

## Cover Page

**Order ID :** Q1199

**Project ID :** CTO WE13

**Client :** Tetra Tech NUS, Inc.

### Lab Sample Number

Q1199-01  
Q1199-02  
Q1199-03  
Q1199-04  
Q1199-05  
Q1199-06  
Q1199-07

### Client Sample Number

BP-VPB-192-TB-20250123  
BP-VPB-192-EB-20250124  
BP-VPB-192-GW-280-282  
BP-VPB-192-GW-260-262  
BP-VPB-192-GW-240-242  
BP-VPB-192-GW-220-222  
BP-VPB-192-GW-DUP-20250123

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: 2/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

## **CASE NARRATIVE**

**Tetra Tech NUS, Inc.**

**Project Name: CTO WE13**

**Project Manager: Ernie Wu**

**Chemtech Project # Q1199**

**Test Name: VOCMS Group1**

### **A. Number of Samples and Date of Receipt:**

7 Water samples were received on 01/27/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for VOCMS Group1.

### **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 Group1 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 RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration File ID VN085526.D met the requirements except for 2-Hexanone and Styrene failing high but associated sample having hit below CRQL therefore no corrective action taken.

The Tuning criteria met requirements.

### **E. Additional Comments:**

The Sample # BP-VPB-192-GW-220-222 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."



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

The not QT review data is reported in the Miscellaneous.

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.

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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 \_\_\_\_\_

## 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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| B     | Indicates the analyte was found in the blank as well as the sample report as “12 B”.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| E     | Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| D     | This flag identifies all compounds identified in an analysis at a secondary dilution factor.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| P     | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.                                                                                                                                                                                                                                                                                                                        |
| N     | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.                                                                                                                                                                                                                  |
| A     | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Q     | Indicates the LCS did not meet the control limits requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |



**ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092**

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

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

CHEMTECH PROJECT NUMBER: Q1199

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<br>ASP CLP, CLP AND NJ)                                                                                                                                                                             |    |    | ✓   |
| 3.  | GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for<br>8000 Series.                                                                                                                                                                                                   |    |    | ✓   |
| 4.  | GC/MS Calibration - Initial Calibration performed before sample analysis and<br>continuing calibration performed within 24 hours of sample analysis for 600 series and<br>12 hours for 8000 series.                                                                                                 |    |    | ✓   |
| 5.  | GC/MS Calibration Requirements.<br>The Initial Calibration met the requirements .<br><br>The Continuous Calibration File ID VN085526.D met the requirements except for 2-<br>Hexanone and Styrene failing high but associated sample having hit below CRQL<br>therefore no corrective action taken. |    |    | ✓   |
| 6.  | Blank Contamination - If yes, list compounds and concentrations in each blank:                                                                                                                                                                                                                      |    | ✓  |     |
| 7.  | Surrogate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable<br>ranges.                                                                                                                                                        |    |    | ✓   |
| 8.  | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable<br>range.<br><br>The Blank Spike met requirements for all samples .<br><br>The Blank Spike Duplicate met requirements for all samples   |    |    | ✓   |
| 9.  | Internal Standard Area/Retention Time Shift Meet Criteria<br><br>Comments:                                                                                                                                                                                                                          |    |    | ✓   |
| 10. | Analysis Holding Time Met<br><br>If not met, list number of days exceeded for each sample:                                                                                                                                                                                                          |    |    | ✓   |

**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 (CONTINUED)**

NA NO YES

ADDITIONAL COMMENTS:

The Sample #BP-VPB-192-GW-220-222 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).”  
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

The not QT review data is reported in the Miscellaneous.

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

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1199

Completed

For thorough review, the report must have the following:

#### GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

#### COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

#### CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 02/03/2025

## LAB CHRONICLE

|                 |                      |                   |                       |
|-----------------|----------------------|-------------------|-----------------------|
| <b>OrderID:</b> | Q1199                | <b>OrderDate:</b> | 1/27/2025 3:35:00 PM  |
| <b>Client:</b>  | Tetra Tech NUS, Inc. | <b>Project:</b>   | CTO WE13              |
| <b>Contact:</b> | Ernie Wu             | <b>Location:</b>  | N21,VOA Ref. #3 Water |

| LabID           | ClientID                               | Matrix       | Test         | Method   | Sample Date     | Prep Date | Anal Date | Received        |
|-----------------|----------------------------------------|--------------|--------------|----------|-----------------|-----------|-----------|-----------------|
| <b>Q1199-01</b> | <b>BP-VPB-192-TB-2025<br/>0123</b>     | <b>Water</b> |              |          | <b>01/23/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-02</b> | <b>BP-VPB-192-EB-2025<br/>0124</b>     | <b>Water</b> |              |          | <b>01/24/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-03</b> | <b>BP-VPB-192-GW-280-<br/>282</b>      | <b>Water</b> |              |          | <b>01/24/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-04</b> | <b>BP-VPB-192-GW-260-<br/>262</b>      | <b>Water</b> |              |          | <b>01/23/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-05</b> | <b>BP-VPB-192-GW-240-<br/>242</b>      | <b>Water</b> |              |          | <b>01/23/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-06</b> | <b>BP-VPB-192-GW-220-<br/>222</b>      | <b>Water</b> |              |          | <b>01/23/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |
| <b>Q1199-07</b> | <b>BP-VPB-192-GW-DUP-<br/>20250123</b> | <b>Water</b> |              |          | <b>01/23/25</b> |           |           | <b>01/27/25</b> |
|                 |                                        |              | VOCMS Group1 | 8260-Low |                 |           | 01/28/25  |                 |

### Hit Summary Sheet SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

| Sample ID                     | Client ID                                                  | Matrix                      | Parameter | Concentration | C | MDL  | LOD  | RDL  | Units |
|-------------------------------|------------------------------------------------------------|-----------------------------|-----------|---------------|---|------|------|------|-------|
| <b>Client ID:</b><br>Q1199-03 | <b>BP-VPB-192-GW-280-282</b><br>BP-VPB-192-GW-2 Water      | Acetone                     |           | 3.80          | J | 1.40 | 3.80 | 5.00 | ug/L  |
|                               |                                                            | <b>Total Voc :</b>          |           | 3.80          |   |      |      |      |       |
|                               |                                                            | <b>Total Concentration:</b> |           | 3.80          |   |      |      |      |       |
| <b>Client ID:</b><br>Q1199-04 | <b>BP-VPB-192-GW-260-262</b><br>BP-VPB-192-GW-2 Water      | Acetone                     |           | 6.30          |   | 1.40 | 3.80 | 5.00 | ug/L  |
|                               |                                                            | <b>Total Voc :</b>          |           | 6.30          |   |      |      |      |       |
|                               |                                                            | <b>Total Concentration:</b> |           | 6.30          |   |      |      |      |       |
| <b>Client ID:</b><br>Q1199-05 | <b>BP-VPB-192-GW-240-242</b><br>BP-VPB-192-GW-2 Water      | Acetone                     |           | 3.90          | J | 1.40 | 3.80 | 5.00 | ug/L  |
| Q1199-05                      | BP-VPB-192-GW-2 Water                                      | Trichloroethene             |           | 12.9          |   | 0.32 | 0.75 | 1.00 | ug/L  |
| Q1199-05                      | BP-VPB-192-GW-2 Water                                      | Tetrachloroethene           |           | 0.95          | J | 0.25 | 0.50 | 1.00 | ug/L  |
|                               |                                                            | <b>Total Voc :</b>          |           | 17.8          |   |      |      |      |       |
|                               |                                                            | <b>Total Concentration:</b> |           | 17.8          |   |      |      |      |       |
| <b>Client ID:</b><br>Q1199-06 | <b>BP-VPB-192-GW-220-222</b><br>BP-VPB-192-GW-2 Water      | Chloromethane               |           | 0.70          | J | 0.35 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | 1,1-Dichloroethene          |           | 0.48          | J | 0.26 | 0.75 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Acetone                     |           | 6.50          |   | 1.40 | 3.80 | 5.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Methyl tert-butyl Ether     |           | 0.56          | J | 0.16 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Chloroform                  |           | 0.83          | J | 0.26 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Trichloroethene             |           | 1.40          |   | 0.32 | 0.75 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Toluene                     |           | 0.52          | J | 0.18 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Ethyl Benzene               |           | 0.34          | J | 0.16 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | o-Xylene                    |           | 0.30          | J | 0.14 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Styrene                     |           | 0.31          | J | 0.16 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | Isopropylbenzene            |           | 0.27          | J | 0.13 | 0.50 | 1.00 | ug/L  |
| Q1199-06                      | BP-VPB-192-GW-2 Water                                      | 1,1,2,2-Tetrachloroethane   |           | 0.61          | J | 0.27 | 0.50 | 1.00 | ug/L  |
|                               |                                                            | <b>Total Voc :</b>          |           | 12.8          |   |      |      |      |       |
|                               |                                                            | <b>Total Concentration:</b> |           | 12.8          |   |      |      |      |       |
| <b>Client ID:</b><br>Q1199-07 | <b>BP-VPB-192-GW-DUP-20250123</b><br>BP-VPB-192-GW-I Water | Acetone                     |           | 5.30          |   | 1.40 | 3.80 | 5.00 | ug/L  |
| Q1199-07                      | BP-VPB-192-GW-I Water                                      | Trichloroethene             |           | 1.10          |   | 0.32 | 0.75 | 1.00 | ug/L  |
|                               |                                                            | <b>Total Voc :</b>          |           | 6.40          |   |      |      |      |       |
|                               |                                                            | <b>Total Concentration:</b> |           | 6.40          |   |      |      |      |       |



# QC SUMMARY

## Surrogate Summary

SDG No.: **Q1199**

Client: **Tetra Tech NUS, Inc.**

Analytical Method: **SW8260-Low**

| Lab Sample ID | Client ID                  | Parameter             | Spike | Result | RecoveryQual | Limits |      |
|---------------|----------------------------|-----------------------|-------|--------|--------------|--------|------|
|               |                            |                       |       |        |              | Low    | High |
| Q1199-01      | BP-VPB-192-TB-20250123     | 1,2-Dichloroethane-d4 | 50    | 55.4   | 111          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 52.1   | 104          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 49.5   | 99           | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 45.5   | 91           | 85     | 114  |
| Q1199-02      | BP-VPB-192-EB-20250124     | 1,2-Dichloroethane-d4 | 50    | 56.7   | 113          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 53.7   | 107          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 49.5   | 99           | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 43.3   | 87           | 85     | 114  |
| Q1199-03      | BP-VPB-192-GW-280-282      | 1,2-Dichloroethane-d4 | 50    | 57.0   | 114          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 54.0   | 108          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 50.0   | 100          | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 47.0   | 94           | 85     | 114  |
| Q1199-04      | BP-VPB-192-GW-260-262      | 1,2-Dichloroethane-d4 | 50    | 57.2   | 114          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 53.6   | 107          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 48.8   | 98           | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 43.5   | 87           | 85     | 114  |
| Q1199-05      | BP-VPB-192-GW-240-242      | 1,2-Dichloroethane-d4 | 50    | 57.1   | 114          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 52.6   | 105          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 49.4   | 99           | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 45.4   | 91           | 85     | 114  |
| Q1199-06      | BP-VPB-192-GW-220-222      | 1,2-Dichloroethane-d4 | 50    | 58.5   | 117          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 53.6   | 107          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 46.9   | 94           | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 44.5   | 89           | 85     | 114  |
| Q1199-07      | BP-VPB-192-GW-DUP-20250123 | 1,2-Dichloroethane-d4 | 50    | 55.6   | 111          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 52.5   | 105          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 50.0   | 100          | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 46.6   | 93           | 85     | 114  |
| VN0128WBL01   | VN0128WBL01                | 1,2-Dichloroethane-d4 | 50    | 53.7   | 107          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 52.2   | 104          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 50.0   | 100          | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 44.2   | 88           | 85     | 114  |
| VN0128WBS01   | VN0128WBS01                | 1,2-Dichloroethane-d4 | 50    | 51.1   | 102          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 53.2   | 106          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 54.1   | 108          | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 52.0   | 104          | 85     | 114  |
| VN0128WBSD0   | VN0128WBSD01               | 1,2-Dichloroethane-d4 | 50    | 50.3   | 101          | 81     | 118  |
|               |                            | Dibromofluoromethane  | 50    | 50.2   | 100          | 80     | 119  |
|               |                            | Toluene-d8            | 50    | 51.1   | 102          | 89     | 112  |
|               |                            | 4-Bromofluorobenzene  | 50    | 51.0   | 102          | 85     | 114  |

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085529.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|-----|----------------|-----|
| VN0128WBS01   | Chloromethane                  | 20    | 17.3   | ug/L | 86  |     |      | 50  | 139            |     |
|               | Vinyl chloride                 | 20    | 18.2   | ug/L | 91  |     |      | 58  | 137            |     |
|               | Bromomethane                   | 20    | 19.5   | ug/L | 98  |     |      | 53  | 141            |     |
|               | Chloroethane                   | 20    | 19.8   | ug/L | 99  |     |      | 60  | 138            |     |
|               | Trichlorofluoromethane         | 20    | 20.7   | ug/L | 104 |     |      | 65  | 141            |     |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 20.5   | ug/L | 103 |     |      | 70  | 136            |     |
|               | 1,1-Dichloroethene             | 20    | 19.1   | ug/L | 96  |     |      | 71  | 131            |     |
|               | Acetone                        | 100   | 100    | ug/L | 100 |     |      | 39  | 160            |     |
|               | Carbon disulfide               | 20    | 16.4   | ug/L | 82  |     |      | 64  | 133            |     |
|               | Methyl tert-butyl Ether        | 20    | 20.9   | ug/L | 104 |     |      | 71  | 124            |     |
|               | Methylene Chloride             | 20    | 19.8   | ug/L | 99  |     |      | 74  | 124            |     |
|               | trans-1,2-Dichloroethene       | 20    | 18.9   | ug/L | 95  |     |      | 75  | 124            |     |
|               | 1,1-Dichloroethane             | 20    | 20.1   | ug/L | 101 |     |      | 77  | 125            |     |
|               | 2-Butanone                     | 100   | 110    | ug/L | 110 |     |      | 56  | 143            |     |
|               | Carbon Tetrachloride           | 20    | 20.5   | ug/L | 103 |     |      | 72  | 136            |     |
|               | cis-1,2-Dichloroethene         | 20    | 19.9   | ug/L | 100 |     |      | 78  | 123            |     |
|               | Chloroform                     | 20    | 20.6   | ug/L | 103 |     |      | 79  | 124            |     |
|               | 1,1,1-Trichloroethane          | 20    | 20.4   | ug/L | 102 |     |      | 74  | 131            |     |
|               | Methylcyclohexane              | 20    | 18.9   | ug/L | 95  |     |      | 72  | 132            |     |
|               | Benzene                        | 20    | 20.7   | ug/L | 104 |     |      | 79  | 120            |     |
|               | 1,2-Dichloroethane             | 20    | 21.0   | ug/L | 105 |     |      | 73  | 128            |     |
|               | Trichloroethene                | 20    | 20.4   | ug/L | 102 |     |      | 79  | 123            |     |
|               | 1,2-Dichloropropane            | 20    | 20.7   | ug/L | 104 |     |      | 78  | 122            |     |
|               | Bromodichloromethane           | 20    | 21.7   | ug/L | 109 |     |      | 79  | 125            |     |
|               | 4-Methyl-2-Pentanone           | 100   | 120    | ug/L | 120 |     |      | 67  | 130            |     |
|               | Toluene                        | 20    | 21.9   | ug/L | 110 |     |      | 80  | 121            |     |
|               | t-1,3-Dichloropropene          | 20    | 21.4   | ug/L | 107 |     |      | 73  | 127            |     |
|               | cis-1,3-Dichloropropene        | 20    | 21.5   | ug/L | 108 |     |      | 75  | 124            |     |
|               | 1,1,2-Trichloroethane          | 20    | 21.9   | ug/L | 110 |     |      | 80  | 119            |     |
|               | 2-Hexanone                     | 100   | 120    | ug/L | 120 |     |      | 57  | 139            |     |
|               | Dibromochloromethane           | 20    | 21.2   | ug/L | 106 |     |      | 74  | 126            |     |
|               | Tetrachloroethene              | 20    | 21.7   | ug/L | 109 |     |      | 74  | 129            |     |
|               | Chlorobenzene                  | 20    | 20.6   | ug/L | 103 |     |      | 82  | 118            |     |
|               | Ethyl Benzene                  | 20    | 20.8   | ug/L | 104 |     |      | 79  | 121            |     |
|               | m/p-Xylenes                    | 40    | 43.1   | ug/L | 108 |     |      | 80  | 121            |     |
|               | o-Xylene                       | 20    | 20.9   | ug/L | 104 |     |      | 78  | 122            |     |
|               | Styrene                        | 20    | 21.3   | ug/L | 106 |     |      | 78  | 123            |     |
|               | Bromoform                      | 20    | 22.5   | ug/L | 113 |     |      | 66  | 130            |     |
|               | Isopropylbenzene               | 20    | 20.9   | ug/L | 104 |     |      | 72  | 131            |     |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 21.6   | ug/L | 108 |     |      | 71  | 121            |     |
|               | 1,3-Dichlorobenzene            | 20    | 20.8   | ug/L | 104 |     |      | 80  | 119            |     |
|               | 1,4-Dichlorobenzene            | 20    | 19.8   | ug/L | 99  |     |      | 79  | 118            |     |
|               | 1,2-Dichlorobenzene            | 20    | 20.4   | ug/L | 102 |     |      | 80  | 119            |     |



Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085530.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|-----|----------------|-----|
| VN0128WBSD01  | Chloromethane                  | 20    | 17.7   | ug/L | 89  | 3   |      | 50  | 139            | 20  |
|               | Vinyl chloride                 | 20    | 17.8   | ug/L | 89  | 2   |      | 58  | 137            | 20  |
|               | Bromomethane                   | 20    | 18.0   | ug/L | 90  | 9   |      | 53  | 141            | 20  |
|               | Chloroethane                   | 20    | 19.6   | ug/L | 98  | 1   |      | 60  | 138            | 20  |
|               | Trichlorofluoromethane         | 20    | 19.5   | ug/L | 98  | 6   |      | 65  | 141            | 20  |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 20.3   | ug/L | 102 | 1   |      | 70  | 136            | 20  |
|               | 1,1-Dichloroethene             | 20    | 19.5   | ug/L | 98  | 2   |      | 71  | 131            | 20  |
|               | Acetone                        | 100   | 110    | ug/L | 110 | 10  |      | 39  | 160            | 20  |
|               | Carbon disulfide               | 20    | 16.2   | ug/L | 81  | 1   |      | 64  | 133            | 20  |
|               | Methyl tert-butyl Ether        | 20    | 21.9   | ug/L | 110 | 6   |      | 71  | 124            | 20  |
|               | Methylene Chloride             | 20    | 19.7   | ug/L | 99  | 0   |      | 74  | 124            | 20  |
|               | trans-1,2-Dichloroethene       | 20    | 18.9   | ug/L | 95  | 0   |      | 75  | 124            | 20  |
|               | 1,1-Dichloroethane             | 20    | 20.4   | ug/L | 102 | 1   |      | 77  | 125            | 20  |
|               | 2-Butanone                     | 100   | 110    | ug/L | 110 | 0   |      | 56  | 143            | 20  |
|               | Carbon Tetrachloride           | 20    | 20.0   | ug/L | 100 | 3   |      | 72  | 136            | 20  |
|               | cis-1,2-Dichloroethene         | 20    | 20.2   | ug/L | 101 | 1   |      | 78  | 123            | 20  |
|               | Chloroform                     | 20    | 20.6   | ug/L | 103 | 0   |      | 79  | 124            | 20  |
|               | 1,1,1-Trichloroethane          | 20    | 20.1   | ug/L | 101 | 1   |      | 74  | 131            | 20  |
|               | Methylcyclohexane              | 20    | 18.7   | ug/L | 94  | 1   |      | 72  | 132            | 20  |
|               | Benzene                        | 20    | 20.2   | ug/L | 101 | 3   |      | 79  | 120            | 20  |
|               | 1,2-Dichloroethane             | 20    | 21.5   | ug/L | 108 | 3   |      | 73  | 128            | 20  |
|               | Trichloroethene                | 20    | 19.4   | ug/L | 97  | 5   |      | 79  | 123            | 20  |
|               | 1,2-Dichloropropane            | 20    | 20.7   | ug/L | 104 | 0   |      | 78  | 122            | 20  |
|               | Bromodichloromethane           | 20    | 21.7   | ug/L | 109 | 0   |      | 79  | 125            | 20  |
|               | 4-Methyl-2-Pentanone           | 100   | 120    | ug/L | 120 | 0   |      | 67  | 130            | 20  |
|               | Toluene                        | 20    | 21.5   | ug/L | 108 | 2   |      | 80  | 121            | 20  |
|               | t-1,3-Dichloropropene          | 20    | 21.5   | ug/L | 108 | 1   |      | 73  | 127            | 20  |
|               | cis-1,3-Dichloropropene        | 20    | 21.8   | ug/L | 109 | 1   |      | 75  | 124            | 20  |
|               | 1,1,2-Trichloroethane          | 20    | 21.5   | ug/L | 108 | 2   |      | 80  | 119            | 20  |
|               | 2-Hexanone                     | 100   | 120    | ug/L | 120 | 0   |      | 57  | 139            | 20  |
|               | Dibromochloromethane           | 20    | 21.9   | ug/L | 110 | 4   |      | 74  | 126            | 20  |
|               | Tetrachloroethene              | 20    | 21.0   | ug/L | 105 | 4   |      | 74  | 129            | 20  |
|               | Chlorobenzene                  | 20    | 20.6   | ug/L | 103 | 0   |      | 82  | 118            | 20  |
|               | Ethyl Benzene                  | 20    | 20.6   | ug/L | 103 | 1   |      | 79  | 121            | 20  |
|               | m/p-Xylenes                    | 40    | 43.4   | ug/L | 109 | 1   |      | 80  | 121            | 20  |
|               | o-Xylene                       | 20    | 20.8   | ug/L | 104 | 0   |      | 78  | 122            | 20  |
|               | Styrene                        | 20    | 21.3   | ug/L | 106 | 0   |      | 78  | 123            | 20  |
|               | Bromoform                      | 20    | 22.5   | ug/L | 113 | 0   |      | 66  | 130            | 20  |
|               | Isopropylbenzene               | 20    | 21.2   | ug/L | 106 | 2   |      | 72  | 131            | 20  |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 21.8   | ug/L | 109 | 1   |      | 71  | 121            | 20  |
|               | 1,3-Dichlorobenzene            | 20    | 21.0   | ug/L | 105 | 1   |      | 80  | 119            | 20  |
|               | 1,4-Dichlorobenzene            | 20    | 20.4   | ug/L | 102 | 3   |      | 79  | 118            | 20  |
|               | 1,2-Dichlorobenzene            | 20    | 20.4   | ug/L | 102 | 0   |      | 80  | 119            | 20  |

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0128WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1199

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: VN085528.D

Lab Sample ID: VN0128WBL01

Date Analyzed: 01/28/2025

Time Analyzed: 10:51

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<br>SAMPLE NO.          | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|----------------------------|------------------|----------------|------------------|
| VN0128WBS01                | VN0128WBS01      | VN085529.D     | 01/28/2025       |
| VN0128WBSD01               | VN0128WBSD01     | VN085530.D     | 01/28/2025       |
| BP-VPB-192-TB-20250123     | Q1199-01         | VN085534.D     | 01/28/2025       |
| BP-VPB-192-EB-20250124     | Q1199-02         | VN085535.D     | 01/28/2025       |
| BP-VPB-192-GW-280-282      | Q1199-03         | VN085536.D     | 01/28/2025       |
| BP-VPB-192-GW-260-262      | Q1199-04         | VN085537.D     | 01/28/2025       |
| BP-VPB-192-GW-240-242      | Q1199-05         | VN085538.D     | 01/28/2025       |
| BP-VPB-192-GW-DUP-20250123 | Q1199-07         | VN085540.D     | 01/28/2025       |
| BP-VPB-192-GW-220-222      | Q1199-06         | VN085545.D     | 01/28/2025       |

COMMENTS: \_\_\_\_\_

\_\_\_\_\_



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06  
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199  
Lab File ID: VN085437.D BFB Injection Date: 01/14/2025  
Instrument ID: MSVOA\_N BFB Injection Time: 14:22  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 22.3                 |
| 75  | 30.0 - 60.0% of mass 95            | 58                   |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 7.8                  |
| 173 | Less than 2.0% of mass 174         | 1.4 ( 1.8 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 76                   |
| 175 | 5.0 - 9.0% of mass 174             | 5.4 ( 7.1 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 74.1 ( 97.4 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 4.9 ( 6.7 ) 2        |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDICC100        | VSTDICC100       | VN085438.D     | 01/14/2025       | 14:56            |
| VSTDICCC050       | VSTDICCC050      | VN085439.D     | 01/14/2025       | 15:19            |
| VSTDICC020        | VSTDICC020       | VN085440.D     | 01/14/2025       | 15:43            |
| VSTDICC010        | VSTDICC010       | VN085441.D     | 01/14/2025       | 16:07            |
| VSTDICC005        | VSTDICC005       | VN085442.D     | 01/14/2025       | 16:31            |
| VSTDICC001        | VSTDICC001       | VN085443.D     | 01/14/2025       | 17:19            |



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06  
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199  
Lab File ID: VN085525.D BFB Injection Date: 01/28/2025  
Instrument ID: MSVOA\_N BFB Injection Time: 09:17  
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            | 21.1                 |
| 75  | 30.0 - 60.0% of mass 95            | 55.9                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 7.4                  |
| 173 | Less than 2.0% of mass 174         | 1.5 ( 1.9 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 75.9                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.5 ( 7.2 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 73.7 ( 97.2 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 5 ( 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<br>SAMPLE NO.          | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|----------------------------|------------------|----------------|------------------|------------------|
| VSTDCCC050                 | VSTDCCC050       | VN085526.D     | 01/28/2025       | 09:53            |
| VN0128WBL01                | VN0128WBL01      | VN085528.D     | 01/28/2025       | 10:51            |
| VN0128WBS01                | VN0128WBS01      | VN085529.D     | 01/28/2025       | 11:15            |
| VN0128WBSD01               | VN0128WBSD01     | VN085530.D     | 01/28/2025       | 11:48            |
| BP-VPB-192-TB-20250123     | Q1199-01         | VN085534.D     | 01/28/2025       | 13:24            |
| BP-VPB-192-EB-20250124     | Q1199-02         | VN085535.D     | 01/28/2025       | 13:49            |
| BP-VPB-192-GW-280-282      | Q1199-03         | VN085536.D     | 01/28/2025       | 14:13            |
| BP-VPB-192-GW-260-262      | Q1199-04         | VN085537.D     | 01/28/2025       | 14:37            |
| BP-VPB-192-GW-240-242      | Q1199-05         | VN085538.D     | 01/28/2025       | 15:01            |
| BP-VPB-192-GW-DUP-20250123 | Q1199-07         | VN085540.D     | 01/28/2025       | 15:49            |
| BP-VPB-192-GW-220-222      | Q1199-06         | VN085545.D     | 01/28/2025       | 17:50            |
| VSTDCCC050EC               | VSTDCCC050       | VN085546.D     | 01/28/2025       | 18:14            |

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06  
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199  
Lab File ID: VN085526.D Date Analyzed: 01/28/2025  
Instrument ID: MSVOA\_N Time Analyzed: 09:53  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

|                            | IS1<br>AREA # | RT #  | IS2<br>AREA # | RT #  | IS3<br>AREA # | RT #   |
|----------------------------|---------------|-------|---------------|-------|---------------|--------|
| 12 HOUR STD                | 203638        | 8.22  | 333806        | 9.09  | 302551        | 11.87  |
| UPPER LIMIT                | 407276        | 8.718 | 667612        | 9.594 | 605102        | 12.365 |
| LOWER LIMIT                | 101819        | 7.718 | 166903        | 8.594 | 151276        | 11.365 |
| EPA SAMPLE NO.             |               |       |               |       |               |        |
| BP-VPB-192-TB-20250123     | 179083        | 8.22  | 333621        | 9.10  | 293971        | 11.87  |
| BP-VPB-192-EB-20250124     | 158329        | 8.22  | 293573        | 9.10  | 250987        | 11.87  |
| BP-VPB-192-GW-280-282      | 162876        | 8.22  | 301319        | 9.10  | 270559        | 11.87  |
| BP-VPB-192-GW-260-262      | 153446        | 8.22  | 287847        | 9.10  | 248805        | 11.87  |
| BP-VPB-192-GW-240-242      | 162553        | 8.22  | 306518        | 9.10  | 270799        | 11.87  |
| BP-VPB-192-GW-220-222      | 169137        | 8.22  | 327198        | 9.10  | 270505        | 11.87  |
| BP-VPB-192-GW-DUP-20250123 | 162005        | 8.22  | 300571        | 9.10  | 271698        | 11.87  |
| VN0128WBL01                | 183717        | 8.22  | 332601        | 9.10  | 291066        | 11.87  |
| VN0128WBS01                | 185562        | 8.22  | 307569        | 9.10  | 271043        | 11.87  |
| VN0128WBSD01               | 182154        | 8.22  | 309854        | 9.10  | 273221        | 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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06  
 Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199  
 Lab File ID: VN085526.D Date Analyzed: 01/28/2025  
 Instrument ID: MSVOA\_N Time Analyzed: 09:53  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

|                            | IS4<br>AREA # | RT #   |  |  |  |  |
|----------------------------|---------------|--------|--|--|--|--|
| 12 HOUR STD                | 155713        | 13.788 |  |  |  |  |
| UPPER LIMIT                | 311426        | 14.288 |  |  |  |  |
| LOWER LIMIT                | 77856.5       | 13.288 |  |  |  |  |
| EPA SAMPLE NO.             |               |        |  |  |  |  |
| BP-VPB-192-TB-20250123     | 113614        | 13.79  |  |  |  |  |
| BP-VPB-192-EB-20250124     | 92670         | 13.79  |  |  |  |  |
| BP-VPB-192-GW-280-282      | 109450        | 13.79  |  |  |  |  |
| BP-VPB-192-GW-260-262      | 90634         | 13.79  |  |  |  |  |
| BP-VPB-192-GW-240-242      | 108170        | 13.79  |  |  |  |  |
| BP-VPB-192-GW-220-222      | 106728        | 13.79  |  |  |  |  |
| BP-VPB-192-GW-DUP-20250123 | 107447        | 13.79  |  |  |  |  |
| VN0128WBL01                | 116250        | 13.79  |  |  |  |  |
| VN0128WBS01                | 126721        | 13.79  |  |  |  |  |
| VN0128WBSD01               | 127977        | 13.79  |  |  |  |  |

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.



# SAMPLE DATA

### Report of Analysis

|                    |                        |        |      |                 |              |    |  |
|--------------------|------------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc.   |        |      | Date Collected: | 01/23/25     |    |  |
| Project:           | CTO WE13               |        |      | Date Received:  | 01/27/25     |    |  |
| Client Sample ID:  | BP-VPB-192-TB-20250123 |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | Q1199-01               |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260                 |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                      | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                        |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624                | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                        |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085534.D        | 1         |           | 01/28/25 13:24 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |



## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-TB-20250123                    | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-01                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085534.D        | 1         |           | 01/28/25 13:24 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 55.4   |           | 81 - 118 |      | 111%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 52.1   |           | 80 - 119 |      | 104%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 49.5   |           | 89 - 112 |      | 99%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 45.5   |           | 85 - 114 |      | 91%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 179000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 334000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 294000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 114000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-TB-20250123                    | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-01                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085534.D        | 1         |           | 01/28/25 13:24 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085534.D  
 Acq On : 28 Jan 2025 13:24  
 Operator : JC\MD  
 Sample : Q1199-01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-TB-20250123

Quant Time: Jan 29 00:38:28 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon           | Response | Conc       | Units | Dev(Min) |
|-----------------------------|--------|----------------|----------|------------|-------|----------|
| -----                       |        |                |          |            |       |          |
| Internal Standards          |        |                |          |            |       |          |
| 1) Pentafluorobenzene       | 8.224  | 168            | 179083   | 50.000     | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 333621   | 50.000     | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 293971   | 50.000     | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 113614   | 50.000     | ug/l  | 0.00     |
| System Monitoring Compounds |        |                |          |            |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 160235   | 55.430     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | = 110.860% |       |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 120678   | 52.140     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | = 104.280% |       |          |
| 50) Toluene-d8              | 10.565 | 98             | 407027   | 49.496     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | = 99.000%  |       |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 127940   | 45.481     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | = 90.960%  |       |          |

Target Compounds Qvalue

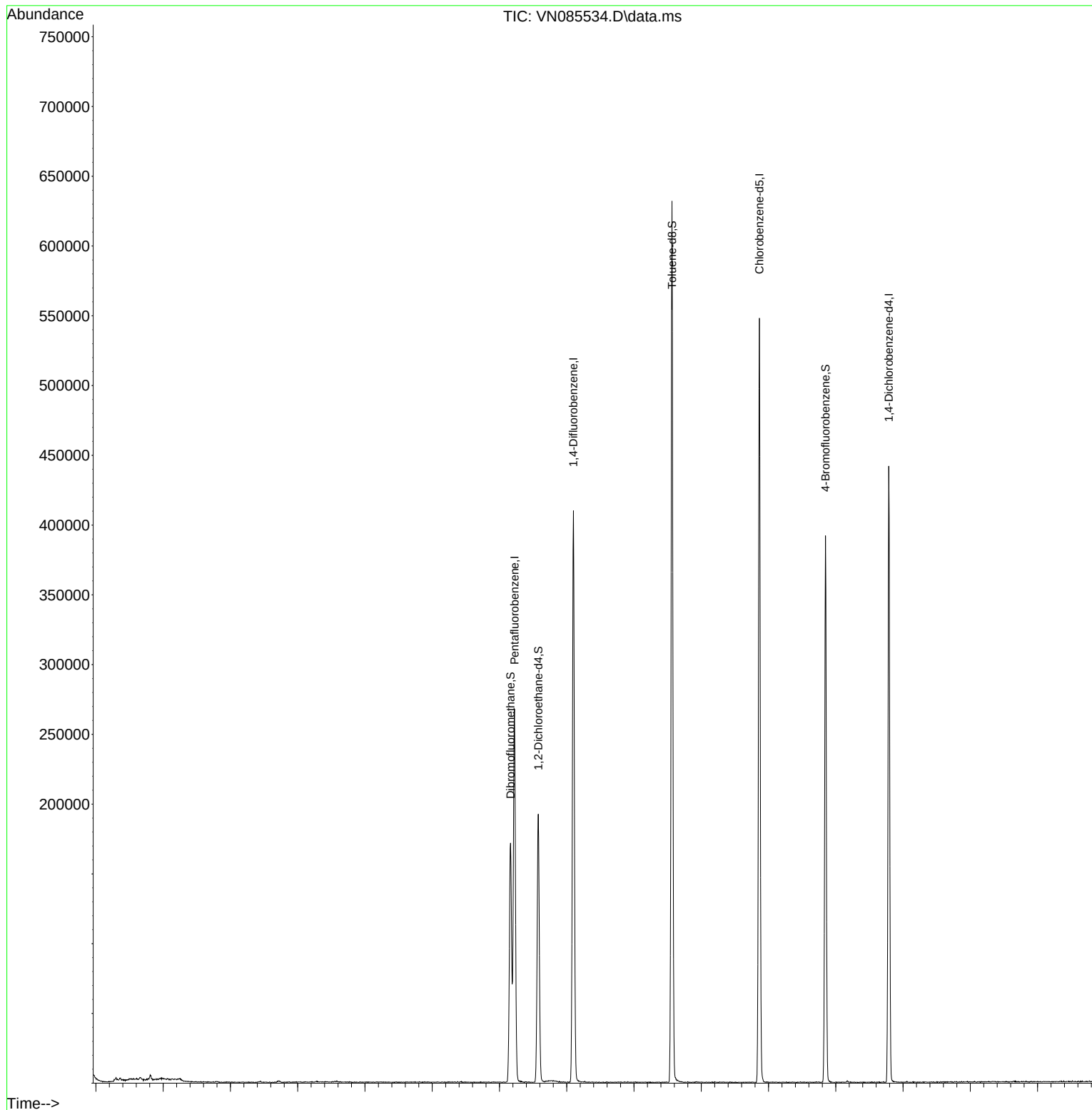
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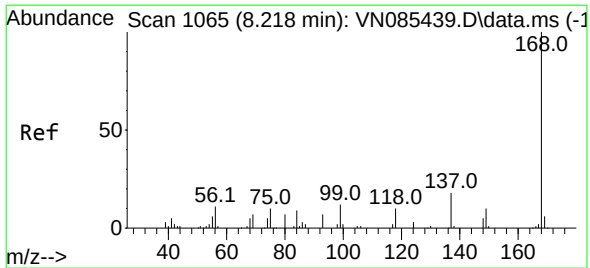
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085534.D  
Acq On : 28 Jan 2025 13:24  
Operator : JC\MD  
Sample : Q1199-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

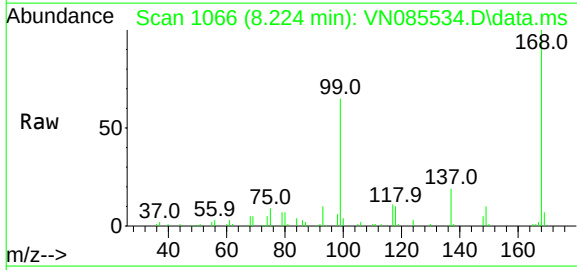
Quant Time: Jan 29 00:38:28 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



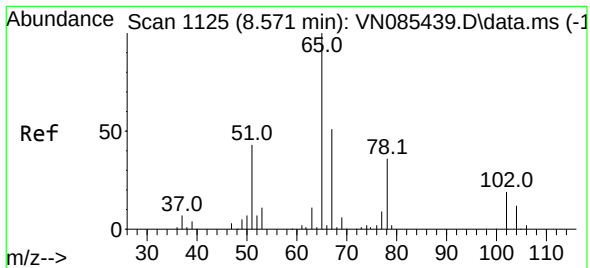
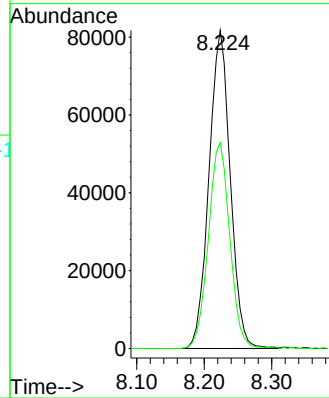
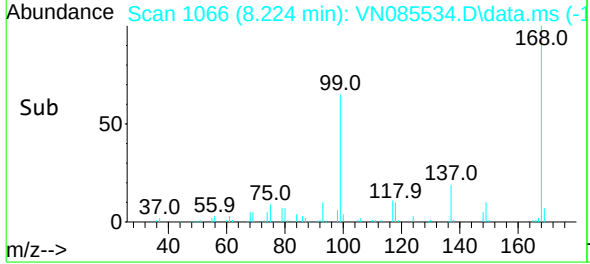


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085534.D  
Acq: 28 Jan 2025 13:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

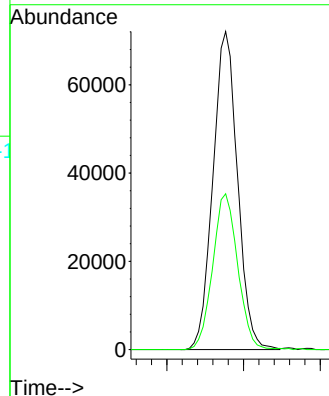
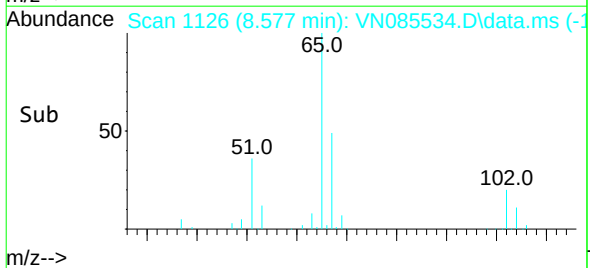
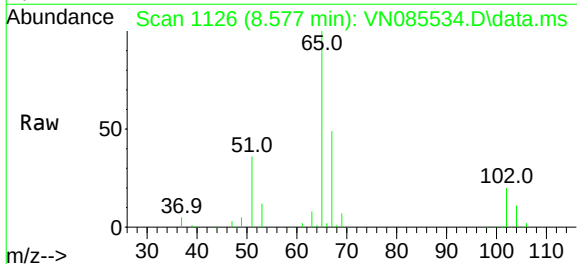


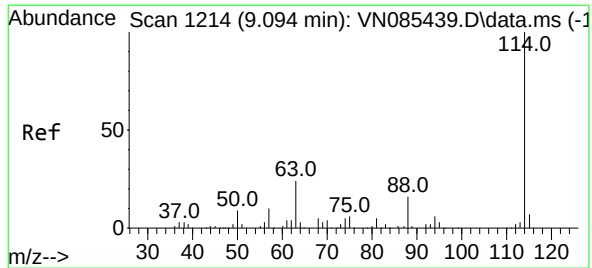
Tgt Ion:168 Resp: 179083  
Ion Ratio Lower Upper  
168 100  
99 64.7 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 55.430 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085534.D  
Acq: 28 Jan 2025 13:24

Tgt Ion: 65 Resp: 160235  
Ion Ratio Lower Upper  
65 100  
67 50.0 0.0 101.6

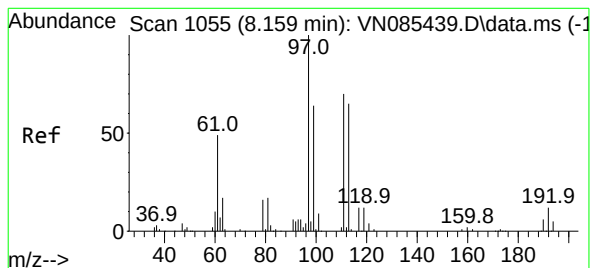
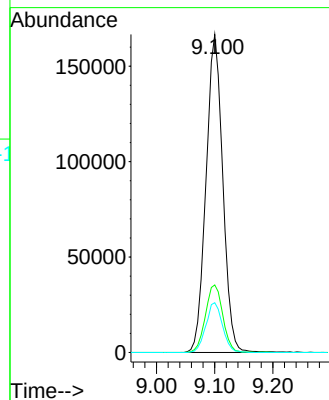
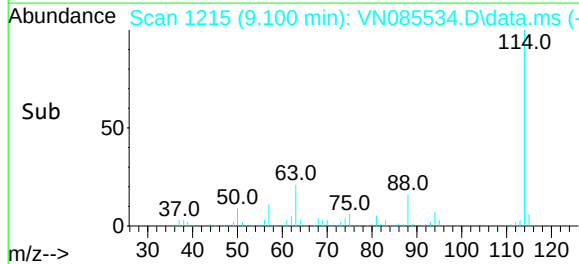
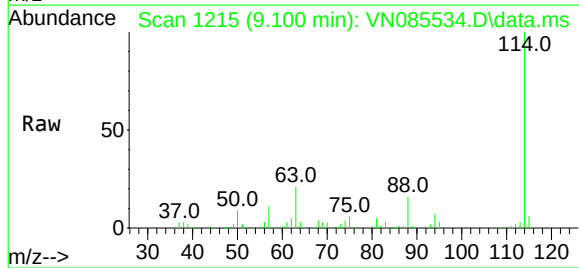




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1214  
Delta R.T. 0.006 min  
Lab File: VN085534.D  
Acq: 28 Jan 2025 13:24

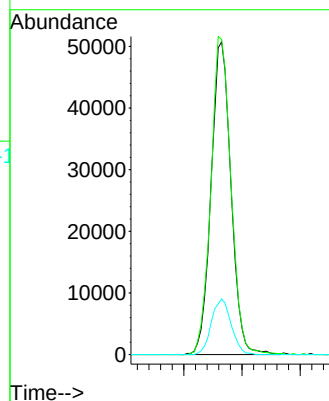
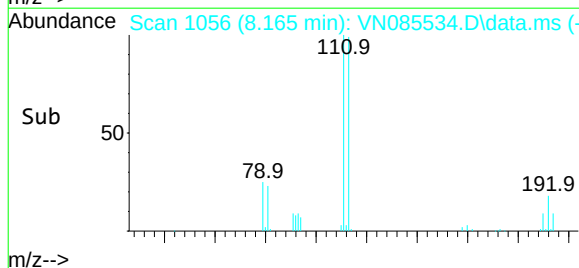
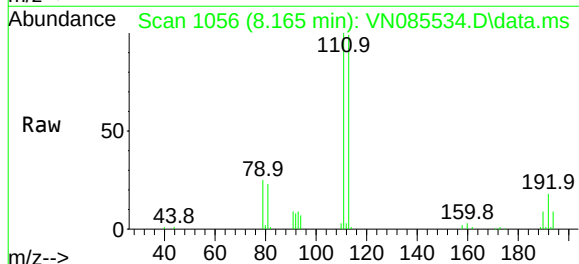
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

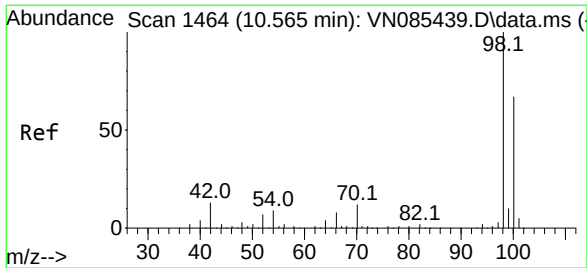
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.2  | 0.0   | 47.6  |
| 88      | 15.6  | 0.0   | 32.6  |



#35  
Dibromofluoromethane  
Concen: 52.140 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085534.D  
Acq: 28 Jan 2025 13:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 82.7  | 124.1 |
| 192     | 17.6  | 14.3  | 21.5  |





#50

Toluene-d8

Concen: 49.496 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085534.D

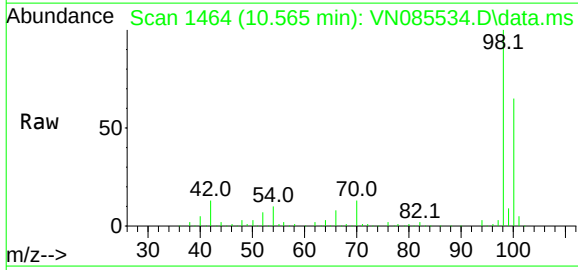
Acq: 28 Jan 2025 13:24

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-TB-20250123

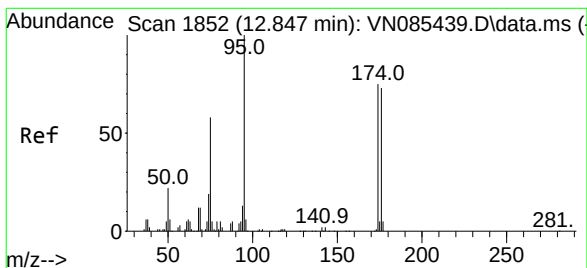
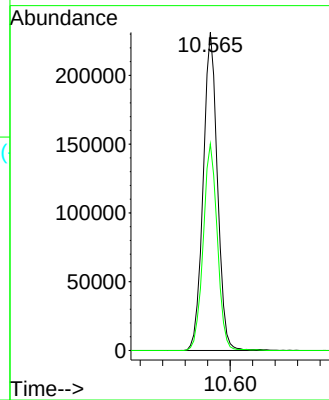
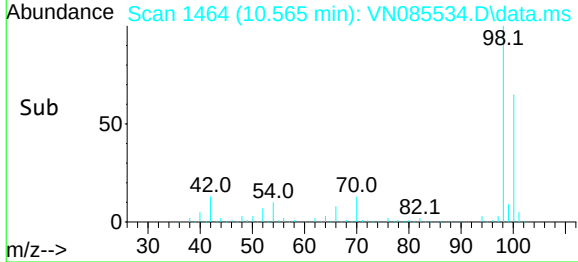


Tgt Ion: 98 Resp: 407027

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 45.481 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085534.D

Acq: 28 Jan 2025 13:24

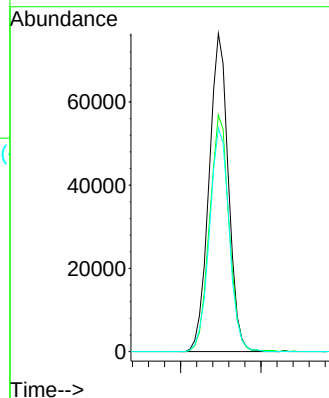
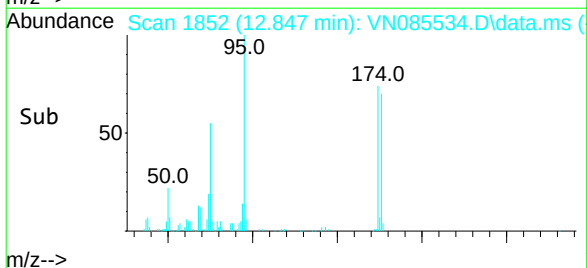
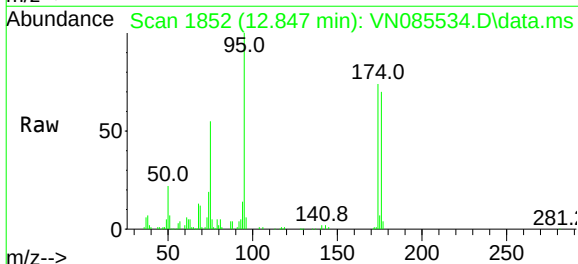
Tgt Ion: 95 Resp: 127940

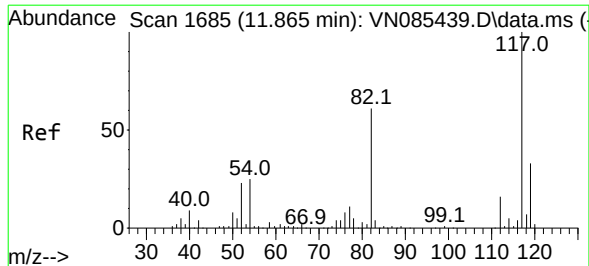
Ion Ratio Lower Upper

95 100

174 74.9 0.0 145.0

176 71.5 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085534.D

Acq: 28 Jan 2025 13:24

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-TB-20250123

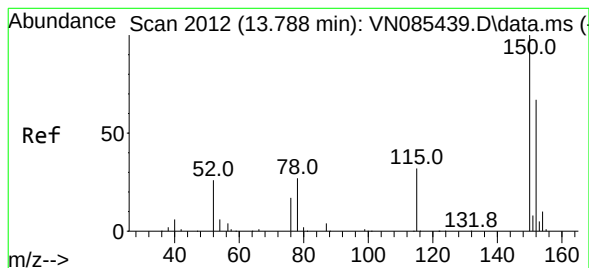
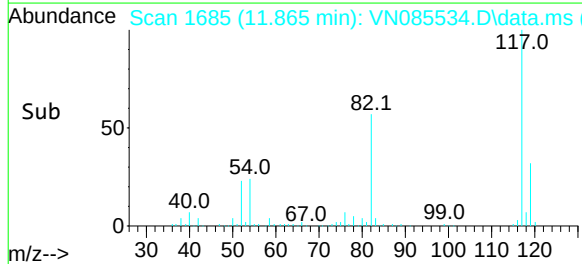
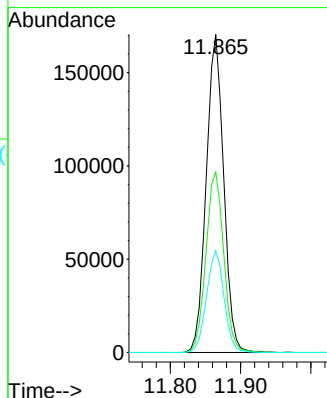
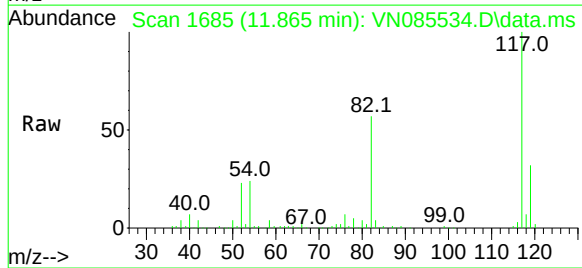
Tgt Ion:117 Resp: 293971

Ion Ratio Lower Upper

117 100

82 56.7 48.6 72.8

119 32.0 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085534.D

Acq: 28 Jan 2025 13:24

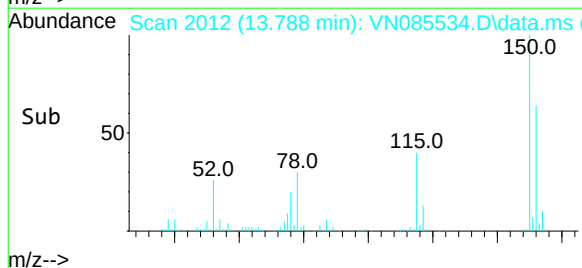
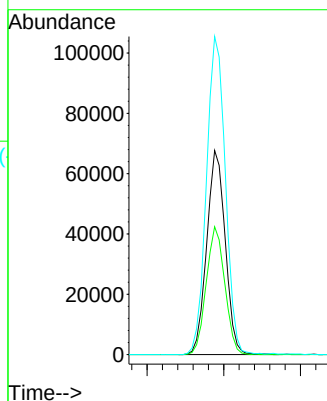
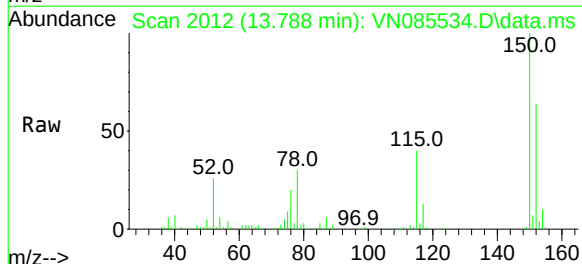
Tgt Ion:152 Resp: 113614

Ion Ratio Lower Upper

152 100

115 62.6 31.1 93.3

150 159.2 0.0 343.6





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085534.D  
Acq On : 28 Jan 2025 13:24  
Operator : JC\MD  
Sample : Q1199-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260

Signal : TIC: VN085534.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 8.165       | 1046          | 1056        | 1060         | rBV      | 171155         | 395569        | 35.77%          | 6.933%        |
| 2         | 8.224       | 1060          | 1066        | 1078         | rVB      | 267035         | 597722        | 54.05%          | 10.476%       |
| 3         | 8.577       | 1117          | 1126        | 1139         | rBV      | 192146         | 427450        | 38.65%          | 7.492%        |
| 4         | 9.100       | 1206          | 1215        | 1226         | rBV      | 409612         | 822324        | 74.36%          | 14.413%       |
| 5         | 10.565      | 1456          | 1464        | 1477         | rBV      | 631405         | 1105941       | 100.00%         | 19.383%       |
| 6         | 11.865      | 1677          | 1685        | 1698         | rBV      | 547850         | 956941        | 86.53%          | 16.772%       |
| 7         | 12.847      | 1845          | 1852        | 1862         | rBV      | 391610         | 657078        | 59.41%          | 11.516%       |
| 8         | 13.788      | 2005          | 2012        | 2023         | rBV      | 441663         | 742576        | 67.14%          | 13.015%       |

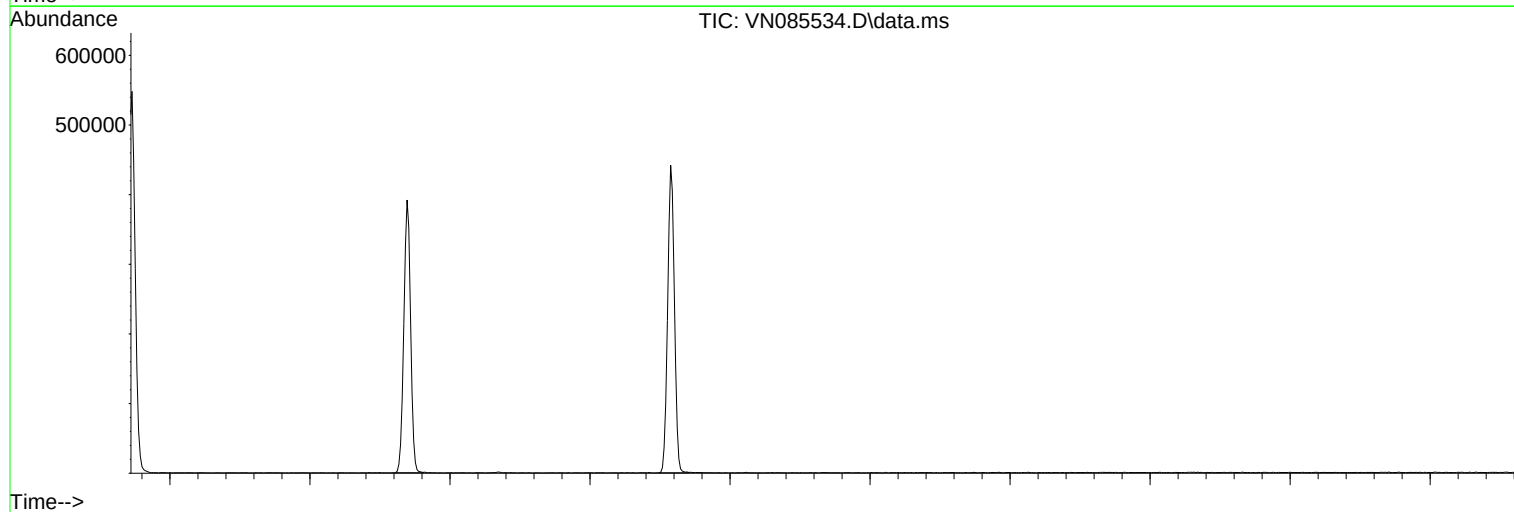
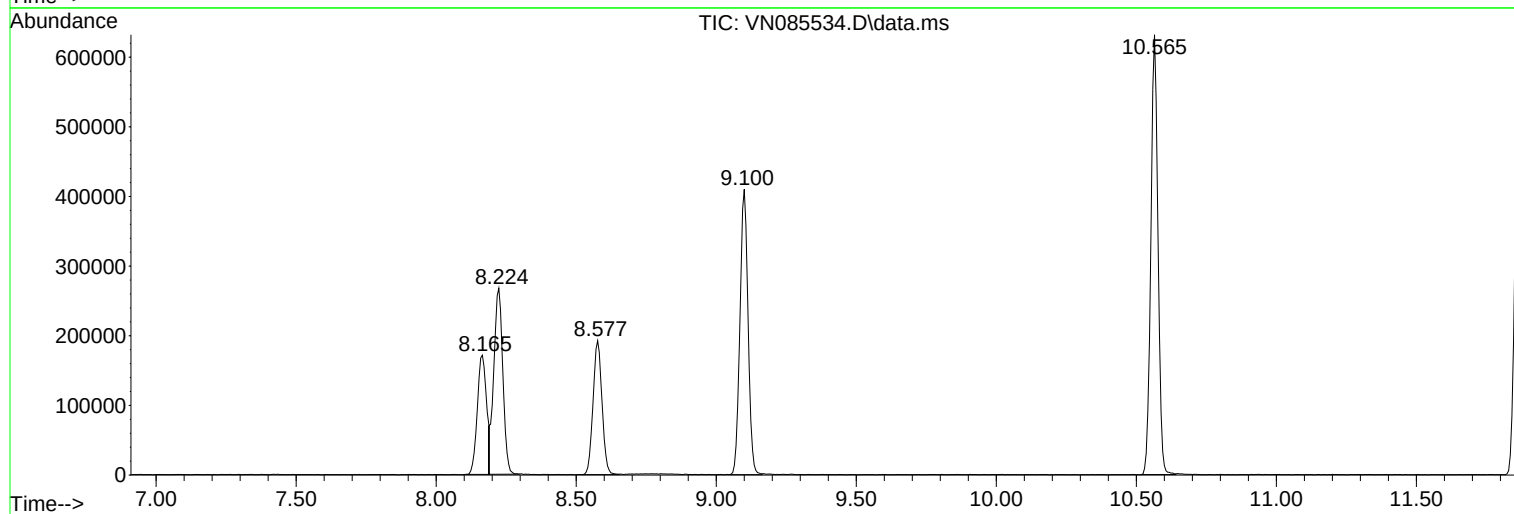
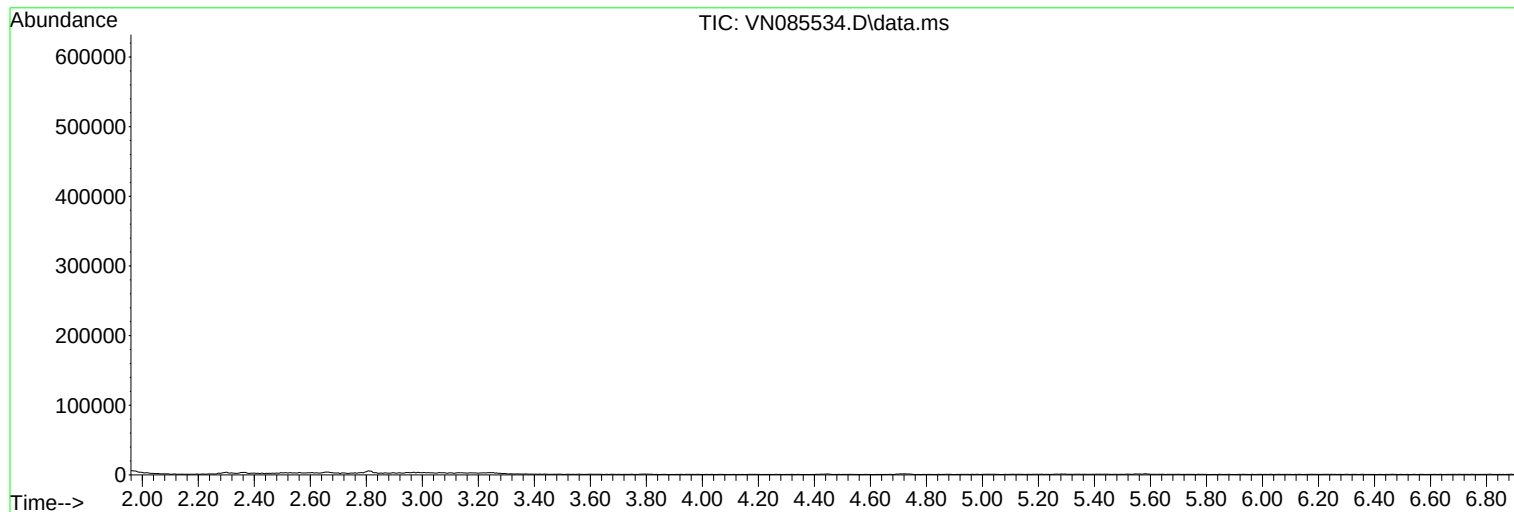
Sum of corrected areas: 5705601

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085534.D  
Acq On : 28 Jan 2025 13:24  
Operator : JC\MD  
Sample : Q1199-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085534.D  
Acq On : 28 Jan 2025 13:24  
Operator : JC\MD  
Sample : Q1199-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085534.D  
Acq On : 28 Jan 2025 13:24  
Operator : JC\MD  
Sample : Q1199-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-TB-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                        |        |      |                 |              |    |  |
|--------------------|------------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc.   |        |      | Date Collected: | 01/24/25     |    |  |
| Project:           | CTO WE13               |        |      | Date Received:  | 01/27/25     |    |  |
| Client Sample ID:  | BP-VPB-192-EB-20250124 |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | Q1199-02               |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260                 |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                      | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                        |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624                | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                        |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085535.D        | 1         |           | 01/28/25 13:49 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

### Report of Analysis

|                    |                        |           |                 |              |    |
|--------------------|------------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.   |           | Date Collected: | 01/24/25     |    |
| Project:           | CTO WE13               |           | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-EB-20250124 |           | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-02               |           | Matrix:         | Water        |    |
| Analytical Method: | SW8260                 |           | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                      | Units: mL | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                        | uL        | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624                | ID : 0.25 | Level :         | LOW          |    |
| Prep Method :      |                        |           |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085535.D        | 1         |           | 01/28/25 13:49 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 56.7   |           | 81 - 118 |      | 113%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 53.7   |           | 80 - 119 |      | 107%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 49.5   |           | 89 - 112 |      | 99%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 43.3   |           | 85 - 114 |      | 87%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 158000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 294000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 251000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 92700  | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/24/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-EB-20250124                    | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-02                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085535.D        | 1         |           | 01/28/25 13:49 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085535.D  
 Acq On : 28 Jan 2025 13:49  
 Operator : JC\MD  
 Sample : Q1199-02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-EB-20250124

Quant Time: Jan 29 00:38:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|-------|----------|
| -----                       |        |       |          |          |       |          |
| Internal Standards          |        |       |          |          |       |          |
| 1) Pentafluorobenzene       | 8.224  | 168   | 158329   | 50.000   | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114   | 293573   | 50.000   | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117   | 250987   | 50.000   | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152   | 92670    | 50.000   | ug/l  | 0.00     |
| System Monitoring Compounds |        |       |          |          |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 144816   | 56.663   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =     | 113.320% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 109419   | 53.724   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =     | 107.440% |
| 50) Toluene-d8              | 10.565 | 98    | 357973   | 49.469   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =     | 98.940%  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 107196   | 43.305   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =     | 86.620%  |

Target Compounds Qvalue

-----

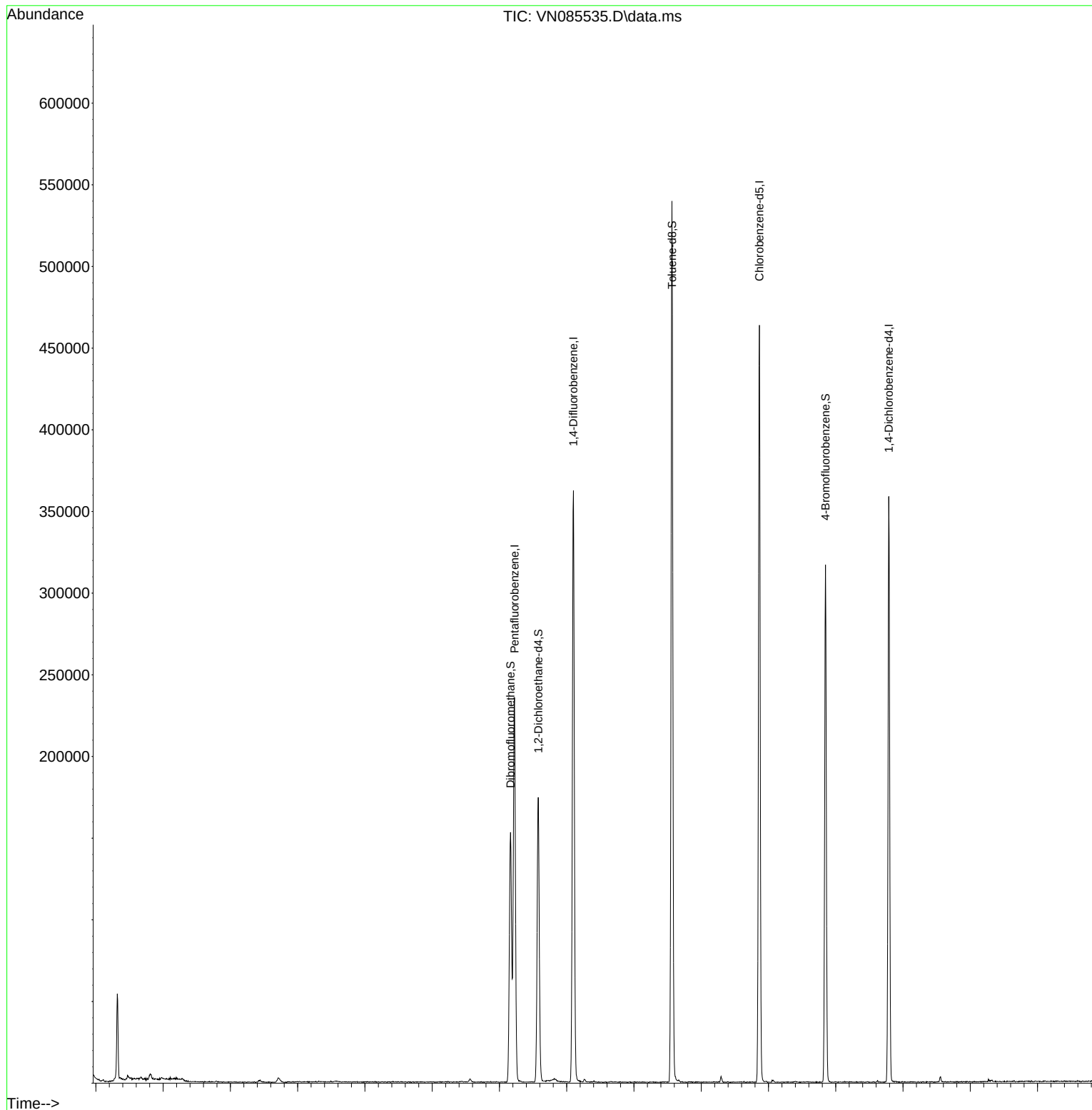
(#) = qualifier out of range (m) = manual integration (+) = signals summed

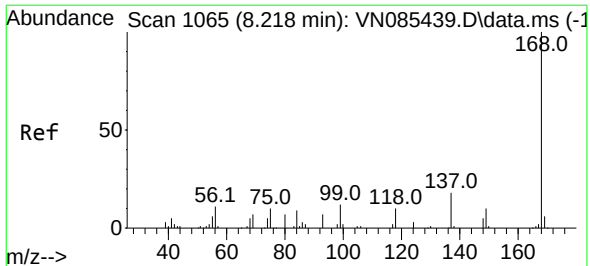


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085535.D  
Acq On : 28 Jan 2025 13:49  
Operator : JC\MD  
Sample : Q1199-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

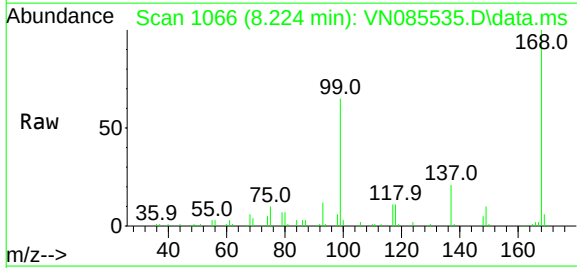
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



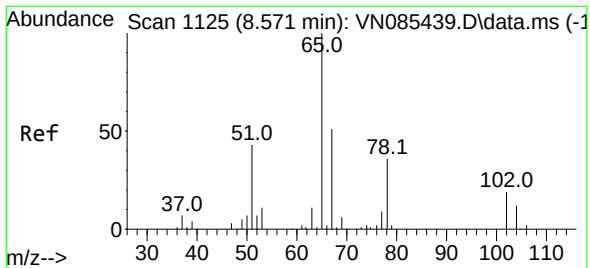
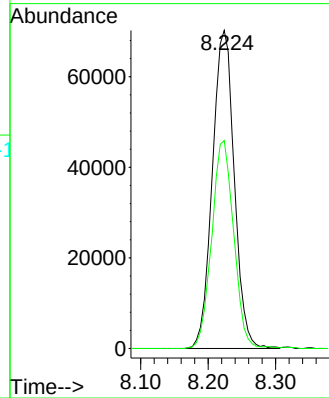
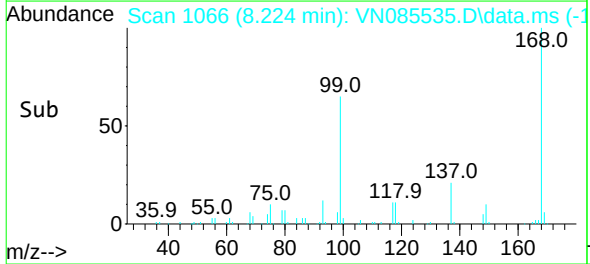


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085535.D  
Acq: 28 Jan 2025 13:49

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

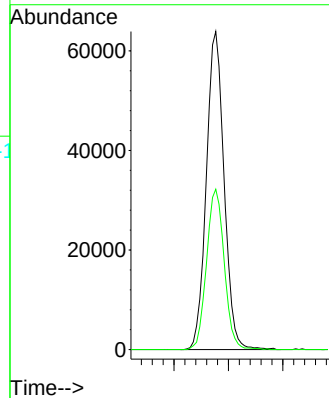
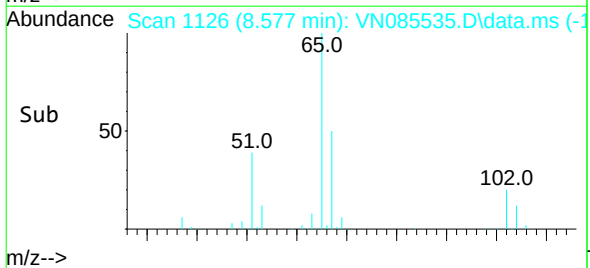
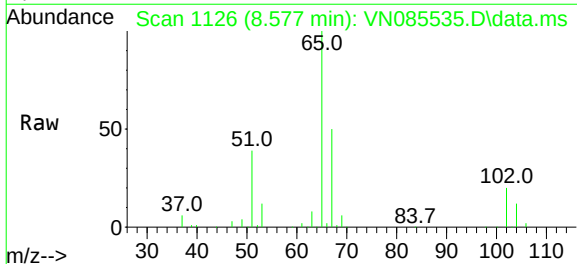


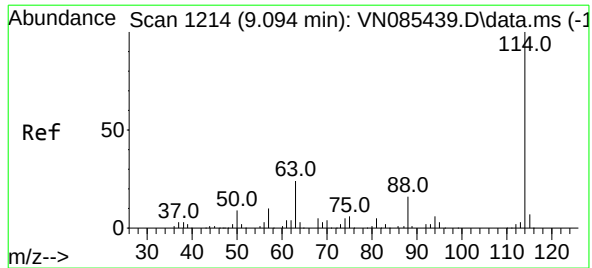
Tgt Ion:168 Resp: 158329  
Ion Ratio Lower Upper  
168 100  
99 65.4 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 56.663 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085535.D  
Acq: 28 Jan 2025 13:49

Tgt Ion: 65 Resp: 144816  
Ion Ratio Lower Upper  
65 100  
67 50.3 0.0 101.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 12

Delta R.T. 0.006 min

Lab File: VN085535.D

Acq: 28 Jan 2025 13:49

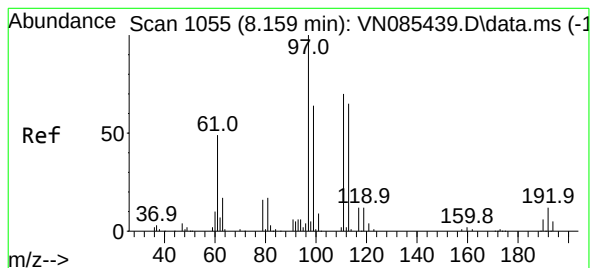
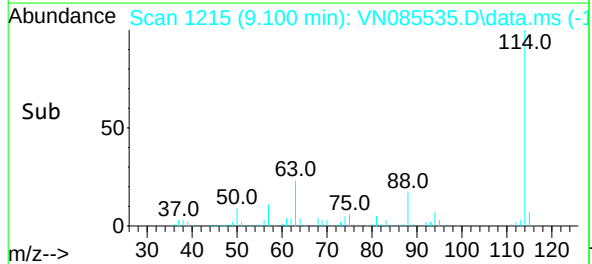
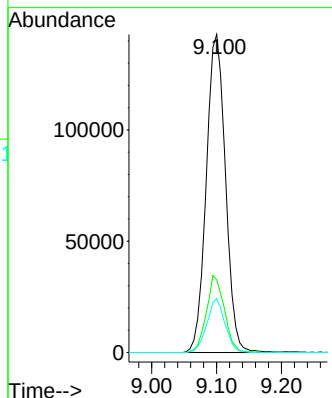
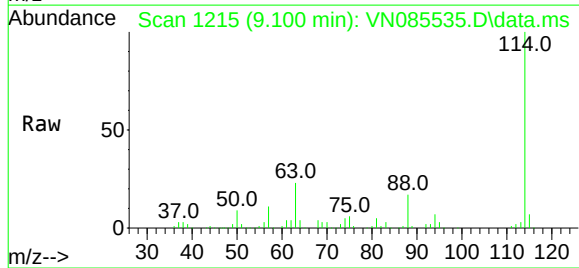
Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-EB-20250124

|             |              |
|-------------|--------------|
| Tgt Ion:114 | Resp: 293573 |
| Ion Ratio   | Lower Upper  |
| 114 100     |              |
| 63 22.8     | 0.0 47.6     |
| 88 17.0     | 0.0 32.6     |



#35

Dibromofluoromethane

Concen: 53.724 ug/l

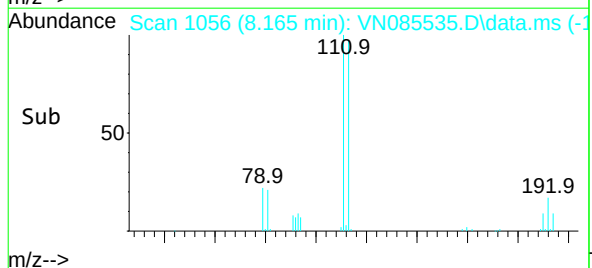
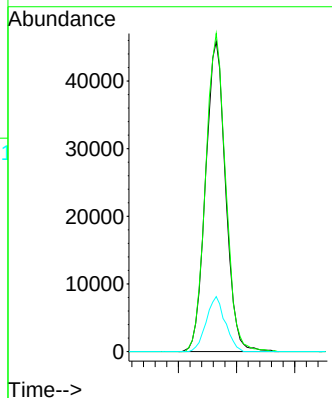
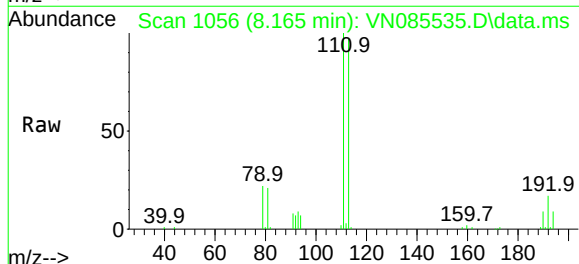
RT: 8.165 min Scan# 1056

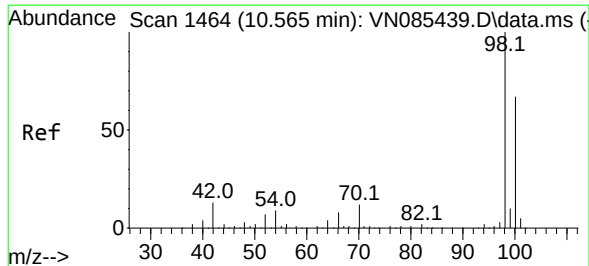
Delta R.T. 0.006 min

Lab File: VN085535.D

Acq: 28 Jan 2025 13:49

|             |              |
|-------------|--------------|
| Tgt Ion:113 | Resp: 109419 |
| Ion Ratio   | Lower Upper  |
| 113 100     |              |
| 111 102.6   | 82.7 124.1   |
| 192 16.8    | 14.3 21.5    |





#50

Toluene-d8

Concen: 49.469 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085535.D

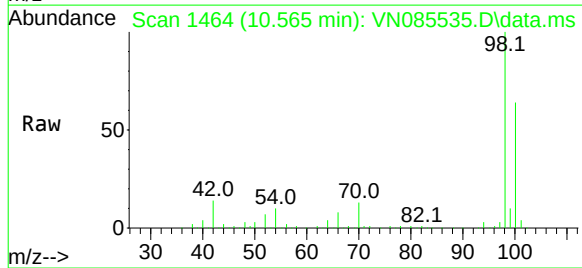
Acq: 28 Jan 2025 13:49

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-EB-20250124

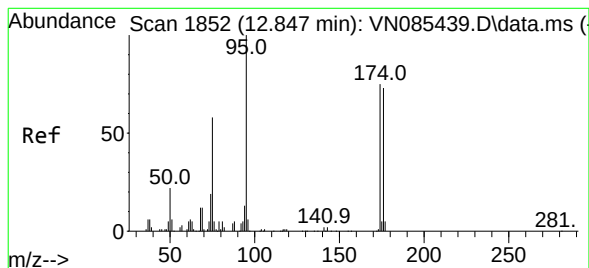
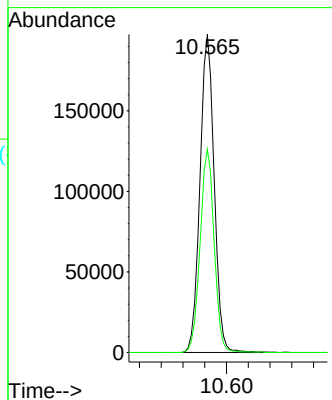
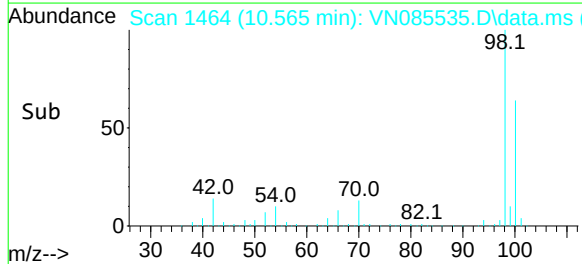


Tgt Ion: 98 Resp: 357973

Ion Ratio Lower Upper

98 100

100 63.3 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 43.305 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085535.D

Acq: 28 Jan 2025 13:49

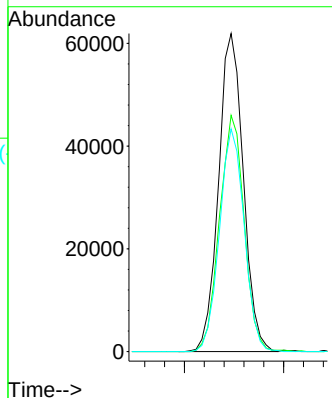
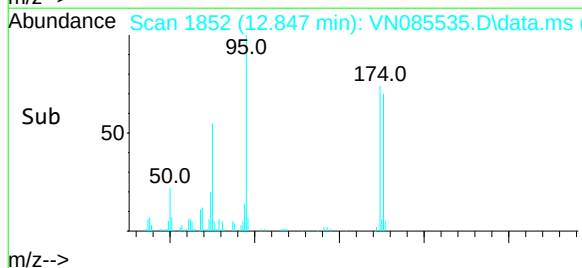
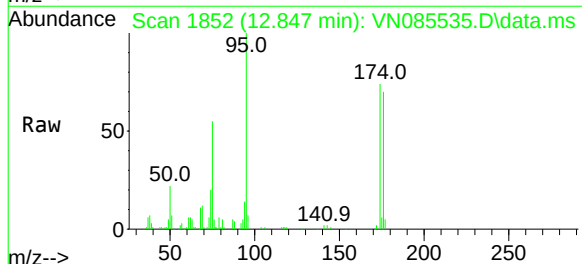
Tgt Ion: 95 Resp: 107196

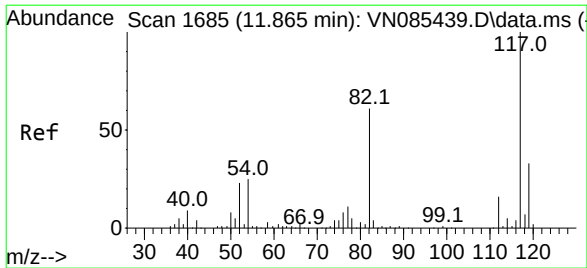
Ion Ratio Lower Upper

95 100

174 74.1 0.0 145.0

176 69.7 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085535.D

Acq: 28 Jan 2025 13:49

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-EB-20250124

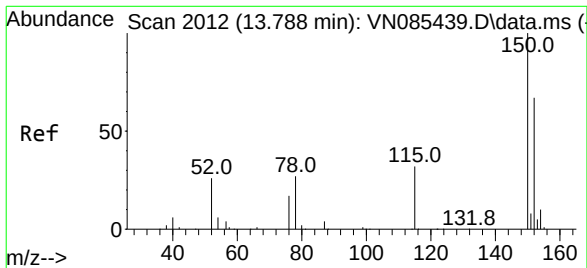
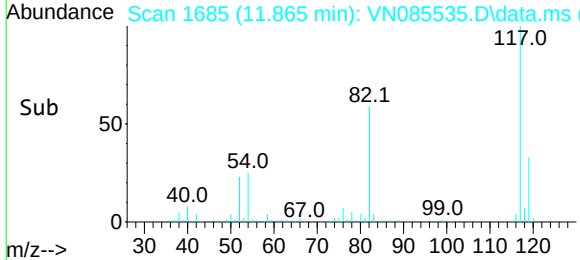
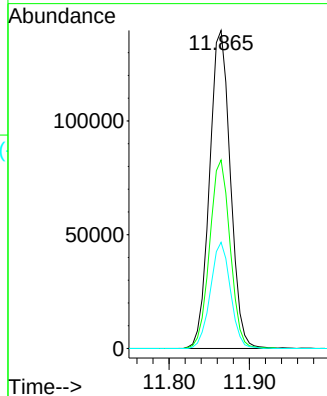
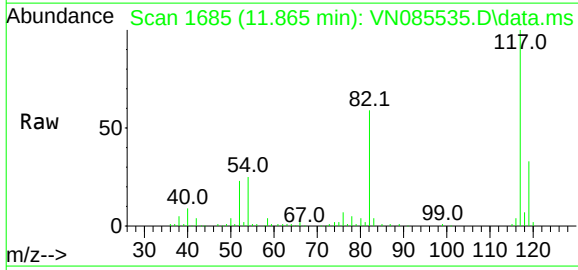
Tgt Ion:117 Resp: 250987

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

119 33.4 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085535.D

Acq: 28 Jan 2025 13:49

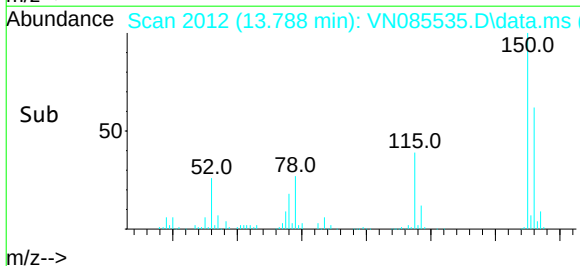
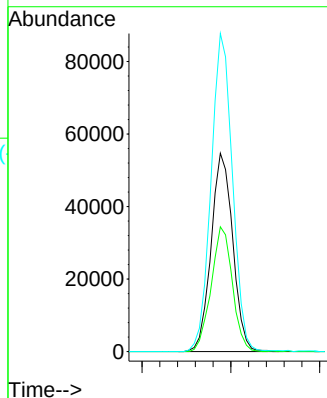
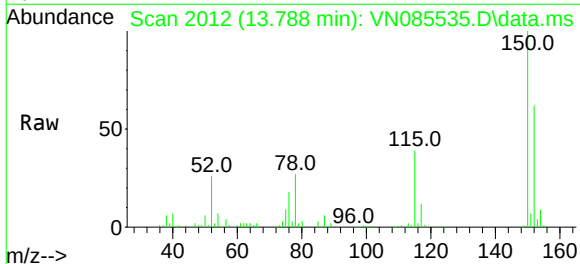
Tgt Ion:152 Resp: 92670

Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 158.3 0.0 343.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085535.D  
Acq On : 28 Jan 2025 13:49  
Operator : JC\MD  
Sample : Q1199-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260

Signal : TIC: VN085535.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.318       | 50            | 62          | 67           | rBV      | 53437          | 81473         | 8.36%           | 1.619%        |
| 2         | 8.165       | 1046          | 1056        | 1060         | rBV      | 153066         | 358050        | 36.75%          | 7.115%        |
| 3         | 8.224       | 1060          | 1066        | 1077         | rVB      | 235036         | 527888        | 54.18%          | 10.489%       |
| 4         | 8.577       | 1116          | 1126        | 1140         | rBV      | 174352         | 388867        | 39.91%          | 7.727%        |
| 5         | 9.100       | 1206          | 1215        | 1227         | rBV      | 362094         | 736413        | 75.59%          | 14.633%       |
| 6         | 10.565      | 1456          | 1464        | 1479         | rBV      | 539422         | 974245        | 100.00%         | 19.359%       |
| 7         | 11.865      | 1676          | 1685        | 1697         | rBV      | 463575         | 820833        | 84.25%          | 16.310%       |
| 8         | 12.847      | 1844          | 1852        | 1862         | rBV      | 316744         | 544778        | 55.92%          | 10.825%       |
| 9         | 13.788      | 2004          | 2012        | 2023         | rBV      | 358369         | 600081        | 61.59%          | 11.924%       |

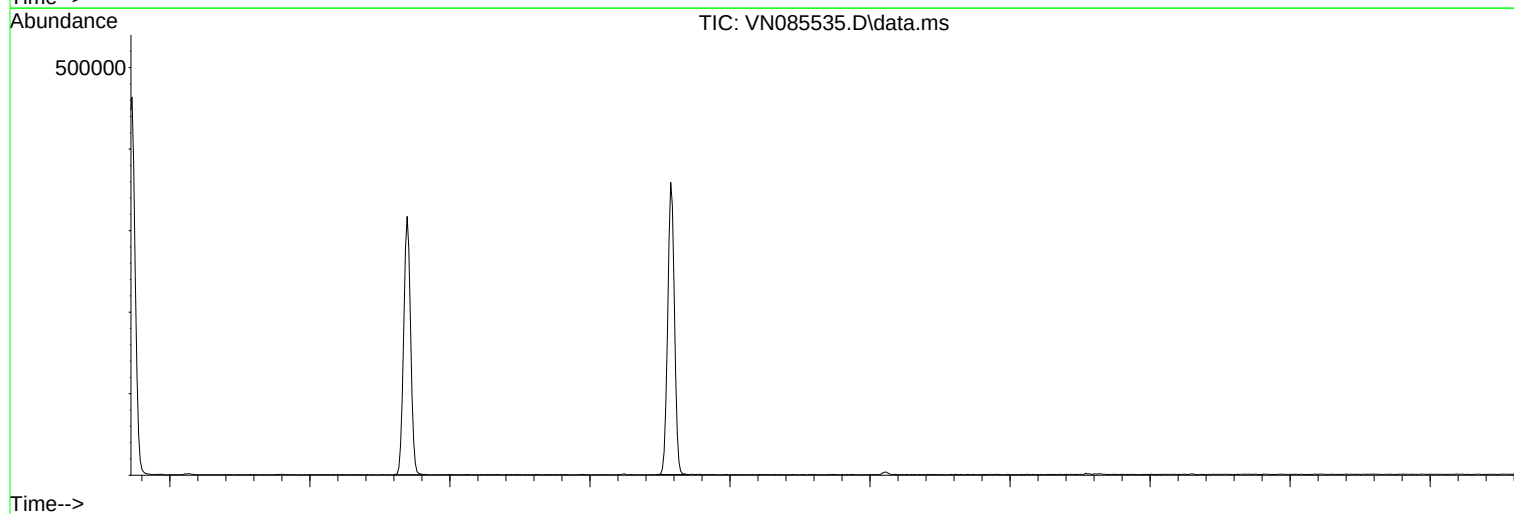
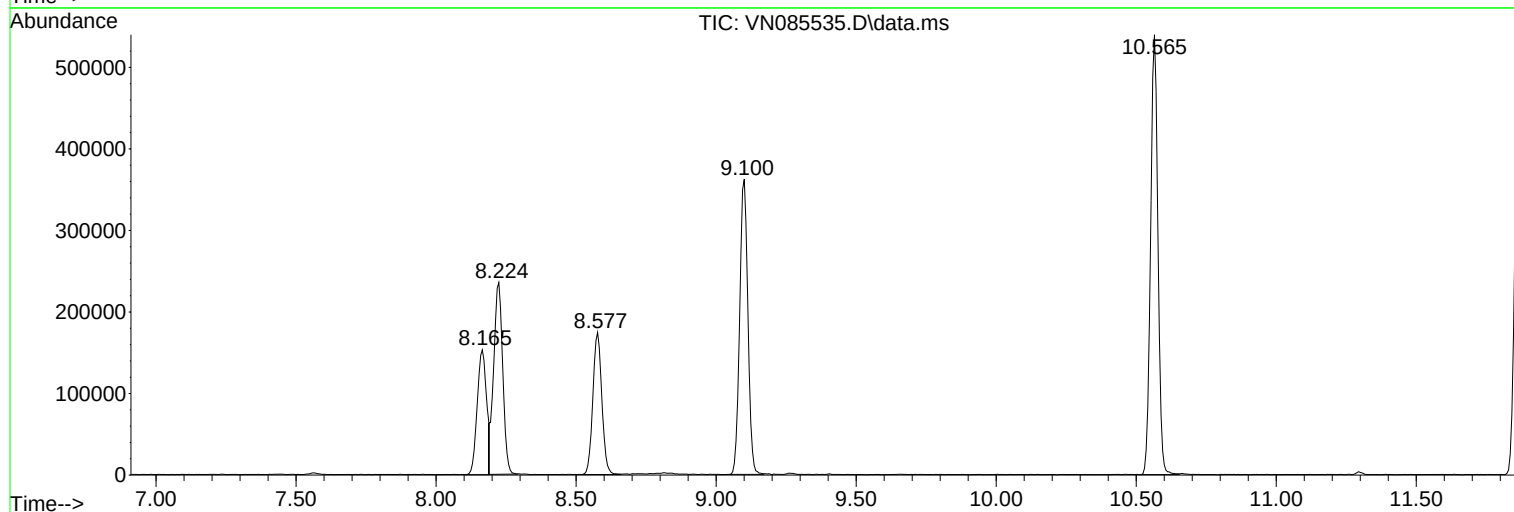
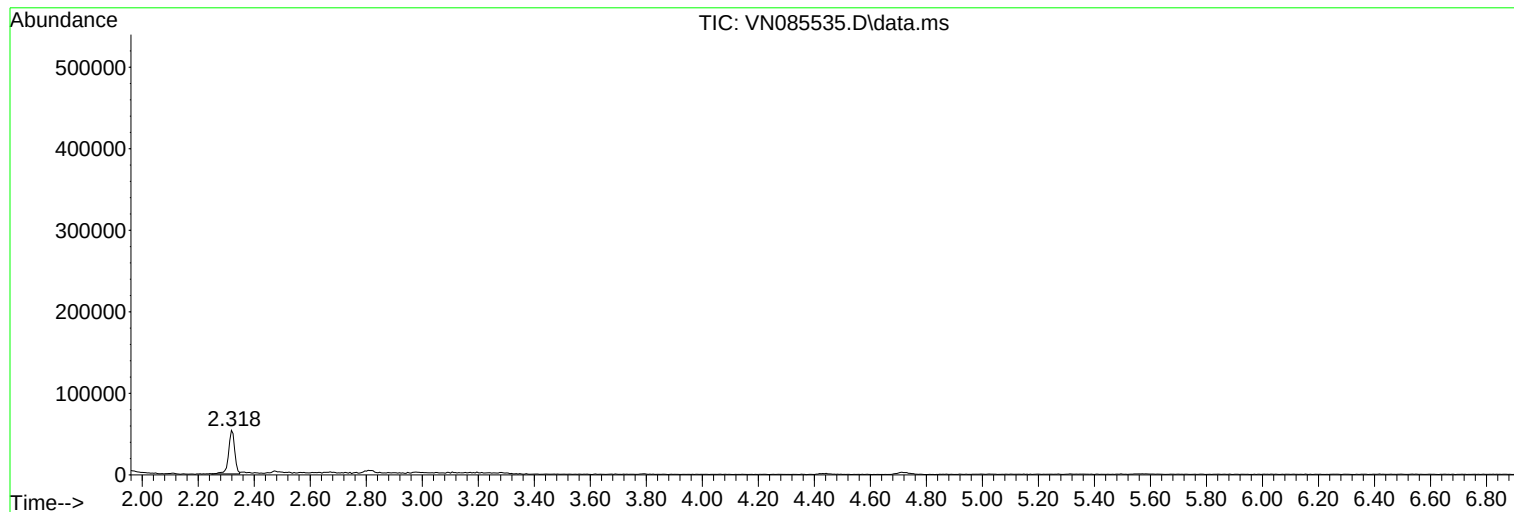
Sum of corrected areas: 5032628

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085535.D  
Acq On : 28 Jan 2025 13:49  
Operator : JC\MD  
Sample : Q1199-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085535.D  
Acq On : 28 Jan 2025 13:49  
Operator : JC\MD  
Sample : Q1199-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085535.D  
Acq On : 28 Jan 2025 13:49  
Operator : JC\MD  
Sample : Q1199-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                       |        |      |                 |              |    |  |
|--------------------|-----------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc.  |        |      | Date Collected: | 01/24/25     |    |  |
| Project:           | CTO WE13              |        |      | Date Received:  | 01/27/25     |    |  |
| Client Sample ID:  | BP-VPB-192-GW-280-282 |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | Q1199-03              |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260                |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                     | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                       |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624               | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                       |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085536.D        | 1         |           | 01/28/25 14:13 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 3.80  | J         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/24/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-280-282                     | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-03                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085536.D        | 1         |           | 01/28/25 14:13 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 57.0   |           | 81 - 118 |      | 114%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 54.0   |           | 80 - 119 |      | 108%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 50.0   |           | 89 - 112 |      | 100%       | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 47.0   |           | 85 - 114 |      | 94%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 163000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 301000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 271000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 109000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/24/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-280-282                     | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-03                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085536.D        | 1         |           | 01/28/25 14:13 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085536.D  
 Acq On : 28 Jan 2025 14:13  
 Operator : JC\MD  
 Sample : Q1199-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-280-282

Quant Time: Jan 29 00:39:05 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

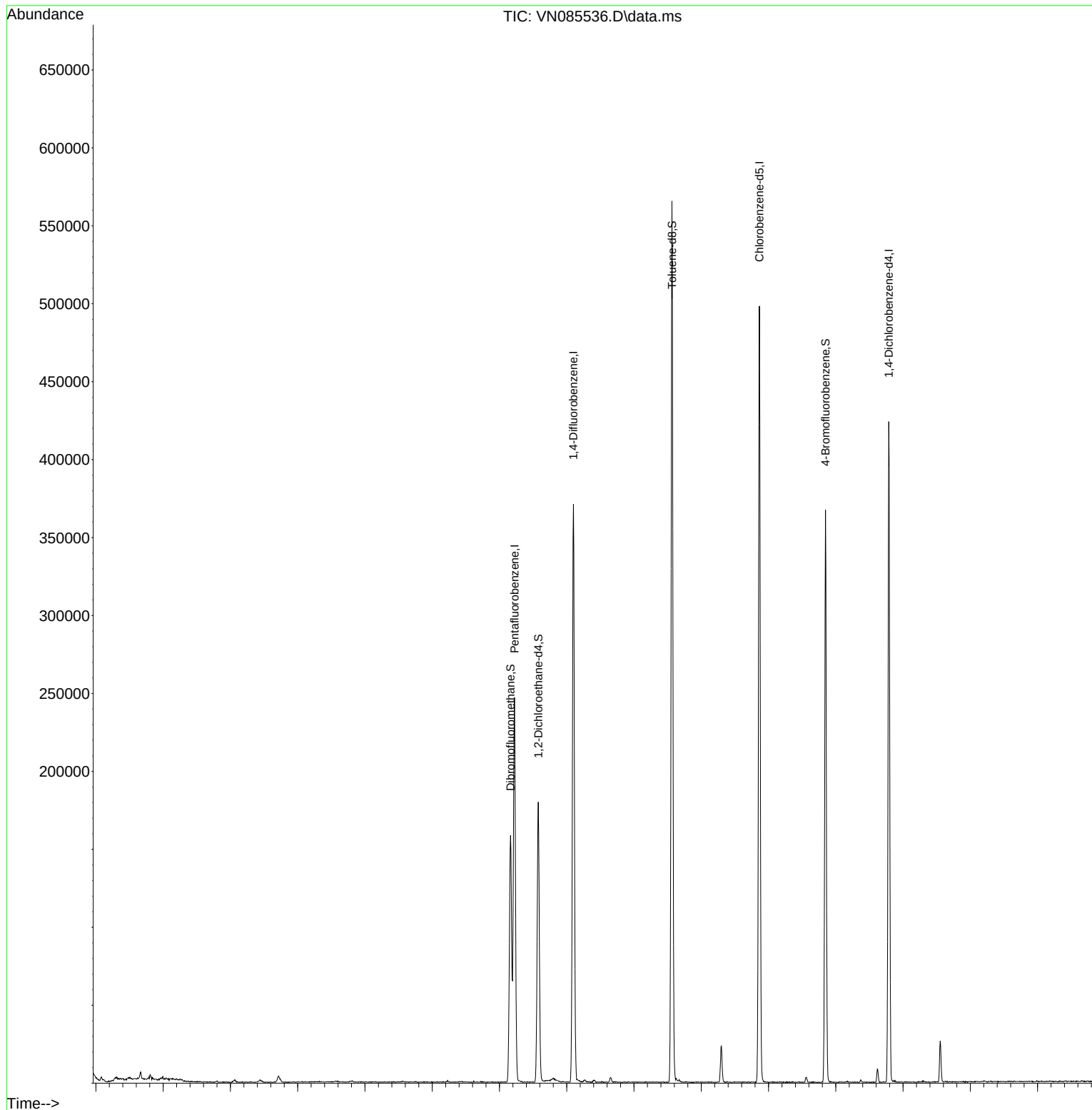
| Compound                    | R.T.           | QIon | Response            | Conc   | Units | Dev(Min)  |
|-----------------------------|----------------|------|---------------------|--------|-------|-----------|
| -----                       |                |      |                     |        |       |           |
| Internal Standards          |                |      |                     |        |       |           |
| 1) Pentafluorobenzene       | 8.224          | 168  | 162876              | 50.000 | ug/l  | 0.00      |
| 34) 1,4-Difluorobenzene     | 9.100          | 114  | 301319              | 50.000 | ug/l  | 0.00      |
| 63) Chlorobenzene-d5        | 11.865         | 117  | 270559              | 50.000 | ug/l  | 0.00      |
| 72) 1,4-Dichlorobenzene-d4  | 13.788         | 152  | 109450              | 50.000 | ug/l  | 0.00      |
|                             |                |      |                     |        |       |           |
| System Monitoring Compounds |                |      |                     |        |       |           |
| 33) 1,2-Dichloroethane-d4   | 8.577          | 65   | 149778              | 56.968 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 74 - 125 |      | Recovery = 113.940% |        |       |           |
| 35) Dibromofluoromethane    | 8.165          | 113  | 112960              | 54.037 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 75 - 124 |      | Recovery = 108.080% |        |       |           |
| 50) Toluene-d8              | 10.565         | 98   | 371723              | 50.049 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 86 - 113 |      | Recovery = 100.100% |        |       |           |
| 62) 4-Bromofluorobenzene    | 12.847         | 95   | 119312              | 46.961 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 77 - 121 |      | Recovery = 93.920%  |        |       |           |
|                             |                |      |                     |        |       |           |
| Target Compounds            |                |      |                     |        |       |           |
| 16) Acetone                 | 4.442          | 43   | 3210                | 3.779  | ug/l  | Qvalue 99 |
| -----                       |                |      |                     |        |       |           |

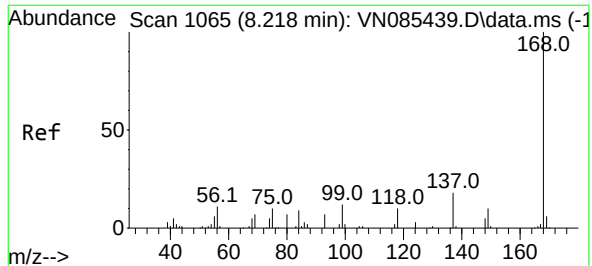
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085536.D  
Acq On : 28 Jan 2025 14:13  
Operator : JC\MD  
Sample : Q1199-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-280-282

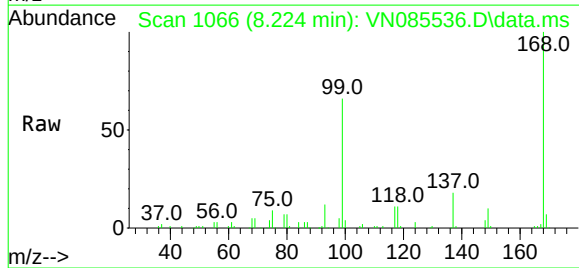
Quant Time: Jan 29 00:39:05 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



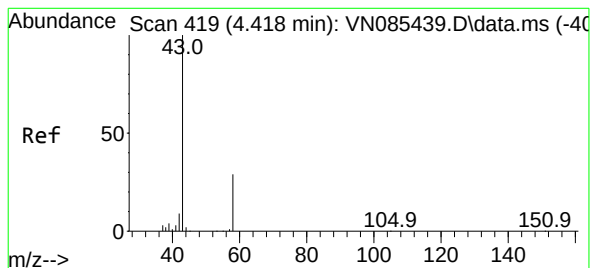
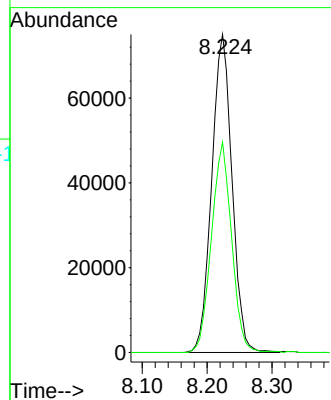
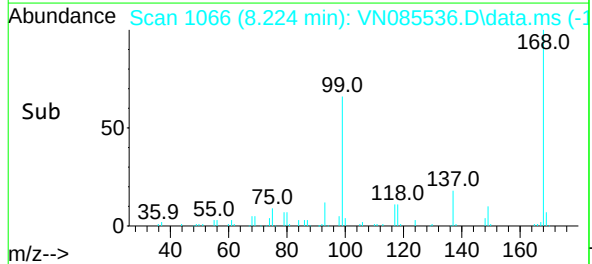


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085536.D  
Acq: 28 Jan 2025 14:13

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-280-282

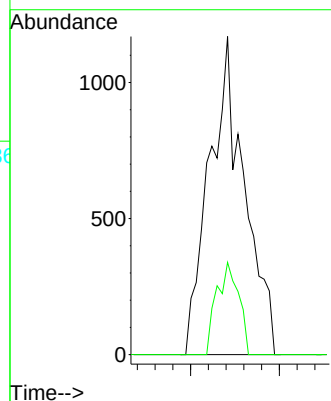
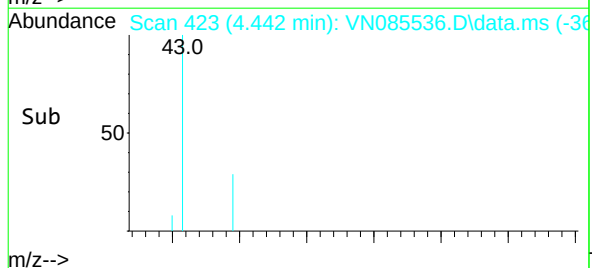
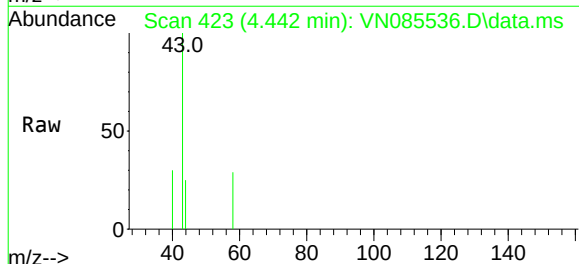


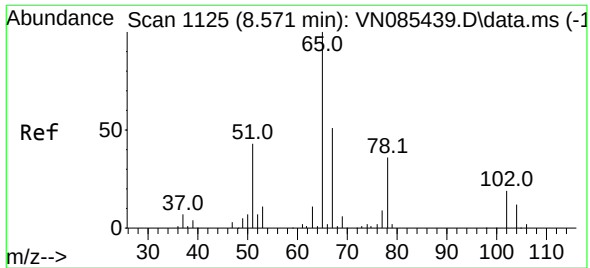
Tgt Ion:168 Resp: 162876  
Ion Ratio Lower Upper  
168 100  
99 66.2 53.6 80.4



#16  
Acetone  
Concen: 3.779 ug/l  
RT: 4.442 min Scan# 423  
Delta R.T. 0.024 min  
Lab File: VN085536.D  
Acq: 28 Jan 2025 14:13

Tgt Ion: 43 Resp: 3210  
Ion Ratio Lower Upper  
43 100  
58 29.0 23.8 35.6





#33

1,2-Dichloroethane-d4

Concen: 56.968 ug/l

RT: 8.577 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085536.D

Acq: 28 Jan 2025 14:13

Instrument :

MSVOA\_N

ClientSampleId :

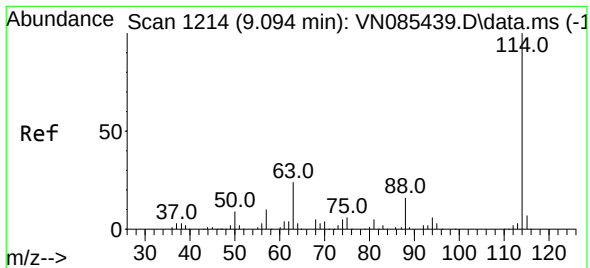
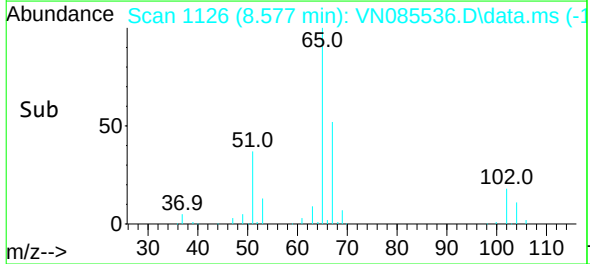
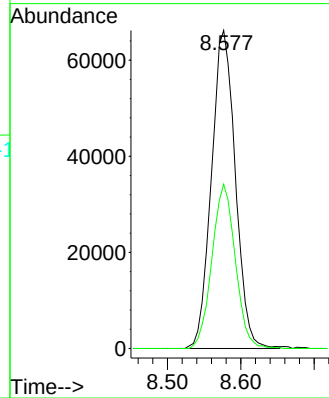
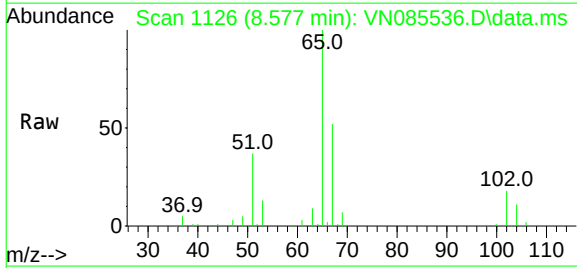
BP-VPB-192-GW-280-282

Tgt Ion: 65 Resp: 149778

Ion Ratio Lower Upper

65 100

67 50.5 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085536.D

Acq: 28 Jan 2025 14:13

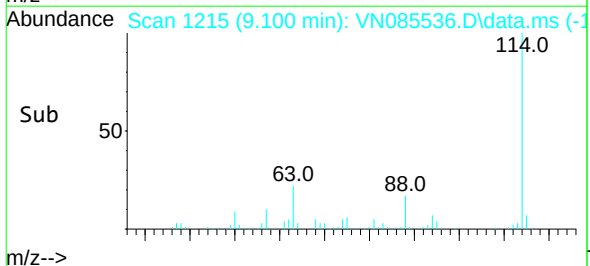
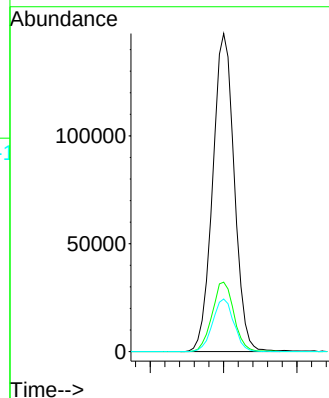
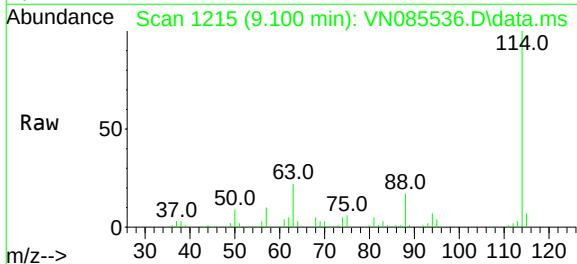
Tgt Ion: 114 Resp: 301319

Ion Ratio Lower Upper

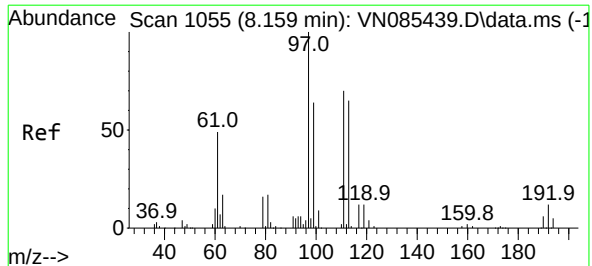
114 100

63 21.8 0.0 47.6

88 16.5 0.0 32.6







#35

Dibromofluoromethane

Concen: 54.037 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085536.D

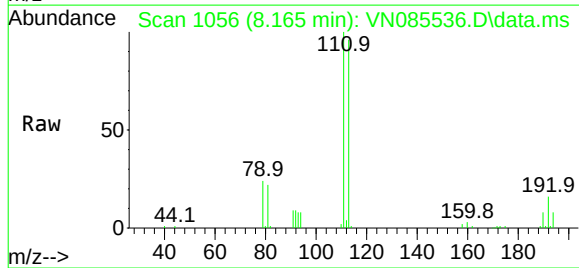
Acq: 28 Jan 2025 14:13

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-280-282



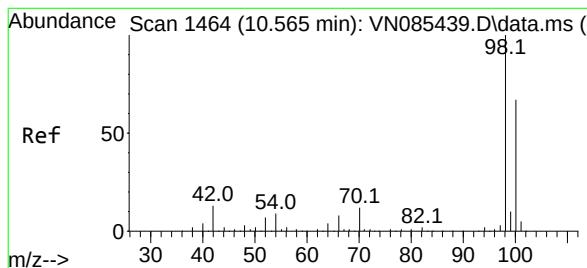
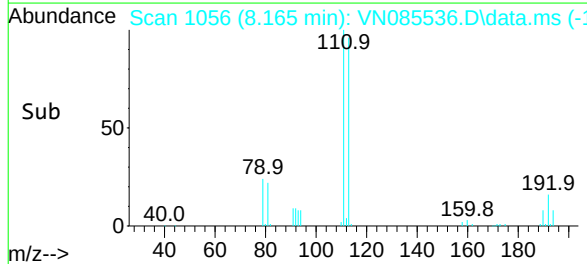
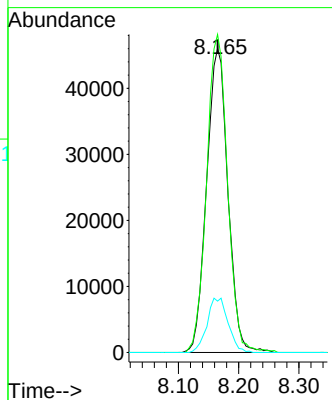
Tgt Ion: 113 Resp: 112960

Ion Ratio Lower Upper

113 100

111 103.0 82.7 124.1

192 17.7 14.3 21.5



#50

Toluene-d8

Concen: 50.049 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085536.D

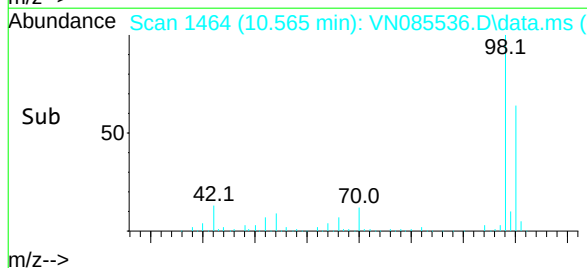
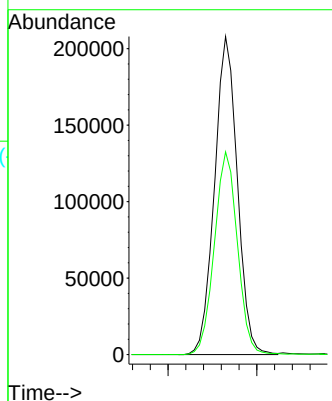
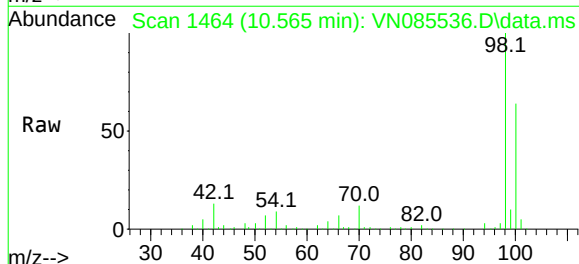
Acq: 28 Jan 2025 14:13

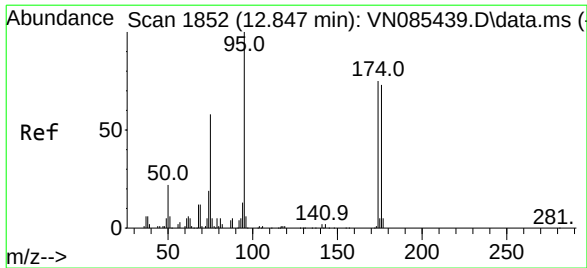
Tgt Ion: 98 Resp: 371723

Ion Ratio Lower Upper

98 100

100 64.3 52.2 78.4





#62

4-Bromofluorobenzene

Concen: 46.961 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085536.D

Acq: 28 Jan 2025 14:13

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-280-282

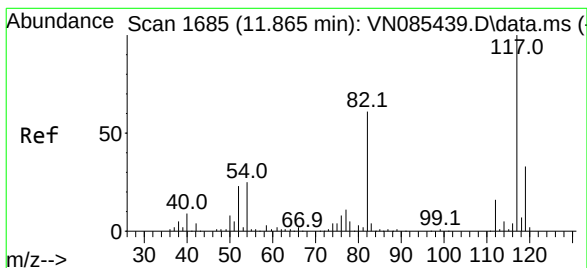
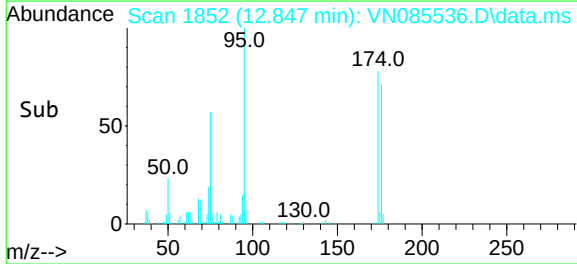
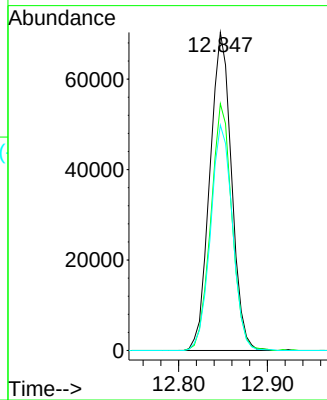
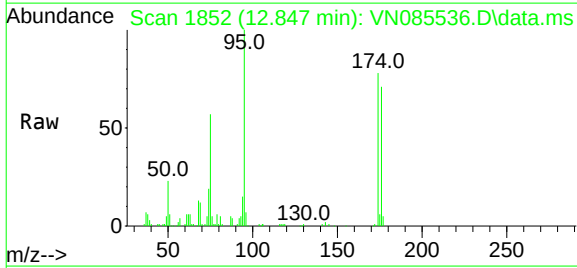
Tgt Ion: 95 Resp: 119312

Ion Ratio Lower Upper

95 100

174 75.7 0.0 145.0

176 71.4 0.0 142.4



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085536.D

Acq: 28 Jan 2025 14:13

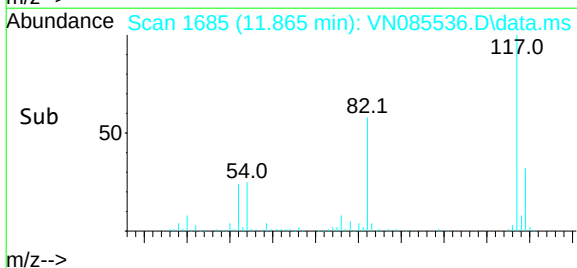
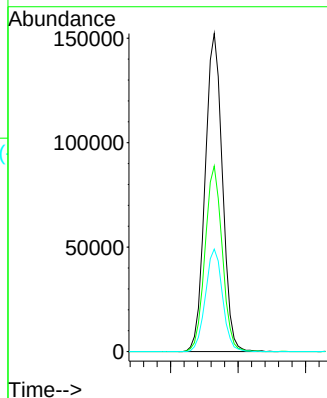
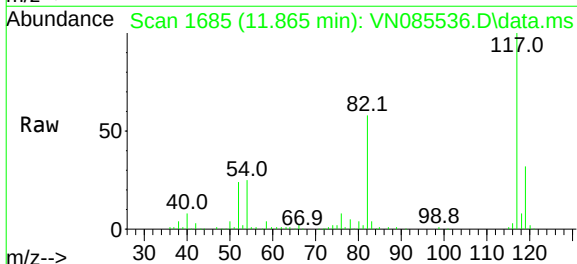
Tgt Ion: 117 Resp: 270559

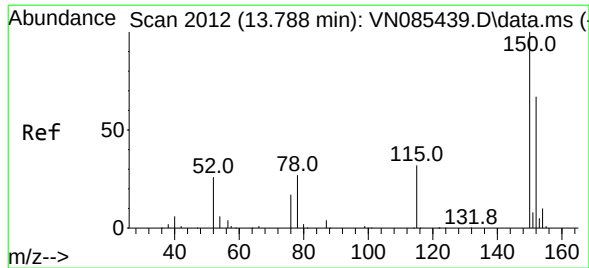
Ion Ratio Lower Upper

117 100

82 58.4 48.6 72.8

119 32.2 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN085536.D

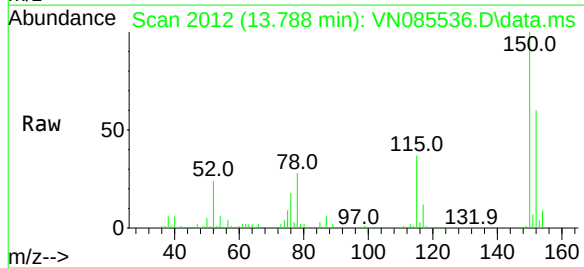
Acq: 28 Jan 2025 14:13

Instrument :

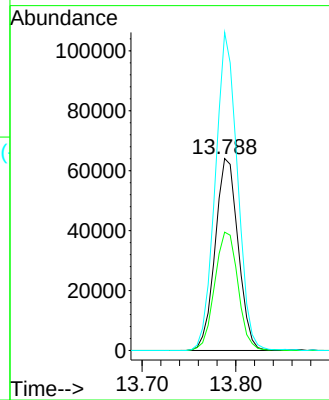
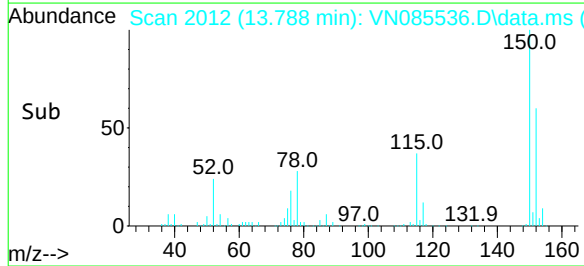
MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-280-282



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 109450 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.6  | 31.1  | 93.3   |
| 150       | 159.5 | 0.0   | 343.6  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085536.D  
 Acq On : 28 Jan 2025 14:13  
 Operator : JC\MD  
 Sample : Q1199-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-280-282

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Title : SW846 8260

Signal : TIC: VN085536.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 4.718       | 461           | 470         | 480          | rBV4     | 4037           | 11562         | 1.14%           | 0.214%        |
| 2         | 8.165       | 1043          | 1056        | 1061         | rBV2     | 158417         | 391775        | 38.48%          | 7.255%        |
| 3         | 8.224       | 1061          | 1066        | 1076         | rVB2     | 245965         | 522468        | 51.32%          | 9.675%        |
| 4         | 8.577       | 1116          | 1126        | 1140         | rBV2     | 179747         | 400957        | 39.38%          | 7.425%        |
| 5         | 9.100       | 1206          | 1215        | 1223         | rBV      | 370767         | 755027        | 74.16%          | 13.981%       |
| 6         | 10.565      | 1456          | 1464        | 1473         | rBV      | 565147         | 1018115       | 100.00%         | 18.853%       |
| 7         | 11.300      | 1583          | 1589        | 1597         | rVB      | 23159          | 39938         | 3.92%           | 0.740%        |
| 8         | 11.865      | 1676          | 1685        | 1695         | rBV      | 498106         | 882446        | 86.67%          | 16.341%       |
| 9         | 12.847      | 1845          | 1852        | 1863         | rVB      | 367128         | 612540        | 60.16%          | 11.343%       |
| 10        | 13.618      | 1978          | 1983        | 1989         | rVB3     | 8547           | 13309         | 1.31%           | 0.246%        |
| 11        | 13.788      | 2005          | 2012        | 2024         | rBV      | 423608         | 710833        | 69.82%          | 13.163%       |
| 12        | 14.553      | 2137          | 2142        | 2151         | rBV4     | 26449          | 41259         | 4.05%           | 0.764%        |

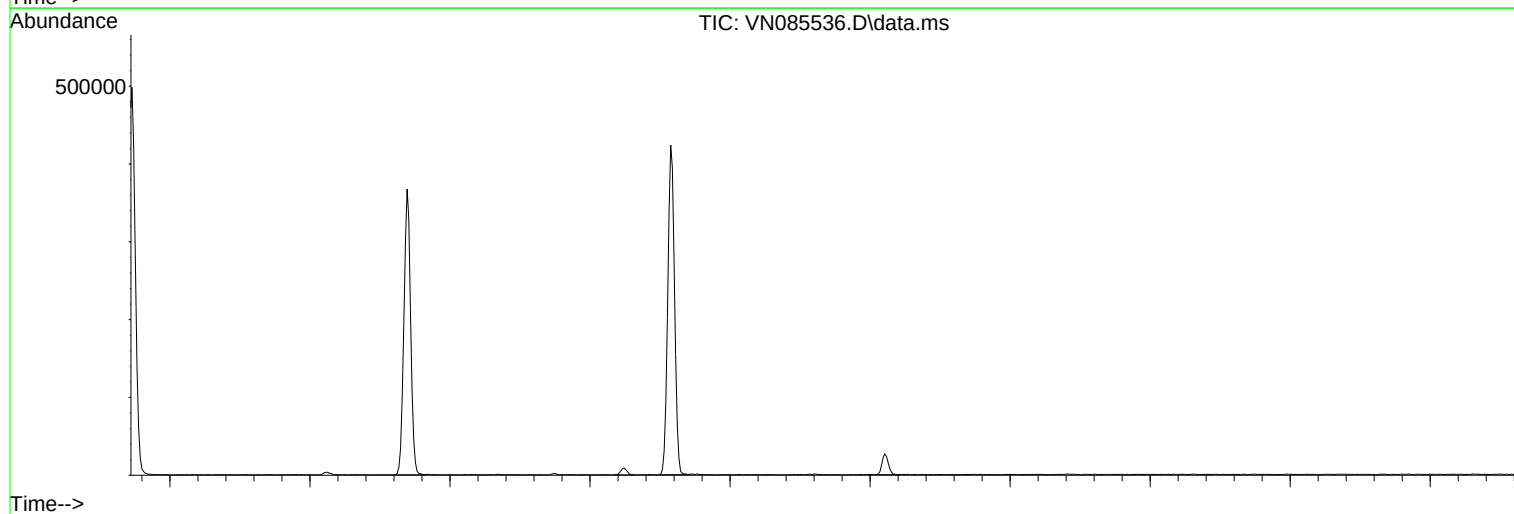
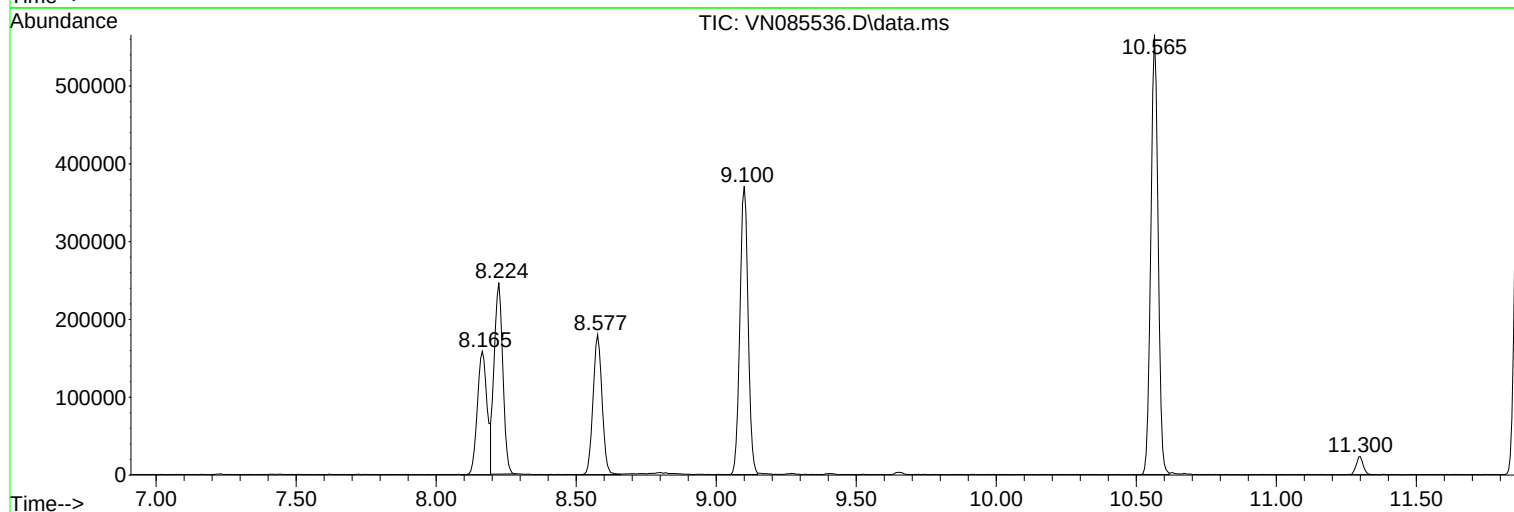
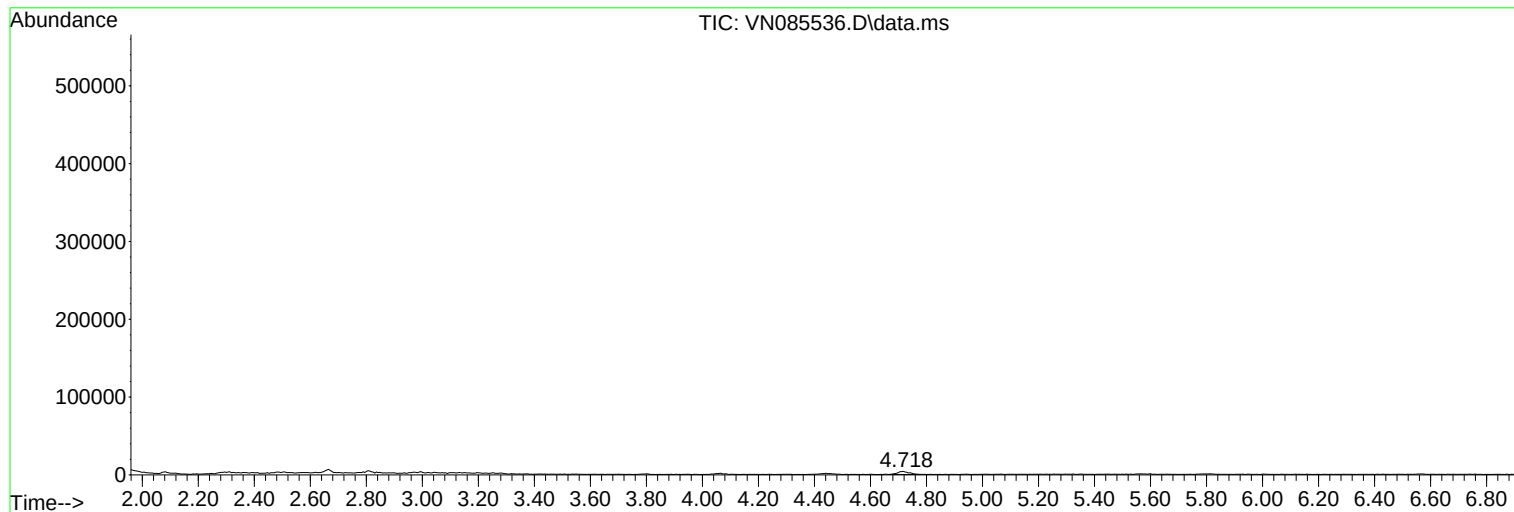
Sum of corrected areas: 5400229

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085536.D  
Acq On : 28 Jan 2025 14:13  
Operator : JC\MD  
Sample : Q1199-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-280-282

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085536.D  
Acq On : 28 Jan 2025 14:13  
Operator : JC\MD  
Sample : Q1199-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-280-282

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085536.D  
Acq On : 28 Jan 2025 14:13  
Operator : JC\MD  
Sample : Q1199-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-192-GW-280-282

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |    |           |
|------------------|----|---------|-------|----------|-----------------------|----|-----------|
|                  |    |         |       |          | #                     | RT | Resp Conc |

-----

## Report of Analysis

|                    |                       |        |      |                 |              |    |
|--------------------|-----------------------|--------|------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |        |      | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |        |      | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-260-262 |        |      | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-04              |        |      | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |        |      | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: | mL   | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       |        | uL   | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID :   | 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |        |      |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085537.D        | 1         |           | 01/28/25 14:37 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 6.30  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |



### Report of Analysis

|                    |                       |           |                 |              |    |
|--------------------|-----------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |           | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |           | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-260-262 |           | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-04              |           | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |           | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: mL | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       | uL        | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID : 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |           |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085537.D        | 1         |           | 01/28/25 14:37 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 57.2   |           | 81 - 118 |      | 114%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 53.6   |           | 80 - 119 |      | 107%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 48.8   |           | 89 - 112 |      | 98%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 43.5   |           | 85 - 114 |      | 87%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 153000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 288000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 249000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 90600  | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                       |           |                 |              |    |
|--------------------|-----------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |           | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |           | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-260-262 |           | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-04              |           | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |           | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: mL | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       | uL        | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID : 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |           |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085537.D        | 1         |           | 01/28/25 14:37 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085537.D  
 Acq On : 28 Jan 2025 14:37  
 Operator : JC\MD  
 Sample : Q1199-04  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-260-262

Quant Time: Jan 29 00:39:25 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

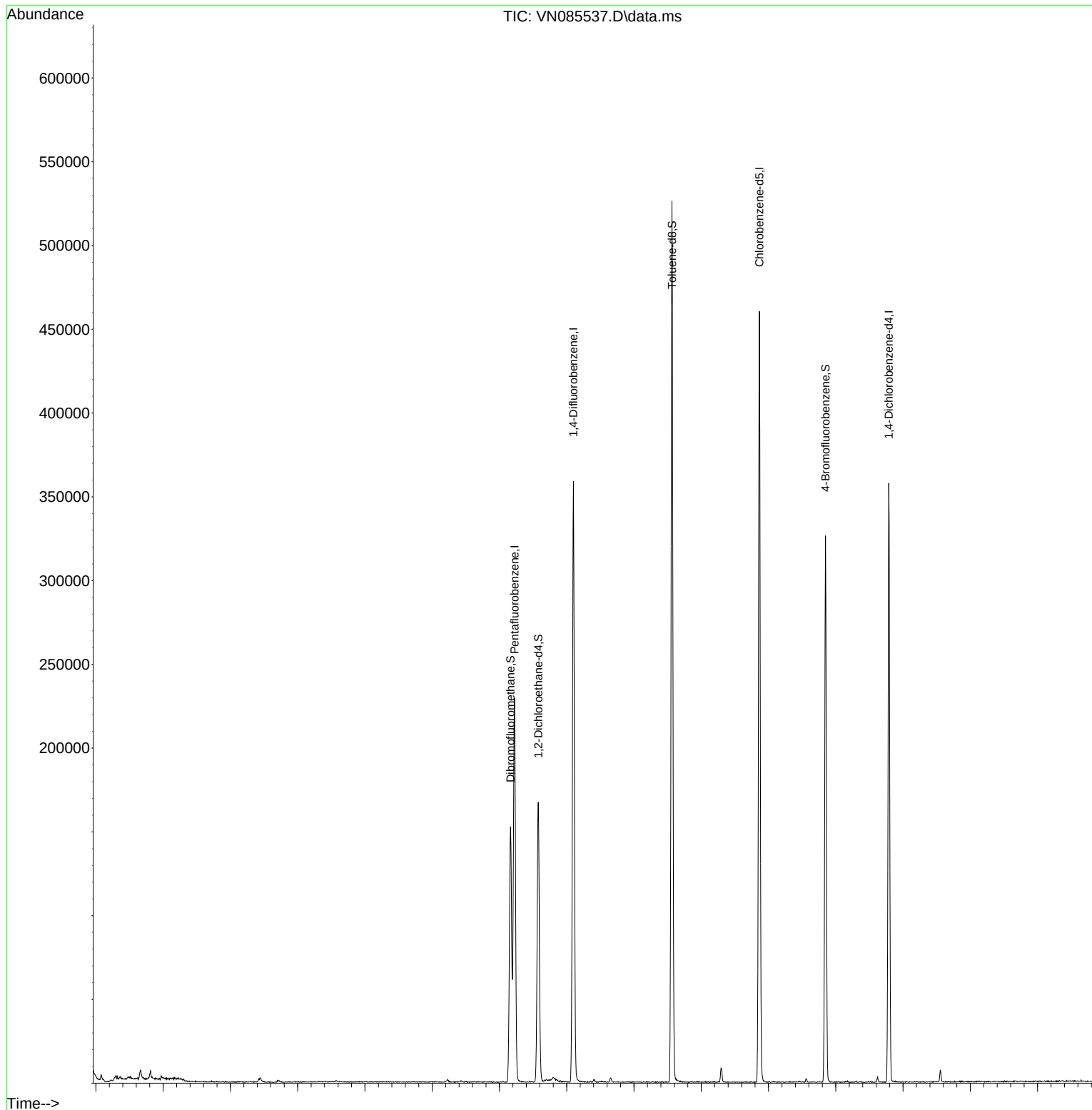
| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min)  |
|-----------------------------|--------|----------------|----------|--------|----------|-----------|
| -----                       |        |                |          |        |          |           |
| Internal Standards          |        |                |          |        |          |           |
| 1) Pentafluorobenzene       | 8.224  | 168            | 153446   | 50.000 | ug/l     | 0.00      |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 287847   | 50.000 | ug/l     | 0.00      |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 248805   | 50.000 | ug/l     | 0.00      |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 90634    | 50.000 | ug/l     | 0.00      |
|                             |        |                |          |        |          |           |
| System Monitoring Compounds |        |                |          |        |          |           |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 141633   | 57.181 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 114.360% |           |
| 35) Dibromofluoromethane    | 8.165  | 113            | 107001   | 53.582 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 107.160% |           |
| 50) Toluene-d8              | 10.565 | 98             | 346432   | 48.827 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 97.660%  |           |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 105662   | 43.535 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 87.060%  |           |
|                             |        |                |          |        |          |           |
| Target Compounds            |        |                |          |        |          |           |
| 16) Acetone                 | 4.447  | 43             | 5039     | 6.296  | ug/l     | Qvalue 93 |
| -----                       |        |                |          |        |          |           |

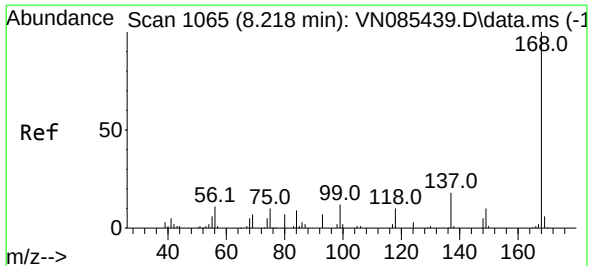
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085537.D  
Acq On : 28 Jan 2025 14:37  
Operator : JC\MD  
Sample : Q1199-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

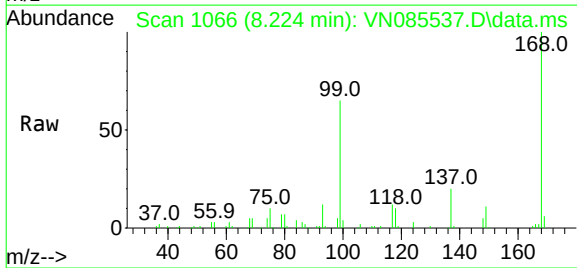
Quant Time: Jan 29 00:39:25 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



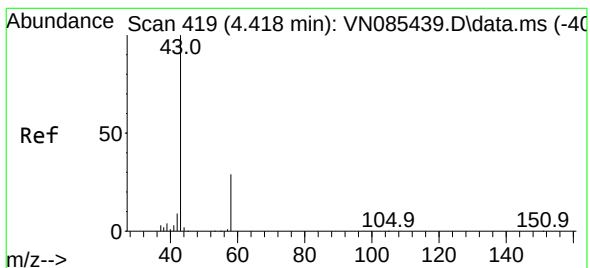
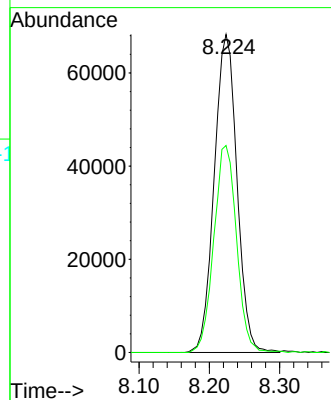
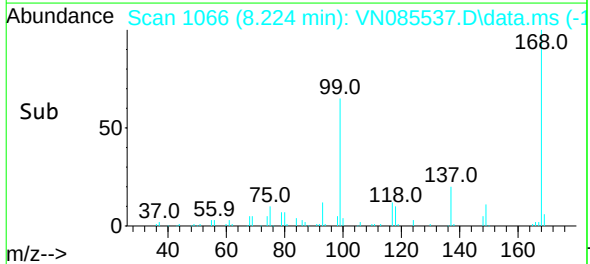


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085537.D  
Acq: 28 Jan 2025 14:37

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

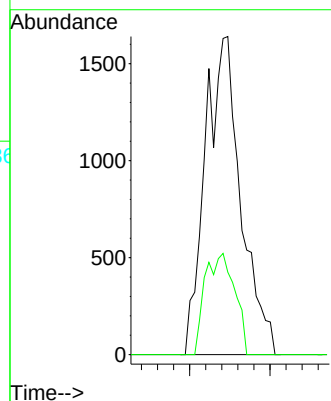
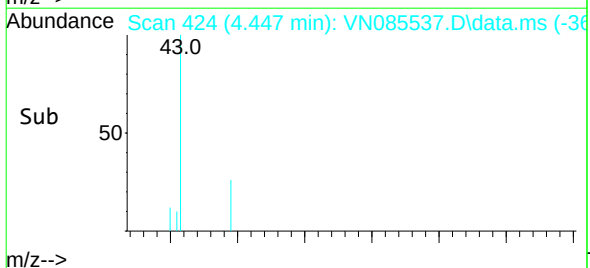
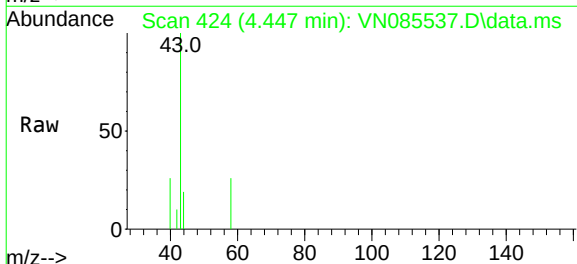


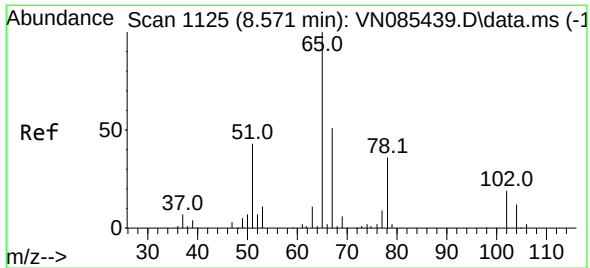
Tgt Ion:168 Resp: 153446  
Ion Ratio Lower Upper  
168 100  
99 65.1 53.6 80.4



#16  
Acetone  
Concen: 6.296 ug/l  
RT: 4.447 min Scan# 424  
Delta R.T. 0.029 min  
Lab File: VN085537.D  
Acq: 28 Jan 2025 14:37

Tgt Ion: 43 Resp: 5039  
Ion Ratio Lower Upper  
43 100  
58 25.9 23.8 35.6





#33

1,2-Dichloroethane-d4

Concen: 57.181 ug/l

RT: 8.577 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085537.D

Acq: 28 Jan 2025 14:37

Instrument :

MSVOA\_N

ClientSampleId :

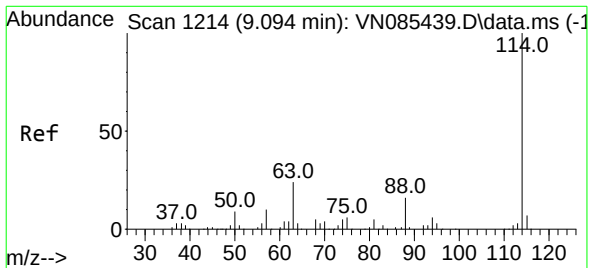
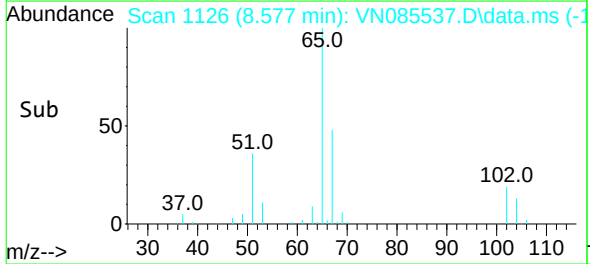
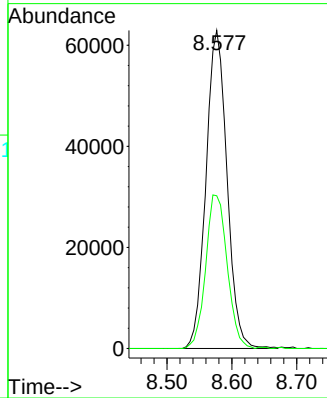
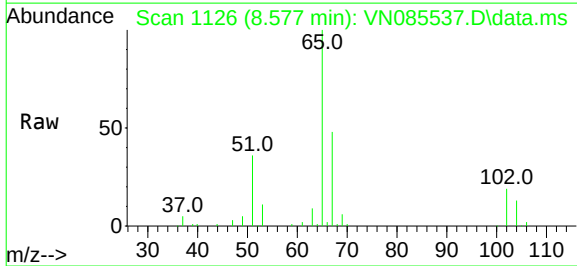
BP-VPB-192-GW-260-262

Tgt Ion: 65 Resp: 141633

Ion Ratio Lower Upper

65 100

67 49.5 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085537.D

Acq: 28 Jan 2025 14:37

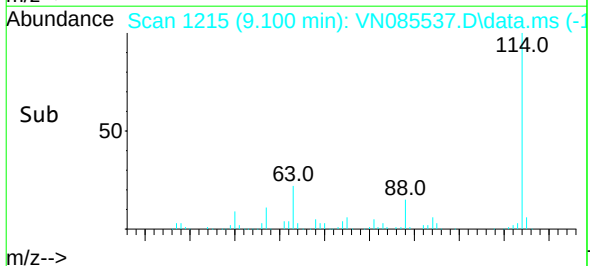
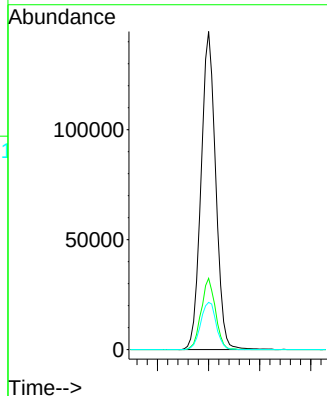
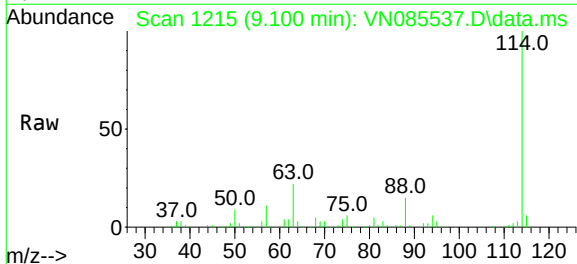
Tgt Ion: 114 Resp: 287847

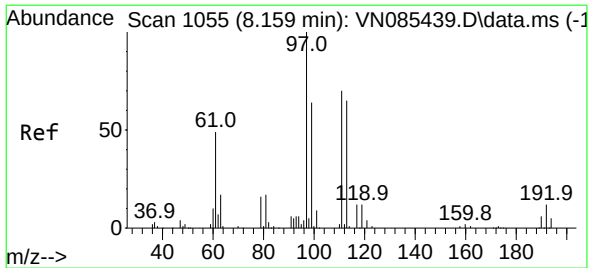
Ion Ratio Lower Upper

114 100

63 22.4 0.0 47.6

88 14.8 0.0 32.6





#35

Dibromofluoromethane

Concen: 53.582 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085537.D

Acq: 28 Jan 2025 14:37

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-260-262

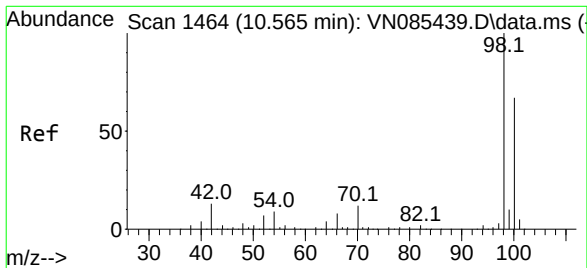
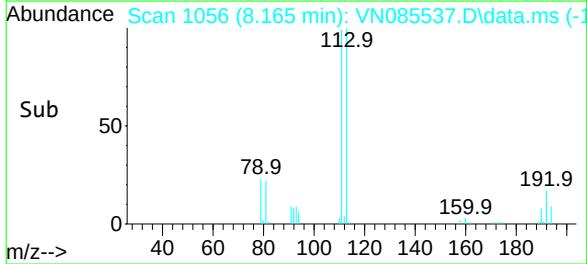
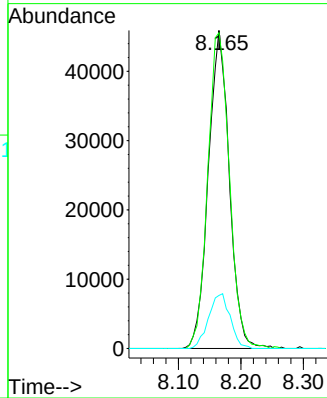
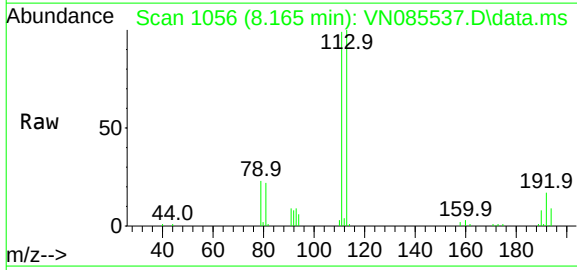
Tgt Ion:113 Resp: 107001

Ion Ratio Lower Upper

113 100

111 102.5 82.7 124.1

192 17.7 14.3 21.5



#50

Toluene-d8

Concen: 48.827 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085537.D

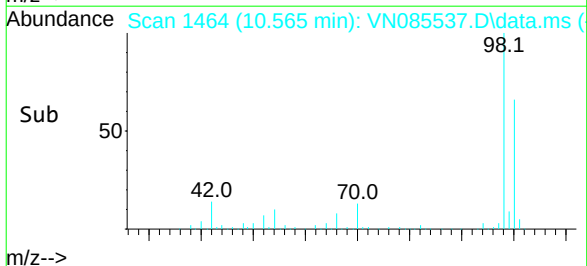
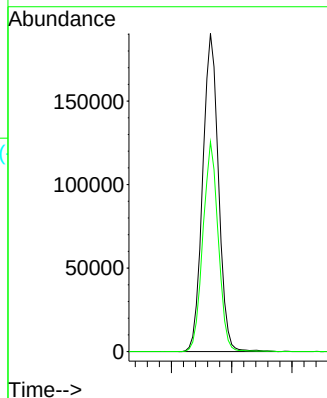
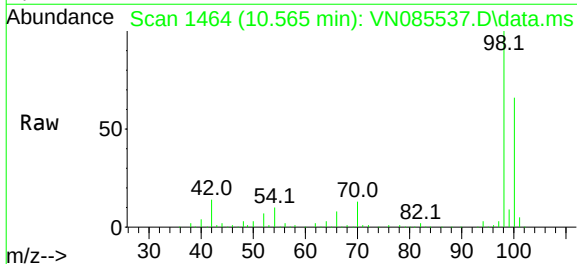
Acq: 28 Jan 2025 14:37

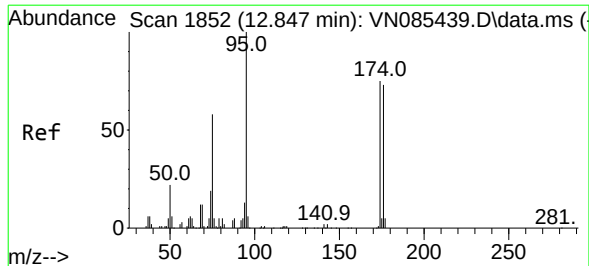
Tgt Ion: 98 Resp: 346432

Ion Ratio Lower Upper

98 100

100 64.1 52.2 78.4





#62

4-Bromofluorobenzene

Concen: 43.535 ug/l

RT: 12.847 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085537.D

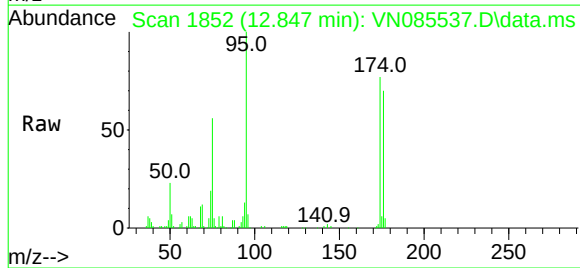
Acq: 28 Jan 2025 14:37

Instrument :

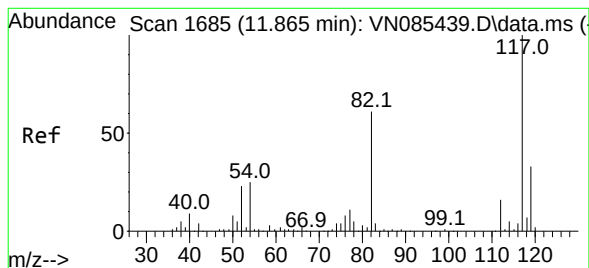
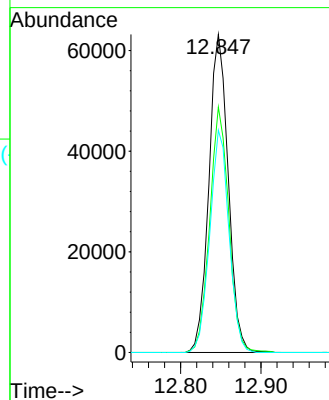
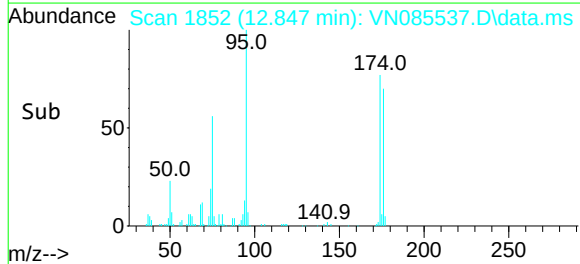
MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-260-262



| Tgt Ion:  | 95    | Resp: | 105662 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 76.3  | 0.0   | 145.0  |
| 176       | 69.3  | 0.0   | 142.4  |



#63

Chlorobenzene-d5

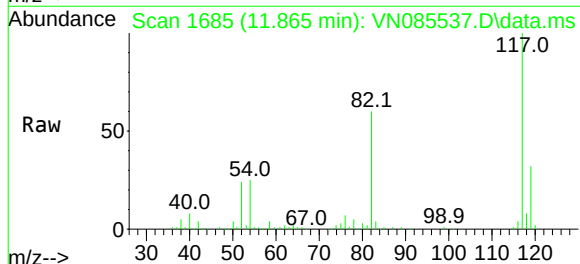
Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

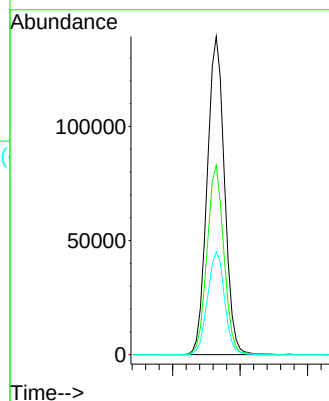
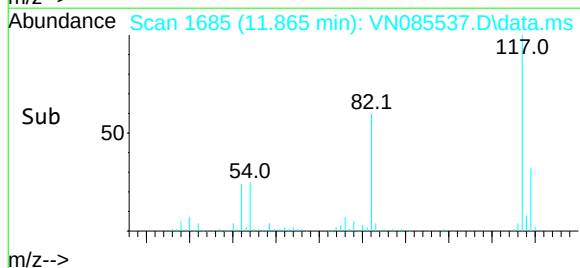
Delta R.T. -0.000 min

Lab File: VN085537.D

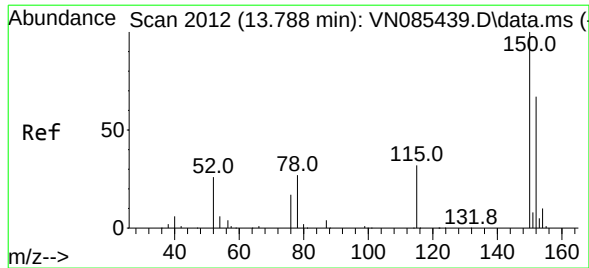
Acq: 28 Jan 2025 14:37



| Tgt Ion:  | 117   | Resp: | 248805 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 59.5  | 48.6  | 72.8   |
| 119       | 32.3  | 26.6  | 39.8   |







#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. -0.000 min

Lab File: VN085537.D

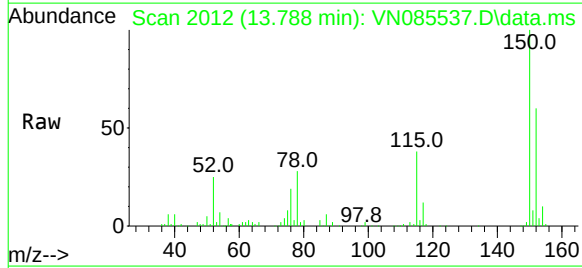
Acq: 28 Jan 2025 14:37

Instrument :

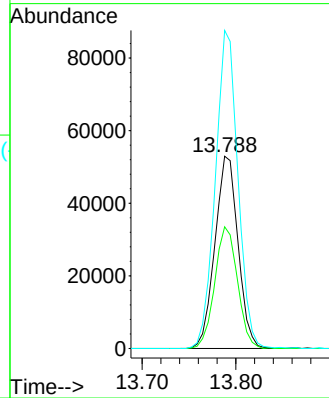
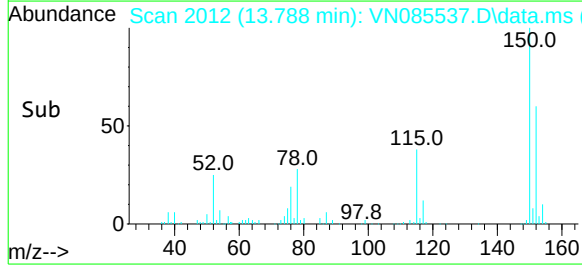
MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-260-262



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 90634 |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 115      | 62.2  | 31.1  | 93.3  |
| 150      | 161.9 | 0.0   | 343.6 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085537.D  
Acq On : 28 Jan 2025 14:37  
Operator : JC\MD  
Sample : Q1199-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

Integration Parameters: RTEINT.P  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 3 % of largest Peak  
Start Thrs: 0.2 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260

Signal : TIC: VN085537.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.665       | 115           | 121         | 126          | rBV4     | 5647           | 11275         | 1.19%           | 0.231%        |
| 2         | 8.165       | 1045          | 1056        | 1061         | rBV2     | 152611         | 371887        | 39.25%          | 7.623%        |
| 3         | 8.224       | 1061          | 1066        | 1079         | rVB      | 228846         | 493592        | 52.10%          | 10.118%       |
| 4         | 8.577       | 1115          | 1126        | 1140         | rBV      | 167156         | 380108        | 40.12%          | 7.792%        |
| 5         | 9.100       | 1206          | 1215        | 1230         | rBV      | 358697         | 714152        | 75.38%          | 14.639%       |
| 6         | 10.565      | 1456          | 1464        | 1475         | rBV      | 525977         | 947450        | 100.00%         | 19.422%       |
| 7         | 11.294      | 1584          | 1588        | 1596         | rBB3     | 8370           | 13899         | 1.47%           | 0.285%        |
| 8         | 11.865      | 1677          | 1685        | 1696         | rBV      | 460140         | 807919        | 85.27%          | 16.562%       |
| 9         | 12.847      | 1844          | 1852        | 1864         | rBV      | 326230         | 541777        | 57.18%          | 11.106%       |
| 10        | 13.788      | 2004          | 2012        | 2021         | rBV      | 357706         | 596216        | 62.93%          | 12.222%       |

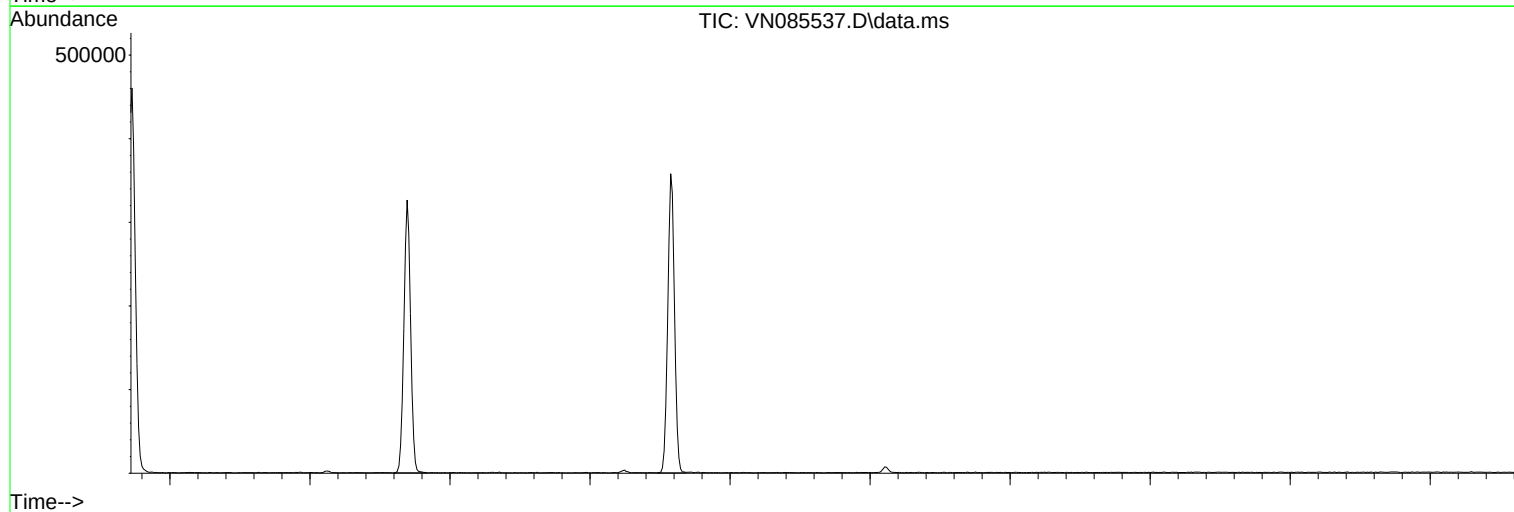
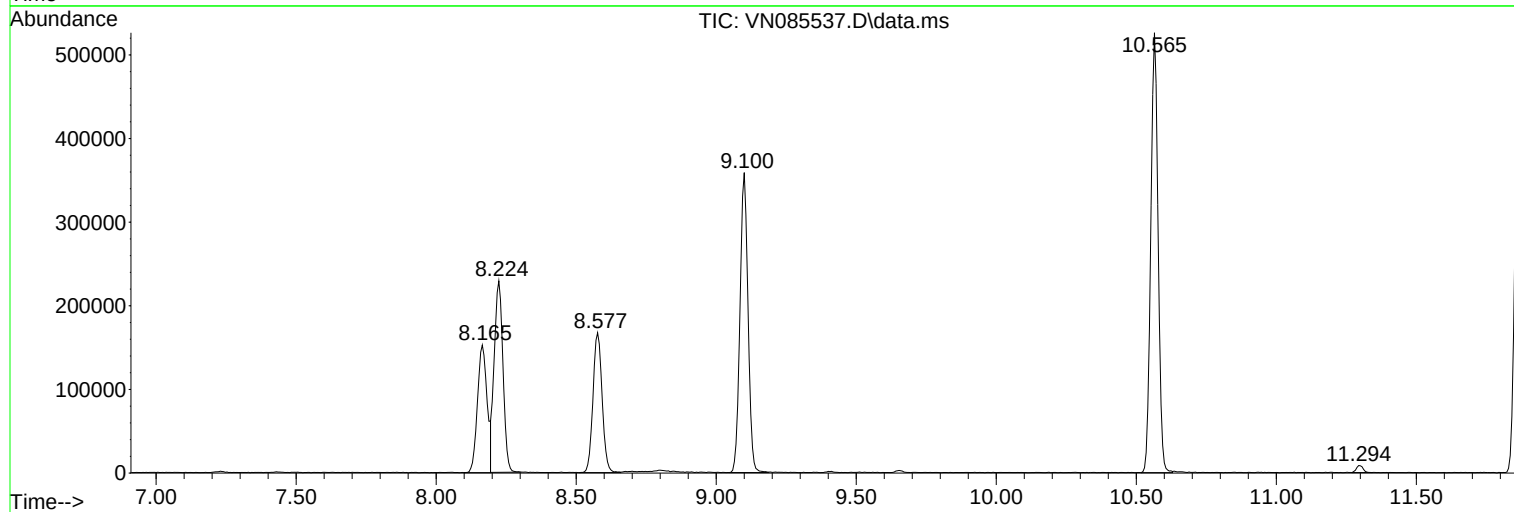
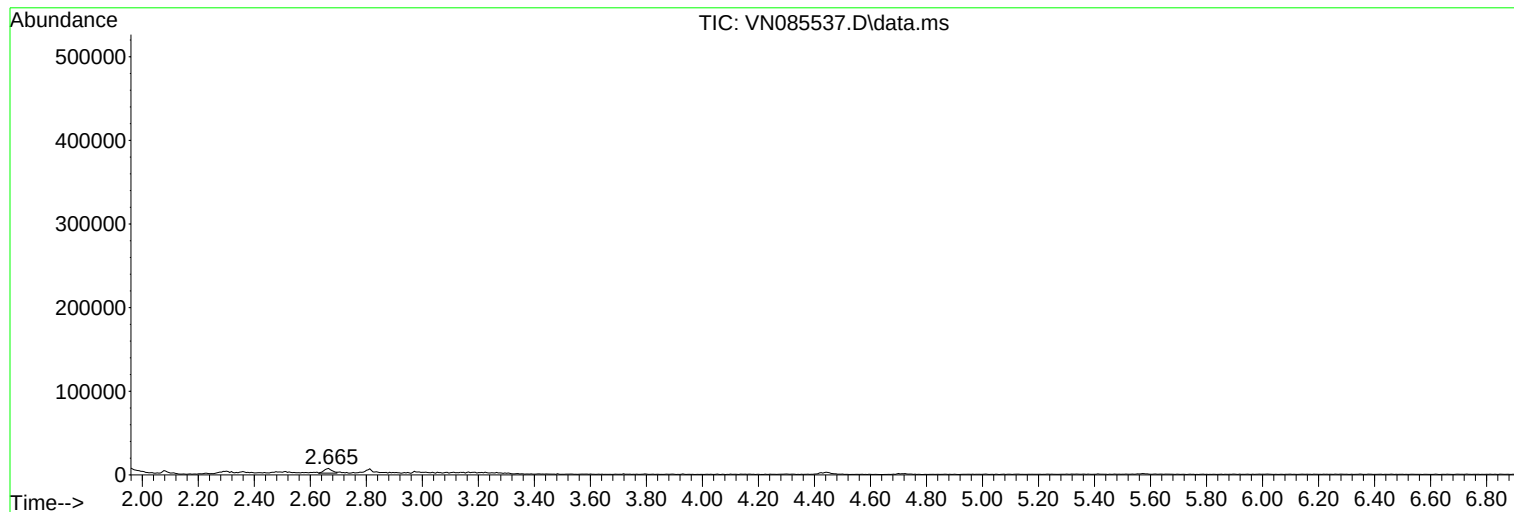
Sum of corrected areas: 4878275

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085537.D  
Acq On : 28 Jan 2025 14:37  
Operator : JC\MD  
Sample : Q1199-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085537.D  
Acq On : 28 Jan 2025 14:37  
Operator : JC\MD  
Sample : Q1199-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-192-GW-260-262

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085537.D  
Acq On : 28 Jan 2025 14:37  
Operator : JC\MD  
Sample : Q1199-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                       |        |      |                 |              |    |  |
|--------------------|-----------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc.  |        |      | Date Collected: | 01/23/25     |    |  |
| Project:           | CTO WE13              |        |      | Date Received:  | 01/27/25     |    |  |
| Client Sample ID:  | BP-VPB-192-GW-240-242 |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | Q1199-05              |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260                |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                     | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                       |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624               | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                       |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085538.D        | 1         |           | 01/28/25 15:01 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 3.90  | J         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 12.9  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-240-242                     | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-05                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085538.D        | 1         |           | 01/28/25 15:01 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.95   | J         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 57.1   |           | 81 - 118 |      | 114%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 52.6   |           | 80 - 119 |      | 105%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 49.4   |           | 89 - 112 |      | 99%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 45.4   |           | 85 - 114 |      | 91%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 163000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 307000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 271000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 108000 | 13.794    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                       |           |                 |              |    |
|--------------------|-----------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |           | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |           | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-240-242 |           | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-05              |           | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |           | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: mL | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       | uL        | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID : 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |           |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085538.D        | 1         |           | 01/28/25 15:01 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085538.D  
 Acq On : 28 Jan 2025 15:01  
 Operator : JC\MD  
 Sample : Q1199-05  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-240-242

Quant Time: Jan 29 00:39:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

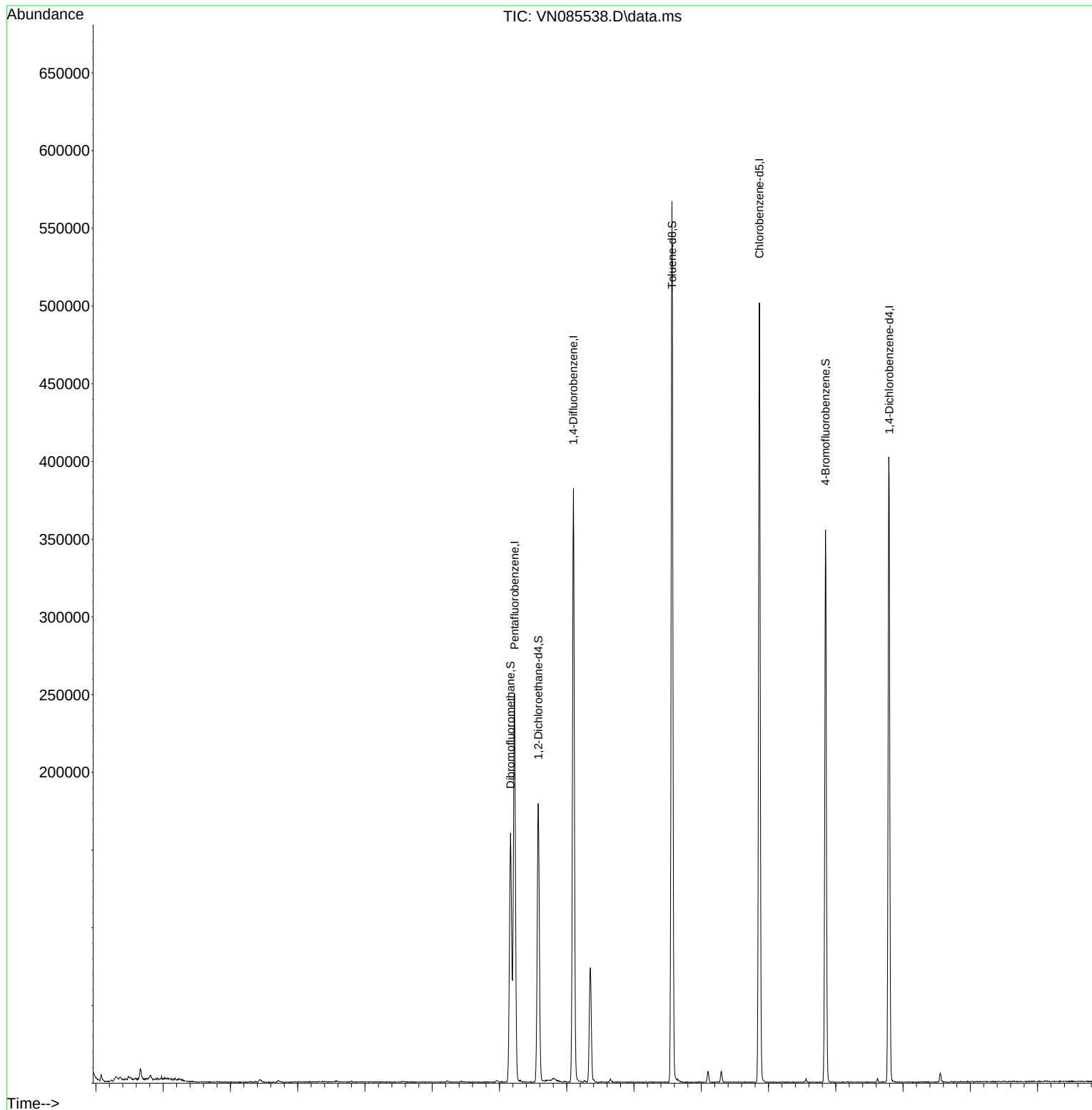
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Pentafluorobenzene       | 8.224  | 168   | 162553   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114   | 306518   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117   | 270799   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.794 | 152   | 108170   | 50.000   | ug/l   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4   | 8.576  | 65    | 149816   | 57.096   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =      | 114.200% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 111820   | 52.585   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =      | 105.160% |
| 50) Toluene-d8              | 10.565 | 98    | 373062   | 49.377   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =      | 98.760%  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 117423   | 45.434   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =      | 90.860%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
| 16) Acetone                 | 4.441  | 43    | 3317     | 3.912    | ug/l   | 95       |
| 44) Trichloroethene         | 9.353  | 130   | 27023    | 12.946   | ug/l   | 89       |
| 64) Tetrachloroethene       | 11.100 | 164   | 1751     | 0.948    | ug/l # | 81       |
| -----                       |        |       |          |          |        |          |

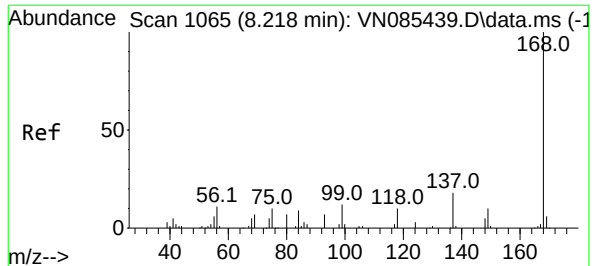
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085538.D  
Acq On : 28 Jan 2025 15:01  
Operator : JC\MD  
Sample : Q1199-05  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

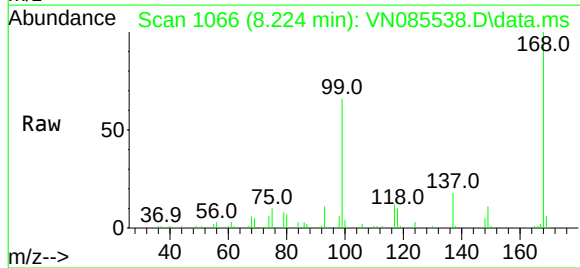
Quant Time: Jan 29 00:39:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



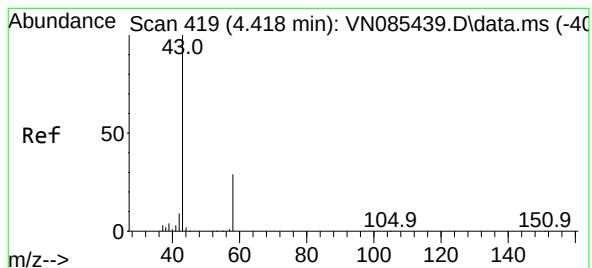
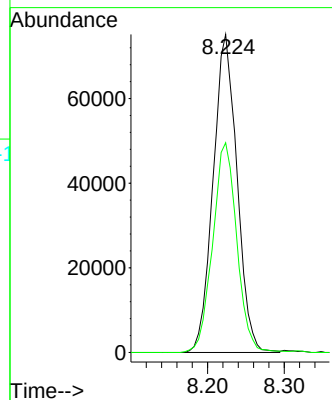
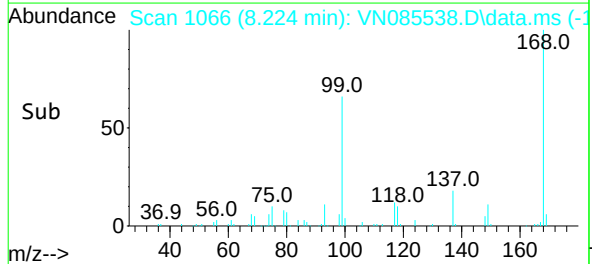


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085538.D  
Acq: 28 Jan 2025 15:01

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

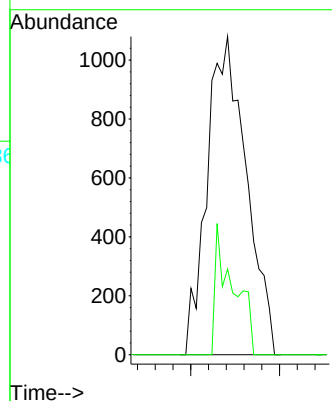
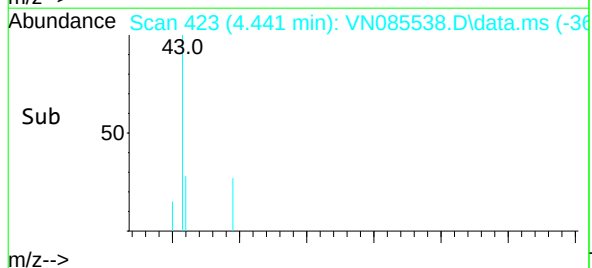
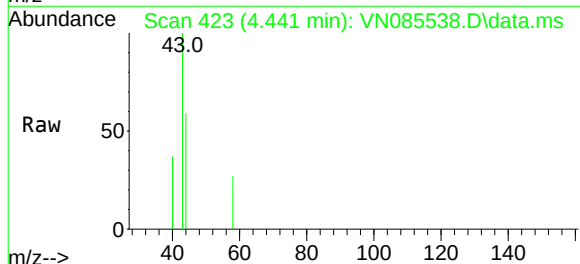


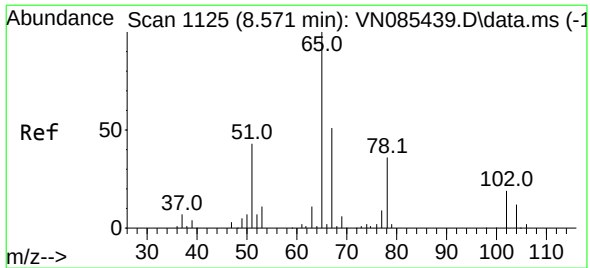
Tgt Ion:168 Resp: 162553  
Ion Ratio Lower Upper  
168 100  
99 65.9 53.6 80.4



#16  
Acetone  
Concen: 3.912 ug/l  
RT: 4.441 min Scan# 423  
Delta R.T. 0.023 min  
Lab File: VN085538.D  
Acq: 28 Jan 2025 15:01

Tgt Ion: 43 Resp: 3317  
Ion Ratio Lower Upper  
43 100  
58 26.9 23.8 35.6





#33

1,2-Dichloroethane-d4

Concen: 57.096 ug/l

RT: 8.576 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085538.D

Acq: 28 Jan 2025 15:01

Instrument :

MSVOA\_N

ClientSampleId :

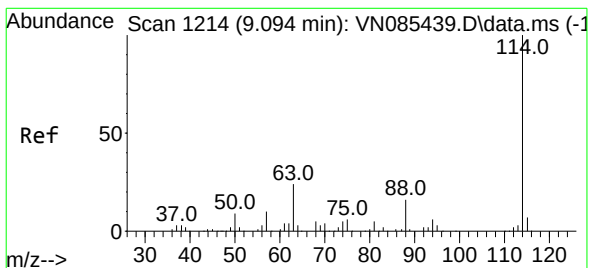
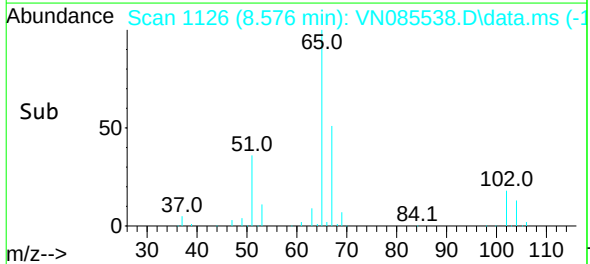
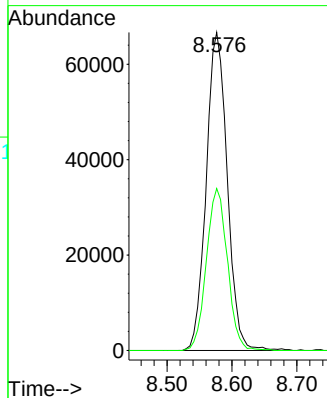
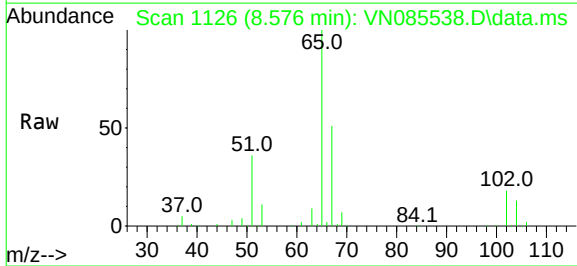
BP-VPB-192-GW-240-242

Tgt Ion: 65 Resp: 149816

Ion Ratio Lower Upper

65 100

67 51.0 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085538.D

Acq: 28 Jan 2025 15:01

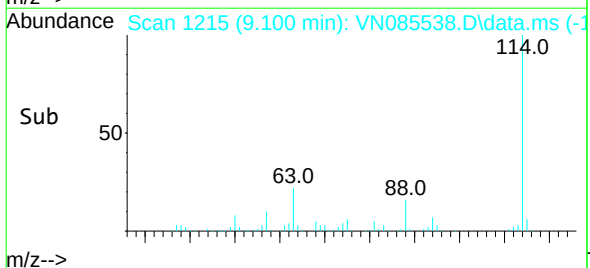
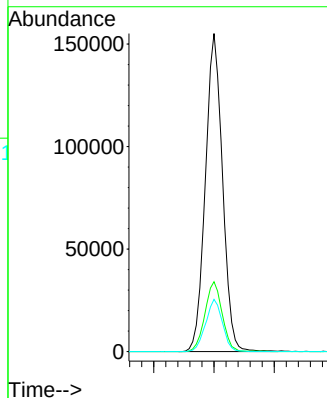
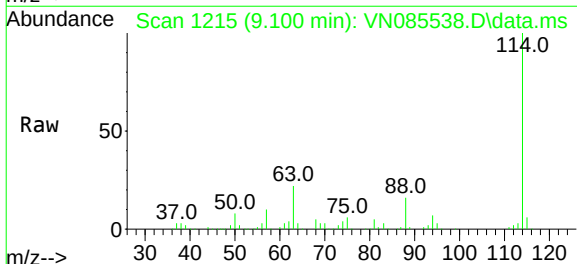
Tgt Ion: 114 Resp: 306518

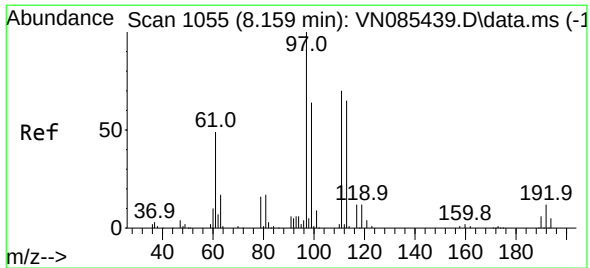
Ion Ratio Lower Upper

114 100

63 22.0 0.0 47.6

88 16.4 0.0 32.6





#35

Dibromofluoromethane

Concen: 52.585 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085538.D

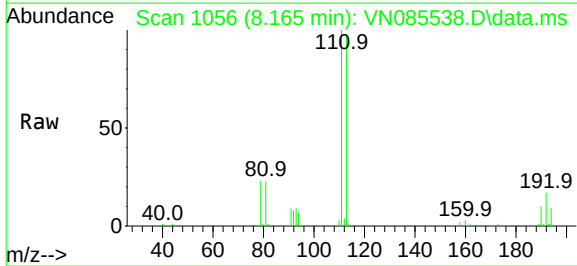
Acq: 28 Jan 2025 15:01

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-240-242



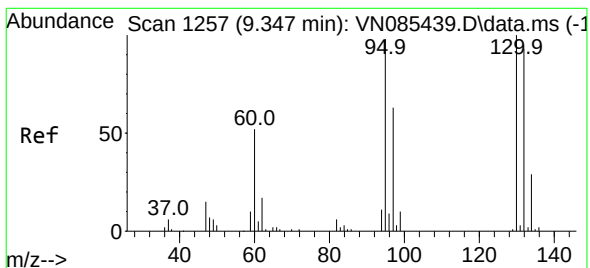
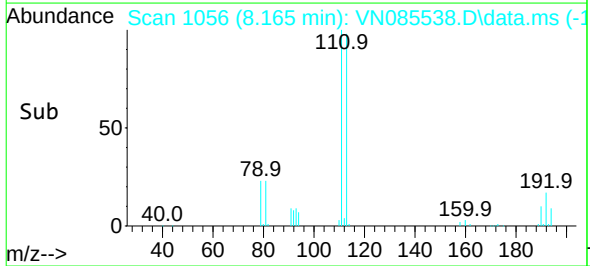
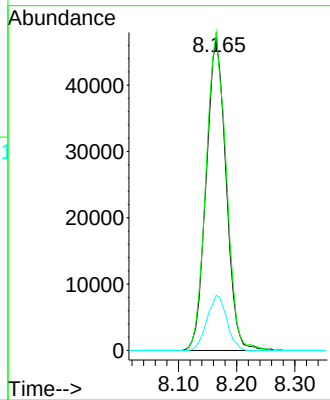
Tgt Ion:113 Resp: 111820

Ion Ratio Lower Upper

113 100

111 103.5 82.7 124.1

192 17.5 14.3 21.5



#44

Trichloroethene

Concen: 12.946 ug/l

RT: 9.353 min Scan# 1258

Delta R.T. 0.006 min

Lab File: VN085538.D

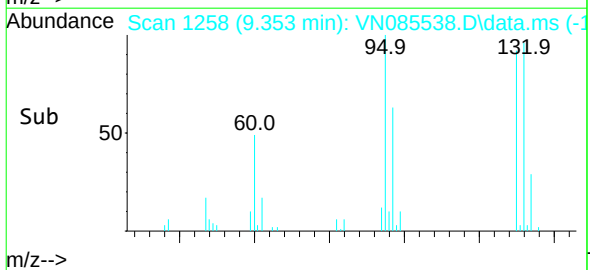
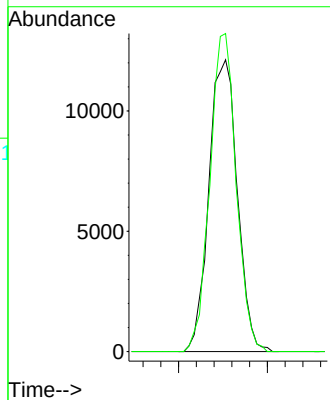
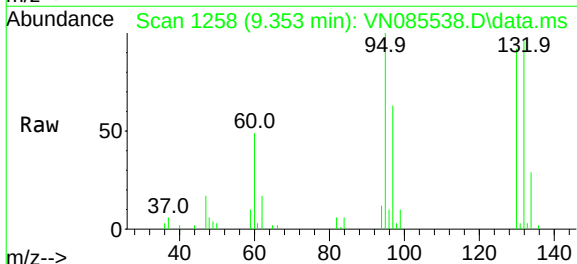
Acq: 28 Jan 2025 15:01

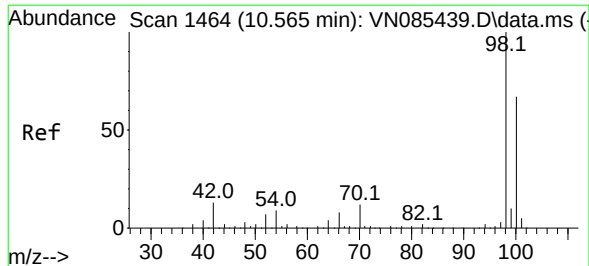
Tgt Ion:130 Resp: 27023

Ion Ratio Lower Upper

130 100

95 109.0 0.0 195.8





#50

Toluene-d8

Concen: 49.377 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085538.D

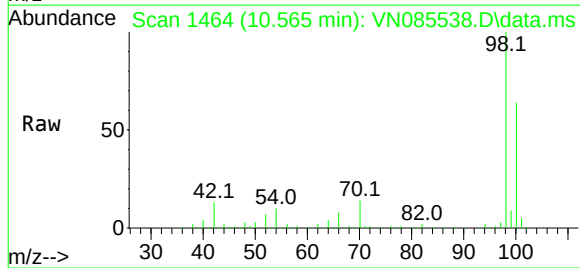
Acq: 28 Jan 2025 15:01

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-240-242

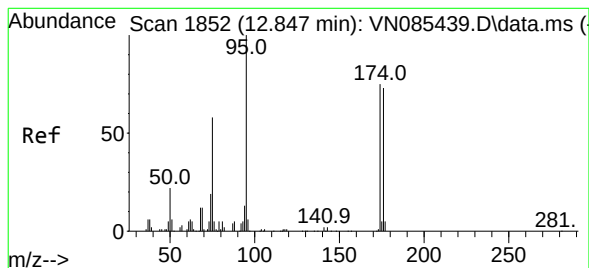
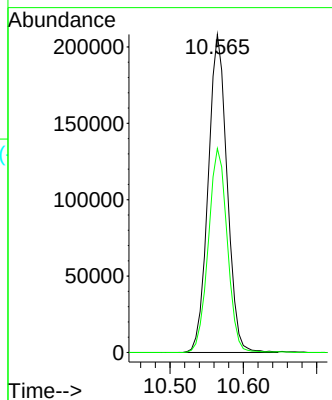
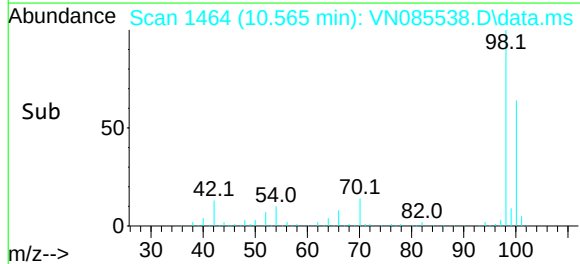


Tgt Ion: 98 Resp: 373062

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 45.434 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085538.D

Acq: 28 Jan 2025 15:01

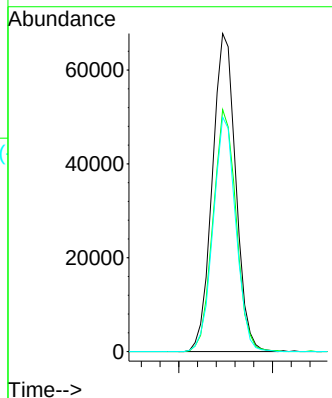
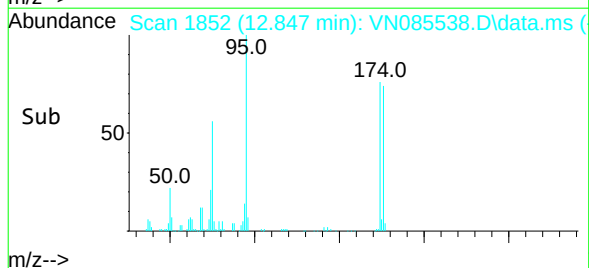
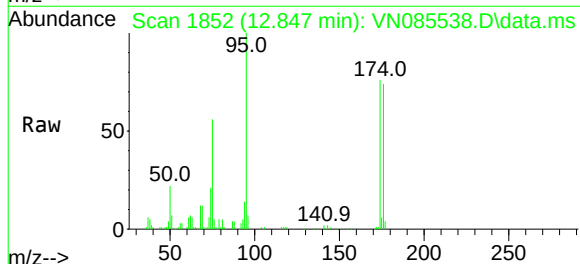
Tgt Ion: 95 Resp: 117423

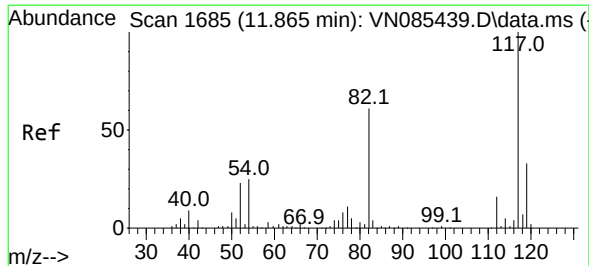
Ion Ratio Lower Upper

95 100

174 75.0 0.0 145.0

176 71.6 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085538.D

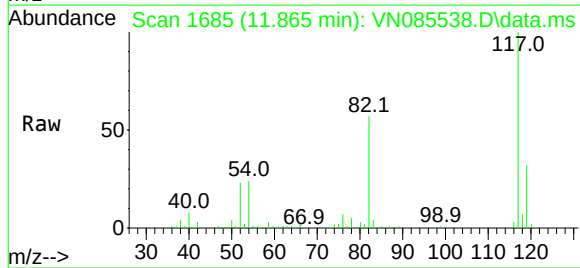
Acq: 28 Jan 2025 15:01

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-240-242



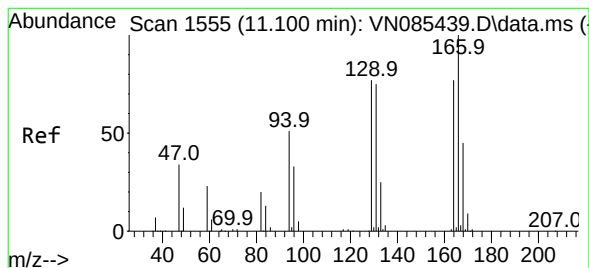
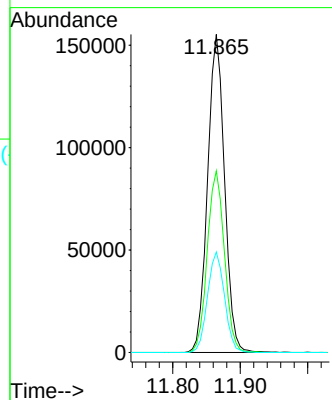
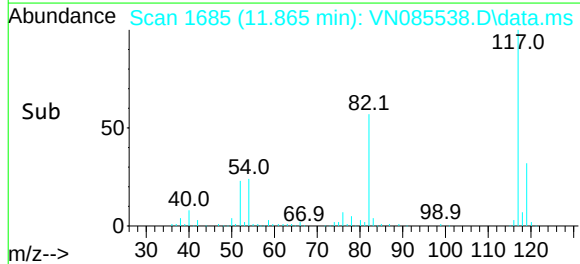
Tgt Ion:117 Resp: 270799

Ion Ratio Lower Upper

117 100

82 57.1 48.6 72.8

119 31.6 26.6 39.8



#64

Tetrachloroethene

Concen: 0.948 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085538.D

Acq: 28 Jan 2025 15:01

Tgt Ion:164 Resp: 1751

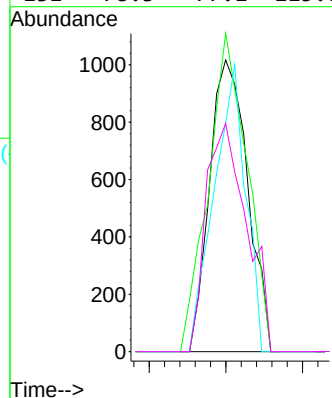
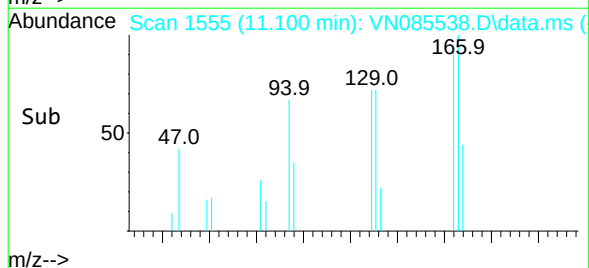
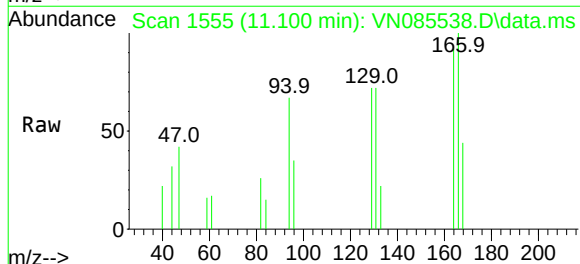
Ion Ratio Lower Upper

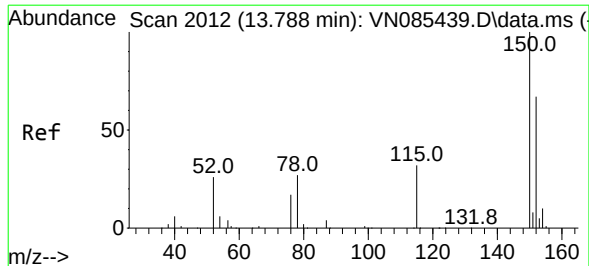
164 100

166 109.0 103.4 155.2

129 78.4 79.2 118.8#

131 78.3 77.1 115.7





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 20

Delta R.T. 0.006 min

Lab File: VN085538.D

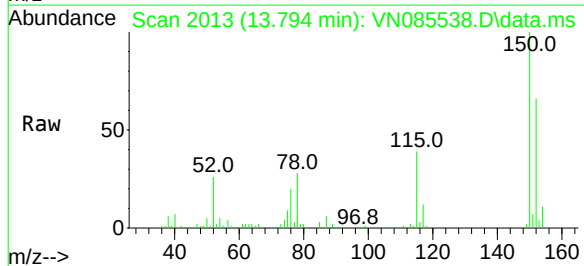
Acq: 28 Jan 2025 15:01

Instrument :

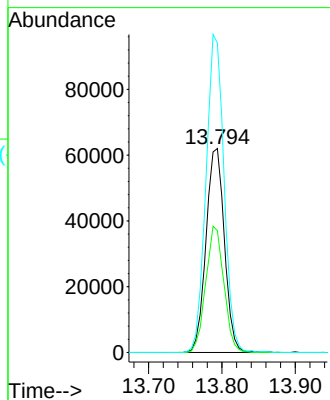
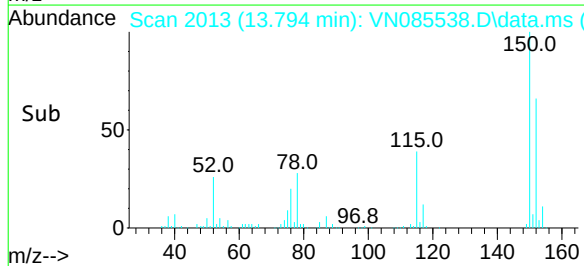
MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-240-242



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 152   | Resp: | 108170 |
| Ion      | Ratio | Lower | Upper  |
| 152      | 100   |       |        |
| 115      | 60.7  | 31.1  | 93.3   |
| 150      | 152.8 | 0.0   | 343.6  |





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085538.D  
Acq On : 28 Jan 2025 15:01  
Operator : JC\MD  
Sample : Q1199-05  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

Integration Parameters: RTEINT.P  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 3 % of largest Peak  
Start Thrs: 0.2 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260

Signal : TIC: VN085538.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.659       | 116           | 120         | 127          | rVB      | 6663           | 12159         | 1.19%           | 0.223%        |
| 2         | 8.165       | 1047          | 1056        | 1061         | rBV      | 160191         | 385326        | 37.64%          | 7.072%        |
| 3         | 8.224       | 1061          | 1066        | 1077         | rVB2     | 249439         | 528183        | 51.59%          | 9.694%        |
| 4         | 8.576       | 1117          | 1126        | 1136         | rBV      | 179179         | 398978        | 38.97%          | 7.323%        |
| 5         | 9.100       | 1206          | 1215        | 1228         | rBV      | 381855         | 762173        | 74.45%          | 13.989%       |
| 6         | 9.353       | 1250          | 1258        | 1271         | rBV      | 73625          | 154770        | 15.12%          | 2.841%        |
| 7         | 10.565      | 1454          | 1464        | 1478         | rBV      | 567041         | 1023760       | 100.00%         | 18.790%       |
| 8         | 11.100      | 1550          | 1555        | 1561         | rVB3     | 6887           | 11160         | 1.09%           | 0.205%        |
| 9         | 11.300      | 1584          | 1589        | 1596         | rVB3     | 7114           | 11315         | 1.11%           | 0.208%        |
| 10        | 11.865      | 1677          | 1685        | 1698         | rBV      | 501371         | 875267        | 85.50%          | 16.064%       |
| 11        | 12.847      | 1845          | 1852        | 1864         | rBV      | 355355         | 599915        | 58.60%          | 11.011%       |
| 12        | 13.788      | 2005          | 2012        | 2022         | rBV      | 402249         | 685547        | 66.96%          | 12.582%       |

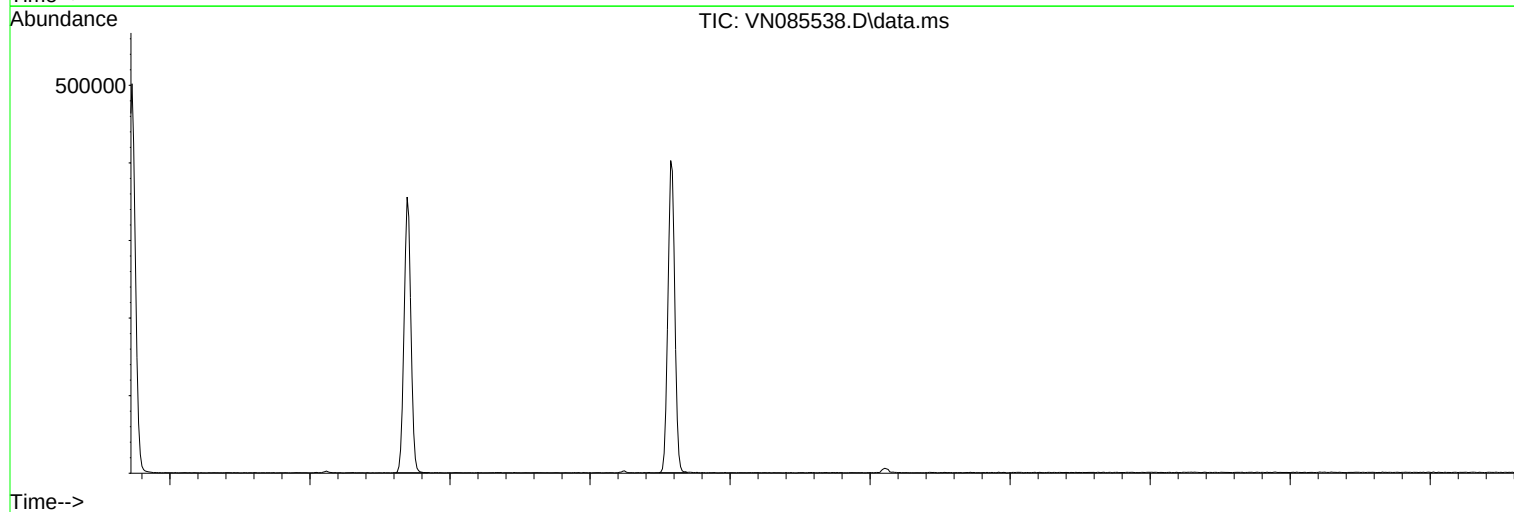
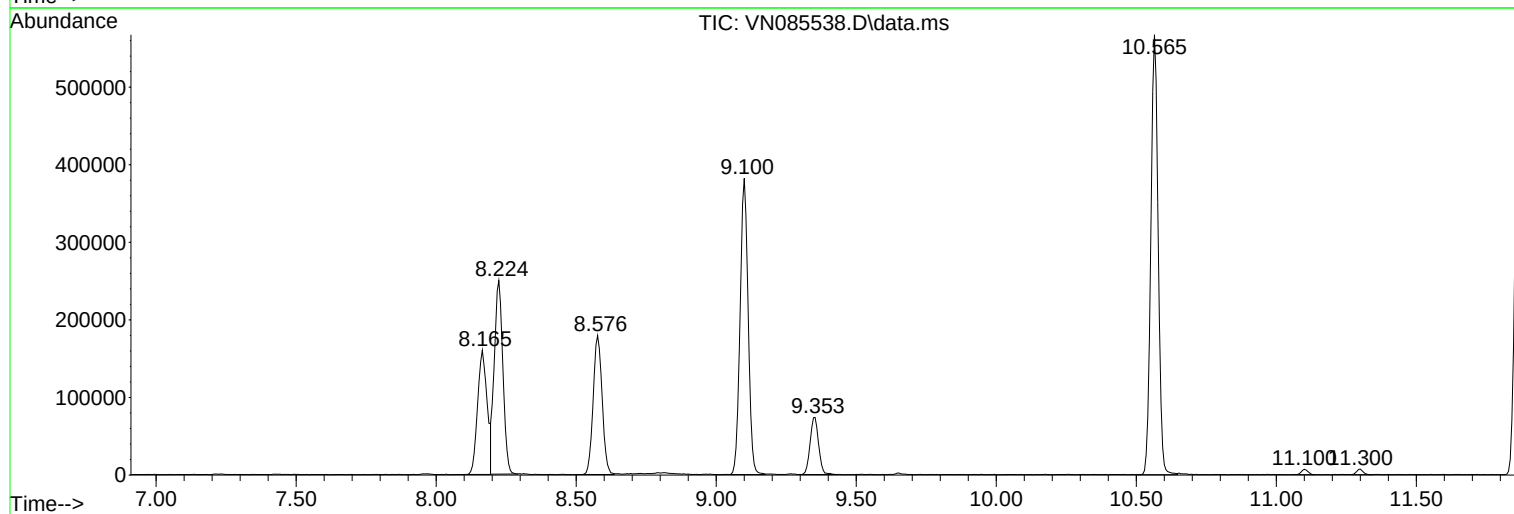
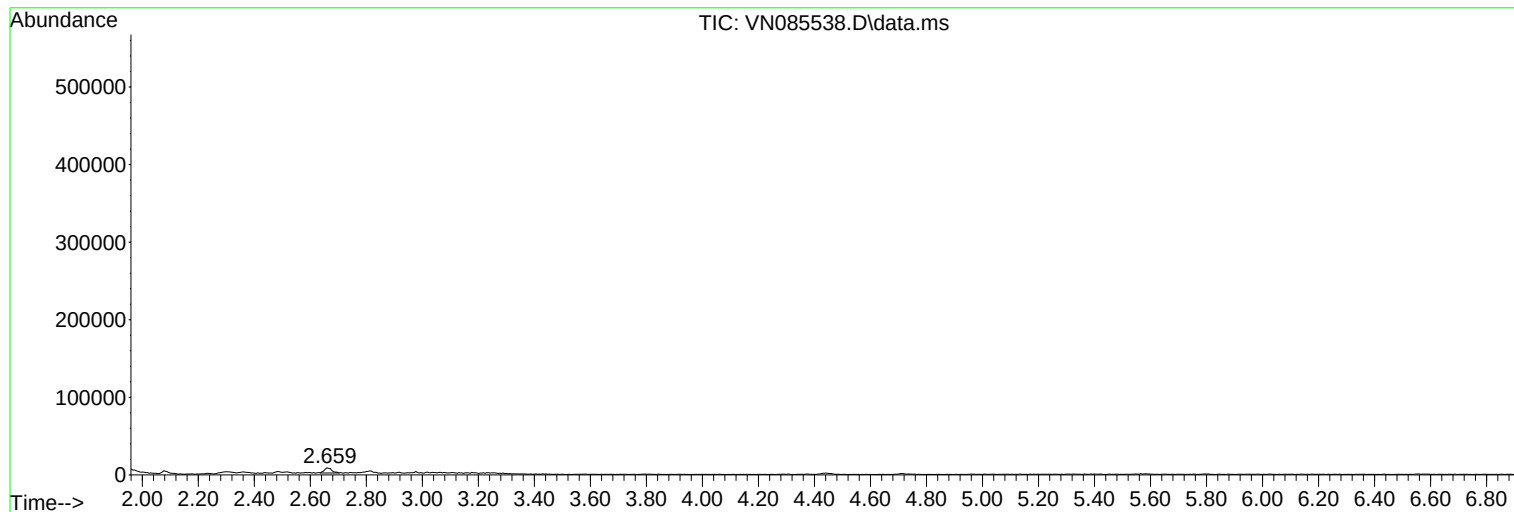
Sum of corrected areas: 5448553

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085538.D  
Acq On : 28 Jan 2025 15:01  
Operator : JC\MD  
Sample : Q1199-05  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085538.D  
Acq On : 28 Jan 2025 15:01  
Operator : JC\MD  
Sample : Q1199-05  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085538.D  
Acq On : 28 Jan 2025 15:01  
Operator : JC\MD  
Sample : Q1199-05  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-192-GW-240-242

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                       |        |      |                 |              |    |
|--------------------|-----------------------|--------|------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |        |      | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |        |      | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-220-222 |        |      | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-06              |        |      | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |        |      | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: | mL   | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       |        | uL   | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID :   | 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |        |      |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085545.D        | 1         |           | 01/28/25 17:50 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.70  | J         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.48  | J         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 6.50  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.56  | J         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.83  | J         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 1.40  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.52  | J         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-220-222                     | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-06                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085545.D        | 1         |           | 01/28/25 17:50 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.34   | J         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.30   | J         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.31   | J         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.27   | J         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.61   | J         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 58.5   |           | 81 - 118 |      | 117%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 53.6   |           | 80 - 119 |      | 107%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 46.9   |           | 89 - 112 |      | 94%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 44.5   |           | 85 - 114 |      | 89%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 169000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 327000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 271000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 107000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                       |           |                 |              |    |
|--------------------|-----------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.  |           | Date Collected: | 01/23/25     |    |
| Project:           | CTO WE13              |           | Date Received:  | 01/27/25     |    |
| Client Sample ID:  | BP-VPB-192-GW-220-222 |           | SDG No.:        | Q1199        |    |
| Lab Sample ID:     | Q1199-06              |           | Matrix:         | Water        |    |
| Analytical Method: | SW8260                |           | % Solid:        | 0            |    |
| Sample Wt/Vol:     | 5                     | Units: mL | Final Vol:      | 5000         | uL |
| Soil Aliquot Vol:  |                       | uL        | Test:           | VOCMS Group1 |    |
| GC Column:         | RXI-624               | ID : 0.25 | Level :         | LOW          |    |
| Prep Method :      |                       |           |                 |              |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085545.D        | 1         |           | 01/28/25 17:50 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085545.D  
 Acq On : 28 Jan 2025 17:50  
 Operator : JC\MD  
 Sample : Q1199-06  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-220-222

Quant Time: Jan 29 00:42:33 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response            | Conc   | Units  | Dev(Min) |
|-------------------------------|----------------|------|---------------------|--------|--------|----------|
| -----                         |                |      |                     |        |        |          |
| Internal Standards            |                |      |                     |        |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 169137              | 50.000 | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 327198              | 50.000 | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 270505              | 50.000 | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 106728              | 50.000 | ug/l   | 0.00     |
|                               |                |      |                     |        |        |          |
| System Monitoring Compounds   |                |      |                     |        |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 159806              | 58.532 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = 117.060% |        |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 121606              | 53.572 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = 107.140% |        |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 378279              | 46.903 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = 93.800%  |        |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 122753              | 44.494 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = 88.980%  |        |        |          |
|                               |                |      |                     |        |        |          |
| Target Compounds              |                |      |                     |        |        |          |
|                               |                |      |                     |        | Qvalue |          |
| 3) Chloromethane              | 2.359          | 50   | 1726                | 0.696  | ug/l # | 88       |
| 5) Bromomethane               | 2.971          | 94   | 960                 | 0.638  | ug/l # | 68       |
| 12) 1,1-Dichloroethene        | 4.353          | 96   | 867                 | 0.478  | ug/l # | 64       |
| 16) Acetone                   | 4.442          | 43   | 5696                | 6.457  | ug/l # | 87       |
| 19) Methyl tert-butyl Ether   | 5.789          | 73   | 3301                | 0.560  | ug/l # | 83       |
| 30) Chloroform                | 7.965          | 83   | 3416                | 0.829  | ug/l   | 96       |
| 44) Trichloroethene           | 9.347          | 130  | 3125                | 1.402  | ug/l   | 87       |
| 52) Toluene                   | 10.629         | 92   | 2909                | 0.524  | ug/l   | 90       |
| 67) Ethyl Benzene             | 11.959         | 91   | 3265                | 0.338  | ug/l   | 91       |
| 68) m/p-Xylenes               | 12.070         | 106  | 1081                | 0.303  | ug/l   | 97       |
| 69) o-Xylene                  | 12.394         | 106  | 1009                | 0.296  | ug/l   | 98       |
| 70) Styrene                   | 12.406         | 104  | 1725                | 0.306  | ug/l # | 89       |
| 73) Isopropylbenzene          | 12.694         | 105  | 1965                | 0.273  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935         | 83   | 1551                | 0.610  | ug/l # | 95       |
| 80) 1,3,5-Trimethylbenzene    | 13.170         | 105  | 1791                | 0.301  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476         | 105  | 1506                | 0.254  | ug/l   | 84       |
| -----                         |                |      |                     |        |        |          |

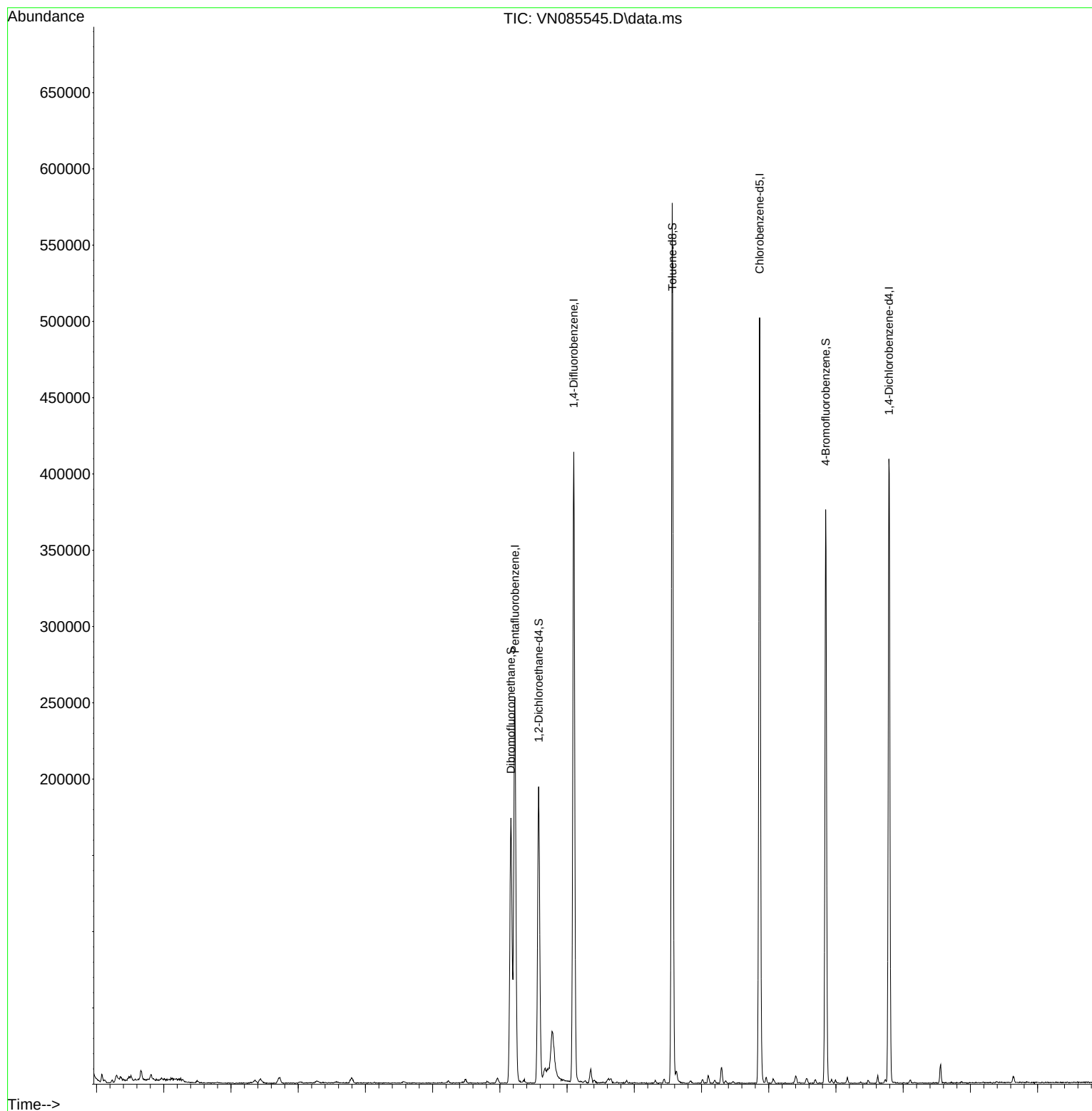
(#) = qualifier out of range (m) = manual integration (+) = signals summed

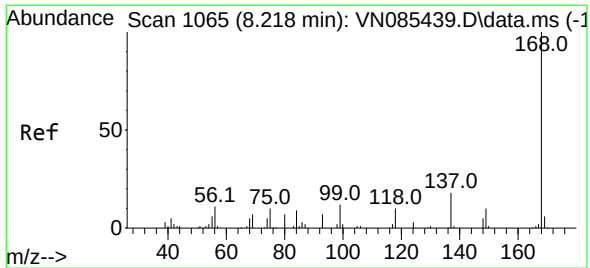


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085545.D  
Acq On : 28 Jan 2025 17:50  
Operator : JC\MD  
Sample : Q1199-06  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

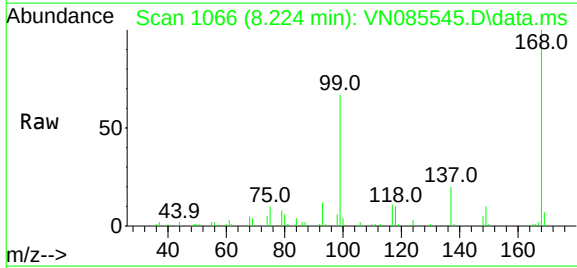
Quant Time: Jan 29 00:42:33 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



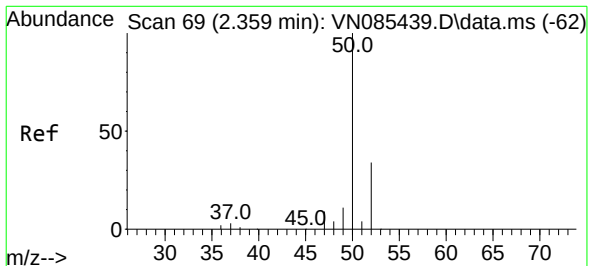
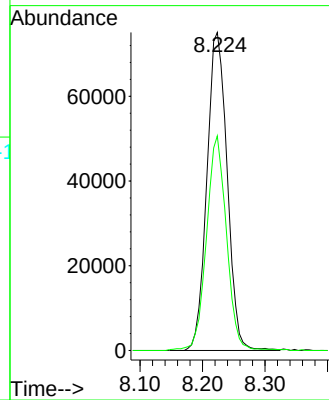
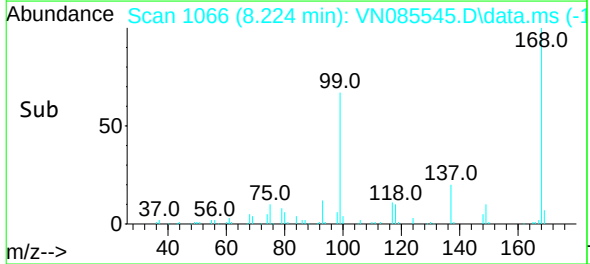


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085545.D  
Acq: 28 Jan 2025 17:50

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

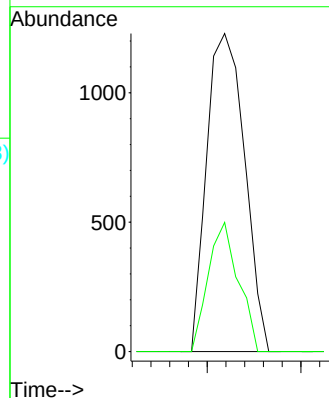
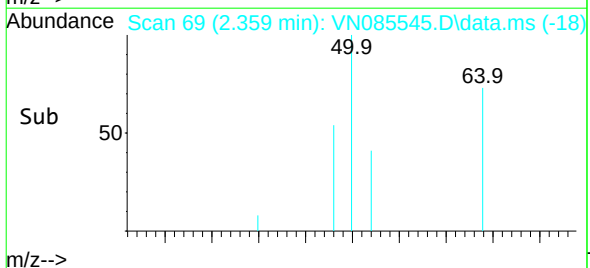
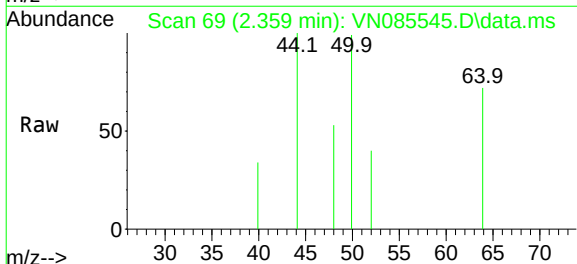


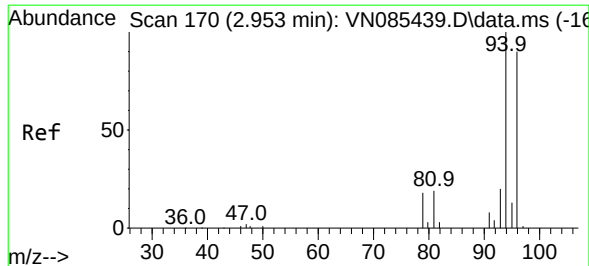
Tgt Ion:168 Resp: 169137  
Ion Ratio Lower Upper  
168 100  
99 67.2 53.6 80.4



#3  
Chloromethane  
Concen: 0.696 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085545.D  
Acq: 28 Jan 2025 17:50

Tgt Ion: 50 Resp: 1726  
Ion Ratio Lower Upper  
50 100  
52 40.6 27.0 40.6#



#5  
Bromomethane

Concen: 0.638 ug/l

RT: 2.971 min Scan# 17

Delta R.T. 0.018 min

Lab File: VN085545.D

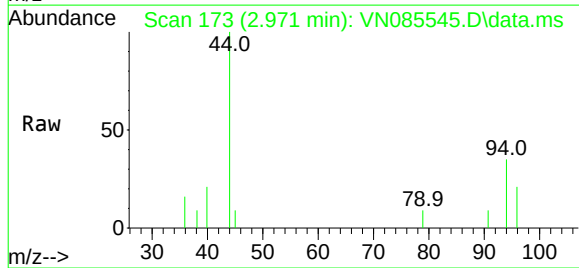
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Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

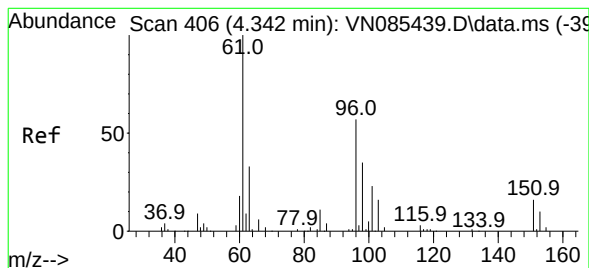
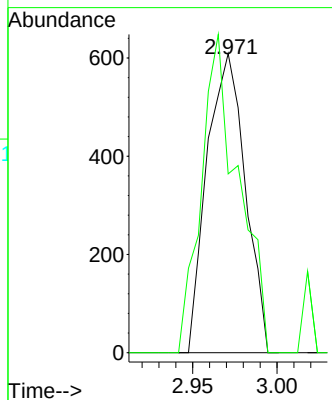
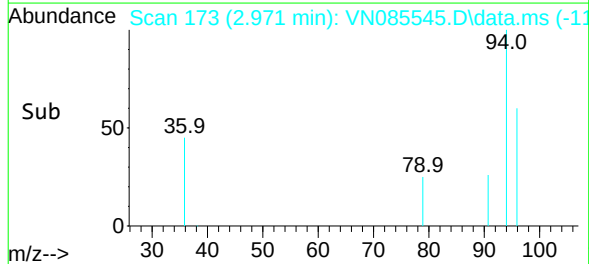


Tgt Ion: 94 Resp: 960

Ion Ratio Lower Upper

94 100

96 59.8 71.8 107.6#



#12

1,1-Dichloroethene

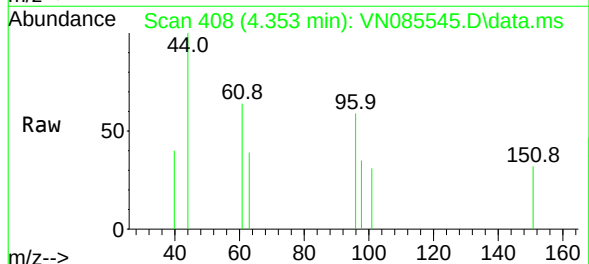
Concen: 0.478 ug/l

RT: 4.353 min Scan# 408

Delta R.T. 0.012 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50



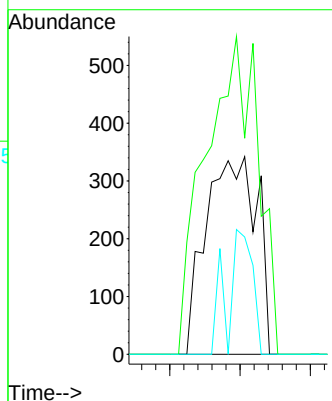
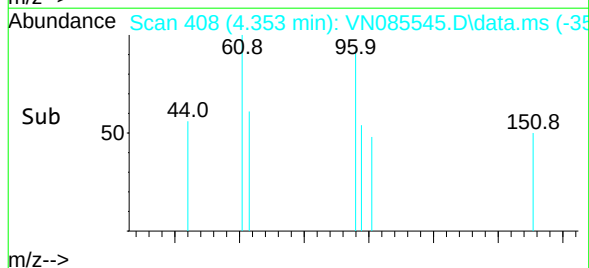
Tgt Ion: 96 Resp: 867

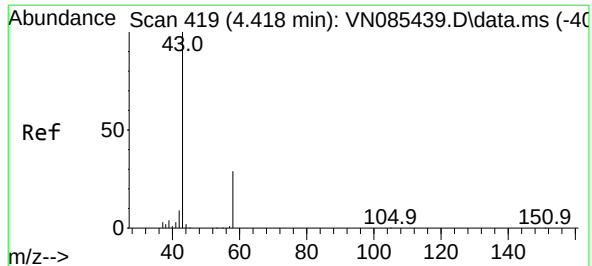
Ion Ratio Lower Upper

96 100

61 109.4 141.0 211.4#

98 59.4 49.0 73.6





#16

Acetone

Concen: 6.457 ug/l

RT: 4.442 min Scan# 423

Delta R.T. 0.023 min

Lab File: VN085545.D

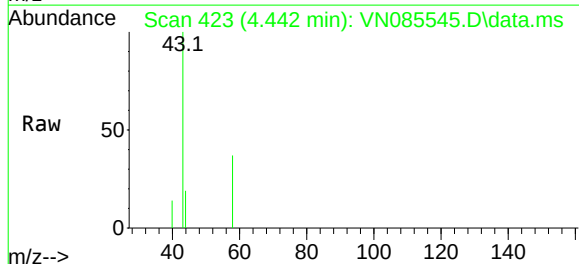
Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

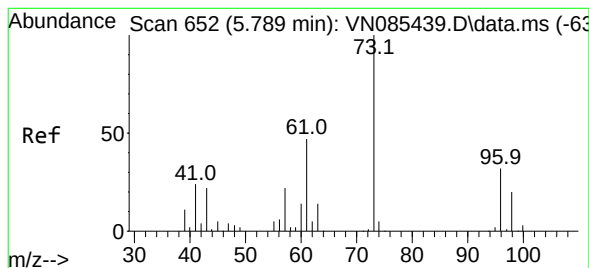
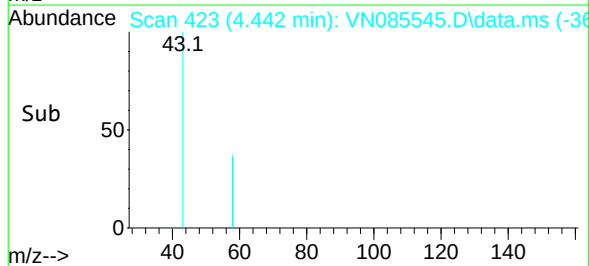
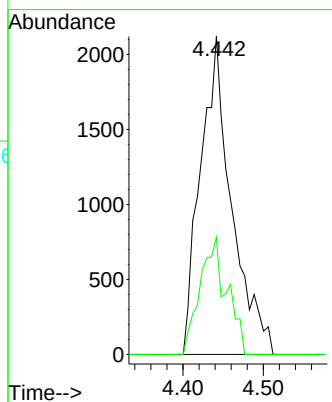


Tgt Ion: 43 Resp: 5696

Ion Ratio Lower Upper

43 100

58 36.8 23.8 35.6#



#19

Methyl tert-butyl Ether

Concen: 0.560 ug/l

RT: 5.789 min Scan# 652

Delta R.T. -0.000 min

Lab File: VN085545.D

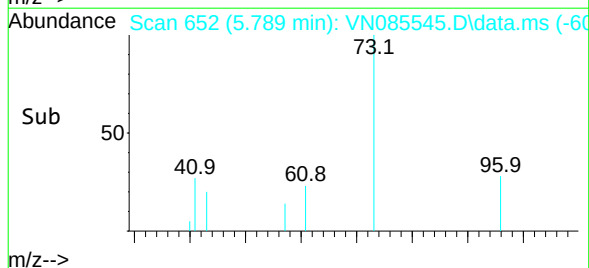
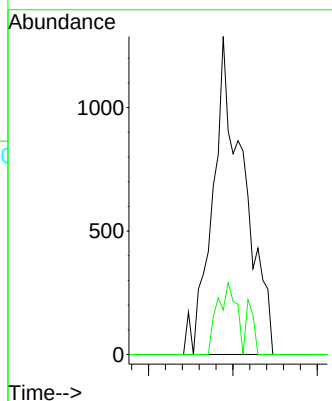
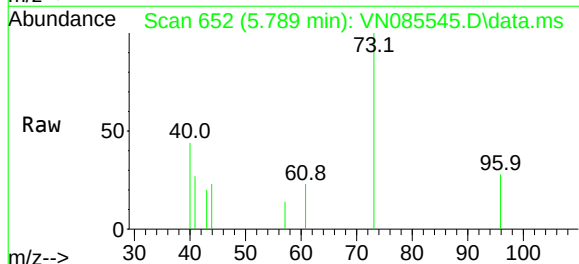
Acq: 28 Jan 2025 17:50

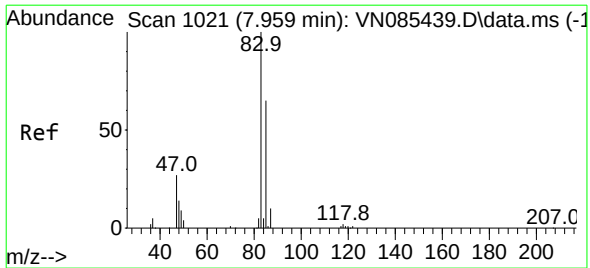
Tgt Ion: 73 Resp: 3301

Ion Ratio Lower Upper

73 100

57 14.0 17.8 26.8#





#30

Chloroform

Concen: 0.829 ug/l

RT: 7.965 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

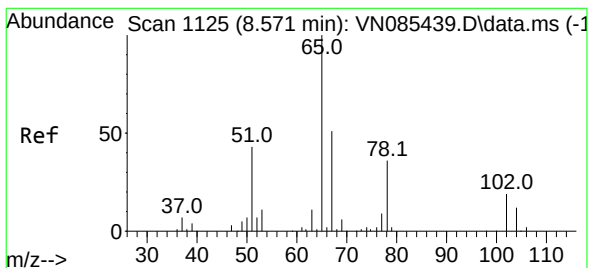
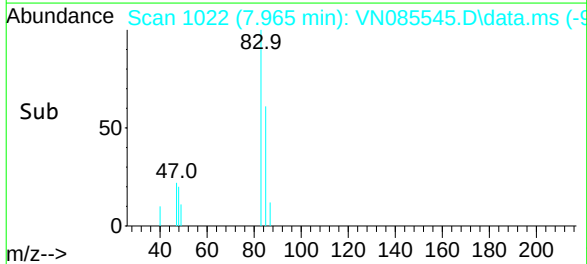
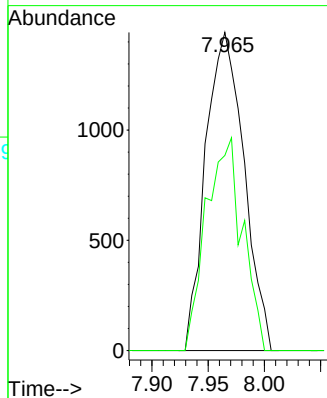
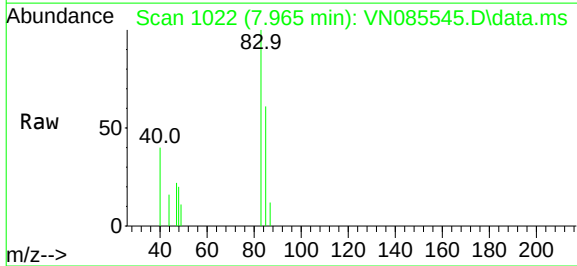
BP-VPB-192-GW-220-222

Tgt Ion: 83 Resp: 3416

Ion Ratio Lower Upper

83 100

85 61.3 51.8 77.6



#33

1,2-Dichloroethane-d4

Concen: 58.532 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.006 min

Lab File: VN085545.D

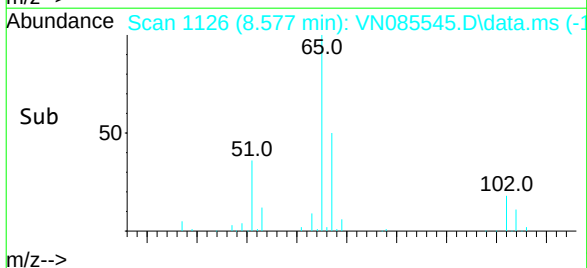
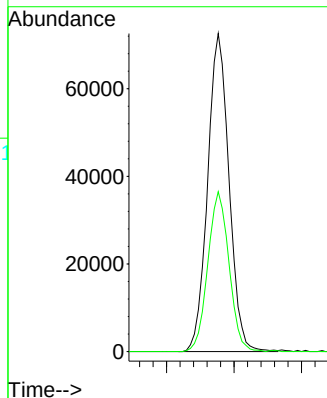
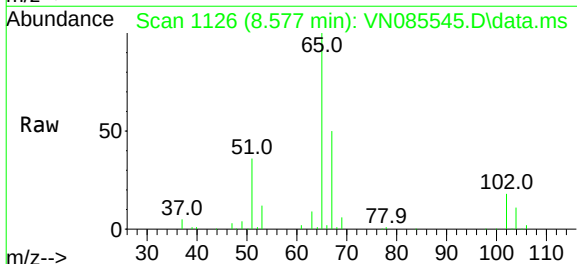
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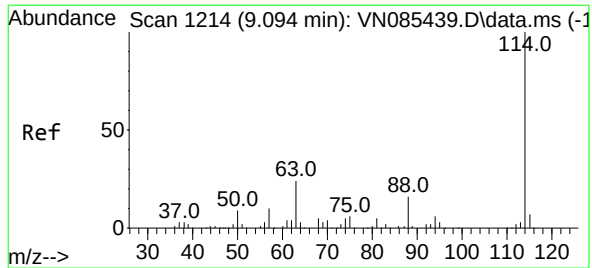
Tgt Ion: 65 Resp: 159806

Ion Ratio Lower Upper

65 100

67 49.8 0.0 101.6

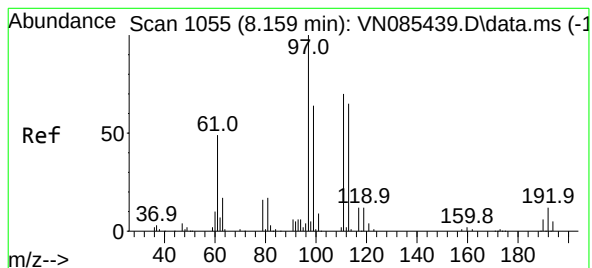
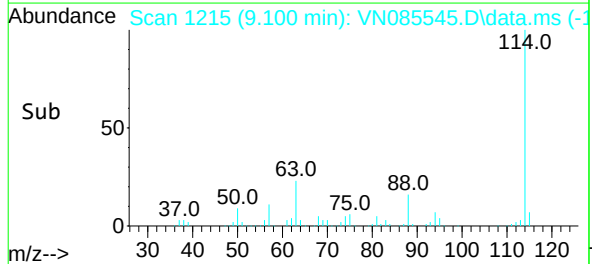
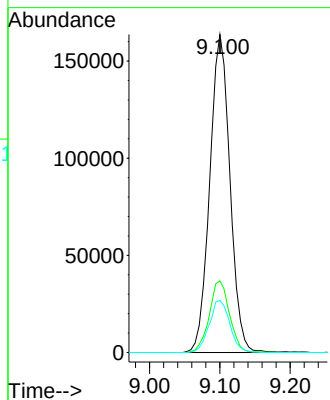
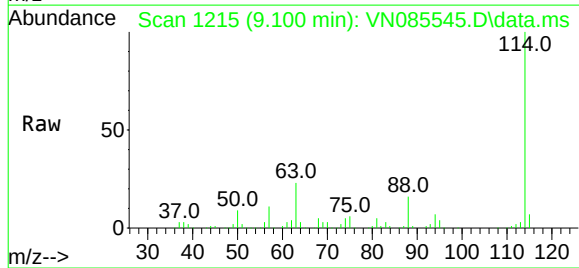




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1214  
Delta R.T. 0.006 min  
Lab File: VN085545.D  
Acq: 28 Jan 2025 17:50

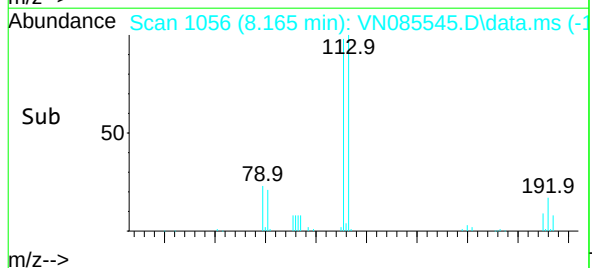
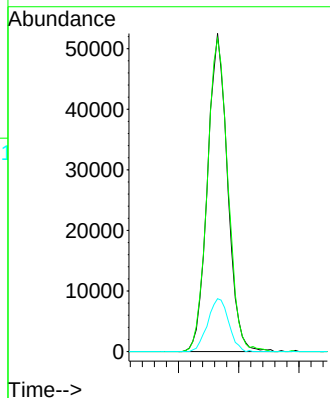
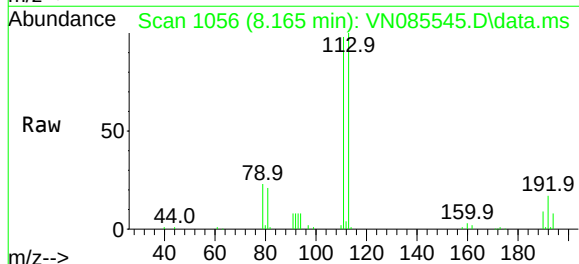
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

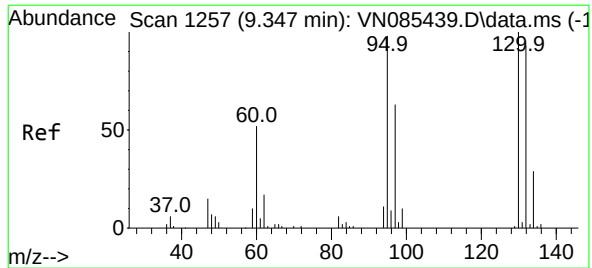
Tgt Ion:114 Resp: 327198  
Ion Ratio Lower Upper  
114 100  
63 22.5 0.0 47.6  
88 16.4 0.0 32.6



#35  
Dibromofluoromethane  
Concen: 53.572 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085545.D  
Acq: 28 Jan 2025 17:50

Tgt Ion:113 Resp: 121606  
Ion Ratio Lower Upper  
113 100  
111 101.6 82.7 124.1  
192 17.3 14.3 21.5





#44

Trichloroethene

Concen: 1.402 ug/l

RT: 9.347 min Scan# 12

Delta R.T. -0.000 min

Lab File: VN085545.D

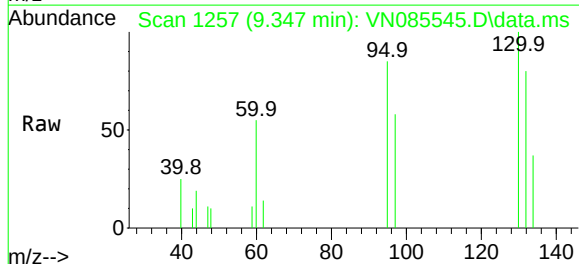
Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

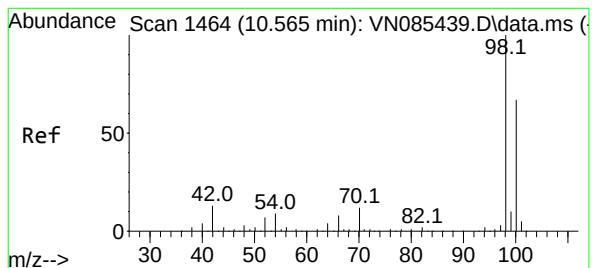
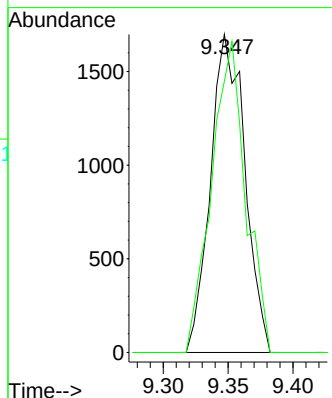
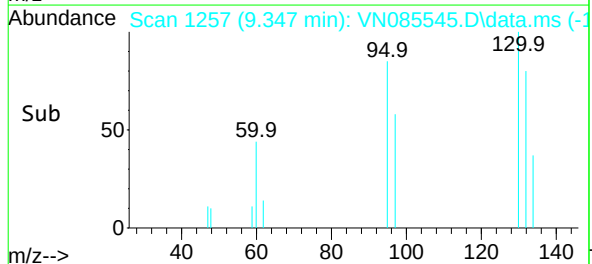


Tgt Ion:130 Resp: 3125

Ion Ratio Lower Upper

130 100

95 85.2 0.0 195.8



#50

Toluene-d8

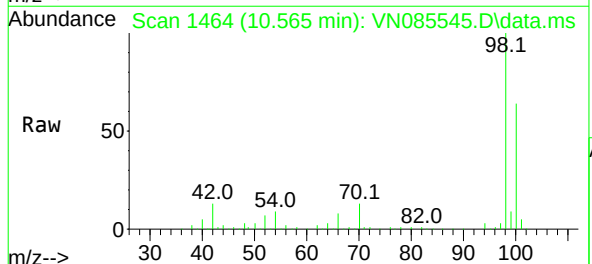
Concen: 46.903 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

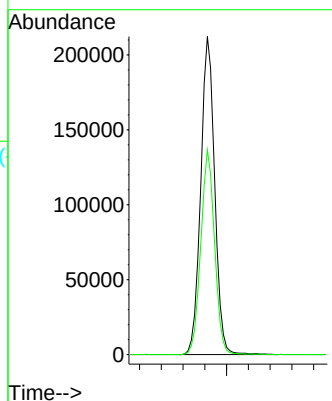
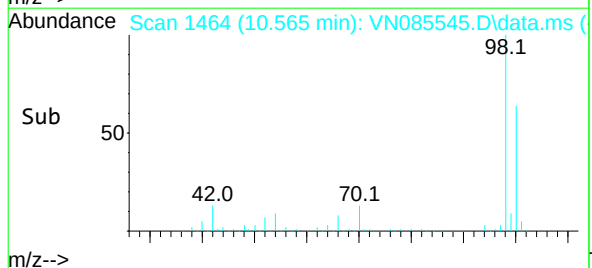


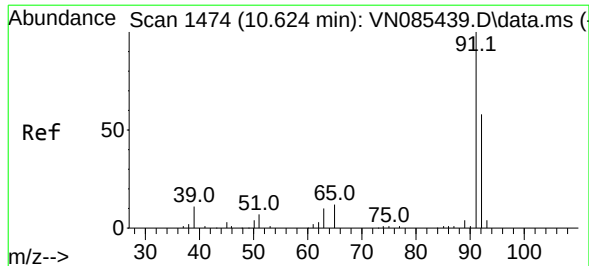
Tgt Ion: 98 Resp: 378279

Ion Ratio Lower Upper

98 100

100 63.6 52.2 78.4





#52

Toluene

Concen: 0.524 ug/l

RT: 10.629 min Scan# 1474

Delta R.T. 0.005 min

Lab File: VN085545.D

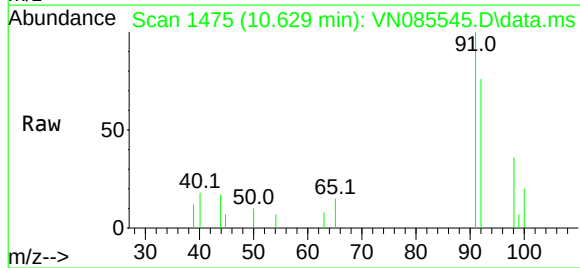
Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

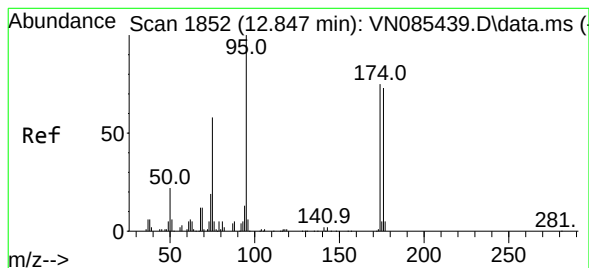
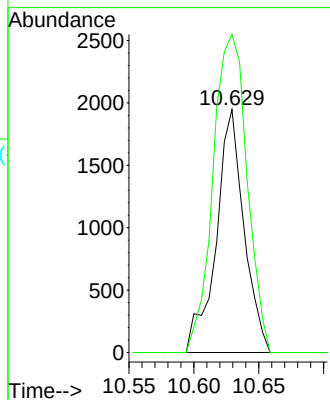
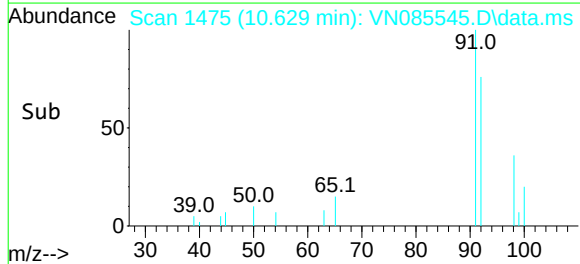


Tgt Ion: 92 Resp: 2909

Ion Ratio Lower Upper

92 100

91 159.9 139.2 208.8



#62

4-Bromofluorobenzene

Concen: 44.494 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

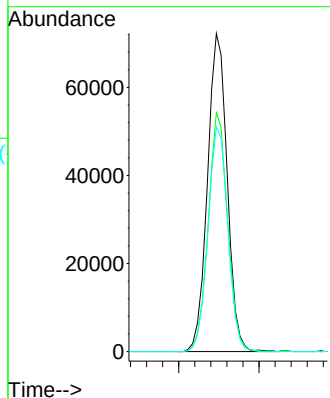
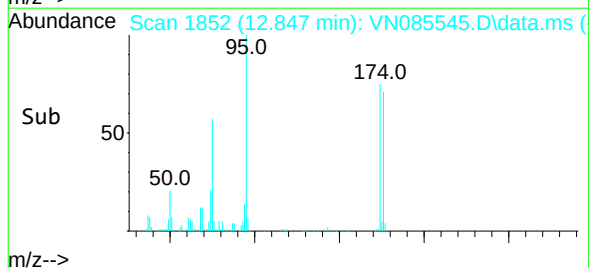
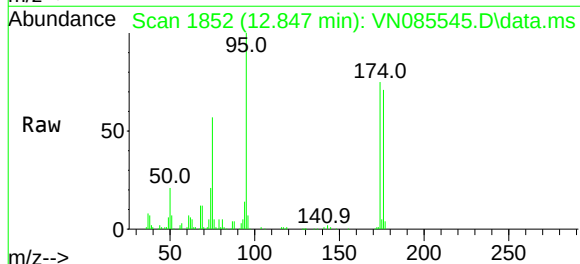
Tgt Ion: 95 Resp: 122753

Ion Ratio Lower Upper

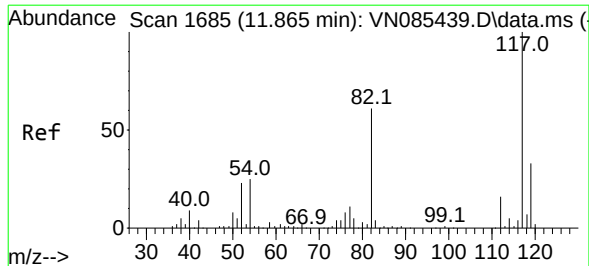
95 100

174 74.2 0.0 145.0

176 71.2 0.0 142.4







#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

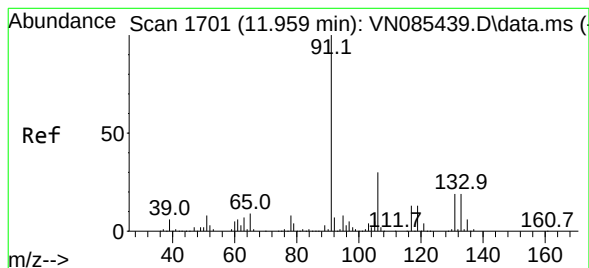
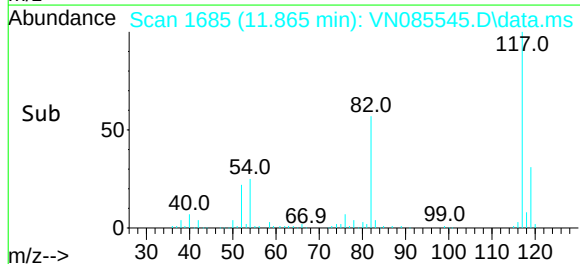
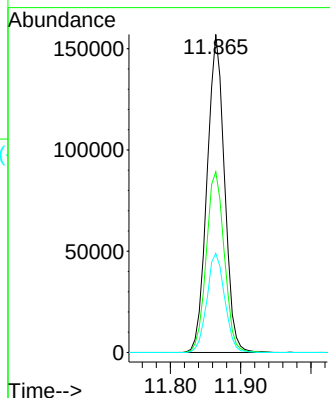
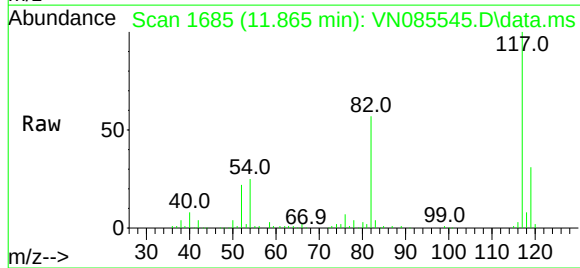
Tgt Ion:117 Resp: 270505

Ion Ratio Lower Upper

117 100

82 56.8 48.6 72.8

119 31.1 26.6 39.8



#67

Ethyl Benzene

Concen: 0.338 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085545.D

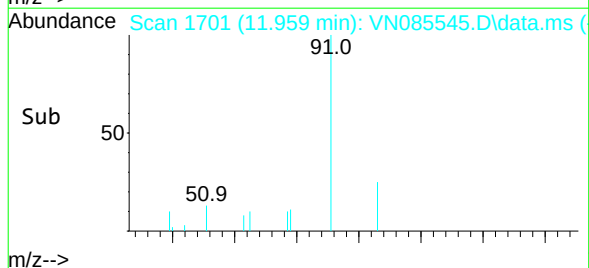
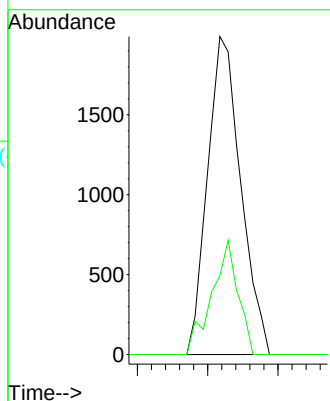
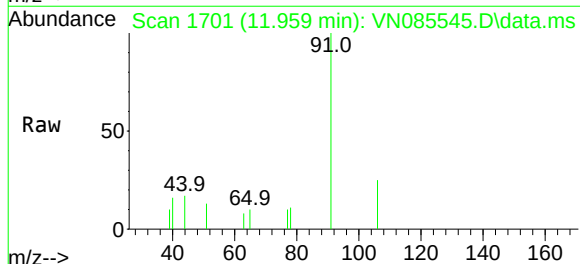
Acq: 28 Jan 2025 17:50

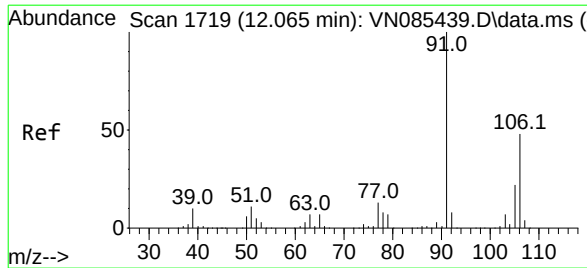
Tgt Ion: 91 Resp: 3265

Ion Ratio Lower Upper

91 100

106 24.8 23.8 35.8





#68

m/p-Xylenes

Concen: 0.303 ug/l

RT: 12.070 min Scan# 1719

Delta R.T. 0.006 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

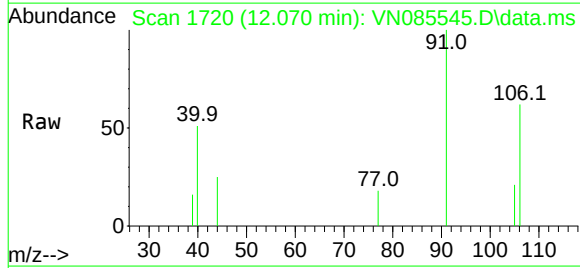
BP-VPB-192-GW-220-222

Tgt Ion:106 Resp: 1081

Ion Ratio Lower Upper

106 100

91 214.1 167.7 251.5



Abundance

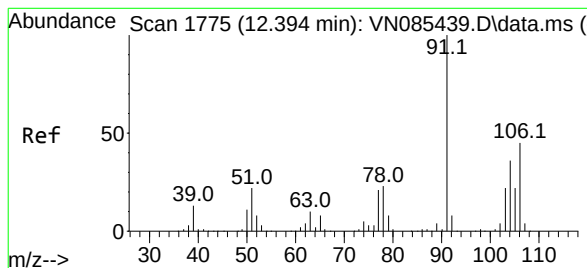
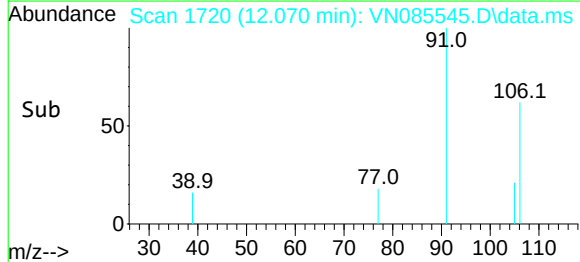
1000

12.070

500

0

Time--&gt;



#69

o-Xylene

Concen: 0.296 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085545.D

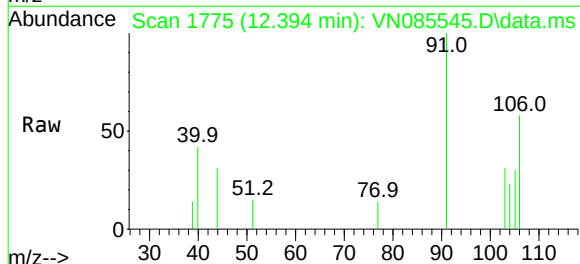
Acq: 28 Jan 2025 17:50

Tgt Ion:106 Resp: 1009

Ion Ratio Lower Upper

106 100

91 216.8 110.4 331.2



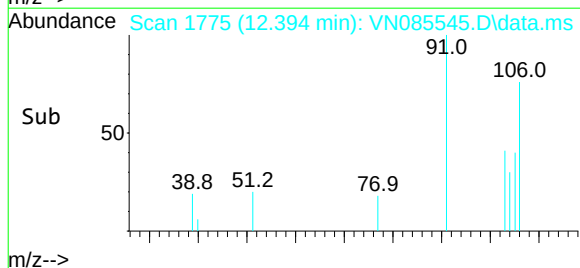
Abundance

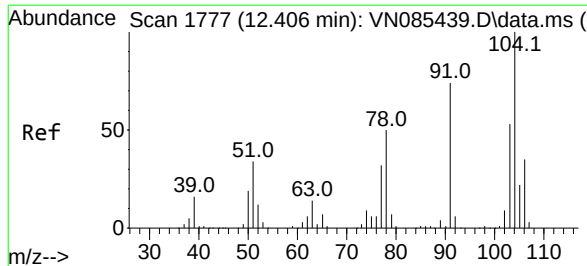
1000

500

0

Time--&gt;





#70

Styrene

Concen: 0.306 ug/l

RT: 12.406 min Scan# 17

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

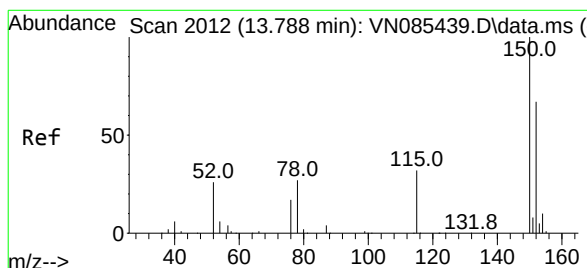
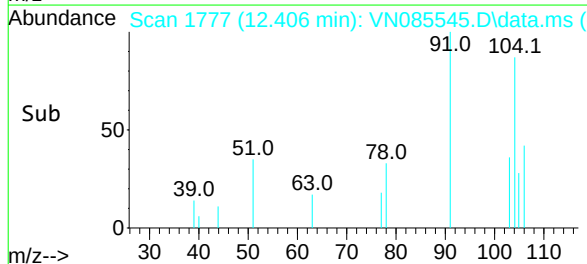
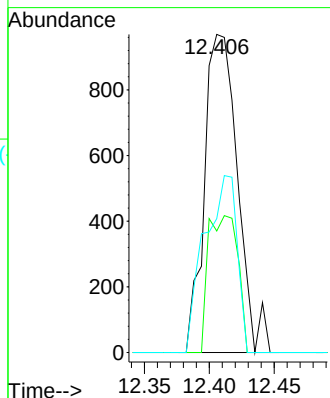
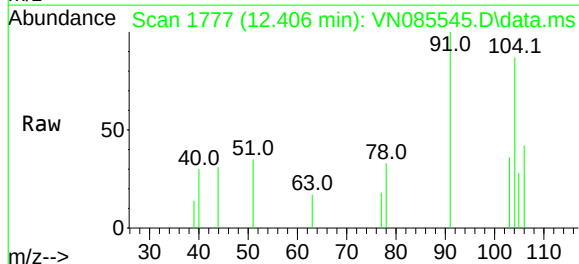
Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-220-222

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 104   | Resp: | 1725  |
| Ion Ratio | Lower | Upper |       |
| 104       | 100   |       |       |
| 78        | 38.2  | 42.5  | 63.7# |
| 103       | 54.2  | 43.8  | 65.8  |



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

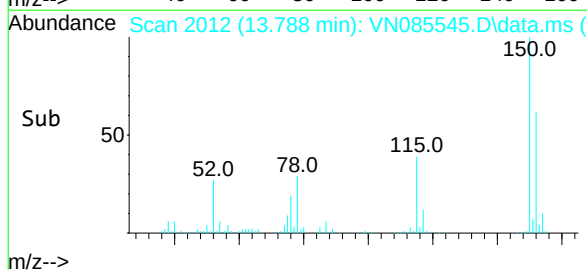
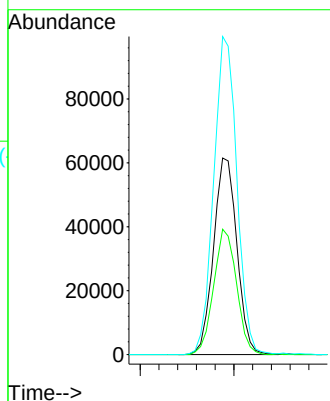
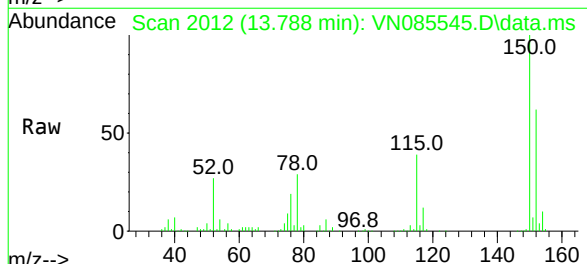
RT: 13.788 min Scan# 2012

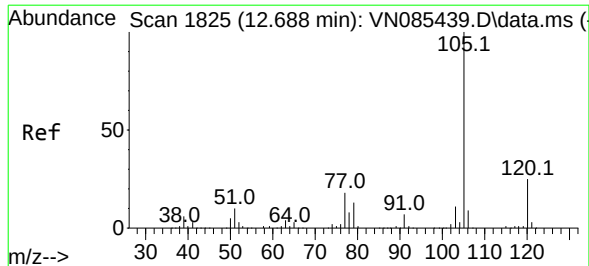
Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 106728 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.4  | 31.1  | 93.3   |
| 150       | 160.4 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 0.273 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

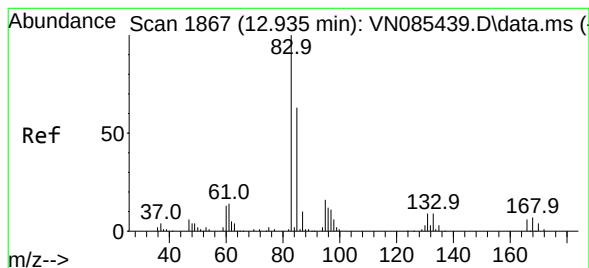
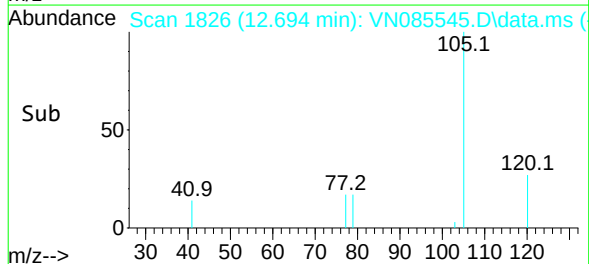
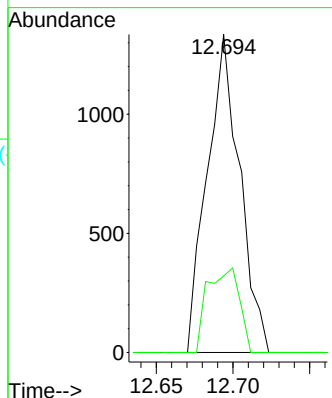
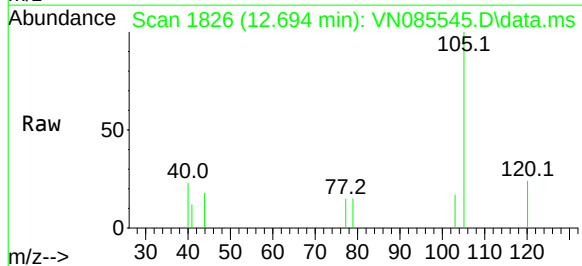
BP-VPB-192-GW-220-222

Tgt Ion:105 Resp: 1965

Ion Ratio Lower Upper

105 100

120 26.1 12.8 38.3



#75

1,1,2,2-Tetrachloroethane

Concen: 0.610 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

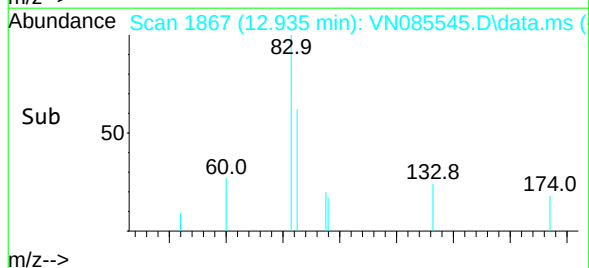
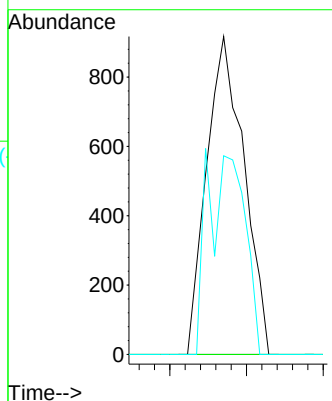
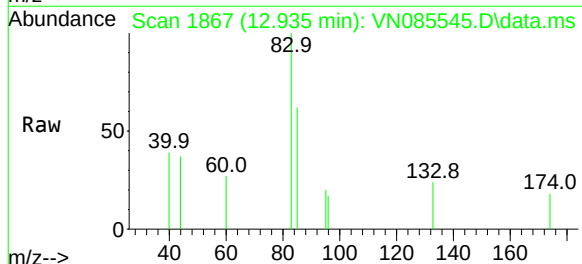
Tgt Ion: 83 Resp: 1551

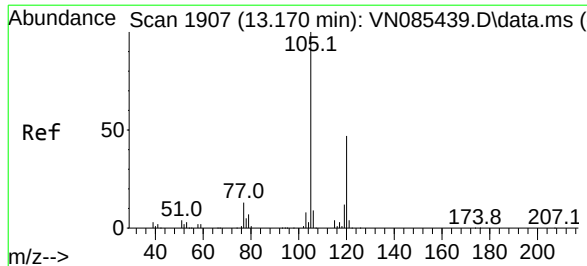
Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.4#

85 62.9 32.2 96.6





#80

1,3,5-Trimethylbenzene

Concen: 0.301 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085545.D

Acq: 28 Jan 2025 17:50

Instrument :

MSVOA\_N

ClientSampleId :

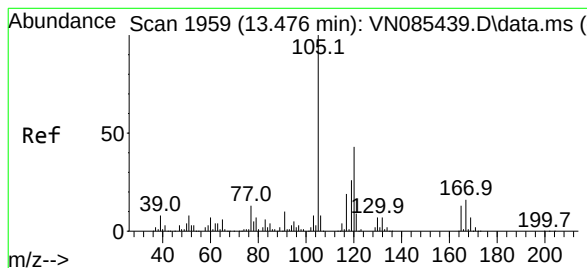
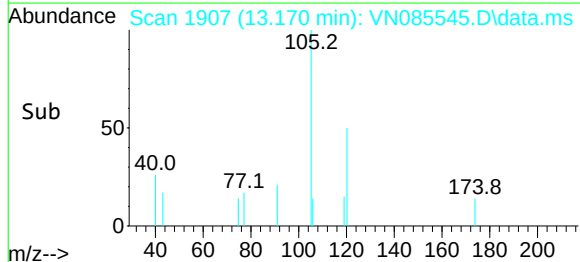
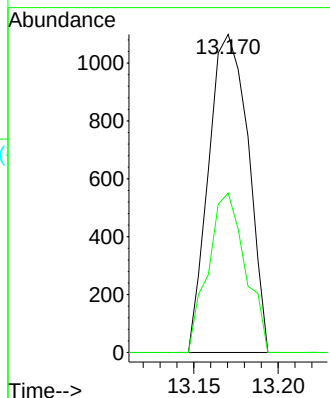
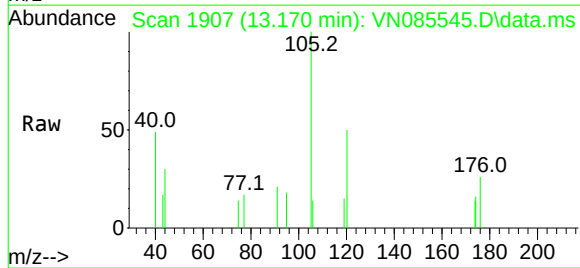
BP-VPB-192-GW-220-222

Tgt Ion:105 Resp: 1791

Ion Ratio Lower Upper

105 100

120 47.1 23.9 71.7



#84

1,2,4-Trimethylbenzene

Concen: 0.254 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085545.D

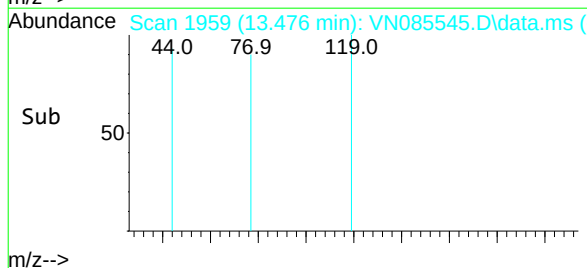
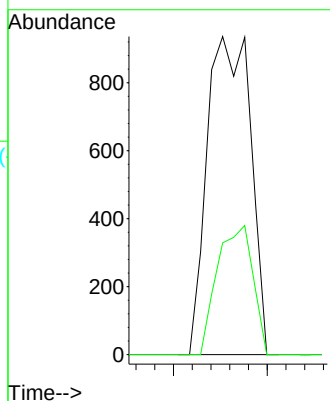
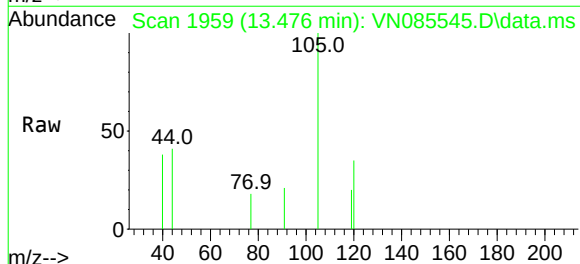
Acq: 28 Jan 2025 17:50

Tgt Ion:105 Resp: 1506

Ion Ratio Lower Upper

105 100

120 33.3 21.6 65.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085545.D  
 Acq On : 28 Jan 2025 17:50  
 Operator : JC\MD  
 Sample : Q1199-06  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-220-222

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Title : SW846 8260

Signal : TIC: VN085545.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.300       | 52            | 59          | 66           | rBV4     | 4605           | 13190         | 1.28%           | 0.231%        |
| 2         | 2.659       | 115           | 120         | 126          | rBV2     | 6095           | 11147         | 1.08%           | 0.195%        |
| 3         | 4.730       | 463           | 472         | 481          | rVB4     | 3840           | 11268         | 1.09%           | 0.197%        |
| 4         | 8.165       | 1045          | 1056        | 1061         | rBV      | 173837         | 417034        | 40.49%          | 7.288%        |
| 5         | 8.224       | 1061          | 1066        | 1078         | rVB      | 252155         | 555963        | 53.98%          | 9.716%        |
| 6         | 8.577       | 1115          | 1126        | 1136         | rBV      | 194360         | 436388        | 42.37%          | 7.626%        |
| 7         | 8.677       | 1136          | 1143        | 1146         | rBV5     | 5979           | 13917         | 1.35%           | 0.243%        |
| 8         | 8.777       | 1153          | 1160        | 1180         | rVB2     | 30907          | 118370        | 11.49%          | 2.069%        |
| 9         | 9.100       | 1205          | 1215        | 1230         | rVB      | 412877         | 822253        | 79.84%          | 14.370%       |
| 10        | 9.353       | 1252          | 1258        | 1263         | rBV4     | 9141           | 17070         | 1.66%           | 0.298%        |
| 11        | 10.565      | 1456          | 1464        | 1472         | rBV      | 576878         | 1029901       | 100.00%         | 17.998%       |
| 12        | 10.623      | 1472          | 1474        | 1481         | rVB3     | 6722           | 10992         | 1.07%           | 0.192%        |
| 13        | 11.300      | 1583          | 1589        | 1595         | rBV4     | 10443          | 18874         | 1.83%           | 0.330%        |
| 14        | 11.865      | 1676          | 1685        | 1696         | rBV      | 501934         | 890322        | 86.45%          | 15.559%       |
| 15        | 12.847      | 1845          | 1852        | 1864         | rBV      | 375912         | 632785        | 61.44%          | 11.058%       |
| 16        | 13.788      | 2005          | 2012        | 2022         | rVB      | 408690         | 704526        | 68.41%          | 12.312%       |
| 17        | 14.559      | 2137          | 2143        | 2147         | rBV3     | 12269          | 18162         | 1.76%           | 0.317%        |

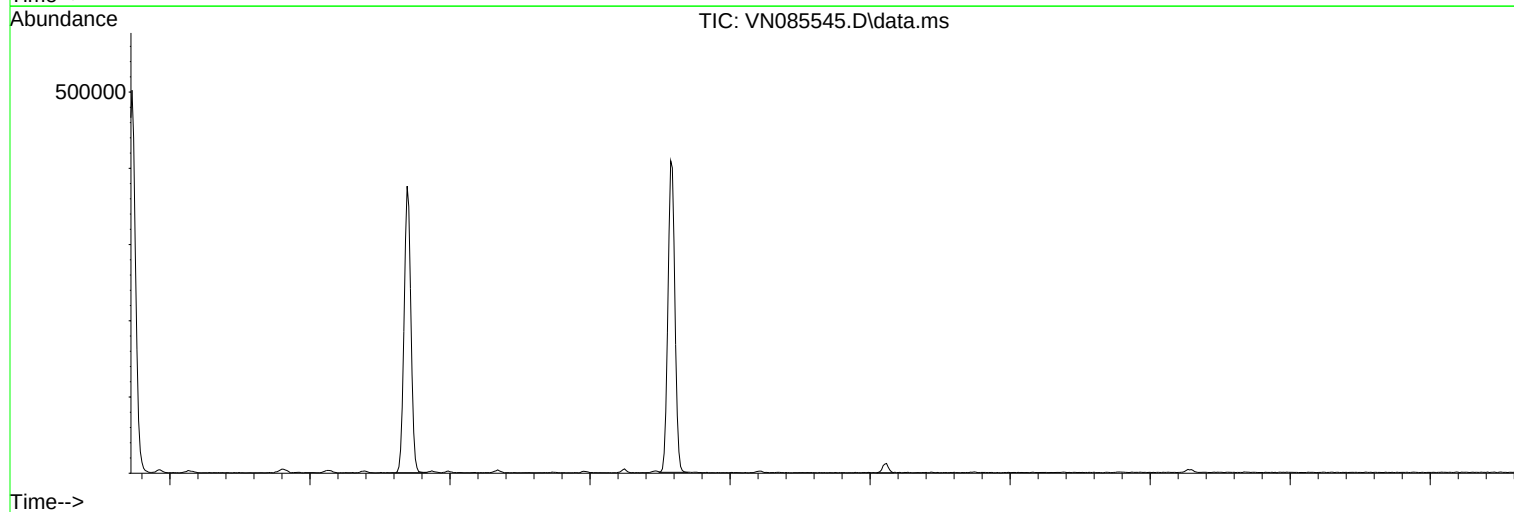
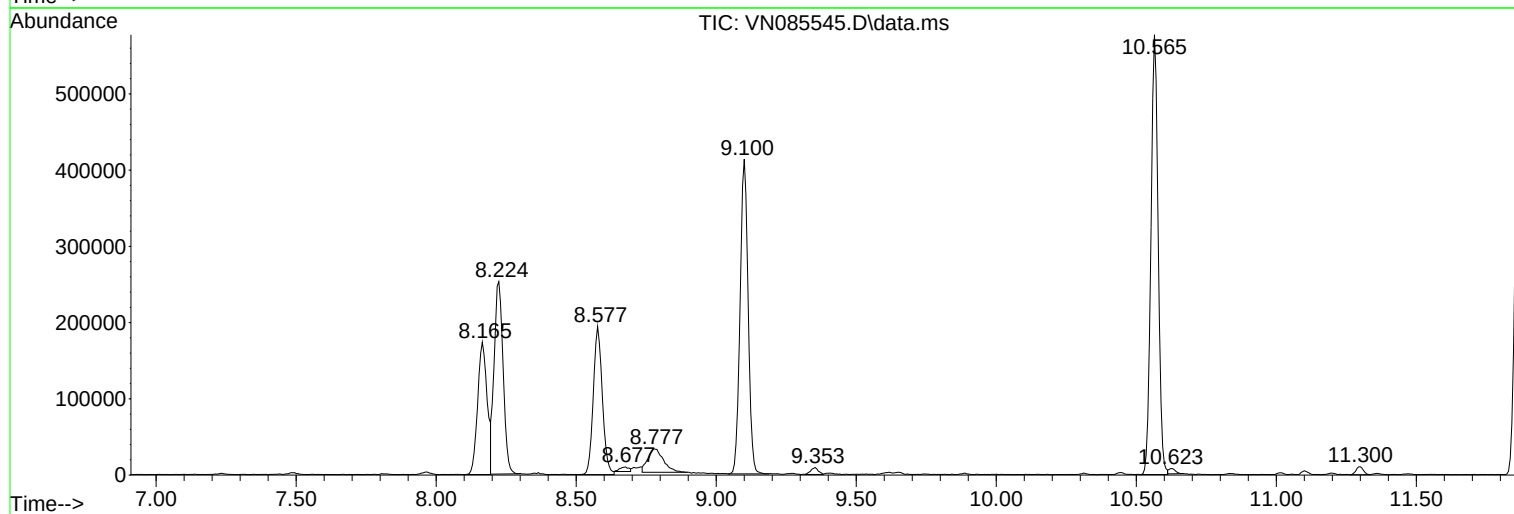
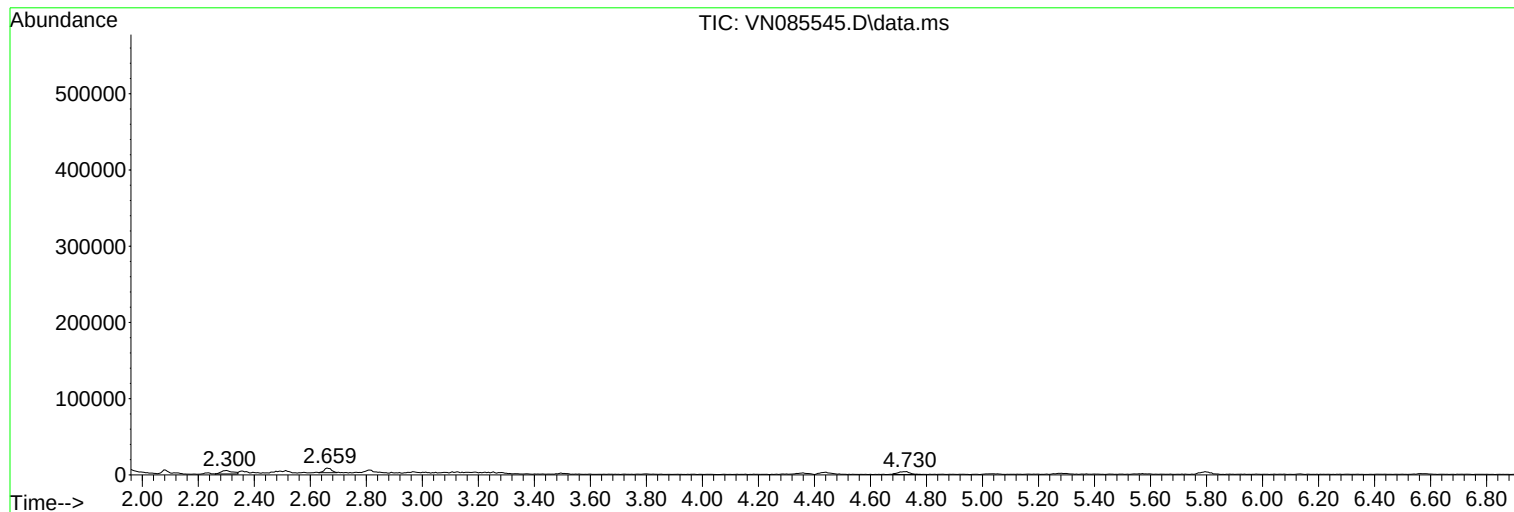
Sum of corrected areas: 5722162

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085545.D  
Acq On : 28 Jan 2025 17:50  
Operator : JC\MD  
Sample : Q1199-06  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085545.D  
Acq On : 28 Jan 2025 17:50  
Operator : JC\MD  
Sample : Q1199-06  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-192-GW-220-222

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085545.D  
Acq On : 28 Jan 2025 17:50  
Operator : JC\MD  
Sample : Q1199-06  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                            |        |      |                 |              |    |  |
|--------------------|----------------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc.       |        |      | Date Collected: | 01/23/25     |    |  |
| Project:           | CTO WE13                   |        |      | Date Received:  | 01/27/25     |    |  |
| Client Sample ID:  | BP-VPB-192-GW-DUP-20250123 |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | Q1199-07                   |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260                     |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                          | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                            |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624                    | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                            |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085540.D        | 1         |           | 01/28/25 15:49 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 5.30  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 1.10  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-DUP-20250123                | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-07                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085540.D        | 1         |           | 01/28/25 15:49 | VN012825      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                               | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                              | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                               | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 55.6   |           | 81 - 118 |      | 111%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 52.5   |           | 80 - 119 |      | 105%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 50.1   |           | 89 - 112 |      | 100%       | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 46.6   |           | 85 - 114 |      | 93%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 162000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 301000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 272000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 107000 | 13.794    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/23/25                     |
| Project:           | CTO WE13                                  | Date Received:  | 01/27/25                     |
| Client Sample ID:  | BP-VPB-192-GW-DUP-20250123                | SDG No.:        | Q1199                        |
| Lab Sample ID:     | Q1199-07                                  | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085540.D        | 1         |           | 01/28/25 15:49 | VN012825      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|-----|------------|-------|
|------------|-----------|-------|-----------|-----|-----|------------|-------|

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\VN012825\  
 Data File : VN085540.D  
 Acq On : 28 Jan 2025 15:49  
 Operator : JC\MD  
 Sample : Q1199-07  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-DUP-20250123

Quant Time: Jan 29 00:40:30 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

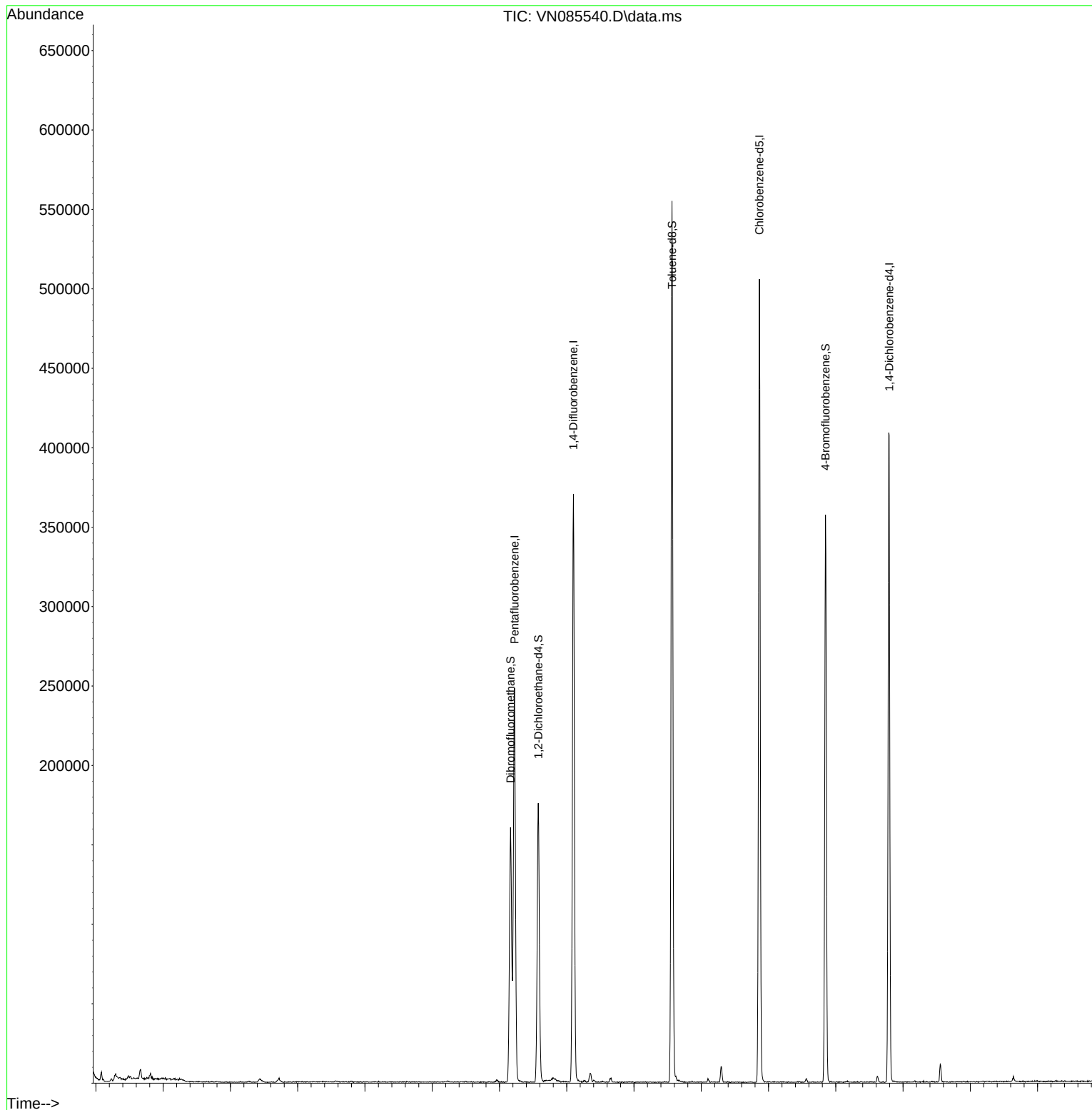
| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min) |
|-----------------------------|--------|----------------|----------|--------|----------|----------|
| -----                       |        |                |          |        |          |          |
| Internal Standards          |        |                |          |        |          |          |
| 1) Pentafluorobenzene       | 8.224  | 168            | 162005   | 50.000 | ug/l     | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 300571   | 50.000 | ug/l     | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 271698   | 50.000 | ug/l     | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.794 | 152            | 107447   | 50.000 | ug/l     | 0.00     |
|                             |        |                |          |        |          |          |
| System Monitoring Compounds |        |                |          |        |          |          |
| 33) 1,2-Dichloroethane-d4   | 8.576  | 65             | 145516   | 55.645 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 111.280% |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 109371   | 52.450 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 104.900% |          |
| 50) Toluene-d8              | 10.565 | 98             | 370808   | 50.050 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 100.100% |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 118170   | 46.627 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 93.260%  |          |
|                             |        |                |          |        |          |          |
| Target Compounds            |        |                |          |        |          |          |
| 16) Acetone                 | 4.436  | 43             | 4495     | 5.320  | ug/l     | 94       |
| 44) Trichloroethene         | 9.359  | 130            | 2214     | 1.082  | ug/l     | 95       |
| 95) Naphthalene             | 15.641 | 128            | 3659     | 0.758  | ug/l #   | 83       |
| -----                       |        |                |          |        |          |          |

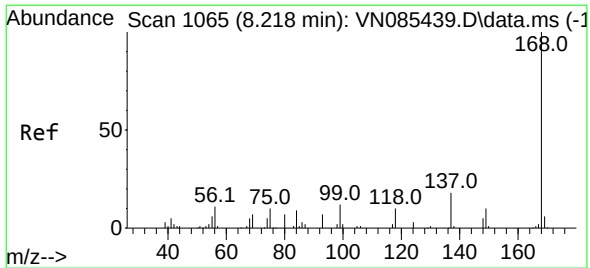
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085540.D  
Acq On : 28 Jan 2025 15:49  
Operator : JC\MD  
Sample : Q1199-07  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-DUP-20250123

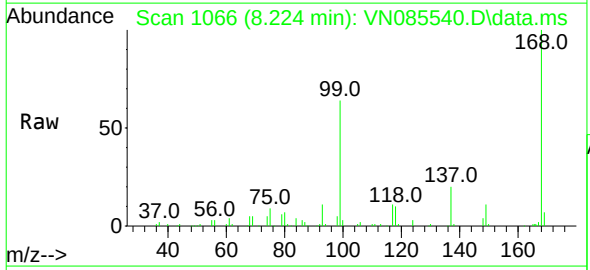
Quant Time: Jan 29 00:40:30 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



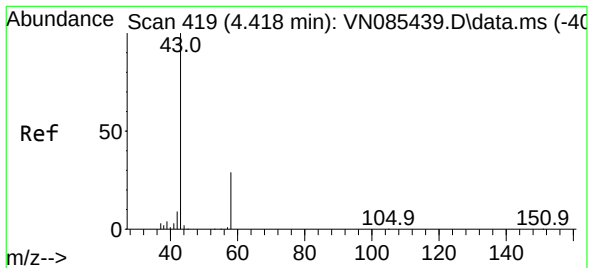
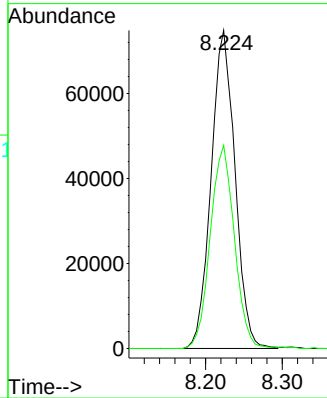
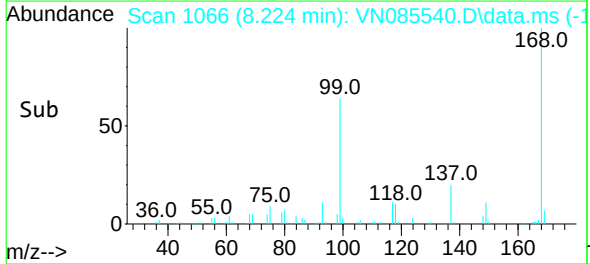


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085540.D  
Acq: 28 Jan 2025 15:49

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-DUP-20250123

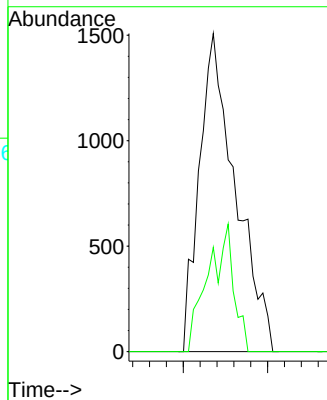
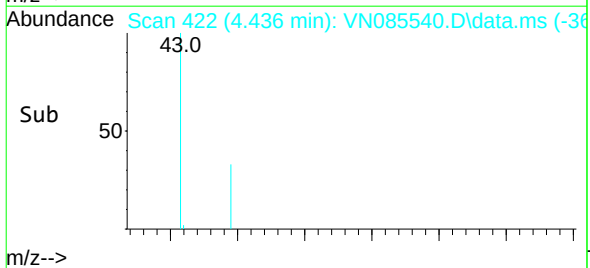
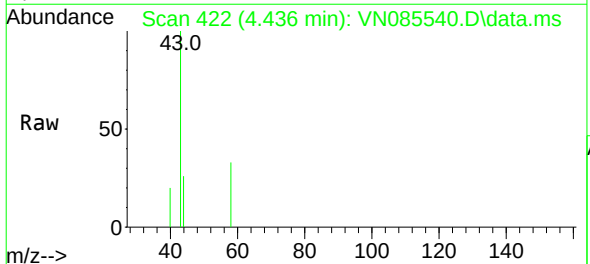


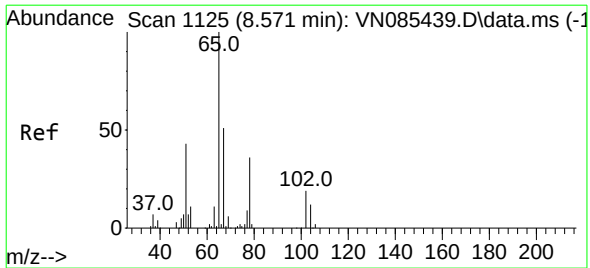
Tgt Ion:168 Resp: 162005  
Ion Ratio Lower Upper  
168 100  
99 63.9 53.6 80.4



#16  
Acetone  
Concen: 5.320 ug/l  
RT: 4.436 min Scan# 422  
Delta R.T. 0.017 min  
Lab File: VN085540.D  
Acq: 28 Jan 2025 15:49

Tgt Ion: 43 Resp: 4495  
Ion Ratio Lower Upper  
43 100  
58 32.8 23.8 35.6





#33

1,2-Dichloroethane-d4

Concen: 55.645 ug/l

RT: 8.576 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

Instrument :

MSVOA\_N

ClientSampleId :

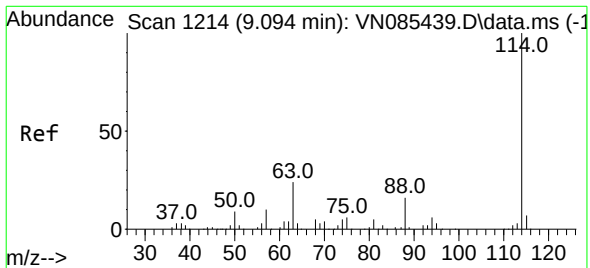
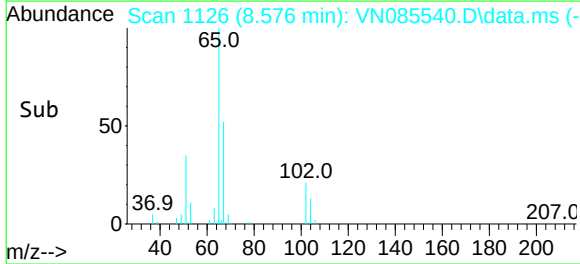
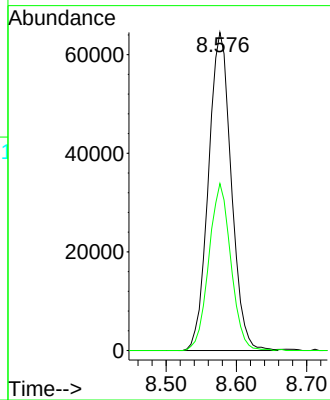
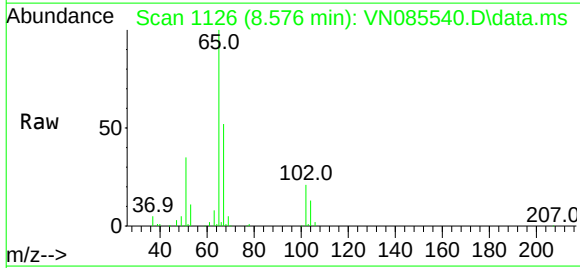
BP-VPB-192-GW-DUP-20250123

Tgt Ion: 65 Resp: 145516

Ion Ratio Lower Upper

65 100

67 50.6 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

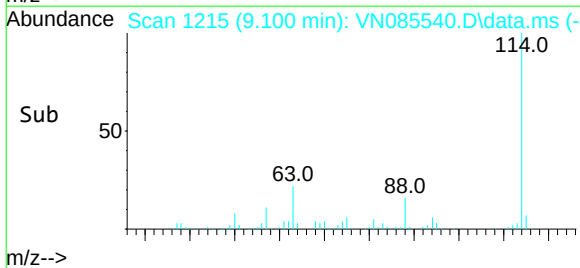
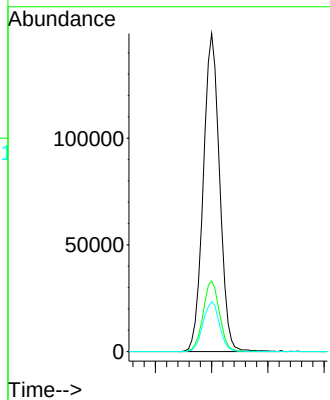
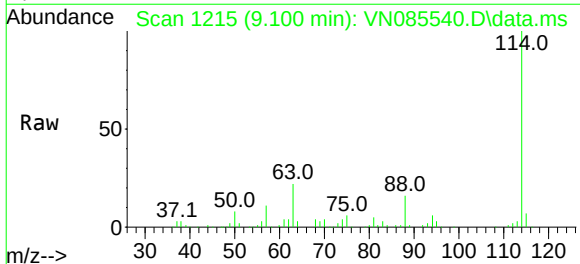
Tgt Ion: 114 Resp: 300571

Ion Ratio Lower Upper

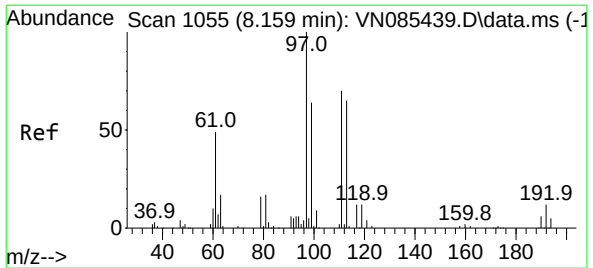
114 100

63 22.2 0.0 47.6

88 15.7 0.0 32.6







#35

Dibromofluoromethane

Concen: 52.450 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085540.D

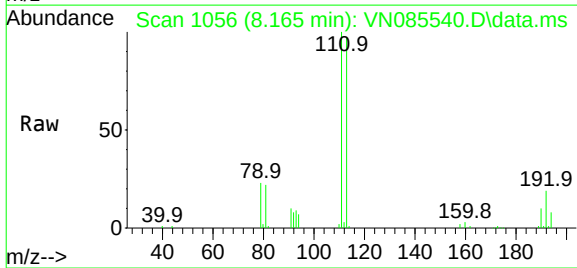
Acq: 28 Jan 2025 15:49

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-DUP-20250123



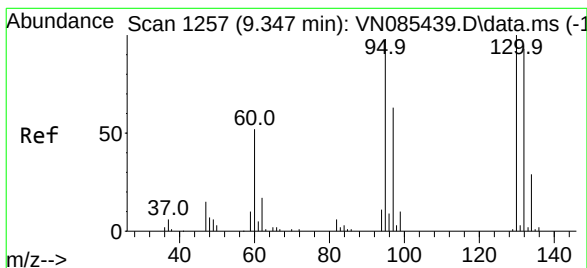
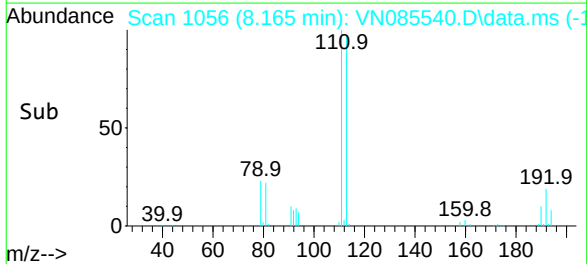
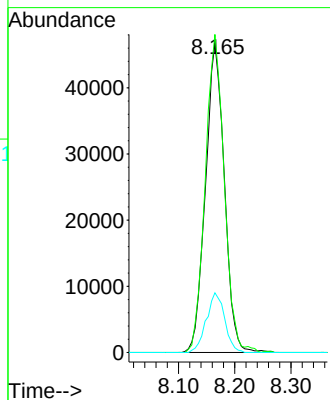
Tgt Ion:113 Resp: 109371

Ion Ratio Lower Upper

113 100

111 103.1 82.7 124.1

192 18.7 14.3 21.5



#44

Trichloroethene

Concen: 1.082 ug/l

RT: 9.359 min Scan# 1259

Delta R.T. 0.012 min

Lab File: VN085540.D

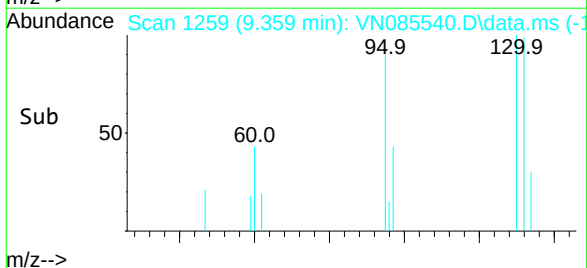
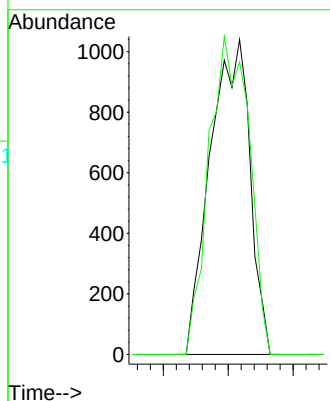
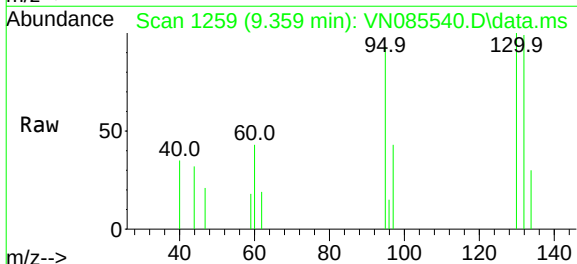
Acq: 28 Jan 2025 15:49

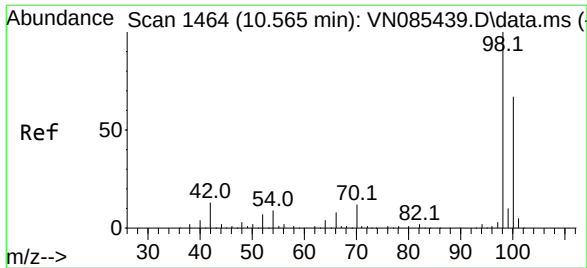
Tgt Ion:130 Resp: 2214

Ion Ratio Lower Upper

130 100

95 92.9 0.0 195.8





#50

Toluene-d8

Concen: 50.050 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

Instrument :

MSVOA\_N

ClientSampleId :

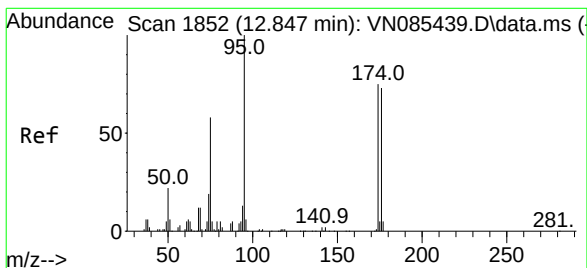
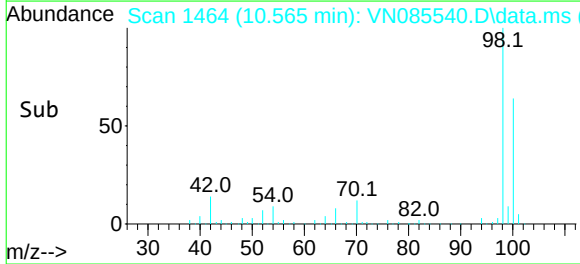
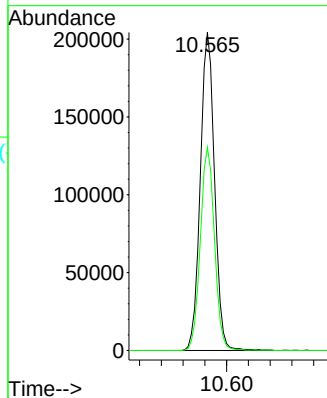
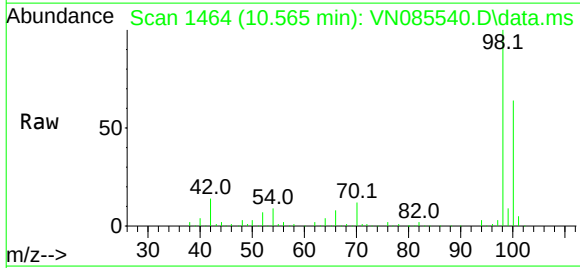
BP-VPB-192-GW-DUP-20250123

Tgt Ion: 98 Resp: 370808

Ion Ratio Lower Upper

98 100

100 63.4 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 46.627 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

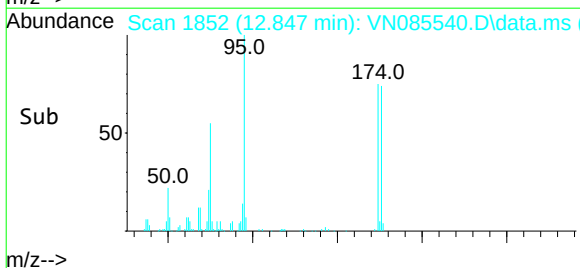
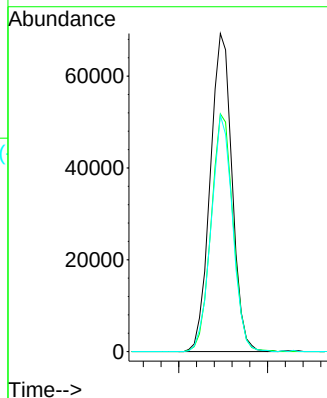
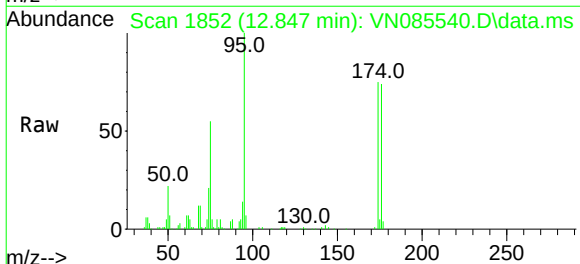
Tgt Ion: 95 Resp: 118170

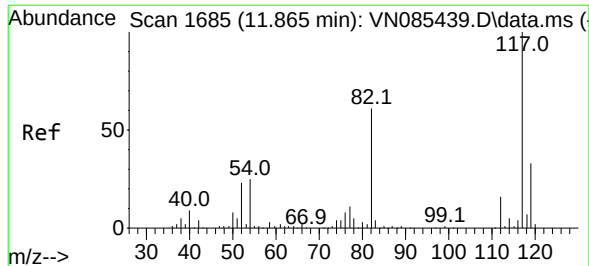
Ion Ratio Lower Upper

95 100

174 74.9 0.0 145.0

176 73.0 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-DUP-20250123

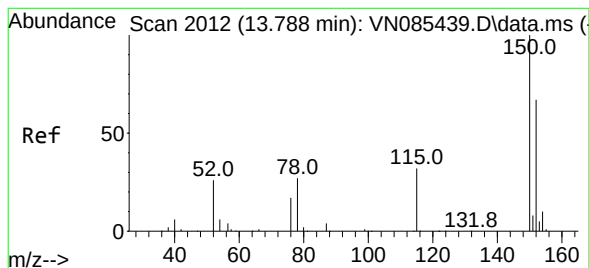
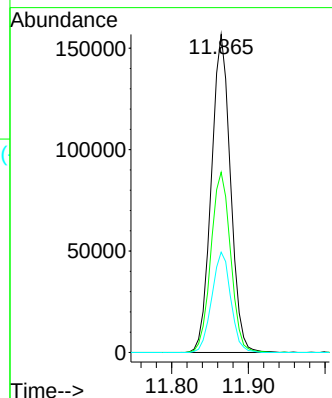
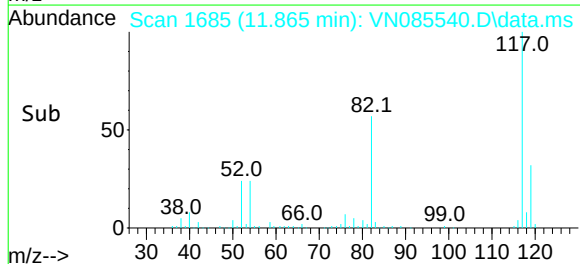
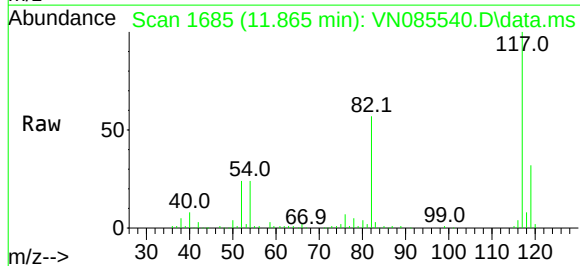
Tgt Ion:117 Resp: 271698

Ion Ratio Lower Upper

117 100

82 56.7 48.6 72.8

119 31.5 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 2013

Delta R.T. 0.006 min

Lab File: VN085540.D

Acq: 28 Jan 2025 15:49

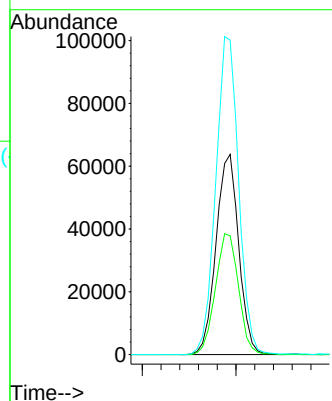
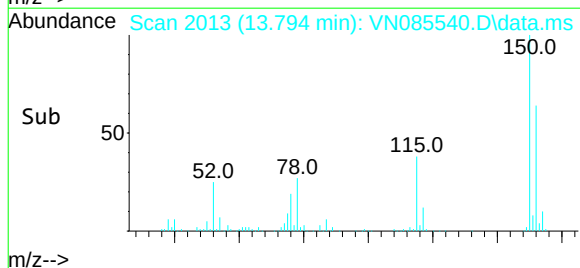
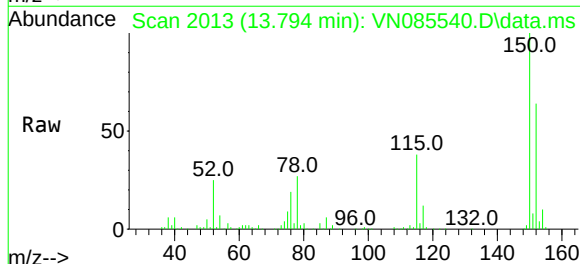
Tgt Ion:152 Resp: 107447

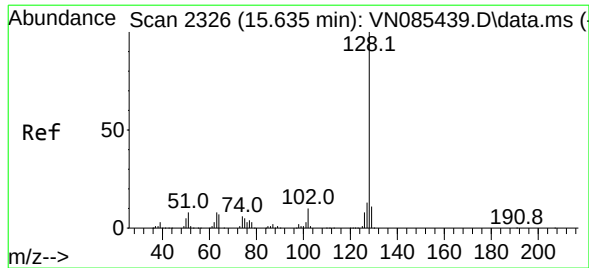
Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 160.0 0.0 343.6





#95

Naphthalene

Concen: 0.758 ug/l

RT: 15.641 min Scan# 23

Delta R.T. 0.006 min

Lab File: VN085540.D

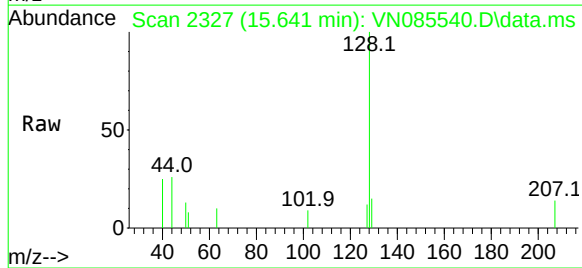
Acq: 28 Jan 2025 15:49

Instrument :

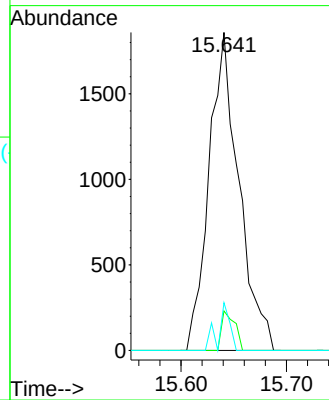
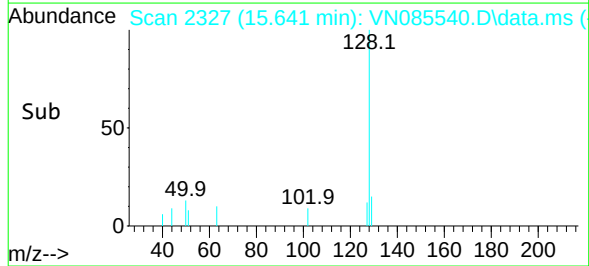
MSVOA\_N

ClientSampleId :

BP-VPB-192-GW-DUP-20250123



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 3659  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 5.5   | 10.6  | 16.0# |
| 129      | 5.7   | 8.8   | 13.2# |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085540.D  
 Acq On : 28 Jan 2025 15:49  
 Operator : JC\MD  
 Sample : Q1199-07  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-DUP-20250123

Integration Parameters: RTEINT.P  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Title : SW846 8260

Signal : TIC: VN085540.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.295       | 50            | 58          | 65           | rBV5     | 4564           | 12896         | 1.28%           | 0.243%        |
| 2         | 8.165       | 1046          | 1056        | 1061         | rBV2     | 160392         | 382091        | 37.99%          | 7.206%        |
| 3         | 8.224       | 1061          | 1066        | 1080         | rVB      | 247782         | 520168        | 51.72%          | 9.810%        |
| 4         | 8.576       | 1117          | 1126        | 1139         | rBV      | 175592         | 397042        | 39.48%          | 7.488%        |
| 5         | 9.100       | 1204          | 1215        | 1227         | rBV      | 370302         | 749008        | 74.47%          | 14.126%       |
| 6         | 9.347       | 1251          | 1257        | 1263         | rBV4     | 5500           | 10997         | 1.09%           | 0.207%        |
| 7         | 10.565      | 1456          | 1464        | 1473         | rBV      | 554585         | 1005766       | 100.00%         | 18.969%       |
| 8         | 11.300      | 1584          | 1589        | 1594         | rVB3     | 9816           | 16342         | 1.62%           | 0.308%        |
| 9         | 11.865      | 1677          | 1685        | 1698         | rVB      | 505506         | 880668        | 87.56%          | 16.609%       |
| 10        | 12.847      | 1844          | 1852        | 1863         | rVB      | 357308         | 608936        | 60.54%          | 11.485%       |
| 11        | 13.788      | 2005          | 2012        | 2023         | rBV      | 408600         | 701074        | 69.71%          | 13.222%       |
| 12        | 14.553      | 2136          | 2142        | 2147         | rBV4     | 11268          | 17228         | 1.71%           | 0.325%        |

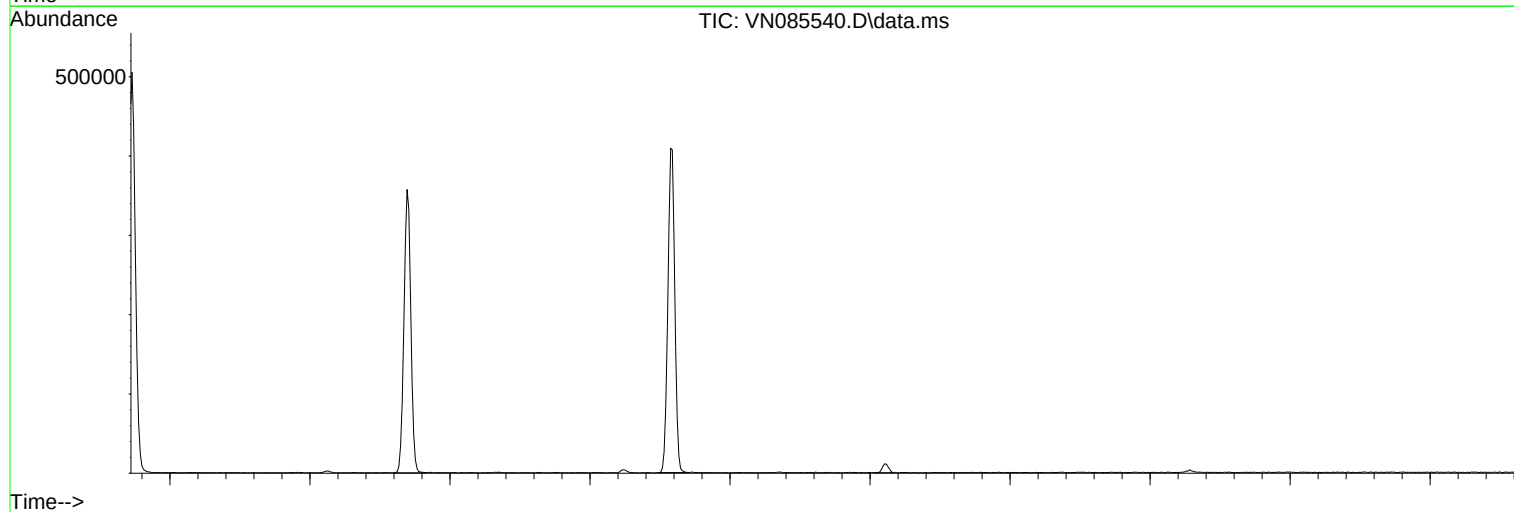
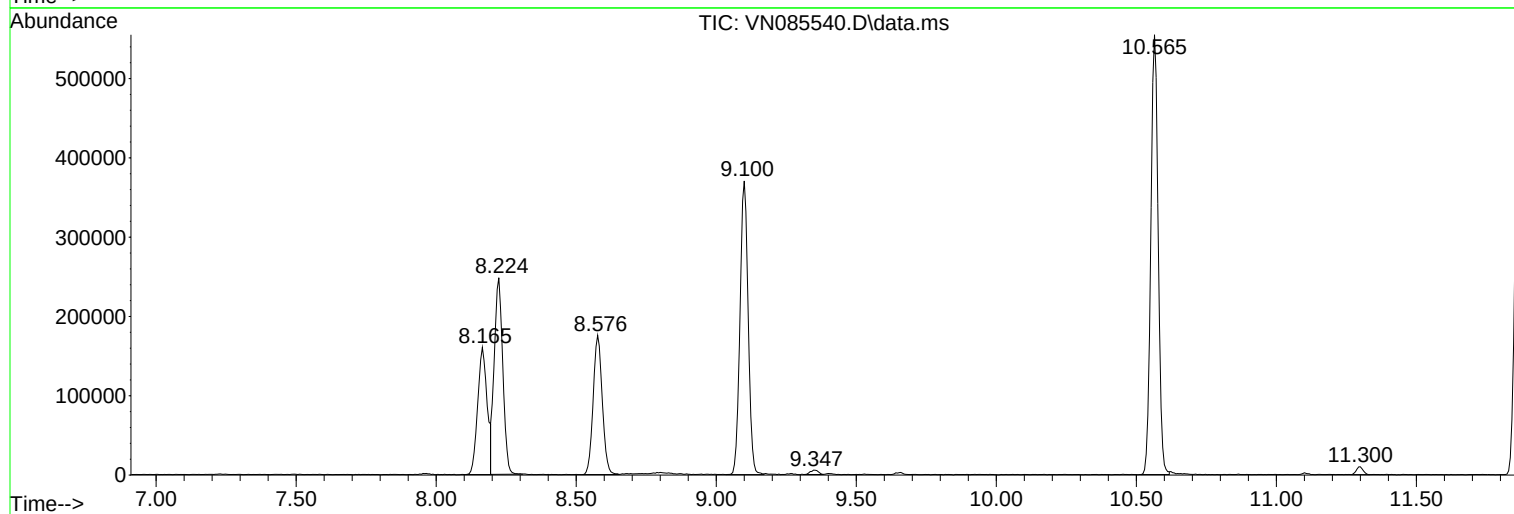
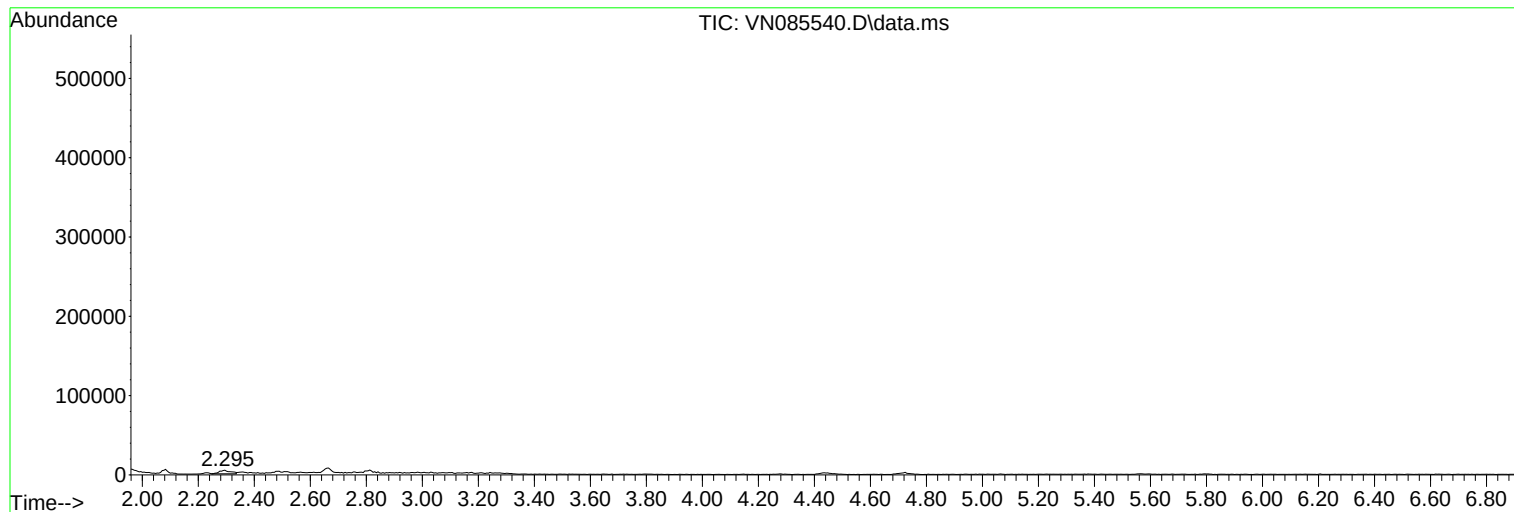
Sum of corrected areas: 5302216

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085540.D  
Acq On : 28 Jan 2025 15:49  
Operator : JC\MD  
Sample : Q1199-07  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-DUP-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085540.D  
Acq On : 28 Jan 2025 15:49  
Operator : JC\MD  
Sample : Q1199-07  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-192-GW-DUP-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085540.D  
Acq On : 28 Jan 2025 15:49  
Operator : JC\MD  
Sample : Q1199-07  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-192-GW-DUP-20250123

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|





# CALIBRATION SUMMARY



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06  
 Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199  
 Instrument ID: MSVOA\_N Calibration Date(s): 01/14/2025 01/14/2025  
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19  
 GC Column: RXI-624 ID: 0.25 (mm)

|                                |                     |        |        |                     |        |                     |       |       |
|--------------------------------|---------------------|--------|--------|---------------------|--------|---------------------|-------|-------|
| LAB FILE ID:                   | RRF100 = VN085438.D |        |        | RRF050 = VN085439.D |        | RRF020 = VN085440.D |       |       |
|                                | RRF010 = VN085441.D |        |        | RRF005 = VN085442.D |        | RRF001 = VN085443.D |       |       |
| COMPOUND                       | RRF100              | RRF050 | RRF020 | RRF010              | RRF005 | RRF001              | RRF   | % RSD |
| Chloromethane                  | 0.680               | 0.680  | 0.727  | 0.693               | 0.779  | 0.839               | 0.733 | 8.8   |
| Vinyl Chloride                 | 0.697               | 0.686  | 0.727  | 0.711               | 0.781  | 0.819               | 0.737 | 7.1   |
| Bromomethane                   | 0.392               | 0.417  | 0.454  | 0.437               | 0.525  |                     | 0.445 | 11.3  |
| Chloroethane                   | 0.435               | 0.424  | 0.468  | 0.429               | 0.505  | 0.542               | 0.467 | 10.3  |
| Trichlorofluoromethane         | 1.046               | 0.997  | 1.097  | 1.040               | 1.077  | 1.157               | 1.069 | 5.1   |
| 1,1,2-Trichlorotrifluoroethane | 0.590               | 0.542  | 0.609  | 0.587               | 0.639  | 0.646               | 0.602 | 6.4   |
| 1,1-Dichloroethene             | 0.548               | 0.533  | 0.556  | 0.526               | 0.559  | 0.497               | 0.537 | 4.3   |
| Acetone                        | 0.238               | 0.252  | 0.252  | 0.247               | 0.269  | 0.306               | 0.261 | 9.3   |
| Carbon Disulfide               | 1.555               | 1.477  | 1.647  | 1.537               | 1.719  | 1.978               | 1.652 | 11    |
| Methyl tert-butyl Ether        | 1.834               | 1.873  | 1.853  | 1.664               | 1.685  | 1.545               | 1.742 | 7.5   |
| Methylene Chloride             | 0.629               | 0.629  | 0.658  | 0.606               | 0.696  | 0.656               | 0.646 | 4.9   |
| trans-1,2-Dichloroethene       | 0.571               | 0.555  | 0.574  | 0.539               | 0.569  | 0.632               | 0.573 | 5.5   |
| 1,1-Dichloroethane             | 1.164               | 1.170  | 1.206  | 1.100               | 1.226  | 1.204               | 1.178 | 3.8   |
| 2-Butanone                     | 0.378               | 0.390  | 0.398  | 0.363               | 0.387  | 0.386               | 0.384 | 3.1   |
| Carbon Tetrachloride           | 0.574               | 0.530  | 0.579  | 0.529               | 0.565  | 0.567               | 0.557 | 4     |
| cis-1,2-Dichloroethene         | 0.691               | 0.683  | 0.715  | 0.639               | 0.669  | 0.655               | 0.675 | 4     |
| Chloroform                     | 1.197               | 1.175  | 1.241  | 1.169               | 1.253  | 1.273               | 1.218 | 3.6   |
| 1,1,1-Trichloroethane          | 1.053               | 1.016  | 1.091  | 1.000               | 1.148  | 1.102               | 1.068 | 5.2   |
| Methylcyclohexane              | 0.564               | 0.463  | 0.477  | 0.407               | 0.437  | 0.397               | 0.457 | 13.3  |
| Benzene                        | 1.551               | 1.449  | 1.527  | 1.376               | 1.474  | 1.400               | 1.463 | 4.7   |
| 1,2-Dichloroethane             | 0.569               | 0.547  | 0.575  | 0.522               | 0.574  | 0.517               | 0.551 | 4.8   |
| Trichloroethene                | 0.362               | 0.324  | 0.352  | 0.310               | 0.343  | 0.352               | 0.341 | 5.8   |
| 1,2-Dichloropropane            | 0.390               | 0.371  | 0.388  | 0.334               | 0.388  | 0.371               | 0.374 | 5.7   |
| Bromodichloromethane           | 0.590               | 0.559  | 0.579  | 0.514               | 0.569  | 0.484               | 0.549 | 7.5   |
| 4-Methyl-2-Pentanone           | 0.499               | 0.492  | 0.495  | 0.432               | 0.443  | 0.380               | 0.457 | 10.3  |
| Toluene                        | 0.964               | 0.870  | 0.919  | 0.808               | 0.835  | 0.690               | 0.848 | 11.3  |
| t-1,3-Dichloropropene          | 0.594               | 0.551  | 0.544  | 0.481               | 0.527  | 0.416               | 0.519 | 12    |
| cis-1,3-Dichloropropene        | 0.623               | 0.588  | 0.601  | 0.527               | 0.538  | 0.450               | 0.554 | 11.4  |
| 1,1,2-Trichloroethane          | 0.348               | 0.340  | 0.353  | 0.309               | 0.349  | 0.314               | 0.335 | 5.7   |
| 2-Hexanone                     | 0.358               | 0.357  | 0.353  | 0.298               | 0.302  | 0.261               | 0.321 | 12.6  |

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



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06  
 Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199  
 Instrument ID: MSVOA\_N Calibration Date(s): 01/14/2025 01/14/2025  
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19  
 GC Column: RXI-624 ID: 0.25 (mm)

| LAB FILE ID:              |        | RRF100 = VN085438.D |        | RRF050 = VN085439.D |        | RRF020 = VN085440.D |       |       |  |
|---------------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|--|
|                           |        | RRF010 = VN085441.D |        | RRF005 = VN085442.D |        | RRF001 = VN085443.D |       |       |  |
| COMPOUND                  | RRF100 | RRF050              | RRF020 | RRF010              | RRF005 | RRF001              | RRF   | % RSD |  |
| Dibromochloromethane      | 0.430  | 0.414               | 0.412  | 0.368               | 0.420  | 0.386               | 0.405 | 5.8   |  |
| Tetrachloroethene         | 0.351  | 0.322               | 0.365  | 0.338               | 0.346  | 0.323               | 0.341 | 4.9   |  |
| Chlorobenzene             | 1.133  | 1.076               | 1.154  | 1.047               | 1.110  | 1.051               | 1.095 | 4     |  |
| Ethyl Benzene             | 2.072  | 1.867               | 1.940  | 1.685               | 1.709  | 1.430               | 1.784 | 12.7  |  |
| m/p-Xylenes               | 0.775  | 0.707               | 0.750  | 0.615               | 0.616  | 0.492               | 0.659 | 16    |  |
| o-Xylene                  | 0.738  | 0.681               | 0.713  | 0.584               | 0.582  | 0.482               | 0.630 | 15.5  |  |
| Styrene                   | 1.271  | 1.173               | 1.186  | 0.956               | 0.929  | 0.742               | 1.043 | 19.2  |  |
| Bromoform                 | 0.311  | 0.311               | 0.312  | 0.273               | 0.284  | 0.235               | 0.288 | 10.6  |  |
| Isopropylbenzene          | 3.922  | 3.448               | 3.681  | 3.272               | 3.157  | 2.766               | 3.375 | 12.1  |  |
| 1,1,2,2-Tetrachloroethane | 1.121  | 1.145               | 1.187  | 1.157               | 1.228  | 1.314               | 1.192 | 5.9   |  |
| 1,3-Dichlorobenzene       | 1.720  | 1.565               | 1.701  | 1.574               | 1.656  | 1.526               | 1.624 | 4.9   |  |
| 1,4-Dichlorobenzene       | 1.706  | 1.562               | 1.713  | 1.607               | 1.743  | 1.767               | 1.683 | 4.8   |  |
| 1,2-Dichlorobenzene       | 1.611  | 1.555               | 1.654  | 1.532               | 1.600  | 1.766               | 1.620 | 5.2   |  |
| 1,2-Dichloroethane-d4     | 0.774  | 0.831               | 0.754  | 0.762               | 0.914  |                     | 0.807 | 8.3   |  |
| Dibromofluoromethane      | 0.359  | 0.358               | 0.335  | 0.310               | 0.373  |                     | 0.347 | 7.1   |  |
| Toluene-d8                | 1.339  | 1.267               | 1.207  | 1.076               | 1.274  |                     | 1.232 | 8.1   |  |
| 4-Bromofluorobenzene      | 0.475  | 0.449               | 0.410  | 0.357               | 0.417  |                     | 0.422 | 10.6  |  |

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

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

## Calibration Files

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

D

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

|                                                  |    |                       |       |       |       |       |       |       |       |        |
|--------------------------------------------------|----|-----------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\ |    |                       |       |       |       |       |       |       |       |        |
| Method File : 82N011425W.M                       |    |                       |       |       |       |       |       |       |       |        |
| 56)                                              | T  | Ethyl methacry...     | 0.317 | 0.434 | 0.418 | 0.521 | 0.544 | 0.582 | 0.469 | 20.85  |
| 57)                                              | T  | 1,3-Dichloropr...     | 0.514 | 0.584 | 0.555 | 0.618 | 0.602 | 0.627 | 0.583 | 7.31   |
| 58)                                              | T  | 2-Chloroethyl ...     | 0.163 | 0.205 | 0.185 | 0.226 | 0.241 | 0.258 | 0.213 | 16.67  |
| 59)                                              | T  | 2-Hexanone            | 0.261 | 0.302 | 0.298 | 0.353 | 0.357 | 0.358 | 0.321 | 12.60  |
| 60)                                              | T  | Dibromochlorom...     | 0.386 | 0.420 | 0.368 | 0.412 | 0.414 | 0.430 | 0.405 | 5.79   |
| 61)                                              | T  | 1,2-Dibromoethane     | 0.334 | 0.321 | 0.309 | 0.356 | 0.334 | 0.349 | 0.334 | 5.16   |
| 62)                                              | S  | 4-Bromofluorob...     |       | 0.417 | 0.357 | 0.410 | 0.449 | 0.475 | 0.422 | 10.57  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |        |
| 63)                                              | I  | Chlorobenzene-d5      |       |       |       |       |       |       |       |        |
| 64)                                              | T  | Tetrachloroethene     | 0.323 | 0.346 | 0.338 | 0.365 | 0.322 | 0.351 | 0.341 | 4.87   |
| 65)                                              | PM | Chlorobenzene         | 1.051 | 1.110 | 1.047 | 1.154 | 1.076 | 1.133 | 1.095 | 4.03   |
| 66)                                              | T  | 1,1,1,2-Tetrac...     | 0.425 | 0.412 | 0.371 | 0.408 | 0.392 | 0.404 | 0.402 | 4.65   |
| 67)                                              | C  | Ethyl Benzene         | 1.430 | 1.709 | 1.685 | 1.940 | 1.867 | 2.072 | 1.784 | 12.67# |
| 68)                                              | T  | m/p-Xylenes           | 0.492 | 0.616 | 0.615 | 0.750 | 0.707 | 0.775 | 0.659 | 16.01  |
| 69)                                              | T  | o-Xylene              | 0.482 | 0.582 | 0.584 | 0.713 | 0.681 | 0.738 | 0.630 | 15.47  |
| 70)                                              | T  | Styrene               | 0.742 | 0.929 | 0.956 | 1.186 | 1.173 | 1.271 | 1.043 | 19.21  |
| 71)                                              | P  | Bromoform             | 0.235 | 0.284 | 0.273 | 0.312 | 0.311 | 0.311 | 0.288 | 10.61  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |        |
| 72)                                              | I  | 1,4-Dichlorobenzen... |       |       |       |       |       |       |       |        |
| 73)                                              | T  | Isopropylbenzene      | 2.766 | 3.157 | 3.272 | 3.681 | 3.448 | 3.922 | 3.375 | 12.06  |
| 74)                                              | T  | N-amyl acetate        | 1.364 | 1.394 | 1.405 | 1.642 | 1.622 | 1.673 | 1.517 | 9.43   |
| 75)                                              | P  | 1,1,2,2-Tetrac...     | 1.314 | 1.228 | 1.157 | 1.187 | 1.145 | 1.121 | 1.192 | 5.89   |
| 76)                                              | T  | 1,2,3-Trichlor...     | 1.104 | 0.965 | 0.957 | 1.118 | 0.893 | 1.061 | 1.016 | 8.96   |
| 77)                                              | T  | Bromobenzene          | 0.871 | 0.880 | 0.857 | 0.906 | 0.858 | 0.919 | 0.882 | 2.90   |
| 78)                                              | T  | n-propylbenzene       | 3.227 | 3.605 | 3.846 | 4.400 | 4.154 | 4.738 | 3.995 | 13.74  |
| 79)                                              | T  | 2-Chlorotoluene       | 2.252 | 2.533 | 2.571 | 2.761 | 2.585 | 2.812 | 2.586 | 7.67   |
| 80)                                              | T  | 1,3,5-Trimethy...     | 2.160 | 2.529 | 2.695 | 3.140 | 2.940 | 3.260 | 2.787 | 14.69  |
| 81)                                              | T  | trans-1,4-Dich...     |       | 0.335 | 0.347 | 0.386 | 0.390 | 0.419 | 0.376 | 9.04   |
| 82)                                              | T  | 4-Chlorotoluene       | 2.144 | 2.536 | 2.512 | 2.820 | 2.588 | 2.847 | 2.574 | 9.91   |
| 83)                                              | T  | tert-Butylbenzene     | 1.885 | 2.189 | 2.236 | 2.570 | 2.439 | 2.726 | 2.341 | 12.85  |
| 84)                                              | T  | 1,2,4-Trimethy...     | 1.888 | 2.542 | 2.710 | 3.190 | 3.016 | 3.323 | 2.778 | 18.89  |
| 85)                                              | T  | sec-Butylbenzene      | 2.318 | 3.026 | 3.147 | 3.643 | 3.421 | 3.912 | 3.244 | 17.17  |
| 86)                                              | T  | p-Isopropyltol...     | 1.777 | 2.368 | 2.541 | 2.942 | 2.872 | 3.286 | 2.631 | 20.04  |
| 87)                                              | T  | 1,3-Dichlorobe...     | 1.526 | 1.656 | 1.574 | 1.701 | 1.565 | 1.720 | 1.624 | 4.91   |
| 88)                                              | T  | 1,4-Dichlorobe...     | 1.767 | 1.743 | 1.607 | 1.713 | 1.562 | 1.706 | 1.683 | 4.78   |
| 89)                                              | T  | n-Butylbenzene        | 1.772 | 2.176 | 2.168 | 2.485 | 2.483 | 2.881 | 2.327 | 16.22  |
| 90)                                              | T  | Hexachloroethane      | 0.681 | 0.616 | 0.574 | 0.613 | 0.577 | 0.645 | 0.618 | 6.59   |
| 91)                                              | T  | 1,2-Dichlorobe...     | 1.766 | 1.600 | 1.532 | 1.654 | 1.555 | 1.611 | 1.620 | 5.15   |
| 92)                                              | T  | 1,2-Dibromo-3-...     | 0.202 | 0.228 | 0.212 | 0.224 | 0.222 | 0.218 | 0.218 | 4.31   |
| 93)                                              | T  | 1,2,4-Trichlor...     | 0.658 | 0.717 | 0.704 | 0.799 | 0.781 | 0.858 | 0.753 | 9.69   |
| 94)                                              | T  | Hexachlorobuta...     | 0.413 | 0.441 | 0.395 | 0.396 | 0.367 | 0.386 | 0.400 | 6.31   |
| 95)                                              | T  | Naphthalene           | 2.115 | 1.987 | 1.958 | 2.348 | 2.482 | 2.588 | 2.246 | 11.79  |
| 96)                                              | T  | 1,2,3-Trichlor...     | 0.750 | 0.693 | 0.732 | 0.792 | 0.786 | 0.817 | 0.762 | 5.96   |

(#) = Out of Range

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

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

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

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 202613   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 329363   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 298938   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 146196   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |           |
|-----------------------------|--------|-------|----------|----------|------|-----------|
| System Monitoring Compounds |        |       |          |          |      |           |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 313645   | 95.899   | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 191.800%# |
| 35) Dibromofluoromethane    | 8.159  | 113   | 236159   | 103.353  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 206.700%# |
| 50) Toluene-d8              | 10.565 | 98    | 881956   | 108.636  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 217.280%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 313161   | 112.765  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 225.520%# |

|                              |       |     |         |         |          |
|------------------------------|-------|-----|---------|---------|----------|
| Target Compounds             |       |     |         |         | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 269023  | 98.065  | ug/l 99  |
| 3) Chloromethane             | 2.359 | 50  | 275415  | 92.724  | ug/l 98  |
| 4) Vinyl Chloride            | 2.512 | 62  | 282361  | 94.576  | ug/l 99  |
| 5) Bromomethane              | 2.942 | 94  | 158888  | 88.105  | ug/l 98  |
| 6) Chloroethane              | 3.112 | 64  | 176111  | 93.043  | ug/l 99  |
| 7) Trichlorofluoromethane    | 3.494 | 101 | 423967  | 97.870  | ug/l 100 |
| 8) Diethyl Ether             | 3.953 | 74  | 146889  | 98.154  | ug/l 98  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 239104  | 97.997  | ug/l 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 292983  | 104.856 | ug/l 95  |
| 11) Tert butyl alcohol       | 5.512 | 59  | 173044  | 462.061 | ug/l 99  |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 222117  | 102.146 | ug/l 99  |
| 13) Acrolein                 | 4.171 | 56  | 275350  | 538.600 | ug/l 99  |
| 14) Allyl chloride           | 5.018 | 41  | 349717  | 99.111  | ug/l 98  |
| 15) Acrylonitrile            | 5.712 | 53  | 585370  | 492.095 | ug/l 99  |
| 16) Acetone                  | 4.418 | 43  | 483221  | 457.268 | ug/l 96  |
| 17) Carbon Disulfide         | 4.712 | 76  | 630294  | 94.140  | ug/l 100 |
| 18) Methyl Acetate           | 5.012 | 43  | 304226  | 94.674  | ug/l 99  |
| 19) Methyl tert-butyl Ether  | 5.788 | 73  | 743008  | 105.230 | ug/l 100 |
| 20) Methylene Chloride       | 5.271 | 84  | 254912  | 97.440  | ug/l 98  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 231503  | 99.618  | ug/l 97  |
| 22) Diisopropyl ether        | 6.665 | 45  | 820871  | 104.812 | ug/l 99  |
| 23) Vinyl Acetate            | 6.594 | 43  | 3029568 | 550.850 | ug/l 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 471831  | 98.803  | ug/l 99  |
| 25) 2-Butanone               | 7.477 | 43  | 764979  | 491.912 | ug/l 98  |
| 26) 2,2-Dichloropropane      | 7.482 | 77  | 388140  | 100.530 | ug/l 100 |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 280197  | 102.367 | ug/l 99  |
| 28) Bromochloromethane       | 7.806 | 49  | 214796  | 96.679  | ug/l 100 |
| 29) Tetrahydrofuran          | 7.830 | 42  | 503459  | 510.635 | ug/l 99  |
| 30) Chloroform               | 7.959 | 83  | 484941  | 98.253  | ug/l 100 |
| 31) Cyclohexane              | 8.253 | 56  | 398641  | 96.041  | ug/l 96  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 426782  | 98.578  | ug/l 98  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 342961  | 106.945 | ug/l 100 |
| 37) Ethyl Acetate            | 7.553 | 43  | 326802  | 100.961 | ug/l 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 378390  | 103.065 | ug/l 97  |
| 39) Methylcyclohexane        | 9.594 | 83  | 371734  | 123.354 | ug/l 99  |
| 40) Benzene                  | 8.600 | 78  | 1021393 | 106.001 | ug/l 100 |

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

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

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

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

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

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

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

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

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

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



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

## Instrument :

MSVOA\_N

## ClientSampleId :

VSTDICC100

## Manual Integrations

## APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025

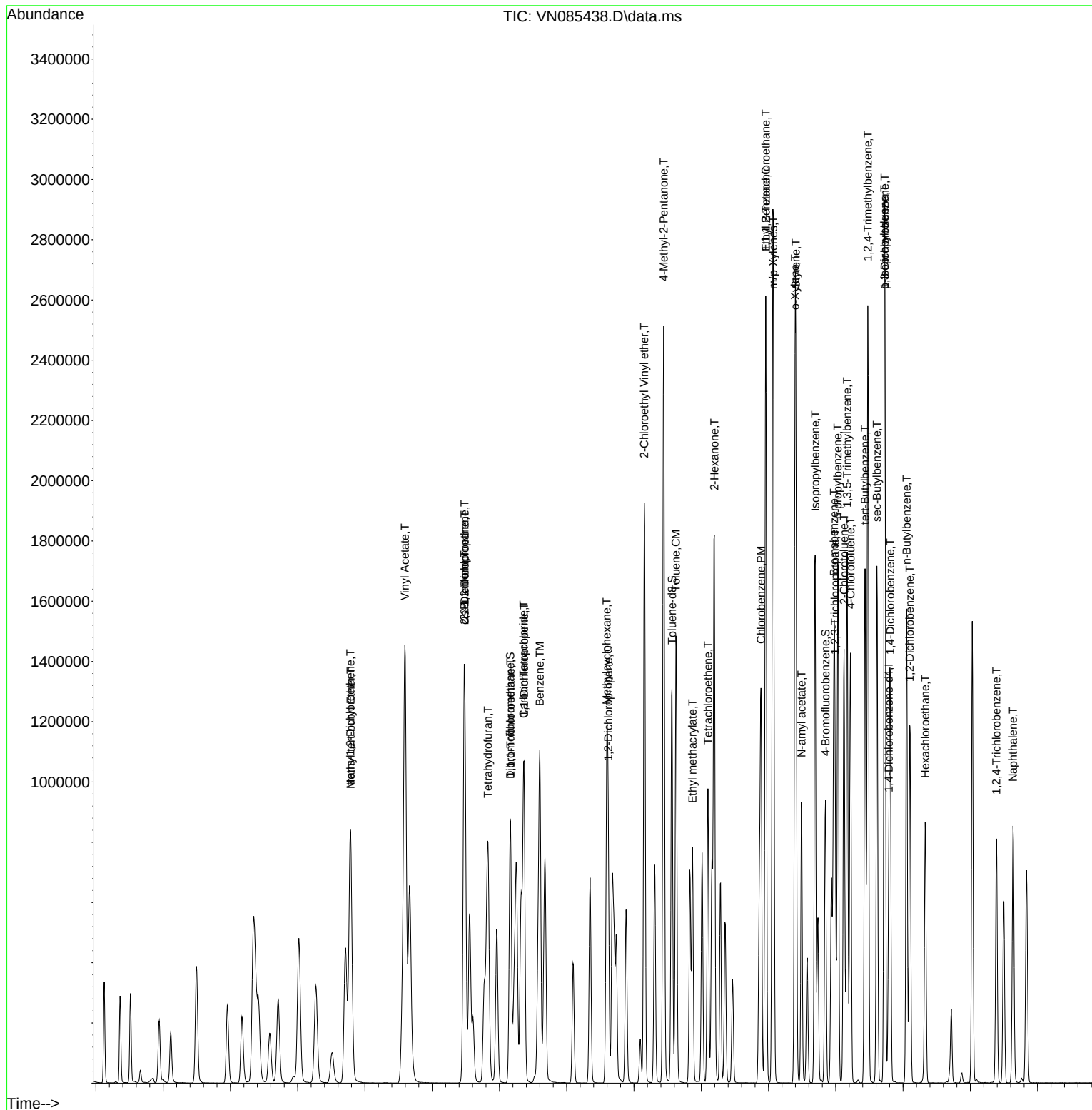
Quant Time: Jan 15 01:41:17 2025

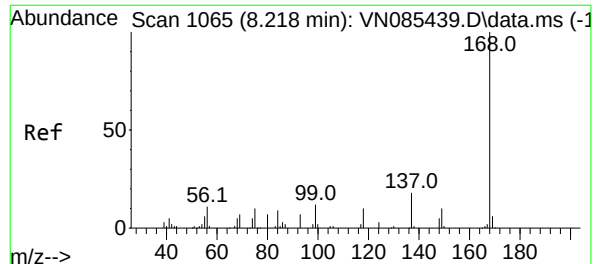
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M

Quant Title : SW846 8260

QLast Update : Wed Jan 15 01:28:51 2025

Response via : Initial Calibration





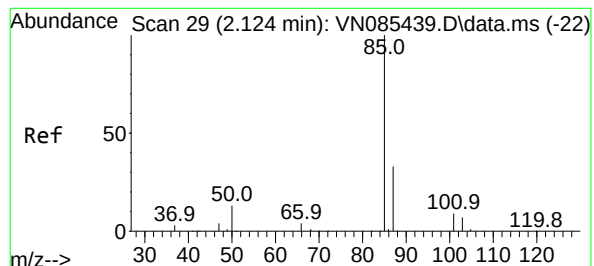
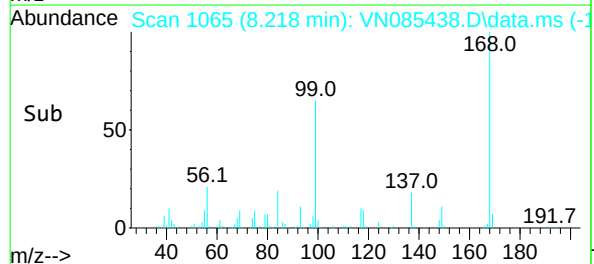
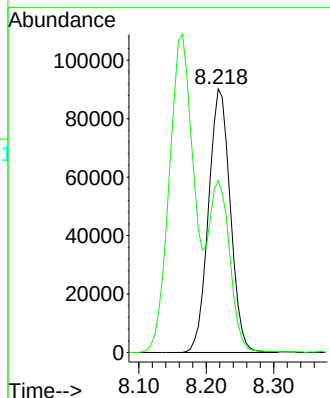
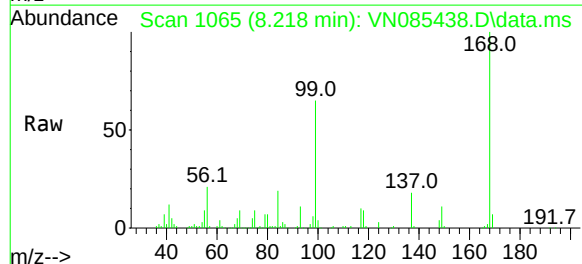
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Tgt Ion:168 Resp: 202613  
Ion Ratio Lower Upper  
168 100  
99 64.9 53.6 80.4

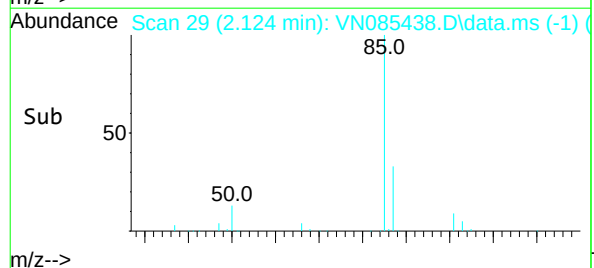
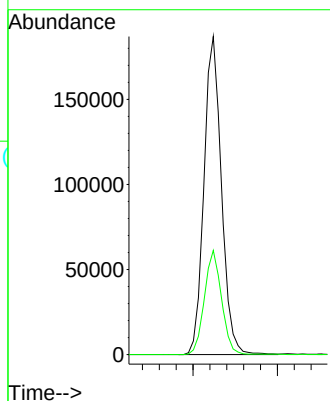
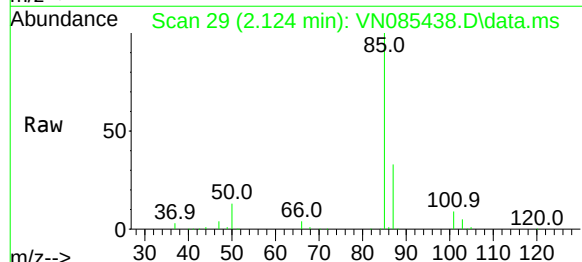
Manual Integrations  
APPROVED

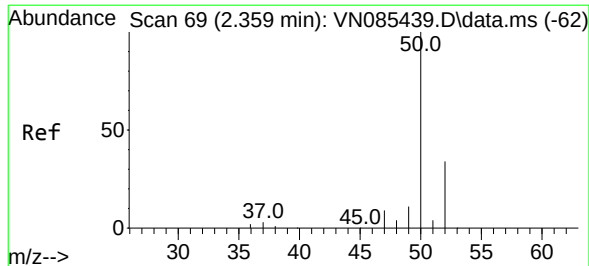
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

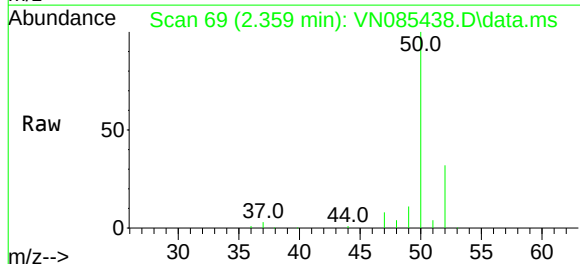
Tgt Ion: 85 Resp: 269023  
Ion Ratio Lower Upper  
85 100  
87 32.7 16.7 50.1





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

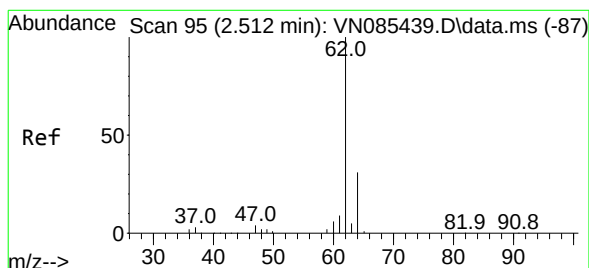
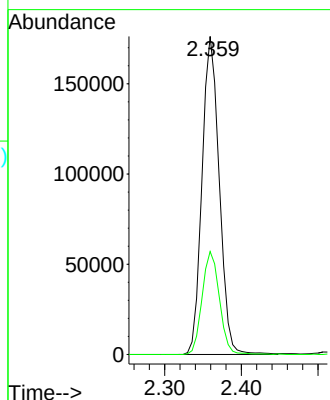
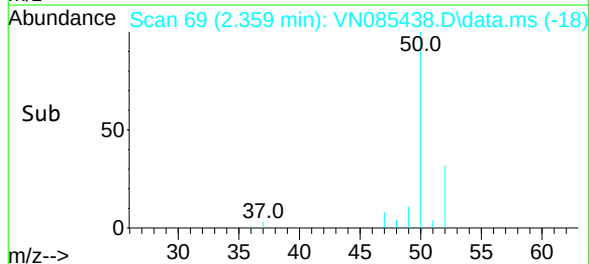
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100



Tgt Ion: 50 Resp: 275415  
Ion Ratio Lower Upper  
50 100  
52 32.4 27.0 40.6

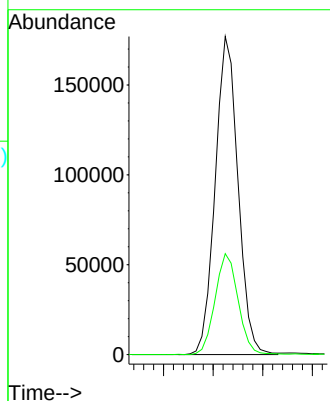
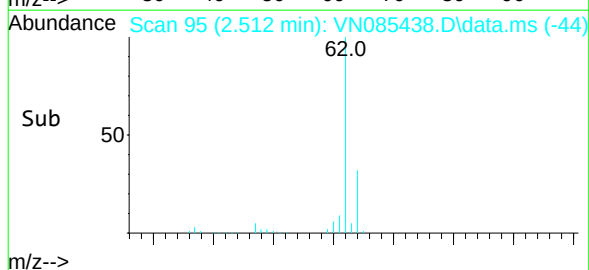
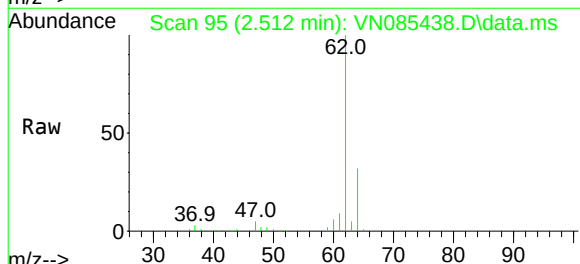
Manual Integrations  
APPROVED

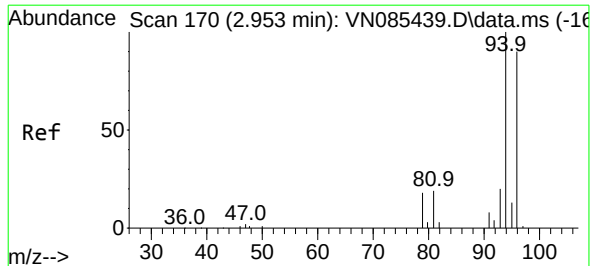
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

Tgt Ion: 62 Resp: 282361  
Ion Ratio Lower Upper  
62 100  
64 31.6 24.8 37.2





#5

Bromomethane

Concen: 88.105 ug/l

RT: 2.942 min Scan# 16

Delta R.T. -0.012 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 94 Resp: 158888

Ion Ratio Lower Upper

94 100

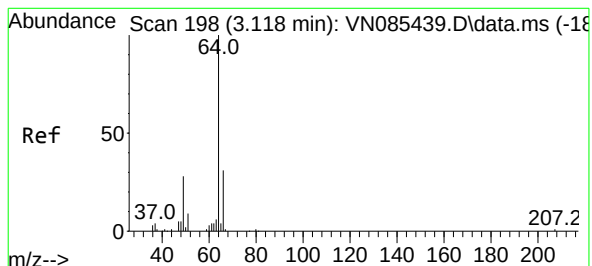
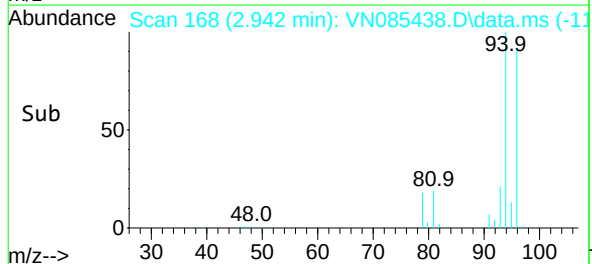
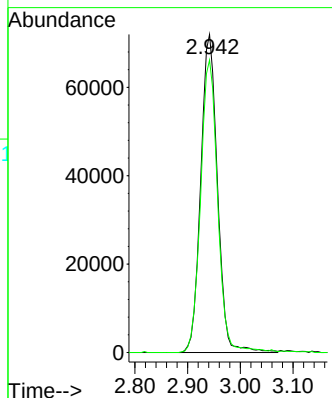
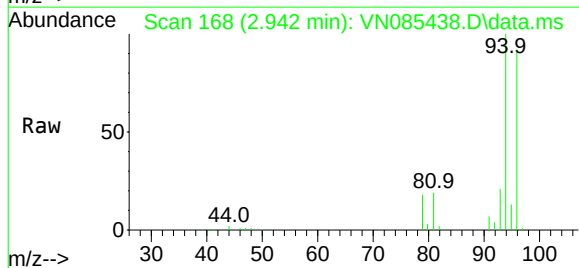
96 91.9 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 93.043 ug/l

RT: 3.112 min Scan# 197

Delta R.T. -0.006 min

Lab File: VN085438.D

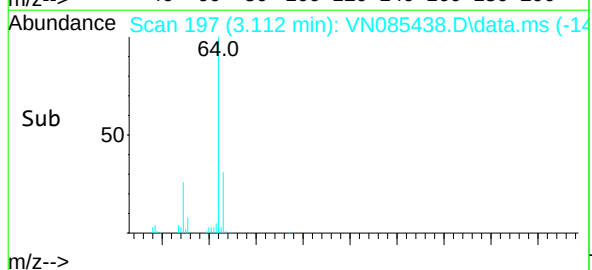
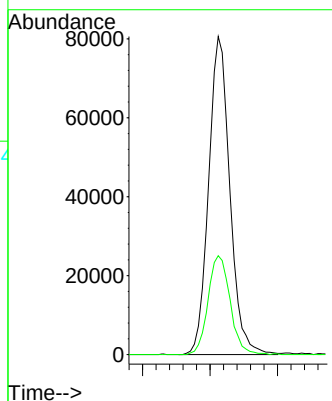
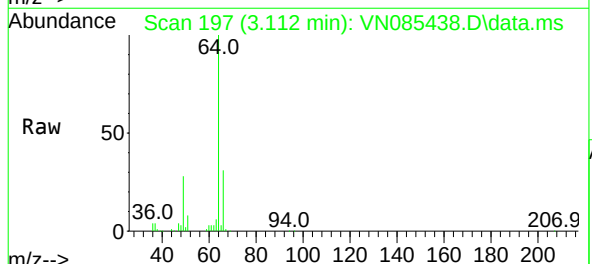
Acq: 14 Jan 2025 14:56

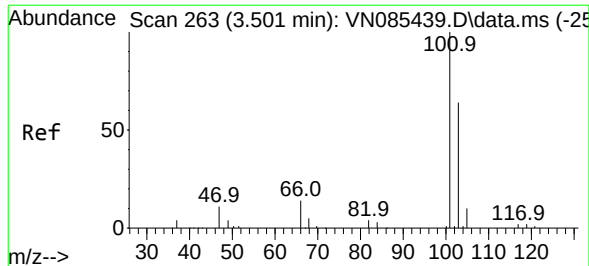
Tgt Ion: 64 Resp: 176111

Ion Ratio Lower Upper

64 100

66 31.1 24.6 36.8





#7

Trichlorofluoromethane

Concen: 97.870 ug/l

RT: 3.494 min Scan# 26

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:101 Resp: 423967

Ion Ratio Lower Upper

101 100

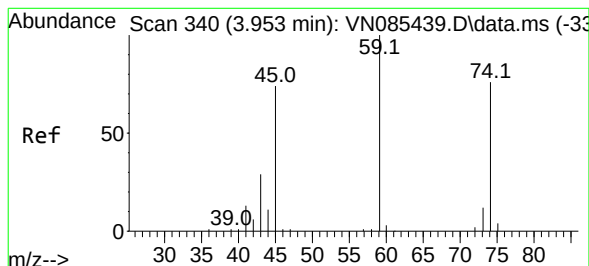
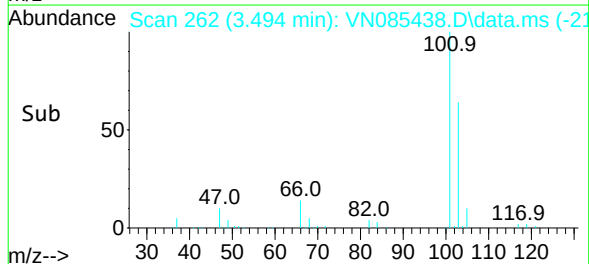
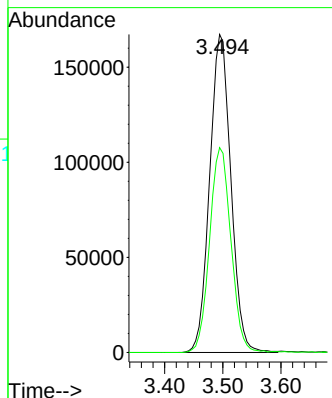
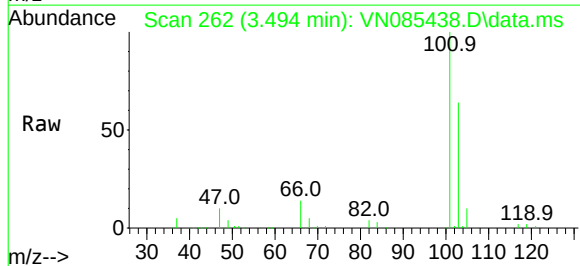
103 64.4 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 98.154 ug/l

RT: 3.953 min Scan# 340

Delta R.T. -0.000 min

Lab File: VN085438.D

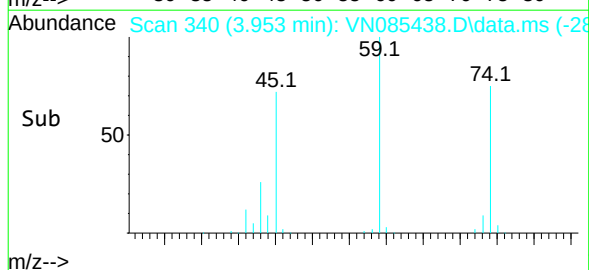
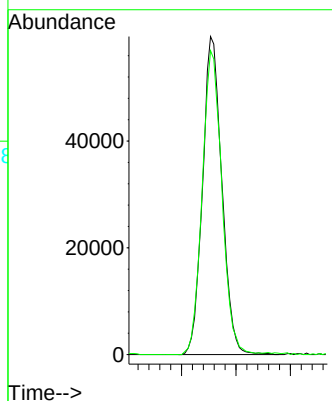
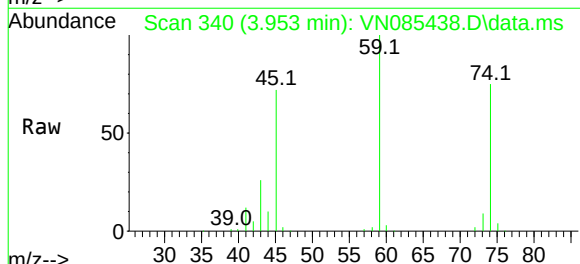
Acq: 14 Jan 2025 14:56

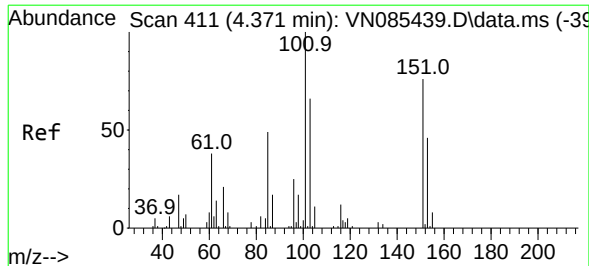
Tgt Ion: 74 Resp: 146889

Ion Ratio Lower Upper

74 100

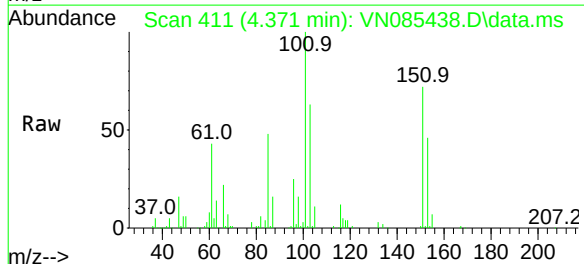
45 97.4 49.7 149.1





#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 97.997 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

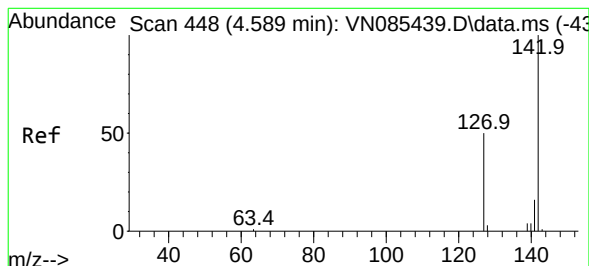
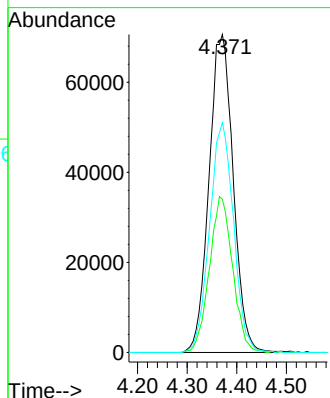
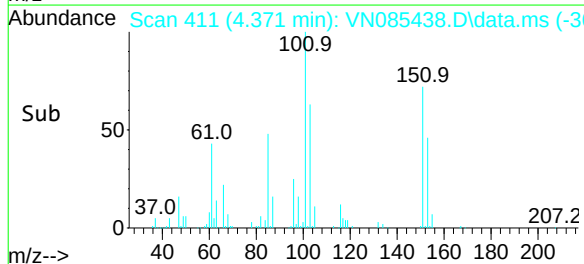
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100



Tgt Ion:101 Resp: 239104  
Ion Ratio Lower Upper  
101 100  
85 47.1 37.8 56.8  
151 71.8 58.8 88.2

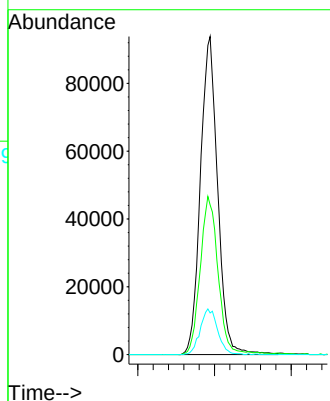
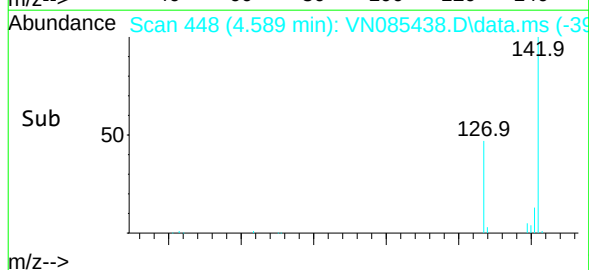
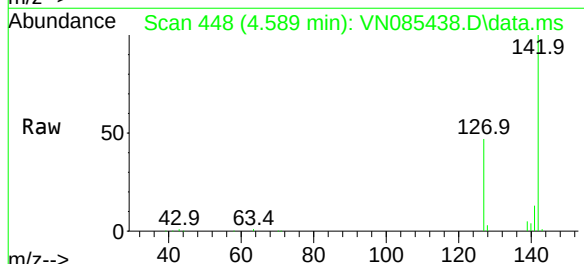
Manual Integrations  
APPROVED

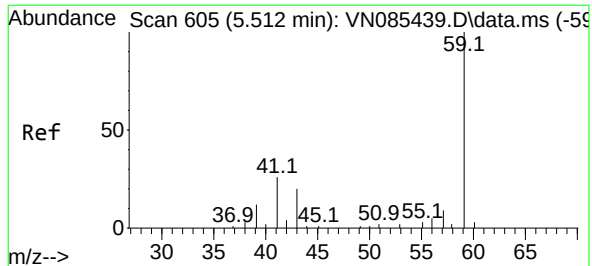
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

Tgt Ion:142 Resp: 292983  
Ion Ratio Lower Upper  
142 100  
127 47.1 40.3 60.5  
141 13.1 12.8 19.2





#11

Tert butyl alcohol

Concen: 462.061 ug/l

RT: 5.512 min Scan# 605

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 59 Resp: 173044

Ion Ratio Lower Upper

59 100

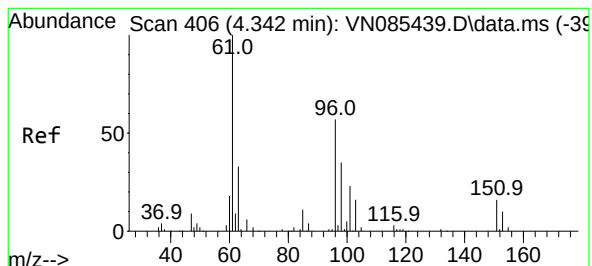
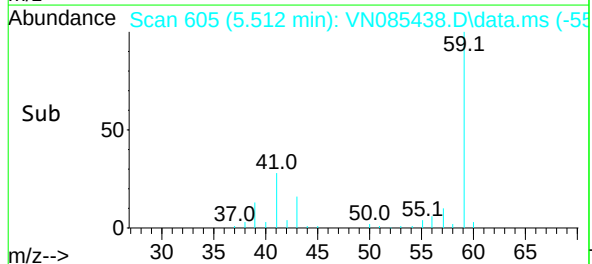
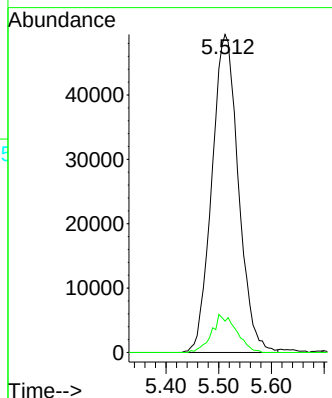
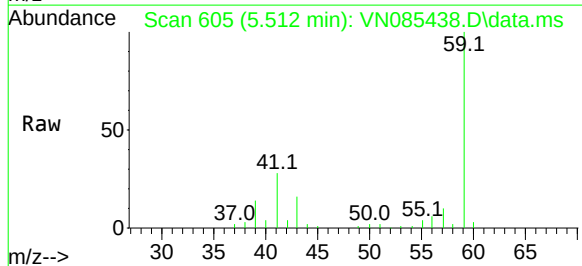
57 11.1 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 102.146 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

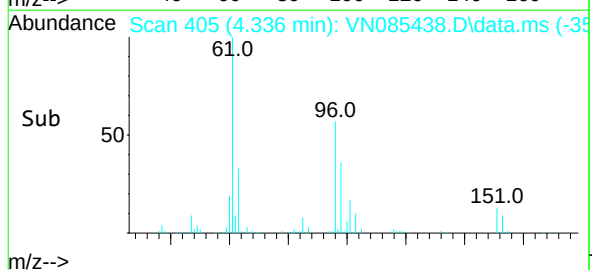
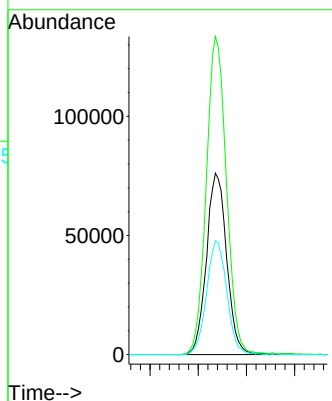
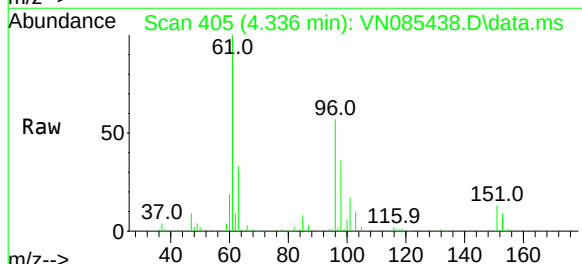
Tgt Ion: 96 Resp: 222117

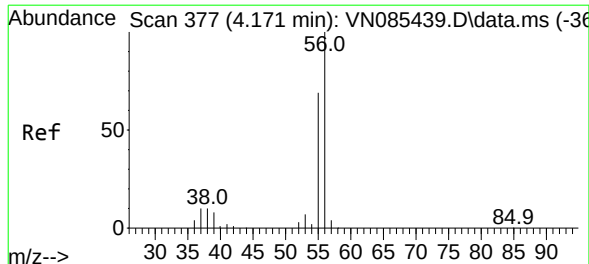
Ion Ratio Lower Upper

96 100

61 175.3 141.0 211.4

98 62.7 49.0 73.6





#13

Acrolein

Concen: 538.600 ug/l

RT: 4.171 min Scan# 377

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 56 Resp: 275350

Ion Ratio Lower Upper

56 100

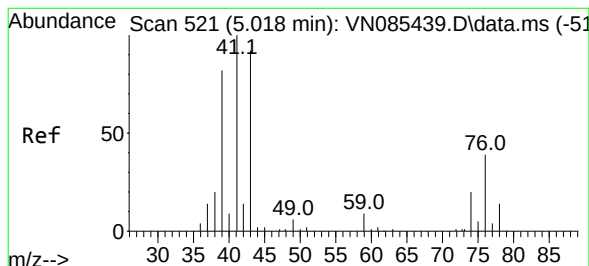
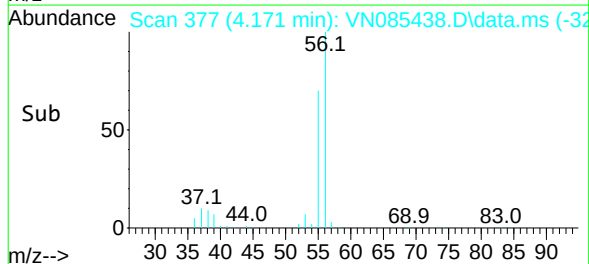
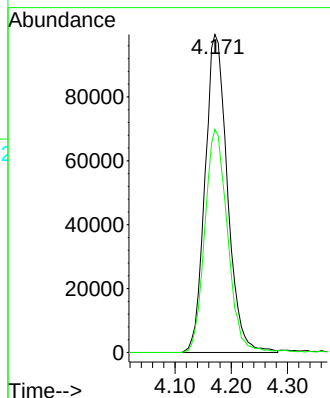
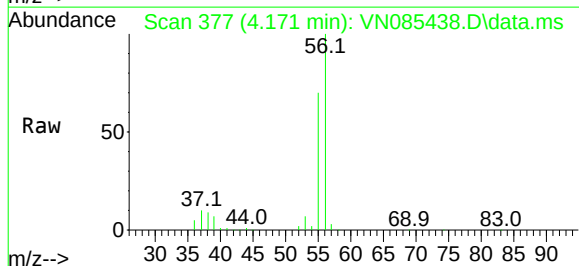
55 71.1 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 99.111 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

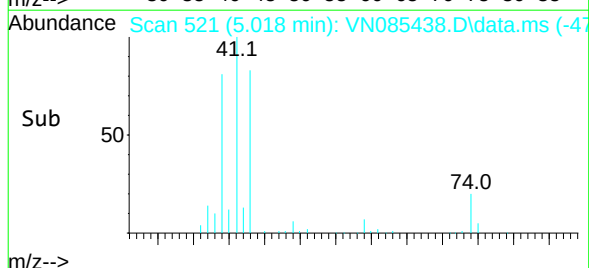
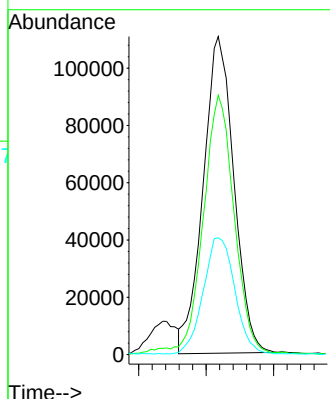
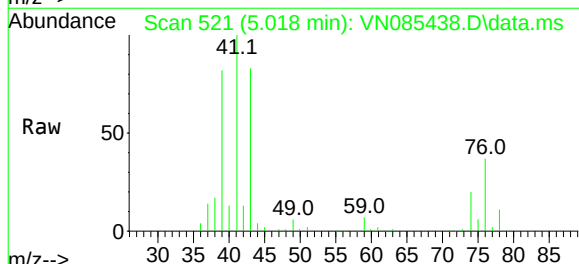
Tgt Ion: 41 Resp: 349717

Ion Ratio Lower Upper

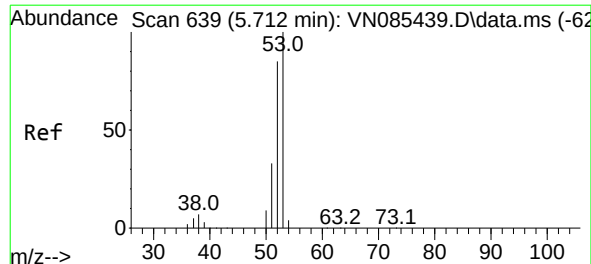
41 100

39 83.3 64.4 96.6

76 37.9 30.5 45.7







#15

Acrylonitrile

Concen: 492.095 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

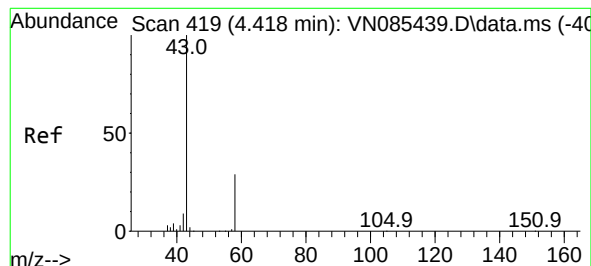
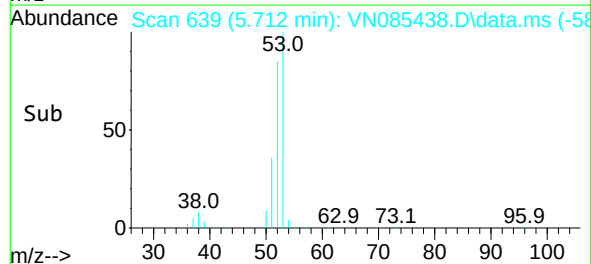
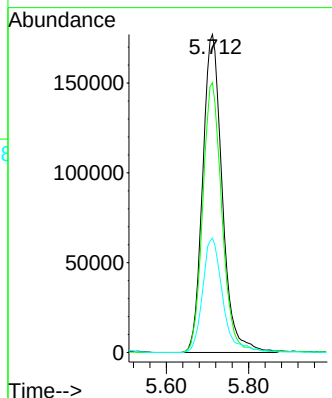
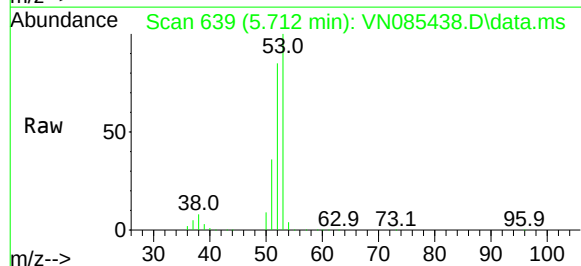
VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 53    | Resp: | 585370 |
| Ion      | Ratio | Lower | Upper  |
| 53       | 100   |       |        |
| 52       | 83.0  | 65.5  | 98.3   |
| 51       | 37.1  | 29.8  | 44.8   |

Manual Integrations

APPROVED

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



#16

Acetone

Concen: 457.268 ug/l

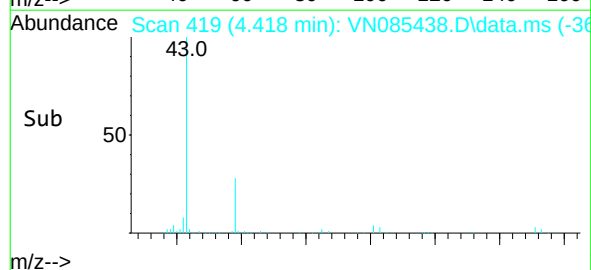
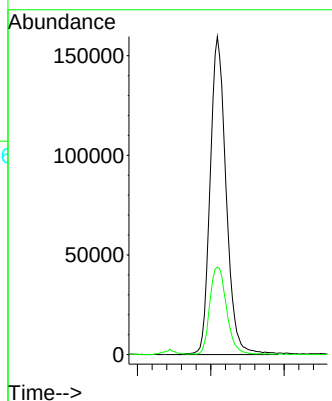
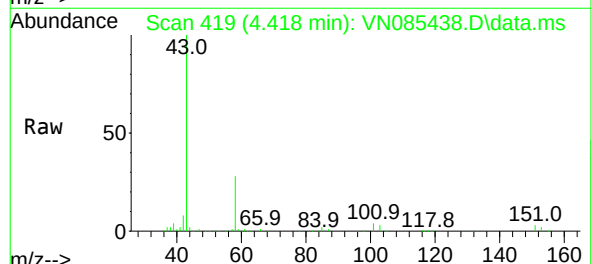
RT: 4.418 min Scan# 419

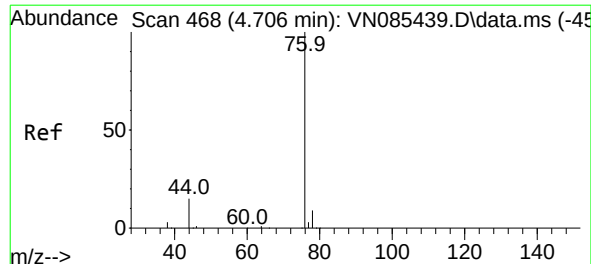
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 483221 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 27.3  | 23.8  | 35.6   |





#17

Carbon Disulfide

Concen: 94.140 ug/l

RT: 4.712 min Scan# 46

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 630294

Ion Ratio Lower Upper

76 100

78 8.7 6.9 10.3

Instrument :

MSVOA\_N

ClientSampleId :

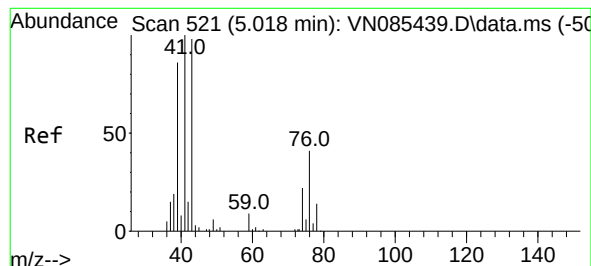
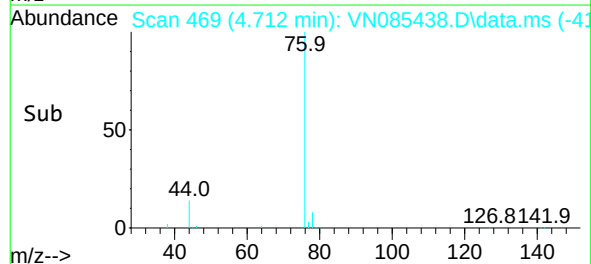
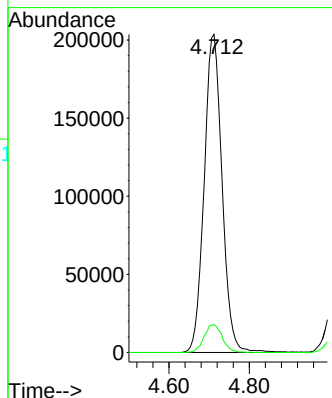
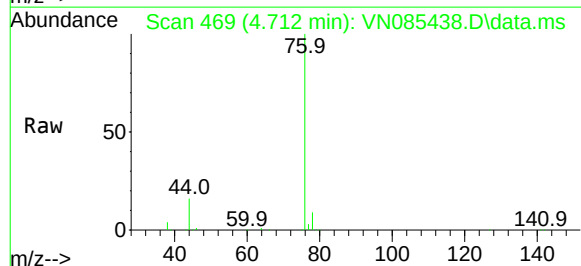
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 94.674 ug/l

RT: 5.012 min Scan# 520

Delta R.T. -0.006 min

Lab File: VN085438.D

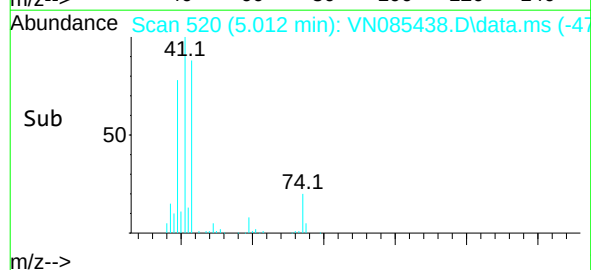
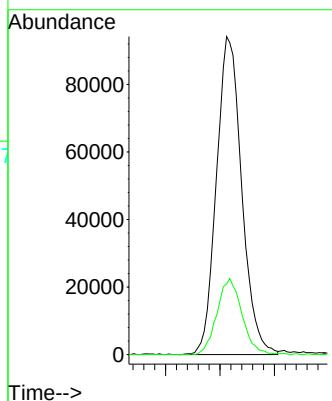
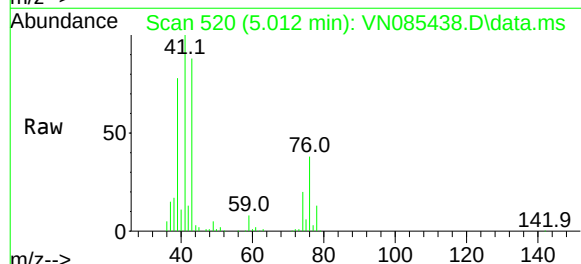
Acq: 14 Jan 2025 14:56

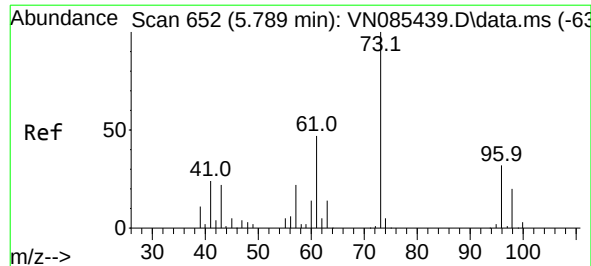
Tgt Ion: 43 Resp: 304226

Ion Ratio Lower Upper

43 100

74 23.6 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 105.230 ug/l

RT: 5.788 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 73 Resp: 743008

Ion Ratio Lower Upper

73 100

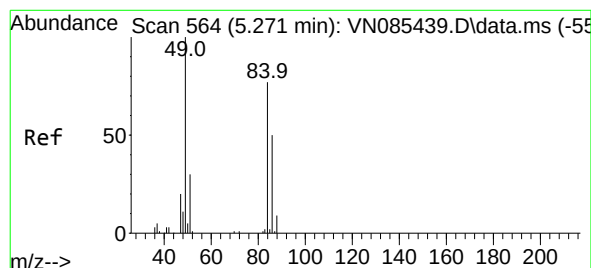
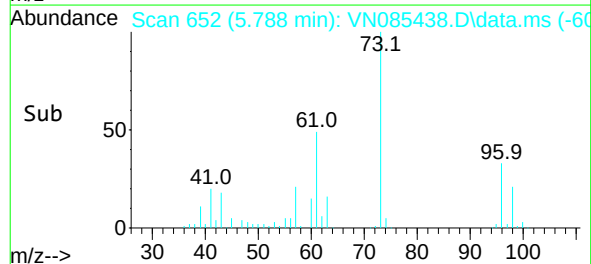
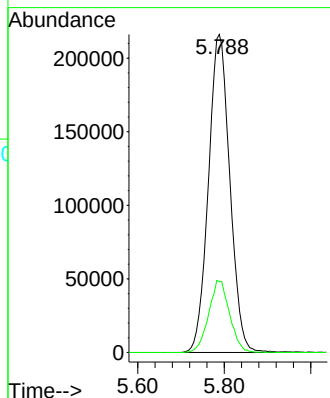
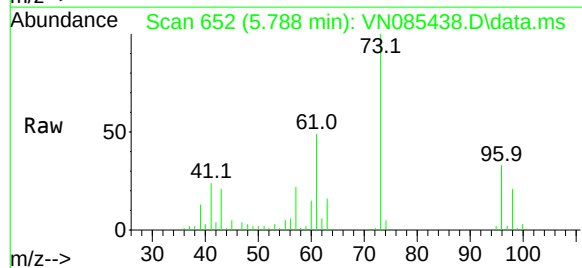
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 97.440 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 84 Resp: 254912

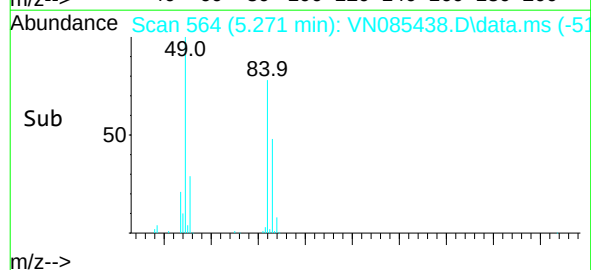
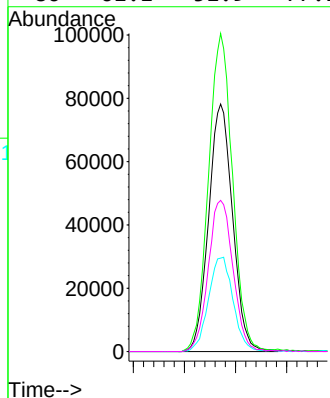
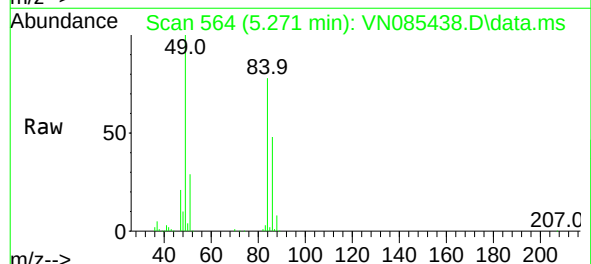
Ion Ratio Lower Upper

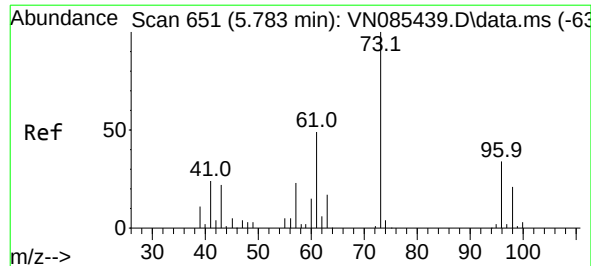
84 100

49 128.5 104.1 156.1

51 37.8 31.0 46.4

86 61.1 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 99.618 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 96 Resp: 231503

Ion Ratio Lower Upper

96 100

61 148.3 115.7 173.5

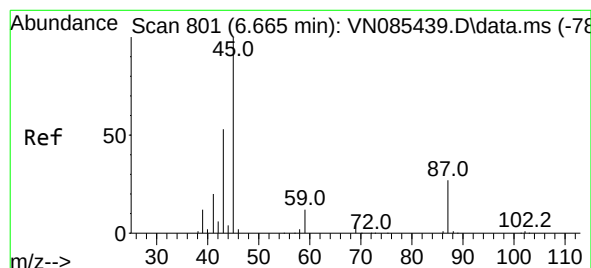
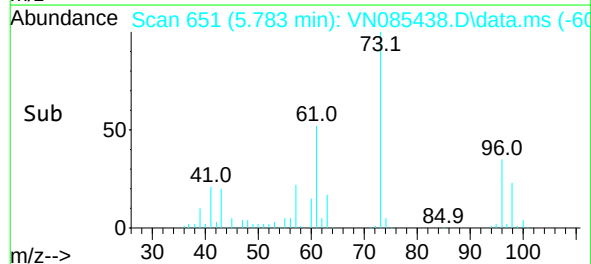
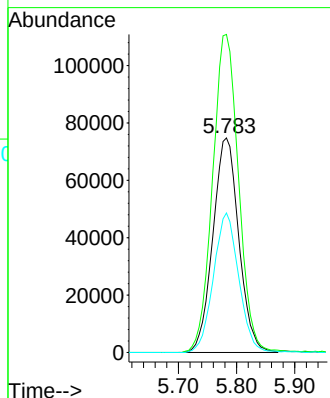
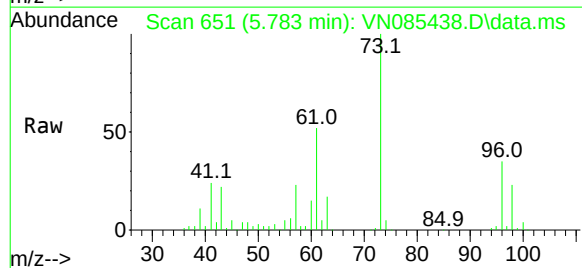
98 65.0 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 104.812 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 45 Resp: 820871

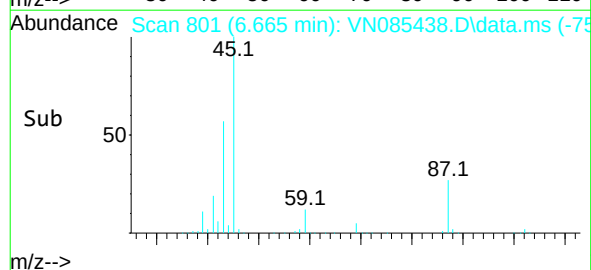
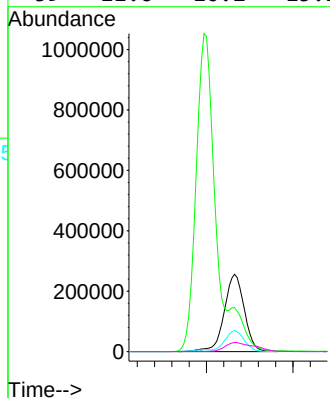
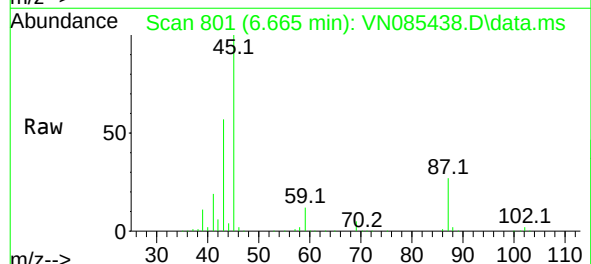
Ion Ratio Lower Upper

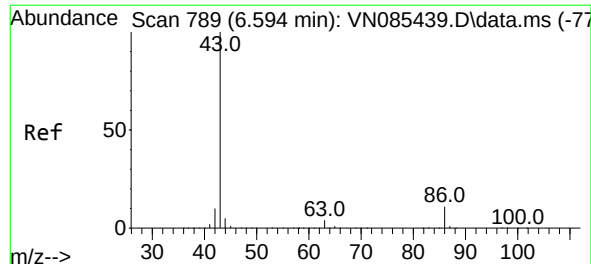
45 100

43 55.7 45.0 67.6

87 27.2 21.8 32.8

59 11.6 10.2 15.2





#23

Vinyl Acetate

Concen: 550.850 ug/l

RT: 6.594 min Scan# 789

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 3029568

Ion Ratio Lower Upper

43 100

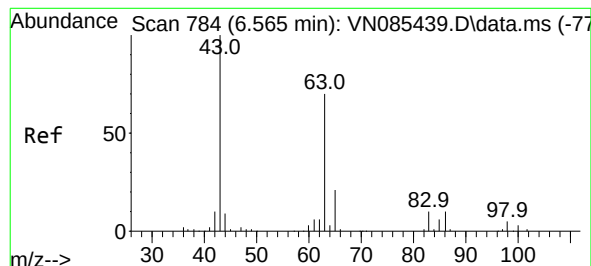
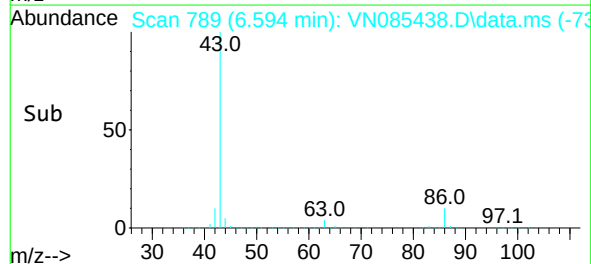
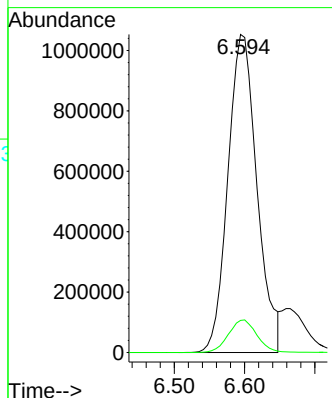
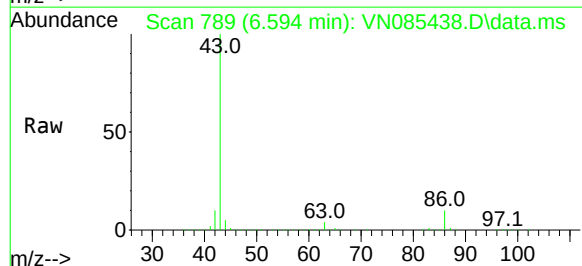
86 10.1 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 98.803 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

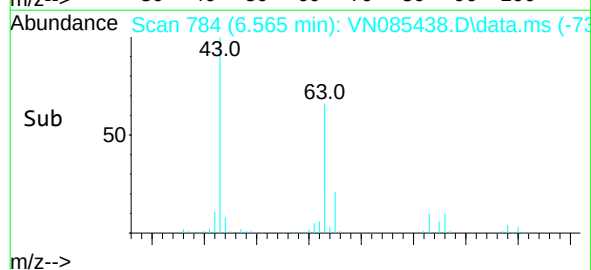
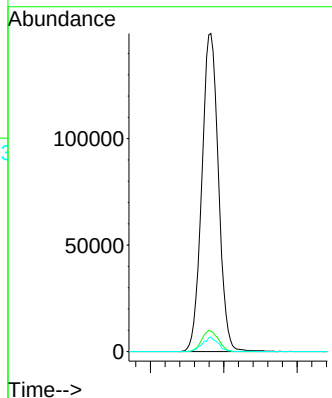
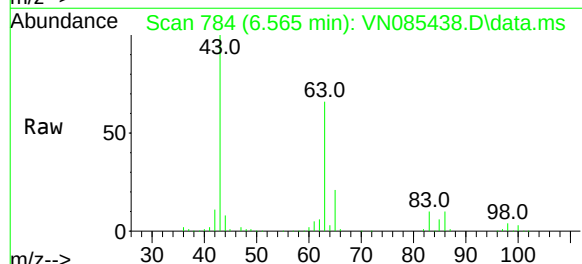
Tgt Ion: 63 Resp: 471831

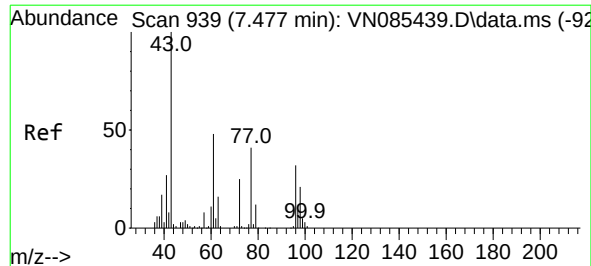
Ion Ratio Lower Upper

63 100

98 6.4 3.3 9.8

100 4.6 2.0 6.0





#25

2-Butanone

Concen: 491.912 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 764979

Ion Ratio Lower Upper

43 100

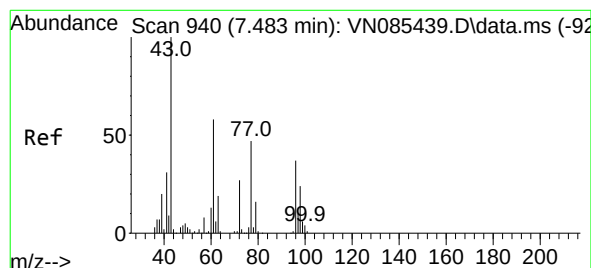
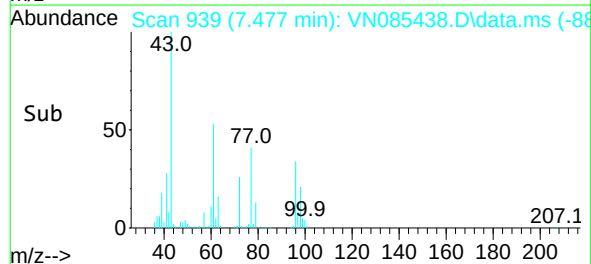
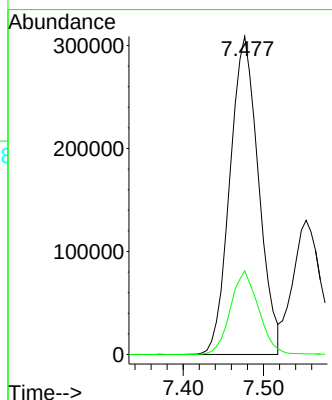
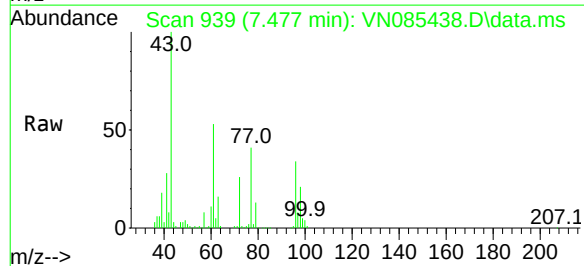
72 26.3 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 100.530 ug/l

RT: 7.482 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085438.D

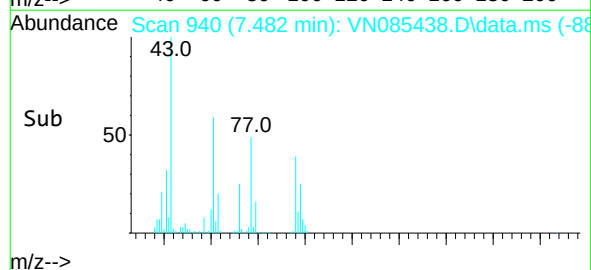
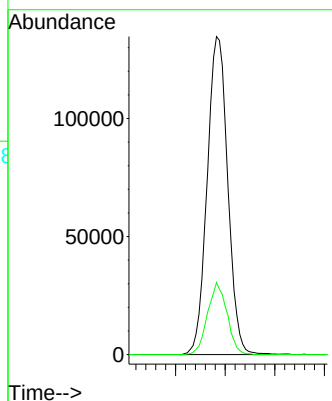
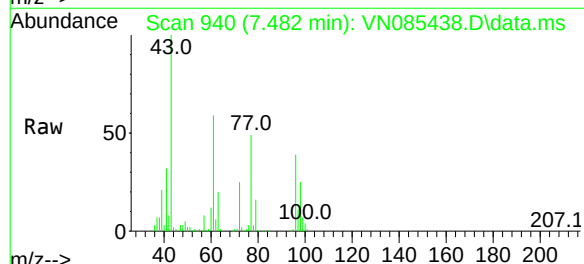
Acq: 14 Jan 2025 14:56

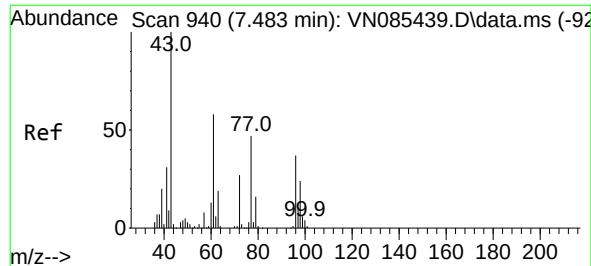
Tgt Ion: 77 Resp: 388140

Ion Ratio Lower Upper

77 100

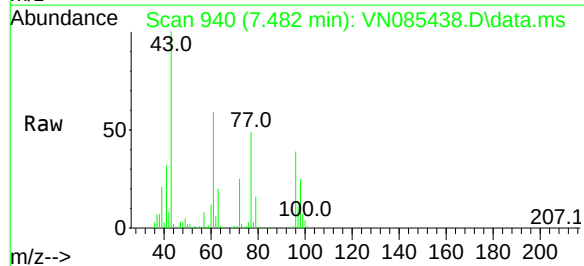
97 21.4 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 102.367 ug/l  
RT: 7.482 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

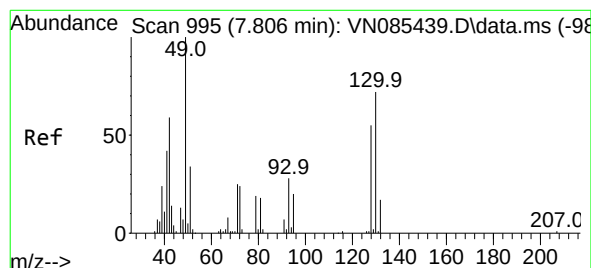
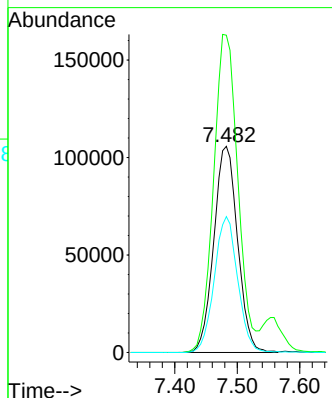
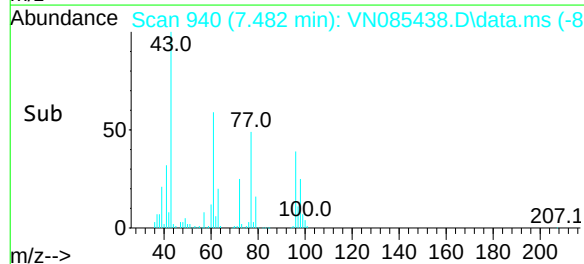
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100



Tgt Ion: 96 Resp: 280197  
Ion Ratio Lower Upper  
96 100  
61 156.8 0.0 311.8  
98 65.0 0.0 126.0

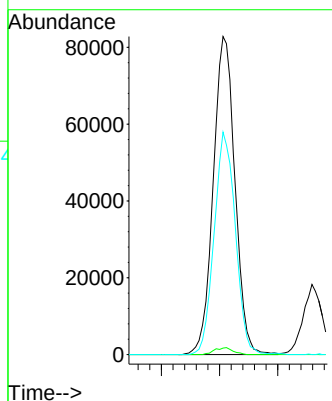
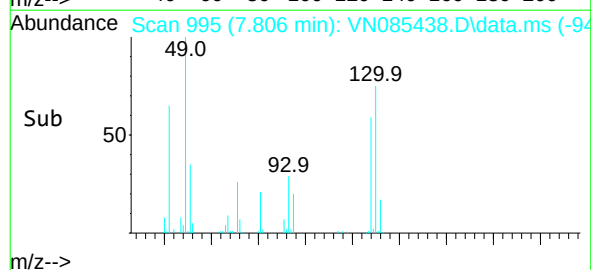
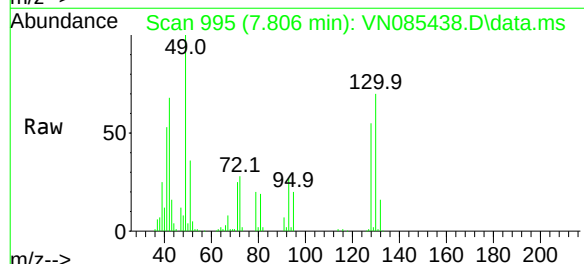
Manual Integrations  
APPROVED

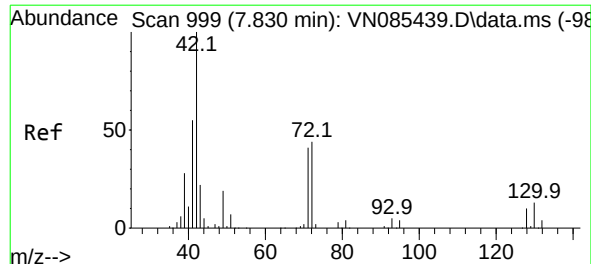
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

Tgt Ion: 49 Resp: 214796  
Ion Ratio Lower Upper  
49 100  
129 1.9 0.0 4.4  
130 68.4 55.0 82.4





#29

Tetrahydrofuran

Concen: 510.635 ug/l

RT: 7.830 min Scan# 999

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 42 Resp: 503459

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

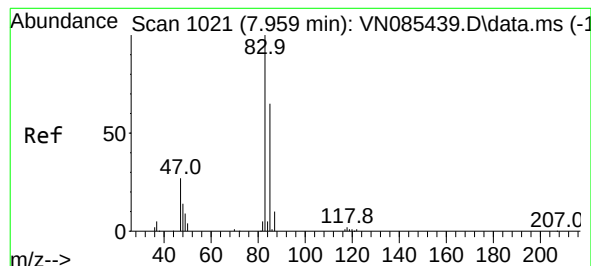
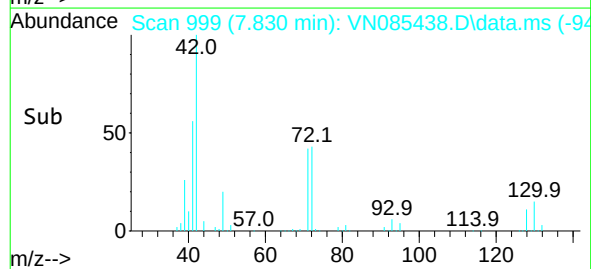
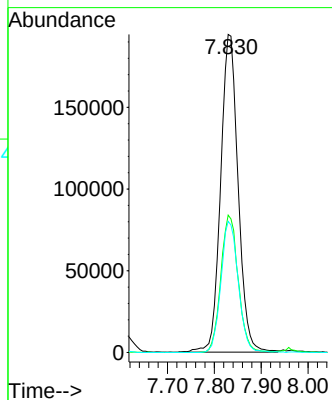
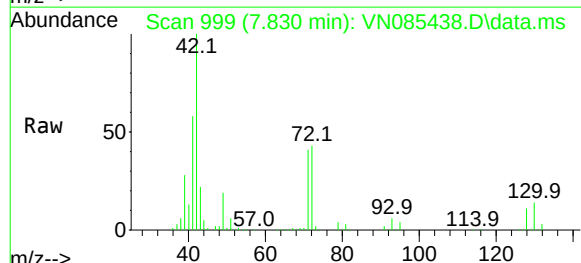
71 40.9 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 98.253 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. -0.000 min

Lab File: VN085438.D

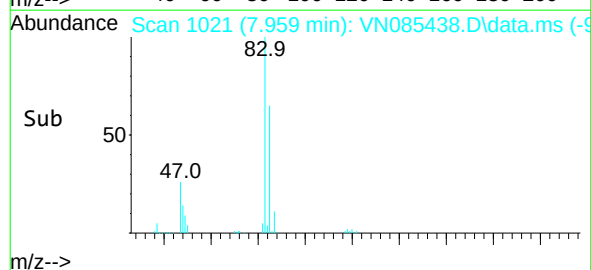
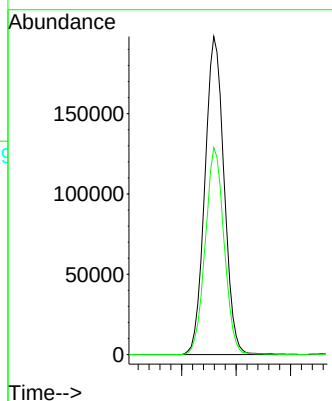
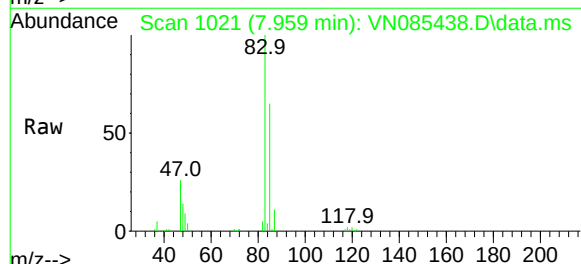
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 484941

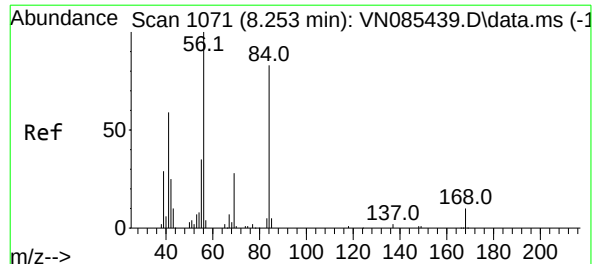
Ion Ratio Lower Upper

83 100

85 65.0 51.8 77.6







#31

Cyclohexane

Concen: 96.041 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 56 Resp: 398641

Ion Ratio Lower Upper

56 100

69 29.2 22.2 33.4

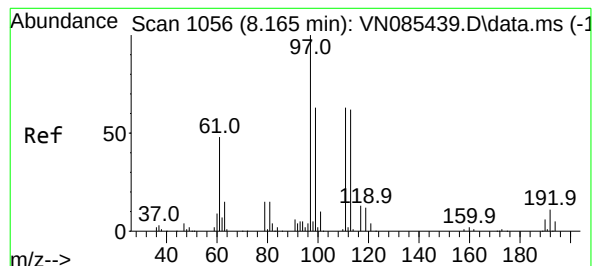
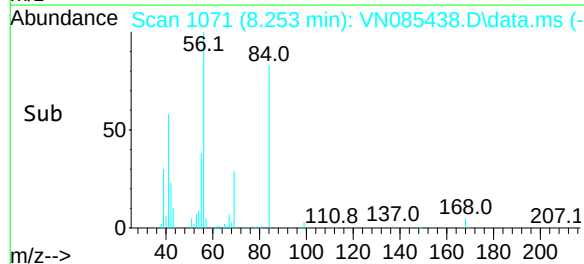
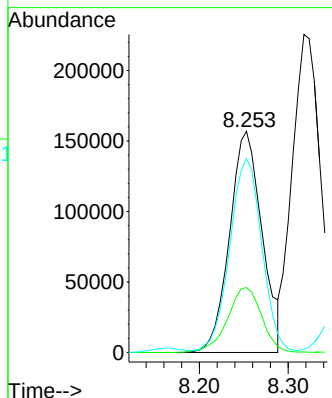
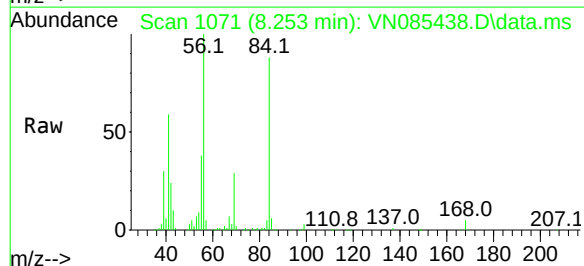
84 86.4 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 98.578 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

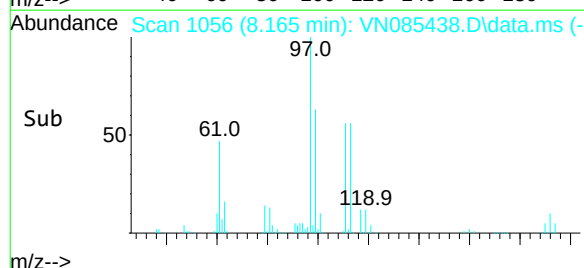
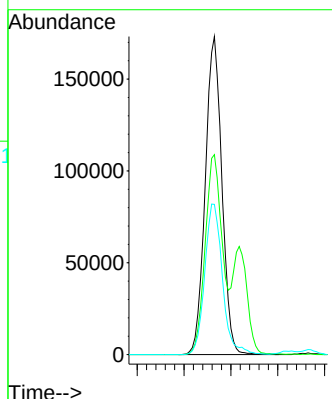
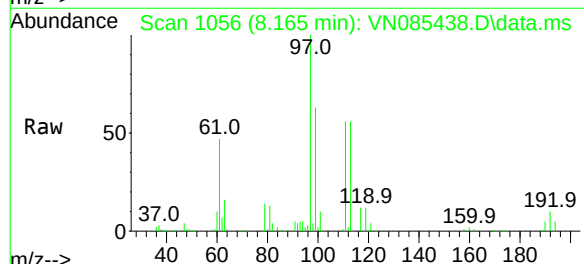
Tgt Ion: 97 Resp: 426782

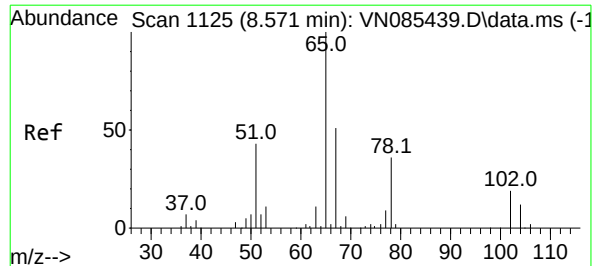
Ion Ratio Lower Upper

97 100

99 64.2 49.8 74.6

61 50.6 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 95.899 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 65 Resp: 313645

Ion Ratio Lower Upper

65 100

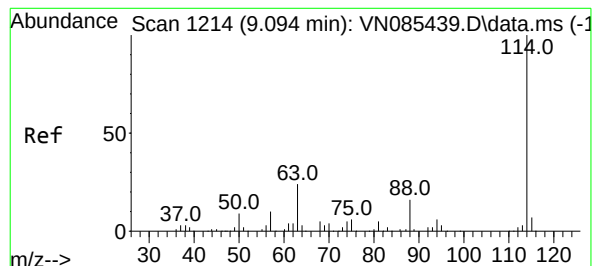
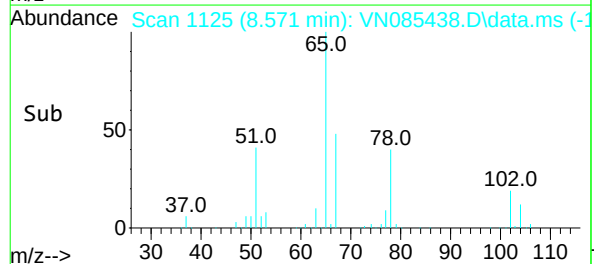
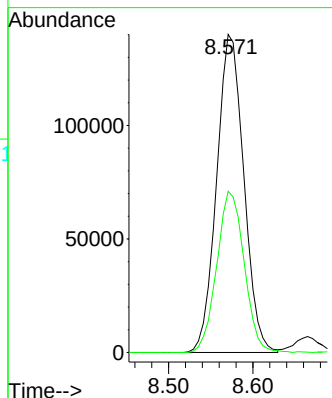
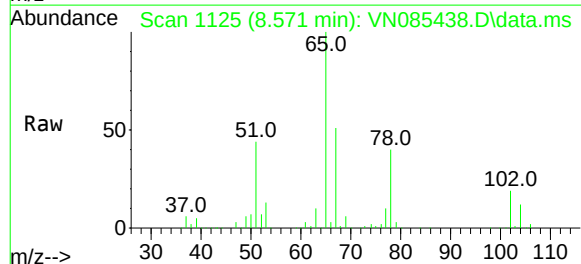
67 51.1 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

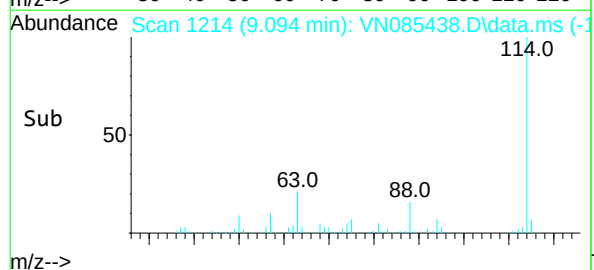
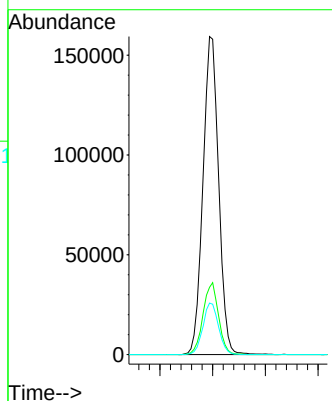
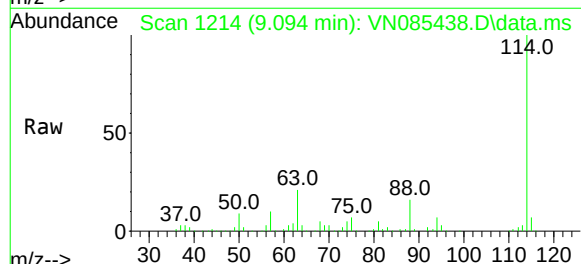
Tgt Ion:114 Resp: 329363

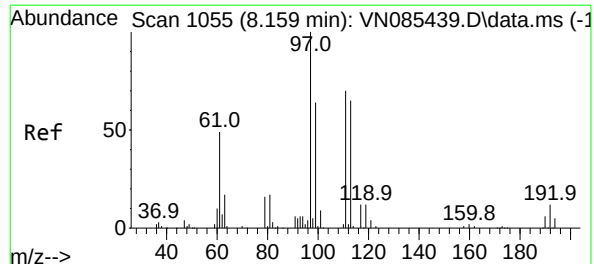
Ion Ratio Lower Upper

114 100

63 21.2 0.0 47.6

88 16.2 0.0 32.6





#35

Dibromofluoromethane

Concen: 103.353 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:113 Resp: 236159

Ion Ratio Lower Upper

113 100

111 102.3 82.7 124.1

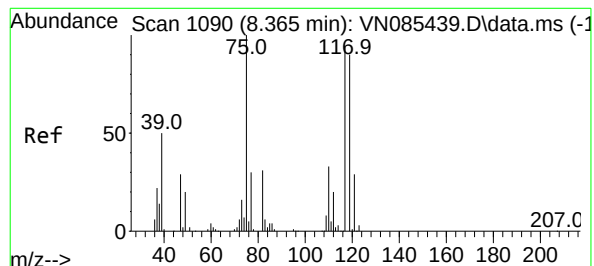
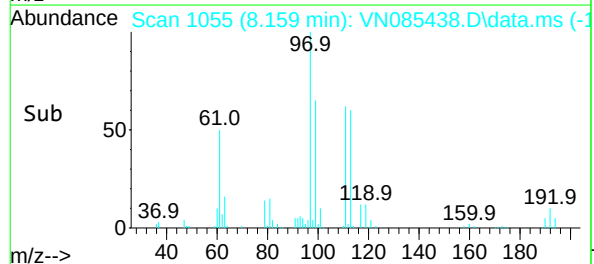
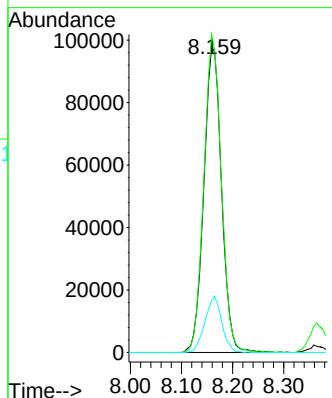
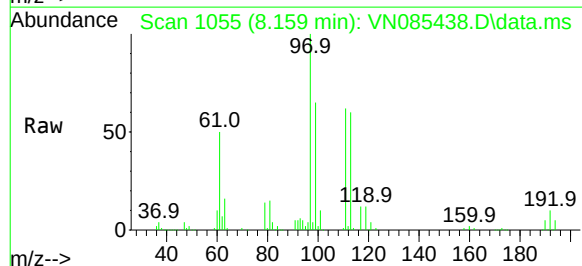
192 17.4 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 106.945 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

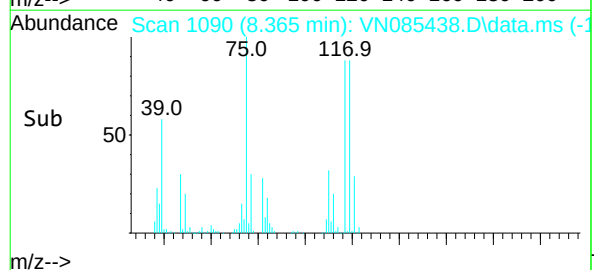
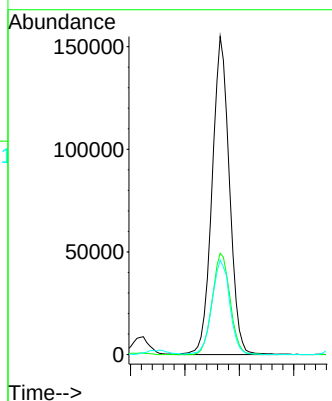
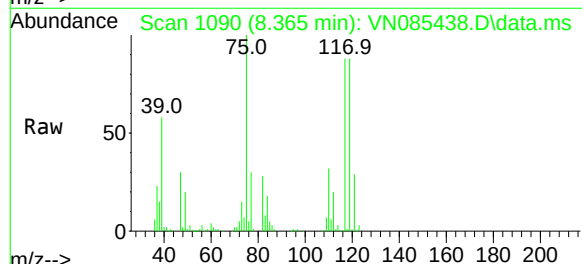
Tgt Ion: 75 Resp: 342961

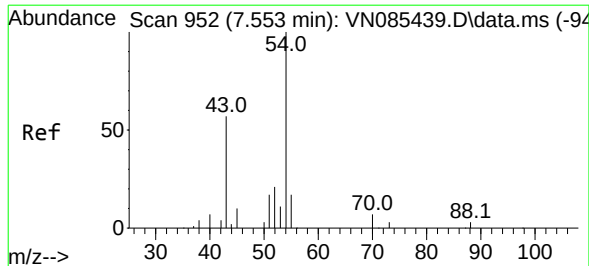
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 30.6 24.4 36.6





#37

Ethyl Acetate

Concen: 100.961 ug/l

RT: 7.553 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

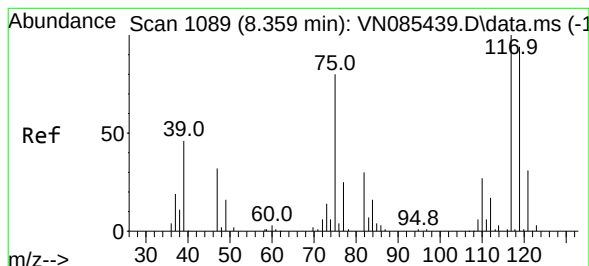
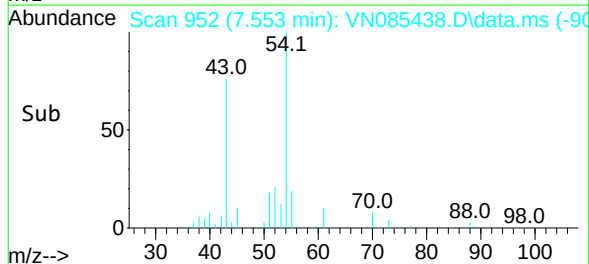
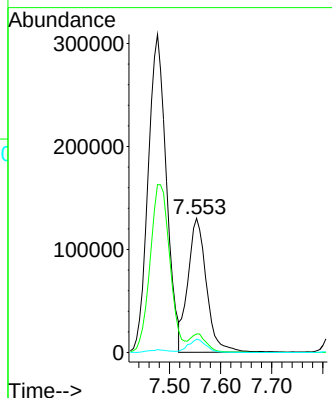
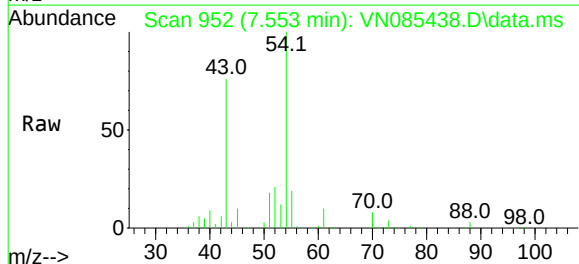
Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

| Tgt Ion: | 43    | Resp: | 326802 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 61       | 12.0  | 10.9  | 16.3   |
| 70       | 9.6   | 7.5   | 11.3   |

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

#38

Carbon Tetrachloride

Concen: 103.065 ug/l

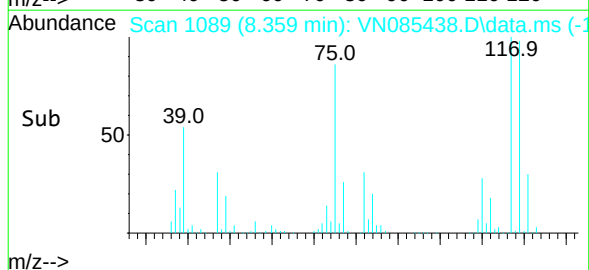
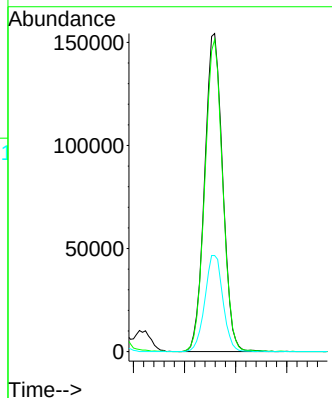
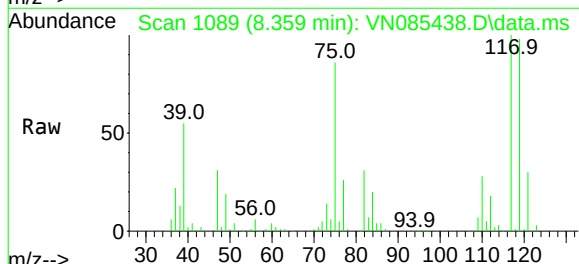
RT: 8.359 min Scan# 1089

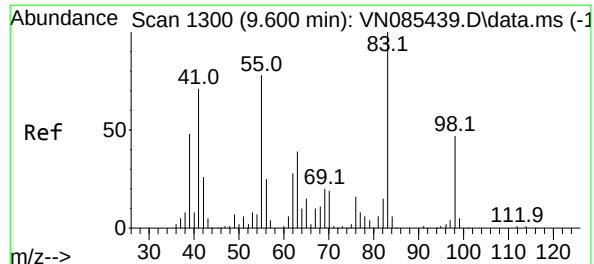
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

| Tgt Ion: | 117   | Resp: | 378390 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 119      | 98.1  | 75.4  | 113.2  |
| 121      | 30.2  | 24.6  | 37.0   |





#39

Methylcyclohexane

Concen: 123.354 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

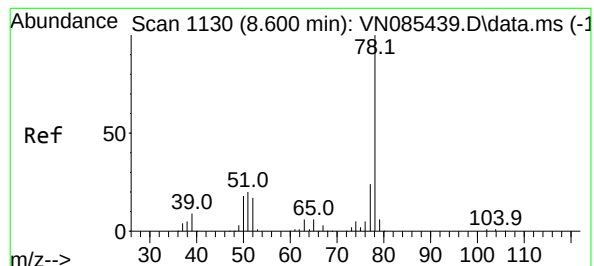
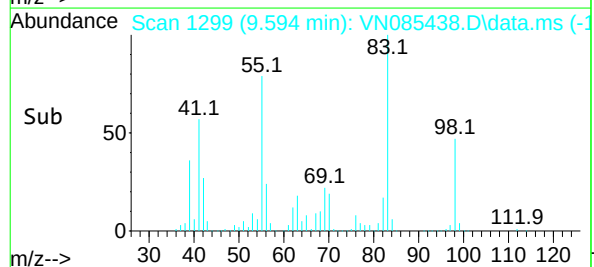
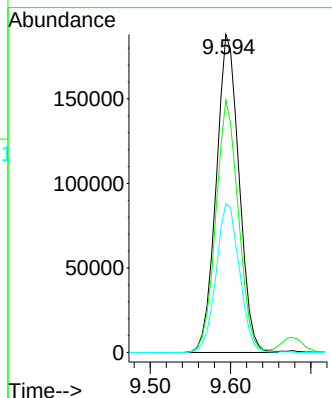
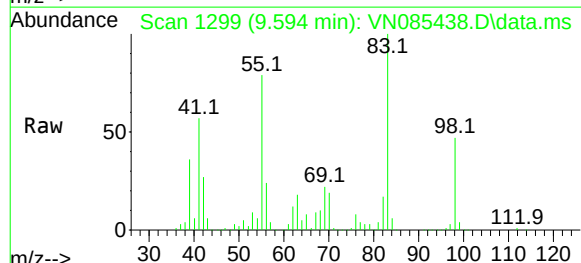
Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

| Tgt Ion | 83    | Resp  | 371734 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 83      | 100   |       |        |
| 55      | 79.3  | 62.6  | 94.0   |
| 98      | 46.7  | 37.7  | 56.5   |

Manual Integrations  
APPROVEDReviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

#40

Benzene

Concen: 106.001 ug/l

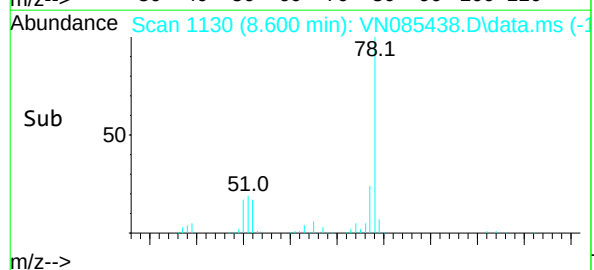
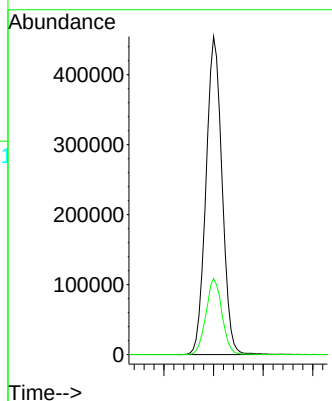
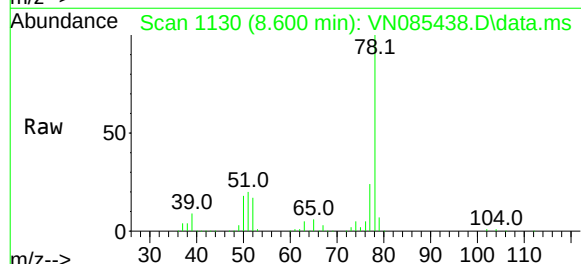
RT: 8.600 min Scan# 1130

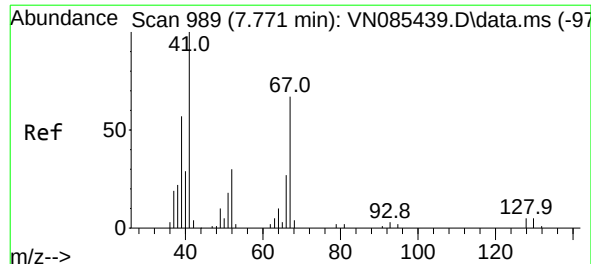
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

| Tgt Ion | 78    | Resp  | 1021393 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 78      | 100   |       |         |
| 77      | 23.9  | 19.0  | 28.6    |





#41

Methacrylonitrile

Concen: 109.454 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 184326

Ion Ratio Lower Upper

41 100

39 52.8 46.0 69.0

67 68.8 57.4 86.2

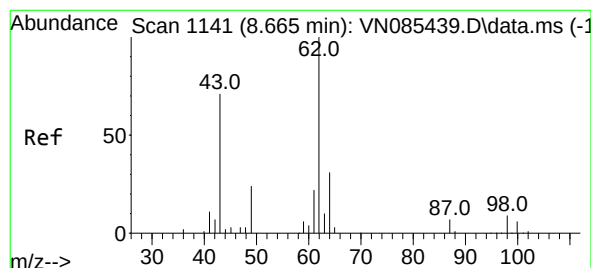
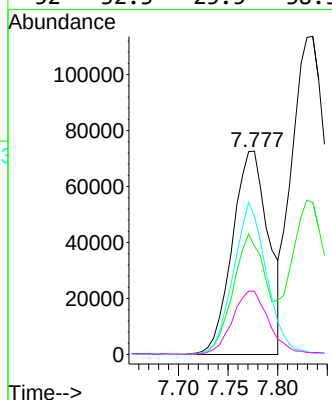
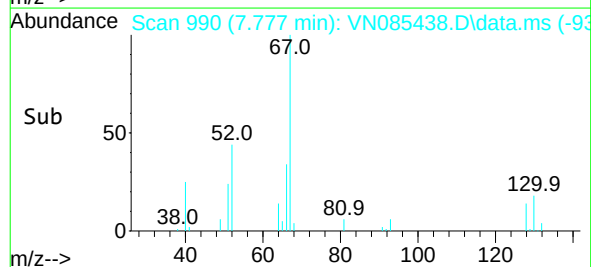
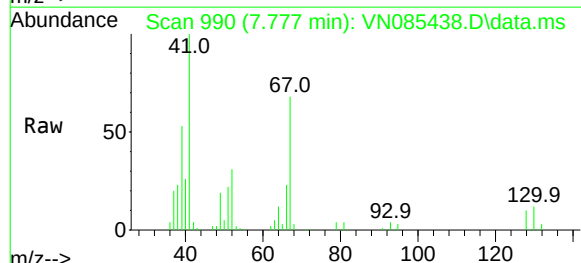
52 32.3 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 103.314 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085438.D

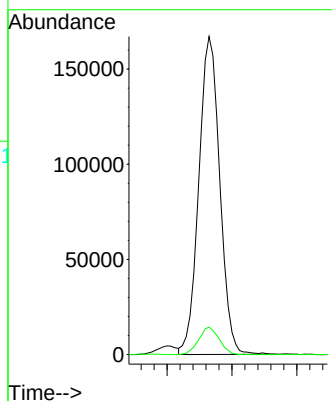
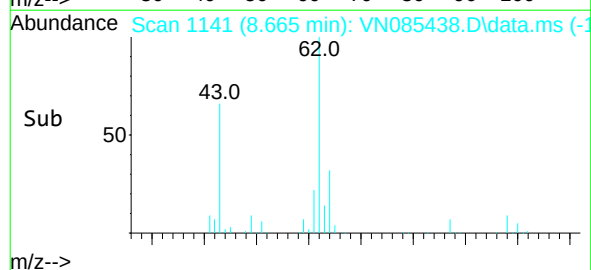
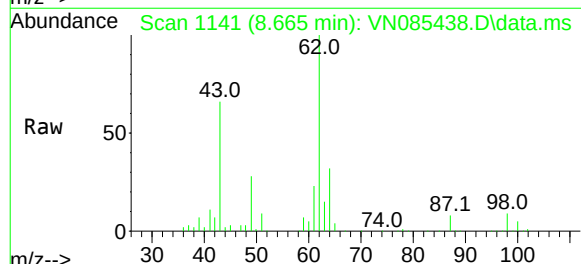
Acq: 14 Jan 2025 14:56

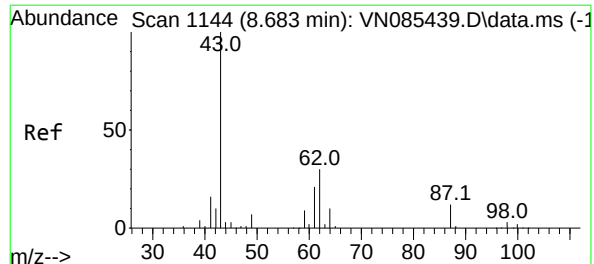
Tgt Ion: 62 Resp: 374938

Ion Ratio Lower Upper

62 100

98 8.4 0.0 17.0





#43

Isopropyl Acetate

Concen: 106.035 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 549969

Ion Ratio Lower Upper

43 100

61 25.7 20.7 31.1

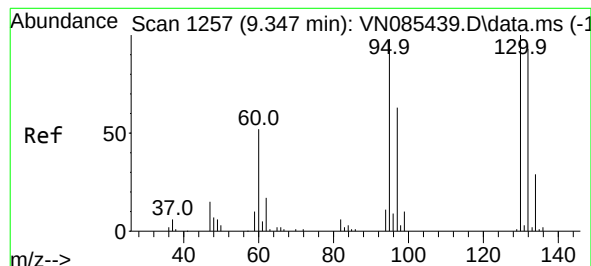
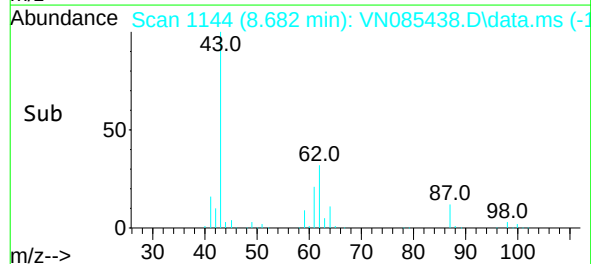
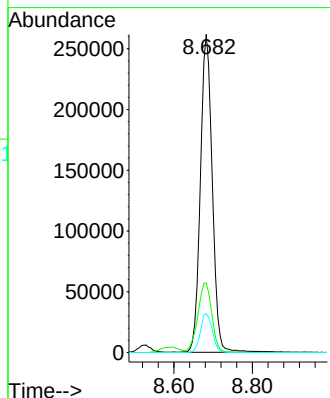
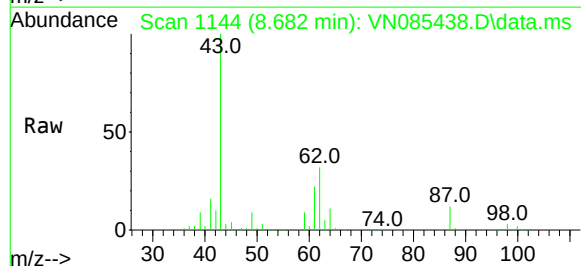
87 12.2 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 106.242 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085438.D

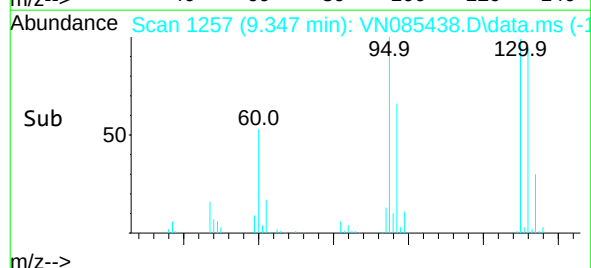
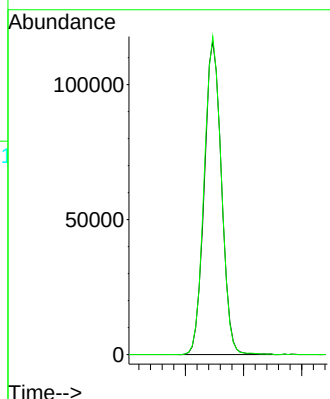
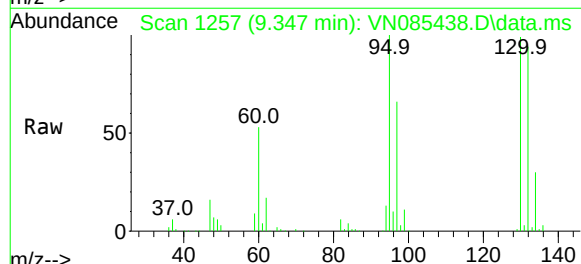
Acq: 14 Jan 2025 14:56

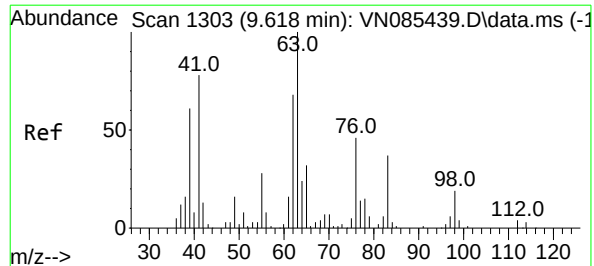
Tgt Ion:130 Resp: 238296

Ion Ratio Lower Upper

130 100

95 101.5 0.0 195.8





#45

1,2-Dichloropropane

Concen: 104.405 ug/l

RT: 9.618 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 63 Resp: 256964

Ion Ratio Lower Upper

63 100

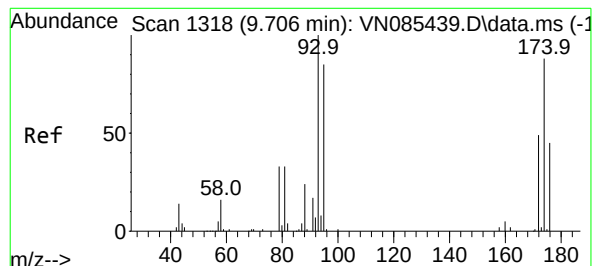
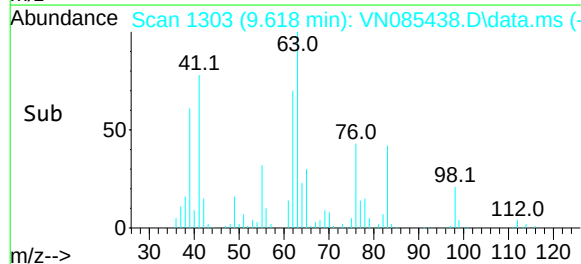
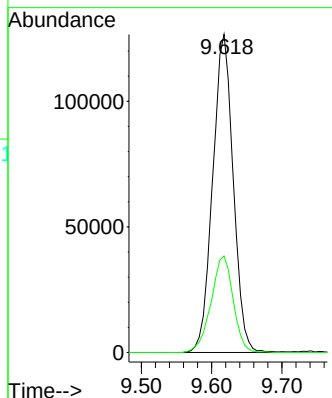
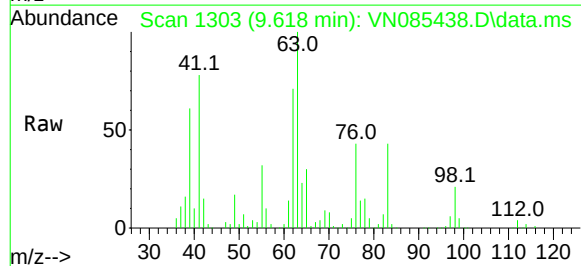
65 30.3 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 101.913 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

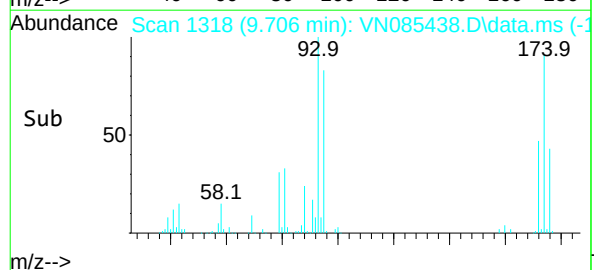
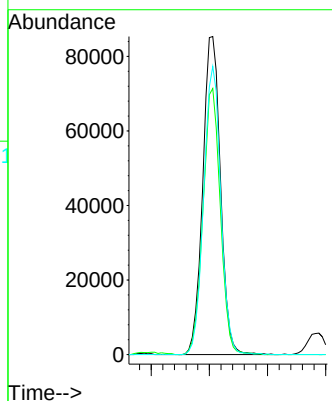
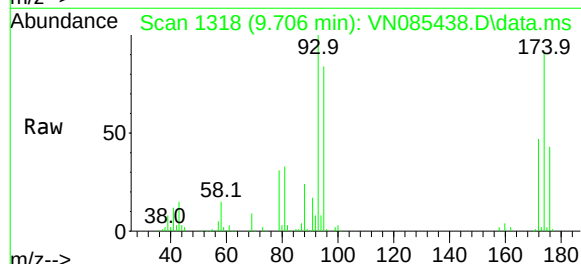
Tgt Ion: 93 Resp: 180990

Ion Ratio Lower Upper

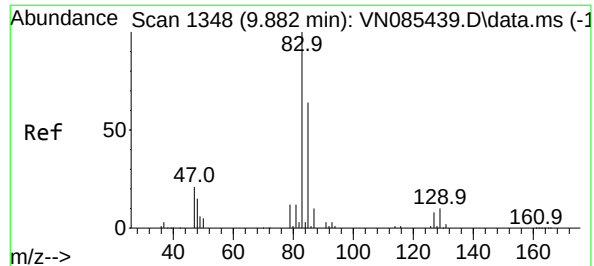
93 100

95 81.6 64.7 97.1

174 87.5 69.0 103.4







#47

Bromodichloromethane

Concen: 107.377 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

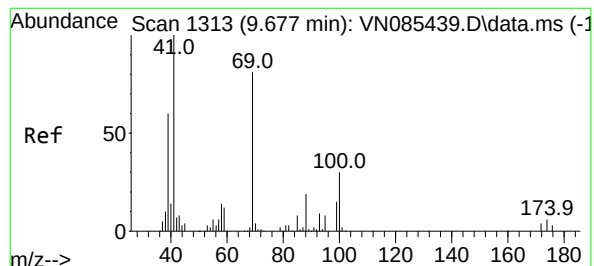
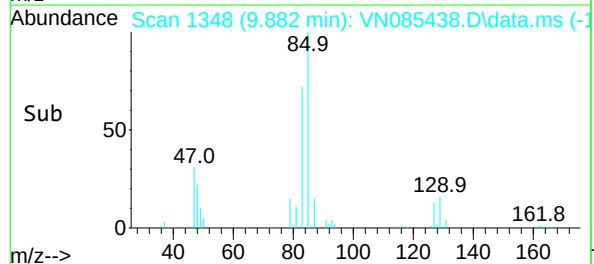
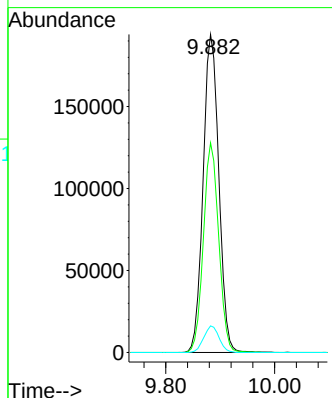
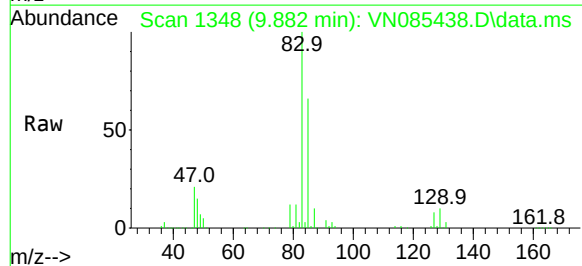
ClientSampleId :

VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 388499 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 85       | 65.9  | 51.2  | 76.8   |
| 127      | 8.4   | 6.5   | 9.7    |

Manual Integrations  
APPROVED

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



#48

Methyl methacrylate

Concen: 114.685 ug/l

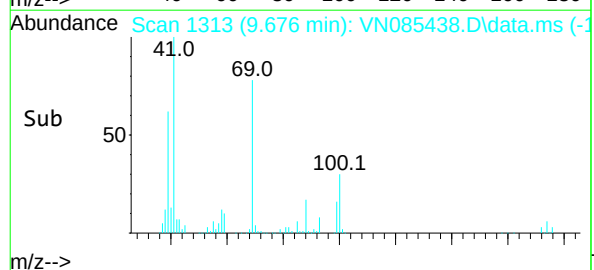
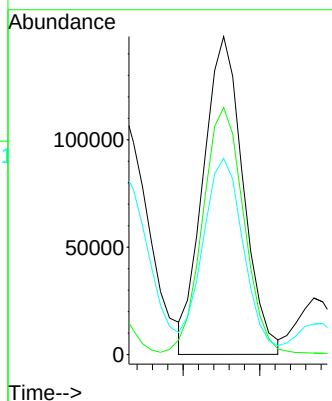
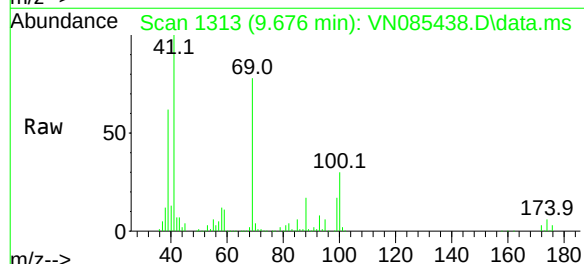
RT: 9.676 min Scan# 1313

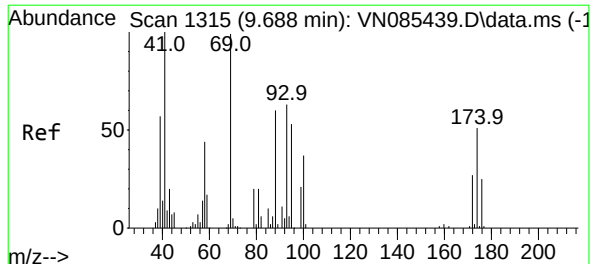
Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 41    | Resp: | 267689 |
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 69       | 80.9  | 64.7  | 97.1   |
| 39       | 63.1  | 49.0  | 73.6   |





#49

1,4-Dioxane

Concen: 2133.992 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 88 Resp: 83879

Ion Ratio Lower Upper

88 100

43 31.3 26.6 39.8

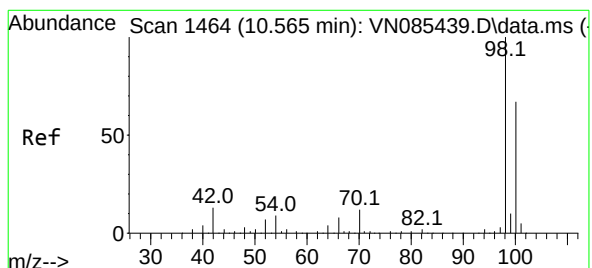
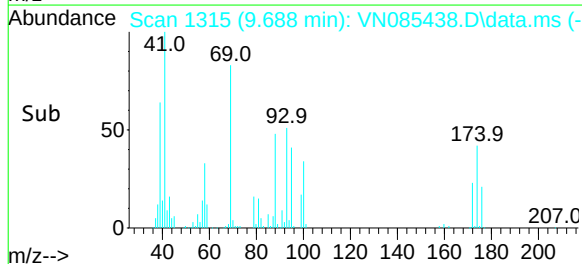
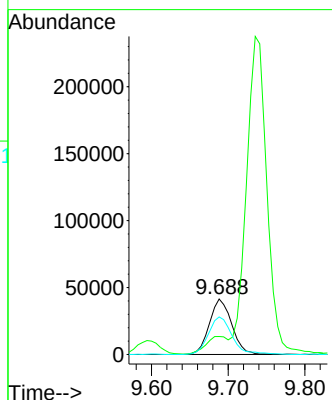
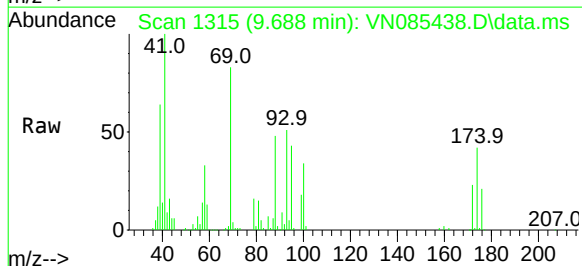
58 72.1 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 108.636 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085438.D

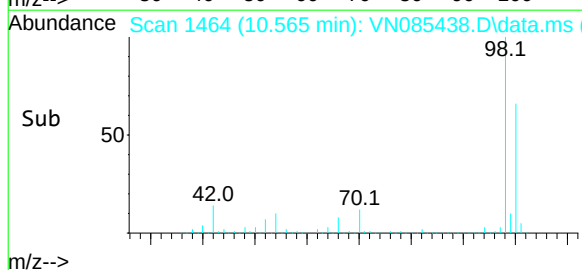
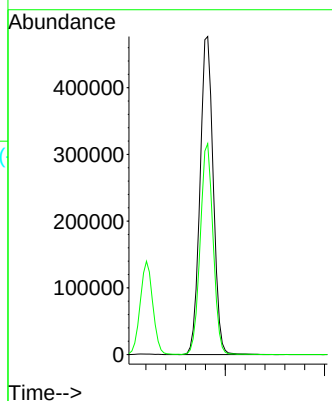
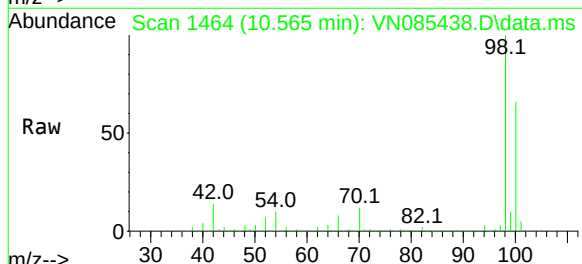
Acq: 14 Jan 2025 14:56

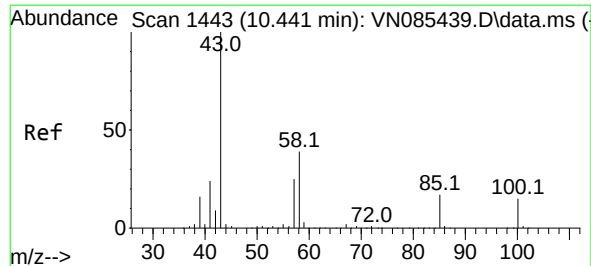
Tgt Ion: 98 Resp: 881956

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





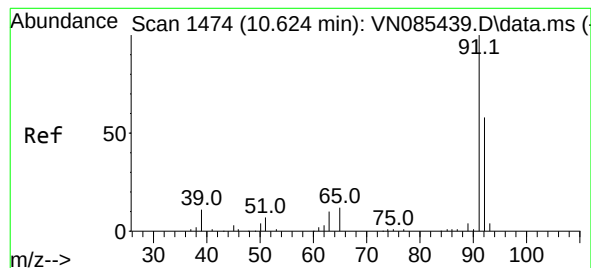
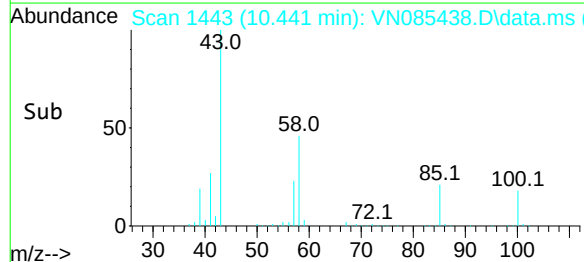
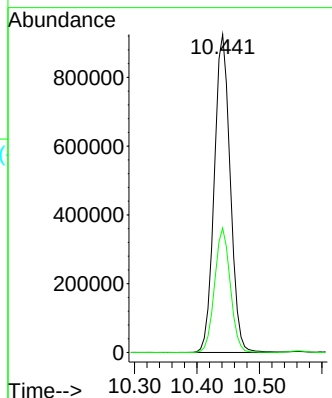
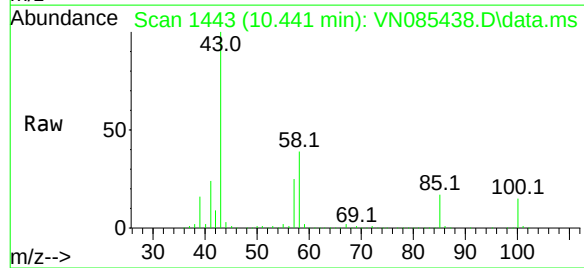
#51  
4-Methyl-2-Pentanone  
Concen: 546.159 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Tgt Ion: 43 Resp: 1643800  
Ion Ratio Lower Upper  
43 100  
58 38.4 30.5 45.7

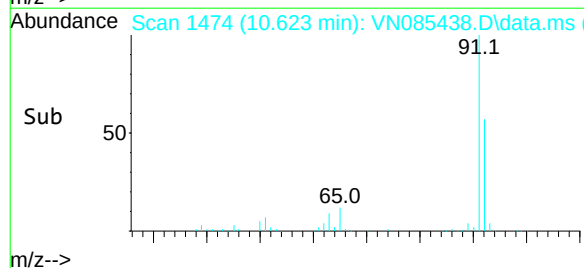
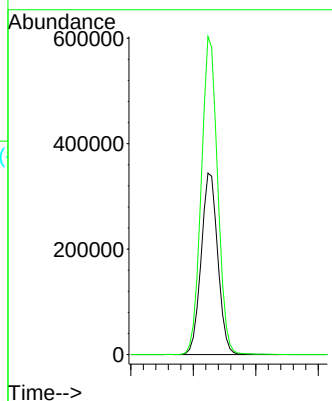
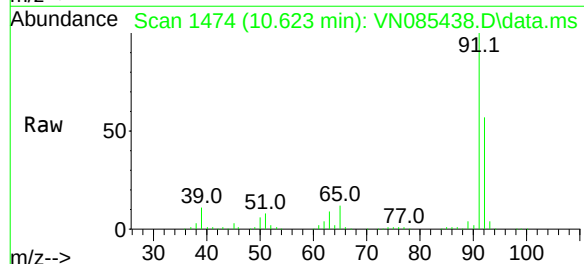
Manual Integrations  
APPROVED

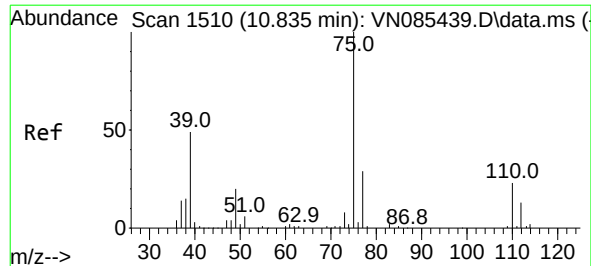
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

Tgt Ion: 92 Resp: 634743  
Ion Ratio Lower Upper  
92 100  
91 173.1 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 114.424 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 75 Resp: 391238

Ion Ratio Lower Upper

75 100

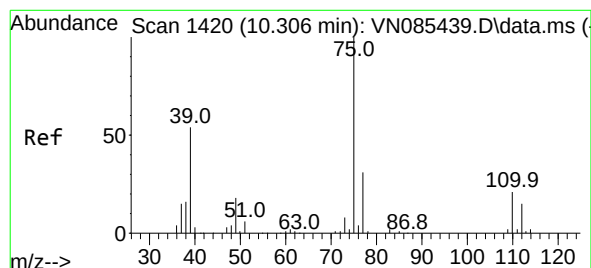
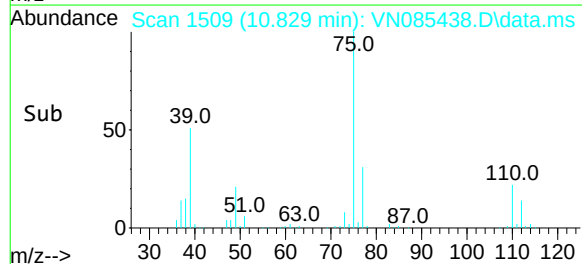
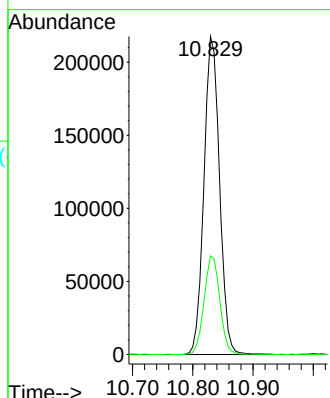
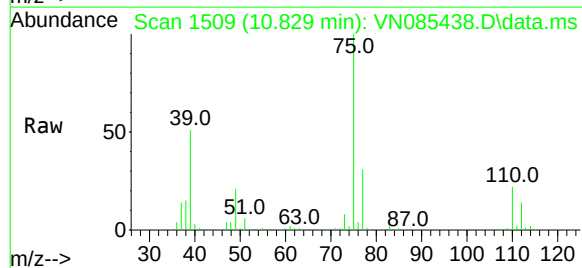
77 31.0 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 112.369 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

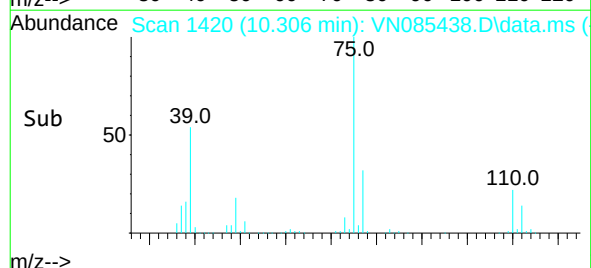
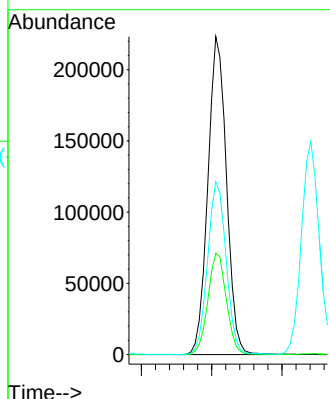
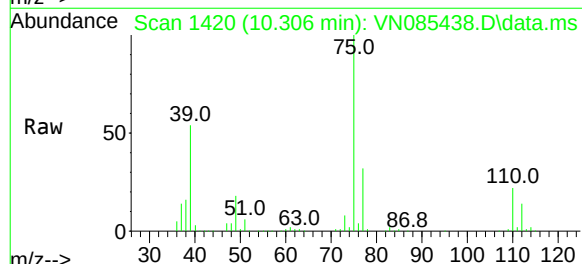
Tgt Ion: 75 Resp: 410403

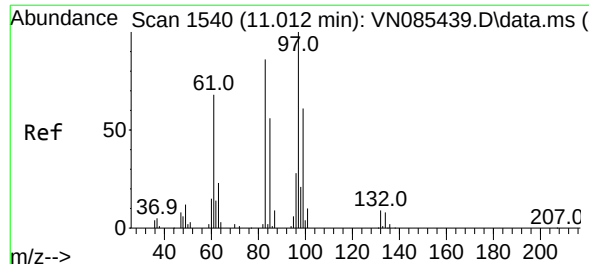
Ion Ratio Lower Upper

75 100

77 31.9 25.0 37.4

39 54.3 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 103.879 ug/l

RT: 11.012 min Scan# 15

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 97 Resp: 229522

Ion Ratio Lower Upper

97 100

83 88.4 69.0 103.6

85 56.3 44.6 66.8

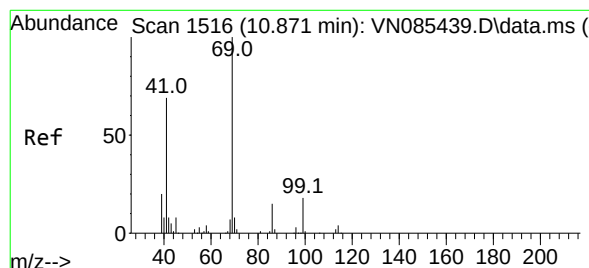
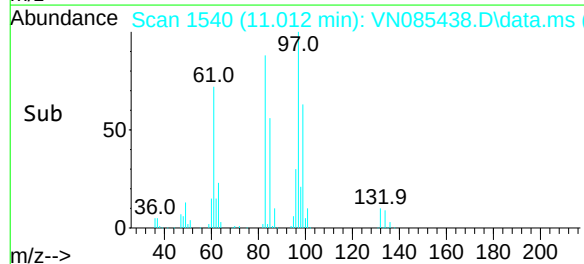
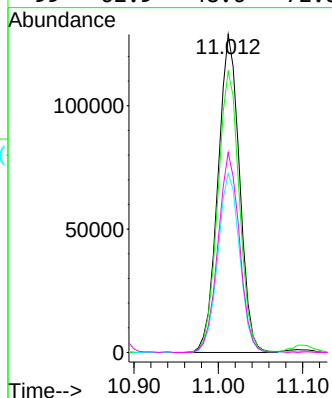
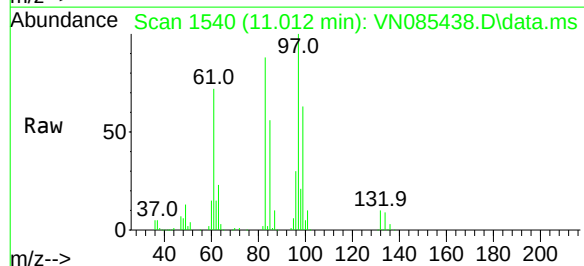
99 62.9 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 101.029 ug/l

RT: 10.870 min Scan# 1516

Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

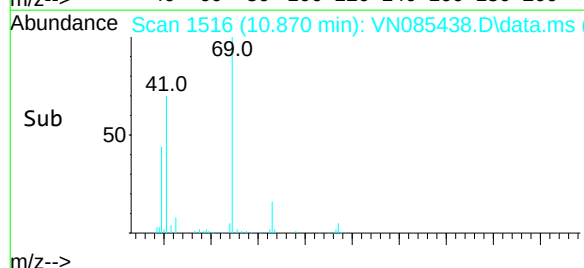
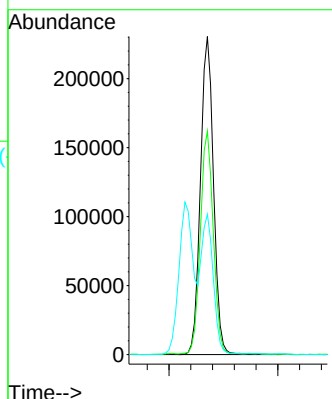
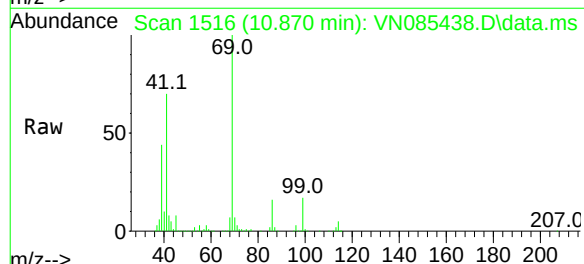
Tgt Ion: 69 Resp: 383663

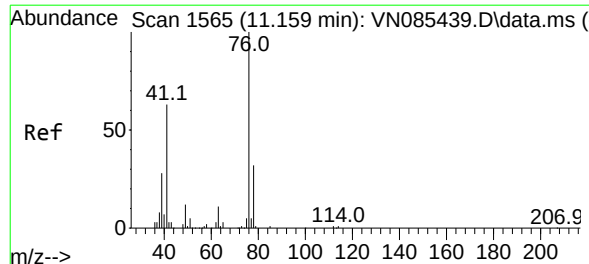
Ion Ratio Lower Upper

69 100

41 69.1 54.6 82.0

39 40.1 32.4 48.6





#57

1,3-Dichloropropane

Concen: 107.469 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 76 Resp: 412886

Ion Ratio Lower Upper

76 100

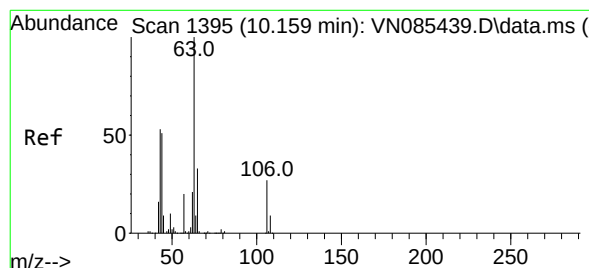
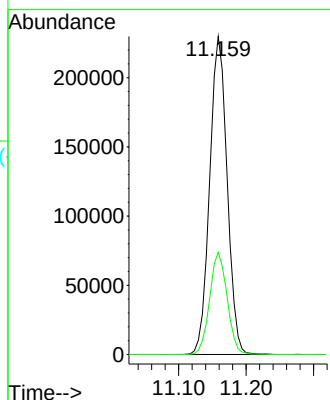
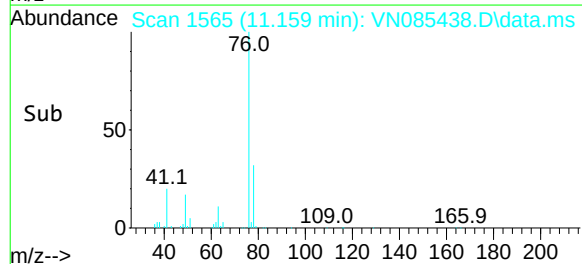
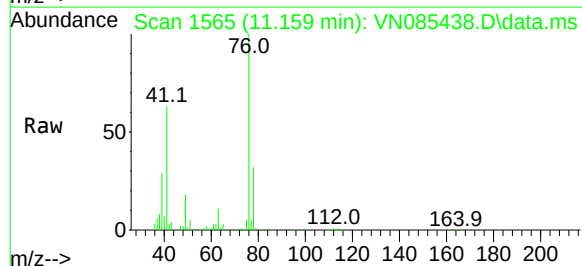
78 32.2 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 605.243 ug/l

RT: 10.153 min Scan# 1394

Delta R.T. -0.006 min

Lab File: VN085438.D

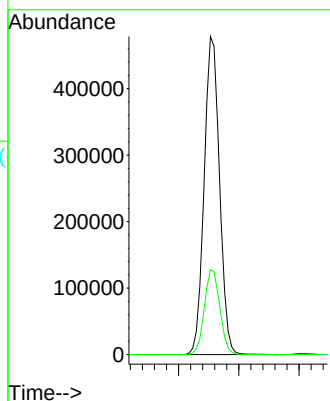
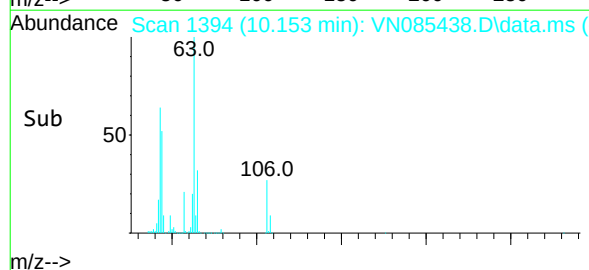
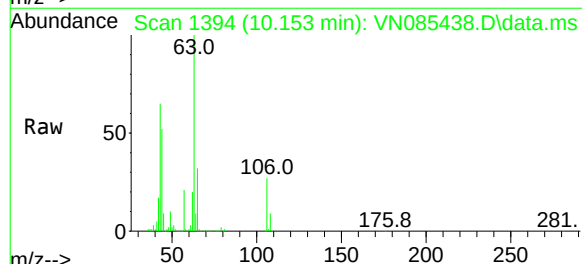
Acq: 14 Jan 2025 14:56

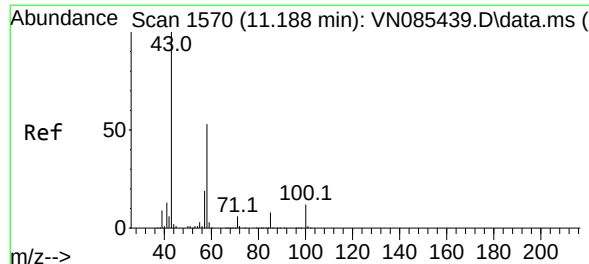
Tgt Ion: 63 Resp: 848636

Ion Ratio Lower Upper

63 100

106 26.8 21.6 32.4





#59

2-Hexanone

Concen: 556.643 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 1178831

Ion Ratio Lower Upper

43 100

58 53.2 26.2 78.6

Instrument :

MSVOA\_N

ClientSampleId :

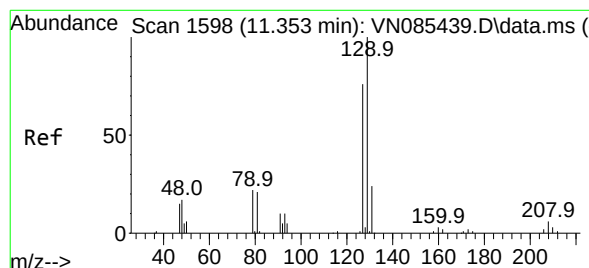
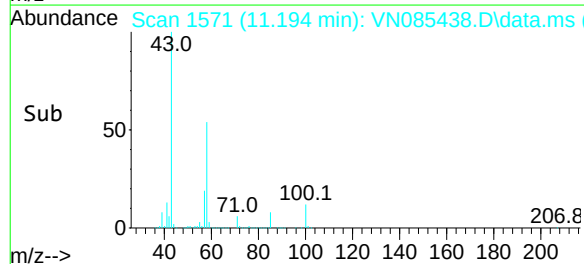
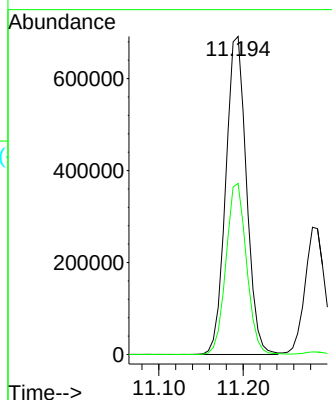
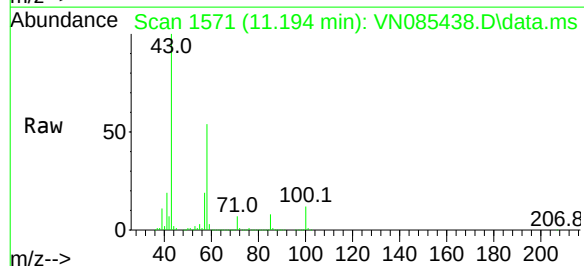
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 106.227 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. -0.000 min

Lab File: VN085438.D

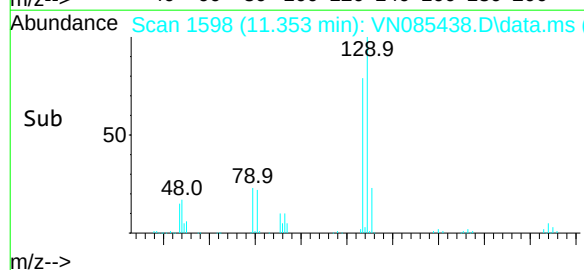
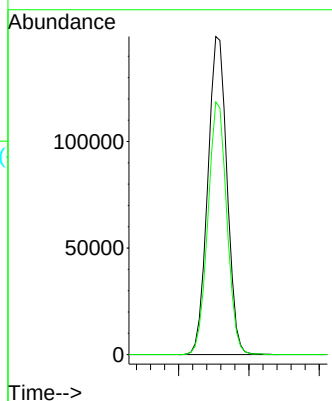
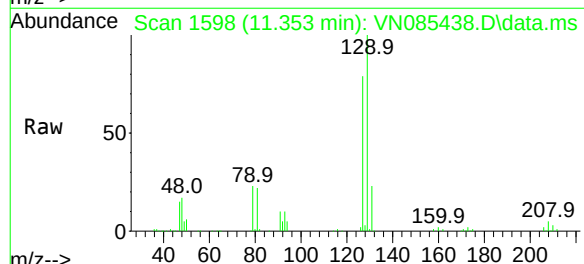
Acq: 14 Jan 2025 14:56

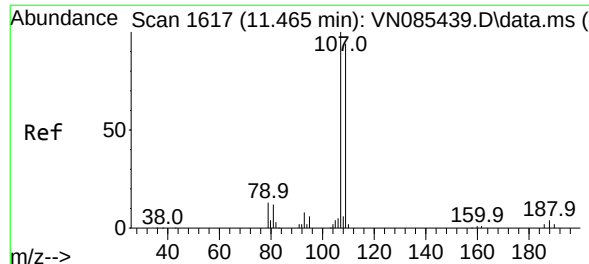
Tgt Ion:129 Resp: 283361

Ion Ratio Lower Upper

129 100

127 78.1 38.6 115.8





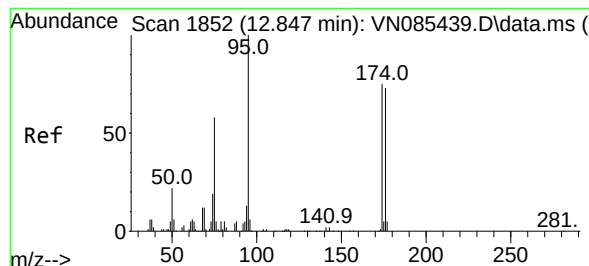
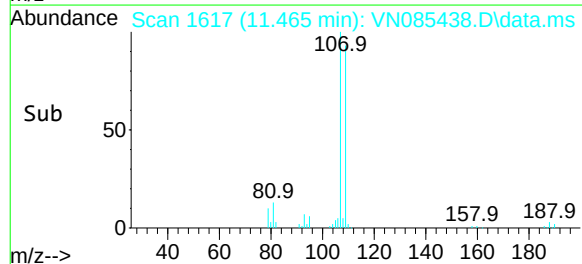
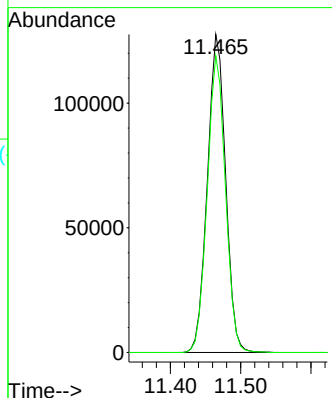
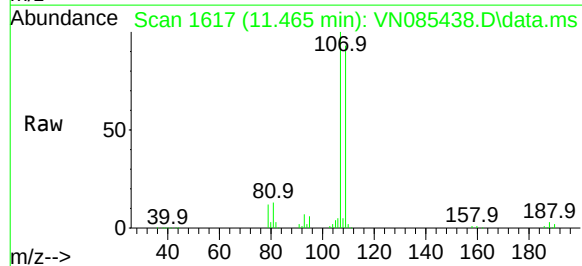
#61  
1,2-Dibromoethane  
Concen: 104.623 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 107 Resp: 230104  
Ion Ratio Lower Upper  
107 100  
109 93.1 75.9 113.9

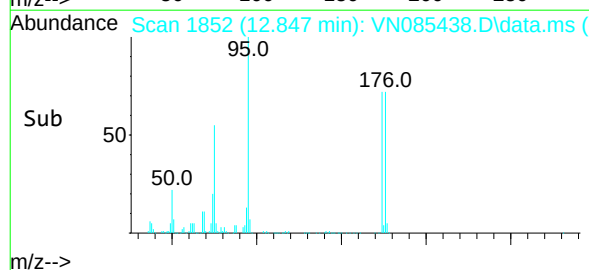
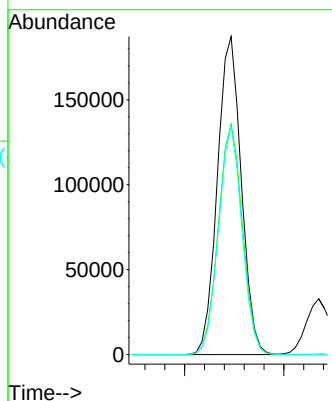
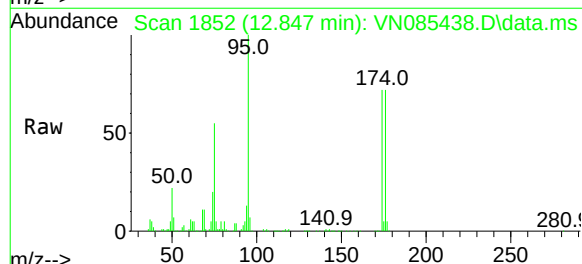
Manual Integrations  
APPROVED

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

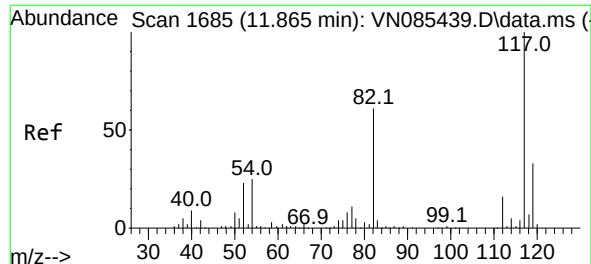


#62  
4-Bromofluorobenzene  
Concen: 112.765 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 95 Resp: 313161  
Ion Ratio Lower Upper  
95 100  
174 73.4 0.0 145.0  
176 70.5 0.0 142.4







#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:117 Resp: 298938

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

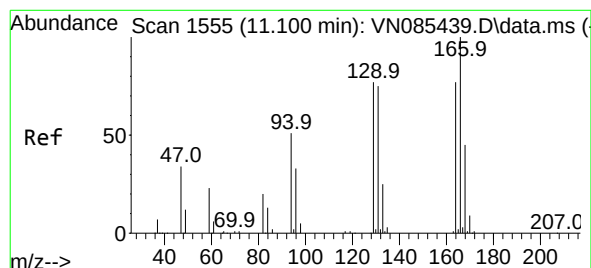
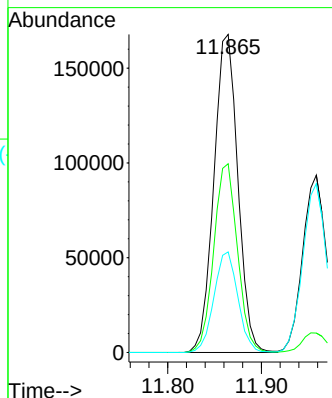
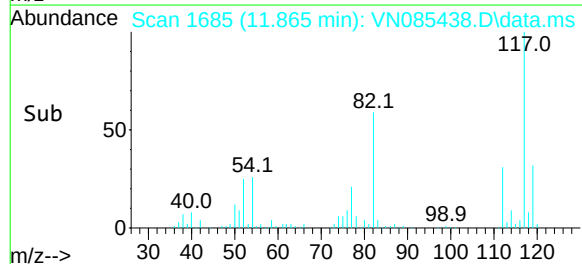
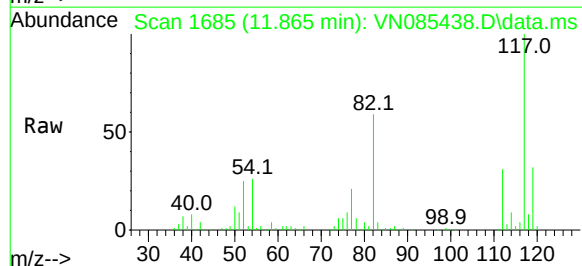
119 31.6 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 102.980 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:164 Resp: 209870

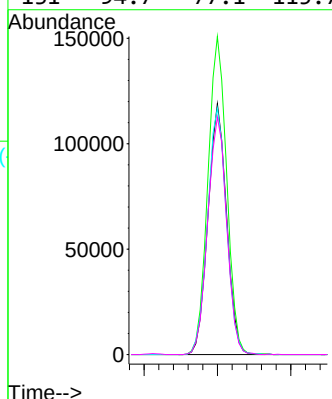
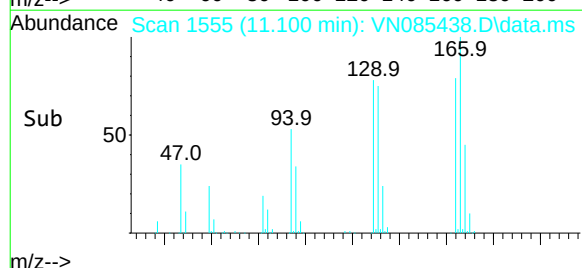
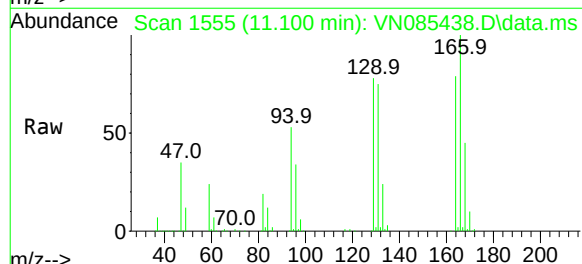
Ion Ratio Lower Upper

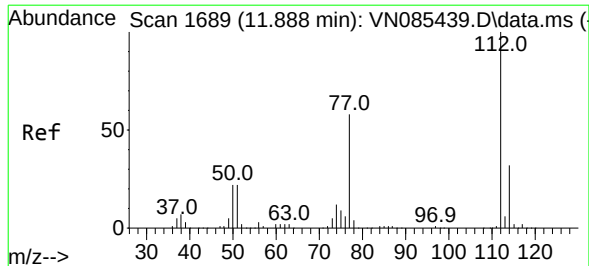
164 100

166 126.8 103.4 155.2

129 98.3 79.2 118.8

131 94.7 77.1 115.7





#65

Chlorobenzene

Concen: 103.482 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:112 Resp: 677679

Ion Ratio Lower Upper

112 100

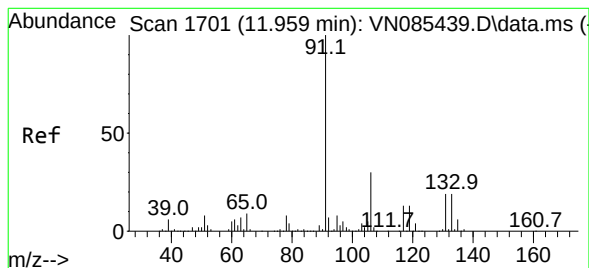
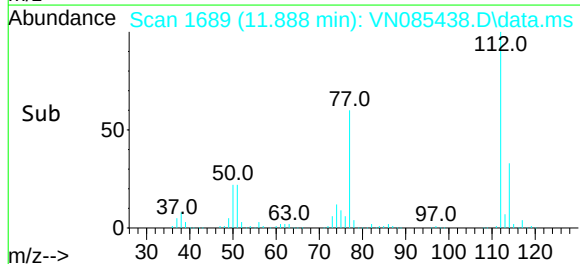
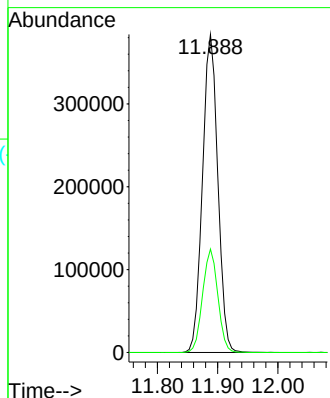
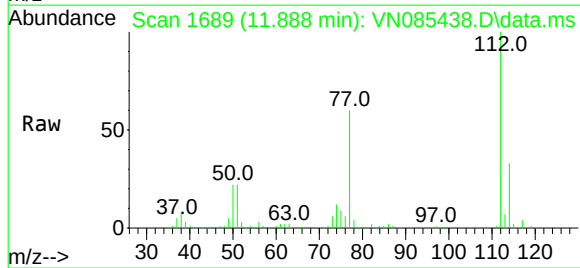
114 32.5 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 100.517 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

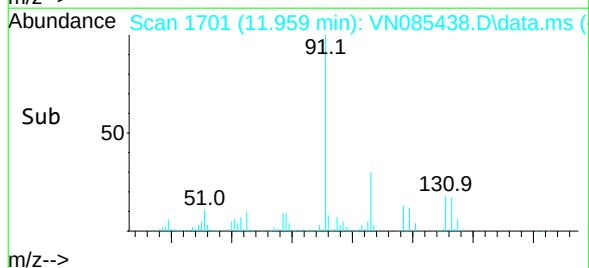
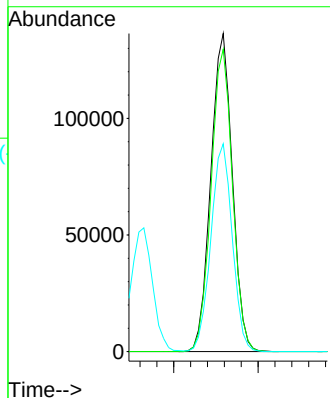
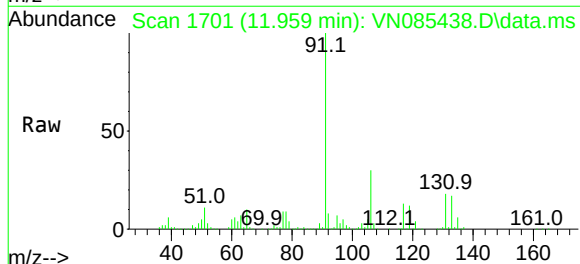
Tgt Ion:131 Resp: 241593

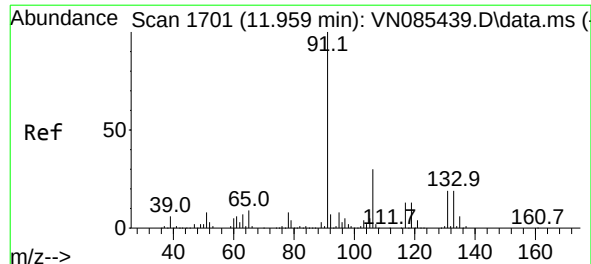
Ion Ratio Lower Upper

131 100

133 94.3 47.4 142.3

119 64.9 33.1 99.5





#67

Ethyl Benzene

Concen: 116.169 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 91 Resp: 1239080

Ion Ratio Lower Upper

91 100

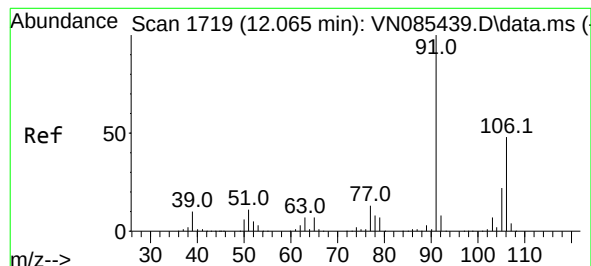
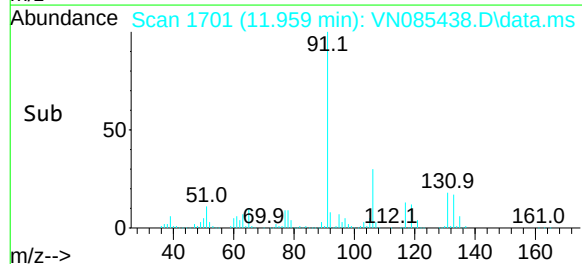
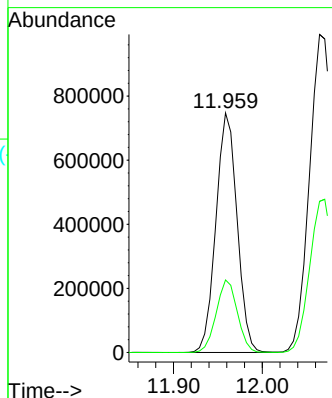
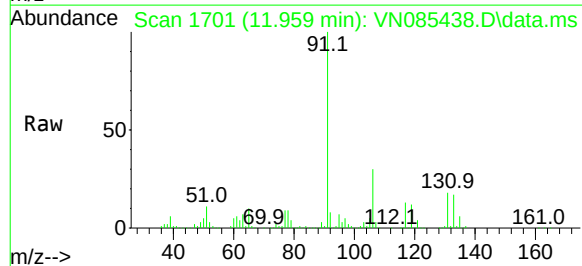
106 30.3 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 235.219 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085438.D

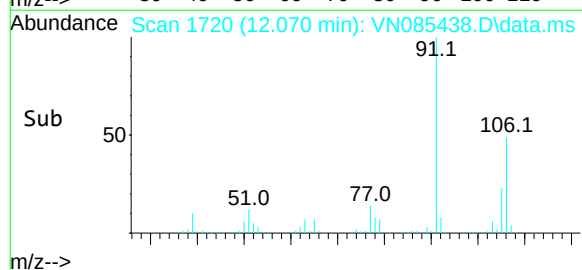
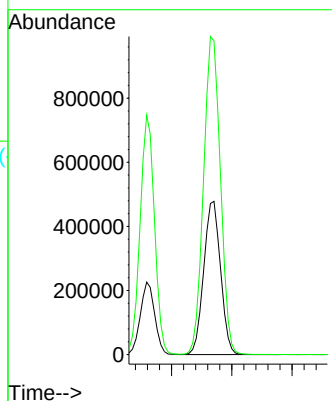
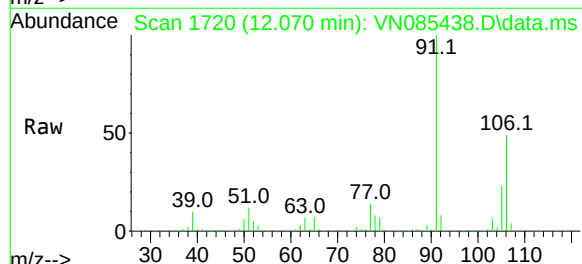
Acq: 14 Jan 2025 14:56

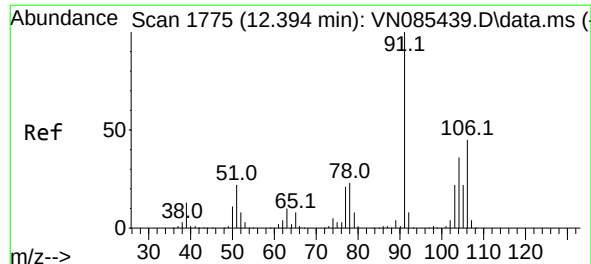
Tgt Ion:106 Resp: 927244

Ion Ratio Lower Upper

106 100

91 208.0 167.7 251.5





#69

o-Xylene

Concen: 117.135 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:106 Resp: 441279

Ion Ratio Lower Upper

106 100

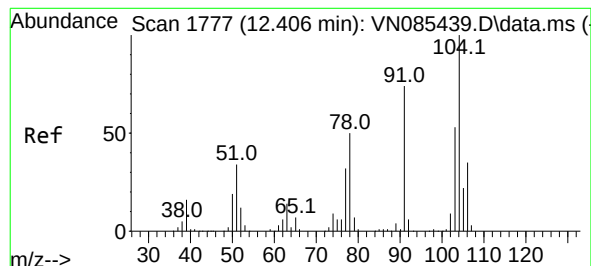
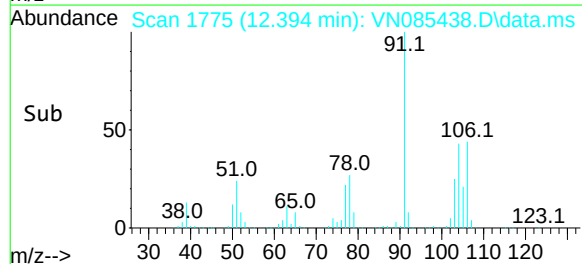
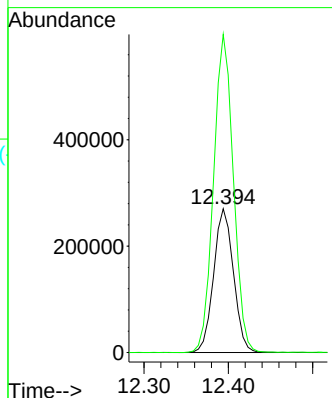
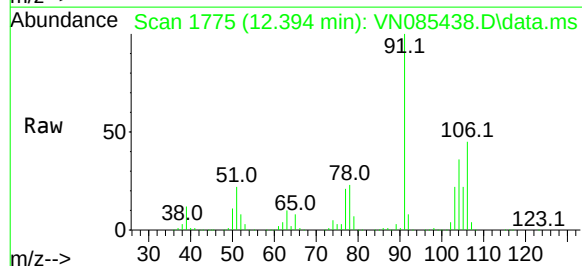
91 221.3 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 121.919 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

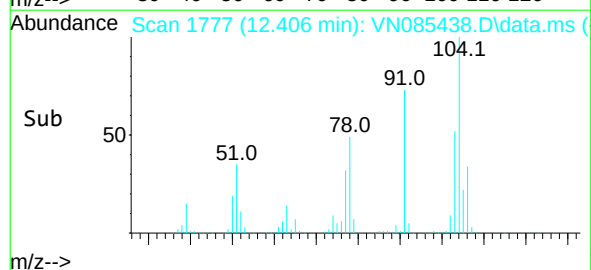
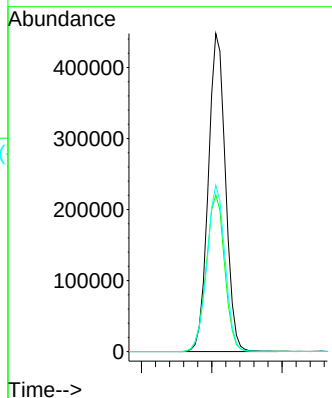
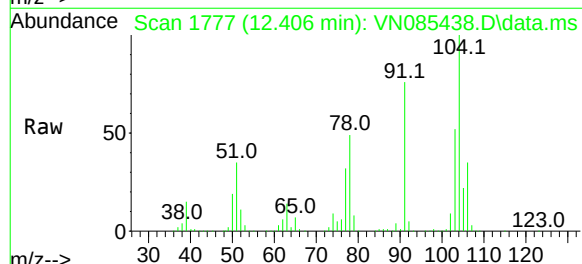
Tgt Ion:104 Resp: 760136

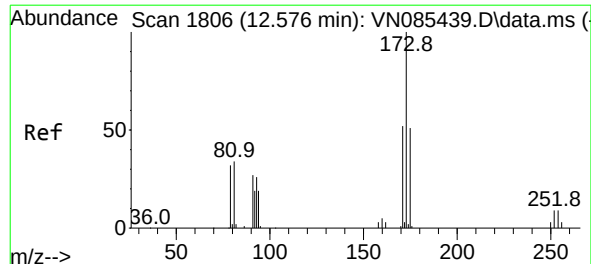
Ion Ratio Lower Upper

104 100

78 52.8 42.5 63.7

103 55.3 43.8 65.8





#71

Bromoform

Concen: 108.227 ug/l

RT: 12.576 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

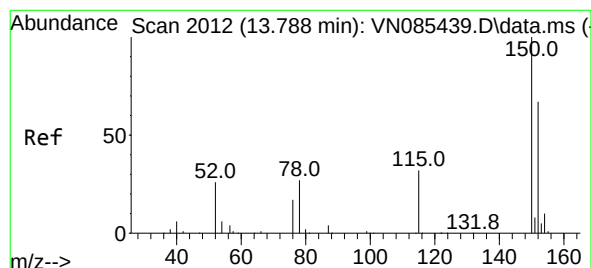
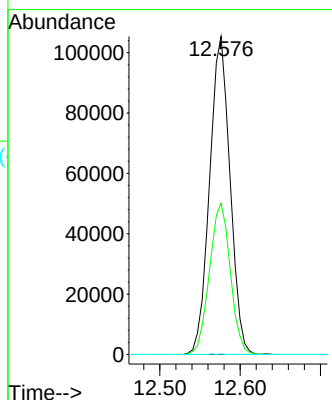
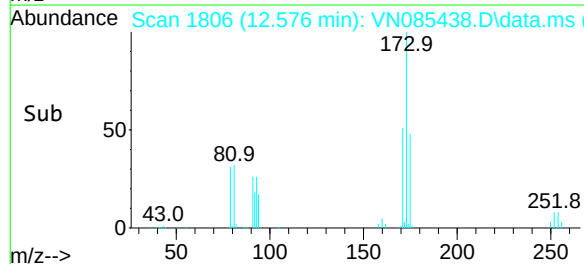
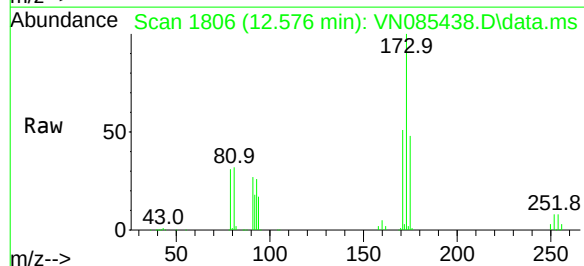
VSTDICC100

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 173   | Resp: | 186124 |
| Ion Ratio | Lower | Upper |        |
| 173       | 100   |       |        |
| 175       | 48.4  | 24.4  | 73.2   |
| 254       | 0.1   | 0.0   | 0.0    |

Manual Integrations

APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

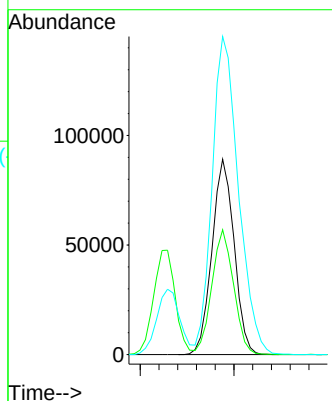
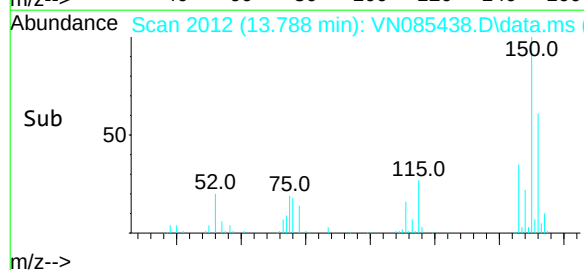
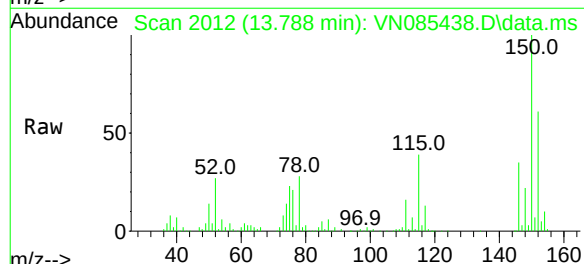
RT: 13.788 min Scan# 2012

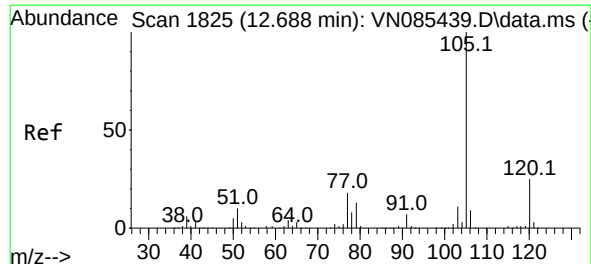
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 146196 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.7  | 31.1  | 93.3   |
| 150       | 193.1 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 116.221 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 105 Resp: 1146752

Ion Ratio Lower Upper

105 100

120 25.7 12.8 38.3

Instrument :

MSVOA\_N

ClientSampleId :

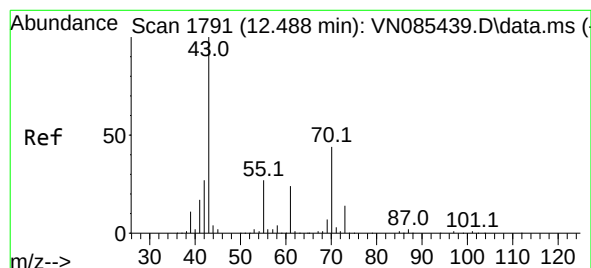
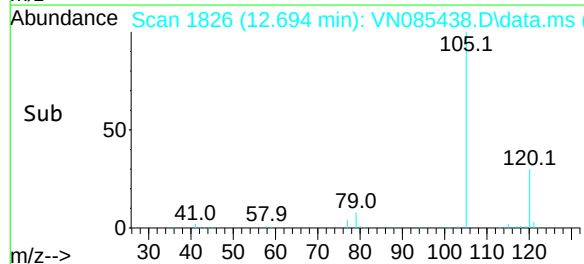
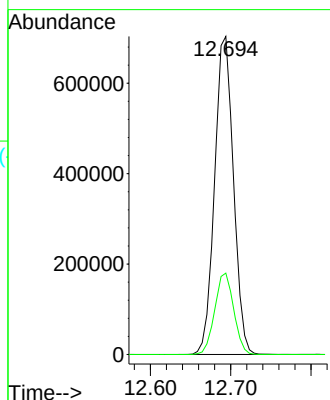
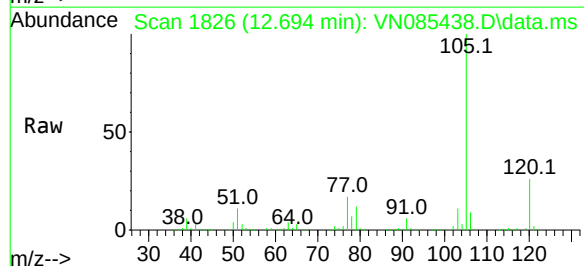
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 110.308 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 489217

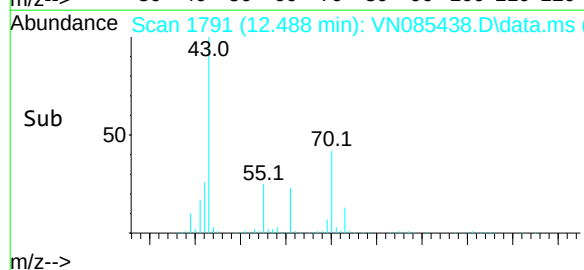
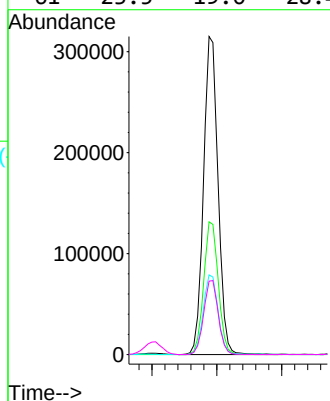
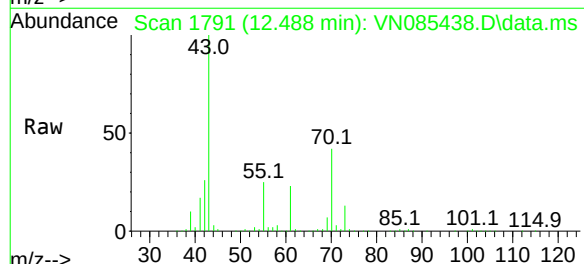
Ion Ratio Lower Upper

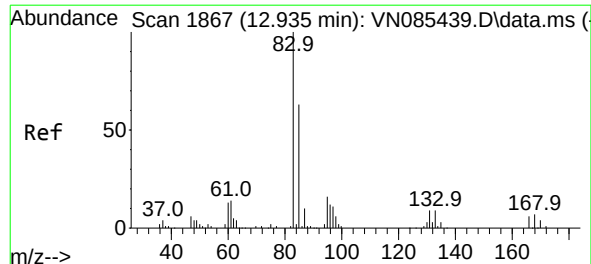
43 100

70 41.9 34.0 51.0

55 25.7 21.4 32.2

61 23.5 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 94.039 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

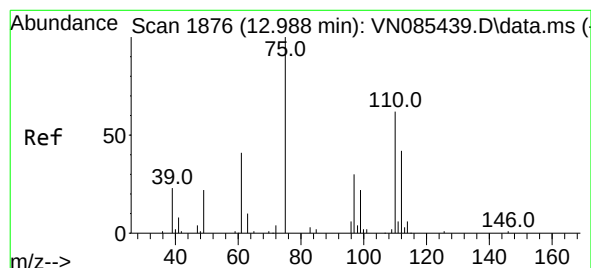
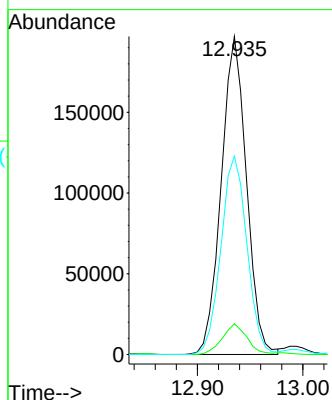
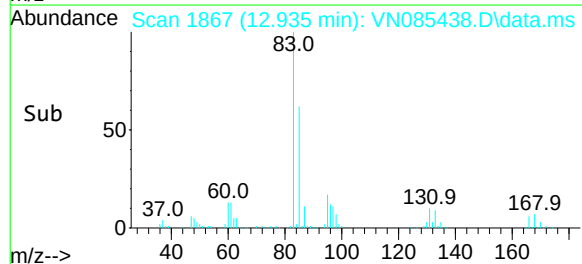
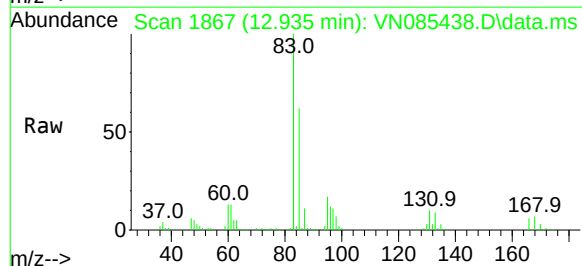
VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 327767 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 131      | 9.8   | 4.8   | 14.4   |
| 85       | 64.1  | 32.2  | 96.6   |

Manual Integrations

APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 104.530 ug/l m

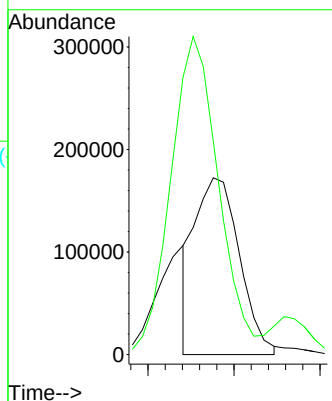
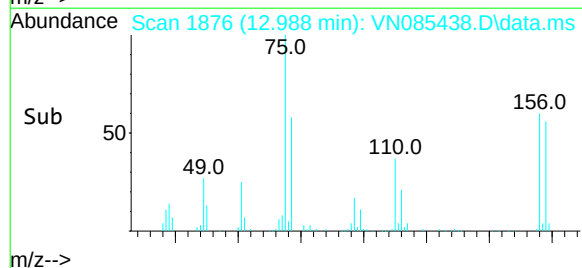
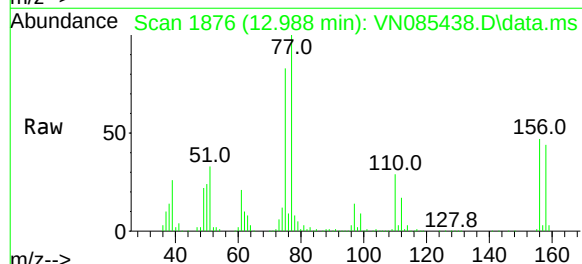
RT: 12.988 min Scan# 1876

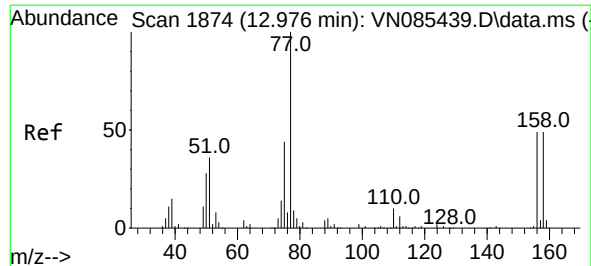
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 310115 |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 77       | 192.6 | 109.7 | 329.2  |





#77

Bromobenzene

Concen: 104.200 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:156 Resp: 268616

Ion Ratio Lower Upper

156 100

77 222.4 114.1 342.4

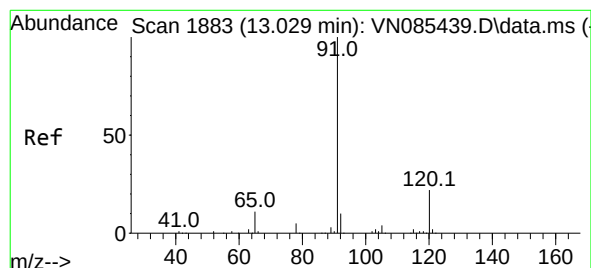
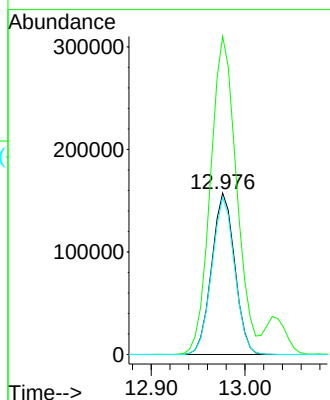
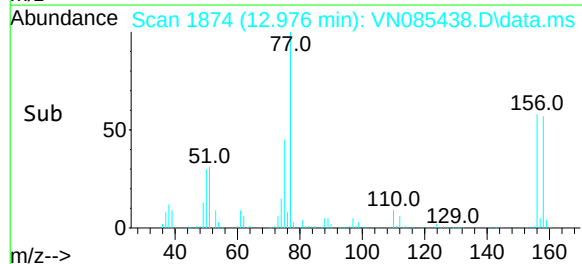
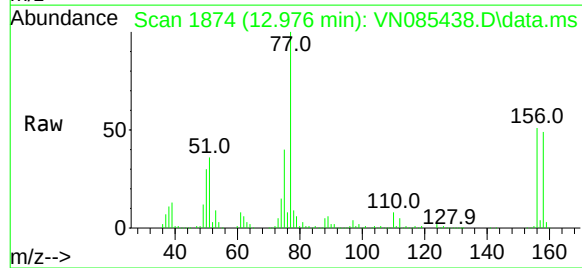
158 96.3 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 118.600 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. -0.000 min

Lab File: VN085438.D

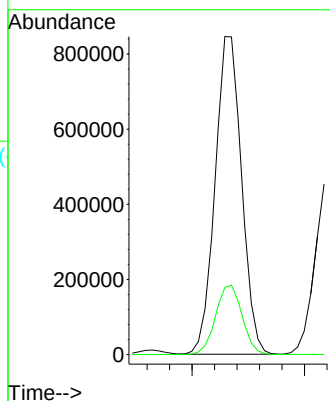
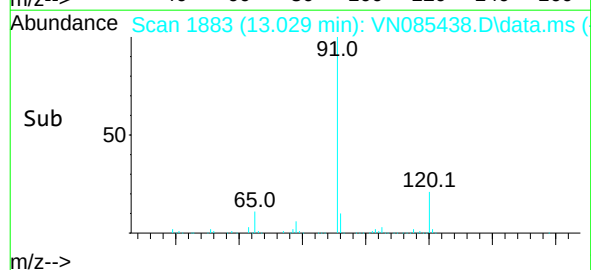
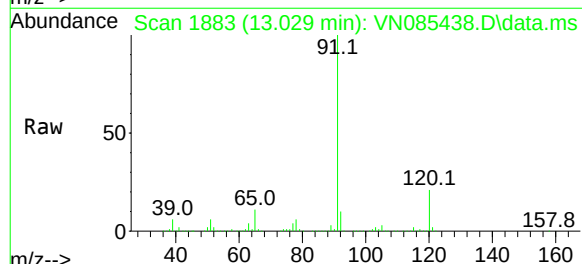
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 1385353

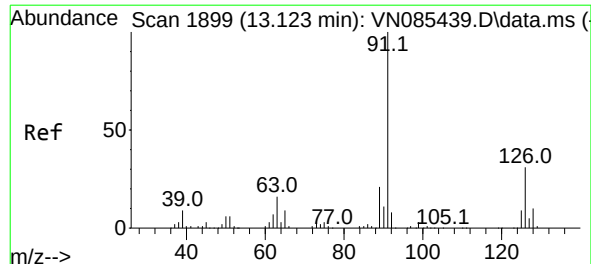
Ion Ratio Lower Upper

91 100

120 21.8 10.9 32.6







#79

2-Chlorotoluene

Concen: 108.767 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion: 91 Resp: 822258

Ion Ratio Lower Upper

91 100

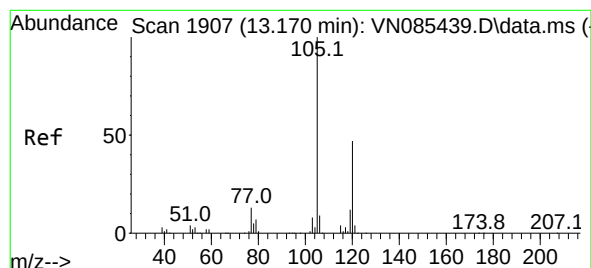
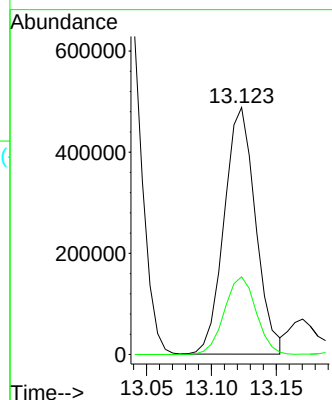
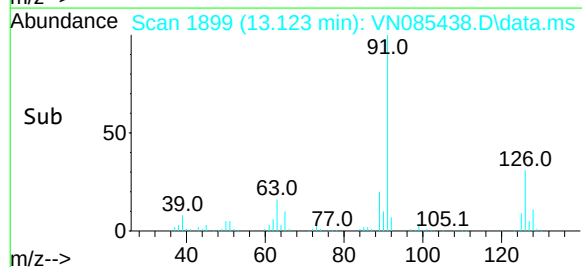
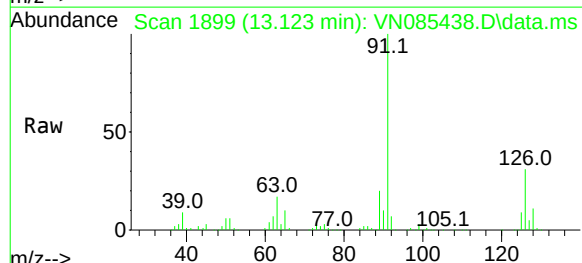
126 31.8 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 116.938 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085438.D

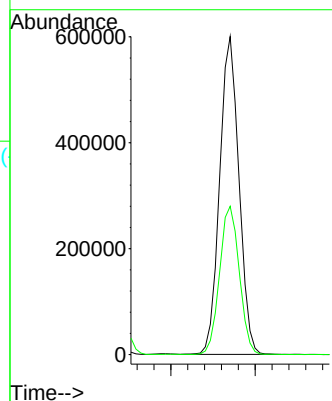
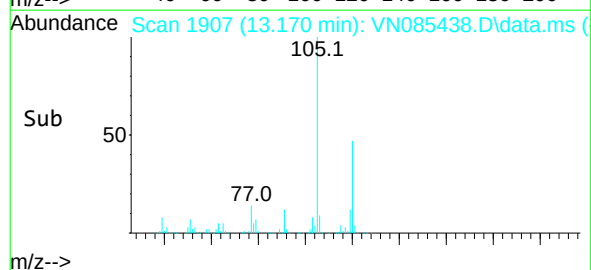
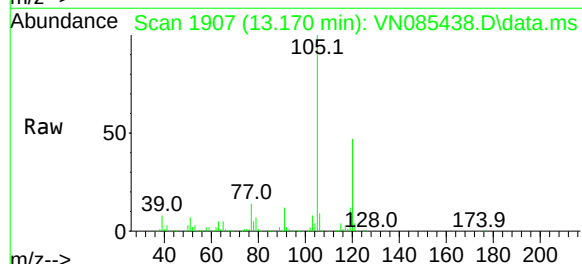
Acq: 14 Jan 2025 14:56

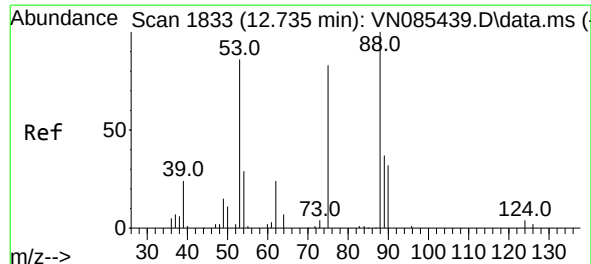
Tgt Ion:105 Resp: 953066

Ion Ratio Lower Upper

105 100

120 47.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 111.544 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. -0.000 min

Lab File: VN085438.D

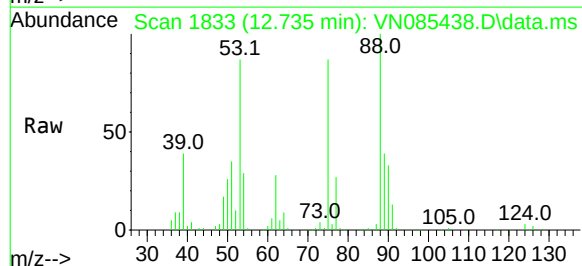
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

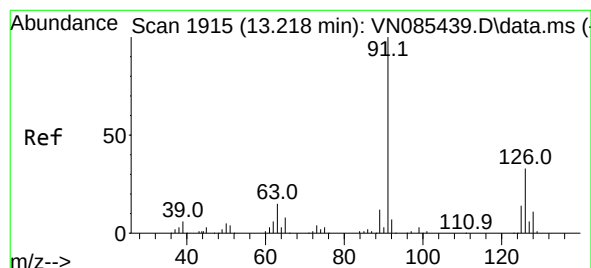
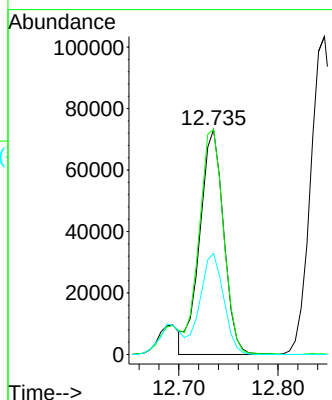
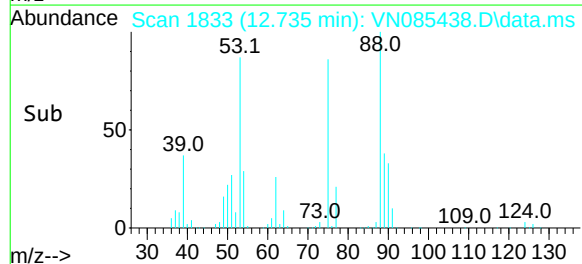
VSTDICC100



| Tgt Ion: | 75    | Resp: | 122508 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 53       | 100.9 | 95.6  | 143.4  |
| 89       | 44.4  | 37.0  | 55.6   |

Manual Integrations  
APPROVED

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



#82

4-Chlorotoluene

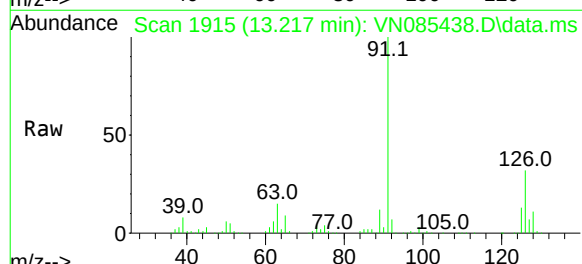
Concen: 110.574 ug/l

RT: 13.217 min Scan# 1915

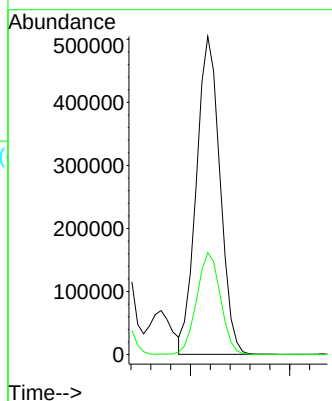
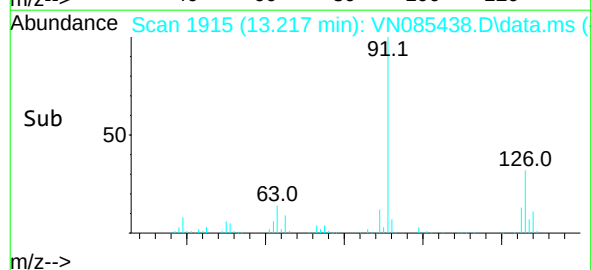
Delta R.T. -0.000 min

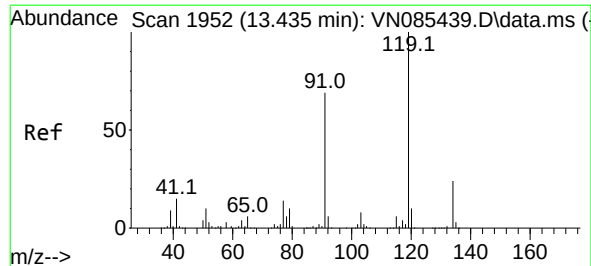
Lab File: VN085438.D

Acq: 14 Jan 2025 14:56



| Tgt Ion: | 91    | Resp: | 832317 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 126      | 32.5  | 15.9  | 47.7   |





#83

tert-Butylbenzene

Concen: 116.457 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:119 Resp: 797069

Ion Ratio Lower Upper

119 100

91 70.7 35.1 105.3

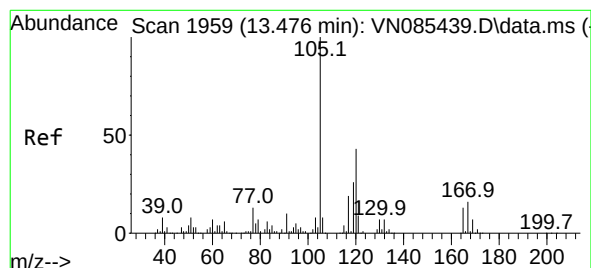
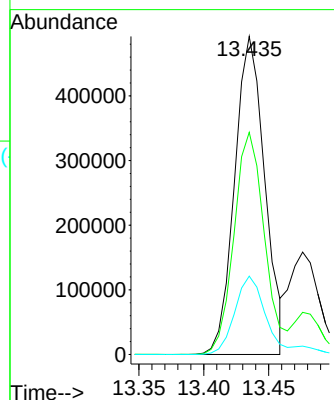
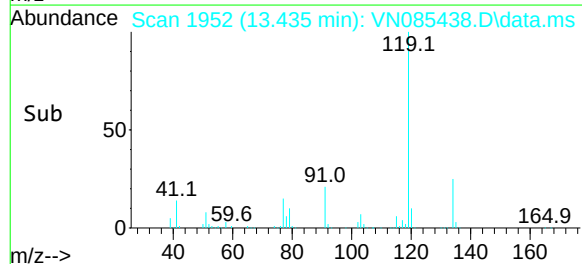
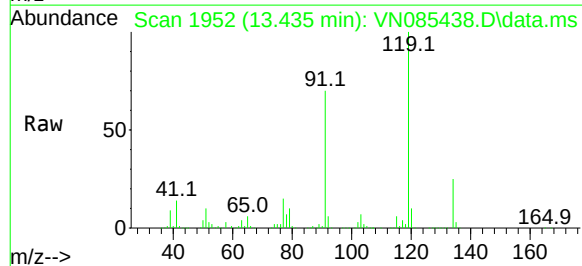
134 26.6 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 119.625 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085438.D

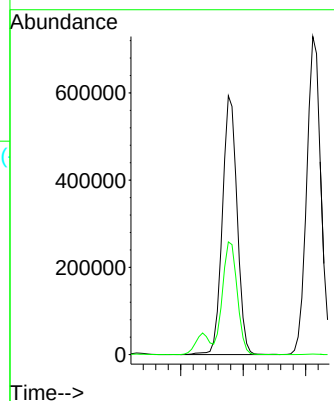
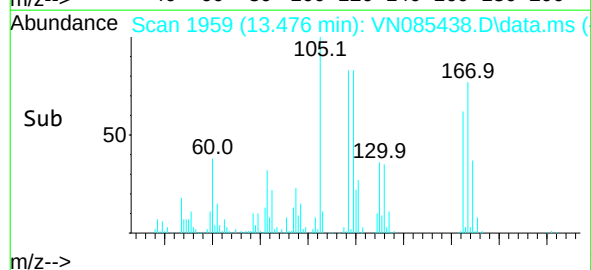
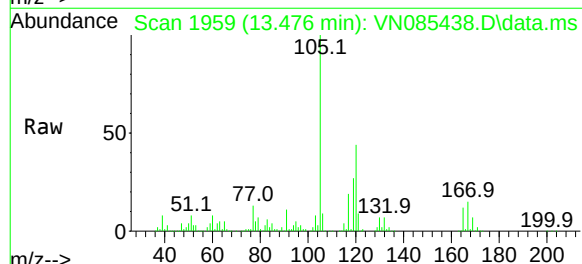
Acq: 14 Jan 2025 14:56

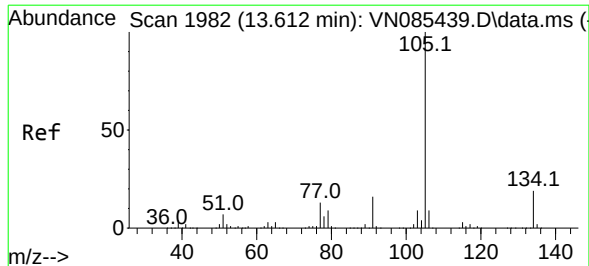
Tgt Ion:105 Resp: 971729

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0





#85

sec-Butylbenzene

Concen: 120.587 ug/l

RT: 13.611 min Scan# 19

Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:105 Resp: 1143885

Ion Ratio Lower Upper

105 100

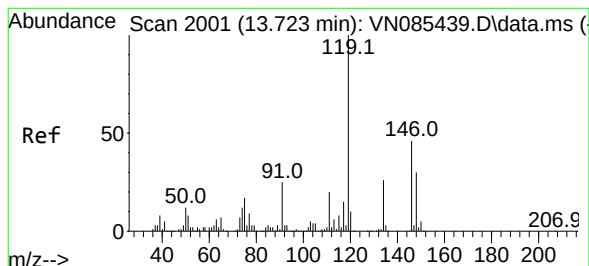
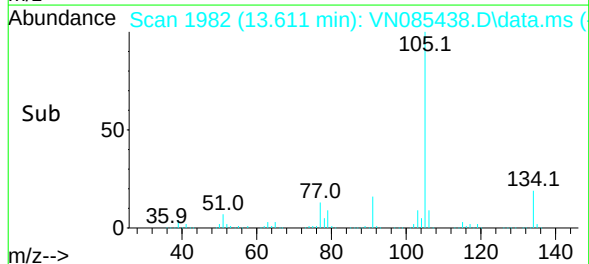
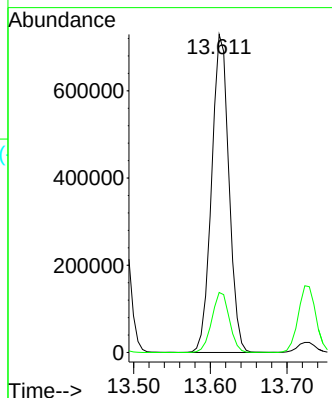
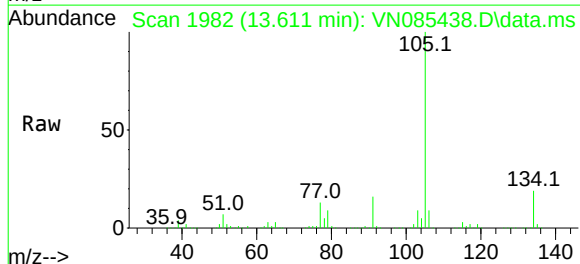
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 100.111 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

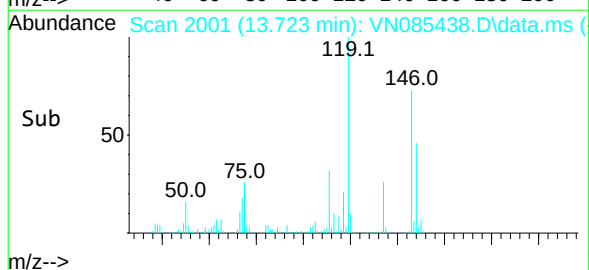
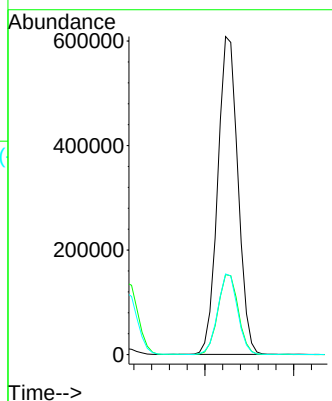
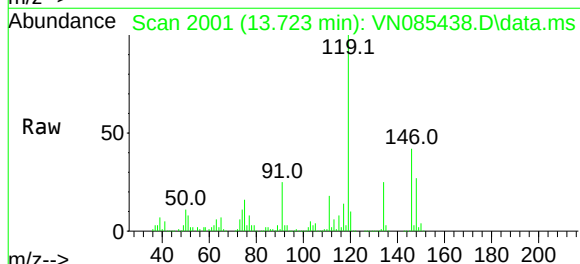
Tgt Ion:119 Resp: 960747

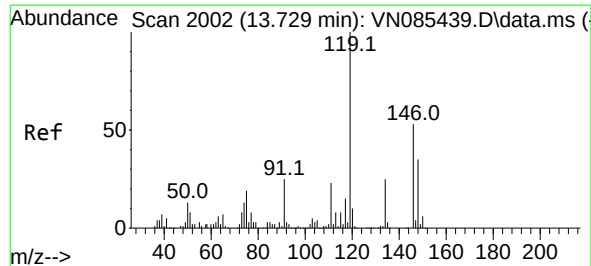
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 25.0 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 105.943 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:146 Resp: 502960

Ion Ratio Lower Upper

146 100

111 42.8 21.4 64.3

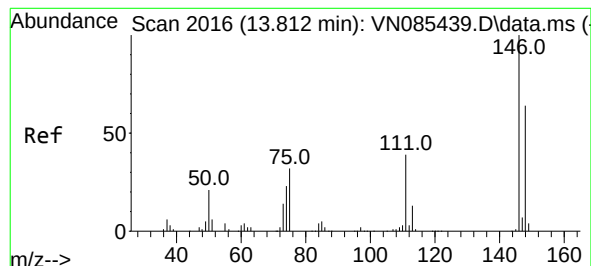
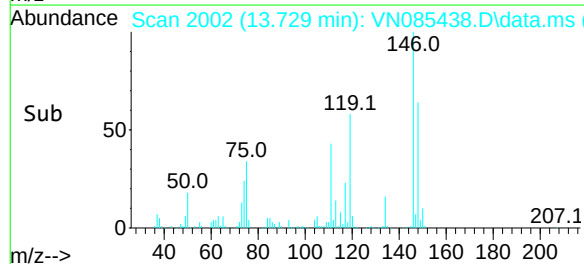
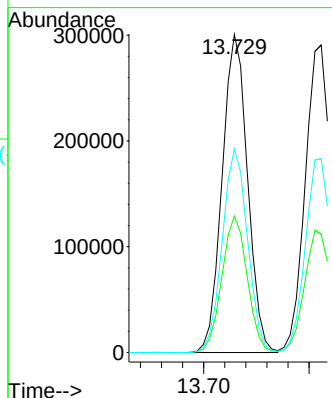
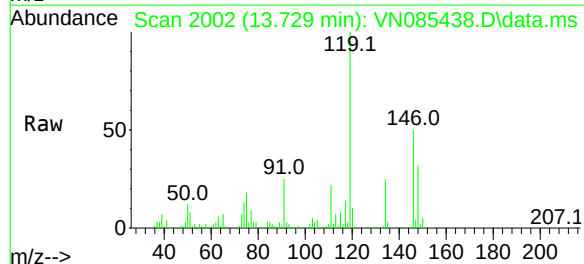
148 63.6 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 101.341 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

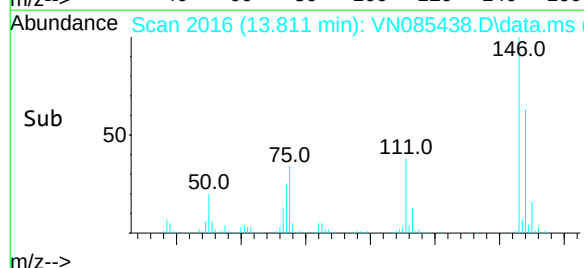
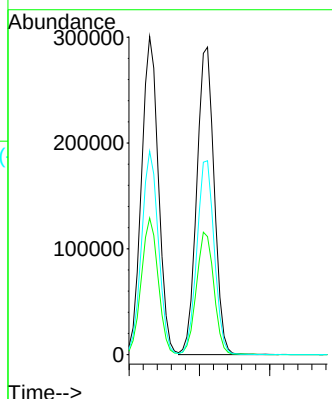
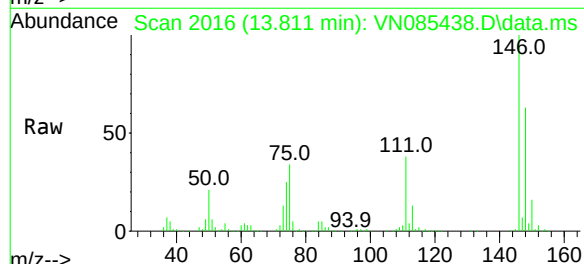
Tgt Ion:146 Resp: 498709

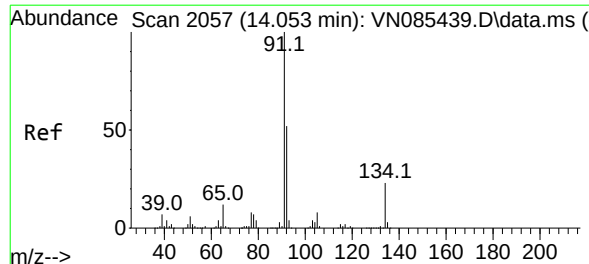
Ion Ratio Lower Upper

146 100

111 40.1 21.3 63.7

148 63.1 32.4 97.0





#89

n-Butylbenzene

Concen: 123.781 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

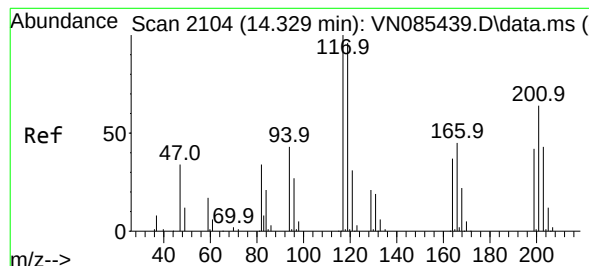
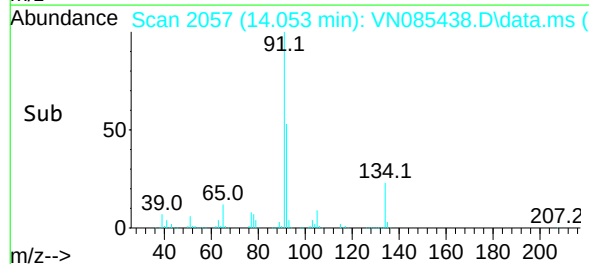
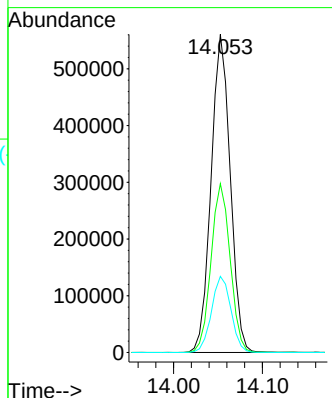
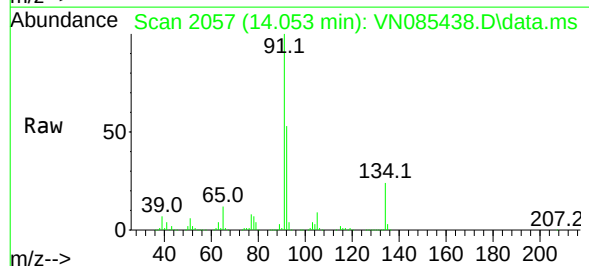
ClientSampleId :

VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 842368 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 52.8  | 25.8  | 77.3   |
| 134      | 24.3  | 11.7  | 35.1   |

Manual Integrations  
APPROVED

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



#90

Hexachloroethane

Concen: 104.405 ug/l

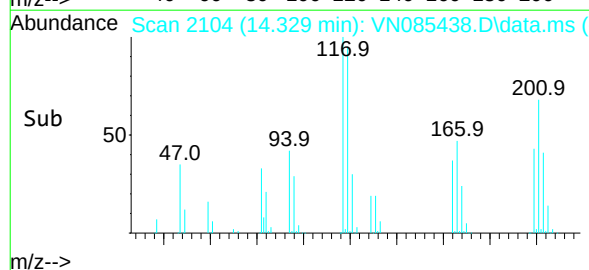
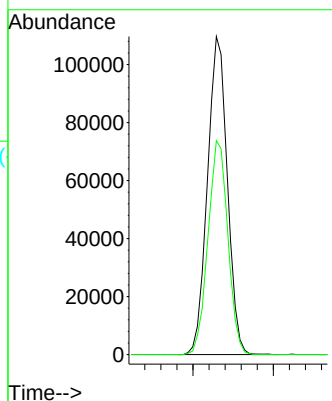
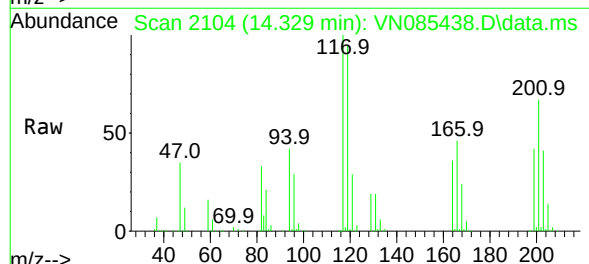
RT: 14.329 min Scan# 2104

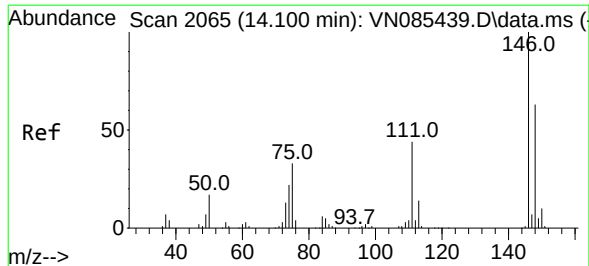
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

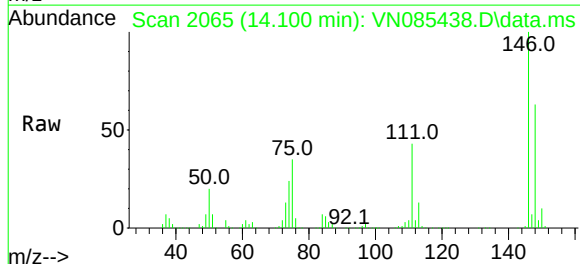
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 188541 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 201      | 67.2  | 33.7  | 101.0  |





#91  
1,2-Dichlorobenzene  
Concen: 99.445 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

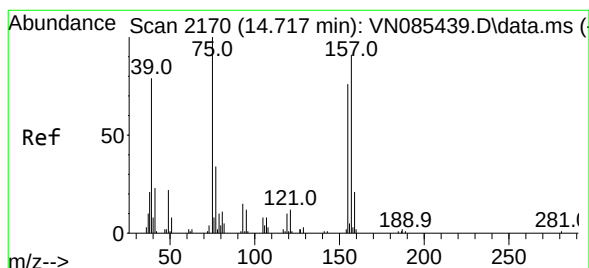
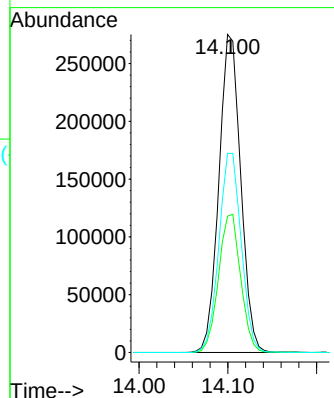
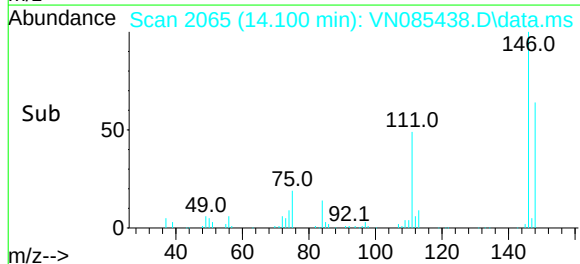
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100



Tgt Ion: 146 Resp: 470919  
Ion Ratio Lower Upper  
146 100  
111 43.9 21.7 65.1  
148 64.0 31.4 94.2

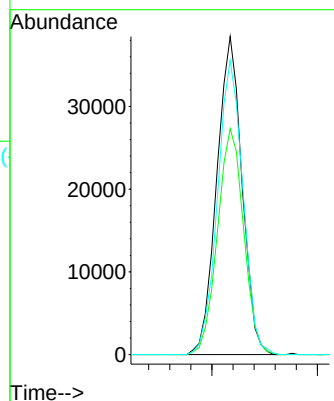
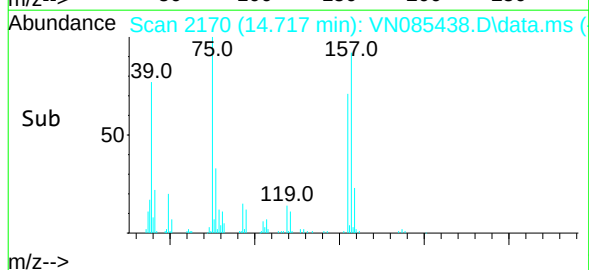
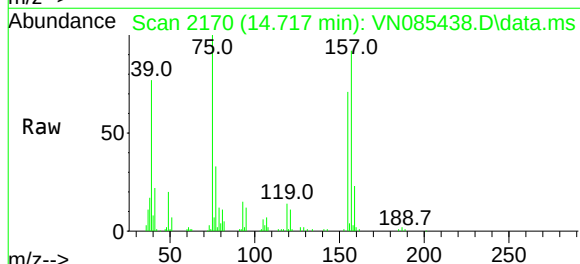
Manual Integrations  
APPROVED

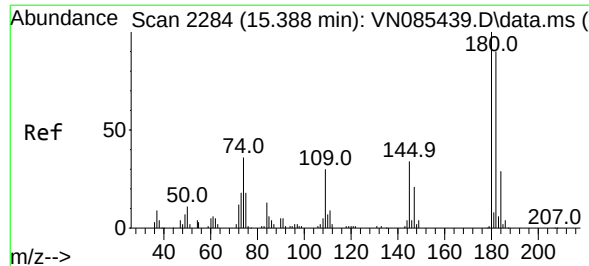
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



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

Tgt Ion: 75 Resp: 63846  
Ion Ratio Lower Upper  
75 100  
155 73.5 36.4 109.2  
157 93.0 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 113.946 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:180 Resp: 250787

Ion Ratio Lower Upper

180 100

182 94.9 46.8 140.3

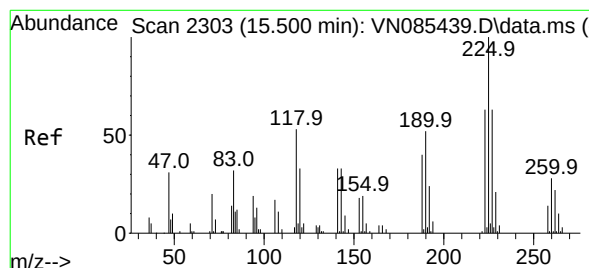
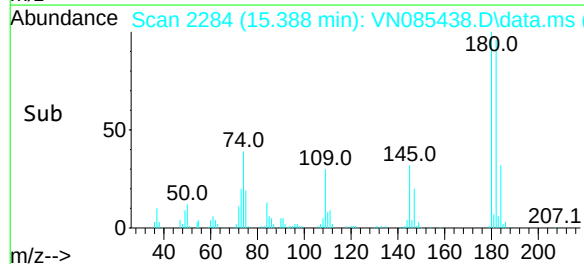
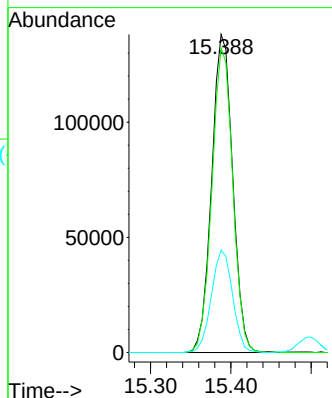
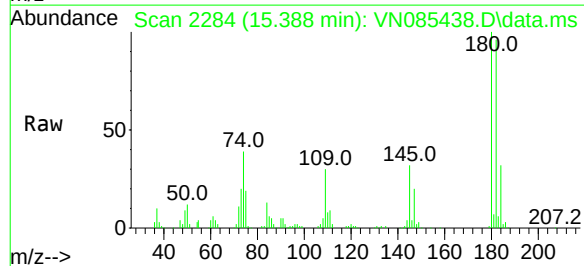
145 32.6 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 96.619 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

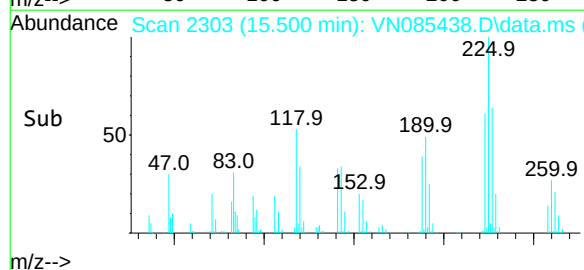
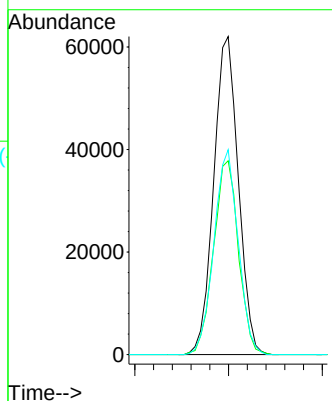
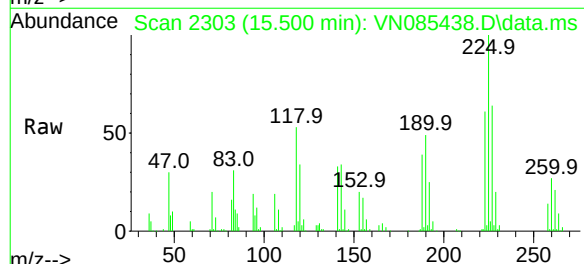
Tgt Ion:225 Resp: 112899

Ion Ratio Lower Upper

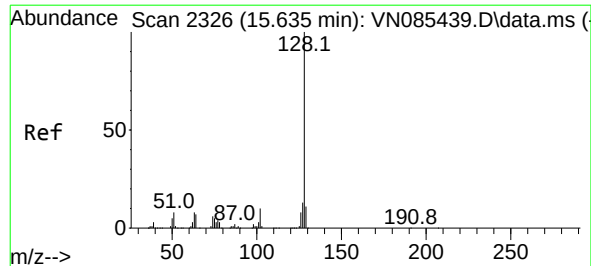
225 100

223 61.8 30.7 92.1

227 63.6 30.9 92.5







#95

Naphthalene

Concen: 115.234 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

Tgt Ion:128 Resp: 756816

Ion Ratio Lower Upper

128 100

127 13.1 10.6 16.0

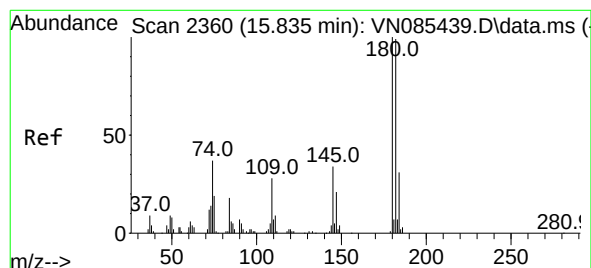
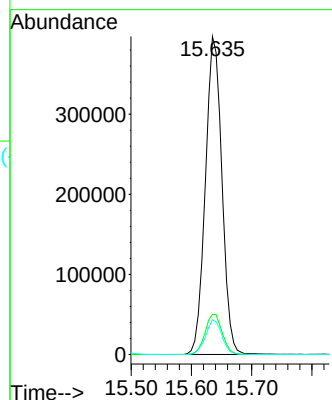
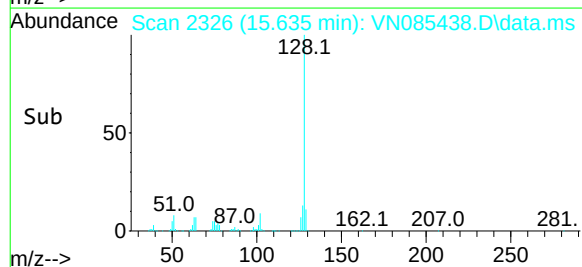
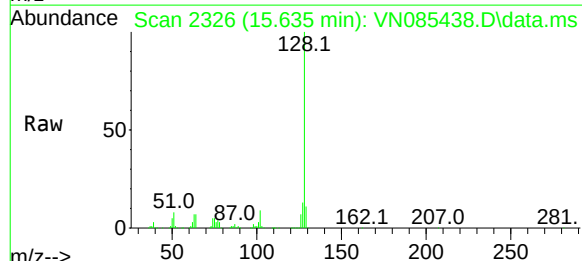
129 10.8 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 107.256 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

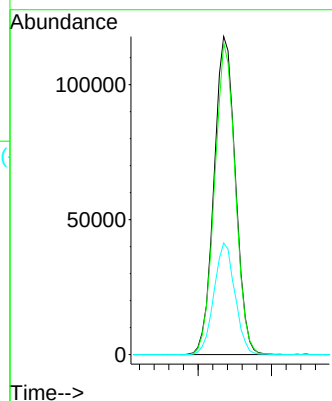
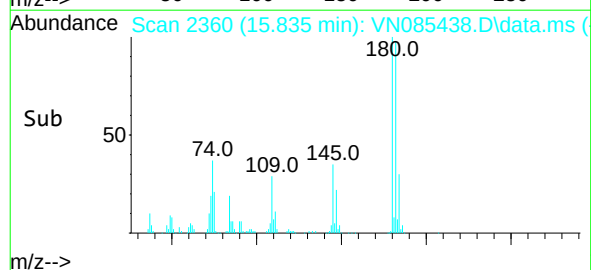
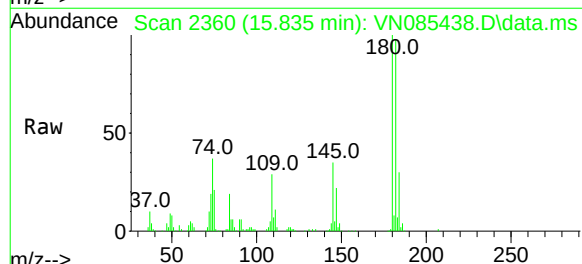
Tgt Ion:180 Resp: 238860

Ion Ratio Lower Upper

180 100

182 95.0 47.4 142.2

145 34.3 16.9 50.7



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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

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

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

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 199403   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 339872   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 297366   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 146624   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 165768   | 51.500   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 103.000% |
| 35) Dibromofluoromethane    | 8.159  | 113   | 121554   | 51.552   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 103.100% |
| 50) Toluene-d8              | 10.565 | 98    | 430698   | 51.411   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 102.820% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 152568   | 53.239   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 106.480% |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 125504  | 46.486  | ug/l   | 100 |
| 3) Chloromethane             | 2.359 | 50  | 135631  | 46.398  | ug/l   | 100 |
| 4) Vinyl Chloride            | 2.512 | 62  | 136831  | 46.569  | ug/l   | 100 |
| 5) Bromomethane              | 2.953 | 94  | 83199   | 46.877  | ug/l   | 100 |
| 6) Chloroethane              | 3.118 | 64  | 84517   | 45.371  | ug/l   | 100 |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 198726  | 46.613  | ug/l   | 100 |
| 8) Diethyl Ether             | 3.953 | 74  | 71764   | 48.726  | ug/l   | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 108081  | 45.010  | ug/l   | 100 |
| 10) Methyl Iodide            | 4.589 | 142 | 143383  | 52.142  | ug/l   | 100 |
| 11) Tert butyl alcohol       | 5.512 | 59  | 92841   | 251.894 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 106247  | 49.647  | ug/l   | 100 |
| 13) Acrolein                 | 4.171 | 56  | 139234  | 276.734 | ug/l   | 100 |
| 14) Allyl chloride           | 5.018 | 41  | 168654  | 48.567  | ug/l   | 100 |
| 15) Acrylonitrile            | 5.712 | 53  | 296781  | 253.507 | ug/l   | 100 |
| 16) Acetone                  | 4.418 | 43  | 251271  | 241.603 | ug/l   | 100 |
| 17) Carbon Disulfide         | 4.706 | 76  | 294604  | 44.710  | ug/l   | 100 |
| 18) Methyl Acetate           | 5.018 | 43  | 157485  | 49.798  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 373561  | 53.758  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.271 | 84  | 125508  | 48.748  | ug/l   | 100 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 110684  | 48.395  | ug/l   | 100 |
| 22) Diisopropyl ether        | 6.665 | 45  | 406253  | 52.707  | ug/l   | 100 |
| 23) Vinyl Acetate            | 6.594 | 43  | 1491031 | 275.471 | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 233336  | 49.648  | ug/l   | 100 |
| 25) 2-Butanone               | 7.477 | 43  | 388457  | 253.815 | ug/l   | 100 |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 186591  | 49.106  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 136229  | 50.571  | ug/l   | 100 |
| 28) Bromochloromethane       | 7.806 | 49  | 108148  | 49.461  | ug/l   | 100 |
| 29) Tetrahydrofuran          | 7.830 | 42  | 259683  | 267.624 | ug/l   | 100 |
| 30) Chloroform               | 7.959 | 83  | 234271  | 48.229  | ug/l   | 100 |
| 31) Cyclohexane              | 8.253 | 56  | 175588  | 42.984  | ug/l   | 100 |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 202590  | 47.547  | ug/l   | 100 |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 157031  | 47.453  | ug/l   | 100 |
| 37) Ethyl Acetate            | 7.553 | 43  | 165866  | 49.658  | ug/l   | 100 |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 180199  | 47.564  | ug/l   | 100 |
| 39) Methylcyclohexane        | 9.600 | 83  | 157234  | 50.562  | ug/l   | 100 |
| 40) Benzene                  | 8.600 | 78  | 492606  | 49.542  | ug/l   | 100 |

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

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

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

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

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

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Manual Integrations  
APPROVED

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

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

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

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

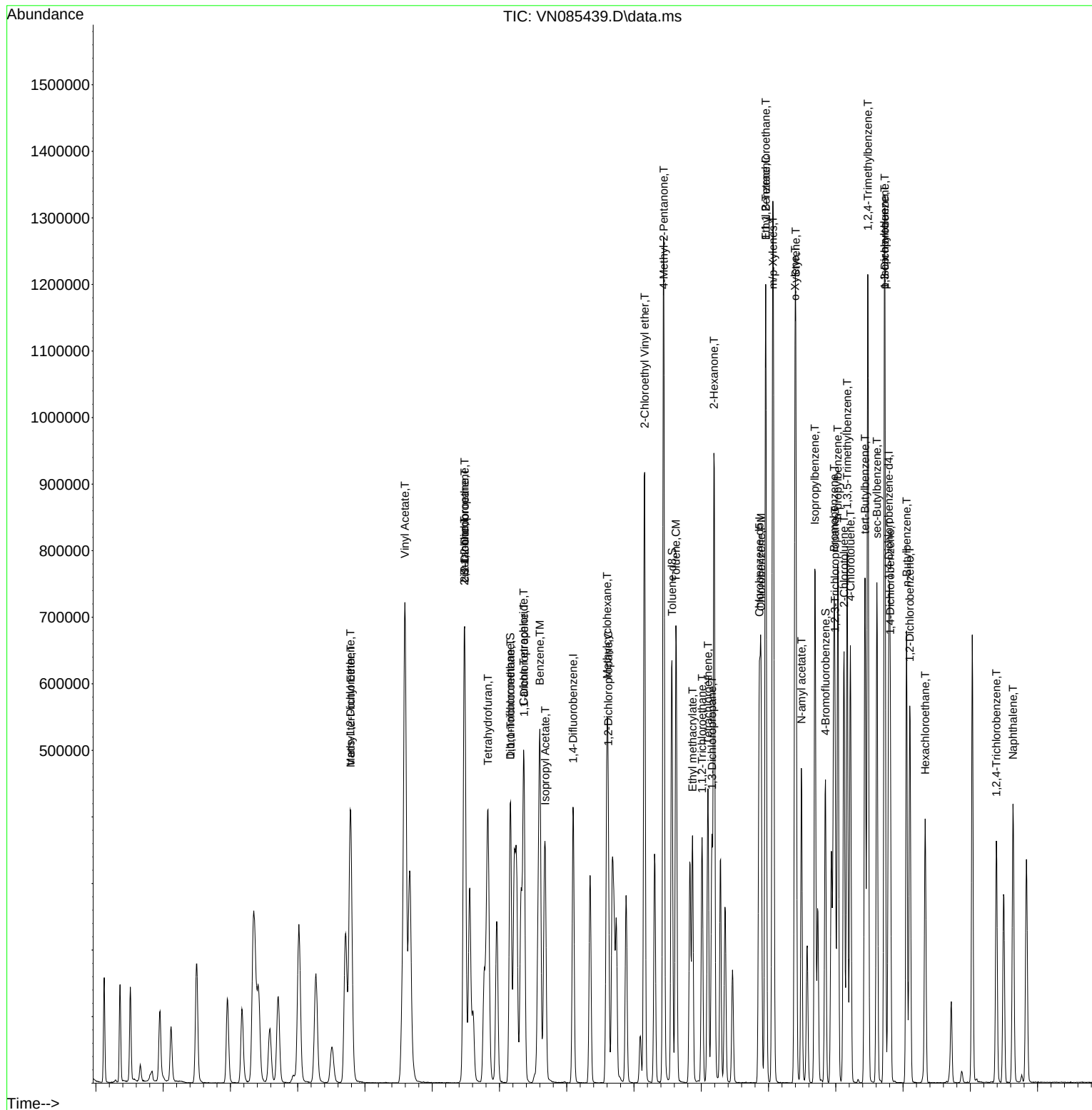
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085439.D  
Acq On : 14 Jan 2025 15:19  
Operator : JC\MD  
Sample : VSTDICCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

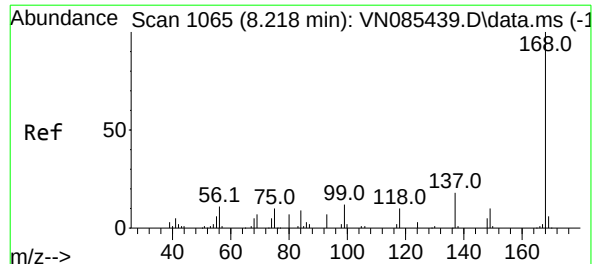
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

Manual Integrations  
APPROVED

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





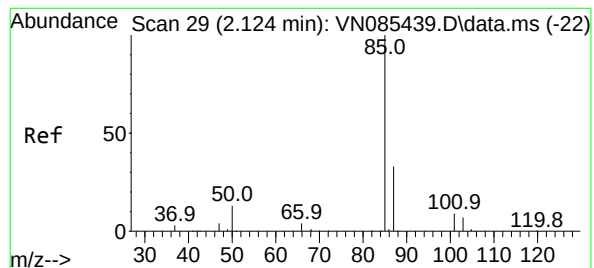
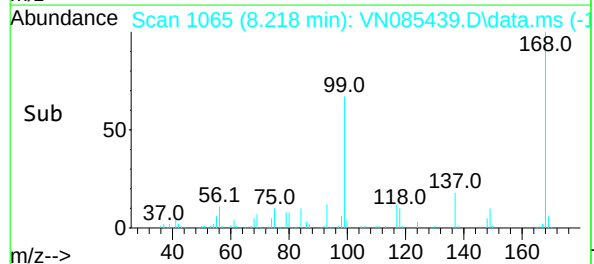
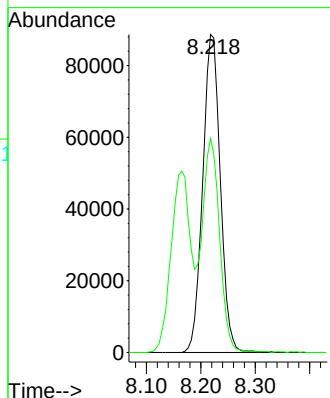
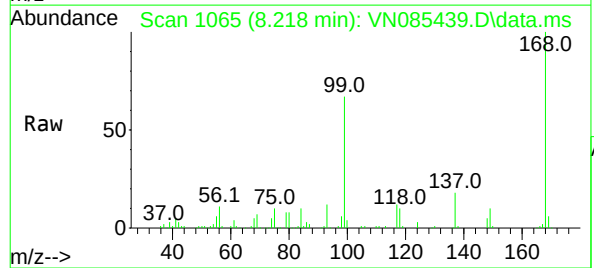
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion:168 Resp: 199403  
Ion Ratio Lower Upper  
168 100  
99 67.0 53.6 80.4

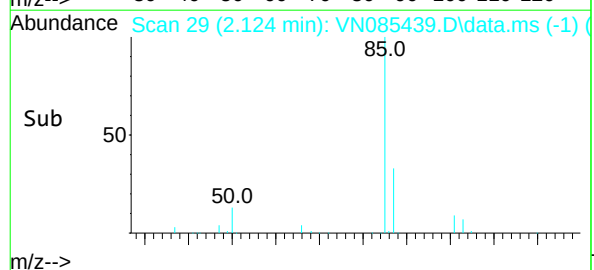
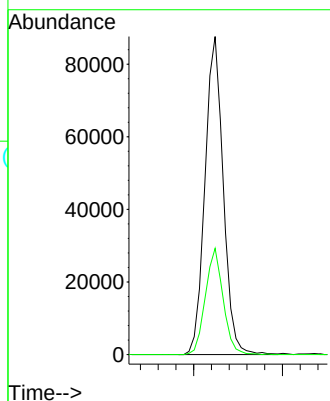
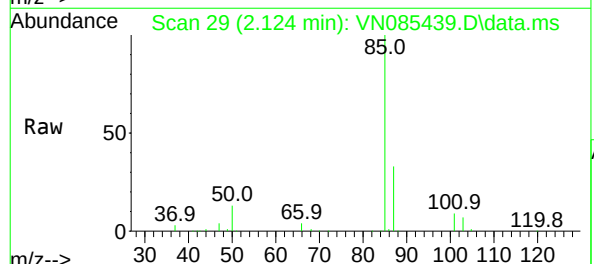
Manual Integrations  
APPROVED

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

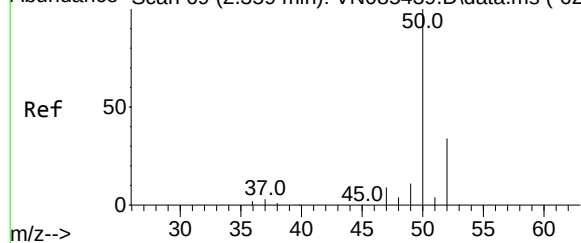


#2  
Dichlorodifluoromethane  
Concen: 46.486 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 85 Resp: 125504  
Ion Ratio Lower Upper  
85 100  
87 33.4 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 46.398 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 50 Resp: 135631

Ion Ratio Lower Upper

50 100

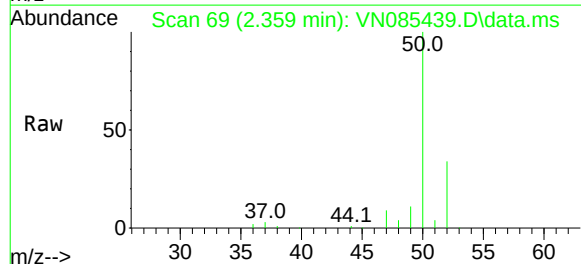
52 33.8 27.0 40.6

Manual Integrations

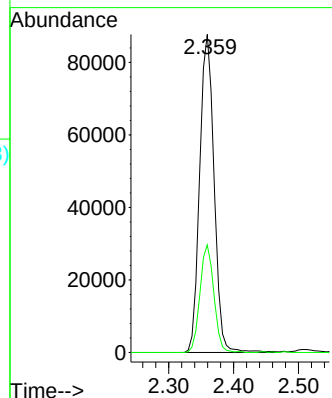
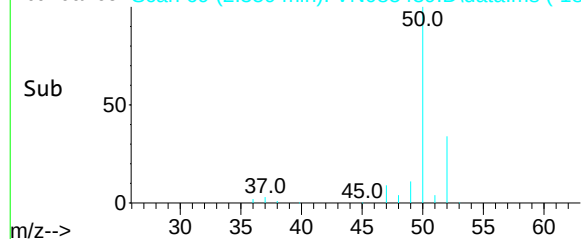
APPROVED

Reviewed By :John Carlone 01/15/2025

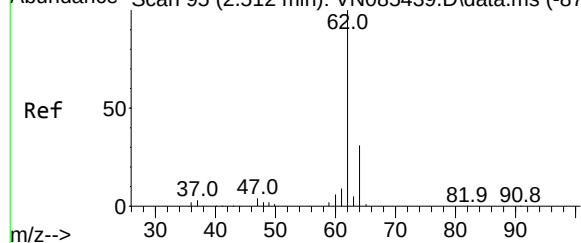
Supervised By :Mahesh Dadoda 01/15/2025



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-18)



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 46.569 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085439.D

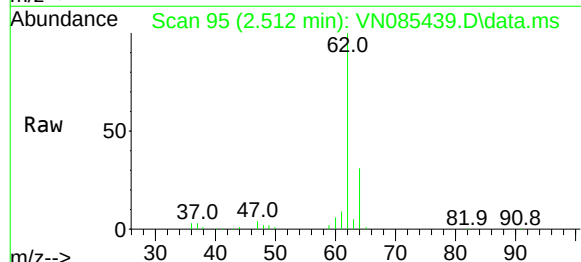
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 136831

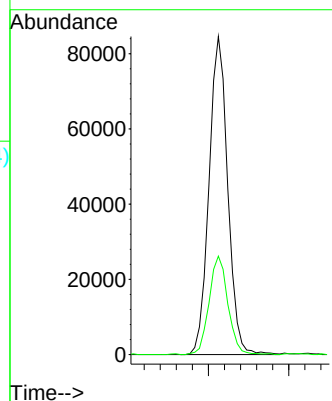
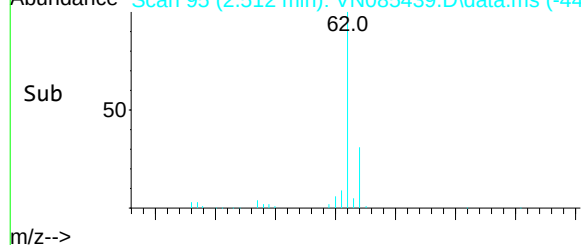
Ion Ratio Lower Upper

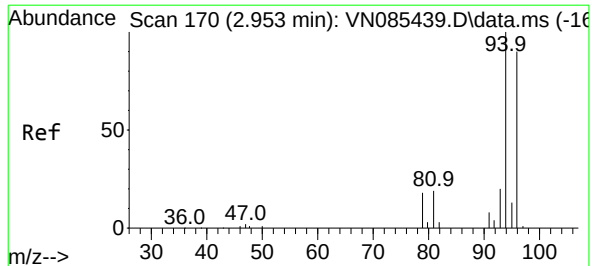
62 100

64 31.0 24.8 37.2



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-44)





#5

Bromomethane

Concen: 46.877 ug/l

RT: 2.953 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 94 Resp: 83199

Ion Ratio Lower Upper

94 100

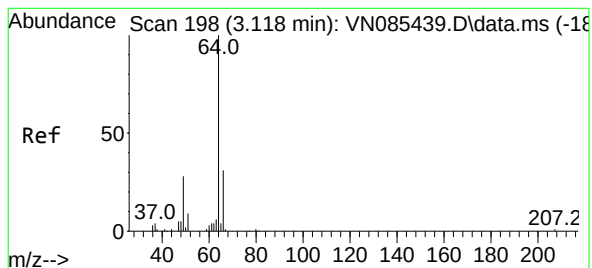
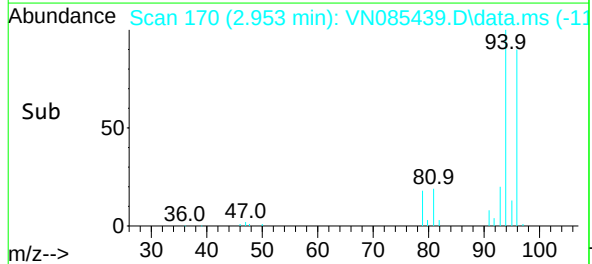
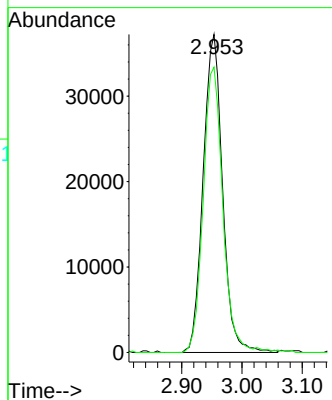
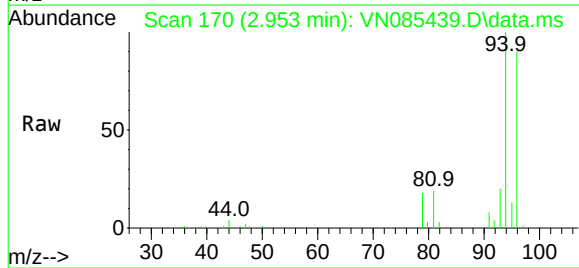
96 89.7 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 45.371 ug/l

RT: 3.118 min Scan# 198

Delta R.T. 0.000 min

Lab File: VN085439.D

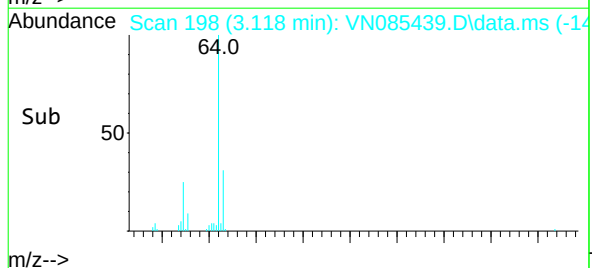
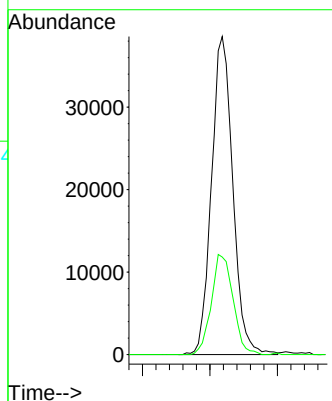
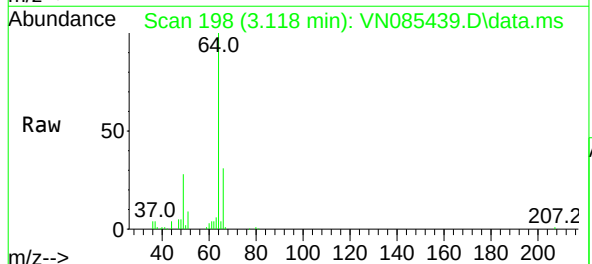
Acq: 14 Jan 2025 15:19

Tgt Ion: 64 Resp: 84517

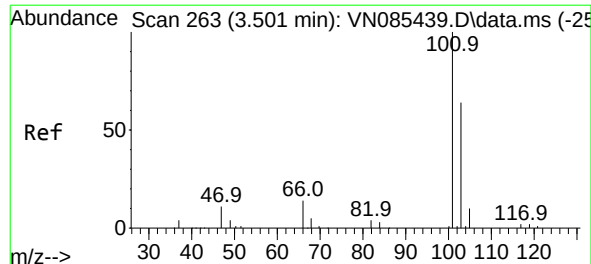
Ion Ratio Lower Upper

64 100

66 30.7 24.6 36.8







#7

Trichlorofluoromethane

Concen: 46.613 ug/l

RT: 3.501 min Scan# 263

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:101 Resp: 198726

Ion Ratio Lower Upper

101 100

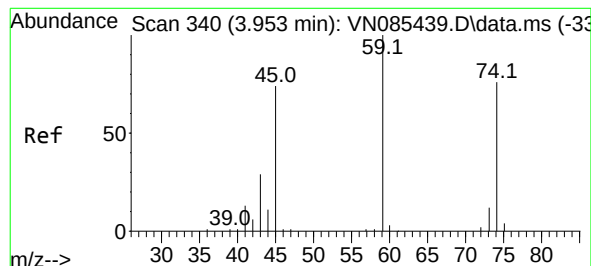
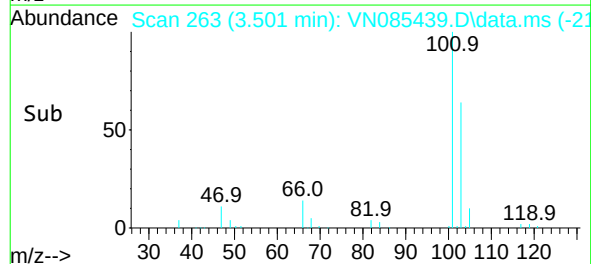
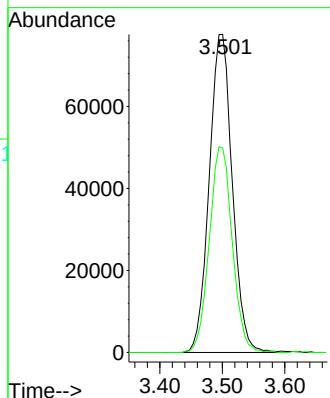
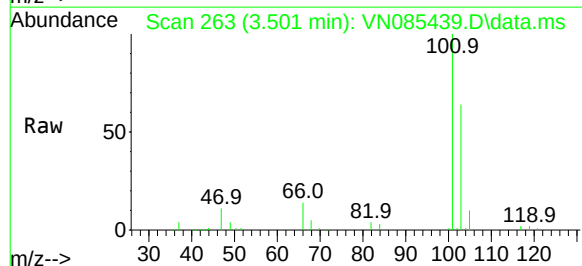
103 64.3 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 48.726 ug/l

RT: 3.953 min Scan# 340

Delta R.T. 0.000 min

Lab File: VN085439.D

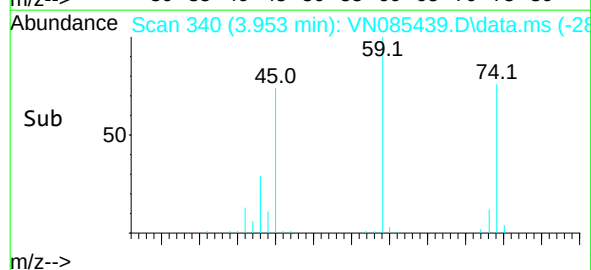
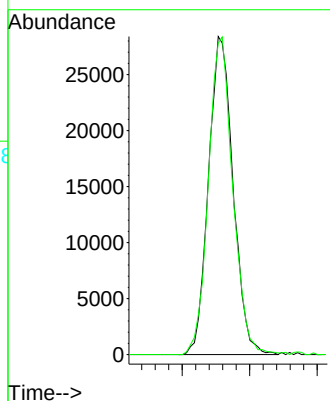
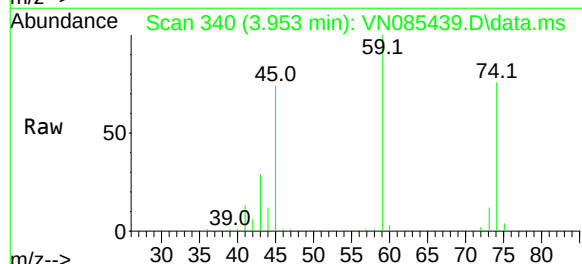
Acq: 14 Jan 2025 15:19

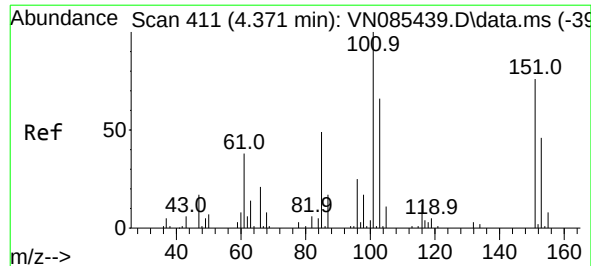
Tgt Ion: 74 Resp: 71764

Ion Ratio Lower Upper

74 100

45 99.4 49.7 149.1





#9

1,1,2-Trichlorotrifluoroethane

Concen: 45.010 ug/l

RT: 4.371 min Scan# 411

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:101 Resp: 108081

Ion Ratio Lower Upper

101 100

85 47.3 37.8 56.8

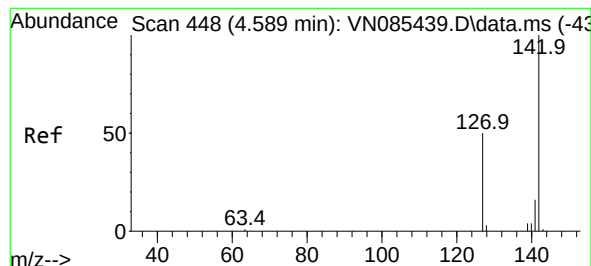
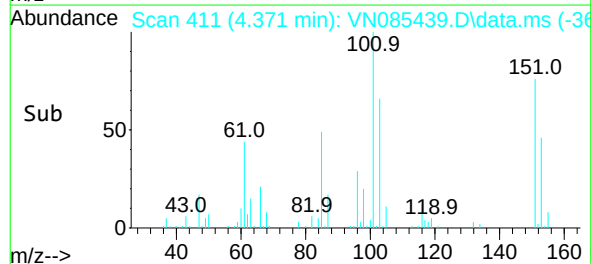
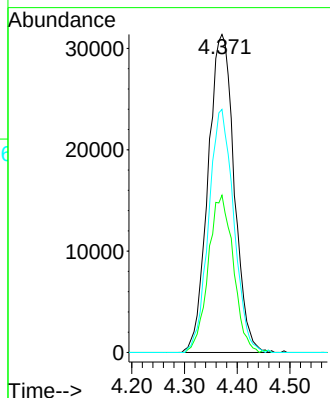
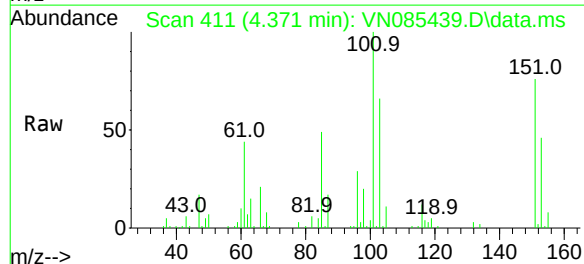
151 73.5 58.8 88.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#10

Methyl Iodide

Concen: 52.142 ug/l

RT: 4.589 min Scan# 448

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

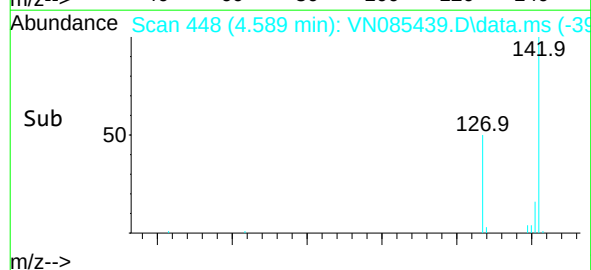
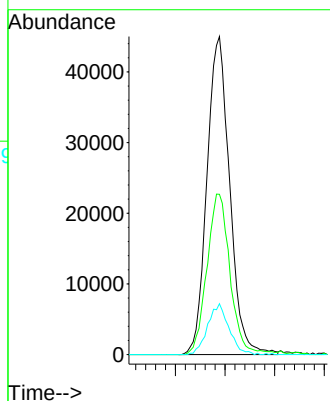
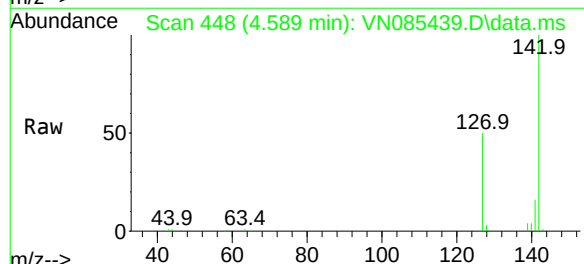
Tgt Ion:142 Resp: 143383

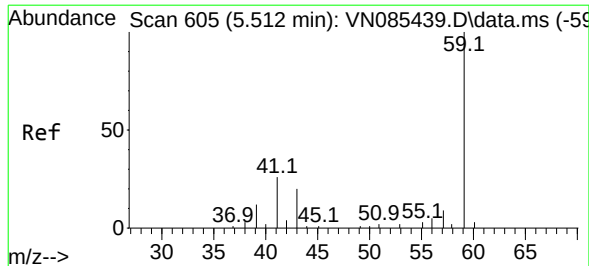
Ion Ratio Lower Upper

142 100

127 50.4 40.3 60.5

141 16.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 251.894 ug/l

RT: 5.512 min Scan# 605

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 59 Resp: 92841

Ion Ratio Lower Upper

59 100

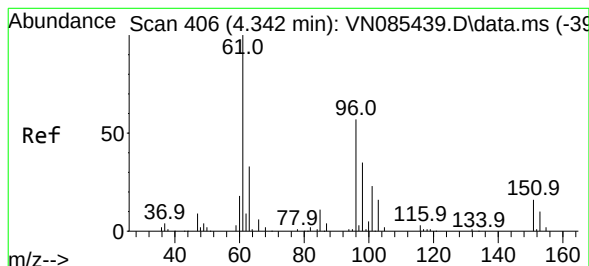
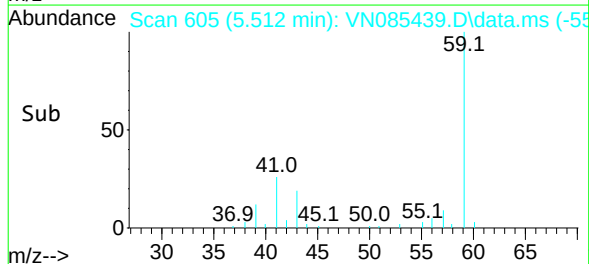
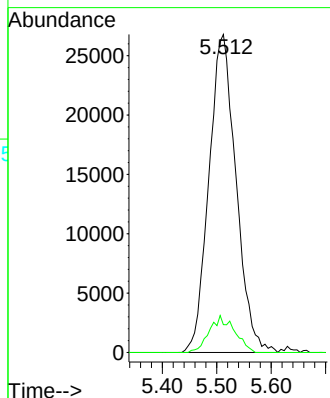
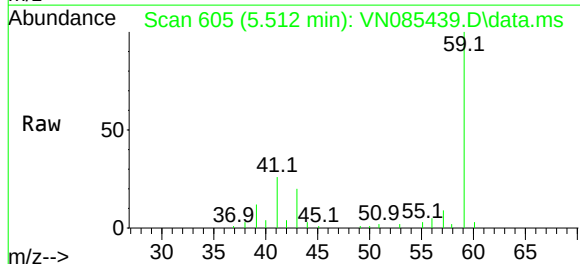
57 10.8 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 49.647 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

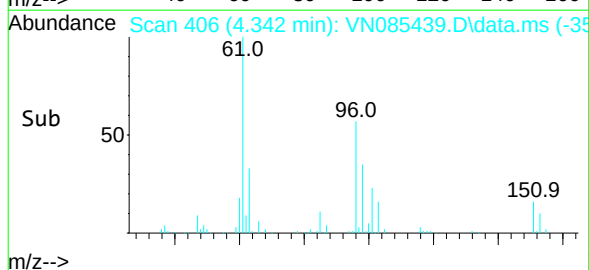
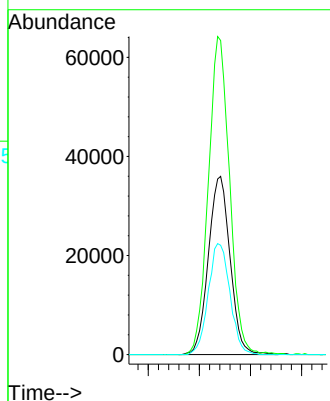
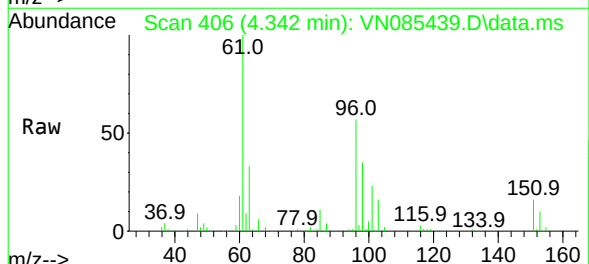
Tgt Ion: 96 Resp: 106247

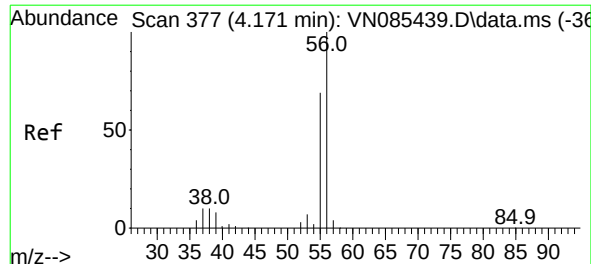
Ion Ratio Lower Upper

96 100

61 176.2 141.0 211.4

98 61.3 49.0 73.6





#13

Acrolein

Concen: 276.734 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 56 Resp: 139234

Ion Ratio Lower Upper

56 100

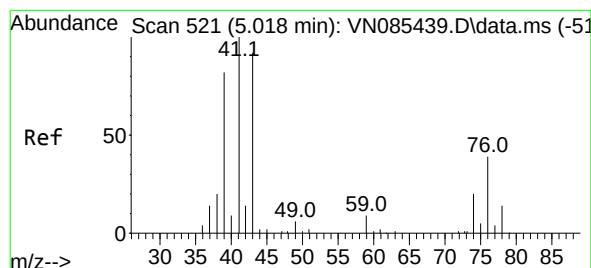
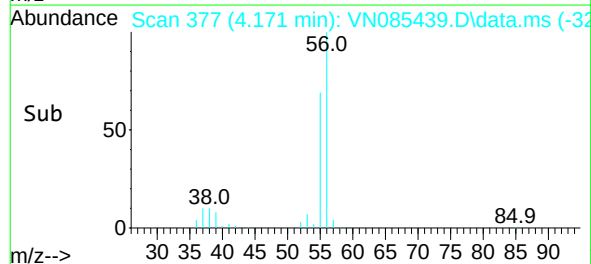
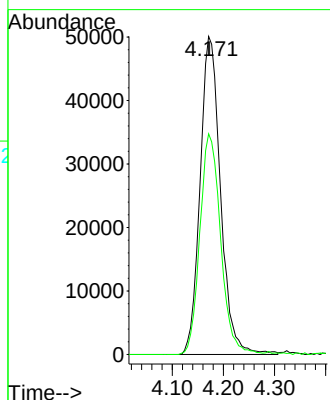
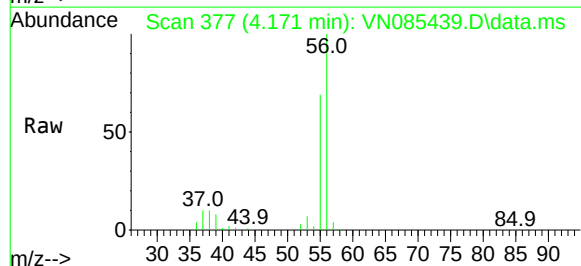
55 70.4 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 48.567 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

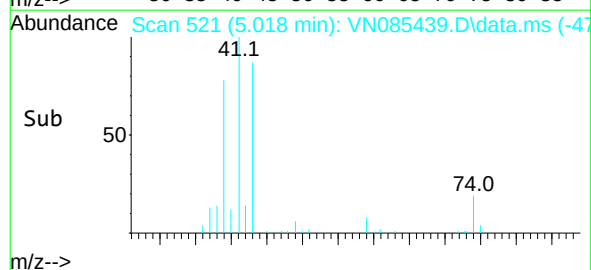
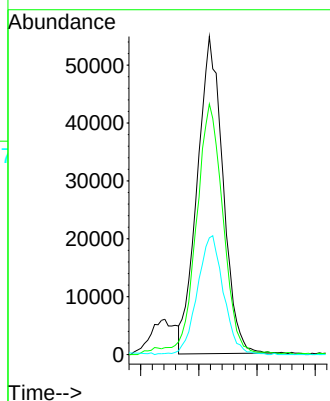
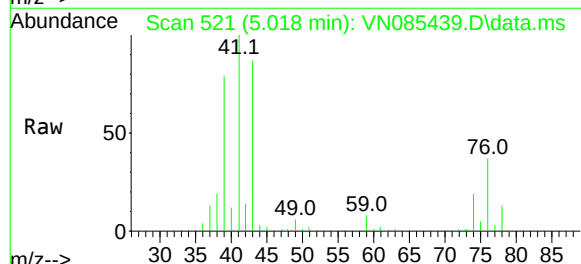
Tgt Ion: 41 Resp: 168654

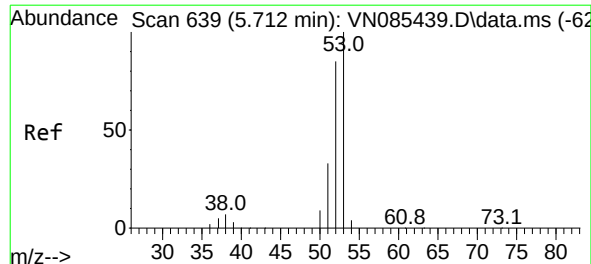
Ion Ratio Lower Upper

41 100

39 80.5 64.4 96.6

76 38.1 30.5 45.7





#15

Acrylonitrile

Concen: 253.507 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

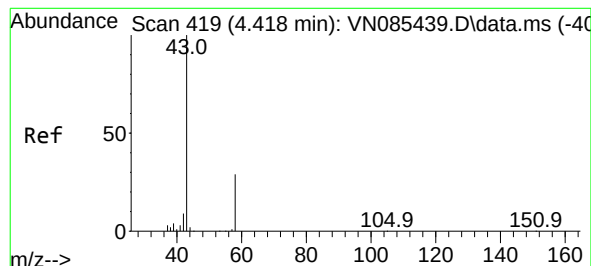
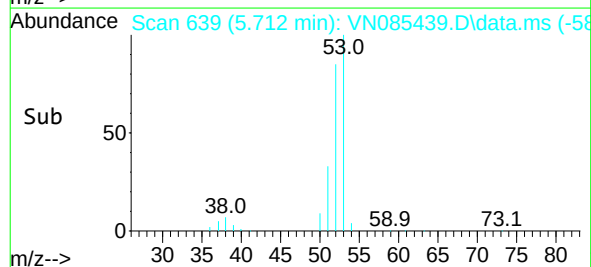
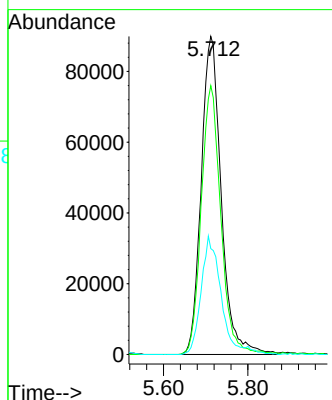
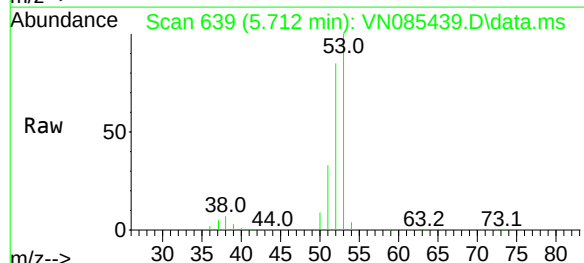
ClientSampleId :

VSTDICCC050

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 53    | Resp: | 296781 |
| Ion      | Ratio | Lower | Upper  |
| 53       | 100   |       |        |
| 52       | 81.9  | 65.5  | 98.3   |
| 51       | 37.3  | 29.8  | 44.8   |

Manual Integrations  
APPROVED

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



#16

Acetone

Concen: 241.603 ug/l

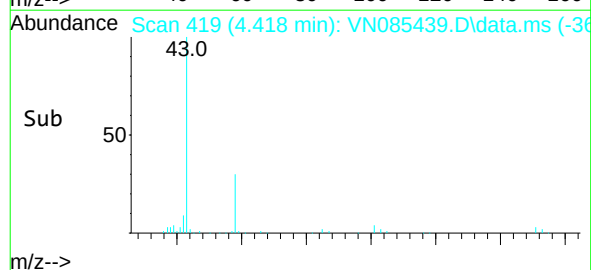
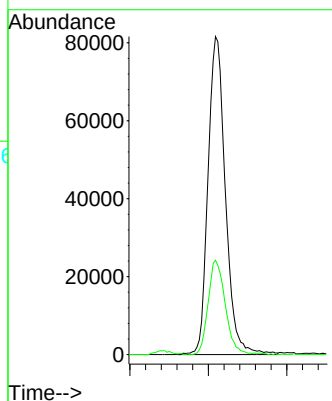
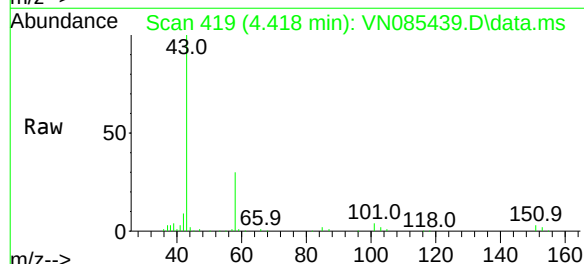
RT: 4.418 min Scan# 419

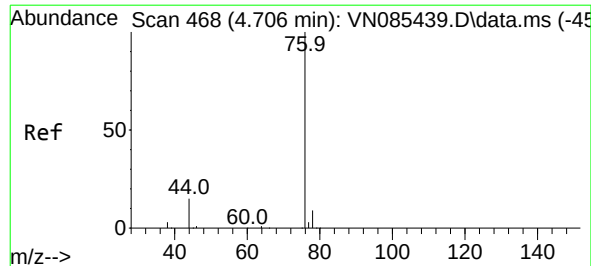
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 251271 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 29.7  | 23.8  | 35.6   |





#17

Carbon Disulfide

Concen: 44.710 ug/l

RT: 4.706 min Scan# 468

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 76 Resp: 294604

Ion Ratio Lower Upper

76 100

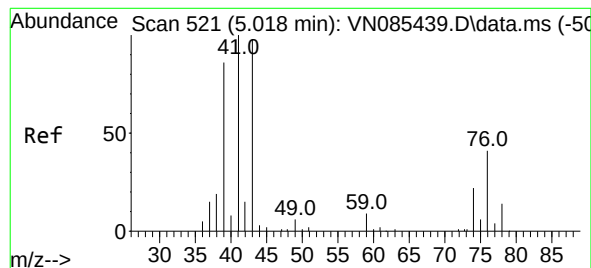
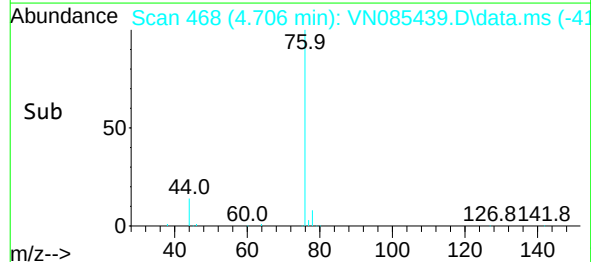
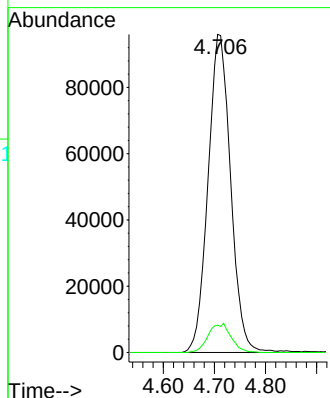
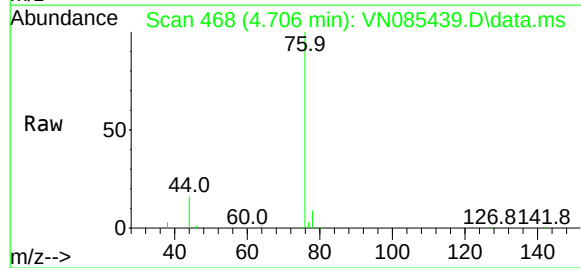
78 8.6 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 49.798 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085439.D

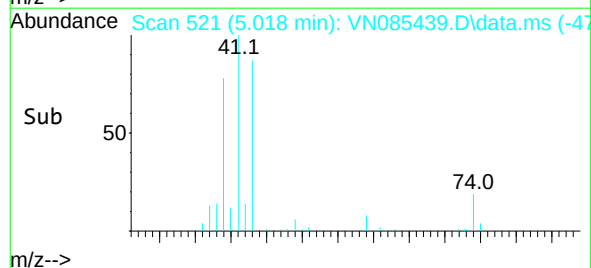
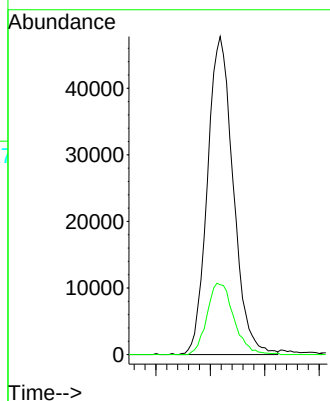
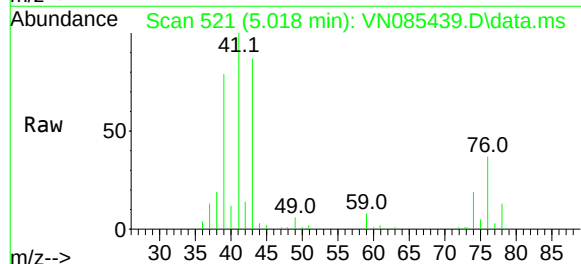
Acq: 14 Jan 2025 15:19

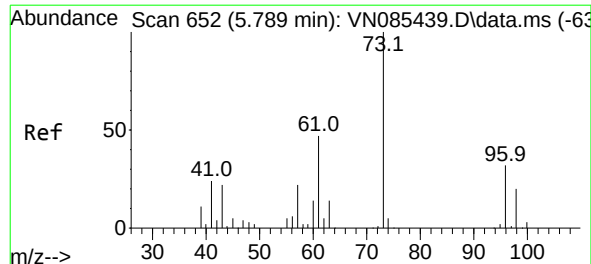
Tgt Ion: 43 Resp: 157485

Ion Ratio Lower Upper

43 100

74 23.3 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 53.758 ug/l

RT: 5.789 min Scan# 65

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 73 Resp: 373561

Ion Ratio Lower Upper

73 100

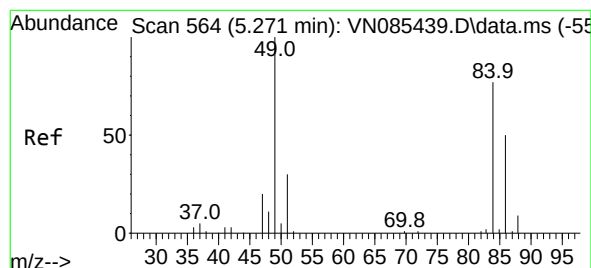
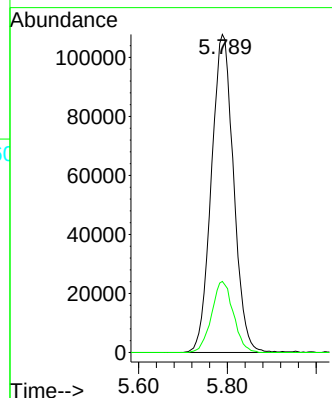
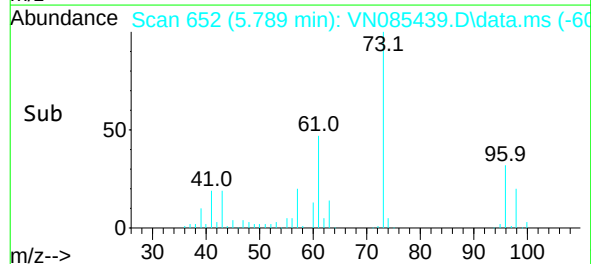
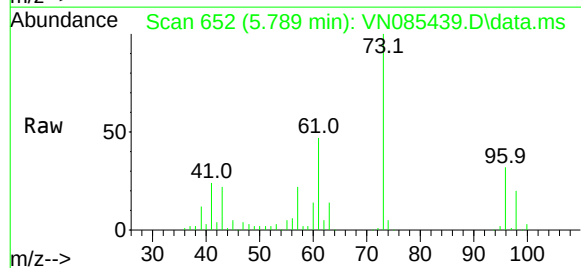
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 48.748 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 84 Resp: 125508

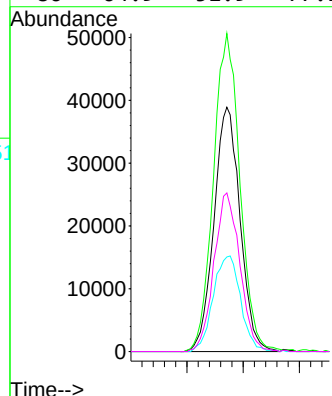
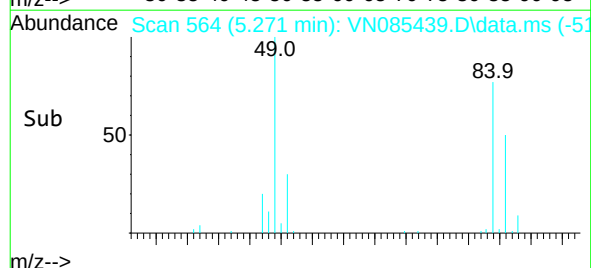
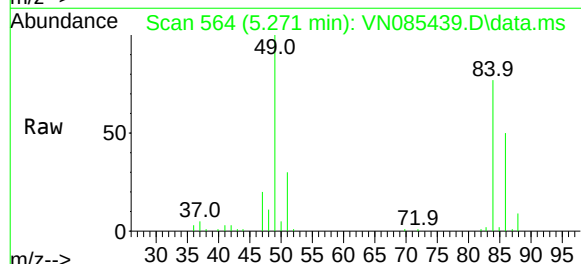
Ion Ratio Lower Upper

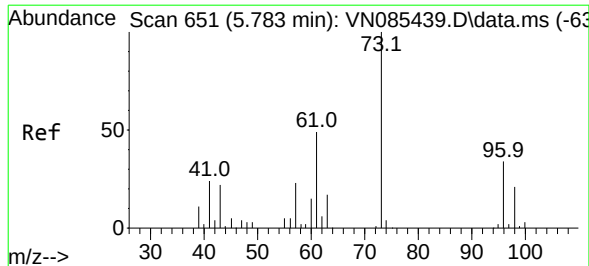
84 100

49 130.1 104.1 156.1

51 38.7 31.0 46.4

86 64.9 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 48.395 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085439.D

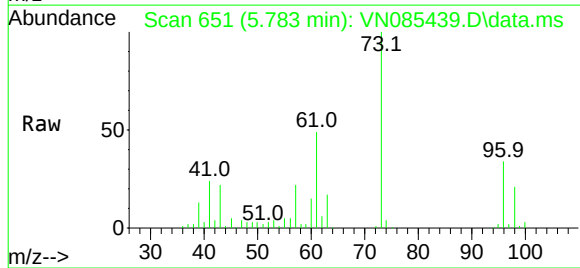
Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

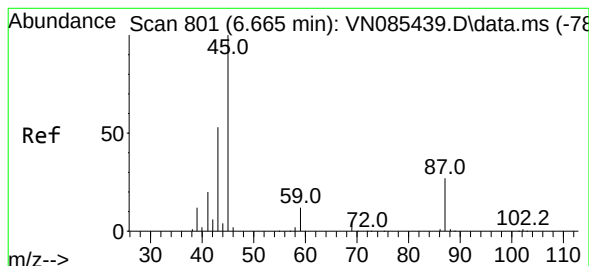
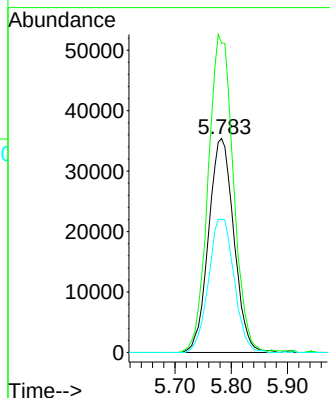
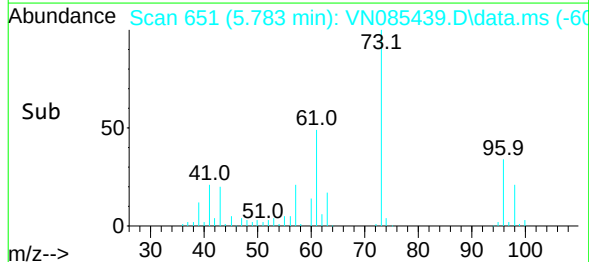
VSTDICCC050



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 110684 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 144.6 | 115.7 | 173.5  |
| 98       | 62.3  | 49.8  | 74.8   |

Manual Integrations  
APPROVED

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



#22

Diisopropyl ether

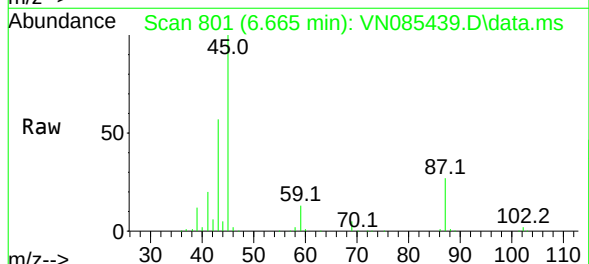
Concen: 52.707 ug/l

RT: 6.665 min Scan# 801

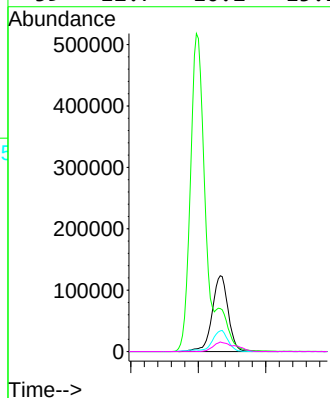
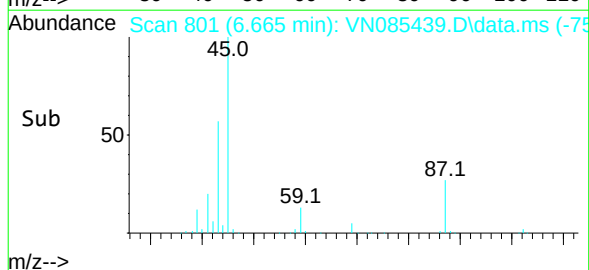
Delta R.T. 0.000 min

Lab File: VN085439.D

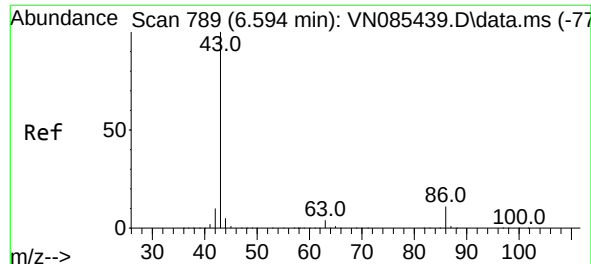
Acq: 14 Jan 2025 15:19



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 45    | Resp: | 406253 |
| Ion      | Ratio | Lower | Upper  |
| 45       | 100   |       |        |
| 43       | 56.3  | 45.0  | 67.6   |
| 87       | 27.3  | 21.8  | 32.8   |
| 59       | 12.7  | 10.2  | 15.2   |







#23

Vinyl Acetate

Concen: 275.471 ug/l

RT: 6.594 min Scan# 789

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 1491031

Ion Ratio Lower Upper

43 100

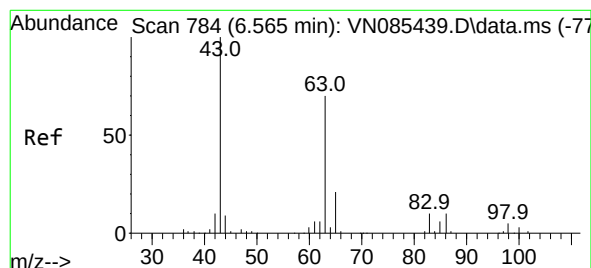
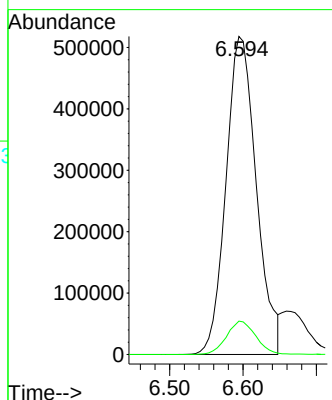
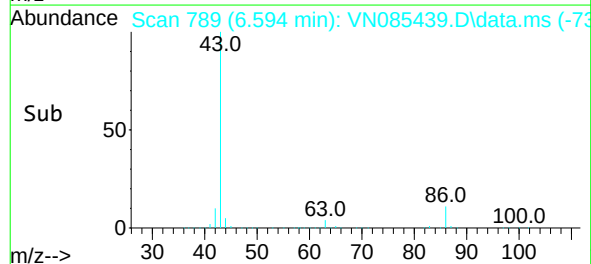
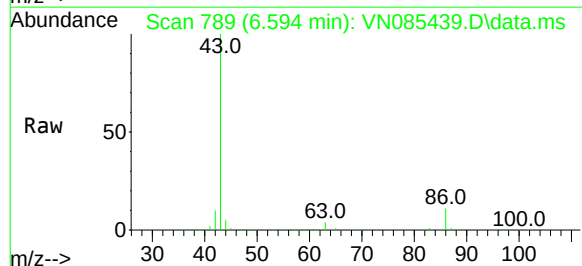
86 10.5 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 49.648 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

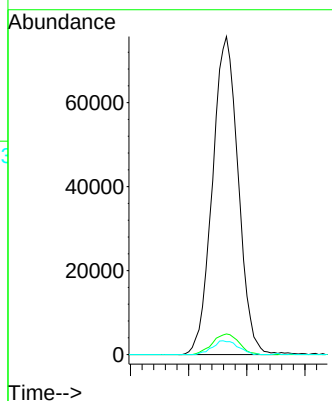
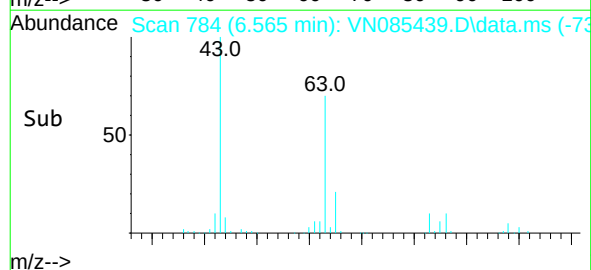
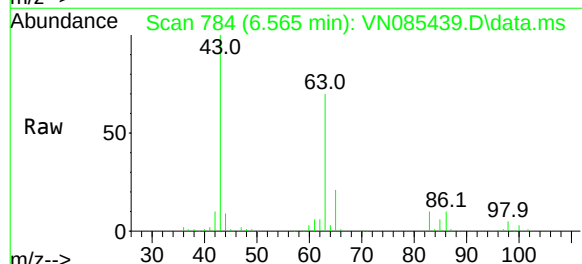
Tgt Ion: 63 Resp: 233336

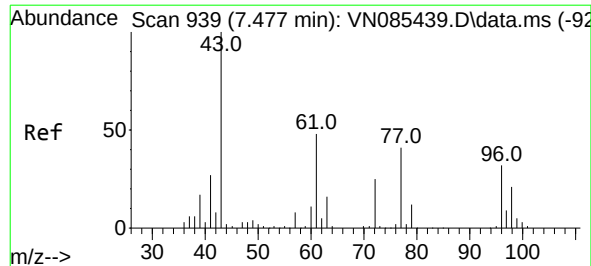
Ion Ratio Lower Upper

63 100

98 6.5 3.3 9.8

100 4.0 2.0 6.0





#25

2-Butanone

Concen: 253.815 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 388457

Ion Ratio Lower Upper

43 100

72 25.3 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

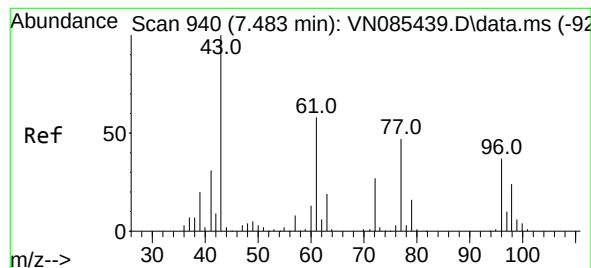
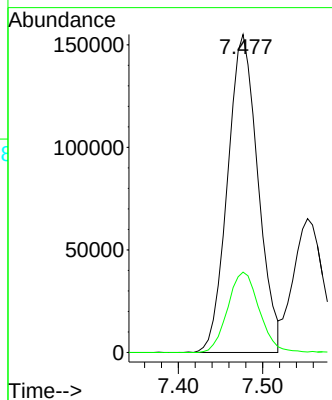
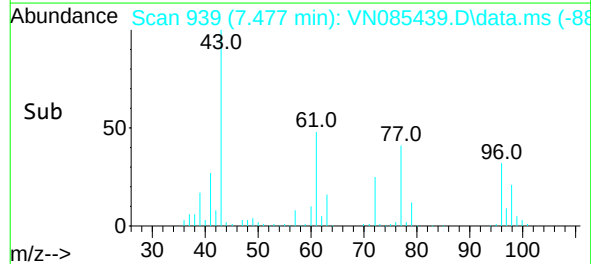
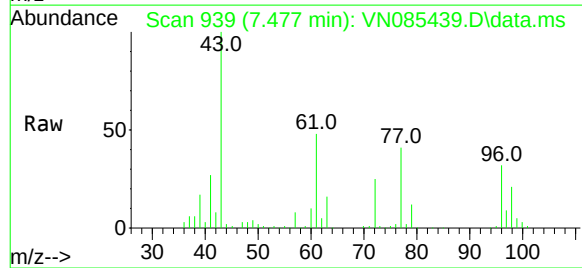
VSTDICCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 49.106 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085439.D

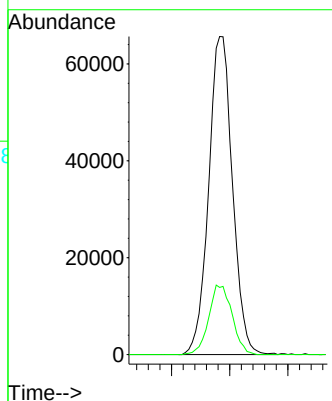
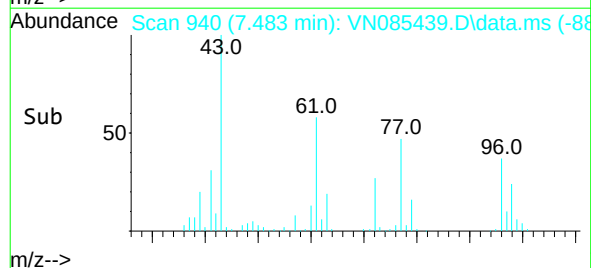
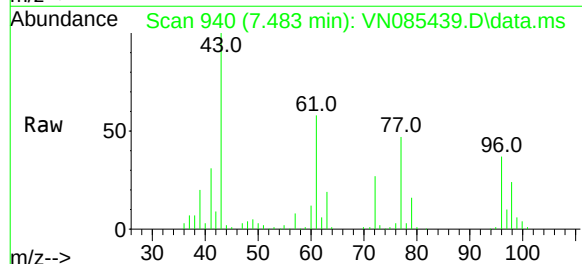
Acq: 14 Jan 2025 15:19

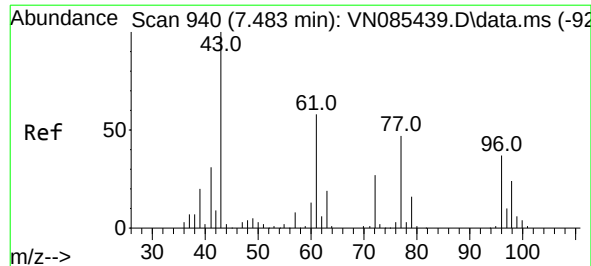
Tgt Ion: 77 Resp: 186591

Ion Ratio Lower Upper

77 100

97 21.4 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 50.571 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 96 Resp: 136229

Ion Ratio Lower Upper

96 100

61 155.9 0.0 311.8

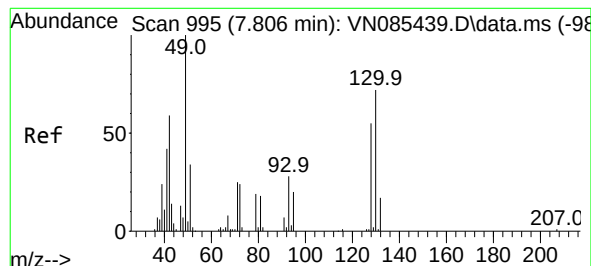
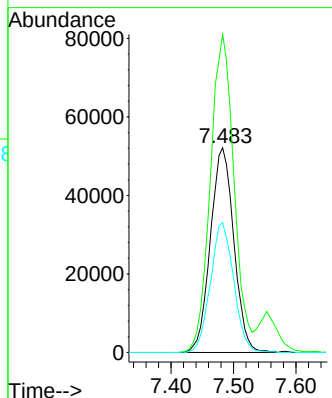
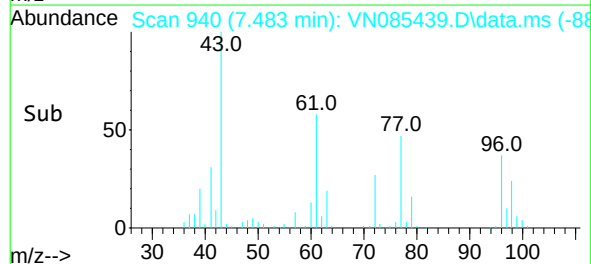
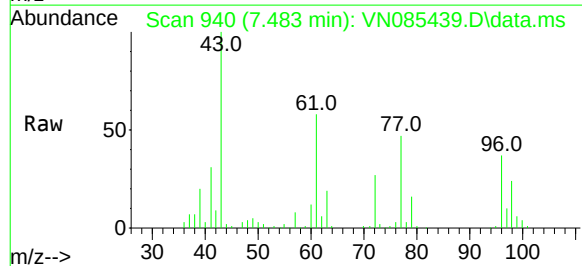
98 63.0 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#28

Bromochloromethane

Concen: 49.461 ug/l

RT: 7.806 min Scan# 995

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

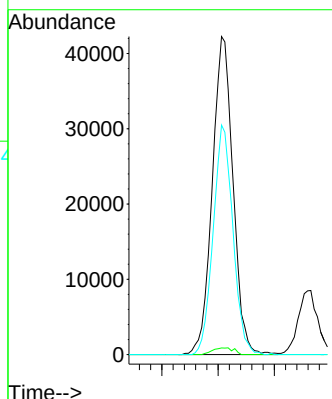
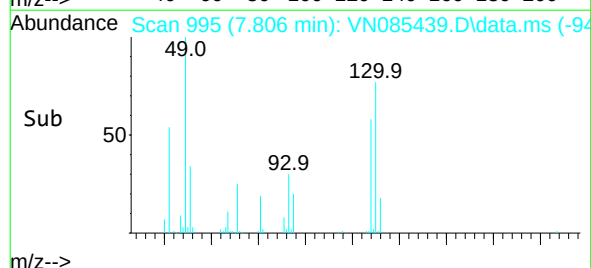
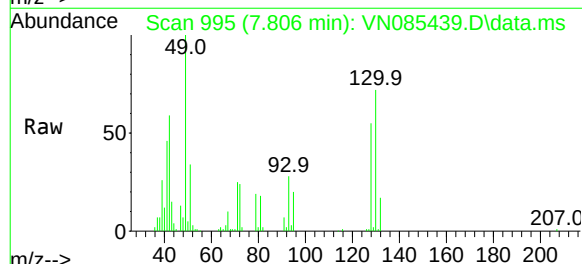
Tgt Ion: 49 Resp: 108148

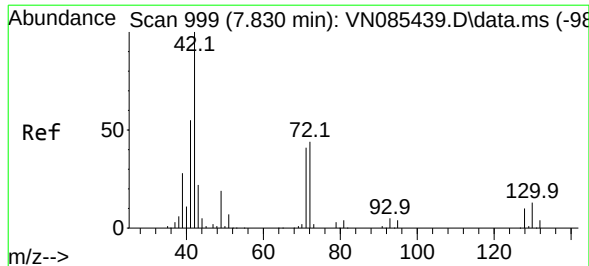
Ion Ratio Lower Upper

49 100

129 2.2 0.0 4.4

130 68.7 55.0 82.4





#29

Tetrahydrofuran

Concen: 267.624 ug/l

RT: 7.830 min Scan# 999

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

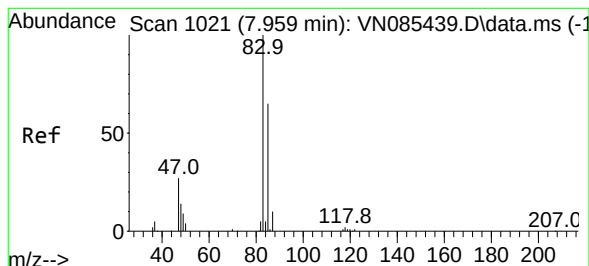
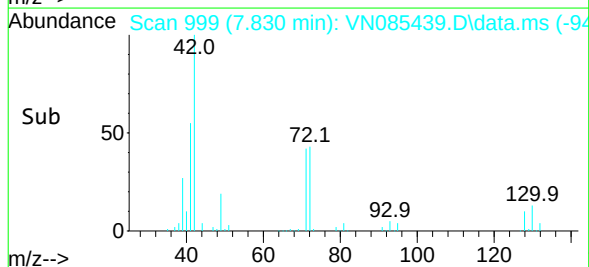
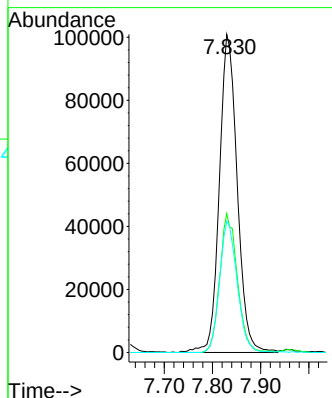
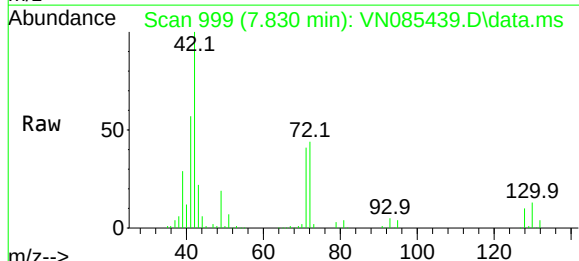
ClientSampleId :

VSTDICCC050

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 42    | Resp: | 259683 |
| Ion      | Ratio | Lower | Upper  |
| 42       | 100   |       |        |
| 72       | 42.7  | 34.2  | 51.2   |
| 71       | 40.6  | 32.5  | 48.7   |

Manual Integrations  
APPROVED

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



#30

Chloroform

Concen: 48.229 ug/l

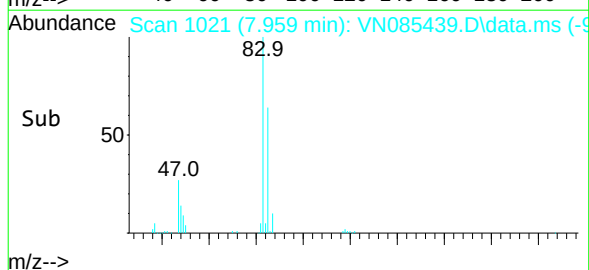
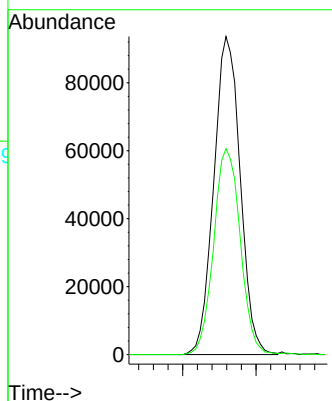
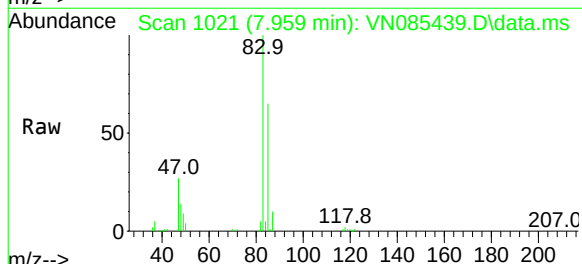
RT: 7.959 min Scan# 1021

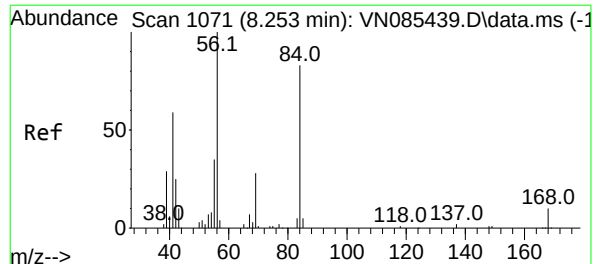
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 234271 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 85       | 64.7  | 51.8  | 77.6   |





#31

Cyclohexane

Concen: 42.984 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 56 Resp: 175588

Ion Ratio Lower Upper

56 100

69 27.8 22.2 33.4

84 83.0 66.4 99.6

Instrument :

MSVOA\_N

ClientSampleId :

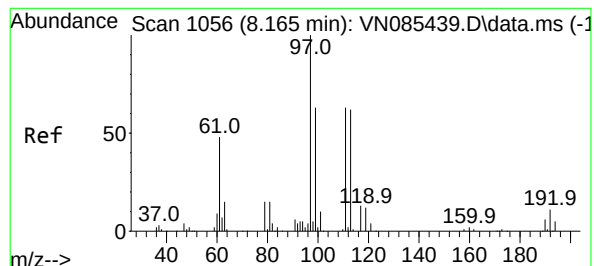
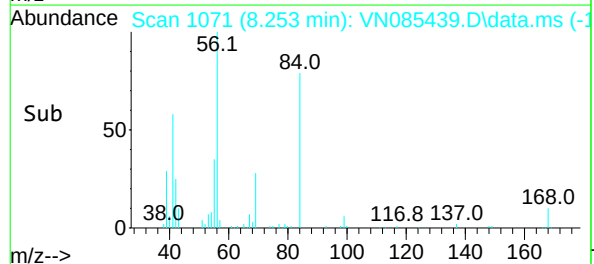
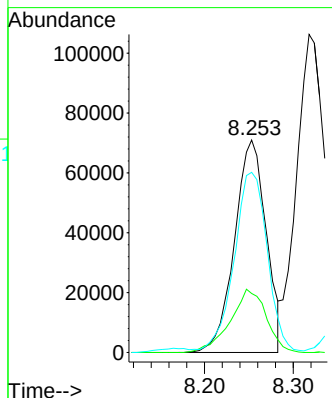
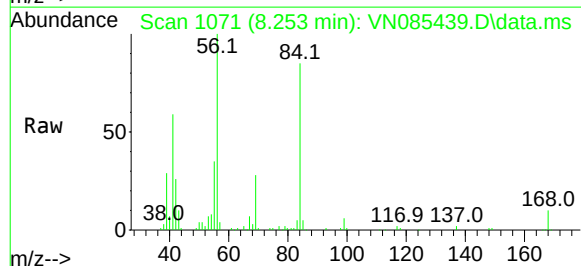
VSTDICCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 47.547 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

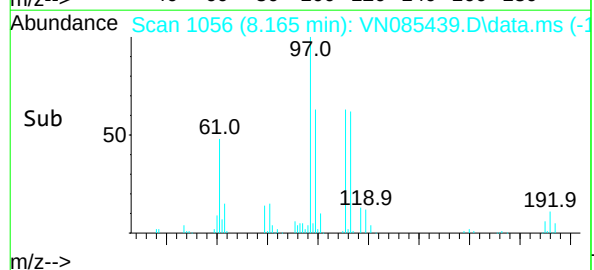
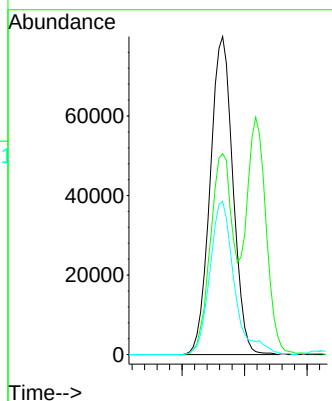
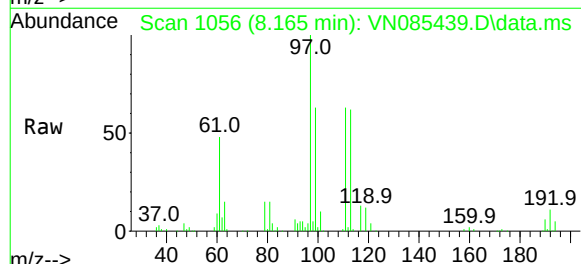
Tgt Ion: 97 Resp: 202590

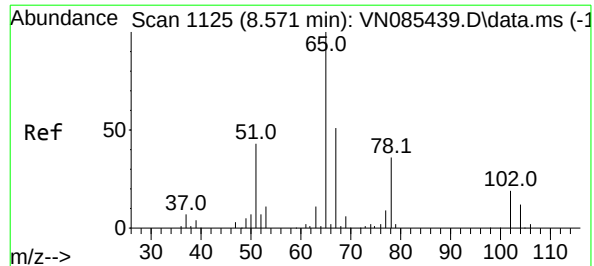
Ion Ratio Lower Upper

97 100

99 62.2 49.8 74.6

61 51.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 51.500 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 65 Resp: 165768

Ion Ratio Lower Upper

65 100

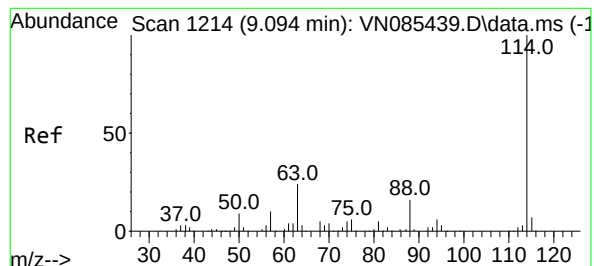
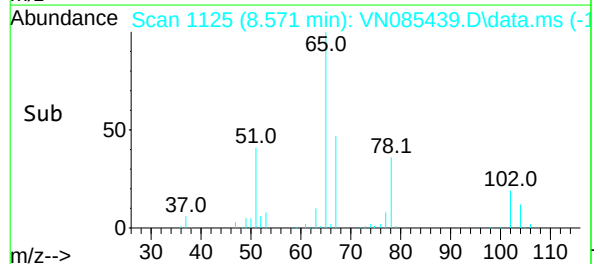
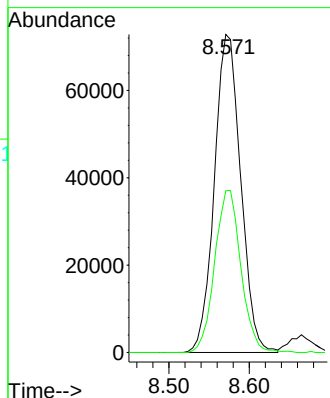
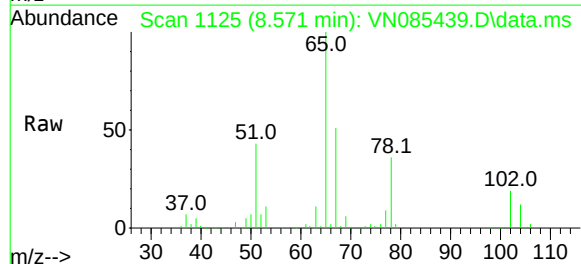
67 50.8 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

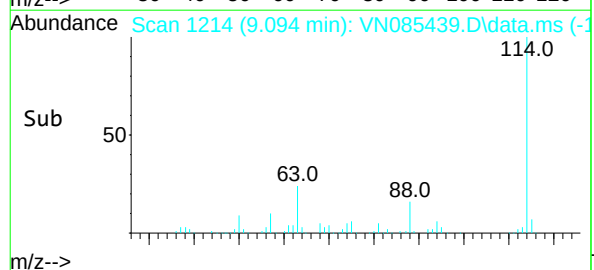
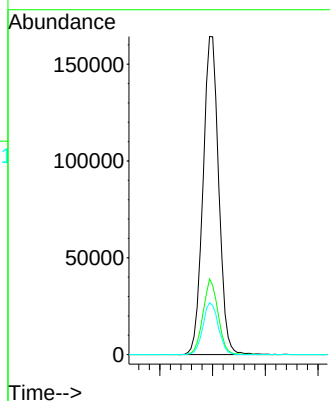
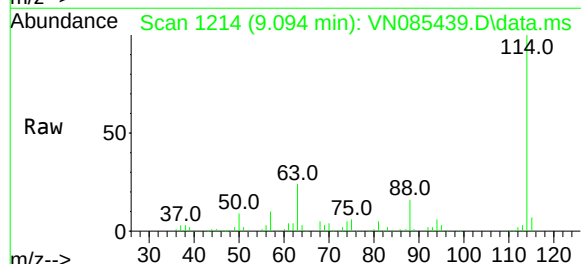
Tgt Ion:114 Resp: 339872

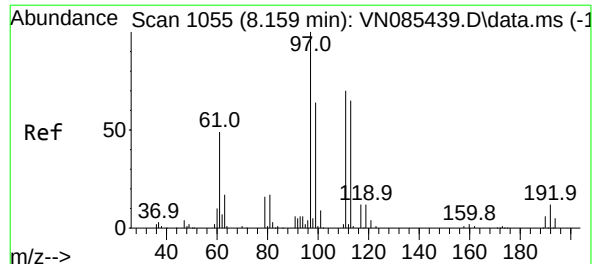
Ion Ratio Lower Upper

114 100

63 23.8 0.0 47.6

88 16.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 51.552 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 113 Resp: 121554

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

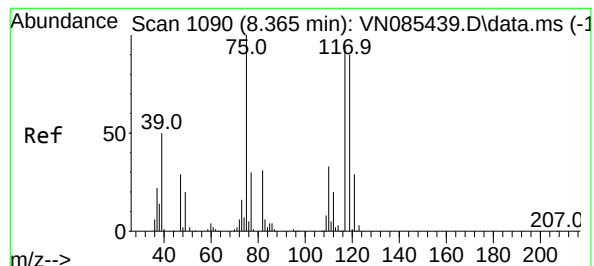
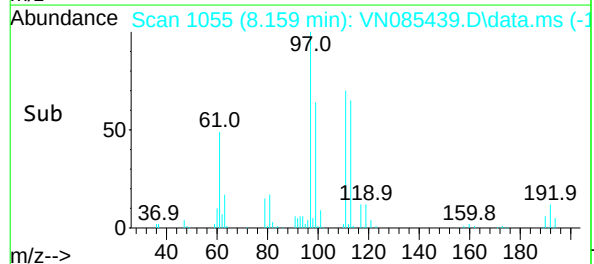
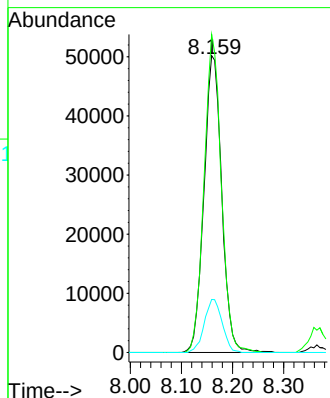
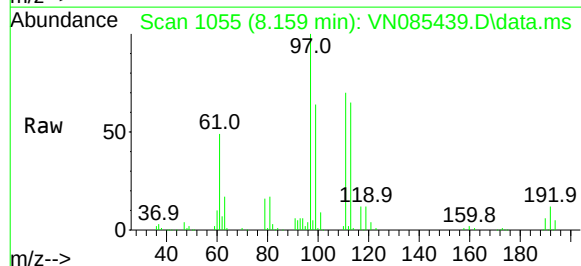
192 17.9 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 47.453 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

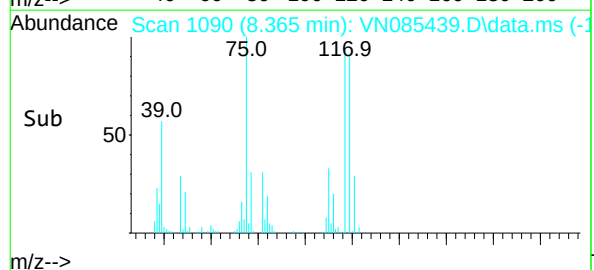
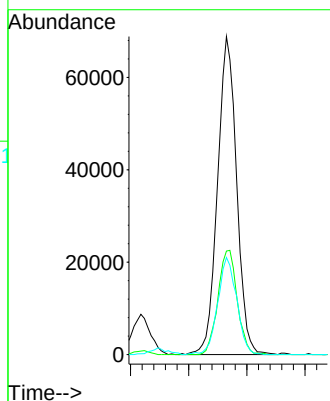
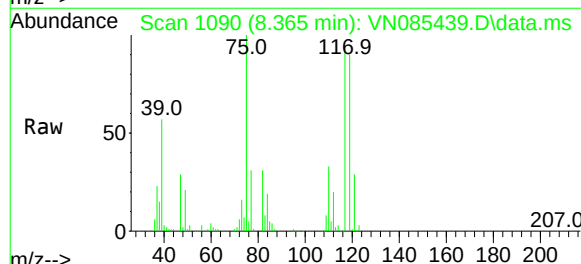
Tgt Ion: 75 Resp: 157031

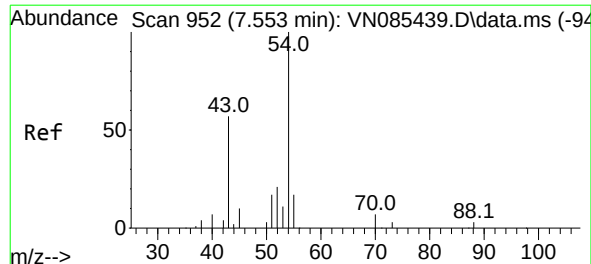
Ion Ratio Lower Upper

75 100

110 33.0 16.5 49.5

77 30.5 24.4 36.6





#37

Ethyl Acetate

Concen: 49.658 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 165866

Ion Ratio Lower Upper

43 100

61 13.6 10.9 16.3

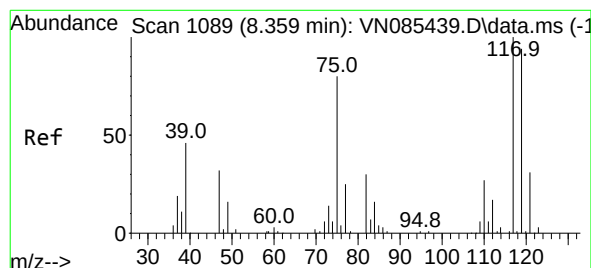
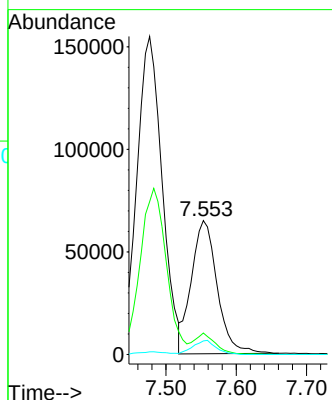
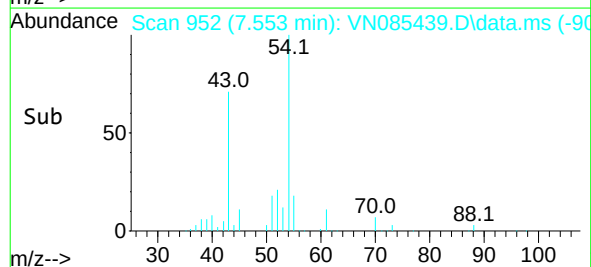
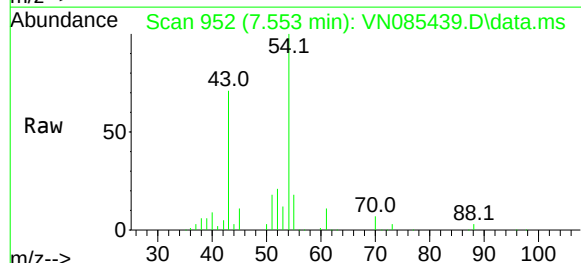
70 9.4 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 47.564 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

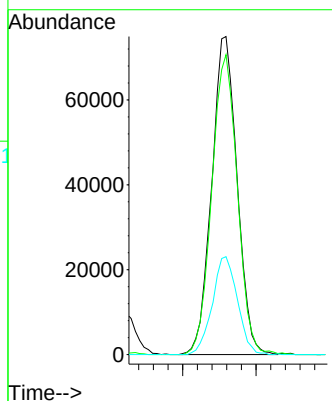
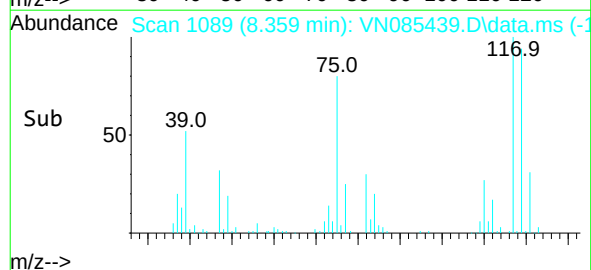
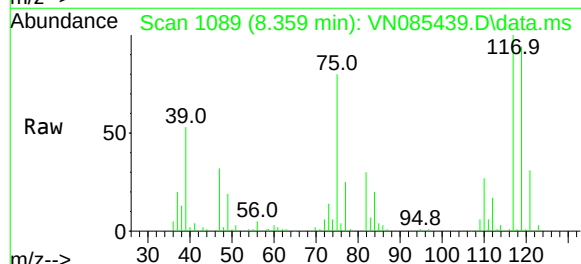
Tgt Ion:117 Resp: 180199

Ion Ratio Lower Upper

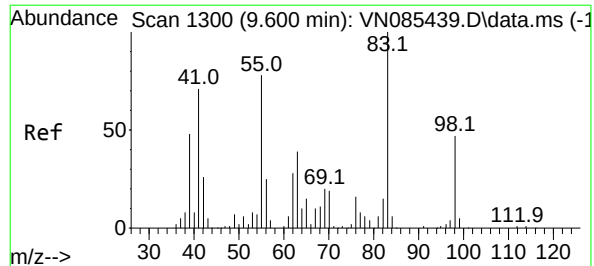
117 100

119 94.3 75.4 113.2

121 30.8 24.6 37.0







#39

Methylcyclohexane

Concen: 50.562 ug/l

RT: 9.600 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

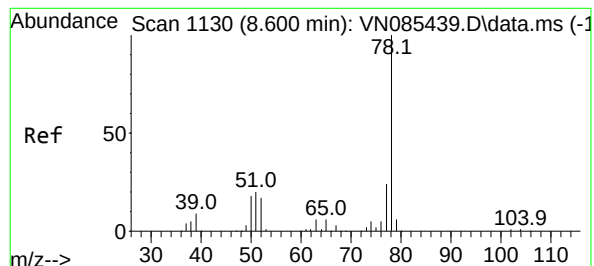
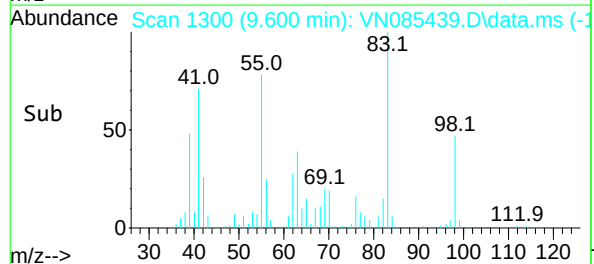
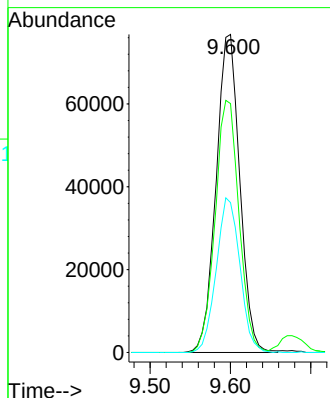
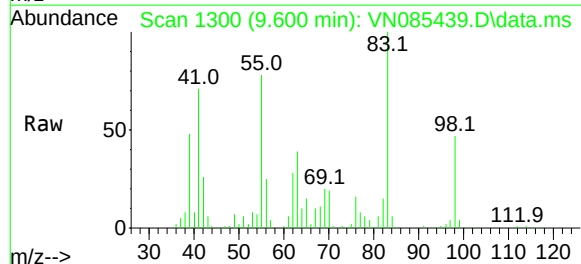
ClientSampleId :

VSTDICCC050

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 157234 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 78.3  | 62.6  | 94.0   |
| 98       | 47.1  | 37.7  | 56.5   |

Manual Integrations  
APPROVED

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



#40

Benzene

Concen: 49.542 ug/l

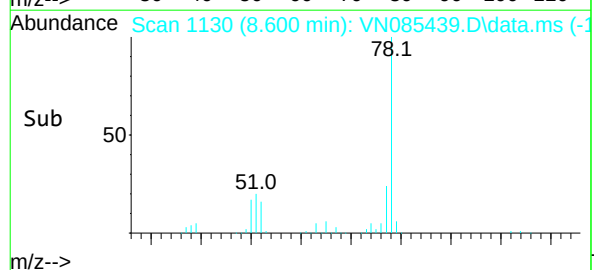
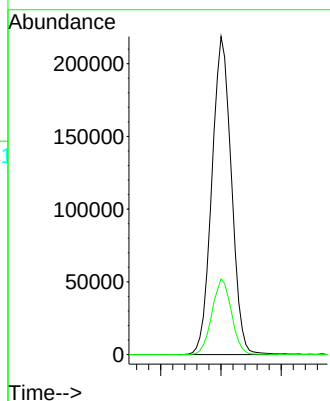
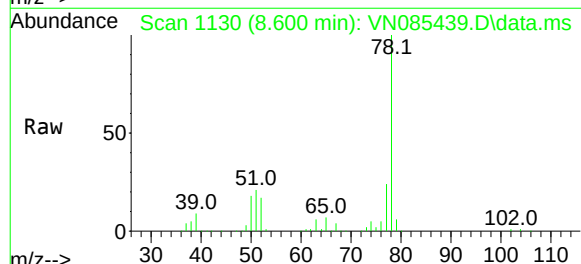
RT: 8.600 min Scan# 1130

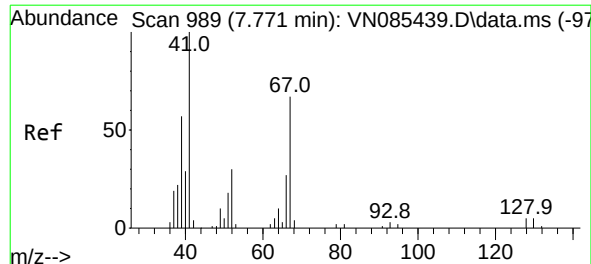
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 78    | Resp: | 492606 |
| Ion      | Ratio | Lower | Upper  |
| 78       | 100   |       |        |
| 77       | 23.8  | 19.0  | 28.6   |





#41

Methacrylonitrile

Concen: 52.775 ug/l

RT: 7.771 min Scan# 989

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

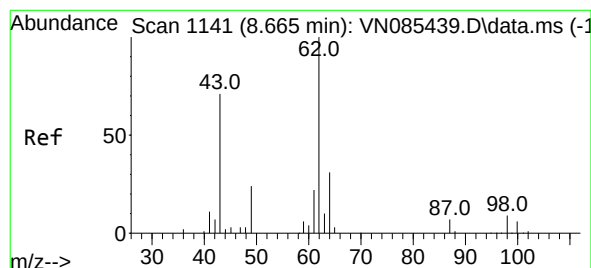
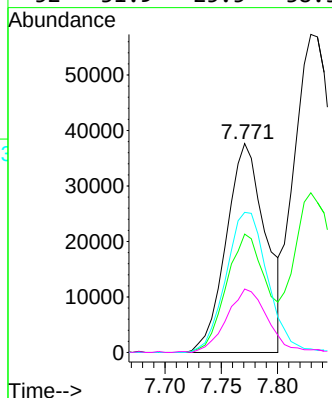
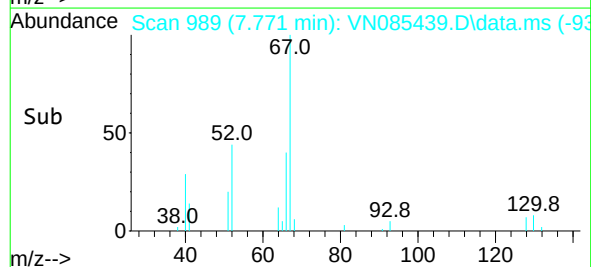
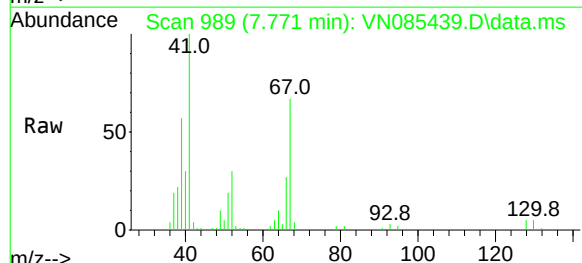
VSTDICCC050

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 91711 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.5  | 46.0  | 69.0  |
| 67       | 71.8  | 57.4  | 86.2  |
| 52       | 31.9  | 25.5  | 38.3  |

Manual Integrations

APPROVED

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



#42

1,2-Dichloroethane

Concen: 49.685 ug/l

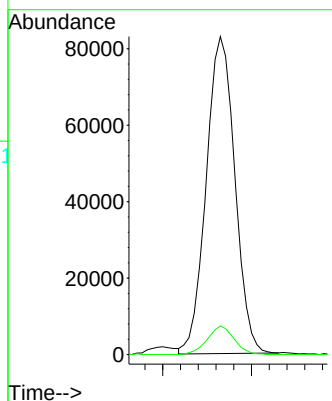
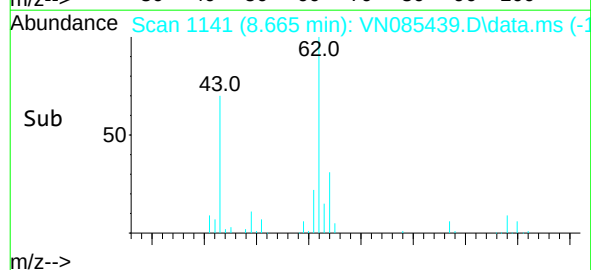
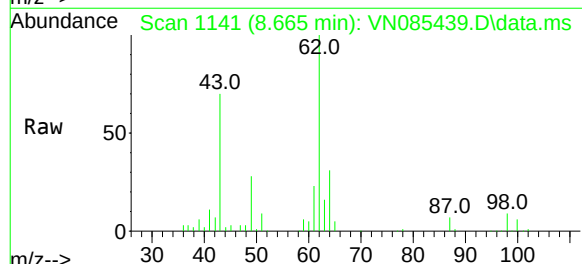
RT: 8.665 min Scan# 1141

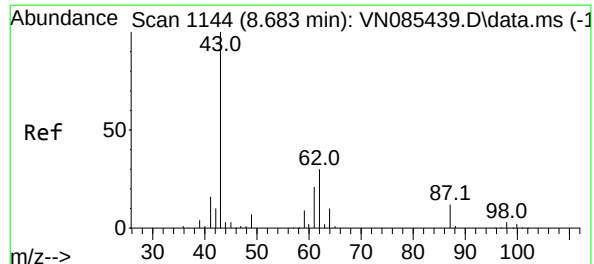
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 186065 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.5   | 0.0   | 17.0   |





#43

Isopropyl Acetate

Concen: 51.611 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 276228

Ion Ratio Lower Upper

43 100

61 25.9 20.7 31.1

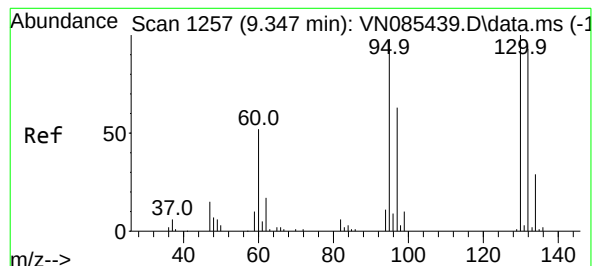
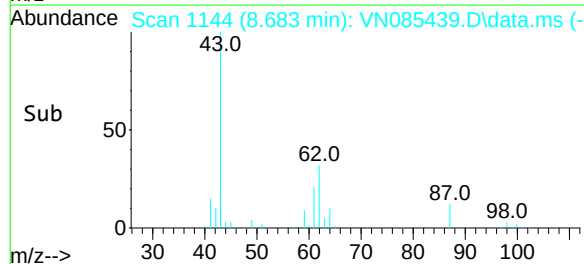
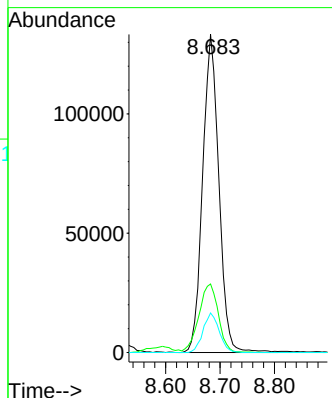
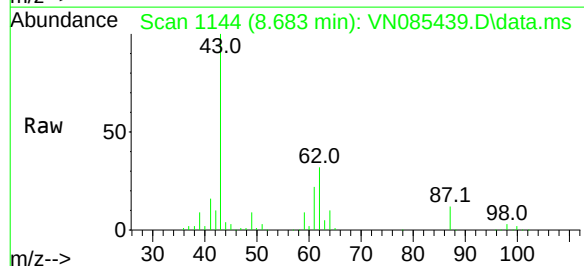
87 12.3 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 47.506 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. 0.000 min

Lab File: VN085439.D

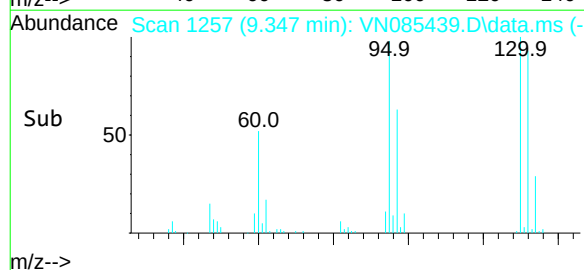
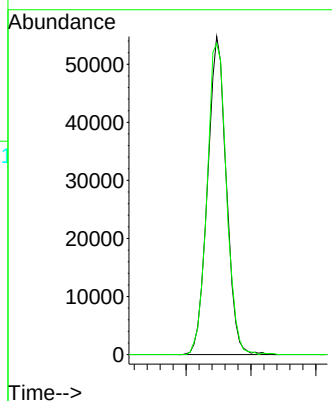
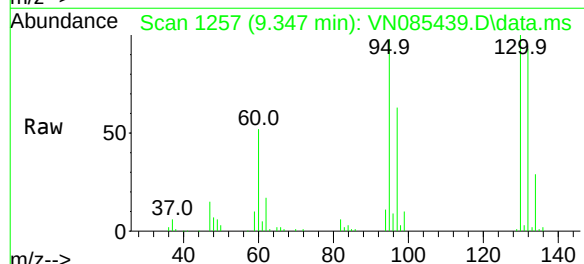
Acq: 14 Jan 2025 15:19

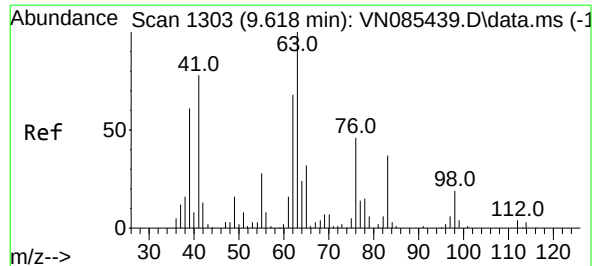
Tgt Ion:130 Resp: 109953

Ion Ratio Lower Upper

130 100

95 97.9 0.0 195.8





#45

1,2-Dichloropropane

Concen: 49.644 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 63 Resp: 126084

Ion Ratio Lower Upper

63 100

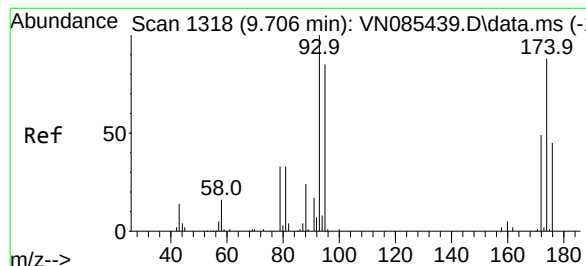
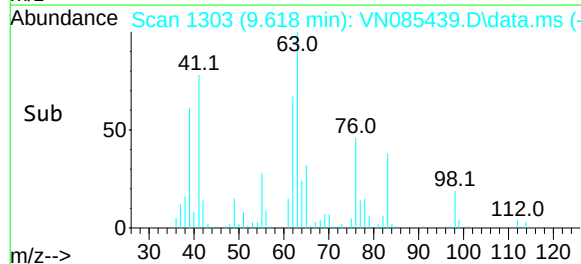
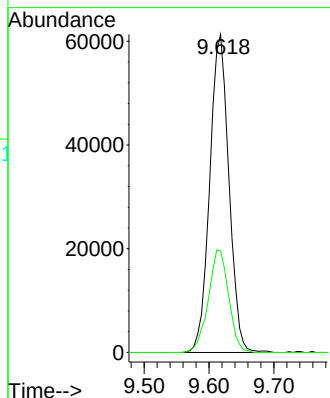
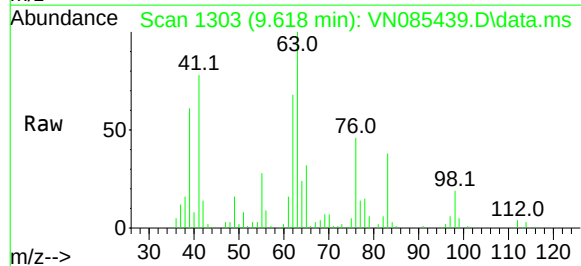
65 32.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 49.476 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

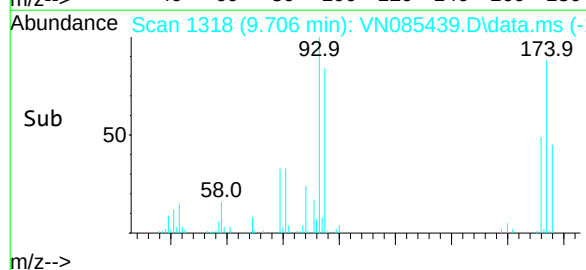
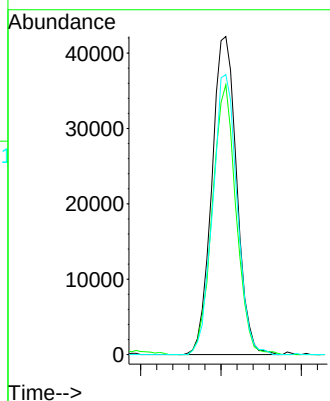
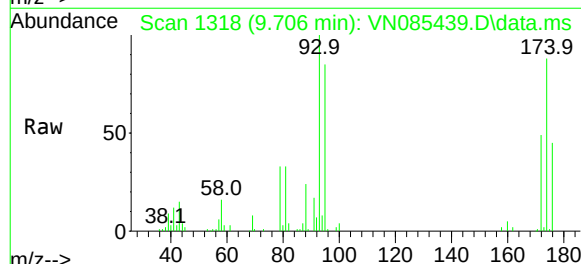
Tgt Ion: 93 Resp: 90670

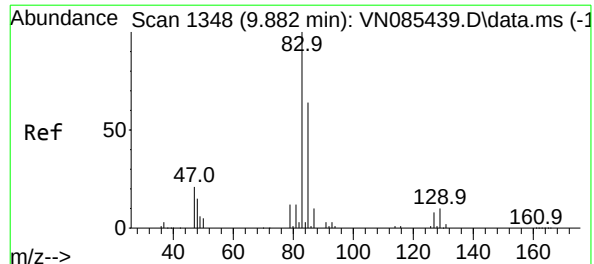
Ion Ratio Lower Upper

93 100

95 80.9 64.7 97.1

174 86.2 69.0 103.4





#47

Bromodichloromethane

Concen: 50.867 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

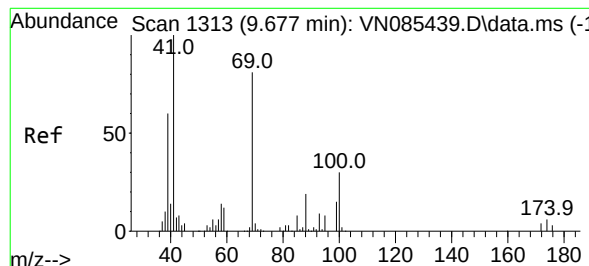
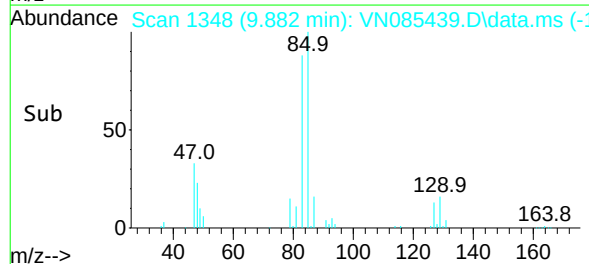
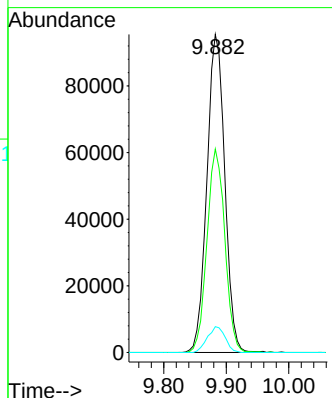
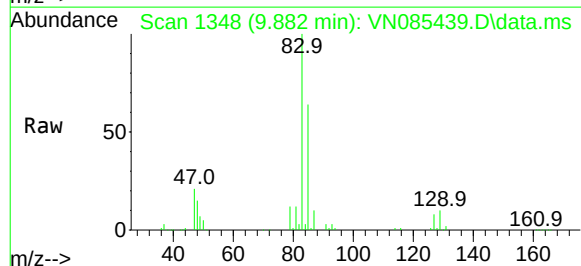
Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

| Tgt Ion: | 83    | Resp: | 189915 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 85       | 64.0  | 51.2  | 76.8   |
| 127      | 8.1   | 6.5   | 9.7    |

Manual Integrations  
APPROVEDReviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

#48

Methyl methacrylate

Concen: 55.385 ug/l

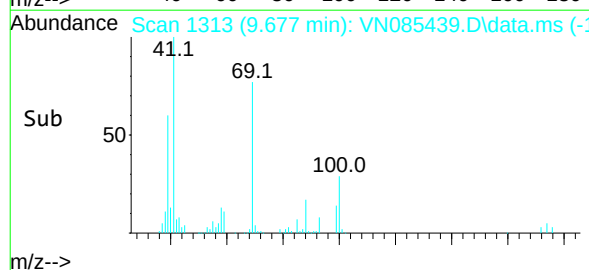
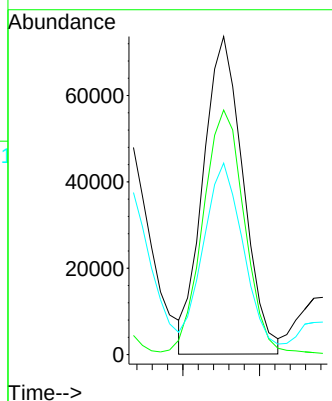
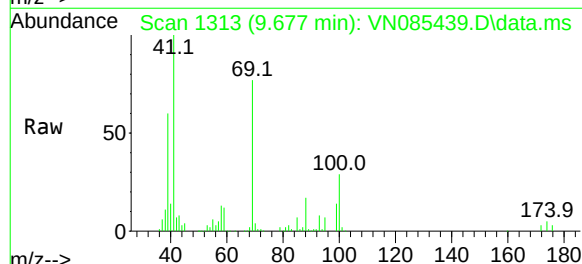
RT: 9.677 min Scan# 1313

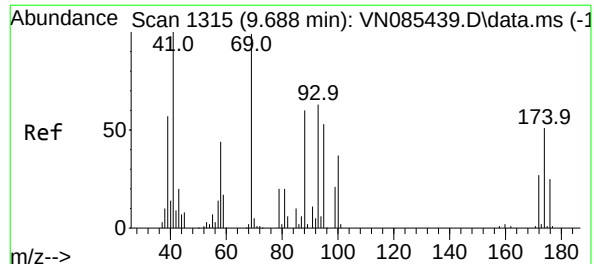
Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

| Tgt Ion: | 41    | Resp: | 133399 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 69       | 80.9  | 64.7  | 97.1   |
| 39       | 61.3  | 49.0  | 73.6   |





#49

1,4-Dioxane

Concen: 1061.334 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 88 Resp: 43048

Ion Ratio Lower Upper

88 100

43 33.2 26.6 39.8

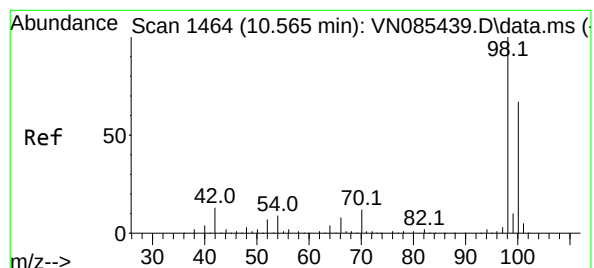
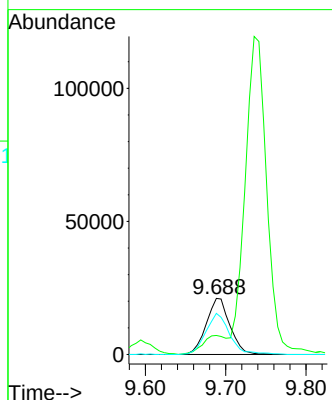
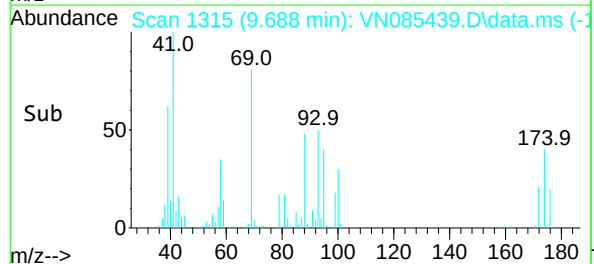
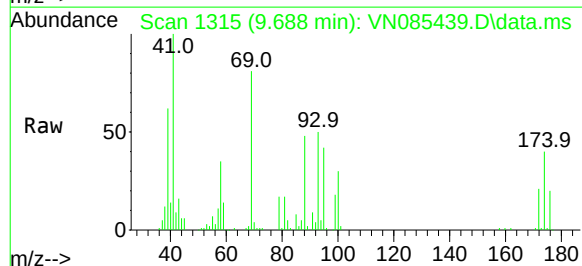
58 74.4 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 51.411 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085439.D

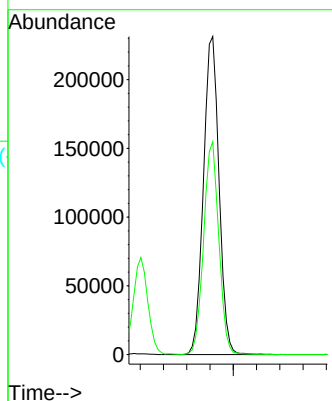
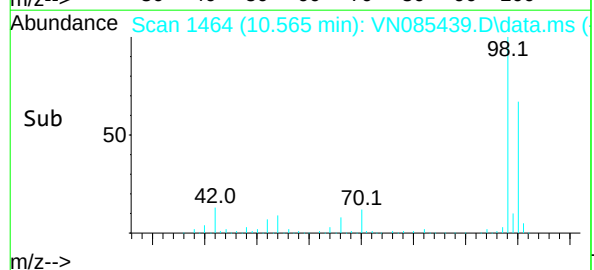
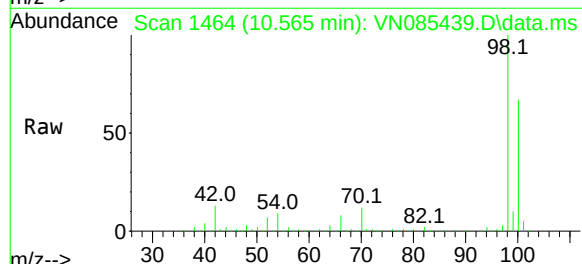
Acq: 14 Jan 2025 15:19

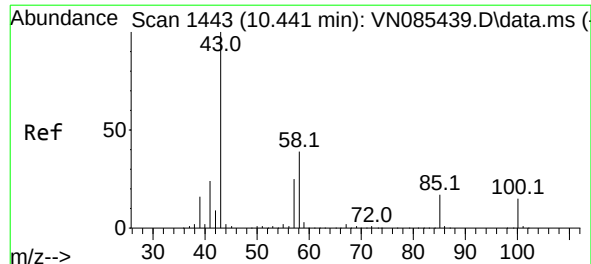
Tgt Ion: 98 Resp: 430698

Ion Ratio Lower Upper

98 100

100 65.3 52.2 78.4





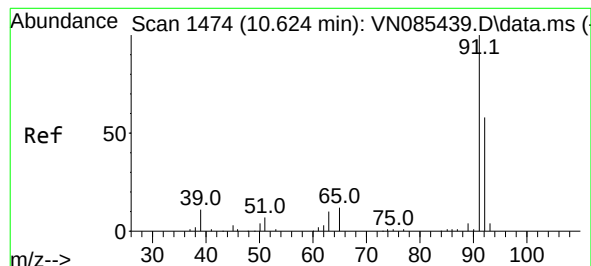
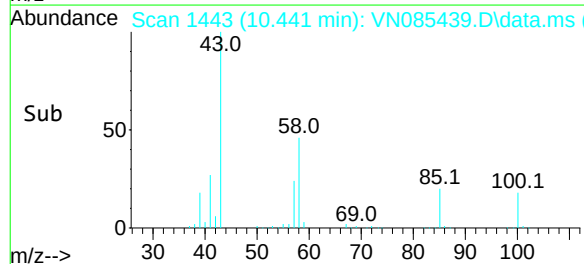
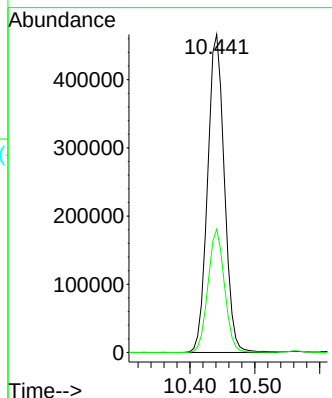
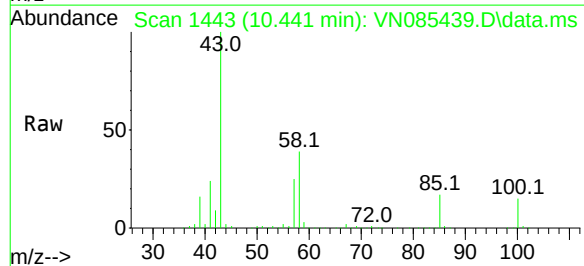
#51  
4-Methyl-2-Pentanone  
Concen: 269.403 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 43 Resp: 836707  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7

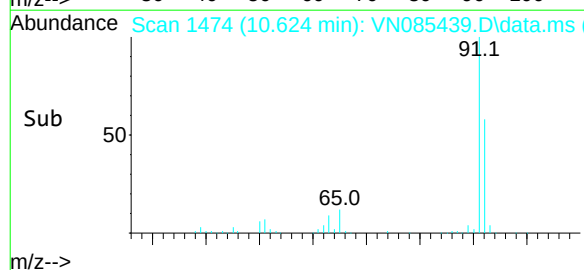
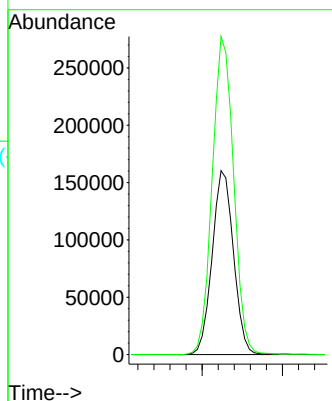
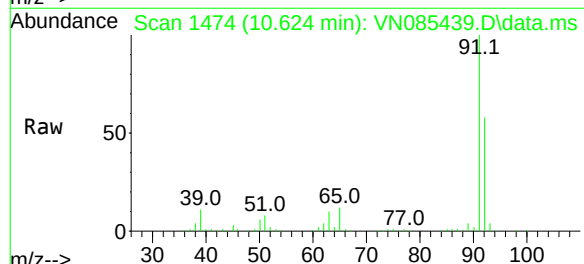
Manual Integrations  
APPROVED

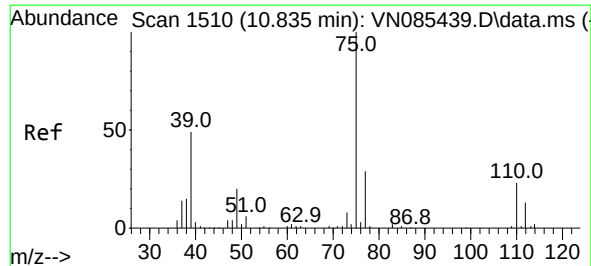
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

Tgt Ion: 92 Resp: 295792  
Ion Ratio Lower Upper  
92 100  
91 174.0 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 53.125 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 75 Resp: 187439

Ion Ratio Lower Upper

75 100

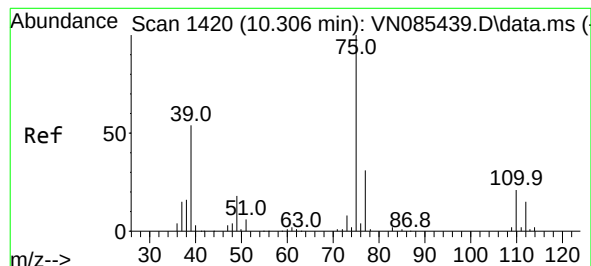
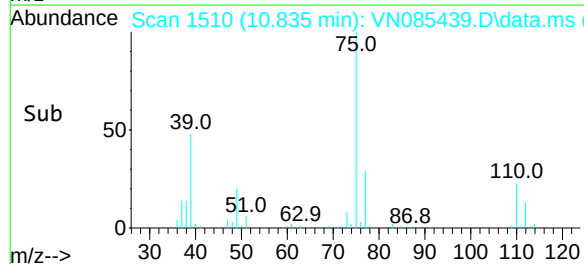
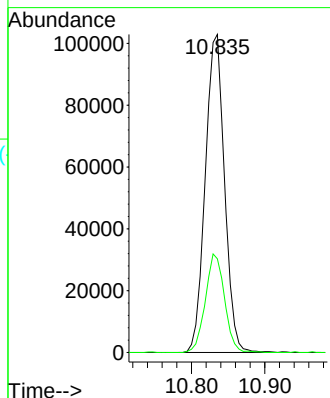
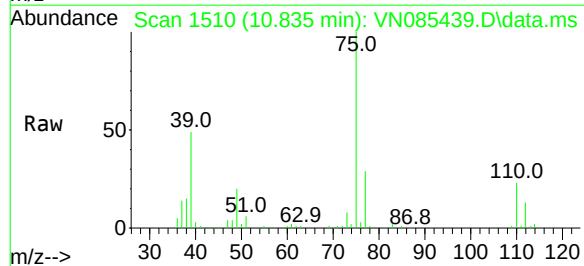
77 29.4 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 53.006 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

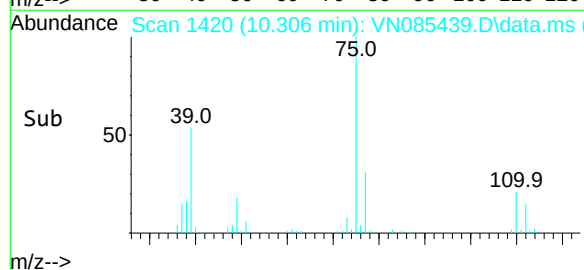
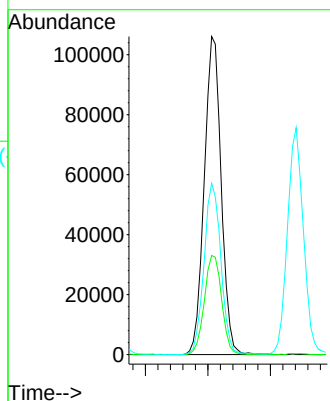
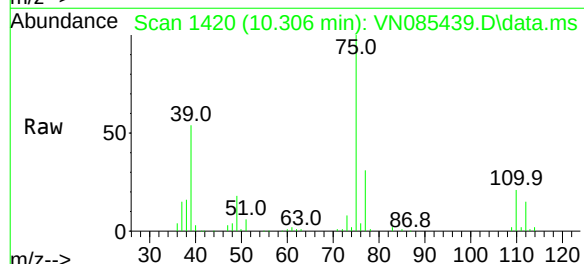
Tgt Ion: 75 Resp: 199771

Ion Ratio Lower Upper

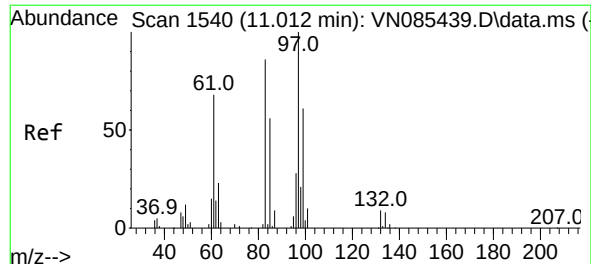
75 100

77 31.2 25.0 37.4

39 53.9 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 50.641 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 97 Resp: 115462

Ion Ratio Lower Upper

97 100

83 86.3 69.0 103.6

85 55.7 44.6 66.8

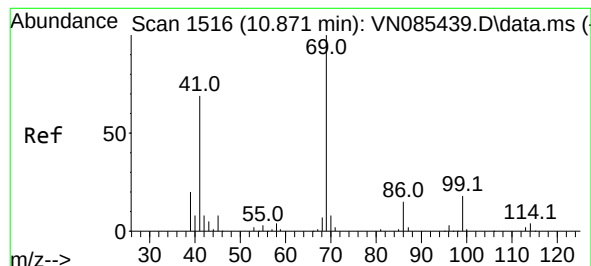
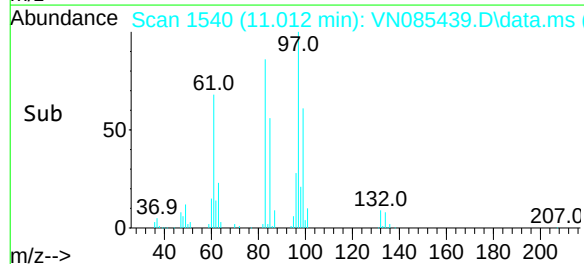
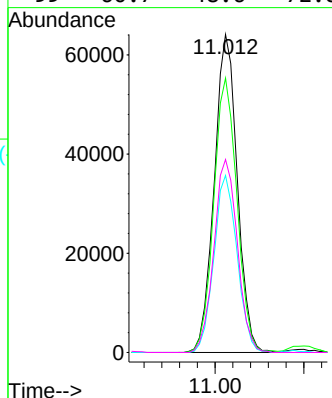
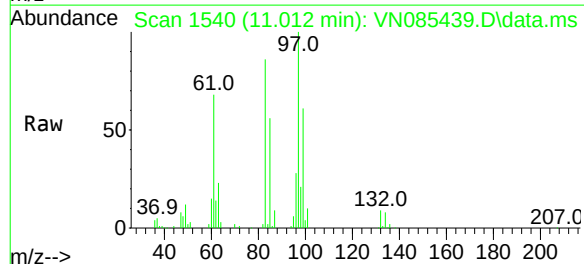
99 60.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 48.182 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

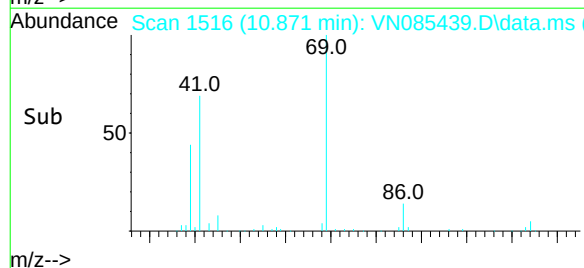
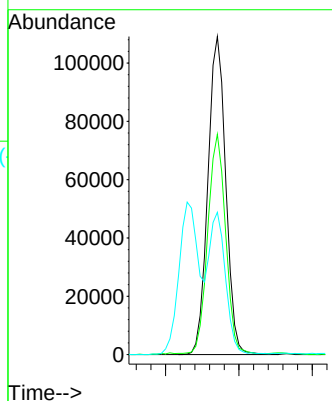
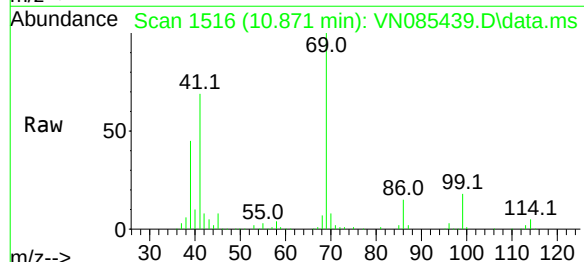
Tgt Ion: 69 Resp: 184775

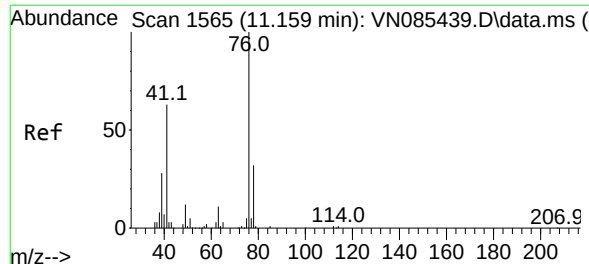
Ion Ratio Lower Upper

69 100

41 68.3 54.6 82.0

39 40.5 32.4 48.6





#57

1,3-Dichloropropane

Concen: 51.606 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 76 Resp: 204596

Ion Ratio Lower Upper

76 100

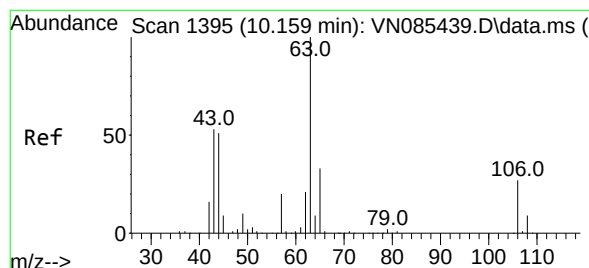
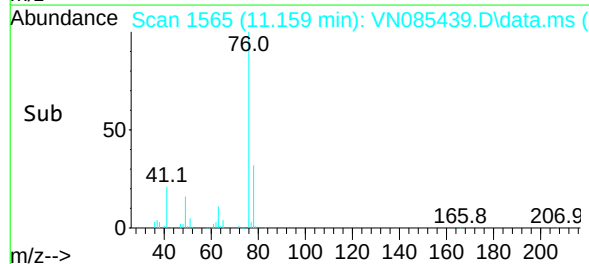
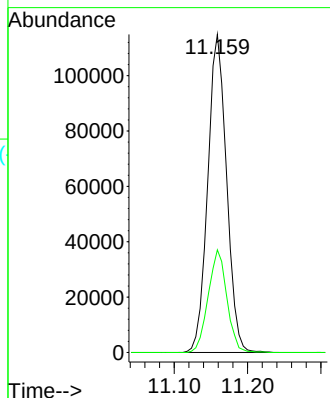
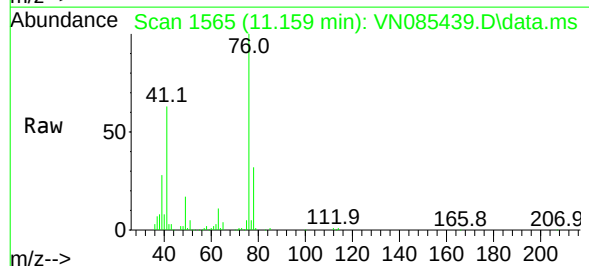
78 32.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 283.088 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085439.D

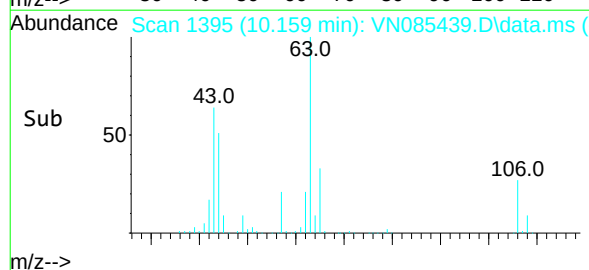
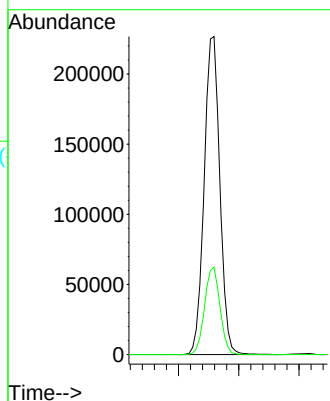
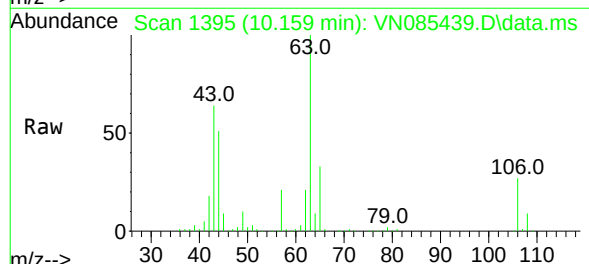
Acq: 14 Jan 2025 15:19

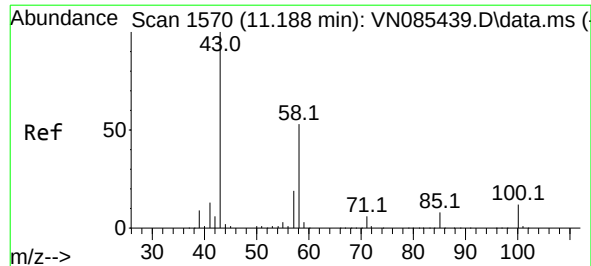
Tgt Ion: 63 Resp: 409594

Ion Ratio Lower Upper

63 100

106 27.0 21.6 32.4





#59

2-Hexanone

Concen: 277.643 ug/l

RT: 11.188 min Scan# 1570

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 606740

Ion Ratio Lower Upper

43 100

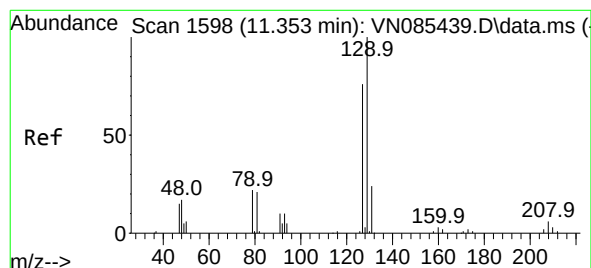
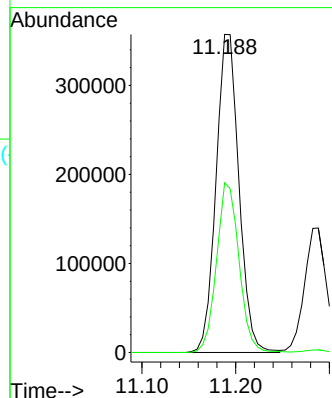
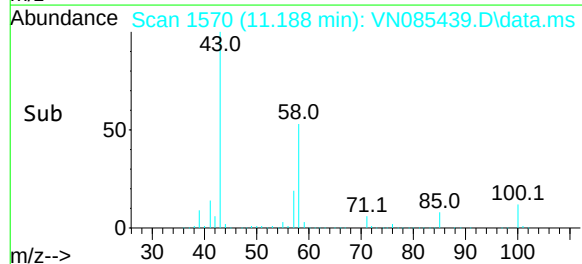
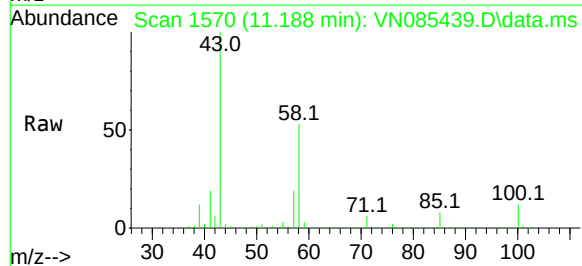
58 52.4 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 51.116 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085439.D

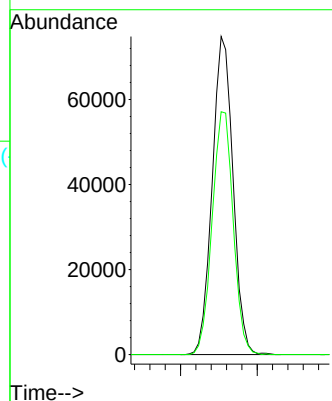
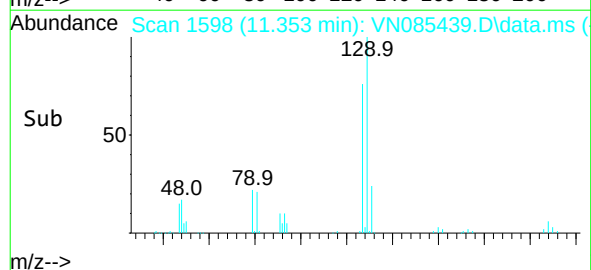
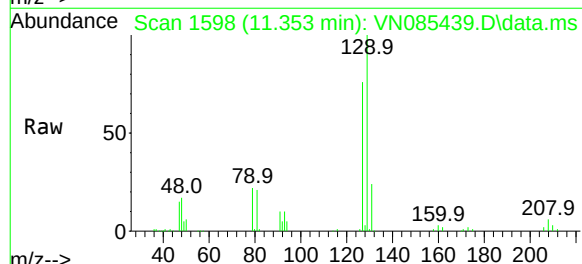
Acq: 14 Jan 2025 15:19

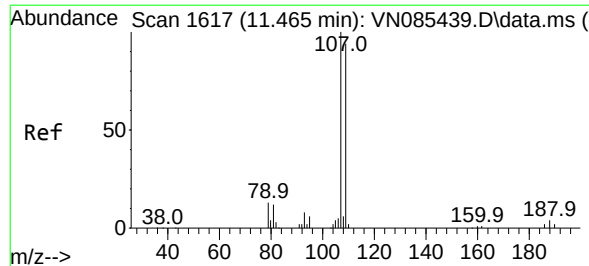
Tgt Ion:129 Resp: 140704

Ion Ratio Lower Upper

129 100

127 77.2 38.6 115.8





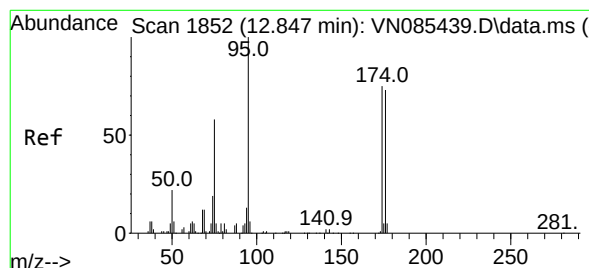
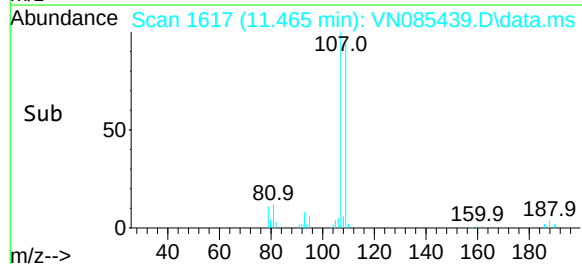
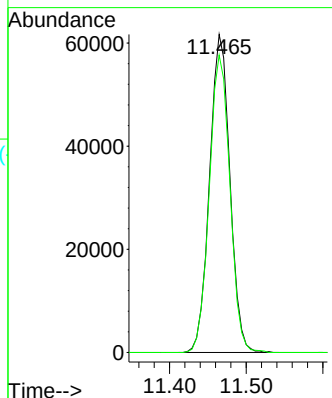
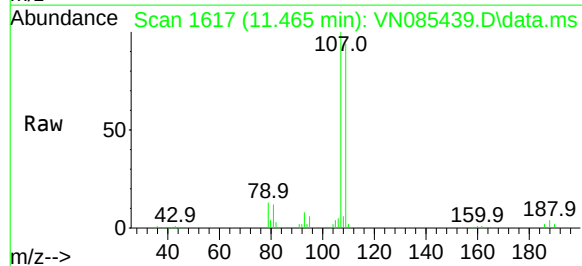
#61  
1,2-Dibromoethane  
Concen: 50.028 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 107 Resp: 113541  
Ion Ratio Lower Upper  
107 100  
109 94.9 75.9 113.9

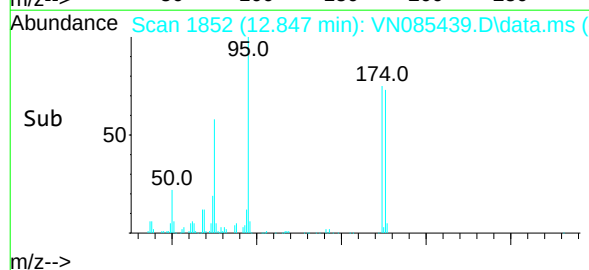
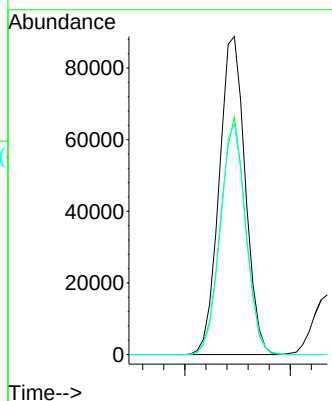
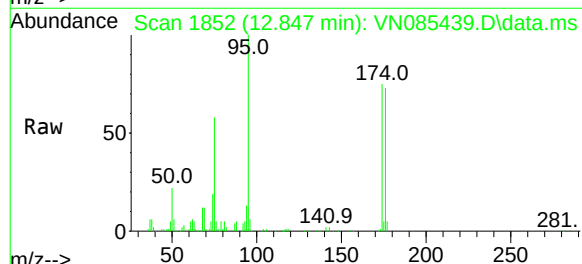
Manual Integrations  
APPROVED

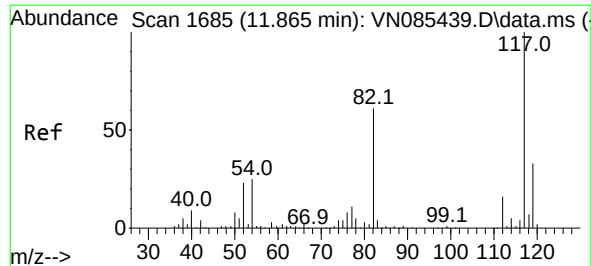
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#62  
4-Bromofluorobenzene  
Concen: 53.239 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 95 Resp: 152568  
Ion Ratio Lower Upper  
95 100  
174 72.5 0.0 145.0  
176 71.2 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:117 Resp: 297366

Ion Ratio Lower Upper

117 100

82 60.7 48.6 72.8

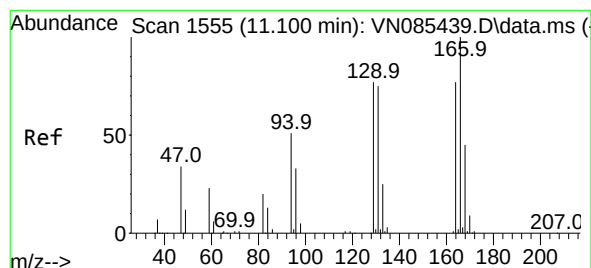
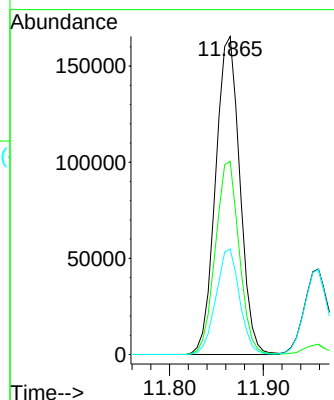
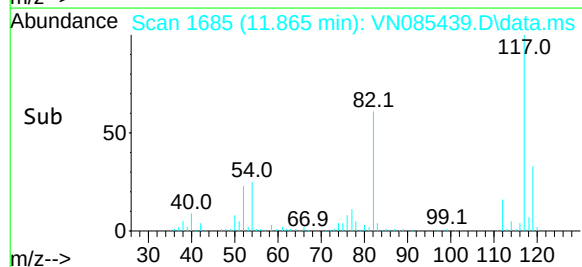
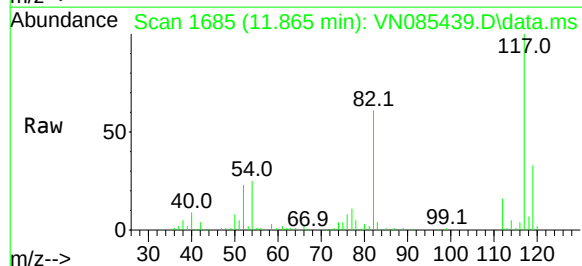
119 33.2 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 47.295 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:164 Resp: 95879

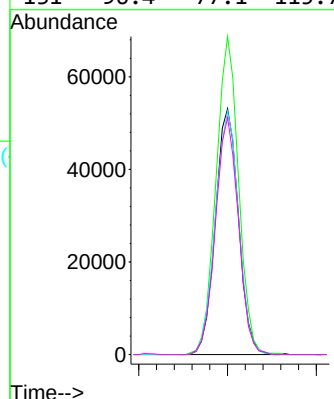
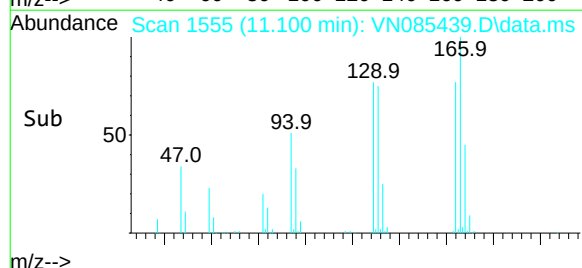
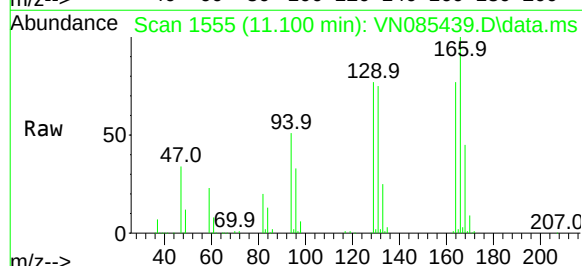
Ion Ratio Lower Upper

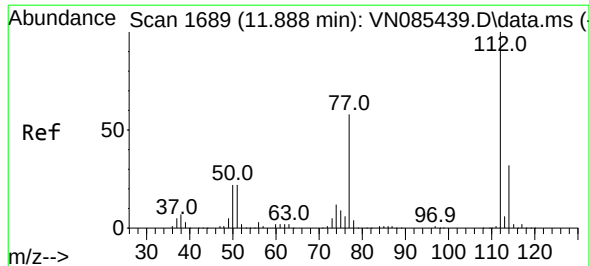
164 100

166 129.3 103.4 155.2

129 99.0 79.2 118.8

131 96.4 77.1 115.7





#65

Chlorobenzene

Concen: 49.121 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:112 Resp: 319992

Ion Ratio Lower Upper

112 100

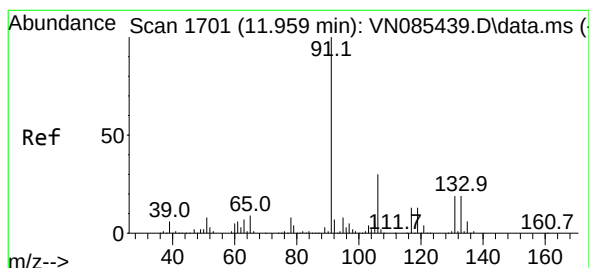
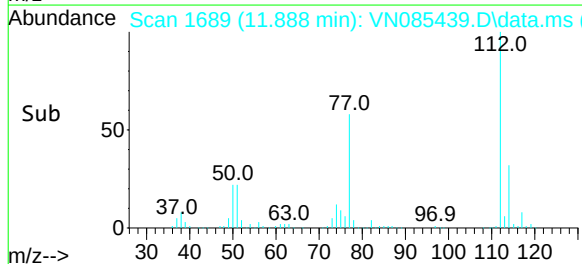
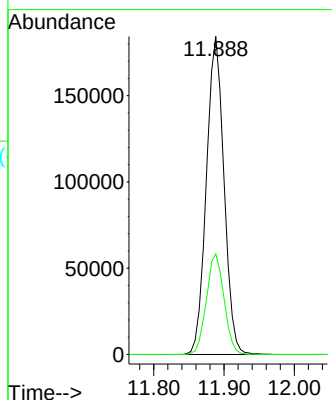
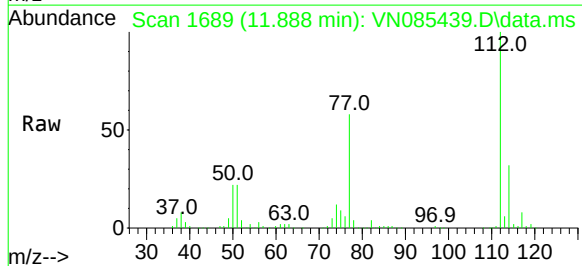
114 31.6 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 48.722 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

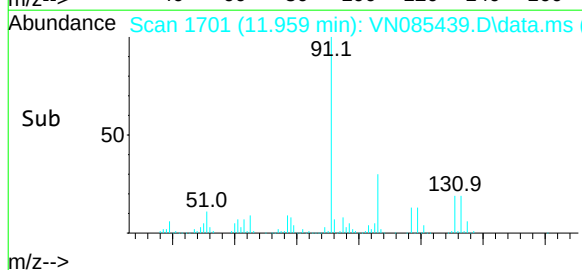
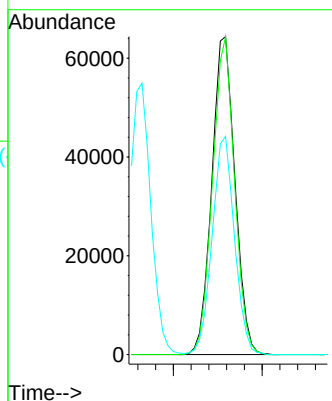
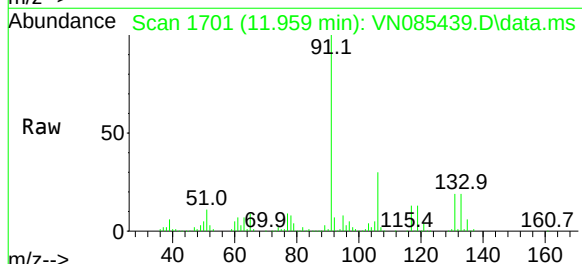
Tgt Ion:131 Resp: 116488

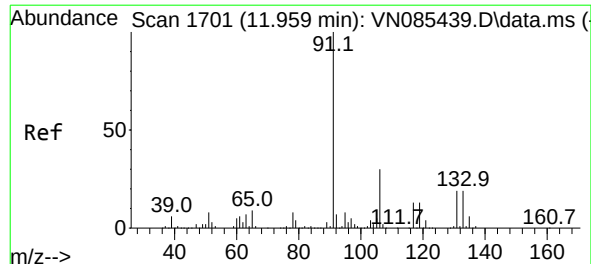
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.3 33.1 99.5





#67

Ethyl Benzene

Concen: 52.339 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 91 Resp: 555322

Ion Ratio Lower Upper

91 100

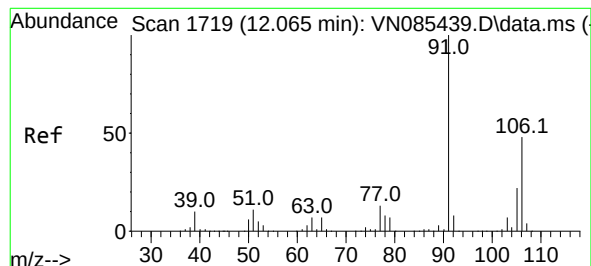
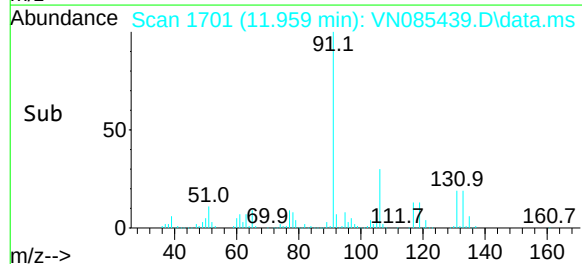
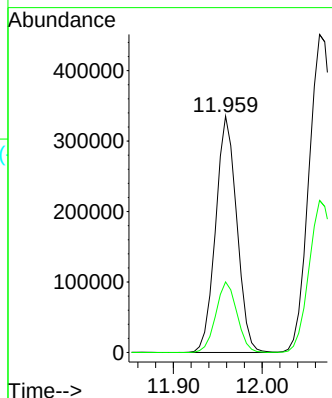
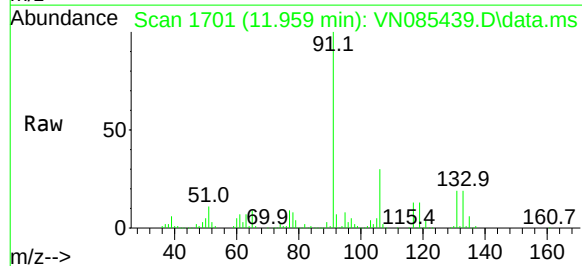
106 29.8 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 107.286 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085439.D

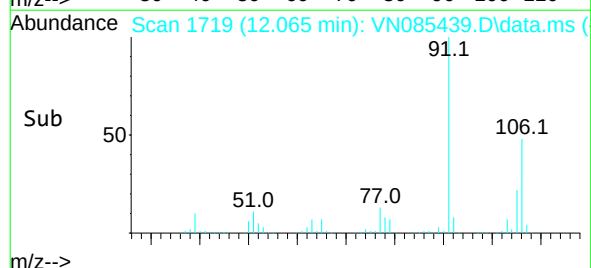
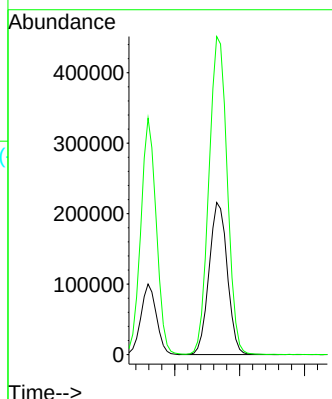
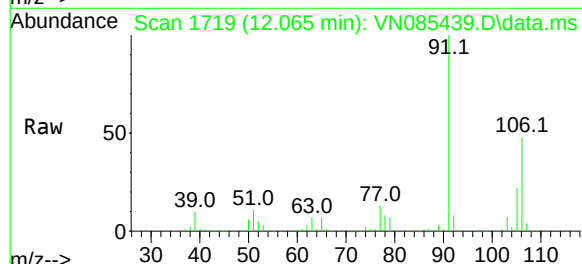
Acq: 14 Jan 2025 15:19

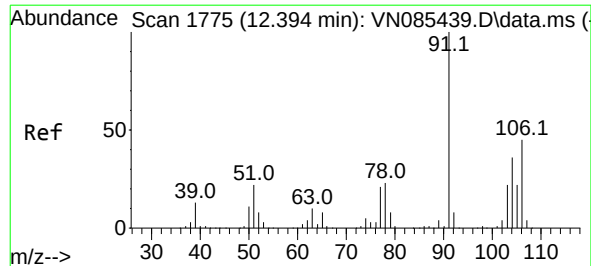
Tgt Ion:106 Resp: 420702

Ion Ratio Lower Upper

106 100

91 209.6 167.7 251.5





#69

o-Xylene

Concen: 54.062 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:106 Resp: 202597

Ion Ratio Lower Upper

106 100

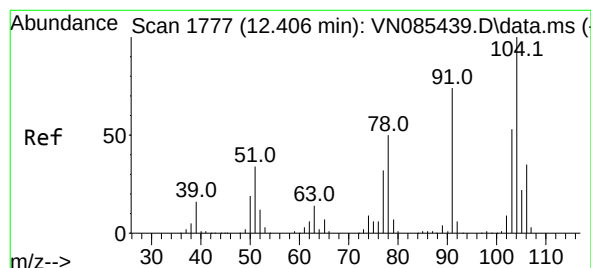
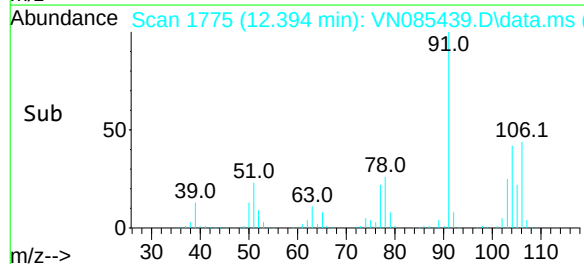
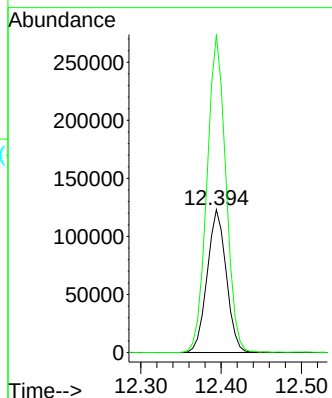
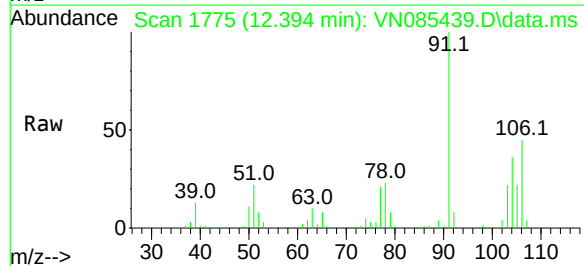
91 220.8 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 56.227 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

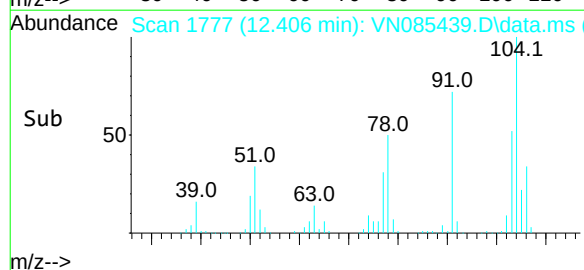
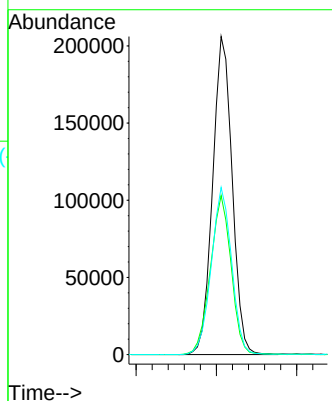
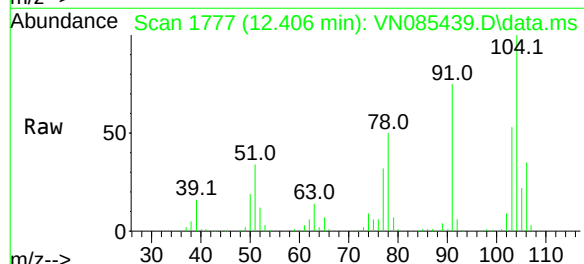
Tgt Ion:104 Resp: 348720

Ion Ratio Lower Upper

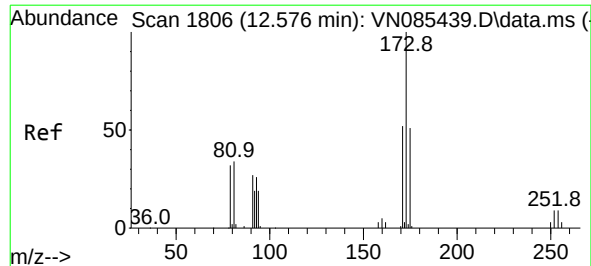
104 100

78 53.1 42.5 63.7

103 54.8 43.8 65.8







#71

Bromoform

Concen: 53.993 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

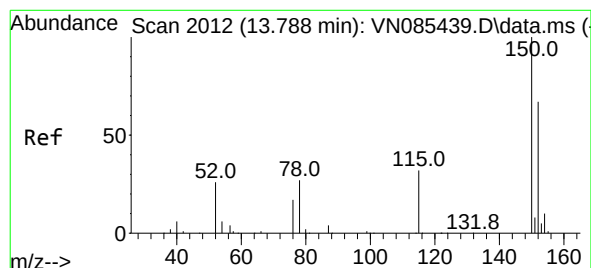
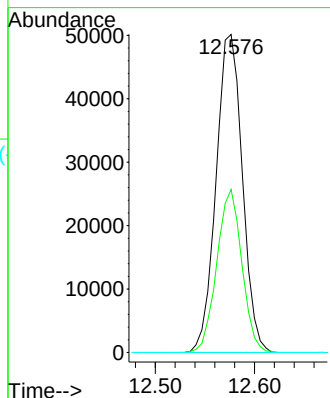
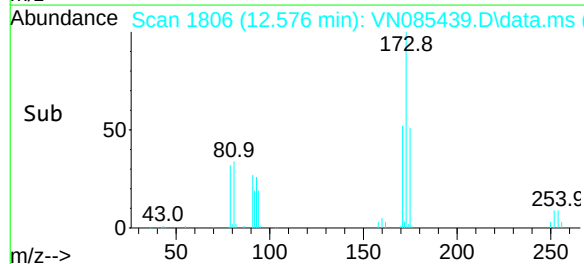
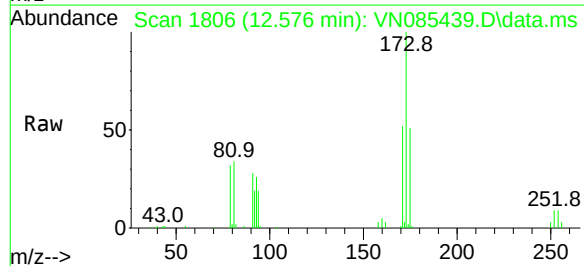
ClientSampleId :

VSTDICCC050

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 92366 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 48.8  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

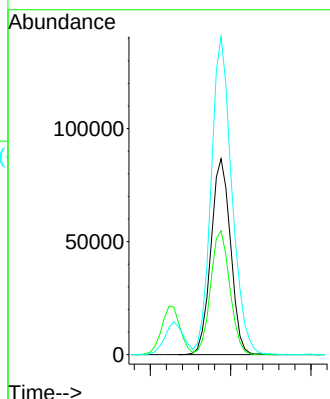
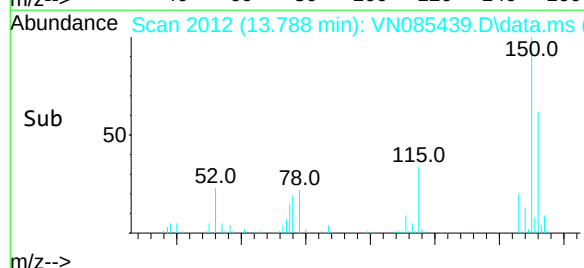
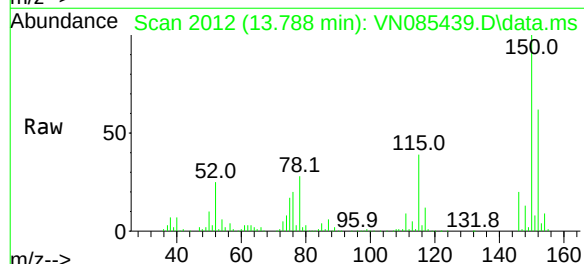
RT: 13.788 min Scan# 2012

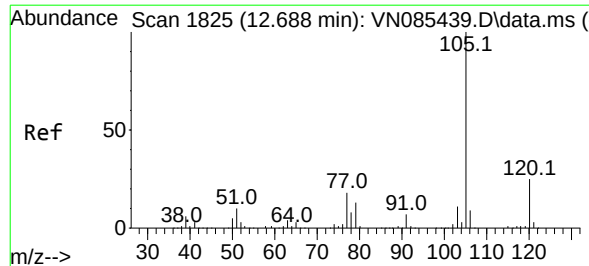
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 146624 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.2  | 31.1  | 93.3   |
| 150       | 171.8 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 51.094 ug/l

RT: 12.688 min Scan# 1825

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:105 Resp: 505619

Ion Ratio Lower Upper

105 100

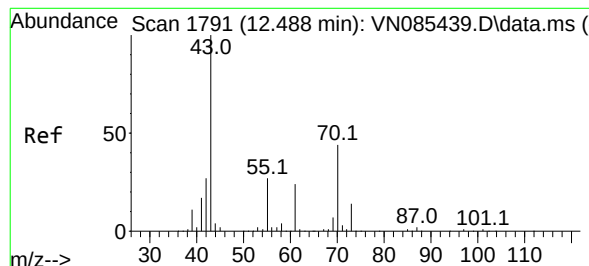
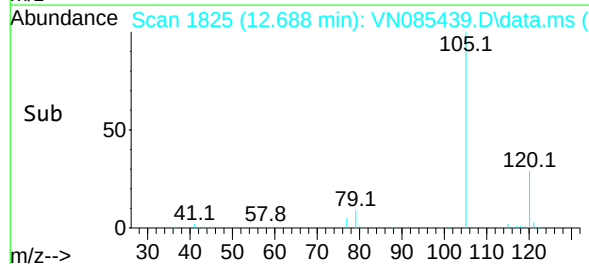
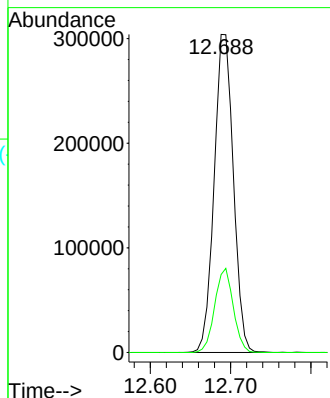
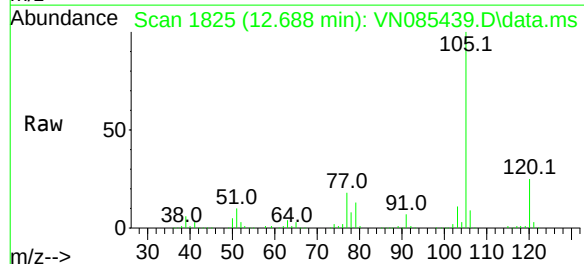
120 25.5 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 53.478 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 237870

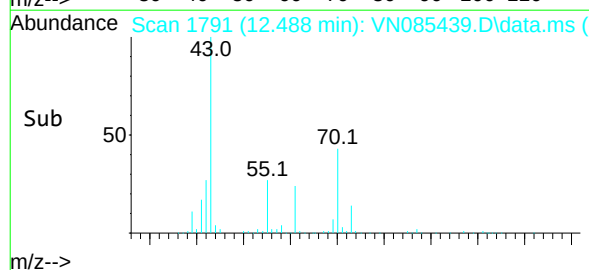
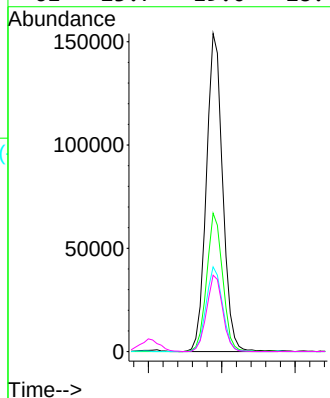
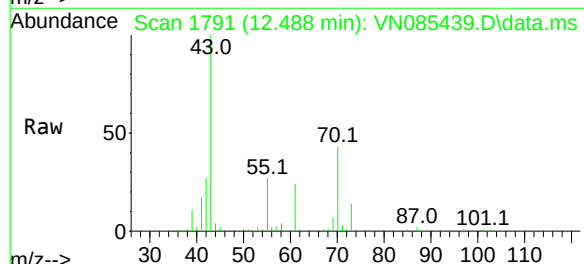
Ion Ratio Lower Upper

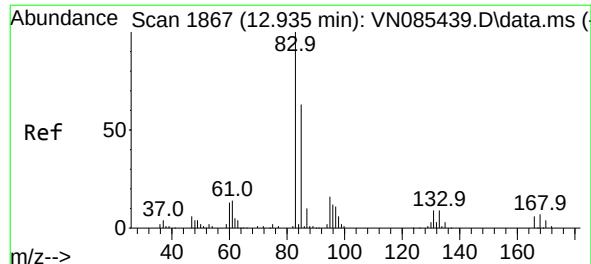
43 100

70 42.5 34.0 51.0

55 26.8 21.4 32.2

61 23.7 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 48.019 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

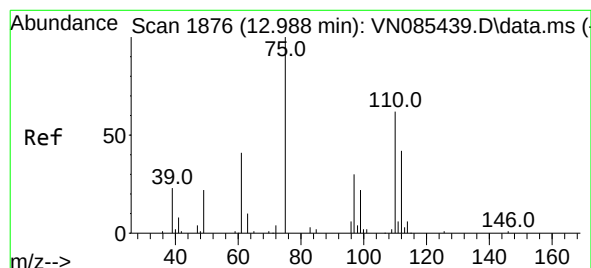
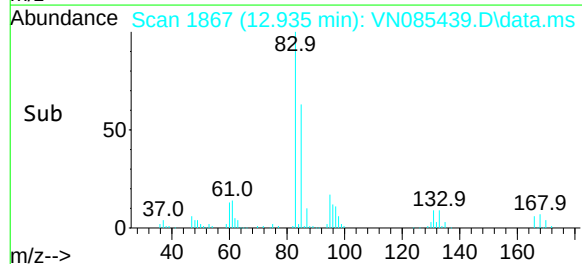
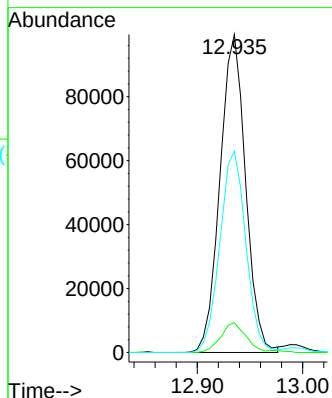
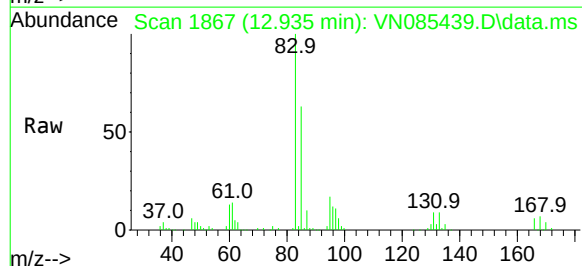
VSTDICCC050

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 167856 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 131      | 9.6   | 4.8   | 14.4   |
| 85       | 64.4  | 32.2  | 96.6   |

Manual Integrations

APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 43.982 ug/l m

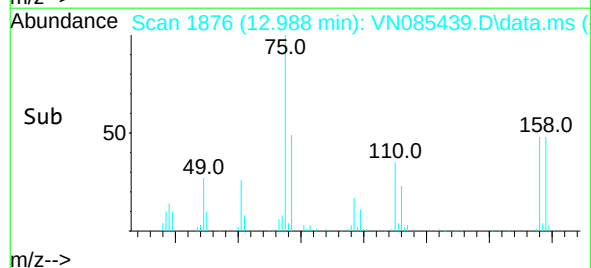
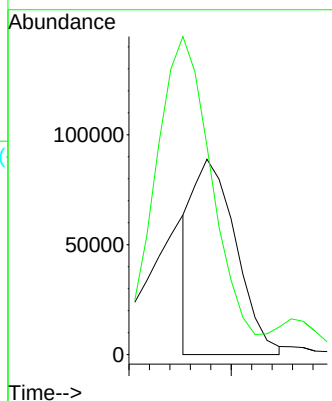
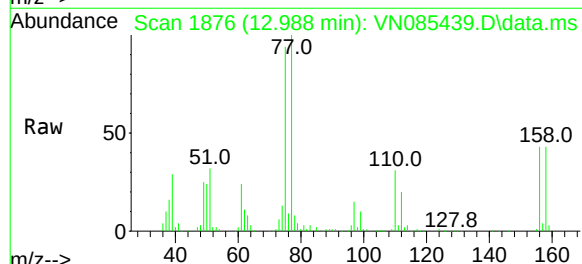
RT: 12.988 min Scan# 1876

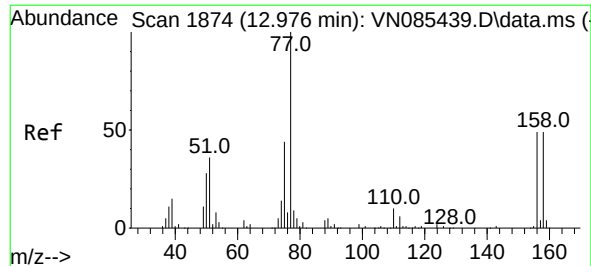
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 130866 |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 77       | 219.5 | 109.7 | 329.2  |





#77

Bromobenzene

Concen: 48.657 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:156 Resp: 125800

Ion Ratio Lower Upper

156 100

77 228.3 114.1 342.4

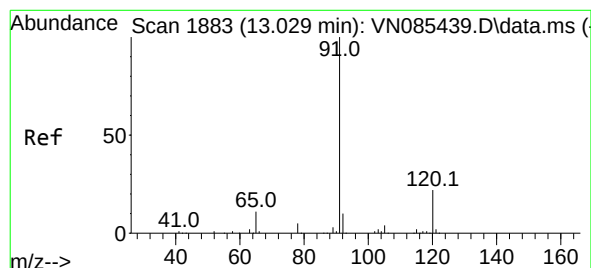
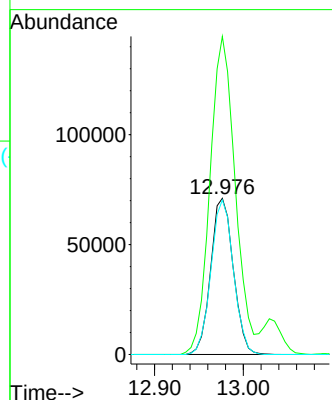
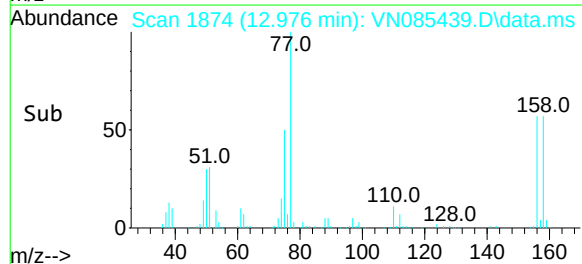
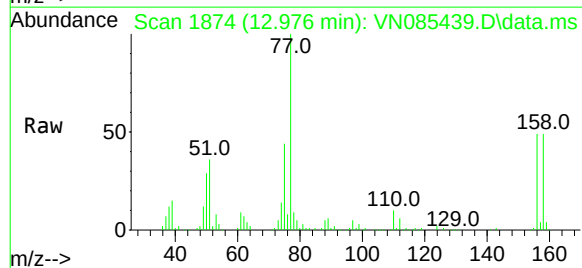
158 97.9 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 51.986 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. 0.000 min

Lab File: VN085439.D

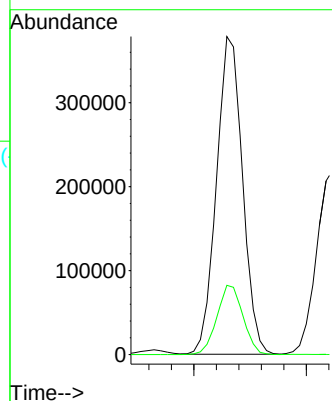
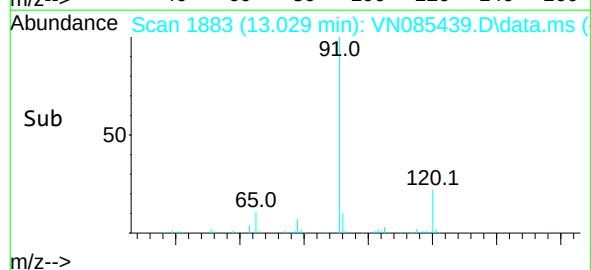
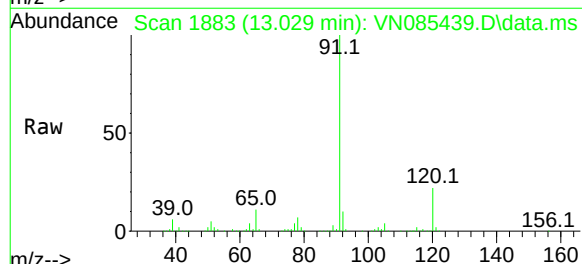
Acq: 14 Jan 2025 15:19

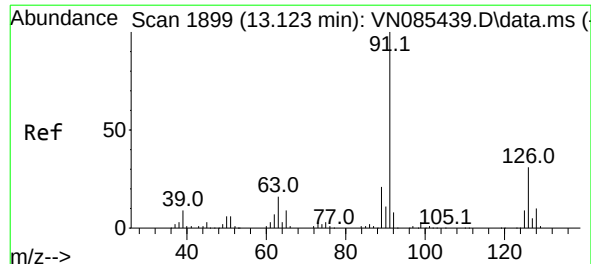
Tgt Ion: 91 Resp: 609022

Ion Ratio Lower Upper

91 100

120 21.7 10.9 32.6





#79

2-Chlorotoluene

Concen: 49.985 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 91 Resp: 378981

Ion Ratio Lower Upper

91 100

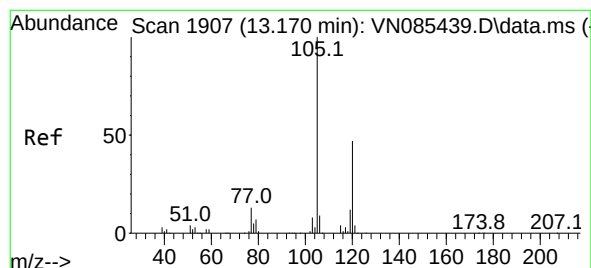
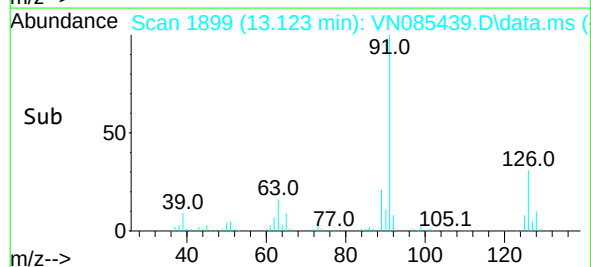
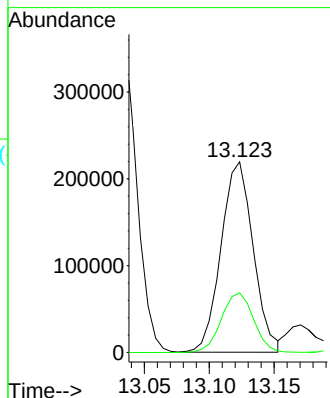
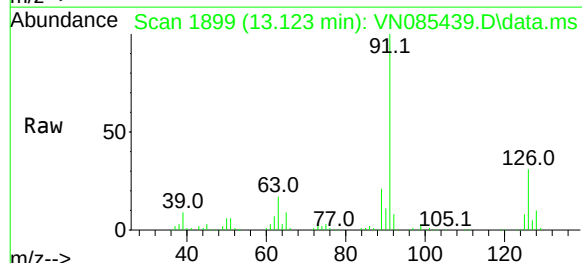
126 31.4 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 52.730 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085439.D

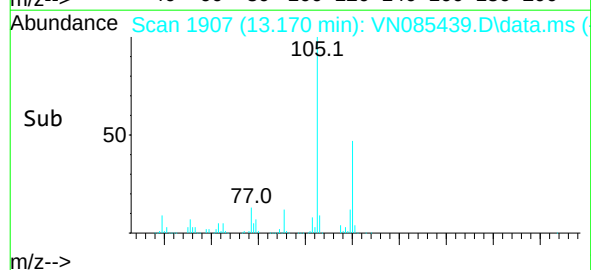
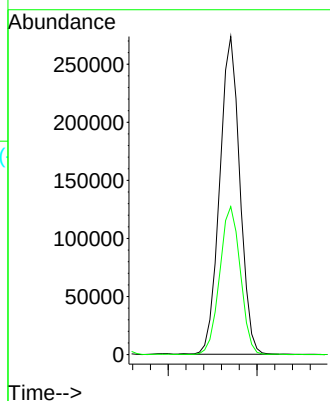
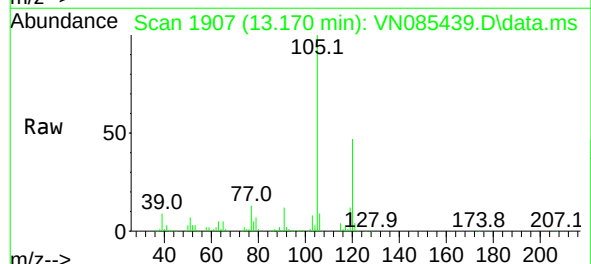
Acq: 14 Jan 2025 15:19

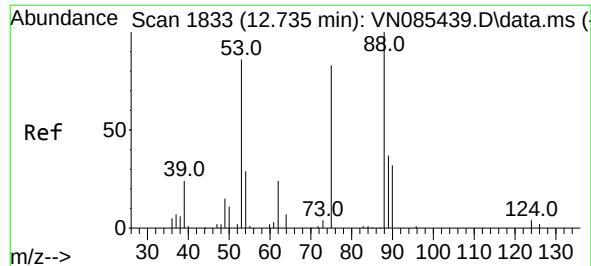
Tgt Ion:105 Resp: 431021

Ion Ratio Lower Upper

105 100

120 47.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 51.914 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

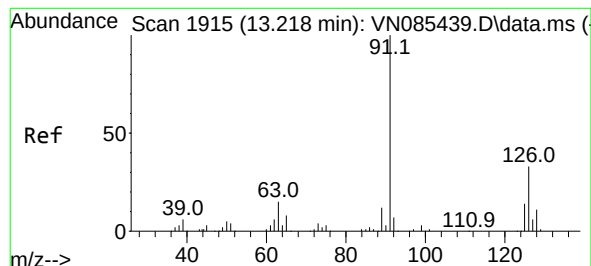
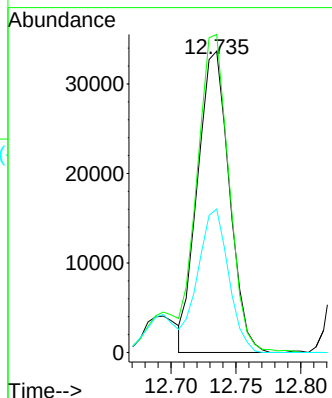
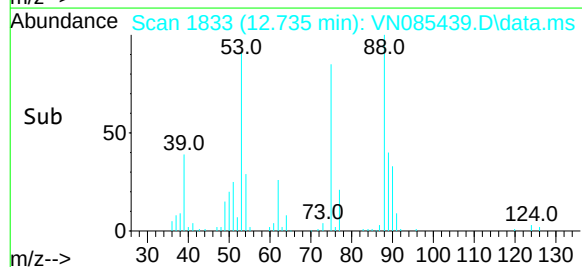
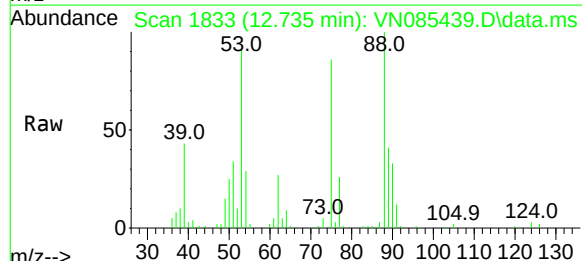
ClientSampleId :

VSTDICCC050

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 57184 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 119.5 | 95.6  | 143.4 |
| 89       | 46.3  | 37.0  | 55.6  |

Manual Integrations  
APPROVED

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



#82

4-Chlorotoluene

Concen: 50.273 ug/l

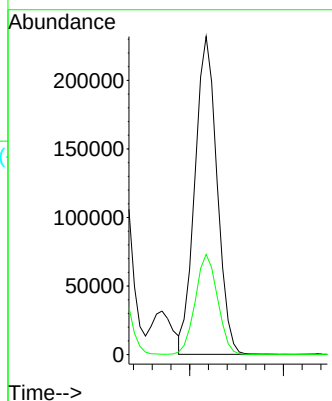
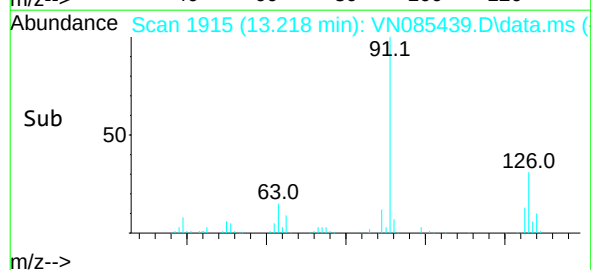
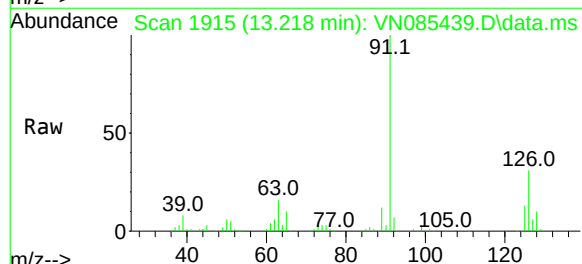
RT: 13.218 min Scan# 1915

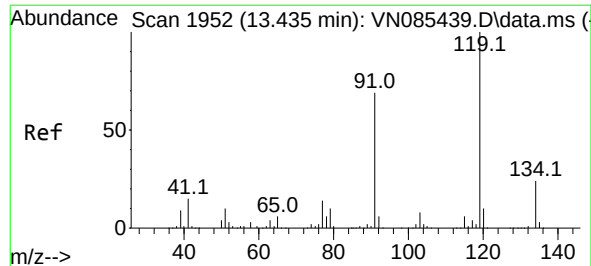
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 379524 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 126      | 31.8  | 15.9  | 47.7   |





#83

tert-Butylbenzene

Concen: 52.090 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:119 Resp: 357563

Ion Ratio Lower Upper

119 100

91 70.2 35.1 105.3

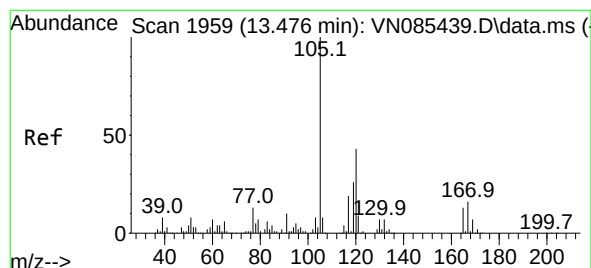
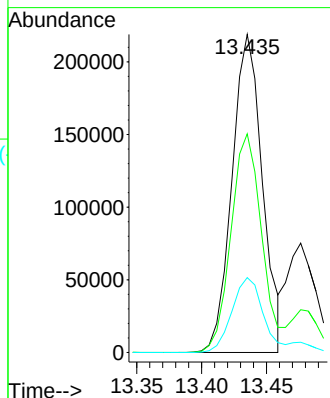
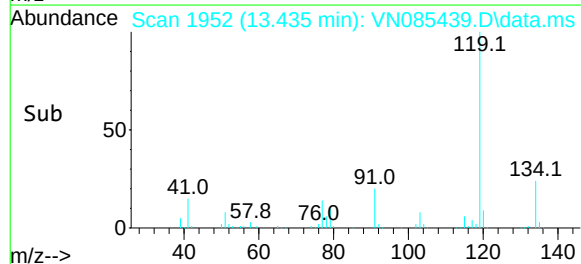
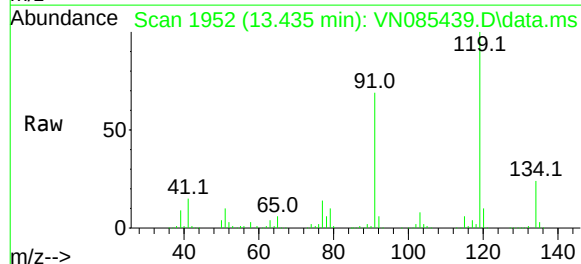
134 24.1 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 54.275 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. 0.000 min

Lab File: VN085439.D

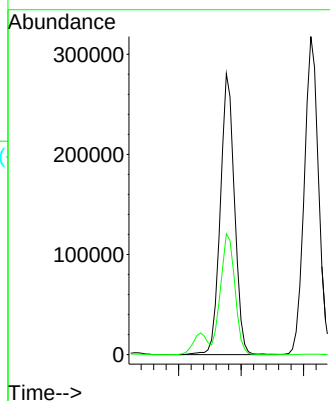
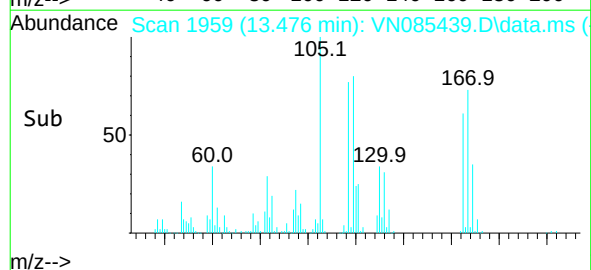
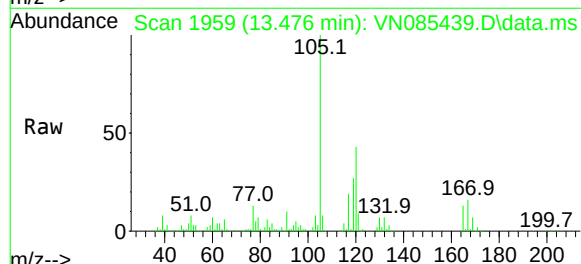
Acq: 14 Jan 2025 15:19

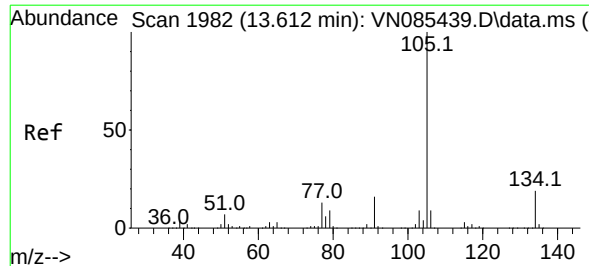
Tgt Ion:105 Resp: 442175

Ion Ratio Lower Upper

105 100

120 43.3 21.6 65.0





#85

sec-Butylbenzene

Concen: 52.719 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:105 Resp: 501561

Ion Ratio Lower Upper

105 100

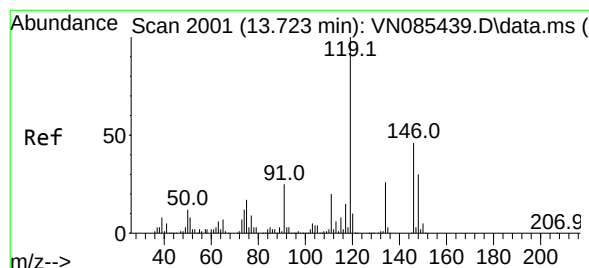
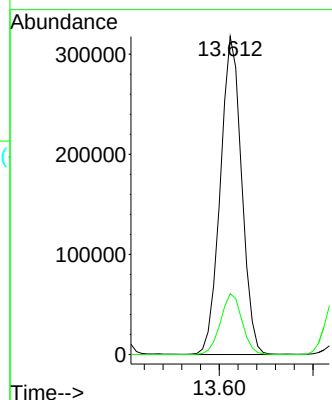
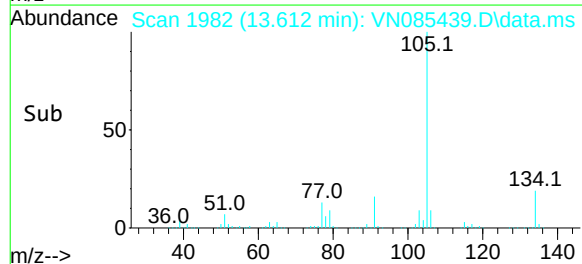
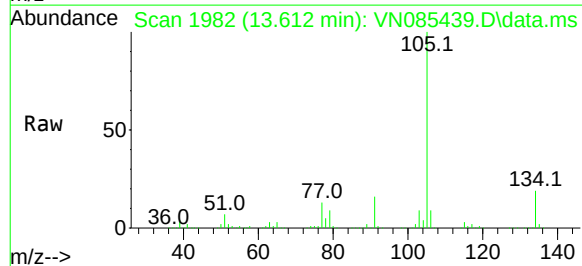
134 19.3 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 49.240 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

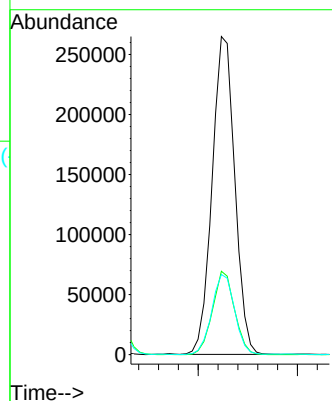
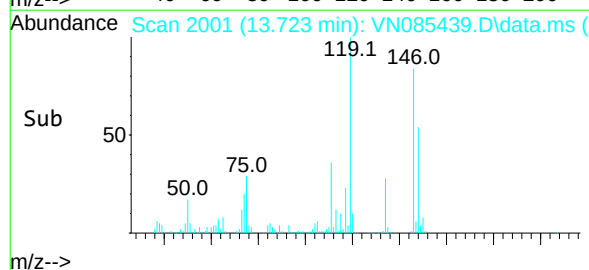
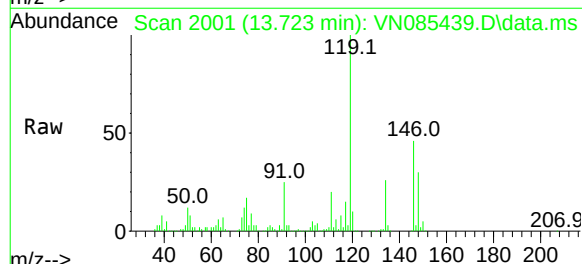
Tgt Ion:119 Resp: 421052

Ion Ratio Lower Upper

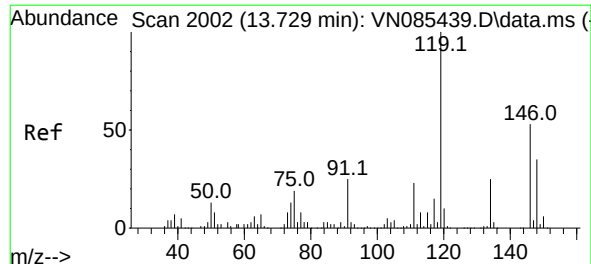
119 100

134 25.3 12.7 38.0

91 25.4 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 48.204 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

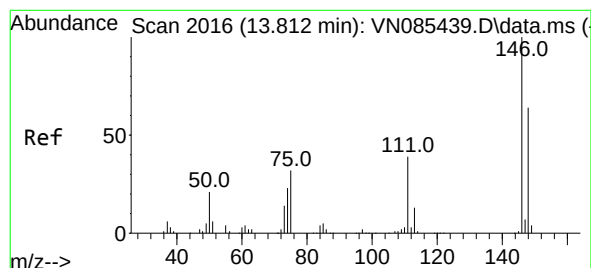
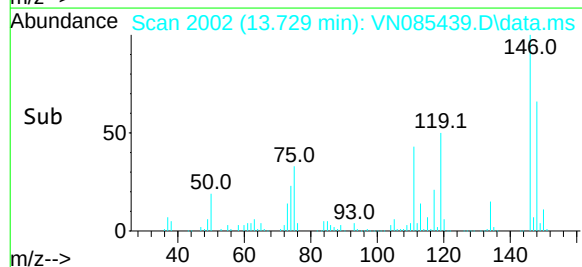
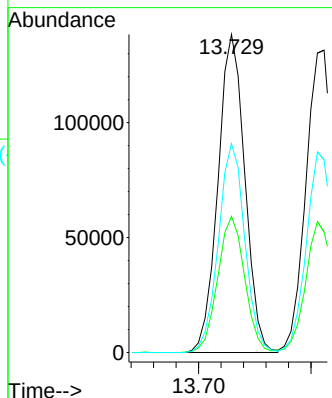
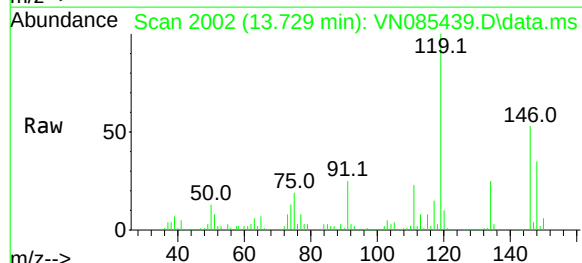
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 229518 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 42.9  | 21.4  | 64.3   |
| 148      | 64.6  | 32.3  | 96.9   |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 46.416 ug/l

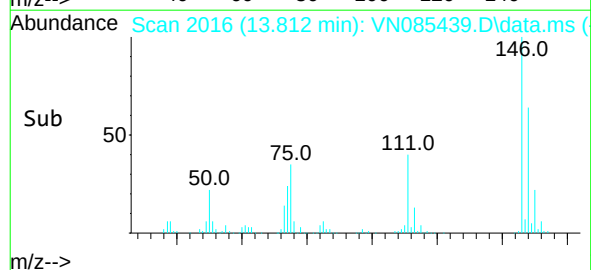
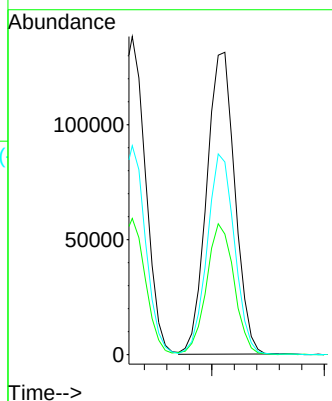
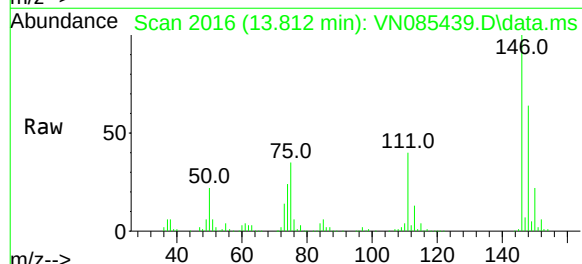
RT: 13.812 min Scan# 2016

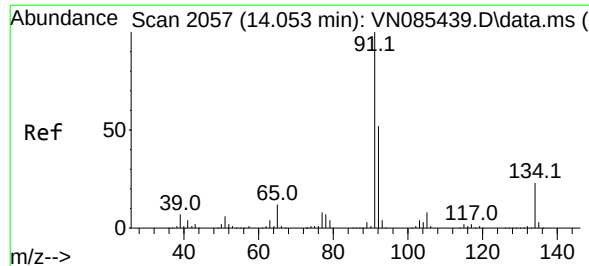
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 229084 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 42.5  | 21.3  | 63.7   |
| 148      | 64.7  | 32.4  | 97.0   |





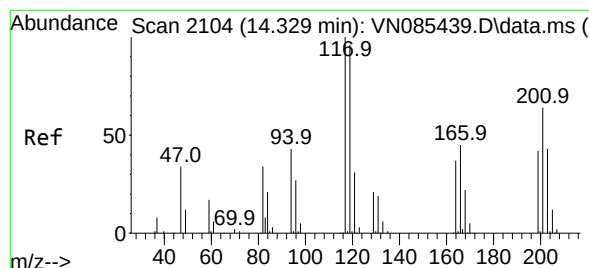
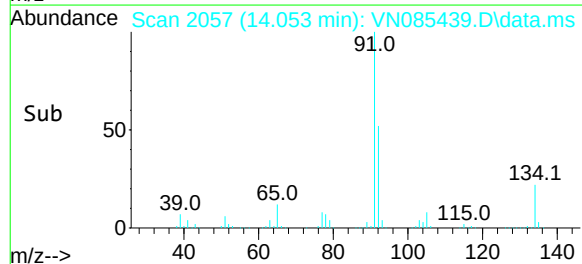
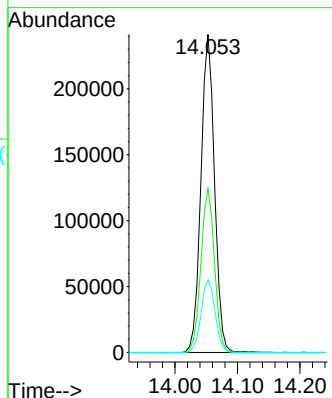
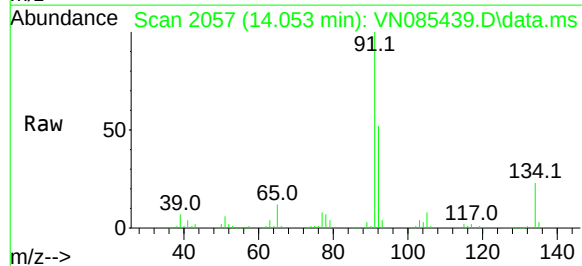
#89  
n-Butylbenzene  
Concen: 53.348 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

| Tgt Ion:  | 91    | Resp: | 364111 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 92        | 51.5  | 25.8  | 77.3   |
| 134       | 23.4  | 11.7  | 35.1   |

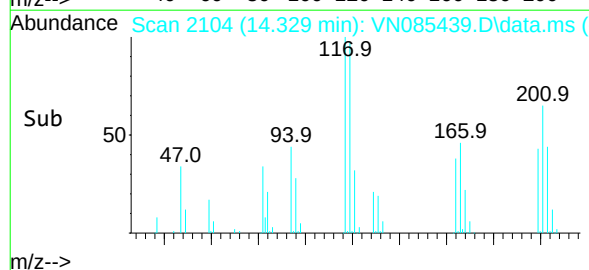
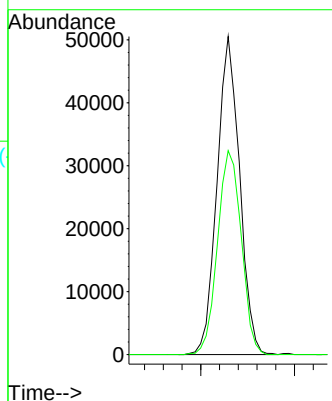
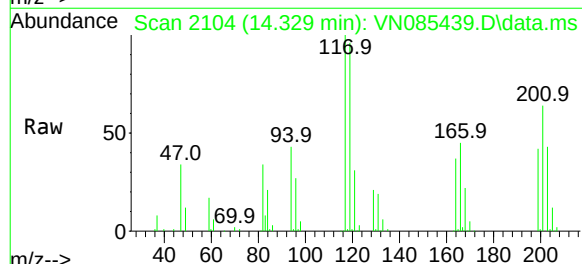
Manual Integrations  
APPROVED

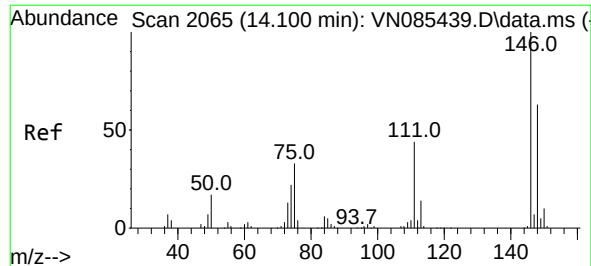
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#90  
Hexachloroethane  
Concen: 46.712 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

| Tgt Ion:  | 117   | Resp: | 84602 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 67.3  | 33.7  | 101.0 |





#91

1,2-Dichlorobenzene

Concen: 48.012 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

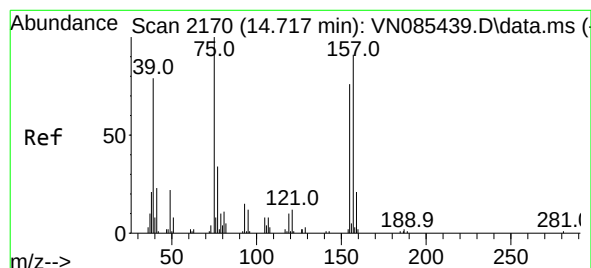
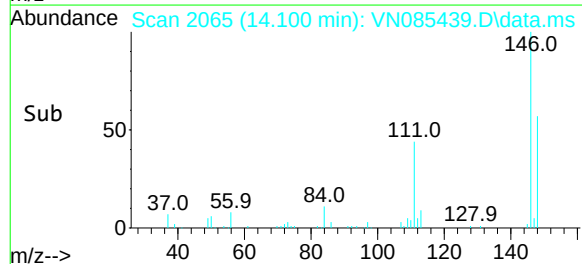
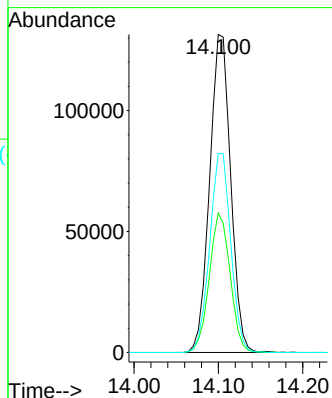
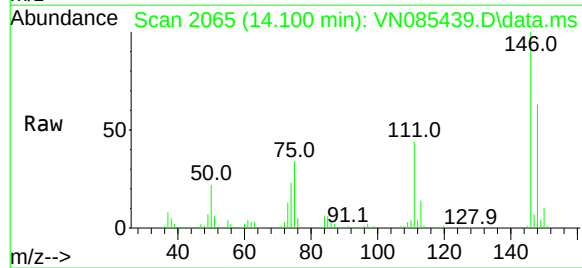
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 228024 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 43.4  | 21.7  | 65.1   |
| 148      | 62.8  | 31.4  | 94.2   |

## Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 50.971 ug/l

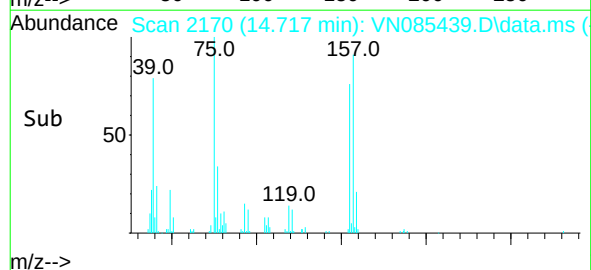
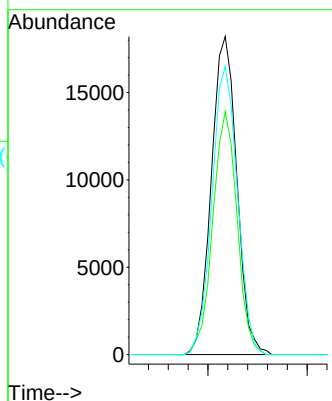
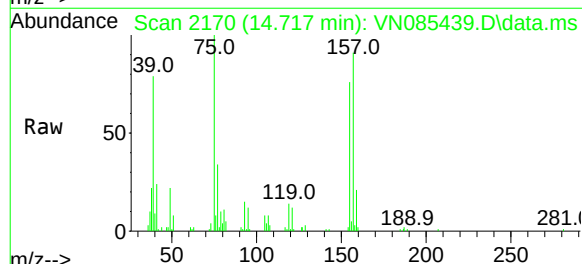
RT: 14.717 min Scan# 2170

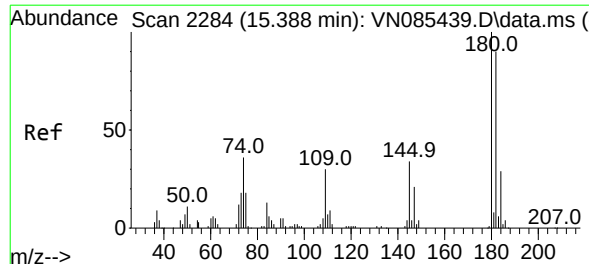
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 32536 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 155      | 72.8  | 36.4  | 109.2 |
| 157      | 90.7  | 45.4  | 136.1 |





#93

1,2,4-Trichlorobenzene

Concen: 51.857 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:180 Resp: 114468

Ion Ratio Lower Upper

180 100

182 93.5 46.8 140.3

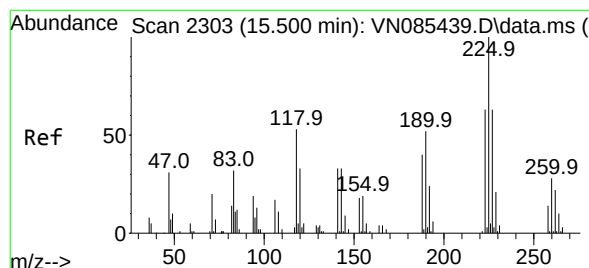
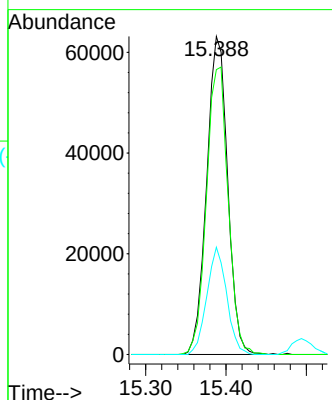
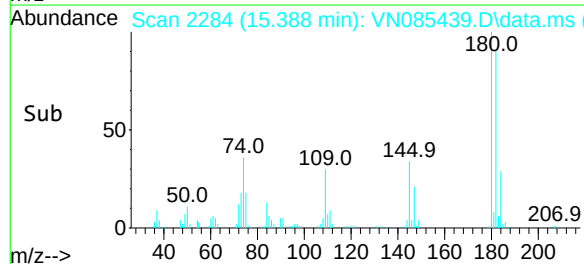
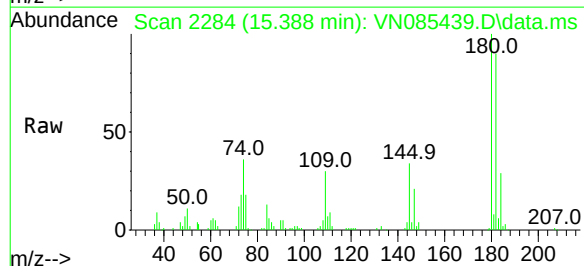
145 32.0 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 45.947 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

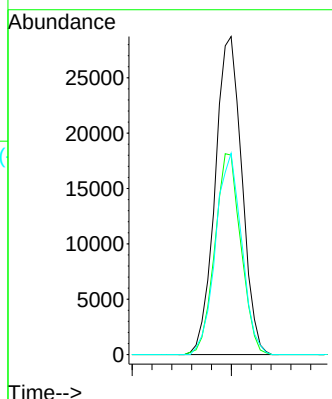
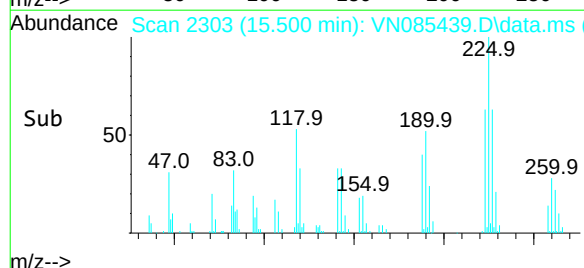
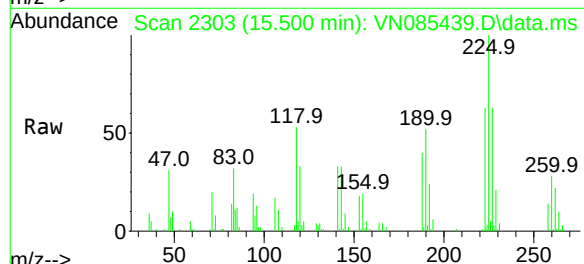
Tgt Ion:225 Resp: 53846

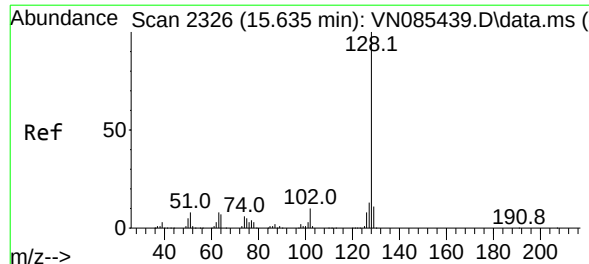
Ion Ratio Lower Upper

225 100

223 61.4 30.7 92.1

227 61.7 30.9 92.5





#95

Naphthalene

Concen: 55.243 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion:128 Resp: 363882

Ion Ratio Lower Upper

128 100

127 13.3 10.6 16.0

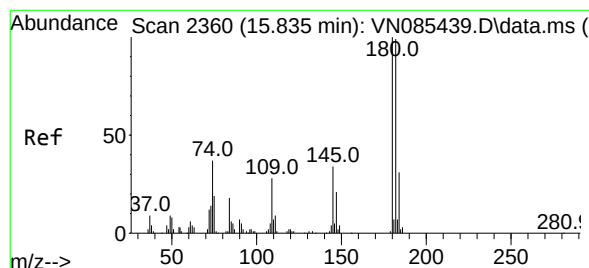
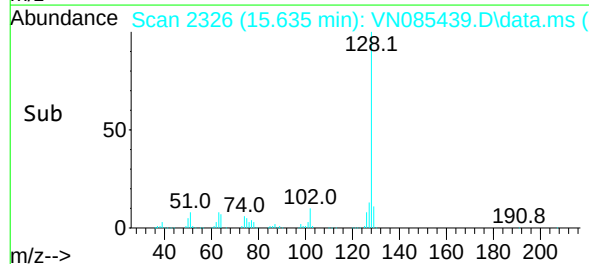
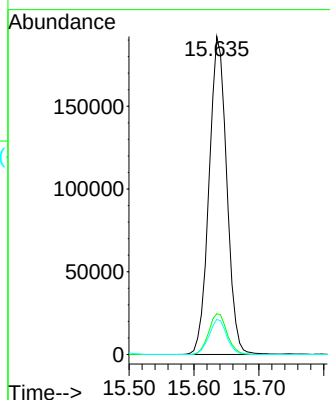
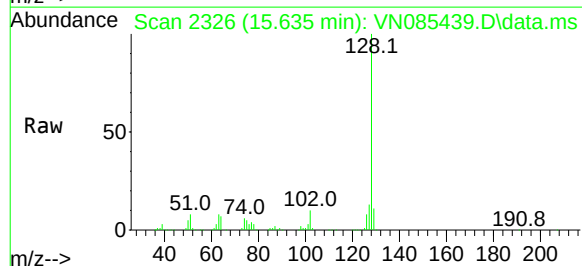
129 11.0 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 51.601 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

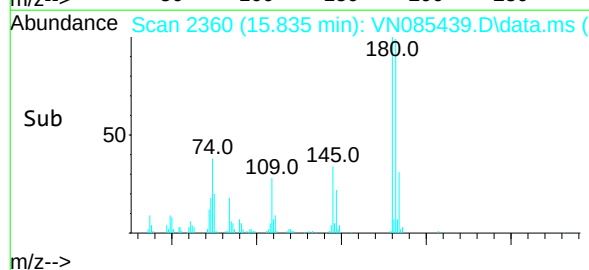
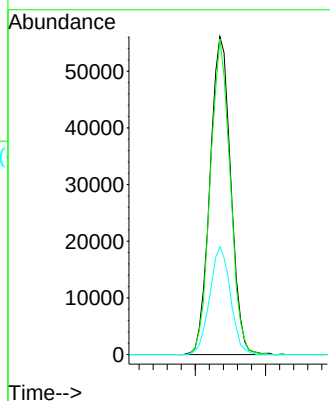
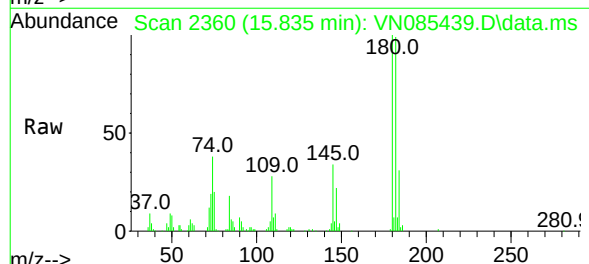
Tgt Ion:180 Resp: 115251

Ion Ratio Lower Upper

180 100

182 94.8 47.4 142.2

145 33.8 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085440.D  
 Acq On : 14 Jan 2025 15:43  
 Operator : JC\MD  
 Sample : VSTDICC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:43:07 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 200796   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 340593   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 296298   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 143526   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 60593    | 18.694   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 37.380%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 45655    | 19.322   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 38.640%# |
| 50) Toluene-d8              | 10.559 | 98    | 164391   | 19.581   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 39.160%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 55798    | 19.430   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 38.860%# |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 54666   | 20.107  | ug/l   | 98  |
| 3) Chloromethane             | 2.359 | 50  | 58426   | 19.848  | ug/l   | 100 |
| 4) Vinyl Chloride            | 2.512 | 62  | 58403   | 19.739  | ug/l   | 99  |
| 5) Bromomethane              | 2.954 | 94  | 36440   | 20.389  | ug/l   | 94  |
| 6) Chloroethane              | 3.118 | 64  | 37594   | 20.041  | ug/l   | 93  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 88121   | 20.526  | ug/l   | 99  |
| 8) Diethyl Ether             | 3.965 | 74  | 29138   | 19.647  | ug/l   | 98  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 48933   | 20.237  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 56567   | 20.428  | ug/l   | 93  |
| 11) Tert butyl alcohol       | 5.506 | 59  | 37984   | 102.342 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 44670   | 20.728  | ug/l   | 95  |
| 13) Acrolein                 | 4.171 | 56  | 49649   | 97.995  | ug/l   | 99  |
| 14) Allyl chloride           | 5.024 | 41  | 67705   | 19.362  | ug/l   | 96  |
| 15) Acrylonitrile            | 5.712 | 53  | 121626  | 103.171 | ug/l   | 99  |
| 16) Acetone                  | 4.424 | 43  | 101065  | 96.502  | ug/l   | 96  |
| 17) Carbon Disulfide         | 4.712 | 76  | 132300  | 19.939  | ug/l   | 98  |
| 18) Methyl Acetate           | 5.018 | 43  | 60873   | 19.115  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether  | 5.795 | 73  | 148847  | 21.272  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.271 | 84  | 52813   | 20.370  | ug/l   | 97  |
| 21) trans-1,2-Dichloroethene | 5.789 | 96  | 46115   | 20.023  | ug/l   | 98  |
| 22) Diisopropyl ether        | 6.671 | 45  | 166719  | 21.480  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.594 | 43  | 588567m | 107.984 | ug/l   |     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 96875   | 20.469  | ug/l # | 96  |
| 25) 2-Butanone               | 7.477 | 43  | 159952  | 103.786 | ug/l   | 98  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 79145   | 20.684  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 57454   | 21.180  | ug/l   | 98  |
| 28) Bromochloromethane       | 7.812 | 49  | 41181   | 18.703  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.836 | 42  | 104792  | 107.247 | ug/l   | 99  |
| 30) Chloroform               | 7.959 | 83  | 99655   | 20.374  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 82980   | 20.173  | ug/l   | 97  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 87659   | 20.431  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 67949   | 20.490  | ug/l   | 98  |
| 37) Ethyl Acetate            | 7.553 | 43  | 66443   | 19.850  | ug/l   | 96  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 78842   | 20.767  | ug/l   | 96  |
| 39) Methylcyclohexane        | 9.594 | 83  | 65012   | 20.862  | ug/l   | 96  |
| 40) Benzene                  | 8.600 | 78  | 207985  | 20.873  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085440.D  
 Acq On : 14 Jan 2025 15:43  
 Operator : JC\MD  
 Sample : VSTDICC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:43:07 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 36578    | 21.004  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 78402    | 20.891  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 109131   | 20.347  | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 48009    | 20.699  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 52833    | 20.758  | ug/l   | 93       |
| 46) Dibromomethane            | 9.700  | 93   | 37721    | 20.540  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 78918    | 21.093  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.677  | 41   | 50224    | 20.808  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 17140    | 421.686 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 336911   | 108.249 | ug/l   | 100      |
| 52) Toluene                   | 10.630 | 92   | 125172   | 21.680  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 74129    | 20.965  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 81897    | 21.684  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 48039    | 21.025  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 70934    | 19.649  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 84210    | 21.196  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 153681   | 105.991 | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 240595   | 109.863 | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 56069    | 20.326  | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 48465    | 21.309  | ug/l   | 96       |
| 64) Tetrachloroethene         | 11.100 | 164  | 43243    | 21.408  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 136809   | 21.077  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 48370    | 20.304  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.959 | 91   | 229978   | 21.753  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.071 | 106  | 177755   | 45.494  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 84548    | 22.643  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 140581   | 22.749  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 36961    | 21.683  | ug/l # | 96       |
| 73) Isopropylbenzene          | 12.694 | 105  | 211354   | 21.819  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 94292    | 21.656  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 68151    | 19.917  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 64180m   | 22.036  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 52022    | 20.556  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 252610   | 22.028  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 158511   | 21.358  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 180294   | 22.533  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 22178m   | 20.569  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 161880   | 21.906  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 147541   | 21.958  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 183144   | 22.965  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 209133   | 22.457  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 168888   | 21.661  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 97652    | 20.952  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 98321    | 20.351  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 142673   | 21.355  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 35205    | 19.858  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 94954    | 20.425  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12859    | 20.580  | ug/l   | 100      |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 45878    | 21.233  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 22719    | 19.805  | ug/l   | 95       |
| 95) Naphthalene               | 15.635 | 128  | 134793   | 20.906  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 45468    | 20.797  | ug/l   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085440.D  
Acq On : 14 Jan 2025 15:43  
Operator : JC\MD  
Sample : VSTDICC020  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:43:07 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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



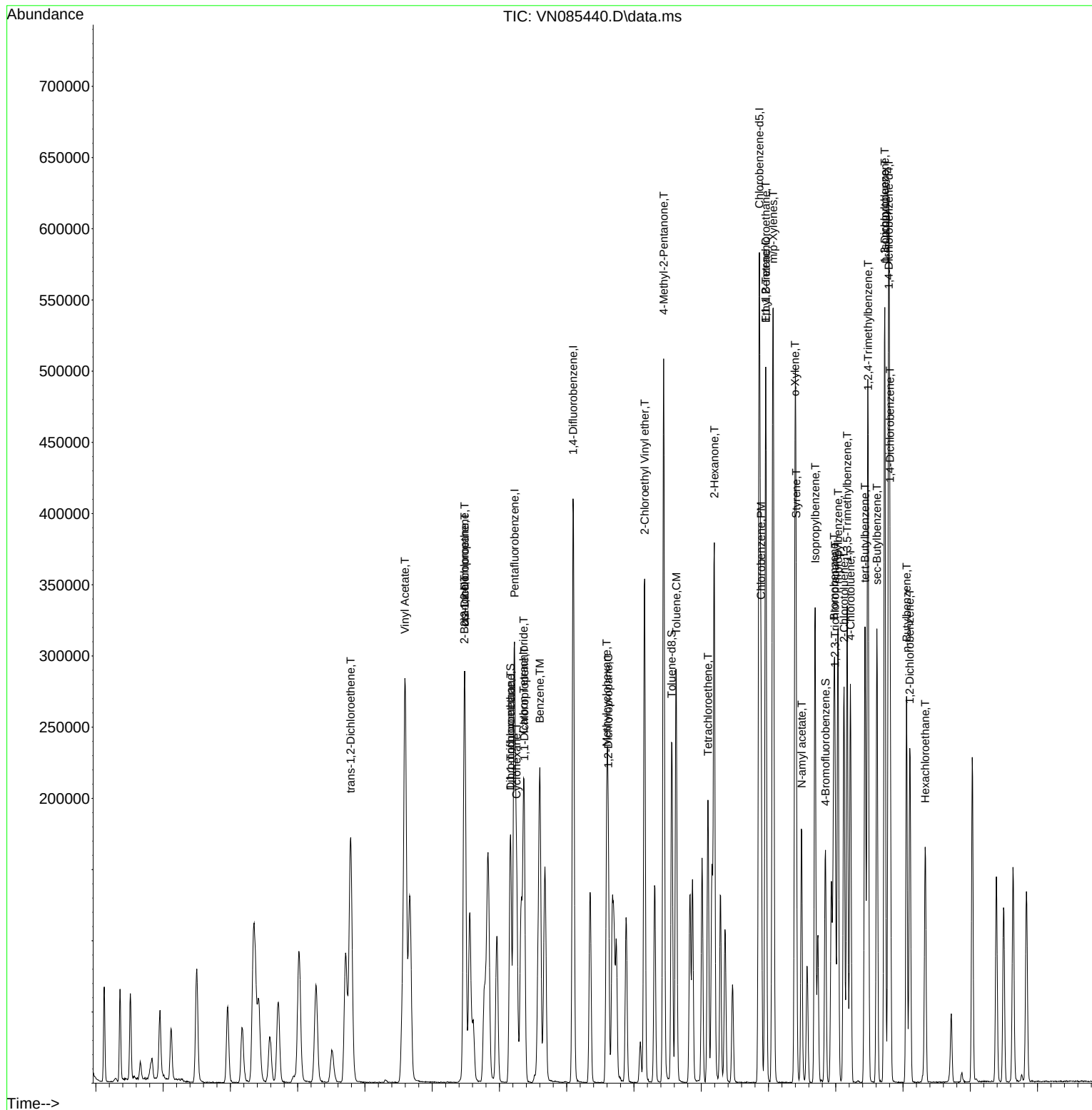
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Operator  : JC\MD  
Sample    : VSTDICC020  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6   Sample Multiplier: 1
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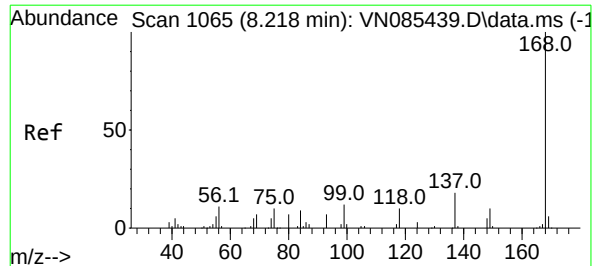
**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC020

## Manual Integrations

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

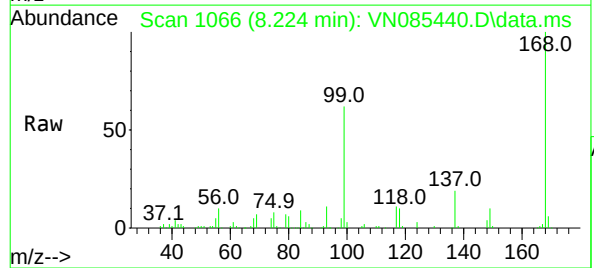
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

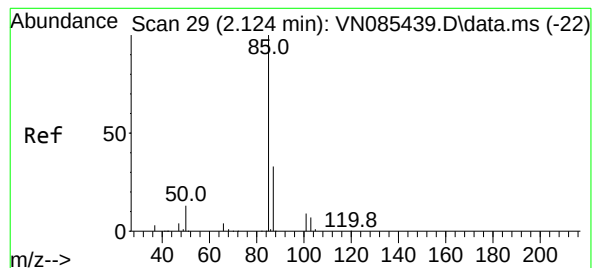
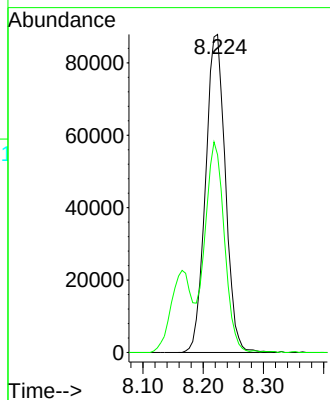
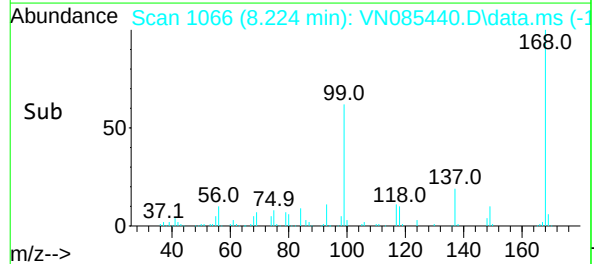
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020



Tgt Ion: 168 Resp: 200796  
Ion Ratio Lower Upper  
168 100  
99 62.2 53.6 80.4

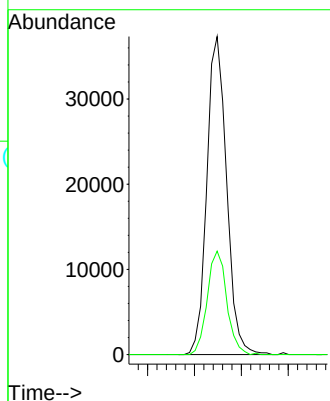
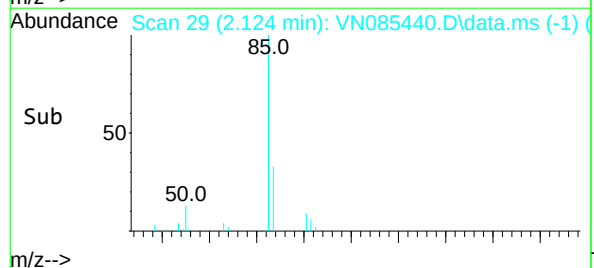
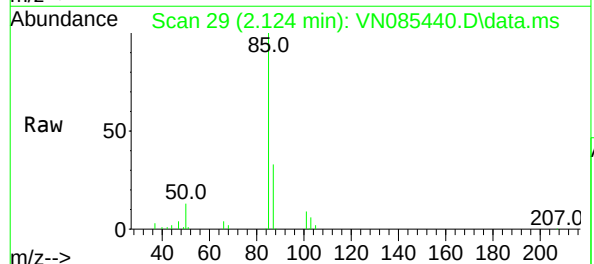
Manual Integrations  
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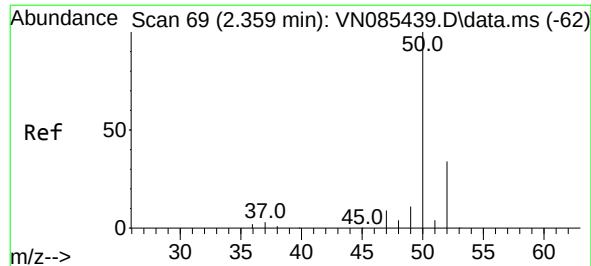
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#2  
Dichlorodifluoromethane  
Concen: 20.107 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 85 Resp: 54666  
Ion Ratio Lower Upper  
85 100  
87 32.5 16.7 50.1





#3

Chloromethane

Concen: 19.848 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 50 Resp: 58426

Ion Ratio Lower Upper

50 100

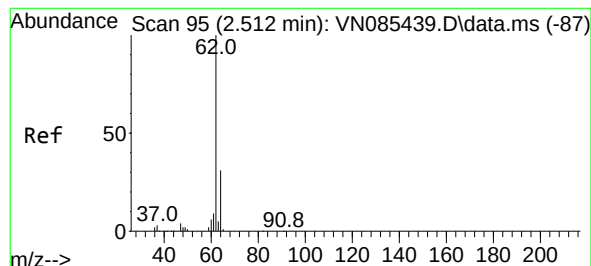
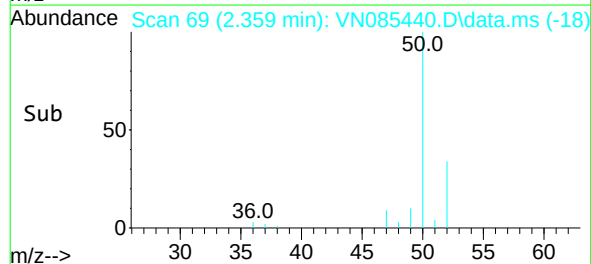
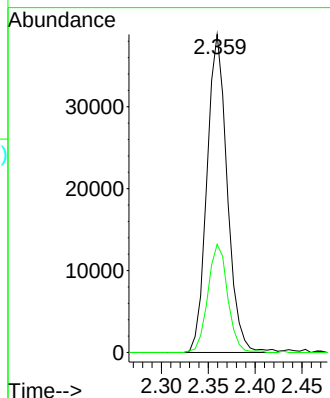
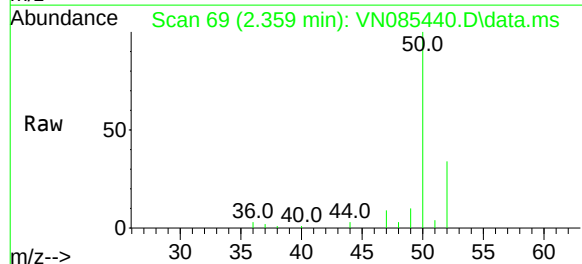
52 34.0 27.0 40.6

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 19.739 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085440.D

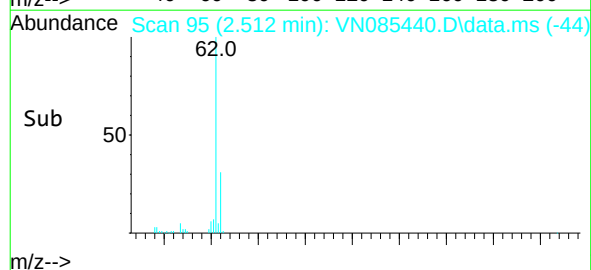
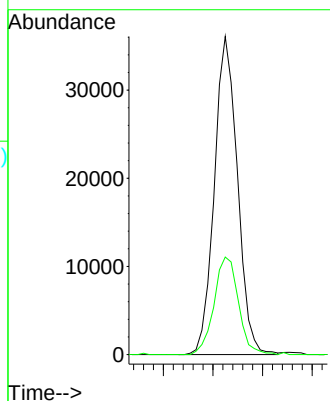
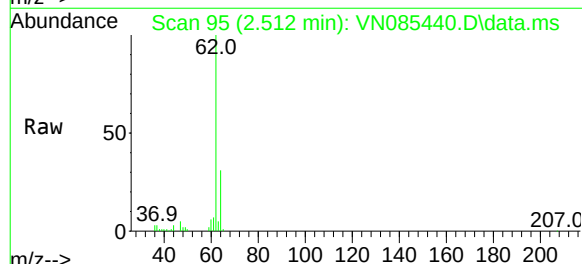
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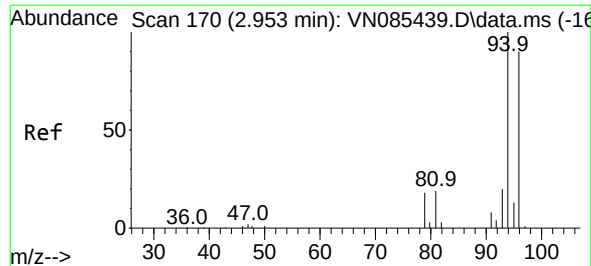
Tgt Ion: 62 Resp: 58403

Ion Ratio Lower Upper

62 100

64 30.7 24.8 37.2





#5

Bromomethane

Concen: 20.389 ug/l

RT: 2.954 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 94 Resp: 36440

Ion Ratio Lower Upper

94 100

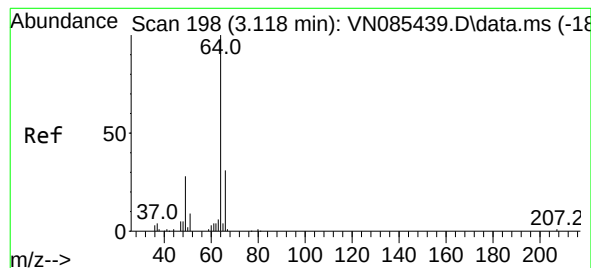
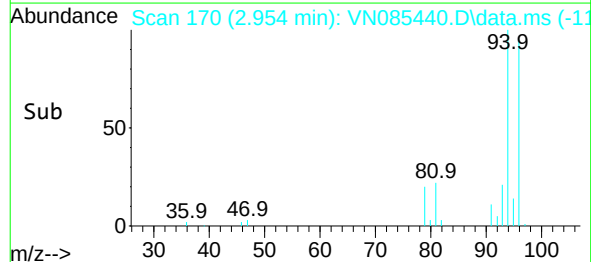
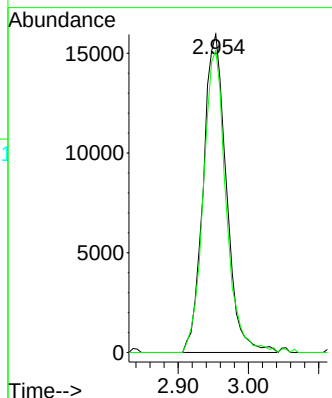
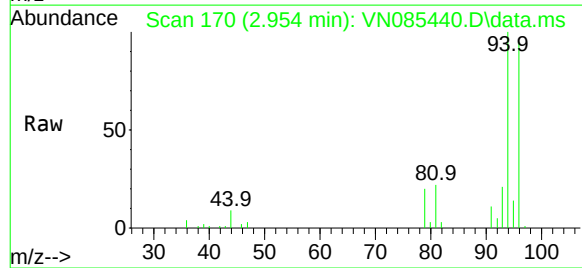
96 94.9 71.8 107.6

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 20.041 ug/l

RT: 3.118 min Scan# 198

Delta R.T. 0.000 min

Lab File: VN085440.D

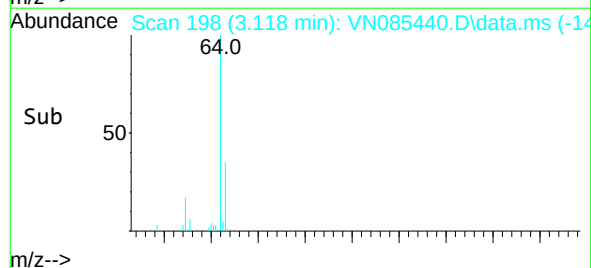
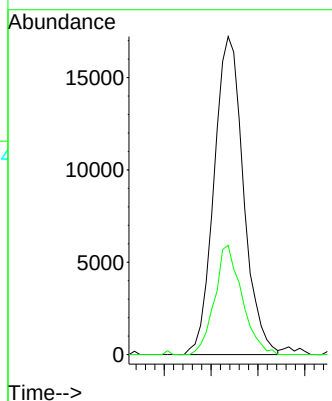
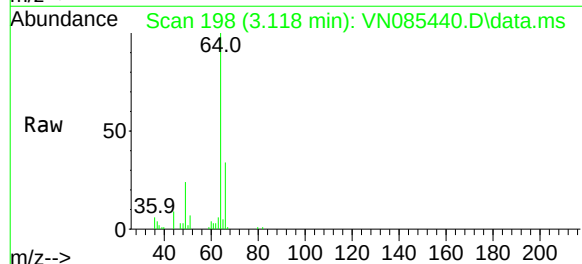
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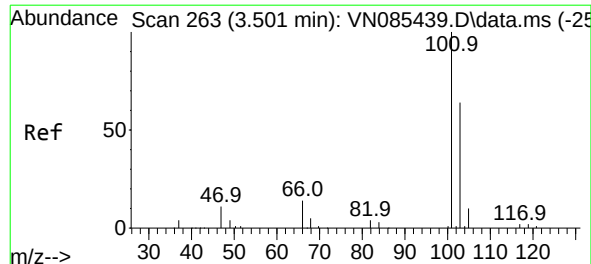
Tgt Ion: 64 Resp: 37594

Ion Ratio Lower Upper

64 100

66 34.3 24.6 36.8





#7

Trichlorofluoromethane

Concen: 20.526 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion:101 Resp: 88121

Ion Ratio Lower Upper

101 100

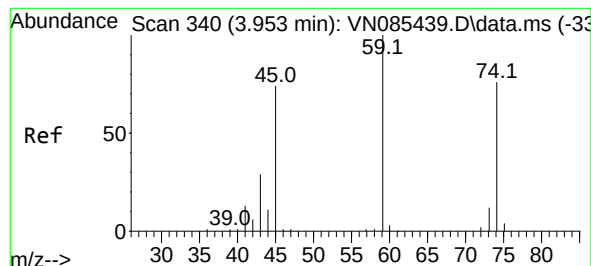
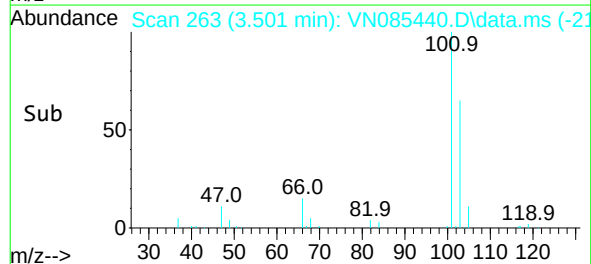
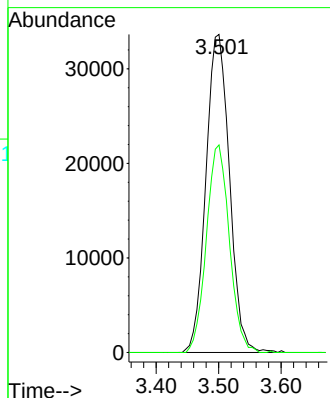
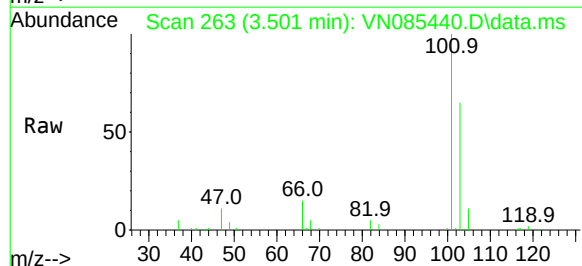
103 65.3 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 19.647 ug/l

RT: 3.965 min Scan# 342

Delta R.T. 0.012 min

Lab File: VN085440.D

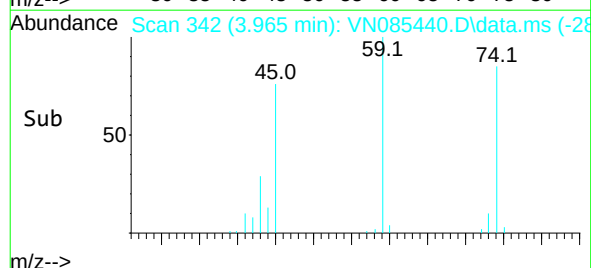
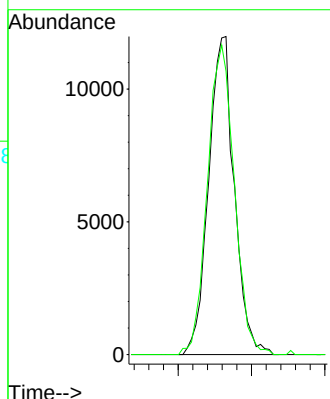
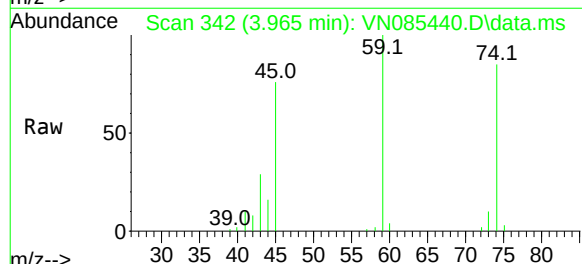
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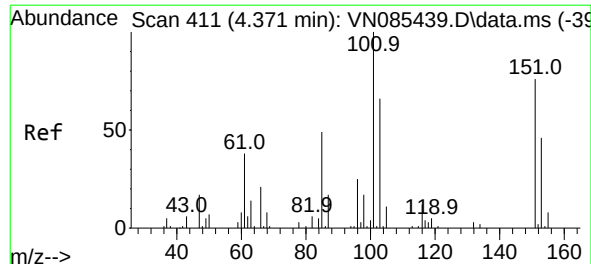
Tgt Ion: 74 Resp: 29138

Ion Ratio Lower Upper

74 100

45 101.8 49.7 149.1





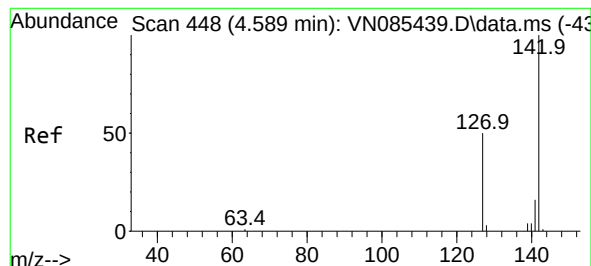
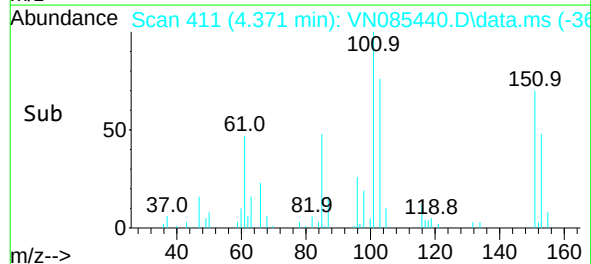
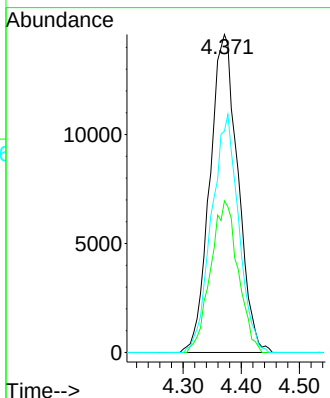
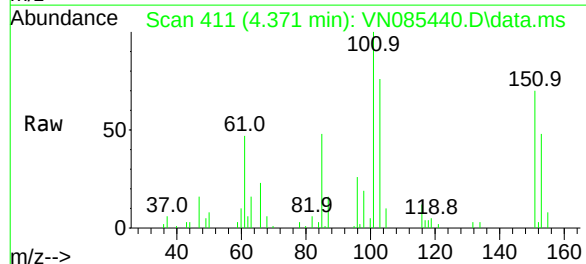
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.237 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

| Tgt Ion   | 101  | Resp | 48933 |
|-----------|------|------|-------|
| Ion Ratio | 100  |      |       |
| 85        | 46.6 | 37.8 | 56.8  |
| 151       | 72.1 | 58.8 | 88.2  |

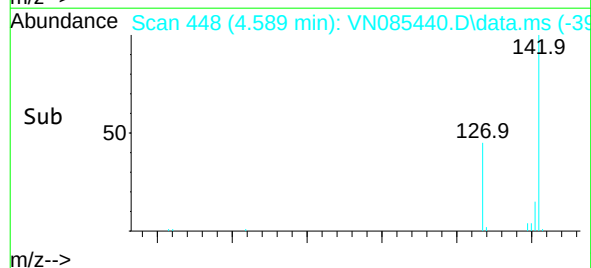
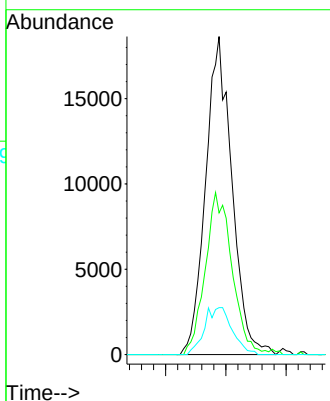
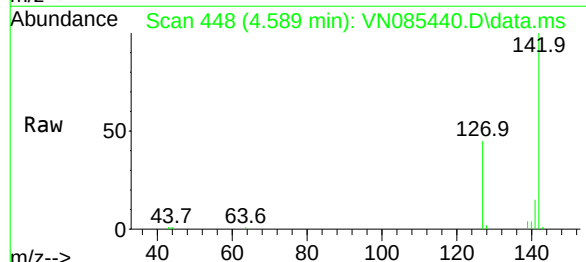
Manual Integrations  
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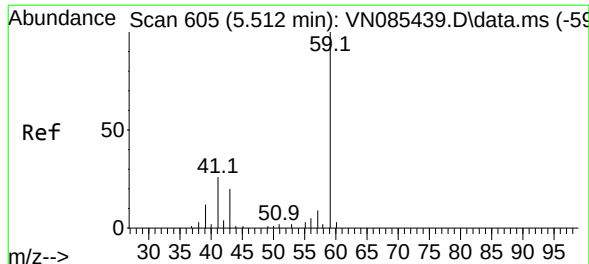
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#10  
Methyl Iodide  
Concen: 20.428 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

| Tgt Ion                                    | 142  | Resp | 56567 |
|--------------------------------------------|------|------|-------|
| Ion Ratio <td>100</td> <td></td> <td></td> | 100  |      |       |
| 127                                        | 44.6 | 40.3 | 60.5  |
| 141                                        | 14.8 | 12.8 | 19.2  |





#11

Tert butyl alcohol

Concen: 102.342 ug/l

RT: 5.506 min Scan# 605

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 59 Resp: 37984

Ion Ratio Lower Upper

59 100

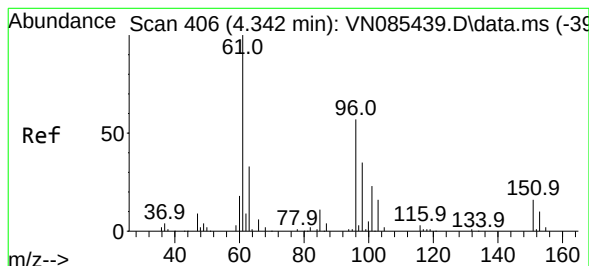
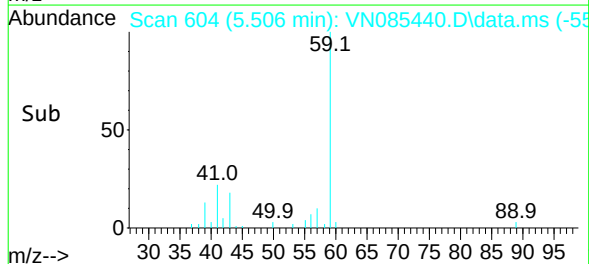
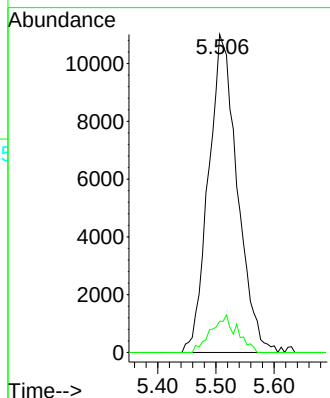
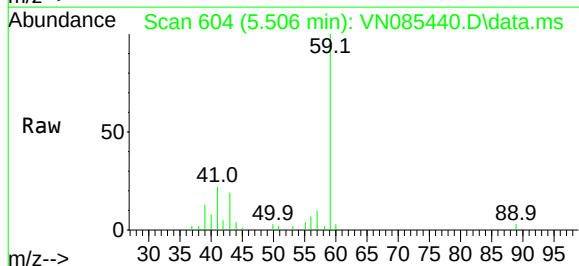
57 10.7 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 20.728 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

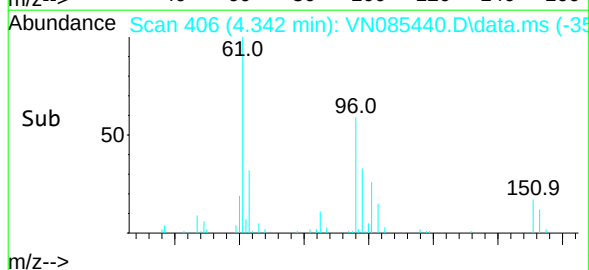
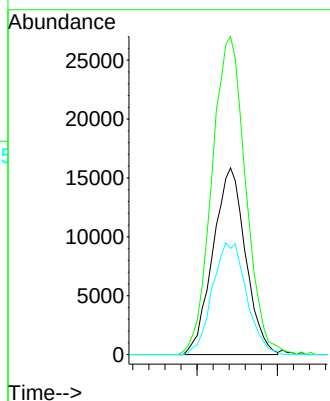
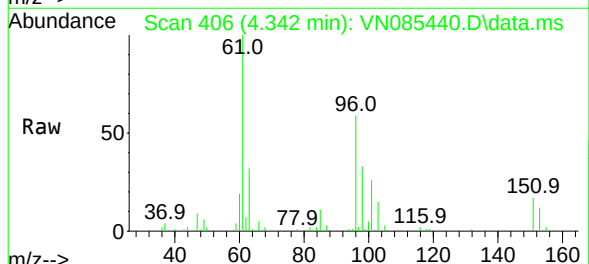
Tgt Ion: 96 Resp: 44670

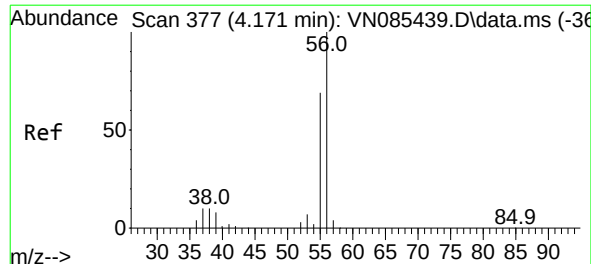
Ion Ratio Lower Upper

96 100

61 170.3 141.0 211.4

98 56.8 49.0 73.6





#13

Acrolein

Concen: 97.995 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 56 Resp: 49649

Ion Ratio Lower Upper

56 100

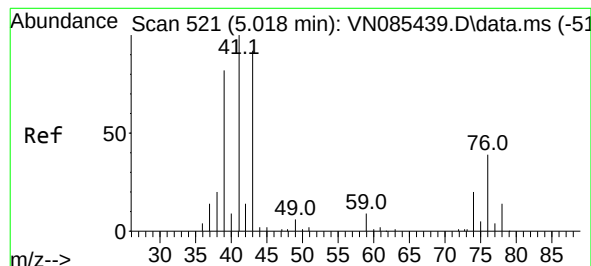
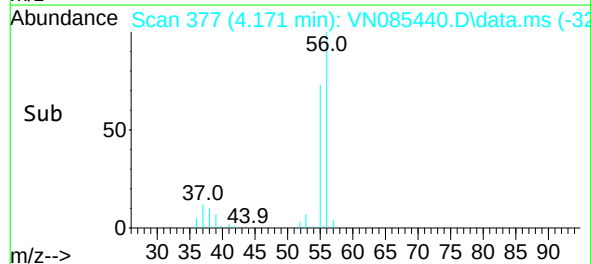
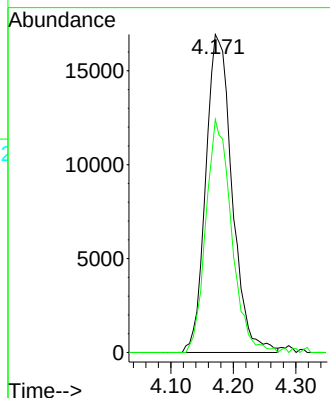
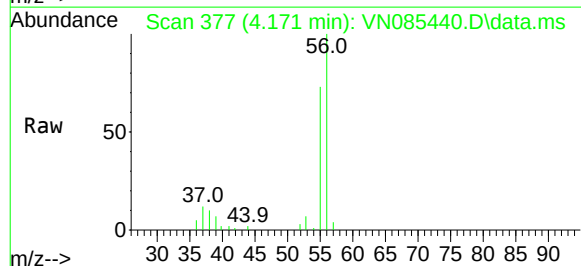
55 71.4 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 19.362 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

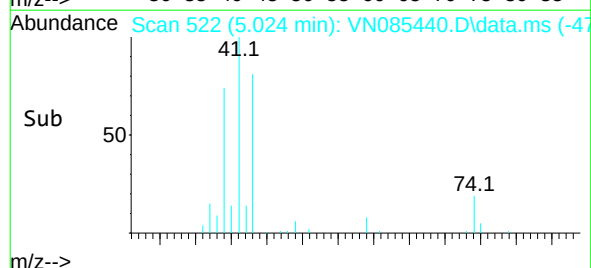
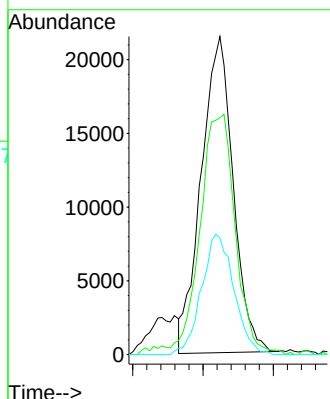
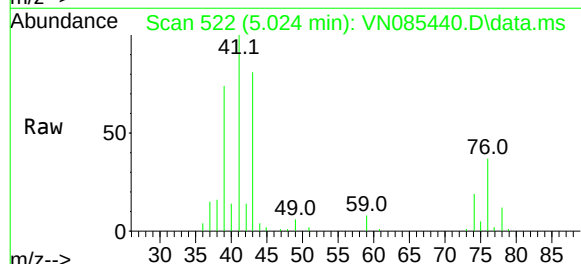
Tgt Ion: 41 Resp: 67705

Ion Ratio Lower Upper

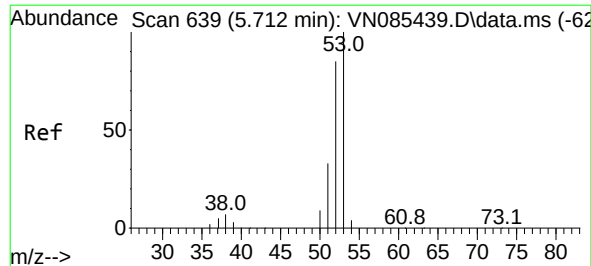
41 100

39 85.0 64.4 96.6

76 38.6 30.5 45.7







#15

Acrylonitrile

Concen: 103.171 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 53 Resp: 121626

Ion Ratio Lower Upper

53 100

52 81.1 65.5 98.3

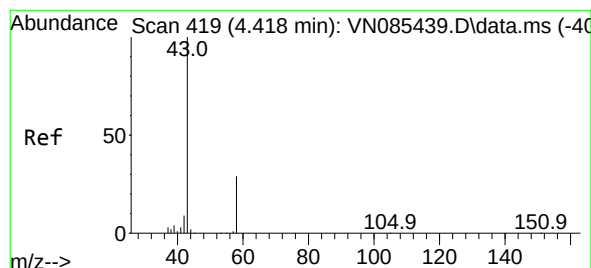
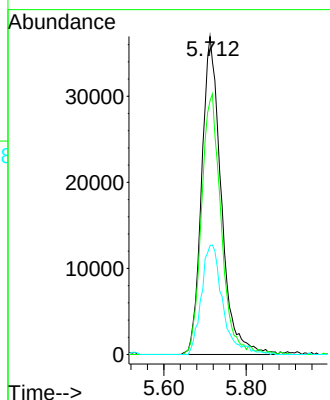
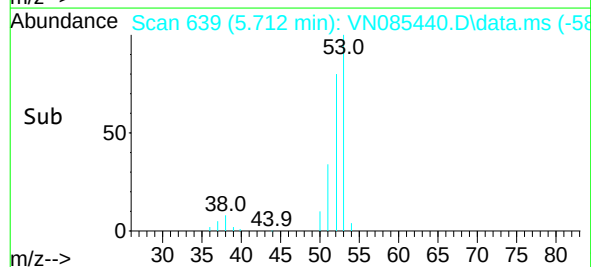
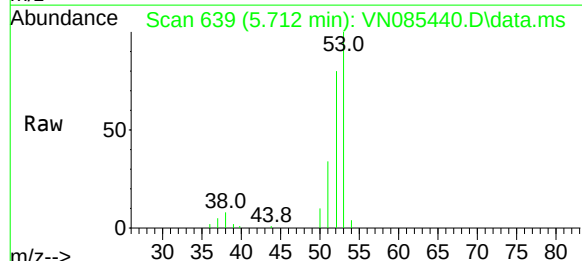
51 36.1 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 96.502 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085440.D

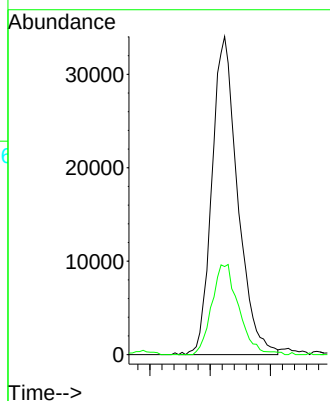
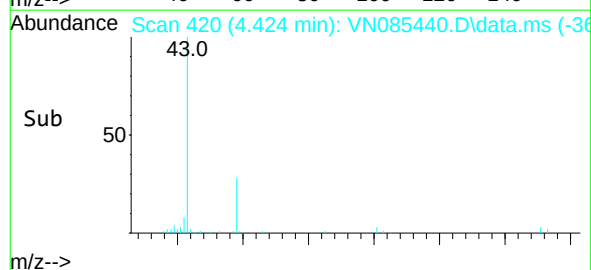
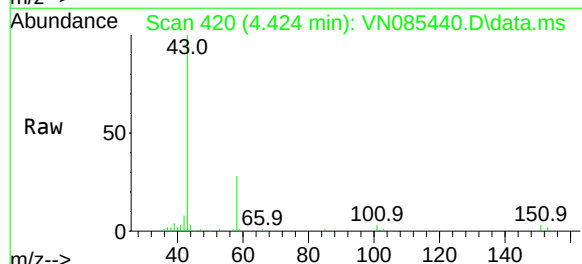
Acq: 14 Jan 2025 15:43

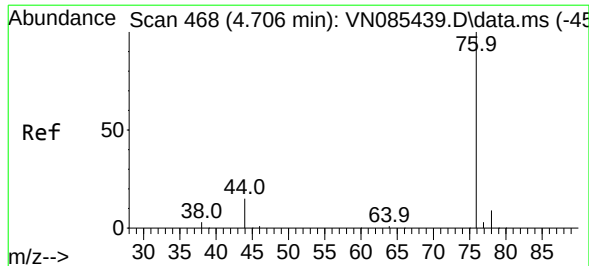
Tgt Ion: 43 Resp: 101065

Ion Ratio Lower Upper

43 100

58 27.7 23.8 35.6





#17

Carbon Disulfide

Concen: 19.939 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 76 Resp: 132300

Ion Ratio Lower Upper

76 100

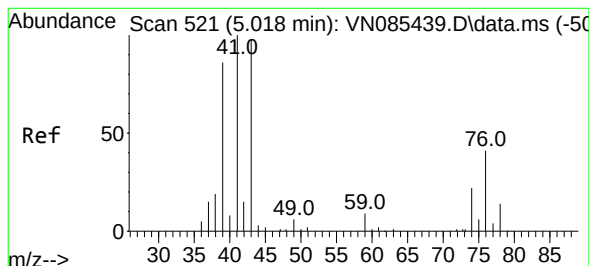
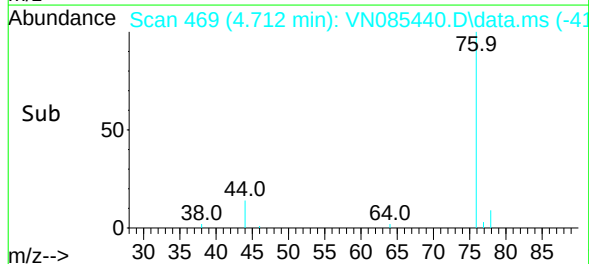
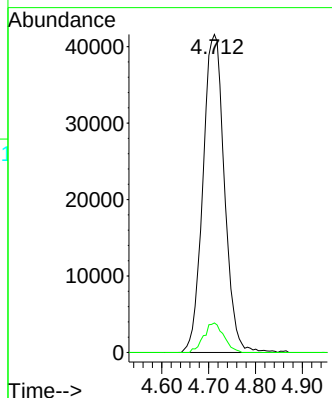
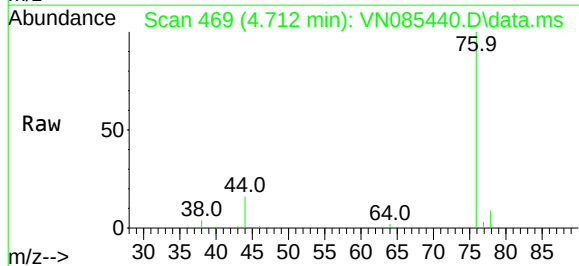
78 9.3 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 19.115 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085440.D

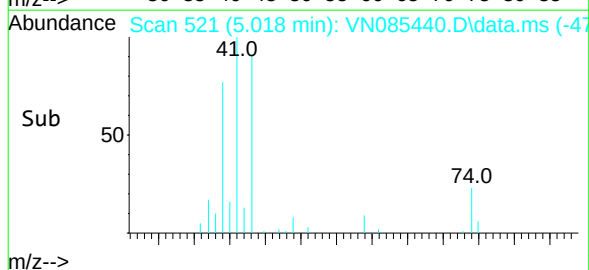
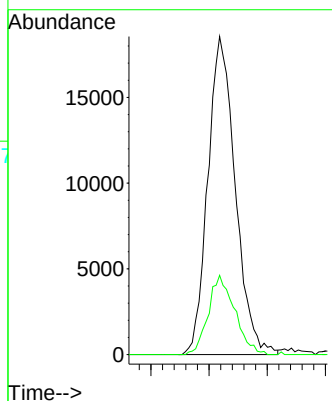
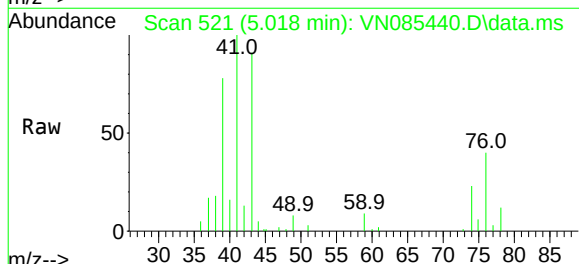
Acq: 14 Jan 2025 15:43

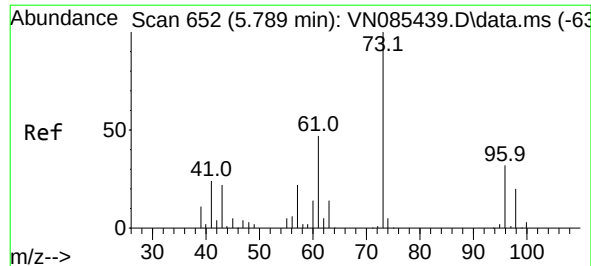
Tgt Ion: 43 Resp: 60873

Ion Ratio Lower Upper

43 100

74 24.0 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 21.272 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 73 Resp: 148847

Ion Ratio Lower Upper

73 100

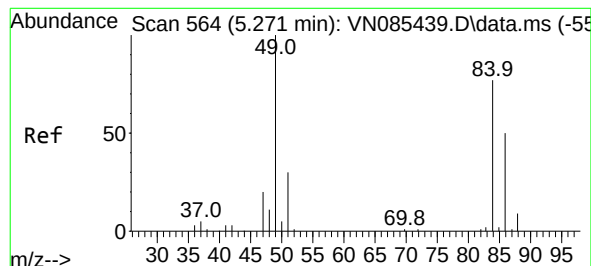
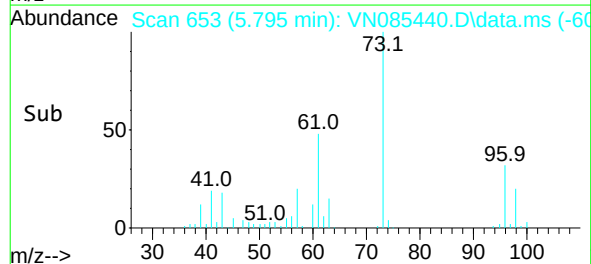
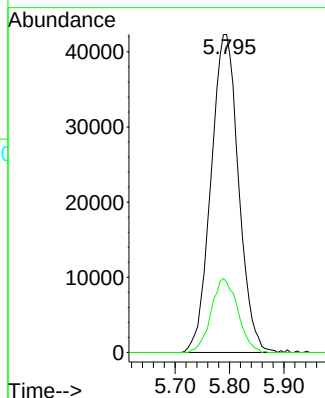
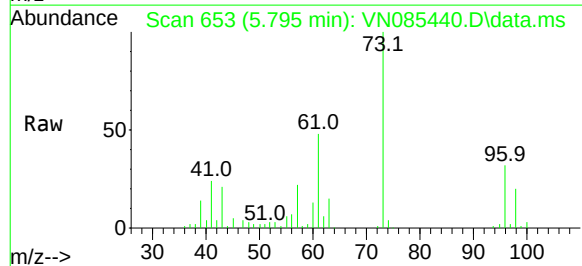
57 22.1 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 20.370 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 84 Resp: 52813

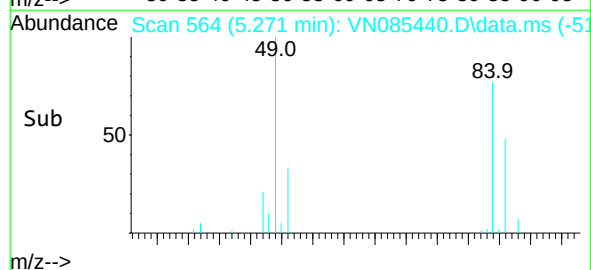
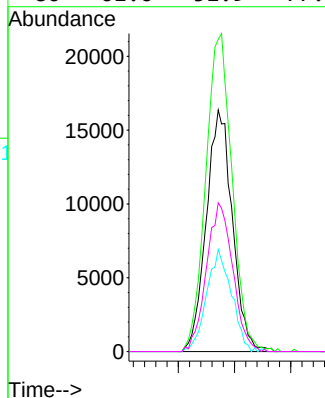
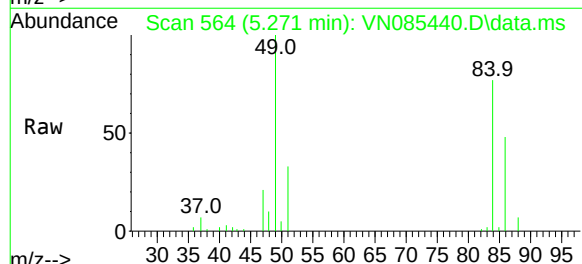
Ion Ratio Lower Upper

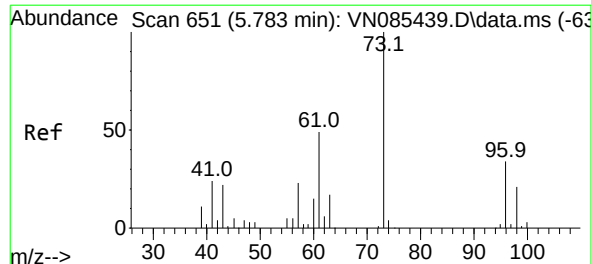
84 100

49 129.2 104.1 156.1

51 42.2 31.0 46.4

86 61.6 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 20.023 ug/l

RT: 5.789 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 96 Resp: 46115

Ion Ratio Lower Upper

96 100

61 146.1 115.7 173.5

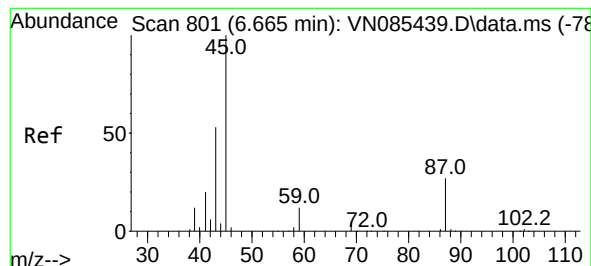
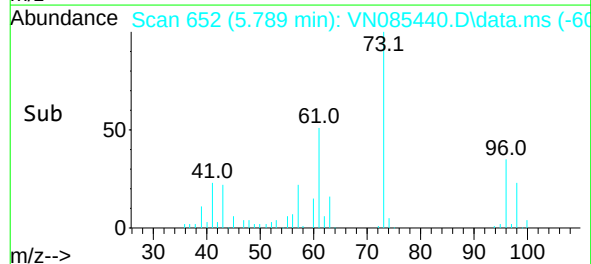
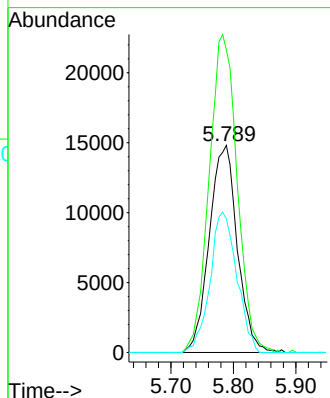
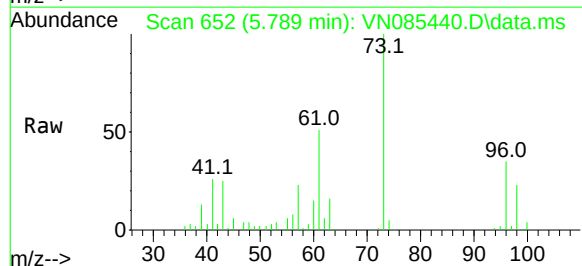
98 64.5 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 21.480 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 45 Resp: 166719

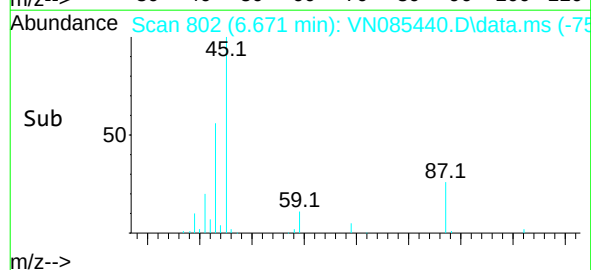
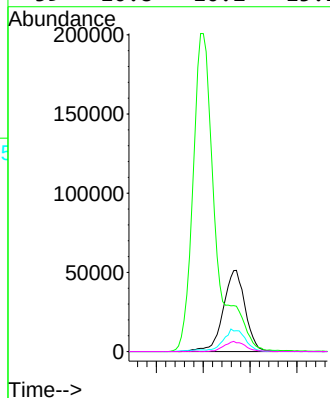
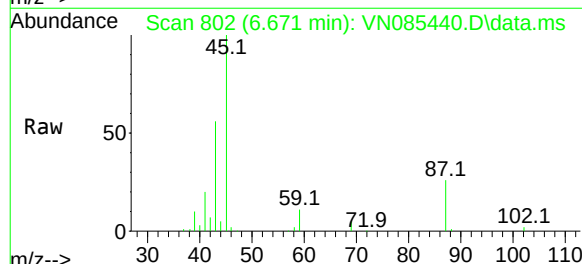
Ion Ratio Lower Upper

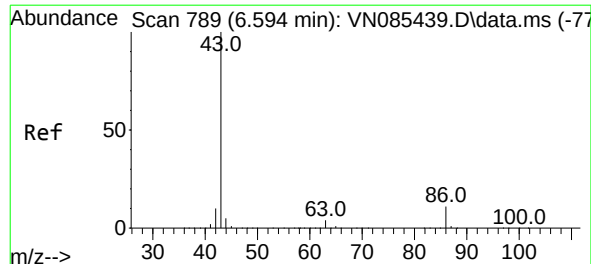
45 100

43 54.3 45.0 67.6

87 25.3 21.8 32.8

59 10.8 10.2 15.2





#23

Vinyl Acetate

Concen: 107.984 ug/l m

RT: 6.594 min Scan# 789

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 43 Resp: 588567

Ion Ratio Lower Upper

43 100

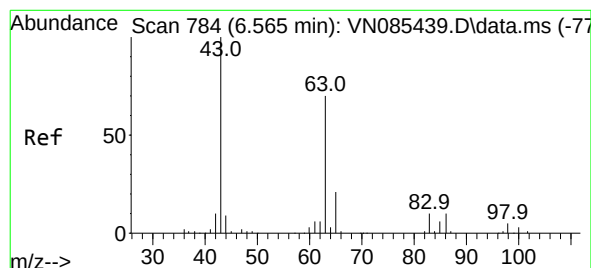
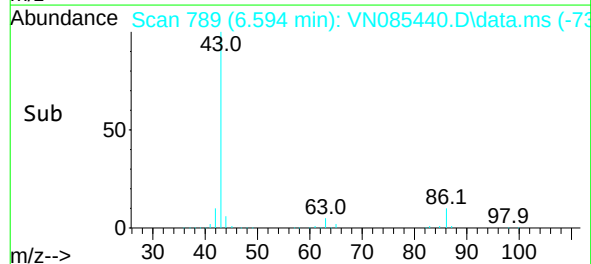
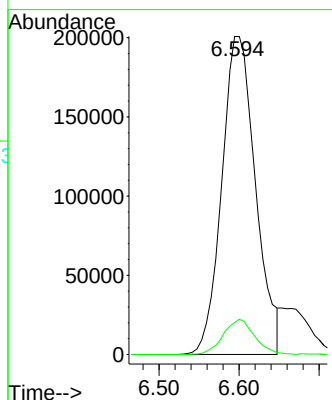
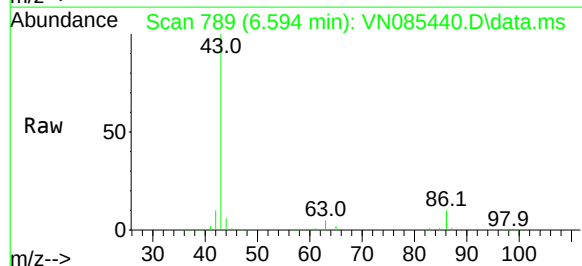
86 10.1 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 20.469 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

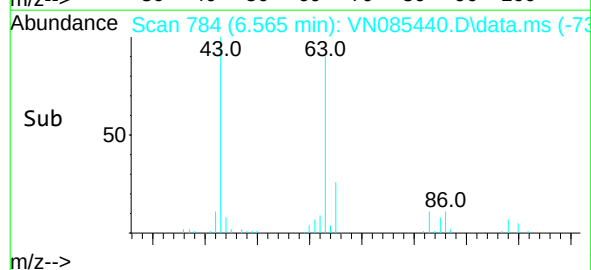
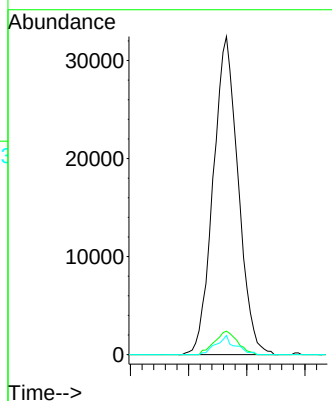
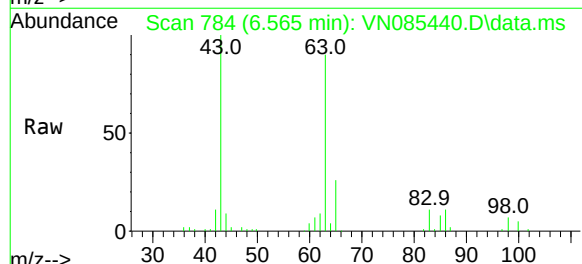
Tgt Ion: 63 Resp: 96875

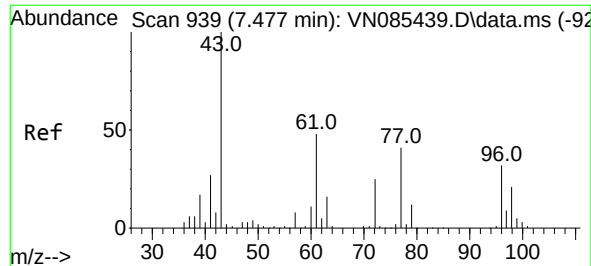
Ion Ratio Lower Upper

63 100

98 7.4 3.3 9.8

100 6.0 2.0 6.0#





#25

2-Butanone

Concen: 103.786 ug/l

RT: 7.477 min Scan# 93

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 159952

Ion Ratio Lower Upper

43 100

72 24.1 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

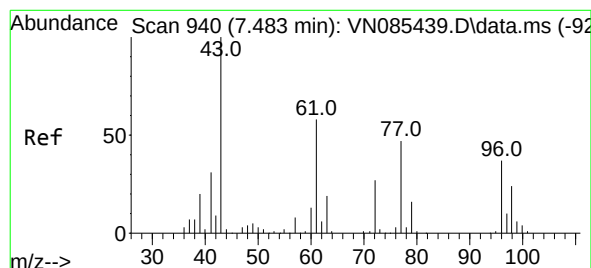
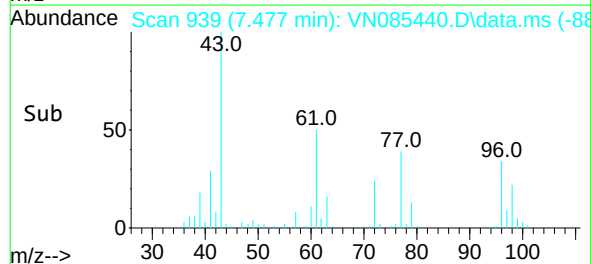
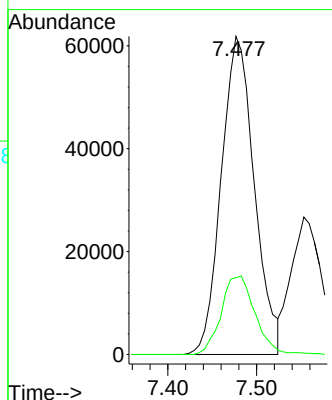
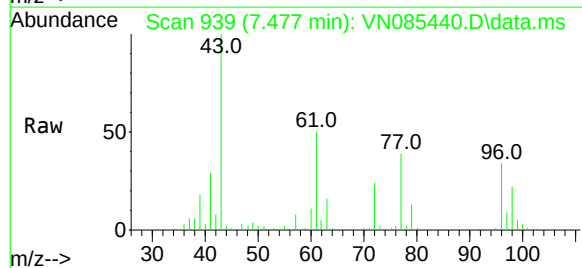
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 20.684 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085440.D

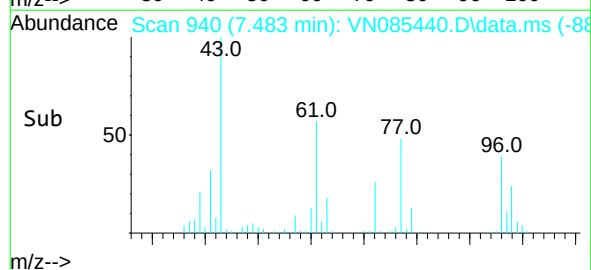
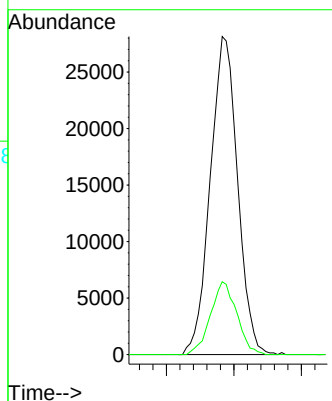
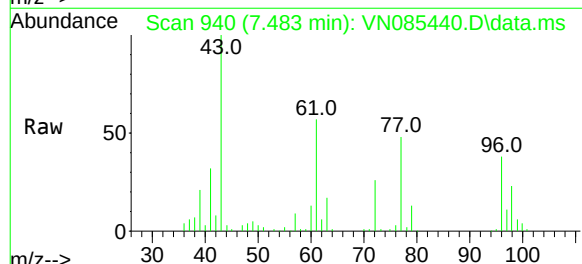
Acq: 14 Jan 2025 15:43

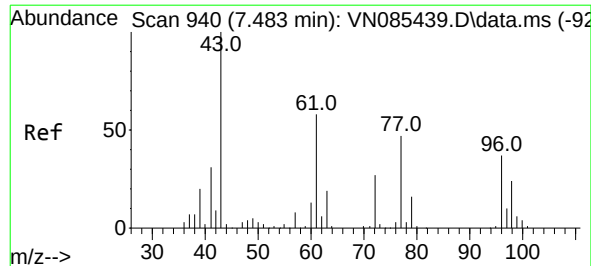
Tgt Ion: 77 Resp: 79145

Ion Ratio Lower Upper

77 100

97 22.0 10.7 32.1





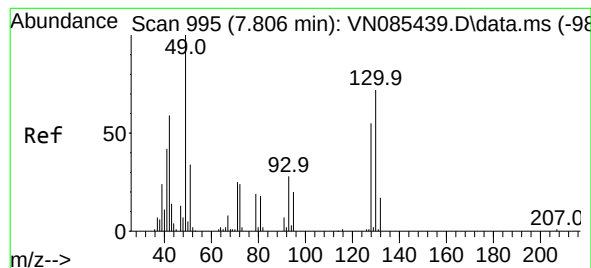
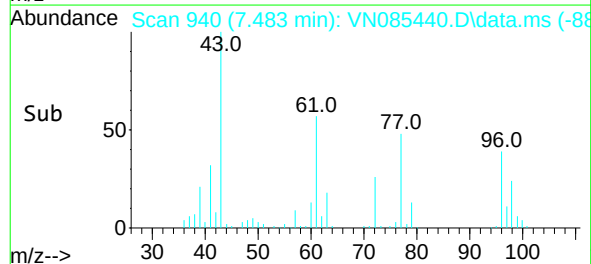
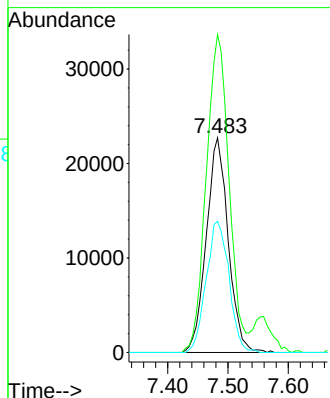
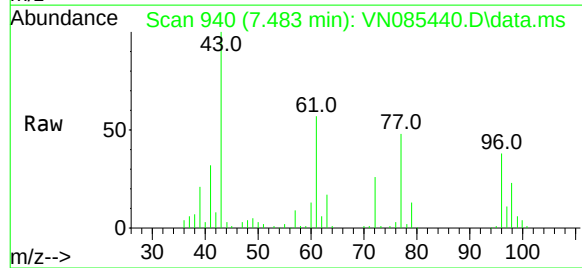
#27  
 cis-1,2-Dichloroethene  
 Concen: 21.180 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

Tgt Ion: 96 Resp: 57454  
 Ion Ratio Lower Upper  
 96 100  
 61 153.0 0.0 311.8  
 98 63.7 0.0 126.0

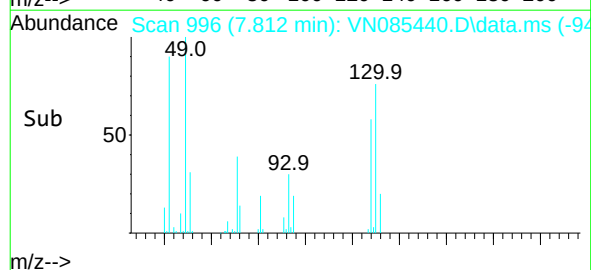
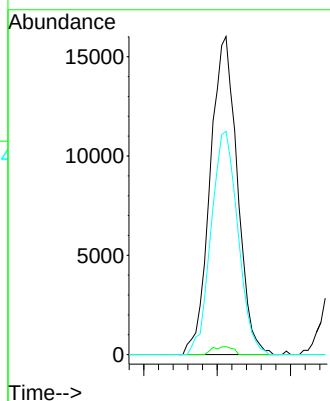
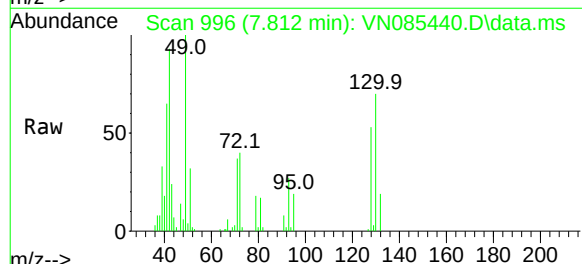
Manual Integrations  
 APPROVED

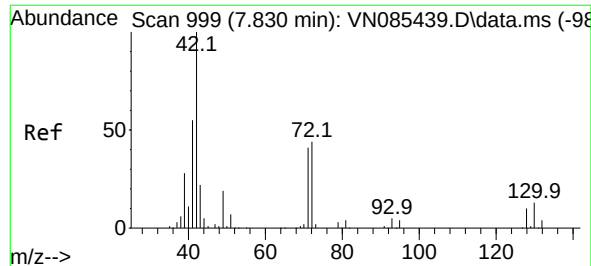
Reviewed By :John Carlone 01/15/2025  
 Supervised By :Mahesh Dadoda 01/15/2025



#28  
 Bromochloromethane  
 Concen: 18.703 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion: 49 Resp: 41181  
 Ion Ratio Lower Upper  
 49 100  
 129 1.9 0.0 4.4  
 130 69.3 55.0 82.4





#29

Tetrahydrofuran

Concen: 107.247 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 42 Resp: 104792

Ion Ratio Lower Upper

42 100

72 42.6 34.2 51.2

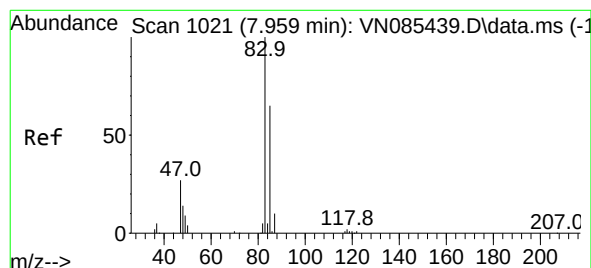
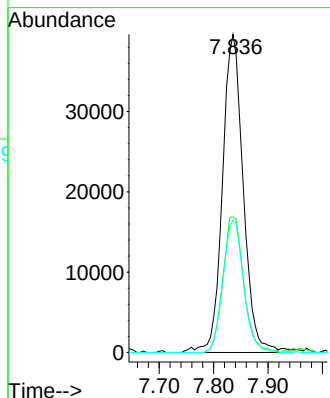
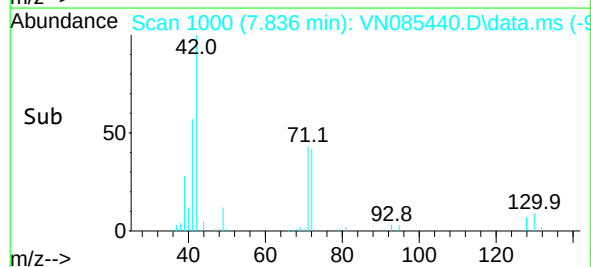
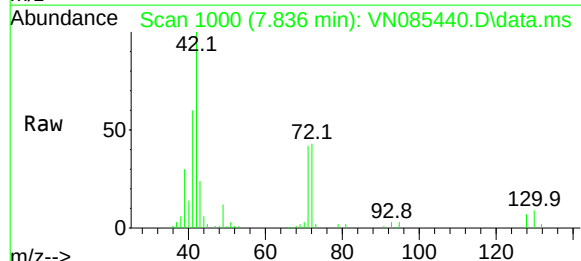
71 41.4 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 20.374 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085440.D

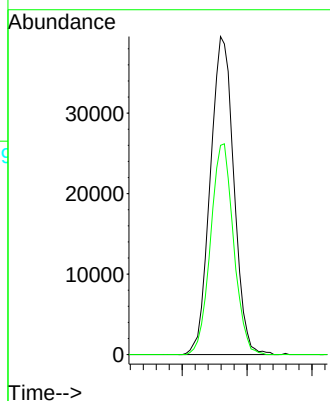
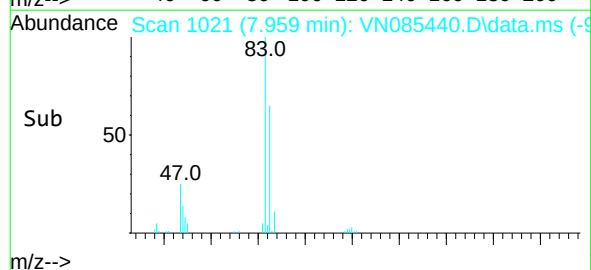
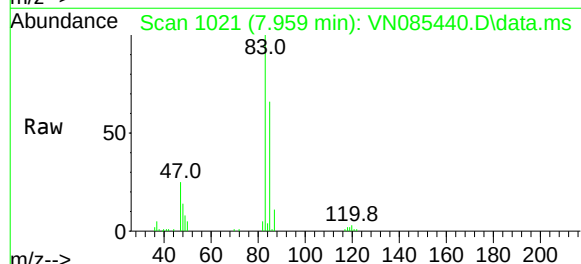
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 99655

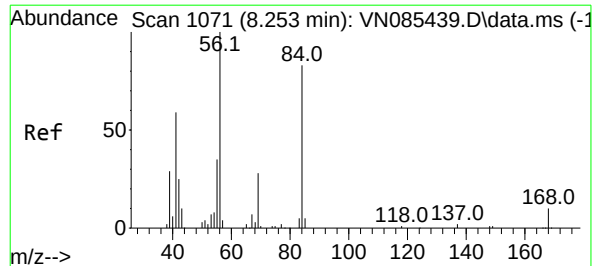
Ion Ratio Lower Upper

83 100

85 65.8 51.8 77.6







#31

Cyclohexane

Concen: 20.173 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 56 Resp: 82980

Ion Ratio Lower Upper

56 100

69 31.2 22.2 33.4

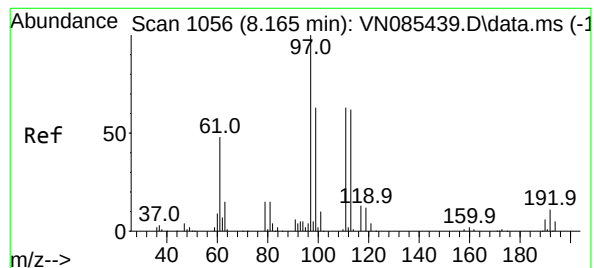
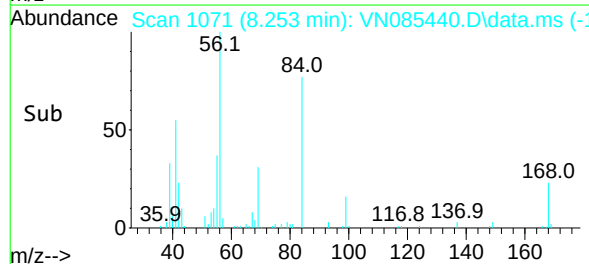
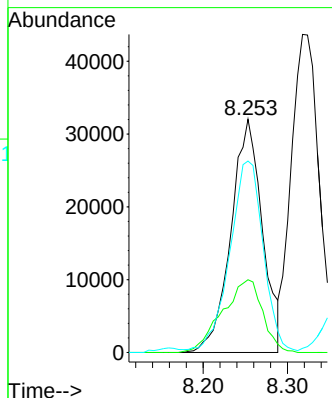
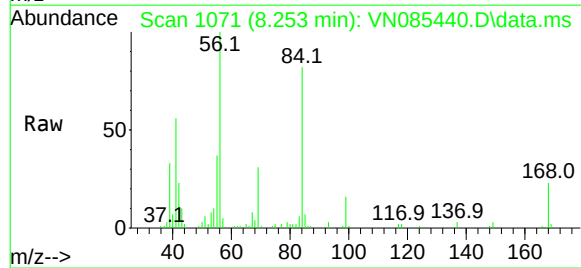
84 80.8 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 20.431 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

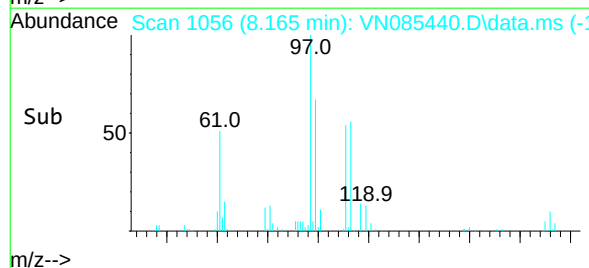
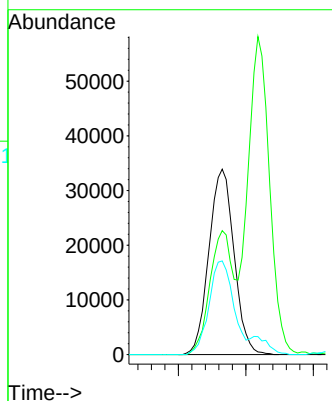
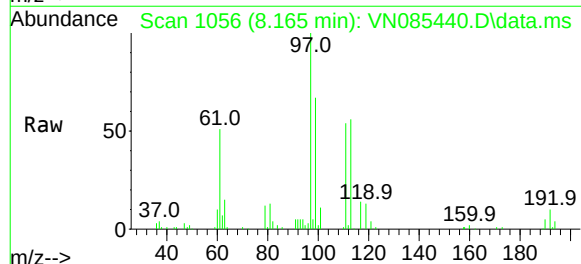
Tgt Ion: 97 Resp: 87659

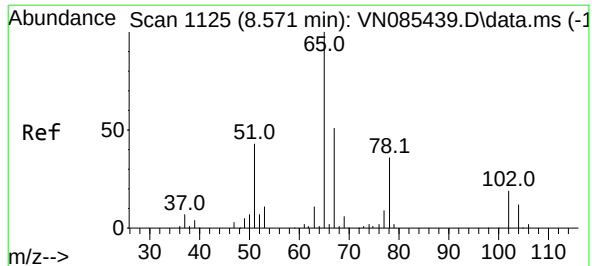
Ion Ratio Lower Upper

97 100

99 64.2 49.8 74.6

61 50.3 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 18.694 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 65 Resp: 60593

Ion Ratio Lower Upper

65 100

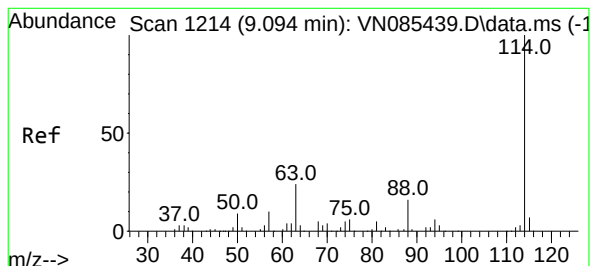
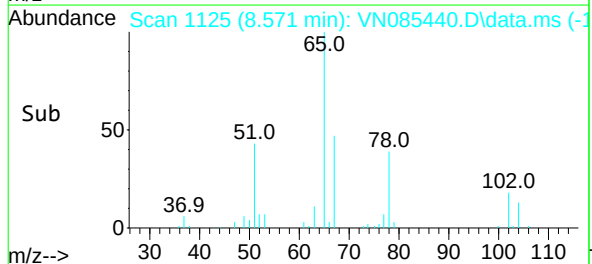
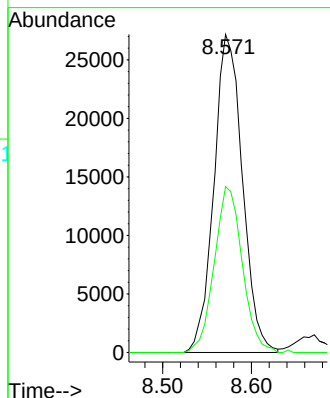
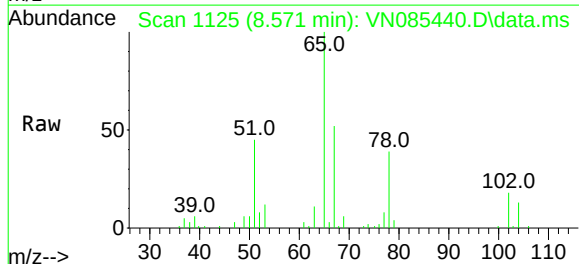
67 51.2 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

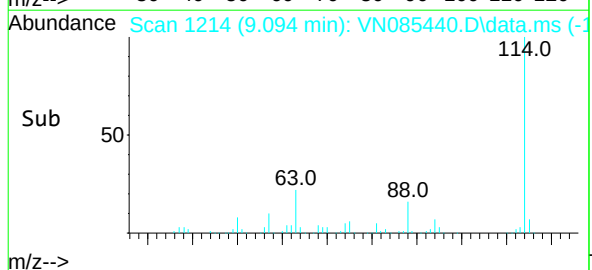
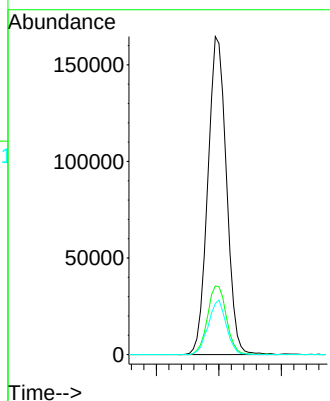
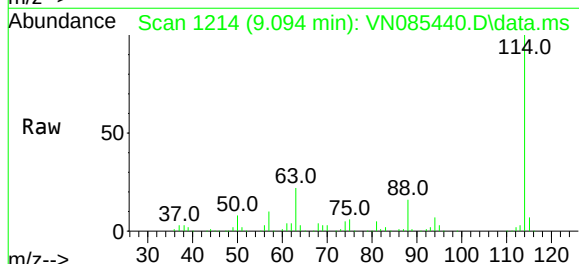
Tgt Ion:114 Resp: 340593

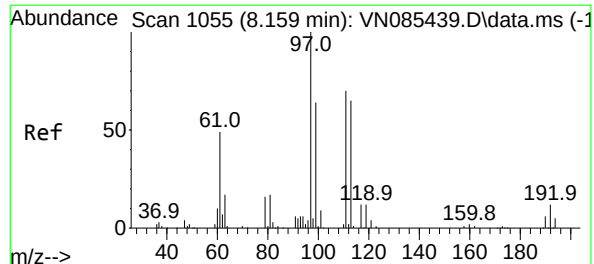
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 19.322 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 113 Resp: 45655

Ion Ratio Lower Upper

113 100

111 100.6 82.7 124.1

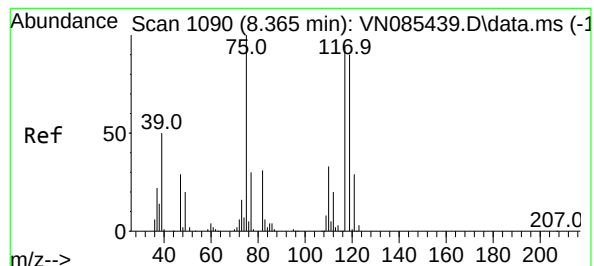
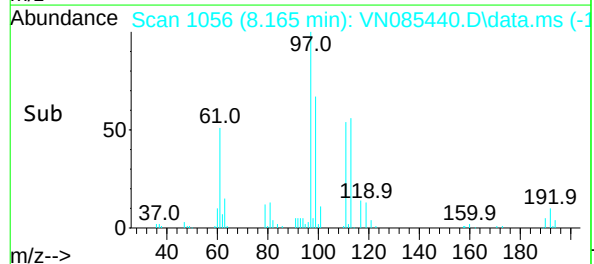
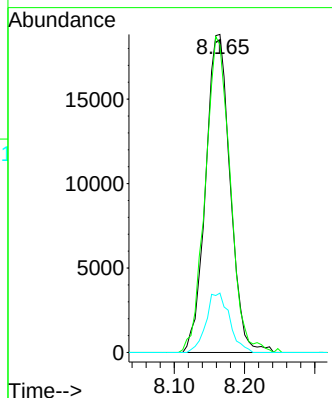
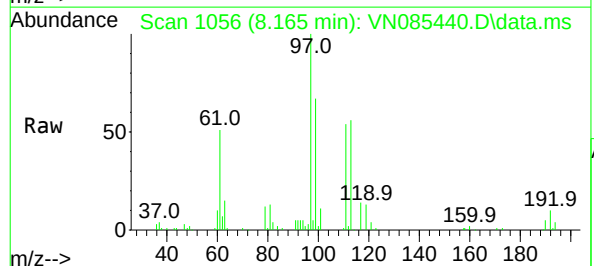
192 17.9 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 20.490 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

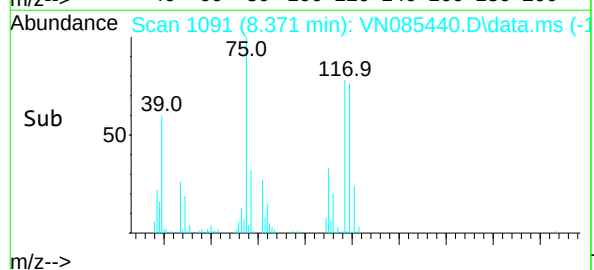
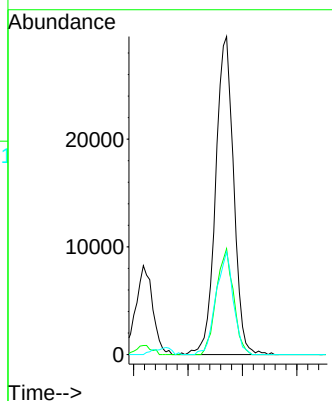
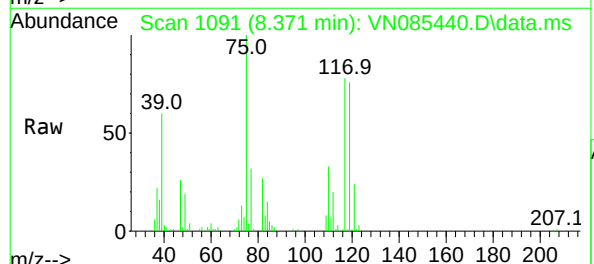
Tgt Ion: 75 Resp: 67949

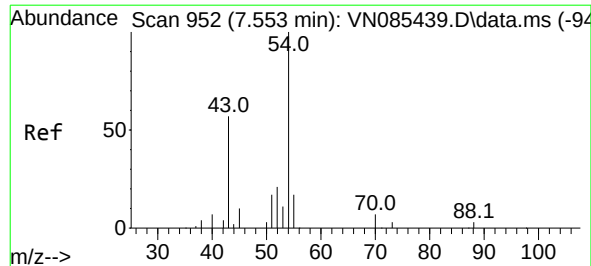
Ion Ratio Lower Upper

75 100

110 31.8 16.5 49.5

77 31.1 24.4 36.6





#37

Ethyl Acetate

Concen: 19.850 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

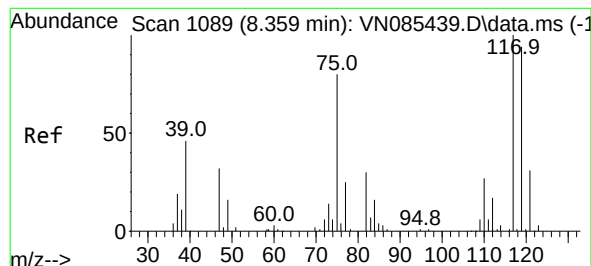
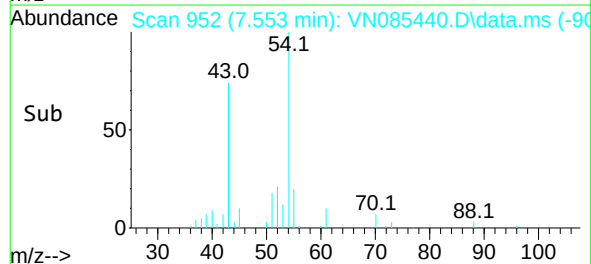
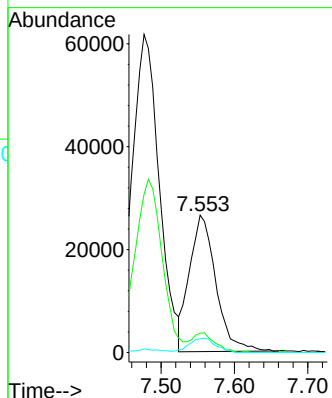
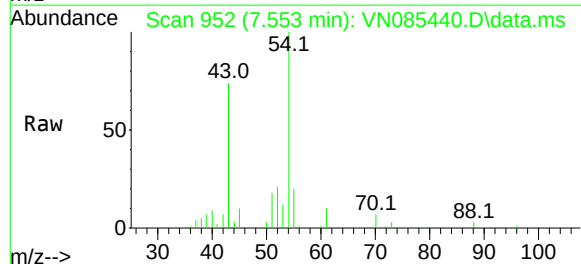
ClientSampleId :

VSTDICC020

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 66443 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 11.9  | 10.9  | 16.3  |
| 70       | 10.6  | 7.5   | 11.3  |

Manual Integrations  
APPROVED

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



#38

Carbon Tetrachloride

Concen: 20.767 ug/l

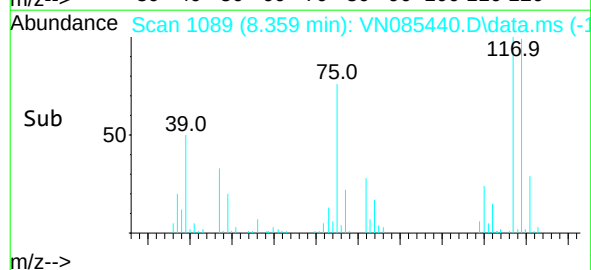
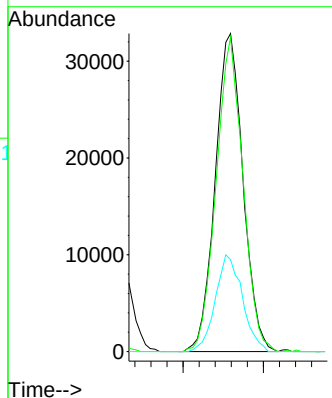
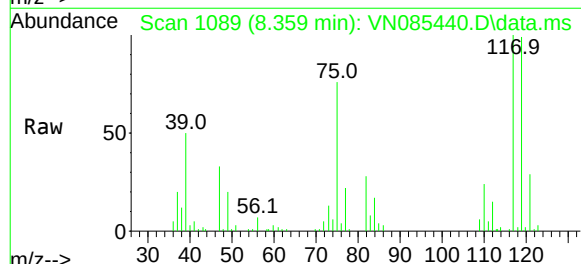
RT: 8.359 min Scan# 1089

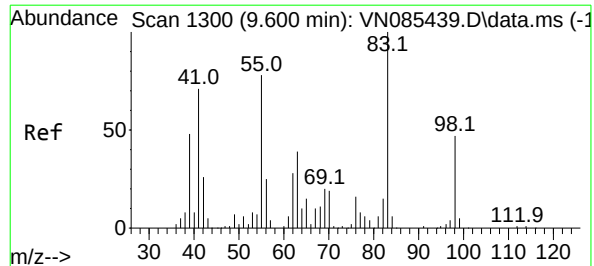
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 78842 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 98.9  | 75.4  | 113.2 |
| 121      | 28.9  | 24.6  | 37.0  |





#39

Methylcyclohexane

Concen: 20.862 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 83 Resp: 65012

Ion Ratio Lower Upper

83 100

55 83.4 62.6 94.0

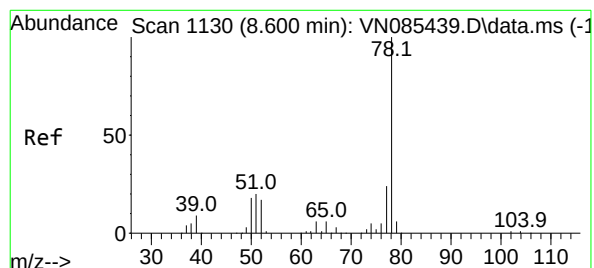
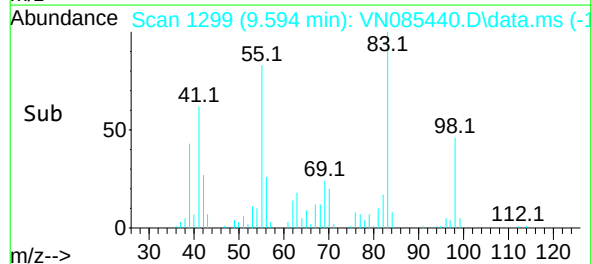
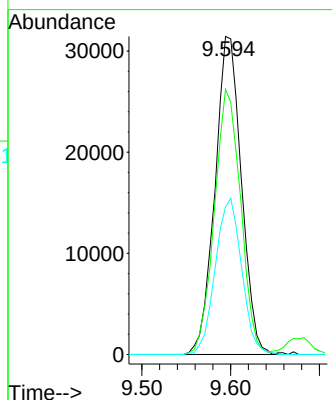
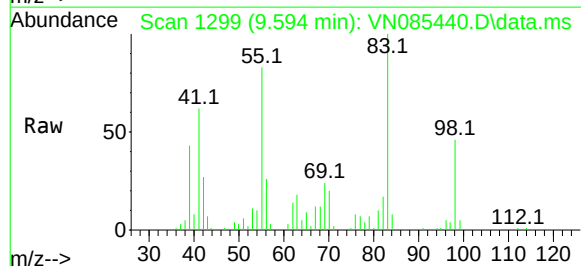
98 46.4 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 20.873 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085440.D

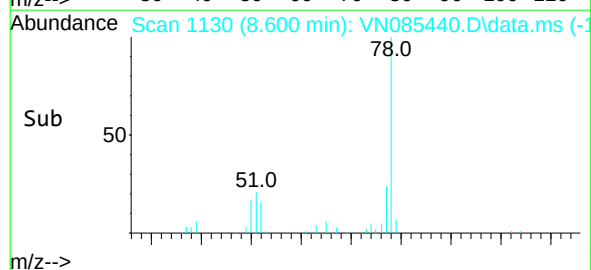
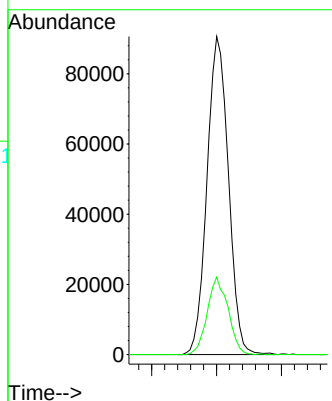
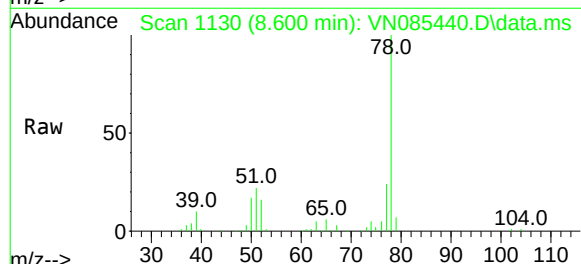
Acq: 14 Jan 2025 15:43

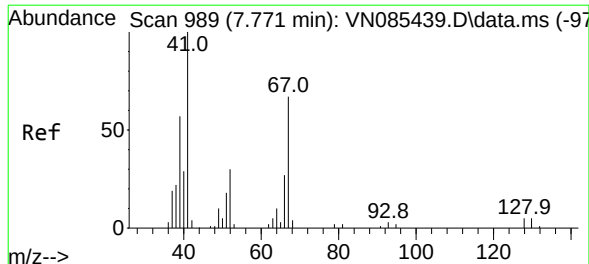
Tgt Ion: 78 Resp: 207985

Ion Ratio Lower Upper

78 100

77 24.4 19.0 28.6





#41

Methacrylonitrile

Concen: 21.004 ug/l

RT: 7.771 min Scan# 989

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 41 Resp: 36578

Ion Ratio Lower Upper

41 100

39 56.6 46.0 69.0

67 70.3 57.4 86.2

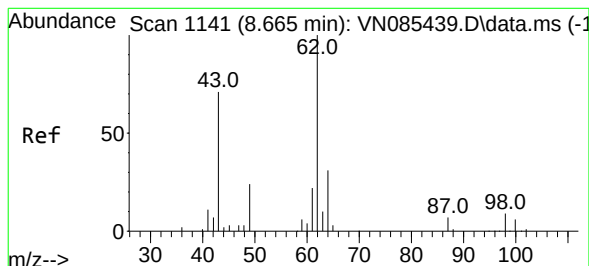
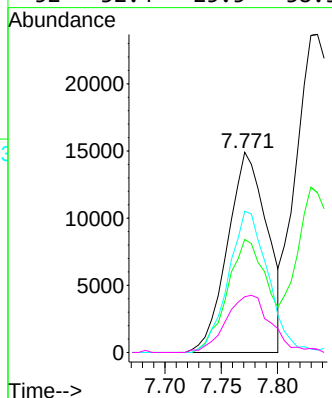
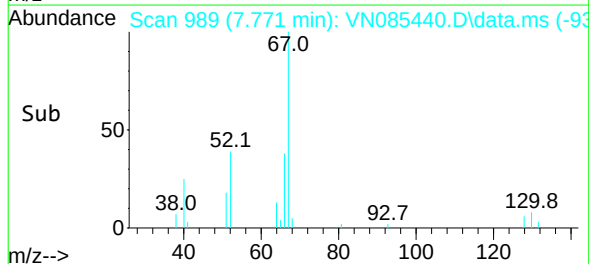
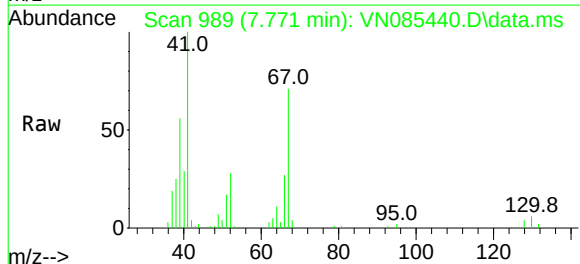
52 32.4 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 20.891 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085440.D

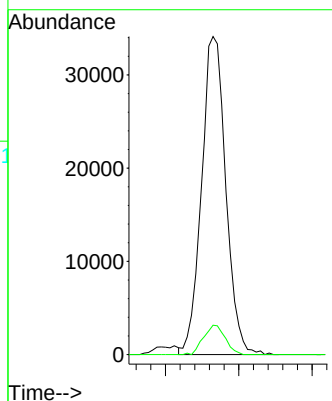
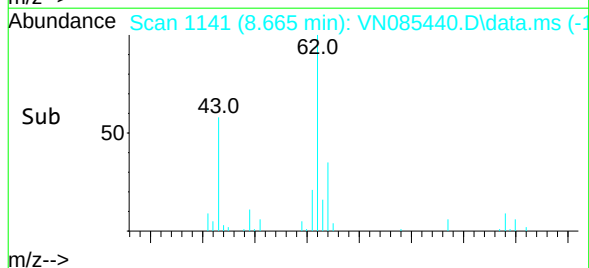
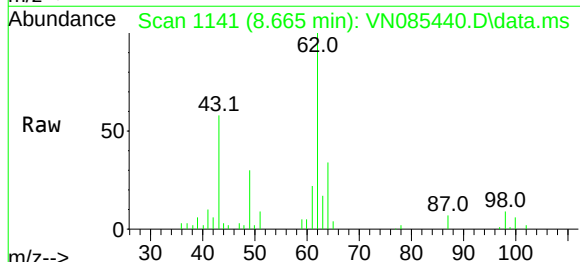
Acq: 14 Jan 2025 15:43

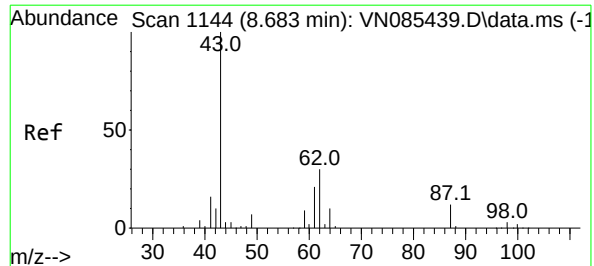
Tgt Ion: 62 Resp: 78402

Ion Ratio Lower Upper

62 100

98 8.3 0.0 17.0





#43

Isopropyl Acetate

Concen: 20.347 ug/l

RT: 8.683 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

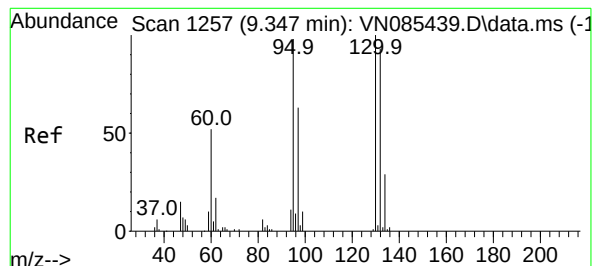
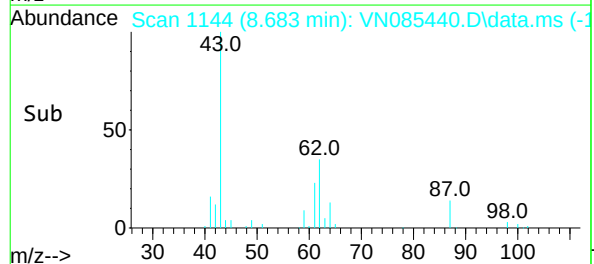
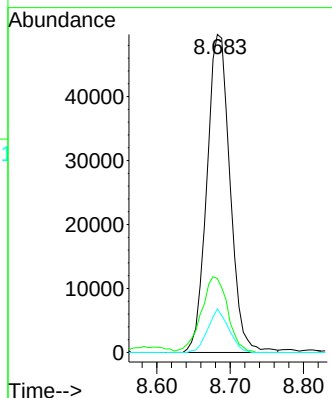
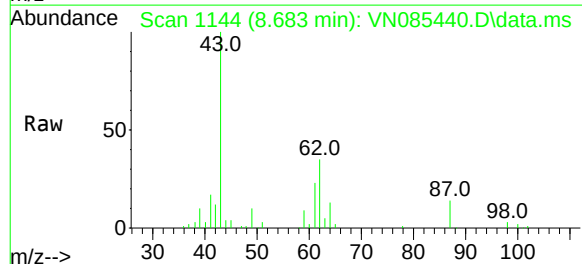
ClientSampleId :

VSTDIC020

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 109131 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 61       | 27.2  | 20.7  | 31.1   |
| 87       | 12.3  | 9.8   | 14.8   |

Manual Integrations  
APPROVED

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



#44

Trichloroethene

Concen: 20.699 ug/l

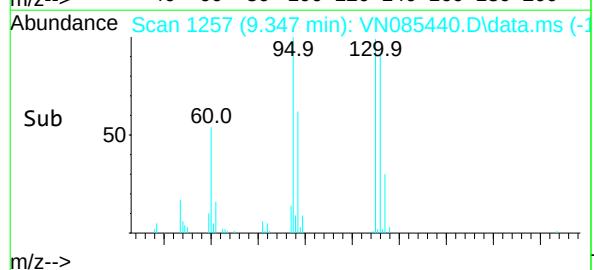
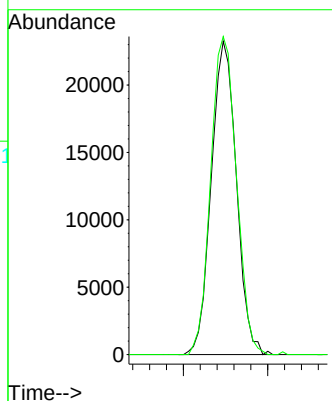
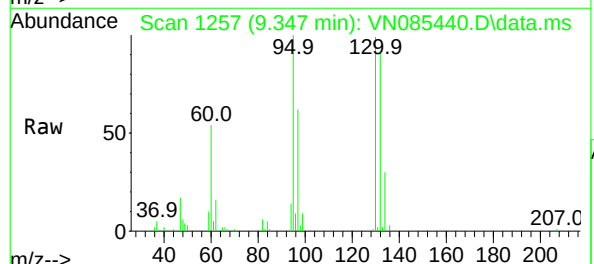
RT: 9.347 min Scan# 1257

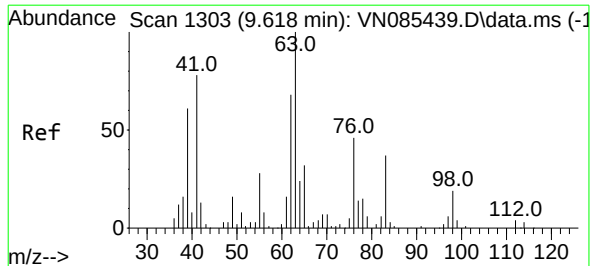
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 130   | Resp: | 48009 |
| Ion      | Ratio | Lower | Upper |
| 130      | 100   |       |       |
| 95       | 101.5 | 0.0   | 195.8 |





#45

1,2-Dichloropropane

Concen: 20.758 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 63 Resp: 52833

Ion Ratio Lower Upper

63 100

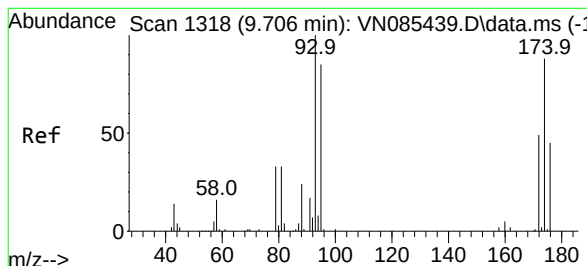
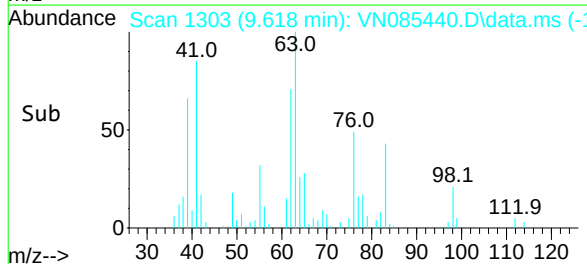
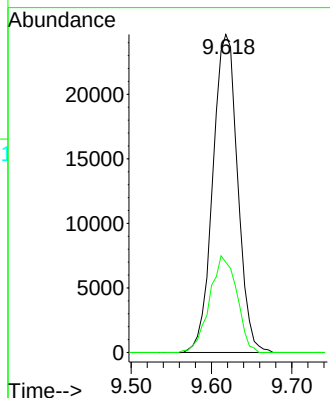
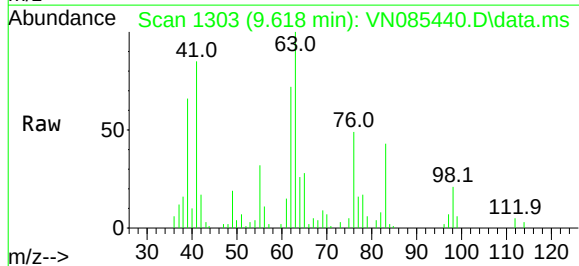
65 28.3 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 20.540 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

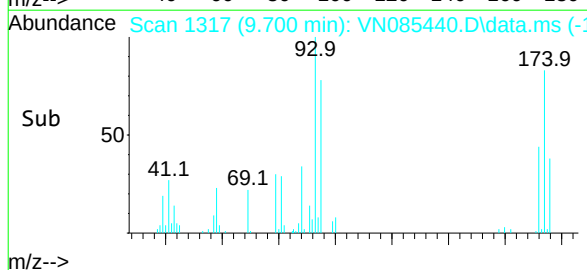
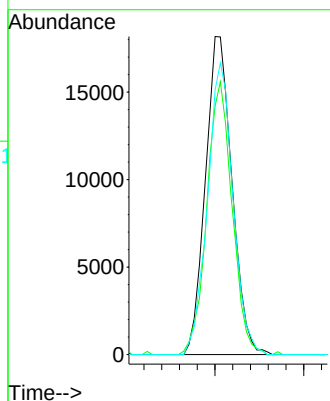
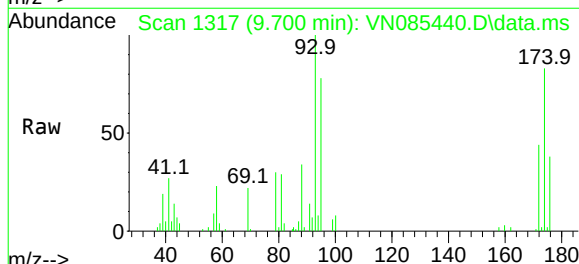
Tgt Ion: 93 Resp: 37721

Ion Ratio Lower Upper

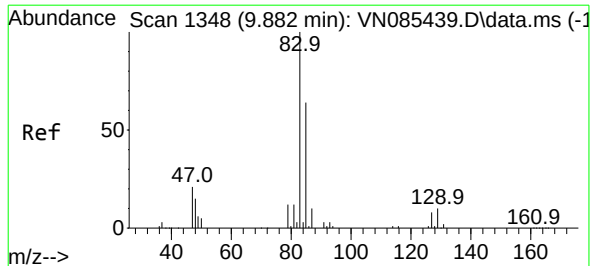
93 100

95 82.0 64.7 97.1

174 88.4 69.0 103.4







#47

Bromodichloromethane

Concen: 21.093 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

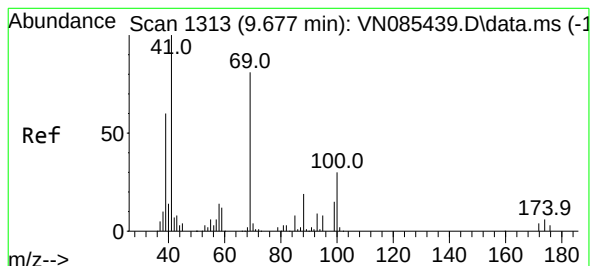
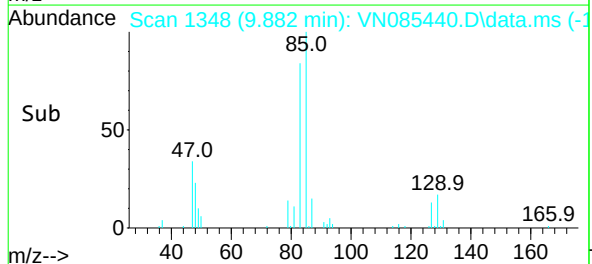
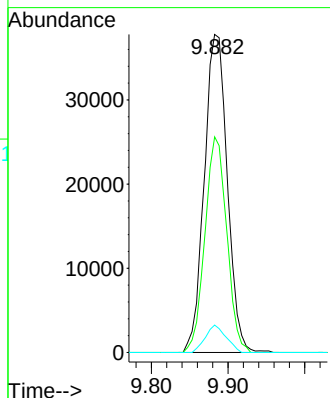
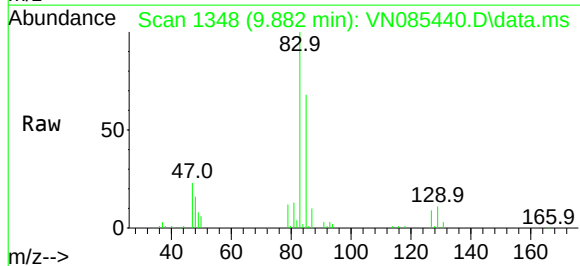
ClientSampleId :

VSTDIC020

| Tgt Ion: | 83    | Resp: | 78918 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 67.8  | 51.2  | 76.8  |
| 127      | 8.6   | 6.5   | 9.7   |

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Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 20.808 ug/l

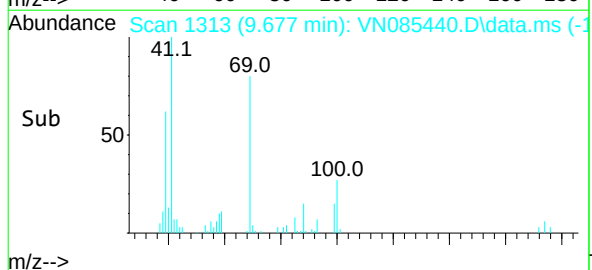
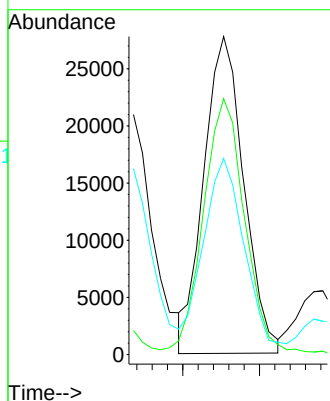
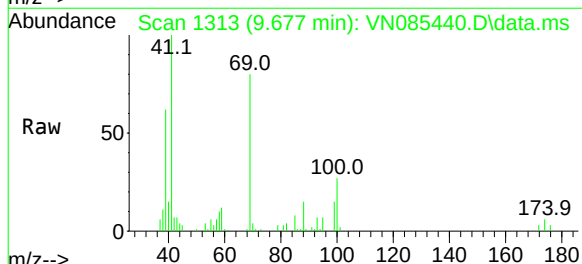
RT: 9.677 min Scan# 1313

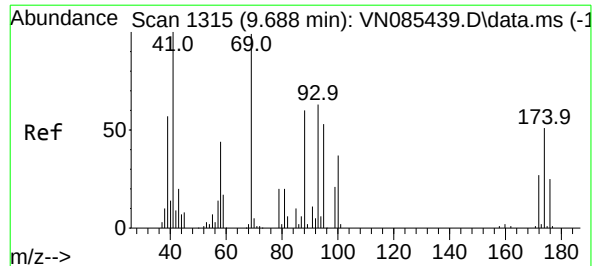
Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

| Tgt Ion: | 41    | Resp: | 50224 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 84.3  | 64.7  | 97.1  |
| 39       | 64.2  | 49.0  | 73.6  |





#49

1,4-Dioxane

Concen: 421.686 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 88 Resp: 17140

Ion Ratio Lower Upper

88 100

43 34.9 26.6 39.8

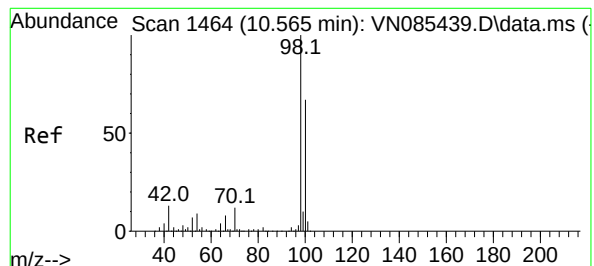
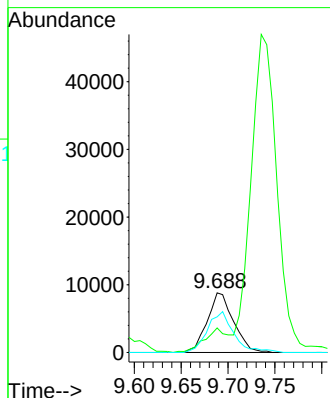
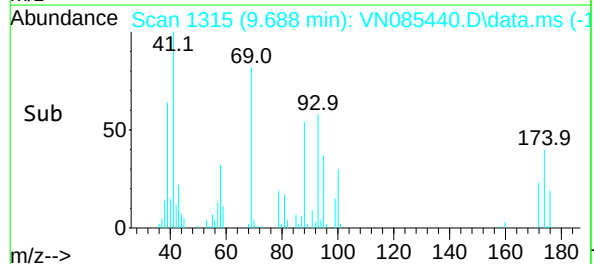
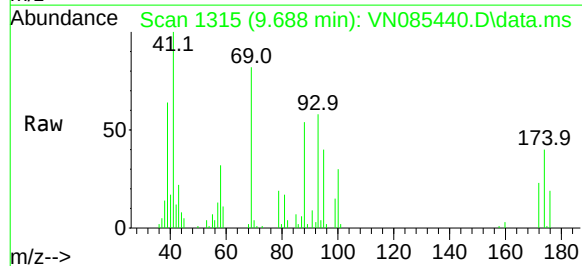
58 69.0 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 19.581 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085440.D

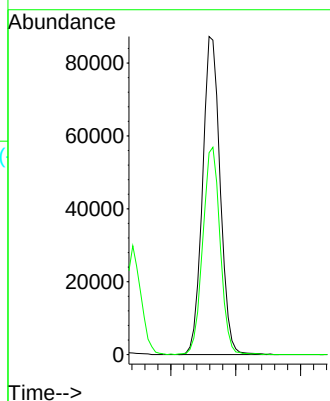
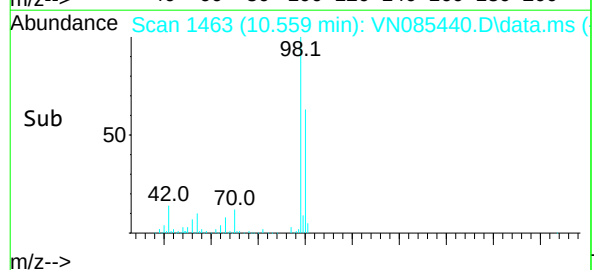
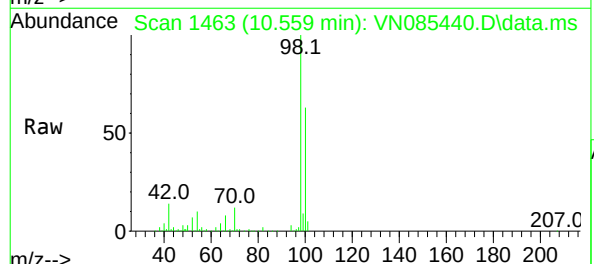
Acq: 14 Jan 2025 15:43

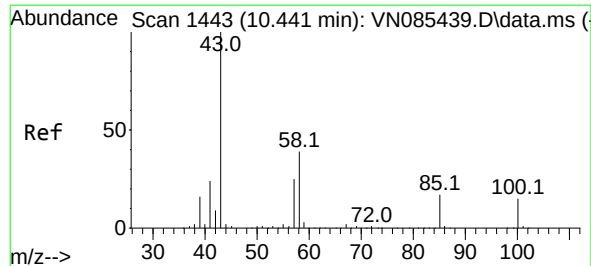
Tgt Ion: 98 Resp: 164391

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4





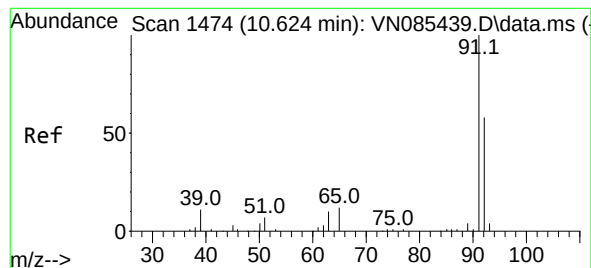
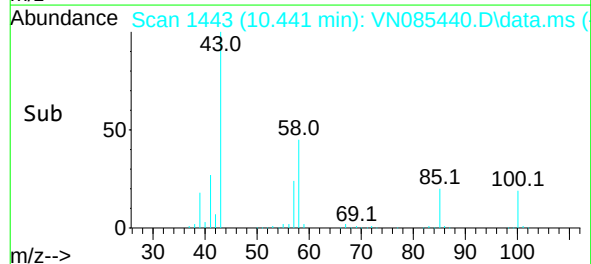
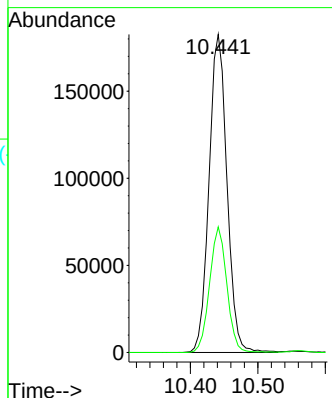
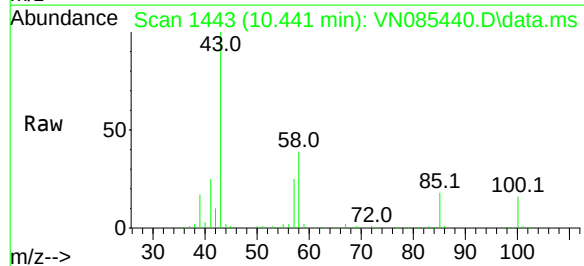
#51  
4-Methyl-2-Pentanone  
Concen: 108.249 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Tgt Ion: 43 Resp: 336911  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7

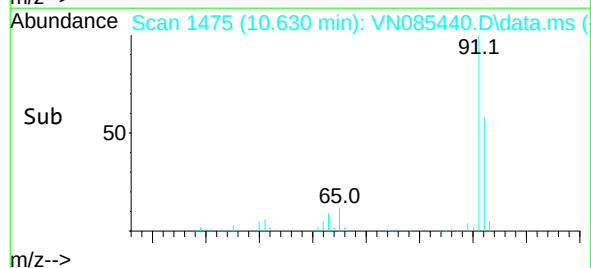
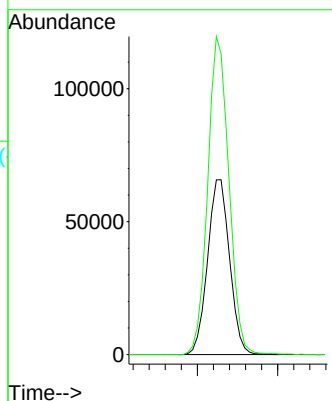
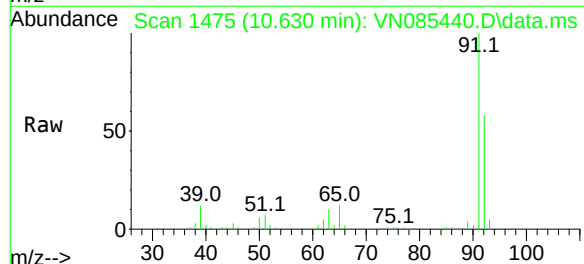
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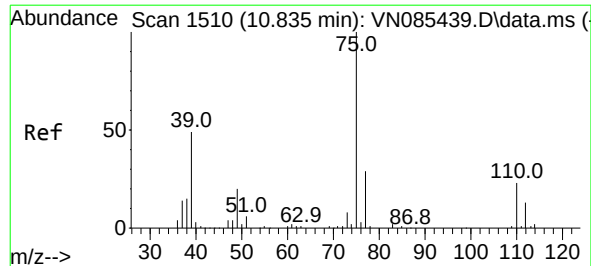
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#52  
Toluene  
Concen: 21.680 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 92 Resp: 125172  
Ion Ratio Lower Upper  
92 100  
91 175.1 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 20.965 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 75 Resp: 74129

Ion Ratio Lower Upper

75 100

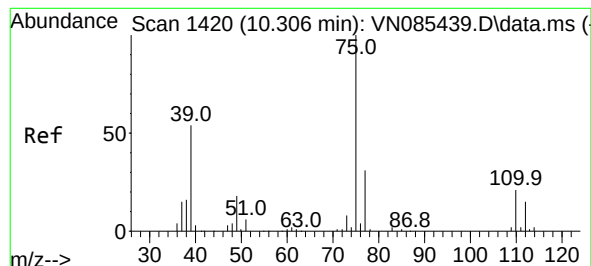
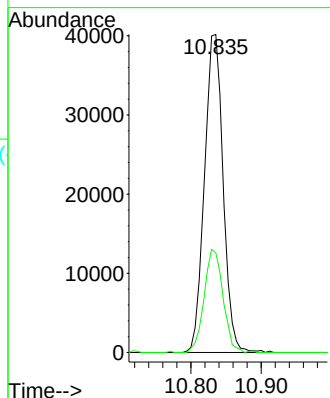
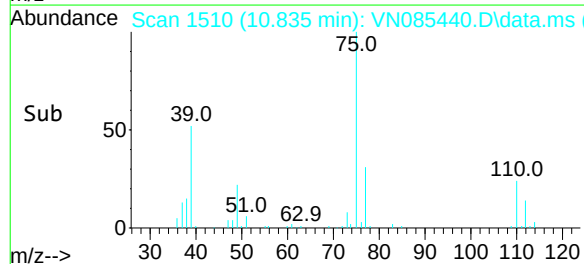
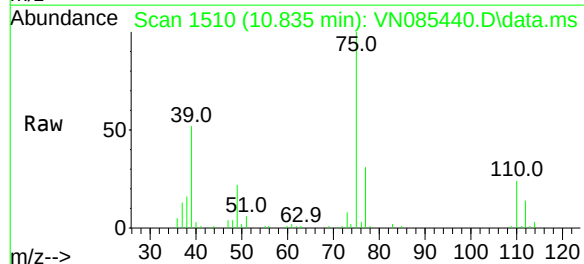
77 31.4 23.5 35.3

Manual Integrations

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#54

cis-1,3-Dichloropropene

Concen: 21.684 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

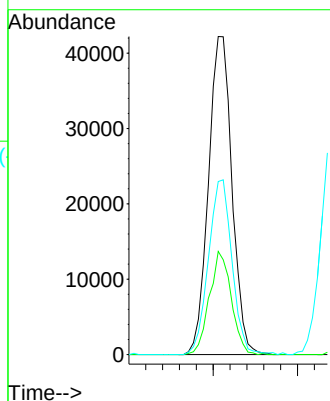
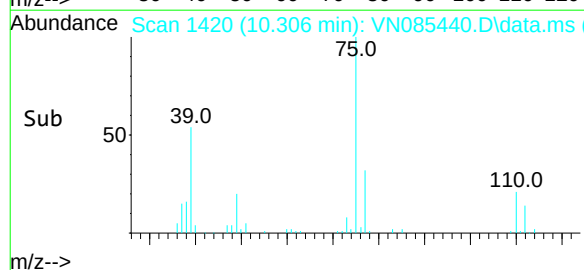
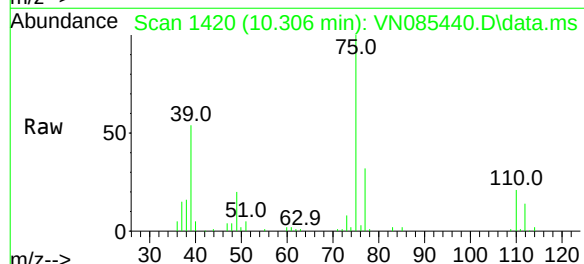
Tgt Ion: 75 Resp: 81897

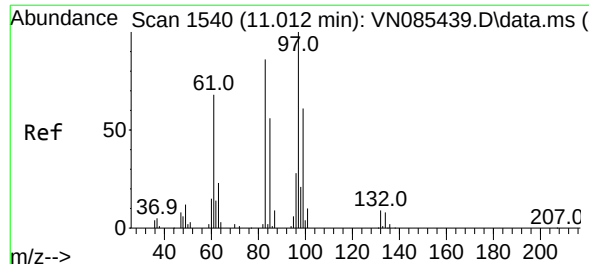
Ion Ratio Lower Upper

75 100

77 32.4 25.0 37.4

39 54.4 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 21.025 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 97 Resp: 48039

Ion Ratio Lower Upper

97 100

83 84.1 69.0 103.6

85 54.6 44.6 66.8

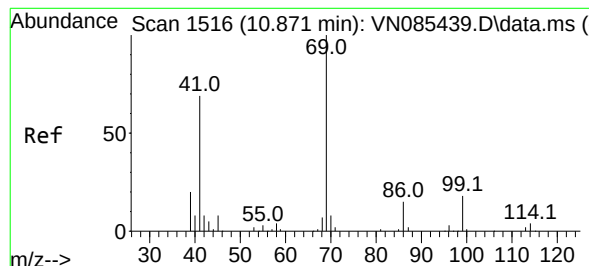
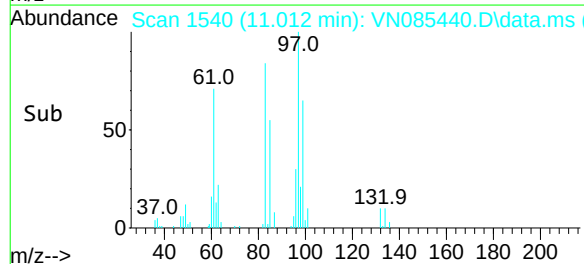
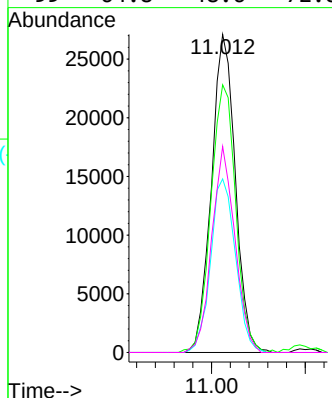
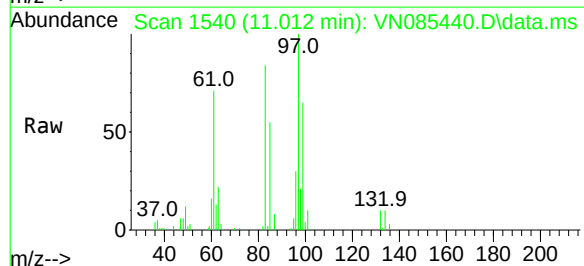
99 64.8 48.6 72.8

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 19.649 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

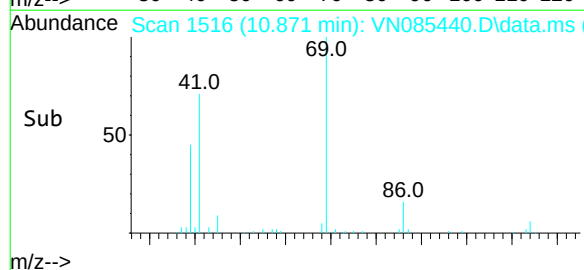
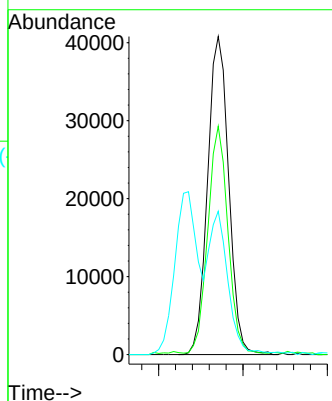
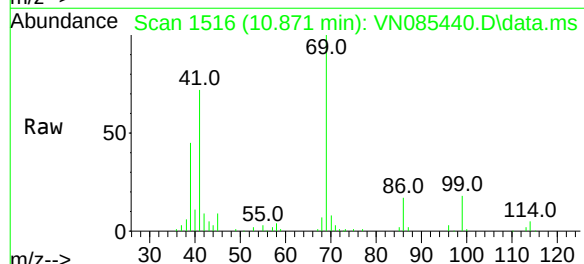
Tgt Ion: 69 Resp: 70934

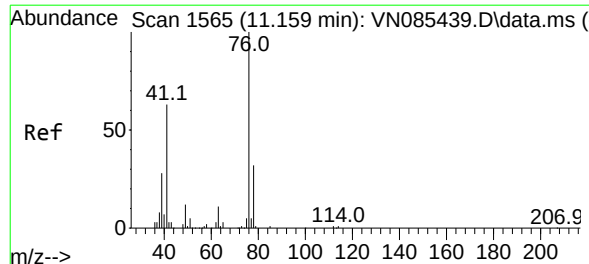
Ion Ratio Lower Upper

69 100

41 67.6 54.6 82.0

39 41.7 32.4 48.6





#57

1,3-Dichloropropane

Concen: 21.196 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 76 Resp: 84210

Ion Ratio Lower Upper

76 100

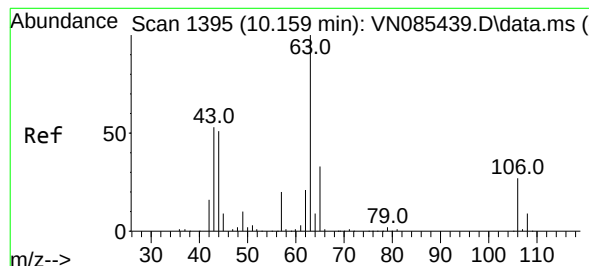
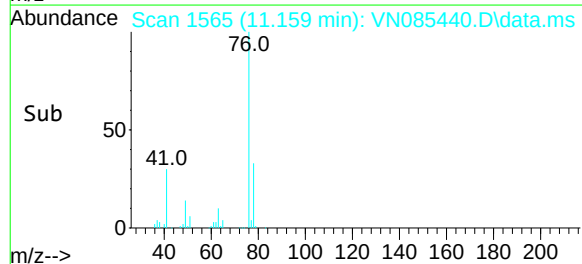
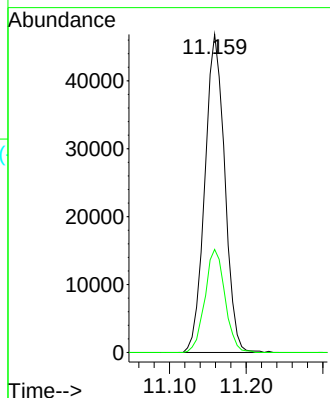
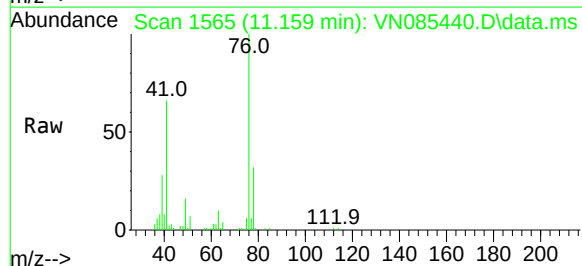
78 32.7 25.6 38.4

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Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 105.991 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085440.D

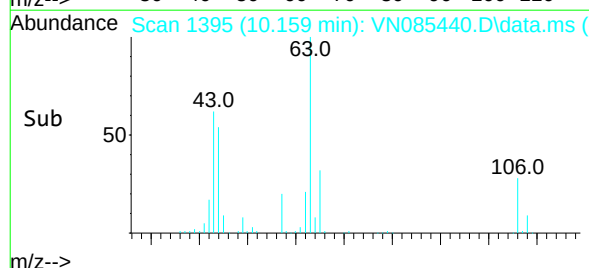
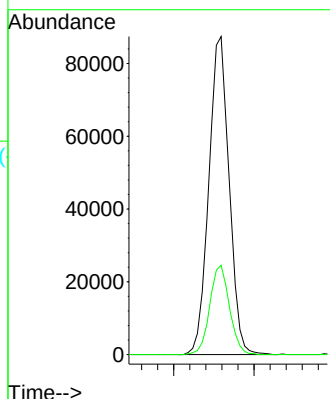
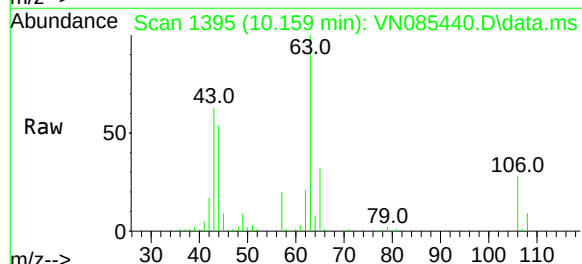
Acq: 14 Jan 2025 15:43

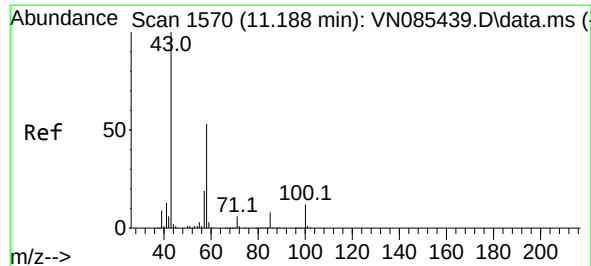
Tgt Ion: 63 Resp: 153681

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 109.863 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion: 43 Resp: 240595

Ion Ratio Lower Upper

43 100

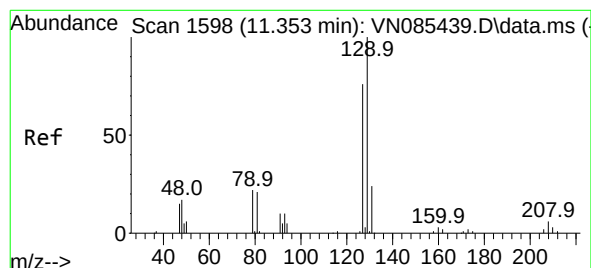
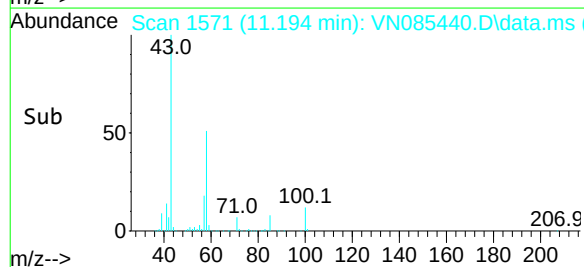
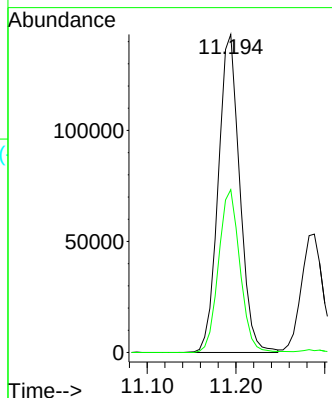
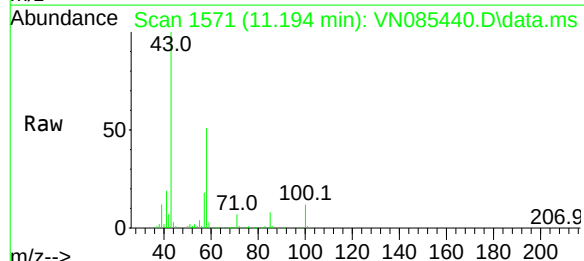
58 51.1 26.2 78.6

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 20.326 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085440.D

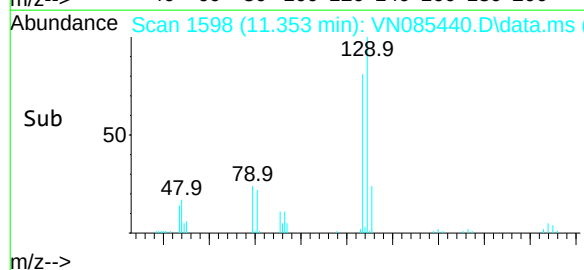
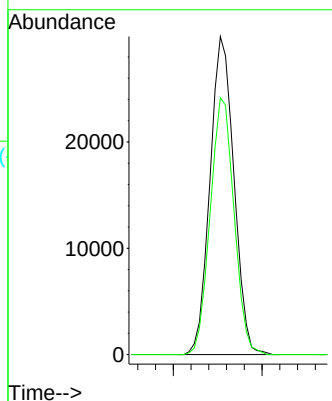
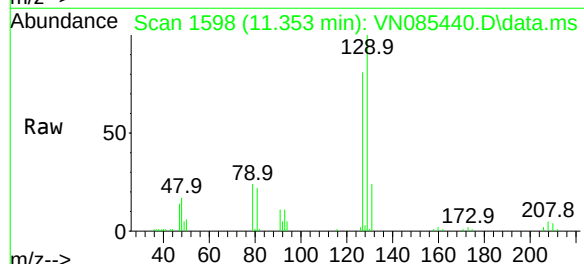
Acq: 14 Jan 2025 15:43

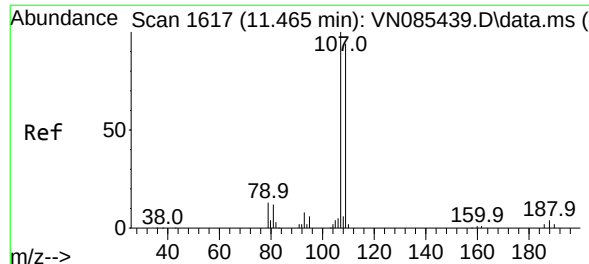
Tgt Ion:129 Resp: 56069

Ion Ratio Lower Upper

129 100

127 80.4 38.6 115.8





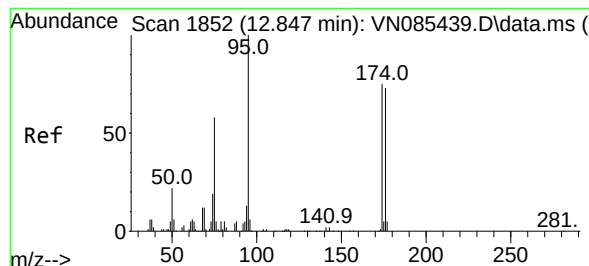
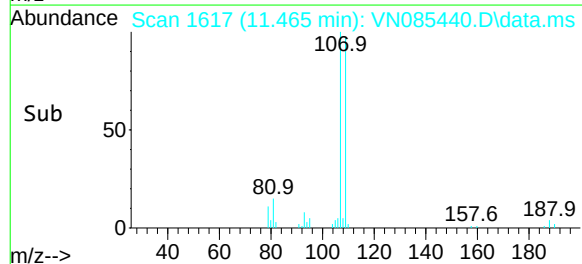
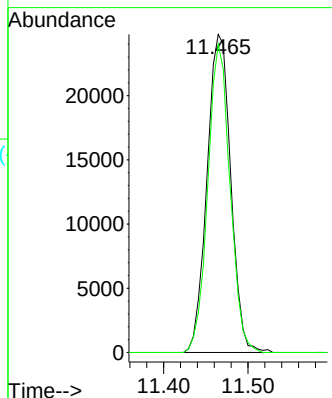
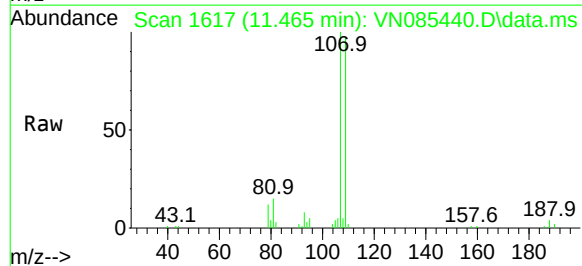
#61  
1,2-Dibromoethane  
Concen: 21.309 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion: 107 Resp: 48465  
Ion Ratio Lower Upper  
107 100  
109 90.6 75.9 113.9

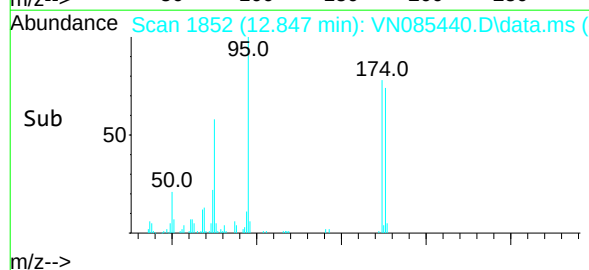
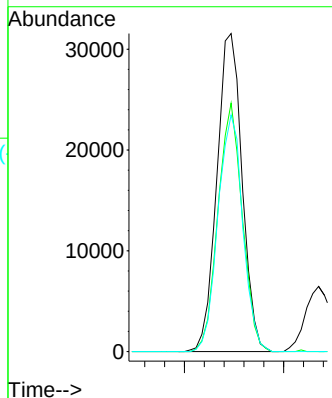
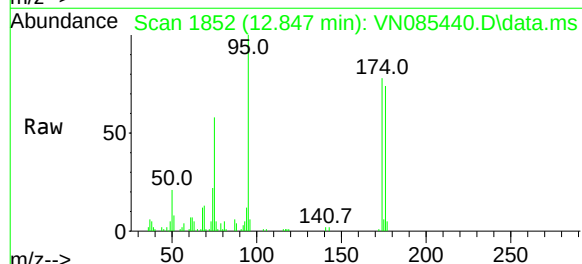
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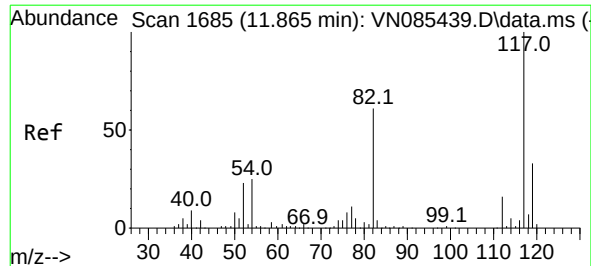


#62  
4-Bromofluorobenzene  
Concen: 19.430 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 95 Resp: 55798  
Ion Ratio Lower Upper  
95 100  
174 75.2 0.0 145.0  
176 73.2 0.0 142.4







#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion:117 Resp: 296298

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

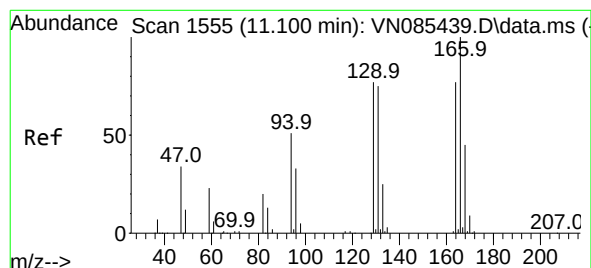
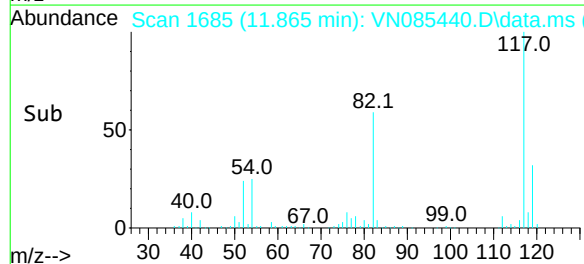
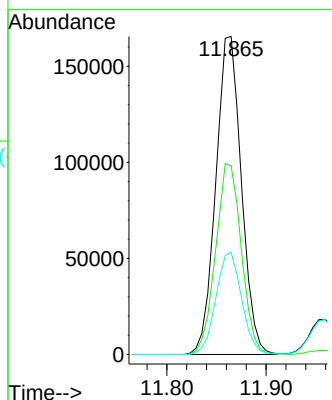
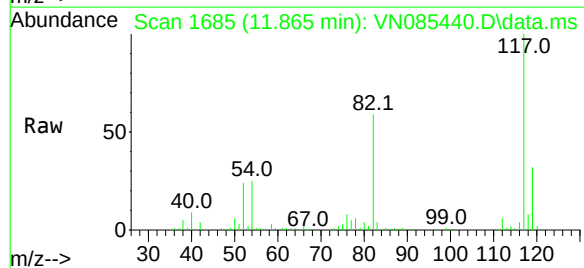
119 32.2 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 21.408 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:164 Resp: 43243

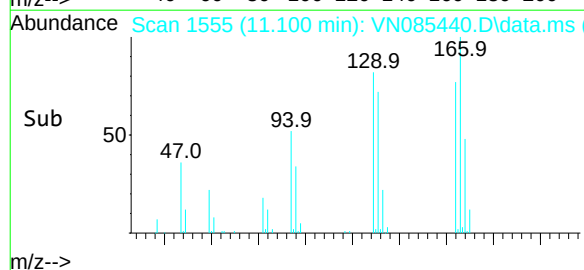
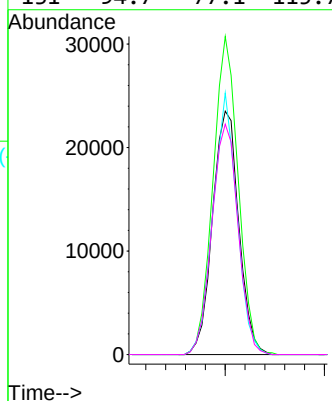
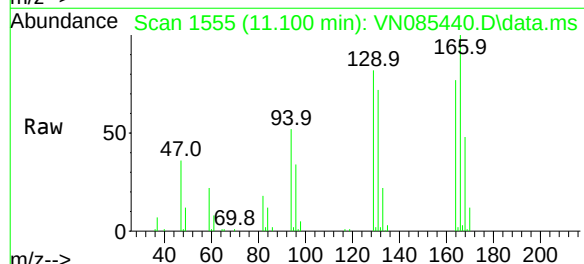
Ion Ratio Lower Upper

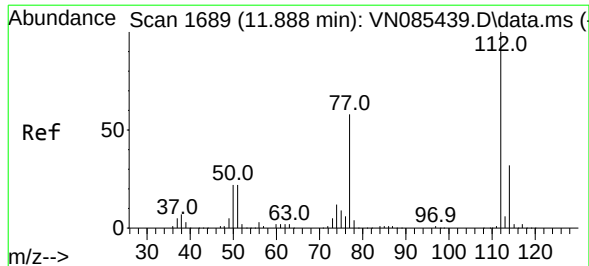
164 100

166 130.6 103.4 155.2

129 107.4 79.2 118.8

131 94.7 77.1 115.7





#65

Chlorobenzene

Concen: 21.077 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion:112 Resp: 136809

Ion Ratio Lower Upper

112 100

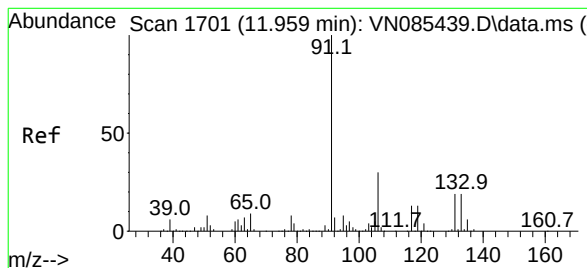
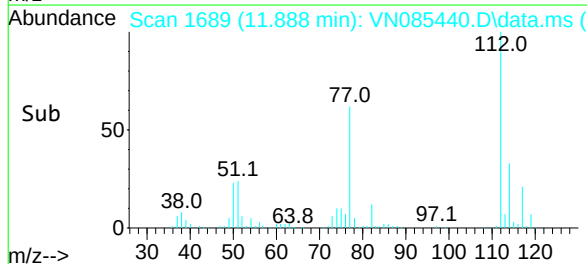
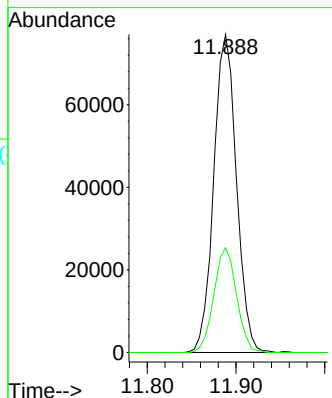
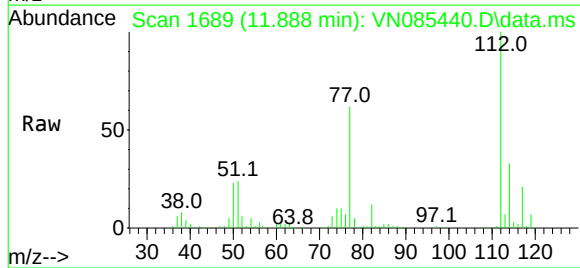
114 32.9 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 20.304 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

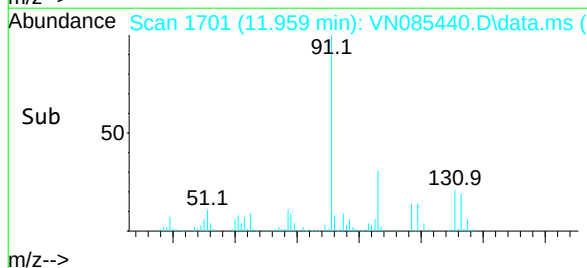
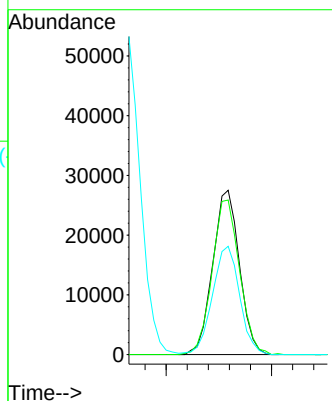
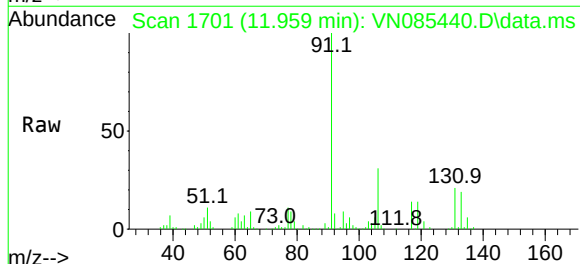
Tgt Ion:131 Resp: 48370

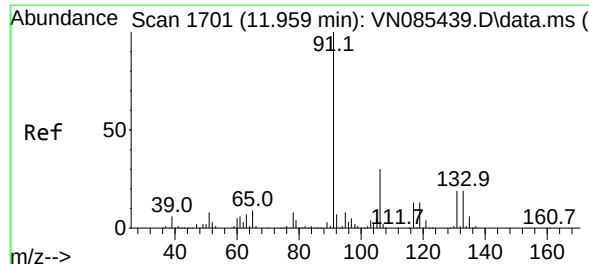
Ion Ratio Lower Upper

131 100

133 96.9 47.4 142.3

119 67.2 33.1 99.5





#67

Ethyl Benzene

Concen: 21.753 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 91 Resp: 229978

Ion Ratio Lower Upper

91 100

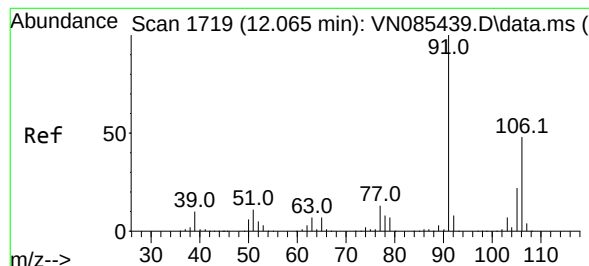
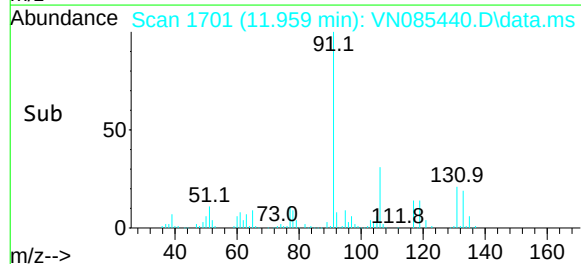
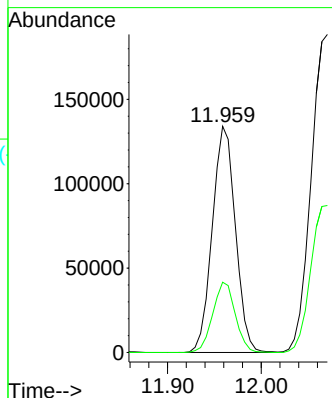
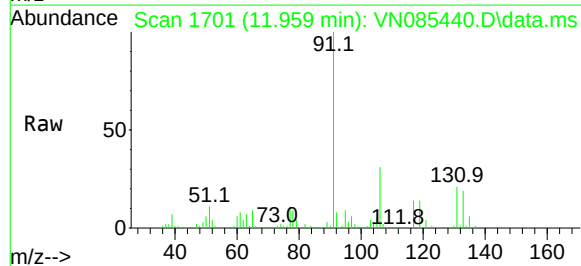
106 31.1 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 45.494 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085440.D

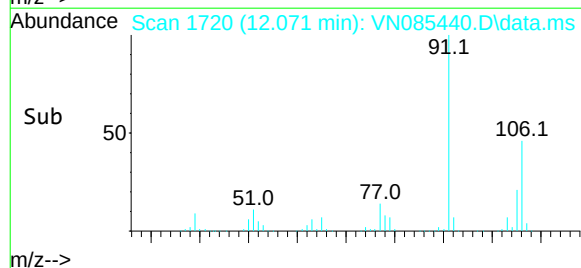
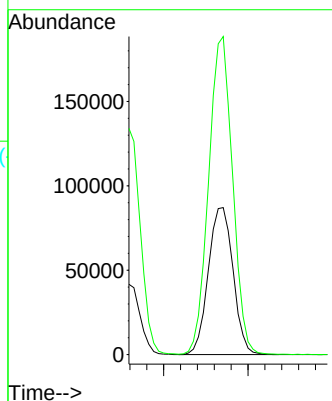
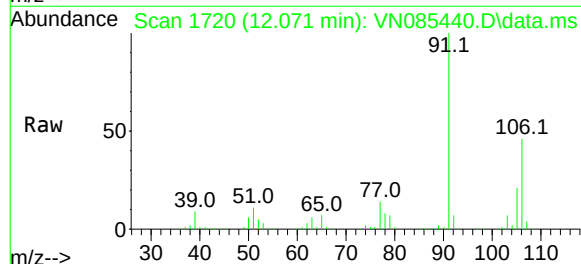
Acq: 14 Jan 2025 15:43

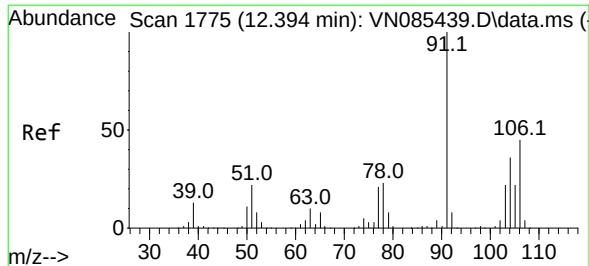
Tgt Ion:106 Resp: 177755

Ion Ratio Lower Upper

106 100

91 209.3 167.7 251.5





#69

o-Xylene

Concen: 22.643 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion:106 Resp: 84548

Ion Ratio Lower Upper

106 100

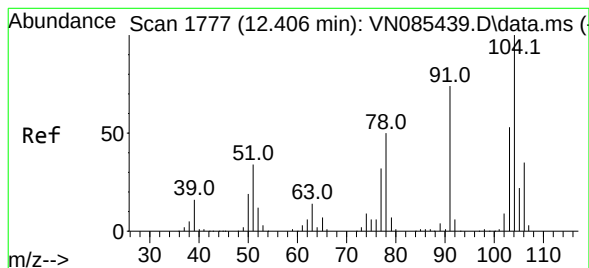
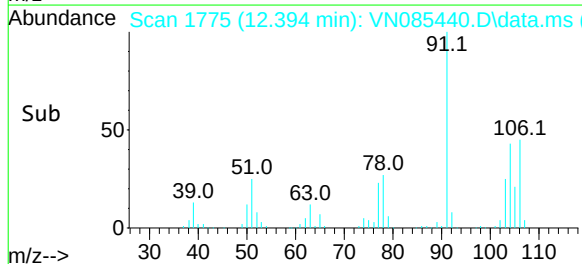
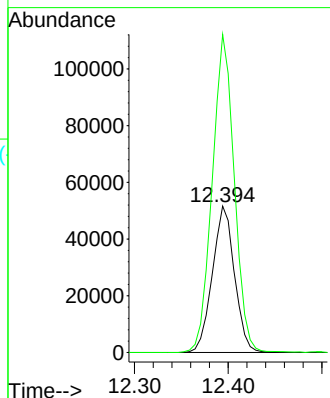
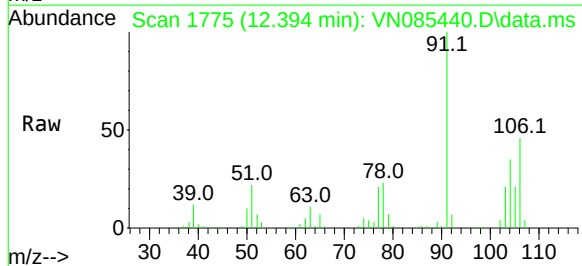
91 217.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 22.749 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

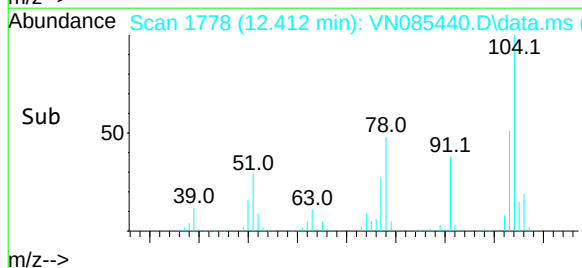
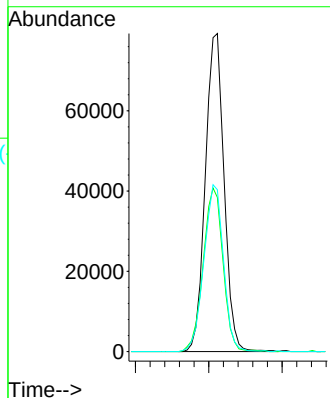
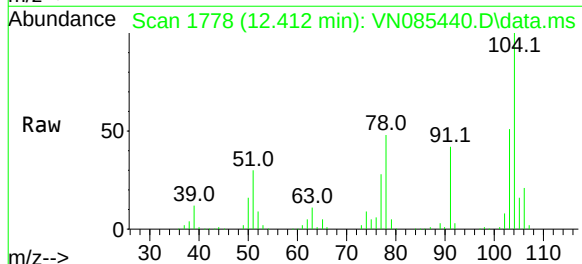
Tgt Ion:104 Resp: 140581

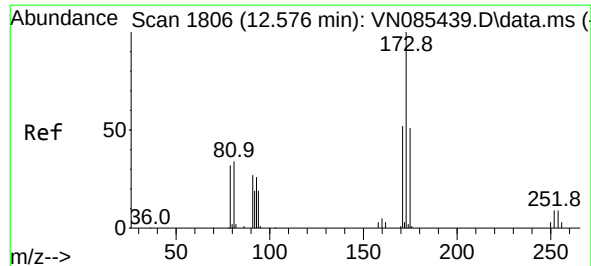
Ion Ratio Lower Upper

104 100

78 54.4 42.5 63.7

103 54.8 43.8 65.8





#71

Bromoform

Concen: 21.683 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

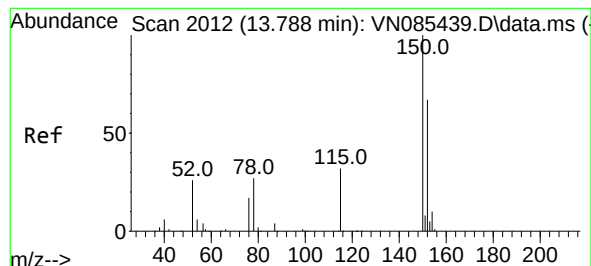
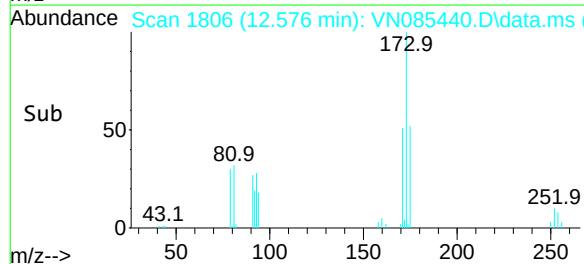
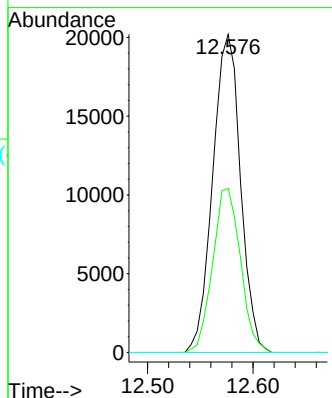
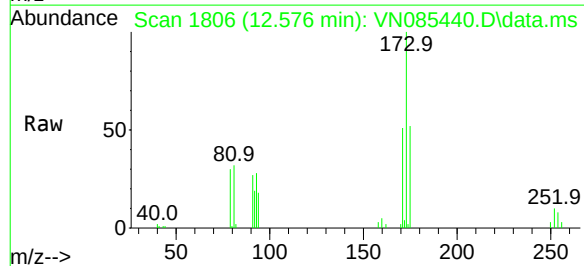
ClientSampleId :

VSTDIC020

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 36961 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 51.7  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

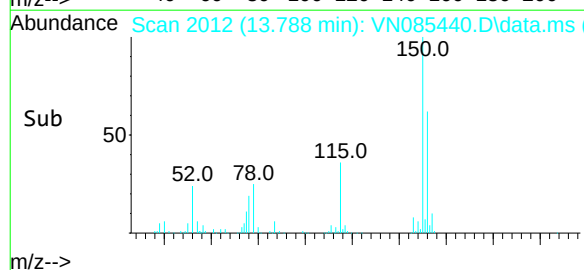
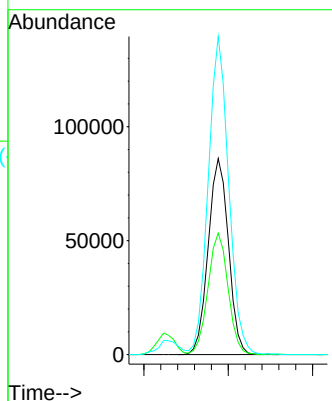
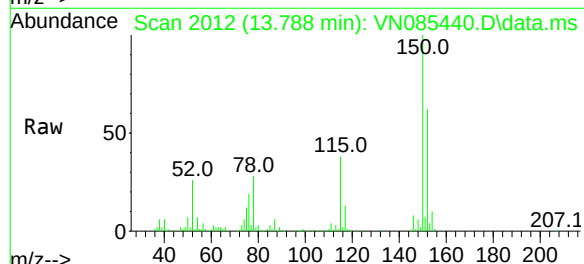
RT: 13.788 min Scan# 2012

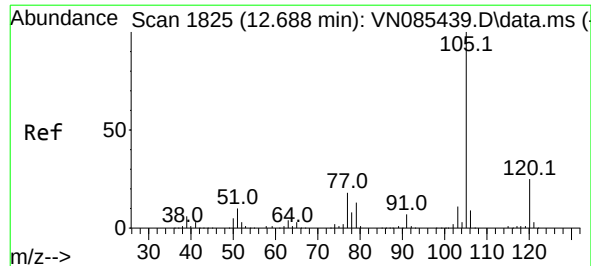
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 143526 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 61.4  | 31.1  | 93.3   |
| 150       | 163.9 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 21.819 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 105 Resp: 211354

Ion Ratio Lower Upper

105 100

120 25.5 12.8 38.3

Instrument :

MSVOA\_N

ClientSampleId :

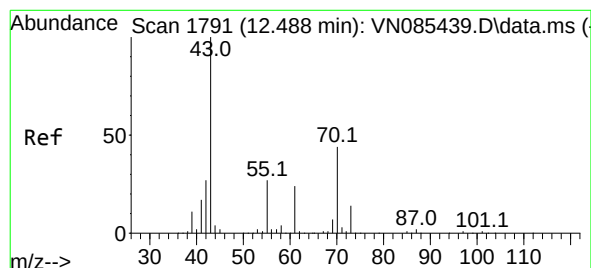
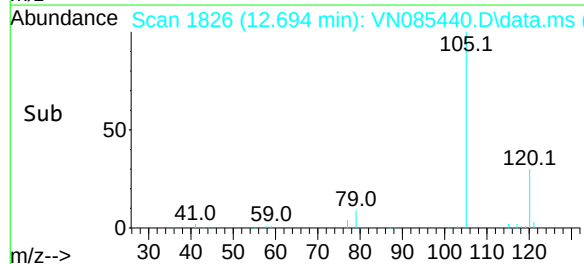
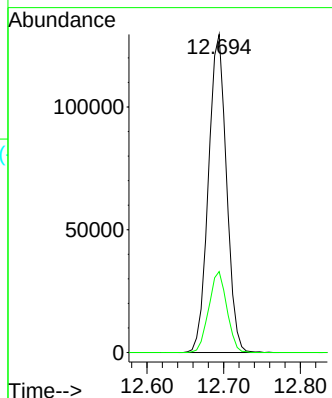
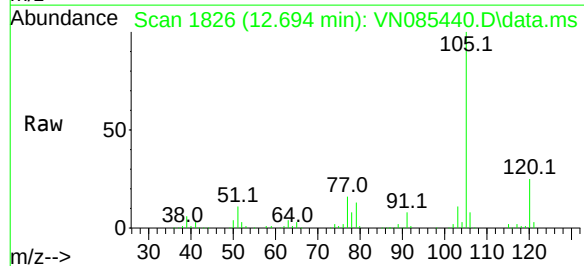
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 21.656 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 94292

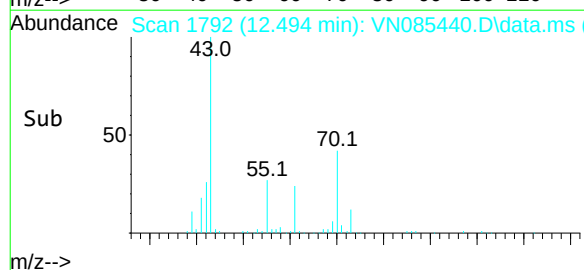
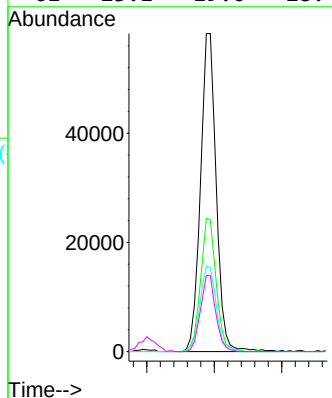
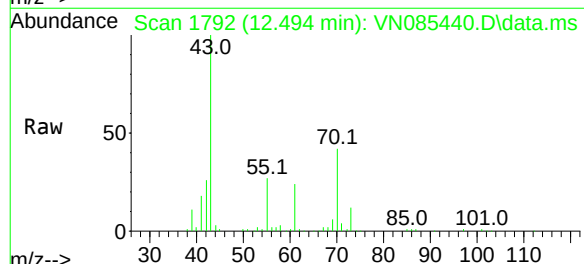
Ion Ratio Lower Upper

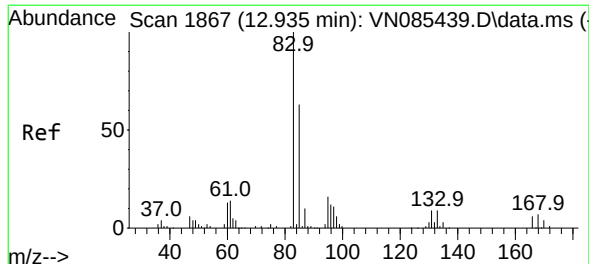
43 100

70 41.4 34.0 51.0

55 27.9 21.4 32.2

61 23.1 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 19.917 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

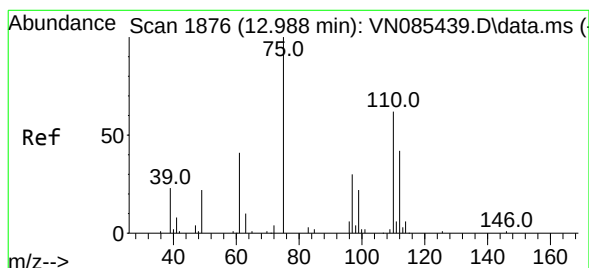
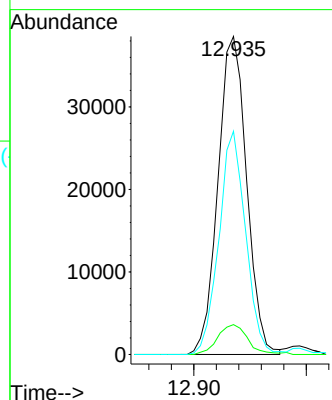
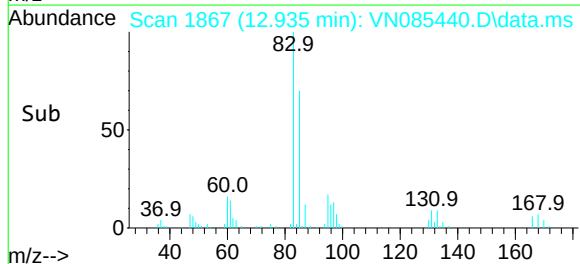
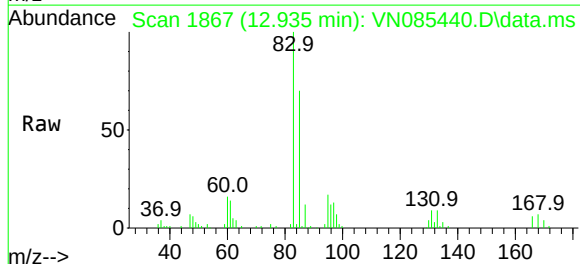
VSTDICC020

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 68151 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 9.9   | 4.8   | 14.4  |
| 85       | 65.5  | 32.2  | 96.6  |

## Manual Integrations

APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 22.036 ug/l m

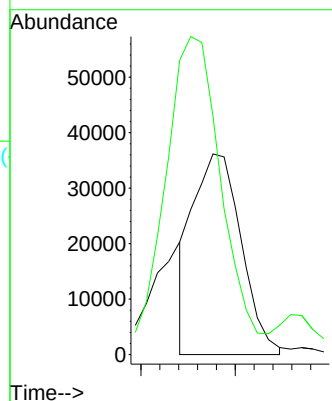
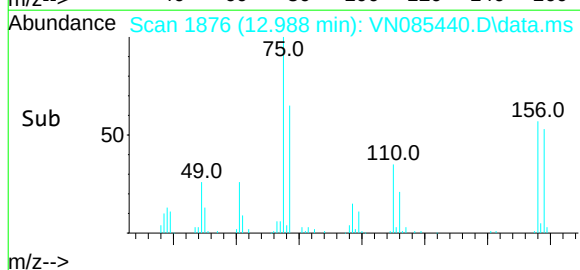
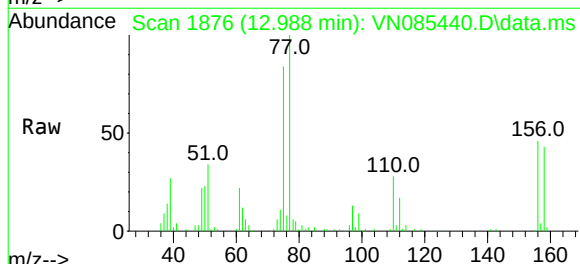
RT: 12.988 min Scan# 1876

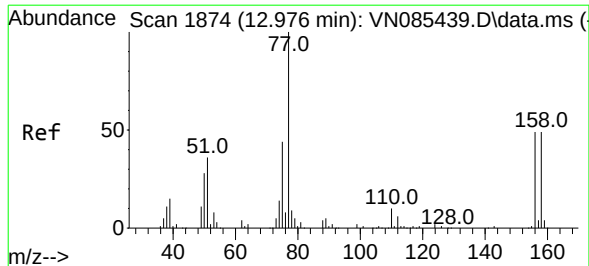
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 64180 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 186.8 | 109.7 | 329.2 |





#77

Bromobenzene

Concen: 20.556 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085440.D

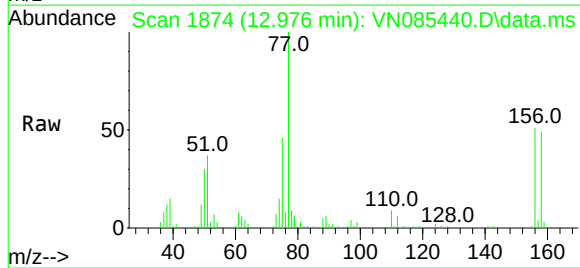
Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

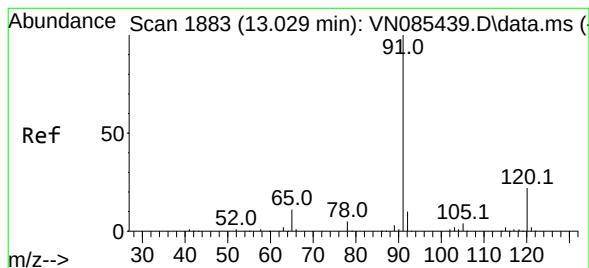
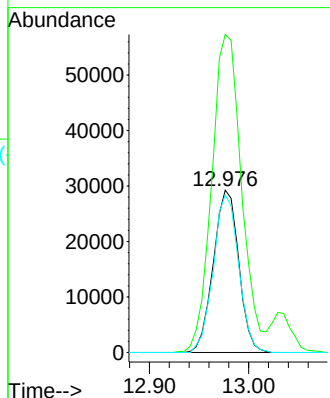
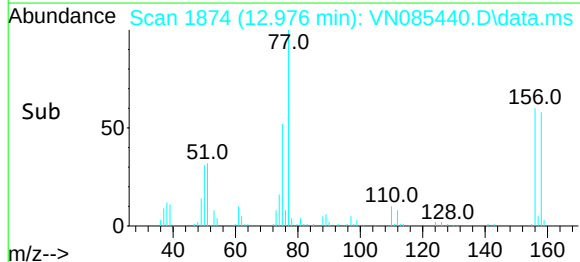
VSTDICC020



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 156   | Resp: | 52022 |
| Ion      | Ratio | Lower | Upper |
| 156      | 100   |       |       |
| 77       | 230.4 | 114.1 | 342.4 |
| 158      | 97.0  | 48.9  | 146.8 |

Manual Integrations  
APPROVED

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



#78

n-propylbenzene

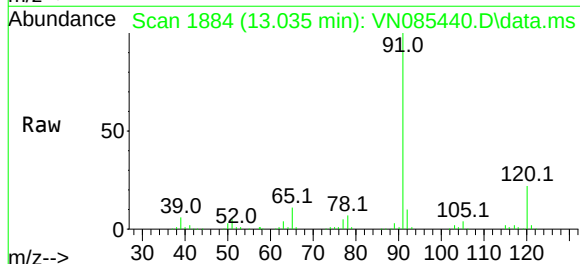
Concen: 22.028 ug/l

RT: 13.035 min Scan# 1884

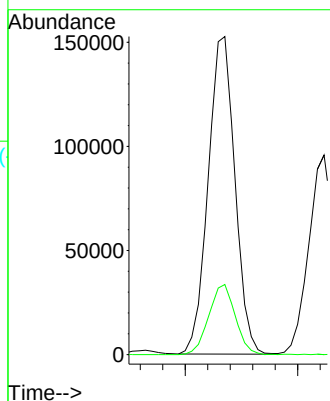
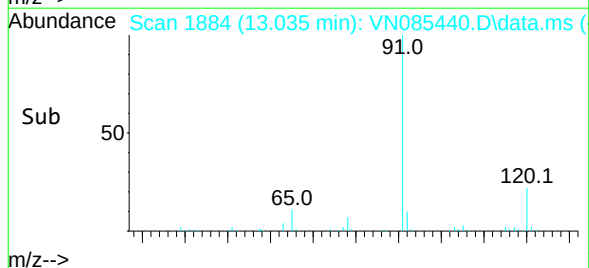
Delta R.T. 0.006 min

Lab File: VN085440.D

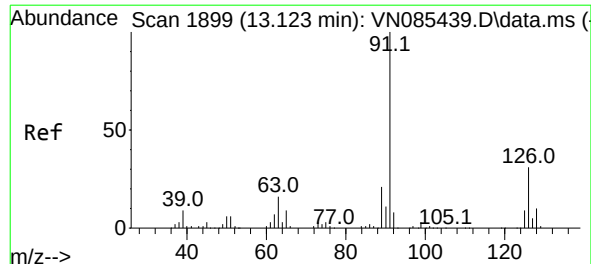
Acq: 14 Jan 2025 15:43



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 252610 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 120      | 21.8  | 10.9  | 32.6   |







#79

2-Chlorotoluene

Concen: 21.358 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 158511

Ion Ratio Lower Upper

91 100

126 31.5 15.7 47.1

Instrument :

MSVOA\_N

ClientSampleId :

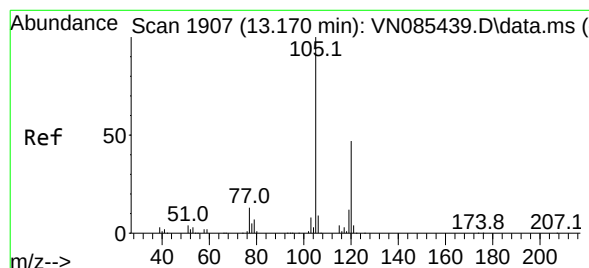
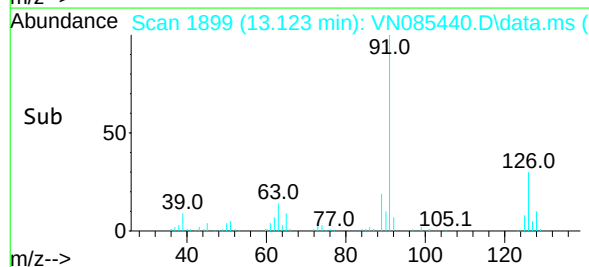
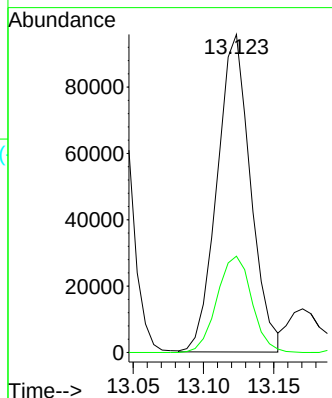
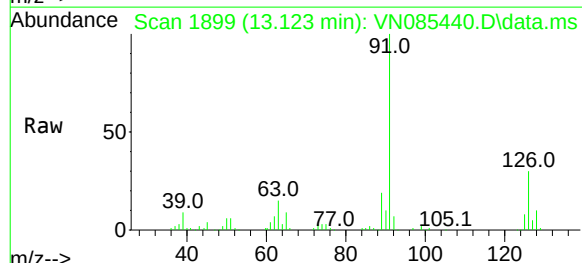
VSTDIC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 22.533 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085440.D

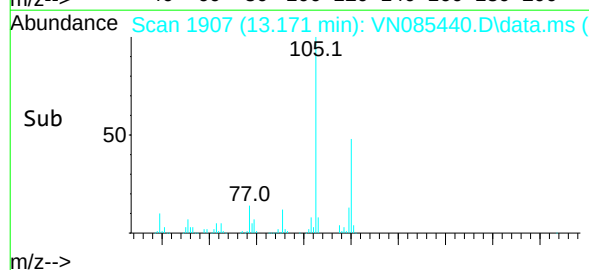
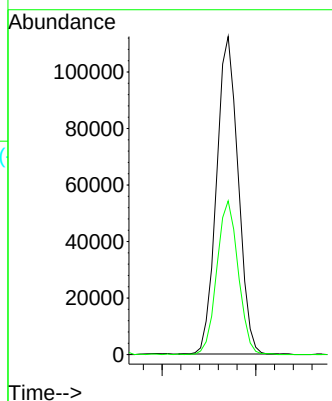
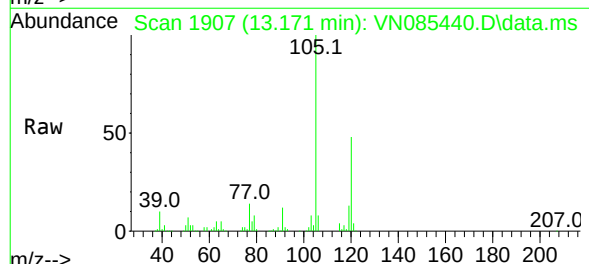
Acq: 14 Jan 2025 15:43

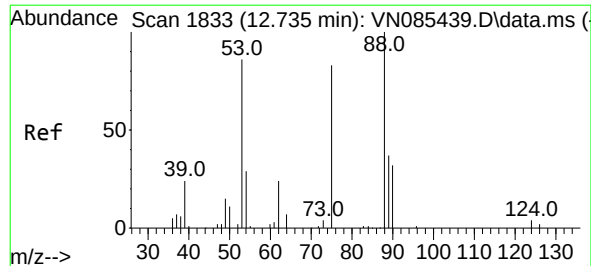
Tgt Ion:105 Resp: 180294

Ion Ratio Lower Upper

105 100

120 47.9 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 20.569 ug/l m

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085440.D

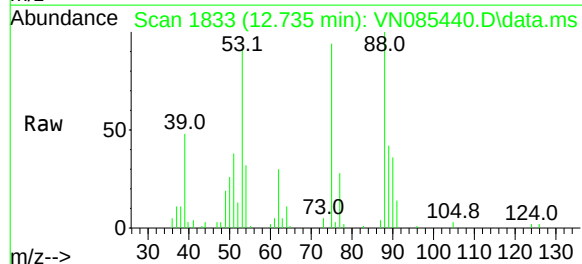
Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020



Tgt Ion: 75 Resp: 22178

Ion Ratio Lower Upper

75 100

53 107.2 95.6 143.4

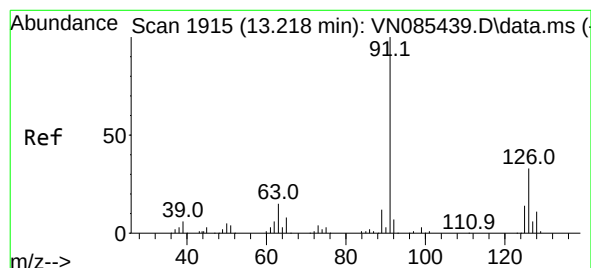
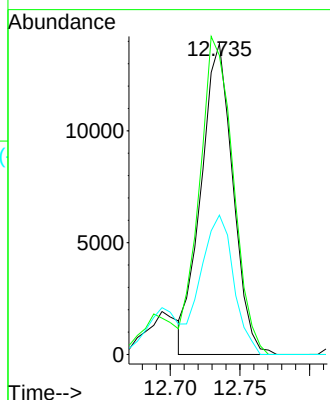
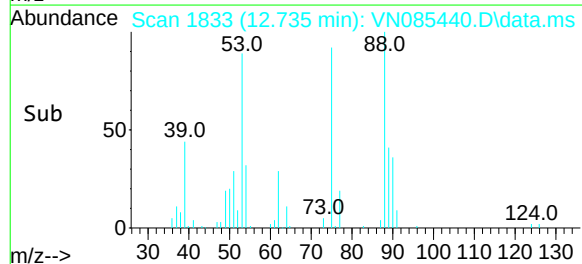
89 46.9 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 21.906 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. 0.000 min

Lab File: VN085440.D

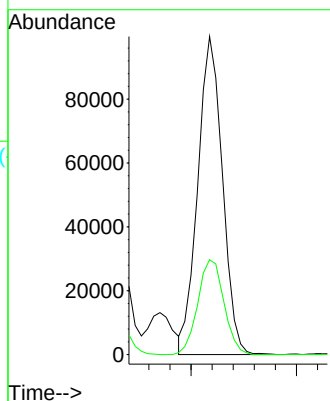
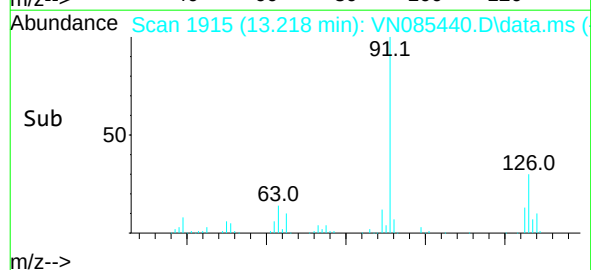
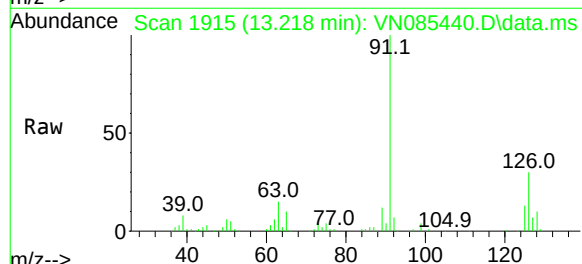
Acq: 14 Jan 2025 15:43

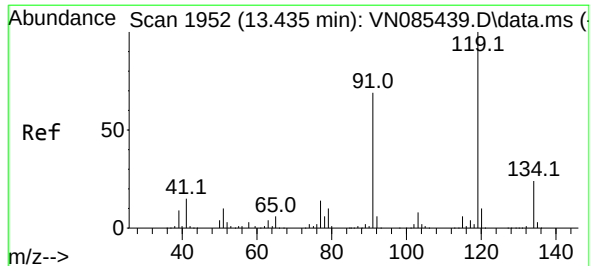
Tgt Ion: 91 Resp: 161880

Ion Ratio Lower Upper

91 100

126 31.6 15.9 47.7





#83

tert-Butylbenzene

Concen: 21.958 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion:119 Resp: 147541

Ion Ratio Lower Upper

119 100

91 69.5 35.1 105.3

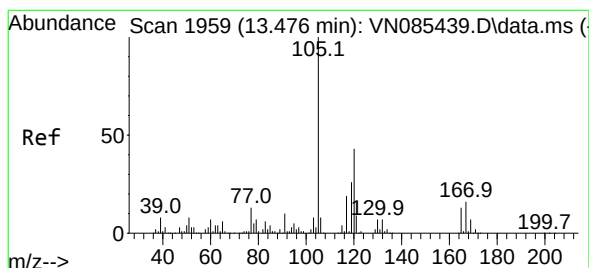
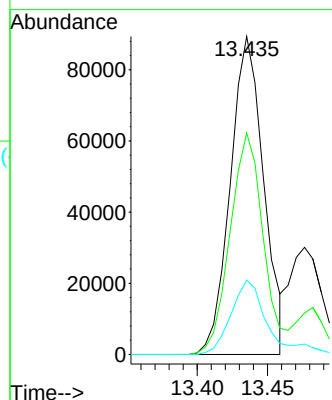
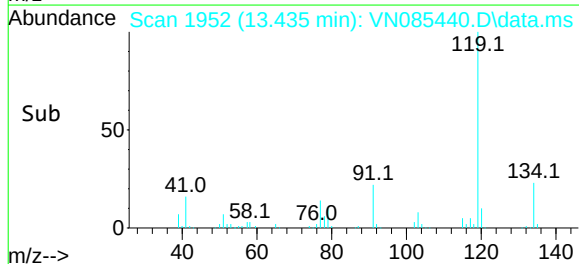
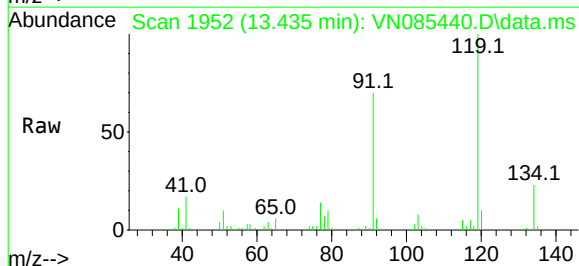
134 25.5 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 22.965 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085440.D

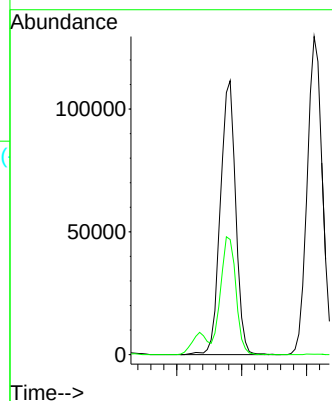
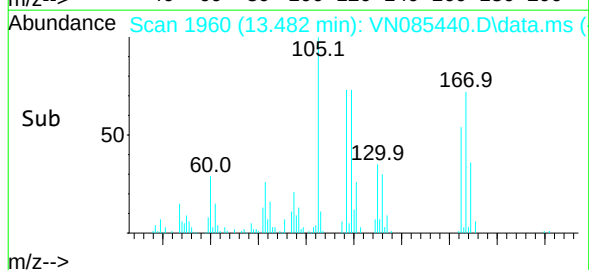
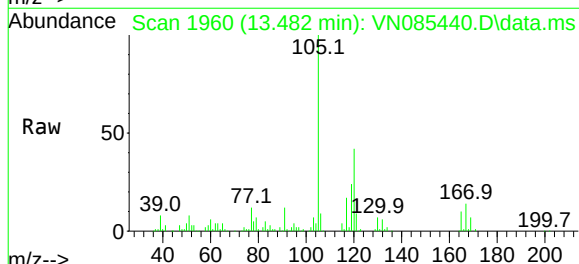
Acq: 14 Jan 2025 15:43

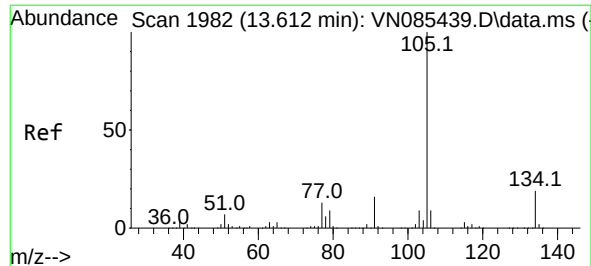
Tgt Ion:105 Resp: 183144

Ion Ratio Lower Upper

105 100

120 42.8 21.6 65.0





#85

sec-Butylbenzene

Concen: 22.457 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

Tgt Ion:105 Resp: 209133

Ion Ratio Lower Upper

105 100

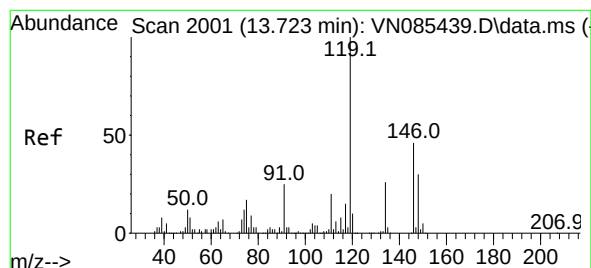
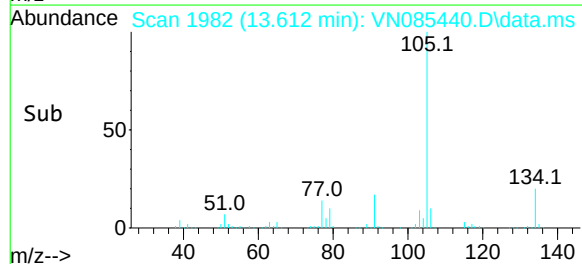
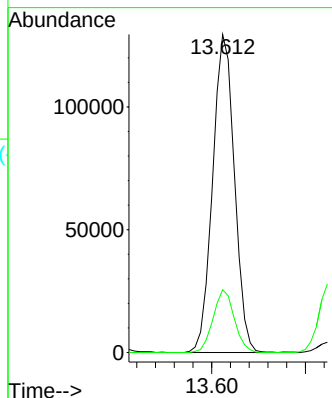
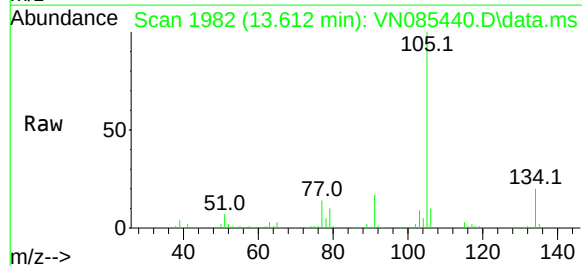
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 21.661 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

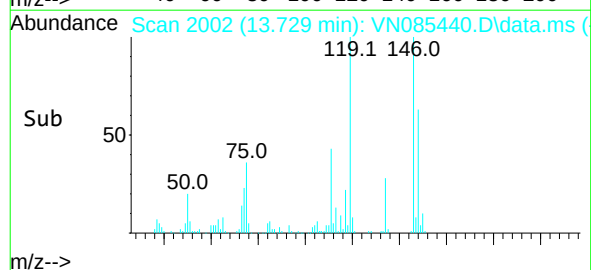
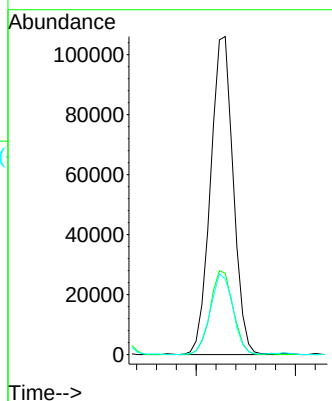
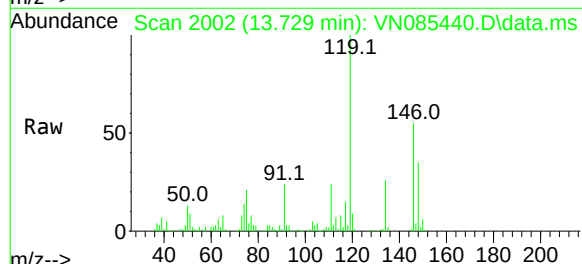
Tgt Ion:119 Resp: 168888

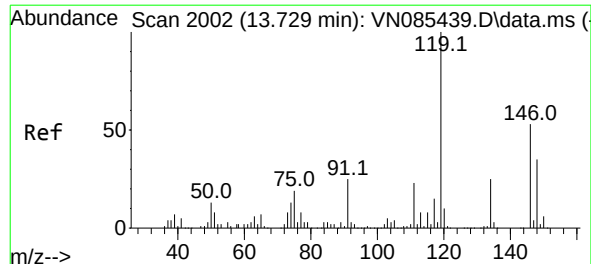
Ion Ratio Lower Upper

119 100

134 26.4 12.7 38.0

91 25.5 12.7 38.1





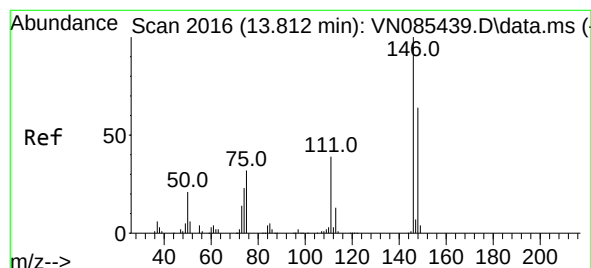
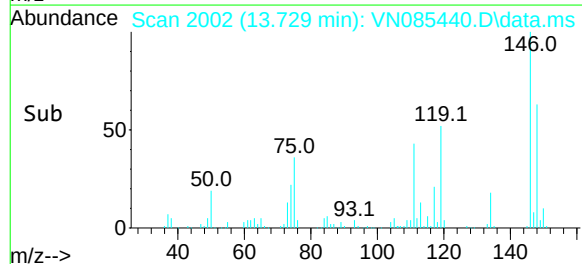
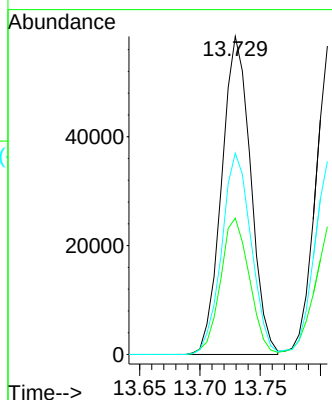
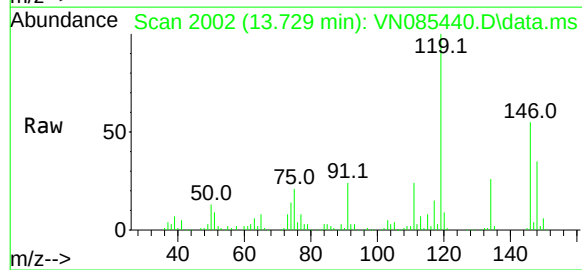
1,3-Dichlorobenzene  
Concen: 20.952 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Tgt Ion:146 Resp: 97652  
Ion Ratio Lower Upper  
146 100  
111 42.9 21.4 64.3  
148 64.3 32.3 96.9

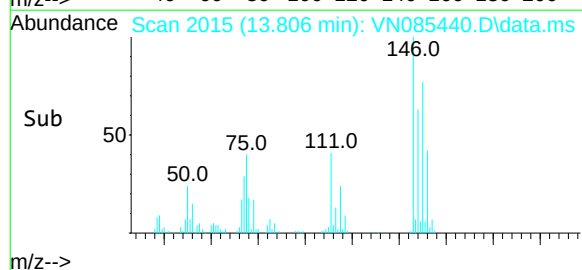
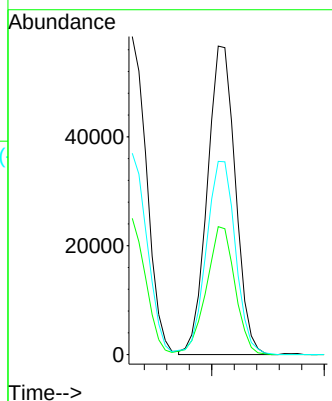
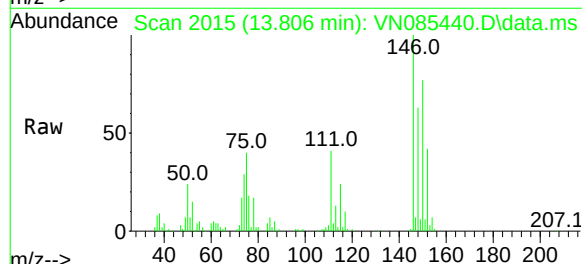
Manual Integrations  
APPROVED

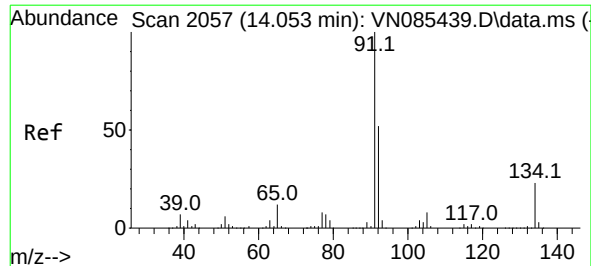
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



1,4-Dichlorobenzene  
Concen: 20.351 ug/l  
RT: 13.806 min Scan# 2015  
Delta R.T. -0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 98321  
Ion Ratio Lower Upper  
146 100  
111 42.2 21.3 63.7  
148 65.1 32.4 97.0





#89

n-Butylbenzene

Concen: 21.355 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

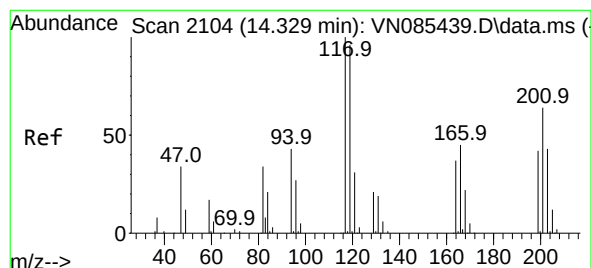
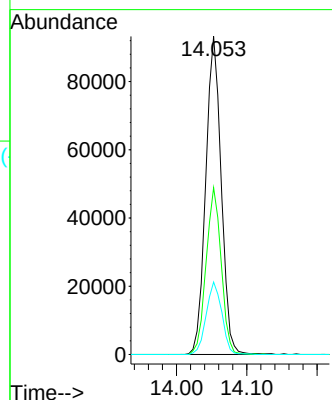
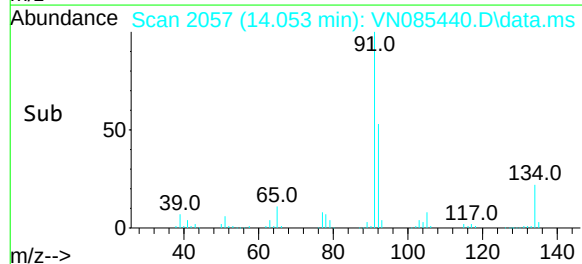
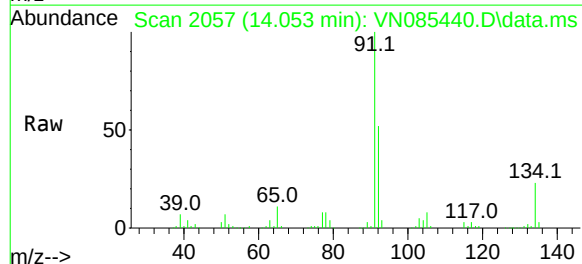
VSTDICC020

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 142673 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 51.0  | 25.8  | 77.3   |
| 134      | 23.0  | 11.7  | 35.1   |

Manual Integrations

APPROVED

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



#90

Hexachloroethane

Concen: 19.858 ug/l

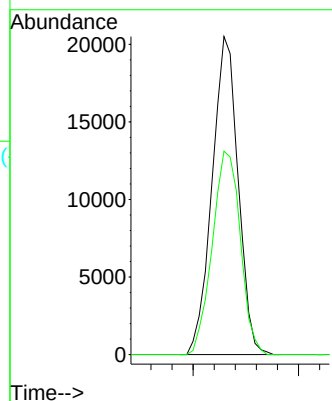
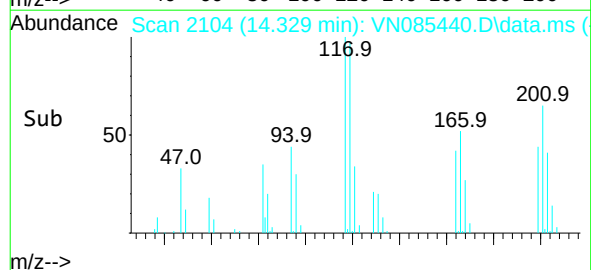
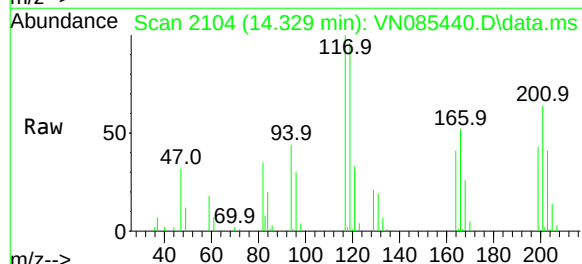
RT: 14.329 min Scan# 2104

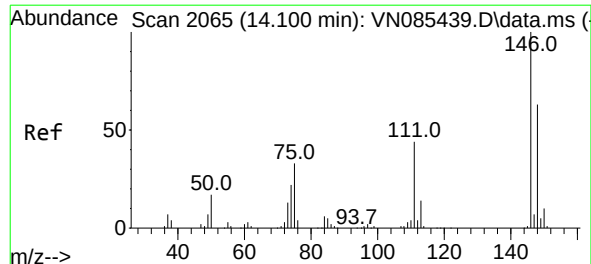
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 35205 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 68.8  | 33.7  | 101.0 |





#91

1,2-Dichlorobenzene

Concen: 20.425 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

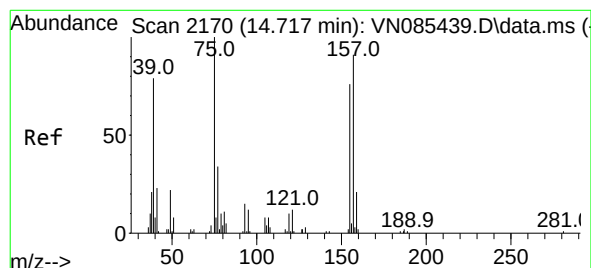
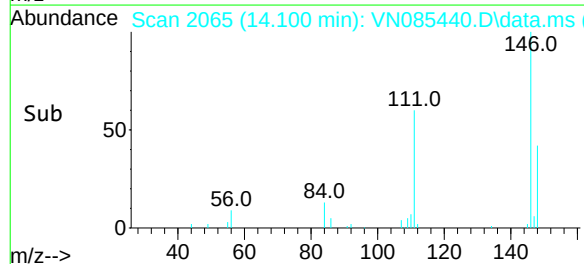
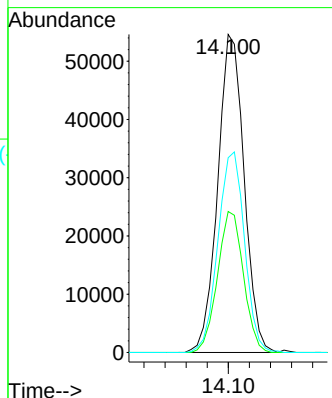
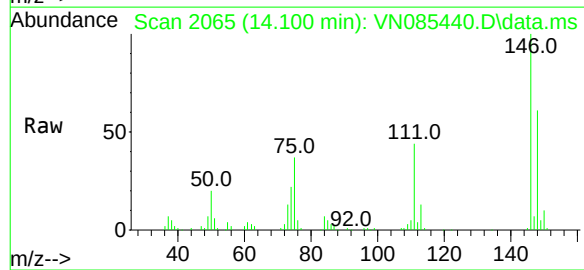
ClientSampleId :

VSTDIC020

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 94954 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 43.5  | 21.7  | 65.1  |
| 148      | 63.5  | 31.4  | 94.2  |

Manual Integrations  
APPROVED

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



#92

1,2-Dibromo-3-Chloropropane

Concen: 20.580 ug/l

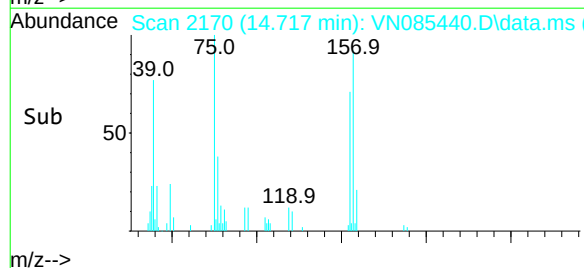
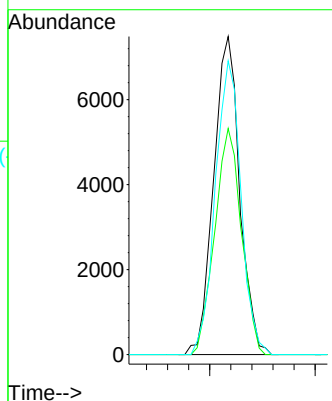
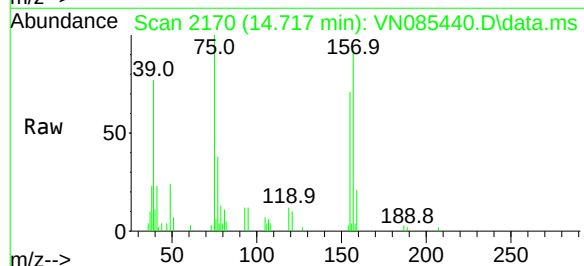
RT: 14.717 min Scan# 2170

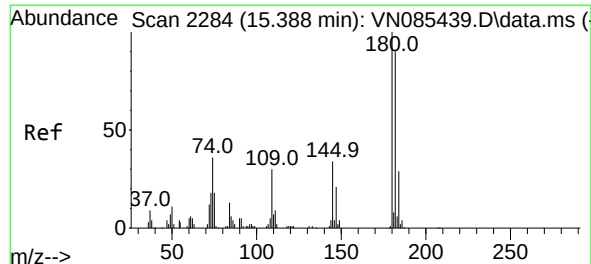
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 12859 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 155      | 72.7  | 36.4  | 109.2 |
| 157      | 90.9  | 45.4  | 136.1 |





#93

1,2,4-Trichlorobenzene

Concen: 21.233 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

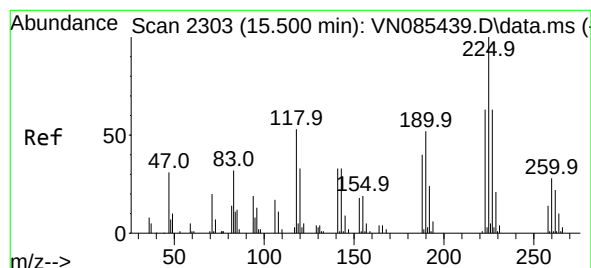
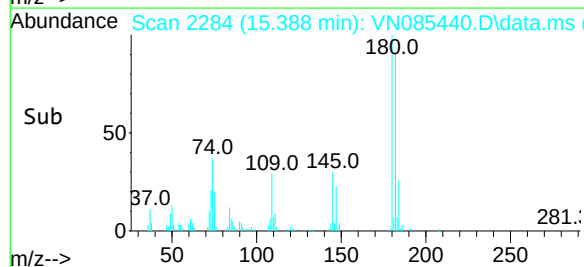
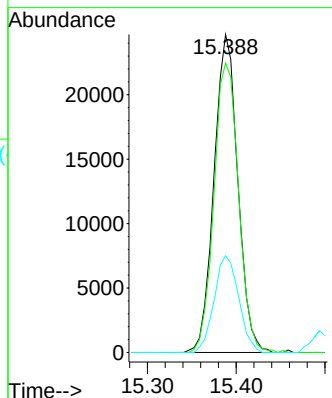
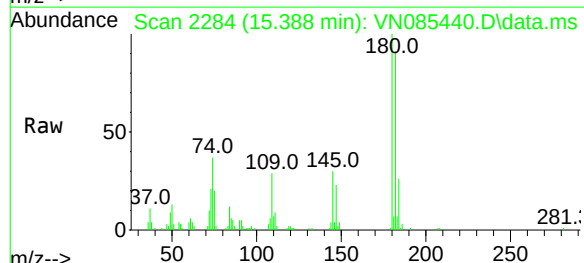
ClientSampleId :

VSTDIC020

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 45878 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 94.2  | 46.8  | 140.3 |
| 145       | 31.4  | 16.0  | 48.0  |

Manual Integrations  
APPROVED

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



#94

Hexachlorobutadiene

Concen: 19.805 ug/l

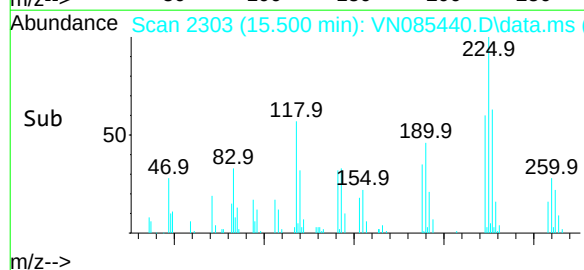
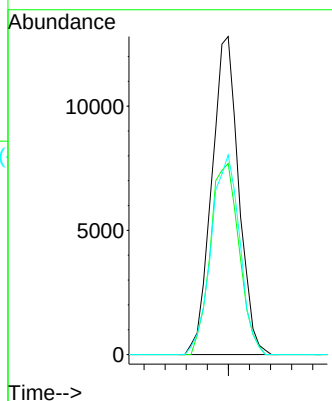
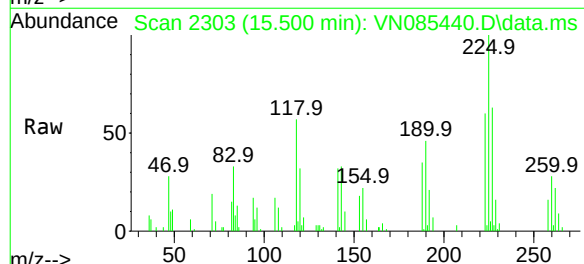
RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

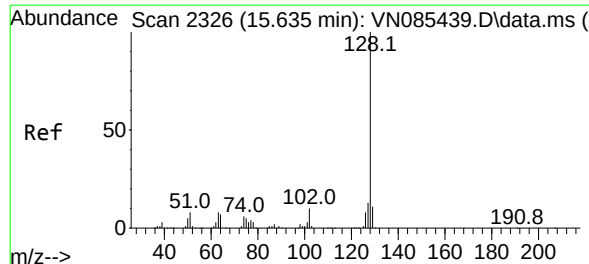
Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 22719 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 64.3  | 30.7  | 92.1  |
| 227       | 66.3  | 30.9  | 92.5  |







#95

Naphthalene

Concen: 20.906 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

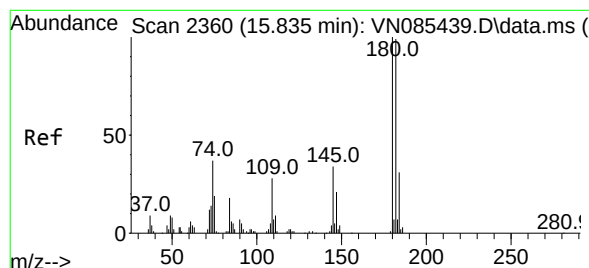
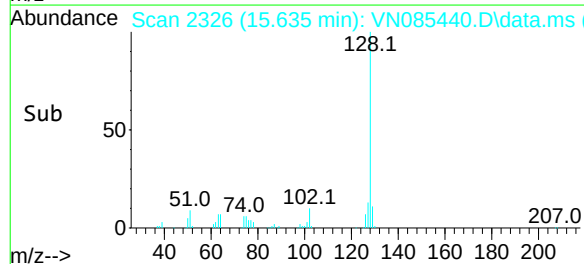
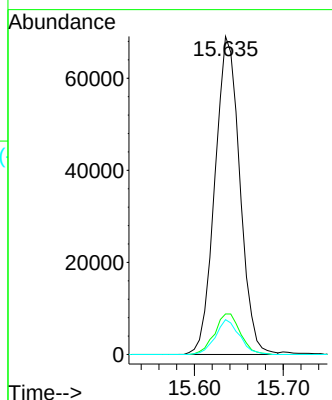
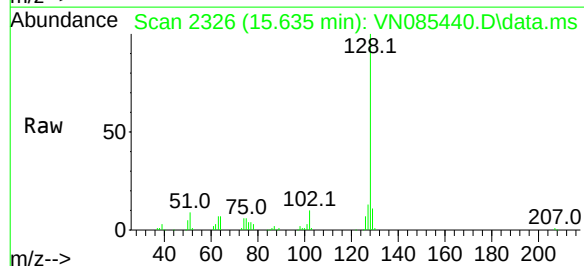
ClientSampleId :

VSTDIC020

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 128   | Resp: | 134793 |
| Ion      | Ratio | Lower | Upper  |
| 128      | 100   |       |        |
| 127      | 13.3  | 10.6  | 16.0   |
| 129      | 10.6  | 8.8   | 13.2   |

Manual Integrations  
APPROVED

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



#96

1,2,3-Trichlorobenzene

Concen: 20.797 ug/l

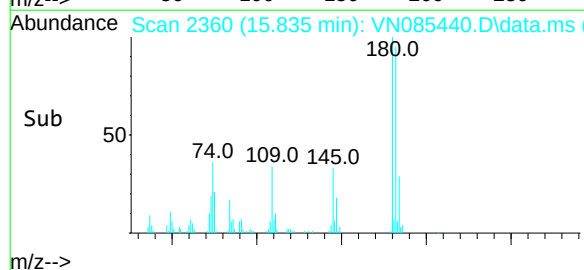
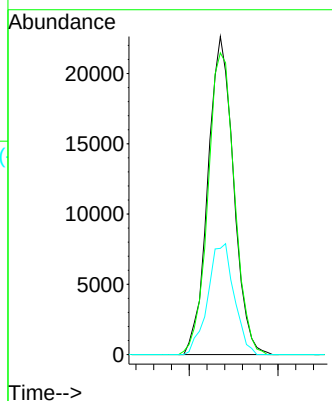
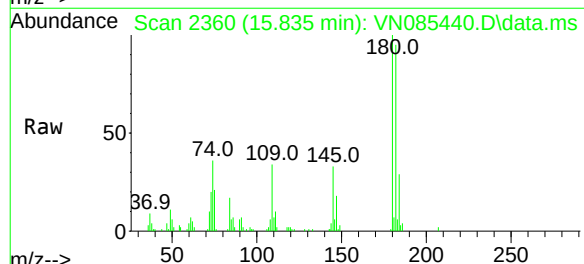
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 45468 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 97.9  | 47.4  | 142.2 |
| 145      | 35.7  | 16.9  | 50.7  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085441.D  
 Acq On : 14 Jan 2025 16:07  
 Operator : JC\MD  
 Sample : VSTDICC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:44:05 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 195889   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 340403   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 294508   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 132934   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 29856    | 9.442    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 18.880%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 21110    | 8.939    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 17.880%# |
| 50) Toluene-d8              | 10.565 | 98    | 73223    | 8.727    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 17.460%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 24327    | 8.476    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 16.960%# |

|                              |       |     |        |        |        |     |
|------------------------------|-------|-----|--------|--------|--------|-----|
| Target Compounds             |       |     |        | Qvalue |        |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 26124  | 9.850  | ug/l   | 96  |
| 3) Chloromethane             | 2.359 | 50  | 27143  | 9.452  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.512 | 62  | 27862  | 9.653  | ug/l   | 100 |
| 5) Bromomethane              | 2.965 | 94  | 17139  | 9.830  | ug/l   | 87  |
| 6) Chloroethane              | 3.130 | 64  | 16791  | 9.175  | ug/l   | 96  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 40755  | 9.731  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.953 | 74  | 12415  | 8.581  | ug/l   | 94  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 22982  | 9.742  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.589 | 142 | 25085  | 9.286  | ug/l   | 99  |
| 11) Tert butyl alcohol       | 5.512 | 59  | 17962  | 49.608 | ug/l   | 97  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 20615  | 9.806  | ug/l   | 99  |
| 13) Acrolein                 | 4.177 | 56  | 25568  | 51.729 | ug/l   | 99  |
| 14) Allyl chloride           | 5.018 | 41  | 32240  | 9.451  | ug/l   | 97  |
| 15) Acrylonitrile            | 5.712 | 53  | 53959  | 46.918 | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 48475  | 47.446 | ug/l   | 98  |
| 17) Carbon Disulfide         | 4.712 | 76  | 60201  | 9.300  | ug/l # | 94  |
| 18) Methyl Acetate           | 5.030 | 43  | 30500  | 9.817  | ug/l   | 98  |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 65207  | 9.552  | ug/l   | 91  |
| 20) Methylene Chloride       | 5.277 | 84  | 23723  | 9.379  | ug/l   | 96  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 21127  | 9.403  | ug/l   | 97  |
| 22) Diisopropyl ether        | 6.671 | 45  | 71857  | 9.490  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.600 | 43  | 250575 | 47.125 | ug/l   | 98  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 43099  | 9.335  | ug/l   | 95  |
| 25) 2-Butanone               | 7.477 | 43  | 71191  | 47.350 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 36105  | 9.672  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.489 | 96  | 25049  | 9.466  | ug/l   | 97  |
| 28) Bromochloromethane       | 7.806 | 49  | 19037  | 8.863  | ug/l   | 97  |
| 29) Tetrahydrofuran          | 7.836 | 42  | 45641  | 47.881 | ug/l   | 98  |
| 30) Chloroform               | 7.965 | 83  | 45792  | 9.596  | ug/l   | 100 |
| 31) Cyclohexane              | 8.253 | 56  | 40211  | 10.020 | ug/l # | 93  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 39170  | 9.358  | ug/l   | 99  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 30015  | 9.056  | ug/l   | 97  |
| 37) Ethyl Acetate            | 7.559 | 43  | 30760  | 9.195  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 36015  | 9.492  | ug/l   | 94  |
| 39) Methylcyclohexane        | 9.594 | 83  | 27721  | 8.900  | ug/l   | 95  |
| 40) Benzene                  | 8.600 | 78  | 93680  | 9.407  | ug/l   | 96  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085441.D  
 Acq On : 14 Jan 2025 16:07  
 Operator : JC\MD  
 Sample : VSTDICC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:44:05 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 16859    | 9.686   | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 35569    | 9.483   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 48926    | 9.127   | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 21113    | 9.108   | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 22747    | 8.942   | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 17260    | 9.404   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.883  | 83   | 35020    | 9.365   | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.677  | 41   | 21873    | 9.067   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 7734     | 190.382 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 146990   | 47.254  | ug/l   | 98       |
| 52) Toluene                   | 10.630 | 92   | 54976    | 9.527   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 32780    | 9.276   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 35904    | 9.512   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 21060    | 9.222   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 28454    | 9.042   | ug/l   | 95       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 37768    | 9.512   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 63110    | 43.550  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 101318   | 46.291  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 25029    | 9.079   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 21055    | 9.263   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 19934    | 9.928   | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 61680    | 9.560   | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 21853    | 9.229   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.959 | 91   | 99248    | 9.445   | ug/l   | 97       |
| 68) m/p-Xylenes               | 12.065 | 106  | 72431    | 18.650  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 34382    | 9.264   | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 56285    | 9.163   | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 16071    | 9.485   | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 87003    | 9.697   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 37343    | 9.260   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 30770    | 9.709   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 25443m   | 9.432   | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 22784    | 9.720   | ug/l   | 97       |
| 78) n-propylbenzene           | 13.035 | 91   | 102262   | 9.628   | ug/l   | 98       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 68346    | 9.943   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 71656    | 9.669   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 9236     | 9.248   | ug/l   | 100      |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 66773    | 9.756   | ug/l   | 97       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 59455    | 9.553   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 72046    | 9.754   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 83662    | 9.699   | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 67556    | 9.674   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 41843    | 9.693   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 42728    | 9.549   | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 57632    | 9.314   | ug/l   | 97       |
| 90) Hexachloroethane          | 14.329 | 117  | 15261    | 9.294   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 40726    | 9.458   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 5639     | 9.744   | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 18720    | 9.354   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 10491    | 9.874   | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 52054    | 8.717   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 19450    | 9.605   | ug/l   | 96       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085441.D  
Acq On : 14 Jan 2025 16:07  
Operator : JC\MD  
Sample : VSTDICC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:44:05 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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

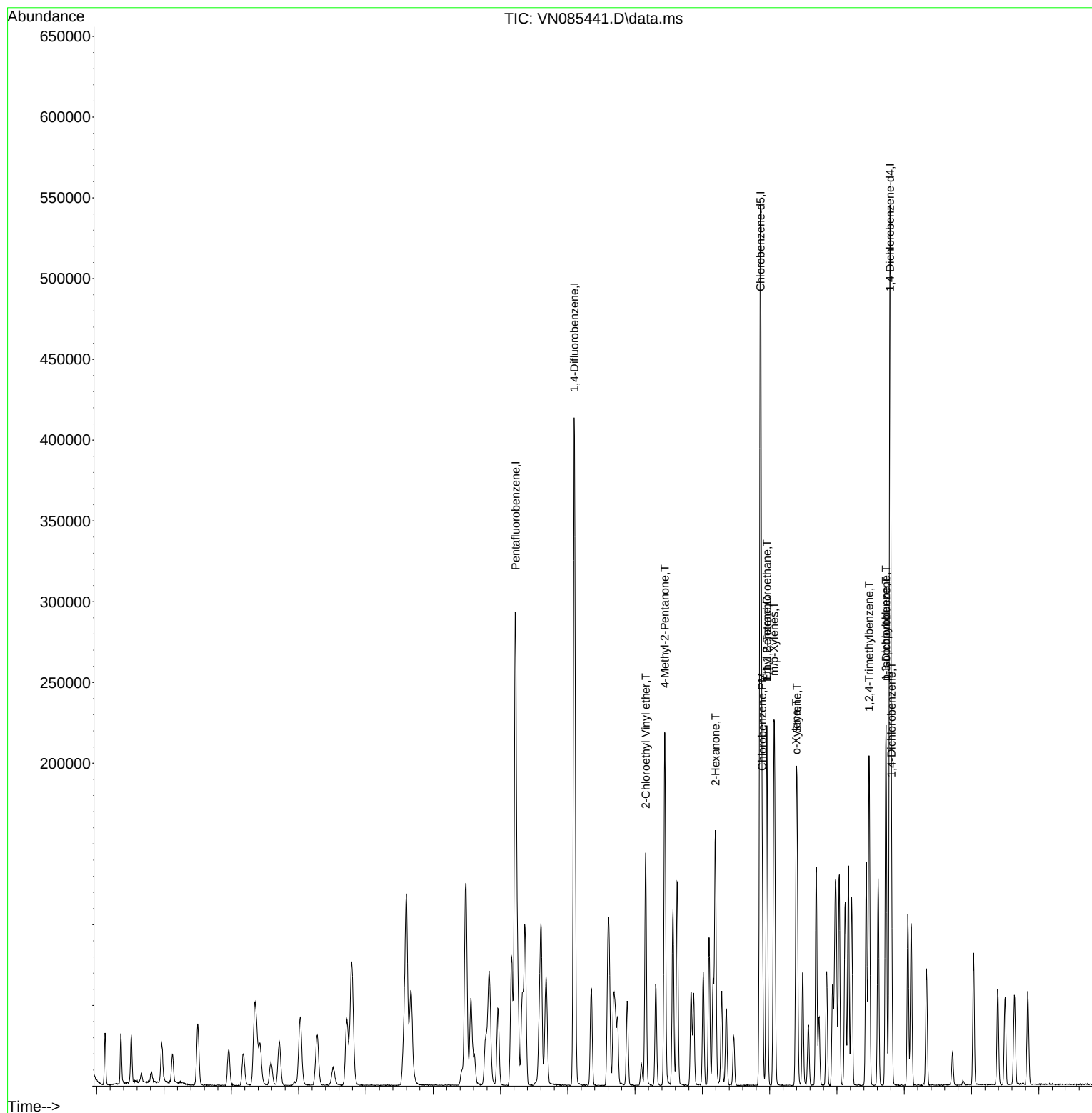
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085441.D  
Acq On : 14 Jan 2025 16:07  
Operator : JC\MD  
Sample : VSTDIC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

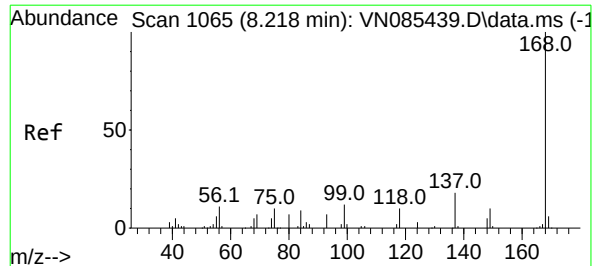
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:44:05 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





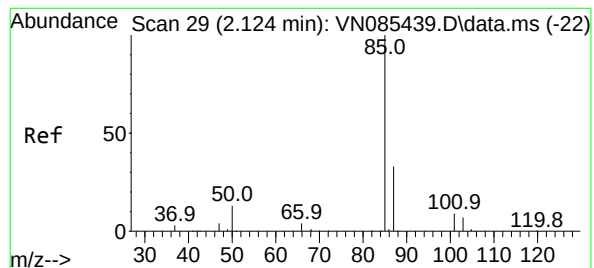
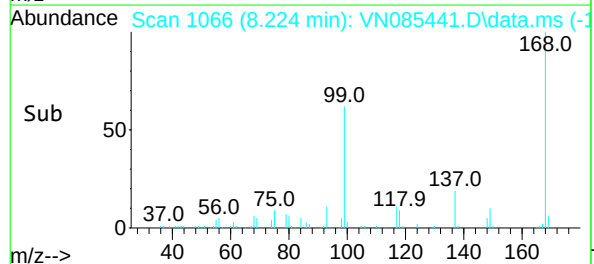
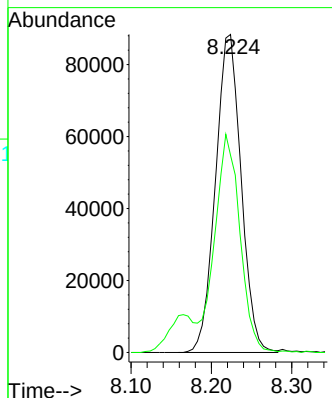
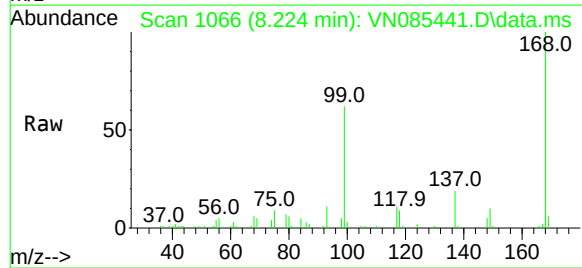
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Tgt Ion:168 Resp: 195889  
Ion Ratio Lower Upper  
168 100  
99 61.7 53.6 80.4

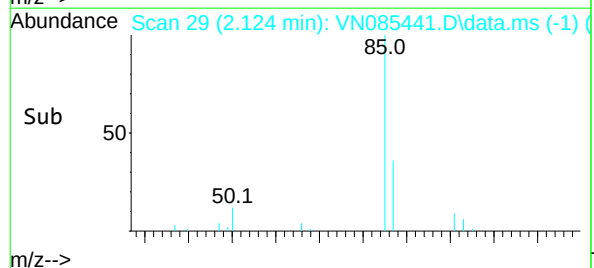
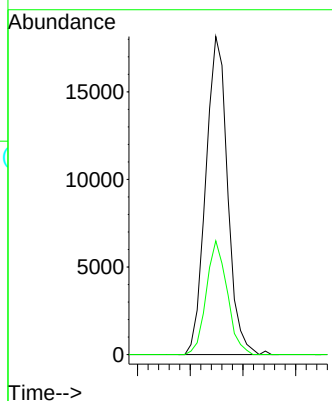
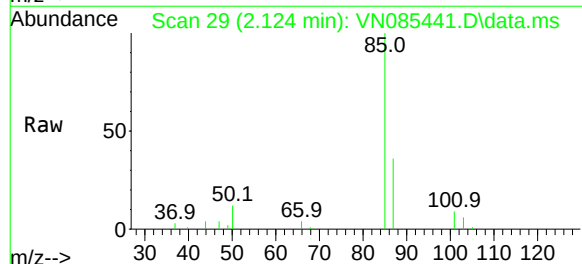
Manual Integrations  
APPROVED

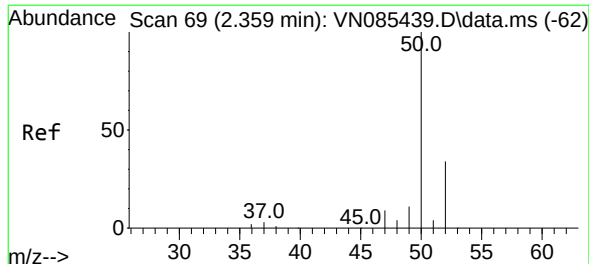
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#2  
Dichlorodifluoromethane  
Concen: 9.850 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

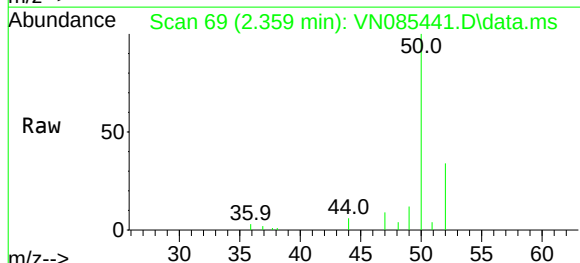
Tgt Ion: 85 Resp: 26124  
Ion Ratio Lower Upper  
85 100  
87 35.8 16.7 50.1





#3  
Chloromethane  
Concen: 9.452 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

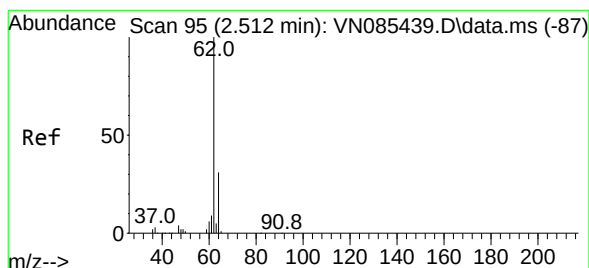
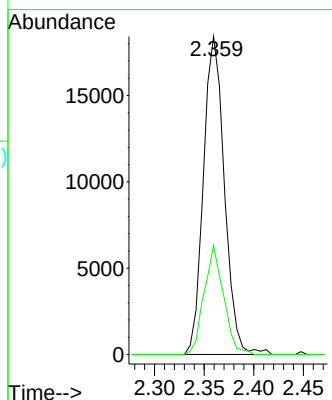
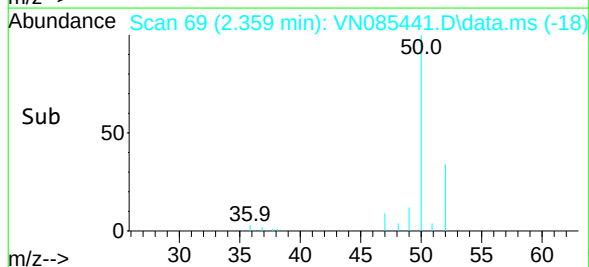
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010



Tgt Ion: 50 Resp: 27143  
Ion Ratio Lower Upper  
50 100  
52 34.3 27.0 40.6

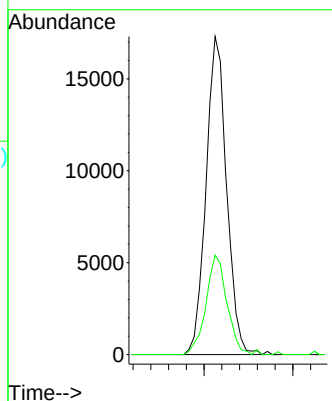
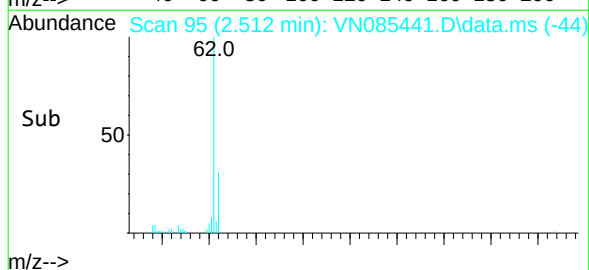
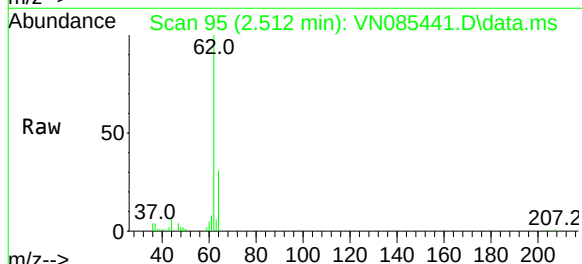
Manual Integrations  
APPROVED

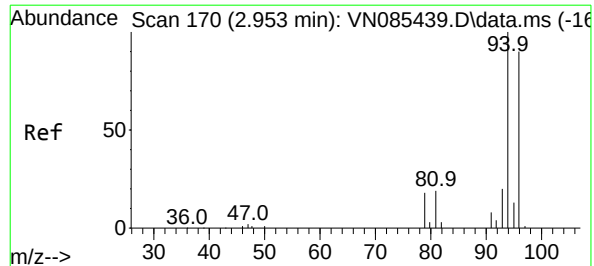
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#4  
Vinyl Chloride  
Concen: 9.653 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 27862  
Ion Ratio Lower Upper  
62 100  
64 31.2 24.8 37.2





#5

Bromomethane

Concen: 9.830 ug/l

RT: 2.965 min Scan# 171

Delta R.T. 0.012 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 94 Resp: 17139

Ion Ratio Lower Upper

94 100

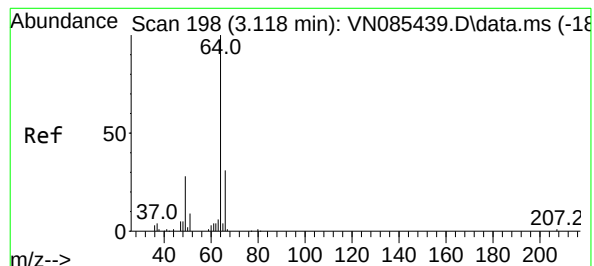
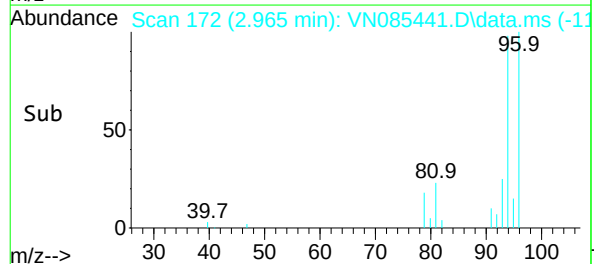
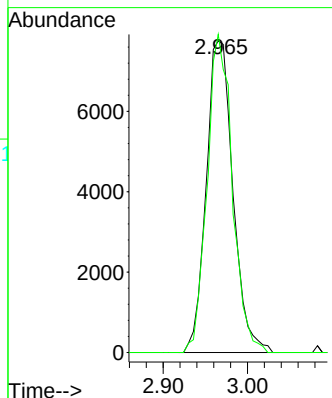
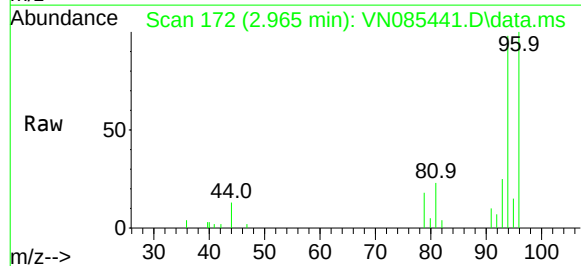
96 102.1 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 9.175 ug/l

RT: 3.130 min Scan# 200

Delta R.T. 0.012 min

Lab File: VN085441.D

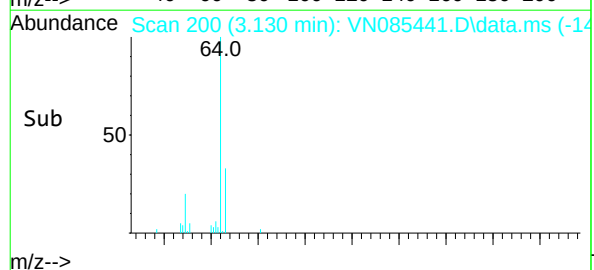
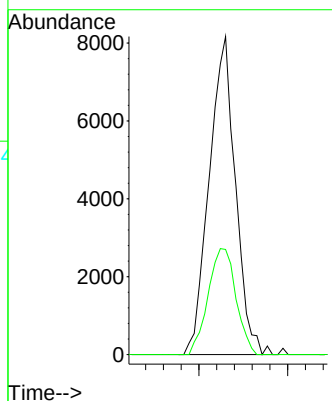
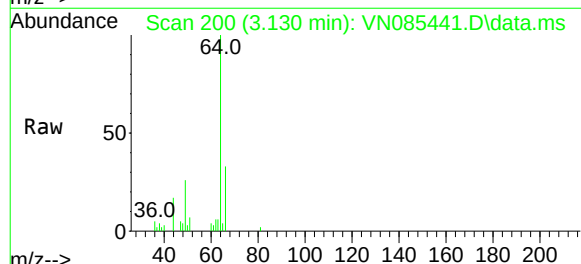
Acq: 14 Jan 2025 16:07

Tgt Ion: 64 Resp: 16791

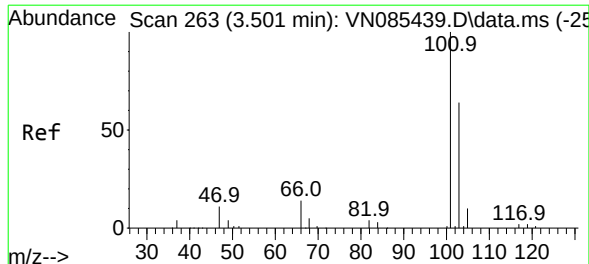
Ion Ratio Lower Upper

64 100

66 33.1 24.6 36.8







#7

Trichlorofluoromethane

Concen: 9.731 ug/l

RT: 3.501 min Scan# 263

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion:101 Resp: 40755

Ion Ratio Lower Upper

101 100

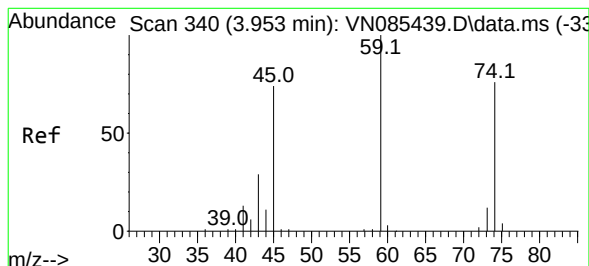
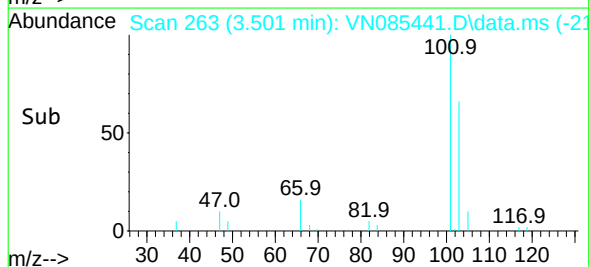
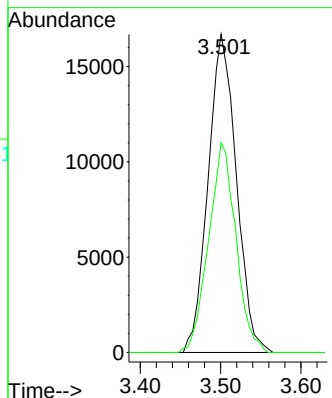
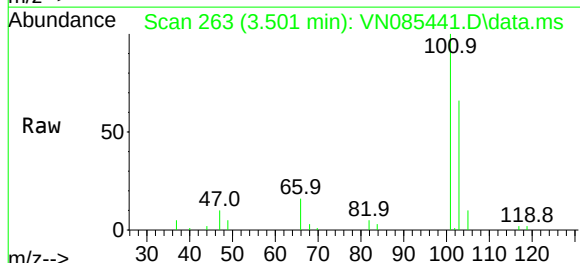
103 65.9 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 8.581 ug/l

RT: 3.953 min Scan# 340

Delta R.T. 0.000 min

Lab File: VN085441.D

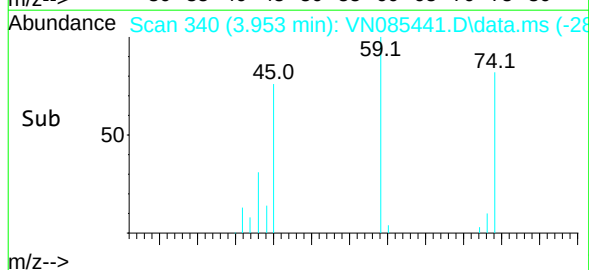
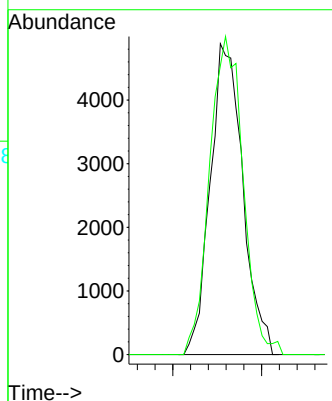
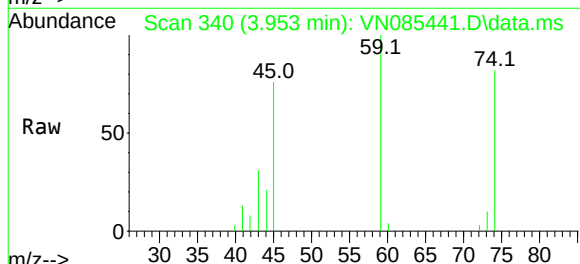
Acq: 14 Jan 2025 16:07

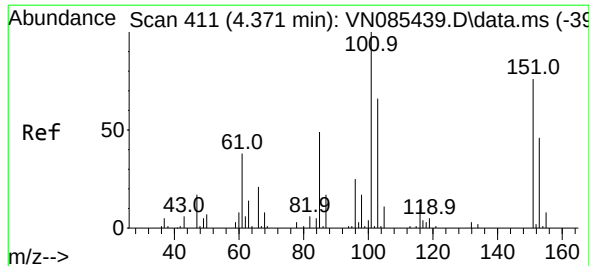
Tgt Ion: 74 Resp: 12415

Ion Ratio Lower Upper

74 100

45 105.3 49.7 149.1





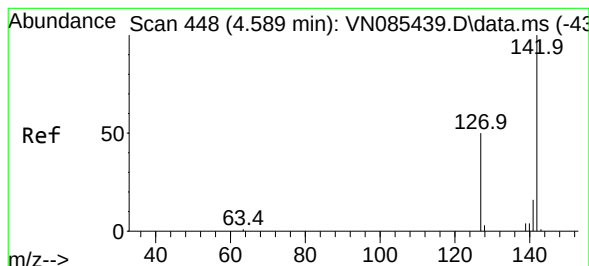
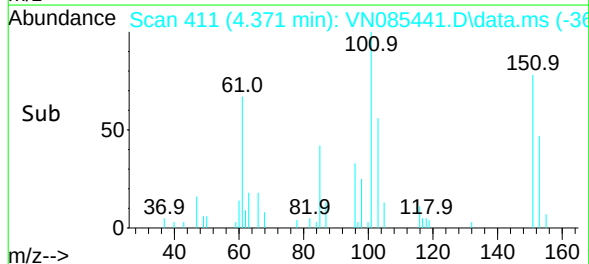
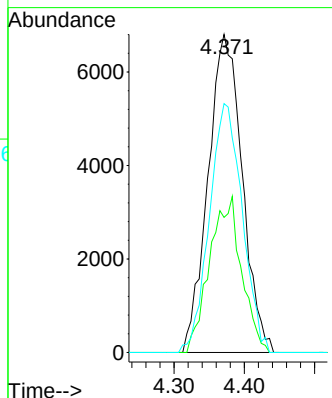
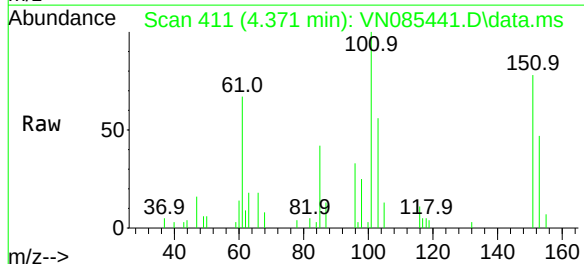
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.742 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion:101 Resp: 22982  
Ion Ratio Lower Upper  
101 100  
85 45.8 37.8 56.8  
151 75.2 58.8 88.2

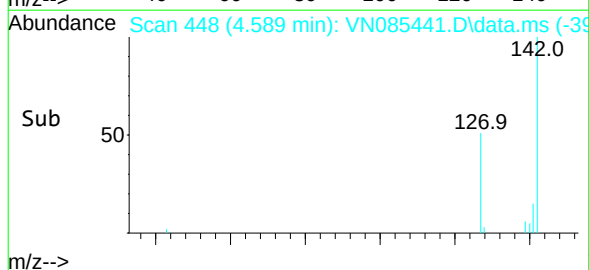
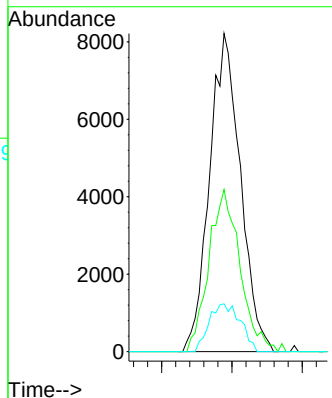
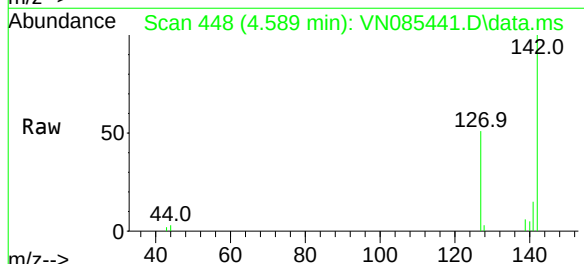
Manual Integrations  
APPROVED

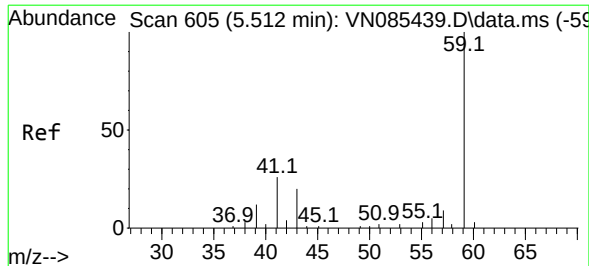
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#10  
Methyl Iodide  
Concen: 9.286 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:142 Resp: 25085  
Ion Ratio Lower Upper  
142 100  
127 50.9 40.3 60.5  
141 15.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 49.608 ug/l

RT: 5.512 min Scan# 605

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 59 Resp: 17962

Ion Ratio Lower Upper

59 100

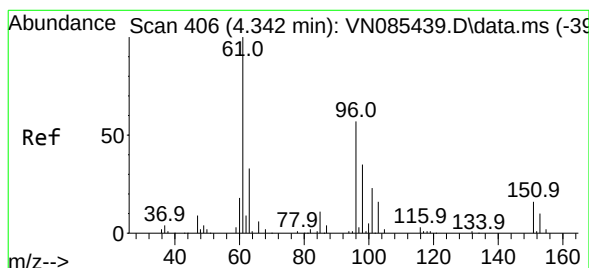
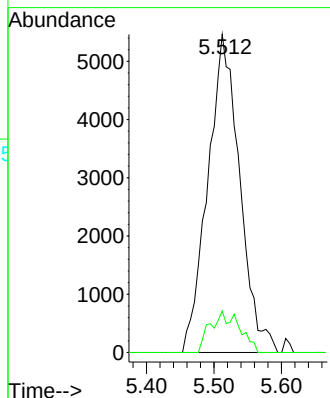
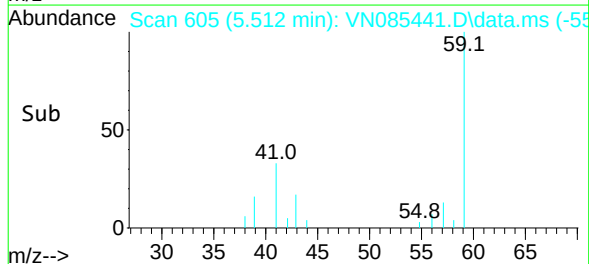
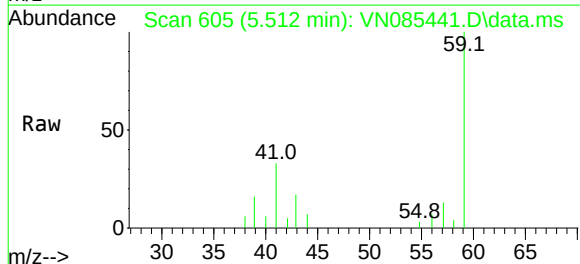
57 11.9 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 9.806 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

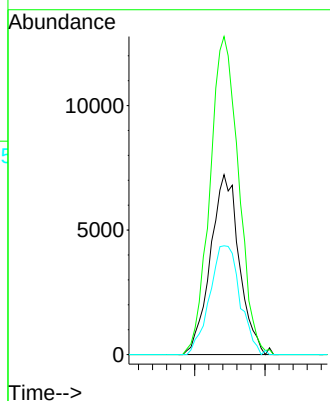
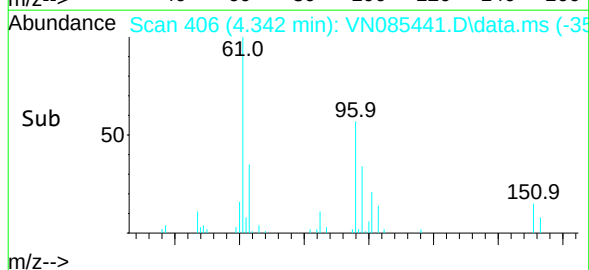
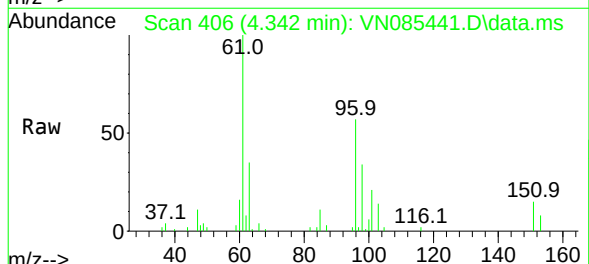
Tgt Ion: 96 Resp: 20615

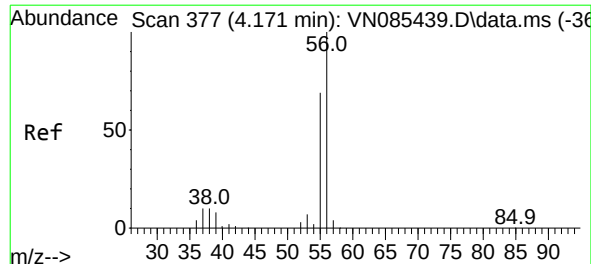
Ion Ratio Lower Upper

96 100

61 176.8 141.0 211.4

98 60.5 49.0 73.6





#13

Acrolein

Concen: 51.729 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 56 Resp: 25568

Ion Ratio Lower Upper

56 100

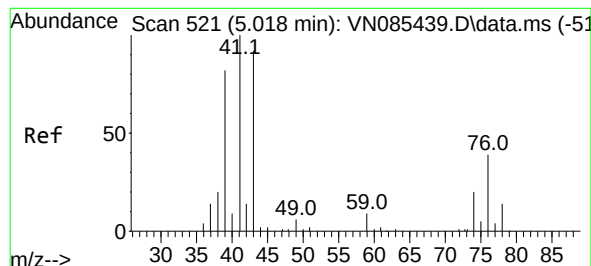
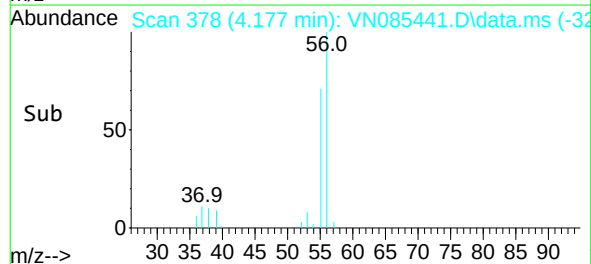
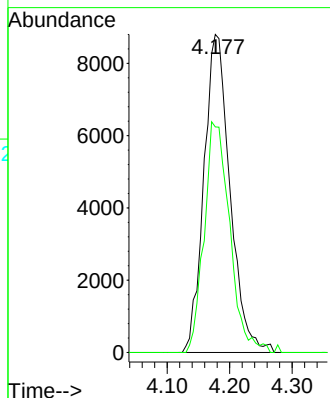
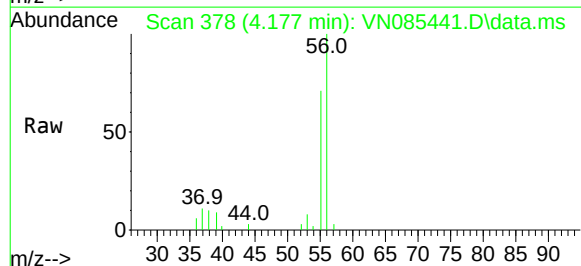
55 70.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 9.451 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

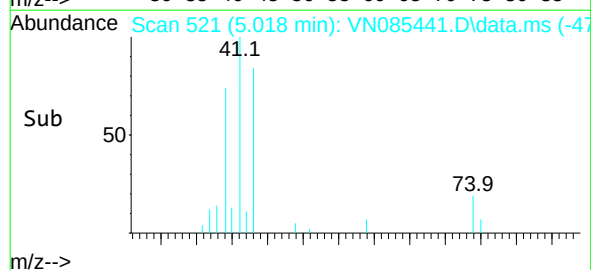
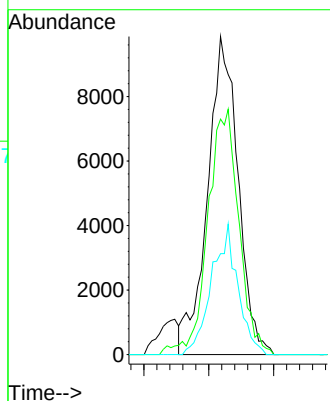
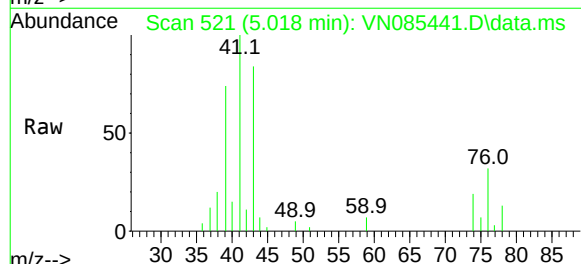
Tgt Ion: 41 Resp: 32240

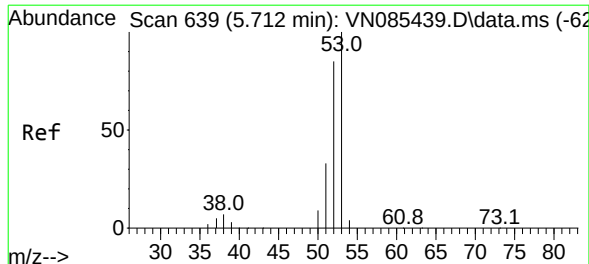
Ion Ratio Lower Upper

41 100

39 78.3 64.4 96.6

76 35.1 30.5 45.7





#15

Acrylonitrile

Concen: 46.918 ug/l

RT: 5.712 min Scan# 63

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

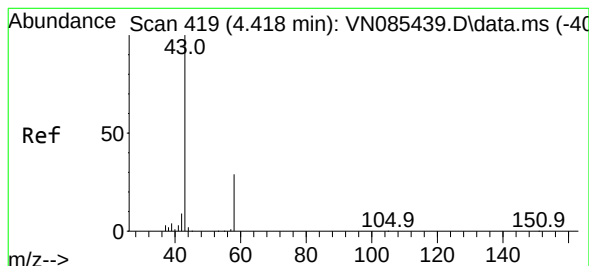
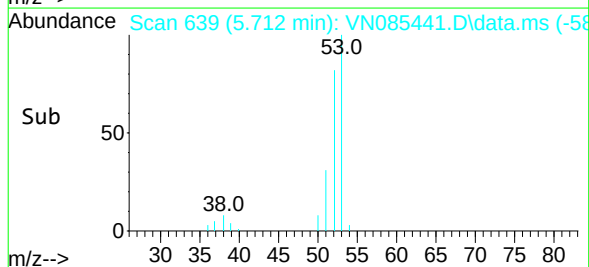
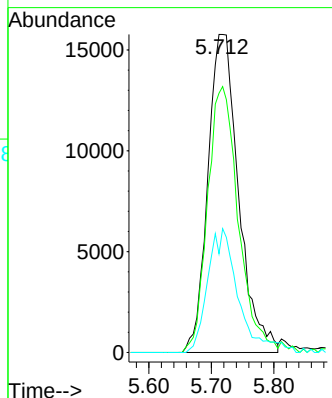
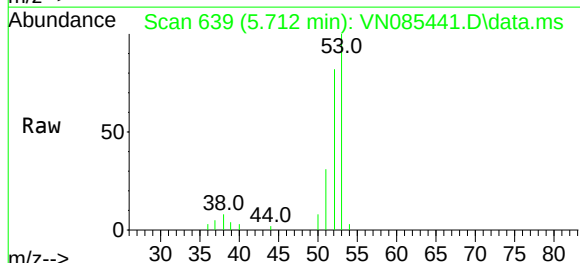
ClientSampleId :

VSTDICC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 53959 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 83.3  | 65.5  | 98.3  |
| 51       | 38.8  | 29.8  | 44.8  |

Manual Integrations  
APPROVED

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



#16

Acetone

Concen: 47.446 ug/l

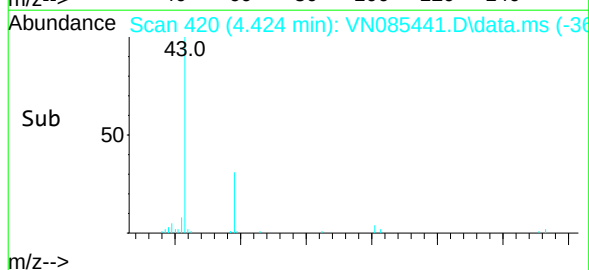
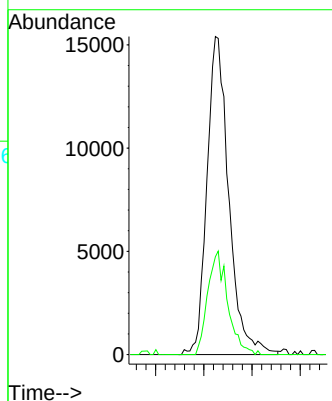
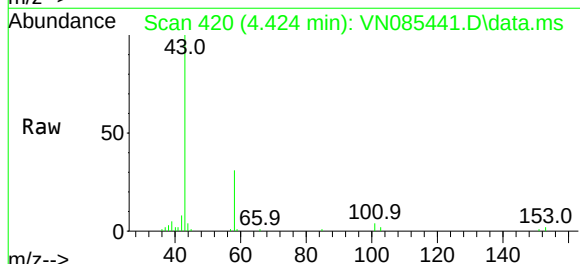
RT: 4.424 min Scan# 420

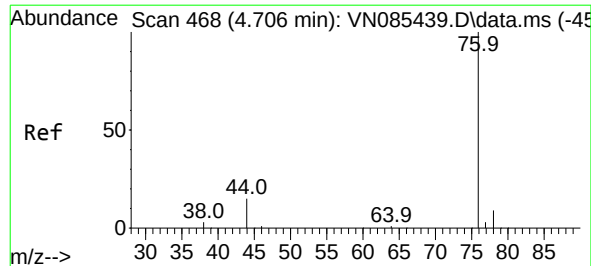
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 48475 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 30.8  | 23.8  | 35.6  |





#17

Carbon Disulfide

Concen: 9.300 ug/l

RT: 4.712 min Scan# 46

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 76 Resp: 60201

Ion Ratio Lower Upper

76 100

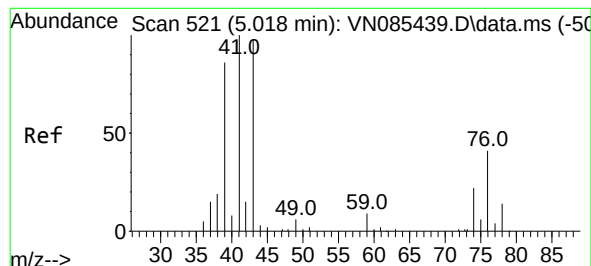
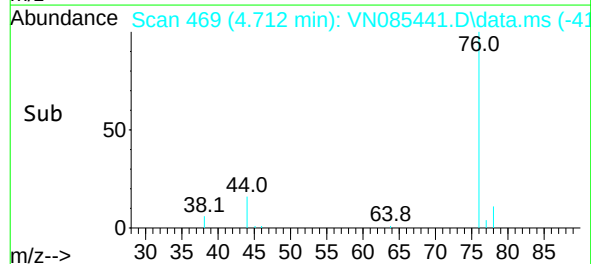
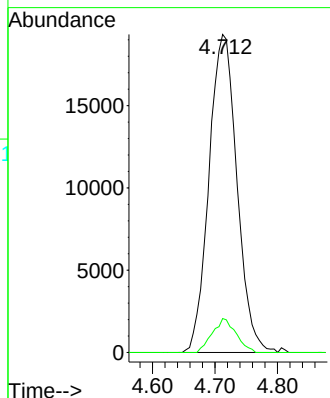
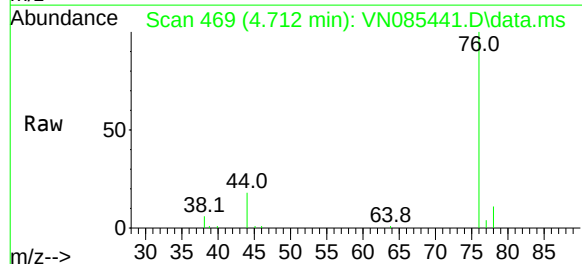
78 10.7 6.9 10.3#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 9.817 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085441.D

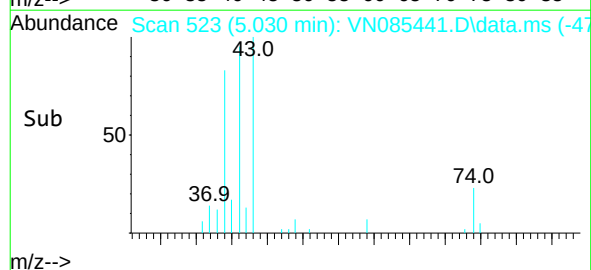
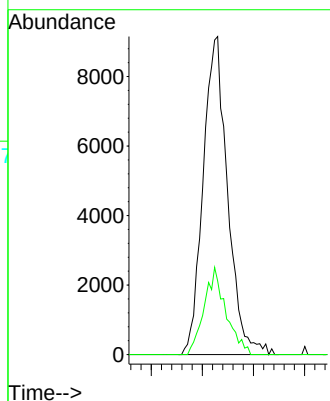
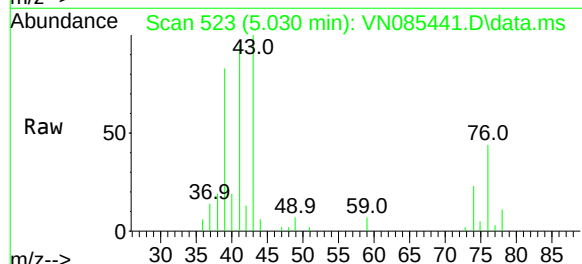
Acq: 14 Jan 2025 16:07

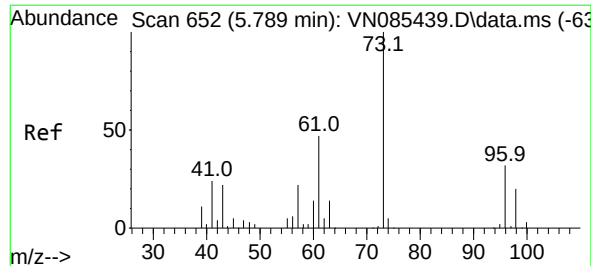
Tgt Ion: 43 Resp: 30500

Ion Ratio Lower Upper

43 100

74 24.3 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 9.552 ug/l

RT: 5.789 min Scan# 65

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 73 Resp: 65207

Ion Ratio Lower Upper

73 100

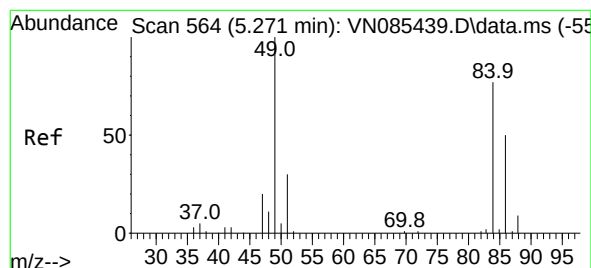
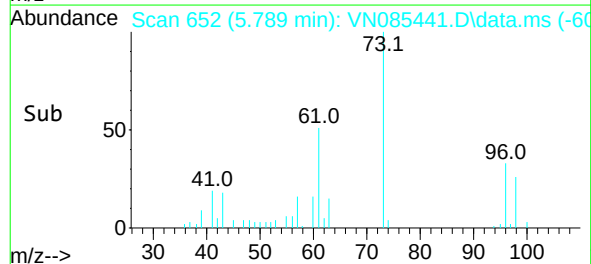
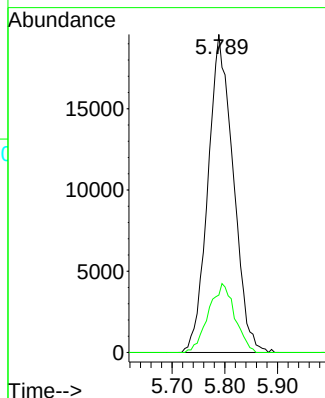
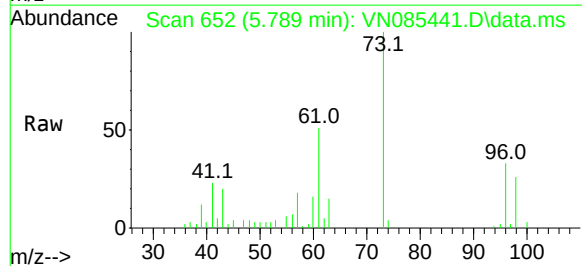
57 18.1 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 9.379 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion: 84 Resp: 23723

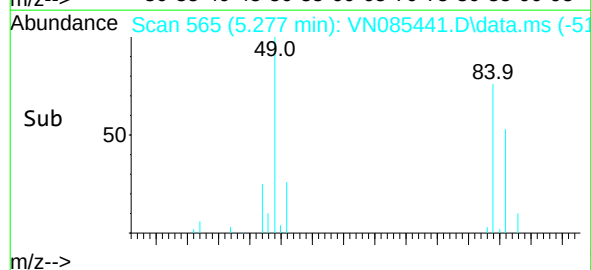
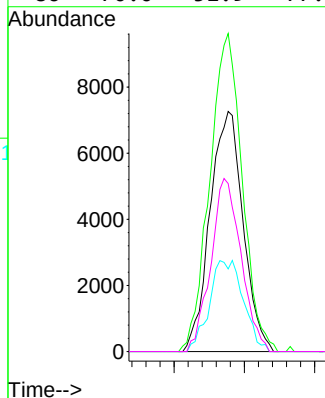
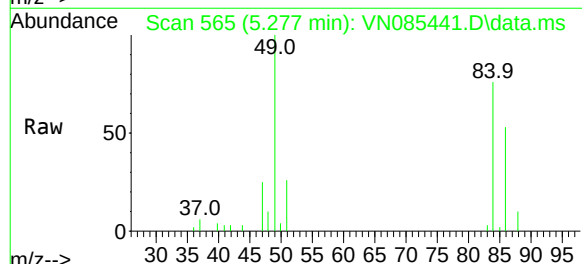
Ion Ratio Lower Upper

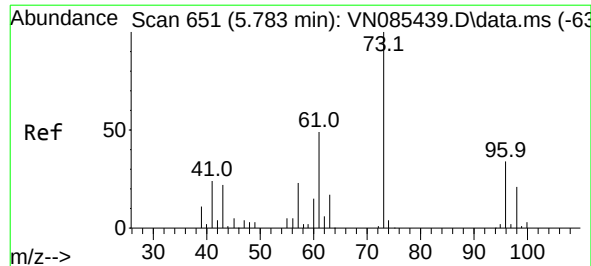
84 100

49 132.4 104.1 156.1

51 34.4 31.0 46.4

86 70.0 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 9.403 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085441.D

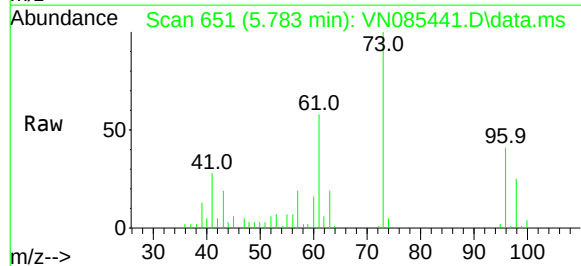
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

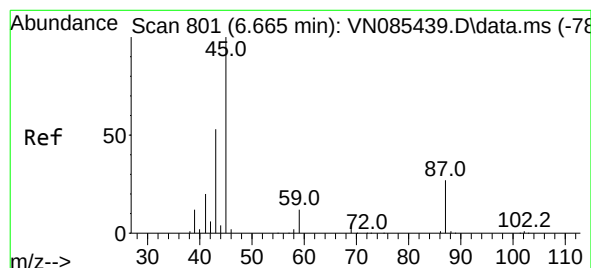
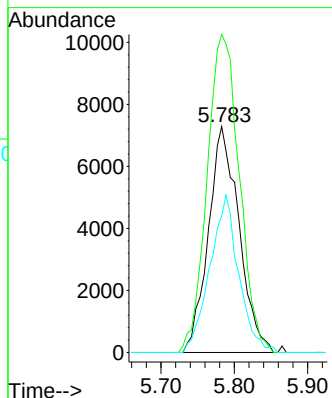
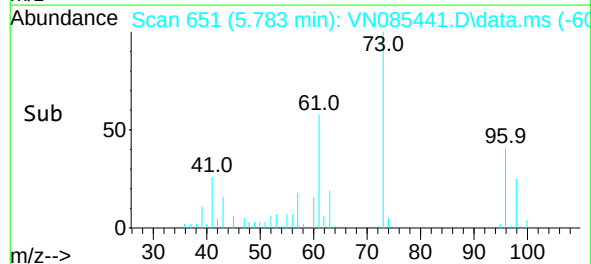
VSTDIC010



| Tgt Ion: | 96    | Resp: | 21127 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 140.8 | 115.7 | 173.5 |
| 98       | 60.5  | 49.8  | 74.8  |

Manual Integrations  
APPROVED

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



#22

Diisopropyl ether

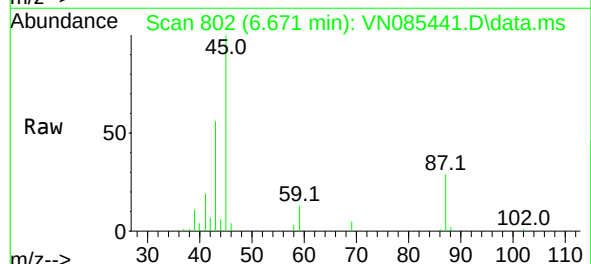
Concen: 9.490 ug/l

RT: 6.671 min Scan# 802

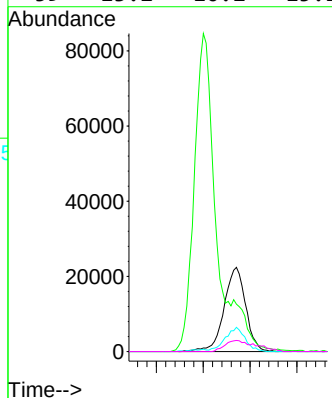
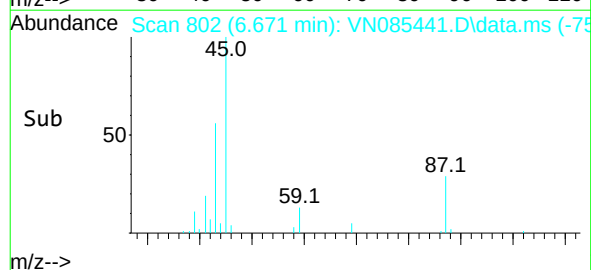
Delta R.T. 0.006 min

Lab File: VN085441.D

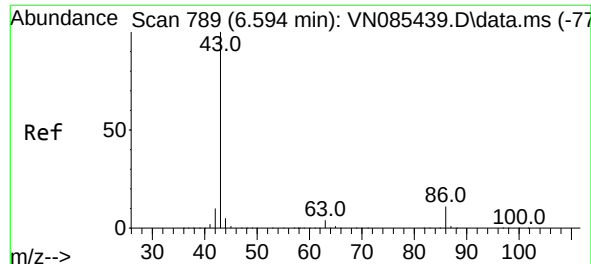
Acq: 14 Jan 2025 16:07



| Tgt Ion: | 45    | Resp: | 71857 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 45       | 100   |       |       |
| 43       | 53.2  | 45.0  | 67.6  |
| 87       | 28.8  | 21.8  | 32.8  |
| 59       | 13.2  | 10.2  | 15.2  |







#23

Vinyl Acetate

Concen: 47.125 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 43 Resp: 250575

Ion Ratio Lower Upper

43 100

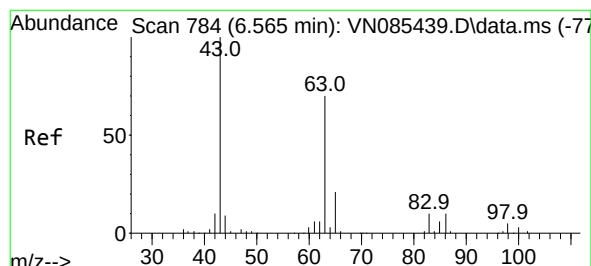
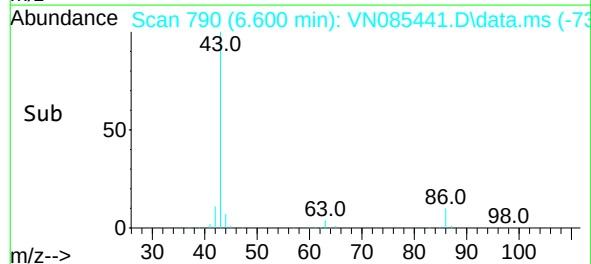
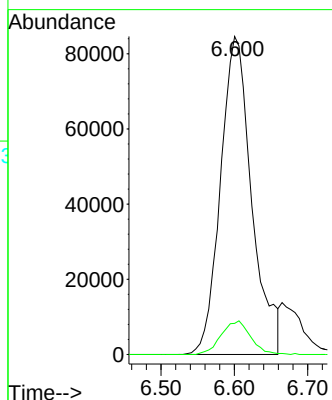
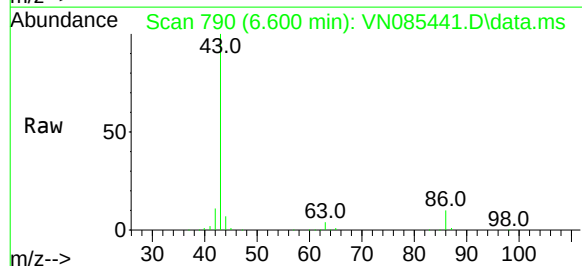
86 9.8 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 9.335 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

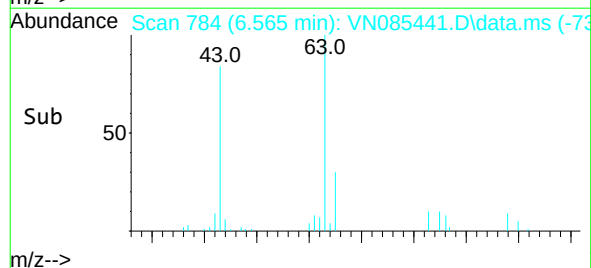
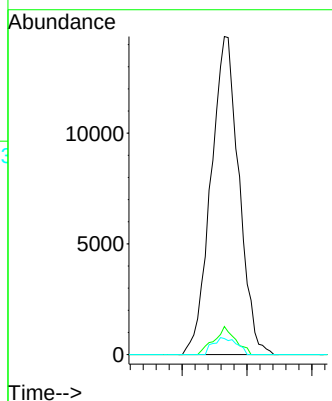
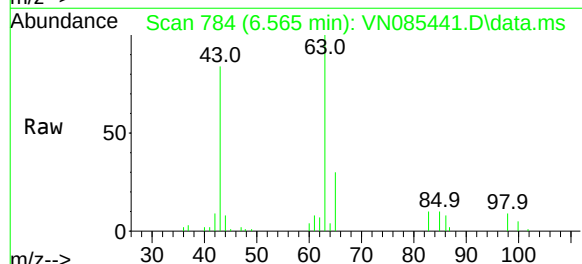
Tgt Ion: 63 Resp: 43099

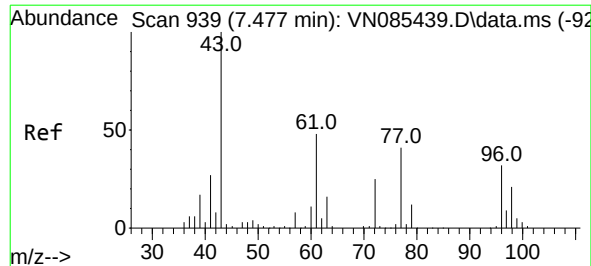
Ion Ratio Lower Upper

63 100

98 8.8 3.3 9.8

100 5.0 2.0 6.0





#25

2-Butanone

Concen: 47.350 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 71191

Ion Ratio Lower Upper

43 100

72 24.8 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

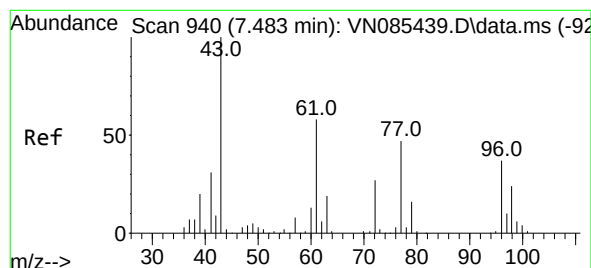
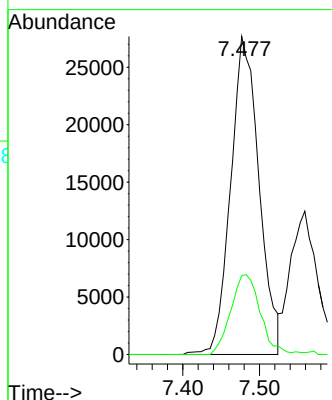
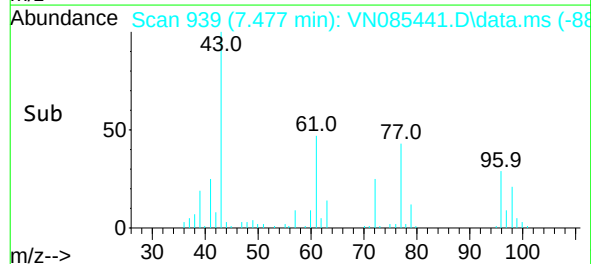
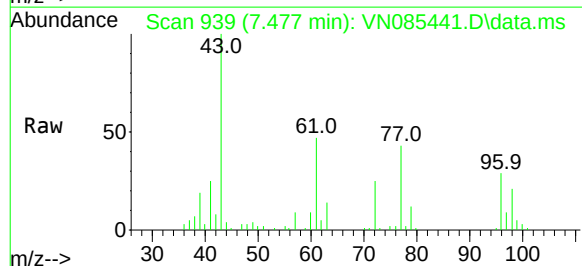
VSTDIC010

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 9.672 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085441.D

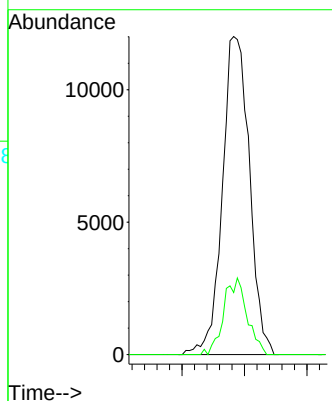
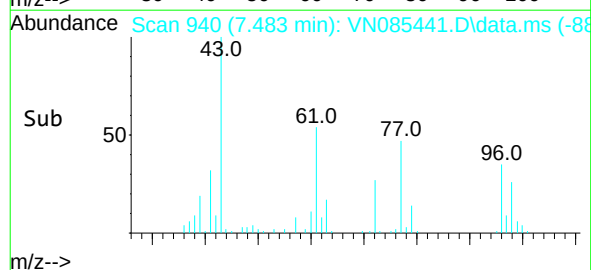
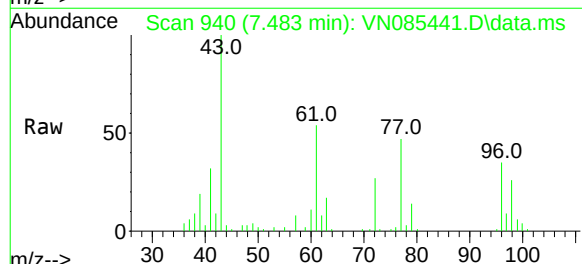
Acq: 14 Jan 2025 16:07

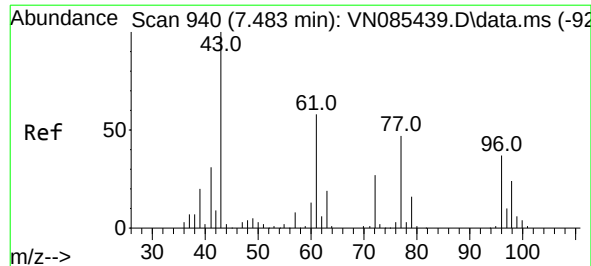
Tgt Ion: 77 Resp: 36105

Ion Ratio Lower Upper

77 100

97 20.8 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 9.466 ug/l

RT: 7.489 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 96 Resp: 25049

Ion Ratio Lower Upper

96 100

61 151.8 0.0 311.8

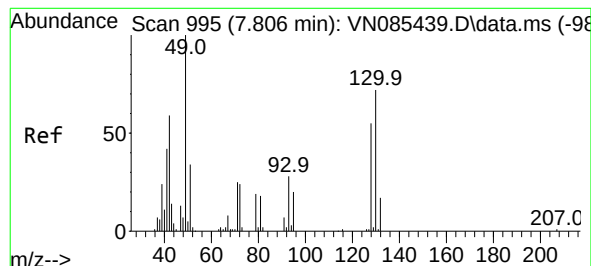
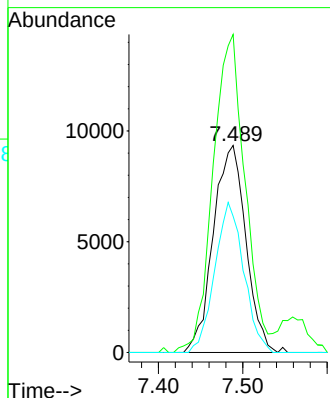
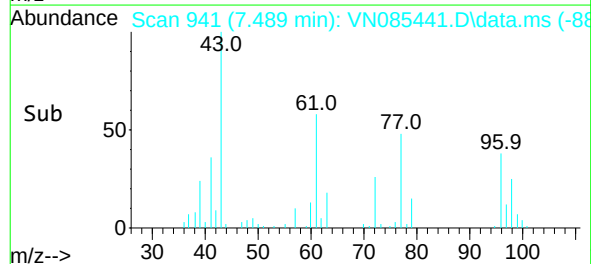
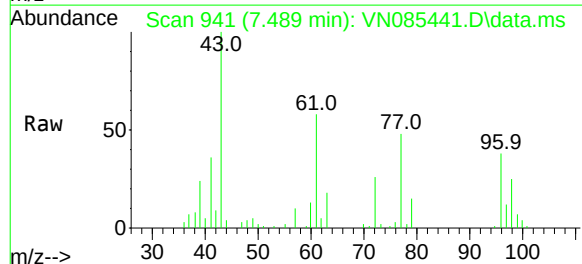
98 64.7 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#28

Bromochloromethane

Concen: 8.863 ug/l

RT: 7.806 min Scan# 995

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

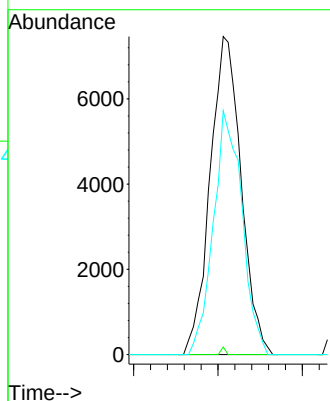
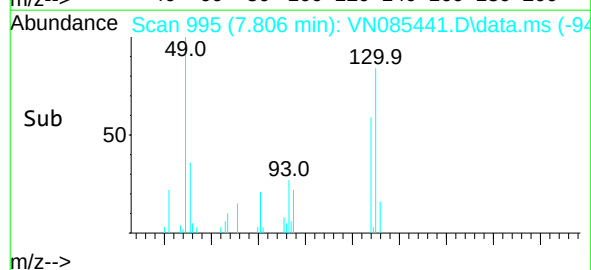
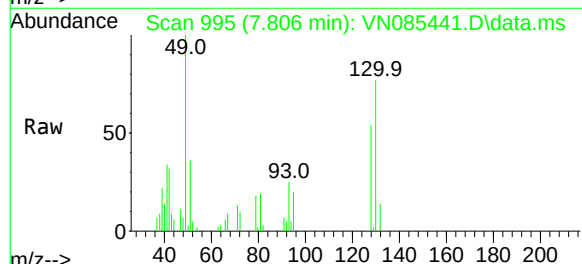
Tgt Ion: 49 Resp: 19037

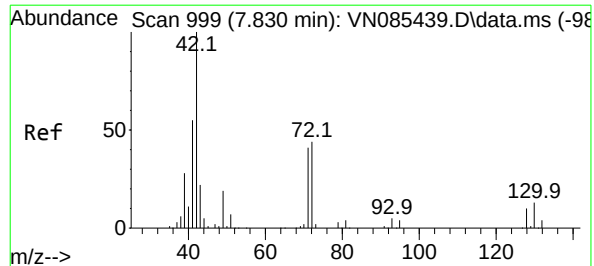
Ion Ratio Lower Upper

49 100

129 0.3 0.0 4.4

130 70.8 55.0 82.4





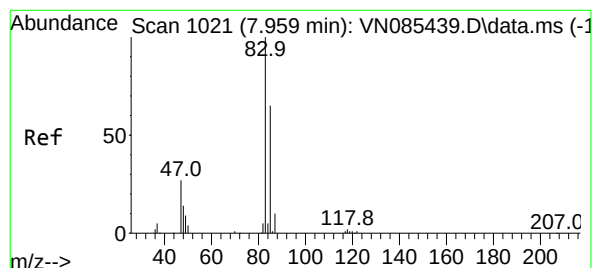
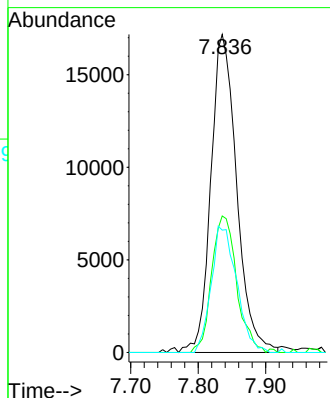
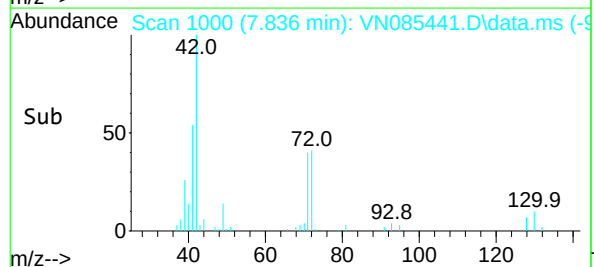
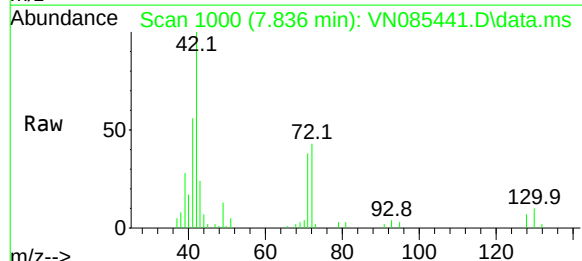
#29  
Tetrahydrofuran  
Concen: 47.881 ug/l  
RT: 7.836 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Tgt Ion: 42 Resp: 45641  
Ion Ratio Lower Upper  
42 100  
72 41.6 34.2 51.2  
71 39.2 32.5 48.7

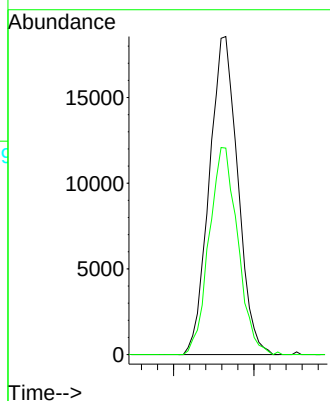
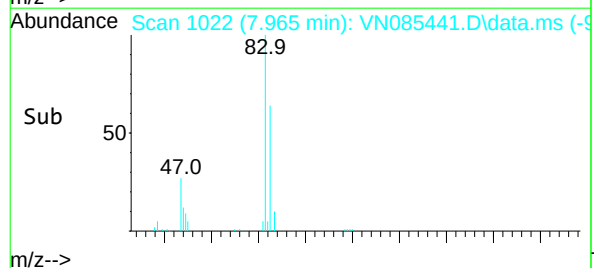
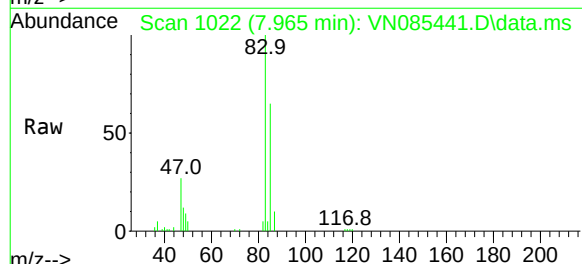
Manual Integrations  
APPROVED

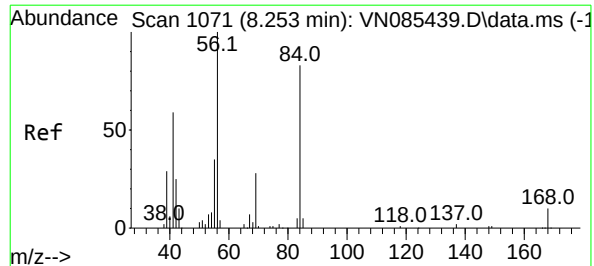
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#30  
Chloroform  
Concen: 9.596 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 45792  
Ion Ratio Lower Upper  
83 100  
85 64.9 51.8 77.6





#31

Cyclohexane

Concen: 10.020 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 56 Resp: 40211

Ion Ratio Lower Upper

56 100

69 34.2 22.2 33.4

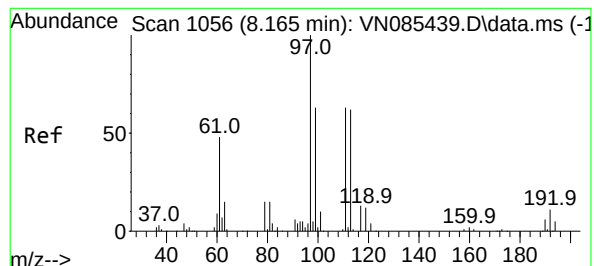
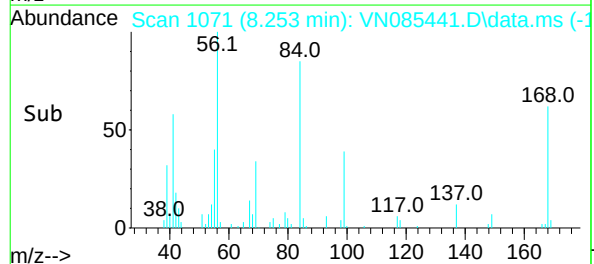
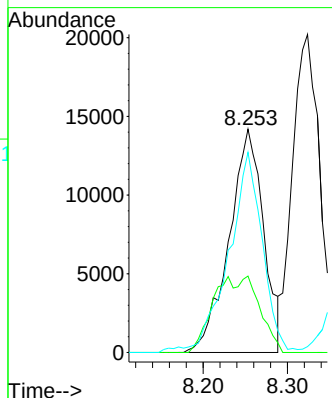
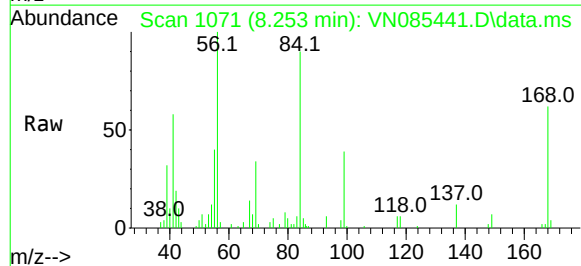
84 87.2 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 9.358 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

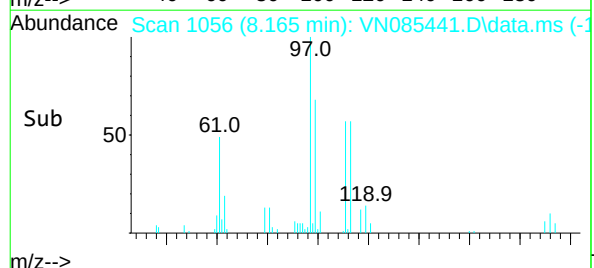
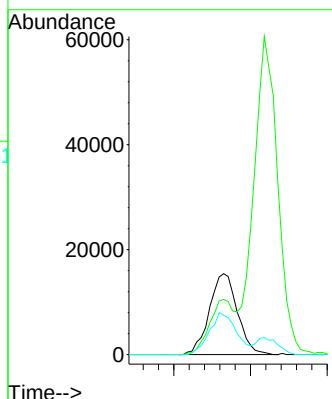
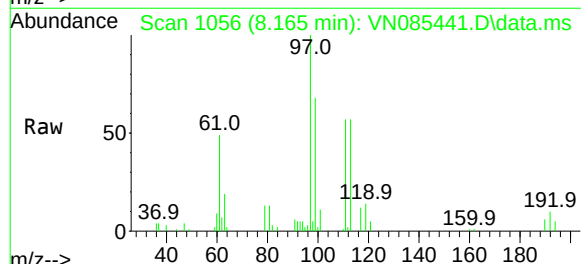
Tgt Ion: 97 Resp: 39170

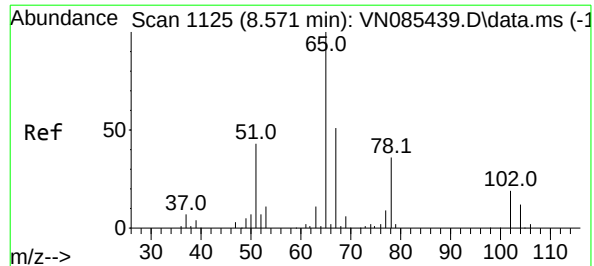
Ion Ratio Lower Upper

97 100

99 62.6 49.8 74.6

61 50.2 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 9.442 ug/l

RT: 8.571 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 65 Resp: 29856

Ion Ratio Lower Upper

65 100

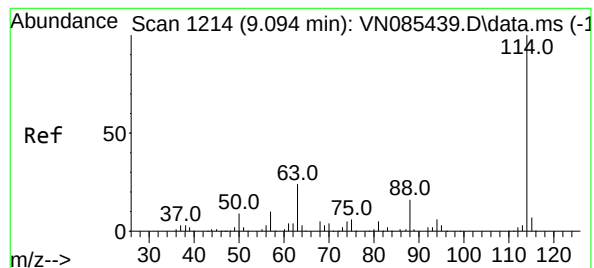
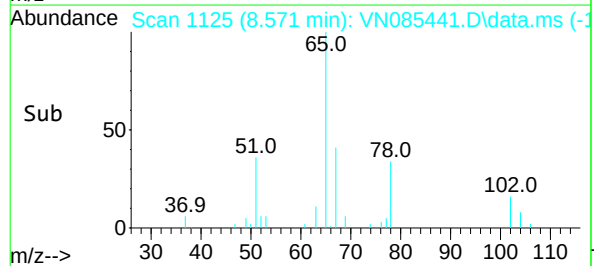
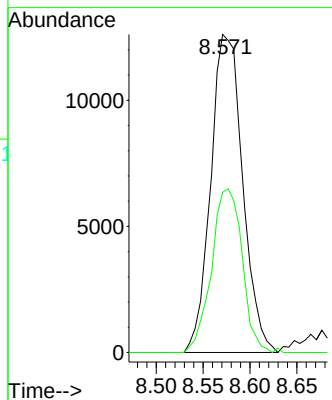
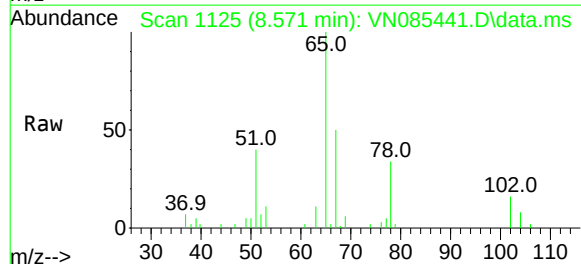
67 49.5 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

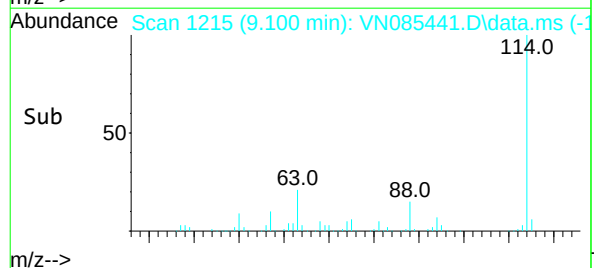
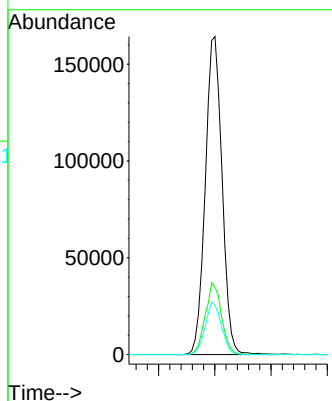
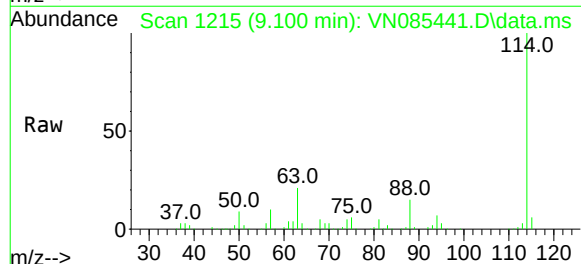
Tgt Ion:114 Resp: 340403

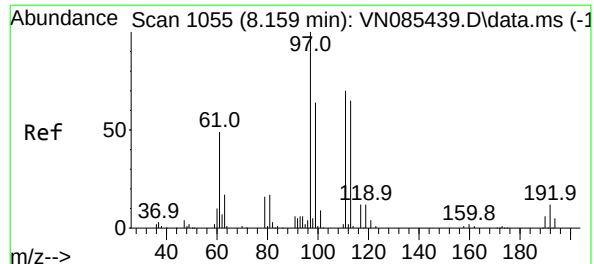
Ion Ratio Lower Upper

114 100

63 21.1 0.0 47.6

88 15.5 0.0 32.6





#35

Dibromofluoromethane

Concen: 8.939 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 113 Resp: 21110

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

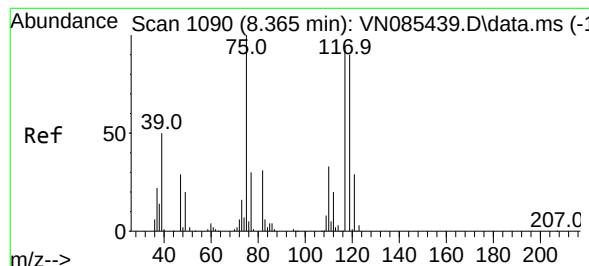
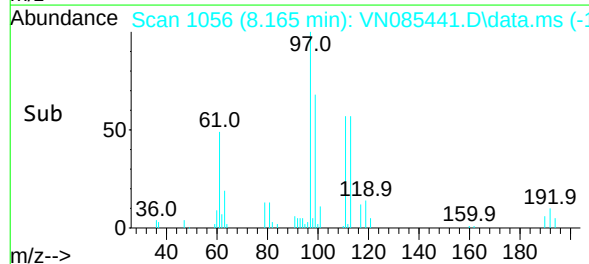
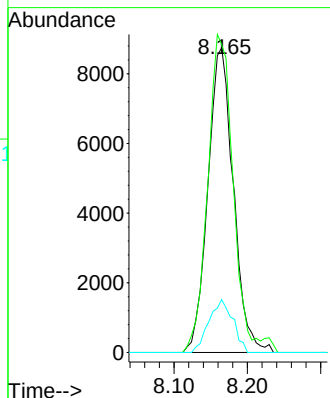
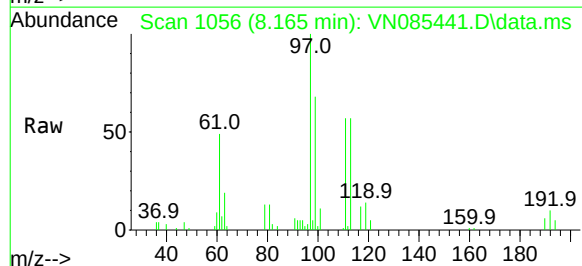
192 16.4 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 9.056 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

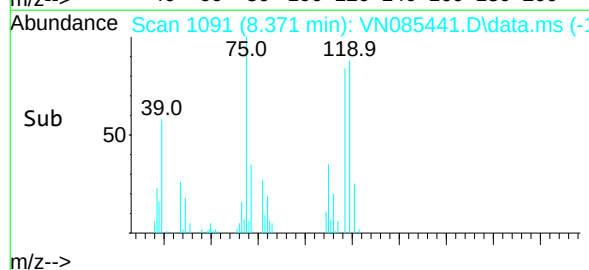
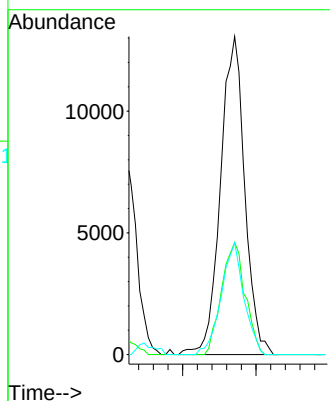
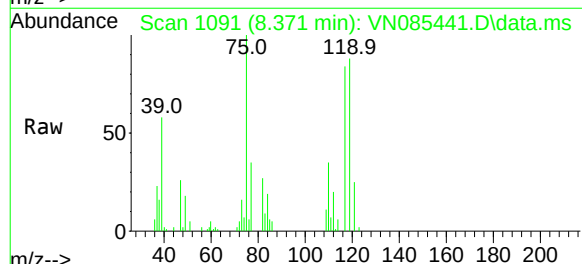
Tgt Ion: 75 Resp: 30015

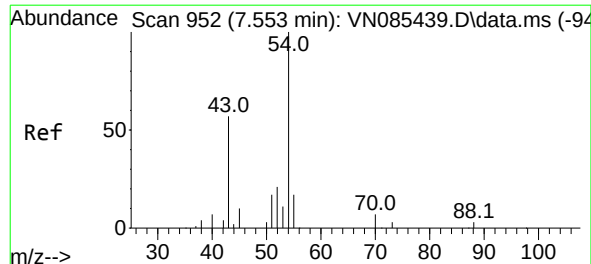
Ion Ratio Lower Upper

75 100

110 34.3 16.5 49.5

77 32.9 24.4 36.6





#37

Ethyl Acetate

Concen: 9.195 ug/l

RT: 7.559 min Scan# 95

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

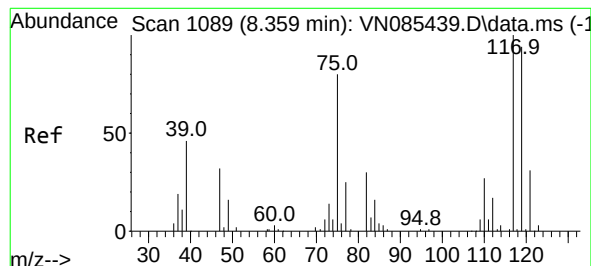
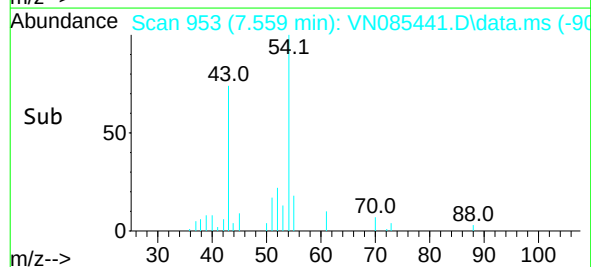
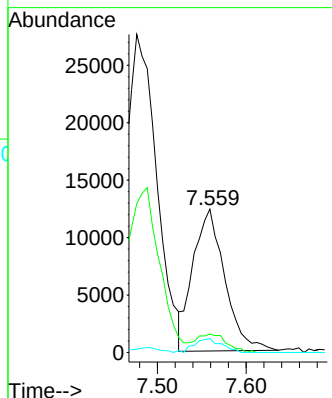
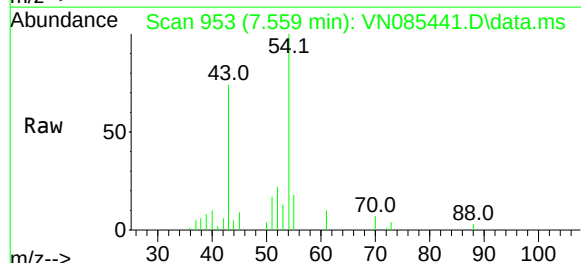
ClientSampleId :

VSTDICC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 30760 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 12.2  | 10.9  | 16.3  |
| 70       | 8.4   | 7.5   | 11.3  |

Manual Integrations  
APPROVED

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



#38

Carbon Tetrachloride

Concen: 9.492 ug/l

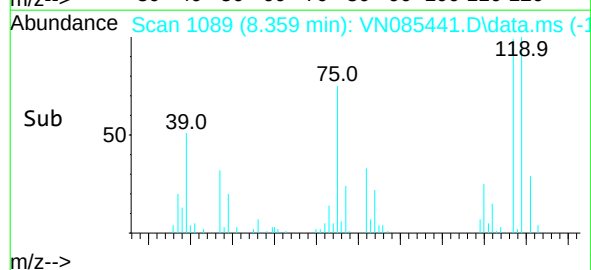
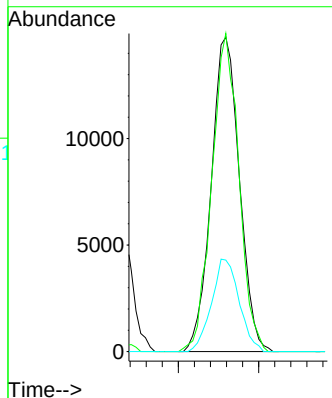
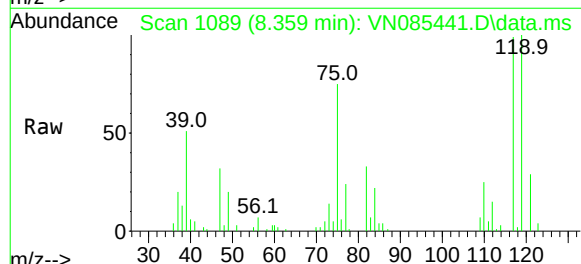
RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

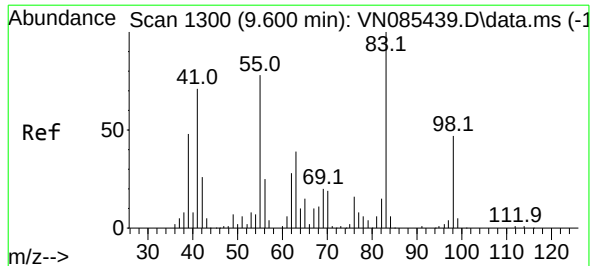
Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 36015 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 101.2 | 75.4  | 113.2 |
| 121      | 29.1  | 24.6  | 37.0  |







#39

Methylcyclohexane

Concen: 8.900 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 83 Resp: 27721

Ion Ratio Lower Upper

83 100

55 83.8 62.6 94.0

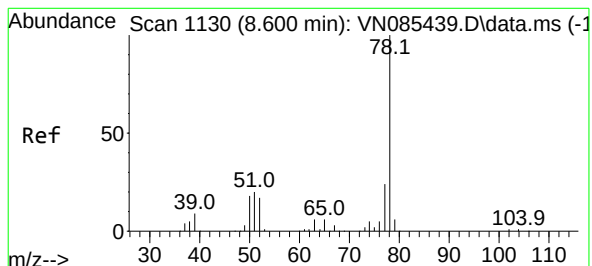
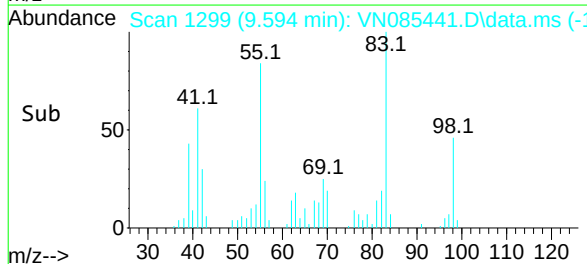
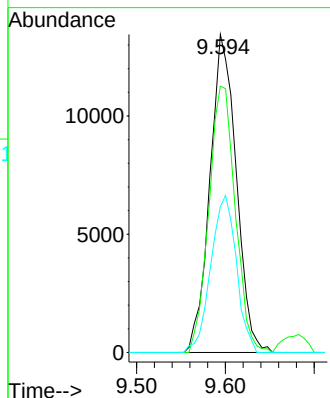
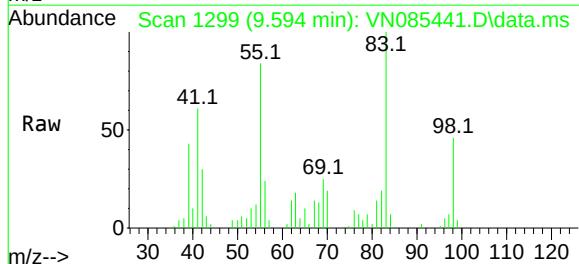
98 45.8 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 9.407 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085441.D

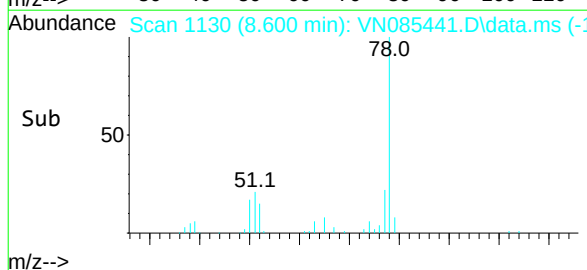
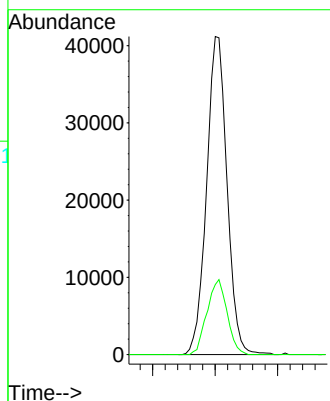
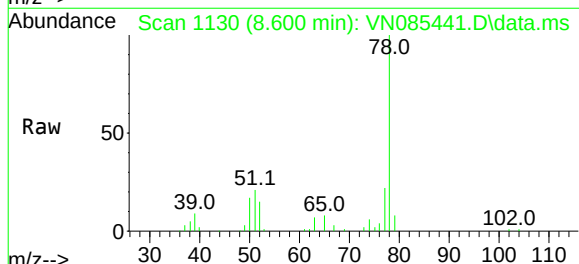
Acq: 14 Jan 2025 16:07

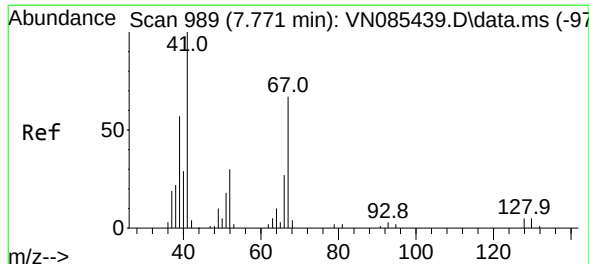
Tgt Ion: 78 Resp: 93680

Ion Ratio Lower Upper

78 100

77 22.0 19.0 28.6





#41

Methacrylonitrile

Concen: 9.686 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

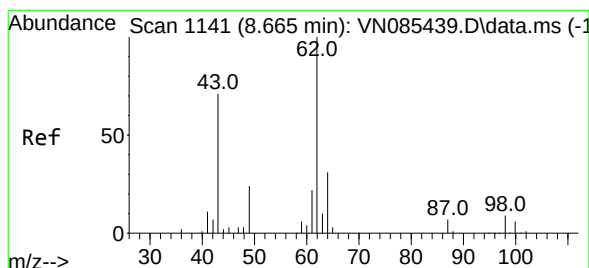
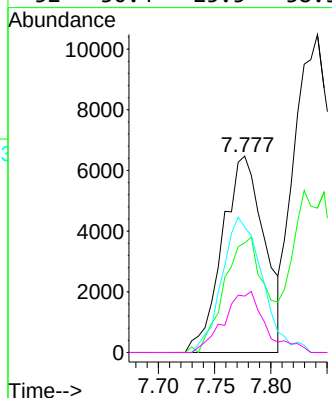
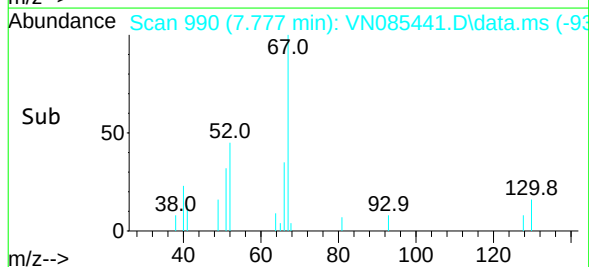
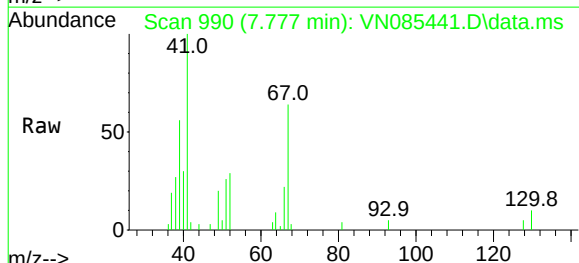
ClientSampleId :

VSTDICC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 16859 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.3  | 46.0  | 69.0  |
| 67       | 66.2  | 57.4  | 86.2  |
| 52       | 30.4  | 25.5  | 38.3  |

Manual Integrations  
APPROVED

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



#42

1,2-Dichloroethane

Concen: 9.483 ug/l

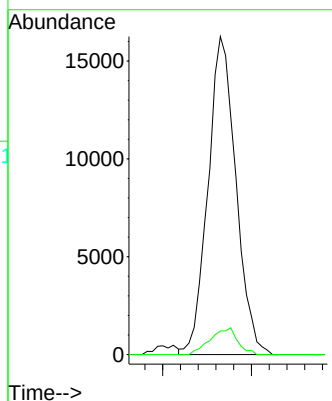
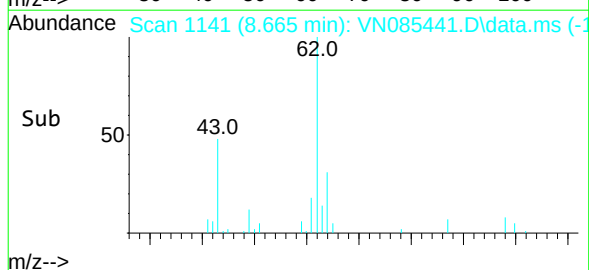
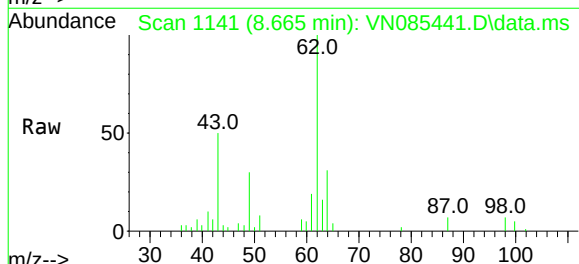
RT: 8.665 min Scan# 1141

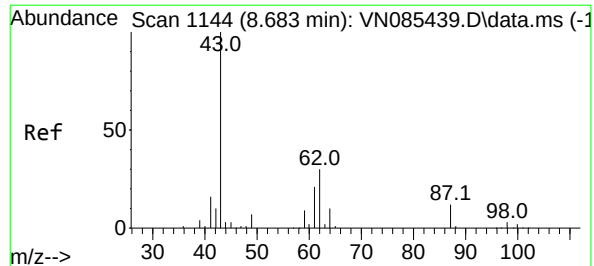
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 35569 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.2   | 0.0   | 17.0  |





#43

Isopropyl Acetate

Concen: 9.127 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 43 Resp: 48926

Ion Ratio Lower Upper

43 100

61 26.2 20.7 31.1

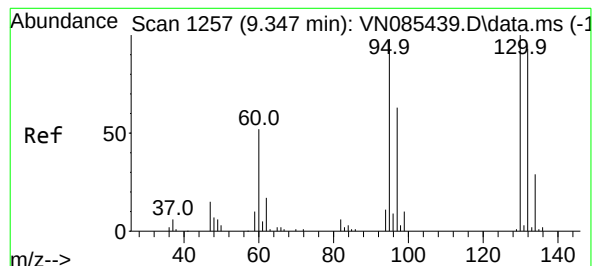
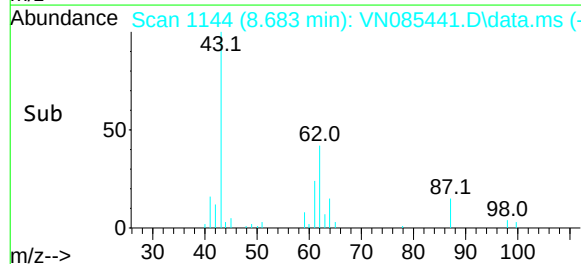
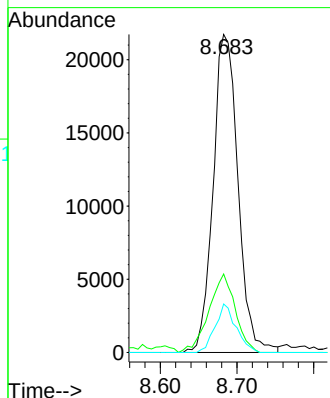
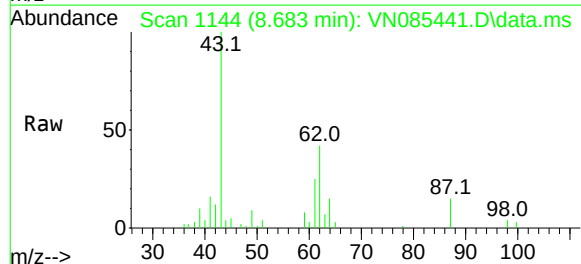
87 12.8 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 9.108 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. 0.000 min

Lab File: VN085441.D

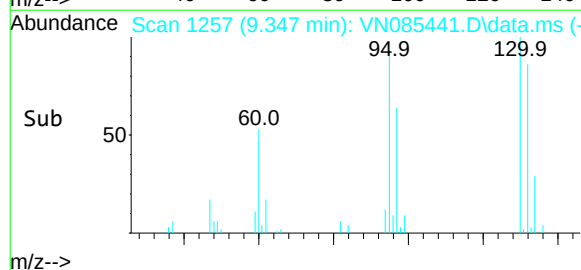
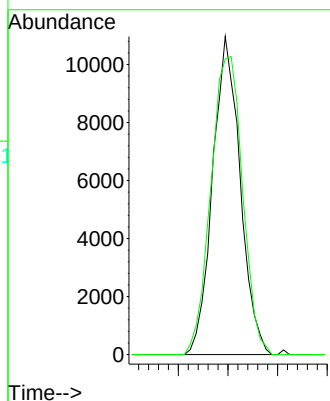
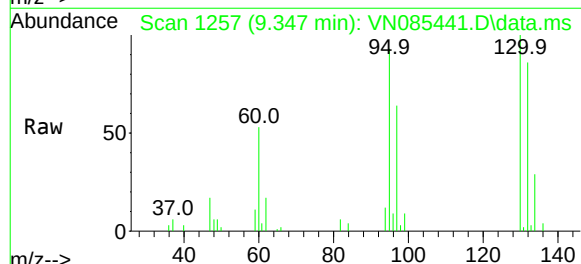
Acq: 14 Jan 2025 16:07

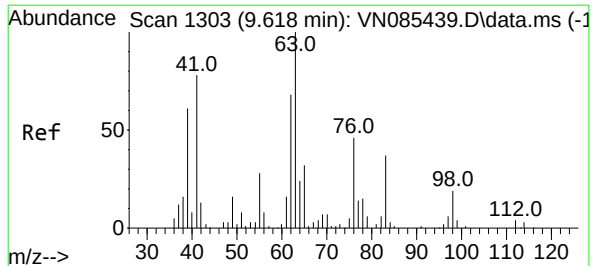
Tgt Ion:130 Resp: 21113

Ion Ratio Lower Upper

130 100

95 92.9 0.0 195.8





#45

1,2-Dichloropropane

Concen: 8.942 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 63 Resp: 22747

Ion Ratio Lower Upper

63 100

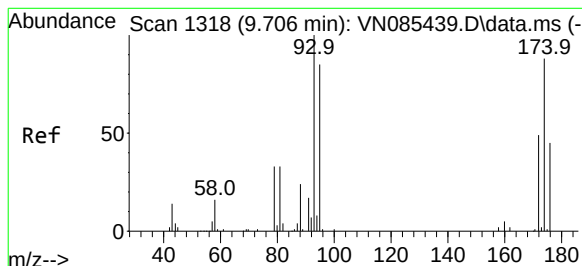
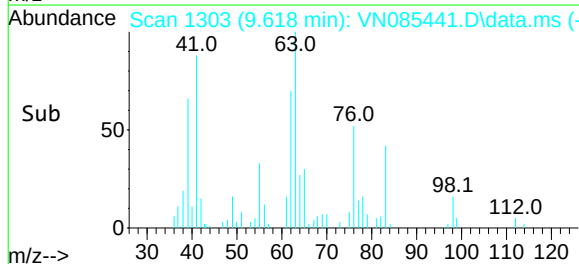
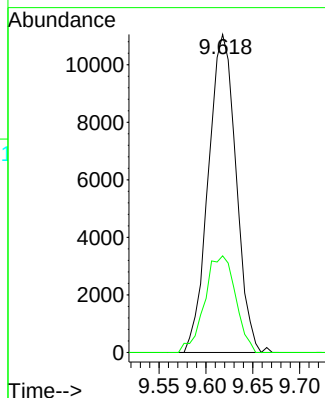
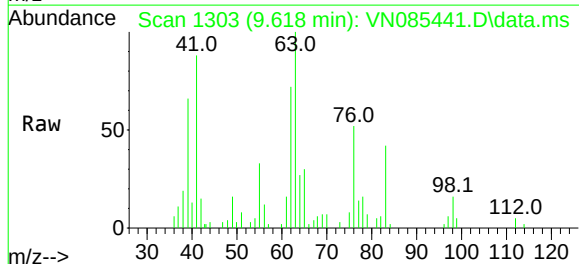
65 30.4 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 9.404 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

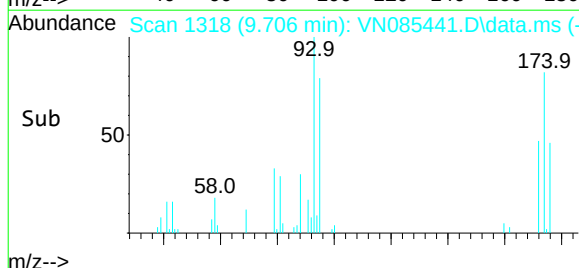
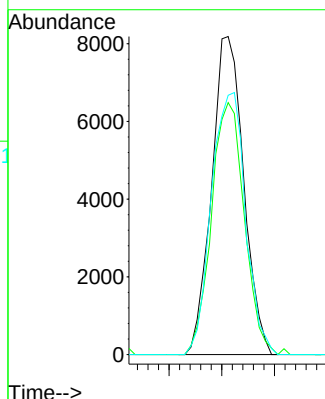
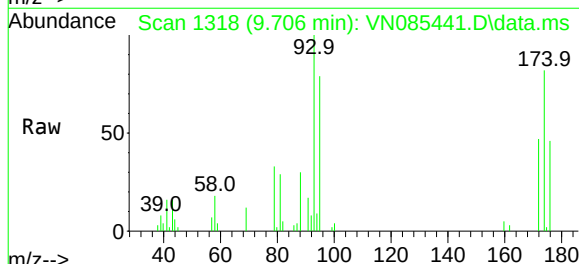
Tgt Ion: 93 Resp: 17260

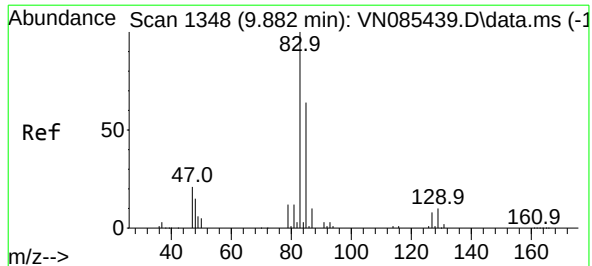
Ion Ratio Lower Upper

93 100

95 81.5 64.7 97.1

174 87.8 69.0 103.4





#47

Bromodichloromethane

Concen: 9.365 ug/l

RT: 9.883 min Scan# 1348

Delta R.T. 0.001 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

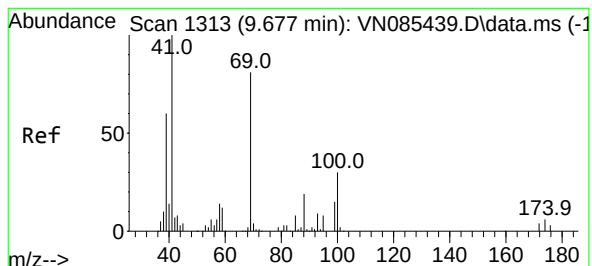
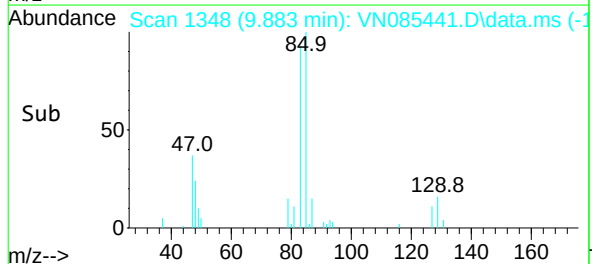
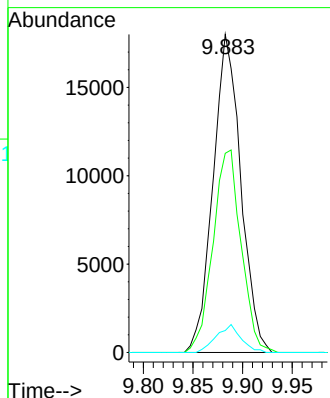
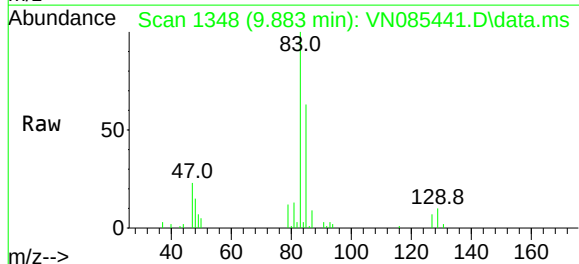
VSTDIC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 35020 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 62.6  | 51.2  | 76.8  |
| 127      | 6.9   | 6.5   | 9.7   |

Manual Integrations

APPROVED

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



#48

Methyl methacrylate

Concen: 9.067 ug/l

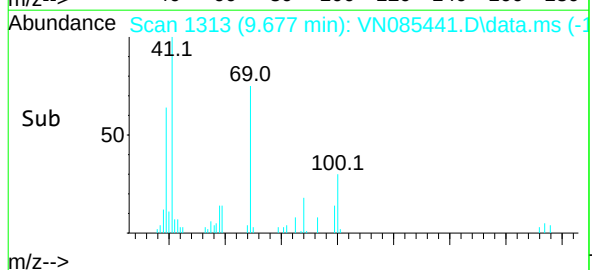
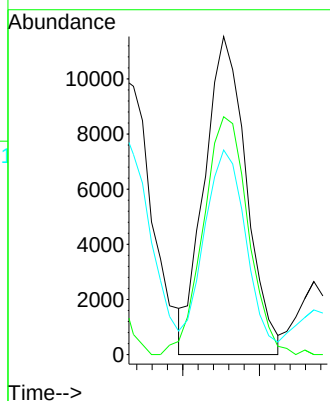
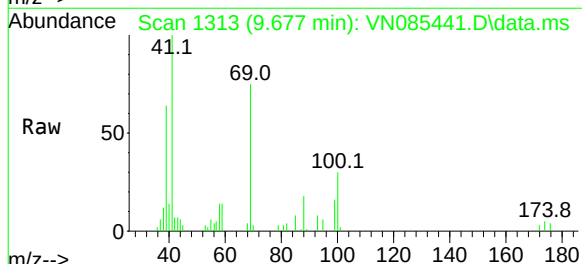
RT: 9.677 min Scan# 1313

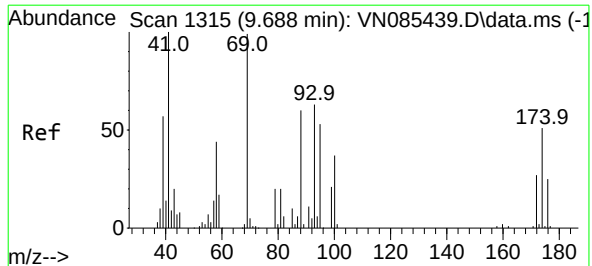
Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 21873 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 80.0  | 64.7  | 97.1  |
| 39       | 65.2  | 49.0  | 73.6  |





#49

1,4-Dioxane

Concen: 190.382 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 88 Resp: 7734

Ion Ratio Lower Upper

88 100

43 35.2 26.6 39.8

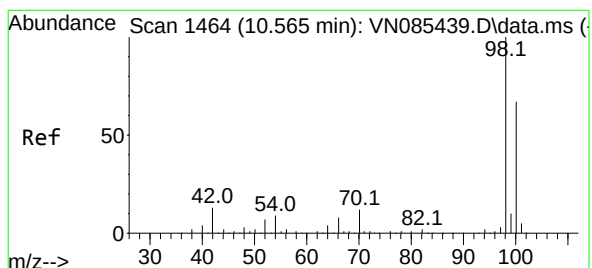
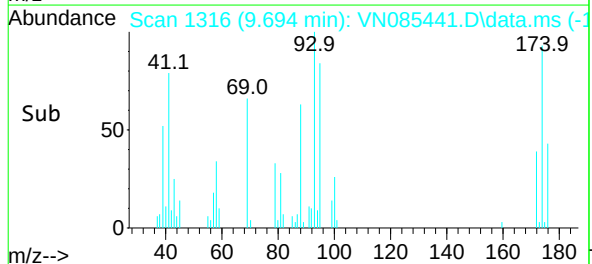
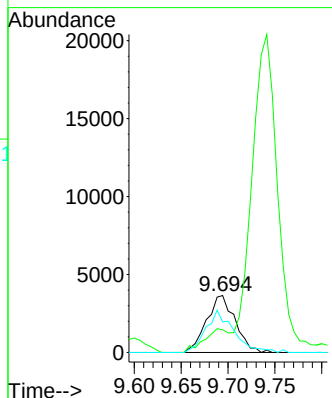
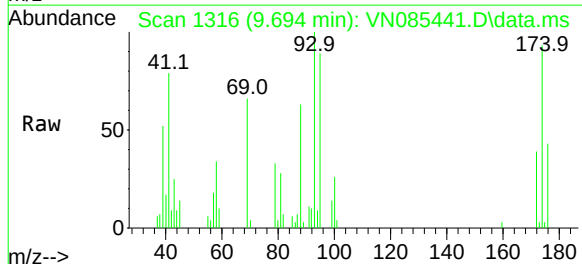
58 73.3 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 8.727 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085441.D

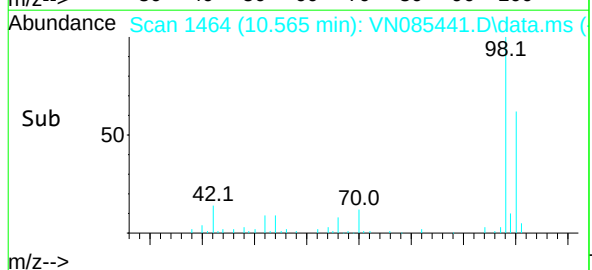
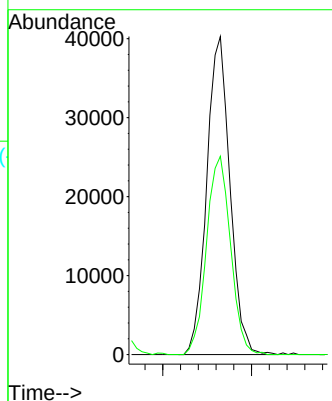
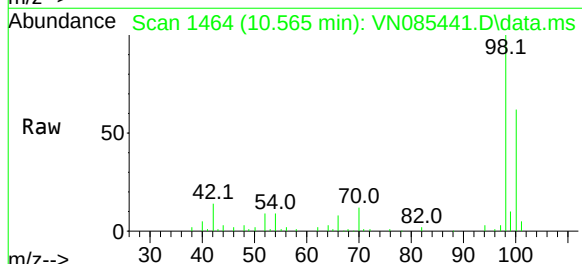
Acq: 14 Jan 2025 16:07

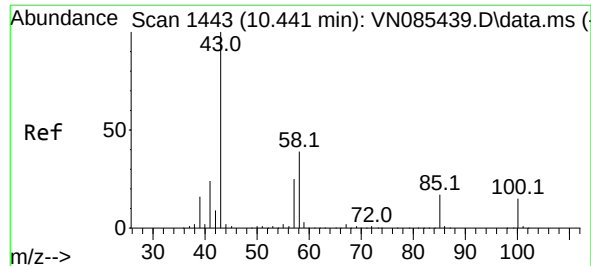
Tgt Ion: 98 Resp: 73223

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





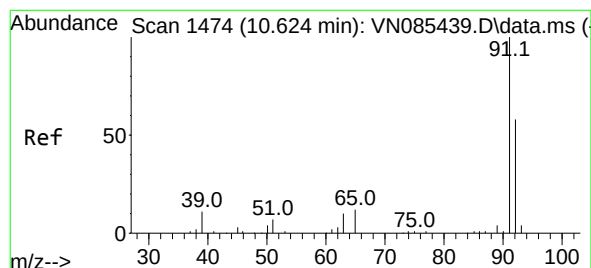
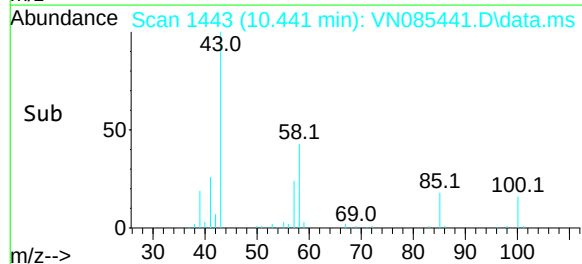
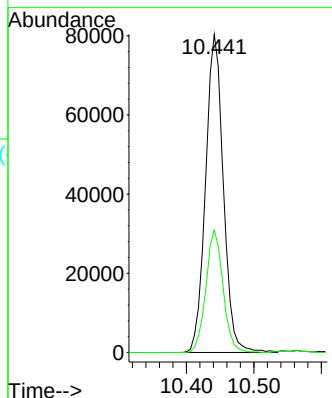
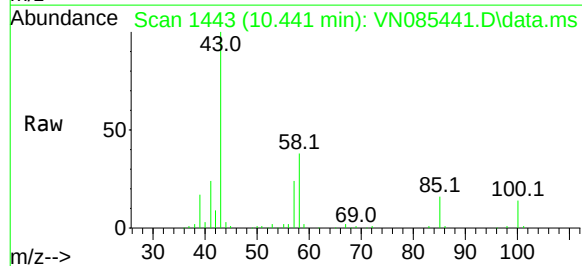
#51  
4-Methyl-2-Pentanone  
Concen: 47.254 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Tgt Ion: 43 Resp: 146990  
Ion Ratio Lower Upper  
43 100  
58 37.1 30.5 45.7

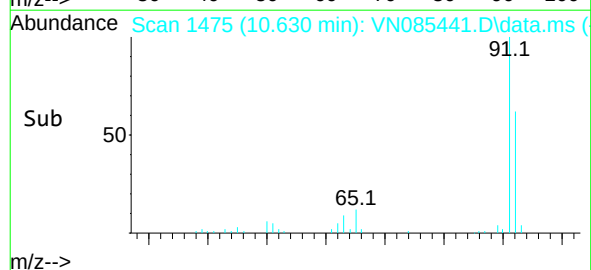
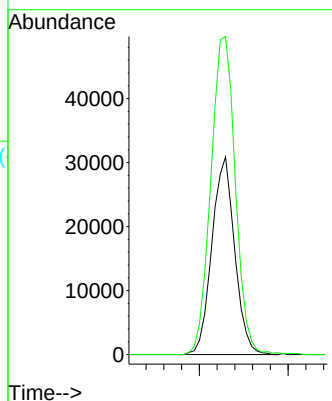
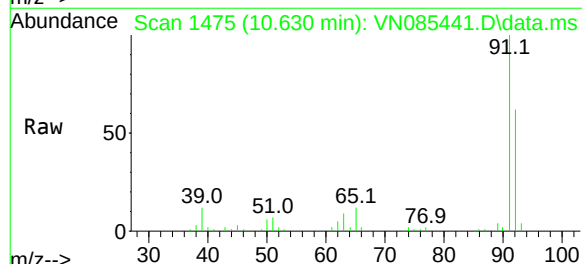
Manual Integrations  
APPROVED

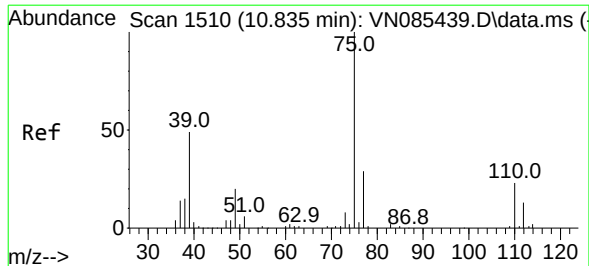
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#52  
Toluene  
Concen: 9.527 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 92 Resp: 54976  
Ion Ratio Lower Upper  
92 100  
91 173.7 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 9.276 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 75 Resp: 32780

Ion Ratio Lower Upper

75 100

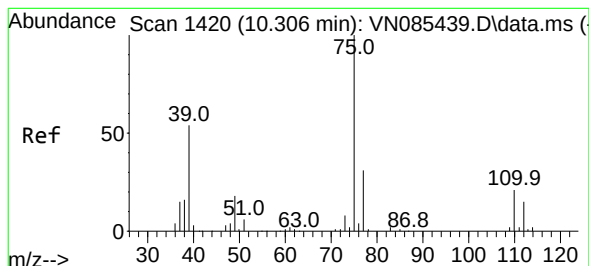
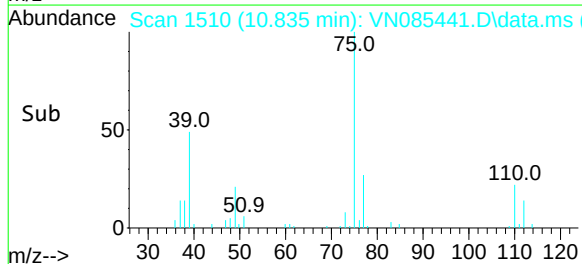
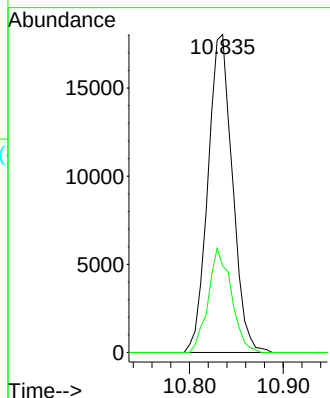
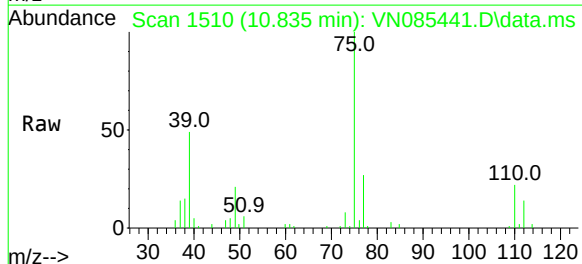
77 27.2 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 9.512 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

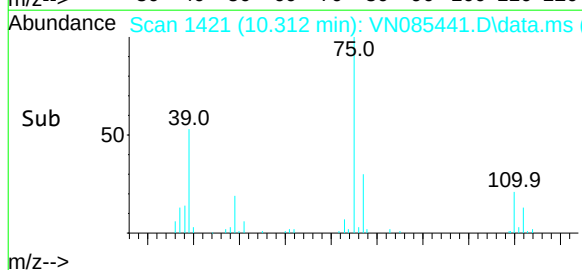
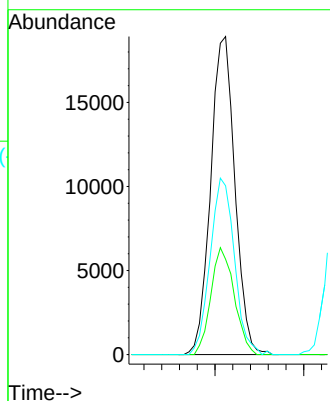
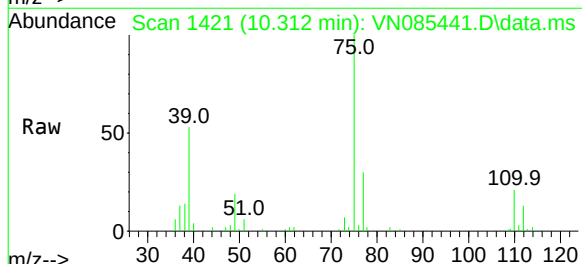
Tgt Ion: 75 Resp: 35904

Ion Ratio Lower Upper

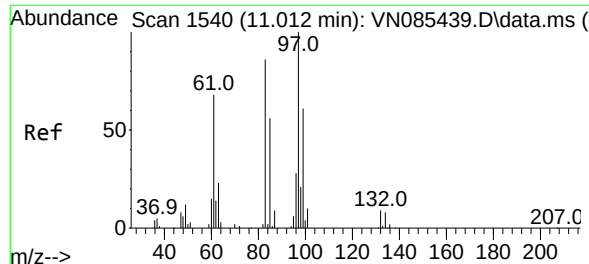
75 100

77 30.0 25.0 37.4

39 53.1 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 9.222 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 97 Resp: 21060

Ion Ratio Lower Upper

97 100

83 88.3 69.0 103.6

85 57.3 44.6 66.8

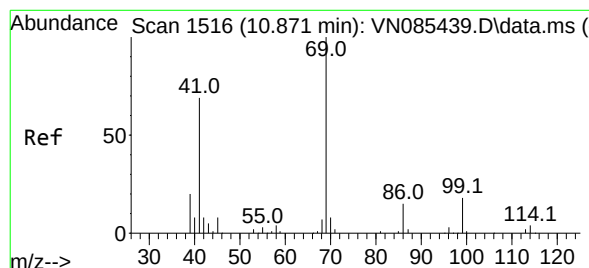
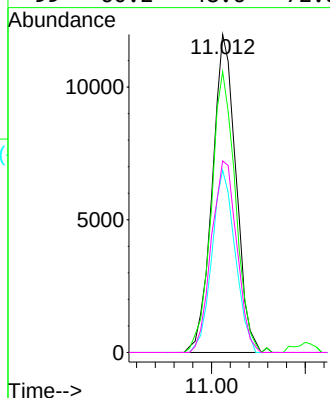
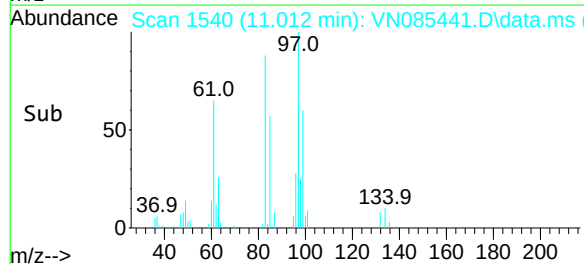
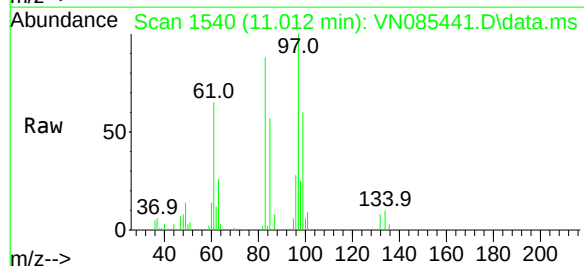
99 60.2 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 9.042 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

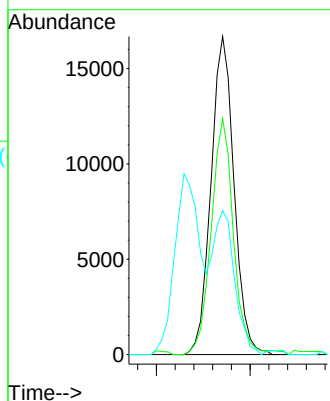
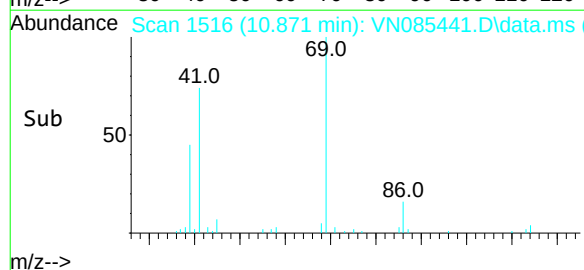
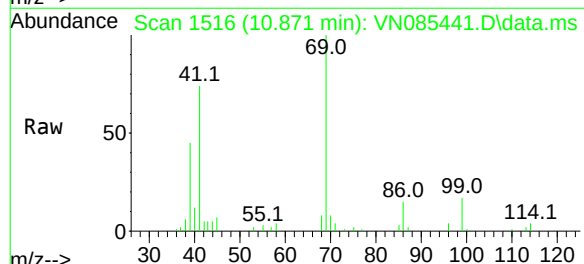
Tgt Ion: 69 Resp: 28454

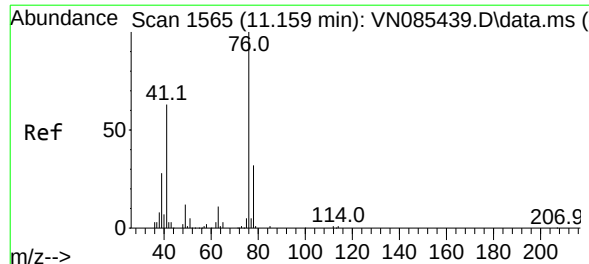
Ion Ratio Lower Upper

69 100

41 72.1 54.6 82.0

39 43.4 32.4 48.6





#57

1,3-Dichloropropane

Concen: 9.512 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 76 Resp: 37768

Ion Ratio Lower Upper

76 100

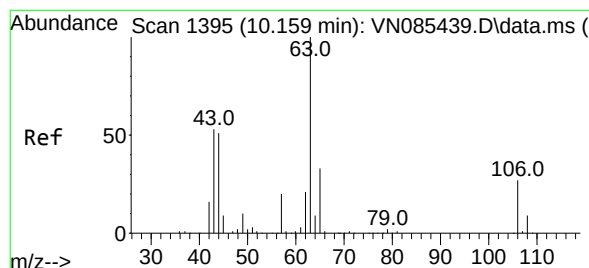
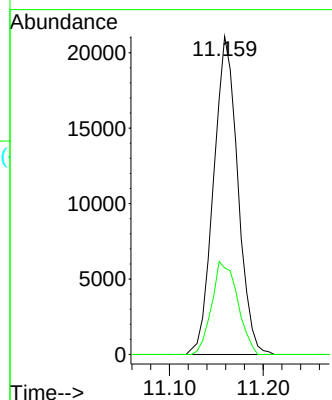
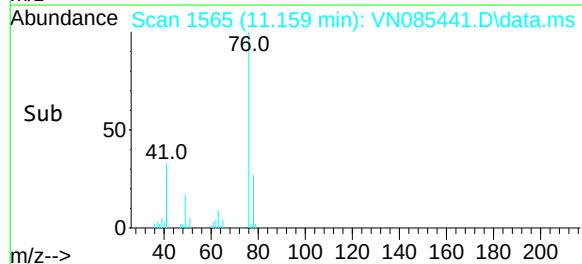
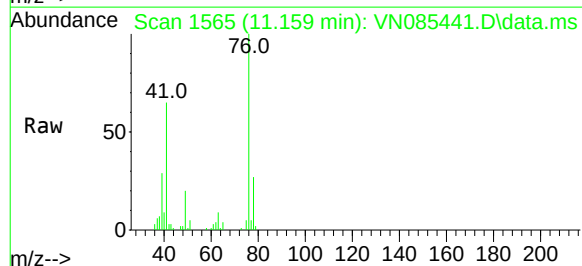
78 31.1 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 43.550 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085441.D

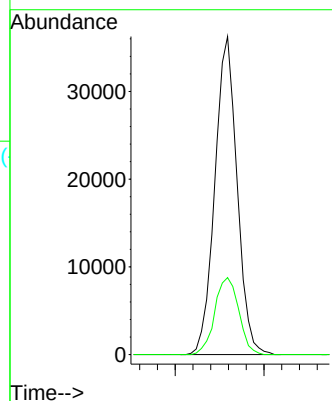
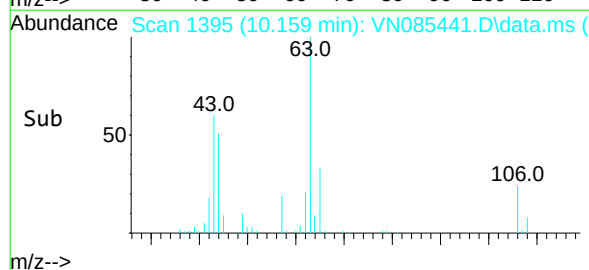
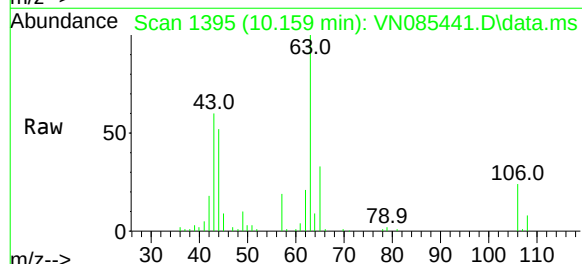
Acq: 14 Jan 2025 16:07

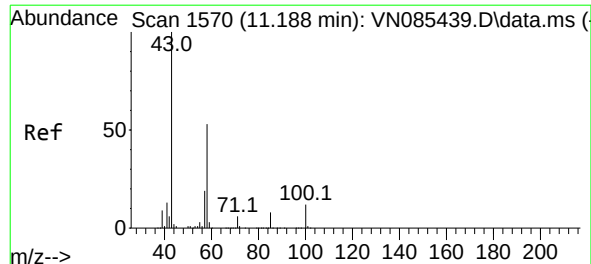
Tgt Ion: 63 Resp: 63110

Ion Ratio Lower Upper

63 100

106 26.1 21.6 32.4





#59

2-Hexanone

Concen: 46.291 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 43 Resp: 101318

Ion Ratio Lower Upper

43 100

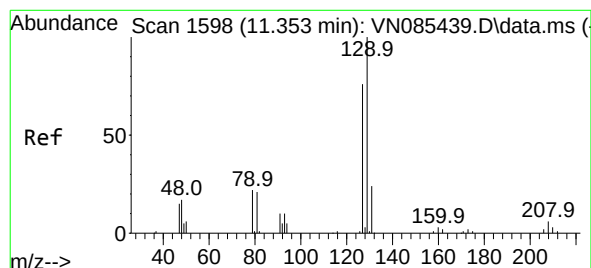
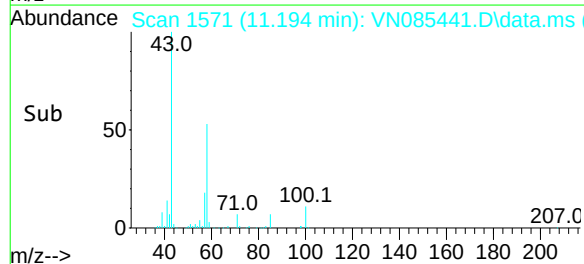
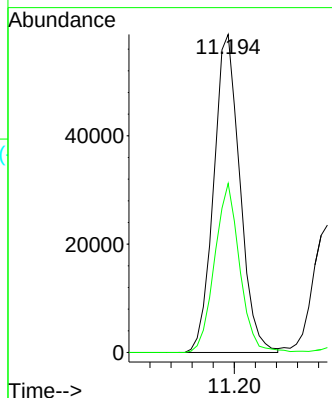
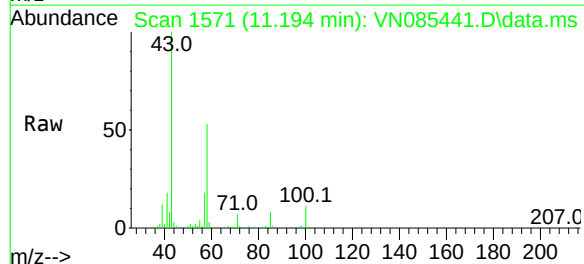
58 50.9 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 9.079 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085441.D

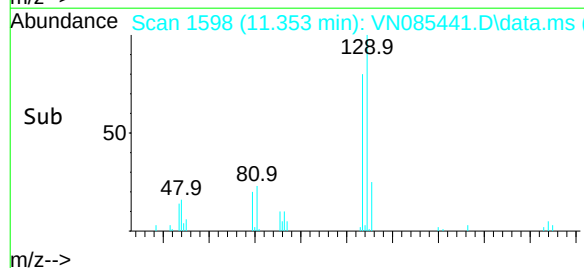
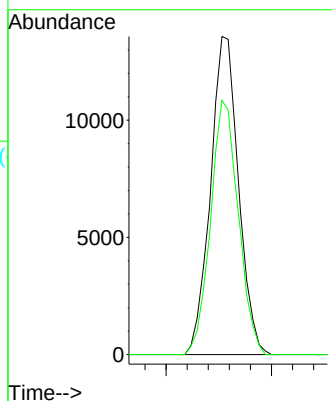
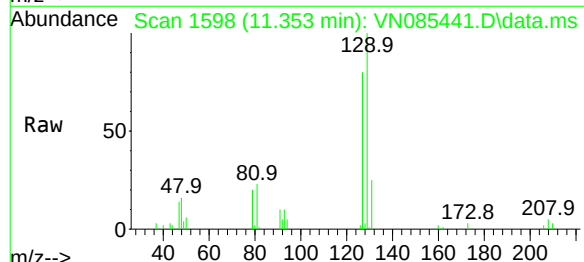
Acq: 14 Jan 2025 16:07

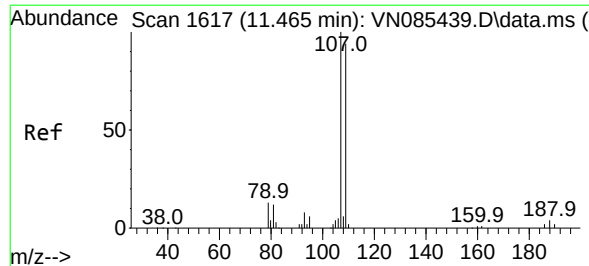
Tgt Ion:129 Resp: 25029

Ion Ratio Lower Upper

129 100

127 79.1 38.6 115.8





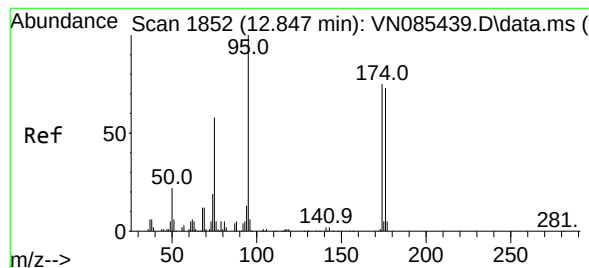
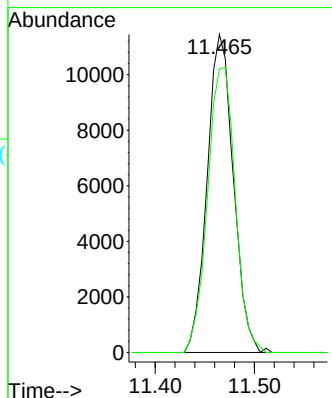
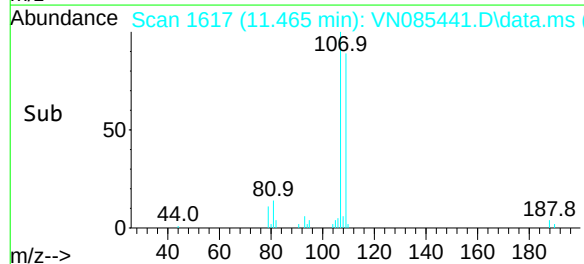
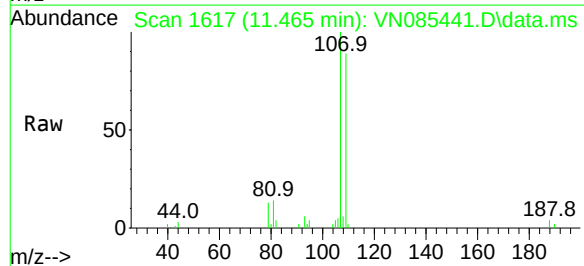
#61  
1,2-Dibromoethane  
Concen: 9.263 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Tgt Ion: 107 Resp: 21055  
Ion Ratio Lower Upper  
107 100  
109 94.6 75.9 113.9

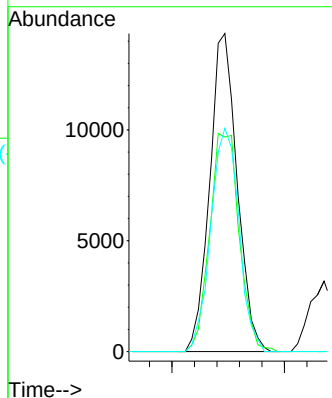
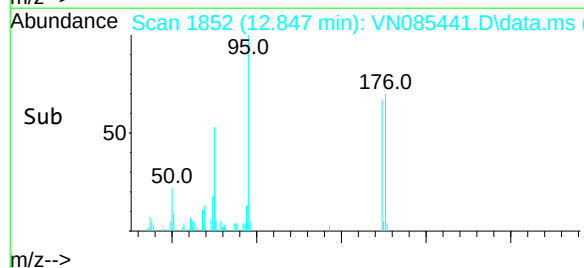
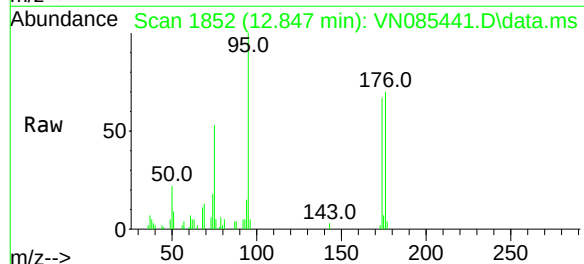
Manual Integrations  
APPROVED

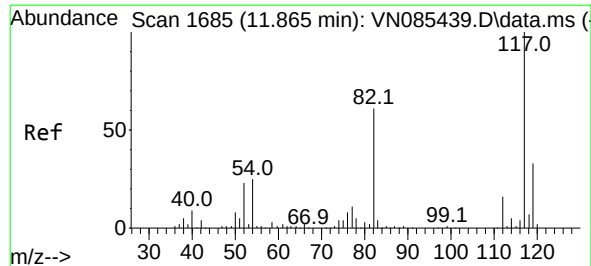
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#62  
4-Bromofluorobenzene  
Concen: 8.476 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 95 Resp: 24327  
Ion Ratio Lower Upper  
95 100  
174 73.9 0.0 145.0  
176 72.1 0.0 142.4





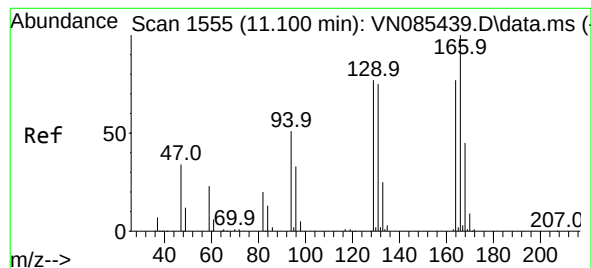
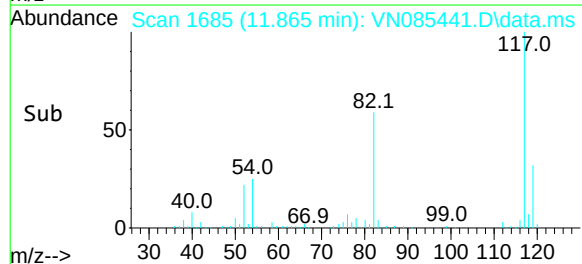
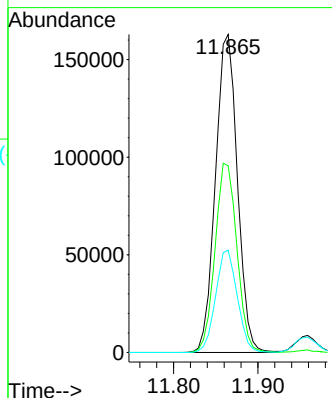
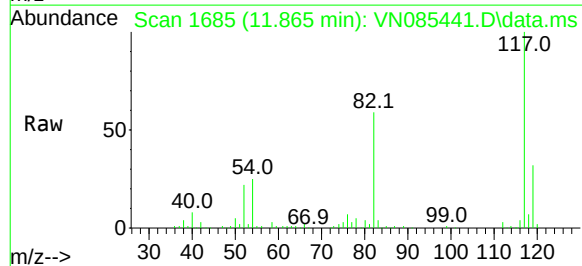
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

| Tgt Ion: | 117   | Resp: | 294508 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 58.7  | 48.6  | 72.8   |
| 119      | 32.2  | 26.6  | 39.8   |

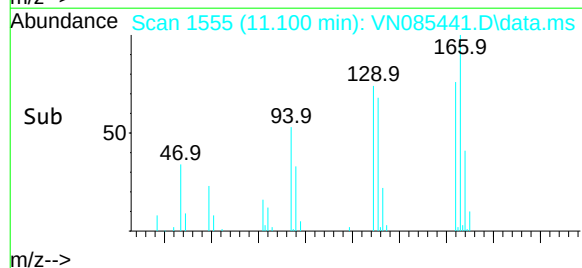
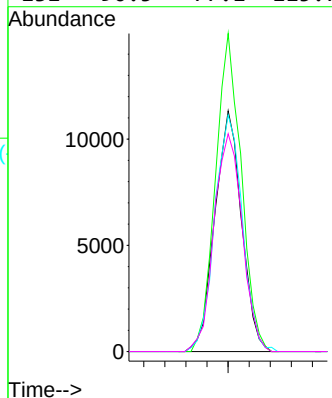
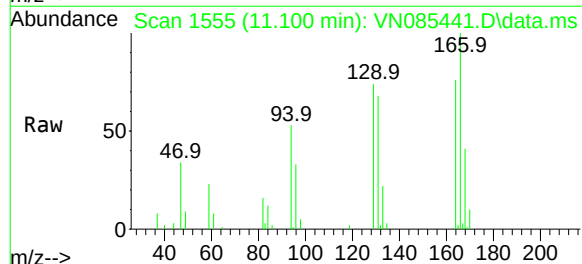
Manual Integrations  
APPROVED

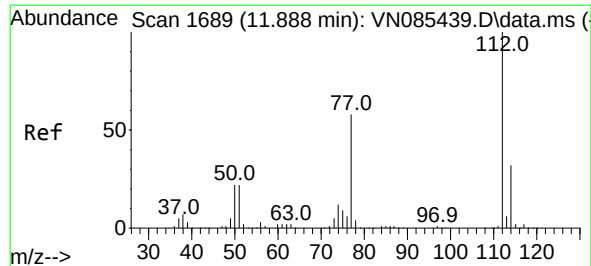
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#64  
Tetrachloroethene  
Concen: 9.928 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

| Tgt Ion: | 164   | Resp: | 19934 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 166      | 132.2 | 103.4 | 155.2 |
| 129      | 98.3  | 79.2  | 118.8 |
| 131      | 90.5  | 77.1  | 115.7 |





#65

Chlorobenzene

Concen: 9.560 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion:112 Resp: 61680

Ion Ratio Lower Upper

112 100

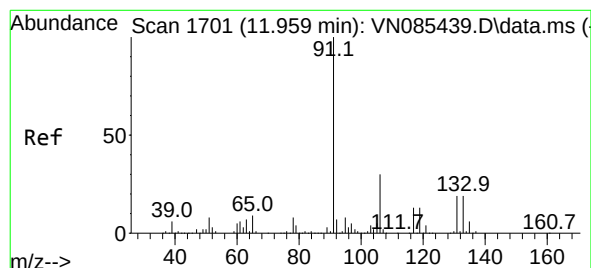
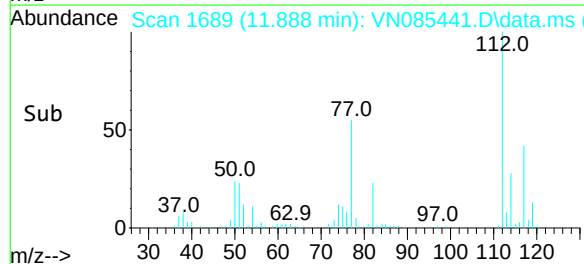
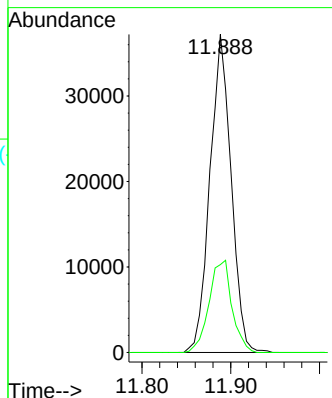
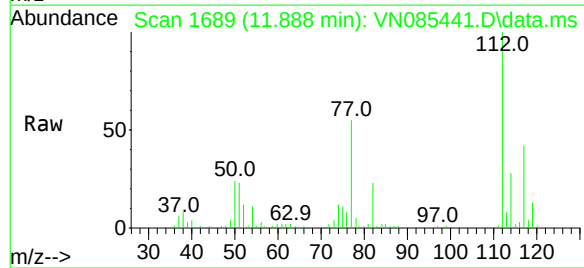
114 27.6 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 9.229 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

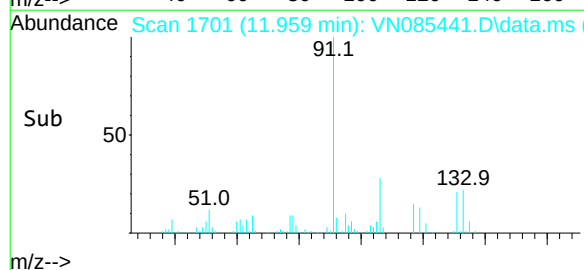
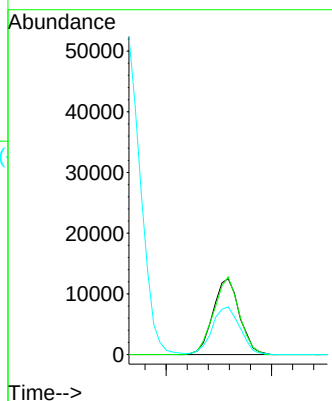
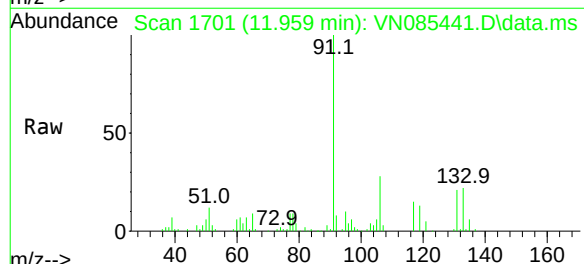
Tgt Ion:131 Resp: 21853

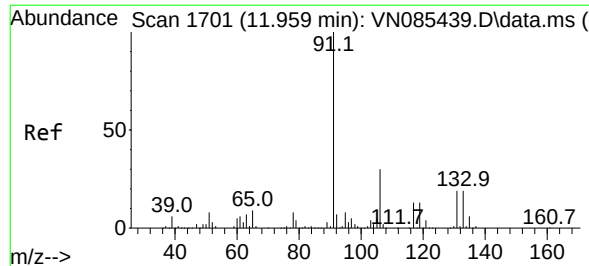
Ion Ratio Lower Upper

131 100

133 98.5 47.4 142.3

119 66.0 33.1 99.5





#67

Ethyl Benzene

Concen: 9.445 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion: 91 Resp: 99248

Ion Ratio Lower Upper

91 100

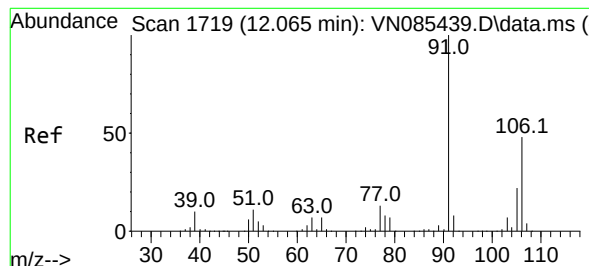
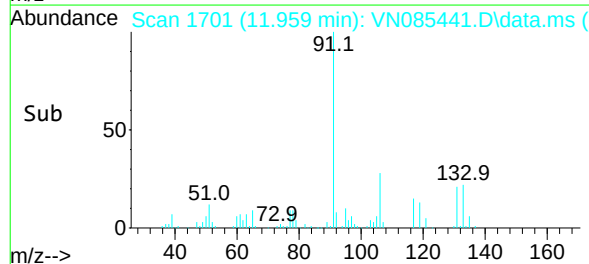
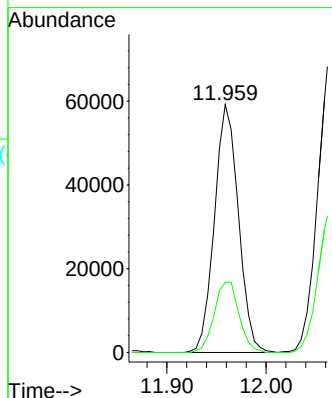
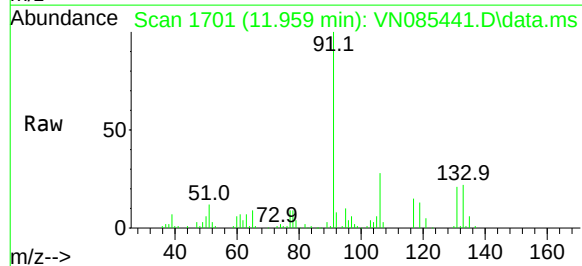
106 28.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 18.650 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085441.D

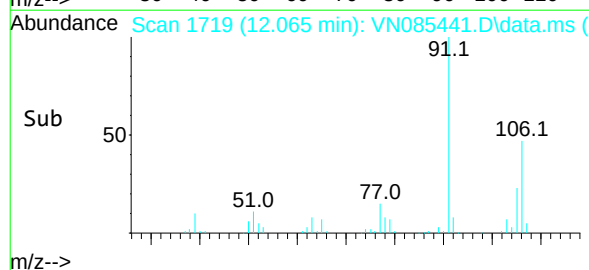
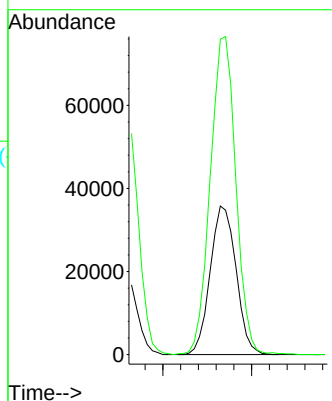
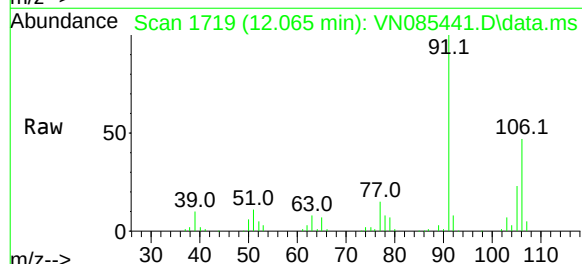
Acq: 14 Jan 2025 16:07

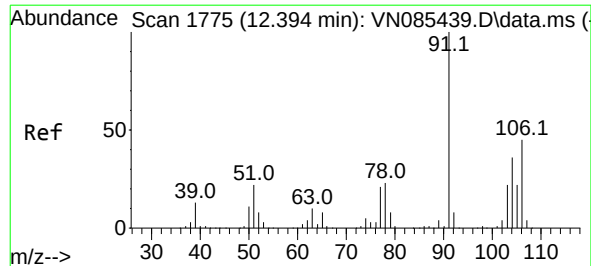
Tgt Ion:106 Resp: 72431

Ion Ratio Lower Upper

106 100

91 211.7 167.7 251.5





#69

o-Xylene

Concen: 9.264 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion:106 Resp: 34382

Ion Ratio Lower Upper

106 100

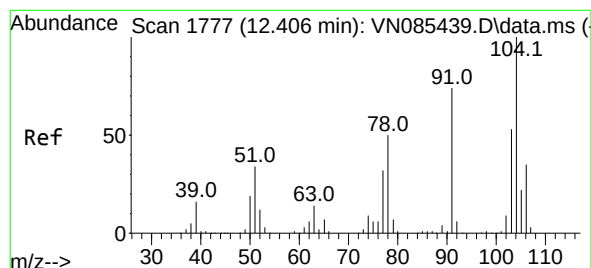
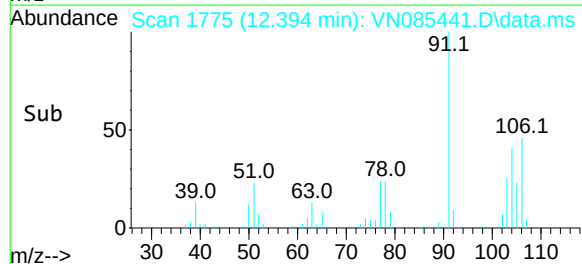
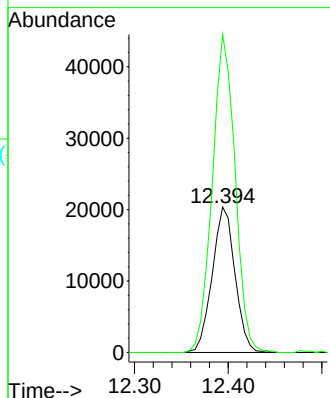
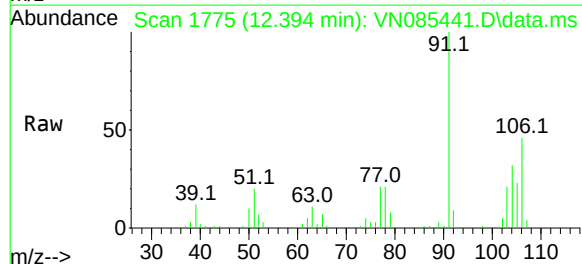
91 219.5 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 9.163 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

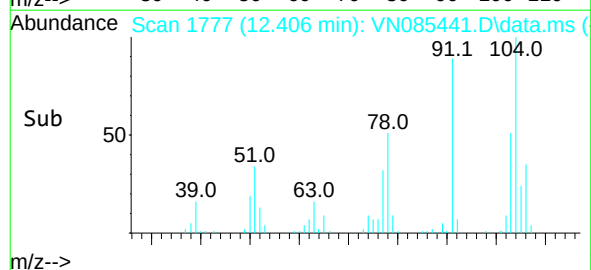
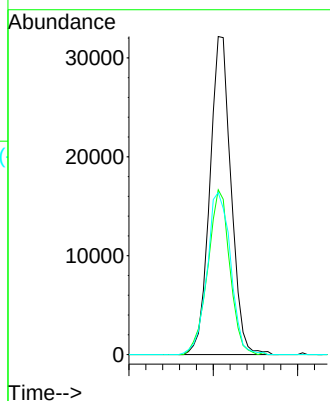
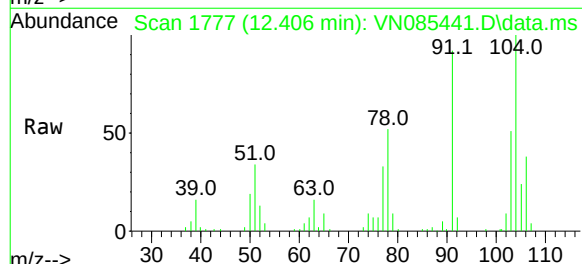
Tgt Ion:104 Resp: 56285

Ion Ratio Lower Upper

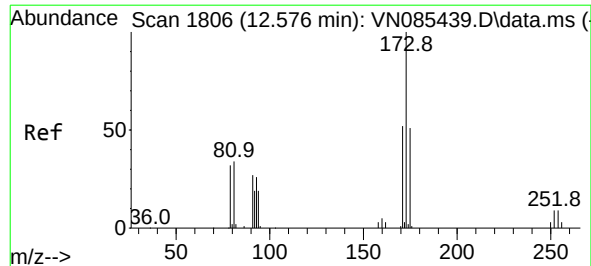
104 100

78 53.8 42.5 63.7

103 56.8 43.8 65.8







#71

Bromoform

Concen: 9.485 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

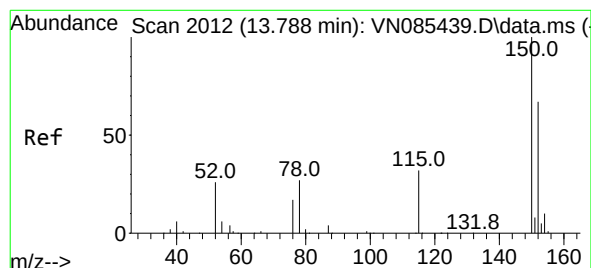
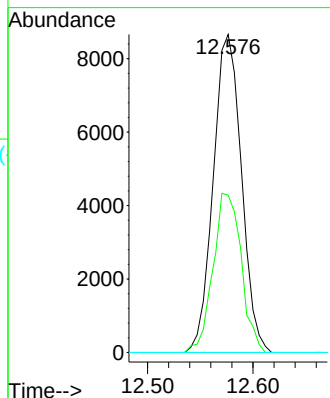
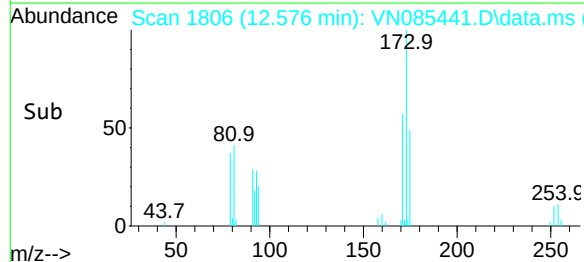
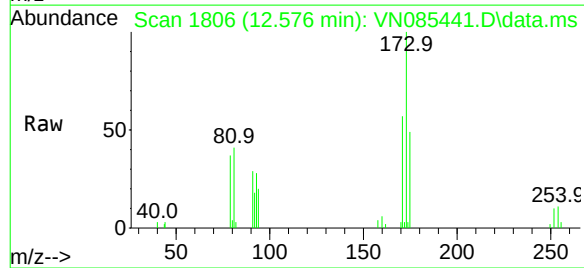
ClientSampleId :

VSTDICC010

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 16071 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 50.0  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

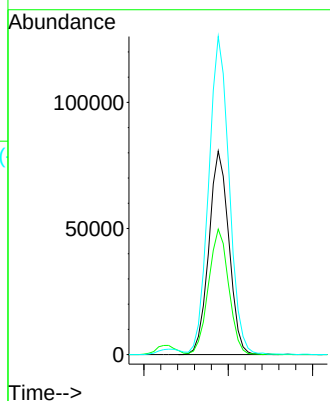
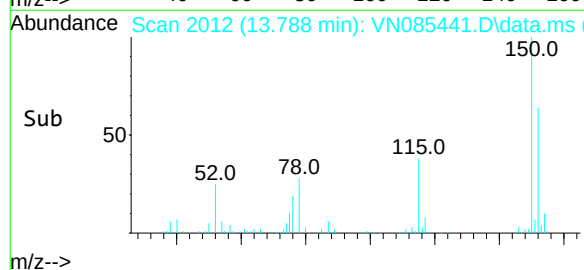
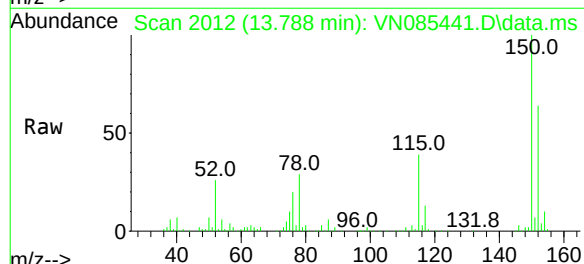
RT: 13.788 min Scan# 2012

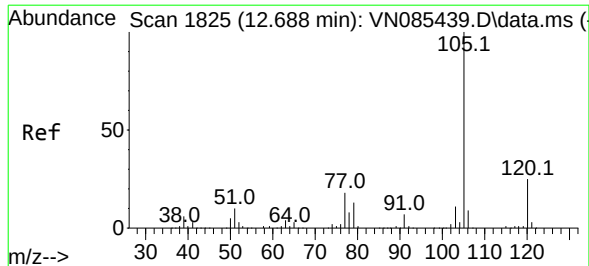
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 132934 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.3  | 31.1  | 93.3   |
| 150       | 159.8 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 9.697 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

Tgt Ion:105 Resp: 87003

Ion Ratio Lower Upper

105 100

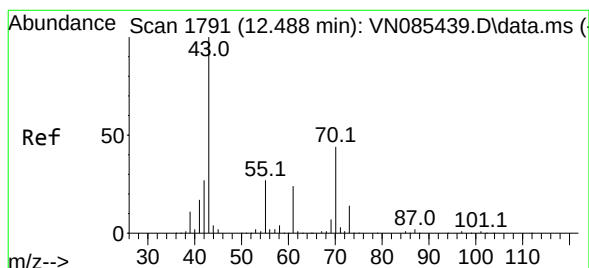
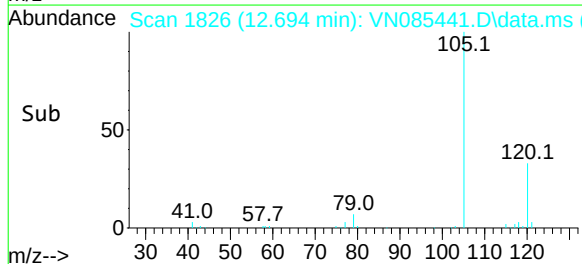
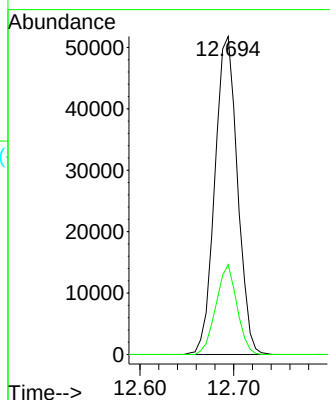
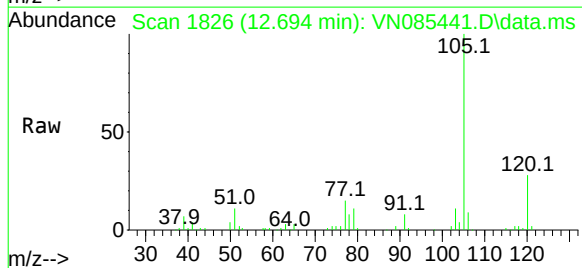
120 26.1 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-amyI acetate

Concen: 9.260 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 37343

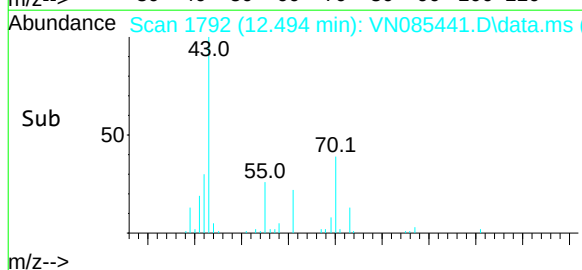
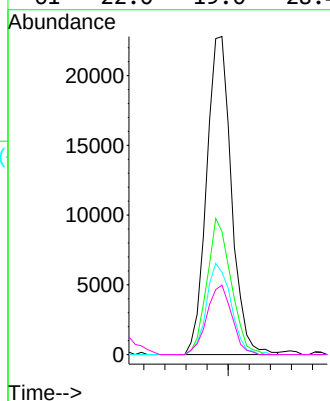
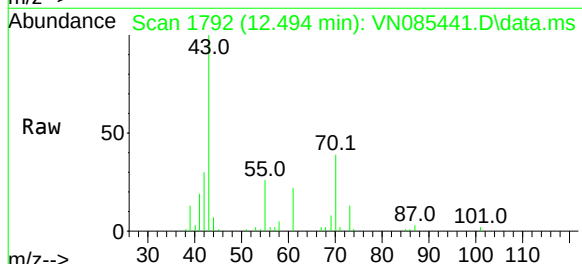
Ion Ratio Lower Upper

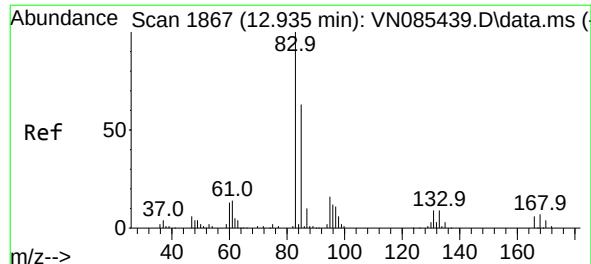
43 100

70 41.4 34.0 51.0

55 28.5 21.4 32.2

61 22.0 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 9.709 ug/l

RT: 12.935 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

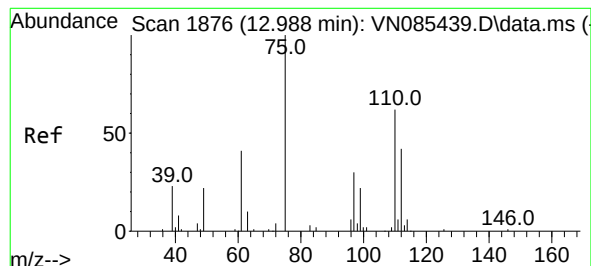
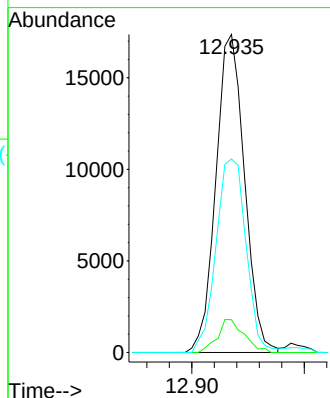
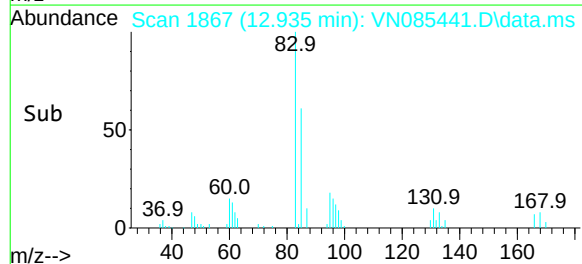
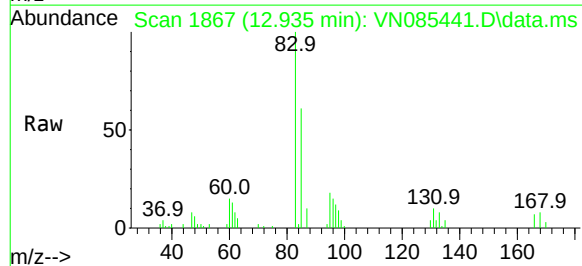
ClientSampleId :

VSTDIC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 30770 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 9.6   | 4.8   | 14.4  |
| 85       | 63.6  | 32.2  | 96.6  |

Manual Integrations  
APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 9.432 ug/l m

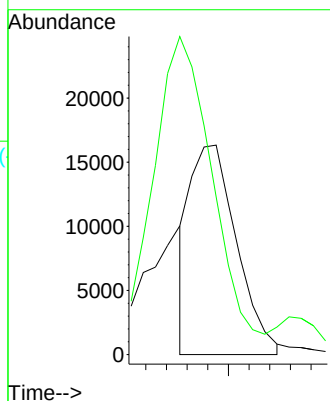
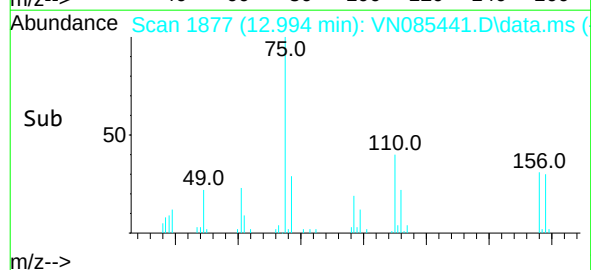
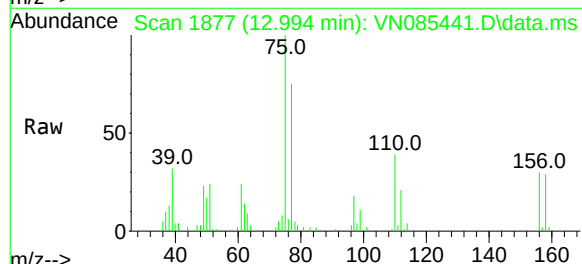
RT: 12.994 min Scan# 1877

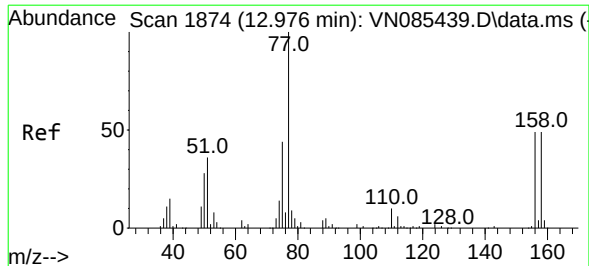
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 25443 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 198.5 | 109.7 | 329.2 |





#77

Bromobenzene

Concen: 9.720 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085441.D

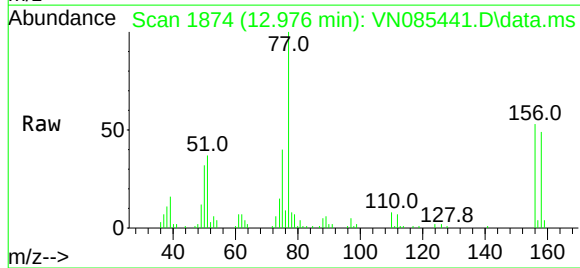
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

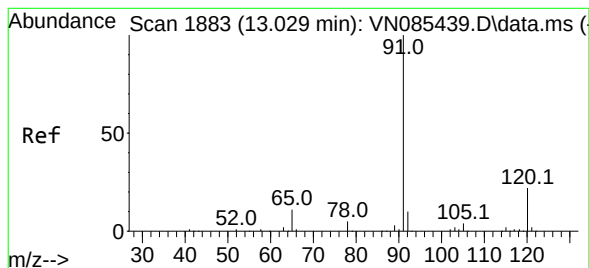
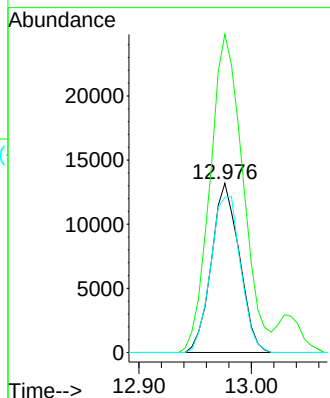
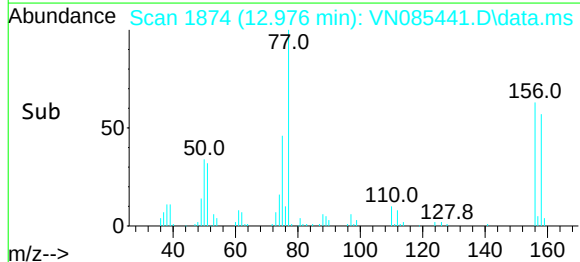
VSTDIC010



| Tgt Ion:  | 156   | Resp: | 22784 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 156       | 100   |       |       |
| 77        | 221.6 | 114.1 | 342.4 |
| 158       | 98.7  | 48.9  | 146.8 |

Manual Integrations  
APPROVED

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



#78

n-propylbenzene

Concen: 9.628 ug/l

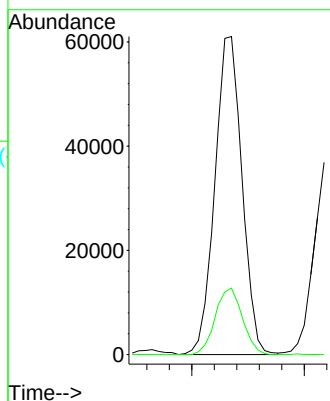
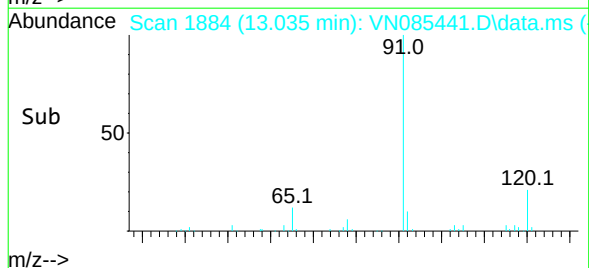
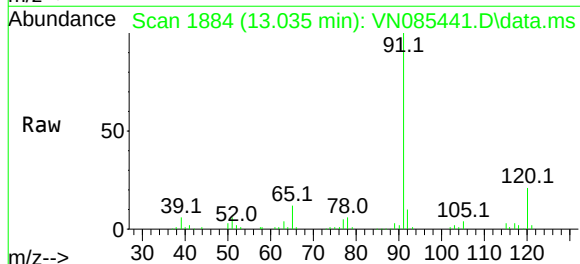
RT: 13.035 min Scan# 1884

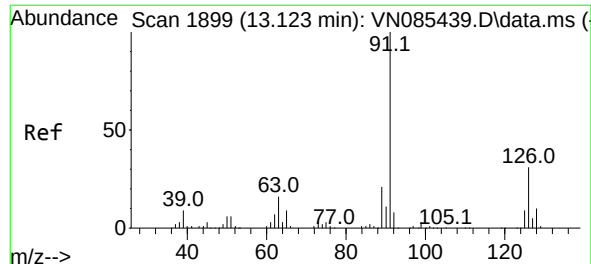
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

| Tgt Ion:  | 91    | Resp: | 102262 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 120       | 20.9  | 10.9  | 32.6   |





#79

2-Chlorotoluene

Concen: 9.943 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 91 Resp: 68346

Ion Ratio Lower Upper

91 100

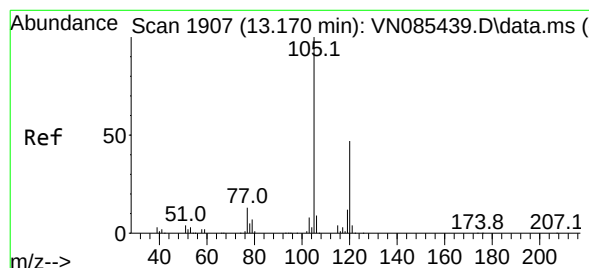
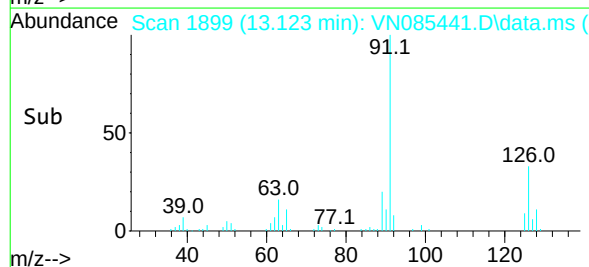
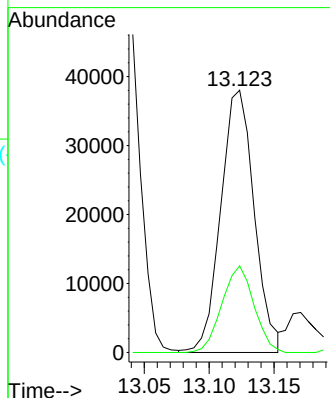
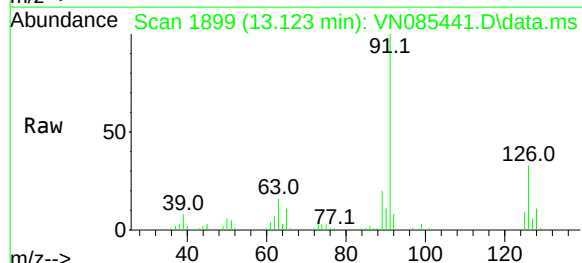
126 31.5 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 9.669 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085441.D

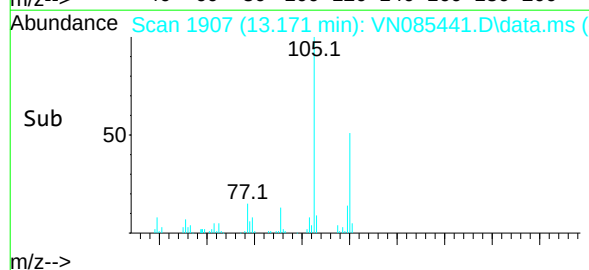
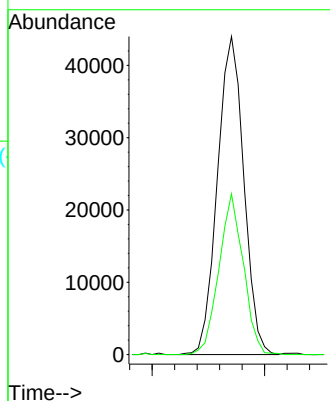
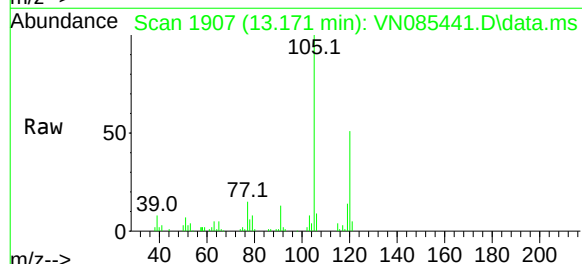
Acq: 14 Jan 2025 16:07

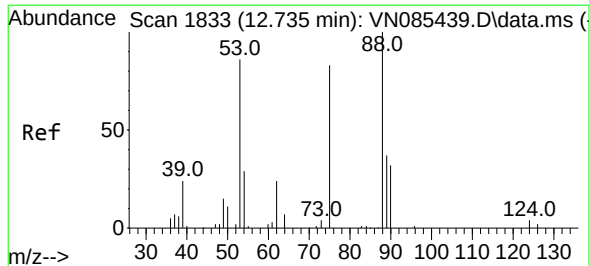
Tgt Ion:105 Resp: 71656

Ion Ratio Lower Upper

105 100

120 46.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 9.248 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085441.D

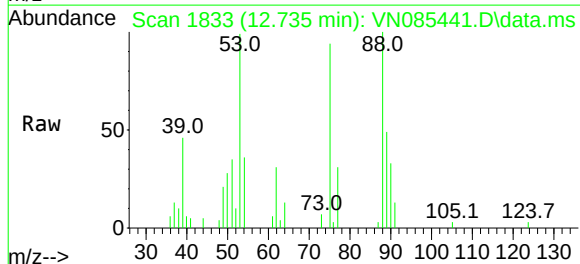
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

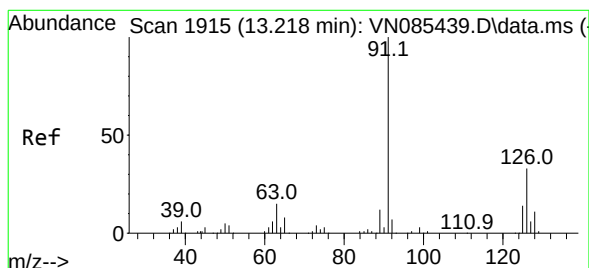
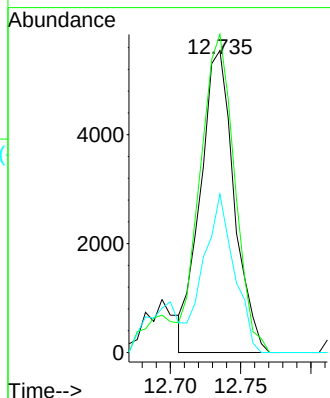
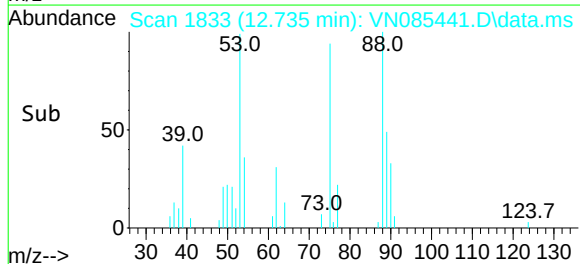
VSTDIC010



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 9236  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 119.6 | 95.6  | 143.4 |
| 89       | 46.6  | 37.0  | 55.6  |

Manual Integrations  
APPROVED

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



#82

4-Chlorotoluene

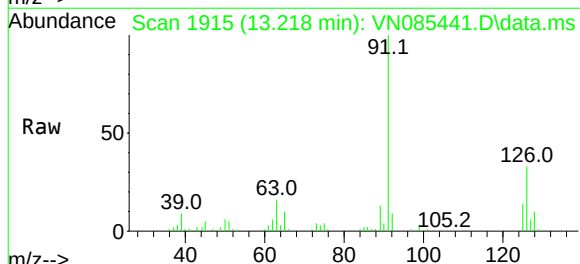
Concen: 9.756 ug/l

RT: 13.218 min Scan# 1915

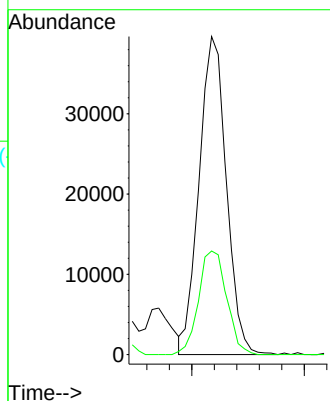
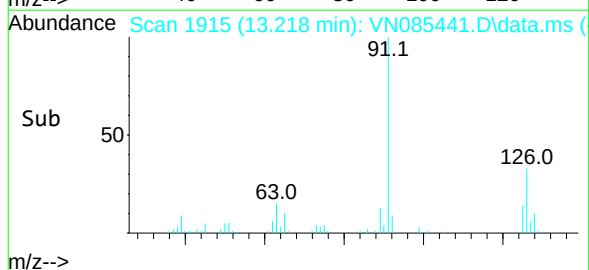
Delta R.T. 0.000 min

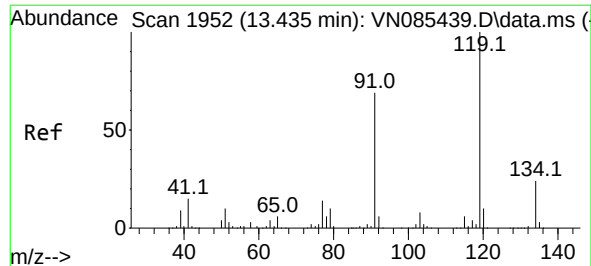
Lab File: VN085441.D

Acq: 14 Jan 2025 16:07



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 66773 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 126      | 33.6  | 15.9  | 47.7  |





#83

tert-Butylbenzene

Concen: 9.553 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

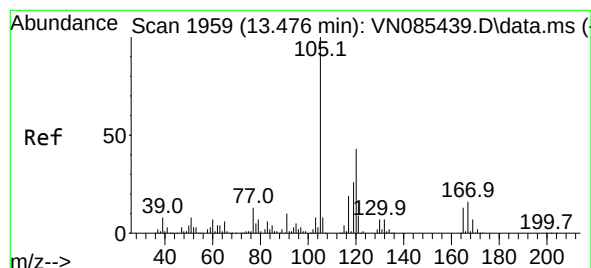
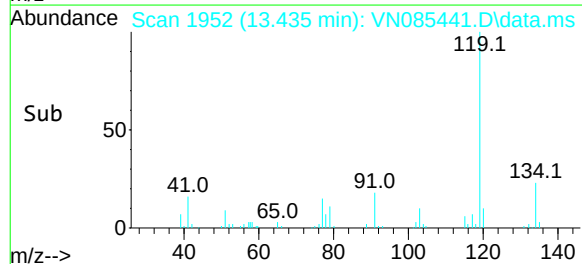
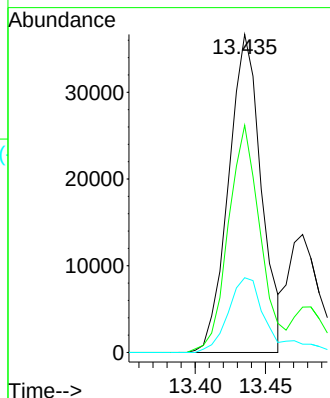
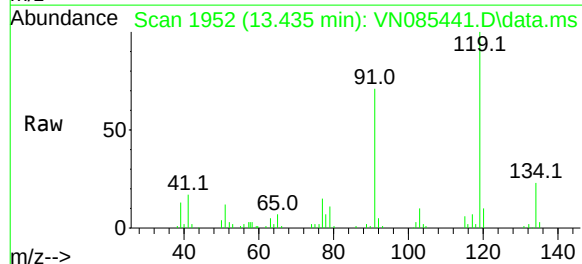
ClientSampleId :

VSTDIC010

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 119   | Resp: | 59455 |
| Ion Ratio | Lower | Upper |       |
| 119       | 100   |       |       |
| 91        | 70.0  | 35.1  | 105.3 |
| 134       | 27.8  | 12.0  | 36.1  |

Manual Integrations  
APPROVED

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



#84

1,2,4-Trimethylbenzene

Concen: 9.754 ug/l

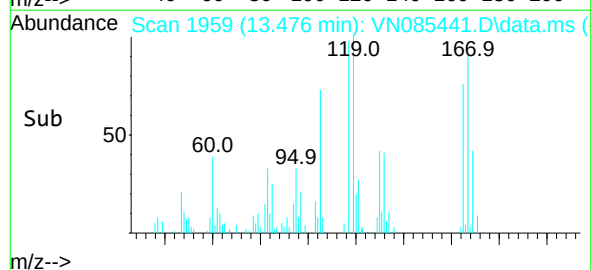
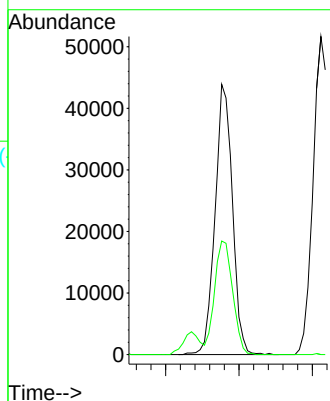
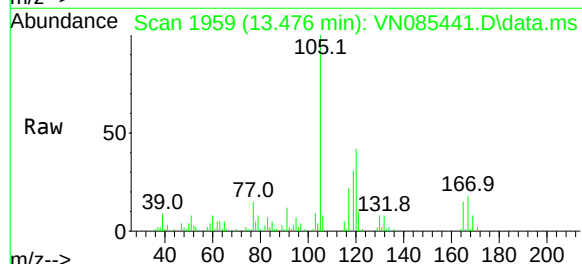
RT: 13.476 min Scan# 1959

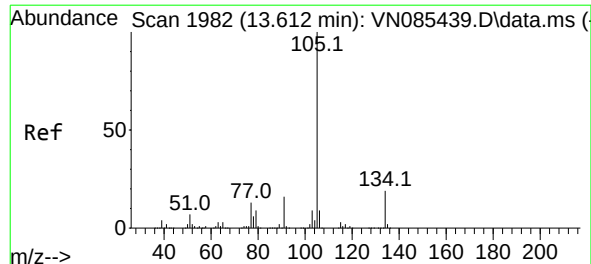
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 72046 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 43.8  | 21.6  | 65.0  |





#85

sec-Butylbenzene

Concen: 9.699 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion:105 Resp: 83662

Ion Ratio Lower Upper

105 100

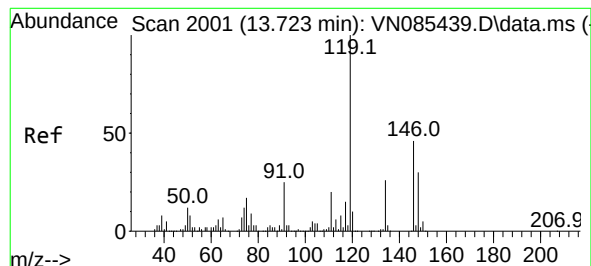
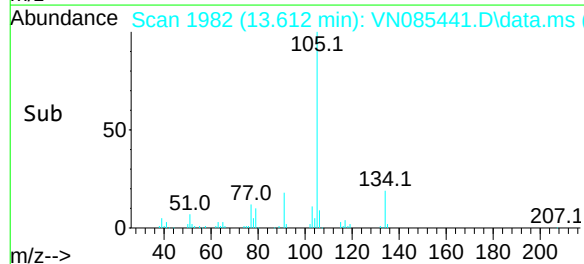
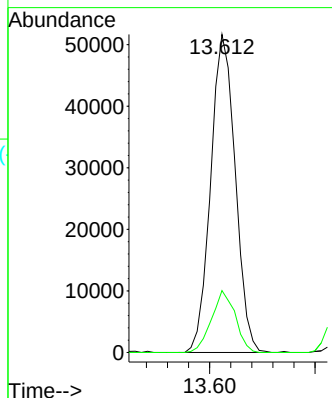
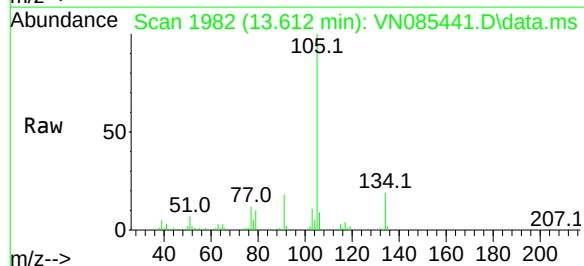
134 18.9 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 9.674 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

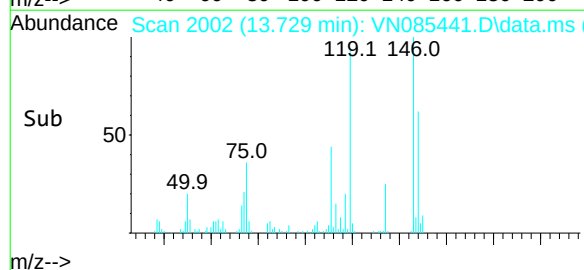
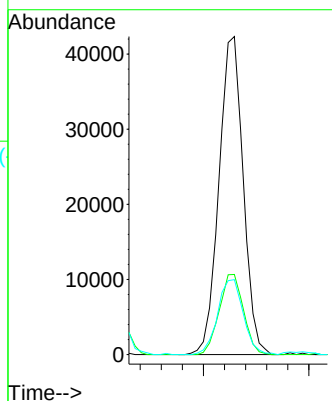
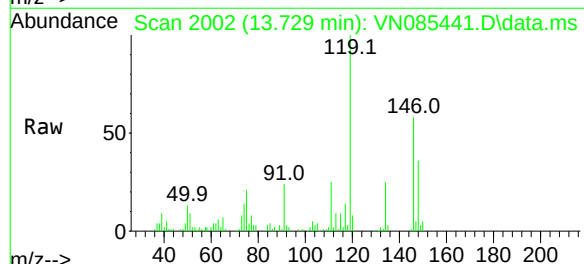
Tgt Ion:119 Resp: 67556

Ion Ratio Lower Upper

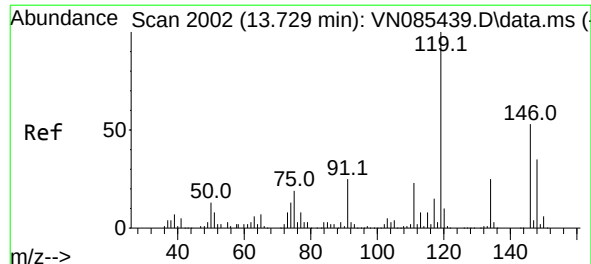
119 100

134 25.2 12.7 38.0

91 25.0 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 9.693 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

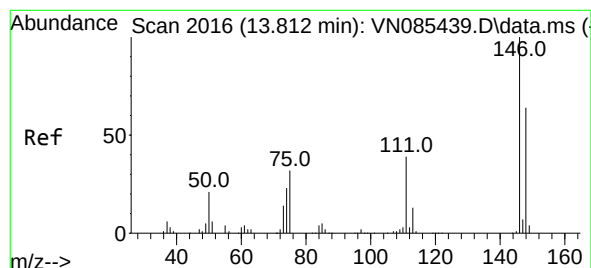
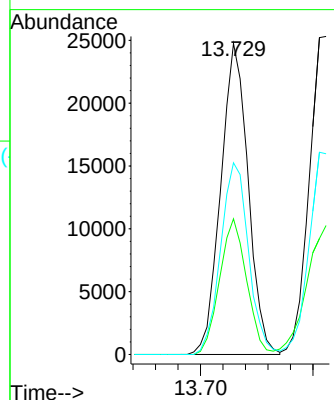
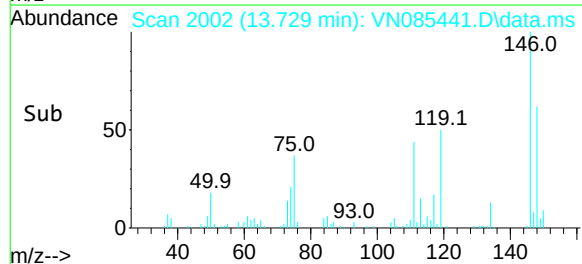
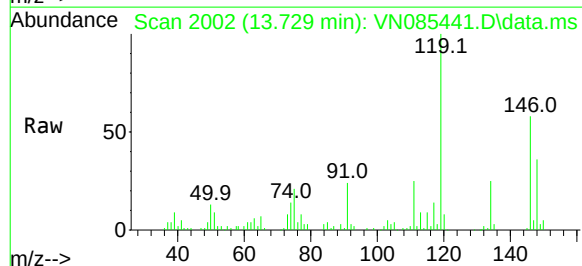
ClientSampleId :

VSTDIC010

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 41843 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 43.1  | 21.4  | 64.3  |
| 148      | 63.0  | 32.3  | 96.9  |

Manual Integrations  
APPROVED

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



#88

1,4-Dichlorobenzene

Concen: 9.549 ug/l

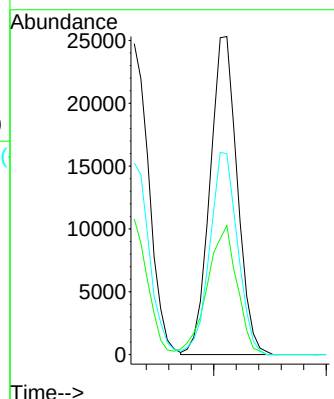
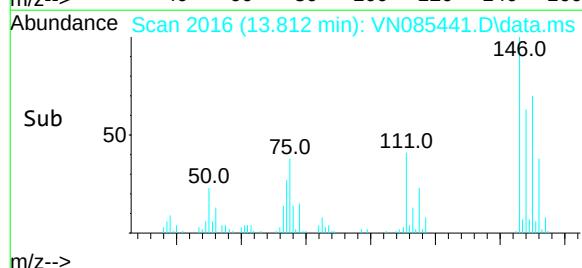
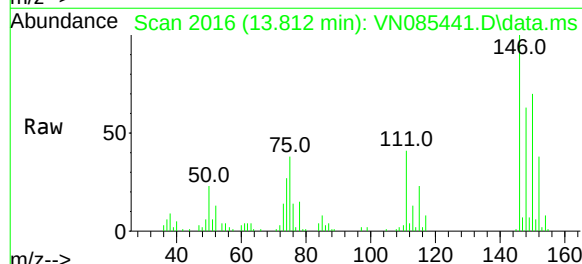
RT: 13.812 min Scan# 2016

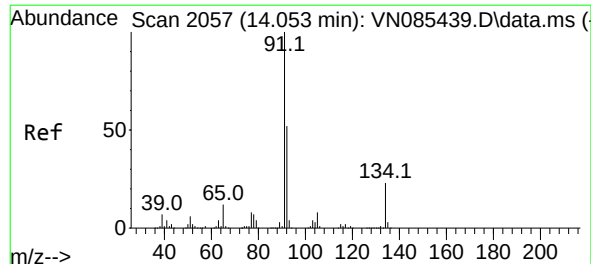
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 42728 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 44.0  | 21.3  | 63.7  |
| 148      | 64.6  | 32.4  | 97.0  |





#89

n-Butylbenzene

Concen: 9.314 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

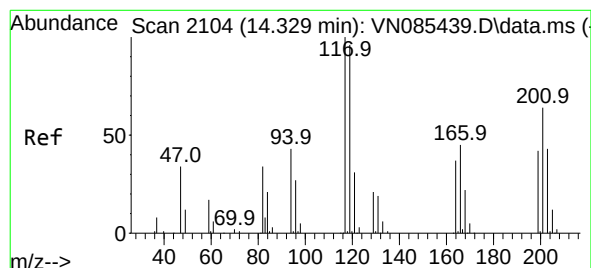
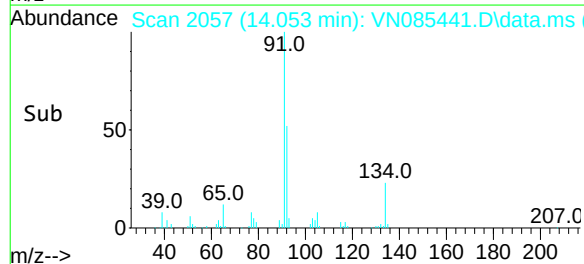
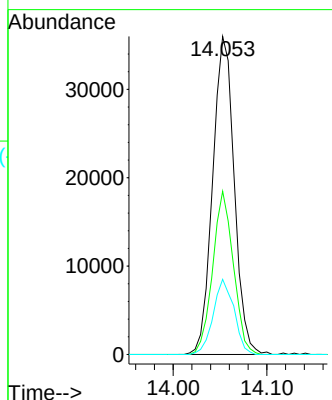
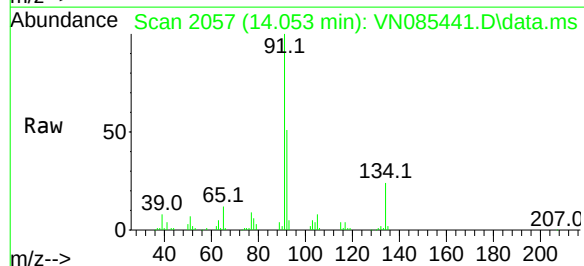
VSTDICC010

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 57632 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 92        | 49.2  | 25.8  | 77.3  |
| 134       | 22.8  | 11.7  | 35.1  |

## Manual Integrations

APPROVED

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



#90

Hexachloroethane

Concen: 9.294 ug/l

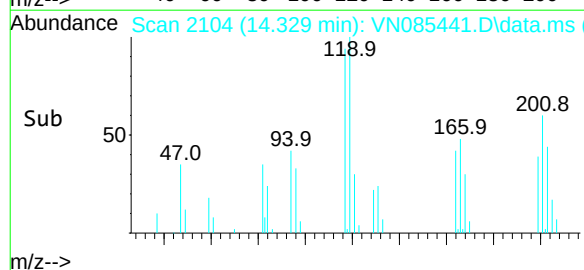
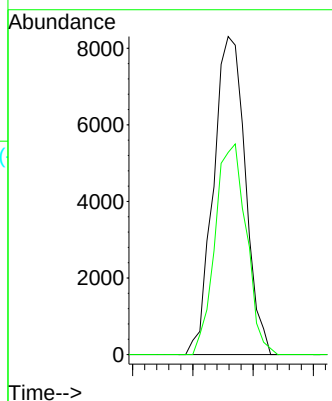
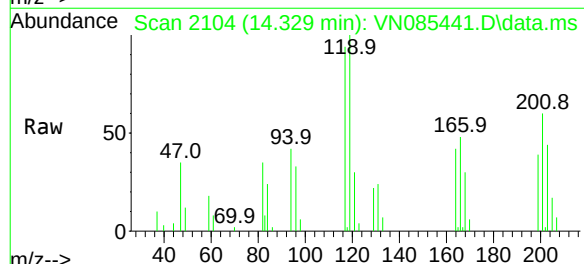
RT: 14.329 min Scan# 2104

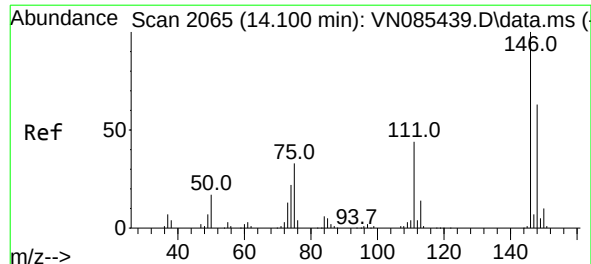
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

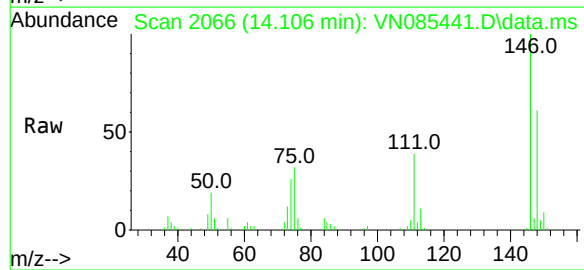
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 117   | Resp: | 15261 |
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 65.0  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 9.458 ug/l  
RT: 14.106 min Scan# 2065  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

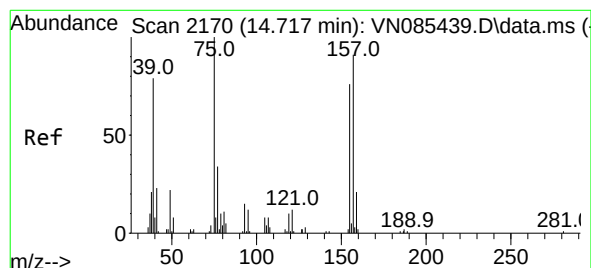
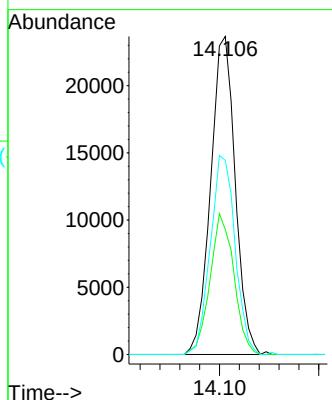
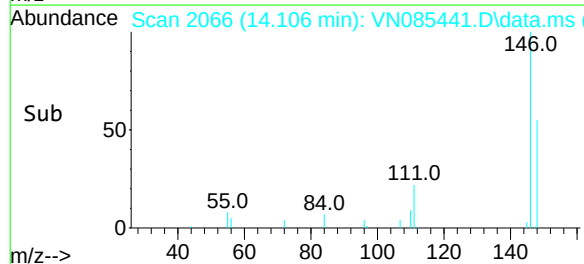
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010



Tgt Ion: 146 Resp: 40726  
Ion Ratio Lower Upper  
146 100  
111 42.9 21.7 65.1  
148 62.9 31.4 94.2

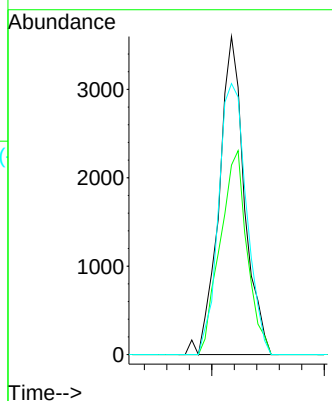
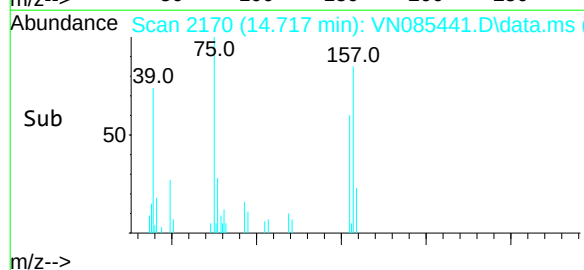
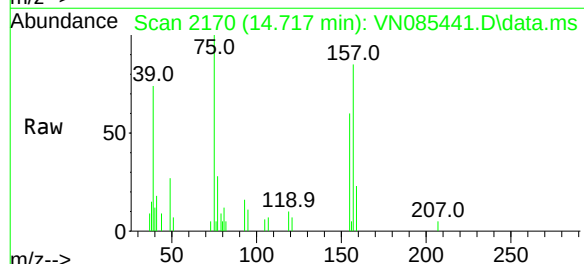
Manual Integrations  
APPROVED

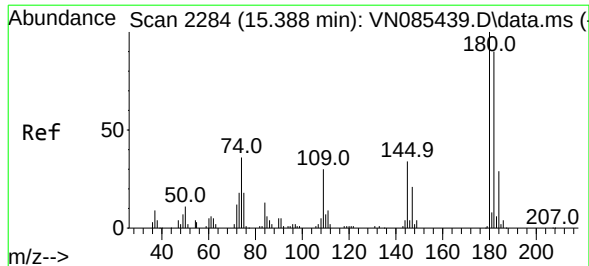
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 9.744 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 5639  
Ion Ratio Lower Upper  
75 100  
155 67.9 36.4 109.2  
157 94.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 9.354 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion:180 Resp: 18720

Ion Ratio Lower Upper

180 100

182 92.4 46.8 140.3

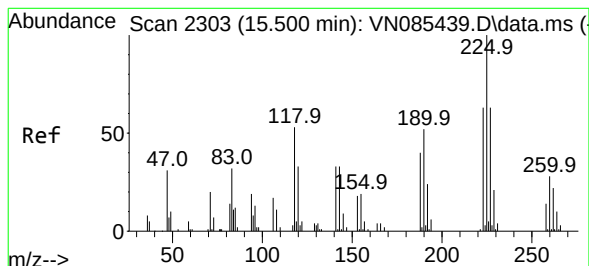
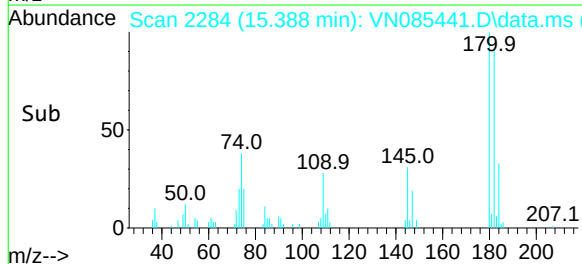
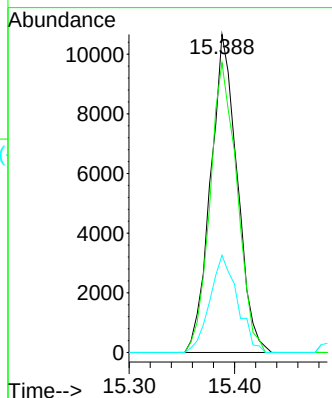
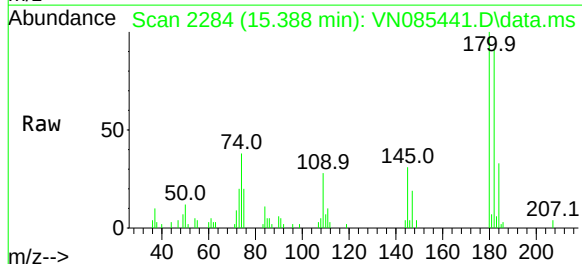
145 31.7 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 9.874 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

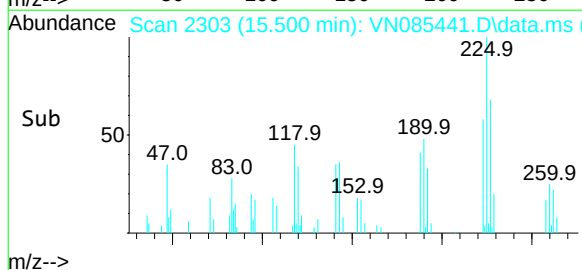
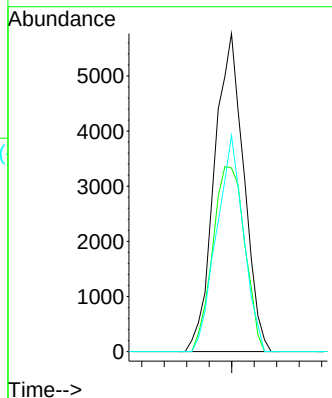
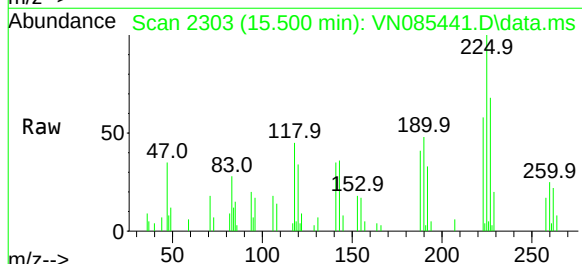
Tgt Ion:225 Resp: 10491

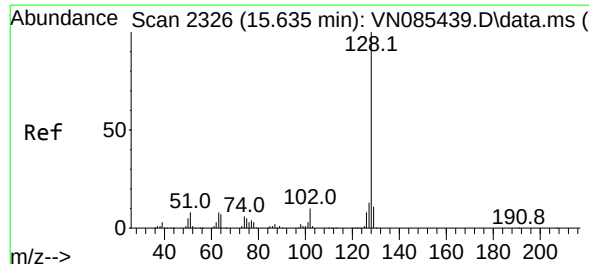
Ion Ratio Lower Upper

225 100

223 63.3 30.7 92.1

227 62.1 30.9 92.5





#95

Naphthalene

Concen: 8.717 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

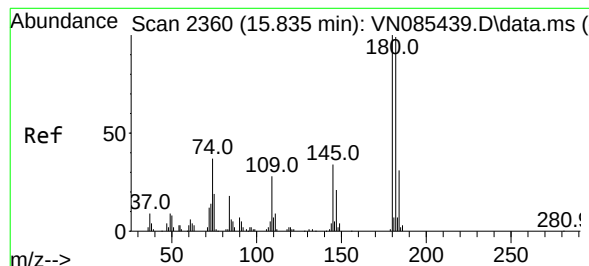
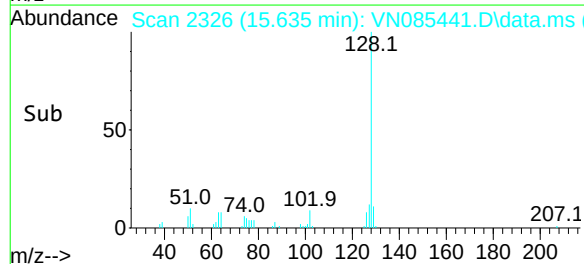
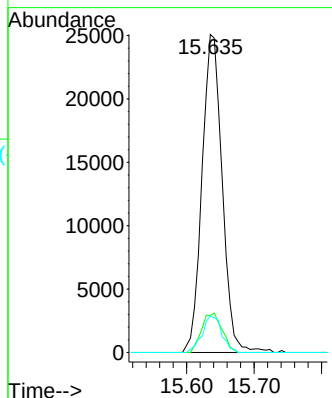
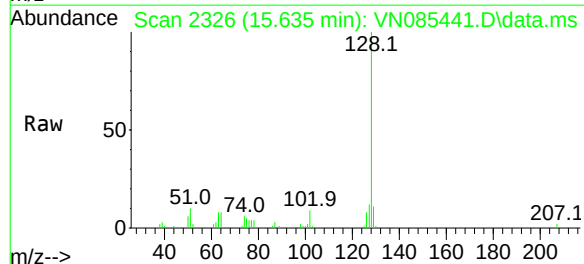
ClientSampleId :

VSTDIC010

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 52054 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 127       | 12.6  | 10.6  | 16.0  |
| 129       | 11.2  | 8.8   | 13.2  |

Manual Integrations  
APPROVED

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



#96

1,2,3-Trichlorobenzene

Concen: 9.605 ug/l

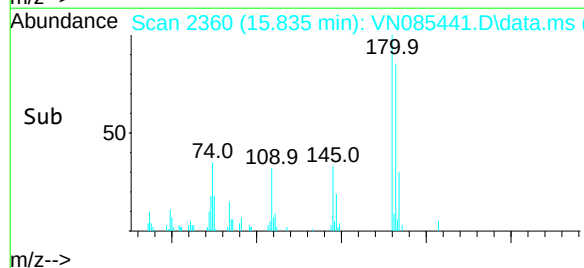
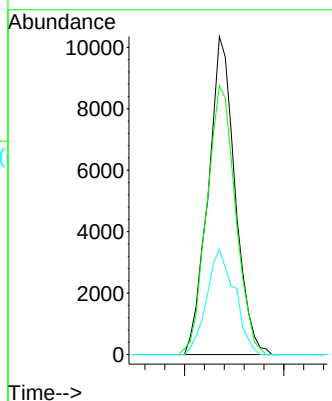
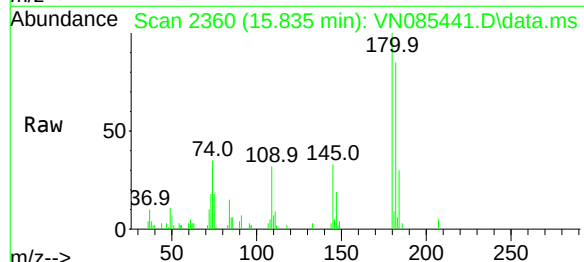
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 19450 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 90.3  | 47.4  | 142.2 |
| 145       | 34.7  | 16.9  | 50.7  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085442.D  
 Acq On : 14 Jan 2025 16:31  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:45:08 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 186556   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 324413   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 282203   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 126086   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 17046    | 5.660    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 11.320%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 12102    | 5.377    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 10.760%# |
| 50) Toluene-d8              | 10.565 | 98    | 41328    | 5.168    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 10.340%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 13520    | 4.943    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 9.880%#  |

|                              |       |     |         |        |        |     |
|------------------------------|-------|-----|---------|--------|--------|-----|
| Target Compounds             |       |     |         |        | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 13199   | 5.225  | ug/l   | 97  |
| 3) Chloromethane             | 2.359 | 50  | 14526   | 5.311  | ug/l   | 96  |
| 4) Vinyl Chloride            | 2.512 | 62  | 14564   | 5.298  | ug/l   | 98  |
| 5) Bromomethane              | 2.953 | 94  | 9788    | 5.895  | ug/l   | 98  |
| 6) Chloroethane              | 3.124 | 64  | 9430    | 5.411  | ug/l   | 99  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 20098   | 5.039  | ug/l   | 92  |
| 8) Diethyl Ether             | 3.959 | 74  | 6652    | 4.828  | ug/l   | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 11917   | 5.305  | ug/l   | 97  |
| 10) Methyl Iodide            | 4.583 | 142 | 12331   | 4.793  | ug/l   | 99  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 9075    | 26.318 | ug/l # | 94  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 10429   | 5.209  | ug/l   | 96  |
| 13) Acrolein                 | 4.171 | 56  | 9430    | 20.033 | ug/l   | 97  |
| 14) Allyl chloride           | 5.030 | 41  | 16741   | 5.153  | ug/l   | 97  |
| 15) Acrylonitrile            | 5.718 | 53  | 27869   | 25.445 | ug/l   | 97  |
| 16) Acetone                  | 4.430 | 43  | 25122   | 25.819 | ug/l   | 97  |
| 17) Carbon Disulfide         | 4.706 | 76  | 32068   | 5.202  | ug/l   | 96  |
| 18) Methyl Acetate           | 5.024 | 43  | 15106   | 5.106  | ug/l   | 97  |
| 19) Methyl tert-butyl Ether  | 5.800 | 73  | 31439   | 4.836  | ug/l   | 94  |
| 20) Methylene Chloride       | 5.271 | 84  | 12981   | 5.389  | ug/l # | 83  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 10614   | 4.960  | ug/l # | 78  |
| 22) Diisopropyl ether        | 6.665 | 45  | 35785   | 4.962  | ug/l # | 96  |
| 23) Vinyl Acetate            | 6.600 | 43  | 118439m | 23.389 | ug/l   |     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 22865   | 5.200  | ug/l   | 99  |
| 25) 2-Butanone               | 7.483 | 43  | 36127   | 25.231 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 18398   | 5.175  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.488 | 96  | 12477   | 4.951  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.806 | 49  | 11096   | 5.424  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.841 | 42  | 21983   | 24.215 | ug/l   | 99  |
| 30) Chloroform               | 7.959 | 83  | 23384   | 5.146  | ug/l   | 98  |
| 31) Cyclohexane              | 8.247 | 56  | 22343   | 5.846  | ug/l # | 92  |
| 32) 1,1,1-Trichloroethane    | 8.159 | 97  | 21416   | 5.372  | ug/l   | 91  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 15886   | 5.029  | ug/l   | 96  |
| 37) Ethyl Acetate            | 7.553 | 43  | 16879m  | 5.294  | ug/l   |     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 18317   | 5.065  | ug/l   | 96  |
| 39) Methylcyclohexane        | 9.600 | 83  | 14175   | 4.776  | ug/l   | 98  |
| 40) Benzene                  | 8.600 | 78  | 47833   | 5.040  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085442.D  
 Acq On : 14 Jan 2025 16:31  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:45:08 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 7380     | 4.449  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 18628    | 5.211  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 24792    | 4.853  | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 11133    | 5.039  | ug/l   | 86       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 12591    | 5.194  | ug/l   | 92       |
| 46) Dibromomethane            | 9.700  | 93   | 8230     | 4.705  | ug/l   | 91       |
| 47) Bromodichloromethane      | 9.888  | 83   | 18456    | 5.179  | ug/l # | 96       |
| 48) Methyl methacrylate       | 9.677  | 41   | 10574    | 4.599  | ug/l   | 95       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 3619     | 93.477 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 71889    | 24.250 | ug/l   | 98       |
| 52) Toluene                   | 10.629 | 92   | 27098    | 4.928  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 17099    | 5.077  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 17440    | 4.848  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 11311    | 5.197  | ug/l   | 96       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 14094    | 5.627  | ug/l   | 94       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 18945    | 5.006  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 33210    | 24.047 | ug/l   | 97       |
| 59) 2-Hexanone                | 11.194 | 43   | 49021    | 23.501 | ug/l   | 94       |
| 60) Dibromochloromethane      | 11.353 | 129  | 13635    | 5.190  | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 10419    | 4.810  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 9756     | 5.071  | ug/l   | 91       |
| 65) Chlorobenzene             | 11.888 | 112  | 31312    | 5.065  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 11620    | 5.121  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 48216    | 4.789  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.065 | 106  | 34771    | 9.344  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 16419    | 4.617  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 26218    | 4.454  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 8017     | 4.938  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 39811    | 4.678  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 17577    | 4.595  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 15483    | 5.151  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 12173m   | 4.758  | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 11091    | 4.989  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 45450    | 4.512  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 31932    | 4.898  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 31891    | 4.537  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 4229     | 4.465  | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 31976    | 4.926  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 27597    | 4.675  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 32054    | 4.575  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 38148    | 4.663  | ug/l   | 98       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 29856    | 4.584  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 20876    | 5.099  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 21982    | 5.179  | ug/l   | 97       |
| 89) n-Butylbenzene            | 14.053 | 91   | 27437    | 4.675  | ug/l   | 96       |
| 90) Hexachloroethane          | 14.329 | 117  | 7767     | 4.987  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 20177    | 4.940  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.729 | 75   | 2872     | 5.232  | ug/l   | 90       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 9037     | 4.761  | ug/l   | 94       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 5563     | 5.520  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 25047    | 4.422  | ug/l   | 96       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 8737     | 4.549  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085442.D  
Acq On : 14 Jan 2025 16:31  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:45:08 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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



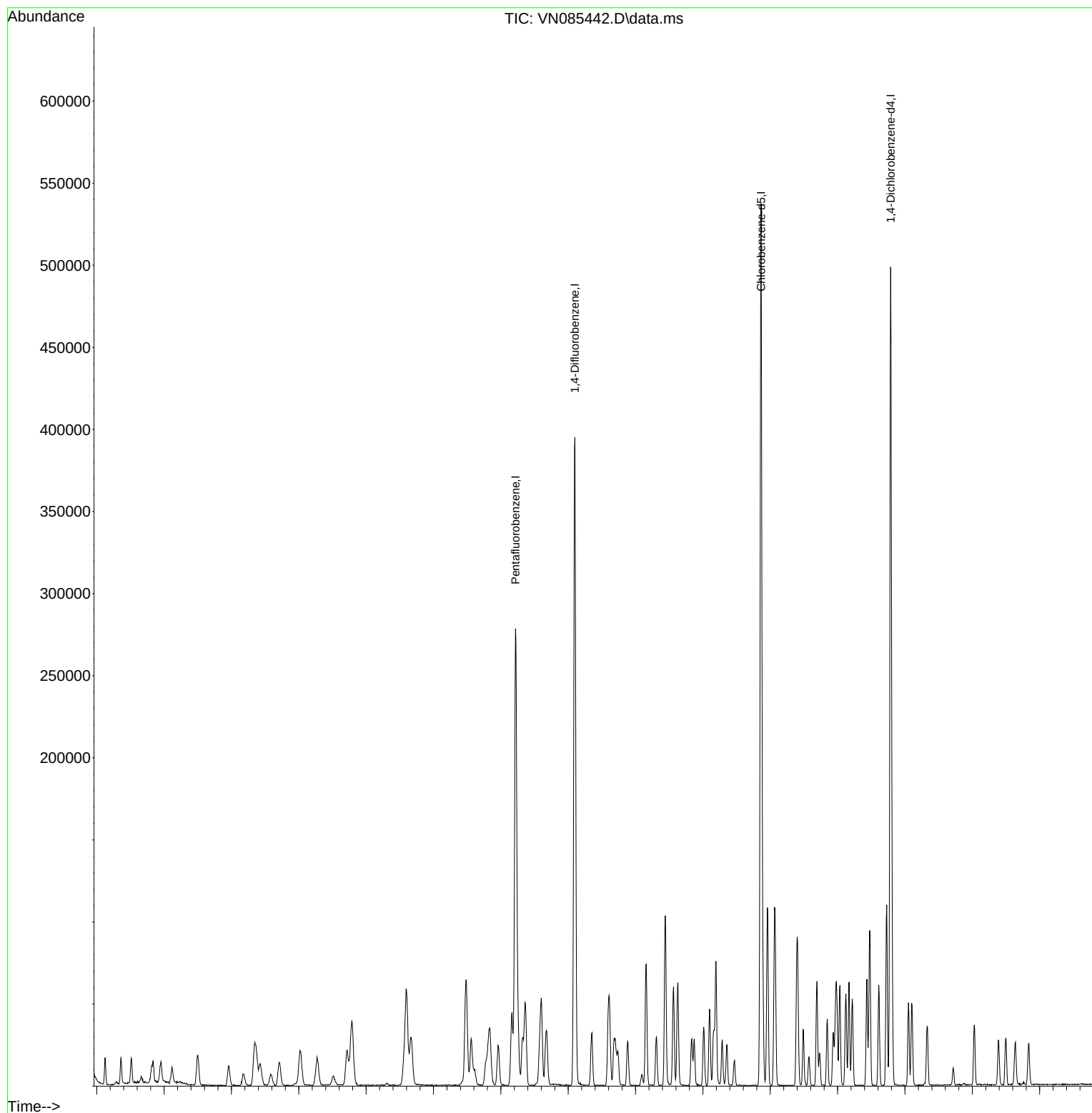
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085442.D  
Acq On : 14 Jan 2025 16:31  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

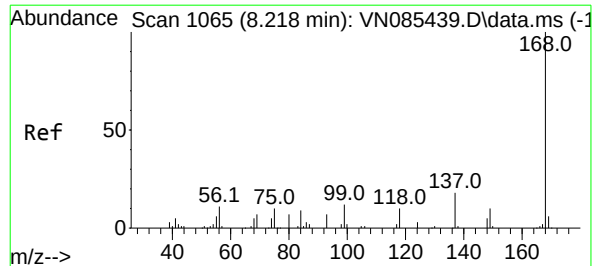
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:45:08 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





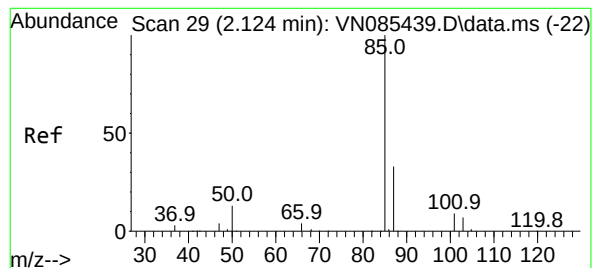
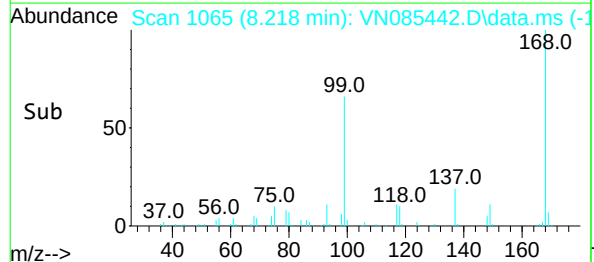
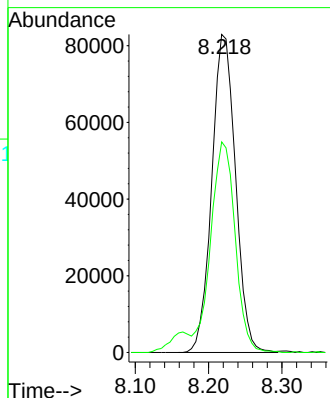
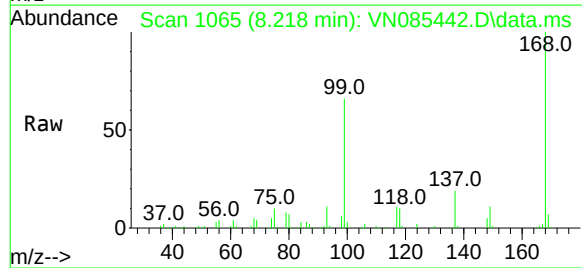
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion: 168 Resp: 186556  
Ion Ratio Lower Upper  
168 100  
99 65.9 53.6 80.4

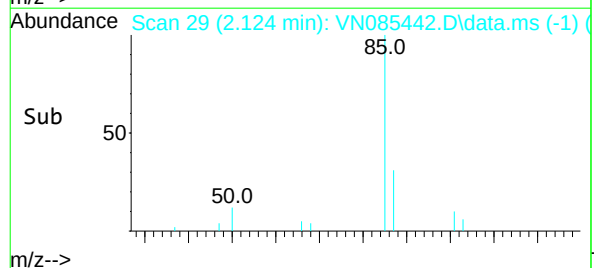
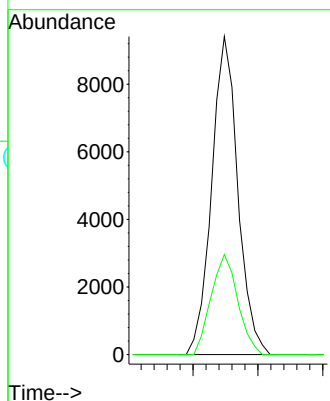
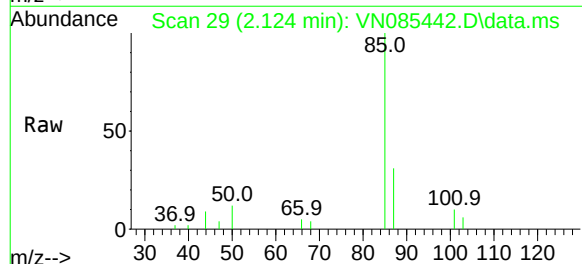
Manual Integrations  
APPROVED

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

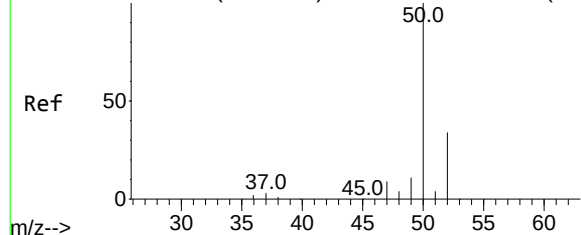


#2  
Dichlorodifluoromethane  
Concen: 5.225 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 85 Resp: 13199  
Ion Ratio Lower Upper  
85 100  
87 31.5 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 5.311 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

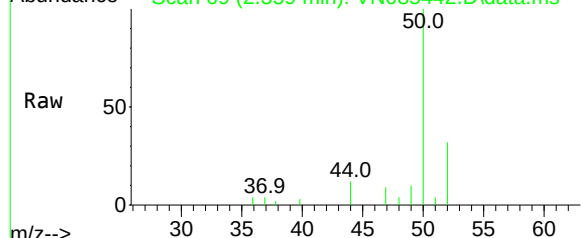
Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Abundance Scan 69 (2.359 min): VN085442.D\data.ms



Tgt Ion: 50 Resp: 14526

Ion Ratio Lower Upper

50 100

52 31.6 27.0 40.6

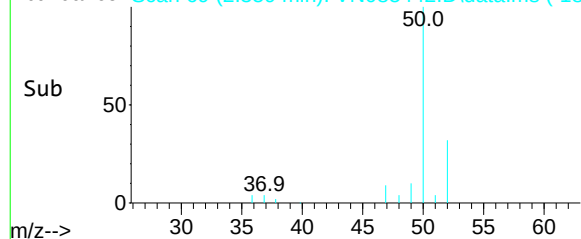
Manual Integrations

APPROVED

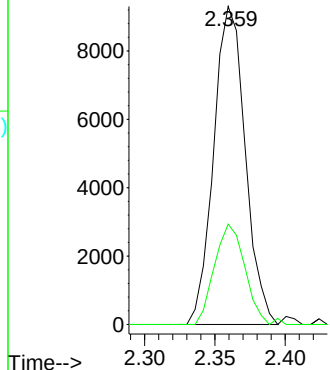
Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

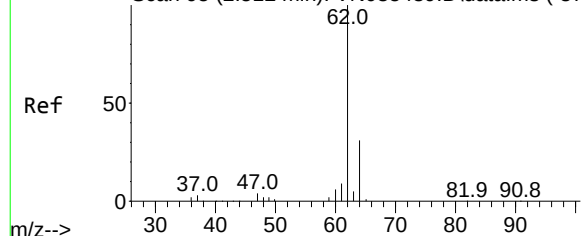
Abundance Scan 69 (2.359 min): VN085442.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 5.298 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

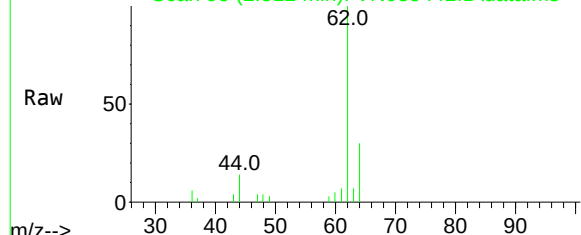
Tgt Ion: 62 Resp: 14564

Ion Ratio Lower Upper

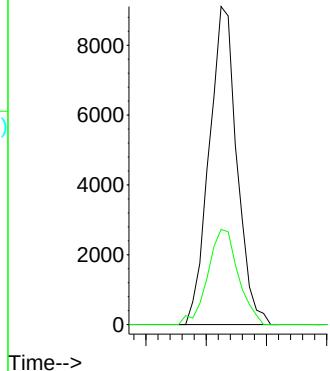
62 100

64 29.9 24.8 37.2

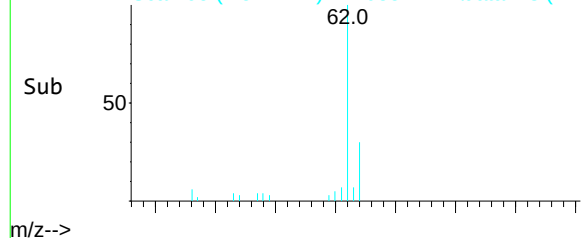
Abundance Scan 95 (2.512 min): VN085442.D\data.ms

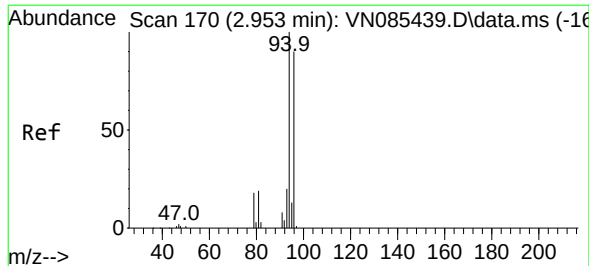


Abundance



Abundance Scan 95 (2.512 min): VN085442.D\data.ms (-44)





#5

Bromomethane

Concen: 5.895 ug/l

RT: 2.953 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 94 Resp: 9788

Ion Ratio Lower Upper

94 100

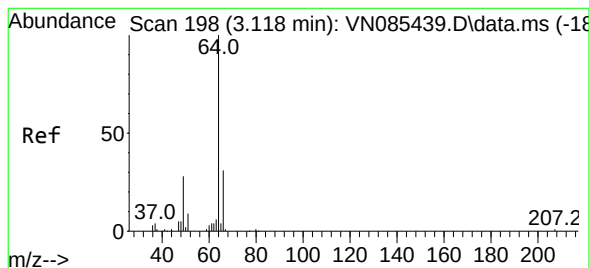
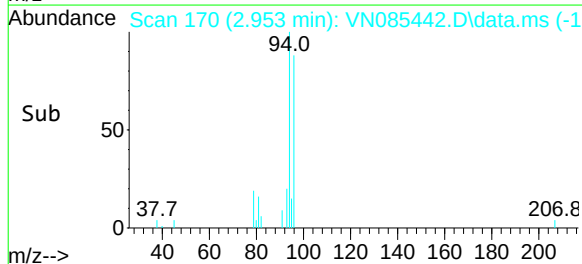
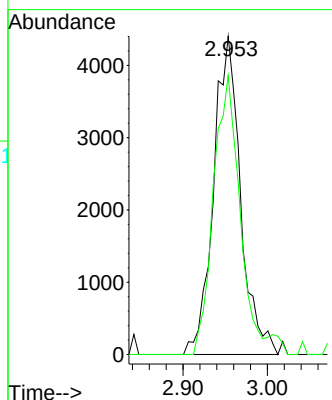
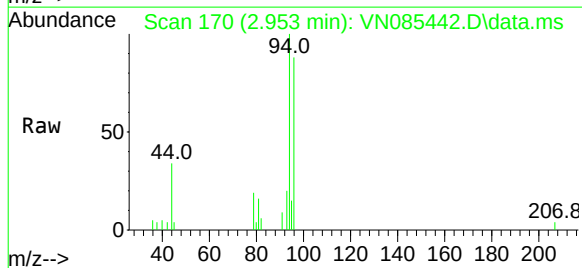
96 87.7 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 5.411 ug/l

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN085442.D

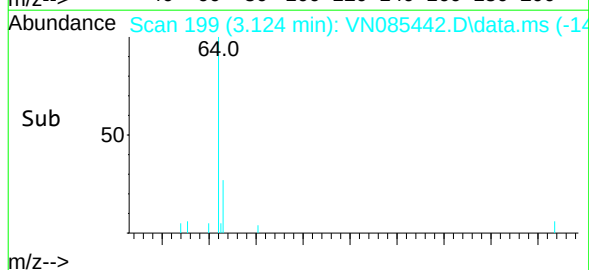
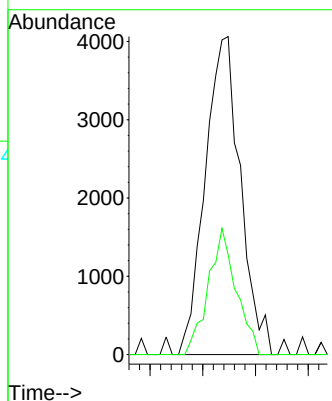
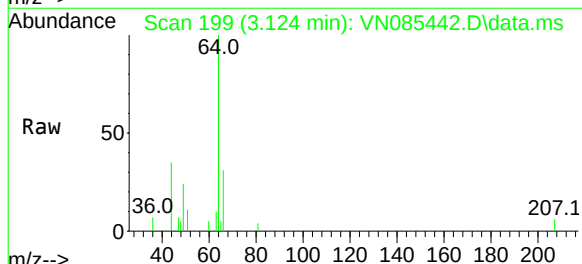
Acq: 14 Jan 2025 16:31

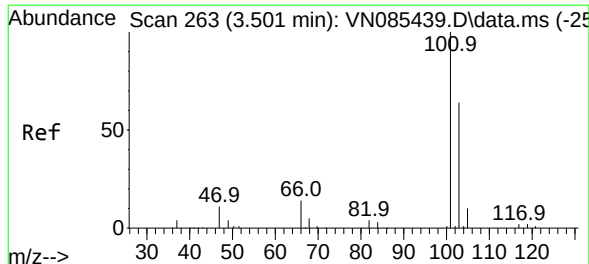
Tgt Ion: 64 Resp: 9430

Ion Ratio Lower Upper

64 100

66 31.4 24.6 36.8





#7

Trichlorofluoromethane

Concen: 5.039 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion:101 Resp: 20098

Ion Ratio Lower Upper

101 100

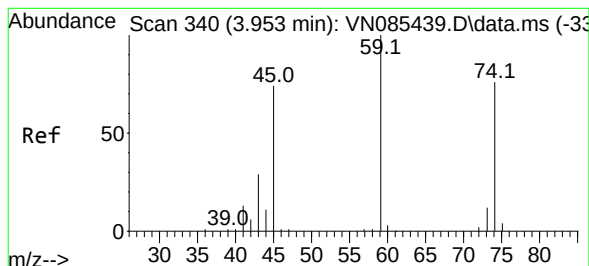
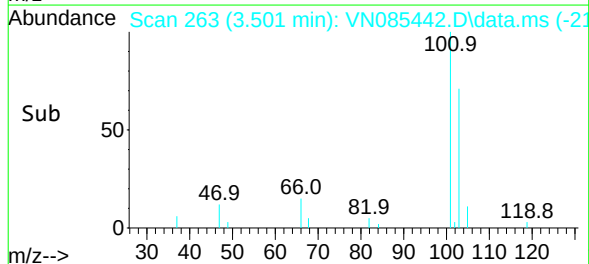
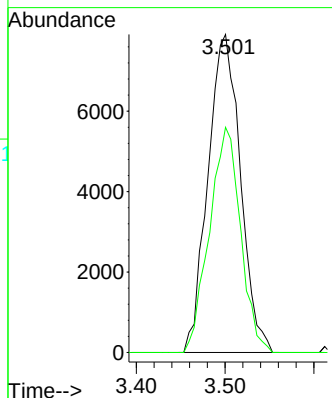
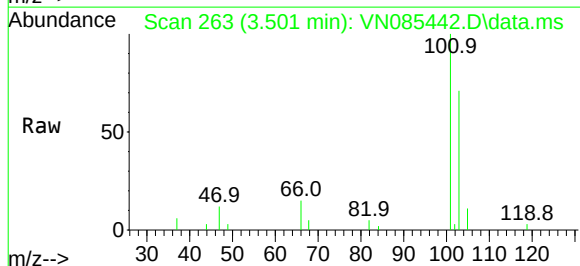
103 70.8 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 4.828 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085442.D

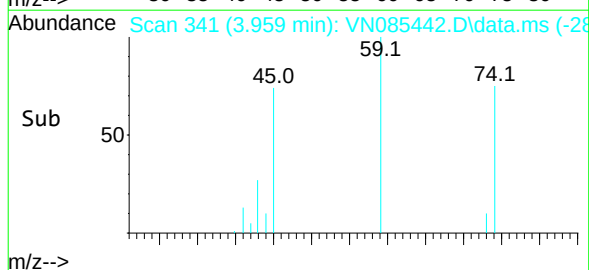
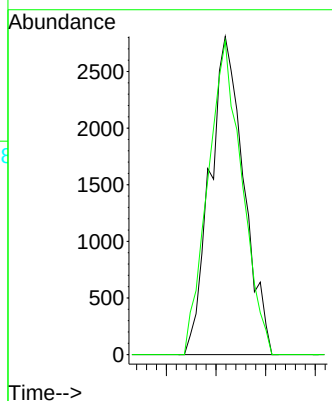
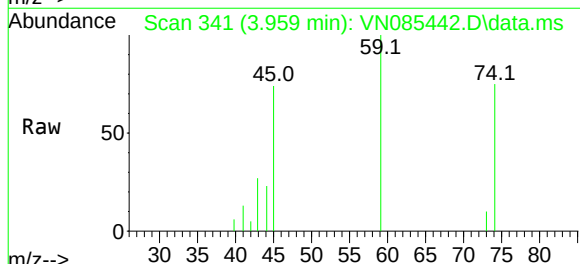
Acq: 14 Jan 2025 16:31

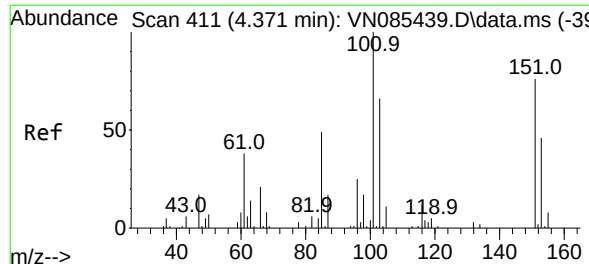
Tgt Ion: 74 Resp: 6652

Ion Ratio Lower Upper

74 100

45 99.5 49.7 149.1





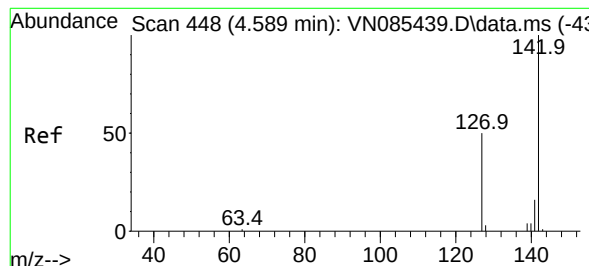
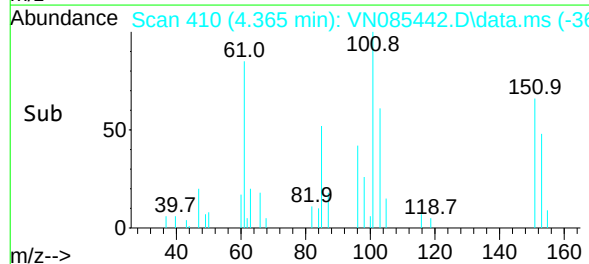
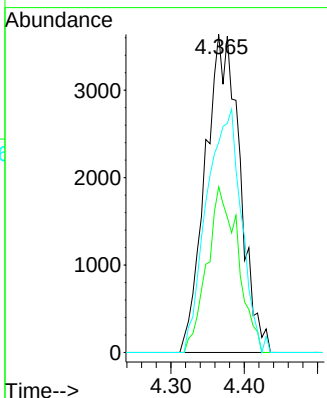
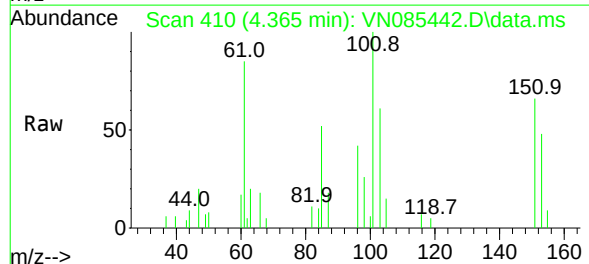
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 5.305 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

| Tgt Ion   | 101   | Resp  | 11917 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 101       | 100   |       |       |
| 85        | 46.5  | 37.8  | 56.8  |
| 151       | 76.7  | 58.8  | 88.2  |

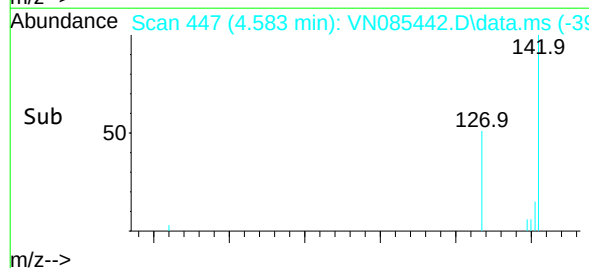
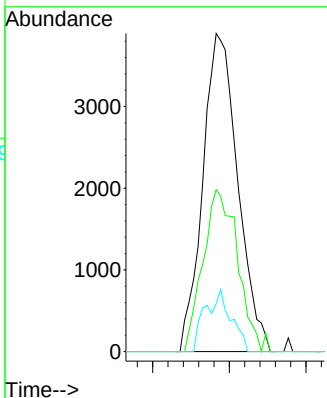
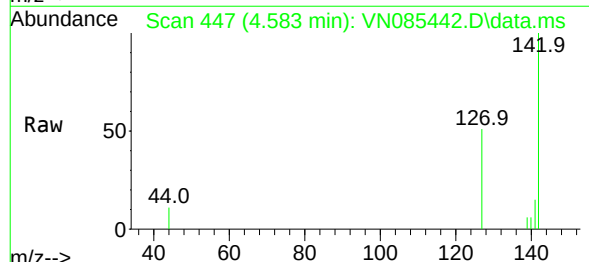
Manual Integrations  
APPROVED

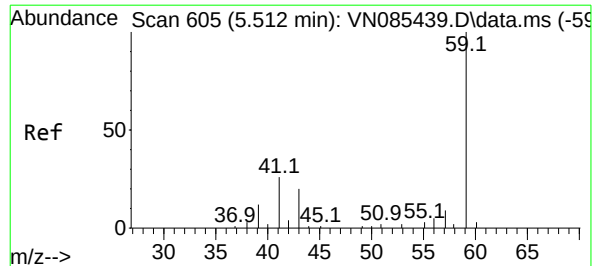
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#10  
Methyl Iodide  
Concen: 4.793 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

| Tgt Ion   | 142   | Resp  | 12331 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 127       | 50.9  | 40.3  | 60.5  |
| 141       | 15.0  | 12.8  | 19.2  |





#11

Tert butyl alcohol

Concen: 26.318 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 59 Resp: 9075

Ion Ratio Lower Upper

59 100

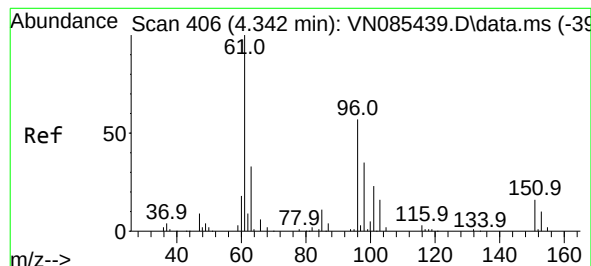
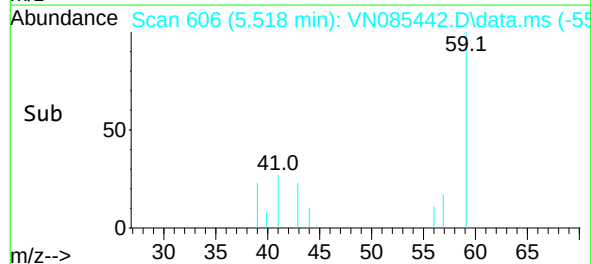
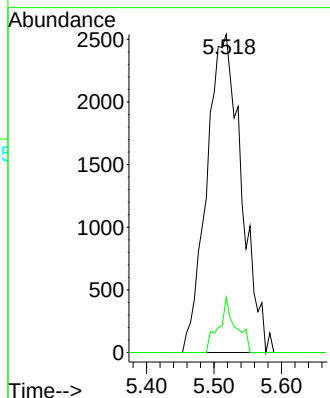
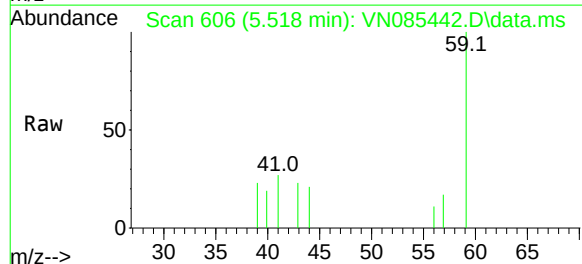
57 8.5 8.6 13.0#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 5.209 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

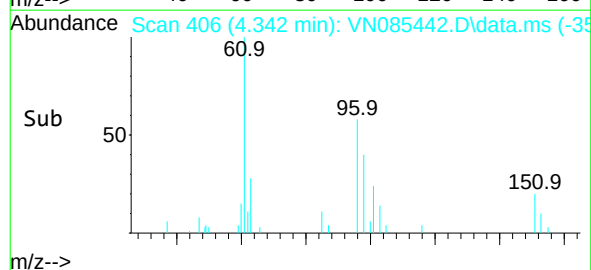
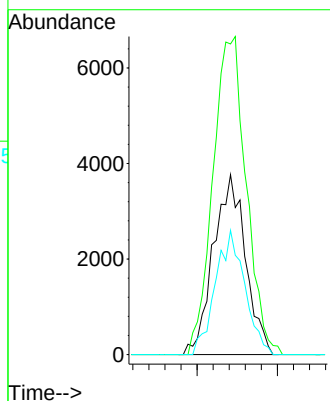
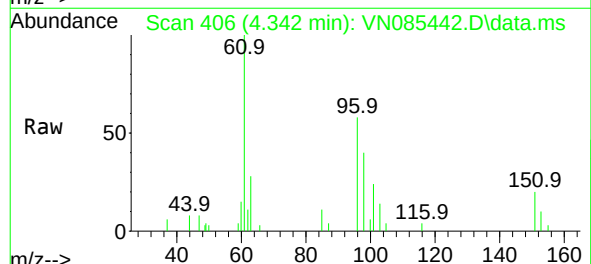
Tgt Ion: 96 Resp: 10429

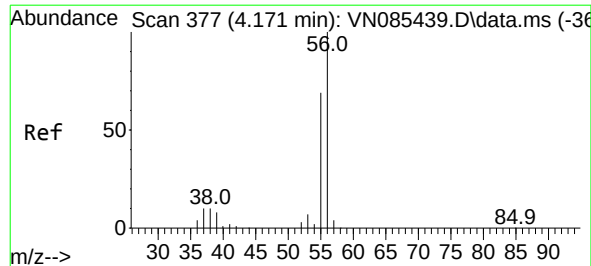
Ion Ratio Lower Upper

96 100

61 172.7 141.0 211.4

98 69.0 49.0 73.6





#13

Acrolein

Concen: 20.033 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 56 Resp: 9430

Ion Ratio Lower Upper

56 100

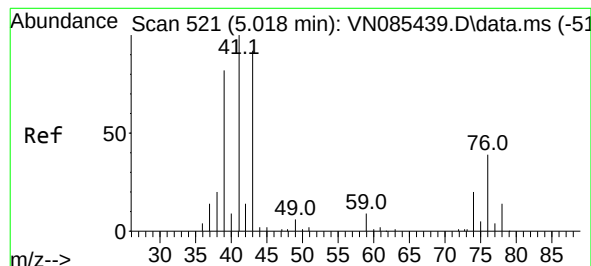
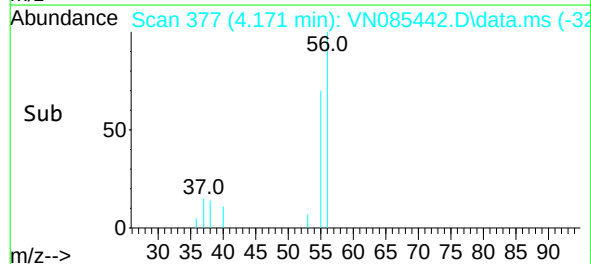
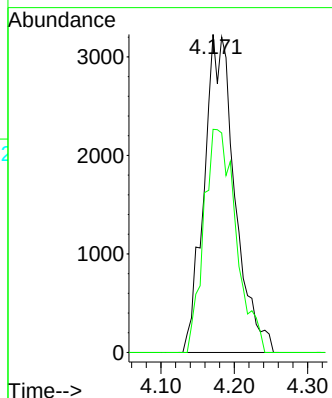
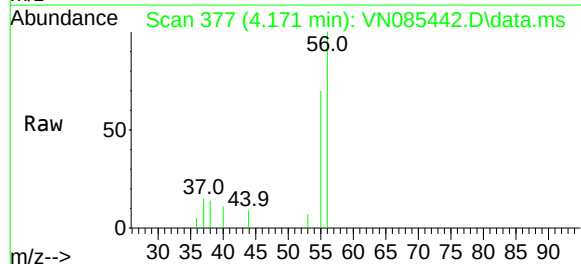
55 73.2 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 5.153 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

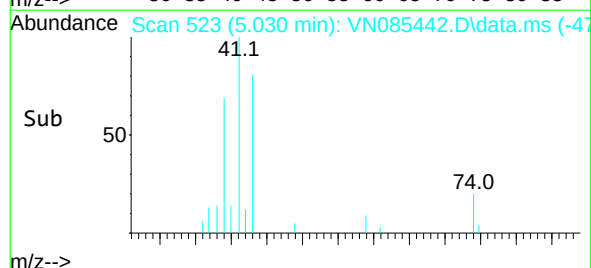
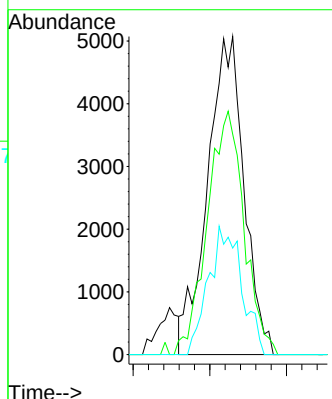
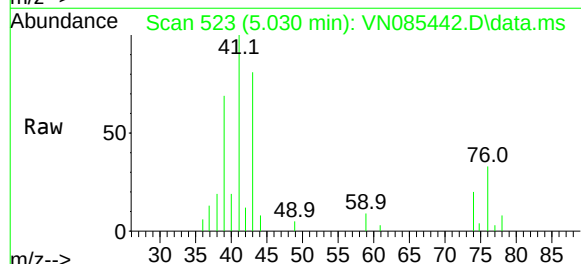
Tgt Ion: 41 Resp: 16741

Ion Ratio Lower Upper

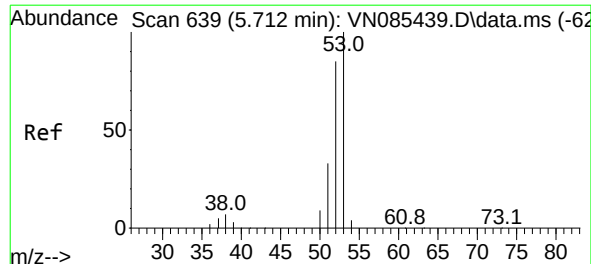
41 100

39 77.4 64.4 96.6

76 36.6 30.5 45.7







#15

Acrylonitrile

Concen: 25.445 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

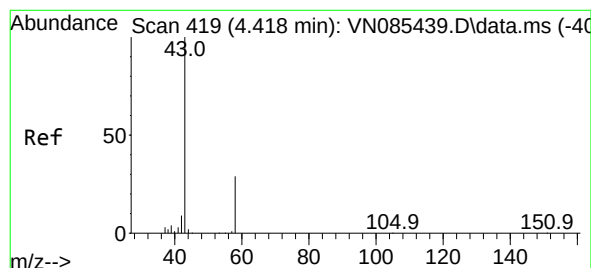
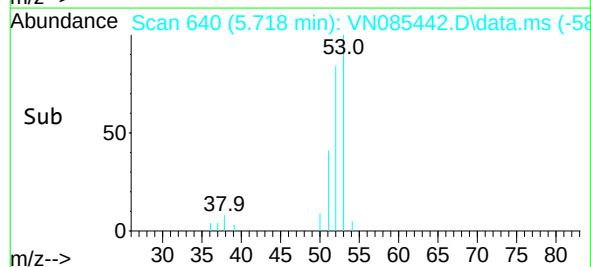
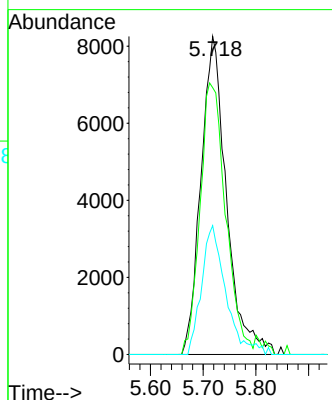
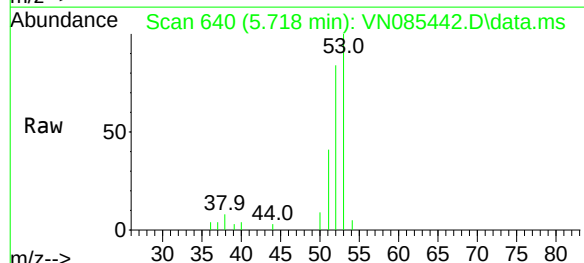
ClientSampleId :

VSTDICC005

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 27869 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 85.5  | 65.5  | 98.3  |
| 51       | 38.5  | 29.8  | 44.8  |

Manual Integrations  
APPROVED

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



#16

Acetone

Concen: 25.819 ug/l

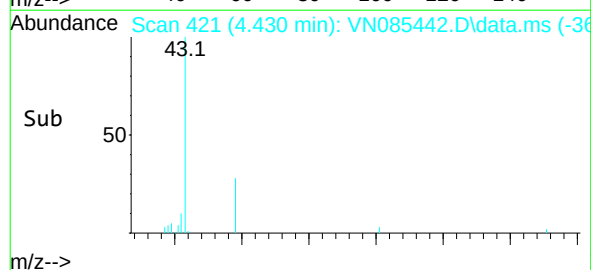
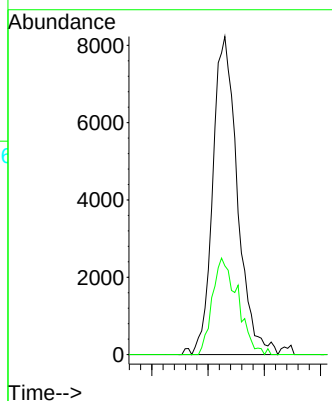
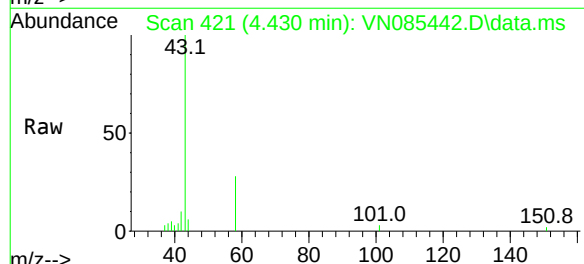
RT: 4.430 min Scan# 421

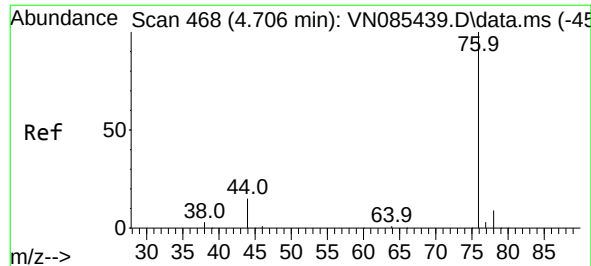
Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 25122 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 27.9  | 23.8  | 35.6  |





#17

Carbon Disulfide

Concen: 5.202 ug/l

RT: 4.706 min Scan# 468

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 76 Resp: 32068

Ion Ratio Lower Upper

76 100

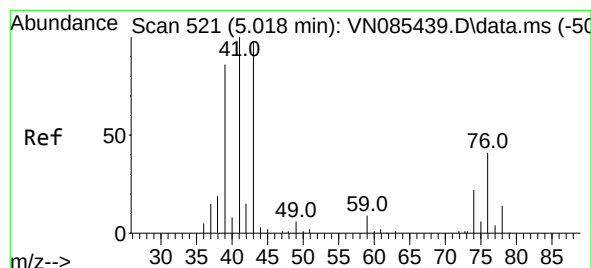
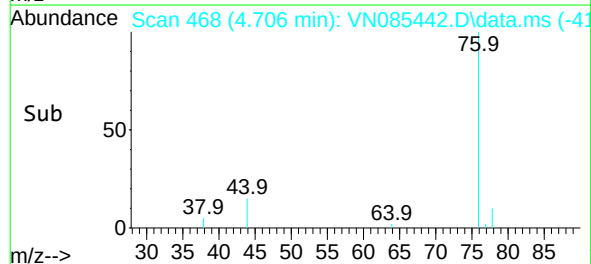
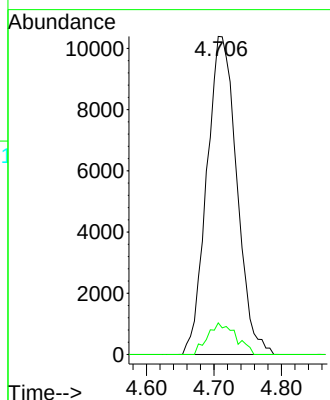
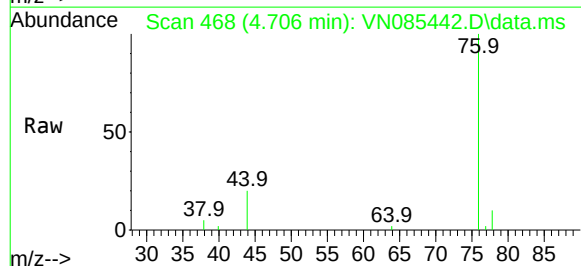
78 9.9 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 5.106 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085442.D

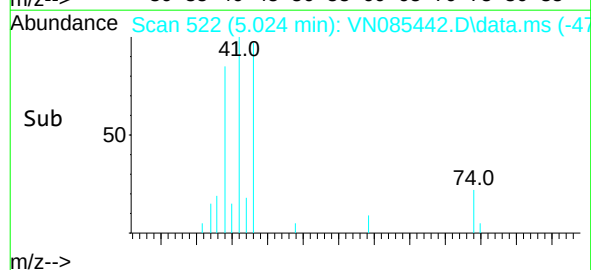
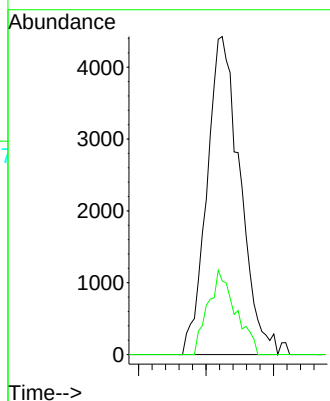
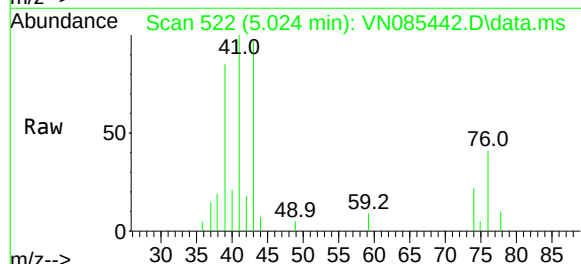
Acq: 14 Jan 2025 16:31

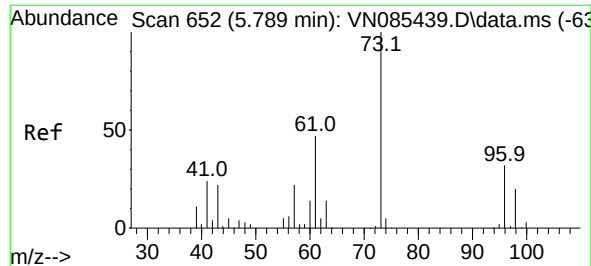
Tgt Ion: 43 Resp: 15106

Ion Ratio Lower Upper

43 100

74 22.0 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 4.836 ug/l

RT: 5.800 min Scan# 65

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 73 Resp: 31439

Ion Ratio Lower Upper

73 100

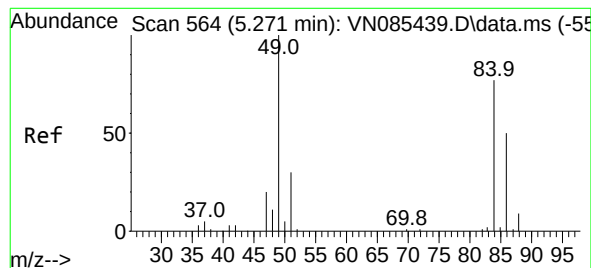
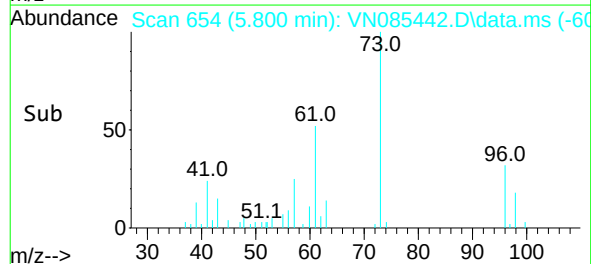
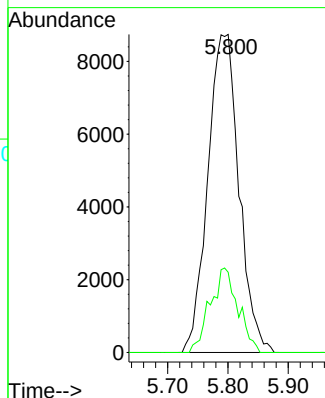
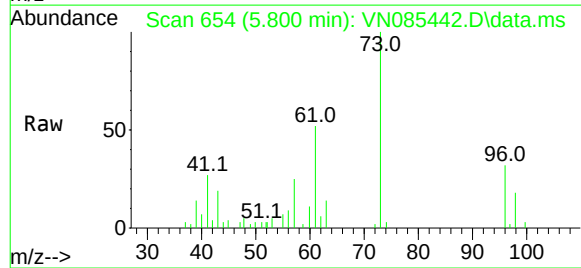
57 25.2 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 5.389 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 84 Resp: 12981

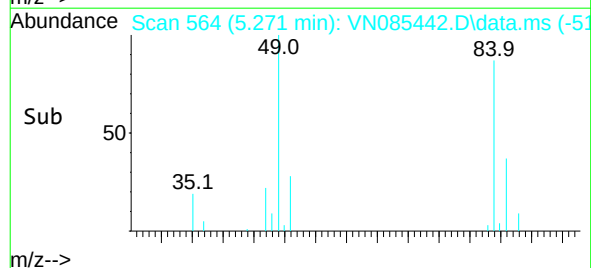
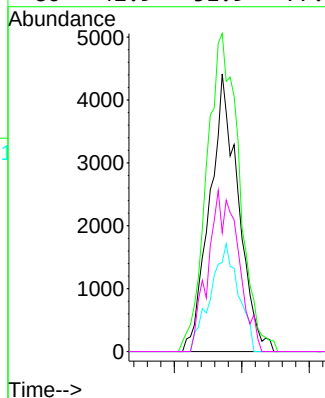
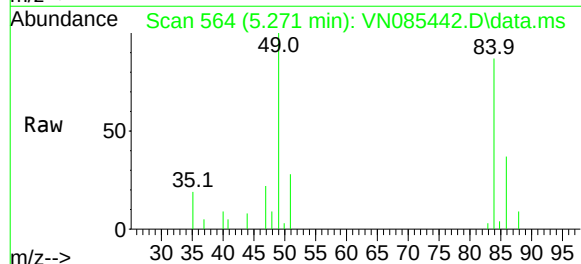
Ion Ratio Lower Upper

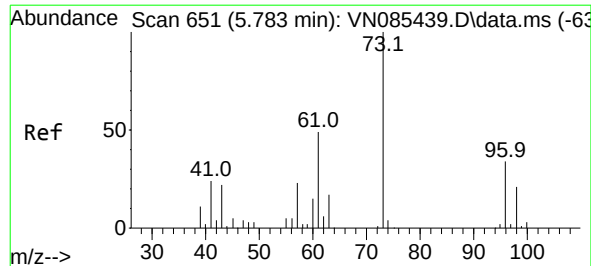
84 100

49 114.5 104.1 156.1

51 32.1 31.0 46.4

86 42.9 51.9 77.9#





#21

trans-1,2-Dichloroethene

Concen: 4.960 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 96 Resp: 10614

Ion Ratio Lower Upper

96 100

61 118.1 115.7 173.5

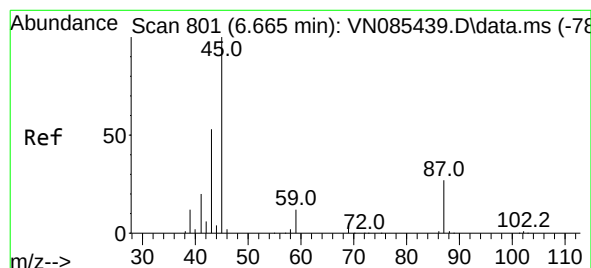
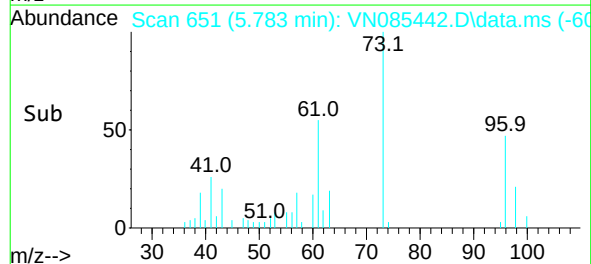
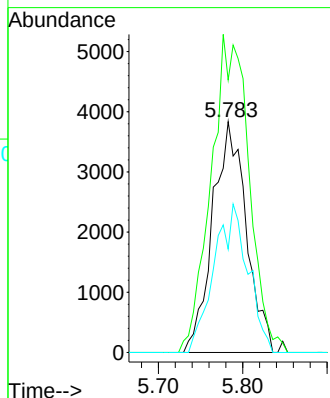
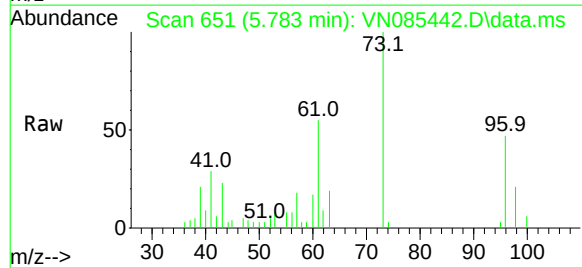
98 44.7 49.8 74.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 4.962 ug/l

RT: 6.665 min Scan# 801

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 45 Resp: 35785

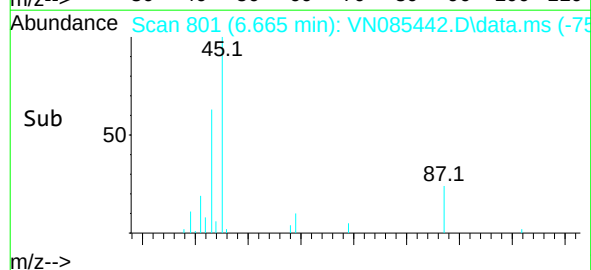
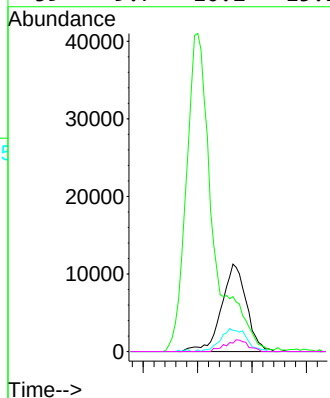
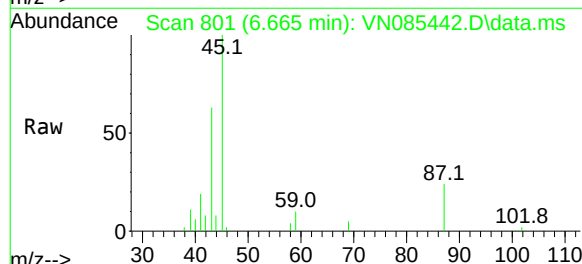
Ion Ratio Lower Upper

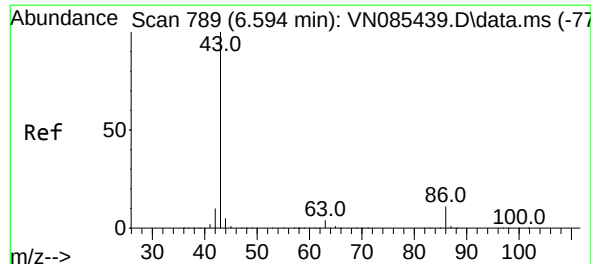
45 100

43 58.3 45.0 67.6

87 24.2 21.8 32.8

59 9.7 10.2 15.2#





#23

Vinyl Acetate

Concen: 23.389 ug/l m

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 43 Resp: 118439

Ion Ratio Lower Upper

43 100

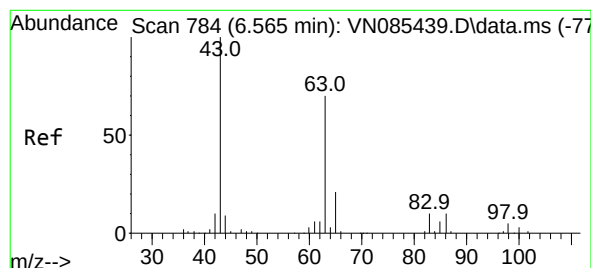
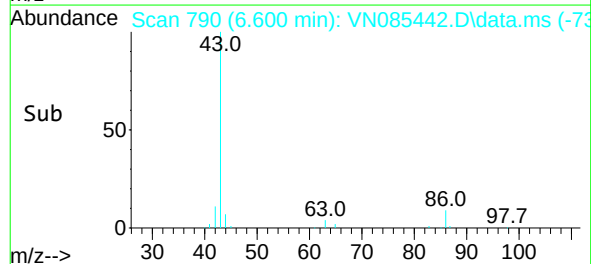
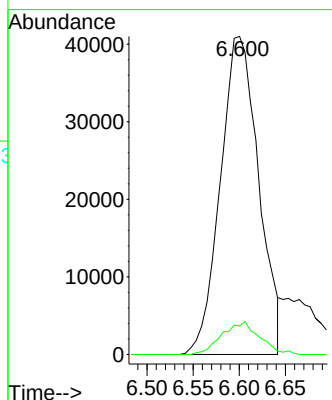
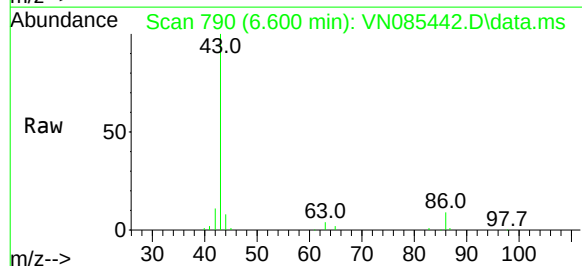
86 9.0 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 5.200 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

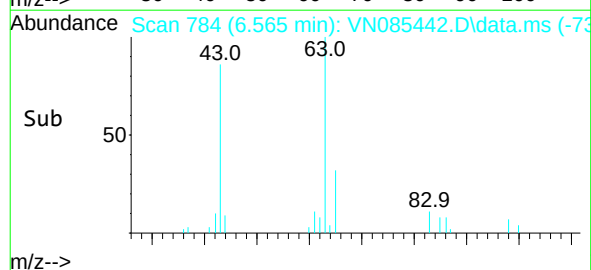
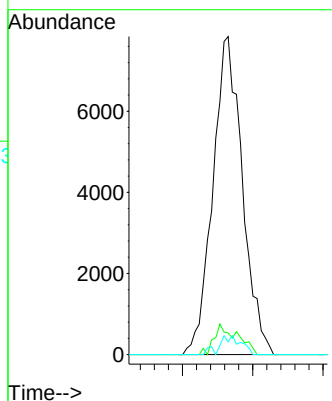
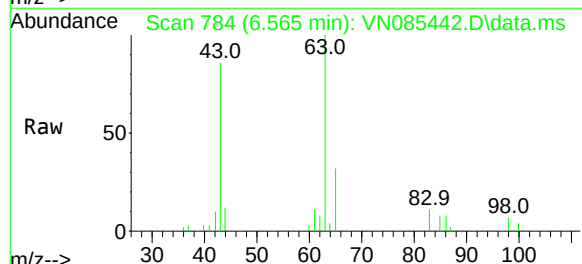
Tgt Ion: 63 Resp: 22865

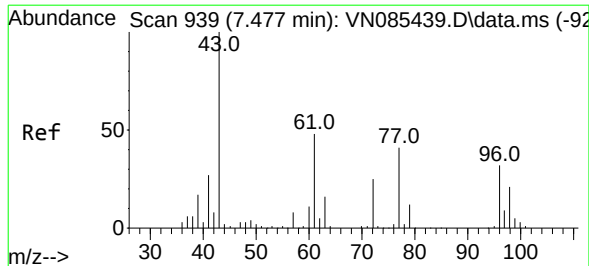
Ion Ratio Lower Upper

63 100

98 6.8 3.3 9.8

100 4.0 2.0 6.0





#25

2-Butanone

Concen: 25.231 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 36127

Ion Ratio Lower Upper

43 100

72 24.9 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

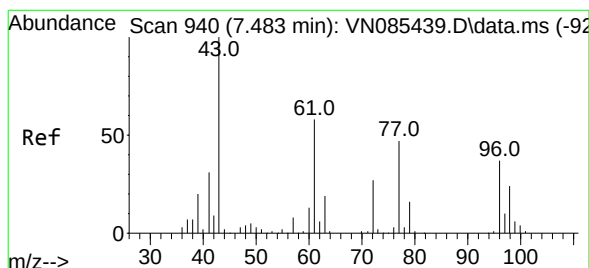
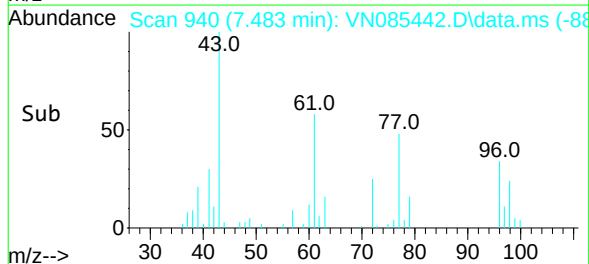
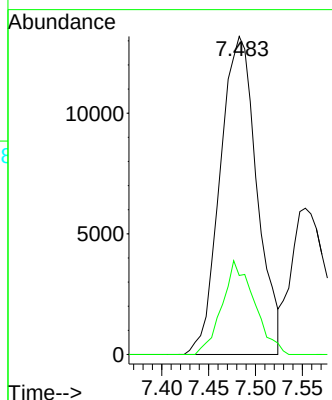
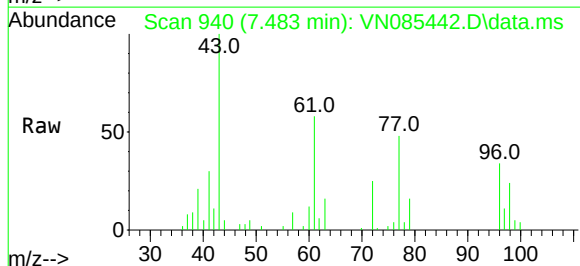
VSTDICC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 5.175 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085442.D

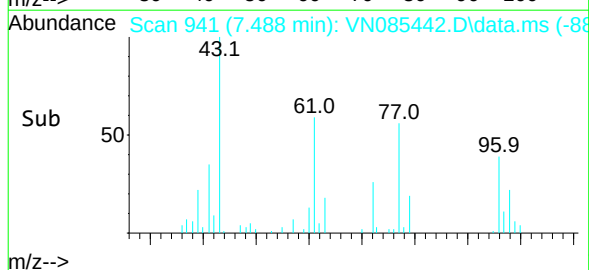
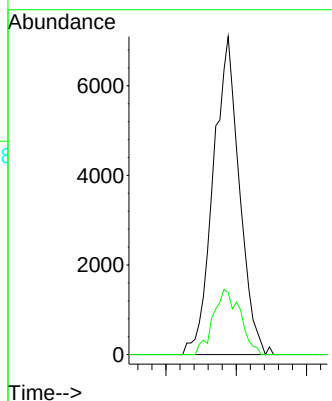
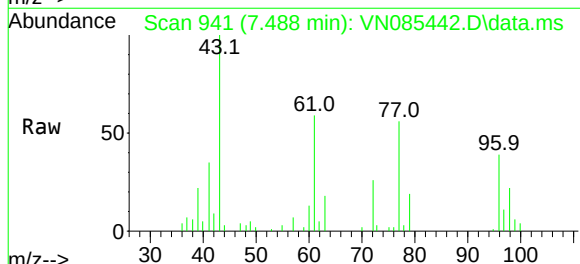
Acq: 14 Jan 2025 16:31

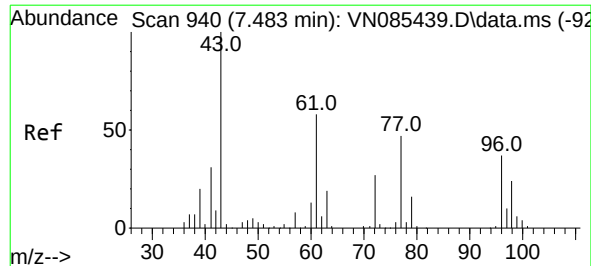
Tgt Ion: 77 Resp: 18398

Ion Ratio Lower Upper

77 100

97 21.2 10.7 32.1





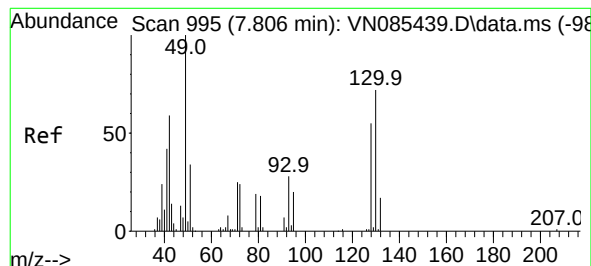
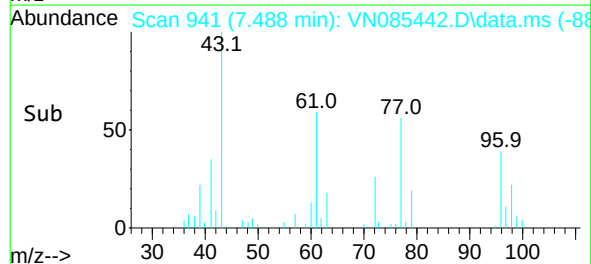
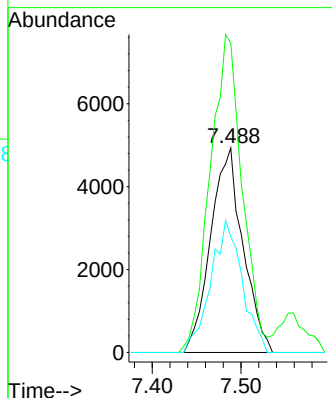
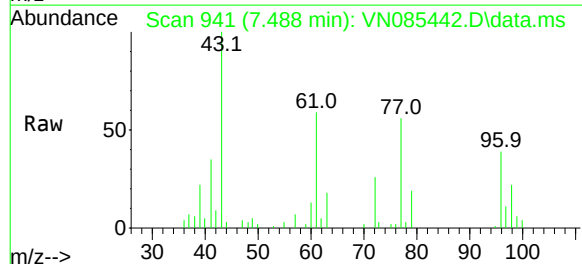
#27  
cis-1,2-Dichloroethene  
Concen: 4.951 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Tgt Ion: 96 Resp: 12477  
Ion Ratio Lower Upper  
96 100  
61 154.5 0.0 311.8  
98 62.8 0.0 126.0

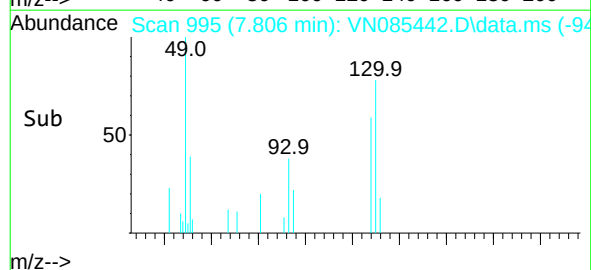
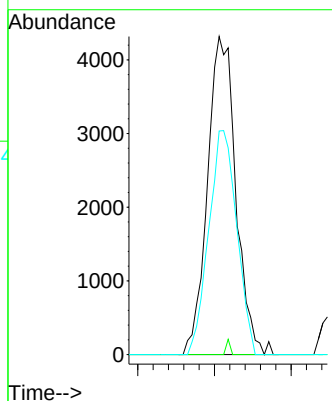
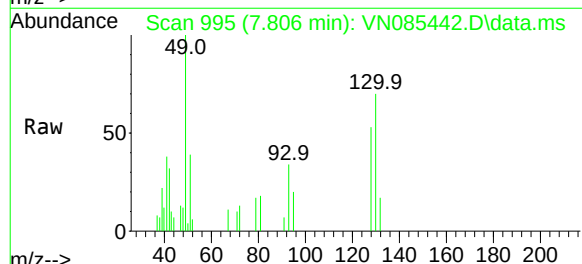
Manual Integrations  
APPROVED

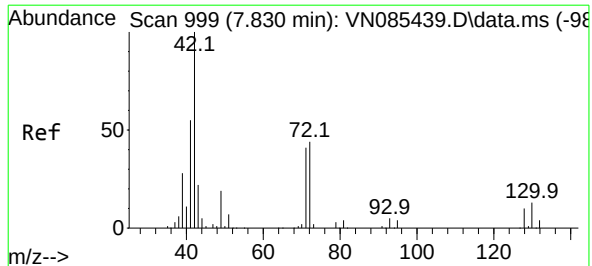
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#28  
Bromochloromethane  
Concen: 5.424 ug/l  
RT: 7.806 min Scan# 995  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 49 Resp: 11096  
Ion Ratio Lower Upper  
49 100  
129 0.7 0.0 4.4  
130 69.5 55.0 82.4





#29

Tetrahydrofuran

Concen: 24.215 ug/l

RT: 7.841 min Scan# 10

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 42 Resp: 21983

Ion Ratio Lower Upper

42 100

72 41.5 34.2 51.2

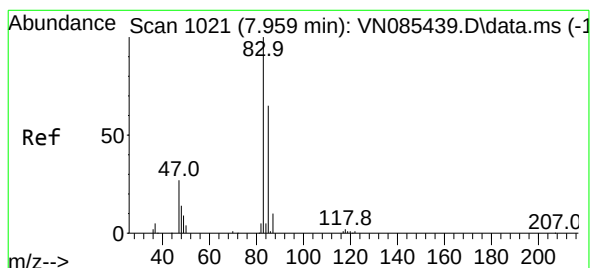
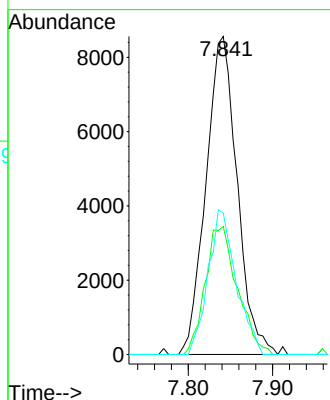
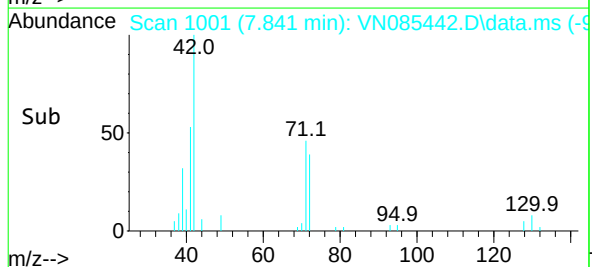
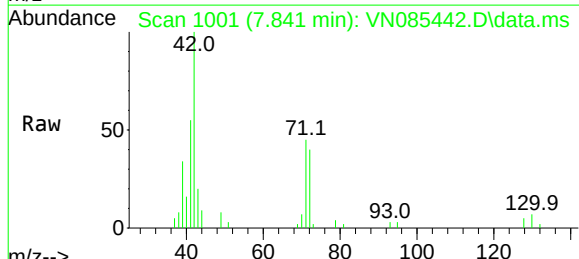
71 41.0 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 5.146 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085442.D

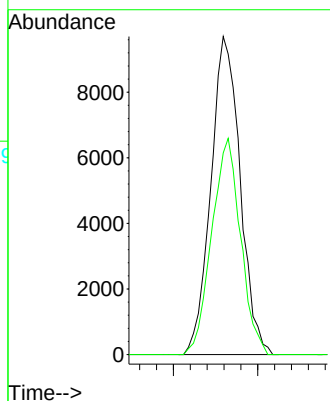
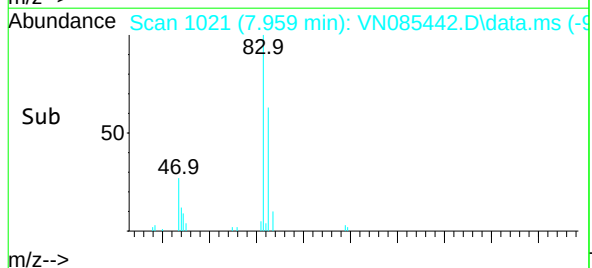
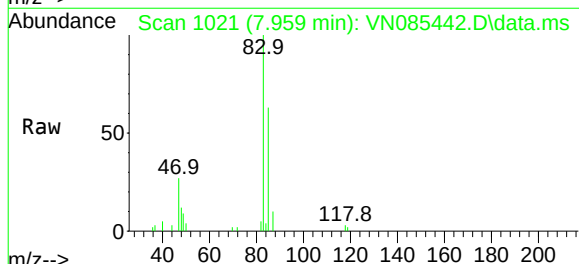
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 23384

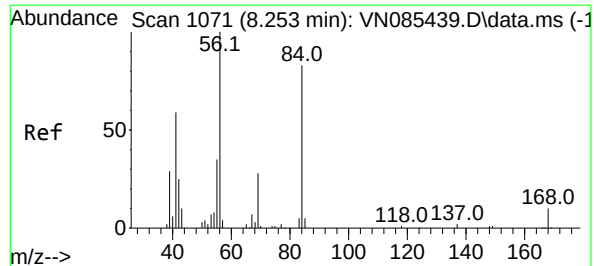
Ion Ratio Lower Upper

83 100

85 63.4 51.8 77.6







#31

Cyclohexane

Concen: 5.846 ug/l

RT: 8.247 min Scan# 1071

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 56 Resp: 22343

Ion Ratio Lower Upper

56 100

69 42.3 22.2 33.4

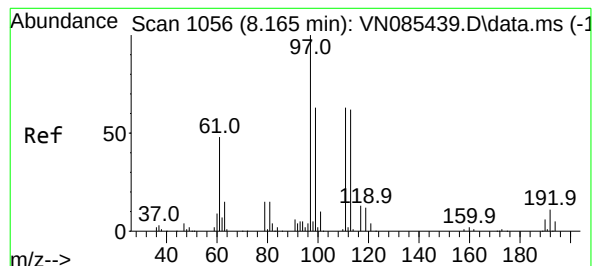
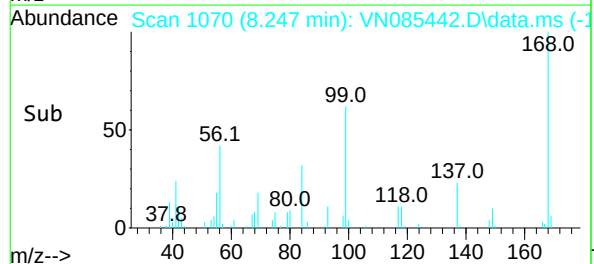
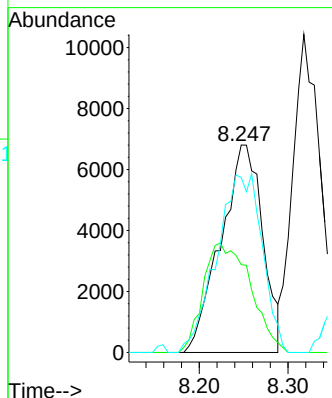
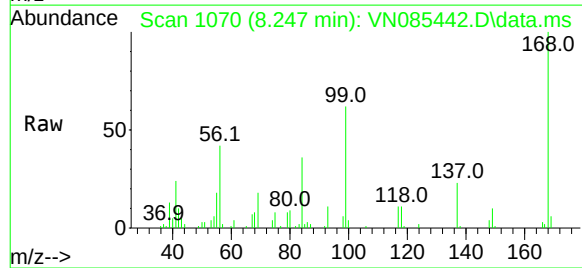
84 84.3 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 5.372 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

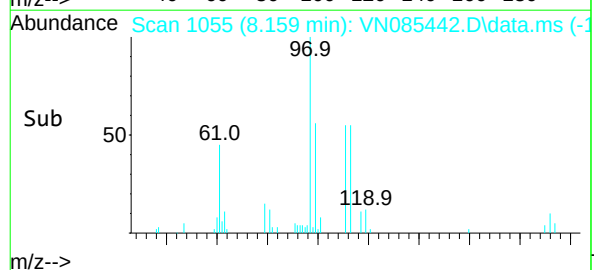
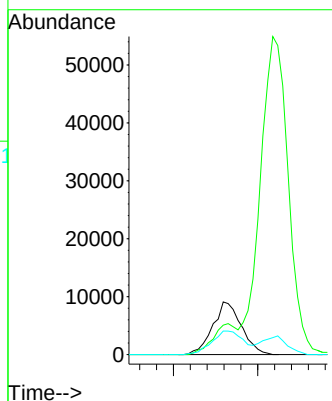
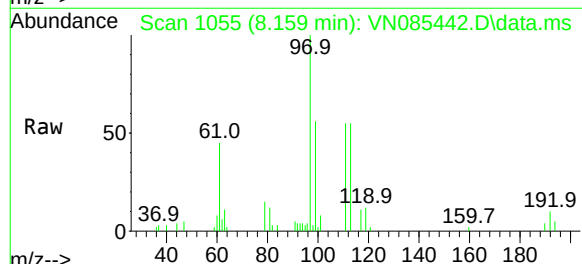
Tgt Ion: 97 Resp: 21416

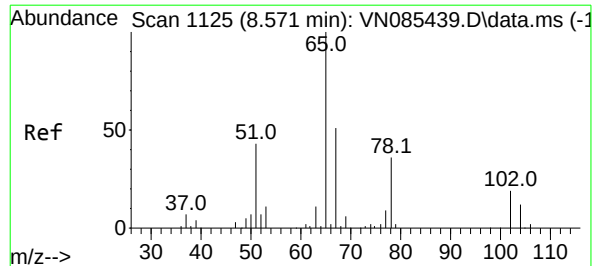
Ion Ratio Lower Upper

97 100

99 50.5 49.8 74.6

61 50.1 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 5.660 ug/l

RT: 8.577 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 65 Resp: 17046

Ion Ratio Lower Upper

65 100

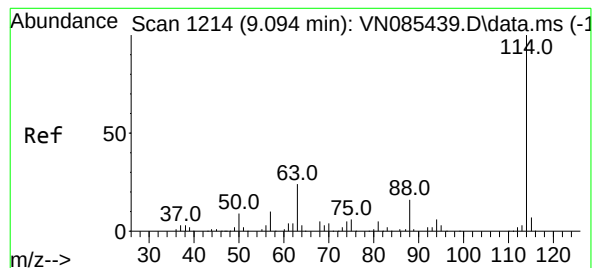
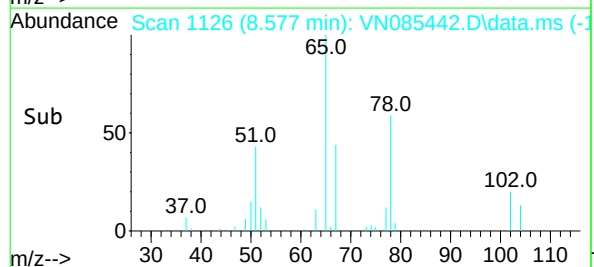
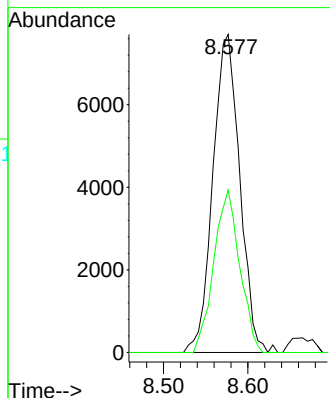
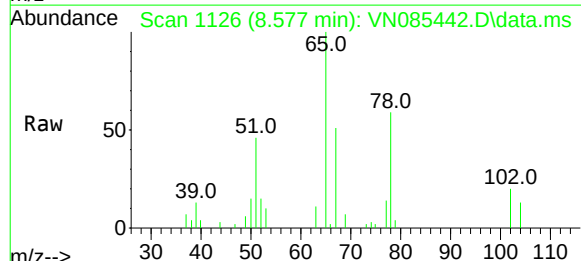
67 49.2 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

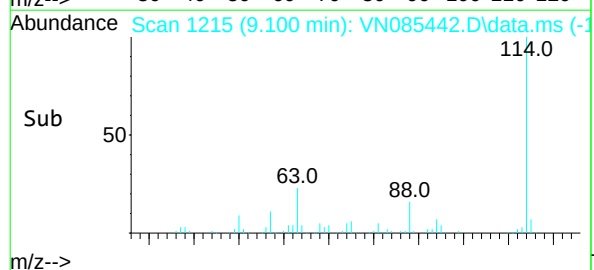
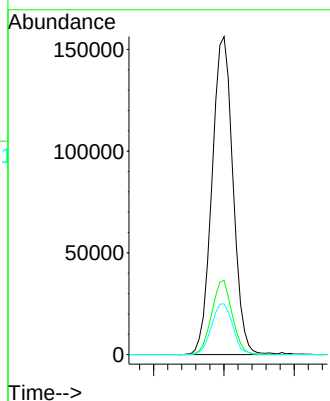
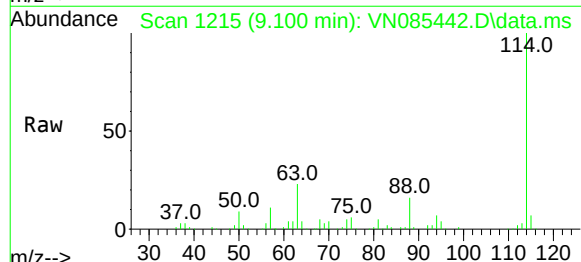
Tgt Ion:114 Resp: 324413

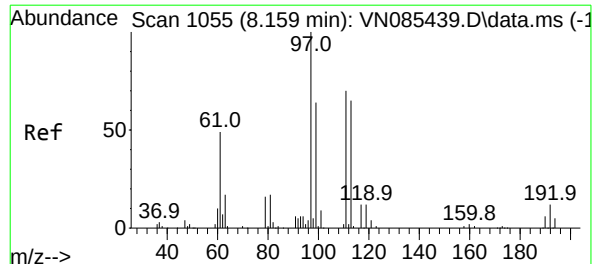
Ion Ratio Lower Upper

114 100

63 23.3 0.0 47.6

88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 5.377 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:113 Resp: 12102

Ion Ratio Lower Upper

113 100

111 107.4 82.7 124.1

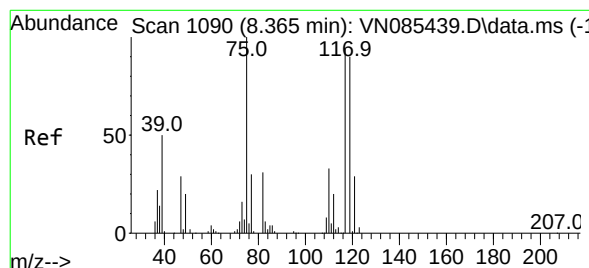
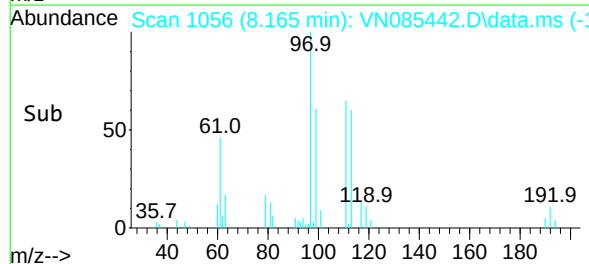
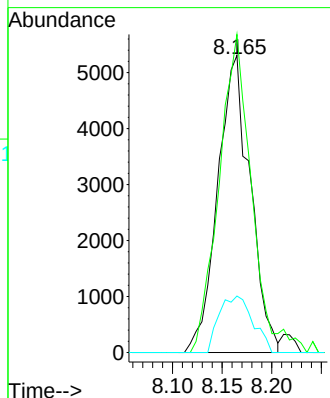
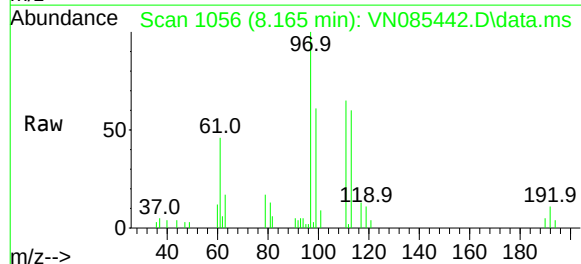
192 19.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 5.029 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

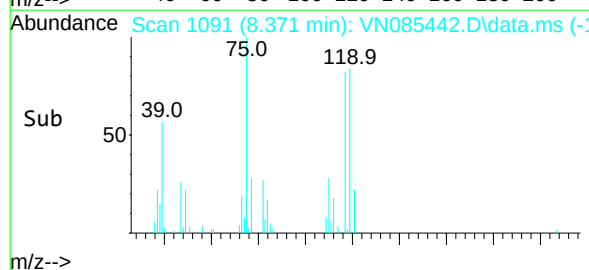
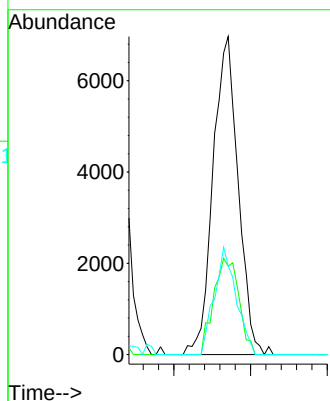
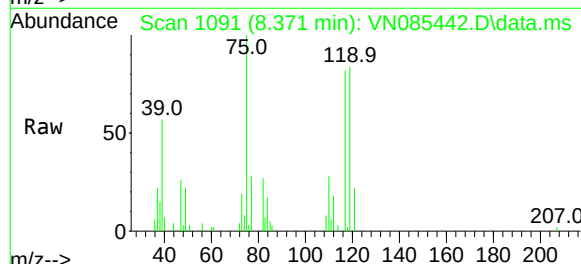
Tgt Ion: 75 Resp: 15886

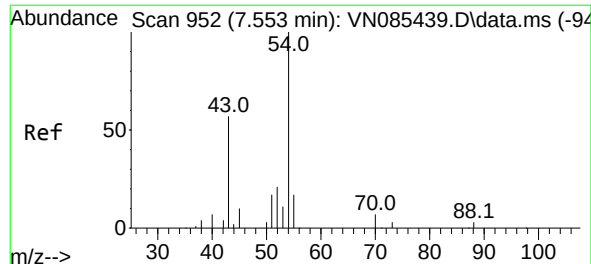
Ion Ratio Lower Upper

75 100

110 30.3 16.5 49.5

77 29.2 24.4 36.6





#37

Ethyl Acetate

Concen: 5.294 ug/l m

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 16879 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 12.3  | 10.9  | 16.3  |
| 70       | 8.4   | 7.5   | 11.3  |

Instrument :

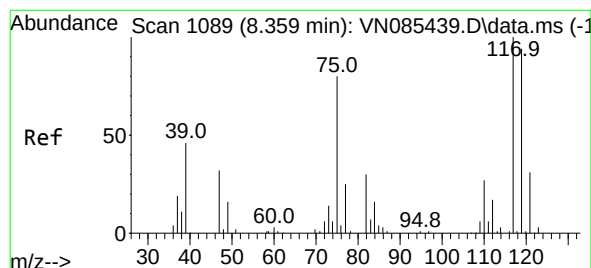
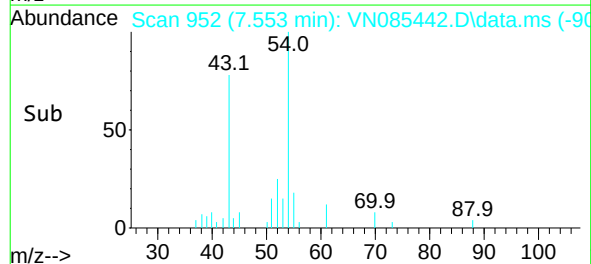
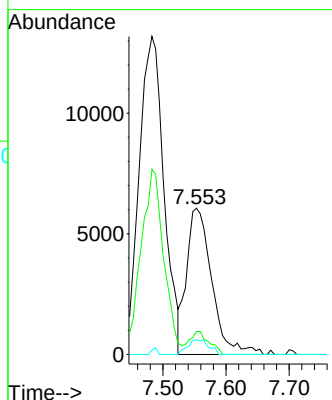
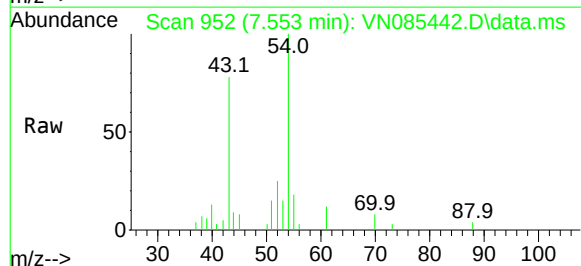
MSVOA\_N

ClientSampleId :

VSTDIC005

Manual Integrations  
APPROVED

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



#38

Carbon Tetrachloride

Concen: 5.065 ug/l

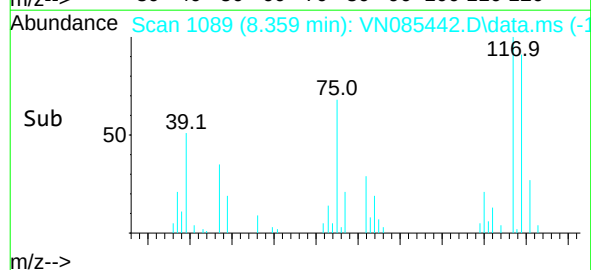
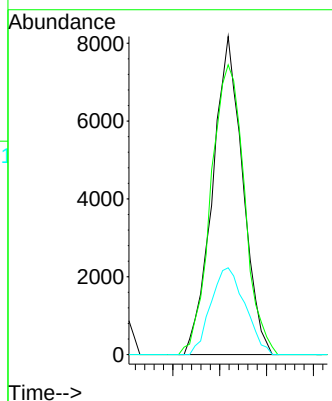
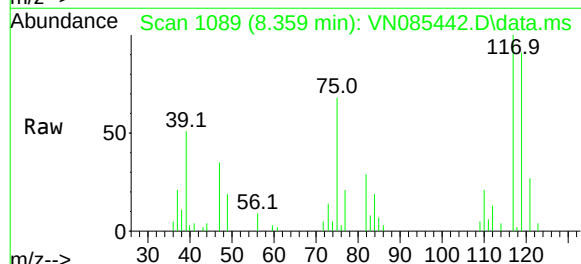
RT: 8.359 min Scan# 1089

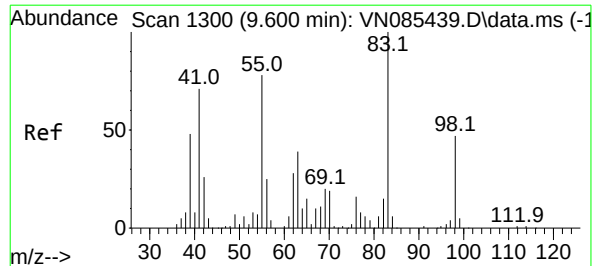
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 18317 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 91.1  | 75.4  | 113.2 |
| 121      | 27.3  | 24.6  | 37.0  |





#39

Methylcyclohexane

Concen: 4.776 ug/l

RT: 9.600 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

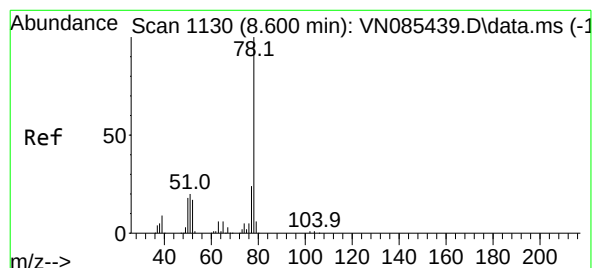
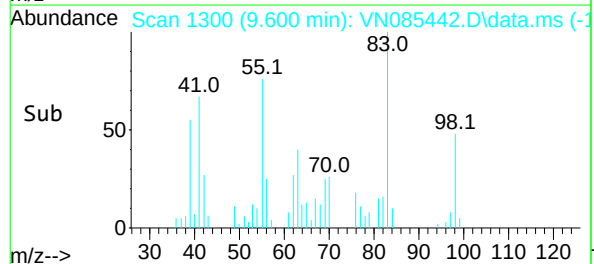
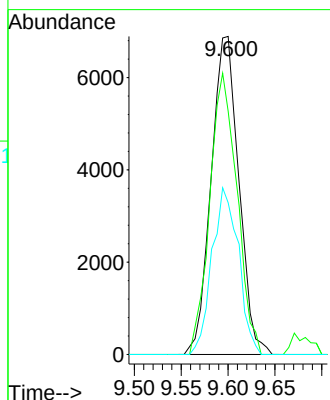
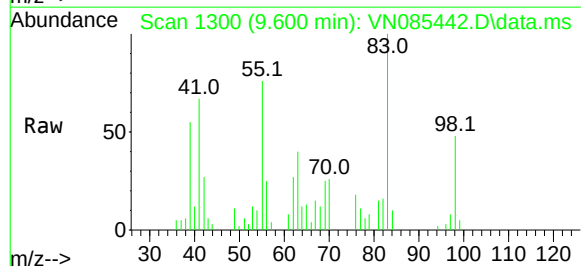
ClientSampleId :

VSTDIC005

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 14175 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 55        | 76.5  | 62.6  | 94.0  |
| 98        | 47.7  | 37.7  | 56.5  |

Manual Integrations  
APPROVED

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



#40

Benzene

Concen: 5.040 ug/l

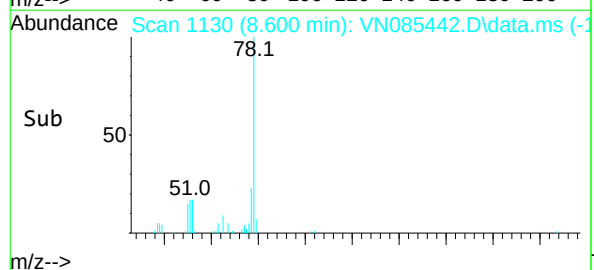
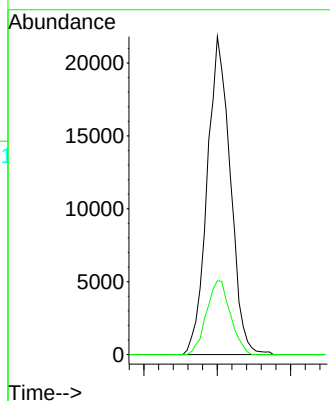
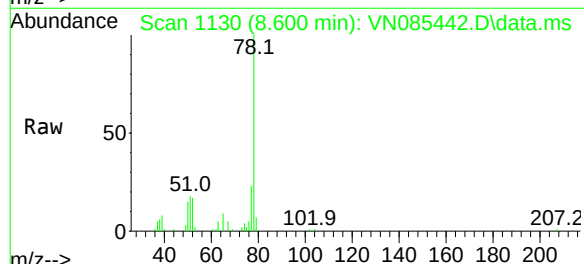
RT: 8.600 min Scan# 1130

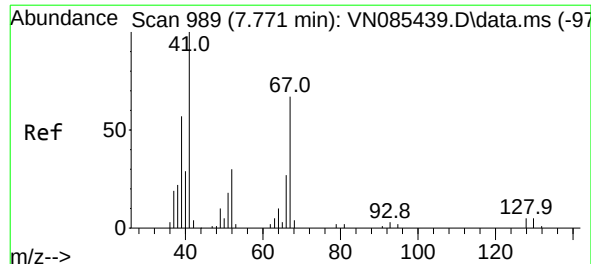
Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 78    | Resp: | 47833 |
| Ion Ratio | Lower | Upper |       |
| 78        | 100   |       |       |
| 77        | 23.2  | 19.0  | 28.6  |





#41

Methacrylonitrile

Concen: 4.449 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 41 Resp: 7380

Ion Ratio Lower Upper

41 100

39 60.5 46.0 69.0

67 74.6 57.4 86.2

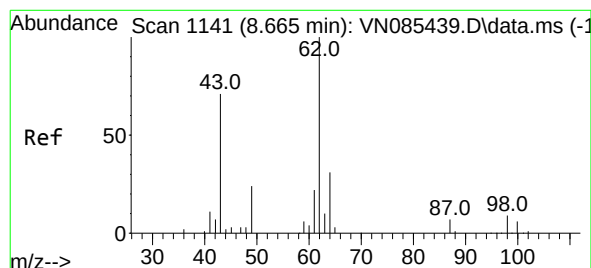
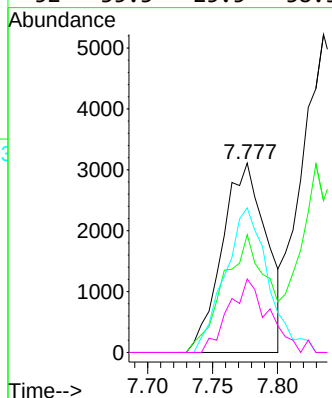
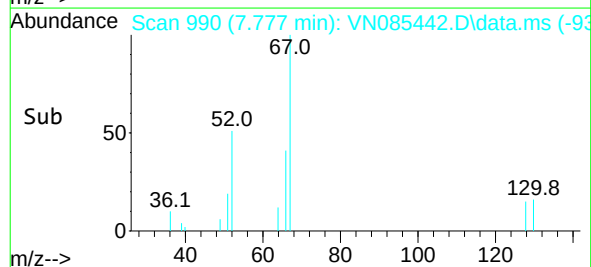
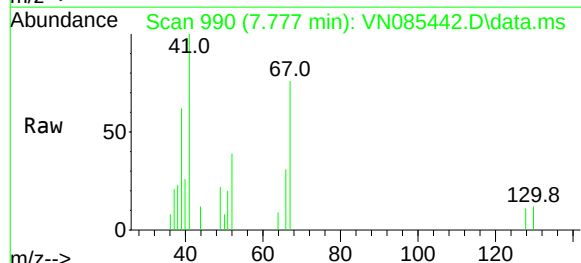
52 35.3 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 5.211 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. 0.006 min

Lab File: VN085442.D

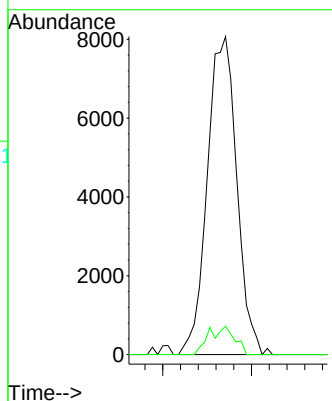
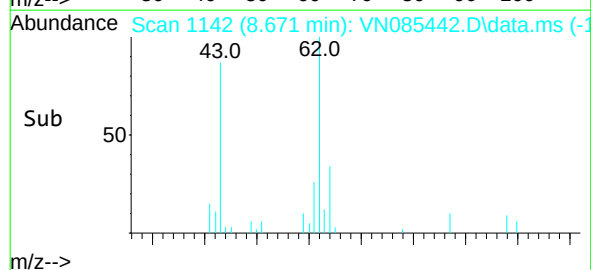
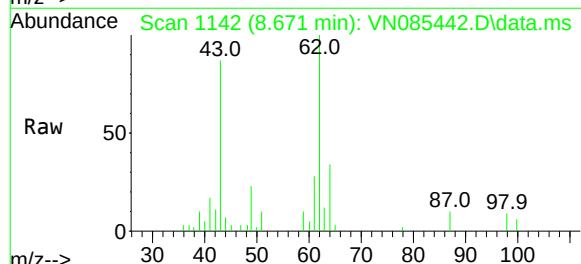
Acq: 14 Jan 2025 16:31

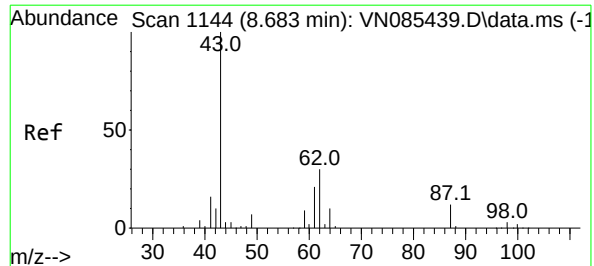
Tgt Ion: 62 Resp: 18628

Ion Ratio Lower Upper

62 100

98 7.8 0.0 17.0





#43

Isopropyl Acetate

Concen: 4.853 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

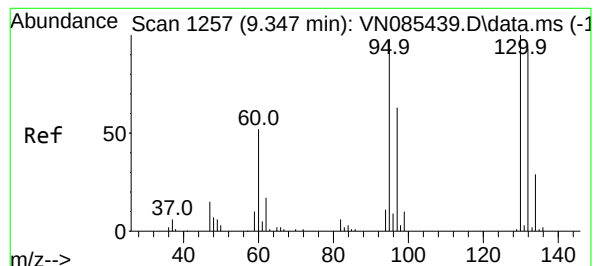
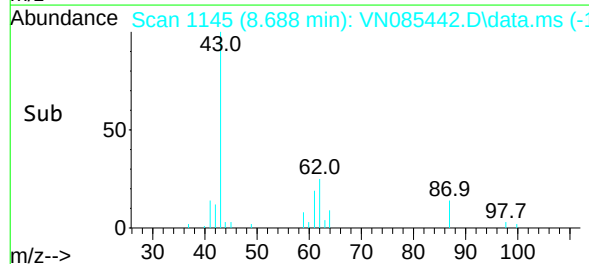
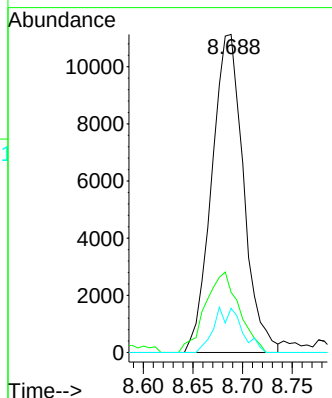
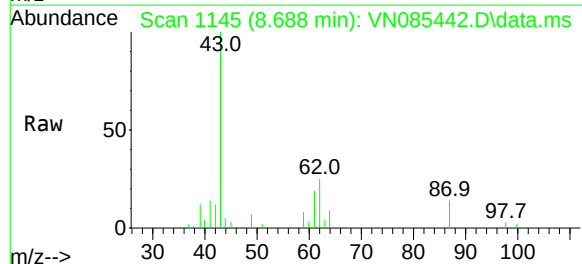
ClientSampleId :

VSTDIC005

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 24792 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 27.0  | 20.7  | 31.1  |
| 87       | 12.3  | 9.8   | 14.8  |

Manual Integrations  
APPROVED

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



#44

Trichloroethene

Concen: 5.039 ug/l

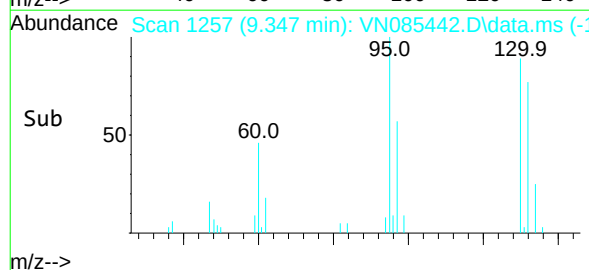
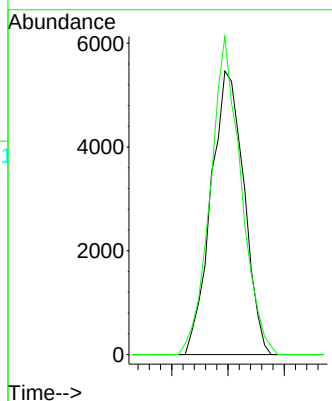
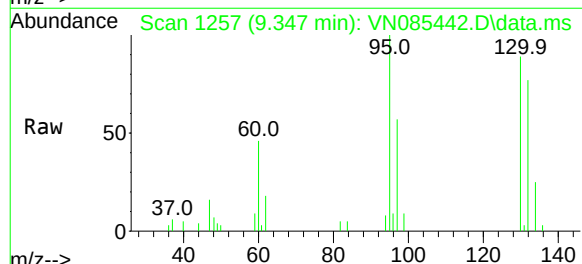
RT: 9.347 min Scan# 1257

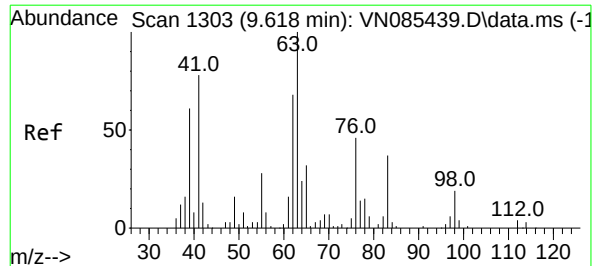
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 130   | Resp: | 11133 |
| Ion      | Ratio | Lower | Upper |
| 130      | 100   |       |       |
| 95       | 112.2 | 0.0   | 195.8 |





#45

1,2-Dichloropropane

Concen: 5.194 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 63 Resp: 12591

Ion Ratio Lower Upper

63 100

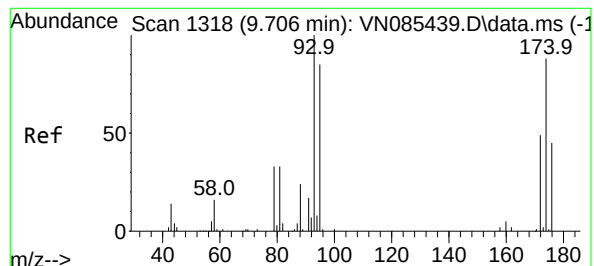
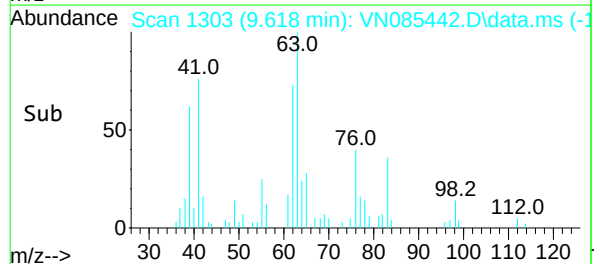
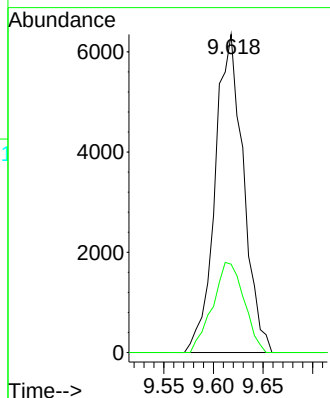
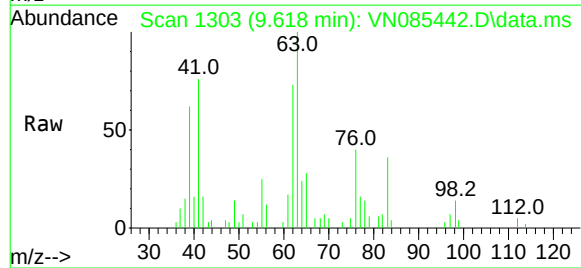
65 27.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 4.705 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

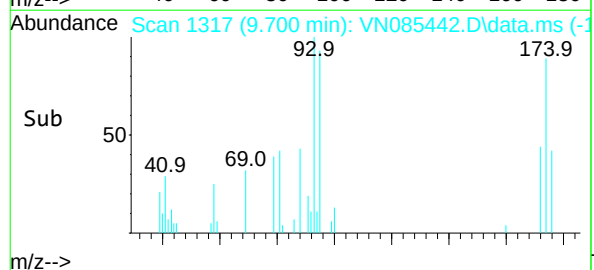
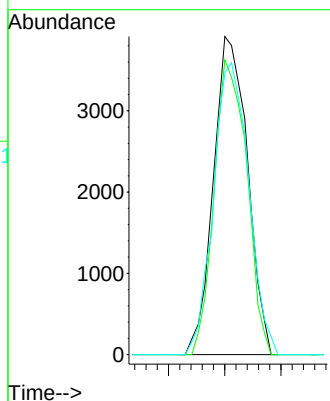
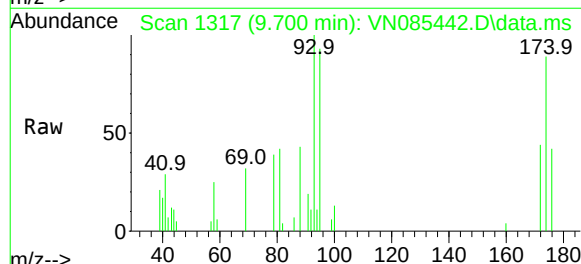
Tgt Ion: 93 Resp: 8230

Ion Ratio Lower Upper

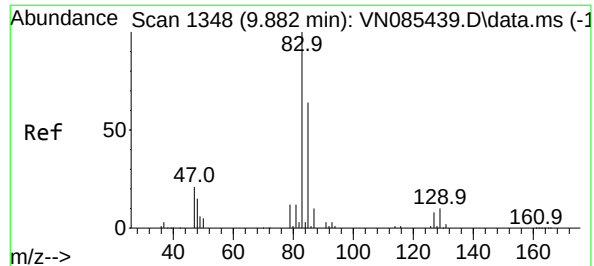
93 100

95 88.7 64.7 97.1

174 95.0 69.0 103.4







#47

Bromodichloromethane

Concen: 5.179 ug/l

RT: 9.888 min Scan# 1348

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

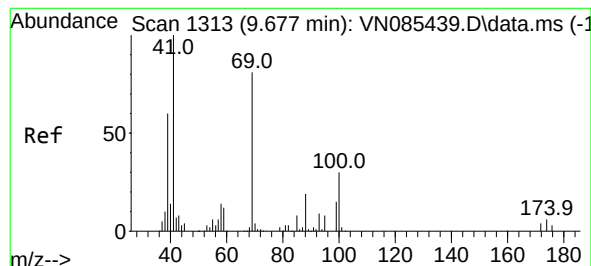
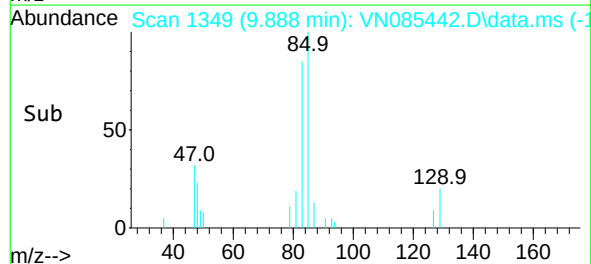
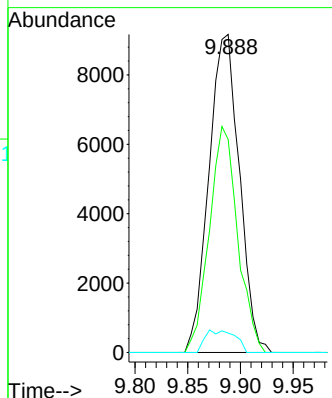
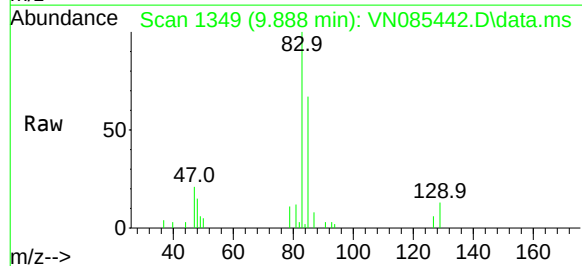
ClientSampleId :

VSTDIC005

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 18456 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 67.0  | 51.2  | 76.8  |
| 127      | 6.1   | 6.5   | 9.7#  |

Manual Integrations  
APPROVED

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



#48

Methyl methacrylate

Concen: 4.599 ug/l

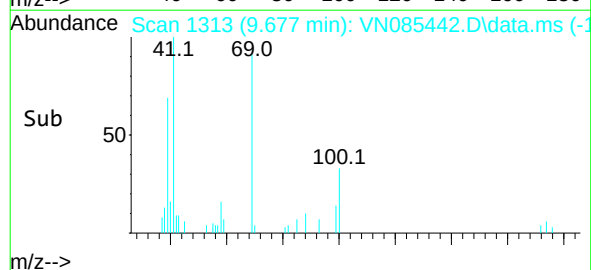
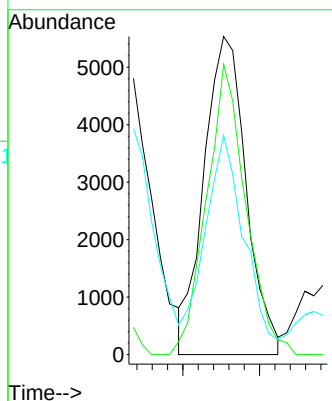
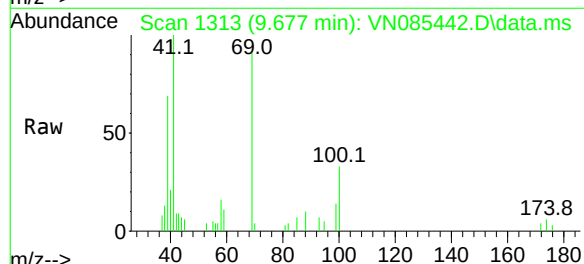
RT: 9.677 min Scan# 1313

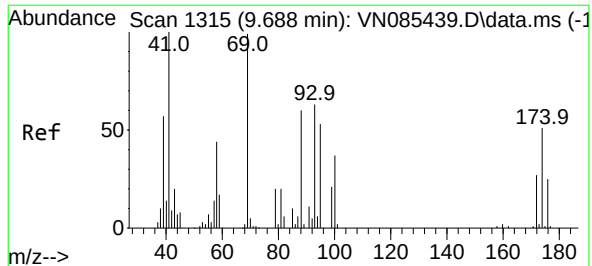
Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 10574 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 84.9  | 64.7  | 97.1  |
| 39       | 65.3  | 49.0  | 73.6  |





#49

1,4-Dioxane

Concen: 93.477 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085442.D

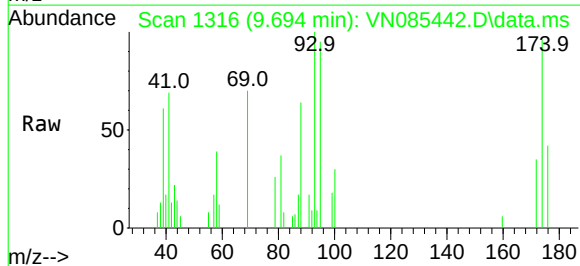
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005



Tgt Ion: 88 Resp: 3619

Ion Ratio Lower Upper

88 100

43 32.3 26.6 39.8

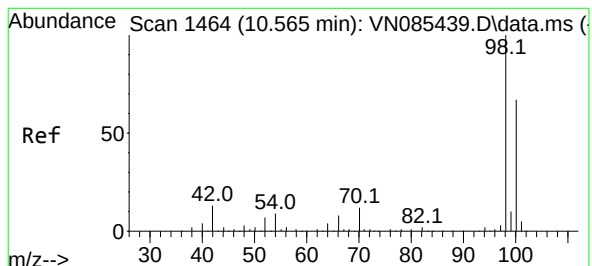
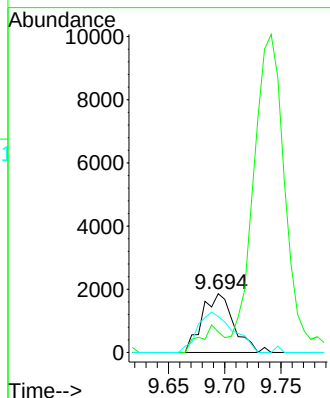
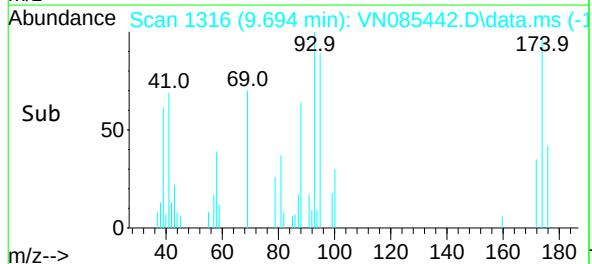
58 77.9 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

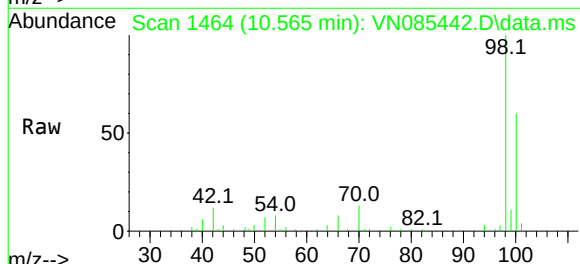
Concen: 5.168 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

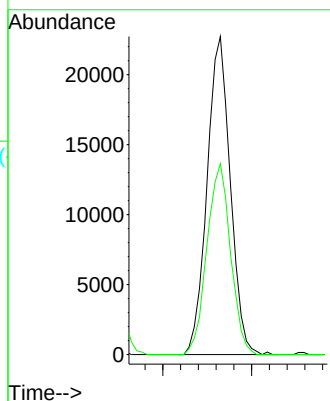
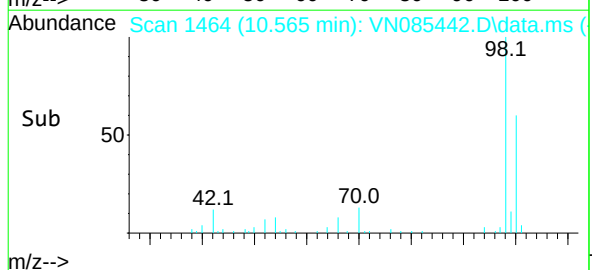


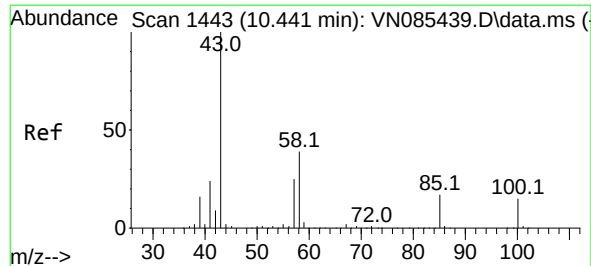
Tgt Ion: 98 Resp: 41328

Ion Ratio Lower Upper

98 100

100 60.9 52.2 78.4





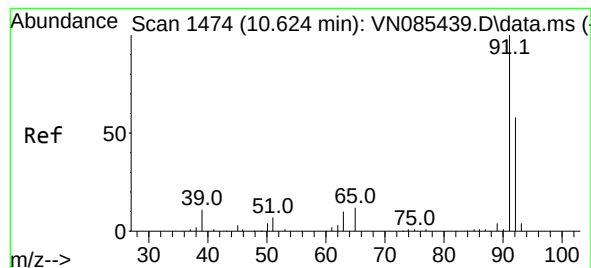
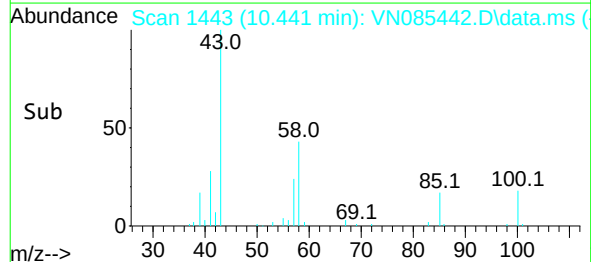
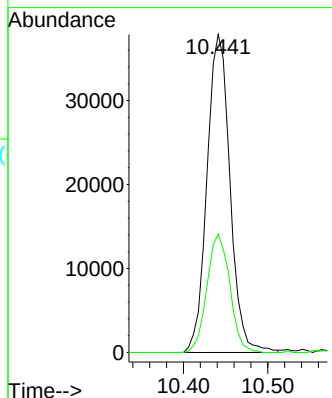
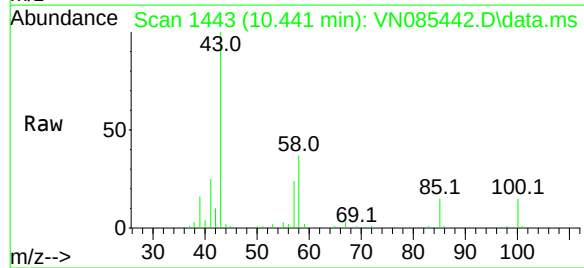
#51  
4-Methyl-2-Pentanone  
Concen: 24.250 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion: 43 Resp: 71889  
Ion Ratio Lower Upper  
43 100  
58 36.9 30.5 45.7

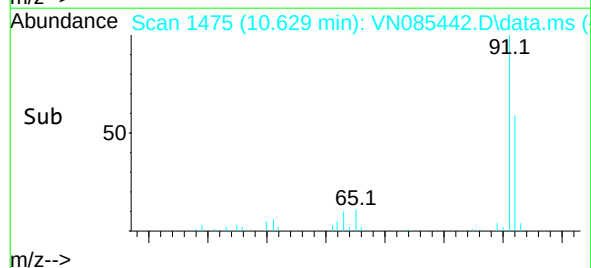
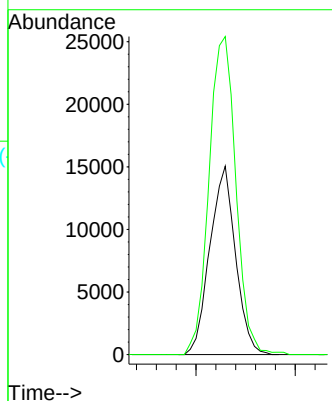
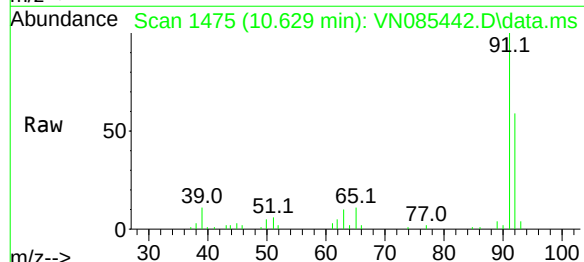
Manual Integrations  
APPROVED

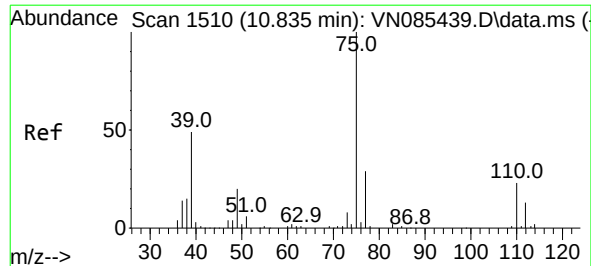
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#52  
Toluene  
Concen: 4.928 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 92 Resp: 27098  
Ion Ratio Lower Upper  
92 100  
91 176.4 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 5.077 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 75 Resp: 17099

Ion Ratio Lower Upper

75 100

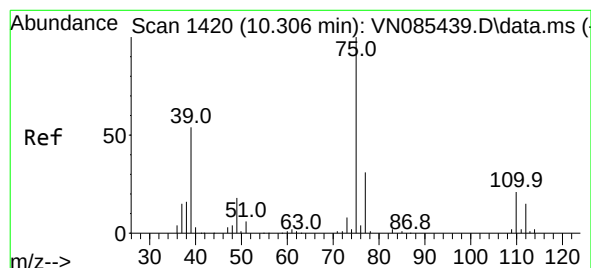
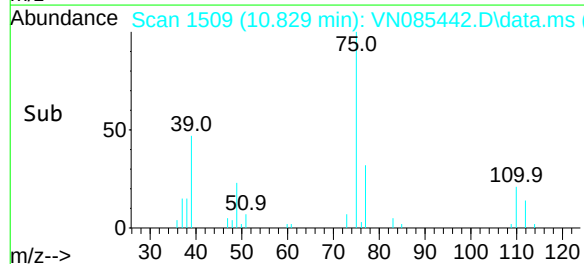
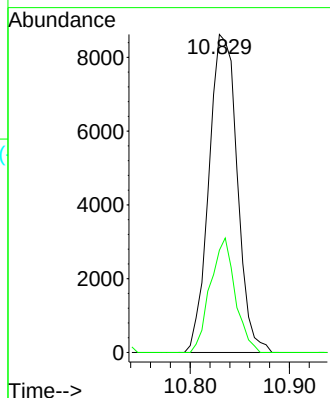
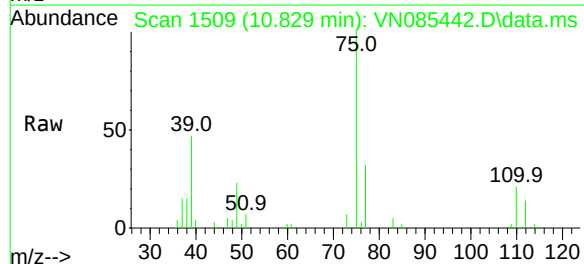
77 32.2 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 4.848 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

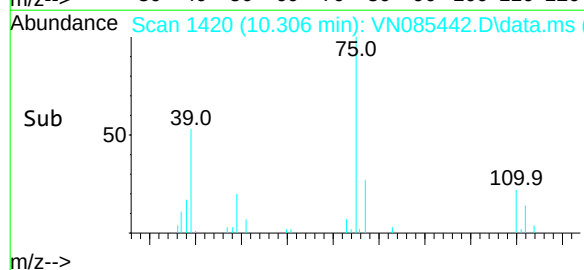
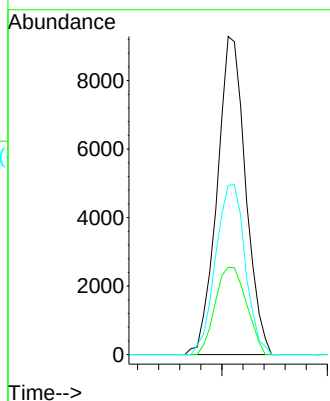
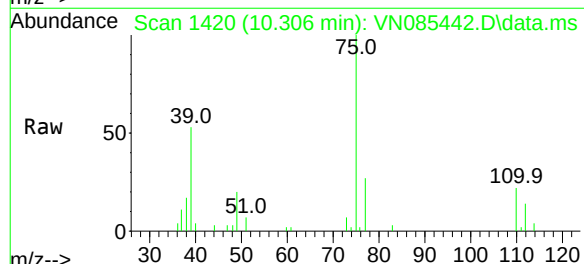
Tgt Ion: 75 Resp: 17440

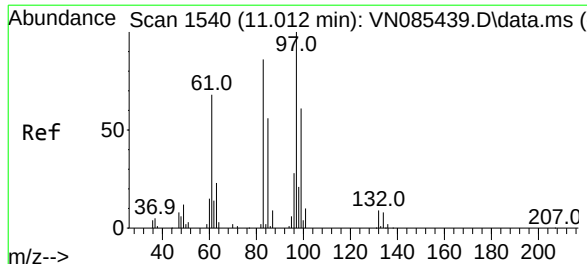
Ion Ratio Lower Upper

75 100

77 27.5 25.0 37.4

39 53.2 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 5.197 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 97 Resp: 11311

Ion Ratio Lower Upper

97 100

83 82.7 69.0 103.6

85 51.3 44.6 66.8

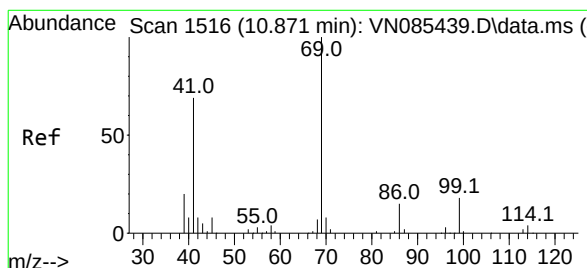
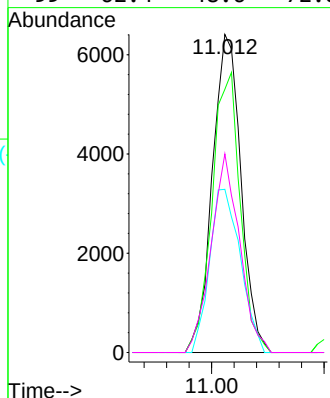
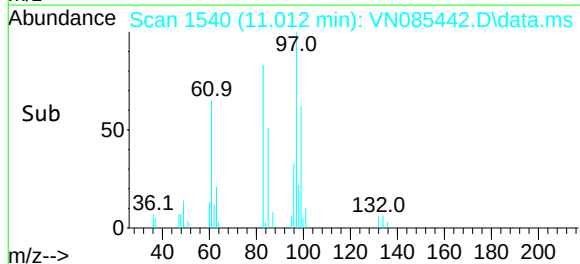
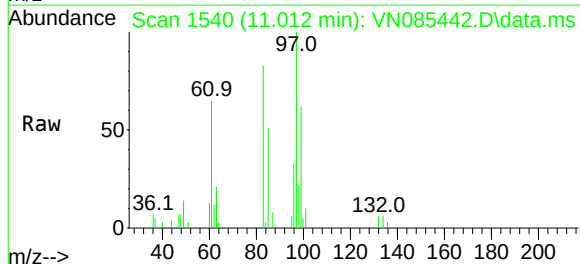
99 62.4 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 5.627 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

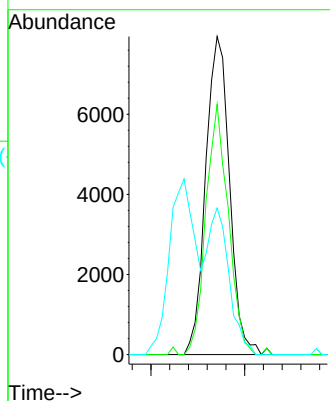
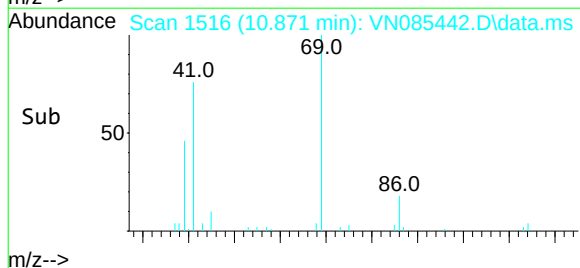
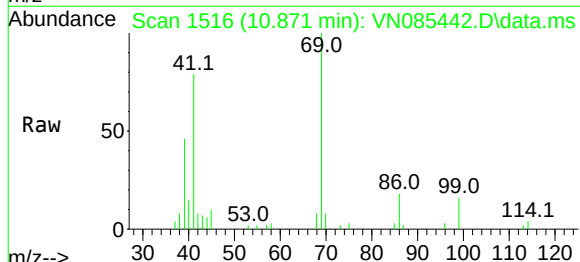
Tgt Ion: 69 Resp: 14094

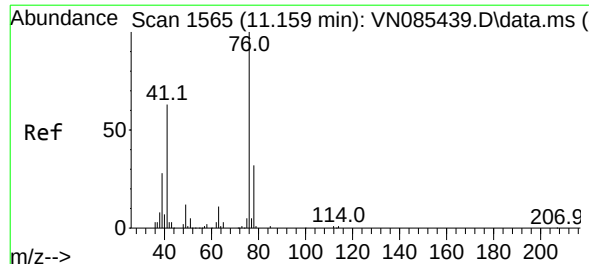
Ion Ratio Lower Upper

69 100

41 73.8 54.6 82.0

39 42.6 32.4 48.6





#57

1,3-Dichloropropane

Concen: 5.006 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 76 Resp: 18945

Ion Ratio Lower Upper

76 100

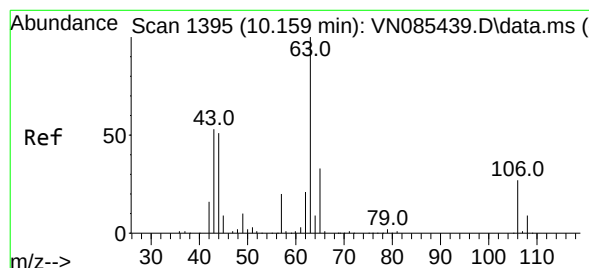
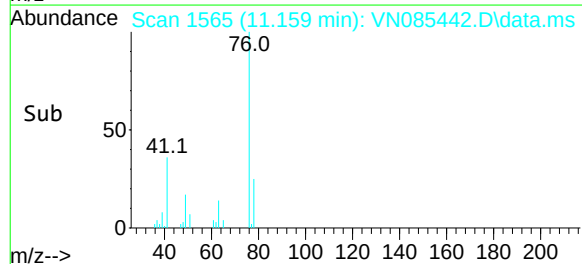
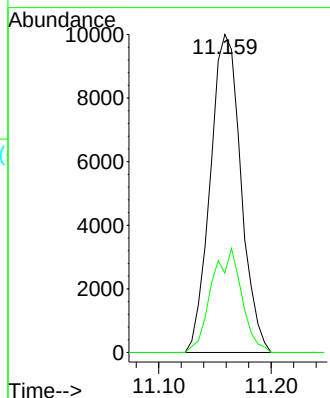
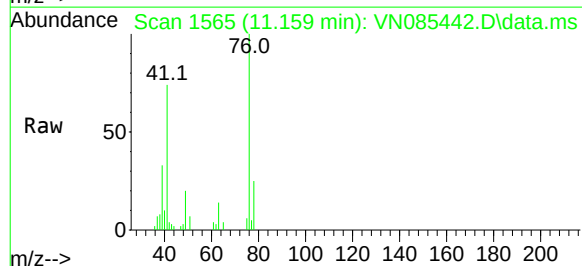
78 32.2 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 24.047 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085442.D

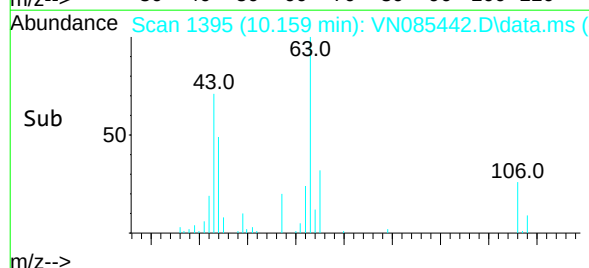
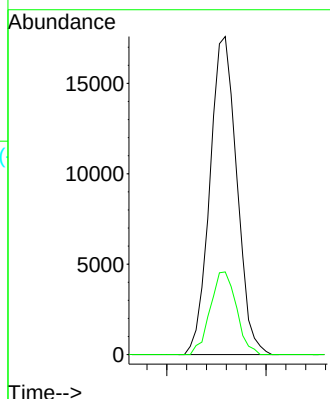
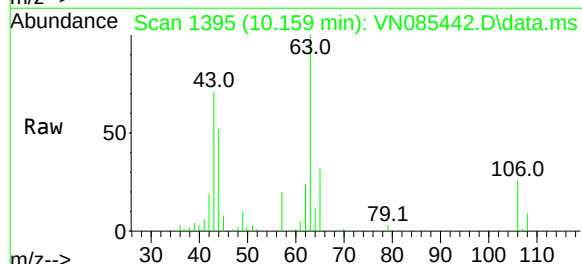
Acq: 14 Jan 2025 16:31

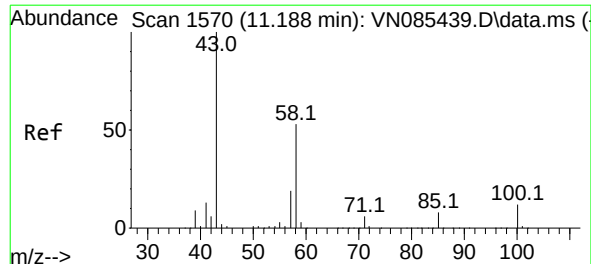
Tgt Ion: 63 Resp: 33210

Ion Ratio Lower Upper

63 100

106 25.2 21.6 32.4





#59

2-Hexanone

Concen: 23.501 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 49021

Ion Ratio Lower Upper

43 100

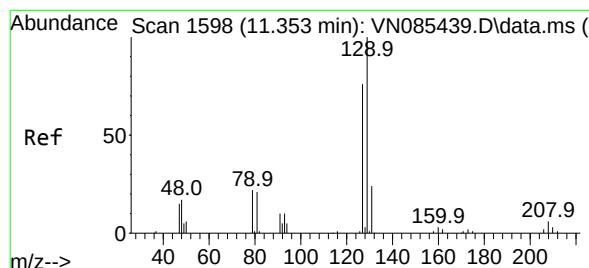
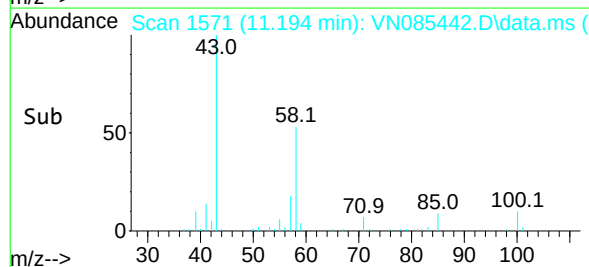
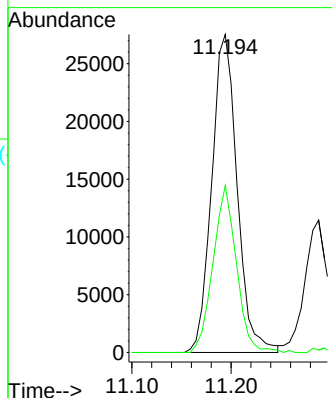
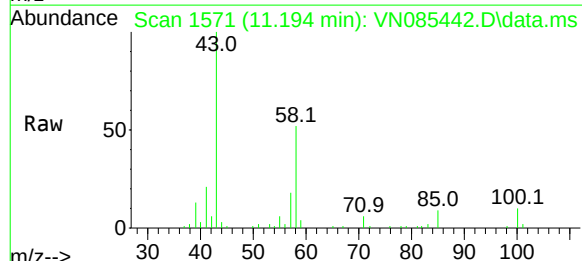
58 48.3 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 5.190 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085442.D

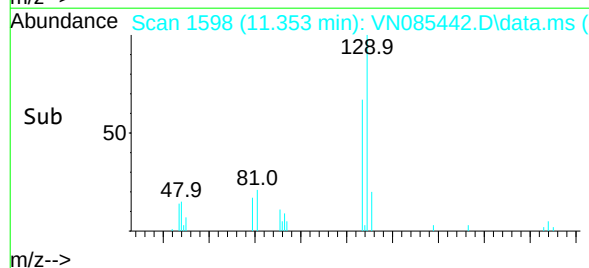
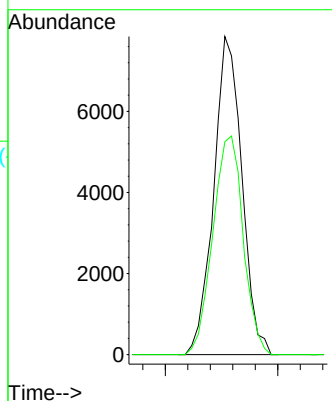
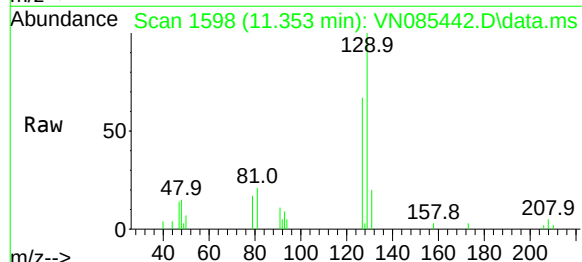
Acq: 14 Jan 2025 16:31

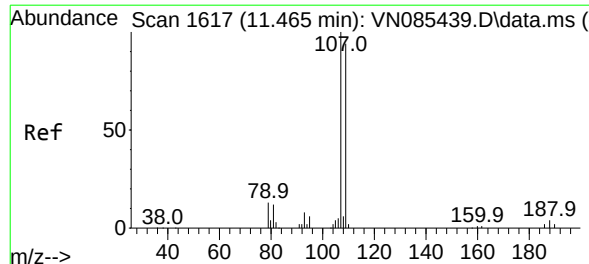
Tgt Ion:129 Resp: 13635

Ion Ratio Lower Upper

129 100

127 73.9 38.6 115.8





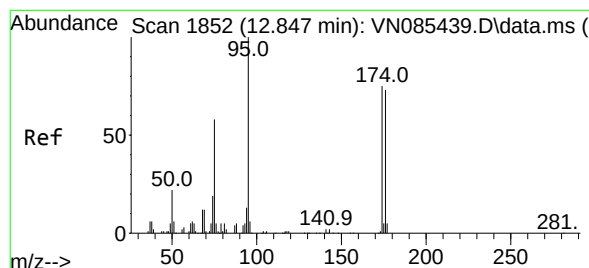
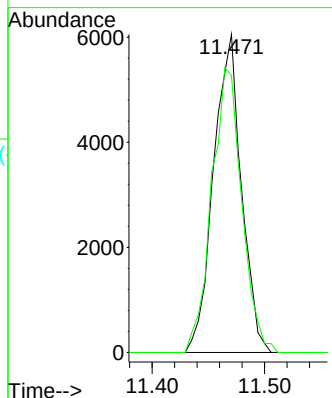
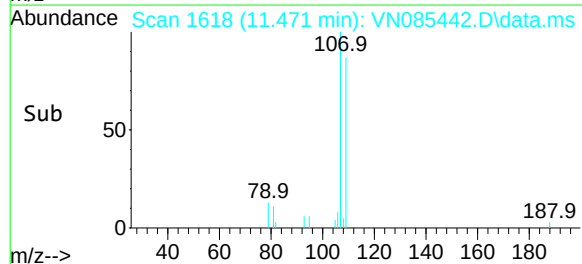
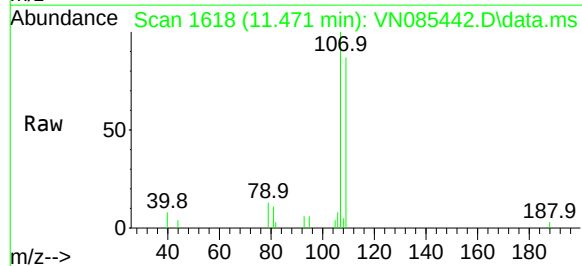
#61  
1,2-Dibromoethane  
Concen: 4.810 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Tgt Ion: 107 Resp: 10419  
Ion Ratio Lower Upper  
107 100  
109 96.8 75.9 113.9

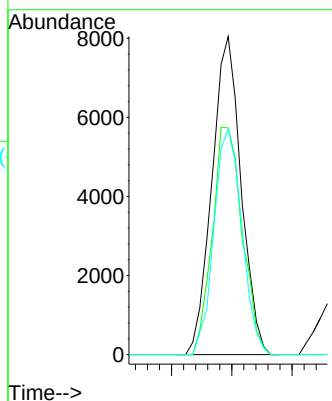
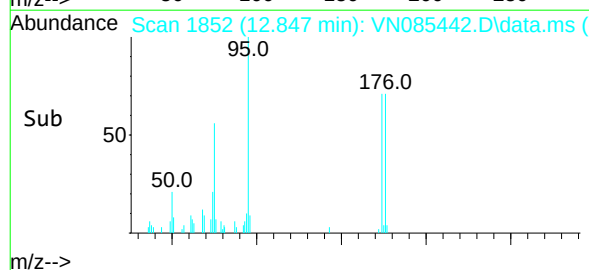
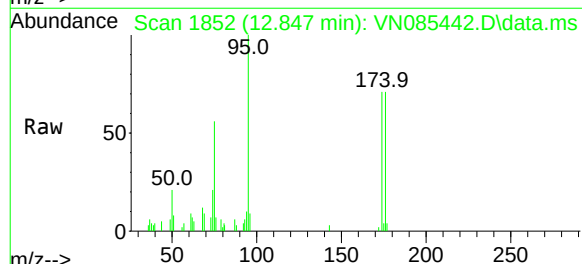
Manual Integrations  
APPROVED

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

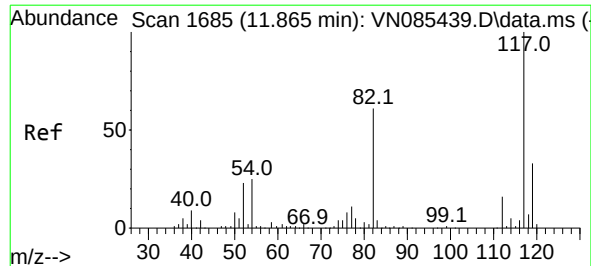


#62  
4-Bromofluorobenzene  
Concen: 4.943 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 95 Resp: 13520  
Ion Ratio Lower Upper  
95 100  
174 73.2 0.0 145.0  
176 68.0 0.0 142.4







#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:117 Resp: 282203

Ion Ratio Lower Upper

117 100

82 58.3 48.6 72.8

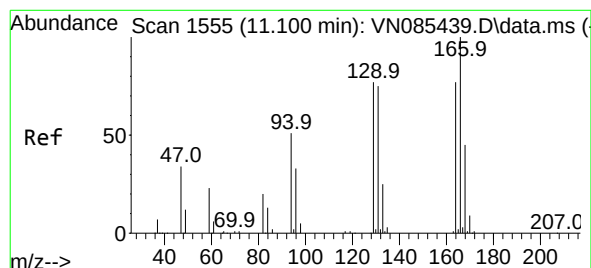
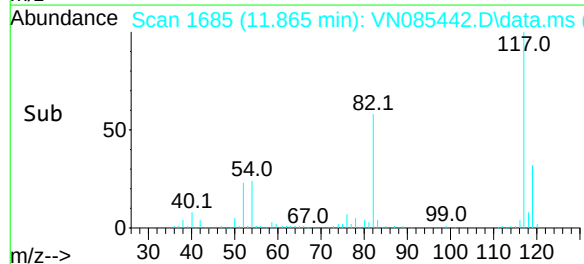
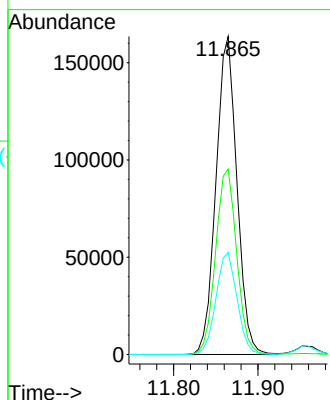
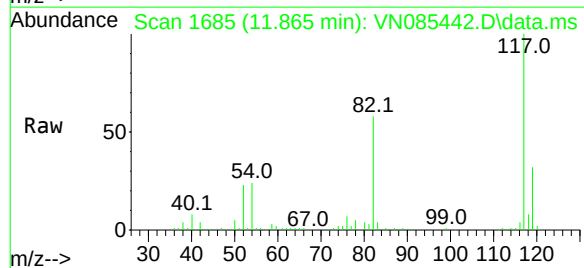
119 32.1 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 5.071 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:164 Resp: 9756

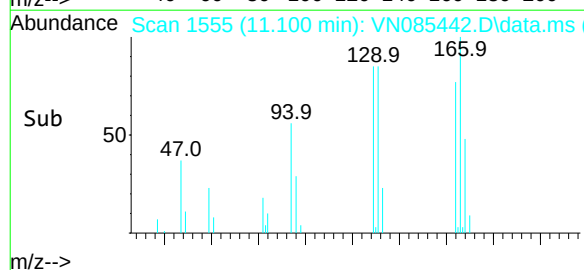
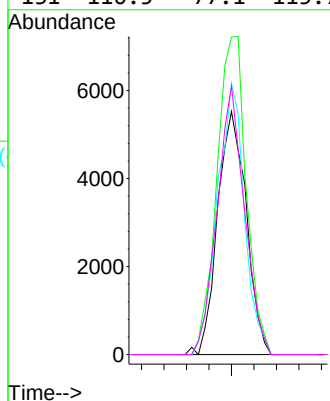
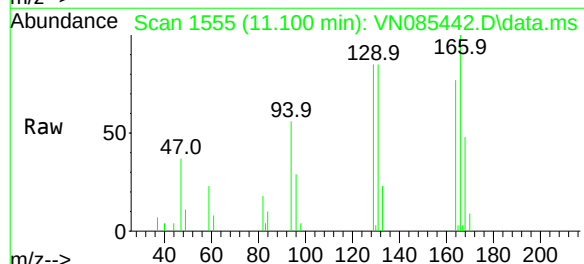
Ion Ratio Lower Upper

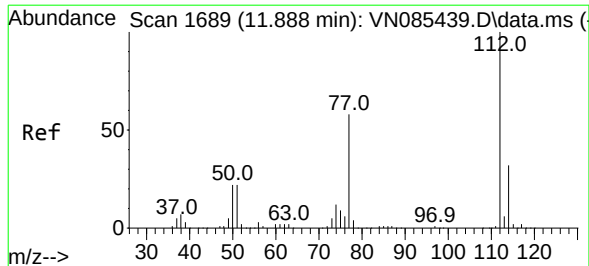
164 100

166 130.6 103.4 155.2

129 111.5 79.2 118.8

131 110.5 77.1 115.7





#65

Chlorobenzene

Concen: 5.065 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:112 Resp: 31312

Ion Ratio Lower Upper

112 100

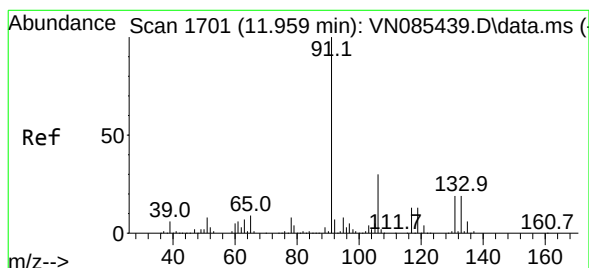
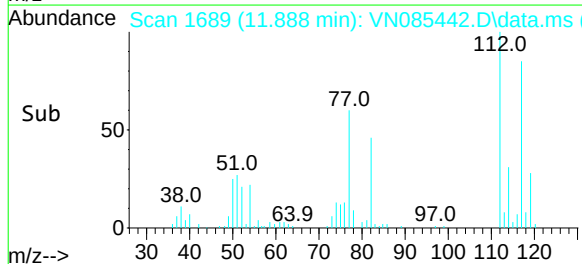
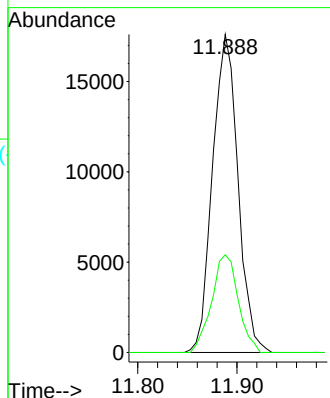
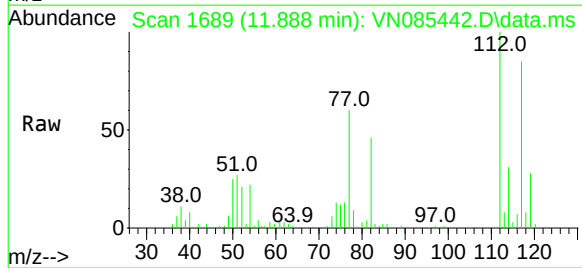
114 30.7 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 5.121 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

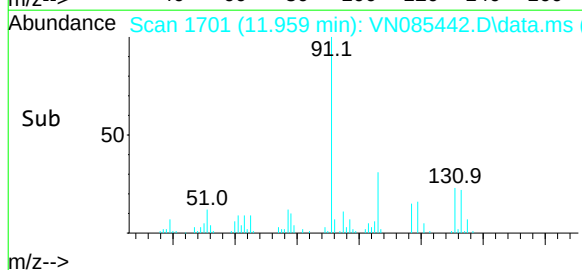
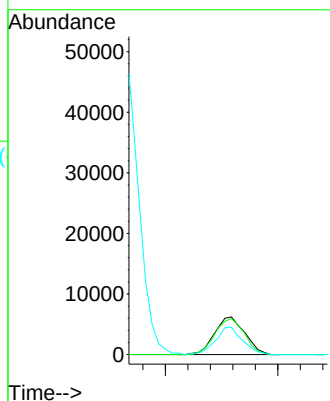
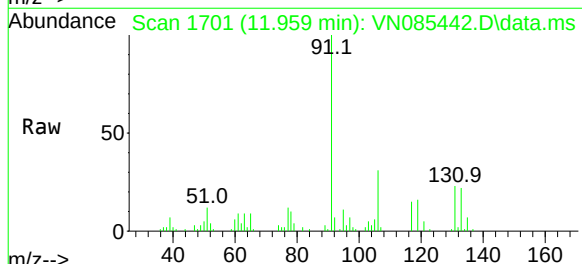
Tgt Ion:131 Resp: 11620

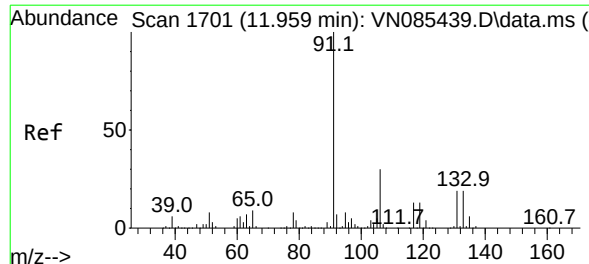
Ion Ratio Lower Upper

131 100

133 92.7 47.4 142.3

119 65.0 33.1 99.5





#67

Ethyl Benzene

Concen: 4.789 ug/l

RT: 11.965 min Scan# 17

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

Tgt Ion: 91 Resp: 48216

Ion Ratio Lower Upper

91 100

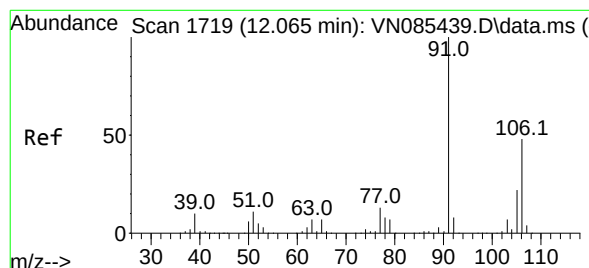
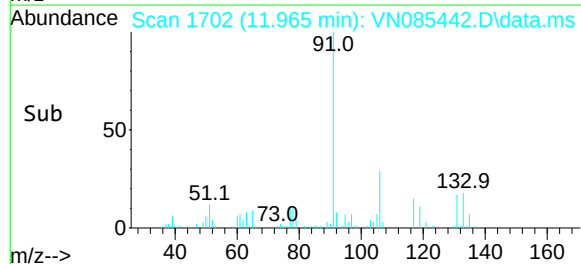
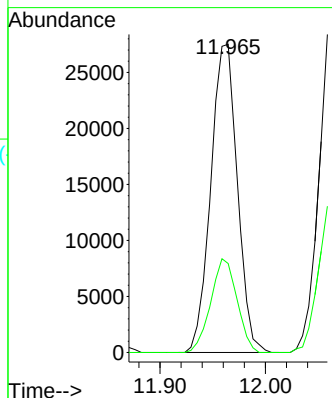
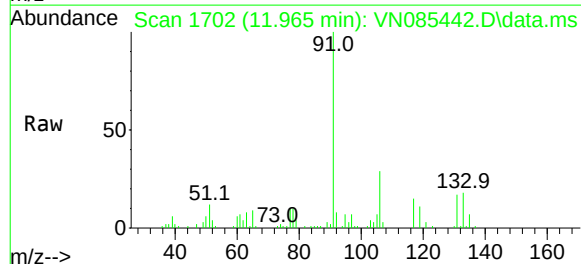
106 28.9 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 9.344 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085442.D

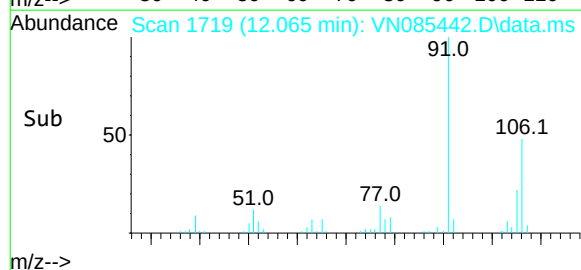
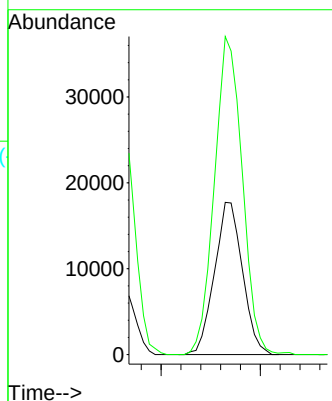
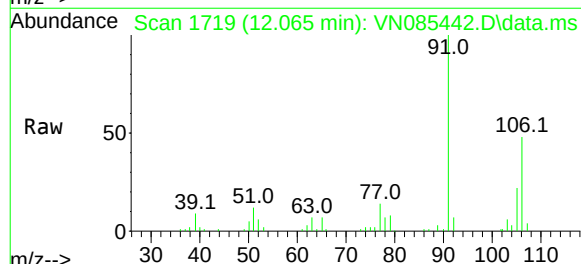
Acq: 14 Jan 2025 16:31

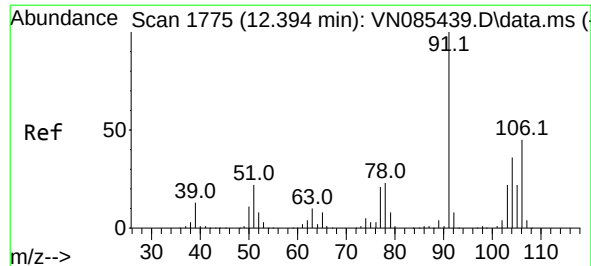
Tgt Ion:106 Resp: 34771

Ion Ratio Lower Upper

106 100

91 207.9 167.7 251.5





#69

o-Xylene

Concen: 4.617 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:106 Resp: 16419

Ion Ratio Lower Upper

106 100

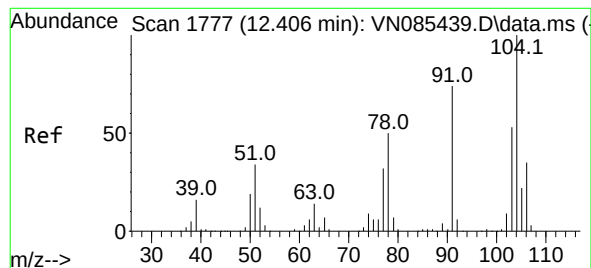
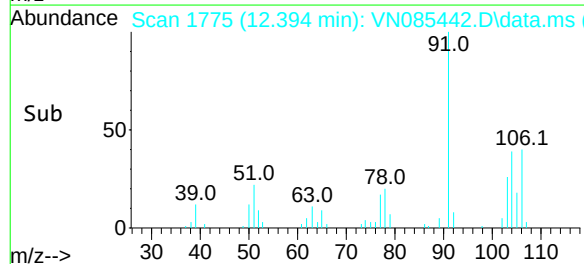
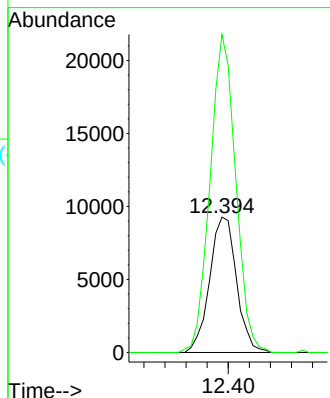
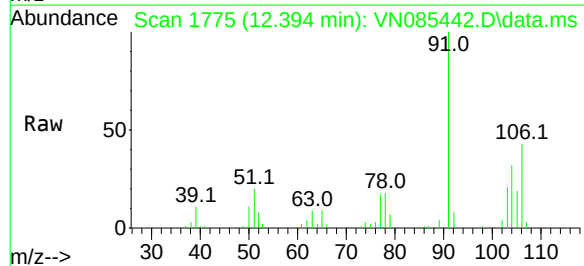
91 224.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 4.454 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

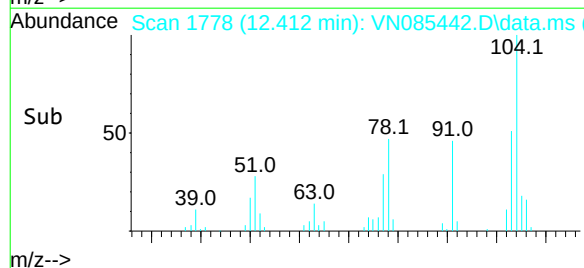
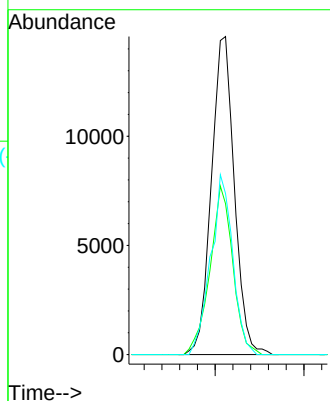
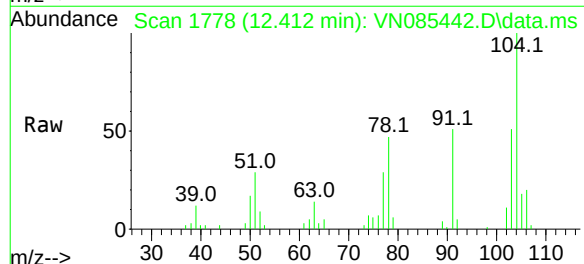
Tgt Ion:104 Resp: 26218

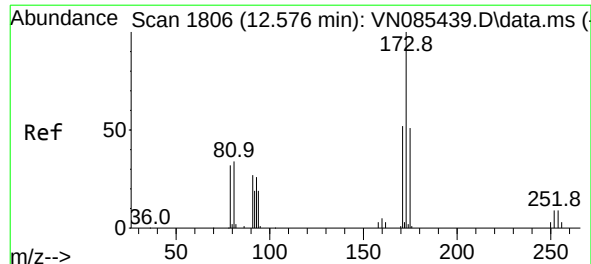
Ion Ratio Lower Upper

104 100

78 52.6 42.5 63.7

103 54.2 43.8 65.8





#71

Bromoform

Concen: 4.938 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

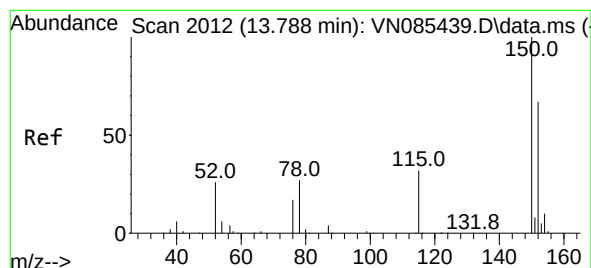
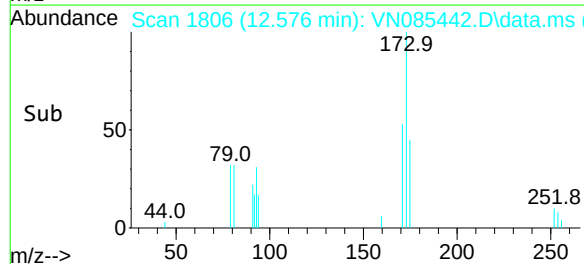
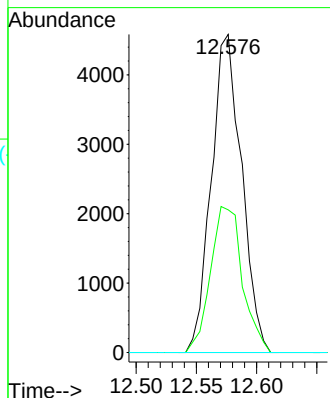
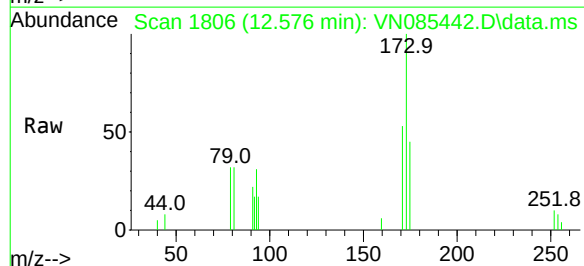
ClientSampleId :

VSTDICC005

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 173   | Resp: | 8017 |
| Ion Ratio | Lower | Upper |      |
| 173       | 100   |       |      |
| 175       | 48.3  | 24.4  | 73.2 |
| 254       | 0.0   | 0.0   | 0.0  |

Manual Integrations  
APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

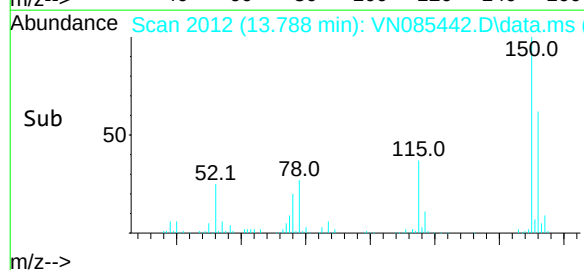
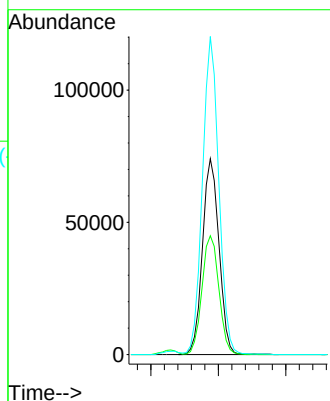
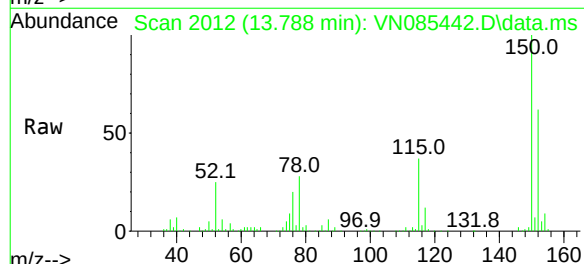
RT: 13.788 min Scan# 2012

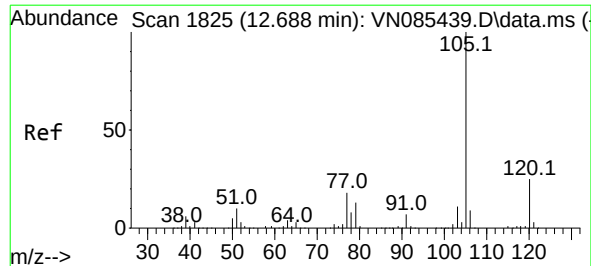
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 126086 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.0  | 31.1  | 93.3   |
| 150       | 160.7 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 4.678 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:105 Resp: 39811

Ion Ratio Lower Upper

105 100

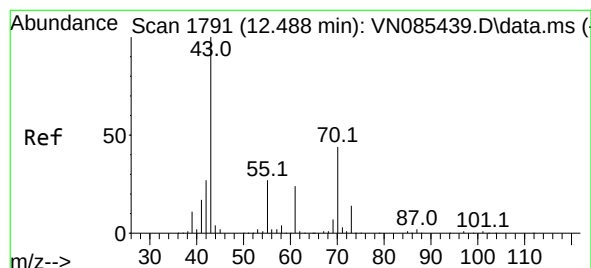
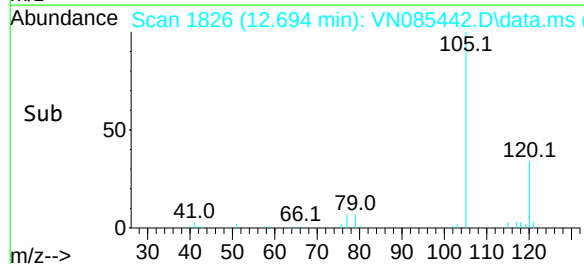
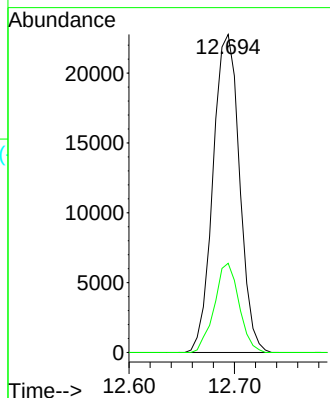
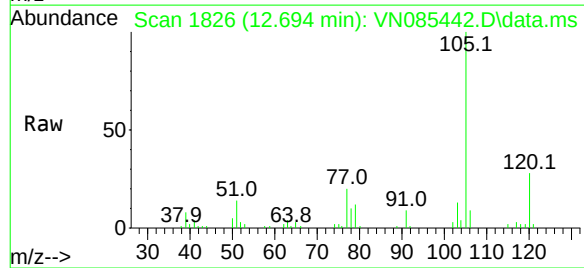
120 26.1 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 4.595 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 17577

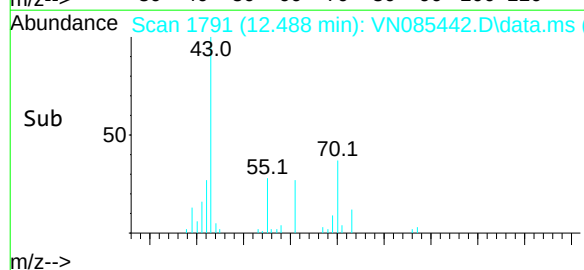
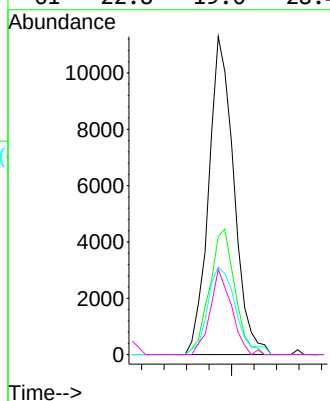
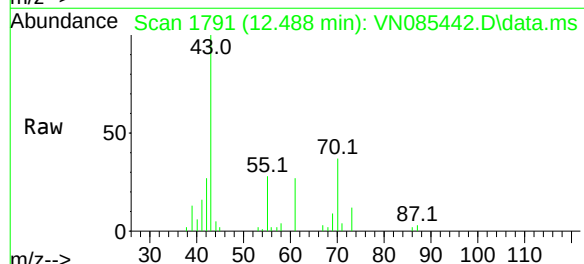
Ion Ratio Lower Upper

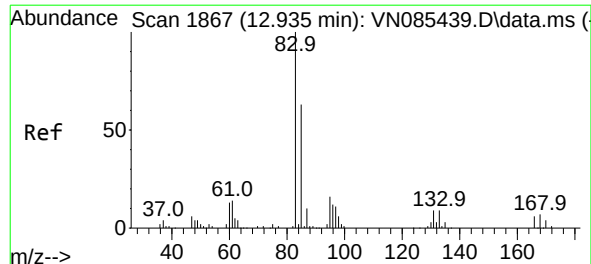
43 100

70 39.5 34.0 51.0

55 30.8 21.4 32.2

61 22.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 5.151 ug/l

RT: 12.935 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

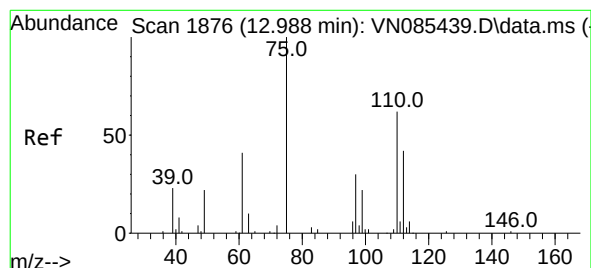
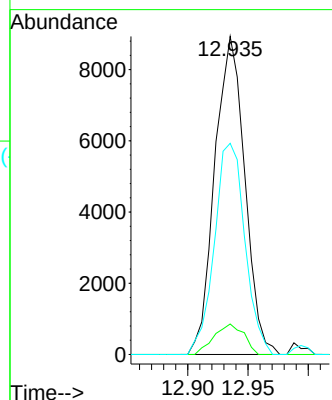
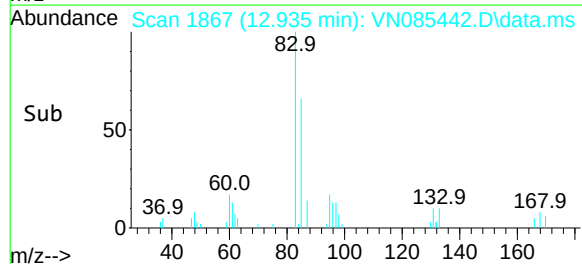
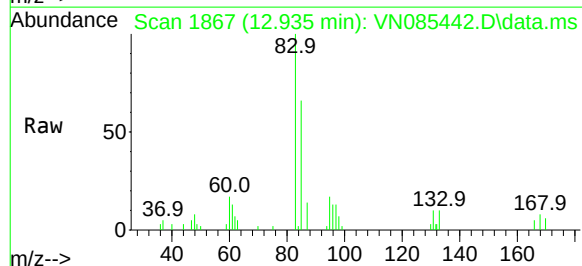
VSTDIC005

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 15483 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 131       | 9.5   | 4.8   | 14.4  |
| 85        | 67.5  | 32.2  | 96.6  |

Manual Integrations

APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 4.758 ug/l m

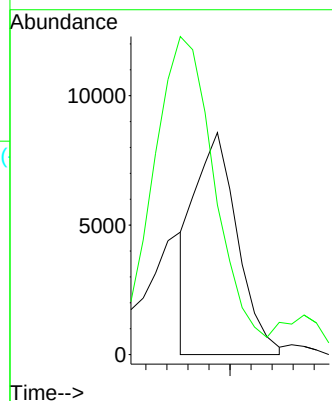
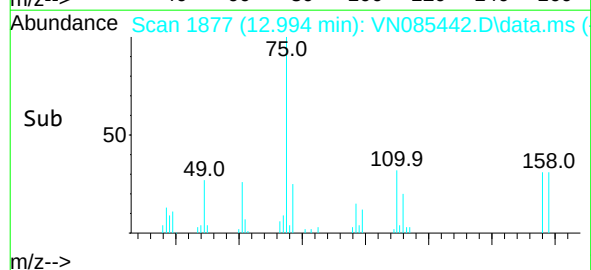
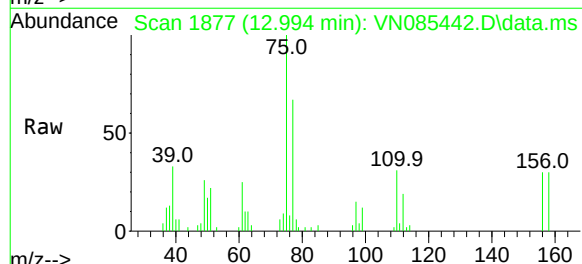
RT: 12.994 min Scan# 1877

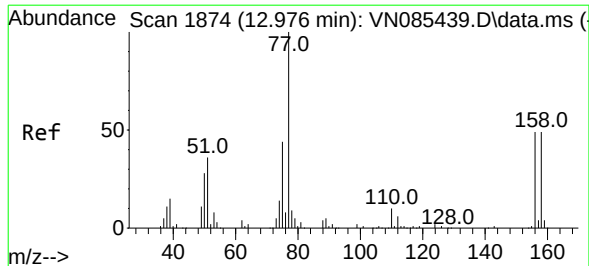
Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 75    | Resp: | 12173 |
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 77        | 209.1 | 109.7 | 329.2 |





#77

Bromobenzene

Concen: 4.989 ug/l

RT: 12.982 min Scan# 1875

Delta R.T. 0.006 min

Lab File: VN085442.D

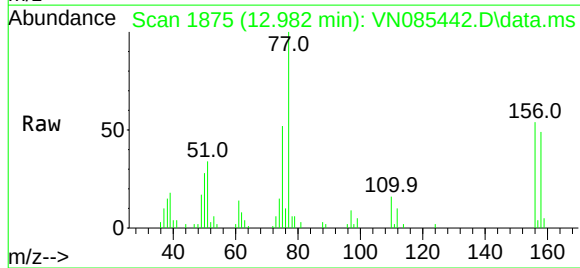
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005



Tgt Ion: 156 Resp: 11091

Ion Ratio Lower Upper

156 100

77 229.5 114.1 342.4

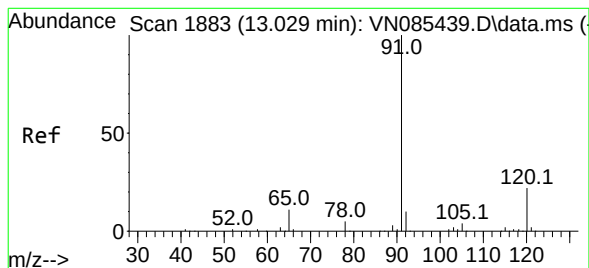
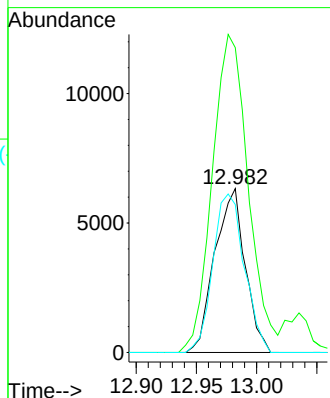
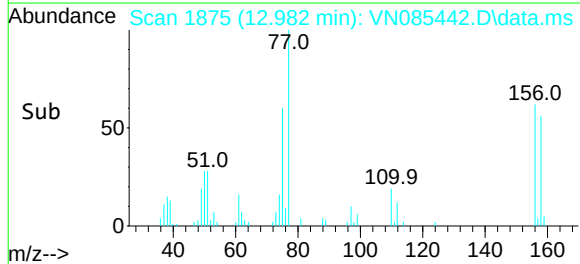
158 100.8 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

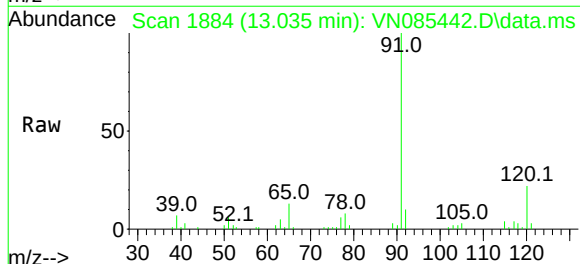
Concen: 4.512 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

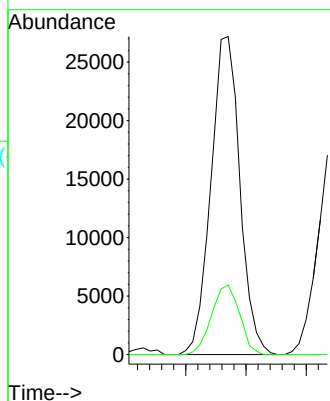
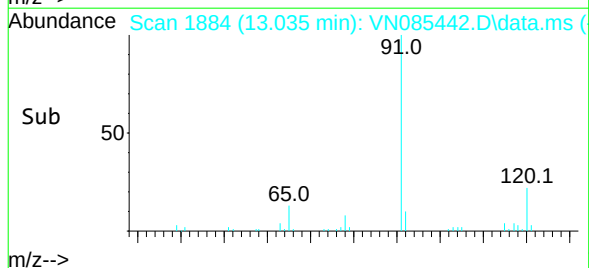


Tgt Ion: 91 Resp: 45450

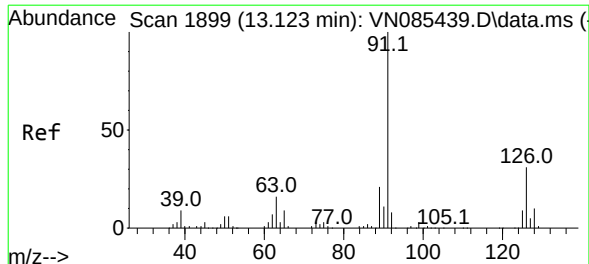
Ion Ratio Lower Upper

91 100

120 21.1 10.9 32.6







#79

2-Chlorotoluene

Concen: 4.898 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 91 Resp: 31932

Ion Ratio Lower Upper

91 100

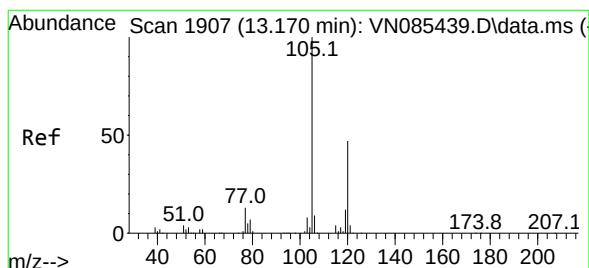
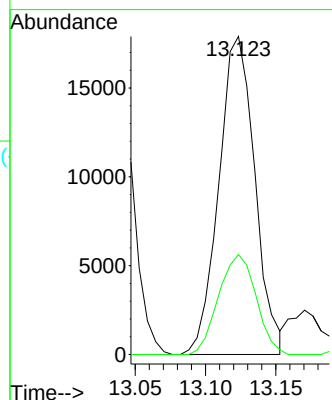
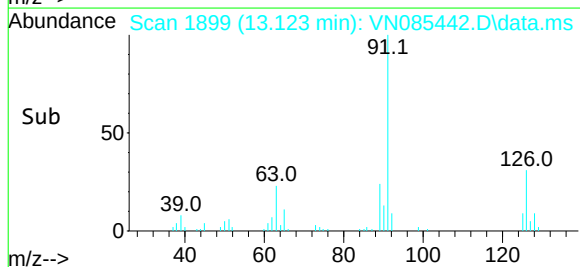
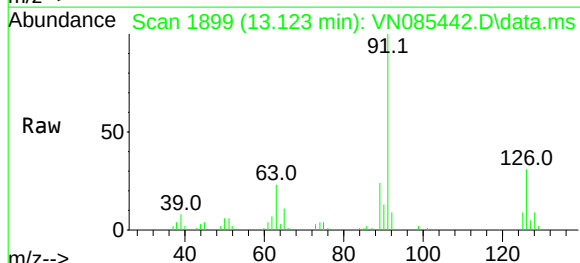
126 32.6 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 4.537 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085442.D

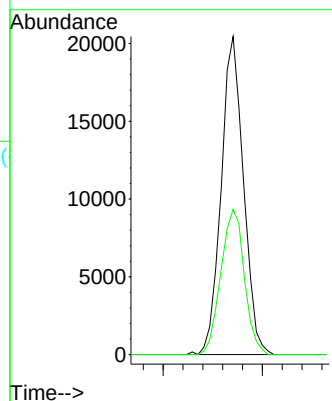
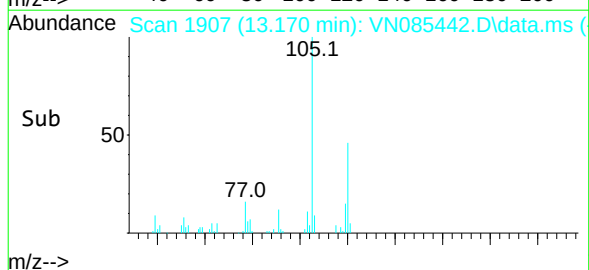
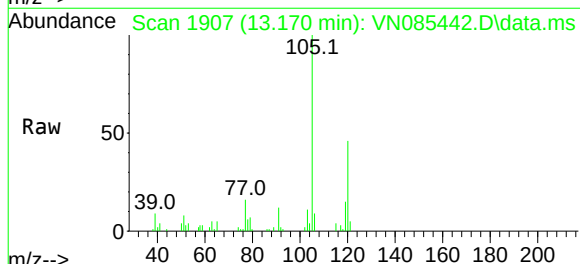
Acq: 14 Jan 2025 16:31

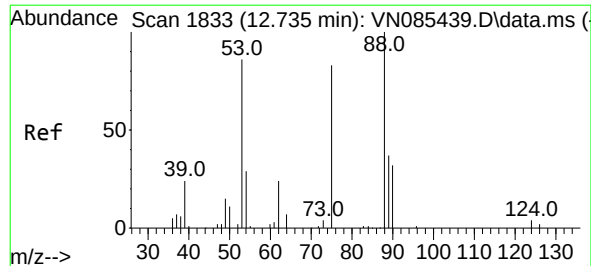
Tgt Ion:105 Resp: 31891

Ion Ratio Lower Upper

105 100

120 48.1 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 4.465 ug/l

RT: 12.729 min Scan# 1833

Delta R.T. -0.006 min

Lab File: VN085442.D

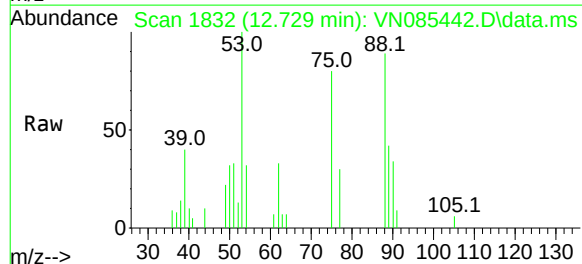
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

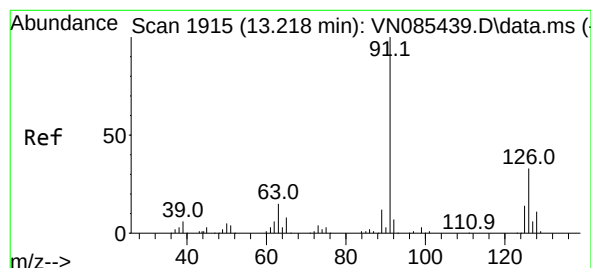
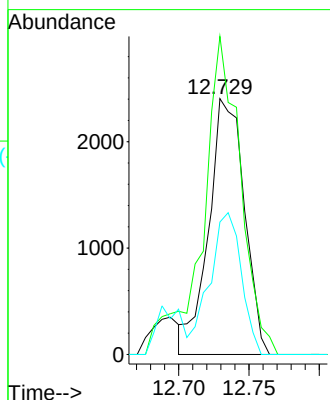
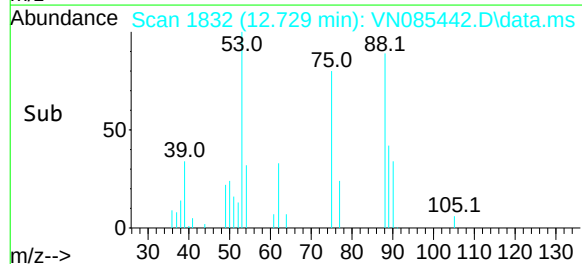
VSTDIC005



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 4229  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 132.6 | 95.6  | 143.4 |
| 89       | 49.7  | 37.0  | 55.6  |

Manual Integrations  
APPROVED

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



#82

4-Chlorotoluene

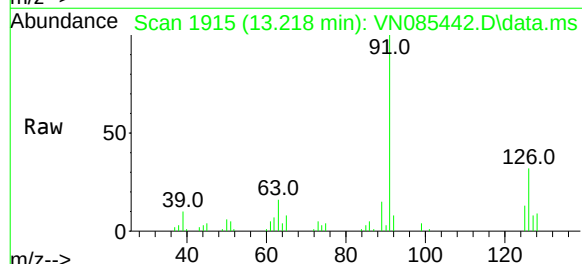
Concen: 4.926 ug/l

RT: 13.218 min Scan# 1915

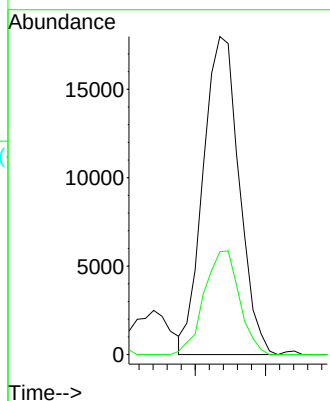
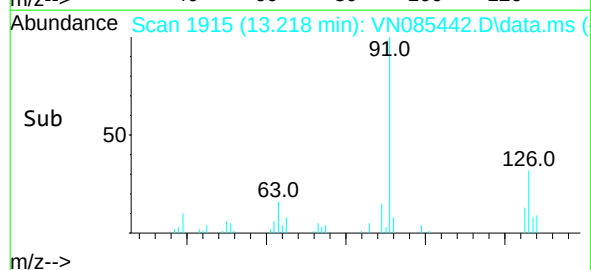
Delta R.T. 0.000 min

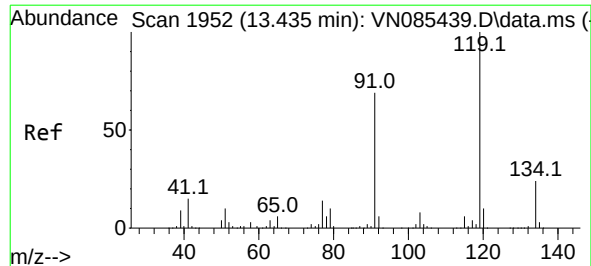
Lab File: VN085442.D

Acq: 14 Jan 2025 16:31



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 31976 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 126      | 31.9  | 15.9  | 47.7  |





#83

tert-Butylbenzene

Concen: 4.675 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

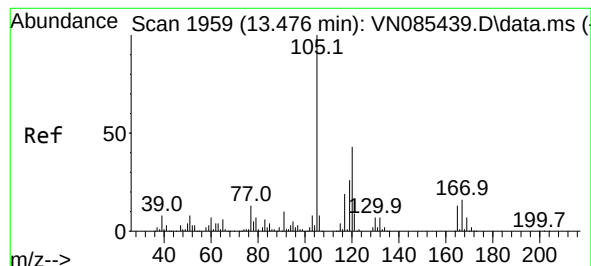
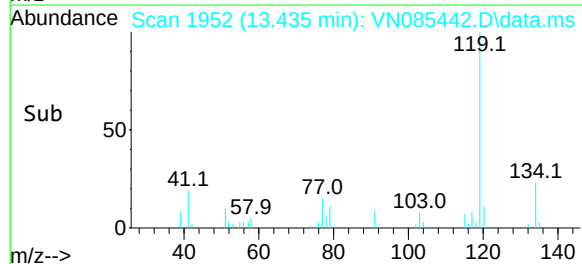
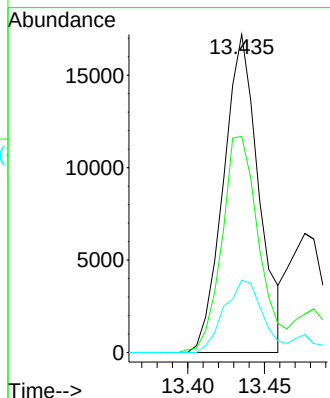
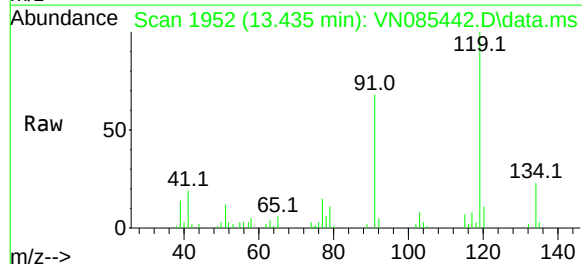
VSTDIC005

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 119   | Resp: | 27597 |
| Ion Ratio | Lower | Upper |       |
| 119       | 100   |       |       |
| 91        | 71.1  | 35.1  | 105.3 |
| 134       | 24.8  | 12.0  | 36.1  |

Manual Integrations

APPROVED

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



#84

1,2,4-Trimethylbenzene

Concen: 4.575 ug/l

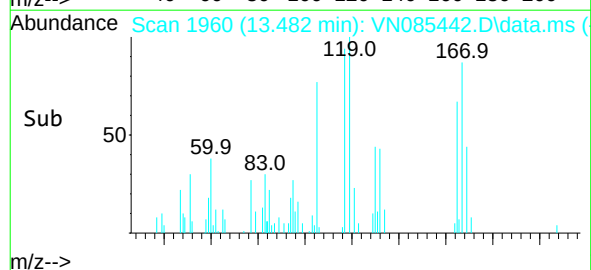
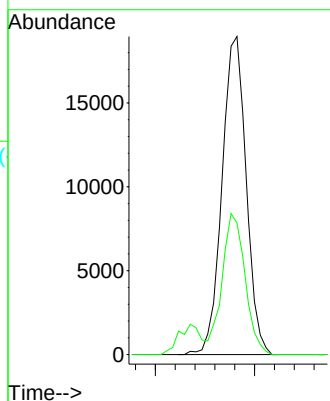
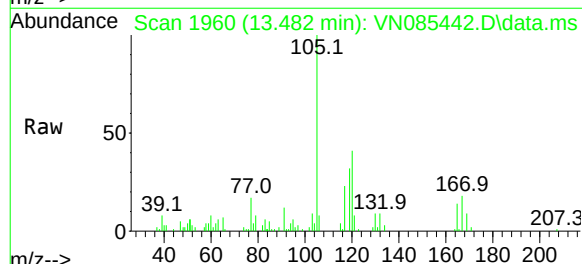
RT: 13.482 min Scan# 1960

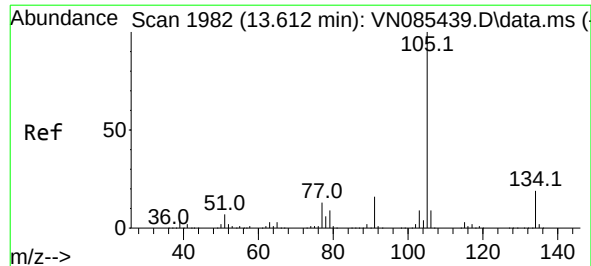
Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 32054 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 42.0  | 21.6  | 65.0  |





#85

sec-Butylbenzene

Concen: 4.663 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:105 Resp: 38148

Ion Ratio Lower Upper

105 100

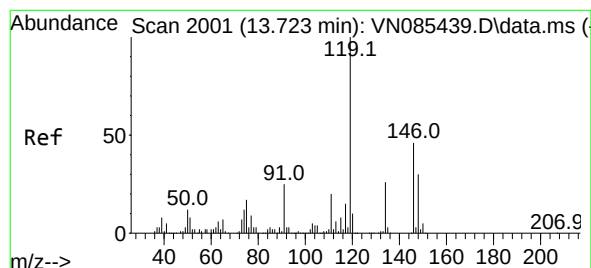
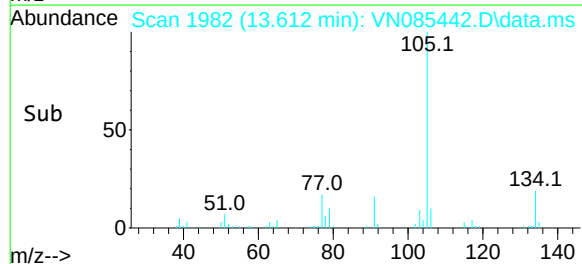
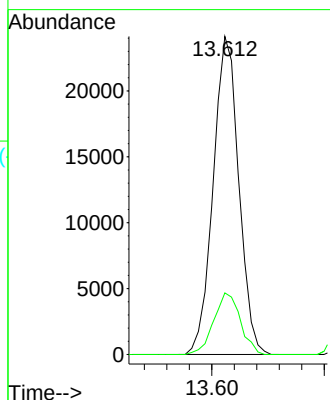
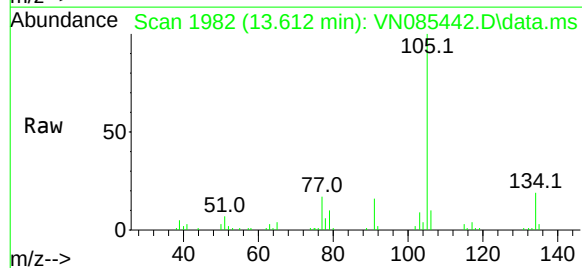
134 20.1 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 4.584 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

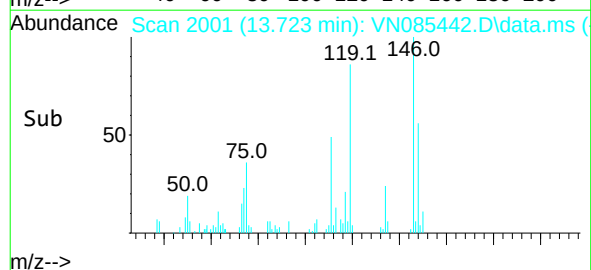
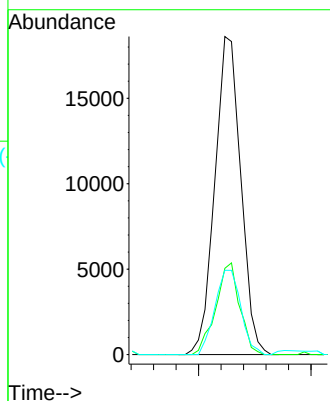
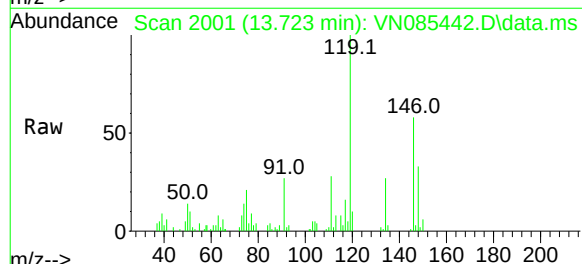
Tgt Ion:119 Resp: 29856

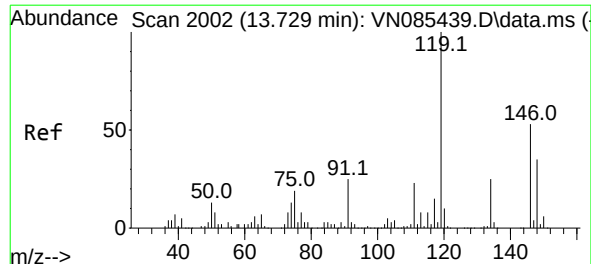
Ion Ratio Lower Upper

119 100

134 26.5 12.7 38.0

91 26.5 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 5.099 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion:146 Resp: 20876

Ion Ratio Lower Upper

146 100

111 42.3 21.4 64.3

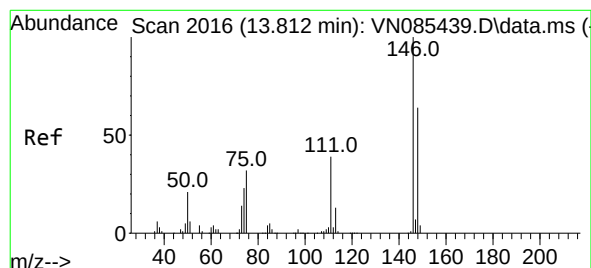
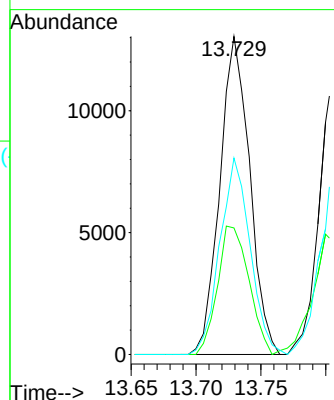
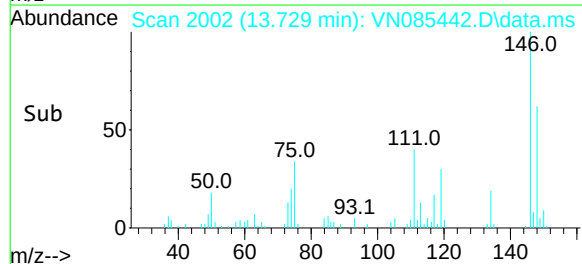
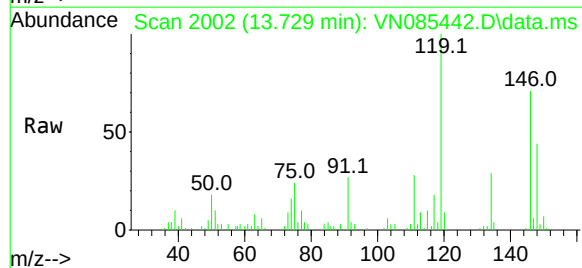
148 62.7 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 5.179 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

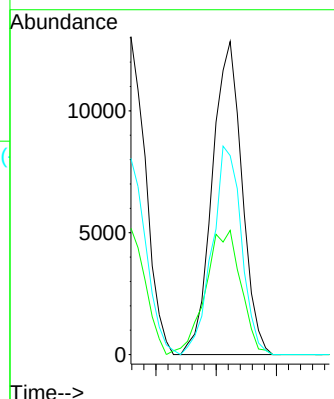
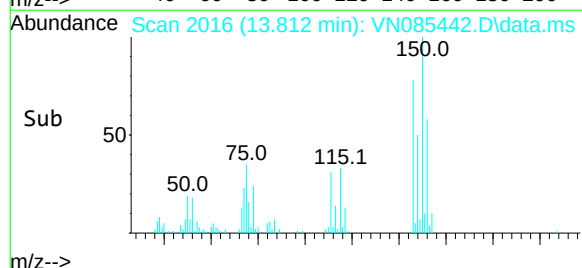
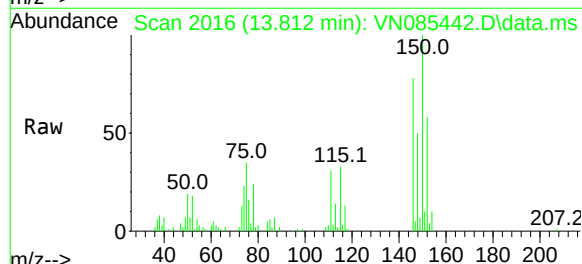
Tgt Ion:146 Resp: 21982

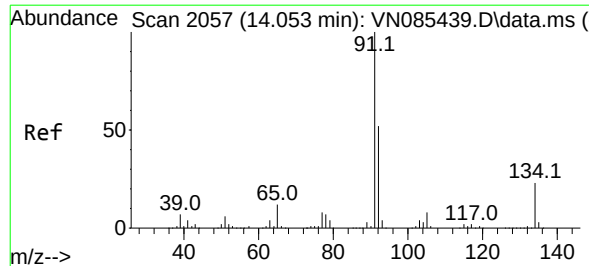
Ion Ratio Lower Upper

146 100

111 47.1 21.3 63.7

148 65.5 32.4 97.0





#89

n-Butylbenzene

Concen: 4.675 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

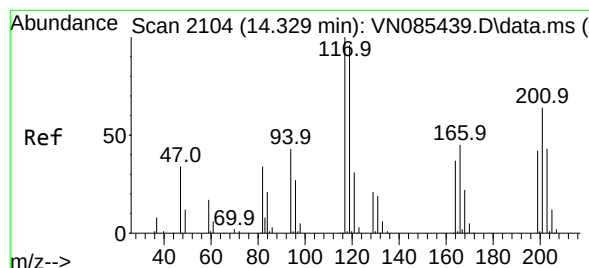
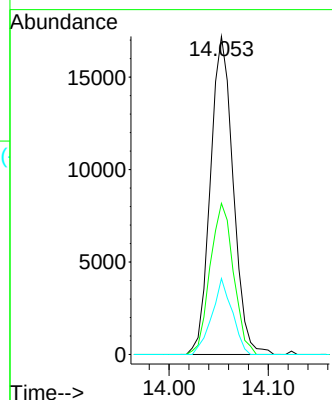
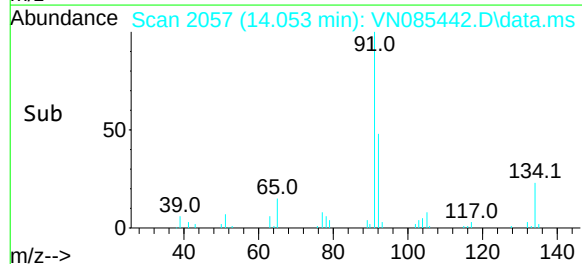
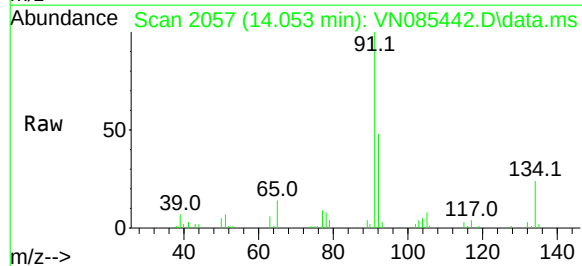
ClientSampleId :

VSTDICC005

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 27437 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 92        | 48.7  | 25.8  | 77.3  |
| 134       | 21.4  | 11.7  | 35.1  |

Manual Integrations  
APPROVED

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



#90

Hexachloroethane

Concen: 4.987 ug/l

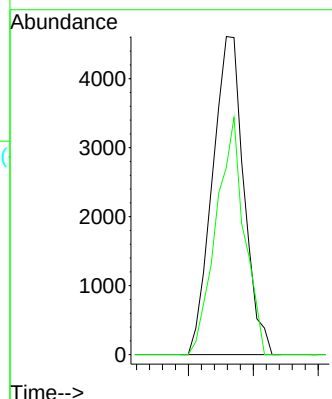
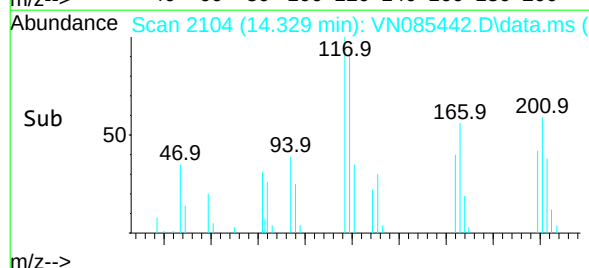
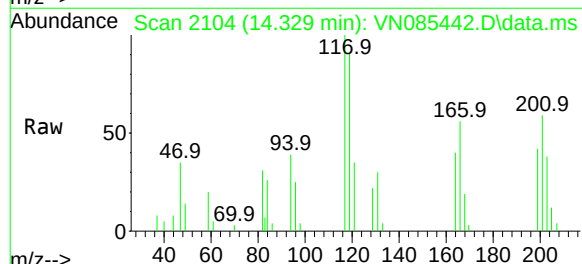
RT: 14.329 min Scan# 2104

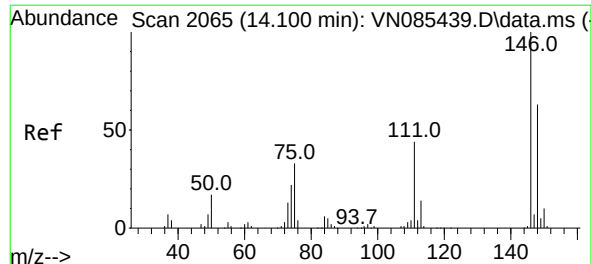
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 117   | Resp: | 7767  |
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 66.9  | 33.7  | 101.0 |





#91

1,2-Dichlorobenzene

Concen: 4.940 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085442.D

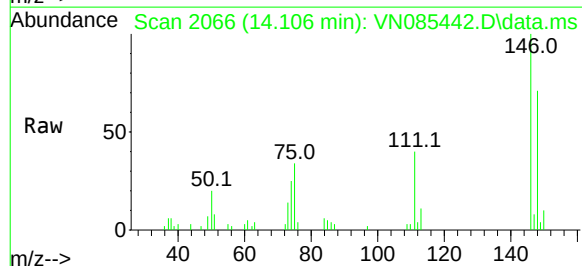
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

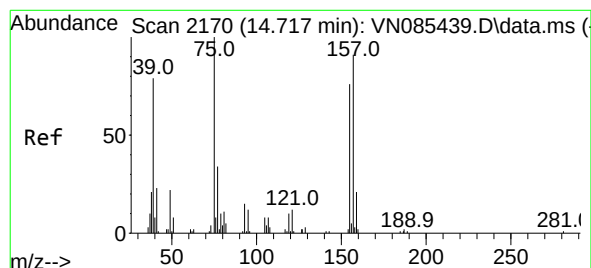
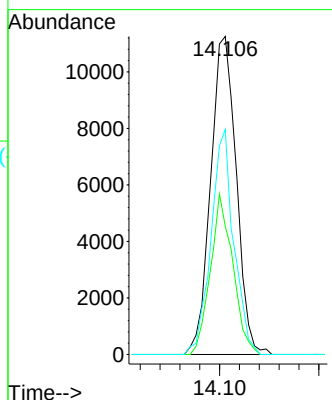
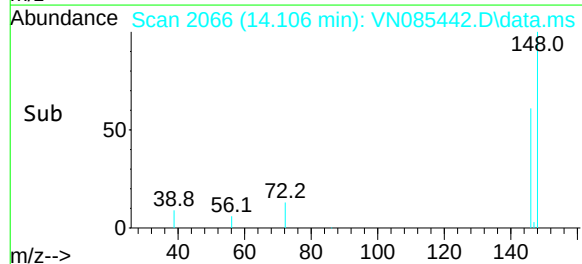
VSTDIC005



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 20177 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 44.0  | 21.7  | 65.1  |
| 148      | 62.8  | 31.4  | 94.2  |

Manual Integrations  
APPROVED

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



#92

1,2-Dibromo-3-Chloropropane

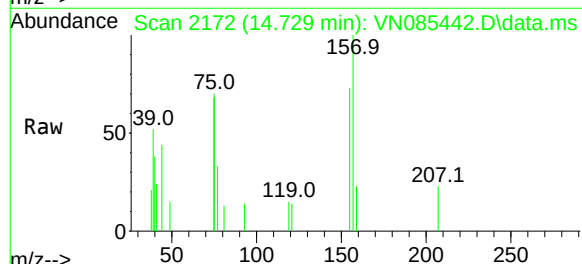
Concen: 5.232 ug/l

RT: 14.729 min Scan# 2172

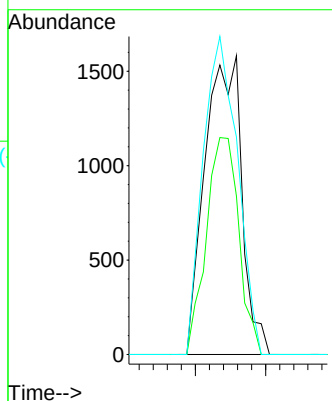
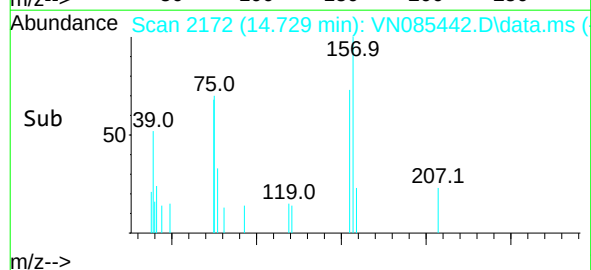
Delta R.T. 0.012 min

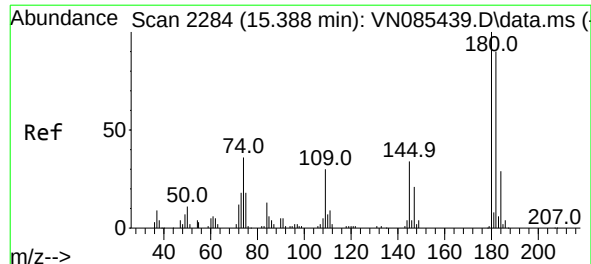
Lab File: VN085442.D

Acq: 14 Jan 2025 16:31



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 2872  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 155      | 64.2  | 36.4  | 109.2 |
| 157      | 99.8  | 45.4  | 136.1 |





#93

1,2,4-Trichlorobenzene

Concen: 4.761 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

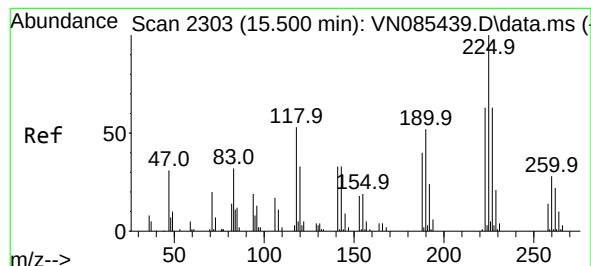
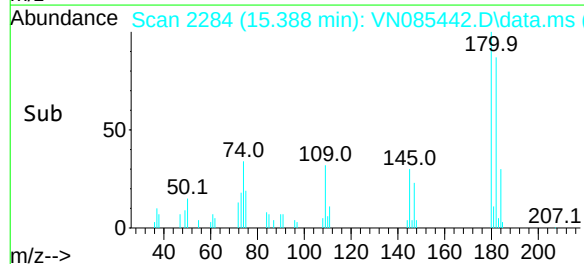
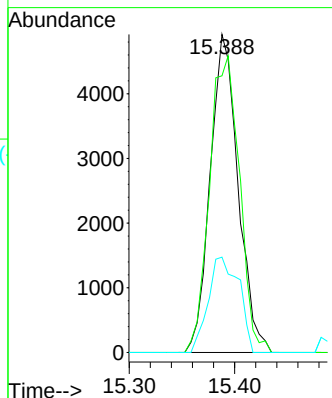
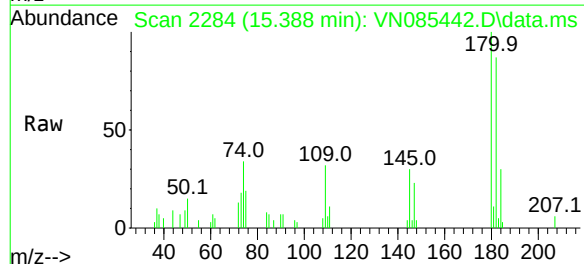
VSTDIC005

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:180 | Resp: | 9037  |
| Ion | Ratio   | Lower | Upper |
| 180 | 100     |       |       |
| 182 | 100.5   | 46.8  | 140.3 |
| 145 | 33.0    | 16.0  | 48.0  |

Manual Integrations

APPROVED

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



#94

Hexachlorobutadiene

Concen: 5.520 ug/l

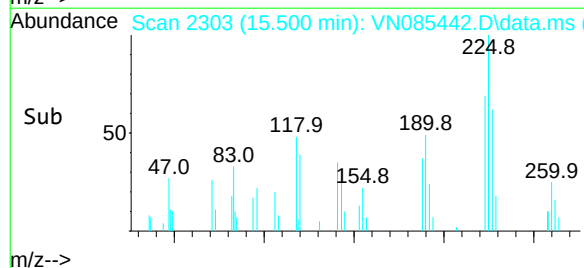
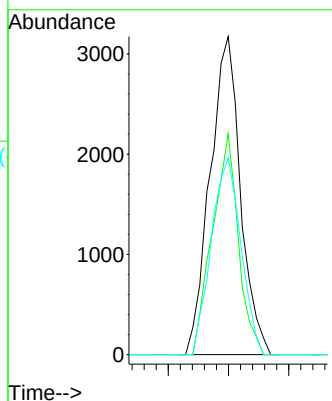
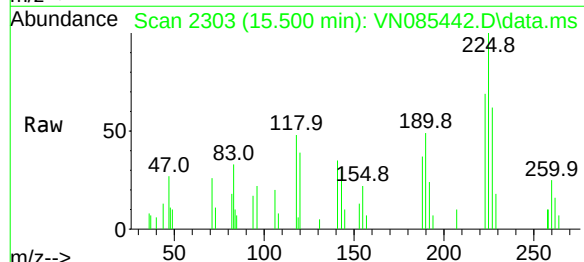
RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

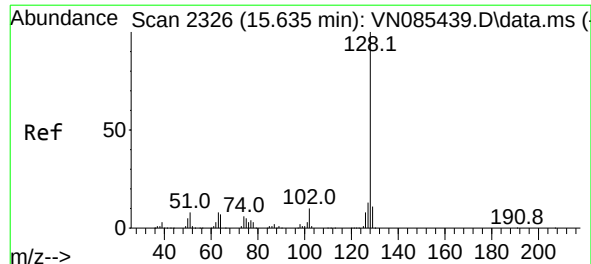
Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:225 | Resp: | 5563  |
| Ion | Ratio   | Lower | Upper |
| 225 | 100     |       |       |
| 223 | 59.2    | 30.7  | 92.1  |
| 227 | 60.1    | 30.9  | 92.5  |







#95

Naphthalene

Concen: 4.422 ug/l

RT: 15.641 min Scan# 23

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

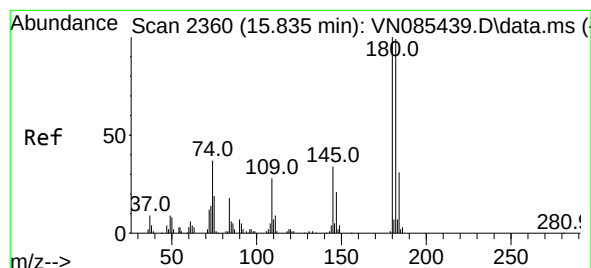
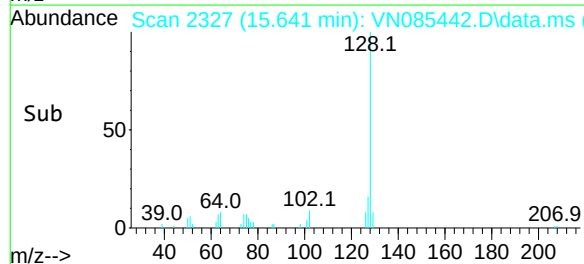
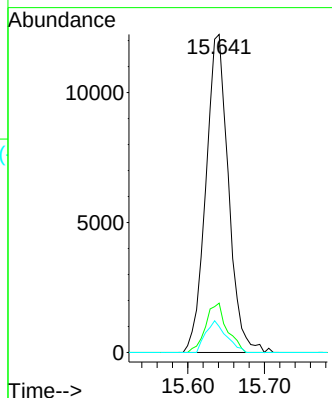
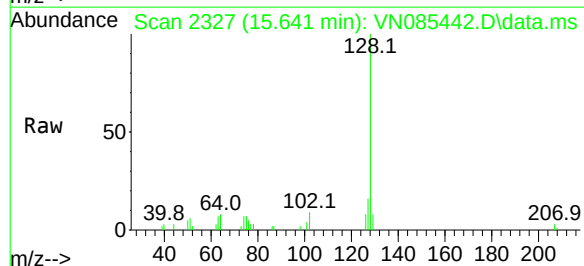
ClientSampleId :

VSTDIC005

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 25047 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 127       | 14.7  | 10.6  | 16.0  |
| 129       | 9.1   | 8.8   | 13.2  |

Manual Integrations  
APPROVED

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



#96

1,2,3-Trichlorobenzene

Concen: 4.549 ug/l

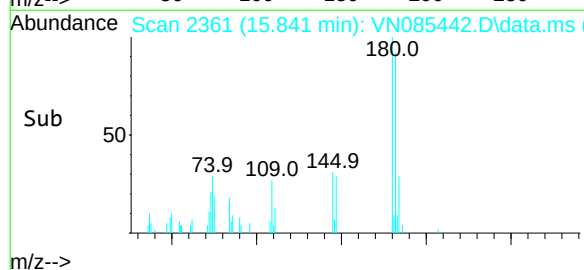
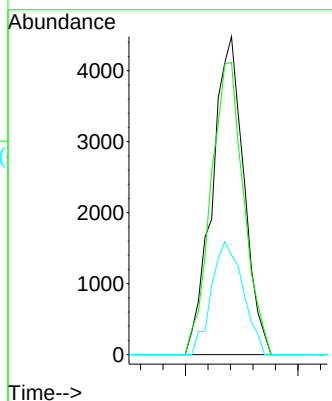
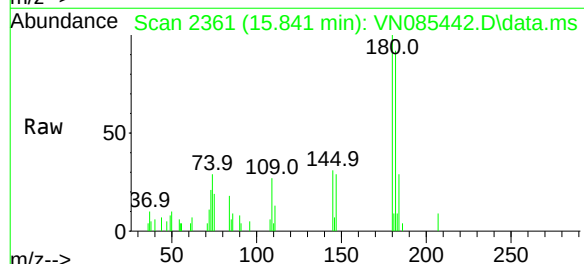
RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 8737  |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 95.6  | 47.4  | 142.2 |
| 145       | 35.5  | 16.9  | 50.7  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085443.D  
 Acq On : 14 Jan 2025 17:19  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Quant Time: Jan 15 01:46:03 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

### Manual Integrations APPROVED

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

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 166880   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 302938   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 256851   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 99539    | 50.000 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 33) 1,2-Dichloroethane-d4 | 0.000  | 65    | 0d       | 0.000    | ug/l |         |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 0.000%# |
| 35) Dibromofluoromethane  | 0.000  | 113   | 0d       | 0.000    | ug/l |         |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 0.000%# |
| 50) Toluene-d8            | 0.000  | 98    | 0d       | 0.000    | ug/l |         |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 0.000%# |
| 62) 4-Bromofluorobenzene  | 0.000  | 95    | 0d       | 0.000    | ug/l |         |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 0.000%# |

#### Target Compounds

|                              |       |     |        |       |        | Qvalue |
|------------------------------|-------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 2382   | 1.054 | ug/l   | 91     |
| 3) Chloromethane             | 2.359 | 50  | 2801   | 1.145 | ug/l   | 93     |
| 4) Vinyl Chloride            | 2.512 | 62  | 2732   | 1.111 | ug/l # | 81     |
| 6) Chloroethane              | 3.124 | 64  | 1809   | 1.160 | ug/l   | 94     |
| 7) Trichlorofluoromethane    | 3.512 | 101 | 3860   | 1.082 | ug/l   | 88     |
| 8) Diethyl Ether             | 3.953 | 74  | 1526   | 1.238 | ug/l   | 81     |
| 9) 1,1,2-Trichlorotrifluo... | 4.359 | 101 | 2156m  | 1.073 | ug/l   |        |
| 12) 1,1-Dichloroethene       | 4.330 | 96  | 1660   | 0.927 | ug/l # | 67     |
| 14) Allyl chloride           | 5.024 | 41  | 3179   | 1.094 | ug/l # | 85     |
| 15) Acrylonitrile            | 5.718 | 53  | 4967   | 5.070 | ug/l # | 70     |
| 16) Acetone                  | 4.436 | 43  | 5102   | 5.862 | ug/l   | 92     |
| 17) Carbon Disulfide         | 4.706 | 76  | 6601   | 1.197 | ug/l # | 87     |
| 18) Methyl Acetate           | 5.030 | 43  | 2908   | 1.099 | ug/l # | 80     |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 5156   | 0.887 | ug/l # | 87     |
| 20) Methylene Chloride       | 5.265 | 84  | 2190   | 1.016 | ug/l # | 87     |
| 21) trans-1,2-Dichloroethene | 5.794 | 96  | 2110   | 1.102 | ug/l # | 66     |
| 22) Diisopropyl ether        | 6.677 | 45  | 5691   | 0.882 | ug/l # | 88     |
| 23) Vinyl Acetate            | 6.606 | 43  | 18526m | 4.090 | ug/l   |        |
| 24) 1,1-Dichloroethane       | 6.583 | 63  | 4020m  | 1.022 | ug/l   |        |
| 25) 2-Butanone               | 7.483 | 43  | 6448m  | 5.034 | ug/l   |        |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 3104   | 0.976 | ug/l   | 92     |
| 27) cis-1,2-Dichloroethene   | 7.477 | 96  | 2185   | 0.969 | ug/l   | 92     |
| 28) Bromochloromethane       | 7.812 | 49  | 2082   | 1.138 | ug/l # | 89     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 3693   | 4.548 | ug/l   | 98     |
| 30) Chloroform               | 7.965 | 83  | 4250   | 1.045 | ug/l # | 80     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 3678   | 1.031 | ug/l # | 56     |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 3084   | 1.046 | ug/l # | 84     |
| 37) Ethyl Acetate            | 7.577 | 43  | 3056m  | 1.026 | ug/l   |        |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 3436   | 1.018 | ug/l   | 90     |
| 39) Methylcyclohexane        | 9.600 | 83  | 2403   | 0.867 | ug/l # | 87     |
| 40) Benzene                  | 8.606 | 78  | 8480   | 0.957 | ug/l   | 91     |
| 41) Methacrylonitrile        | 7.771 | 41  | 1458   | 0.941 | ug/l # | 76     |
| 42) 1,2-Dichloroethane       | 8.665 | 62  | 3131   | 0.938 | ug/l   | 91     |
| 43) Isopropyl Acetate        | 8.682 | 43  | 4803   | 1.007 | ug/l # | 87     |
| 44) Trichloroethene          | 9.347 | 130 | 2133   | 1.034 | ug/l   | 71     |
| 45) 1,2-Dichloropropane      | 9.618 | 63  | 2246   | 0.992 | ug/l   | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085443.D  
 Acq On : 14 Jan 2025 17:19  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Manual Integrations  
 APPROVED

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

Quant Time: Jan 15 01:46:03 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) Dibromomethane            | 9.706  | 93   | 1769     | 1.083  | ug/l   | 92       |
| 47) Bromodichloromethane      | 9.882  | 83   | 2935     | 0.882  | ug/l   | 90       |
| 48) Methyl methacrylate       | 9.677  | 41   | 1886     | 0.878  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 673      | 18.616 | ug/l # | 47       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 11523    | 4.163  | ug/l   | 93       |
| 52) Toluene                   | 10.618 | 92   | 4180     | 0.814  | ug/l   | 93       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 2522     | 0.802  | ug/l   | 92       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 2725     | 0.811  | ug/l # | 83       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 1901     | 0.935  | ug/l   | 91       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 1923     | 2.471  | ug/l # | 88       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 3113     | 0.881  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 4929     | 3.822  | ug/l   | 91       |
| 59) 2-Hexanone                | 11.194 | 43   | 7905     | 4.058  | ug/l   | 87       |
| 60) Dibromochloromethane      | 11.359 | 129  | 2339     | 0.953  | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 2022     | 1.000  | ug/l   | 90       |
| 64) Tetrachloroethene         | 11.106 | 164  | 1658     | 0.947  | ug/l # | 83       |
| 65) Chlorobenzene             | 11.888 | 112  | 5401     | 0.960  | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 2185     | 1.058  | ug/l # | 64       |
| 67) Ethyl Benzene             | 11.959 | 91   | 7347     | 0.802  | ug/l   | 94       |
| 68) m/p-Xylenes               | 12.070 | 106  | 5059     | 1.494  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 2478     | 0.766  | ug/l   | 97       |
| 70) Styrene                   | 12.406 | 104  | 3812     | 0.712  | ug/l   | 99       |
| 71) Bromoform                 | 12.582 | 173  | 1208     | 0.818  | ug/l # | 88       |
| 73) Isopropylbenzene          | 12.688 | 105  | 5506     | 0.820  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.494 | 43   | 2716     | 0.899  | ug/l # | 87       |
| 75) 1,1,1,2-Tetrachloroethane | 12.935 | 83   | 2616     | 1.102  | ug/l # | 96       |
| 76) 1,2,3-Trichloropropane    | 12.982 | 75   | 2198m    | 1.088  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 1733     | 0.987  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.029 | 91   | 6424     | 0.808  | ug/l   | 93       |
| 79) 2-Chlorotoluene           | 13.117 | 91   | 4483     | 0.871  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene    | 13.165 | 105  | 4301     | 0.775  | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.223 | 91   | 4268     | 0.833  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 3753     | 0.805  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 3758     | 0.679  | ug/l   | 93       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 4614     | 0.714  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 3538     | 0.716  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.723 | 146  | 3038     | 0.940  | ug/l   | 95       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 3517m    | 1.050  | ug/l   |          |
| 89) n-Butylbenzene            | 14.053 | 91   | 3527     | 0.761  | ug/l   | 93       |
| 90) Hexachloroethane          | 14.341 | 117  | 1355     | 1.102  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 3515     | 1.090  | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75   | 402      | 0.928  | ug/l   | 74       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 1310     | 0.874  | ug/l # | 80       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 822      | 1.033  | ug/l   | 89       |
| 95) Naphthalene               | 15.641 | 128  | 4210     | 0.941  | ug/l # | 90       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 1494     | 0.985  | ug/l # | 86       |

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

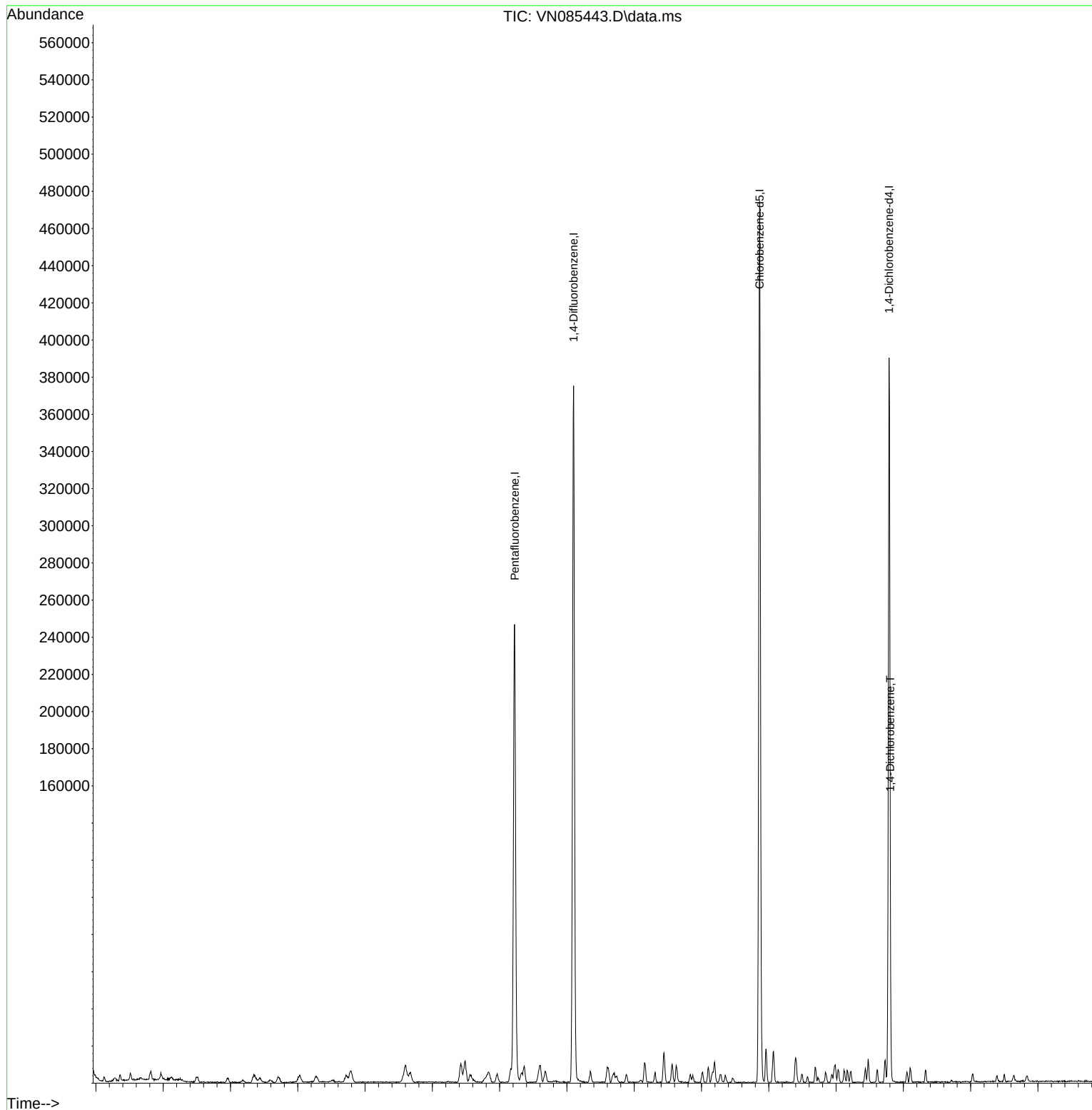
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Data File : VN085443.D  
Acq On : 14 Jan 2025 17:19  
Operator : JC\MD  
Sample : VSTDIC001  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

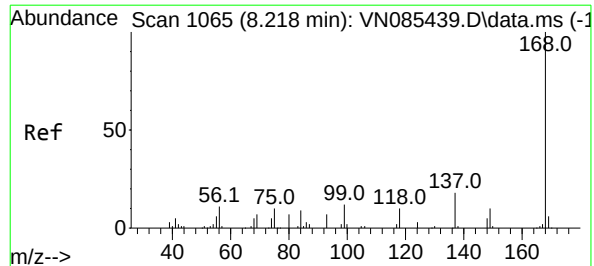
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 01:46:03 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





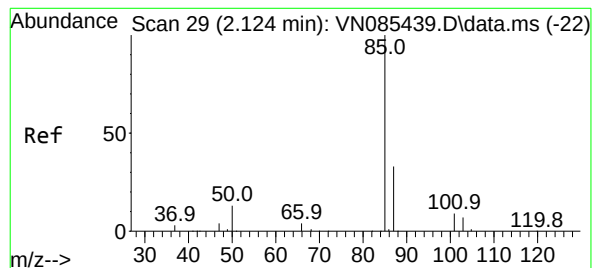
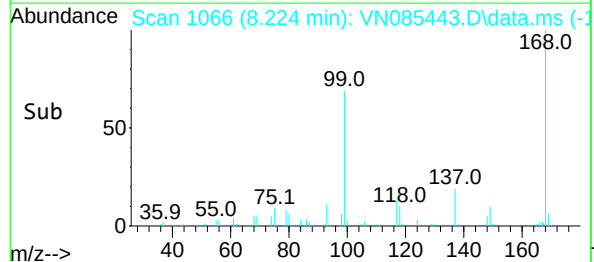
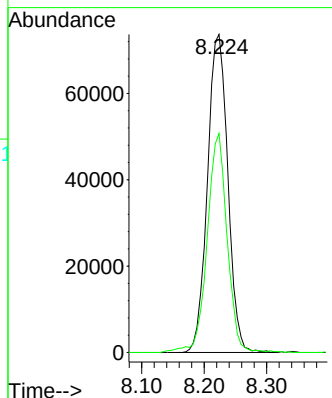
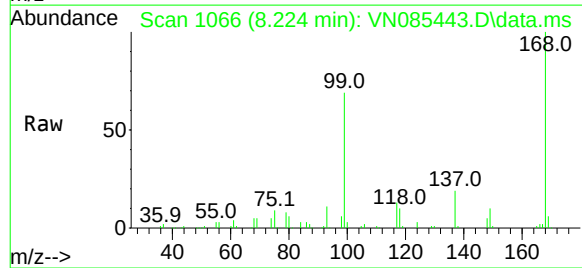
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion:168 Resp: 166880  
Ion Ratio Lower Upper  
168 100  
99 68.6 53.6 80.4

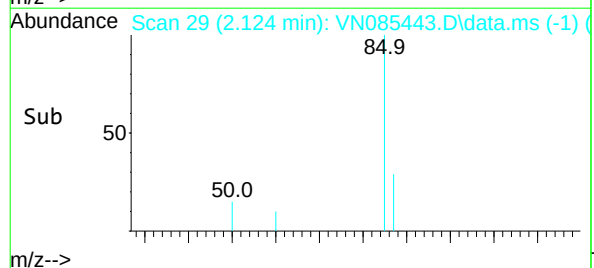
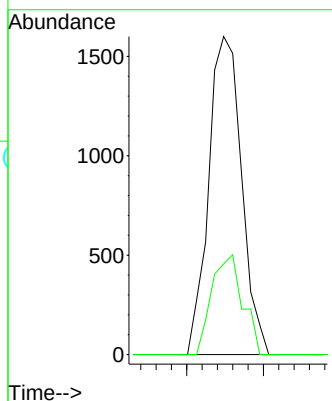
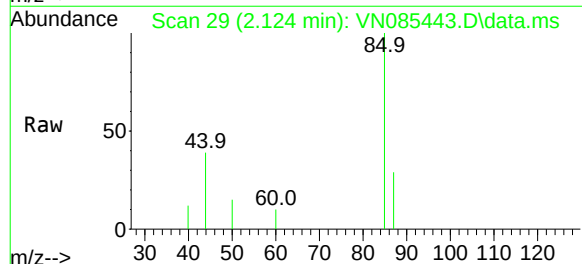
Manual Integrations  
APPROVED

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

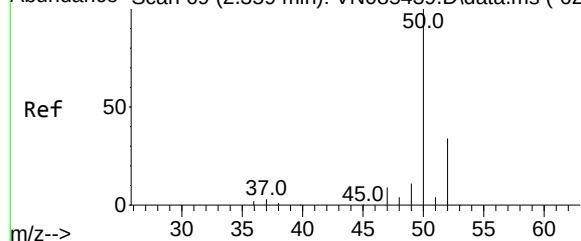


#2  
Dichlorodifluoromethane  
Concen: 1.054 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 85 Resp: 2382  
Ion Ratio Lower Upper  
85 100  
87 28.5 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 1.145 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

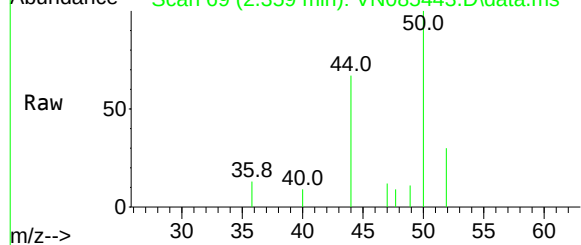
Instrument :

MSVOA\_N

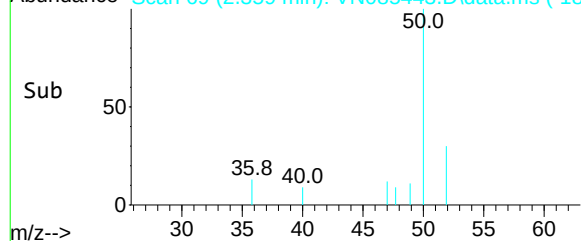
ClientSampleId :

VSTDIC001

Abundance Scan 69 (2.359 min): VN085443.D\data.ms



Abundance Scan 69 (2.359 min): VN085443.D\data.ms (-18)



Tgt Ion: 50 Resp: 2801

Ion Ratio Lower Upper

50 100

52 29.7 27.0 40.6

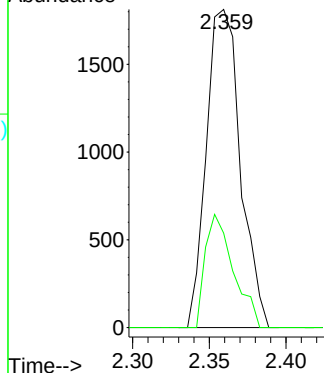
Manual Integrations

APPROVED

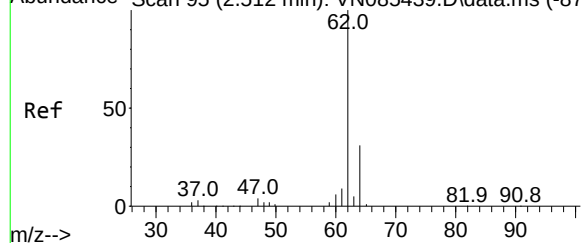
Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 1.111 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

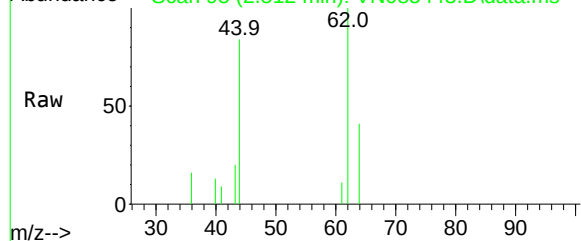
Tgt Ion: 62 Resp: 2732

Ion Ratio Lower Upper

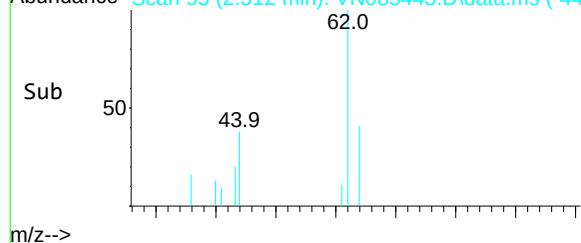
62 100

64 41.4 24.8 37.2

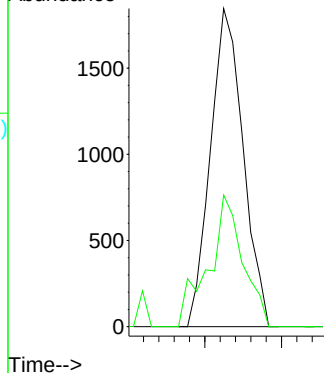
Abundance Scan 95 (2.512 min): VN085443.D\data.ms

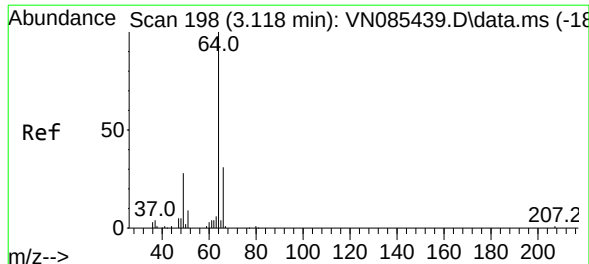


Abundance Scan 95 (2.512 min): VN085443.D\data.ms (-44)



Abundance





#6

Chloroethane

Concen: 1.160 ug/l

RT: 3.124 min Scan# 19

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 64 Resp: 1809

Ion Ratio Lower Upper

64 100

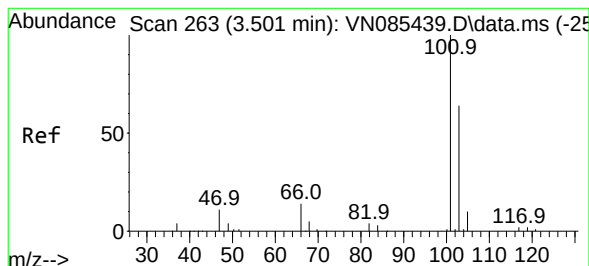
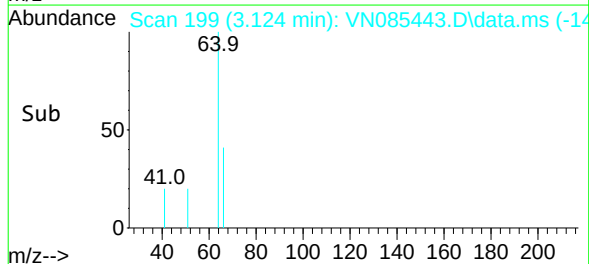
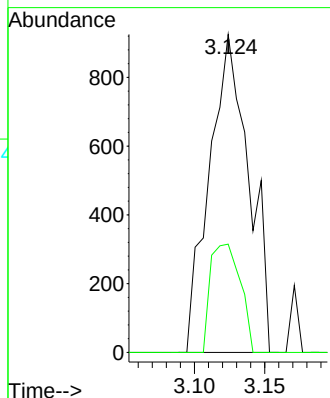
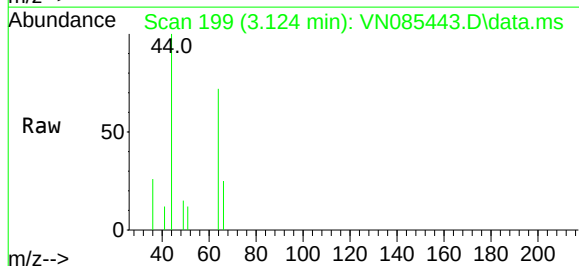
66 34.1 24.6 36.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#7

Trichlorofluoromethane

Concen: 1.082 ug/l

RT: 3.512 min Scan# 265

Delta R.T. 0.012 min

Lab File: VN085443.D

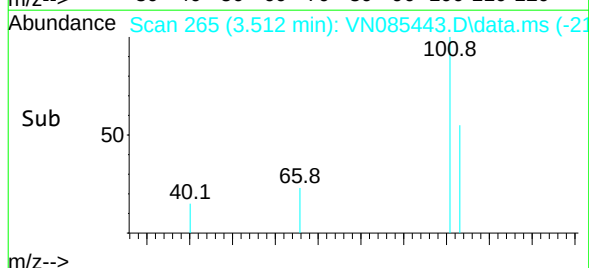
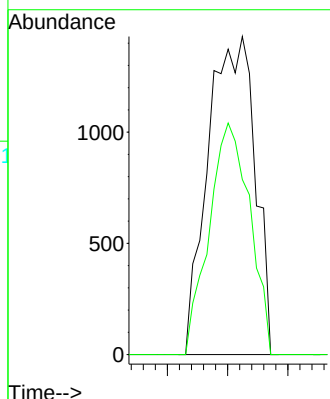
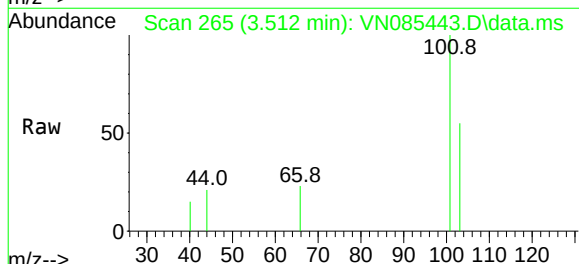
Acq: 14 Jan 2025 17:19

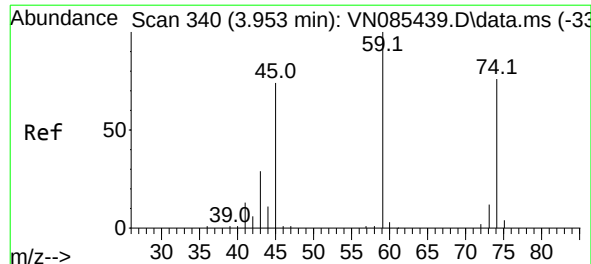
Tgt Ion:101 Resp: 3860

Ion Ratio Lower Upper

101 100

103 55.0 51.4 77.2





#8

Diethyl Ether

Concen: 1.238 ug/l

RT: 3.953 min Scan# 340

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 74 Resp: 1526

Ion Ratio Lower Upper

74 100

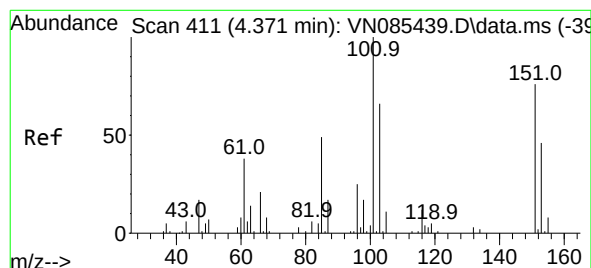
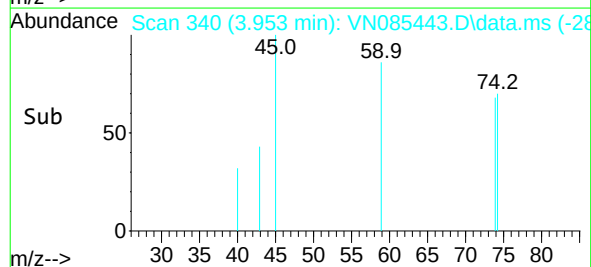
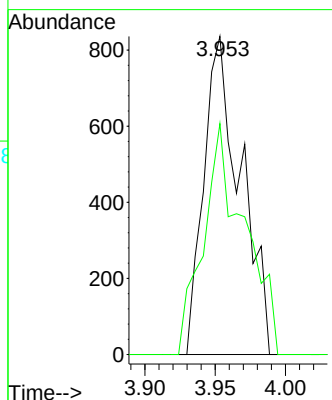
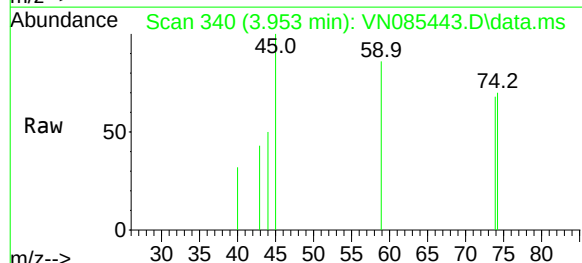
45 80.9 49.7 149.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#9

1,1,2-Trichlorotrifluoroethane

Concen: 1.073 ug/l m

RT: 4.359 min Scan# 409

Delta R.T. -0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

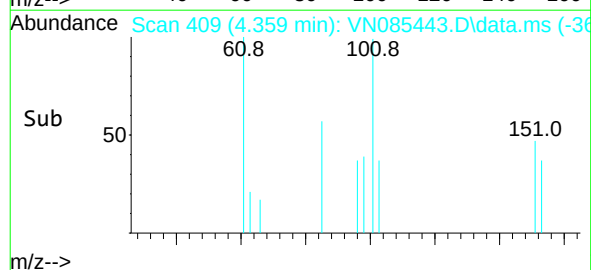
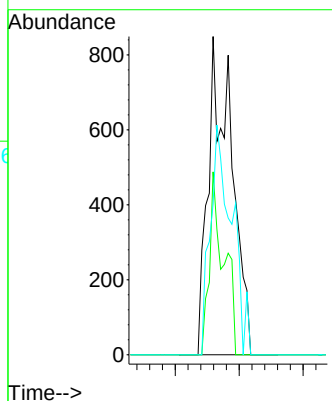
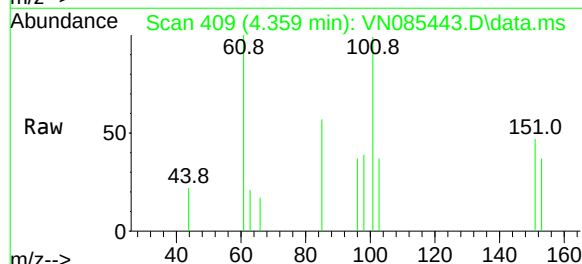
Tgt Ion:101 Resp: 2156

Ion Ratio Lower Upper

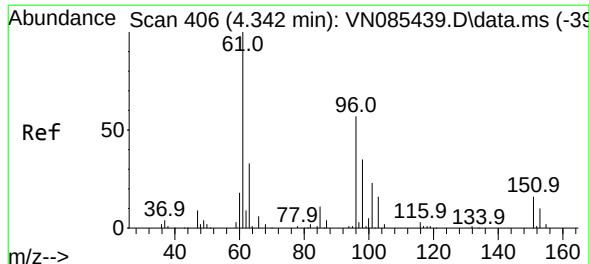
101 100

85 35.3 37.8 56.8#

151 66.4 58.8 88.2







#12

1,1-Dichloroethene

Concen: 0.927 ug/l

RT: 4.330 min Scan# 406

Delta R.T. -0.012 min

Lab File: VN085443.D

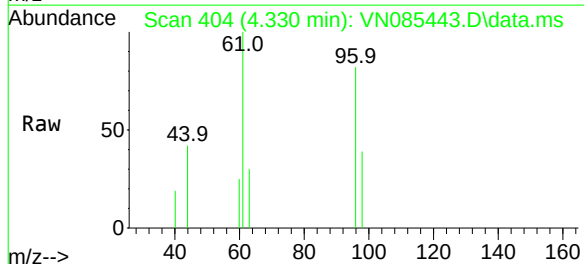
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

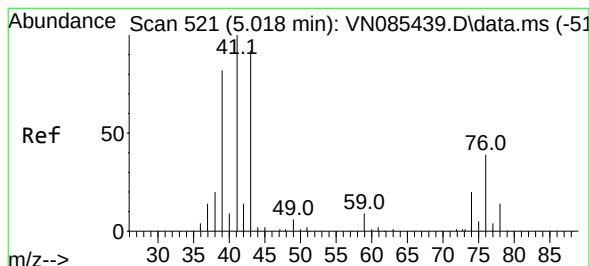
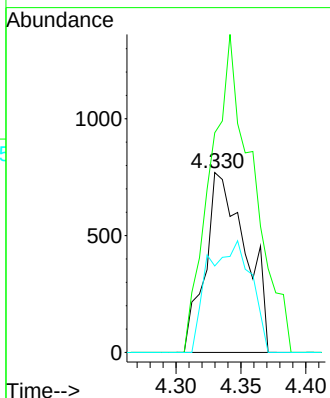
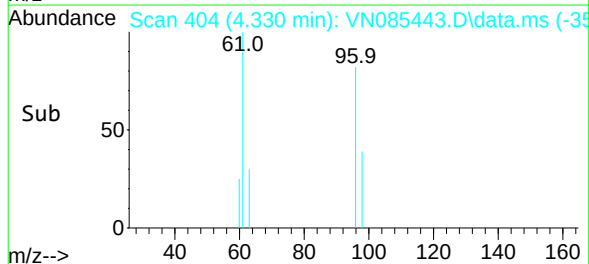
VSTDIC001



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 1660   |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 122.1 | 141.0 | 211.4# |
| 98       | 48.1  | 49.0  | 73.6#  |

Manual Integrations  
APPROVED

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



#14

Allyl chloride

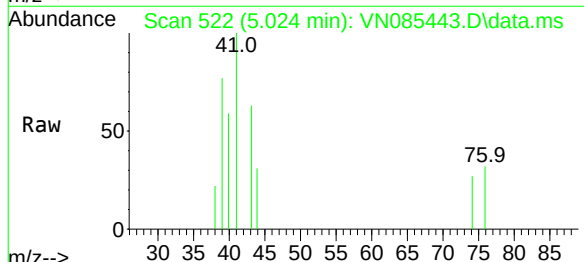
Concen: 1.094 ug/l

RT: 5.024 min Scan# 522

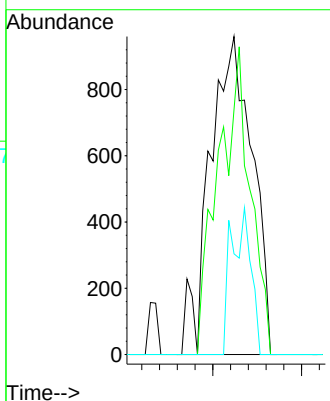
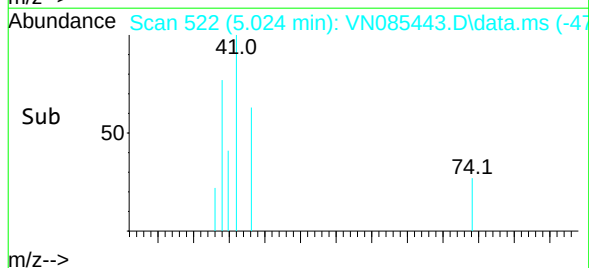
Delta R.T. 0.006 min

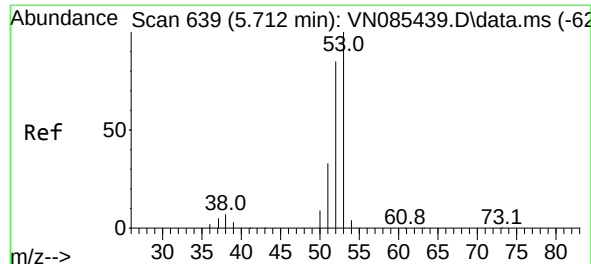
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 3179  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 73.1  | 64.4  | 96.6  |
| 76       | 21.4  | 30.5  | 45.7# |





#15

Acrylonitrile

Concen: 5.070 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

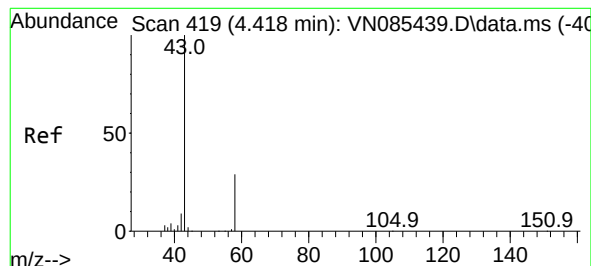
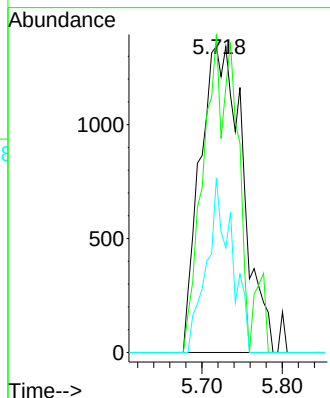
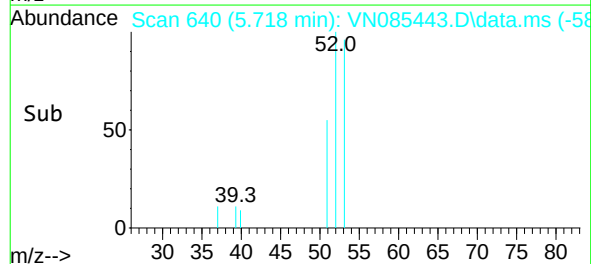
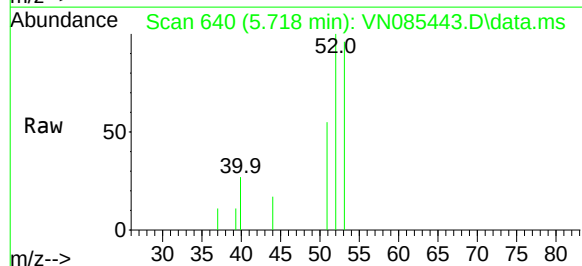
ClientSampleId :

VSTDIC001

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 4967  |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 45.1  | 65.5  | 98.3  |
| 51       | 33.3  | 29.8  | 44.8  |

Manual Integrations  
APPROVED

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



#16

Acetone

Concen: 5.862 ug/l

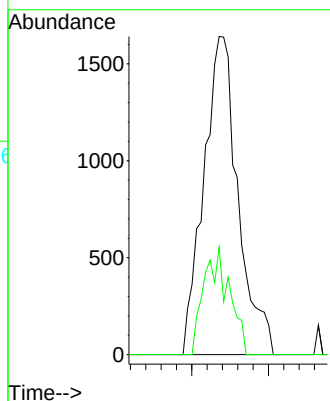
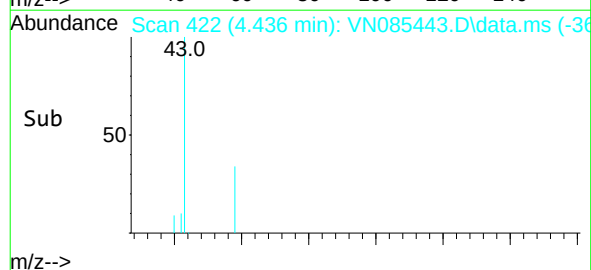
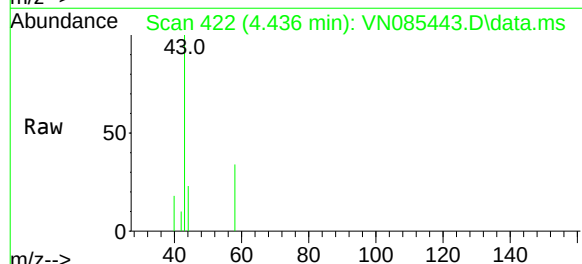
RT: 4.436 min Scan# 422

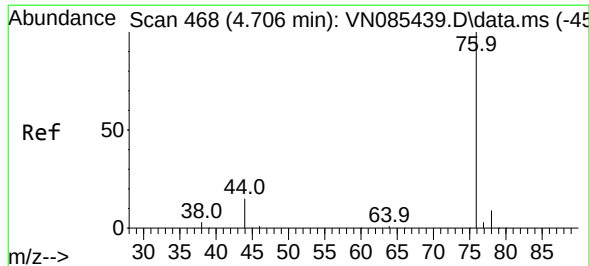
Delta R.T. 0.018 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 5102  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 33.8  | 23.8  | 35.6  |





#17

Carbon Disulfide

Concen: 1.197 ug/l

RT: 4.706 min Scan# 468

Delta R.T. -0.000 min

Lab File: VN085443.D

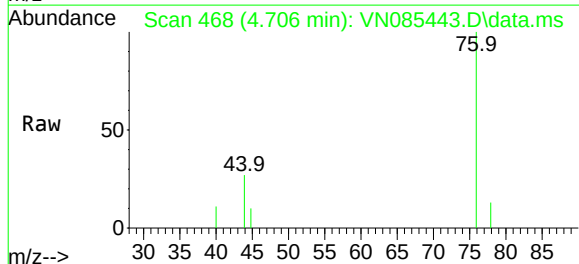
Acq: 14 Jan 2025 17:19

Instrument :

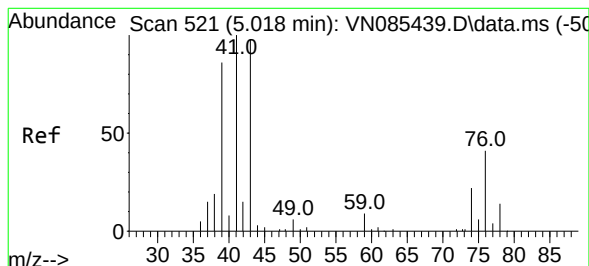
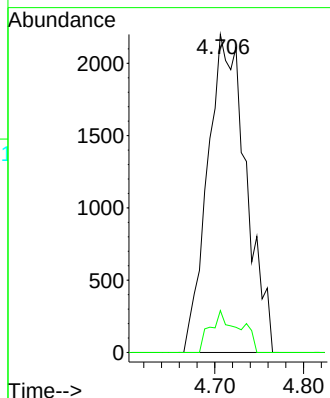
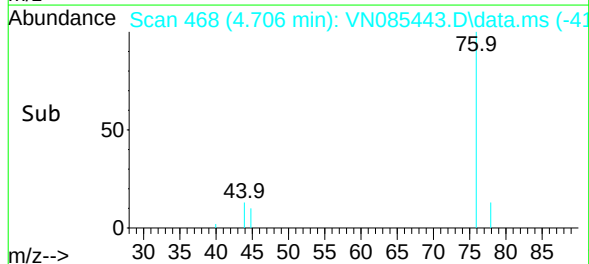
MSVOA\_N

ClientSampleId :

VSTDIC001



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 76      | 100   |       |       |
| 78      | 13.2  | 6.9   | 10.3  |

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

#18

Methyl Acetate

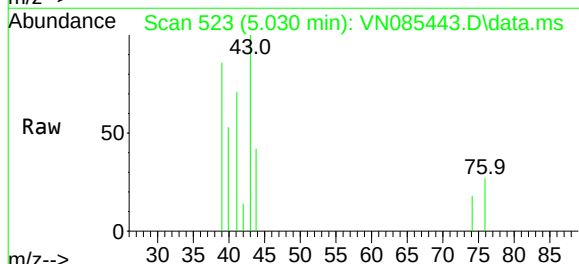
Concen: 1.099 ug/l

RT: 5.030 min Scan# 523

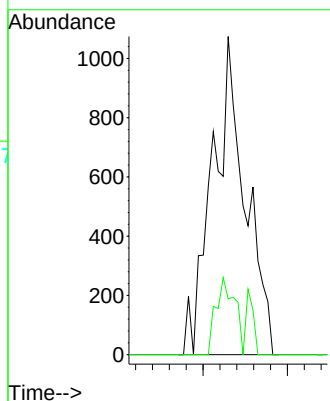
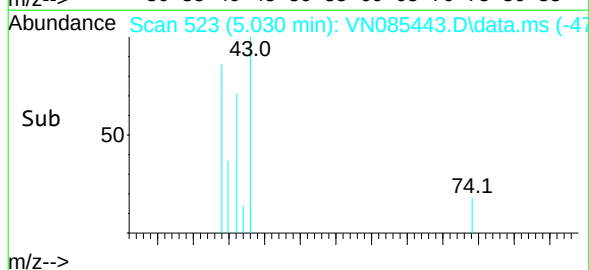
Delta R.T. 0.012 min

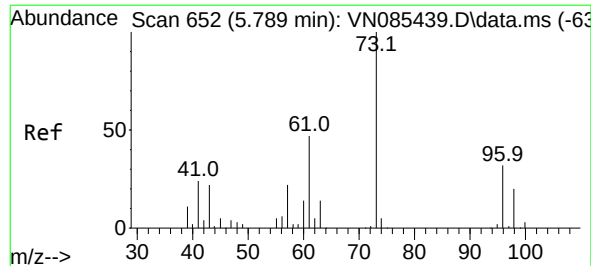
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 74      | 13.8  | 18.6  | 28.0  |





#19

Methyl tert-butyl Ether

Concen: 0.887 ug/l

RT: 5.789 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 73 Resp: 5156

Ion Ratio Lower Upper

73 100

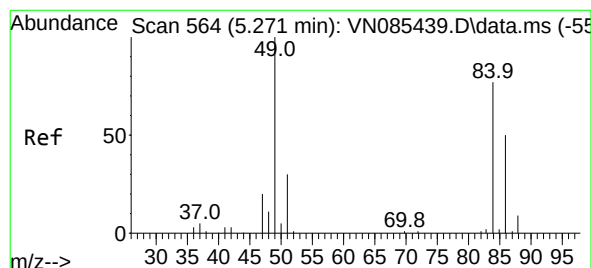
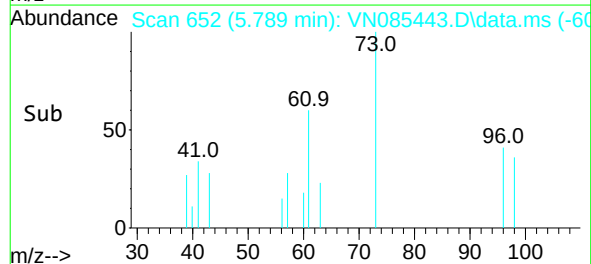
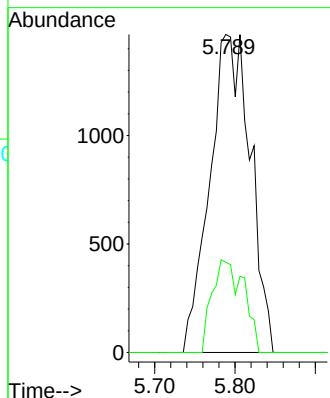
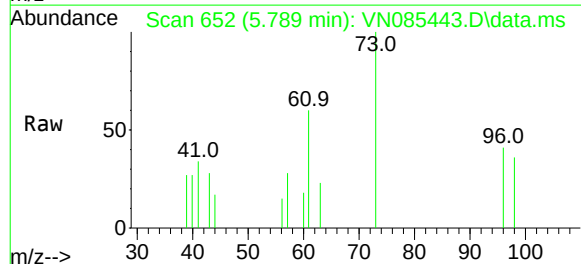
57 28.4 17.8 26.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 1.016 ug/l

RT: 5.265 min Scan# 563

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 84 Resp: 2190

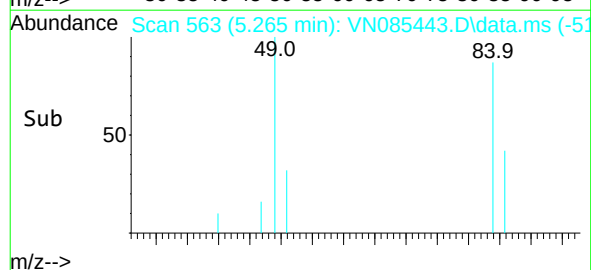
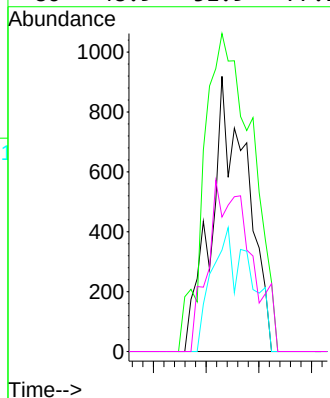
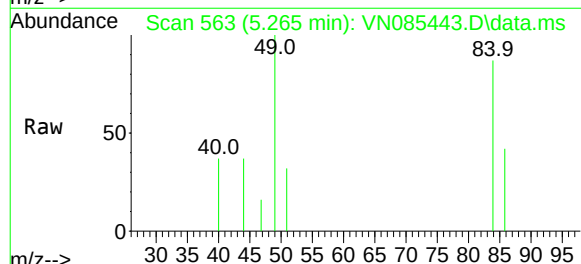
Ion Ratio Lower Upper

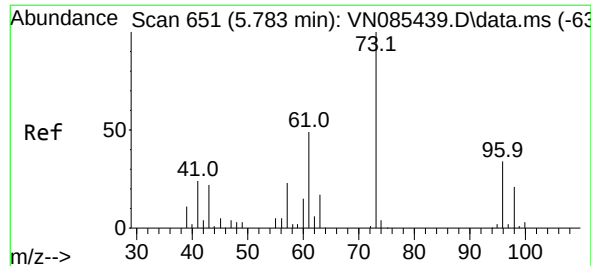
84 100

49 115.6 104.1 156.1

51 36.9 31.0 46.4

86 48.9 51.9 77.9#





#21

trans-1,2-Dichloroethene

Concen: 1.102 ug/l

RT: 5.794 min Scan# 651

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 96 Resp: 2110

Ion Ratio Lower Upper

96 100

61 98.7 115.7 173.5#

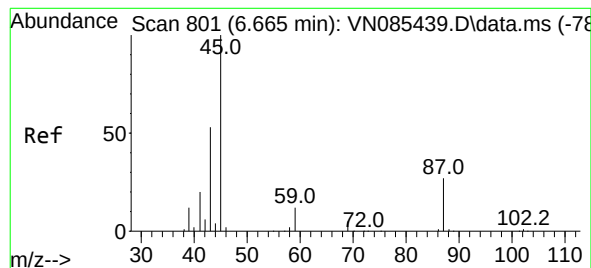
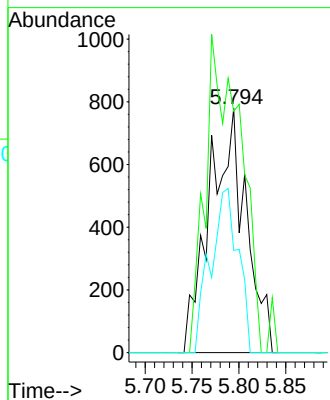
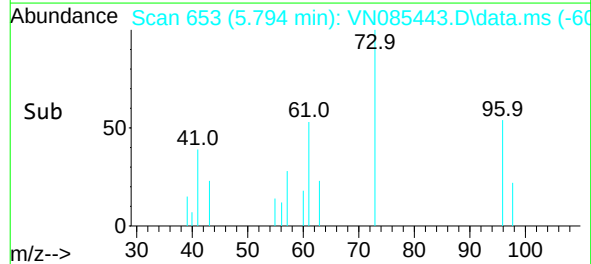
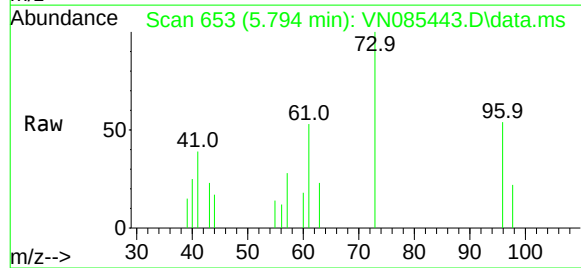
98 41.8 49.8 74.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 0.882 ug/l

RT: 6.677 min Scan# 803

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 45 Resp: 5691

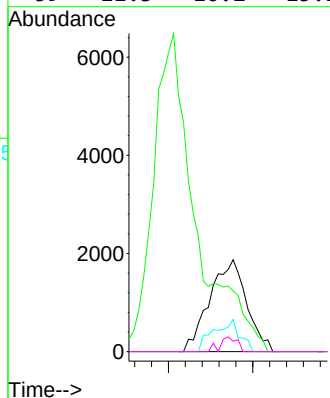
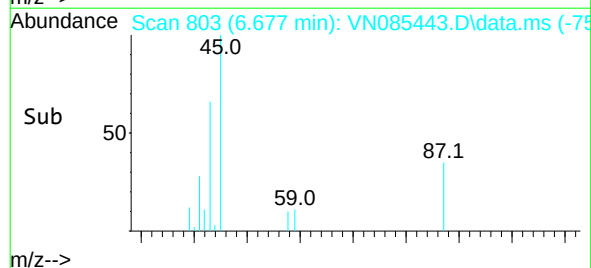
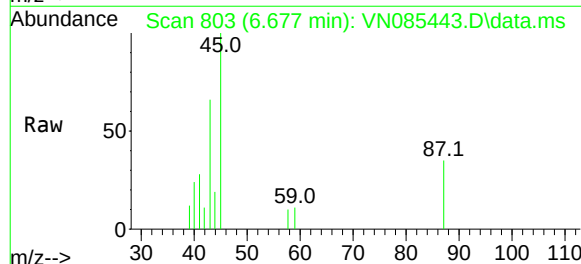
Ion Ratio Lower Upper

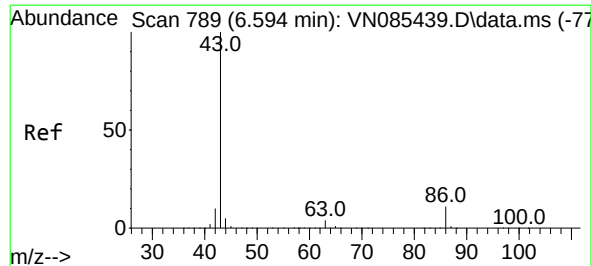
45 100

43 65.9 45.0 67.6

87 35.0 21.8 32.8#

59 11.3 10.2 15.2





#23

Vinyl Acetate

Concen: 4.090 ug/l m

RT: 6.606 min Scan# 791

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 43 Resp: 18526

Ion Ratio Lower Upper

43 100

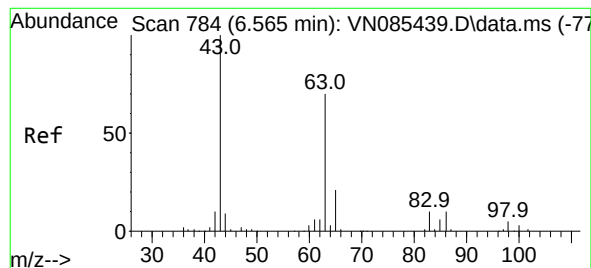
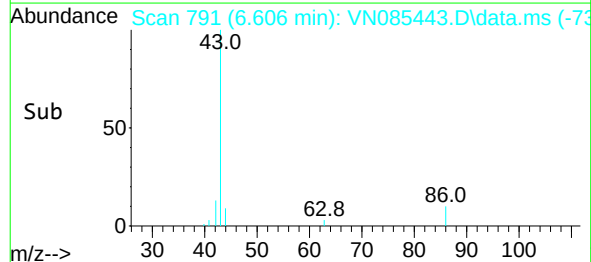
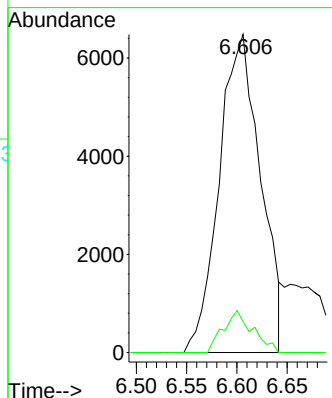
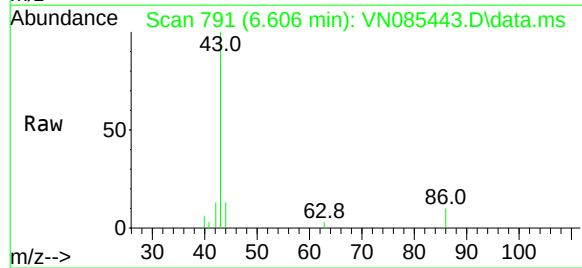
86 9.8 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 1.022 ug/l m

RT: 6.583 min Scan# 787

Delta R.T. 0.018 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

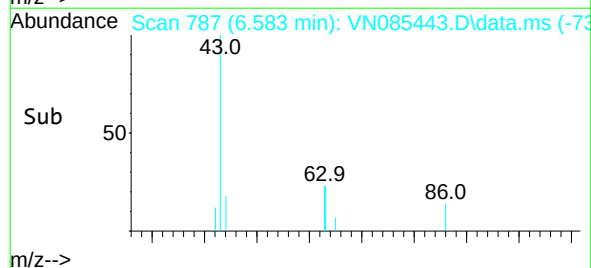
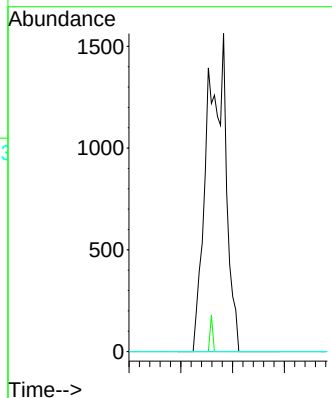
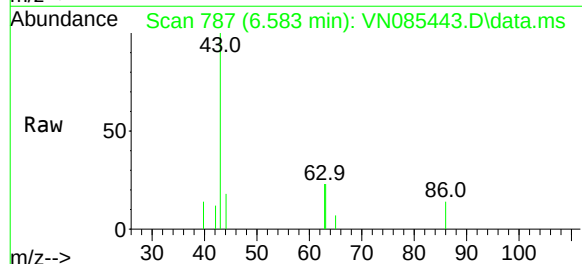
Tgt Ion: 63 Resp: 4020

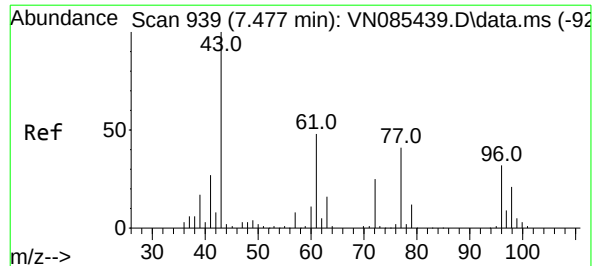
Ion Ratio Lower Upper

63 100

98 0.0 3.3 9.8#

100 0.0 2.0 6.0#





#25

2-Butanone

Concen: 5.034 ug/l m

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 6448

Ion Ratio Lower Upper

43 100

72 18.0 20.2 30.4#

Instrument :

MSVOA\_N

ClientSampleId :

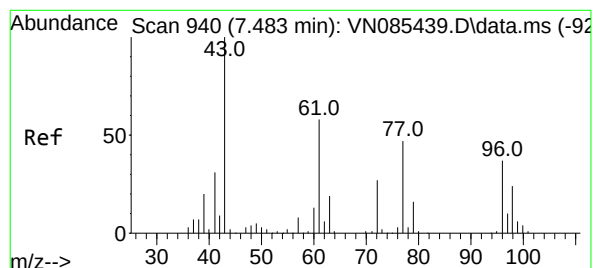
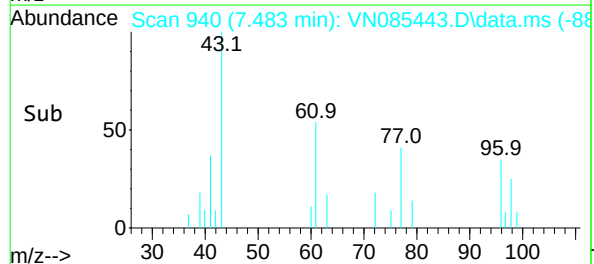
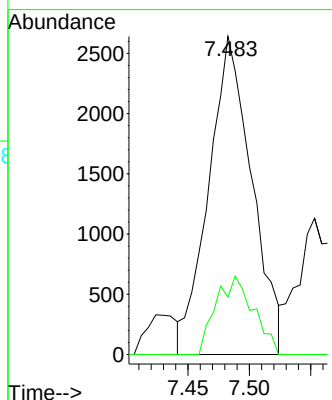
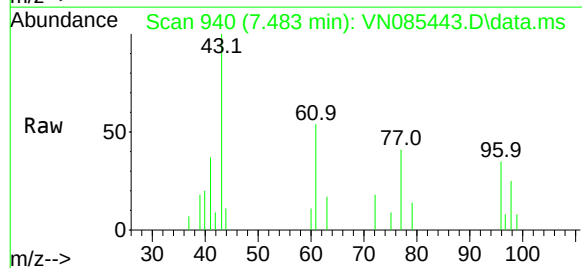
VSTDIC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 0.976 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085443.D

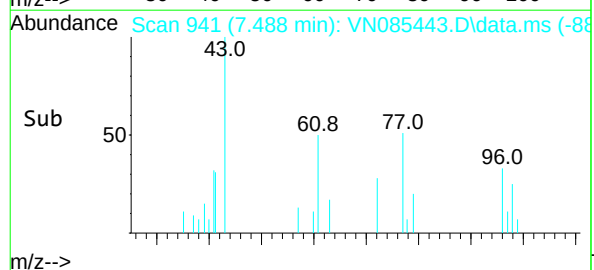
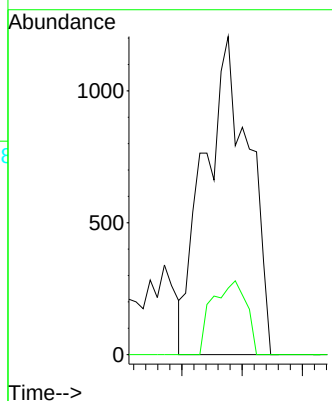
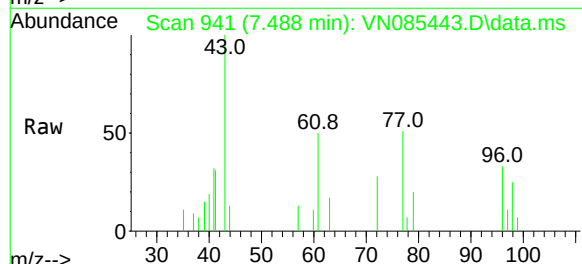
Acq: 14 Jan 2025 17:19

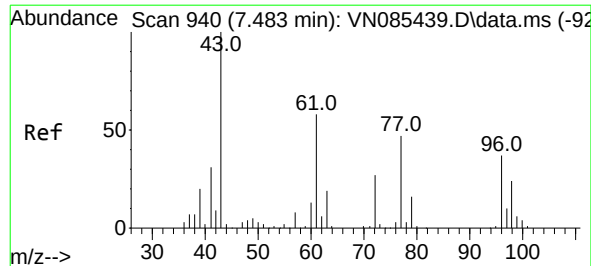
Tgt Ion: 77 Resp: 3104

Ion Ratio Lower Upper

77 100

97 17.7 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 0.969 ug/l

RT: 7.477 min Scan# 93

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 96 Resp: 2185

Ion Ratio Lower Upper

96 100

61 166.1 0.0 311.8

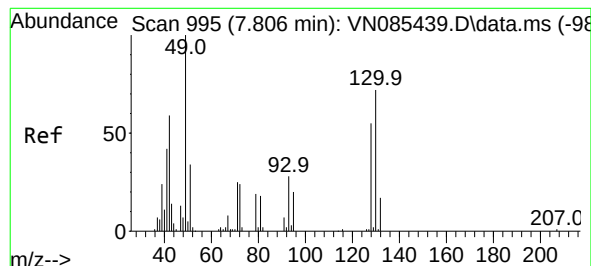
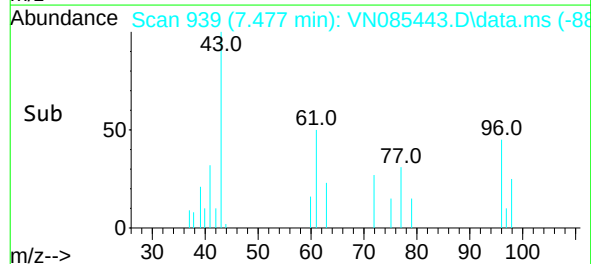
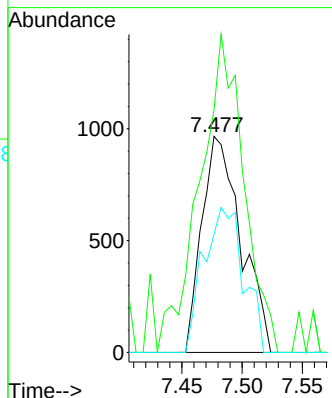
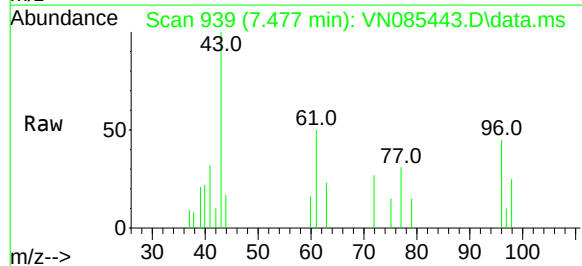
98 68.7 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#28

Bromochloromethane

Concen: 1.138 ug/l

RT: 7.812 min Scan# 996

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

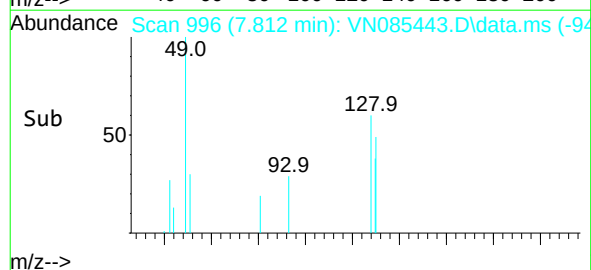
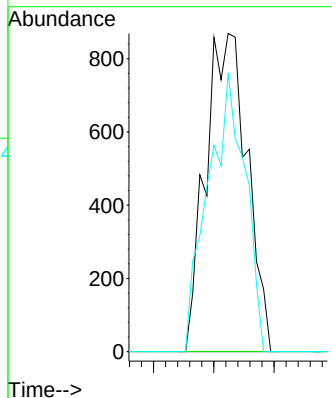
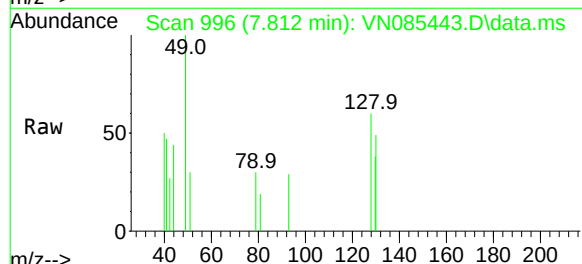
Tgt Ion: 49 Resp: 2082

Ion Ratio Lower Upper

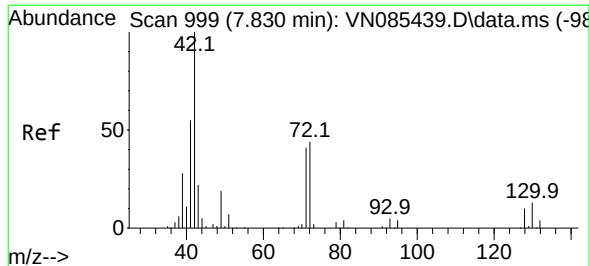
49 100

129 0.0 0.0 4.4

130 78.0 55.0 82.4







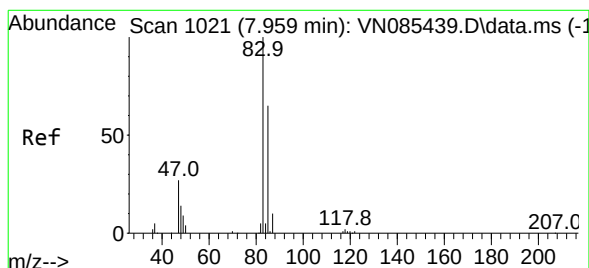
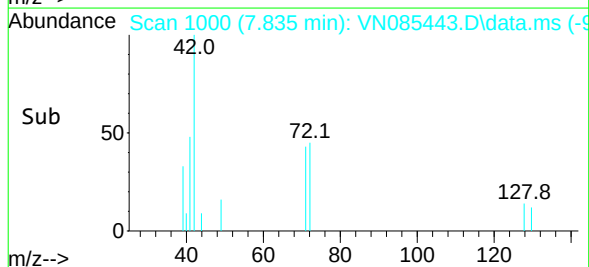
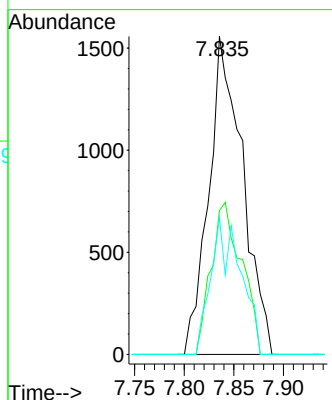
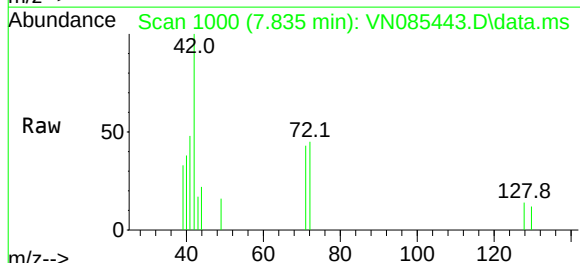
#29  
Tetrahydrofuran  
Concen: 4.548 ug/l  
RT: 7.835 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion: 42 Resp: 3693  
Ion Ratio Lower Upper  
42 100  
72 43.1 34.2 51.2  
71 37.9 32.5 48.7

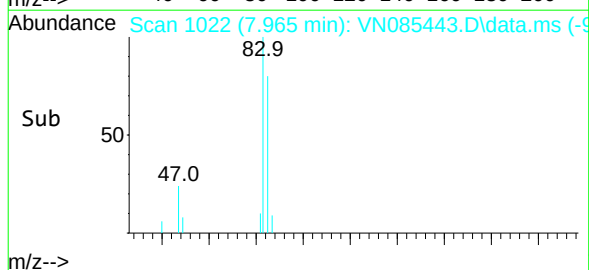
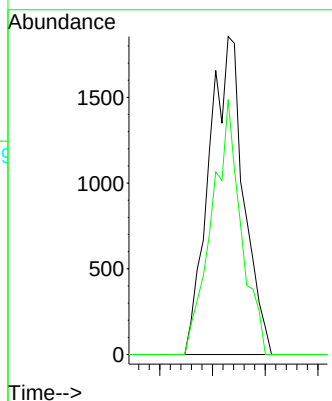
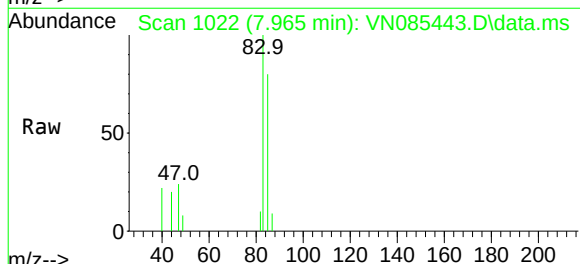
Manual Integrations  
APPROVED

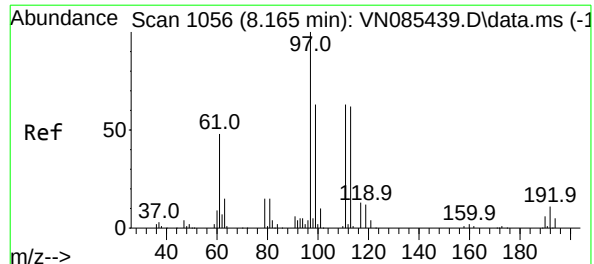
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#30  
Chloroform  
Concen: 1.045 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

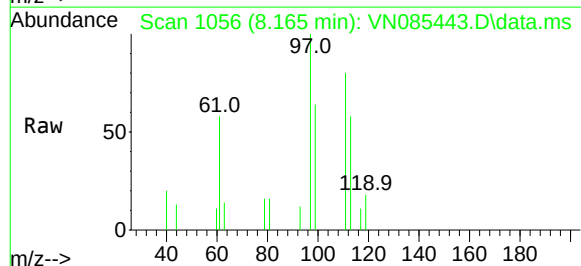
Tgt Ion: 83 Resp: 4250  
Ion Ratio Lower Upper  
83 100  
85 80.2 51.8 77.6#





#32  
1,1,1-Trichloroethane  
Concen: 1.031 ug/l  
RT: 8.165 min Scan# 10  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

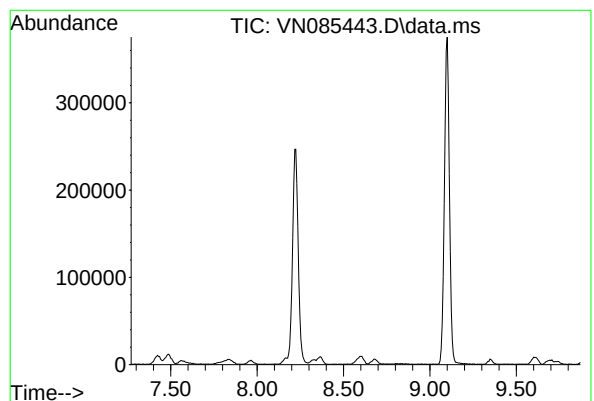
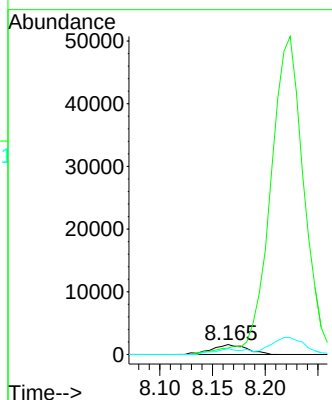
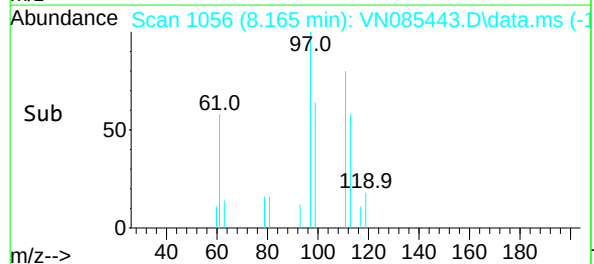
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001



Tgt Ion: 97 Resp: 3678  
Ion Ratio Lower Upper  
97 100  
99 0.0 49.8 74.6#  
61 52.2 41.4 62.2

Manual Integrations  
APPROVED

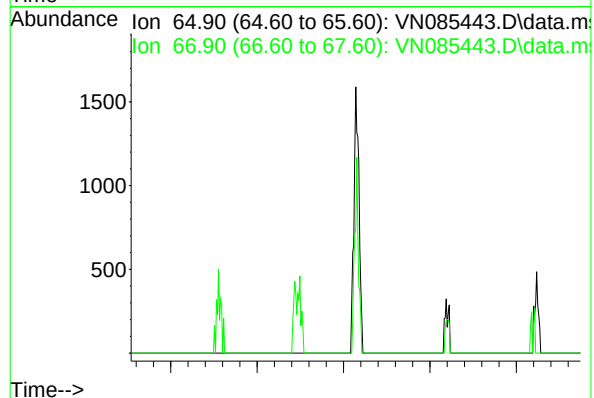
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

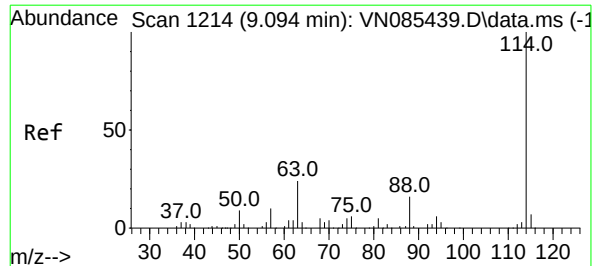


#33  
1,2-Dichloroethane-d4  
Concen: 0.000 ug/l  
Expected RT: 8.57 min

Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 65  
Sig Exp Ratio  
65 100  
67 50.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 12

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion:114 Resp: 302938

Ion Ratio Lower Upper

114 100

63 22.3 0.0 47.6

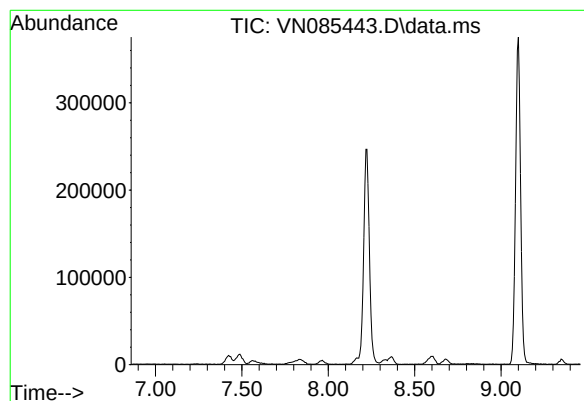
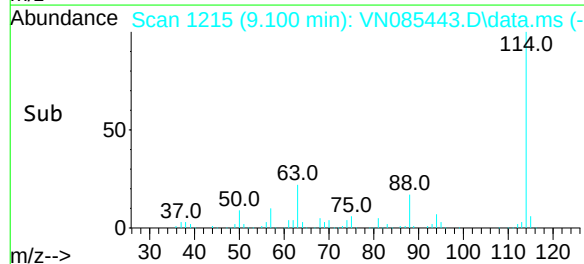
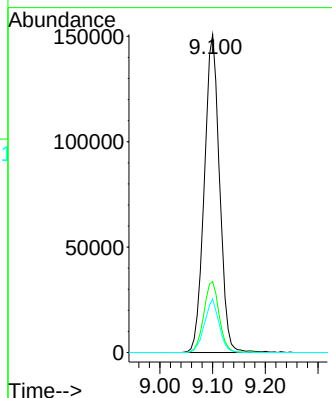
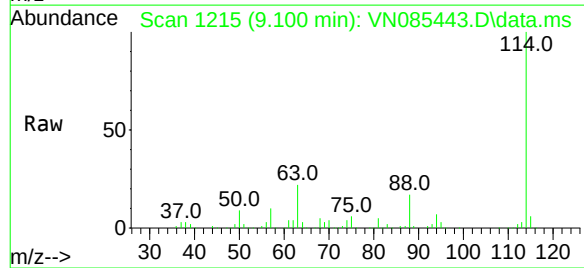
88 16.8 0.0 32.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#35

Dibromofluoromethane

Concen: 0.000 ug/l

Expected RT: 8.16 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

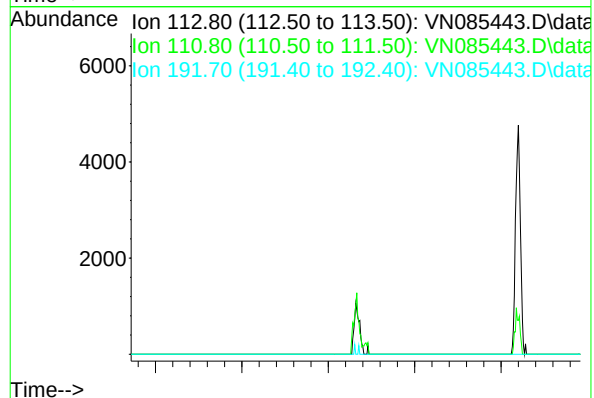
Tgt Ion: 113

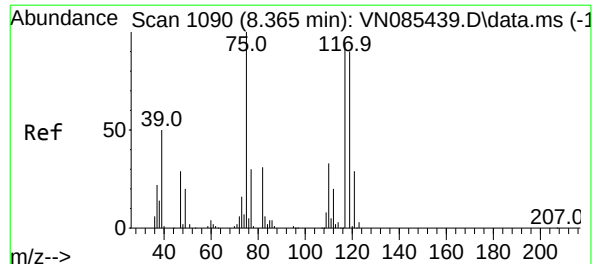
Sig Exp Ratio

113 100

111 103.4

192 17.9





#36

1,1-Dichloropropene

Concen: 1.046 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 75 Resp: 3084

Ion Ratio Lower Upper

75 100

110 30.1 16.5 49.5

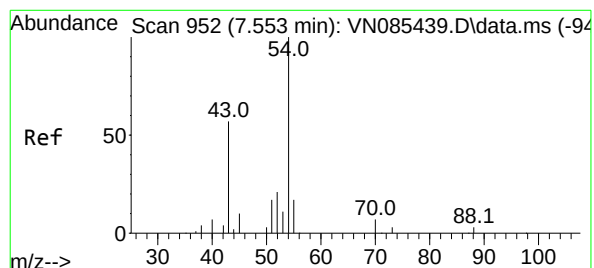
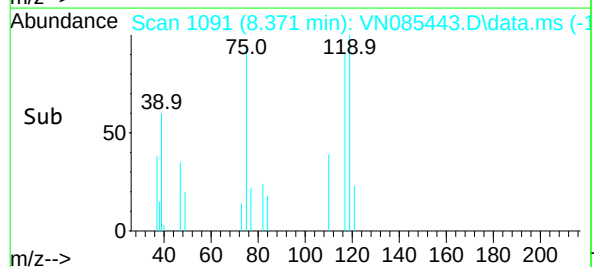
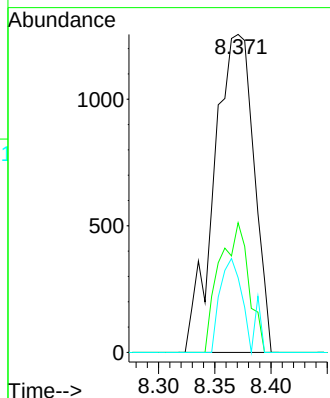
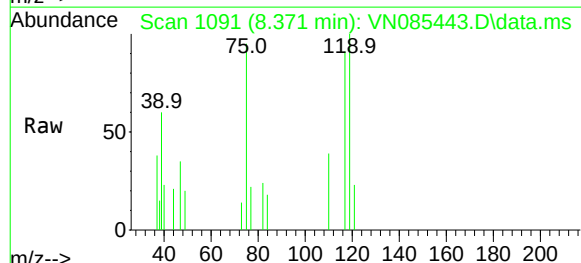
77 15.9 24.4 36.6#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#37

Ethyl Acetate

Concen: 1.026 ug/l m

RT: 7.577 min Scan# 956

Delta R.T. 0.023 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

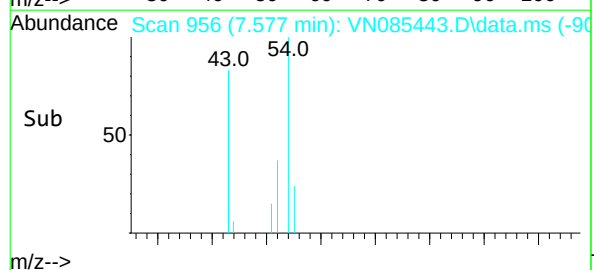
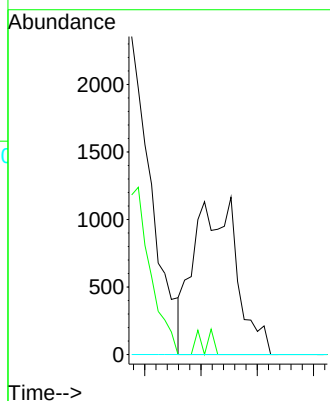
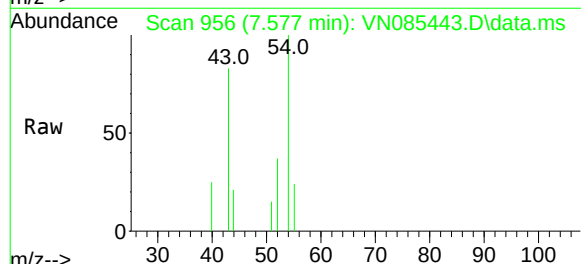
Tgt Ion: 43 Resp: 3056

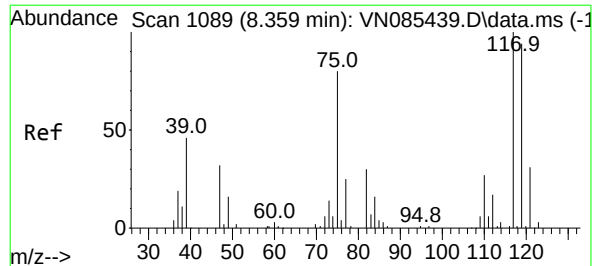
Ion Ratio Lower Upper

43 100

61 4.3 10.9 16.3#

70 0.0 7.5 11.3#





#38

Carbon Tetrachloride

Concen: 1.018 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 117 Resp: 3436

Ion Ratio Lower Upper

117 100

119 106.6 75.4 113.2

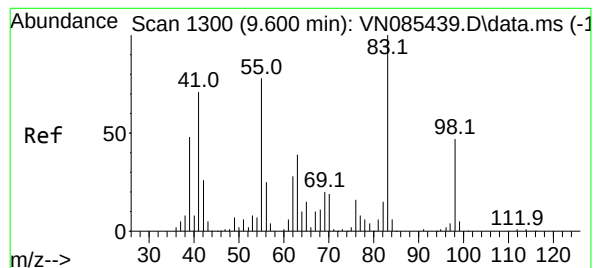
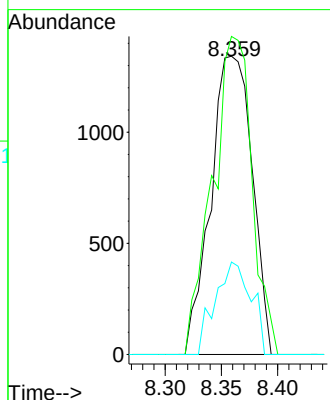
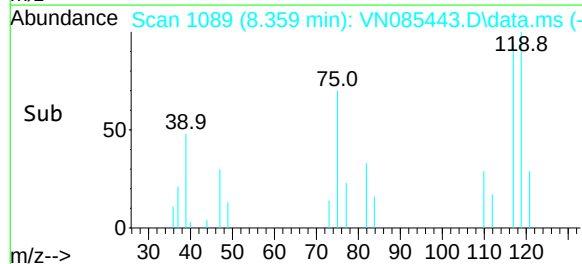
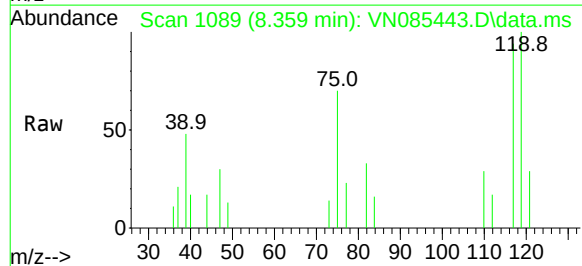
121 31.0 24.6 37.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#39

Methylcyclohexane

Concen: 0.867 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

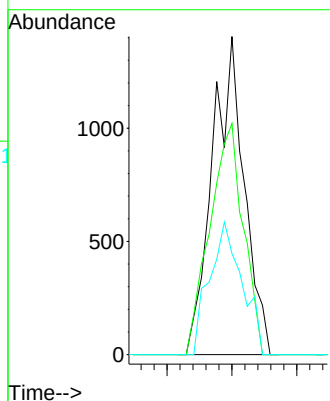
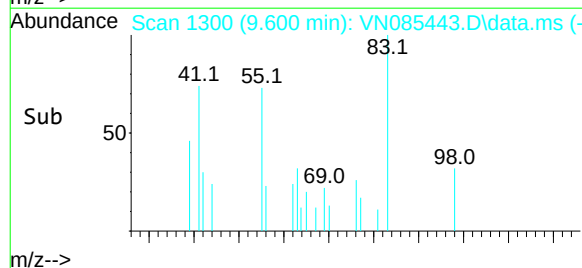
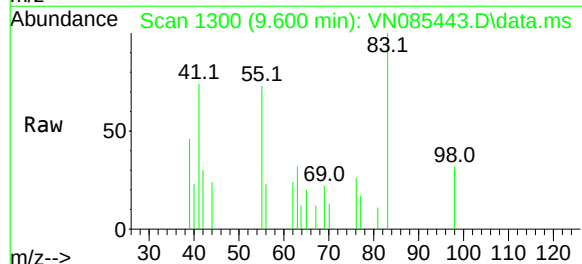
Tgt Ion: 83 Resp: 2403

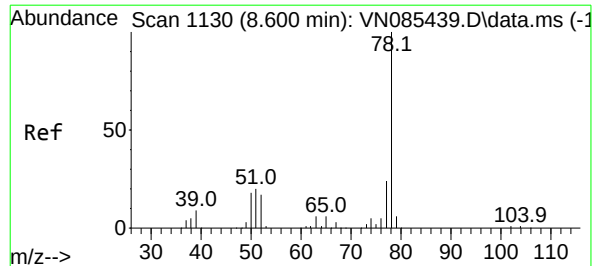
Ion Ratio Lower Upper

83 100

55 72.7 62.6 94.0

98 31.8 37.7 56.5#





#40

Benzene

Concen: 0.957 ug/l

RT: 8.606 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 78 Resp: 8480

Ion Ratio Lower Upper

78 100

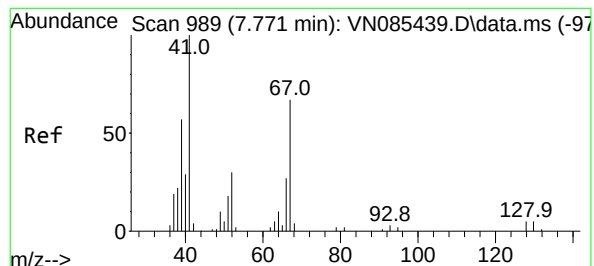
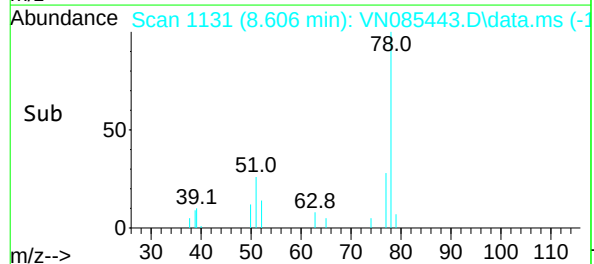
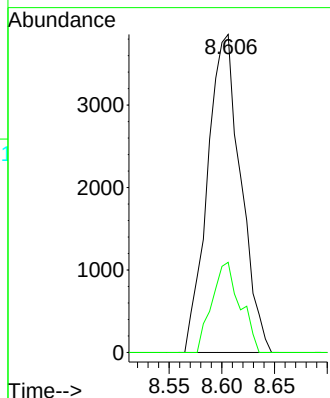
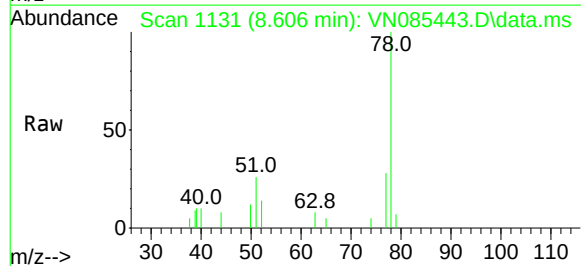
77 28.3 19.0 28.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#41

Methacrylonitrile

Concen: 0.941 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1458

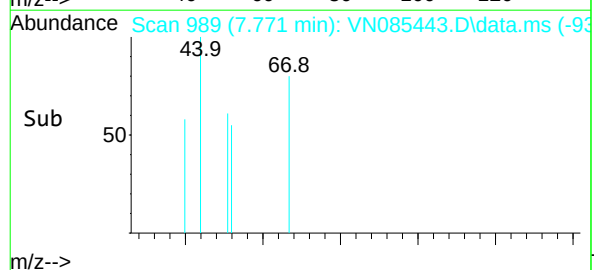
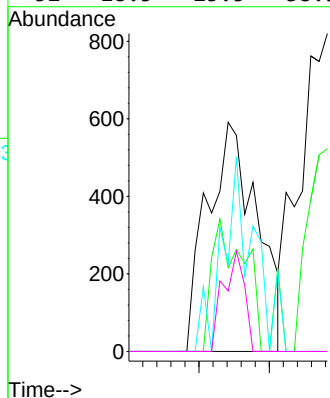
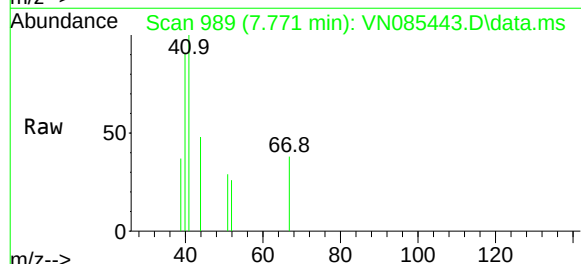
Ion Ratio Lower Upper

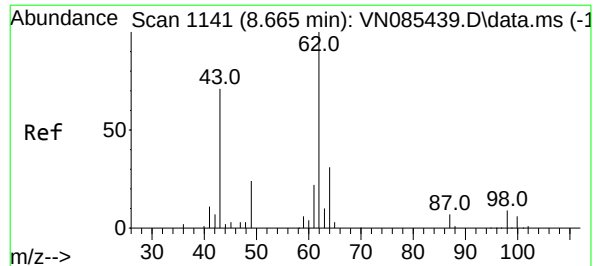
41 100

39 37.6 46.0 69.0#

67 53.8 57.4 86.2#

52 18.5 25.5 38.3#





#42

1,2-Dichloroethane

Concen: 0.938 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 62 Resp: 3131

Ion Ratio Lower Upper

62 100

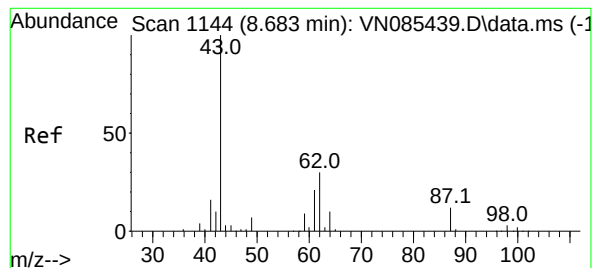
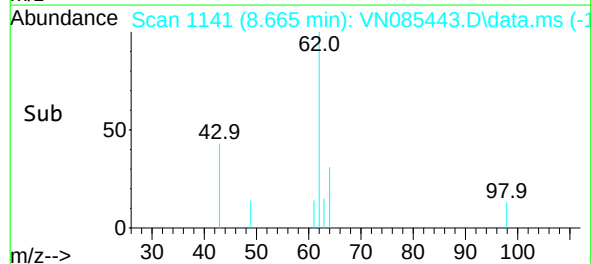
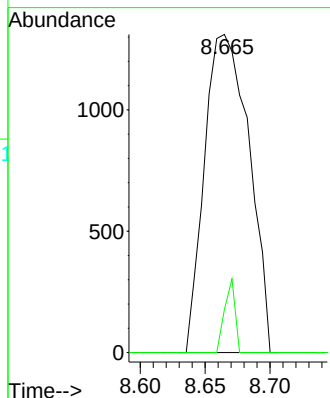
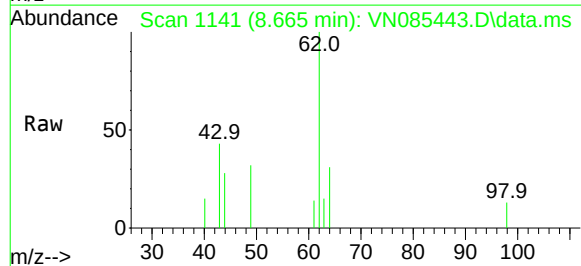
98 5.4 0.0 17.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#43

Isopropyl Acetate

Concen: 1.007 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

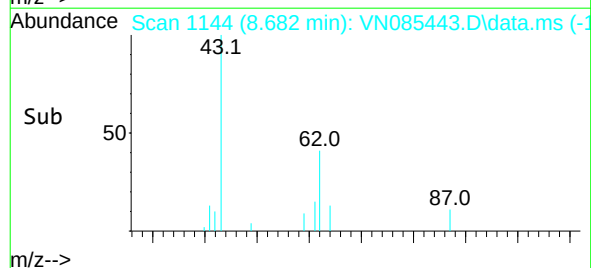
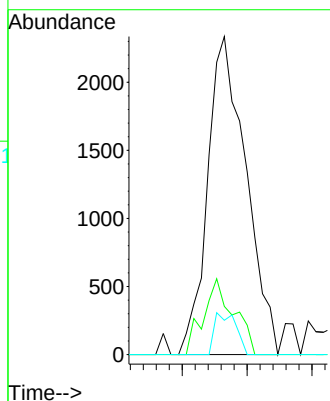
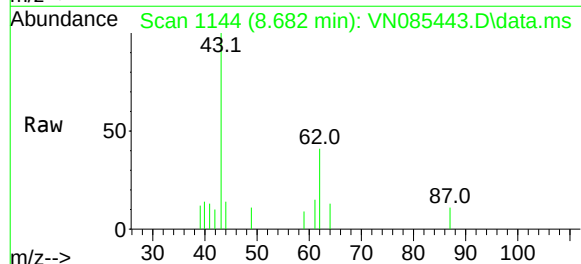
Tgt Ion: 43 Resp: 4803

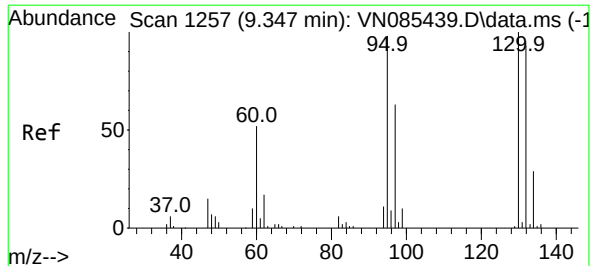
Ion Ratio Lower Upper

43 100

61 18.9 20.7 31.1#

87 7.3 9.8 14.8#





#44

Trichloroethene

Concen: 1.034 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085443.D

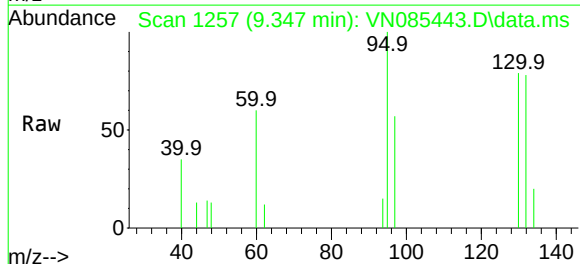
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001



Tgt Ion:130 Resp: 2133

Ion Ratio Lower Upper

130 100

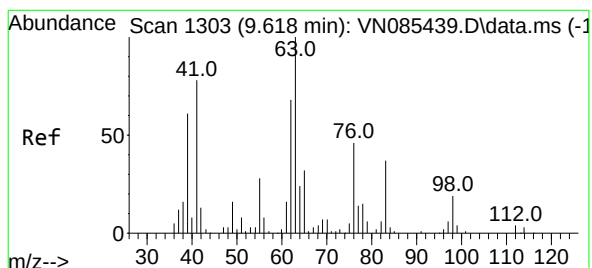
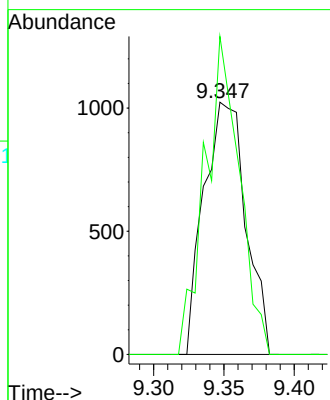
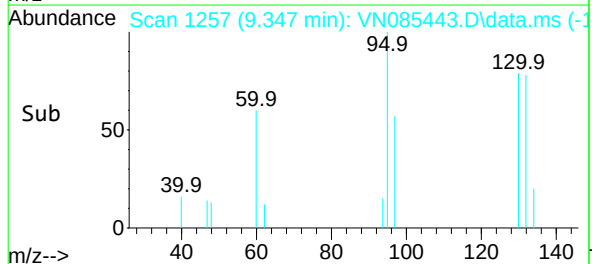
95 126.1 0.0 195.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#45

1,2-Dichloropropane

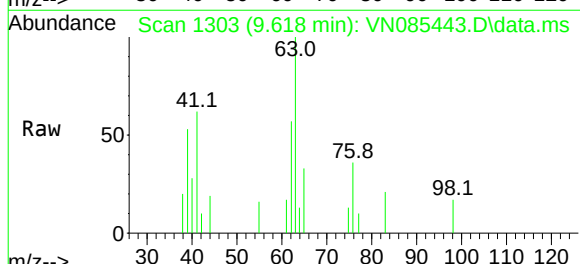
Concen: 0.992 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

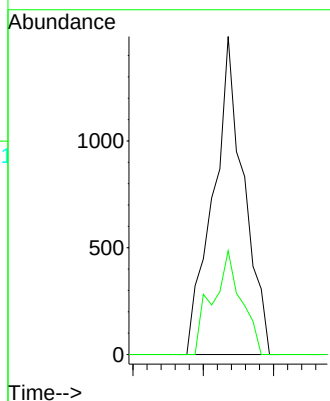
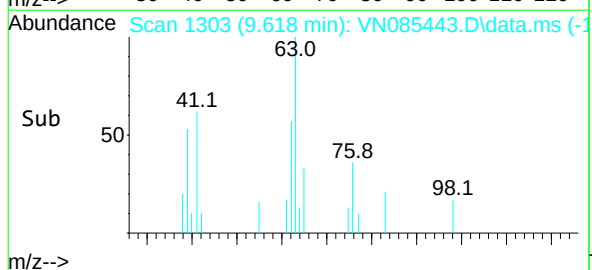


Tgt Ion: 63 Resp: 2246

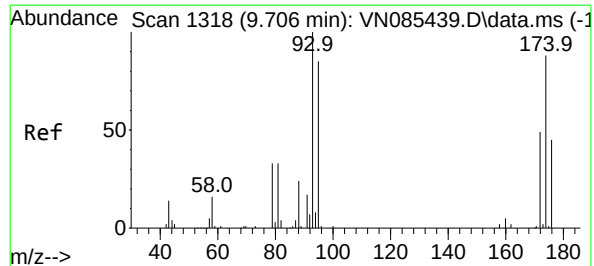
Ion Ratio Lower Upper

63 100

65 32.6 25.6 38.4







#46

Dibromomethane

Concen: 1.083 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085443.D

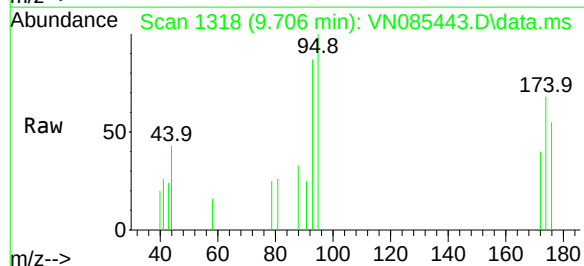
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

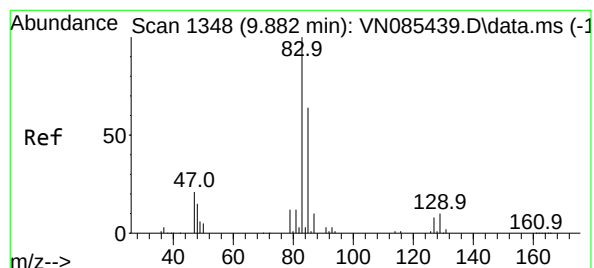
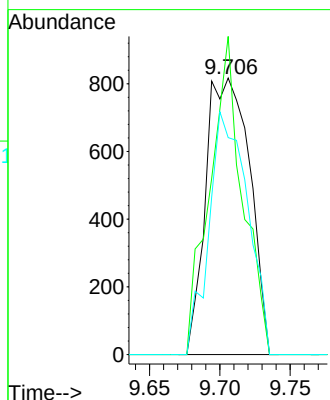
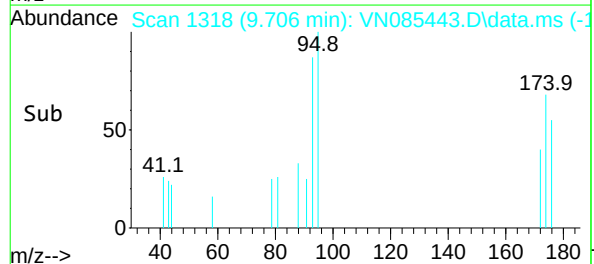
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 93    | Resp: | 1769  |
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 95       | 86.5  | 64.7  | 97.1  |
| 174      | 77.4  | 69.0  | 103.4 |

Manual Integrations  
APPROVED

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



#47

Bromodichloromethane

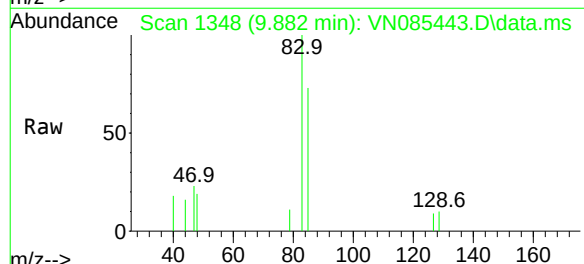
Concen: 0.882 ug/l

RT: 9.882 min Scan# 1348

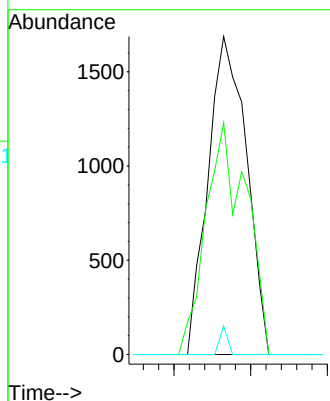
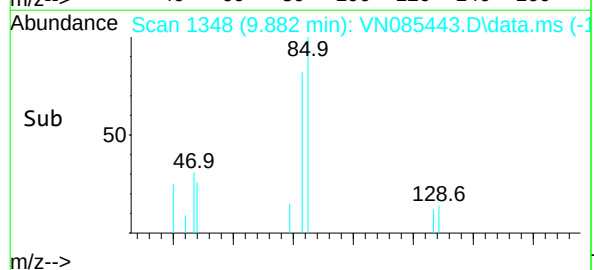
Delta R.T. 0.000 min

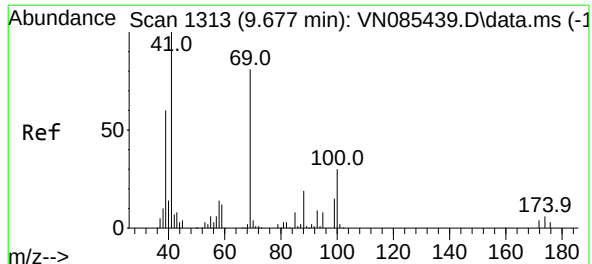
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 2935  |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 72.9  | 51.2  | 76.8  |
| 127      | 9.0   | 6.5   | 9.7   |





#48

Methyl methacrylate

Concen: 0.878 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085443.D

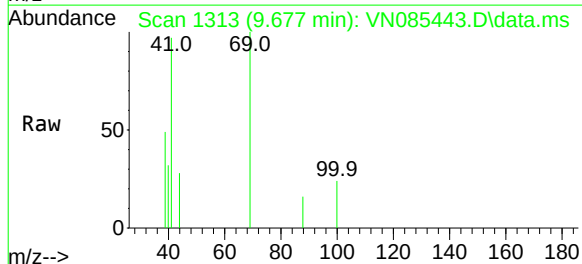
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

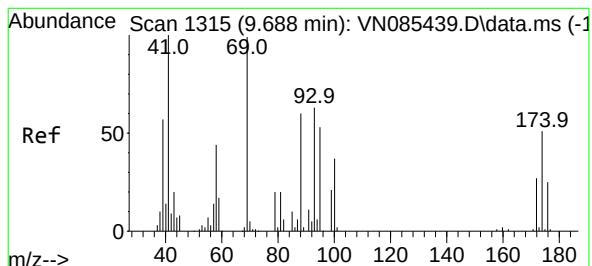
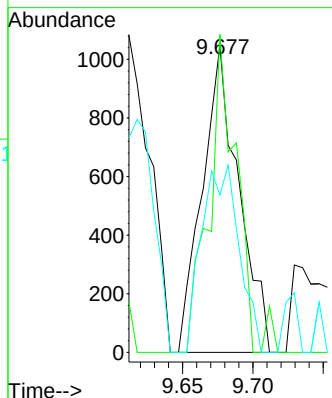
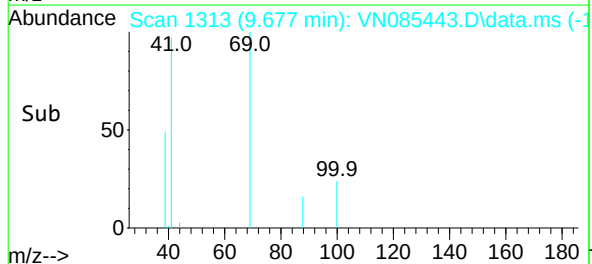
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 1886  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 76.2  | 64.7  | 97.1  |
| 39       | 62.8  | 49.0  | 73.6  |

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#49

1,4-Dioxane

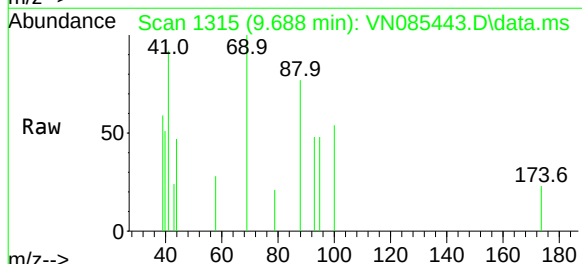
Concen: 18.616 ug/l

RT: 9.688 min Scan# 1315

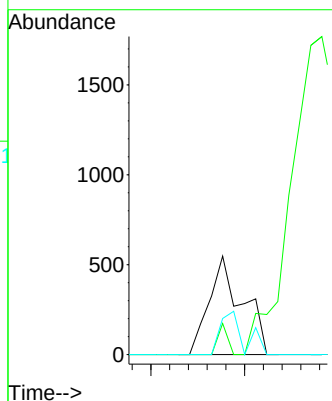
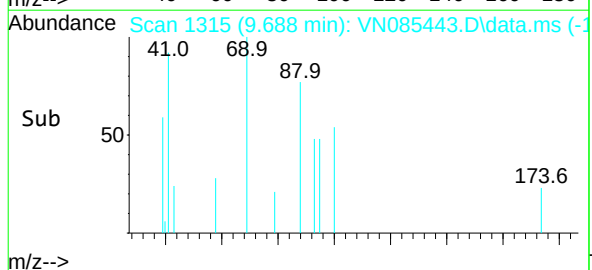
Delta R.T. -0.000 min

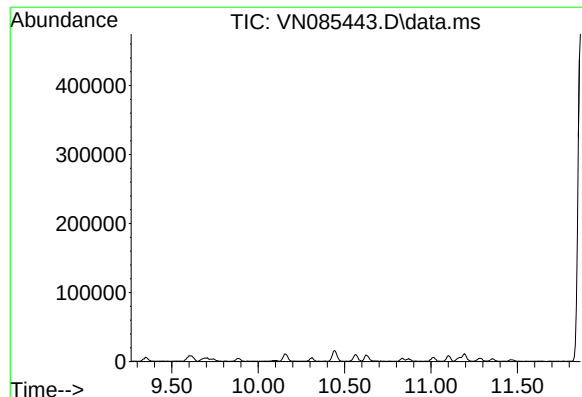
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 673   |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 43       | 0.0   | 26.6  | 39.8# |
| 58       | 31.1  | 59.5  | 89.3# |





#50

Toluene-d8

Concen: 0.000 ug/l

Expected RT: 10.56 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 98

Sig Exp Ratio

98 100

100 65.3

Instrument :

MSVOA\_N

ClientSampleId :

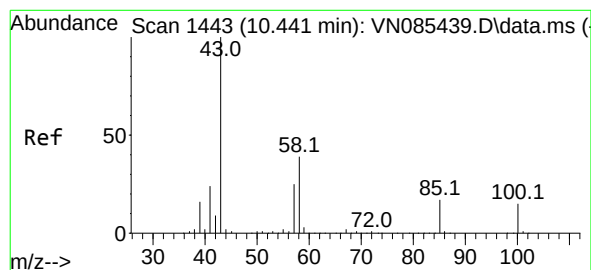
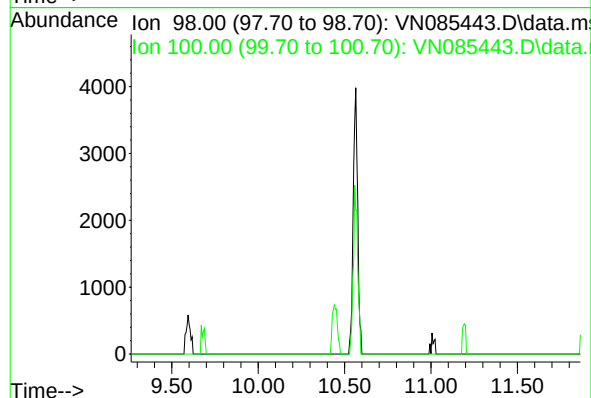
VSTDICC001

Manual Integrations

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#51

4-Methyl-2-Pentanone

Concen: 4.163 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. 0.000 min

Lab File: VN085443.D

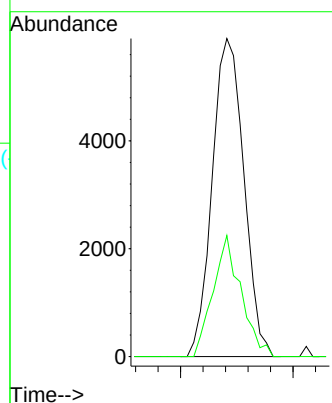
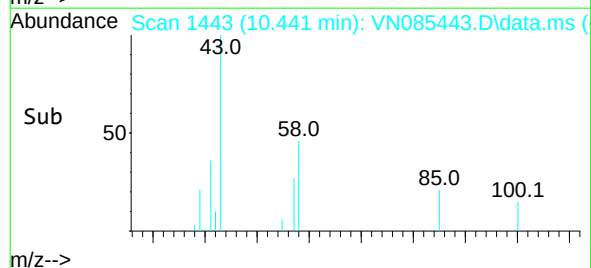
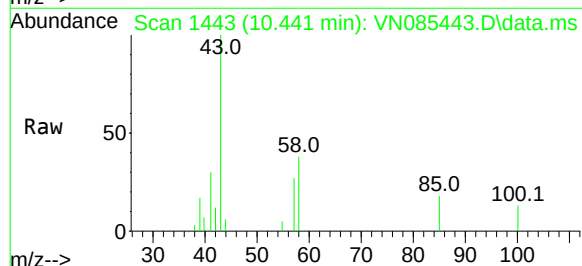
Acq: 14 Jan 2025 17:19

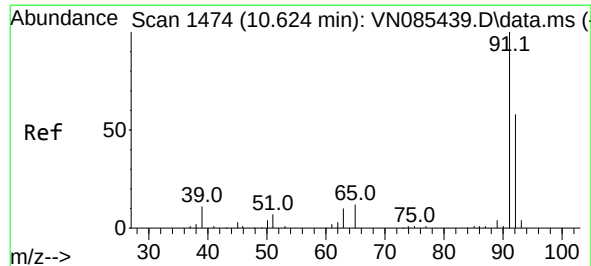
Tgt Ion: 43 Resp: 11523

Ion Ratio Lower Upper

43 100

58 33.6 30.5 45.7





#52

Toluene

Concen: 0.814 ug/l

RT: 10.618 min Scan# 1473

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 92 Resp: 4180

Ion Ratio Lower Upper

92 100

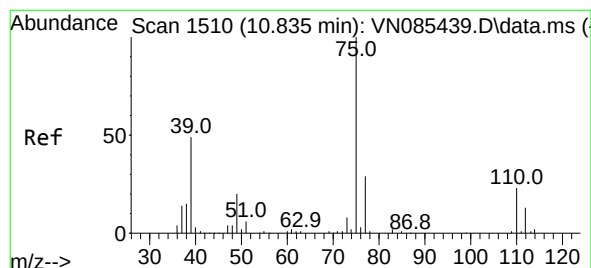
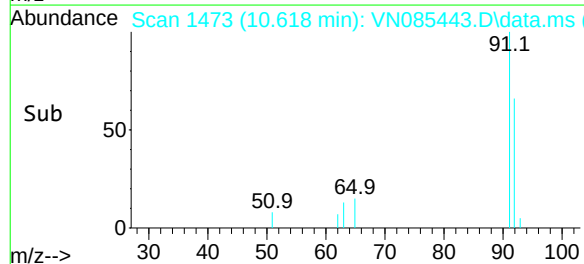
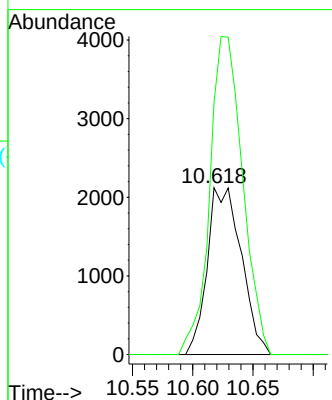
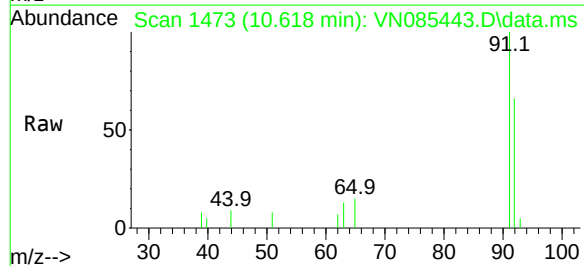
91 183.9 139.2 208.8

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#53

t-1,3-Dichloropropene

Concen: 0.802 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN085443.D

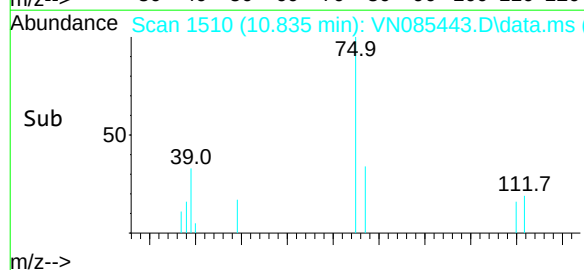
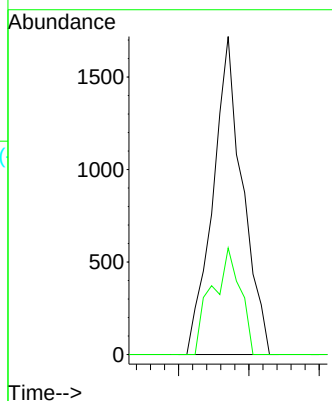
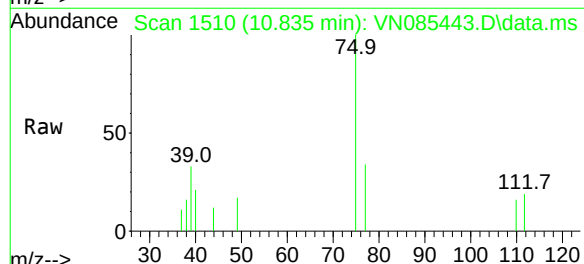
Acq: 14 Jan 2025 17:19

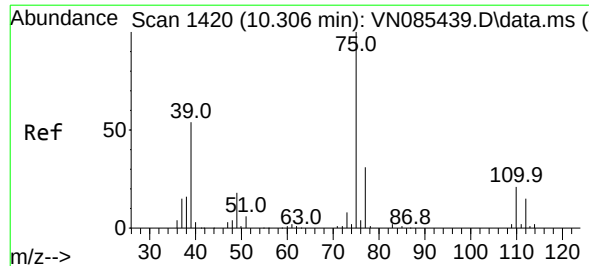
Tgt Ion: 75 Resp: 2522

Ion Ratio Lower Upper

75 100

77 33.5 23.5 35.3





#54

cis-1,3-Dichloropropene

Concen: 0.811 ug/l

RT: 10.312 min Scan# 14

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 75 Resp: 2725

Ion Ratio Lower Upper

75 100

77 39.0 25.0 37.4#

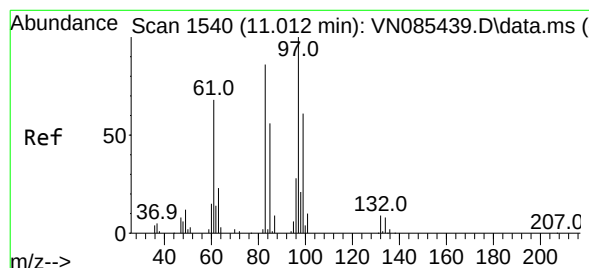
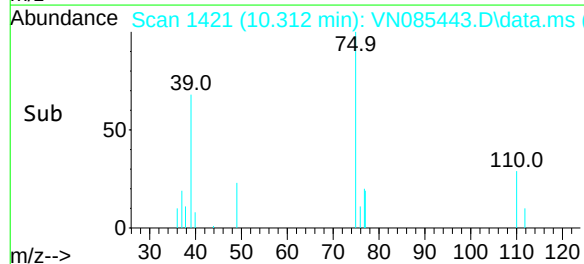
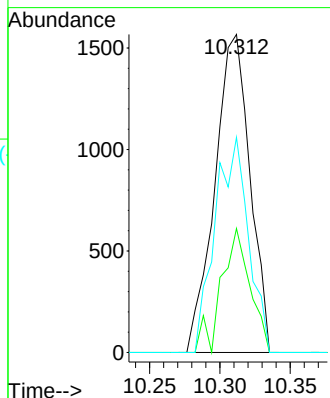
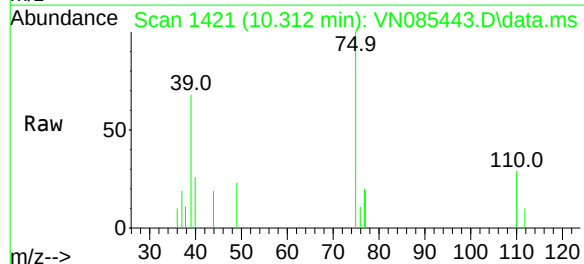
39 67.6 43.1 64.7#

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#55

1,1,2-Trichloroethane

Concen: 0.935 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 1901

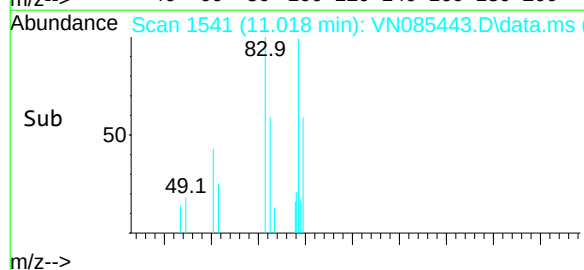
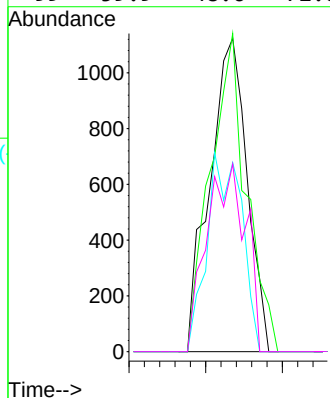
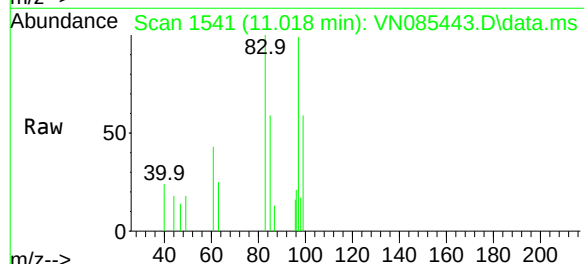
Ion Ratio Lower Upper

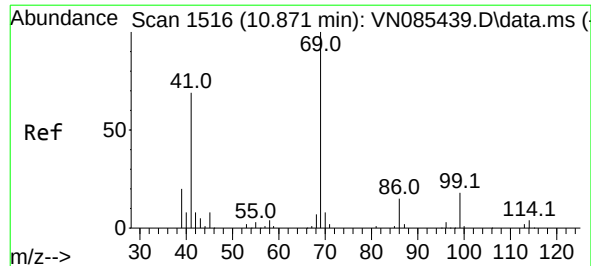
97 100

83 101.5 69.0 103.6

85 60.3 44.6 66.8

99 59.9 48.6 72.8





#56

Ethyl methacrylate

Concen: 2.471 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 69 Resp: 1923

Ion Ratio Lower Upper

69 100

41 74.4 54.6 82.0

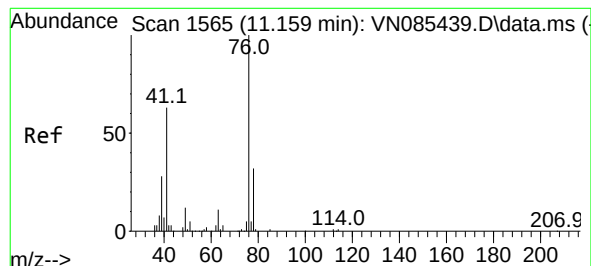
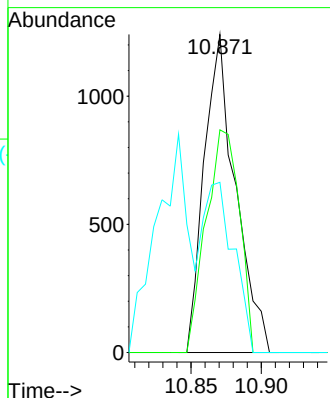
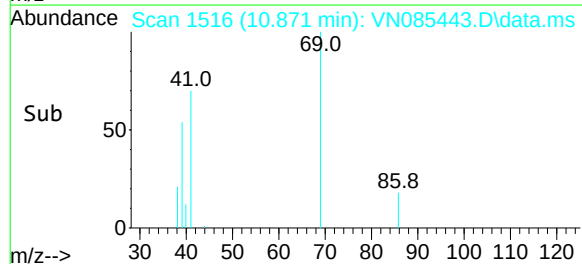
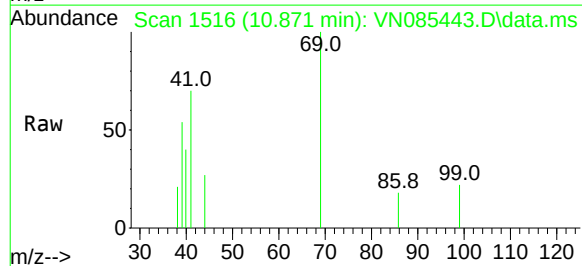
39 52.4 32.4 48.6

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#57

1,3-Dichloropropane

Concen: 0.881 ug/l

RT: 11.165 min Scan# 1566

Delta R.T. 0.006 min

Lab File: VN085443.D

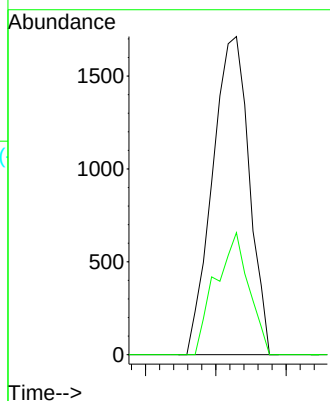
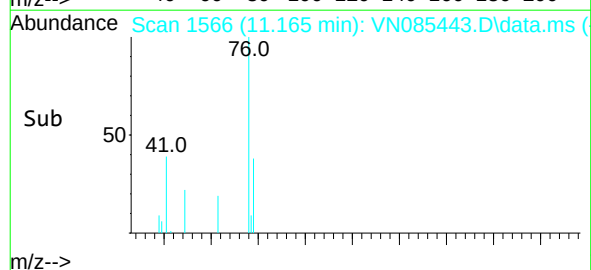
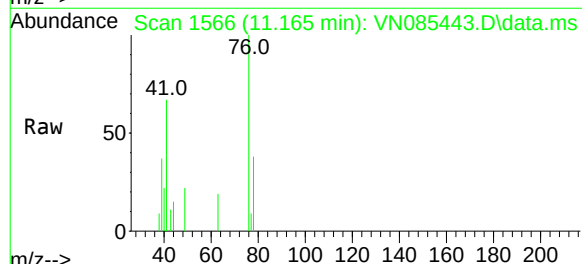
Acq: 14 Jan 2025 17:19

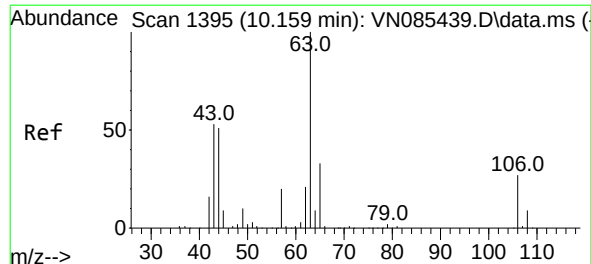
Tgt Ion: 76 Resp: 3113

Ion Ratio Lower Upper

76 100

78 34.9 25.6 38.4





#58

2-Chloroethyl Vinyl ether

Concen: 3.822 ug/l

RT: 10.153 min Scan# 1395

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 63 Resp: 4929

Ion Ratio Lower Upper

63 100

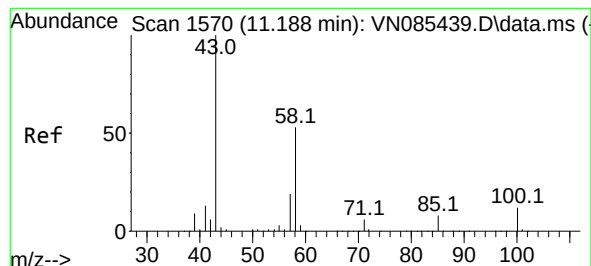
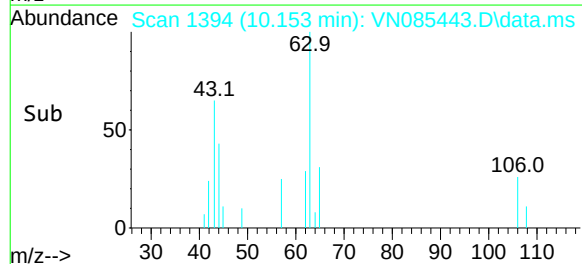
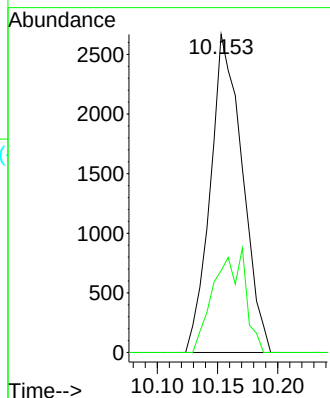
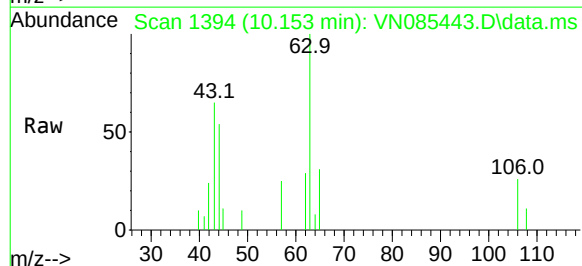
106 31.7 21.6 32.4

Manual Integrations

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#59

2-Hexanone

Concen: 4.058 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085443.D

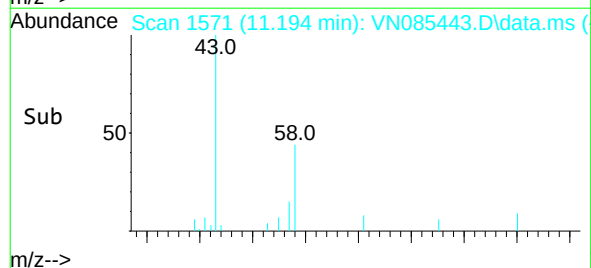
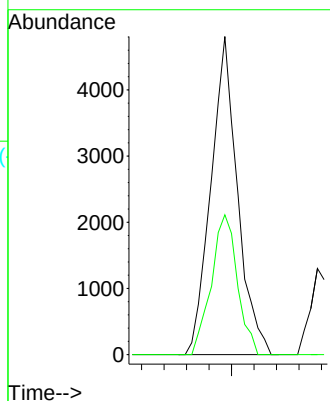
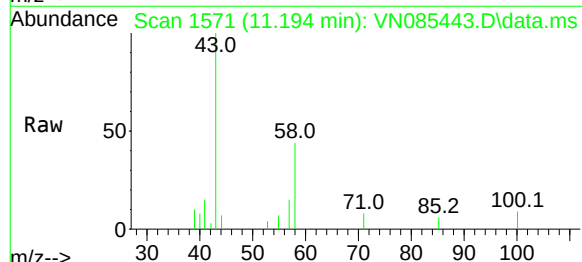
Acq: 14 Jan 2025 17:19

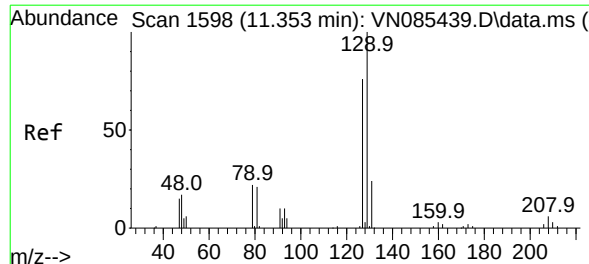
Tgt Ion: 43 Resp: 7905

Ion Ratio Lower Upper

43 100

58 42.9 26.2 78.6





#60

Dibromochloromethane

Concen: 0.953 ug/l

RT: 11.359 min Scan# 1598

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:129 Resp: 2339

Ion Ratio Lower Upper

129 100

127 78.9 38.6 115.8

Instrument :

MSVOA\_N

ClientSampleId :

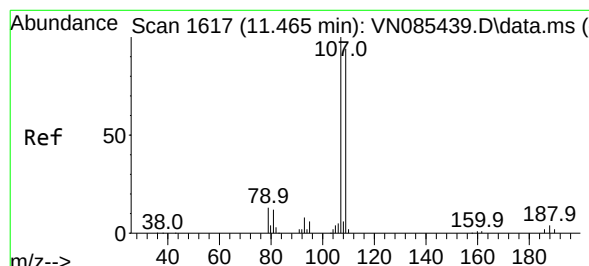
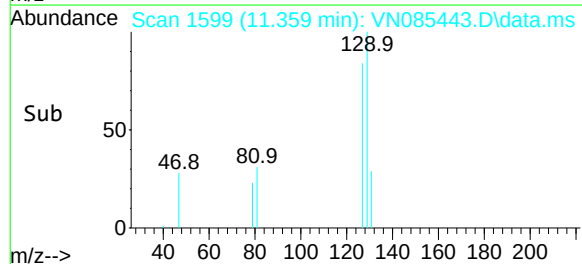
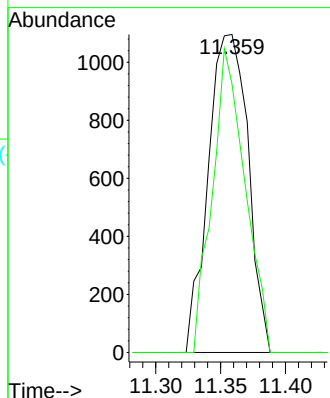
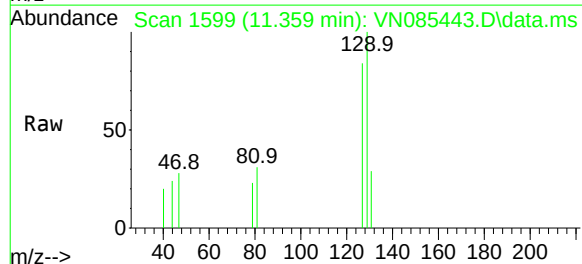
VSTDIC001

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#61

1,2-Dibromoethane

Concen: 1.000 ug/l

RT: 11.465 min Scan# 1617

Delta R.T. -0.000 min

Lab File: VN085443.D

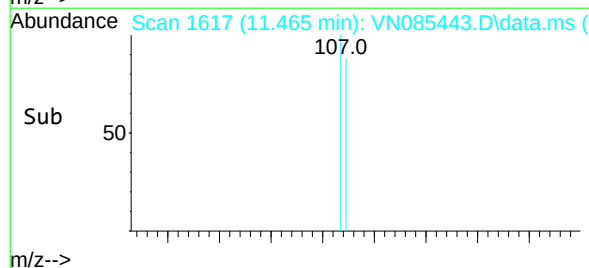
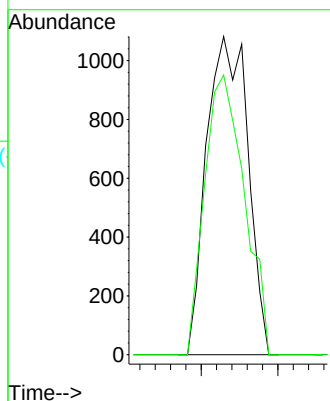
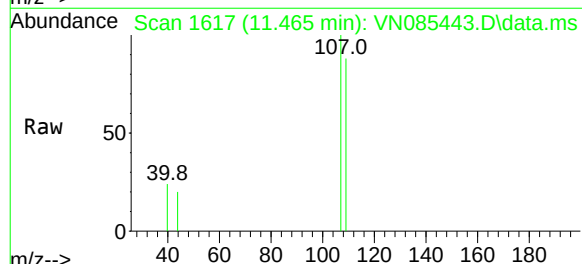
Acq: 14 Jan 2025 17:19

Tgt Ion:107 Resp: 2022

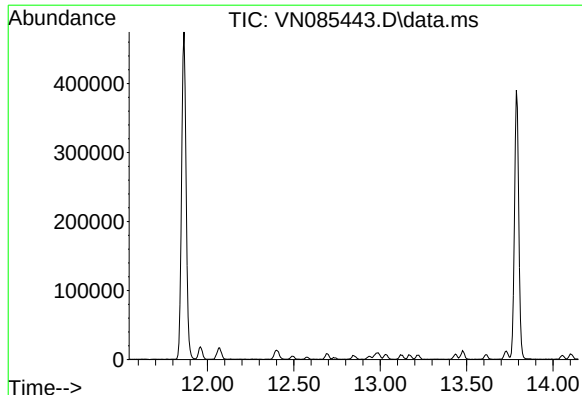
Ion Ratio Lower Upper

107 100

109 84.8 75.9 113.9







#62

4-Bromofluorobenzene

Concen: 0.000 ug/l

Expected RT: 12.85 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 95

Sig Exp Ratio

95 100

174 72.5

176 71.2

Instrument :

MSVOA\_N

ClientSampleId :

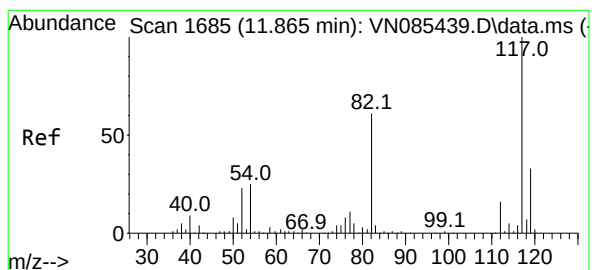
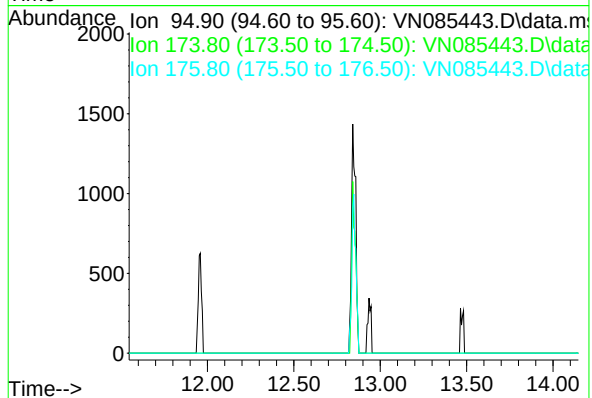
VSTDICC001

Manual Integrations

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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: VN085443.D

Acq: 14 Jan 2025 17:19

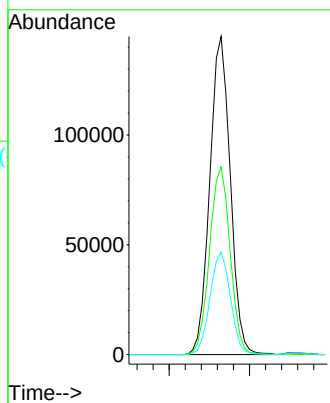
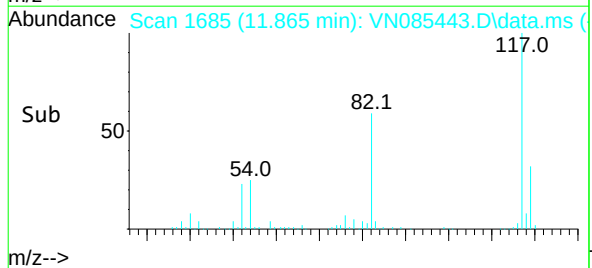
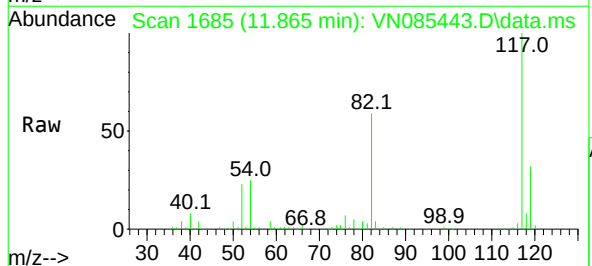
Tgt Ion:117 Resp: 256851

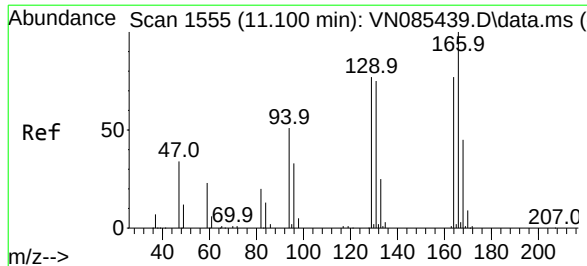
Ion Ratio Lower Upper

117 100

82 59.0 48.6 72.8

119 32.2 26.6 39.8





#64

Tetrachloroethene

Concen: 0.947 ug/l

RT: 11.106 min Scan# 1555

Delta R.T. 0.006 min

Lab File: VN085443.D

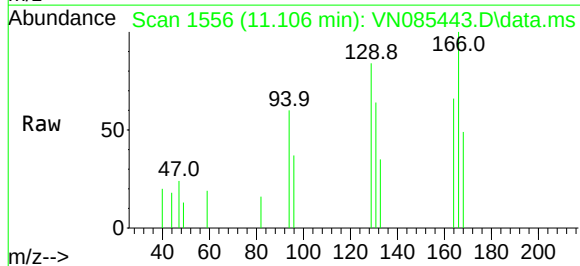
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001



Tgt Ion:164 Resp: 1658

Ion Ratio Lower Upper

164 100

166 152.1 103.4 155.2

129 128.3 79.2 118.8#

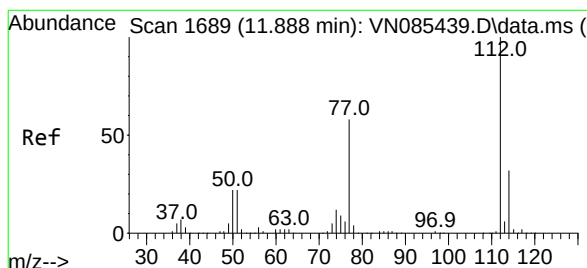
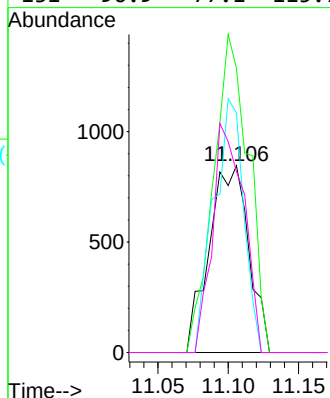
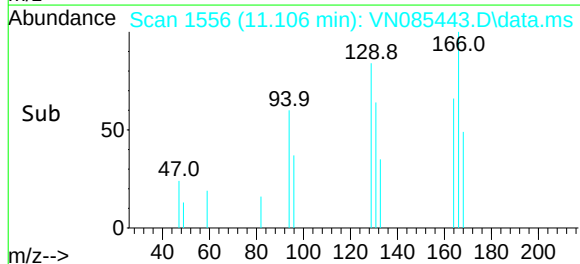
131 96.9 77.1 115.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#65

Chlorobenzene

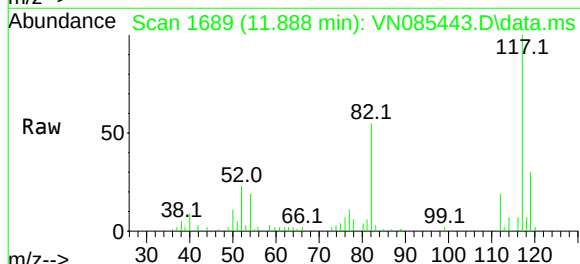
Concen: 0.960 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

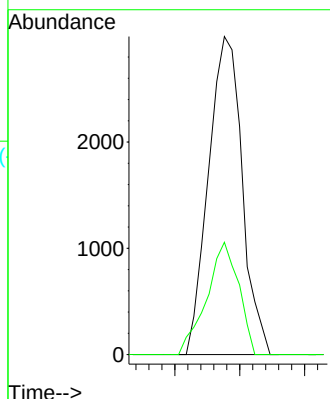
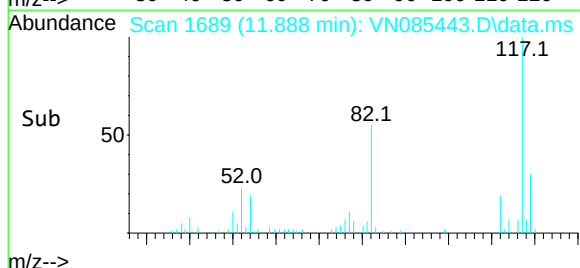


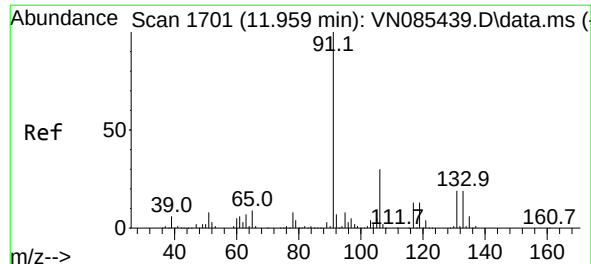
Tgt Ion:112 Resp: 5401

Ion Ratio Lower Upper

112 100

114 35.3 25.3 37.9





#66

1,1,1,2-Tetrachloroethane

Concen: 1.058 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

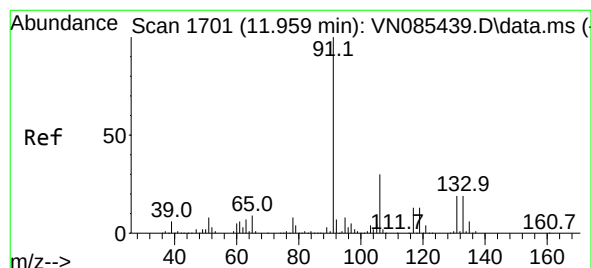
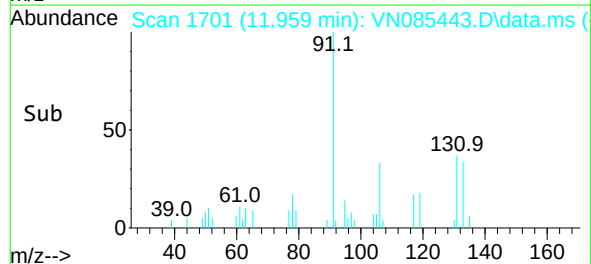
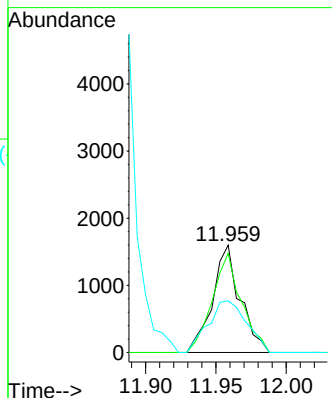
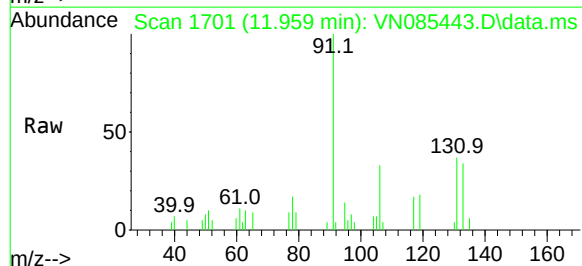
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 131   | Resp: | 2185  |
| Ion Ratio | Lower | Upper |       |
| 131       | 100   |       |       |
| 133       | 97.7  | 47.4  | 142.3 |
| 119       | 0.0   | 33.1  | 99.5  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#67

Ethyl Benzene

Concen: 0.802 ug/l

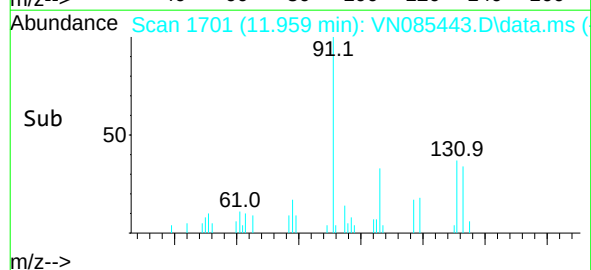
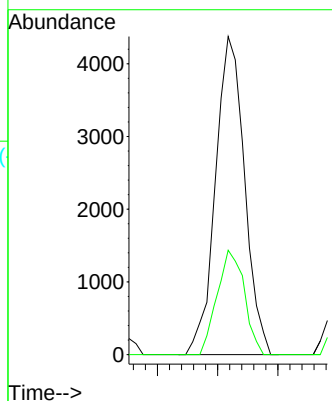
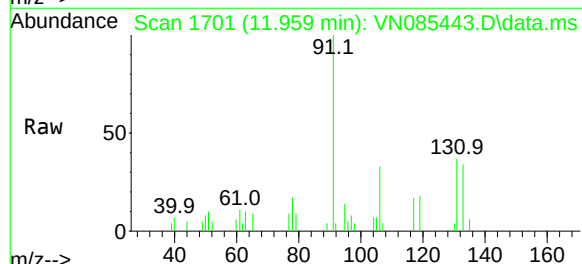
RT: 11.959 min Scan# 1701

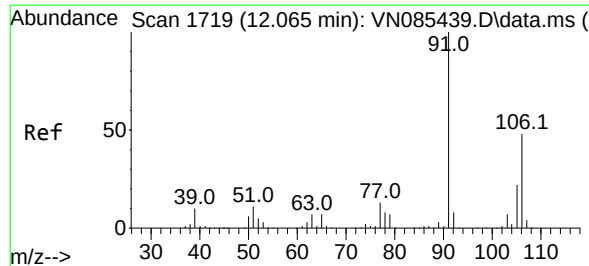
Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 91    | Resp: | 7347 |
| Ion Ratio | Lower | Upper |      |
| 91        | 100   |       |      |
| 106       | 32.8  | 23.8  | 35.8 |





#68

m/p-Xylenes

Concen: 1.494 ug/l

RT: 12.070 min Scan# 1719

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion:106 Resp: 5059

Ion Ratio Lower Upper

106 100

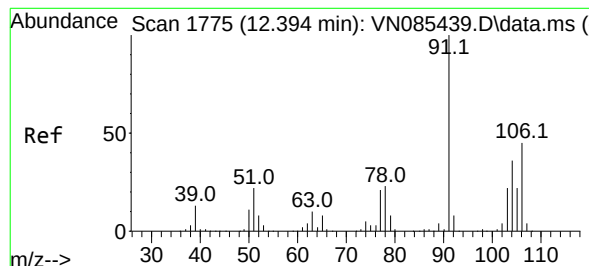
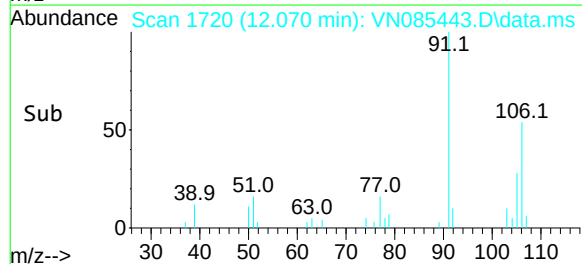
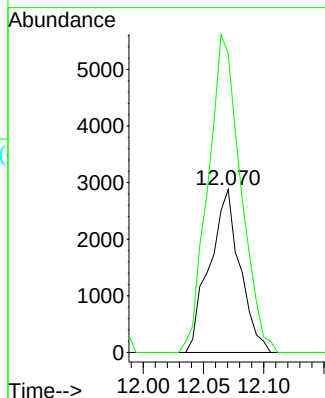
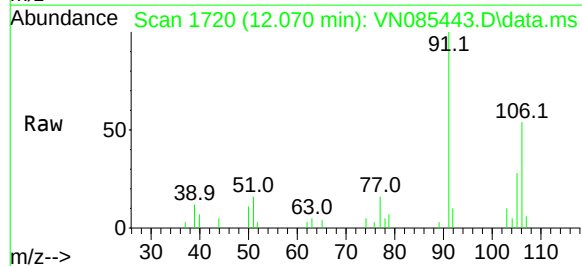
91 209.3 167.7 251.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#69

o-Xylene

Concen: 0.766 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085443.D

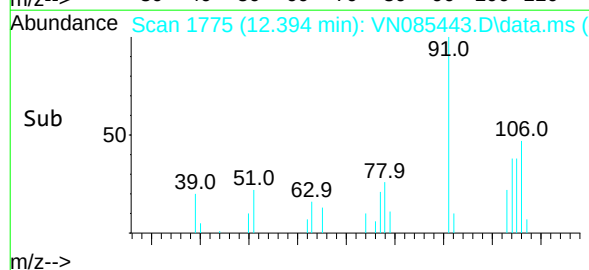
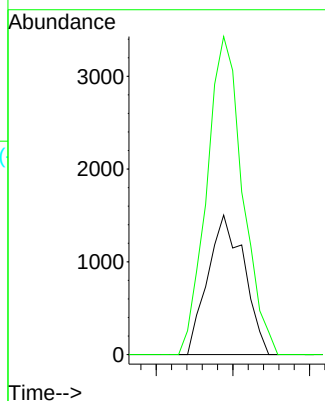
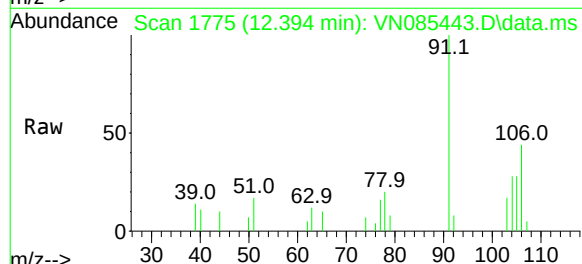
Acq: 14 Jan 2025 17:19

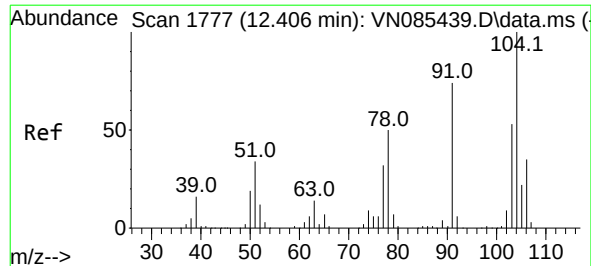
Tgt Ion:106 Resp: 2478

Ion Ratio Lower Upper

106 100

91 225.4 110.4 331.2





#70

Styrene

Concen: 0.712 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

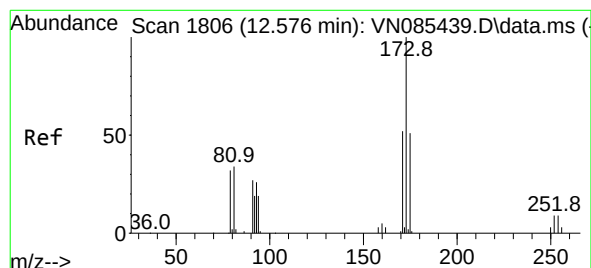
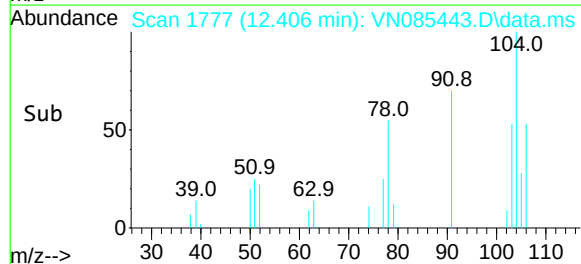
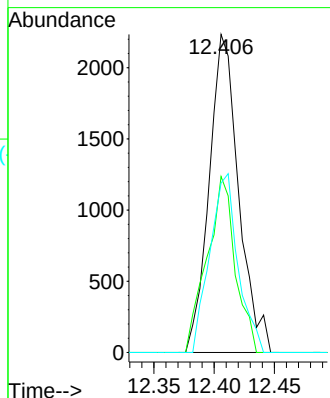
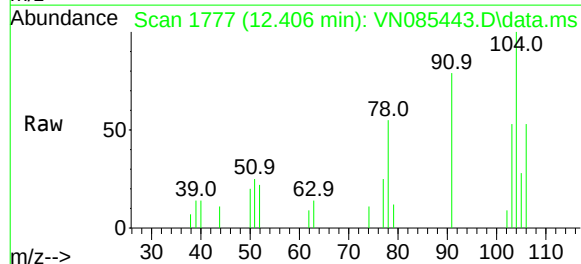
VSTDIC001

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 104   | Resp: | 3812 |
| Ion Ratio | Lower | Upper |      |
| 104       | 100   |       |      |
| 78        | 52.9  | 42.5  | 63.7 |
| 103       | 53.7  | 43.8  | 65.8 |

Manual Integrations

APPROVED

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



#71

Bromoform

Concen: 0.818 ug/l

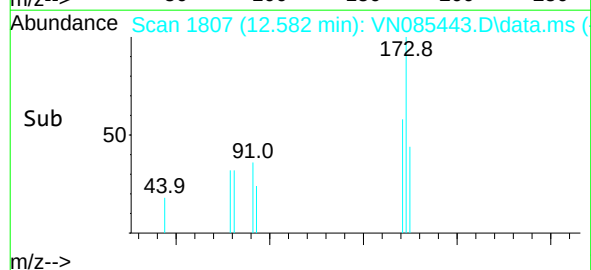
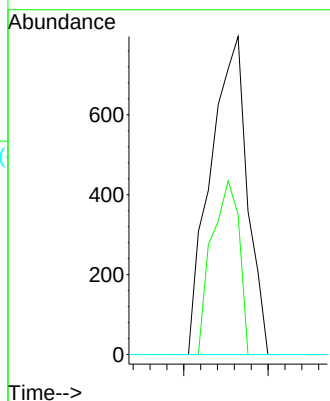
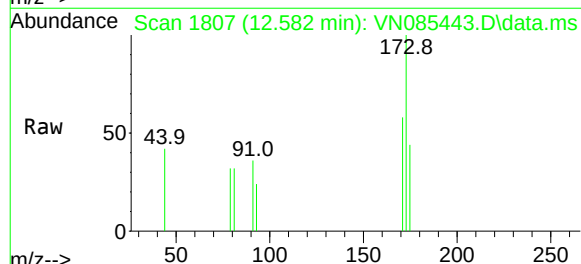
RT: 12.582 min Scan# 1807

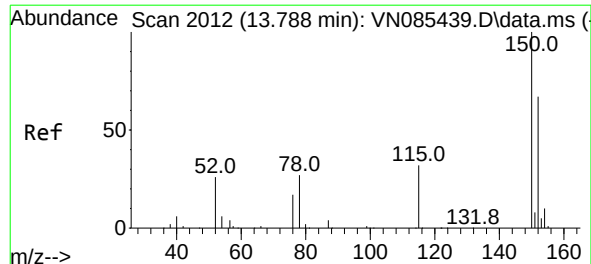
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 173   | Resp: | 1208 |
| Ion Ratio | Lower | Upper |      |
| 173       | 100   |       |      |
| 175       | 40.7  | 24.4  | 73.2 |
| 254       | 0.0   | 0.0   | 0.0  |





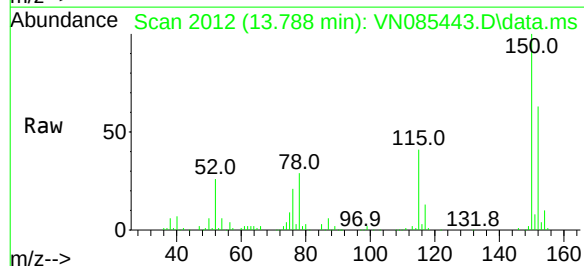
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

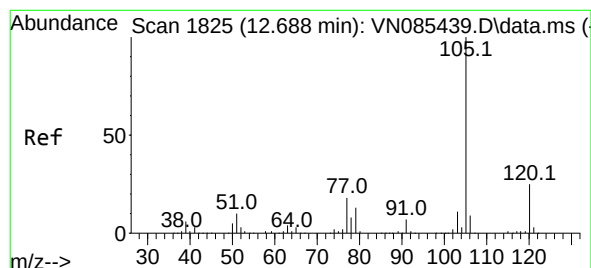
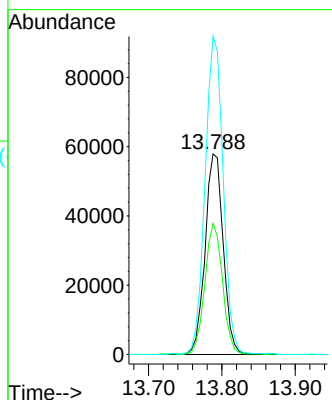
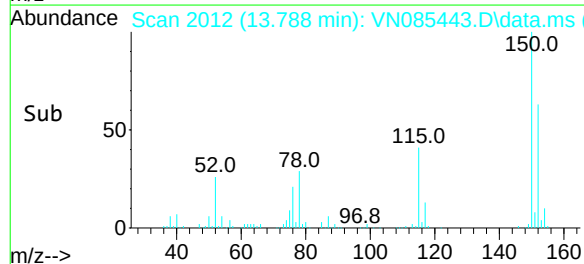
VSTDIC001



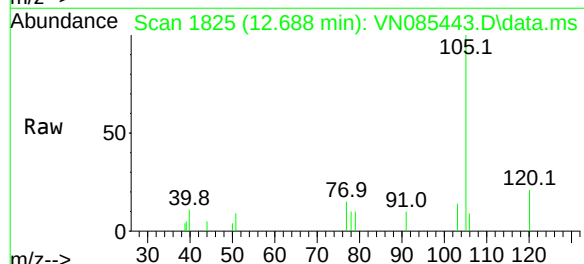
Tgt Ion:152 Resp: 99539  
Ion Ratio Lower Upper  
152 100  
115 63.8 31.1 93.3  
150 158.5 0.0 343.6

Manual Integrations  
APPROVED

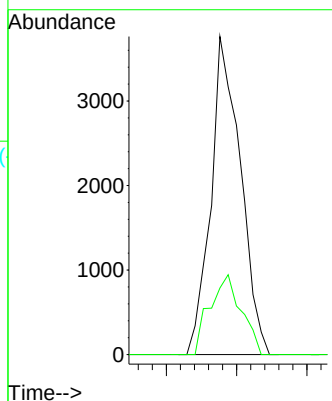
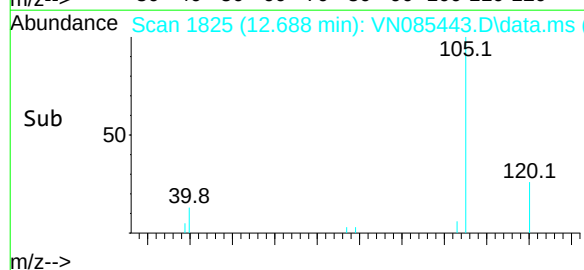
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

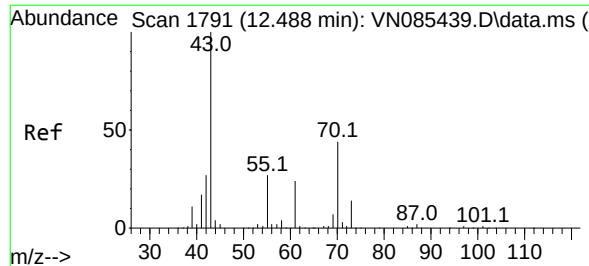


#73  
Isopropylbenzene  
Concen: 0.820 ug/l  
RT: 12.688 min Scan# 1825  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19



Tgt Ion:105 Resp: 5506  
Ion Ratio Lower Upper  
105 100  
120 26.7 12.8 38.3





#74

N-amy1 acetate

Concen: 0.899 ug/l

RT: 12.494 min Scan# 1791

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 43 Resp: 2716

Ion Ratio Lower Upper

43 100

70 30.4 34.0 51.0#

55 24.2 21.4 32.2

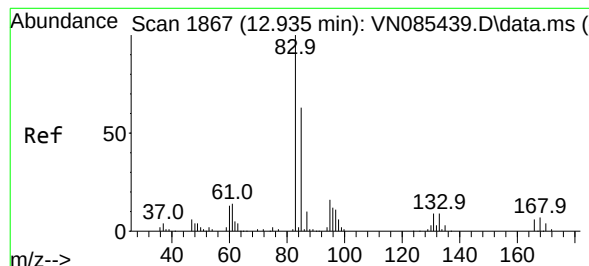
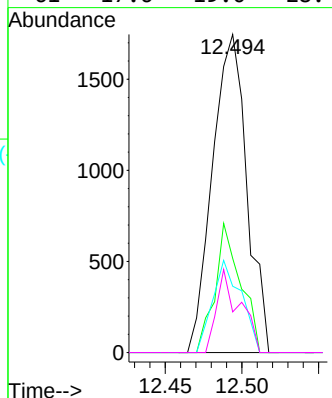
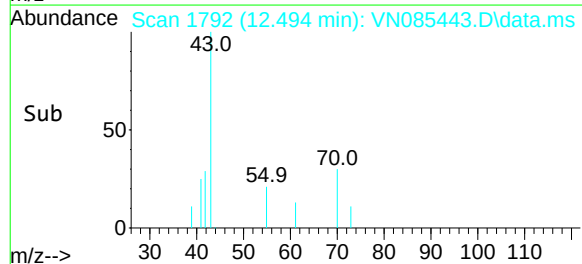
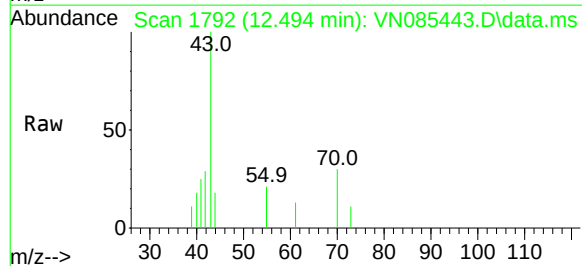
61 17.6 19.0 28.4#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#75

1,1,2,2-Tetrachloroethane

Concen: 1.102 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

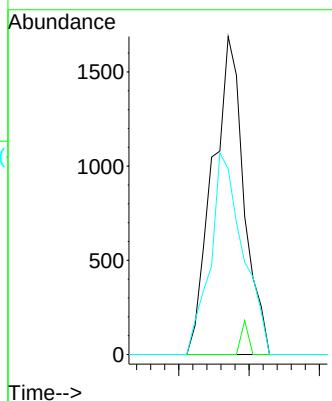
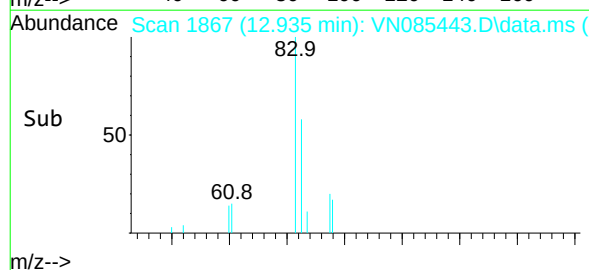
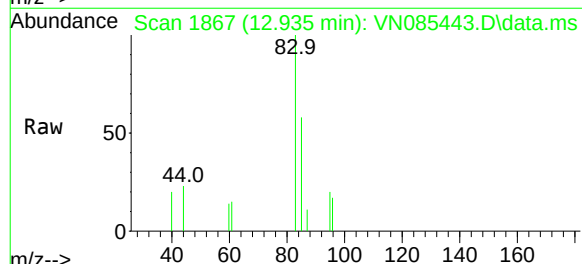
Tgt Ion: 83 Resp: 2616

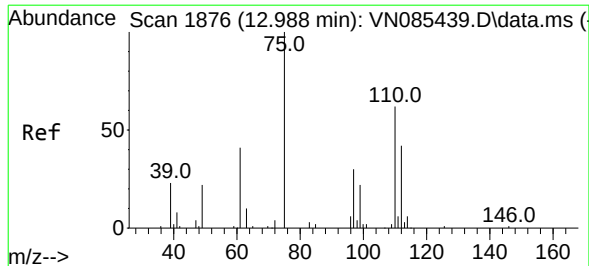
Ion Ratio Lower Upper

83 100

131 2.4 4.8 14.4#

85 65.7 32.2 96.6





#76

1,2,3-Trichloropropane

Concen: 1.088 ug/l m

RT: 12.982 min Scan# 18

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 75 Resp: 2198

Ion Ratio Lower Upper

75 100

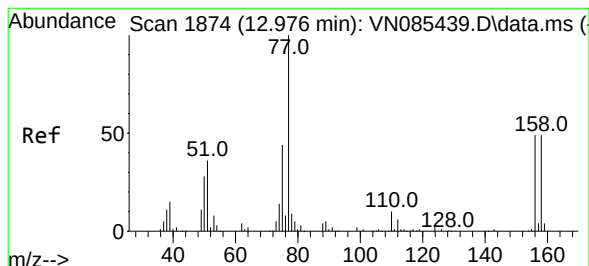
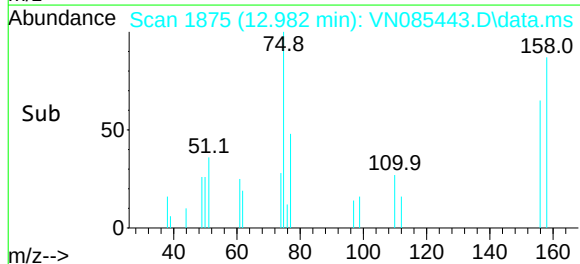
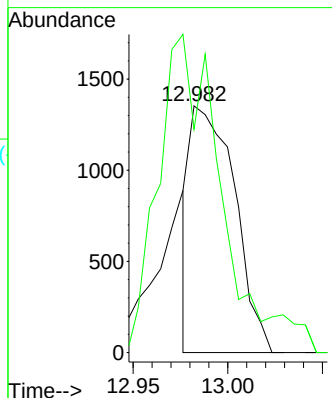
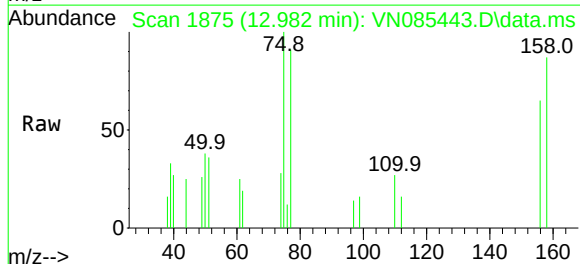
77 184.2 109.7 329.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#77

Bromobenzene

Concen: 0.987 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

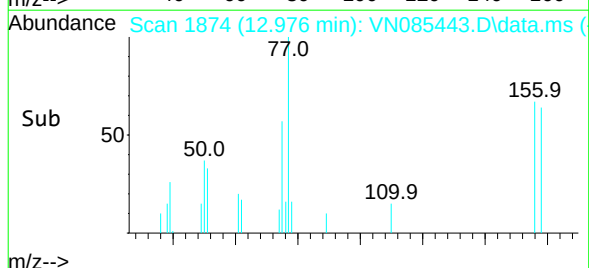
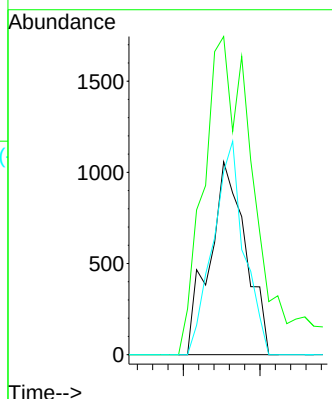
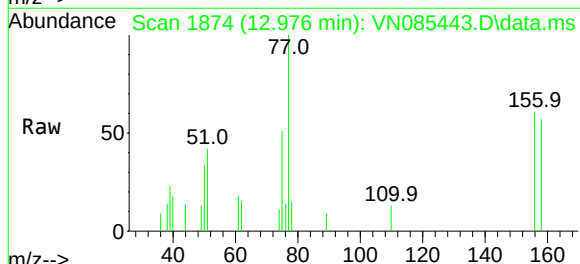
Tgt Ion:156 Resp: 1733

Ion Ratio Lower Upper

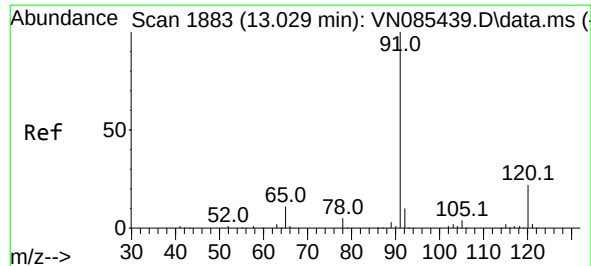
156 100

77 233.6 114.1 342.4

158 94.9 48.9 146.8







#78

n-propylbenzene

Concen: 0.808 ug/l

RT: 13.029 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 91 Resp: 6424

Ion Ratio Lower Upper

91 100

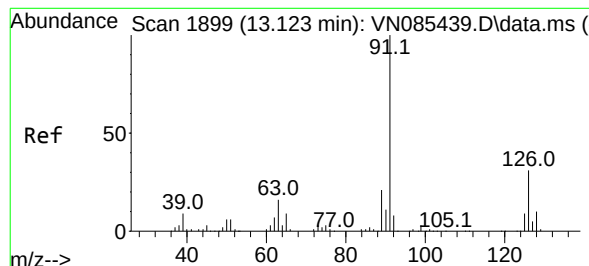
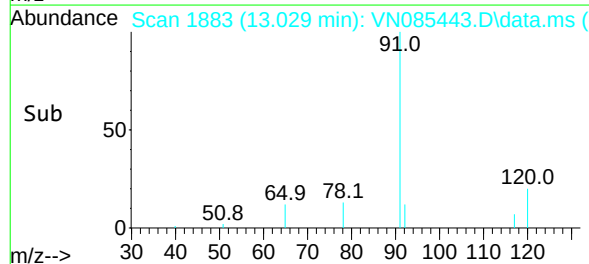
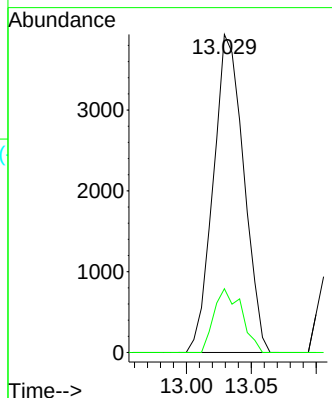
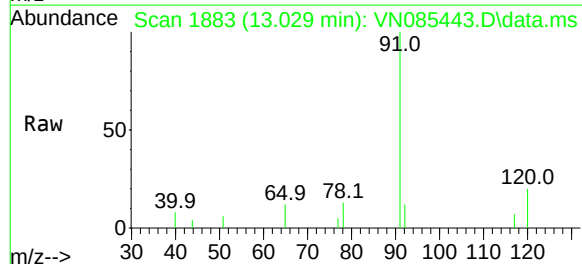
120 18.2 10.9 32.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#79

2-Chlorotoluene

Concen: 0.871 ug/l

RT: 13.117 min Scan# 1898

Delta R.T. -0.006 min

Lab File: VN085443.D

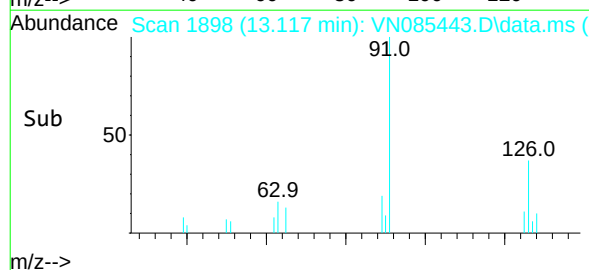
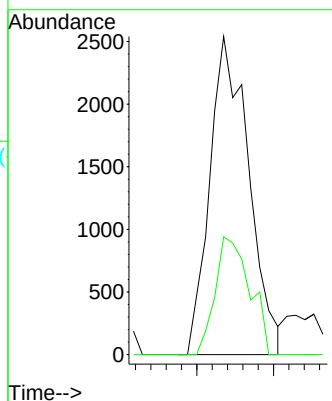
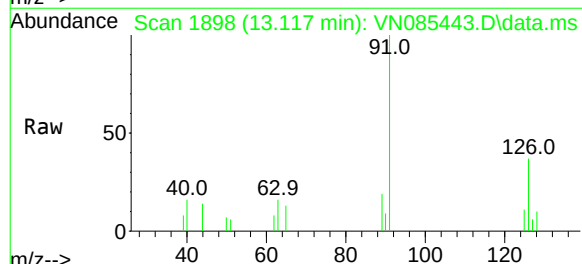
Acq: 14 Jan 2025 17:19

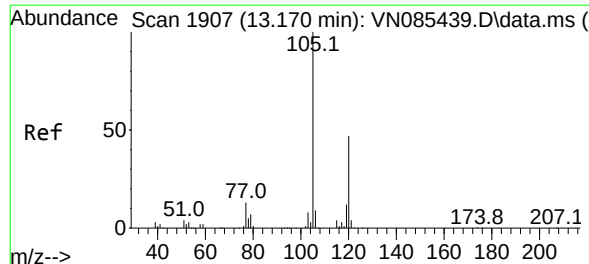
Tgt Ion: 91 Resp: 4483

Ion Ratio Lower Upper

91 100

126 32.9 15.7 47.1





#80

1,3,5-Trimethylbenzene

Concen: 0.775 ug/l

RT: 13.165 min Scan# 19

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion: 105 Resp: 4301

Ion Ratio Lower Upper

105 100

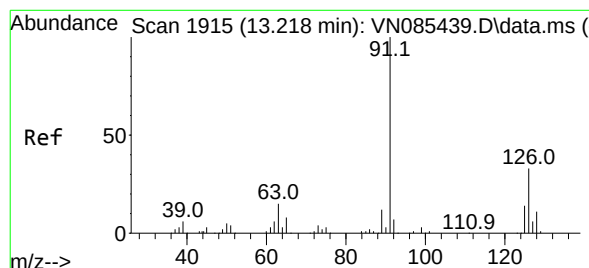
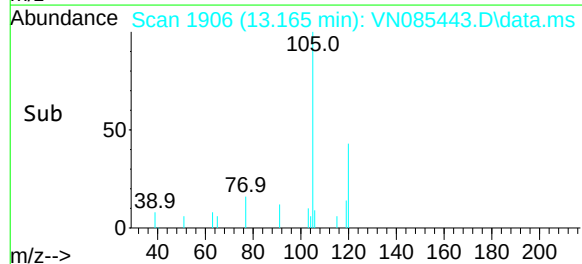
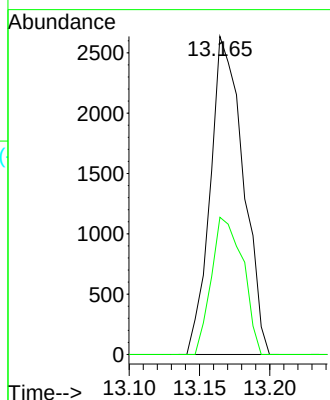
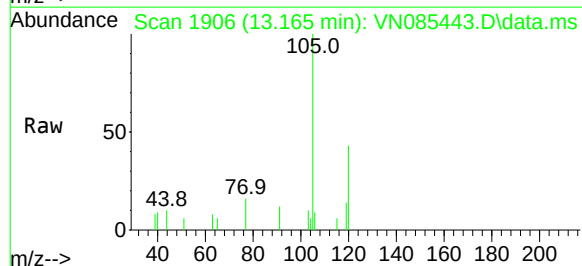
120 41.2 23.9 71.7

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 0.833 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. 0.006 min

Lab File: VN085443.D

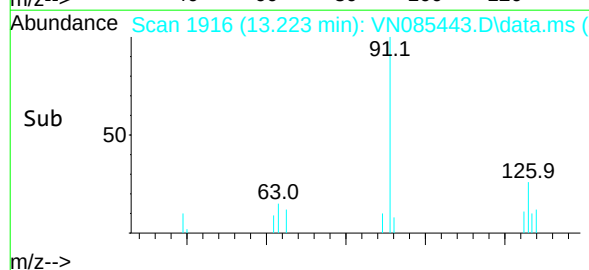
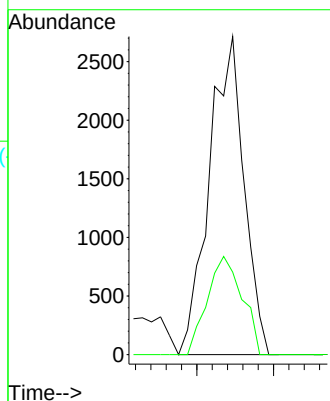
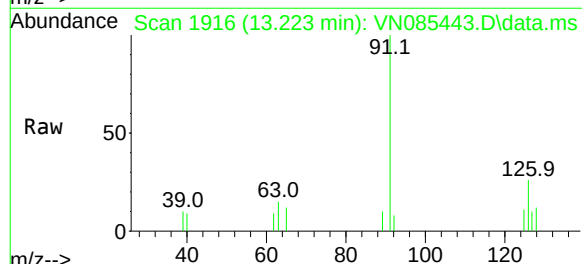
Acq: 14 Jan 2025 17:19

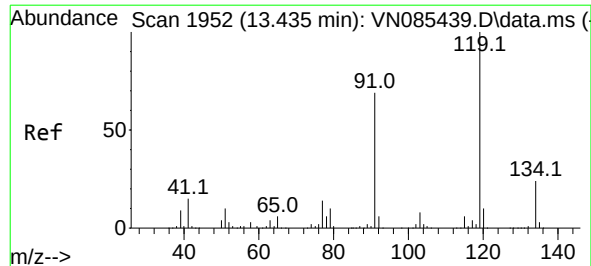
Tgt Ion: 91 Resp: 4268

Ion Ratio Lower Upper

91 100

126 31.0 15.9 47.7





#83

tert-Butylbenzene

Concen: 0.805 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

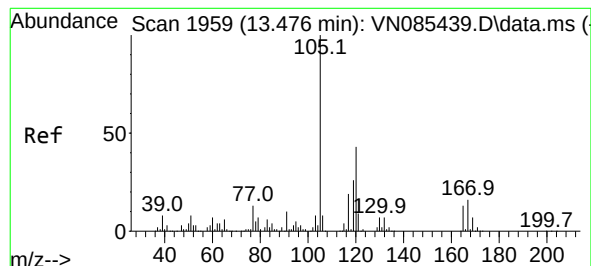
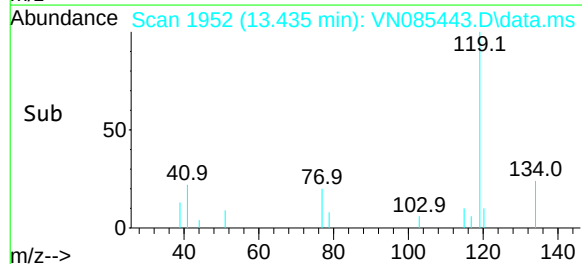
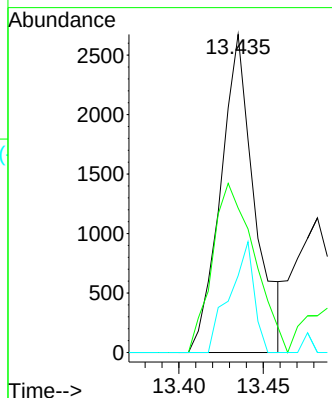
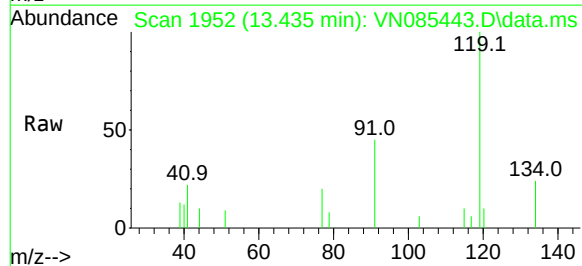
ClientSampleId :

VSTDIC001

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 119   | Resp: | 3753  |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 91       | 65.9  | 35.1  | 105.3 |
| 134      | 24.9  | 12.0  | 36.1  |

Manual Integrations  
APPROVED

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



#84

1,2,4-Trimethylbenzene

Concen: 0.679 ug/l

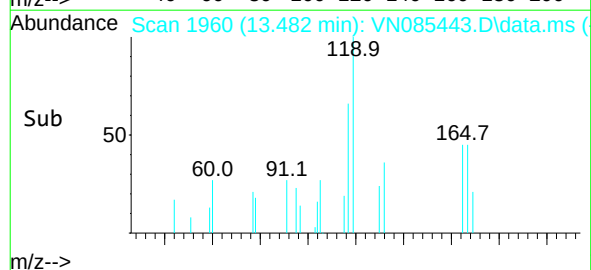
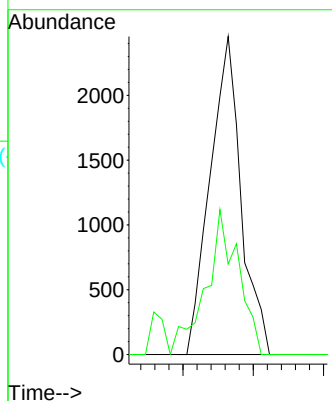
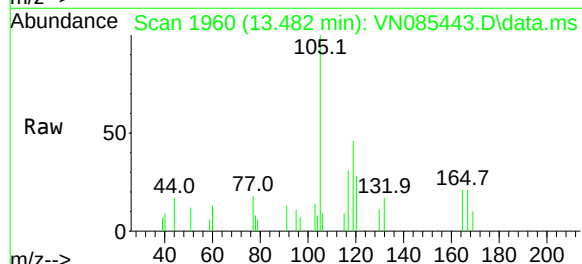
RT: 13.482 min Scan# 1960

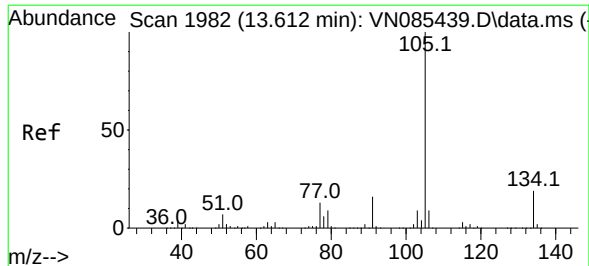
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 3758  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 47.7  | 21.6  | 65.0  |





#85

sec-Butylbenzene

Concen: 0.714 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC001

Tgt Ion:105 Resp: 4614

Ion Ratio Lower Upper

105 100

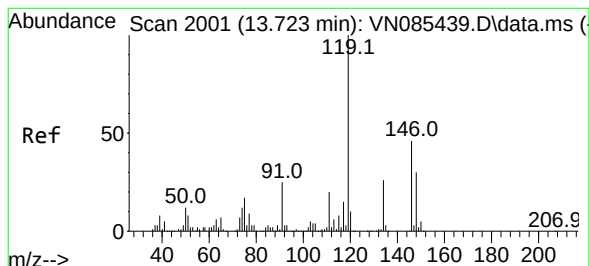
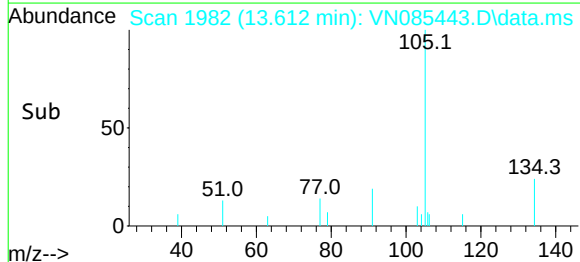
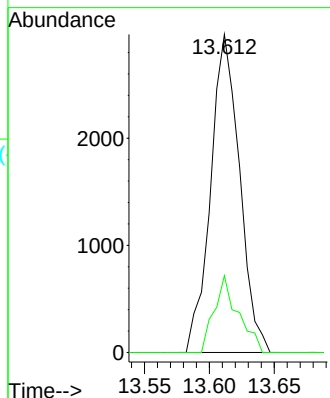
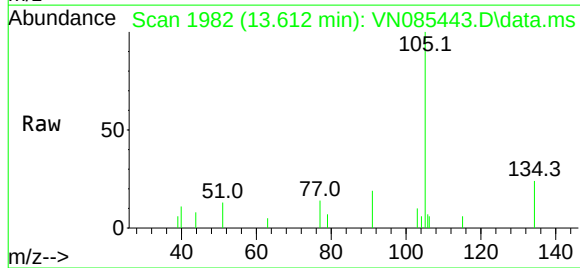
134 19.9 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 0.716 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

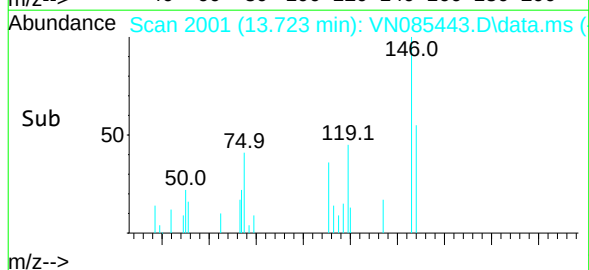
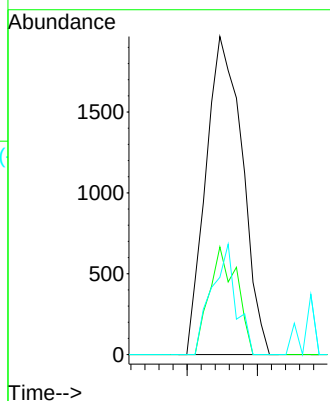
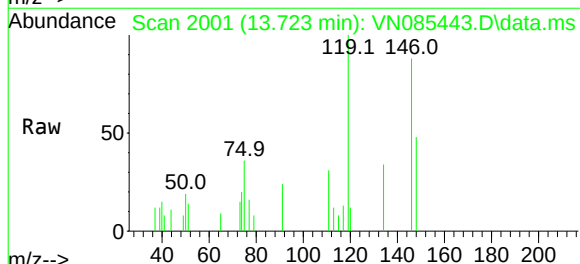
Tgt Ion:119 Resp: 3538

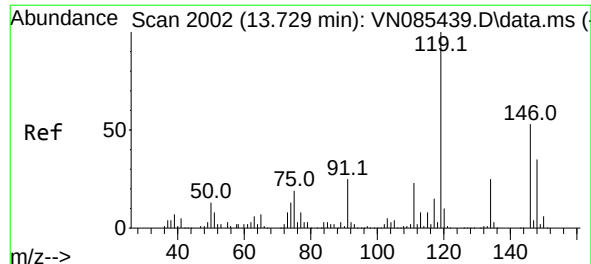
Ion Ratio Lower Upper

119 100

134 25.6 12.7 38.0

91 23.2 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 0.940 ug/l

RT: 13.723 min Scan# 20

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

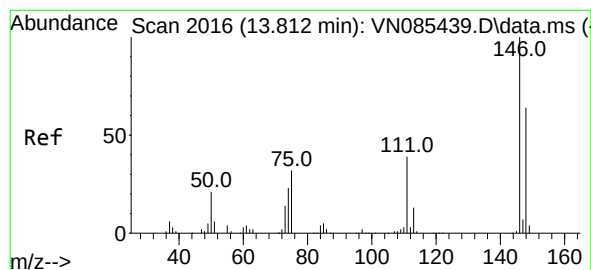
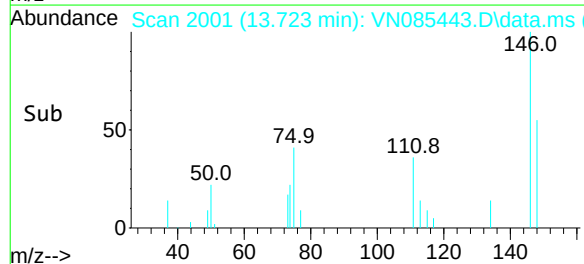
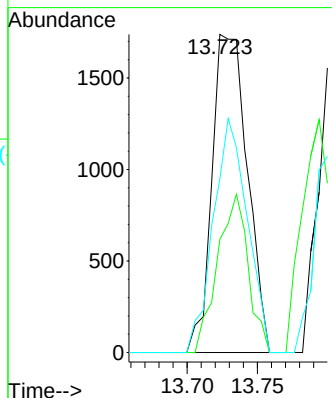
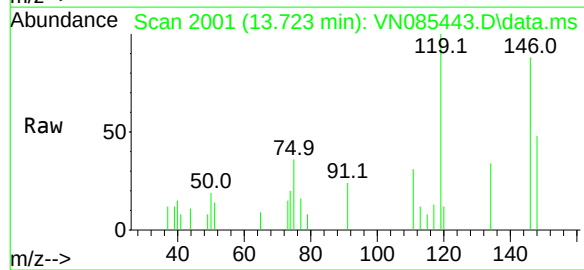
ClientSampleId :

VSTDIC001

|     |       |       |       |      |
|-----|-------|-------|-------|------|
| Tgt | Ion   | 146   | Resp: | 3038 |
| Ion | Ratio | Lower | Upper |      |
| 146 | 100   |       |       |      |
| 111 | 43.0  | 21.4  | 64.3  |      |
| 148 | 70.9  | 32.3  | 96.9  |      |

Manual Integrations  
APPROVED

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



#88

1,4-Dichlorobenzene

Concen: 1.050 ug/l m

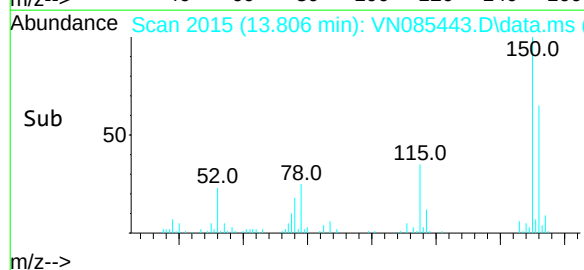
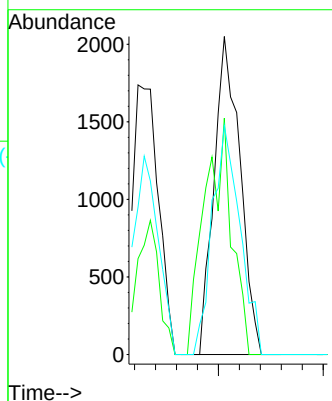
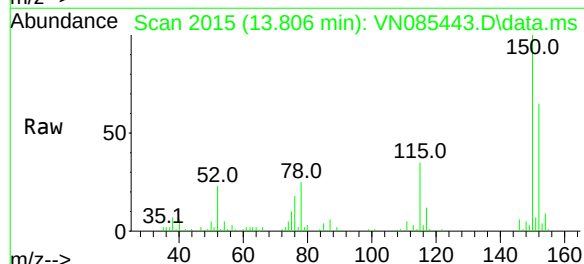
RT: 13.806 min Scan# 2015

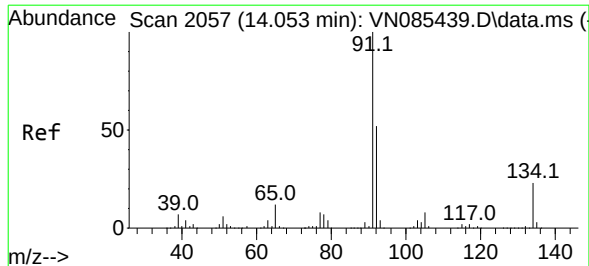
Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|     |       |       |       |      |
|-----|-------|-------|-------|------|
| Tgt | Ion   | 146   | Resp: | 3517 |
| Ion | Ratio | Lower | Upper |      |
| 146 | 100   |       |       |      |
| 111 | 37.2  | 21.3  | 63.7  |      |
| 148 | 61.2  | 32.4  | 97.0  |      |





#89

n-Butylbenzene

Concen: 0.761 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

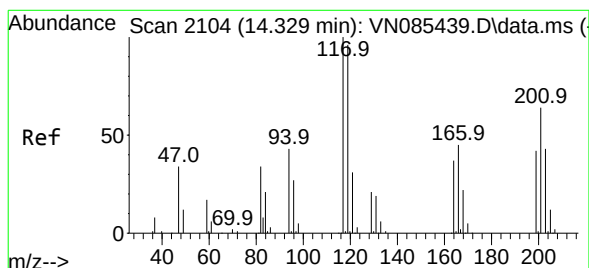
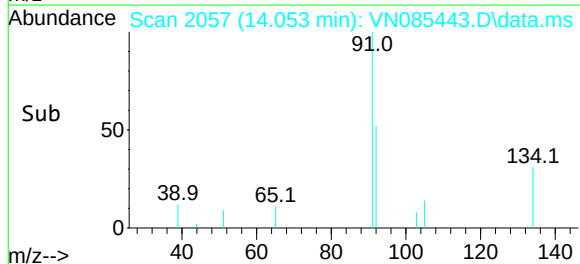
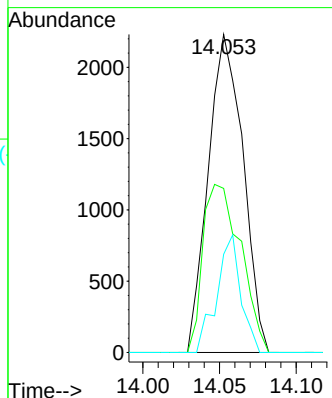
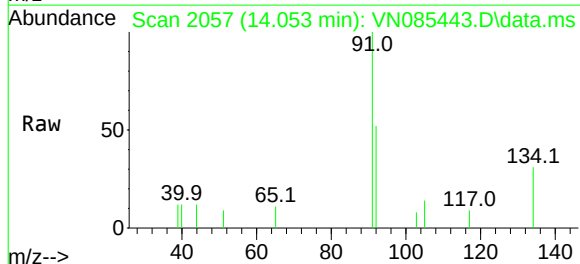
ClientSampleId :

VSTDIC001

|     |       |       |       |      |
|-----|-------|-------|-------|------|
| Tgt | Ion   | 91    | Resp: | 3527 |
| Ion | Ratio | Lower | Upper |      |
| 91  | 100   |       |       |      |
| 92  | 57.2  | 25.8  | 77.3  |      |
| 134 | 25.5  | 11.7  | 35.1  |      |

Manual Integrations  
APPROVED

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



#90

Hexachloroethane

Concen: 1.102 ug/l

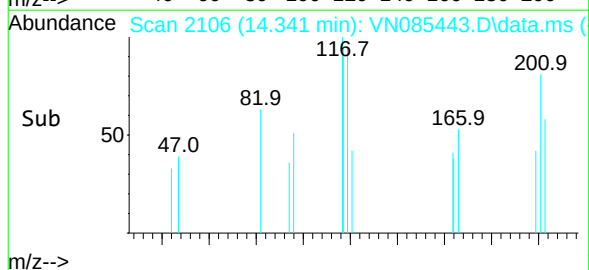
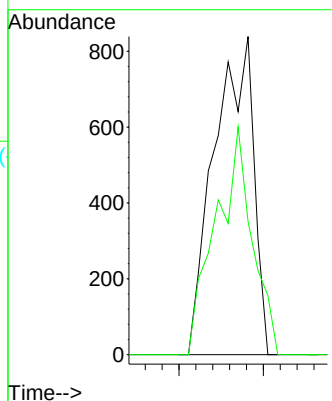
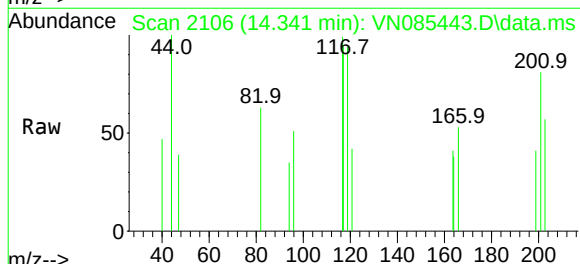
RT: 14.341 min Scan# 2106

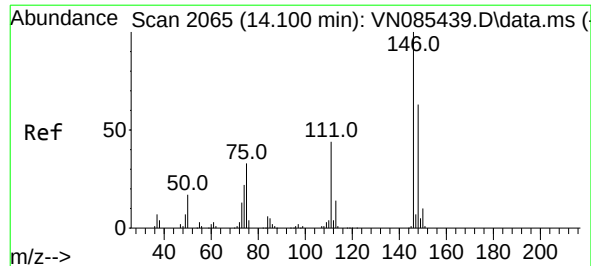
Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|     |       |       |       |      |
|-----|-------|-------|-------|------|
| Tgt | Ion   | 117   | Resp: | 1355 |
| Ion | Ratio | Lower | Upper |      |
| 117 | 100   |       |       |      |
| 201 | 66.5  | 33.7  | 101.0 |      |





#91

1,2-Dichlorobenzene

Concen: 1.090 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

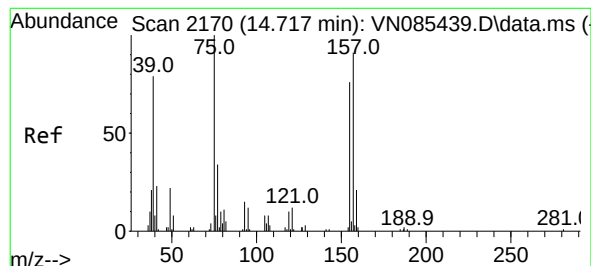
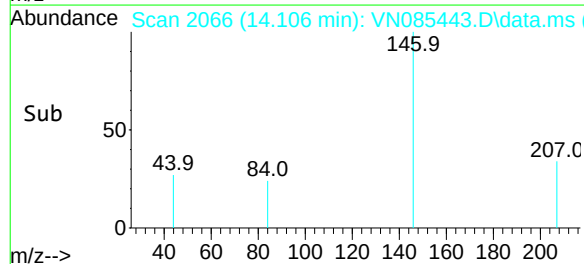
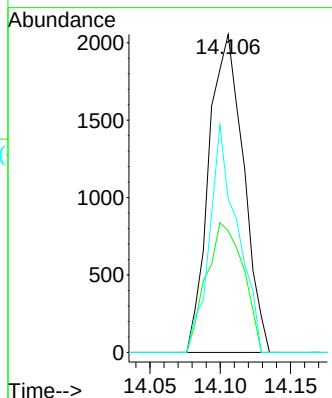
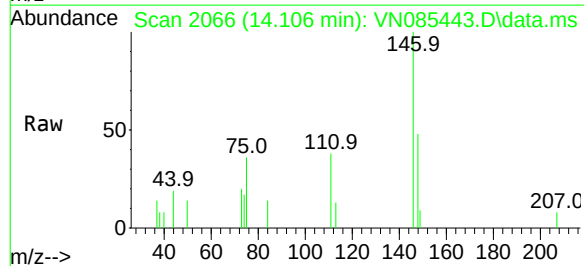
VSTDIC001

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 3515  |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 43.4  | 21.7  | 65.1  |
| 148      | 57.8  | 31.4  | 94.2  |

Manual Integrations

APPROVED

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



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.928 ug/l

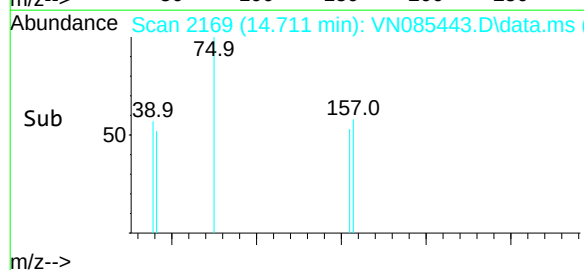
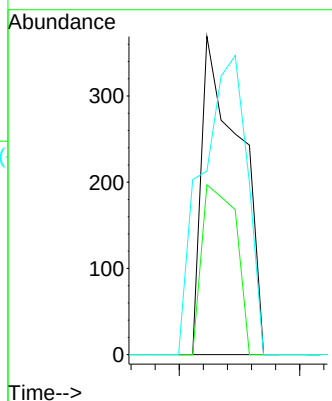
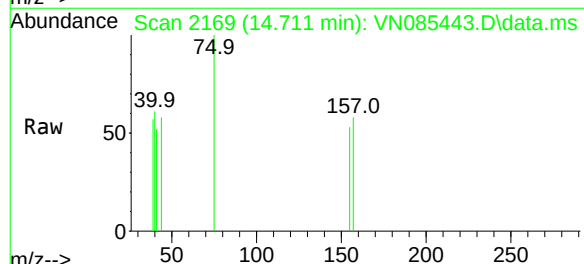
RT: 14.711 min Scan# 2169

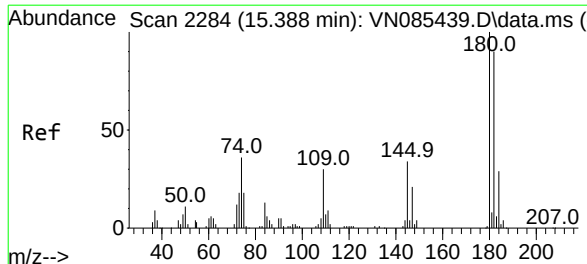
Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 402   |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 155      | 48.0  | 36.4  | 109.2 |
| 157      | 112.7 | 45.4  | 136.1 |





#93

1,2,4-Trichlorobenzene

Concen: 0.874 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085443.D

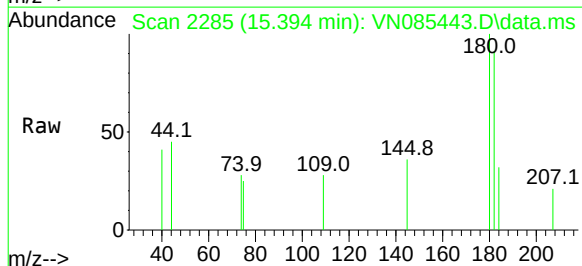
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

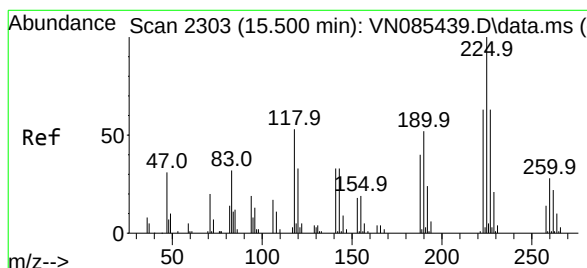
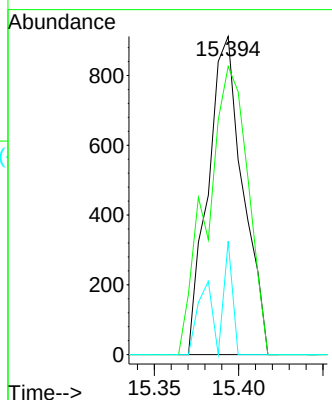
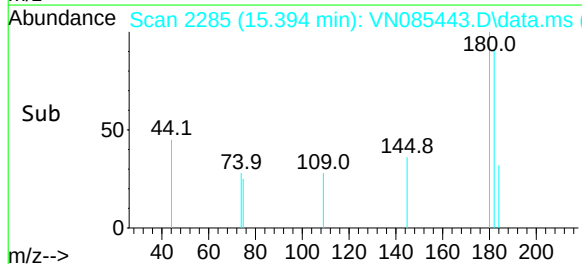
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 1310  |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 106.3 | 46.8  | 140.3 |
| 145      | 9.7   | 16.0  | 48.0  |

Manual Integrations  
APPROVED

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



#94

Hexachlorobutadiene

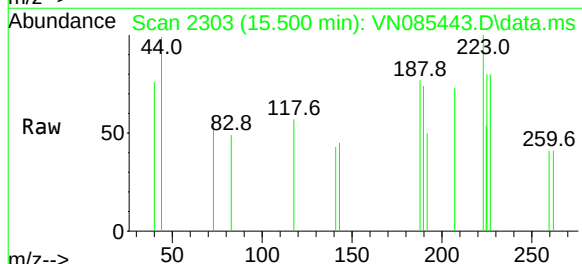
Concen: 1.033 ug/l

RT: 15.500 min Scan# 2303

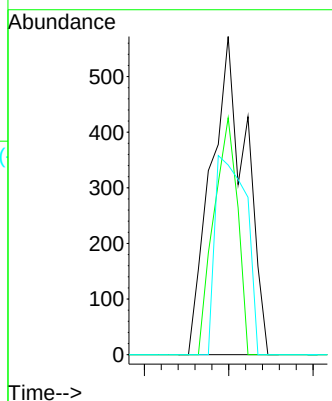
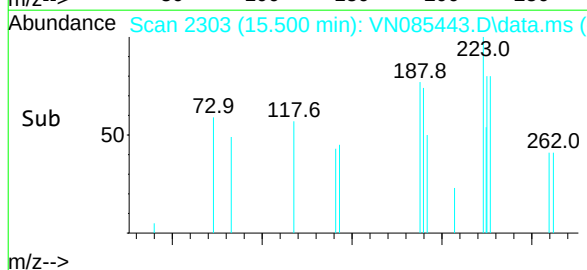
Delta R.T. -0.000 min

Lab File: VN085443.D

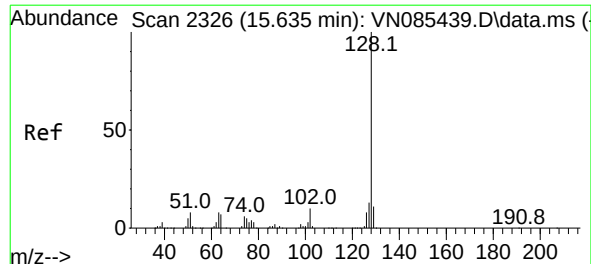
Acq: 14 Jan 2025 17:19



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 822   |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 50.7  | 30.7  | 92.1  |
| 227      | 55.7  | 30.9  | 92.5  |







#95

Naphthalene

Concen: 0.941 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

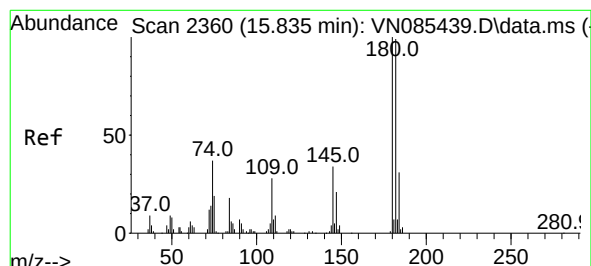
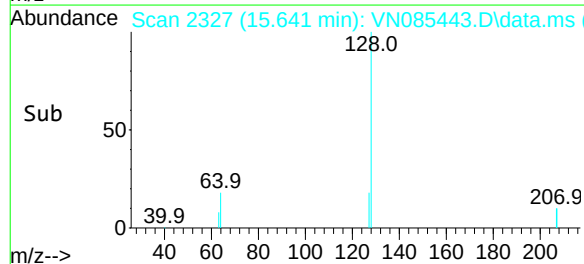
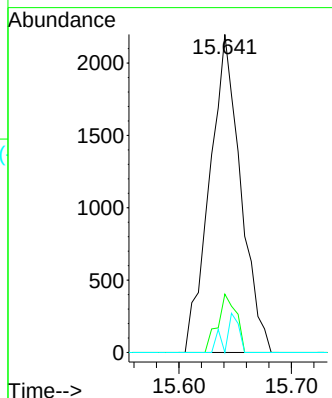
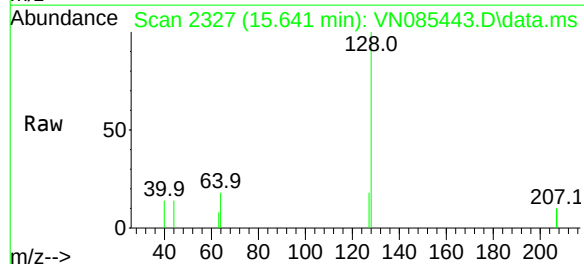
ClientSampleId :

VSTDIC001

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 4210  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 11.1  | 10.6  | 16.0  |
| 129      | 5.3   | 8.8   | 13.2  |

Manual Integrations  
APPROVED

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



#96

1,2,3-Trichlorobenzene

Concen: 0.985 ug/l

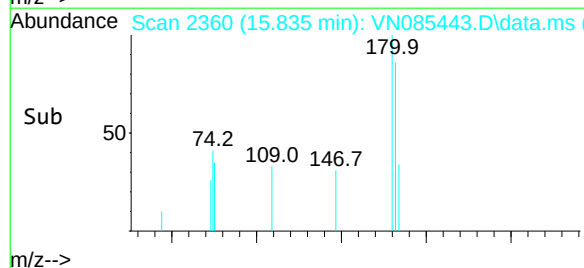
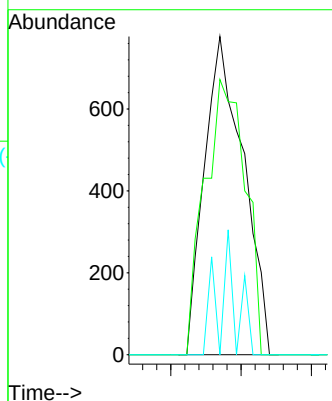
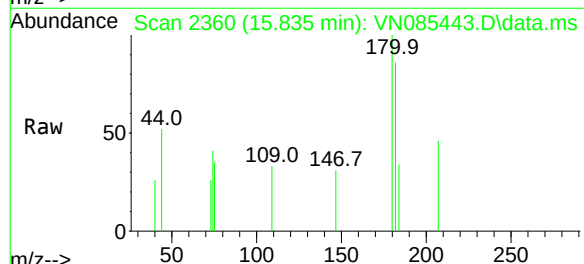
RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 1494  |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 90.2  | 47.4  | 142.2 |
| 145      | 11.8  | 16.9  | 50.7  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

### Manual Integrations APPROVED

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

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Pentafluorobenzene        | 8.218          | 168  | 219757     | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.094          | 114  | 370487     | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865         | 117  | 320948     | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.788         | 152  | 158525     | 50.000   | ug/l   | 0.00     |
|                              |                |      |            |          |        |          |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.571          | 65   | 176594     | 49.782   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 74 - 125 |      | Recovery = | 99.560%  |        |          |
| 35) Dibromofluoromethane     | 8.165          | 113  | 130487     | 50.768   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 75 - 124 |      | Recovery = | 101.540% |        |          |
| 50) Toluene-d8               | 10.565         | 98   | 477630     | 52.302   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 86 - 113 |      | Recovery = | 104.600% |        |          |
| 62) 4-Bromofluorobenzene     | 12.847         | 95   | 165249     | 52.899   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 77 - 121 |      | Recovery = | 105.800% |        |          |
|                              |                |      |            |          |        |          |
| Target Compounds             |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124          | 85   | 130242     | 43.772   | ug/l   | 100      |
| 3) Chloromethane             | 2.360          | 50   | 138152     | 42.883   | ug/l   | 99       |
| 4) Vinyl Chloride            | 2.513          | 62   | 138316     | 42.715   | ug/l   | 99       |
| 5) Bromomethane              | 2.954          | 94   | 80019      | 40.910   | ug/l   | 91       |
| 6) Chloroethane              | 3.124          | 64   | 86837      | 42.299   | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.501          | 101  | 206526     | 43.956   | ug/l   | 99       |
| 8) Diethyl Ether             | 3.959          | 74   | 69545      | 42.846   | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 4.371          | 101  | 118310     | 44.706   | ug/l   | 98       |
| 10) Methyl Iodide            | 4.595          | 142  | 140190     | 46.259   | ug/l   | 98       |
| 11) Tert butyl alcohol       | 5.518          | 59   | 83933      | 206.633  | ug/l   | 99       |
| 12) 1,1-Dichloroethene       | 4.342          | 96   | 106880     | 45.317   | ug/l   | 98       |
| 13) Acrolein                 | 4.177          | 56   | 135720     | 244.765  | ug/l   | 99       |
| 14) Allyl chloride           | 5.024          | 41   | 170308     | 44.501   | ug/l   | 99       |
| 15) Acrylonitrile            | 5.712          | 53   | 294062     | 227.920  | ug/l   | 99       |
| 16) Acetone                  | 4.418          | 43   | 245248     | 213.971  | ug/l   | 98       |
| 17) Carbon Disulfide         | 4.712          | 76   | 300215     | 41.342   | ug/l   | 100      |
| 18) Methyl Acetate           | 5.018          | 43   | 156938     | 45.028   | ug/l   | 100      |
| 19) Methyl tert-butyl Ether  | 5.795          | 73   | 365819     | 47.768   | ug/l   | 100      |
| 20) Methylene Chloride       | 5.271          | 84   | 122059     | 43.017   | ug/l   | 98       |
| 21) trans-1,2-Dichloroethene | 5.783          | 96   | 112597     | 44.672   | ug/l   | 93       |
| 22) Diisopropyl ether        | 6.665          | 45   | 399206     | 46.996   | ug/l   | 99       |
| 23) Vinyl Acetate            | 6.601          | 43   | 1471068    | 247.459  | ug/l   | 100      |
| 24) 1,1-Dichloroethane       | 6.571          | 63   | 228489     | 44.114   | ug/l   | 98       |
| 25) 2-Butanone               | 7.477          | 43   | 386125     | 228.924  | ug/l   | 100      |
| 26) 2,2-Dichloropropane      | 7.489          | 77   | 199303     | 47.593   | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene   | 7.483          | 96   | 134920     | 45.446   | ug/l   | 98       |
| 28) Bromochloromethane       | 7.812          | 49   | 106323     | 44.122   | ug/l   | 100      |
| 29) Tetrahydrofuran          | 7.836          | 42   | 255650     | 239.065  | ug/l   | 99       |
| 30) Chloroform               | 7.965          | 83   | 235923     | 44.071   | ug/l   | 98       |
| 31) Cyclohexane              | 8.253          | 56   | 193034     | 42.878   | ug/l   | 93       |
| 32) 1,1,1-Trichloroethane    | 8.165          | 97   | 208172     | 44.332   | ug/l   | 99       |
| 36) 1,1-Dichloropropene      | 8.365          | 75   | 161834     | 44.863   | ug/l   | 98       |
| 37) Ethyl Acetate            | 7.559          | 43   | 160656     | 44.123   | ug/l   | 97       |
| 38) Carbon Tetrachloride     | 8.359          | 117  | 183592     | 44.456   | ug/l   | 99       |
| 39) Methylcyclohexane        | 9.600          | 83   | 168431     | 49.687   | ug/l   | 98       |
| 40) Benzene                  | 8.600          | 78   | 494871     | 45.657   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Manual Integrations  
 APPROVED

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

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 89326    | 47.155  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 185663   | 45.481  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.683  | 43   | 265107   | 45.440  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 110058   | 43.622  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 123876   | 44.744  | ug/l   | 97       |
| 46) Dibromomethane            | 9.700  | 93   | 88325    | 44.214  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.889  | 83   | 185808   | 45.655  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 131142   | 49.948  | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.689  | 88   | 35051    | 792.760 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 832426   | 245.877 | ug/l   | 99       |
| 52) Toluene                   | 10.630 | 92   | 301911   | 48.073  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.830 | 75   | 183680   | 47.757  | ug/l   | 94       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 196307   | 47.783  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 114757   | 46.173  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 182170   | 43.762  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 202583   | 46.877  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 403949   | 256.116 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 598433   | 251.213 | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.353 | 129  | 137831   | 45.935  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 110926   | 44.837  | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 98211    | 44.886  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 322723   | 45.901  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 115379   | 44.712  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 577059   | 50.391  | ug/l   | 97       |
| 68) m/p-Xylenes               | 12.071 | 106  | 437367   | 103.341 | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 210698   | 52.093  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 355459   | 53.103  | ug/l   | 100      |
| 71) Bromoform                 | 12.577 | 173  | 90693    | 49.119  | ug/l # | 100      |
| 73) Isopropylbenzene          | 12.694 | 105  | 534428   | 49.951  | ug/l   | 99       |
| 74) N-ethyl acetate           | 12.488 | 43   | 234342   | 48.730  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 164882   | 43.627  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 134976m  | 41.891  | ug/l   |          |
| 77) Bromobenzene              | 12.977 | 156  | 128968   | 46.138  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.029 | 91   | 645977   | 51.001  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.124 | 91   | 392404   | 47.870  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 456048   | 51.604  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 58623m   | 49.226  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 398110   | 48.776  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 378478   | 50.997  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.477 | 105  | 457340   | 51.922  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 532578   | 51.777  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 440284   | 47.795  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 236387   | 45.920  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 235319   | 44.102  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 373227   | 50.578  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 88538    | 45.215  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 231646   | 45.113  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75   | 31899    | 46.221  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 109157   | 45.739  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 53358    | 42.112  | ug/l   | 99       |
| 95) Naphthalene               | 15.641 | 128  | 335535   | 47.116  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 107583   | 44.551  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085445.D  
Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Manual Integrations  
APPROVED

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

Quant Time: Jan 15 02:20:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

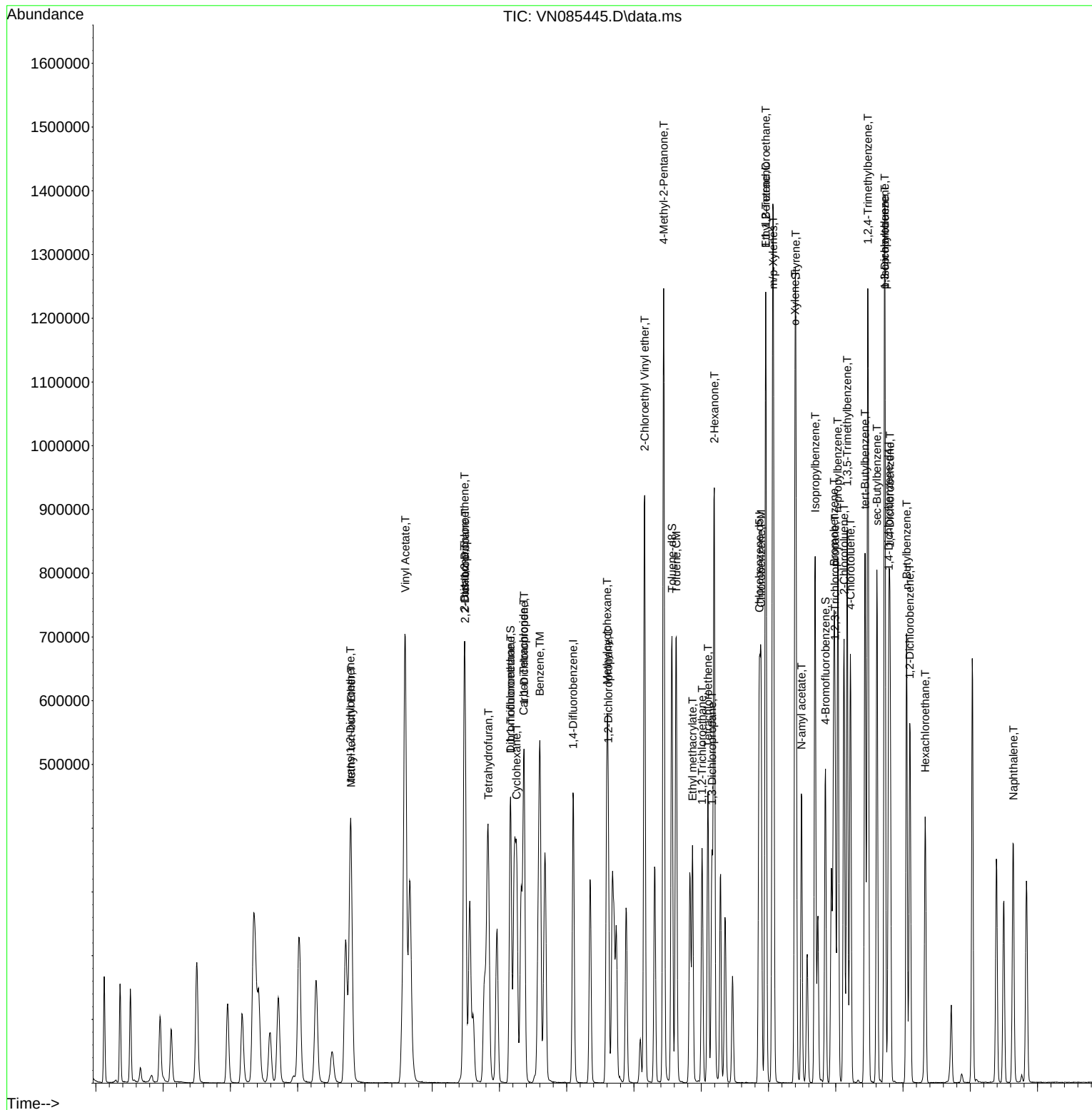
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Acq On    : 14 Jan 2025  18:06  
Operator  : JC\MD  
Sample    : VSTDICV050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 12   Sample Multiplier: 1
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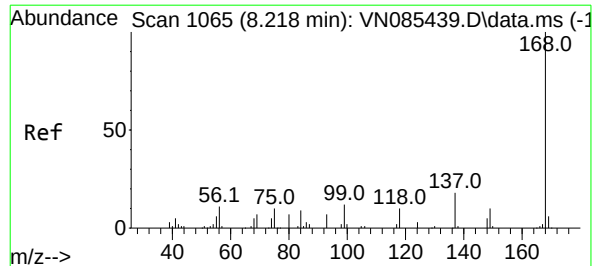
**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
ICVVN011425

## Manual Integrations APPROVED

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

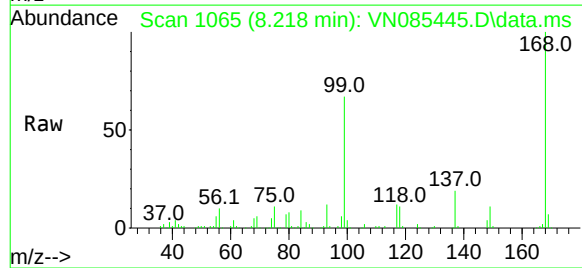
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

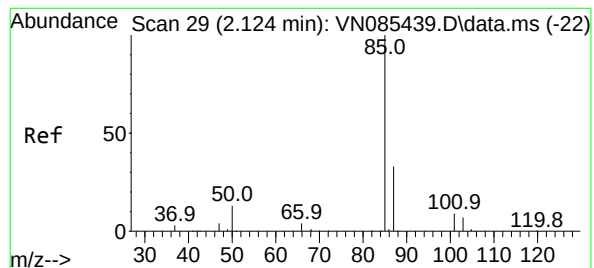
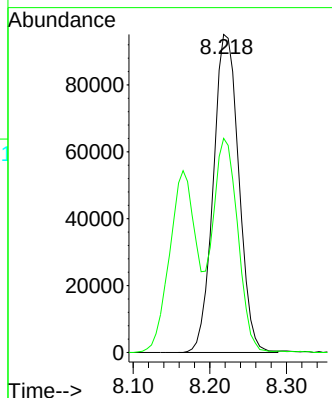
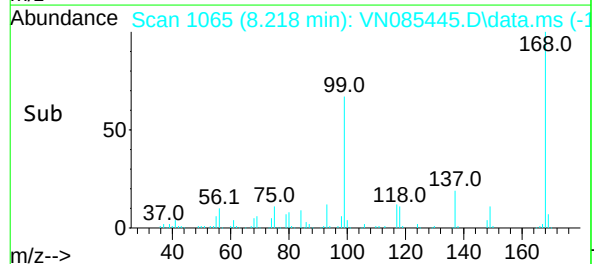
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion:168 Resp: 219757  
Ion Ratio Lower Upper  
168 100  
99 66.9 53.6 80.4

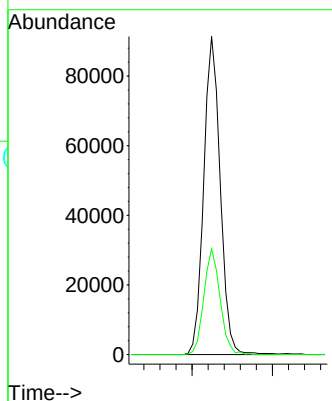
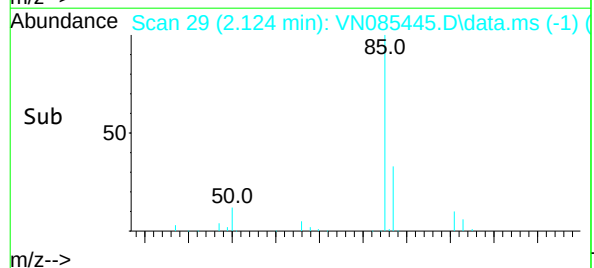
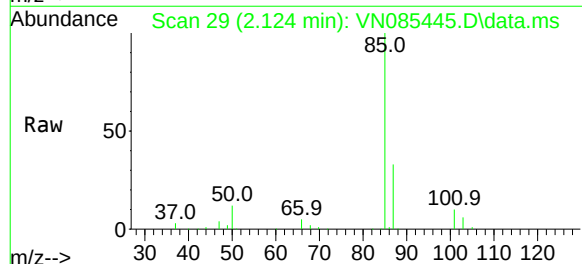
Manual Integrations  
APPROVED

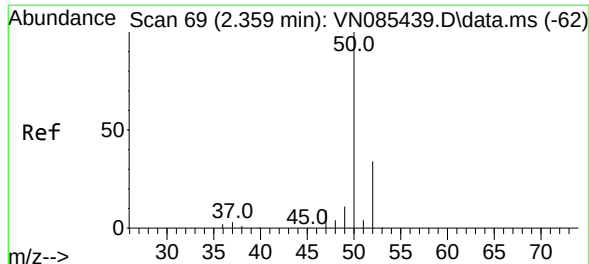
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#2  
Dichlorodifluoromethane  
Concen: 43.772 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 85 Resp: 130242  
Ion Ratio Lower Upper  
85 100  
87 33.2 16.7 50.1





#3

Chloromethane

Concen: 42.883 ug/l

RT: 2.360 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 50 Resp: 138152

Ion Ratio Lower Upper

50 100

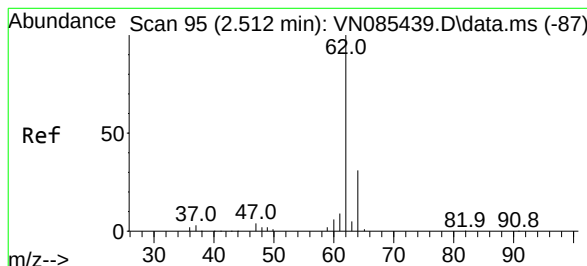
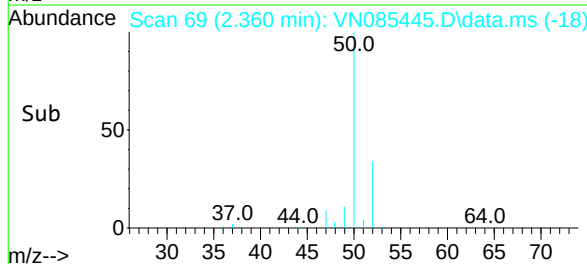
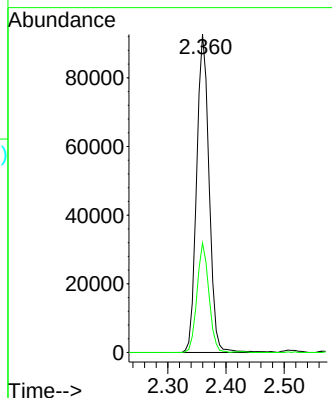
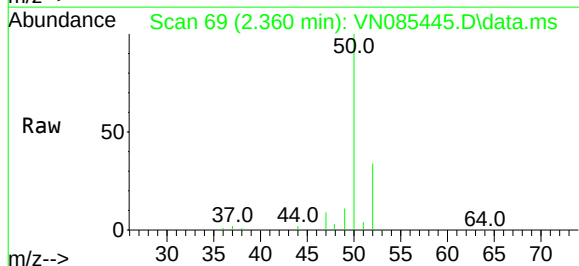
52 34.4 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 42.715 ug/l

RT: 2.513 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085445.D

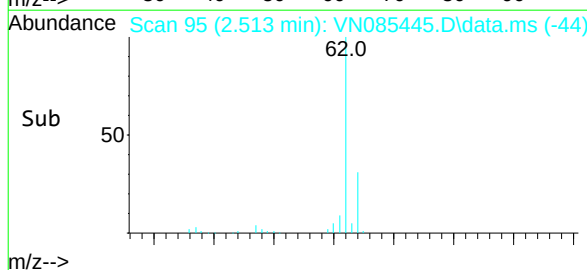
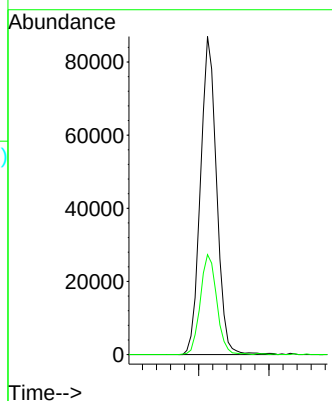
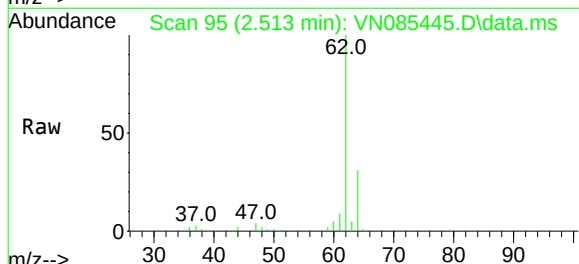
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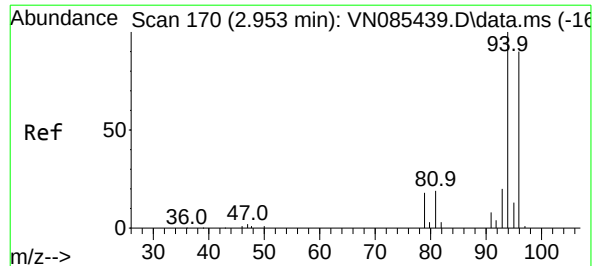
Tgt Ion: 62 Resp: 138316

Ion Ratio Lower Upper

62 100

64 31.4 24.8 37.2





#5

Bromomethane

Concen: 40.910 ug/l

RT: 2.954 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 94 Resp: 80019

Ion Ratio Lower Upper

94 100

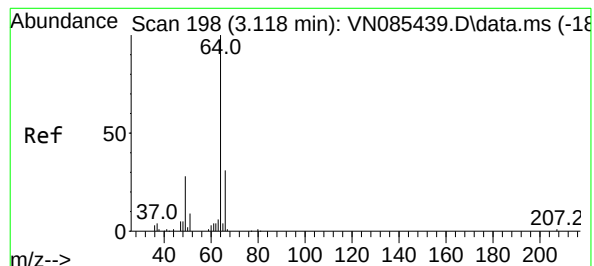
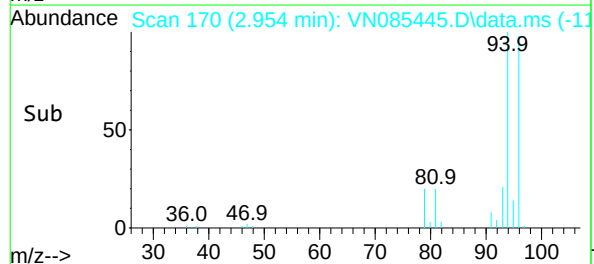
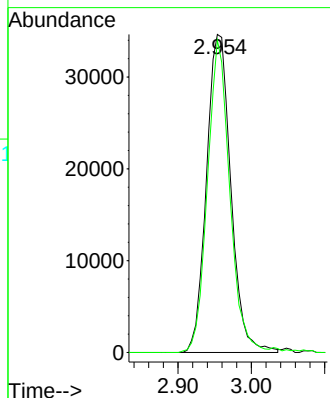
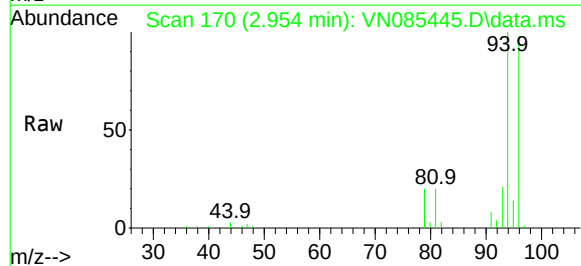
96 98.2 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 42.299 ug/l

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN085445.D

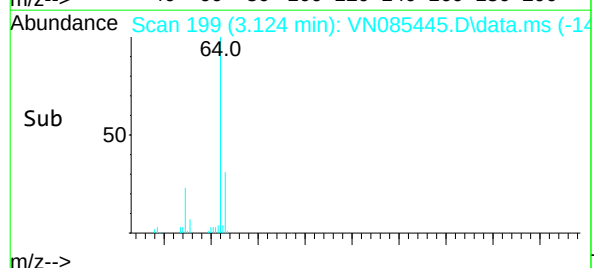
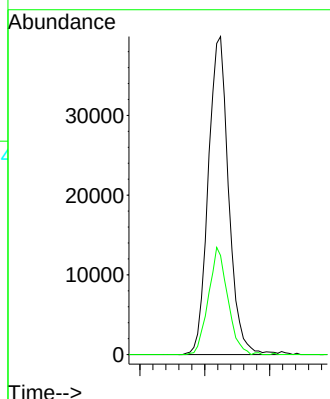
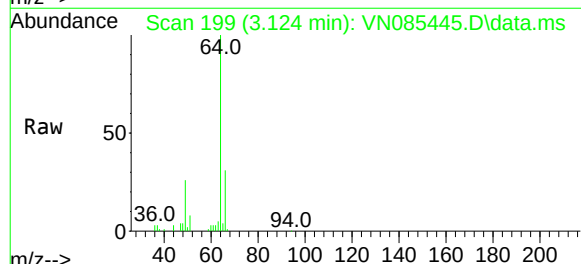
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Tgt Ion: 64 Resp: 86837

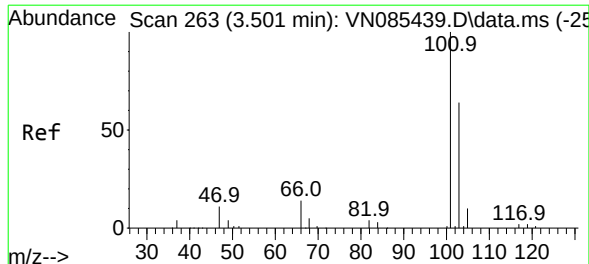
Ion Ratio Lower Upper

64 100

66 31.1 24.6 36.8







#7

Trichlorofluoromethane

Concen: 43.956 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:101 Resp: 206526

Ion Ratio Lower Upper

101 100

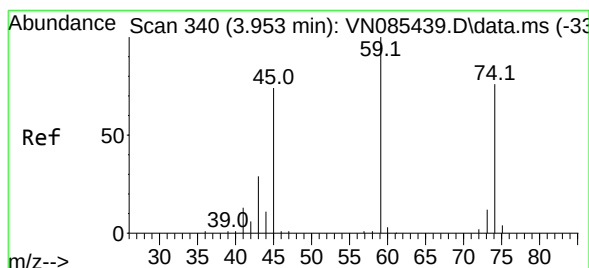
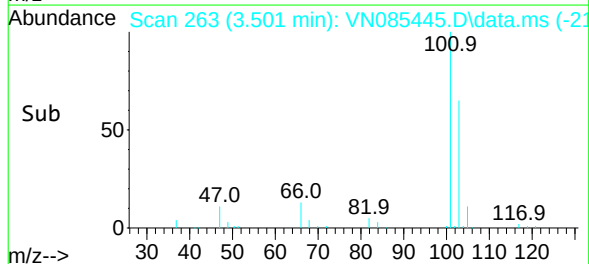
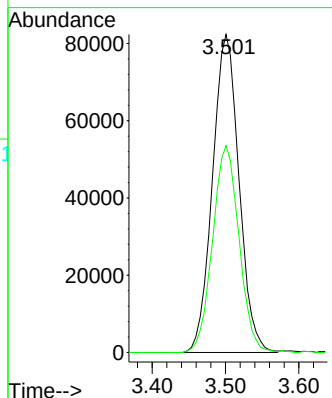
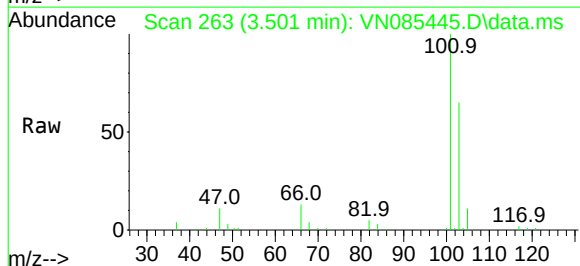
103 65.1 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 42.846 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085445.D

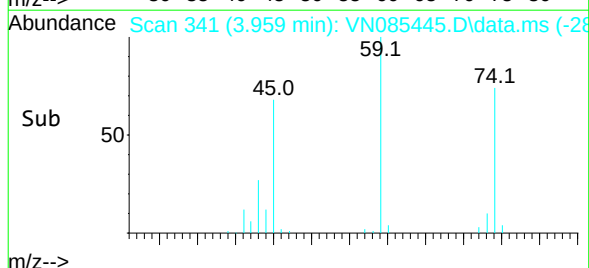
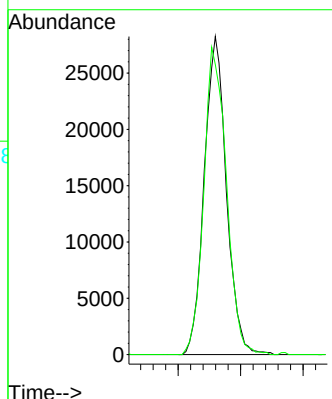
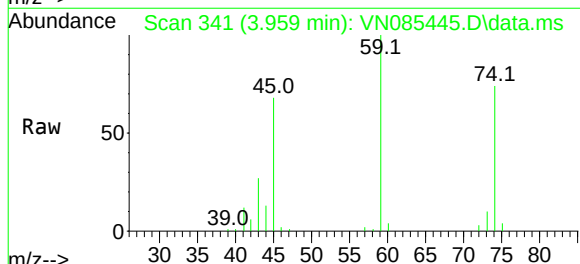
Acq: 14 Jan 2025 18:06

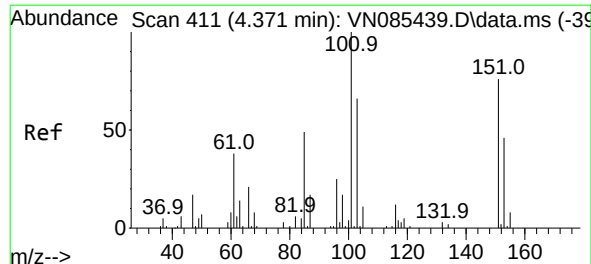
Tgt Ion: 74 Resp: 69545

Ion Ratio Lower Upper

74 100

45 99.0 49.7 149.1





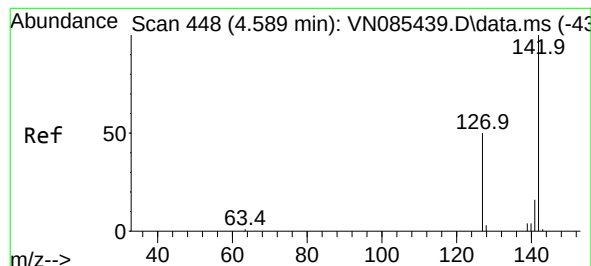
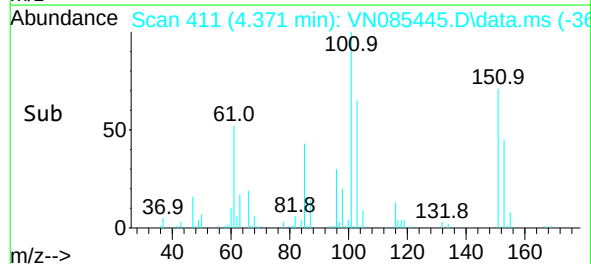
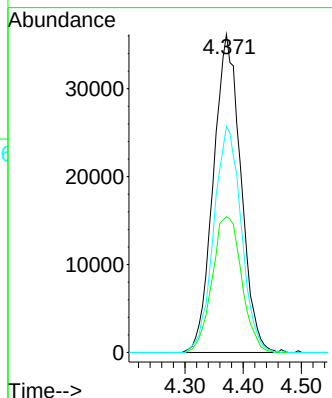
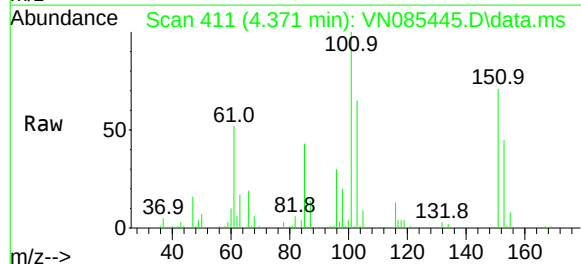
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 44.706 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion:101 Resp: 118310  
Ion Ratio Lower Upper  
101 100  
85 45.9 37.8 56.8  
151 71.5 58.8 88.2

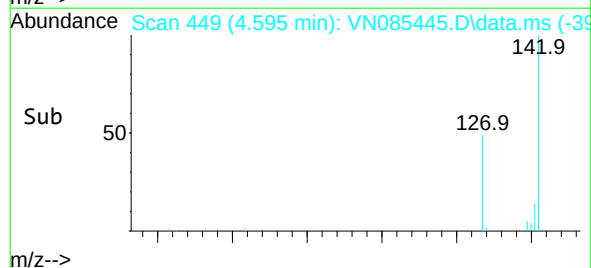
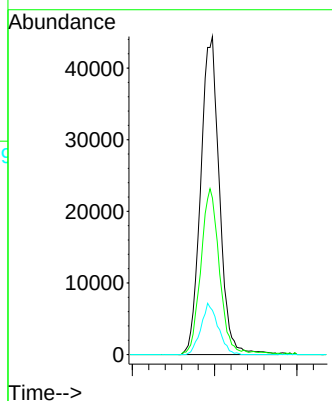
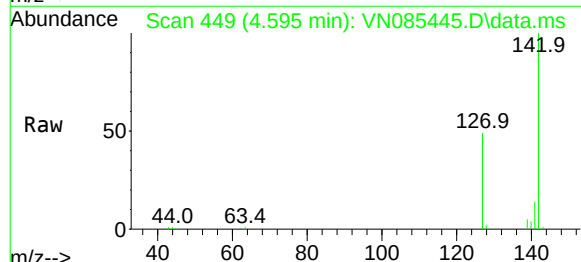
Manual Integrations  
APPROVED

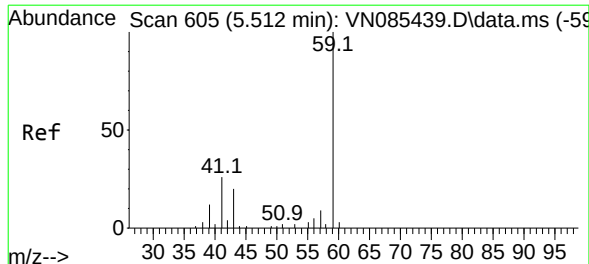
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#10  
Methyl Iodide  
Concen: 46.259 ug/l  
RT: 4.595 min Scan# 449  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:142 Resp: 140190  
Ion Ratio Lower Upper  
142 100  
127 49.2 40.3 60.5  
141 13.9 12.8 19.2





#11

Tert butyl alcohol

Concen: 206.633 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085445.D

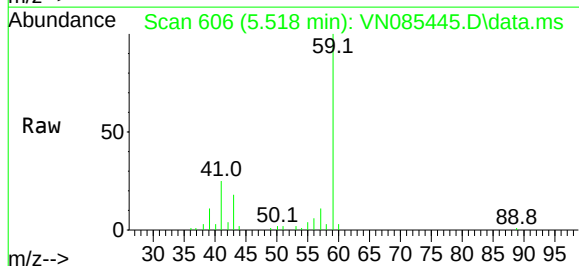
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425



Tgt Ion: 59 Resp: 83933

Ion Ratio Lower Upper

59 100

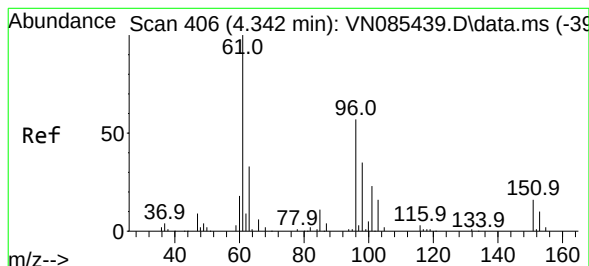
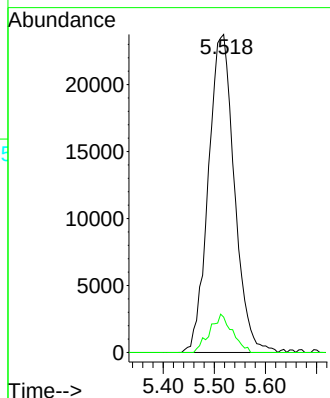
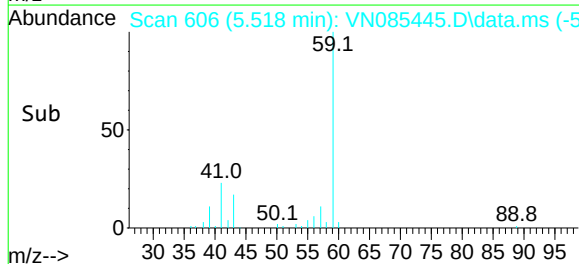
57 10.4 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 45.317 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

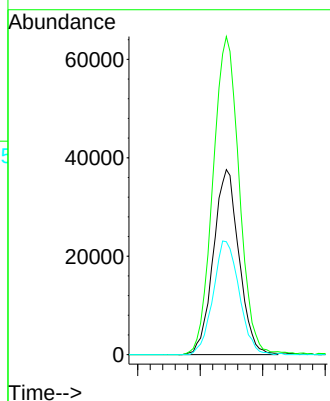
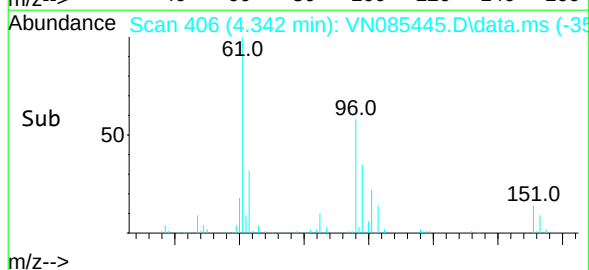
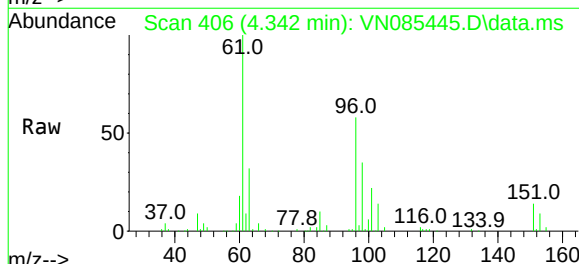
Tgt Ion: 96 Resp: 106880

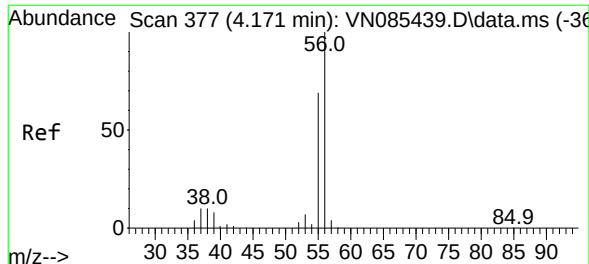
Ion Ratio Lower Upper

96 100

61 171.9 141.0 211.4

98 61.0 49.0 73.6





#13

Acrolein

Concen: 244.765 ug/l

RT: 4.177 min Scan# 37

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 56 Resp: 135720

Ion Ratio Lower Upper

56 100

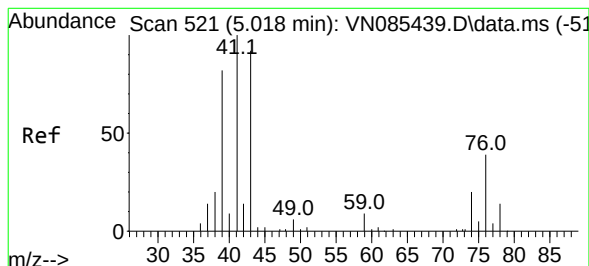
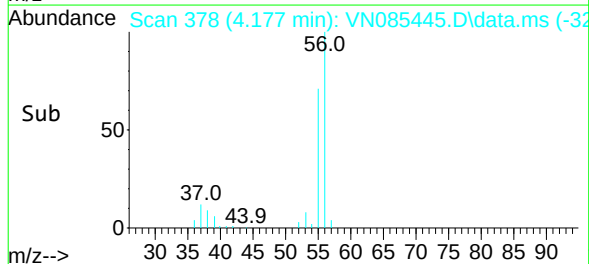
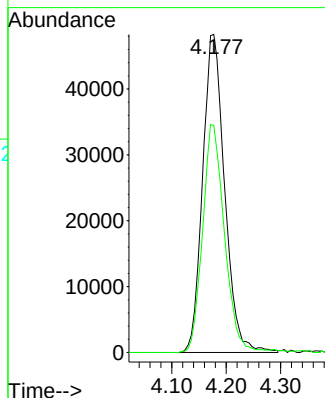
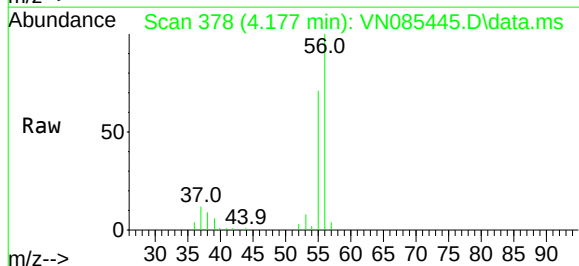
55 70.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 44.501 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

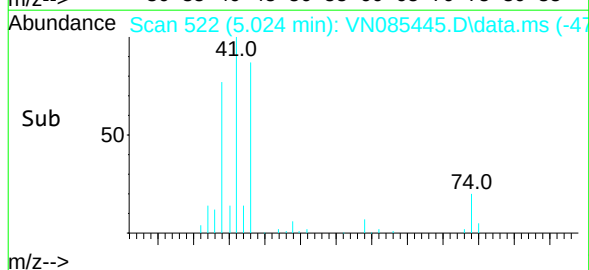
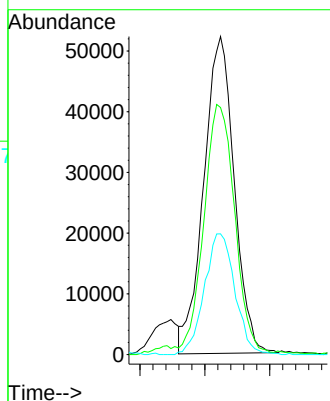
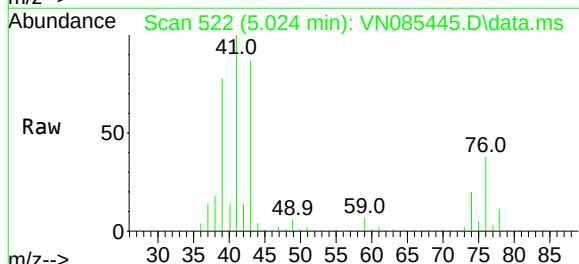
Tgt Ion: 41 Resp: 170308

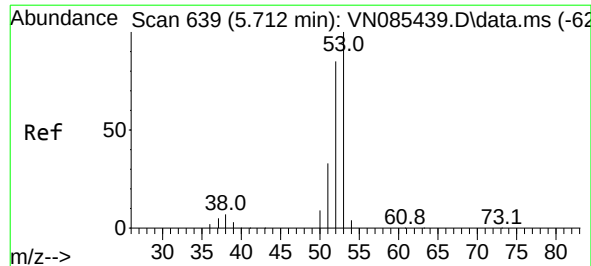
Ion Ratio Lower Upper

41 100

39 78.9 64.4 96.6

76 38.2 30.5 45.7





#15

Acrylonitrile

Concen: 227.920 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 53 Resp: 294062

Ion Ratio Lower Upper

53 100

52 82.7 65.5 98.3

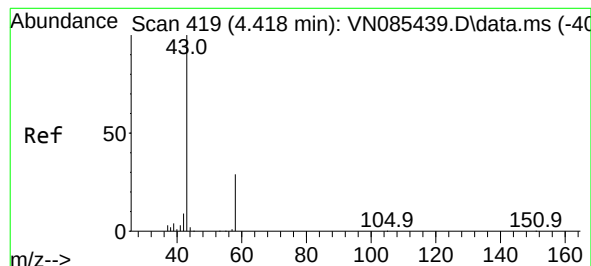
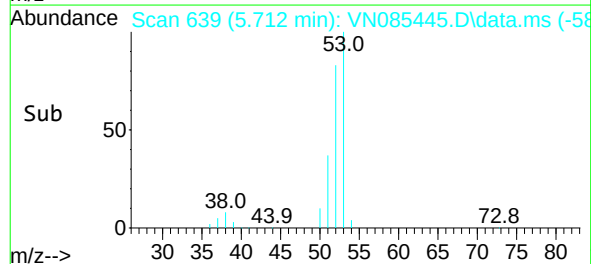
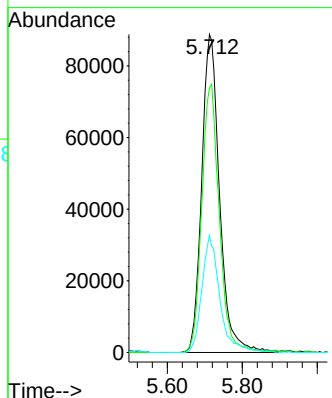
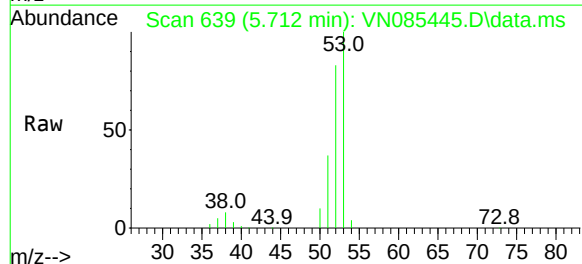
51 36.8 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 213.971 ug/l

RT: 4.418 min Scan# 419

Delta R.T. 0.000 min

Lab File: VN085445.D

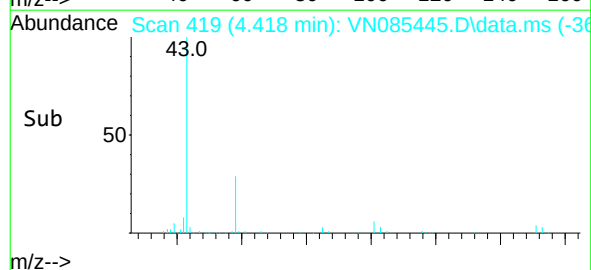
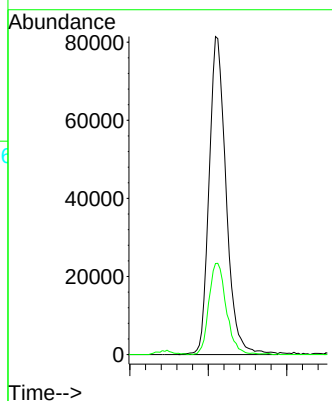
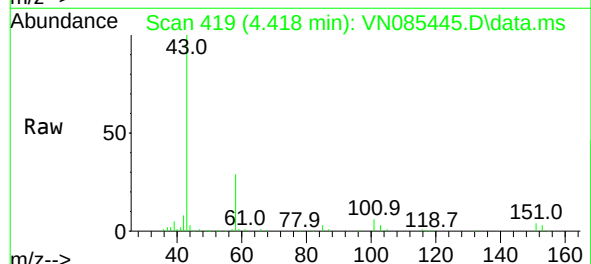
Acq: 14 Jan 2025 18:06

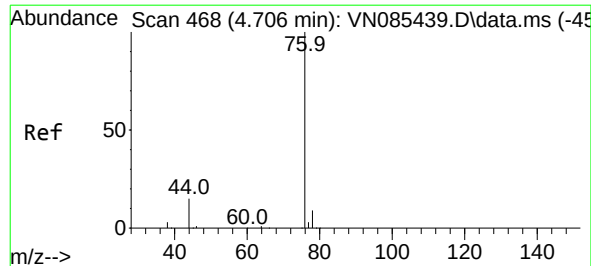
Tgt Ion: 43 Resp: 245248

Ion Ratio Lower Upper

43 100

58 28.4 23.8 35.6





#17

Carbon Disulfide

Concen: 41.342 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 76 Resp: 300215

Ion Ratio Lower Upper

76 100

78 8.7 6.9 10.3

Instrument :

MSVOA\_N

ClientSampleId :

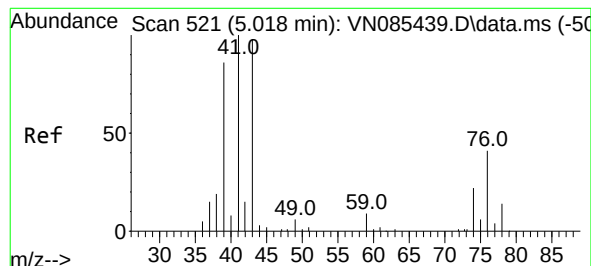
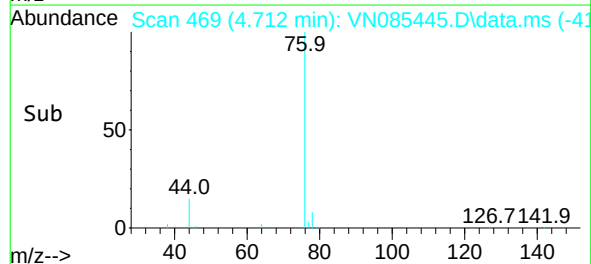
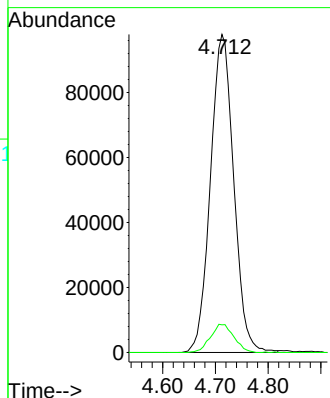
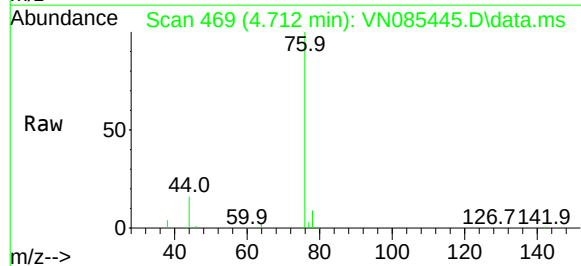
ICVVN011425

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 45.028 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085445.D

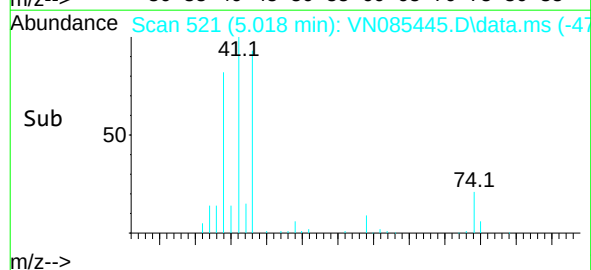
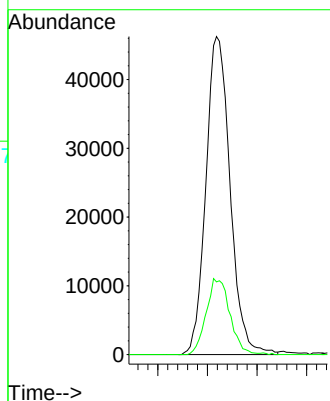
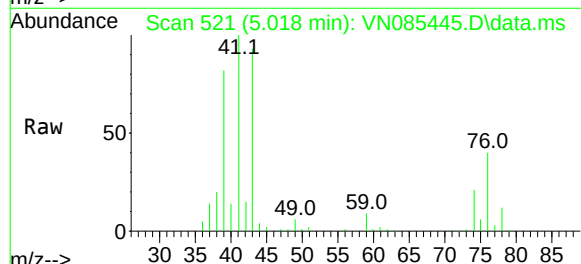
Acq: 14 Jan 2025 18:06

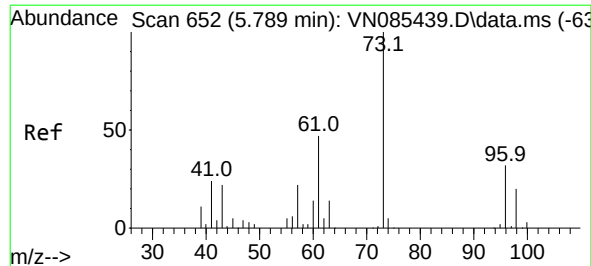
Tgt Ion: 43 Resp: 156938

Ion Ratio Lower Upper

43 100

74 23.4 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 47.768 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 73 Resp: 365819

Ion Ratio Lower Upper

73 100

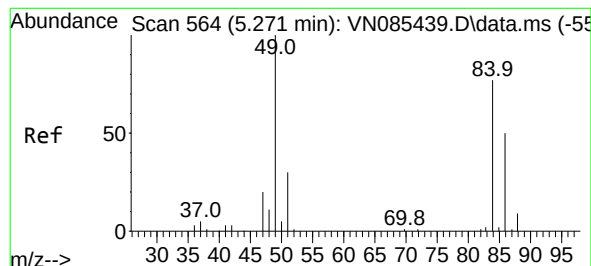
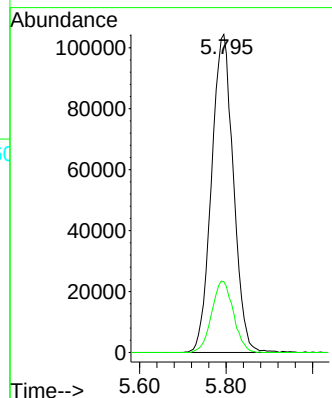
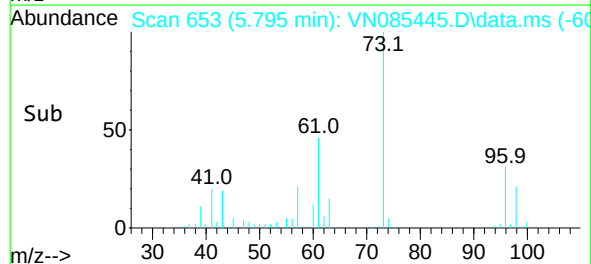
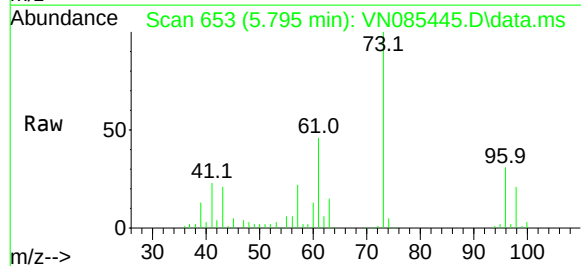
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 43.017 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 84 Resp: 122059

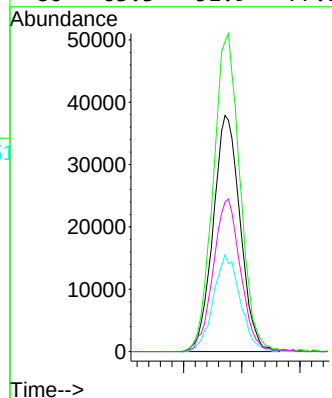
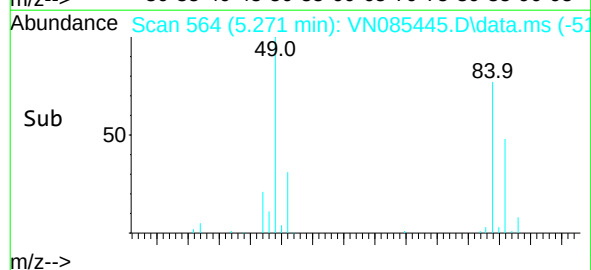
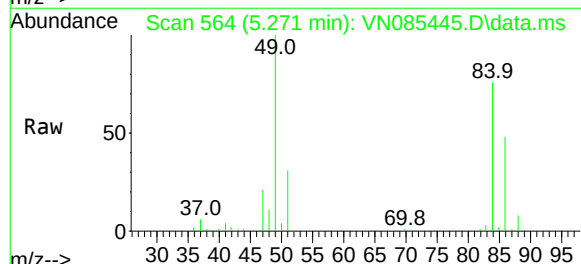
Ion Ratio Lower Upper

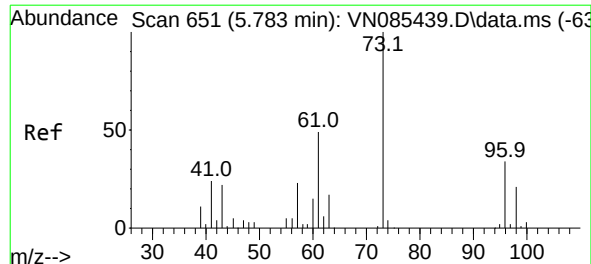
84 100

49 131.3 104.1 156.1

51 41.0 31.0 46.4

86 63.3 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 44.672 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 96 Resp: 112597

Ion Ratio Lower Upper

96 100

61 134.3 115.7 173.5

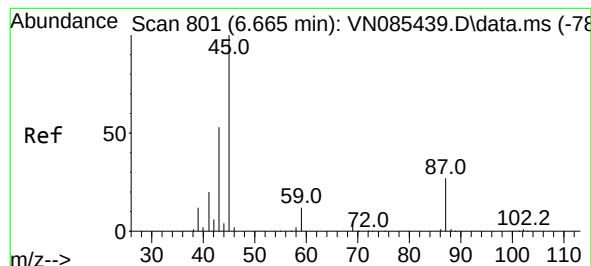
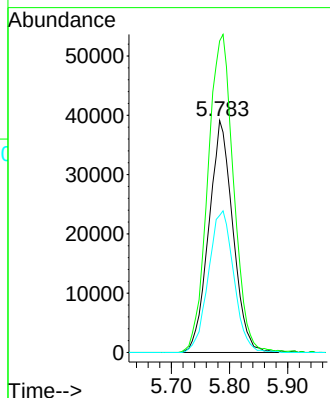
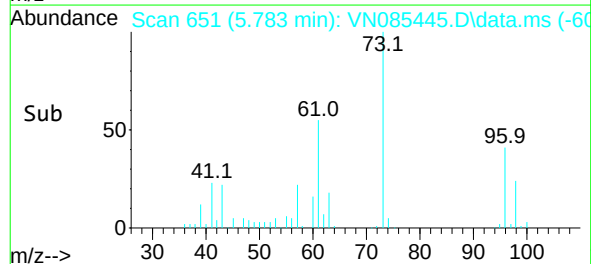
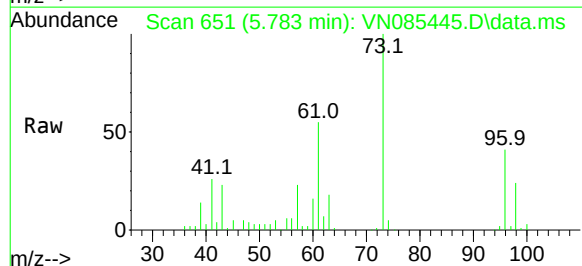
98 59.1 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 46.996 ug/l

RT: 6.665 min Scan# 801

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 45 Resp: 399206

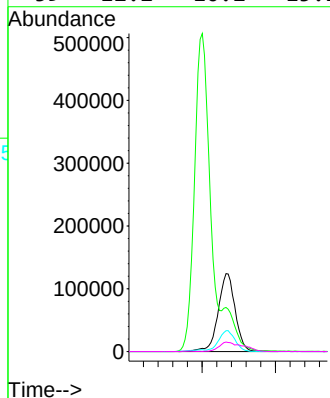
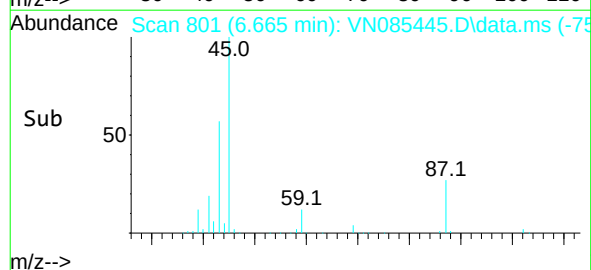
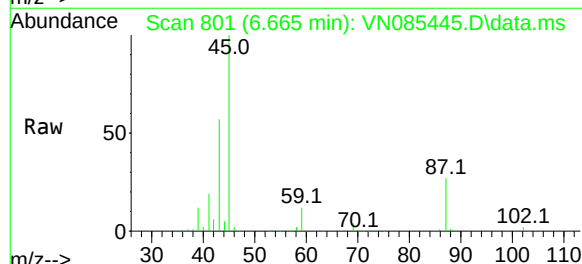
Ion Ratio Lower Upper

45 100

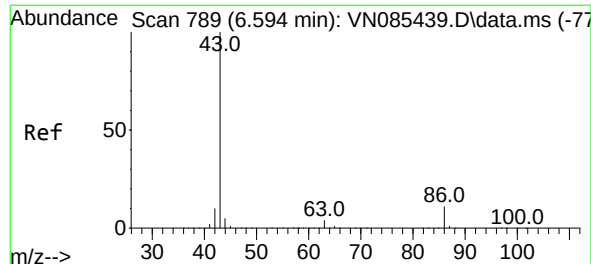
43 56.0 45.0 67.6

87 26.8 21.8 32.8

59 12.2 10.2 15.2







#23

Vinyl Acetate

Concen: 247.459 ug/l

RT: 6.601 min Scan# 79

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 1471068

Ion Ratio Lower Upper

43 100

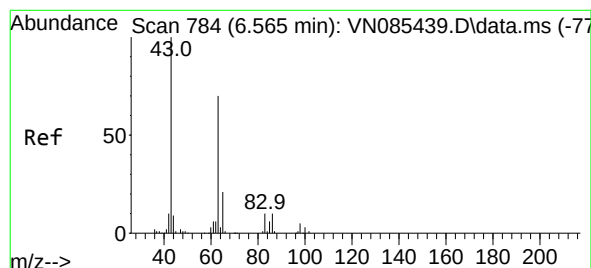
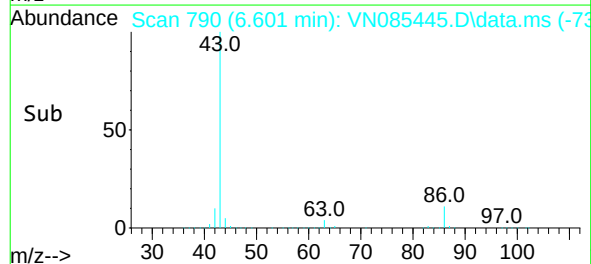
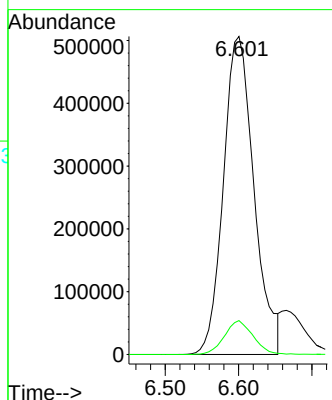
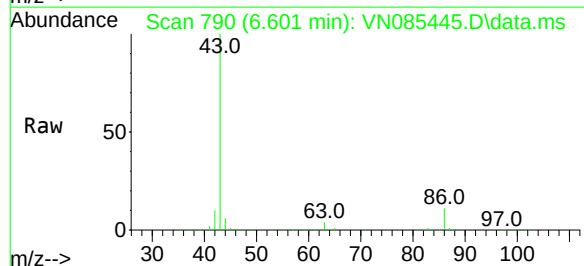
86 10.7 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 44.114 ug/l

RT: 6.571 min Scan# 785

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

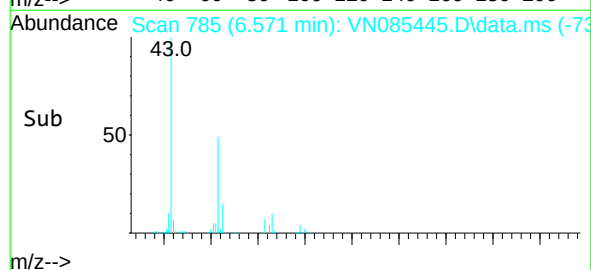
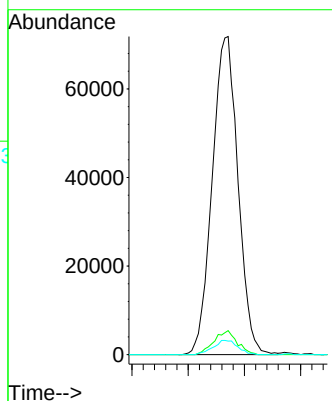
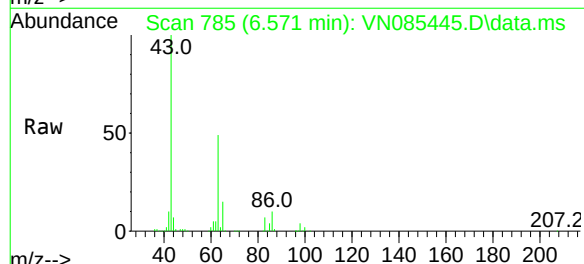
Tgt Ion: 63 Resp: 228489

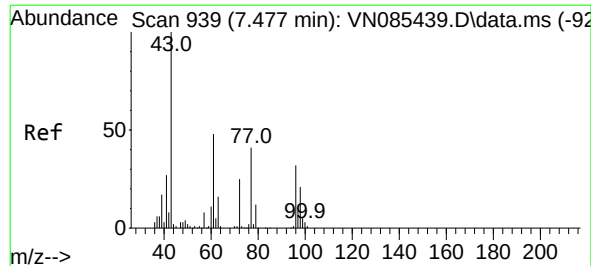
Ion Ratio Lower Upper

63 100

98 7.5 3.3 9.8

100 4.2 2.0 6.0





#25

2-Butanone

Concen: 228.924 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 386125

Ion Ratio Lower Upper

43 100

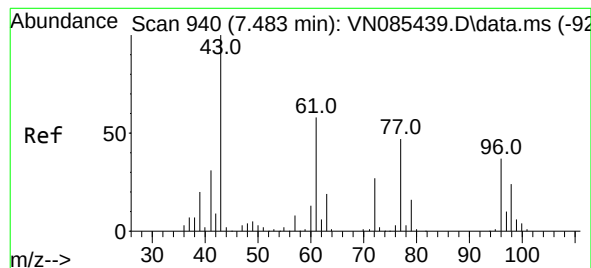
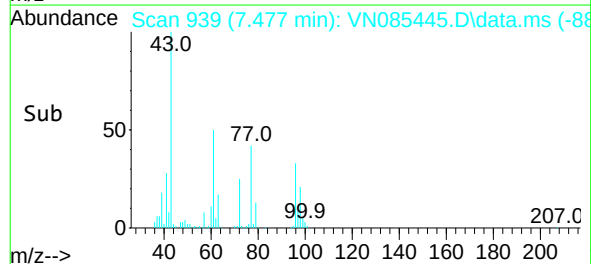
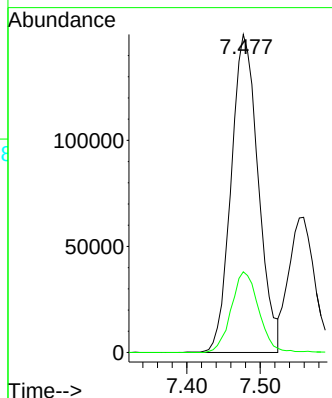
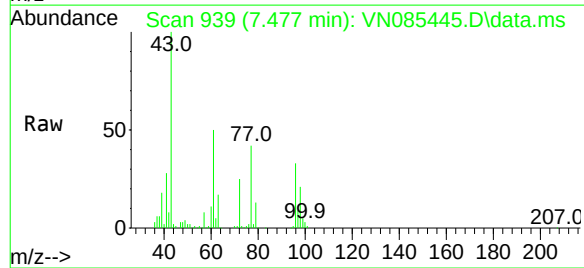
72 25.4 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 47.593 ug/l

RT: 7.489 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085445.D

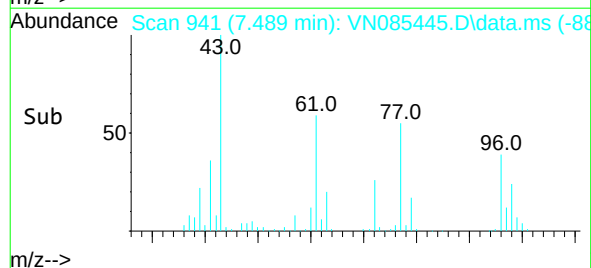
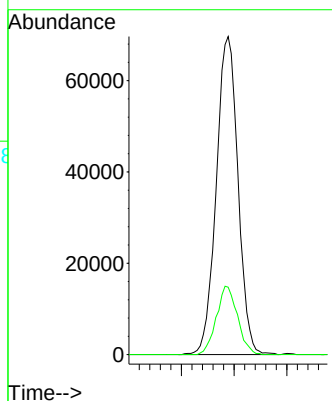
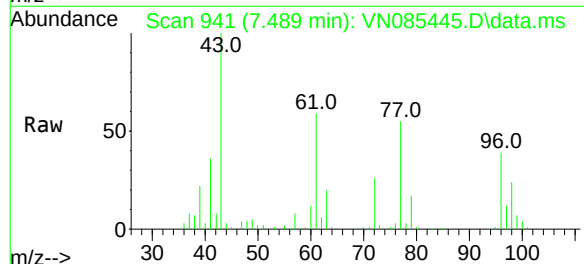
Acq: 14 Jan 2025 18:06

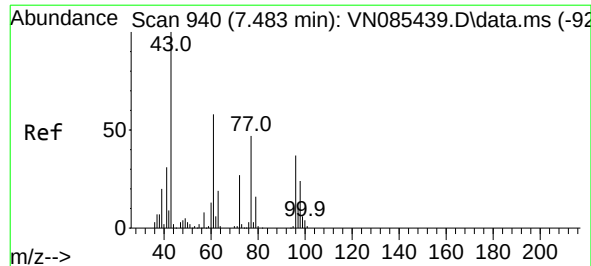
Tgt Ion: 77 Resp: 199303

Ion Ratio Lower Upper

77 100

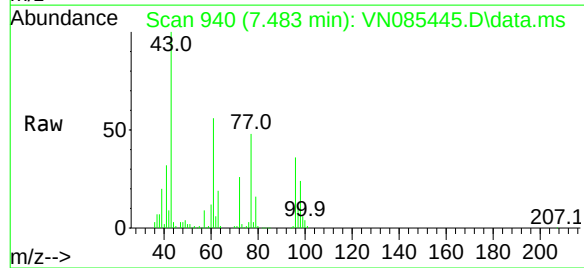
97 20.9 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 45.446 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

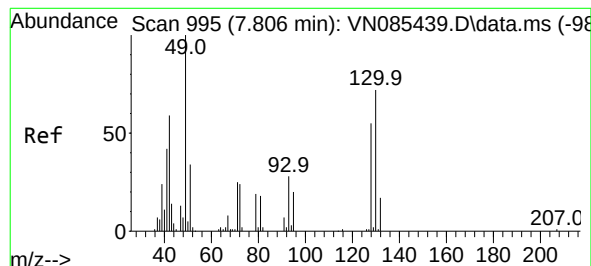
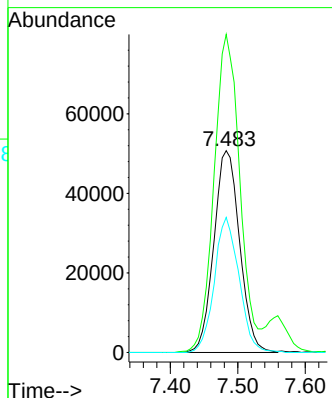
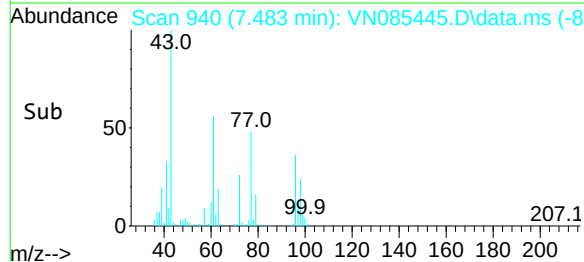
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion: 96 Resp: 134920  
Ion Ratio Lower Upper  
96 100  
61 158.0 0.0 311.8  
98 64.1 0.0 126.0

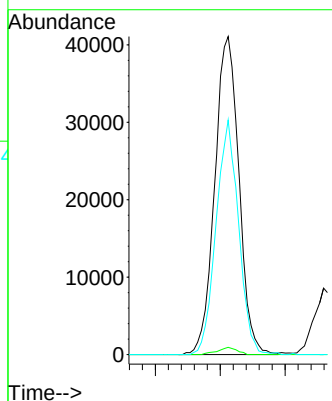
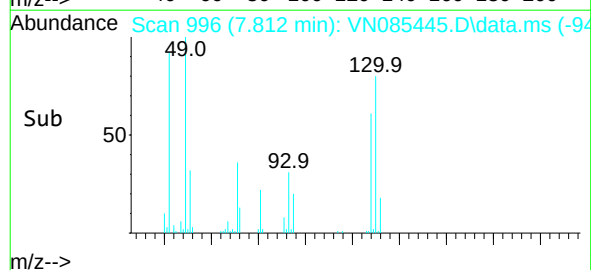
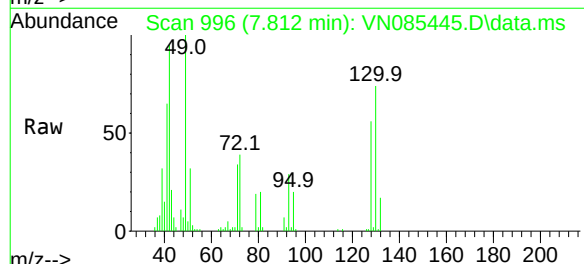
Manual Integrations  
APPROVED

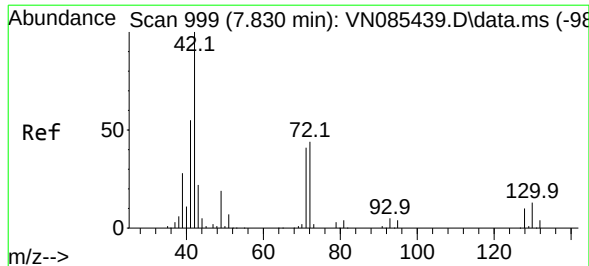
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#28  
Bromochloromethane  
Concen: 44.122 ug/l  
RT: 7.812 min Scan# 996  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 49 Resp: 106323  
Ion Ratio Lower Upper  
49 100  
129 1.8 0.0 4.4  
130 68.6 55.0 82.4





#29

Tetrahydrofuran

Concen: 239.065 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 42 Resp: 255650

Ion Ratio Lower Upper

42 100

72 42.5 34.2 51.2

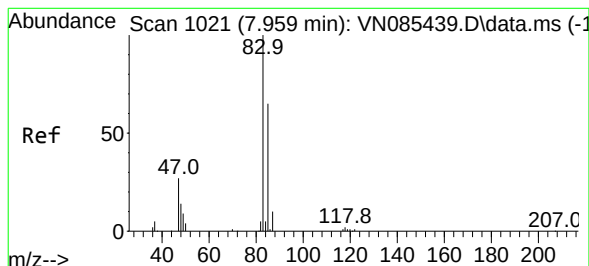
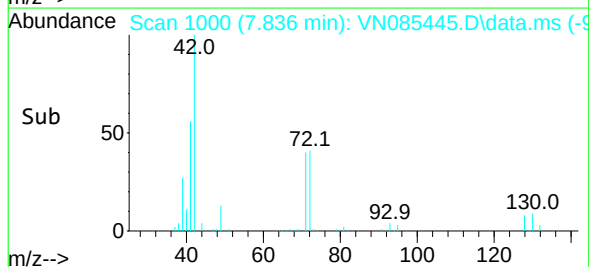
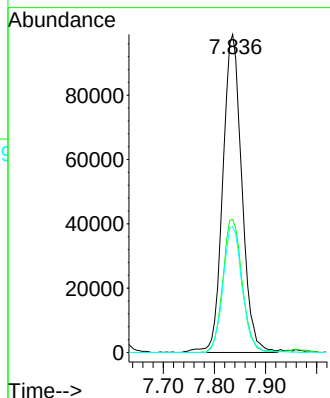
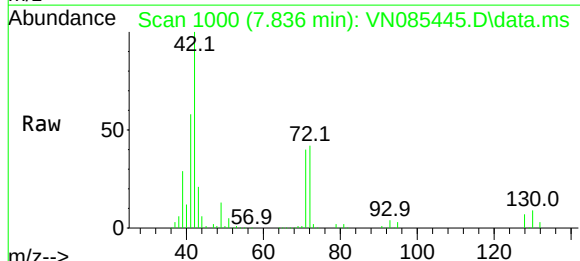
71 39.9 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 44.071 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085445.D

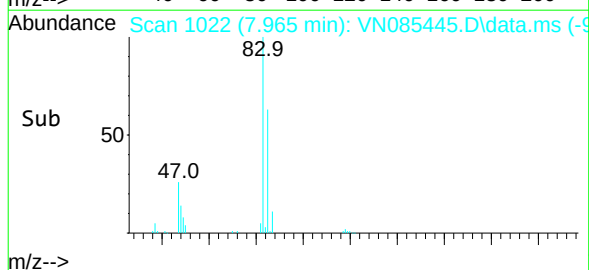
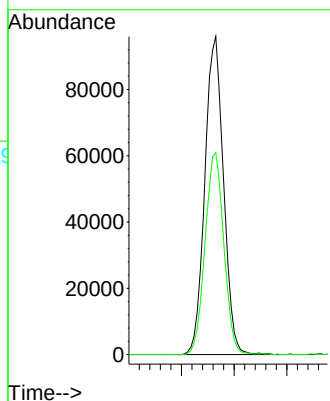
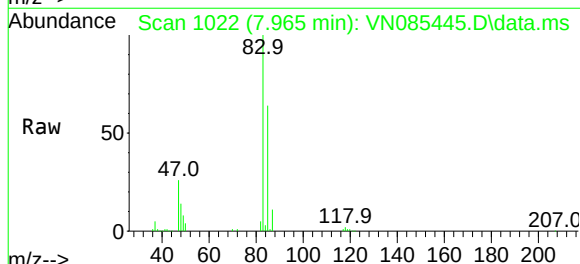
Acq: 14 Jan 2025 18:06

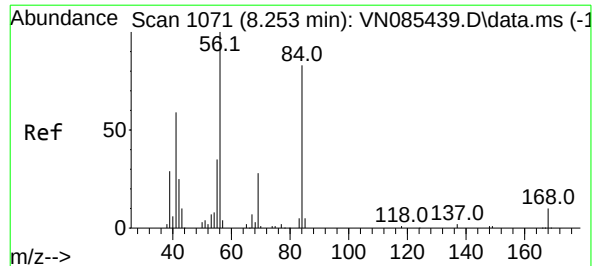
Tgt Ion: 83 Resp: 235923

Ion Ratio Lower Upper

83 100

85 63.5 51.8 77.6





#31

Cyclohexane

Concen: 42.878 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 56 Resp: 193034

Ion Ratio Lower Upper

56 100

69 30.5 22.2 33.4

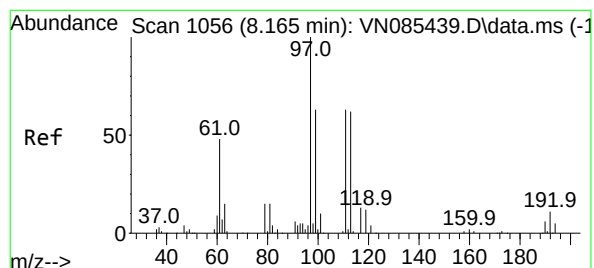
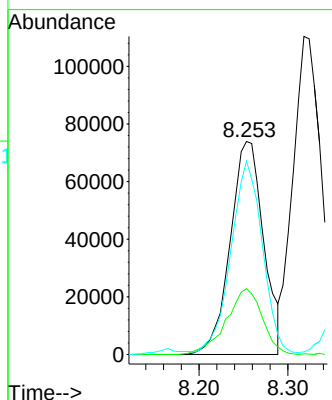
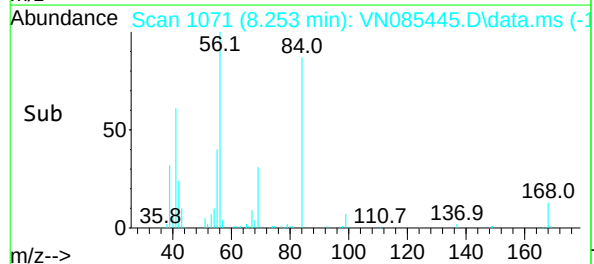
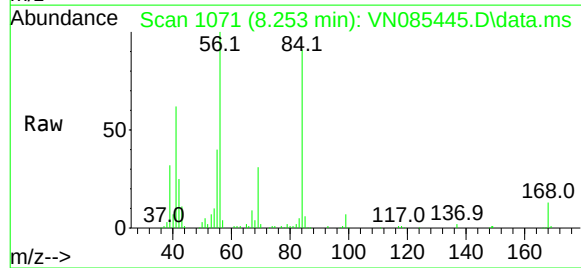
84 89.4 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 44.332 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

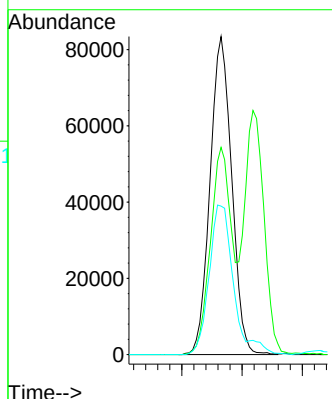
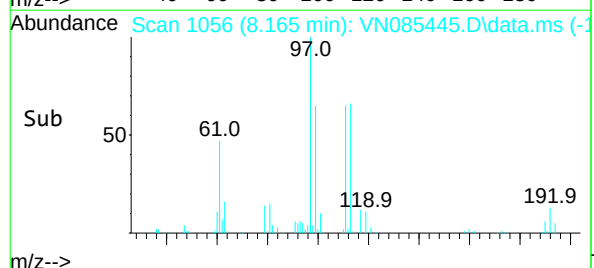
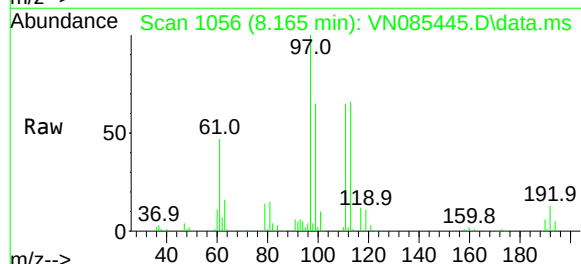
Tgt Ion: 97 Resp: 208172

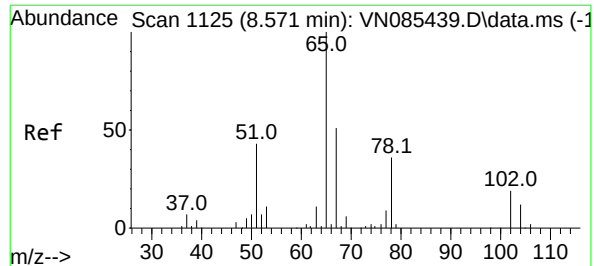
Ion Ratio Lower Upper

97 100

99 61.8 49.8 74.6

61 52.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 49.782 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 65 Resp: 176594

Ion Ratio Lower Upper

65 100

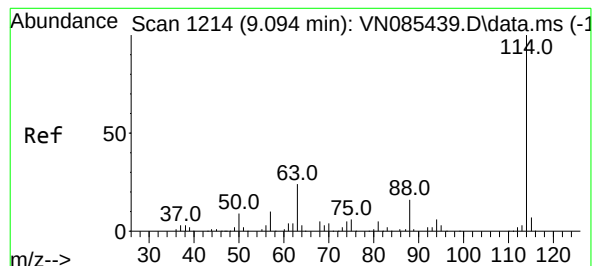
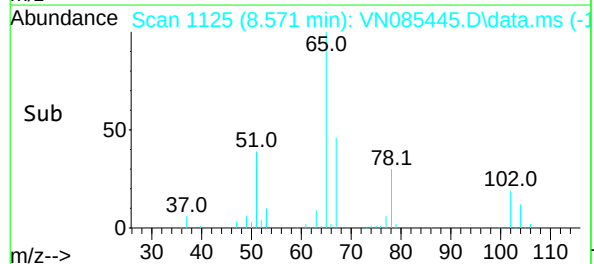
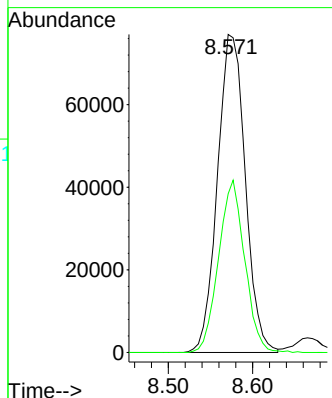
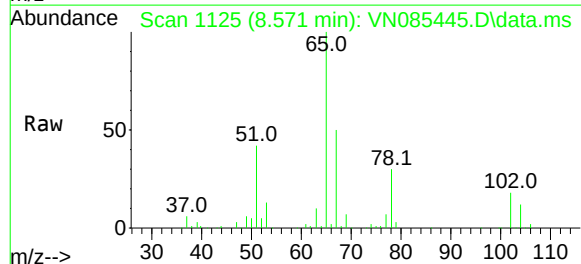
67 50.9 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

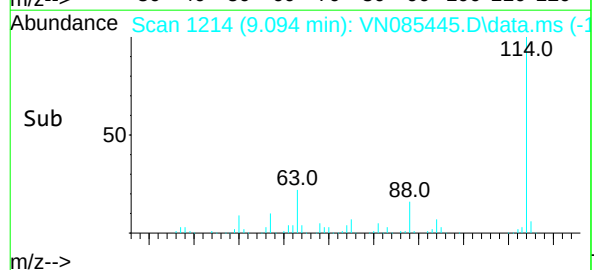
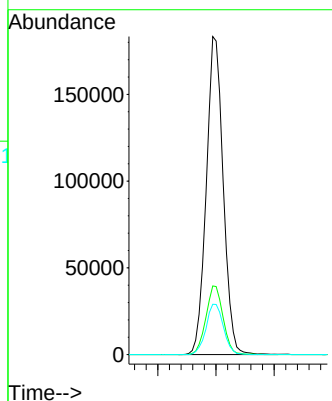
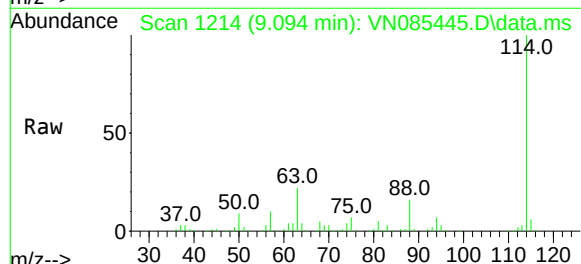
Tgt Ion:114 Resp: 370487

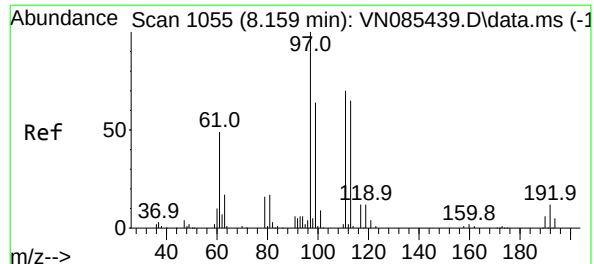
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 15.8 0.0 32.6





#35

Dibromofluoromethane

Concen: 50.768 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:113 Resp: 130487

Ion Ratio Lower Upper

113 100

111 102.5 82.7 124.1

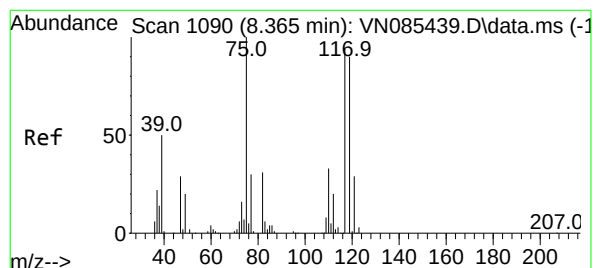
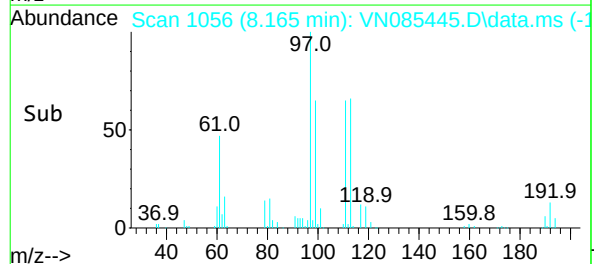
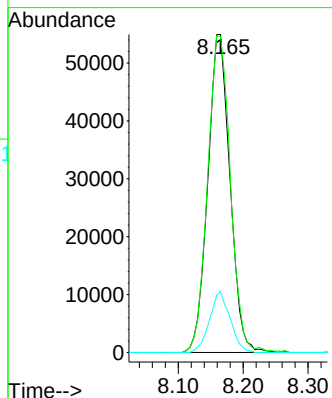
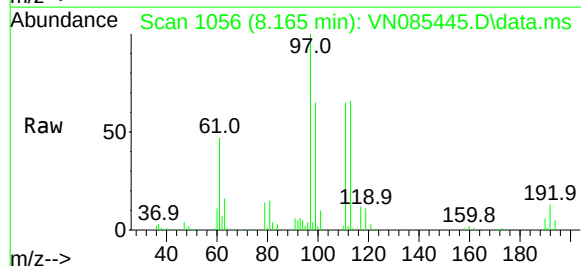
192 17.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 44.863 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

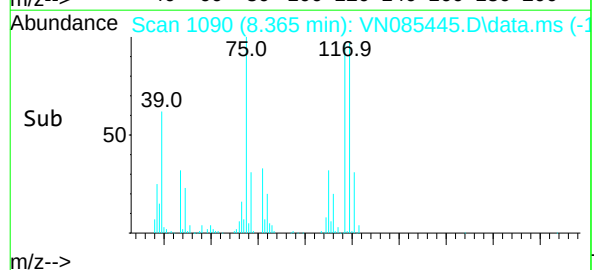
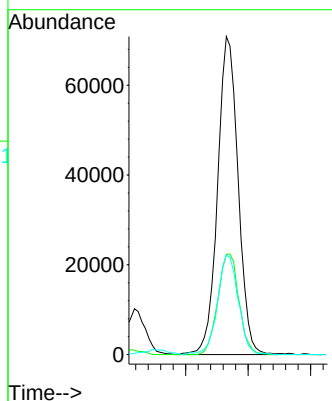
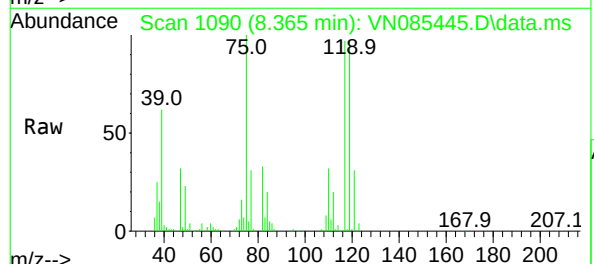
Tgt Ion: 75 Resp: 161834

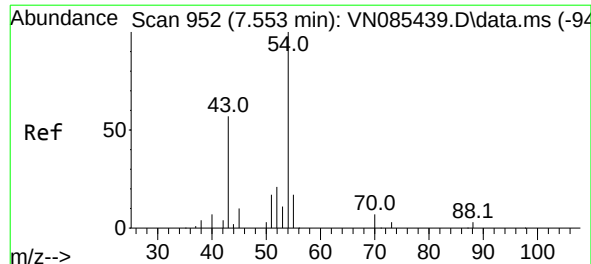
Ion Ratio Lower Upper

75 100

110 32.4 16.5 49.5

77 31.8 24.4 36.6





#37

Ethyl Acetate

Concen: 44.123 ug/l

RT: 7.559 min Scan# 952

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 160656

Ion Ratio Lower Upper

43 100

61 11.9 10.9 16.3

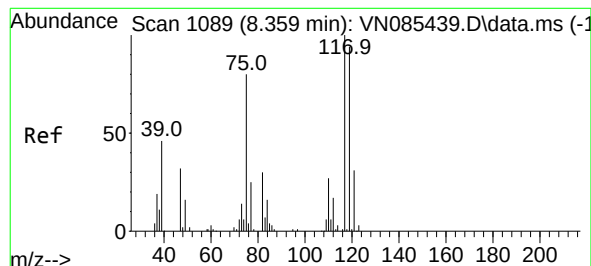
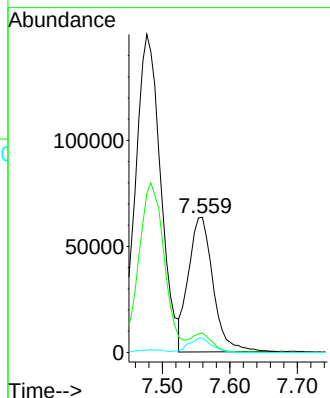
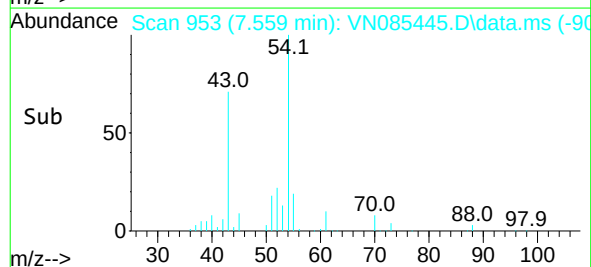
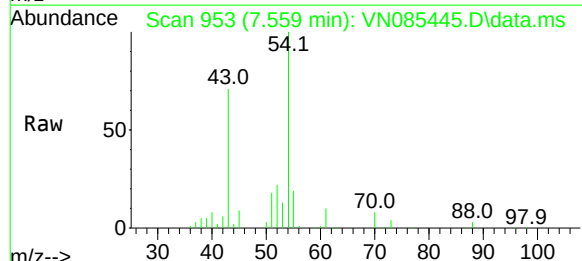
70 10.2 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 44.456 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

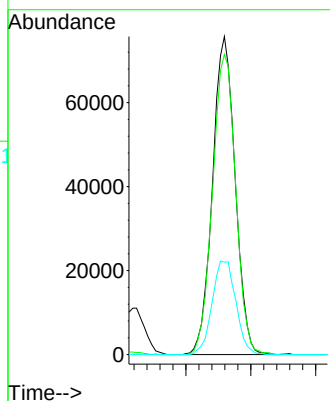
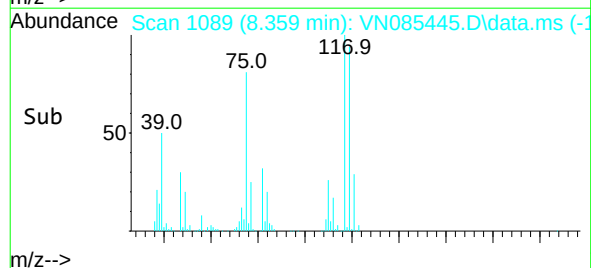
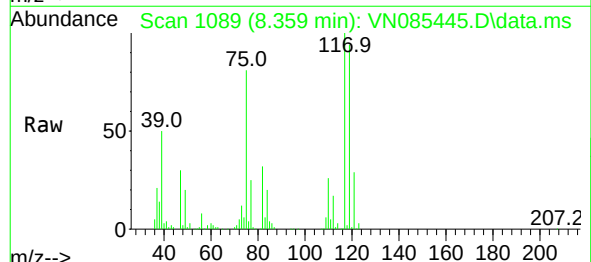
Tgt Ion:117 Resp: 183592

Ion Ratio Lower Upper

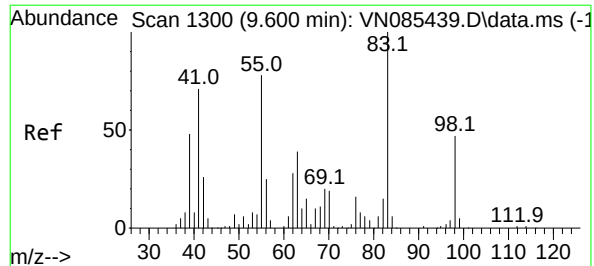
117 100

119 94.4 75.4 113.2

121 29.0 24.6 37.0







#39

Methylcyclohexane

Concen: 49.687 ug/l

RT: 9.600 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

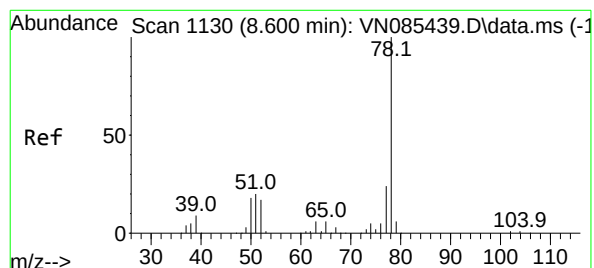
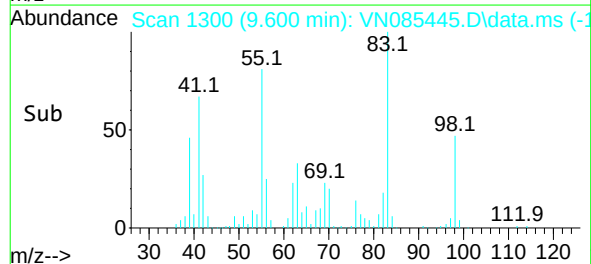
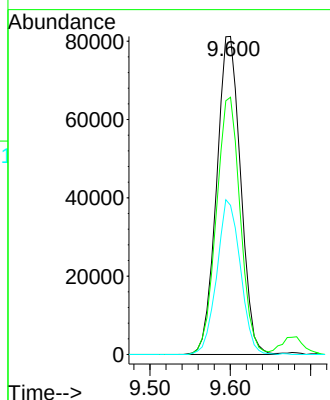
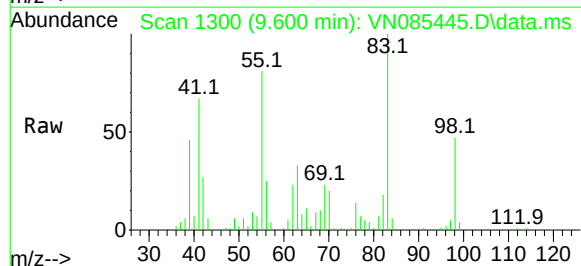
ClientSampleId :

ICVVN011425

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 168431 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 80.9  | 62.6  | 94.0   |
| 98       | 46.9  | 37.7  | 56.5   |

Manual Integrations  
APPROVED

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



#40

Benzene

Concen: 45.657 ug/l

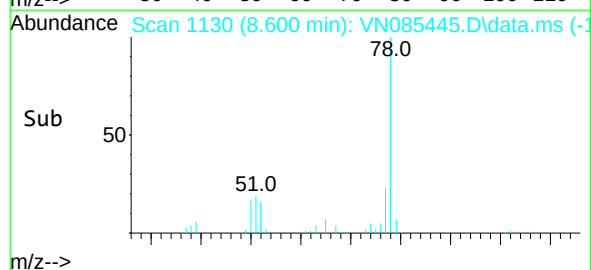
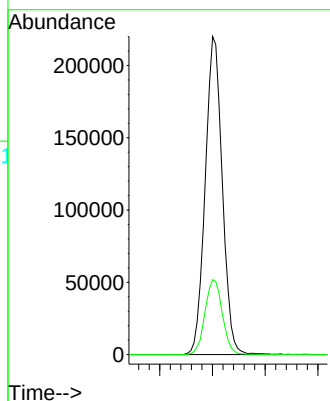
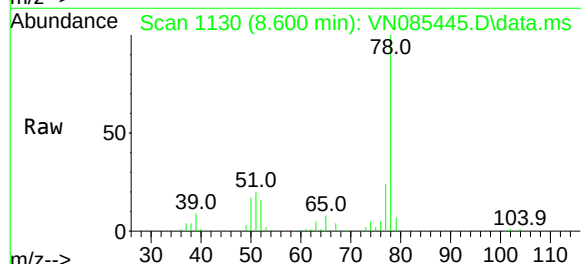
RT: 8.600 min Scan# 1130

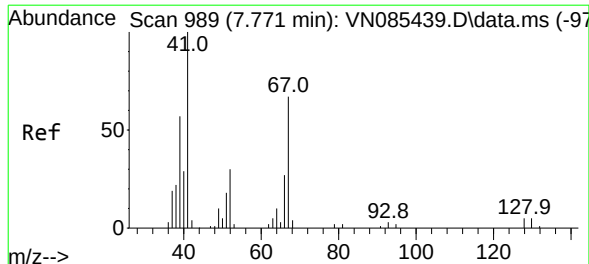
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 78    | Resp: | 494871 |
| Ion      | Ratio | Lower | Upper  |
| 78       | 100   |       |        |
| 77       | 23.5  | 19.0  | 28.6   |





#41

Methacrylonitrile

Concen: 47.155 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 41 Resp: 89326

Ion Ratio Lower Upper

41 100

39 56.6 46.0 69.0

67 70.9 57.4 86.2

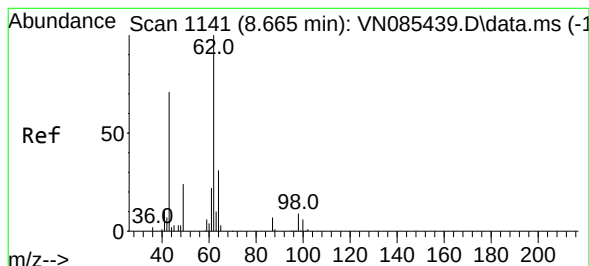
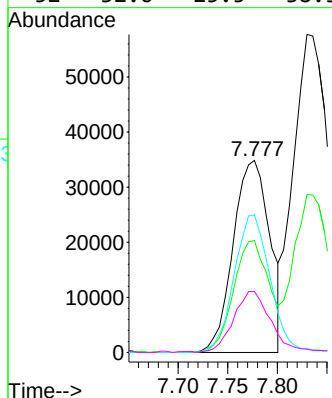
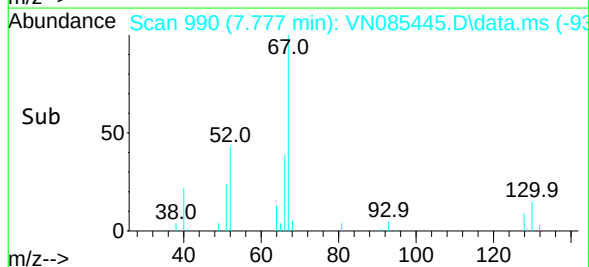
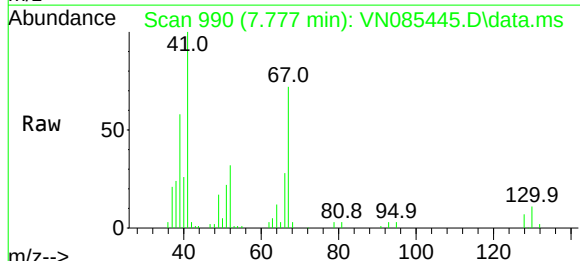
52 32.6 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 45.481 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085445.D

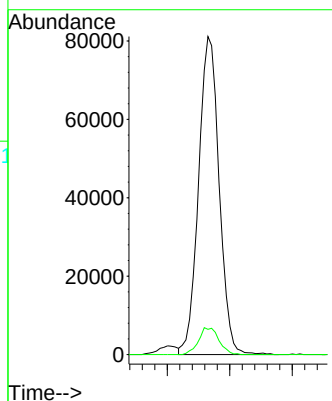
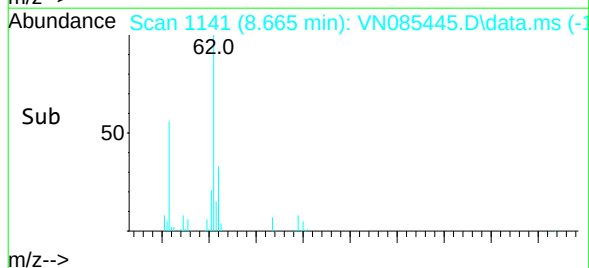
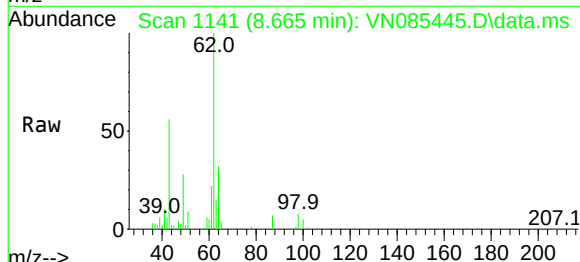
Acq: 14 Jan 2025 18:06

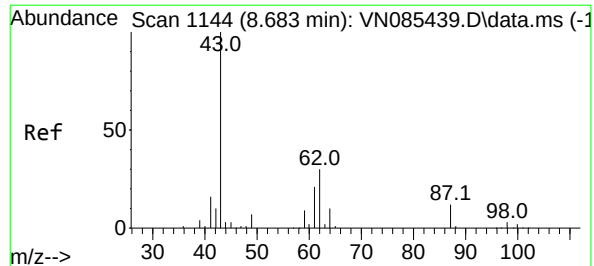
Tgt Ion: 62 Resp: 185663

Ion Ratio Lower Upper

62 100

98 8.3 0.0 17.0





#43

Isopropyl Acetate

Concen: 45.440 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

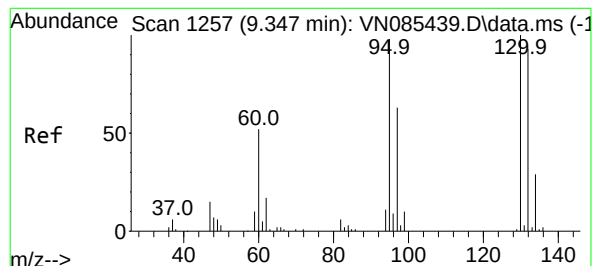
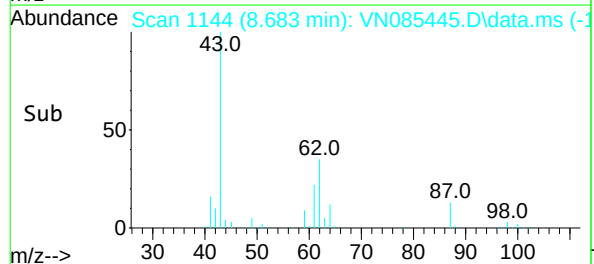
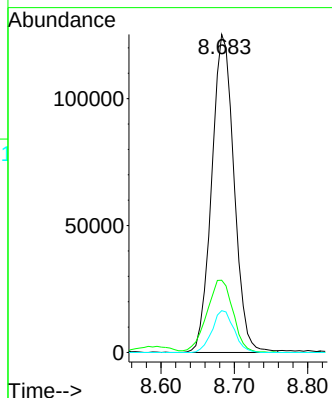
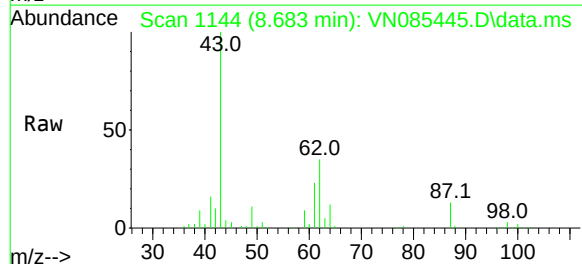
ICVVN011425

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 265107 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 61       | 26.7  | 20.7  | 31.1   |
| 87       | 12.9  | 9.8   | 14.8   |

Manual Integrations

APPROVED

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



#44

Trichloroethene

Concen: 43.622 ug/l

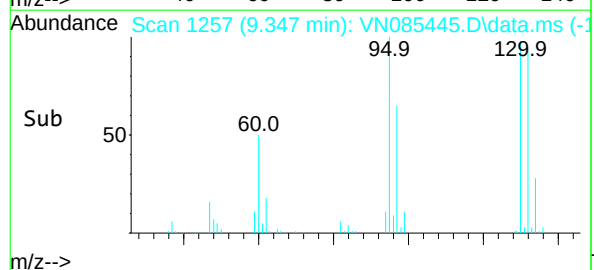
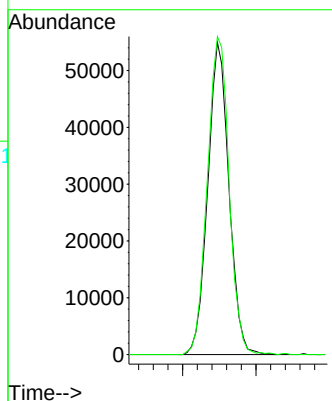
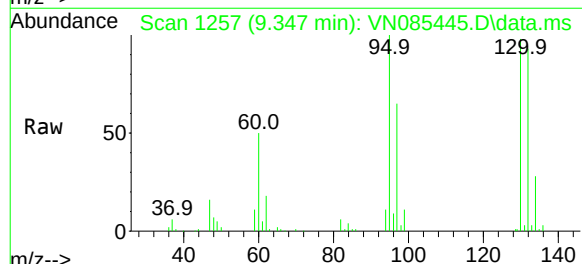
RT: 9.347 min Scan# 1257

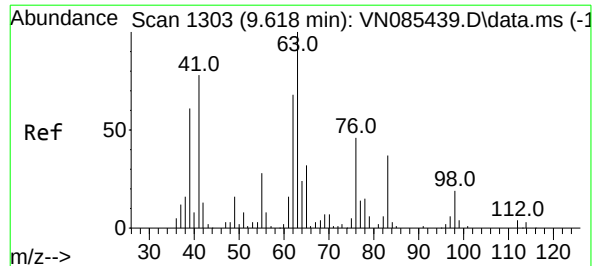
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 130   | Resp: | 110058 |
| Ion      | Ratio | Lower | Upper  |
| 130      | 100   |       |        |
| 95       | 101.9 | 0.0   | 195.8  |





#45

1,2-Dichloropropane

Concen: 44.744 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 63 Resp: 123876

Ion Ratio Lower Upper

63 100

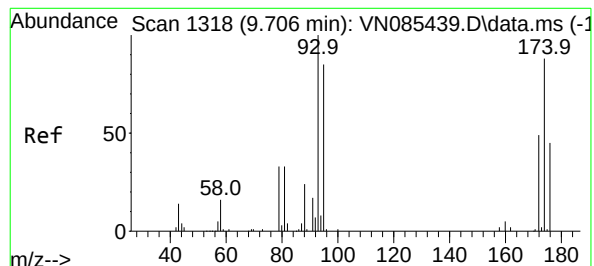
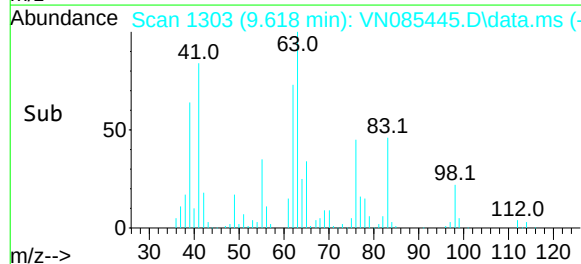
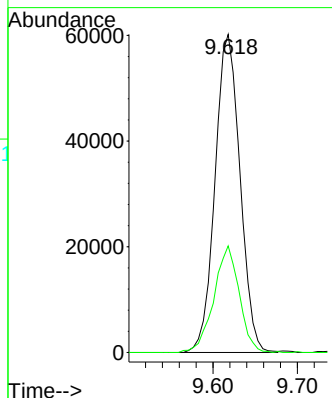
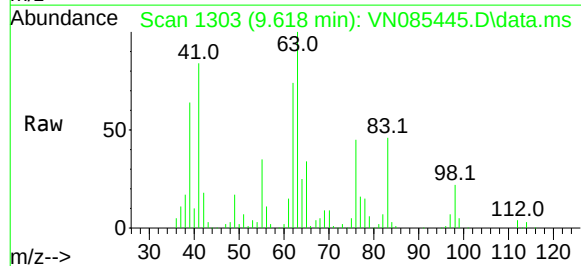
65 33.5 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 44.214 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

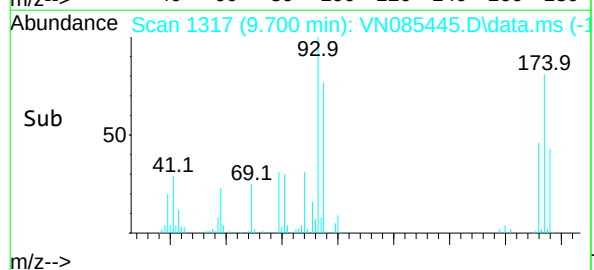
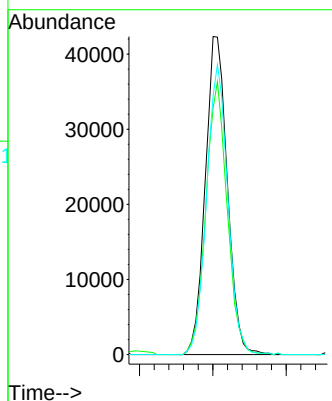
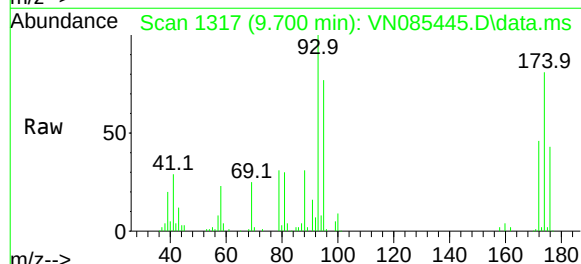
Tgt Ion: 93 Resp: 88325

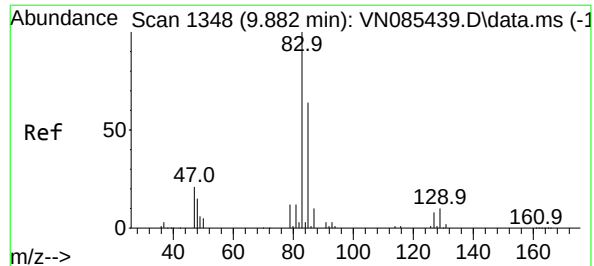
Ion Ratio Lower Upper

93 100

95 82.9 64.7 97.1

174 88.0 69.0 103.4





#47

Bromodichloromethane

Concen: 45.655 ug/l

RT: 9.889 min Scan# 1348

Delta R.T. 0.007 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 83 Resp: 185808

Ion Ratio Lower Upper

83 100

85 63.5 51.2 76.8

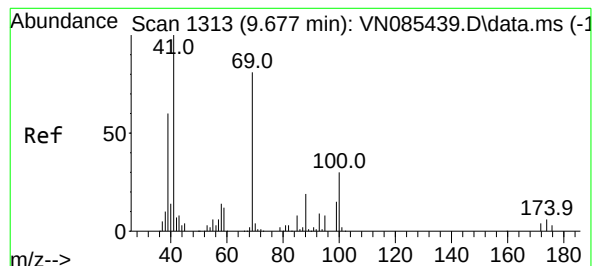
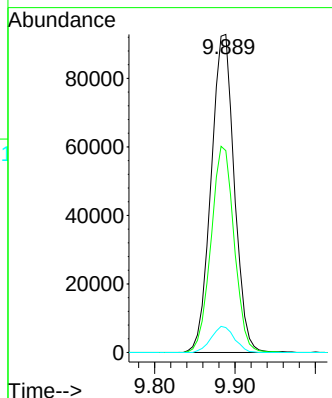
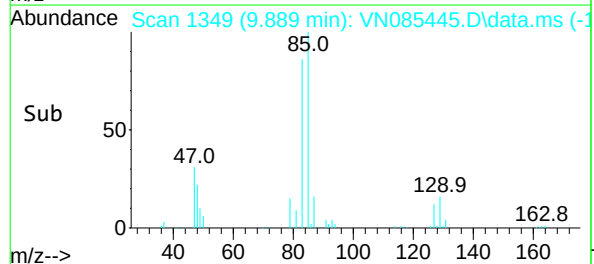
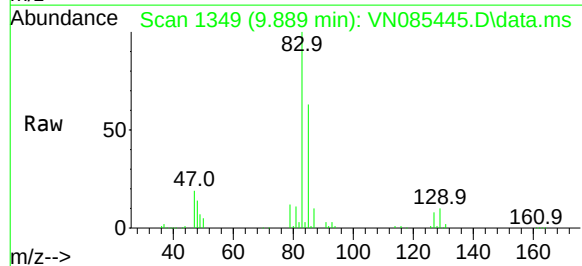
127 7.8 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 49.948 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

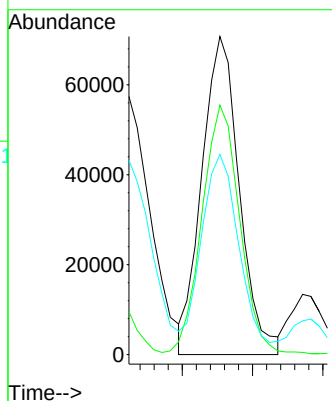
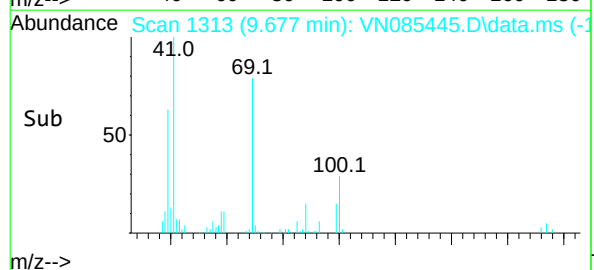
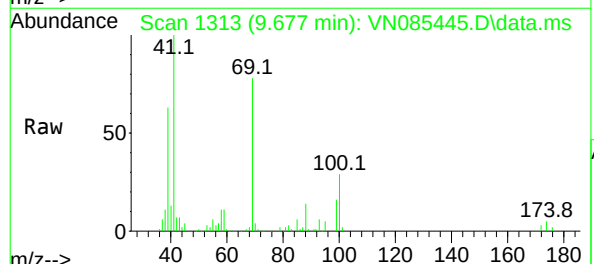
Tgt Ion: 41 Resp: 131142

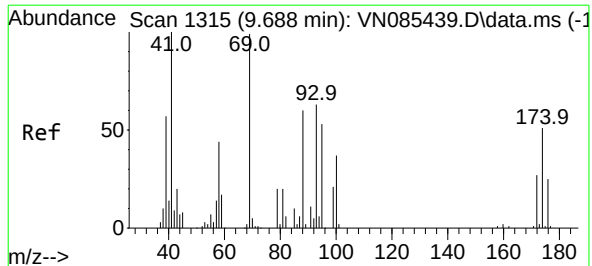
Ion Ratio Lower Upper

41 100

69 78.6 64.7 97.1

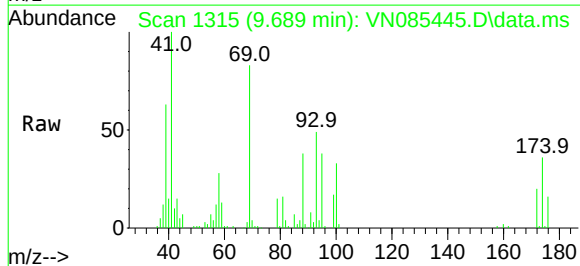
39 63.3 49.0 73.6





#49  
1,4-Dioxane  
Concen: 792.760 ug/l  
RT: 9.689 min Scan# 1315  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

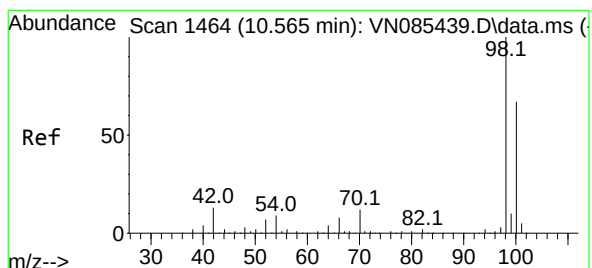
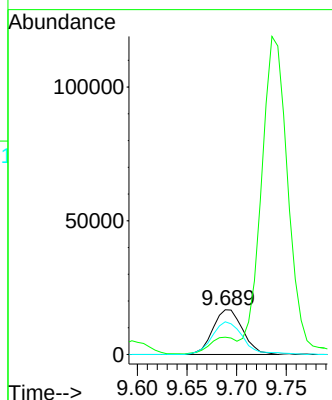
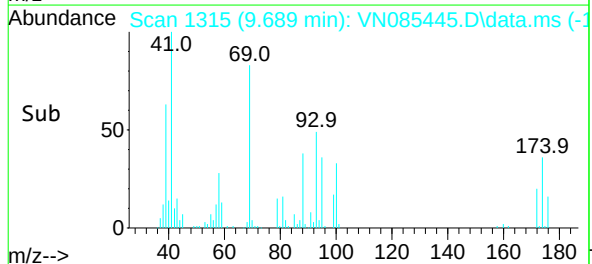
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion: 88 Resp: 35051  
Ion Ratio Lower Upper  
88 100  
43 33.8 26.6 39.8  
58 76.1 59.5 89.3

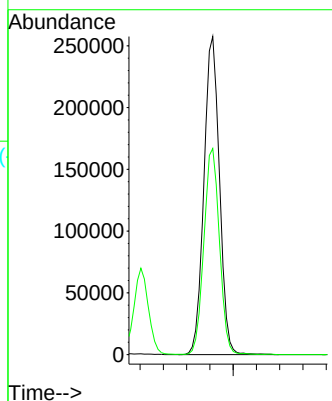
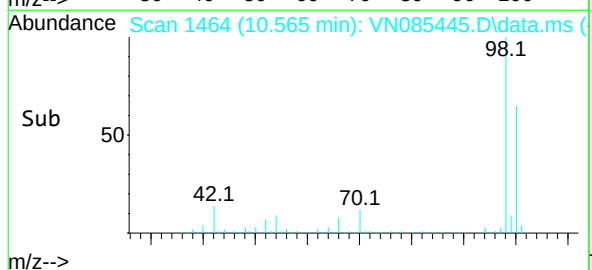
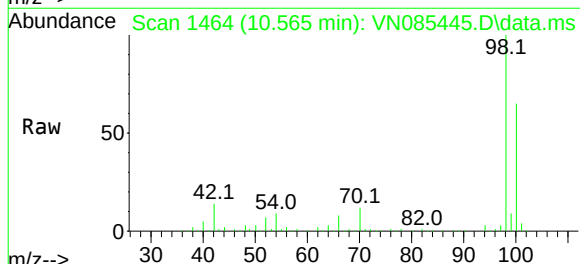
Manual Integrations  
APPROVED

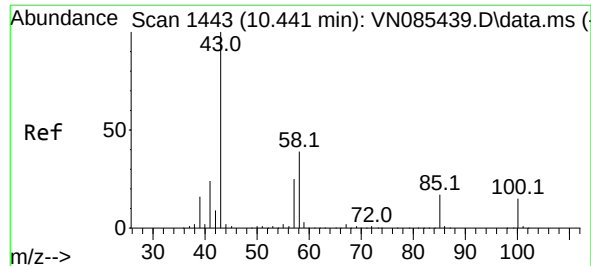
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#50  
Toluene-d8  
Concen: 52.302 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 98 Resp: 477630  
Ion Ratio Lower Upper  
98 100  
100 64.7 52.2 78.4





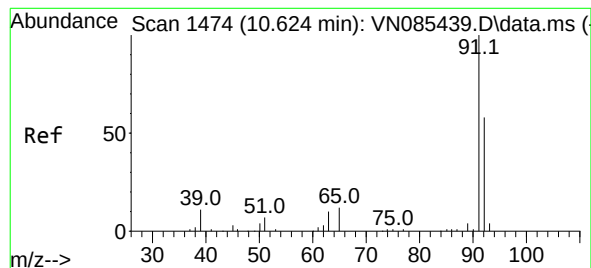
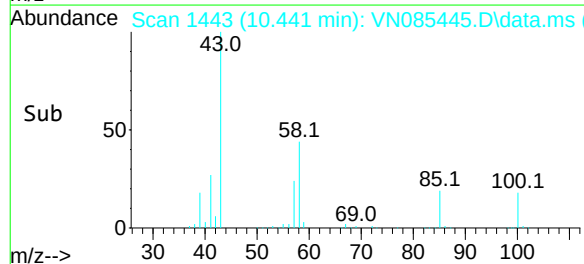
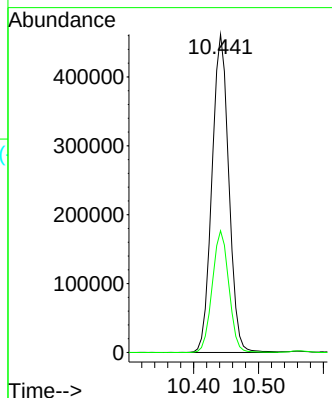
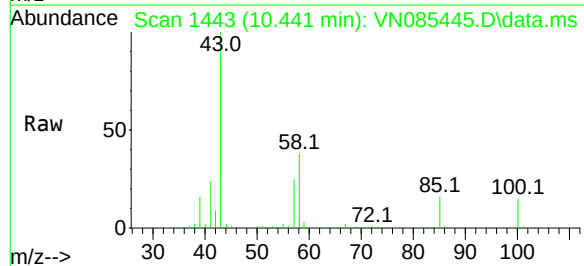
#51  
4-Methyl-2-Pentanone  
Concen: 245.877 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 43 Resp: 832426  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7

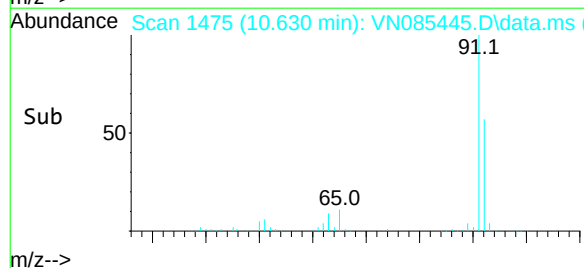
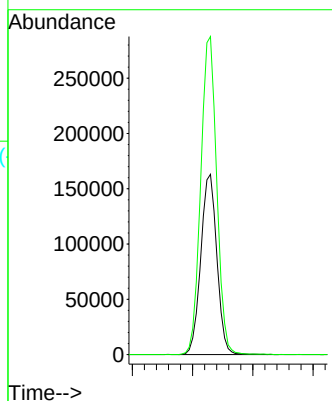
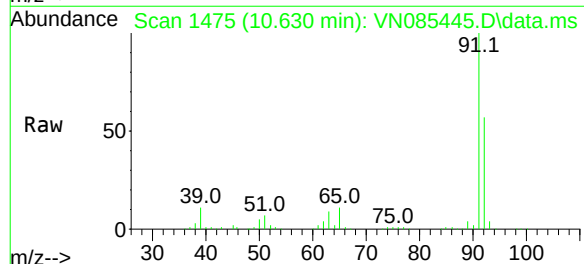
Manual Integrations  
APPROVED

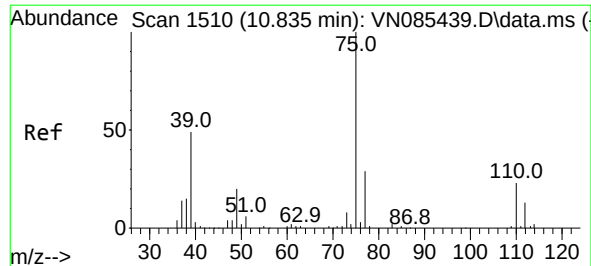
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#52  
Toluene  
Concen: 48.073 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 92 Resp: 301911  
Ion Ratio Lower Upper  
92 100  
91 175.7 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 47.757 ug/l

RT: 10.830 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 75 Resp: 183680

Ion Ratio Lower Upper

75 100

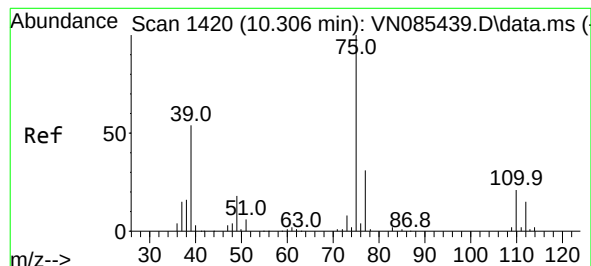
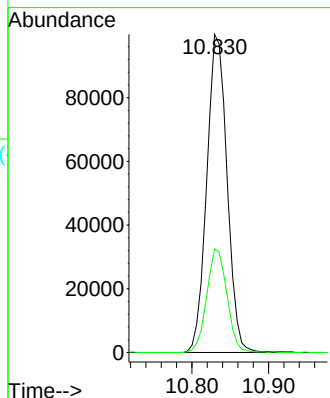
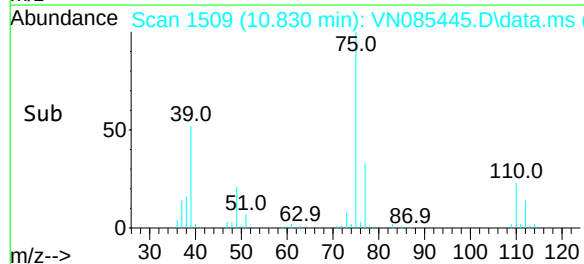
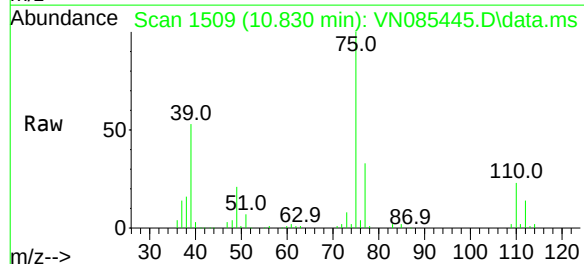
77 32.6 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 47.783 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

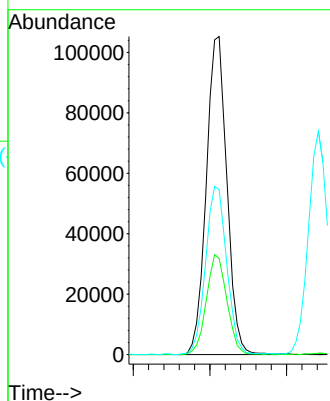
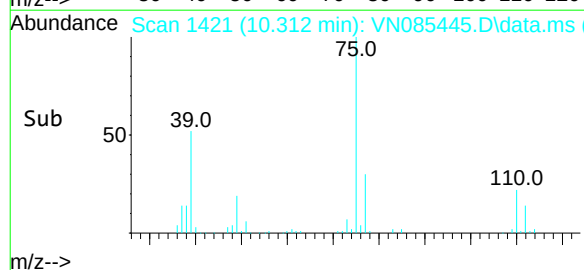
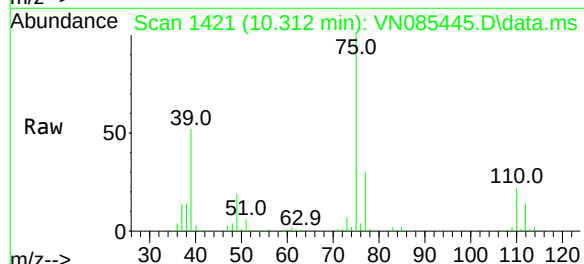
Tgt Ion: 75 Resp: 196307

Ion Ratio Lower Upper

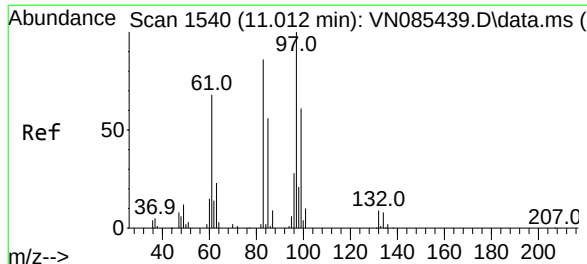
75 100

77 30.2 25.0 37.4

39 51.9 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 46.173 ug/l

RT: 11.012 min Scan# 15

Delta R.T. 0.000 min

Lab File: VN085445.D

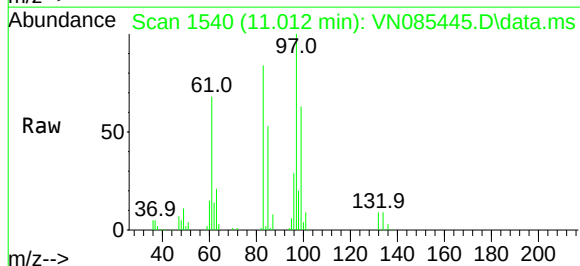
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

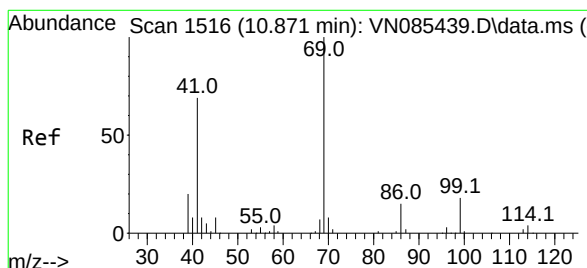
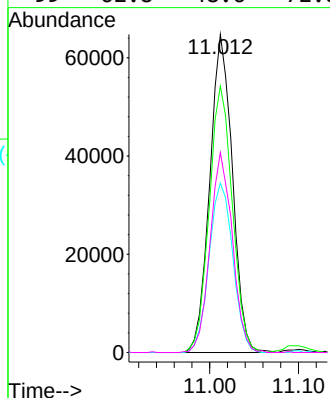
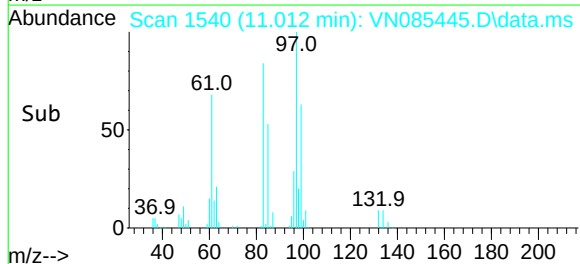
ICVVN011425



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 114757 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 83       | 83.7  | 69.0  | 103.6  |
| 85       | 53.2  | 44.6  | 66.8   |
| 99       | 62.8  | 48.6  | 72.8   |

Manual Integrations  
APPROVED

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



#56

Ethyl methacrylate

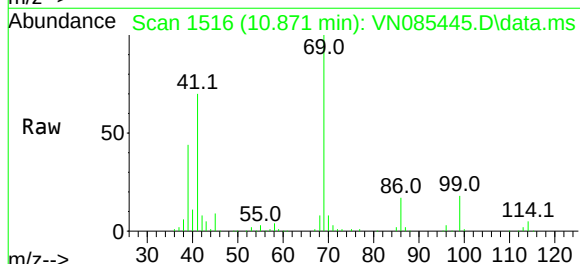
Concen: 43.762 ug/l

RT: 10.871 min Scan# 1516

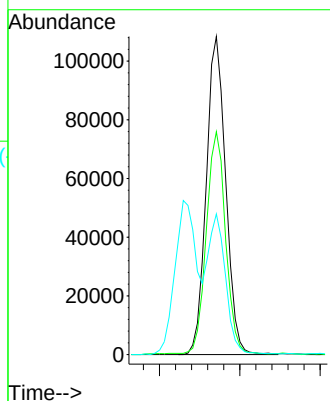
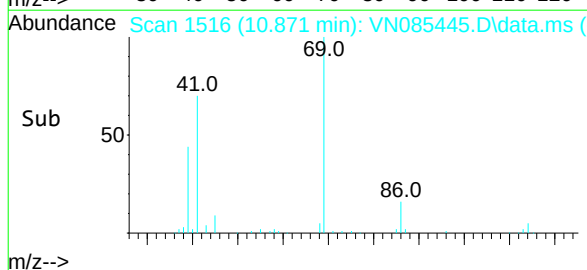
Delta R.T. -0.000 min

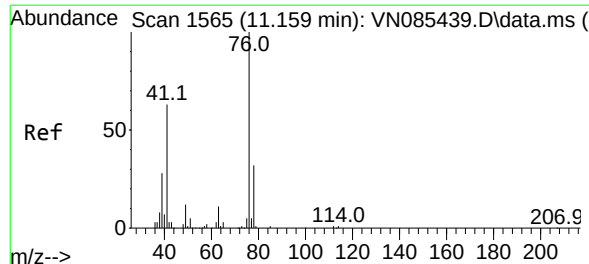
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 69    | Resp: | 182170 |
| Ion      | Ratio | Lower | Upper  |
| 69       | 100   |       |        |
| 41       | 70.4  | 54.6  | 82.0   |
| 39       | 40.2  | 32.4  | 48.6   |





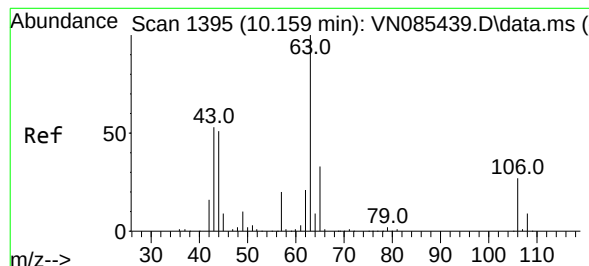
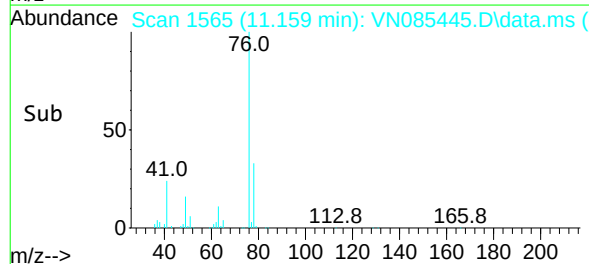
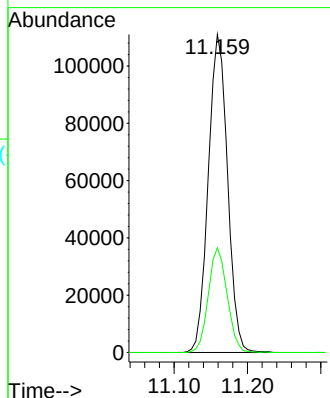
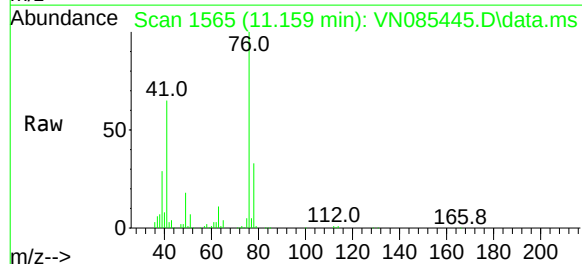
#57  
1,3-Dichloropropane  
Concen: 46.877 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 76 Resp: 202583  
Ion Ratio Lower Upper  
76 100  
78 32.1 25.6 38.4

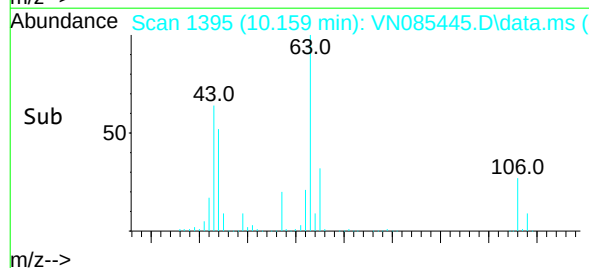
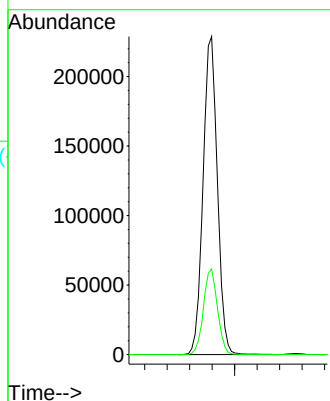
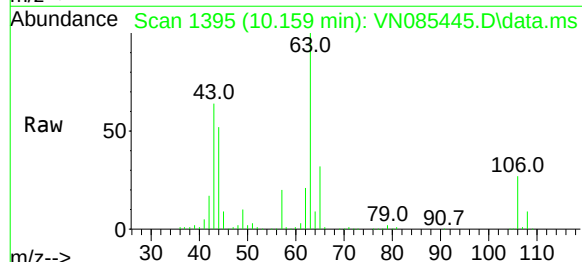
Manual Integrations  
APPROVED

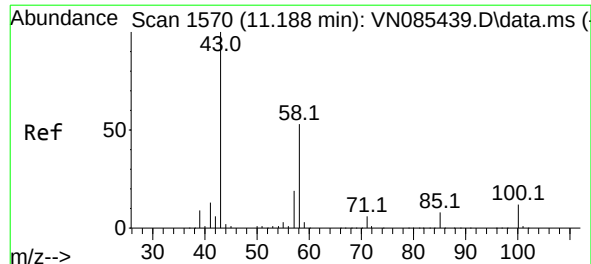
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#58  
2-Chloroethyl Vinyl ether  
Concen: 256.116 ug/l  
RT: 10.159 min Scan# 1395  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 403949  
Ion Ratio Lower Upper  
63 100  
106 26.4 21.6 32.4





#59

2-Hexanone

Concen: 251.213 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 598433

Ion Ratio Lower Upper

43 100

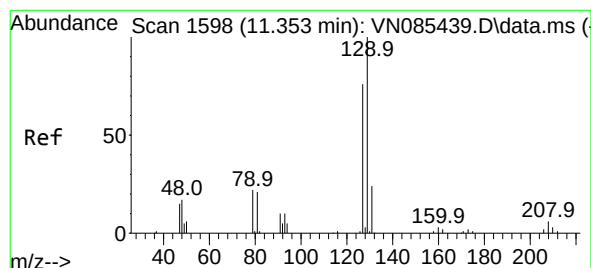
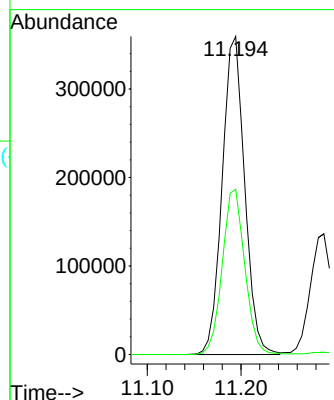
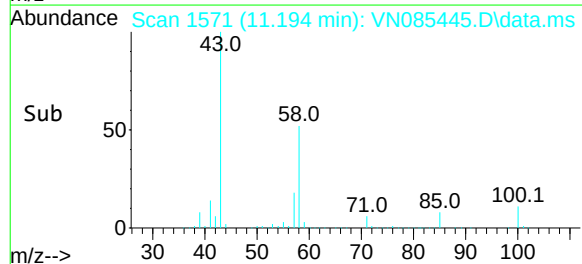
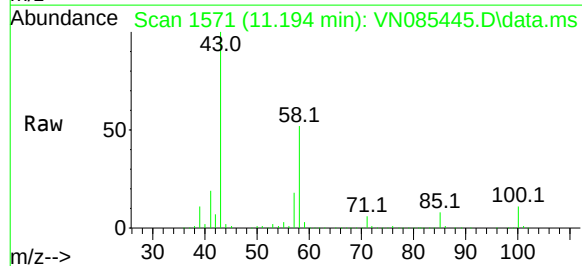
58 52.1 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 45.935 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085445.D

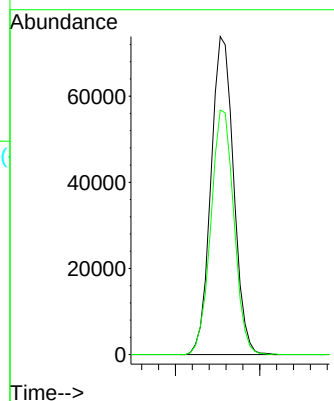
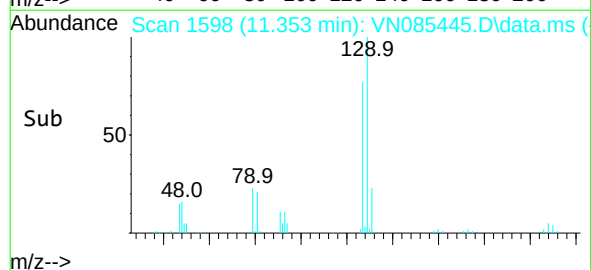
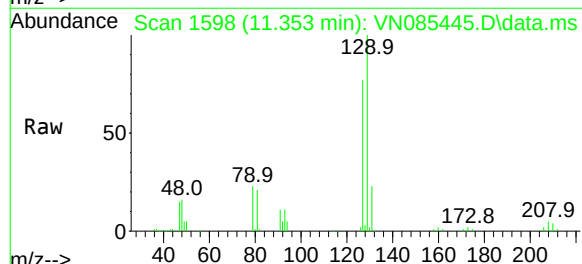
Acq: 14 Jan 2025 18:06

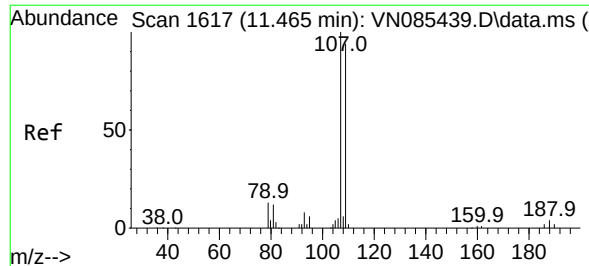
Tgt Ion:129 Resp: 137831

Ion Ratio Lower Upper

129 100

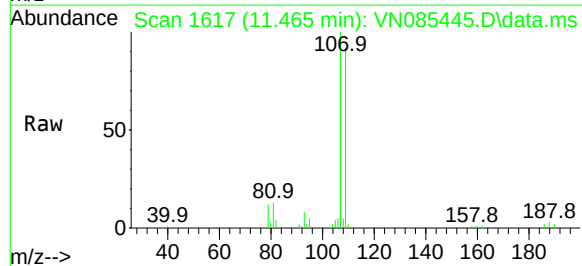
127 78.1 38.6 115.8





#61  
1,2-Dibromoethane  
Concen: 44.837 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

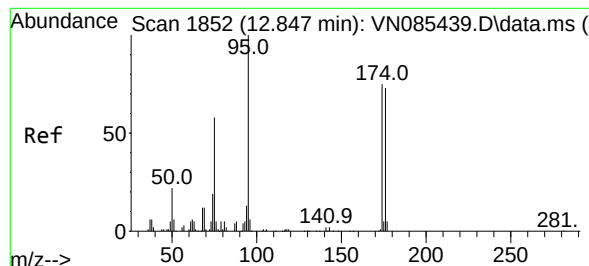
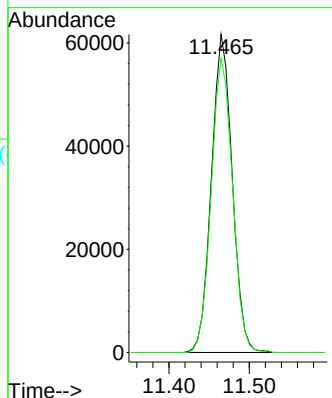
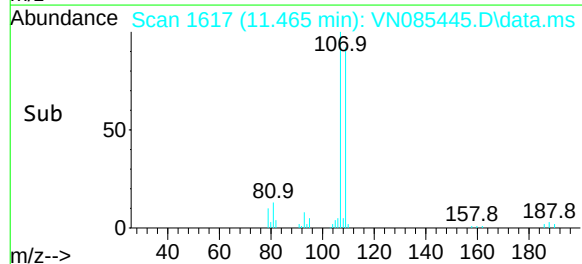
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion: 107 Resp: 110926  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9

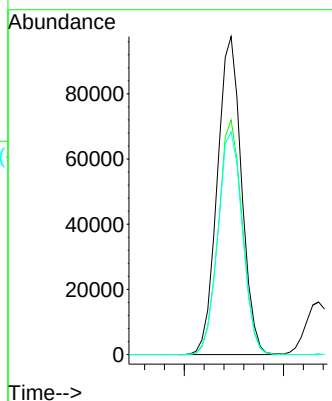
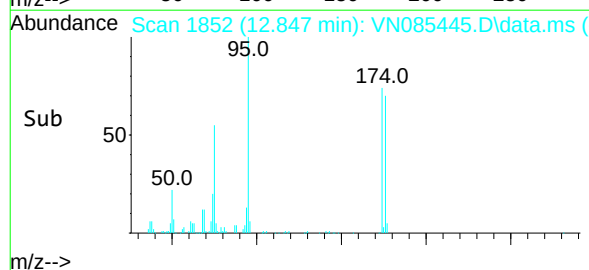
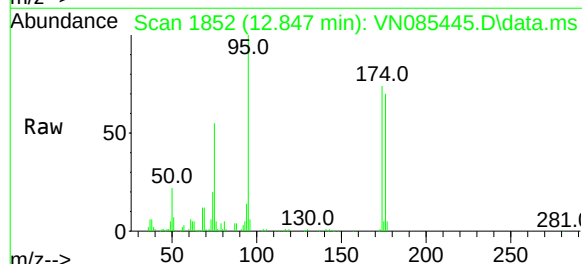
Manual Integrations  
APPROVED

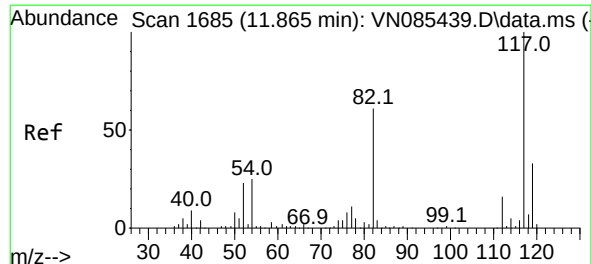
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#62  
4-Bromofluorobenzene  
Concen: 52.899 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 95 Resp: 165249  
Ion Ratio Lower Upper  
95 100  
174 73.1 0.0 145.0  
176 70.8 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:117 Resp: 320948

Ion Ratio Lower Upper

117 100

82 60.1 48.6 72.8

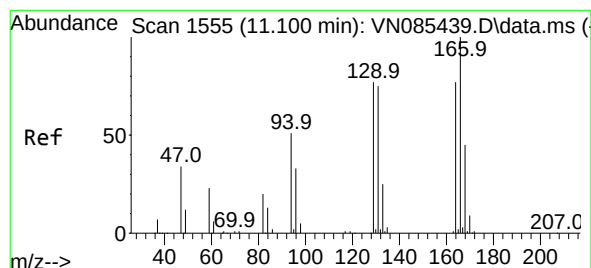
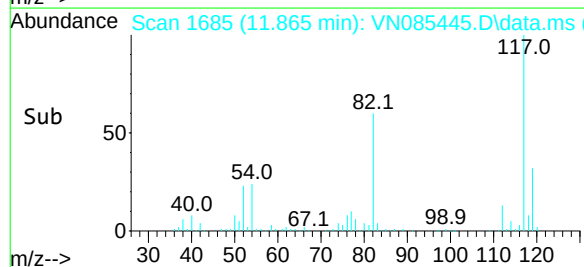
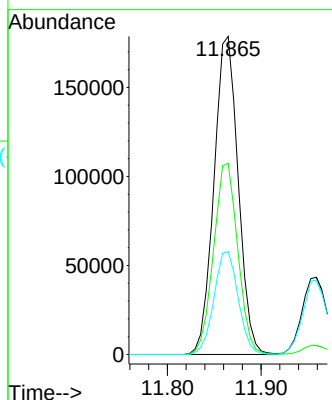
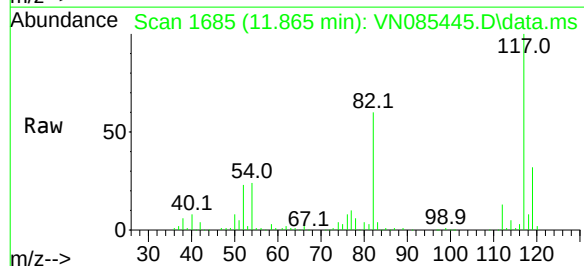
119 32.4 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 44.886 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:164 Resp: 98211

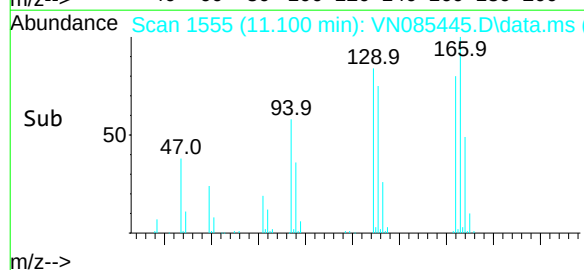
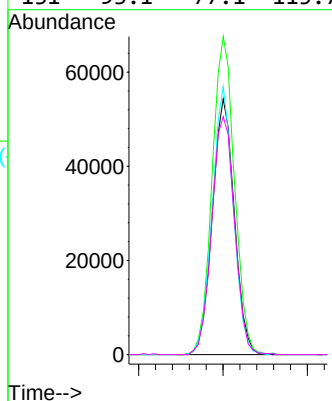
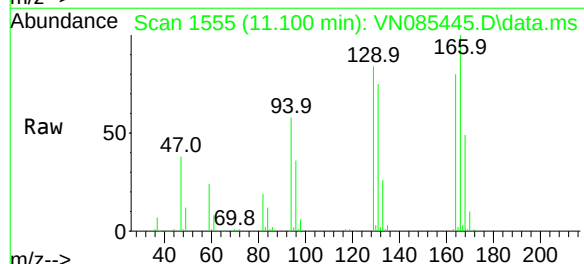
Ion Ratio Lower Upper

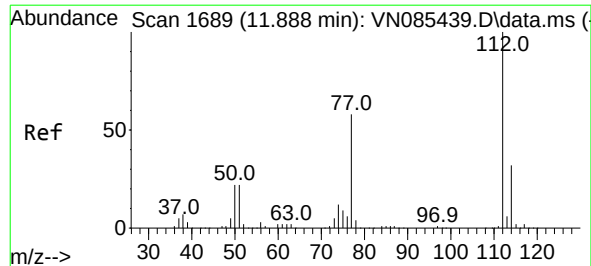
164 100

166 124.4 103.4 155.2

129 104.8 79.2 118.8

131 93.1 77.1 115.7





#65

Chlorobenzene

Concen: 45.901 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:112 Resp: 322723

Ion Ratio Lower Upper

112 100

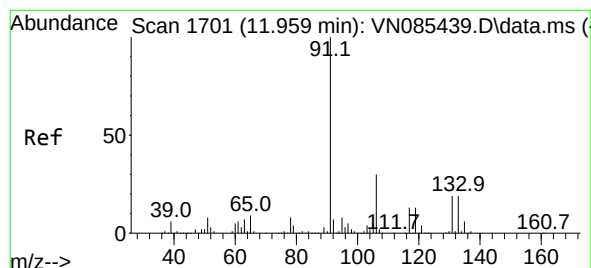
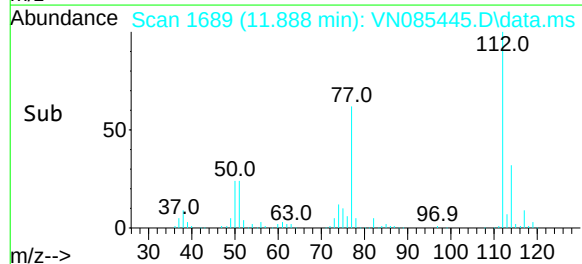
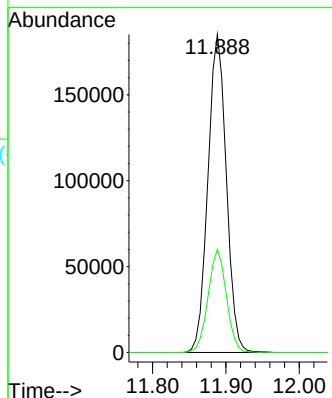
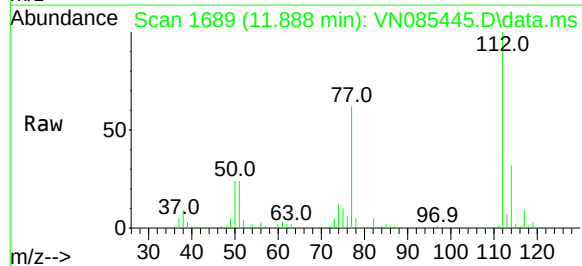
114 32.4 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 44.712 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

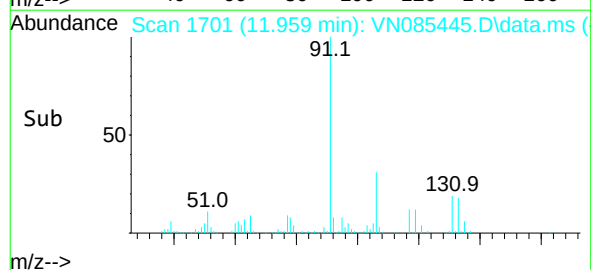
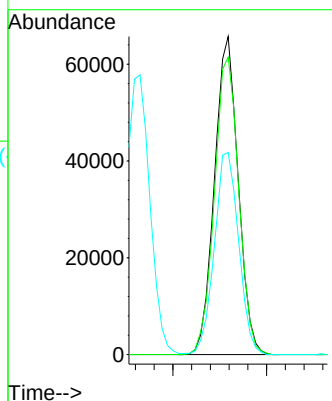
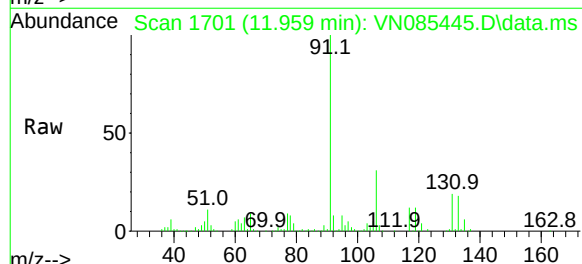
Tgt Ion:131 Resp: 115379

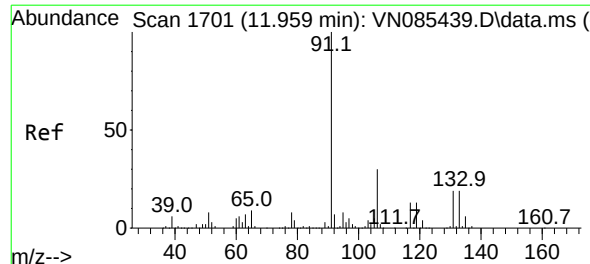
Ion Ratio Lower Upper

131 100

133 95.8 47.4 142.3

119 65.2 33.1 99.5





#67

Ethyl Benzene

Concen: 50.391 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 91 Resp: 577059

Ion Ratio Lower Upper

91 100

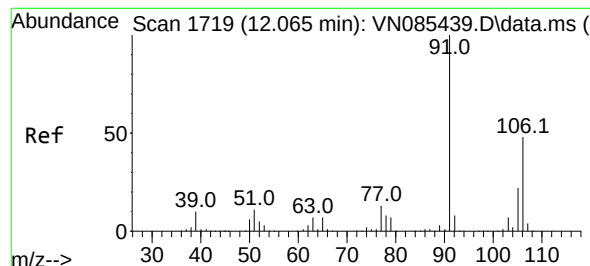
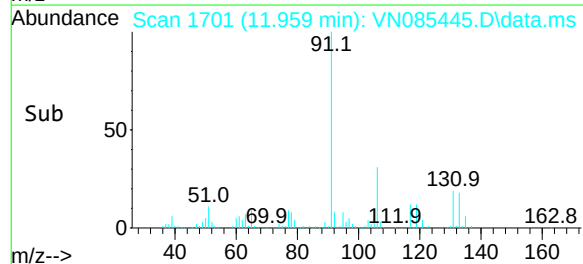
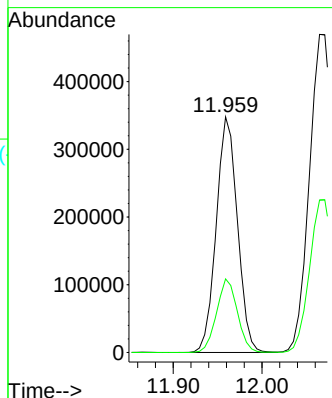
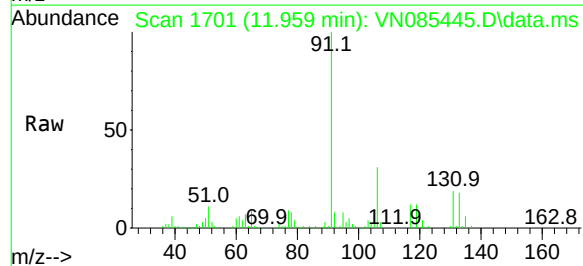
106 31.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 103.341 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085445.D

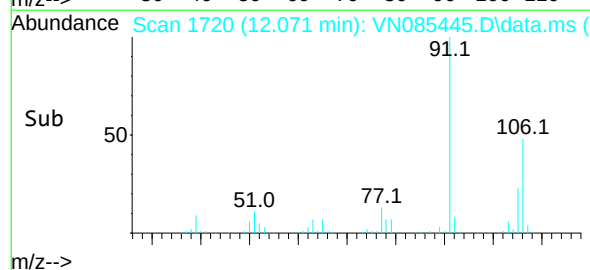
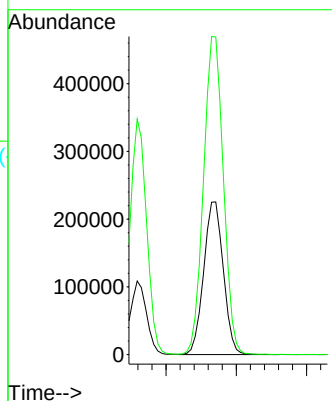
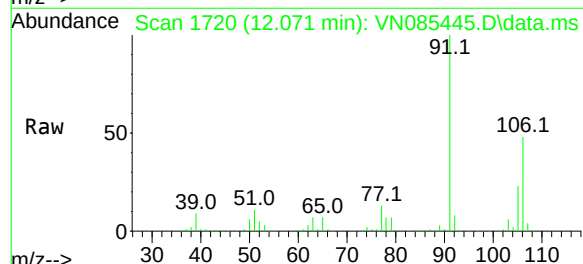
Acq: 14 Jan 2025 18:06

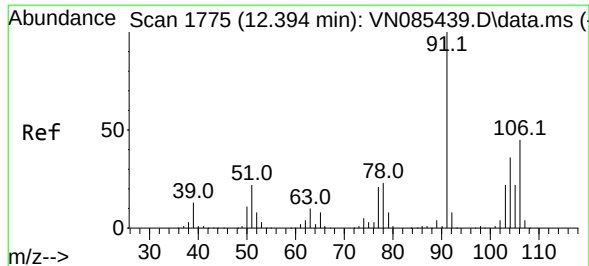
Tgt Ion:106 Resp: 437367

Ion Ratio Lower Upper

106 100

91 210.1 167.7 251.5





#69

o-Xylene

Concen: 52.093 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:106 Resp: 210698

Ion Ratio Lower Upper

106 100

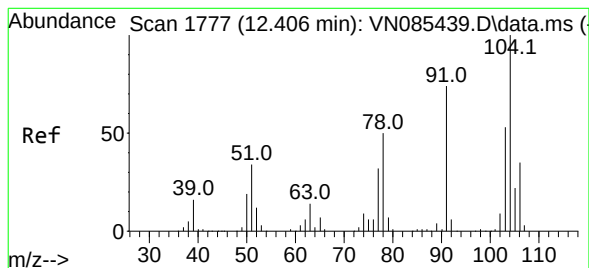
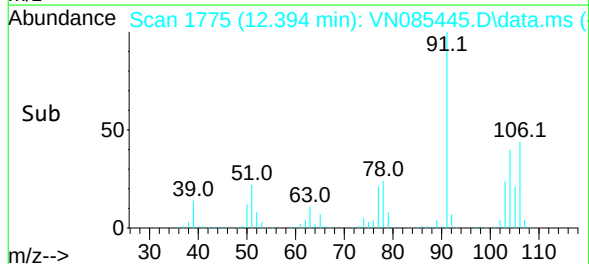
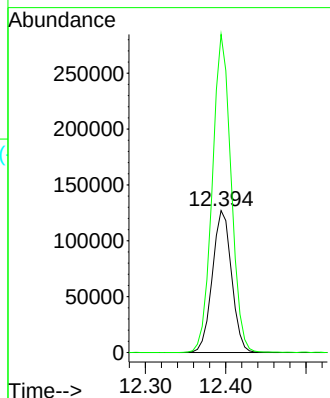
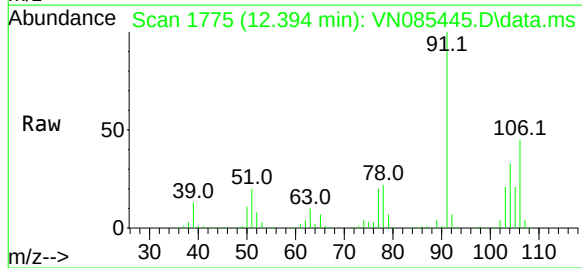
91 219.9 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 53.103 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

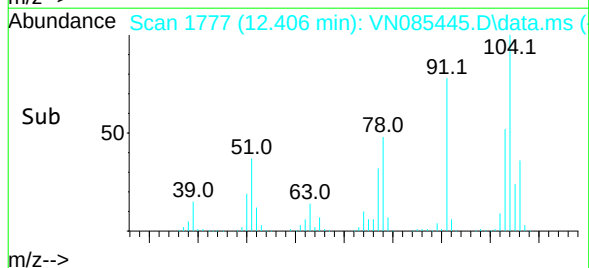
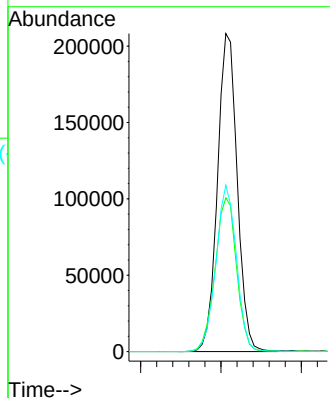
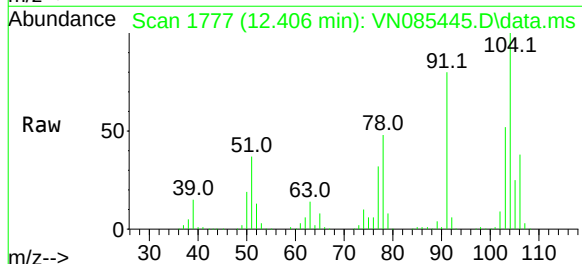
Tgt Ion:104 Resp: 355459

Ion Ratio Lower Upper

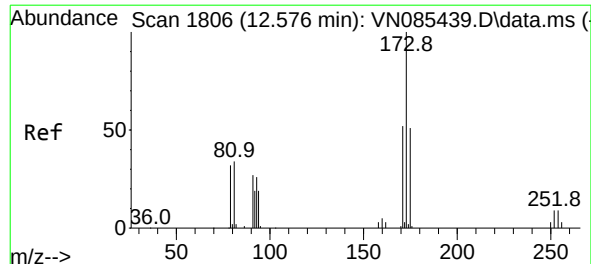
104 100

78 52.8 42.5 63.7

103 54.5 43.8 65.8







#71

Bromoform

Concen: 49.119 ug/l

RT: 12.577 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

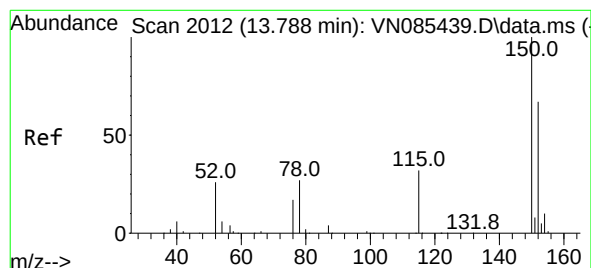
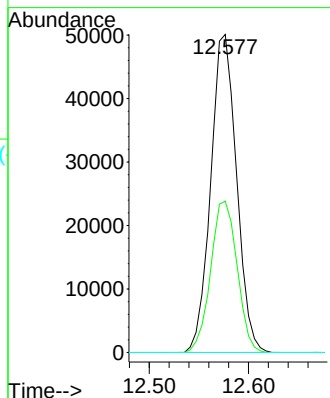
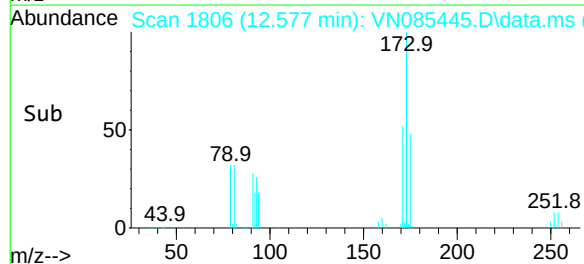
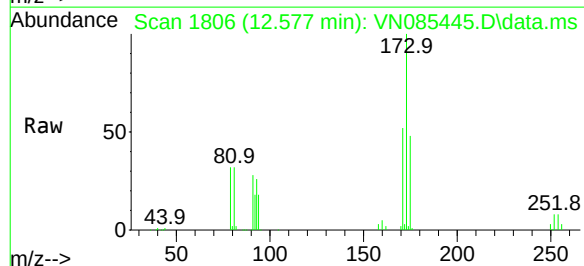
ClientSampleId :

ICVVN011425

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 90693 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 48.7  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVED

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

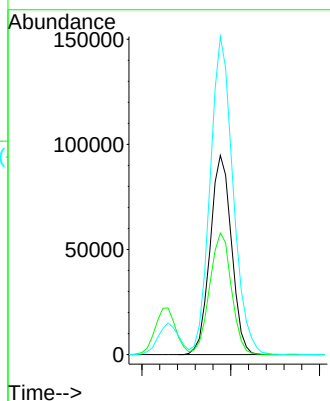
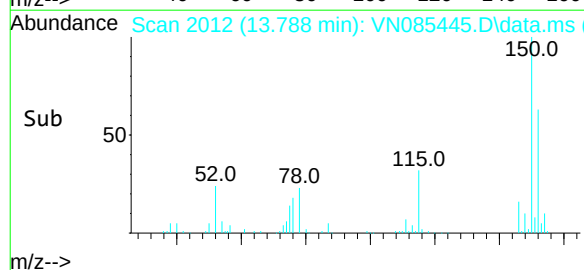
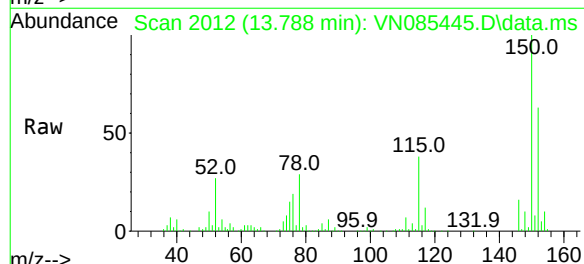
RT: 13.788 min Scan# 2012

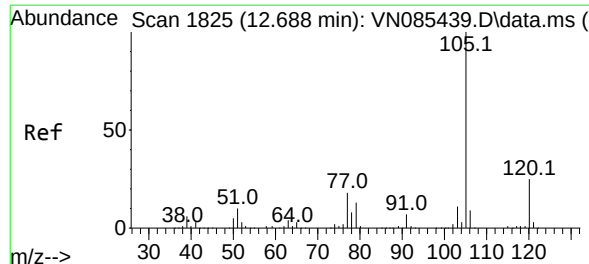
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 158525 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.2  | 31.1  | 93.3   |
| 150       | 171.0 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 49.951 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 105 Resp: 534428

Ion Ratio Lower Upper

105 100

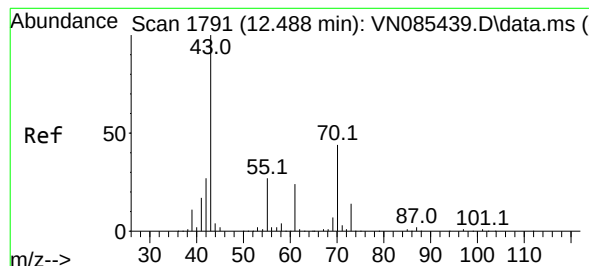
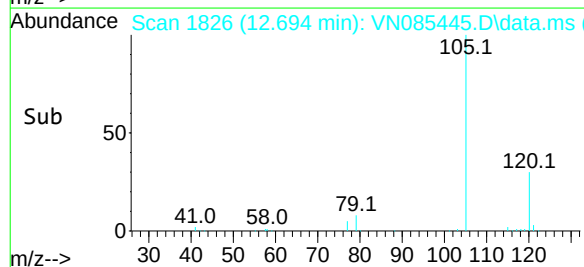
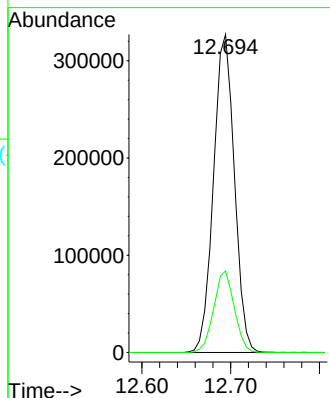
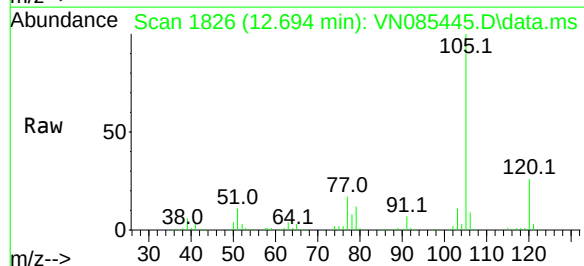
120 25.2 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 48.730 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 234342

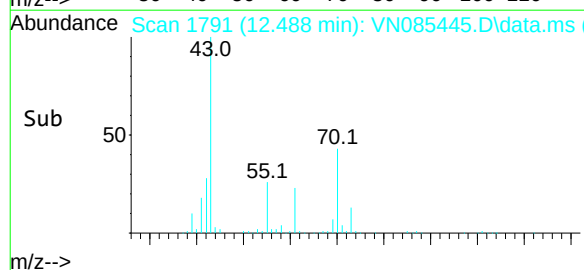
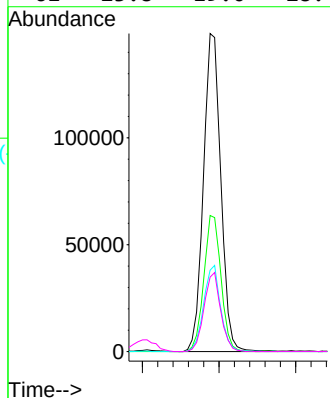
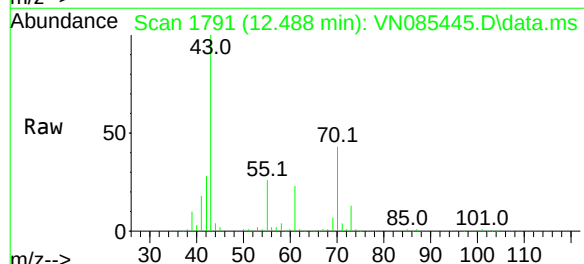
Ion Ratio Lower Upper

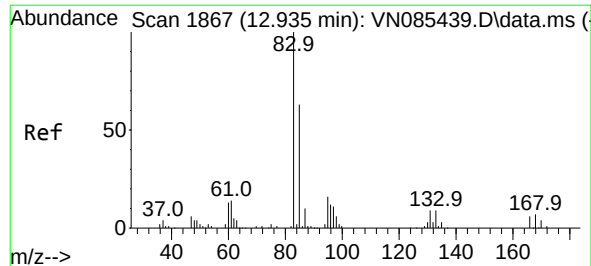
43 100

70 42.2 34.0 51.0

55 26.5 21.4 32.2

61 23.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 43.627 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

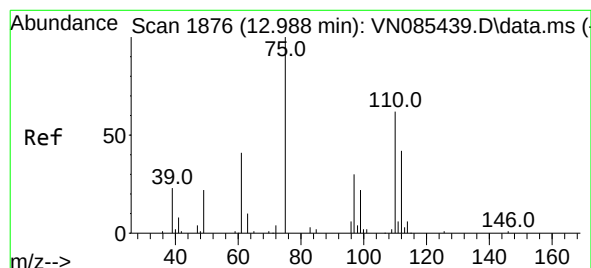
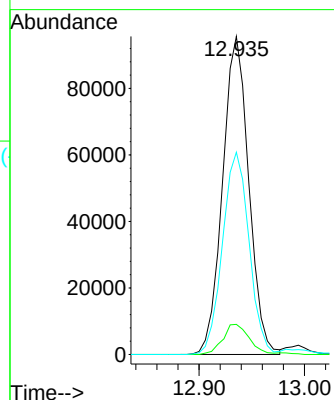
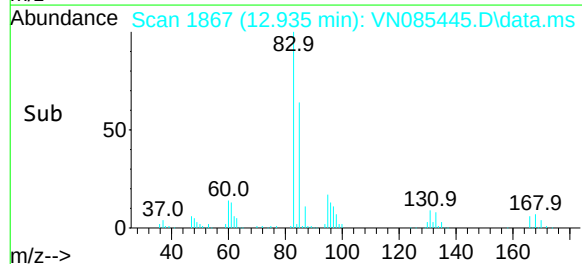
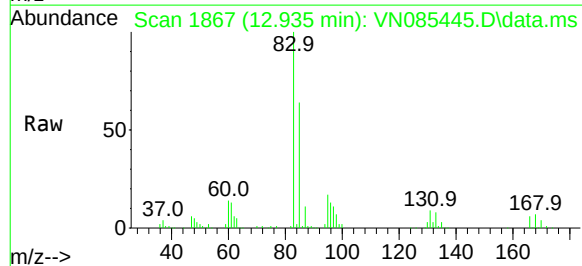
ICVVN011425

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 164882 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 131      | 9.9   | 4.8   | 14.4   |
| 85       | 64.6  | 32.2  | 96.6   |

Manual Integrations

APPROVED

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



#76

1,2,3-Trichloropropane

Concen: 41.891 ug/l m

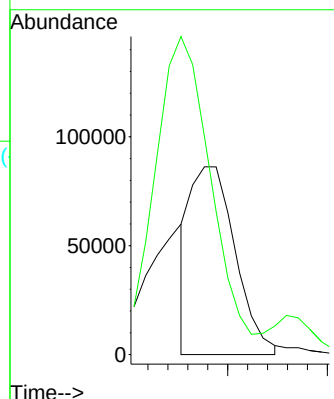
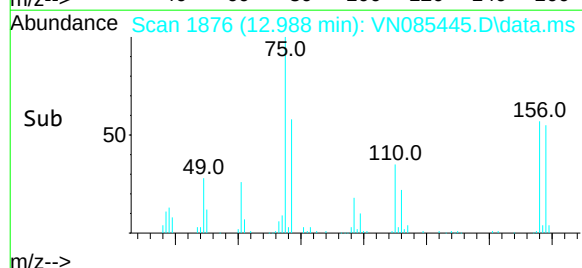
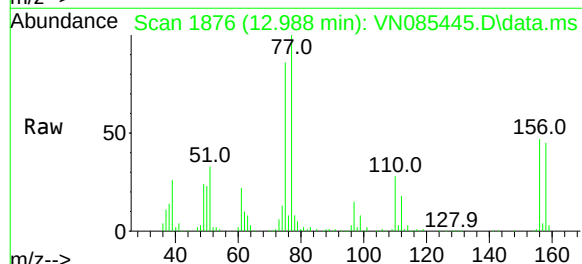
RT: 12.988 min Scan# 1876

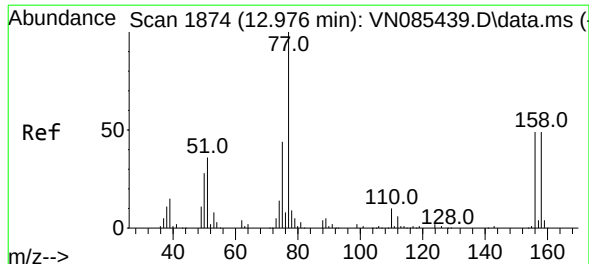
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 134976 |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 77       | 213.9 | 109.7 | 329.2  |





#77

Bromobenzene

Concen: 46.138 ug/l

RT: 12.977 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085445.D

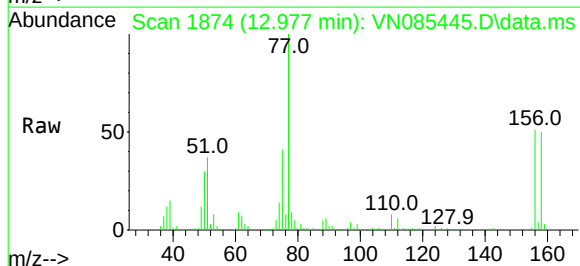
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

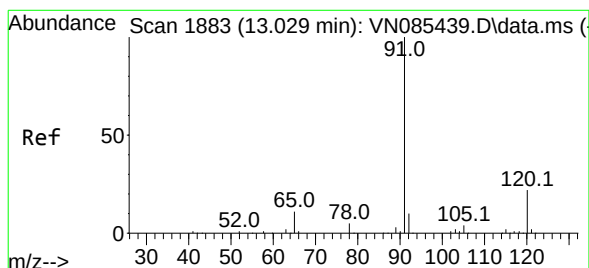
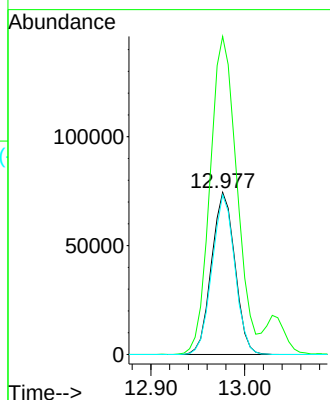
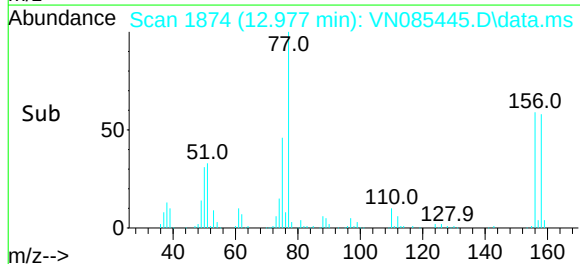
ICVVN011425



| Tgt Ion | 156   | Resp  | 128968 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 156     | 100   |       |        |
| 77      | 223.8 | 114.1 | 342.4  |
| 158     | 95.7  | 48.9  | 146.8  |

Manual Integrations  
APPROVED

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



#78

n-propylbenzene

Concen: 51.001 ug/l

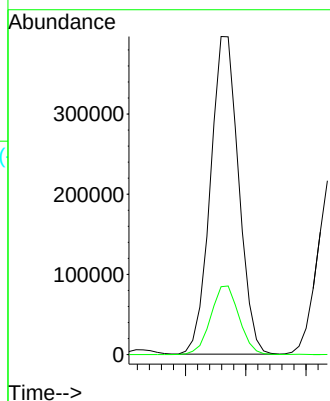
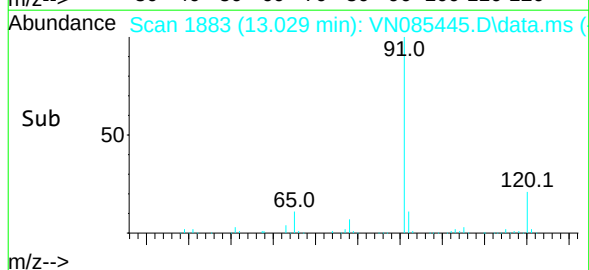
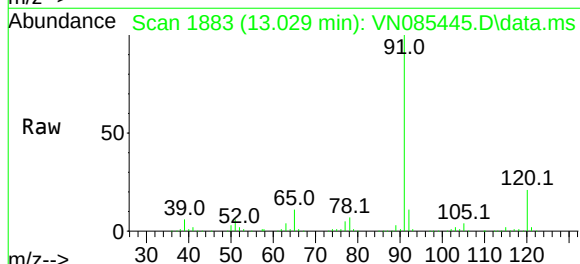
RT: 13.029 min Scan# 1883

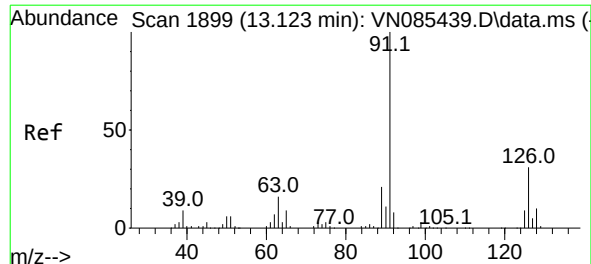
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

| Tgt Ion | 91    | Resp  | 645977 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 91      | 100   |       |        |
| 120     | 21.7  | 10.9  | 32.6   |





#79

2-Chlorotoluene

Concen: 47.870 ug/l

RT: 13.124 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 91 Resp: 392404

Ion Ratio Lower Upper

91 100

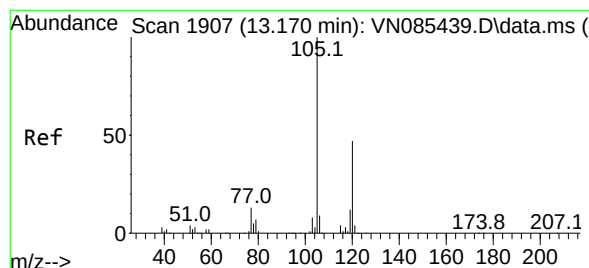
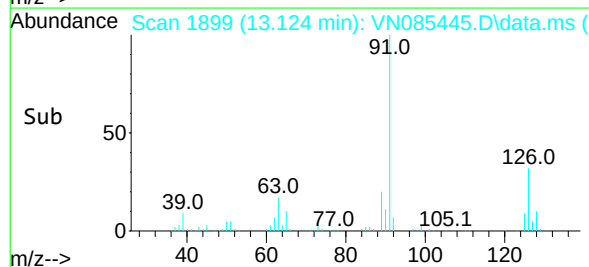
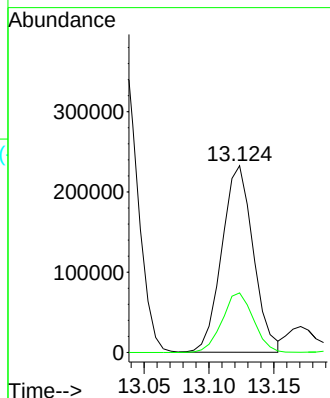
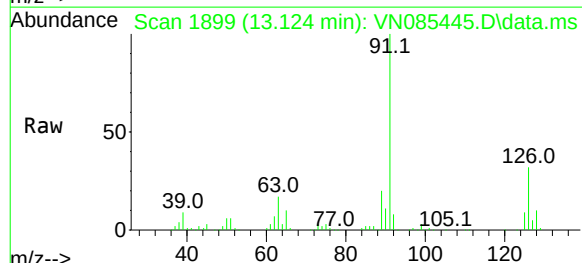
126 31.8 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 51.604 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085445.D

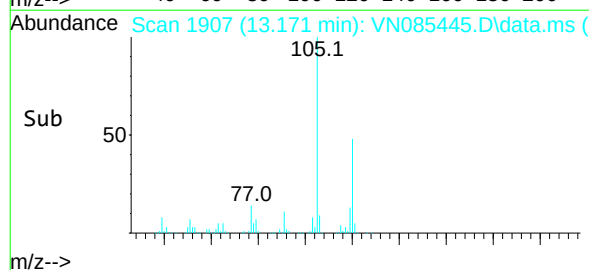
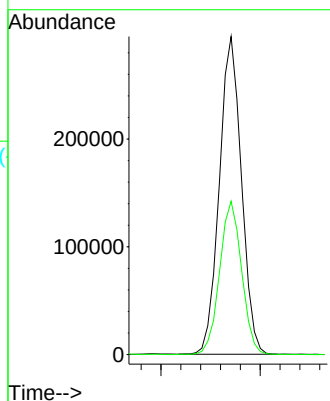
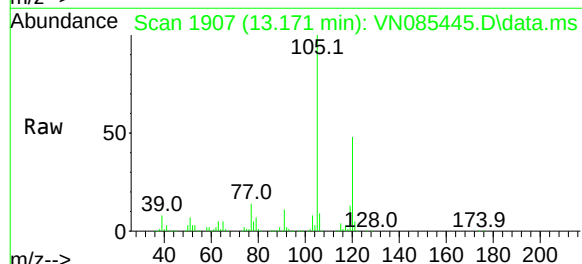
Acq: 14 Jan 2025 18:06

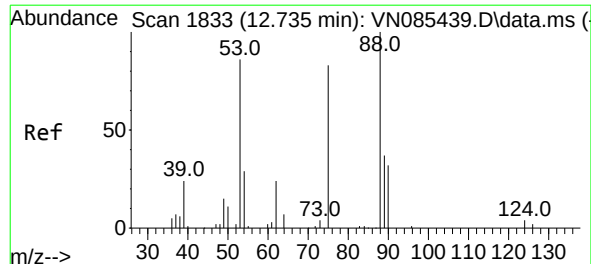
Tgt Ion:105 Resp: 456048

Ion Ratio Lower Upper

105 100

120 48.1 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 49.226 ug/l m

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085445.D

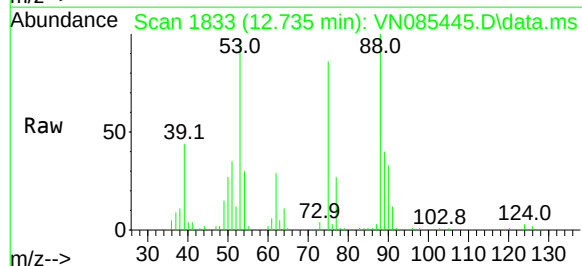
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

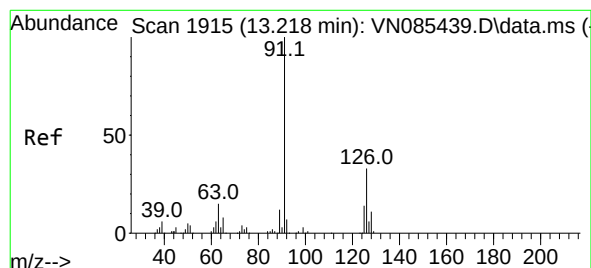
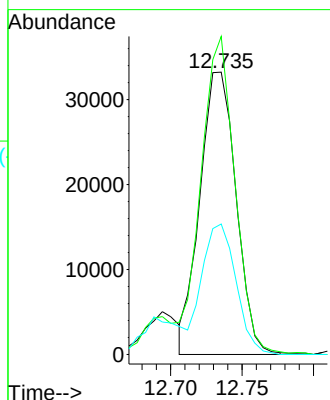
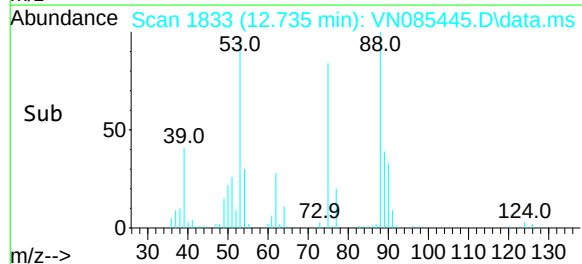
ICVVN011425



| Tgt Ion: | 75    | Resp: | 58623 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 118.0 | 95.6  | 143.4 |
| 89       | 43.3  | 37.0  | 55.6  |

Manual Integrations  
APPROVED

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



#82

4-Chlorotoluene

Concen: 48.776 ug/l

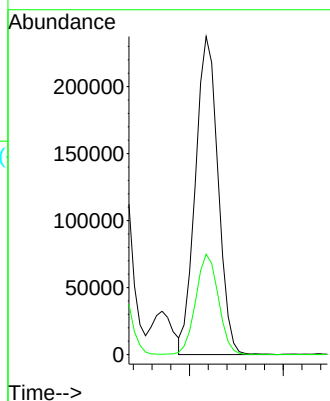
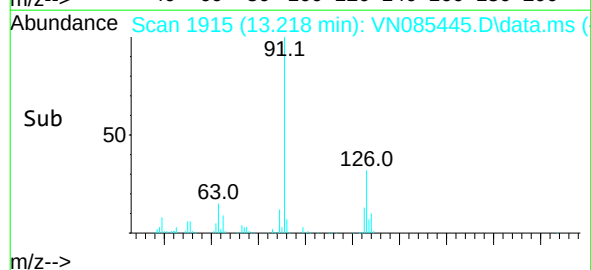
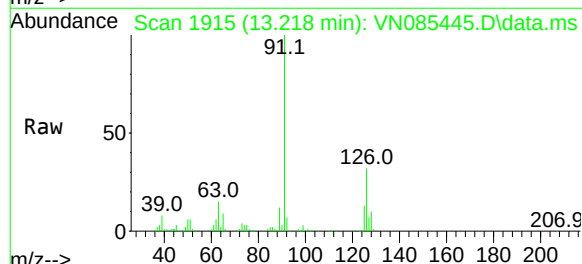
RT: 13.218 min Scan# 1915

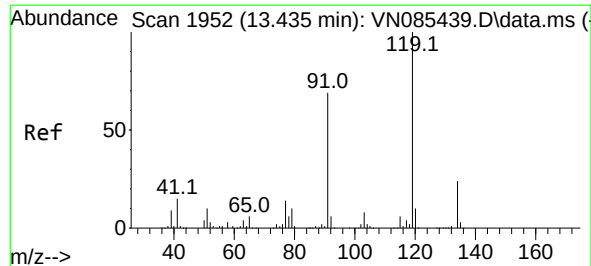
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

| Tgt Ion: | 91    | Resp: | 398110 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 126      | 31.6  | 15.9  | 47.7   |





#83

tert-Butylbenzene

Concen: 50.997 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:119 Resp: 378478

Ion Ratio Lower Upper

119 100

91 70.6 35.1 105.3

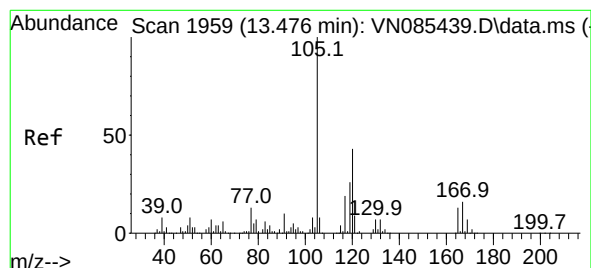
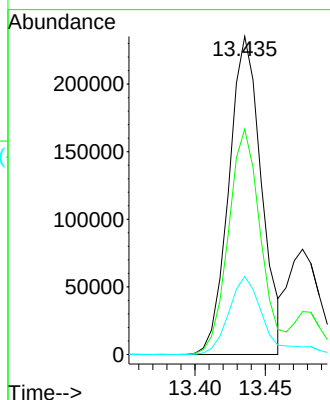
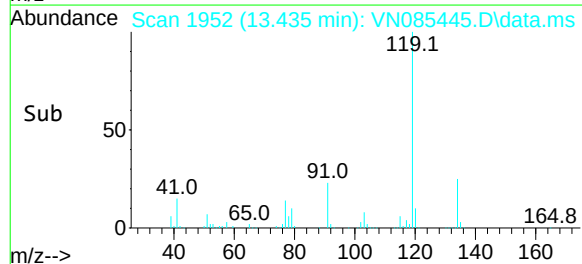
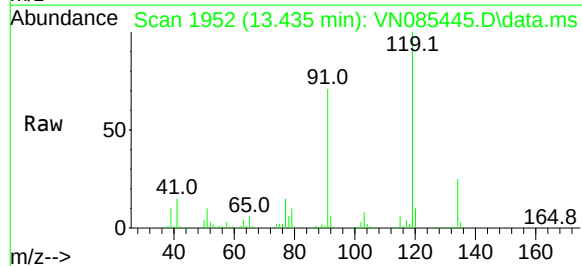
134 26.7 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 51.922 ug/l

RT: 13.477 min Scan# 1959

Delta R.T. 0.000 min

Lab File: VN085445.D

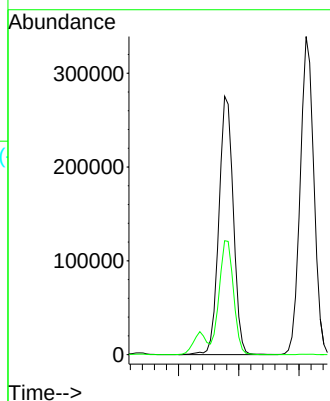
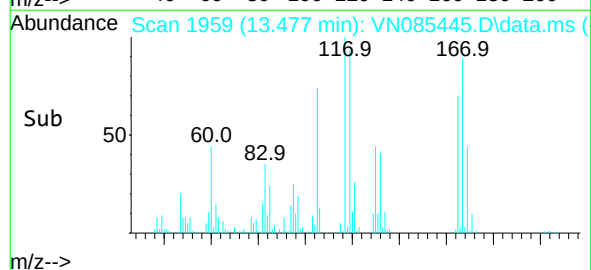
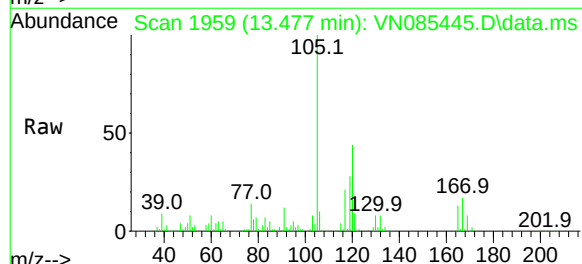
Acq: 14 Jan 2025 18:06

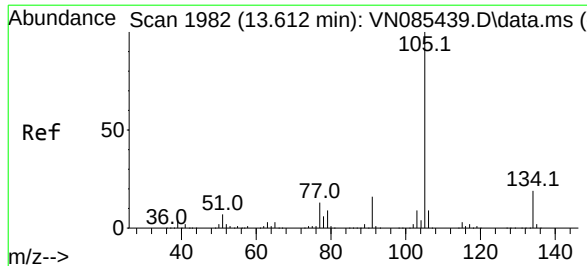
Tgt Ion:105 Resp: 457340

Ion Ratio Lower Upper

105 100

120 43.6 21.6 65.0





#85

sec-Butylbenzene

Concen: 51.777 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:105 Resp: 532578

Ion Ratio Lower Upper

105 100

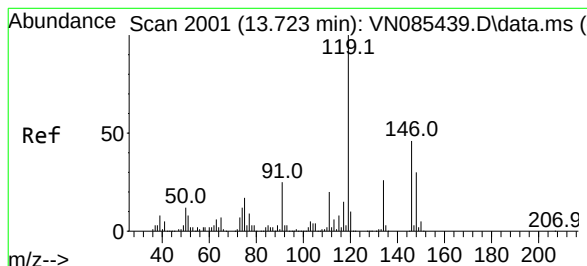
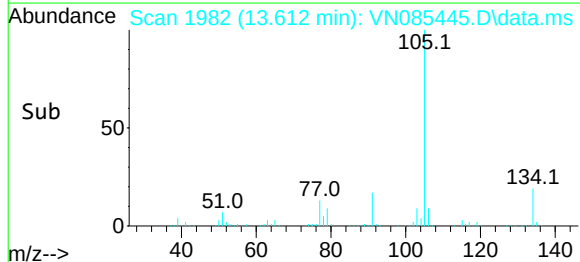
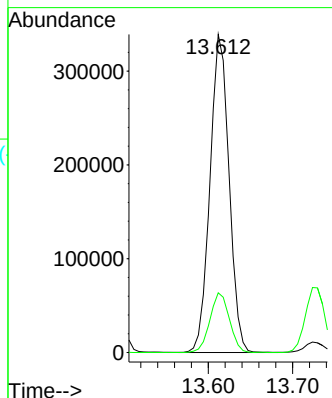
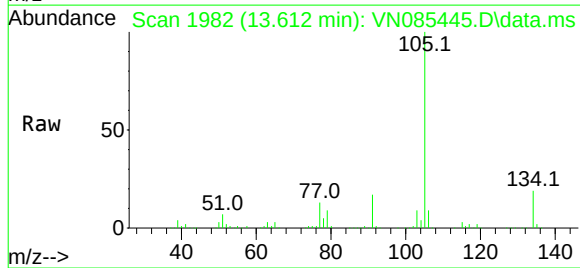
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 47.795 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

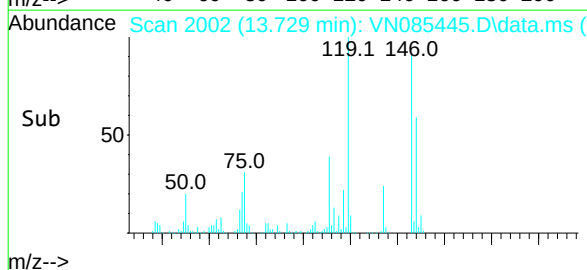
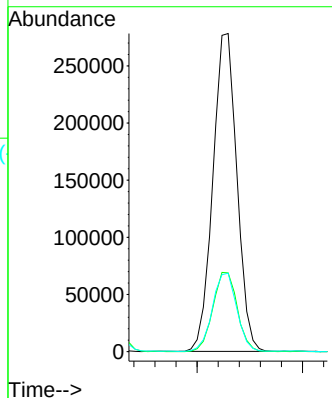
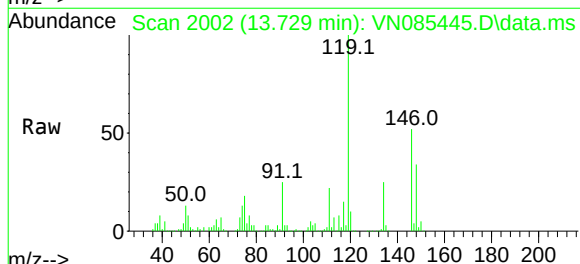
Tgt Ion:119 Resp: 440284

Ion Ratio Lower Upper

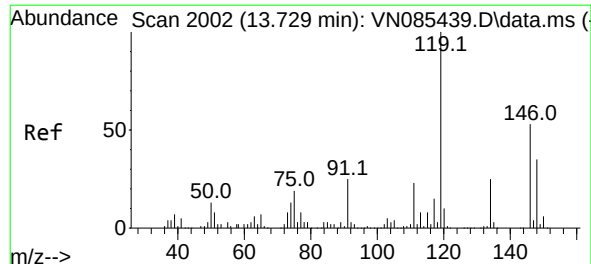
119 100

134 25.3 12.7 38.0

91 25.0 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 45.920 ug/l

RT: 13.729 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN085445.D

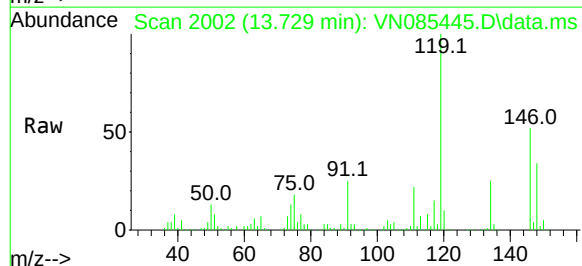
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

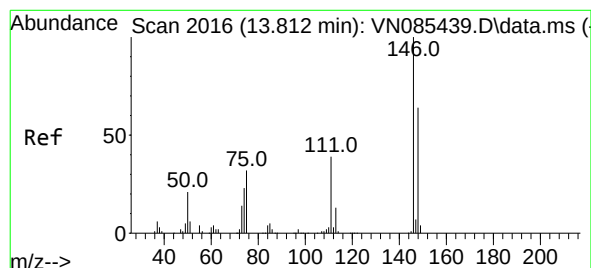
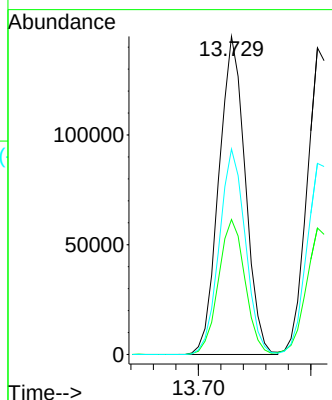
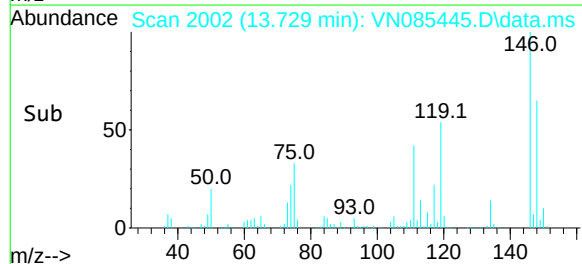
ICVVN011425



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 236387 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 42.6  | 21.4  | 64.3   |
| 148      | 63.8  | 32.3  | 96.9   |

Manual Integrations  
APPROVED

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



#88

1,4-Dichlorobenzene

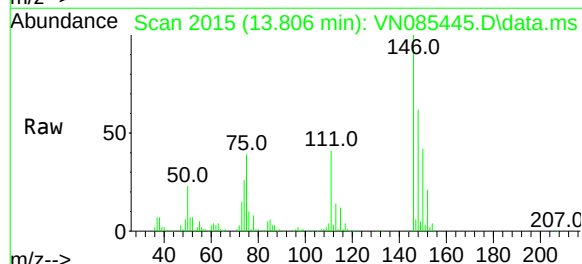
Concen: 44.102 ug/l

RT: 13.806 min Scan# 2015

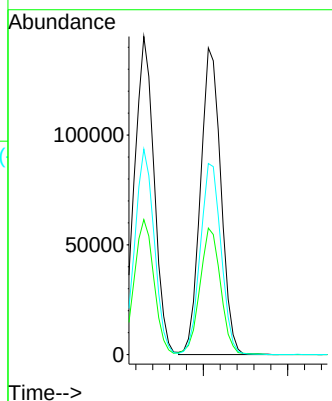
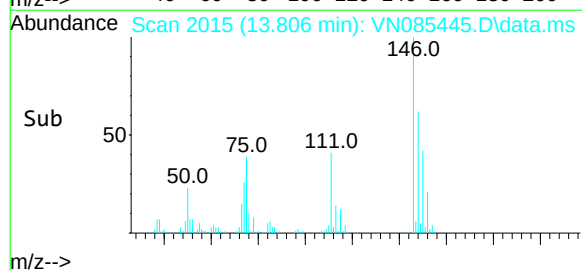
Delta R.T. -0.006 min

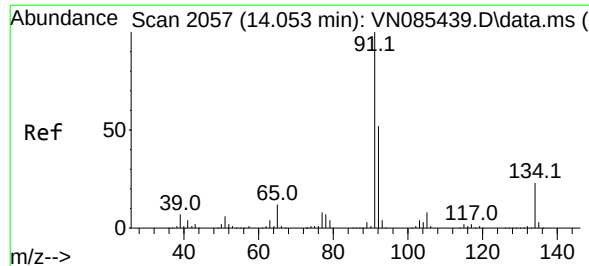
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 235319 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 41.9  | 21.3  | 63.7   |
| 148      | 63.5  | 32.4  | 97.0   |





#89

n-Butylbenzene

Concen: 50.578 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

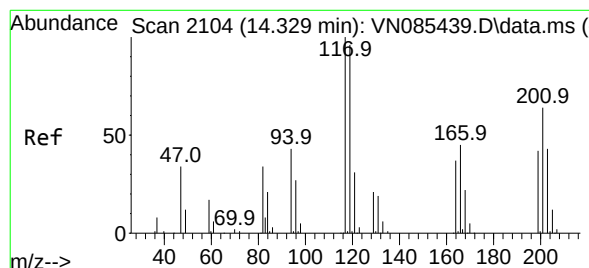
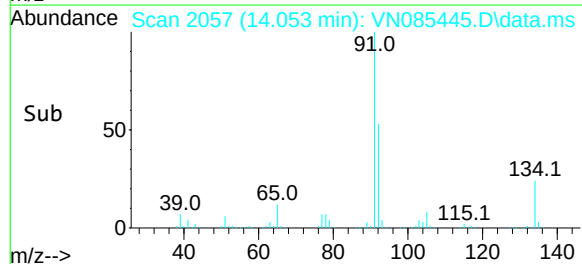
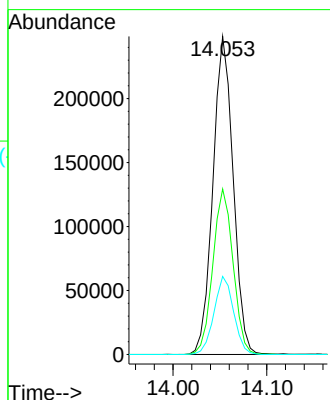
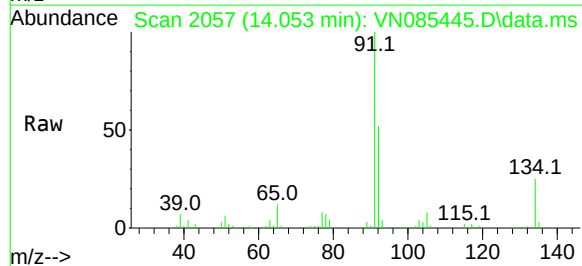
ClientSampleId :

ICVVN011425

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 373227 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 51.9  | 25.8  | 77.3   |
| 134      | 23.8  | 11.7  | 35.1   |

Manual Integrations  
APPROVED

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



#90

Hexachloroethane

Concen: 45.215 ug/l

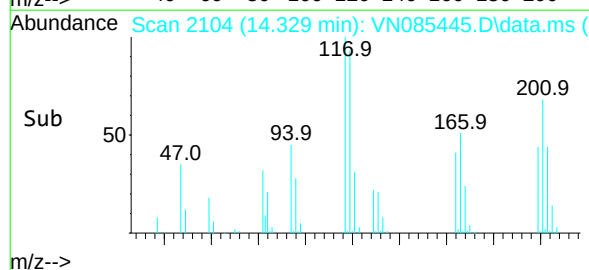
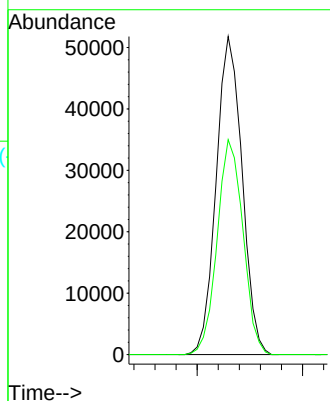
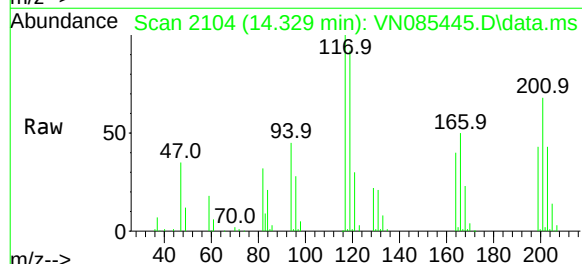
RT: 14.329 min Scan# 2104

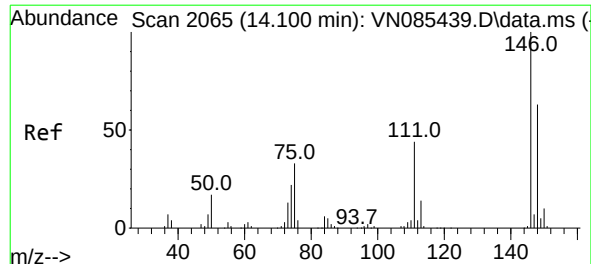
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

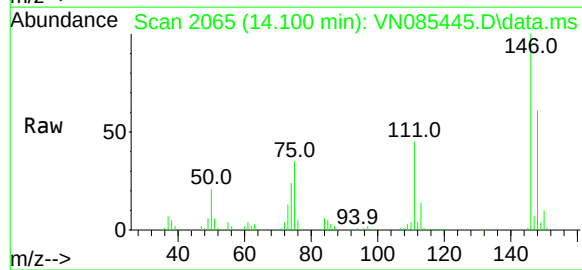
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 88538 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 67.2  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 45.113 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

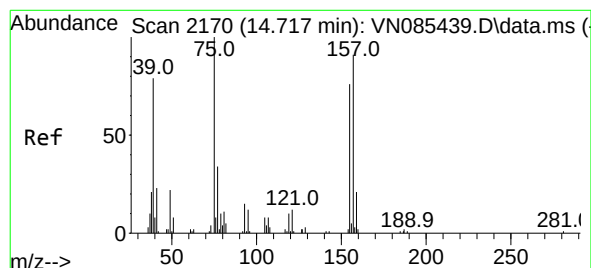
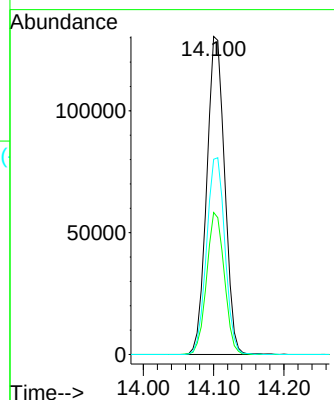
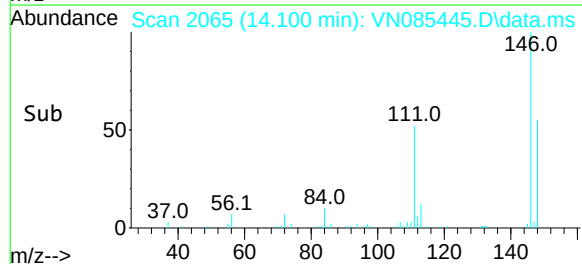
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion: 146 Resp: 231646  
Ion Ratio Lower Upper  
146 100  
111 43.9 21.7 65.1  
148 63.1 31.4 94.2

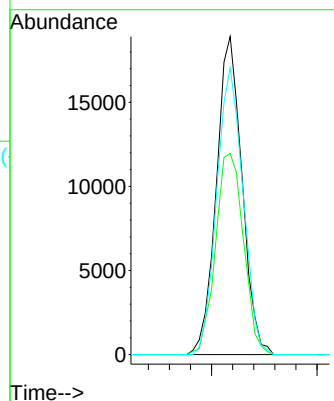
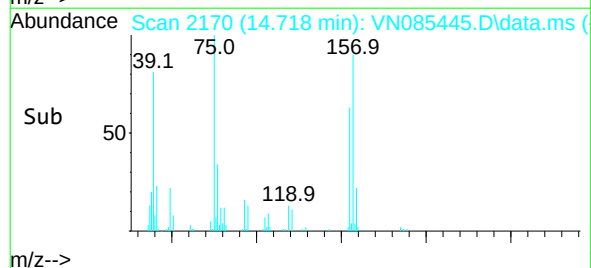
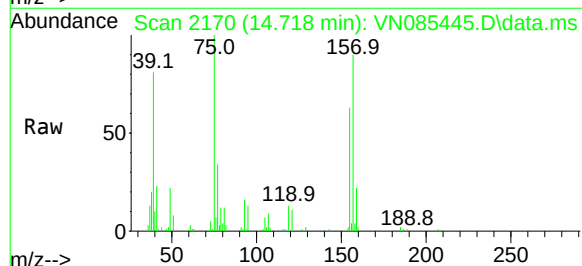
Manual Integrations  
APPROVED

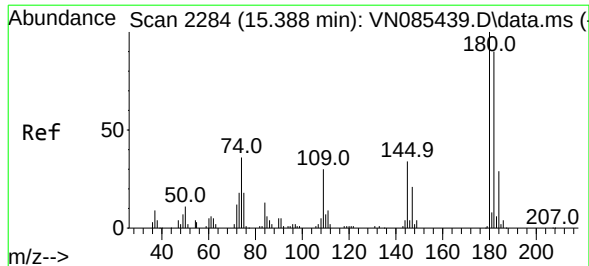
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 46.221 ug/l  
RT: 14.718 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 31899  
Ion Ratio Lower Upper  
75 100  
155 69.0 36.4 109.2  
157 92.3 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 45.739 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085445.D

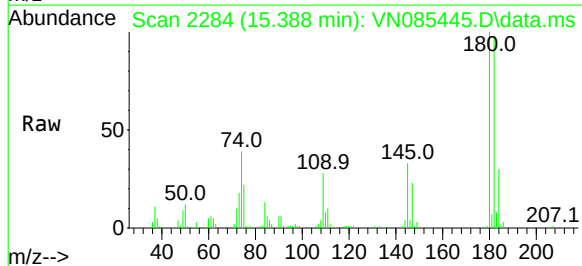
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

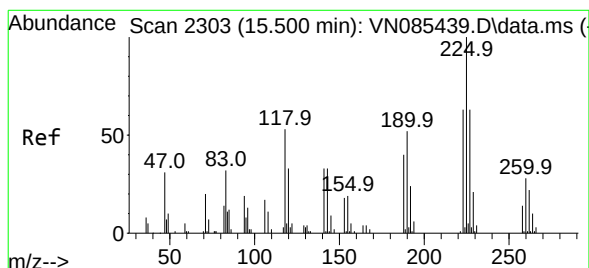
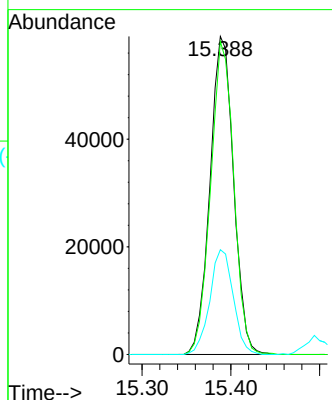
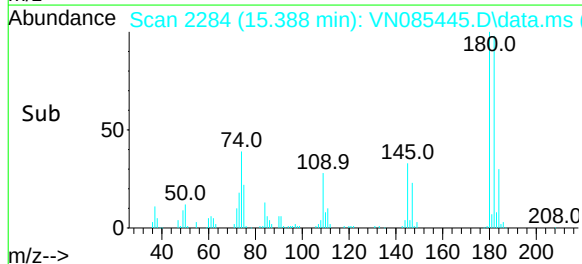


|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 109157 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 96.3  | 46.8  | 140.3  |
| 145       | 32.7  | 16.0  | 48.0   |

Manual Integrations

APPROVED

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



#94

Hexachlorobutadiene

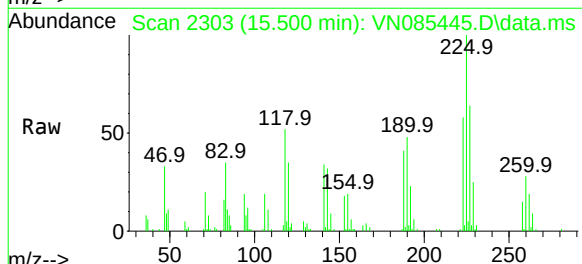
Concen: 42.112 ug/l

RT: 15.500 min Scan# 2303

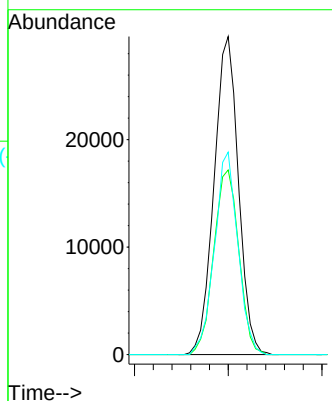
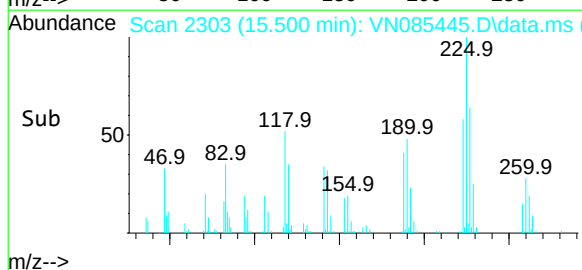
Delta R.T. 0.000 min

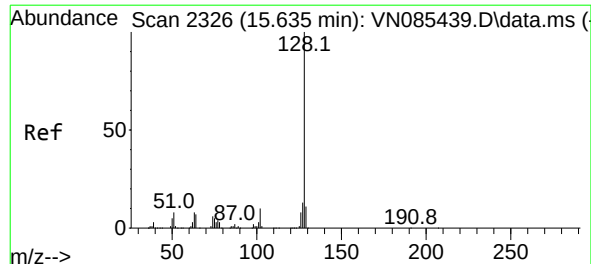
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 53358 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 59.8  | 30.7  | 92.1  |
| 227       | 61.2  | 30.9  | 92.5  |





#95

Naphthalene

Concen: 47.116 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

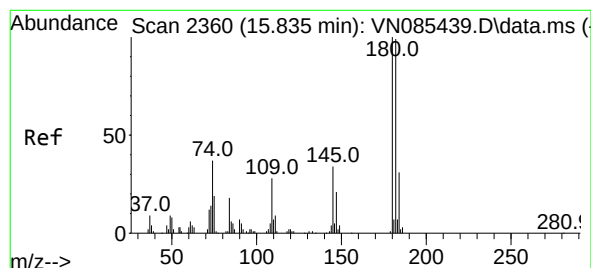
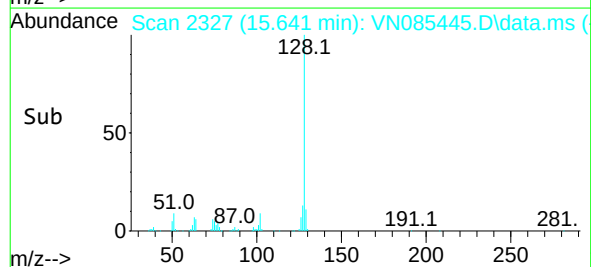
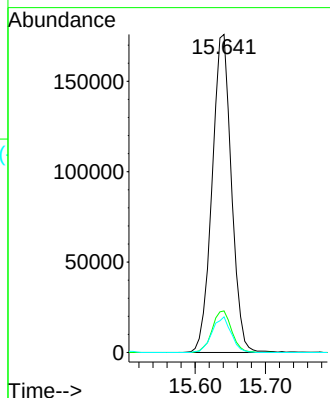
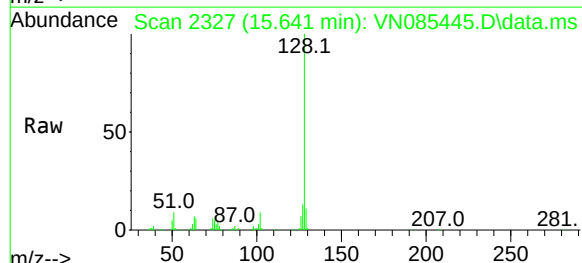
ICVVN011425

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 335535 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 127       | 13.2  | 10.6  | 16.0   |
| 129       | 11.1  | 8.8   | 13.2   |

Manual Integrations

APPROVED

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



#96

1,2,3-Trichlorobenzene

Concen: 44.551 ug/l

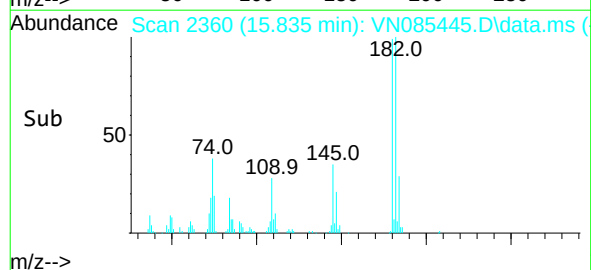
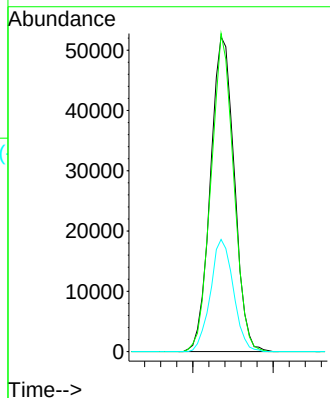
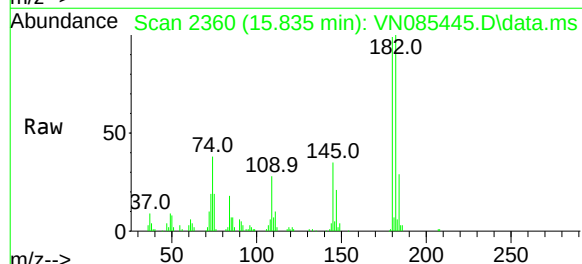
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 107583 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 95.6  | 47.4  | 142.2  |
| 145       | 34.3  | 16.9  | 50.7   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 110   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.677 | 0.593 | 12.4  | 104   | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.629 | 14.2  | 102   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.629 | 14.7# | 101   | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.364 | 18.2  | 96    | 0.00     |
| 6 T   | Chloroethane                | 0.467 | 0.395 | 15.4  | 103   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.069 | 0.940 | 12.1  | 104   | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.316 | 14.4  | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.538 | 10.6  | 109   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.638 | 7.5   | 98    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.076 | 17.4  | 90    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.486 | 9.5#  | 101   | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.124 | 1.6   | 97    | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.775 | 11.0  | 101   | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.268 | 8.8   | 99    | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.223 | 14.6  | 98    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.366 | 17.3  | 102   | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.714 | 10.0  | 100   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.665 | 4.4   | 98    | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.555 | 14.1  | 97    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.512 | 10.6  | 102   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 1.817 | 6.0   | 98    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.339 | 1.0   | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.040 | 11.7  | 98    | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.351 | 8.6   | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 0.907 | 4.8   | 107   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.614 | 9.0   | 99    | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.484 | 11.7  | 98    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.233 | 4.1   | 98    | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.074 | 11.8# | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.878 | 14.3  | 110   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 0.947 | 11.3  | 103   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.804 | 0.4   | 107   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 109   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.352 | -1.4  | 107   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.437 | 10.3  | 103   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.434 | 11.6  | 97    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.496 | 11.0  | 102   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.455 | 0.4   | 107   | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.336 | 8.7   | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.241 | 5.9   | 97    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.501 | 9.1   | 100   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 0.716 | 9.0   | 96    | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.297 | 12.9  | 100   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.334 | 10.7# | 98    | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.238 | 11.9  | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.502 | 8.6   | 98    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.354 | 0.0   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.005 | 16.7  | 81    | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.289 | -4.6  | 111   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.449 | 1.8   | 99    | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.815 | 3.9#  | 102   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.496 | 4.4   | 98    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.530 | 4.3   | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.310 | 7.5   | 99    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.492 | -4.9  | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.547 | 6.2   | 99    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.218 | -2.3  | 99    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.323 | -0.6  | 99    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.372 | 8.1   | 98    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.299 | 10.5  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.446 | -5.7  | 108   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.306 | 10.3  | 102   | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.006 | 8.1   | 101   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.359 | 10.7  | 99    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.798 | -0.8# | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.681 | -3.3  | 104   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.656 | -4.1  | 104   | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.108 | -6.2  | 102   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.283 | 1.7   | 98    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.371 | 0.1   | 106   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.478 | 2.6   | 99    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.040 | 12.8  | 98    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 0.851 | 16.2  | 103   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.814 | 7.7   | 103   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.075 | -2.0  | 106   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.475 | 4.3   | 104   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 2.877 | -3.2  | 106   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.370 | 1.6   | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.511 | 2.4   | 105   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.387 | -2.0  | 106   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 2.885 | -3.9  | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.360 | -3.6  | 106   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 2.777 | -5.5  | 105   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.491 | 8.2   | 103   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.484 | 11.8  | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.354 | -1.2  | 103   | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.559 | 9.5   | 105   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.461 | 9.8   | 102   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.201 | 7.8   | 98    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.689 | 8.5   | 95    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.337 | 15.8  | 99    | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.117 | 5.7   | 92    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085445.D  
Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.762 | 0.679 | 10.9 | 93    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 110   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 43.772  | 12.5  | 104   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 42.883  | 14.2  | 102   | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 42.715  | 14.6# | 101   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 40.910  | 18.2  | 96    | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 42.299  | 15.4  | 103   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 43.956  | 12.1  | 104   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 42.846  | 14.3  | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 44.706  | 10.6  | 109   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 46.259  | 7.5   | 98    | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 206.633 | 17.3  | 90    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 45.317  | 9.4#  | 101   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 244.765 | 2.1   | 97    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 44.501  | 11.0  | 101   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 227.920 | 8.8   | 99    | 0.00     |
| 16 T  | Acetone                     | 250.000 | 213.971 | 14.4  | 98    | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 41.342  | 17.3  | 102   | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 45.028  | 9.9   | 100   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 47.768  | 4.5   | 98    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 43.017  | 14.0  | 97    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 44.672  | 10.7  | 102   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 46.996  | 6.0   | 98    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 247.459 | 1.0   | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 44.114  | 11.8  | 98    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 228.924 | 8.4   | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 47.593  | 4.8   | 107   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 45.446  | 9.1   | 99    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 44.122  | 11.8  | 98    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 239.065 | 4.4   | 98    | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 44.071  | 11.9# | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 42.878  | 14.2  | 110   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 44.332  | 11.3  | 103   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 49.782  | 0.4   | 107   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 109   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 50.768  | -1.5  | 107   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 44.863  | 10.3  | 103   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 44.123  | 11.8  | 97    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 44.456  | 11.1  | 102   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 49.687  | 0.6   | 107   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 45.657  | 8.7   | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 47.155  | 5.7   | 97    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 45.481  | 9.0   | 100   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 45.440  | 9.1   | 96    | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 43.622  | 12.8  | 100   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 44.744  | 10.5# | 98    | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 44.214  | 11.6  | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 45.655  | 8.7   | 98    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 49.948  | 0.1   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|---------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 792.760 | 20.7  | 81    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 52.302  | -4.6  | 111   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 245.877 | 1.6   | 99    | 0.00     |
| 52 CM | Toluene                     | 50.000   | 48.073  | 3.9#  | 102   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 47.757  | 4.5   | 98    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 47.783  | 4.4   | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 46.173  | 7.7   | 99    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 43.762  | 12.5  | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 46.877  | 6.2   | 99    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 256.116 | -2.4  | 99    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 251.213 | -0.5  | 99    | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 45.935  | 8.1   | 98    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 44.837  | 10.3  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 52.899  | -5.8  | 108   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000  | 0.0   | 108   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 44.886  | 10.2  | 102   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 45.901  | 8.2   | 101   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 44.712  | 10.6  | 99    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 50.391  | -0.8# | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 103.341 | -3.3  | 104   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 52.093  | -4.2  | 104   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 53.103  | -6.2  | 102   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 49.119  | 1.8   | 98    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000  | 0.0   | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 49.951  | 0.1   | 106   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 48.730  | 2.5   | 99    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 43.627  | 12.7  | 98    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 41.891  | 16.2  | 103   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 46.138  | 7.7   | 103   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 51.001  | -2.0  | 106   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 47.870  | 4.3   | 104   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 51.604  | -3.2  | 106   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 49.226  | 1.5   | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 48.776  | 2.4   | 105   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 50.997  | -2.0  | 106   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 51.922  | -3.8  | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 51.777  | -3.6  | 106   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 47.795  | 4.4   | 105   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 45.920  | 8.2   | 103   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 44.102  | 11.8  | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 50.578  | -1.2  | 103   | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 45.215  | 9.6   | 105   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 45.113  | 9.8   | 102   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 46.221  | 7.6   | 98    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 45.739  | 8.5   | 95    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 42.112  | 15.8  | 99    | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 47.116  | 5.8   | 92    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085445.D  
Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 44.551 | 10.9 | 93    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA\_N Calibration Date/Time: 01/28/2025 09:53

Lab File ID: VN085526.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

| COMPOUND                       | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Chloromethane                  | 0.733 | 0.642  | 0.1        | -12.41 | 20    |
| Vinyl Chloride                 | 0.737 | 0.665  |            | -9.77  | 20    |
| Bromomethane                   | 0.445 | 0.389  |            | -12.58 | 20    |
| Chloroethane                   | 0.467 | 0.439  |            | -6     | 20    |
| Trichlorofluoromethane         | 1.069 | 1.071  |            | 0.19   | 20    |
| 1,1,2-Trichlorotrifluoroethane | 0.602 | 0.618  |            | 2.66   | 20    |
| 1,1-Dichloroethene             | 0.537 | 0.526  |            | -2.05  | 20    |
| Acetone                        | 0.261 | 0.263  |            | 0.77   | 20    |
| Carbon Disulfide               | 1.652 | 1.391  |            | -15.8  | 20    |
| Methyl tert-butyl Ether        | 1.742 | 1.940  |            | 11.37  | 20    |
| Methylene Chloride             | 0.646 | 0.645  |            | -0.16  | 20    |
| trans-1,2-Dichloroethene       | 0.573 | 0.570  |            | -0.52  | 20    |
| 1,1-Dichloroethane             | 1.178 | 1.202  | 0.1        | 2.04   | 20    |
| 2-Butanone                     | 0.384 | 0.399  |            | 3.91   | 20    |
| Carbon Tetrachloride           | 0.557 | 0.602  |            | 8.08   | 20    |
| cis-1,2-Dichloroethene         | 0.675 | 0.700  |            | 3.7    | 20    |
| Chloroform                     | 1.218 | 1.248  |            | 2.46   | 20    |
| 1,1,1-Trichloroethane          | 1.068 | 1.105  |            | 3.46   | 20    |
| Methylcyclohexane              | 0.457 | 0.513  |            | 12.25  | 20    |
| Benzene                        | 1.463 | 1.575  |            | 7.66   | 20    |
| 1,2-Dichloroethane             | 0.551 | 0.585  |            | 6.17   | 20    |
| Trichloroethene                | 0.341 | 0.359  |            | 5.28   | 20    |
| 1,2-Dichloropropane            | 0.374 | 0.407  |            | 8.82   | 20    |
| Bromodichloromethane           | 0.549 | 0.613  |            | 11.66  | 20    |
| 4-Methyl-2-Pentanone           | 0.457 | 0.535  |            | 17.07  | 20    |
| Toluene                        | 0.848 | 0.975  |            | 14.98  | 20    |
| t-1,3-Dichloropropene          | 0.519 | 0.611  |            | 17.73  | 20    |
| cis-1,3-Dichloropropene        | 0.554 | 0.639  |            | 15.34  | 20    |
| 1,1,2-Trichloroethane          | 0.335 | 0.375  |            | 11.94  | 20    |
| 2-Hexanone                     | 0.321 | 0.386  |            | 20.25  | 20    |
| Dibromochloromethane           | 0.405 | 0.460  |            | 13.58  | 20    |
| Tetrachloroethene              | 0.341 | 0.361  |            | 5.86   | 20    |
| Chlorobenzene                  | 1.095 | 1.171  | 0.3        | 6.94   | 20    |
| Ethyl Benzene                  | 1.784 | 2.053  |            | 15.08  | 20    |
| m/p-Xylenes                    | 0.659 | 0.785  |            | 19.12  | 20    |
| o-Xylene                       | 0.630 | 0.739  |            | 17.3   | 20    |
| Styrene                        | 1.043 | 1.279  |            | 22.63  | 20    |
| Bromoform                      | 0.288 | 0.334  | 0.1        | 15.97  | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA\_N Calibration Date/Time: 01/28/2025 09:53

Lab File ID: VN085526.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

| COMPOUND                  | RRF   | RRF050 | MIN<br>RRF | %D    | MAX%D |
|---------------------------|-------|--------|------------|-------|-------|
| Isopropylbenzene          | 3.375 | 3.736  |            | 10.7  | 20    |
| 1,1,2,2-Tetrachloroethane | 1.192 | 1.170  | 0.3        | -1.85 | 20    |
| 1,3-Dichlorobenzene       | 1.624 | 1.699  |            | 4.62  | 20    |
| 1,4-Dichlorobenzene       | 1.683 | 1.700  |            | 1.01  | 20    |
| 1,2-Dichlorobenzene       | 1.620 | 1.644  |            | 1.48  | 20    |
| 1,2-Dichloroethane-d4     | 0.807 | 0.777  |            | -3.72 | 20    |
| Dibromofluoromethane      | 0.347 | 0.355  |            | 2.31  | 20    |
| Toluene-d8                | 1.232 | 1.296  |            | 5.2   | 20    |
| 4-Bromofluorobenzene      | 0.422 | 0.467  |            | 10.66 | 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\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

### Manual Integrations APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 203638   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 333806   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 302551   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 155713   | 50.000 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.577  | 65    | 158323   | 48.164   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 96.320%  |
| 35) Dibromofluoromethane  | 8.159  | 113   | 118662   | 51.240   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 102.480% |
| 50) Toluene-d8            | 10.565 | 98    | 432537   | 52.569   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 105.140% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 155870   | 55.379   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 110.760% |

#### Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 126280  | 45.800  | ug/l | 98     |
| 3) Chloromethane             | 2.359 | 50  | 130825  | 43.823  | ug/l | 99     |
| 4) Vinyl Chloride            | 2.512 | 62  | 135494  | 45.155  | ug/l | 98     |
| 5) Bromomethane              | 2.948 | 94  | 79311   | 43.757  | ug/l | 98     |
| 6) Chloroethane              | 3.118 | 64  | 89399   | 46.993  | ug/l | 100    |
| 7) Trichlorofluoromethane    | 3.495 | 101 | 218167  | 50.109  | ug/l | 99     |
| 8) Diethyl Ether             | 3.959 | 74  | 73428   | 48.819  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 125888  | 51.335  | ug/l | 99     |
| 10) Methyl Iodide            | 4.583 | 142 | 144081  | 51.306  | ug/l | 97     |
| 11) Tert butyl alcohol       | 5.518 | 59  | 110319  | 293.091 | ug/l | 100    |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 107139  | 49.022  | ug/l | 98     |
| 13) Acrolein                 | 4.171 | 56  | 134509  | 261.783 | ug/l | 100    |
| 14) Allyl chloride           | 5.018 | 41  | 172649  | 48.683  | ug/l | 98     |
| 15) Acrylonitrile            | 5.712 | 53  | 312035  | 260.994 | ug/l | 99     |
| 16) Acetone                  | 4.418 | 43  | 267575  | 251.929 | ug/l | 97     |
| 17) Carbon Disulfide         | 4.712 | 76  | 283263  | 42.095  | ug/l | 98     |
| 18) Methyl Acetate           | 5.018 | 43  | 174889  | 54.151  | ug/l | 100    |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 395014  | 55.663  | ug/l | 98     |
| 20) Methylene Chloride       | 5.277 | 84  | 131284  | 49.931  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 116065  | 49.692  | ug/l | 97     |
| 22) Diisopropyl ether        | 6.665 | 45  | 426926  | 54.237  | ug/l | 98     |
| 23) Vinyl Acetate            | 6.600 | 43  | 1520538 | 276.027 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 244849  | 51.014  | ug/l | 98     |
| 25) 2-Butanone               | 7.477 | 43  | 406723  | 260.223 | ug/l | 100    |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 223673  | 57.640  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 142501  | 51.799  | ug/l | 99     |
| 28) Bromochloromethane       | 7.812 | 49  | 101613  | 45.505  | ug/l | 98     |
| 29) Tetrahydrofuran          | 7.830 | 42  | 272222  | 274.712 | ug/l | 100    |
| 30) Chloroform               | 7.959 | 83  | 254209  | 51.246  | ug/l | 100    |
| 31) Cyclohexane              | 8.253 | 56  | 189607  | 45.451  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 225078  | 51.727  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 170755  | 52.537  | ug/l | 99     |
| 37) Ethyl Acetate            | 7.553 | 43  | 173618  | 52.923  | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 200977  | 54.013  | ug/l | 99     |
| 39) Methylcyclohexane        | 9.600 | 83  | 171154  | 56.039  | ug/l | 99     |
| 40) Benzene                  | 8.600 | 78  | 525669  | 53.828  | ug/l | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 95095    | 55.717   | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 195201   | 53.072   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 287826   | 54.755   | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 119734   | 52.672   | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 135814   | 54.447   | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 95715    | 53.179   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.883  | 83   | 204517   | 55.774   | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 136479   | 57.693   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 40607    | 1019.345 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 892528   | 292.599  | ug/l   | 100      |
| 52) Toluene                   | 10.630 | 92   | 325356   | 57.499   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.830 | 75   | 204105   | 58.899   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 213245   | 57.610   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 125068   | 55.851   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 191924   | 50.844   | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 219323   | 56.327   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 426978   | 300.465  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 643969   | 300.034  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 153599   | 56.815   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 122098   | 54.776   | ug/l   | 97       |
| 64) Tetrachloroethene         | 11.100 | 164  | 109264   | 52.974   | ug/l   | 98       |
| 65) Chlorobenzene             | 11.888 | 112  | 354308   | 53.457   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 130012   | 53.447   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 621051   | 57.531   | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.065 | 106  | 475266   | 119.124  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 223578   | 58.639   | ug/l   | 100      |
| 70) Styrene                   | 12.406 | 104  | 387081   | 61.343   | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 101032   | 58.046   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 581759   | 55.357   | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 249973   | 52.919   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 182235   | 49.089   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 147100m  | 46.478   | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 138788   | 50.547   | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 701218   | 56.362   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 424851   | 52.764   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 494666   | 56.984   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 63601    | 54.370   | ug/l   | 92       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 432608   | 53.960   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 405613   | 55.641   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 501298   | 57.941   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 580942   | 57.499   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 491281   | 53.532   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 264631   | 52.335   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 264719   | 50.507   | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 420498   | 58.013   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 97383    | 50.630   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 255916   | 50.739   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 34993    | 51.620   | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 127164   | 54.246   | ug/l   | 100      |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 63906    | 51.348   | ug/l   | 99       |
| 95) Naphthalene               | 15.641 | 128  | 367063   | 52.473   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 121516   | 51.230   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085526.D  
Acq On : 28 Jan 2025 09:53  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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



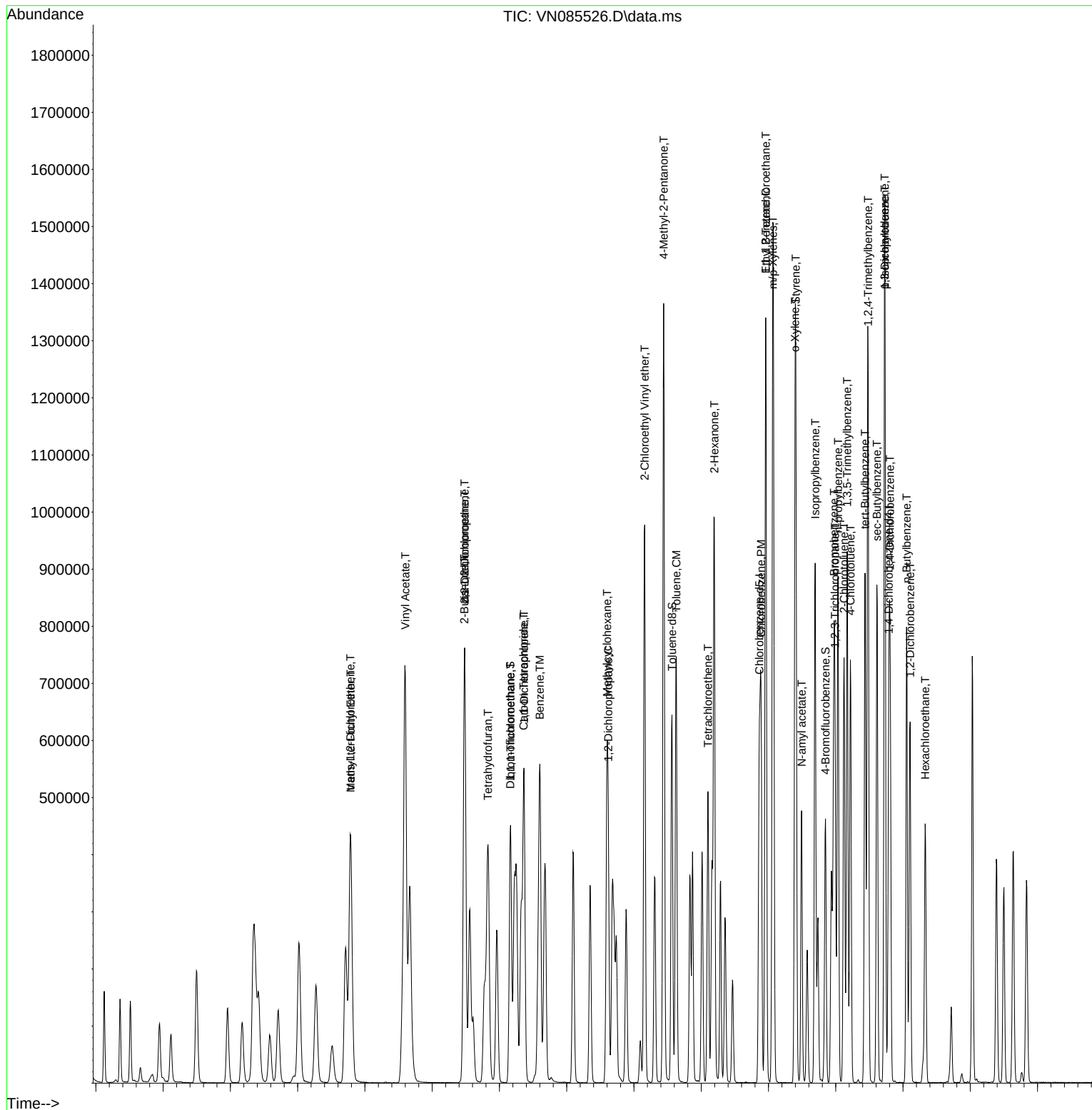
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Data File : VN085526.D  
Acq On : 28 Jan 2025 09:53  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

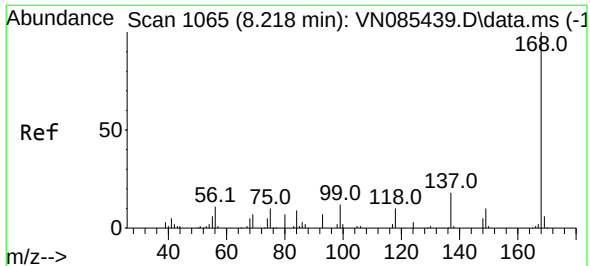
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

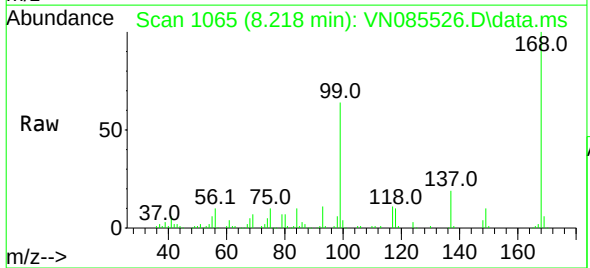
Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

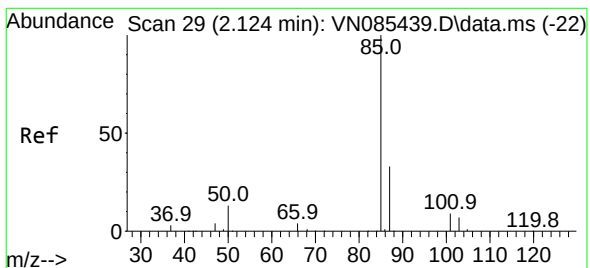
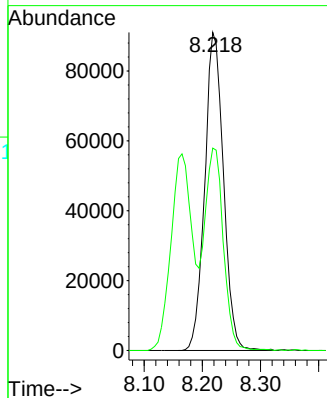
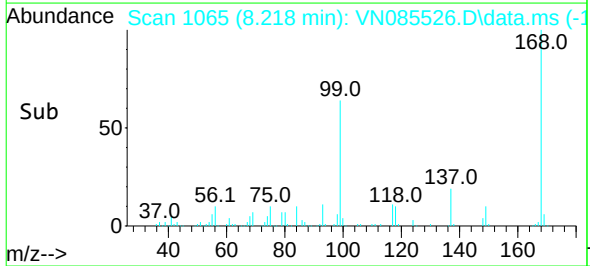
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 168 Resp: 203638  
Ion Ratio Lower Upper  
168 100  
99 63.5 53.6 80.4

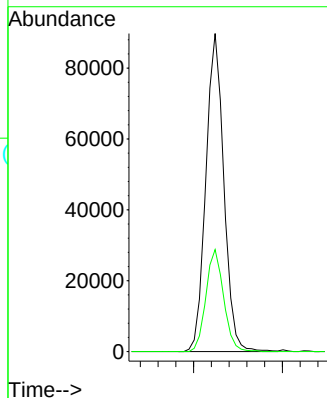
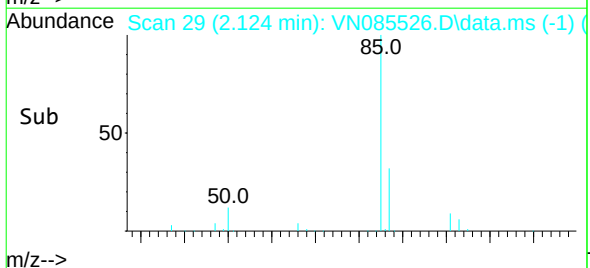
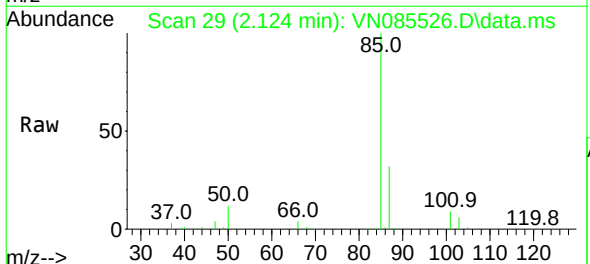
Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

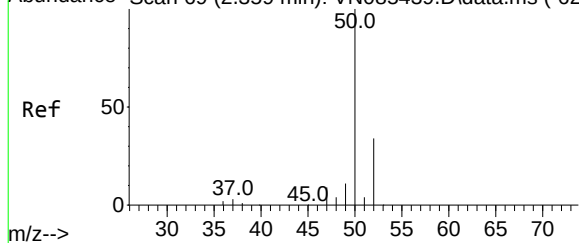


#2  
Dichlorodifluoromethane  
Concen: 45.800 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 85 Resp: 126280  
Ion Ratio Lower Upper  
85 100  
87 32.1 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 43.823 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 50 Resp: 130825

Ion Ratio Lower Upper

50 100

52 33.0 27.0 40.6

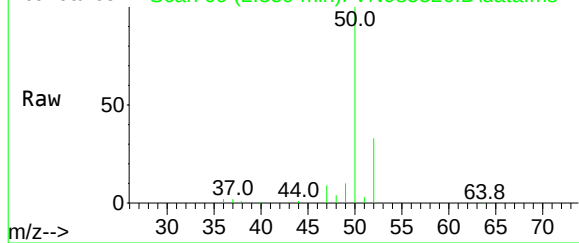
Manual Integrations

APPROVED

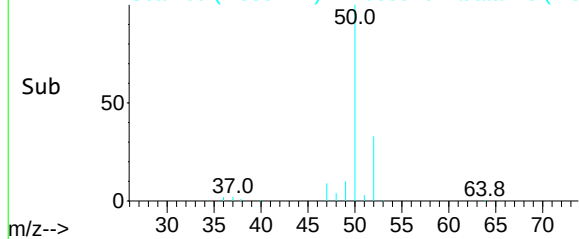
Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025

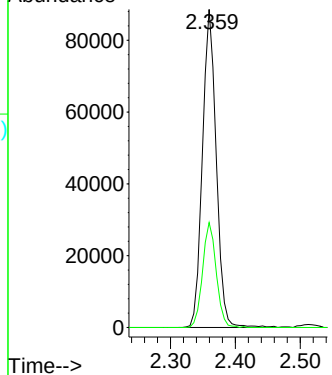
Abundance Scan 69 (2.359 min): VN085526.D\data.ms



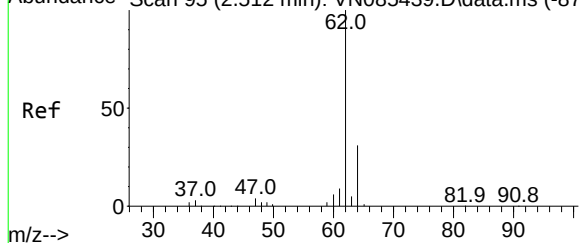
Abundance Scan 69 (2.359 min): VN085526.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 45.155 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

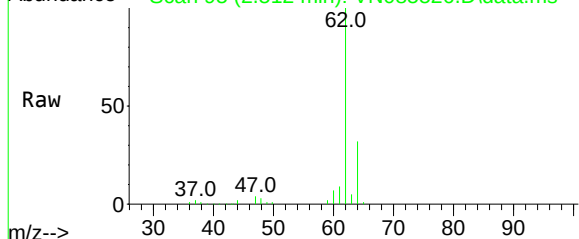
Tgt Ion: 62 Resp: 135494

Ion Ratio Lower Upper

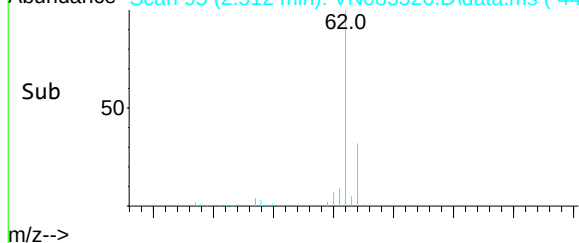
62 100

64 31.9 24.8 37.2

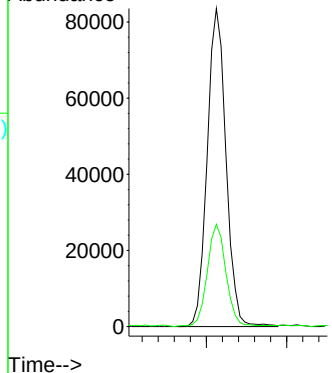
Abundance Scan 95 (2.512 min): VN085526.D\data.ms

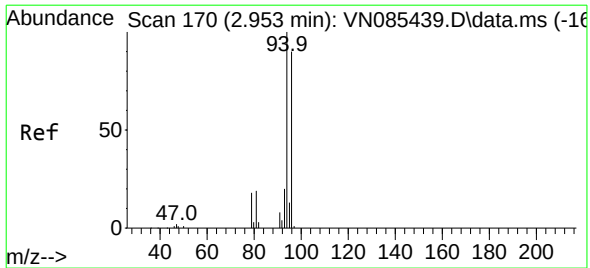


Abundance Scan 95 (2.512 min): VN085526.D\data.ms (-44)



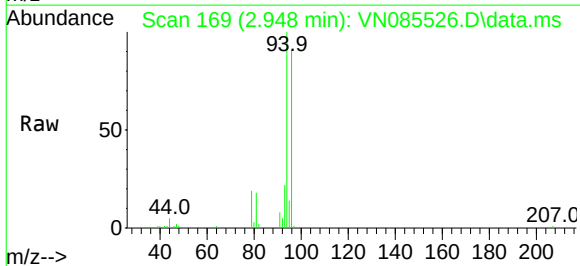
Abundance





#5  
Bromomethane  
Concen: 43.757 ug/l  
RT: 2.948 min Scan# 16  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

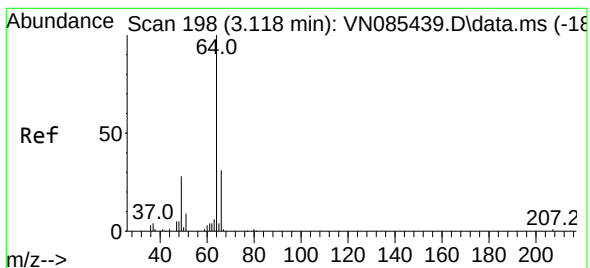
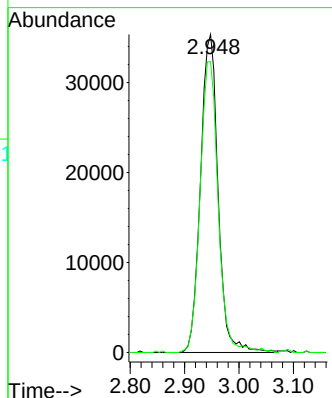
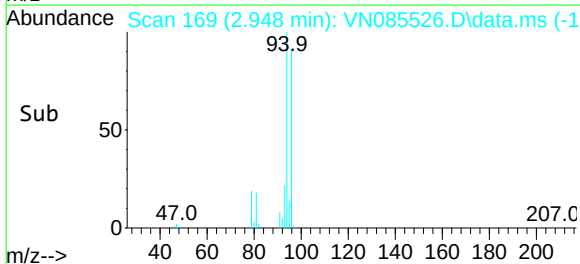
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 94 Resp: 79311  
Ion Ratio Lower Upper  
94 100  
96 91.4 71.8 107.6

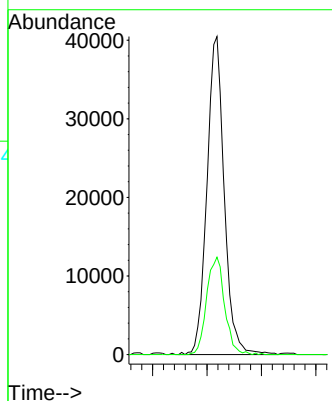
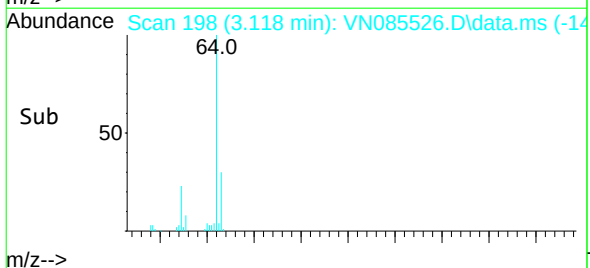
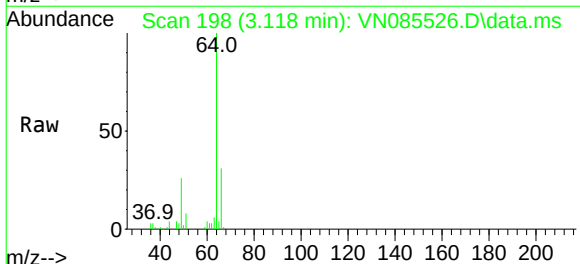
Manual Integrations  
APPROVED

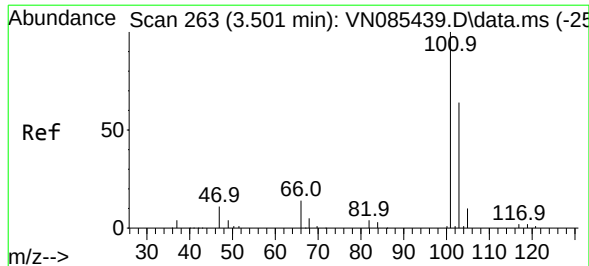
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#6  
Chloroethane  
Concen: 46.993 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

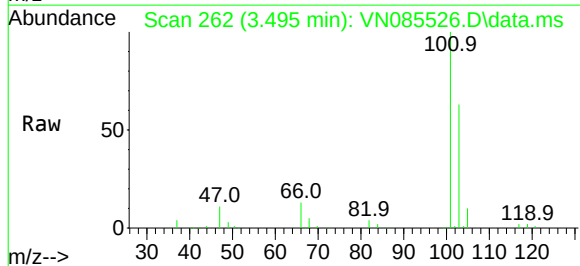
Tgt Ion: 64 Resp: 89399  
Ion Ratio Lower Upper  
64 100  
66 30.6 24.6 36.8





#7  
Trichlorofluoromethane  
Concen: 50.109 ug/l  
RT: 3.495 min Scan# 263  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

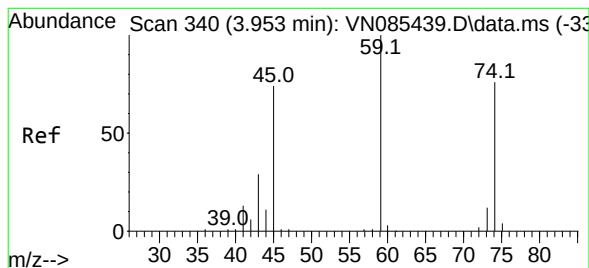
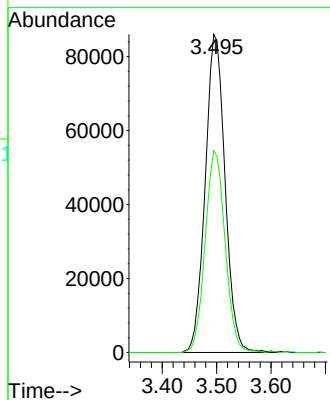
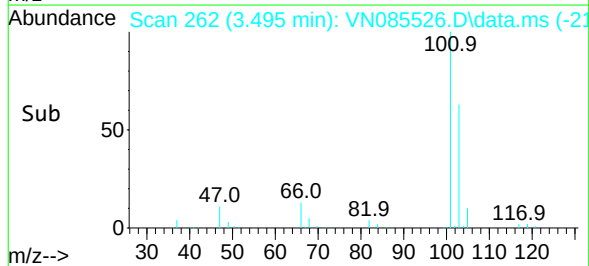
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



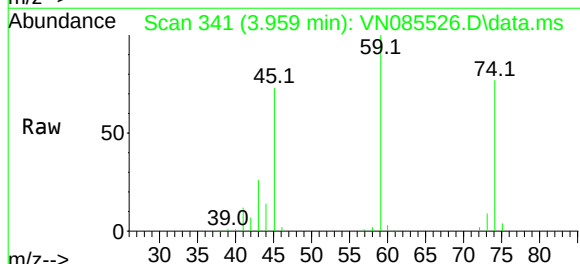
Tgt Ion: 101 Resp: 218167  
Ion Ratio Lower Upper  
101 100  
103 63.5 51.4 77.2

Manual Integrations  
APPROVED

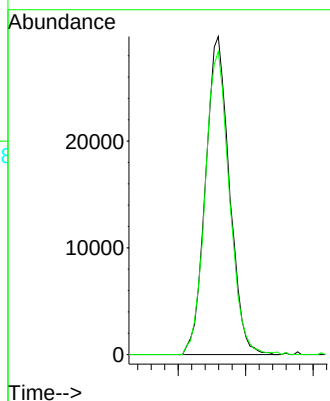
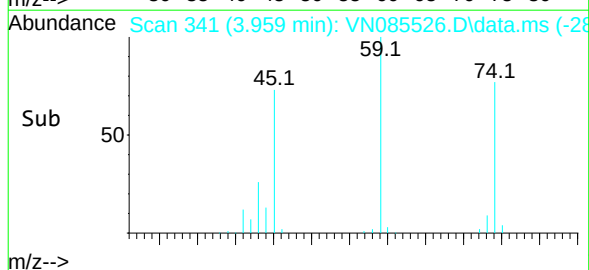
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

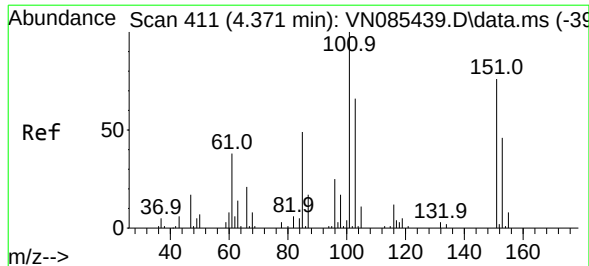


#8  
Diethyl Ether  
Concen: 48.819 ug/l  
RT: 3.959 min Scan# 341  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53



Tgt Ion: 74 Resp: 73428  
Ion Ratio Lower Upper  
74 100  
45 96.9 49.7 149.1





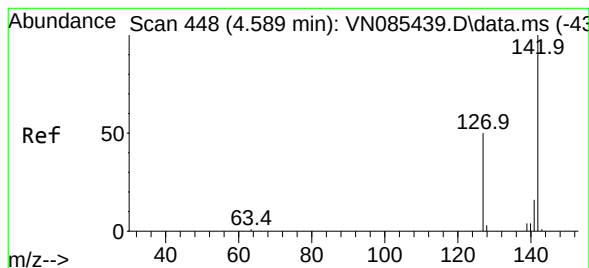
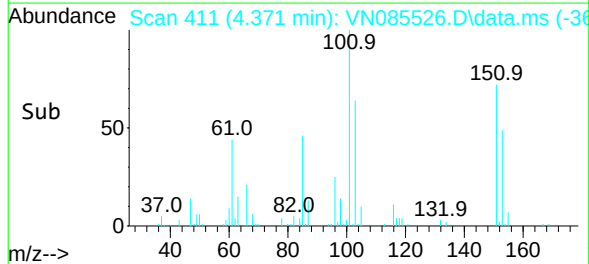
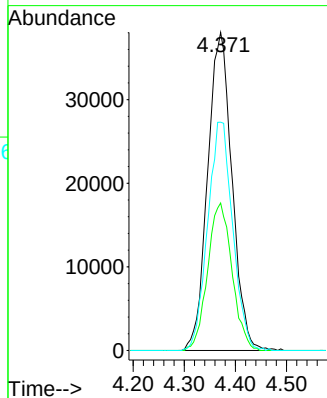
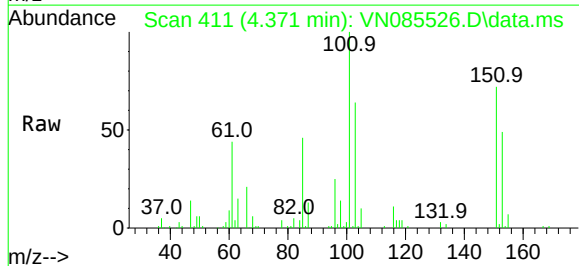
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 51.335 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:101 Resp: 125888  
Ion Ratio Lower Upper  
101 100  
85 46.4 37.8 56.8  
151 73.8 58.8 88.2

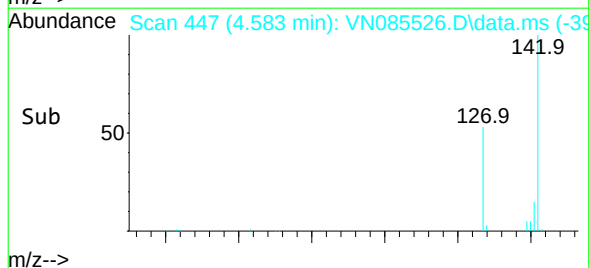
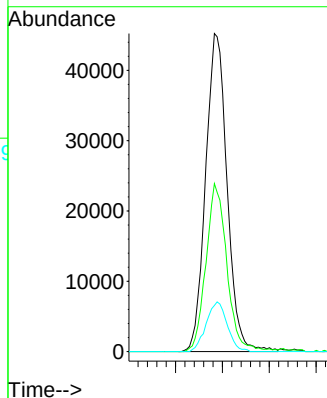
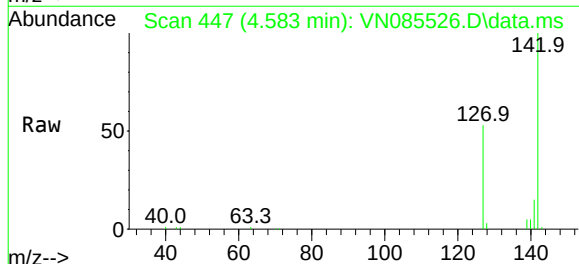
Manual Integrations  
APPROVED

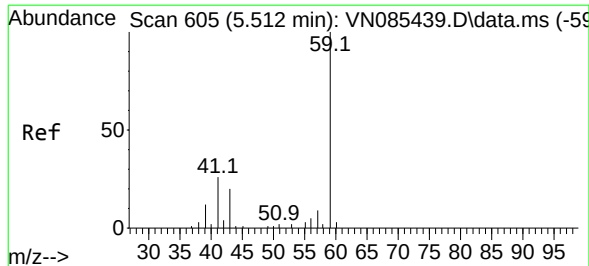
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#10  
Methyl Iodide  
Concen: 51.306 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:142 Resp: 144081  
Ion Ratio Lower Upper  
142 100  
127 52.8 40.3 60.5  
141 14.5 12.8 19.2





#11

Tert butyl alcohol

Concen: 293.091 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 59 Resp: 110319

Ion Ratio Lower Upper

59 100

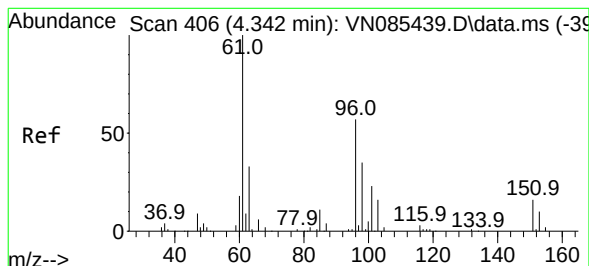
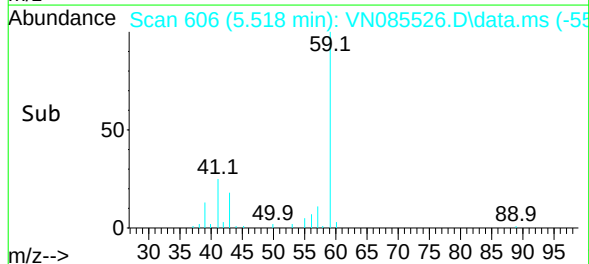
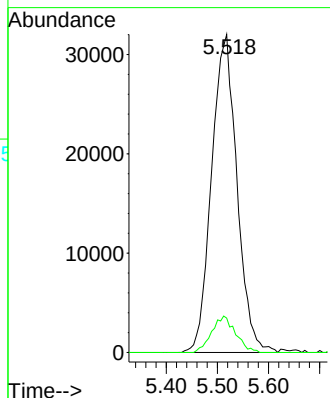
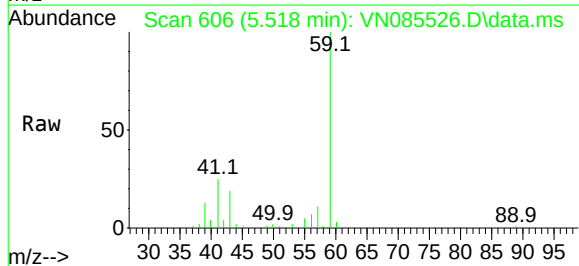
57 10.8 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#12

1,1-Dichloroethene

Concen: 49.022 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

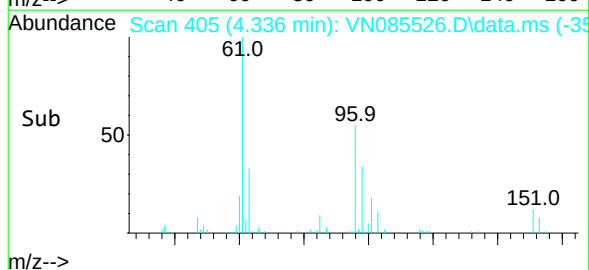
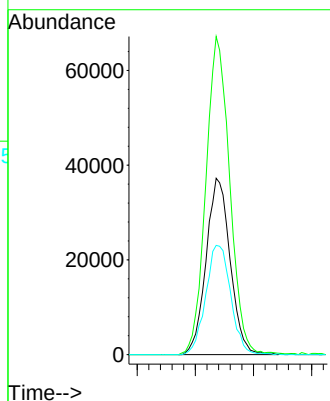
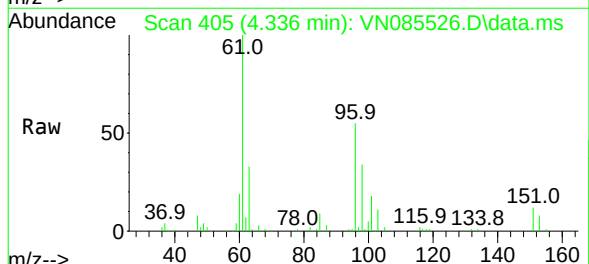
Tgt Ion: 96 Resp: 107139

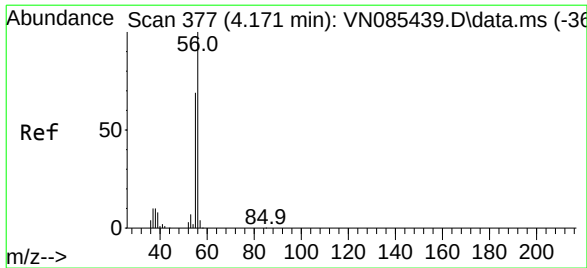
Ion Ratio Lower Upper

96 100

61 180.3 141.0 211.4

98 61.9 49.0 73.6





#13

Acrolein

Concen: 261.783 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 134509

Ion Ratio Lower Upper

56 100

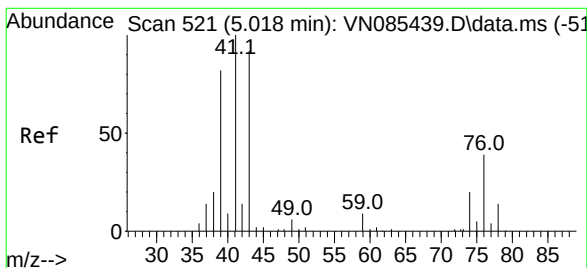
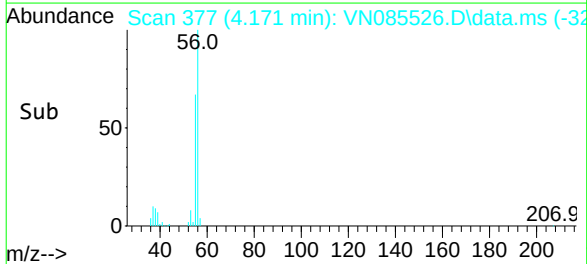
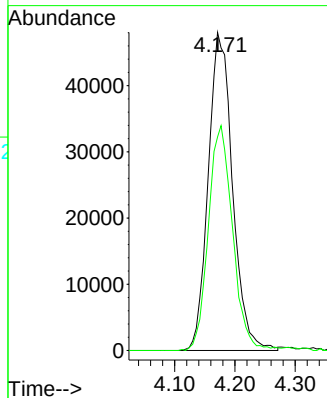
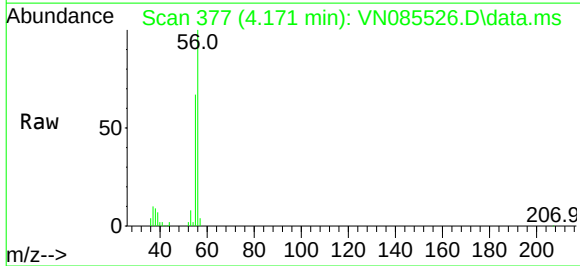
55 70.5 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#14

Allyl chloride

Concen: 48.683 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

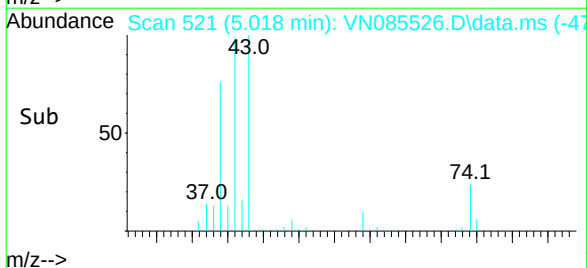
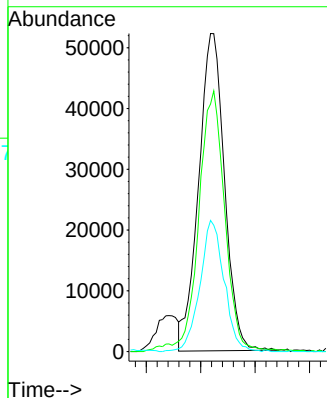
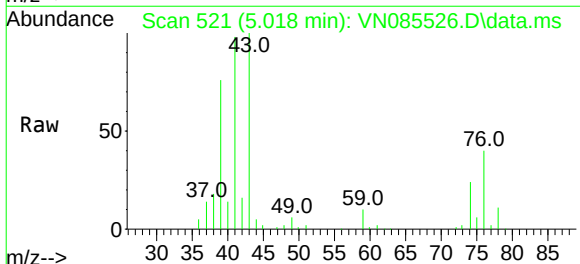
Tgt Ion: 41 Resp: 172649

Ion Ratio Lower Upper

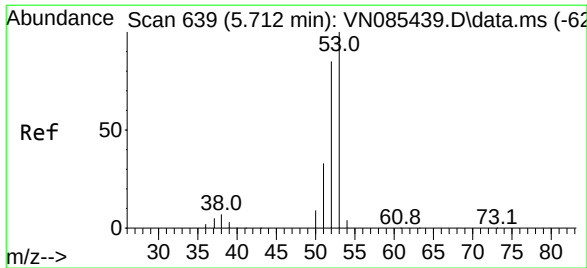
41 100

39 82.7 64.4 96.6

76 38.6 30.5 45.7







#15

Acrylonitrile

Concen: 260.994 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 53 Resp: 312035

Ion Ratio Lower Upper

53 100

52 82.4 65.5 98.3

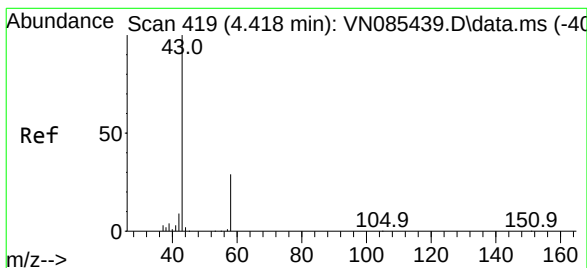
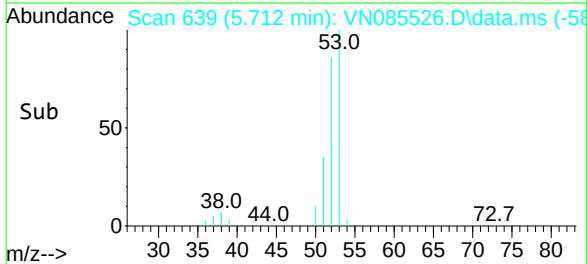
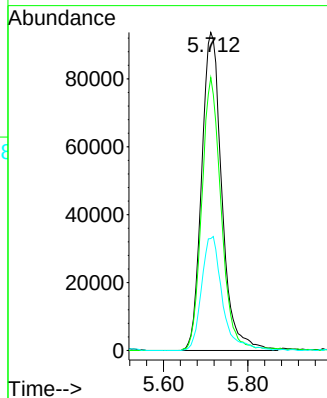
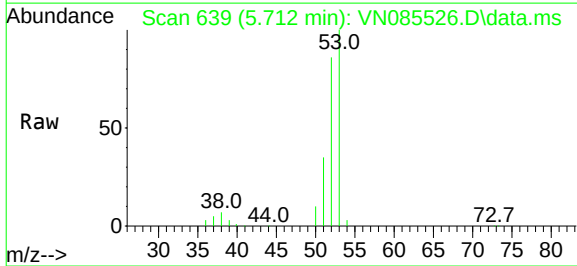
51 36.9 29.8 44.8

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#16

Acetone

Concen: 251.929 ug/l

RT: 4.418 min Scan# 419

Delta R.T. 0.000 min

Lab File: VN085526.D

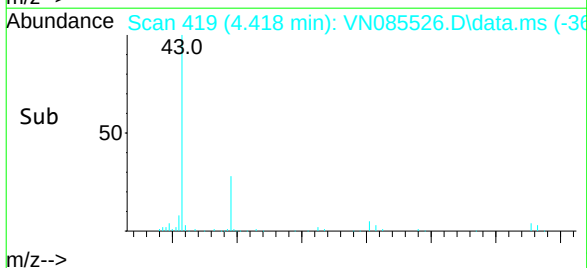
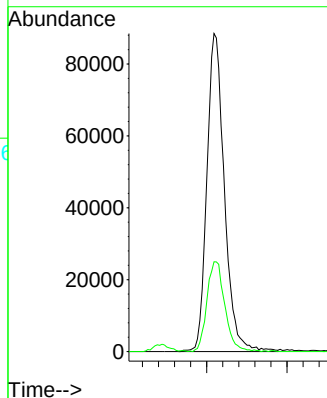
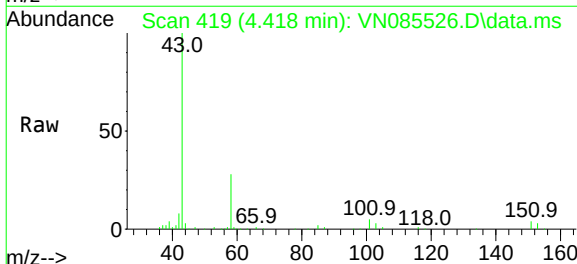
Acq: 28 Jan 2025 09:53

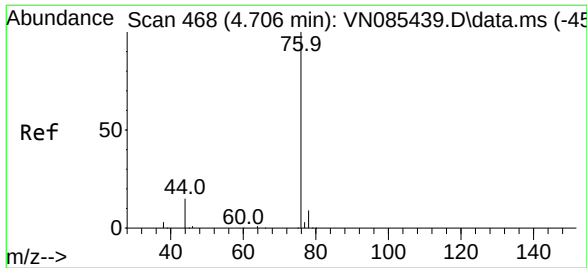
Tgt Ion: 43 Resp: 267575

Ion Ratio Lower Upper

43 100

58 28.2 23.8 35.6





#17

Carbon Disulfide

Concen: 42.095 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 76 Resp: 283263

Ion Ratio Lower Upper

76 100

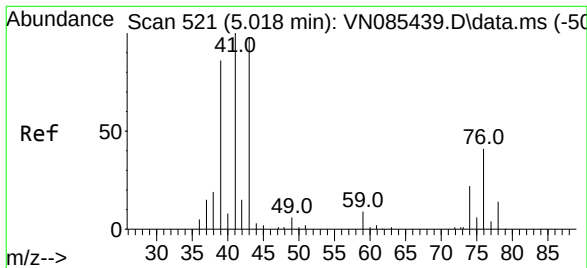
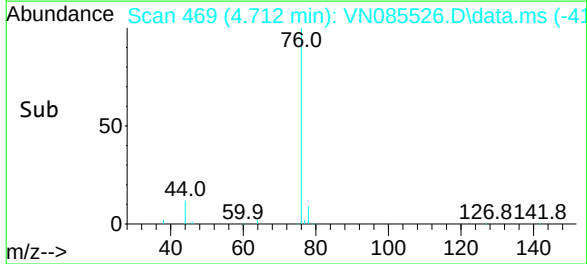
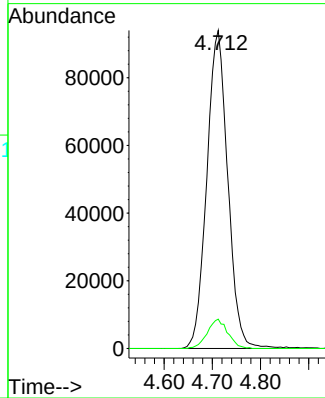
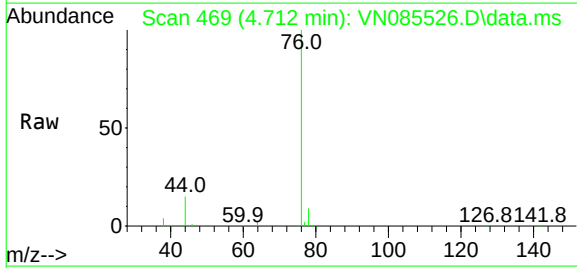
78 9.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#18

Methyl Acetate

Concen: 54.151 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085526.D

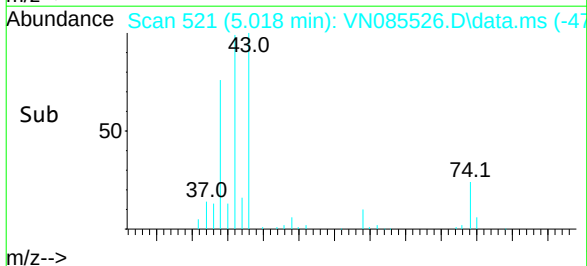
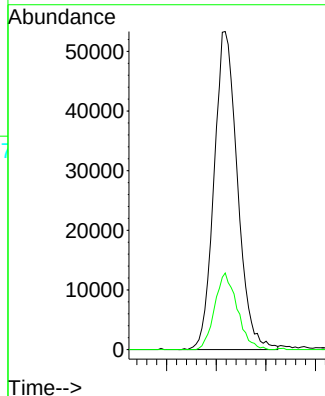
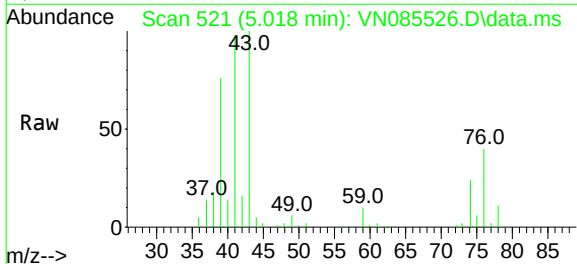
Acq: 28 Jan 2025 09:53

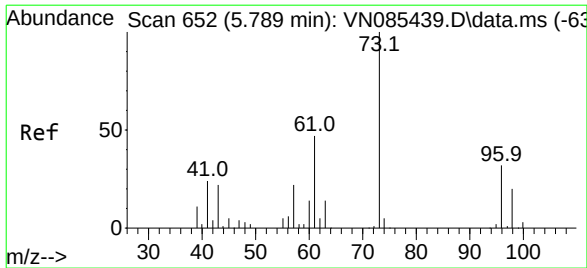
Tgt Ion: 43 Resp: 174889

Ion Ratio Lower Upper

43 100

74 23.1 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 55.663 ug/l

RT: 5.789 min Scan# 65

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 73 Resp: 395014

Ion Ratio Lower Upper

73 100

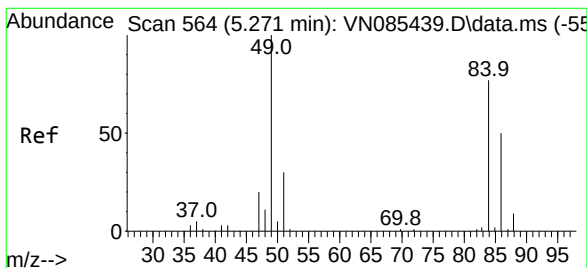
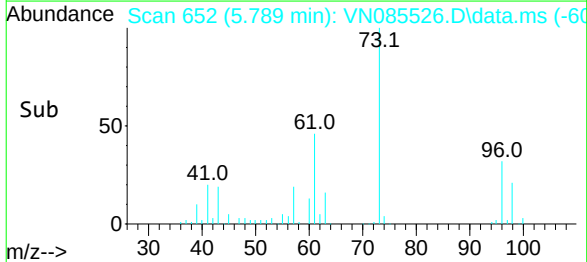
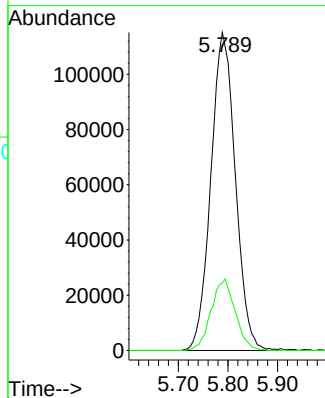
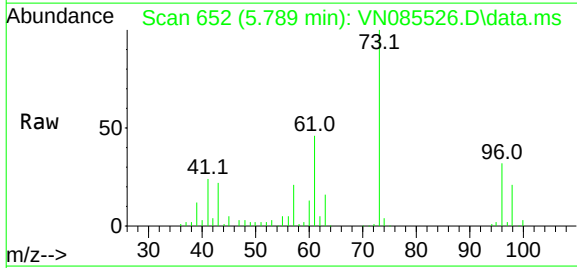
57 21.3 17.8 26.8

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#20

Methylene Chloride

Concen: 49.931 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Tgt Ion: 84 Resp: 131284

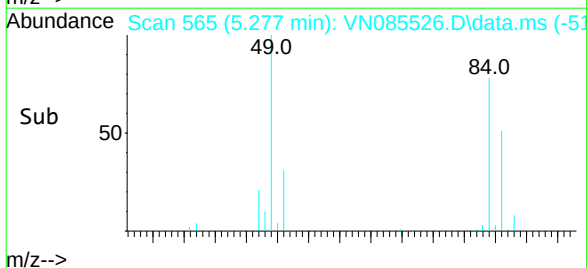
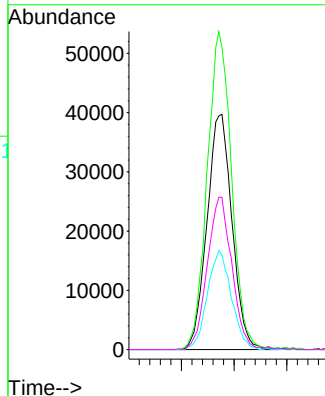
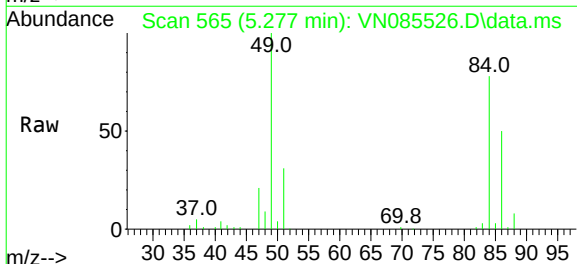
Ion Ratio Lower Upper

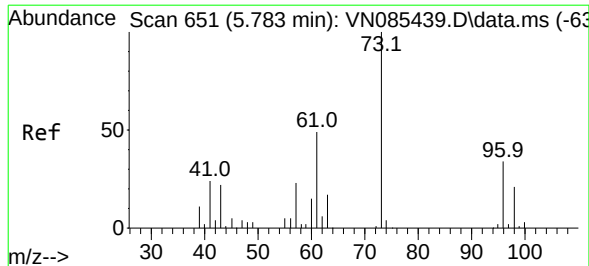
84 100

49 128.3 104.1 156.1

51 40.2 31.0 46.4

86 64.3 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 49.692 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085526.D

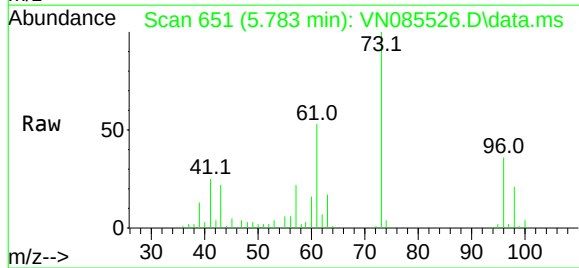
Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 96 Resp: 116065

Ion Ratio Lower Upper

96 100

61 148.4 115.7 173.5

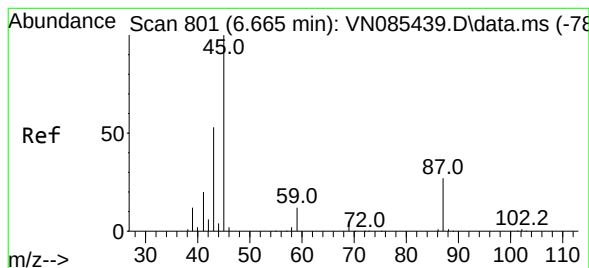
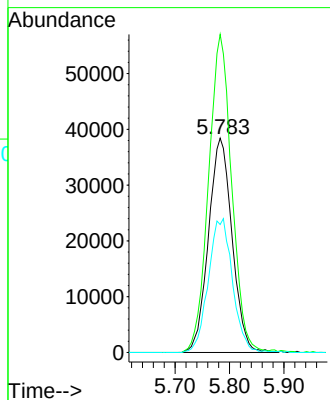
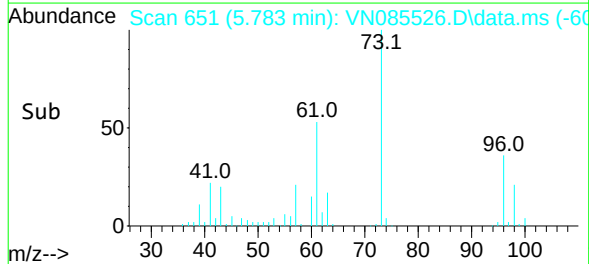
98 59.7 49.8 74.8

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#22

Diisopropyl ether

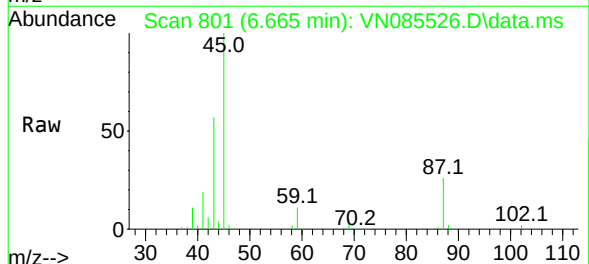
Concen: 54.237 ug/l

RT: 6.665 min Scan# 801

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53



Tgt Ion: 45 Resp: 426926

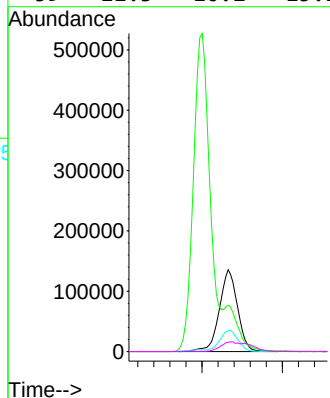
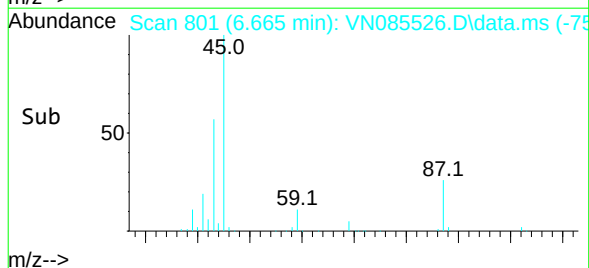
Ion Ratio Lower Upper

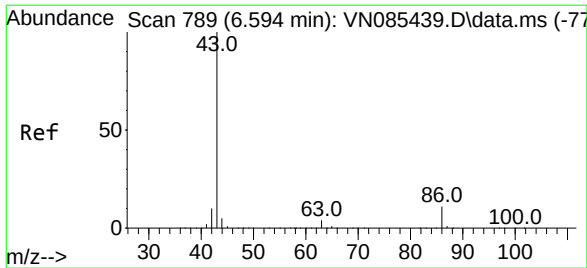
45 100

43 55.8 45.0 67.6

87 25.6 21.8 32.8

59 11.3 10.2 15.2





#23

Vinyl Acetate

Concen: 276.027 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 1520538

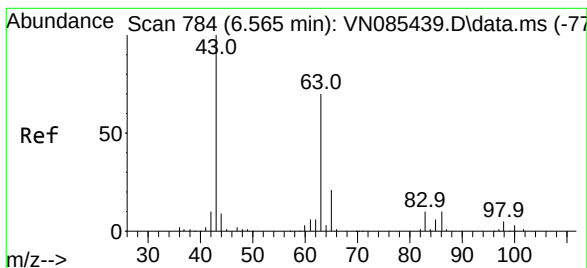
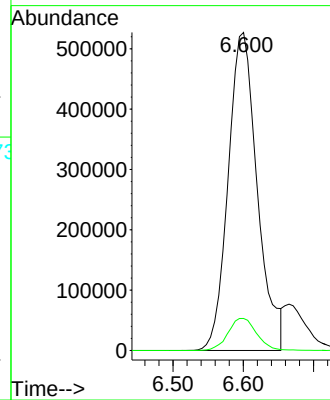
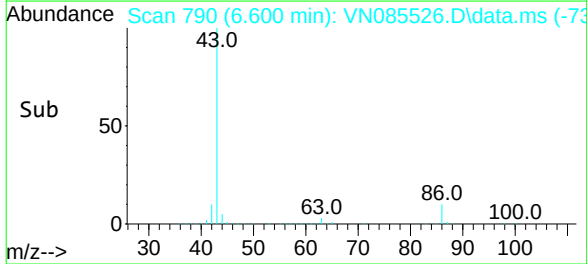
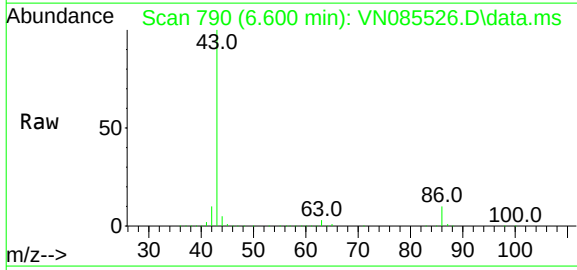
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 10.1  | 8.4   | 12.6  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#24

1,1-Dichloroethane

Concen: 51.014 ug/l

RT: 6.565 min Scan# 784

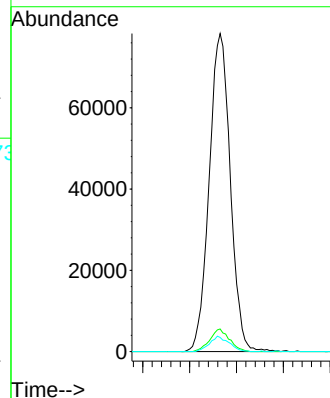
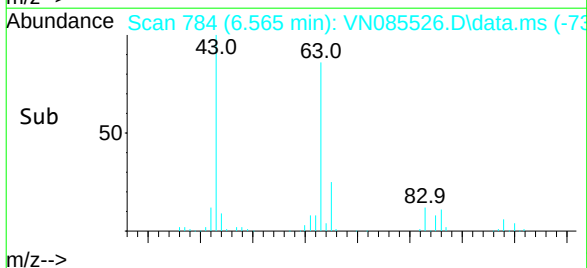
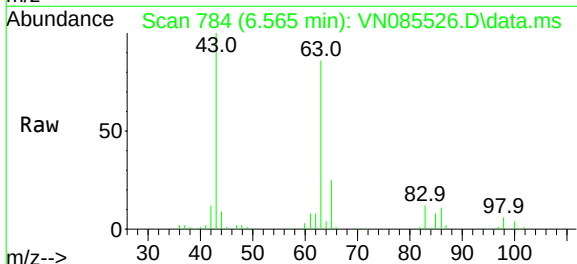
Delta R.T. 0.000 min

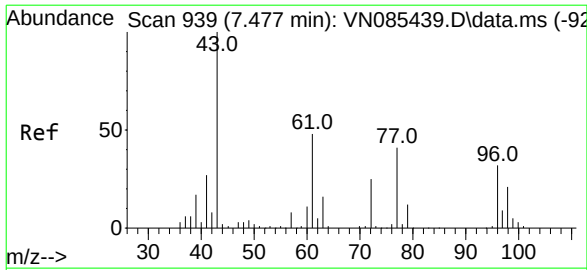
Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Tgt Ion: 63 Resp: 244849

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 98  | 7.1   | 3.3   | 9.8   |
| 100 | 4.4   | 2.0   | 6.0   |





#25

2-Butanone

Concen: 260.223 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 406723

Ion Ratio Lower Upper

43 100

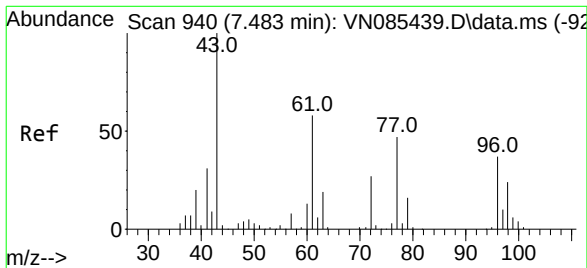
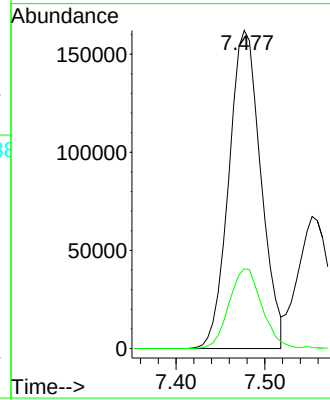
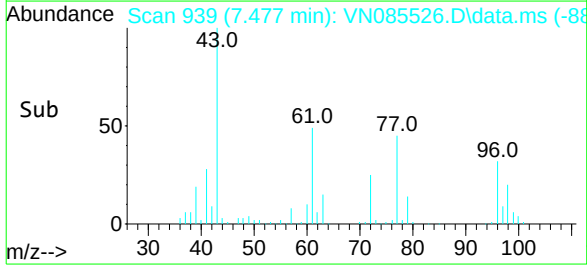
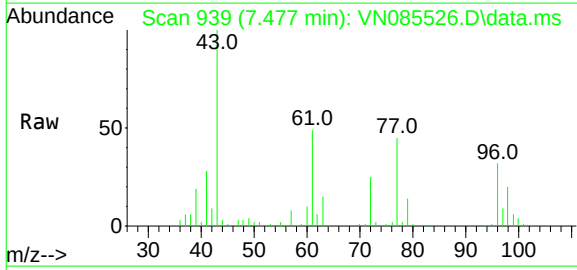
72 25.0 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#26

2,2-Dichloropropane

Concen: 57.640 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085526.D

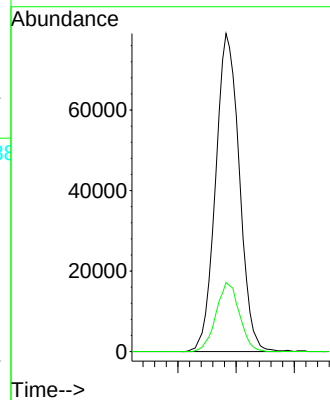
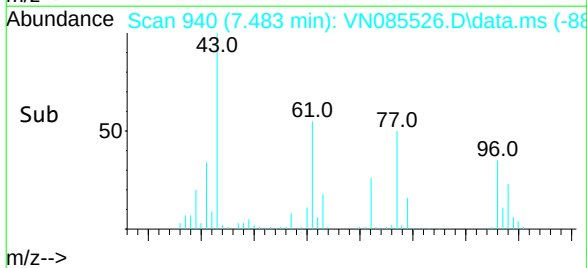
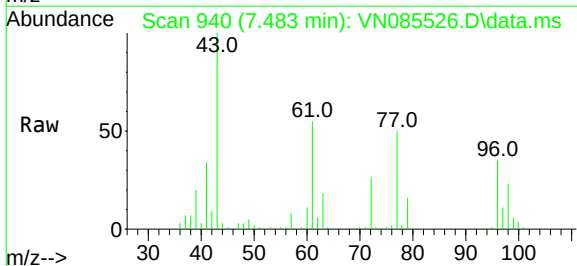
Acq: 28 Jan 2025 09:53

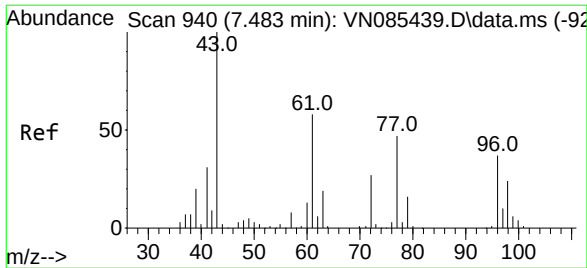
Tgt Ion: 77 Resp: 223673

Ion Ratio Lower Upper

77 100

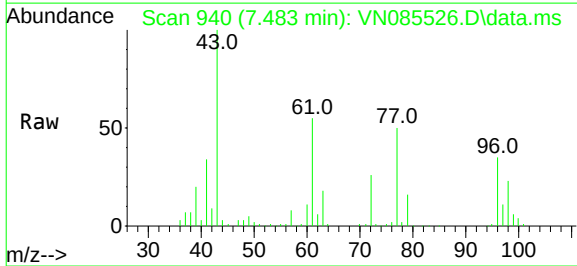
97 21.3 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 51.799 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

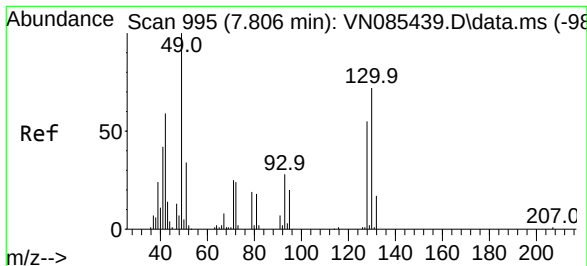
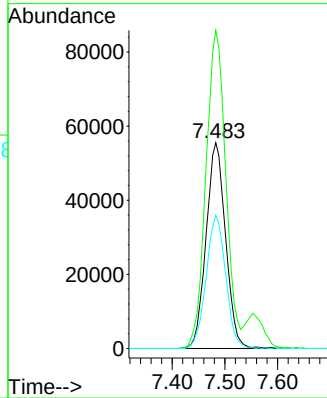
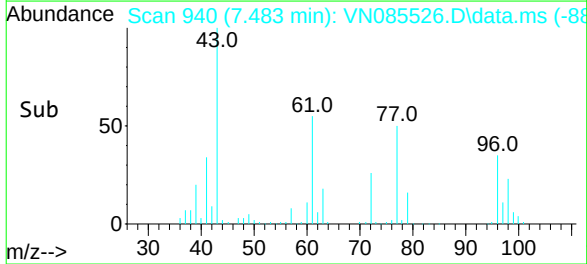
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 96 Resp: 142501  
Ion Ratio Lower Upper  
96 100  
61 157.2 0.0 311.8  
98 64.9 0.0 126.0

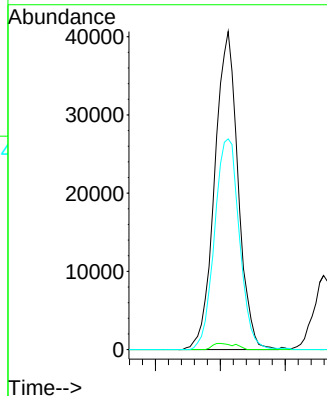
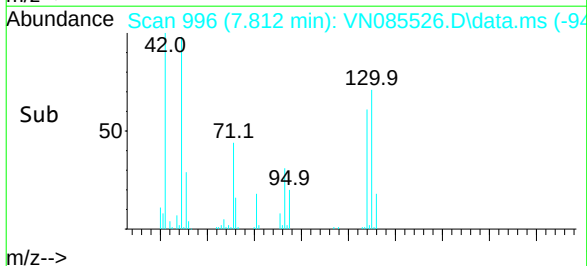
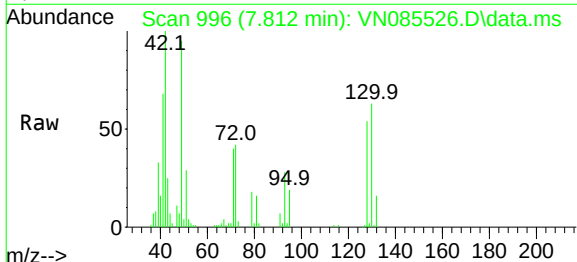
Manual Integrations  
APPROVED

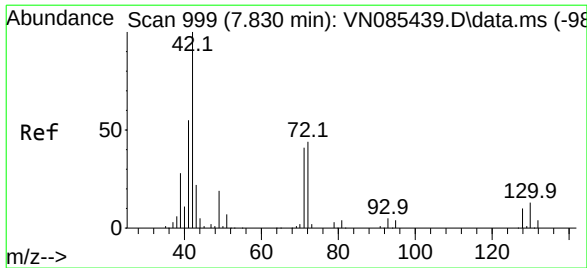
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#28  
Bromochloromethane  
Concen: 45.505 ug/l  
RT: 7.812 min Scan# 996  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 49 Resp: 101613  
Ion Ratio Lower Upper  
49 100  
129 1.9 0.0 4.4  
130 70.7 55.0 82.4





#29

Tetrahydrofuran

Concen: 274.712 ug/l

RT: 7.830 min Scan# 999

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 42 Resp: 272222

Ion Ratio Lower Upper

42 100

72 43.0 34.2 51.2

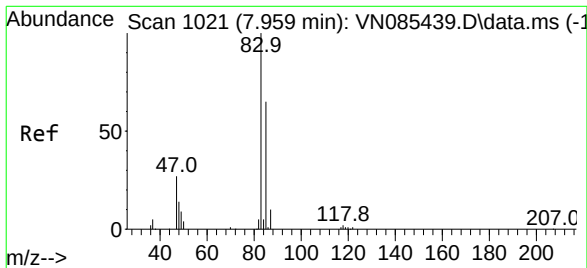
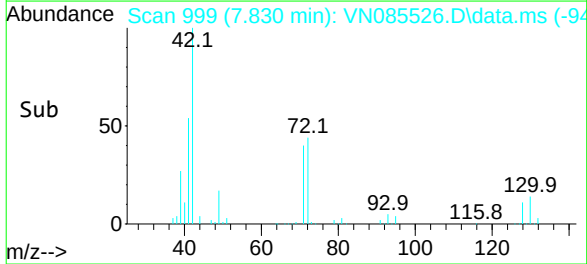
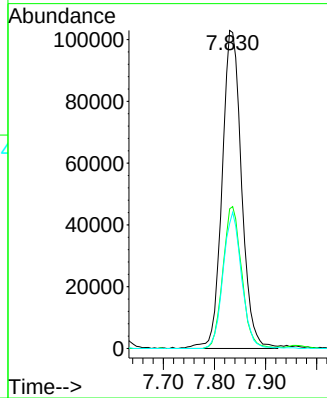
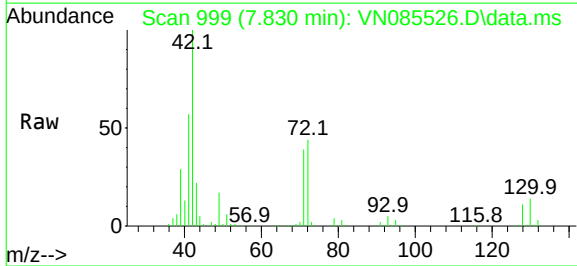
71 40.6 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#30

Chloroform

Concen: 51.246 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085526.D

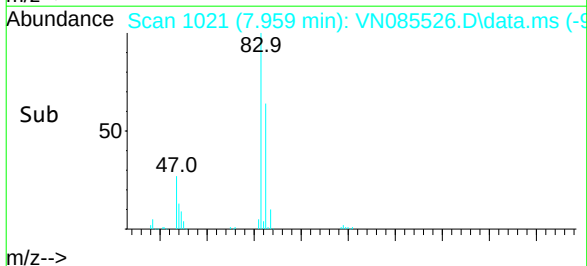
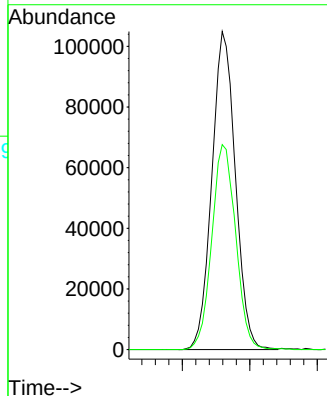
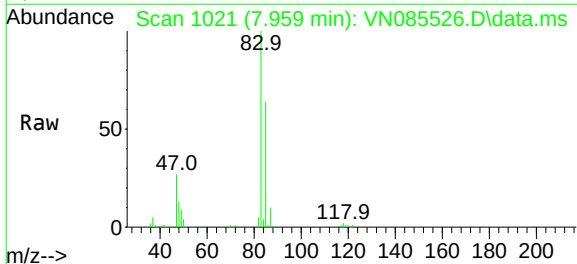
Acq: 28 Jan 2025 09:53

Tgt Ion: 83 Resp: 254209

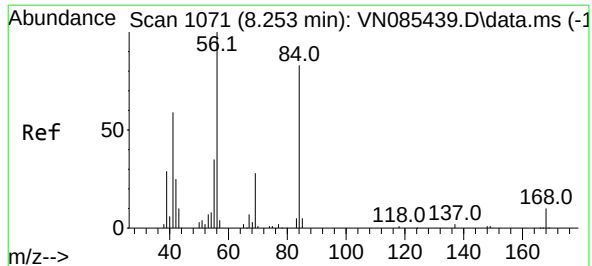
Ion Ratio Lower Upper

83 100

85 64.5 51.8 77.6







#31

Cyclohexane

Concen: 45.451 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 189607

Ion Ratio Lower Upper

56 100

69 30.2 22.2 33.4

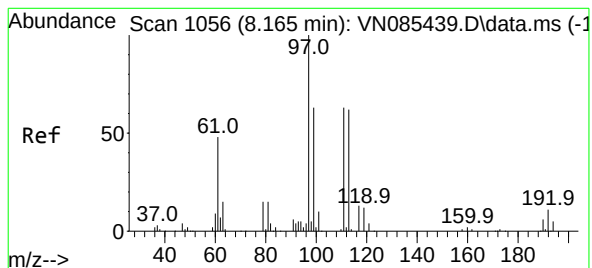
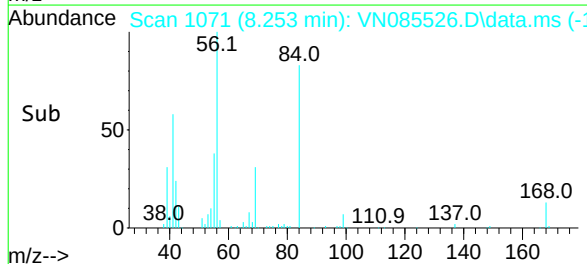
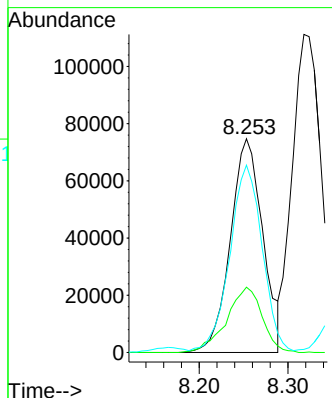
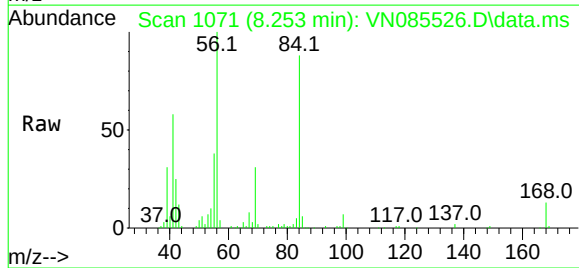
84 85.8 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#32

1,1,1-Trichloroethane

Concen: 51.727 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

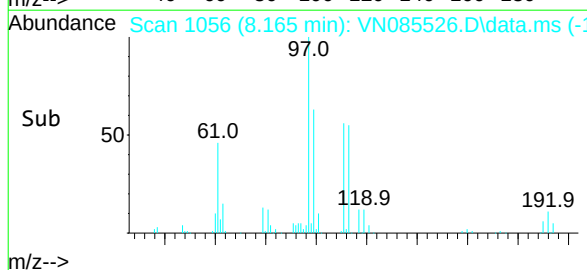
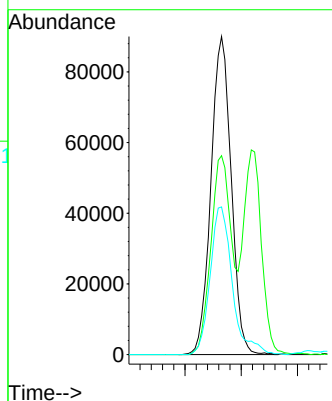
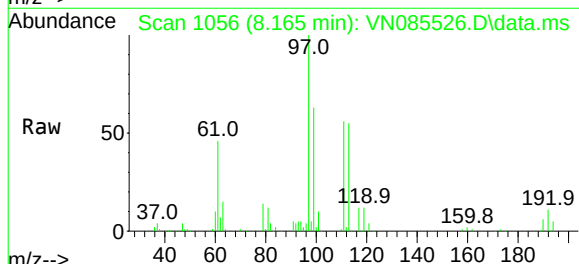
Tgt Ion: 97 Resp: 225078

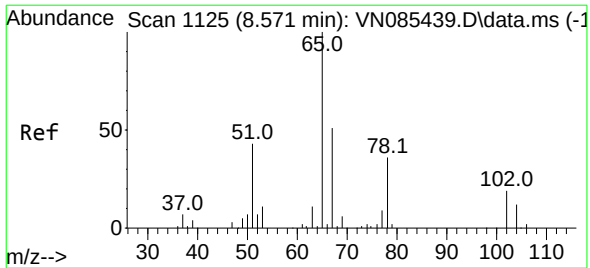
Ion Ratio Lower Upper

97 100

99 64.9 49.8 74.6

61 50.9 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 48.164 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 65 Resp: 158323

Ion Ratio Lower Upper

65 100

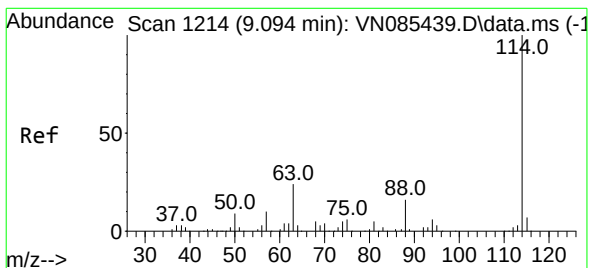
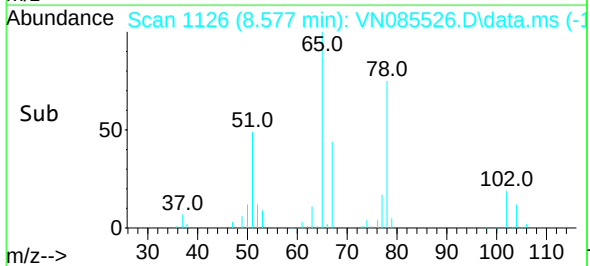
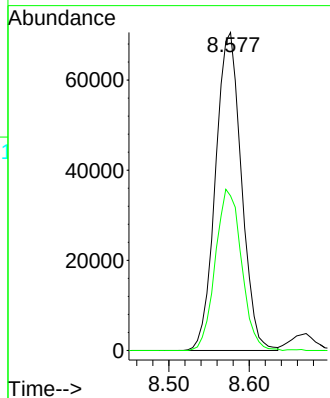
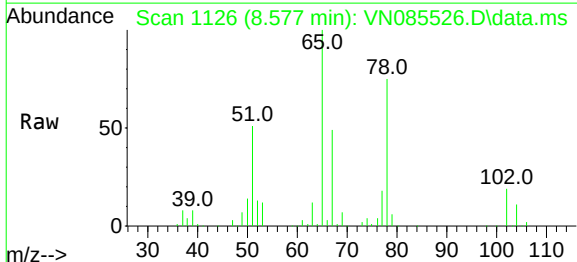
67 51.1 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

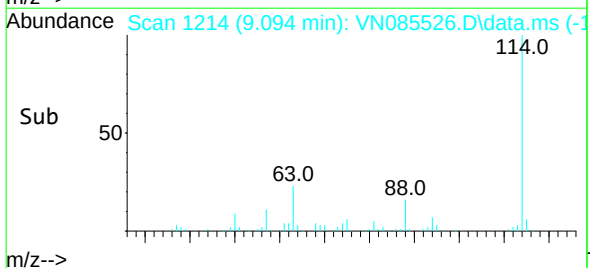
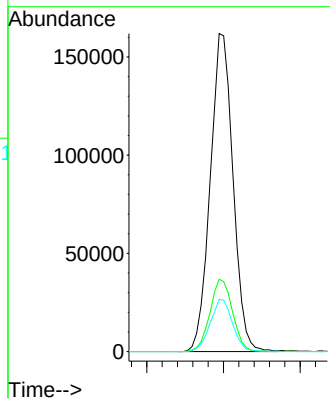
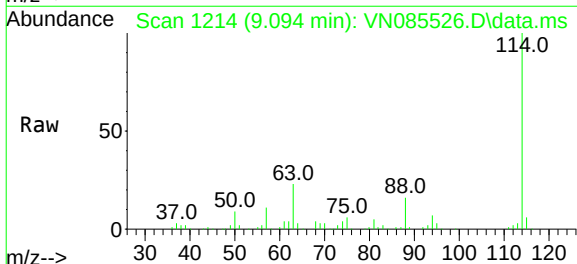
Tgt Ion:114 Resp: 333806

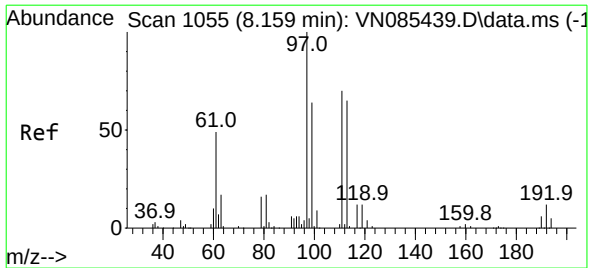
Ion Ratio Lower Upper

114 100

63 22.7 0.0 47.6

88 16.4 0.0 32.6





#35

Dibromofluoromethane

Concen: 51.240 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 113 Resp: 118662

Ion Ratio Lower Upper

113 100

111 103.2 82.7 124.1

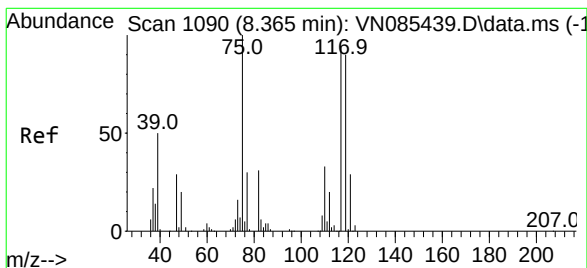
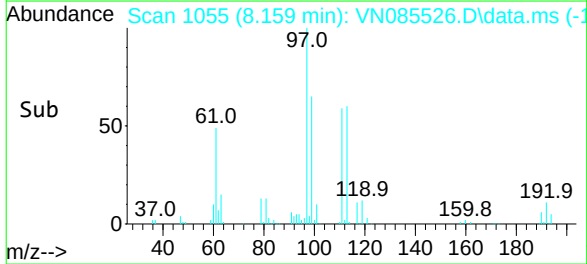
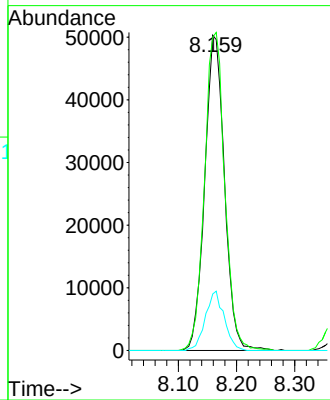
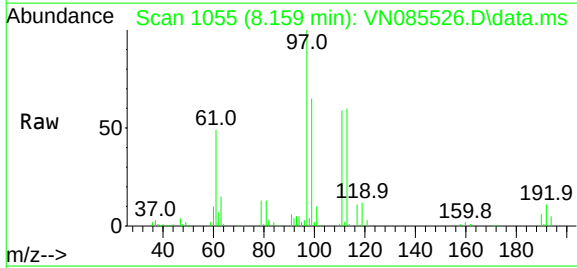
192 18.0 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/29/2025

Supervised By : Semsettin Yesilyurt 01/29/2025



#36

1,1-Dichloropropene

Concen: 52.537 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

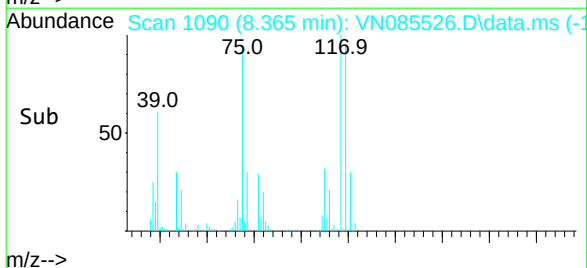
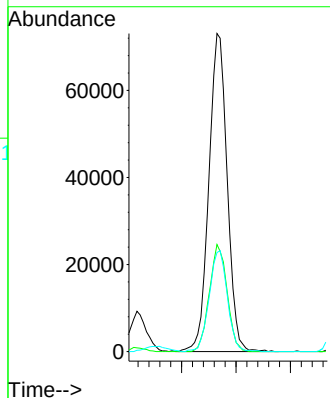
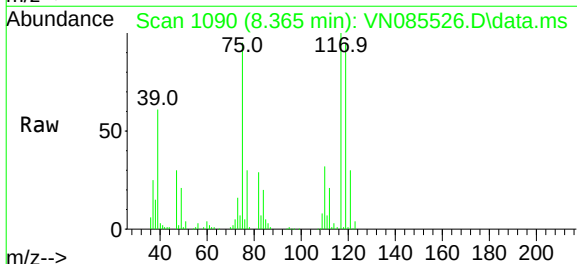
Tgt Ion: 75 Resp: 170755

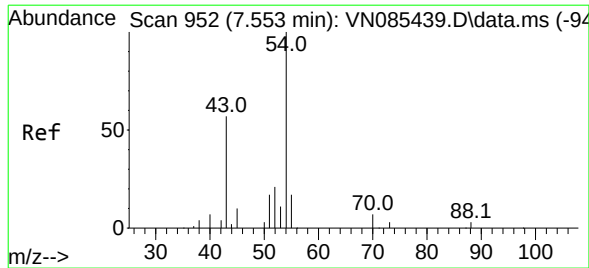
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 31.6 24.4 36.6





#37

Ethyl Acetate

Concen: 52.923 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 173618

Ion Ratio Lower Upper

43 100

61 11.8 10.9 16.3

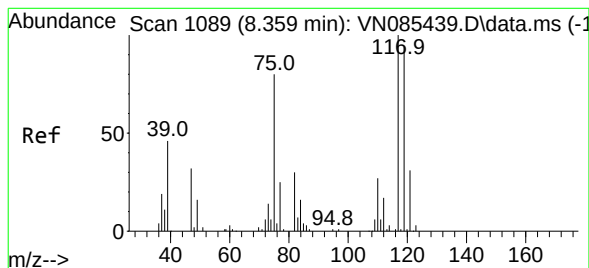
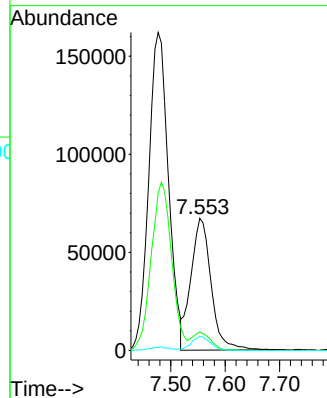
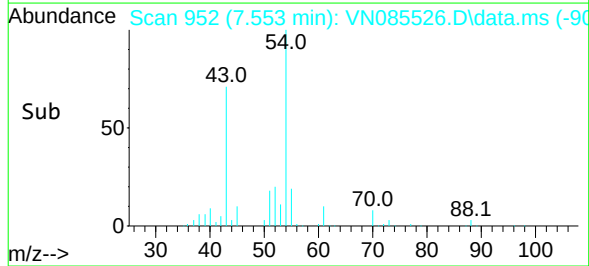
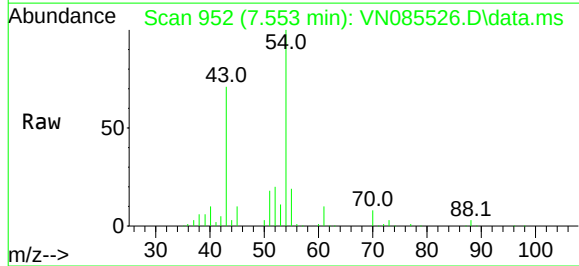
70 10.0 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#38

Carbon Tetrachloride

Concen: 54.013 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

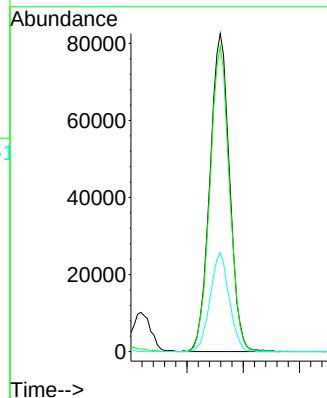
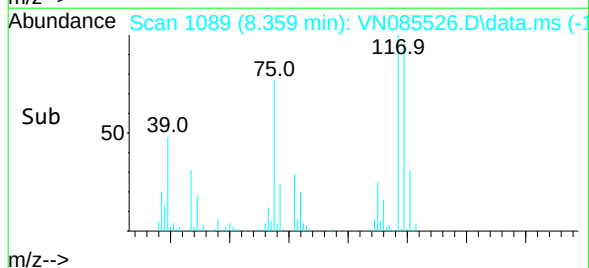
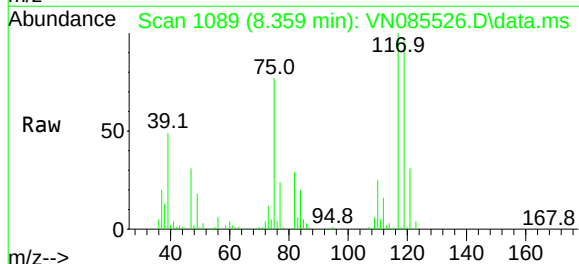
Tgt Ion:117 Resp: 200977

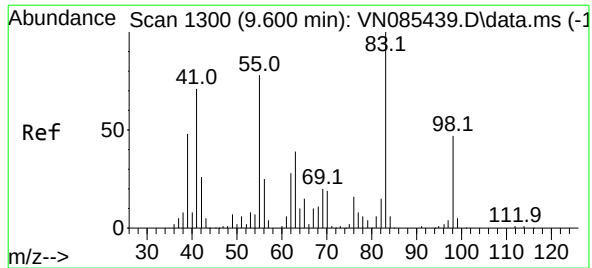
Ion Ratio Lower Upper

117 100

119 96.0 75.4 113.2

121 31.1 24.6 37.0





#39

Methylcyclohexane

Concen: 56.039 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 171154

Ion Ratio Lower Upper

83 100

55 79.2 62.6 94.0

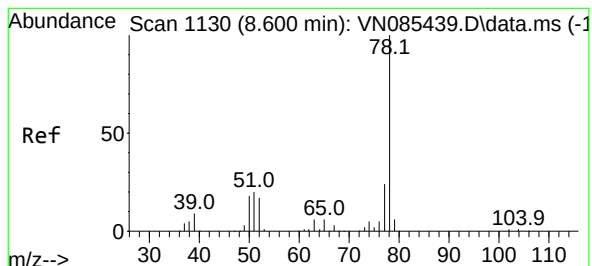
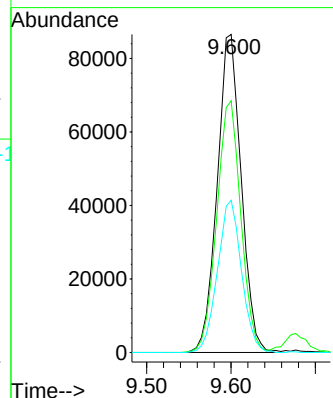
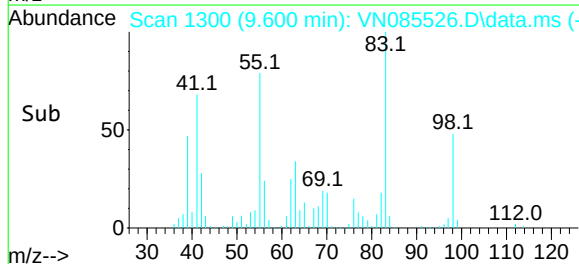
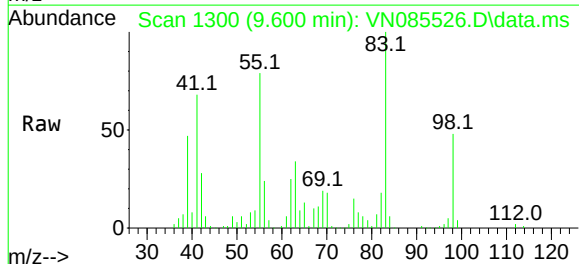
98 47.9 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#40

Benzene

Concen: 53.828 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085526.D

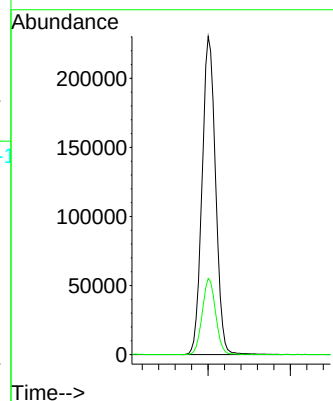
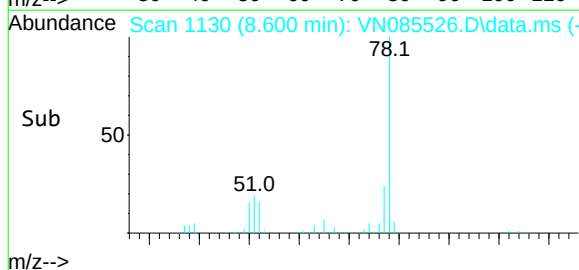
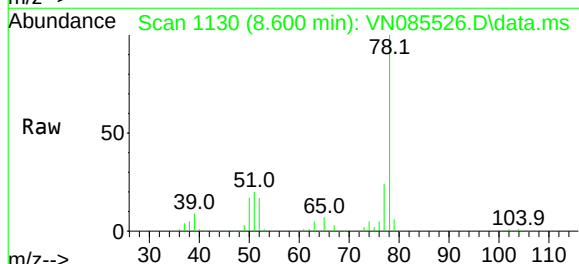
Acq: 28 Jan 2025 09:53

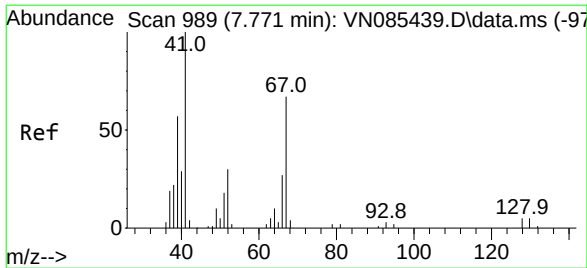
Tgt Ion: 78 Resp: 525669

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6





#41

Methacrylonitrile

Concen: 55.717 ug/l

RT: 7.771 min Scan# 989

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 41 Resp: 95095

Ion Ratio Lower Upper

41 100

39 56.3 46.0 69.0

67 71.1 57.4 86.2

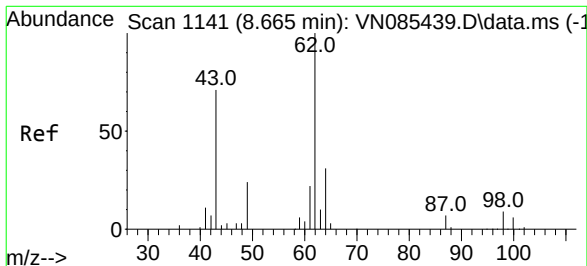
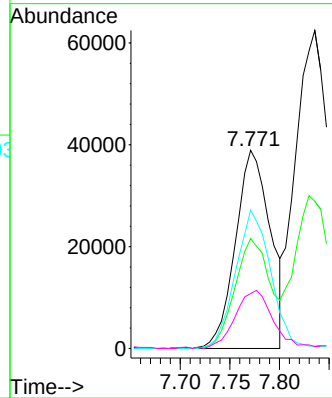
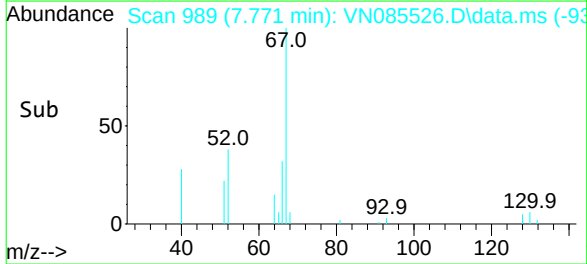
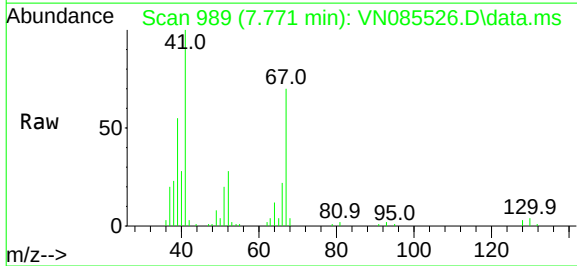
52 32.2 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#42

1,2-Dichloroethane

Concen: 53.072 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085526.D

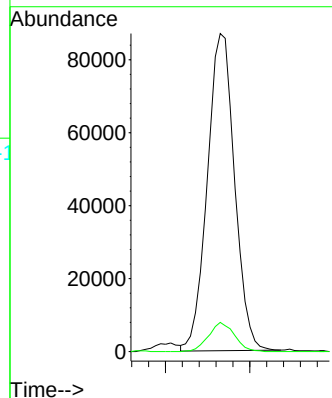
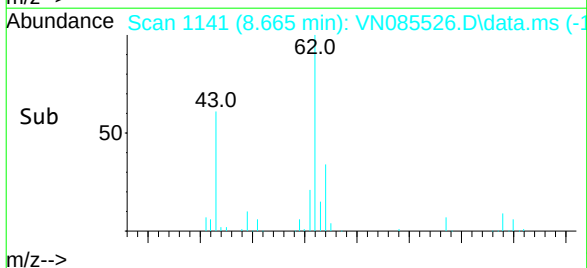
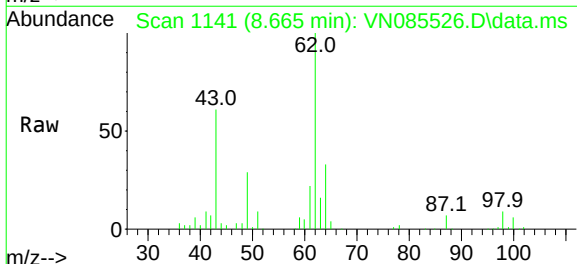
Acq: 28 Jan 2025 09:53

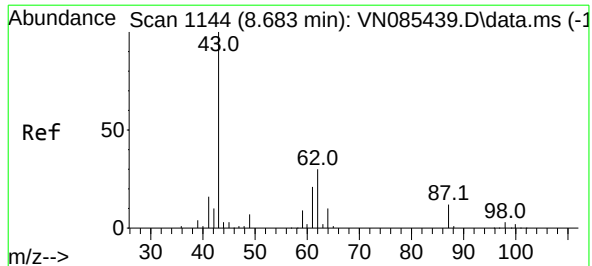
Tgt Ion: 62 Resp: 195201

Ion Ratio Lower Upper

62 100

98 8.8 0.0 17.0





#43

Isopropyl Acetate

Concen: 54.755 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 287826

Ion Ratio Lower Upper

43 100

61 25.9 20.7 31.1

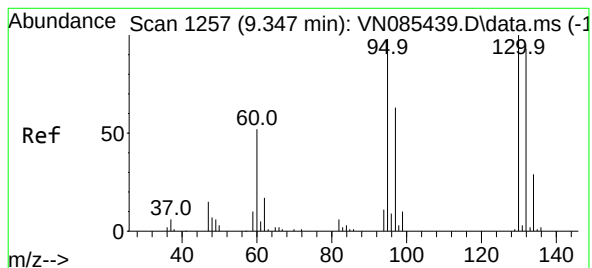
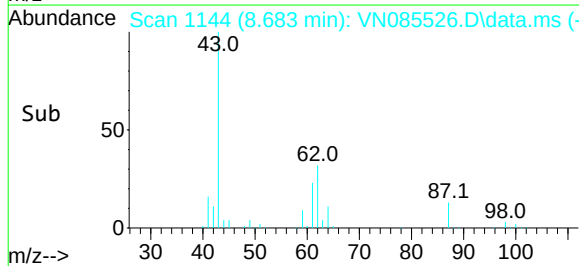
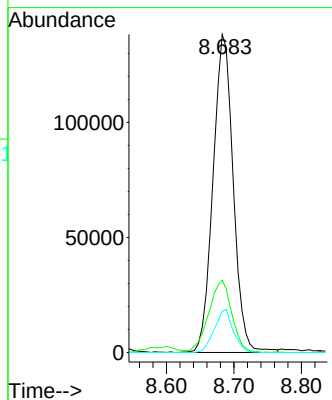
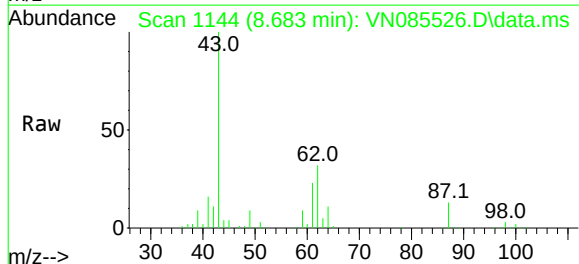
87 12.6 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#44

Trichloroethene

Concen: 52.672 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. 0.000 min

Lab File: VN085526.D

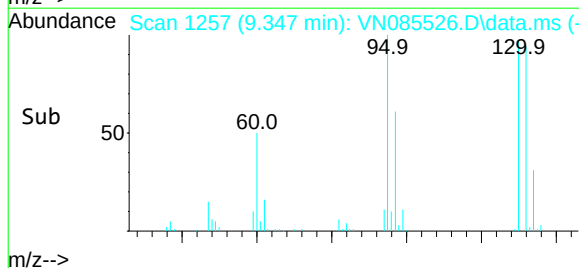
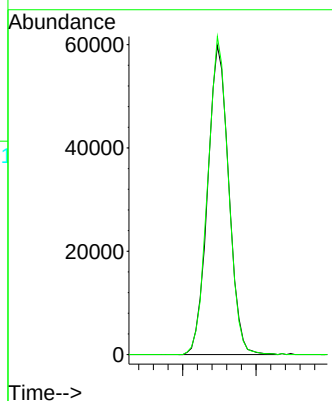
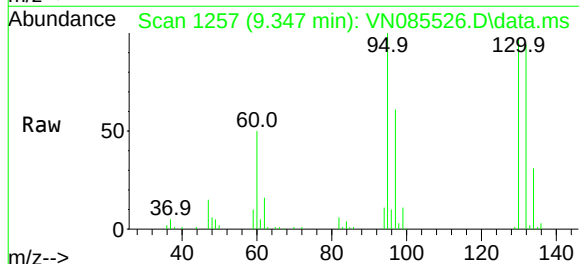
Acq: 28 Jan 2025 09:53

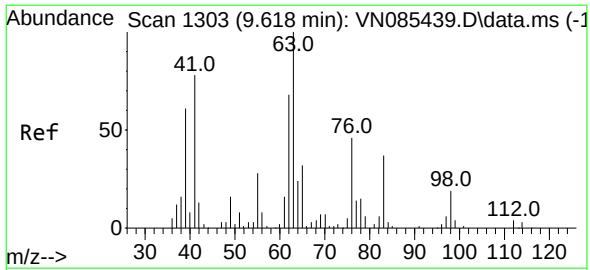
Tgt Ion:130 Resp: 119734

Ion Ratio Lower Upper

130 100

95 103.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 54.447 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 63 Resp: 135814

Ion Ratio Lower Upper

63 100

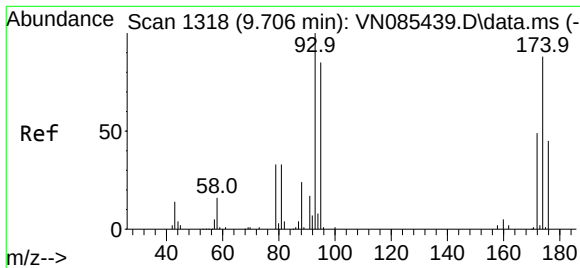
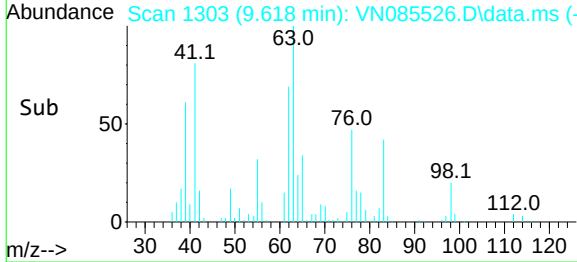
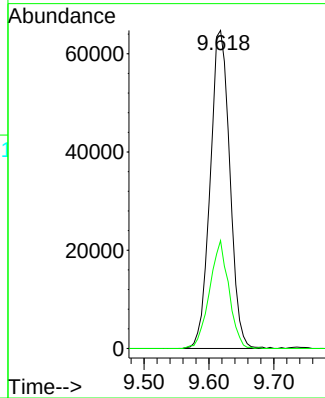
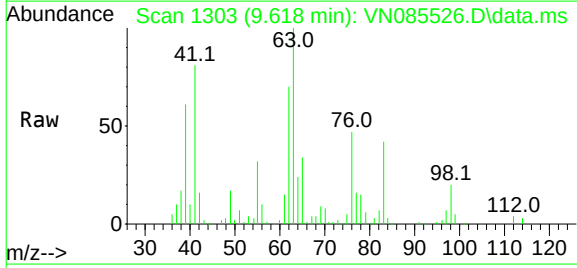
65 33.9 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#46

Dibromomethane

Concen: 53.179 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

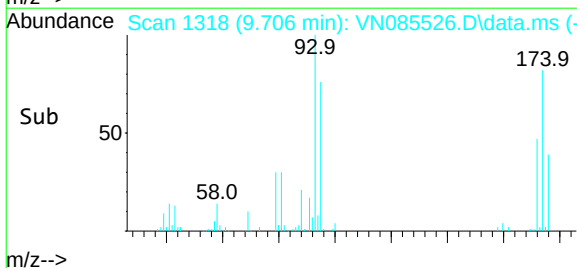
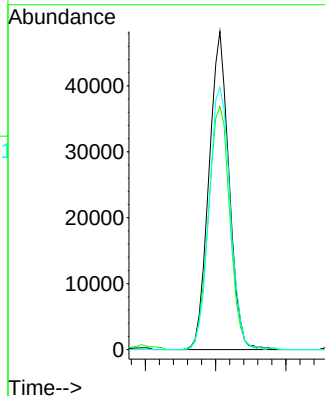
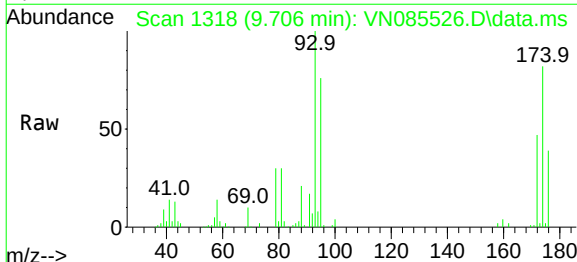
Tgt Ion: 93 Resp: 95715

Ion Ratio Lower Upper

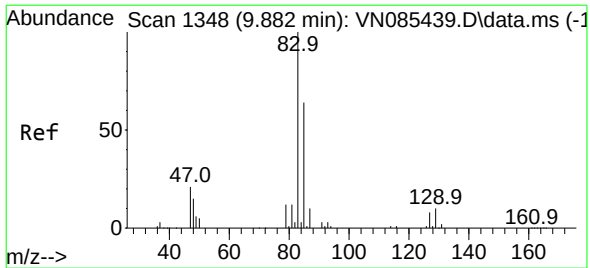
93 100

95 81.2 64.7 97.1

174 87.0 69.0 103.4







#47

Bromodichloromethane

Concen: 55.774 ug/l

RT: 9.883 min Scan# 13

Delta R.T. 0.001 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 204517

Ion Ratio Lower Upper

83 100

85 65.1 51.2 76.8

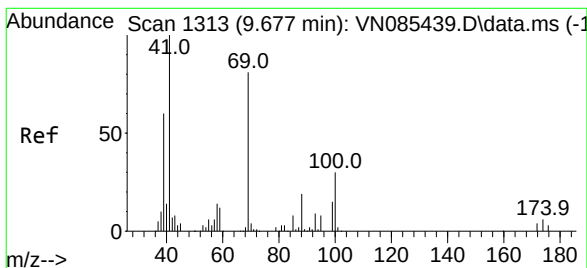
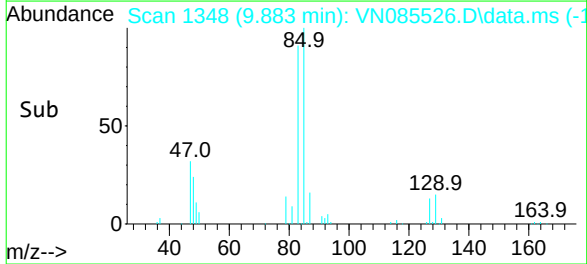
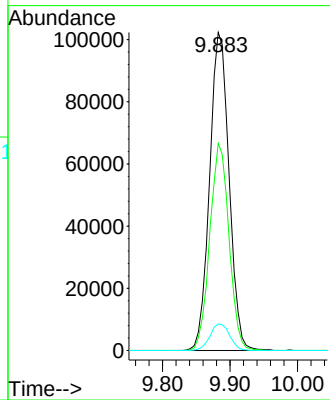
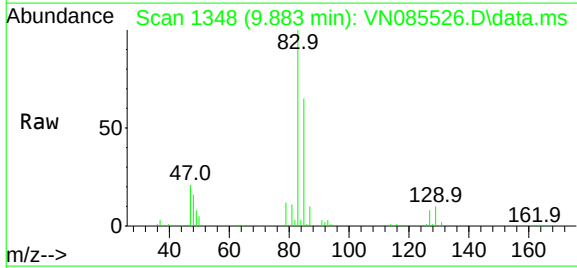
127 8.4 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#48

Methyl methacrylate

Concen: 57.693 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

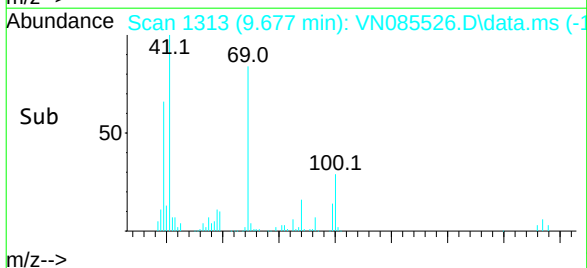
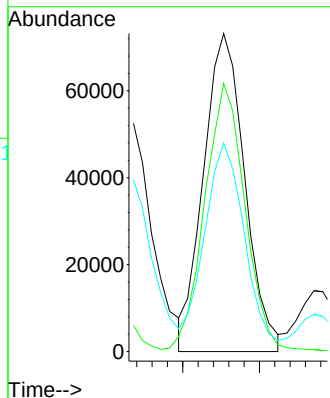
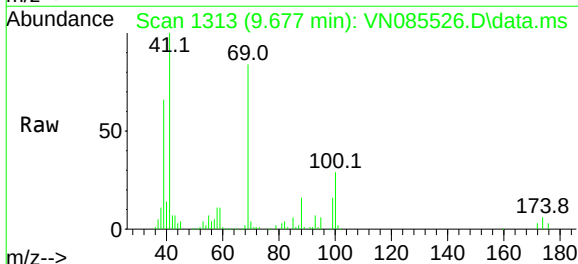
Tgt Ion: 41 Resp: 136479

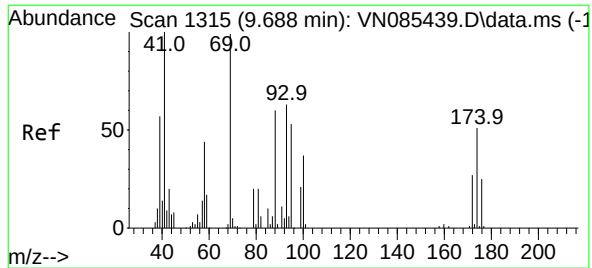
Ion Ratio Lower Upper

41 100

69 83.2 64.7 97.1

39 64.1 49.0 73.6





#49

1,4-Dioxane

Concen: 1019.345 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 88 Resp: 40607

Ion Ratio Lower Upper

88 100

43 33.0 26.6 39.8

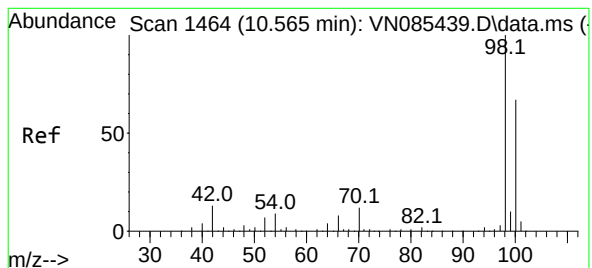
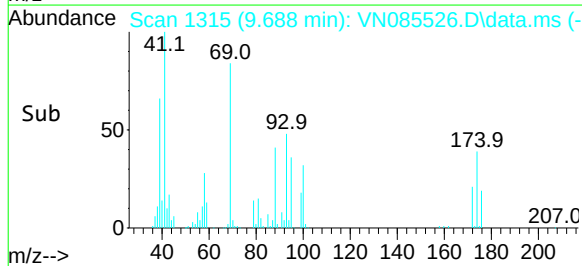
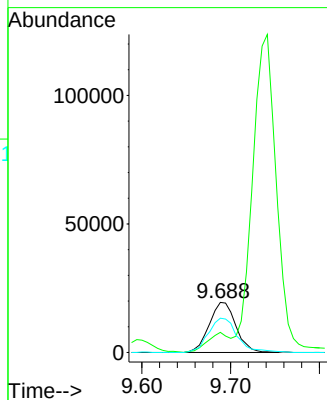
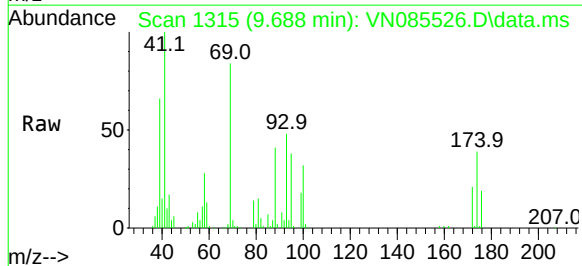
58 74.6 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#50

Toluene-d8

Concen: 52.569 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085526.D

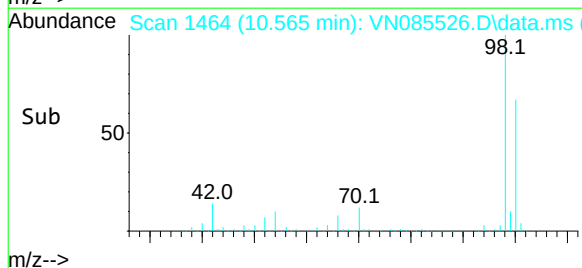
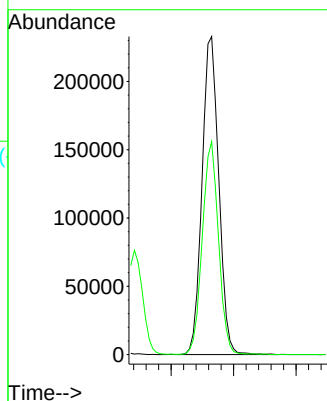
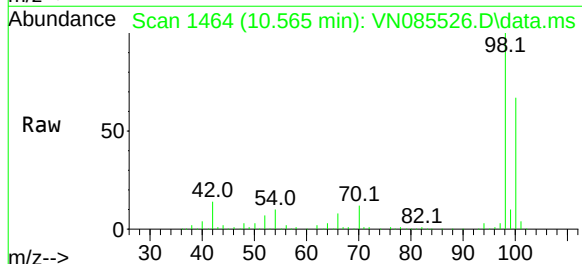
Acq: 28 Jan 2025 09:53

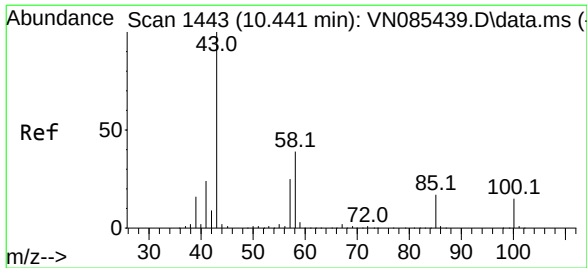
Tgt Ion: 98 Resp: 432537

Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.4





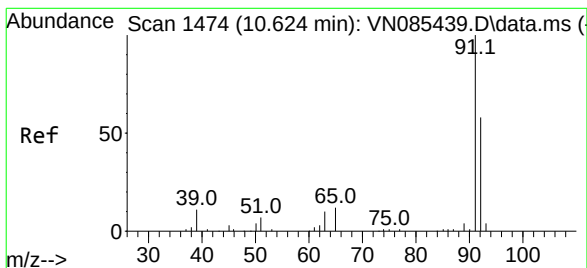
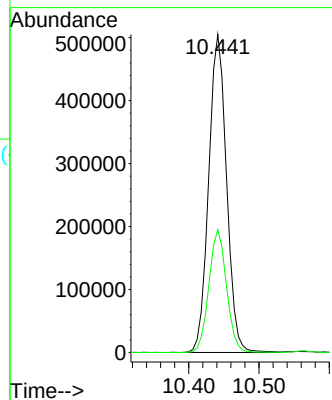
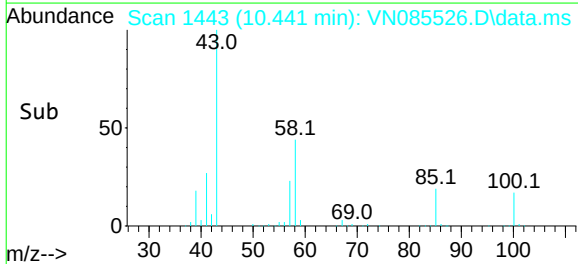
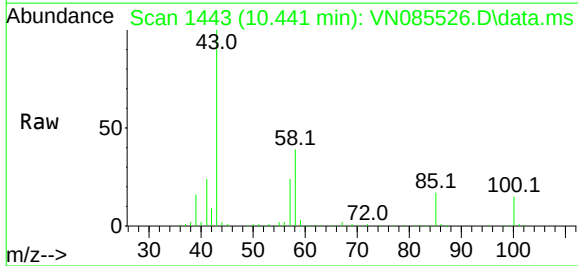
#51  
4-Methyl-2-Pentanone  
Concen: 292.599 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 43 Resp: 892528  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7

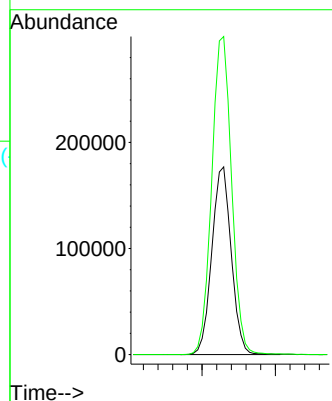
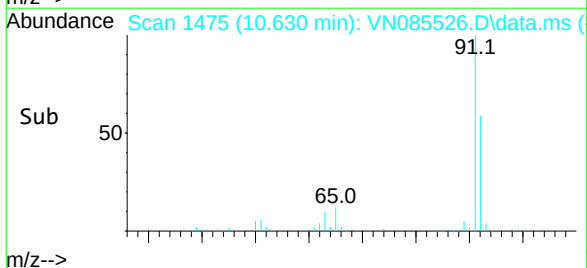
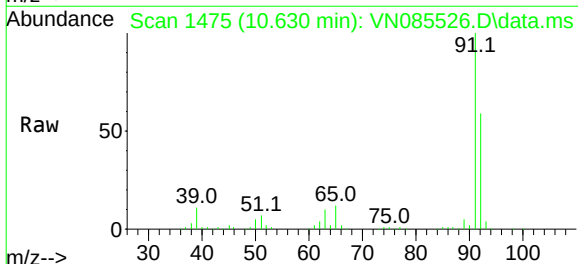
Manual Integrations  
APPROVED

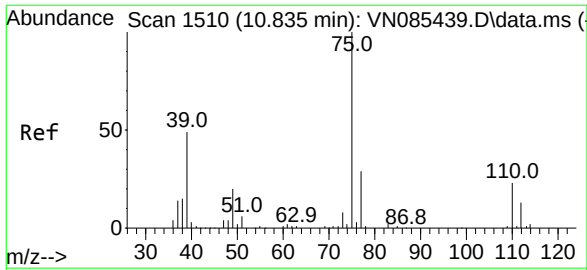
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#52  
Toluene  
Concen: 57.499 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 92 Resp: 325356  
Ion Ratio Lower Upper  
92 100  
91 173.6 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 58.899 ug/l

RT: 10.830 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 75 Resp: 204105

Ion Ratio Lower Upper

75 100

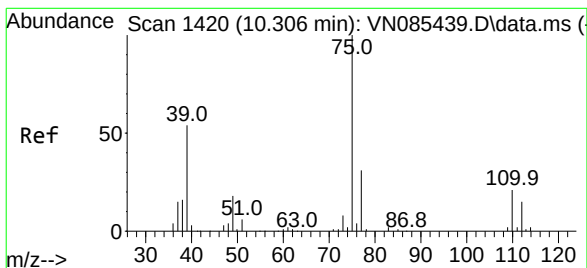
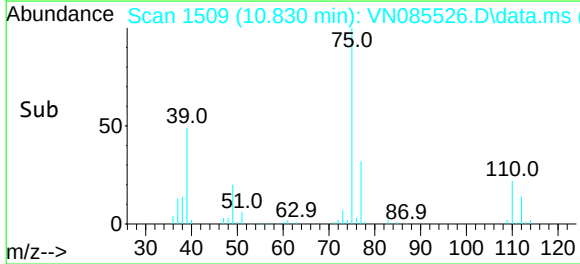
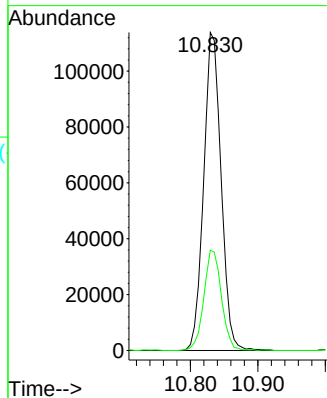
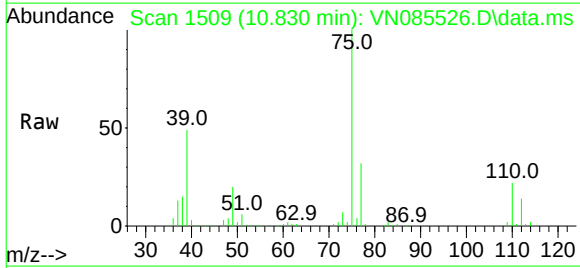
77 31.6 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#54

cis-1,3-Dichloropropene

Concen: 57.610 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

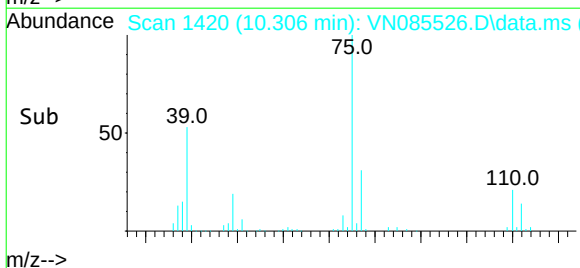
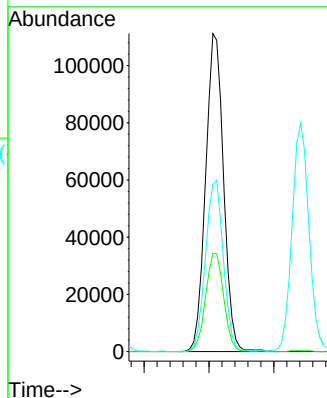
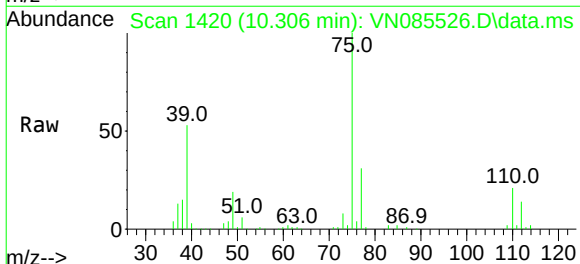
Tgt Ion: 75 Resp: 213245

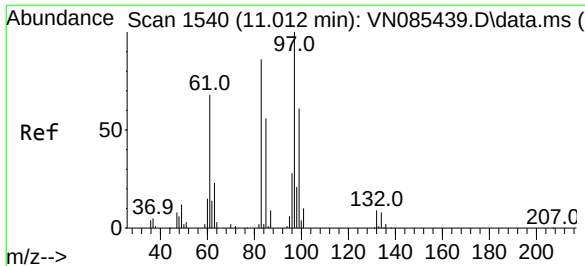
Ion Ratio Lower Upper

75 100

77 30.8 25.0 37.4

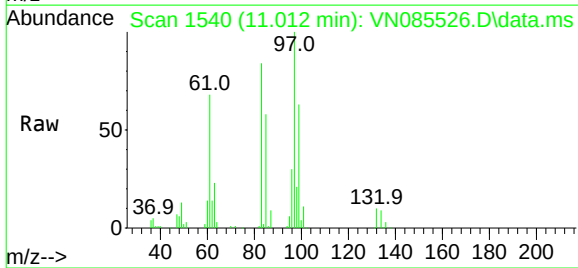
39 52.6 43.1 64.7





#55  
1,1,2-Trichloroethane  
Concen: 55.851 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

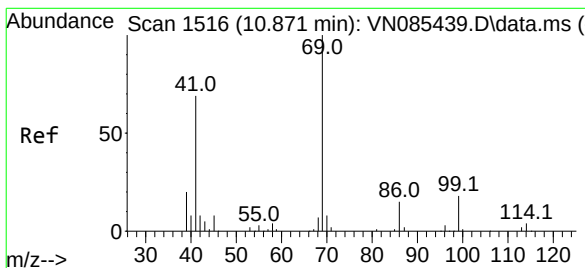
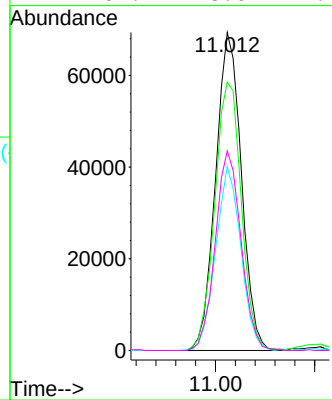
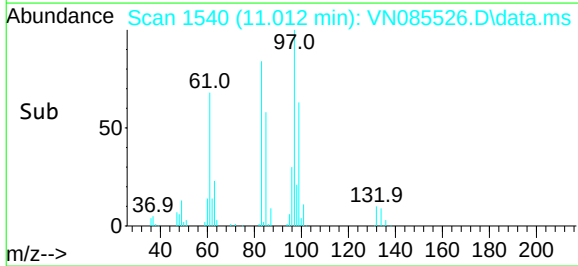
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



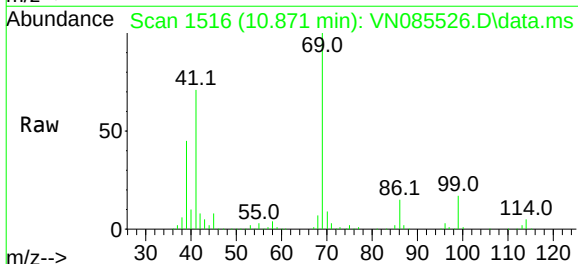
Tgt Ion: 97 Resp: 125068  
Ion Ratio Lower Upper  
97 100  
83 84.4 69.0 103.6  
85 57.9 44.6 66.8  
99 62.7 48.6 72.8

Manual Integrations  
APPROVED

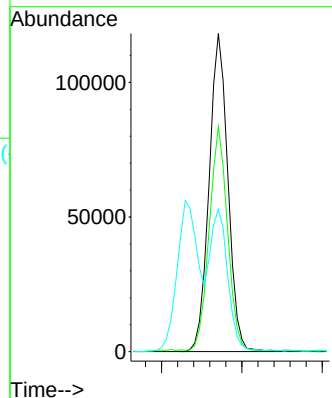
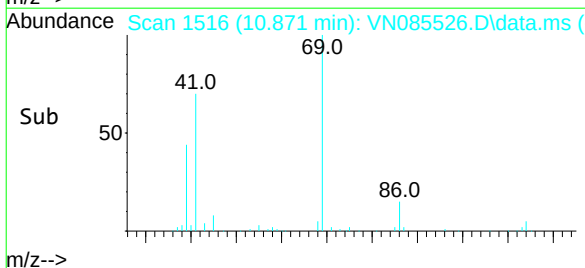
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

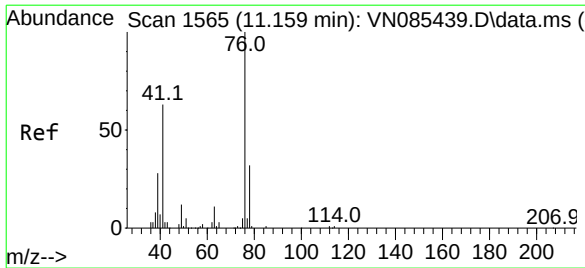


#56  
Ethyl methacrylate  
Concen: 50.844 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53



Tgt Ion: 69 Resp: 191924  
Ion Ratio Lower Upper  
69 100  
41 68.4 54.6 82.0  
39 42.2 32.4 48.6





#57

1,3-Dichloropropane

Concen: 56.327 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 76 Resp: 219323

Ion Ratio Lower Upper

76 100

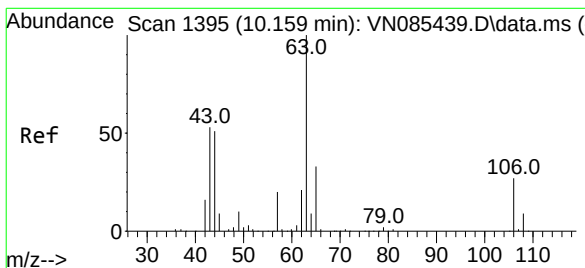
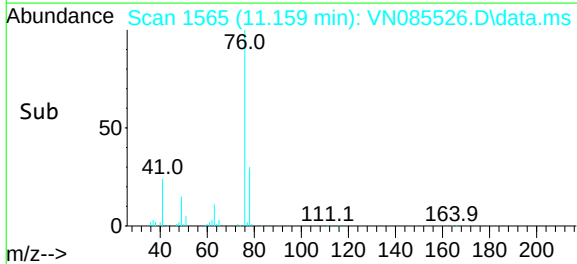
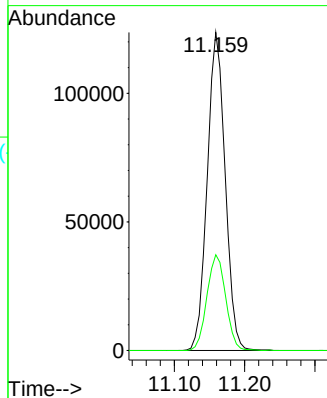
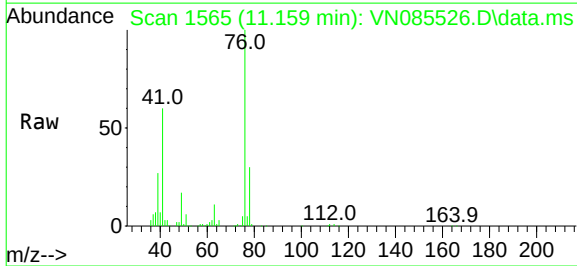
78 31.5 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#58

2-Chloroethyl Vinyl ether

Concen: 300.465 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085526.D

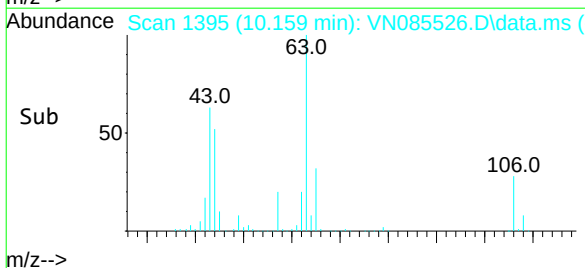
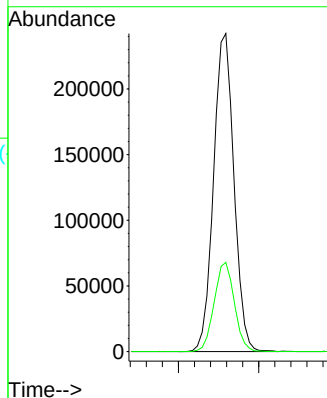
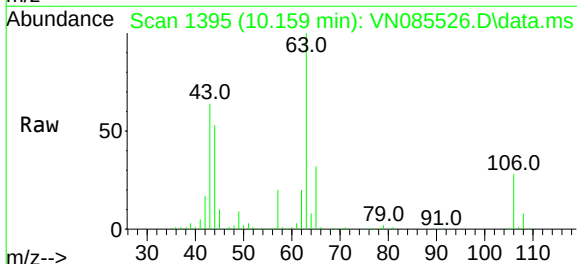
Acq: 28 Jan 2025 09:53

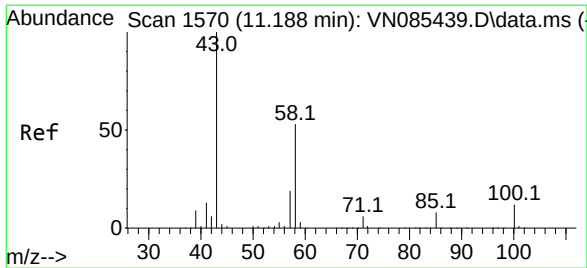
Tgt Ion: 63 Resp: 426978

Ion Ratio Lower Upper

63 100

106 27.8 21.6 32.4





#59

2-Hexanone

Concen: 300.034 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 643969

Ion Ratio Lower Upper

43 100

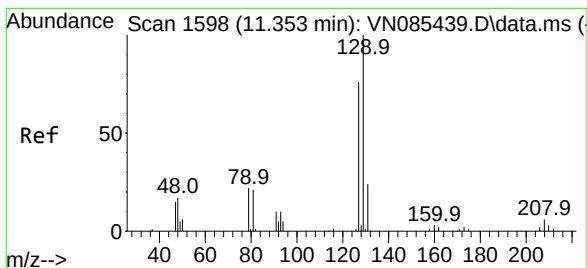
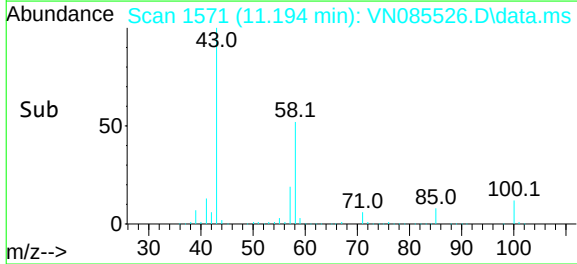
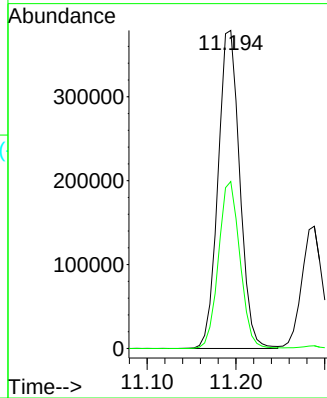
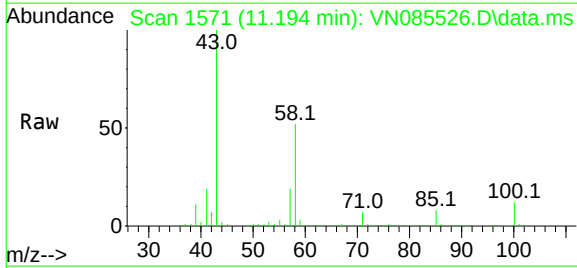
58 51.8 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#60

Dibromochloromethane

Concen: 56.815 ug/l

RT: 11.359 min Scan# 1599

Delta R.T. 0.006 min

Lab File: VN085526.D

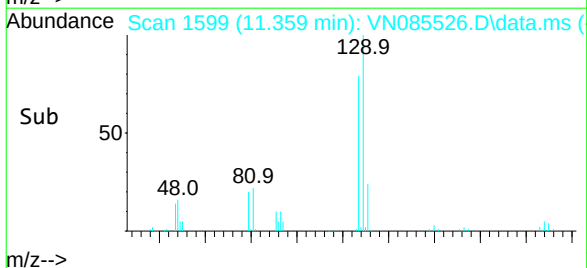
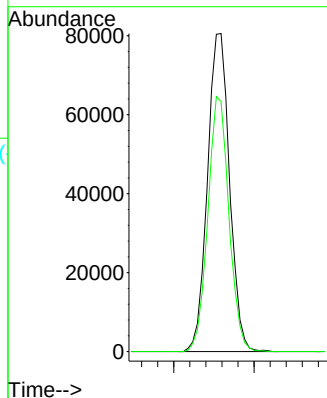
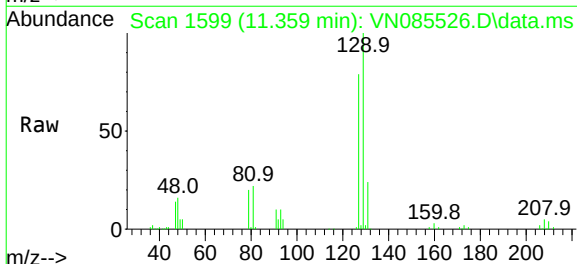
Acq: 28 Jan 2025 09:53

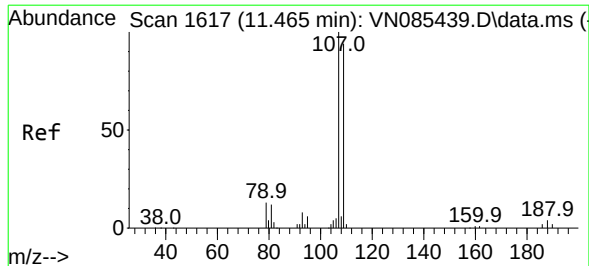
Tgt Ion:129 Resp: 153599

Ion Ratio Lower Upper

129 100

127 76.7 38.6 115.8





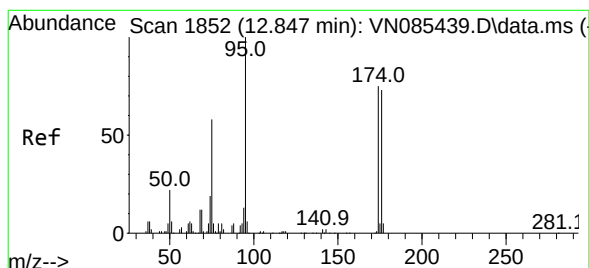
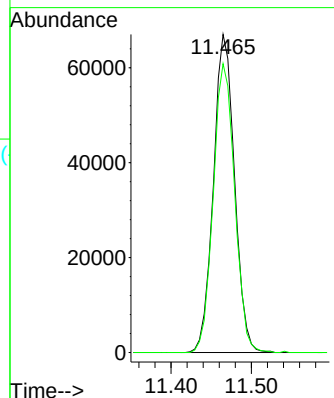
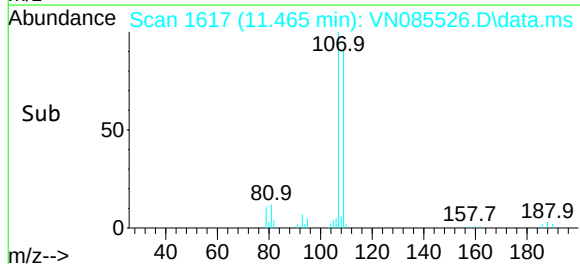
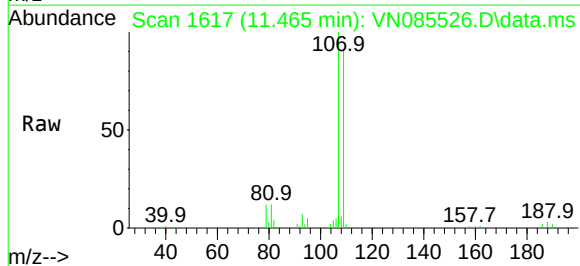
#61  
1,2-Dibromoethane  
Concen: 54.776 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 107 Resp: 122098  
Ion Ratio Lower Upper  
107 100  
109 92.4 75.9 113.9

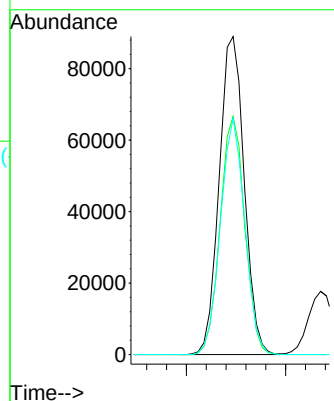
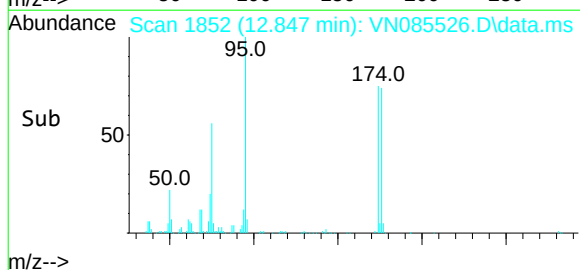
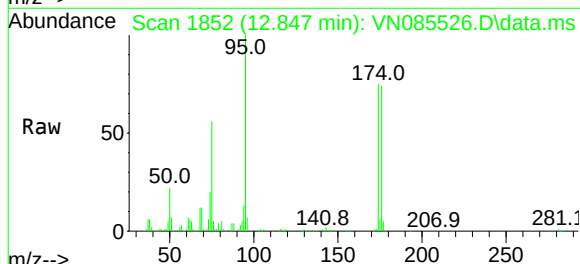
Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

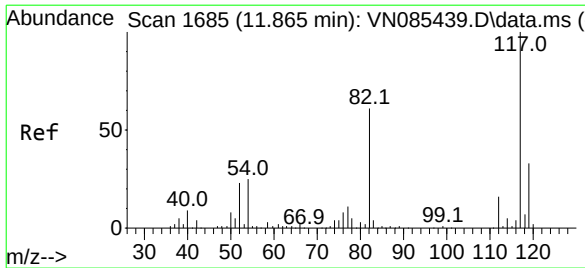


#62  
4-Bromofluorobenzene  
Concen: 55.379 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 95 Resp: 155870  
Ion Ratio Lower Upper  
95 100  
174 73.4 0.0 145.0  
176 71.9 0.0 142.4







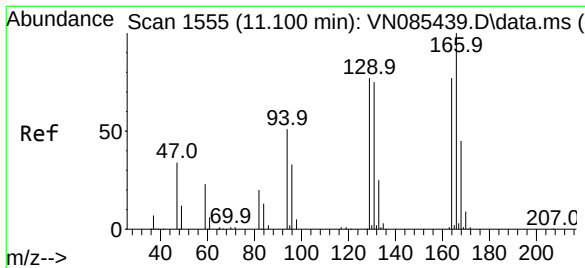
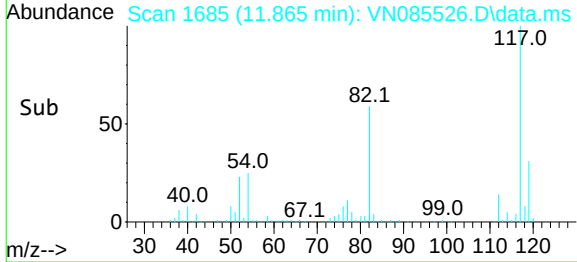
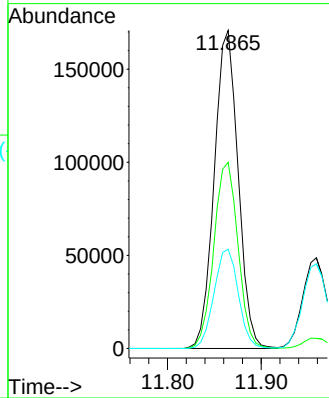
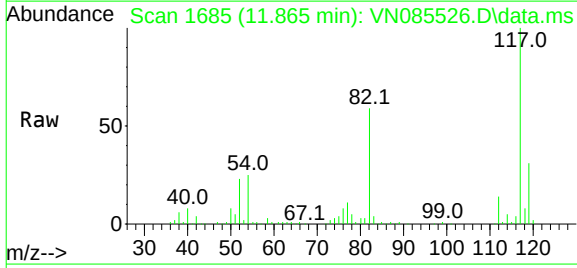
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

| Tgt Ion: | 117   | Resp: | 302551 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 58.5  | 48.6  | 72.8   |
| 119      | 31.2  | 26.6  | 39.8   |

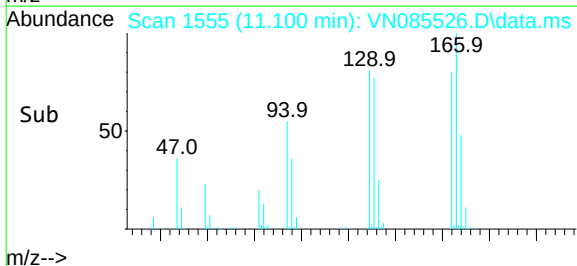
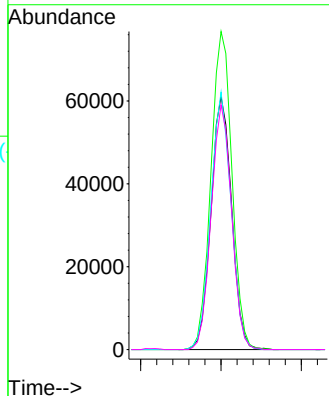
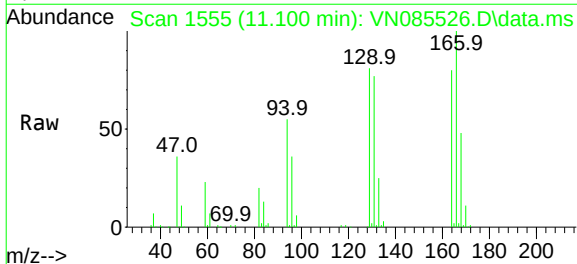
Manual Integrations  
APPROVED

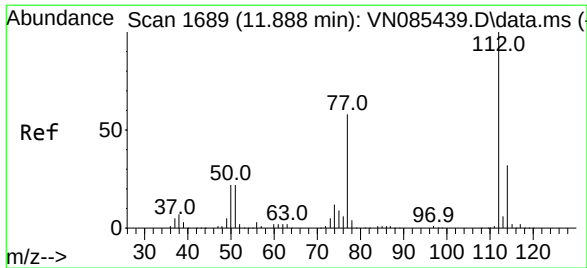
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#64  
Tetrachloroethene  
Concen: 52.974 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

| Tgt Ion: | 164   | Resp: | 109264 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 166      | 125.7 | 103.4 | 155.2  |
| 129      | 101.8 | 79.2  | 118.8  |
| 131      | 96.7  | 77.1  | 115.7  |





#65

Chlorobenzene

Concen: 53.457 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:112 Resp: 354308

Ion Ratio Lower Upper

112 100

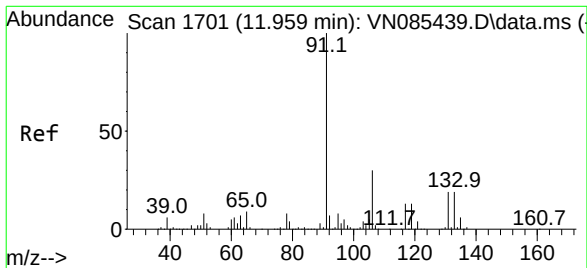
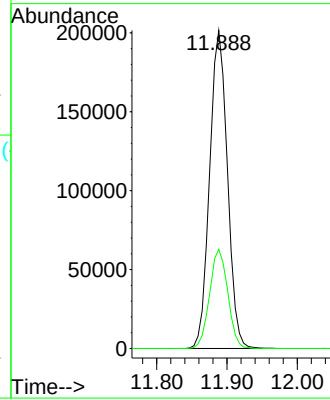
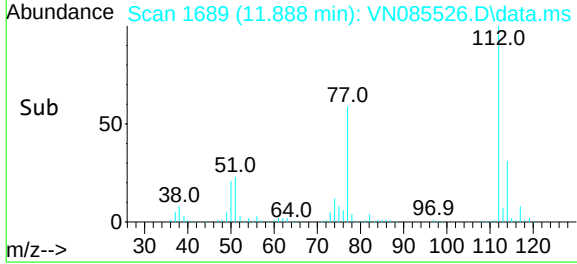
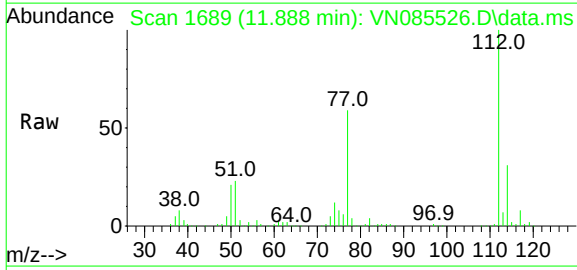
114 31.2 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 53.447 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

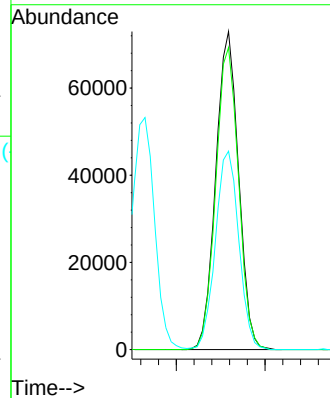
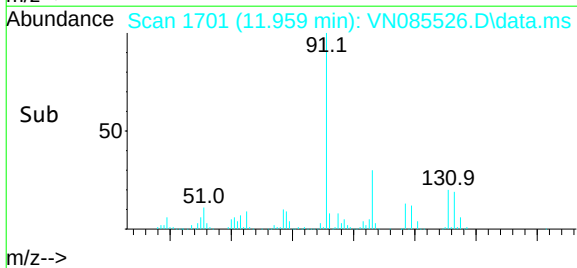
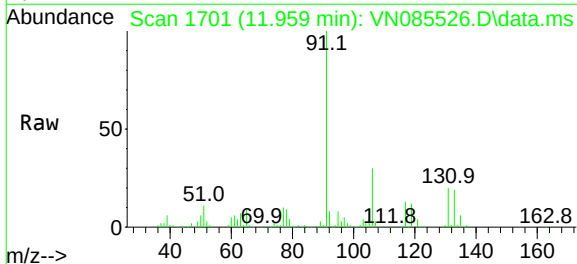
Tgt Ion:131 Resp: 130012

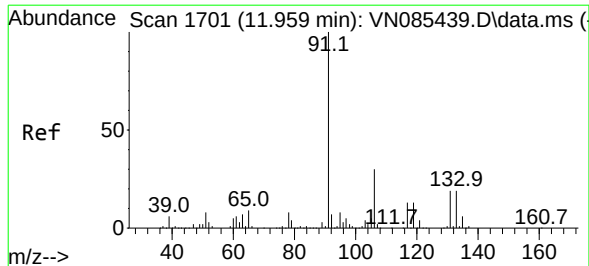
Ion Ratio Lower Upper

131 100

133 95.0 47.4 142.3

119 64.2 33.1 99.5





#67

Ethyl Benzene

Concen: 57.531 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 621051

Ion Ratio Lower Upper

91 100

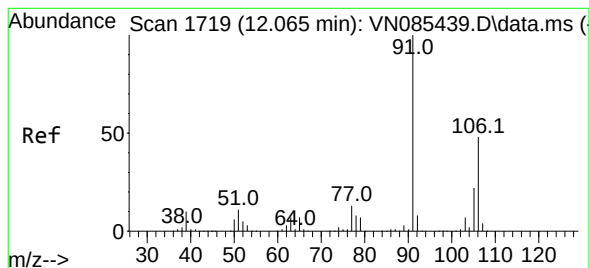
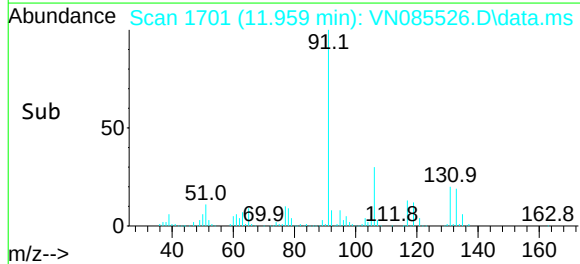
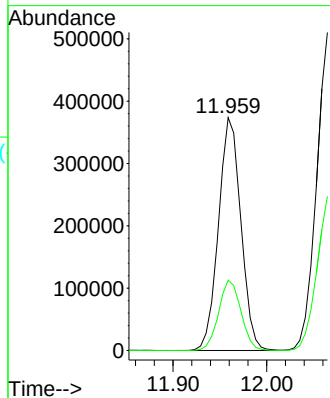
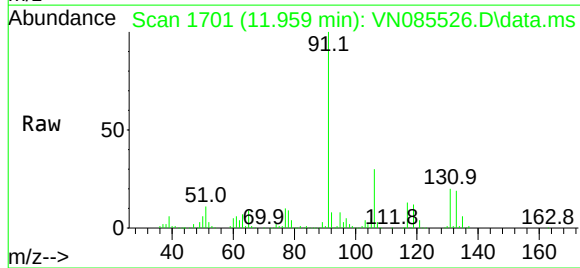
106 30.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#68

m/p-Xylenes

Concen: 119.124 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085526.D

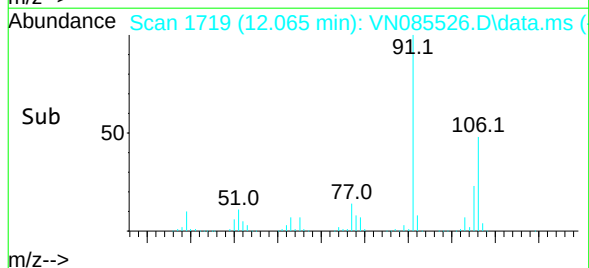
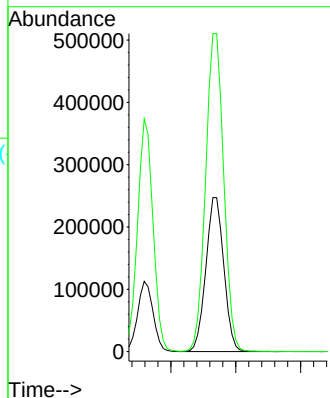
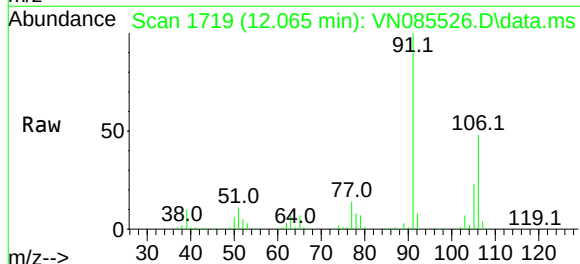
Acq: 28 Jan 2025 09:53

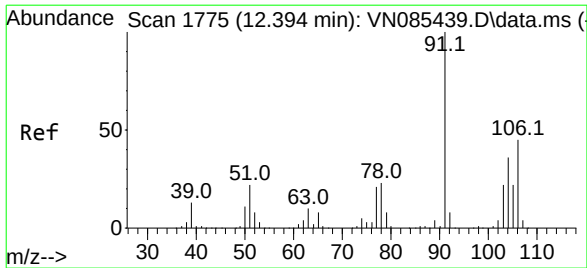
Tgt Ion:106 Resp: 475266

Ion Ratio Lower Upper

106 100

91 207.6 167.7 251.5





#69

o-Xylene

Concen: 58.639 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:106 Resp: 223578

Ion Ratio Lower Upper

106 100

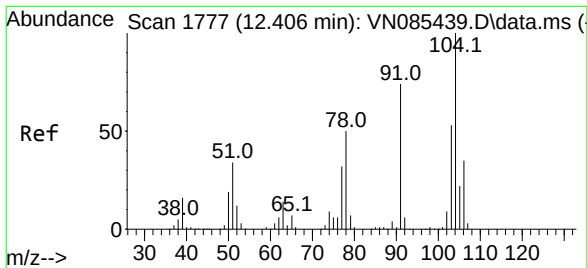
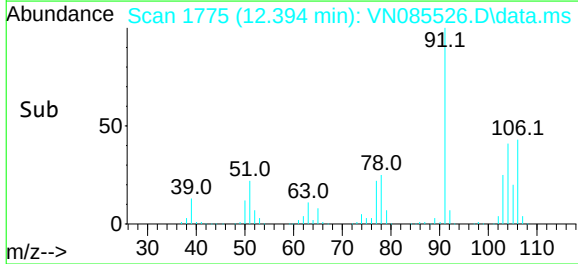
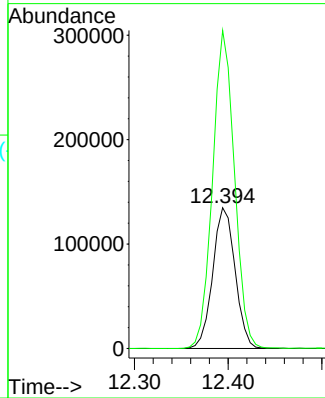
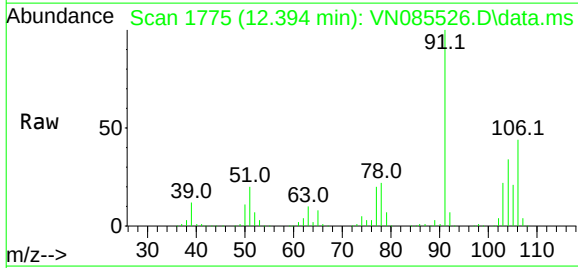
91 220.9 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#70

Styrene

Concen: 61.343 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

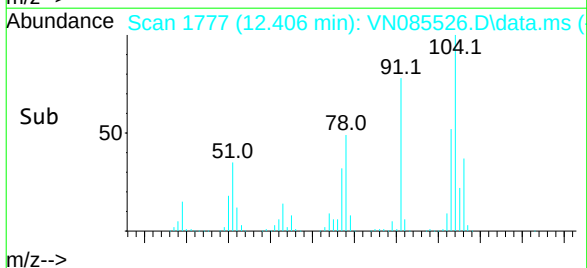
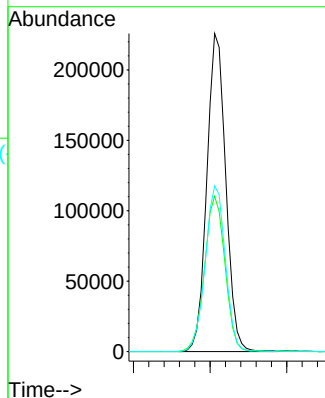
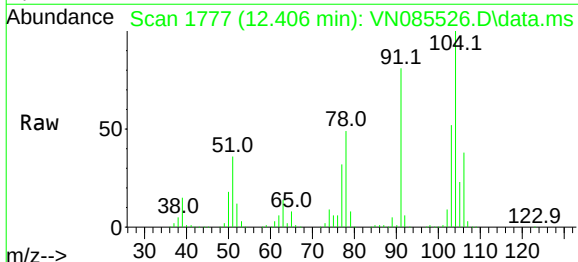
Tgt Ion:104 Resp: 387081

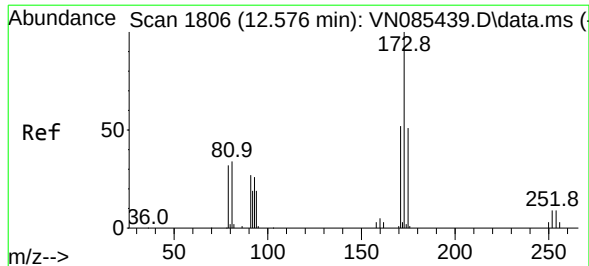
Ion Ratio Lower Upper

104 100

78 52.7 42.5 63.7

103 55.4 43.8 65.8





#71

Bromoform

Concen: 58.046 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:173 Resp: 101032

Ion Ratio Lower Upper

173 100

175 49.5 24.4 73.2

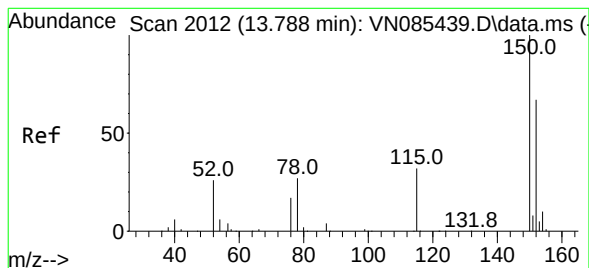
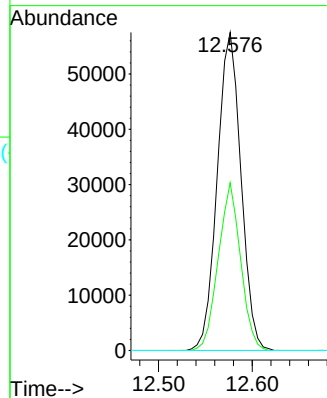
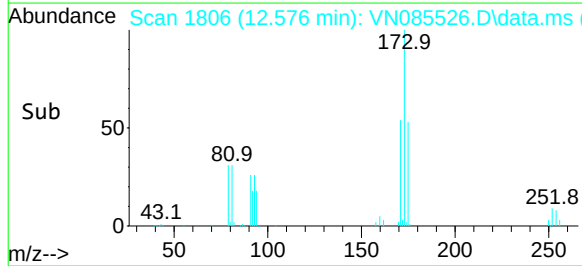
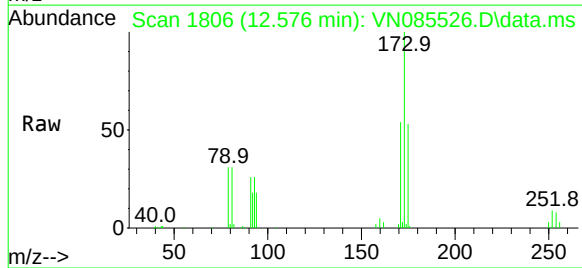
254 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

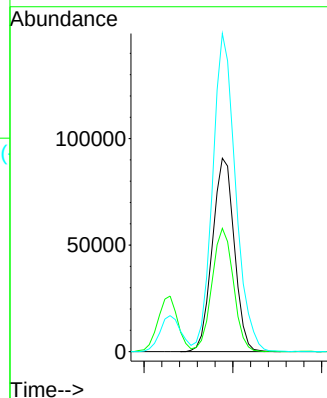
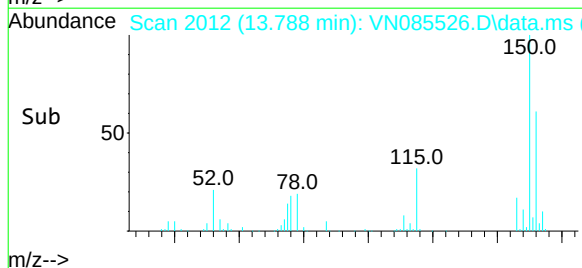
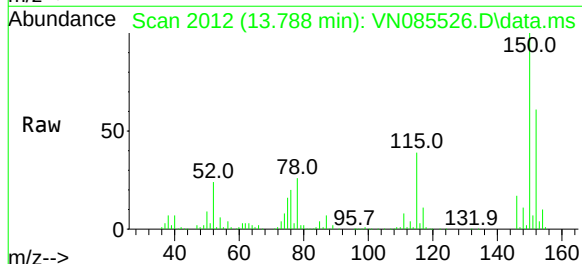
Tgt Ion:152 Resp: 155713

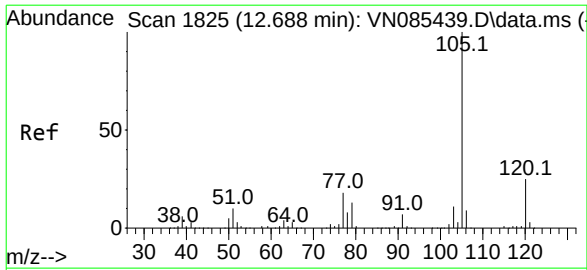
Ion Ratio Lower Upper

152 100

115 62.3 31.1 93.3

150 172.0 0.0 343.6





#73

Isopropylbenzene

Concen: 55.357 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:105 Resp: 581759

Ion Ratio Lower Upper

105 100

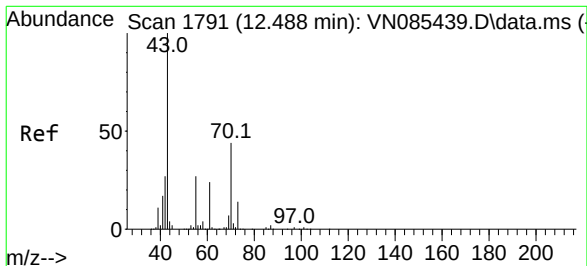
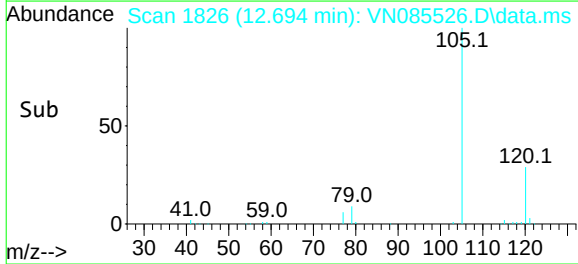
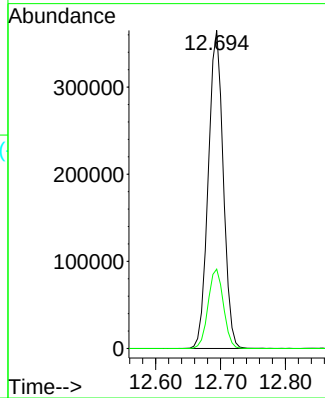
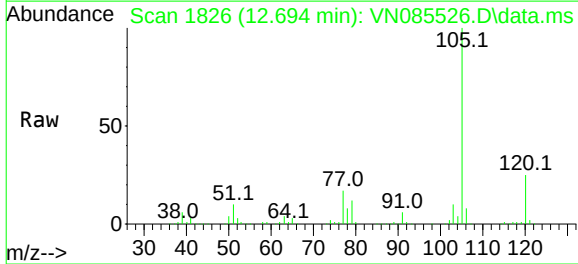
120 25.5 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#74

N-ethyl acetate

Concen: 52.919 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Tgt Ion: 43 Resp: 249973

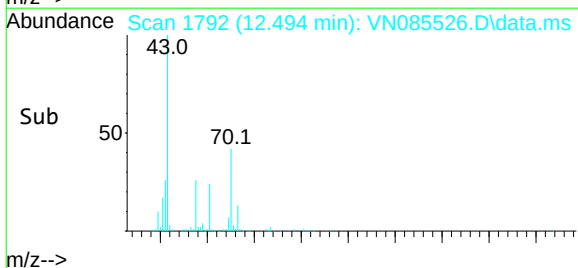
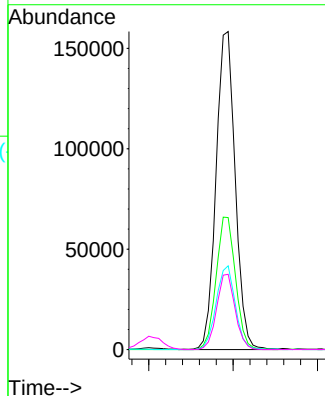
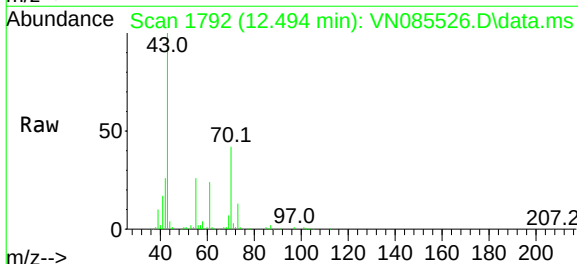
Ion Ratio Lower Upper

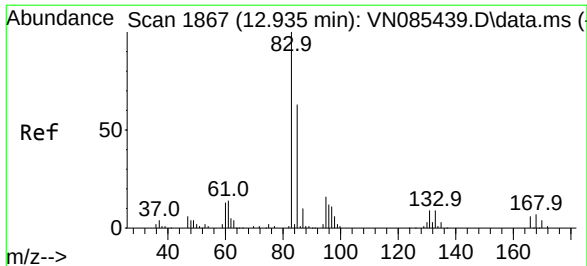
43 100

70 42.1 34.0 51.0

55 26.4 21.4 32.2

61 22.9 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 49.089 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

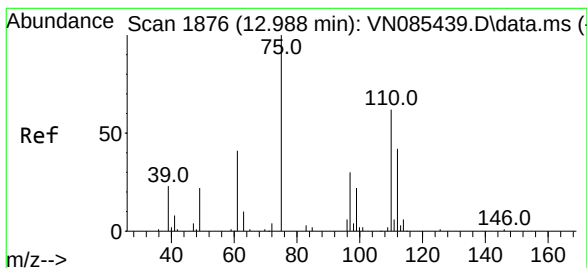
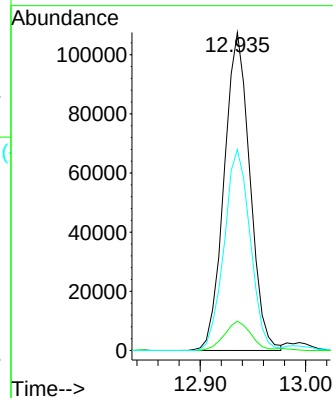
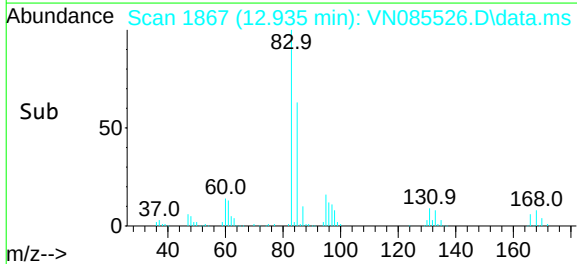
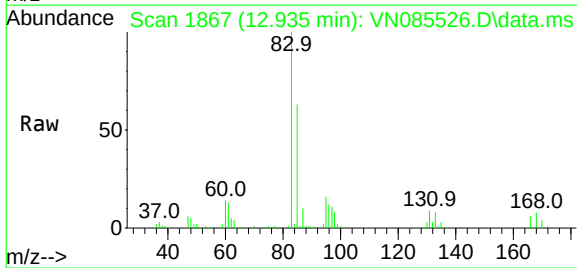
VSTDCCC050

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 182235 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 131      | 9.9   | 4.8   | 14.4   |
| 85       | 63.9  | 32.2  | 96.6   |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#76

1,2,3-Trichloropropane

Concen: 46.478 ug/l m

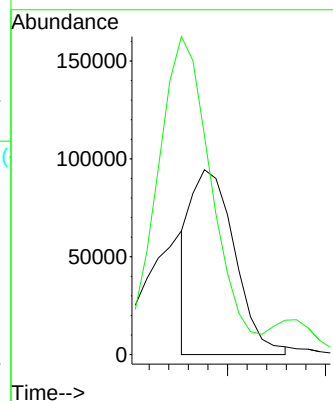
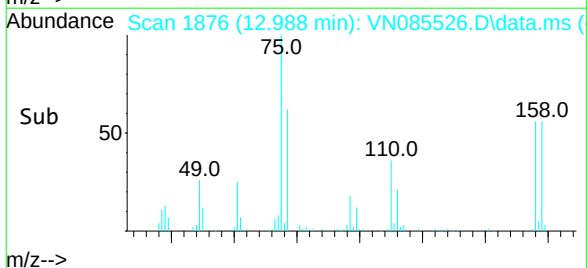
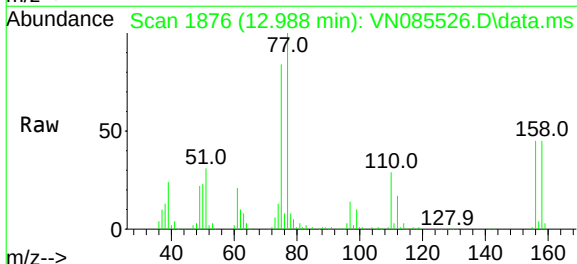
RT: 12.988 min Scan# 1876

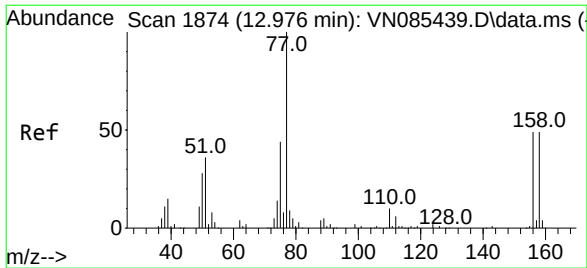
Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 147100 |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 77       | 216.6 | 109.7 | 329.2  |





#77

Bromobenzene

Concen: 50.547 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085526.D

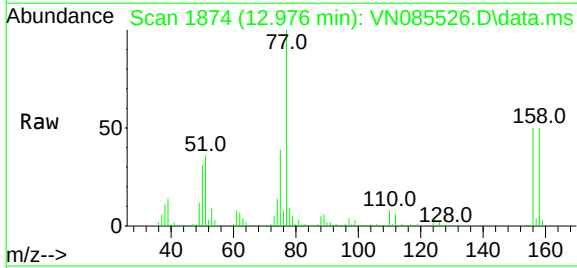
Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 156 Resp: 138788

Ion Ratio Lower Upper

156 100

77 229.6 114.1 342.4

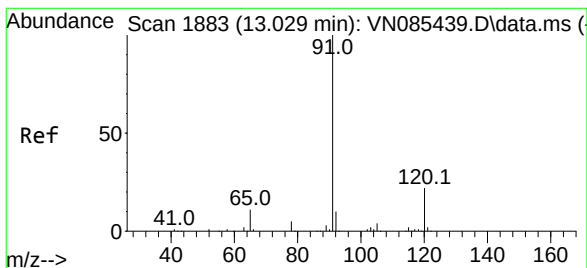
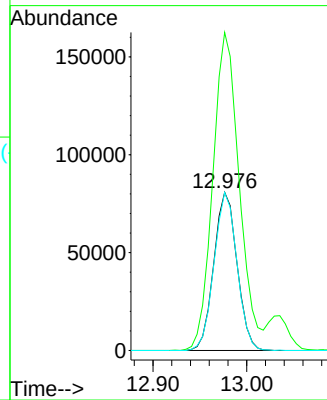
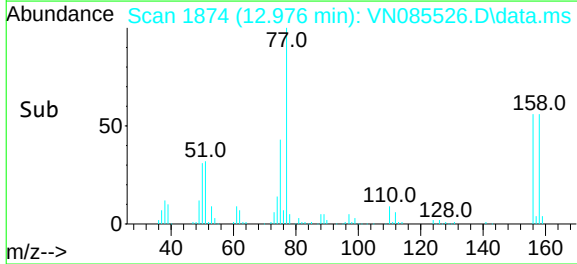
158 98.7 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#78

n-propylbenzene

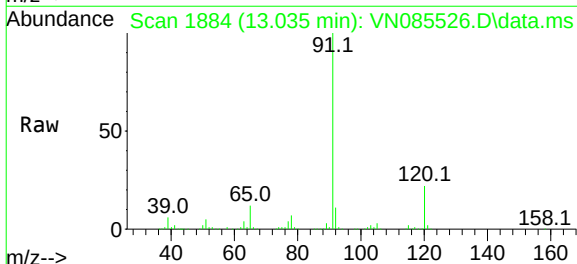
Concen: 56.362 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

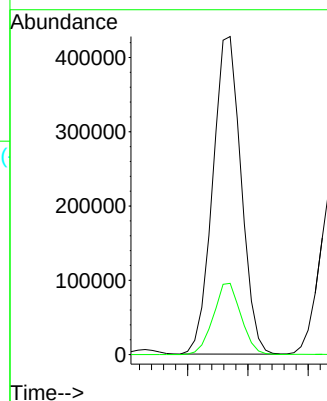
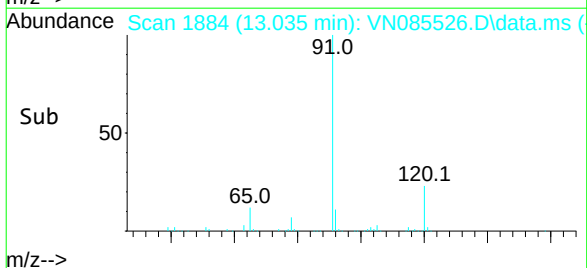


Tgt Ion: 91 Resp: 701218

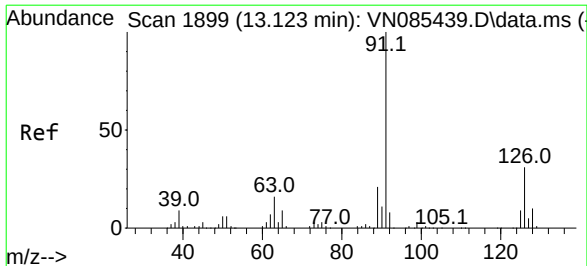
Ion Ratio Lower Upper

91 100

120 21.9 10.9 32.6







#79

2-Chlorotoluene

Concen: 52.764 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 424851

Ion Ratio Lower Upper

91 100

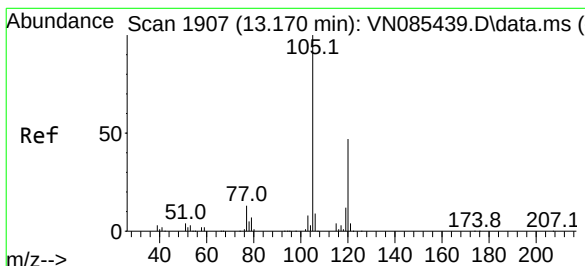
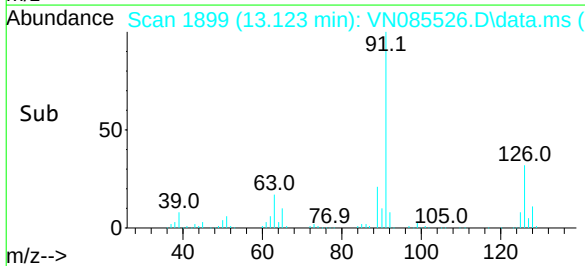
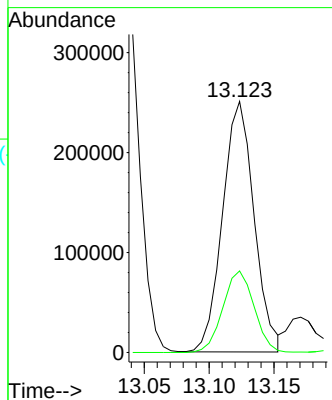
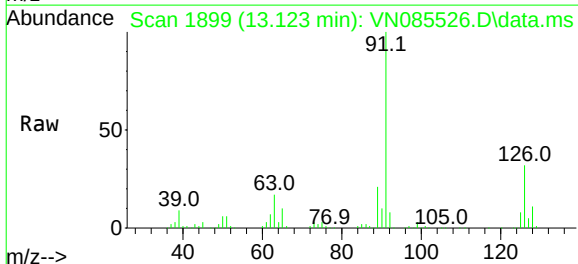
126 32.2 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#80

1,3,5-Trimethylbenzene

Concen: 56.984 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085526.D

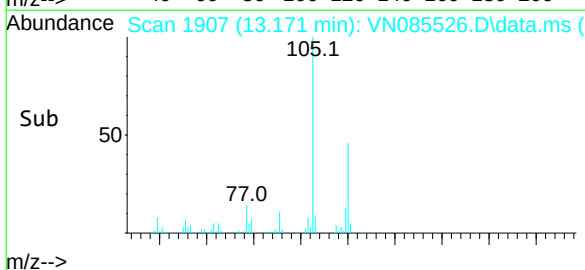
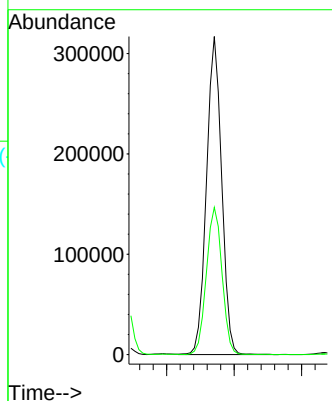
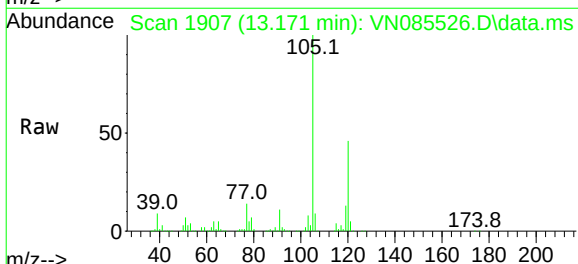
Acq: 28 Jan 2025 09:53

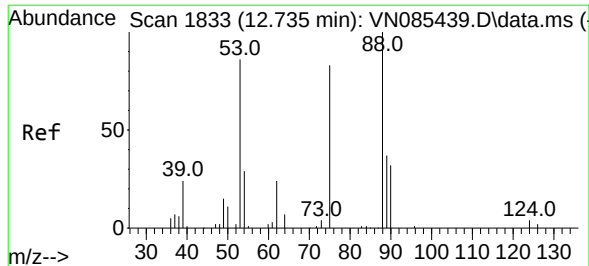
Tgt Ion:105 Resp: 494666

Ion Ratio Lower Upper

105 100

120 47.7 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 54.370 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 75 Resp: 63601

Ion Ratio Lower Upper

75 100

53 107.1 95.6 143.4

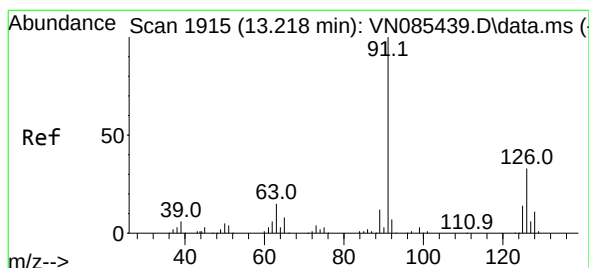
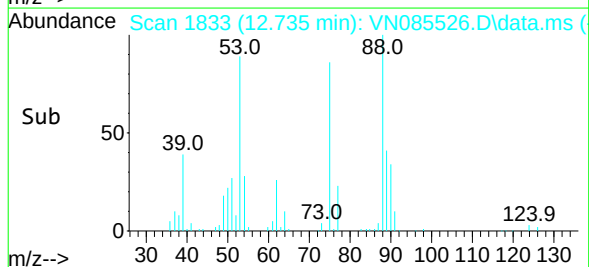
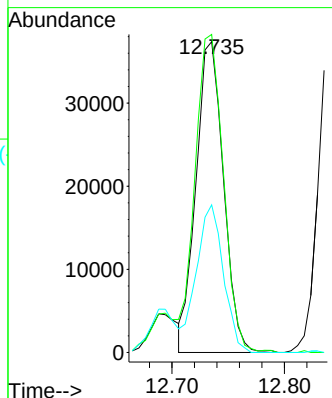
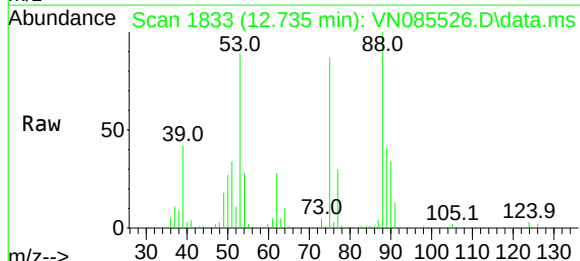
89 46.8 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#82

4-Chlorotoluene

Concen: 53.960 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. 0.000 min

Lab File: VN085526.D

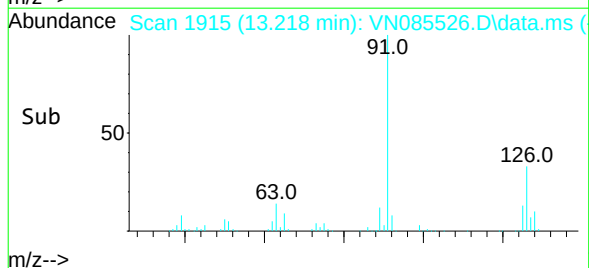
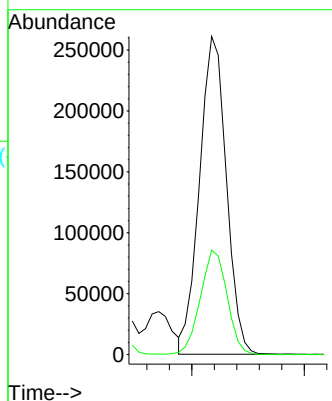
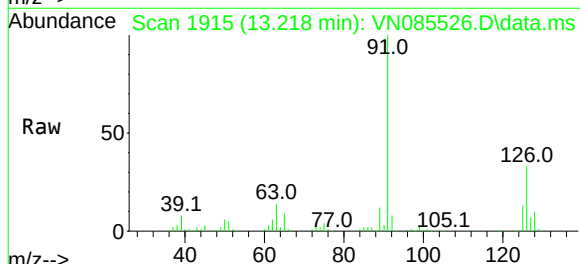
Acq: 28 Jan 2025 09:53

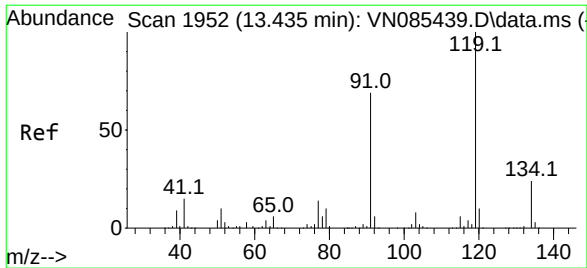
Tgt Ion: 91 Resp: 432608

Ion Ratio Lower Upper

91 100

126 32.8 15.9 47.7





#83

tert-Butylbenzene

Concen: 55.641 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:119 Resp: 405613

Ion Ratio Lower Upper

119 100

91 69.8 35.1 105.3

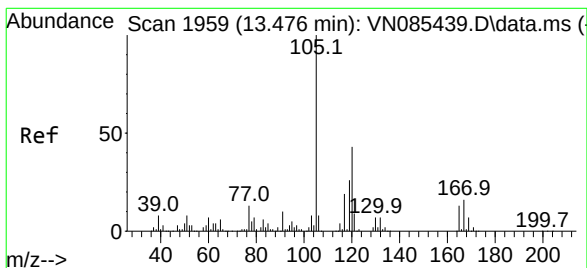
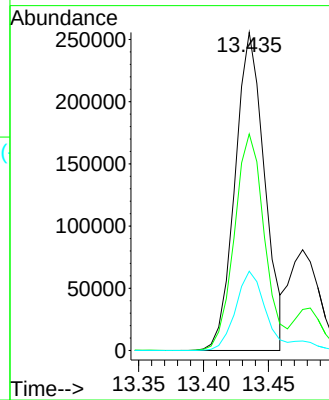
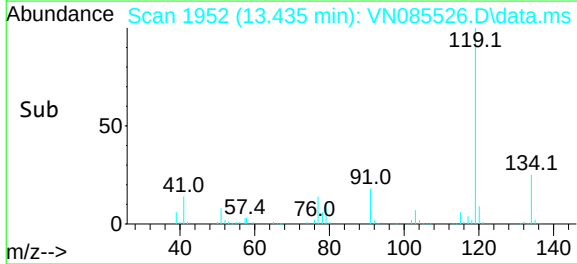
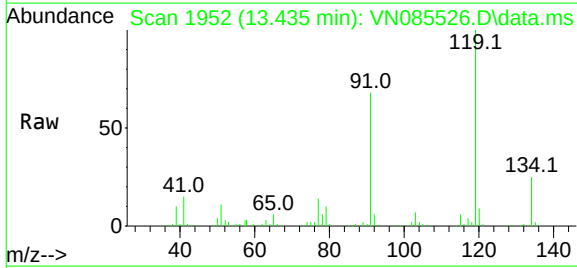
134 27.3 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#84

1,2,4-Trimethylbenzene

Concen: 57.941 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085526.D

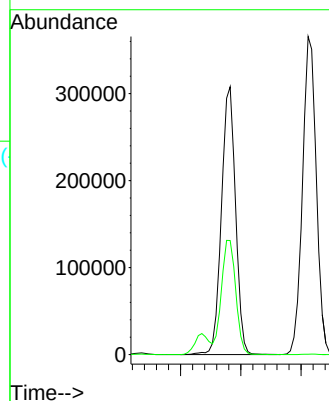
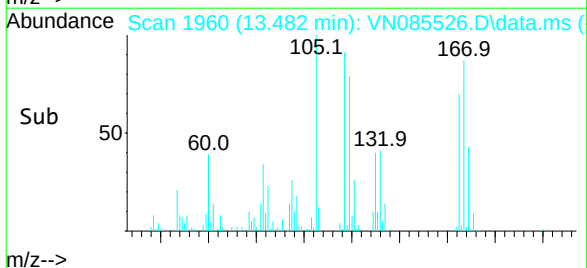
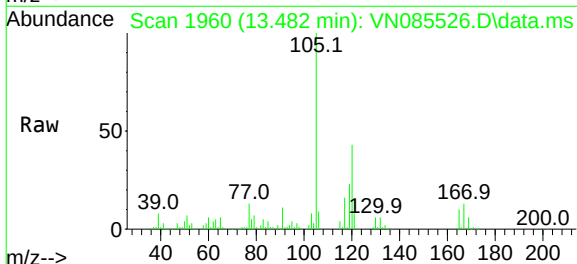
Acq: 28 Jan 2025 09:53

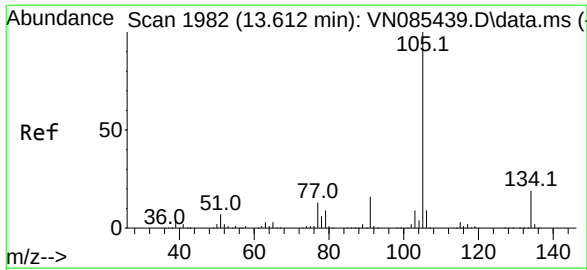
Tgt Ion:105 Resp: 501298

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0





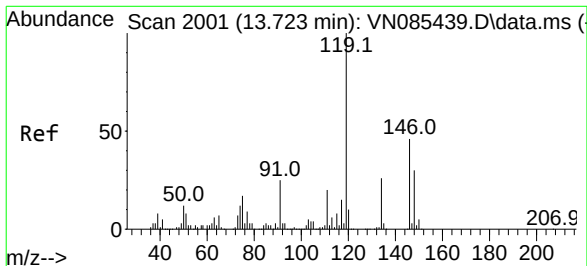
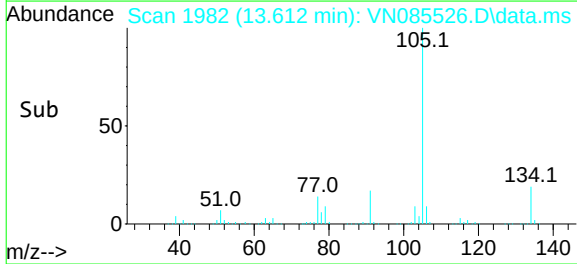
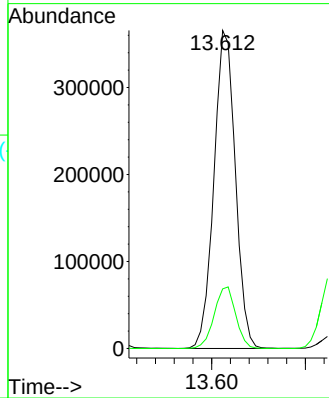
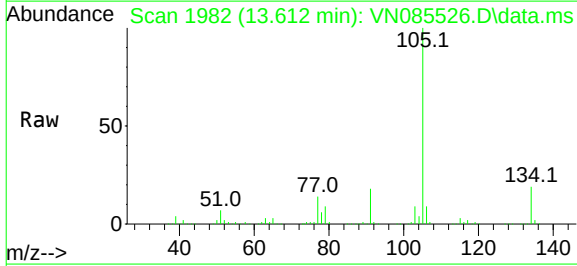
#85  
sec-Butylbenzene  
Concen: 57.499 ug/l  
RT: 13.612 min Scan# 1982  
Delta R.T. -0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:105 Resp: 580942  
Ion Ratio Lower Upper  
105 100  
134 19.4 9.7 28.9

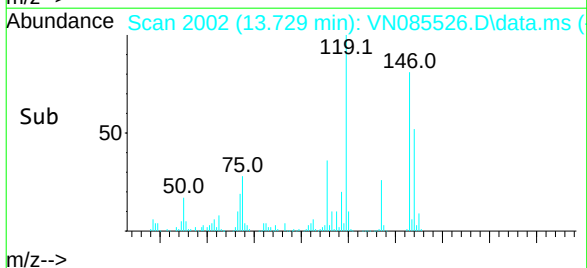
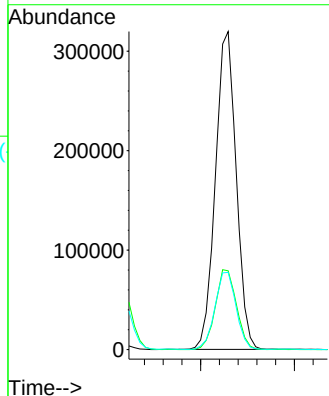
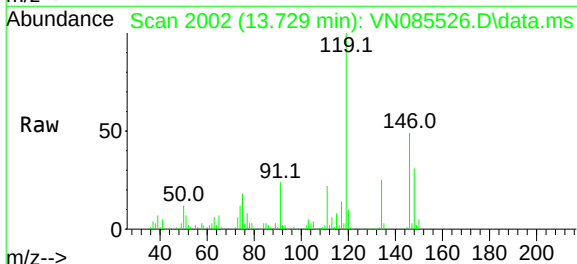
Manual Integrations  
APPROVED

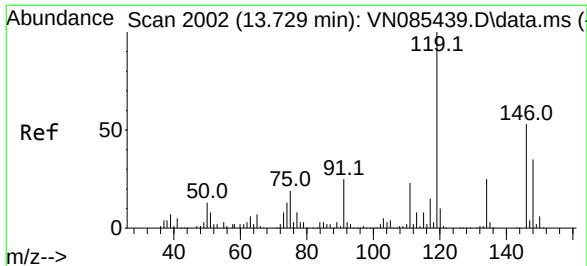
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#86  
p-Isopropyltoluene  
Concen: 53.532 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:119 Resp: 491281  
Ion Ratio Lower Upper  
119 100  
134 25.5 12.7 38.0  
91 24.7 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 52.335 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:146 Resp: 264631

Ion Ratio Lower Upper

146 100

111 43.3 21.4 64.3

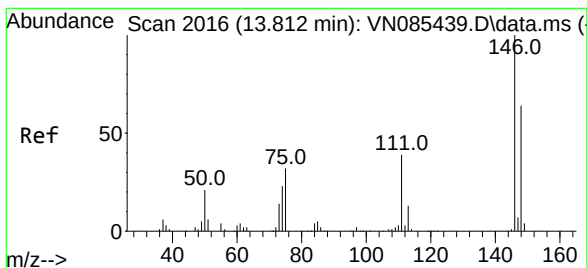
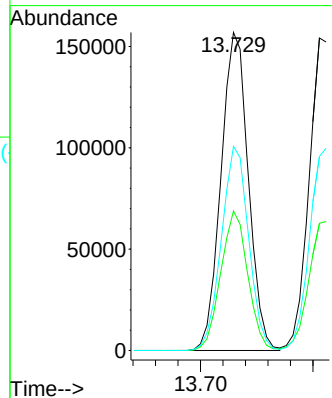
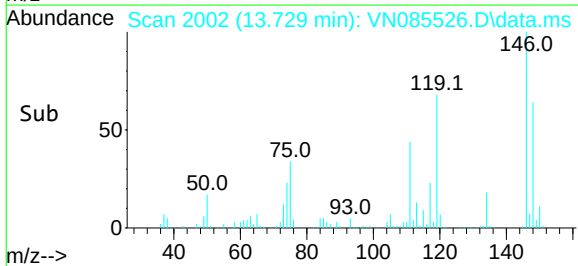
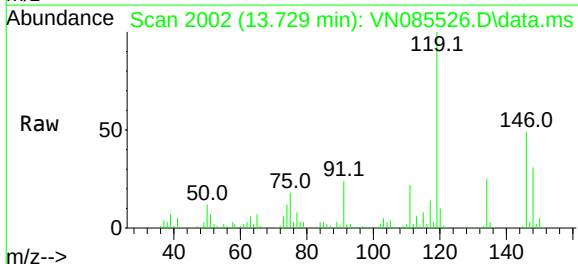
148 64.1 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#88

1,4-Dichlorobenzene

Concen: 50.507 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

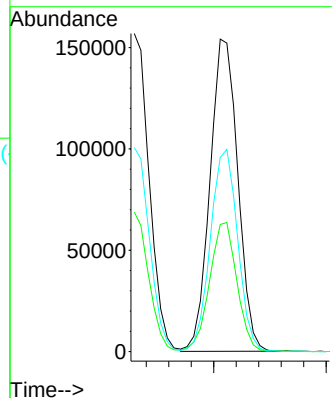
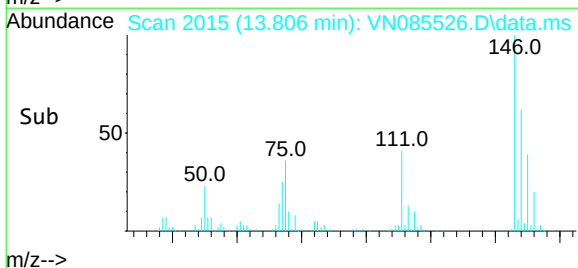
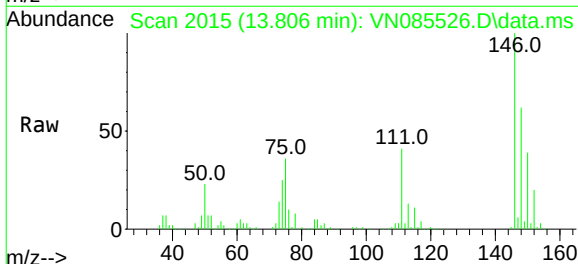
Tgt Ion:146 Resp: 264719

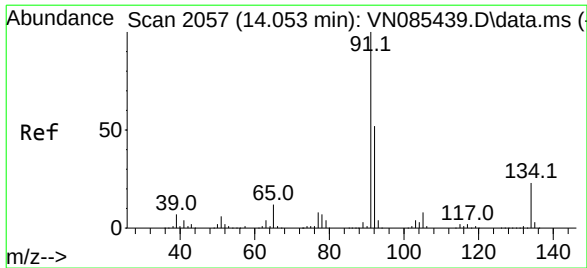
Ion Ratio Lower Upper

146 100

111 40.8 21.3 63.7

148 63.7 32.4 97.0





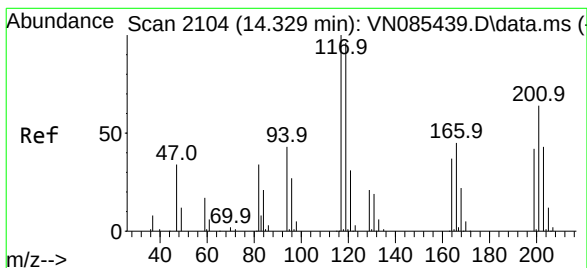
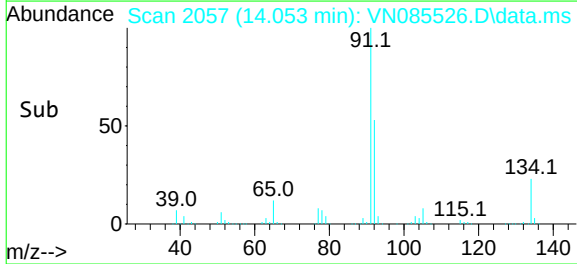
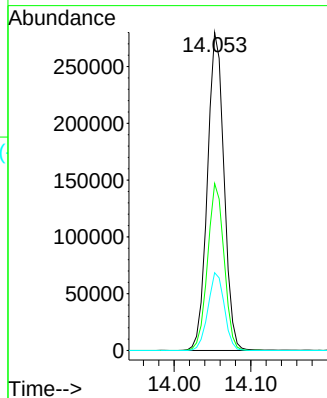
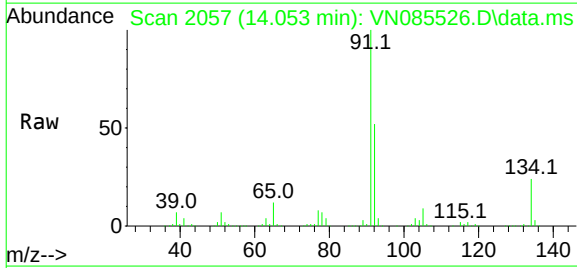
#89  
n-Butylbenzene  
Concen: 58.013 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

| Tgt Ion: | 91    | Resp: | 420498 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 52.1  | 25.8  | 77.3   |
| 134      | 24.2  | 11.7  | 35.1   |

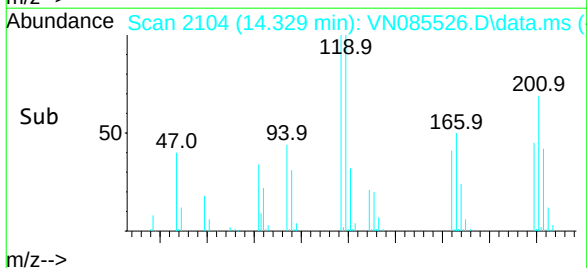
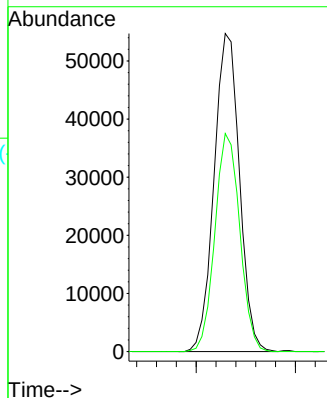
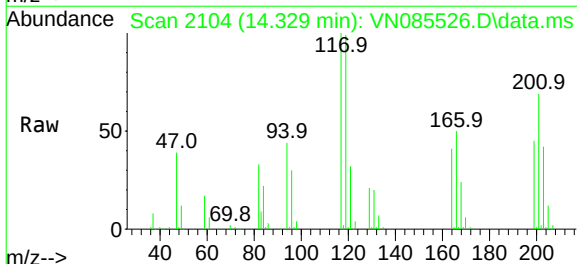
Manual Integrations  
APPROVED

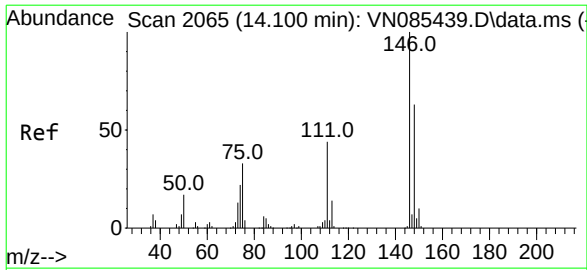
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#90  
Hexachloroethane  
Concen: 50.630 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

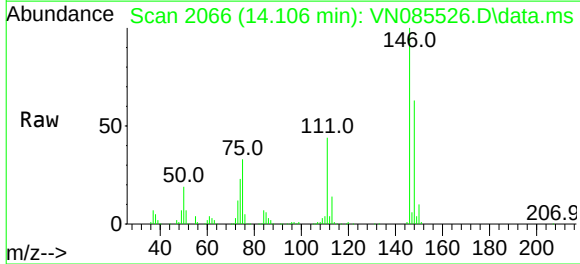
| Tgt Ion: | 117   | Resp: | 97383 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 67.0  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 50.739 ug/l  
RT: 14.106 min Scan# 2065  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

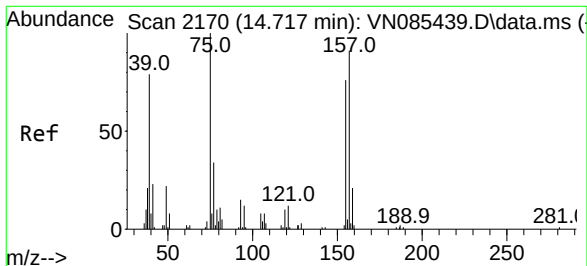
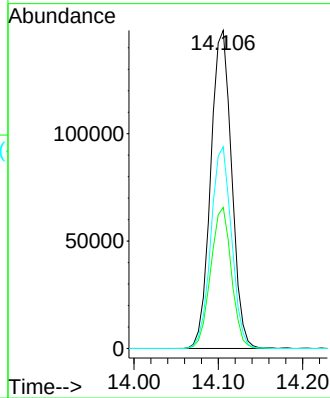
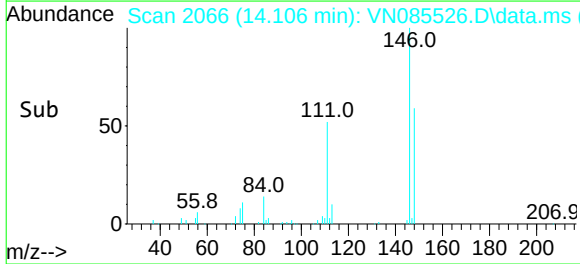
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion:146 Resp: 255916  
Ion Ratio Lower Upper  
146 100  
111 43.8 21.7 65.1  
148 62.7 31.4 94.2

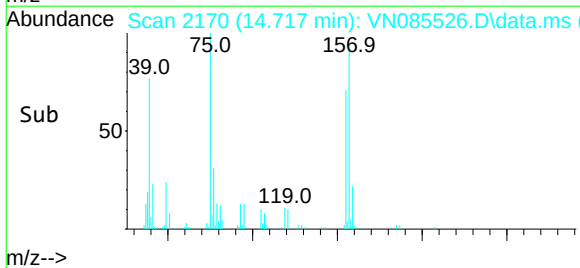
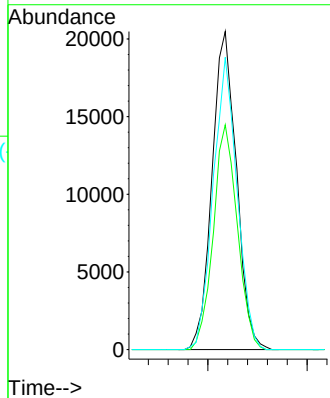
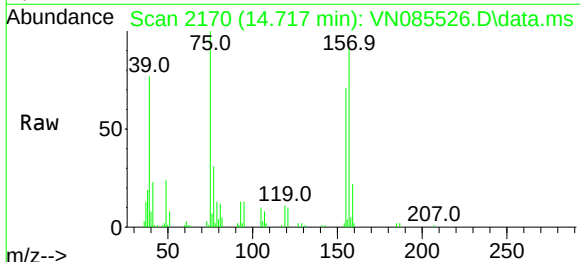
Manual Integrations  
APPROVED

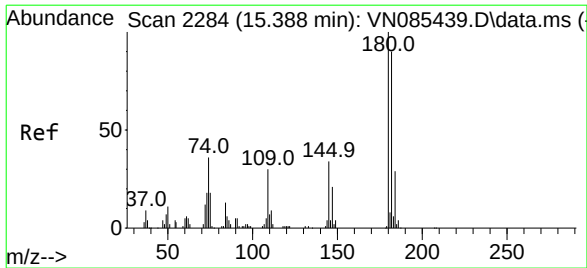
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 51.620 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 75 Resp: 34993  
Ion Ratio Lower Upper  
75 100  
155 69.5 36.4 109.2  
157 90.0 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 54.246 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085526.D

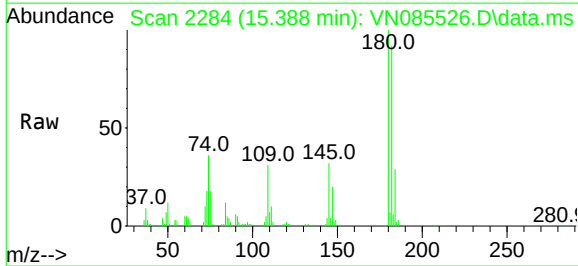
Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

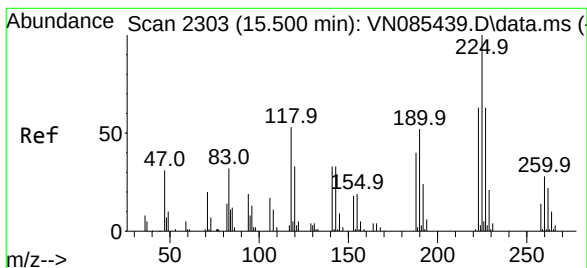
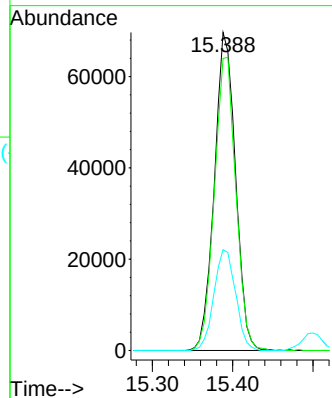
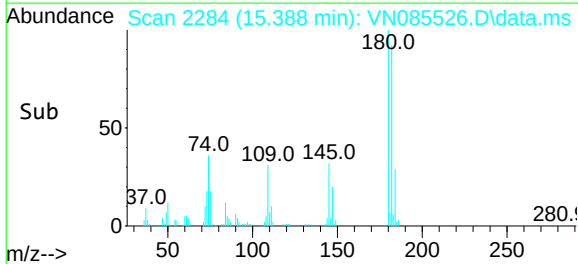
VSTDCCC050



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 127164 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 93.6  | 46.8  | 140.3  |
| 145       | 32.5  | 16.0  | 48.0   |

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#94

Hexachlorobutadiene

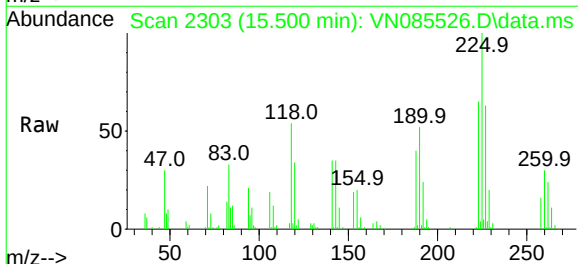
Concen: 51.348 ug/l

RT: 15.500 min Scan# 2303

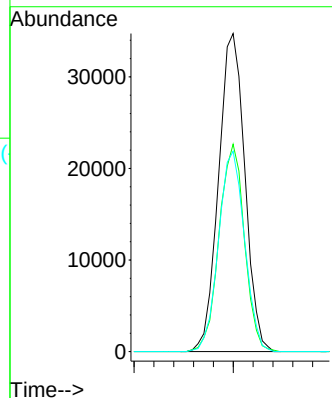
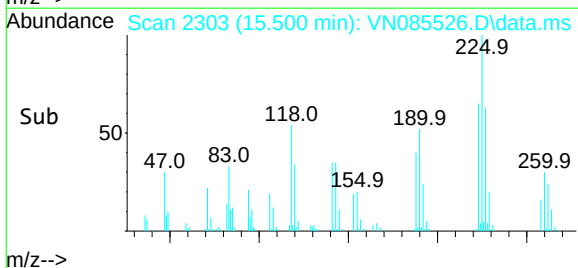
Delta R.T. 0.000 min

Lab File: VN085526.D

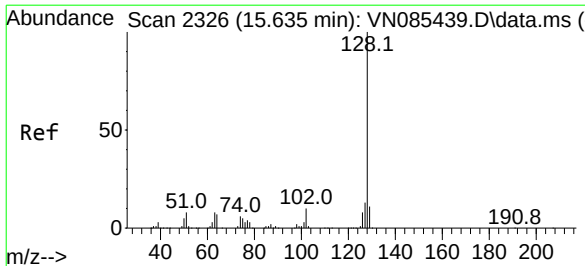
Acq: 28 Jan 2025 09:53



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 63906 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 62.8  | 30.7  | 92.1  |
| 227       | 62.3  | 30.9  | 92.5  |







#95

Naphthalene

Concen: 52.473 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:128 Resp: 367063

Ion Ratio Lower Upper

128 100

127 12.9 10.6 16.0

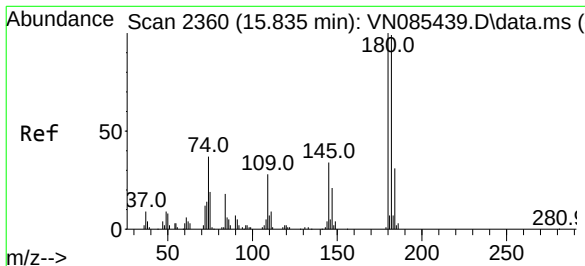
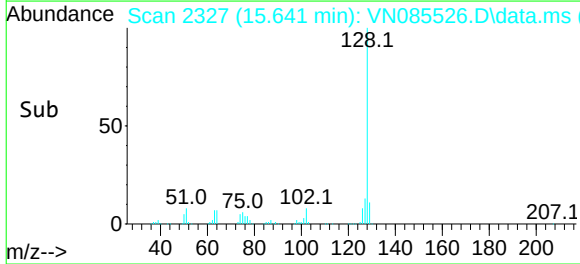
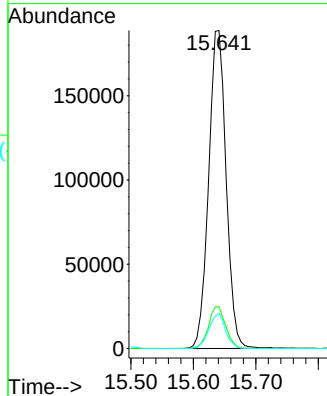
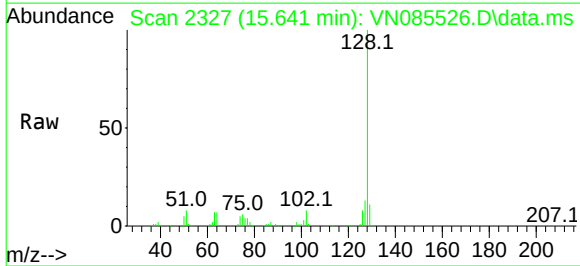
129 10.5 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#96

1,2,3-Trichlorobenzene

Concen: 51.230 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

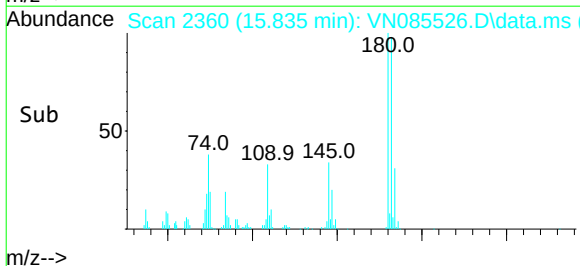
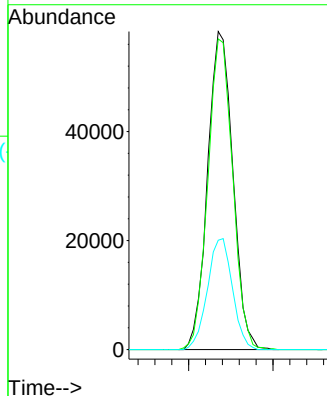
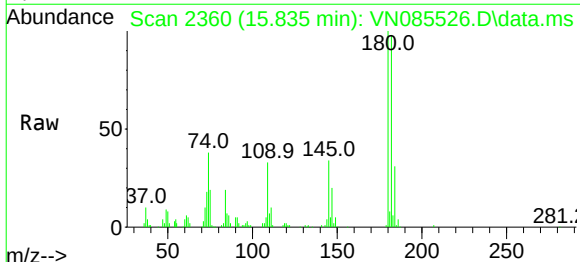
Tgt Ion:180 Resp: 121516

Ion Ratio Lower Upper

180 100

182 96.0 47.4 142.2

145 34.5 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 102   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.677 | 0.620 | 8.4   | 101   | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.642 | 12.4  | 96    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.665 | 9.8#  | 99    | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.389 | 12.6  | 95    | 0.00     |
| 6 T   | Chloroethane                | 0.467 | 0.439 | 6.0   | 106   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.069 | 1.071 | -0.2  | 110   | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.361 | 2.2   | 102   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.618 | -2.7  | 116   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.708 | -2.6  | 100   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.108 | -17.4 | 119   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.526 | 2.0#  | 101   | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.132 | -4.8  | 97    | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.848 | 2.6   | 102   | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.306 | -4.1  | 105   | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.263 | -0.8  | 106   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.391 | 15.8  | 96    | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.859 | -8.3  | 111   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.940 | -11.4 | 106   | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.645 | 0.2   | 105   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.570 | 0.5   | 105   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 2.096 | -8.4  | 105   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.493 | -10.3 | 102   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.202 | -2.0  | 105   | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.399 | -3.9  | 105   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 1.098 | -15.2 | 120   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.700 | -3.7  | 105   | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.499 | 8.9   | 94    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.267 | -9.9  | 105   | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.248 | -2.5# | 109   | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.931 | 9.1   | 108   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 1.105 | -3.5  | 111   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.777 | 3.7   | 96    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.355 | -2.3  | 98    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.512 | -5.1  | 109   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.520 | -5.9  | 105   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.602 | -8.1  | 112   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.513 | -12.3 | 109   | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.575 | -7.7  | 107   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.285 | -11.3 | 104   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.585 | -6.2  | 105   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 0.862 | -9.5  | 104   | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.359 | -5.3  | 109   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.407 | -8.8# | 108   | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.287 | -6.3  | 106   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.613 | -11.7 | 108   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.409 | -15.5 | 102   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.006 | 0.0    | 94    | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.296 | -5.2   | 100   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.535 | -17.1  | 107   | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.975 | -15.0# | 110   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.611 | -17.7  | 109   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.639 | -15.3  | 107   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.375 | -11.9  | 108   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.575 | -22.6  | 104   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.657 | -12.7  | 107   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.256 | -20.2  | 104   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.386 | -20.2  | 106   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.460 | -13.6  | 109   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.366 | -9.6   | 108   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.467 | -10.7  | 102   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 102   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.361 | -5.9   | 114   | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.171 | -6.9   | 111   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.430 | -7.0   | 112   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 2.053 | -15.1# | 112   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.785 | -19.1  | 113   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.739 | -17.3  | 110   | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.279 | -22.6  | 111   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.334 | -16.0  | 109   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 106   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.736 | -10.7  | 115   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.605 | -5.8   | 105   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.170 | 1.8    | 109   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 0.945 | 7.0    | 112   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.891 | -1.0   | 110   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.503 | -12.7  | 115   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.728 | -5.5   | 112   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 3.177 | -14.0  | 115   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.408 | -8.5   | 111   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.778 | -7.9   | 114   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.605 | -11.3  | 113   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 3.219 | -15.9  | 113   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.731 | -15.0  | 116   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 3.155 | -19.9  | 117   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.699 | -4.6   | 115   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.700 | -1.0   | 116   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.700 | -16.0  | 115   | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.625 | -1.1   | 115   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.644 | -1.5   | 112   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.225 | -3.2   | 108   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.817 | -8.5   | 111   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.410 | -2.5   | 119   | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.357 | -4.9   | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085526.D  
Acq On : 28 Jan 2025 09:53  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.762 | 0.780 | -2.4 | 105   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 102   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 45.800  | 8.4   | 101   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 43.823  | 12.4  | 96    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 45.155  | 9.7#  | 99    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 43.757  | 12.5  | 95    | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 46.993  | 6.0   | 106   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 50.109  | -0.2  | 110   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 48.819  | 2.4   | 102   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 51.335  | -2.7  | 116   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 51.306  | -2.6  | 100   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 293.091 | -17.2 | 119   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 49.022  | 2.0#  | 101   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 261.783 | -4.7  | 97    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 48.683  | 2.6   | 102   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 260.994 | -4.4  | 105   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 251.929 | -0.8  | 106   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 42.095  | 15.8  | 96    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 54.151  | -8.3  | 111   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 55.663  | -11.3 | 106   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 49.931  | 0.1   | 105   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 49.692  | 0.6   | 105   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 54.237  | -8.5  | 105   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 276.027 | -10.4 | 102   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 51.014  | -2.0  | 105   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 260.223 | -4.1  | 105   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 57.640  | -15.3 | 120   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 51.799  | -3.6  | 105   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 45.505  | 9.0   | 94    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 274.712 | -9.9  | 105   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 51.246  | -2.5# | 109   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 45.451  | 9.1   | 108   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 51.727  | -3.5  | 111   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 48.164  | 3.7   | 96    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 98    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 51.240  | -2.5  | 98    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 52.537  | -5.1  | 109   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 52.923  | -5.8  | 105   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 54.013  | -8.0  | 112   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 56.039  | -12.1 | 109   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 53.828  | -7.7  | 107   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 55.717  | -11.4 | 104   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 53.072  | -6.1  | 105   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 54.755  | -9.5  | 104   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 52.672  | -5.3  | 109   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 54.447  | -8.9# | 108   | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 53.179  | -6.4  | 106   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 55.774  | -11.5 | 108   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 57.693  | -15.4 | 102   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|--------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1019.345 | -1.9   | 94    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 52.569   | -5.1   | 100   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 292.599  | -17.0  | 107   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 57.499   | -15.0# | 110   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 58.899   | -17.8  | 109   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 57.610   | -15.2  | 107   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 55.851   | -11.7  | 108   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 50.844   | -1.7   | 104   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 56.327   | -12.7  | 107   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 300.465  | -20.2  | 104   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 300.034  | -20.0  | 106   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 56.815   | -13.6  | 109   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 54.776   | -9.6   | 108   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 55.379   | -10.8  | 102   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0    | 102   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 52.974   | -5.9   | 114   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 53.457   | -6.9   | 111   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 53.447   | -6.9   | 112   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 57.531   | -15.1# | 112   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 119.124  | -19.1  | 113   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 58.639   | -17.3  | 110   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 61.343   | -22.7  | 111   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 58.046   | -16.1  | 109   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0    | 106   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 55.357   | -10.7  | 115   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 52.919   | -5.8   | 105   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 49.089   | 1.8    | 109   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 46.478   | 7.0    | 112   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 50.547   | -1.1   | 110   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 56.362   | -12.7  | 115   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 52.764   | -5.5   | 112   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 56.984   | -14.0  | 115   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 54.370   | -8.7   | 111   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 53.960   | -7.9   | 114   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 55.641   | -11.3  | 113   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 57.941   | -15.9  | 113   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 57.499   | -15.0  | 116   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 53.532   | -7.1   | 117   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 52.335   | -4.7   | 115   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 50.507   | -1.0   | 116   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 58.013   | -16.0  | 115   | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 50.630   | -1.3   | 115   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 50.739   | -1.5   | 112   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 51.620   | -3.2   | 108   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 54.246   | -8.5   | 111   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 51.348   | -2.7   | 119   | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 52.473   | -4.9   | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085526.D  
Acq On : 28 Jan 2025 09:53  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 51.230 | -2.5 | 105   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA\_N Calibration Date/Time: 01/28/2025 18:14

Lab File ID: VN085546.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

| COMPOUND                       | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Chloromethane                  | 0.733 | 0.606  | 0.1        | -17.33 | 50    |
| Vinyl Chloride                 | 0.737 | 0.641  |            | -13.03 | 50    |
| Bromomethane                   | 0.445 | 0.362  |            | -18.65 | 50    |
| Chloroethane                   | 0.467 | 0.426  |            | -8.78  | 50    |
| Trichlorofluoromethane         | 1.069 | 1.034  |            | -3.27  | 50    |
| 1,1,2-Trichlorotrifluoroethane | 0.602 | 0.590  |            | -1.99  | 50    |
| 1,1-Dichloroethene             | 0.537 | 0.523  |            | -2.61  | 50    |
| Acetone                        | 0.261 | 0.285  |            | 9.19   | 50    |
| Carbon Disulfide               | 1.652 | 1.307  |            | -20.88 | 50    |
| Methyl tert-butyl Ether        | 1.742 | 1.909  |            | 9.59   | 50    |
| Methylene Chloride             | 0.646 | 0.637  |            | -1.39  | 50    |
| trans-1,2-Dichloroethene       | 0.573 | 0.549  |            | -4.19  | 50    |
| 1,1-Dichloroethane             | 1.178 | 1.186  | 0.1        | 0.68   | 50    |
| 2-Butanone                     | 0.384 | 0.451  |            | 17.45  | 50    |
| Carbon Tetrachloride           | 0.557 | 0.573  |            | 2.87   | 50    |
| cis-1,2-Dichloroethene         | 0.675 | 0.693  |            | 2.67   | 50    |
| Chloroform                     | 1.218 | 1.238  |            | 1.64   | 50    |
| 1,1,1-Trichloroethane          | 1.068 | 1.078  |            | 0.94   | 50    |
| Methylcyclohexane              | 0.457 | 0.458  |            | 0.22   | 50    |
| Benzene                        | 1.463 | 1.498  |            | 2.39   | 50    |
| 1,2-Dichloroethane             | 0.551 | 0.571  |            | 3.63   | 50    |
| Trichloroethene                | 0.341 | 0.341  |            | 0      | 50    |
| 1,2-Dichloropropane            | 0.374 | 0.391  |            | 4.55   | 50    |
| Bromodichloromethane           | 0.549 | 0.602  |            | 9.65   | 50    |
| 4-Methyl-2-Pentanone           | 0.457 | 0.577  |            | 26.26  | 50    |
| Toluene                        | 0.848 | 0.923  |            | 8.84   | 50    |
| t-1,3-Dichloropropene          | 0.519 | 0.580  |            | 11.75  | 50    |
| cis-1,3-Dichloropropene        | 0.554 | 0.602  |            | 8.66   | 50    |
| 1,1,2-Trichloroethane          | 0.335 | 0.367  |            | 9.55   | 50    |
| 2-Hexanone                     | 0.321 | 0.420  |            | 30.84  | 50    |
| Dibromochloromethane           | 0.405 | 0.444  |            | 9.63   | 50    |
| Tetrachloroethene              | 0.341 | 0.309  |            | -9.38  | 50    |
| Chlorobenzene                  | 1.095 | 1.102  | 0.3        | 0.64   | 50    |
| Ethyl Benzene                  | 1.784 | 1.936  |            | 8.52   | 50    |
| m/p-Xylenes                    | 0.659 | 0.738  |            | 11.99  | 50    |
| o-Xylene                       | 0.630 | 0.697  |            | 10.64  | 50    |
| Styrene                        | 1.043 | 1.210  |            | 16.01  | 50    |
| Bromoform                      | 0.288 | 0.322  | 0.1        | 11.81  | 50    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.





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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA\_N Calibration Date/Time: 01/28/2025 18:14

Lab File ID: VN085546.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

| COMPOUND                  | RRF   | RRF050 | MIN<br>RRF | %D    | MAX%D |
|---------------------------|-------|--------|------------|-------|-------|
| Isopropylbenzene          | 3.375 | 3.613  |            | 7.05  | 50    |
| 1,1,2,2-Tetrachloroethane | 1.192 | 1.228  | 0.3        | 3.02  | 50    |
| 1,3-Dichlorobenzene       | 1.624 | 1.626  |            | 0.12  | 50    |
| 1,4-Dichlorobenzene       | 1.683 | 1.600  |            | -4.93 | 50    |
| 1,2-Dichlorobenzene       | 1.620 | 1.592  |            | -1.73 | 50    |
| 1,2-Dichloroethane-d4     | 0.807 | 0.882  |            | 9.29  | 50    |
| Dibromofluoromethane      | 0.347 | 0.384  |            | 10.66 | 50    |
| Toluene-d8                | 1.232 | 1.397  |            | 13.39 | 50    |
| 4-Bromofluorobenzene      | 0.422 | 0.503  |            | 19.19 | 50    |

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\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/29/2025  
 Supervised By : Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 187799   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 314055   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 286739   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 143565   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |           |
|-----------------------------|--------|-------|----------|----------|------|-----------|
| System Monitoring Compounds |        |       |          |          |      |           |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 165633   | 54.638   | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 109.280%  |
| 35) Dibromofluoromethane    | 8.165  | 113   | 120592   | 55.349   | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 110.700%  |
| 50) Toluene-d8              | 10.565 | 98    | 438659   | 56.666   | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 113.340%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 157860   | 59.614   | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 119.220%  |

|                              |       |     |         |         |          |
|------------------------------|-------|-----|---------|---------|----------|
| Target Compounds             |       |     |         |         | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 109169  | 42.934  | ug/l 94  |
| 3) Chloromethane             | 2.359 | 50  | 113732  | 41.310  | ug/l 100 |
| 4) Vinyl Chloride            | 2.512 | 62  | 120445  | 43.525  | ug/l 98  |
| 5) Bromomethane              | 2.936 | 94  | 67919   | 40.633  | ug/l 97  |
| 6) Chloroethane              | 3.106 | 64  | 80051   | 45.629  | ug/l 97  |
| 7) Trichlorofluoromethane    | 3.495 | 101 | 194108  | 48.343  | ug/l 98  |
| 8) Diethyl Ether             | 3.959 | 74  | 65944   | 47.541  | ug/l 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 110829  | 49.006  | ug/l 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 128917  | 49.778  | ug/l 98  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 122061  | 351.637 | ug/l 99  |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 98130   | 48.687  | ug/l 97  |
| 13) Acrolein                 | 4.177 | 56  | 129555  | 273.407 | ug/l 100 |
| 14) Allyl chloride           | 5.024 | 41  | 155852  | 47.653  | ug/l 98  |
| 15) Acrylonitrile            | 5.712 | 53  | 310806  | 281.891 | ug/l 98  |
| 16) Acetone                  | 4.424 | 43  | 267295  | 272.891 | ug/l 99  |
| 17) Carbon Disulfide         | 4.712 | 76  | 245541  | 39.567  | ug/l 99  |
| 18) Methyl Acetate           | 5.018 | 43  | 178998  | 60.097  | ug/l 99  |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 358554  | 54.787  | ug/l 99  |
| 20) Methylene Chloride       | 5.271 | 84  | 119628  | 49.335  | ug/l 97  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 103142  | 47.884  | ug/l 97  |
| 22) Diisopropyl ether        | 6.671 | 45  | 392245  | 54.034  | ug/l 99  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1454703 | 286.348 | ug/l 98  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 222797  | 50.334  | ug/l 98  |
| 25) 2-Butanone               | 7.482 | 43  | 423099  | 293.531 | ug/l 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 189076  | 52.834  | ug/l 100 |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 130214  | 51.325  | ug/l 99  |
| 28) Bromochloromethane       | 7.812 | 49  | 89552   | 43.487  | ug/l 98  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 275635  | 301.616 | ug/l 100 |
| 30) Chloroform               | 7.965 | 83  | 232517  | 50.826  | ug/l 99  |
| 31) Cyclohexane              | 8.253 | 56  | 166703  | 43.331  | ug/l 97  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 202362  | 50.429  | ug/l 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 152437  | 49.851  | ug/l 99  |
| 37) Ethyl Acetate            | 7.559 | 43  | 171657  | 55.616  | ug/l 98  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 179826  | 51.368  | ug/l 98  |
| 39) Methylcyclohexane        | 9.600 | 83  | 143759  | 50.030  | ug/l 98  |
| 40) Benzene                  | 8.606 | 78  | 470586  | 51.218  | ug/l 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 97709    | 60.848   | ug/l   | 97       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 179469   | 51.863   | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 345380   | 69.836   | ug/l # | 91       |
| 44) Trichloroethene           | 9.347  | 130  | 106986   | 50.023   | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 122928   | 52.380   | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 87054    | 51.408   | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.888  | 83   | 188980   | 54.778   | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.676  | 41   | 134702   | 60.523   | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 46510    | 1240.952 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 906426   | 315.843  | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 289726   | 54.423   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 182074   | 55.846   | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 188960   | 54.260   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 115272   | 54.714   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 183142   | 51.541   | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 203386   | 55.519   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 389176   | 291.087  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 659035   | 326.364  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 139526   | 54.855   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.470 | 107  | 112753   | 53.765   | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 88612    | 45.330   | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 315889   | 50.289   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 117993   | 51.180   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 555215   | 54.268   | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.070 | 106  | 423444   | 111.987  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 199877   | 55.313   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 347052   | 58.032   | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 92343    | 55.980   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 518634   | 53.526   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 244112   | 56.051   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 176292   | 51.507   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 145886m  | 49.995   | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 127032   | 50.181   | ug/l   | 100      |
| 78) n-propylbenzene           | 13.035 | 91   | 616293   | 53.728   | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 384370   | 51.776   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 432662   | 54.059   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 61346    | 56.880   | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 383756   | 51.917   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 354690   | 52.772   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 443501   | 55.598   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.617 | 105  | 504931   | 54.205   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 422476   | 50.325   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 233419   | 50.068   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 229722   | 47.539   | ug/l   | 100      |
| 89) n-Butylbenzene            | 14.053 | 91   | 351230   | 52.557   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 86748    | 48.917   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 228524   | 49.142   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 34650    | 55.439   | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 108928   | 50.399   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 49834    | 43.430   | ug/l   | 95       |
| 95) Naphthalene               | 15.641 | 128  | 342729   | 53.141   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 107618   | 49.210   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085546.D  
Acq On : 28 Jan 2025 18:14  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 03:39:00 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

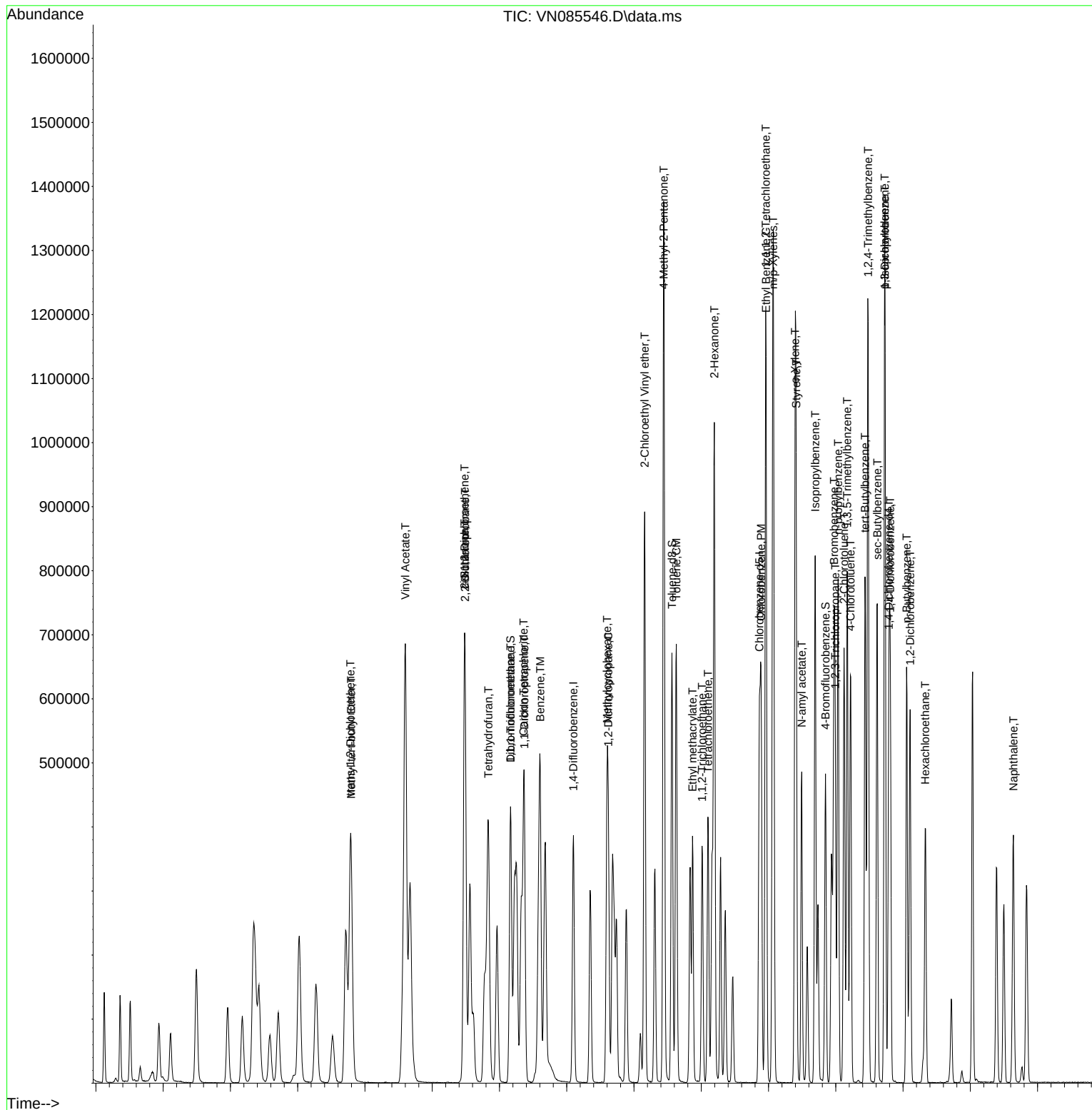
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ALS Vial  : 22   Sample Multiplier: 1
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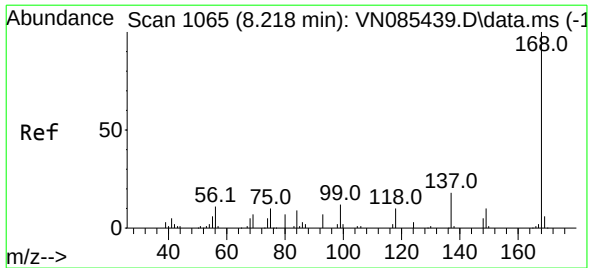
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MSVOA\_N  
**ClientSampleId :**  
VSTDCCC050EC

## Manual Integrations APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

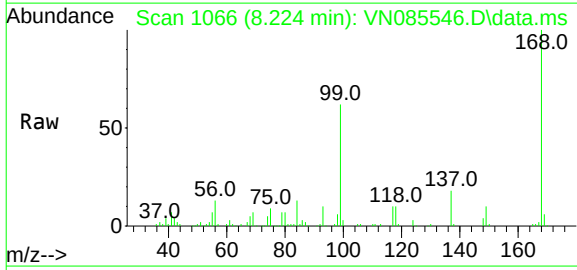
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

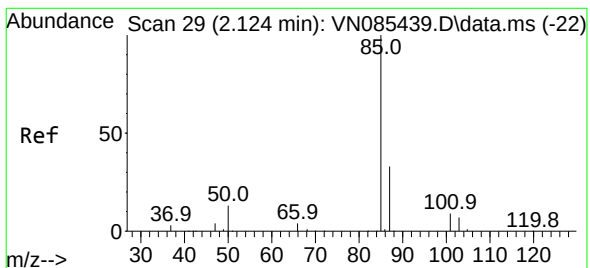
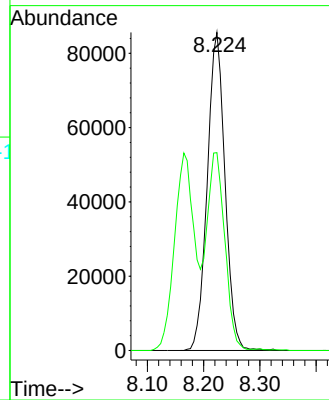
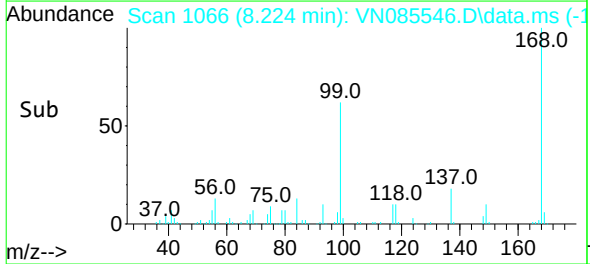
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:168 Resp: 187799  
Ion Ratio Lower Upper  
168 100  
99 62.0 53.6 80.4

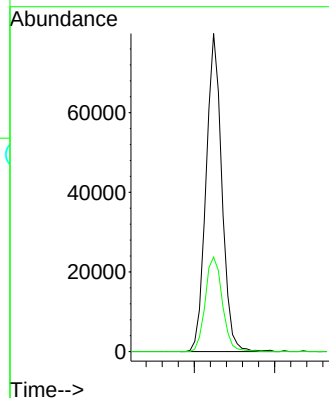
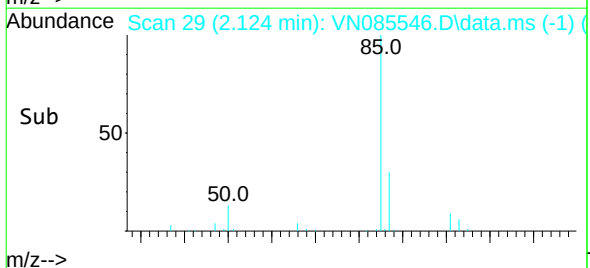
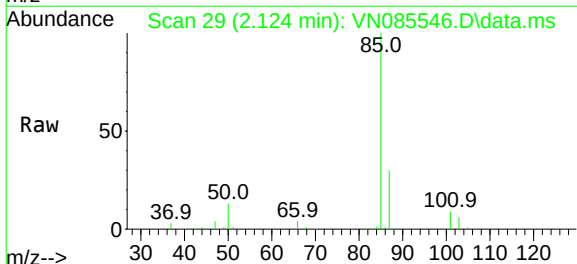
Manual Integrations  
APPROVED

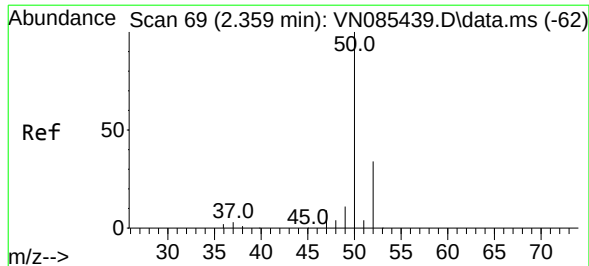
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#2  
Dichlorodifluoromethane  
Concen: 42.934 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 85 Resp: 109169  
Ion Ratio Lower Upper  
85 100  
87 29.7 16.7 50.1





#3

Chloromethane

Concen: 41.310 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 50 Resp: 113732

Ion Ratio Lower Upper

50 100

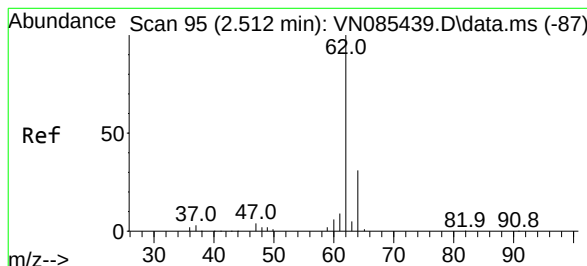
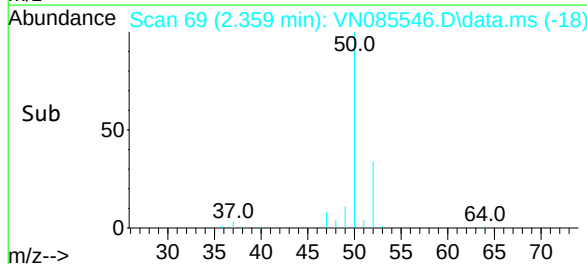
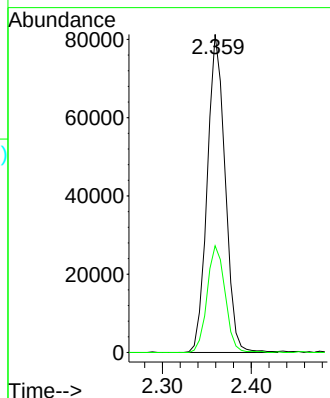
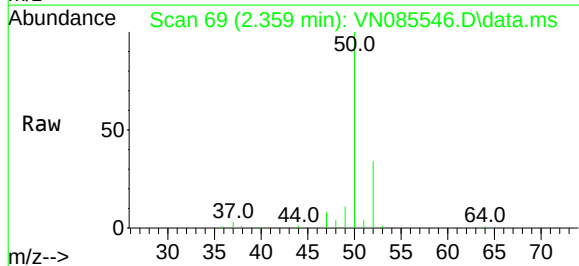
52 33.6 27.0 40.6

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#4

Vinyl Chloride

Concen: 43.525 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085546.D

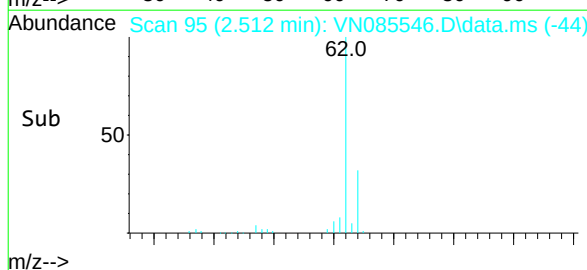
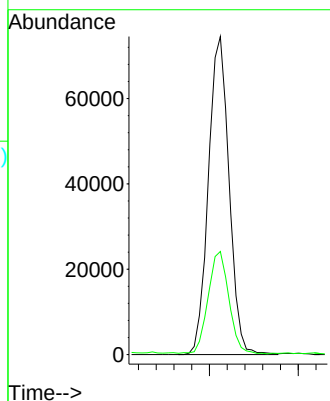
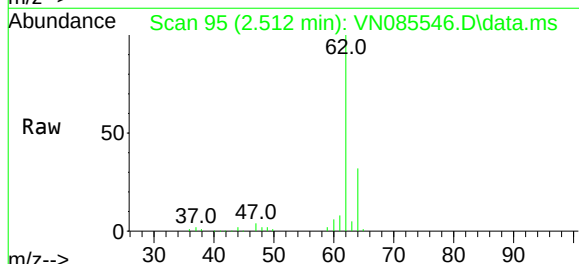
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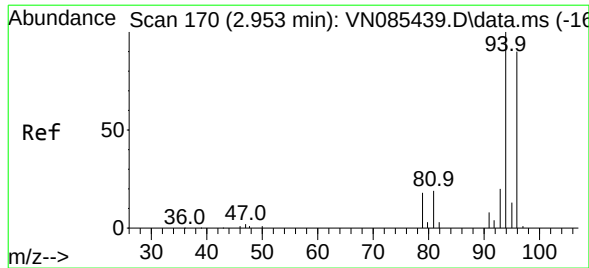
Tgt Ion: 62 Resp: 120445

Ion Ratio Lower Upper

62 100

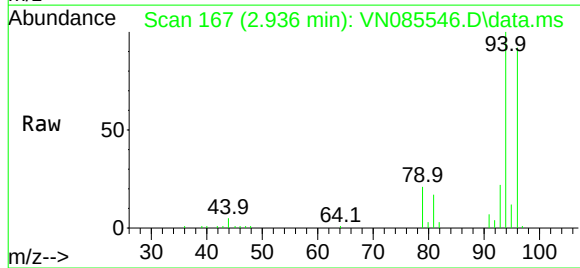
64 32.0 24.8 37.2





#5  
Bromomethane  
Concen: 40.633 ug/l  
RT: 2.936 min Scan# 16  
Delta R.T. -0.018 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

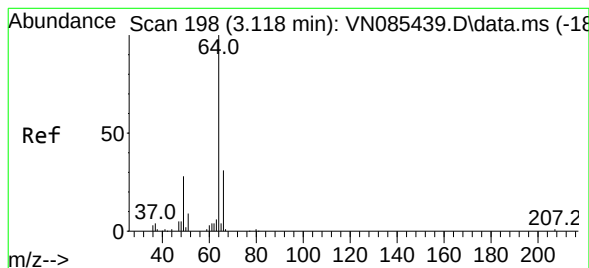
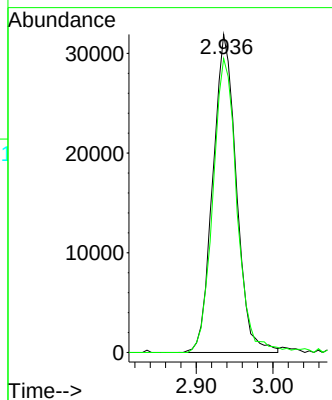
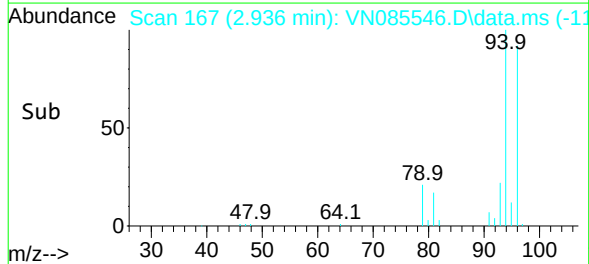
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 94 Resp: 67919  
Ion Ratio Lower Upper  
94 100  
96 92.4 71.8 107.6

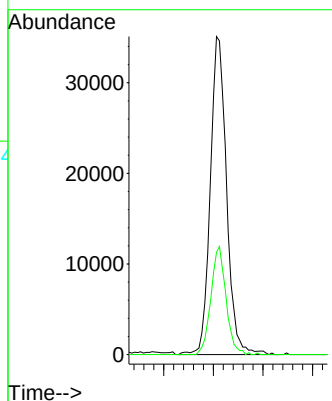
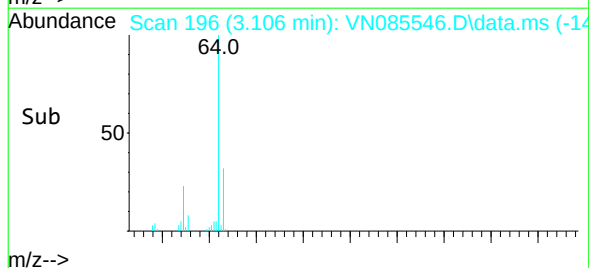
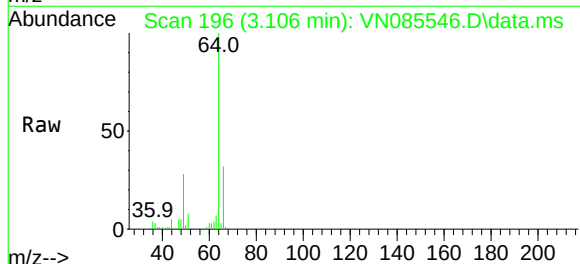
Manual Integrations  
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Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

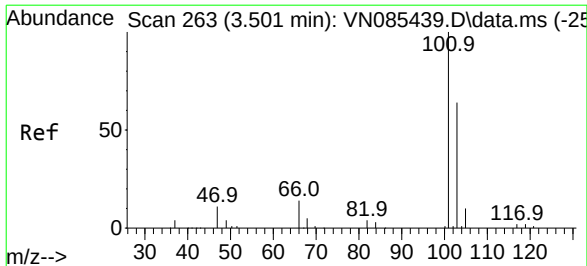


#6  
Chloroethane  
Concen: 45.629 ug/l  
RT: 3.106 min Scan# 196  
Delta R.T. -0.012 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 64 Resp: 80051  
Ion Ratio Lower Upper  
64 100  
66 32.1 24.6 36.8

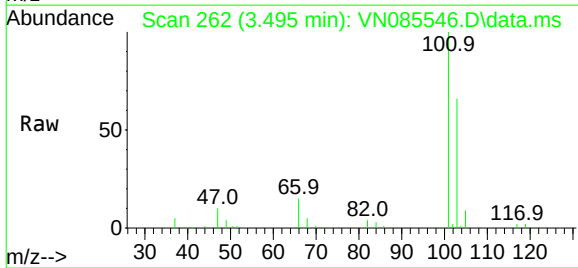






#7  
Trichlorofluoromethane  
Concen: 48.343 ug/l  
RT: 3.495 min Scan# 263  
Delta R.T. -0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

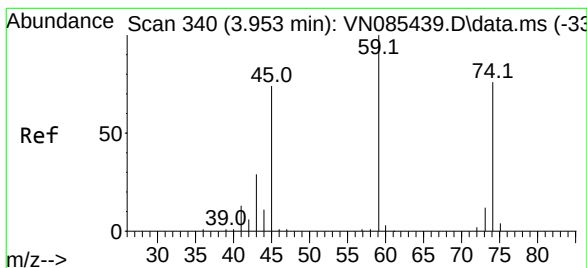
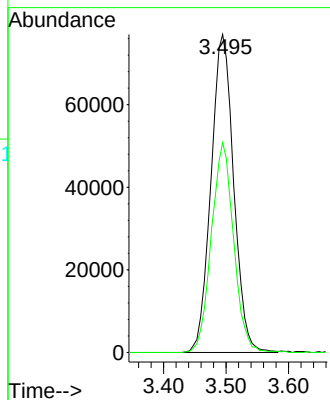
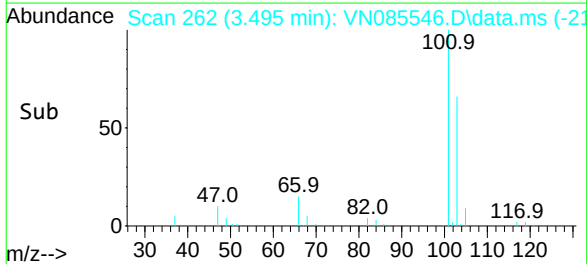
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ClientSampleId :  
VSTDCCC050EC



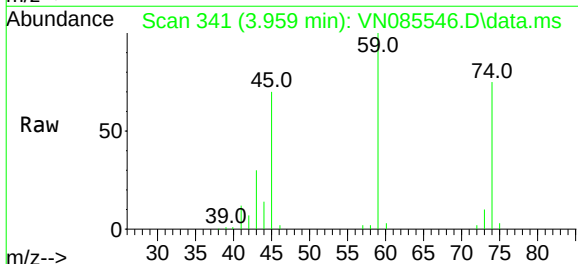
Tgt Ion: 101 Resp: 194108  
Ion Ratio Lower Upper  
101 100  
103 66.0 51.4 77.2

Manual Integrations  
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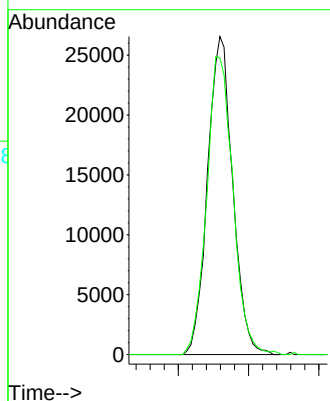
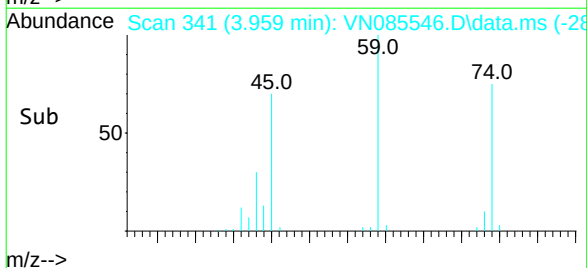
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

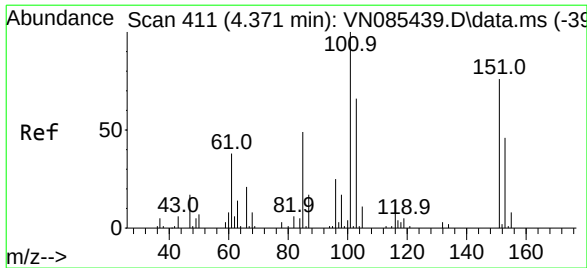


#8  
Diethyl Ether  
Concen: 47.541 ug/l  
RT: 3.959 min Scan# 341  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14



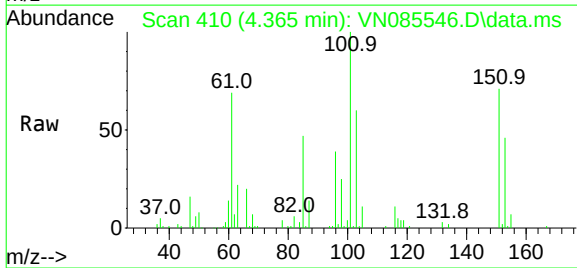
Tgt Ion: 74 Resp: 65944  
Ion Ratio Lower Upper  
74 100  
45 98.3 49.7 149.1





#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 49.006 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

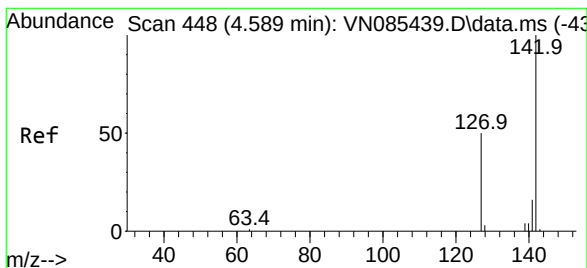
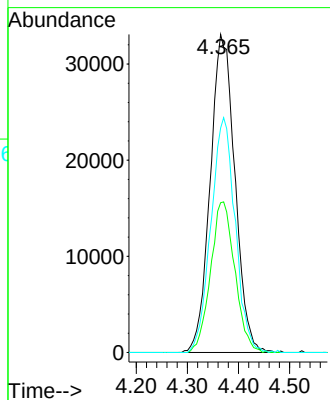
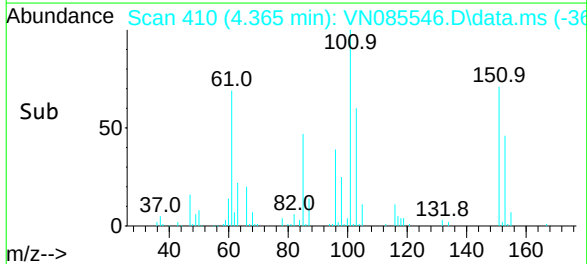
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:101 Resp: 110829  
Ion Ratio Lower Upper  
101 100  
85 46.6 37.8 56.8  
151 72.6 58.8 88.2

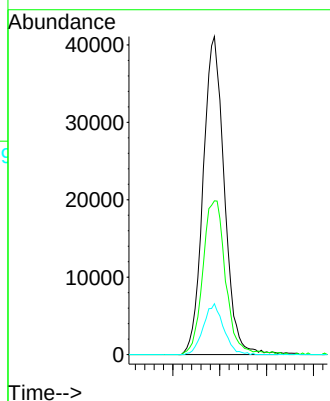
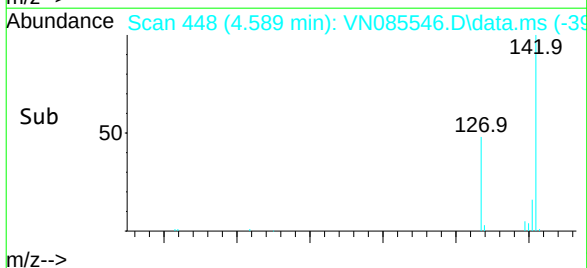
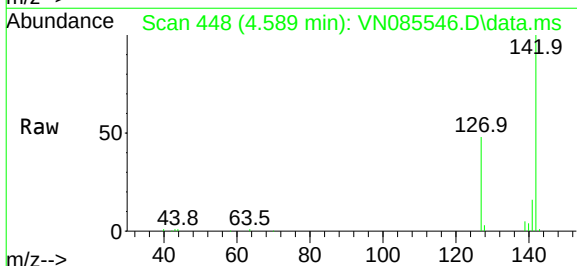
Manual Integrations  
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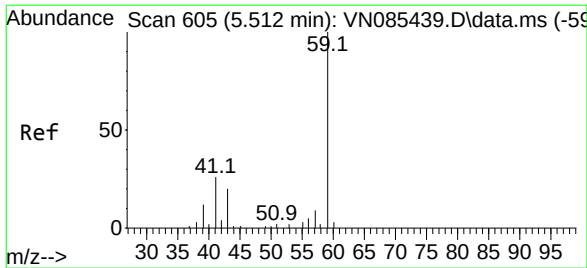
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#10  
Methyl Iodide  
Concen: 49.778 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:142 Resp: 128917  
Ion Ratio Lower Upper  
142 100  
127 48.3 40.3 60.5  
141 16.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 351.637 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 59 Resp: 122061

Ion Ratio Lower Upper

59 100

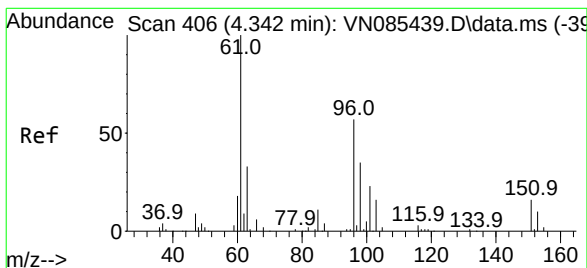
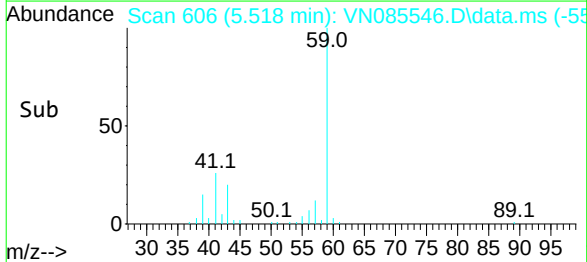
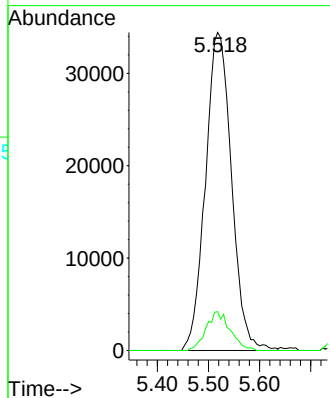
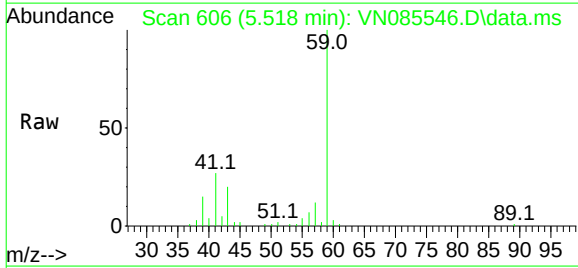
57 11.2 8.6 13.0

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#12

1,1-Dichloroethene

Concen: 48.687 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

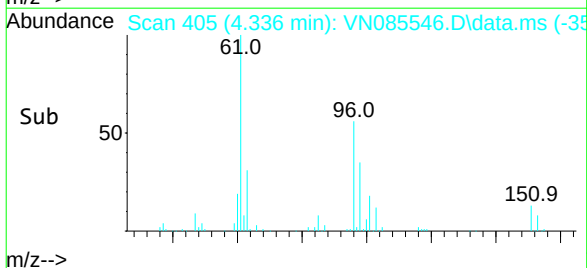
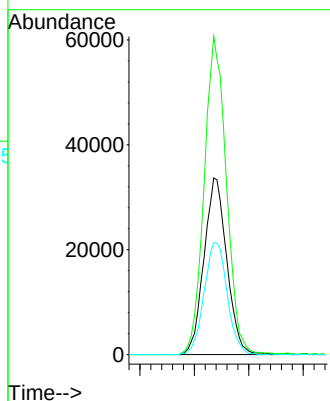
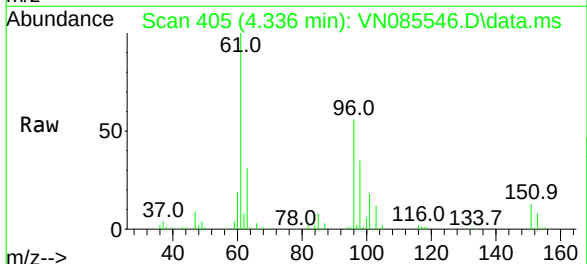
Tgt Ion: 96 Resp: 98130

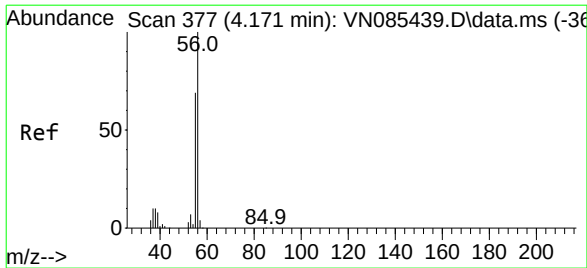
Ion Ratio Lower Upper

96 100

61 180.0 141.0 211.4

98 63.4 49.0 73.6





#13

Acrolein

Concen: 273.407 ug/l

RT: 4.177 min Scan# 37

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 56 Resp: 129555

Ion Ratio Lower Upper

56 100

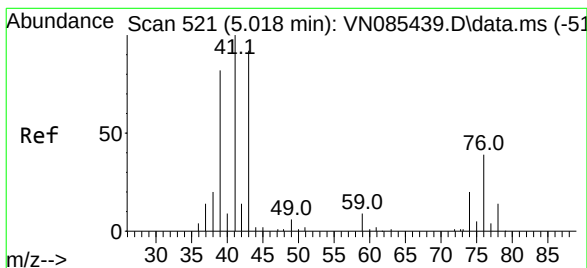
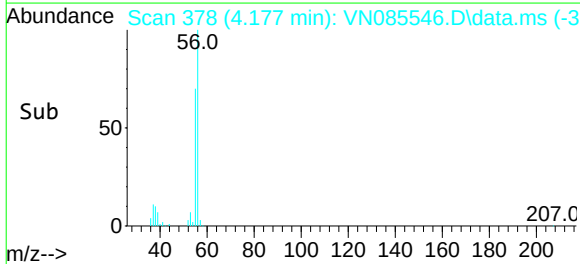
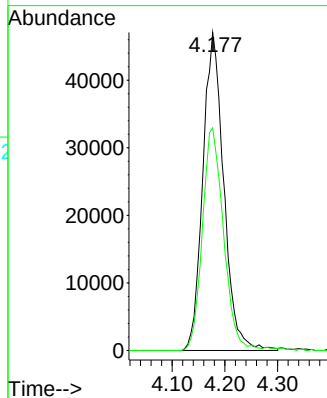
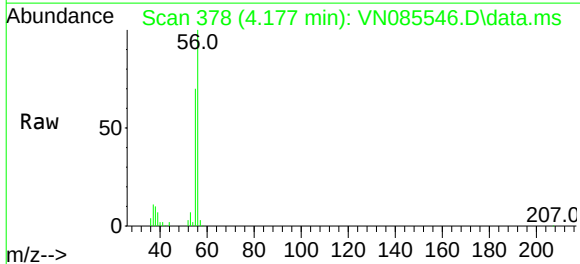
55 70.6 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#14

Allyl chloride

Concen: 47.653 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

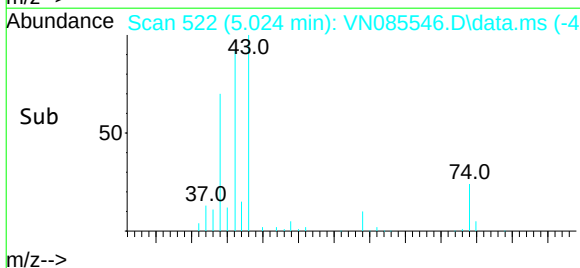
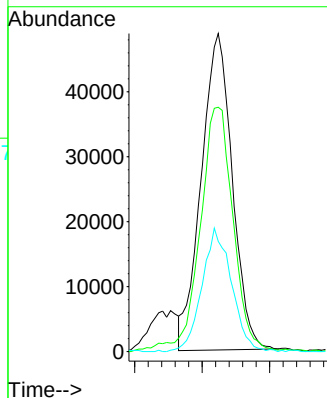
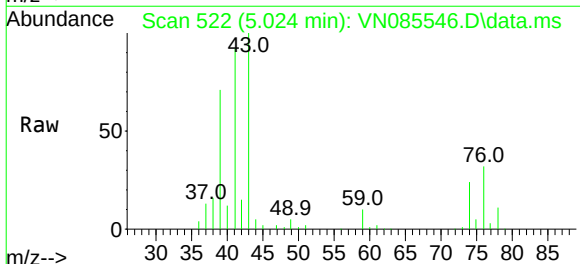
Tgt Ion: 41 Resp: 155852

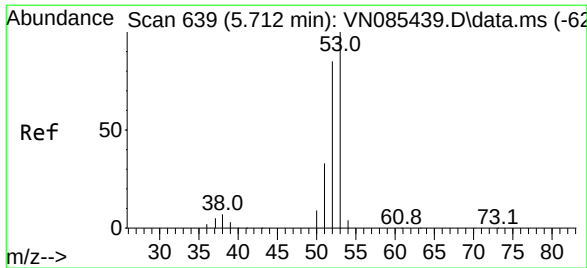
Ion Ratio Lower Upper

41 100

39 82.2 64.4 96.6

76 37.0 30.5 45.7





#15

Acrylonitrile

Concen: 281.891 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 53 Resp: 310806

Ion Ratio Lower Upper

53 100

52 83.9 65.5 98.3

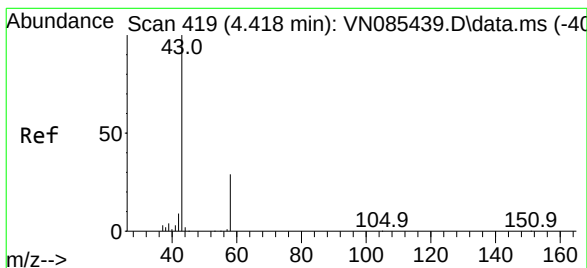
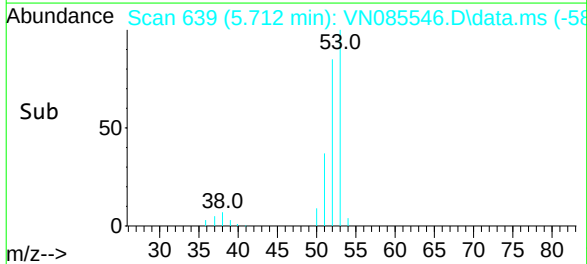
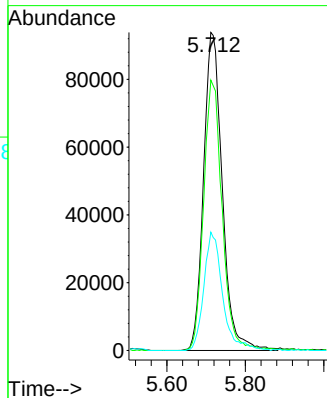
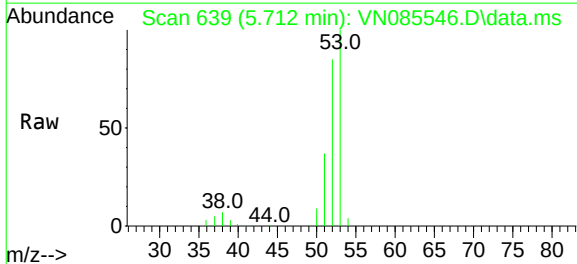
51 37.3 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#16

Acetone

Concen: 272.891 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085546.D

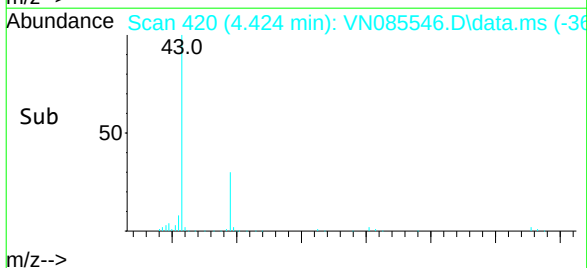
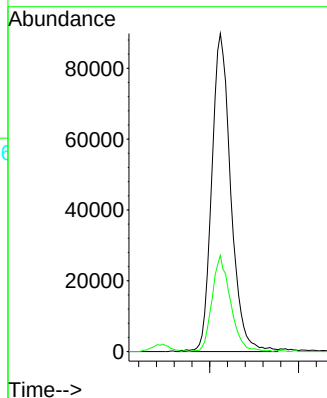
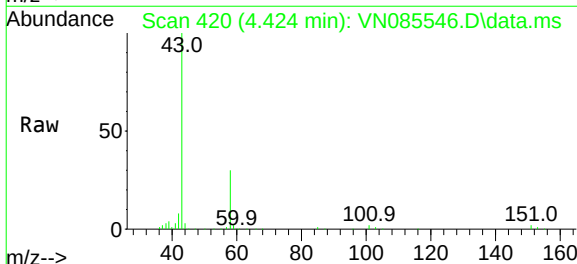
Acq: 28 Jan 2025 18:14

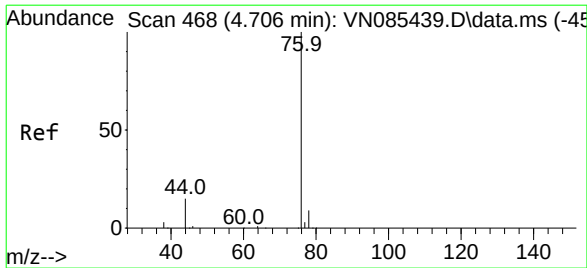
Tgt Ion: 43 Resp: 267295

Ion Ratio Lower Upper

43 100

58 30.0 23.8 35.6





#17

Carbon Disulfide

Concen: 39.567 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085546.D

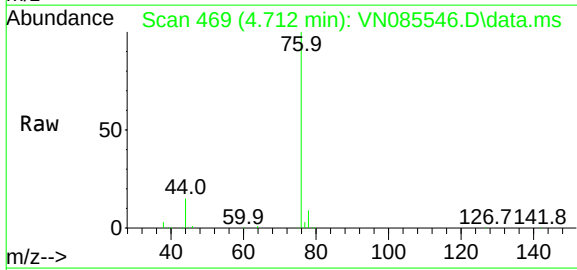
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 76 Resp: 245541

Ion Ratio Lower Upper

76 100

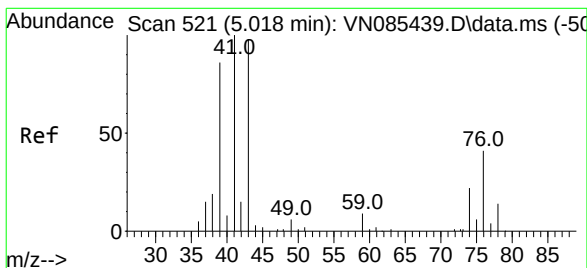
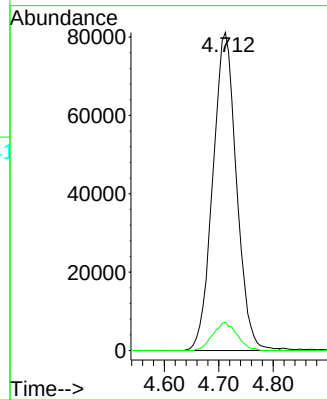
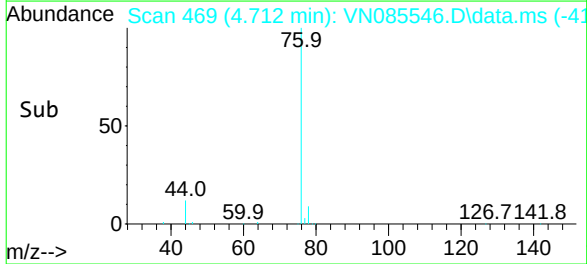
78 8.9 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#18

Methyl Acetate

Concen: 60.097 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085546.D

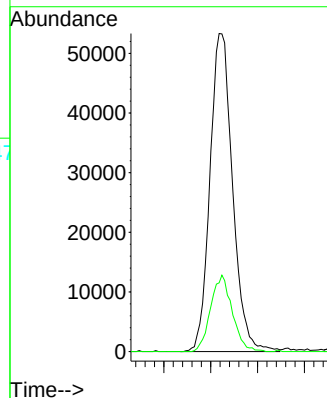
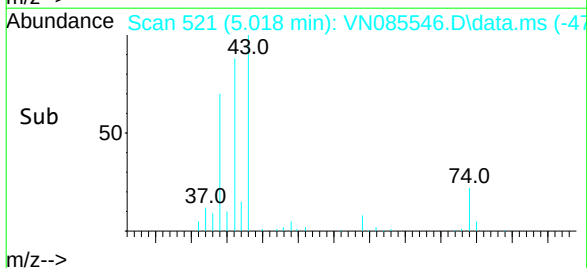
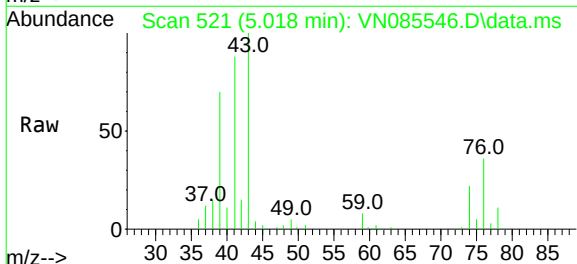
Acq: 28 Jan 2025 18:14

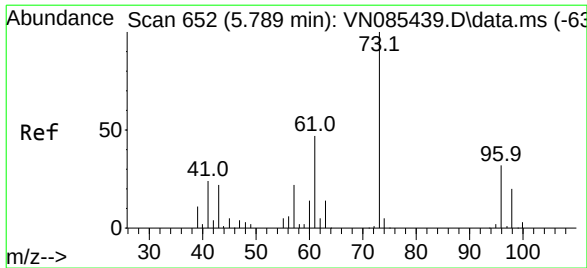
Tgt Ion: 43 Resp: 178998

Ion Ratio Lower Upper

43 100

74 22.9 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 54.787 ug/l

RT: 5.794 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 73 Resp: 358554

Ion Ratio Lower Upper

73 100

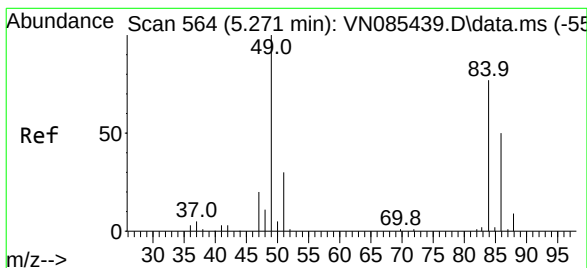
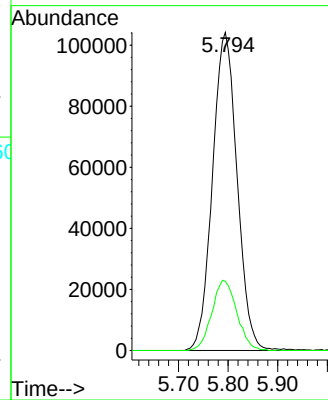
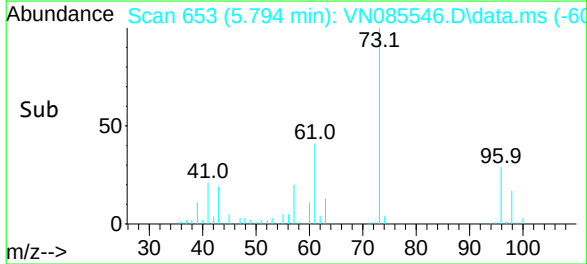
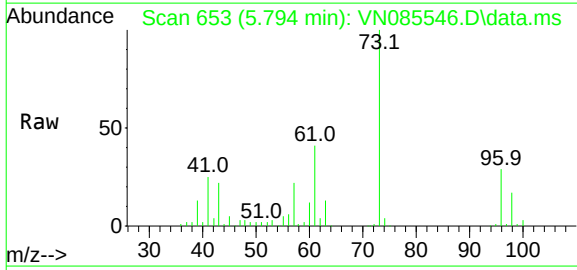
57 21.7 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#20

Methylene Chloride

Concen: 49.335 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Tgt Ion: 84 Resp: 119628

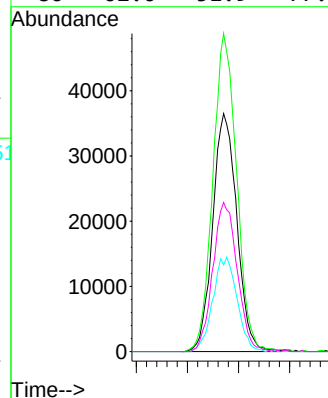
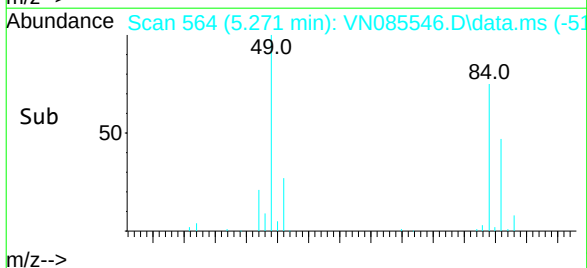
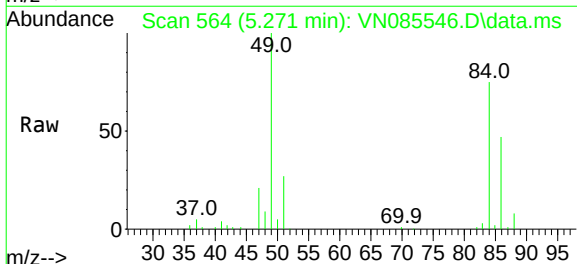
Ion Ratio Lower Upper

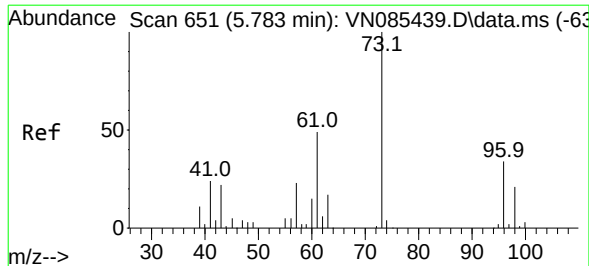
84 100

49 133.6 104.1 156.1

51 36.4 31.0 46.4

86 62.6 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 47.884 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085546.D

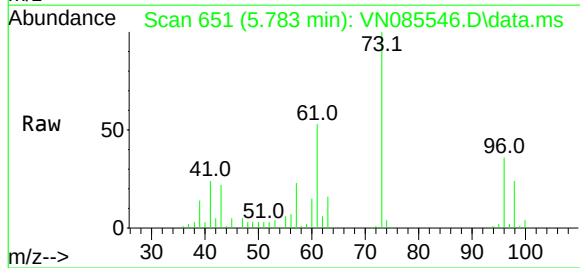
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 96 Resp: 103142

Ion Ratio Lower Upper

96 100

61 146.0 115.7 173.5

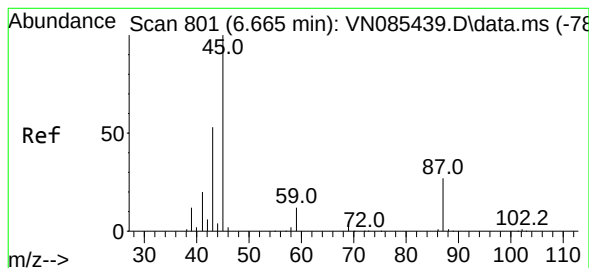
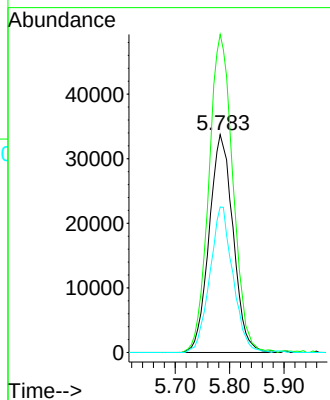
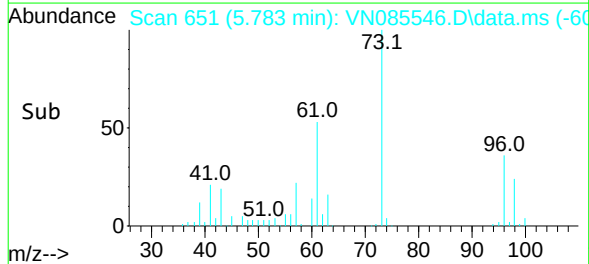
98 66.8 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#22

Diisopropyl ether

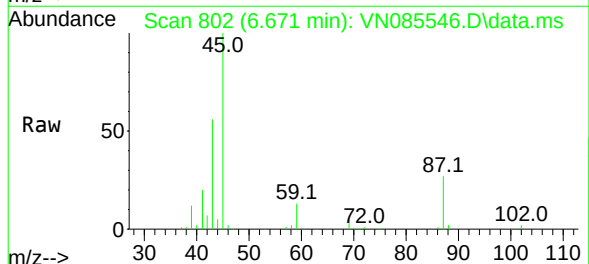
Concen: 54.034 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14



Tgt Ion: 45 Resp: 392245

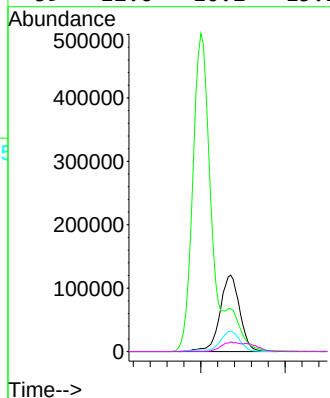
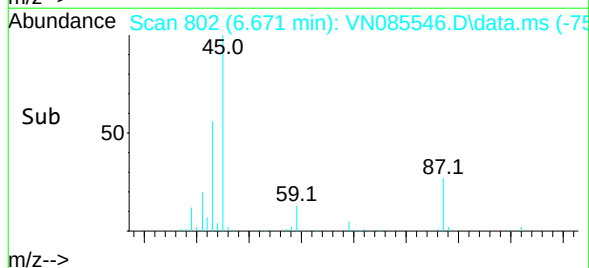
Ion Ratio Lower Upper

45 100

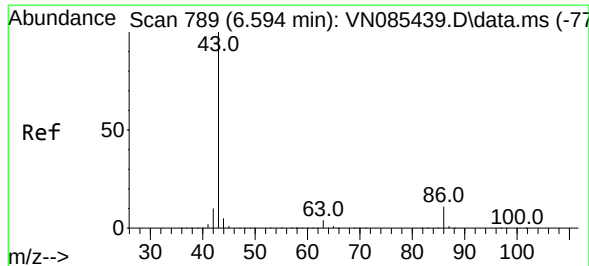
43 54.9 45.0 67.6

87 26.8 21.8 32.8

59 12.6 10.2 15.2







#23

Vinyl Acetate

Concen: 286.348 ug/l

RT: 6.600 min Scan# 79

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 1454703

Ion Ratio Lower Upper

43 100

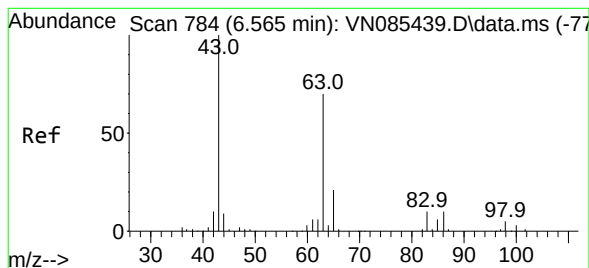
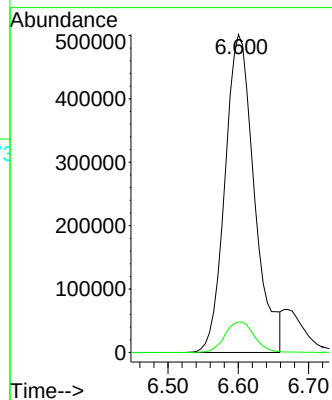
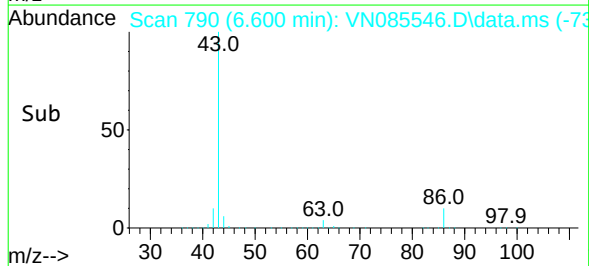
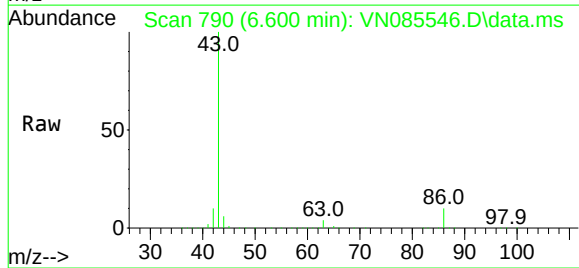
86 9.6 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#24

1,1-Dichloroethane

Concen: 50.334 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

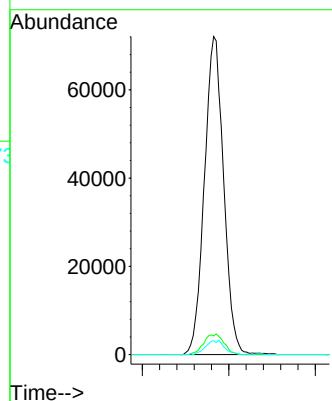
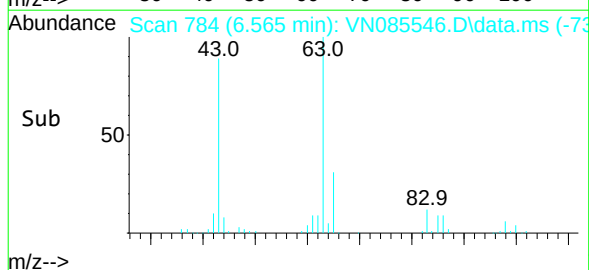
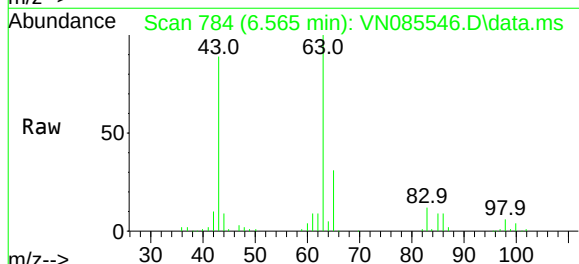
Tgt Ion: 63 Resp: 222797

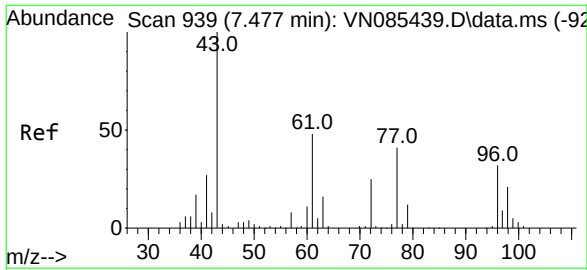
Ion Ratio Lower Upper

63 100

98 5.9 3.3 9.8

100 4.4 2.0 6.0





#25

2-Butanone

Concen: 293.531 ug/l

RT: 7.482 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Tgt Ion: 43 Resp: 423099

Ion Ratio Lower Upper

43 100

72 24.7 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

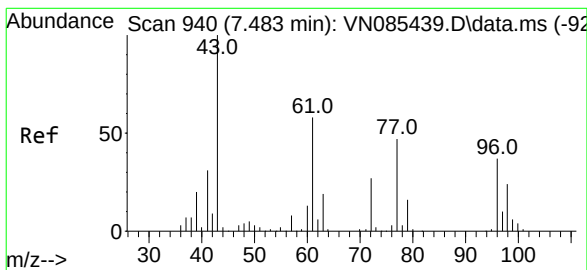
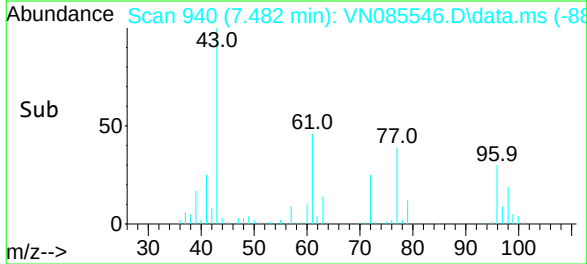
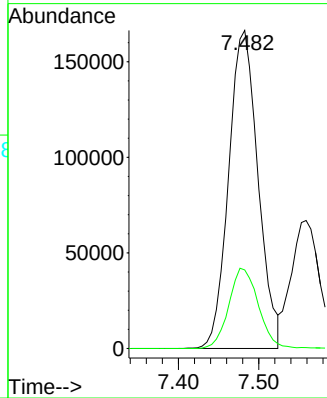
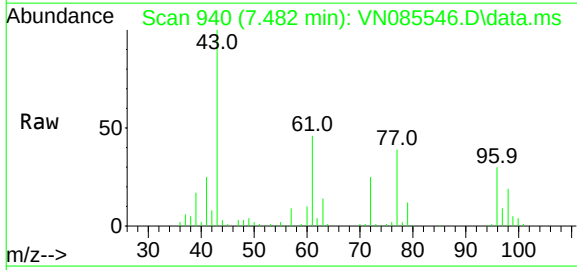
VSTDCCC050EC

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#26

2,2-Dichloropropane

Concen: 52.834 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085546.D

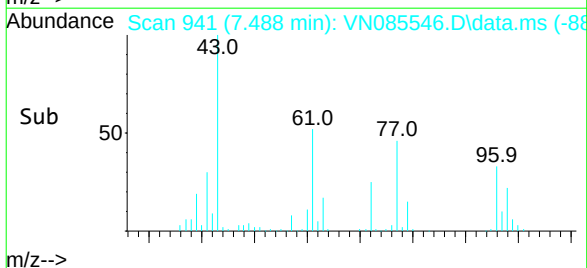
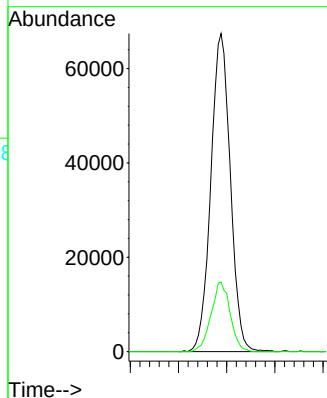
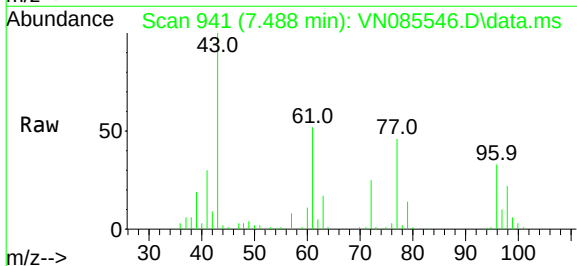
Acq: 28 Jan 2025 18:14

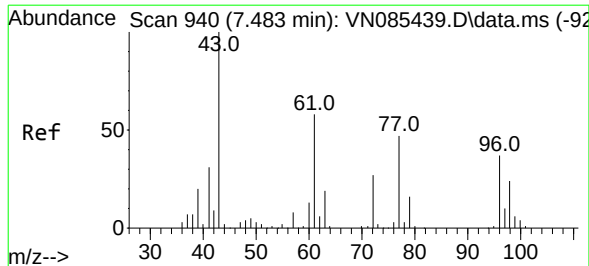
Tgt Ion: 77 Resp: 189076

Ion Ratio Lower Upper

77 100

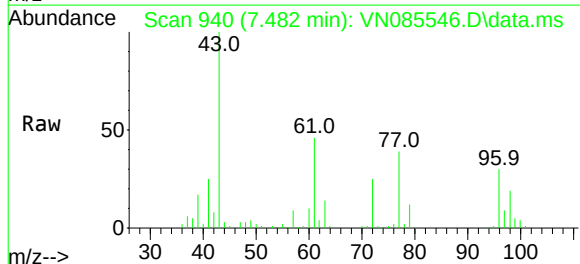
97 21.4 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 51.325 ug/l  
RT: 7.482 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

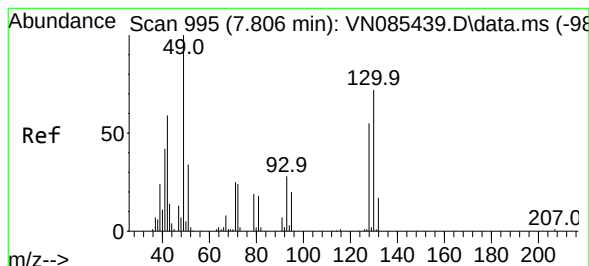
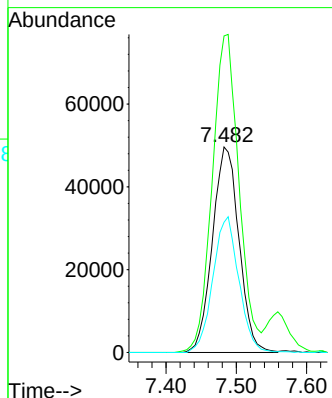
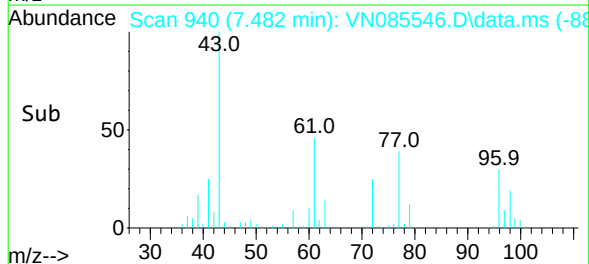
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 96 Resp: 130214  
Ion Ratio Lower Upper  
96 100  
61 155.9 0.0 311.8  
98 64.7 0.0 126.0

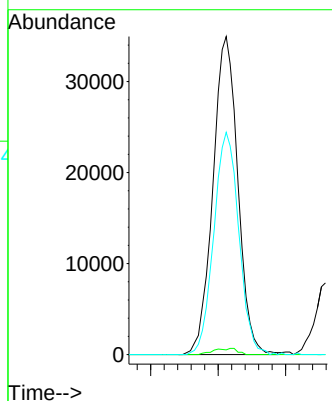
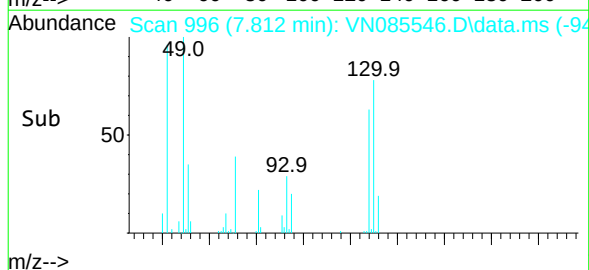
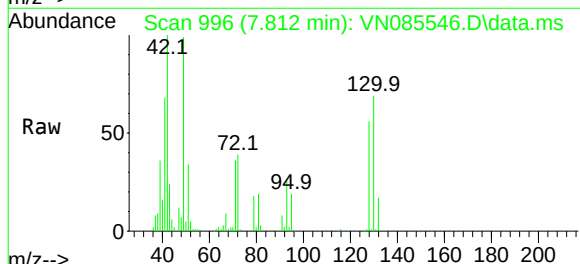
Manual Integrations  
APPROVED

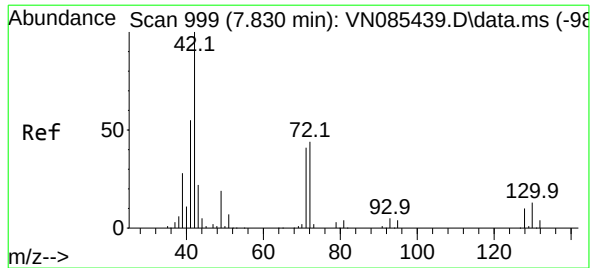
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#28  
Bromochloromethane  
Concen: 43.487 ug/l  
RT: 7.812 min Scan# 996  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 49 Resp: 89552  
Ion Ratio Lower Upper  
49 100  
129 1.9 0.0 4.4  
130 70.3 55.0 82.4





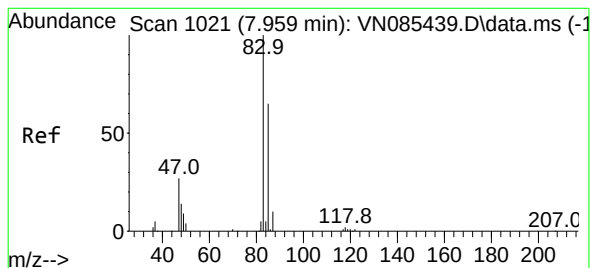
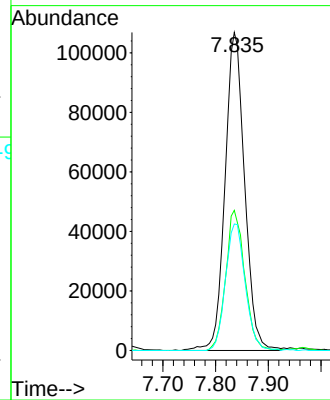
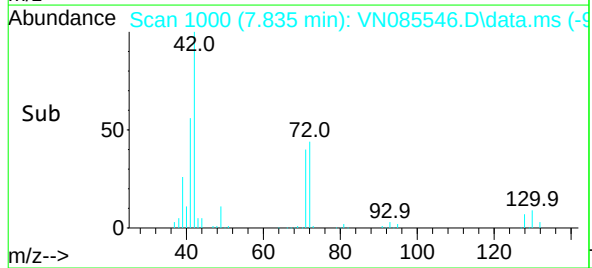
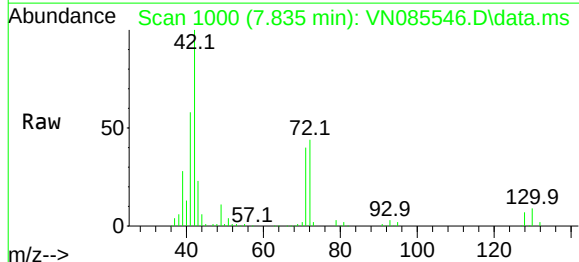
#29  
Tetrahydrofuran  
Concen: 301.616 ug/l  
RT: 7.835 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 42 Resp: 275635  
Ion Ratio Lower Upper  
42 100  
72 42.8 34.2 51.2  
71 40.1 32.5 48.7

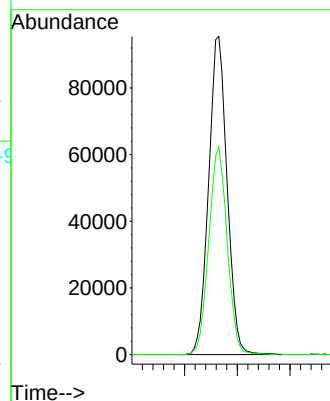
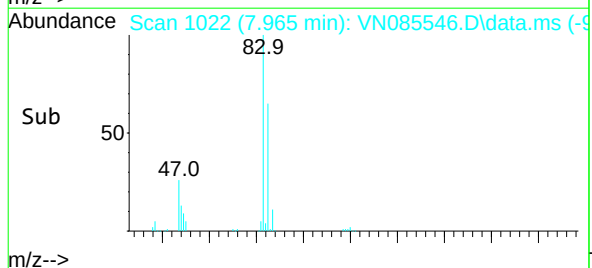
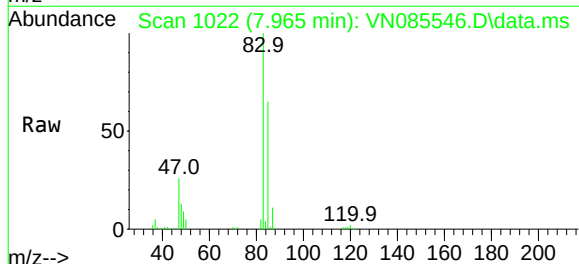
Manual Integrations  
APPROVED

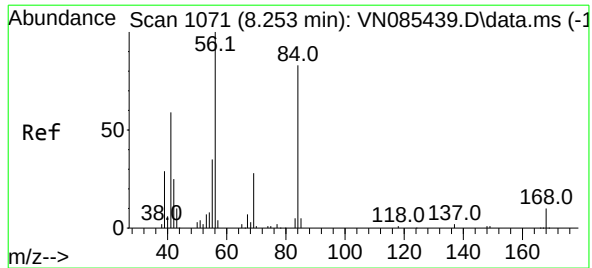
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#30  
Chloroform  
Concen: 50.826 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 83 Resp: 232517  
Ion Ratio Lower Upper  
83 100  
85 65.3 51.8 77.6





#31

Cyclohexane

Concen: 43.331 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 56 Resp: 166703

Ion Ratio Lower Upper

56 100

69 29.8 22.2 33.4

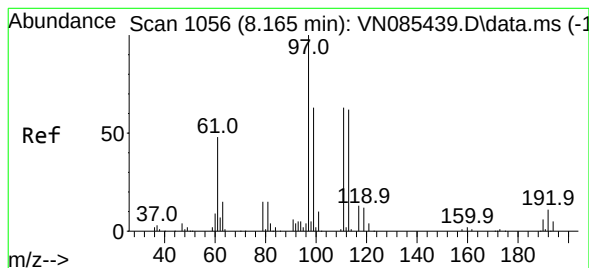
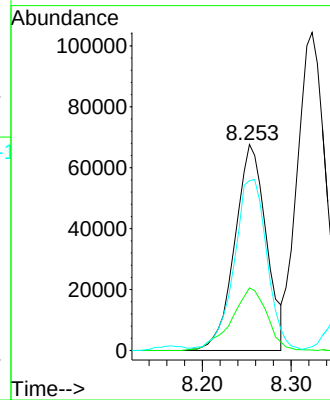
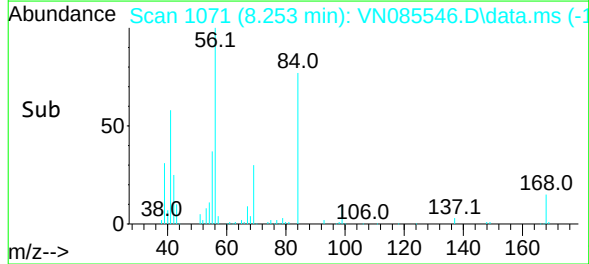
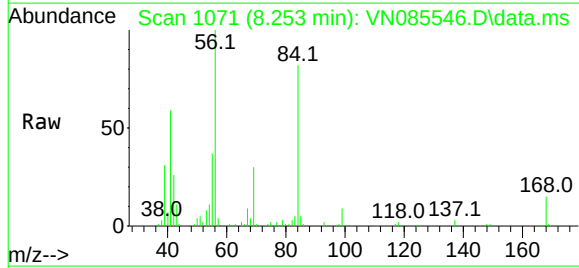
84 80.6 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#32

1,1,1-Trichloroethane

Concen: 50.429 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

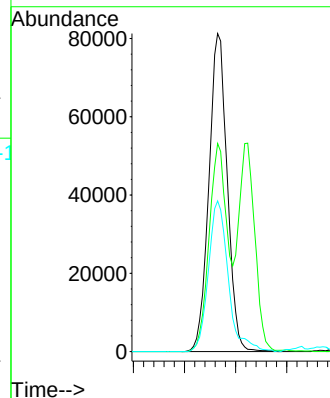
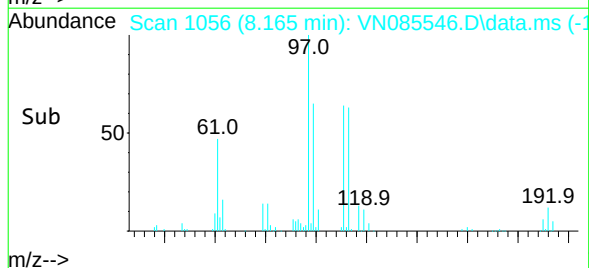
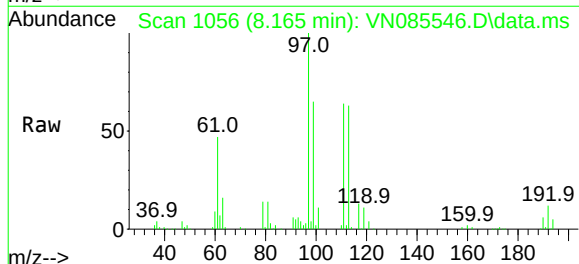
Tgt Ion: 97 Resp: 202362

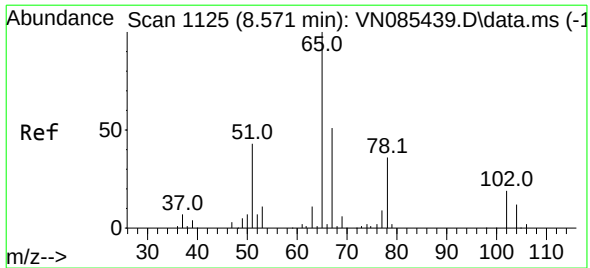
Ion Ratio Lower Upper

97 100

99 65.0 49.8 74.6

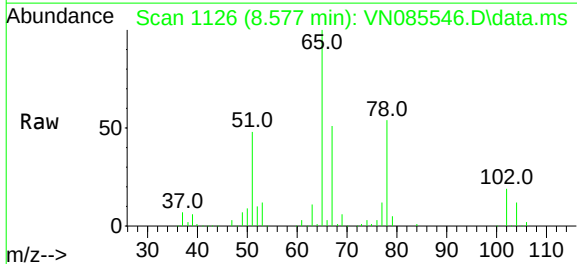
61 51.3 41.4 62.2





#33  
1,2-Dichloroethane-d4  
Concen: 54.638 ug/l  
RT: 8.577 min Scan# 1125  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

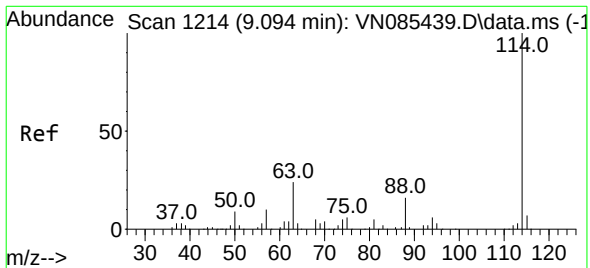
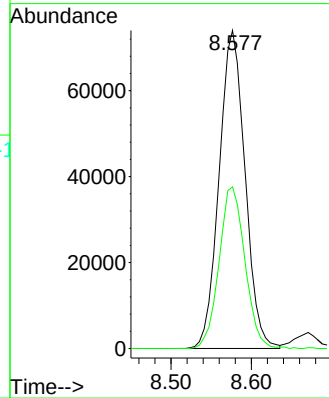
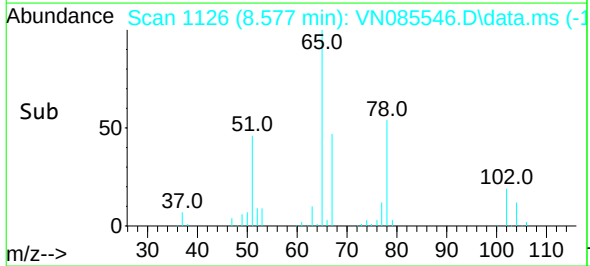
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 65 Resp: 165633  
Ion Ratio Lower Upper  
65 100  
67 50.7 0.0 101.6

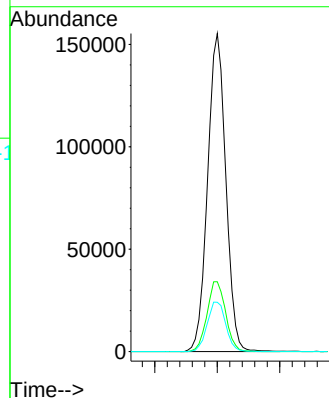
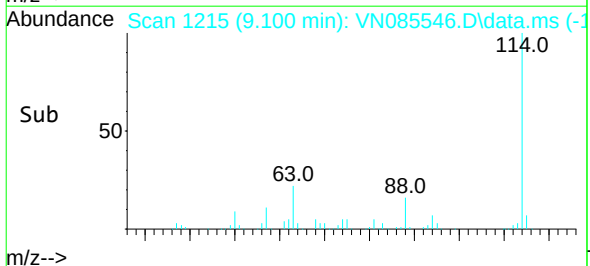
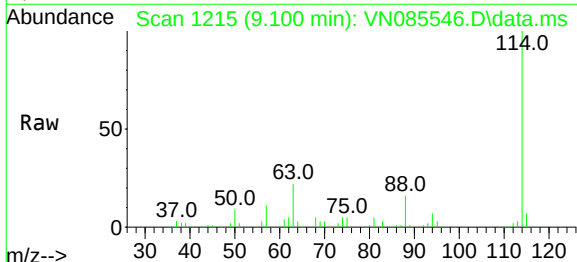
Manual Integrations  
APPROVED

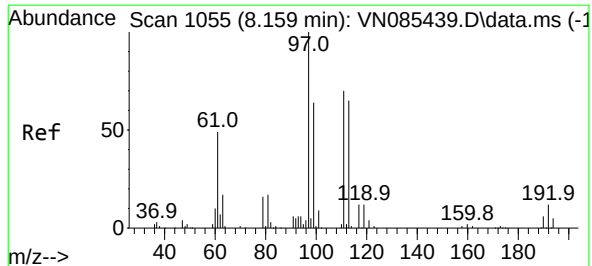
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:114 Resp: 314055  
Ion Ratio Lower Upper  
114 100  
63 22.0 0.0 47.6  
88 15.5 0.0 32.6





#35

Dibromofluoromethane

Concen: 55.349 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 113 Resp: 120592

Ion Ratio Lower Upper

113 100

111 102.9 82.7 124.1

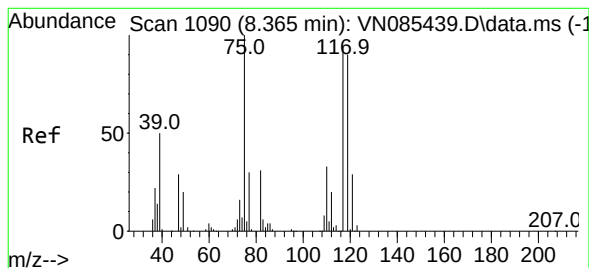
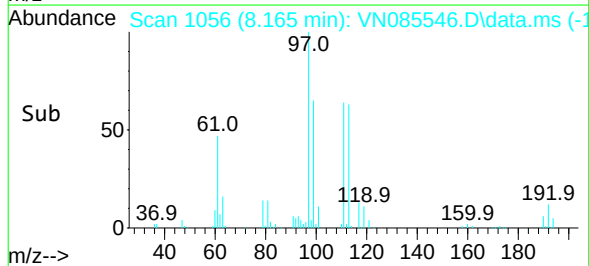
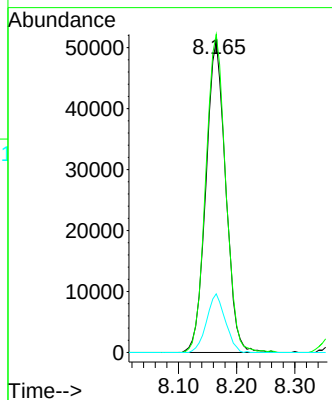
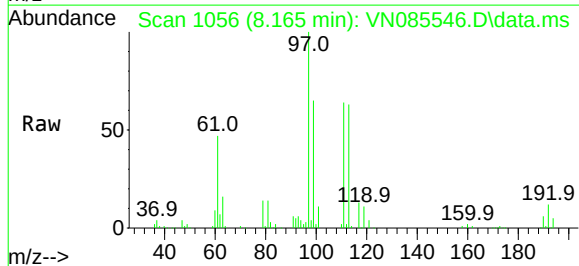
192 17.8 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/29/2025

Supervised By : Semsettin Yesilyurt 01/29/2025



#36

1,1-Dichloropropene

Concen: 49.851 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

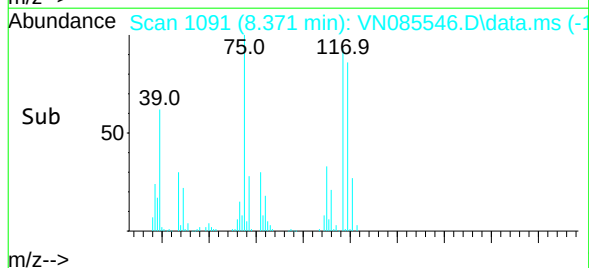
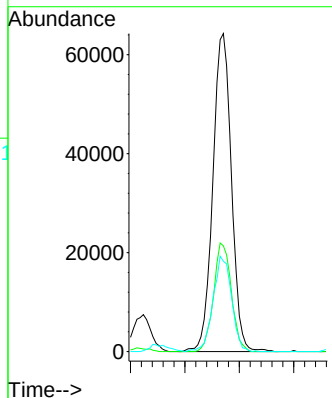
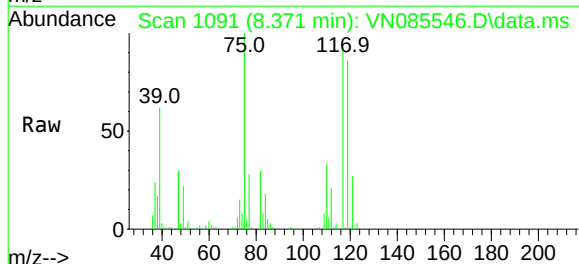
Tgt Ion: 75 Resp: 152437

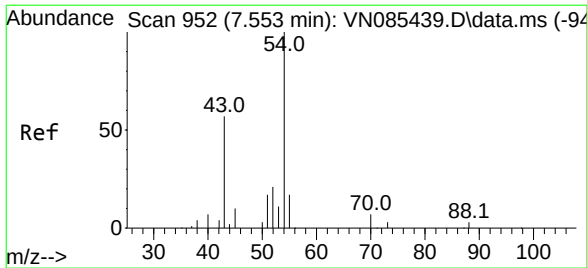
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 29.9 24.4 36.6





#37

Ethyl Acetate

Concen: 55.616 ug/l

RT: 7.559 min Scan# 952

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 171657

Ion Ratio Lower Upper

43 100

61 12.5 10.9 16.3

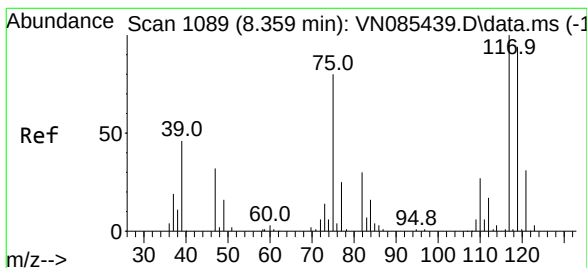
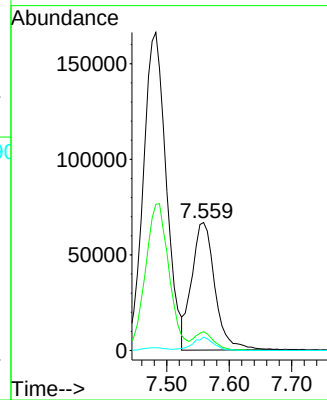
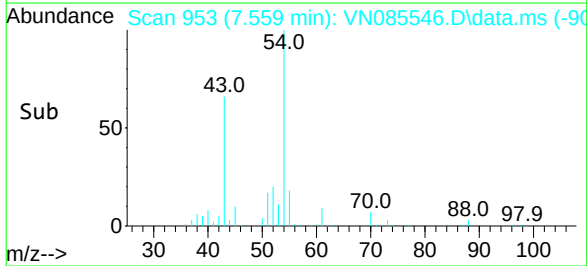
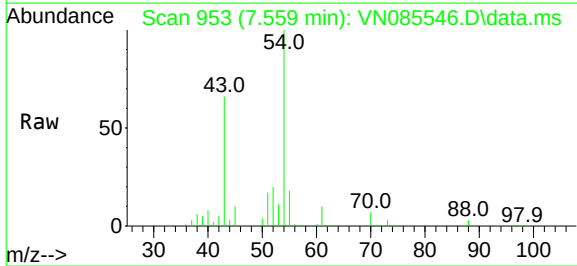
70 9.5 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#38

Carbon Tetrachloride

Concen: 51.368 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

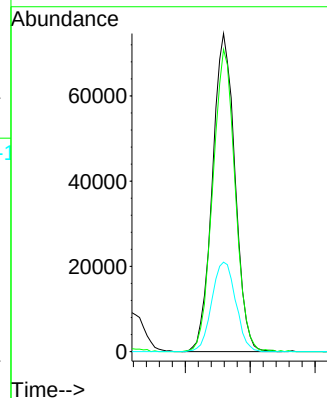
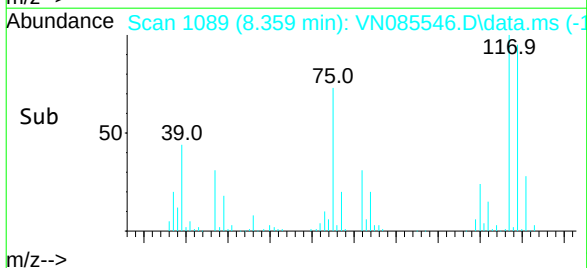
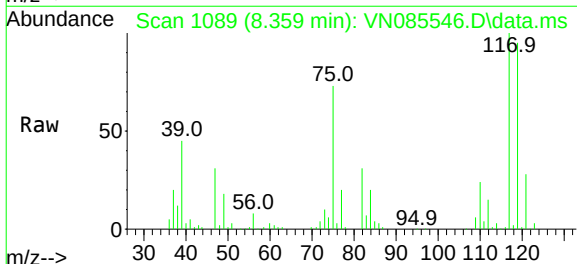
Tgt Ion:117 Resp: 179826

Ion Ratio Lower Upper

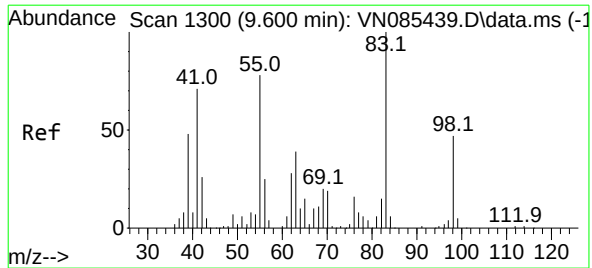
117 100

119 95.0 75.4 113.2

121 28.1 24.6 37.0







#39

Methylcyclohexane

Concen: 50.030 ug/l

RT: 9.600 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 83 Resp: 143759

Ion Ratio Lower Upper

83 100

55 77.8 62.6 94.0

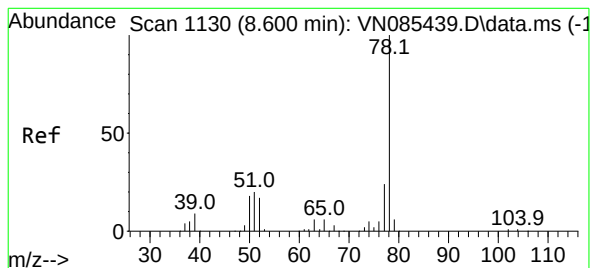
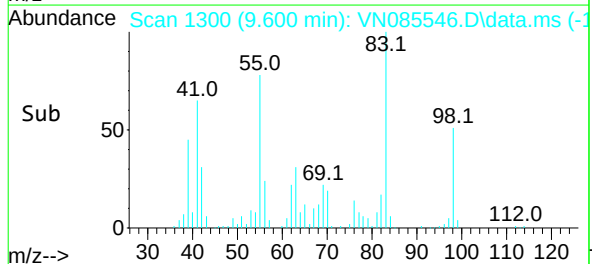
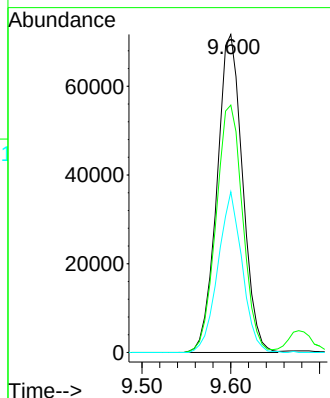
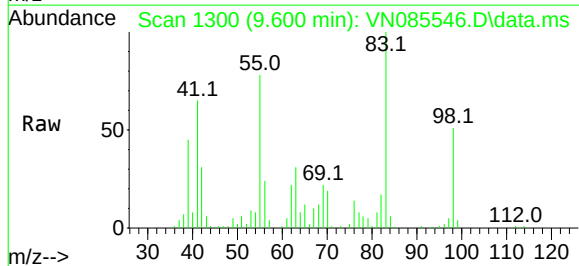
98 50.5 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#40

Benzene

Concen: 51.218 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085546.D

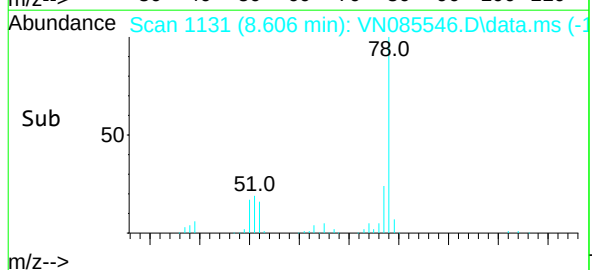
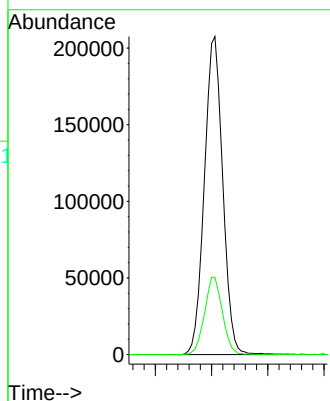
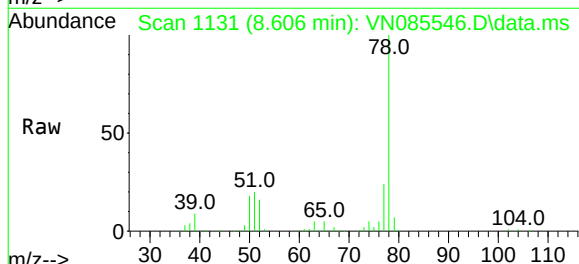
Acq: 28 Jan 2025 18:14

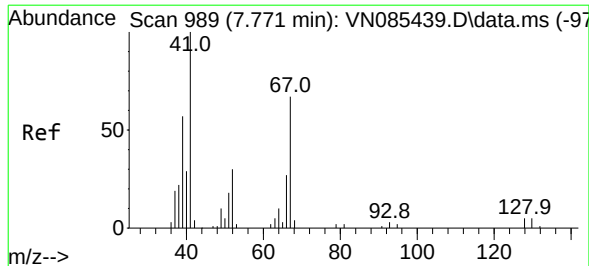
Tgt Ion: 78 Resp: 470586

Ion Ratio Lower Upper

78 100

77 24.3 19.0 28.6





#41

Methacrylonitrile

Concen: 60.848 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 41 Resp: 97709

Ion Ratio Lower Upper

41 100

39 56.4 46.0 69.0

67 68.0 57.4 86.2

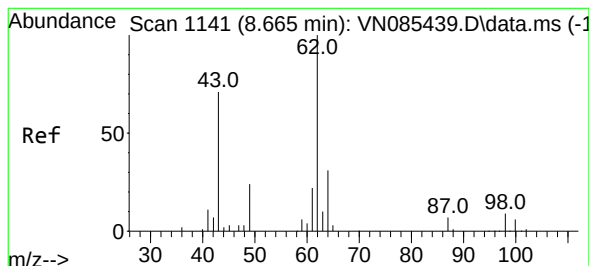
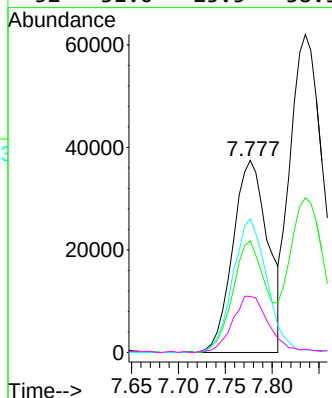
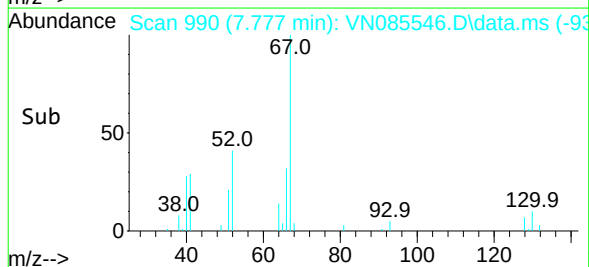
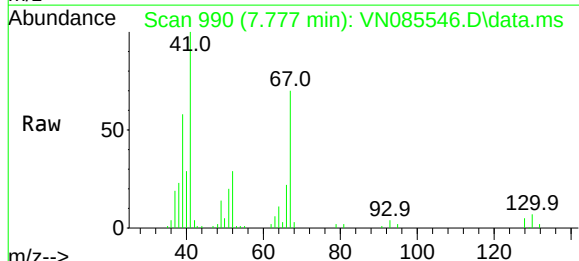
52 31.0 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#42

1,2-Dichloroethane

Concen: 51.863 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. 0.006 min

Lab File: VN085546.D

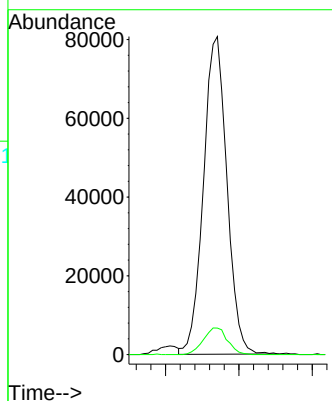
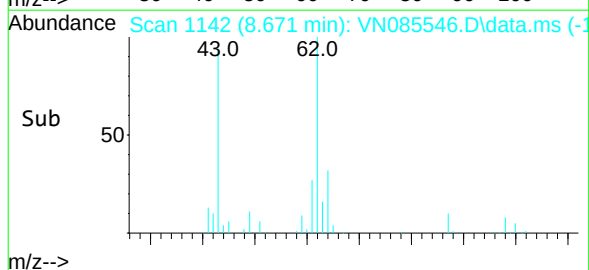
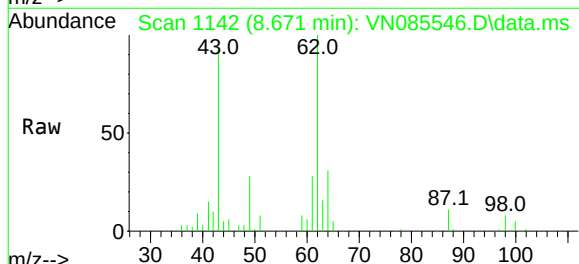
Acq: 28 Jan 2025 18:14

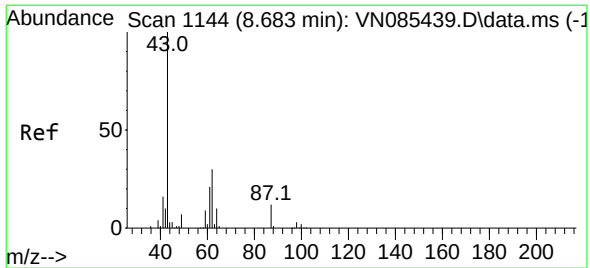
Tgt Ion: 62 Resp: 179469

Ion Ratio Lower Upper

62 100

98 8.6 0.0 17.0





#43

Isopropyl Acetate

Concen: 69.836 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085546.D

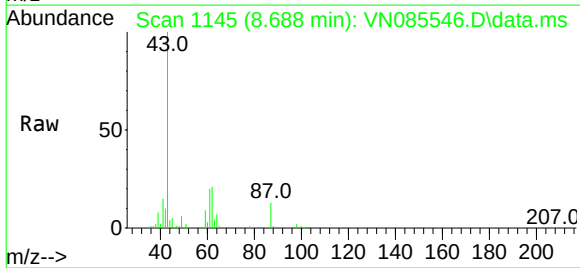
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 43 Resp: 345386

Ion Ratio Lower Upper

43 100

61 20.6 20.7 31.1

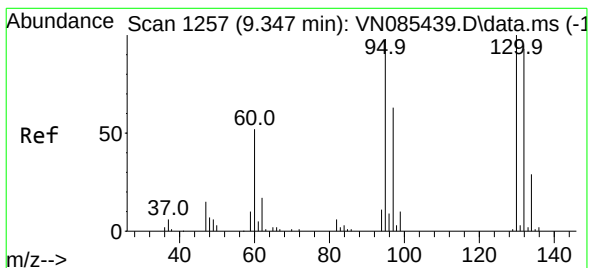
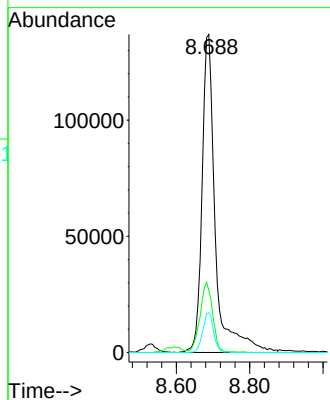
87 10.2 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#44

Trichloroethene

Concen: 50.023 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085546.D

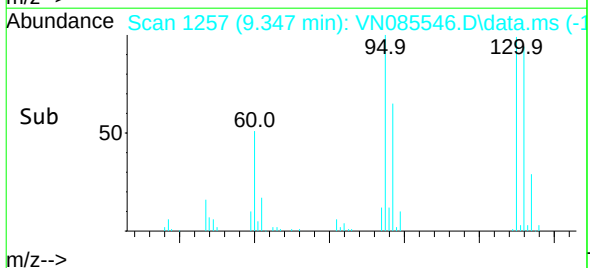
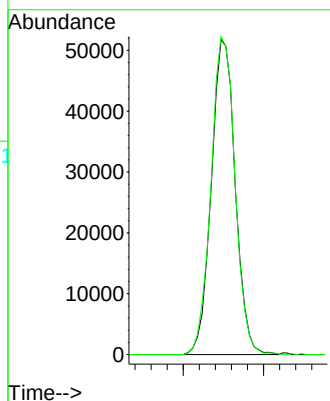
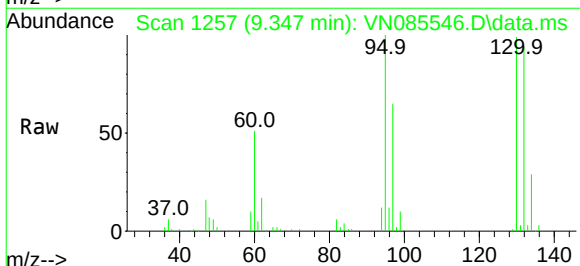
Acq: 28 Jan 2025 18:14

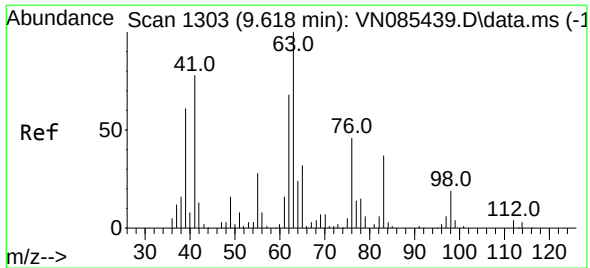
Tgt Ion:130 Resp: 106986

Ion Ratio Lower Upper

130 100

95 101.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 52.380 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 63 Resp: 122928

Ion Ratio Lower Upper

63 100

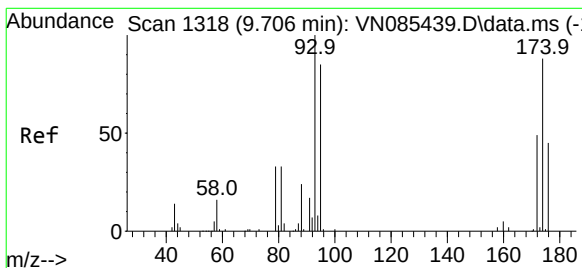
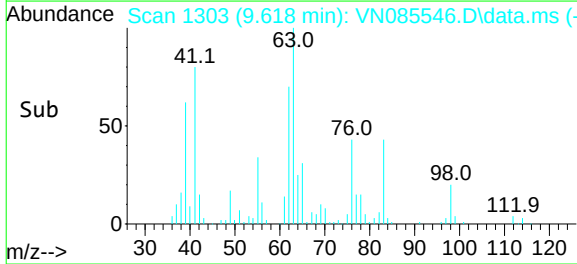
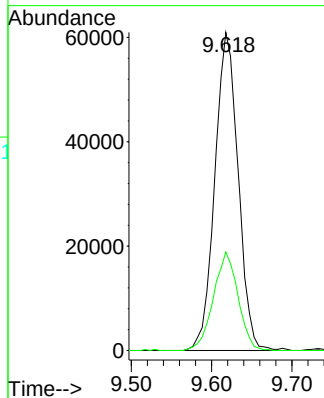
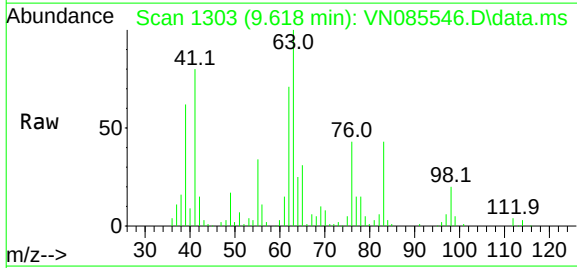
65 31.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#46

Dibromomethane

Concen: 51.408 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

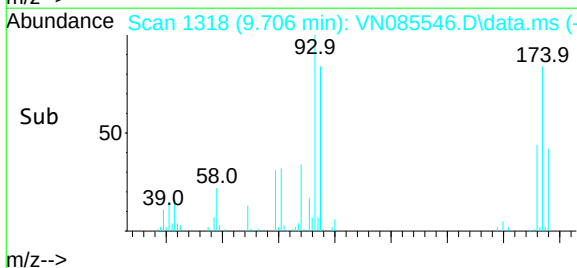
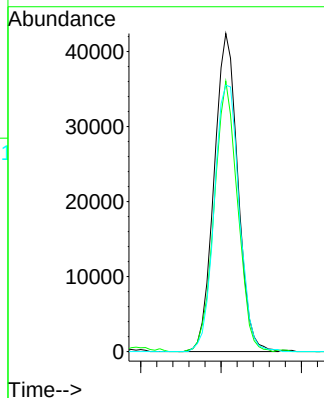
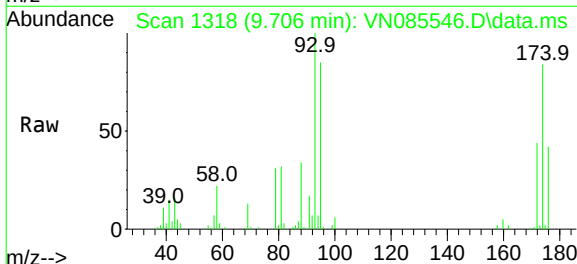
Tgt Ion: 93 Resp: 87054

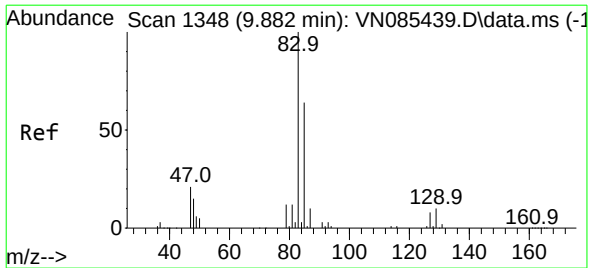
Ion Ratio Lower Upper

93 100

95 83.2 64.7 97.1

174 88.2 69.0 103.4





#47

Bromodichloromethane

Concen: 54.778 ug/l

RT: 9.888 min Scan# 1348

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 83 Resp: 188980

Ion Ratio Lower Upper

83 100

85 61.4 51.2 76.8

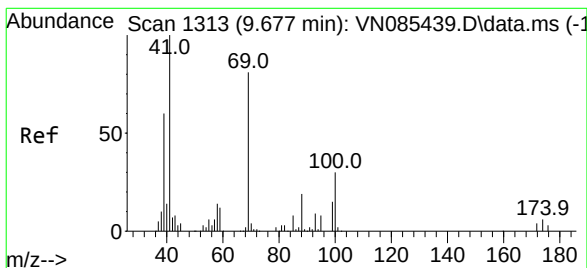
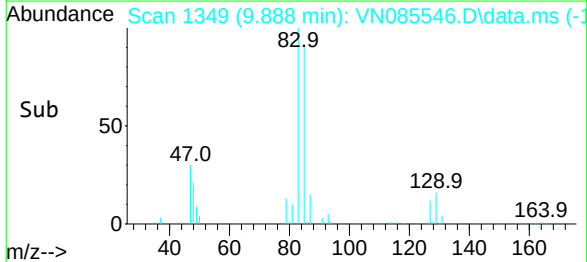
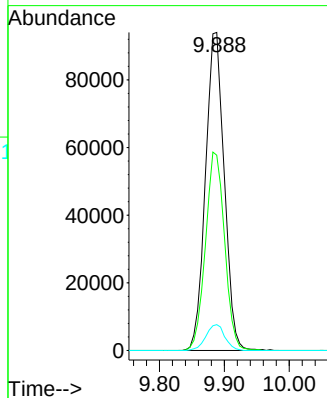
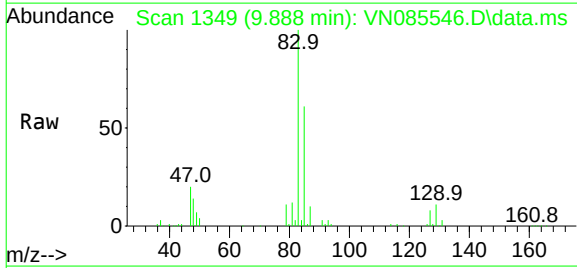
127 8.1 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#48

Methyl methacrylate

Concen: 60.523 ug/l

RT: 9.676 min Scan# 1313

Delta R.T. -0.001 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

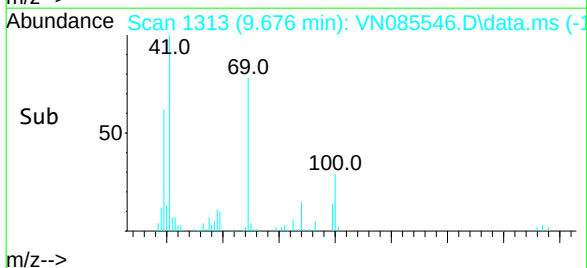
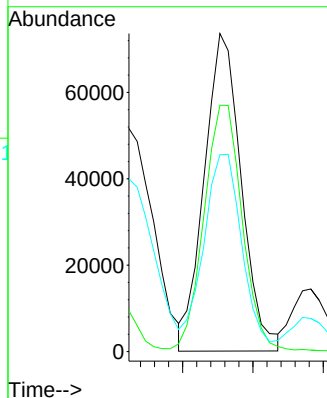
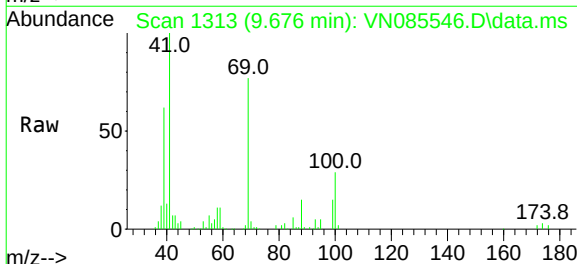
Tgt Ion: 41 Resp: 134702

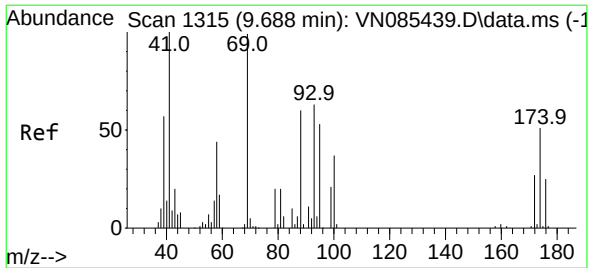
Ion Ratio Lower Upper

41 100

69 80.5 64.7 97.1

39 64.5 49.0 73.6





#49

1,4-Dioxane

Concen: 1240.952 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085546.D

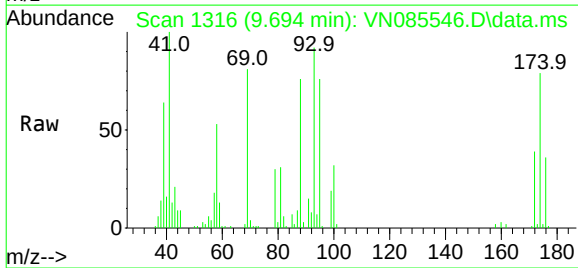
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 88 Resp: 46510

Ion Ratio Lower Upper

88 100

43 23.4 26.6 39.8

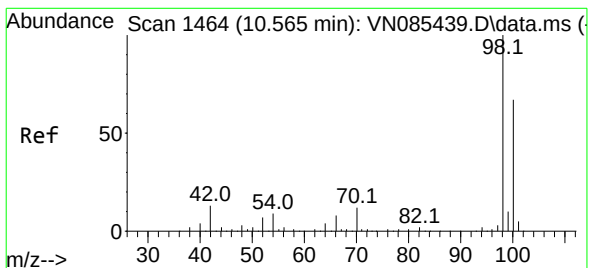
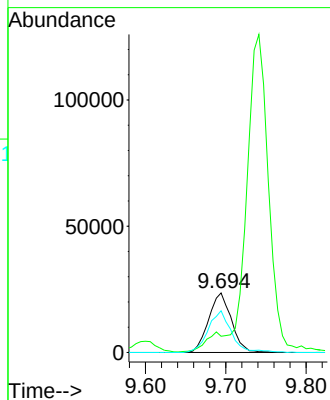
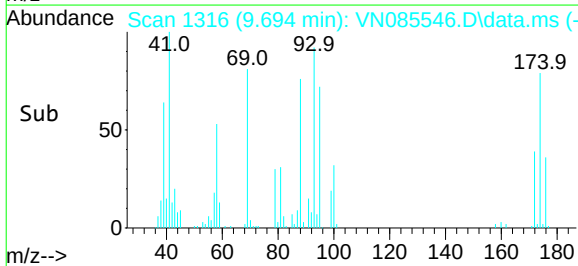
58 71.6 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#50

Toluene-d8

Concen: 56.666 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085546.D

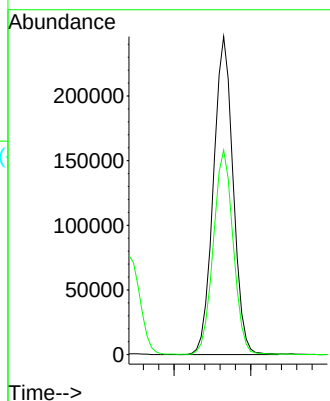
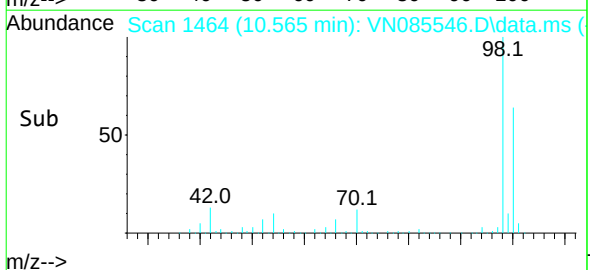
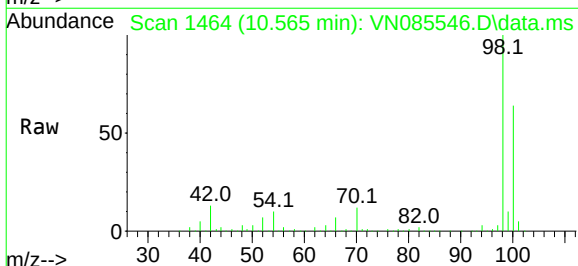
Acq: 28 Jan 2025 18:14

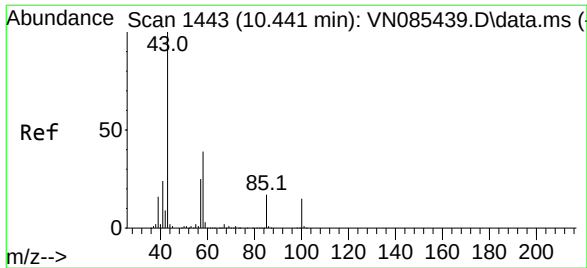
Tgt Ion: 98 Resp: 438659

Ion Ratio Lower Upper

98 100

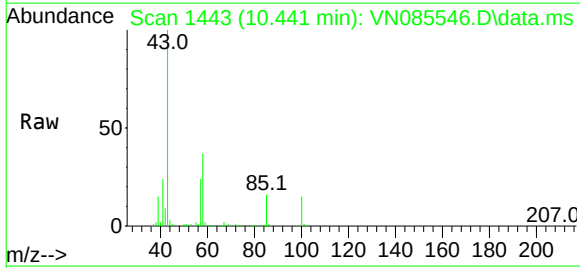
100 65.0 52.2 78.4





#51  
4-Methyl-2-Pentanone  
Concen: 315.843 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

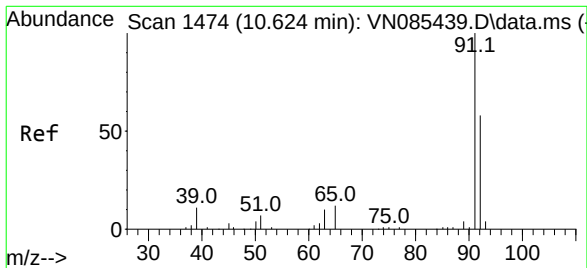
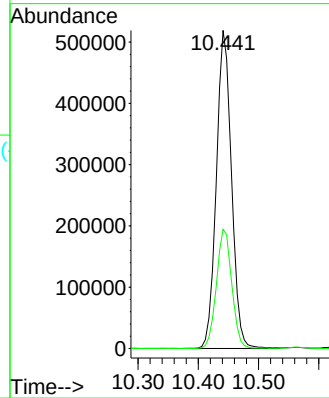
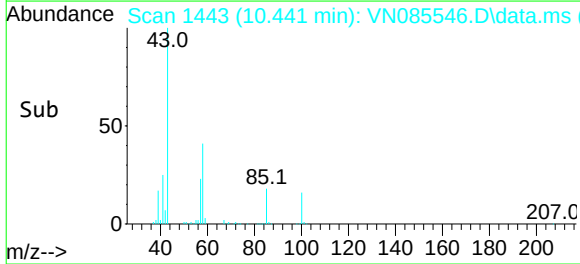
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 43 Resp: 906426  
Ion Ratio Lower Upper  
43 100  
58 38.0 30.5 45.7

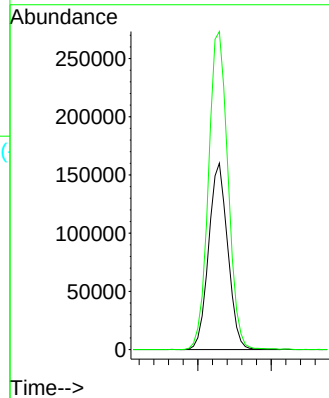
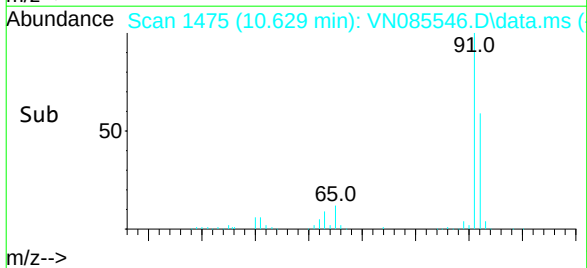
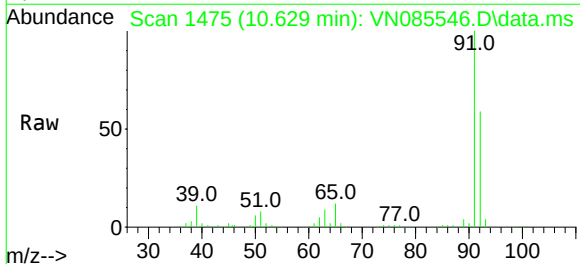
Manual Integrations  
APPROVED

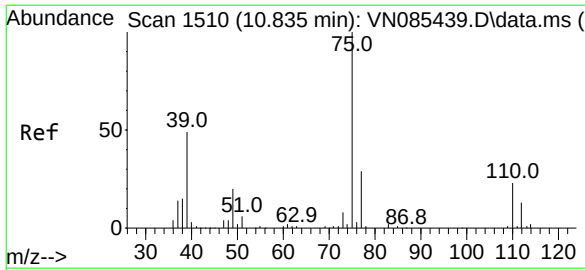
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#52  
Toluene  
Concen: 54.423 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

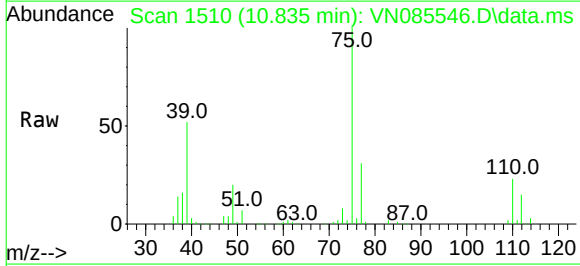
Tgt Ion: 92 Resp: 289726  
Ion Ratio Lower Upper  
92 100  
91 174.4 139.2 208.8





#53  
t-1,3-Dichloropropene  
Concen: 55.846 ug/l  
RT: 10.835 min Scan# 1510  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

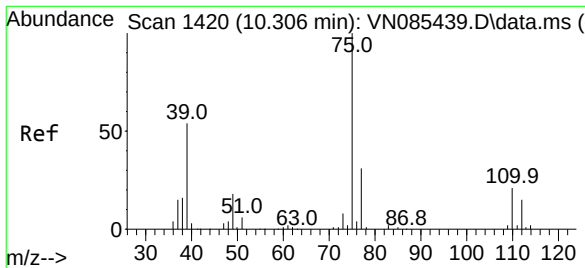
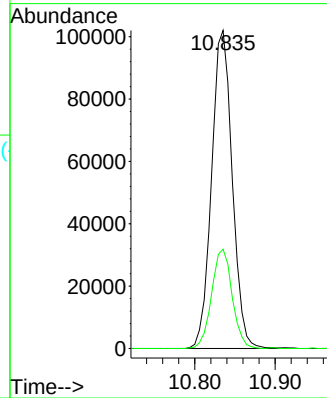
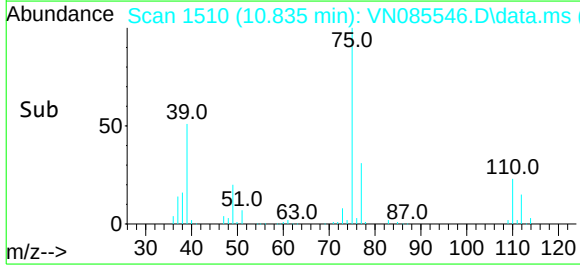
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



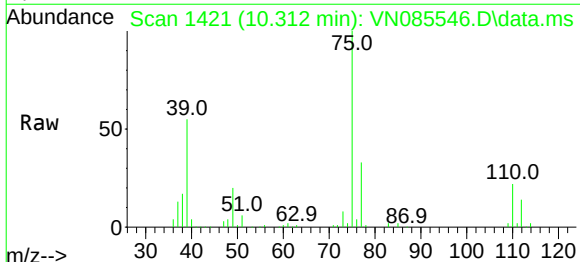
Tgt Ion: 75 Resp: 182074  
Ion Ratio Lower Upper  
75 100  
77 31.2 23.5 35.3

Manual Integrations  
APPROVED

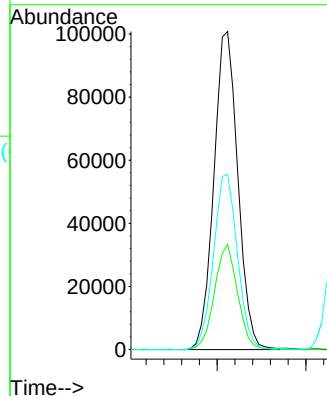
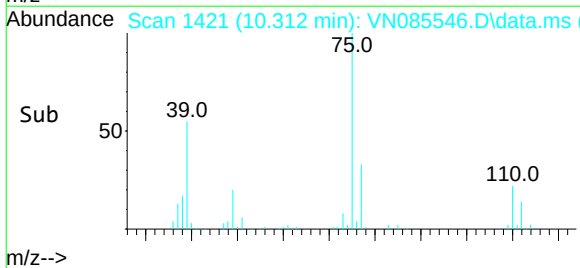
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



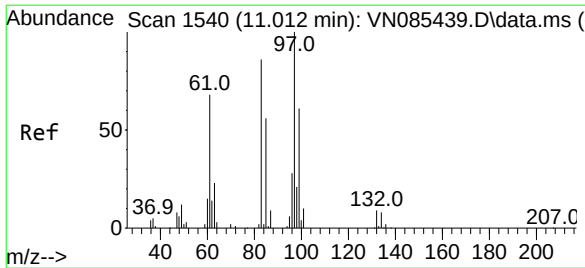
#54  
cis-1,3-Dichloropropene  
Concen: 54.260 ug/l  
RT: 10.312 min Scan# 1421  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14



Tgt Ion: 75 Resp: 188960  
Ion Ratio Lower Upper  
75 100  
77 33.1 25.0 37.4  
39 55.1 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 54.714 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085546.D

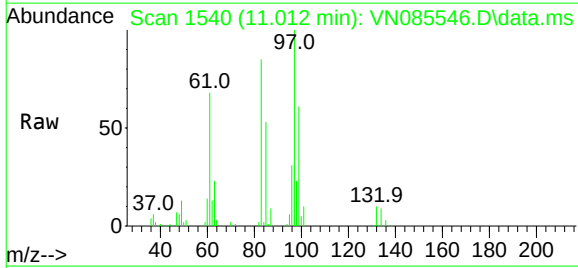
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 97 Resp: 115272

Ion Ratio Lower Upper

97 100

83 85.0 69.0 103.6

85 53.3 44.6 66.8

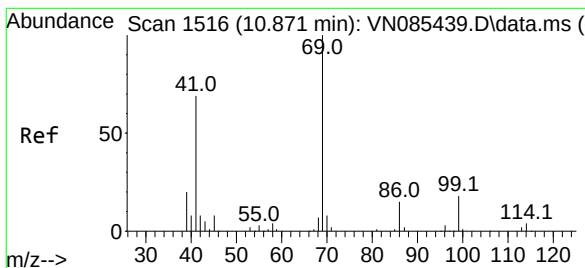
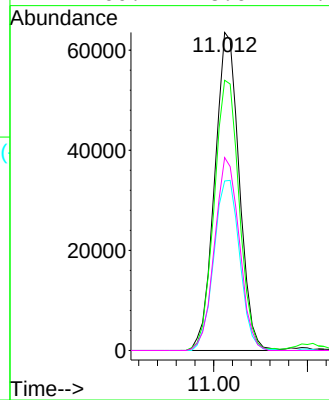
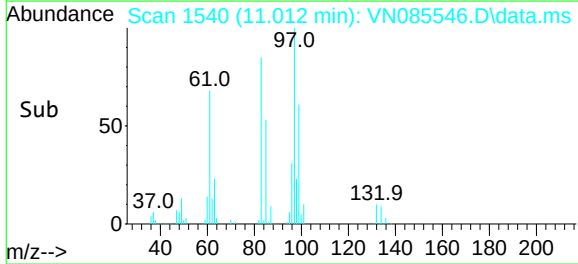
99 60.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#56

Ethyl methacrylate

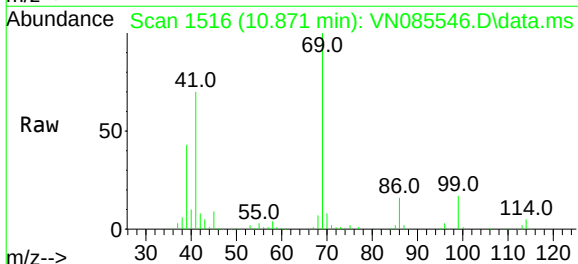
Concen: 51.541 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14



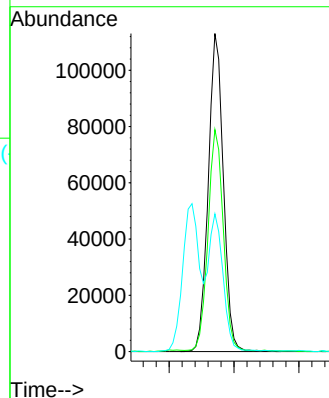
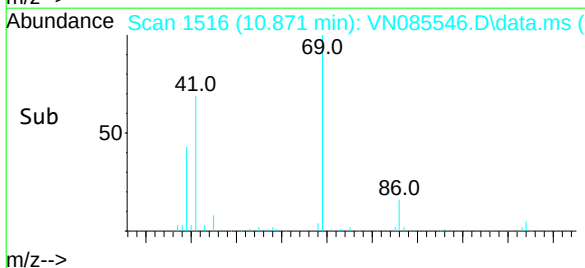
Tgt Ion: 69 Resp: 183142

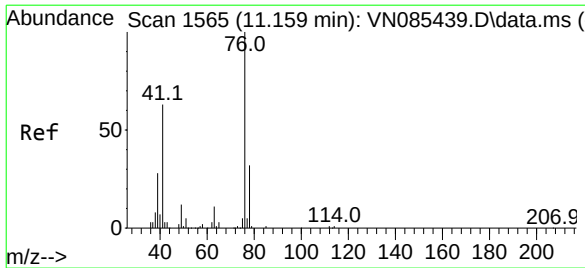
Ion Ratio Lower Upper

69 100

41 69.8 54.6 82.0

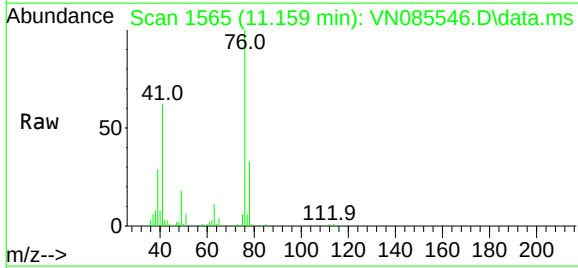
39 41.8 32.4 48.6





#57  
1,3-Dichloropropane  
Concen: 55.519 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

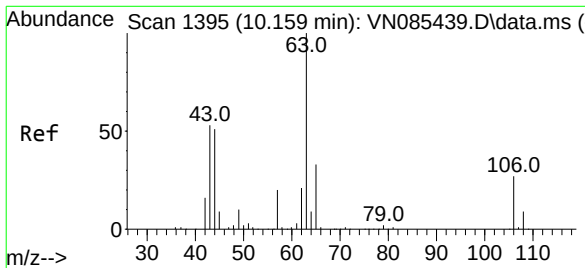
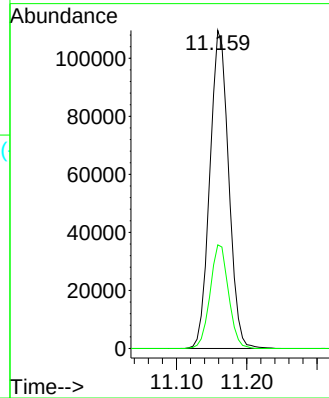
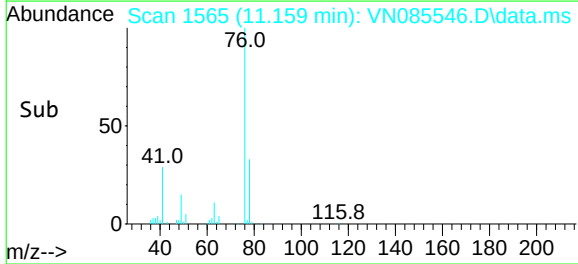
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 76 Resp: 203386  
Ion Ratio Lower Upper  
76 100  
78 31.9 25.6 38.4

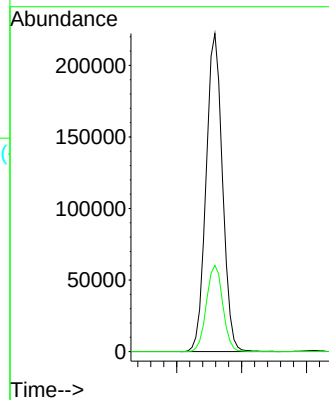
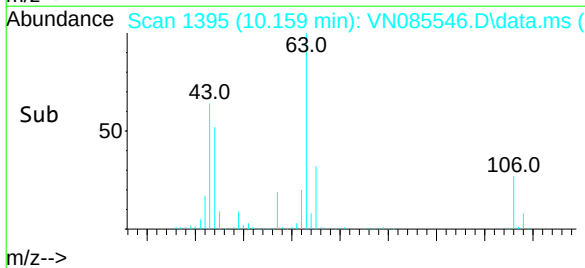
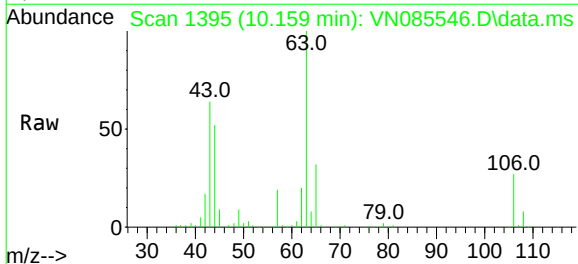
Manual Integrations  
APPROVED

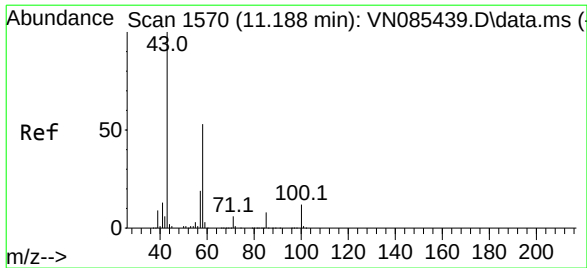
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#58  
2-Chloroethyl Vinyl ether  
Concen: 291.087 ug/l  
RT: 10.159 min Scan# 1395  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 63 Resp: 389176  
Ion Ratio Lower Upper  
63 100  
106 27.0 21.6 32.4





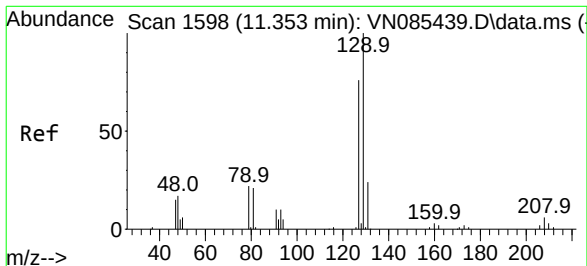
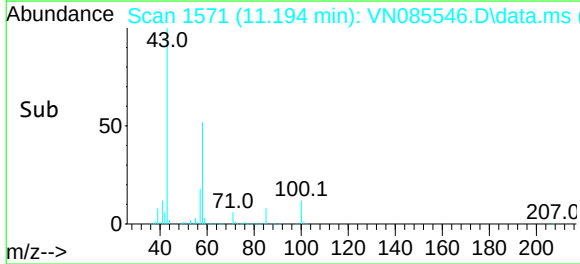
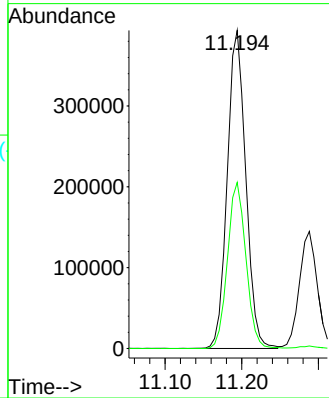
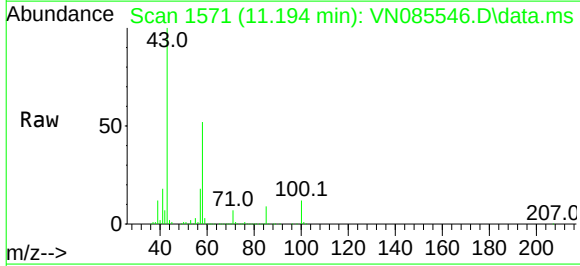
#59  
2-Hexanone  
Concen: 326.364 ug/l  
RT: 11.194 min Scan# 1570  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 43 Resp: 659035  
Ion Ratio Lower Upper  
43 100  
58 52.0 26.2 78.6

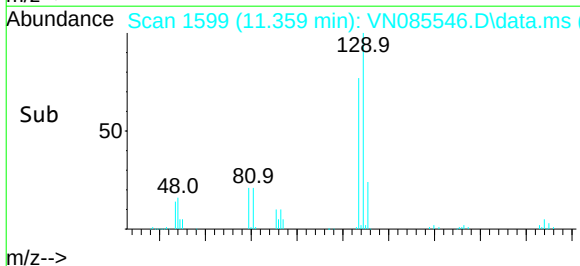
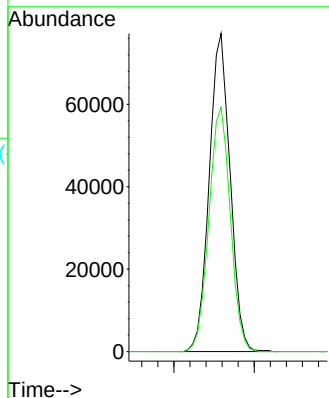
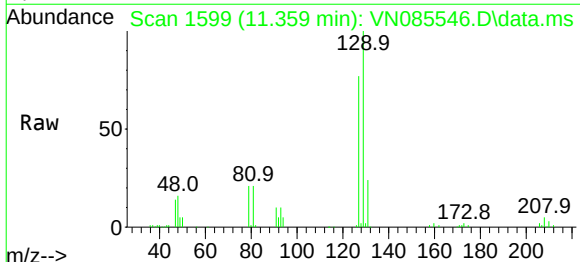
Manual Integrations  
APPROVED

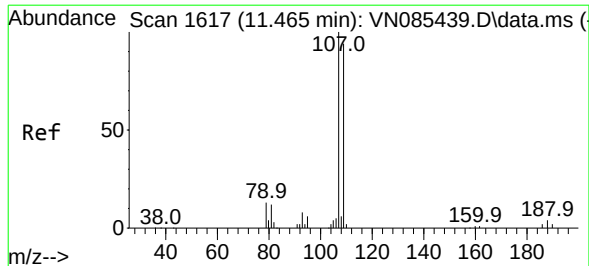
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#60  
Dibromochloromethane  
Concen: 54.855 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:129 Resp: 139526  
Ion Ratio Lower Upper  
129 100  
127 78.8 38.6 115.8





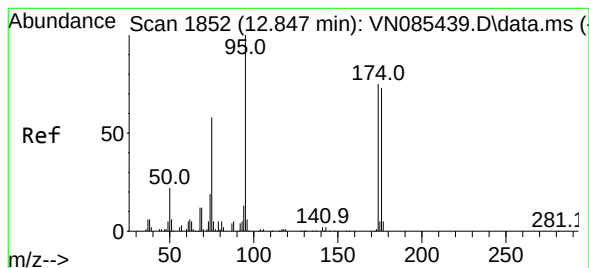
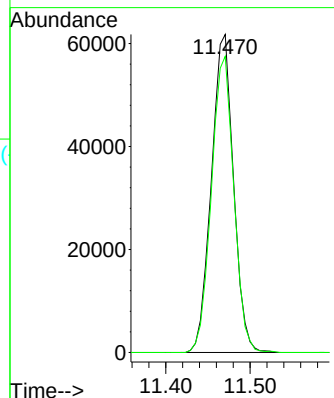
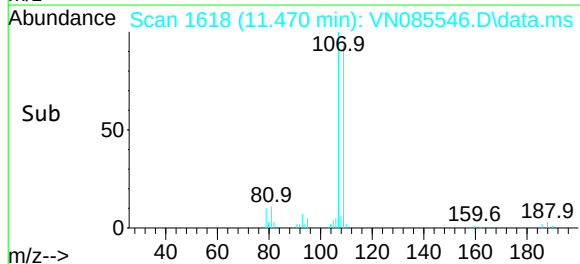
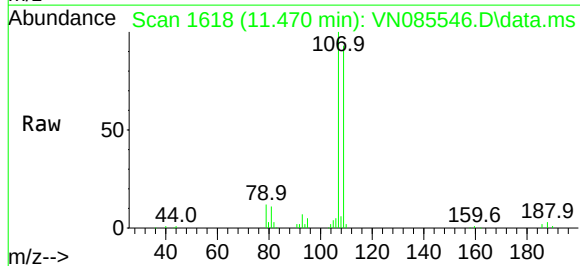
#61  
1,2-Dibromoethane  
Concen: 53.765 ug/l  
RT: 11.470 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 107 Resp: 112753  
Ion Ratio Lower Upper  
107 100  
109 94.2 75.9 113.9

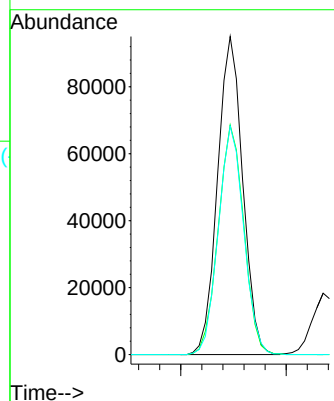
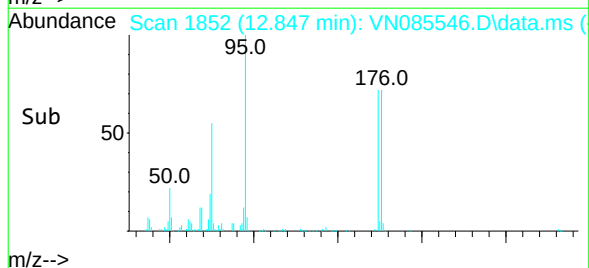
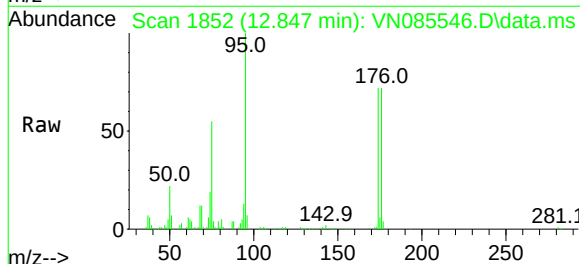
Manual Integrations  
APPROVED

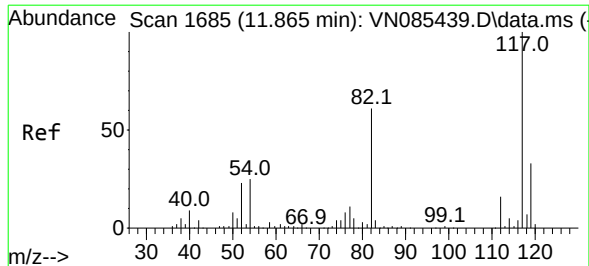
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025



#62  
4-Bromofluorobenzene  
Concen: 59.614 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

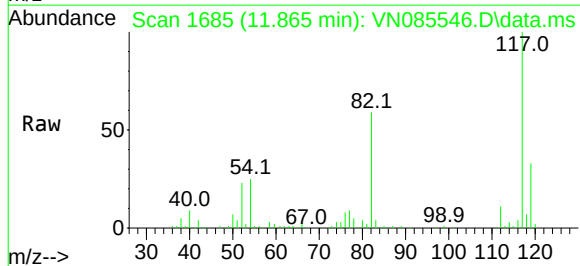
Tgt Ion: 95 Resp: 157860  
Ion Ratio Lower Upper  
95 100  
174 73.2 0.0 145.0  
176 72.3 0.0 142.4





#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

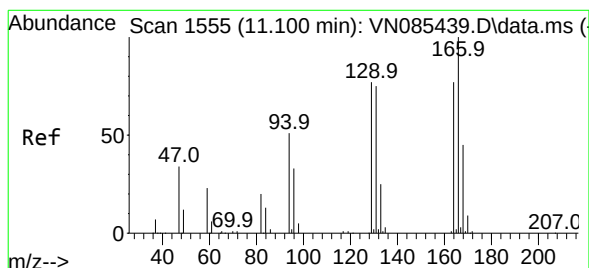
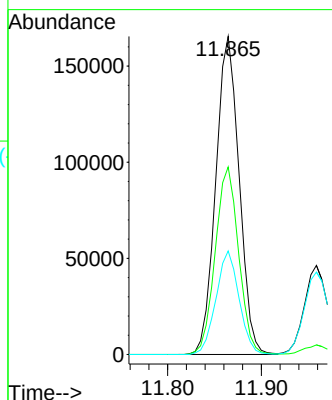
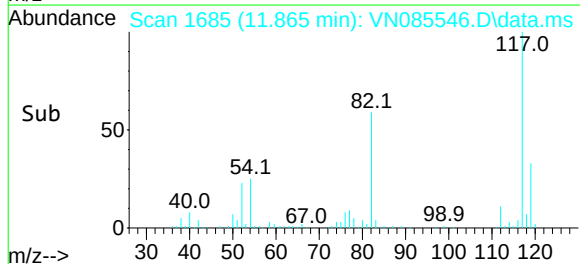
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:117 Resp: 286739  
Ion Ratio Lower Upper  
117 100  
82 59.0 48.6 72.8  
119 32.6 26.6 39.8

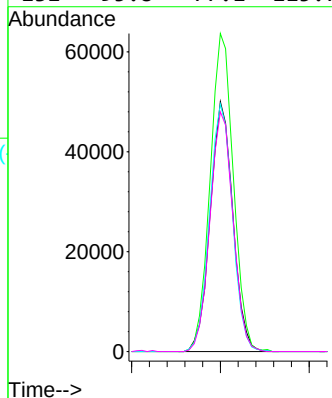
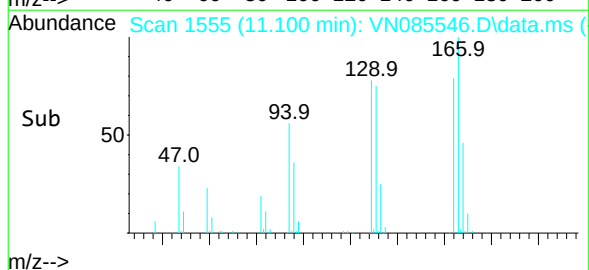
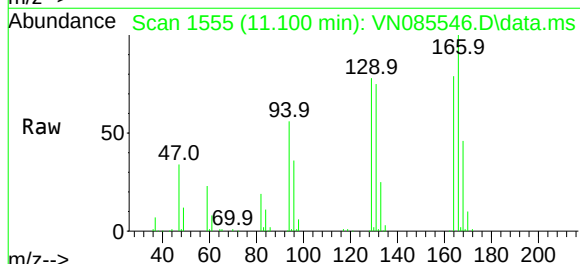
Manual Integrations  
APPROVED

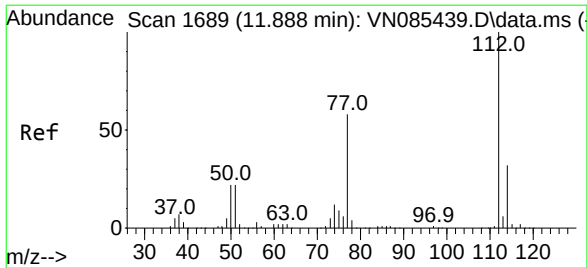
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#64  
Tetrachloroethene  
Concen: 45.330 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:164 Resp: 88612  
Ion Ratio Lower Upper  
164 100  
166 127.2 103.4 155.2  
129 99.0 79.2 118.8  
131 95.8 77.1 115.7





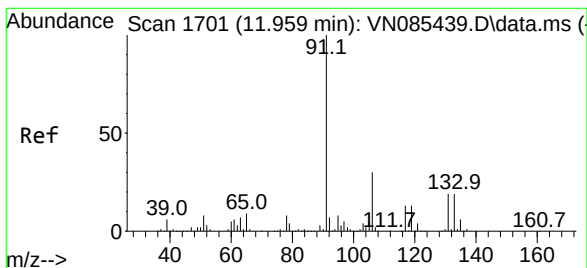
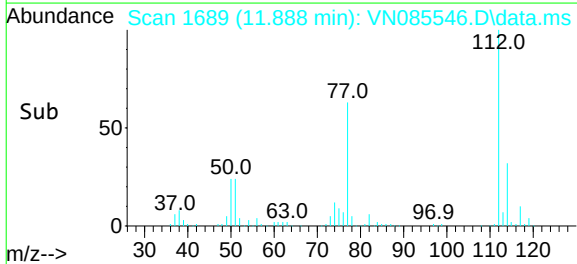
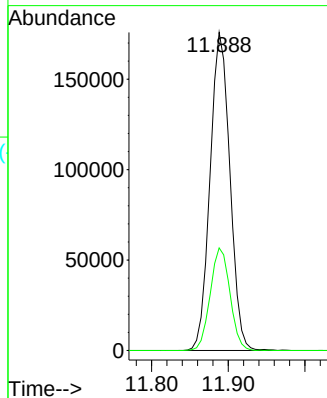
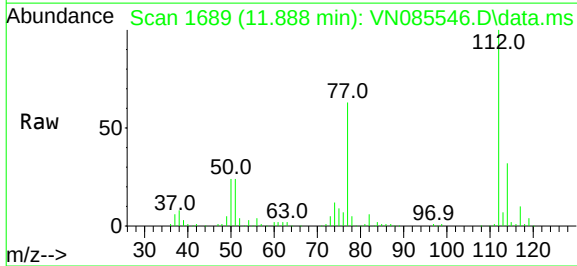
#65  
Chlorobenzene  
Concen: 50.289 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:112 Resp: 315889  
Ion Ratio Lower Upper  
112 100  
114 32.3 25.3 37.9

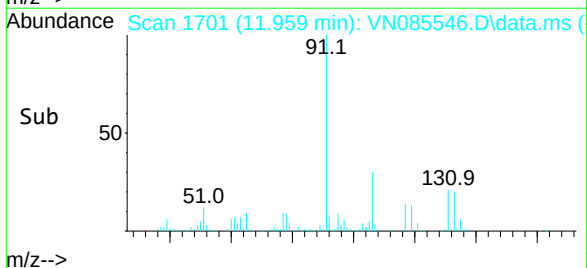
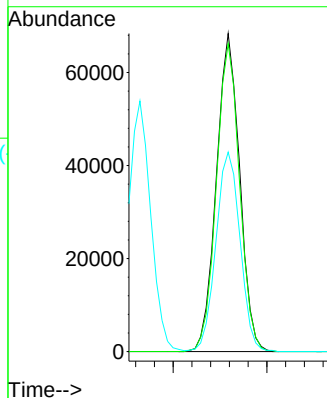
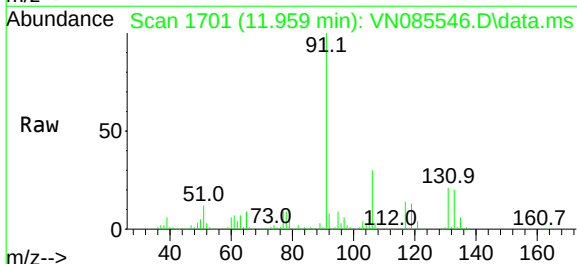
Manual Integrations  
APPROVED

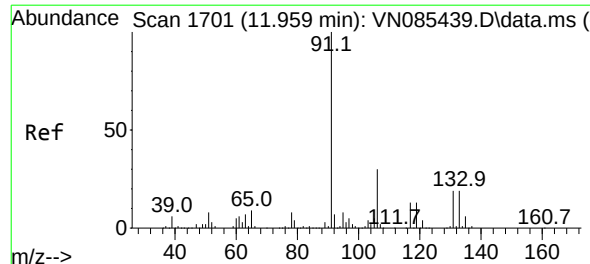
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#66  
1,1,1,2-Tetrachloroethane  
Concen: 51.180 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:131 Resp: 117993  
Ion Ratio Lower Upper  
131 100  
133 96.4 47.4 142.3  
119 65.0 33.1 99.5





#67

Ethyl Benzene

Concen: 54.268 ug/l

RT: 11.965 min Scan# 17

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 91 Resp: 555215

Ion Ratio Lower Upper

91 100

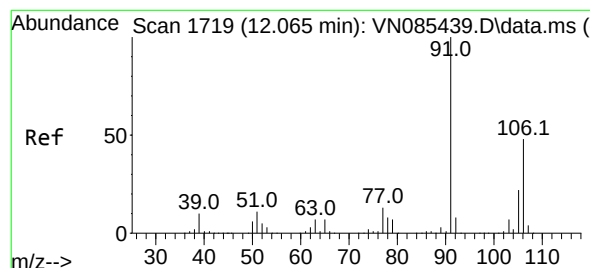
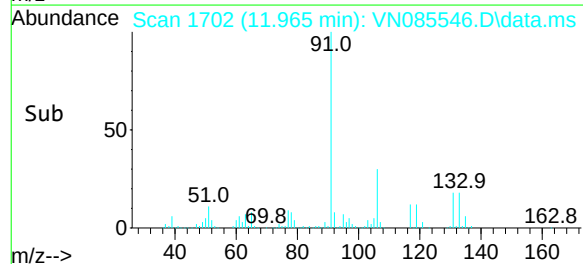
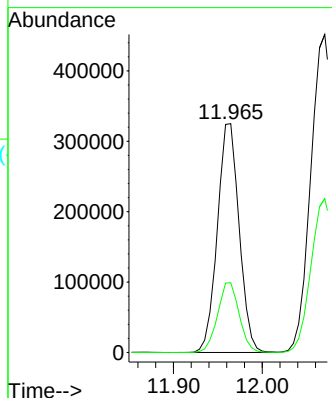
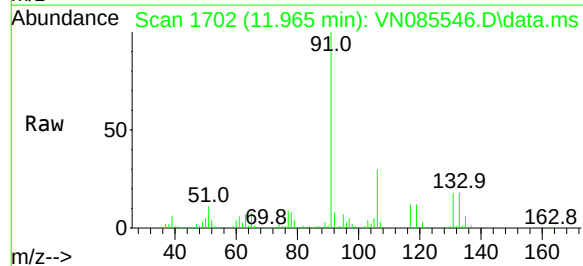
106 30.5 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#68

m/p-Xylenes

Concen: 111.987 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085546.D

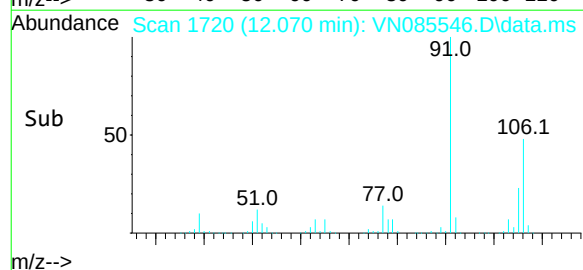
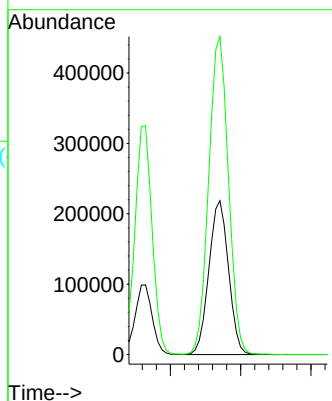
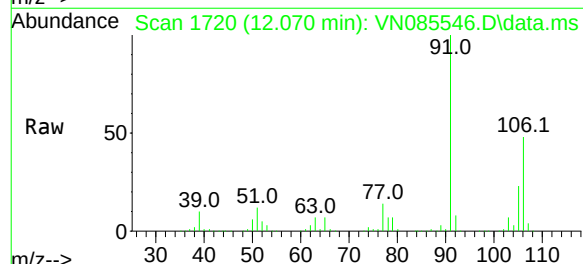
Acq: 28 Jan 2025 18:14

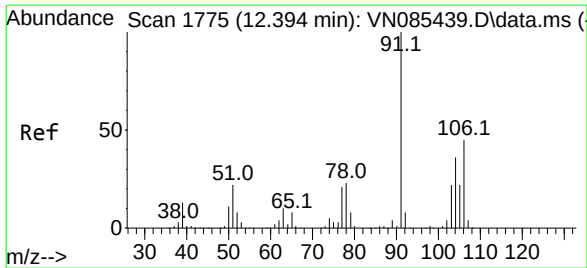
Tgt Ion:106 Resp: 423444

Ion Ratio Lower Upper

106 100

91 207.7 167.7 251.5





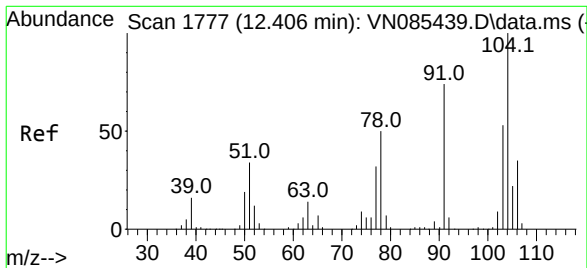
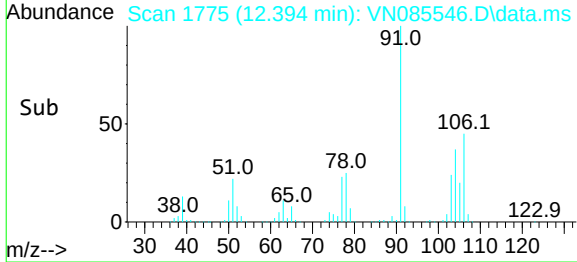
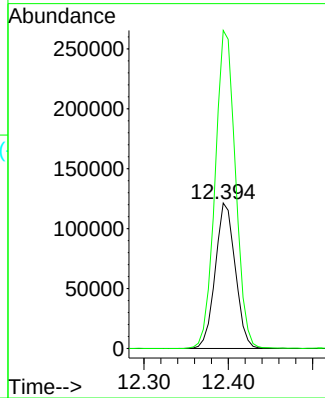
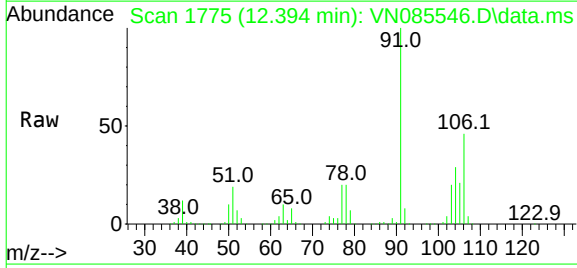
#69  
o-Xylene  
Concen: 55.313 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:106 Resp: 199877  
Ion Ratio Lower Upper  
106 100  
91 222.8 110.4 331.2

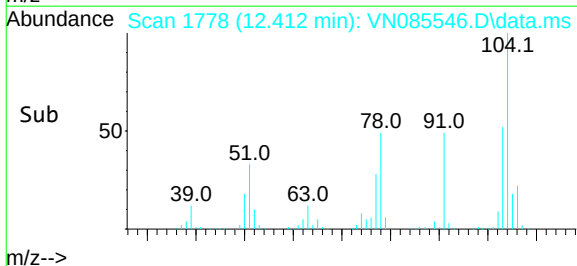
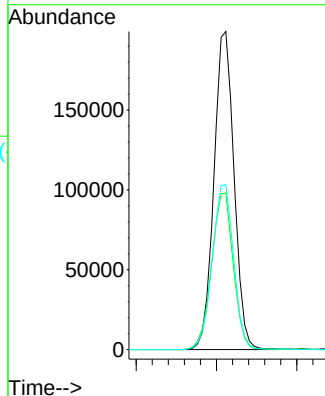
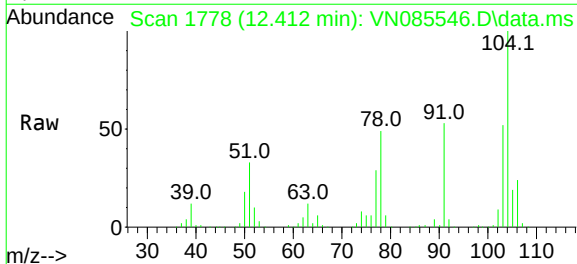
Manual Integrations  
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Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

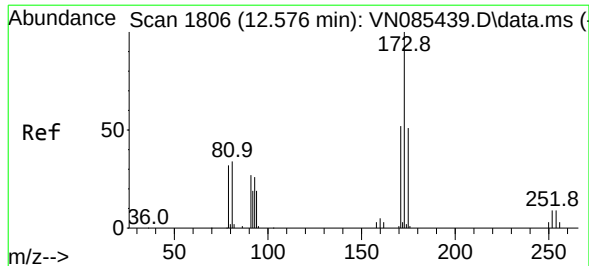


#70  
Styrene  
Concen: 58.032 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:104 Resp: 347052  
Ion Ratio Lower Upper  
104 100  
78 53.0 42.5 63.7  
103 55.1 43.8 65.8







#71

Bromoform

Concen: 55.980 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:173 Resp: 92343

Ion Ratio Lower Upper

173 100

175 49.3 24.4 73.2

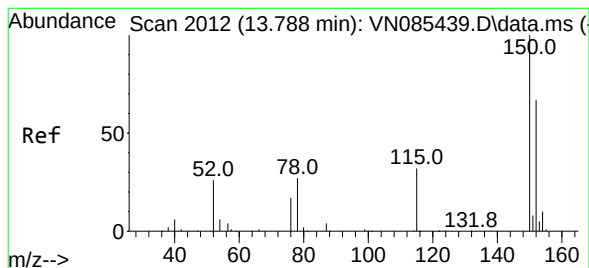
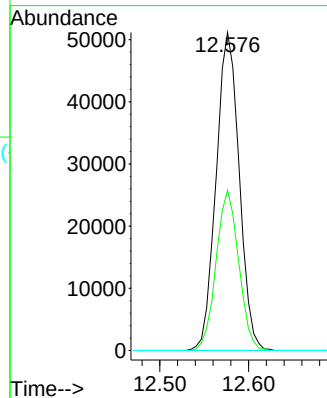
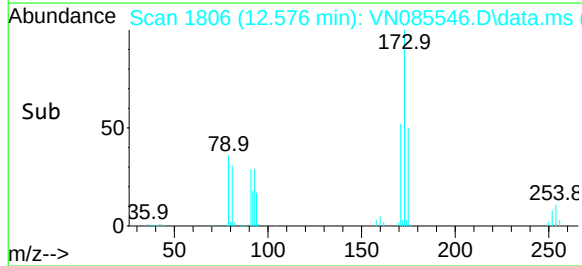
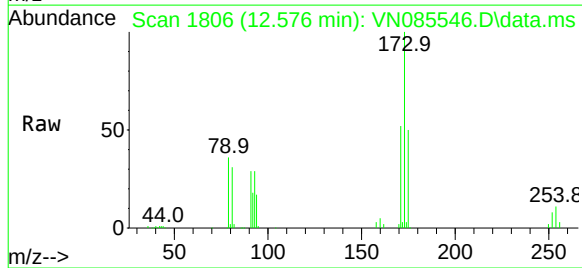
254 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

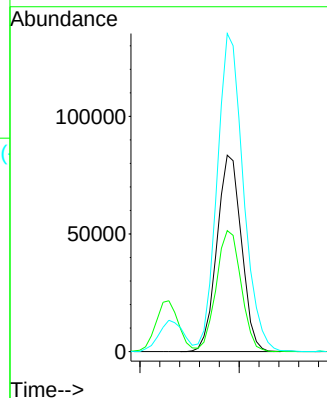
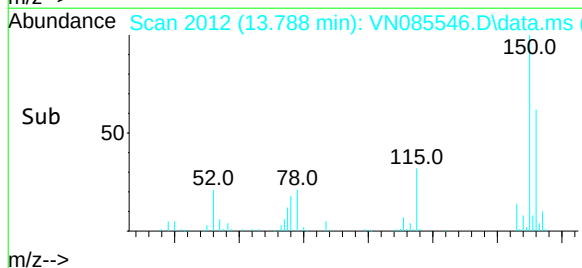
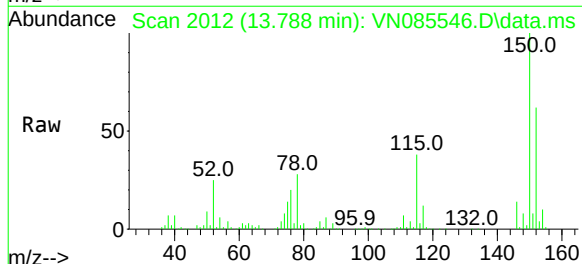
Tgt Ion:152 Resp: 143565

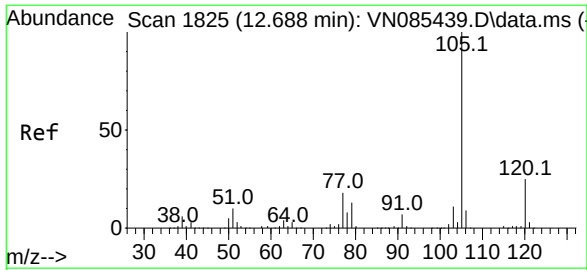
Ion Ratio Lower Upper

152 100

115 62.2 31.1 93.3

150 173.3 0.0 343.6





#73

Isopropylbenzene

Concen: 53.526 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Tgt Ion: 105 Resp: 518634

Ion Ratio Lower Upper

105 100

120 25.8 12.8 38.3

Instrument :

MSVOA\_N

ClientSampleId :

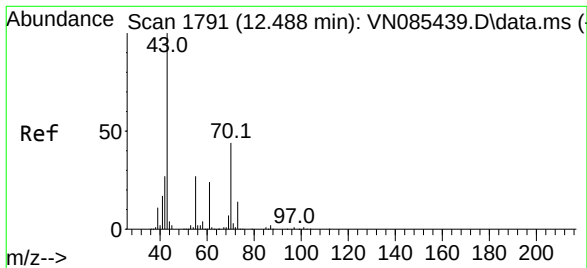
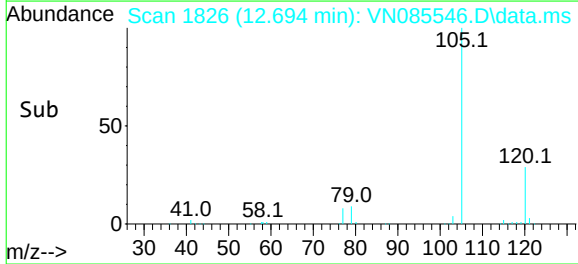
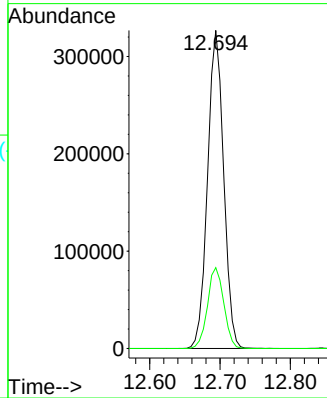
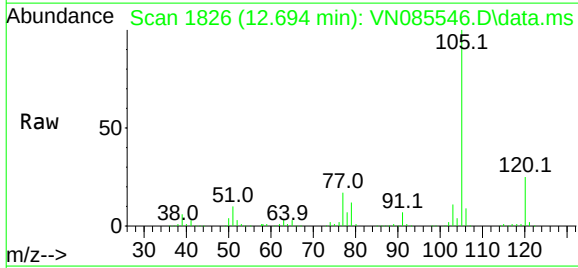
VSTDCCC050EC

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#74

N-ethyl acetate

Concen: 56.051 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Tgt Ion: 43 Resp: 244112

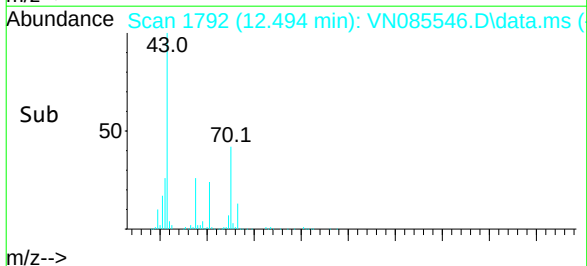
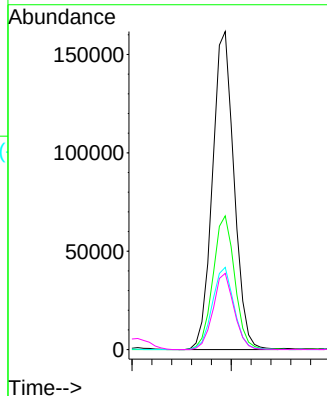
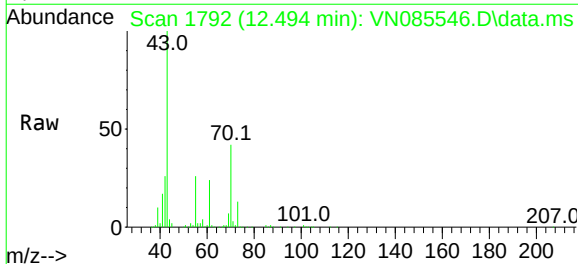
Ion Ratio Lower Upper

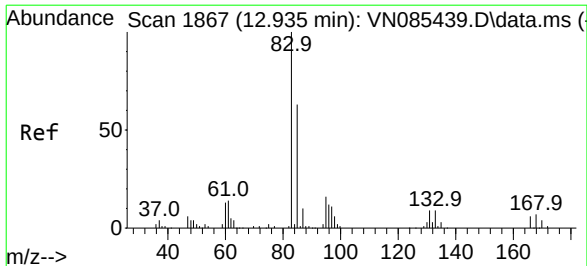
43 100

70 42.5 34.0 51.0

55 26.1 21.4 32.2

61 23.3 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 51.507 ug/l

RT: 12.935 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 83 Resp: 176292

Ion Ratio Lower Upper

83 100

131 9.4 4.8 14.4

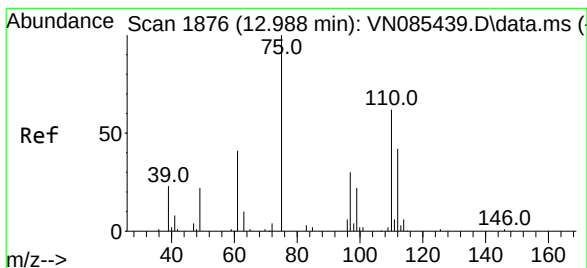
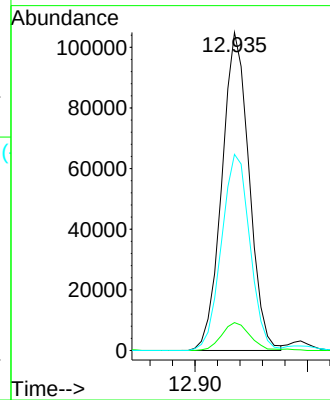
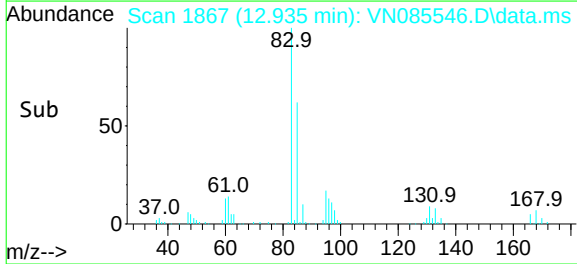
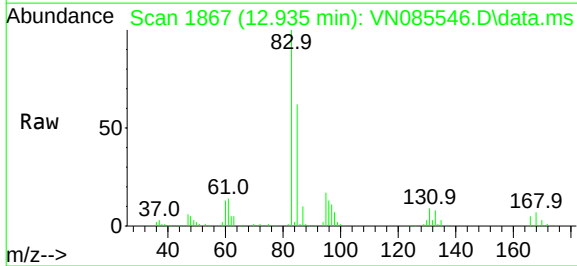
85 64.2 32.2 96.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#76

1,2,3-Trichloropropane

Concen: 49.995 ug/l m

RT: 12.994 min Scan# 1877

Delta R.T. 0.006 min

Lab File: VN085546.D

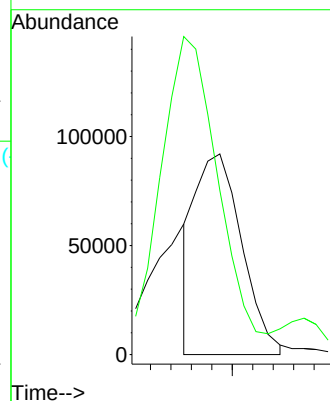
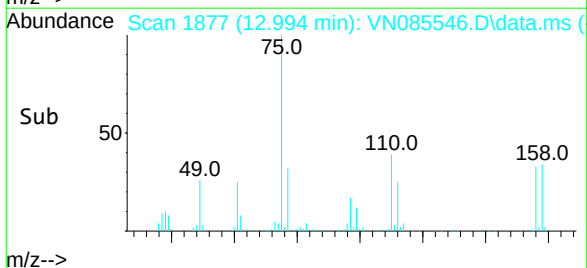
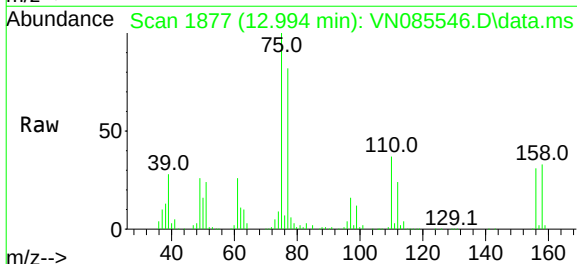
Acq: 28 Jan 2025 18:14

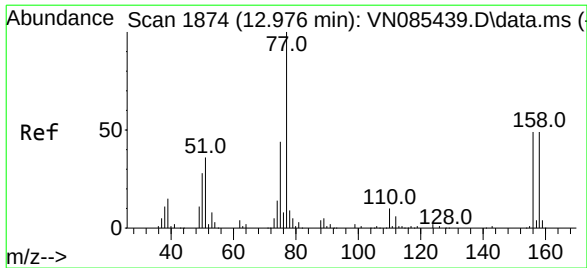
Tgt Ion: 75 Resp: 145886

Ion Ratio Lower Upper

75 100

77 199.3 109.7 329.2





#77

Bromobenzene

Concen: 50.181 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085546.D

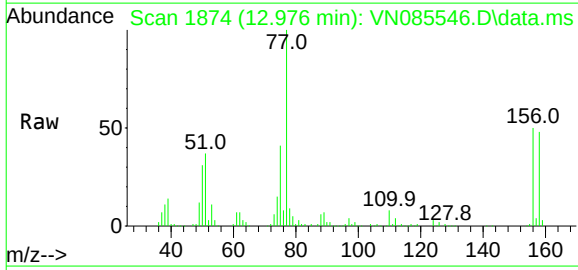
Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



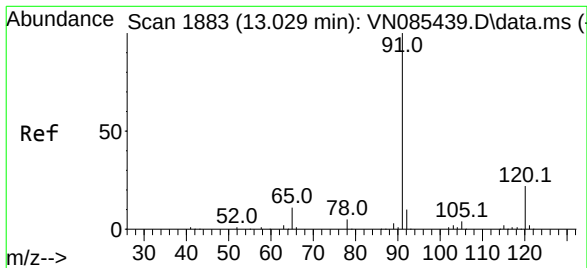
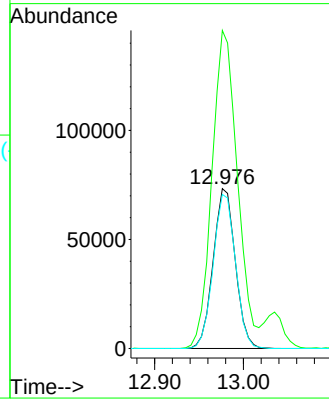
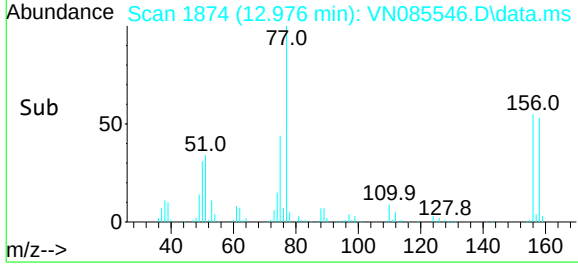
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 156   | Resp: | 127032 |
| Ion      | Ratio | Lower | Upper  |
| 156      | 100   |       |        |
| 77       | 228.8 | 114.1 | 342.4  |
| 158      | 97.3  | 48.9  | 146.8  |

## Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#78

n-propylbenzene

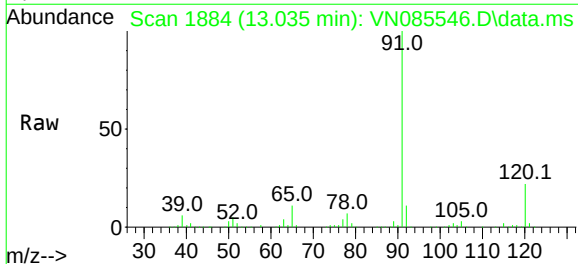
Concen: 53.728 ug/l

RT: 13.035 min Scan# 1884

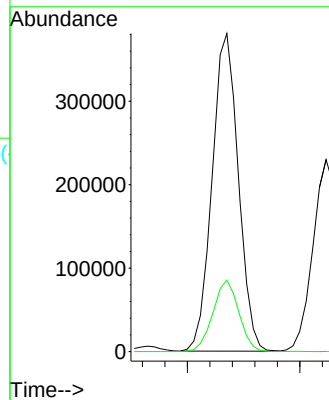
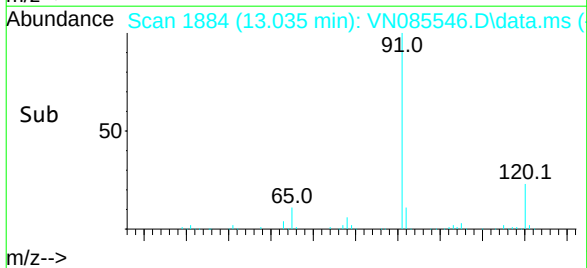
Delta R.T. 0.006 min

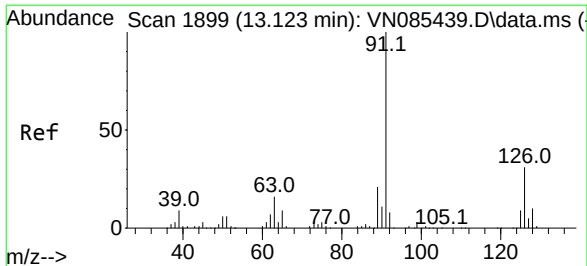
Lab File: VN085546.D

Acq: 28 Jan 2025 18:14



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 616293 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 120      | 22.1  | 10.9  | 32.6   |





#79

2-Chlorotoluene

Concen: 51.776 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 91 Resp: 384376

Ion Ratio Lower Upper

91 100

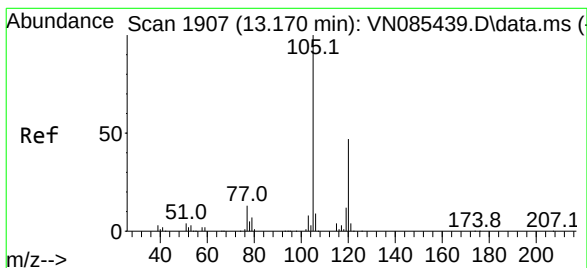
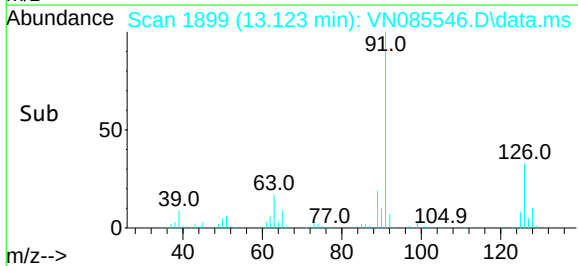
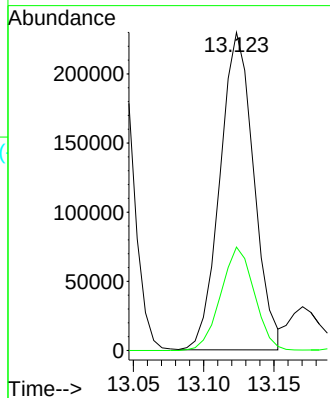
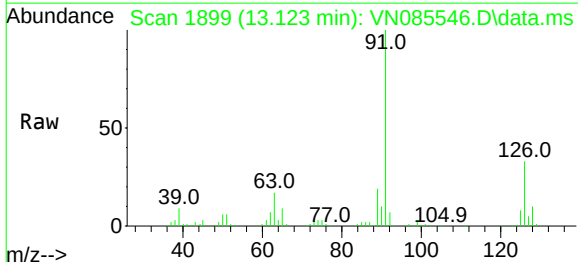
126 32.3 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#80

1,3,5-Trimethylbenzene

Concen: 54.059 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085546.D

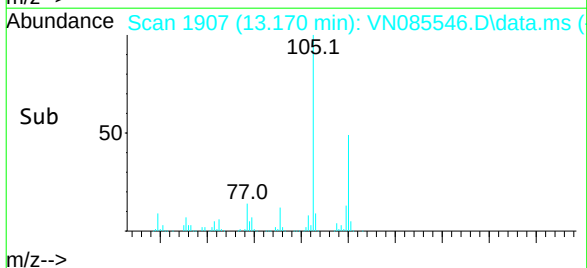
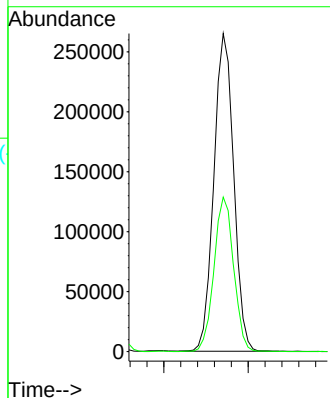
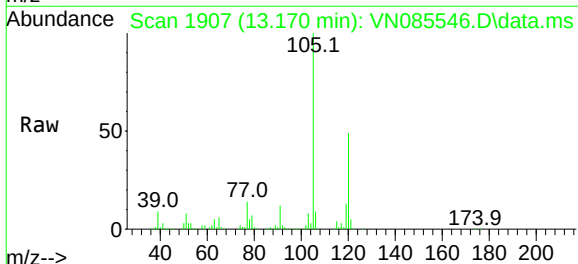
Acq: 28 Jan 2025 18:14

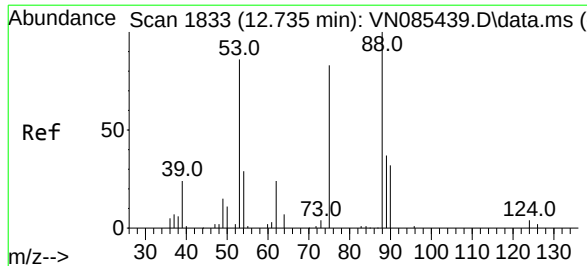
Tgt Ion:105 Resp: 432662

Ion Ratio Lower Upper

105 100

120 48.3 23.9 71.7





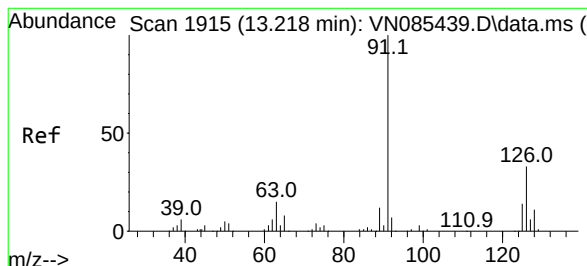
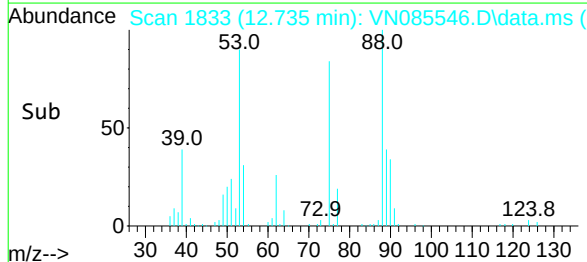
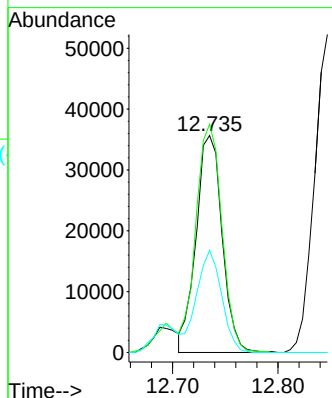
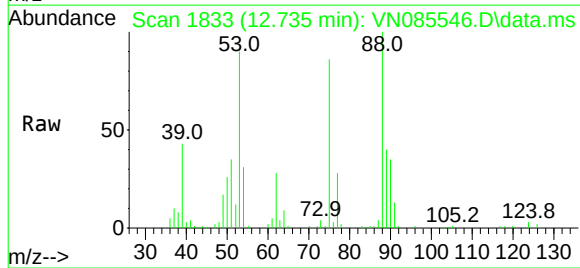
#81  
trans-1,4-Dichloro-2-butene  
Concen: 56.880 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 75 Resp: 61346  
Ion Ratio Lower Upper  
75 100  
53 105.0 95.6 143.4  
89 45.8 37.0 55.6

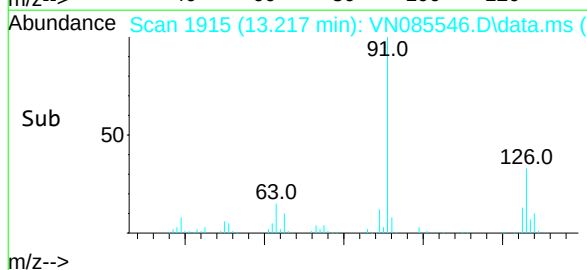
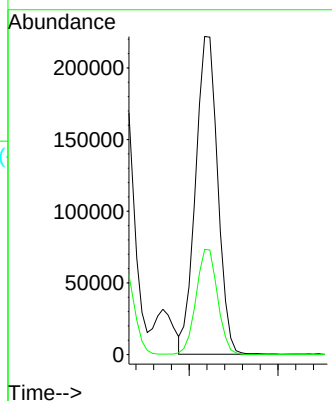
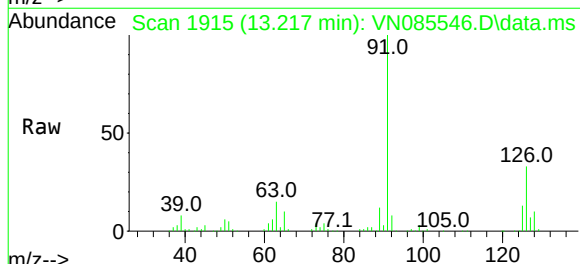
Manual Integrations  
APPROVED

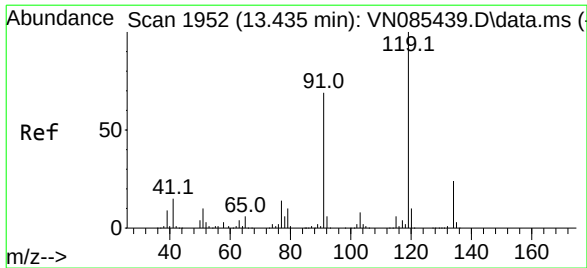
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#82  
4-Chlorotoluene  
Concen: 51.917 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 91 Resp: 383756  
Ion Ratio Lower Upper  
91 100  
126 32.3 15.9 47.7





#83

tert-Butylbenzene

Concen: 52.772 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:119 Resp: 354690

Ion Ratio Lower Upper

119 100

91 71.2 35.1 105.3

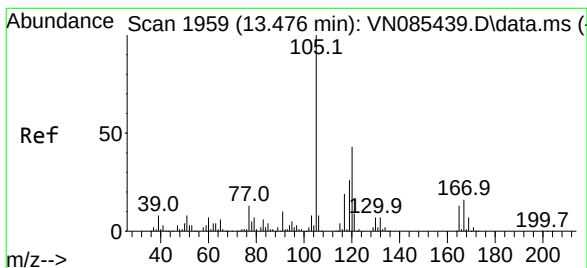
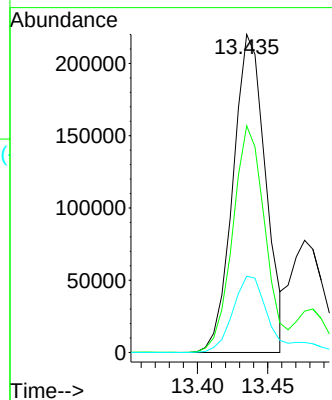
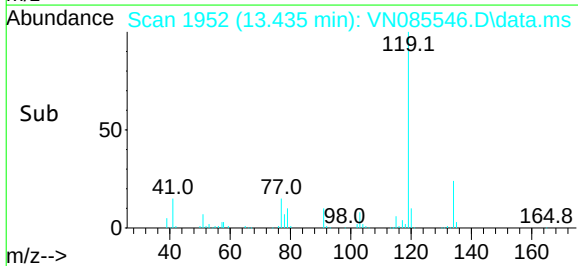
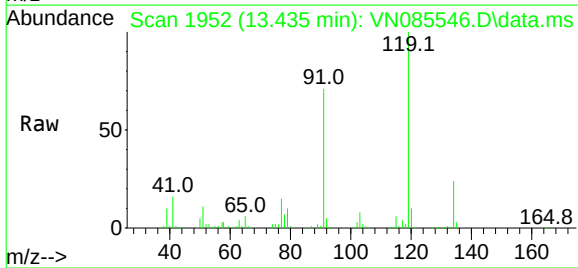
134 27.6 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#84

1,2,4-Trimethylbenzene

Concen: 55.598 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085546.D

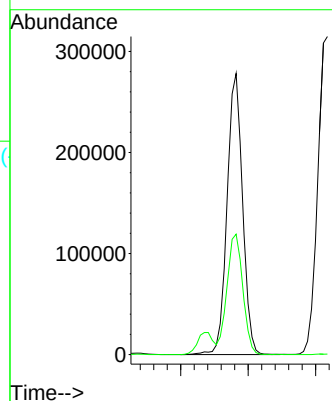
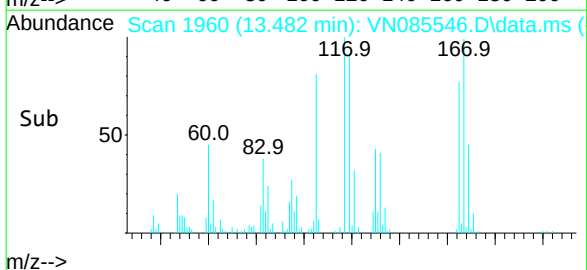
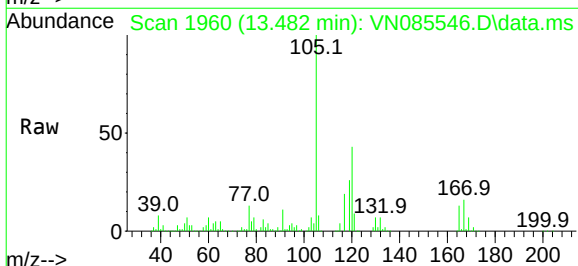
Acq: 28 Jan 2025 18:14

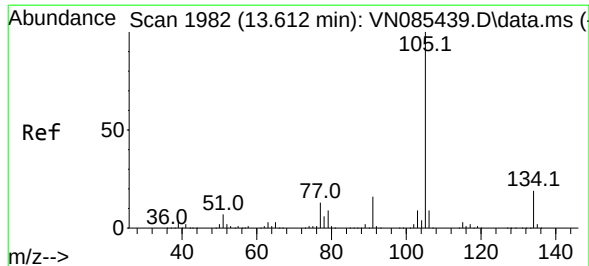
Tgt Ion:105 Resp: 443501

Ion Ratio Lower Upper

105 100

120 44.0 21.6 65.0





#85

sec-Butylbenzene

Concen: 54.205 ug/l

RT: 13.617 min Scan# 19

Delta R.T. 0.005 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:105 Resp: 504931

Ion Ratio Lower Upper

105 100

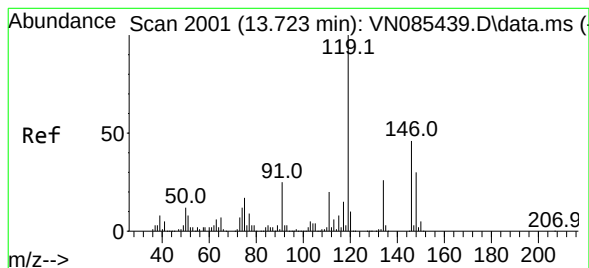
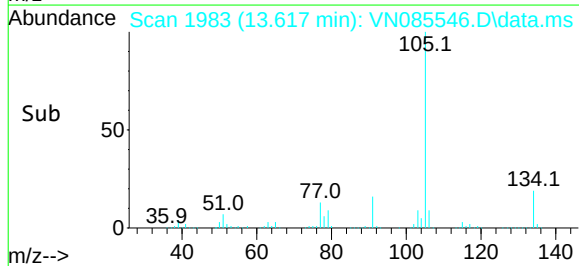
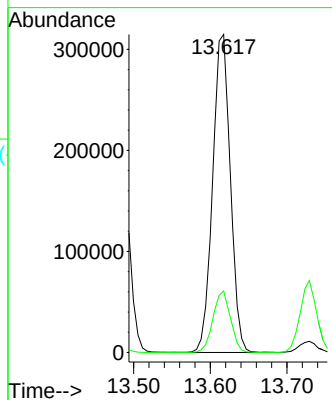
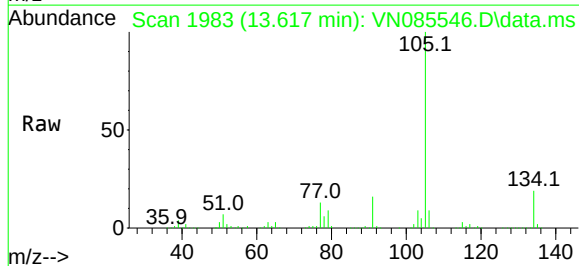
134 19.1 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#86

p-Isopropyltoluene

Concen: 50.325 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

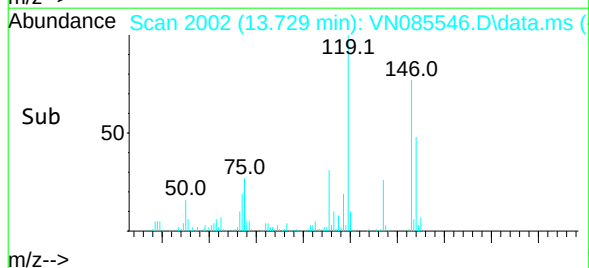
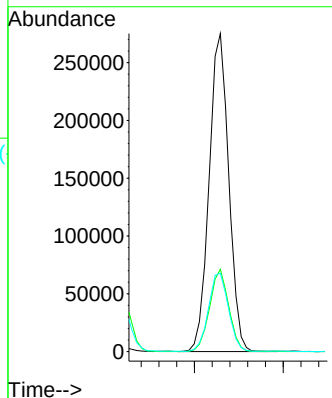
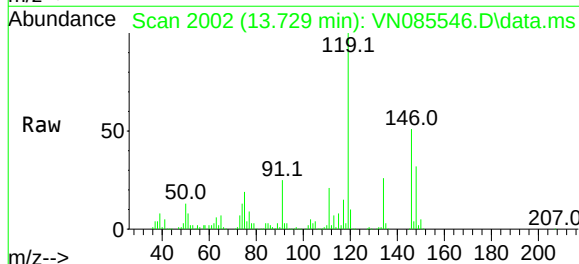
Tgt Ion:119 Resp: 422476

Ion Ratio Lower Upper

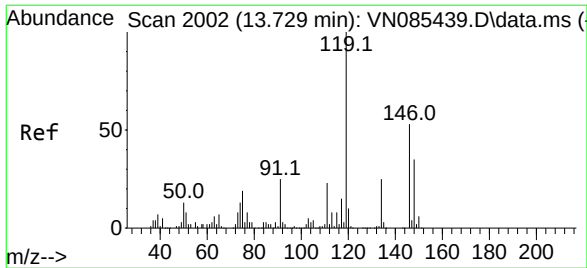
119 100

134 25.2 12.7 38.0

91 25.0 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 50.068 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:146 Resp: 233419

Ion Ratio Lower Upper

146 100

111 42.4 21.4 64.3

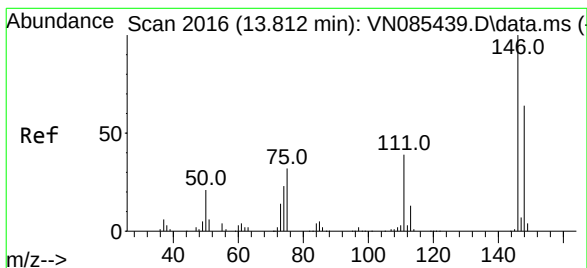
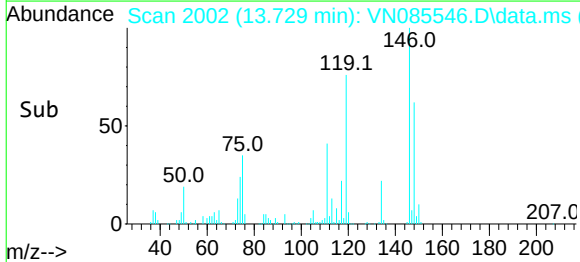
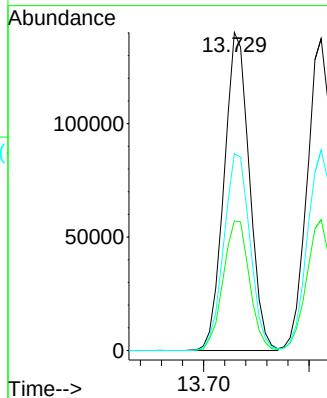
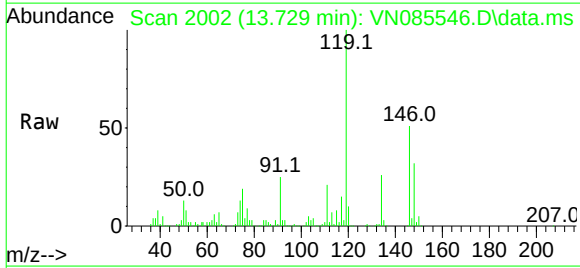
148 64.2 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#88

1,4-Dichlorobenzene

Concen: 47.539 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

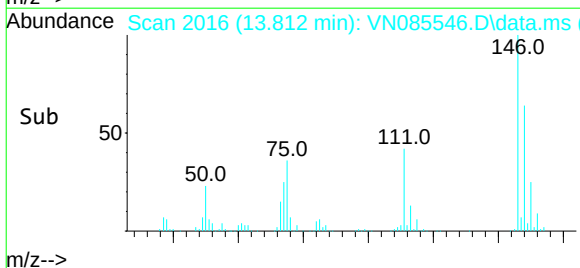
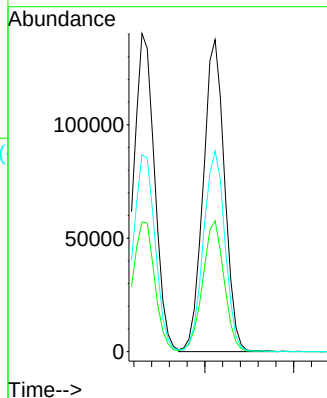
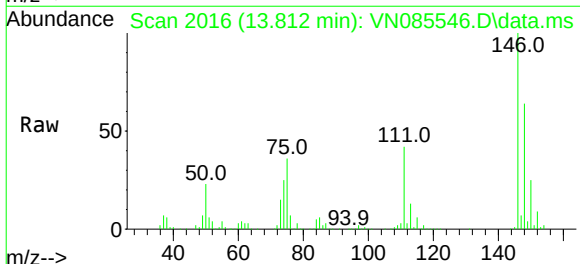
Tgt Ion:146 Resp: 229722

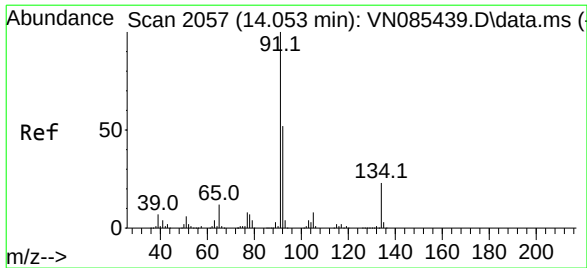
Ion Ratio Lower Upper

146 100

111 42.1 21.3 63.7

148 64.8 32.4 97.0





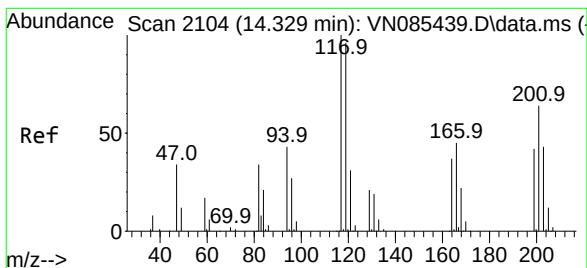
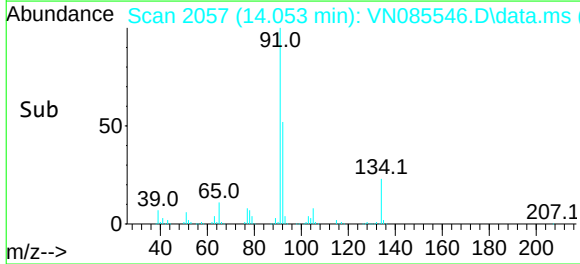
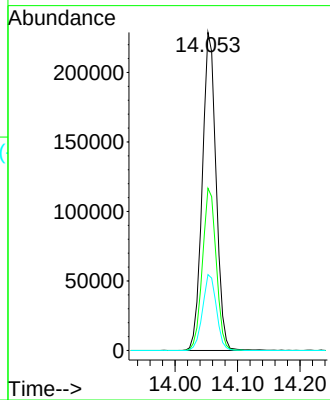
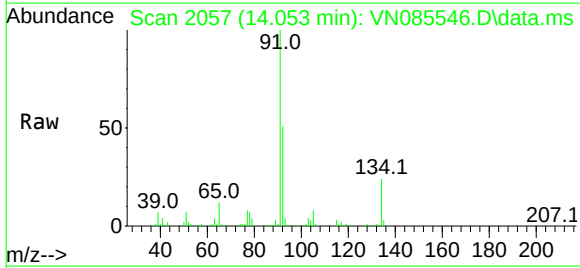
#89  
n-Butylbenzene  
Concen: 52.557 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

| Tgt Ion:  | 91    | Resp: | 351230 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 92        | 50.9  | 25.8  | 77.3   |
| 134       | 24.0  | 11.7  | 35.1   |

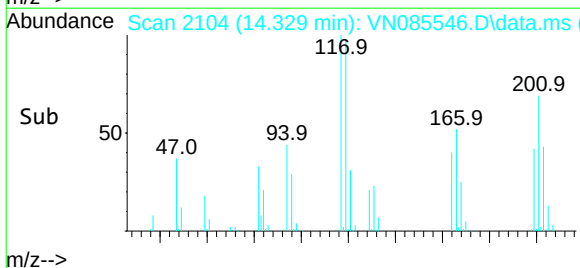
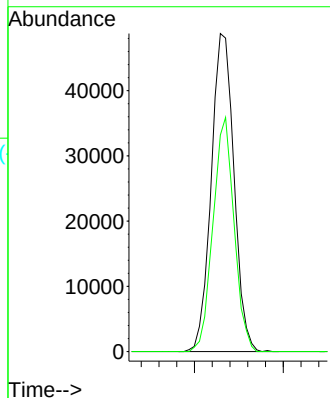
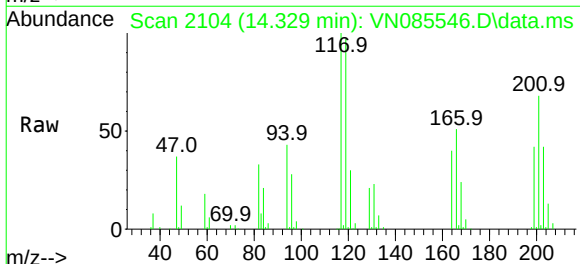
Manual Integrations  
APPROVED

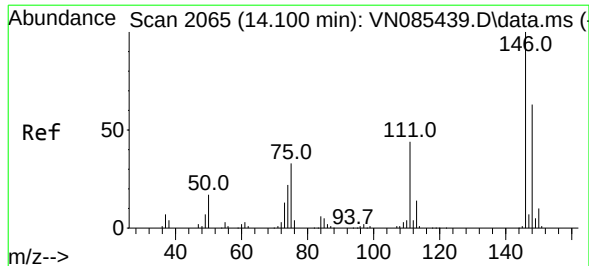
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#90  
Hexachloroethane  
Concen: 48.917 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

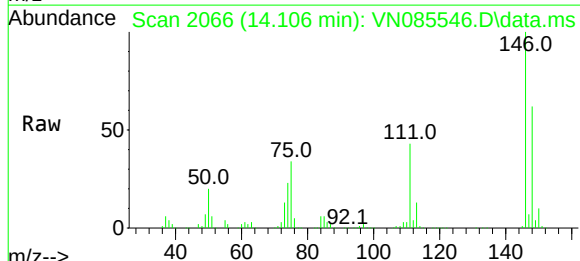
| Tgt Ion:  | 117   | Resp: | 86748 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 68.1  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 49.142 ug/l  
RT: 14.106 min Scan# 2065  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

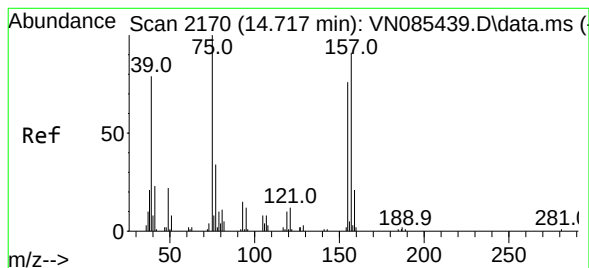
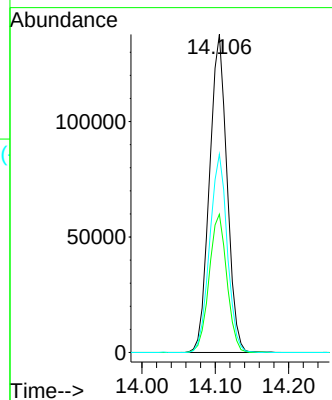
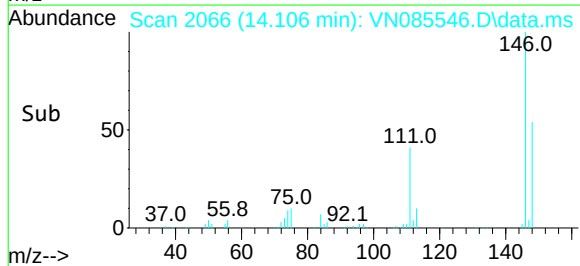
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:146 Resp: 228524  
Ion Ratio Lower Upper  
146 100  
111 43.9 21.7 65.1  
148 62.5 31.4 94.2

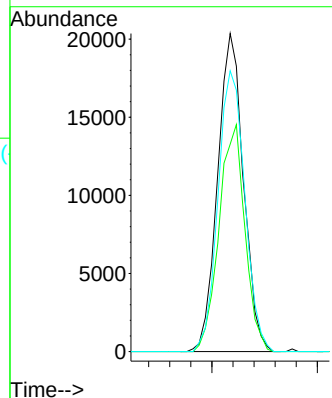
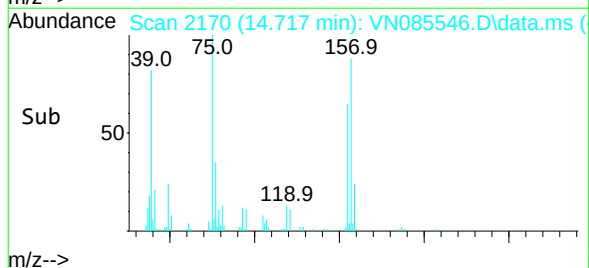
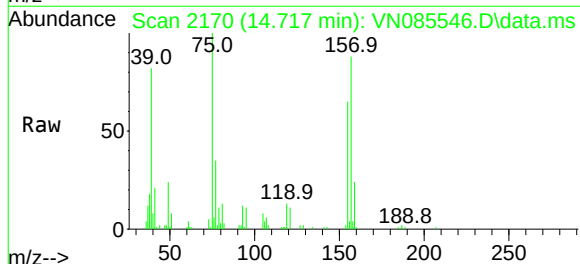
Manual Integrations  
APPROVED

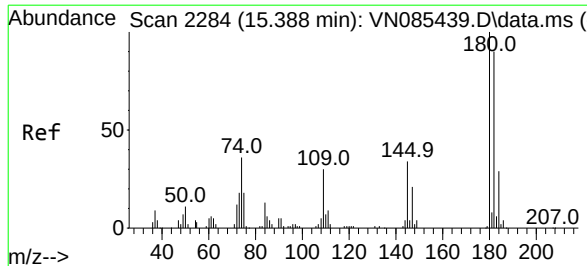
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 55.439 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 75 Resp: 34650  
Ion Ratio Lower Upper  
75 100  
155 71.7 36.4 109.2  
157 91.5 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 50.399 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:180 Resp: 108928

Ion Ratio Lower Upper

180 100

182 92.9 46.8 140.3

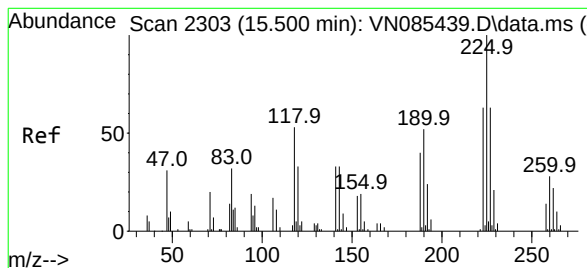
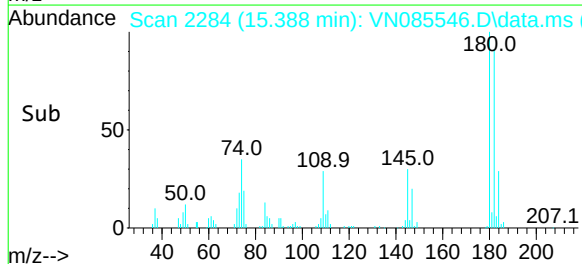
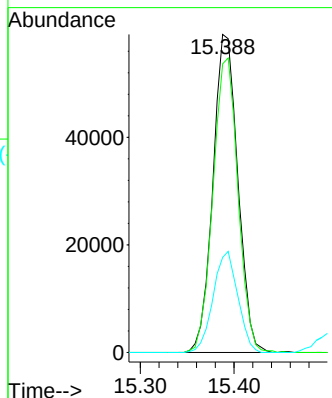
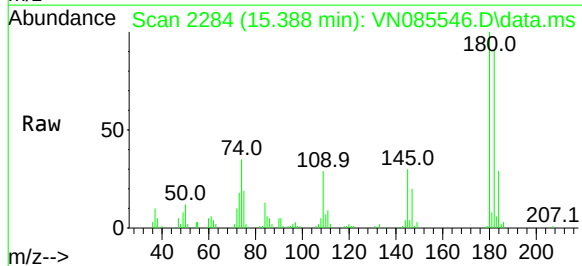
145 31.5 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#94

Hexachlorobutadiene

Concen: 43.430 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

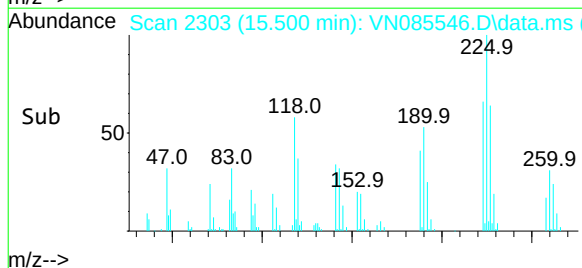
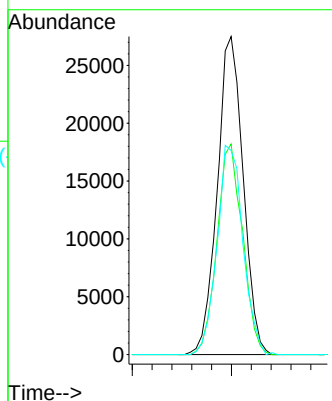
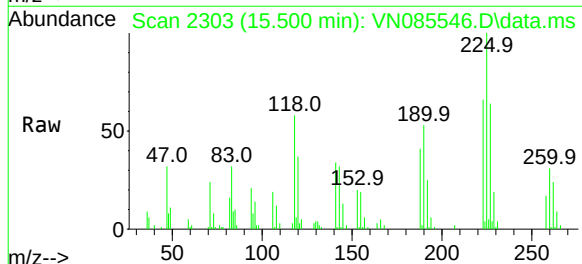
Tgt Ion:225 Resp: 49834

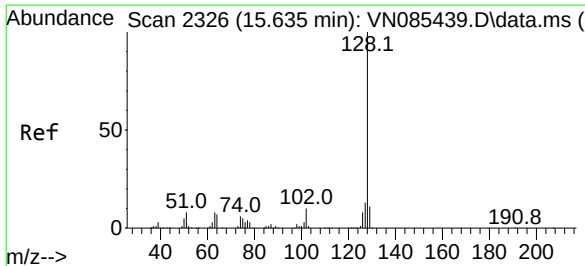
Ion Ratio Lower Upper

225 100

223 65.2 30.7 92.1

227 65.8 30.9 92.5





#95

Naphthalene

Concen: 53.141 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

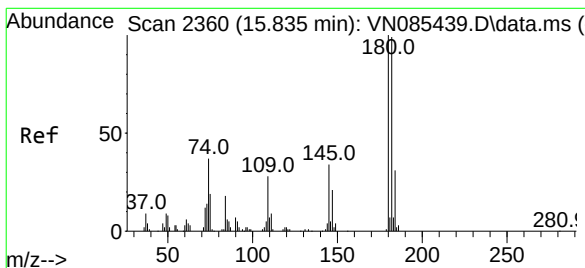
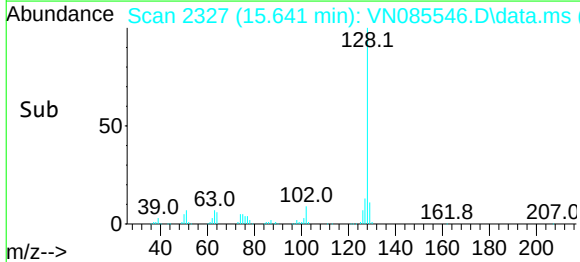
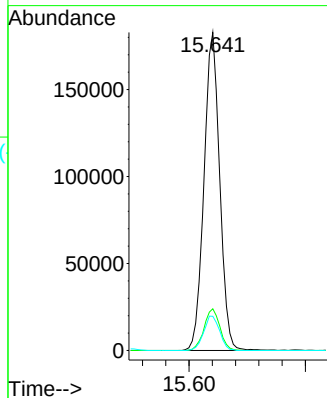
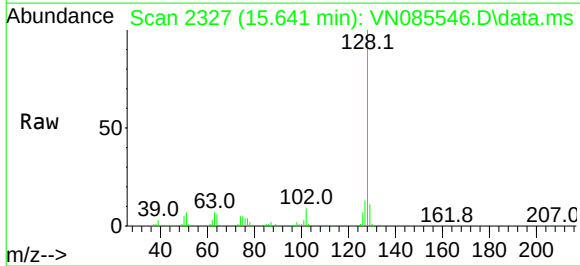
VSTDCCC050EC

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 342729 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 127       | 13.3  | 10.6  | 16.0   |
| 129       | 11.0  | 8.8   | 13.2   |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#96

1,2,3-Trichlorobenzene

Concen: 49.210 ug/l

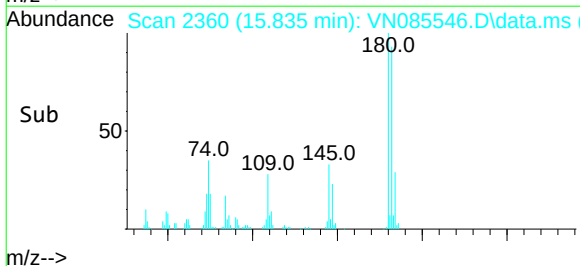
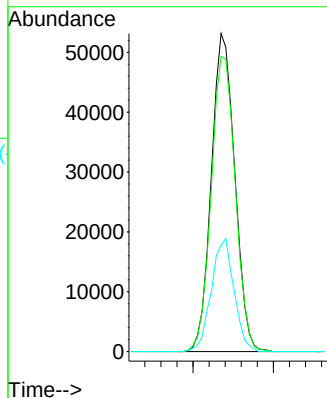
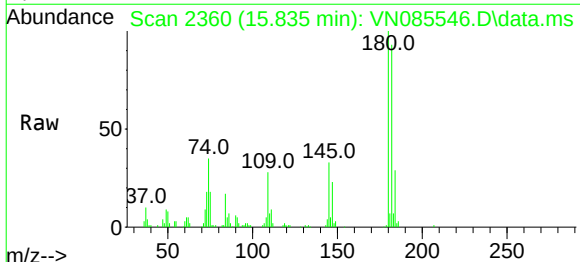
RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 107618 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 95.6  | 47.4  | 142.2  |
| 145       | 34.4  | 16.9  | 50.7   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

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    | 94    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.677 | 0.581 | 14.2   | 87    | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.606 | 17.3   | 84    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.641 | 13.0#  | 88    | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.362 | 18.7   | 82    | -0.02    |
| 6 T   | Chloroethane                | 0.467 | 0.426 | 8.8    | 95    | -0.01    |
| 7 T   | Trichlorofluoromethane      | 1.069 | 1.034 | 3.3    | 98    | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.351 | 4.9    | 92    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.590 | 2.0    | 103   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.686 | 0.6    | 90    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.130 | -41.3# | 131   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.523 | 2.6#   | 92    | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.138 | -9.5   | 93    | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.830 | 4.7    | 92    | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.331 | -12.6  | 105   | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.285 | -9.2   | 106   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.307 | 20.9   | 83    | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.953 | -20.2  | 114   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.909 | -9.6   | 96    | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.637 | 1.4    | 95    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.549 | 4.2    | 93    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 2.089 | -8.1   | 97    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.549 | -14.5  | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.186 | -0.7   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.451 | -17.4  | 109   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 1.007 | -5.7   | 101   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.693 | -2.7   | 96    | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.477 | 13.0   | 83    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.294 | -21.0  | 106   | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.238 | -1.6#  | 99    | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.888 | 13.3   | 95    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 1.078 | -0.9   | 100   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.882 | -9.3   | 100   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 92    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.384 | -10.7  | 99    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.485 | 0.4    | 97    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.547 | -11.4  | 103   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.573 | -2.9   | 100   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.458 | -0.2   | 91    | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.498 | -2.4   | 96    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.311 | -21.5  | 107   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.571 | -3.6   | 96    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 1.100 | -39.8# | 125   | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.341 | 0.0    | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.391 | -4.5#  | 97    | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.277 | -2.6   | 96    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.602 | -9.7   | 100   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.429 | -21.2  | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.007 | -16.7  | 108   | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.397 | -13.4  | 102   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.577 | -26.3# | 108   | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.923 | -8.8#  | 98    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.580 | -11.8  | 97    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.602 | -8.7   | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.367 | -9.6   | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.583 | -24.3  | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.648 | -11.1  | 99    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.248 | -16.4  | 95    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.420 | -30.8# | 109   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.444 | -9.6   | 99    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.359 | -7.5   | 99    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.503 | -19.2  | 103   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 96    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.309 | 9.4    | 92    | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.102 | -0.6   | 99    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.411 | -2.2   | 101   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.936 | -8.5#  | 100   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.738 | -12.0  | 101   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.697 | -10.6  | 99    | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.210 | -16.0  | 100   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.322 | -11.8  | 100   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 98    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.613 | -7.1   | 103   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.700 | -12.1  | 103   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.228 | -3.0   | 105   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 1.016 | 0.0    | 111   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.885 | -0.3   | 101   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.293 | -7.5   | 101   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.677 | -3.5   | 101   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 3.014 | -8.1   | 100   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.427 | -13.6  | 107   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.673 | -3.8   | 101   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.471 | -5.6   | 99    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 3.089 | -11.2  | 100   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.517 | -8.4   | 101   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 2.943 | -11.9  | 100   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.626 | -0.1   | 102   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.600 | 4.9    | 100   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.446 | -5.1   | 96    | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.604 | 2.3    | 103   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.592 | 1.7    | 100   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.241 | -10.6  | 106   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.759 | -0.8   | 95    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.347 | 13.3   | 93    | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.387 | -6.3   | 94    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085546.D  
Acq On : 28 Jan 2025 18:14  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.762 | 0.750 | 1.6  | 93    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

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    | 94    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 42.934  | 14.1   | 87    | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 41.310  | 17.4   | 84    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 43.525  | 13.0#  | 88    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 40.633  | 18.7   | 82    | -0.02    |
| 6 T   | Chloroethane                | 50.000  | 45.629  | 8.7    | 95    | -0.01    |
| 7 T   | Trichlorofluoromethane      | 50.000  | 48.343  | 3.3    | 98    | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 47.541  | 4.9    | 92    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 49.006  | 2.0    | 103   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 49.778  | 0.4    | 90    | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 351.637 | -40.7# | 131   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 48.687  | 2.6#   | 92    | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 273.407 | -9.4   | 93    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 47.653  | 4.7    | 92    | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 281.891 | -12.8  | 105   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 272.891 | -9.2   | 106   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 39.567  | 20.9   | 83    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 60.097  | -20.2  | 114   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 54.787  | -9.6   | 96    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 49.335  | 1.3    | 95    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 47.884  | 4.2    | 93    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 54.034  | -8.1   | 97    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 286.348 | -14.5  | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 50.334  | -0.7   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 293.531 | -17.4  | 109   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 52.834  | -5.7   | 101   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 51.325  | -2.7   | 96    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 43.487  | 13.0   | 83    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 301.616 | -20.6  | 106   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 50.826  | -1.7#  | 99    | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 43.331  | 13.3   | 95    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 50.429  | -0.9   | 100   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 54.638  | -9.3   | 100   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0    | 92    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 55.349  | -10.7  | 99    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 49.851  | 0.3    | 97    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 55.616  | -11.2  | 103   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 51.368  | -2.7   | 100   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 50.030  | -0.1   | 91    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 51.218  | -2.4   | 96    | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 60.848  | -21.7  | 107   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 51.863  | -3.7   | 96    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 69.836  | -39.7# | 125   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 50.023  | -0.0   | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 52.380  | -4.8#  | 97    | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 51.408  | -2.8   | 96    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 54.778  | -9.6   | 100   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 60.523  | -21.0  | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

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 | 1240.952 | -24.1  | 108   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 56.666   | -13.3  | 102   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 315.843  | -26.3# | 108   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 54.423   | -8.8#  | 98    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 55.846   | -11.7  | 97    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 54.260   | -8.5   | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 54.714   | -9.4   | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 51.541   | -3.1   | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 55.519   | -11.0  | 99    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 291.087  | -16.4  | 95    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 326.364  | -30.5# | 109   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 54.855   | -9.7   | 99    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 53.765   | -7.5   | 99    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 59.614   | -19.2  | 103   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0    | 96    | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 45.330   | 9.3    | 92    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 50.289   | -0.6   | 99    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 51.180   | -2.4   | 101   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 54.268   | -8.5#  | 100   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 111.987  | -12.0  | 101   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 55.313   | -10.6  | 99    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 58.032   | -16.1  | 100   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 55.980   | -12.0  | 100   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0    | 98    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 53.526   | -7.1   | 103   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 56.051   | -12.1  | 103   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 51.507   | -3.0   | 105   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 49.995   | 0.0    | 111   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 50.181   | -0.4   | 101   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 53.728   | -7.5   | 101   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 51.776   | -3.6   | 101   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 54.059   | -8.1   | 100   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 56.880   | -13.8  | 107   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 51.917   | -3.8   | 101   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 52.772   | -5.5   | 99    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 55.598   | -11.2  | 100   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 54.205   | -8.4   | 101   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 50.325   | -0.7   | 100   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 50.068   | -0.1   | 102   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 47.539   | 4.9    | 100   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 52.557   | -5.1   | 96    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 48.917   | 2.2    | 103   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 49.142   | 1.7    | 100   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 55.439   | -10.9  | 106   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 50.399   | -0.8   | 95    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 43.430   | 13.1   | 93    | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 53.141   | -6.3   | 94    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085546.D  
Acq On : 28 Jan 2025 18:14  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 29 03:39:00 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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 | 49.210 | 1.6  | 93    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



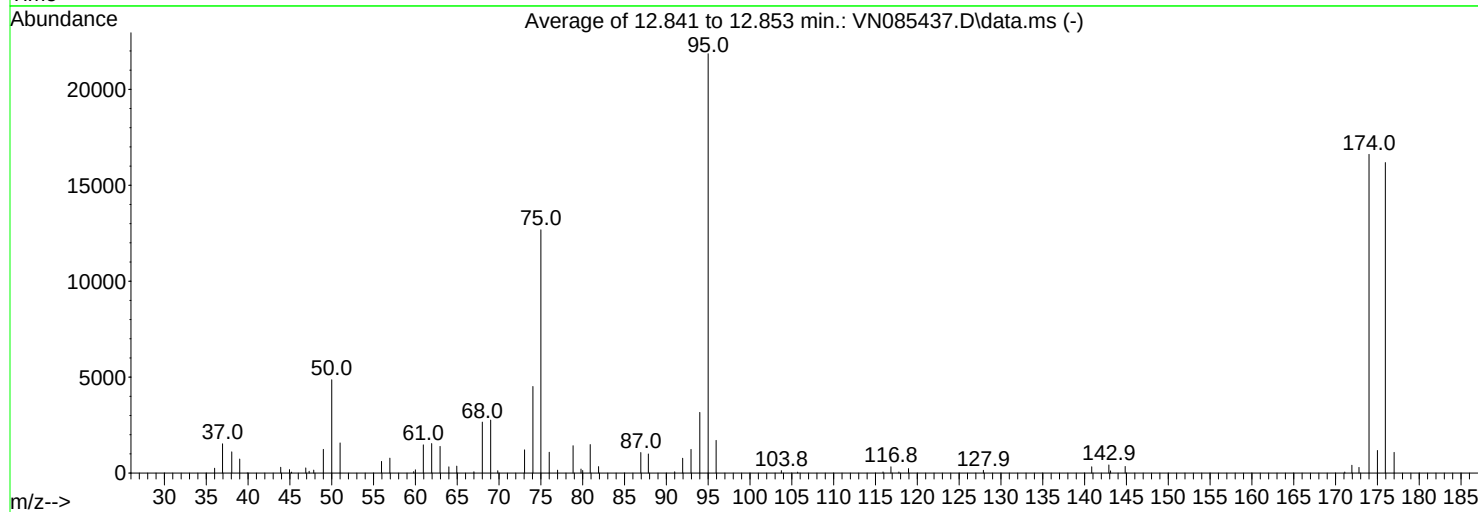
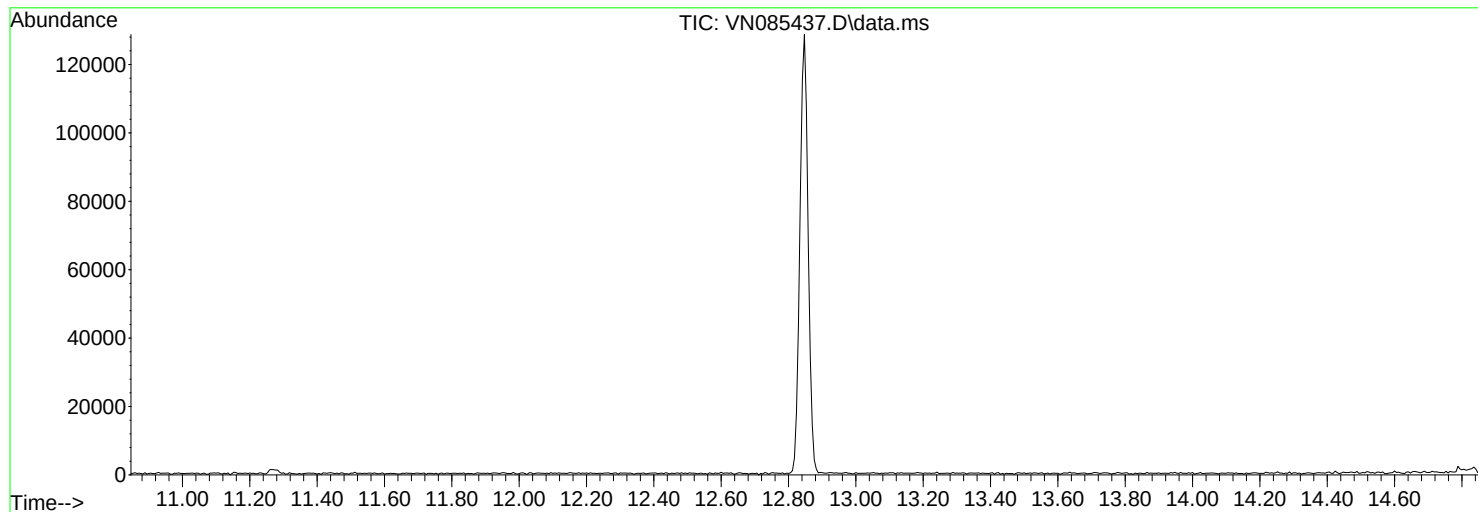
# QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085437.D  
Acq On : 14 Jan 2025 14:22  
Operator : JC\MD  
Sample : BFB  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260  
Last Update : Wed Jan 15 02:16:08 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

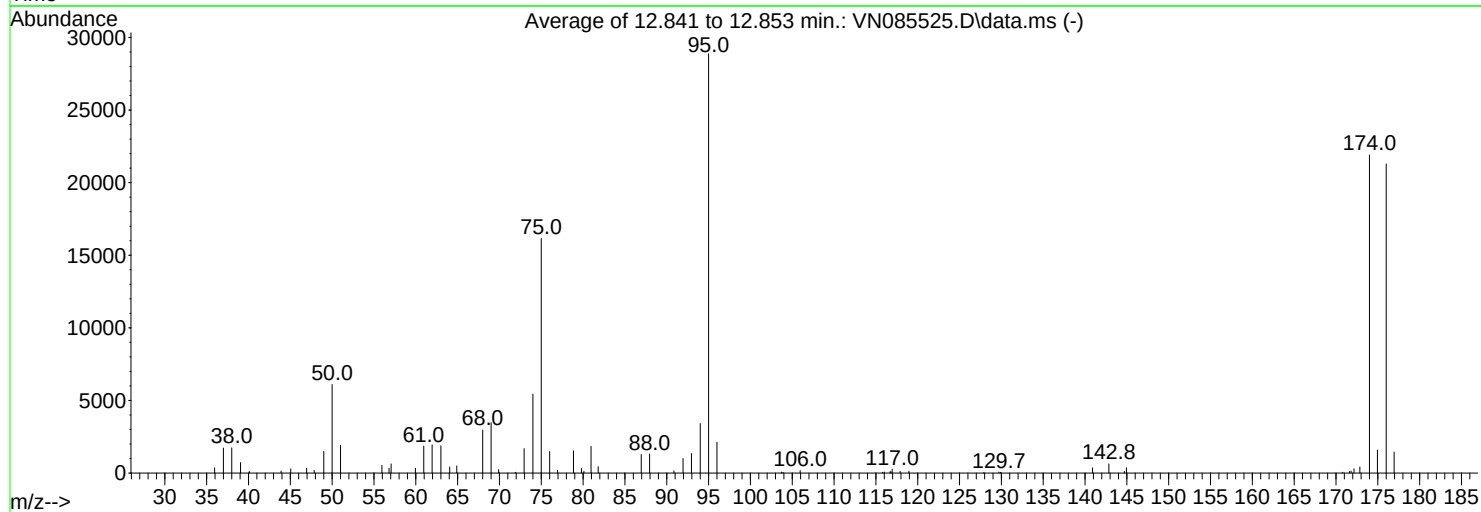
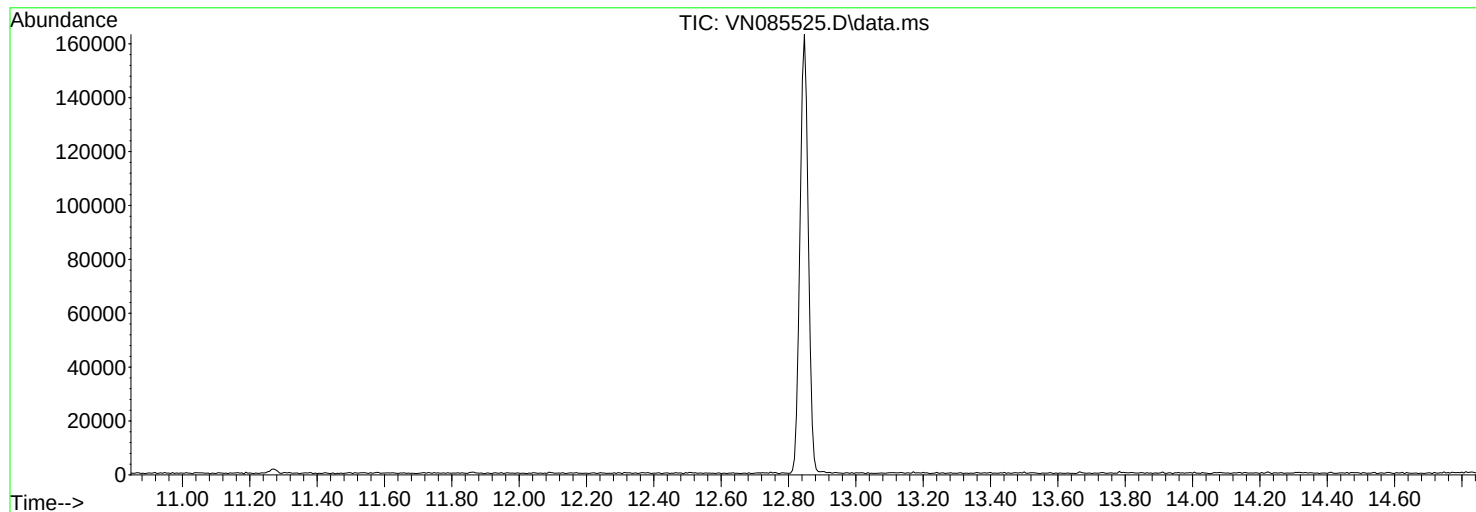
| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 22.3         | 4864       | PASS                |
| 75             | 95              | 30              | 60              | 58.0         | 12679      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 21856      | PASS                |
| 96             | 95              | 5               | 9               | 7.8          | 1703       | PASS                |
| 173            | 174             | 0.00            | 2               | 1.8          | 296        | PASS                |
| 174            | 95              | 50              | 100             | 76.0         | 16613      | PASS                |
| 175            | 174             | 5               | 9               | 7.1          | 1179       | PASS                |
| 176            | 174             | 95              | 101             | 97.4         | 16185      | PASS                |
| 177            | 176             | 5               | 9               | 6.7          | 1079       | PASS                |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085525.D  
Acq On : 28 Jan 2025 09:17  
Operator : JC\MD  
Sample : BFB  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260  
Last Update : Wed Jan 15 02:16:08 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 21.1         | 6102       | PASS                |
| 75             | 95              | 30              | 60              | 55.9         | 16153      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 28877      | PASS                |
| 96             | 95              | 5               | 9               | 7.4          | 2133       | PASS                |
| 173            | 174             | 0.00            | 2               | 1.9          | 424        | PASS                |
| 174            | 95              | 50              | 100             | 75.9         | 21904      | PASS                |
| 175            | 174             | 5               | 9               | 7.2          | 1583       | PASS                |
| 176            | 174             | 95              | 101             | 97.2         | 21288      | PASS                |
| 177            | 176             | 5               | 9               | 6.8          | 1447       | PASS                |

## Report of Analysis

|                    |                      |        |      |                 |              |    |  |
|--------------------|----------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc. |        |      | Date Collected: |              |    |  |
| Project:           | CTO WE13             |        |      | Date Received:  |              |    |  |
| Client Sample ID:  | VN0128WBL01          |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | VN0128WBL01          |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260               |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                    | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                      |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624              | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                      |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085528.D        | 1         |           | 01/28/25 10:51 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 0.50  | U         | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.75  | U         | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.75  | U         | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.50  | U         | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.75  | U         | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 3.80  | U         | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.50  | U         | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.50  | U         | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 2.50  | U         | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.50  | U         | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.75  | U         | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.50  | U         | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.50  | U         | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.50  | U         | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.50  | U         | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 2.50  | U         | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.50  | U         | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.50  | U         | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 2.50  | U         | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: |                              |
| Project:           | CTO WE13                                  | Date Received:  |                              |
| Client Sample ID:  | VN0128WBL01                               | SDG No.:        | Q1199                        |
| Lab Sample ID:     | VN0128WBL01                               | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOCMS Group1                 |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085528.D        | 1         |           | 01/28/25 10:51 | VN012825      |

| CAS Number                | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 0.50   | U         | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene         | 0.50   | U         | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene             | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene             | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes               | 1.00   | U         | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                  | 0.50   | U         | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                  | Styrene                   | 0.50   | U         | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                 | 0.50   | U         | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene          | 0.50   | U         | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene       | 0.50   | U         | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene       | 0.50   | U         | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene       | 0.50   | U         | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                           |        |           |          |      |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4     | 53.7   |           | 81 - 118 |      | 107%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 52.2   |           | 80 - 119 |      | 104%       | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 50.1   |           | 89 - 112 |      | 100%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 44.2   |           | 85 - 114 |      | 88%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 184000 | 8.218     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 333000 | 9.1       |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 291000 | 11.865    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 116000 | 13.788    |          |      |            |         |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085528.D  
 Acq On : 28 Jan 2025 10:51  
 Operator : JC\MD  
 Sample : VN0128WBL01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBL01

Quant Time: Jan 29 00:35:19 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 183717   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 332601   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 291066   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 116250   | 50.000 | ug/l  | 0.00     |

|                             |        |                |          |        |          |      |
|-----------------------------|--------|----------------|----------|--------|----------|------|
| System Monitoring Compounds |        |                |          |        |          |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 159230   | 53.693 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 107.380% |      |
| 35) Dibromofluoromethane    | 8.165  | 113            | 120495   | 52.220 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 104.440% |      |
| 50) Toluene-d8              | 10.565 | 98             | 410338   | 50.052 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 100.100% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 124045   | 44.232 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 88.460%  |      |

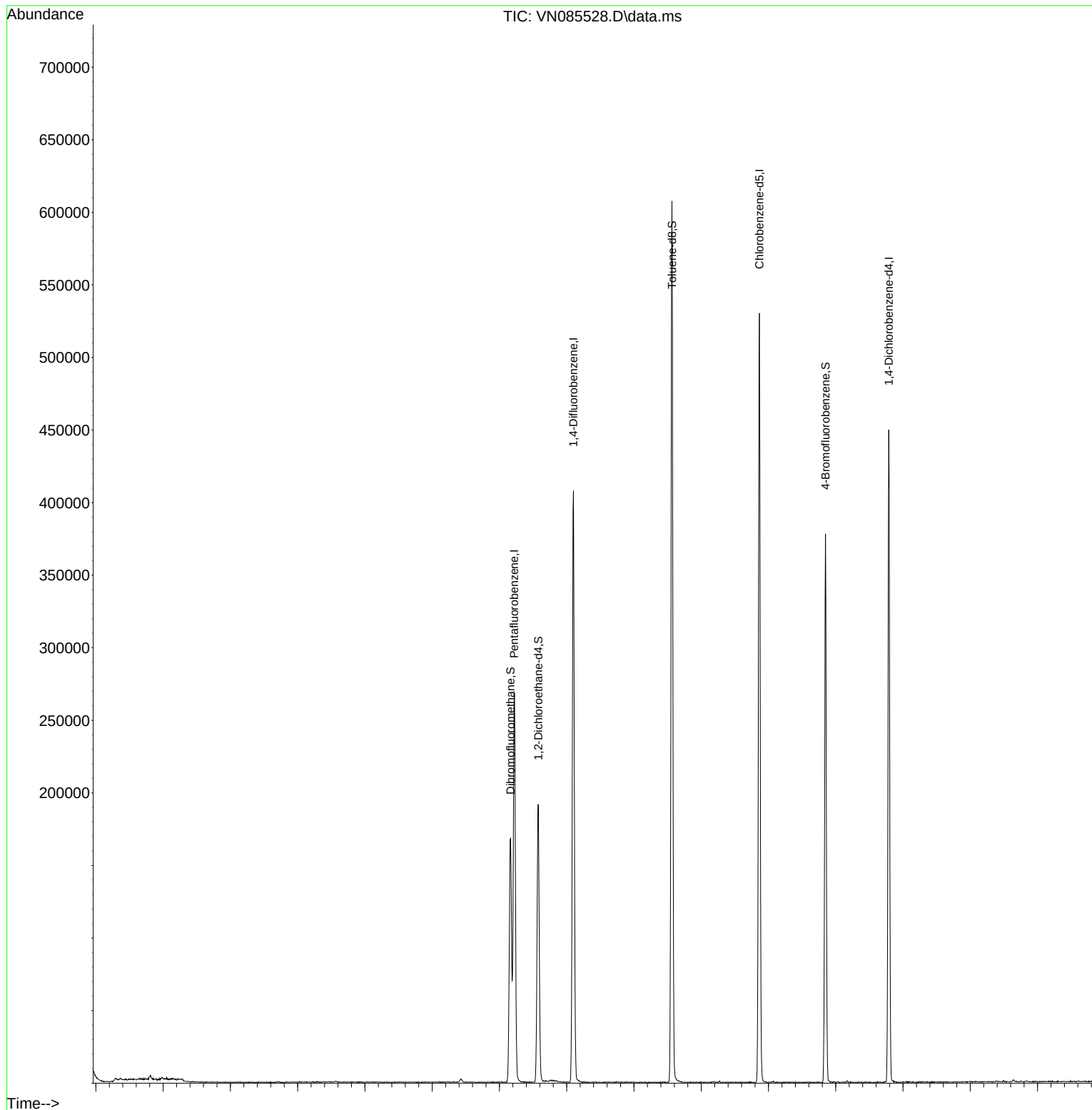
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

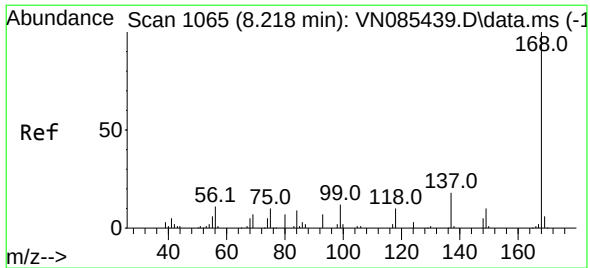
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085528.D  
Acq On : 28 Jan 2025 10:51  
Operator : JC\MD  
Sample : VN0128WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

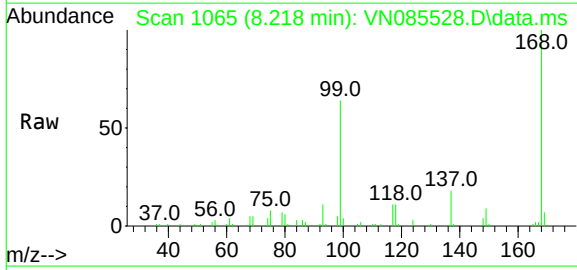
Quant Time: Jan 29 00:35:19 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



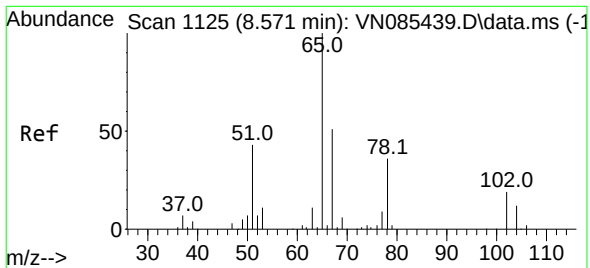
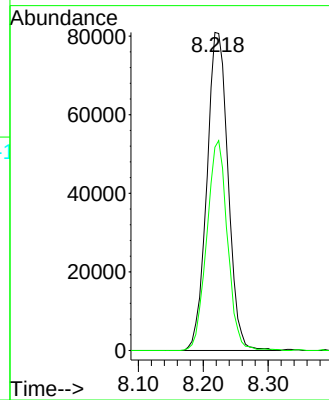
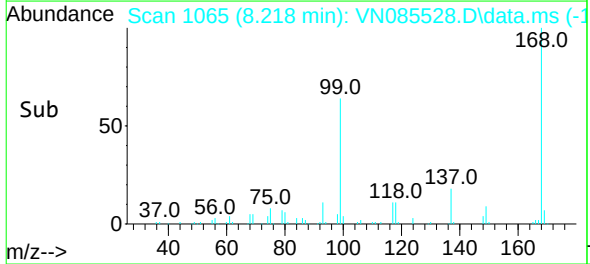


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085528.D  
Acq: 28 Jan 2025 10:51

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

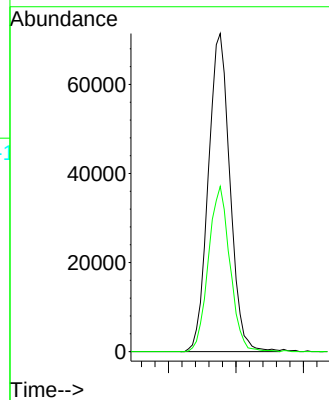
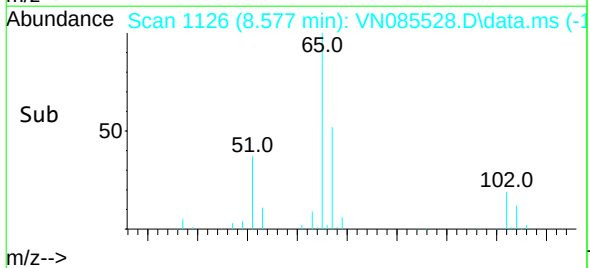
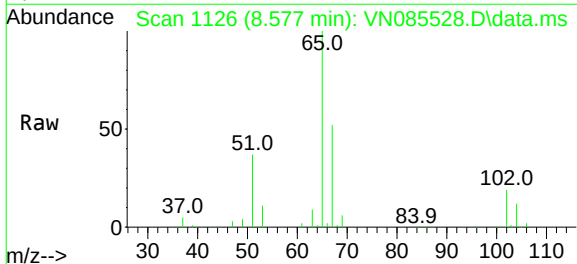


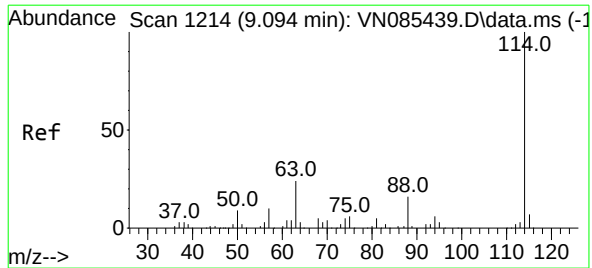
Tgt Ion:168 Resp: 183717  
Ion Ratio Lower Upper  
168 100  
99 63.9 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 53.693 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085528.D  
Acq: 28 Jan 2025 10:51

Tgt Ion: 65 Resp: 159230  
Ion Ratio Lower Upper  
65 100  
67 51.5 0.0 101.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1214

Delta R.T. 0.006 min

Lab File: VN085528.D

Acq: 28 Jan 2025 10:51

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBL01

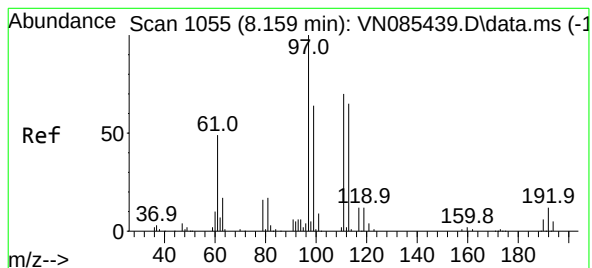
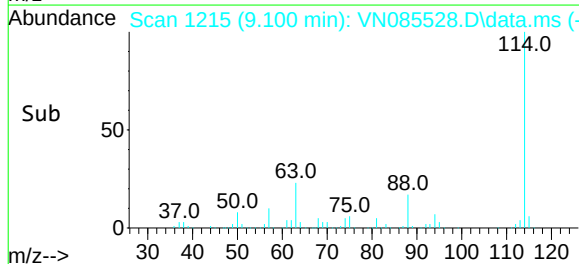
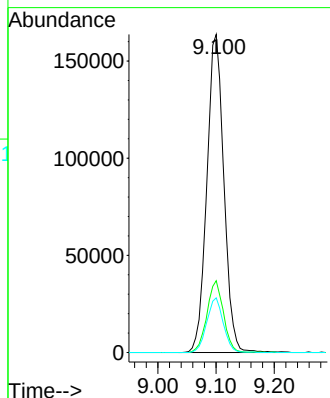
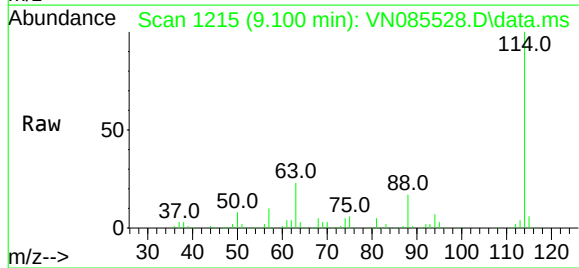
Tgt Ion:114 Resp: 332601

Ion Ratio Lower Upper

114 100

63 22.6 0.0 47.6

88 17.2 0.0 32.6



#35

Dibromofluoromethane

Concen: 52.220 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085528.D

Acq: 28 Jan 2025 10:51

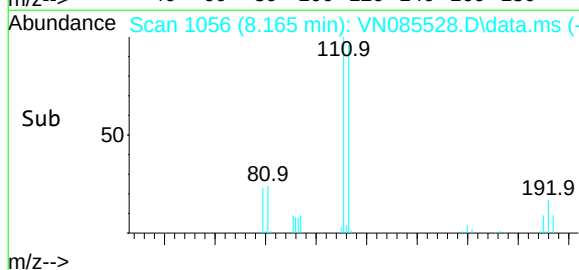
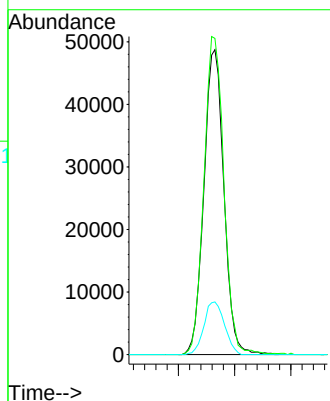
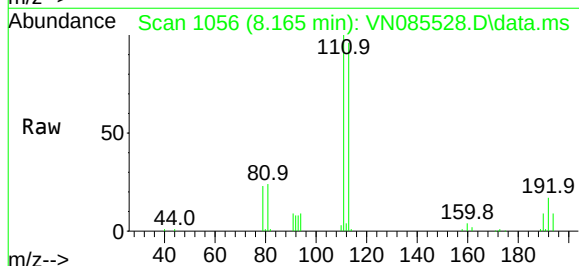
Tgt Ion:113 Resp: 120495

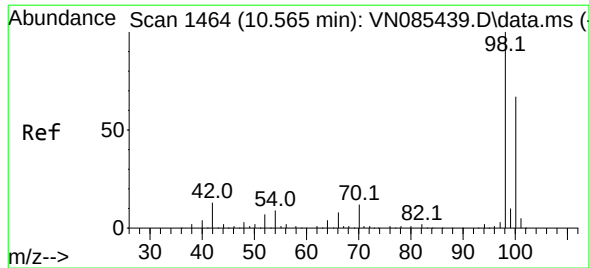
Ion Ratio Lower Upper

113 100

111 103.9 82.7 124.1

192 17.8 14.3 21.5





#50

Toluene-d8

Concen: 50.052 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085528.D

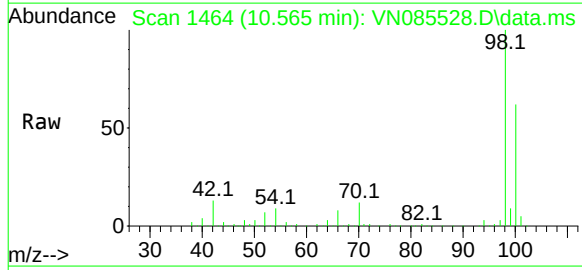
Acq: 28 Jan 2025 10:51

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBL01

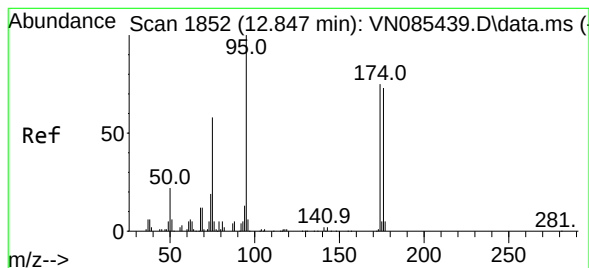
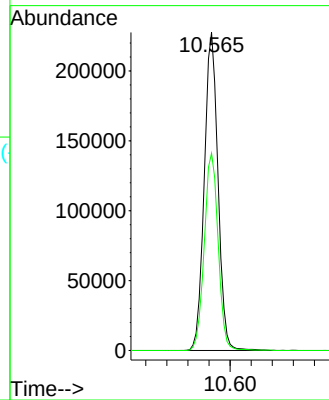
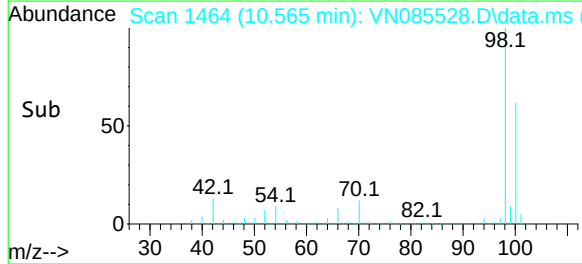


Tgt Ion: 98 Resp: 410338

Ion Ratio Lower Upper

98 100

100 63.0 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 44.232 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085528.D

Acq: 28 Jan 2025 10:51

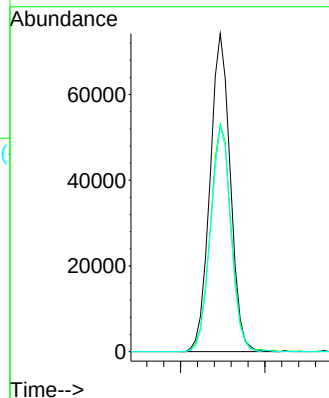
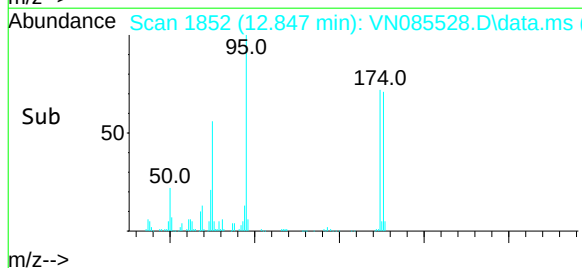
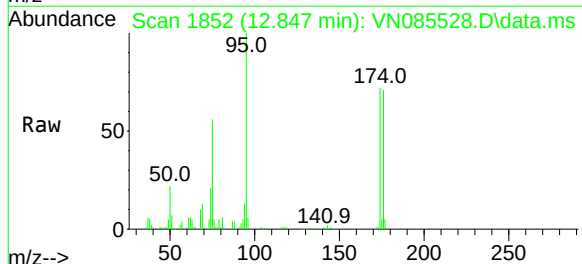
Tgt Ion: 95 Resp: 124045

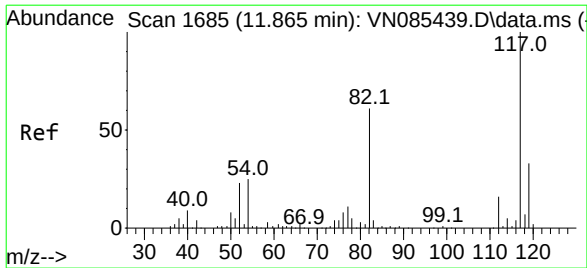
Ion Ratio Lower Upper

95 100

174 74.0 0.0 145.0

176 70.5 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085528.D

Acq: 28 Jan 2025 10:51

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBL01

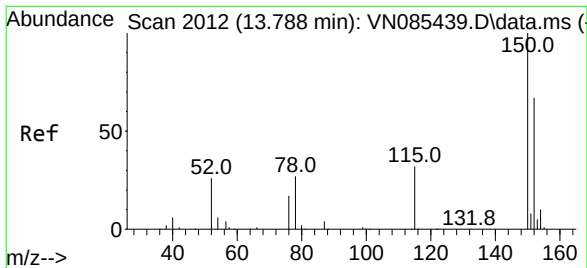
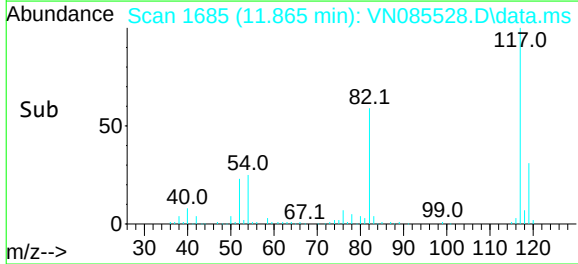
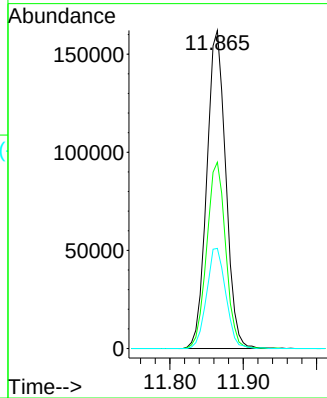
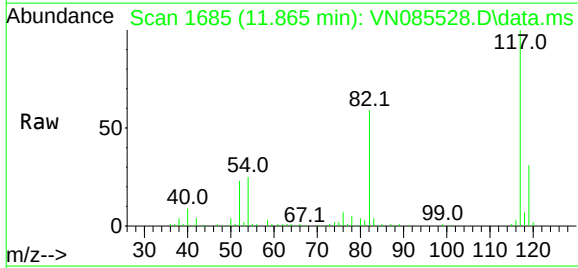
Tgt Ion:117 Resp: 291066

Ion Ratio Lower Upper

117 100

82 58.6 48.6 72.8

119 31.5 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085528.D

Acq: 28 Jan 2025 10:51

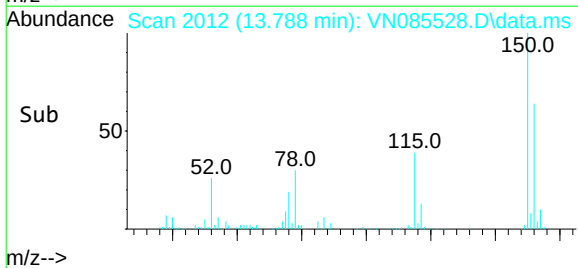
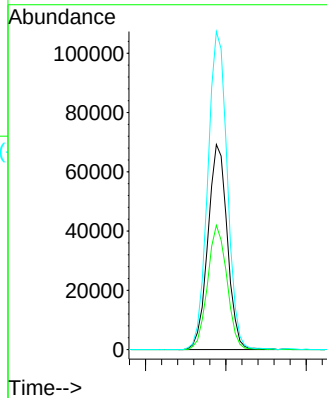
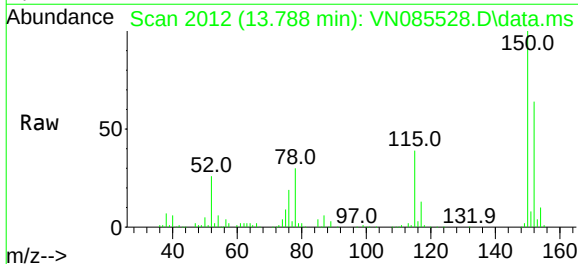
Tgt Ion:152 Resp: 116250

Ion Ratio Lower Upper

152 100

115 60.3 31.1 93.3

150 155.3 0.0 343.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085528.D  
Acq On : 28 Jan 2025 10:51  
Operator : JC\MD  
Sample : VN0128WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Title : SW846 8260

Signal : TIC: VN085528.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 8.165       | 1046          | 1056        | 1060         | rBV      | 167943         | 401423        | 36.19%          | 7.042%        |
| 2         | 8.224       | 1060          | 1066        | 1082         | rVB      | 267962         | 606129        | 54.65%          | 10.633%       |
| 3         | 8.577       | 1116          | 1126        | 1138         | rBV      | 191499         | 427577        | 38.55%          | 7.501%        |
| 4         | 9.100       | 1205          | 1215        | 1229         | rBV      | 407646         | 827937        | 74.65%          | 14.524%       |
| 5         | 10.565      | 1455          | 1464        | 1480         | rBV      | 607166         | 1109139       | 100.00%         | 19.457%       |
| 6         | 11.865      | 1676          | 1685        | 1697         | rBV      | 529971         | 948825        | 85.55%          | 16.645%       |
| 7         | 12.847      | 1845          | 1852        | 1860         | rBV      | 378051         | 632238        | 57.00%          | 11.091%       |
| 8         | 13.788      | 2005          | 2012        | 2021         | rBV      | 449400         | 747250        | 67.37%          | 13.108%       |

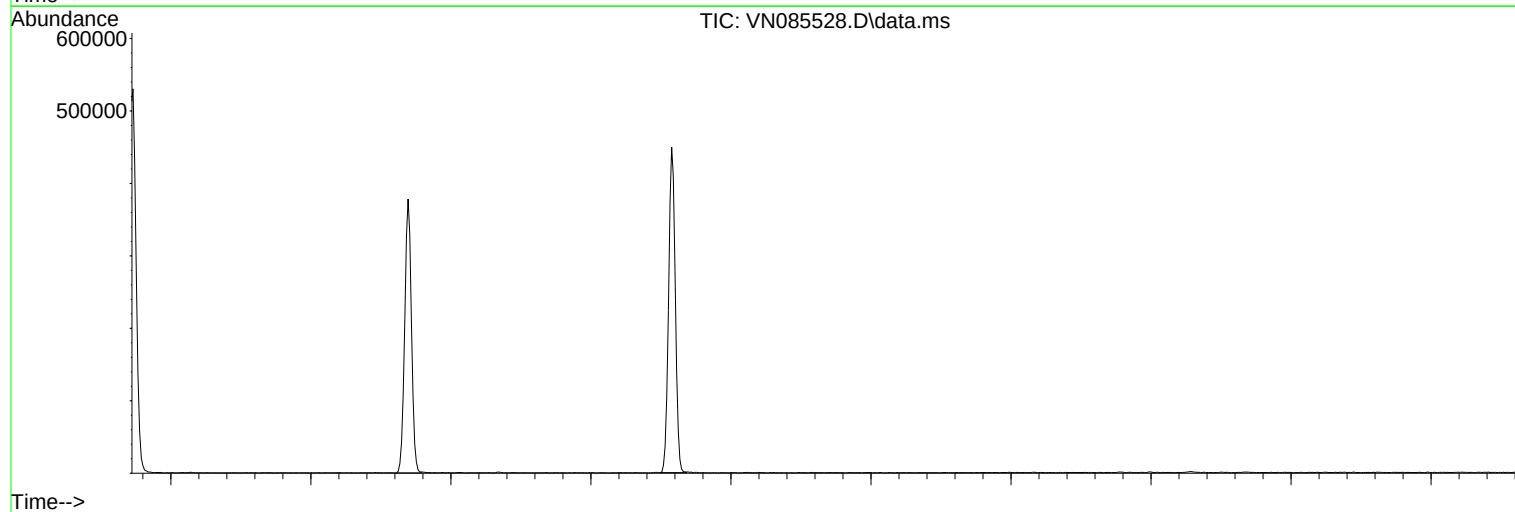
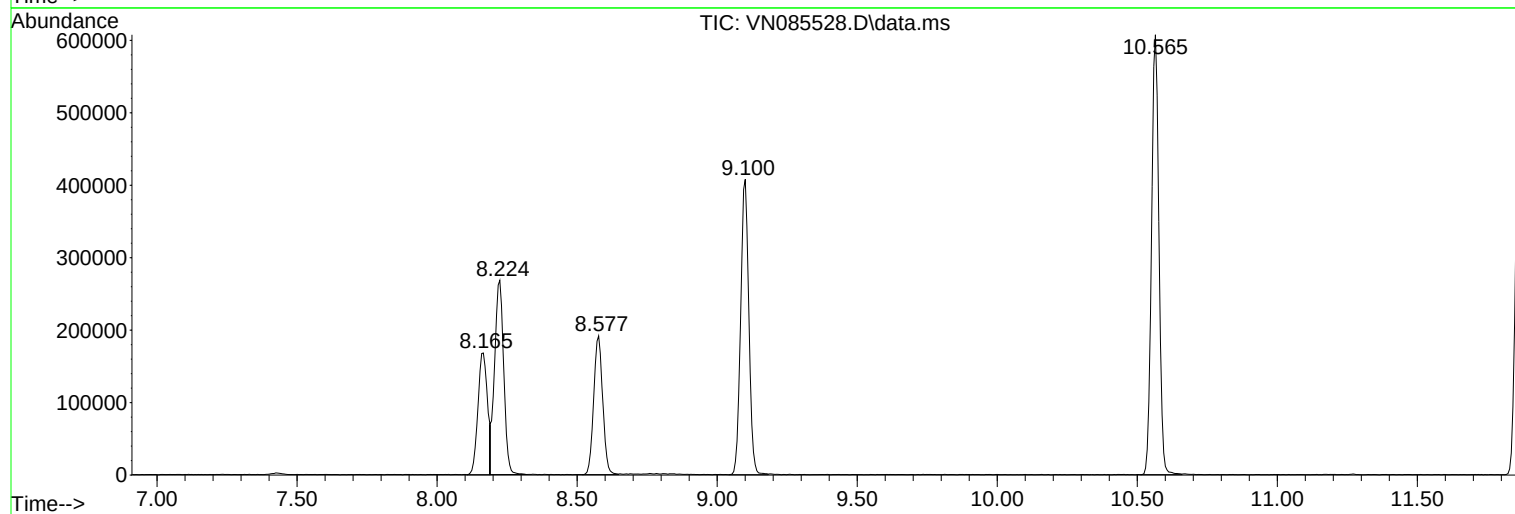
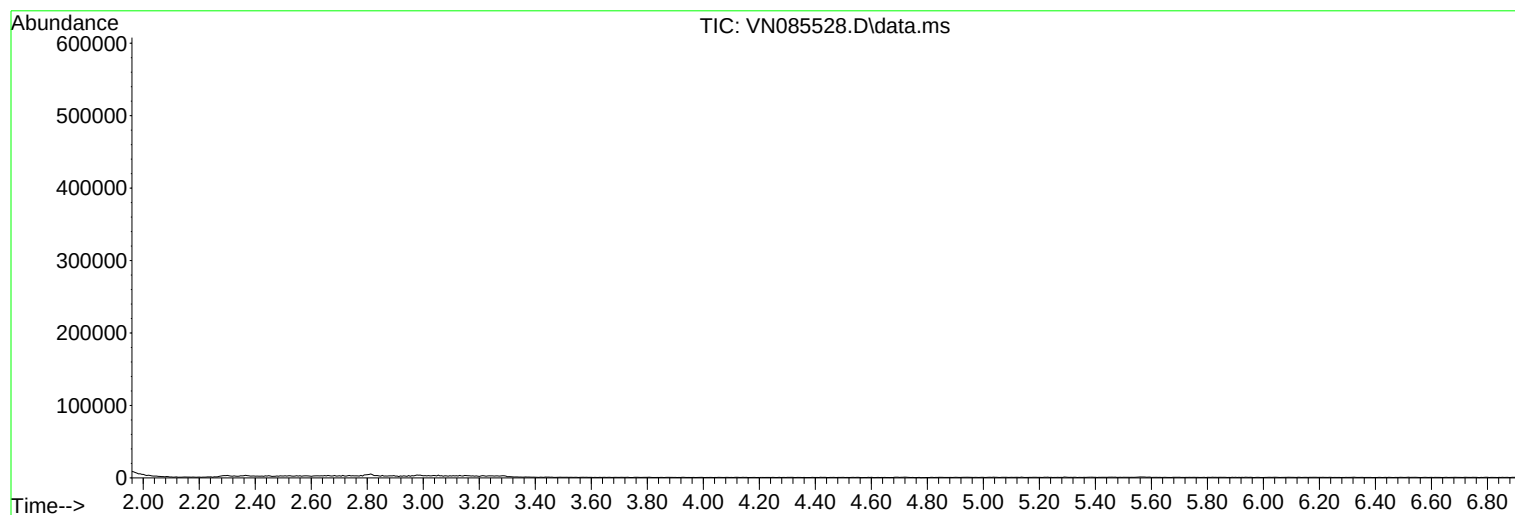
Sum of corrected areas: 5700518

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085528.D  
Acq On : 28 Jan 2025 10:51  
Operator : JC\MD  
Sample : VN0128WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085528.D  
Acq On : 28 Jan 2025 10:51  
Operator : JC\MD  
Sample : VN0128WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085528.D  
Acq On : 28 Jan 2025 10:51  
Operator : JC\MD  
Sample : VN0128WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |
|------------------|----|---------|-------|----------|-----------------------|
|                  |    |         |       | #        | RT Resp Conc          |

### Report of Analysis

|                    |                      |        |      |                 |              |    |  |
|--------------------|----------------------|--------|------|-----------------|--------------|----|--|
| Client:            | Tetra Tech NUS, Inc. |        |      | Date Collected: |              |    |  |
| Project:           | CTO WE13             |        |      | Date Received:  |              |    |  |
| Client Sample ID:  | VN0128WBS01          |        |      | SDG No.:        | Q1199        |    |  |
| Lab Sample ID:     | VN0128WBS01          |        |      | Matrix:         | Water        |    |  |
| Analytical Method: | SW8260               |        |      | % Solid:        | 0            |    |  |
| Sample Wt/Vol:     | 5                    | Units: | mL   | Final Vol:      | 5000         | uL |  |
| Soil Aliquot Vol:  |                      |        | uL   | Test:           | VOCMS Group1 |    |  |
| GC Column:         | RXI-624              | ID :   | 0.25 | Level :         | LOW          |    |  |
| Prep Method :      |                      |        |      |                 |              |    |  |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085529.D        | 1         |           | 01/28/25 11:15 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 17.3  |           | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 18.2  |           | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 19.5  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 19.8  |           | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 20.7  |           | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 20.5  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 19.1  |           | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 100   |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 16.4  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 20.9  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 19.8  |           | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 18.9  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 20.1  |           | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 110   |           | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 20.5  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 19.9  |           | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 20.6  |           | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 20.4  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 18.9  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 20.7  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 21.0  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 20.4  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 20.7  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 21.7  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 120   |           | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 21.9  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 21.4  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 21.5  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 21.9  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 120   |           | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                      |        |      |                 |              |
|--------------------|----------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc. |        |      | Date Collected: |              |
| Project:           | CTO WE13             |        |      | Date Received:  |              |
| Client Sample ID:  | VN0128WBS01          |        |      | SDG No.:        | Q1199        |
| Lab Sample ID:     | VN0128WBS01          |        |      | Matrix:         | Water        |
| Analytical Method: | SW8260               |        |      | % Solid:        | 0            |
| Sample Wt/Vol:     | 5                    | Units: | mL   | Final Vol:      | 5000 uL      |
| Soil Aliquot Vol:  |                      |        | uL   | Test:           | VOCMS Group1 |
| GC Column:         | RXI-624              | ID :   | 0.25 | Level :         | LOW          |
| Prep Method :      |                      |        |      |                 |              |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VN085529.D        | 1         |           | 01/28/25 11:15 | VN012825      |

| CAS Number                | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 21.2   |           | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene         | 21.7   |           | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene             | 20.6   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene             | 20.8   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes               | 43.1   |           | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                  | 20.9   |           | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                  | Styrene                   | 21.3   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                 | 22.5   |           | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene          | 20.9   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 21.6   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene       | 20.8   |           | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene       | 19.8   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene       | 20.4   |           | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                           |        |           |          |      |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4     | 51.1   |           | 81 - 118 |      | 102%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 53.2   |           | 80 - 119 |      | 106%       | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 54.1   |           | 89 - 112 |      | 108%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 52.0   |           | 85 - 114 |      | 104%       | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 186000 | 8.224     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 308000 | 9.1       |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 271000 | 11.865    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 127000 | 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\VN012825\  
 Data File : VN085529.D  
 Acq On : 28 Jan 2025 11:15  
 Operator : JC\MD  
 Sample : VN0128WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

### Manual Integrations APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:35:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 185562   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 307569   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 271043   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 126721   | 50.000 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.577  | 65    | 153168   | 51.135   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 102.280% |
| 35) Dibromofluoromethane  | 8.165  | 113   | 113571   | 53.225   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 106.460% |
| 50) Toluene-d8            | 10.565 | 98    | 410056   | 54.088   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 108.180% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 134929   | 52.029   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 104.060% |

#### Target Compounds

|                              |       |     |        |         |      | Qvalue |
|------------------------------|-------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 45881  | 18.261  | ug/l | 99     |
| 3) Chloromethane             | 2.359 | 50  | 46936  | 17.254  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.512 | 62  | 49715  | 18.182  | ug/l | 98     |
| 5) Bromomethane              | 2.965 | 94  | 32217  | 19.506  | ug/l | 93     |
| 6) Chloroethane              | 3.118 | 64  | 34288  | 19.780  | ug/l | 95     |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 82151  | 20.707  | ug/l | 94     |
| 8) Diethyl Ether             | 3.959 | 74  | 26345  | 19.222  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 45774  | 20.484  | ug/l | 98     |
| 10) Methyl Iodide            | 4.589 | 142 | 50026  | 19.549  | ug/l | 95     |
| 11) Tert butyl alcohol       | 5.512 | 59  | 37334  | 108.849 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 37952  | 19.057  | ug/l | 93     |
| 13) Acrolein                 | 4.177 | 56  | 39646  | 84.676  | ug/l | 98     |
| 14) Allyl chloride           | 5.024 | 41  | 59056  | 18.275  | ug/l | 98     |
| 15) Acrylonitrile            | 5.712 | 53  | 116207 | 106.667 | ug/l | 98     |
| 16) Acetone                  | 4.424 | 43  | 101360 | 104.730 | ug/l | 94     |
| 17) Carbon Disulfide         | 4.706 | 76  | 100344 | 16.364  | ug/l | 98     |
| 18) Methyl Acetate           | 5.018 | 43  | 66988  | 22.762  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 135056 | 20.885  | ug/l | 97     |
| 20) Methylene Chloride       | 5.277 | 84  | 47487  | 19.820  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene | 5.789 | 96  | 40233  | 18.903  | ug/l | 94     |
| 22) Diisopropyl ether        | 6.671 | 45  | 147403 | 20.550  | ug/l | 97     |
| 23) Vinyl Acetate            | 6.600 | 43  | 516002 | 102.796 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 87952  | 20.110  | ug/l | 99     |
| 25) 2-Butanone               | 7.477 | 43  | 153642 | 107.876 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 78263  | 22.133  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene   | 7.488 | 96  | 49822  | 19.875  | ug/l | 99     |
| 28) Bromochloromethane       | 7.812 | 49  | 32851  | 16.145  | ug/l | 96     |
| 29) Tetrahydrofuran          | 7.836 | 42  | 102010 | 112.971 | ug/l | 99     |
| 30) Chloroform               | 7.965 | 83  | 92905  | 20.553  | ug/l | 93     |
| 31) Cyclohexane              | 8.253 | 56  | 67069  | 17.643  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 80919  | 20.408  | ug/l | 97     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 58916  | 19.673  | ug/l | 99     |
| 37) Ethyl Acetate            | 7.553 | 43  | 62638  | 20.722  | ug/l | 98     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 70429  | 20.543  | ug/l | 97     |
| 39) Methylcyclohexane        | 9.600 | 83  | 53089  | 18.865  | ug/l | 96     |
| 40) Benzene                  | 8.606 | 78  | 186111 | 20.683  | ug/l | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085529.D  
 Acq On : 28 Jan 2025 11:15  
 Operator : JC\MD  
 Sample : VN0128WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:35:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 33670    | 21.410  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 71068    | 20.970  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 105036   | 21.686  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 42674    | 20.374  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 47674    | 20.743  | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 33823    | 20.395  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 73309    | 21.697  | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.677  | 41   | 47567    | 21.823  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 15432    | 420.430 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 324778   | 115.555 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 113994   | 21.864  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 68322    | 21.398  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 73429    | 21.530  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 45212    | 21.912  | ug/l   | 94       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 62727    | 19.281  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78623    | 21.915  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 114984   | 87.817  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 234494   | 118.574 | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.359 | 129  | 52835    | 21.210  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 42361    | 20.625  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 40019    | 21.658  | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 122235   | 20.586  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 46034    | 21.124  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 201123   | 20.797  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.071 | 106  | 154069   | 43.106  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 71535    | 20.943  | ug/l   | 100      |
| 70) Styrene                   | 12.412 | 104  | 120125   | 21.250  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 35108    | 22.516  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 178577   | 20.880  | ug/l   | 98       |
| 74) N-ethyl acetate           | 12.488 | 43   | 80633    | 20.975  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 65405    | 21.649  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 60066m   | 23.321  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 47665    | 21.332  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 217855   | 21.517  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 138138   | 21.081  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 154258   | 21.836  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 21965    | 23.073  | ug/l   | 87       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 139420   | 21.369  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 124147   | 20.926  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 155548   | 22.092  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 178351   | 21.691  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 143953   | 20.952  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 85729    | 20.833  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 84406    | 19.789  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 115181   | 19.526  | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 30558    | 19.522  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 83529    | 20.350  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12961    | 23.494  | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 36081    | 18.913  | ug/l   | 95       |
| 94) Hexachlorobutadiene       | 15.494 | 225  | 20163    | 19.907  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 104713   | 18.394  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 36634    | 18.978  | ug/l   | 98       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085529.D  
Acq On : 28 Jan 2025 11:15  
Operator : JC\MD  
Sample : VN0128WBS01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:35:38 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

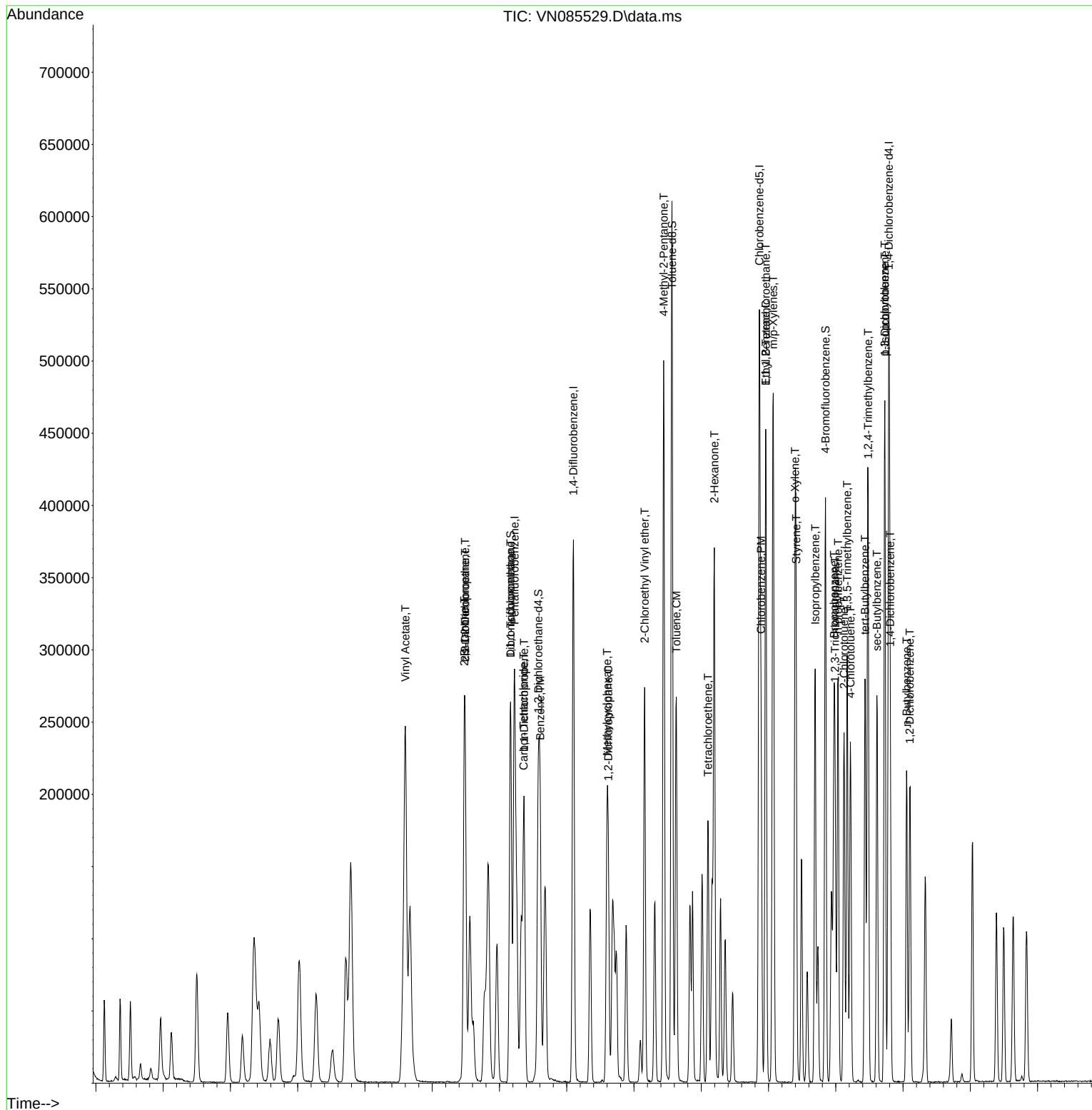
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Operator : JC\MD  
Sample : VN0128WBS01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

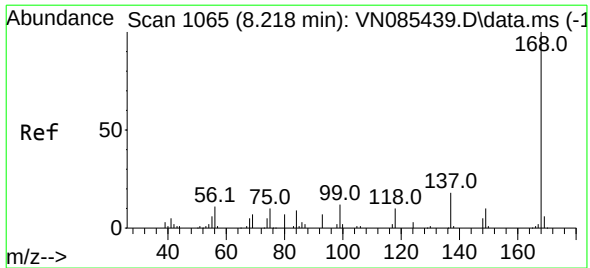
Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:35:38 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

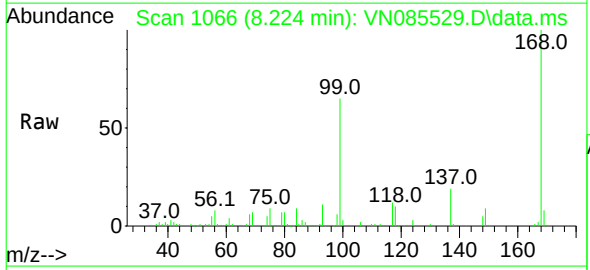






#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

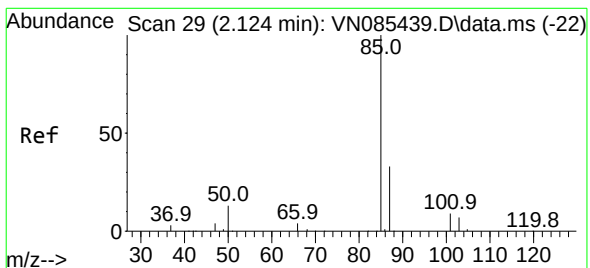
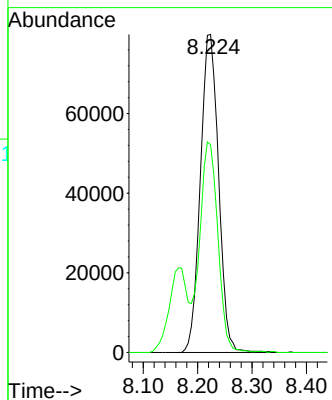
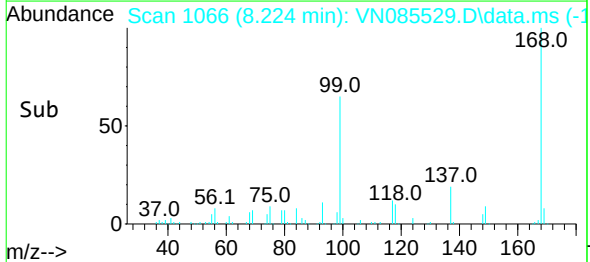
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 168 Resp: 185562  
Ion Ratio Lower Upper  
168 100  
99 65.3 53.6 80.4

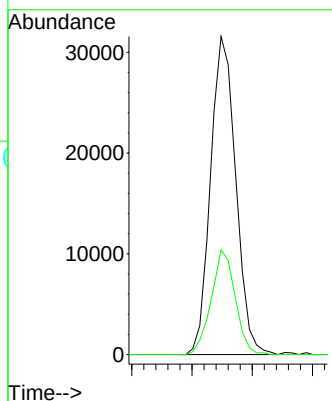
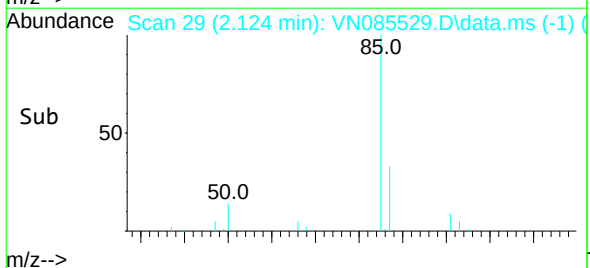
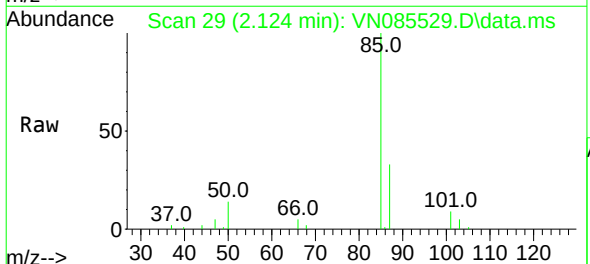
Manual Integrations  
APPROVED

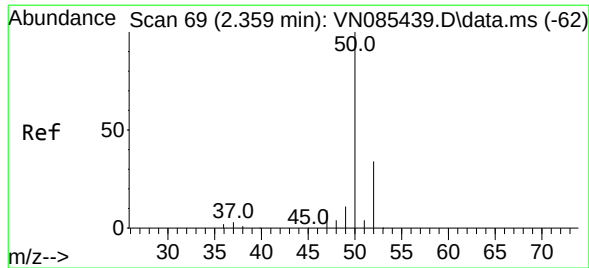
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025



#2  
Dichlorodifluoromethane  
Concen: 18.261 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

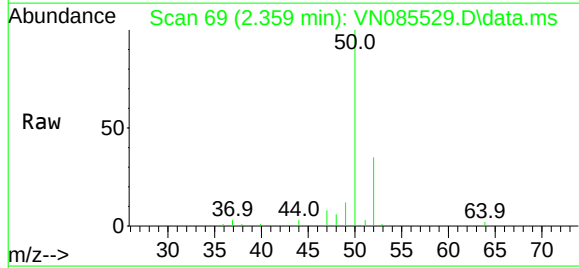
Tgt Ion: 85 Resp: 45881  
Ion Ratio Lower Upper  
85 100  
87 33.0 16.7 50.1





#3  
Chloromethane  
Concen: 17.254 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

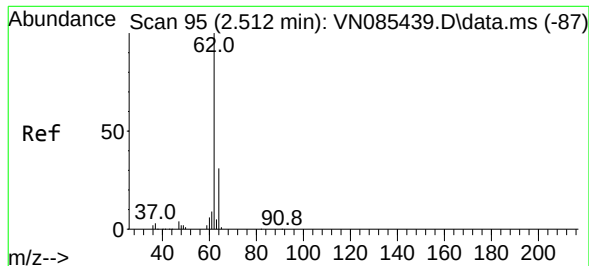
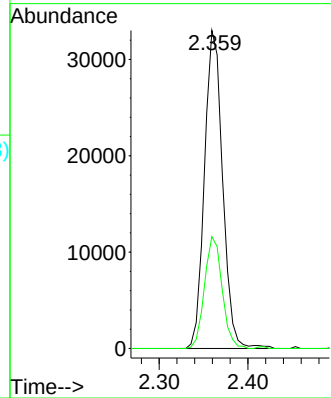
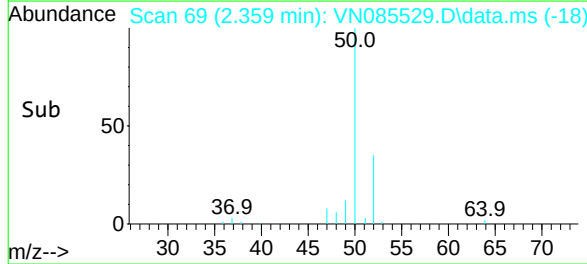
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 50 Resp: 46936  
Ion Ratio Lower Upper  
50 100  
52 35.2 27.0 40.6

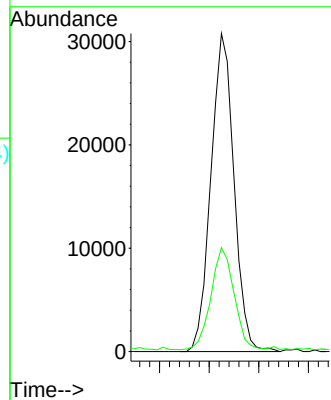
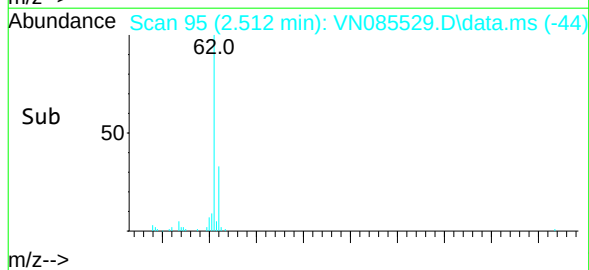
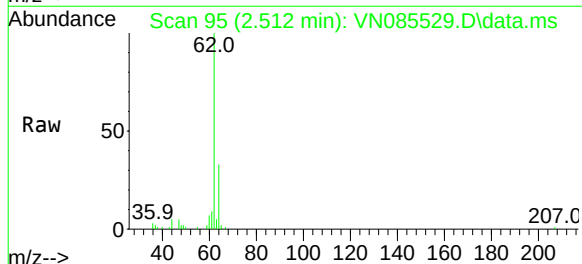
Manual Integrations  
APPROVED

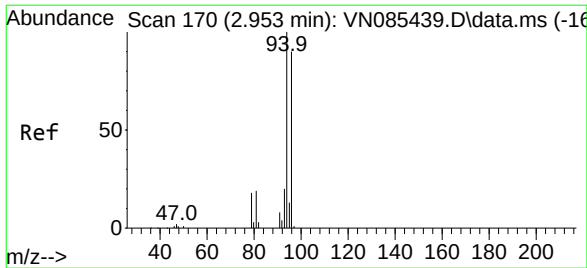
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#4  
Vinyl Chloride  
Concen: 18.182 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

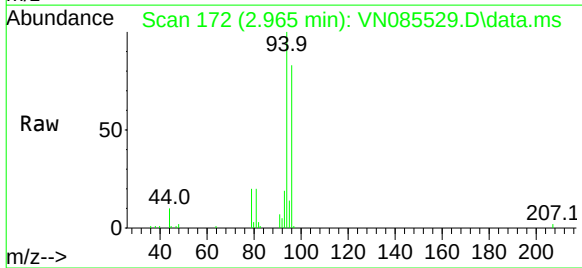
Tgt Ion: 62 Resp: 49715  
Ion Ratio Lower Upper  
62 100  
64 32.1 24.8 37.2





#5  
Bromomethane  
Concen: 19.506 ug/l  
RT: 2.965 min Scan# 170  
Delta R.T. 0.012 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

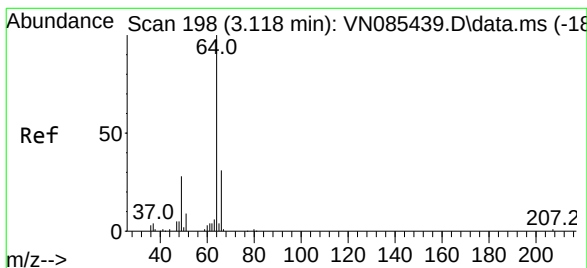
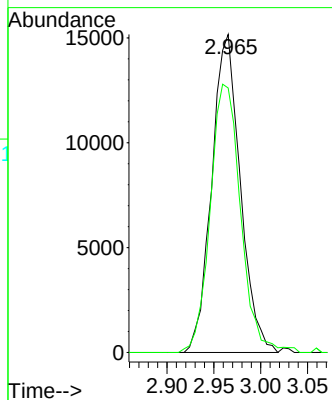
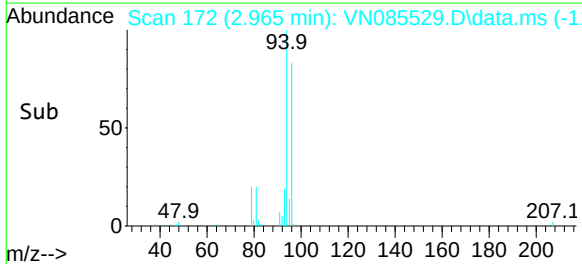
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 94 Resp: 32217  
Ion Ratio Lower Upper  
94 100  
96 83.2 71.8 107.6

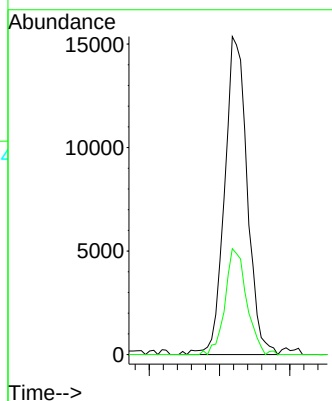
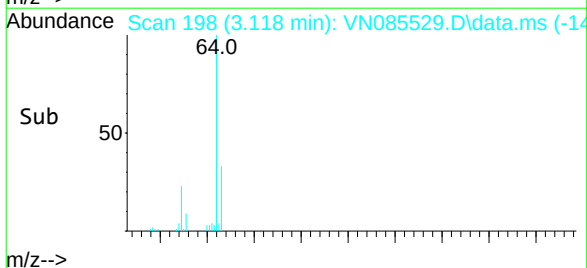
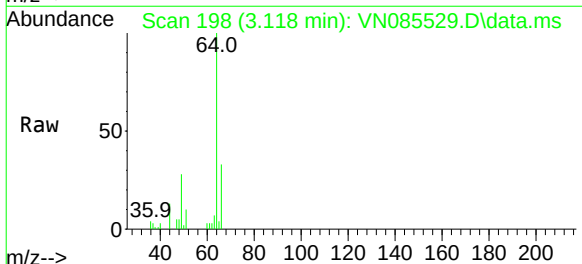
Manual Integrations  
APPROVED

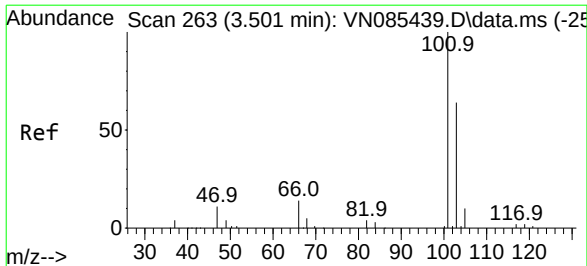
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#6  
Chloroethane  
Concen: 19.780 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 64 Resp: 34288  
Ion Ratio Lower Upper  
64 100  
66 33.3 24.6 36.8





#7

Trichlorofluoromethane

Concen: 20.707 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:101 Resp: 82151

Ion Ratio Lower Upper

101 100

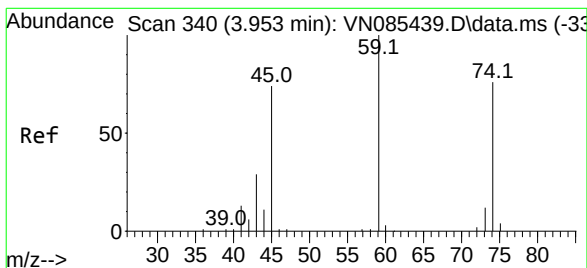
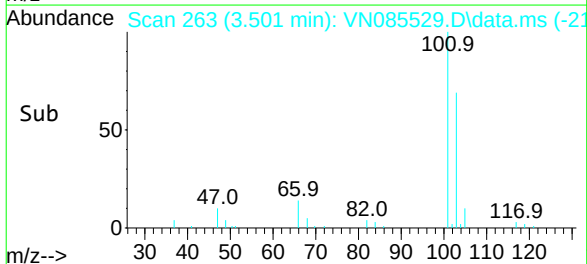
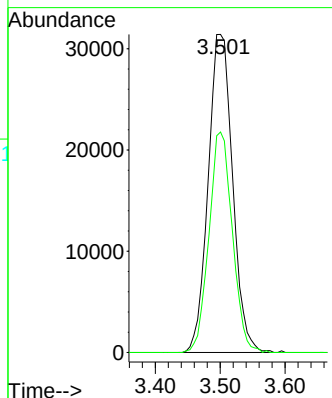
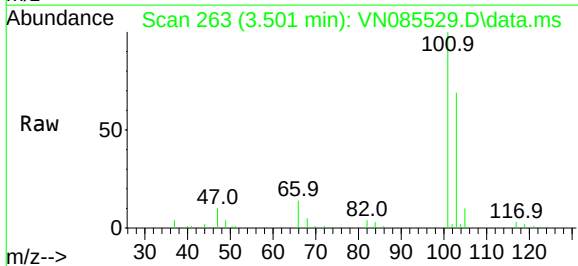
103 69.3 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#8

Diethyl Ether

Concen: 19.222 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085529.D

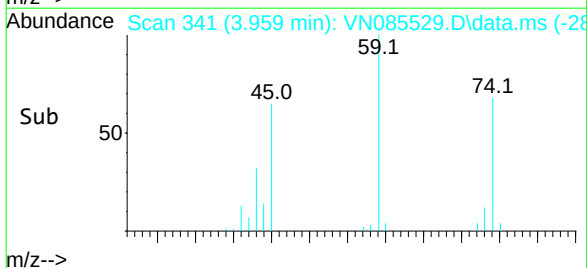
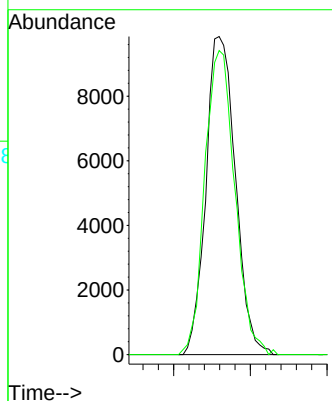
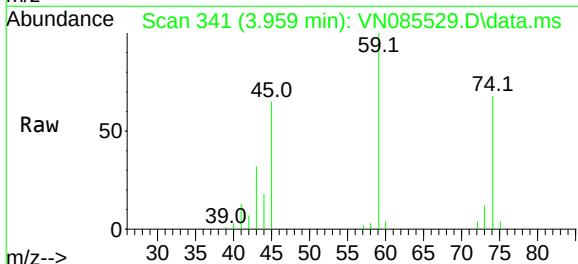
Acq: 28 Jan 2025 11:15

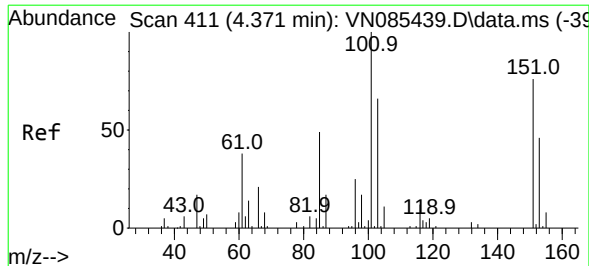
Tgt Ion: 74 Resp: 26345

Ion Ratio Lower Upper

74 100

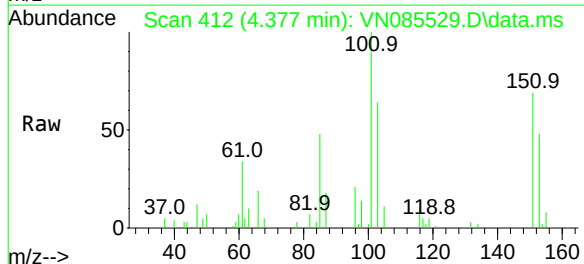
45 97.4 49.7 149.1





#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.484 ug/l  
RT: 4.377 min Scan# 411  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

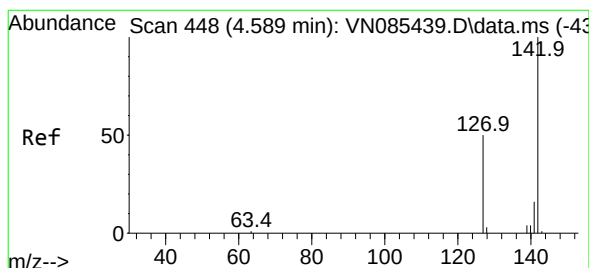
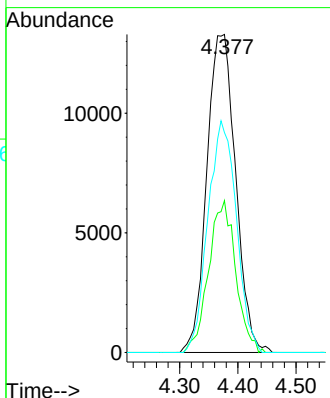
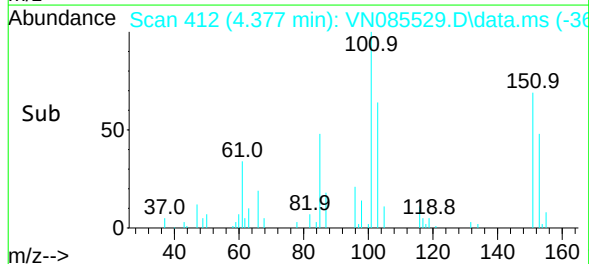
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



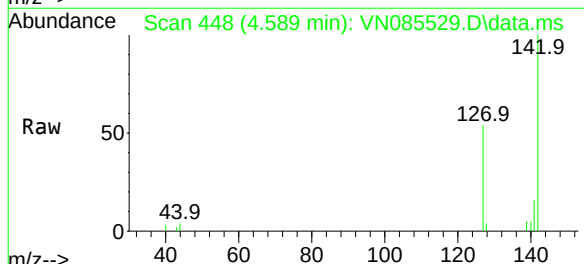
Tgt Ion:101 Resp: 45774  
Ion Ratio Lower Upper  
101 100  
85 44.9 37.8 56.8  
151 72.0 58.8 88.2

Manual Integrations  
APPROVED

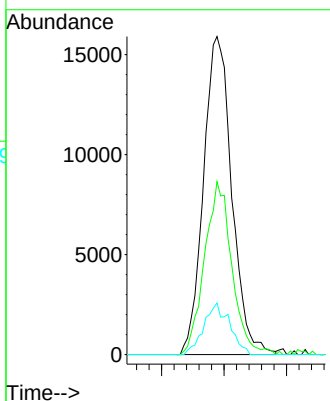
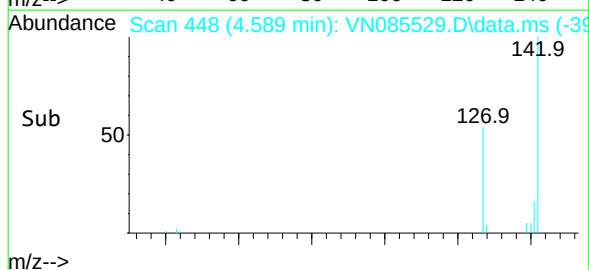
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

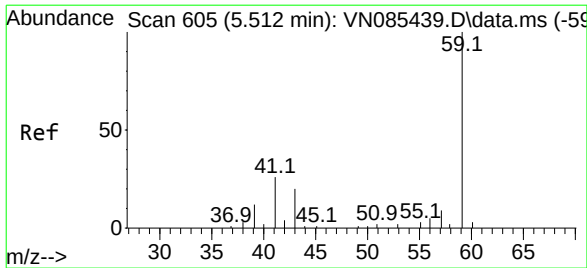


#10  
Methyl Iodide  
Concen: 19.549 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15



Tgt Ion:142 Resp: 50026  
Ion Ratio Lower Upper  
142 100  
127 54.4 40.3 60.5  
141 16.2 12.8 19.2





#11

Tert butyl alcohol

Concen: 108.849 ug/l

RT: 5.512 min Scan# 605

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 59 Resp: 37334

Ion Ratio Lower Upper

59 100

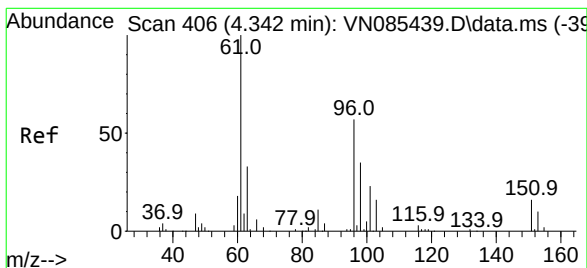
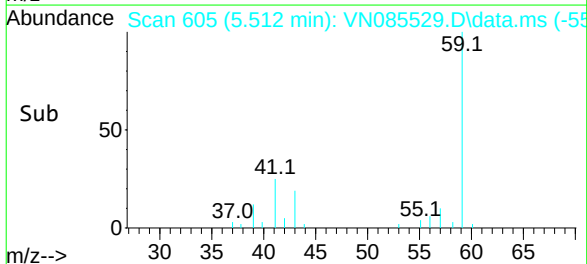
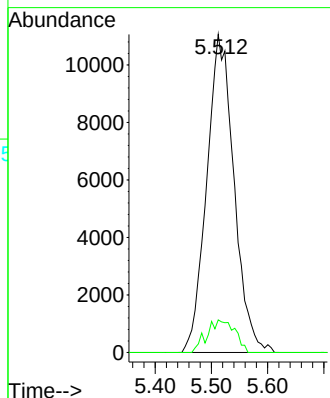
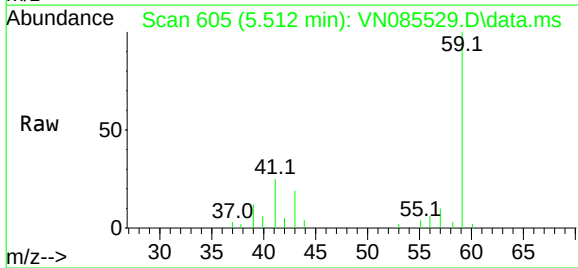
57 10.4 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#12

1,1-Dichloroethene

Concen: 19.057 ug/l

RT: 4.342 min Scan# 406

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

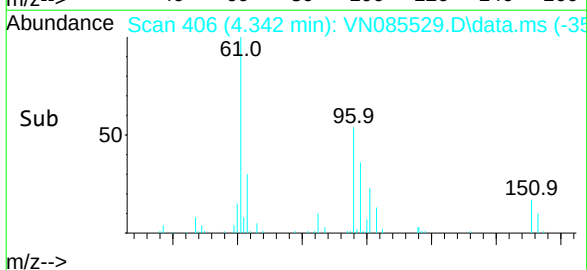
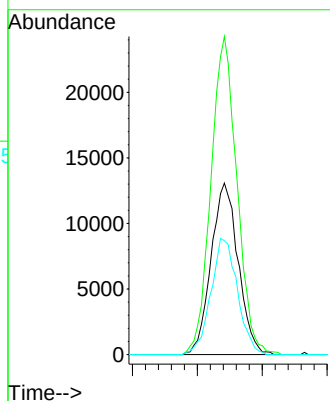
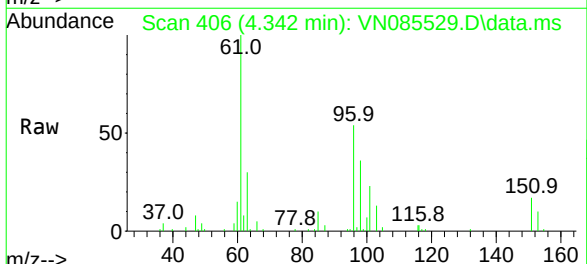
Tgt Ion: 96 Resp: 37952

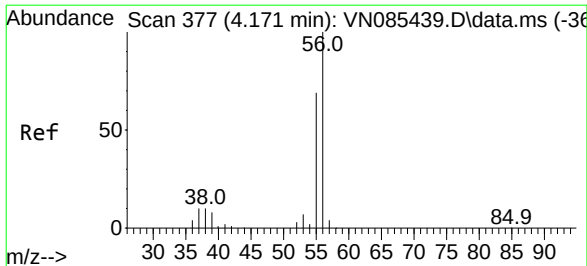
Ion Ratio Lower Upper

96 100

61 185.5 141.0 211.4

98 66.4 49.0 73.6





#13

Acrolein

Concen: 84.676 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 56 Resp: 39646

Ion Ratio Lower Upper

56 100

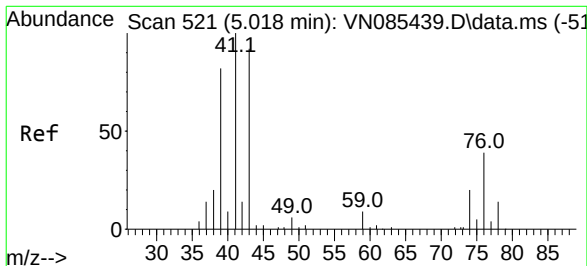
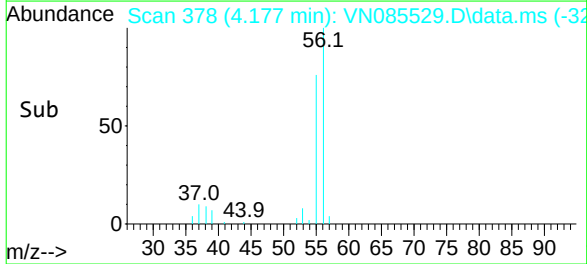
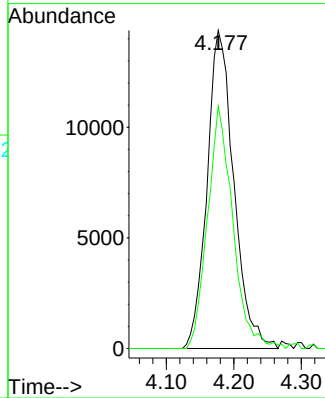
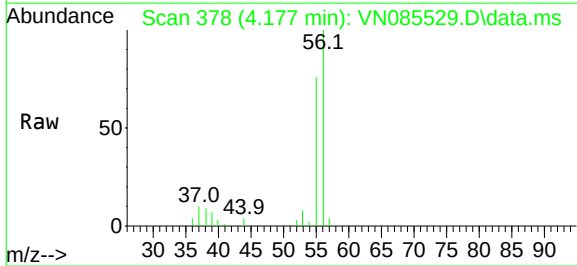
55 71.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#14

Allyl chloride

Concen: 18.275 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

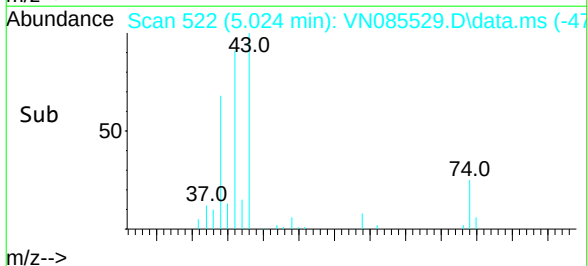
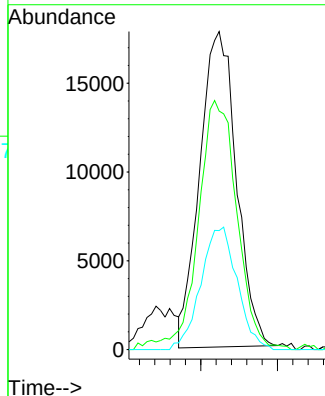
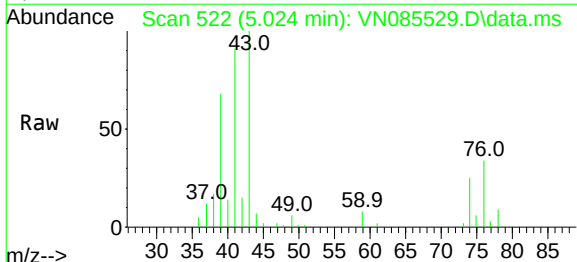
Tgt Ion: 41 Resp: 59056

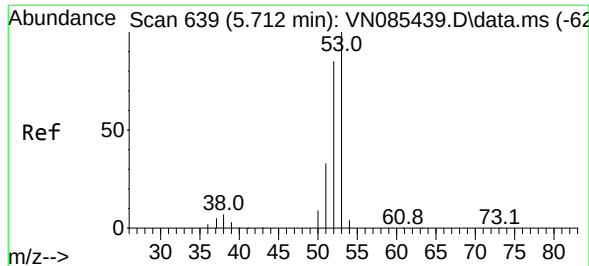
Ion Ratio Lower Upper

41 100

39 83.5 64.4 96.6

76 38.4 30.5 45.7





#15

Acrylonitrile

Concen: 106.667 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 53 Resp: 116207

Ion Ratio Lower Upper

53 100

52 83.3 65.5 98.3

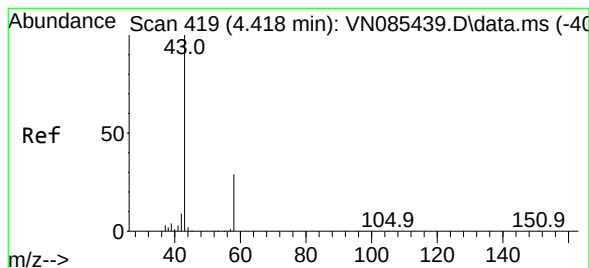
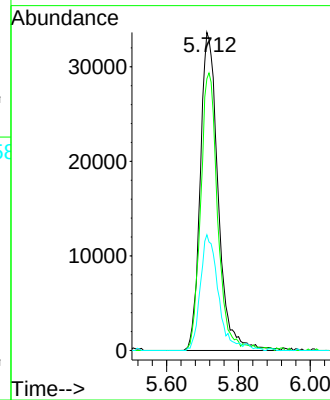
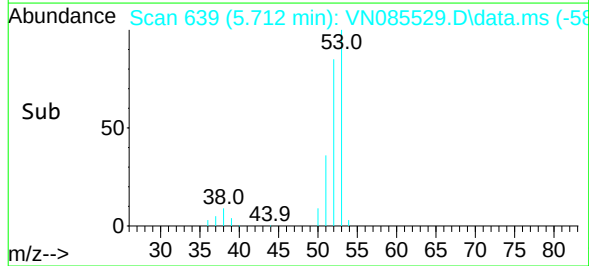
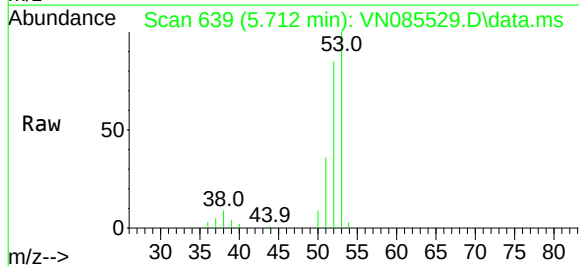
51 36.3 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#16

Acetone

Concen: 104.730 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085529.D

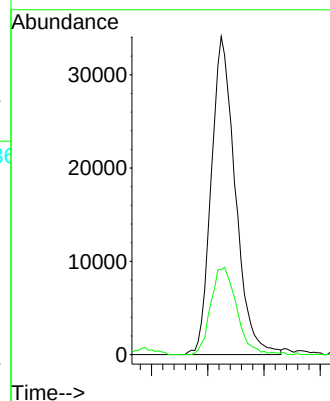
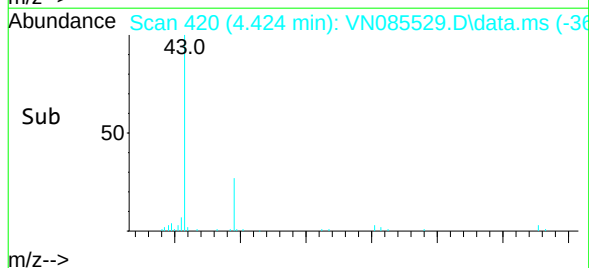
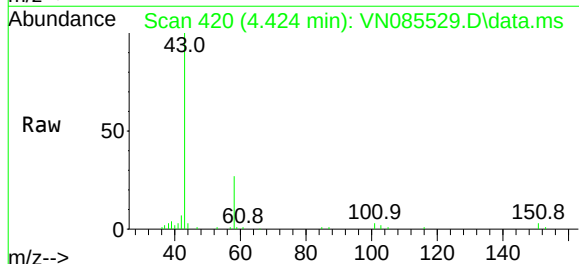
Acq: 28 Jan 2025 11:15

Tgt Ion: 43 Resp: 101360

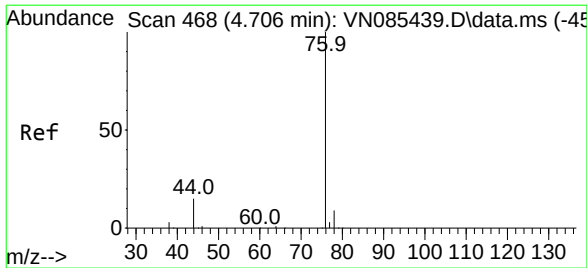
Ion Ratio Lower Upper

43 100

58 26.7 23.8 35.6







#17

Carbon Disulfide

Concen: 16.364 ug/l

RT: 4.706 min Scan# 468

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 76 Resp: 100344

Ion Ratio Lower Upper

76 100

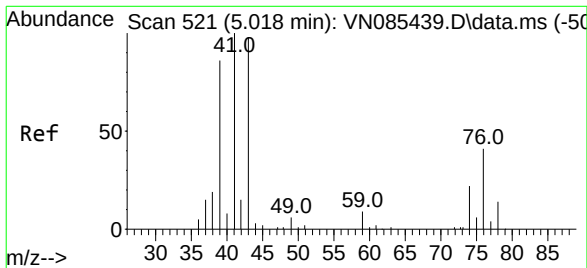
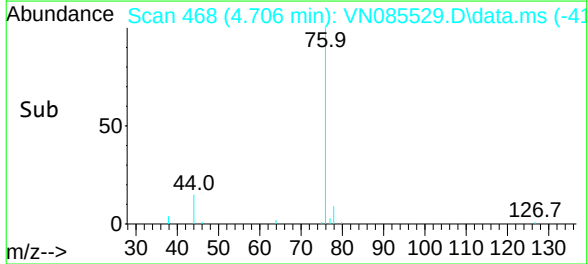
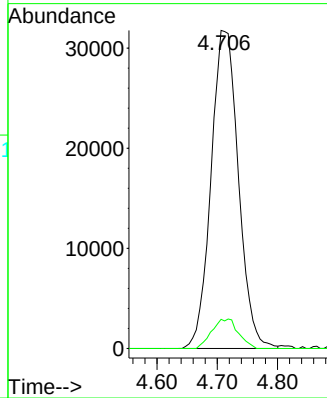
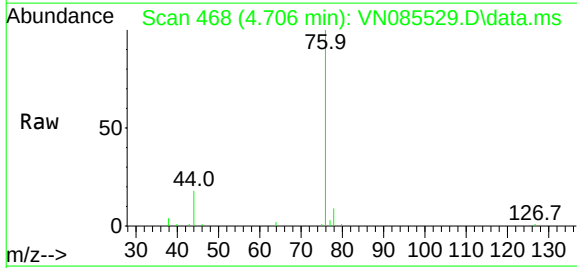
78 9.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#18

Methyl Acetate

Concen: 22.762 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085529.D

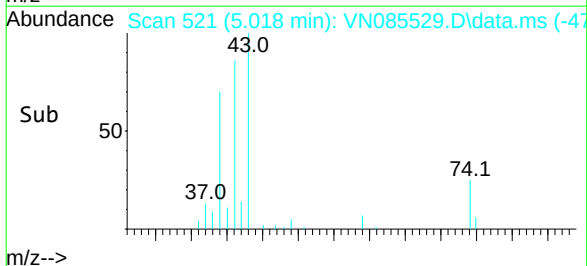
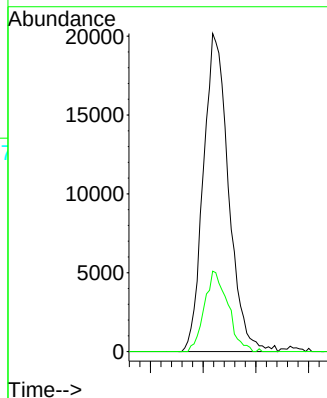
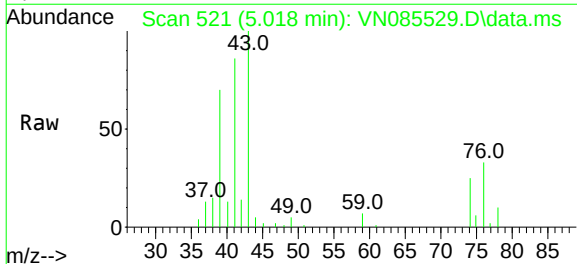
Acq: 28 Jan 2025 11:15

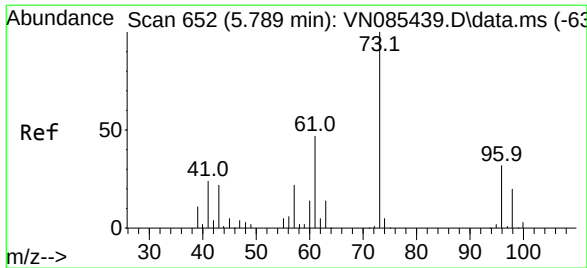
Tgt Ion: 43 Resp: 66988

Ion Ratio Lower Upper

43 100

74 23.6 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 20.885 ug/l

RT: 5.789 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 73 Resp: 135056

Ion Ratio Lower Upper

73 100

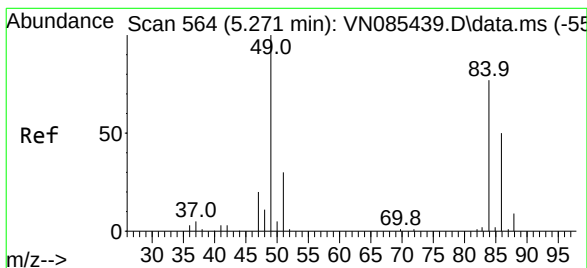
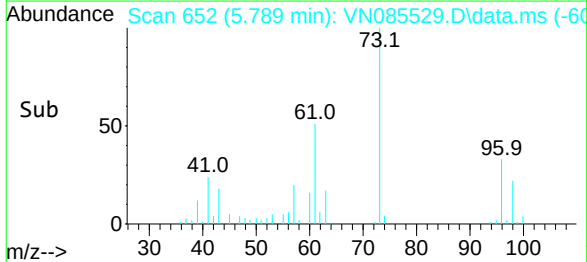
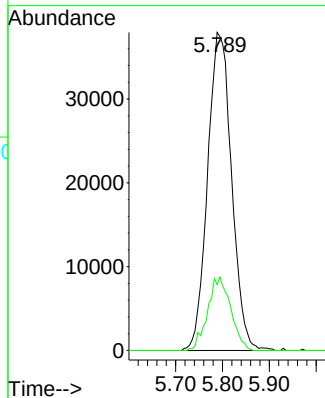
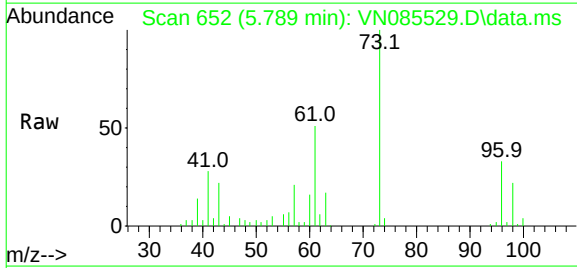
57 20.8 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#20

Methylene Chloride

Concen: 19.820 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Tgt Ion: 84 Resp: 47487

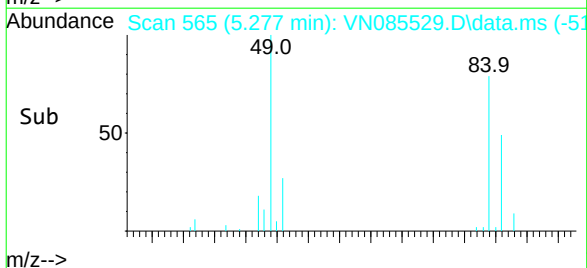
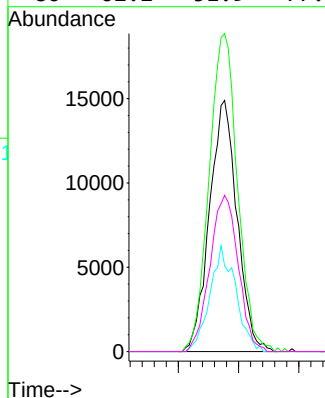
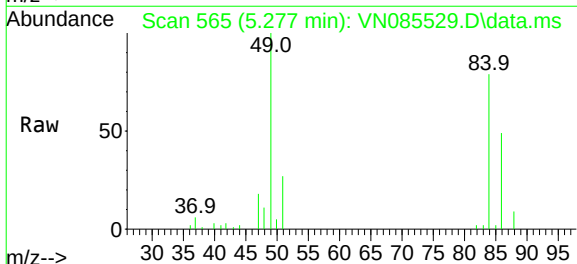
Ion Ratio Lower Upper

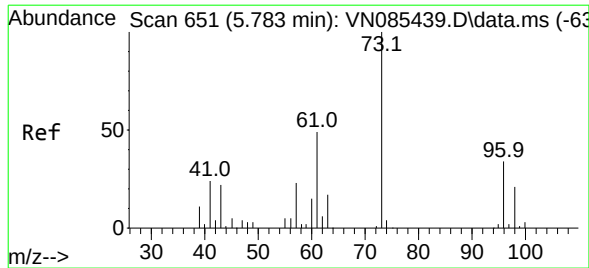
84 100

49 126.6 104.1 156.1

51 34.2 31.0 46.4

86 62.2 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 18.903 ug/l

RT: 5.789 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 96 Resp: 40233

Ion Ratio Lower Upper

96 100

61 152.9 115.7 173.5

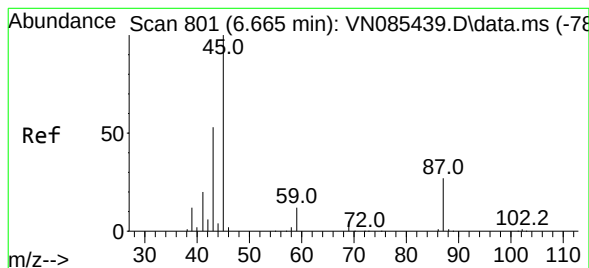
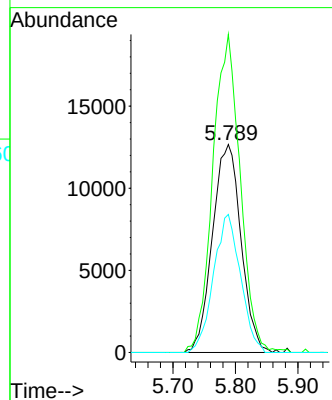
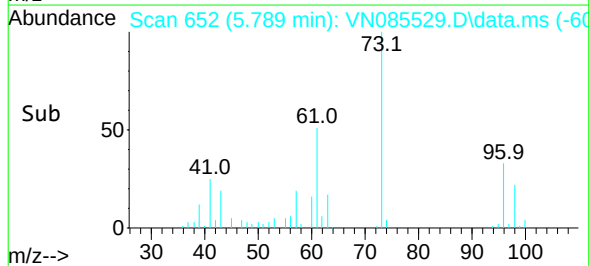
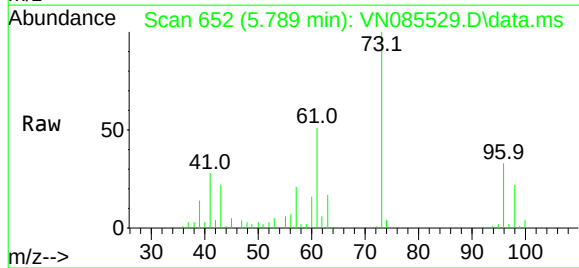
98 66.4 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#22

Diisopropyl ether

Concen: 20.550 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Tgt Ion: 45 Resp: 147403

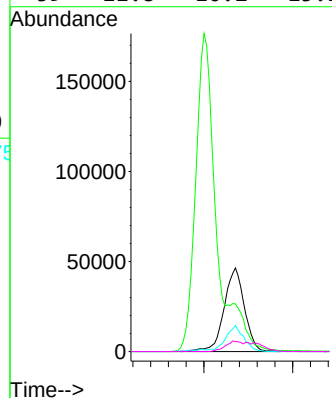
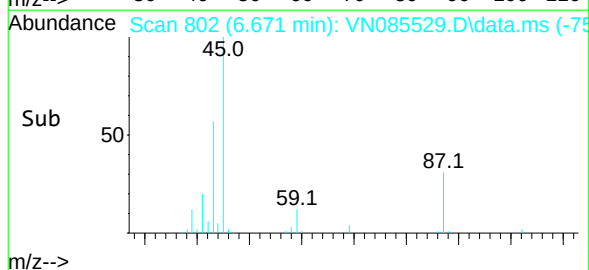
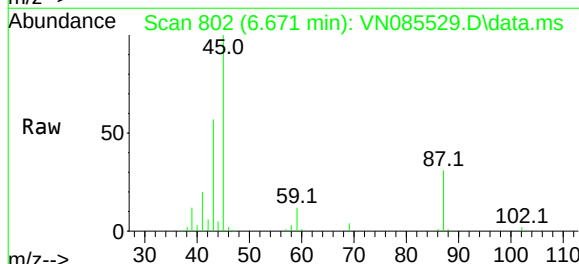
Ion Ratio Lower Upper

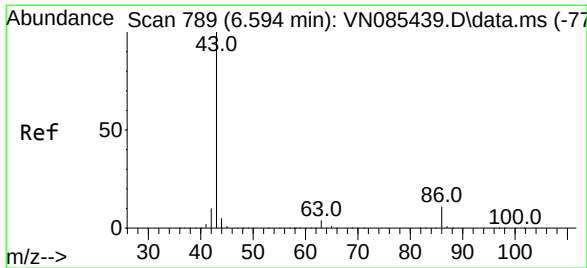
45 100

43 55.8 45.0 67.6

87 31.0 21.8 32.8

59 11.8 10.2 15.2





#23

Vinyl Acetate

Concen: 102.796 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 43 Resp: 516002

Ion Ratio Lower Upper

43 100

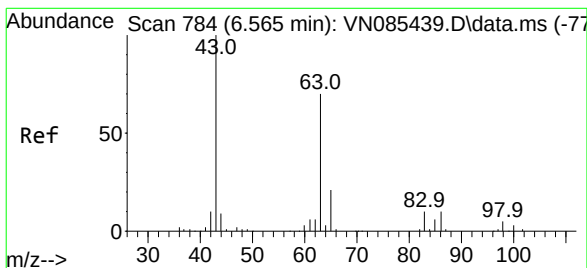
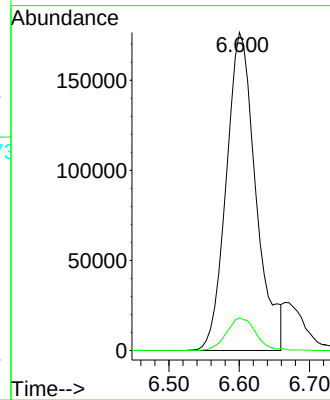
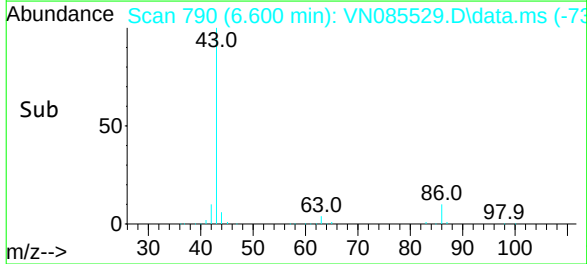
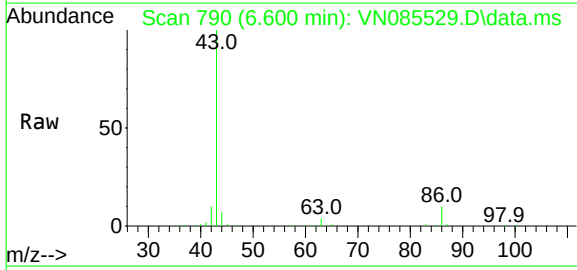
86 10.2 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#24

1,1-Dichloroethane

Concen: 20.110 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

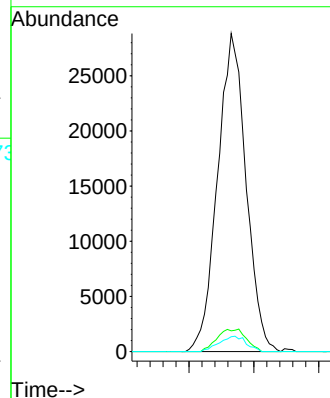
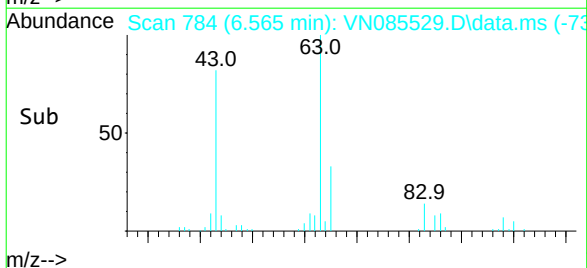
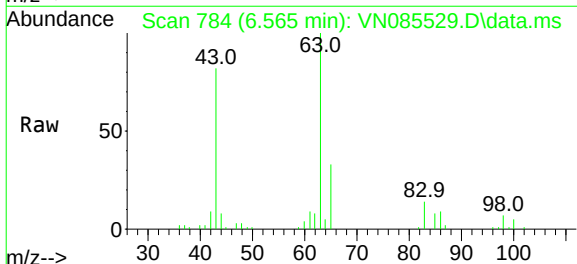
Tgt Ion: 63 Resp: 87952

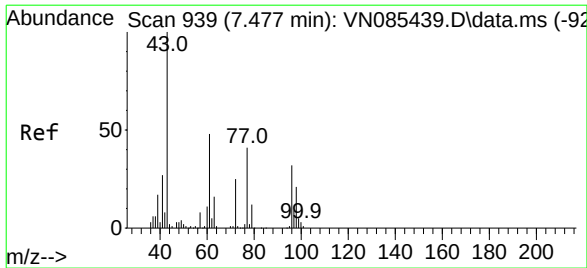
Ion Ratio Lower Upper

63 100

98 6.5 3.3 9.8

100 4.7 2.0 6.0





#25

2-Butanone

Concen: 107.876 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 43 Resp: 153642

Ion Ratio Lower Upper

43 100

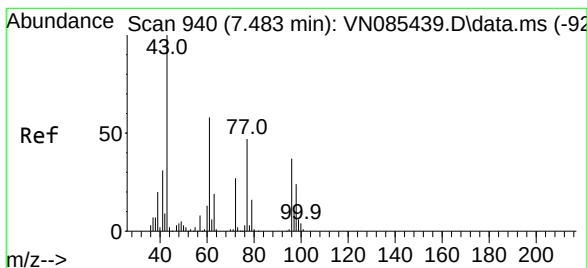
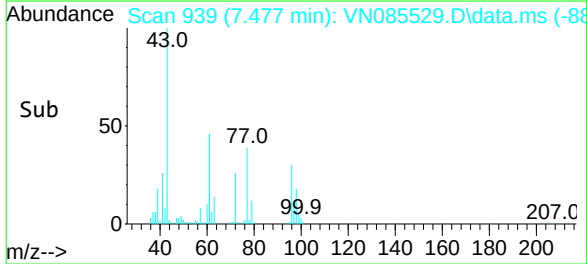
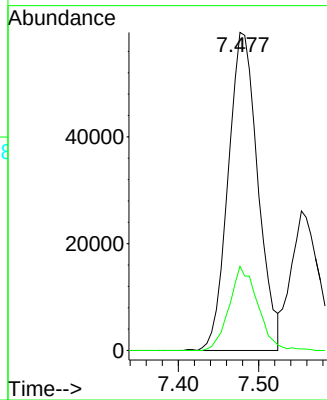
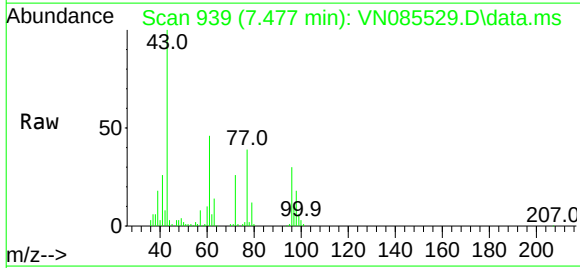
72 26.4 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#26

2,2-Dichloropropane

Concen: 22.133 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085529.D

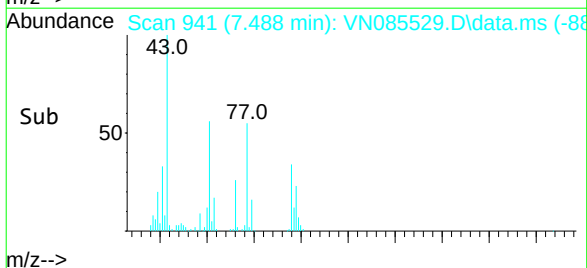
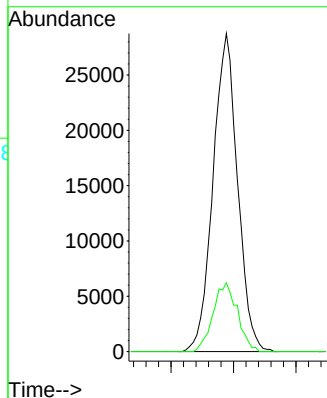
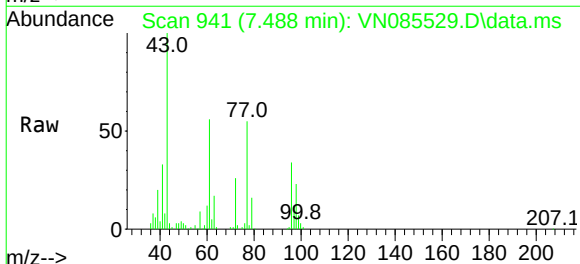
Acq: 28 Jan 2025 11:15

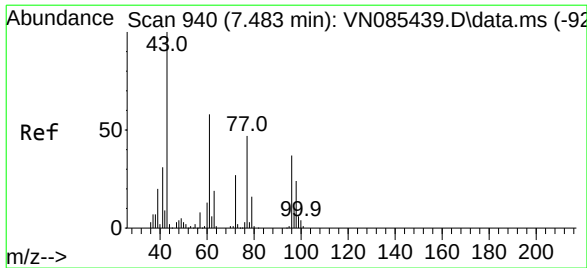
Tgt Ion: 77 Resp: 78263

Ion Ratio Lower Upper

77 100

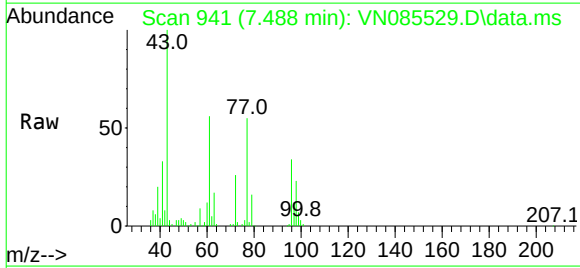
97 21.4 10.7 32.1





#27  
 cis-1,2-Dichloroethene  
 Concen: 19.875 ug/l  
 RT: 7.488 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

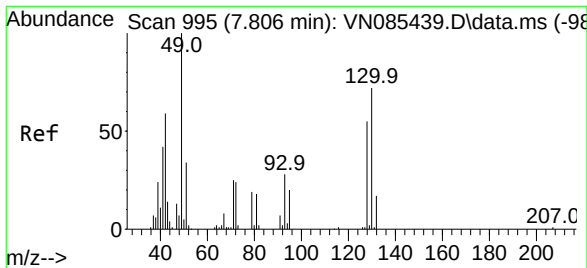
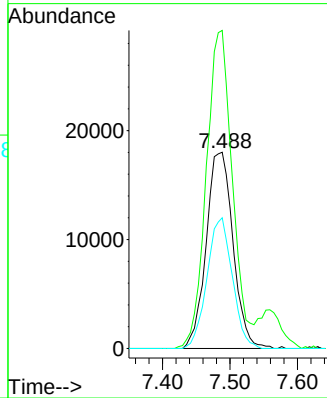
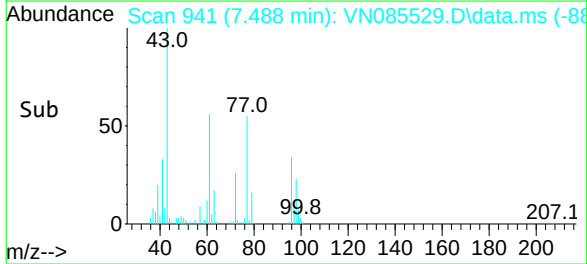
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01



Tgt Ion: 96 Resp: 49822  
 Ion Ratio Lower Upper  
 96 100  
 61 157.4 0.0 311.8  
 98 62.7 0.0 126.0

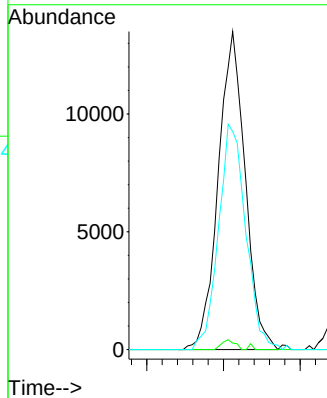
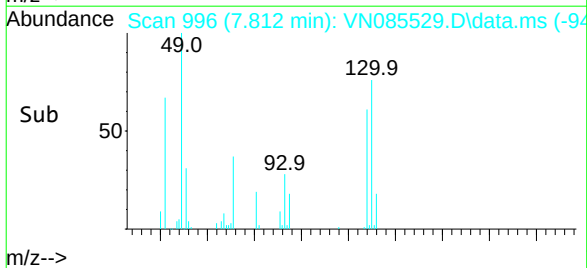
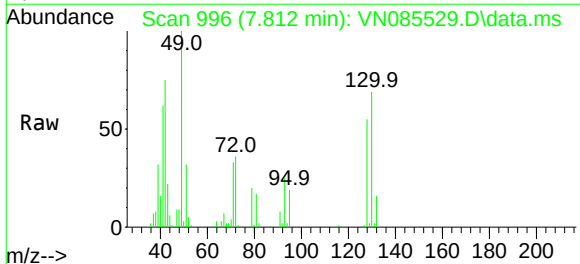
Manual Integrations  
 APPROVED

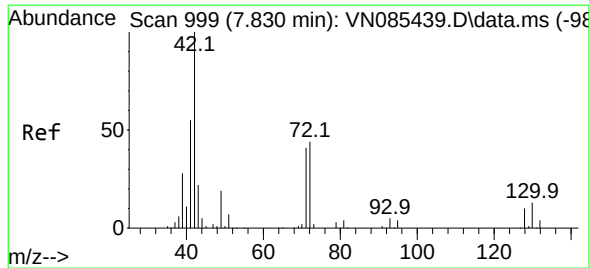
Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025



#28  
 Bromochloromethane  
 Concen: 16.145 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion: 49 Resp: 32851  
 Ion Ratio Lower Upper  
 49 100  
 129 1.5 0.0 4.4  
 130 72.0 55.0 82.4





#29

Tetrahydrofuran

Concen: 112.971 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 42 Resp: 102010

Ion Ratio Lower Upper

42 100

72 41.9 34.2 51.2

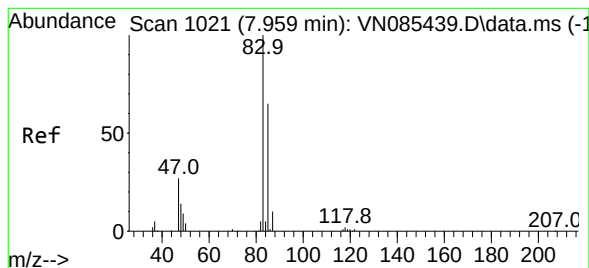
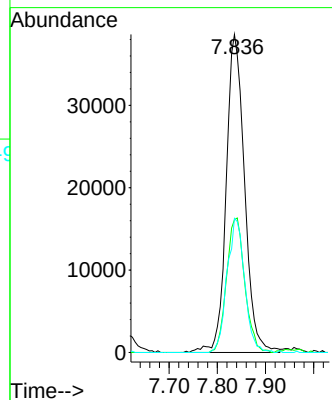
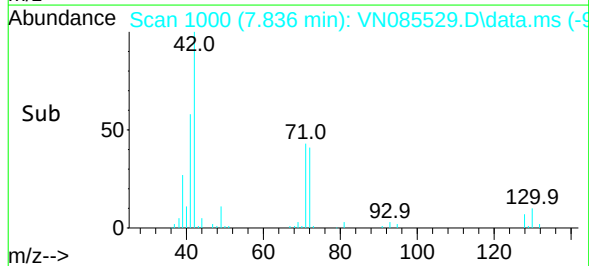
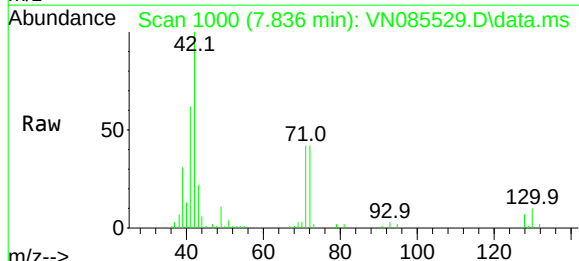
71 40.5 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#30

Chloroform

Concen: 20.553 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085529.D

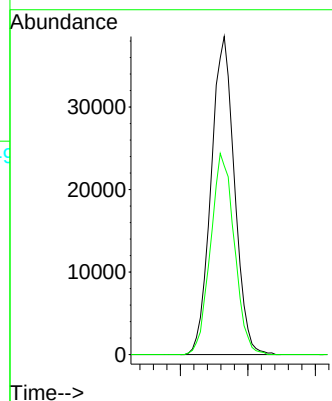
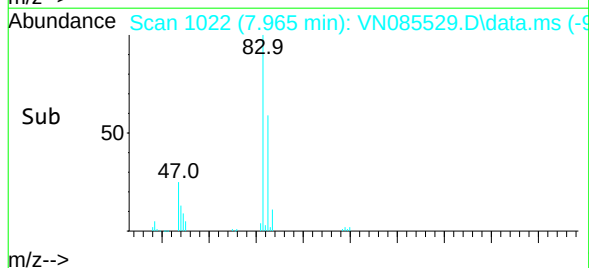
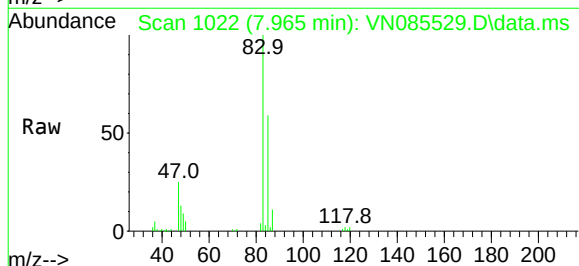
Acq: 28 Jan 2025 11:15

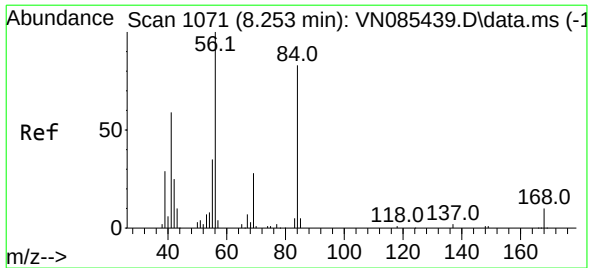
Tgt Ion: 83 Resp: 92905

Ion Ratio Lower Upper

83 100

85 59.4 51.8 77.6





#31

Cyclohexane

Concen: 17.643 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 56 Resp: 67069

Ion Ratio Lower Upper

56 100

69 29.0 22.2 33.4

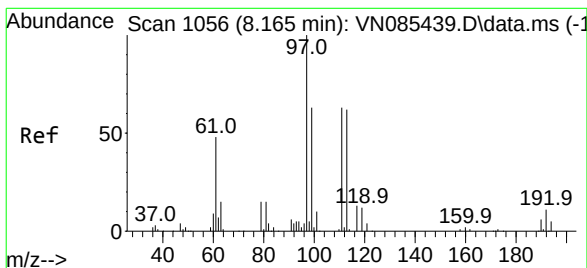
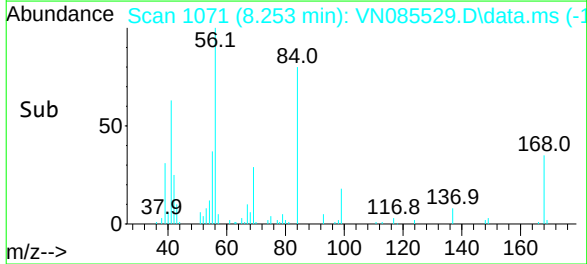
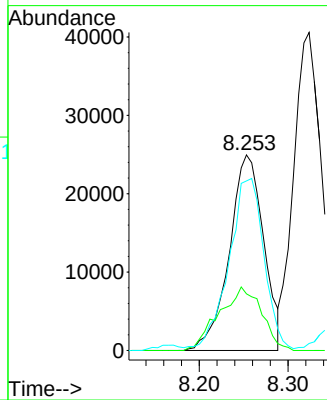
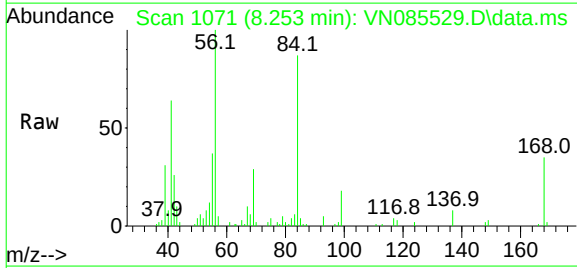
84 84.8 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#32

1,1,1-Trichloroethane

Concen: 20.408 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

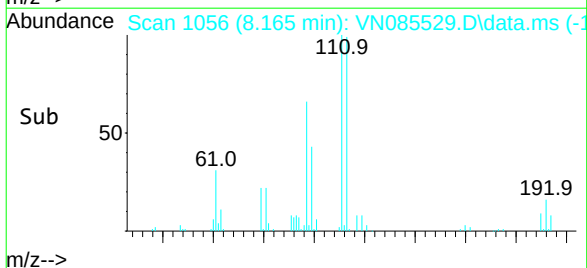
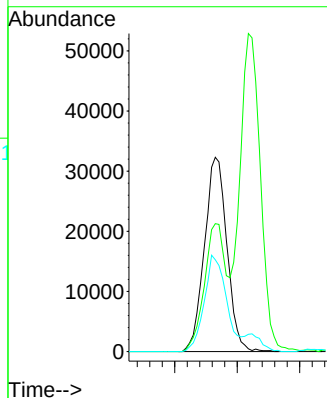
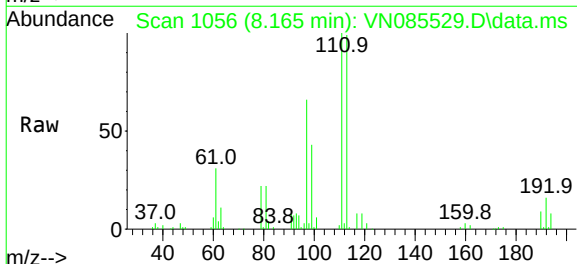
Tgt Ion: 97 Resp: 80919

Ion Ratio Lower Upper

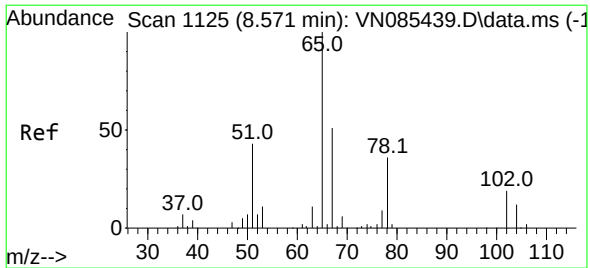
97 100

99 63.9 49.8 74.6

61 48.7 41.4 62.2

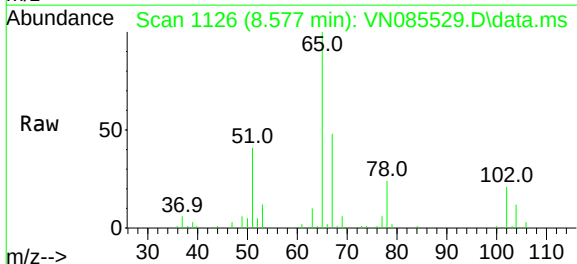






#33  
1,2-Dichloroethane-d4  
Concen: 51.135 ug/l  
RT: 8.577 min Scan# 1125  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

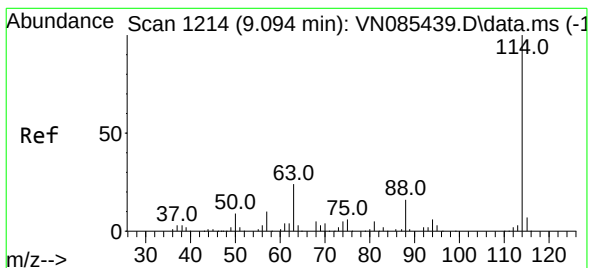
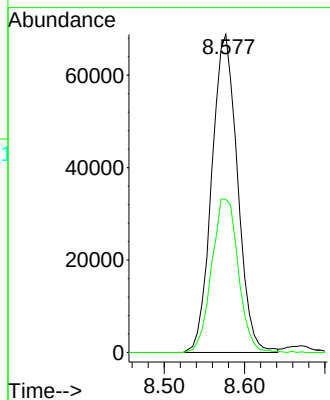
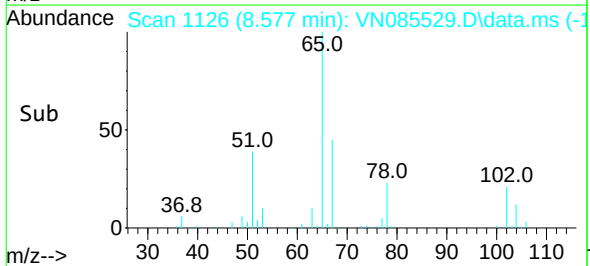
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



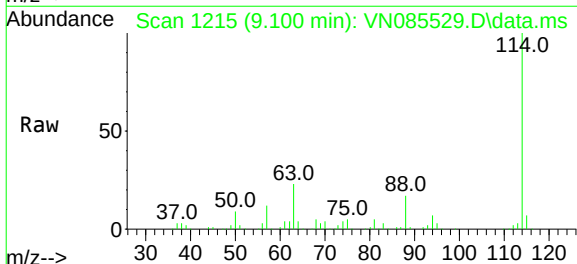
Tgt Ion: 65 Resp: 153168  
Ion Ratio Lower Upper  
65 100  
67 50.0 0.0 101.6

Manual Integrations  
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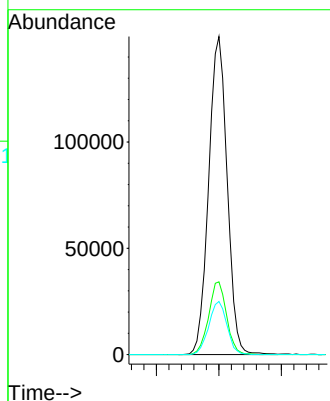
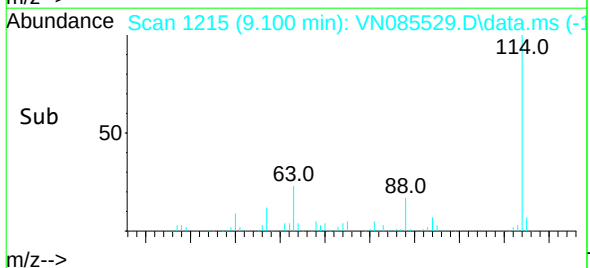
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

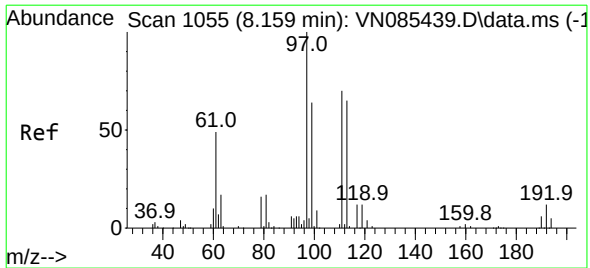


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15



Tgt Ion: 114 Resp: 307569  
Ion Ratio Lower Upper  
114 100  
63 22.9 0.0 47.6  
88 16.7 0.0 32.6





#35

Dibromofluoromethane

Concen: 53.225 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 113 Resp: 113571

Ion Ratio Lower Upper

113 100

111 103.6 82.7 124.1

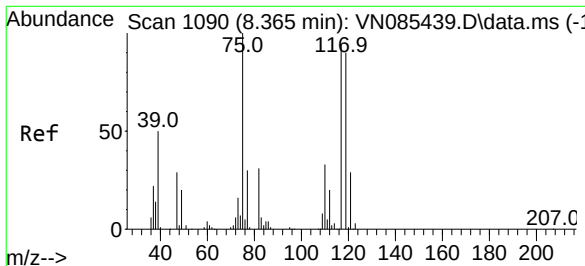
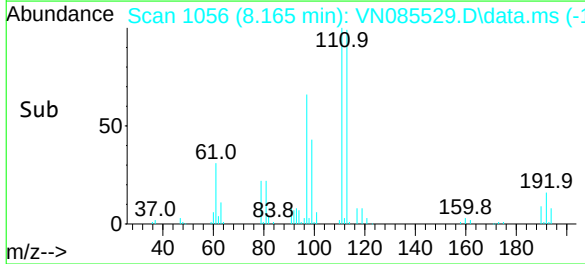
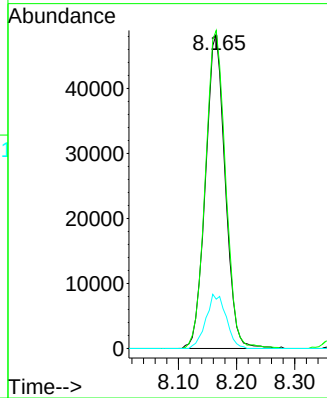
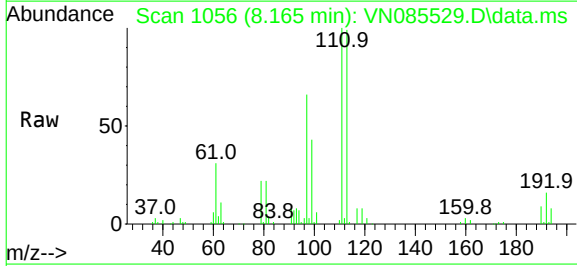
192 17.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/29/2025

Supervised By : Semsettin Yesilyurt 01/29/2025



#36

1,1-Dichloropropene

Concen: 19.673 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

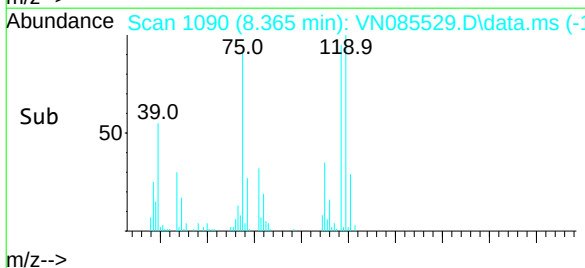
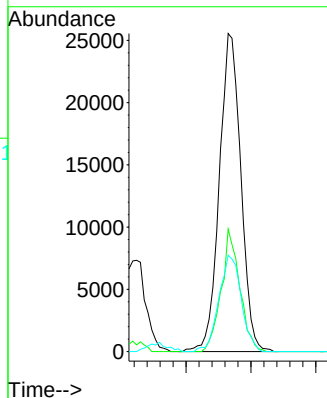
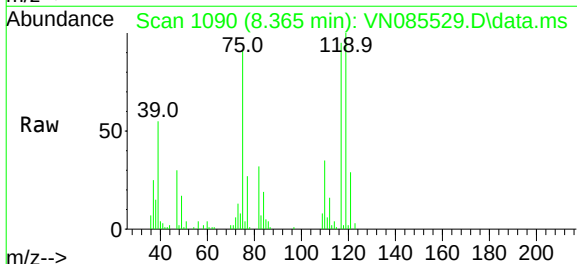
Tgt Ion: 75 Resp: 58916

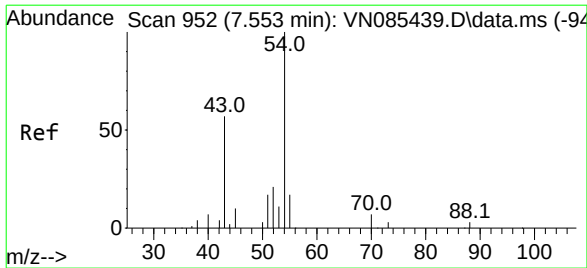
Ion Ratio Lower Upper

75 100

110 33.1 16.5 49.5

77 31.4 24.4 36.6





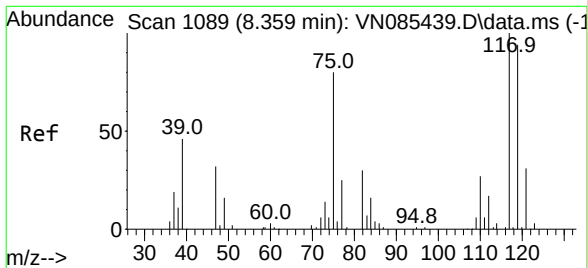
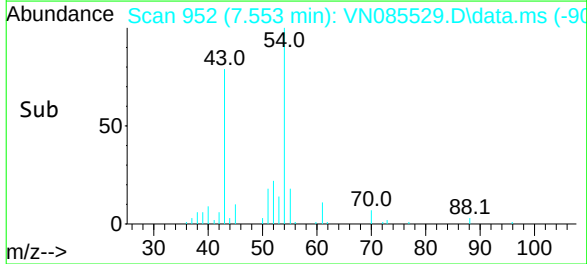
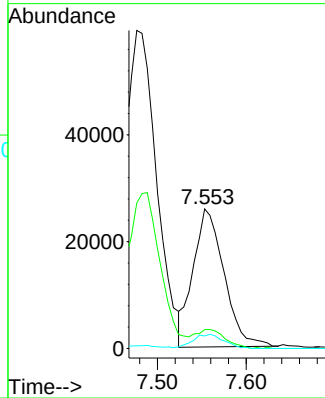
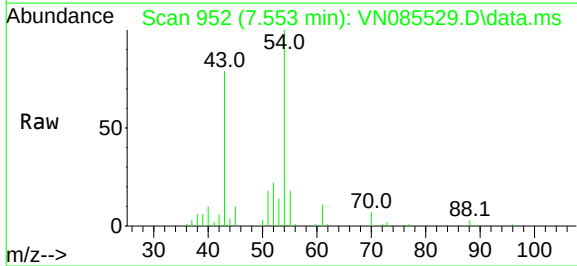
#37  
Ethyl Acetate  
Concen: 20.722 ug/l  
RT: 7.553 min Scan# 952  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

| Tgt Ion: | 43    | Resp: | 62638 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 13.1  | 10.9  | 16.3  |
| 70       | 10.3  | 7.5   | 11.3  |

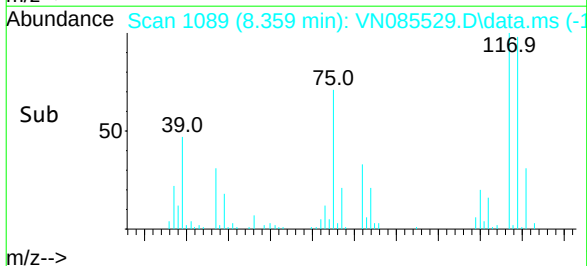
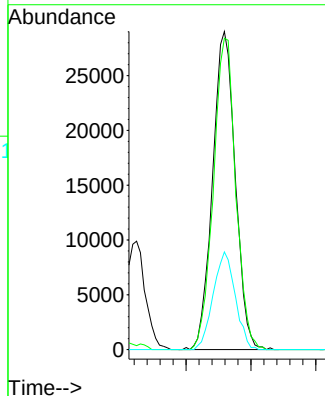
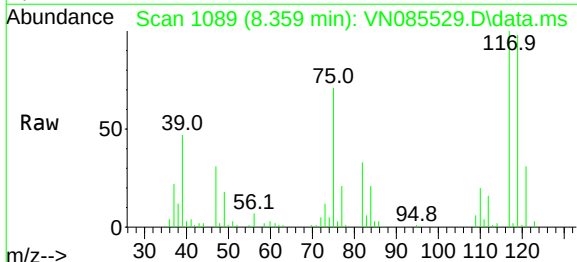
Manual Integrations  
APPROVED

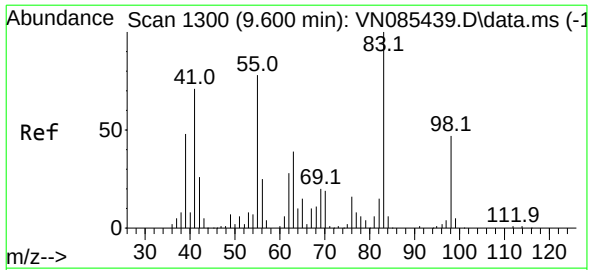
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#38  
Carbon Tetrachloride  
Concen: 20.543 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

| Tgt Ion: | 117   | Resp: | 70429 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 97.9  | 75.4  | 113.2 |
| 121      | 30.7  | 24.6  | 37.0  |





#39

Methylcyclohexane

Concen: 18.865 ug/l

RT: 9.600 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

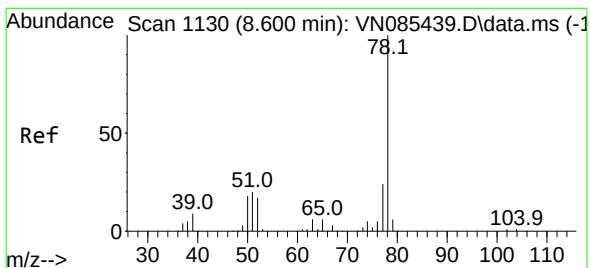
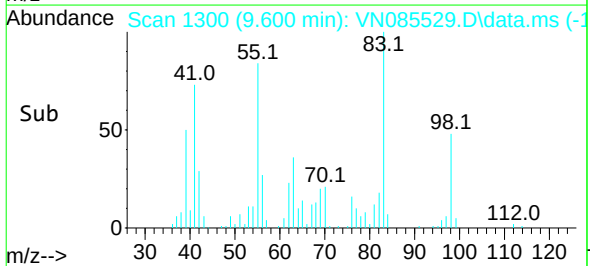
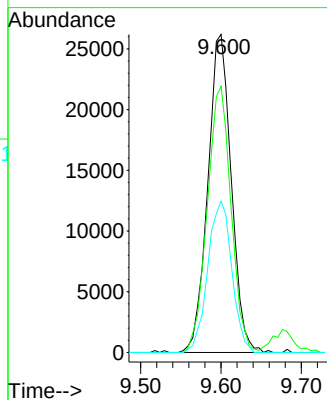
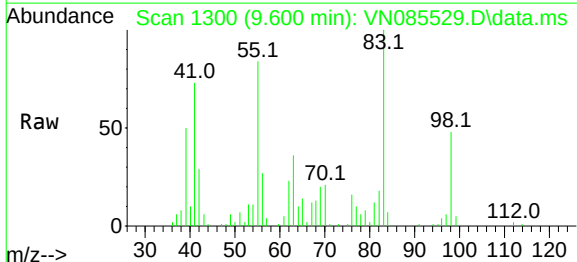
ClientSampleId :

VN0128WBS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 53089 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 83.8  | 62.6  | 94.0  |
| 98       | 47.6  | 37.7  | 56.5  |

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#40

Benzene

Concen: 20.683 ug/l

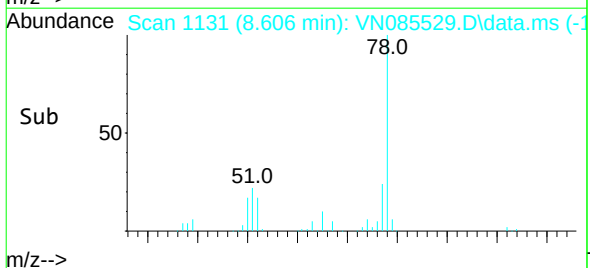
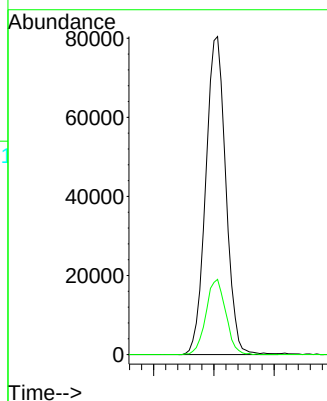
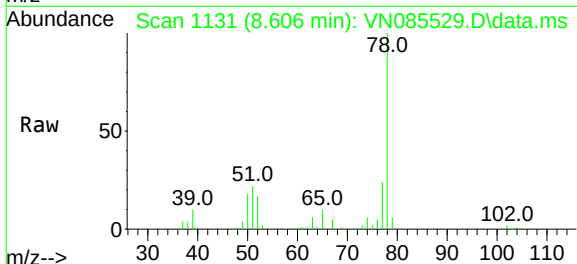
RT: 8.606 min Scan# 1131

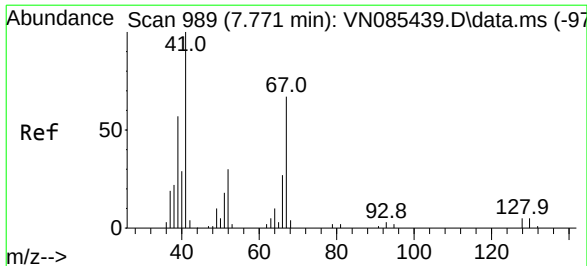
Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 78    | Resp: | 186111 |
| Ion      | Ratio | Lower | Upper  |
| 78       | 100   |       |        |
| 77       | 23.7  | 19.0  | 28.6   |





#41

Methacrylonitrile

Concen: 21.410 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 41 Resp: 33670

Ion Ratio Lower Upper

41 100

39 60.5 46.0 69.0

67 71.9 57.4 86.2

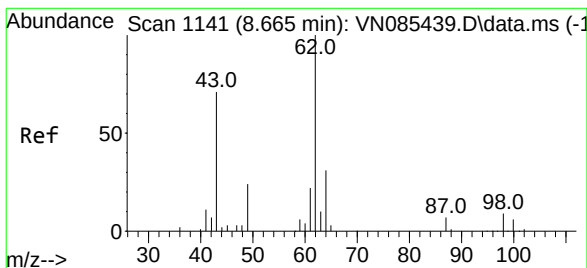
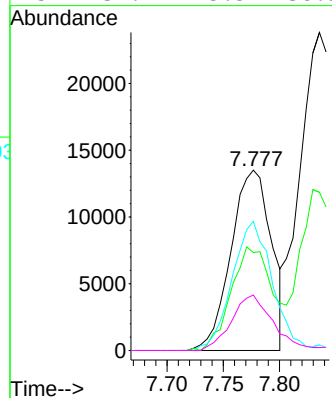
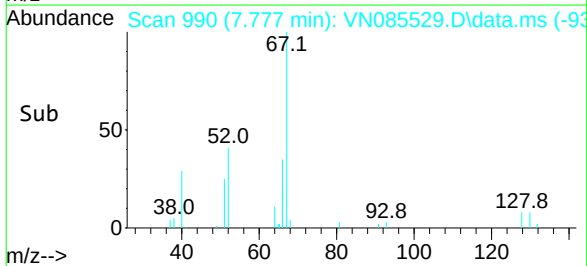
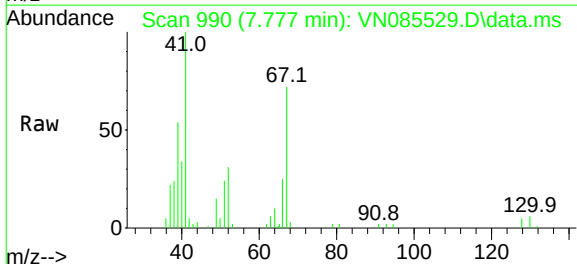
52 32.1 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#42

1,2-Dichloroethane

Concen: 20.970 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085529.D

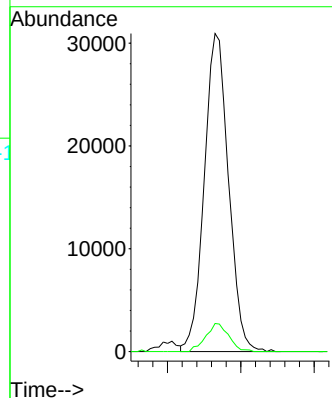
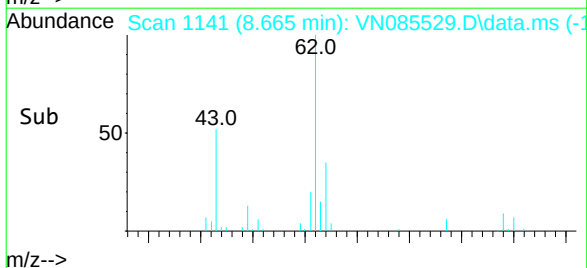
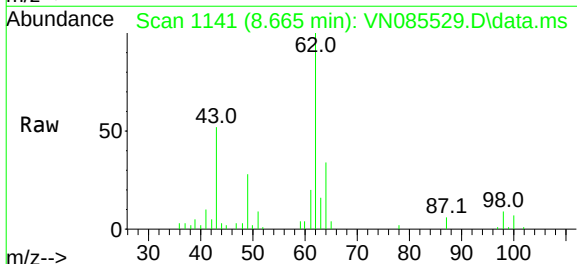
Acq: 28 Jan 2025 11:15

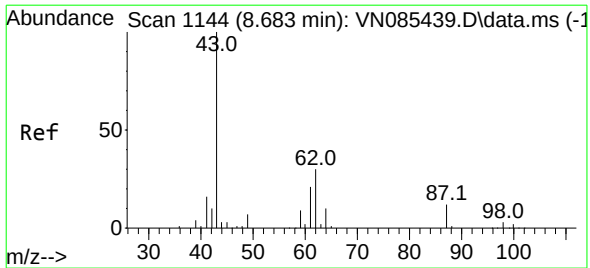
Tgt Ion: 62 Resp: 71068

Ion Ratio Lower Upper

62 100

98 8.4 0.0 17.0





#43

Isopropyl Acetate

Concen: 21.686 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 43 Resp: 105036

Ion Ratio Lower Upper

43 100

61 25.2 20.7 31.1

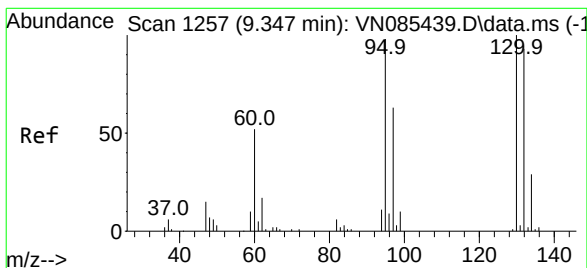
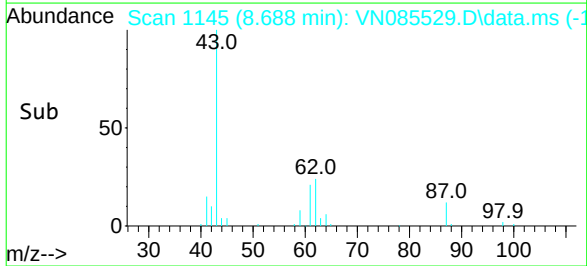
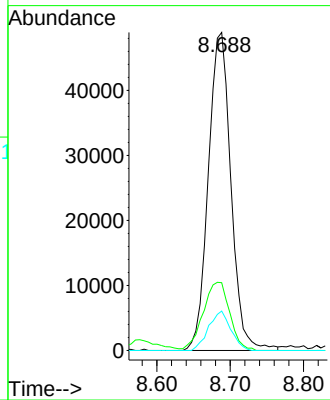
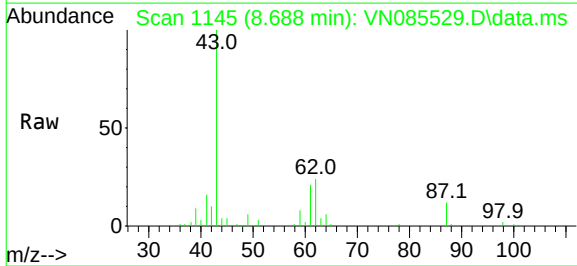
87 12.1 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#44

Trichloroethene

Concen: 20.374 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. 0.000 min

Lab File: VN085529.D

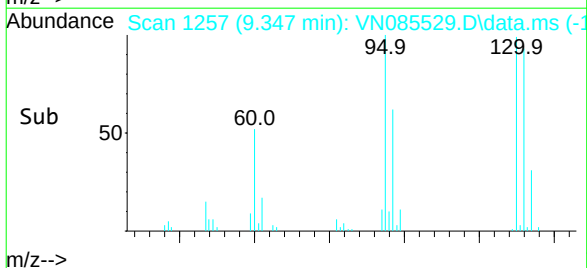
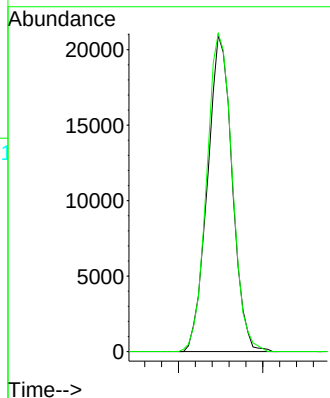
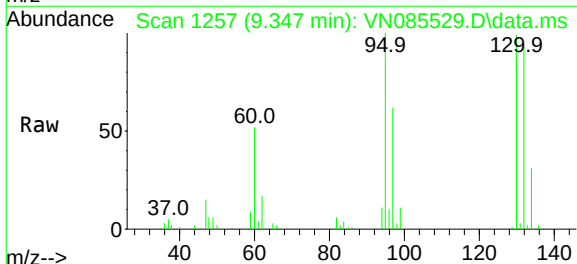
Acq: 28 Jan 2025 11:15

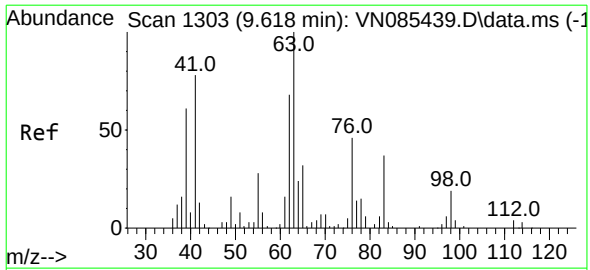
Tgt Ion:130 Resp: 42674

Ion Ratio Lower Upper

130 100

95 100.5 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.743 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 63 Resp: 47674

Ion Ratio Lower Upper

63 100

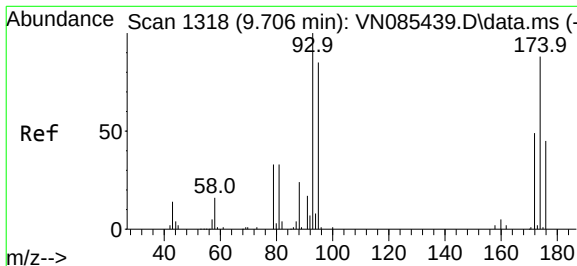
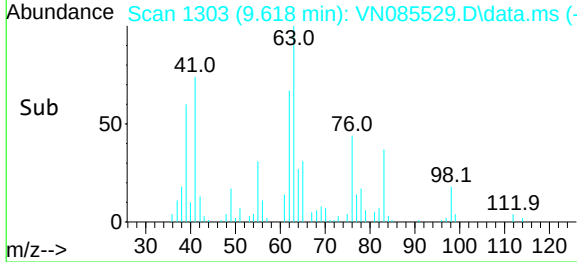
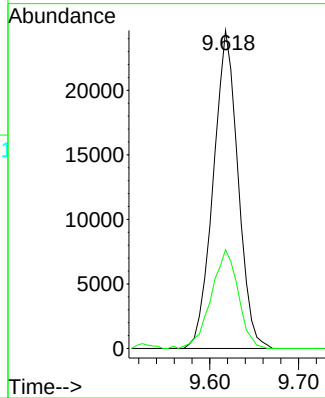
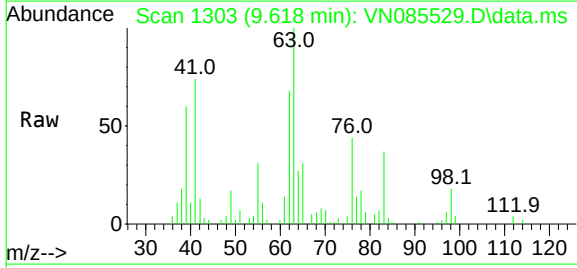
65 31.1 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#46

Dibromomethane

Concen: 20.395 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

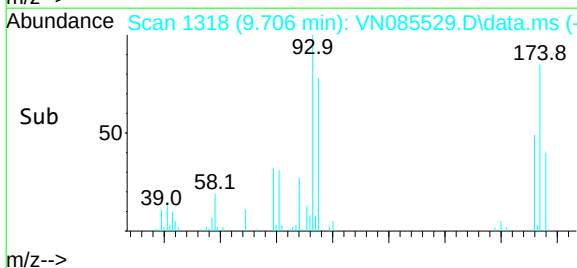
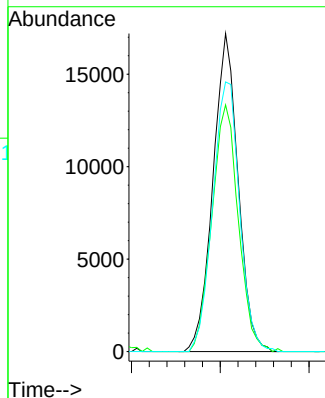
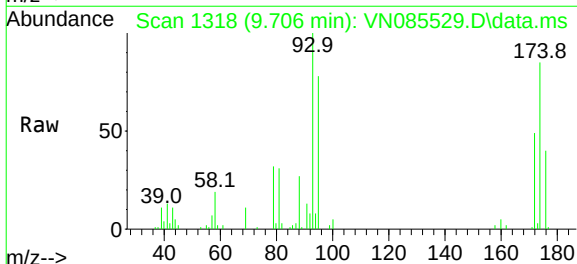
Tgt Ion: 93 Resp: 33823

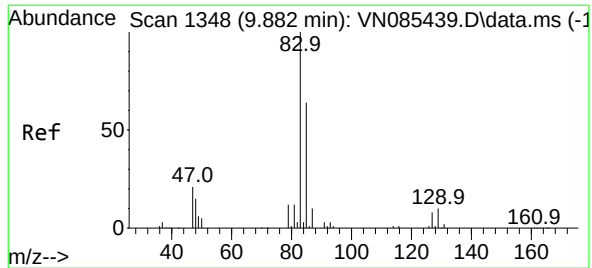
Ion Ratio Lower Upper

93 100

95 81.5 64.7 97.1

174 90.4 69.0 103.4





#47

Bromodichloromethane

Concen: 21.697 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 83 Resp: 73309

Ion Ratio Lower Upper

83 100

85 61.0 51.2 76.8

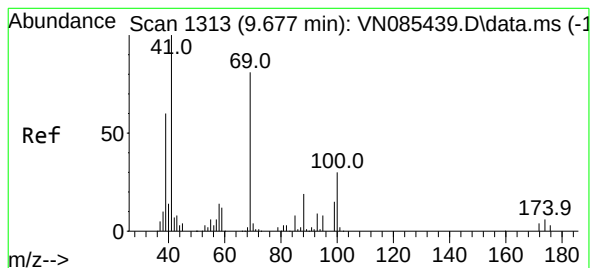
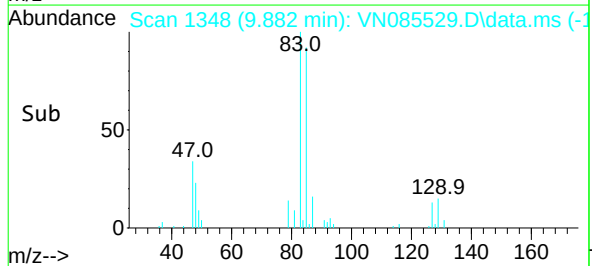
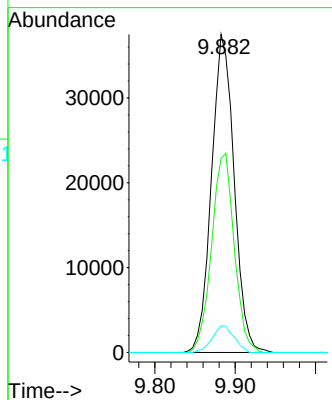
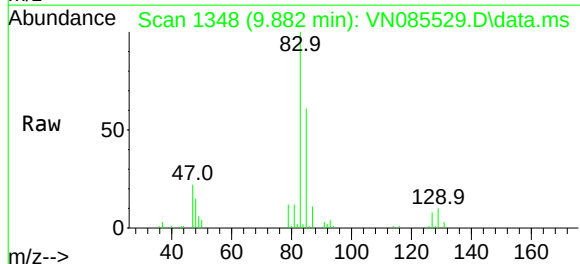
127 8.4 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#48

Methyl methacrylate

Concen: 21.823 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

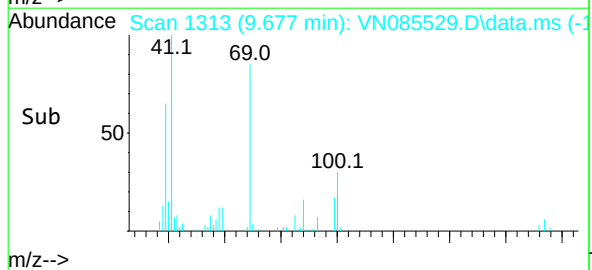
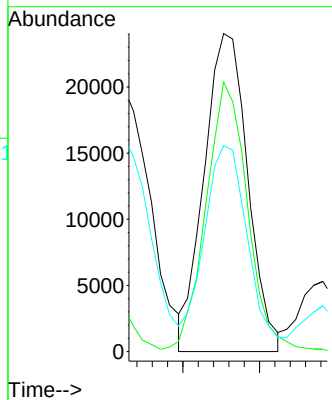
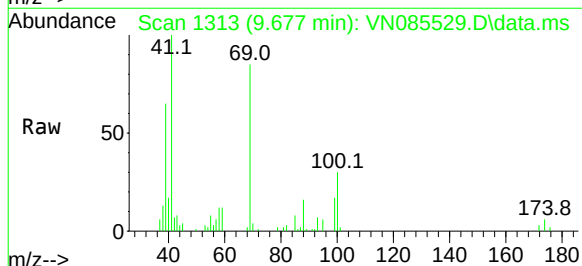
Tgt Ion: 41 Resp: 47567

Ion Ratio Lower Upper

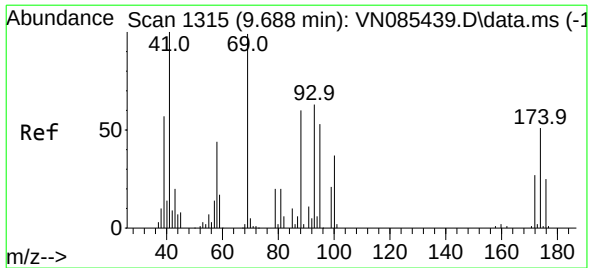
41 100

69 81.0 64.7 97.1

39 65.5 49.0 73.6







#49

1,4-Dioxane

Concen: 420.430 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 88 Resp: 15432

Ion Ratio Lower Upper

88 100

43 37.0 26.6 39.8

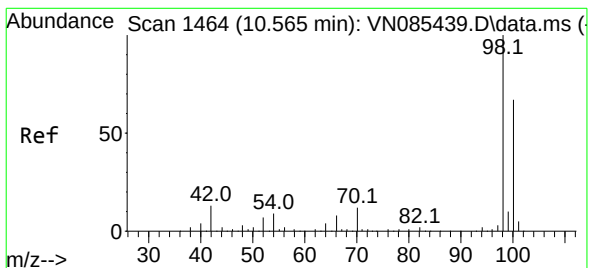
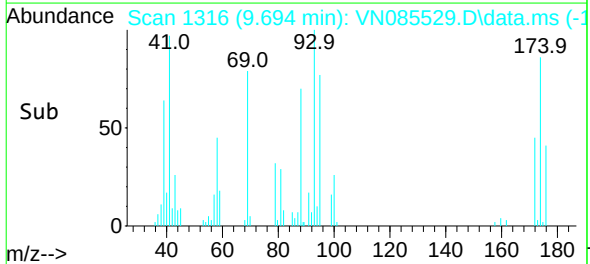
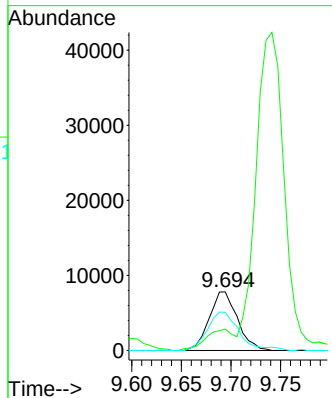
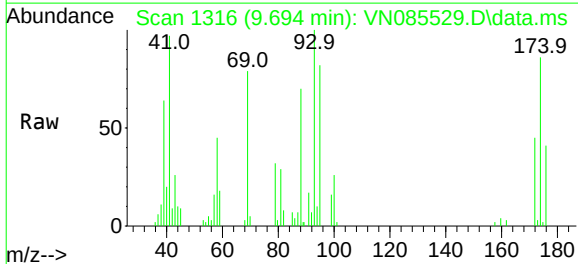
58 74.0 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#50

Toluene-d8

Concen: 54.088 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085529.D

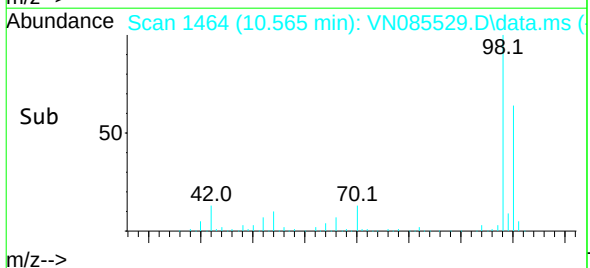
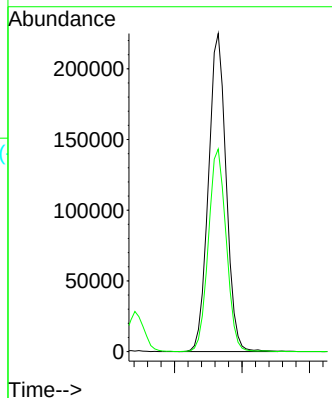
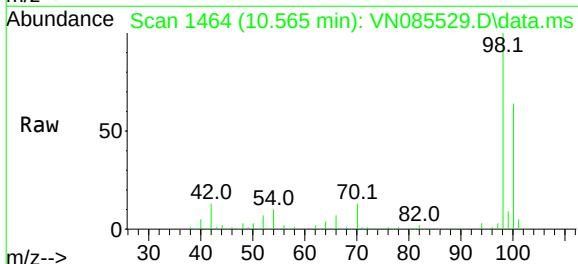
Acq: 28 Jan 2025 11:15

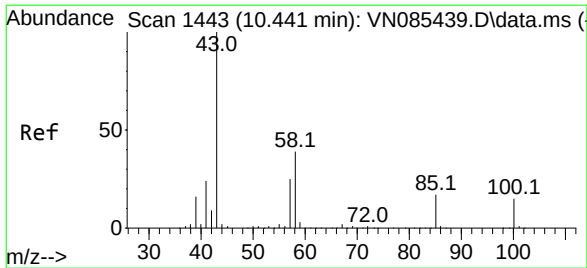
Tgt Ion: 98 Resp: 410056

Ion Ratio Lower Upper

98 100

100 64.1 52.2 78.4





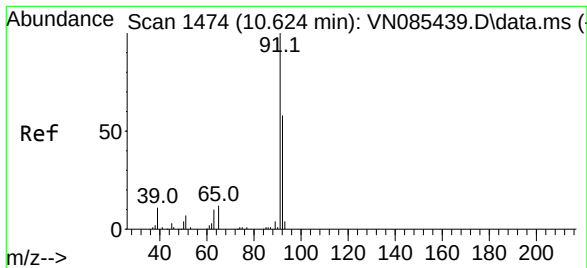
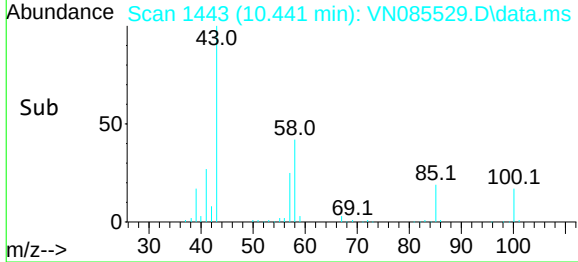
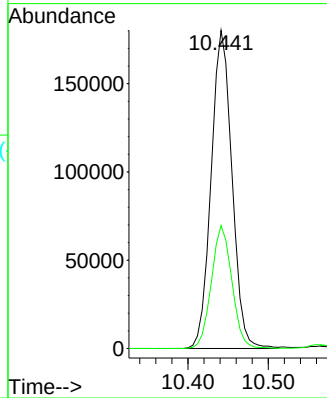
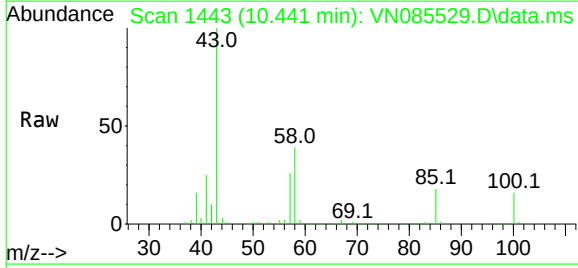
#51  
4-Methyl-2-Pentanone  
Concen: 115.555 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion: 43 Resp: 324778  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7

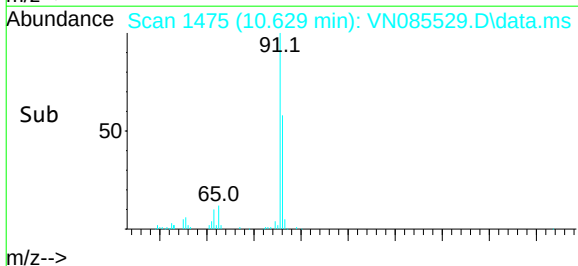
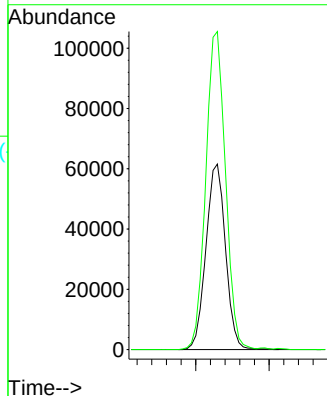
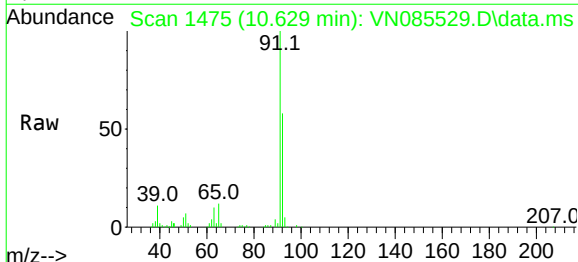
Manual Integrations  
APPROVED

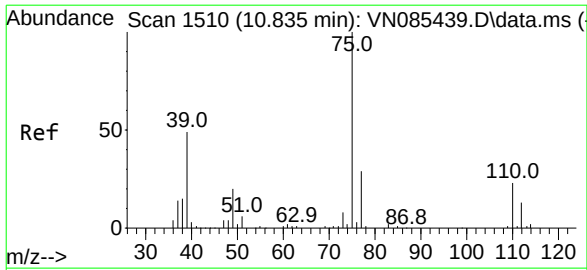
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#52  
Toluene  
Concen: 21.864 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

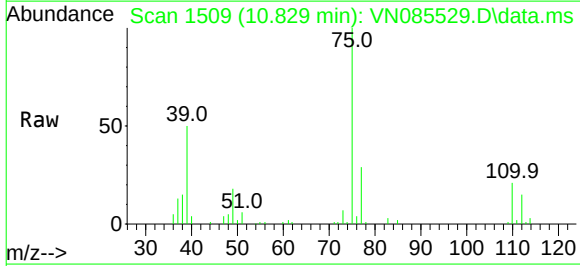
Tgt Ion: 92 Resp: 113994  
Ion Ratio Lower Upper  
92 100  
91 172.4 139.2 208.8





#53  
t-1,3-Dichloropropene  
Concen: 21.398 ug/l  
RT: 10.829 min Scan# 1510  
Delta R.T. -0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

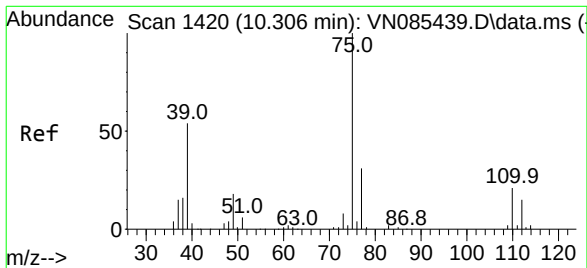
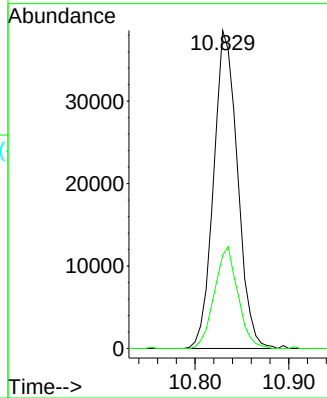
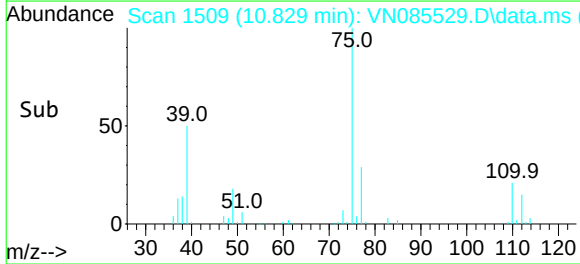
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 75 Resp: 68322  
Ion Ratio Lower Upper  
75 100  
77 29.3 23.5 35.3

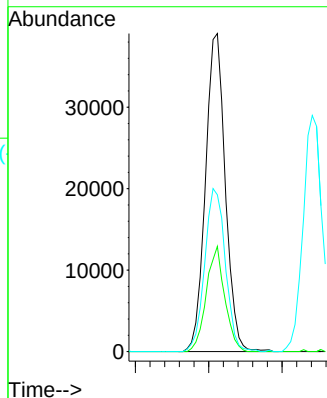
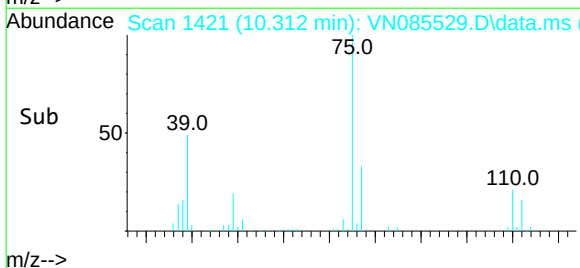
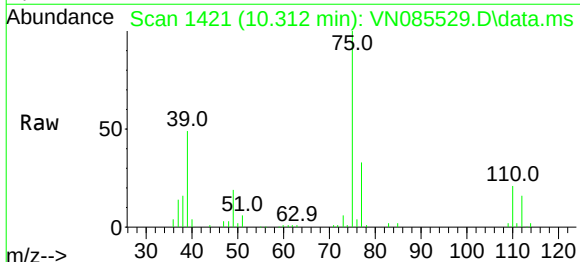
Manual Integrations  
APPROVED

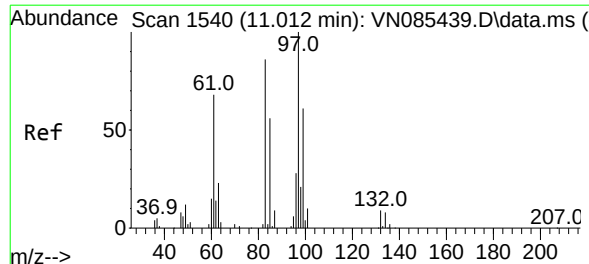
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#54  
cis-1,3-Dichloropropene  
Concen: 21.530 ug/l  
RT: 10.312 min Scan# 1421  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 75 Resp: 73429  
Ion Ratio Lower Upper  
75 100  
77 33.1 25.0 37.4  
39 49.3 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 21.912 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 97 Resp: 45212

Ion Ratio Lower Upper

97 100

83 92.7 69.0 103.6

85 59.4 44.6 66.8

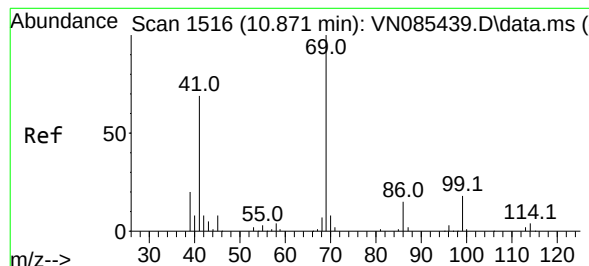
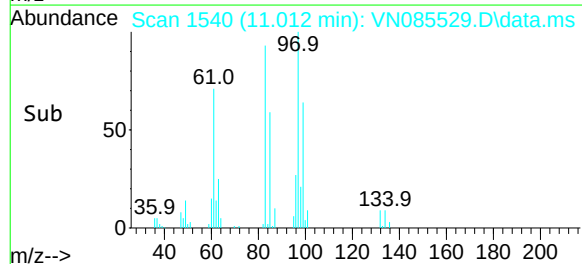
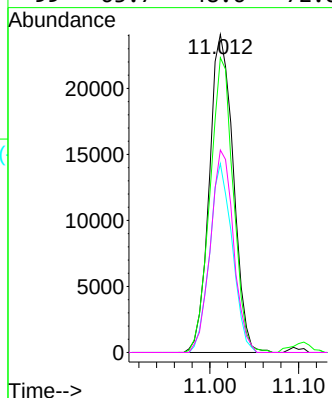
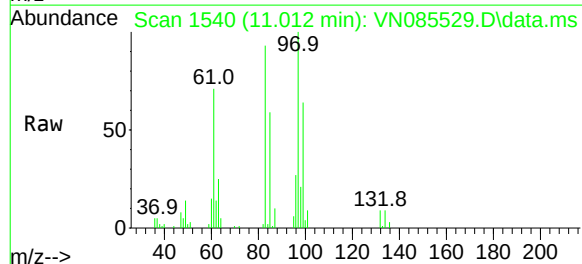
99 63.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#56

Ethyl methacrylate

Concen: 19.281 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

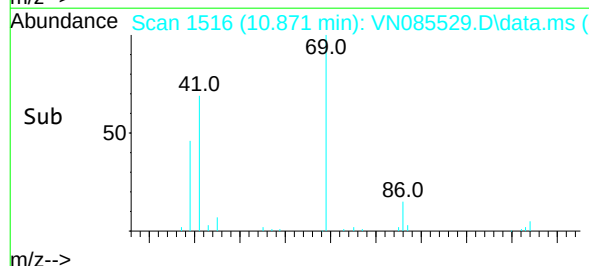
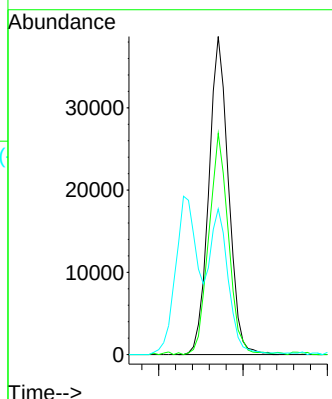
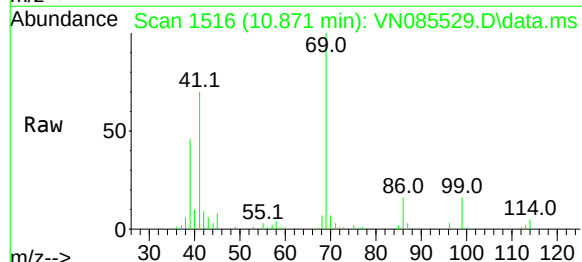
Tgt Ion: 69 Resp: 62727

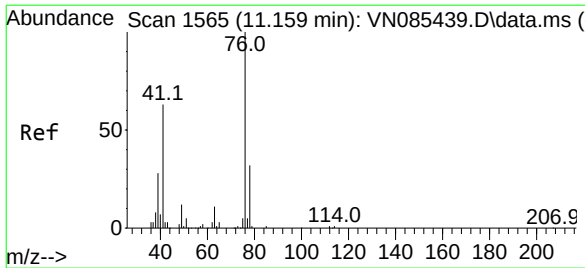
Ion Ratio Lower Upper

69 100

41 69.3 54.6 82.0

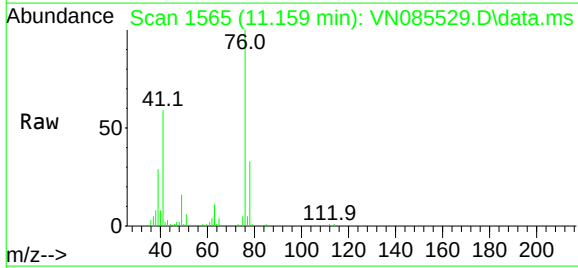
39 42.9 32.4 48.6





#57  
1,3-Dichloropropane  
Concen: 21.915 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

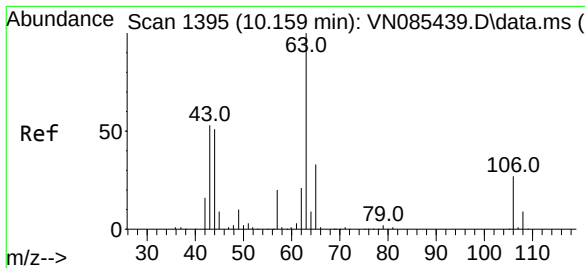
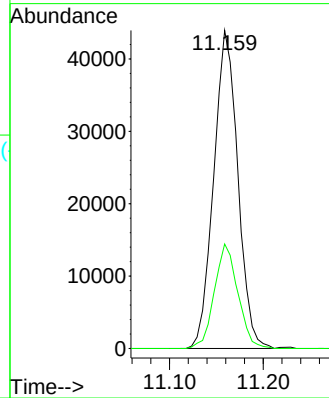
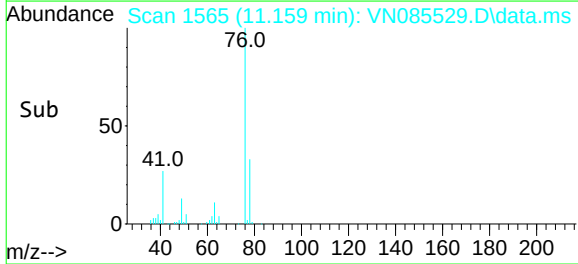
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 76 Resp: 78623  
Ion Ratio Lower Upper  
76 100  
78 32.0 25.6 38.4

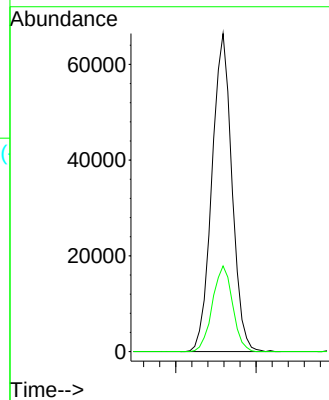
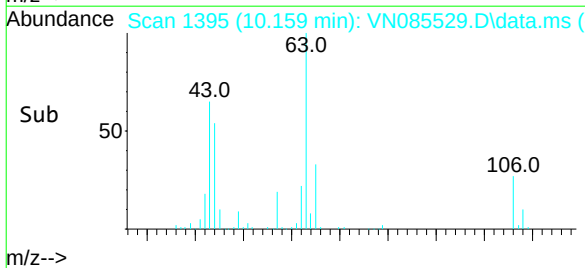
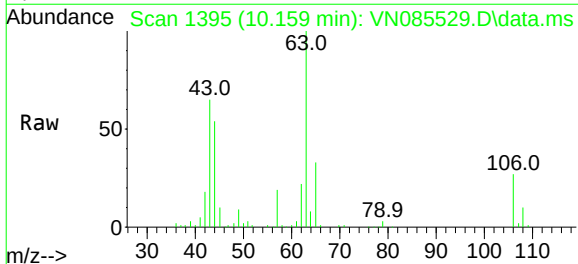
Manual Integrations  
APPROVED

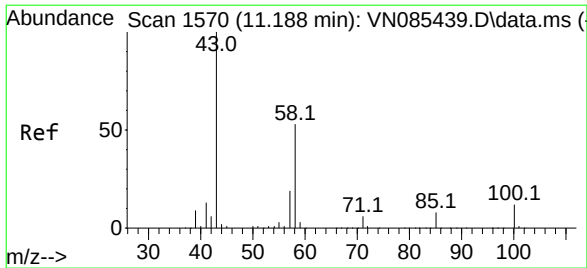
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#58  
2-Chloroethyl Vinyl ether  
Concen: 87.817 ug/l  
RT: 10.159 min Scan# 1395  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 63 Resp: 114984  
Ion Ratio Lower Upper  
63 100  
106 27.1 21.6 32.4





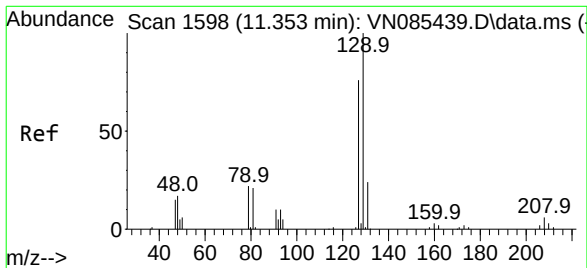
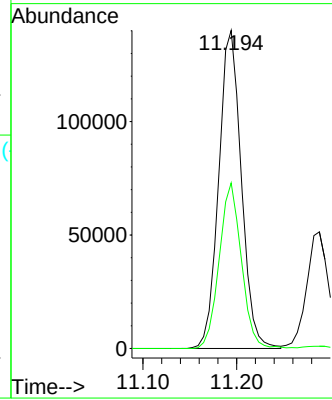
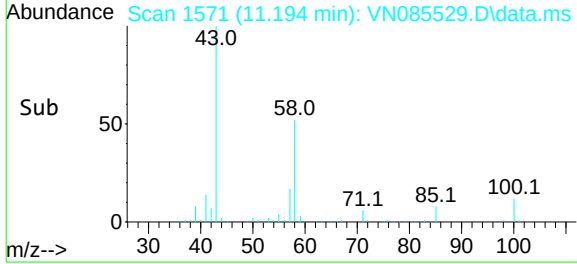
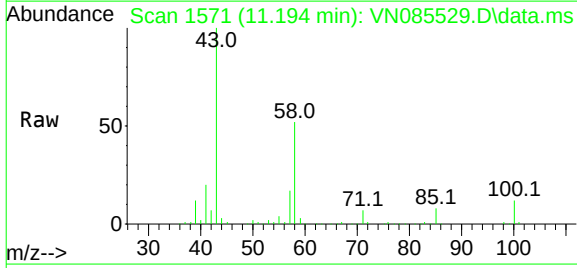
#59  
2-Hexanone  
Concen: 118.574 ug/l  
RT: 11.194 min Scan# 1570  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion: 43 Resp: 234494  
Ion Ratio Lower Upper  
43 100  
58 51.0 26.2 78.6

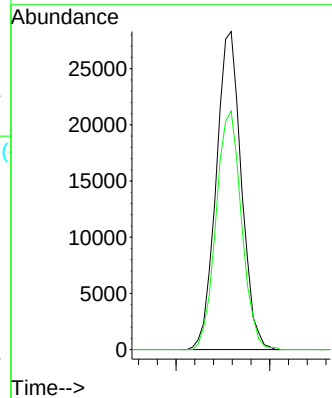
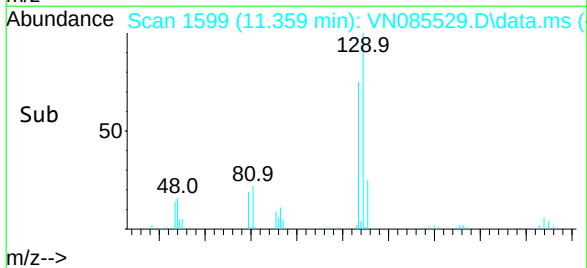
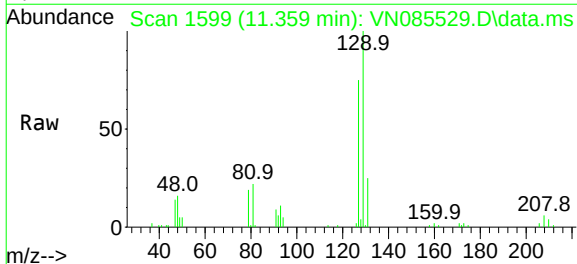
Manual Integrations  
APPROVED

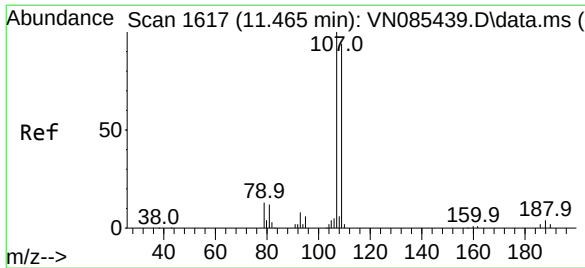
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#60  
Dibromochloromethane  
Concen: 21.210 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:129 Resp: 52835  
Ion Ratio Lower Upper  
129 100  
127 75.9 38.6 115.8





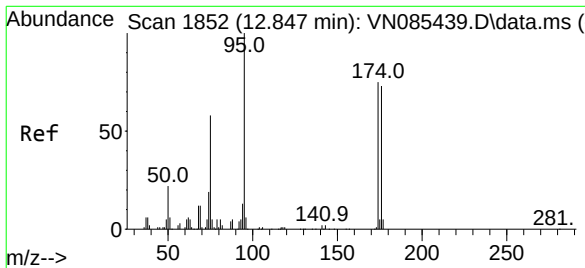
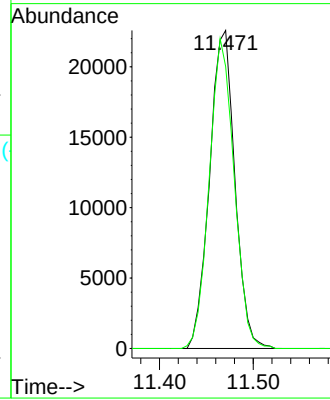
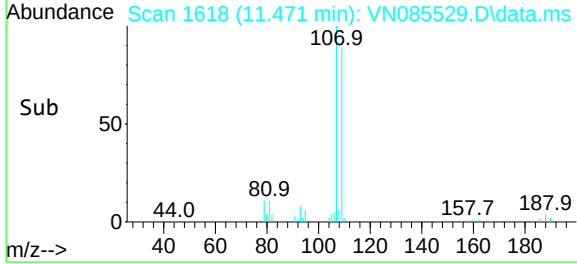
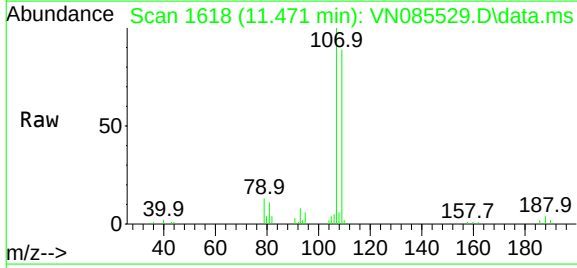
#61  
1,2-Dibromoethane  
Concen: 20.625 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion: 107 Resp: 42361  
Ion Ratio Lower Upper  
107 100  
109 95.9 75.9 113.9

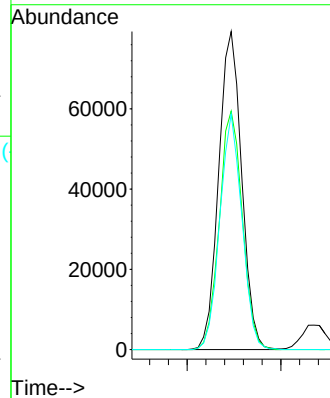
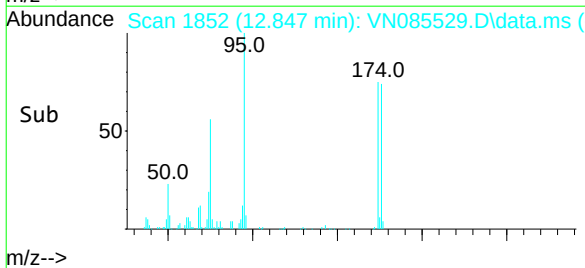
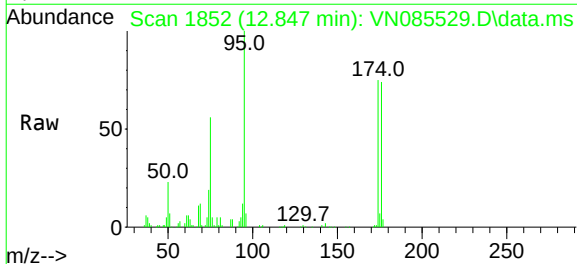
Manual Integrations  
APPROVED

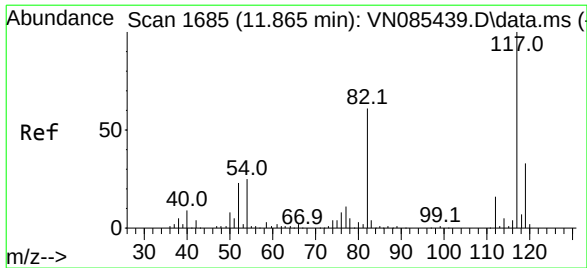
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025



#62  
4-Bromofluorobenzene  
Concen: 52.029 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 95 Resp: 134929  
Ion Ratio Lower Upper  
95 100  
174 75.1 0.0 145.0  
176 70.9 0.0 142.4





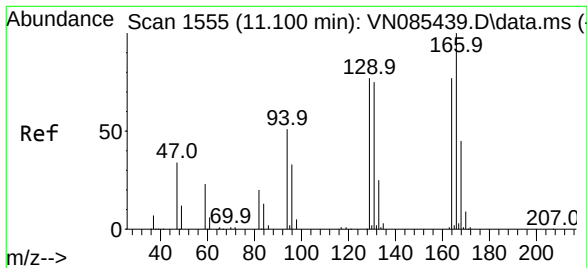
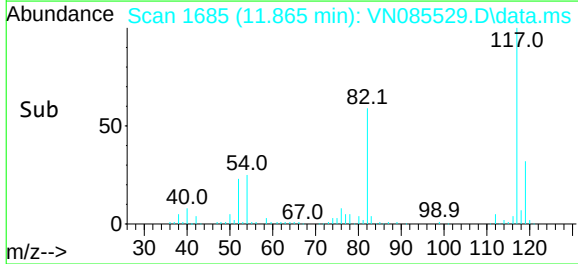
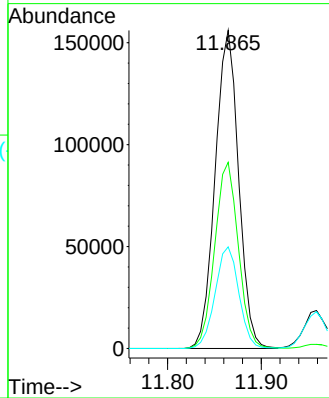
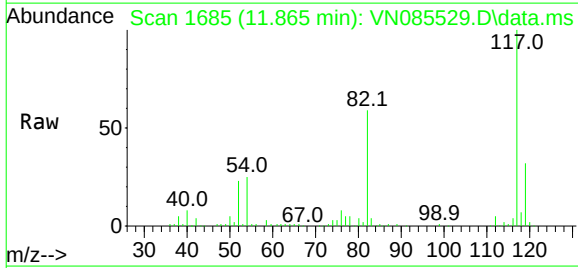
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion:117 Resp: 271043  
Ion Ratio Lower Upper  
117 100  
82 58.5 48.6 72.8  
119 31.9 26.6 39.8

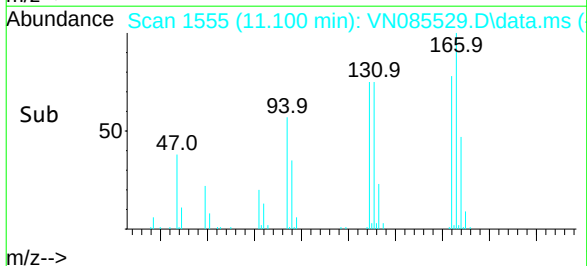
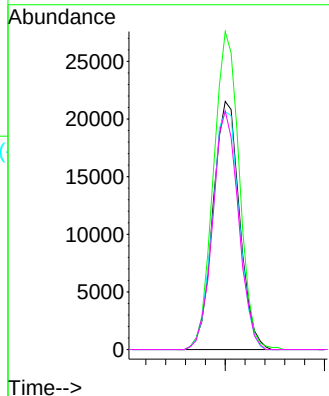
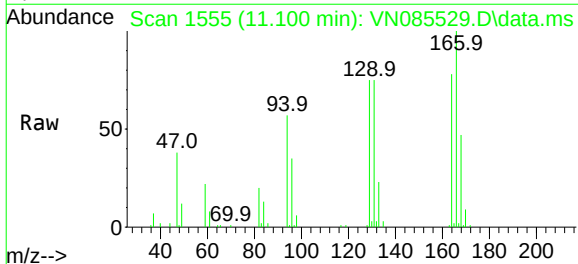
Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

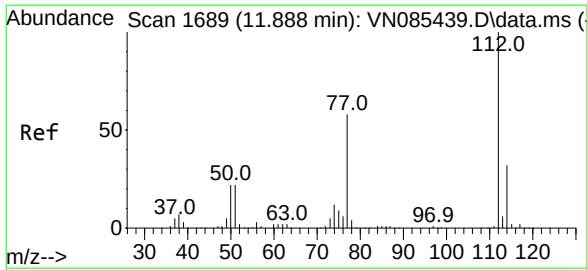


#64  
Tetrachloroethene  
Concen: 21.658 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:164 Resp: 40019  
Ion Ratio Lower Upper  
164 100  
166 128.2 103.4 155.2  
129 95.9 79.2 118.8  
131 96.1 77.1 115.7







#65

Chlorobenzene

Concen: 20.586 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:112 Resp: 122235

Ion Ratio Lower Upper

112 100

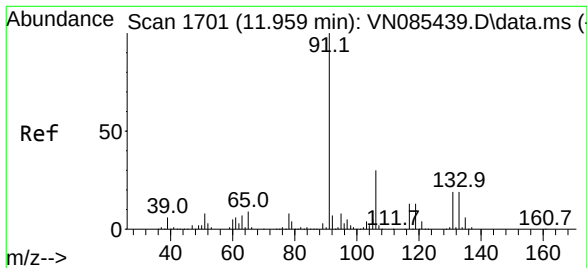
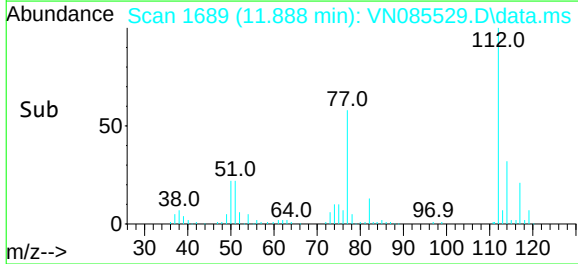
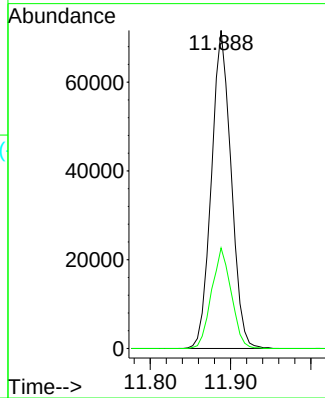
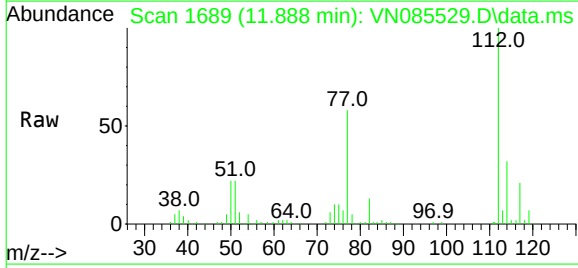
114 31.6 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 21.124 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

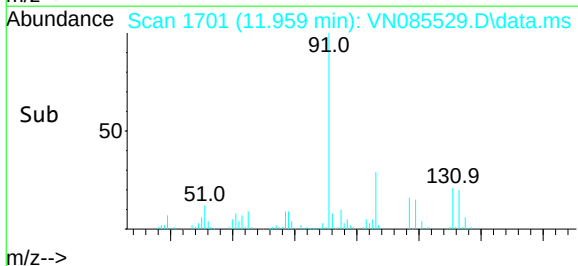
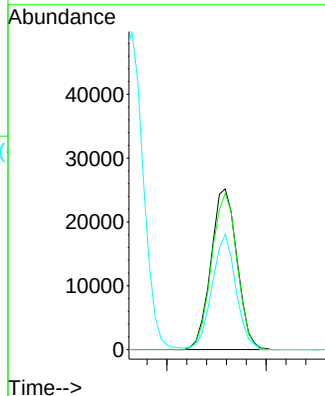
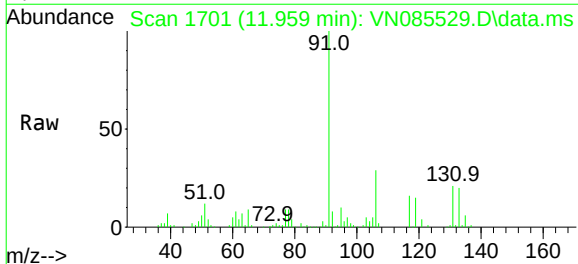
Tgt Ion:131 Resp: 46034

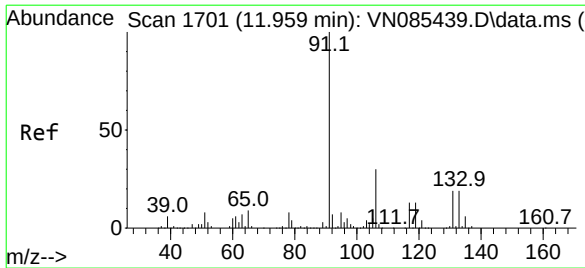
Ion Ratio Lower Upper

131 100

133 95.1 47.4 142.3

119 65.4 33.1 99.5





#67

Ethyl Benzene

Concen: 20.797 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 91 Resp: 201123

Ion Ratio Lower Upper

91 100

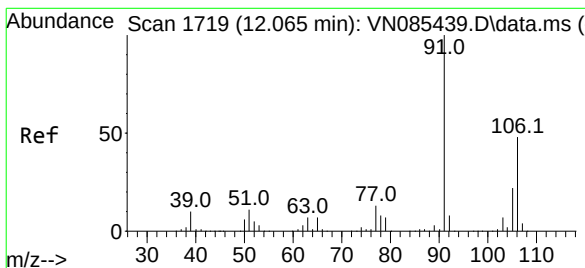
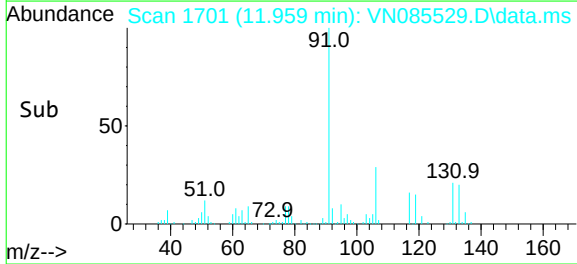
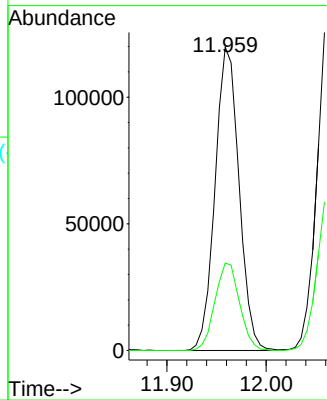
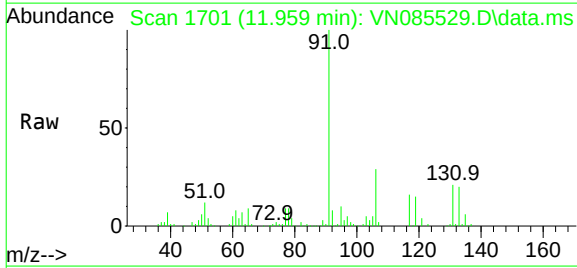
106 28.8 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#68

m/p-Xylenes

Concen: 43.106 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085529.D

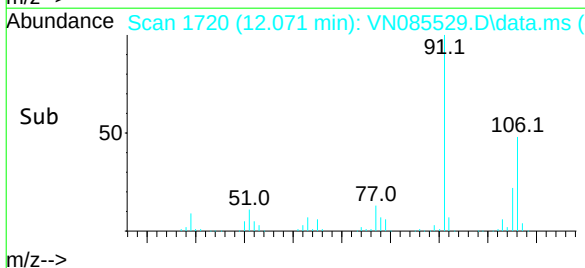
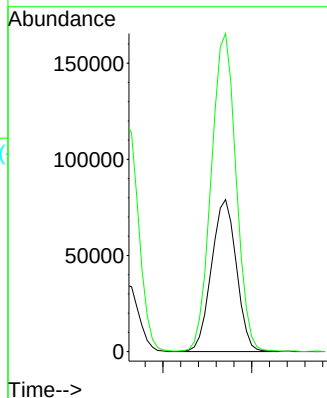
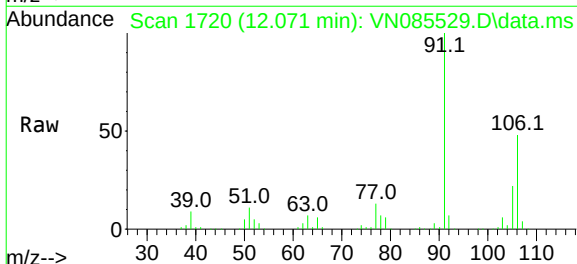
Acq: 28 Jan 2025 11:15

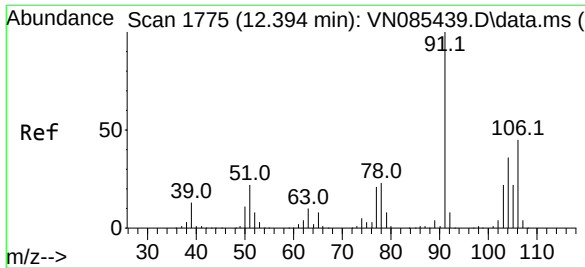
Tgt Ion:106 Resp: 154069

Ion Ratio Lower Upper

106 100

91 208.4 167.7 251.5





#69

o-Xylene

Concen: 20.943 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:106 Resp: 71535

Ion Ratio Lower Upper

106 100

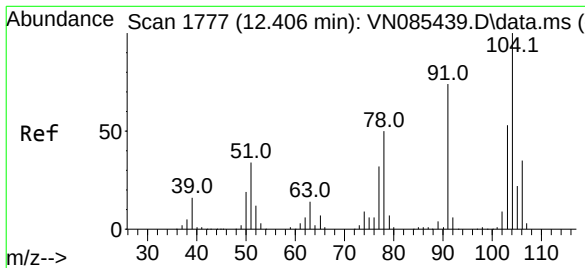
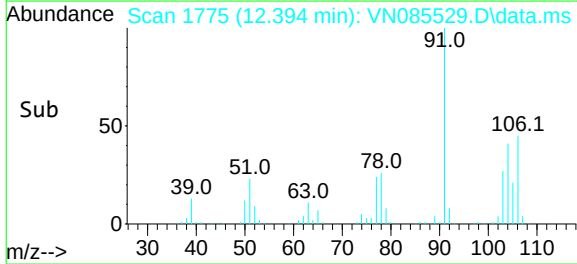
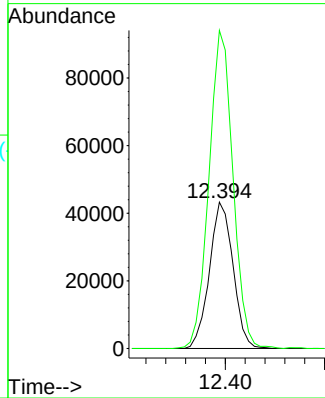
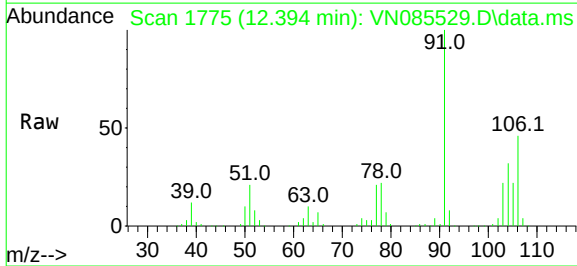
91 220.7 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#70

Styrene

Concen: 21.250 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

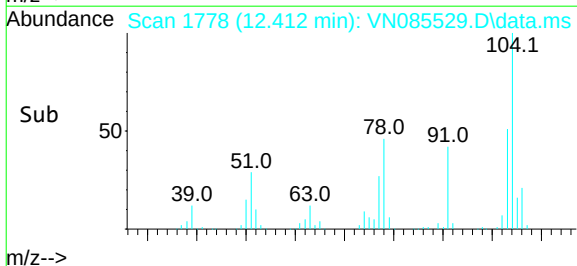
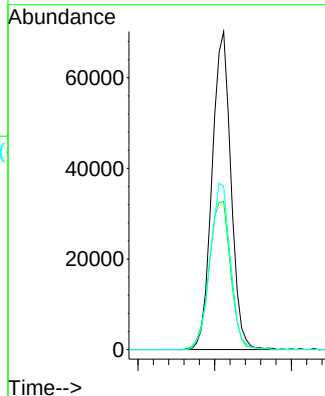
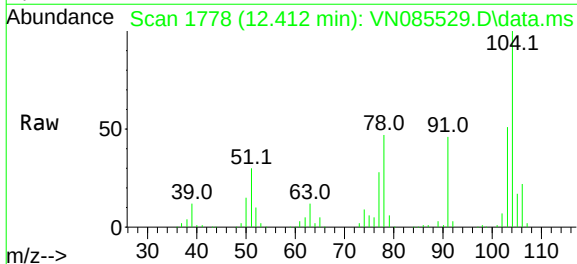
Tgt Ion:104 Resp: 120125

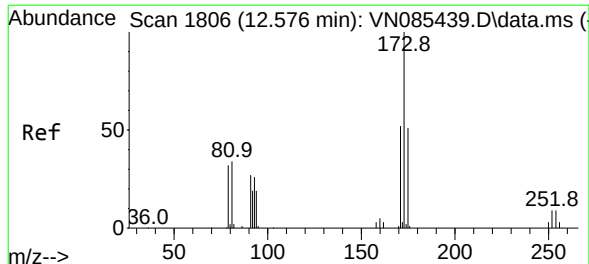
Ion Ratio Lower Upper

104 100

78 53.0 42.5 63.7

103 55.9 43.8 65.8





#71

Bromoform

Concen: 22.516 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

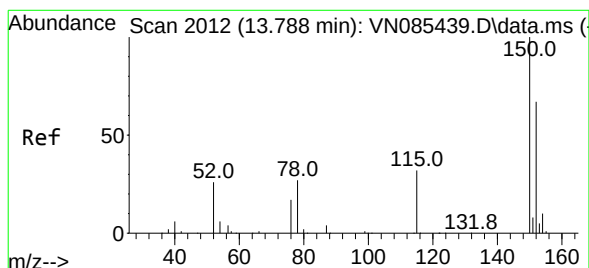
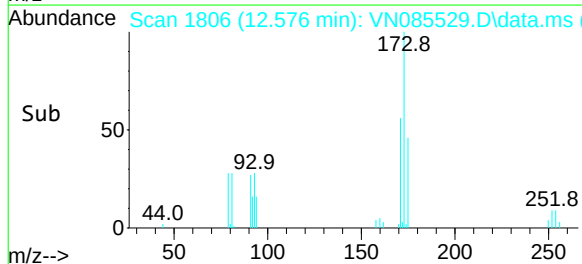
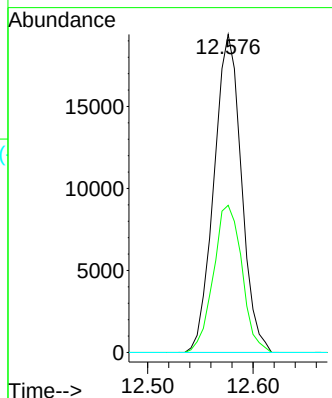
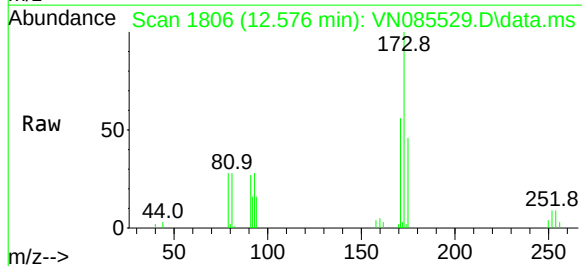
ClientSampleId :

VN0128WBS01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 35108 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 48.0  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

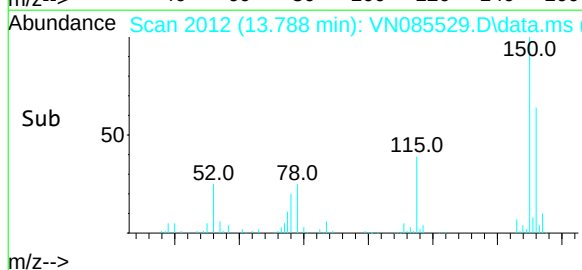
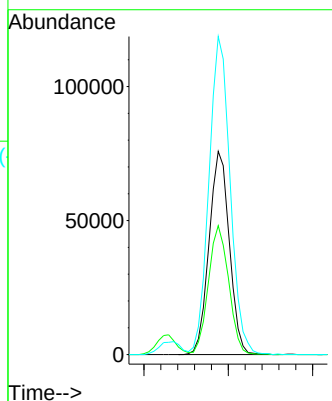
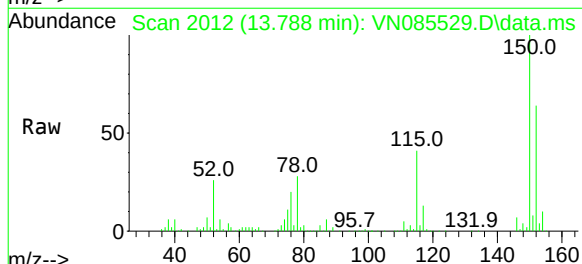
RT: 13.788 min Scan# 2012

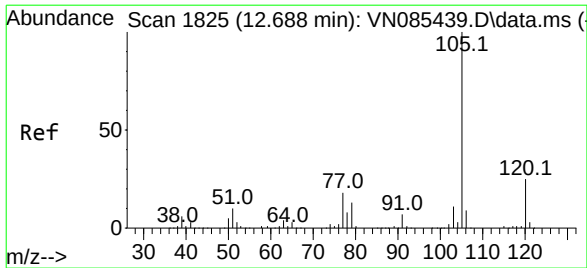
Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 126721 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 63.7  | 31.1  | 93.3   |
| 150       | 163.7 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 20.880 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:105 Resp: 178577

Ion Ratio Lower Upper

105 100

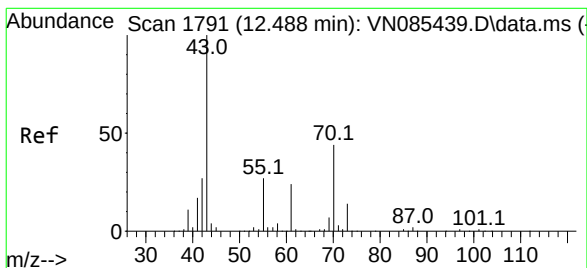
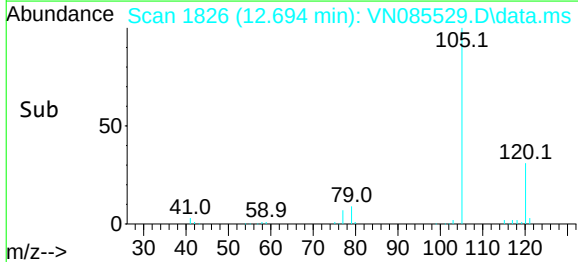
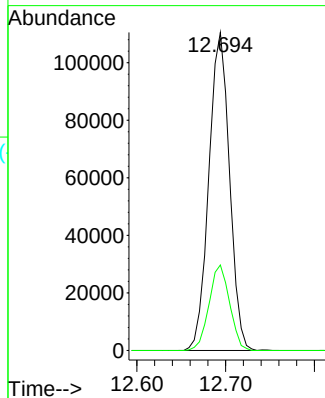
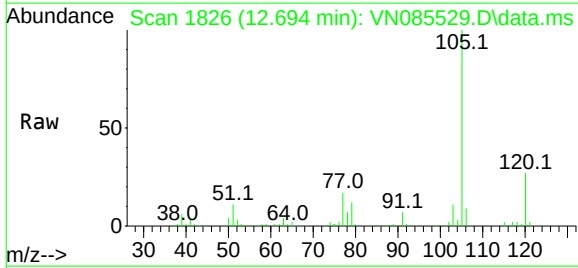
120 26.7 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#74

N-ethyl acetate

Concen: 20.975 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Tgt Ion: 43 Resp: 80633

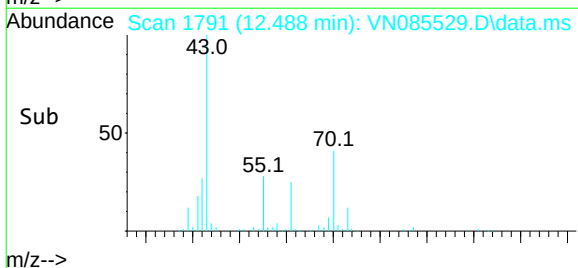
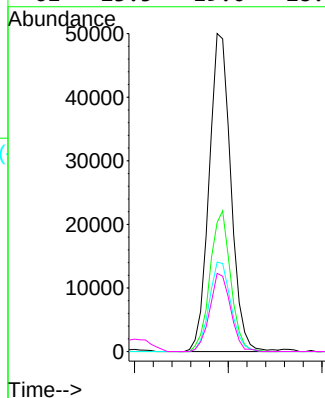
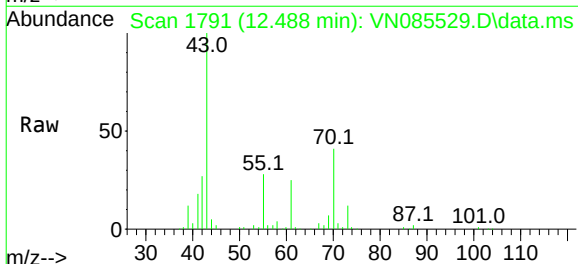
Ion Ratio Lower Upper

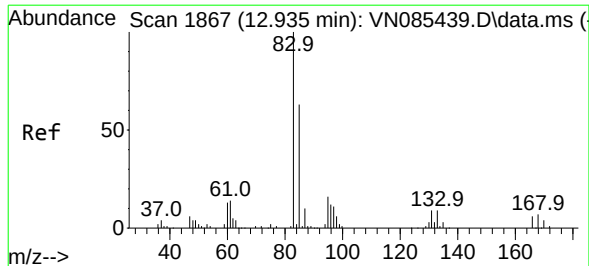
43 100

70 41.7 34.0 51.0

55 28.0 21.4 32.2

61 23.5 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 21.649 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

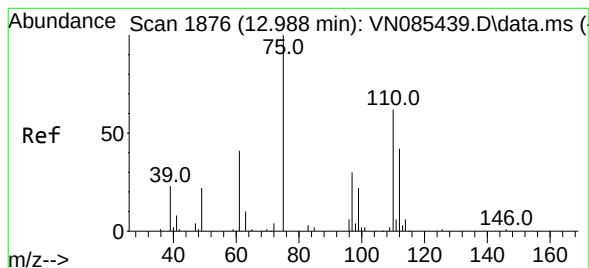
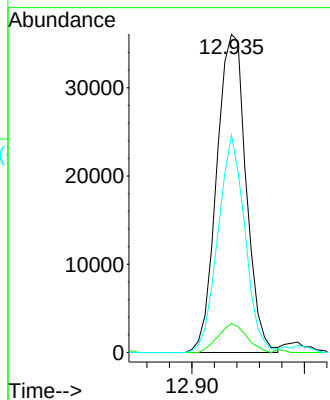
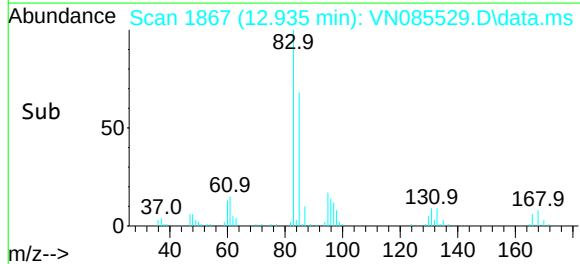
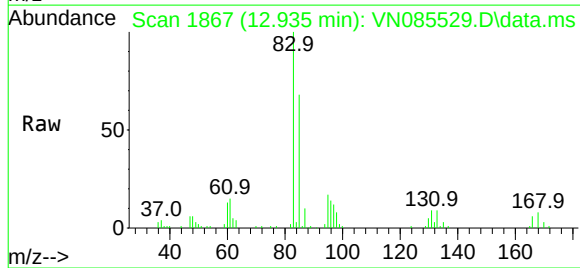
VN0128WBS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 65405 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 8.8   | 4.8   | 14.4  |
| 85       | 62.7  | 32.2  | 96.6  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#76

1,2,3-Trichloropropane

Concen: 23.321 ug/l m

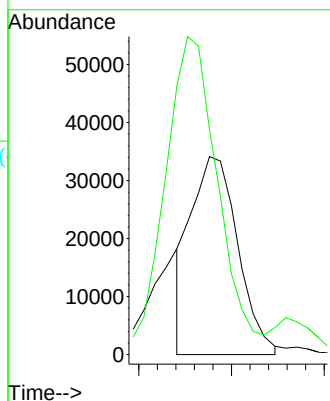
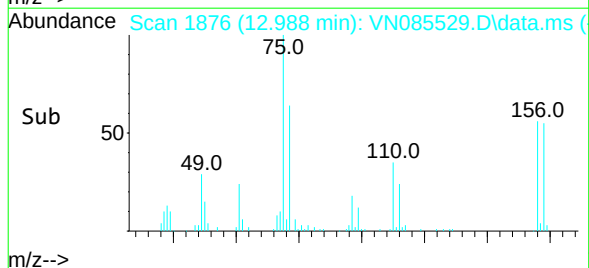
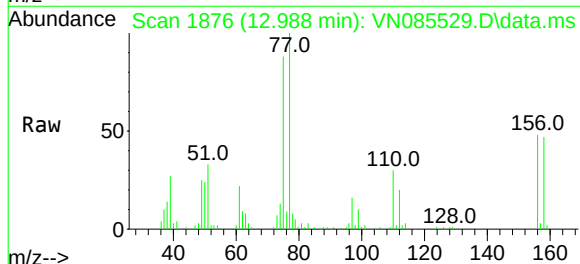
RT: 12.988 min Scan# 1876

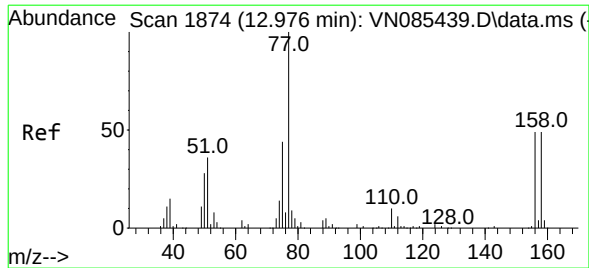
Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 60066 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 181.2 | 109.7 | 329.2 |





#77

Bromobenzene

Concen: 21.332 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 156 Resp: 47665

Ion Ratio Lower Upper

156 100

77 228.4 114.1 342.4

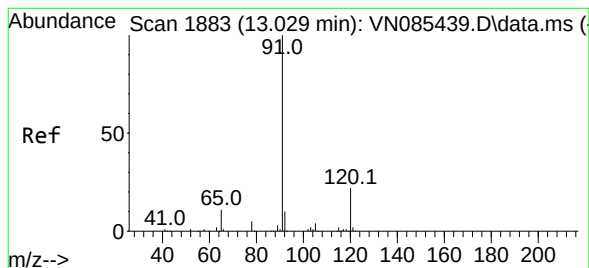
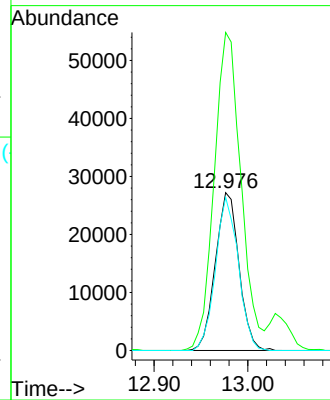
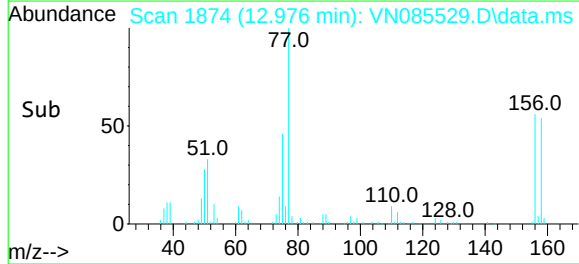
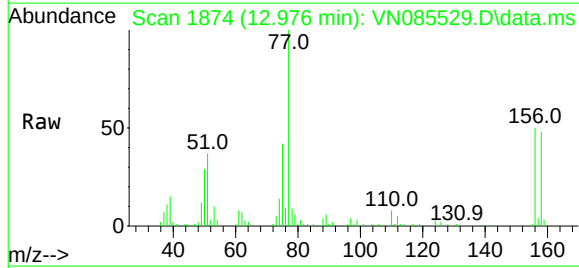
158 94.0 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#78

n-propylbenzene

Concen: 21.517 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085529.D

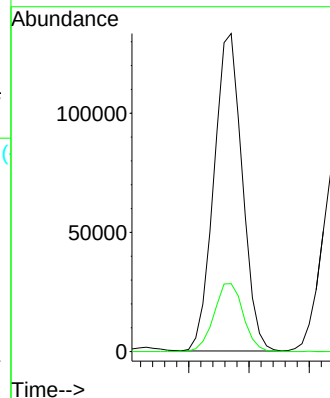
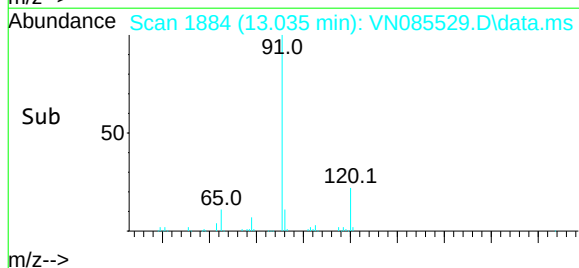
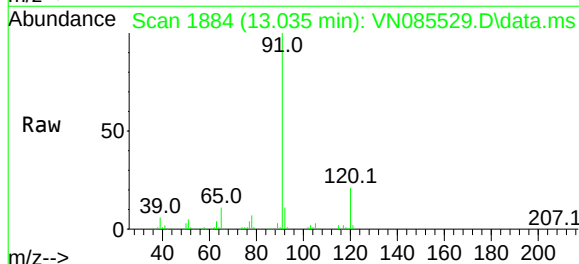
Acq: 28 Jan 2025 11:15

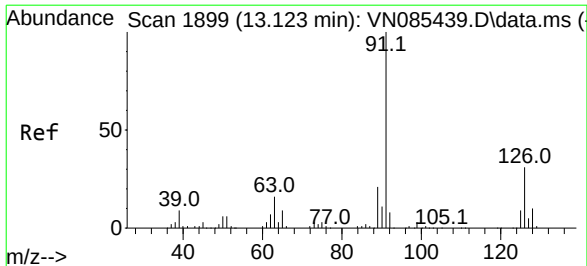
Tgt Ion: 91 Resp: 217855

Ion Ratio Lower Upper

91 100

120 22.1 10.9 32.6





#79

2-Chlorotoluene

Concen: 21.081 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion: 91 Resp: 138138

Ion Ratio Lower Upper

91 100

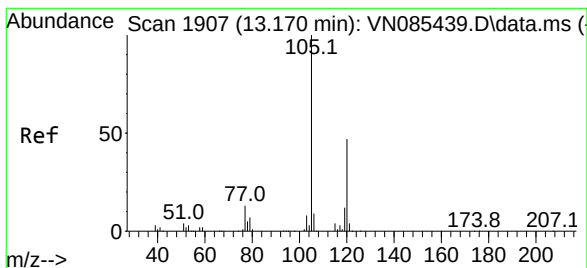
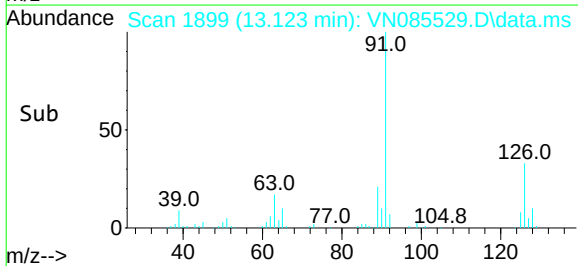
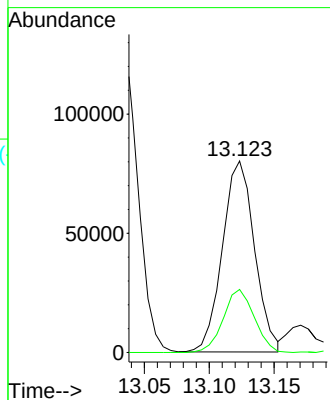
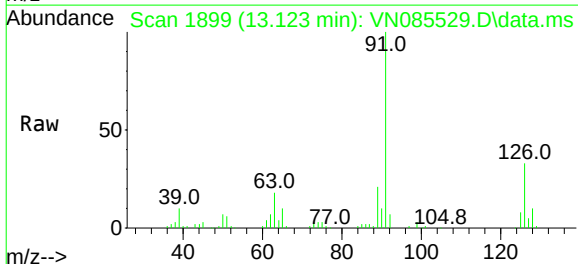
126 31.9 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#80

1,3,5-Trimethylbenzene

Concen: 21.836 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085529.D

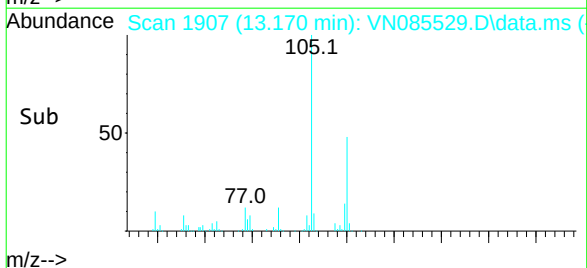
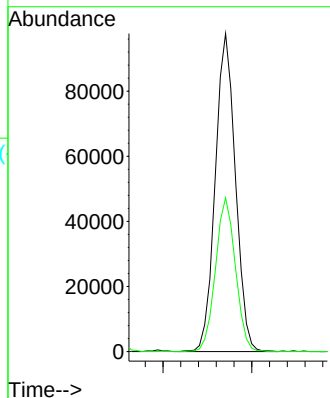
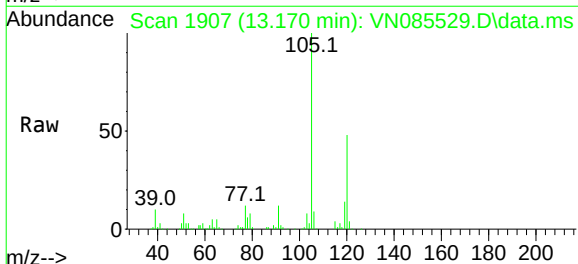
Acq: 28 Jan 2025 11:15

Tgt Ion:105 Resp: 154258

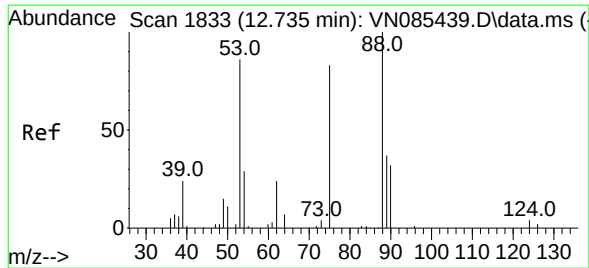
Ion Ratio Lower Upper

105 100

120 47.7 23.9 71.7







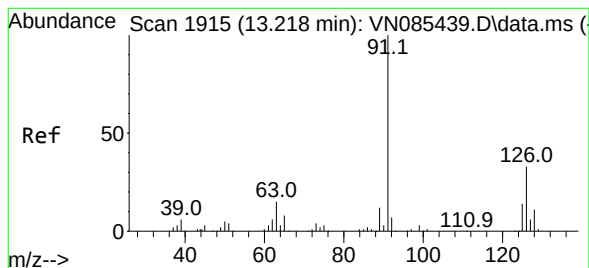
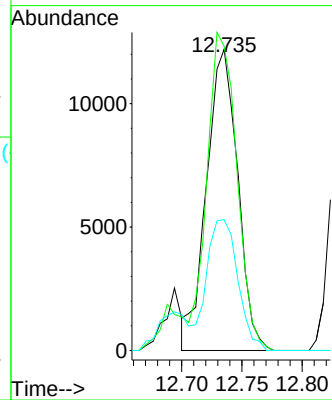
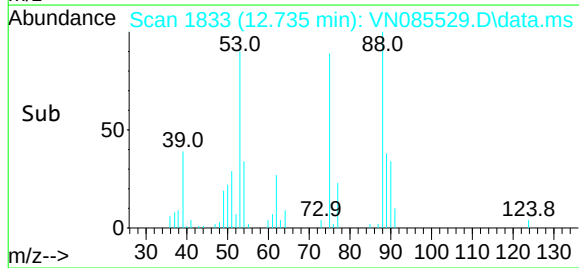
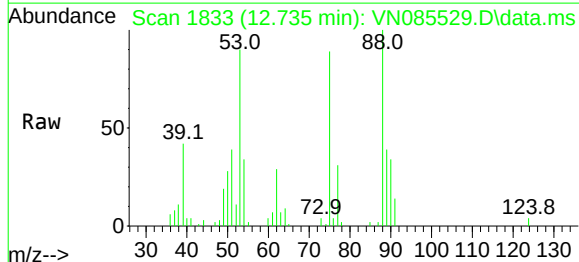
#81  
trans-1,4-Dichloro-2-butene  
Concen: 23.073 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion: 75 Resp: 21965  
Ion Ratio Lower Upper  
75 100  
53 101.0 95.6 143.4  
89 44.0 37.0 55.6

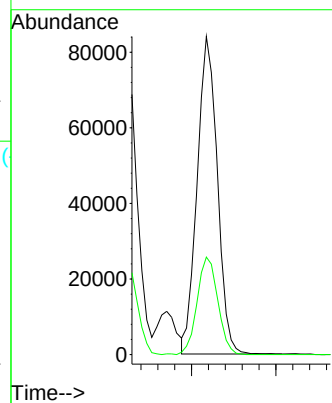
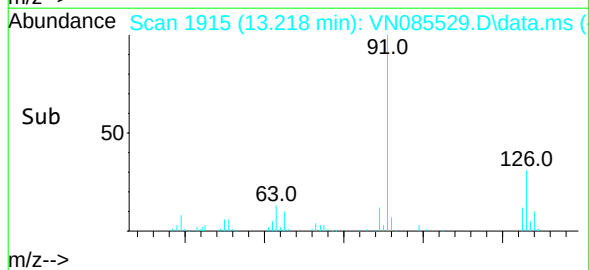
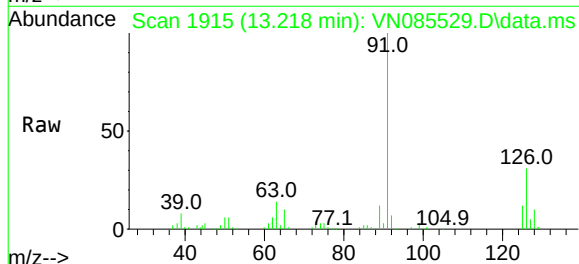
Manual Integrations  
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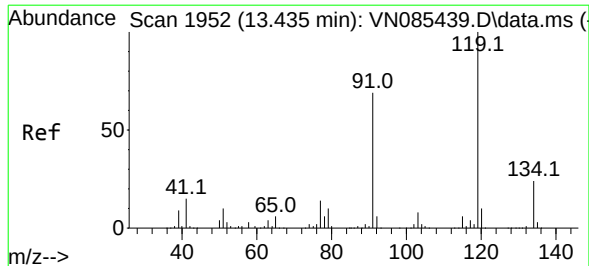
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#82  
4-Chlorotoluene  
Concen: 21.369 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 91 Resp: 139420  
Ion Ratio Lower Upper  
91 100  
126 31.6 15.9 47.7





#83

tert-Butylbenzene

Concen: 20.926 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:119 Resp: 124147

Ion Ratio Lower Upper

119 100

91 71.0 35.1 105.3

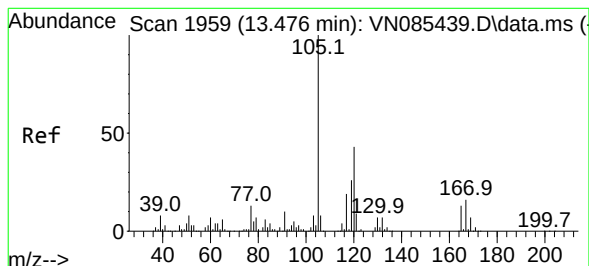
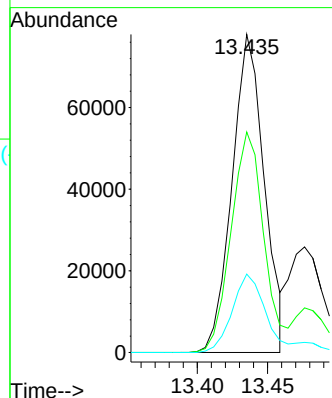
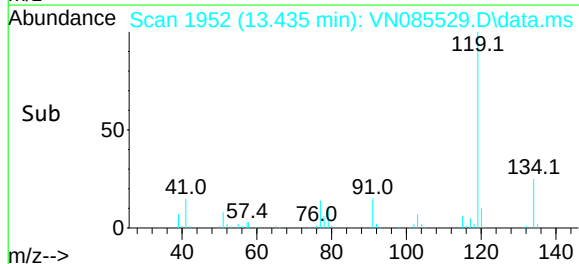
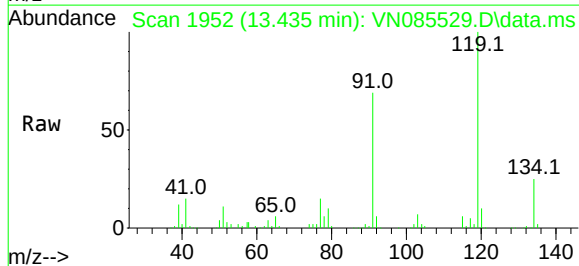
134 27.7 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#84

1,2,4-Trimethylbenzene

Concen: 22.092 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085529.D

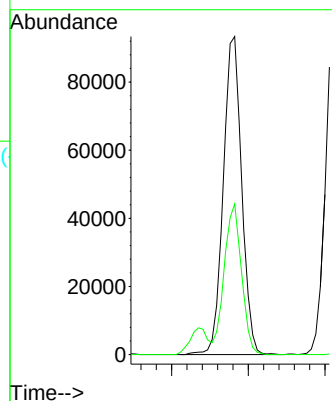
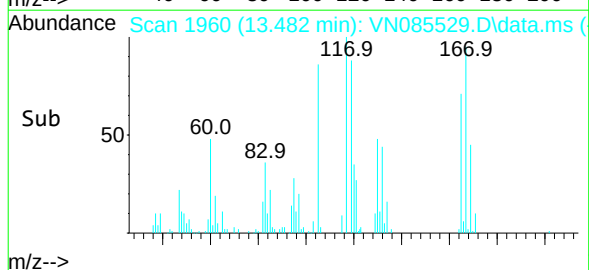
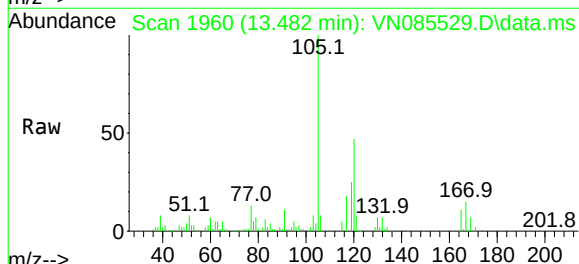
Acq: 28 Jan 2025 11:15

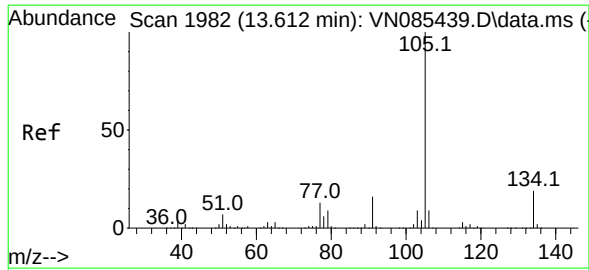
Tgt Ion:105 Resp: 155548

Ion Ratio Lower Upper

105 100

120 44.5 21.6 65.0





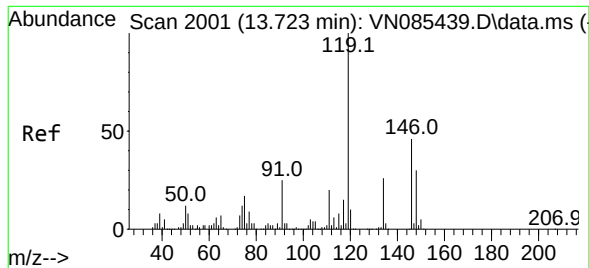
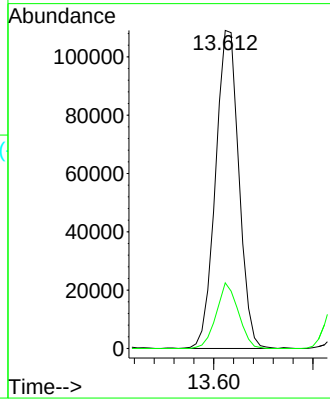
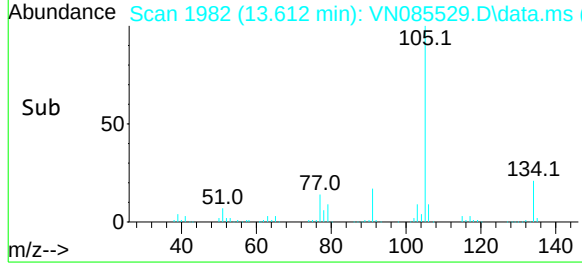
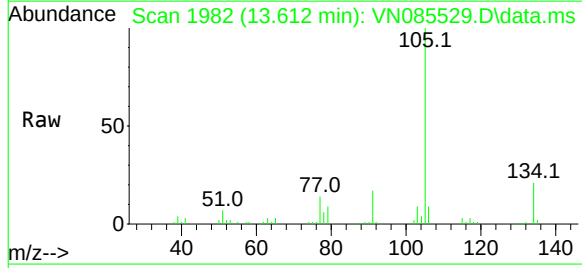
#85  
sec-Butylbenzene  
Concen: 21.691 ug/l  
RT: 13.612 min Scan# 1982  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion:105 Resp: 178351  
Ion Ratio Lower Upper  
105 100  
134 19.5 9.7 28.9

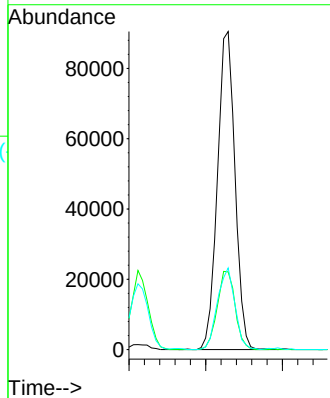
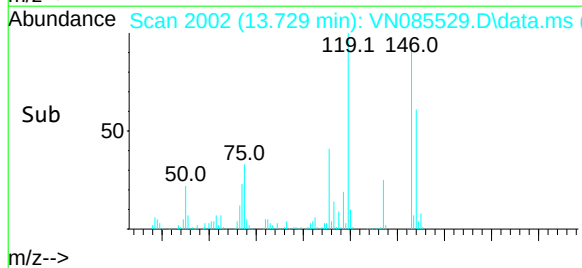
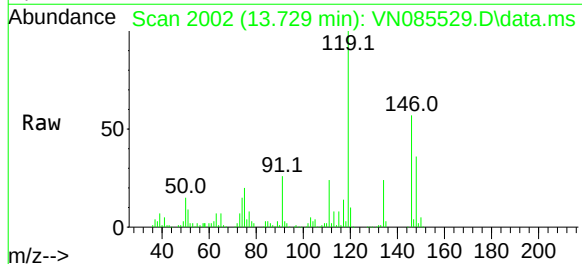
Manual Integrations  
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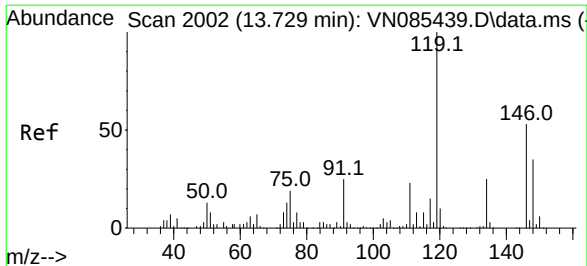
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#86  
p-Isopropyltoluene  
Concen: 20.952 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:119 Resp: 143953  
Ion Ratio Lower Upper  
119 100  
134 25.1 12.7 38.0  
91 25.5 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 20.833 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

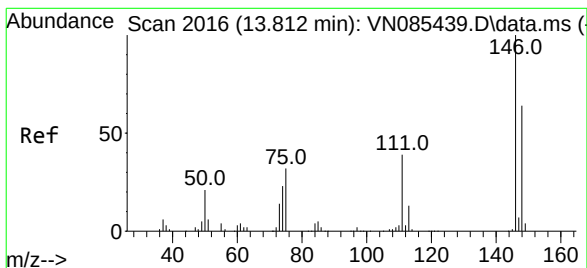
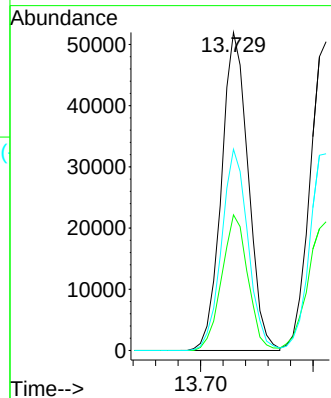
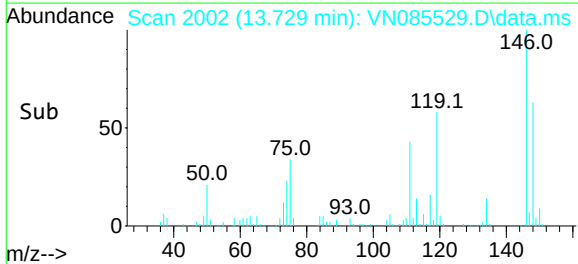
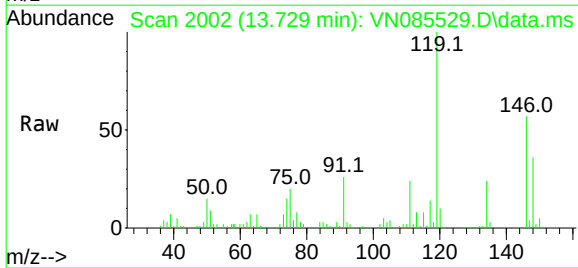
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 85729 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 111       | 41.8  | 21.4  | 64.3  |
| 148       | 62.6  | 32.3  | 96.9  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#88

1,4-Dichlorobenzene

Concen: 19.789 ug/l

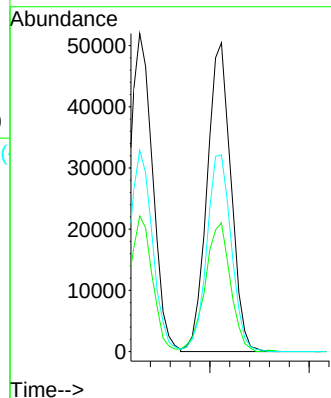
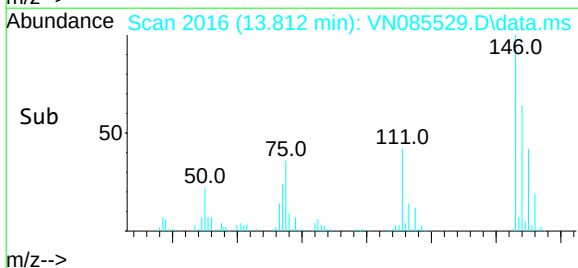
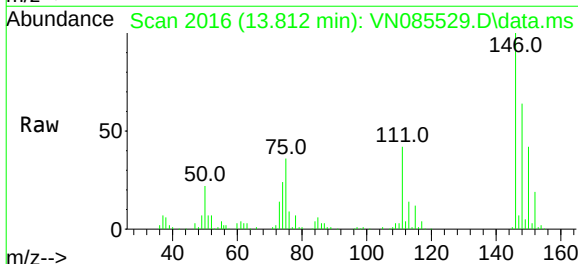
RT: 13.812 min Scan# 2016

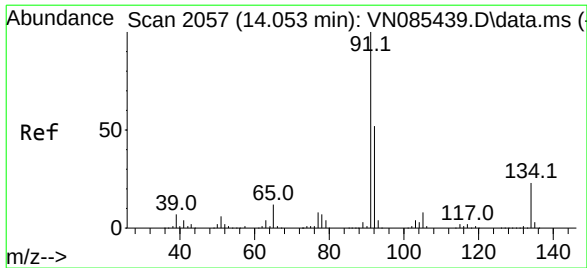
Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

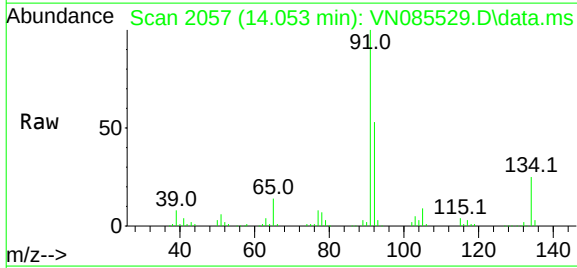
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 84406 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 111       | 43.9  | 21.3  | 63.7  |
| 148       | 65.4  | 32.4  | 97.0  |





#89  
n-Butylbenzene  
Concen: 19.526 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

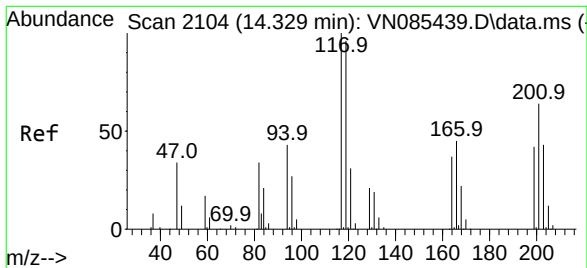
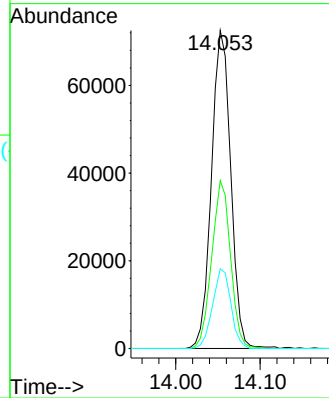
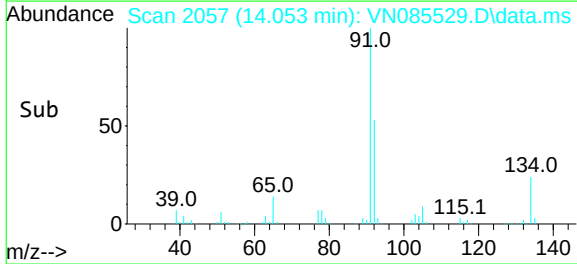
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 51.5  | 25.8  | 77.3  |
| 134     | 23.8  | 11.7  | 35.1  |

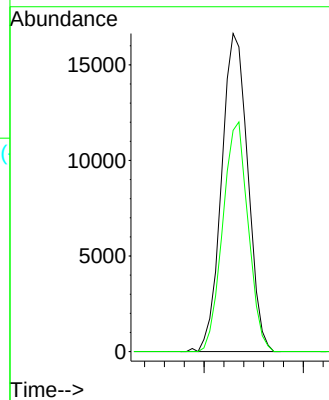
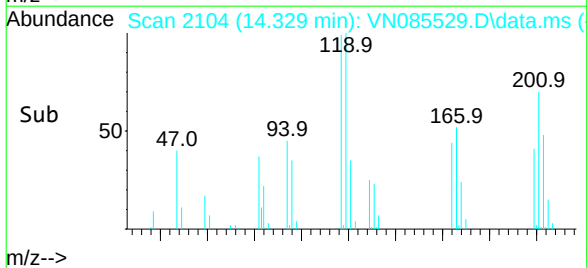
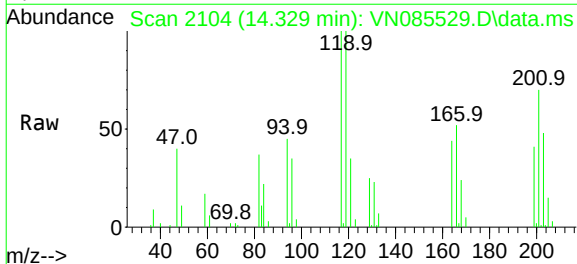
Manual Integrations  
APPROVED

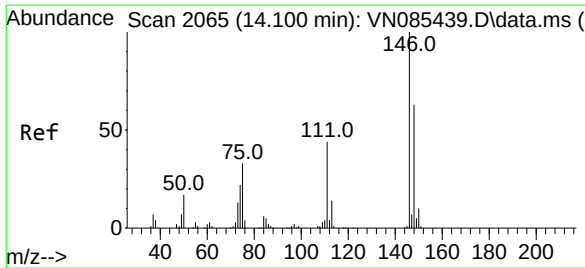
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#90  
Hexachloroethane  
Concen: 19.522 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

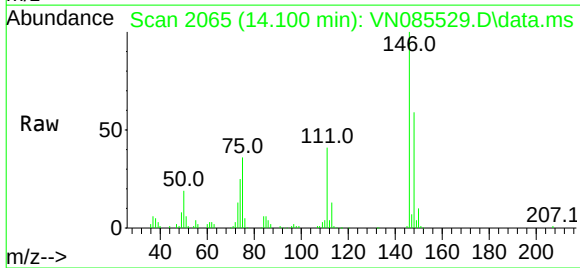
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 201     | 70.0  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 20.350 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

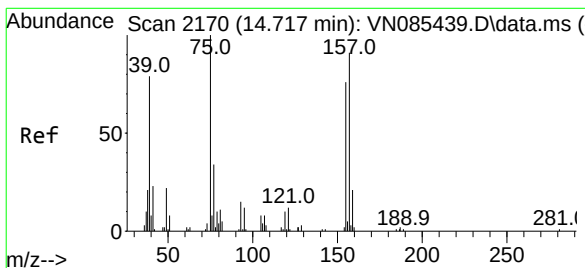
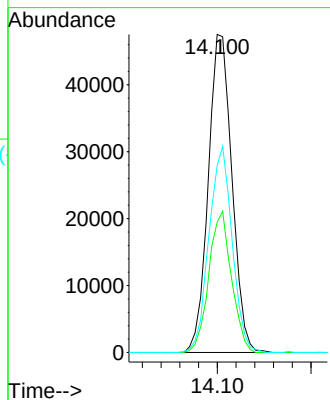
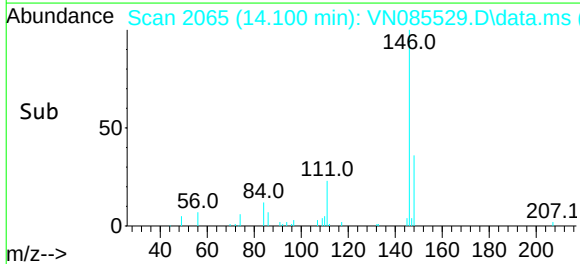
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01



Tgt Ion: 146 Resp: 83529  
Ion Ratio Lower Upper  
146 100  
111 42.3 21.7 65.1  
148 63.4 31.4 94.2

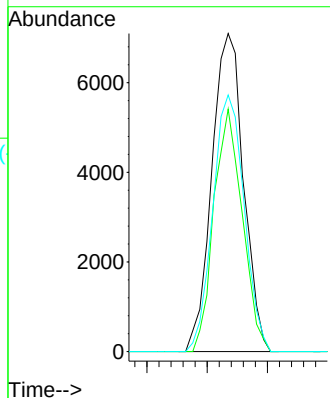
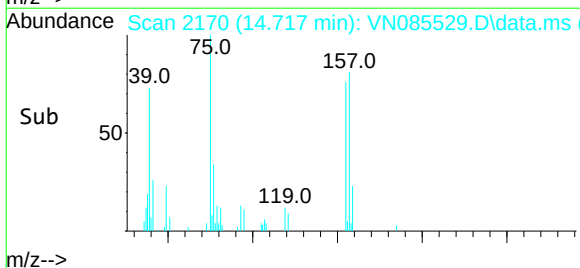
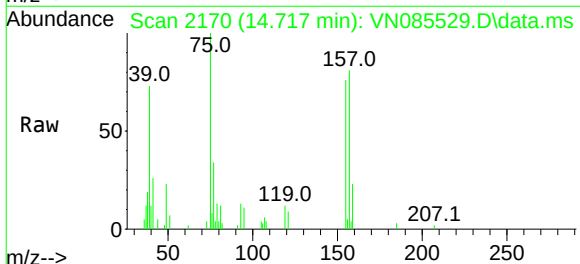
Manual Integrations  
APPROVED

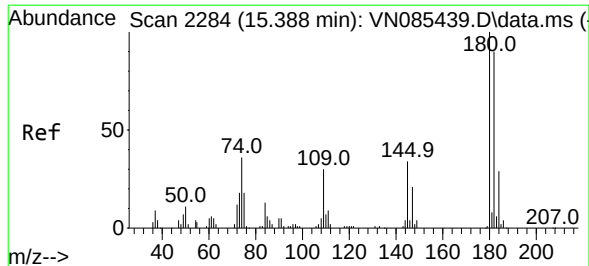
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 23.494 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 75 Resp: 12961  
Ion Ratio Lower Upper  
75 100  
155 68.3 36.4 109.2  
157 79.8 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 18.913 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

Tgt Ion:180 Resp: 36081

Ion Ratio Lower Upper

180 100

182 99.0 46.8 140.3

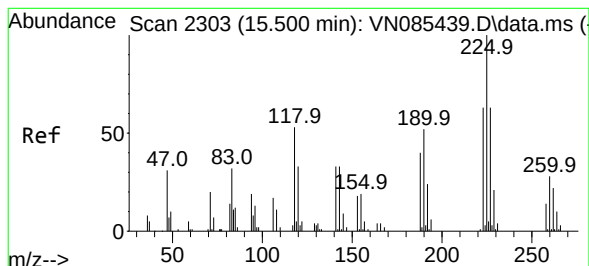
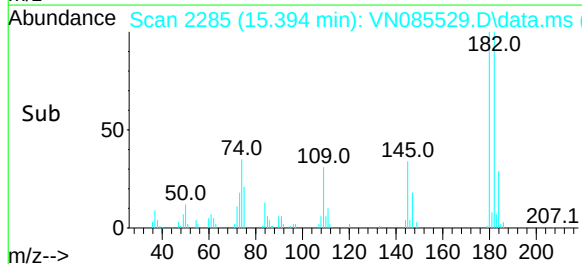
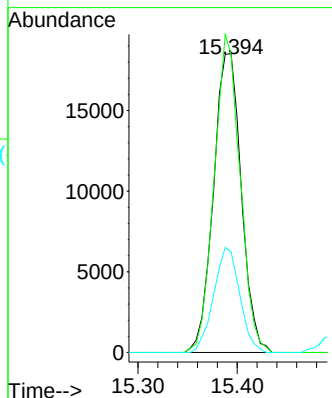
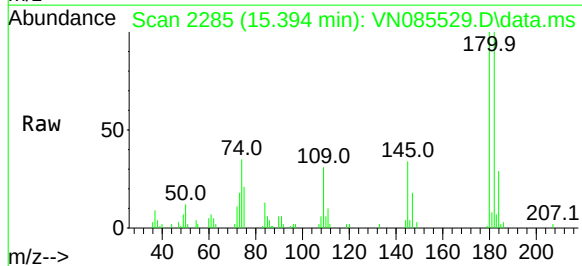
145 32.9 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#94

Hexachlorobutadiene

Concen: 19.907 ug/l

RT: 15.494 min Scan# 2302

Delta R.T. -0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

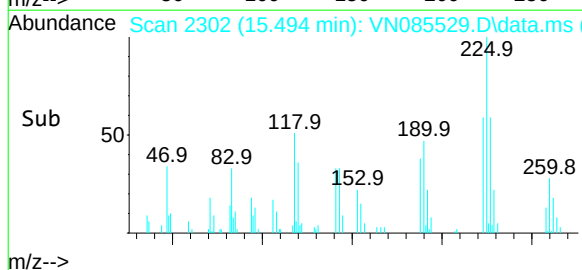
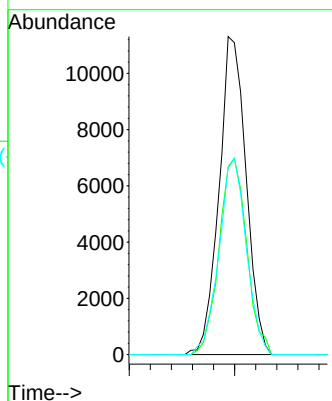
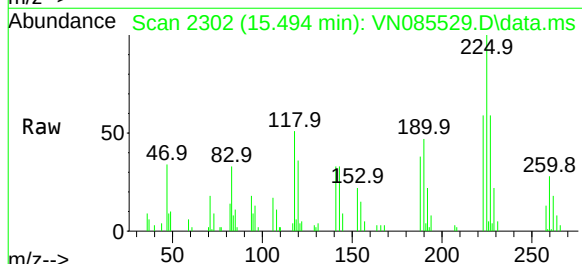
Tgt Ion:225 Resp: 20163

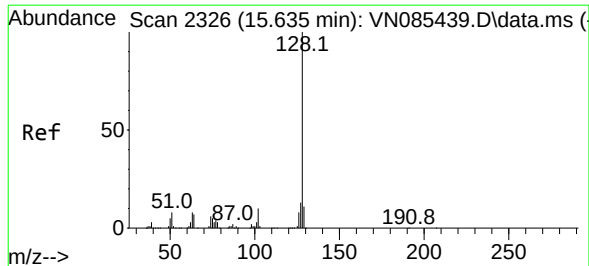
Ion Ratio Lower Upper

225 100

223 63.1 30.7 92.1

227 62.5 30.9 92.5





#95

Naphthalene

Concen: 18.394 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

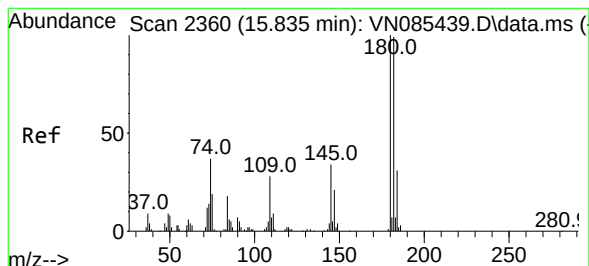
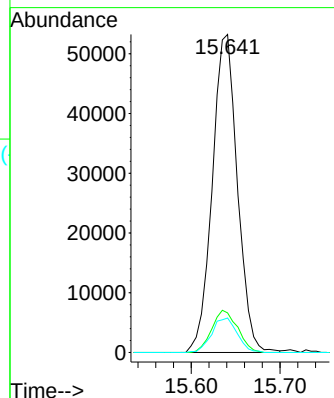
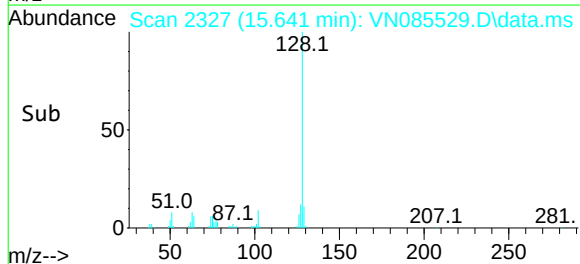
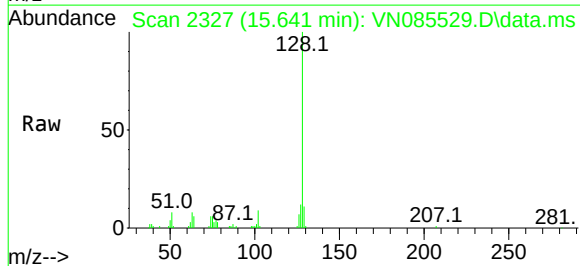
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 104713 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 127       | 13.6  | 10.6  | 16.0   |
| 129       | 11.0  | 8.8   | 13.2   |

## Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#96

1,2,3-Trichlorobenzene

Concen: 18.978 ug/l

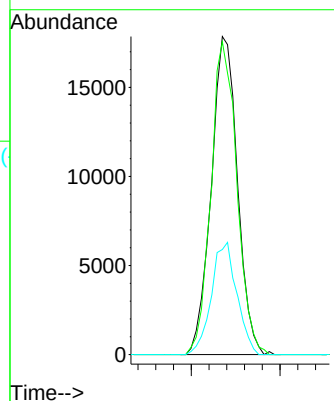
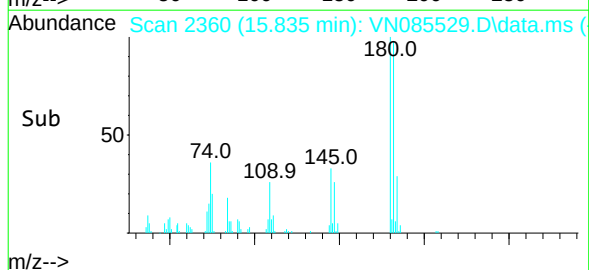
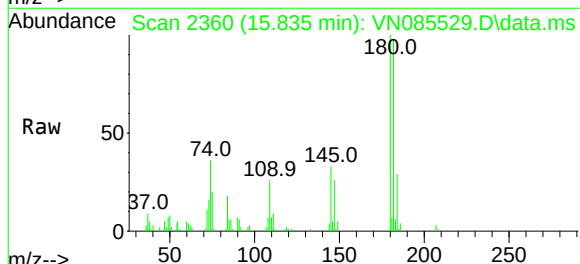
RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 36634 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 97.1  | 47.4  | 142.2 |
| 145       | 34.3  | 16.9  | 50.7  |





### Report of Analysis

|                    |                      |        |      |                 |              |
|--------------------|----------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc. |        |      | Date Collected: |              |
| Project:           | CTO WE13             |        |      | Date Received:  |              |
| Client Sample ID:  | VN0128WBSD01         |        |      | SDG No.:        | Q1199        |
| Lab Sample ID:     | VN0128WBSD01         |        |      | Matrix:         | Water        |
| Analytical Method: | SW8260               |        |      | % Solid:        | 0            |
| Sample Wt/Vol:     | 5                    | Units: | mL   | Final Vol:      | 5000 uL      |
| Soil Aliquot Vol:  |                      |        | uL   | Test:           | VOCMS Group1 |
| GC Column:         | RXI-624              | ID :   | 0.25 | Level :         | LOW          |
| Prep Method :      |                      |        |      |                 |              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN085530.D        | 1         |           | 01/28/25 11:48 | VN012825      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 17.7  |           | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 17.8  |           | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 18.0  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 19.6  |           | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 19.5  |           | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 20.3  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 19.5  |           | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 110   |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 16.2  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 21.9  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 19.7  |           | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 18.9  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 20.4  |           | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 110   |           | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 20.0  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 20.2  |           | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 20.6  |           | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 20.1  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 18.7  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 20.2  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 21.5  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 19.4  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 20.7  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 21.7  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 120   |           | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 21.5  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 21.5  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 21.8  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 21.5  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 120   |           | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                      |        |      |                 |              |
|--------------------|----------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc. |        |      | Date Collected: |              |
| Project:           | CTO WE13             |        |      | Date Received:  |              |
| Client Sample ID:  | VN0128WBSD01         |        |      | SDG No.:        | Q1199        |
| Lab Sample ID:     | VN0128WBSD01         |        |      | Matrix:         | Water        |
| Analytical Method: | SW8260               |        |      | % Solid:        | 0            |
| Sample Wt/Vol:     | 5                    | Units: | mL   | Final Vol:      | 5000 uL      |
| Soil Aliquot Vol:  |                      |        | uL   | Test:           | VOCMS Group1 |
| GC Column:         | RXI-624              | ID :   | 0.25 | Level :         | LOW          |
| Prep Method :      |                      |        |      |                 |              |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VN085530.D        | 1         |           | 01/28/25 11:48 | VN012825      |

| CAS Number                | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 21.9   |           | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene         | 21.0   |           | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene             | 20.6   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene             | 20.6   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes               | 43.4   |           | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                  | 20.8   |           | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                  | Styrene                   | 21.3   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                 | 22.5   |           | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene          | 21.2   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 21.8   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene       | 21.0   |           | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene       | 20.4   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene       | 20.4   |           | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                           |        |           |          |      |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4     | 50.3   |           | 81 - 118 |      | 101%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 50.2   |           | 80 - 119 |      | 100%       | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 51.1   |           | 89 - 112 |      | 102%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 51.0   |           | 85 - 114 |      | 102%       | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 182000 | 8.224     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 310000 | 9.1       |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 273000 | 11.865    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 128000 | 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\VN012825\  
 Data File : VN085530.D  
 Acq On : 28 Jan 2025 11:48  
 Operator : JC\MD  
 Sample : VN0128WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:36:31 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 182154   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 309854   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 273221   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 127977   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 147838   | 50.279   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 100.560% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 107958   | 50.222   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 100.440% |
| 50) Toluene-d8              | 10.565 | 98    | 390099   | 51.076   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 102.160% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 133187   | 50.978   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 101.960% |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 43993  | 17.838  | ug/l   | 98  |
| 3) Chloromethane             | 2.359 | 50  | 47315  | 17.719  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.512 | 62  | 47895  | 17.844  | ug/l   | 98  |
| 5) Bromomethane              | 2.959 | 94  | 29197  | 18.008  | ug/l   | 93  |
| 6) Chloroethane              | 3.118 | 64  | 33369  | 19.610  | ug/l   | 98  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 75960  | 19.504  | ug/l   | 99  |
| 8) Diethyl Ether             | 3.965 | 74  | 26094  | 19.395  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 44549  | 20.309  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.583 | 142 | 50174  | 19.974  | ug/l   | 99  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 39612  | 117.652 | ug/l   | 98  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 38078  | 19.478  | ug/l   | 96  |
| 13) Acrolein                 | 4.183 | 56  | 40971  | 89.143  | ug/l   | 96  |
| 14) Allyl chloride           | 5.024 | 41  | 61288  | 19.320  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.718 | 53  | 117305 | 109.689 | ug/l   | 97  |
| 16) Acetone                  | 4.424 | 43  | 102700 | 108.100 | ug/l   | 95  |
| 17) Carbon Disulfide         | 4.712 | 76  | 97539  | 16.205  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.024 | 43  | 67889  | 23.500  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.795 | 73  | 139282 | 21.942  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.277 | 84  | 46285  | 19.680  | ug/l   | 93  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 39520  | 18.916  | ug/l   | 94  |
| 22) Diisopropyl ether        | 6.665 | 45  | 150475 | 21.371  | ug/l   | 98  |
| 23) Vinyl Acetate            | 6.600 | 43  | 520716 | 105.676 | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 87788  | 20.448  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 154236 | 110.320 | ug/l   | 96  |
| 26) 2,2-Dichloropropane      | 7.489 | 77  | 75260  | 21.682  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 49722  | 20.206  | ug/l   | 98  |
| 28) Bromochloromethane       | 7.812 | 49  | 33640  | 16.842  | ug/l   | 97  |
| 29) Tetrahydrofuran          | 7.841 | 42  | 101879 | 114.937 | ug/l   | 100 |
| 30) Chloroform               | 7.965 | 83  | 91378  | 20.593  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 65567  | 17.571  | ug/l   | 98  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 78366  | 20.134  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 57513  | 19.063  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 64941  | 21.326  | ug/l   | 99  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 69210  | 20.038  | ug/l   | 96  |
| 39) Methylcyclohexane        | 9.600 | 83  | 52898  | 18.659  | ug/l   | 99  |
| 40) Benzene                  | 8.606 | 78  | 183341 | 20.225  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085530.D  
 Acq On : 28 Jan 2025 11:48  
 Operator : JC\MD  
 Sample : VN0128WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:36:31 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 33920    | 21.410  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 73450    | 21.514  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.683  | 43   | 105226   | 21.565  | ug/l   | 100      |
| 44) Trichloroethene           | 9.353  | 130  | 40907    | 19.386  | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 47937    | 20.703  | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 35054    | 20.981  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 73992    | 21.738  | ug/l   | 95       |
| 48) Methyl methacrylate       | 9.677  | 41   | 48128    | 21.918  | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 17249    | 466.467 | ug/l # | 80       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 334158   | 118.016 | ug/l   | 100      |
| 52) Toluene                   | 10.624 | 92   | 113049   | 21.523  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 69056    | 21.468  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 74974    | 21.821  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 44789    | 21.547  | ug/l   | 92       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 65671    | 19.962  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78972    | 21.850  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 129996   | 98.550  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 235784   | 118.347 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 54955    | 21.899  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 43841    | 21.189  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 39045    | 20.962  | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 123448   | 20.625  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 47119    | 21.449  | ug/l   | 97       |
| 67) Ethyl Benzene             | 11.959 | 91   | 200961   | 20.614  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.071 | 106  | 156444   | 43.421  | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 71566    | 20.785  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 121646   | 21.347  | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 35363    | 22.498  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 183110   | 21.200  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 84761    | 21.833  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 66402    | 21.763  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 61286m   | 23.561  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 47394    | 21.002  | ug/l   | 100      |
| 78) n-propylbenzene           | 13.035 | 91   | 222149   | 21.726  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 143547   | 21.691  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 155679   | 21.820  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 21365    | 22.223  | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 141708   | 21.506  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 126399   | 21.097  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 158115   | 22.236  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 176846   | 21.297  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 144432   | 20.822  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 87193    | 20.981  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 87963    | 20.420  | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 121076   | 20.324  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 31810    | 20.123  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 84554    | 20.397  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12008    | 21.553  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 37673    | 19.554  | ug/l   | 96       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 20093    | 19.644  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 110672   | 19.250  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 39684    | 20.356  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085530.D  
Acq On : 28 Jan 2025 11:48  
Operator : JC\MD  
Sample : VN0128WBSD01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

Quant Time: Jan 29 00:36:31 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

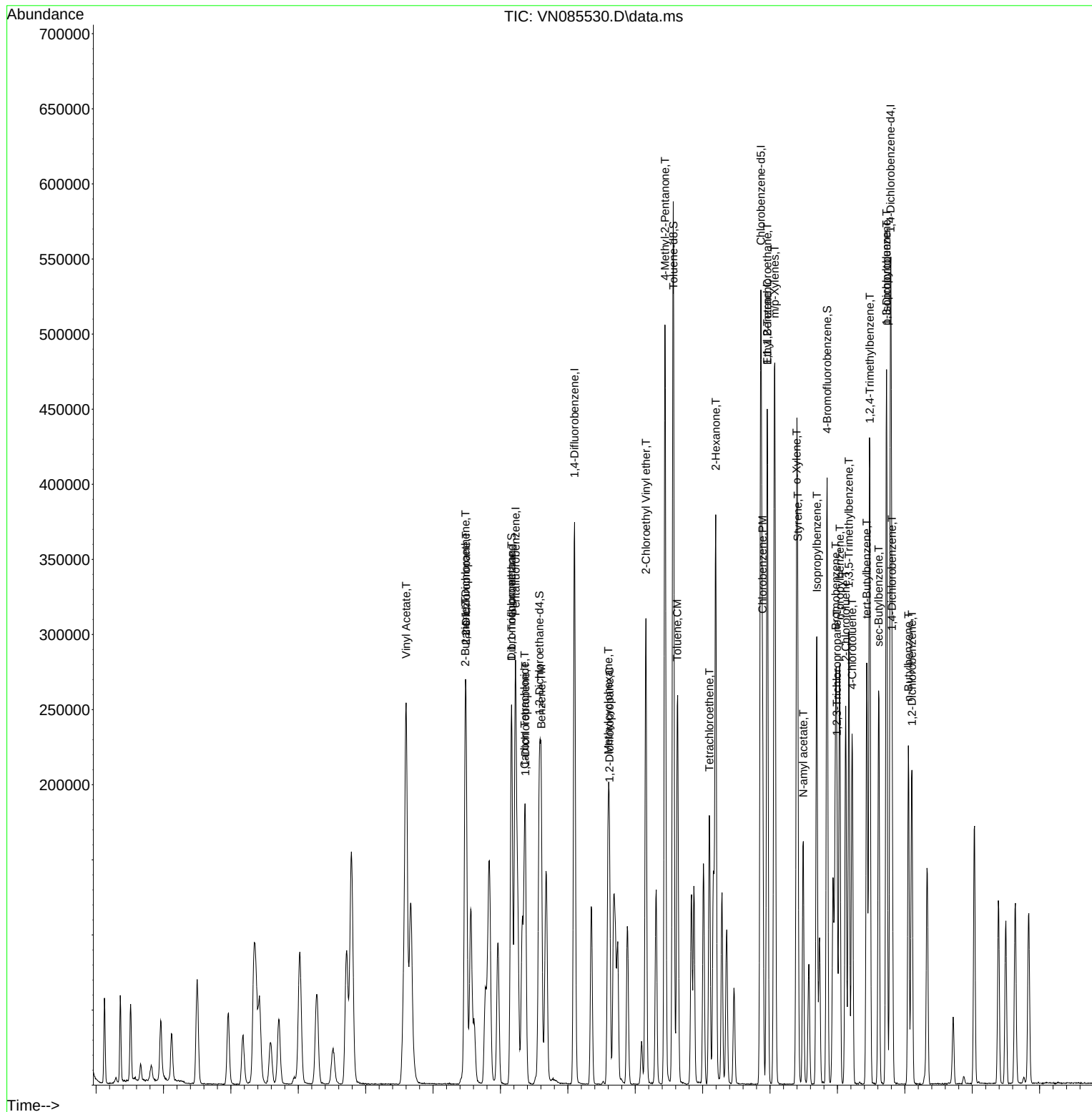
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012825\  
Data File : VN085530.D  
Acq On    : 28 Jan 2025   11:48  
Operator  : JC\MD  
Sample    : VN0128WBSD01  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6      Sample Multiplier: 1
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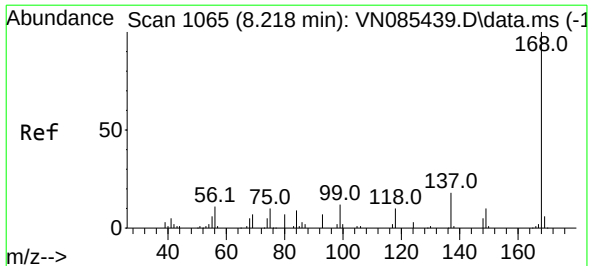
**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VN0128WBSD01

## Manual Integrations

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

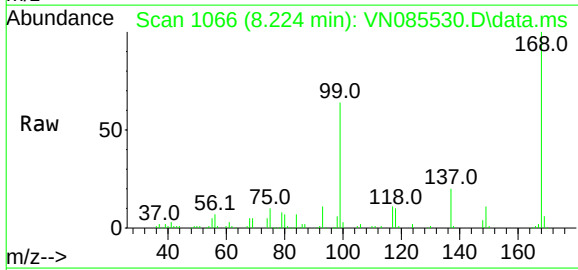
Quant Time: Jan 29 00:36:31 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

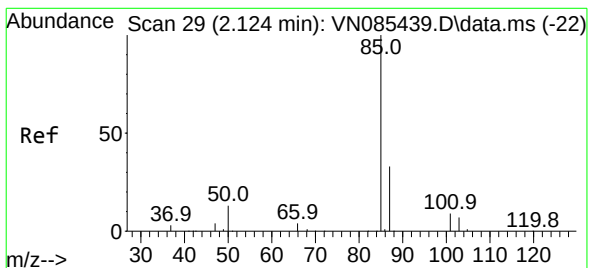
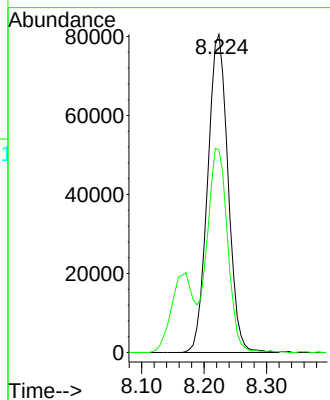
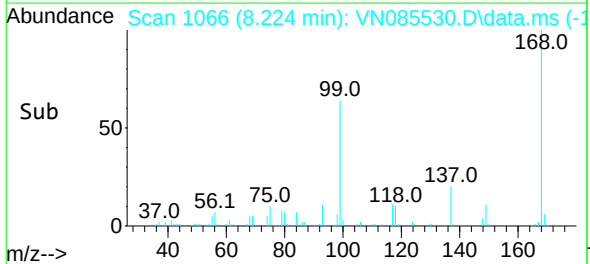
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01



Tgt Ion: 168 Resp: 182154  
Ion Ratio Lower Upper  
168 100  
99 63.5 53.6 80.4

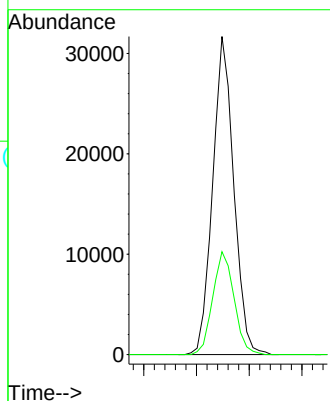
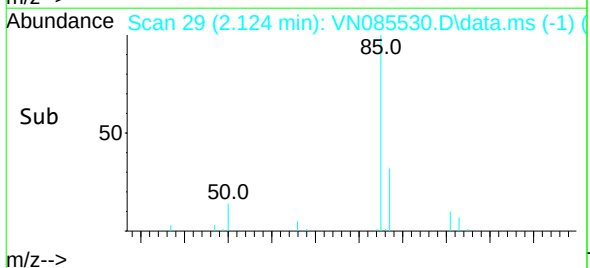
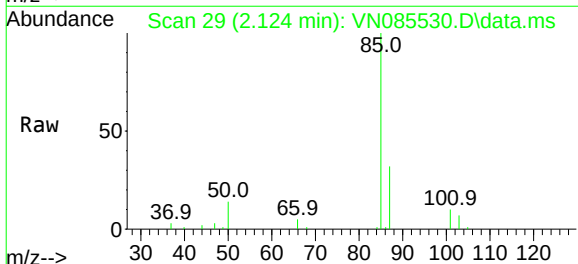
Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025

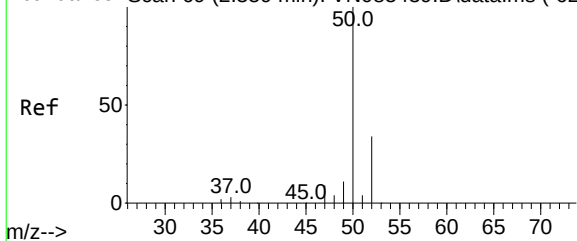


#2  
Dichlorodifluoromethane  
Concen: 17.838 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 85 Resp: 43993  
Ion Ratio Lower Upper  
85 100  
87 32.3 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 17.719 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 50 Resp: 47315

Ion Ratio Lower Upper

50 100

52 33.4 27.0 40.6

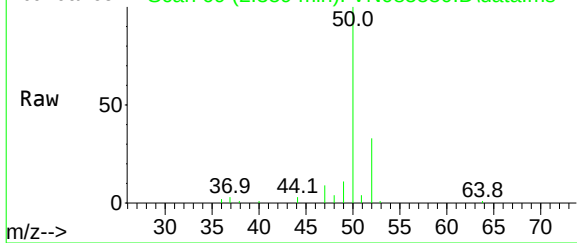
Manual Integrations

APPROVED

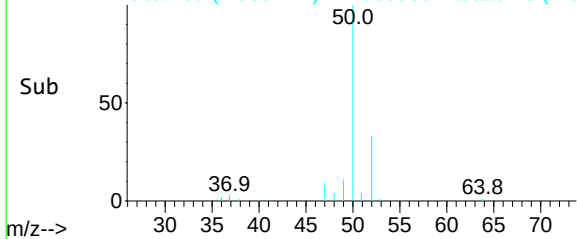
Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025

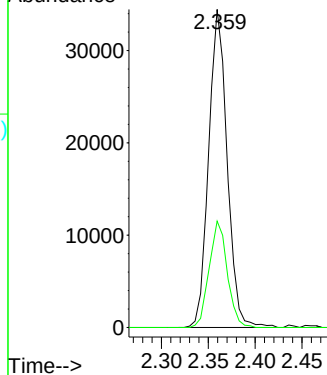
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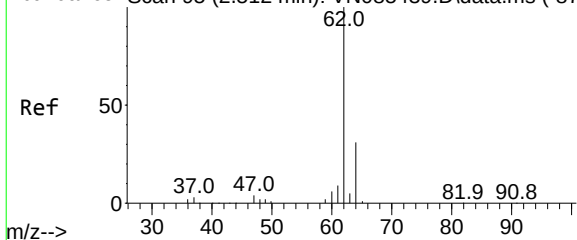
Abundance Scan 69 (2.359 min): VN085530.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 17.844 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

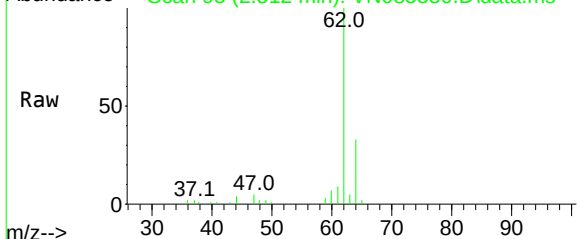
Tgt Ion: 62 Resp: 47895

Ion Ratio Lower Upper

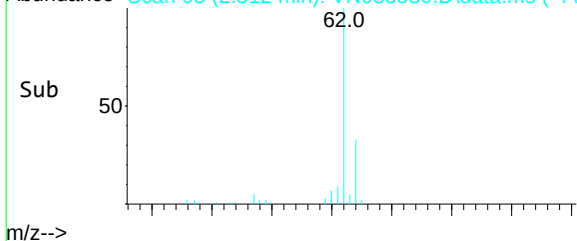
62 100

64 32.3 24.8 37.2

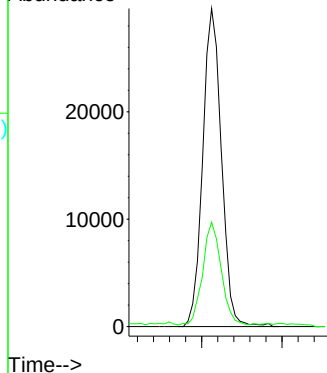
Abundance Scan 95 (2.512 min): VN085530.D\data.ms



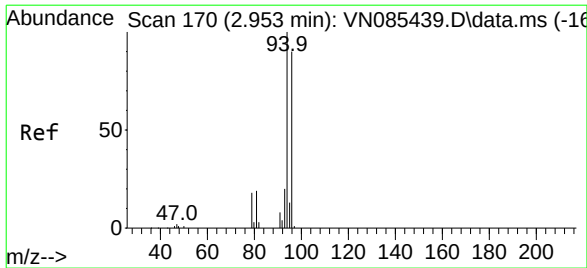
Abundance Scan 95 (2.512 min): VN085530.D\data.ms (-44)



Abundance

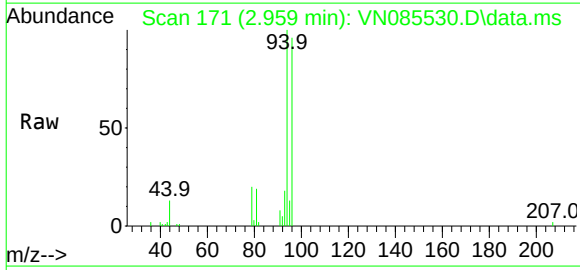






#5  
Bromomethane  
Concen: 18.008 ug/l  
RT: 2.959 min Scan# 171  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

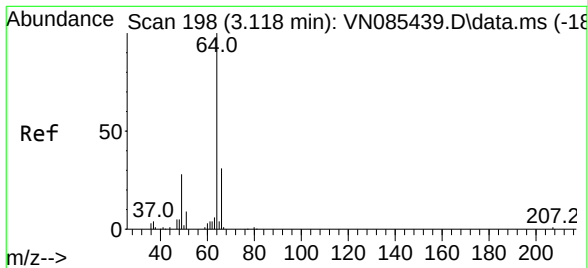
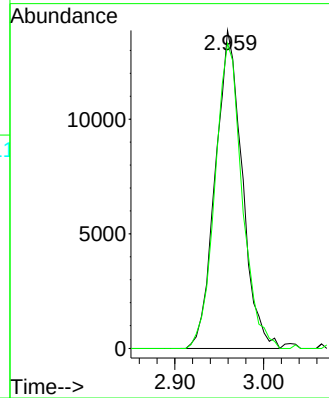
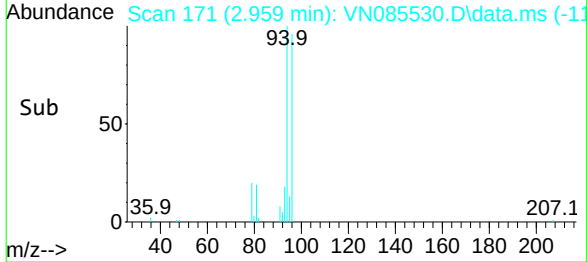
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01



Tgt Ion: 94 Resp: 29197  
Ion Ratio Lower Upper  
94 100  
96 95.9 71.8 107.6

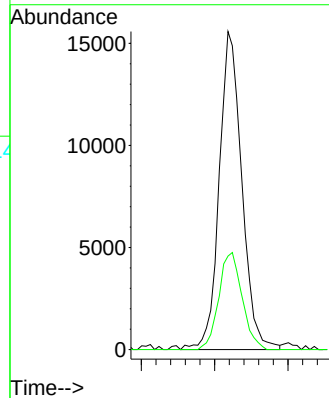
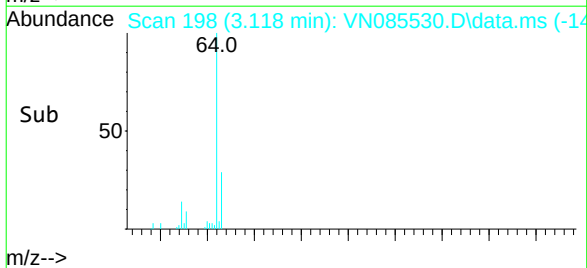
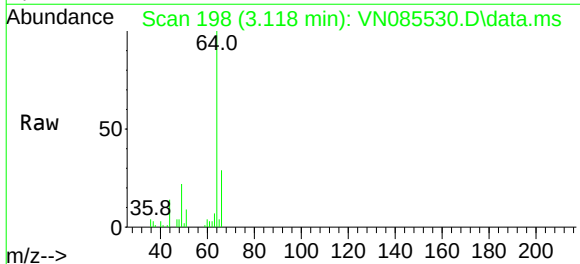
Manual Integrations  
APPROVED

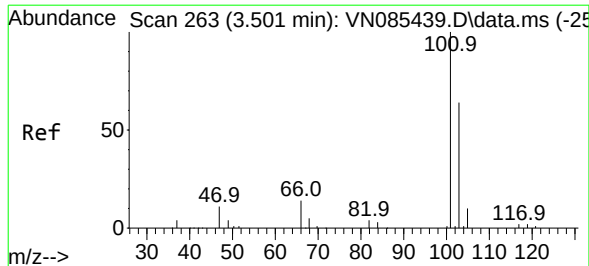
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#6  
Chloroethane  
Concen: 19.610 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 64 Resp: 33369  
Ion Ratio Lower Upper  
64 100  
66 29.4 24.6 36.8





#7

Trichlorofluoromethane

Concen: 19.504 ug/l

RT: 3.501 min Scan# 263

Delta R.T. 0.000 min

Lab File: VN085530.D

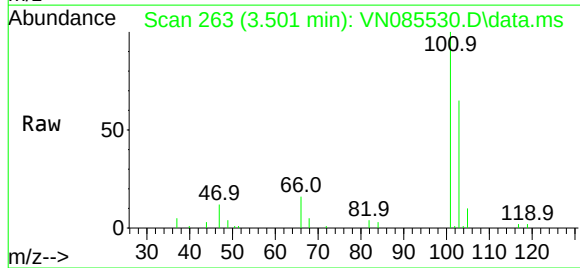
Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01



Tgt Ion: 101 Resp: 75960

Ion Ratio Lower Upper

101 100

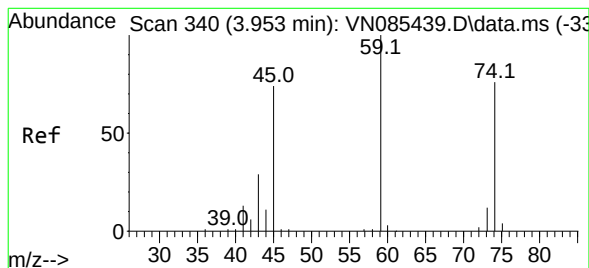
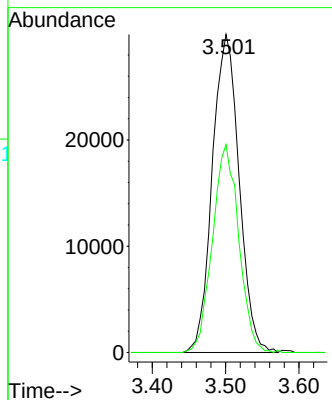
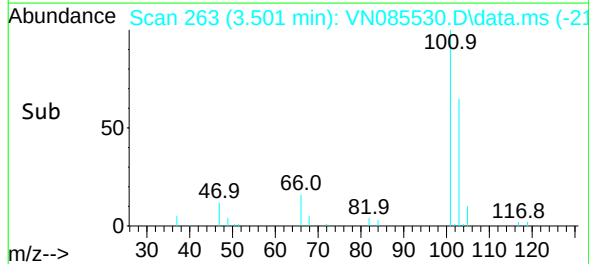
103 65.4 51.4 77.2

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/29/2025

Supervised By : Semsettin Yesilyurt 01/29/2025



#8

Diethyl Ether

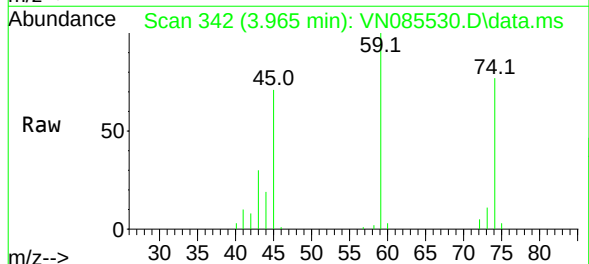
Concen: 19.395 ug/l

RT: 3.965 min Scan# 342

Delta R.T. 0.012 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

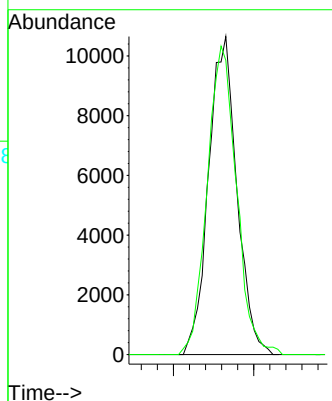
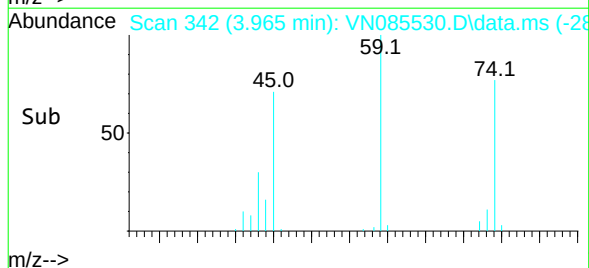


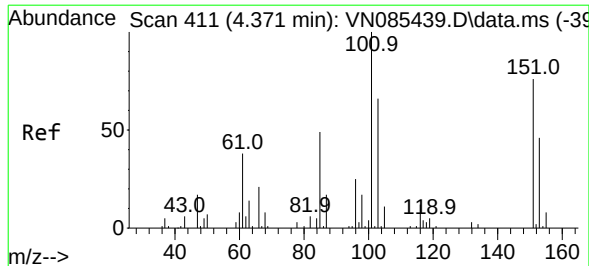
Tgt Ion: 74 Resp: 26094

Ion Ratio Lower Upper

74 100

45 100.4 49.7 149.1





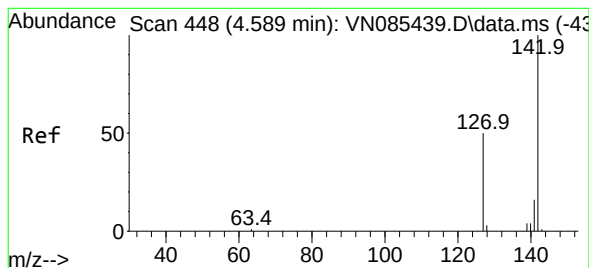
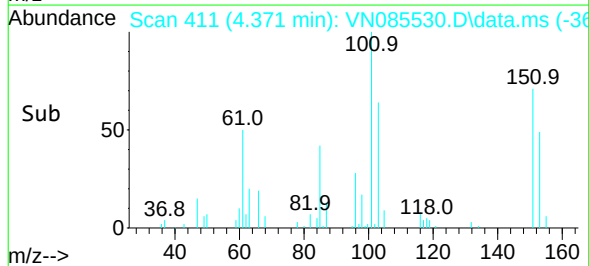
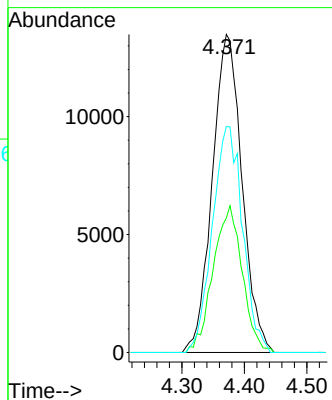
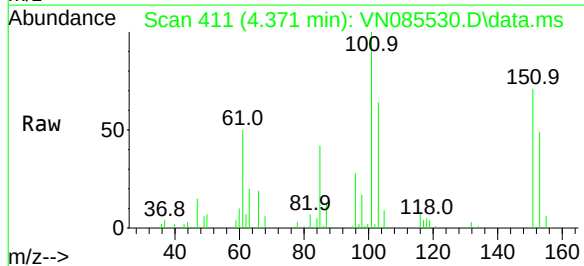
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.309 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion:101 Resp: 44549  
Ion Ratio Lower Upper  
101 100  
85 45.2 37.8 56.8  
151 72.2 58.8 88.2

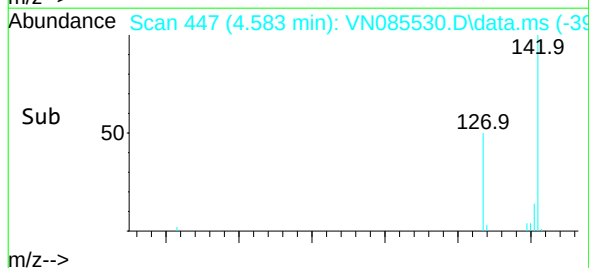
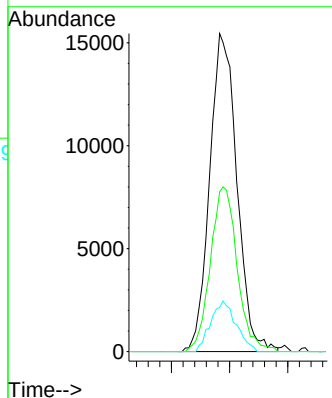
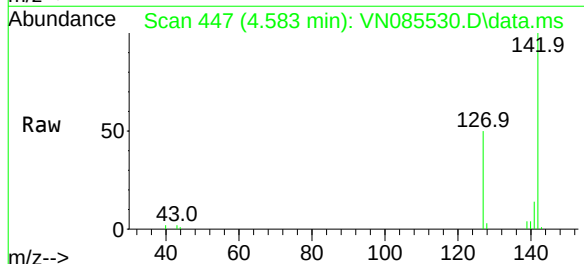
Manual Integrations  
APPROVED

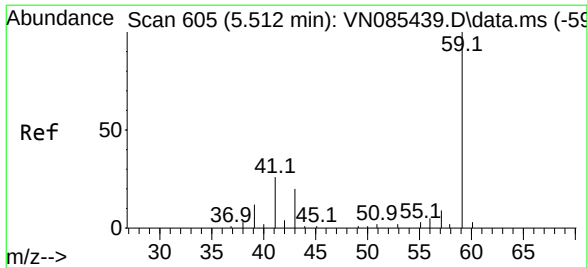
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#10  
Methyl Iodide  
Concen: 19.974 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:142 Resp: 50174  
Ion Ratio Lower Upper  
142 100  
127 50.2 40.3 60.5  
141 13.9 12.8 19.2





#11

Tert butyl alcohol

Concen: 117.652 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 59 Resp: 39612

Ion Ratio Lower Upper

59 100

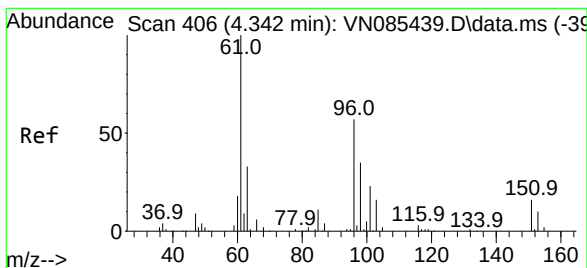
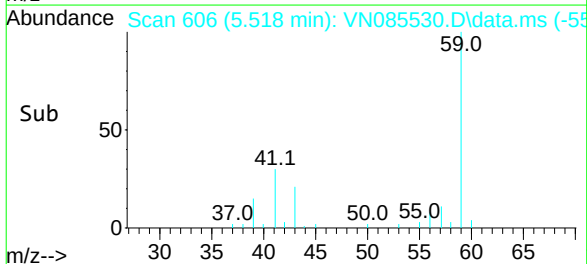
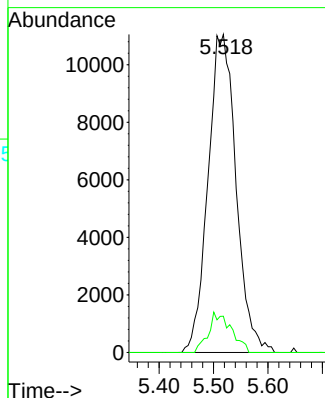
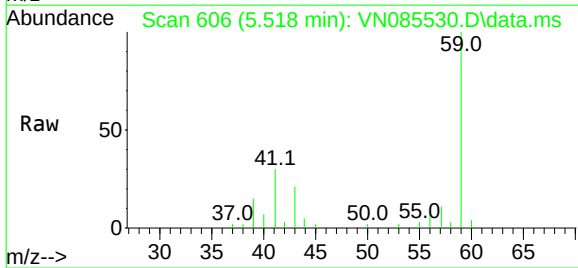
57 10.2 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#12

1,1-Dichloroethene

Concen: 19.478 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

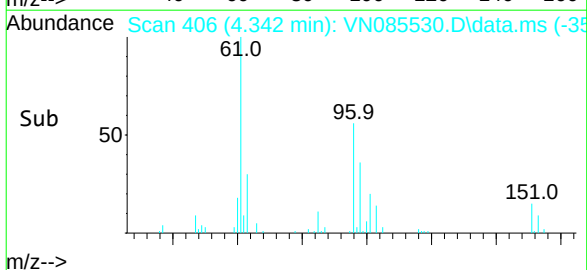
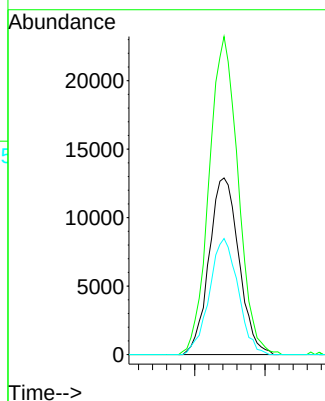
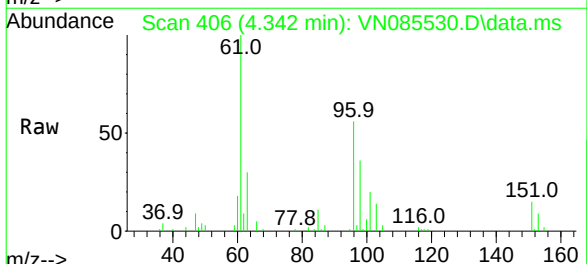
Tgt Ion: 96 Resp: 38078

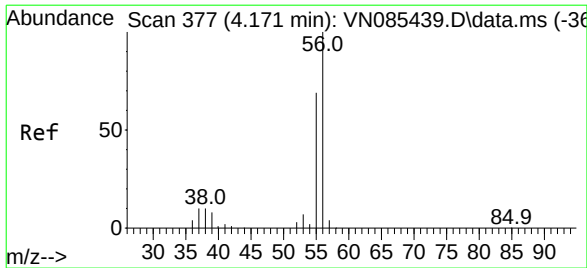
Ion Ratio Lower Upper

96 100

61 180.1 141.0 211.4

98 65.7 49.0 73.6





#13

Acrolein

Concen: 89.143 ug/l

RT: 4.183 min Scan# 377

Delta R.T. 0.012 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 56 Resp: 40971

Ion Ratio Lower Upper

56 100

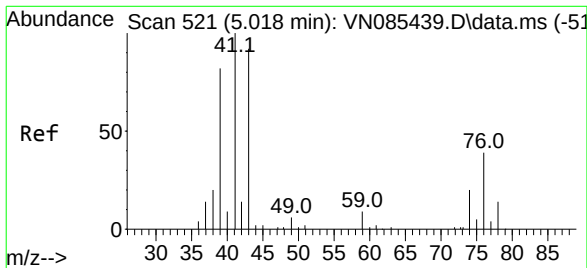
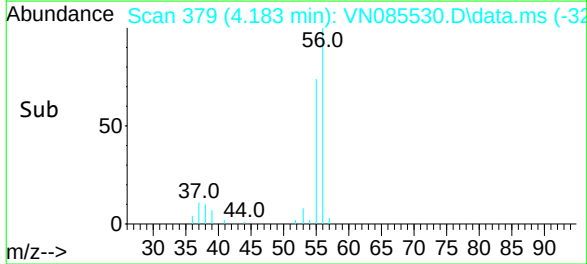
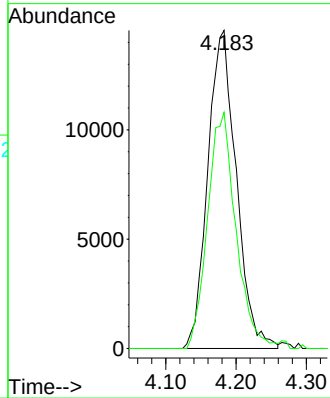
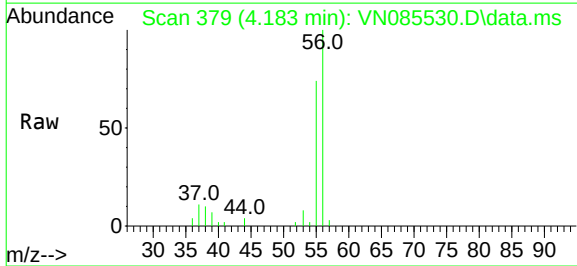
55 73.7 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#14

Allyl chloride

Concen: 19.320 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

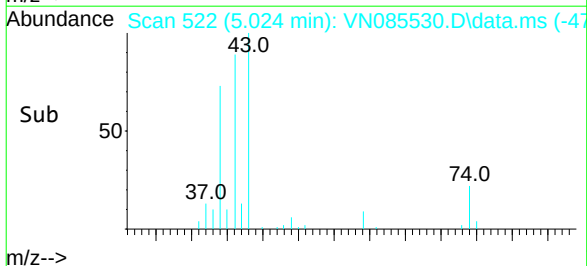
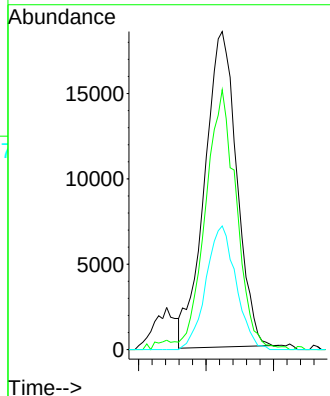
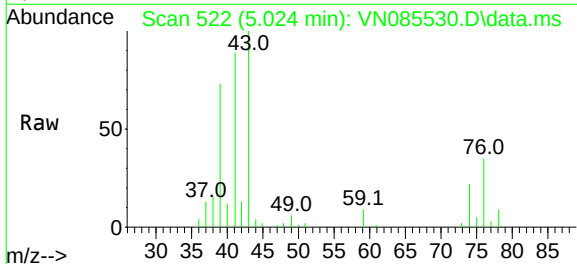
Tgt Ion: 41 Resp: 61288

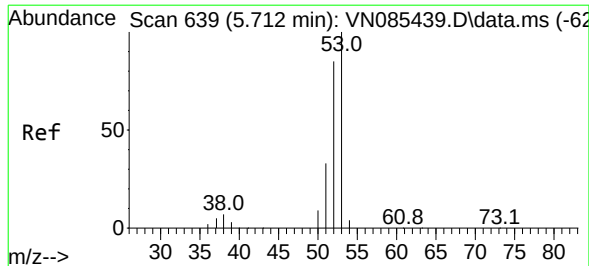
Ion Ratio Lower Upper

41 100

39 78.5 64.4 96.6

76 36.5 30.5 45.7





#15

Acrylonitrile

Concen: 109.689 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 53 Resp: 117305

Ion Ratio Lower Upper

53 100

52 84.6 65.5 98.3

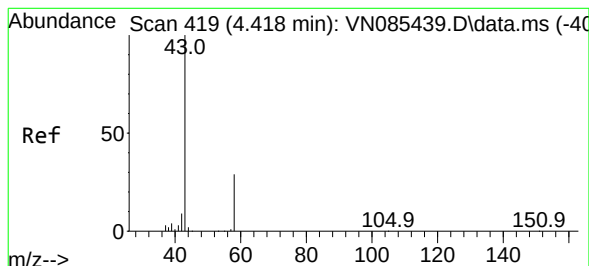
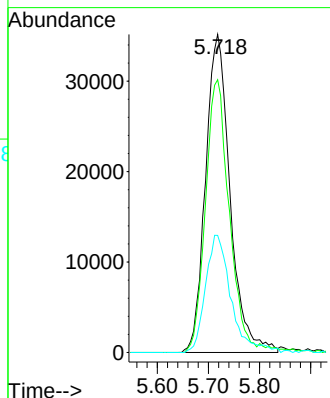
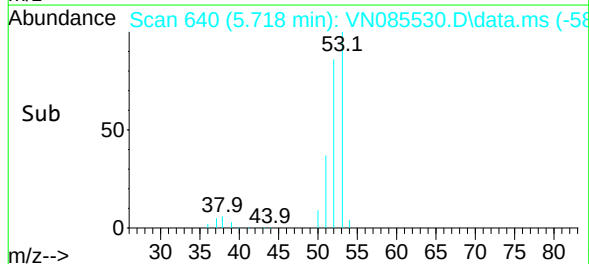
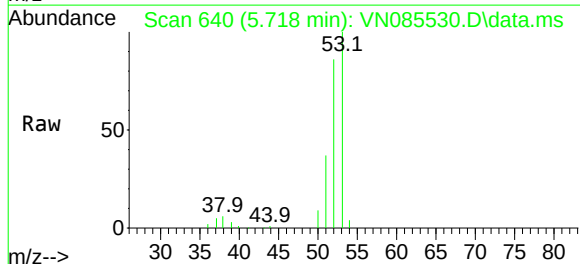
51 38.2 29.8 44.8

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#16

Acetone

Concen: 108.100 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085530.D

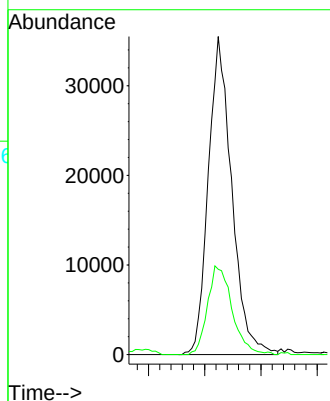
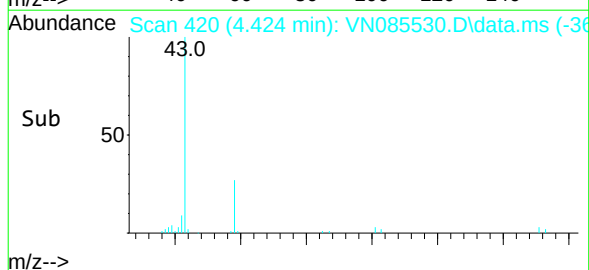
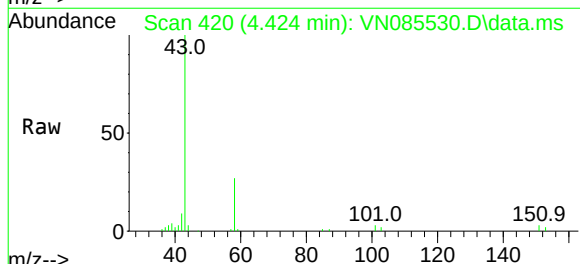
Acq: 28 Jan 2025 11:48

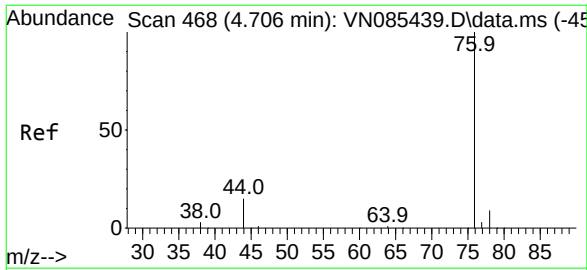
Tgt Ion: 43 Resp: 102700

Ion Ratio Lower Upper

43 100

58 26.8 23.8 35.6





#17

Carbon Disulfide

Concen: 16.205 ug/l

RT: 4.712 min Scan# 46

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 76 Resp: 97539

Ion Ratio Lower Upper

76 100

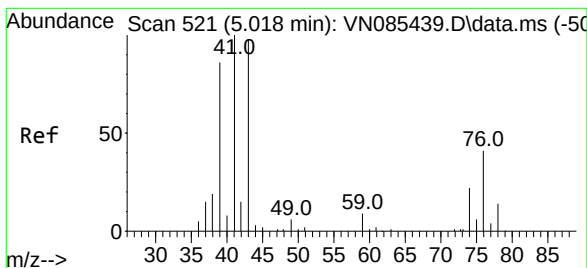
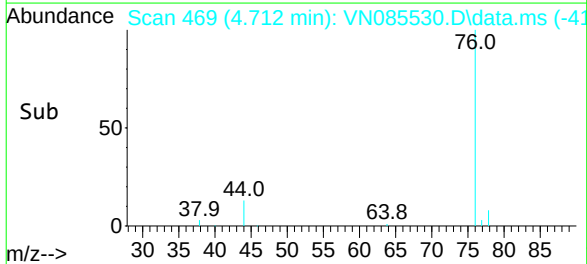
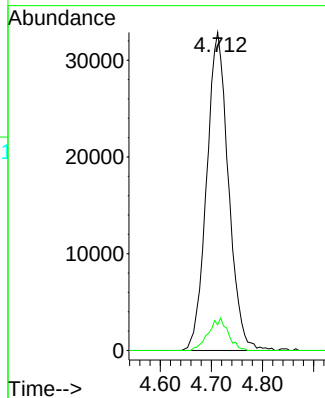
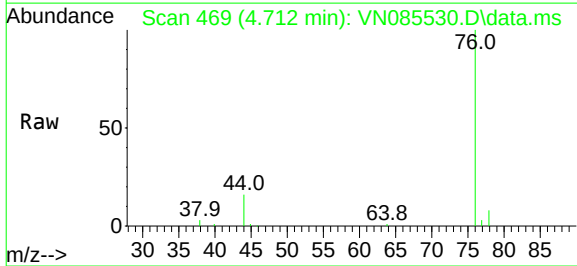
78 8.1 6.9 10.3

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#18

Methyl Acetate

Concen: 23.500 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085530.D

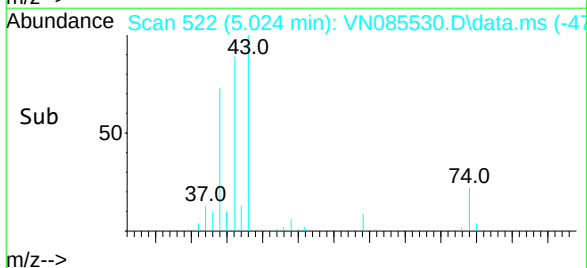
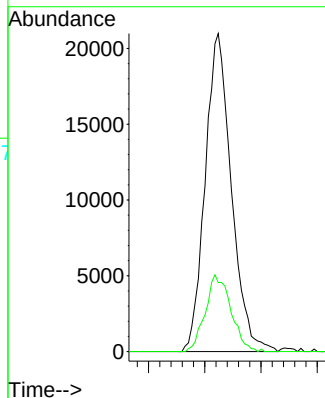
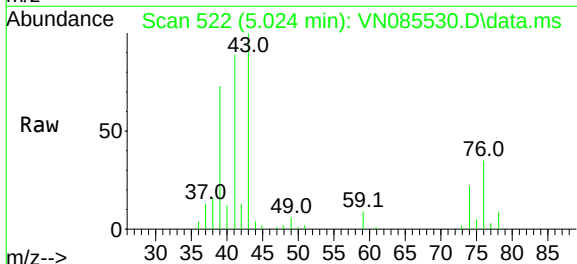
Acq: 28 Jan 2025 11:48

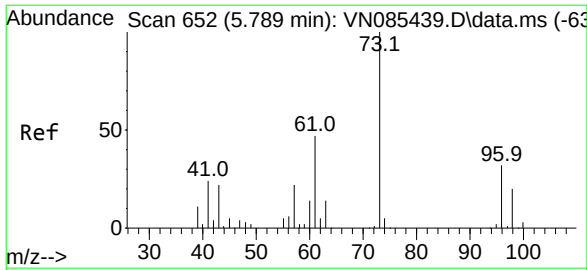
Tgt Ion: 43 Resp: 67889

Ion Ratio Lower Upper

43 100

74 23.5 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 21.942 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 73 Resp: 139282

Ion Ratio Lower Upper

73 100

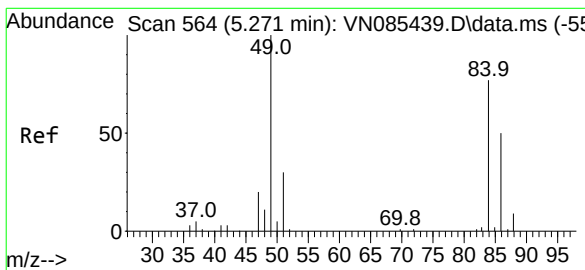
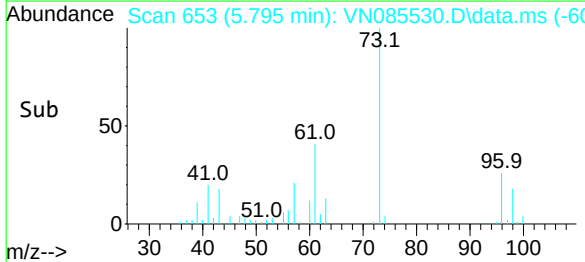
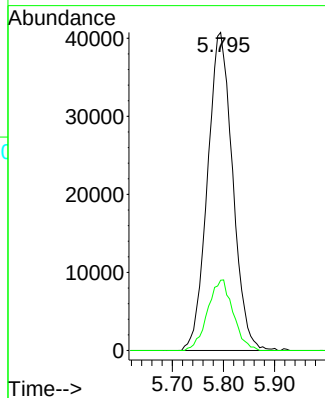
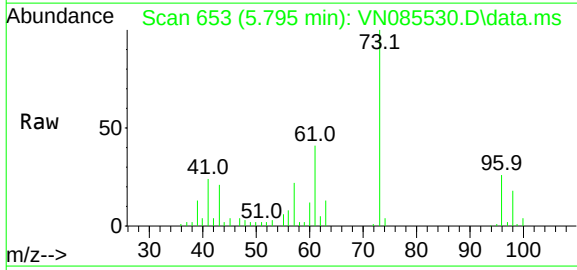
57 22.1 17.8 26.8

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#20

Methylene Chloride

Concen: 19.680 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Tgt Ion: 84 Resp: 46285

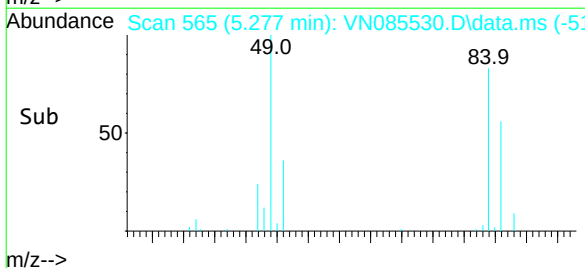
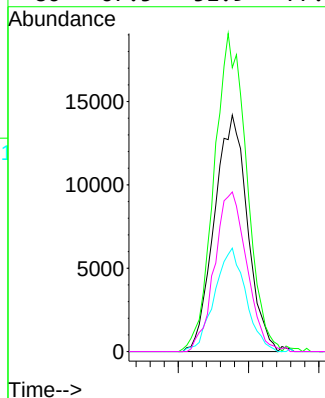
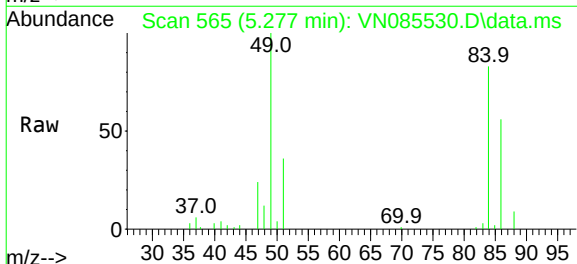
Ion Ratio Lower Upper

84 100

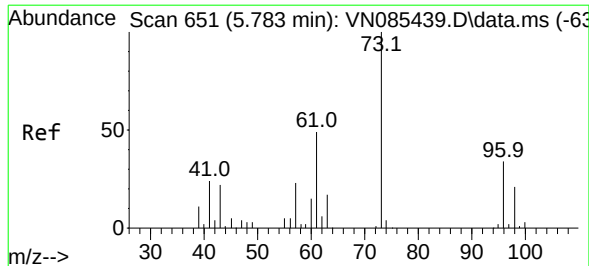
49 120.0 104.1 156.1

51 43.7 31.0 46.4

86 67.5 51.9 77.9







#21

trans-1,2-Dichloroethene

Concen: 18.916 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085530.D

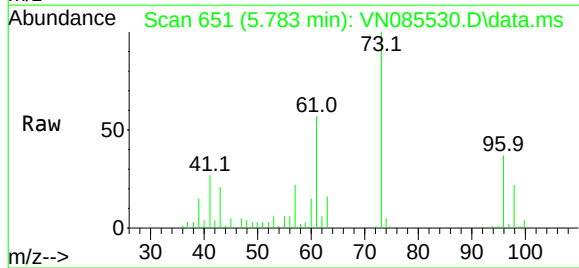
Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01



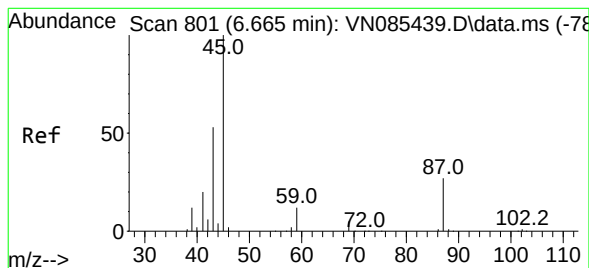
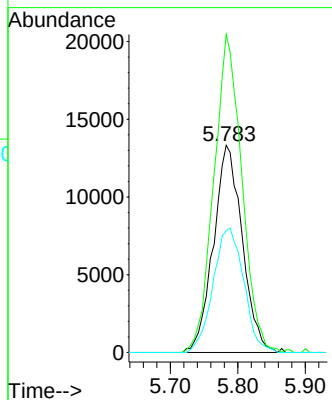
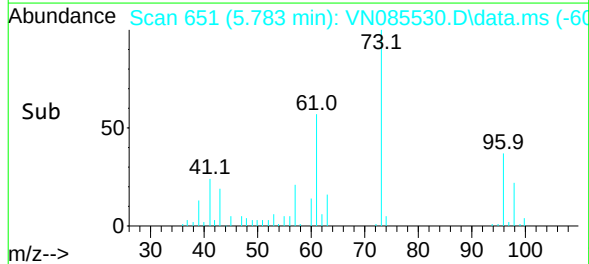
| Tgt Ion: | 96    | Resp: | 39520 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 153.6 | 115.7 | 173.5 |
| 98       | 58.7  | 49.8  | 74.8  |

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#22

Diisopropyl ether

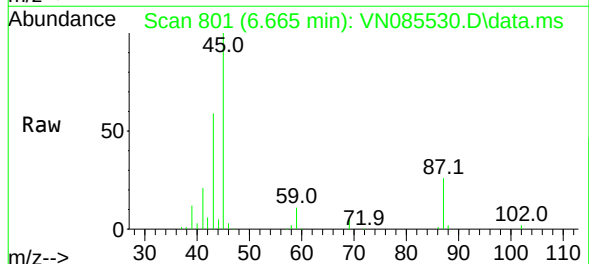
Concen: 21.371 ug/l

RT: 6.665 min Scan# 801

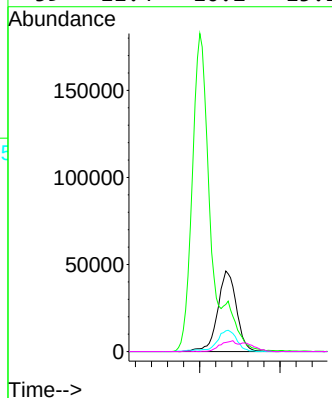
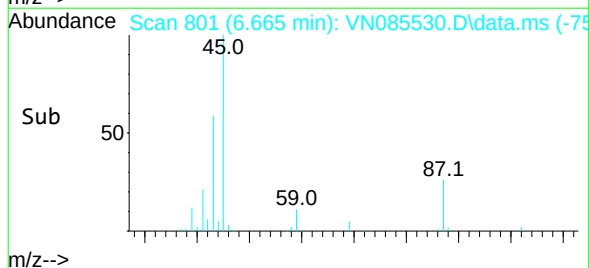
Delta R.T. 0.000 min

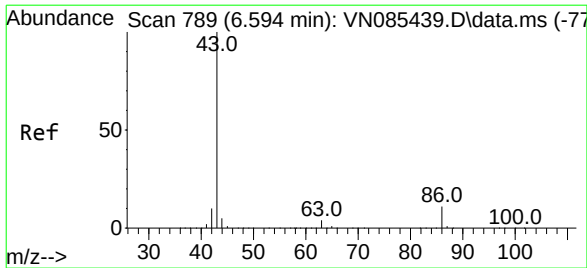
Lab File: VN085530.D

Acq: 28 Jan 2025 11:48



| Tgt Ion: | 45    | Resp: | 150475 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 45       | 100   |       |        |
| 43       | 57.5  | 45.0  | 67.6   |
| 87       | 25.7  | 21.8  | 32.8   |
| 59       | 11.4  | 10.2  | 15.2   |





#23

Vinyl Acetate

Concen: 105.676 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 43 Resp: 520716

Ion Ratio Lower Upper

43 100

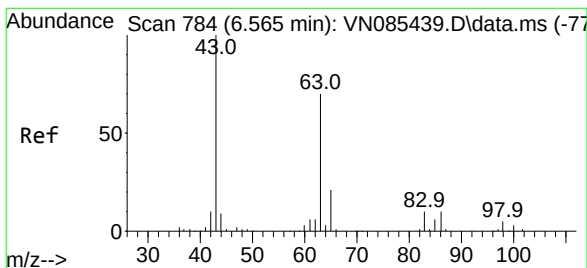
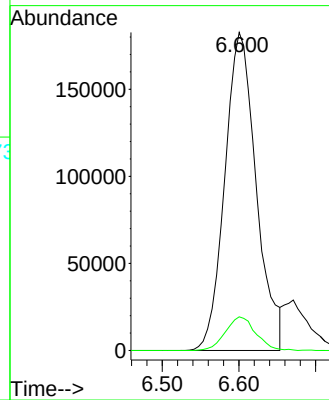
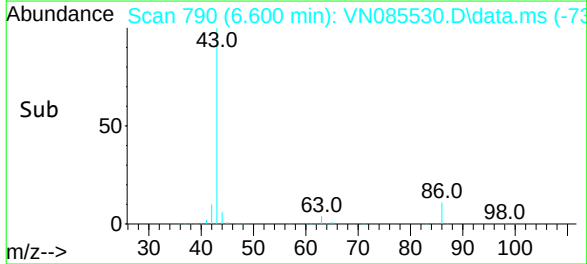
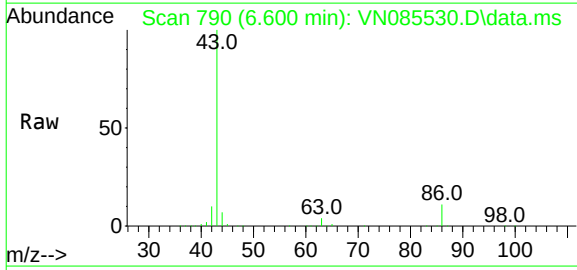
86 10.6 8.4 12.6

Manual Integrations

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Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#24

1,1-Dichloroethane

Concen: 20.448 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

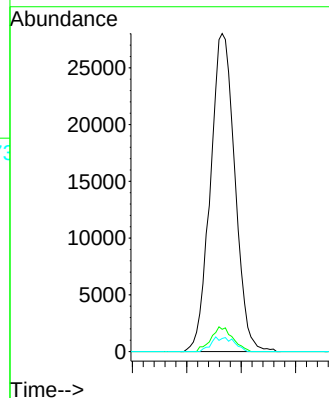
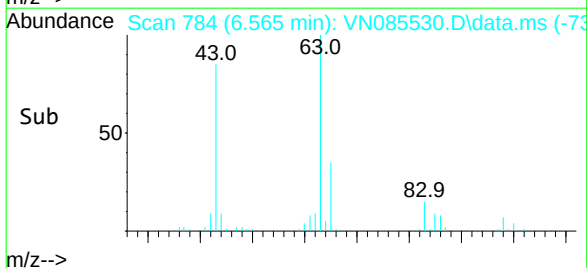
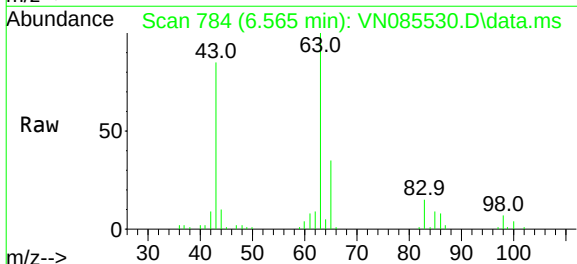
Tgt Ion: 63 Resp: 87788

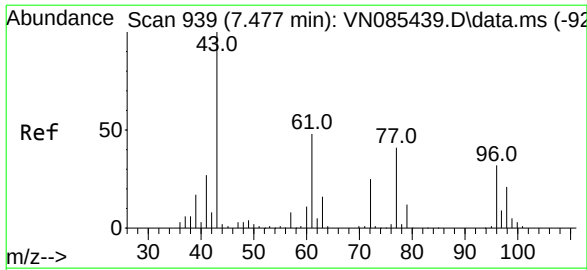
Ion Ratio Lower Upper

63 100

98 7.0 3.3 9.8

100 4.1 2.0 6.0





#25

2-Butanone

Concen: 110.320 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 43 Resp: 154236

Ion Ratio Lower Upper

43 100

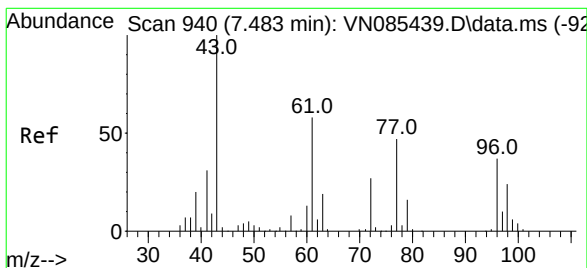
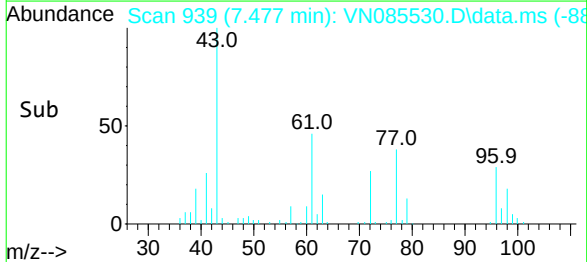
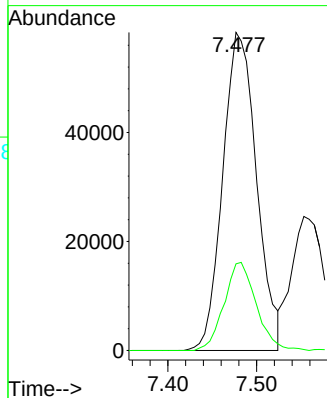
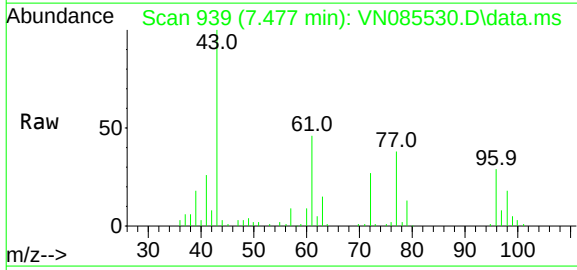
72 27.2 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#26

2,2-Dichloropropane

Concen: 21.682 ug/l

RT: 7.489 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085530.D

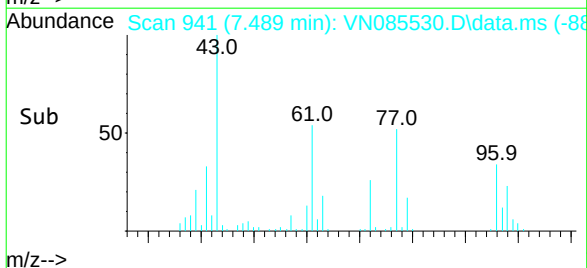
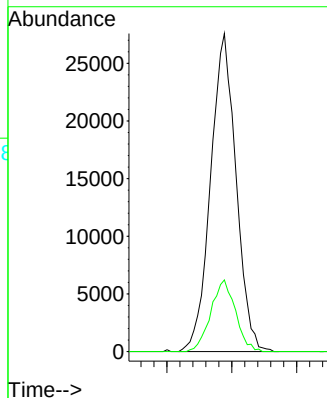
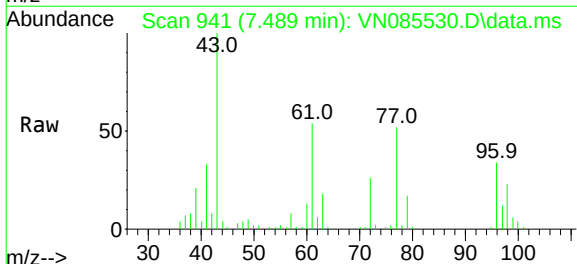
Acq: 28 Jan 2025 11:48

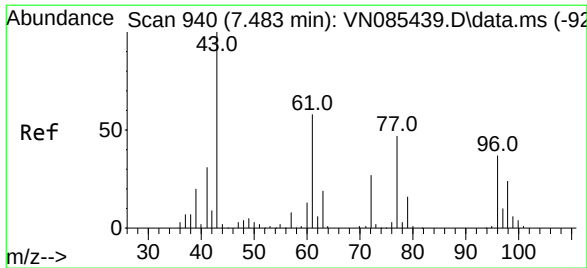
Tgt Ion: 77 Resp: 75260

Ion Ratio Lower Upper

77 100

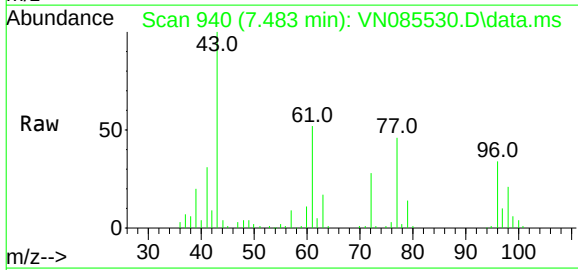
97 21.8 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 20.206 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

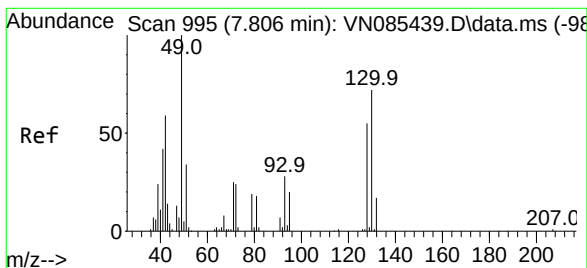
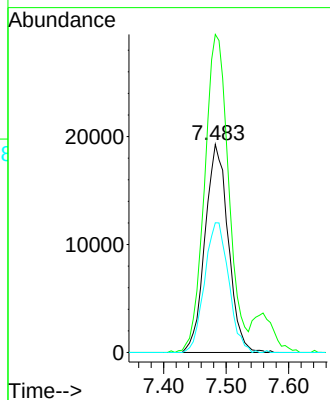
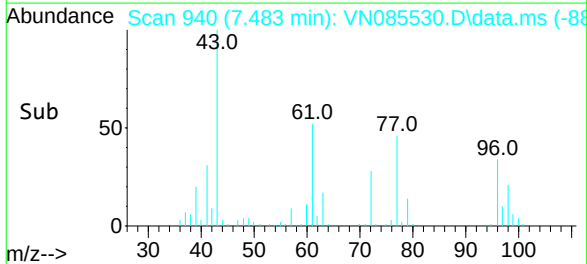
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01



Tgt Ion: 96 Resp: 49722  
Ion Ratio Lower Upper  
96 100  
61 158.8 0.0 311.8  
98 64.8 0.0 126.0

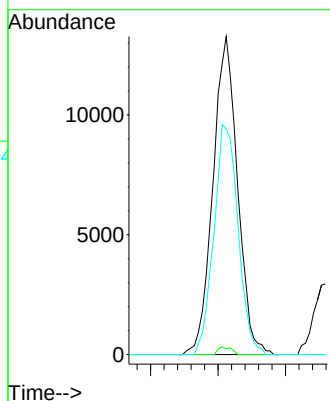
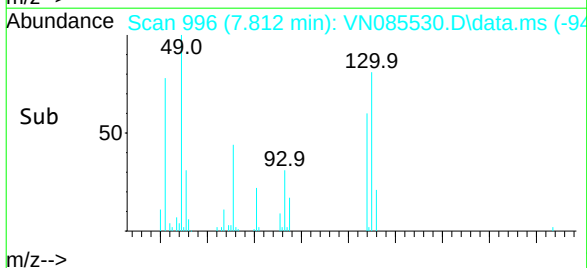
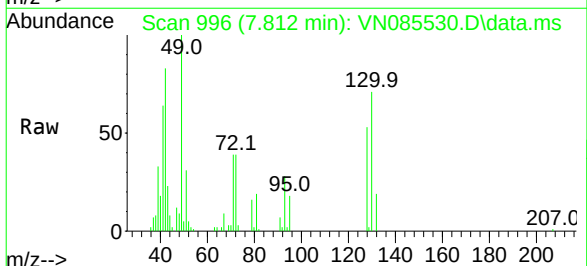
Manual Integrations  
APPROVED

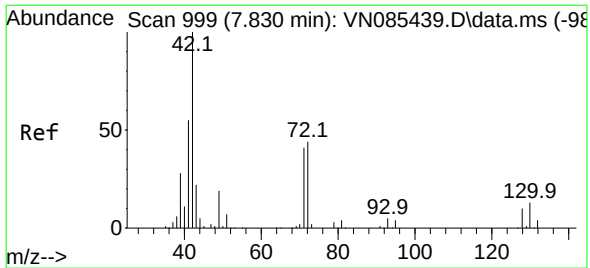
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#28  
Bromochloromethane  
Concen: 16.842 ug/l  
RT: 7.812 min Scan# 996  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 49 Resp: 33640  
Ion Ratio Lower Upper  
49 100  
129 1.3 0.0 4.4  
130 71.1 55.0 82.4





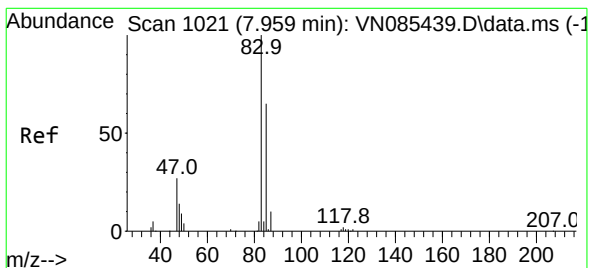
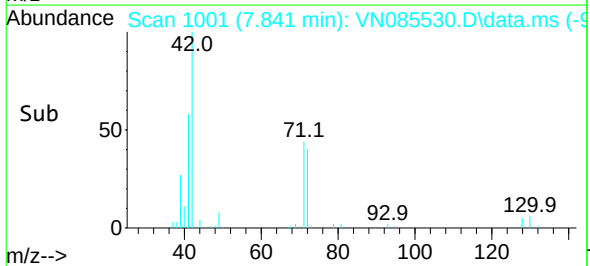
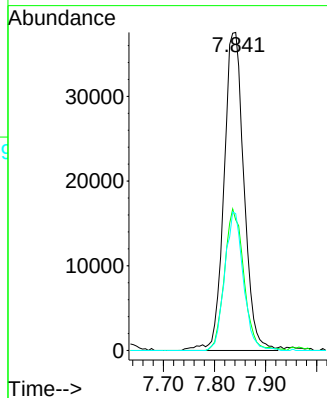
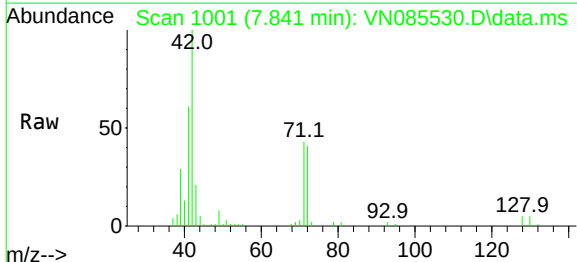
#29  
Tetrahydrofuran  
Concen: 114.937 ug/l  
RT: 7.841 min Scan# 1018  
Delta R.T. 0.012 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 42 Resp: 101879  
Ion Ratio Lower Upper  
42 100  
72 43.2 34.2 51.2  
71 40.7 32.5 48.7

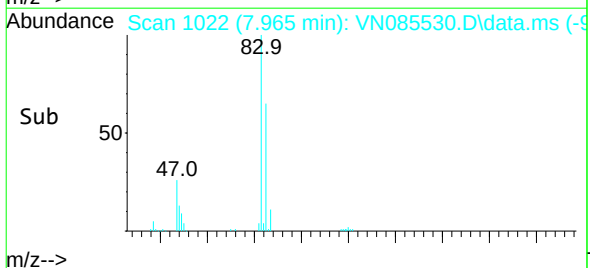
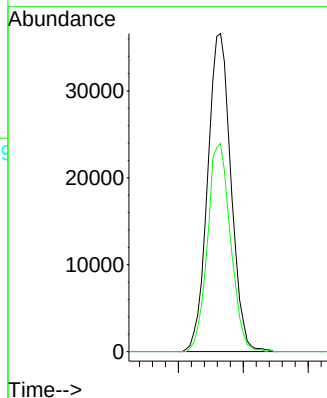
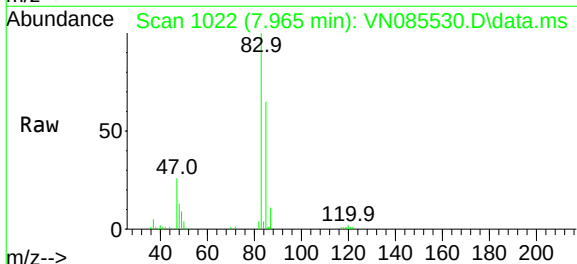
Manual Integrations  
APPROVED

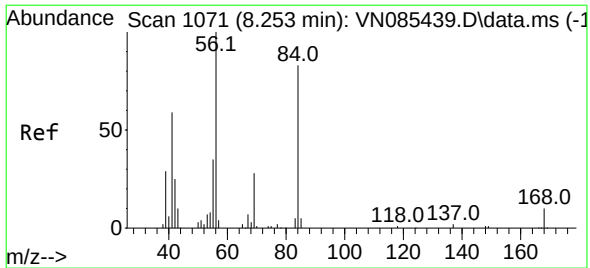
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#30  
Chloroform  
Concen: 20.593 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 83 Resp: 91378  
Ion Ratio Lower Upper  
83 100  
85 65.4 51.8 77.6





#31

Cyclohexane

Concen: 17.571 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 56 Resp: 65567

Ion Ratio Lower Upper

56 100

69 29.3 22.2 33.4

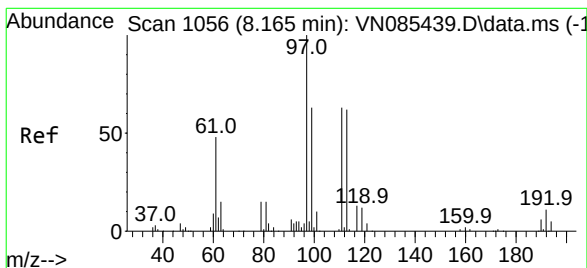
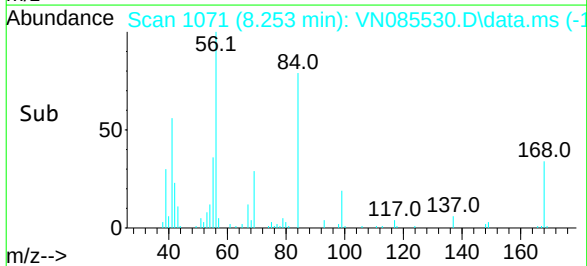
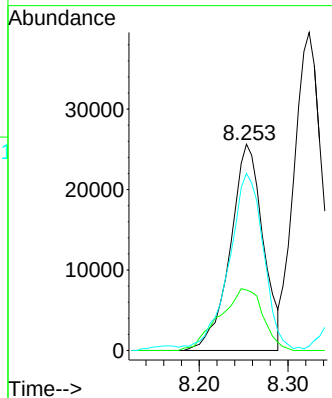
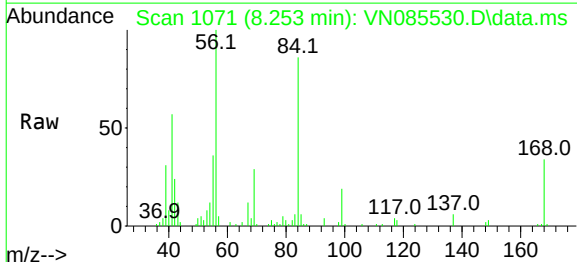
84 84.2 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#32

1,1,1-Trichloroethane

Concen: 20.134 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

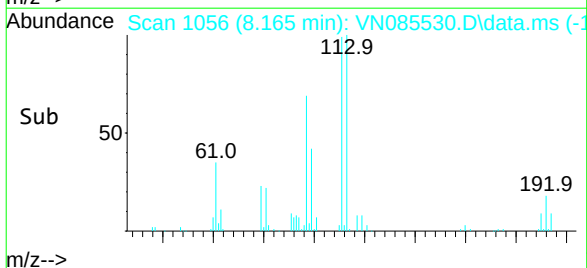
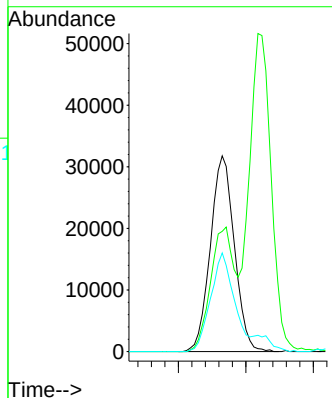
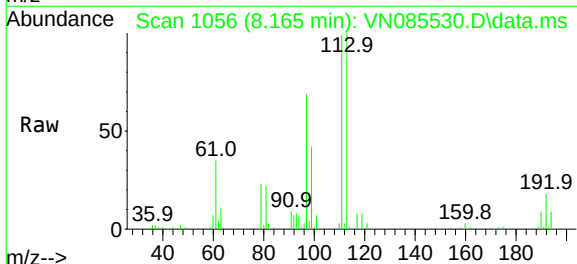
Tgt Ion: 97 Resp: 78366

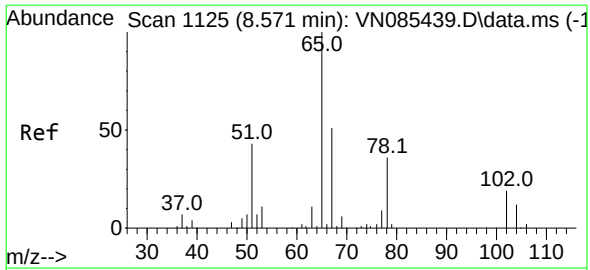
Ion Ratio Lower Upper

97 100

99 63.6 49.8 74.6

61 50.8 41.4 62.2





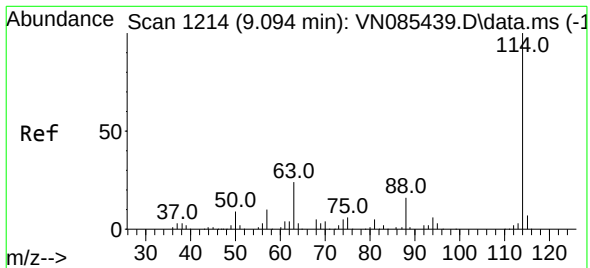
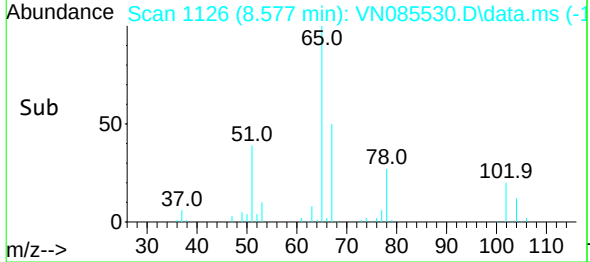
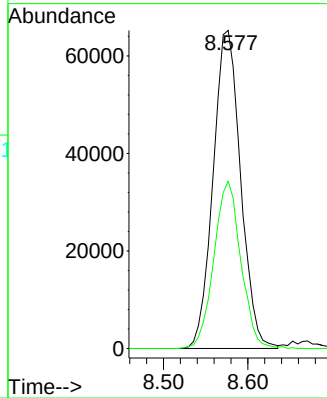
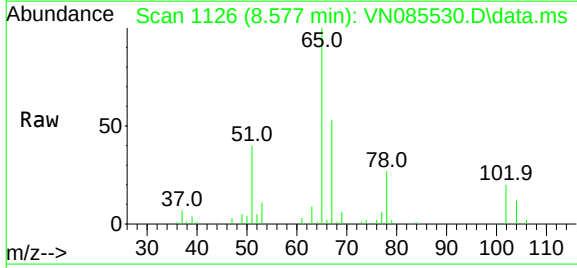
#33  
1,2-Dichloroethane-d4  
Concen: 50.279 ug/l  
RT: 8.577 min Scan# 1125  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 65 Resp: 147838  
Ion Ratio Lower Upper  
65 100  
67 51.5 0.0 101.6

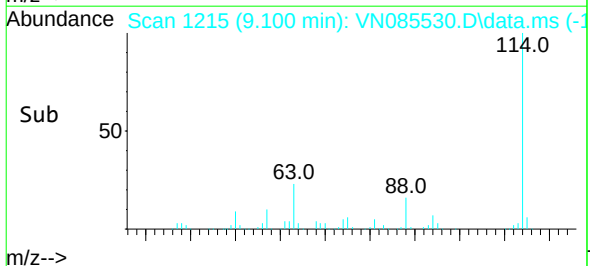
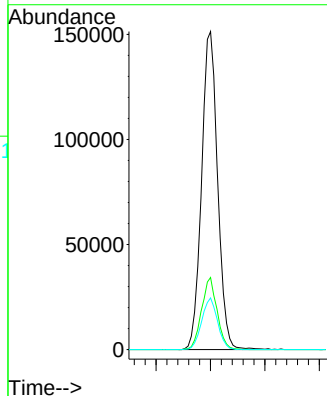
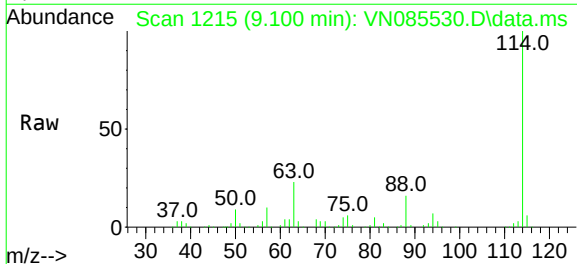
Manual Integrations  
APPROVED

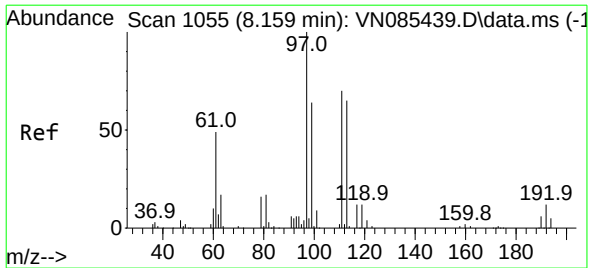
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 114 Resp: 309854  
Ion Ratio Lower Upper  
114 100  
63 22.7 0.0 47.6  
88 16.2 0.0 32.6





#35

Dibromofluoromethane

Concen: 50.222 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 113 Resp: 107958

Ion Ratio Lower Upper

113 100

111 101.5 82.7 124.1

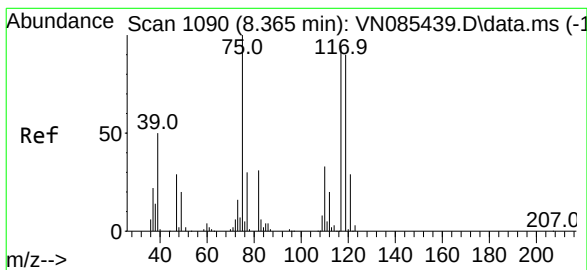
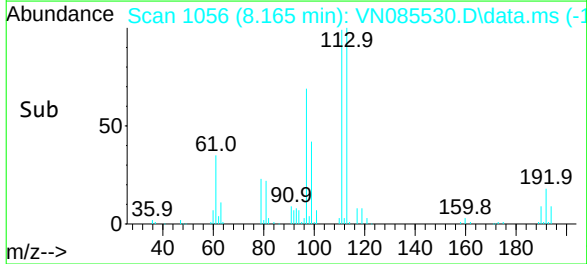
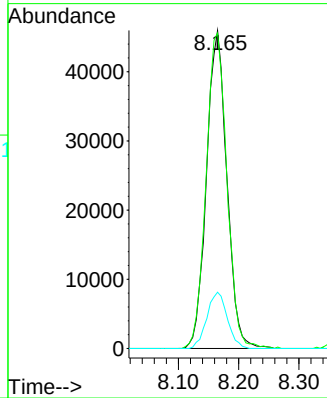
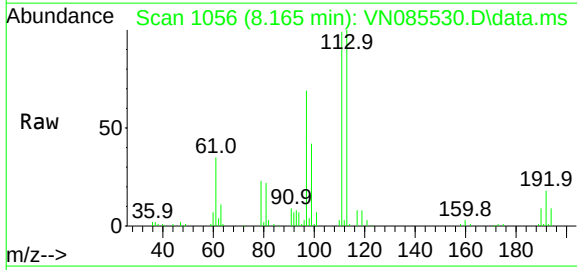
192 17.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/29/2025

Supervised By : Semsettin Yesilyurt 01/29/2025



#36

1,1-Dichloropropene

Concen: 19.063 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

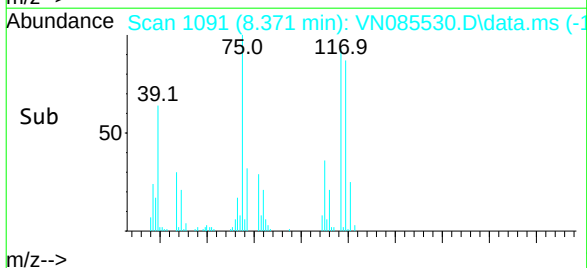
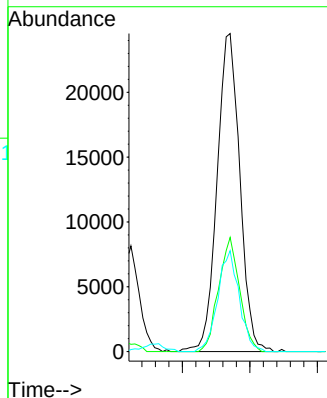
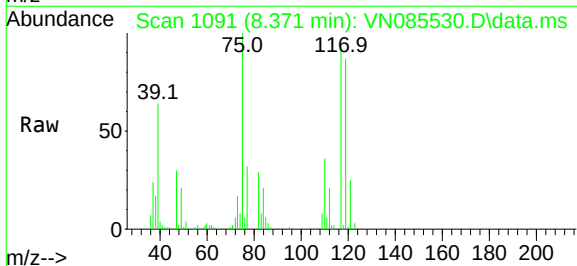
Tgt Ion: 75 Resp: 57513

Ion Ratio Lower Upper

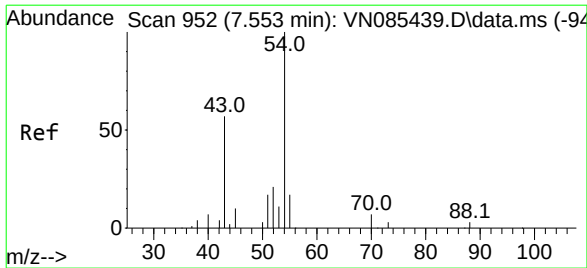
75 100

110 33.1 16.5 49.5

77 29.9 24.4 36.6







#37

Ethyl Acetate

Concen: 21.326 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

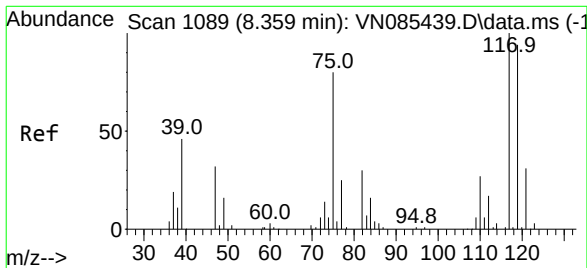
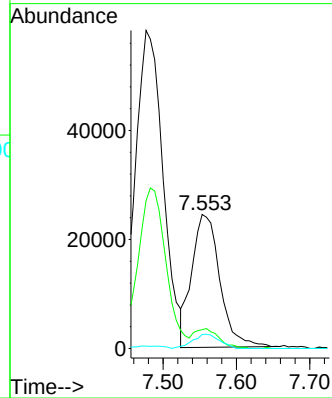
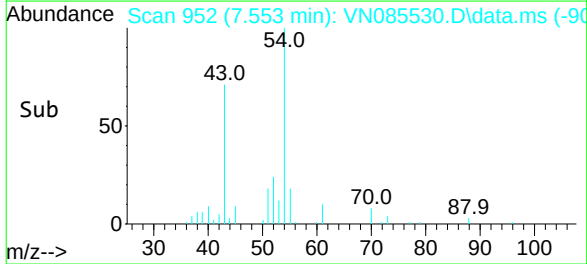
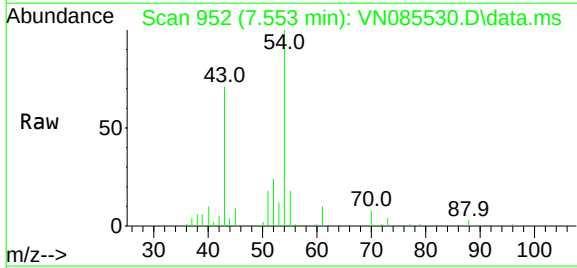
ClientSampleId :

VN0128WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 64941 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 13.2  | 10.9  | 16.3  |
| 70       | 10.2  | 7.5   | 11.3  |

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#38

Carbon Tetrachloride

Concen: 20.038 ug/l

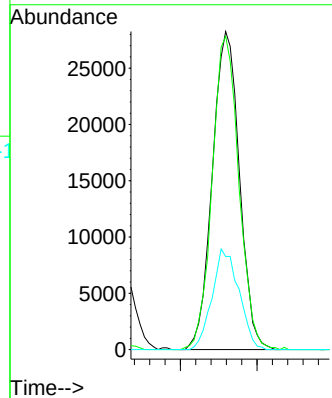
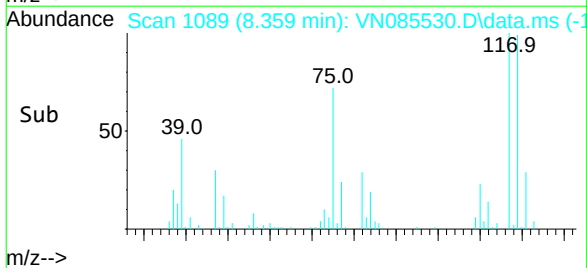
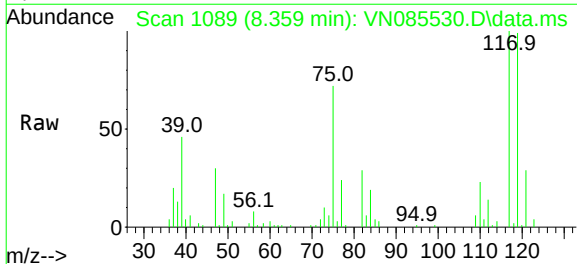
RT: 8.359 min Scan# 1089

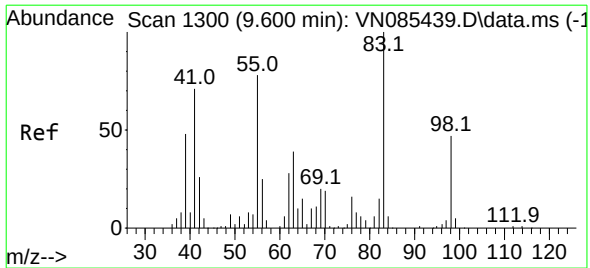
Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 69210 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 98.5  | 75.4  | 113.2 |
| 121      | 29.3  | 24.6  | 37.0  |





#39

Methylcyclohexane

Concen: 18.659 ug/l

RT: 9.600 min Scan# 131

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

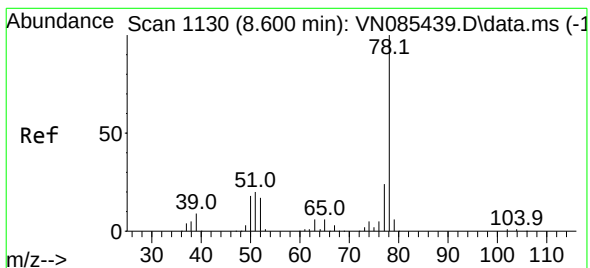
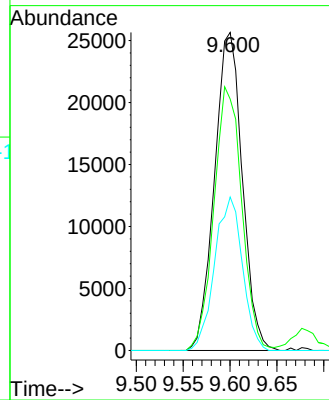
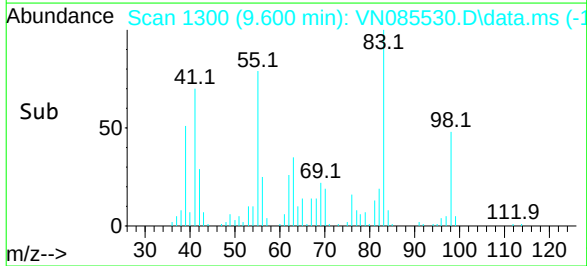
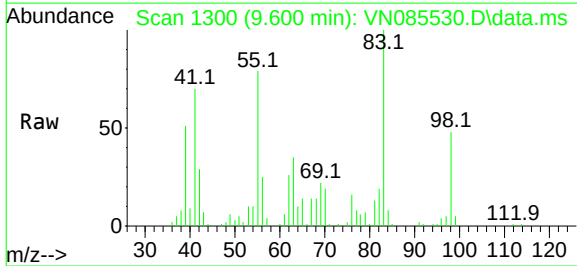
ClientSampleId :

VN0128WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 52898 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 79.0  | 62.6  | 94.0  |
| 98       | 48.2  | 37.7  | 56.5  |

Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#40

Benzene

Concen: 20.225 ug/l

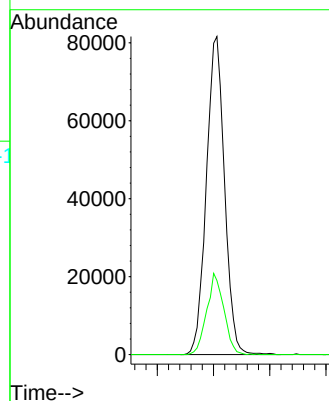
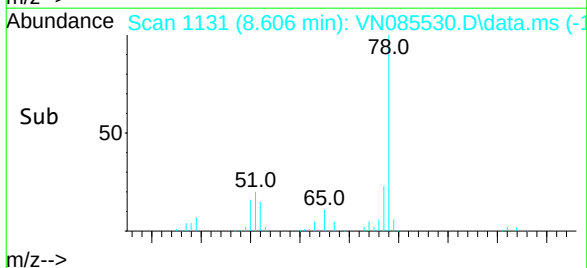
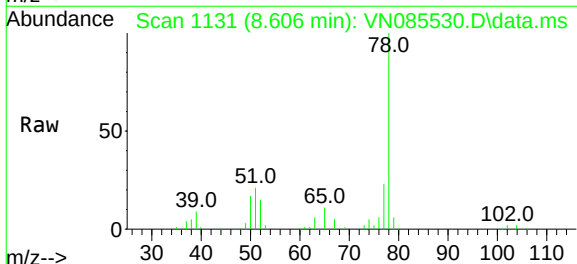
RT: 8.606 min Scan# 1131

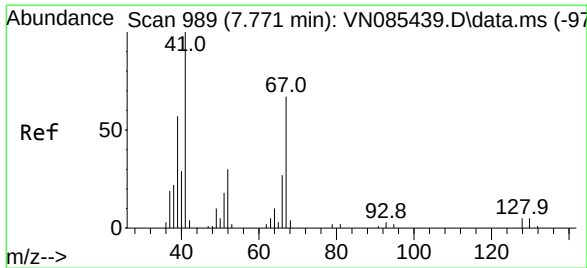
Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 78    | Resp: | 183341 |
| Ion      | Ratio | Lower | Upper  |
| 78       | 100   |       |        |
| 77       | 23.3  | 19.0  | 28.6   |





#41

Methacrylonitrile

Concen: 21.410 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 41 Resp: 33920

Ion Ratio Lower Upper

41 100

39 55.6 46.0 69.0

67 73.8 57.4 86.2

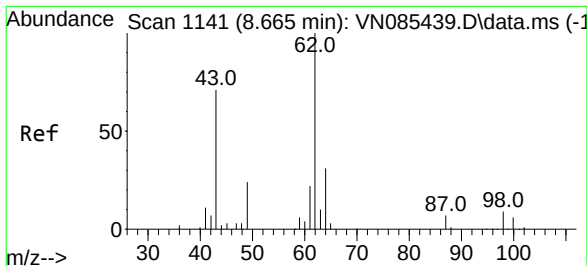
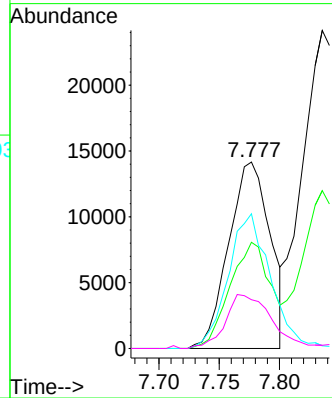
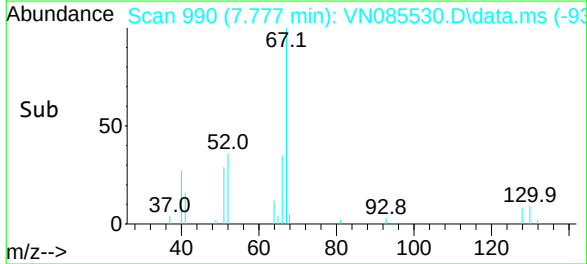
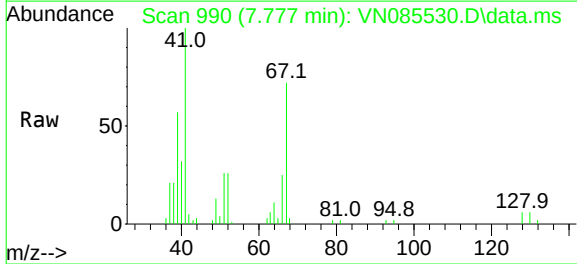
52 32.7 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#42

1,2-Dichloroethane

Concen: 21.514 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085530.D

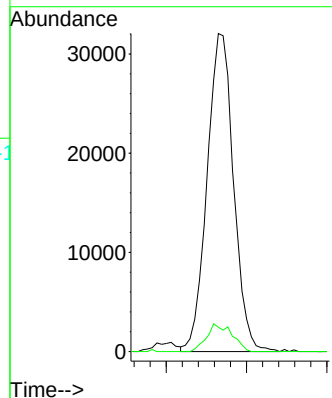
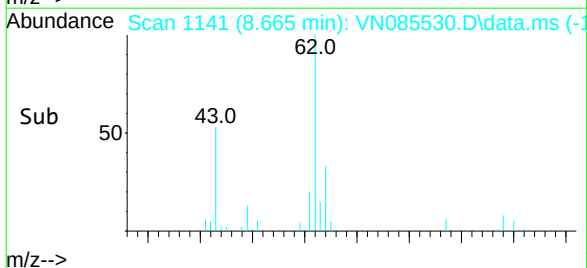
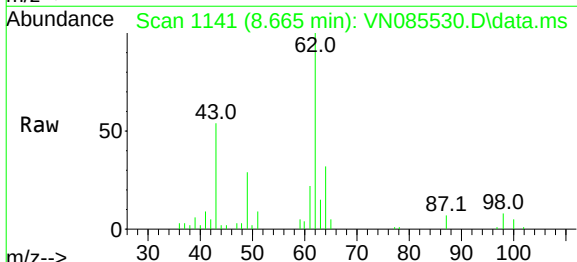
Acq: 28 Jan 2025 11:48

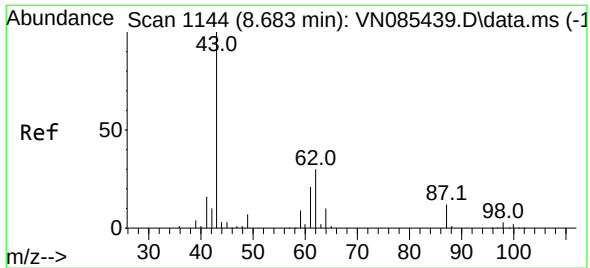
Tgt Ion: 62 Resp: 73450

Ion Ratio Lower Upper

62 100

98 8.4 0.0 17.0





#43

Isopropyl Acetate

Concen: 21.565 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 43 Resp: 105226

Ion Ratio Lower Upper

43 100

61 26.0 20.7 31.1

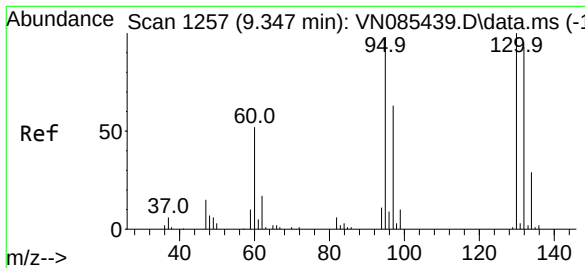
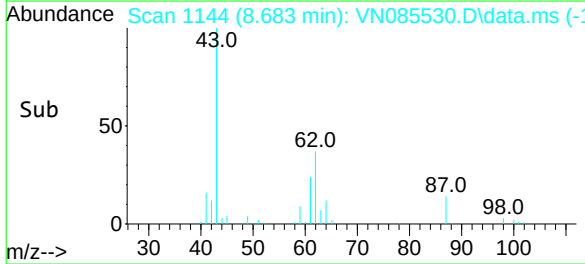
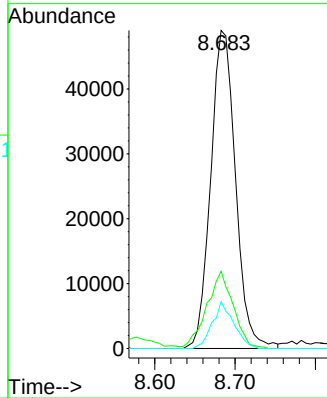
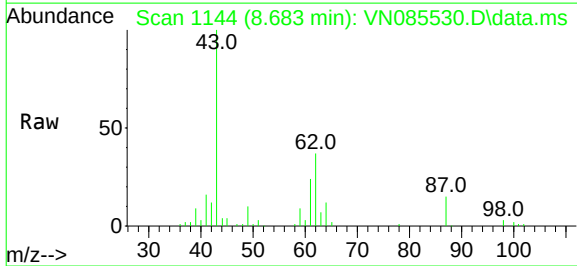
87 12.7 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#44

Trichloroethene

Concen: 19.386 ug/l

RT: 9.353 min Scan# 1258

Delta R.T. 0.006 min

Lab File: VN085530.D

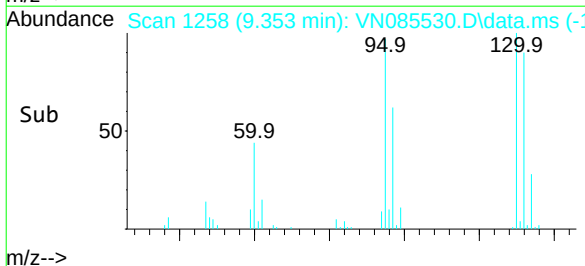
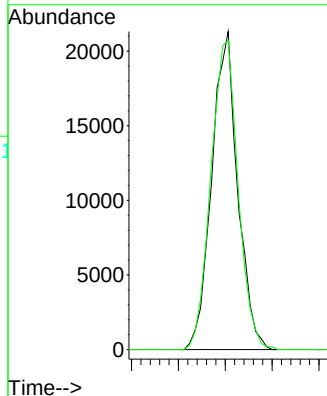
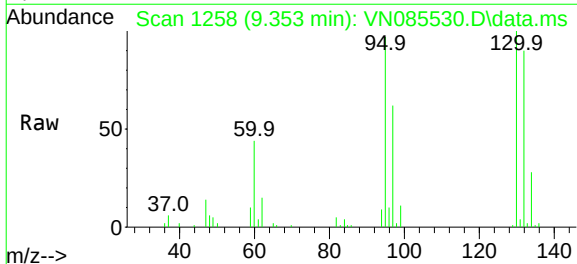
Acq: 28 Jan 2025 11:48

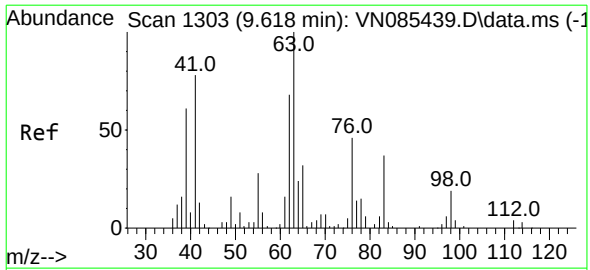
Tgt Ion:130 Resp: 40907

Ion Ratio Lower Upper

130 100

95 97.3 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.703 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 63 Resp: 47937

Ion Ratio Lower Upper

63 100

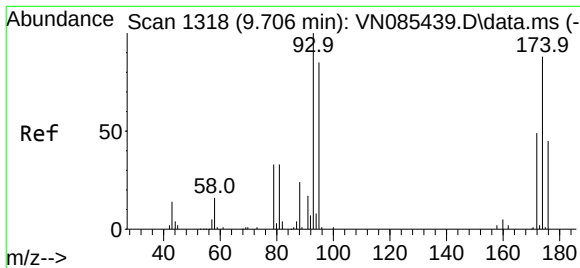
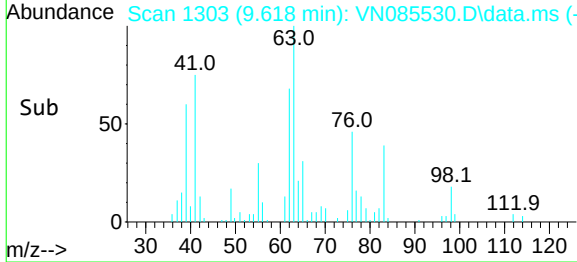
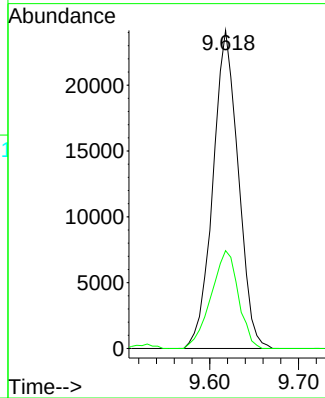
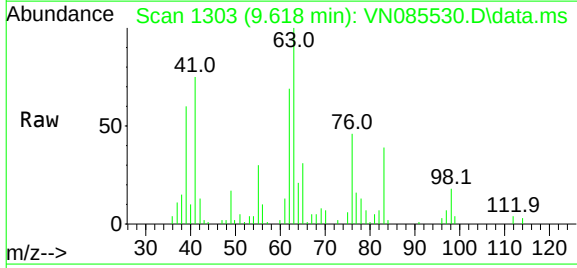
65 30.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#46

Dibromomethane

Concen: 20.981 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

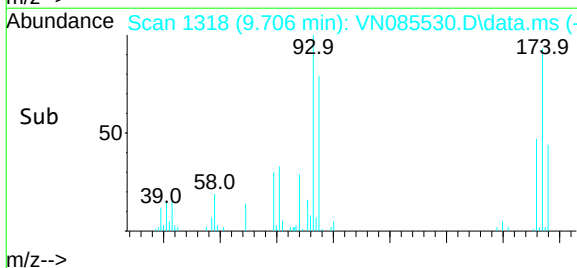
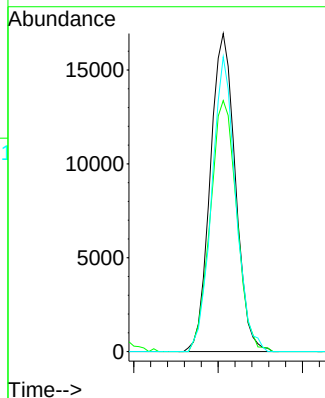
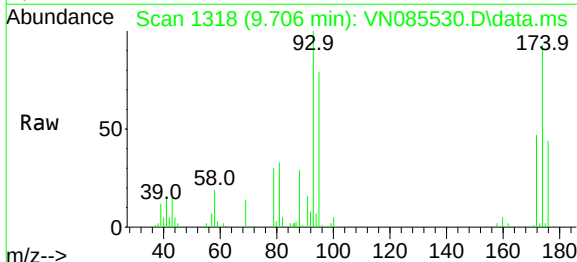
Tgt Ion: 93 Resp: 35054

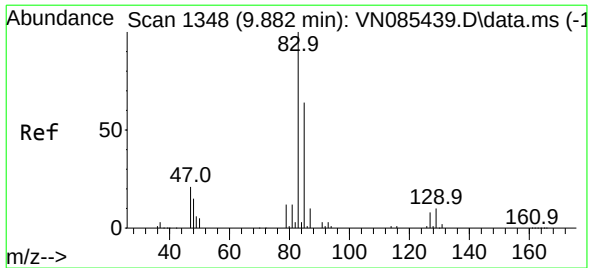
Ion Ratio Lower Upper

93 100

95 82.8 64.7 97.1

174 88.1 69.0 103.4





#47

Bromodichloromethane

Concen: 21.738 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 83 Resp: 73992

Ion Ratio Lower Upper

83 100

85 60.1 51.2 76.8

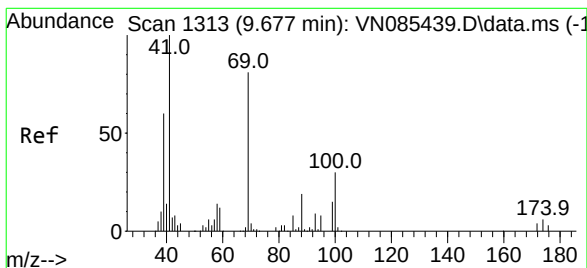
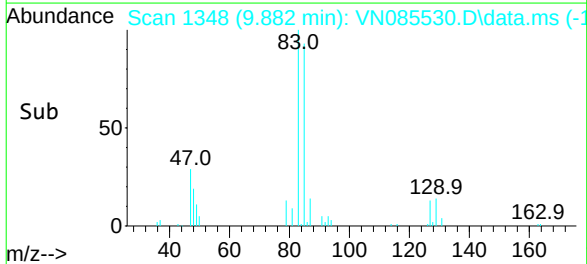
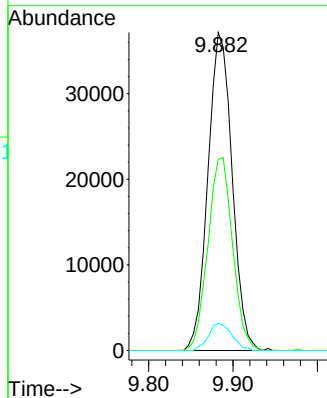
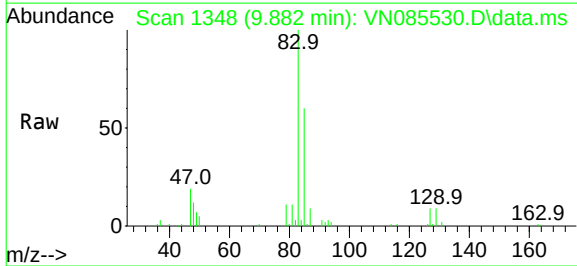
127 8.5 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#48

Methyl methacrylate

Concen: 21.918 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

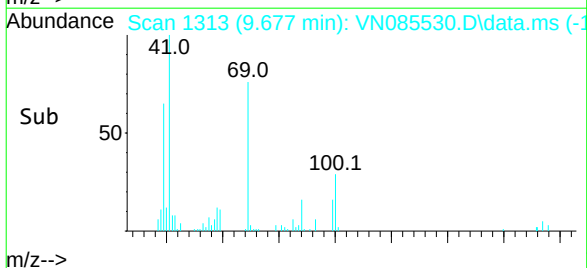
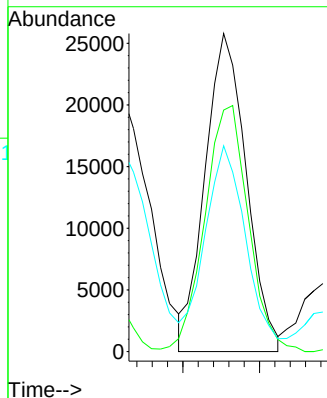
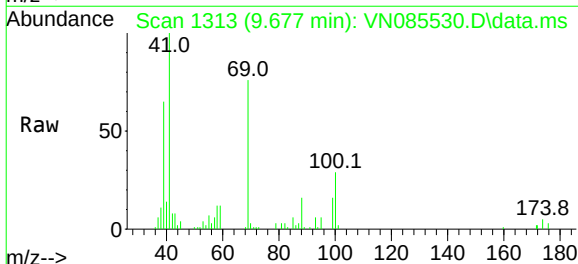
Tgt Ion: 41 Resp: 48128

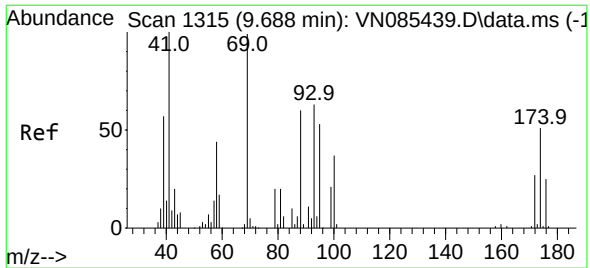
Ion Ratio Lower Upper

41 100

69 81.9 64.7 97.1

39 65.4 49.0 73.6





#49

1,4-Dioxane

Concen: 466.467 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 88 Resp: 17249

Ion Ratio Lower Upper

88 100

43 0.0 26.6 39.8

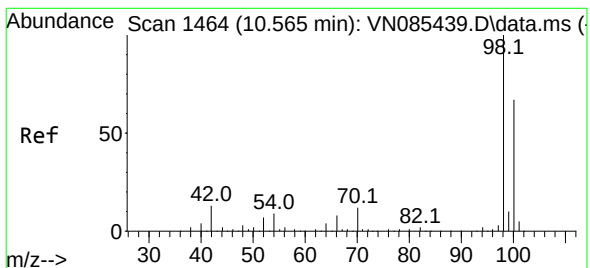
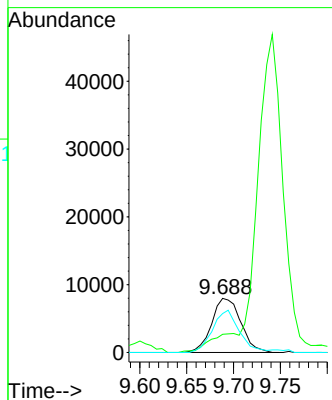
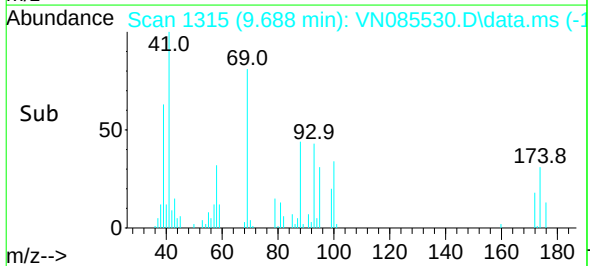
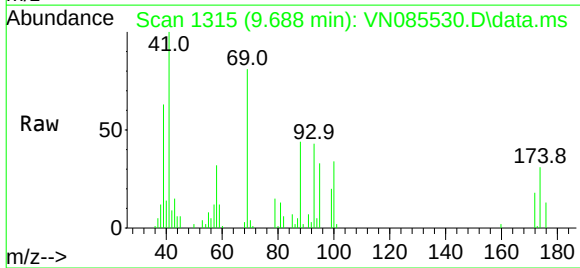
58 72.4 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#50

Toluene-d8

Concen: 51.076 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085530.D

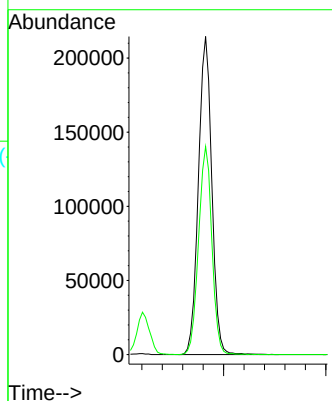
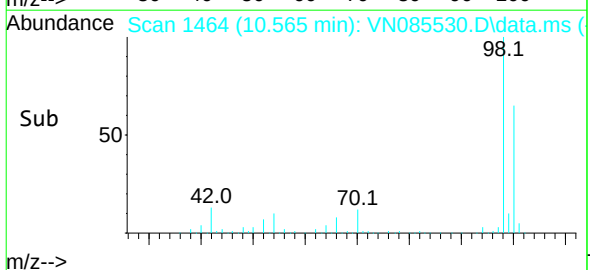
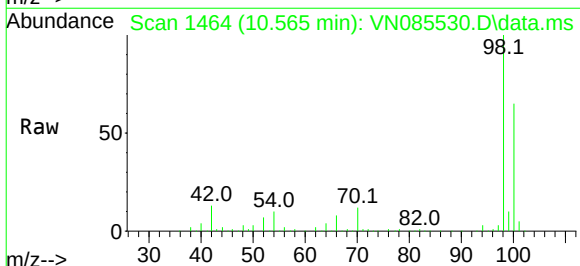
Acq: 28 Jan 2025 11:48

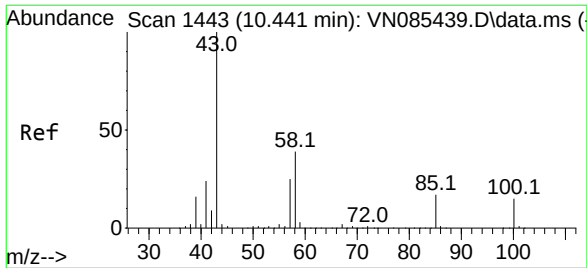
Tgt Ion: 98 Resp: 390099

Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.4





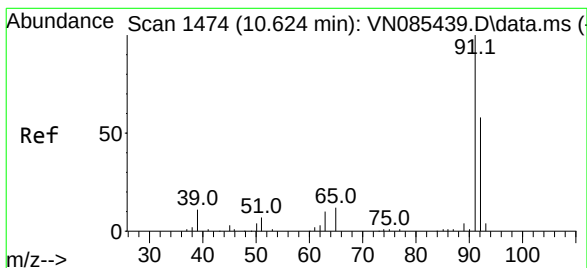
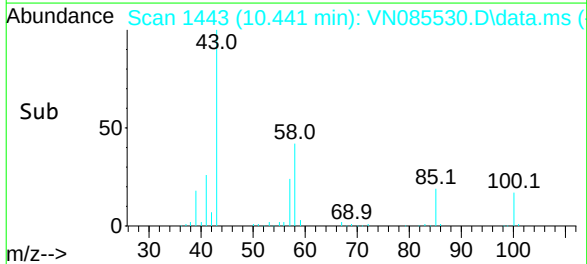
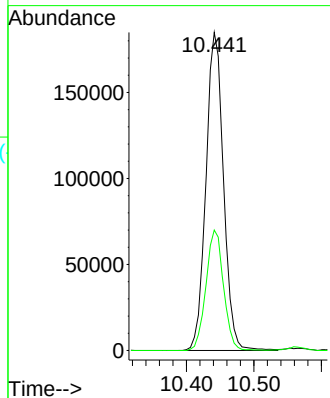
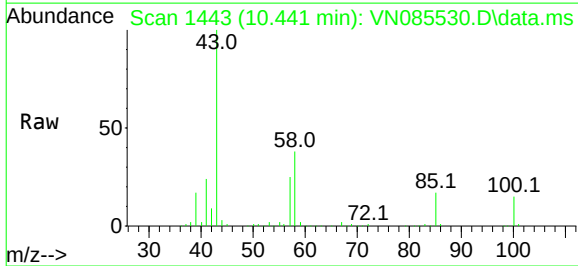
#51  
4-Methyl-2-Pentanone  
Concen: 118.016 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 43 Resp: 334158  
Ion Ratio Lower Upper  
43 100  
58 37.9 30.5 45.7

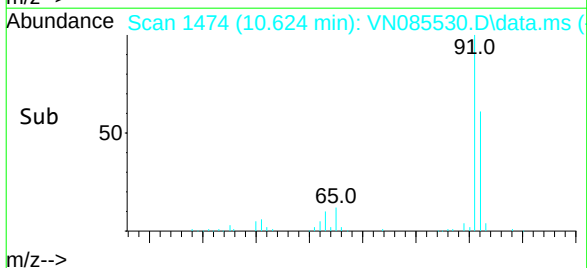
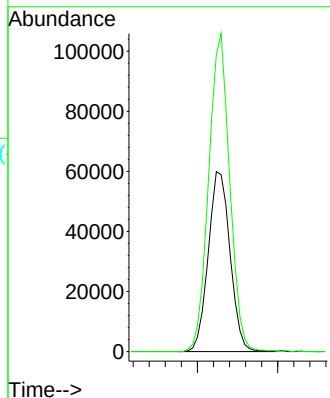
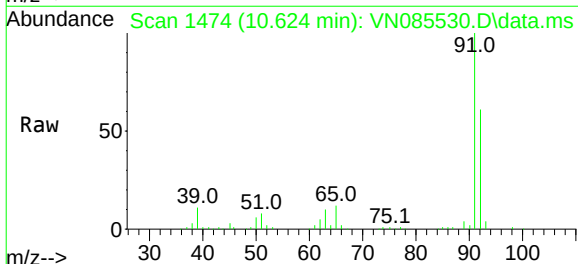
Manual Integrations  
APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

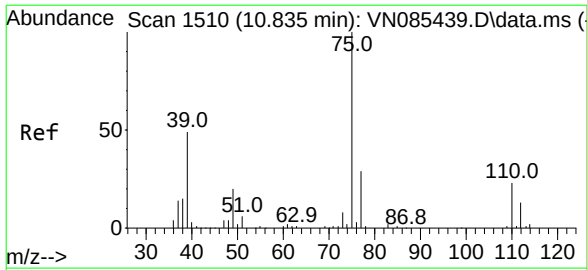


#52  
Toluene  
Concen: 21.523 ug/l  
RT: 10.624 min Scan# 1474  
Delta R.T. -0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 92 Resp: 113049  
Ion Ratio Lower Upper  
92 100  
91 170.5 139.2 208.8







#53

t-1,3-Dichloropropene

Concen: 21.468 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 75 Resp: 69056

Ion Ratio Lower Upper

75 100

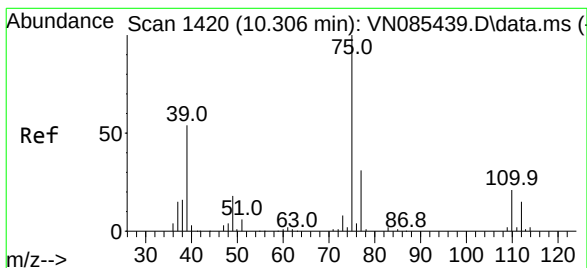
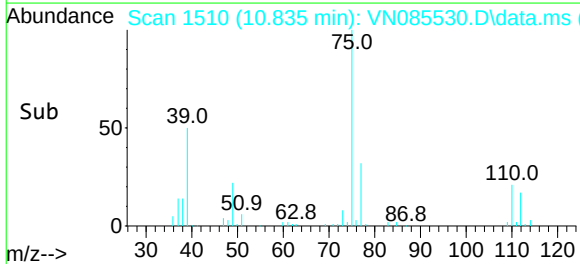
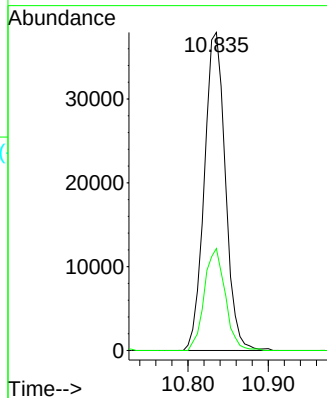
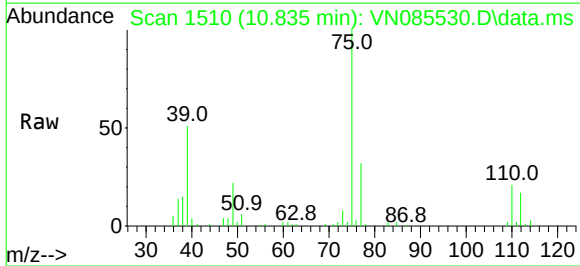
77 32.1 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#54

cis-1,3-Dichloropropene

Concen: 21.821 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

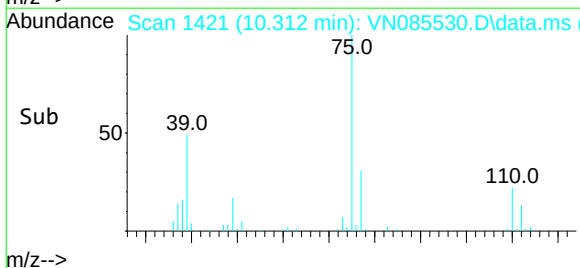
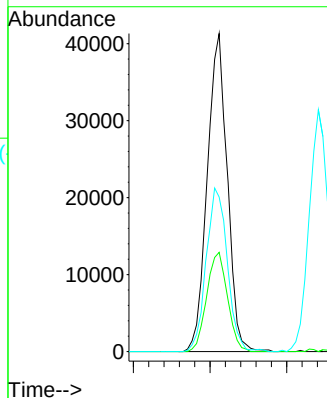
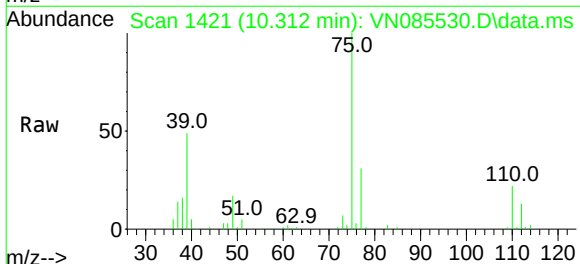
Tgt Ion: 75 Resp: 74974

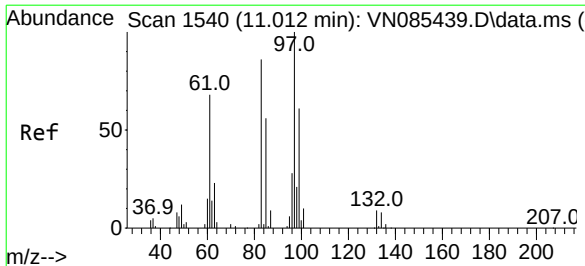
Ion Ratio Lower Upper

75 100

77 31.2 25.0 37.4

39 48.6 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 21.547 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 97 Resp: 44789

Ion Ratio Lower Upper

97 100

83 92.0 69.0 103.6

85 61.6 44.6 66.8

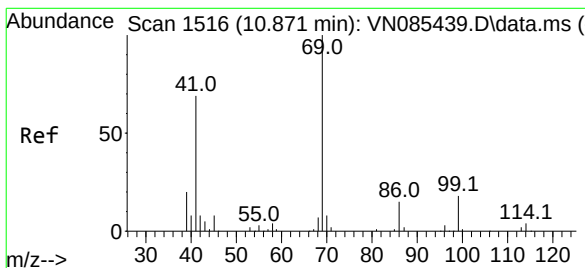
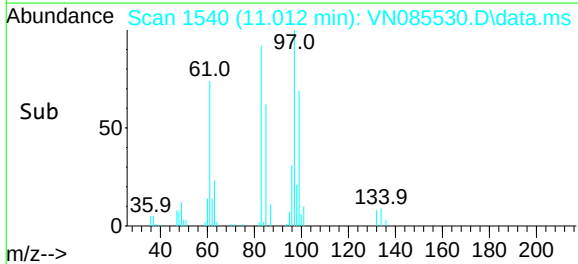
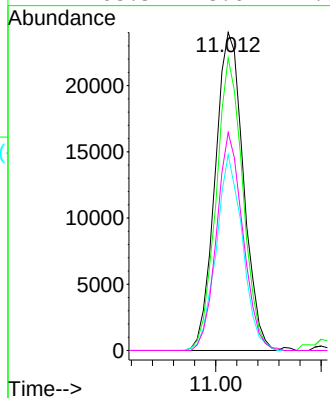
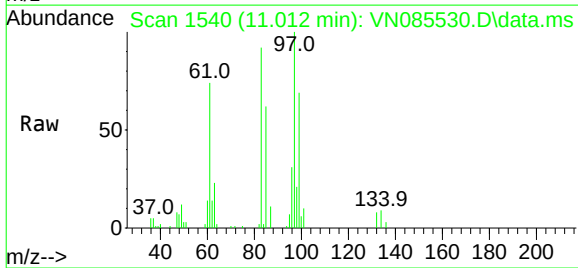
99 68.5 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#56

Ethyl methacrylate

Concen: 19.962 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

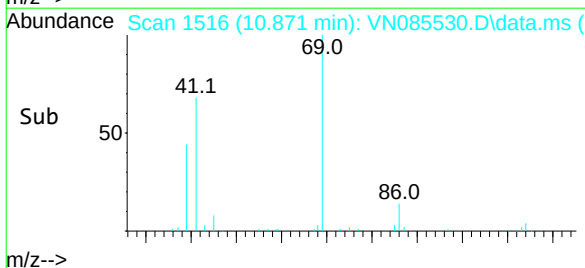
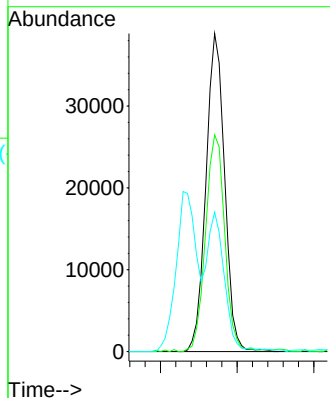
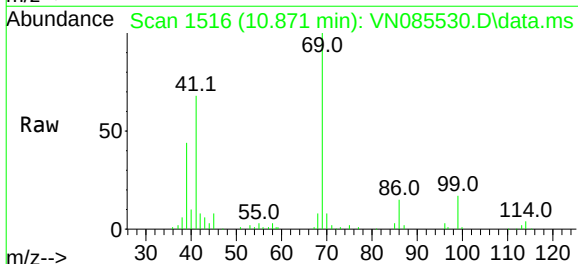
Tgt Ion: 69 Resp: 65671

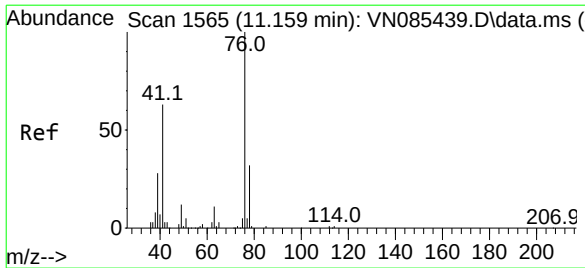
Ion Ratio Lower Upper

69 100

41 70.1 54.6 82.0

39 41.9 32.4 48.6





#57

1,3-Dichloropropane

Concen: 21.850 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 76 Resp: 78972

Ion Ratio Lower Upper

76 100

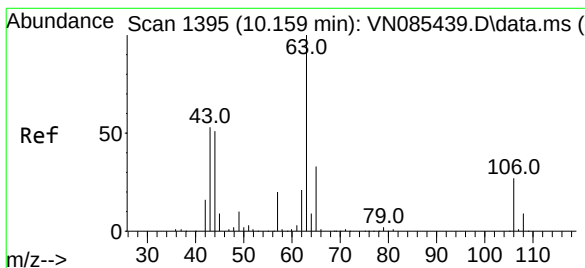
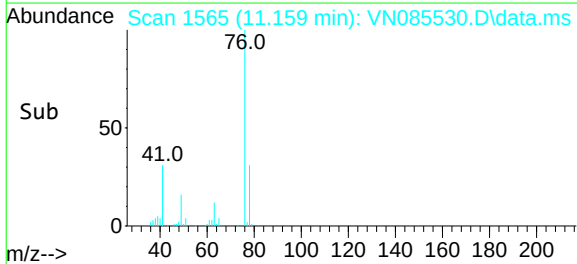
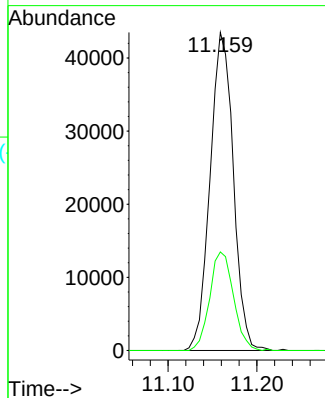
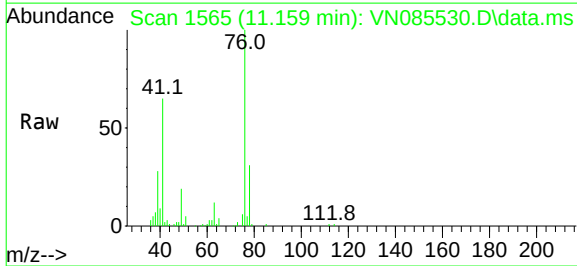
78 31.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#58

2-Chloroethyl Vinyl ether

Concen: 98.550 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085530.D

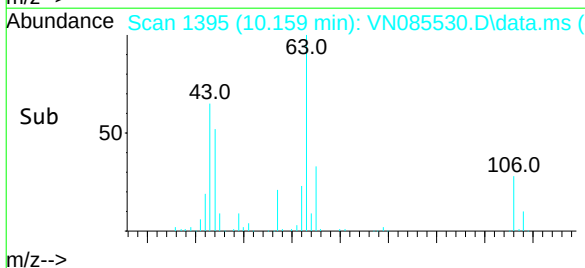
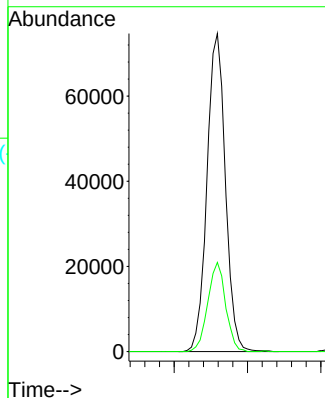
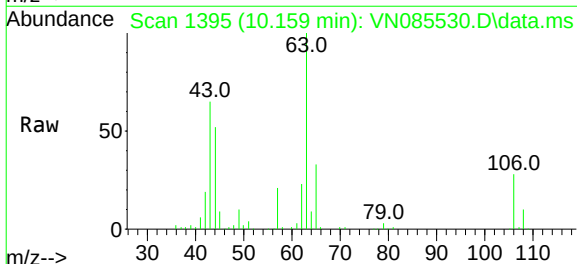
Acq: 28 Jan 2025 11:48

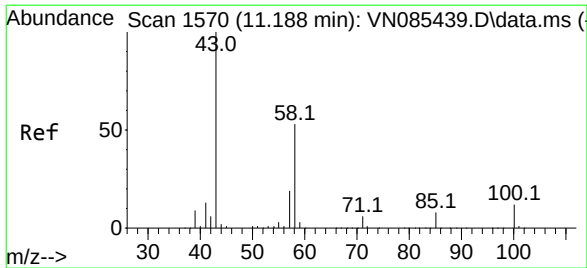
Tgt Ion: 63 Resp: 129996

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 118.347 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 43 Resp: 235784

Ion Ratio Lower Upper

43 100

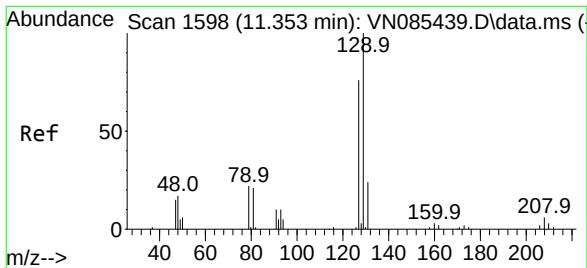
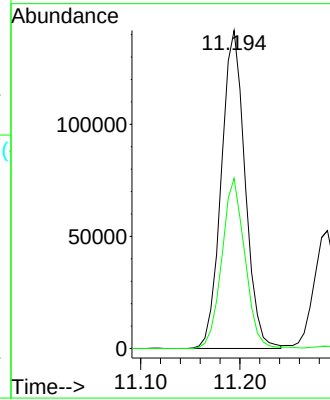
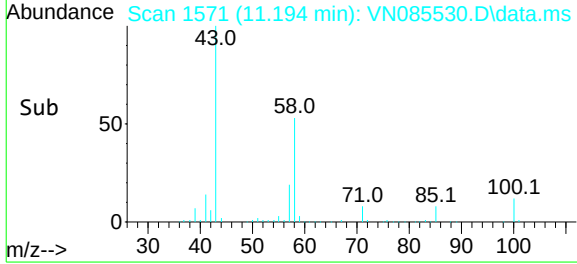
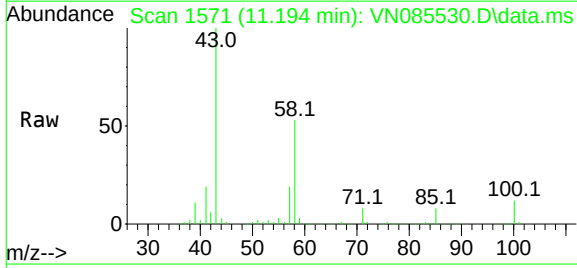
58 52.0 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#60

Dibromochloromethane

Concen: 21.899 ug/l

RT: 11.359 min Scan# 1599

Delta R.T. 0.006 min

Lab File: VN085530.D

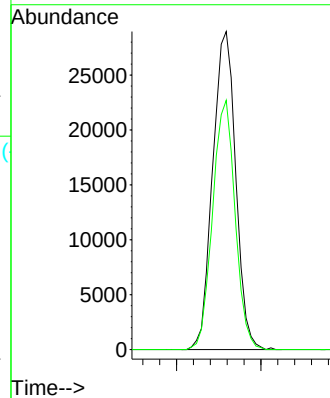
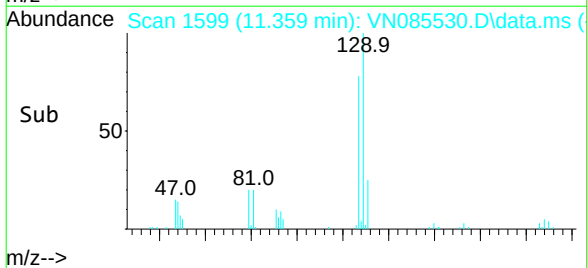
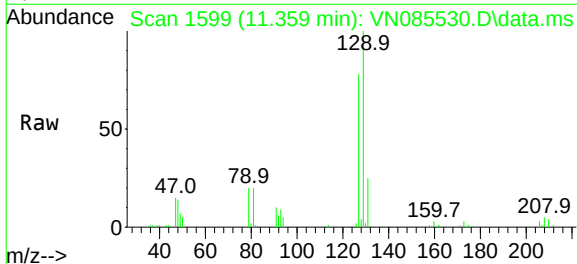
Acq: 28 Jan 2025 11:48

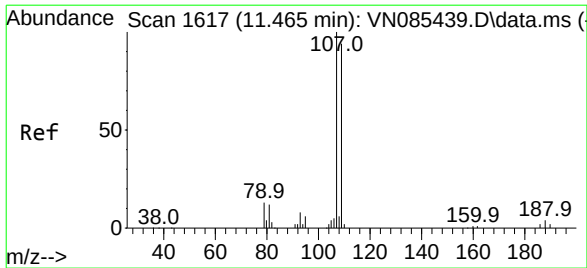
Tgt Ion:129 Resp: 54955

Ion Ratio Lower Upper

129 100

127 76.6 38.6 115.8





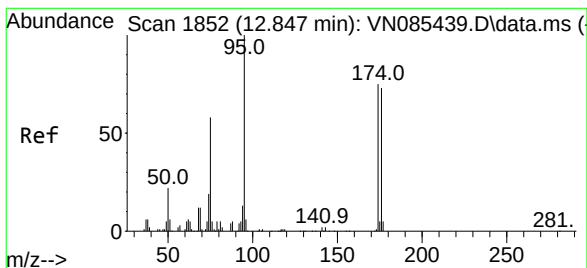
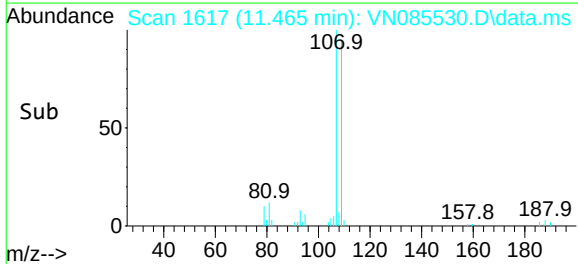
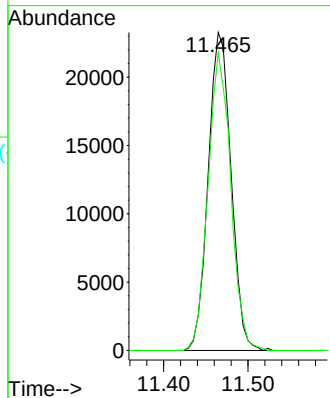
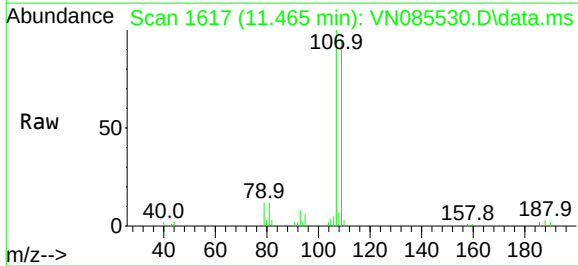
#61  
1,2-Dibromoethane  
Concen: 21.189 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 107 Resp: 43841  
Ion Ratio Lower Upper  
107 100  
109 93.3 75.9 113.9

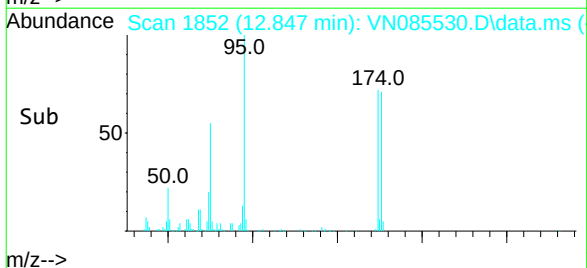
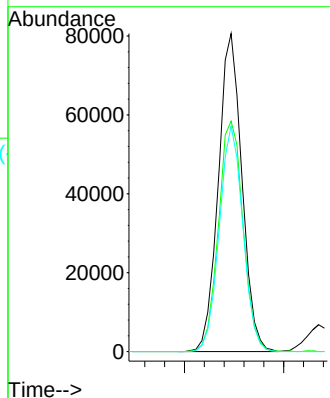
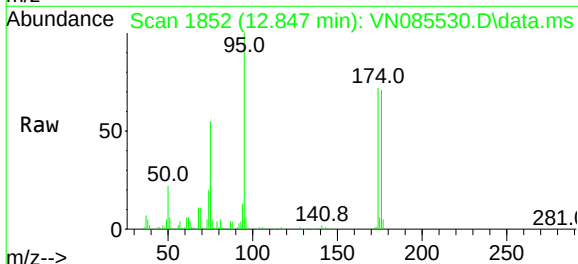
Manual Integrations  
APPROVED

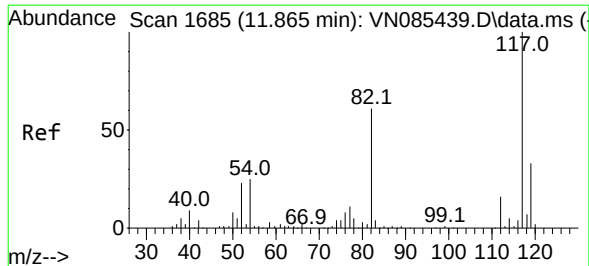
Reviewed By : John Carlone 01/29/2025  
Supervised By : Semsettin Yesilyurt 01/29/2025



#62  
4-Bromofluorobenzene  
Concen: 50.978 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 95 Resp: 133187  
Ion Ratio Lower Upper  
95 100  
174 75.7 0.0 145.0  
176 70.9 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:117 Resp: 273221

Ion Ratio Lower Upper

117 100

82 58.5 48.6 72.8

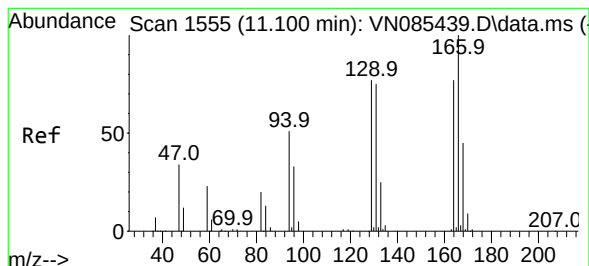
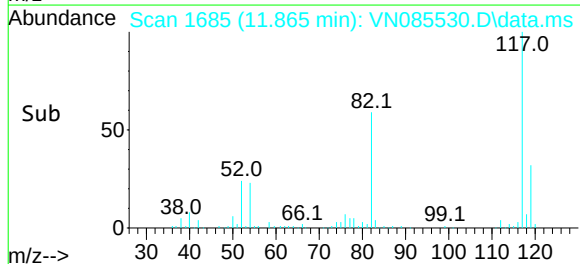
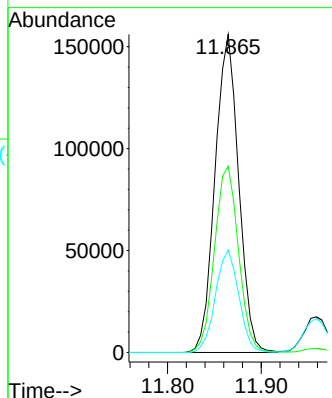
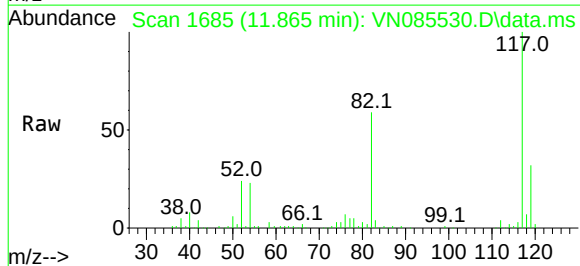
119 32.2 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#64

Tetrachloroethene

Concen: 20.962 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Tgt Ion:164 Resp: 39045

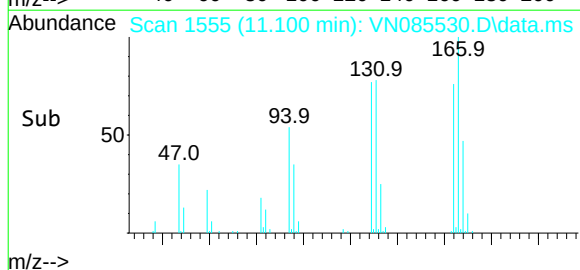
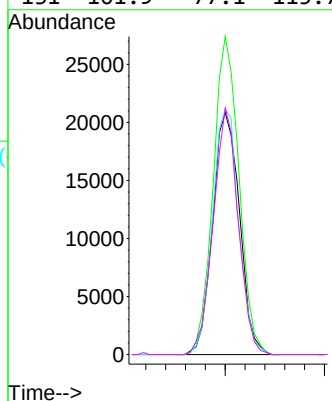
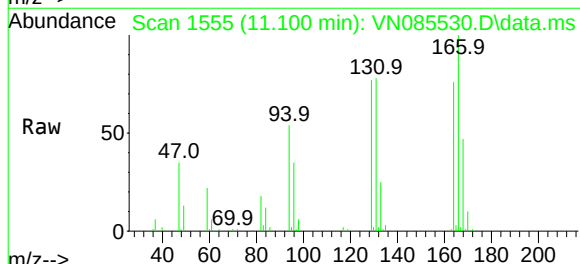
Ion Ratio Lower Upper

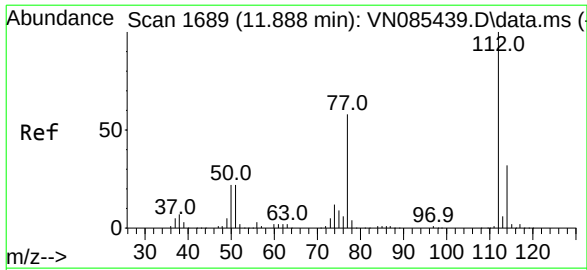
164 100

166 131.5 103.4 155.2

129 101.5 79.2 118.8

131 101.9 77.1 115.7





#65

Chlorobenzene

Concen: 20.625 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:112 Resp: 123448

Ion Ratio Lower Upper

112 100

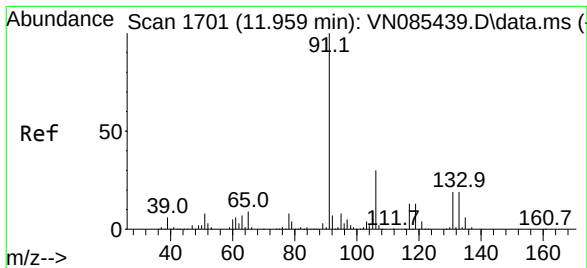
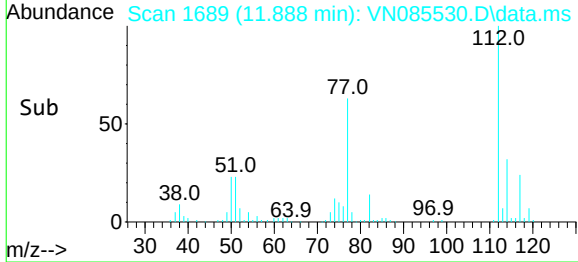
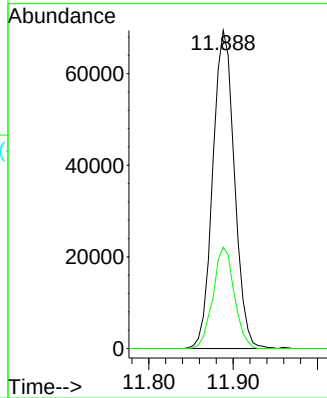
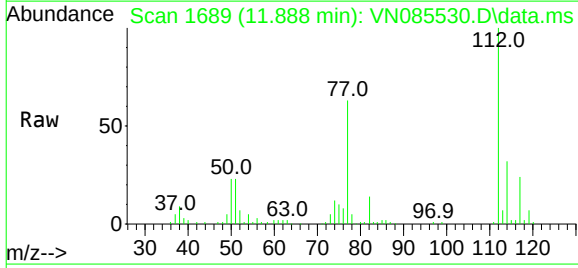
114 31.9 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 21.449 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

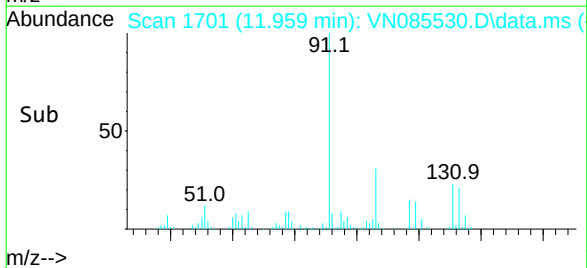
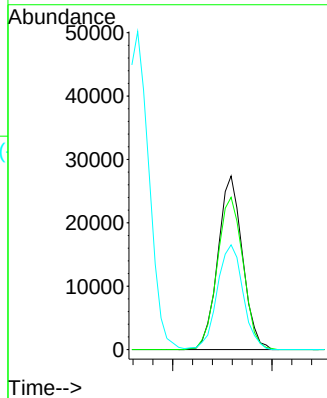
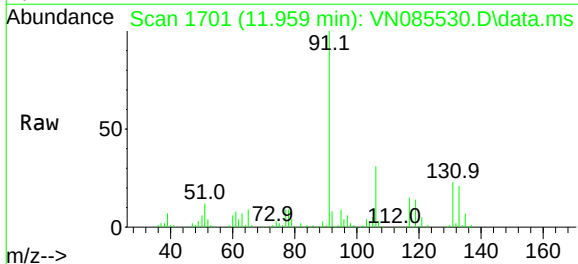
Tgt Ion:131 Resp: 47119

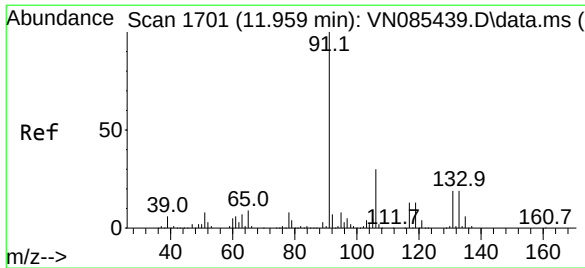
Ion Ratio Lower Upper

131 100

133 92.4 47.4 142.3

119 63.4 33.1 99.5





#67

Ethyl Benzene

Concen: 20.614 ug/l

RT: 11.959 min Scan# 17

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Tgt Ion: 91 Resp: 200961

Ion Ratio Lower Upper

91 100

106 30.6 23.8 35.8

Instrument :

MSVOA\_N

ClientSampleId :

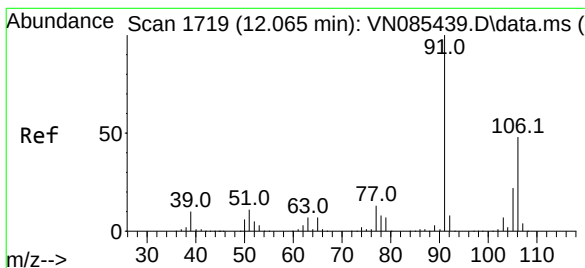
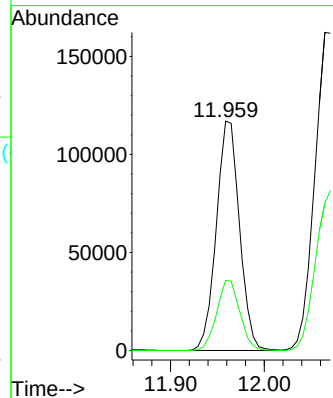
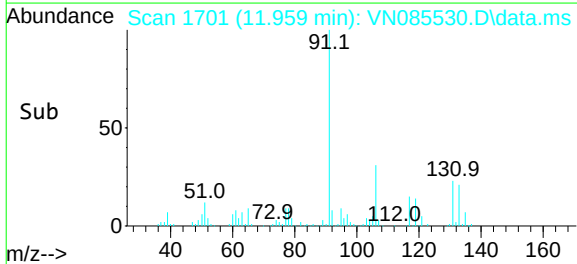
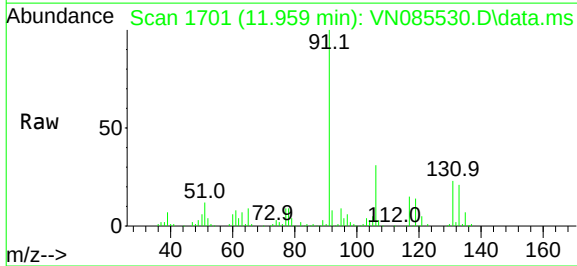
VN0128WBSD01

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#68

m/p-Xylenes

Concen: 43.421 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085530.D

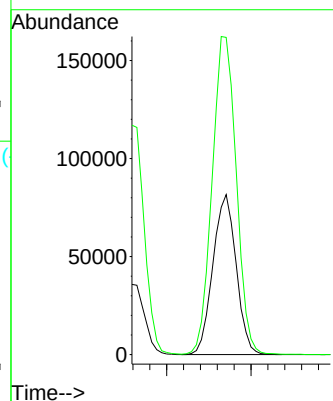
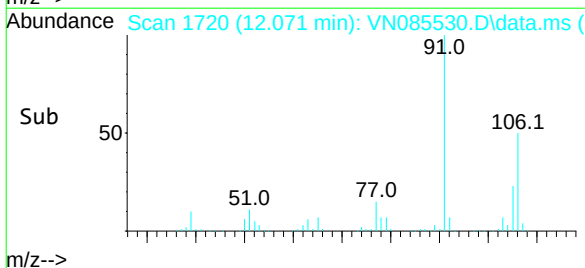
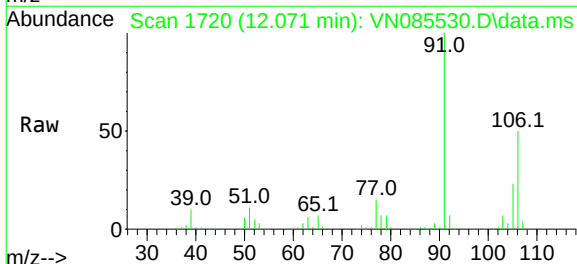
Acq: 28 Jan 2025 11:48

Tgt Ion:106 Resp: 156444

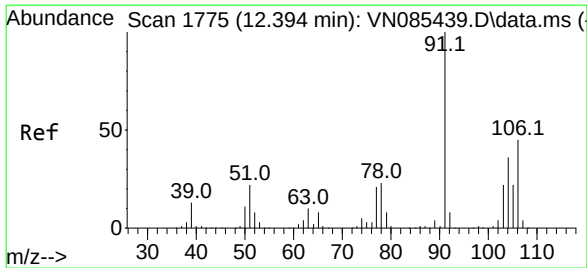
Ion Ratio Lower Upper

106 100

91 206.6 167.7 251.5







#69

o-Xylene

Concen: 20.785 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:106 Resp: 71566

Ion Ratio Lower Upper

106 100

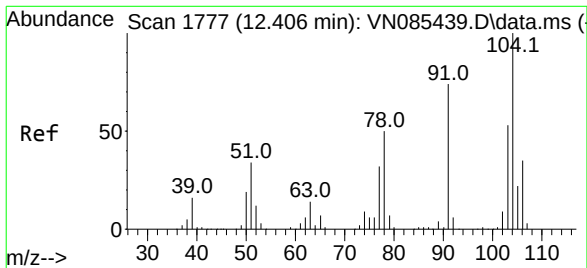
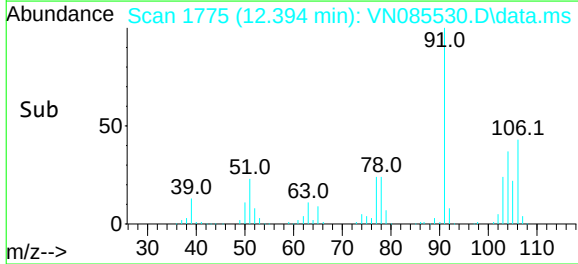
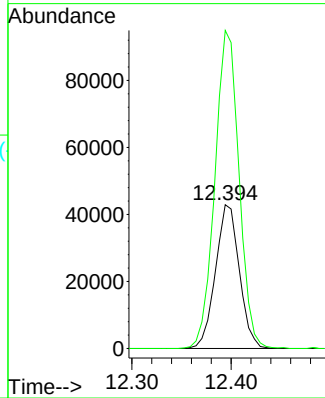
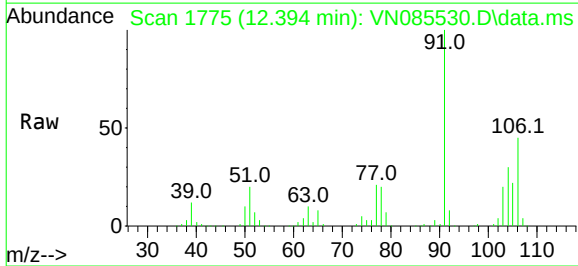
91 224.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#70

Styrene

Concen: 21.347 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

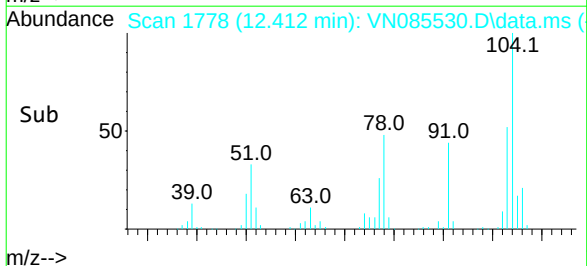
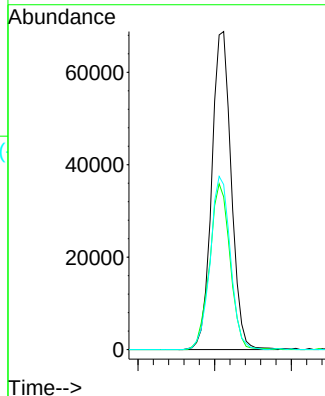
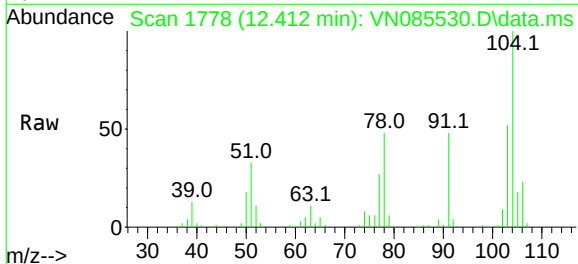
Tgt Ion:104 Resp: 121646

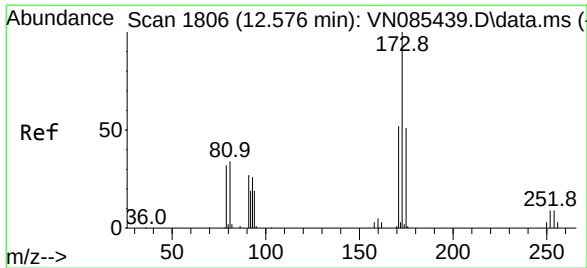
Ion Ratio Lower Upper

104 100

78 54.5 42.5 63.7

103 56.3 43.8 65.8





#71

Bromoform

Concen: 22.498 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

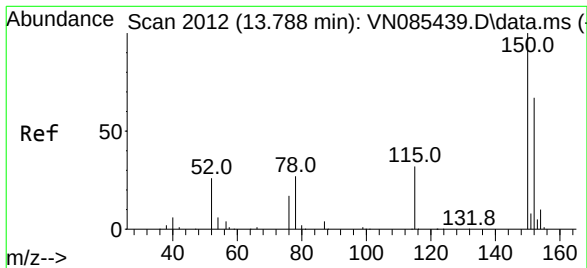
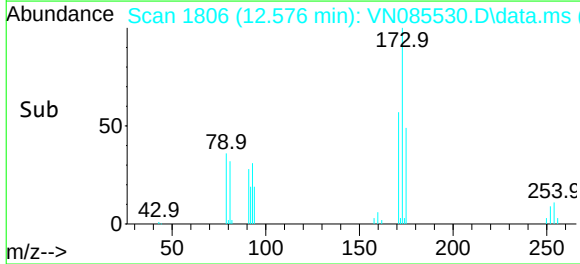
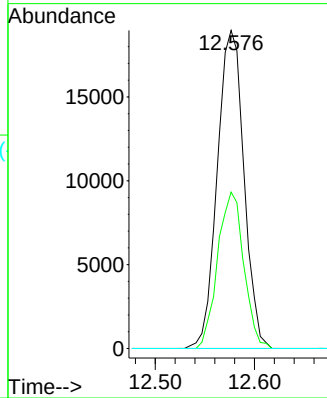
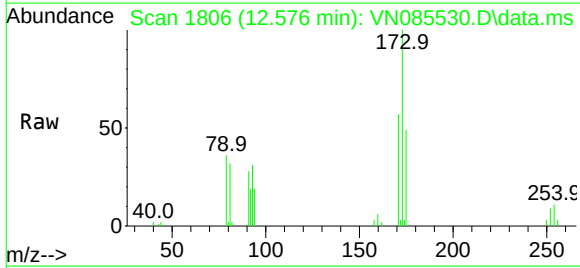
Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

| Tgt Ion:  | 173   | Resp: | 35363 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 48.3  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |

Manual Integrations  
APPROVEDReviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025

#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

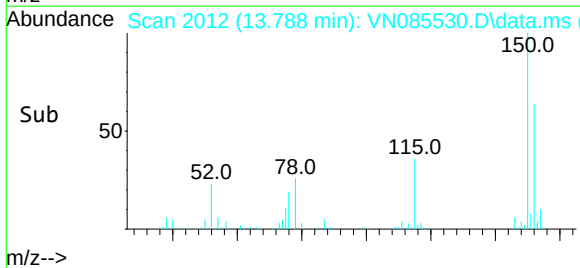
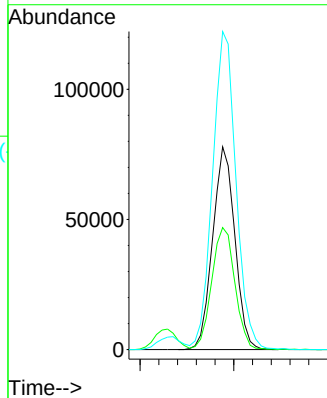
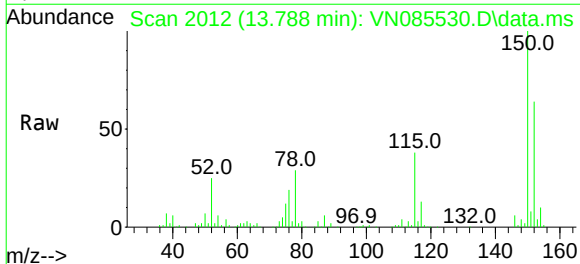
RT: 13.788 min Scan# 2012

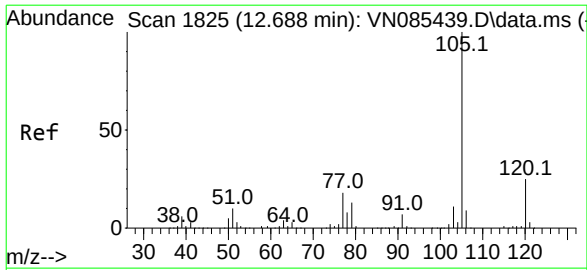
Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

| Tgt Ion:  | 152   | Resp: | 127977 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.9  | 31.1  | 93.3   |
| 150       | 165.8 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 21.200 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 105 Resp: 183110

Ion Ratio Lower Upper

105 100

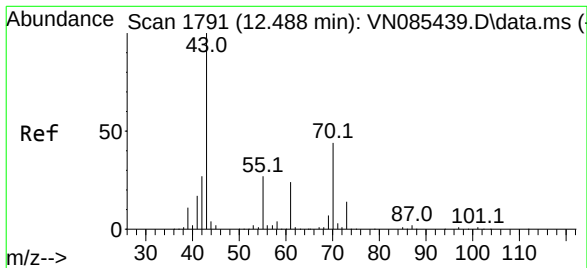
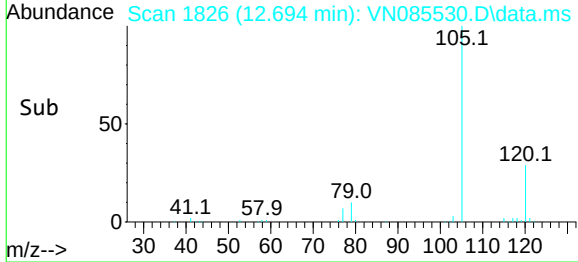
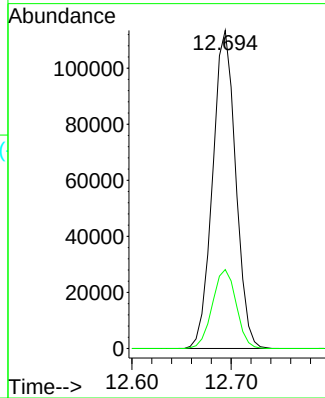
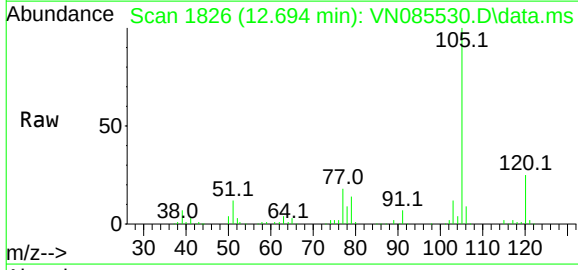
120 25.6 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#74

N-ethyl acetate

Concen: 21.833 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Tgt Ion: 43 Resp: 84761

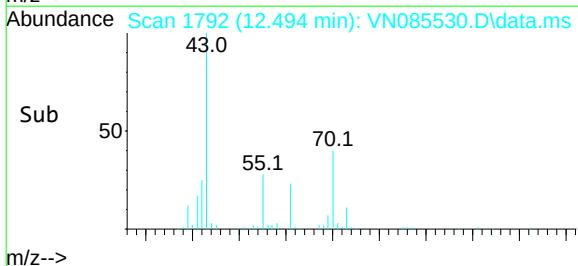
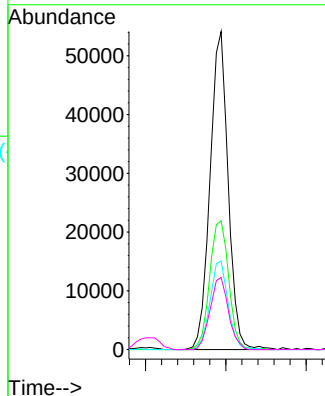
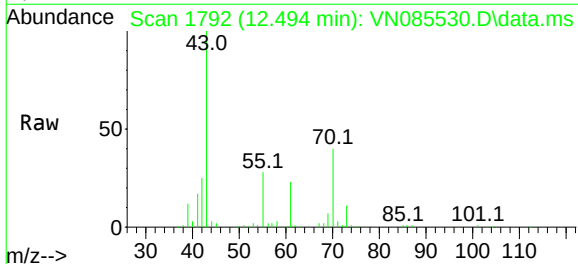
Ion Ratio Lower Upper

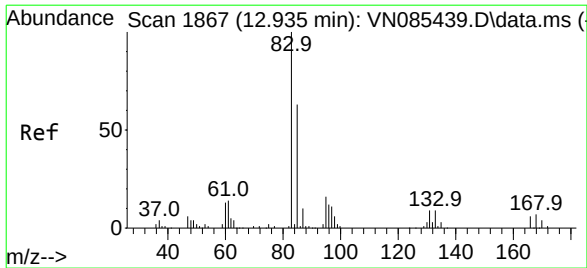
43 100

70 42.4 34.0 51.0

55 27.8 21.4 32.2

61 23.0 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 21.763 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

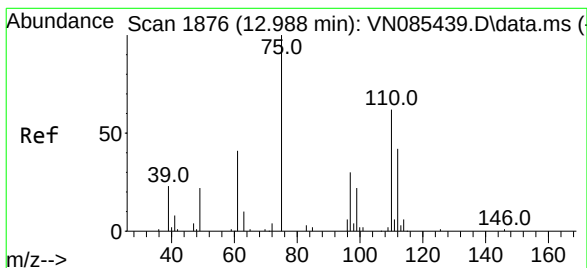
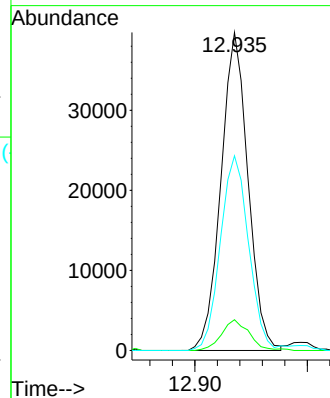
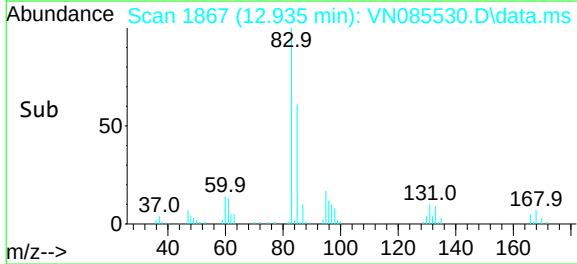
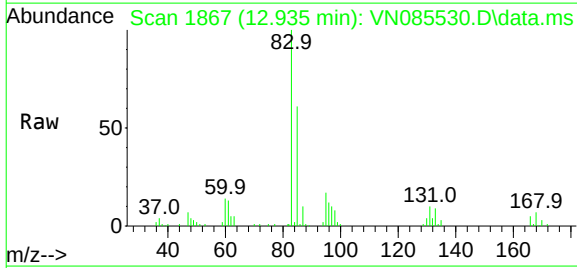
VN0128WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 66402 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 9.9   | 4.8   | 14.4  |
| 85       | 64.2  | 32.2  | 96.6  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#76

1,2,3-Trichloropropane

Concen: 23.561 ug/l m

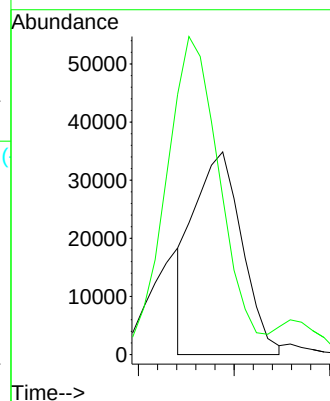
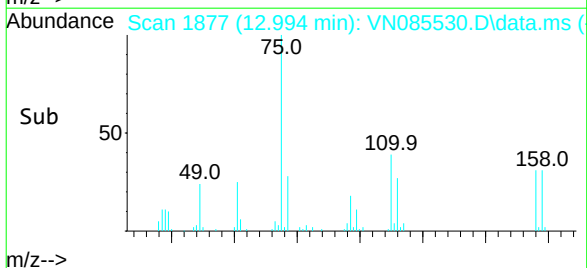
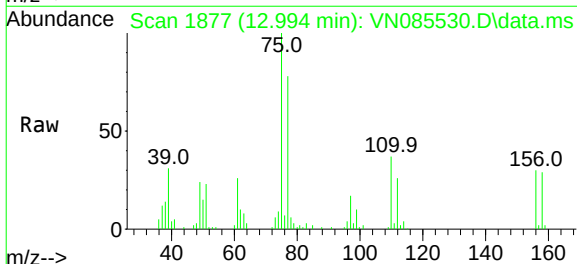
RT: 12.994 min Scan# 1877

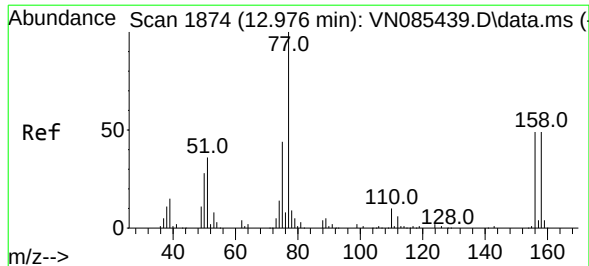
Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

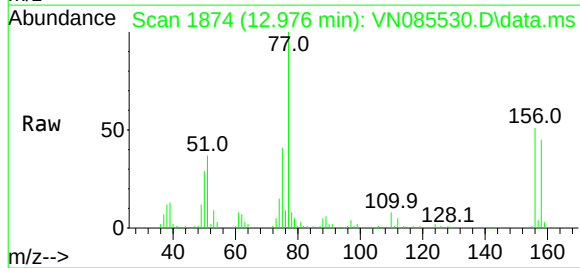
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 61286 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 176.6 | 109.7 | 329.2 |





Bromobenzene  
 Concen: 21.002 ug/l  
 RT: 12.976 min Scan# 1874  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

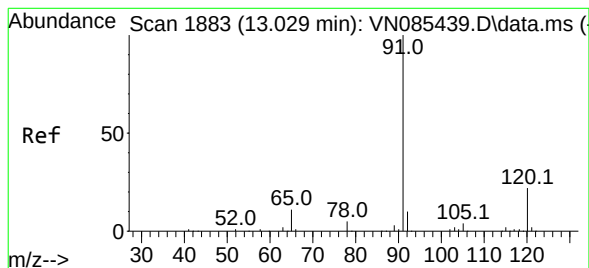
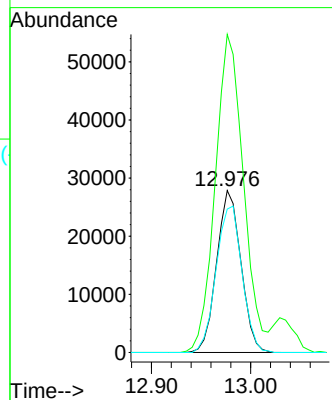
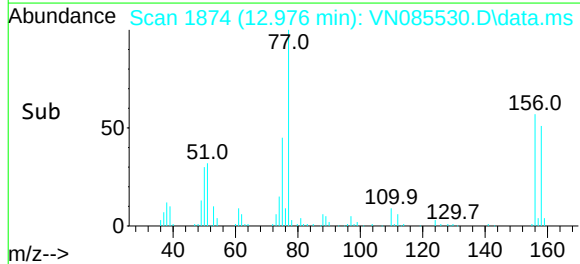
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01



Tgt Ion: 156 Resp: 47394  
 Ion Ratio Lower Upper  
 156 100  
 77 228.3 114.1 342.4  
 158 96.4 48.9 146.8

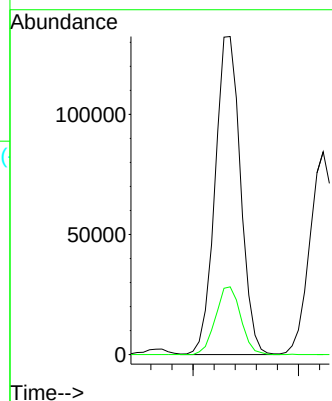
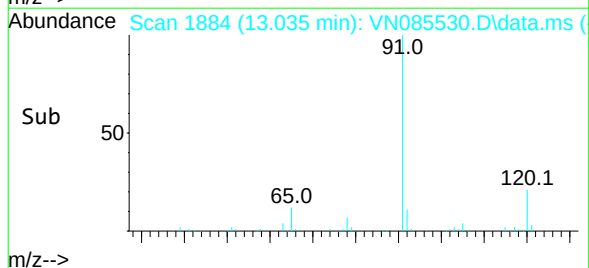
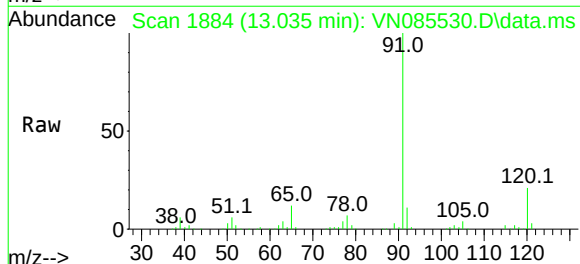
Manual Integrations  
 APPROVED

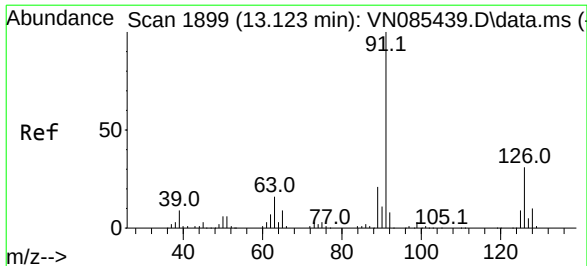
Reviewed By :John Carlone 01/29/2025  
 Supervised By :Semsettin Yesilyurt 01/29/2025



n-propylbenzene  
 Concen: 21.726 ug/l  
 RT: 13.035 min Scan# 1884  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 91 Resp: 222149  
 Ion Ratio Lower Upper  
 91 100  
 120 21.0 10.9 32.6





#79

2-Chlorotoluene

Concen: 21.691 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 91 Resp: 143547

Ion Ratio Lower Upper

91 100

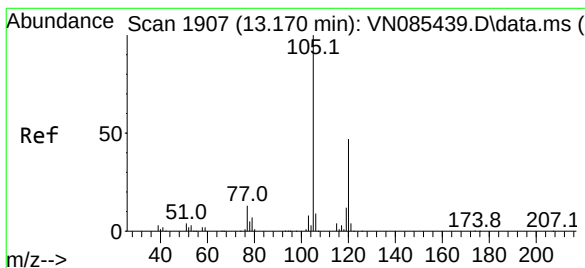
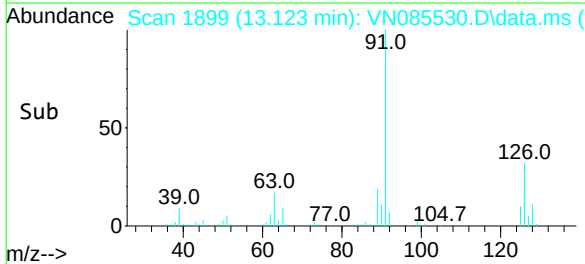
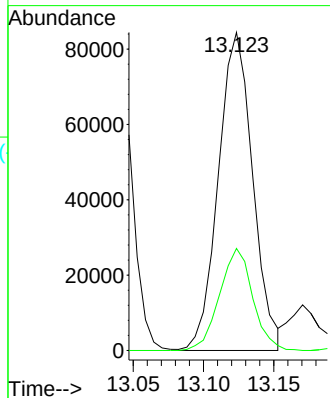
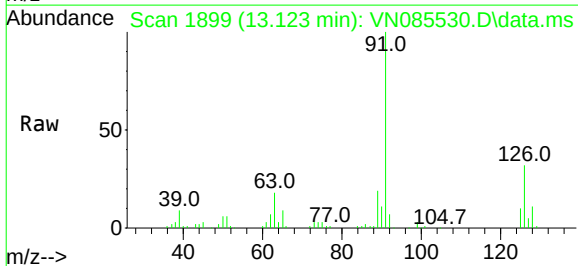
126 30.9 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#80

1,3,5-Trimethylbenzene

Concen: 21.820 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085530.D

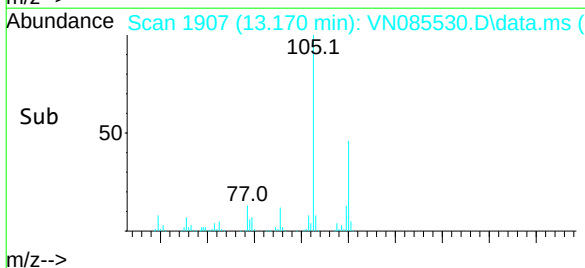
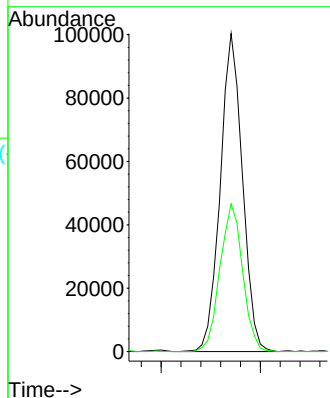
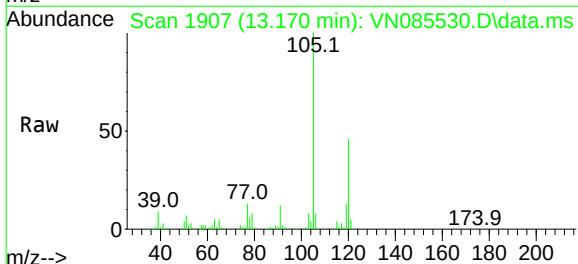
Acq: 28 Jan 2025 11:48

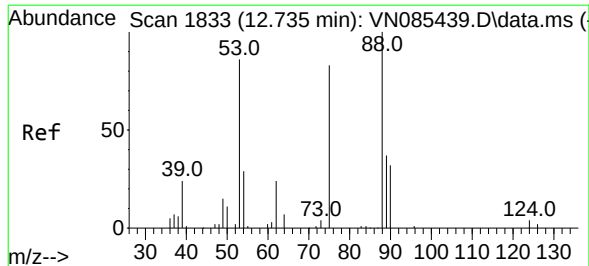
Tgt Ion:105 Resp: 155679

Ion Ratio Lower Upper

105 100

120 47.5 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 22.223 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion: 75 Resp: 21365

Ion Ratio Lower Upper

75 100

53 115.4 95.6 143.4

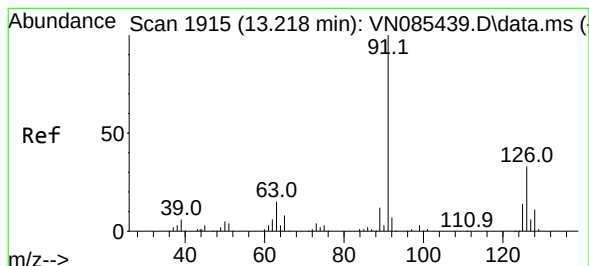
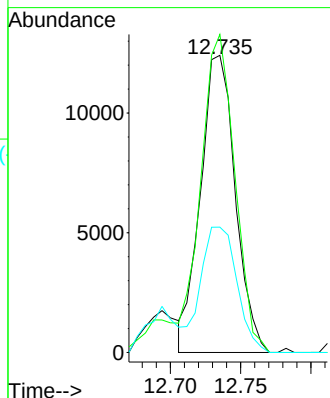
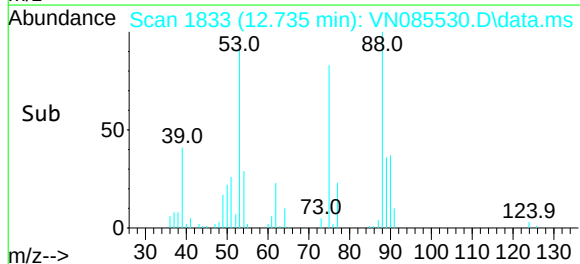
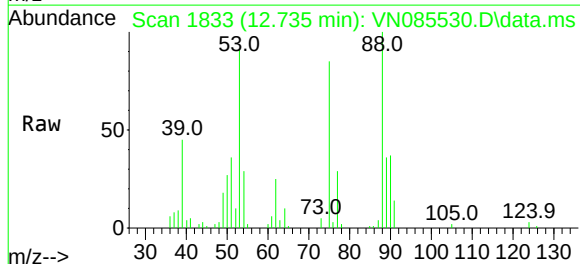
89 44.8 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#82

4-Chlorotoluene

Concen: 21.506 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. 0.000 min

Lab File: VN085530.D

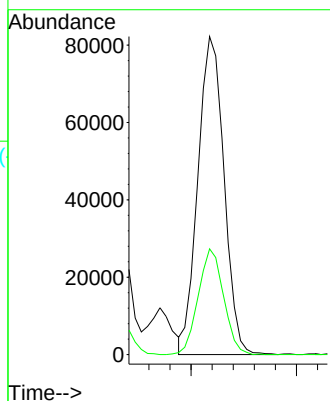
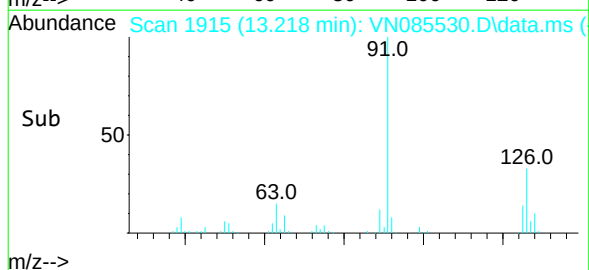
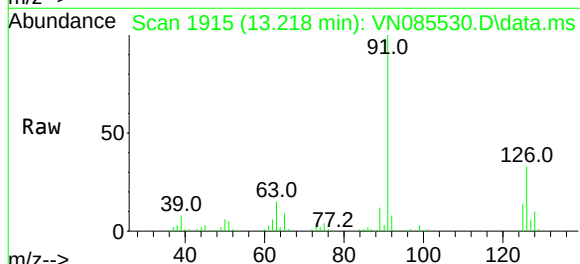
Acq: 28 Jan 2025 11:48

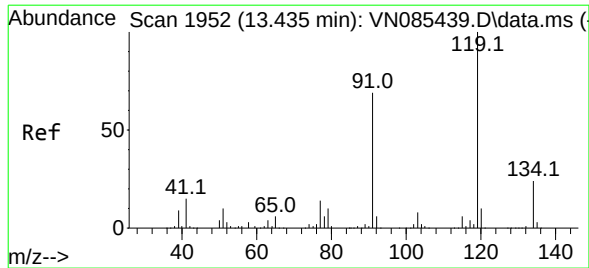
Tgt Ion: 91 Resp: 141708

Ion Ratio Lower Upper

91 100

126 32.2 15.9 47.7





#83

tert-Butylbenzene

Concen: 21.097 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:119 Resp: 126399

Ion Ratio Lower Upper

119 100

91 70.5 35.1 105.3

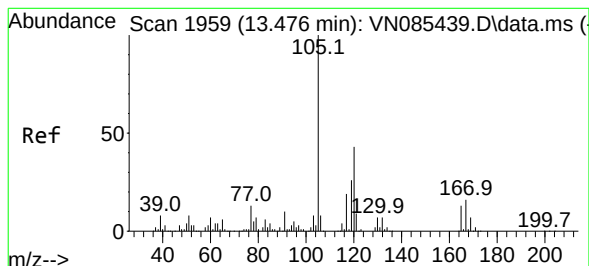
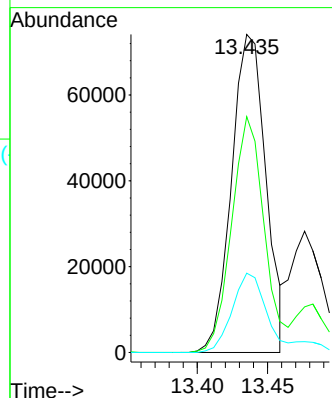
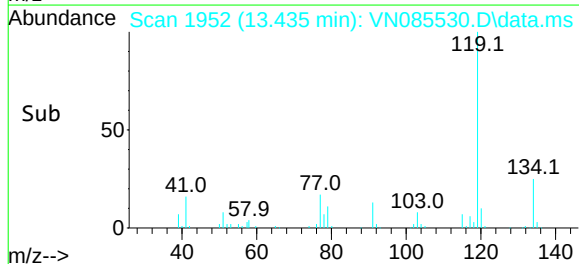
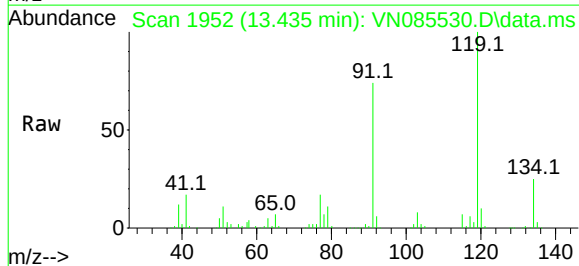
134 27.3 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#84

1,2,4-Trimethylbenzene

Concen: 22.236 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085530.D

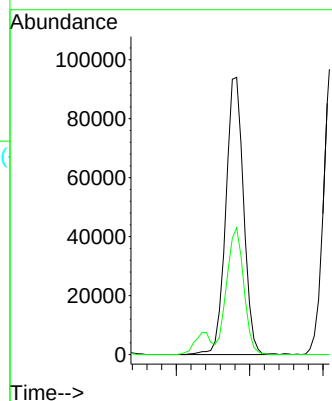
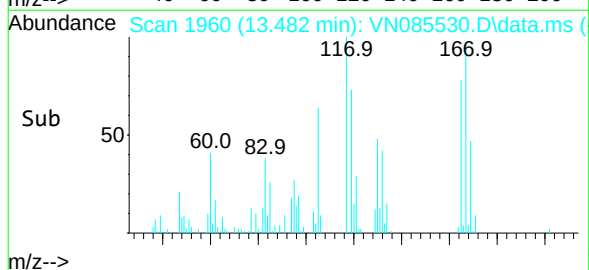
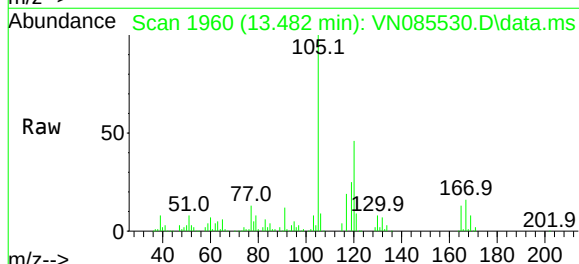
Acq: 28 Jan 2025 11:48

Tgt Ion:105 Resp: 158115

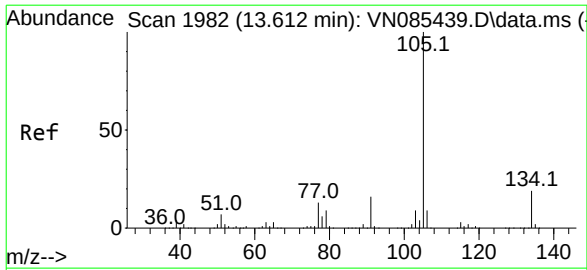
Ion Ratio Lower Upper

105 100

120 43.9 21.6 65.0







#85

sec-Butylbenzene

Concen: 21.297 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:105 Resp: 176846

Ion Ratio Lower Upper

105 100

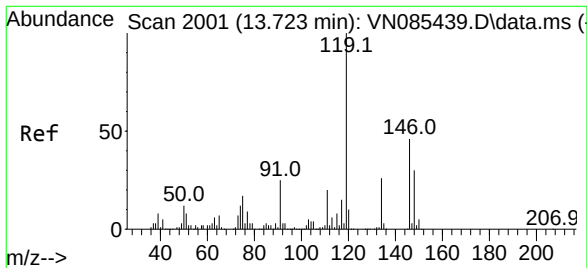
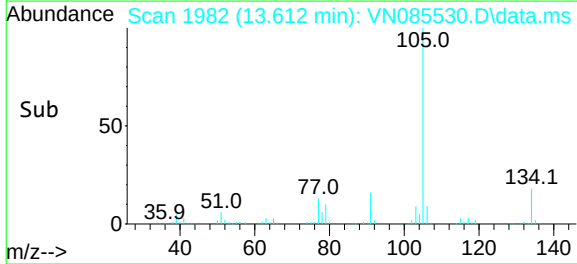
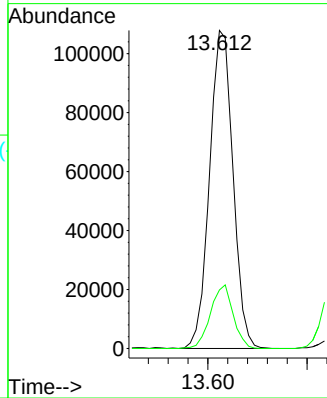
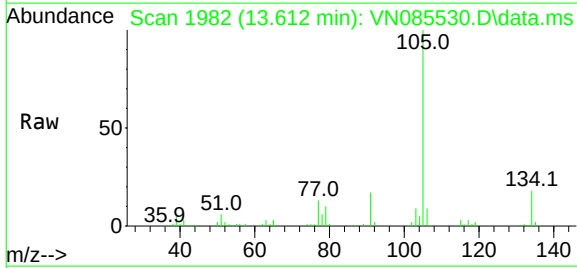
134 19.3 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#86

p-Isopropyltoluene

Concen: 20.822 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

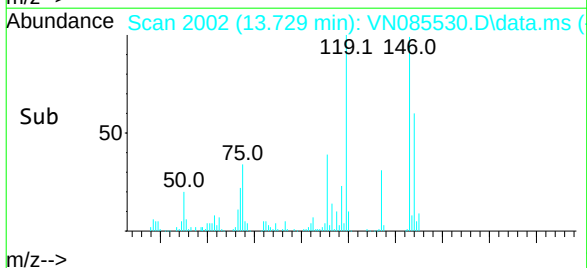
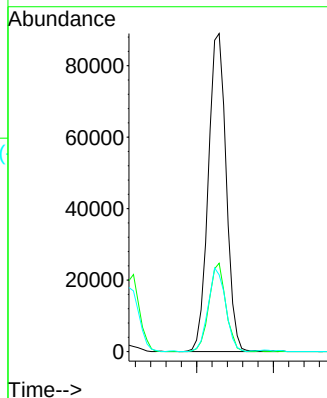
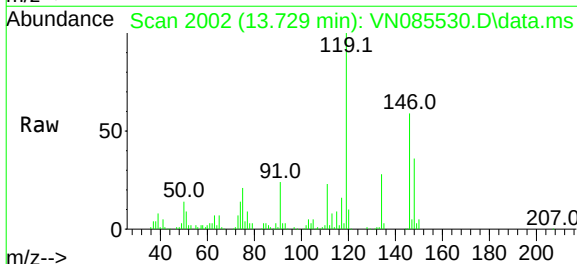
Tgt Ion:119 Resp: 144432

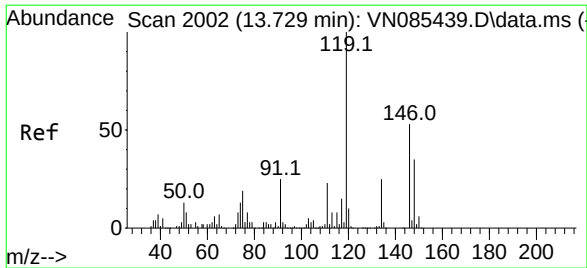
Ion Ratio Lower Upper

119 100

134 26.1 12.7 38.0

91 25.6 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 20.981 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

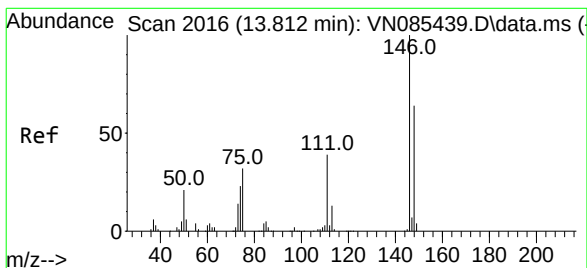
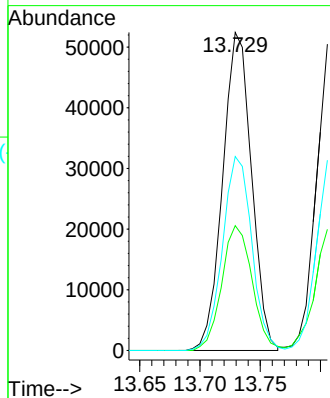
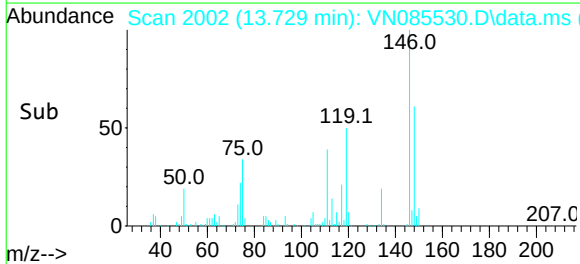
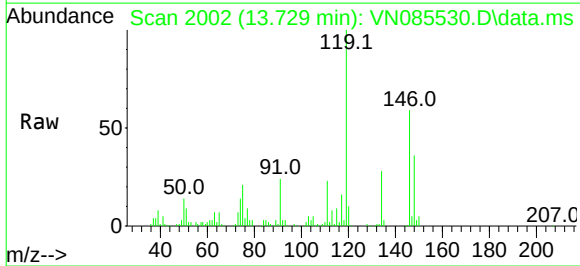
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 87193 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 41.4  | 21.4  | 64.3  |
| 148      | 62.2  | 32.3  | 96.9  |

## Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#88

1,4-Dichlorobenzene

Concen: 20.420 ug/l

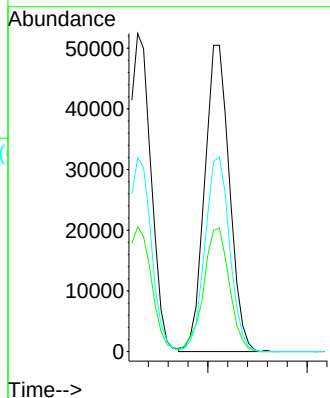
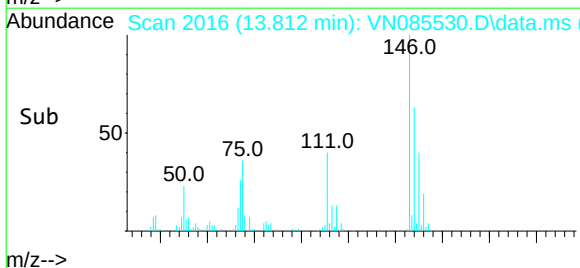
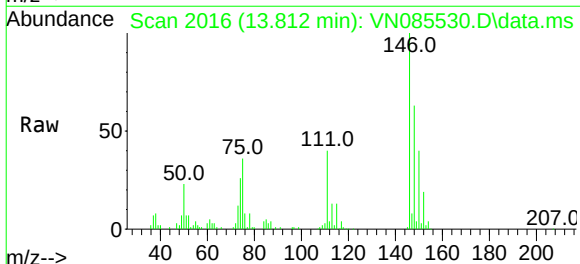
RT: 13.812 min Scan# 2016

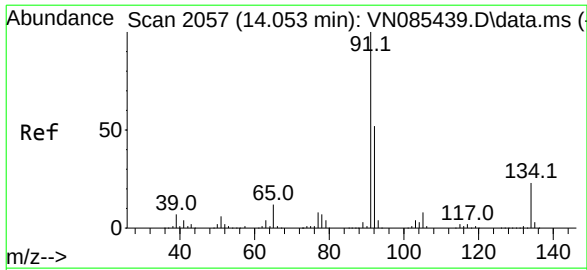
Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 87963 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 41.6  | 21.3  | 63.7  |
| 148      | 63.2  | 32.4  | 97.0  |





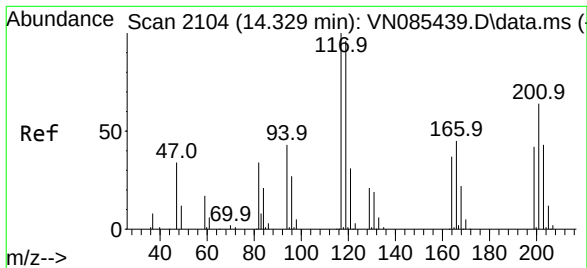
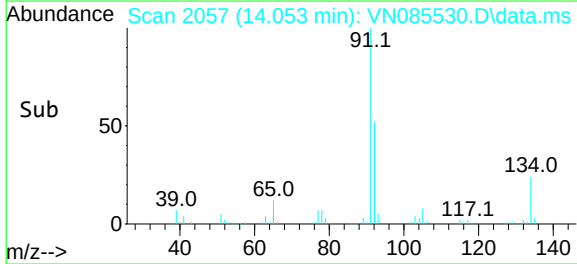
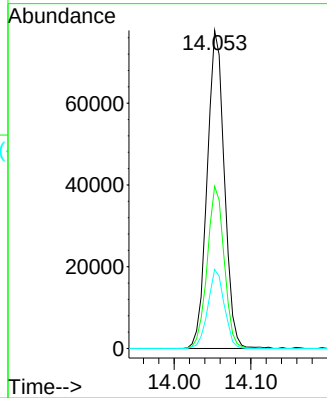
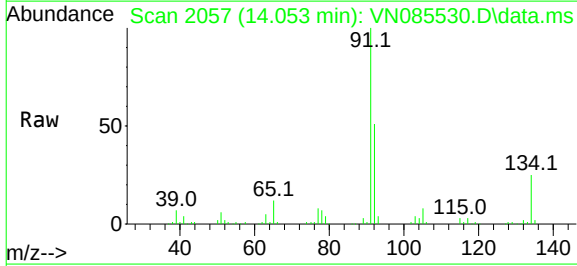
#89  
n-Butylbenzene  
Concen: 20.324 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

| Tgt Ion:  | 91    | Resp: | 121076 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 92        | 50.3  | 25.8  | 77.3   |
| 134       | 23.8  | 11.7  | 35.1   |

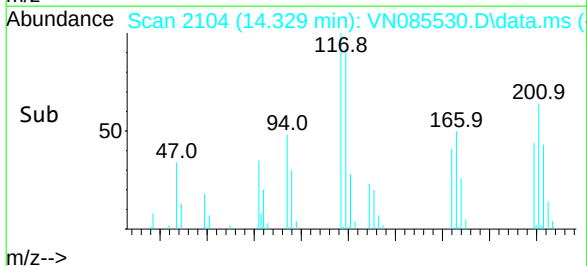
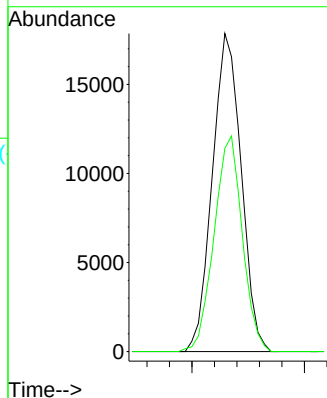
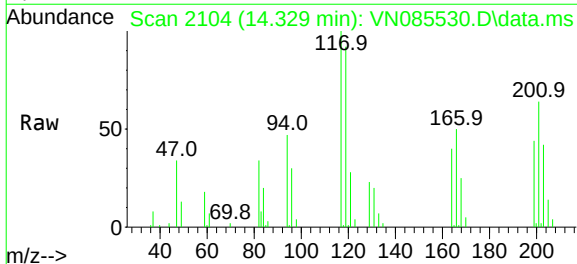
Manual Integrations  
APPROVED

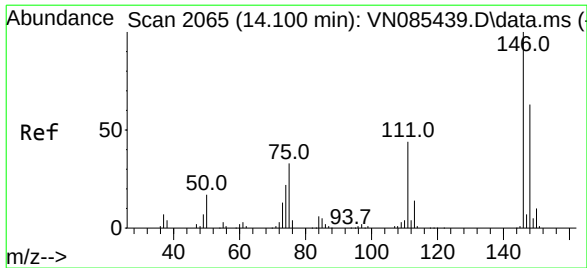
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#90  
Hexachloroethane  
Concen: 20.123 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

| Tgt Ion:  | 117   | Resp: | 31810 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 66.3  | 33.7  | 101.0 |





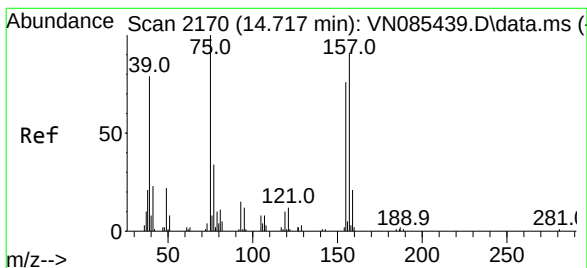
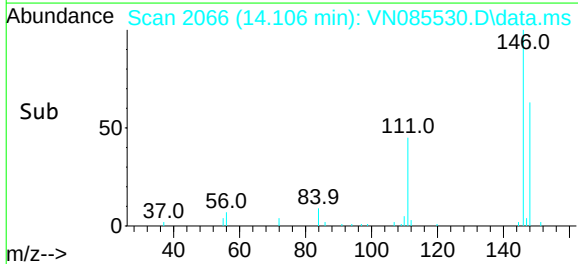
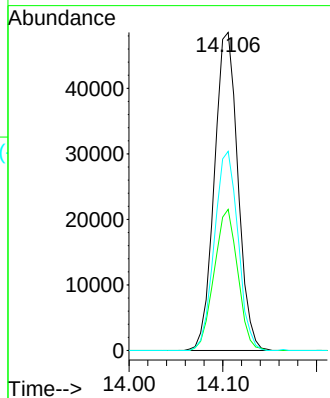
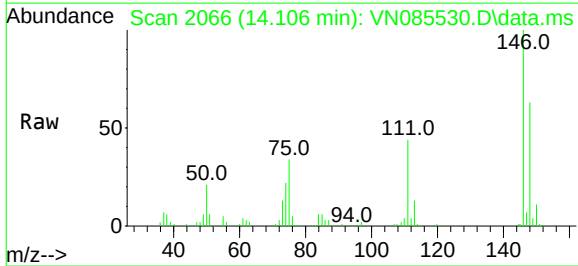
#91  
1,2-Dichlorobenzene  
Concen: 20.397 ug/l  
RT: 14.106 min Scan# 2065  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion:146 Resp: 84554  
Ion Ratio Lower Upper  
146 100  
111 44.6 21.7 65.1  
148 63.0 31.4 94.2

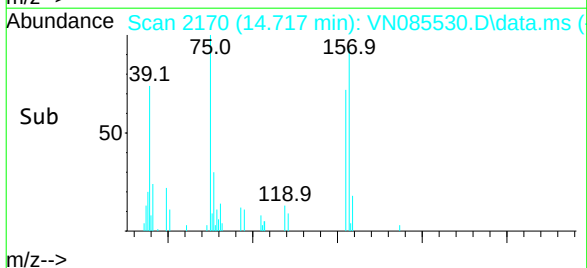
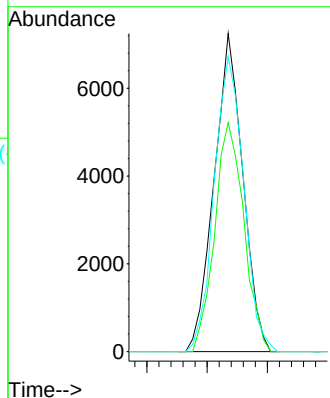
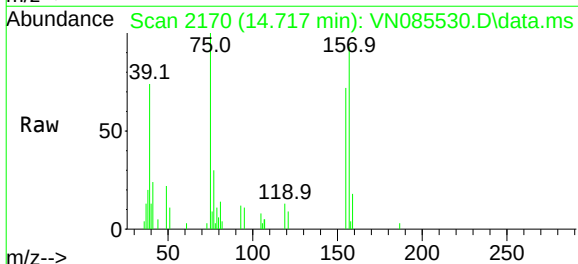
Manual Integrations  
APPROVED

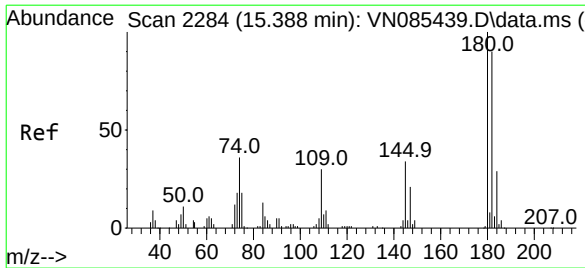
Reviewed By :John Carlone 01/29/2025  
Supervised By :Semsettin Yesilyurt 01/29/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 21.553 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 75 Resp: 12008  
Ion Ratio Lower Upper  
75 100  
155 73.1 36.4 109.2  
157 95.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 19.554 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:180 Resp: 37673

Ion Ratio Lower Upper

180 100

182 96.9 46.8 140.3

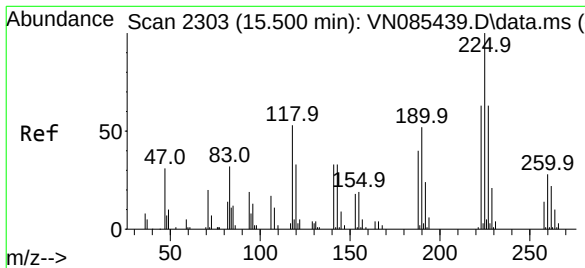
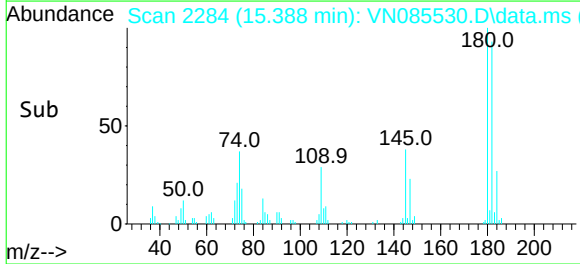
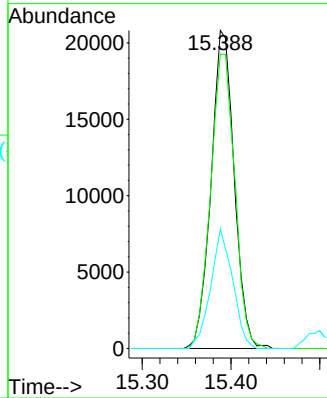
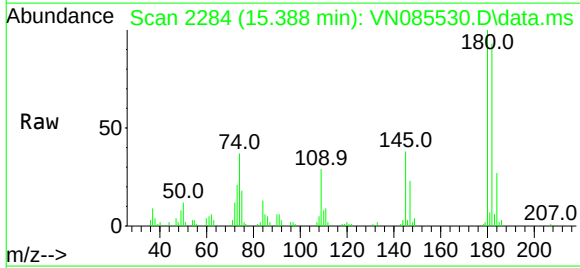
145 35.9 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#94

Hexachlorobutadiene

Concen: 19.644 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

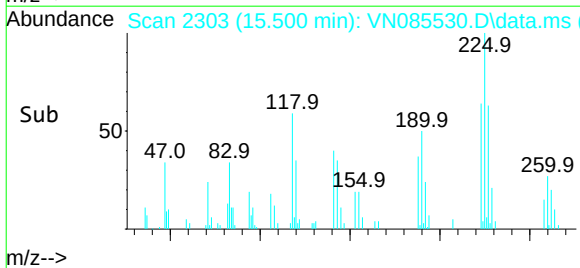
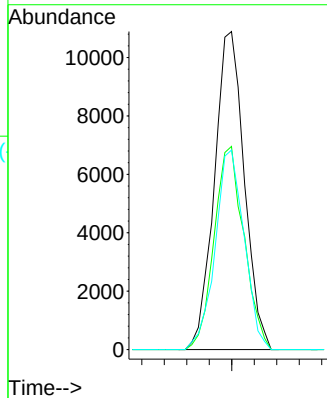
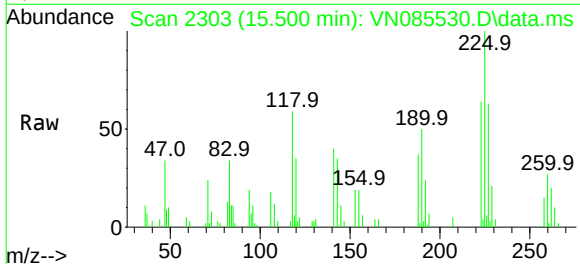
Tgt Ion:225 Resp: 20093

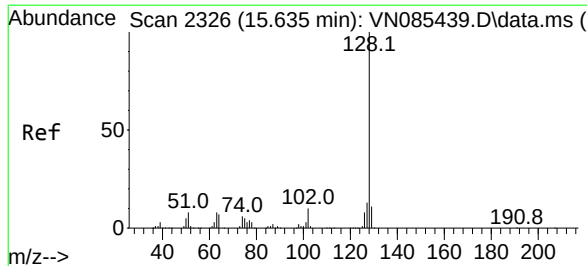
Ion Ratio Lower Upper

225 100

223 63.7 30.7 92.1

227 60.8 30.9 92.5





#95

Naphthalene

Concen: 19.250 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

Tgt Ion:128 Resp: 110672

Ion Ratio Lower Upper

128 100

127 13.4 10.6 16.0

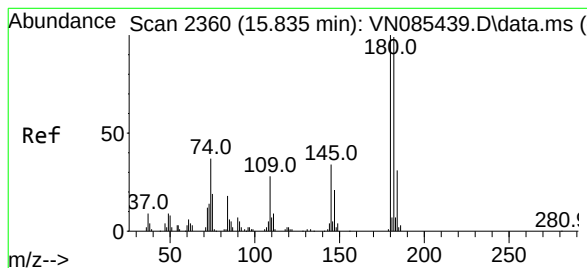
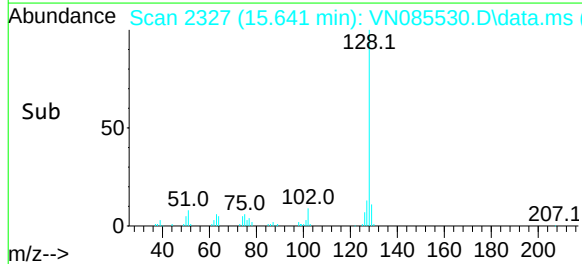
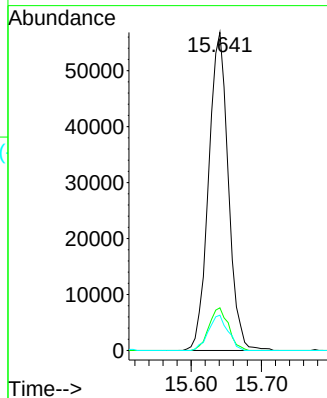
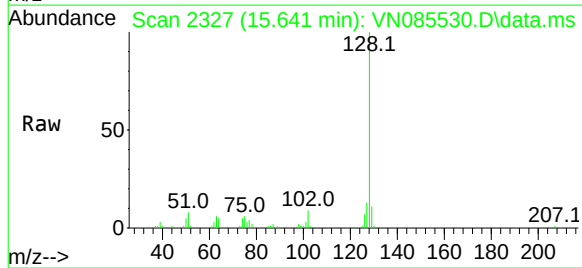
129 11.0 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/29/2025

Supervised By :Semsettin Yesilyurt 01/29/2025



#96

1,2,3-Trichlorobenzene

Concen: 20.356 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

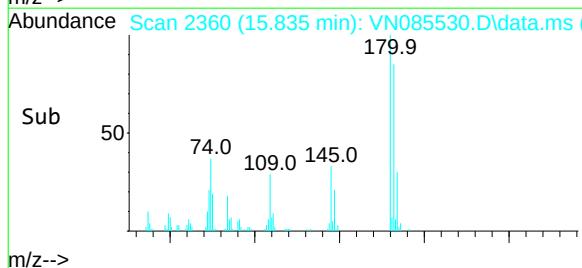
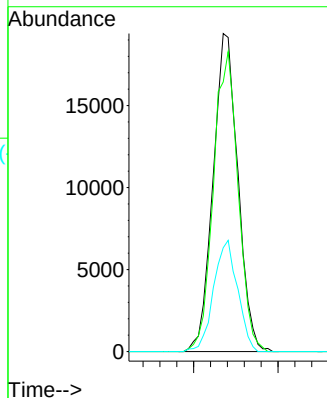
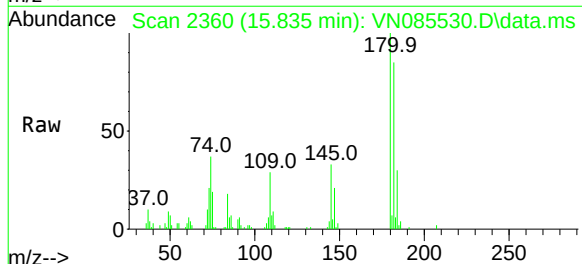
Tgt Ion:180 Resp: 39684

Ion Ratio Lower Upper

180 100

182 93.4 47.4 142.2

145 33.7 16.9 50.7



## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VN011425 | Instrument | MSVOA_n |
|-----------|----------|------------|---------|

| Sample ID   | File ID    | Parameter                       | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|-------------|------------|---------------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| VSTDICC100  | VN085438.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:09 AM | MMDadoda      | 1/15/2025 12:55:19 PM | Peak Integrated by Software |
| VSTDICCC050 | VN085439.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:14 AM | MMDadoda      | 1/15/2025 12:55:22 PM | Peak Integrated by Software |
| VSTDICC020  | VN085440.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:19 AM | MMDadoda      | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC020  | VN085440.D | trans-1,4-Dichloro-2-but ene    | JOHN      | 1/15/2025 9:31:19 AM | MMDadoda      | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC020  | VN085440.D | Vinyl Acetate                   | JOHN      | 1/15/2025 9:31:19 AM | MMDadoda      | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC010  | VN085441.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:23 AM | MMDadoda      | 1/15/2025 12:55:29 PM | Peak Integrated by Software |
| VSTDICC005  | VN085442.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:28 AM | MMDadoda      | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC005  | VN085442.D | Ethyl Acetate                   | JOHN      | 1/15/2025 9:31:28 AM | MMDadoda      | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC005  | VN085442.D | Vinyl Acetate                   | JOHN      | 1/15/2025 9:31:28 AM | MMDadoda      | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC001  | VN085443.D | 1,1,2-Trichlorotrifluoroet hane | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001  | VN085443.D | 1,1-Dichloroethane              | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001  | VN085443.D | 1,2,3-Trichloropropane          | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001  | VN085443.D | 1,4-Dichlorobenzene             | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |

## Manual Integration Report

Sequence:

VN011425

Instrument

MSVOA\_n

| Sample ID  | File ID    | Parameter                   | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|------------|------------|-----------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| VSTDICC001 | VN085443.D | 2-Butanone                  | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | Ethyl Acetate               | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | Vinyl Acetate               | JOHN      | 1/15/2025 9:31:32 AM | MMDadoda      | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICV050 | VN085445.D | 1,2,3-Trichloropropane      | JOHN      | 1/15/2025 9:31:37 AM | MMDadoda      | 1/15/2025 12:55:43 PM | Peak Integrated by Software |
| VSTDICV050 | VN085445.D | trans-1,4-Dichloro-2-butene | JOHN      | 1/15/2025 9:31:37 AM | MMDadoda      | 1/15/2025 12:55:43 PM | Peak Integrated by Software |



## Manual Integration Report

Sequence:

VN012825

Instrument

MSVOA\_n

| Sample ID    | File ID    | Parameter              | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|--------------|------------|------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| VSTDCCC050   | VN085526.D | 1,2,3-Trichloropropane | JOHN      | 1/29/2025 9:37:19 AM | SAM           | 1/29/2025 12:55:25 PM | Peak Integrated by Software |
| VN0128WBS01  | VN085529.D | 1,2,3-Trichloropropane | JOHN      | 1/29/2025 9:37:23 AM | SAM           | 1/29/2025 12:55:23 PM | Peak Integrated by Software |
| VN0128WBSD01 | VN085530.D | 1,2,3-Trichloropropane | JOHN      | 1/29/2025 9:37:28 AM | SAM           | 1/29/2025 12:55:21 PM | Peak Integrated by Software |
| VSTDCCC050   | VN085546.D | 1,2,3-Trichloropropane | JOHN      | 1/29/2025 9:37:40 AM | SAM           | 1/29/2025 12:55:20 PM | Peak Integrated by Software |

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN011425**

|                          |               |                                                       |                       |                      |              |
|--------------------------|---------------|-------------------------------------------------------|-----------------------|----------------------|--------------|
| Review By                | John Carlone  | Review On                                             | 1/15/2025 9:31:51 AM  |                      |              |
| Supervise By             | Maresh Dadoda | Supervise On                                          | 1/15/2025 12:55:51 PM |                      |              |
| SubDirectory             | VN011425      | HP Acquire Method                                     | MSVOA_N               | HP Processing Method | 82N011425W.M |
| STD. NAME                |               | STD REF.#                                             |                       |                      |              |
| Tune/Reschk              |               | VP132529                                              |                       |                      |              |
| Initial Calibration Stds |               | VP132530,VP132531,VP132532,VP132533,VP132534,VP132535 |                       |                      |              |
| CCC                      |               |                                                       |                       |                      |              |
| Internal Standard/PEM    |               |                                                       |                       |                      |              |
| ICV/I.BLK                |               | VP132544                                              |                       |                      |              |
| Surrogate Standard       |               |                                                       |                       |                      |              |
| MS/MSD Standard          |               |                                                       |                       |                      |              |
| LCS Standard             |               |                                                       |                       |                      |              |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | BFB         | VN085437.D     | 14 Jan 2025 14:22 | JC\MD    | Ok     |
| 2   | VSTDICC100  | VN085438.D     | 14 Jan 2025 14:56 | JC\MD    | Ok,M   |
| 3   | VSTDICCC050 | VN085439.D     | 14 Jan 2025 15:19 | JC\MD    | Ok,M   |
| 4   | VSTDICC020  | VN085440.D     | 14 Jan 2025 15:43 | JC\MD    | Ok,M   |
| 5   | VSTDICC010  | VN085441.D     | 14 Jan 2025 16:07 | JC\MD    | Ok,M   |
| 6   | VSTDICC005  | VN085442.D     | 14 Jan 2025 16:31 | JC\MD    | Ok,M   |
| 7   | VSTDICC001  | VN085443.D     | 14 Jan 2025 17:19 | JC\MD    | Ok,M   |
| 8   | IBLK        | VN085444.D     | 14 Jan 2025 17:42 | JC\MD    | Ok     |
| 9   | VSTDICV050  | VN085445.D     | 14 Jan 2025 18:06 | JC\MD    | Ok,M   |

M : Manual Integration

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN012825**

|                                                                                                    |                     |                   |                                   |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Review By                                                                                          | John Carlone        | Review On         | 1/29/2025 9:40:00 AM              |
| Supervise By                                                                                       | Semsettin Yesilyurt | Supervise On      | 1/29/2025 12:55:29 PM             |
| SubDirectory                                                                                       | VN012825            | HP Acquire Method | HP Processing Method 82N011425W.M |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>    |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132723            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132724,VP132725   |                   |                                   |

| Sr# | SampleId       | Data File Name | Date-Time         | Operator | Status |
|-----|----------------|----------------|-------------------|----------|--------|
| 1   | BFB            | VN085525.D     | 28 Jan 2025 09:17 | JC\MD    | Ok     |
| 2   | VSTDCCC050     | VN085526.D     | 28 Jan 2025 09:53 | JC\MD    | Ok,M   |
| 3   | VN0128MBL01    | VN085527.D     | 28 Jan 2025 10:27 | JC\MD    | Ok     |
| 4   | VN0128WBL01    | VN085528.D     | 28 Jan 2025 10:51 | JC\MD    | Ok     |
| 5   | VN0128WBS01    | VN085529.D     | 28 Jan 2025 11:15 | JC\MD    | Ok,M   |
| 6   | VN0128WBSD01   | VN085530.D     | 28 Jan 2025 11:48 | JC\MD    | Ok,M   |
| 7   | IBLK           | VN085531.D     | 28 Jan 2025 12:12 | JC\MD    | Ok     |
| 8   | Q1180-04       | VN085532.D     | 28 Jan 2025 12:36 | JC\MD    | Ok     |
| 9   | Q1194-09       | VN085533.D     | 28 Jan 2025 13:00 | JC\MD    | Ok     |
| 10  | Q1199-01       | VN085534.D     | 28 Jan 2025 13:24 | JC\MD    | Ok     |
| 11  | Q1199-02       | VN085535.D     | 28 Jan 2025 13:49 | JC\MD    | Ok     |
| 12  | Q1199-03       | VN085536.D     | 28 Jan 2025 14:13 | JC\MD    | Ok     |
| 13  | Q1199-04       | VN085537.D     | 28 Jan 2025 14:37 | JC\MD    | Ok     |
| 14  | Q1199-05       | VN085538.D     | 28 Jan 2025 15:01 | JC\MD    | Ok     |
| 15  | Q1199-06       | VN085539.D     | 28 Jan 2025 15:25 | JC\MD    | ReRun  |
| 16  | Q1199-07       | VN085540.D     | 28 Jan 2025 15:49 | JC\MD    | Ok     |
| 17  | PB166233ZHE#11 | VN085541.D     | 28 Jan 2025 16:13 | JC\MD    | Ok     |
| 18  | PB166233ZHE#12 | VN085542.D     | 28 Jan 2025 16:37 | JC\MD    | Ok     |
| 19  | PB166233ZHE#13 | VN085543.D     | 28 Jan 2025 17:01 | JC\MD    | Ok     |
| 20  | IBLK           | VN085544.D     | 28 Jan 2025 17:25 | JC\MD    | Ok     |
| 21  | Q1199-06       | VN085545.D     | 28 Jan 2025 17:50 | JC\MD    | Ok     |

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN012825**

| Review By                                                                                          | John Carlone        | Review On         | 1/29/2025 9:40:00 AM              |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                                                                                       | Semsettin Yesilyurt | Supervise On      | 1/29/2025 12:55:29 PM             |
| SubDirectory                                                                                       | VN012825            | HP Acquire Method | HP Processing Method 82N011425W.M |
| STD. NAME                                                                                          | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132723            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132724,VP132725   |                   |                                   |

|    |            |            |                   |       |      |
|----|------------|------------|-------------------|-------|------|
| 22 | VSTDCCC050 | VN085546.D | 28 Jan 2025 18:14 | JC\MD | Ok,M |
|----|------------|------------|-------------------|-------|------|

M : Manual Integration

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN011425**

|              |               |                   |                                           |
|--------------|---------------|-------------------|-------------------------------------------|
| Review By    | John Carlone  | Review On         | 1/15/2025 9:31:51 AM                      |
| Supervise By | Maresh Dadoda | Supervise On      | 1/15/2025 12:55:51 PM                     |
| SubDirectory | VN011425      | HP Acquire Method | MSVOA_N HP Processing Method 82N011425W.M |

| STD. NAME                                                                                                                                         | STD REF.#                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Tune/Reschk<br>Initial Calibration Stds<br><br>CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132529<br>VP132530,VP132531,VP132532,VP132533,VP132534,VP132535<br><br><br><br><br>VP132544 |

| Sr# | SampleID    | ClientID    | Data File Name | Date-Time         | Comment                             | Operator | Status |
|-----|-------------|-------------|----------------|-------------------|-------------------------------------|----------|--------|
| 1   | BFB         | BFB         | VN085437.D     | 14 Jan 2025 14:22 |                                     | JC\MD    | Ok     |
| 2   | VSTDICC100  | VSTDICC100  | VN085438.D     | 14 Jan 2025 14:56 |                                     | JC\MD    | Ok,M   |
| 3   | VSTDICCC050 | VSTDICCC050 | VN085439.D     | 14 Jan 2025 15:19 | Comp.#56 is on Linear Regression    | JC\MD    | Ok,M   |
| 4   | VSTDICC020  | VSTDICC020  | VN085440.D     | 14 Jan 2025 15:43 | Comp.#86 is on Quadratic Regression | JC\MD    | Ok,M   |
| 5   | VSTDICC010  | VSTDICC010  | VN085441.D     | 14 Jan 2025 16:07 |                                     | JC\MD    | Ok,M   |
| 6   | VSTDICC005  | VSTDICC005  | VN085442.D     | 14 Jan 2025 16:31 |                                     | JC\MD    | Ok,M   |
| 7   | VSTDICC001  | VSTDICC001  | VN085443.D     | 14 Jan 2025 17:19 |                                     | JC\MD    | Ok,M   |
| 8   | IBLK        | IBLK        | VN085444.D     | 14 Jan 2025 17:42 |                                     | JC\MD    | Ok     |
| 9   | VSTDICV050  | ICVVN011425 | VN085445.D     | 14 Jan 2025 18:06 |                                     | JC\MD    | Ok,M   |

M : Manual Integration

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN012825**

|              |                     |                   |                                   |
|--------------|---------------------|-------------------|-----------------------------------|
| Review By    | John Carlone        | Review On         | 1/29/2025 9:40:00 AM              |
| Supervise By | Semsettin Yesilyurt | Supervise On      | 1/29/2025 12:55:29 PM             |
| SubDirectory | VN012825            | HP Acquire Method | HP Processing Method 82N011425W.M |

| STD. NAME                                                                                          | STD REF.#         |
|----------------------------------------------------------------------------------------------------|-------------------|
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132723          |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132724,VP132725 |

| Sr# | SampleID       | ClientID             | Data File Name | Date-Time         | Comment                    | Operator | Status |
|-----|----------------|----------------------|----------------|-------------------|----------------------------|----------|--------|
| 1   | BFB            | BFB                  | VN085525.D     | 28 Jan 2025 09:17 |                            | JC\MD    | Ok     |
| 2   | VSTDCCC050     | VSTDCCC050           | VN085526.D     | 28 Jan 2025 09:53 | V13516                     | JC\MD    | Ok,M   |
| 3   | VN0128MBL01    | VN0128MBL01          | VN085527.D     | 28 Jan 2025 10:27 |                            | JC\MD    | Ok     |
| 4   | VN0128WBL01    | VN0128WBL01          | VN085528.D     | 28 Jan 2025 10:51 |                            | JC\MD    | Ok     |
| 5   | VN0128WBS01    | VN0128WBS01          | VN085529.D     | 28 Jan 2025 11:15 |                            | JC\MD    | Ok,M   |
| 6   | VN0128WBSD01   | VN0128WBSD01         | VN085530.D     | 28 Jan 2025 11:48 |                            | JC\MD    | Ok,M   |
| 7   | IBLK           | IBLK                 | VN085531.D     | 28 Jan 2025 12:12 |                            | JC\MD    | Ok     |
| 8   | Q1180-04       | Storage-Blank-SAMPLE | VN085532.D     | 28 Jan 2025 12:36 | vial B pH<2                | JC\MD    | Ok     |
| 9   | Q1194-09       | FB                   | VN085533.D     | 28 Jan 2025 13:00 | vial B pH<2 FB             | JC\MD    | Ok     |
| 10  | Q1199-01       | BP-VPB-192-TB-20250  | VN085534.D     | 28 Jan 2025 13:24 | vial A pH<2 TB             | JC\MD    | Ok     |
| 11  | Q1199-02       | BP-VPB-192-EB-20250  | VN085535.D     | 28 Jan 2025 13:49 | vial A pH<2 EB             | JC\MD    | Ok     |
| 12  | Q1199-03       | BP-VPB-192-GW-280-2  | VN085536.D     | 28 Jan 2025 14:13 | vial A pH<2                | JC\MD    | Ok     |
| 13  | Q1199-04       | BP-VPB-192-GW-260-2  | VN085537.D     | 28 Jan 2025 14:37 | vial A pH<2                | JC\MD    | Ok     |
| 14  | Q1199-05       | BP-VPB-192-GW-240-2  | VN085538.D     | 28 Jan 2025 15:01 | vial A pH<2                | JC\MD    | Ok     |
| 15  | Q1199-06       | BP-VPB-192-GW-220-2  | VN085539.D     | 28 Jan 2025 15:25 | vial A pH<2 Surrogate Fail | JC\MD    | ReRun  |
| 16  | Q1199-07       | BP-VPB-192-GW-DUP4   | VN085540.D     | 28 Jan 2025 15:49 | vial A pH<2                | JC\MD    | Ok     |
| 17  | PB166233ZHE#11 | PB166233ZHE#11       | VN085541.D     | 28 Jan 2025 16:13 |                            | JC\MD    | Ok     |
| 18  | PB166233ZHE#12 | PB166233ZHE#12       | VN085542.D     | 28 Jan 2025 16:37 |                            | JC\MD    | Ok     |

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN012825**

|                                                                                                    |                     |                   |                                   |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Review By                                                                                          | John Carlone        | Review On         | 1/29/2025 9:40:00 AM              |
| Supervise By                                                                                       | Semsettin Yesilyurt | Supervise On      | 1/29/2025 12:55:29 PM             |
| SubDirectory                                                                                       | VN012825            | HP Acquire Method | HP Processing Method 82N011425W.M |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>    |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132723            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132724,VP132725   |                   |                                   |

|    |                |                     |            |                   |             |       |      |
|----|----------------|---------------------|------------|-------------------|-------------|-------|------|
| 19 | PB166233ZHE#13 | PB166233ZHE#13      | VN085543.D | 28 Jan 2025 17:01 |             | JC\MD | Ok   |
| 20 | IBLK           | IBLK                | VN085544.D | 28 Jan 2025 17:25 |             | JC\MD | Ok   |
| 21 | Q1199-06       | BP-VPB-192-GW-220-2 | VN085545.D | 28 Jan 2025 17:50 | vial B pH<2 | JC\MD | Ok   |
| 22 | VSTDCCC050     | VSTDCCC050EC        | VN085546.D | 28 Jan 2025 18:14 |             | JC\MD | Ok,M |

M : Manual Integration

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1199

**Test :** VOCMS Group1

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VN012825,

**Standard ID :**

VP130430,VP131746,VP131767,VP132035,VP132096,VP132468,VP132613,VP132723,VP132724,VP132725,

**Chemical ID :**

V13391,V13446,V13457,V13460,V13465,V13466,V13707,V14145,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14614,V14624,V14627,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14754,V14756,V14801,V14814,V14830,V14831,V14832,W3112,



## VOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>            | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>  | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 617              | 8260 Surrogate, 400PPM | <a href="#">VP130430</a> | 09/20/2024       | 02/28/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 09/26/2024       |                        |                          |                  |                        |                     |                |                  |                      |

**FROM** 0.40000ml of V13707 + 24.60000ml of V14145 = Final Quantity: 25.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                    | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>  | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|--------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 247              | 8260 Internal Standard, 250PPM | <a href="#">VP131746</a> | 11/22/2024       | 05/18/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 11/23/2024       |                                |                          |                  |                        |                     |                |                  |                      |

**FROM** 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

## VOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>  | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|-------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 218              | BFB, 25PPM  | <a href="#">VP131767</a> | 11/22/2024       | 05/18/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
|                  |             |                          |                  |                        |                     |                |                  | 11/27/2024           |

**FROM** 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                    | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>  | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|--------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 1810             | 8260 Working Std(2-CVE)-800ppm | <a href="#">VP132035</a> | 12/10/2024       | 06/10/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
|                  |                                |                          |                  |                        |                     |                |                  | 12/12/2024           |

**FROM** 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

## VOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                                                                                                                              | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>  | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 719              | 8260 Working STD (BCM)-First source, 400PPM                                                                                              | <a href="#">VP132096</a> | 12/12/2024       | 06/10/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 12/19/2024       |                                                                                                                                          |                          |                  |                        |                     |                |                  |                      |
| <u>FROM</u>      | 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final Quantity: 25.000 ml |                          |                  |                        |                     |                |                  |                      |



## VOC STANDARD PREPARATION LOG

| <u>Recipe ID</u>   | <u>NAME</u>                                                                                                                                                                                                                                                                                                                                                                   | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u>     | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>            |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|------------------------|------------------------|----------------|------------------|---------------------------------|
| 257                | 8260 Calibration Working STD<br>Mix-First source, 160PPM                                                                                                                                                                                                                                                                                                                      | <a href="#">VP132613</a> | 01/20/2025       | 02/28/2025             | Semsettin<br>Yesilyurt | None           | None             | Mahesh Dadoda<br><br>01/29/2025 |
| <b><u>FROM</u></b> | 0.40000ml of V13446 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 +<br>1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 +<br>1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = Final<br>Quantity: 25.000 ml |                          |                  |                        |                        |                |                  |                                 |

| <u>Recipe ID</u> | <u>NAME</u>                                                             | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>        |
|------------------|-------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------|
| 589              | BFB TUNE CHECK                                                          | <a href="#">VP132723</a> | 01/28/2025       | 01/29/2025             | John Carlone       | None           | None             | Mahesh Dadoda<br>01/29/2025 |
| <u>FROM</u>      | 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml |                          |                  |                        |                    |                |                  |                             |

## VOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                                                                                                                                                                                     | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>        |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------|
| 620              | 50 PPB CCC, 8260-Water                                                                                                                                                                          | <a href="#">VP132724</a> | 01/28/2025       | 01/29/2025             | John Carlone       | None           | None             | Mahesh Dadoda<br>01/29/2025 |
| <u>FROM</u>      | 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml |                          |                  |                        |                    |                |                  |                             |

| <u>Recipe ID</u> | <u>NAME</u>                                                                                                                                                                                     | <u>NO.</u>               | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>        |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------|
| 620              | 50 PPB CCC, 8260-Water                                                                                                                                                                          | <a href="#">VP132725</a> | 01/28/2025       | 01/29/2025             | John Carlone       | None           | None             | Mahesh Dadoda<br>01/29/2025 |
| <u>FROM</u>      | 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml |                          |                  |                        |                    |                |                  |                             |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName          | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30067 / BFB tuneing solution | A0191805 | 11/22/2025      | 11/22/2024 / SAM        | 01/13/2023 / SAM            | V13391         |

| Supplier | ItemCode / ItemName                                     | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0181905 | 02/28/2025      | 01/10/2025 / SAM        | 01/23/2023 / SAM            | V13446         |

| Supplier | ItemCode / ItemName                                             | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025      | 12/12/2024 / SAM        | 01/27/2023 / SAM            | V13457         |

| Supplier | ItemCode / ItemName                                             | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025      | 12/12/2024 / SAM        | 01/27/2023 / SAM            | V13460         |

| Supplier | ItemCode / ItemName                                             | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025      | 12/12/2024 / SAM        | 01/27/2023 / SAM            | V13465         |

| Supplier | ItemCode / ItemName                                             | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025      | 12/12/2024 / SAM        | 01/27/2023 / SAM            | V13466         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                         | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 06/10/2025      | 06/10/2024 / SAM        | 04/12/2023 / SAM            | V13707         |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 02/28/2025      | 08/29/2024 / SAM        | 02/06/2024 / SAM            | V14145         |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 05/18/2025      | 11/18/2024 / pedro      | 02/06/2024 / SAM            | V14154         |

| Supplier                 | ItemCode / ItemName                            | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 07/10/2025      | 01/10/2025 / SAM        | 02/20/2024 / SAM            | V14175         |

| Supplier                 | ItemCode / ItemName                            | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 07/10/2025      | 01/10/2025 / SAM        | 02/20/2024 / SAM            | V14176         |

| Supplier | ItemCode / ItemName                                     | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555581 / Custom Standard, 8260 Internal Std [CS 5179-1] | A0210184 | 11/22/2025      | 11/22/2024 / SAM        | 04/15/2024 / SAM            | V14289         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0209618 | 07/10/2025      | 01/10/2025 / SAM        | 08/15/2024 / SAM            | V14433         |

| Supplier | ItemCode / ItemName                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0209618 | 07/10/2025      | 01/10/2025 / SAM        | 08/15/2024 / SAM            | V14439         |

| Supplier                 | ItemCode / ItemName                     | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 091724 | 07/10/2025      | 01/10/2025 / SAM        | 09/18/2024 / SAM            | V14521         |

| Supplier                 | ItemCode / ItemName                     | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 091724 | 07/10/2025      | 01/10/2025 / SAM        | 09/18/2024 / SAM            | V14522         |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 06/10/2025      | 12/10/2024 / SAM        | 11/26/2024 / SAM            | V14614         |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 23I0762004 | 07/13/2025      | 01/13/2025 / SAM        | 11/26/2024 / SAM            | V14624         |



## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 23I0762004 | 07/06/2025      | 01/06/2025 / SAM        | 11/26/2024 / SAM            | V14627         |

| Supplier                 | ItemCode / ItemName         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025      | 12/10/2024 / SAM        | 12/06/2024 / SAM            | V14630         |

| Supplier                 | ItemCode / ItemName         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025      | 12/10/2024 / SAM        | 12/06/2024 / SAM            | V14631         |

| Supplier                 | ItemCode / ItemName         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025      | 12/10/2024 / SAM        | 12/06/2024 / SAM            | V14632         |

| Supplier                 | ItemCode / ItemName         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025      | 12/10/2024 / SAM        | 12/06/2024 / SAM            | V14633         |

| Supplier | ItemCode / ItemName                                                        | Lot #     | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------|-----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025      | 01/10/2025 / SAM        | 12/17/2024 / SAM            | V14722         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                                        | Lot #     | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------|-----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025      | 01/10/2025 / SAM        | 12/17/2024 / SAM            | V14723         |

| Supplier | ItemCode / ItemName                                                        | Lot #     | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------|-----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025      | 01/10/2025 / SAM        | 12/17/2024 / SAM            | V14724         |

| Supplier | ItemCode / ItemName                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 05/31/2031      | 01/10/2025 / SAM        | 12/17/2024 / SAM            | V14754         |

| Supplier | ItemCode / ItemName                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 07/10/2025      | 01/10/2025 / SAM        | 12/17/2024 / SAM            | V14756         |

| Supplier | ItemCode / ItemName                                                               | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE | A0220563 | 06/30/2026      | 01/10/2025 / SAM        | 01/08/2025 / SAM            | V14801         |

LOTS

| 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 | A0220471 | 07/10/2025      | 01/10/2025 / SAM        | 01/08/2025 / SAM            | V14814         |

LOTS

## CHEMICAL RECEIPT LOG BOOK

| Supplier                 | ItemCode / ItemName           | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025      | 01/08/2025 / SAM        | 01/08/2025 / SAM            | V14830         |

| Supplier                 | ItemCode / ItemName           | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025      | 01/08/2025 / SAM        | 01/08/2025 / SAM            | V14831         |

| Supplier                 | ItemCode / ItemName           | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025      | 01/08/2025 / SAM        | 01/08/2025 / SAM            | V14832         |

| Supplier         | ItemCode / ItemName | Lot #               | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------|---------------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | DIW / DI Water      | Daily Lab-Certified | 07/03/2029      | 07/03/2024 / lwona      | 07/03/2024 / lwona          | W3112          |

Methanol  
ULTRA RESI-ANALYZED  
For Purge and Trap Analysis



Material No.: 9077-02  
Batch No.: 23I0762004  
Manufactured Date: 2023-08-11  
Expiration Date: 2026-08-10  
Revision No.: 0

## Certificate of Analysis

| Test                                                    | Specification | Result   |
|---------------------------------------------------------|---------------|----------|
| Assay (CH <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.5 ppm  |
| Titration Acid (μeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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



Material No.: 9077-02  
Batch No.: 23I0762004  
Manufactured Date: 2023-08-11  
Expiration Date: 2026-08-10  
Revision No.: 0

## Certificate of Analysis

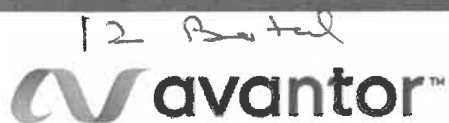
| Test                                                    | Specification | Result   |
|---------------------------------------------------------|---------------|----------|
| Assay (CH <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.5 ppm  |
| Titration Acid (μeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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



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 <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.2 ppm  |
| Titration Acid (μeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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

Jamie Ethier  
Vice President Global Quality



## Certified Reference Material CRM



## CERTIFIED WEIGHT REPORT

Part Number: **91980**  
Lot Number: **010725**  
Description: **Acrolein**

Expiration Date: **020725**Recommended Storage: **Refrigerate (4 °C)**Nominal Concentration (µg/mL): **5000**NIST Test ID#: **6UTB**

Solvent(s): **Water** Lot# **072324Q**

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

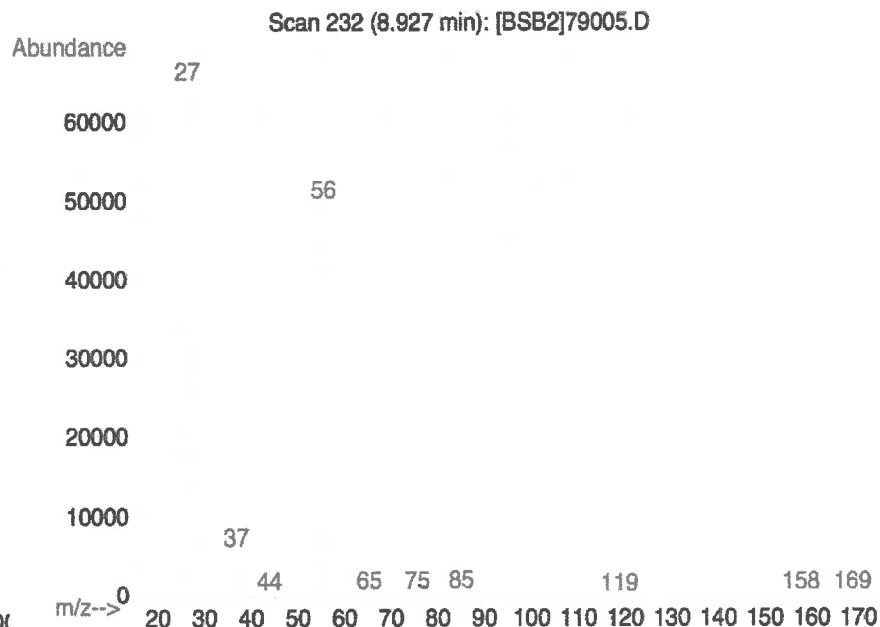
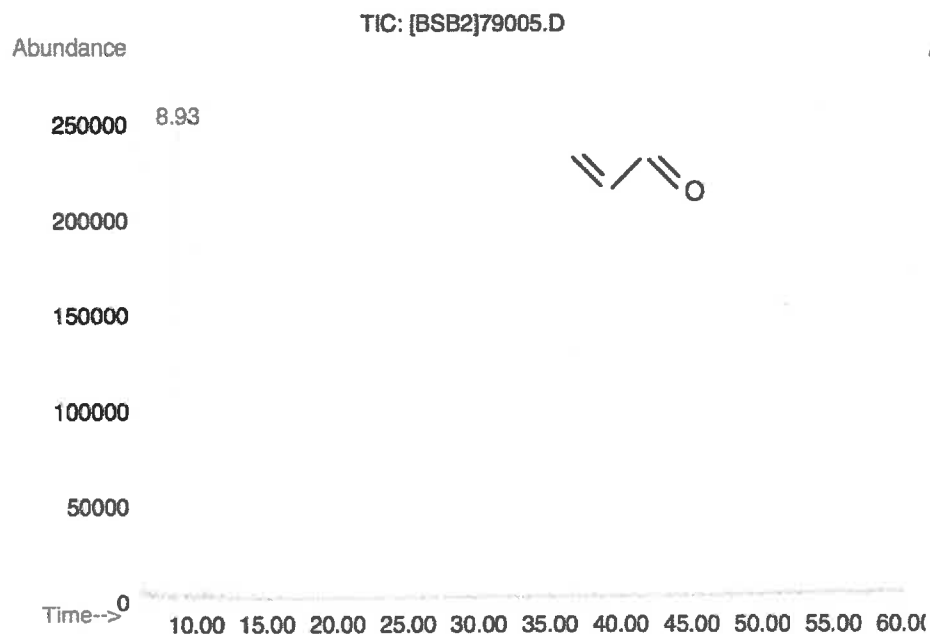
Weight(s) shown below were combined and diluted to (mL): **10.0**

|                        |                 |        |
|------------------------|-----------------|--------|
| <i>Anthony Mahoney</i> |                 | 010725 |
| Formulated By:         | Anthony Mahoney | DATE   |
| <i>Pedro L. Rentas</i> |                 | 010725 |
| Reviewed By:           | Pedro L. Rentas | DATE   |

5 vial  
V 14823 to  
V 14829 V14827

| 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<br>(Solvent Safety Info. On Attached pg.) |                |                 |
|-------------|-----|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|-----------------------------------------------------------|----------------|-----------------|
|             |     |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                      | OSHA PEL (TWA) | LD50            |
| 1. Acrolein | 5   | 103755V10F | 5000                 | 97         | 0.5                | 0.05166          | 0.05178          | 5011.8              | 52.6                               | 107-02-8                                                  | 0.1 ppm        | ori-rat 46mg/kg |

Method: GC6MSD-1. Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

## Safety Data Sheet (SDS)

GHS/OSHA Compliant

## Section I Product and Company Identification

## IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

|                     |                        |                                   |                 |
|---------------------|------------------------|-----------------------------------|-----------------|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA  | 1-800-535-5053  |
| Address             | 44 Rossetto Dr.        | Emergency Telephone International | 1-352-323-3500  |
|                     | Hamden CT, 06514       | Date Prepared/Revised             | January 1, 2024 |

## Section II - Hazards Identification

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

|          |                                      |              |                                               |
|----------|--------------------------------------|--------------|-----------------------------------------------|
| P271     | Use in ventilated area               | H315         | Causes skin and eye irritation.               |
| P302,332 | If on skin, wash with soap and water | P280         | Use gloves, eye protection/face shield        |
|          |                                      | P305,351,338 | If in eyes, remove contacts, rinse with water |



Signal Word: DANGER

## Section III - Composition

|                                                         |                 |              |
|---------------------------------------------------------|-----------------|--------------|
| Components (Specific Chemical Identity; Common Name(s)) | CAS#: 7732-18-5 | % (optional) |
| Water                                                   |                 | > 97         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                                  |                                                                          |
|----------------------------------|--------------------------------------------------------------------------|
| Suitable extinguishing media     | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Protective equipment for fire    | Wear self contained breathing apparatus for fire fighting if necessary.  |
| Hazardous Decomposition products | Carbon oxides                                                            |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.                                                                                         |
|                               | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.                                                |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                        |                                                                            |
|-----------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------|
| Water                                                                                         | CAS#: 7732-18-5        | TWA: 500 ppm                                                               |
| Personal protective equipment                                                                 | Respiratory protection | Handle with gloves. Gloves must be inspected prior to use. Eye protection. |
| Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product. |                        |                                                                            |

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

|                        |       |                            |   |
|------------------------|-------|----------------------------|---|
| Boiling Point          | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) |       | Melting Point              |   |



|                         |                                                    |                                         |     |
|-------------------------|----------------------------------------------------|-----------------------------------------|-----|
| Vapor Density (AIR = 1) | NA                                                 | Evaporation rate<br>(Butyl Acetate = 1) | 0°C |
| Solubility in Water     | Completely miscible                                |                                         | NA  |
| Appearance and Odor     | CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR. |                                         |     |

**Section X. STABILITY AND REACTIVITY**

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| Chemical stability                 | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | NA                                           |
| Conditions to avoid                | NA                                           |
| Materials to avoid                 | NA                                           |
| Hazardous decomposition products - | No data available                            |

**Section XI. TOXICOLOGICAL INFORMATION**

|                          |    |
|--------------------------|----|
| LD50 Oral - Rat          | NA |
| LC50 Inhalation - Rat    | NA |
| LD50 Dermal - Guinea pig | NA |
| Causes skin irritation.  |    |
| Eye irritation           |    |

**Section XII. ECOLOGICAL INFORMATION**

|      |    |
|------|----|
| LC50 | NA |
| EC50 | NA |

**Section XIII. DISPOSAL CONSIDERATIONS**

Dispose with normal Laboratory Solvent Waste.

**Section XIV. TRANSPORT INFORMATION**

|                             |                             |
|-----------------------------|-----------------------------|
| DOT (US)                    | IATA                        |
| Not dangerous goods         | Not dangerous goods         |
| Proper shipping name: Water | Proper shipping name: Water |

**Section XV. REGULATORY INFORMATION**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## Certified Reference Material CRM


 ANAB ISO 17034 Accredited  
 AR-1539 Certificate Number  
<https://Absolutestandards.com>

## CERTIFIED WEIGHT REPORT

 Part Number: 91980  
 Lot Number: 010725  
 Description: Acrolein

Expiration Date: 020725

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

 Solvent(s): Water  
 Lot#: 072324Q

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

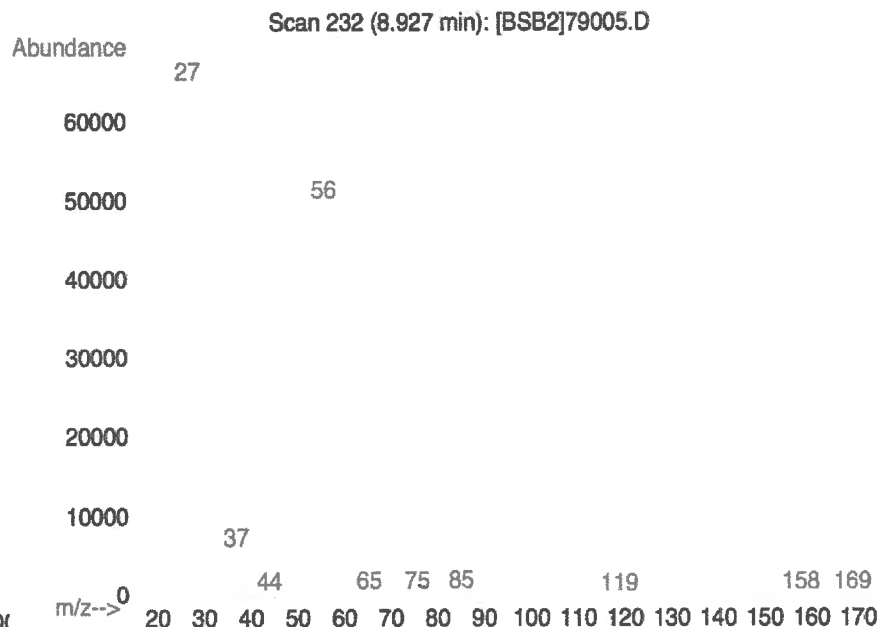
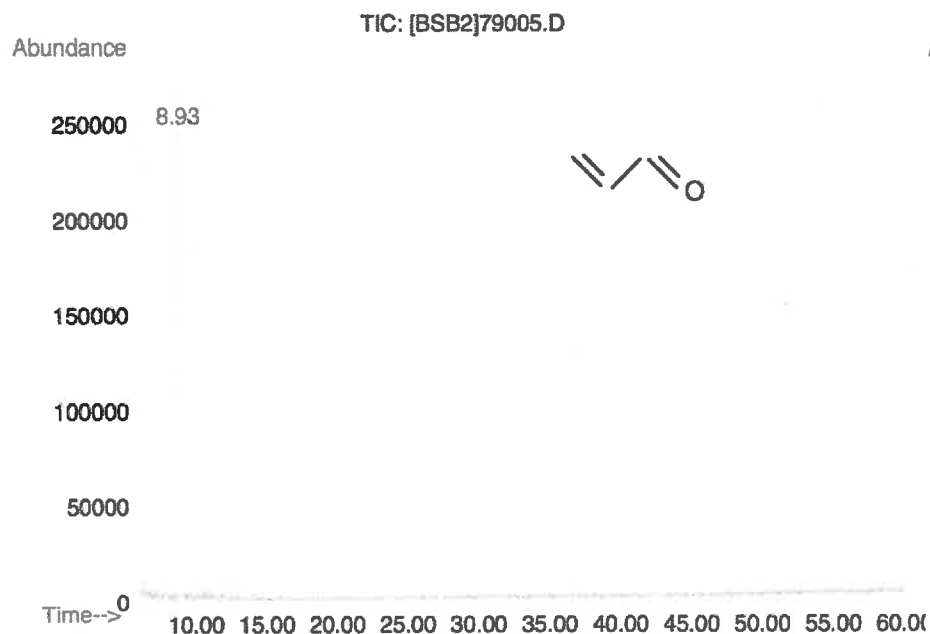
Weight(s) shown below were combined and diluted to (mL): 10.0

|                        |                 |        |
|------------------------|-----------------|--------|
| <i>Anthony Mahoney</i> |                 | 010725 |
| Formulated By:         | Anthony Mahoney | DATE   |
| <i>Pedro L. Rentas</i> |                 | 010725 |
| Reviewed By:           | Pedro L. Rentas | DATE   |

 Rec 01/08/25  
 5 vial  
 V 14823 to  
 V 14829

| Compound    | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                 |
|-------------|-----|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|-----------------|
|             |     |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50            |
| 1. Acrolein | 5   | 103755V10F | 5000                 | 97         | 0.5                | 0.05166          | 0.05178          | 5011.8              | 52.6                               | 107-02-8                                               | 0.1 ppm        | ori-rat 46mg/kg |

Method: GC6MSD-1. Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

## Safety Data Sheet (SDS)

GHS/OSHA Compliant

## Section I Product and Company Identification

## IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

|                     |                        |                                   |                 |
|---------------------|------------------------|-----------------------------------|-----------------|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA  | 1-800-535-5053  |
| Address             | 44 Rossetto Dr.        | Emergency Telephone International | 1-352-323-3500  |
|                     | Hamden CT, 06514       | Date Prepared/Revised             | January 1, 2024 |

## Section II - Hazards Identification

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

|          |                                      |              |                                               |
|----------|--------------------------------------|--------------|-----------------------------------------------|
| P271     | Use in ventilated area               | H315         | Causes skin and eye irritation.               |
| P302,332 | If on skin, wash with soap and water | P280         | Use gloves, eye protection/face shield        |
|          |                                      | P305,351,338 | If in eyes, remove contacts, rinse with water |



Signal Word: DANGER

## Section III - Composition

|                                                         |                 |              |
|---------------------------------------------------------|-----------------|--------------|
| Components (Specific Chemical Identity; Common Name(s)) | CAS#: 7732-18-5 | % (optional) |
| Water                                                   |                 | > 97         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                                  |                                                                          |
|----------------------------------|--------------------------------------------------------------------------|
| Suitable extinguishing media     | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Protective equipment for fire    | Wear self contained breathing apparatus for fire fighting if necessary.  |
| Hazardous Decomposition products | Carbon oxides                                                            |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.                                                                                         |
|                               | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.                                                |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                        |                                                                            |
|-----------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------|
| Water                                                                                         | CAS#: 7732-18-5        | TWA: 500 ppm                                                               |
| Personal protective equipment                                                                 | Respiratory protection | Handle with gloves. Gloves must be inspected prior to use. Eye protection. |
| Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product. |                        |                                                                            |

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

|                        |       |                            |   |
|------------------------|-------|----------------------------|---|
| Boiling Point          | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) |       | Melting Point              |   |

|                         |                                                    |                                         |     |
|-------------------------|----------------------------------------------------|-----------------------------------------|-----|
| Vapor Density (AIR = 1) | NA                                                 | Evaporation rate<br>(Butyl Acetate = 1) | 0°C |
| Solubility in Water     | Completely miscible                                |                                         | NA  |
| Appearance and Odor     | CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR. |                                         |     |

**Section X. STABILITY AND REACTIVITY**

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| Chemical stability                 | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | NA                                           |
| Conditions to avoid                | NA                                           |
| Materials to avoid                 | NA                                           |
| Hazardous decomposition products - | No data available                            |

**Section XI. TOXICOLOGICAL INFORMATION**

|                          |    |
|--------------------------|----|
| LD50 Oral - Rat          | NA |
| LC50 Inhalation - Rat    | NA |
| LD50 Dermal - Guinea pig | NA |
| Causes skin irritation.  |    |
| Eye irritation           |    |

**Section XII. ECOLOGICAL INFORMATION**

|      |    |
|------|----|
| LC50 | NA |
| EC50 | NA |

**Section XIII. DISPOSAL CONSIDERATIONS**

Dispose with normal Laboratory Solvent Waste.

**Section XIV. TRANSPORT INFORMATION**

|                             |                             |
|-----------------------------|-----------------------------|
| DOT (US)                    | IATA                        |
| Not dangerous goods         | Not dangerous goods         |
| Proper shipping name: Water | Proper shipping name: Water |

**Section XV. REGULATORY INFORMATION**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## Certified Reference Material CRM


 ANAB ISO 17034 Accredited  
 AR-1539 Certificate Number  
 https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

 Part Number: 91980  
 Lot Number: 010725  
 Description: Acrolein

Expiration Date: 020725

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

 Solvent(s): Water  
 Lot#: 072324Q

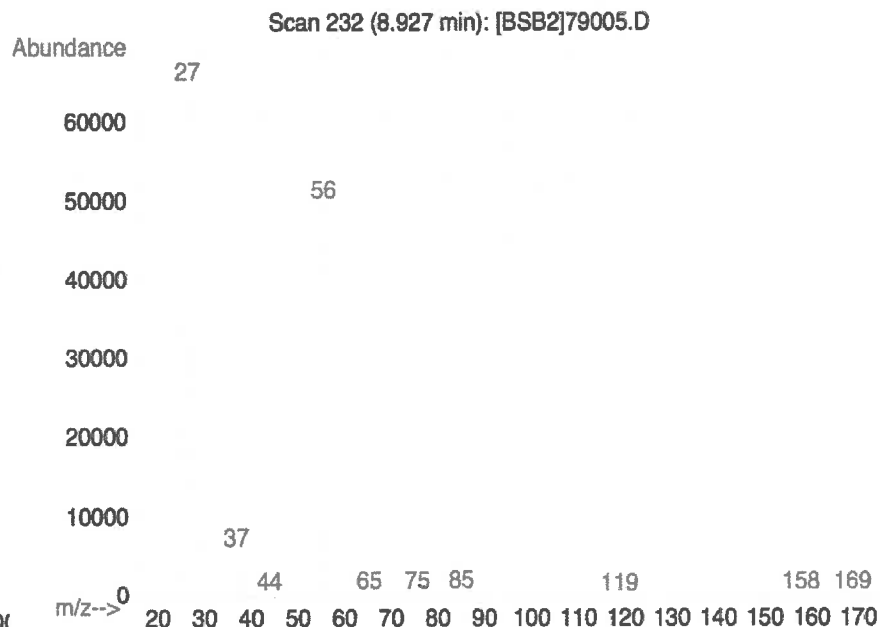
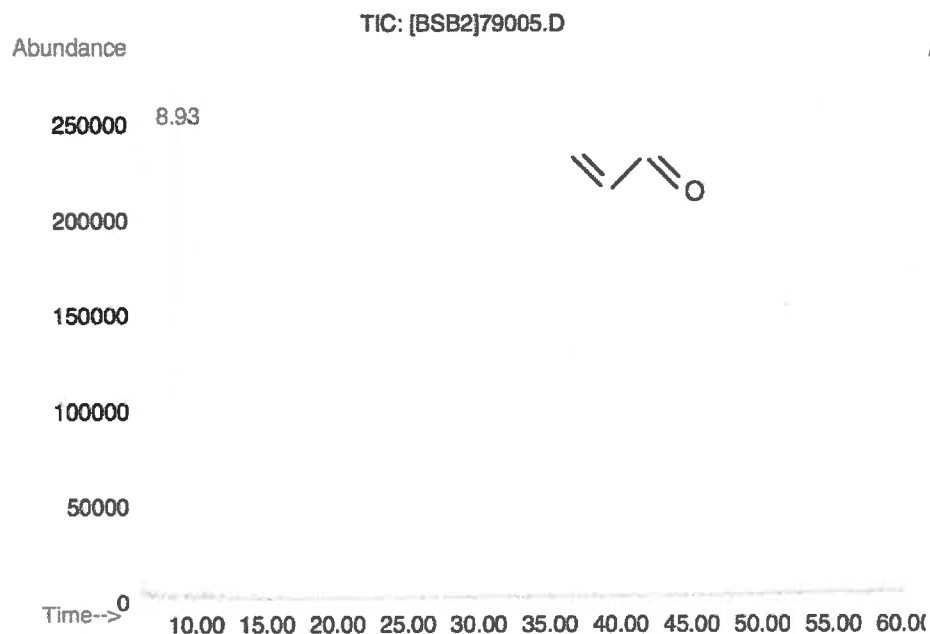
 5E-05 Balance Uncertainty  
 0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

|                        |                 |        |
|------------------------|-----------------|--------|
| <i>Anthony Mahoney</i> |                 | 010725 |
| Formulated By:         | Anthony Mahoney | DATE   |
| <i>Pedro L. Rentas</i> |                 | 010725 |
| Reviewed By:           | Pedro L. Rentas | DATE   |

| Compound    | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                 |
|-------------|-----|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|-----------------|
|             |     |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50            |
| 1. Acrolein | 5   | 103755V10F | 5000                 | 97         | 0.5                | 0.05166          | 0.05178          | 5011.8              | 52.6                               | 107-02-8                                               | 0.1 ppm        | ori-rat 46mg/kg |

Method: GC6MSD-1. Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

## Safety Data Sheet (SDS)

GHS/OSHA Compliant

## Section I Product and Company Identification

## IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

|                     |                        |                                   |                 |
|---------------------|------------------------|-----------------------------------|-----------------|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA  | 1-800-535-5053  |
| Address             | 44 Rossetto Dr.        | Emergency Telephone International | 1-352-323-3500  |
|                     | Hamden CT, 06514       | Date Prepared/Revised             | January 1, 2024 |

## Section II - Hazards Identification

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

|          |                                      |              |                                               |
|----------|--------------------------------------|--------------|-----------------------------------------------|
| P271     | Use in ventilated area               | H315         | Causes skin and eye irritation.               |
| P302,332 | If on skin, wash with soap and water | P280         | Use gloves, eye protection/face shield        |
|          |                                      | P305,351,338 | If in eyes, remove contacts, rinse with water |



Signal Word: DANGER

## Section III - Composition

|                                                         |                 |              |
|---------------------------------------------------------|-----------------|--------------|
| Components (Specific Chemical Identity; Common Name(s)) | CAS#: 7732-18-5 | % (optional) |
| Water                                                   |                 | > 97         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                                  |                                                                          |
|----------------------------------|--------------------------------------------------------------------------|
| Suitable extinguishing media     | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Protective equipment for fire    | Wear self contained breathing apparatus for fire fighting if necessary.  |
| Hazardous Decomposition products | Carbon oxides                                                            |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.                                                                                         |
|                               | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.                                                |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                        |                                                                            |
|-----------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------|
| Water                                                                                         | CAS#: 7732-18-5        | TWA: 500 ppm                                                               |
| Personal protective equipment                                                                 | Respiratory protection | Handle with gloves. Gloves must be inspected prior to use. Eye protection. |
| Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product. |                        |                                                                            |

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

|                        |       |                            |   |
|------------------------|-------|----------------------------|---|
| Boiling Point          | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) |       | Melting Point              |   |

|                         |                                                    |                                         |     |
|-------------------------|----------------------------------------------------|-----------------------------------------|-----|
| Vapor Density (AIR = 1) | NA                                                 | Evaporation rate<br>(Butyl Acetate = 1) | 0°C |
| Solubility in Water     | Completely miscible                                |                                         | NA  |
| Appearance and Odor     | CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR. |                                         |     |

**Section X. STABILITY AND REACTIVITY**

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| Chemical stability                 | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | NA                                           |
| Conditions to avoid                | NA                                           |
| Materials to avoid                 | NA                                           |
| Hazardous decomposition products - | No data available                            |

**Section XI. TOXICOLOGICAL INFORMATION**

|                          |    |
|--------------------------|----|
| LD50 Oral - Rat          | NA |
| LC50 Inhalation - Rat    | NA |
| LD50 Dermal - Guinea pig | NA |
| Causes skin irritation.  |    |
| Eye irritation           |    |

**Section XII. ECOLOGICAL INFORMATION**

|      |    |
|------|----|
| LC50 | NA |
| EC50 | NA |

**Section XIII. DISPOSAL CONSIDERATIONS**

Dispose with normal Laboratory Solvent Waste.

**Section XIV. TRANSPORT INFORMATION**

|                             |                             |
|-----------------------------|-----------------------------|
| DOT (US)                    | IATA                        |
| Not dangerous goods         | Not dangerous goods         |
| Proper shipping name: Water | Proper shipping name: Water |

**Section XV. REGULATORY INFORMATION**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



**CERTIFIED WEIGHT REPORT**

Part Number: **95317**  
Lot Number: **021624**  
Description: **Universal VOA Megamix**  
69 components  
Expiration Date: 021627  
Recommended Storage: Freezer (0 °C)  
Nominal Concentration (µg/mL): 2000  
NIST Test ID#: 8UTB

Solvent(s): **Methanol**  
Lot#: **EG359-USQ12**

Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty: **5E-05** Flask Uncertainty: **0.021**

|                |                  |        |
|----------------|------------------|--------|
|                |                  | 021624 |
| Formulated By: | Prashant Chauhan | DATE   |
|                |                  | 021624 |
| Reviewed By:   | Pedro L. Rentes  | DATE   |

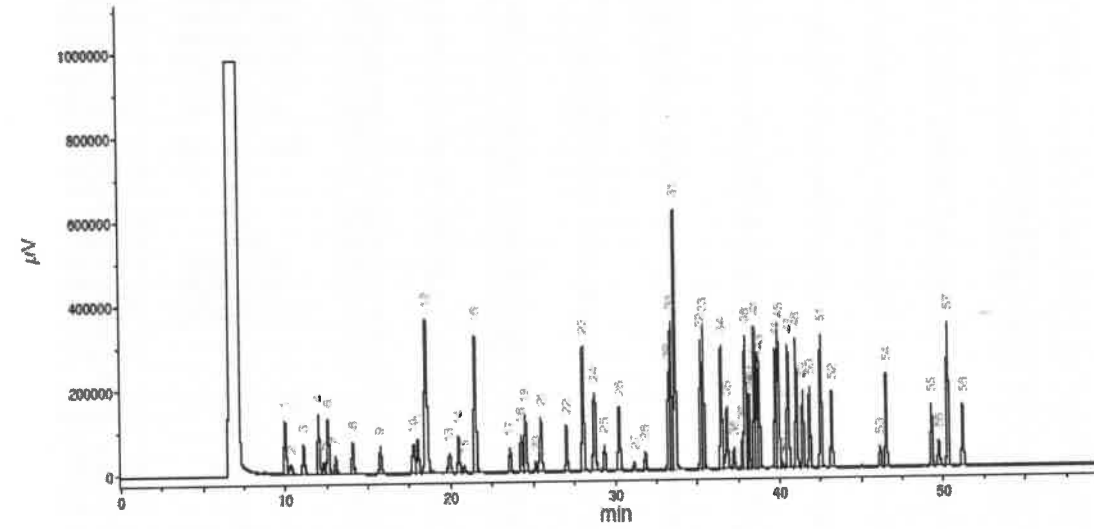
| Compound                         | (RM#)  | Lot         | Di.  | Initial | Initial | Nominal | Purity | Purity | Uncertainty | Target  | Actual  | Actual | Expanded | SDS Information                        |                              |                   |           |
|----------------------------------|--------|-------------|------|---------|---------|---------|--------|--------|-------------|---------|---------|--------|----------|----------------------------------------|------------------------------|-------------------|-----------|
|                                  |        |             |      |         |         |         |        |        |             |         |         |        |          | (Solvent Safety Info. On Attached pg.) |                              |                   |           |
|                                  |        |             |      |         |         |         |        |        |             |         |         |        |          | Part Number                            | Number                       | Factor            | Vol. (mL) |
| 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)          | or-rat 2400mg/kg  |           |
| 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)            | or-rat 700mg/kg   |           |
| Carbon disulfide                 | (0060) | MKCR8581    | 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)       | or-rat 1200mg/kg  |           |
| 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               |           |
| trans-1,4-Dichloro-2-butene      | (0486) | MKBP6041V   | NA   | NA      | NA      | 2000    | 96.5   | 0.2    | NA          | 0.20731 | 0.20748 | 2001.7 | 8.4      | 110-57-6                               | N/A                          | N/A               |           |
| Diethyl ether                    | (0153) | IK18CA5000K | NA   | NA      | NA      | 2000    | 99.9   | 0.2    | NA          | 0.20025 | 0.20040 | 2001.5 | 8.1      | 60-29-7                                | N/A                          | N/A               |           |
| Ethyl methacrylate               | (0381) | 06126PK     | NA   | NA      | NA      | 2000    | 99     | 0.2    | NA          | 0.20207 | 0.20230 | 2002.3 | 8.2      | 97-63-2                                | N/A                          | or-rat 14800mg/kg |           |
| Iodomethane                      | (0489) | 5HBF8718V   | 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)    | or-rat 70mg/kg    |           |
| 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)         | or-rat 3480mg/kg  |           |
| 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)     | or-rat 1200mg/kg  |           |
| 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)   | or-rat 277mg/kg   |           |
| 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)        | or-rat 7872mg/kg  |           |
| 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)     | or-rat 700mg/kg   |           |
| 2-Nitropropane                   | (0461) | 14002JK     | 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)          | or-rat 720mg/kg   |           |
| 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               |           |
| 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 (7800mg/m3/8H)      | or-rat 43g/kg     |           |
| 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                          | or-rat 910mg/kg   |           |
| 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                          | or-rat 840mg/kg   |           |
| cis-1,2-Dichloroethane           | 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               |           |
| trans-1,2-Dichloroethane         | 35171  | 101623      | 0.05 | 5.00    | 40002.4 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 23.0     | 156-60-5                               | N/A                          | or-rat 1235mg/kg  |           |
| 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                      | or-rat 820mg/kg   |           |
| 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)            | or-rat 200mg/kg   |           |
| 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)      | or-rat 930mg/kg   |           |
| 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)         | or-rat 2350mg/kg  |           |
| 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)       | or-rat 900mg/kg   |           |
| Dibromomethane                   | 95321  | 020724      | 0.10 | 10.00   | 20002.9 | 2000    | NA     | NA     | 0.042       | NA      | NA      | 1999.8 | 20.5     | 74-85-3                                | N/A                          | or-rat 105mg/kg   |           |
| 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                      | or-rat 725mg/kg   |           |
| 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               |           |
| Tetrachloroethane                | 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) | or-rat 2629mg/kg  |           |
| 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)       | or-rat 10300mg/kg |           |
| 1,2-Dibromo-3-chloropropane      | 35161  | 112322      | 0.05 | 5.00    | 40016.5 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.3 | 22.9     | 96-12-6                                | 0.001 ppm                    | or-rat 170mg/kg   |           |
| 1,2-Dibromomethane               | 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)                  | or-rat 108mg/kg   |           |
| 1,2-Dichloroethane               | 35161  | 112322      | 0.05 | 5.00    | 40018.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.4 | 22.9     | 107-08-2                               | 50 ppm (8H)                  | or-rat 870mg/kg   |           |
| 1,2-Dichloropropane              | 35161  | 112322      | 0.05 | 5.00    | 40051.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.2 | 22.9     | 78-57-5                                | 75 ppm (350mg/m3/8H)         | or-rat 1947mg/kg  |           |
| 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                          | un-rat 3600mg/kg  |           |
| 1,1-Dichloropropane              | 35161  | 112322      | 0.05 | 5.00    | 40012.1 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.1 | 29.7     | 563-56-6                               | N/A                          | N/A               |           |
| 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               |           |
| trans-1,3-Dichloropropene        | 35161  | 112322      | 0.05 | 5.00    | 40017.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.4 | 23.0     | 10061-02-6                             | N/A                          | N/A               |           |
| 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)      | or-rat 82mg/kg    |           |
| 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                          | or-rat 670mg/kg   |           |
| 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)    | or-rat 800mg/kg   |           |
| 1,1,2-Trichloroethane            | 35161  | 112322      | 0.05 | 5.00    | 40006.6 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 23.0     | 79-00-5                                | 10 ppm (46mg/m3/8H) (skin)   | or-rat 836mg/kg   |           |
| 1,2,3-Trichloropropane           | 35161  | 112322      | 0.05 | 5.00    | 40007.5 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.9 | 22.9     | 79-01-6                                | 80 ppm (270mg/m3/8H)         | or-rat 2400mg/kg  |           |
| Benzene                          | 35162  | 050823      | 0.05 | 5.00    | 40005.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.9 | 22.9     | 96-18-4                                | 10 ppm (50mg/m3/8H)          | or-rat 149.6mg/kg |           |
| Bromobenzene                     | 35162  | 050823      | 0.05 | 5.00    | 40006.9 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 104-51-8                               | 1 ppm                        | or-rat 4694mg/kg  |           |
| n-Butyl benzene                  | 35162  | 050823      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 108-98-1                               | N/A                          | or-rat 2699mg/kg  |           |
| Ethyl benzene                    | 35162  | 050823      | 0.05 | 5.00    | 40004.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 104-51-8                               | N/A                          | N/A               |           |
| Isopropyl toluene                | 35162  | 050823      | 0.05 | 5.00    | 40005.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 100-41-4                               | 100 ppm (435mg/m3/8H)        | or-rat >2000mg/kg |           |
| Naphthalene                      | 35162  | 050823      | 0.05 | 5.00    | 40006.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 99-87-8                                | N/A                          | or-rat 4750mg/kg  |           |
| Styrene                          | 35162  | 050823      | 0.05 | 5.00    | 40004.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 91-20-3                                | 10 ppm (50mg/m3/8H)          | or-rat 490mg/kg   |           |
| Toluene                          | 35162  | 050823      | 0.05 | 5.00    | 40006.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 100-42-5                               | 100 ppm                      | or-rat 5000mg/kg  |           |
| 1,2,3-Trichlorobenzene           | 35162  | 050823      | 0.05 | 5.00    | 40003.1 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 108-98-3                               | 200 ppm                      | or-rat 5000mg/kg  |           |
| 1,2,4-Trichlorobenzene           | 35162  | 050823      | 0.05 | 5.00    | 40006.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 87-61-6                                | N/A                          | or-rat 1390mg/kg  |           |
| 1,2,4-Trimethylbenzene           | 35162  | 050823      | 0.05 | 5.00    | 40001.6 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 120-82-1                               | 5 ppm (CL) (40mg/m3)         | or-rat 750mg/kg   |           |
| 1,3,5-Trimethylbenzene           | 35162  | 050823      | 0.05 | 5.00    | 40006.7 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 95-63-6                                | N/A                          | or-rat 5g/kg      |           |
| m-Xylene                         | 35162  | 050823      | 0.05 | 5.00    | 40005.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 106-67-8                               | N/A                          | or-rat 5000mg/kg  |           |
| tert-Butyl benzene               | 35163  | 101923      | 0.05 | 5.00    | 40001.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 22.9     | 98-06-6                                | 100 ppm (435mg/m3/8H)        | or-rat 5g/kg      |           |
| sec-Butyl benzene                | 35163  | 101923      | 0.05 | 5.00    | 40002.4 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 22.9     | 135-98-8                               | N/A                          | N/A               |           |
| Chlorobenzene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 95-49-8                                | 75 ppm (350mg/m3/8H)         | or-rat 2240mg/kg  |           |
| Chlorotoluene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.5 | 22.9     | 108-90-7                               | 75 ppm (350mg/m3/8H)         | or-rat 2290mg/kg  |           |
| Chlorotoluene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.5 | 22.9     | 95-49-8                                | 50 ppm (250mg/m3/8H)         | or-rat 3900mg/kg  |           |
| 2-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 106-43-4                               | N/A                          | or-rat 2100mg/kg  |           |
| 3-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.7 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 95-50-1                                | 50 ppm (300mg/m3) (CL)       | or-rat 500mg/kg   |           |
| 4-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.8 |         |        |        |             |         |         |        |          |                                        |                              |                   |           |



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., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.  
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),  
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.  
FID Signal = Edaq Channel 1  
Standard injection = 0.5µL, Range=3



| Peak # | Name                                         | FID RT (min.) |
|--------|----------------------------------------------|---------------|
| 1      | Ether                                        | 9.97          |
| 2      | 1,1,2-Trichloro-1,2,2-trifluoroethane        | 10.33         |
| 3      | 1,1-Dichloroethane                           | 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-Dichloroethane                     | 14.07         |
| 9      | 1,1-Dichloroethane                           | 15.74         |
| 10     | 2,2-Dichloropropane                          | 17.24         |
| 11     | cis-1,2-Dichloroethane                       | 18.00         |
| 12     | Methacrylonitrile/methyl acrylate/Chloroform | 18.46         |
| 13     | Isobutane/1,1,1-Trichloroethane              | 19.01         |
| 14     | 1,1-Dichloropropane                          | 20.46         |
| 15     | Carbon tetrachloride                         | 20.79         |
| 16     | Benzene/1,2-Dichloroethane                   | 21.49         |
| 17     | Trichloroethane                              | 23.58         |
| 18     | 1,2-Dichloropropane                          | 24.38         |
| 19     | Methyl methacrylate                          | 24.52         |
| 20     | Bromochloromethane                           | 25.13         |
| 21     | Dibromomethane/2-Hitropropane                | 25.46         |
| 22     | cis-1,3-Dichloropropane                      | 27.02         |
| 23     | Toluene                                      | 28.05         |
| 24     | Ethyl methacrylate/trans-1,3-Dichloropropane | 28.73         |
| 25     | 1,1,2-Trichloroethane                        | 29.34         |
| 26     | Tetrachloroethene/1,3-Dichloropropane        | 30.24         |
| 27     | Dibromochloromethane                         | 31.16         |
| 28     | 1,2-Dibromomethane                           | 31.84         |
| 29     | Chlorobenzene                                | 33.26         |
| 30     | Ethylbenzene/1,1,1,2-Tetrachloroethane       | 33.40         |
| 31     | m-Xylene/p-Xylene                            | 33.66         |
| 32     | o-Xylene                                     | 35.22         |
| 33     | Styrene                                      | 35.39         |
| 34     | Isopropylbenzene/Bromoforn                   | 36.18         |
| 35     | cis-1,4-Dichloro-3-butene                    | 36.80         |
| 36     | 1,1,2,2-Tetrachloroethane                    | 37.23         |
| 37     | 1,2,3-Trichloropropane                       | 37.77         |
| 38     | n-Propylbenzene                              | 37.93         |
| 39     | trans-1,4-Dichloro-3-butene                  | 38.05         |
| 40     | Bromobenzene                                 | 38.14         |
| 41     | 1,3,5-Trimethylbenzene                       | 38.80         |
| 42     | 2-Chlorotoluene                              | 38.82         |
| 43     | 4-Chlorotoluene                              | 38.77         |
| 44     | tert-Butylbenzene                            | 39.74         |
| 45     | 1,2,4-Trimethylbenzene                       | 39.91         |
| 46     | Pentachloroethane                            | 40.17         |
| 47     | sec-Butylbenzene                             | 40.52         |
| 48     | p-Isopropyltoluene                           | 41.02         |
| 49     | 1,3-Dichlorobenzene                          | 41.42         |
| 50     | 1,4-Dichlorobenzene                          | 41.83         |
| 51     | n-Butylbenzene                               | 42.53         |
| 52     | 1,2-Dichlorobenzene                          | 43.18         |
| 53     | 1,2-Dibromo-3-chloropropane                  | 46.12         |
| 54     | Nitrobenzene                                 | 46.46         |
| 55     | 1,2,4-Trichlorobenzene                       | 49.26         |
| 56     | Hexachlorobutadiene                          | 49.72         |
| 57     | Naphthalene                                  | 50.26         |
| 58     | 1,2,3-Trichlorobenzene                       | 51.16         |

## 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 | 1-352-323-3500  |
|                     |                                     | Date Prepared/Revised             | January 1, 2023 |

## Section II - Hazards Identification

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

|          |                                      |                |                                               |
|----------|--------------------------------------|----------------|-----------------------------------------------|
| H225     | Highly Flammable Liquid and Vapor    | H301, 311, 331 | Toxic if swallowed, skin contact, inhaled     |
| H370     | Cause damage to organs               | H351           | Suspected of causing cancer                   |
| P271     | Use in ventilated area               | P280           | Use gloves, eye protection/face shield        |
| 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.                                                                                                                                                                                                        |
| Storage Conditions            | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | Proper shipping name: Methanol             |

**Section XV. REGULATORY INFORMATION**

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



**CERTIFIED WEIGHT REPORT**

Part Number: **95317**  
Lot Number: **021624**  
Description: **Universal VOA Megamix**  
69 components  
Expiration Date: 021627  
Recommended Storage: Freezer (0 °C)  
Nominal Concentration (µg/mL): 2000  
NIST Test ID#: 8UTB

Solvent(s): **Methanol**  
Lot# **EG359-USQ12**

Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty: **5E-05** Flask Uncertainty: **0.021**

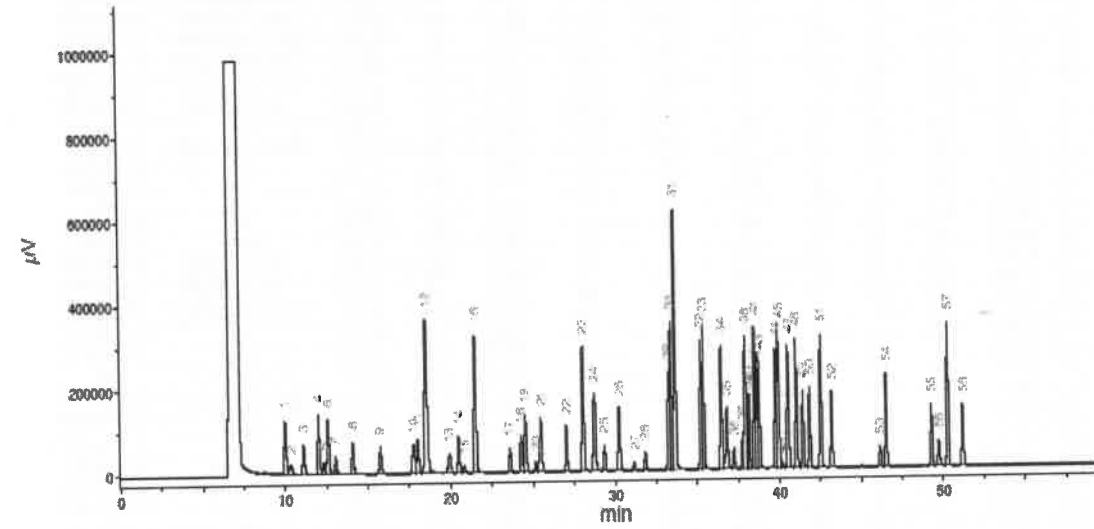
|                |                  |        |
|----------------|------------------|--------|
|                |                  | 021624 |
| Formulated By: | Prashant Chauhan | DATE   |
|                |                  | 021624 |
| Reviewed By:   | Pedro L. Rentes  | DATE   |

| Compound                         | (RM#)  | Lot         | Di.  | Initial | Initial | Nominal | Purity | Purity | Uncertainty | Target  | Actual  | Actual | Expanded | SDS Information                        |                              |                   |           |
|----------------------------------|--------|-------------|------|---------|---------|---------|--------|--------|-------------|---------|---------|--------|----------|----------------------------------------|------------------------------|-------------------|-----------|
|                                  |        |             |      |         |         |         |        |        |             |         |         |        |          | (Solvent Safety Info. On Attached pg.) |                              |                   |           |
|                                  |        |             |      |         |         |         |        |        |             |         |         |        |          | Part Number                            | Number                       | Factor            | Vol. (mL) |
| 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)          | or-rat 2400mg/kg  |           |
| 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)            | or-rat 700mg/kg   |           |
| Carbon disulfide                 | (0060) | MKCR8581    | 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)       | or-rat 1200mg/kg  |           |
| 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               |           |
| trans-1,4-Dichloro-2-butene      | (0486) | MKBP6041V   | NA   | NA      | NA      | 2000    | 96.5   | 0.2    | NA          | 0.20731 | 0.20748 | 2001.7 | 8.4      | 110-57-6                               | N/A                          | N/A               |           |
| Diethyl ether                    | (0153) | IK18CA5000K | NA   | NA      | NA      | 2000    | 99.9   | 0.2    | NA          | 0.20025 | 0.20040 | 2001.5 | 8.1      | 60-29-7                                | N/A                          | N/A               |           |
| Ethyl methacrylate               | (0381) | 06126PK     | NA   | NA      | NA      | 2000    | 99     | 0.2    | NA          | 0.20207 | 0.20230 | 2002.3 | 8.2      | 97-63-2                                | N/A                          | or-rat 14800mg/kg |           |
| Iodomethane                      | (0489) | 5HBF8718V   | 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)    | or-rat 70mg/kg    |           |
| 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)         | or-rat 3480mg/kg  |           |
| 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)     | or-rat 1200mg/kg  |           |
| 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)   | or-rat 277mg/kg   |           |
| 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)        | or-rat 7872mg/kg  |           |
| 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)     | or-rat 700mg/kg   |           |
| 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)          | or-rat 720mg/kg   |           |
| 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               |           |
| 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 (7800mg/m3/8H)      | or-rat 43g/kg     |           |
| 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                          | or-rat 910mg/kg   |           |
| 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                          | or-rat 840mg/kg   |           |
| cis-1,2-Dichloroethane           | 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               |           |
| trans-1,2-Dichloroethane         | 35171  | 101623      | 0.05 | 5.00    | 40002.4 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 23.0     | 156-60-5                               | N/A                          | N/A               |           |
| 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                      | or-rat 820mg/kg   |           |
| 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)            | or-rat 200mg/kg   |           |
| 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)      | or-rat 930mg/kg   |           |
| 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)         | or-rat 2350mg/kg  |           |
| Chloroform                       | 95321  | 020724      | 0.10 | 10.00   | 20024.0 | 2000    | NA     | NA     | 0.042       | NA      | NA      | 2001.9 | 20.5     | 67-68-3                                | 50 ppm (240mg/m3) (CL)       | or-rat 900mg/kg   |           |
| Dibromomethane                   | 95321  | 020724      | 0.10 | 10.00   | 20002.9 | 2000    | NA     | NA     | 0.042       | NA      | NA      | 1999.8 | 20.5     | 74-85-3                                | N/A                          | or-rat 105mg/kg   |           |
| 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                      | or-rat 725mg/kg   |           |
| 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               |           |
| Tetrachloroethane                | 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) | or-rat 2629mg/kg  |           |
| 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)       | or-rat 10300mg/kg |           |
| 1,2-Dibromo-3-chloropropane      | 35161  | 112322      | 0.05 | 5.00    | 40016.5 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.3 | 22.9     | 96-12-6                                | 0.001 ppm                    | or-rat 170mg/kg   |           |
| 1,2-Dibromomethane               | 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)                  | or-rat 108mg/kg   |           |
| 1,2-Dichloroethane               | 35161  | 112322      | 0.05 | 5.00    | 40018.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.4 | 22.9     | 107-08-2                               | 50 ppm (8H)                  | or-rat 870mg/kg   |           |
| 1,2-Dichloropropane              | 35161  | 112322      | 0.05 | 5.00    | 40051.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.2 | 22.9     | 78-57-5                                | 75 ppm (350mg/m3/8H)         | or-rat 1947mg/kg  |           |
| 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                          | un-rat 3600mg/kg  |           |
| 1,1-Dichloropropane              | 35161  | 112322      | 0.05 | 5.00    | 40012.1 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.1 | 22.9     | 563-56-6                               | N/A                          | N/A               |           |
| 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               |           |
| trans-1,3-Dichloropropene        | 35161  | 112322      | 0.05 | 5.00    | 40017.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.4 | 23.0     | 10061-02-6                             | N/A                          | N/A               |           |
| Hexachloro-1,3-butadiene         | 35161  | 112322      | 0.05 | 5.00    | 40021.9 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.6 | 22.9     | 87-68-3                                | 0.02 ppm (0.24mg/m3/8H)      | or-rat 82mg/kg    |           |
| 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                          | or-rat 670mg/kg   |           |
| 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)    | or-rat 800mg/kg   |           |
| 1,1,2-Trichloroethane            | 35161  | 112322      | 0.05 | 5.00    | 40006.6 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 23.0     | 79-00-5                                | 10 ppm (46mg/m3/8H) (skin)   | or-rat 830mg/kg   |           |
| 2,3-Trichloropropane             | 35161  | 112322      | 0.05 | 5.00    | 40007.5 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 2000.9 | 22.9     | 79-01-6                                | 50 ppm (270mg/m3/8H)         | or-rat 2400mg/kg  |           |
| Benzene                          | 35162  | 050823      | 0.05 | 5.00    | 40005.0 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.9 | 22.9     | 96-18-4                                | 10 ppm (50mg/m3/8H)          | or-rat 149.6mg/kg |           |
| Bromobenzene                     | 35162  | 050823      | 0.05 | 5.00    | 40006.9 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 104-51-8                               | 1 ppm                        | or-rat 4694mg/kg  |           |
| n-Butyl benzene                  | 35162  | 050823      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 108-98-1                               | N/A                          | or-rat 2699mg/kg  |           |
| Ethyl benzene                    | 35162  | 050823      | 0.05 | 5.00    | 40004.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 104-51-8                               | N/A                          | N/A               |           |
| Isopropyl toluene                | 35162  | 050823      | 0.05 | 5.00    | 40005.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 100-41-4                               | 100 ppm (435mg/m3/8H)        | or-rat >2000mg/kg |           |
| Naphthalene                      | 35162  | 050823      | 0.05 | 5.00    | 40006.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 99-87-8                                | N/A                          | or-rat 4750mg/kg  |           |
| Tyrene                           | 35162  | 050823      | 0.05 | 5.00    | 40004.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 91-20-3                                | 10 ppm (50mg/m3/8H)          | or-rat 490mg/kg   |           |
| Toluene                          | 35162  | 050823      | 0.05 | 5.00    | 40006.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 100-42-5                               | 100 ppm                      | or-rat 5000mg/kg  |           |
| 2,3-Trichlorobenzene             | 35162  | 050823      | 0.05 | 5.00    | 40003.1 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 106-98-3                               | 200 ppm                      | or-rat 5000mg/kg  |           |
| 2,4-Trichlorobenzene             | 35162  | 050823      | 0.05 | 5.00    | 40006.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 87-61-6                                | N/A                          | or-rat 1390mg/kg  |           |
| 2,4-Trimethylbenzene             | 35162  | 050823      | 0.05 | 5.00    | 40001.6 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 120-82-1                               | 5 ppm (CL) (40mg/m3)         | or-rat 750mg/kg   |           |
| 3,5-Trimethylbenzene             | 35162  | 050823      | 0.05 | 5.00    | 40006.7 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 95-63-6                                | N/A                          | or-rat 5g/kg      |           |
| Xylene                           | 35162  | 050823      | 0.05 | 5.00    | 40005.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 106-57-8                               | N/A                          | or-rat 5000mg/kg  |           |
| tert-Butyl benzene               | 35163  | 101923      | 0.05 | 5.00    | 40001.2 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 22.9     | 98-06-6                                | 100 ppm (435mg/m3/8H)        | or-rat 5g/kg      |           |
| sec-Butyl benzene                | 35163  | 101923      | 0.05 | 5.00    | 40002.4 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 22.9     | 135-98-8                               | N/A                          | N/A               |           |
| Chlorobenzene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 95-49-8                                | 75 ppm (350mg/m3/8H)         | or-rat 2240mg/kg  |           |
| Chlorotoluene                    | 35163  | 101923      | 0.05 | 5.00    | 40000.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.5 | 22.9     | 108-90-7                               | 75 ppm (350mg/m3/8H)         | or-rat 2290mg/kg  |           |
| Chlorotoluene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.5 | 22.9     | 95-49-8                                | 50 ppm (250mg/m3/8H)         | or-rat 3900mg/kg  |           |
| 2-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 106-43-4                               | N/A                          | or-rat 2100mg/kg  |           |
| 3-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.7 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 95-50-1                                | 50 ppm (300mg/m3) (CL)       | or-rat 500mg/kg   |           |
| 4-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      |        |          |                                        |                              |                   |           |

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., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.  
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),  
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.  
FID Signal = Edaq Channel 1  
Standard injection = 0.5µL, Range=3



| Peak # | Name                                         | FID RT (min.) |
|--------|----------------------------------------------|---------------|
| 1      | Ether                                        | 9.97          |
| 2      | 1,1,2-Trichloro-1,2,2-trifluoroethane        | 10.33         |
| 3      | 1,1-Dichloroethane                           | 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-Dichloroethane                     | 14.07         |
| 9      | 1,1-Dichloroethane                           | 15.74         |
| 10     | 2,2-Dichloropropane                          | 17.24         |
| 11     | cis-1,2-Dichloroethane                       | 18.00         |
| 12     | Methacrylonitrile/methyl acrylate/Chloroform | 18.46         |
| 13     | Isobutane/1,1,1-Trichloroethane              | 19.01         |
| 14     | 1,1-Dichloropropane                          | 20.46         |
| 15     | Carbon tetrachloride                         | 20.79         |
| 16     | Benzene/1,2-Dichloroethane                   | 21.49         |
| 17     | Trichloroethane                              | 23.58         |
| 18     | 1,2-Dichloropropane                          | 24.38         |
| 19     | Methyl methacrylate                          | 24.52         |
| 20     | Bromochloromethane                           | 25.13         |
| 21     | Dibromomethane/2-Hitropropane                | 25.46         |
| 22     | cis-1,3-Dichloropropane                      | 27.02         |
| 23     | Toluene                                      | 28.05         |
| 24     | Ethyl methacrylate/trans-1,3-Dichloropropane | 28.73         |
| 25     | 1,1,2-Trichloroethane                        | 29.34         |
| 26     | Tetrachloroethene/1,3-Dichloropropane        | 30.24         |
| 27     | Dibromochloromethane                         | 31.16         |
| 28     | 1,2-Dibromomethane                           | 31.84         |
| 29     | Chlorobenzene                                | 33.26         |
| 30     | Ethylbenzene/1,1,1,2-Tetrachloroethane       | 33.40         |
| 31     | m-Xylene/p-Xylene                            | 33.66         |
| 32     | o-Xylene                                     | 35.22         |
| 33     | Styrene                                      | 35.39         |
| 34     | Isopropylbenzene/Bromoforn                   | 36.18         |
| 35     | cis-1,4-Dichloro-3-butene                    | 36.80         |
| 36     | 1,1,2,2-Tetrachloroethane                    | 37.23         |
| 37     | 1,2,3-Trichloropropane                       | 37.77         |
| 38     | n-Propylbenzene                              | 37.93         |
| 39     | trans-1,4-Dichloro-3-butene                  | 38.05         |
| 40     | Bromobenzene                                 | 38.14         |
| 41     | 1,3,5-Trimethylbenzene                       | 38.80         |
| 42     | 2-Chlorotoluene                              | 38.82         |
| 43     | 4-Chlorotoluene                              | 38.77         |
| 44     | tert-Butylbenzene                            | 39.74         |
| 45     | 1,2,4-Trimethylbenzene                       | 39.91         |
| 46     | Pentachloroethane                            | 40.17         |
| 47     | sec-Butylbenzene                             | 40.52         |
| 48     | p-Isopropyltoluene                           | 41.02         |
| 49     | 1,3-Dichlorobenzene                          | 41.42         |
| 50     | 1,4-Dichlorobenzene                          | 41.83         |
| 51     | n-Butylbenzene                               | 42.53         |
| 52     | 1,2-Dichlorobenzene                          | 43.18         |
| 53     | 1,2-Dibromo-3-chloropropane                  | 46.12         |
| 54     | Nitrobenzene                                 | 46.46         |
| 55     | 1,2,4-Trichlorobenzene                       | 49.26         |
| 56     | Hexachlorobutadiene                          | 49.72         |
| 57     | Naphthalene                                  | 50.26         |
| 58     | 1,2,3-Trichlorobenzene                       | 51.16         |

## 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 | 1-352-323-3500  |
|                     |                                     | Date Prepared/Revised             | January 1, 2023 |

## Section II - Hazards Identification

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

|          |                                      |                |                                               |
|----------|--------------------------------------|----------------|-----------------------------------------------|
| H225     | Highly Flammable Liquid and Vapor    | H301, 311, 331 | Toxic if swallowed, skin contact, inhaled     |
| H370     | Cause damage to organs               | H351           | Suspected of causing cancer                   |
| P271     | Use in ventilated area               | P280           | Use gloves, eye protection/face shield        |
| 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.                                                                                                                                                                                                        |
| Storage Conditions            | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | Proper shipping name: Methanol             |

**Section XV. REGULATORY INFORMATION**

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## Certified Reference Material CRM

Dec 09/17/24

2 vials

ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

Part Number: **91980**  
Lot Number: **091424**  
Description: **Acrolein**Solvent(s):  
Water Lot#  
072324Q

|                        |                 |        |
|------------------------|-----------------|--------|
| <i>Justin Dippold</i>  |                 | 091424 |
| Formulated By:         | Justin Dippold  | DATE   |
| <i>Pedro L. Rentas</i> |                 | 091424 |
| Reviewed By:           | Pedro L. Rentas | DATE   |

Expiration Date: 101424

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| Compound    | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                 |
|-------------|-----|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|-----------------|
|             |     |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50            |
| 1. Acrolein | 5   | 103755V10F | 5000                 | 97         | 0.5                | 0.05166          | 0.05175          | 5008.9              | 52.5                               | 107-02-8                                               | 0.1 ppm        | ori-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.

Abundance TIC: [BSB2]79005.D

Abundance

Scan 232 (8.927 min): [BSB2]79005.D

250000 8.93

200000

150000

100000

50000

Time--&gt; 0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z--&gt; 0

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

- 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).





## Certified Reference Material CRM

Dec 09/17/24

2 vials

ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

Part Number: **91980**  
Lot Number: **091424**  
Description: **Acrolein**Solvent(s):  
Water Lot#  
072324QExpiration Date: 101424  
Recommended Storage: Refrigerate (4 °C)  
Nominal Concentration (µg/mL): 5000  
NIST Test ID#: 6UTBWeight(s) shown below were combined and diluted to (mL): 10.0  
5E-05 Balance Uncertainty  
0.001 Flask Uncertainty

|                        |                 |        |
|------------------------|-----------------|--------|
| <i>Justin Dippold</i>  |                 | 091424 |
| Formulated By:         | Justin Dippold  | DATE   |
| <i>Pedro L. Rentas</i> |                 | 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        | ori-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.

Abundance TIC: [BSB2]79005.D

Abundance Scan 232 (8.927 min): [BSB2]79005.D

250000 8.93

200000

150000

100000

50000

Time--&gt; 0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00



m/z--&gt; 0

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

27

60000

50000

40000

30000

20000

10000

37

44

65 75 85

119

158 169

- 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).



## Certified Reference Material CRM



## CERTIFIED WEIGHT REPORT

Part Number: **95318**  
Lot Number: **120524**  
Description: **2-Chloroethyl vinyl ether**

Solvent(s):  
Methanol

Lot#  
EJ143-US

Expiration Date: **120527**  
Recommended Storage: **Refrigerate (4 °C)**  
Nominal Concentration (µg/mL): **10000**  
NIST Test ID#: **6UTB**

*See 1216124*  
*20 vial*  
*✓ 14630 to*  
*✓ 14649*

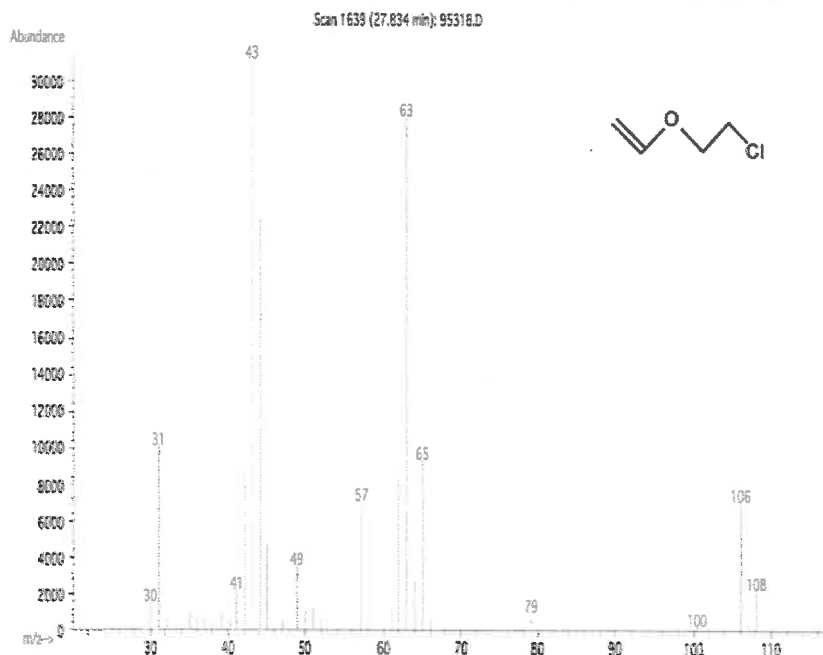
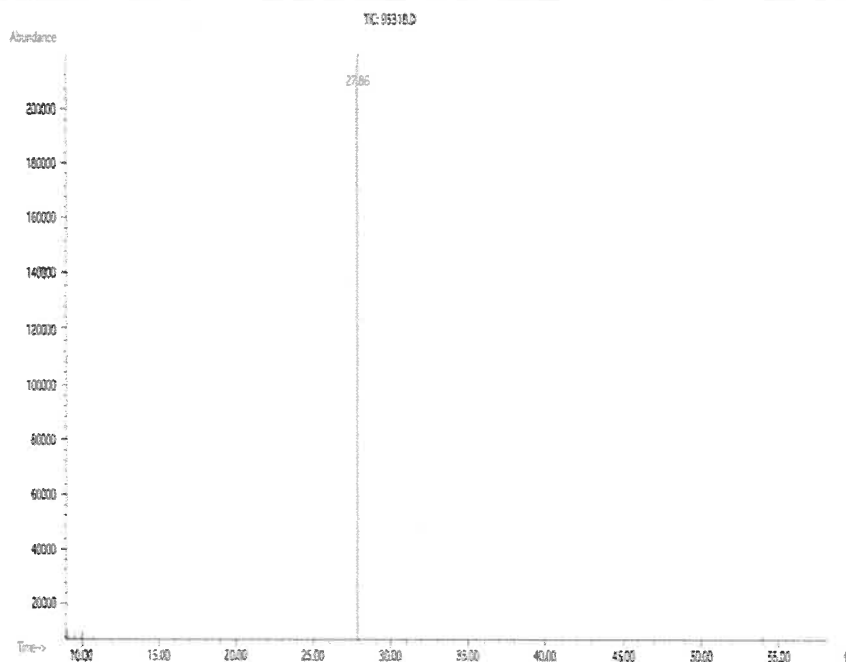
Weight(s) shown below were combined and diluted to (mL): **50.0**

5E-05 Balance Uncertainty  
0.001 Flask Uncertainty

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 120524 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 120524 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

| Compound                     | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                  |
|------------------------------|-----|------------|----------------------|------------|--------------------|-------------------|-------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|------------------|
|                              |     |            |                      |            |                    |                   |                   |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50             |
| 1. 2-Chloroethyl vinyl ether | 74  | MKCD0033   | 10000                | 99         | 0.2                | 0.50536           | 0.50550           | 10002.9             | 40.5                               | 110-75-8                                               | N/A            | ori-rat 250mg/kg |

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).

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                           | <b>1-800-535-5053</b>                    |
| Address             | 44 Rosotto Dr.<br>Hamden CT. 06514 | Emergency Telephone International<br>Date Prepared/Revised | <b>1-352-323-3500</b><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 shield        |
| 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)) | CAS#           | % (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

|                                |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| <b>If inhaled</b>              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| <b>In case of skin contact</b> | Wash with soap and water. Consult a physician.                                                              |
| <b>In case of eye contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| <b>If swallowed</b>            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                                      |                                                                                                                                                                 |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flammability</b>                  | 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. |
| <b>Suitable extinguishing media</b>  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                        |
| <b>Protective equipment for fire</b> | 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | Proper shipping name: Methanol             |

**Section XV. REGULATORY INFORMATION**

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## CERTIFIED WEIGHT REPORT

Part Number: **95318**  
Lot Number: **120524**  
Description: **2-Chloroethyl vinyl ether**

Solvent(s):  
Methanol

Lot#  
EJ143-US

Expiration Date: **120527**  
Recommended Storage: **Refrigerate (4 °C)**  
Nominal Concentration (µg/mL): **10000**  
NIST Test ID#: **6UTB**

*See 1216124*  
*20 vial*  
*✓ 14630 to*  
*✓ 14649*

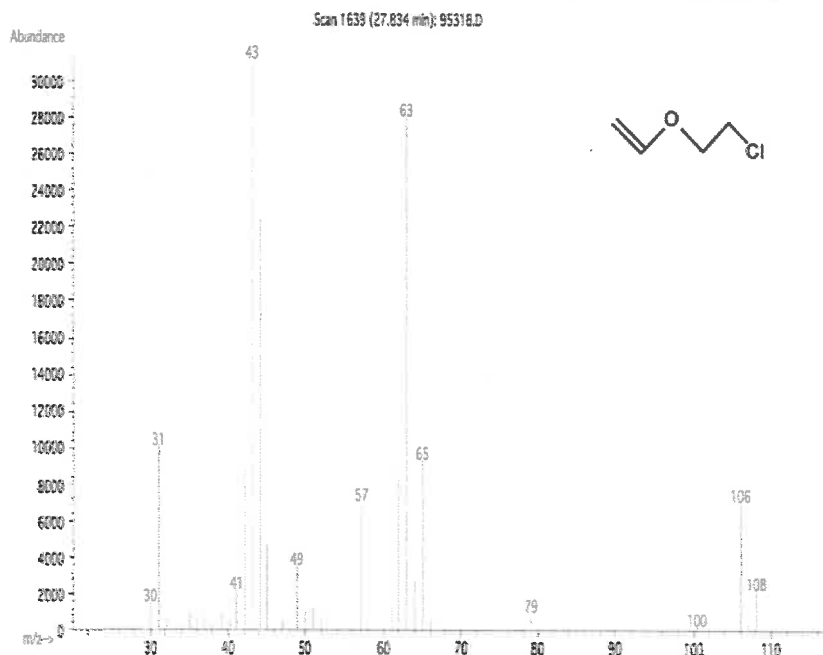
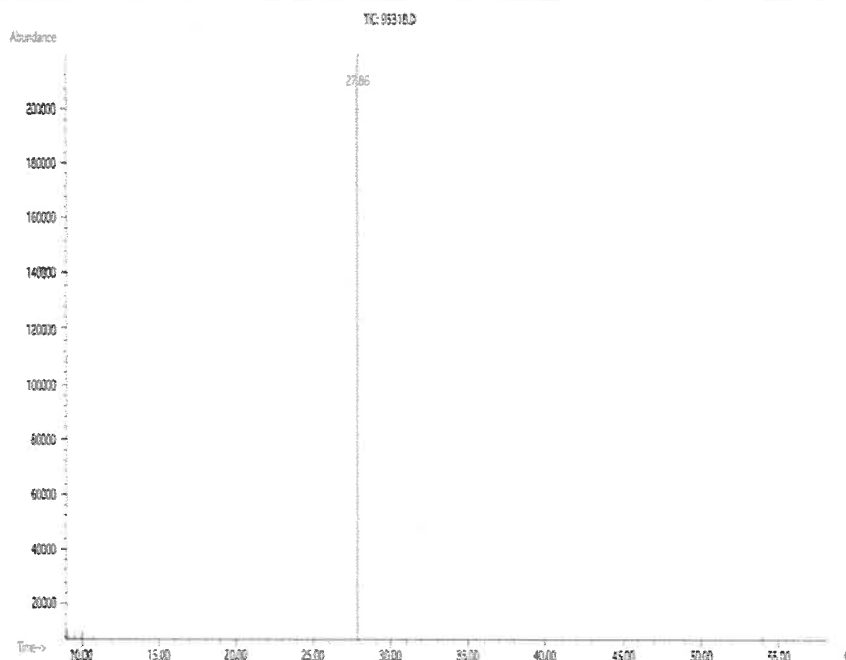
Weight(s) shown below were combined and diluted to (mL): **50.0**

5E-05 Balance Uncertainty  
0.001 Flask Uncertainty

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 120524 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 120524 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

| Compound                     | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                  |
|------------------------------|-----|------------|----------------------|------------|--------------------|-------------------|-------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|------------------|
|                              |     |            |                      |            |                    |                   |                   |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50             |
| 1. 2-Chloroethyl vinyl ether | 74  | MKCD0033   | 10000                | 99         | 0.2                | 0.50536           | 0.50550           | 10002.9             | 40.5                               | 110-75-8                                               | N/A            | ori-rat 250mg/kg |

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).

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                           | <b>1-800-535-5053</b>                    |
| Address             | 44 Rosotto Dr.<br>Hamden CT. 06514 | Emergency Telephone International<br>Date Prepared/Revised | <b>1-352-323-3500</b><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 shield        |
| 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)) | CAS#           | % (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

|                                |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| <b>If inhaled</b>              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| <b>In case of skin contact</b> | Wash with soap and water. Consult a physician.                                                              |
| <b>In case of eye contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| <b>If swallowed</b>            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                                      |                                                                                                                                                                 |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flammability</b>                  | 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. |
| <b>Suitable extinguishing media</b>  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                        |
| <b>Protective equipment for fire</b> | 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | Proper shipping name: Methanol             |

**Section XV. REGULATORY INFORMATION**

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## Certified Reference Material CRM



## CERTIFIED WEIGHT REPORT

Part Number: **95318**  
Lot Number: **120524**  
Description: **2-Chloroethyl vinyl ether**

Solvent(s):  
Methanol

Lot#  
EJ143-US

Expiration Date: **120527**  
Recommended Storage: **Refrigerate (4 °C)**  
Nominal Concentration (µg/mL): **10000**  
NIST Test ID#: **6UTB**

*See 1216124*  
*20 vial*  
*✓ 14630 to*  
*✓ 14649*

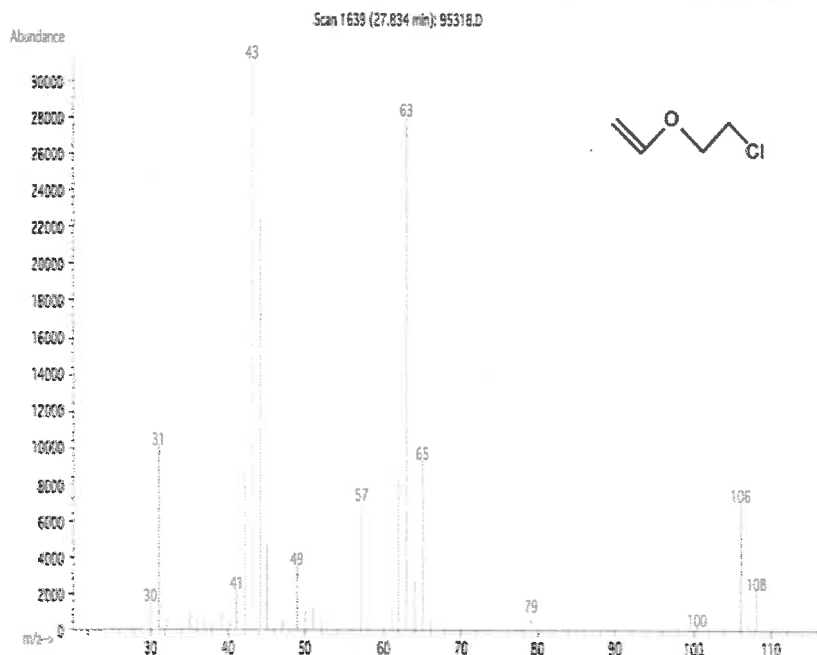
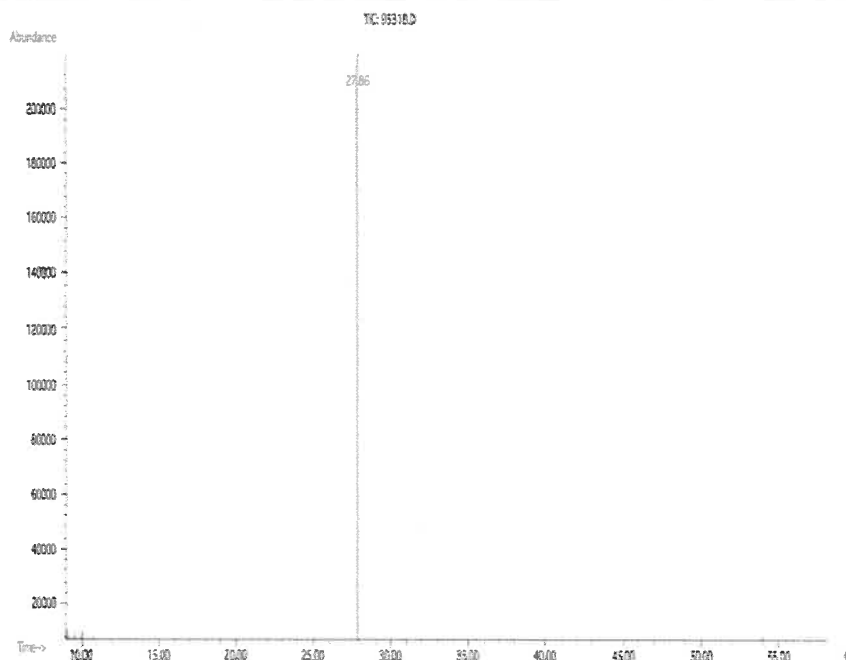
Weight(s) shown below were combined and diluted to (mL): **50.0**

5E-05 Balance Uncertainty  
0.001 Flask Uncertainty

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 120524 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 120524 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

| Compound                     | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                  |
|------------------------------|-----|------------|----------------------|------------|--------------------|-------------------|-------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|------------------|
|                              |     |            |                      |            |                    |                   |                   |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50             |
| 1. 2-Chloroethyl vinyl ether | 74  | MKCD0033   | 10000                | 99         | 0.2                | 0.50536           | 0.50550           | 10002.9             | 40.5                               | 110-75-8                                               | N/A            | ori-rat 250mg/kg |

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).



## 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 shield        |
| 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 | > 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                | 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | Proper shipping name: Methanol             |

**Section XV. REGULATORY INFORMATION**

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Section XVI. Misc. INFORMATION**

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



## CERTIFIED WEIGHT REPORT

Part Number: **95318**  
Lot Number: **120524**  
Description: **2-Chloroethyl vinyl ether**

Solvent(s):  
Methanol

Lot#  
EJ143-US

Expiration Date: **120527**  
Recommended Storage: **Refrigerate (4 °C)**  
Nominal Concentration (µg/mL): **10000**  
NIST Test ID#: **6UTB**

*See 1216124*  
*20 vial*  
*✓ 14630 to*  
*✓ 14649*

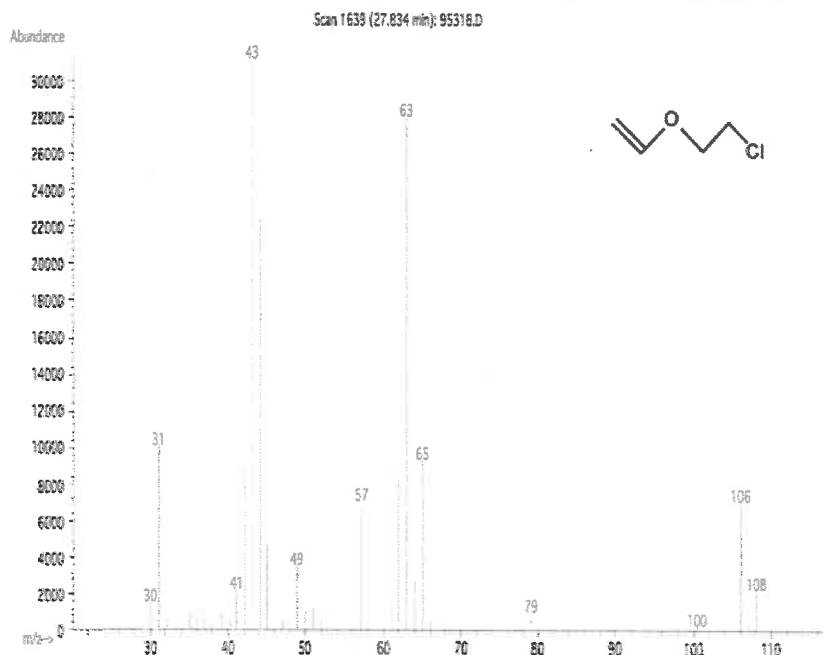
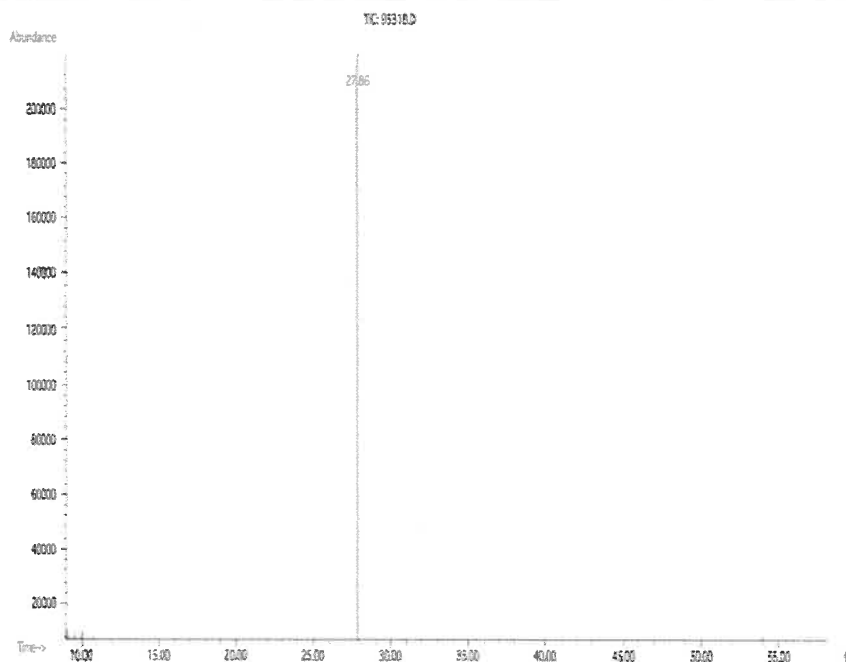
Weight(s) shown below were combined and diluted to (mL): **50.0**

5E-05 Balance Uncertainty  
0.001 Flask Uncertainty

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 120524 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 120524 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

| Compound                     | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) |                |                  |
|------------------------------|-----|------------|----------------------|------------|--------------------|-------------------|-------------------|---------------------|------------------------------------|--------------------------------------------------------|----------------|------------------|
|                              |     |            |                      |            |                    |                   |                   |                     |                                    | CAS#                                                   | OSHA PEL (TWA) | LD50             |
| 1. 2-Chloroethyl vinyl ether | 74  | MKCD0033   | 10000                | 99         | 0.2                | 0.50536           | 0.50550           | 10002.9             | 40.5                               | 110-75-8                                               | N/A            | ori-rat 250mg/kg |

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).

## 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 shield        |
| 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 | > 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                | 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 (H <sub>2</sub> O = 1) | 0.79  |
| Vapor Pressure (mm Hg)  | 96                                                        | Melting Point                           | -98°C |
| Vapor Density (AIR = 1) | 1.11                                                      | Evaporation rate<br>(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)                                   | IATA                                       |
| UN number: 1230 Class: 3 Packing group: II | UN number: 1230 Class: 3 Packing group: II |
| Proper shipping name: Methanol             | 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.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 30470 Lot No.: A0181905  
Description : tert-Butanol Standard  
tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : February 28, 2025 Storage: 0°C or colder  
Ship: Ambient

### CERTIFIED VALUES

| Elution Order | Compound                     | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2) |            |       |             |
|---------------|------------------------------|--------------------------------|-----------------------------------------|------------|-------|-------------|
| 1             | tert-Butanol (TBA)           | 50,126.0 µg/mL                 | +/-                                     | 293.4988   | µg/mL | Gravimetric |
|               | CAS # 75-65-0 (Lot SHBM7694) |                                | +/-                                     | 1,073.7654 | µg/mL | Unstressed  |
|               | Purity 99%                   |                                | +/-                                     | 1,104.9494 | µg/mL | Stressed    |

Solvent: P&T Methanol  
CAS # 67-56-1  
Purity 99%

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

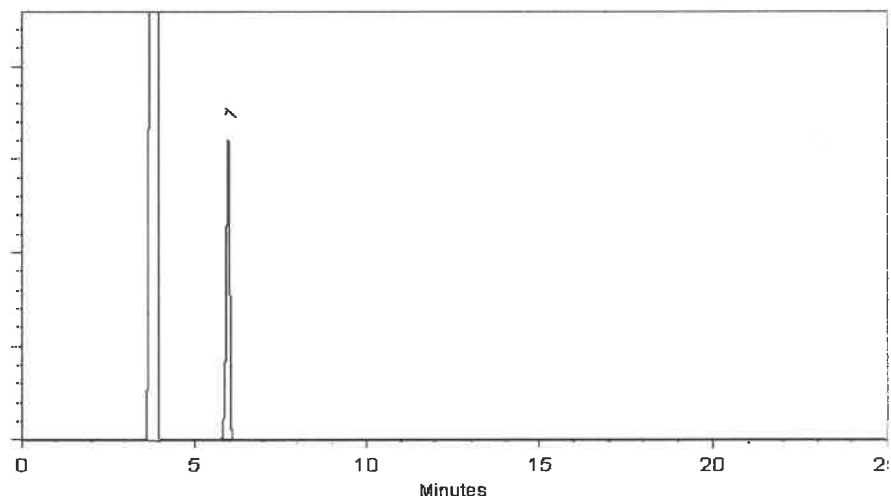
200°C

**Det. Temp:**

250°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022

Balance: B442140311

Marlene Cowan - Operations Tech I

Date Passed: 21-Feb-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions                                          | Standard Conditions | Non-Standard Conditions |
|-----------------------------------------------------------|---------------------|-------------------------|
| 25°C Nominal (Room Temperature)                           | < 60°C              | ≥ 60°C up to 7 days     |
| 10°C or colder (Refrigerate)                              | < 40°C              | ≥ 40°C up to 7 days     |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C              | ≥ 25°C up to 7 days     |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.





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*



### 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:**

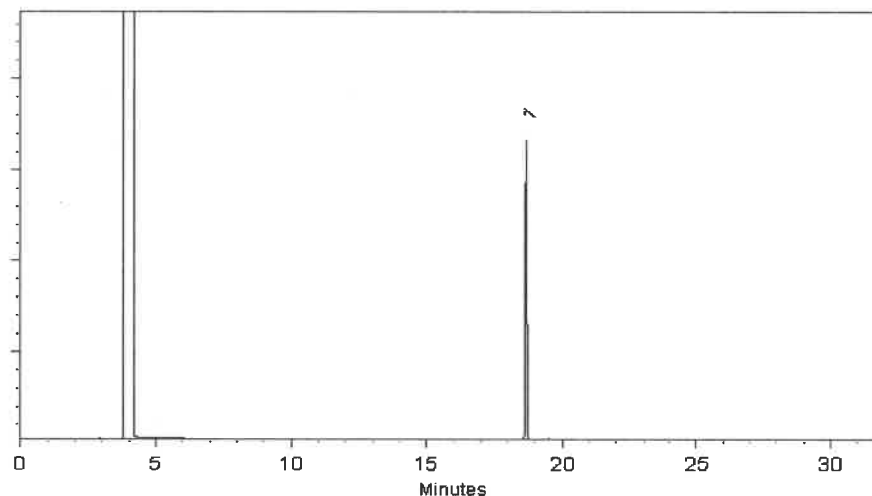
FID

**Split Vent:**

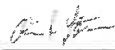
40 ml/min

**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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard  
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

## CERTIFIED VALUES

| Elution Order | Compound           | CAS #   | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------|---------|----------|--------|-----------------------------|----------------------------------------|
| 1             | Bromochloromethane | 74-97-5 | 00008541 | 99%    | 2,018.0 µg/mL               | +/- 113.3890                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

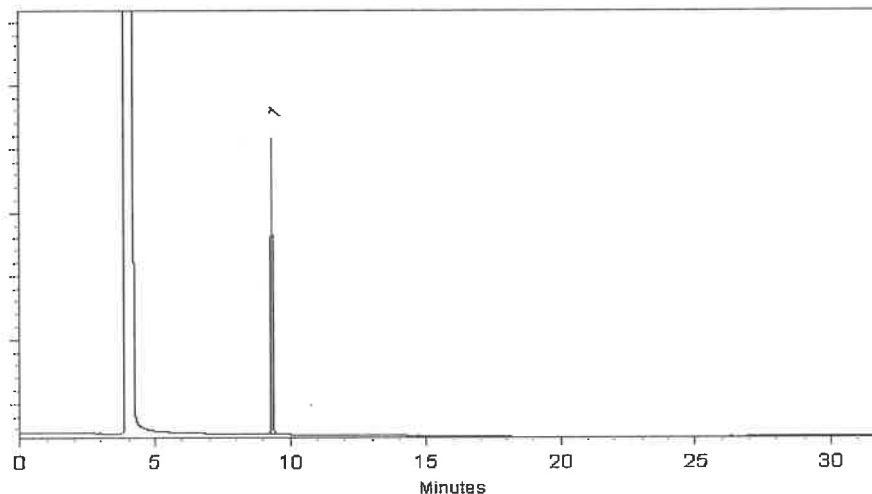
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022      Balance Serial #      B707717271

  
Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30225 **Lot No.:** A0193071  
**Description :** Bromochloromethane Standard  
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder  
**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound           | CAS #   | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------|---------|----------|--------|-----------------------------|----------------------------------------|
| 1             | Bromochloromethane | 74-97-5 | 00008541 | 99%    | 2,018.0 µg/mL               | +/- 113.3890                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

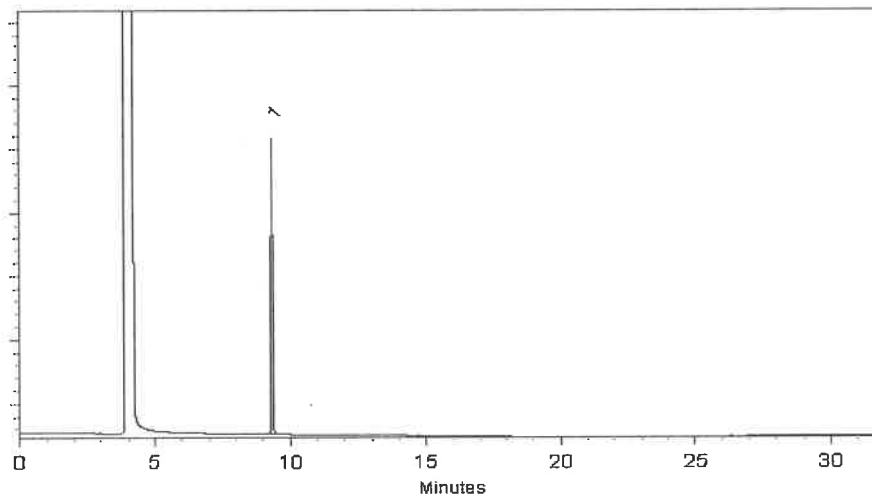
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022      Balance Serial #      B707717271

  
Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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 plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound           | CAS #   | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------|---------|----------|--------|-----------------------------|----------------------------------------|
| 1             | Bromochloromethane | 74-97-5 | 00008541 | 99%    | 2,018.0 µg/mL               | +/- 113.3890                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol

**CAS #** 67-56-1

**Purity** 99%

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

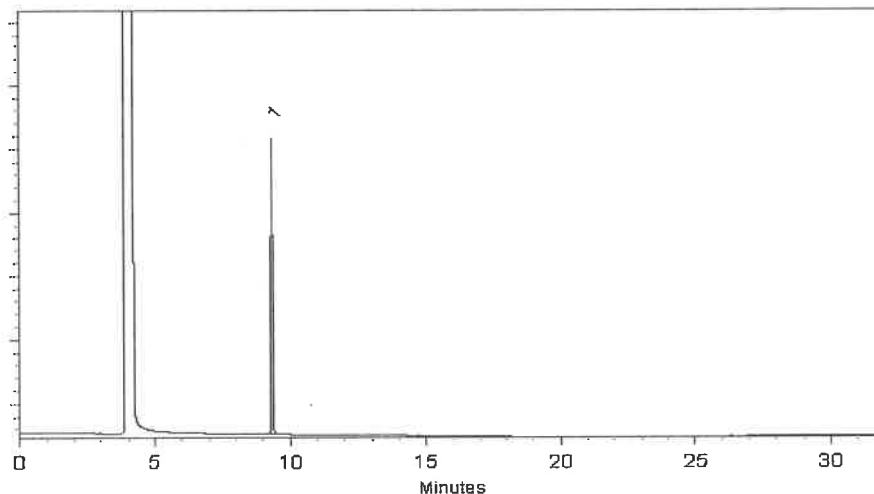
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022      Balance Serial #      B707717271

  
Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound           | CAS #   | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------|---------|----------|--------|-----------------------------|----------------------------------------|
| 1             | Bromochloromethane | 74-97-5 | 00008541 | 99%    | 2,018.0 µg/mL               | +/- 113.3890                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol

**CAS #** 67-56-1

**Purity** 99%

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

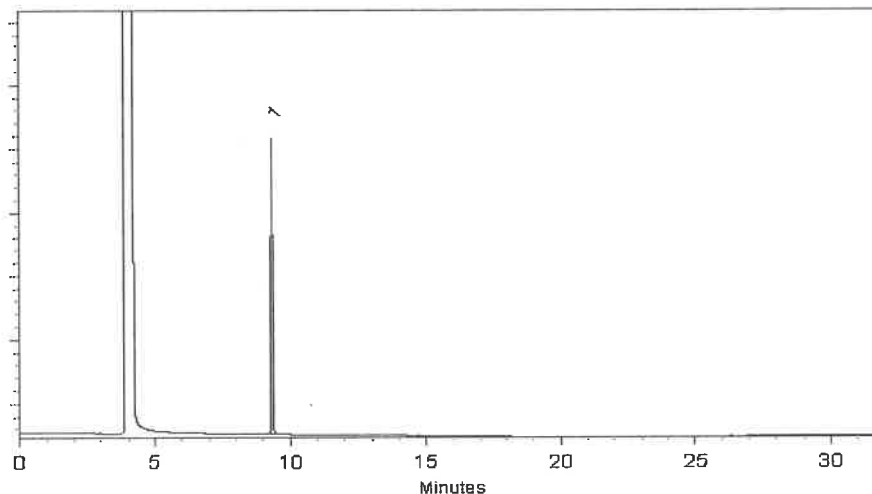
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022      Balance Serial #      B707717271

  
Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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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.
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

### gravimetric



### 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:

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*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

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CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30489 **Lot No.:** A0209618

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

### CERTIFIED VALUES

| Elution Order | Compound          | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Methyl acetate    | 79-20-9  | SHBP3100    | 99%    | 2,019.3 µg/mL               | +/- 69.7974                            |
| 2             | Vinyl acetate     | 108-05-4 | RP231030CTH | 98%    | 2,016.8 µg/mL               | +/- 69.7112                            |
| 3             | Ethyl acetate     | 141-78-6 | SHBQ9682    | 99%    | 2,010.7 µg/mL               | +/- 69.4979                            |
| 4             | Isopropyl acetate | 108-21-4 | BCCG7069    | 99%    | 2,016.0 µg/mL               | +/- 69.6822                            |
| 5             | Propyl acetate    | 109-60-4 | P8XLN       | 99%    | 2,008.0 µg/mL               | +/- 69.4057                            |
| 6             | Butyl acetate     | 123-86-4 | SHBP6314    | 99%    | 2,007.3 µg/mL               | +/- 69.3826                            |
| 7             | Amyl acetate      | 628-63-7 | 41325/1     | 97%    | 2,004.7 µg/mL               | +/- 69.2905                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

### Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

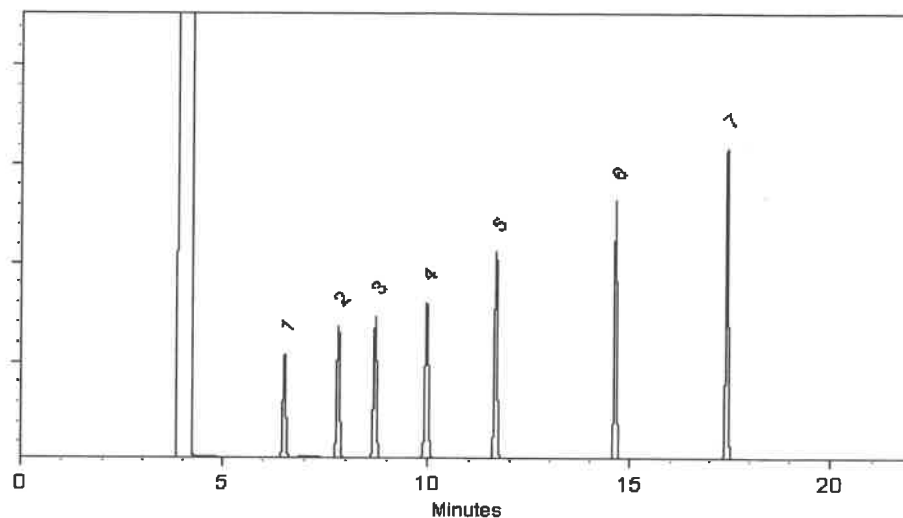
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Sam Moodler*  
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

*Dillon Murphy*  
Dillon 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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



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:**

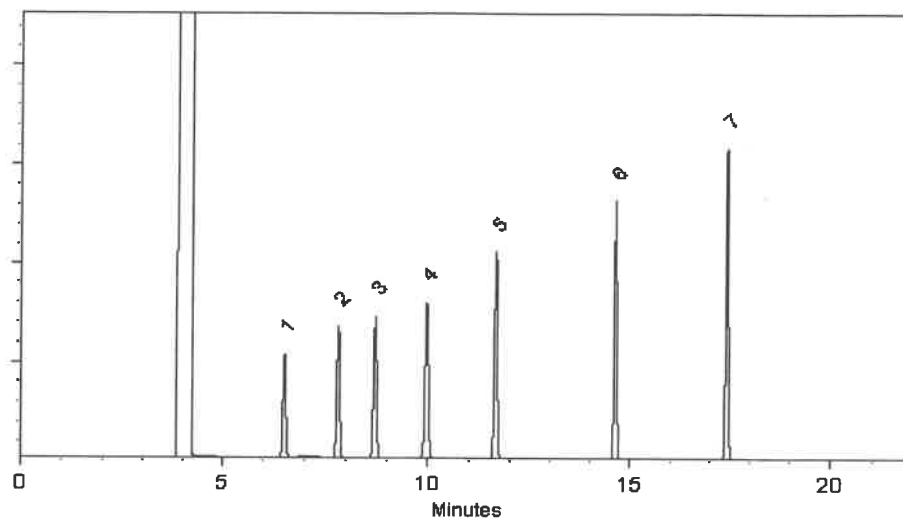
FID

**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*  
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

*Dillon Murphy*  
Dillon 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



### 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

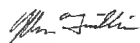
**Expiration Date :** April 30, 2027 **Storage:** 10°C or colder

**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

REVISED  
By Restek Review of SDS per April 18, 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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V14697-to-14726



**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:**

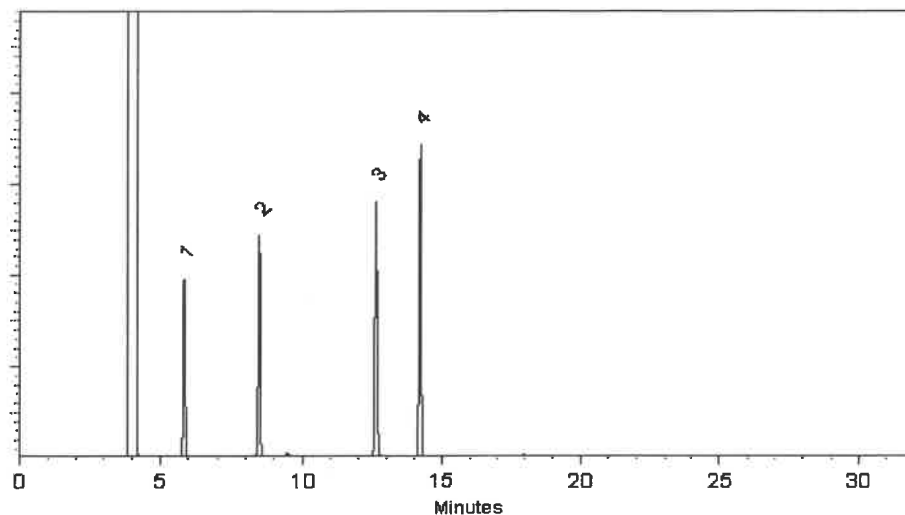
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl

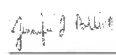


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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**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:**

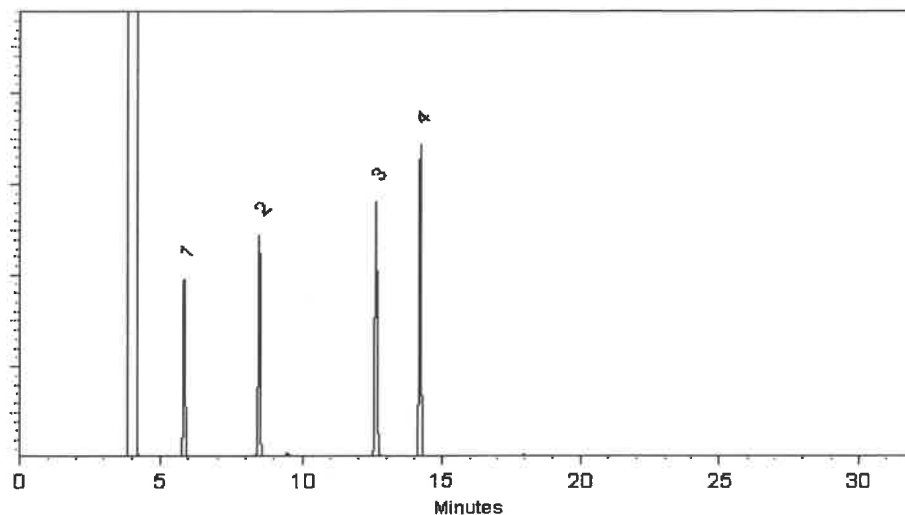
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl

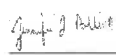


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
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:

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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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**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:**

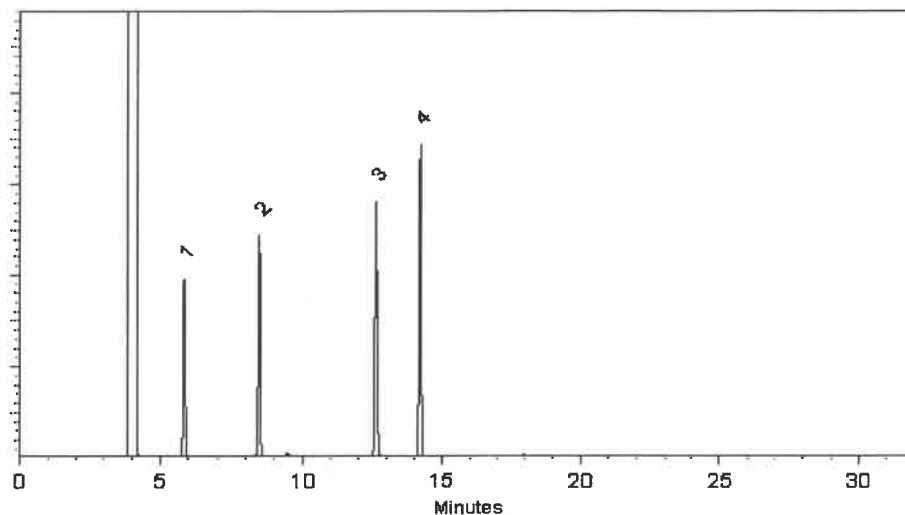
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl

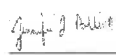


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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Fax: 1-814-353-1309

www.restek.com

Rec 12/17/24  
30 ml  
CERTIFIED REFERENCE MATERIAL

**Certificate of Analysis**  
*chromatographic plus*

V14727 to  
V14756



**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:**

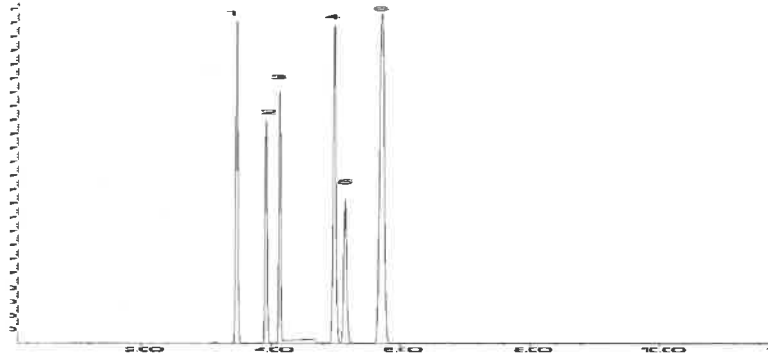
MSD

**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 Suckal - 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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Fax: 1-814-353-1309

www.restek.com

Rec 12/17/24  
30 ml  
CERTIFIED REFERENCE MATERIAL

**Certificate of Analysis**  
*chromatographic plus*

V14727 to  
V14756



**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:**

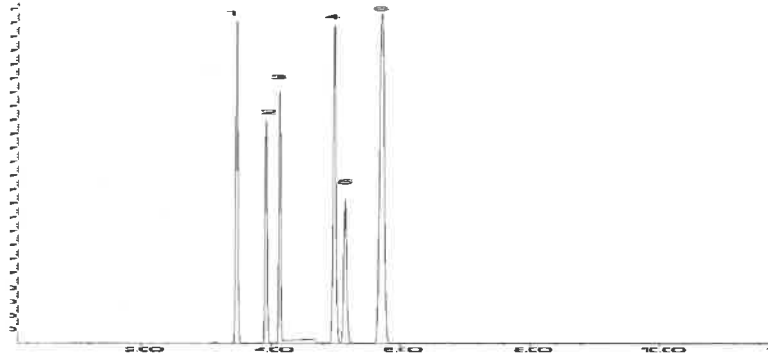
MSD

**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 Suckal - 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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2014 Dec 01/08/21  
CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

chromatographic

V14803 - V14822



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0220471  
**Description :** Custom Vinyl Acetate Standard  
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder  
**Handling:** This product is photosensitive. **Ship:** On Ice

### CERTIFIED VALUES

| Elution Order | Compound      | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|---------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Vinyl acetate | 108-05-4 | RD240423RSR | 99%    | 8,066.0 µg/mL               | +/- 278.7979                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

### Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

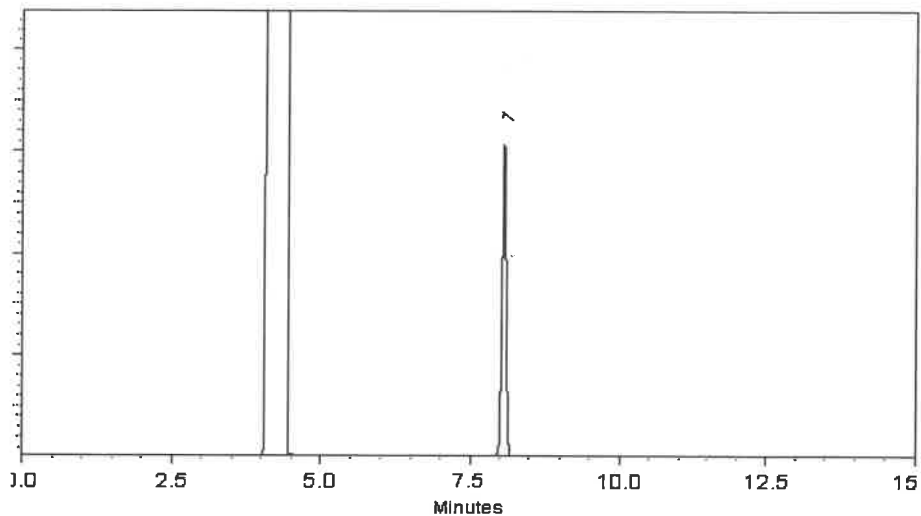
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED  
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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/ $\mu$ ECD, 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  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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10 vol Rec 01/08/25  
CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic

V14793 to 14802



## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-FL **Lot No.:** A0220563  
**Description :** Custom Vinyl Acetate Standard  
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder  
**Handling:** This product is photosensitive. **Ship:** On Ice

## CERTIFIED VALUES

| Elution Order | Compound      | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|---------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Vinyl acetate | 108-05-4 | RD240423RSR | 99%    | 8,060.0 µg/mL               | +/- 278.5905                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

### Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

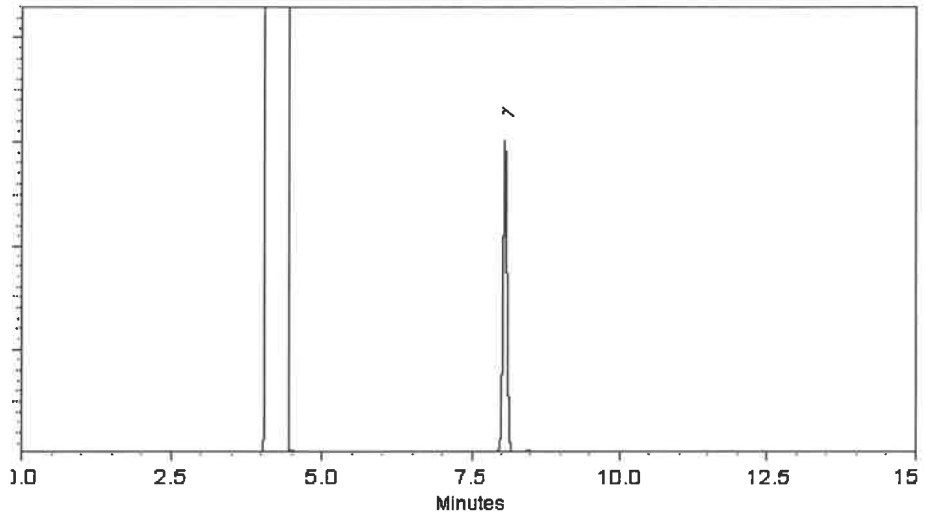
FID

**Split Vent:**

40 ml/min

**Inj. Vol**

1µl

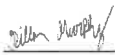


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckal - Mix Technician

Date Mixed: 30-Dec-2024

Balance Serial # B345965662

  
Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED  
By Jennifer Pothos at 7:11 am, Jan 03, 2025

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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol  
ULTRA RESI-ANALYZED  
For Purge and Trap Analysis



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 <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.2 ppm  |
| Titration Acid (μeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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

Jamie Ethier  
Vice President Global Quality

Methanol  
ULTRA RESI-ANALYZED  
For Purge and Trap Analysis



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 <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.2 ppm  |
| Titration Acid (µeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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

Jamie Ethier  
Vice President Global Quality





# SHIPPING DOCUMENTS

# CHEMTECH

## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092  
(908) 789-8900 Fax: (908) 78-8922  
www.chemtech.net

Chemtech Project Number: Q1199

COC Number: \_\_\_\_\_

### CLIENT INFORMATION

COMPANY: Tetra Tech  
ADDRESS: 4433 Corporation Lane Suite 300  
CITY: Virginia Beach STATE: VA ZIP: 23462  
ATTENTION: Ernie Wu  
PHONE: 757-466-4901 FAX: 757-461-4148

### PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage  
PROJECT #: 112G08005-WE13 LOCATION: VPB-192  
PROJECT MANAGER: Ernie Wu  
E-MAIL: ernie.wu@tetratech.com  
PHONE: 757-466-4901 FAX: 757-461-4148

### BILLING INFORMATION

BILL TO: SEE CONTRACT PO#  
ADDRESS:  
CITY: STATE: ZIP:  
ATTENTION: PHONE:

### DATA TURNAROUND INFORMATION

FAX: 10 DAYS\*  
HARD COPY: 10 DAYS\*  
EDD 10 DAYS\*  
\* TO BE APPROVED BY CHEMTECH  
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP  
☐ RESULTS + QC ☐ New York State ASP "B"  
☐ New Jersey REDUCED ☐ New York State ASP "A"  
☐ New Jersey CLP ☐ Other \_\_\_\_\_  
☐ EDD Format \_\_\_\_\_

### ANALYSIS

|                    |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|
| VOC(SW846-8260B)   |  |  |  |  |  |  |  |  |  |
| 1,4 Dioxane (8270) |  |  |  |  |  |  |  |  |  |
| SIM                |  |  |  |  |  |  |  |  |  |

### PRESERVATIVES

### COMMENTS

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE | SAMPLE COLLECTION DATE | SAMPLE TIME | # of Bottles | A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|--------------------|-------------------------------|---------------|-------------|------------------------|-------------|--------------|---|---|---|---|---|---|---|---|---|---|----------|
|--------------------|-------------------------------|---------------|-------------|------------------------|-------------|--------------|---|---|---|---|---|---|---|---|---|---|----------|

|     |                            |    |  |   |         |       |   |   |   |  |  |  |  |  |  |  |                 |
|-----|----------------------------|----|--|---|---------|-------|---|---|---|--|--|--|--|--|--|--|-----------------|
| 1.  | BP-VPB-192-TB-20250123     | QA |  | X | 1/23/25 | 9:00  | 2 | 2 |   |  |  |  |  |  |  |  | Tip Blank       |
| 2.  | BP-VPB-192-EB-20250124     | QA |  | X | 1/24/25 | 12:15 | 3 | 2 | 1 |  |  |  |  |  |  |  | Equipment Blank |
| 3.  | BP-VPB-192-GW-280-282      | AQ |  | X | 1/24/25 | 11:45 | 3 | 2 | 1 |  |  |  |  |  |  |  |                 |
| 4.  | BP-VPB-192-GW-260-262      | AQ |  | X | 1/23/25 | 14:45 | 3 | 2 | 1 |  |  |  |  |  |  |  |                 |
| 5.  | BP-VPB-192-GW-240-242      | AQ |  | X | 1/23/25 | 12:50 | 3 | 2 | 1 |  |  |  |  |  |  |  |                 |
| 6.  | BP-VPB-192-GW-220-222      | AQ |  | X | 1/23/25 | 10:55 | 3 | 2 | 1 |  |  |  |  |  |  |  |                 |
| 7.  | BP-VPB-192-GW-DUP-20250123 | AQ |  | X | 1/23/25 | 12:00 | 3 | 2 |   |  |  |  |  |  |  |  | 8260B Duplicate |
| 8.  |                            |    |  |   |         |       |   |   |   |  |  |  |  |  |  |  |                 |
| 9.  |                            |    |  |   |         |       |   |   |   |  |  |  |  |  |  |  |                 |
| 10. |                            |    |  |   |         |       |   |   |   |  |  |  |  |  |  |  |                 |

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY | DATE/TIME | RECEIVED BY | DATE/TIME | RECEIVED FOR LAB BY | DATE/TIME | SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight | SHIPMENT COMPLETE <input type="checkbox"/> YES <input type="checkbox"/> NO |
|-----------------|-----------|-------------|-----------|---------------------|-----------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
|-----------------|-----------|-------------|-----------|---------------------|-----------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|

|                    |              |                    |         |  |  |  |  |
|--------------------|--------------|--------------------|---------|--|--|--|--|
| 1. <u>Ernie Wu</u> | 1/27/25 1530 | 1. <u>Ernie Wu</u> | 1-27-25 |  |  |  |  |
| 2.                 |              | 2.                 |         |  |  |  |  |
| 3.                 |              | 3.                 |         |  |  |  |  |

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.2  
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: \_\_\_\_\_  
Comments: Standard TAT



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       |

## LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q1199 TETR06

**Order Date :** 1/27/2025 3:35:00 PM

**Project Mgr :**

**Client Name :** Tetra Tech NUS, Inc.

**Project Name :** CTO WE13

**Report Type :** Level 4

**Client Contact :** Ernie Wu

**Receive DateTime :** 1/27/2025 12:00:00 AM

**EDD Type :** ADAPT

**Invoice Name :** Tetra Tech NUS, Inc.

**Purchase Order :**

**Hard Copy Date :**

**Invoice Contact :** Ernie Wu

**Date Signoff :**

| LAB ID   | CLIENT ID                                              | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD   | FAX DATE     | DUE DATES |
|----------|--------------------------------------------------------|--------|-------------|-------------|--------------|------------|----------|--------------|-----------|
| Q1199-01 | BP-VPB-192-TB-20250123                                 | Water  | 01/23/2025  | 09:00       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-02 | BP-VPB-192-EB-20250124                                 | Water  | 01/24/2025  | 12:15       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-03 | BP-VPB-192-GW-280-282                                  | Water  | 01/24/2025  | 11:45       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-04 | BP-VPB-192-GW-260-262                                  | Water  | 01/23/2025  | 14:45       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-05 | BP-VPB-192-GW-240-242                                  | Water  | 01/23/2025  | 12:50       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-06 | <del>BP-VPB-192-220-222</del><br>BP-VPB-192-GW-220-222 | Water  | 01/23/2025  | 10:55       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |
| Q1199-07 | BP-VPB-192-GW-DUP-20250123                             | Water  | 01/23/2025  | 12:00       |              |            |          |              |           |
|          |                                                        |        |             |             | VOCMS Group1 |            | 8260-Low | 10 Bus. Days |           |

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1199 TETR06

Order Date : 1/27/2025 3:35:00 PM

Project Mgr :

Client Name : Tetra Tech NUS, Inc.

Project Name : CTO WE13

Report Type : Level 4

Client Contact : Ernie Wu

Receive DateTime : 1/27/2025 12:00:00 AM

EDD Type : ADAPT

Invoice Name : Tetra Tech NUS, Inc.

Purchase Order :

Hard Copy Date :

Invoice Contact : Ernie Wu

Date Signoff :

| LAB ID | CLIENT ID | MATRIX | SAMPLE<br>DATE | SAMPLE<br>TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE<br>DATES |
|--------|-----------|--------|----------------|----------------|------|------------|--------|----------|--------------|
|--------|-----------|--------|----------------|----------------|------|------------|--------|----------|--------------|

Relinquished By :

Date / Time :

*[Signature]*  
1-28-25 0845

Received By :

Date / Time :

*[Signature]*  
01/28/25 0845 Ng # 4

Storage Area : VOA Refridgerator Room

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

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

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 202613   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 329363   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 298938   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 146196   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |             |      |
|---------------------------|--------|-------|----------|----------|-------------|------|
| 33) 1,2-Dichloroethane-d4 | 8.571  | 65    | 313645   | 95.899   | ug/l        | 0.00 |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | = 191.800%# |      |
| 35) Dibromofluoromethane  | 8.159  | 113   | 236159   | 103.353  | ug/l        | 0.00 |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | = 206.700%# |      |
| 50) Toluene-d8            | 10.565 | 98    | 881956   | 108.636  | ug/l        | 0.00 |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | = 217.280%# |      |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 313161   | 112.765  | ug/l        | 0.00 |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | = 225.520%# |      |

## Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 269023  | 98.065  | ug/l | 99     |
| 3) Chloromethane             | 2.359 | 50  | 275415  | 92.724  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.512 | 62  | 282361  | 94.576  | ug/l | 99     |
| 5) Bromomethane              | 2.942 | 94  | 158888  | 88.105  | ug/l | 98     |
| 6) Chloroethane              | 3.112 | 64  | 176111  | 93.043  | ug/l | 99     |
| 7) Trichlorofluoromethane    | 3.494 | 101 | 423967  | 97.870  | ug/l | 100    |
| 8) Diethyl Ether             | 3.953 | 74  | 146889  | 98.154  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 239104  | 97.997  | ug/l | 99     |
| 10) Methyl Iodide            | 4.589 | 142 | 292983  | 104.856 | ug/l | 95     |
| 11) Tert butyl alcohol       | 5.512 | 59  | 173044  | 462.061 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 222117  | 102.146 | ug/l | 99     |
| 13) Acrolein                 | 4.171 | 56  | 275350  | 538.600 | ug/l | 99     |
| 14) Allyl chloride           | 5.018 | 41  | 349717  | 99.111  | ug/l | 98     |
| 15) Acrylonitrile            | 5.712 | 53  | 585370  | 492.095 | ug/l | 99     |
| 16) Acetone                  | 4.418 | 43  | 483221  | 457.268 | ug/l | 96     |
| 17) Carbon Disulfide         | 4.712 | 76  | 630294  | 94.140  | ug/l | 100    |
| 18) Methyl Acetate           | 5.012 | 43  | 304226  | 94.674  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.788 | 73  | 743008  | 105.230 | ug/l | 100    |
| 20) Methylene Chloride       | 5.271 | 84  | 254912  | 97.440  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 231503  | 99.618  | ug/l | 97     |
| 22) Diisopropyl ether        | 6.665 | 45  | 820871  | 104.812 | ug/l | 99     |
| 23) Vinyl Acetate            | 6.594 | 43  | 3029568 | 550.850 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 471831  | 98.803  | ug/l | 99     |
| 25) 2-Butanone               | 7.477 | 43  | 764979  | 491.912 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.482 | 77  | 388140  | 100.530 | ug/l | 100    |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 280197  | 102.367 | ug/l | 99     |
| 28) Bromochloromethane       | 7.806 | 49  | 214796  | 96.679  | ug/l | 100    |
| 29) Tetrahydrofuran          | 7.830 | 42  | 503459  | 510.635 | ug/l | 99     |
| 30) Chloroform               | 7.959 | 83  | 484941  | 98.253  | ug/l | 100    |
| 31) Cyclohexane              | 8.253 | 56  | 398641  | 96.041  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 426782  | 98.578  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 342961  | 106.945 | ug/l | 100    |
| 37) Ethyl Acetate            | 7.553 | 43  | 326802  | 100.961 | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 378390  | 103.065 | ug/l | 97     |
| 39) Methylcyclohexane        | 9.594 | 83  | 371734  | 123.354 | ug/l | 99     |
| 40) Benzene                  | 8.600 | 78  | 1021393 | 106.001 | ug/l | 100    |

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

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

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 184326   | 109.454  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 374938   | 103.314  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.682  | 43   | 549969   | 106.035  | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 238296   | 106.242  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 256964   | 104.405  | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 180990   | 101.913  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.882  | 83   | 388499   | 107.377  | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.676  | 41   | 267689   | 114.685  | ug/l   | 99       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 83879    | 2133.992 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 1643800  | 546.159  | ug/l   | 100      |
| 52) Toluene                   | 10.623 | 92   | 634743   | 113.689  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 391238   | 114.424  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 410403   | 112.369  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 229522   | 103.879  | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 383663   | 101.029  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 412886   | 107.469  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 848636   | 605.243  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 1178831  | 556.643  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.353 | 129  | 283361   | 106.227  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 230104   | 104.623  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 209870   | 102.980  | ug/l   | 98       |
| 65) Chlorobenzene             | 11.888 | 112  | 677679   | 103.482  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 241593   | 100.517  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 1239080  | 116.169  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.070 | 106  | 927244   | 235.219  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 441279   | 117.135  | ug/l   | 100      |
| 70) Styrene                   | 12.406 | 104  | 760136   | 121.919  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 186124   | 108.227  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 1146752  | 116.221  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 489217   | 110.308  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 327767   | 94.039   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 446237   | 150.413  | ug/l   | 47       |
| 77) Bromobenzene              | 12.976 | 156  | 268616   | 104.200  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.029 | 91   | 1385353  | 118.600  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 822258   | 108.767  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 953066   | 116.938  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 122508   | 111.544  | ug/l   | 87       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 832317   | 110.574  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 797069   | 116.457  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 971729   | 119.625  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.611 | 105  | 1143885  | 120.587  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 960747   | 100.111  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 502960   | 105.943  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.811 | 146  | 498709   | 101.341  | ug/l   | 97       |
| 89) n-Butylbenzene            | 14.053 | 91   | 842368   | 123.781  | ug/l   | 98       |
| 90) Hexachloroethane          | 14.329 | 117  | 188541   | 104.405  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 470919   | 99.445   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 63846    | 100.313  | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 250787   | 113.946  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 112899   | 96.619   | ug/l   | 99       |
| 95) Naphthalene               | 15.635 | 128  | 756816   | 115.234  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 238860   | 107.256  | ug/l   | 100      |

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

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

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

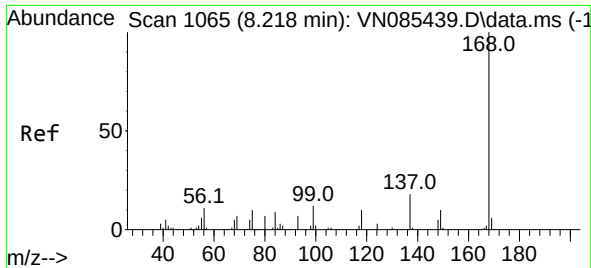
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



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

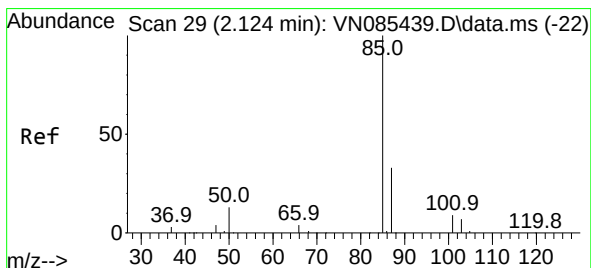
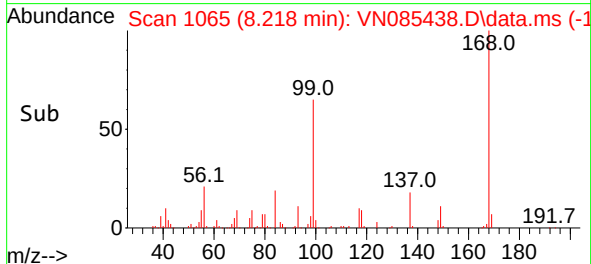
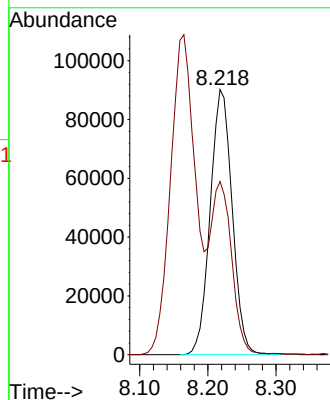
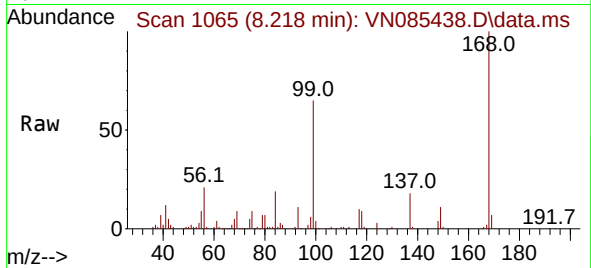




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

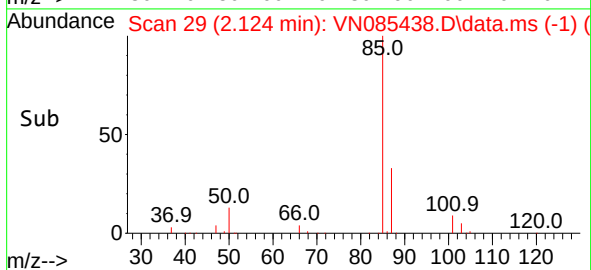
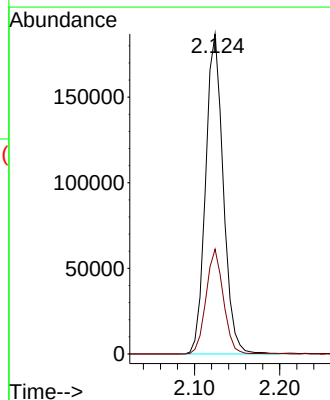
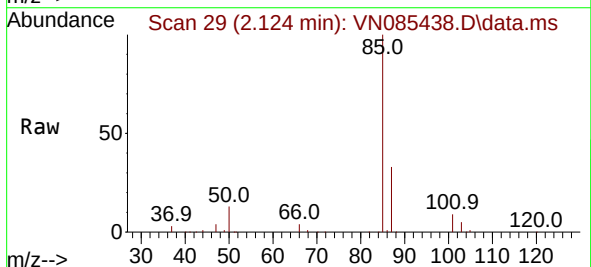
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

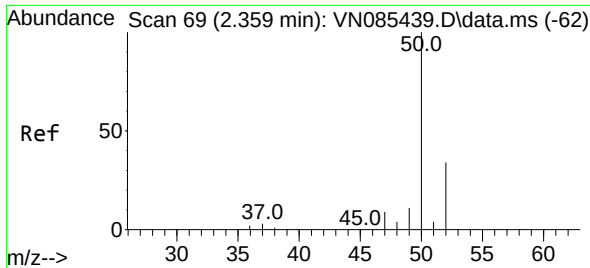
Tgt Ion:168 Resp: 202613  
Ion Ratio Lower Upper  
168 100  
99 64.9 53.6 80.4



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

Tgt Ion: 85 Resp: 269023  
Ion Ratio Lower Upper  
85 100  
87 32.7 16.7 50.1

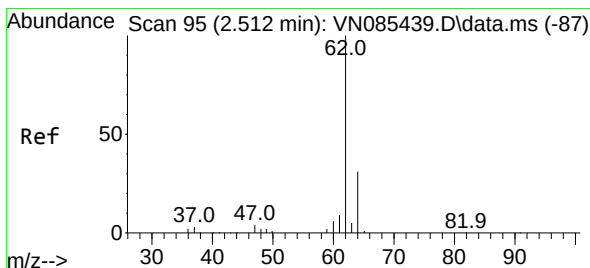
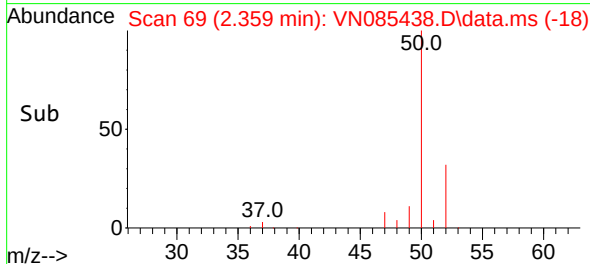
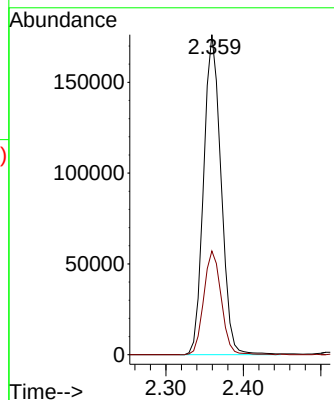
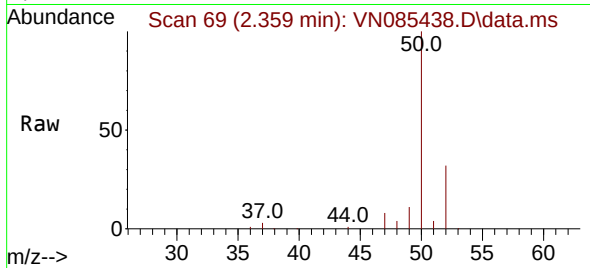




#3  
Chloromethane  
Concen: 92.724 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

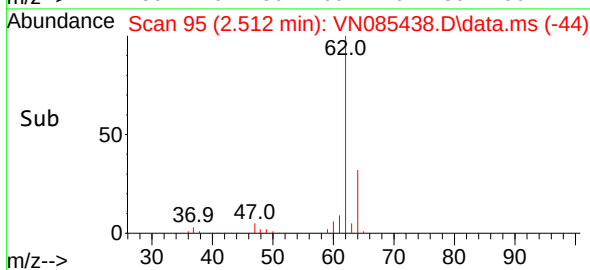
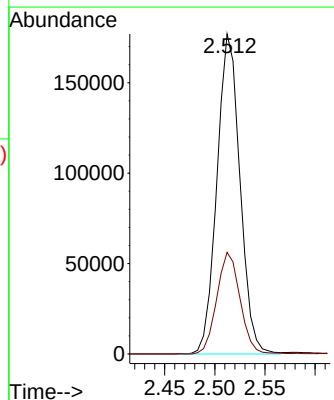
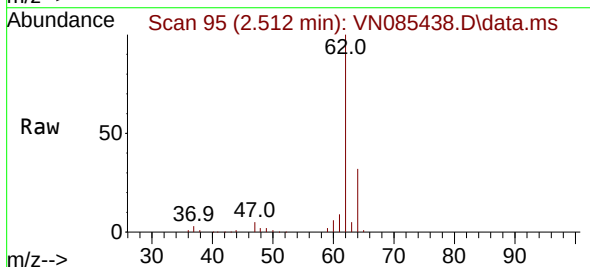
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

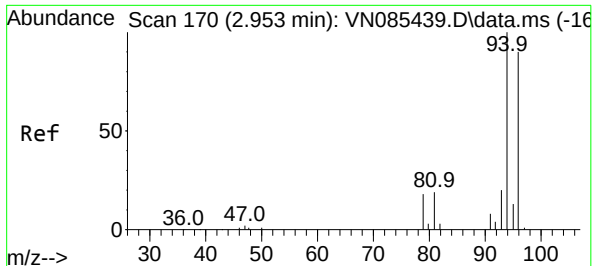
Tgt Ion: 50 Resp: 275415  
Ion Ratio Lower Upper  
50 100  
52 32.4 27.0 40.6



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

Tgt Ion: 62 Resp: 282361  
Ion Ratio Lower Upper  
62 100  
64 31.6 24.8 37.2

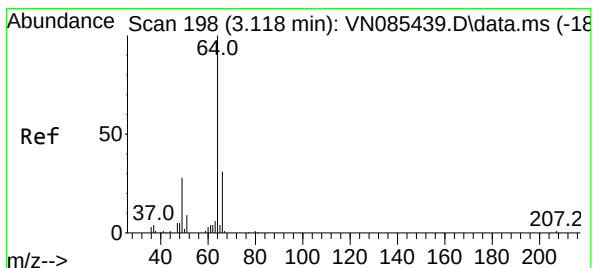
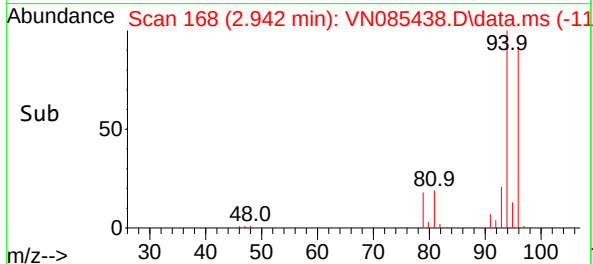
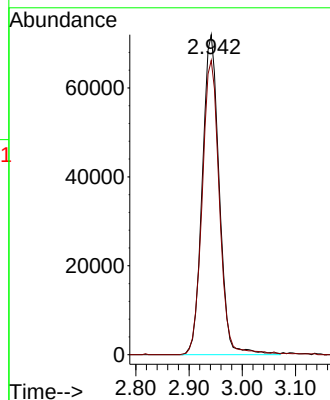
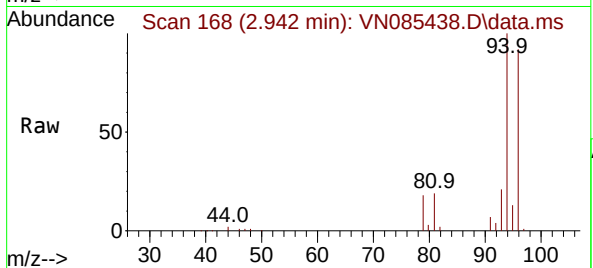




#5  
Bromomethane  
Concen: 88.105 ug/l  
RT: 2.942 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

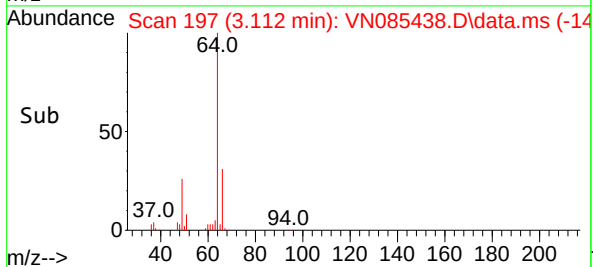
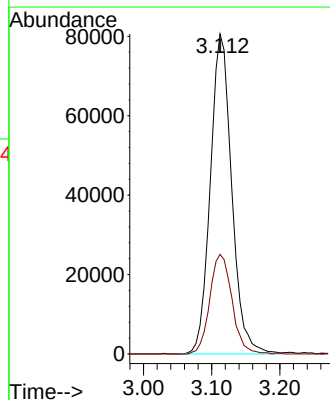
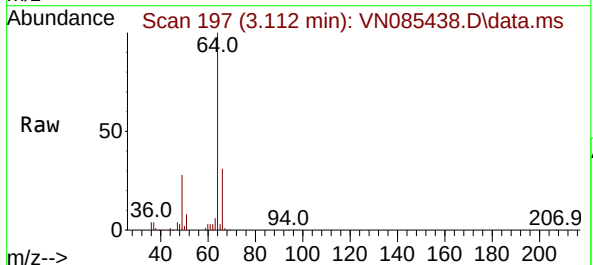
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

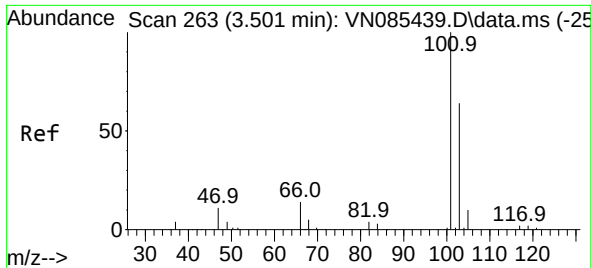
Tgt Ion: 94 Resp: 158888  
Ion Ratio Lower Upper  
94 100  
96 91.9 71.8 107.6



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

Tgt Ion: 64 Resp: 176111  
Ion Ratio Lower Upper  
64 100  
66 31.1 24.6 36.8

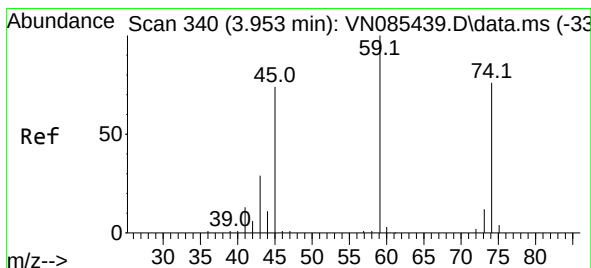
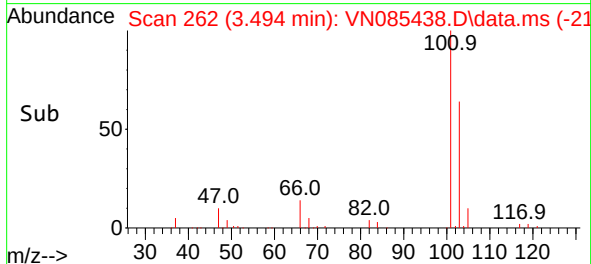
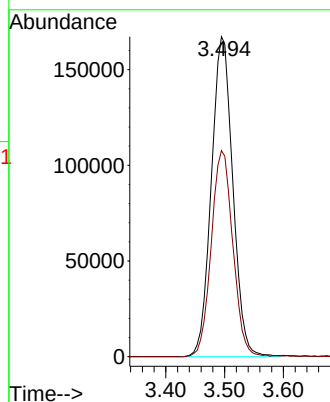
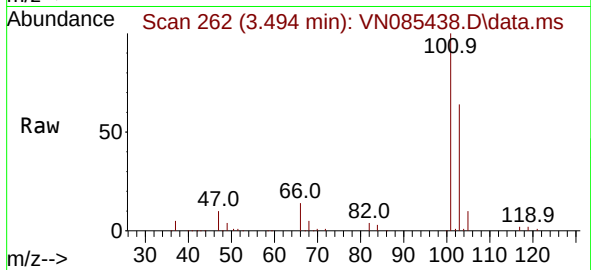




#7  
 Trichlorofluoromethane  
 Concen: 97.870 ug/l  
 RT: 3.494 min Scan# 21  
 Delta R.T. -0.006 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

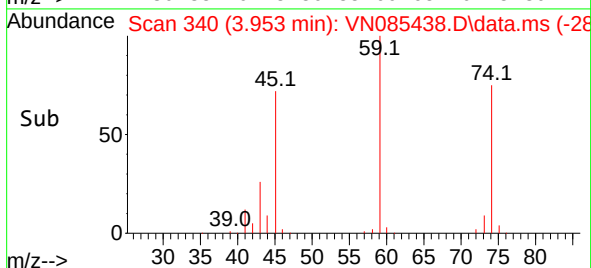
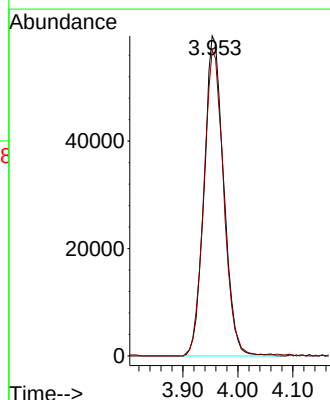
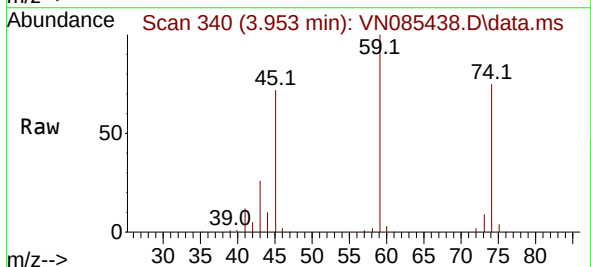
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

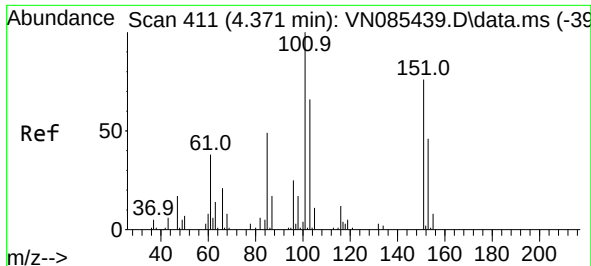
Tgt Ion:101 Resp: 423967  
 Ion Ratio Lower Upper  
 101 100  
 103 64.4 51.4 77.2



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

Tgt Ion: 74 Resp: 146889  
 Ion Ratio Lower Upper  
 74 100  
 45 97.4 49.7 149.1

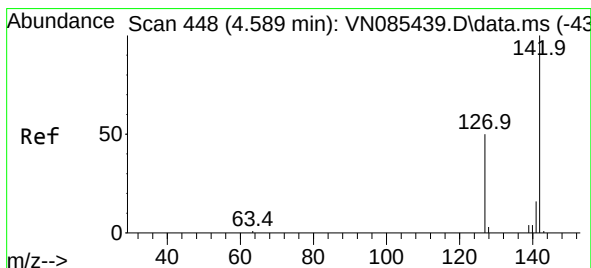
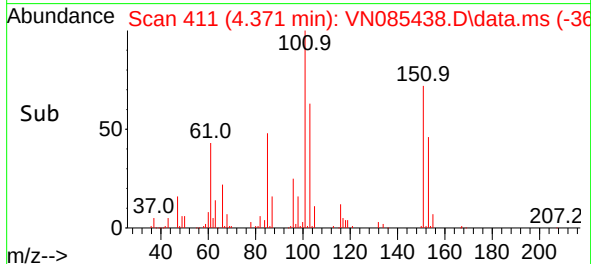
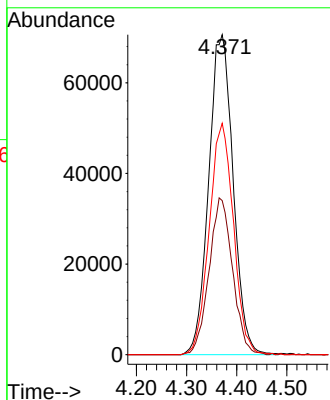
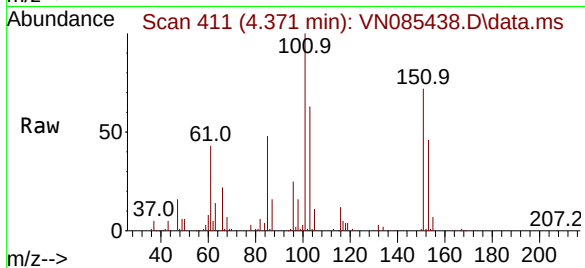




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 97.997 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

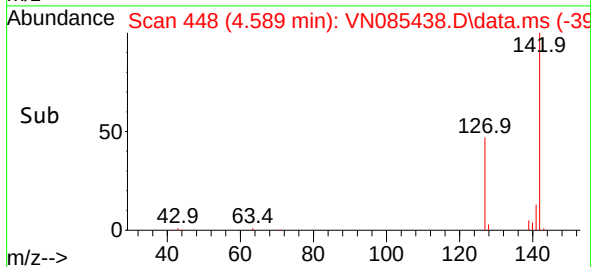
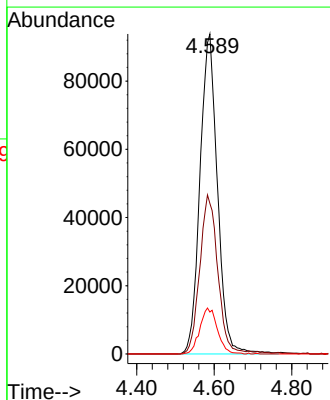
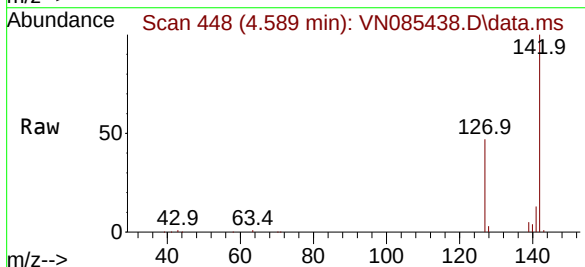
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

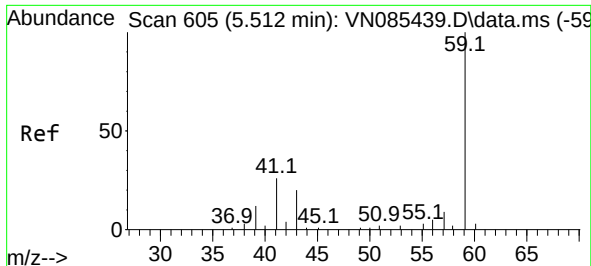
Tgt Ion:101 Resp: 239104  
Ion Ratio Lower Upper  
101 100  
85 47.1 37.8 56.8  
151 71.8 58.8 88.2



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

Tgt Ion:142 Resp: 292983  
Ion Ratio Lower Upper  
142 100  
127 47.1 40.3 60.5  
141 13.1 12.8 19.2

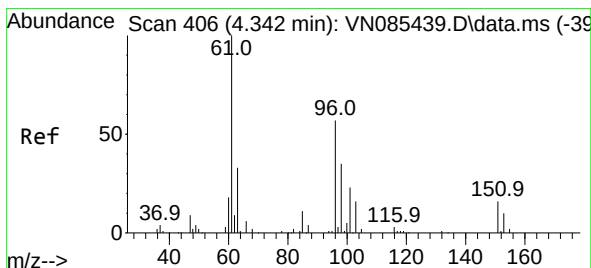
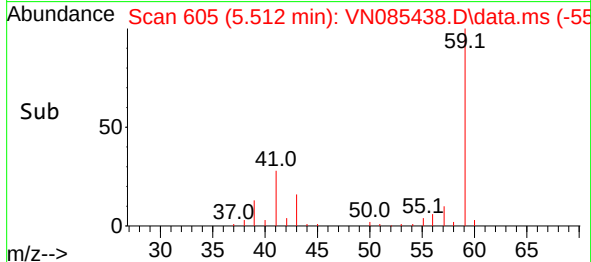
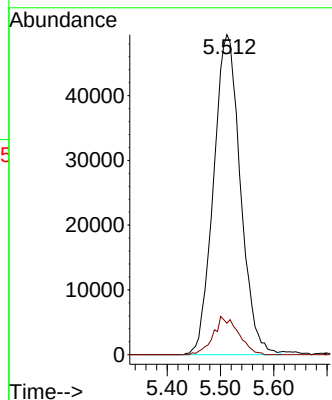
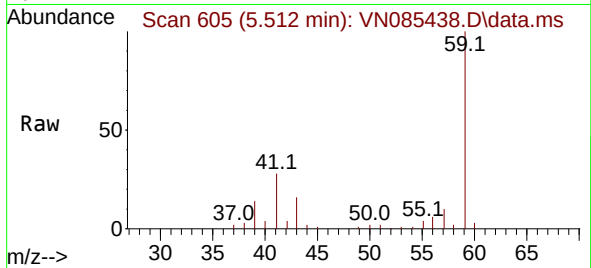




#11  
Tert butyl alcohol  
Concen: 462.061 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

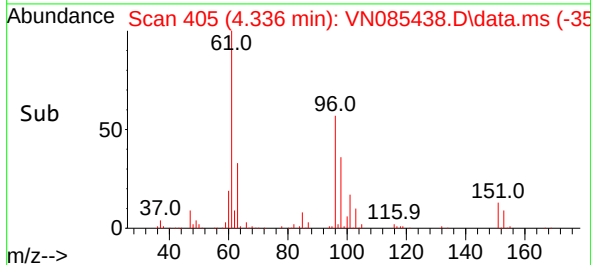
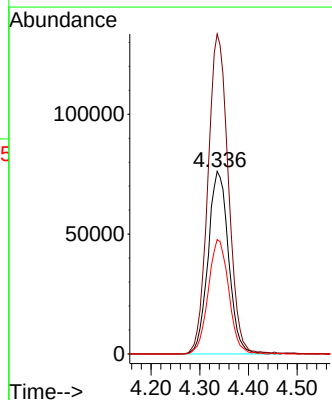
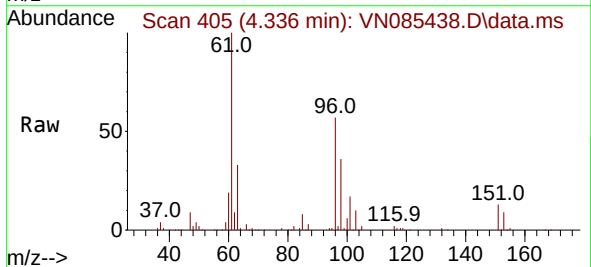
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

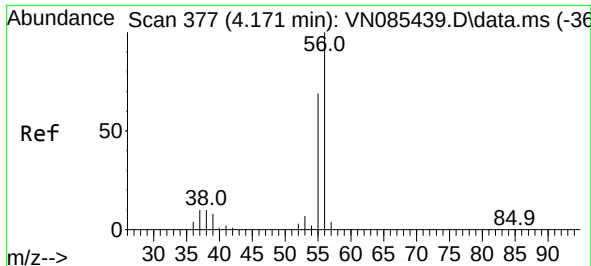
Tgt Ion: 59 Resp: 173044  
Ion Ratio Lower Upper  
59 100  
57 11.1 8.6 13.0



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

Tgt Ion: 96 Resp: 222117  
Ion Ratio Lower Upper  
96 100  
61 175.3 141.0 211.4  
98 62.7 49.0 73.6





#13

Acrolein

Concen: 538.600 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

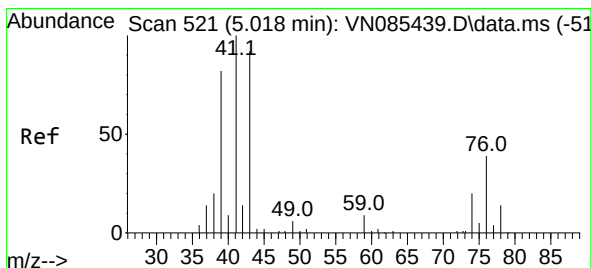
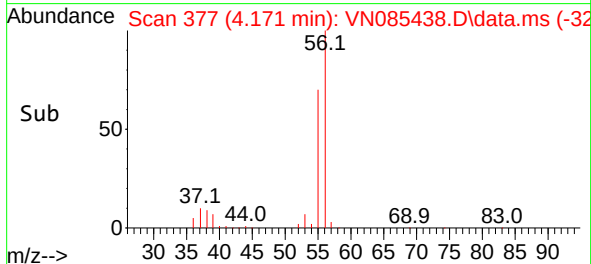
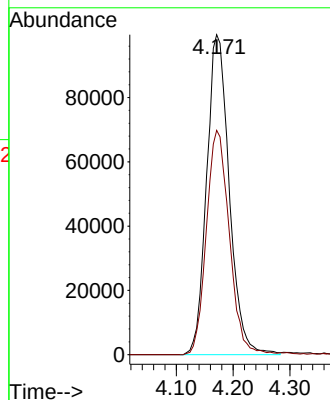
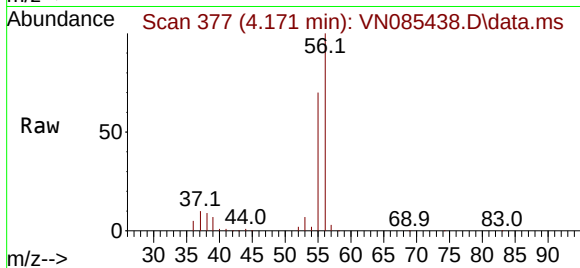
VSTDICC100

Tgt Ion: 56 Resp: 275350

Ion Ratio Lower Upper

56 100

55 71.1 56.3 84.5



#14

Allyl chloride

Concen: 99.111 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

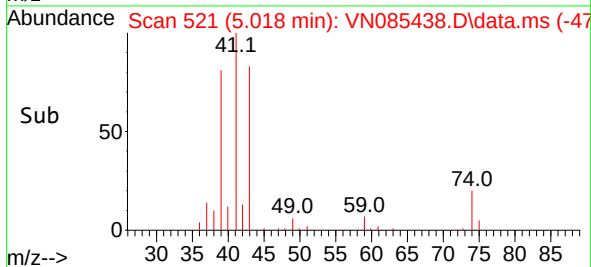
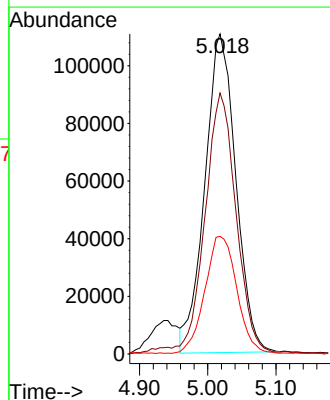
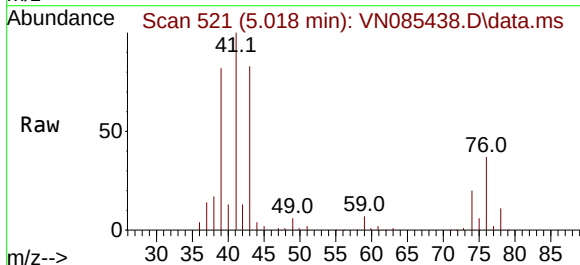
Tgt Ion: 41 Resp: 349717

Ion Ratio Lower Upper

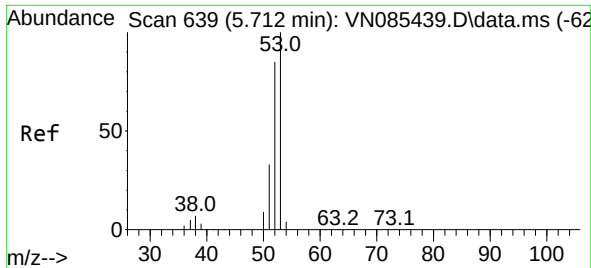
41 100

39 83.3 64.4 96.6

76 37.9 30.5 45.7



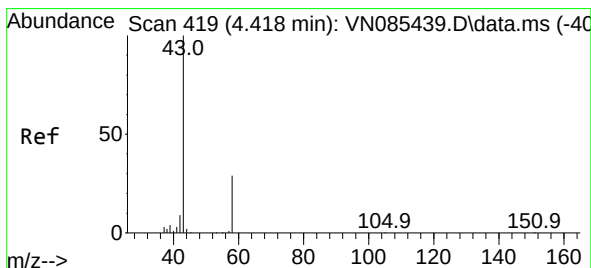
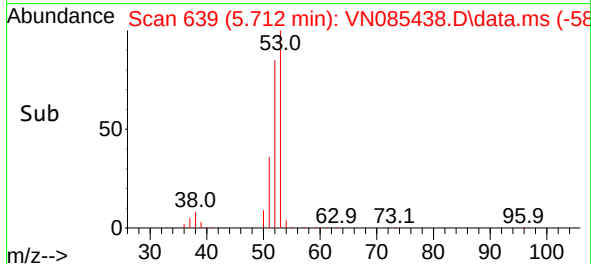
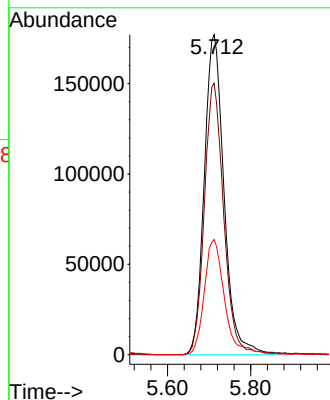
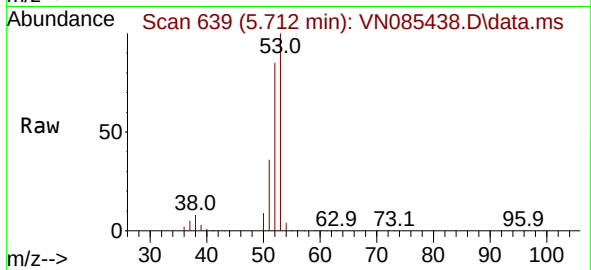




#15  
Acrylonitrile  
Concen: 492.095 ug/l  
RT: 5.712 min Scan# 611  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

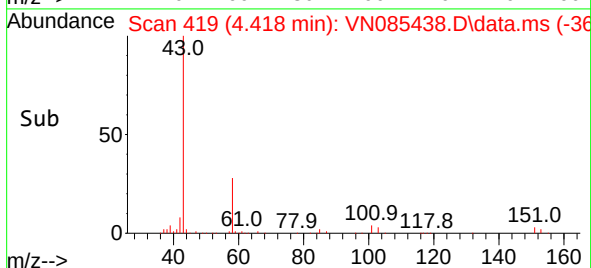
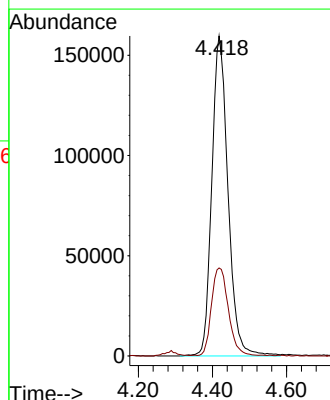
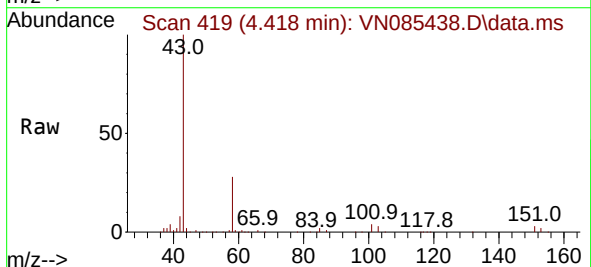
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

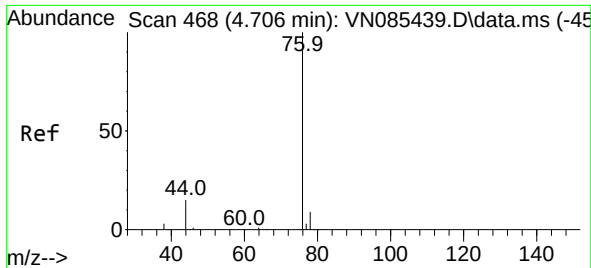
Tgt Ion: 53 Resp: 585370  
Ion Ratio Lower Upper  
53 100  
52 83.0 65.5 98.3  
51 37.1 29.8 44.8



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

Tgt Ion: 43 Resp: 483221  
Ion Ratio Lower Upper  
43 100  
58 27.3 23.8 35.6

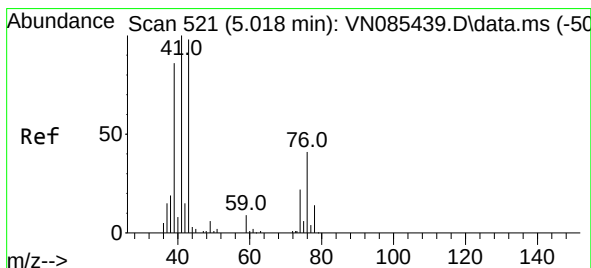
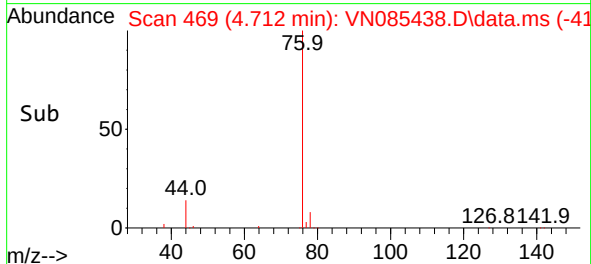
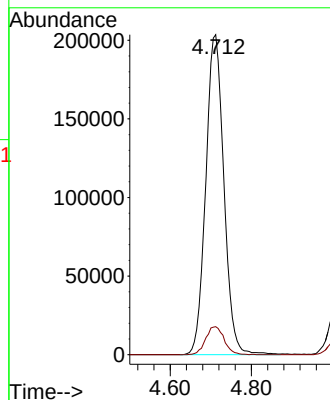
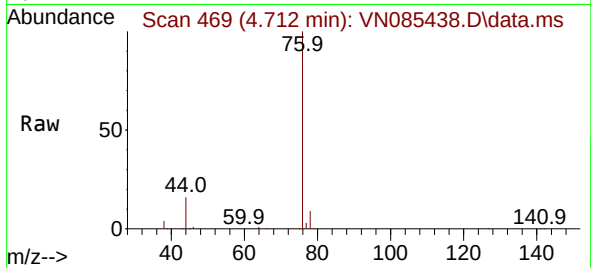




#17  
Carbon Disulfide  
Concen: 94.140 ug/l  
RT: 4.712 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

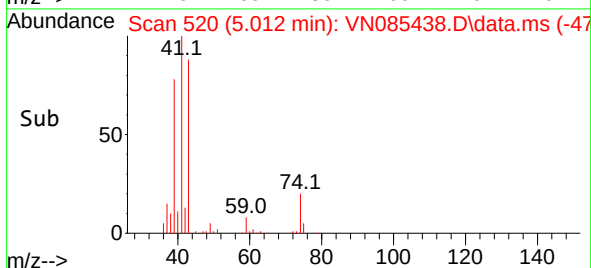
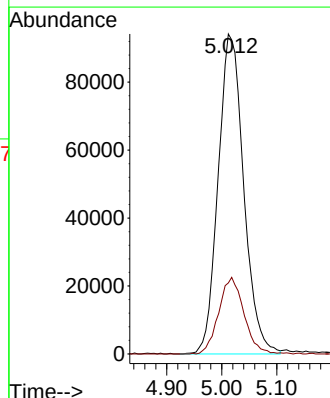
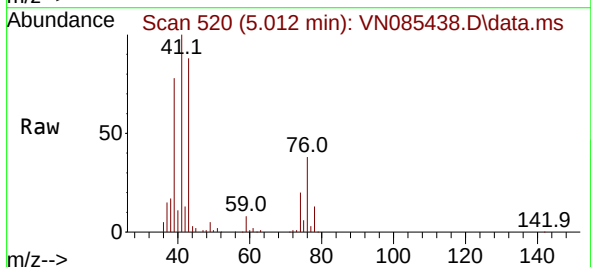
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MSVOA\_N  
ClientSampleId :  
VSTDIC100

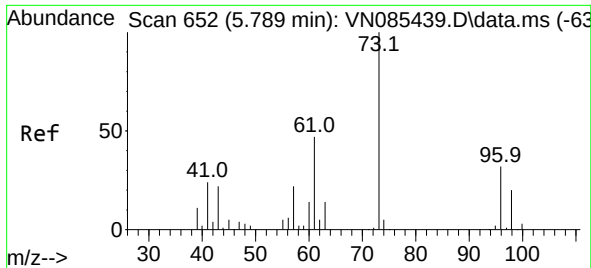
Tgt Ion: 76 Resp: 630294  
Ion Ratio Lower Upper  
76 100  
78 8.7 6.9 10.3



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

Tgt Ion: 43 Resp: 304226  
Ion Ratio Lower Upper  
43 100  
74 23.6 18.6 28.0

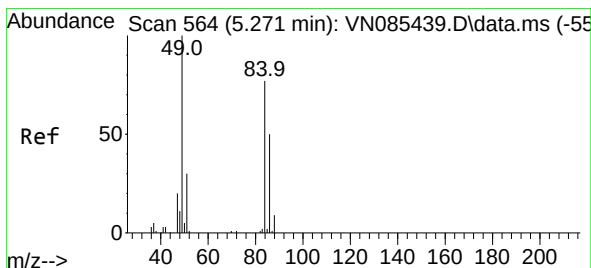
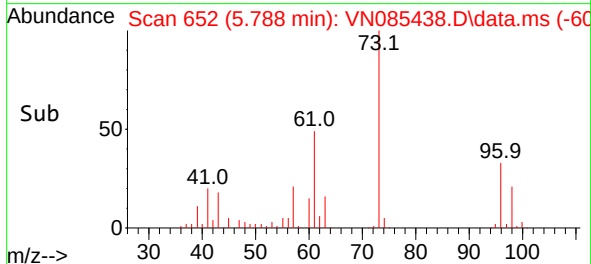
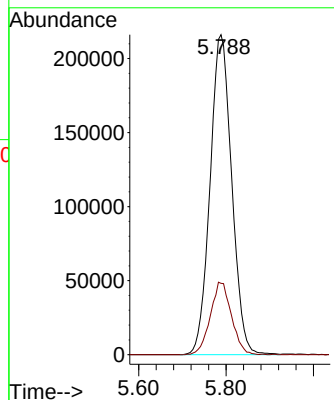
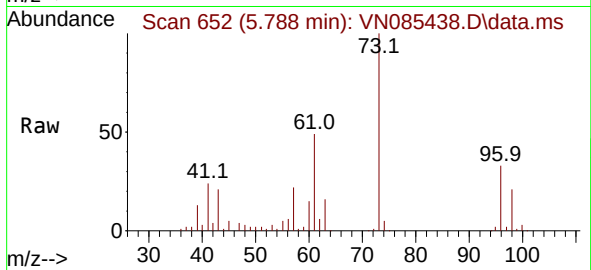




#19  
Methyl tert-butyl Ether  
Concen: 105.230 ug/l  
RT: 5.788 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

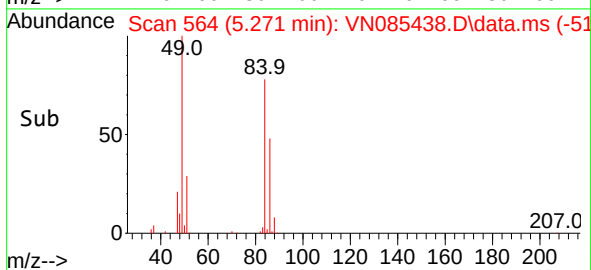
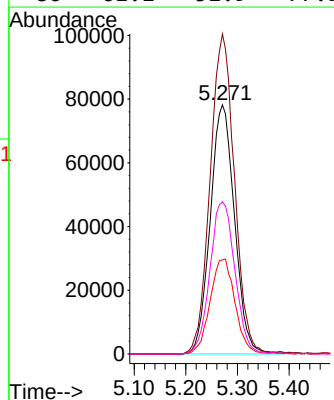
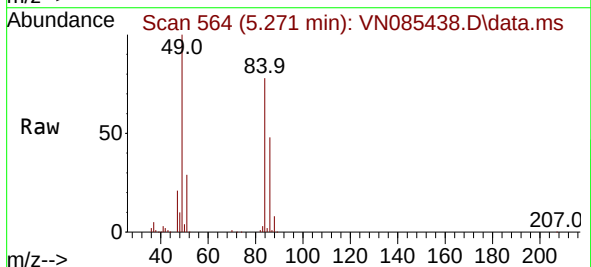
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

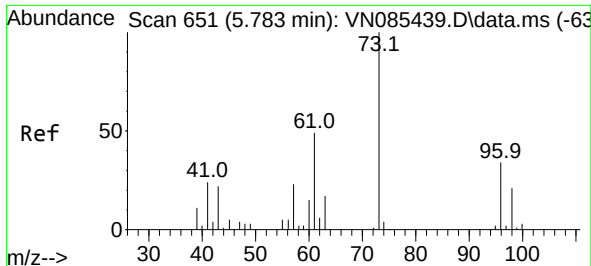
Tgt Ion: 73 Resp: 743008  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



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

Tgt Ion: 84 Resp: 254912  
Ion Ratio Lower Upper  
84 100  
49 128.5 104.1 156.1  
51 37.8 31.0 46.4  
86 61.1 51.9 77.9

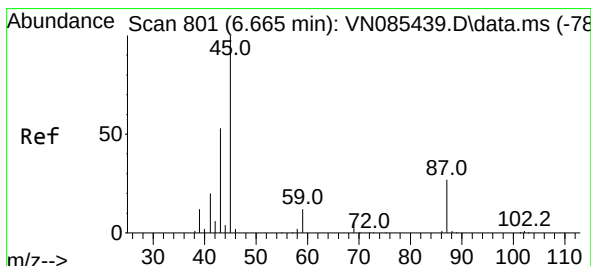
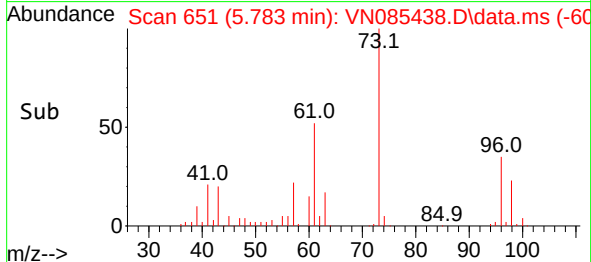
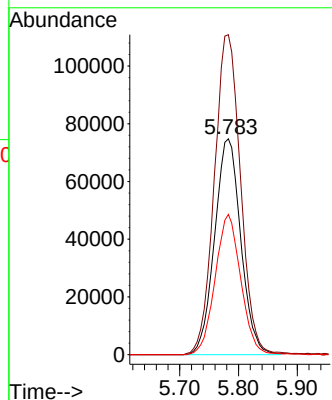
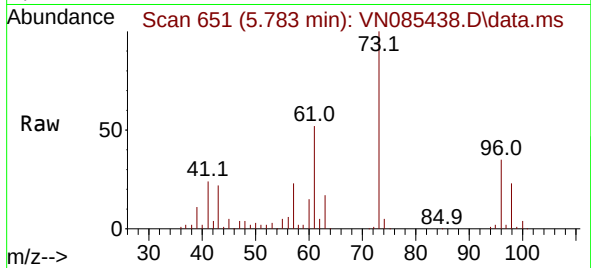




#21  
trans-1,2-Dichloroethene  
Concen: 99.618 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

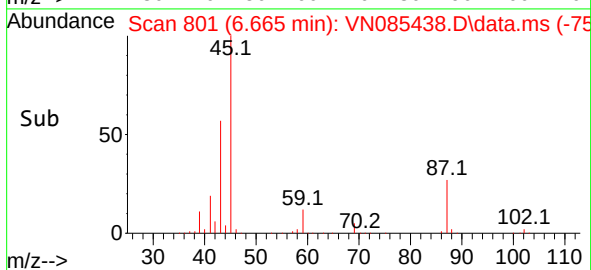
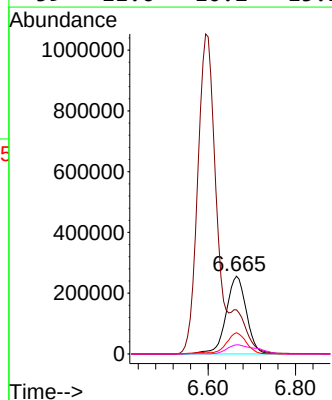
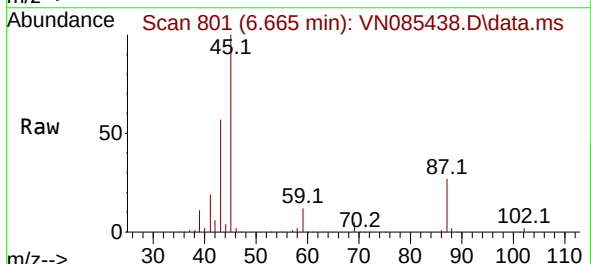
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

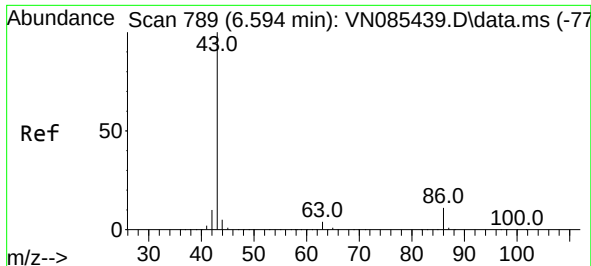
Tgt Ion: 96 Resp: 231503  
Ion Ratio Lower Upper  
96 100  
61 148.3 115.7 173.5  
98 65.0 49.8 74.8



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

Tgt Ion: 45 Resp: 820871  
Ion Ratio Lower Upper  
45 100  
43 55.7 45.0 67.6  
87 27.2 21.8 32.8  
59 11.6 10.2 15.2

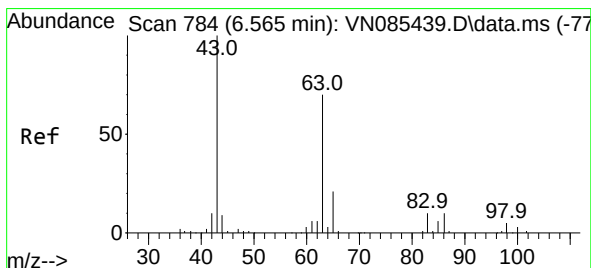
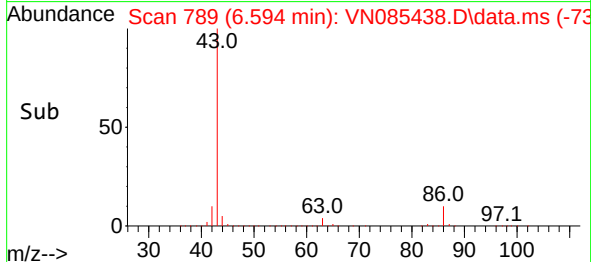
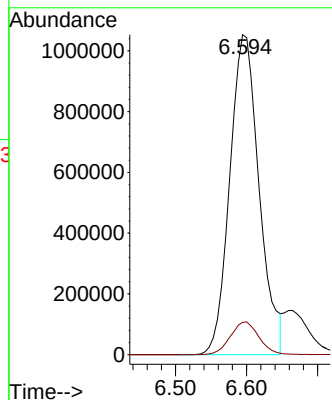
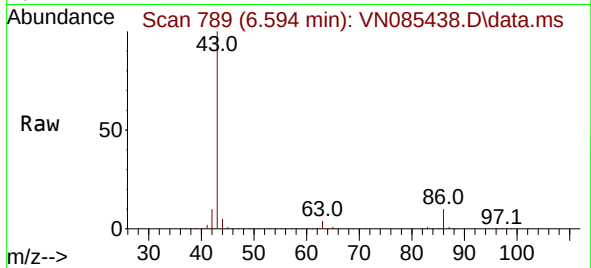




#23  
 Vinyl Acetate  
 Concen: 550.850 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

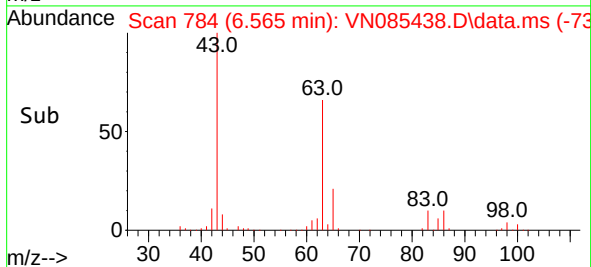
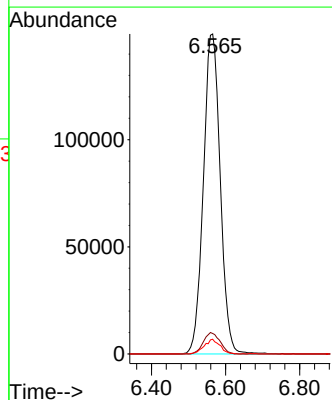
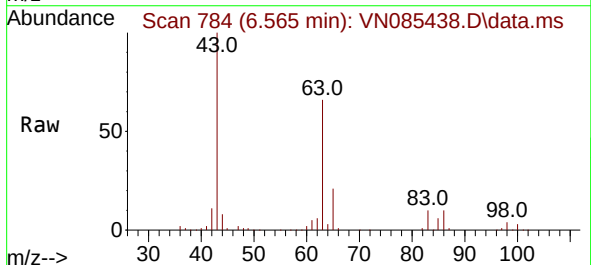
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

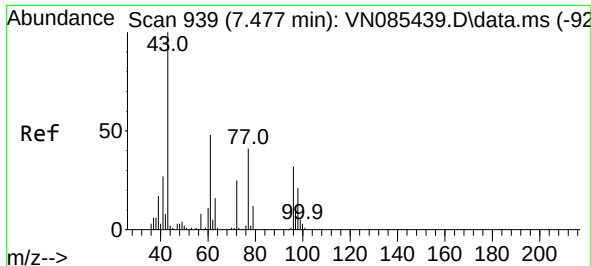
Tgt Ion: 43 Resp: 3029568  
 Ion Ratio Lower Upper  
 43 100  
 86 10.1 8.4 12.6



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

Tgt Ion: 63 Resp: 471831  
 Ion Ratio Lower Upper  
 63 100  
 98 6.4 3.3 9.8  
 100 4.6 2.0 6.0

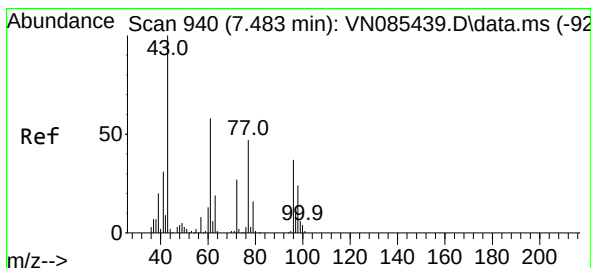
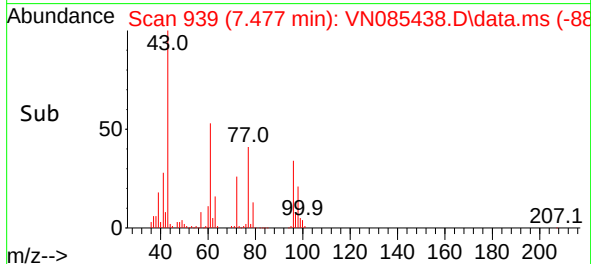
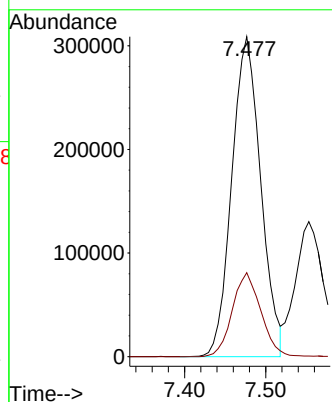
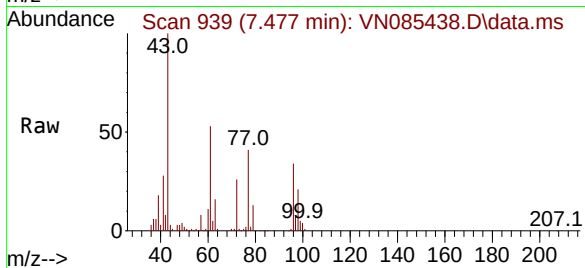




#25  
2-Butanone  
Concen: 491.912 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

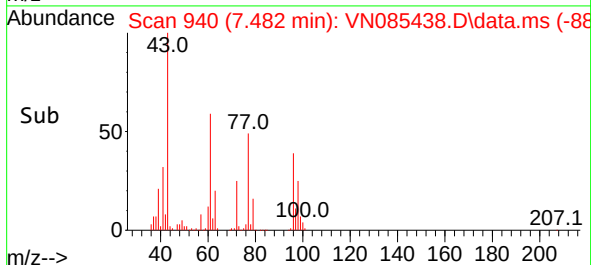
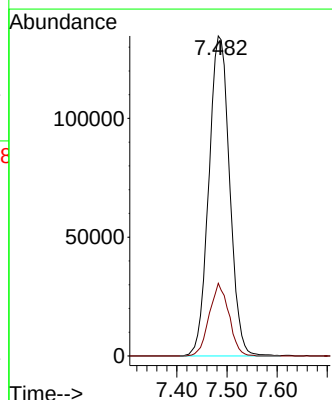
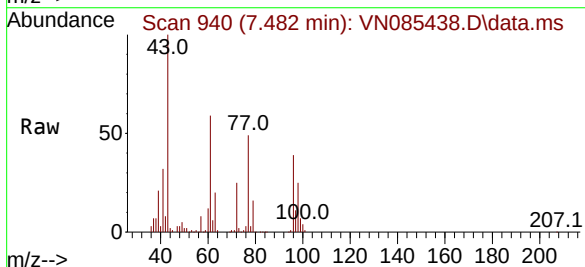
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

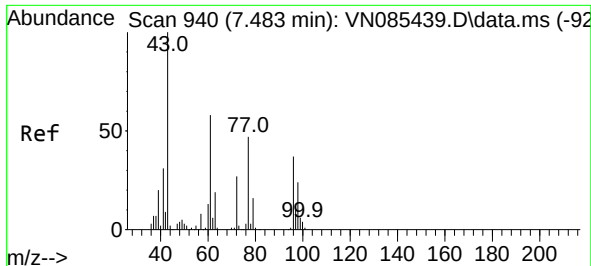
Tgt Ion: 43 Resp: 764979  
Ion Ratio Lower Upper  
43 100  
72 26.3 20.2 30.4



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

Tgt Ion: 77 Resp: 388140  
Ion Ratio Lower Upper  
77 100  
97 21.4 10.7 32.1

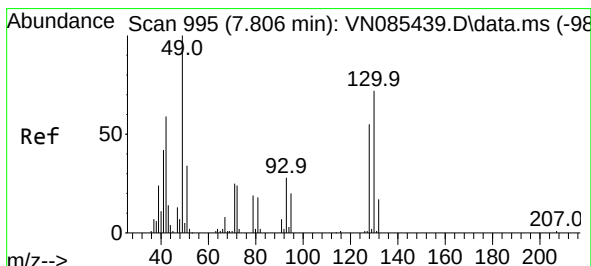
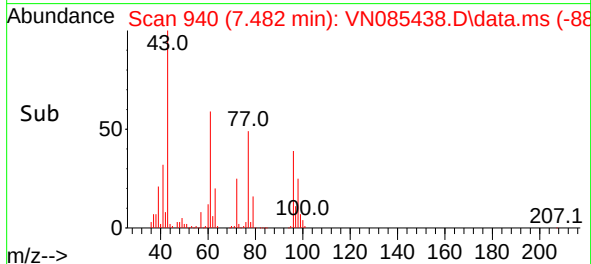
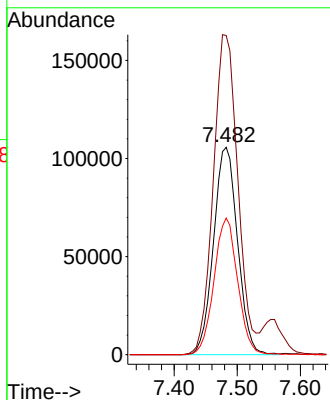
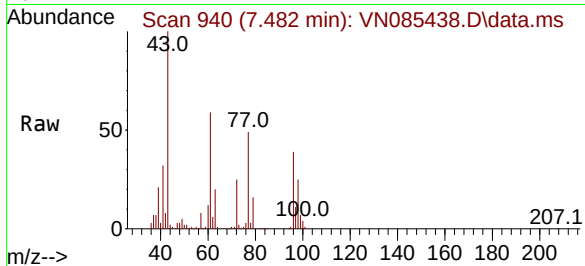




#27  
 cis-1,2-Dichloroethene  
 Concen: 102.367 ug/l  
 RT: 7.482 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

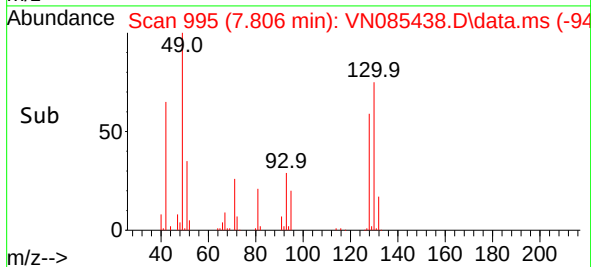
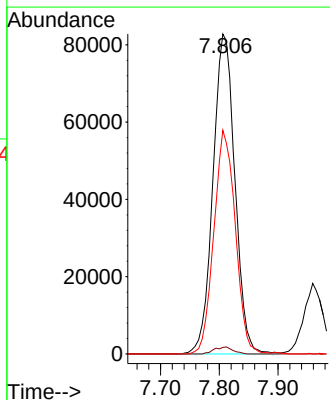
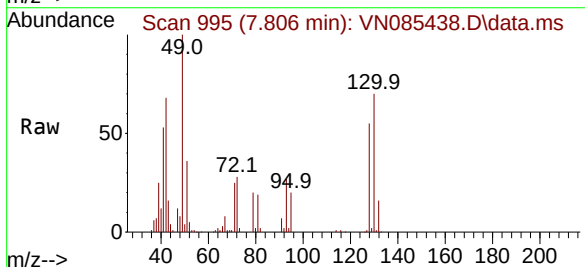
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

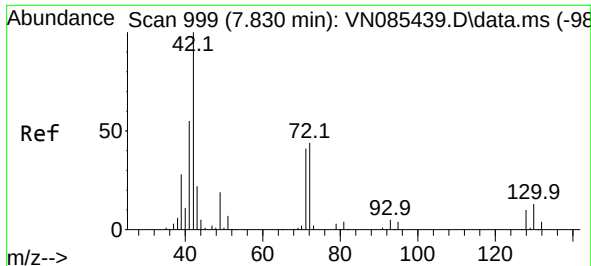
Tgt Ion: 96 Resp: 280197  
 Ion Ratio Lower Upper  
 96 100  
 61 156.8 0.0 311.8  
 98 65.0 0.0 126.0



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

Tgt Ion: 49 Resp: 214796  
 Ion Ratio Lower Upper  
 49 100  
 129 1.9 0.0 4.4  
 130 68.4 55.0 82.4





#29

Tetrahydrofuran

Concen: 510.635 ug/l

RT: 7.830 min Scan# 999

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

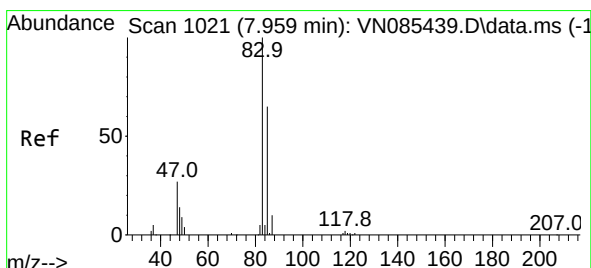
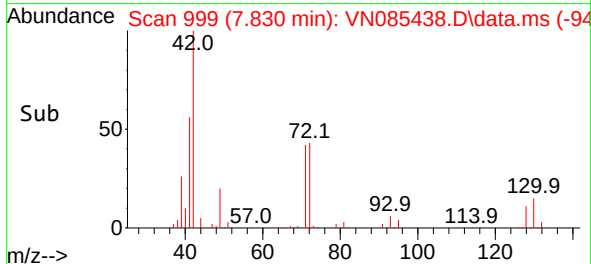
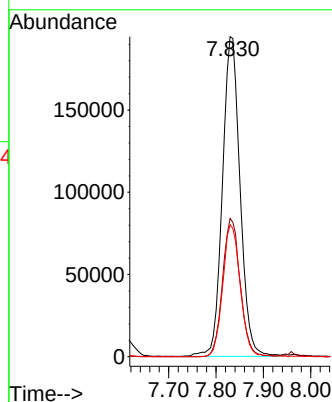
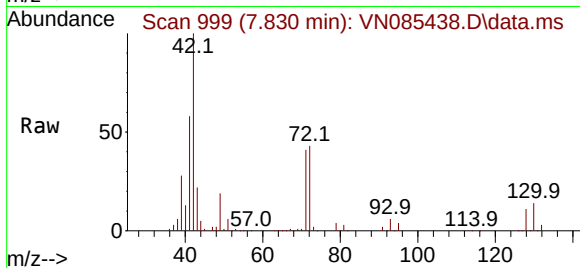
Tgt Ion: 42 Resp: 503459

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

71 40.9 32.5 48.7



#30

Chloroform

Concen: 98.253 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. -0.000 min

Lab File: VN085438.D

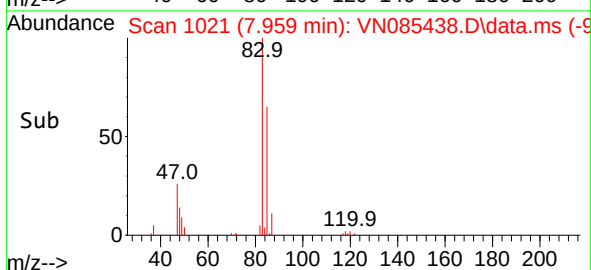
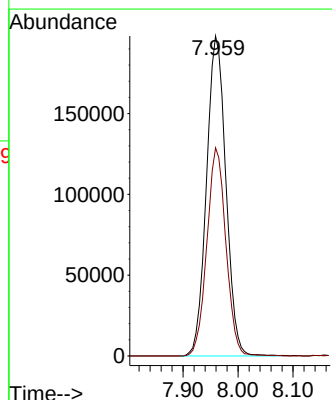
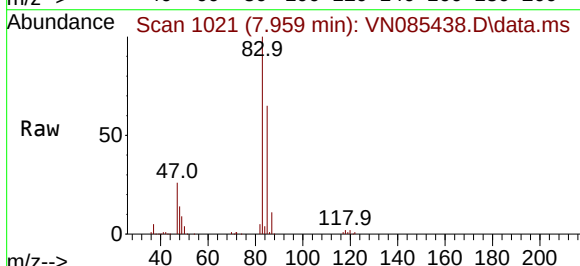
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 484941

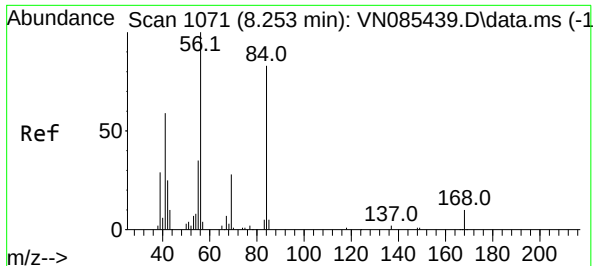
Ion Ratio Lower Upper

83 100

85 65.0 51.8 77.6



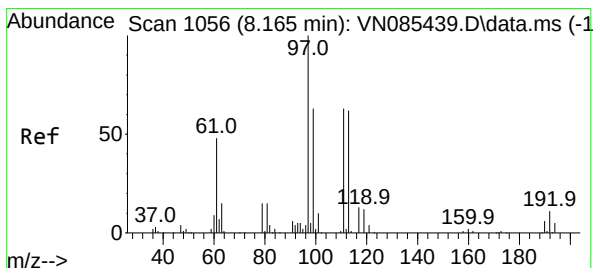
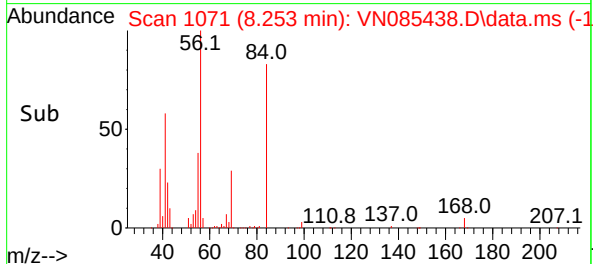
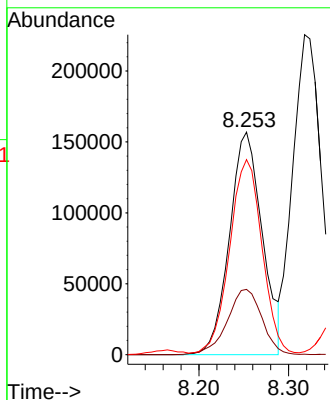
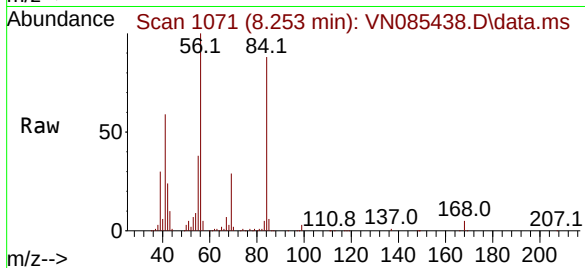




#31  
Cyclohexane  
Concen: 96.041 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

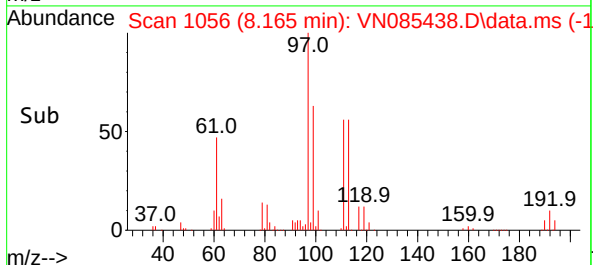
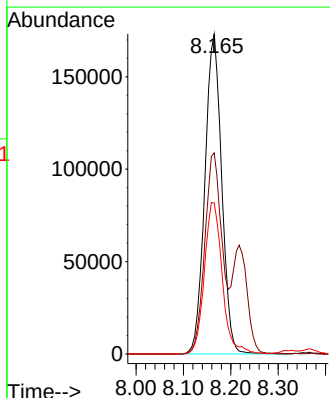
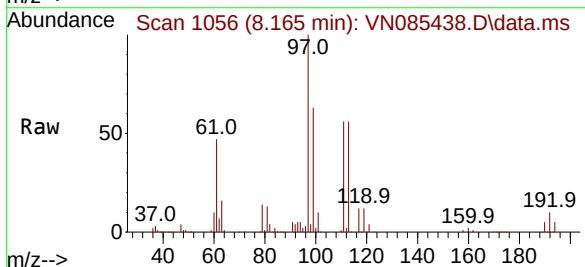
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

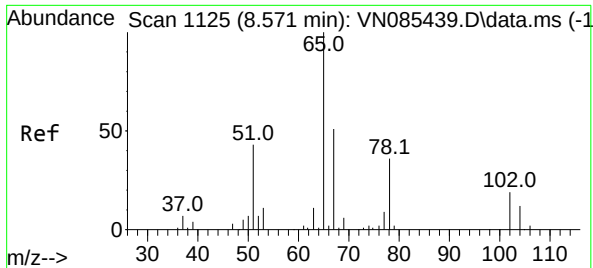
Tgt Ion: 56 Resp: 398641  
Ion Ratio Lower Upper  
56 100  
69 29.2 22.2 33.4  
84 86.4 66.4 99.6



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

Tgt Ion: 97 Resp: 426782  
Ion Ratio Lower Upper  
97 100  
99 64.2 49.8 74.6  
61 50.6 41.4 62.2

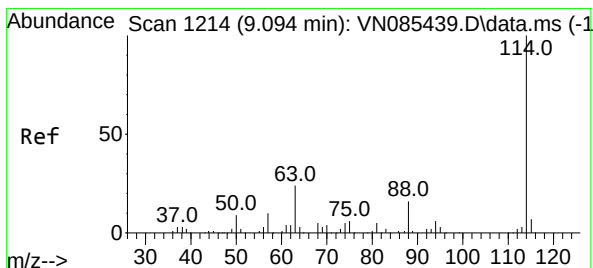
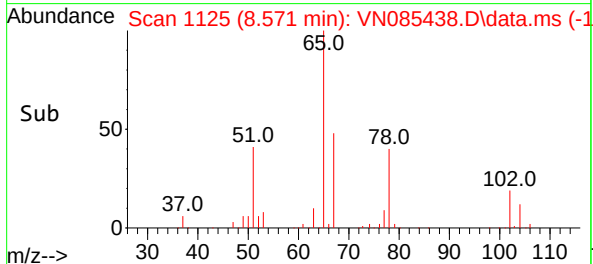
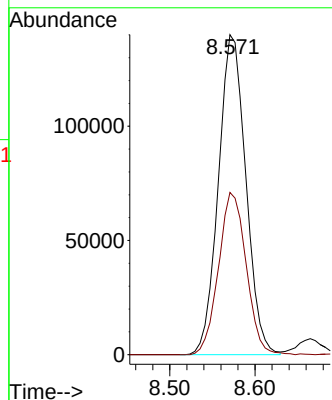
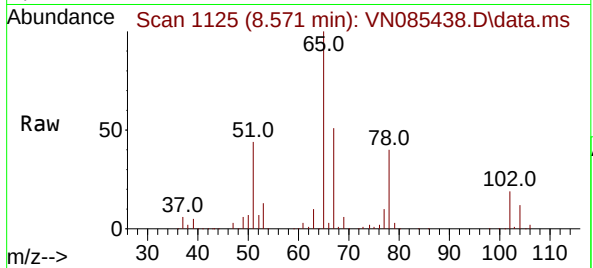




#33  
 1,2-Dichloroethane-d4  
 Concen: 95.899 ug/l  
 RT: 8.571 min Scan# 1125  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

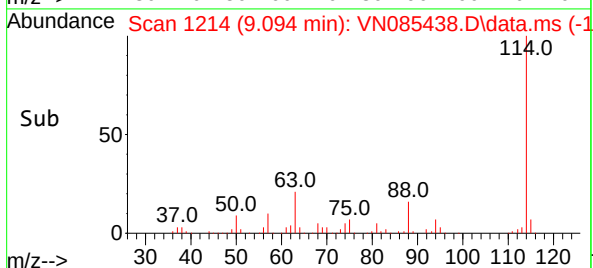
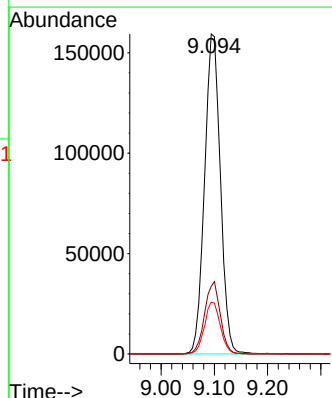
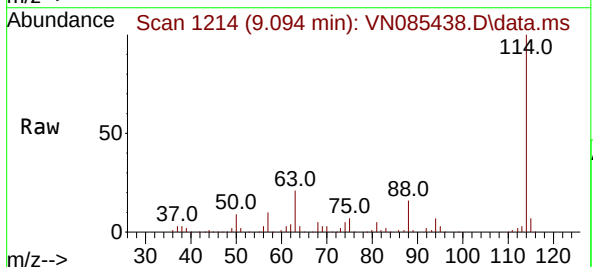
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 ClientSampleId :  
 VSTDIC100

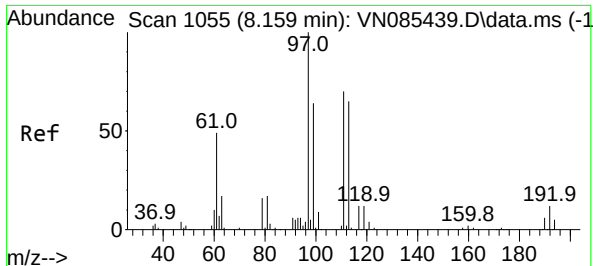
Tgt Ion: 65 Resp: 313645  
 Ion Ratio Lower Upper  
 65 100  
 67 51.1 0.0 101.6



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

Tgt Ion: 114 Resp: 329363  
 Ion Ratio Lower Upper  
 114 100  
 63 21.2 0.0 47.6  
 88 16.2 0.0 32.6

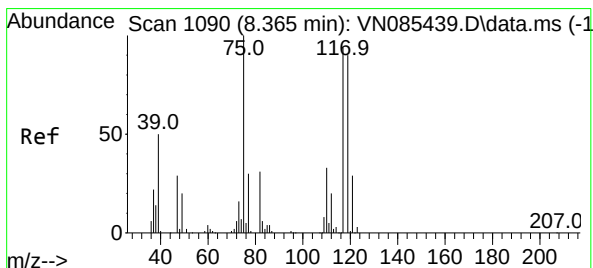
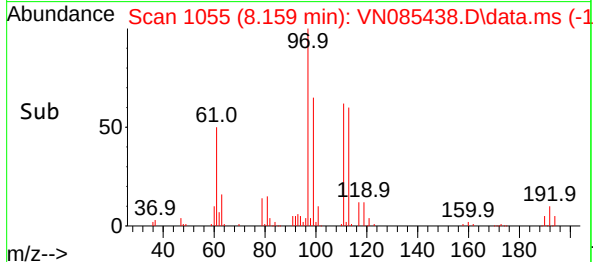
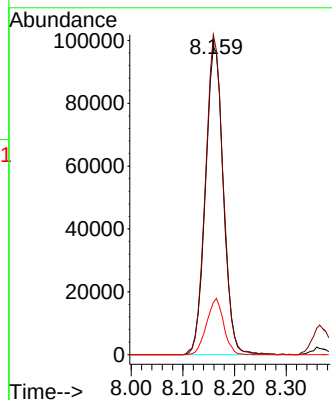
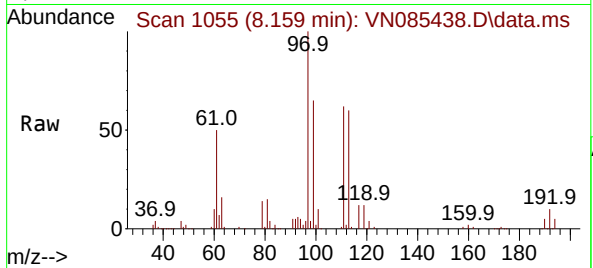




#35  
Dibromofluoromethane  
Concen: 103.353 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

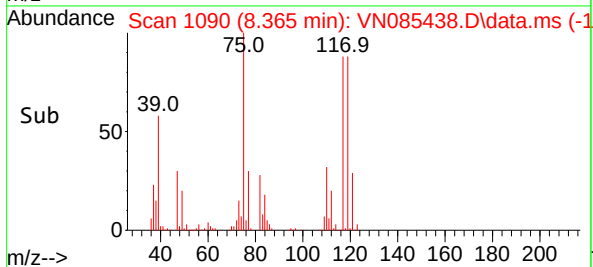
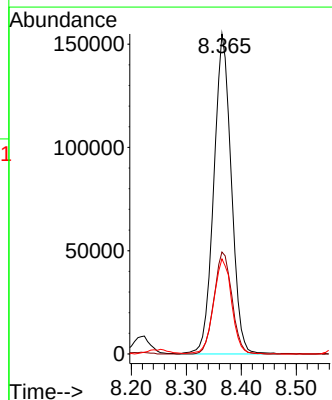
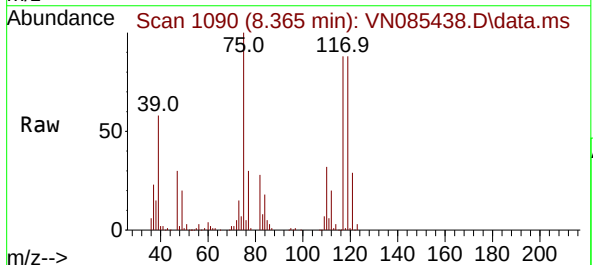
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

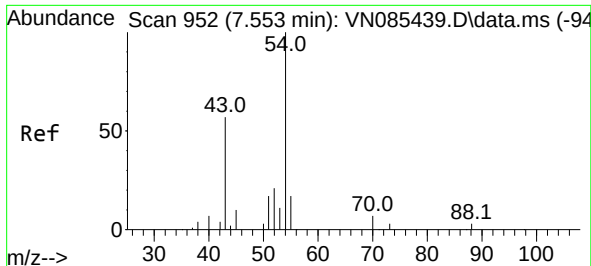
Tgt Ion:113 Resp: 236159  
Ion Ratio Lower Upper  
113 100  
111 102.3 82.7 124.1  
192 17.4 14.3 21.5



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

Tgt Ion: 75 Resp: 342961  
Ion Ratio Lower Upper  
75 100  
110 32.6 16.5 49.5  
77 30.6 24.4 36.6





#37

Ethyl Acetate

Concen: 100.961 ug/l

RT: 7.553 min Scan# 91

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

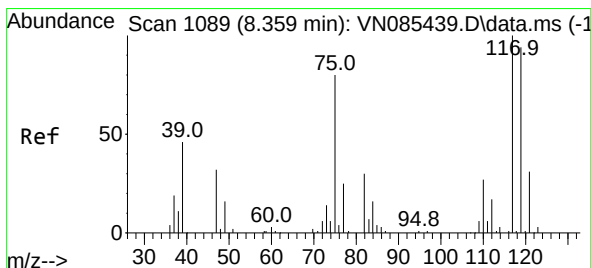
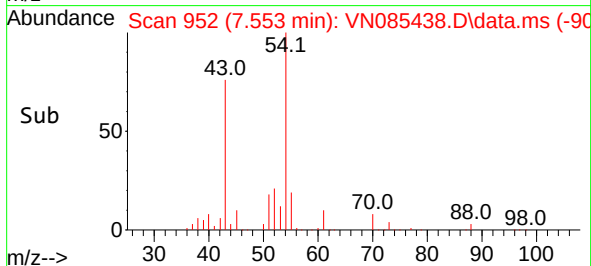
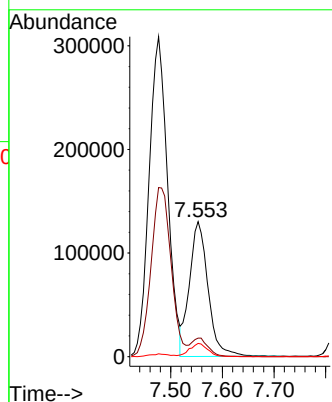
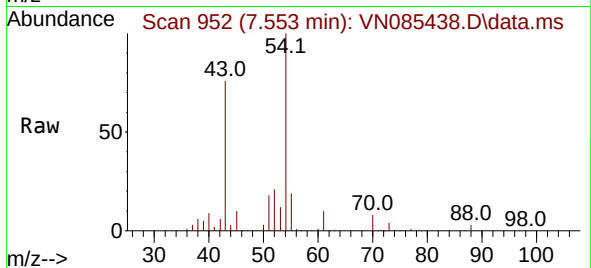
Tgt Ion: 43 Resp: 326802

Ion Ratio Lower Upper

43 100

61 12.0 10.9 16.3

70 9.6 7.5 11.3



#38

Carbon Tetrachloride

Concen: 103.065 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

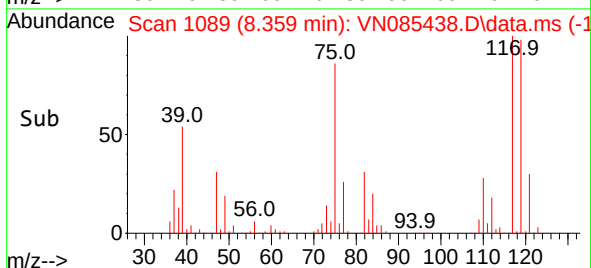
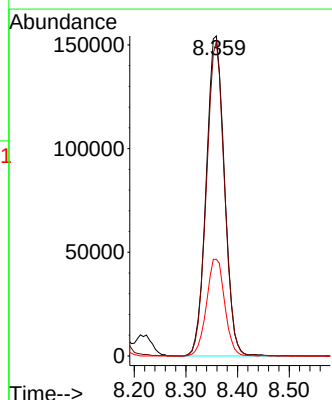
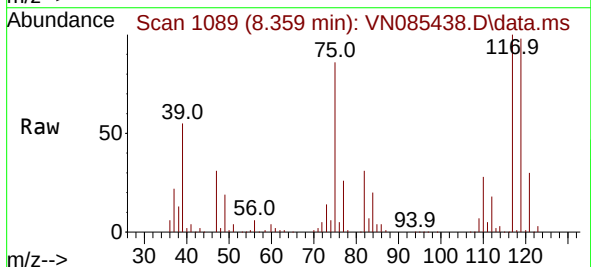
Tgt Ion: 117 Resp: 378390

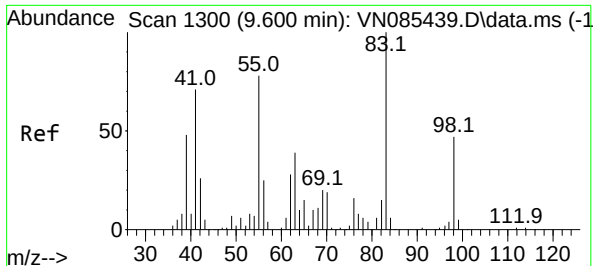
Ion Ratio Lower Upper

117 100

119 98.1 75.4 113.2

121 30.2 24.6 37.0





#39

Methylcyclohexane

Concen: 123.354 ug/l

RT: 9.594 min Scan# 1299

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

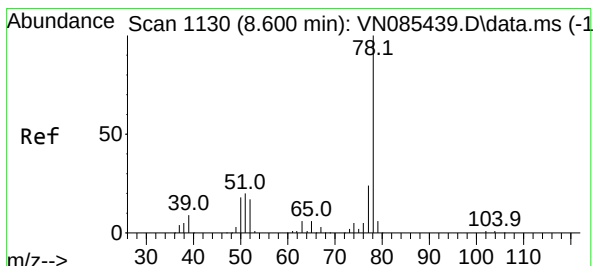
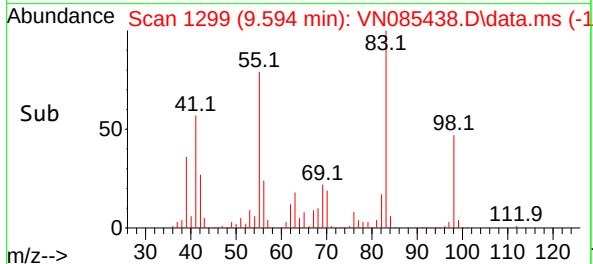
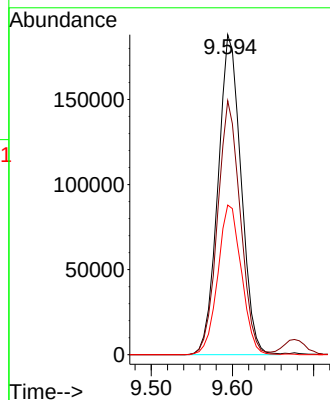
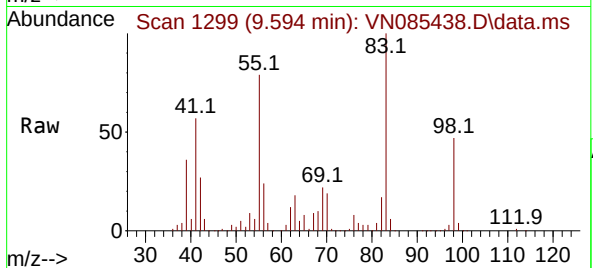
Tgt Ion: 83 Resp: 371734

Ion Ratio Lower Upper

83 100

55 79.3 62.6 94.0

98 46.7 37.7 56.5



#40

Benzene

Concen: 106.001 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085438.D

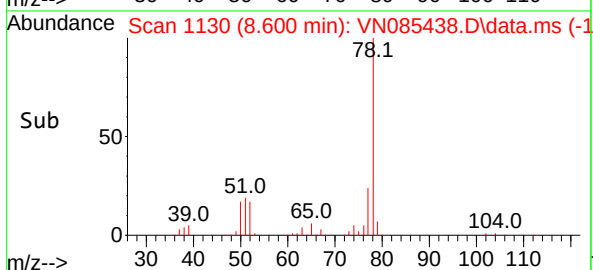
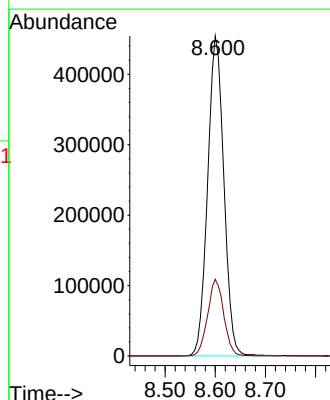
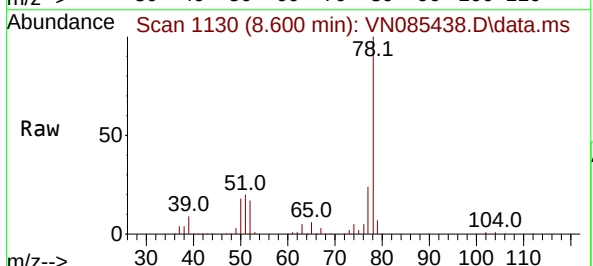
Acq: 14 Jan 2025 14:56

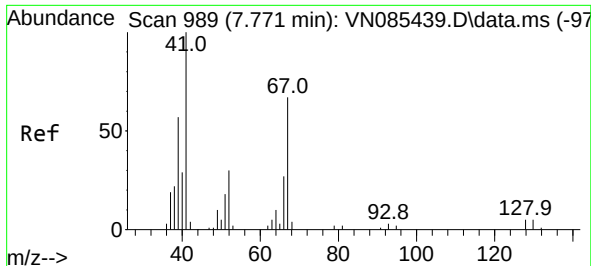
Tgt Ion: 78 Resp: 1021393

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6



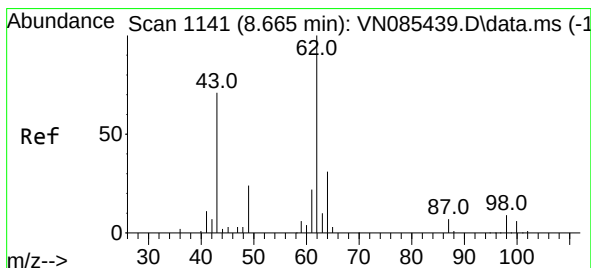
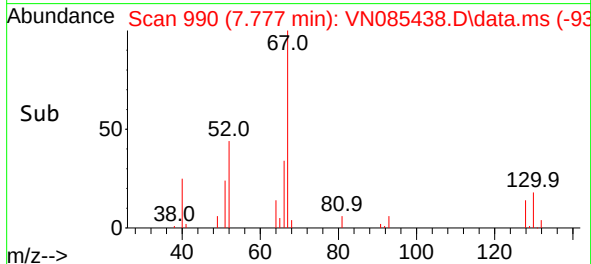
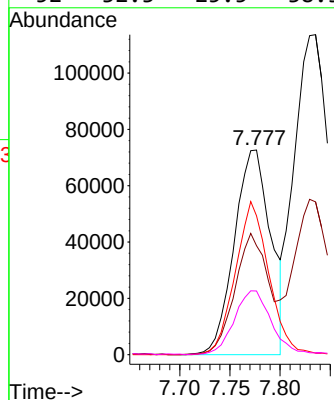
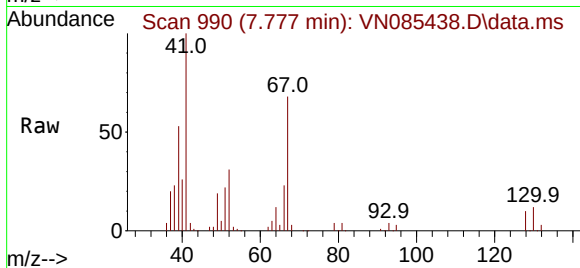


#41  
Methacrylonitrile  
Concen: 109.454 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Tgt Ion: 41 Resp: 184326

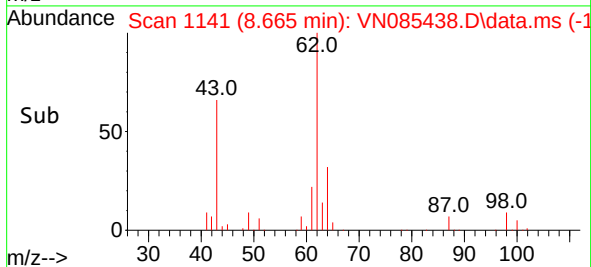
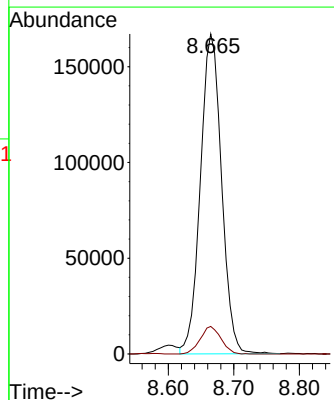
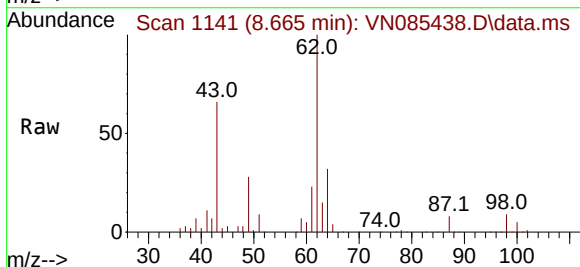
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 39  | 52.8  | 46.0  | 69.0  |
| 67  | 68.8  | 57.4  | 86.2  |
| 52  | 32.3  | 25.5  | 38.3  |

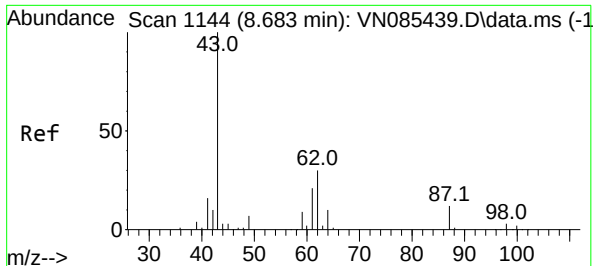


#42  
1,2-Dichloroethane  
Concen: 103.314 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 374938

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

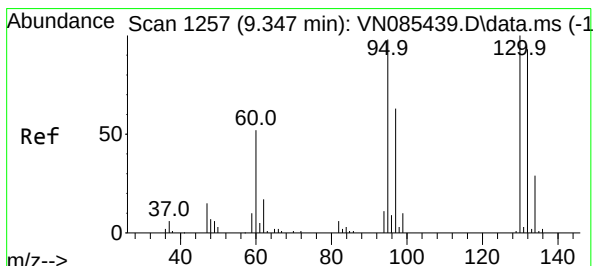
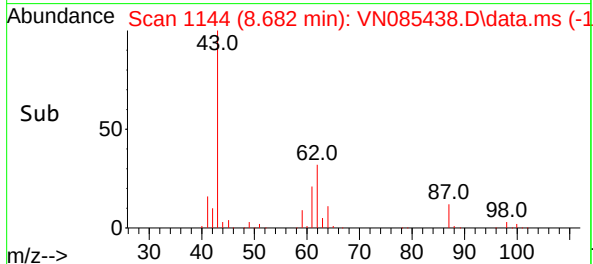
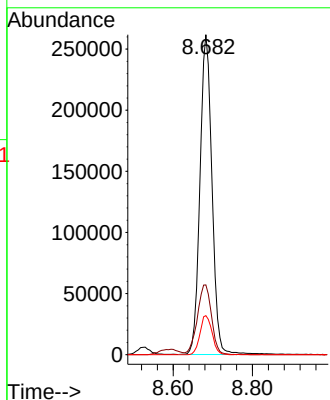
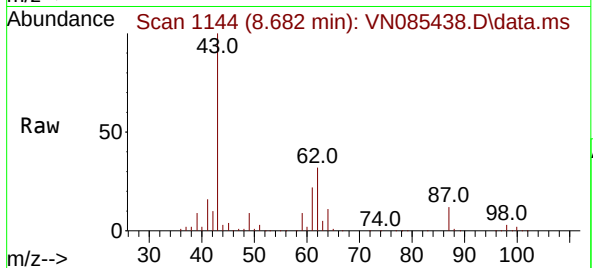




#43  
Isopropyl Acetate  
Concen: 106.035 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

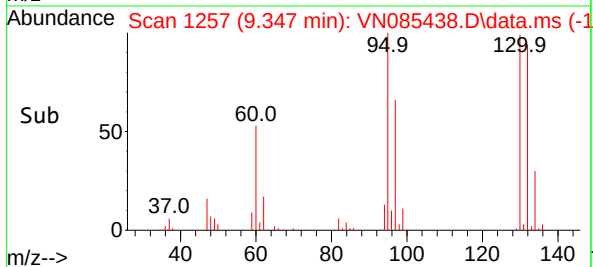
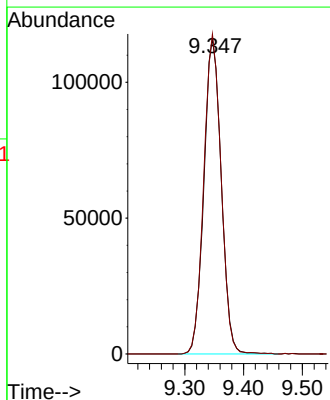
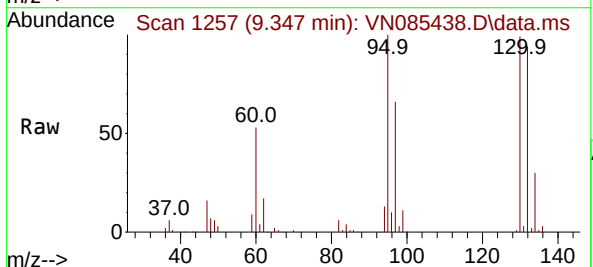
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

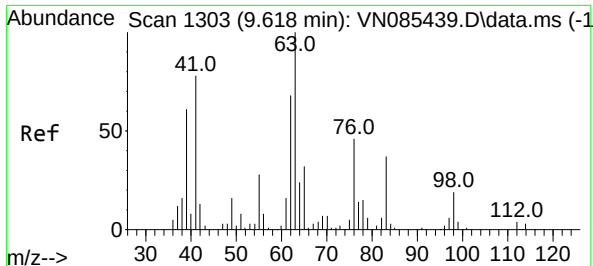
Tgt Ion: 43 Resp: 549969  
Ion Ratio Lower Upper  
43 100  
61 25.7 20.7 31.1  
87 12.2 9.8 14.8



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

Tgt Ion: 130 Resp: 238296  
Ion Ratio Lower Upper  
130 100  
95 101.5 0.0 195.8

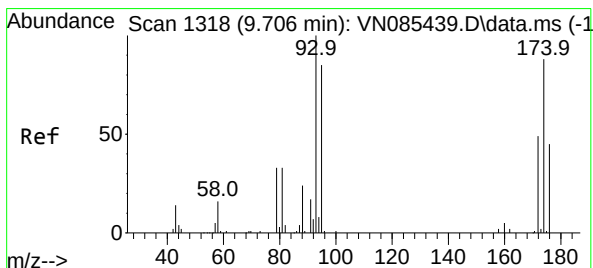
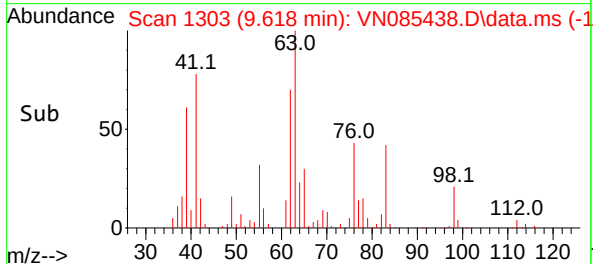
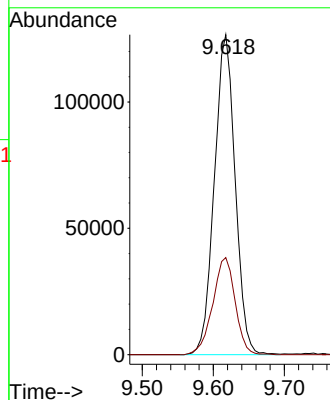
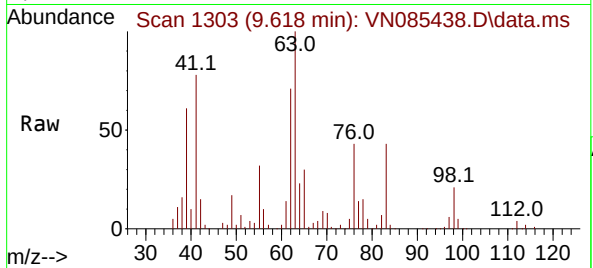




#45  
1,2-Dichloropropane  
Concen: 104.405 ug/l  
RT: 9.618 min Scan# 1303  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

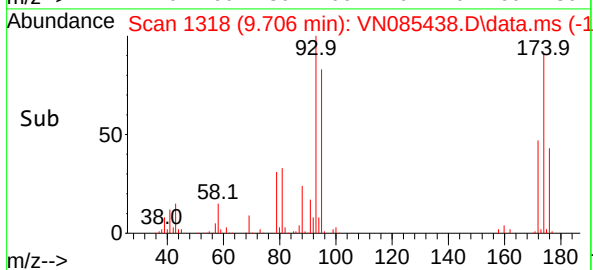
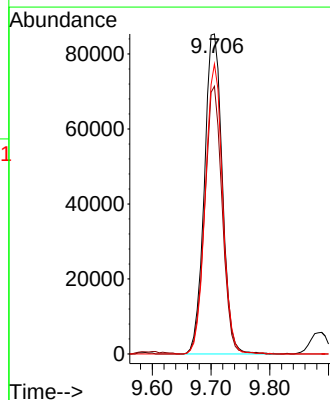
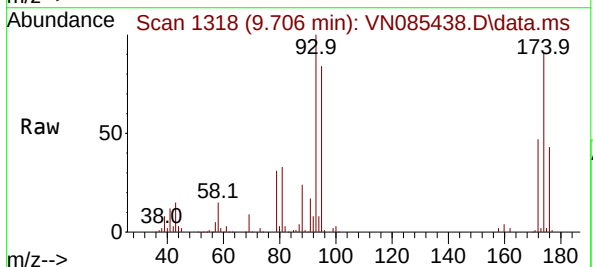
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 63 Resp: 256964  
Ion Ratio Lower Upper  
63 100  
65 30.3 25.6 38.4

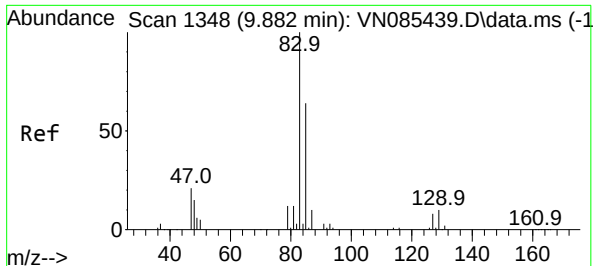


#46  
Dibromomethane  
Concen: 101.913 ug/l  
RT: 9.706 min Scan# 1318  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 93 Resp: 180990  
Ion Ratio Lower Upper  
93 100  
95 81.6 64.7 97.1  
174 87.5 69.0 103.4



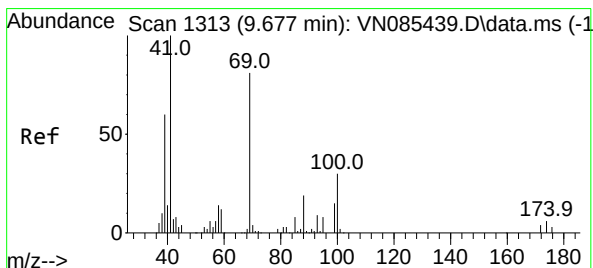
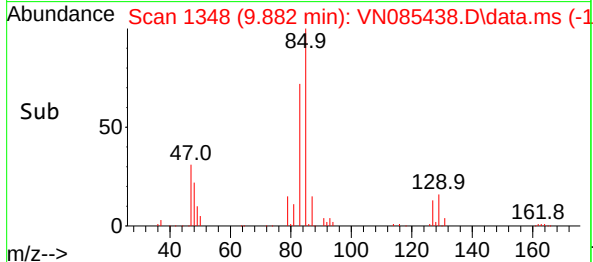
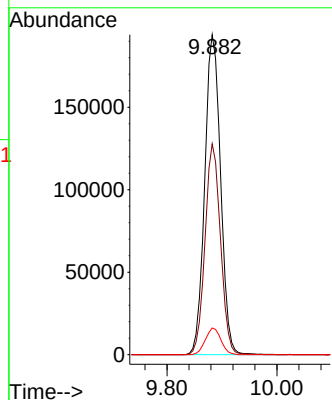
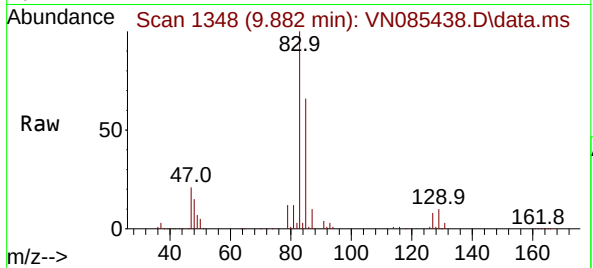




#47  
Bromodichloromethane  
Concen: 107.377 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

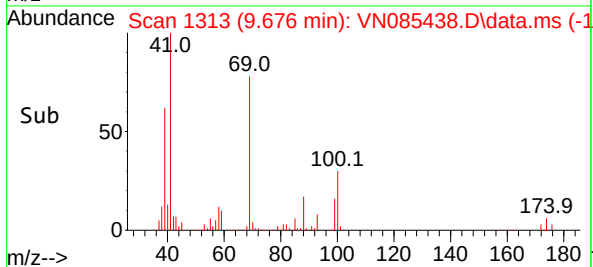
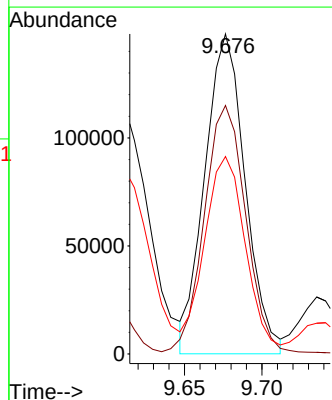
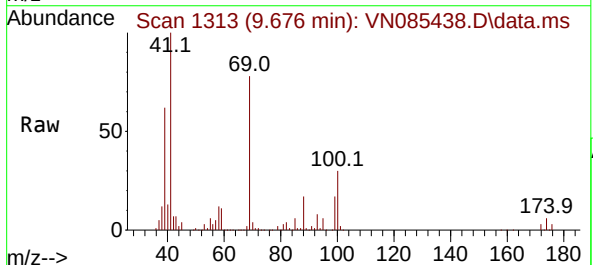
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

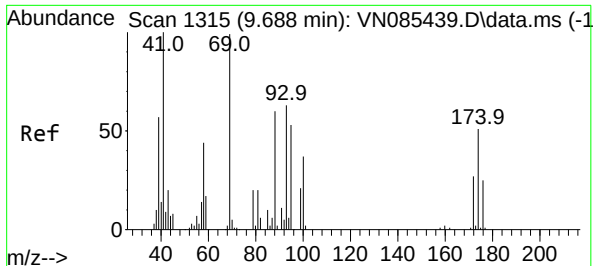
Tgt Ion: 83 Resp: 388499  
Ion Ratio Lower Upper  
83 100  
85 65.9 51.2 76.8  
127 8.4 6.5 9.7



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

Tgt Ion: 41 Resp: 267689  
Ion Ratio Lower Upper  
41 100  
69 80.9 64.7 97.1  
39 63.1 49.0 73.6





#49

1,4-Dioxane

Concen: 2133.992 ug/l

RT: 9.688 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

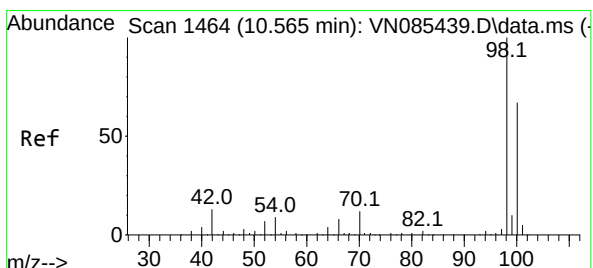
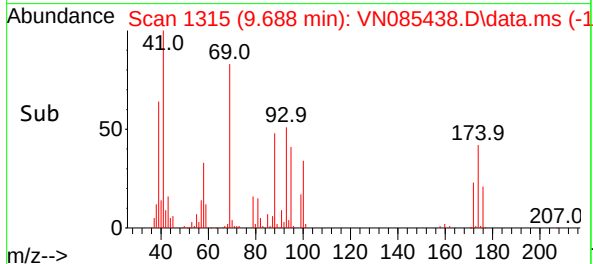
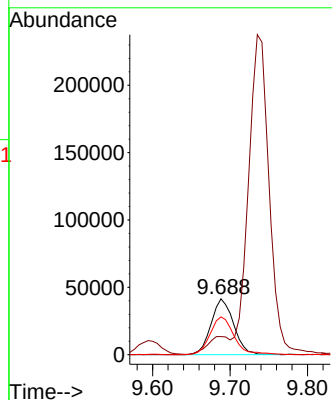
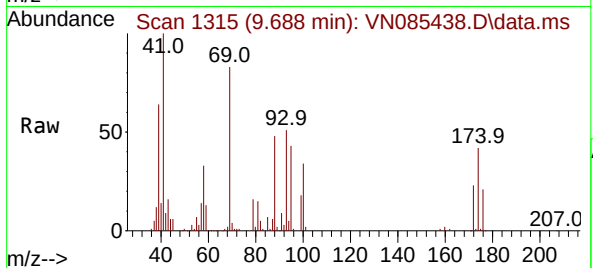
Tgt Ion: 88 Resp: 83879

Ion Ratio Lower Upper

88 100

43 31.3 26.6 39.8

58 72.1 59.5 89.3



#50

Toluene-d8

Concen: 108.636 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085438.D

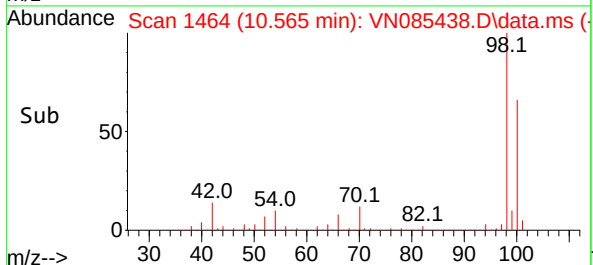
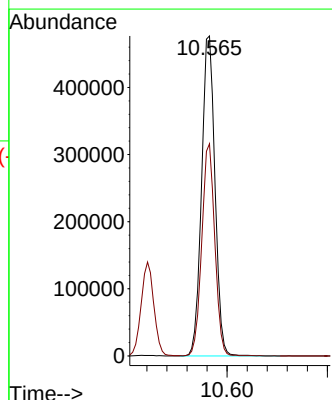
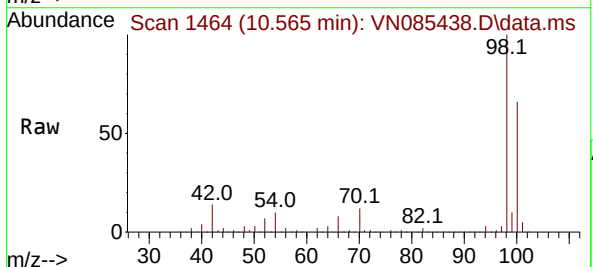
Acq: 14 Jan 2025 14:56

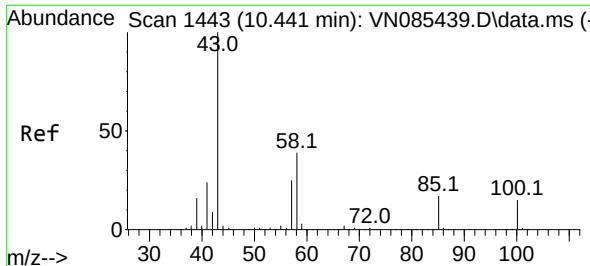
Tgt Ion: 98 Resp: 881956

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4

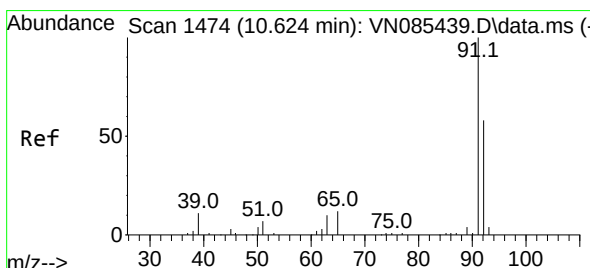
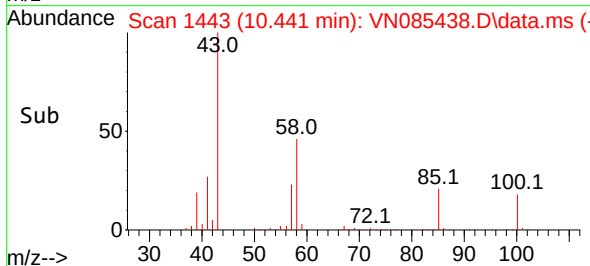
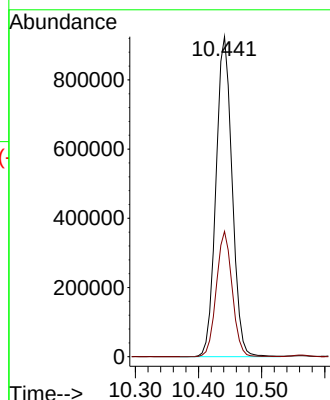
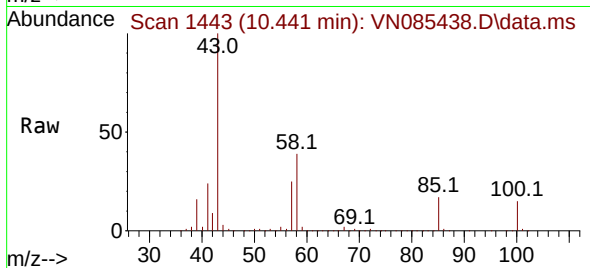




#51  
4-Methyl-2-Pentanone  
Concen: 546.159 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

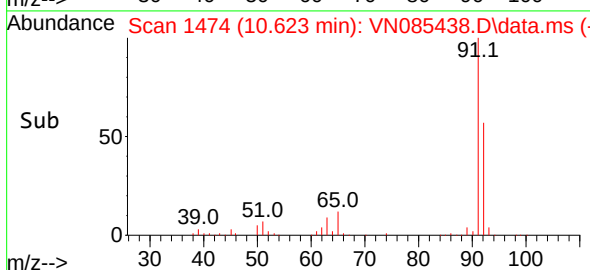
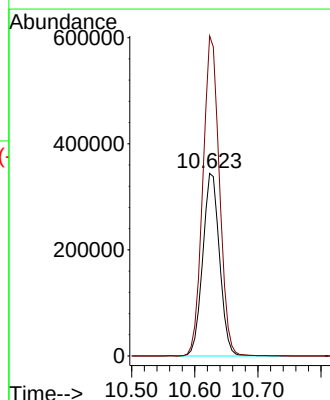
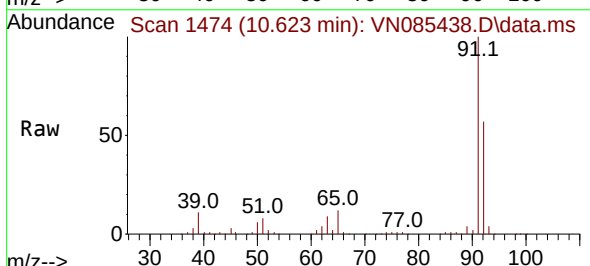
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

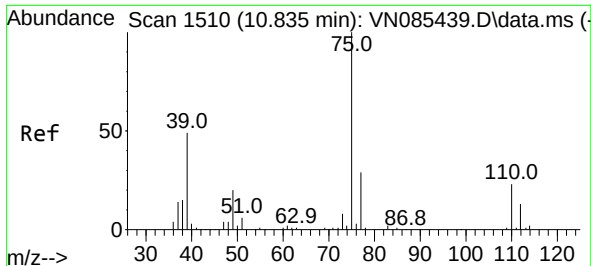
Tgt Ion: 43 Resp: 1643800  
Ion Ratio Lower Upper  
43 100  
58 38.4 30.5 45.7



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

Tgt Ion: 92 Resp: 634743  
Ion Ratio Lower Upper  
92 100  
91 173.1 139.2 208.8

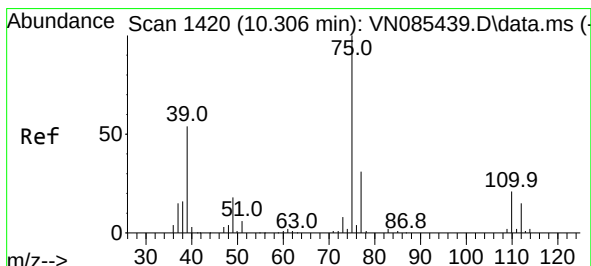
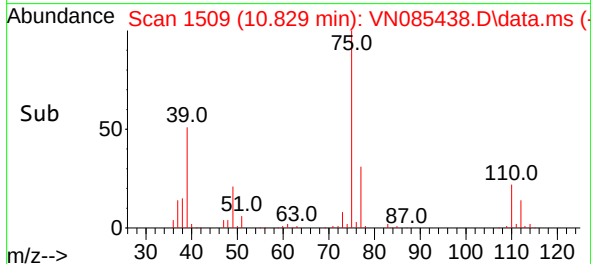
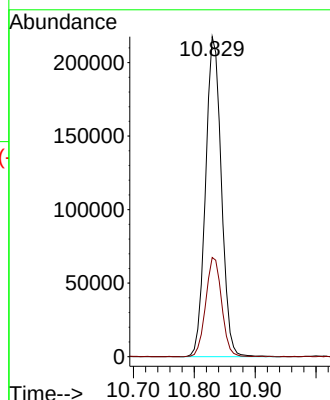
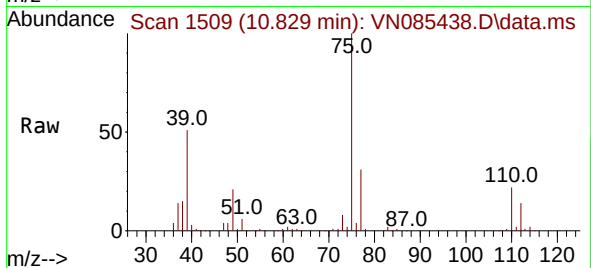




#53  
 t-1,3-Dichloropropene  
 Concen: 114.424 ug/l  
 RT: 10.829 min Scan# 1510  
 Delta R.T. -0.006 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

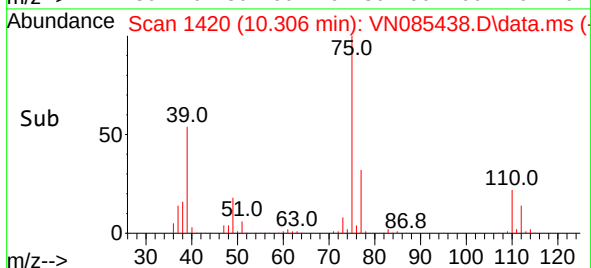
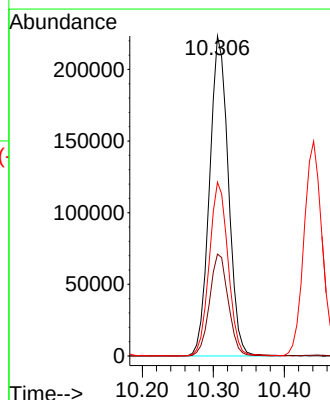
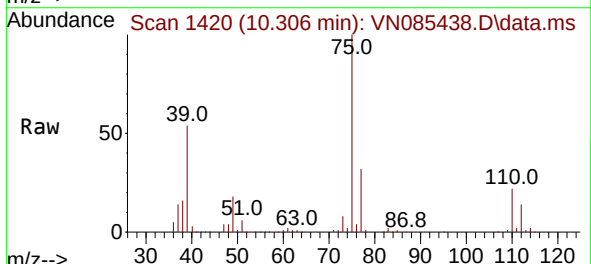
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

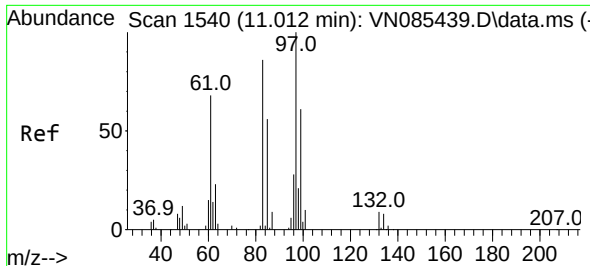
Tgt Ion: 75 Resp: 391238  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 23.5 35.3



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

Tgt Ion: 75 Resp: 410403  
 Ion Ratio Lower Upper  
 75 100  
 77 31.9 25.0 37.4  
 39 54.3 43.1 64.7



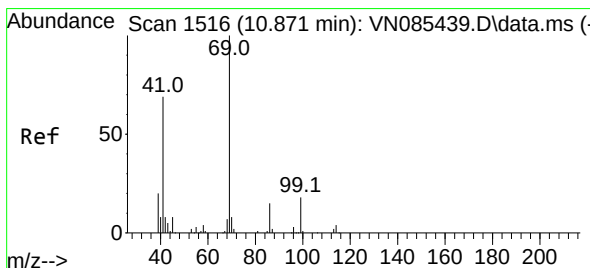
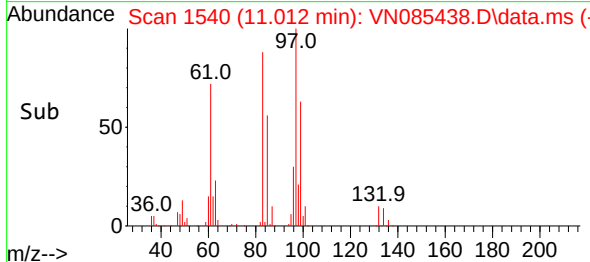
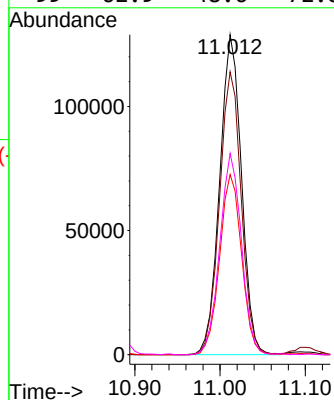
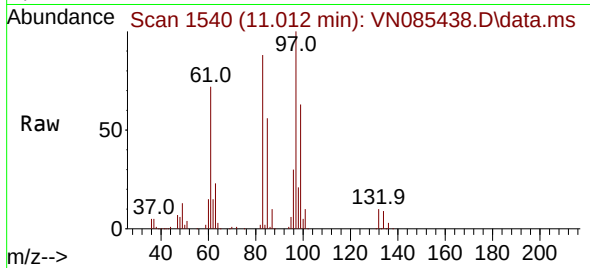


#55  
1,1,2-Trichloroethane  
Concen: 103.879 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 97 Resp: 229522

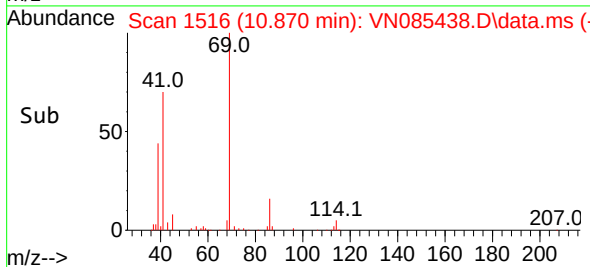
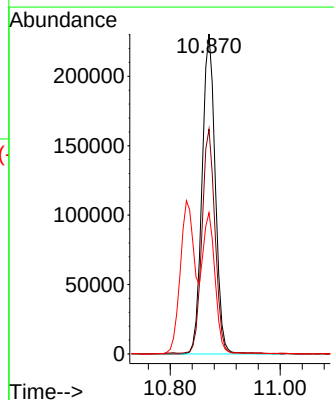
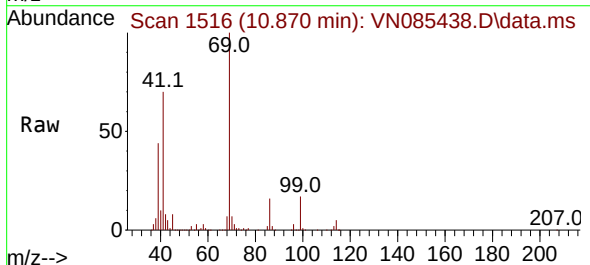
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 88.4  | 69.0  | 103.6 |
| 85  | 56.3  | 44.6  | 66.8  |
| 99  | 62.9  | 48.6  | 72.8  |

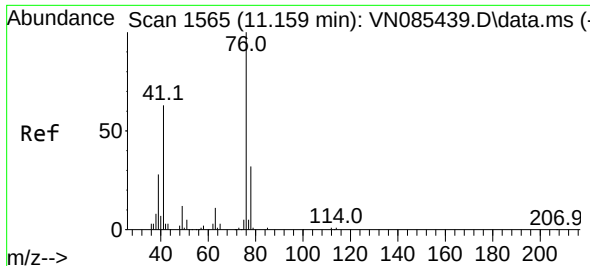


#56  
Ethyl methacrylate  
Concen: 101.029 ug/l  
RT: 10.870 min Scan# 1516  
Delta R.T. -0.001 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 69 Resp: 383663

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





#57

1,3-Dichloropropane

Concen: 107.469 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

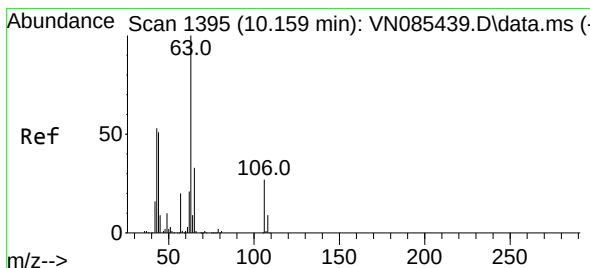
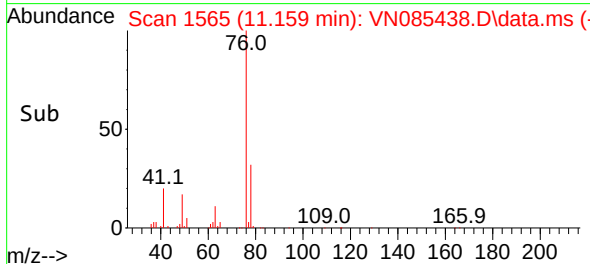
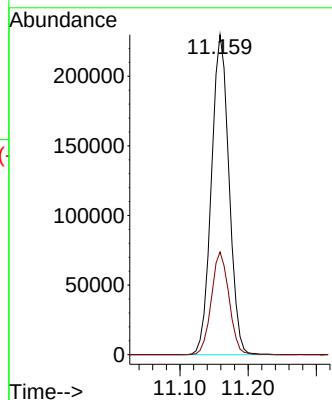
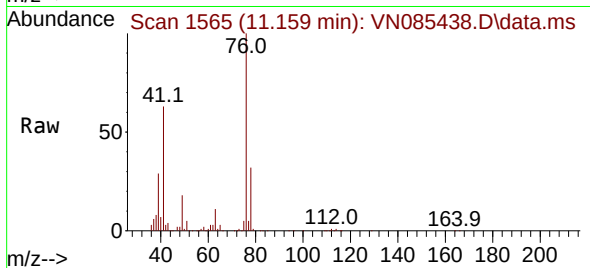
VSTDIC100

Tgt Ion: 76 Resp: 412886

Ion Ratio Lower Upper

76 100

78 32.2 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 605.243 ug/l

RT: 10.153 min Scan# 1394

Delta R.T. -0.006 min

Lab File: VN085438.D

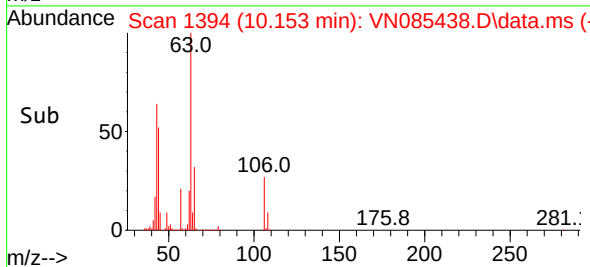
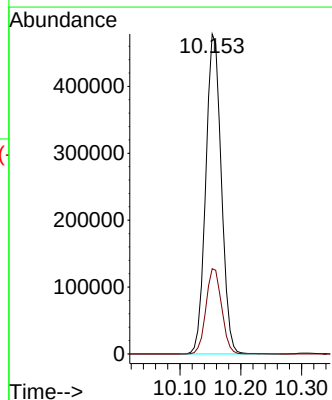
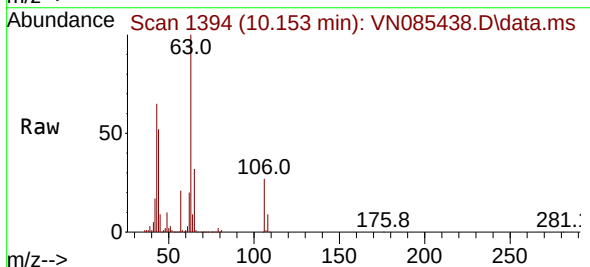
Acq: 14 Jan 2025 14:56

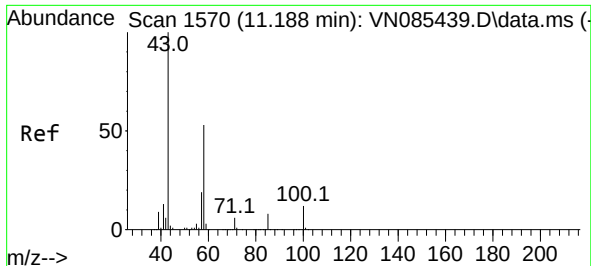
Tgt Ion: 63 Resp: 848636

Ion Ratio Lower Upper

63 100

106 26.8 21.6 32.4

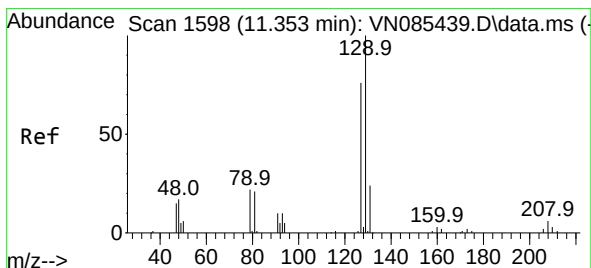
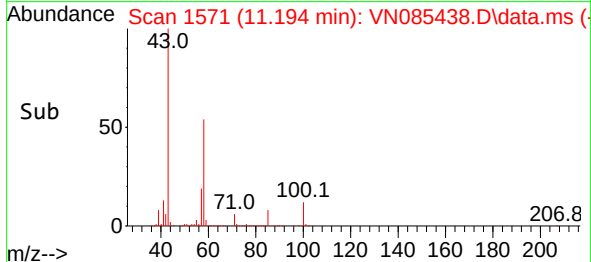
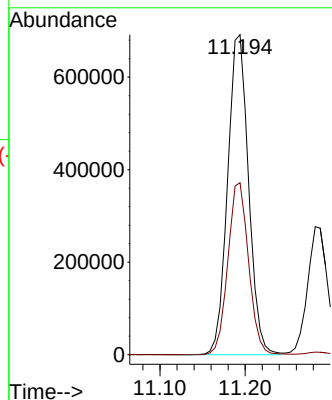
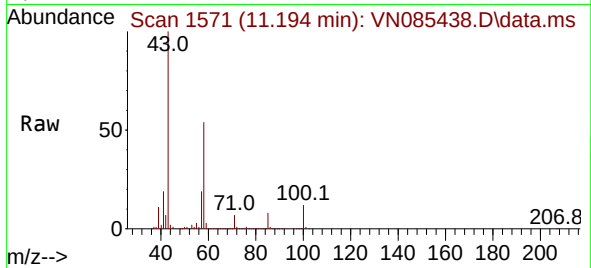




#59  
2-Hexanone  
Concen: 556.643 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

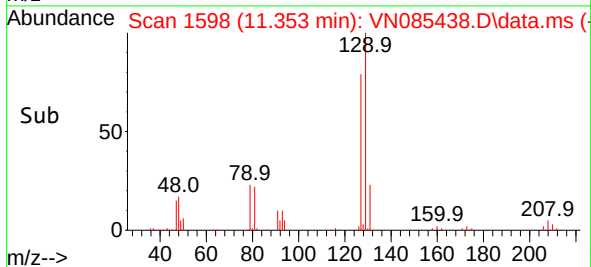
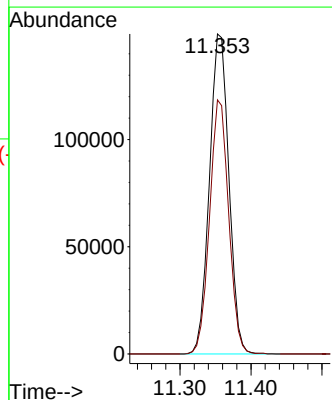
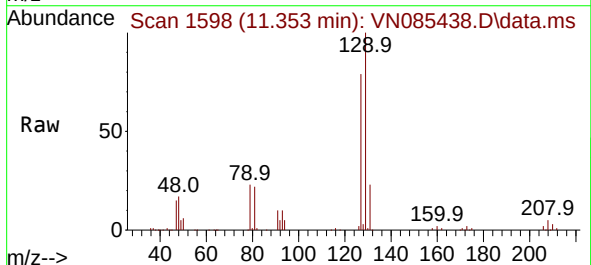
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

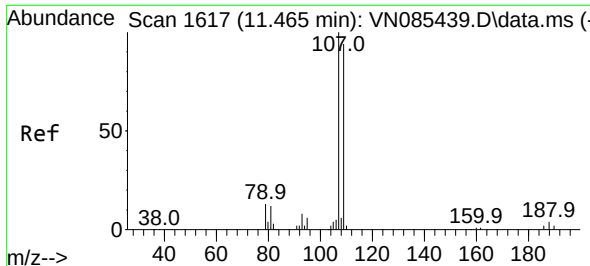
Tgt Ion: 43 Resp: 1178831  
Ion Ratio Lower Upper  
43 100  
58 53.2 26.2 78.6



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

Tgt Ion: 129 Resp: 283361  
Ion Ratio Lower Upper  
129 100  
127 78.1 38.6 115.8

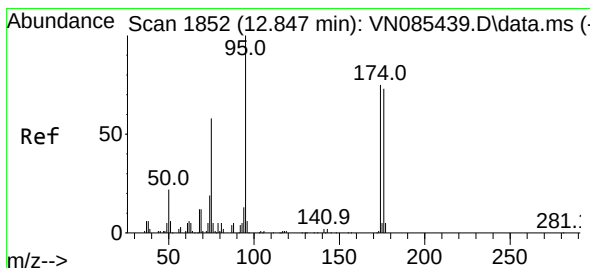
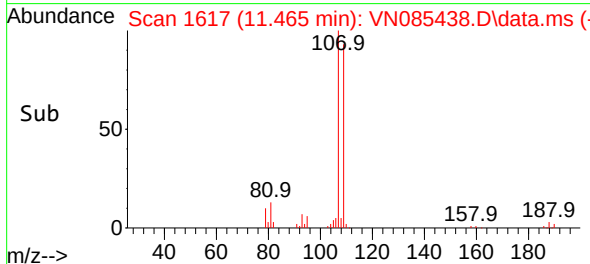
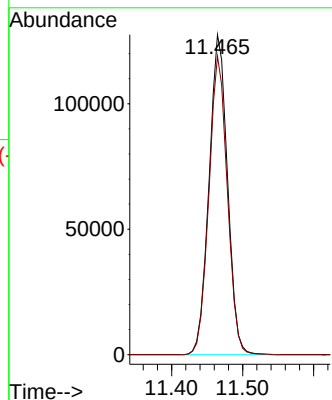
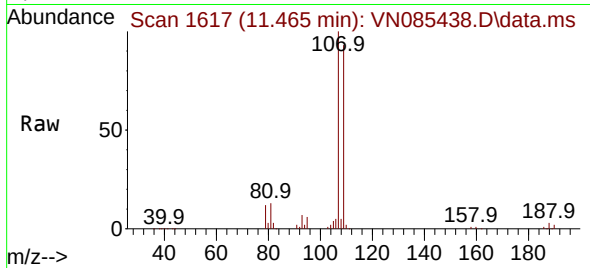




#61  
1,2-Dibromoethane  
Concen: 104.623 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

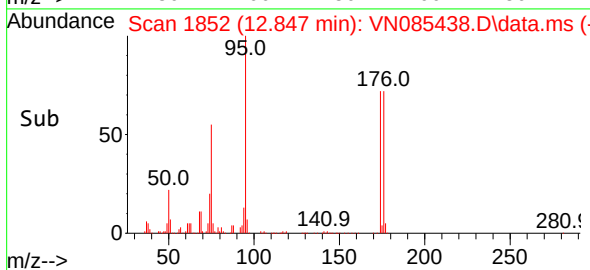
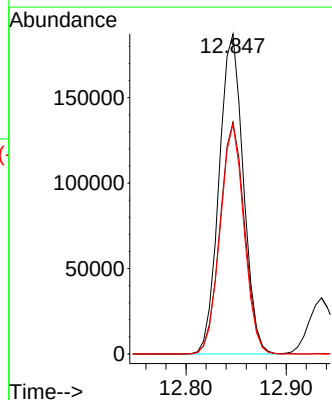
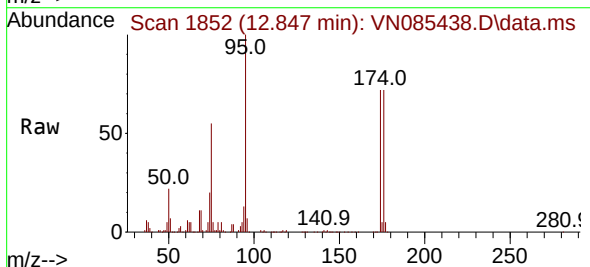
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion:107 Resp: 230104  
Ion Ratio Lower Upper  
107 100  
109 93.1 75.9 113.9

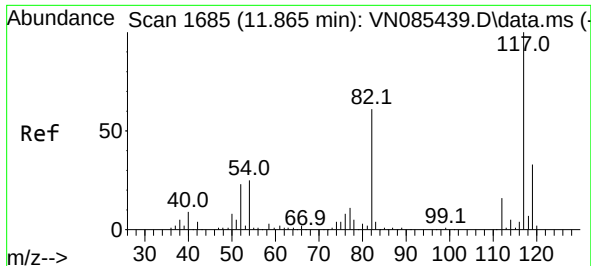


#62  
4-Bromofluorobenzene  
Concen: 112.765 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 95 Resp: 313161  
Ion Ratio Lower Upper  
95 100  
174 73.4 0.0 145.0  
176 70.5 0.0 142.4



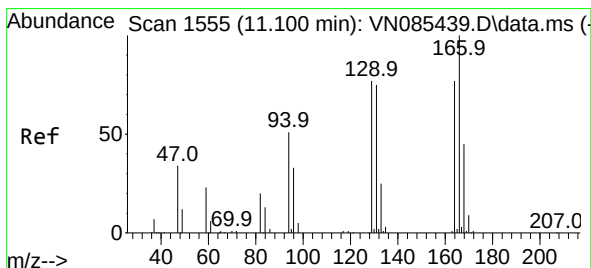
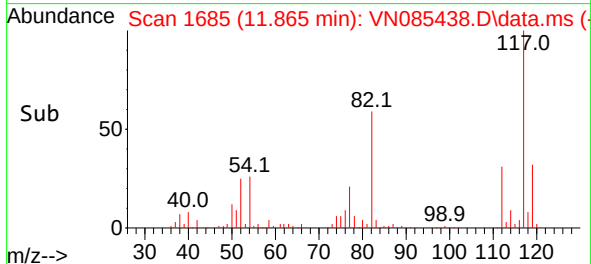
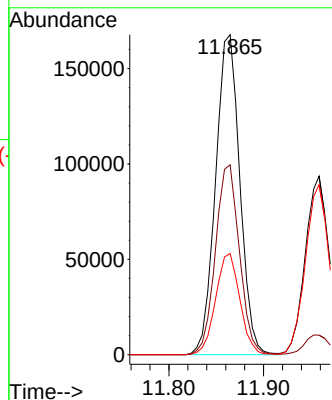
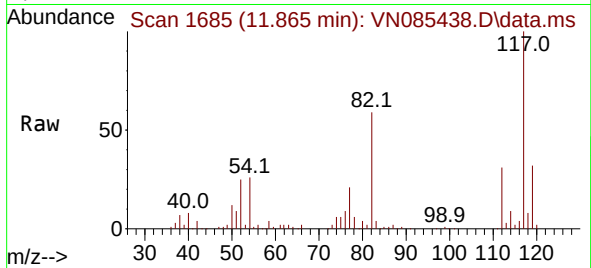




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

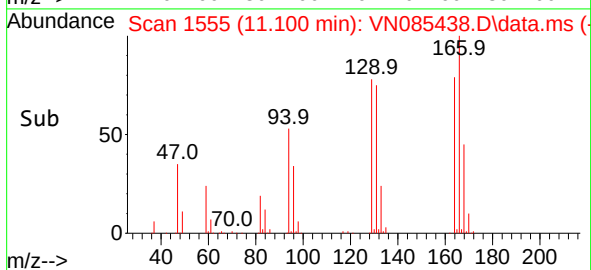
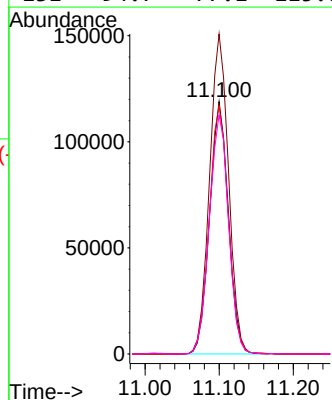
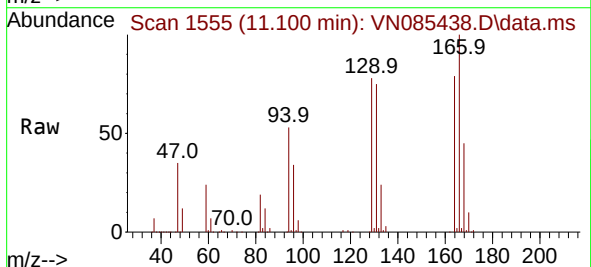
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

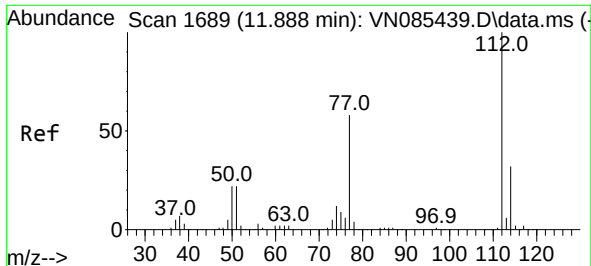
Tgt Ion:117 Resp: 298938  
Ion Ratio Lower Upper  
117 100  
82 59.3 48.6 72.8  
119 31.6 26.6 39.8



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

Tgt Ion:164 Resp: 209870  
Ion Ratio Lower Upper  
164 100  
166 126.8 103.4 155.2  
129 98.3 79.2 118.8  
131 94.7 77.1 115.7

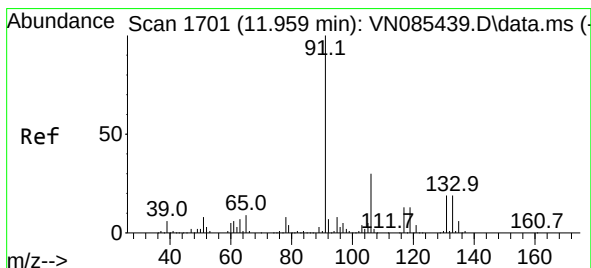
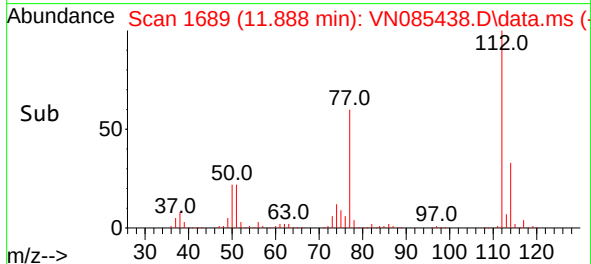
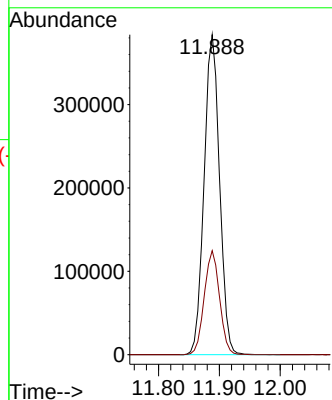
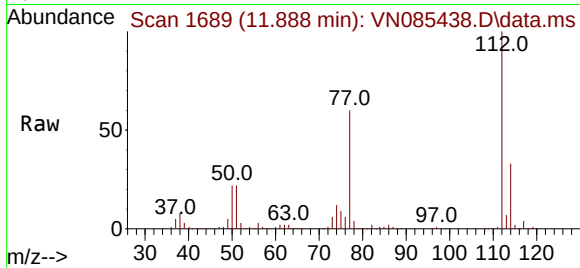




#65  
Chlorobenzene  
Concen: 103.482 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

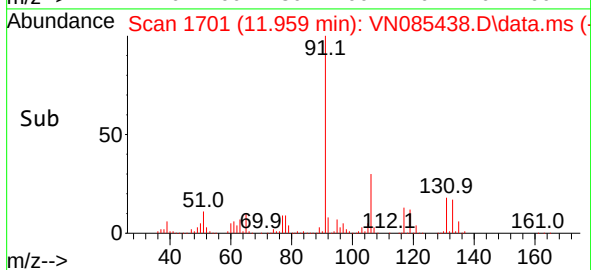
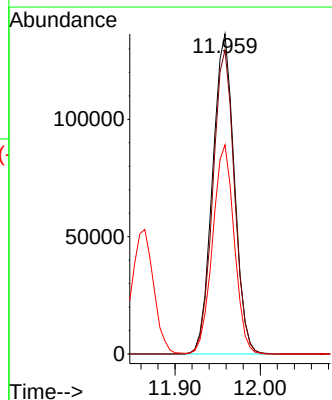
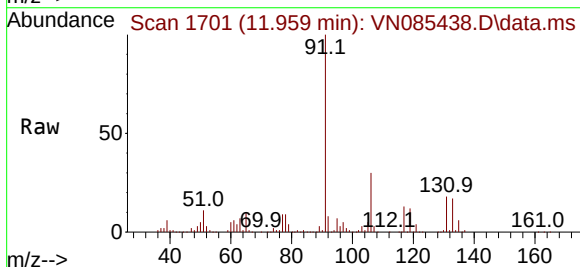
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

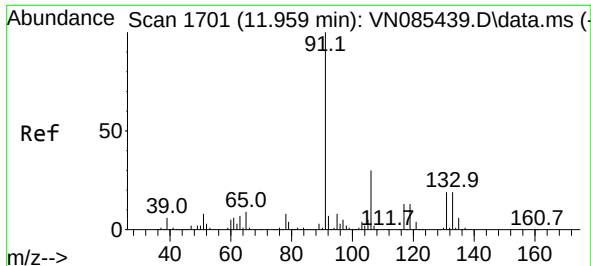
Tgt Ion:112 Resp: 677679  
Ion Ratio Lower Upper  
112 100  
114 32.5 25.3 37.9



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

Tgt Ion:131 Resp: 241593  
Ion Ratio Lower Upper  
131 100  
133 94.3 47.4 142.3  
119 64.9 33.1 99.5

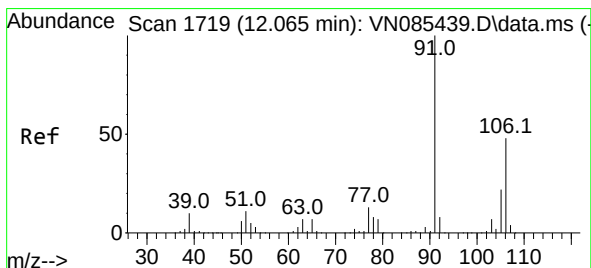
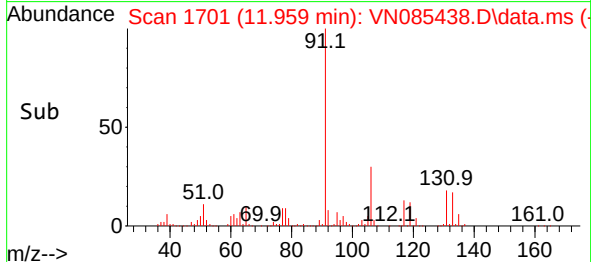
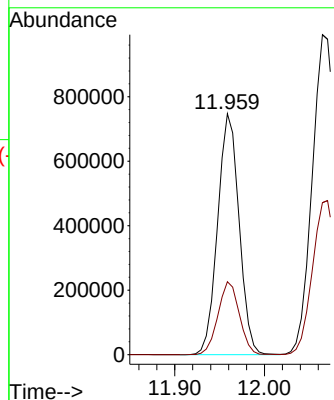
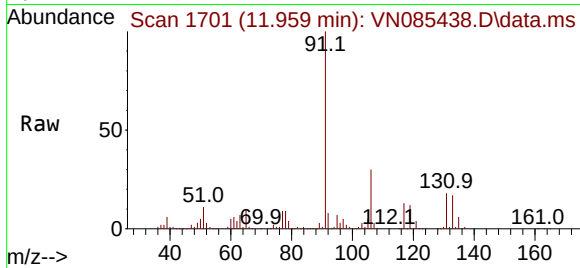




#67  
Ethyl Benzene  
Concen: 116.169 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

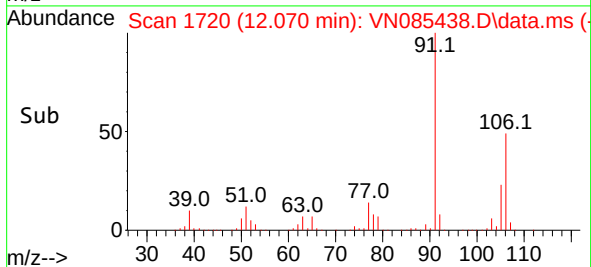
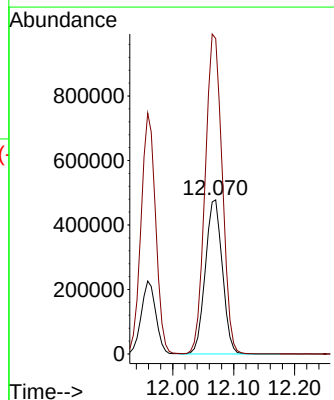
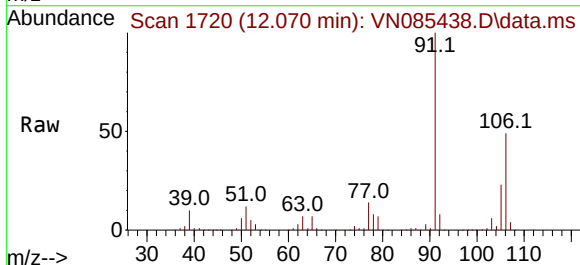
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

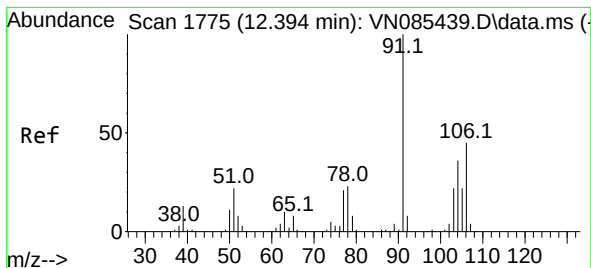
Tgt Ion: 91 Resp: 1239080  
Ion Ratio Lower Upper  
91 100  
106 30.3 23.8 35.8



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

Tgt Ion:106 Resp: 927244  
Ion Ratio Lower Upper  
106 100  
91 208.0 167.7 251.5





#69

o-Xylene

Concen: 117.135 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

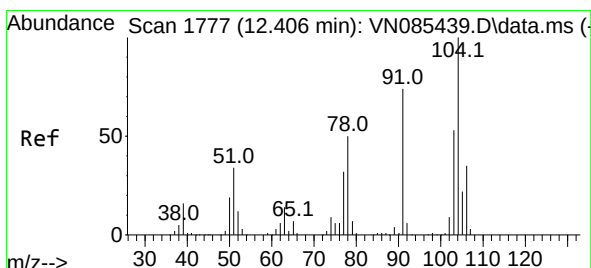
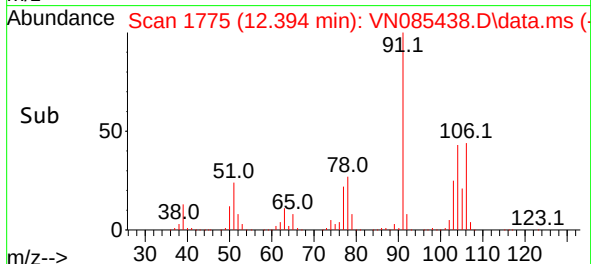
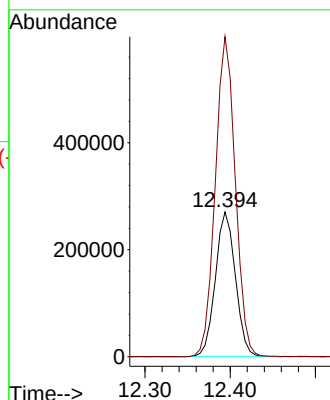
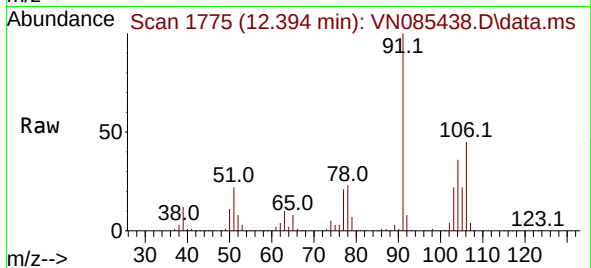
VSTDIC100

Tgt Ion:106 Resp: 441279

Ion Ratio Lower Upper

106 100

91 221.3 110.4 331.2



#70

Styrene

Concen: 121.919 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

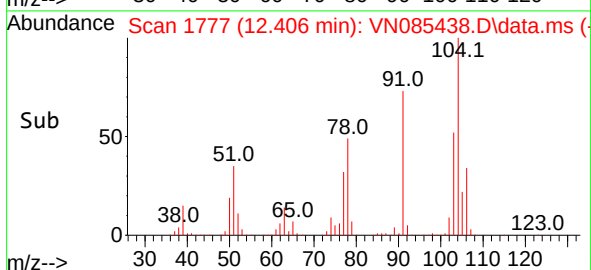
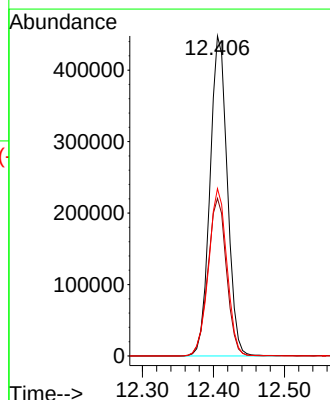
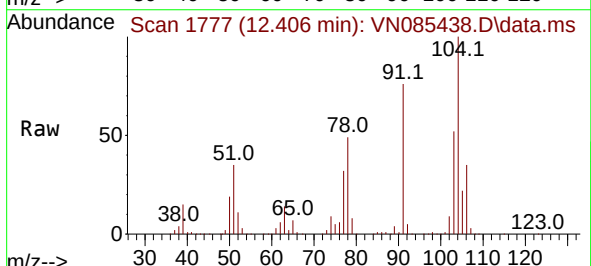
Tgt Ion:104 Resp: 760136

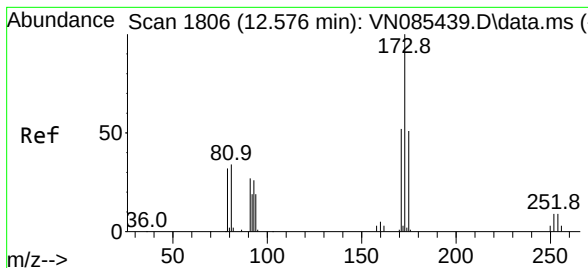
Ion Ratio Lower Upper

104 100

78 52.8 42.5 63.7

103 55.3 43.8 65.8

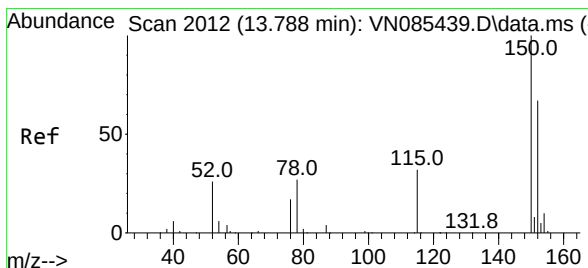
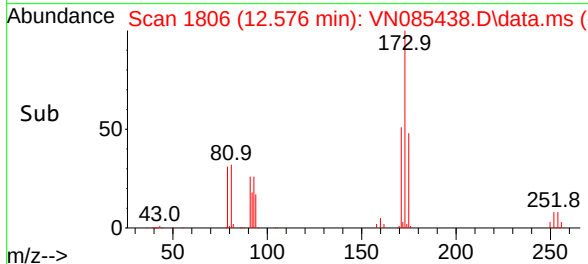
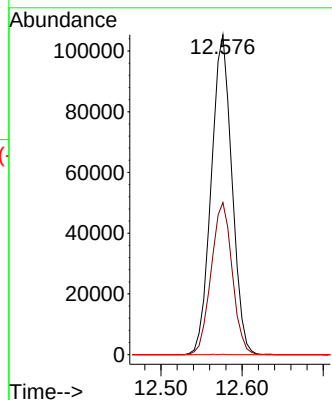
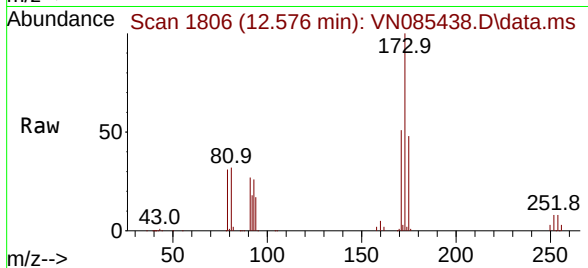




#71  
Bromoform  
Concen: 108.227 ug/l  
RT: 12.576 min Scan# 1806  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

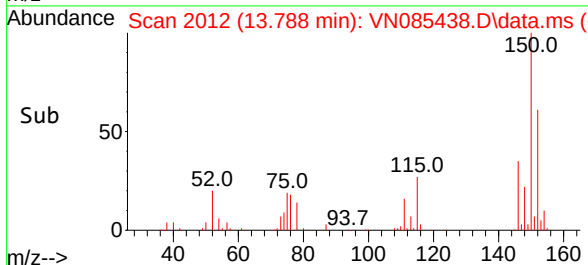
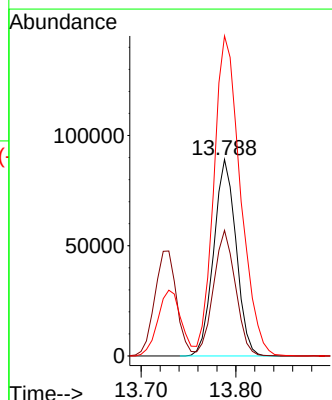
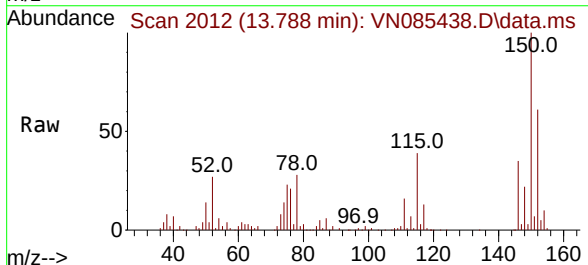
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

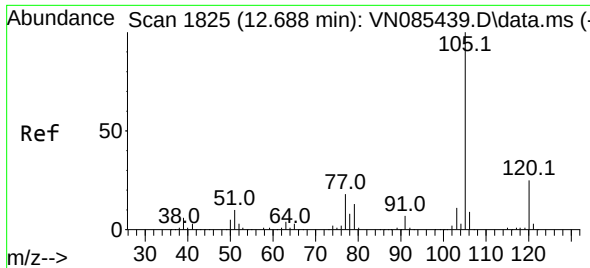
Tgt Ion:173 Resp: 186124  
Ion Ratio Lower Upper  
173 100  
175 48.4 24.4 73.2  
254 0.1 0.0 0.0#



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

Tgt Ion:152 Resp: 146196  
Ion Ratio Lower Upper  
152 100  
115 62.7 31.1 93.3  
150 193.1 0.0 343.6

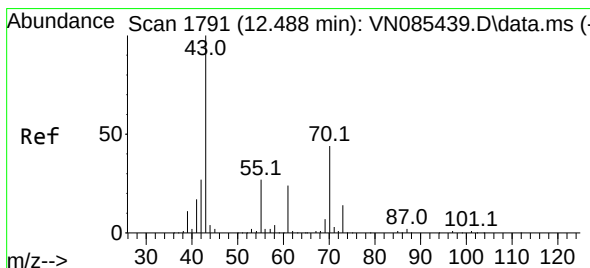
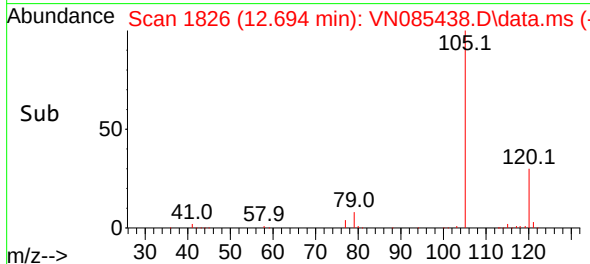
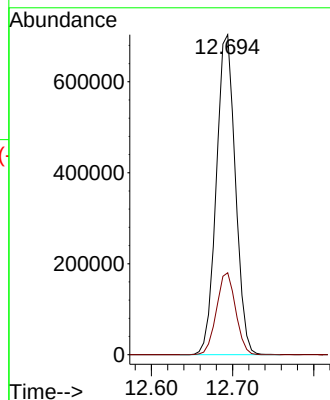
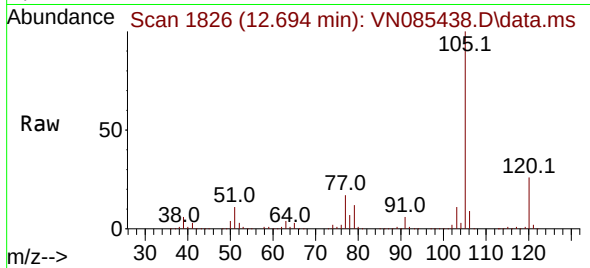




#73  
Isopropylbenzene  
Concen: 116.221 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

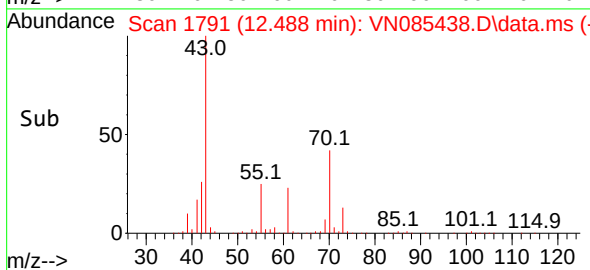
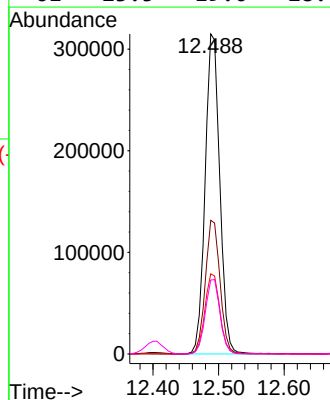
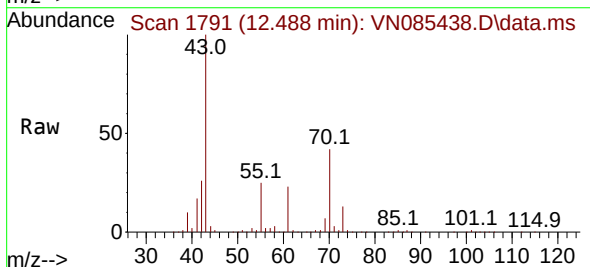
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

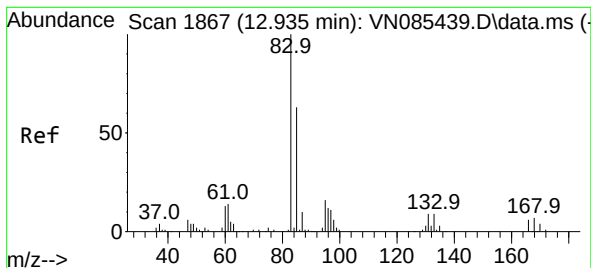
Tgt Ion:105 Resp: 1146752  
Ion Ratio Lower Upper  
105 100  
120 25.7 12.8 38.3



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

Tgt Ion: 43 Resp: 489217  
Ion Ratio Lower Upper  
43 100  
70 41.9 34.0 51.0  
55 25.7 21.4 32.2  
61 23.5 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 94.039 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

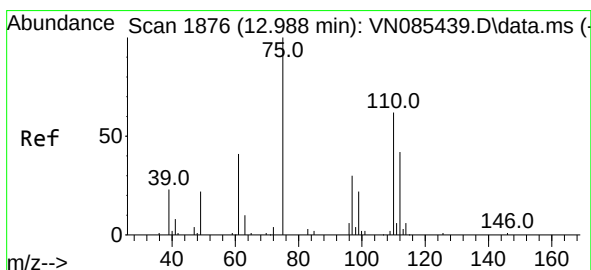
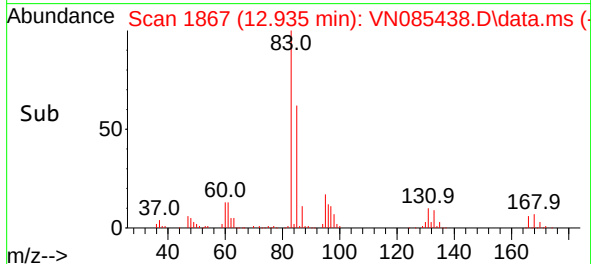
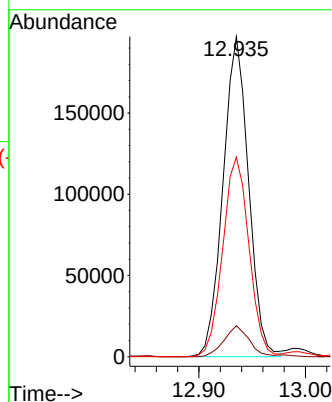
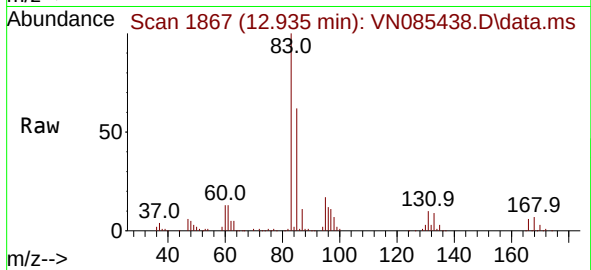
Tgt Ion: 83 Resp: 327767

Ion Ratio Lower Upper

83 100

131 9.8 4.8 14.4

85 64.1 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 150.413 ug/l

RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

Lab File: VN085438.D

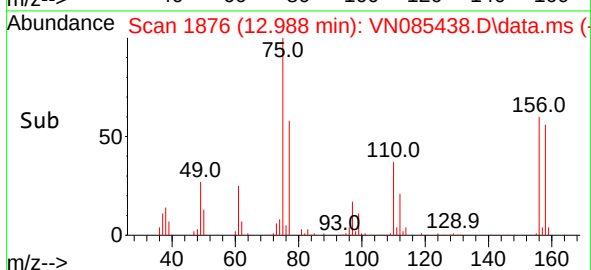
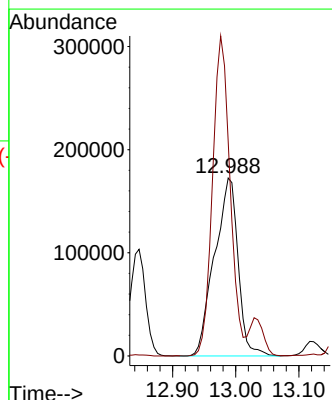
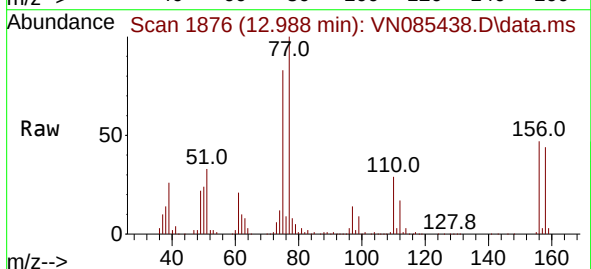
Acq: 14 Jan 2025 14:56

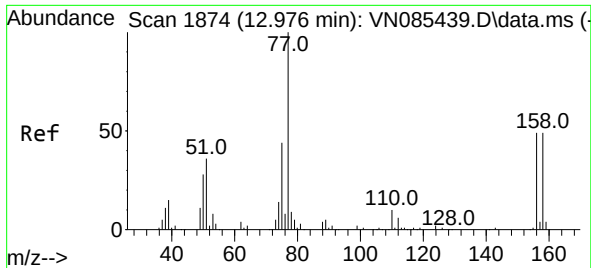
Tgt Ion: 75 Resp: 446237

Ion Ratio Lower Upper

75 100

77 133.9 109.7 329.2

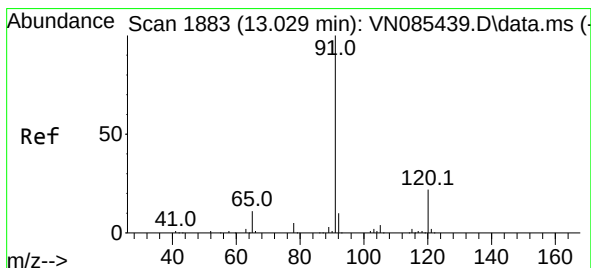
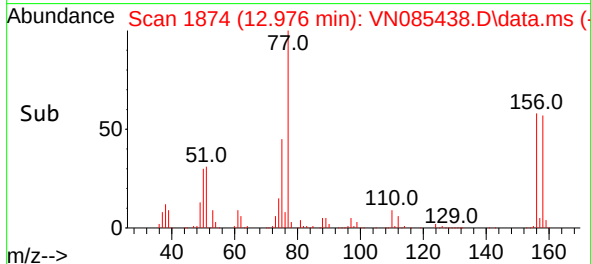
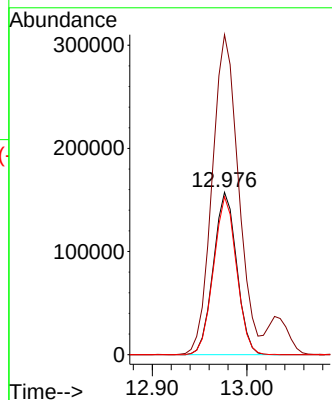
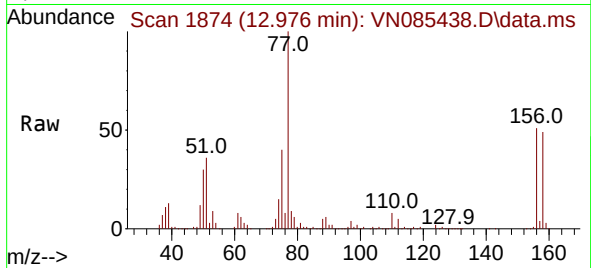




#77  
Bromobenzene  
Concen: 104.200 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

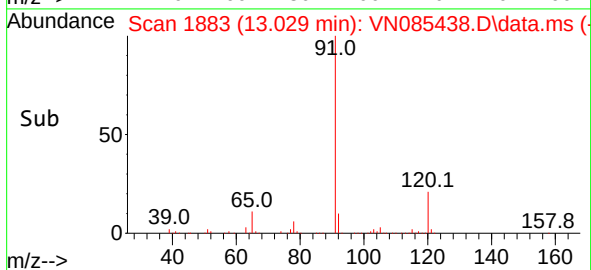
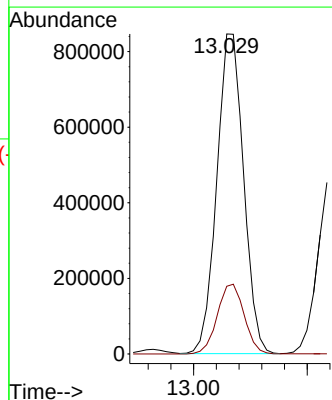
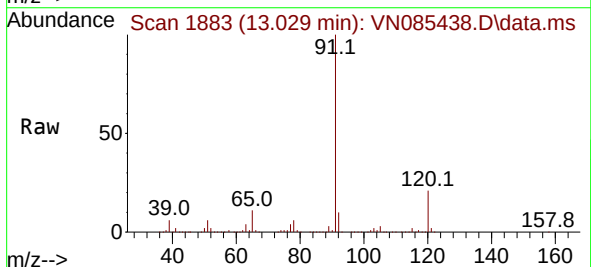
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion:156 Resp: 268616  
Ion Ratio Lower Upper  
156 100  
77 222.4 114.1 342.4  
158 96.3 48.9 146.8

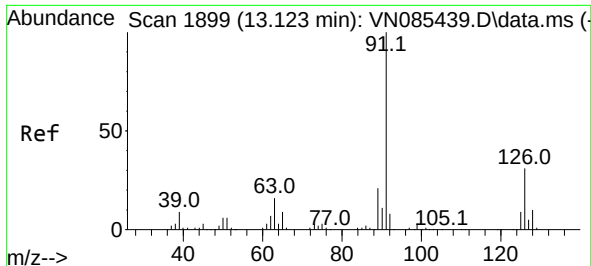


#78  
n-propylbenzene  
Concen: 118.600 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 1385353  
Ion Ratio Lower Upper  
91 100  
120 21.8 10.9 32.6



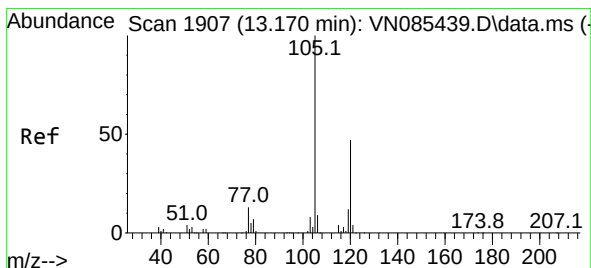
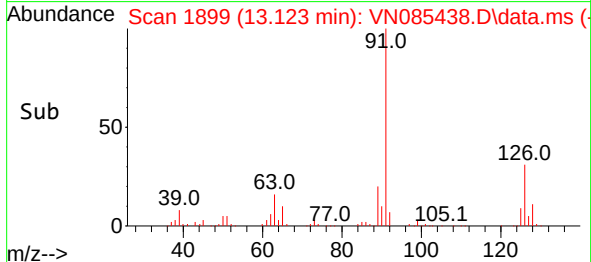
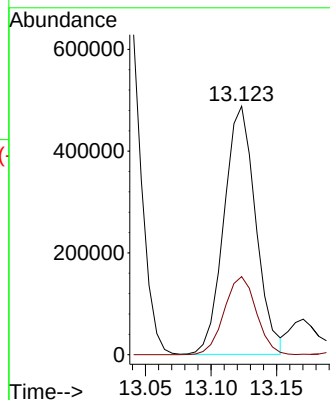
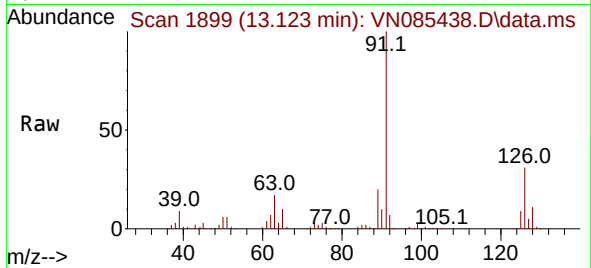




#79  
2-Chlorotoluene  
Concen: 108.767 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

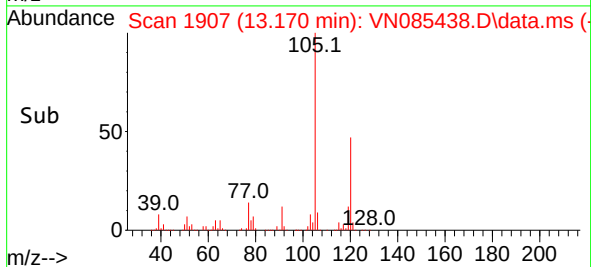
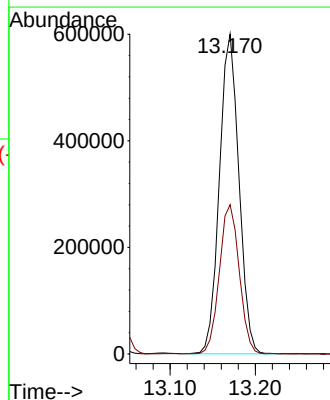
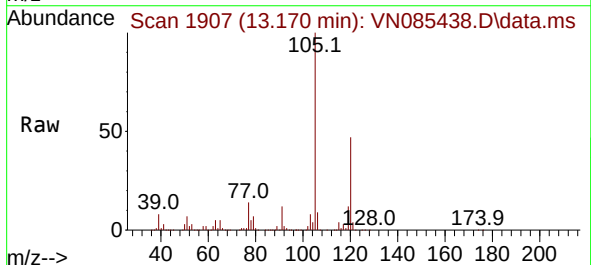
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

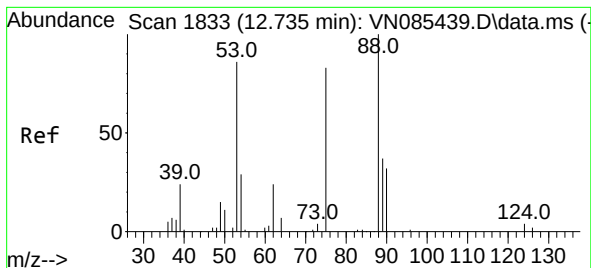
Tgt Ion: 91 Resp: 822258  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.7 47.1



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

Tgt Ion:105 Resp: 953066  
Ion Ratio Lower Upper  
105 100  
120 47.8 23.9 71.7

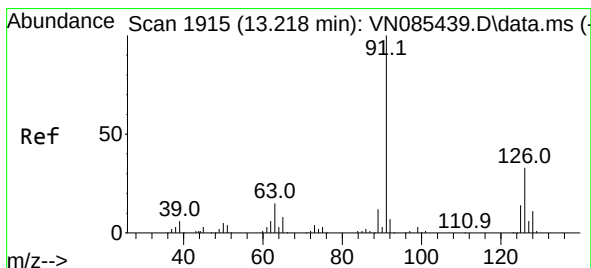
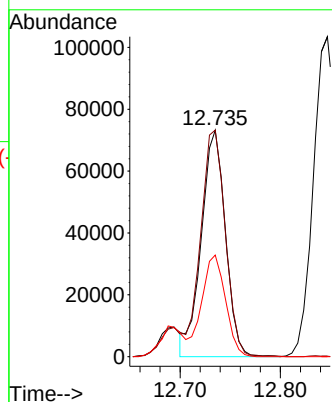
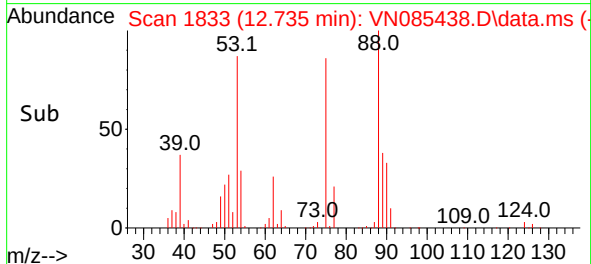
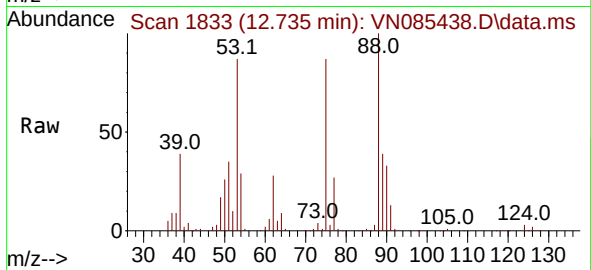




#81  
trans-1,4-Dichloro-2-butene  
Concen: 111.544 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

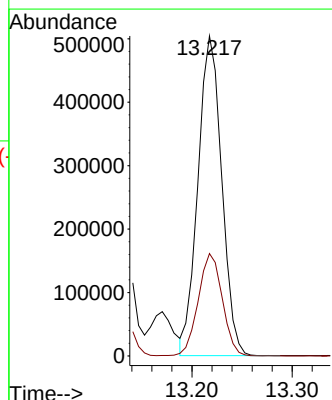
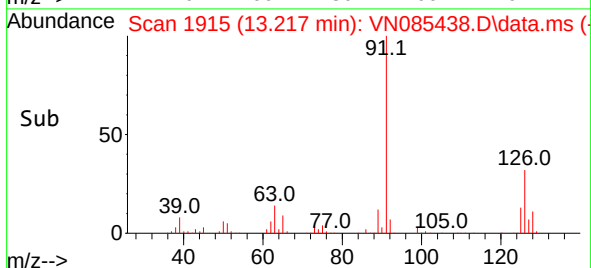
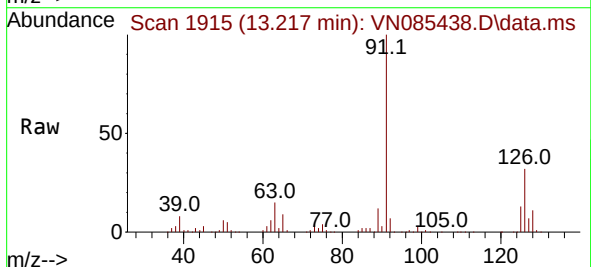
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

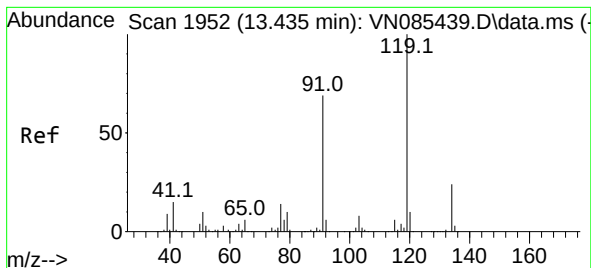
Tgt Ion: 75 Resp: 122508  
Ion Ratio Lower Upper  
75 100  
53 100.9 95.6 143.4  
89 44.4 37.0 55.6



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

Tgt Ion: 91 Resp: 832317  
Ion Ratio Lower Upper  
91 100  
126 32.5 15.9 47.7





#83

tert-Butylbenzene

Concen: 116.457 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

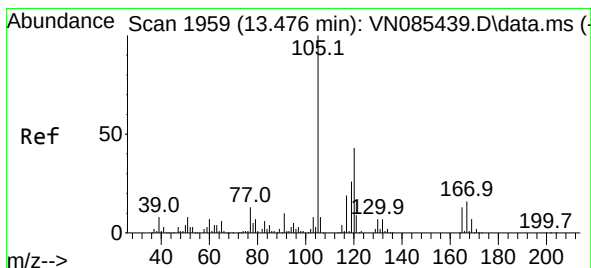
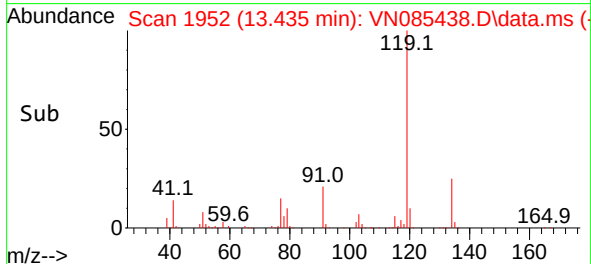
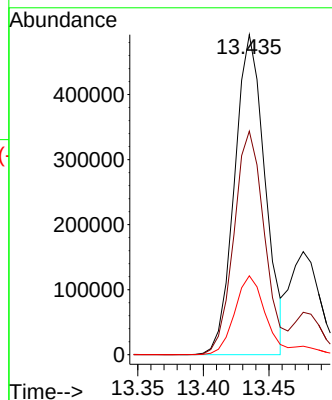
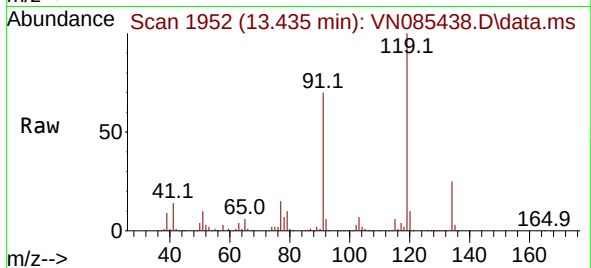
Tgt Ion:119 Resp: 797069

Ion Ratio Lower Upper

119 100

91 70.7 35.1 105.3

134 26.6 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 119.625 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085438.D

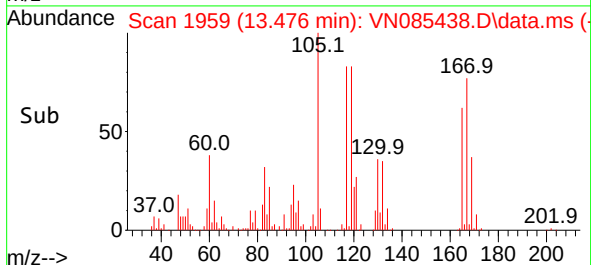
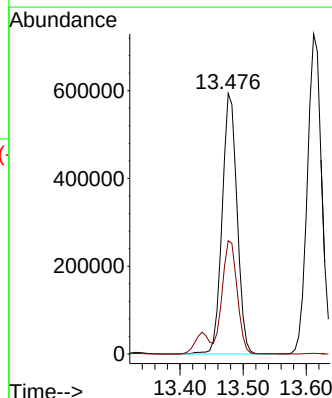
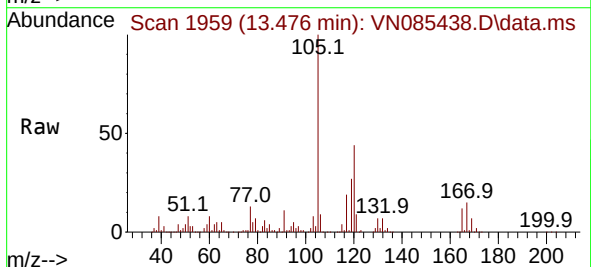
Acq: 14 Jan 2025 14:56

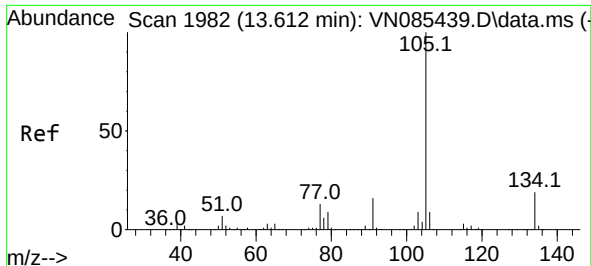
Tgt Ion:105 Resp: 971729

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0

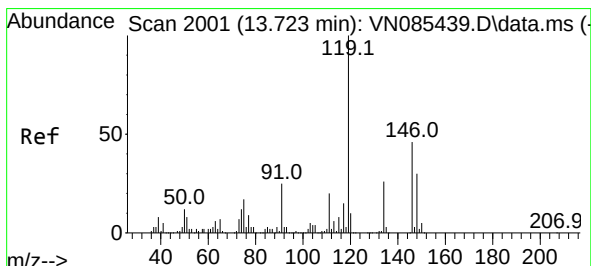
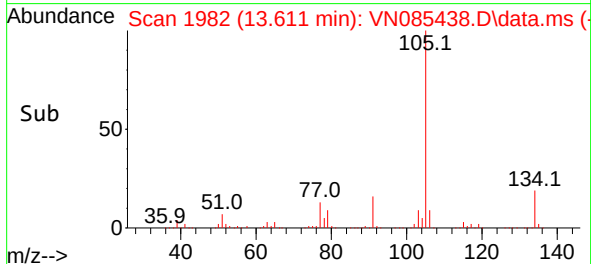
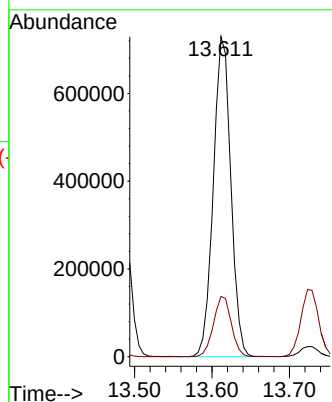
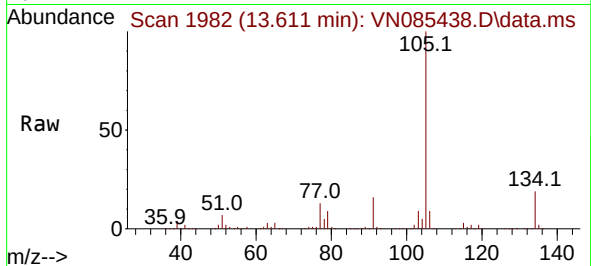




#85  
 sec-Butylbenzene  
 Concen: 120.587 ug/l  
 RT: 13.611 min Scan# 1982  
 Delta R.T. -0.001 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

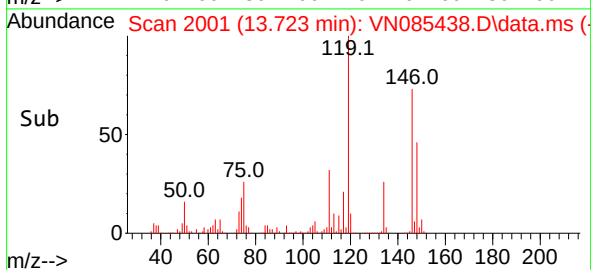
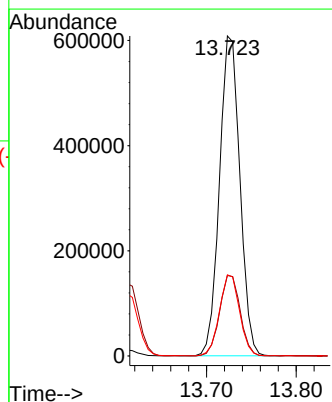
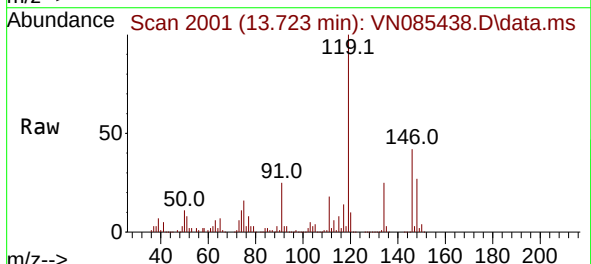
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

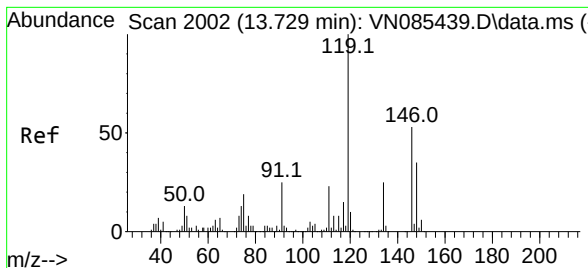
Tgt Ion:105 Resp: 1143885  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9



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

Tgt Ion:119 Resp: 960747  
 Ion Ratio Lower Upper  
 119 100  
 134 25.3 12.7 38.0  
 91 25.0 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 105.943 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

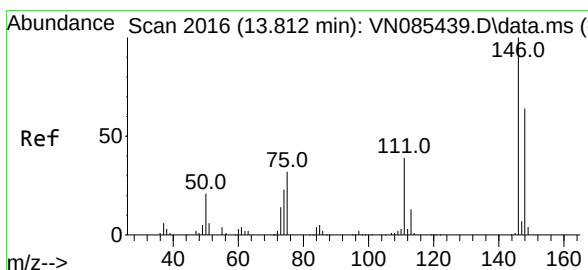
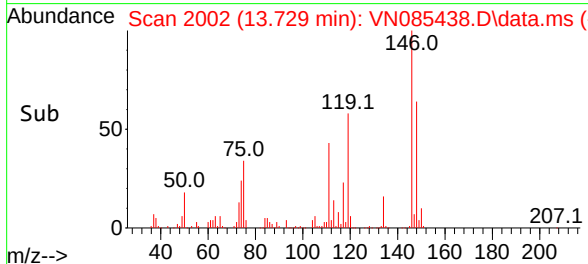
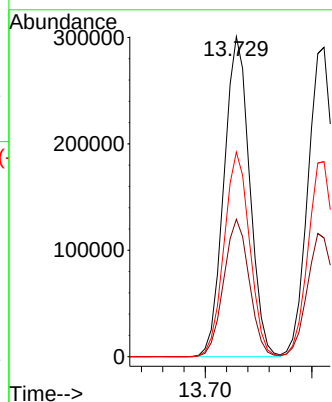
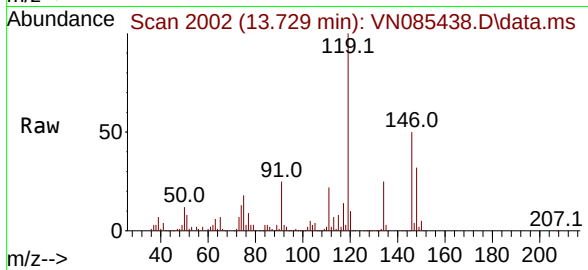
Tgt Ion:146 Resp: 502960

Ion Ratio Lower Upper

146 100

111 42.8 21.4 64.3

148 63.6 32.3 96.9



#88

1,4-Dichlorobenzene

Concen: 101.341 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

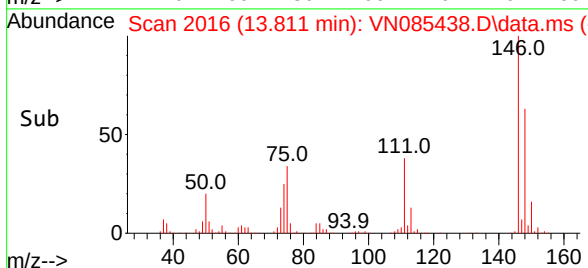
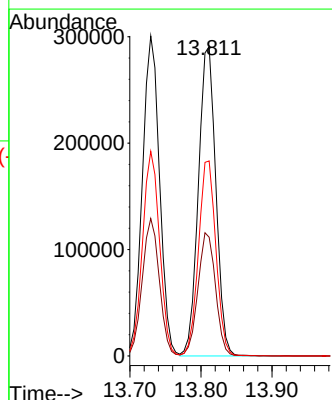
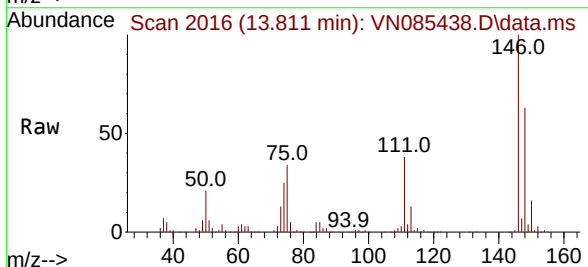
Tgt Ion:146 Resp: 498709

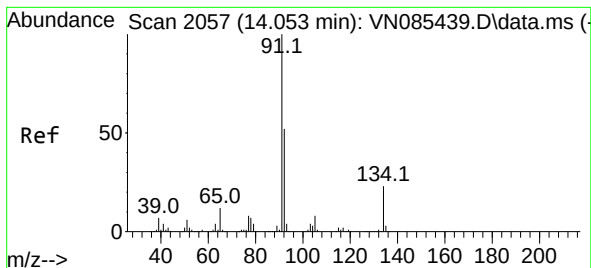
Ion Ratio Lower Upper

146 100

111 40.1 21.3 63.7

148 63.1 32.4 97.0





#89

n-Butylbenzene

Concen: 123.781 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

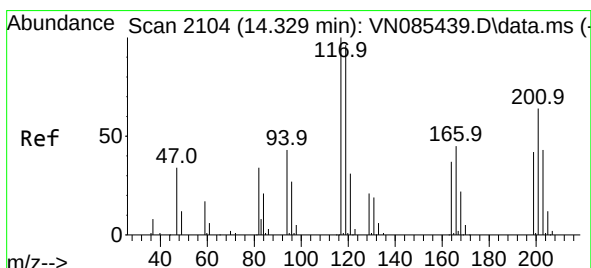
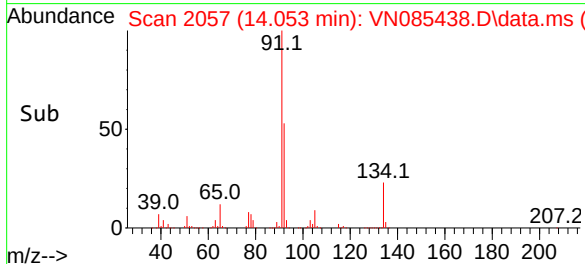
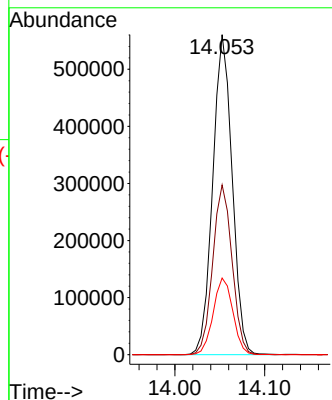
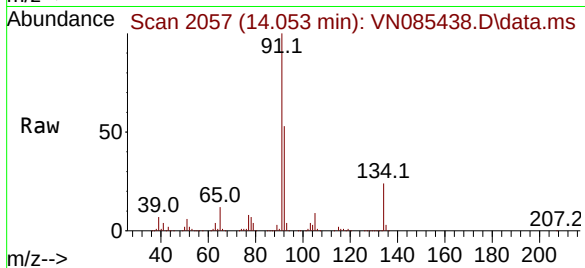
Tgt Ion: 91 Resp: 842368

Ion Ratio Lower Upper

91 100

92 52.8 25.8 77.3

134 24.3 11.7 35.1



#90

Hexachloroethane

Concen: 104.405 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. -0.000 min

Lab File: VN085438.D

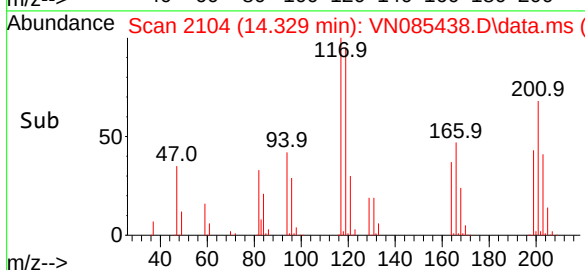
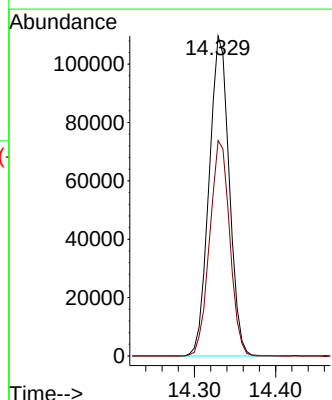
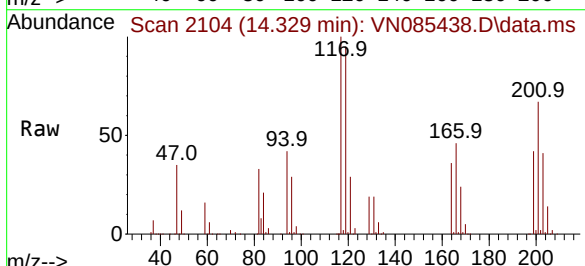
Acq: 14 Jan 2025 14:56

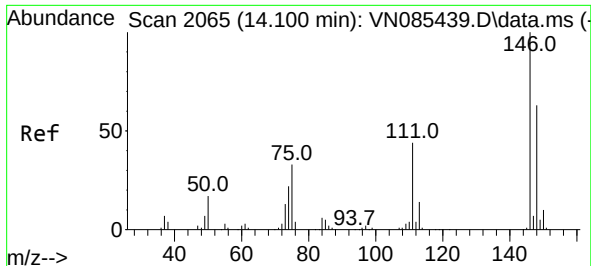
Tgt Ion: 117 Resp: 188541

Ion Ratio Lower Upper

117 100

201 67.2 33.7 101.0

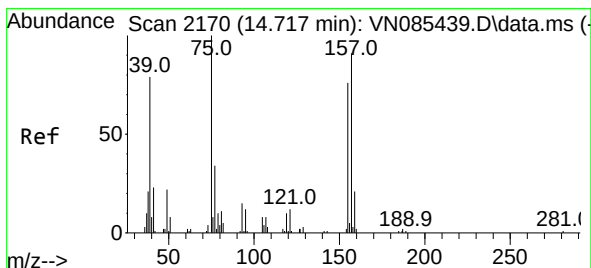
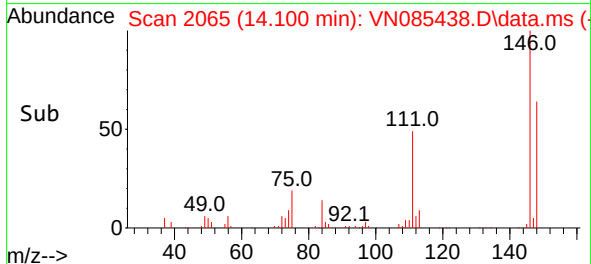
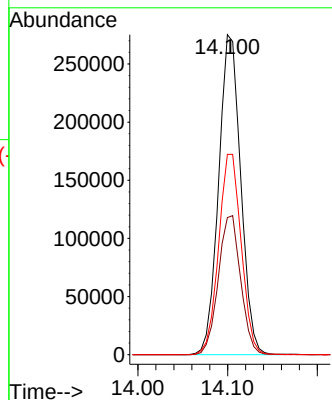
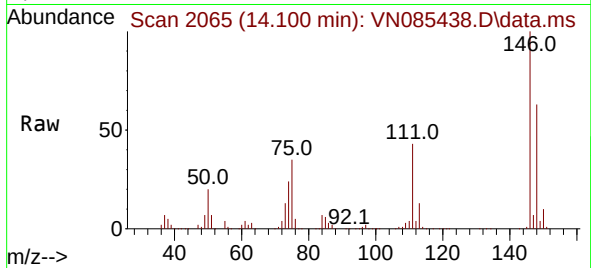




#91  
1,2-Dichlorobenzene  
Concen: 99.445 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

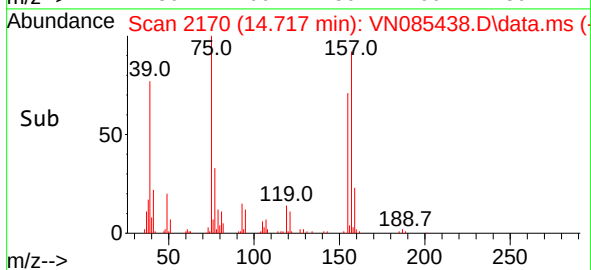
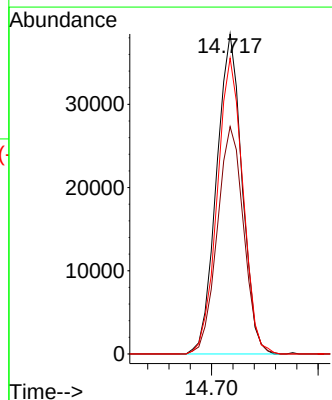
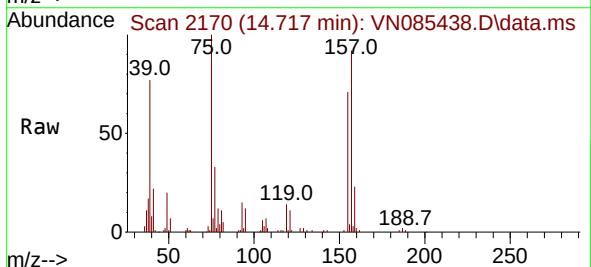
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

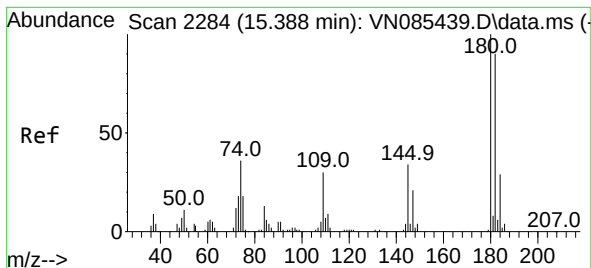
Tgt Ion:146 Resp: 470919  
Ion Ratio Lower Upper  
146 100  
111 43.9 21.7 65.1  
148 64.0 31.4 94.2



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

Tgt Ion: 75 Resp: 63846  
Ion Ratio Lower Upper  
75 100  
155 73.5 36.4 109.2  
157 93.0 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 113.946 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

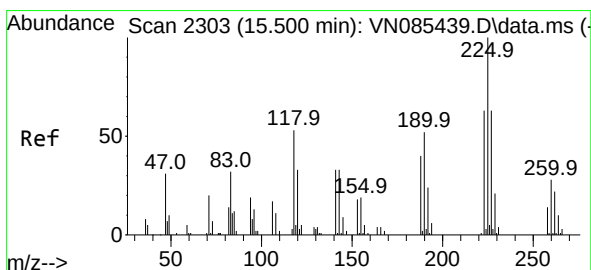
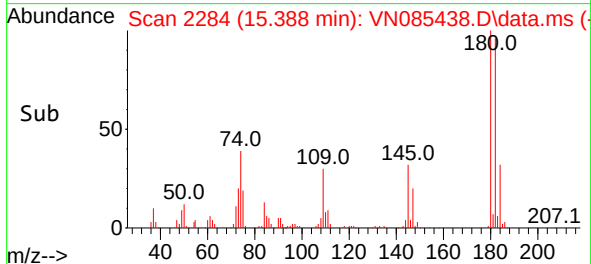
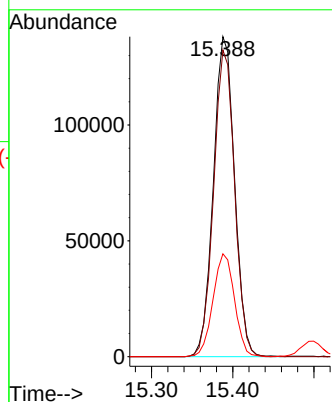
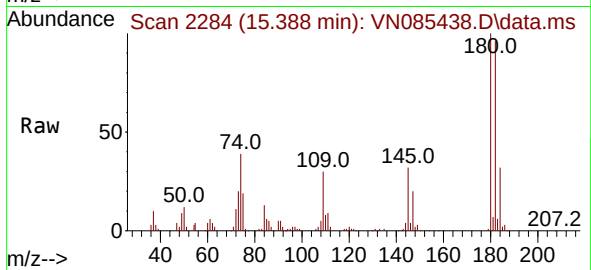
Tgt Ion:180 Resp: 250787

Ion Ratio Lower Upper

180 100

182 94.9 46.8 140.3

145 32.6 16.0 48.0



#94

Hexachlorobutadiene

Concen: 96.619 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

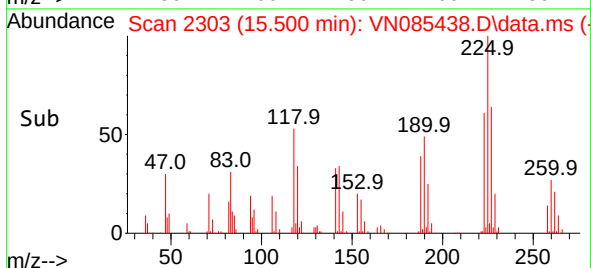
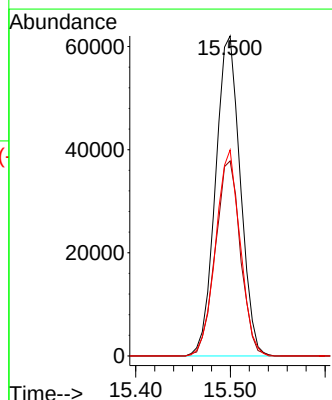
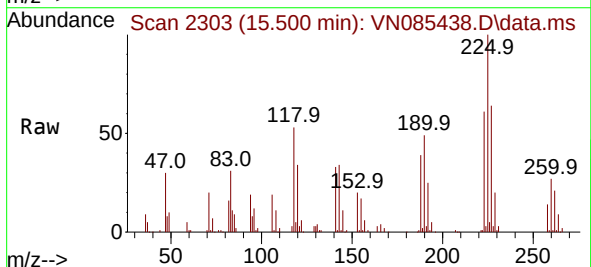
Tgt Ion:225 Resp: 112899

Ion Ratio Lower Upper

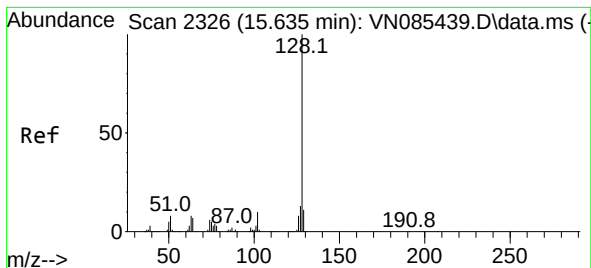
225 100

223 61.8 30.7 92.1

227 63.6 30.9 92.5







#95

Naphthalene

Concen: 115.234 ug/l

RT: 15.635 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

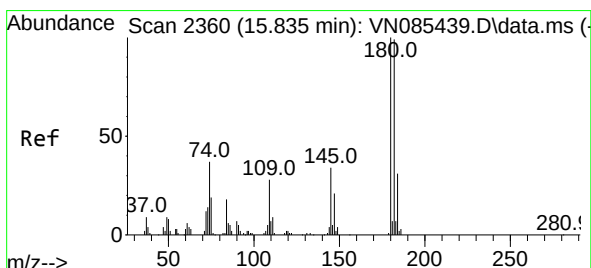
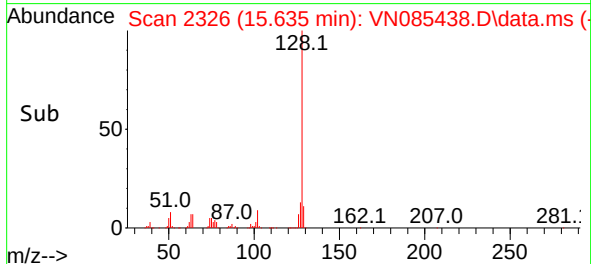
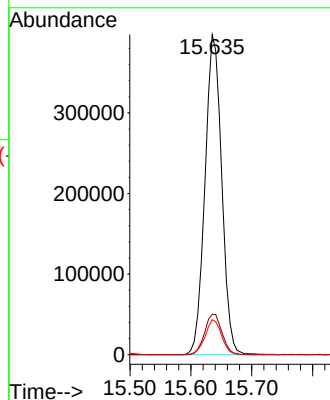
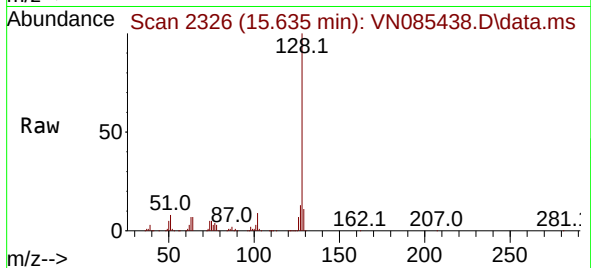
Tgt Ion:128 Resp: 756816

Ion Ratio Lower Upper

128 100

127 13.1 10.6 16.0

129 10.8 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 107.256 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

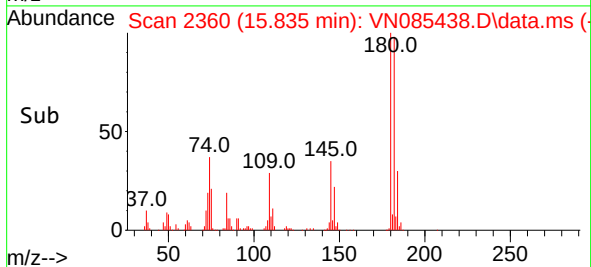
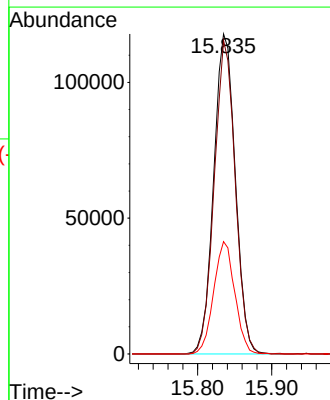
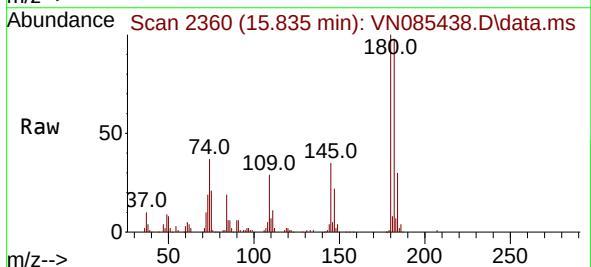
Tgt Ion:180 Resp: 238860

Ion Ratio Lower Upper

180 100

182 95.0 47.4 142.2

145 34.3 16.9 50.7



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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

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

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 199403   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 339872   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 297366   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 146624   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| System Monitoring Compounds |        |       |          |          |            |      |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 165768   | 51.500   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 103.000% |      |
| 35) Dibromofluoromethane    | 8.159  | 113   | 121554   | 51.552   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 103.100% |      |
| 50) Toluene-d8              | 10.565 | 98    | 430698   | 51.411   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 102.820% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 152568   | 53.239   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 106.480% |      |

|                              |       |     |         |         |      |     |
|------------------------------|-------|-----|---------|---------|------|-----|
| Target Compounds             |       |     |         | Qvalue  |      |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 125504  | 46.486  | ug/l | 100 |
| 3) Chloromethane             | 2.359 | 50  | 135631  | 46.398  | ug/l | 100 |
| 4) Vinyl Chloride            | 2.512 | 62  | 136831  | 46.569  | ug/l | 100 |
| 5) Bromomethane              | 2.953 | 94  | 83199   | 46.877  | ug/l | 100 |
| 6) Chloroethane              | 3.118 | 64  | 84517   | 45.371  | ug/l | 100 |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 198726  | 46.613  | ug/l | 100 |
| 8) Diethyl Ether             | 3.953 | 74  | 71764   | 48.726  | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 108081  | 45.010  | ug/l | 100 |
| 10) Methyl Iodide            | 4.589 | 142 | 143383  | 52.142  | ug/l | 100 |
| 11) Tert butyl alcohol       | 5.512 | 59  | 92841   | 251.894 | ug/l | 100 |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 106247  | 49.647  | ug/l | 100 |
| 13) Acrolein                 | 4.171 | 56  | 139234  | 276.734 | ug/l | 100 |
| 14) Allyl chloride           | 5.018 | 41  | 168654  | 48.567  | ug/l | 100 |
| 15) Acrylonitrile            | 5.712 | 53  | 296781  | 253.507 | ug/l | 100 |
| 16) Acetone                  | 4.418 | 43  | 251271  | 241.603 | ug/l | 100 |
| 17) Carbon Disulfide         | 4.706 | 76  | 294604  | 44.710  | ug/l | 100 |
| 18) Methyl Acetate           | 5.018 | 43  | 157485  | 49.798  | ug/l | 100 |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 373561  | 53.758  | ug/l | 100 |
| 20) Methylene Chloride       | 5.271 | 84  | 125508  | 48.748  | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 110684  | 48.395  | ug/l | 100 |
| 22) Diisopropyl ether        | 6.665 | 45  | 406253  | 52.707  | ug/l | 100 |
| 23) Vinyl Acetate            | 6.594 | 43  | 1491031 | 275.471 | ug/l | 100 |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 233336  | 49.648  | ug/l | 100 |
| 25) 2-Butanone               | 7.477 | 43  | 388457  | 253.815 | ug/l | 100 |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 186591  | 49.106  | ug/l | 100 |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 136229  | 50.571  | ug/l | 100 |
| 28) Bromochloromethane       | 7.806 | 49  | 108148  | 49.461  | ug/l | 100 |
| 29) Tetrahydrofuran          | 7.830 | 42  | 259683  | 267.624 | ug/l | 100 |
| 30) Chloroform               | 7.959 | 83  | 234271  | 48.229  | ug/l | 100 |
| 31) Cyclohexane              | 8.253 | 56  | 175588  | 42.984  | ug/l | 100 |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 202590  | 47.547  | ug/l | 100 |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 157031  | 47.453  | ug/l | 100 |
| 37) Ethyl Acetate            | 7.553 | 43  | 165866  | 49.658  | ug/l | 100 |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 180199  | 47.564  | ug/l | 100 |
| 39) Methylcyclohexane        | 9.600 | 83  | 157234  | 50.562  | ug/l | 100 |
| 40) Benzene                  | 8.600 | 78  | 492606  | 49.542  | ug/l | 100 |

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

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

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 91711    | 52.775   | ug/l   | 100      |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 186065   | 49.685   | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.683  | 43   | 276228   | 51.611   | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 109953   | 47.506   | ug/l   | 100      |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 126084   | 49.644   | ug/l   | 100      |
| 46) Dibromomethane            | 9.706  | 93   | 90670    | 49.476   | ug/l   | 100      |
| 47) Bromodichloromethane      | 9.882  | 83   | 189915   | 50.867   | ug/l   | 100      |
| 48) Methyl methacrylate       | 9.677  | 41   | 133399   | 55.385   | ug/l   | 100      |
| 49) 1,4-Dioxane               | 9.688  | 88   | 43048    | 1061.334 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 836707   | 269.403  | ug/l   | 100      |
| 52) Toluene                   | 10.624 | 92   | 295792   | 51.341   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 187439   | 53.125   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 199771   | 53.006   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 115462   | 50.641   | ug/l   | 100      |
| 56) Ethyl methacrylate        | 10.871 | 69   | 184775   | 48.182   | ug/l   | 100      |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 204590   | 51.606   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 409594   | 283.088  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.188 | 43   | 606740   | 277.643  | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.353 | 129  | 140704   | 51.116   | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 113541   | 50.028   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 95879    | 47.295   | ug/l   | 100      |
| 65) Chlorobenzene             | 11.888 | 112  | 319992   | 49.121   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 116488   | 48.722   | ug/l   | 100      |
| 67) Ethyl Benzene             | 11.959 | 91   | 555322   | 52.339   | ug/l   | 100      |
| 68) m/p-Xylenes               | 12.065 | 106  | 420702   | 107.286  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 202597   | 54.062   | ug/l   | 100      |
| 70) Styrene                   | 12.406 | 104  | 348720   | 56.227   | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 92366    | 53.993   | ug/l # | 100      |
| 73) Isopropylbenzene          | 12.688 | 105  | 505619   | 51.094   | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 237870   | 53.478   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 167856   | 48.019   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 219507   | 73.773   | ug/l   | 45       |
| 77) Bromobenzene              | 12.976 | 156  | 125800   | 48.657   | ug/l   | 100      |
| 78) n-propylbenzene           | 13.029 | 91   | 609022   | 51.986   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 378981   | 49.985   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 431021   | 52.730   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 57184    | 51.914   | ug/l   | 100      |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 379524   | 50.273   | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 357563   | 52.090   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 442175   | 54.275   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 501561   | 52.719   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 421052   | 49.240   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 229518   | 48.204   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 229084   | 46.416   | ug/l   | 100      |
| 89) n-Butylbenzene            | 14.053 | 91   | 364111   | 53.348   | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 84602    | 46.712   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 228024   | 48.012   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 32536    | 50.971   | ug/l   | 100      |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 114468   | 51.857   | ug/l   | 100      |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 53846    | 45.947   | ug/l   | 100      |
| 95) Naphthalene               | 15.635 | 128  | 363882   | 55.243   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 115251   | 51.601   | ug/l   | 100      |

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

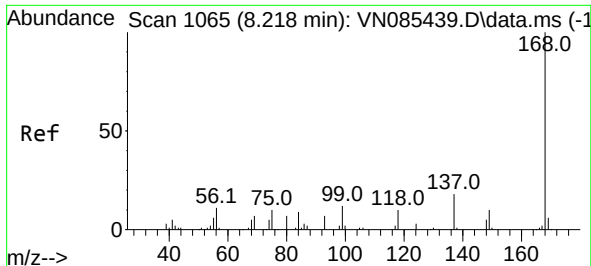
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

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

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

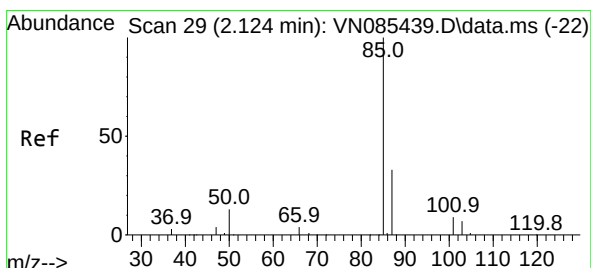
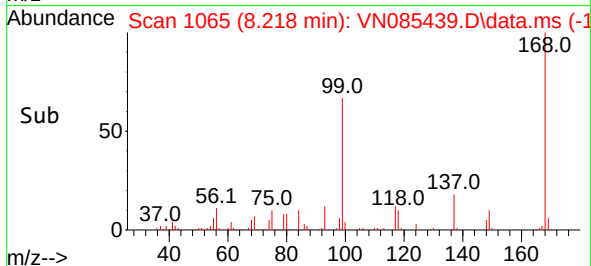
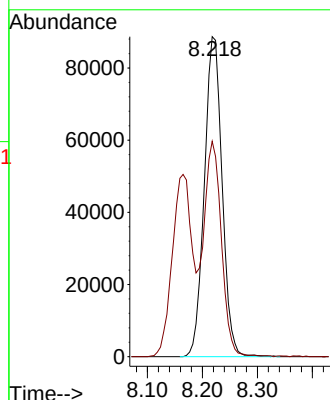
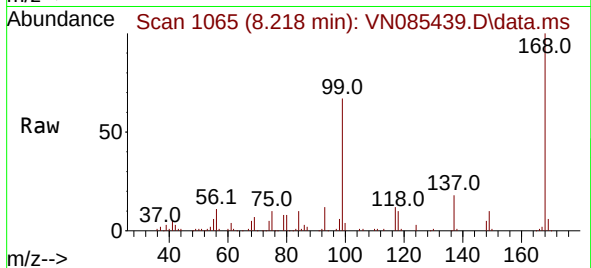




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

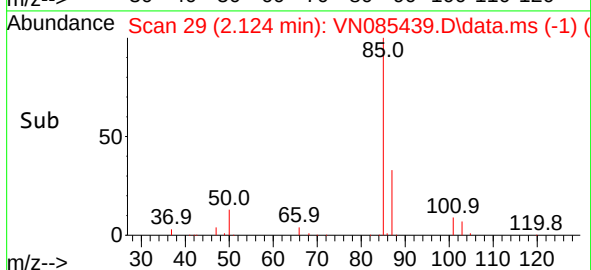
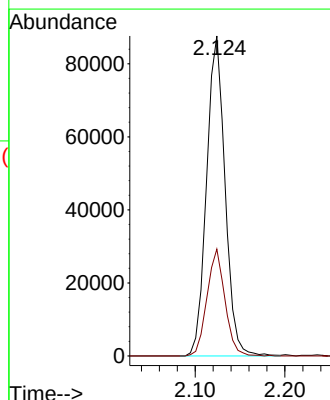
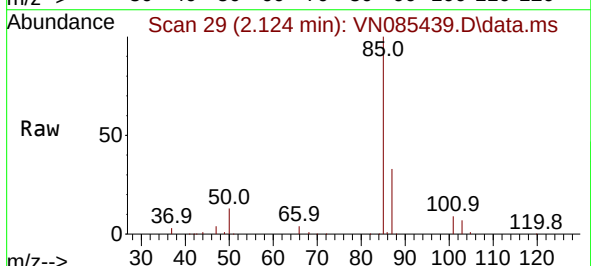
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

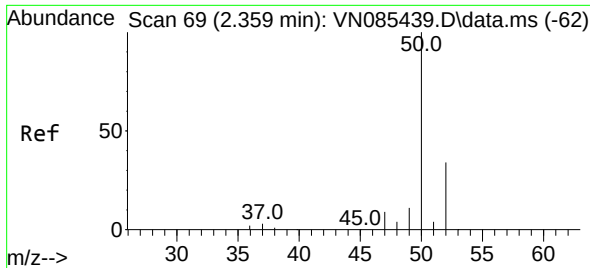
Tgt Ion:168 Resp: 199403  
Ion Ratio Lower Upper  
168 100  
99 67.0 53.6 80.4



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

Tgt Ion: 85 Resp: 125504  
Ion Ratio Lower Upper  
85 100  
87 33.4 16.7 50.1

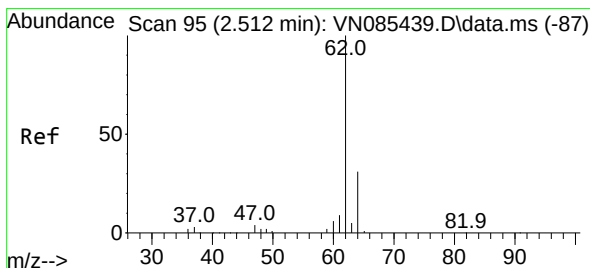
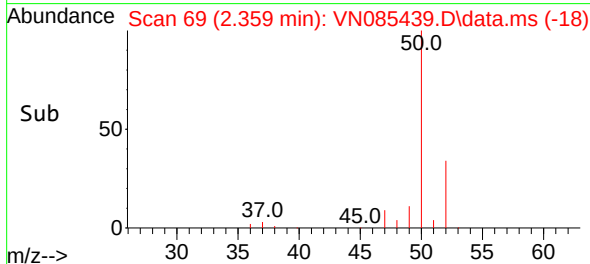
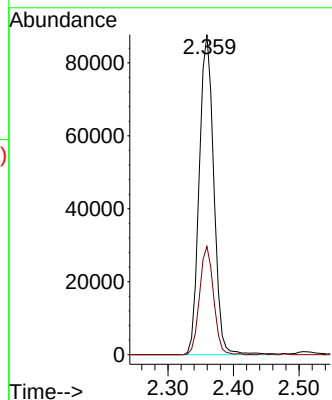
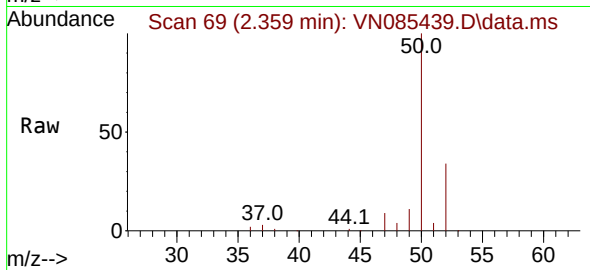




#3  
Chloromethane  
Concen: 46.398 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

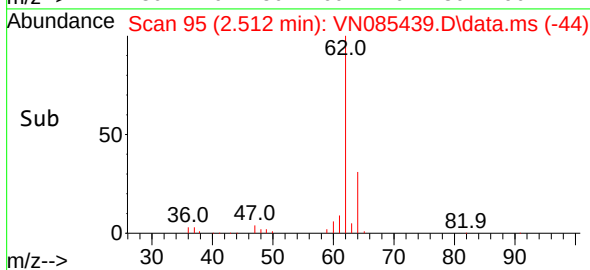
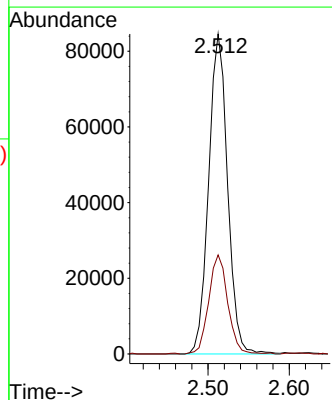
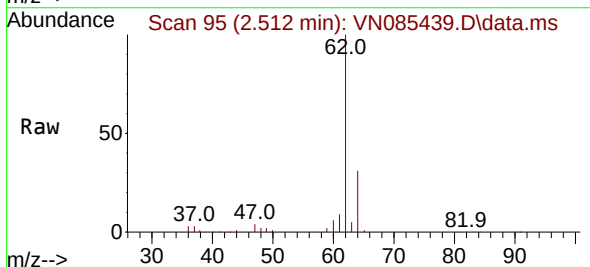
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ClientSampleId :  
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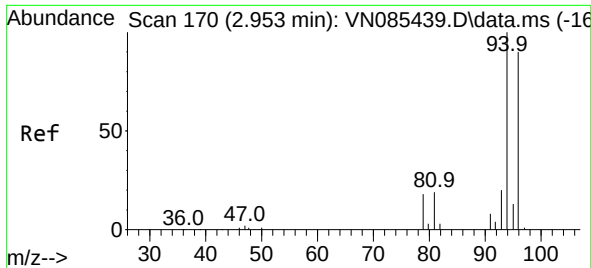
Tgt Ion: 50 Resp: 135631  
Ion Ratio Lower Upper  
50 100  
52 33.8 27.0 40.6



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

Tgt Ion: 62 Resp: 136831  
Ion Ratio Lower Upper  
62 100  
64 31.0 24.8 37.2

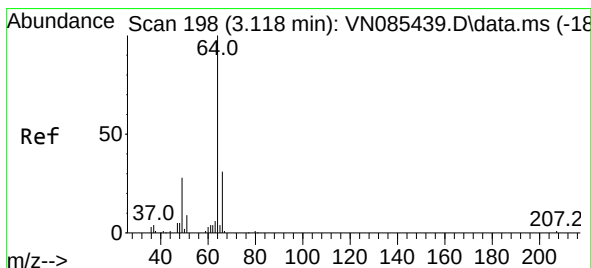
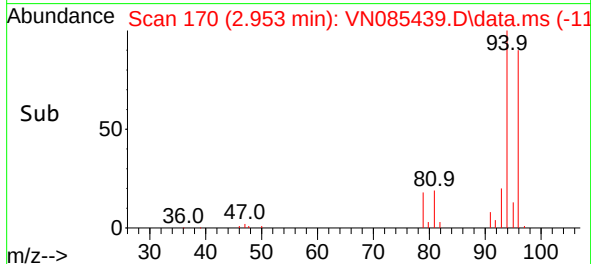
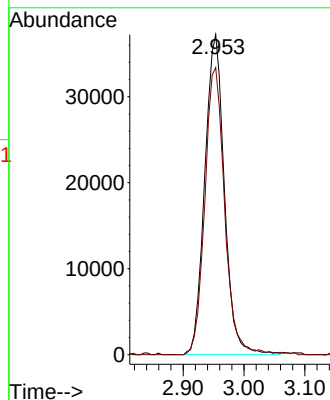
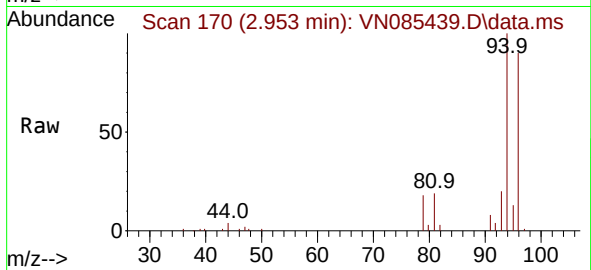




#5  
Bromomethane  
Concen: 46.877 ug/l  
RT: 2.953 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

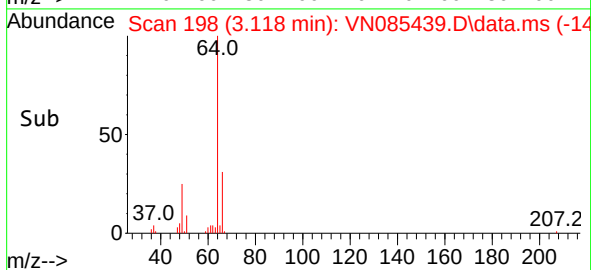
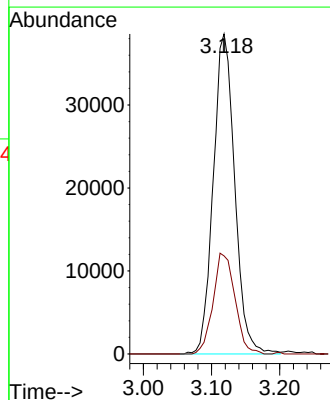
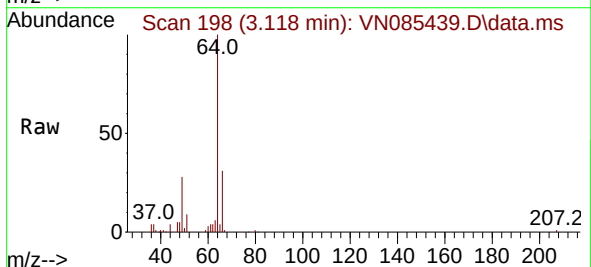
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 94 Resp: 83199  
Ion Ratio Lower Upper  
94 100  
96 89.7 71.8 107.6

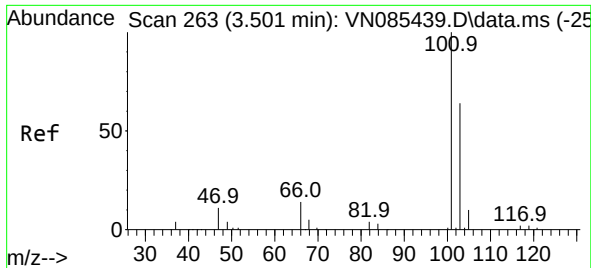


#6  
Chloroethane  
Concen: 45.371 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 64 Resp: 84517  
Ion Ratio Lower Upper  
64 100  
66 30.7 24.6 36.8



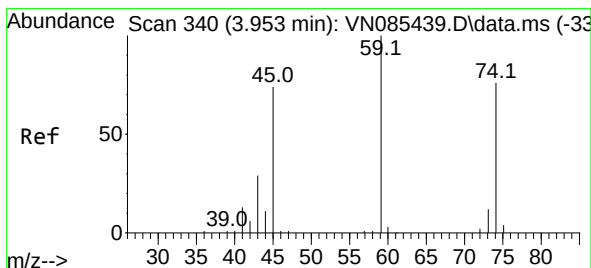
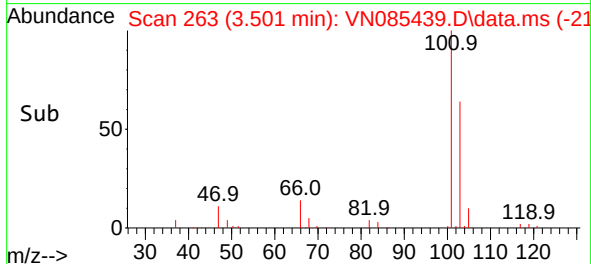
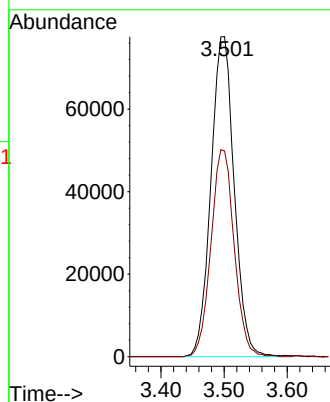
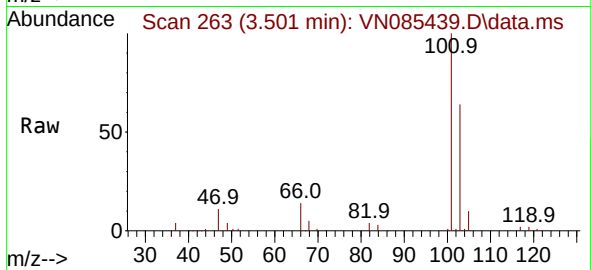




#7  
 Trichlorofluoromethane  
 Concen: 46.613 ug/l  
 RT: 3.501 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

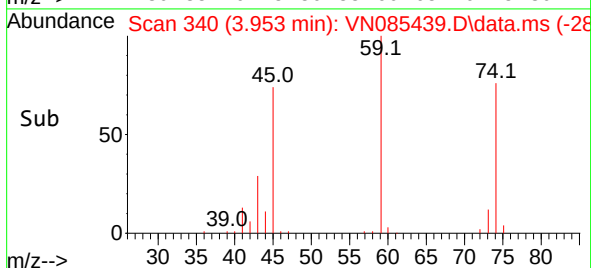
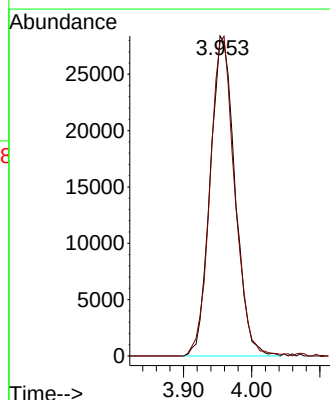
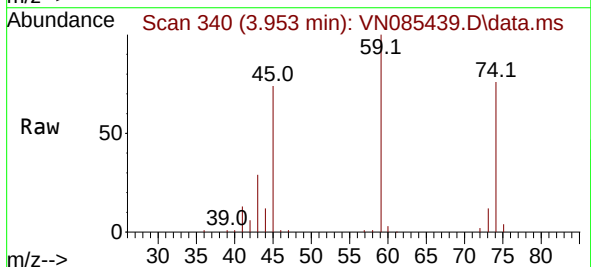
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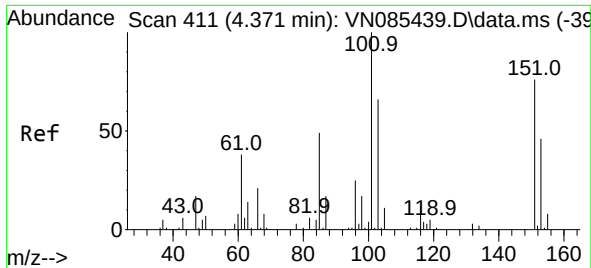
Tgt Ion:101 Resp: 198726  
 Ion Ratio Lower Upper  
 101 100  
 103 64.3 51.4 77.2



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

Tgt Ion: 74 Resp: 71764  
 Ion Ratio Lower Upper  
 74 100  
 45 99.4 49.7 149.1

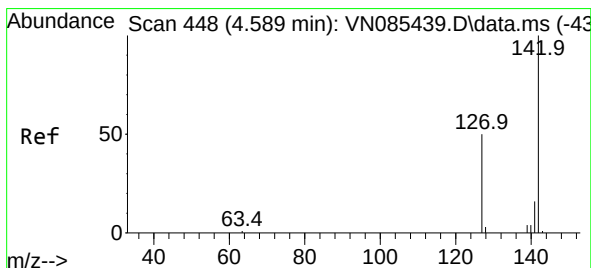
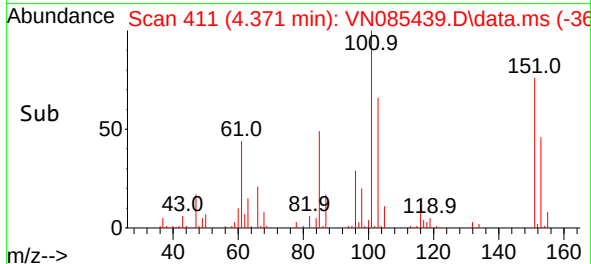
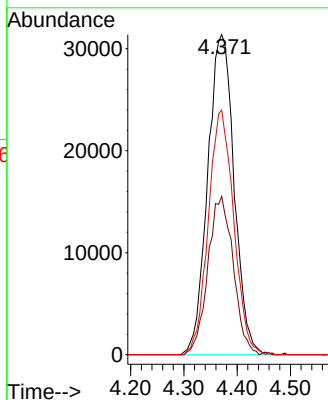
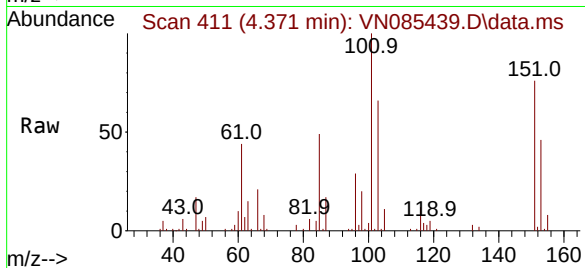




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 45.010 ug/l  
 RT: 4.371 min Scan# 411  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

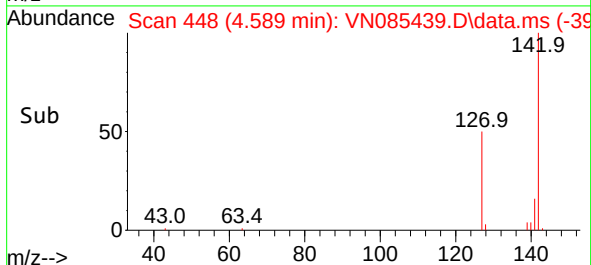
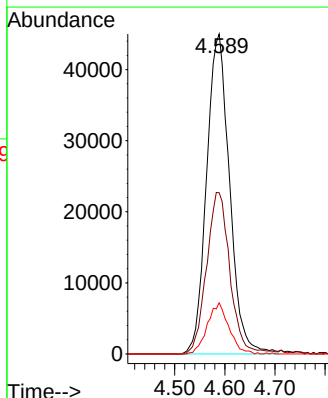
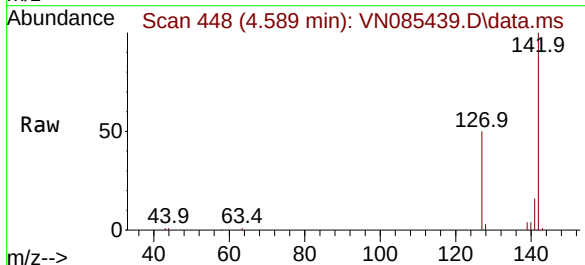
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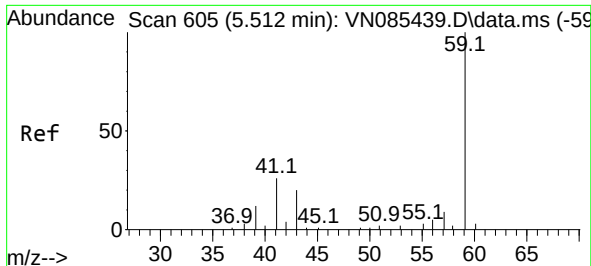
Tgt Ion:101 Resp: 108081  
 Ion Ratio Lower Upper  
 101 100  
 85 47.3 37.8 56.8  
 151 73.5 58.8 88.2



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

Tgt Ion:142 Resp: 143383  
 Ion Ratio Lower Upper  
 142 100  
 127 50.4 40.3 60.5  
 141 16.0 12.8 19.2

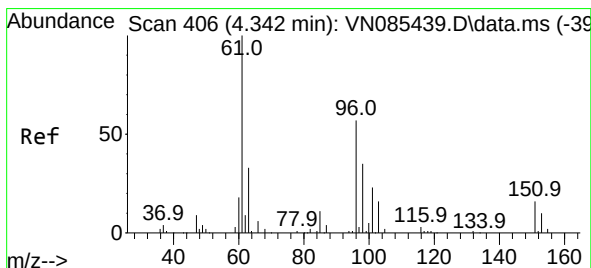
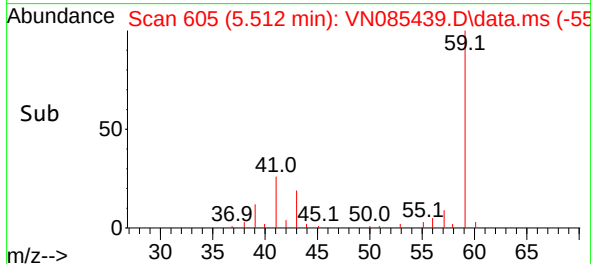
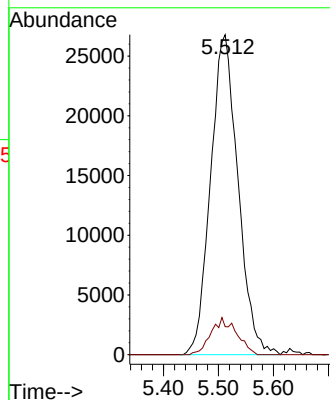
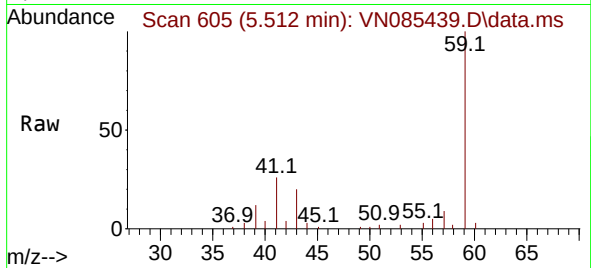




#11  
Tert butyl alcohol  
Concen: 251.894 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

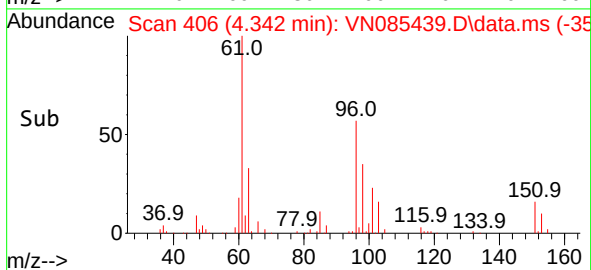
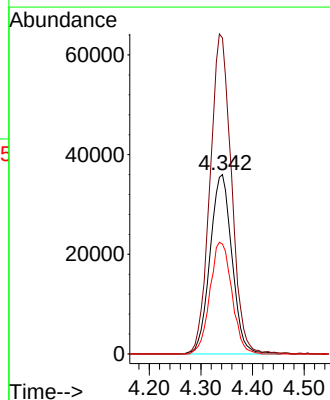
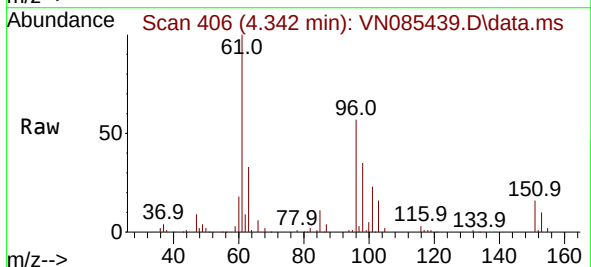
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ClientSampleId :  
VSTDICCC050

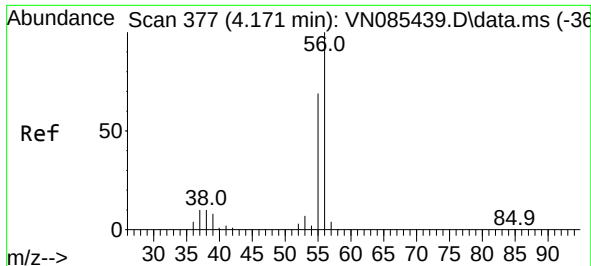
Tgt Ion: 59 Resp: 92841  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 13.0



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

Tgt Ion: 96 Resp: 106247  
Ion Ratio Lower Upper  
96 100  
61 176.2 141.0 211.4  
98 61.3 49.0 73.6

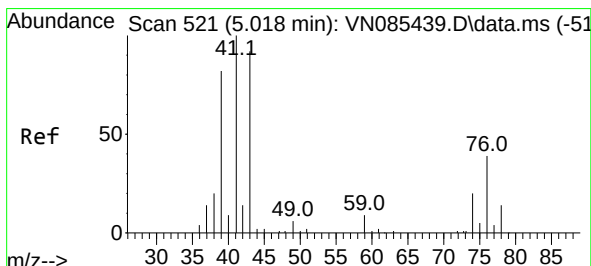
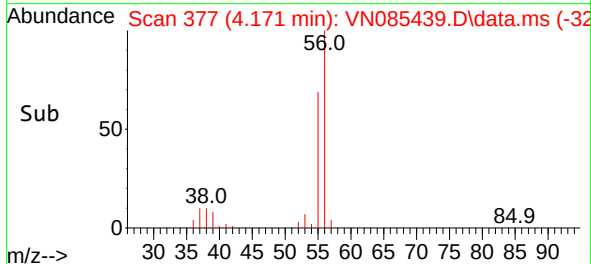
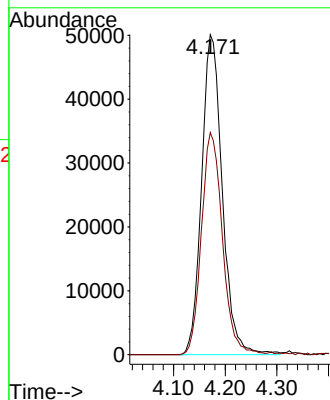
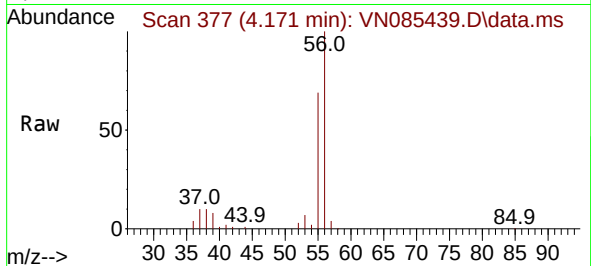




#13  
Acrolein  
Concen: 276.734 ug/l  
RT: 4.171 min Scan# 31  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

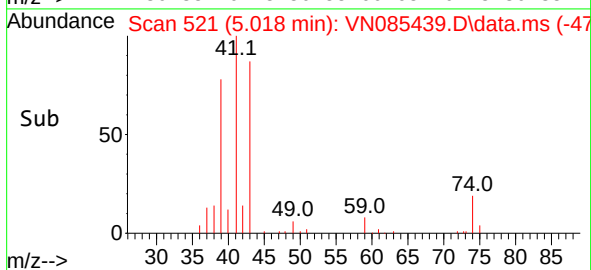
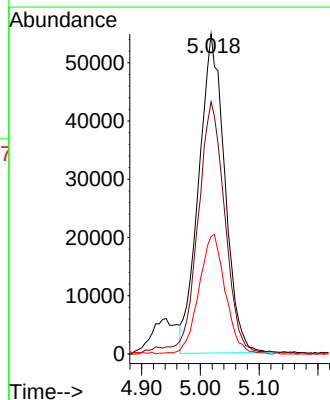
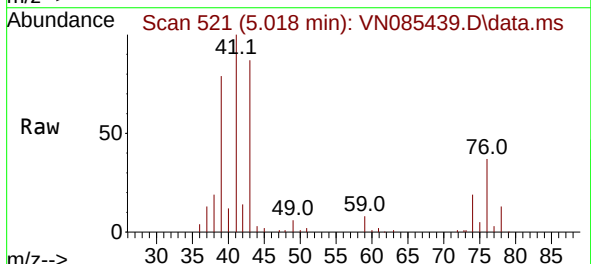
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

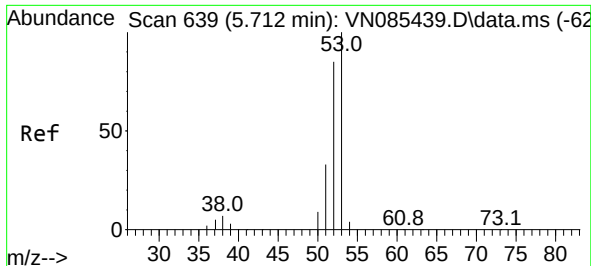
Tgt Ion: 56 Resp: 139234  
Ion Ratio Lower Upper  
56 100  
55 70.4 56.3 84.5



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

Tgt Ion: 41 Resp: 168654  
Ion Ratio Lower Upper  
41 100  
39 80.5 64.4 96.6  
76 38.1 30.5 45.7

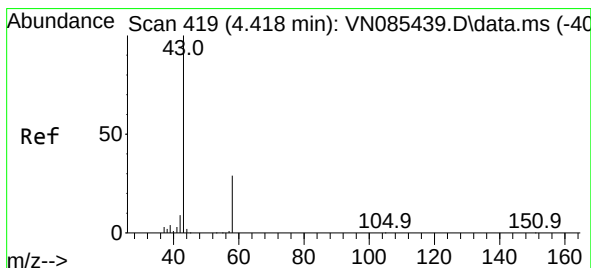
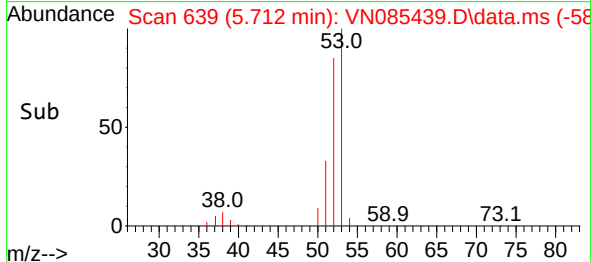
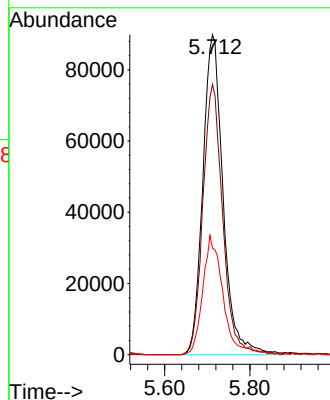
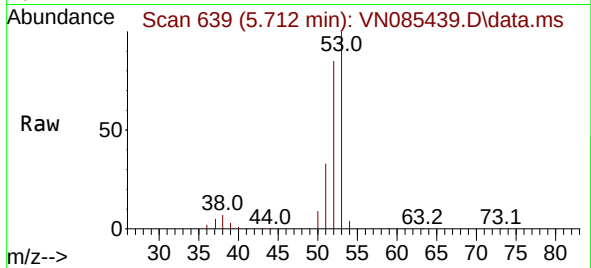




#15  
Acrylonitrile  
Concen: 253.507 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

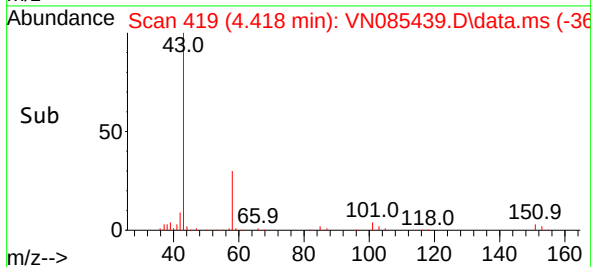
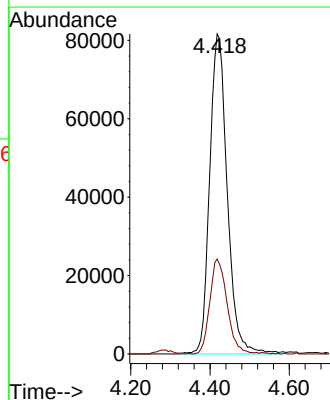
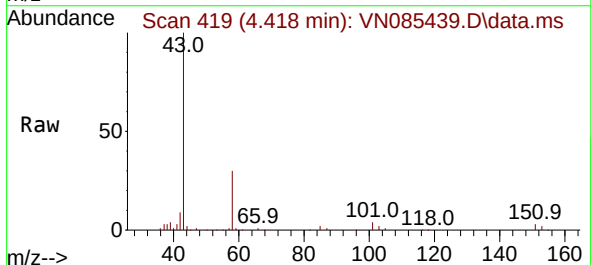
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

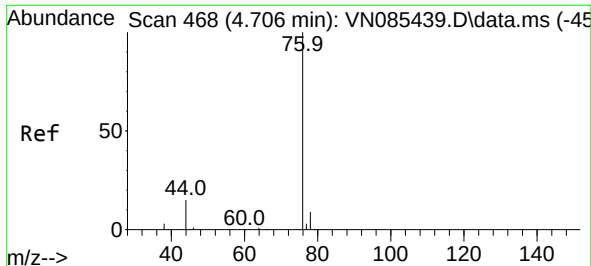
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 53    | Resp: | 296781 |
| Ion      | Ratio | Lower | Upper  |
| 53       | 100   |       |        |
| 52       | 81.9  | 65.5  | 98.3   |
| 51       | 37.3  | 29.8  | 44.8   |



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

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 251271 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 29.7  | 23.8  | 35.6   |

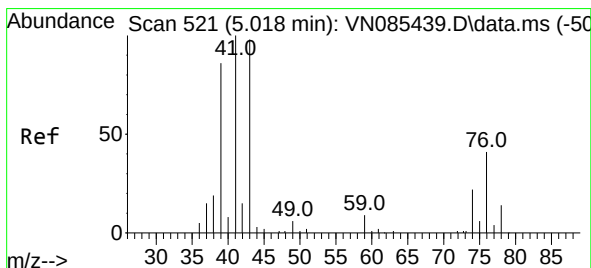
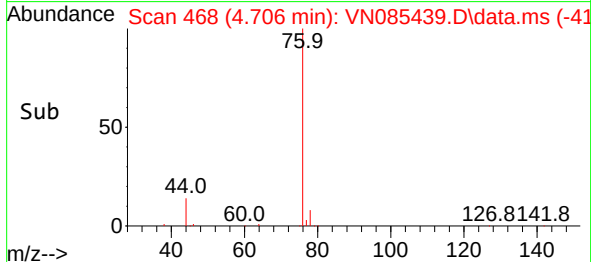
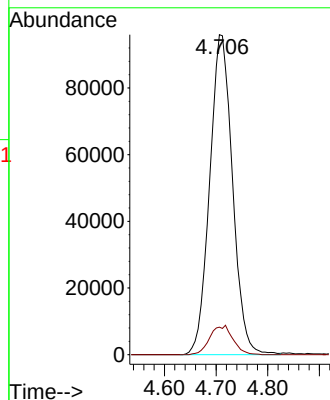
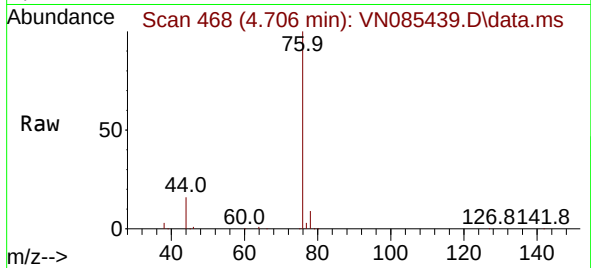




#17  
Carbon Disulfide  
Concen: 44.710 ug/l  
RT: 4.706 min Scan# 468  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

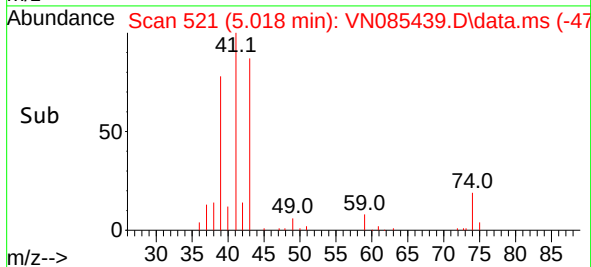
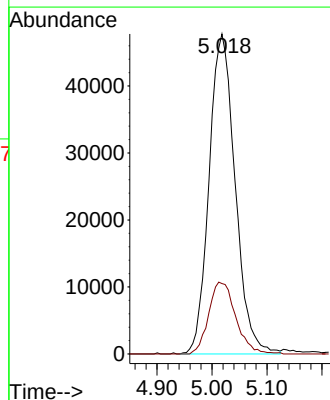
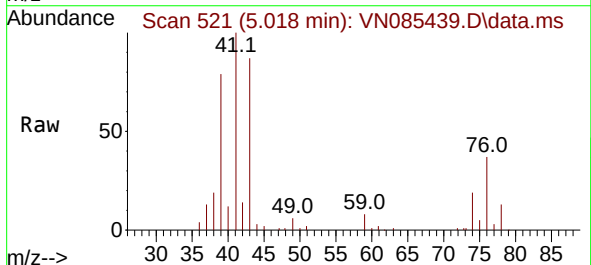
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

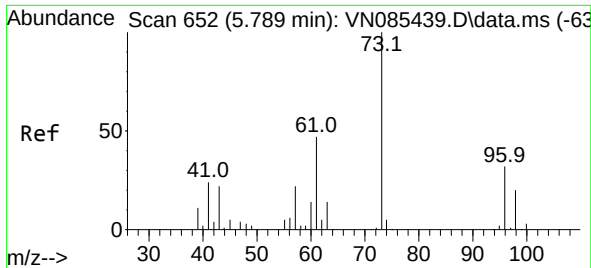
Tgt Ion: 76 Resp: 294604  
Ion Ratio Lower Upper  
76 100  
78 8.6 6.9 10.3



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

Tgt Ion: 43 Resp: 157485  
Ion Ratio Lower Upper  
43 100  
74 23.3 18.6 28.0

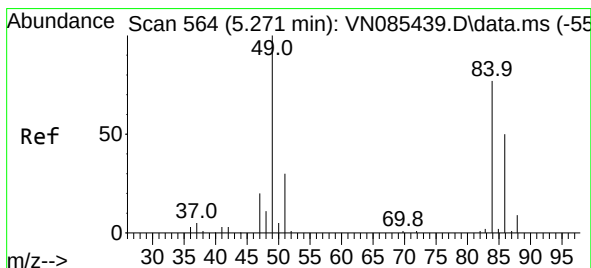
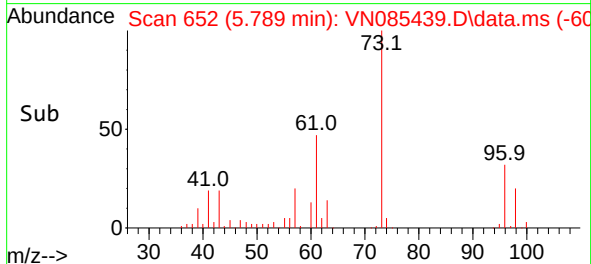
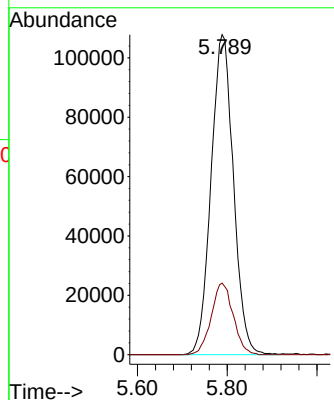
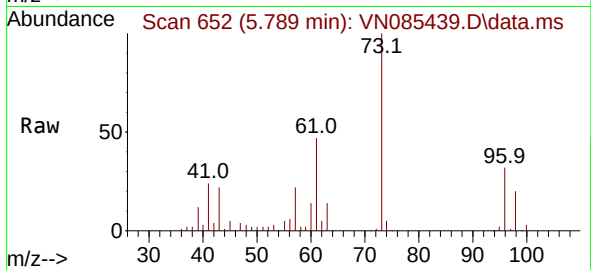




#19  
Methyl tert-butyl Ether  
Concen: 53.758 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

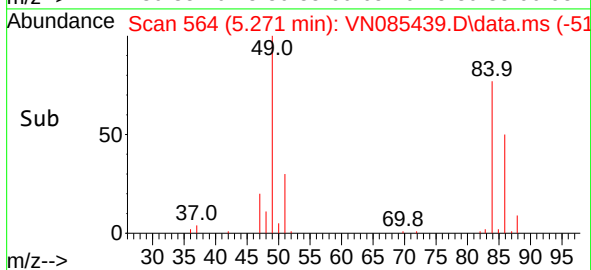
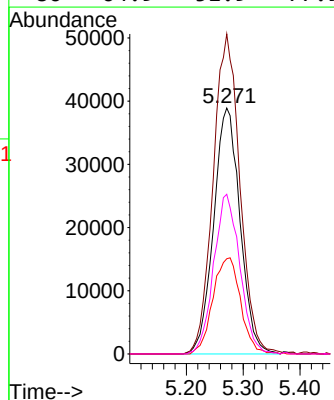
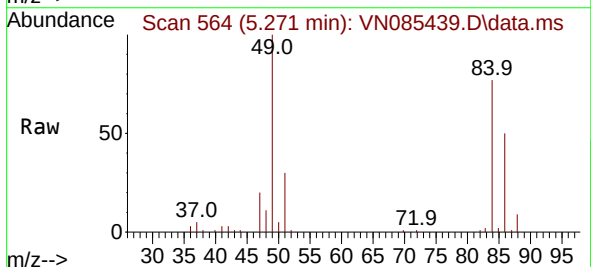
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

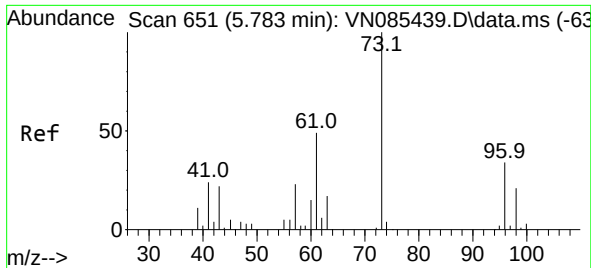
Tgt Ion: 73 Resp: 373561  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



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

Tgt Ion: 84 Resp: 125508  
Ion Ratio Lower Upper  
84 100  
49 130.1 104.1 156.1  
51 38.7 31.0 46.4  
86 64.9 51.9 77.9

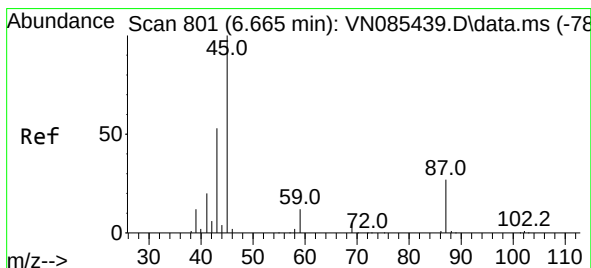
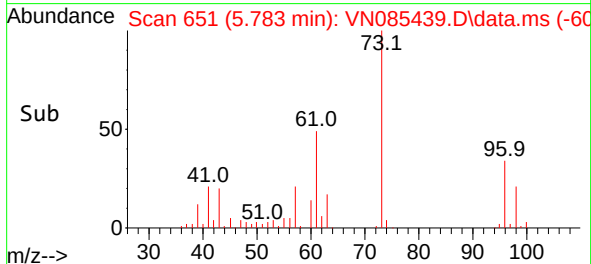
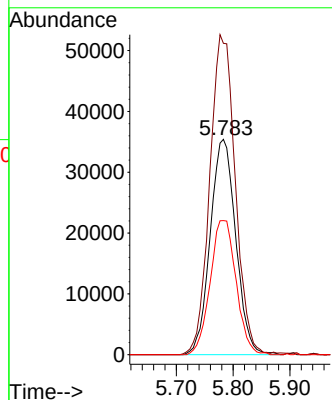
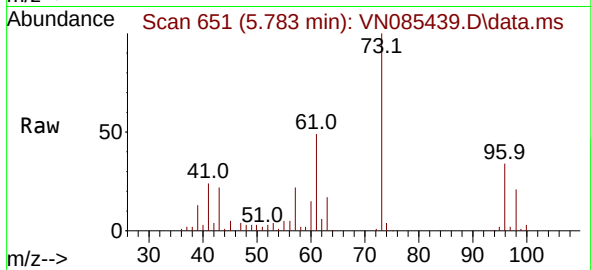




#21  
trans-1,2-Dichloroethene  
Concen: 48.395 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

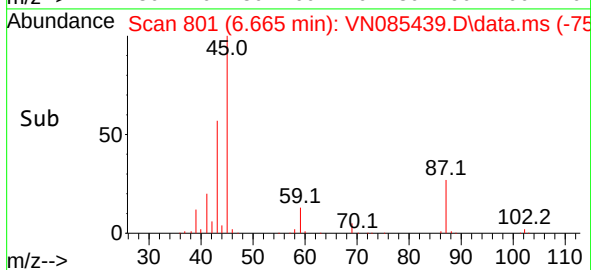
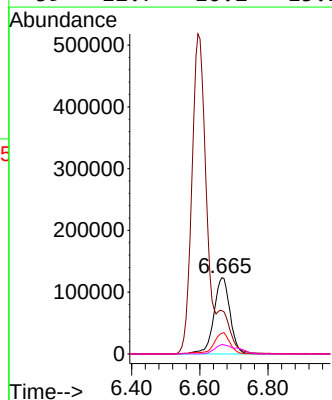
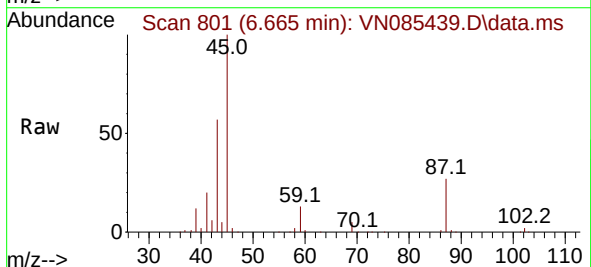
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 96 Resp: 110684  
Ion Ratio Lower Upper  
96 100  
61 144.6 115.7 173.5  
98 62.3 49.8 74.8

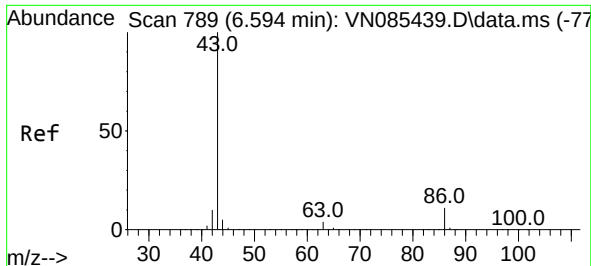


#22  
Diisopropyl ether  
Concen: 52.707 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 45 Resp: 406253  
Ion Ratio Lower Upper  
45 100  
43 56.3 45.0 67.6  
87 27.3 21.8 32.8  
59 12.7 10.2 15.2



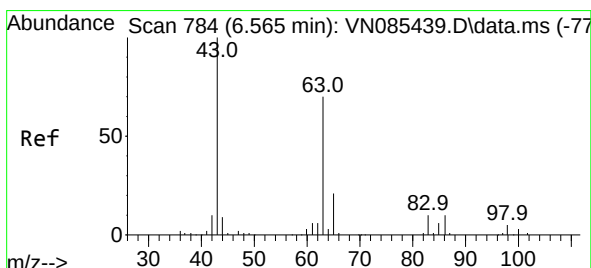
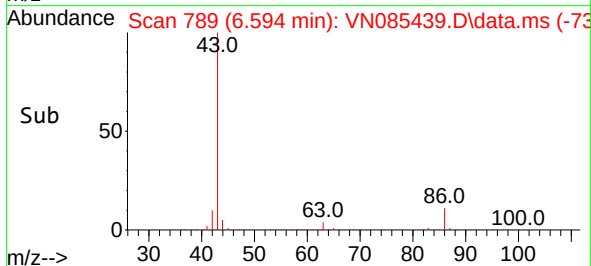
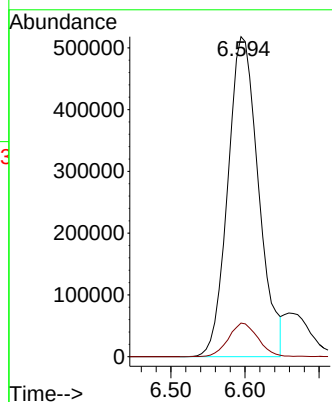
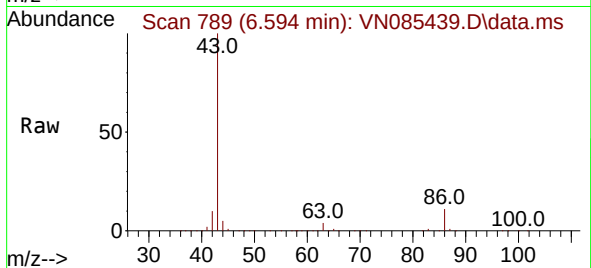




#23  
 Vinyl Acetate  
 Concen: 275.471 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

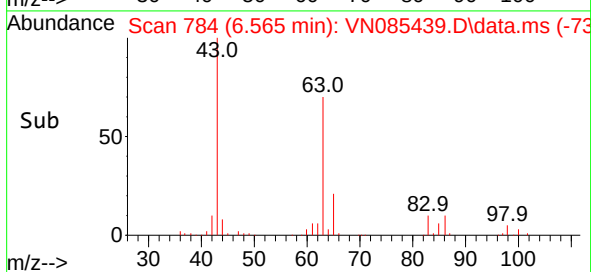
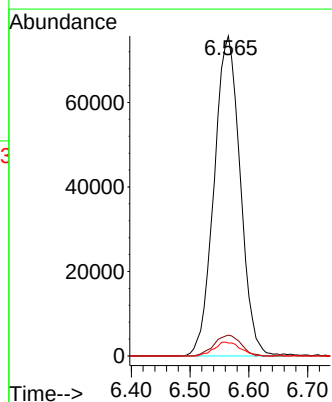
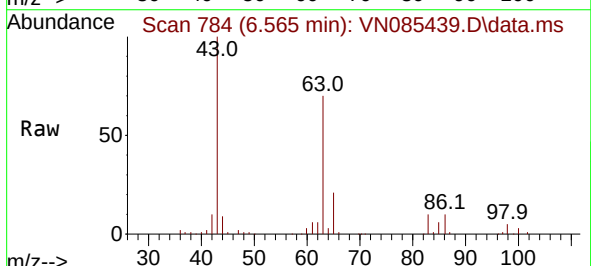
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

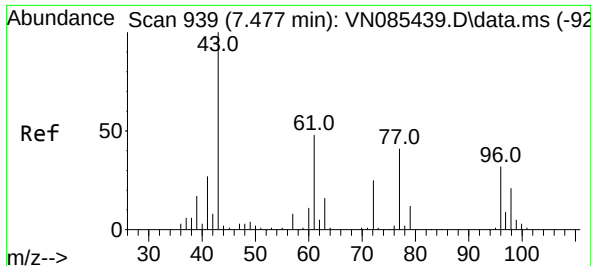
Tgt Ion: 43 Resp: 1491031  
 Ion Ratio Lower Upper  
 43 100  
 86 10.5 8.4 12.6



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

Tgt Ion: 63 Resp: 233336  
 Ion Ratio Lower Upper  
 63 100  
 98 6.5 3.3 9.8  
 100 4.0 2.0 6.0

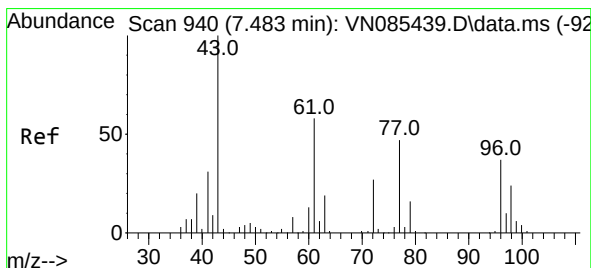
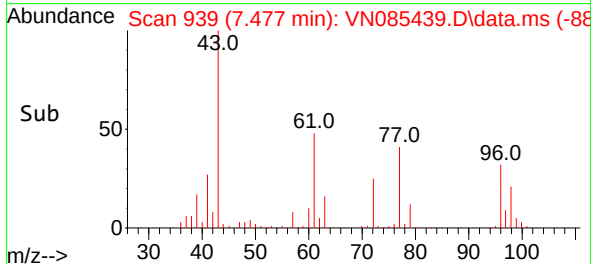
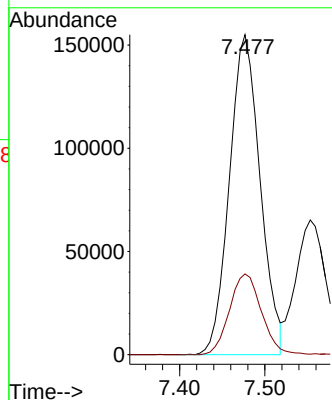
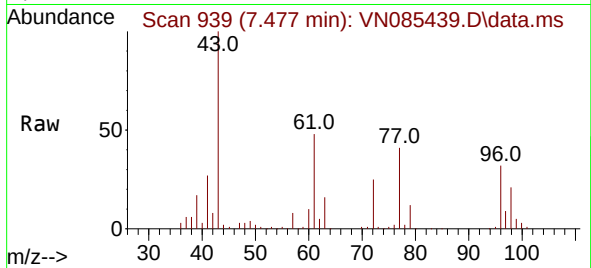




#25  
2-Butanone  
Concen: 253.815 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

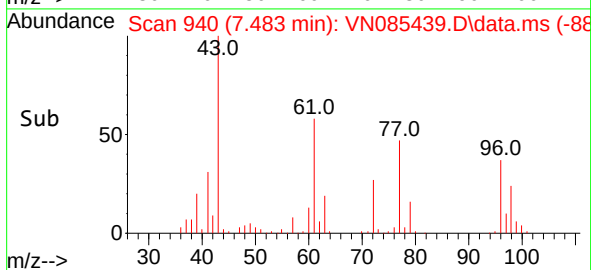
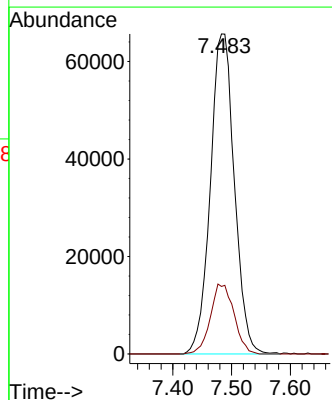
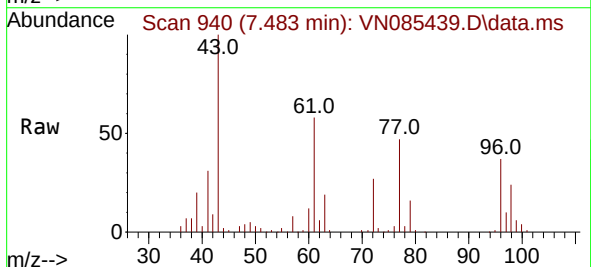
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

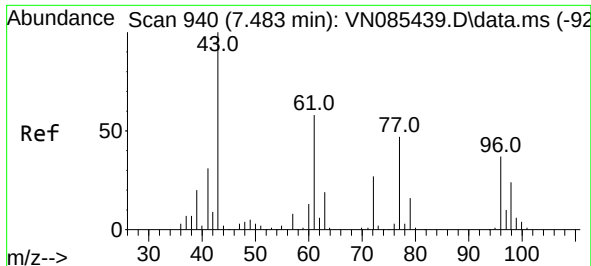
Tgt Ion: 43 Resp: 388457  
Ion Ratio Lower Upper  
43 100  
72 25.3 20.2 30.4



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

Tgt Ion: 77 Resp: 186591  
Ion Ratio Lower Upper  
77 100  
97 21.4 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 50.571 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

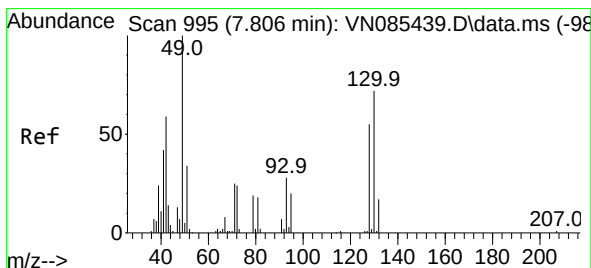
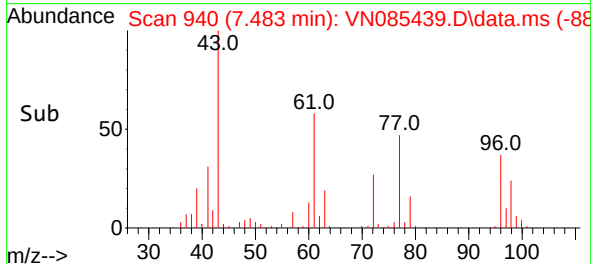
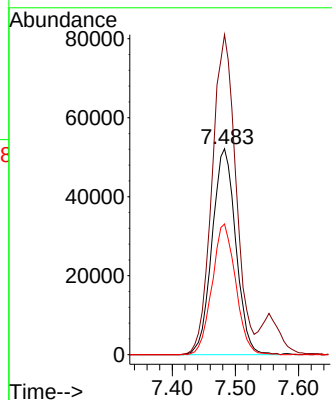
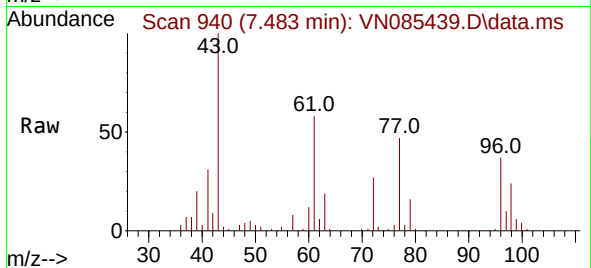
Tgt Ion: 96 Resp: 136229

Ion Ratio Lower Upper

96 100

61 155.9 0.0 311.8

98 63.0 0.0 126.0



#28

Bromochloromethane

Concen: 49.461 ug/l

RT: 7.806 min Scan# 995

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

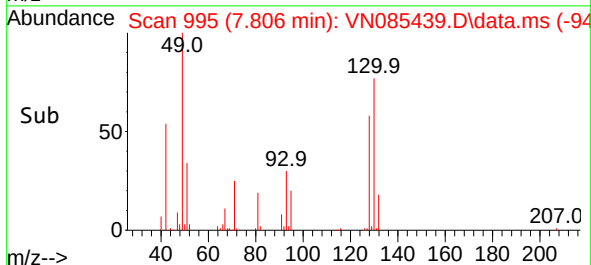
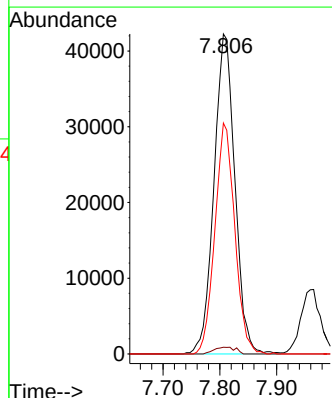
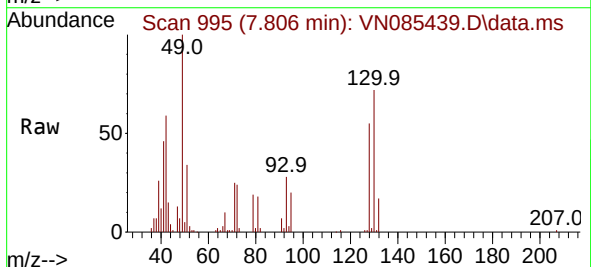
Tgt Ion: 49 Resp: 108148

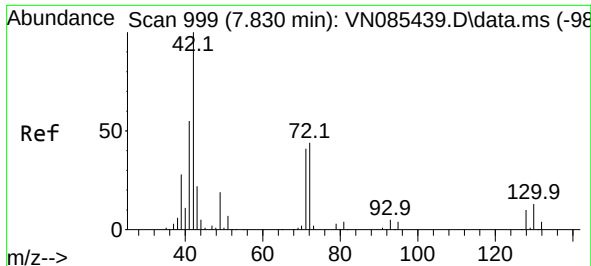
Ion Ratio Lower Upper

49 100

129 2.2 0.0 4.4

130 68.7 55.0 82.4





#29

Tetrahydrofuran

Concen: 267.624 ug/l

RT: 7.830 min Scan# 999

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

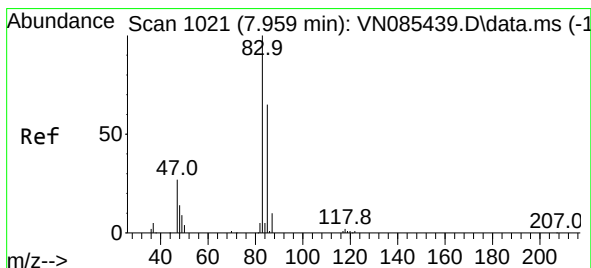
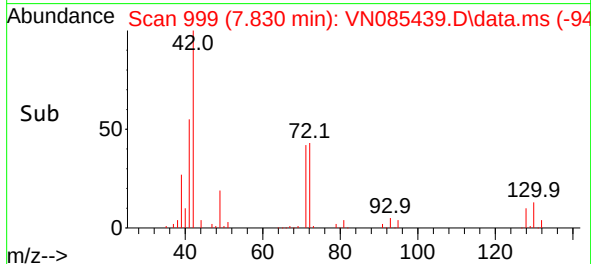
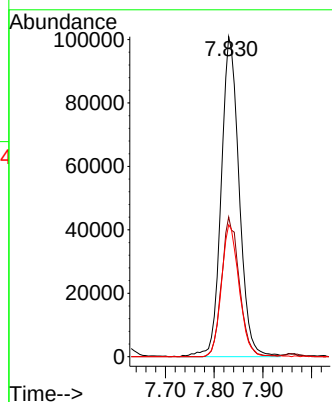
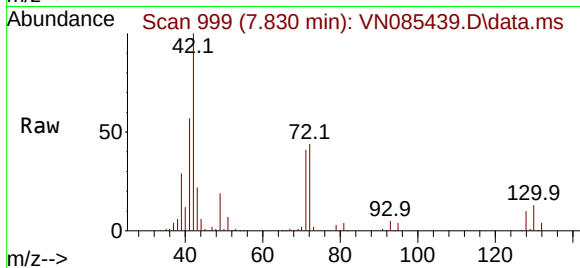
Tgt Ion: 42 Resp: 259683

Ion Ratio Lower Upper

42 100

72 42.7 34.2 51.2

71 40.6 32.5 48.7



#30

Chloroform

Concen: 48.229 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085439.D

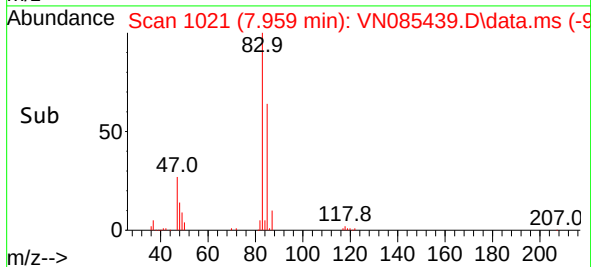
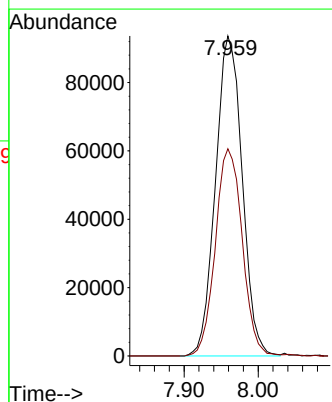
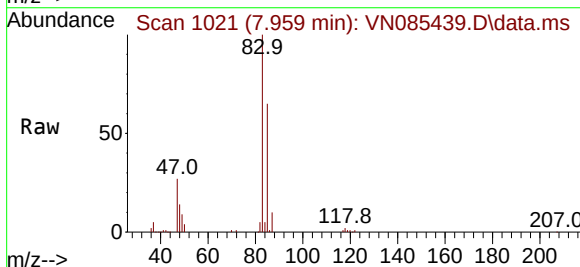
Acq: 14 Jan 2025 15:19

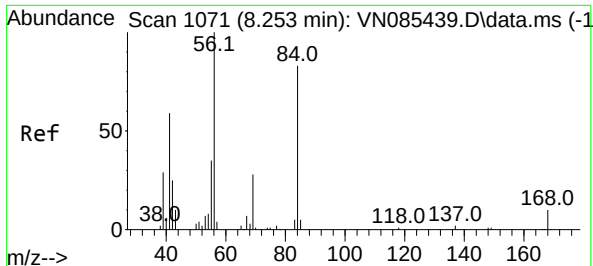
Tgt Ion: 83 Resp: 234271

Ion Ratio Lower Upper

83 100

85 64.7 51.8 77.6

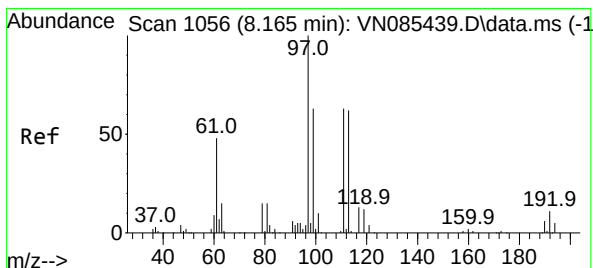
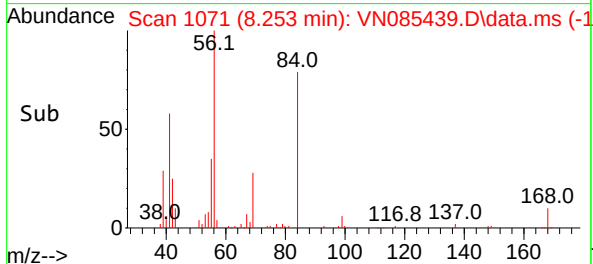
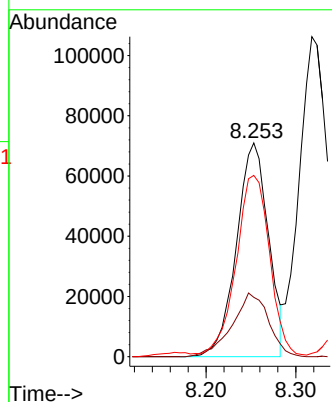
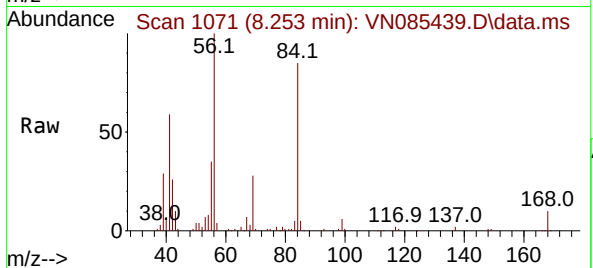




#31  
Cyclohexane  
Concen: 42.984 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

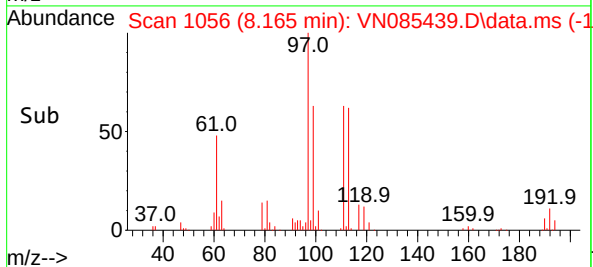
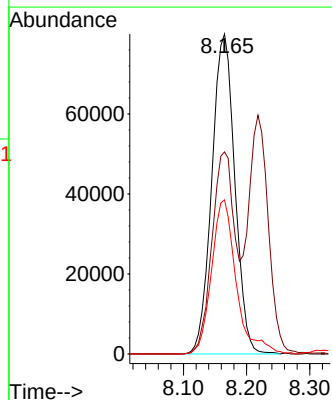
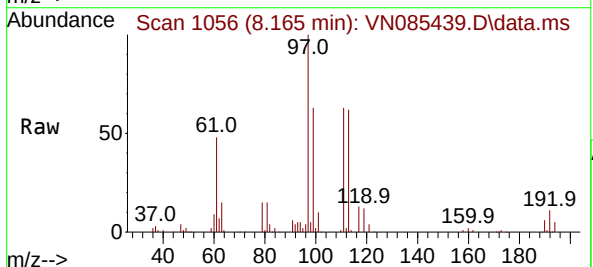
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

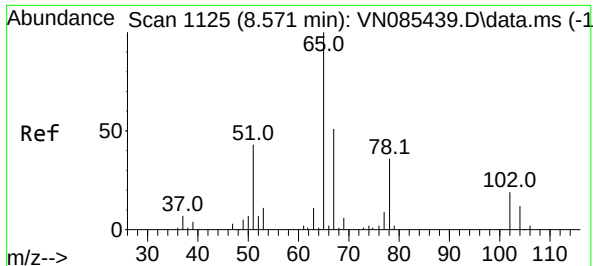
Tgt Ion: 56 Resp: 175588  
Ion Ratio Lower Upper  
56 100  
69 27.8 22.2 33.4  
84 83.0 66.4 99.6



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

Tgt Ion: 97 Resp: 202590  
Ion Ratio Lower Upper  
97 100  
99 62.2 49.8 74.6  
61 51.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 51.500 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

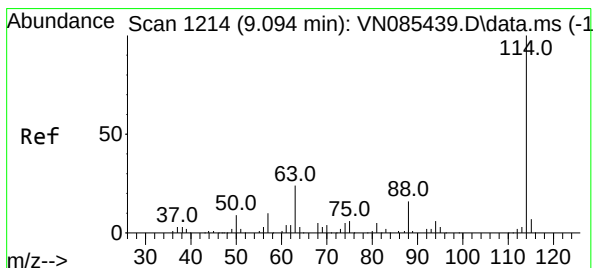
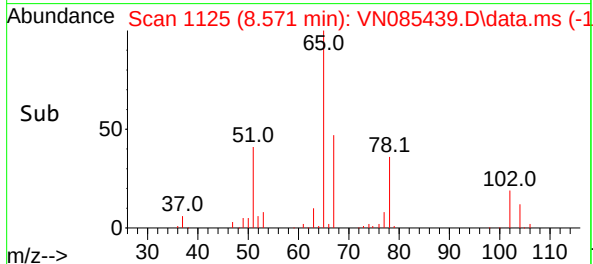
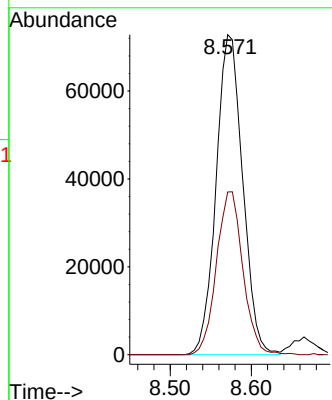
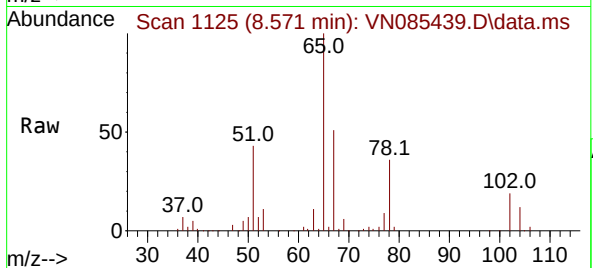
VSTDICCC050

Tgt Ion: 65 Resp: 165768

Ion Ratio Lower Upper

65 100

67 50.8 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

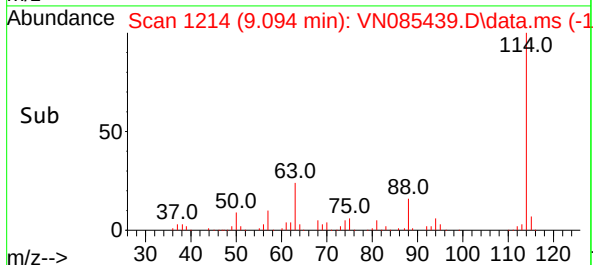
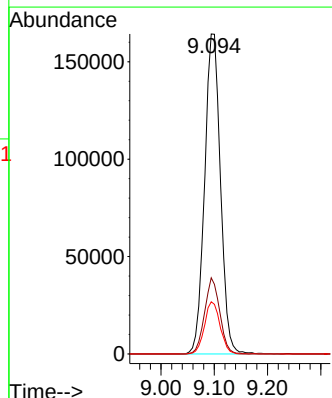
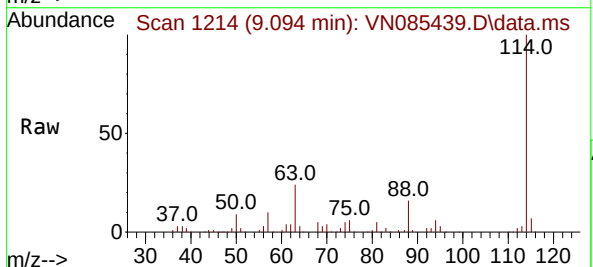
Tgt Ion: 114 Resp: 339872

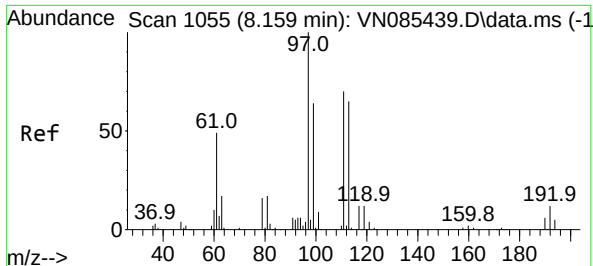
Ion Ratio Lower Upper

114 100

63 23.8 0.0 47.6

88 16.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 51.552 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

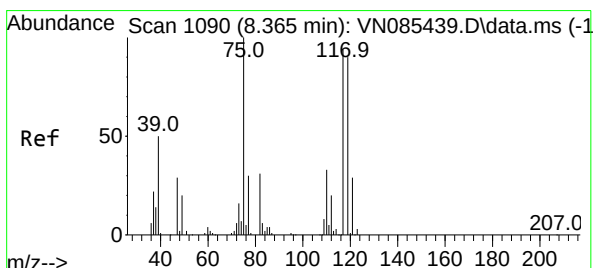
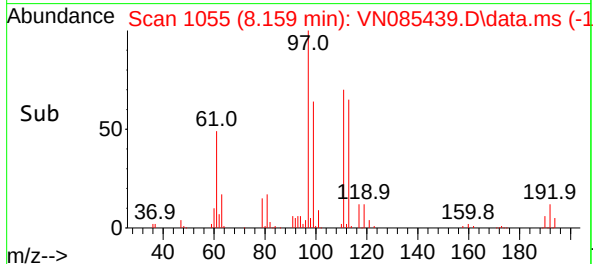
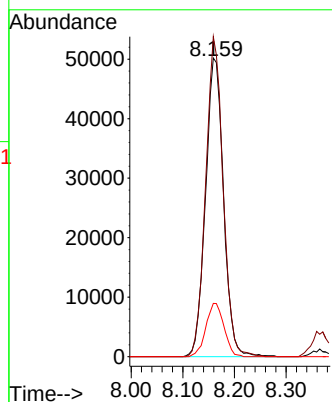
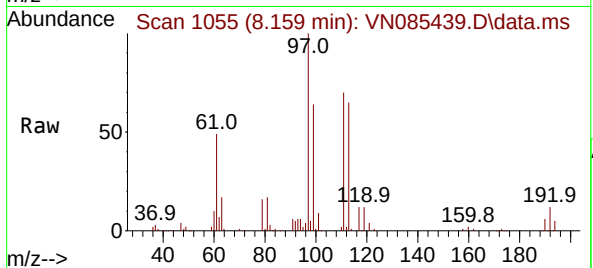
Tgt Ion:113 Resp: 121554

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

192 17.9 14.3 21.5



#36

1,1-Dichloropropene

Concen: 47.453 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

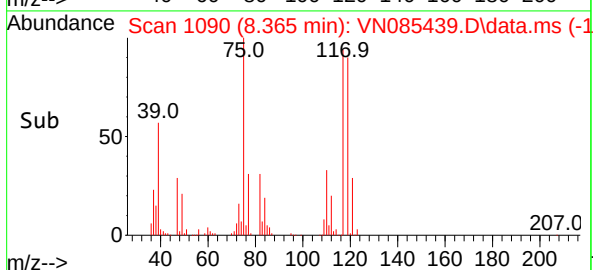
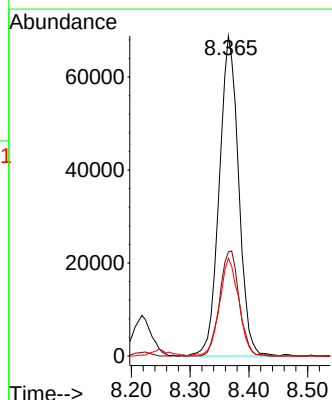
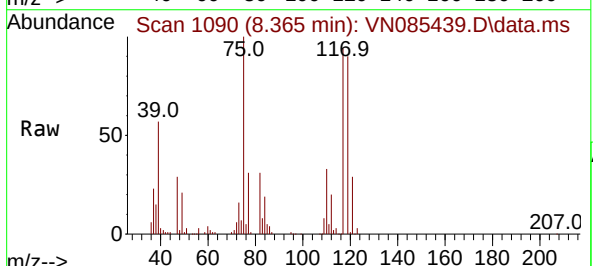
Tgt Ion: 75 Resp: 157031

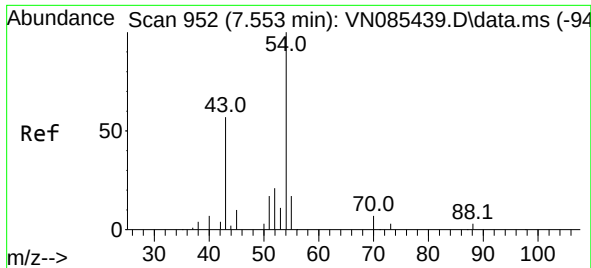
Ion Ratio Lower Upper

75 100

110 33.0 16.5 49.5

77 30.5 24.4 36.6

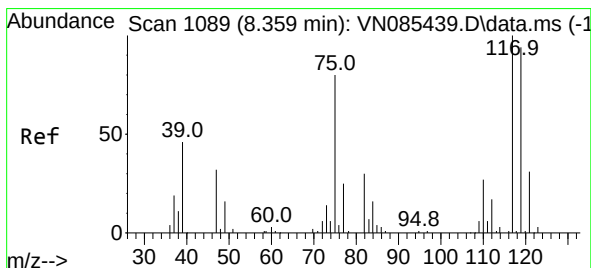
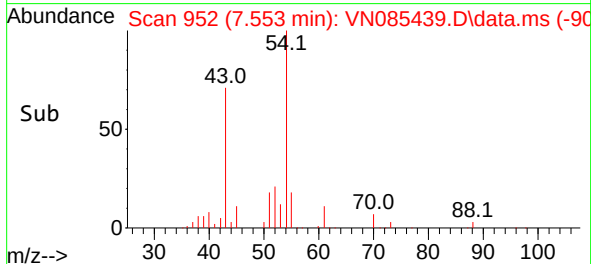
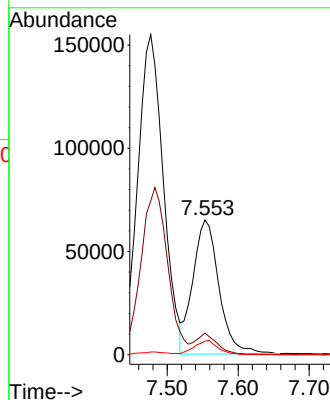
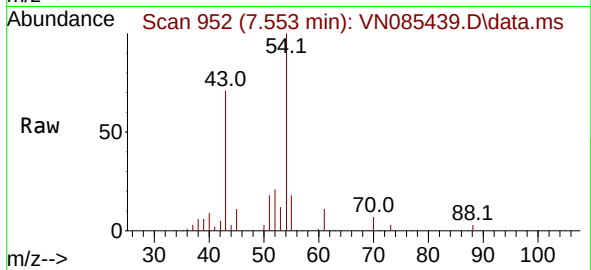




#37  
Ethyl Acetate  
Concen: 49.658 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

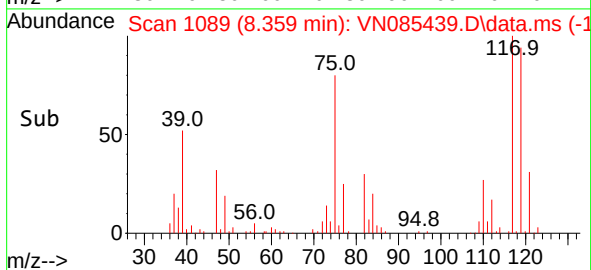
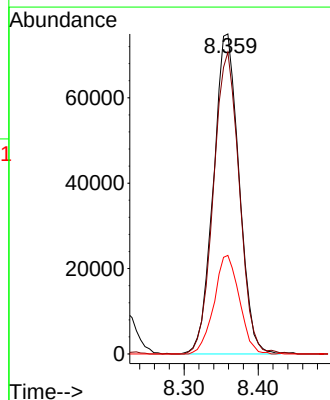
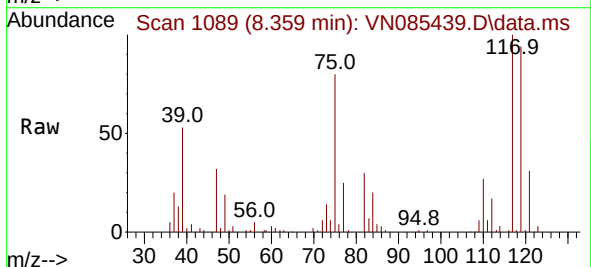
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 43 Resp: 165866  
Ion Ratio Lower Upper  
43 100  
61 13.6 10.9 16.3  
70 9.4 7.5 11.3

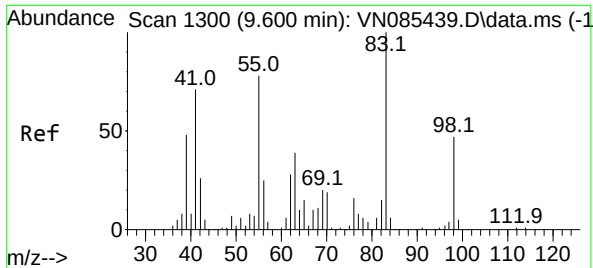


#38  
Carbon Tetrachloride  
Concen: 47.564 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 117 Resp: 180199  
Ion Ratio Lower Upper  
117 100  
119 94.3 75.4 113.2  
121 30.8 24.6 37.0







#39

Methylcyclohexane

Concen: 50.562 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

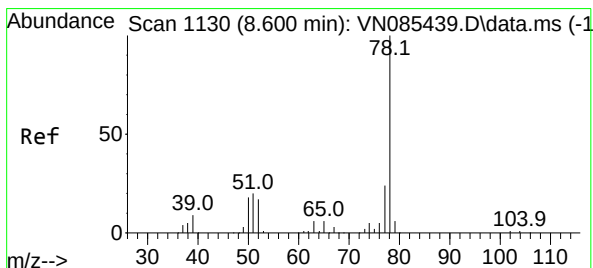
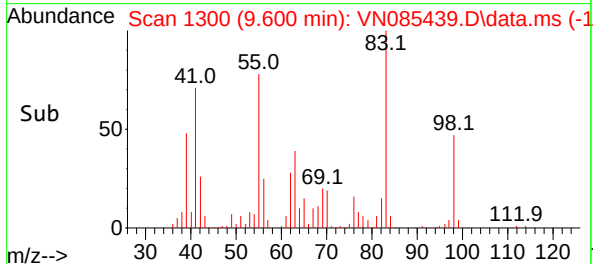
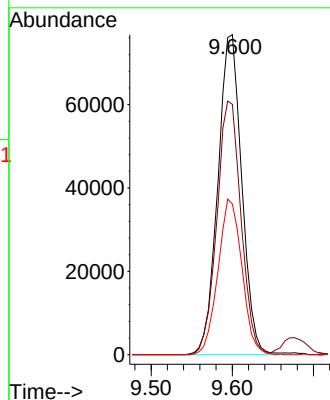
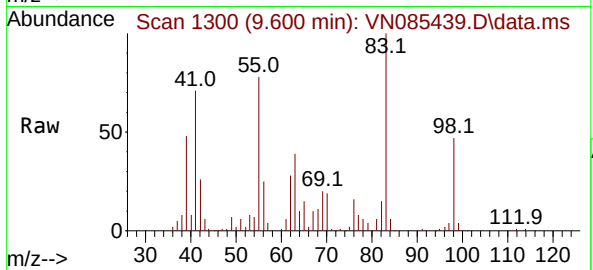
Tgt Ion: 83 Resp: 157234

Ion Ratio Lower Upper

83 100

55 78.3 62.6 94.0

98 47.1 37.7 56.5



#40

Benzene

Concen: 49.542 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085439.D

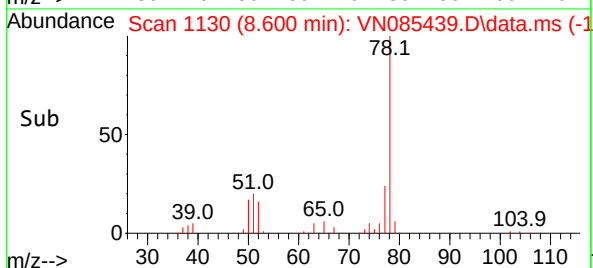
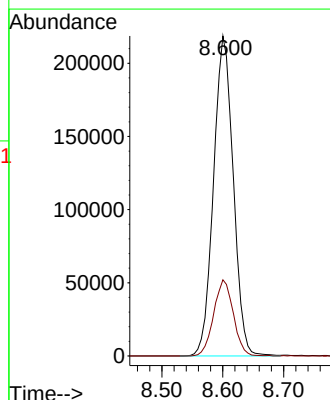
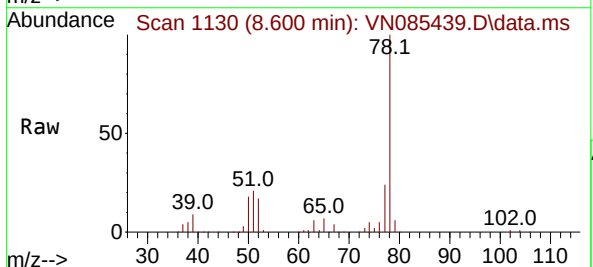
Acq: 14 Jan 2025 15:19

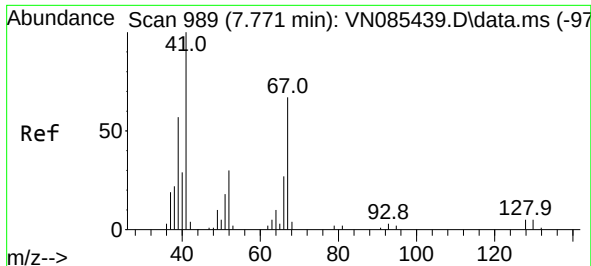
Tgt Ion: 78 Resp: 492606

Ion Ratio Lower Upper

78 100

77 23.8 19.0 28.6

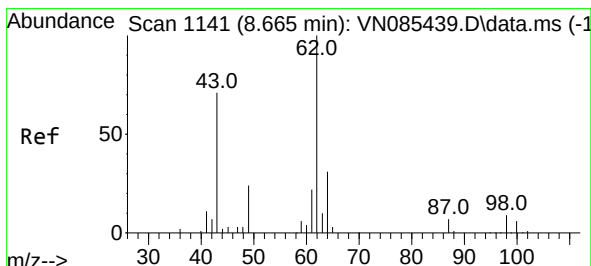
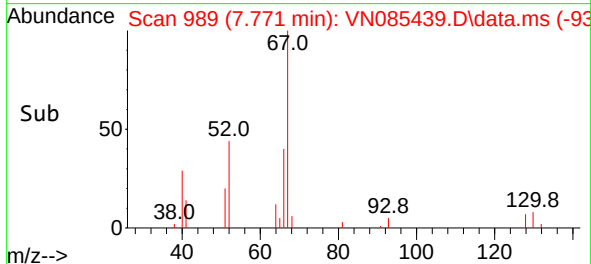
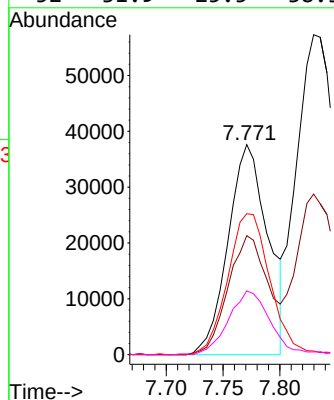
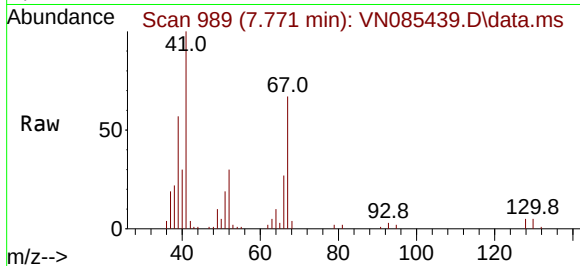




#41  
Methacrylonitrile  
Concen: 52.775 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

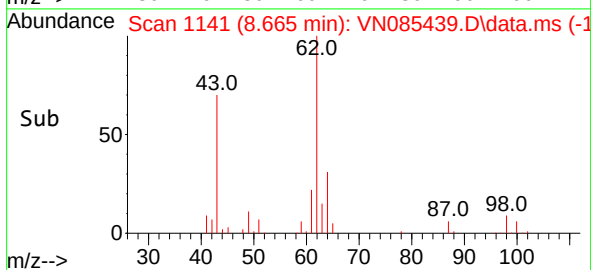
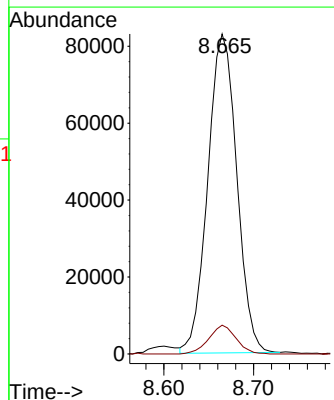
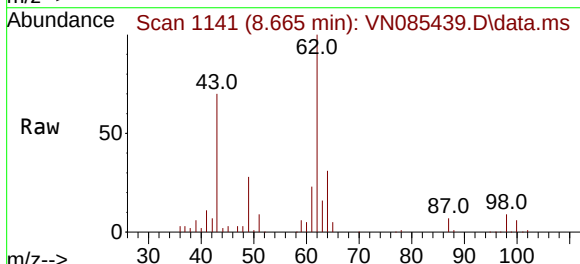
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

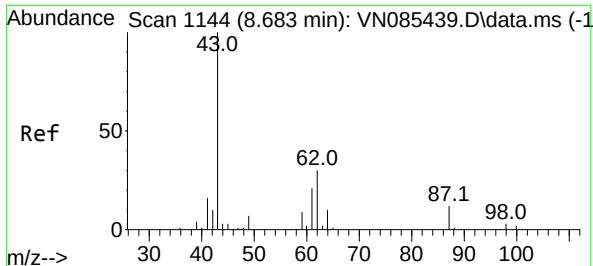
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 91711 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.5  | 46.0  | 69.0  |
| 67       | 71.8  | 57.4  | 86.2  |
| 52       | 31.9  | 25.5  | 38.3  |



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

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 186065 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.5   | 0.0   | 17.0   |

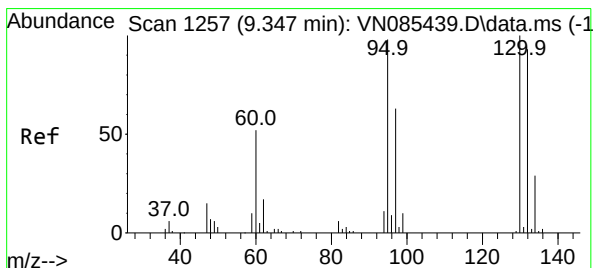
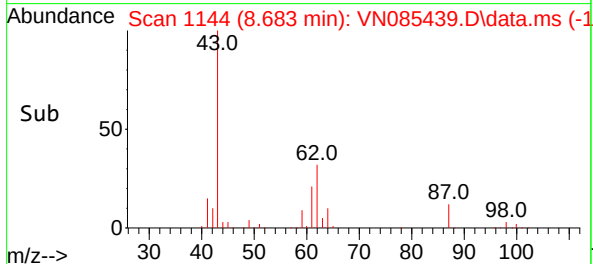
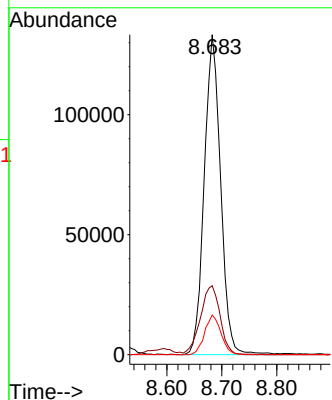
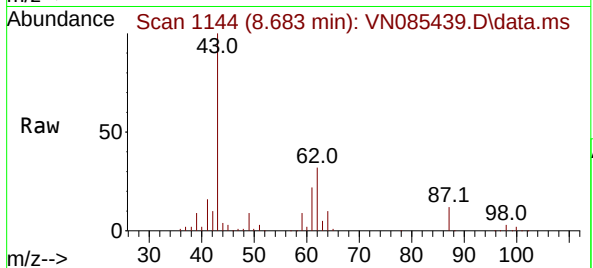




#43  
Isopropyl Acetate  
Concen: 51.611 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

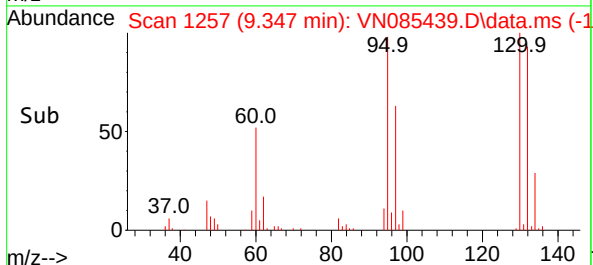
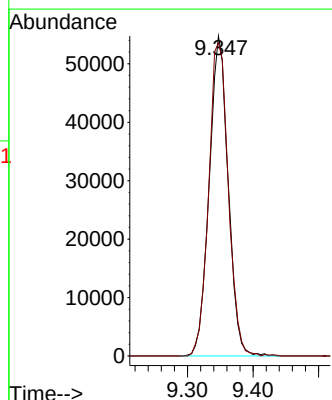
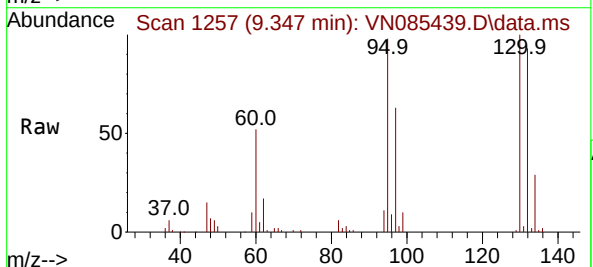
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

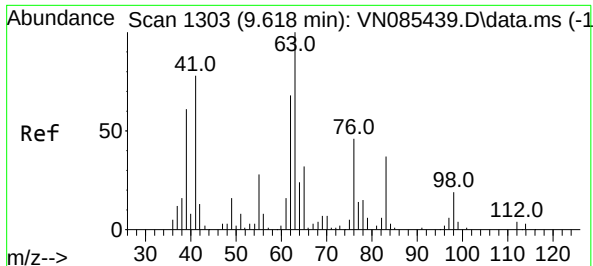
Tgt Ion: 43 Resp: 276228  
Ion Ratio Lower Upper  
43 100  
61 25.9 20.7 31.1  
87 12.3 9.8 14.8



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

Tgt Ion:130 Resp: 109953  
Ion Ratio Lower Upper  
130 100  
95 97.9 0.0 195.8





#45

1,2-Dichloropropane

Concen: 49.644 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

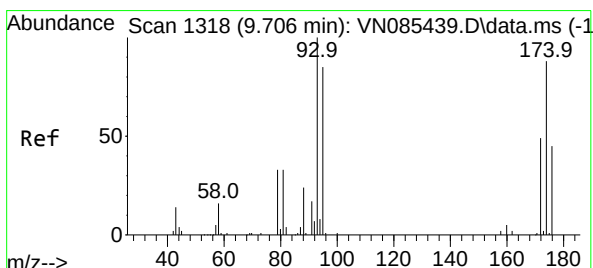
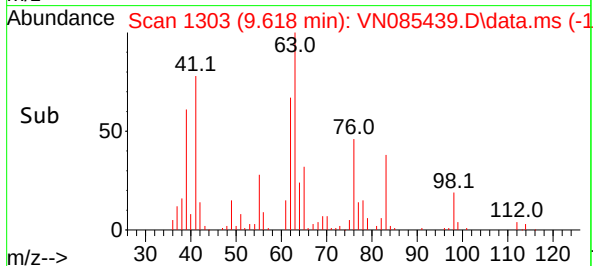
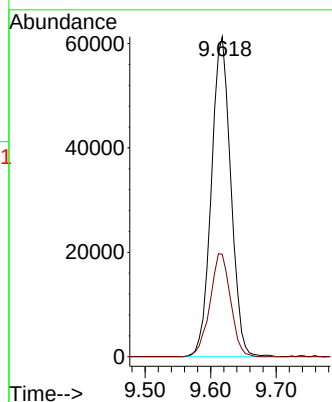
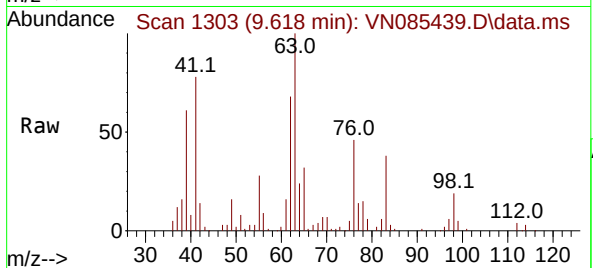
VSTDICCC050

Tgt Ion: 63 Resp: 126084

Ion Ratio Lower Upper

63 100

65 32.0 25.6 38.4



#46

Dibromomethane

Concen: 49.476 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

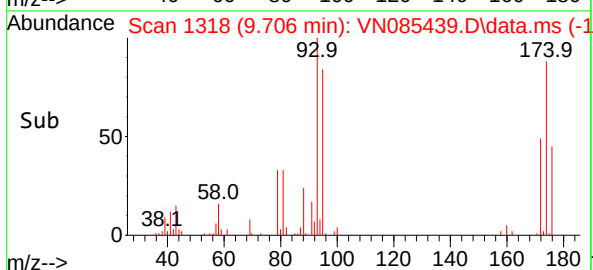
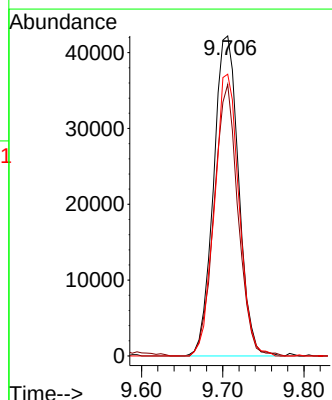
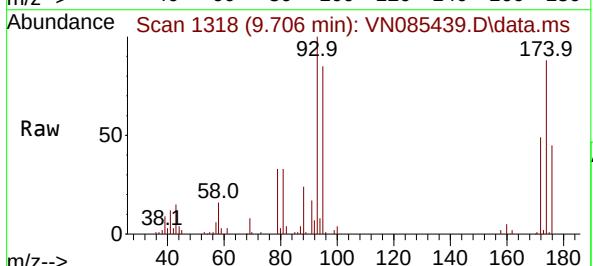
Tgt Ion: 93 Resp: 90670

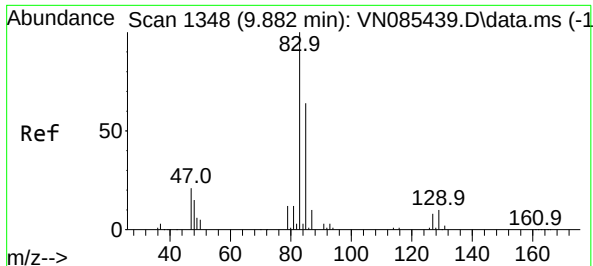
Ion Ratio Lower Upper

93 100

95 80.9 64.7 97.1

174 86.2 69.0 103.4

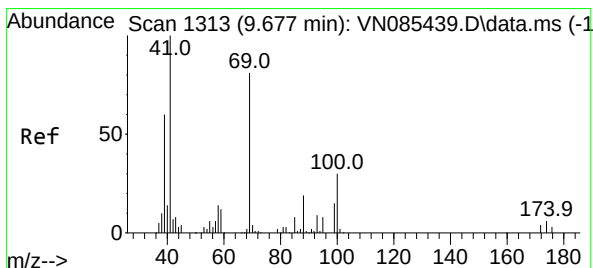
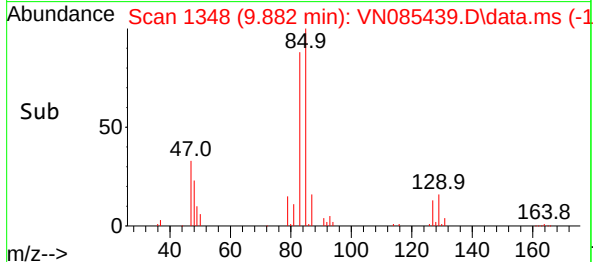
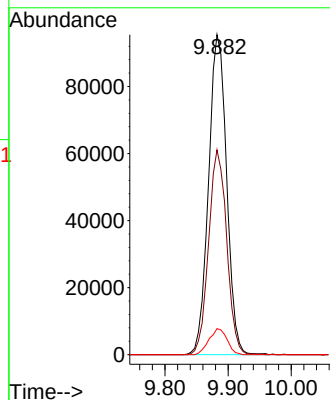
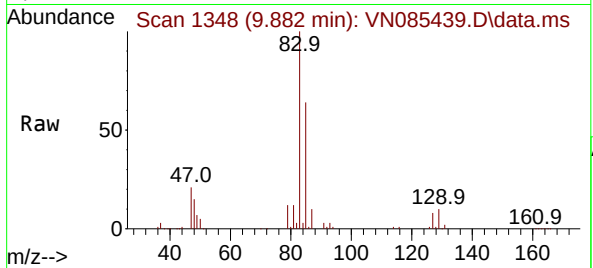




#47  
Bromodichloromethane  
Concen: 50.867 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

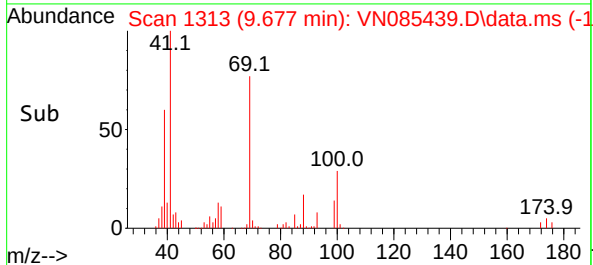
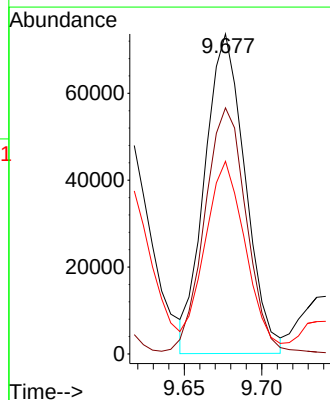
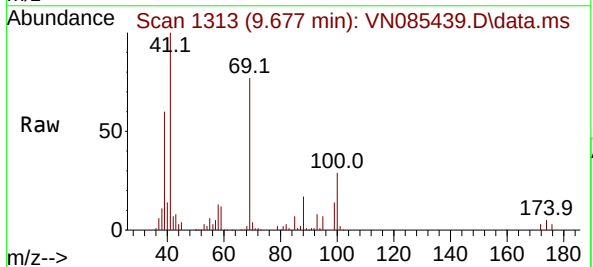
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

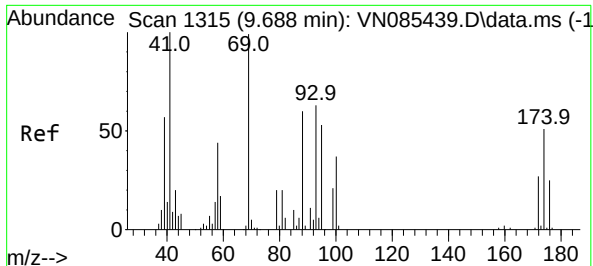
Tgt Ion: 83 Resp: 189915  
Ion Ratio Lower Upper  
83 100  
85 64.0 51.2 76.8  
127 8.1 6.5 9.7



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

Tgt Ion: 41 Resp: 133399  
Ion Ratio Lower Upper  
41 100  
69 80.9 64.7 97.1  
39 61.3 49.0 73.6





#49

1,4-Dioxane

Concen: 1061.334 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

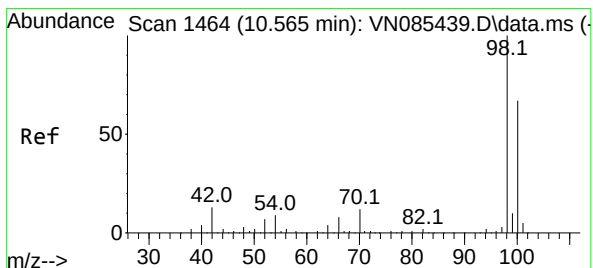
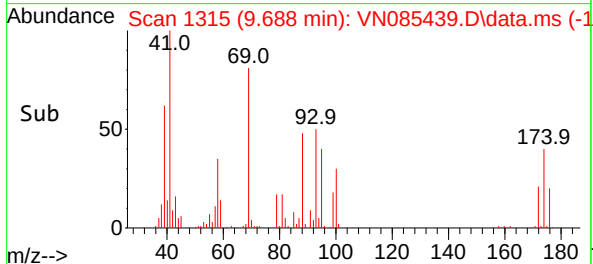
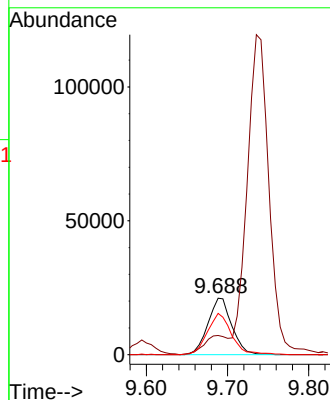
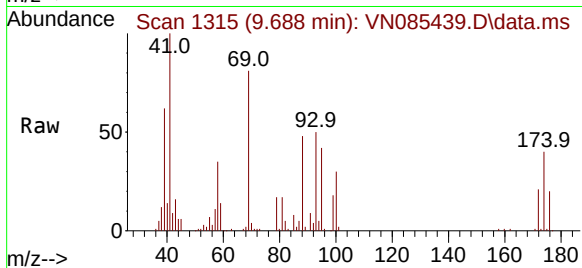
Tgt Ion: 88 Resp: 43048

Ion Ratio Lower Upper

88 100

43 33.2 26.6 39.8

58 74.4 59.5 89.3



#50

Toluene-d8

Concen: 51.411 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085439.D

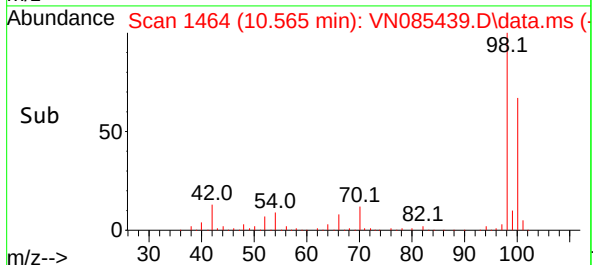
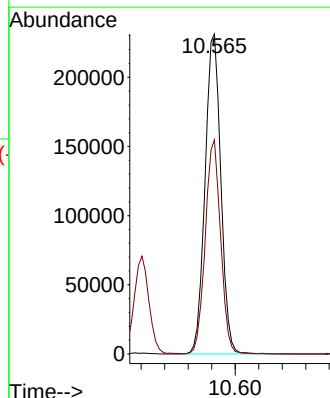
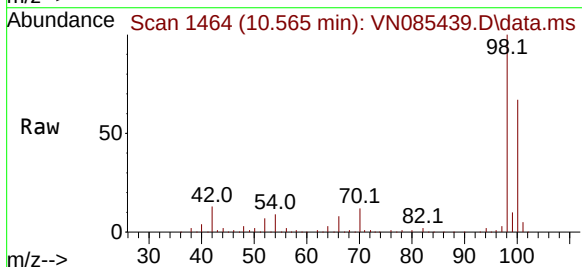
Acq: 14 Jan 2025 15:19

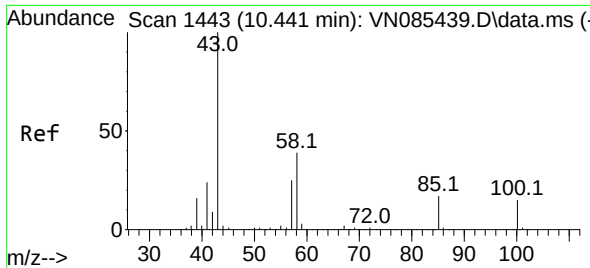
Tgt Ion: 98 Resp: 430698

Ion Ratio Lower Upper

98 100

100 65.3 52.2 78.4

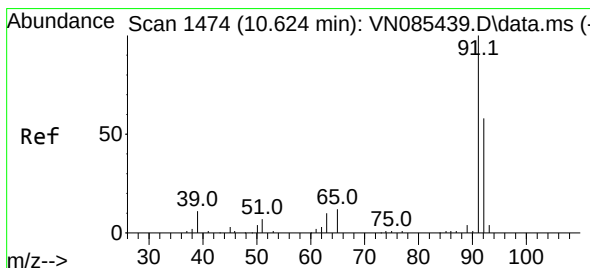
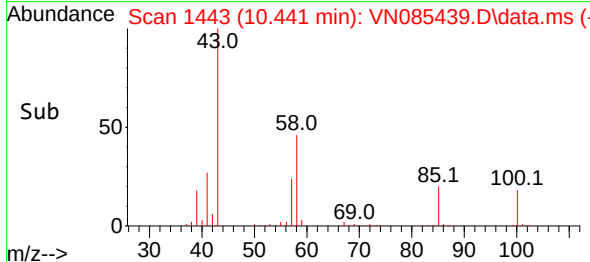
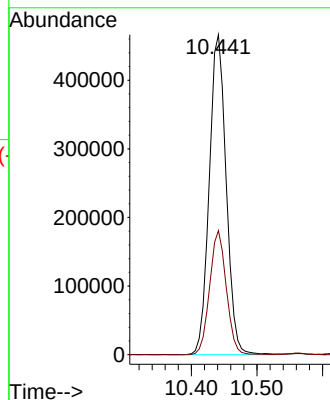
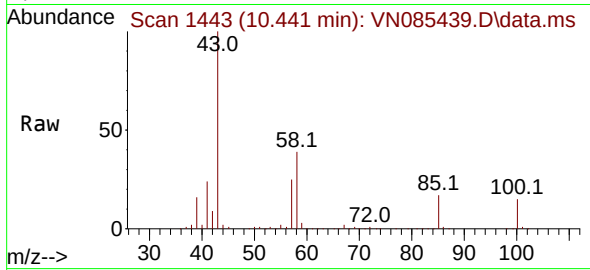




#51  
4-Methyl-2-Pentanone  
Concen: 269.403 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

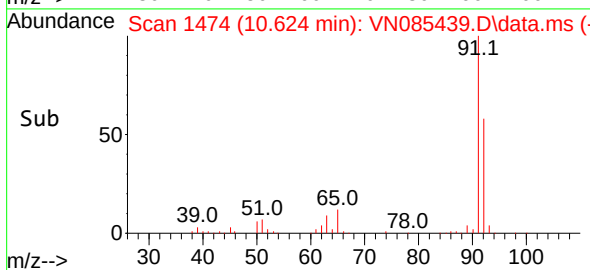
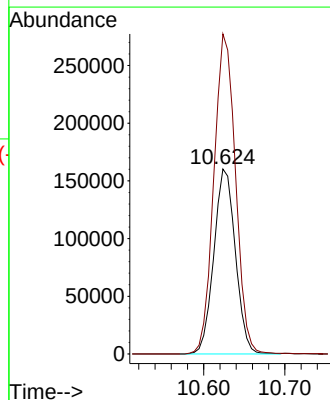
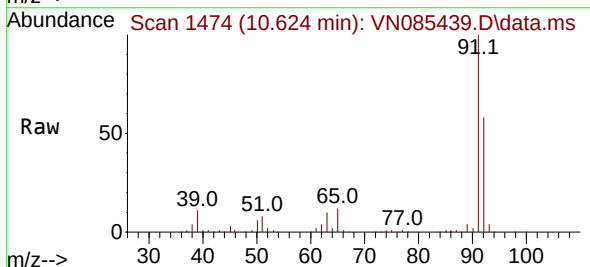
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

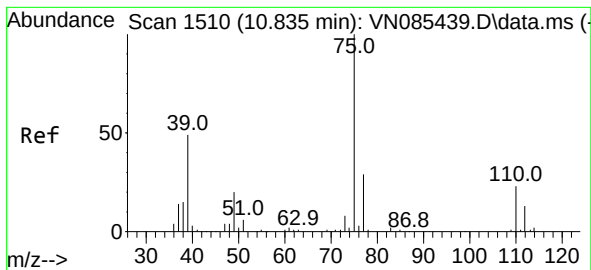
Tgt Ion: 43 Resp: 836707  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



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

Tgt Ion: 92 Resp: 295792  
Ion Ratio Lower Upper  
92 100  
91 174.0 139.2 208.8

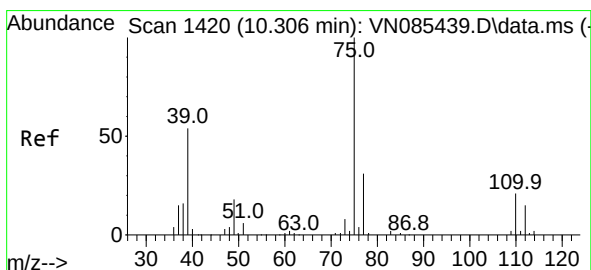
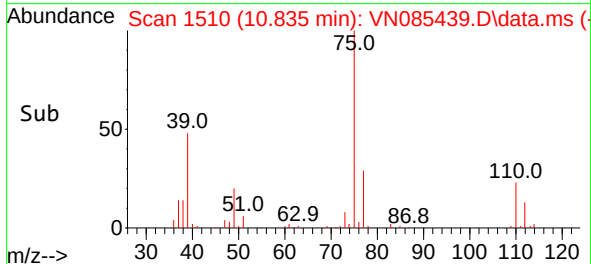
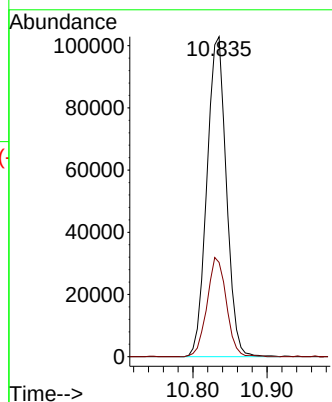
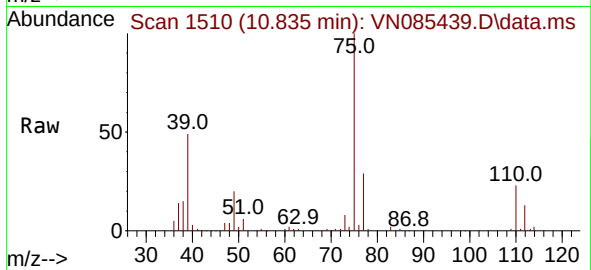




#53  
 t-1,3-Dichloropropene  
 Concen: 53.125 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

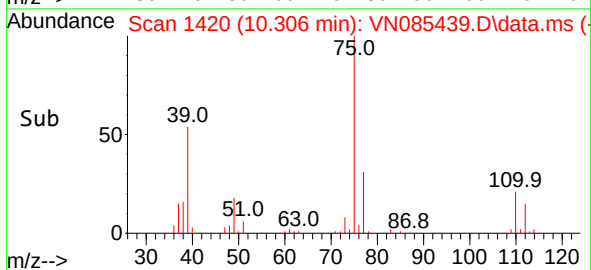
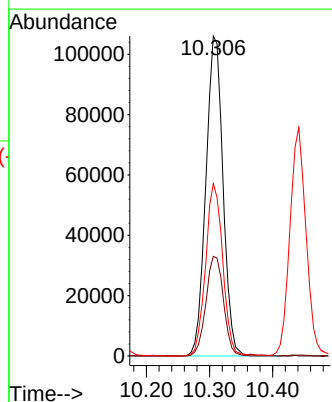
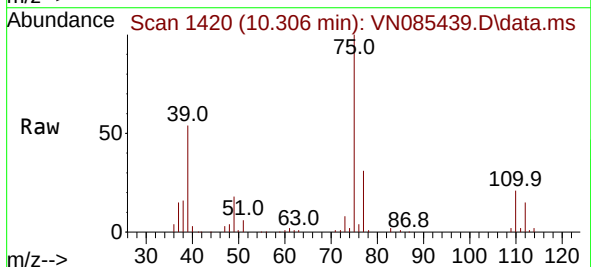
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Tgt Ion: 75 Resp: 187439  
 Ion Ratio Lower Upper  
 75 100  
 77 29.4 23.5 35.3

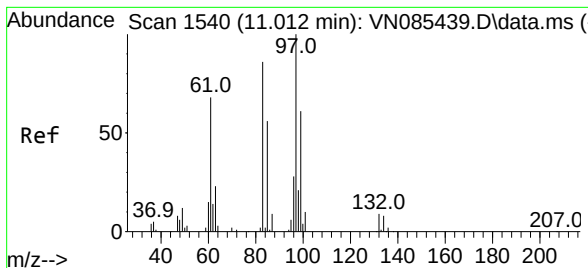


#54  
 cis-1,3-Dichloropropene  
 Concen: 53.006 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 199771  
 Ion Ratio Lower Upper  
 75 100  
 77 31.2 25.0 37.4  
 39 53.9 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 50.641 ug/l

RT: 11.012 min Scan# 115462

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 97 Resp: 115462

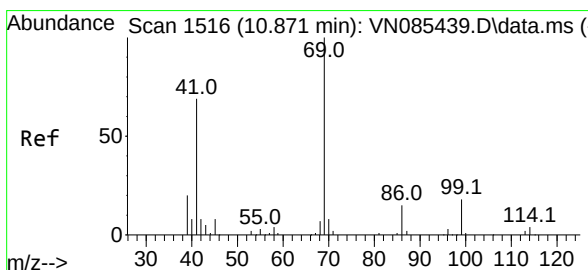
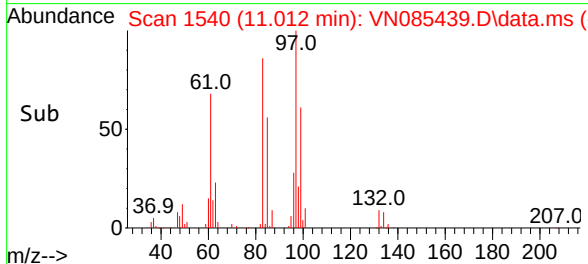
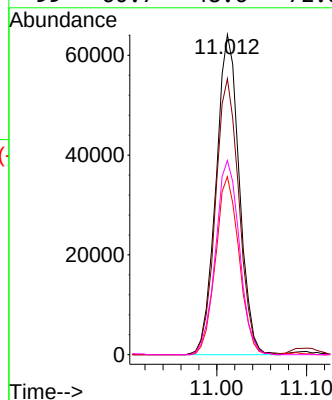
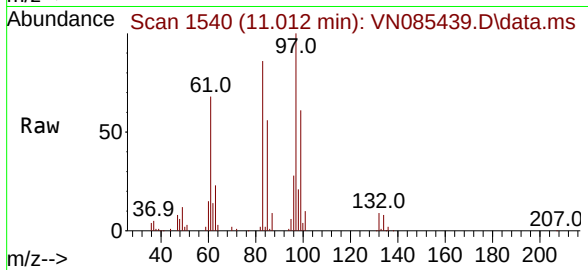
Ion Ratio Lower Upper

97 100

83 86.3 69.0 103.6

85 55.7 44.6 66.8

99 60.7 48.6 72.8



#56

Ethyl methacrylate

Concen: 48.182 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

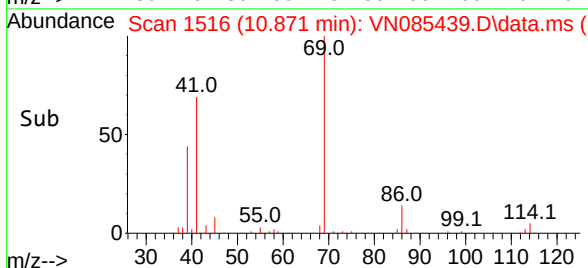
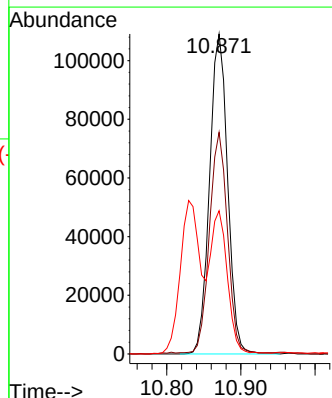
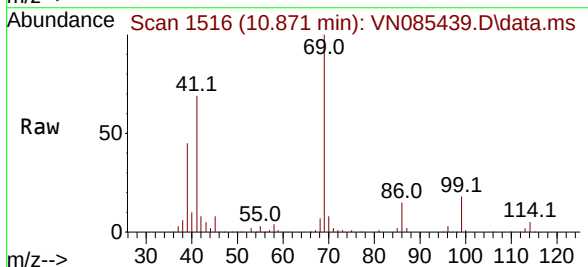
Tgt Ion: 69 Resp: 184775

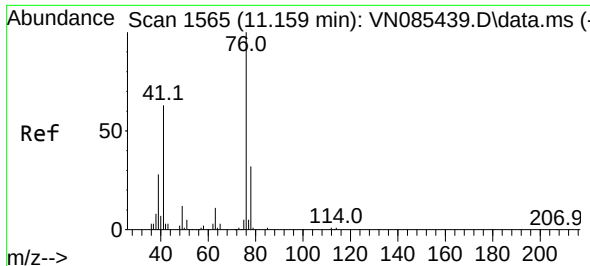
Ion Ratio Lower Upper

69 100

41 68.3 54.6 82.0

39 40.5 32.4 48.6





#57

1,3-Dichloropropane

Concen: 51.606 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

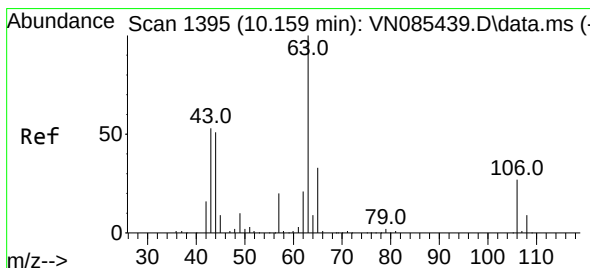
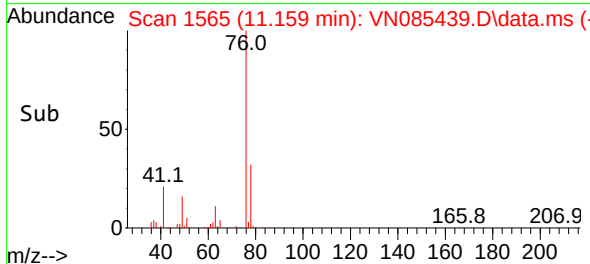
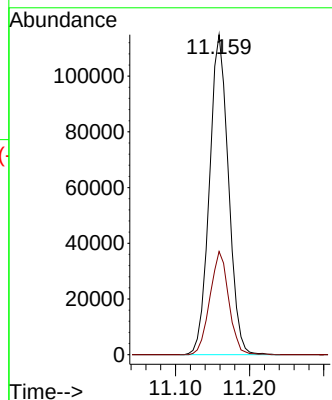
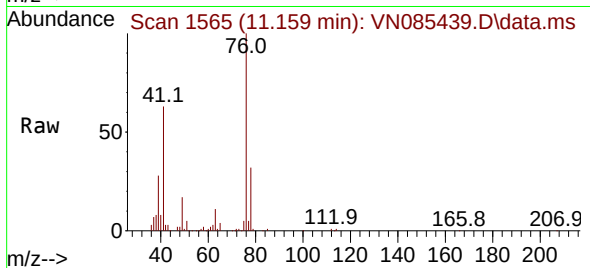
VSTDICCC050

Tgt Ion: 76 Resp: 204590

Ion Ratio Lower Upper

76 100

78 32.0 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 283.088 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085439.D

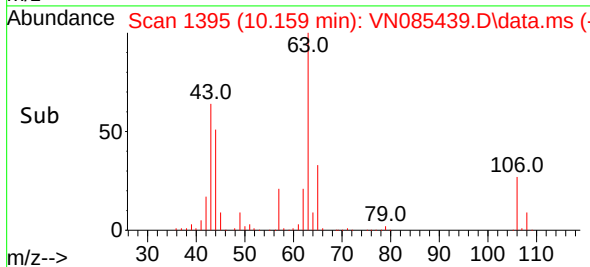
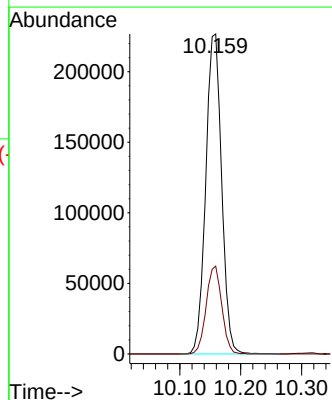
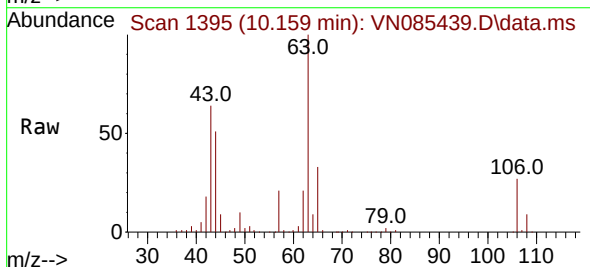
Acq: 14 Jan 2025 15:19

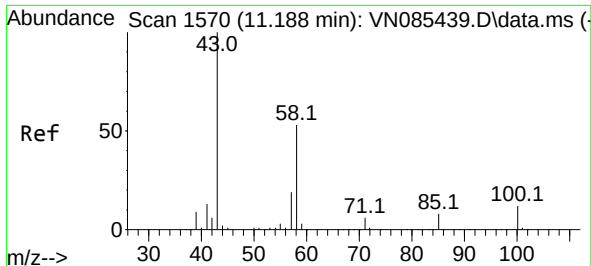
Tgt Ion: 63 Resp: 409594

Ion Ratio Lower Upper

63 100

106 27.0 21.6 32.4

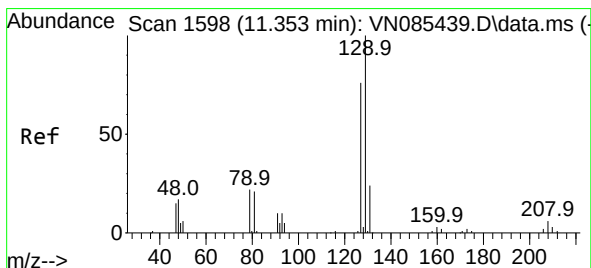
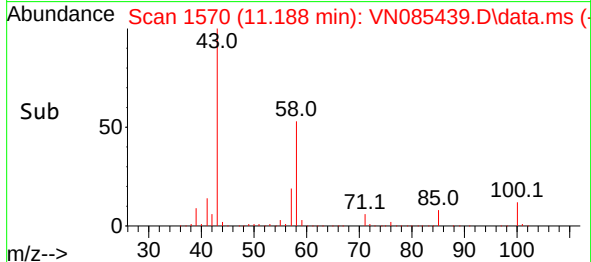
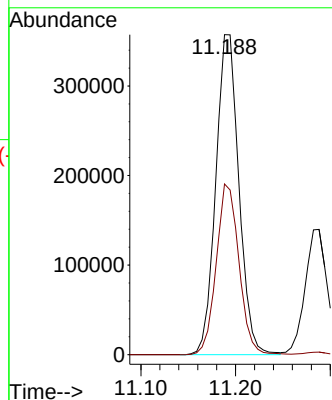
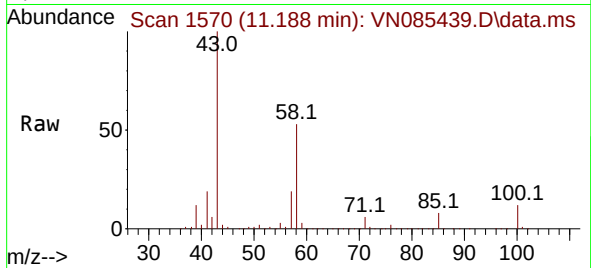




#59  
2-Hexanone  
Concen: 277.643 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

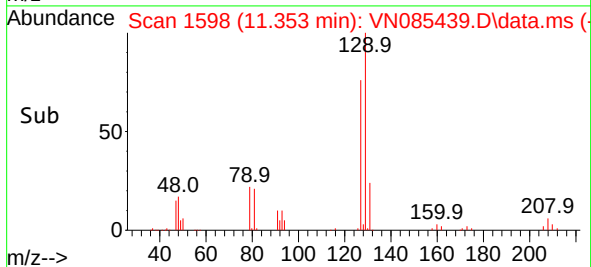
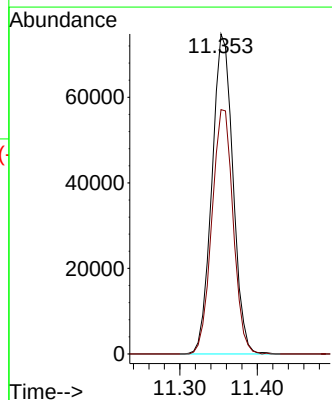
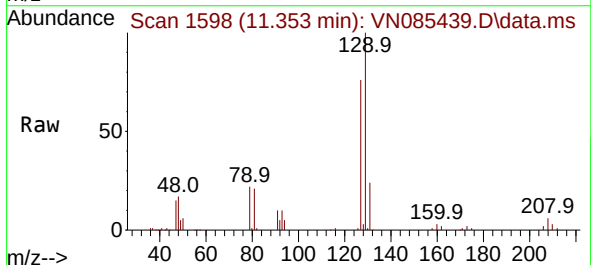
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

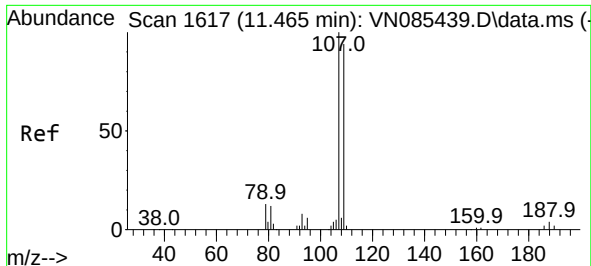
Tgt Ion: 43 Resp: 606740  
Ion Ratio Lower Upper  
43 100  
58 52.4 26.2 78.6



#60  
Dibromochloromethane  
Concen: 51.116 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:129 Resp: 140704  
Ion Ratio Lower Upper  
129 100  
127 77.2 38.6 115.8

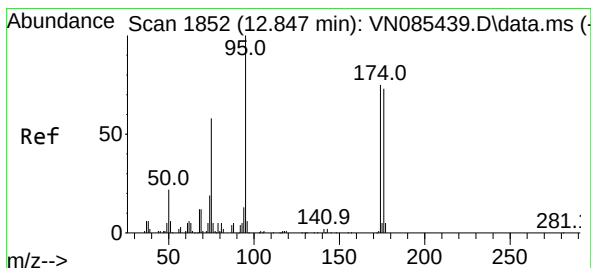
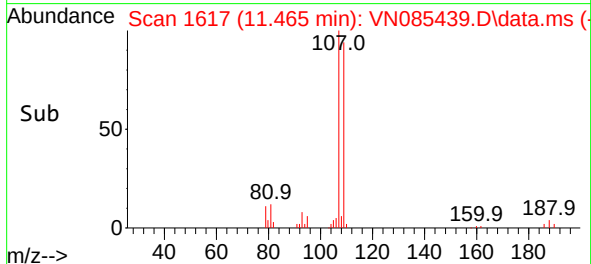
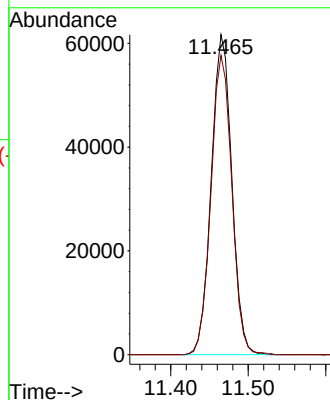
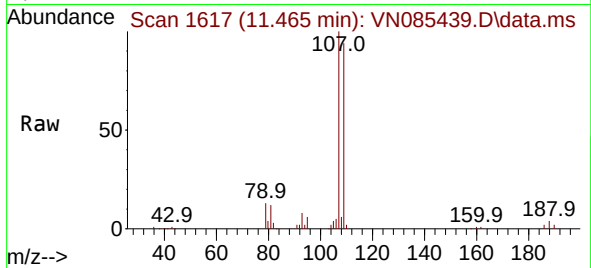




#61  
1,2-Dibromoethane  
Concen: 50.028 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

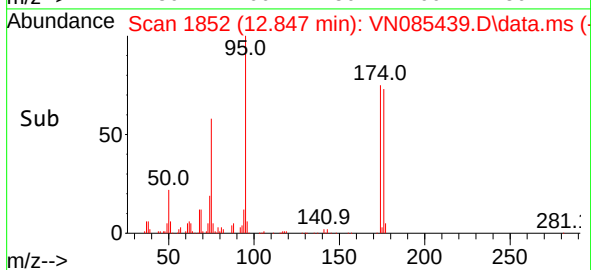
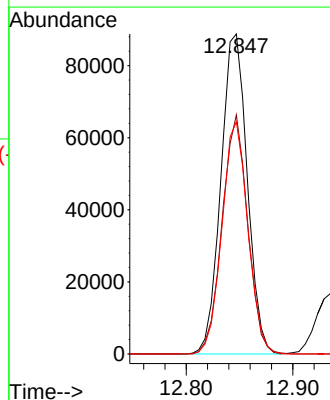
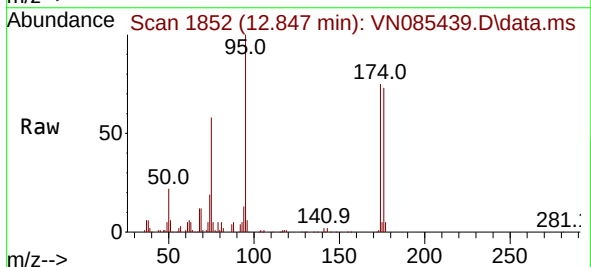
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

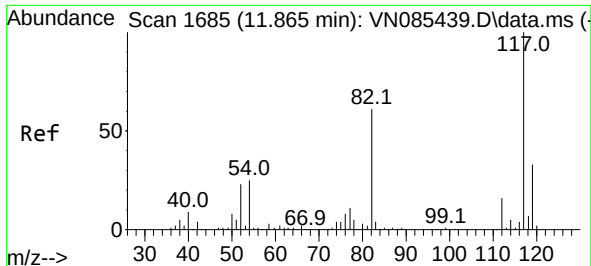
Tgt Ion:107 Resp: 113541  
Ion Ratio Lower Upper  
107 100  
109 94.9 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 53.239 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 95 Resp: 152568  
Ion Ratio Lower Upper  
95 100  
174 72.5 0.0 145.0  
176 71.2 0.0 142.4

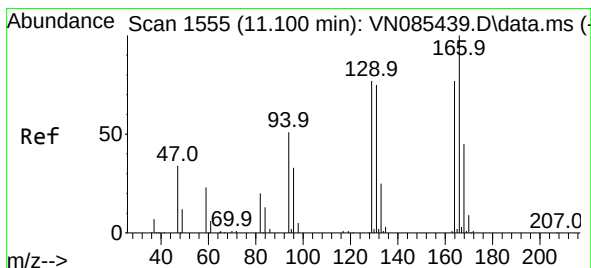
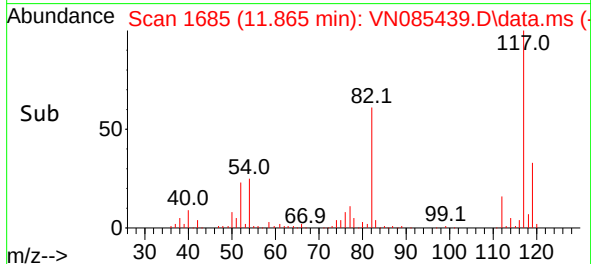
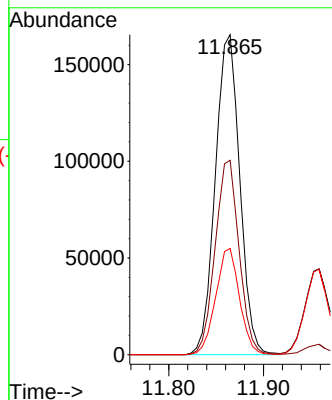
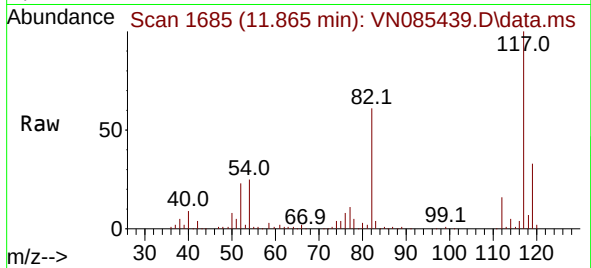




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

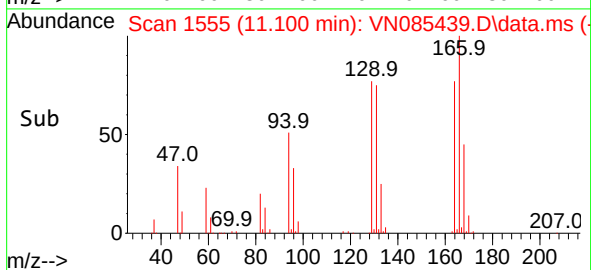
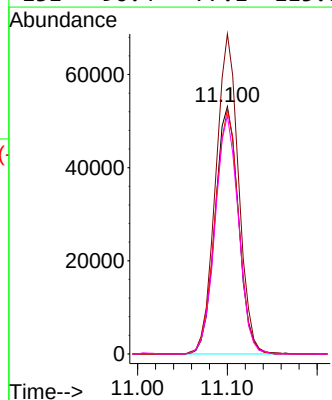
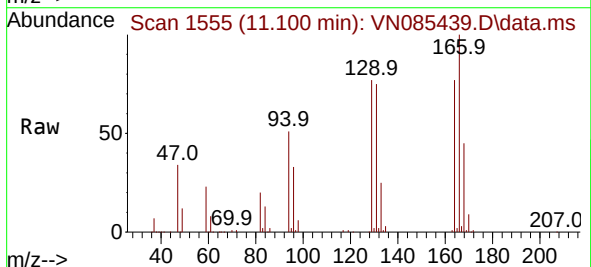
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

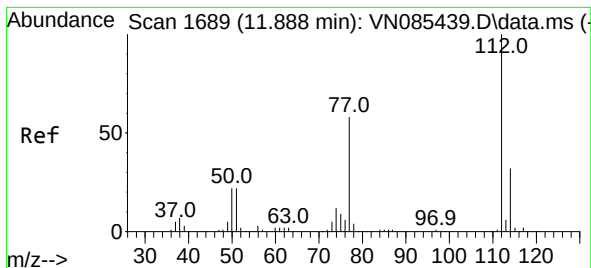
Tgt Ion:117 Resp: 297366  
Ion Ratio Lower Upper  
117 100  
82 60.7 48.6 72.8  
119 33.2 26.6 39.8



#64  
Tetrachloroethene  
Concen: 47.295 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:164 Resp: 95879  
Ion Ratio Lower Upper  
164 100  
166 129.3 103.4 155.2  
129 99.0 79.2 118.8  
131 96.4 77.1 115.7





#65

Chlorobenzene

Concen: 49.121 ug/l

RT: 11.888 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

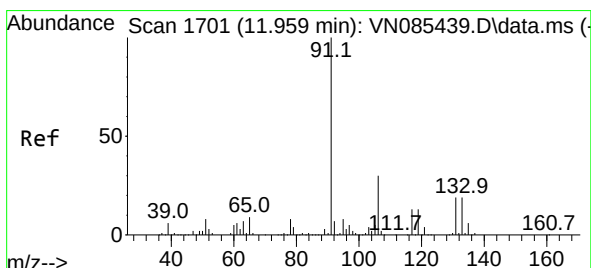
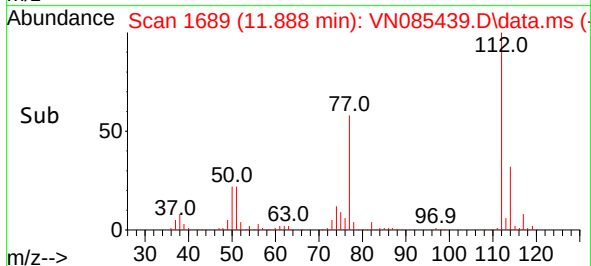
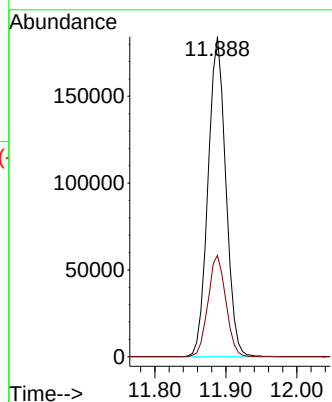
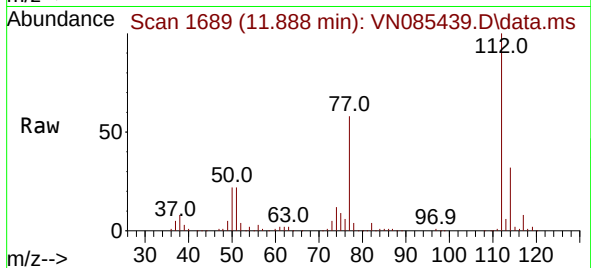
VSTDICCC050

Tgt Ion:112 Resp: 319992

Ion Ratio Lower Upper

112 100

114 31.6 25.3 37.9



#66

1,1,1,2-Tetrachloroethane

Concen: 48.722 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

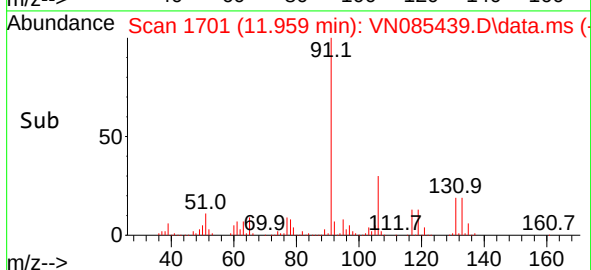
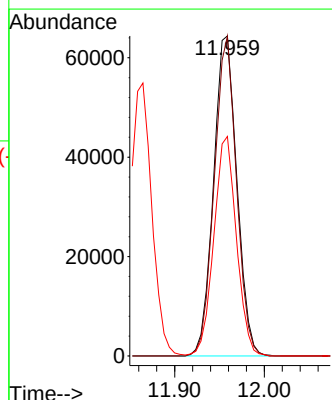
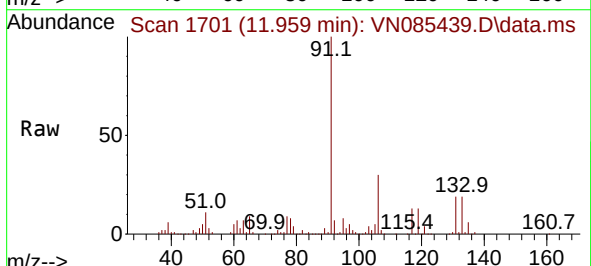
Tgt Ion:131 Resp: 116488

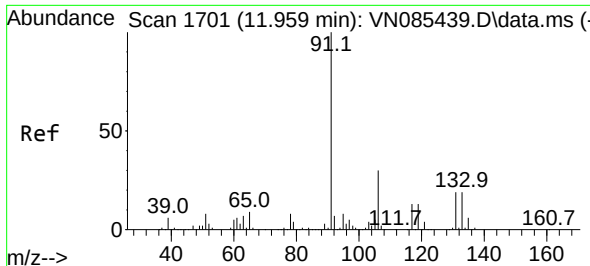
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.3 33.1 99.5

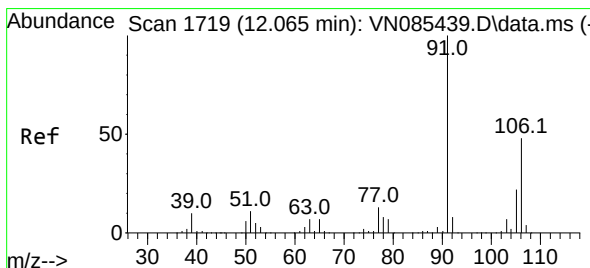
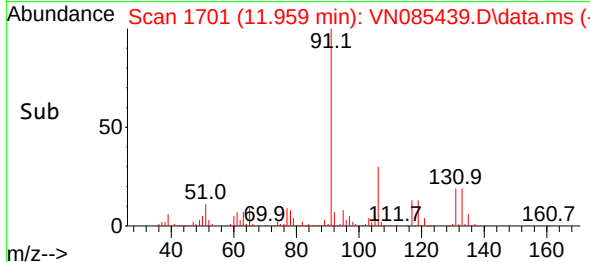
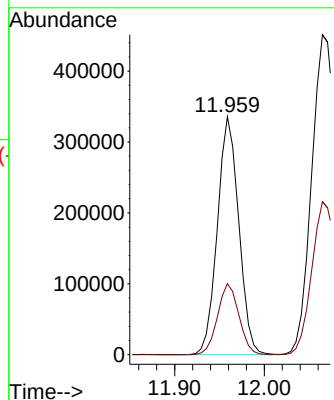
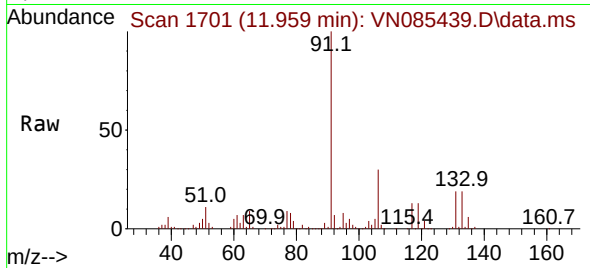




#67  
Ethyl Benzene  
Concen: 52.339 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

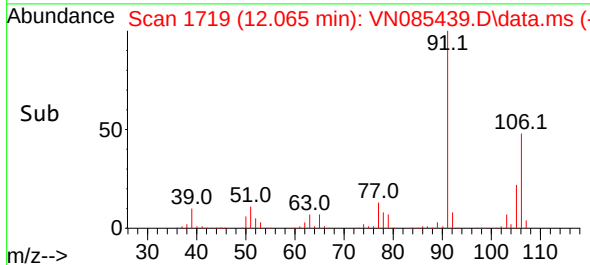
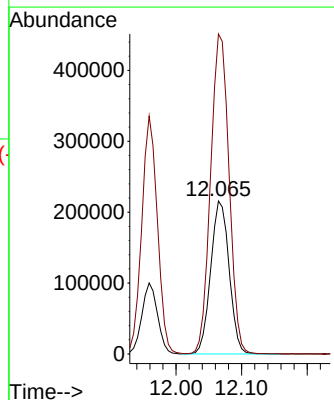
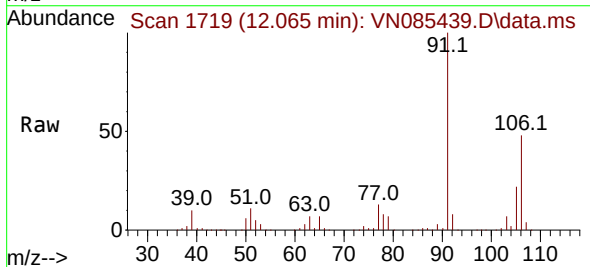
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

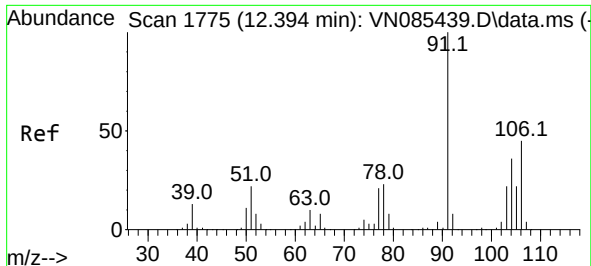
Tgt Ion: 91 Resp: 555322  
Ion Ratio Lower Upper  
91 100  
106 29.8 23.8 35.8



#68  
m/p-Xylenes  
Concen: 107.286 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:106 Resp: 420702  
Ion Ratio Lower Upper  
106 100  
91 209.6 167.7 251.5

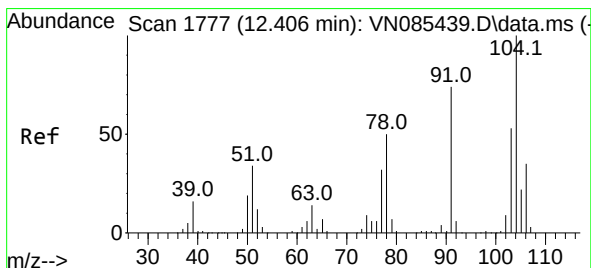
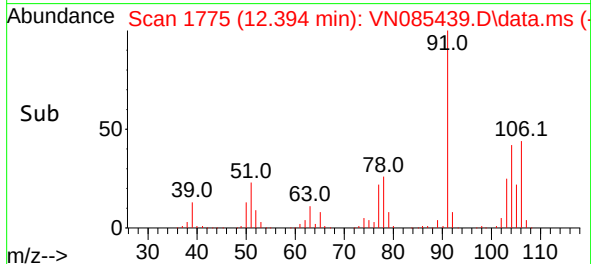
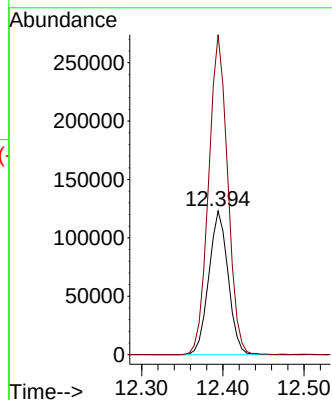
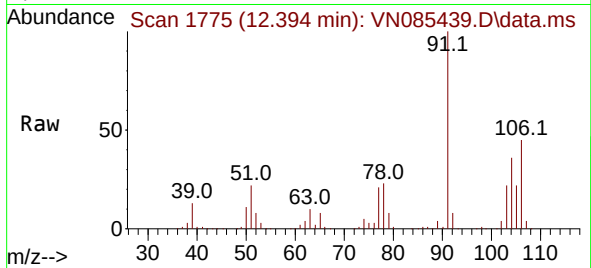




#69  
o-Xylene  
Concen: 54.062 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

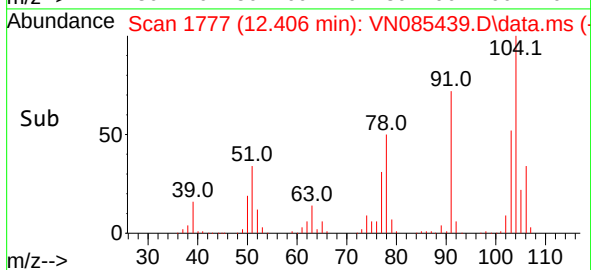
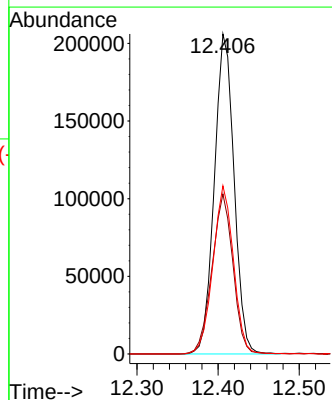
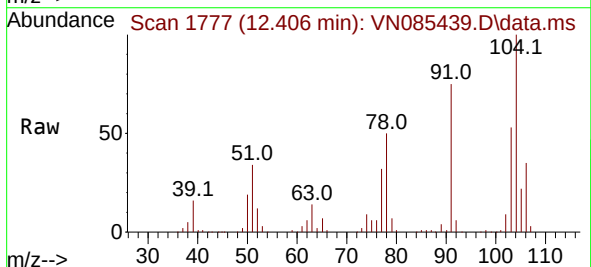
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion:106 Resp: 202597  
Ion Ratio Lower Upper  
106 100  
91 220.8 110.4 331.2

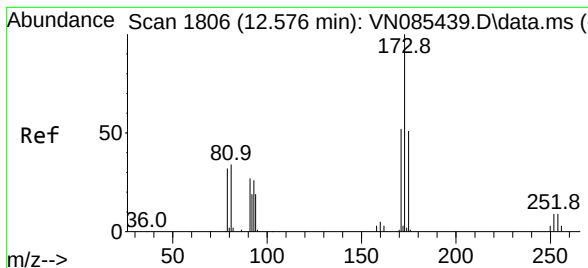


#70  
Styrene  
Concen: 56.227 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:104 Resp: 348720  
Ion Ratio Lower Upper  
104 100  
78 53.1 42.5 63.7  
103 54.8 43.8 65.8







#71

Bromoform

Concen: 53.993 ug/l

RT: 12.576 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

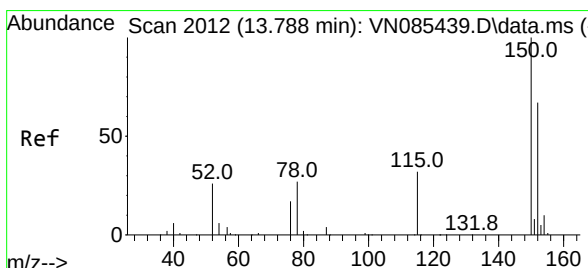
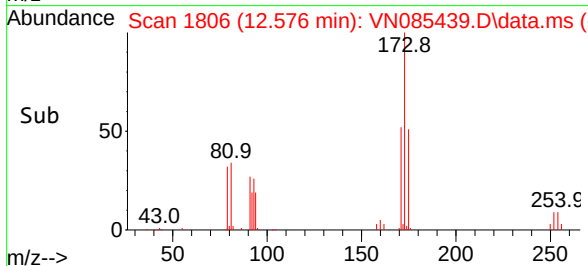
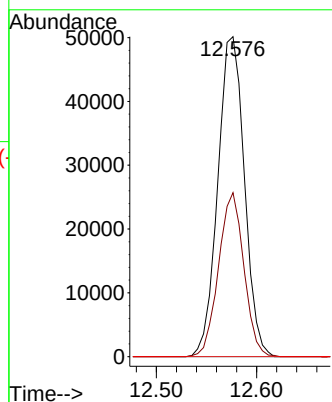
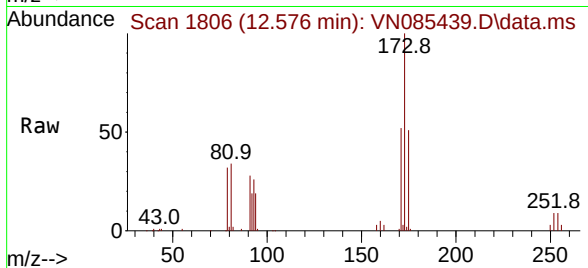
Tgt Ion:173 Resp: 92366

Ion Ratio Lower Upper

173 100

175 48.8 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

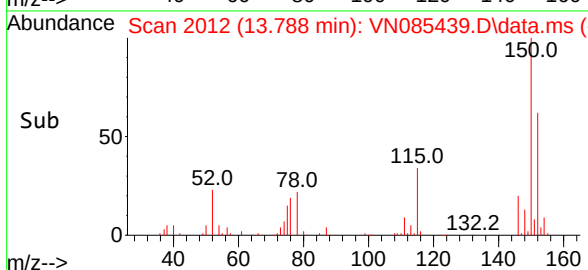
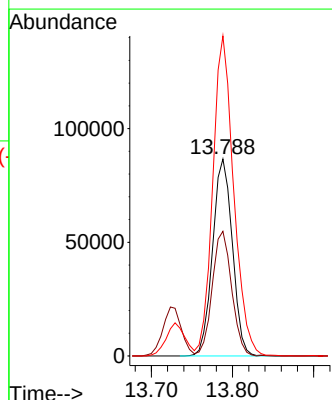
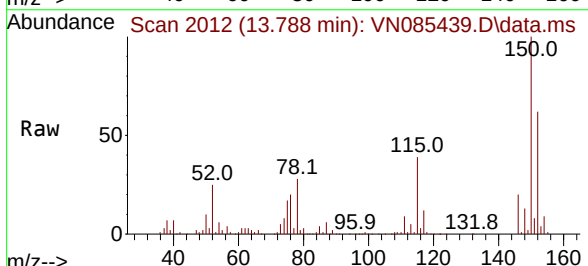
Tgt Ion:152 Resp: 146624

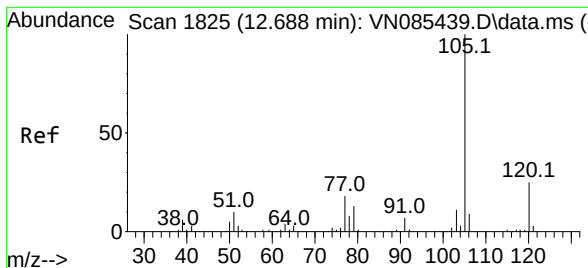
Ion Ratio Lower Upper

152 100

115 62.2 31.1 93.3

150 171.8 0.0 343.6





#73

Isopropylbenzene

Concen: 51.094 ug/l

RT: 12.688 min Scan# 1825

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

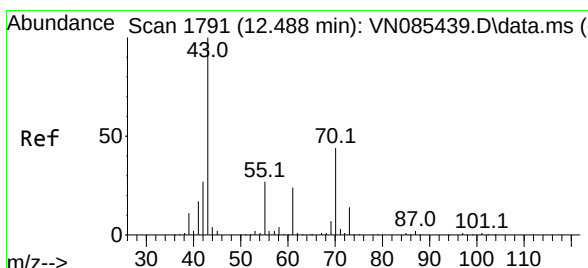
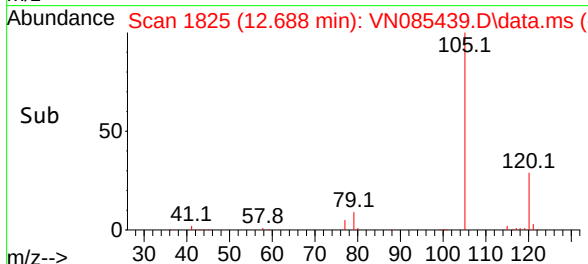
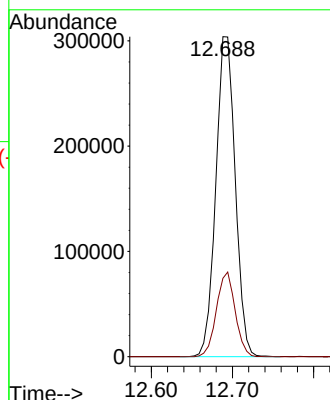
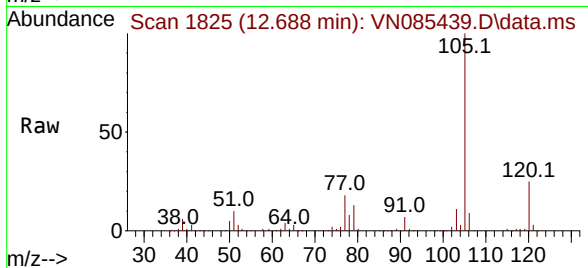
VSTDICCC050

Tgt Ion:105 Resp: 505619

Ion Ratio Lower Upper

105 100

120 25.5 12.8 38.3



#74

N-ethyl acetate

Concen: 53.478 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 237870

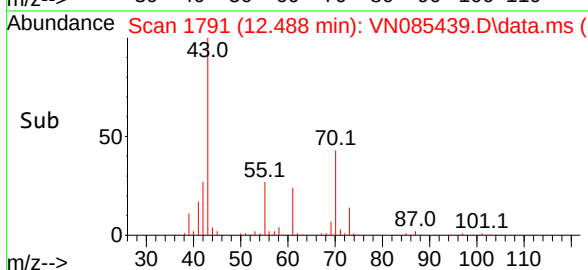
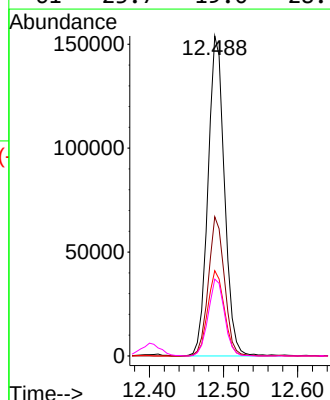
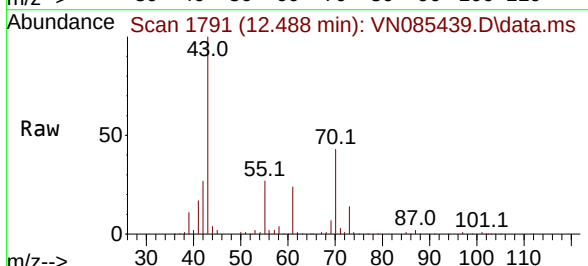
Ion Ratio Lower Upper

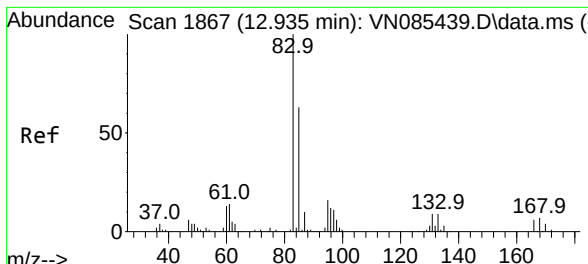
43 100

70 42.5 34.0 51.0

55 26.8 21.4 32.2

61 23.7 19.0 28.4

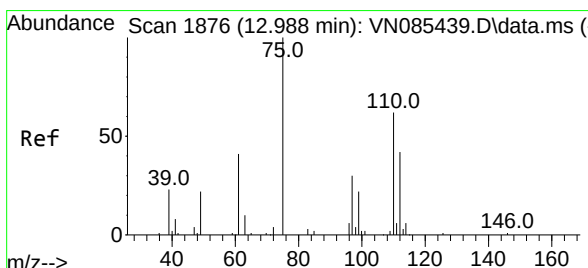
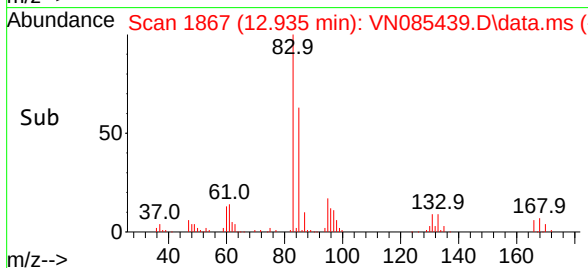
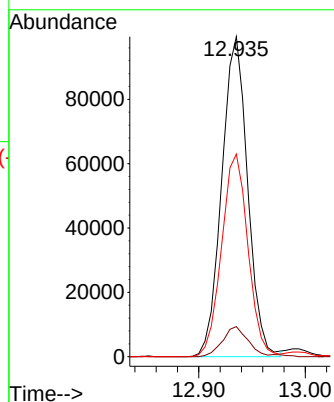
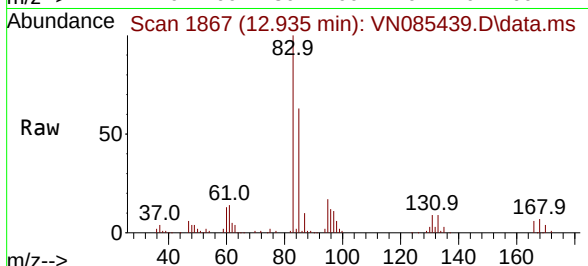




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 48.019 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

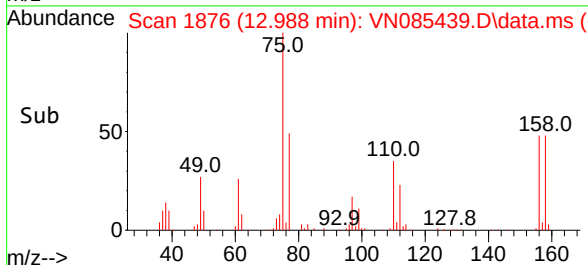
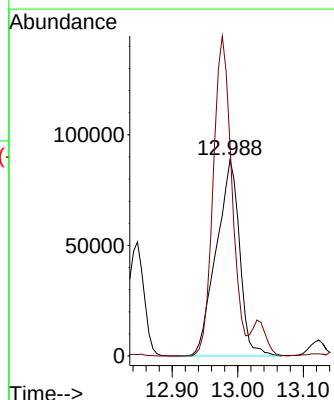
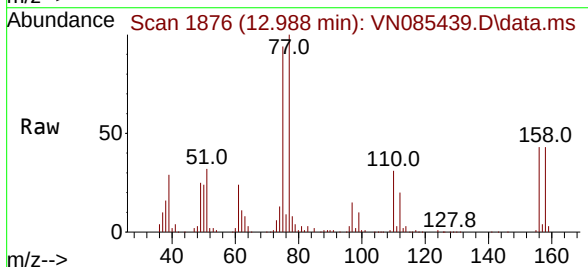
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

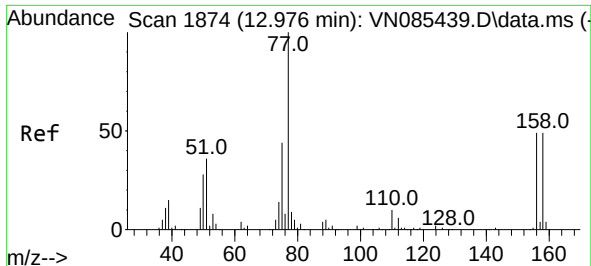
Tgt Ion: 83 Resp: 167856  
 Ion Ratio Lower Upper  
 83 100  
 131 9.6 4.8 14.4  
 85 64.4 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 73.773 ug/l  
 RT: 12.988 min Scan# 1876  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 219507  
 Ion Ratio Lower Upper  
 75 100  
 77 130.9 109.7 329.2

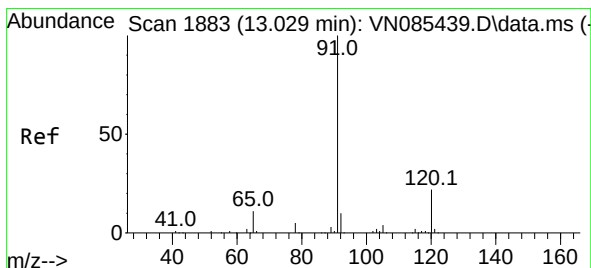
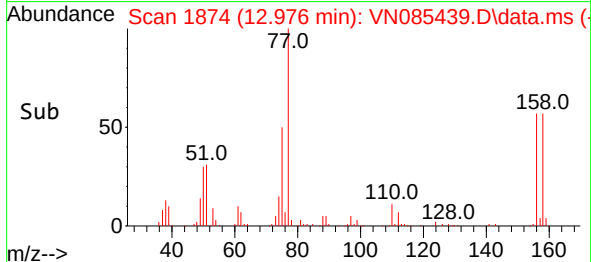
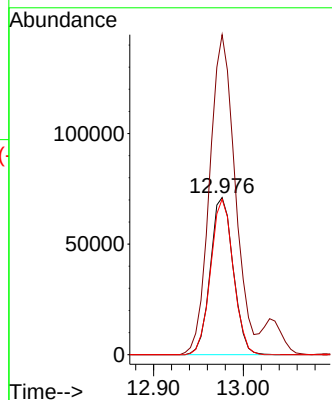
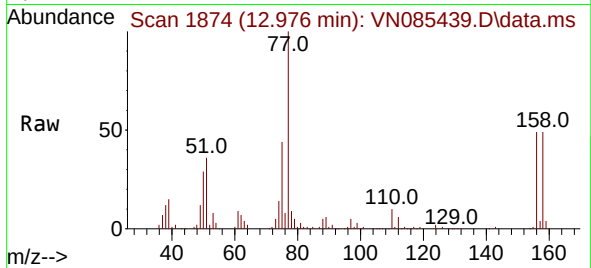




#77  
Bromobenzene  
Concen: 48.657 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

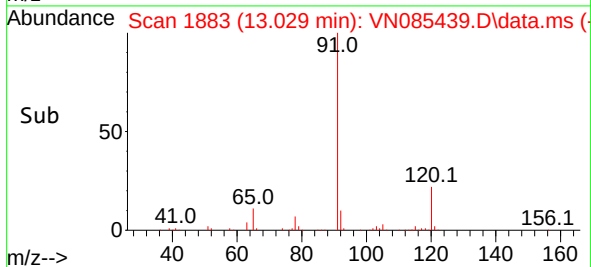
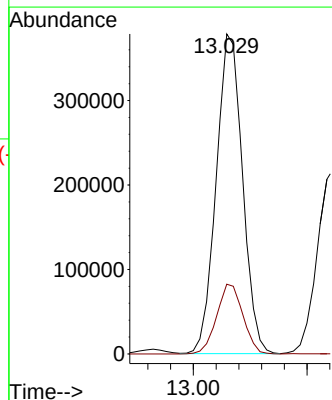
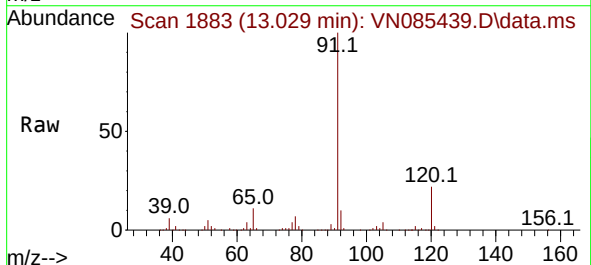
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

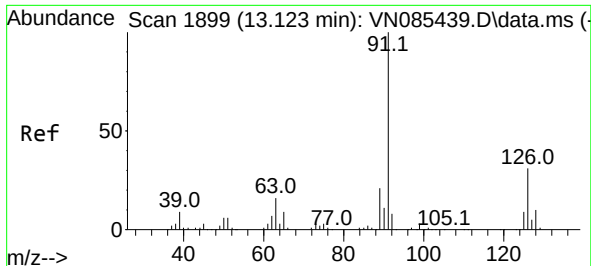
Tgt Ion:156 Resp: 125800  
Ion Ratio Lower Upper  
156 100  
77 228.3 114.1 342.4  
158 97.9 48.9 146.8



#78  
n-propylbenzene  
Concen: 51.986 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 609022  
Ion Ratio Lower Upper  
91 100  
120 21.7 10.9 32.6

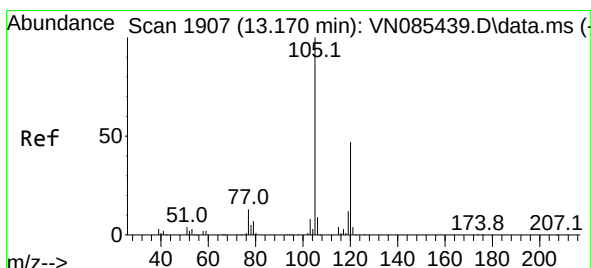
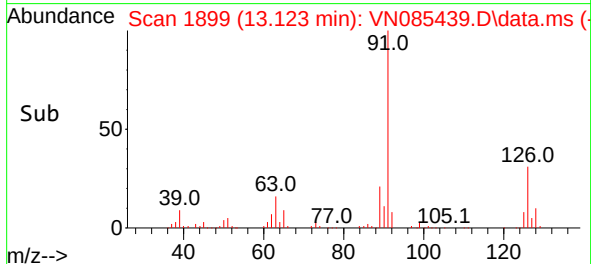
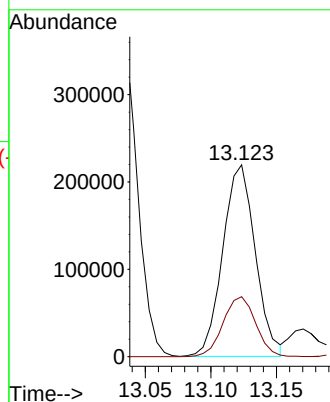
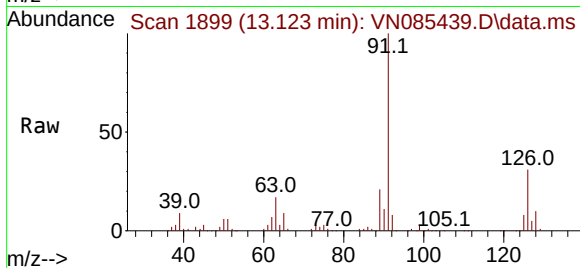




#79  
2-Chlorotoluene  
Concen: 49.985 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

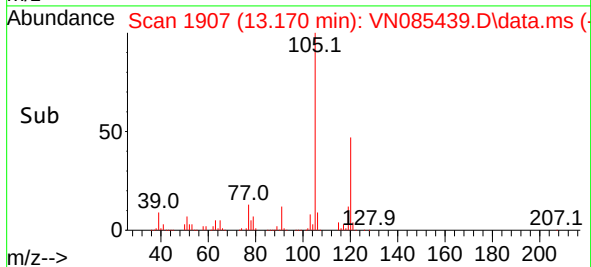
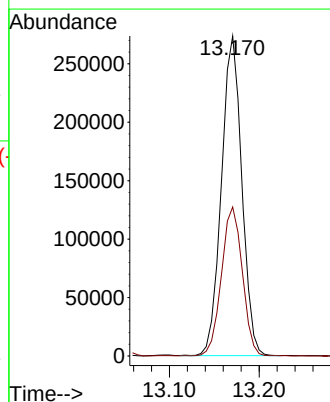
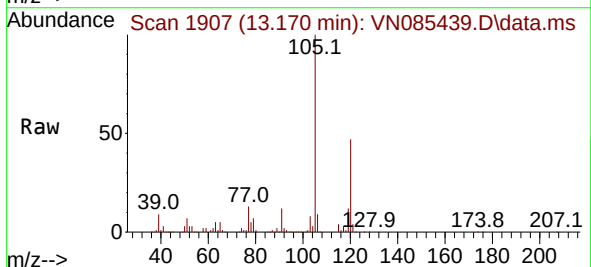
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

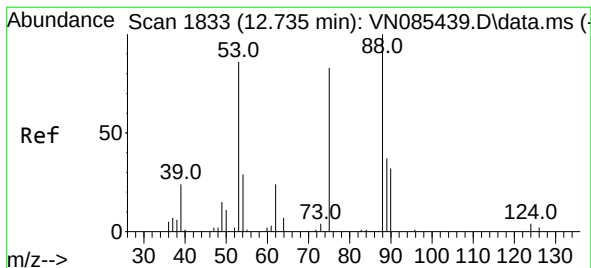
Tgt Ion: 91 Resp: 378981  
Ion Ratio Lower Upper  
91 100  
126 31.4 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 52.730 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 105 Resp: 431021  
Ion Ratio Lower Upper  
105 100  
120 47.8 23.9 71.7

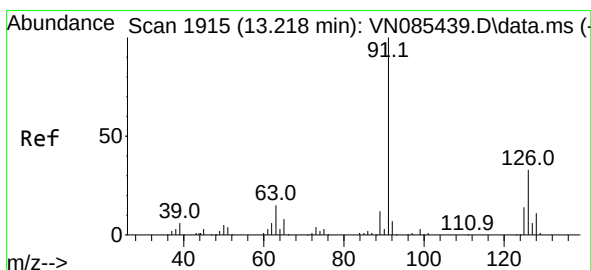
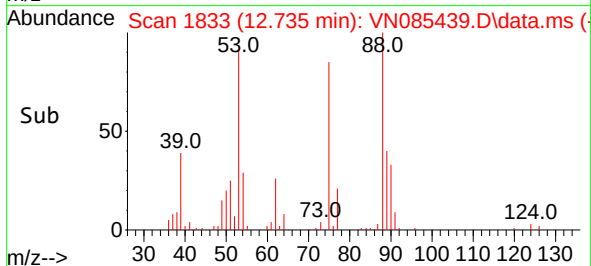
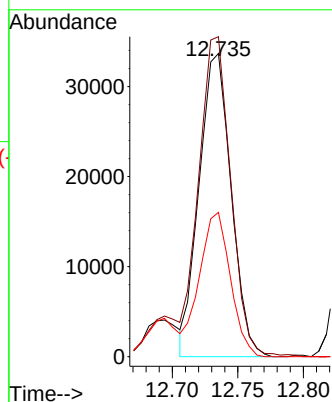
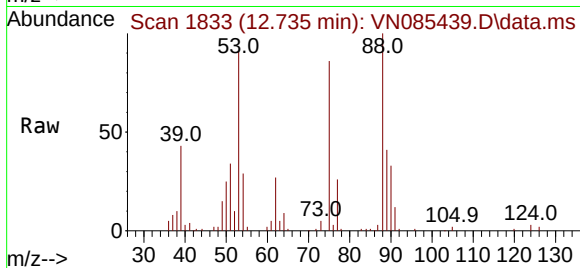




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 51.914 ug/l  
 RT: 12.735 min Scan# 1833  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

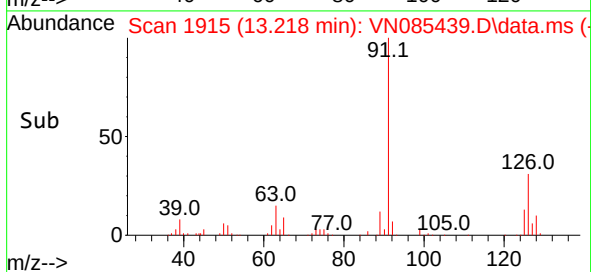
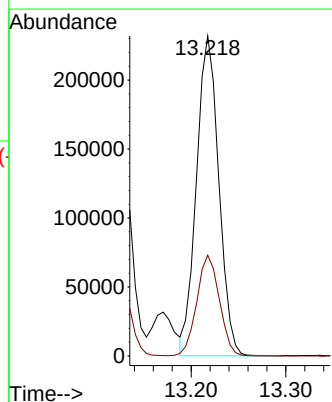
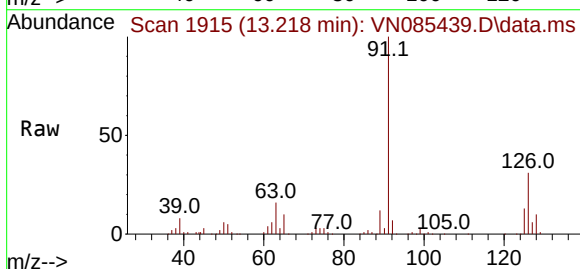
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

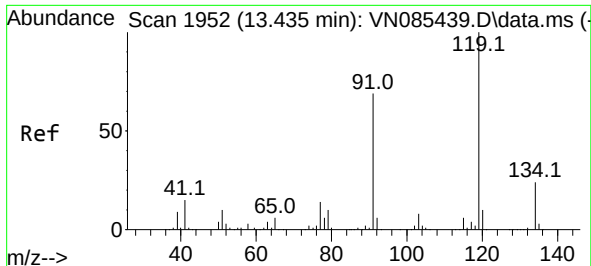
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 57184 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 119.5 | 95.6  | 143.4 |
| 89       | 46.3  | 37.0  | 55.6  |



#82  
 4-Chlorotoluene  
 Concen: 50.273 ug/l  
 RT: 13.218 min Scan# 1915  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 379524 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 126      | 31.8  | 15.9  | 47.7   |

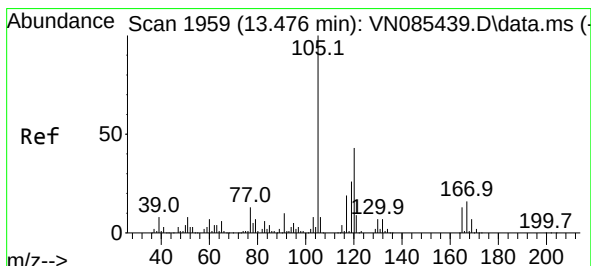
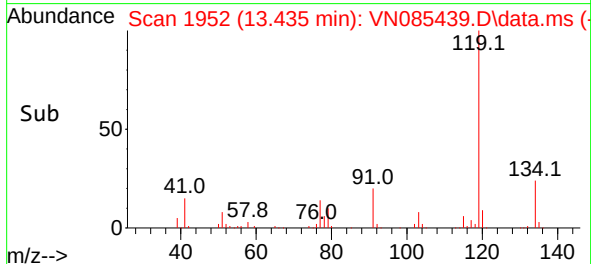
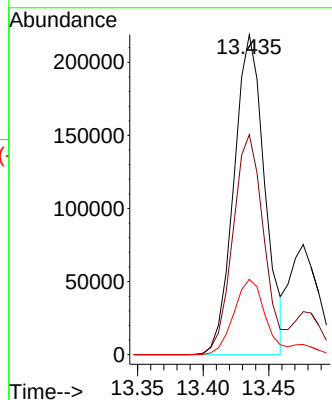
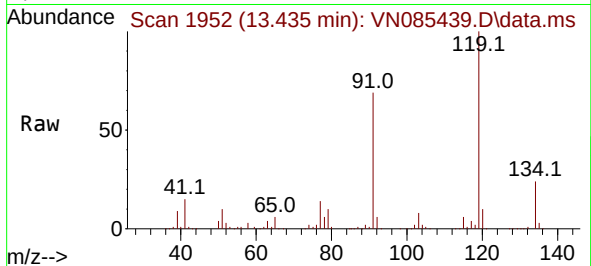




#83  
tert-Butylbenzene  
Concen: 52.090 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

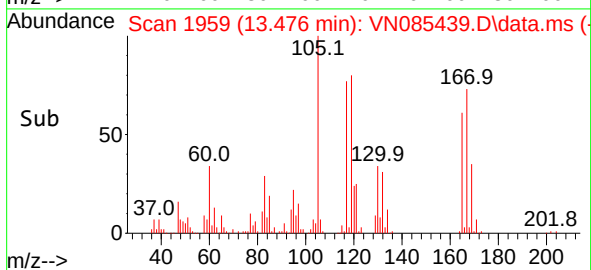
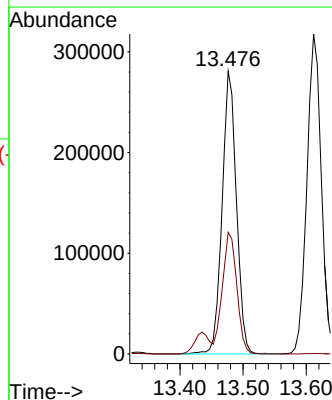
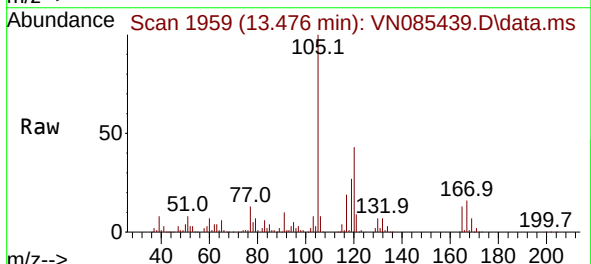
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

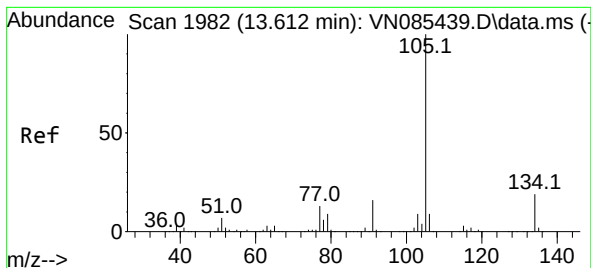
Tgt Ion:119 Resp: 357563  
Ion Ratio Lower Upper  
119 100  
91 70.2 35.1 105.3  
134 24.1 12.0 36.1



#84  
1,2,4-Trimethylbenzene  
Concen: 54.275 ug/l  
RT: 13.476 min Scan# 1959  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 442175  
Ion Ratio Lower Upper  
105 100  
120 43.3 21.6 65.0





#85

sec-Butylbenzene

Concen: 52.719 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

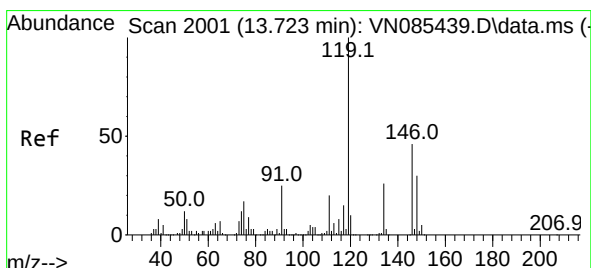
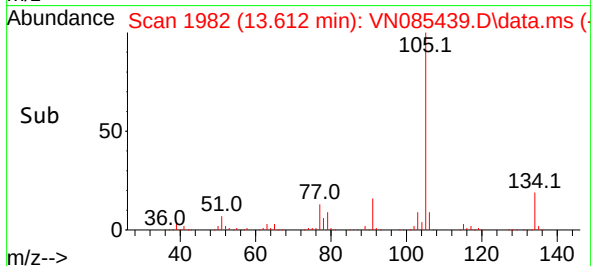
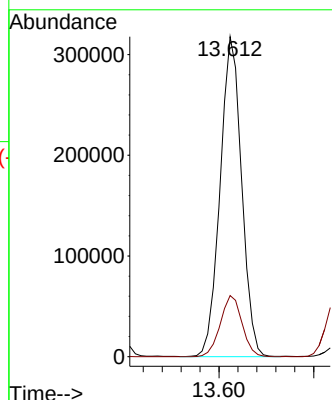
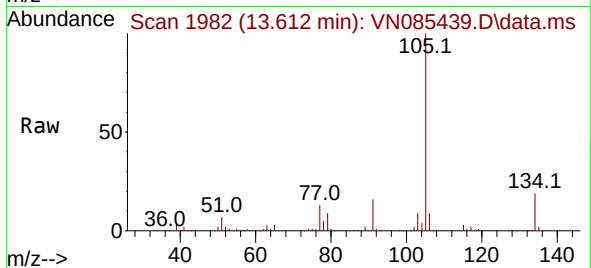
VSTDICCC050

Tgt Ion:105 Resp: 501561

Ion Ratio Lower Upper

105 100

134 19.3 9.7 28.9



#86

p-Isopropyltoluene

Concen: 49.240 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

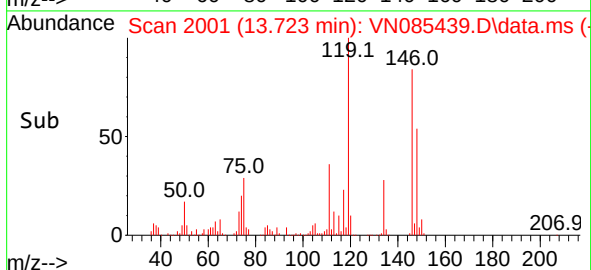
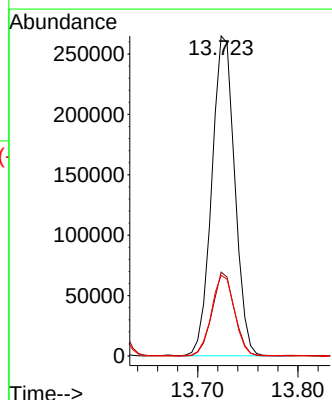
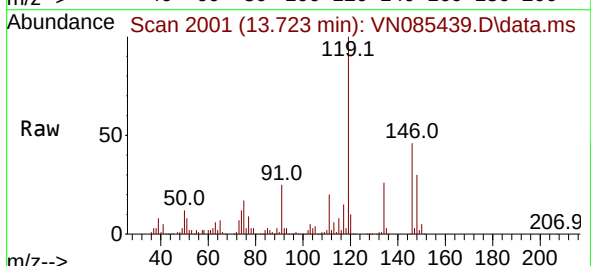
Tgt Ion:119 Resp: 421052

Ion Ratio Lower Upper

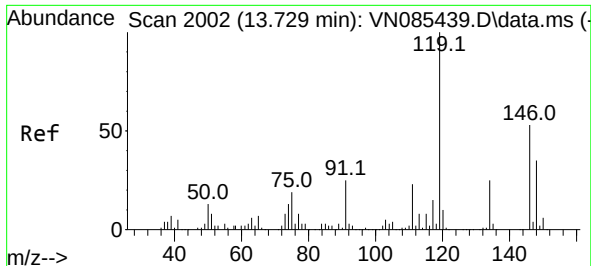
119 100

134 25.3 12.7 38.0

91 25.4 12.7 38.1



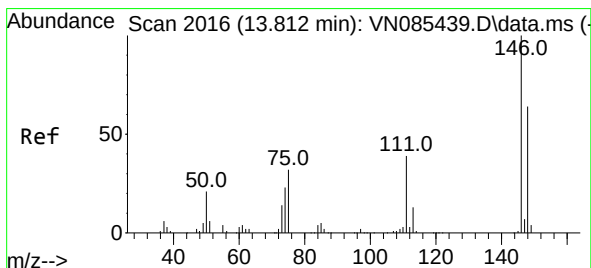
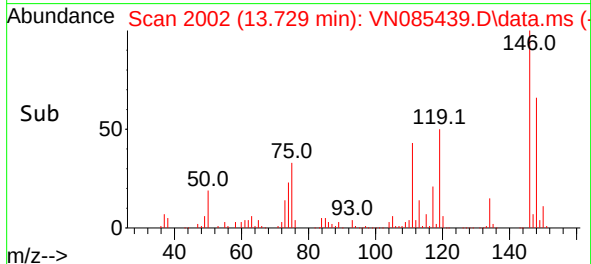
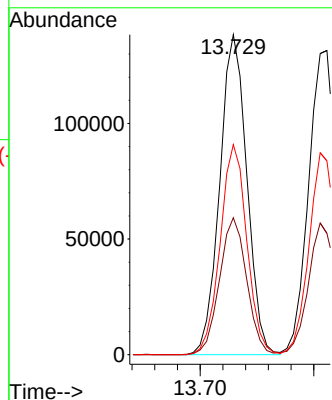
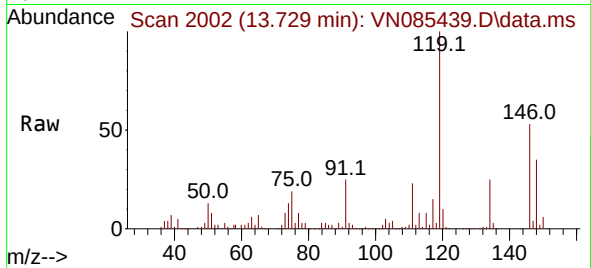




#87  
 1,3-Dichlorobenzene  
 Concen: 48.204 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

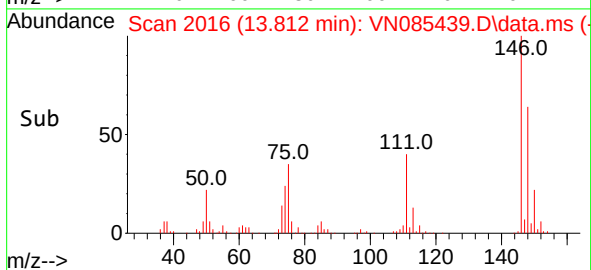
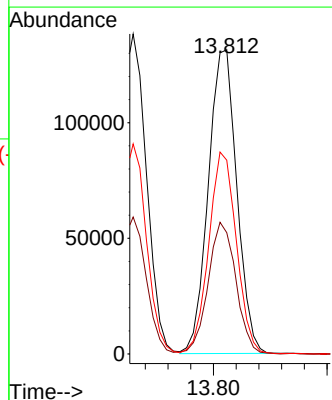
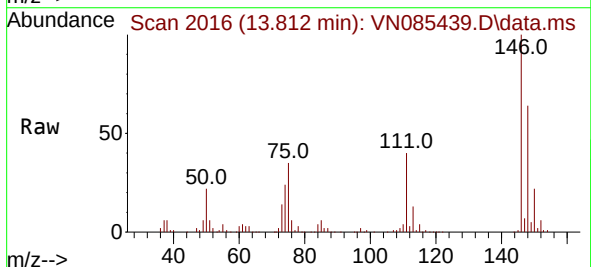
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

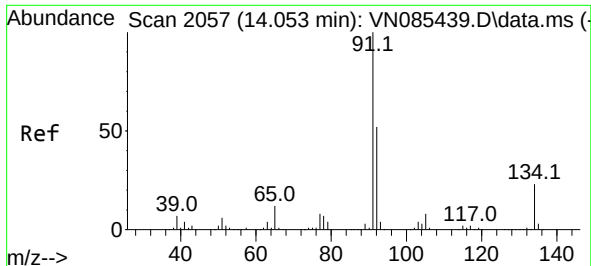
Tgt Ion:146 Resp: 229518  
 Ion Ratio Lower Upper  
 146 100  
 111 42.9 21.4 64.3  
 148 64.6 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 46.416 ug/l  
 RT: 13.812 min Scan# 2016  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 229084  
 Ion Ratio Lower Upper  
 146 100  
 111 42.5 21.3 63.7  
 148 64.7 32.4 97.0

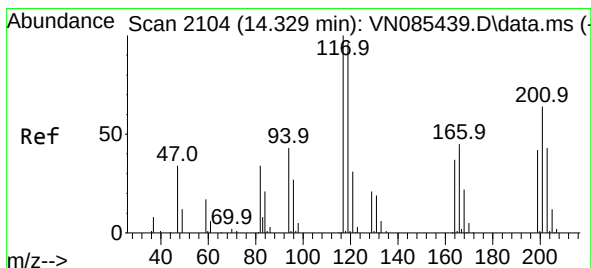
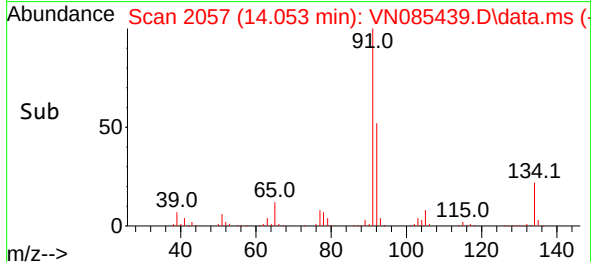
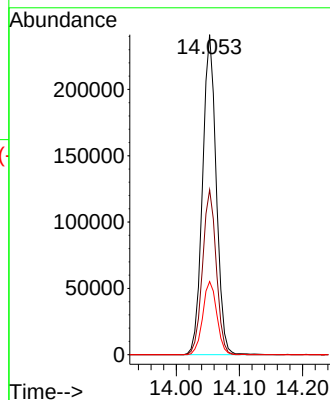
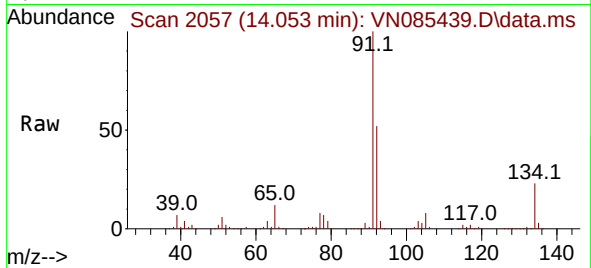




#89  
n-Butylbenzene  
Concen: 53.348 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

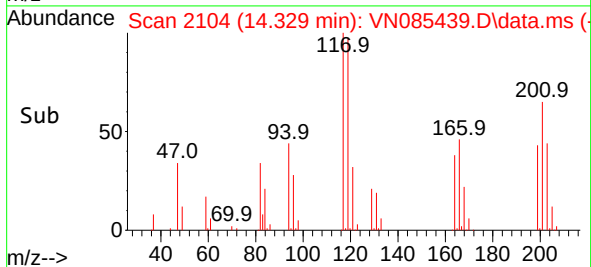
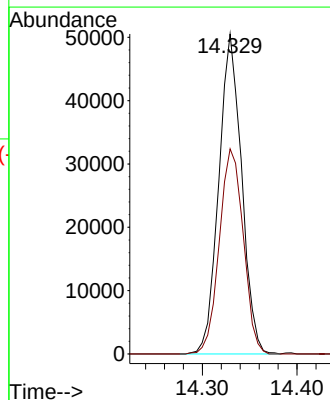
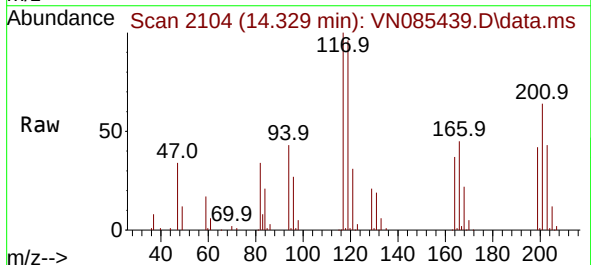
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

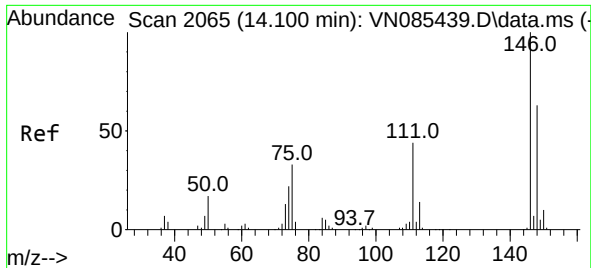
Tgt Ion: 91 Resp: 364111  
Ion Ratio Lower Upper  
91 100  
92 51.5 25.8 77.3  
134 23.4 11.7 35.1



#90  
Hexachloroethane  
Concen: 46.712 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 117 Resp: 84602  
Ion Ratio Lower Upper  
117 100  
201 67.3 33.7 101.0

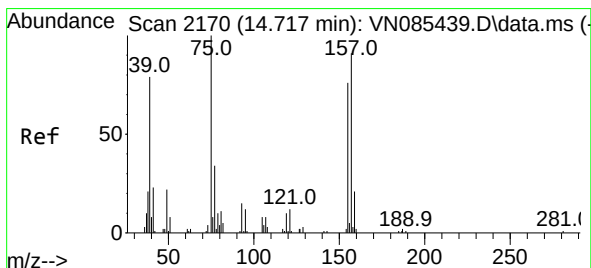
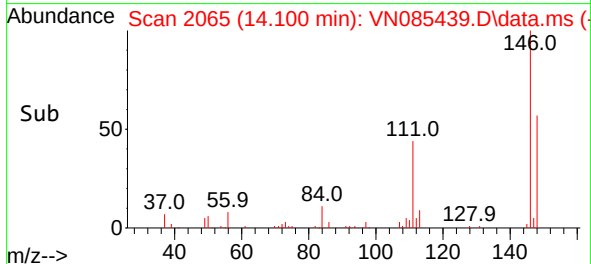
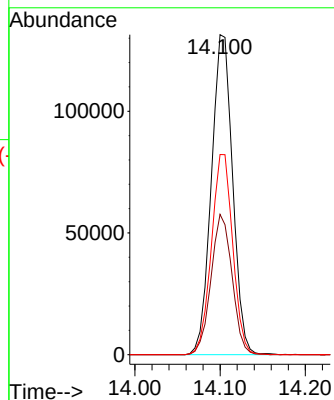
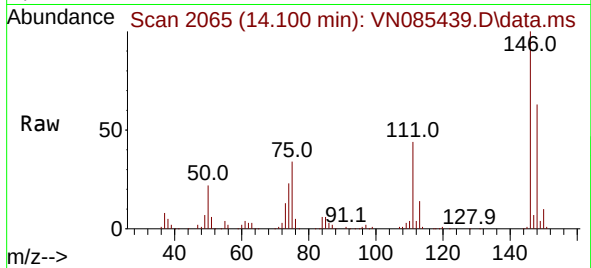




#91  
1,2-Dichlorobenzene  
Concen: 48.012 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

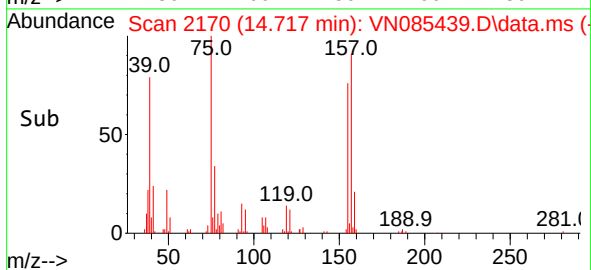
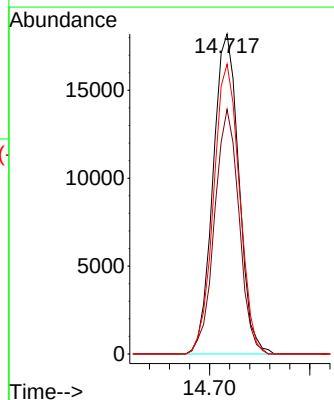
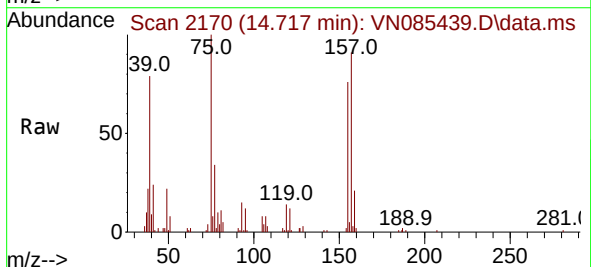
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

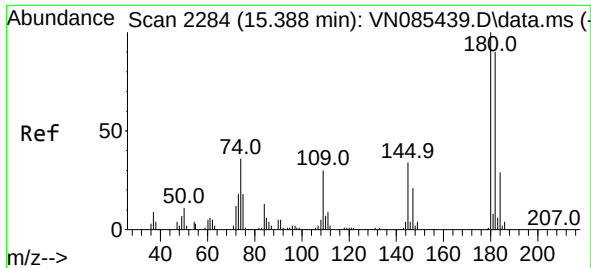
Tgt Ion:146 Resp: 228024  
Ion Ratio Lower Upper  
146 100  
111 43.4 21.7 65.1  
148 62.8 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 50.971 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 32536  
Ion Ratio Lower Upper  
75 100  
155 72.8 36.4 109.2  
157 90.7 45.4 136.1

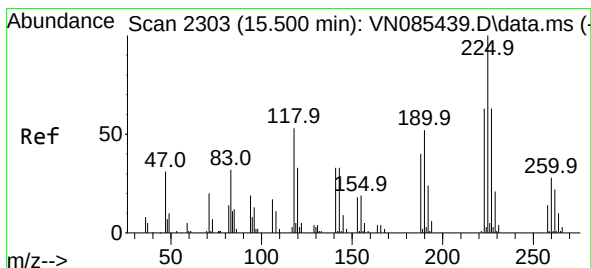
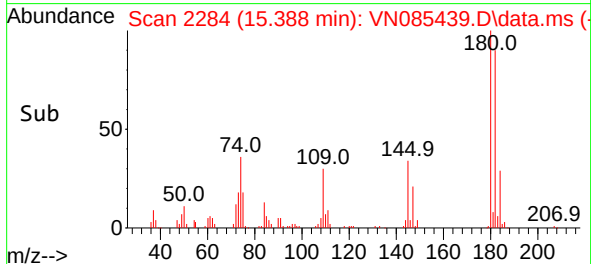
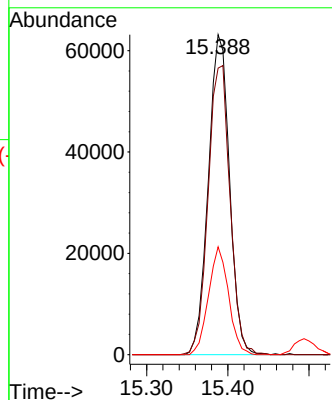
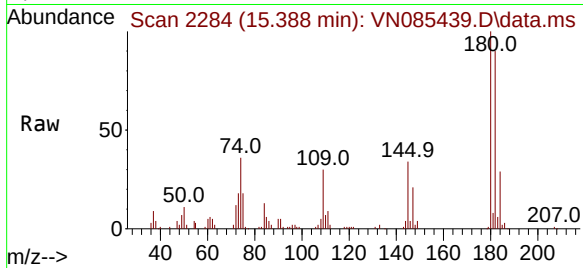




#93  
 1,2,4-Trichlorobenzene  
 Concen: 51.857 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

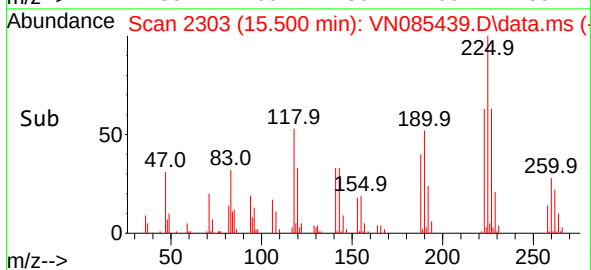
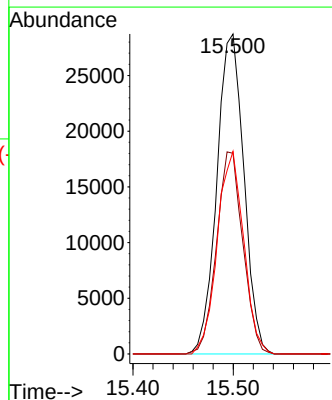
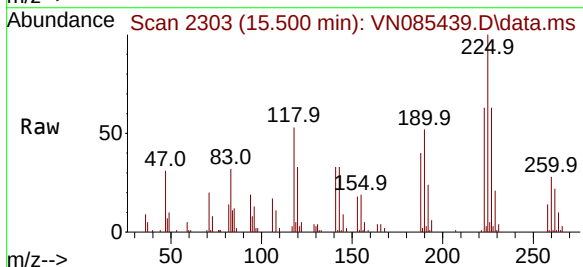
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

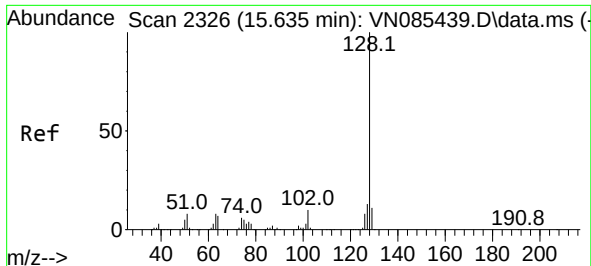
Tgt Ion:180 Resp: 114468  
 Ion Ratio Lower Upper  
 180 100  
 182 93.5 46.8 140.3  
 145 32.0 16.0 48.0



#94  
 Hexachlorobutadiene  
 Concen: 45.947 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

Tgt Ion:225 Resp: 53846  
 Ion Ratio Lower Upper  
 225 100  
 223 61.4 30.7 92.1  
 227 61.7 30.9 92.5

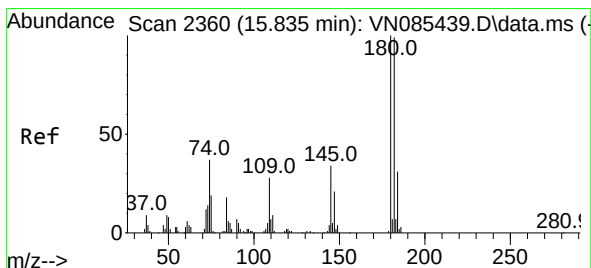
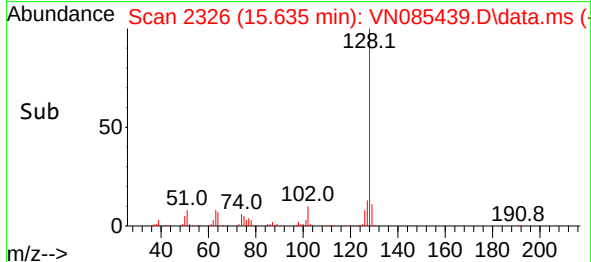
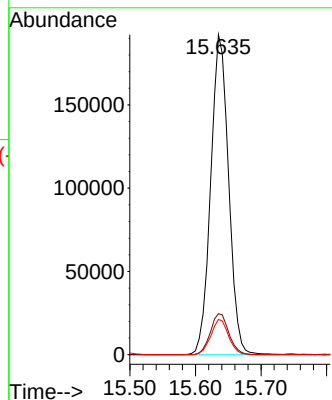
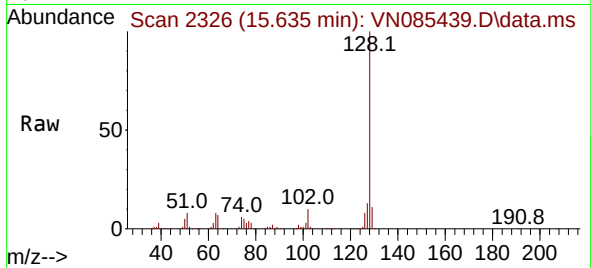




#95  
Naphthalene  
Concen: 55.243 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

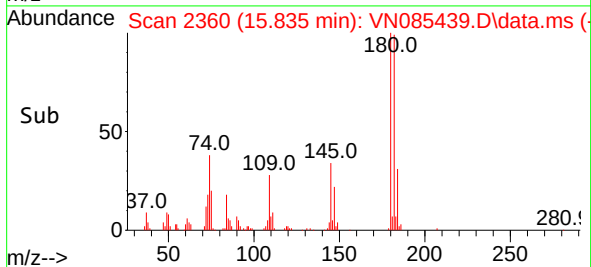
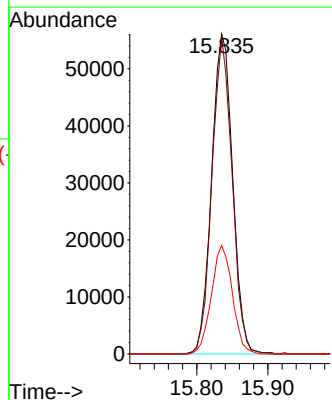
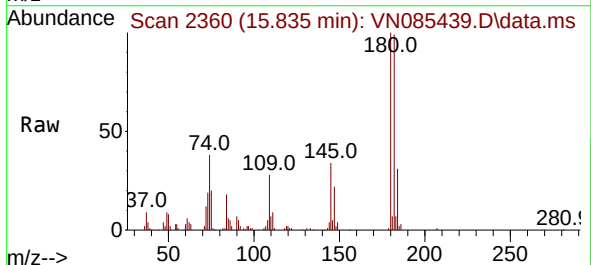
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion:128 Resp: 363882  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.6 16.0  
129 11.0 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 51.601 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion:180 Resp: 115251  
Ion Ratio Lower Upper  
180 100  
182 94.8 47.4 142.2  
145 33.8 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085440.D  
 Acq On : 14 Jan 2025 15:43  
 Operator : JC\MD  
 Sample : VSTDIC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

Quant Time: Jan 15 01:43:07 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Pentafluorobenzene        | 8.224  | 168   | 200796   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.094  | 114   | 340593   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865 | 117   | 296298   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.788 | 152   | 143526   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.571  | 65    | 60593    | 18.694   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 74 - 125 | Recovery | =      | 37.380%# |
| 35) Dibromofluoromethane     | 8.165  | 113   | 45655    | 19.322   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 75 - 124 | Recovery | =      | 38.640%# |
| 50) Toluene-d8               | 10.559 | 98    | 164391   | 19.581   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 86 - 113 | Recovery | =      | 39.160%# |
| 62) 4-Bromofluorobenzene     | 12.847 | 95    | 55798    | 19.430   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 77 - 121 | Recovery | =      | 38.860%# |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124  | 85    | 54666    | 20.107   | ug/l   | 98       |
| 3) Chloromethane             | 2.359  | 50    | 58426    | 19.848   | ug/l   | 100      |
| 4) Vinyl Chloride            | 2.512  | 62    | 58403    | 19.739   | ug/l   | 99       |
| 5) Bromomethane              | 2.954  | 94    | 36440    | 20.389   | ug/l   | 94       |
| 6) Chloroethane              | 3.118  | 64    | 37594    | 20.041   | ug/l   | 93       |
| 7) Trichlorofluoromethane    | 3.501  | 101   | 88121    | 20.526   | ug/l   | 99       |
| 8) Diethyl Ether             | 3.965  | 74    | 29138    | 19.647   | ug/l   | 98       |
| 9) 1,1,2-Trichlorotrifluo... | 4.371  | 101   | 48933    | 20.237   | ug/l   | 99       |
| 10) Methyl Iodide            | 4.589  | 142   | 56567    | 20.428   | ug/l   | 93       |
| 11) Tert butyl alcohol       | 5.506  | 59    | 37984    | 102.342  | ug/l   | 100      |
| 12) 1,1-Dichloroethene       | 4.342  | 96    | 44670    | 20.728   | ug/l   | 95       |
| 13) Acrolein                 | 4.171  | 56    | 49649    | 97.995   | ug/l   | 99       |
| 14) Allyl chloride           | 5.024  | 41    | 67705    | 19.362   | ug/l   | 96       |
| 15) Acrylonitrile            | 5.712  | 53    | 121626   | 103.171  | ug/l   | 99       |
| 16) Acetone                  | 4.424  | 43    | 101065   | 96.502   | ug/l   | 96       |
| 17) Carbon Disulfide         | 4.712  | 76    | 132300   | 19.939   | ug/l   | 98       |
| 18) Methyl Acetate           | 5.018  | 43    | 60873    | 19.115   | ug/l   | 99       |
| 19) Methyl tert-butyl Ether  | 5.795  | 73    | 148847   | 21.272   | ug/l   | 100      |
| 20) Methylene Chloride       | 5.271  | 84    | 52813    | 20.370   | ug/l   | 97       |
| 21) trans-1,2-Dichloroethene | 5.789  | 96    | 46115    | 20.023   | ug/l   | 98       |
| 22) Diisopropyl ether        | 6.671  | 45    | 166719   | 21.480   | ug/l   | 97       |
| 23) Vinyl Acetate            | 6.594  | 43    | 666942   | 122.364  | ug/l   | 99       |
| 24) 1,1-Dichloroethane       | 6.565  | 63    | 96875    | 20.469   | ug/l # | 96       |
| 25) 2-Butanone               | 7.477  | 43    | 159952   | 103.786  | ug/l   | 98       |
| 26) 2,2-Dichloropropane      | 7.483  | 77    | 79145    | 20.684   | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene   | 7.483  | 96    | 57454    | 21.180   | ug/l   | 98       |
| 28) Bromochloromethane       | 7.812  | 49    | 41181    | 18.703   | ug/l   | 99       |
| 29) Tetrahydrofuran          | 7.836  | 42    | 104792   | 107.247  | ug/l   | 99       |
| 30) Chloroform               | 7.959  | 83    | 99655    | 20.374   | ug/l   | 99       |
| 31) Cyclohexane              | 8.253  | 56    | 82980    | 20.173   | ug/l   | 97       |
| 32) 1,1,1-Trichloroethane    | 8.165  | 97    | 87659    | 20.431   | ug/l   | 98       |
| 36) 1,1-Dichloropropene      | 8.371  | 75    | 67949    | 20.490   | ug/l   | 98       |
| 37) Ethyl Acetate            | 7.553  | 43    | 66443    | 19.850   | ug/l   | 96       |
| 38) Carbon Tetrachloride     | 8.359  | 117   | 78842    | 20.767   | ug/l   | 96       |
| 39) Methylcyclohexane        | 9.594  | 83    | 65012    | 20.862   | ug/l   | 96       |
| 40) Benzene                  | 8.600  | 78    | 207985   | 20.873   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085440.D  
 Acq On : 14 Jan 2025 15:43  
 Operator : JC\MD  
 Sample : VSTDICC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

Quant Time: Jan 15 01:43:07 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 36578    | 21.004  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 78402    | 20.891  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 109131   | 20.347  | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 48009    | 20.699  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 52833    | 20.758  | ug/l   | 93       |
| 46) Dibromomethane            | 9.700  | 93   | 37721    | 20.540  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 78918    | 21.093  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.677  | 41   | 50224    | 20.808  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 17140    | 421.686 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 336911   | 108.249 | ug/l   | 100      |
| 52) Toluene                   | 10.630 | 92   | 125172   | 21.680  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 74129    | 20.965  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 81897    | 21.684  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 48039    | 21.025  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 70934    | 19.649  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 84210    | 21.196  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 153681   | 105.991 | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 240595   | 109.863 | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 56069    | 20.326  | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 48465    | 21.309  | ug/l   | 96       |
| 64) Tetrachloroethene         | 11.100 | 164  | 43243    | 21.408  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 136809   | 21.077  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 48370    | 20.304  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.959 | 91   | 229978   | 21.753  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.071 | 106  | 177755   | 45.494  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 84548    | 22.643  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 140581   | 22.749  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 36961    | 21.683  | ug/l # | 96       |
| 73) Isopropylbenzene          | 12.694 | 105  | 211354   | 21.819  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 94292    | 21.656  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 68151    | 19.917  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 90004    | 30.902  | ug/l   | 46       |
| 77) Bromobenzene              | 12.976 | 156  | 52022    | 20.556  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 252610   | 22.028  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 158511   | 21.358  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 180294   | 22.533  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 25146    | 23.322  | ug/l # | 82       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 161880   | 21.906  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 147541   | 21.958  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 183144   | 22.965  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 209133   | 22.457  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 168888   | 21.661  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 97652    | 20.952  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 98321    | 20.351  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 142673   | 21.355  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 35205    | 19.858  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 94954    | 20.425  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12859    | 20.580  | ug/l   | 100      |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 45878    | 21.233  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 22719    | 19.805  | ug/l   | 95       |
| 95) Naphthalene               | 15.635 | 128  | 134793   | 20.906  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 45468    | 20.797  | ug/l   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
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Acq On : 14 Jan 2025 15:43  
Operator : JC\MD  
Sample : VSTDICC020  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Quant Time: Jan 15 01:43:07 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

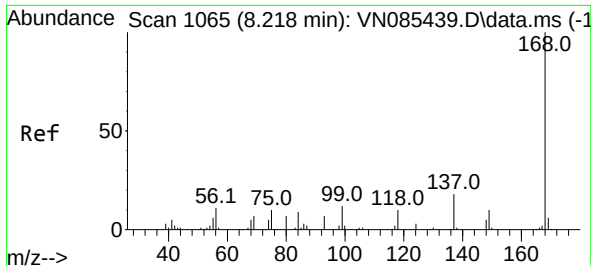
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|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 15 01:43:07 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
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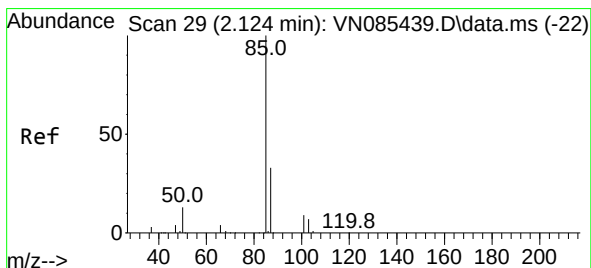
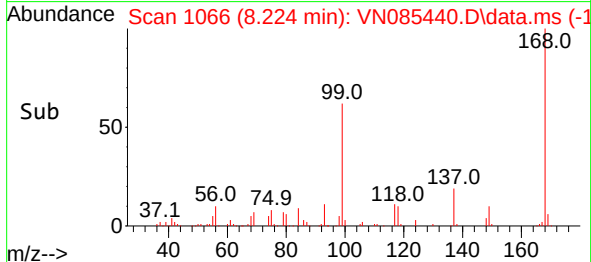
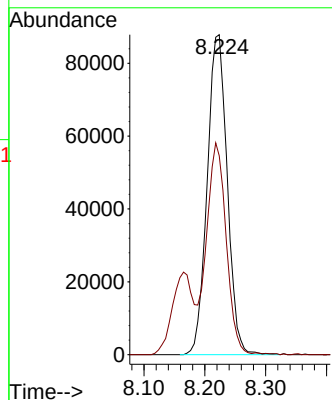
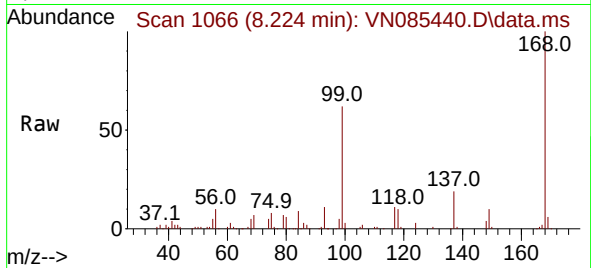




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

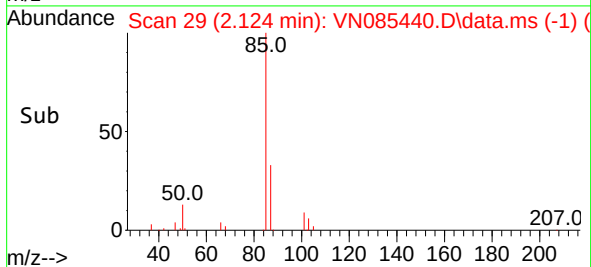
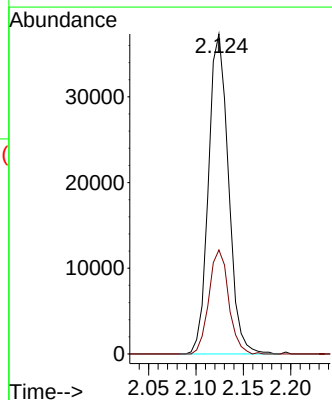
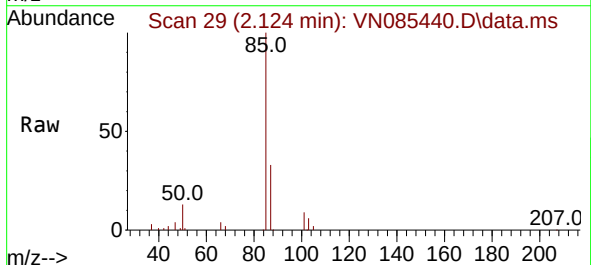
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MSVOA\_N  
ClientSampleId :  
VSTDIC020

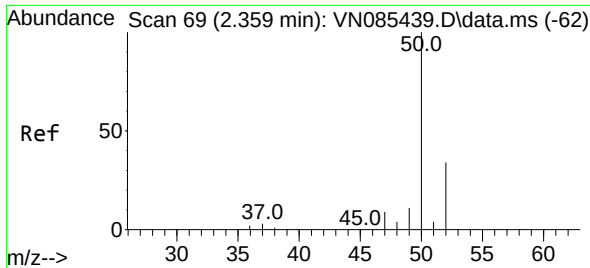
Tgt Ion:168 Resp: 200796  
Ion Ratio Lower Upper  
168 100  
99 62.2 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 20.107 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 85 Resp: 54666  
Ion Ratio Lower Upper  
85 100  
87 32.5 16.7 50.1

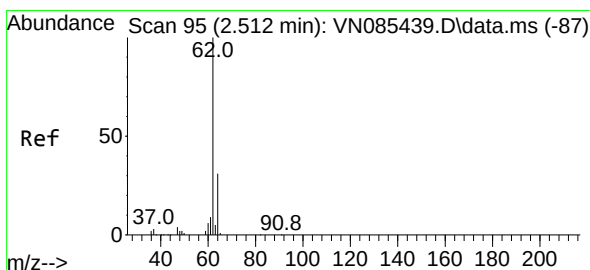
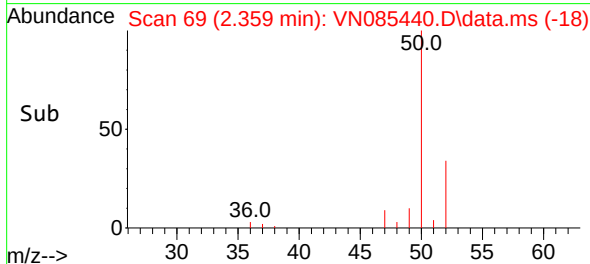
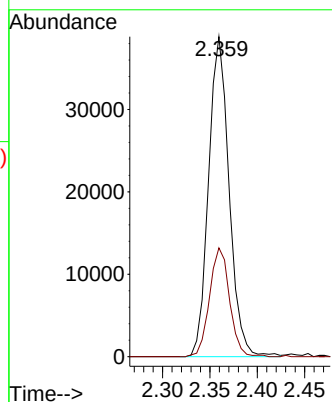
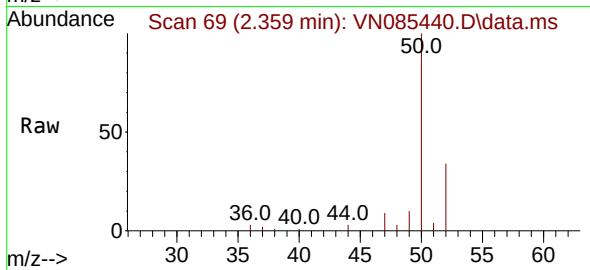




#3  
Chloromethane  
Concen: 19.848 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

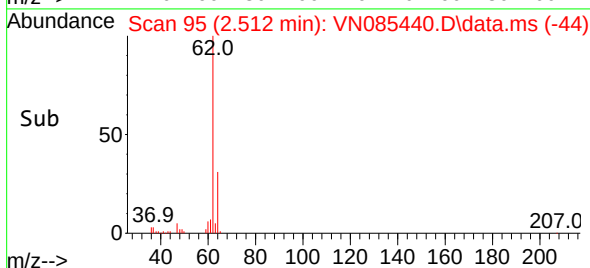
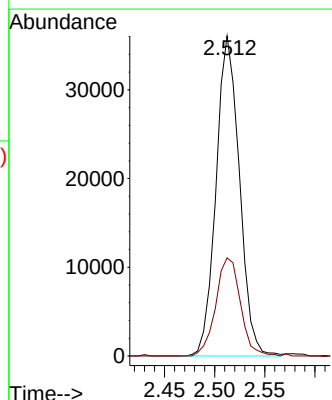
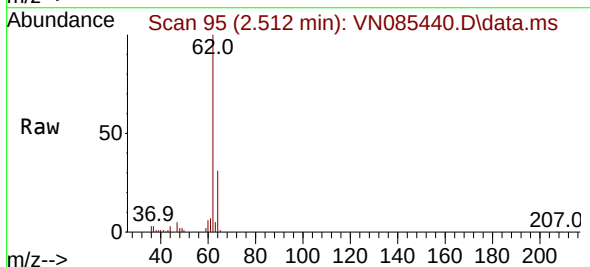
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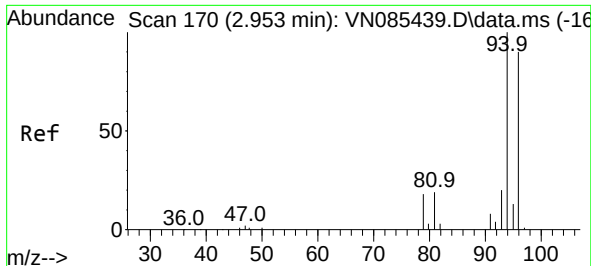
Tgt Ion: 50 Resp: 58426  
Ion Ratio Lower Upper  
50 100  
52 34.0 27.0 40.6



#4  
Vinyl Chloride  
Concen: 19.739 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 62 Resp: 58403  
Ion Ratio Lower Upper  
62 100  
64 30.7 24.8 37.2

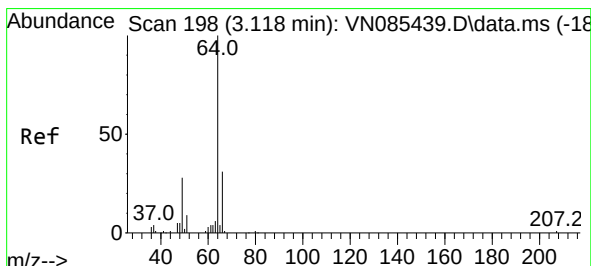
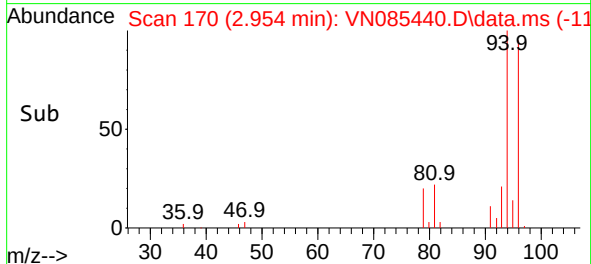
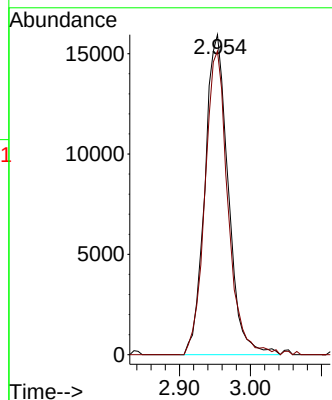
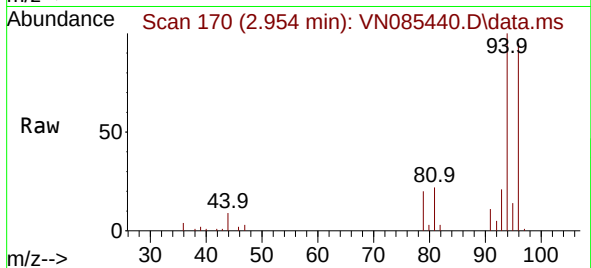




#5  
Bromomethane  
Concen: 20.389 ug/l  
RT: 2.954 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

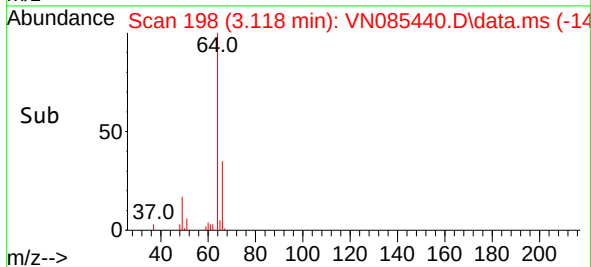
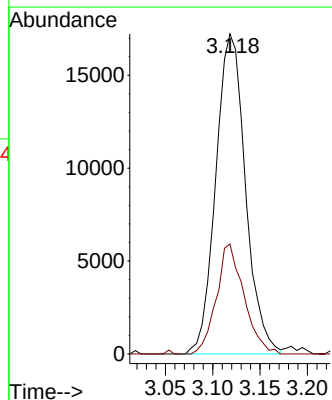
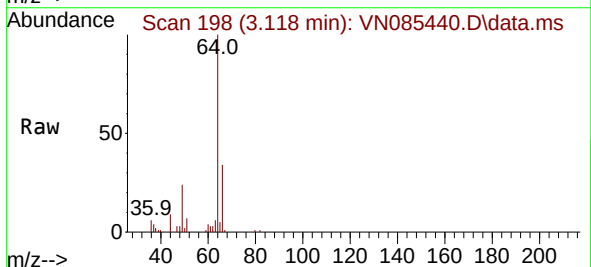
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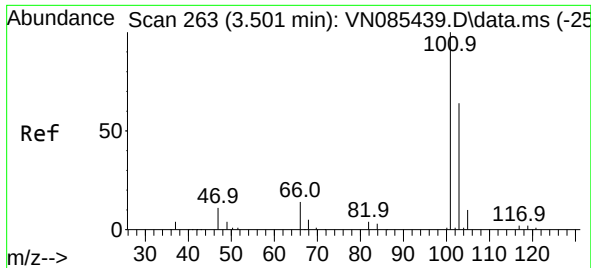
Tgt Ion: 94 Resp: 36440  
Ion Ratio Lower Upper  
94 100  
96 94.9 71.8 107.6



#6  
Chloroethane  
Concen: 20.041 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 64 Resp: 37594  
Ion Ratio Lower Upper  
64 100  
66 34.3 24.6 36.8

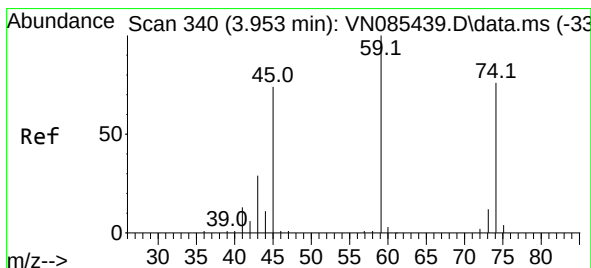
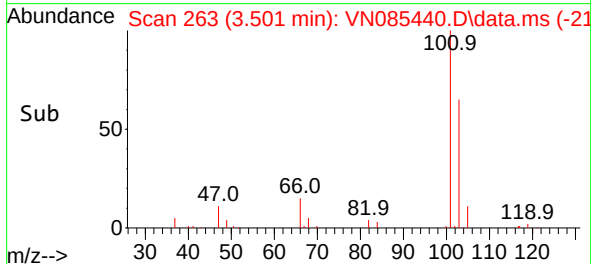
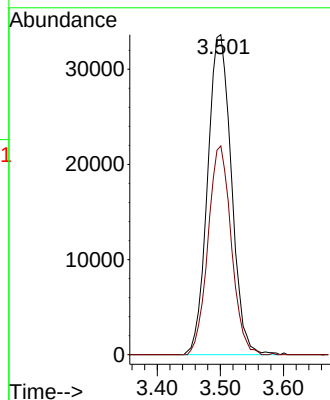
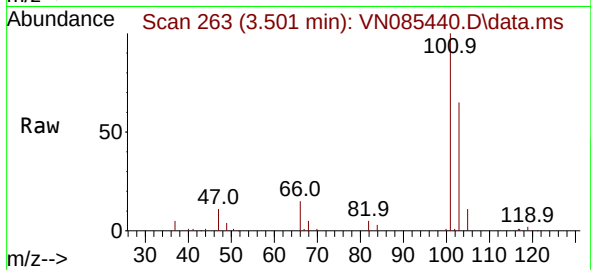




#7  
 Trichlorofluoromethane  
 Concen: 20.526 ug/l  
 RT: 3.501 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

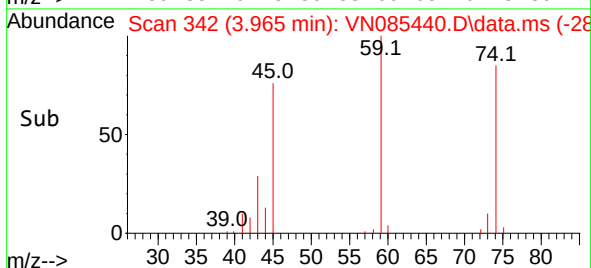
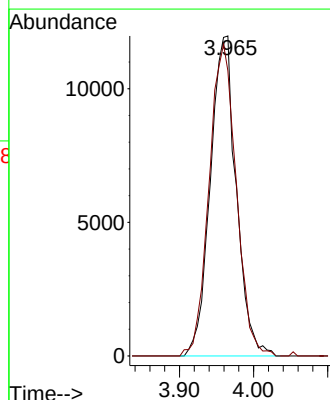
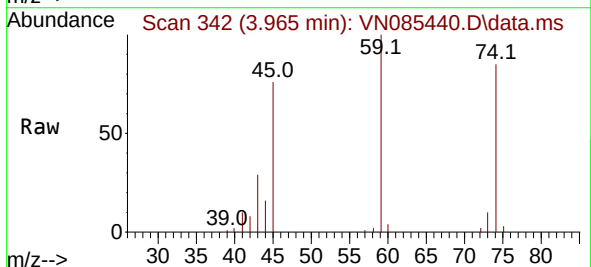
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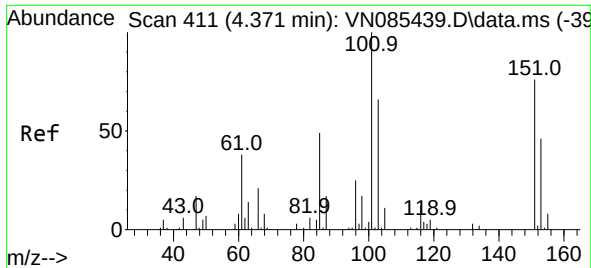
Tgt Ion:101 Resp: 88121  
 Ion Ratio Lower Upper  
 101 100  
 103 65.3 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 19.647 ug/l  
 RT: 3.965 min Scan# 342  
 Delta R.T. 0.012 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion: 74 Resp: 29138  
 Ion Ratio Lower Upper  
 74 100  
 45 101.8 49.7 149.1

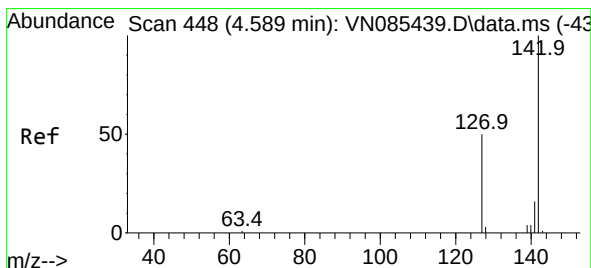
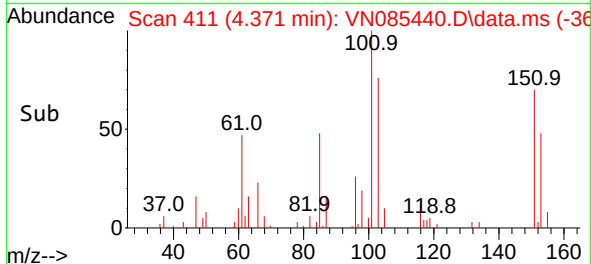
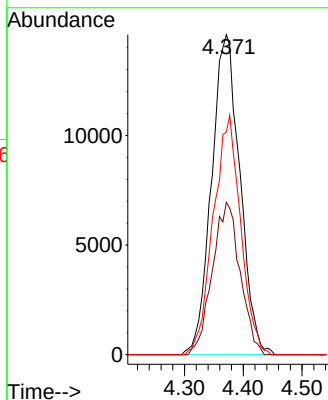
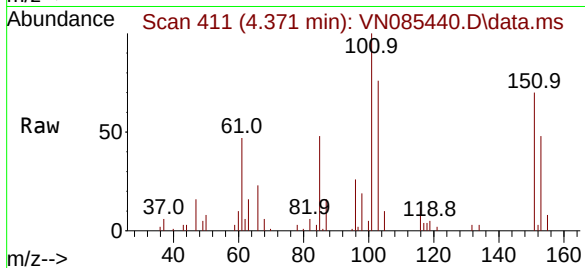




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 20.237 ug/l  
 RT: 4.371 min Scan# 411  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

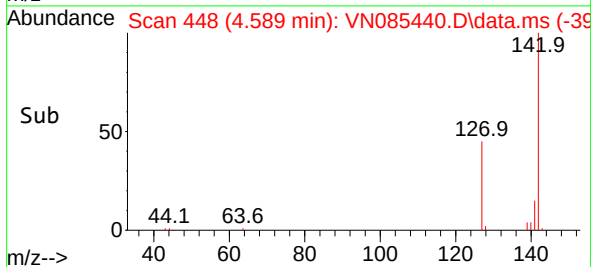
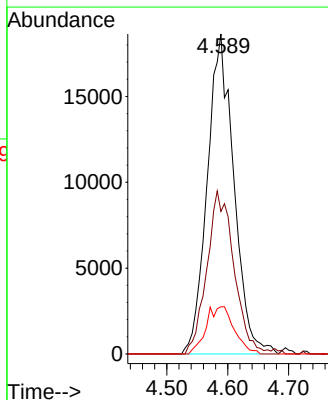
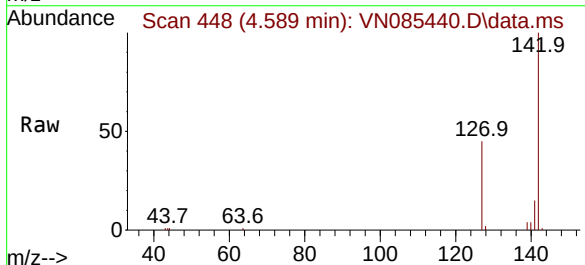
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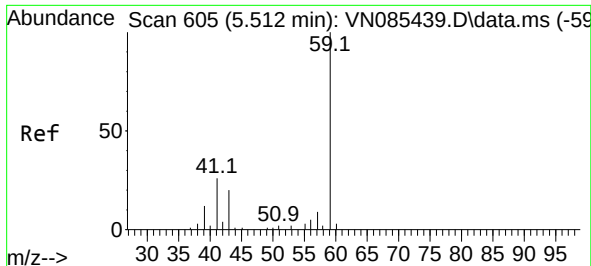
Tgt Ion:101 Resp: 48933  
 Ion Ratio Lower Upper  
 101 100  
 85 46.6 37.8 56.8  
 151 72.1 58.8 88.2



#10  
 Methyl Iodide  
 Concen: 20.428 ug/l  
 RT: 4.589 min Scan# 448  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion:142 Resp: 56567  
 Ion Ratio Lower Upper  
 142 100  
 127 44.6 40.3 60.5  
 141 14.8 12.8 19.2

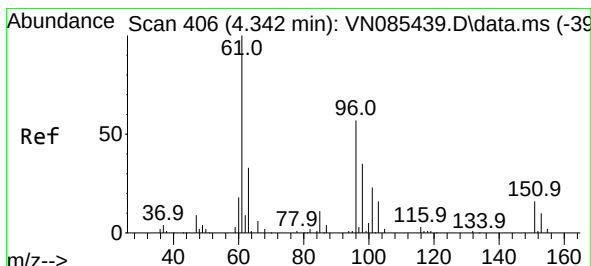
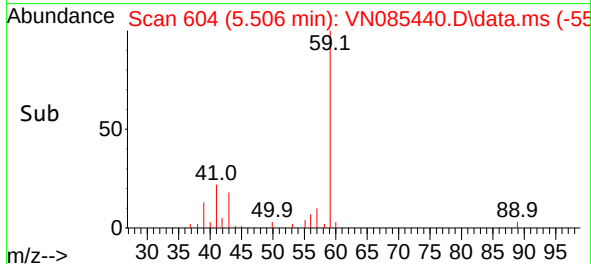
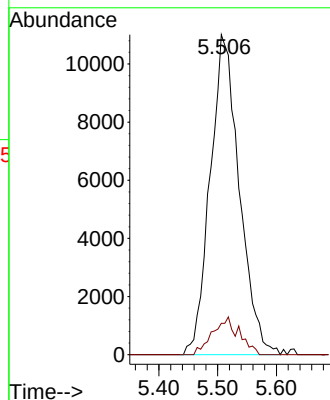
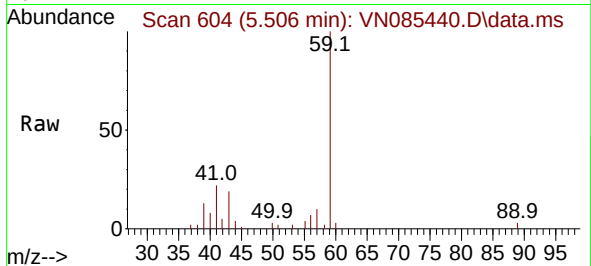




#11  
Tert butyl alcohol  
Concen: 102.342 ug/l  
RT: 5.506 min Scan# 605  
Delta R.T. -0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

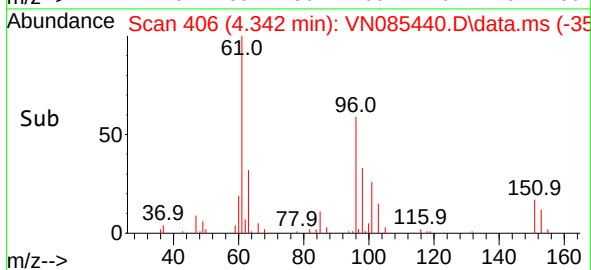
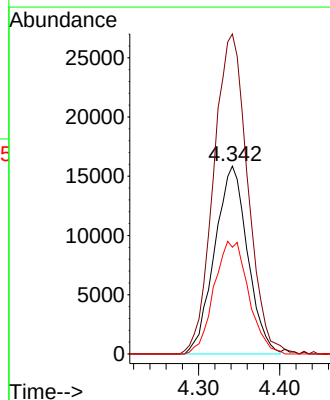
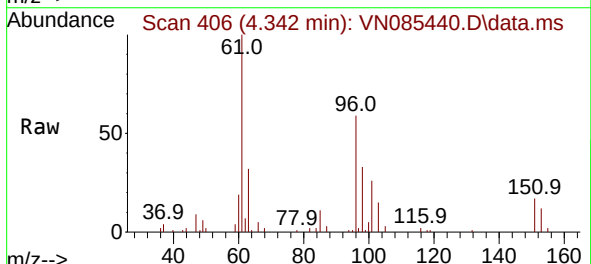
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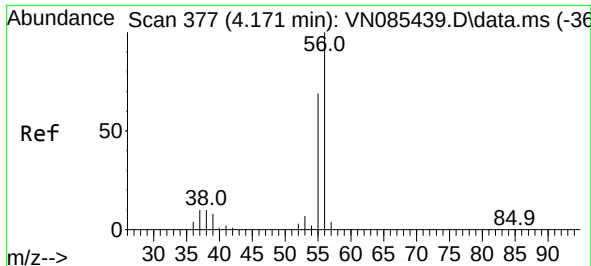
Tgt Ion: 59 Resp: 37984  
Ion Ratio Lower Upper  
59 100  
57 10.7 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 20.728 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 44670  
Ion Ratio Lower Upper  
96 100  
61 170.3 141.0 211.4  
98 56.8 49.0 73.6





#13

Acrolein

Concen: 97.995 ug/l

RT: 4.171 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

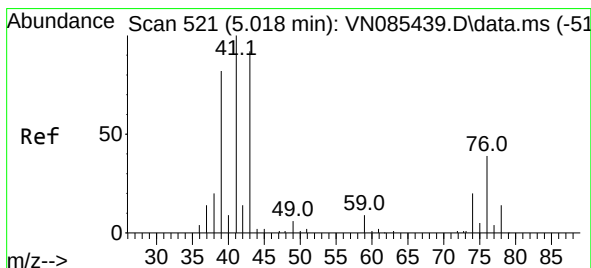
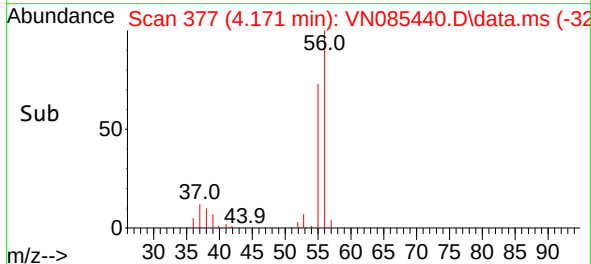
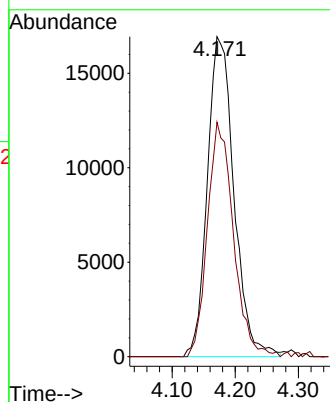
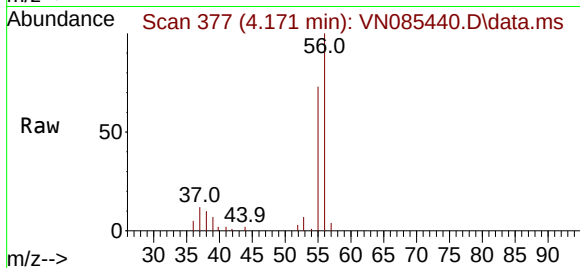
VSTDICC020

Tgt Ion: 56 Resp: 49649

Ion Ratio Lower Upper

56 100

55 71.4 56.3 84.5



#14

Allyl chloride

Concen: 19.362 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

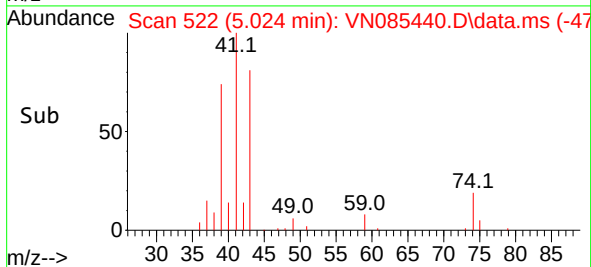
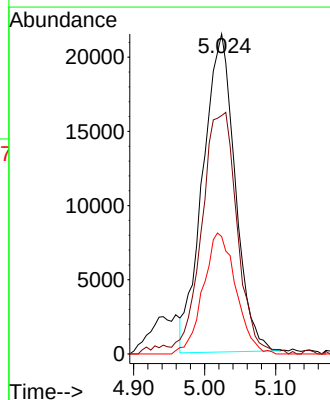
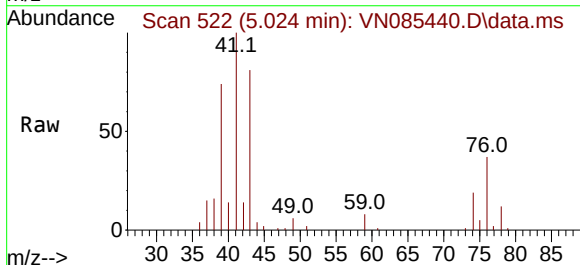
Tgt Ion: 41 Resp: 67705

Ion Ratio Lower Upper

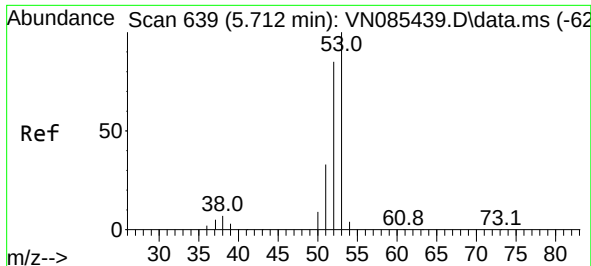
41 100

39 85.0 64.4 96.6

76 38.6 30.5 45.7



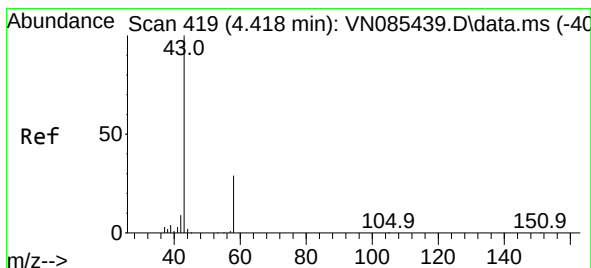
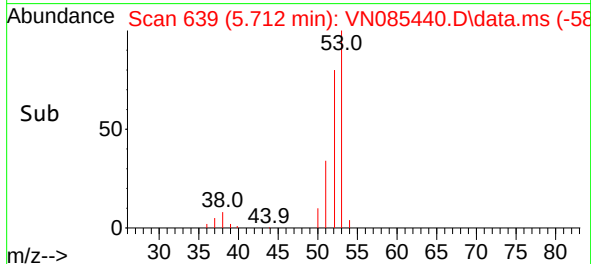
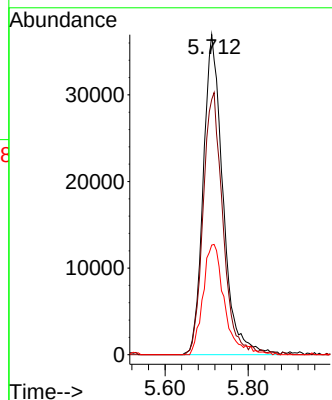
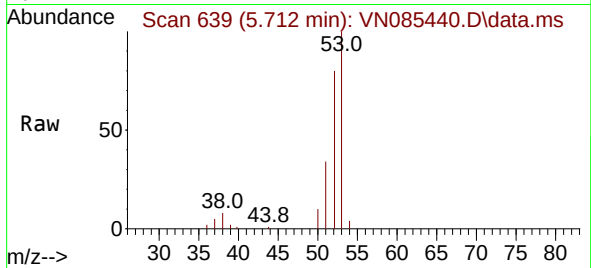




#15  
Acrylonitrile  
Concen: 103.171 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

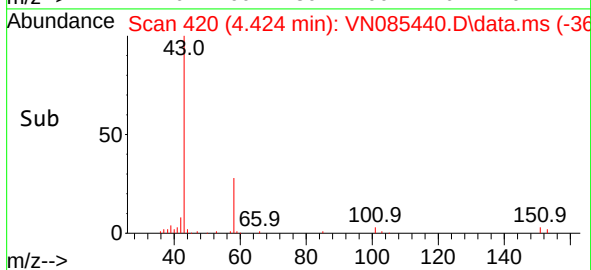
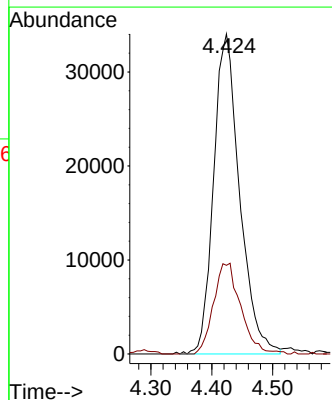
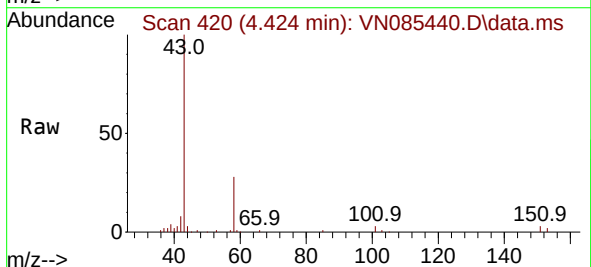
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

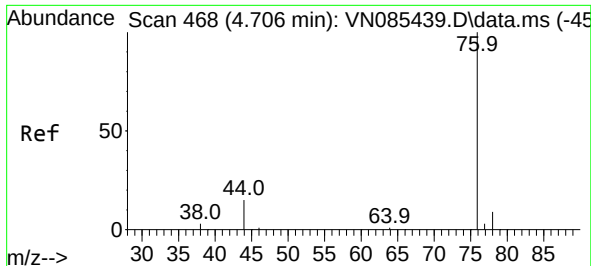
Tgt Ion: 53 Resp: 121626  
Ion Ratio Lower Upper  
53 100  
52 81.1 65.5 98.3  
51 36.1 29.8 44.8



#16  
Acetone  
Concen: 96.502 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 101065  
Ion Ratio Lower Upper  
43 100  
58 27.7 23.8 35.6

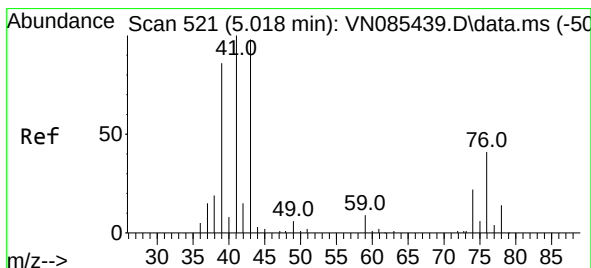
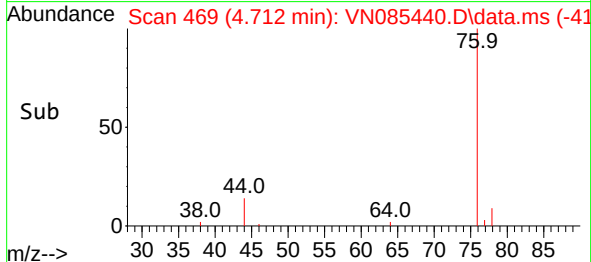
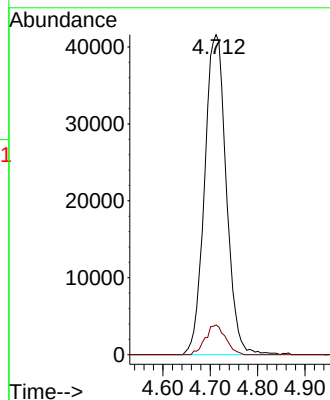
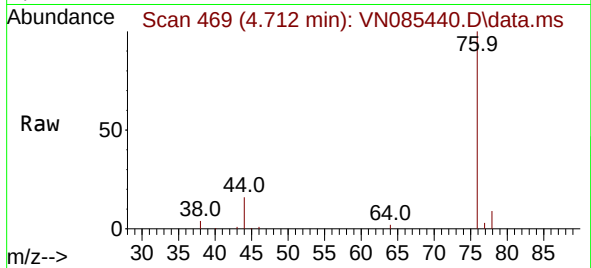




#17  
Carbon Disulfide  
Concen: 19.939 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

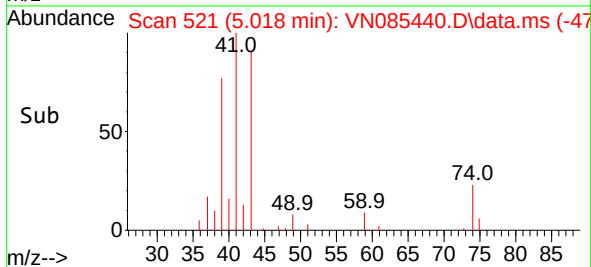
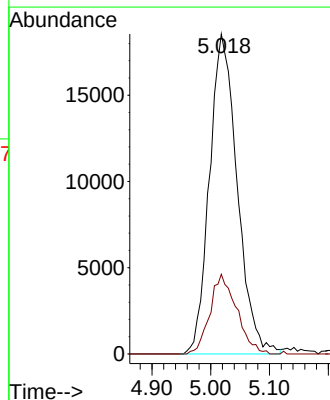
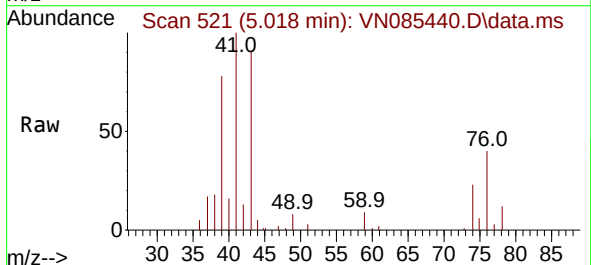
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

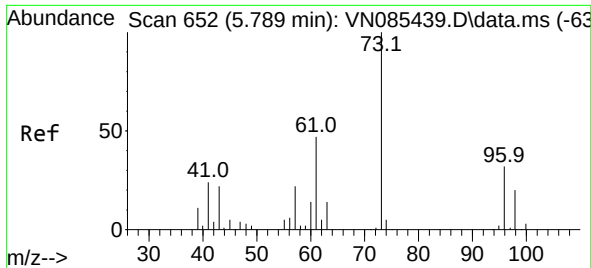
Tgt Ion: 76 Resp: 132300  
Ion Ratio Lower Upper  
76 100  
78 9.3 6.9 10.3



#18  
Methyl Acetate  
Concen: 19.115 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 60873  
Ion Ratio Lower Upper  
43 100  
74 24.0 18.6 28.0

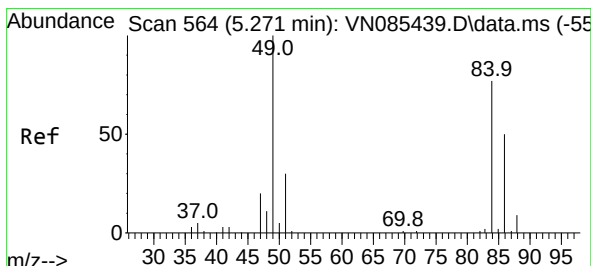
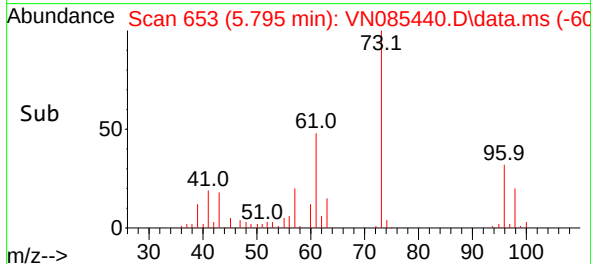
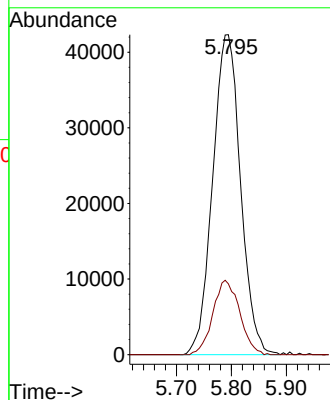
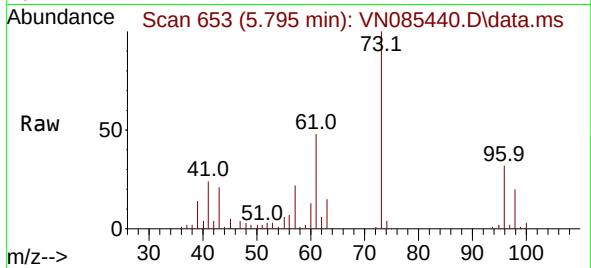




#19  
Methyl tert-butyl Ether  
Concen: 21.272 ug/l  
RT: 5.795 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

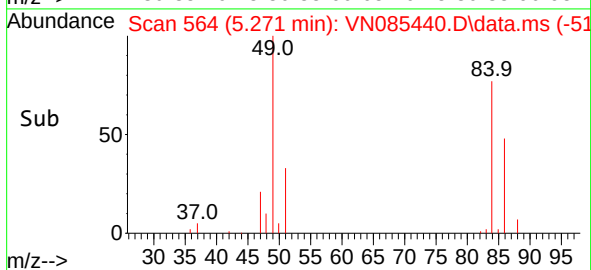
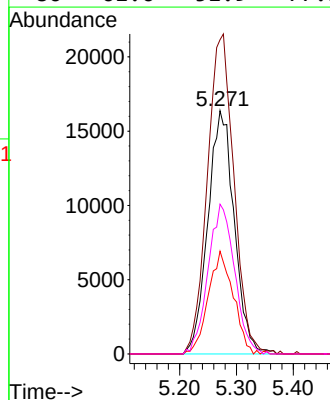
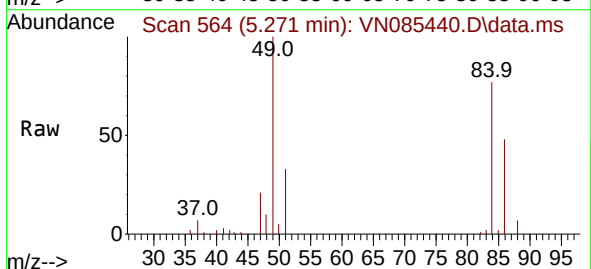
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

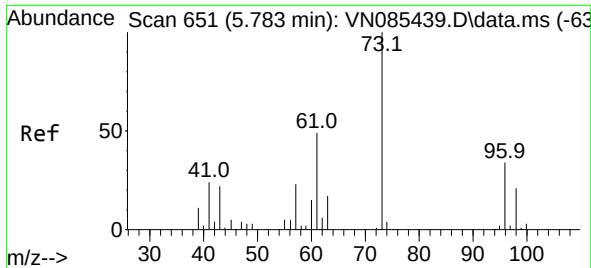
Tgt Ion: 73 Resp: 148847  
Ion Ratio Lower Upper  
73 100  
57 22.1 17.8 26.8



#20  
Methylene Chloride  
Concen: 20.370 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 84 Resp: 52813  
Ion Ratio Lower Upper  
84 100  
49 129.2 104.1 156.1  
51 42.2 31.0 46.4  
86 61.6 51.9 77.9

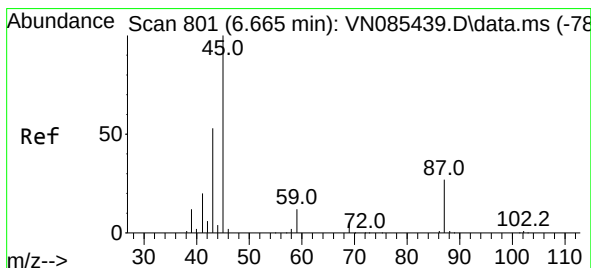
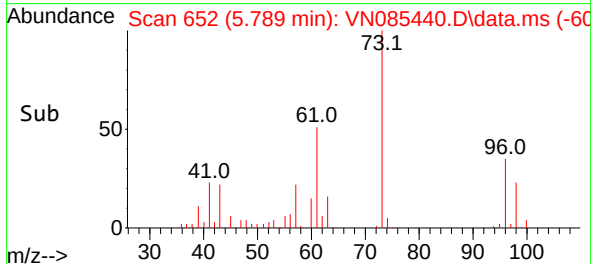
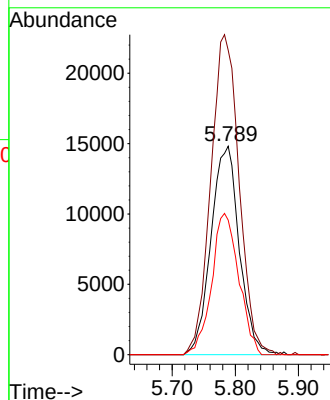
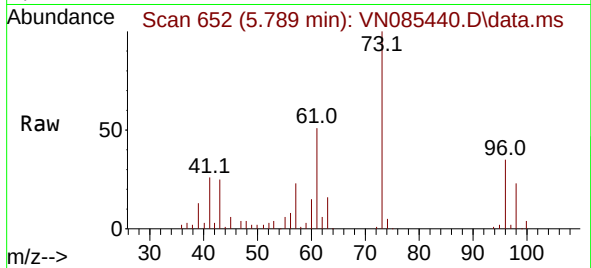




#21  
trans-1,2-Dichloroethene  
Concen: 20.023 ug/l  
RT: 5.789 min Scan# 651  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

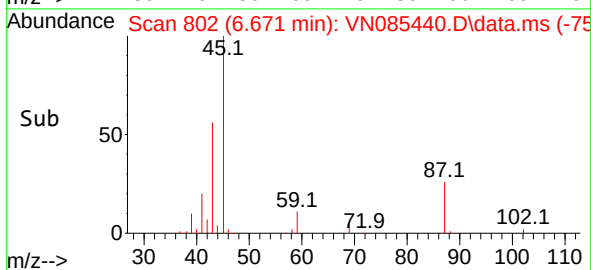
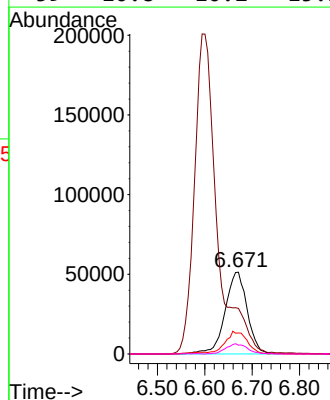
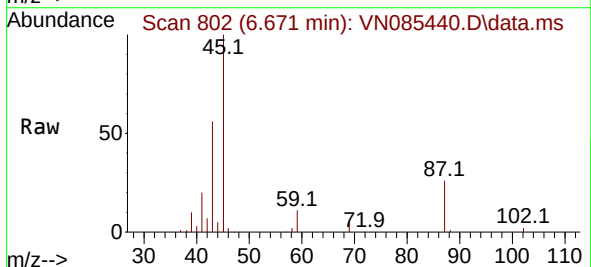
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

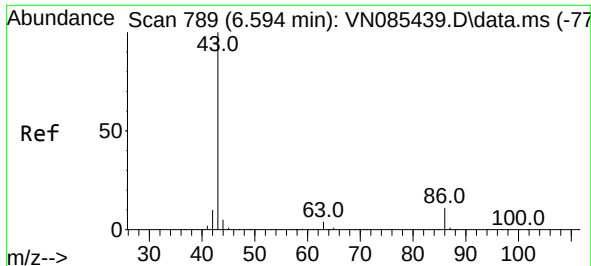
Tgt Ion: 96 Resp: 46115  
Ion Ratio Lower Upper  
96 100  
61 146.1 115.7 173.5  
98 64.5 49.8 74.8



#22  
Diisopropyl ether  
Concen: 21.480 ug/l  
RT: 6.671 min Scan# 802  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 45 Resp: 166719  
Ion Ratio Lower Upper  
45 100  
43 54.3 45.0 67.6  
87 25.3 21.8 32.8  
59 10.8 10.2 15.2

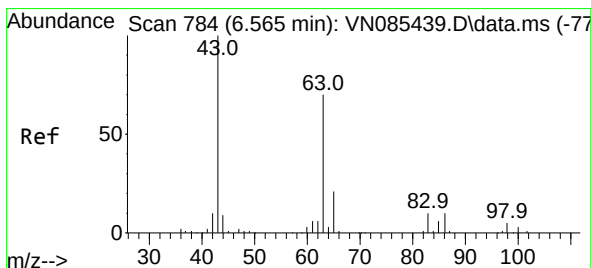
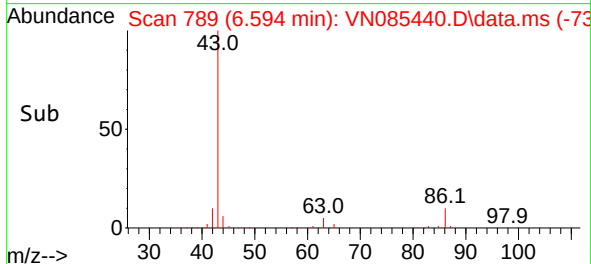
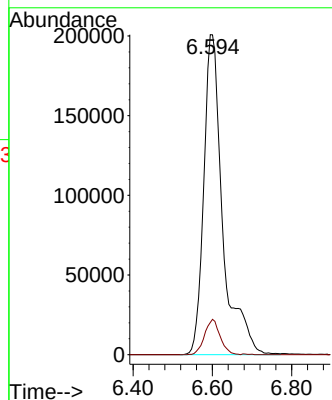
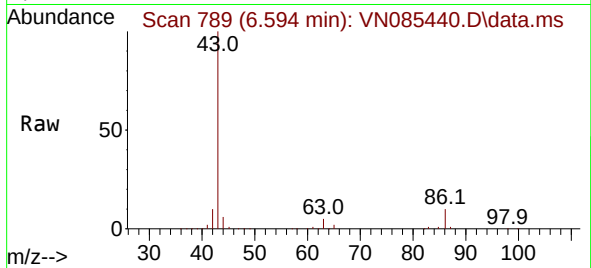




#23  
 Vinyl Acetate  
 Concen: 122.364 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

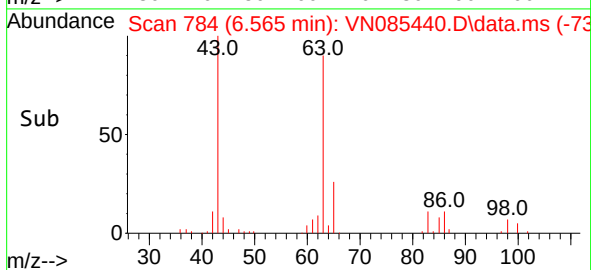
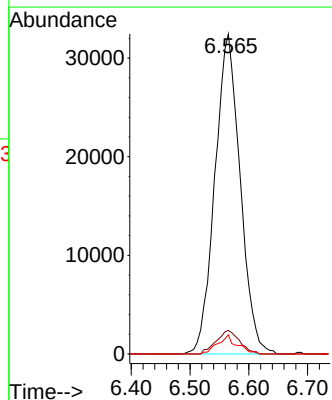
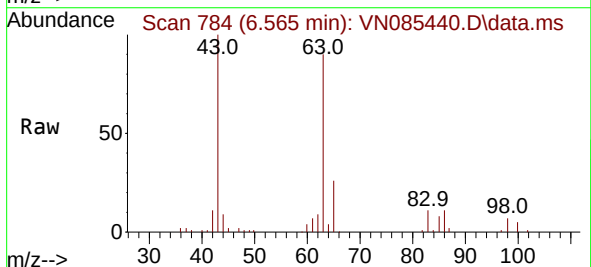
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

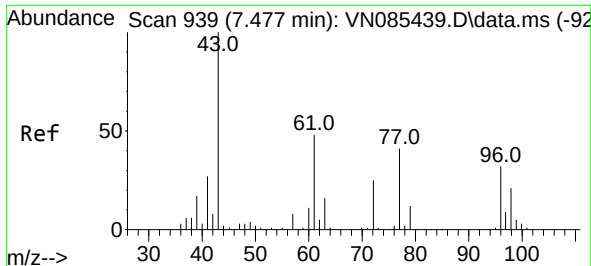
Tgt Ion: 43 Resp: 666942  
 Ion Ratio Lower Upper  
 43 100  
 86 10.1 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 20.469 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 96875  
 Ion Ratio Lower Upper  
 63 100  
 98 7.4 3.3 9.8  
 100 6.0 2.0 6.0#

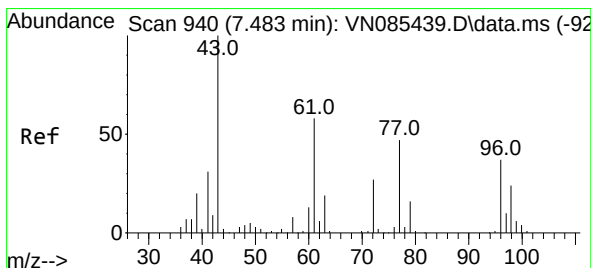
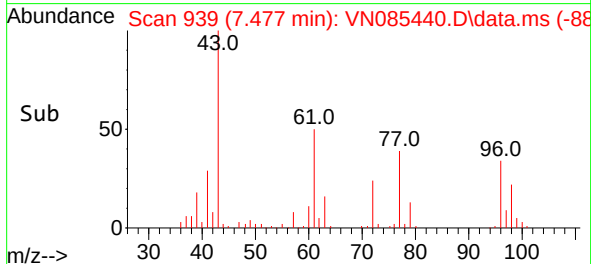
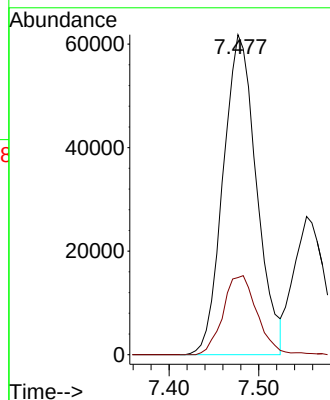
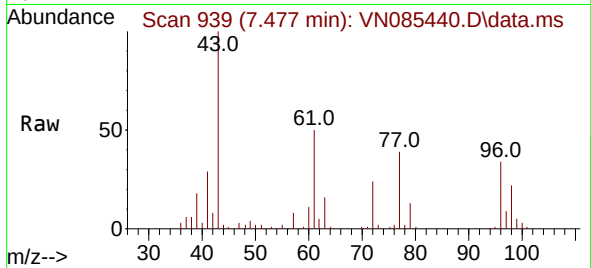




#25  
2-Butanone  
Concen: 103.786 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

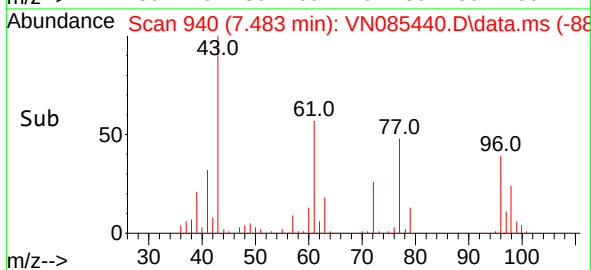
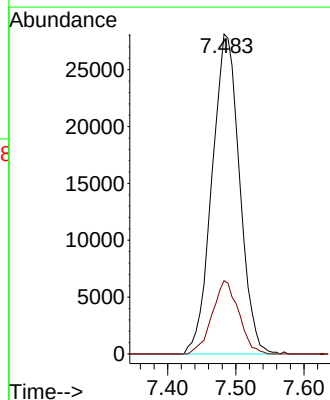
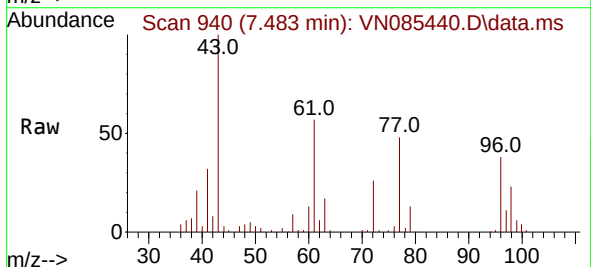
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

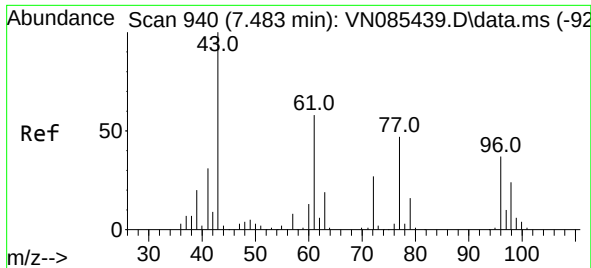
Tgt Ion: 43 Resp: 159952  
Ion Ratio Lower Upper  
43 100  
72 24.1 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 20.684 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 77 Resp: 79145  
Ion Ratio Lower Upper  
77 100  
97 22.0 10.7 32.1

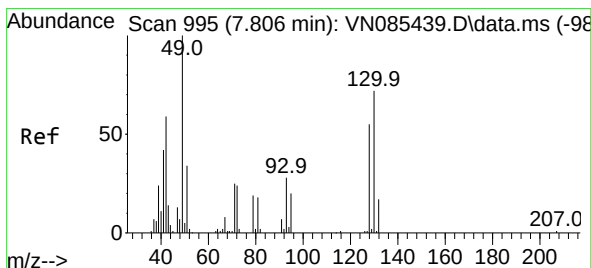
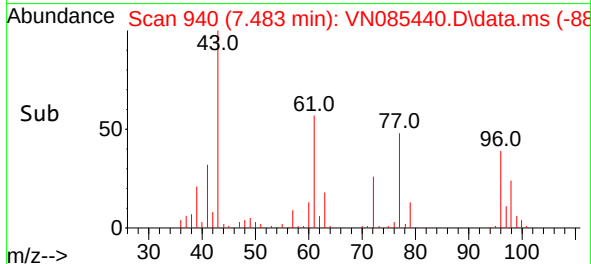
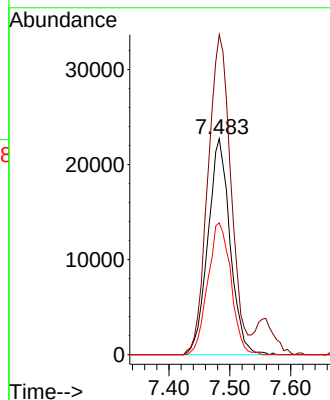
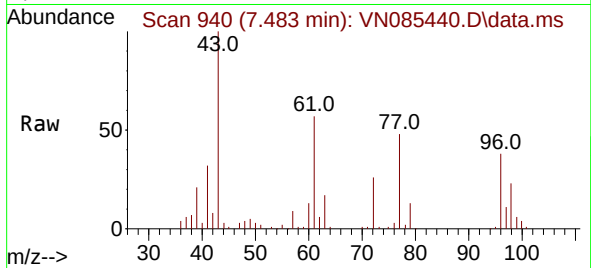




#27  
 cis-1,2-Dichloroethene  
 Concen: 21.180 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

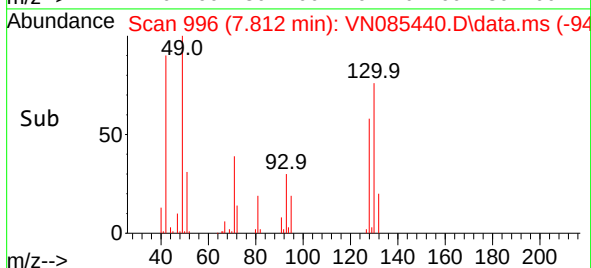
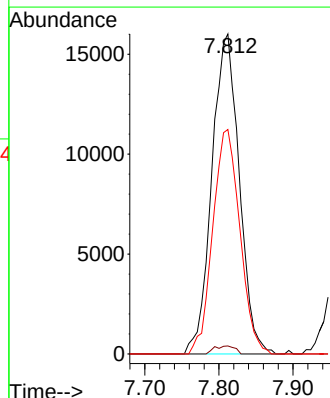
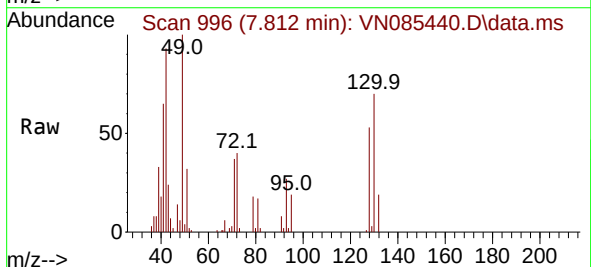
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 ClientSampleId :  
 VSTDIC020

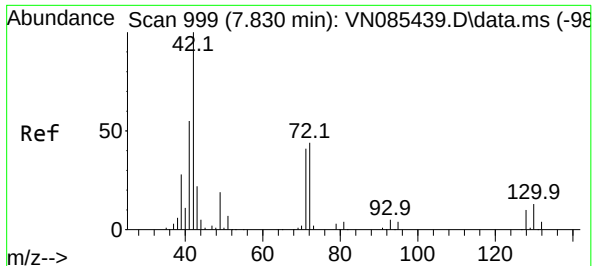
Tgt Ion: 96 Resp: 57454  
 Ion Ratio Lower Upper  
 96 100  
 61 153.0 0.0 311.8  
 98 63.7 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 18.703 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion: 49 Resp: 41181  
 Ion Ratio Lower Upper  
 49 100  
 129 1.9 0.0 4.4  
 130 69.3 55.0 82.4





#29

Tetrahydrofuran

Concen: 107.247 ug/l

RT: 7.836 min Scan# 1000

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

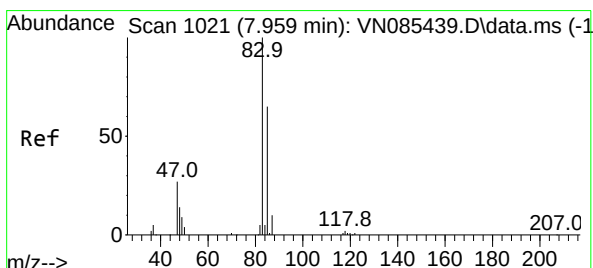
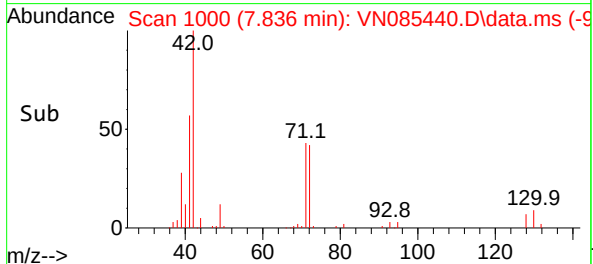
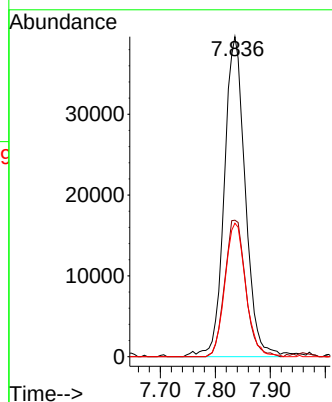
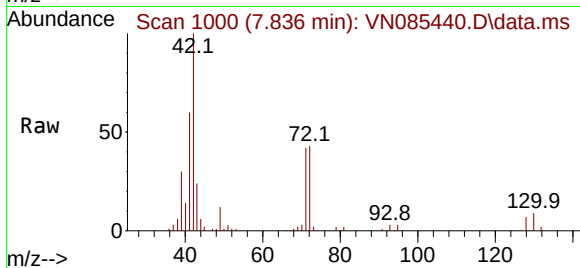
Tgt Ion: 42 Resp: 104792

Ion Ratio Lower Upper

42 100

72 42.6 34.2 51.2

71 41.4 32.5 48.7



#30

Chloroform

Concen: 20.374 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085440.D

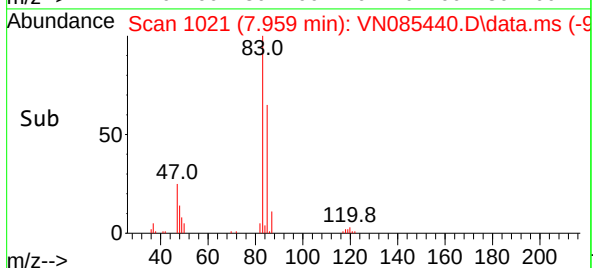
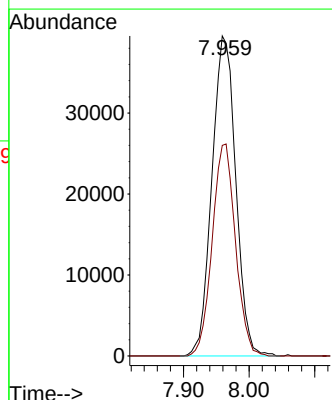
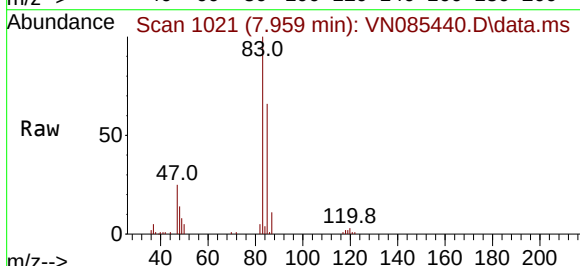
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 99655

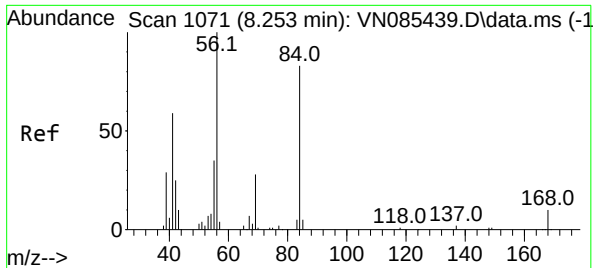
Ion Ratio Lower Upper

83 100

85 65.8 51.8 77.6



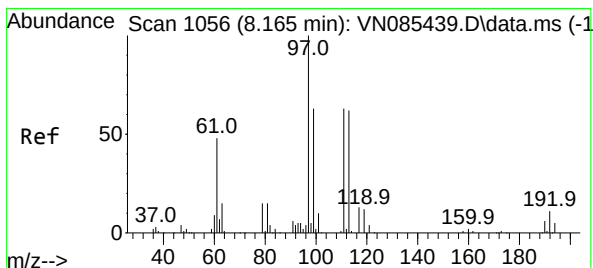
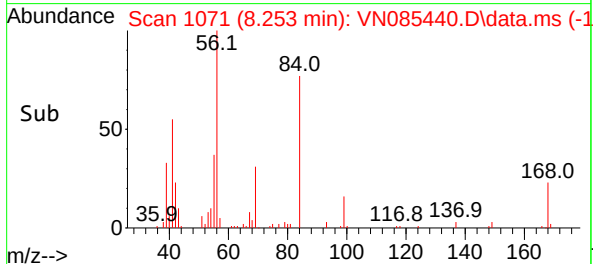
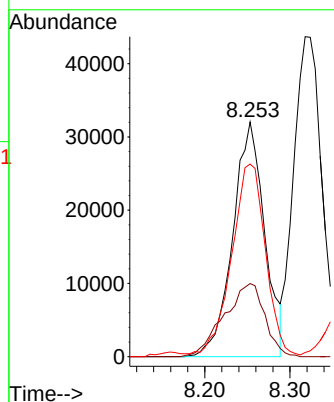
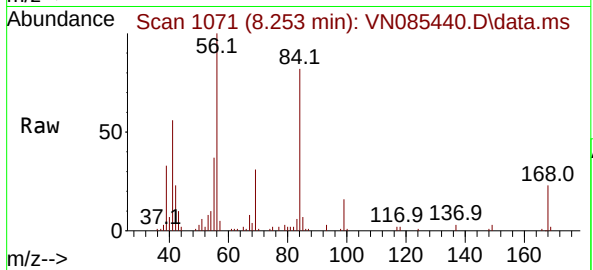




#31  
Cyclohexane  
Concen: 20.173 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

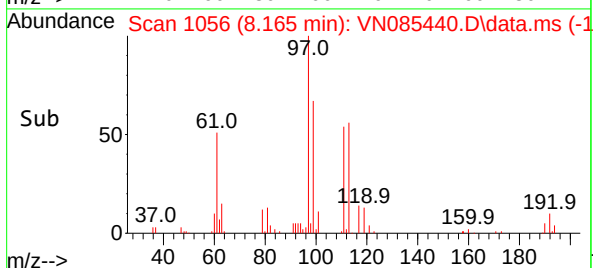
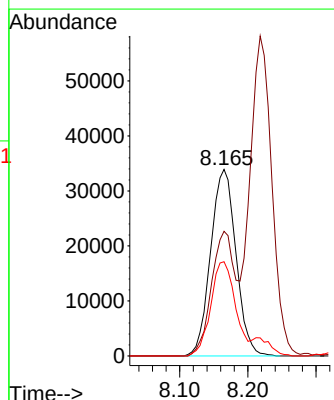
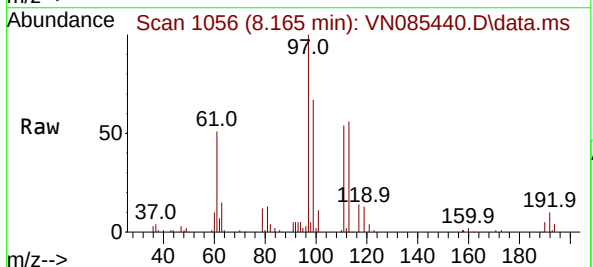
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

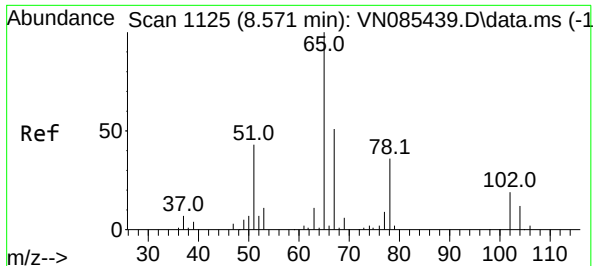
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 56    | Resp: | 82980 |
| Ion Ratio | Lower | Upper |       |
| 56        | 100   |       |       |
| 69        | 31.2  | 22.2  | 33.4  |
| 84        | 80.8  | 66.4  | 99.6  |



#32  
1,1,1-Trichloroethane  
Concen: 20.431 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 97    | Resp: | 87659 |
| Ion Ratio | Lower | Upper |       |
| 97        | 100   |       |       |
| 99        | 64.2  | 49.8  | 74.6  |
| 61        | 50.3  | 41.4  | 62.2  |





#33

1,2-Dichloroethane-d4

Concen: 18.694 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

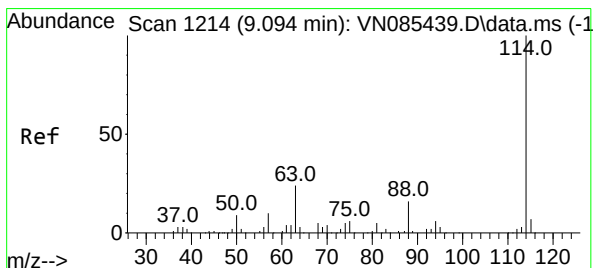
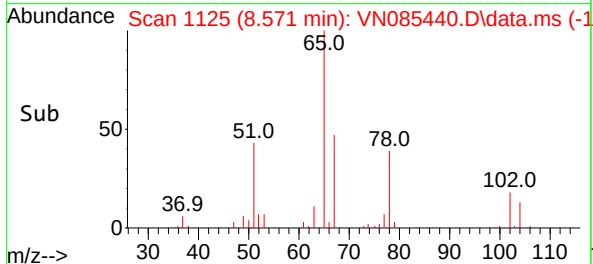
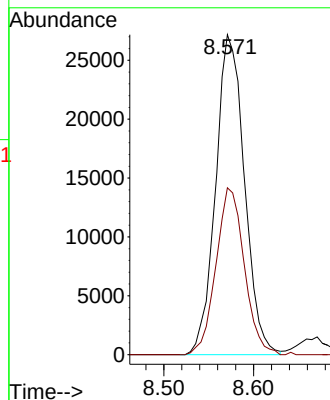
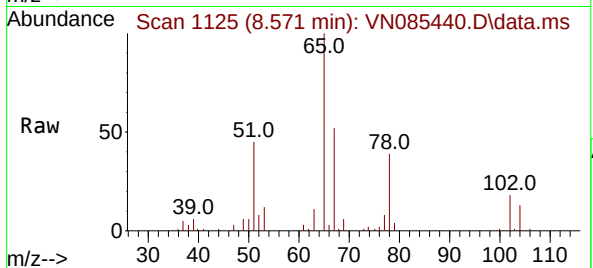
VSTDICC020

Tgt Ion: 65 Resp: 60593

Ion Ratio Lower Upper

65 100

67 51.2 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

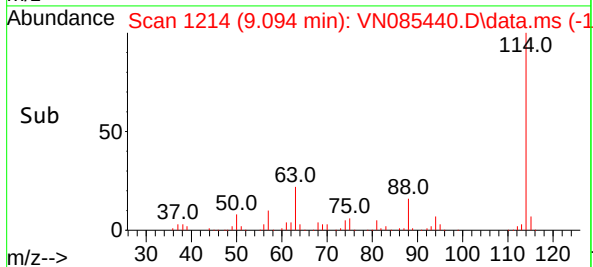
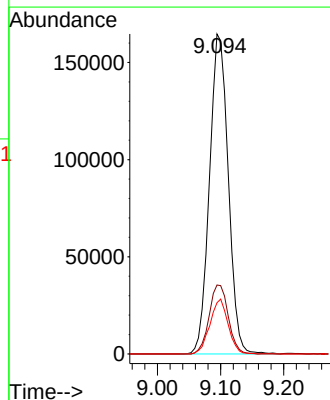
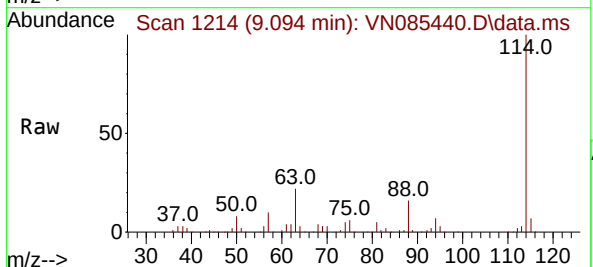
Tgt Ion: 114 Resp: 340593

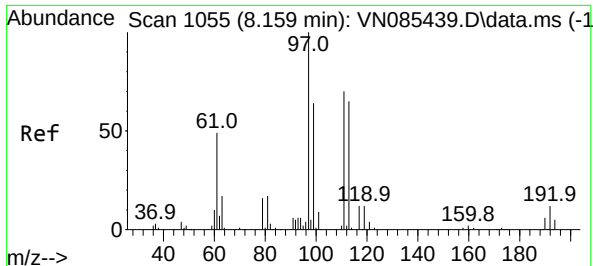
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 16.0 0.0 32.6

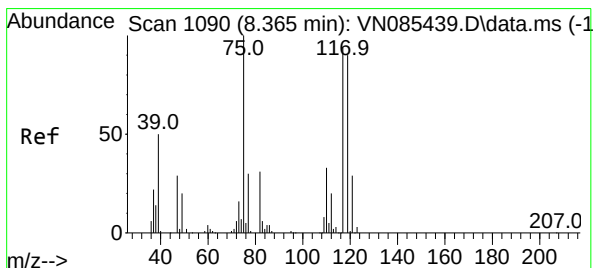
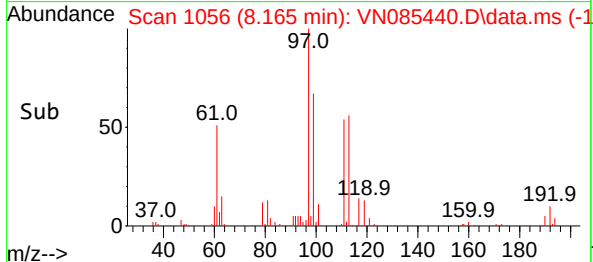
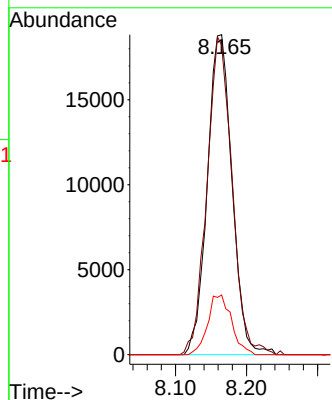
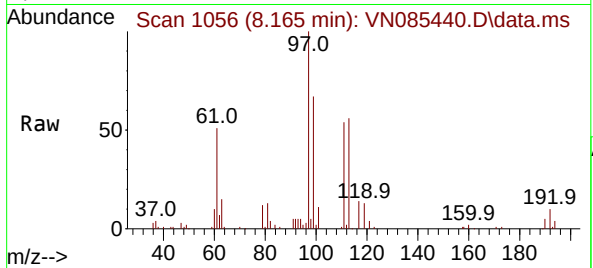




#35  
Dibromofluoromethane  
Concen: 19.322 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

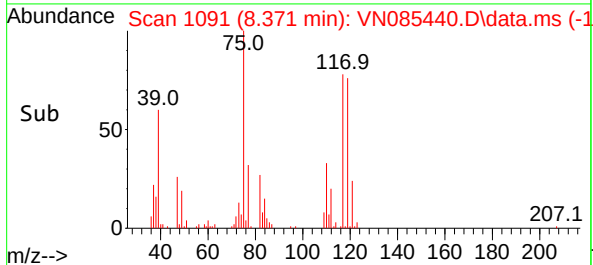
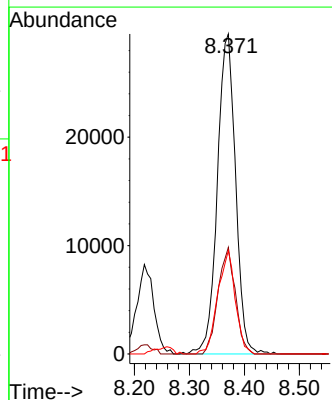
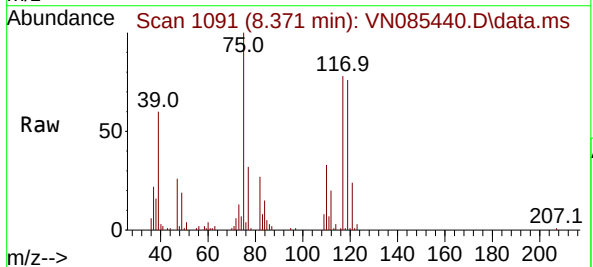
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

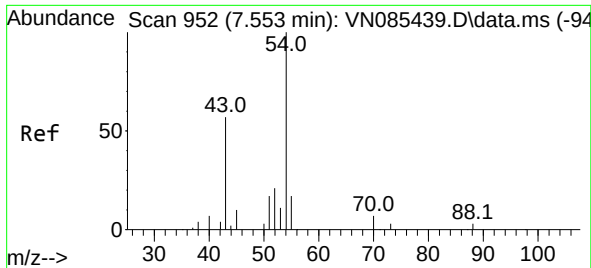
Tgt Ion:113 Resp: 45655  
Ion Ratio Lower Upper  
113 100  
111 100.6 82.7 124.1  
192 17.9 14.3 21.5



#36  
1,1-Dichloropropene  
Concen: 20.490 ug/l  
RT: 8.371 min Scan# 1091  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 67949  
Ion Ratio Lower Upper  
75 100  
110 31.8 16.5 49.5  
77 31.1 24.4 36.6

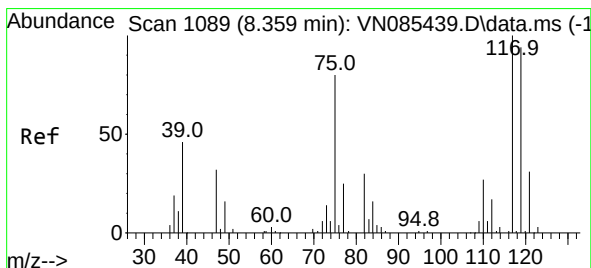
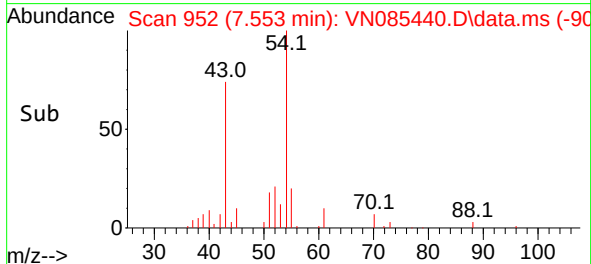
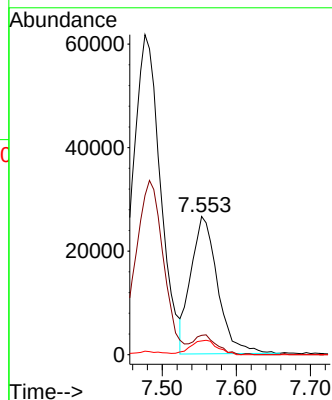
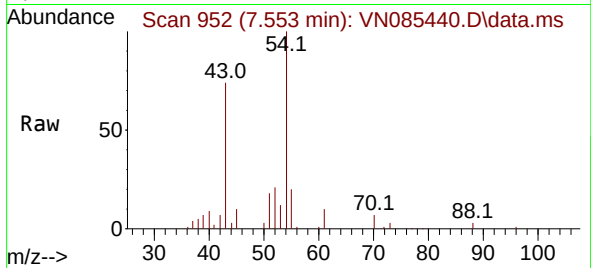




#37  
Ethyl Acetate  
Concen: 19.850 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

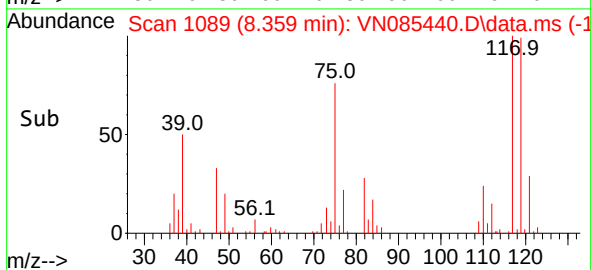
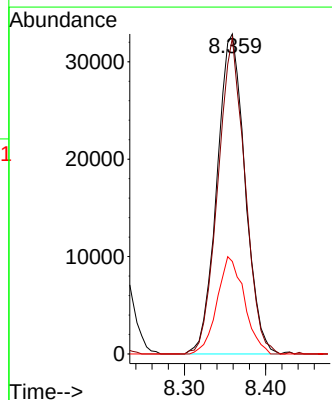
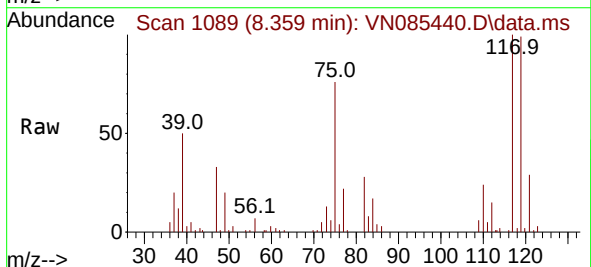
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

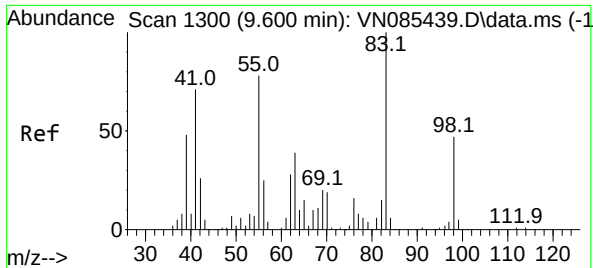
Tgt Ion: 43 Resp: 66443  
Ion Ratio Lower Upper  
43 100  
61 11.9 10.9 16.3  
70 10.6 7.5 11.3



#38  
Carbon Tetrachloride  
Concen: 20.767 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 117 Resp: 78842  
Ion Ratio Lower Upper  
117 100  
119 98.9 75.4 113.2  
121 28.9 24.6 37.0





#39

Methylcyclohexane

Concen: 20.862 ug/l

RT: 9.594 min Scan# 1129

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

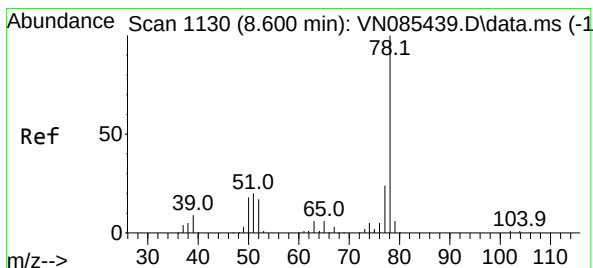
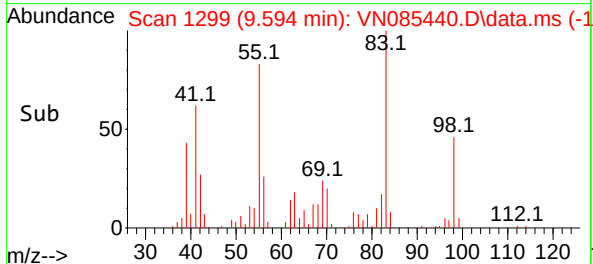
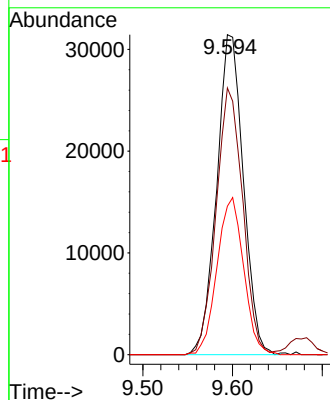
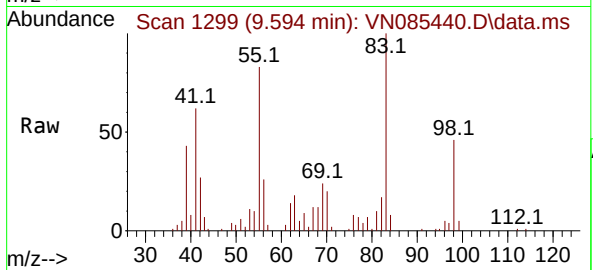
Tgt Ion: 83 Resp: 65012

Ion Ratio Lower Upper

83 100

55 83.4 62.6 94.0

98 46.4 37.7 56.5



#40

Benzene

Concen: 20.873 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085440.D

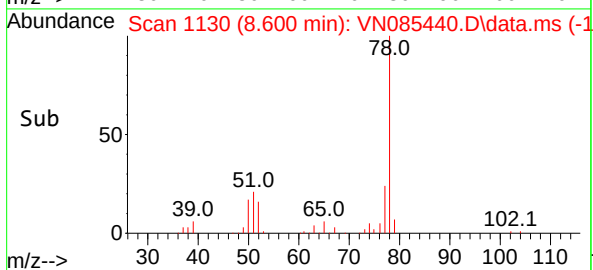
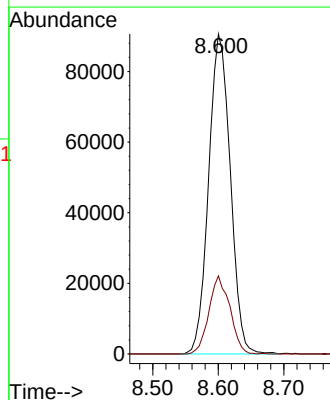
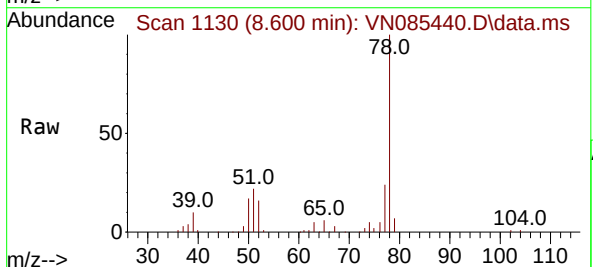
Acq: 14 Jan 2025 15:43

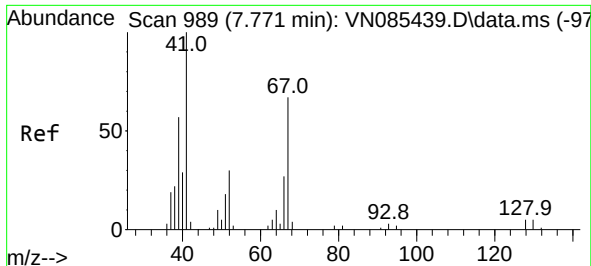
Tgt Ion: 78 Resp: 207985

Ion Ratio Lower Upper

78 100

77 24.4 19.0 28.6

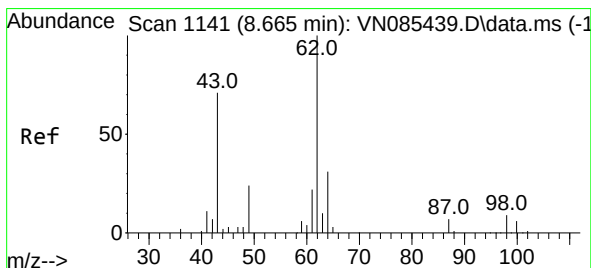
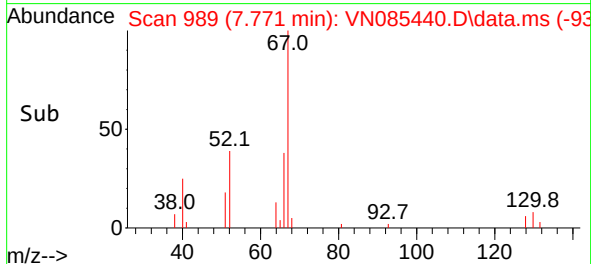
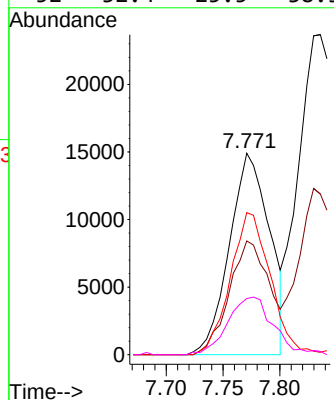
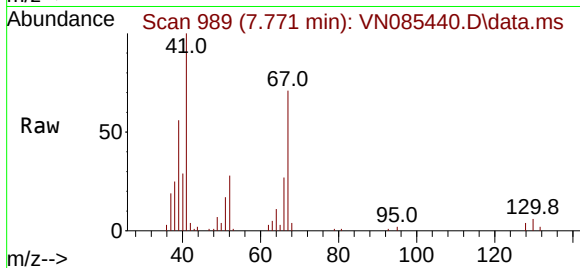




#41  
Methacrylonitrile  
Concen: 21.004 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

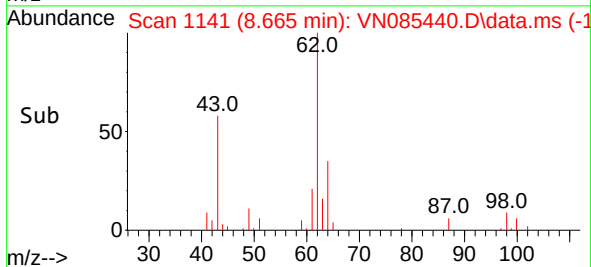
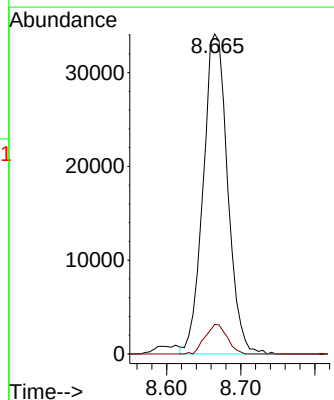
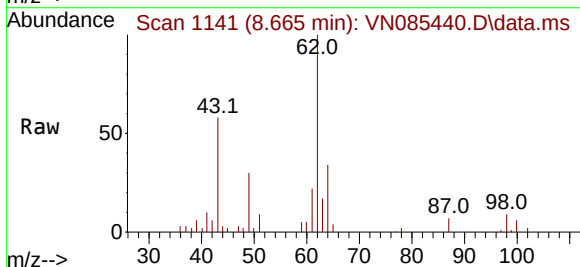
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

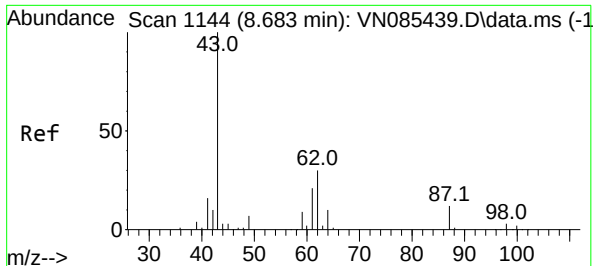
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 36578 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.6  | 46.0  | 69.0  |
| 67       | 70.3  | 57.4  | 86.2  |
| 52       | 32.4  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 20.891 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 78402 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.3   | 0.0   | 17.0  |

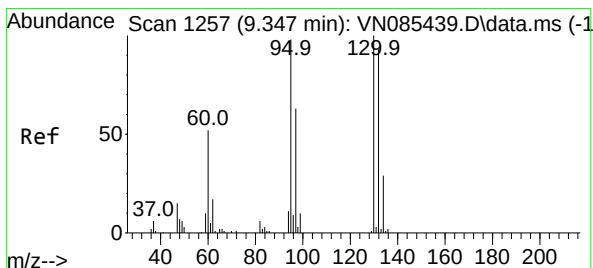
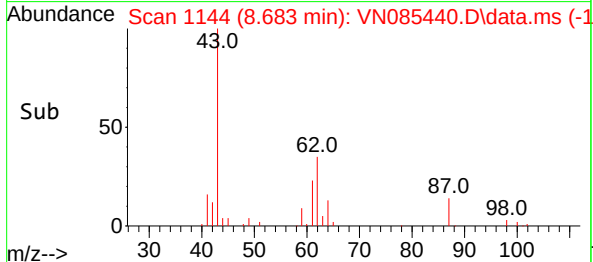
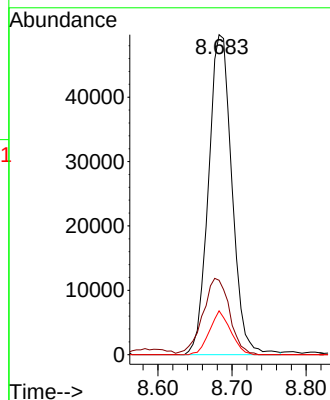
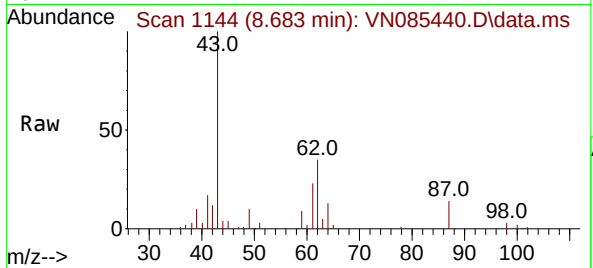




#43  
Isopropyl Acetate  
Concen: 20.347 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

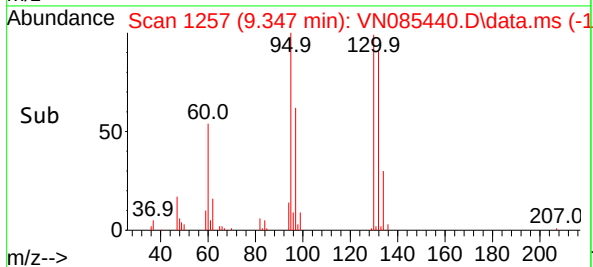
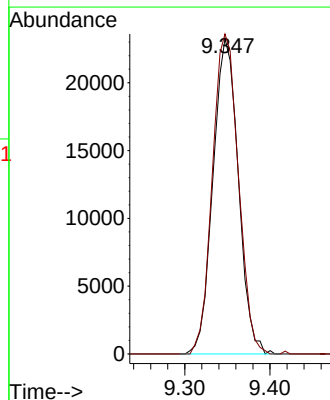
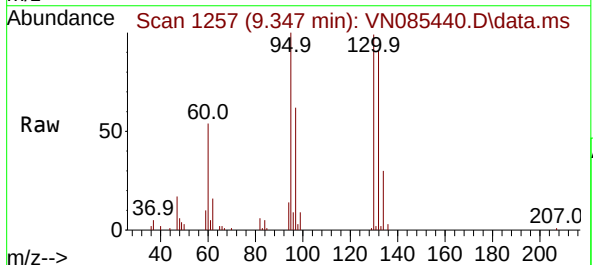
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

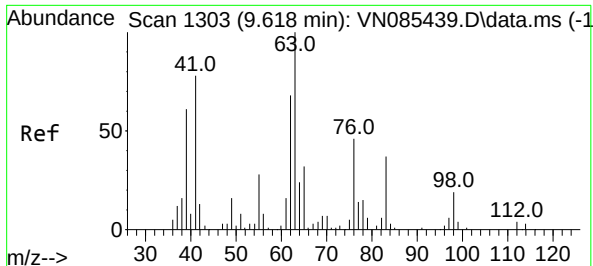
Tgt Ion: 43 Resp: 109131  
Ion Ratio Lower Upper  
43 100  
61 27.2 20.7 31.1  
87 12.3 9.8 14.8



#44  
Trichloroethene  
Concen: 20.699 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:130 Resp: 48009  
Ion Ratio Lower Upper  
130 100  
95 101.5 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.758 ug/l

RT: 9.618 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

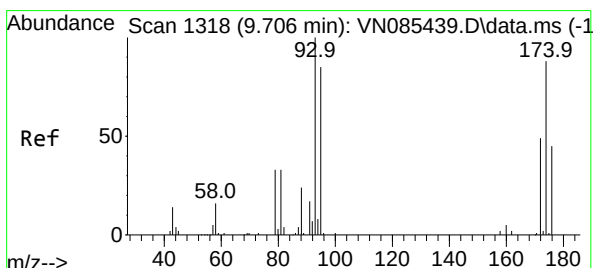
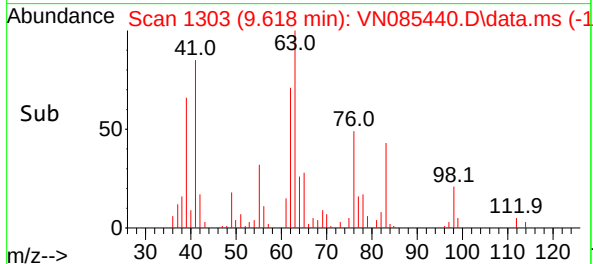
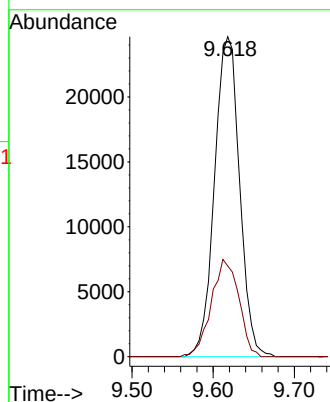
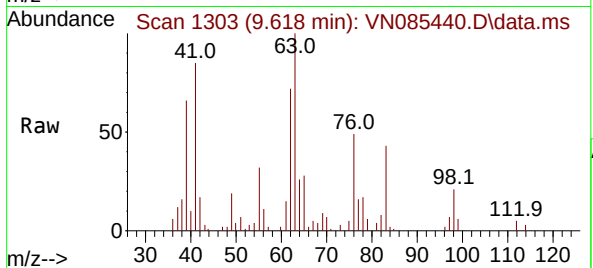
VSTDIC020

Tgt Ion: 63 Resp: 52833

Ion Ratio Lower Upper

63 100

65 28.3 25.6 38.4



#46

Dibromomethane

Concen: 20.540 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

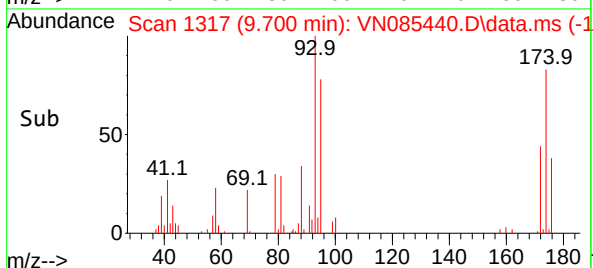
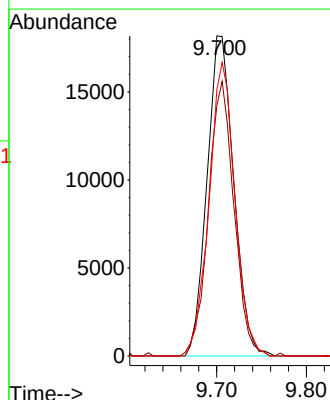
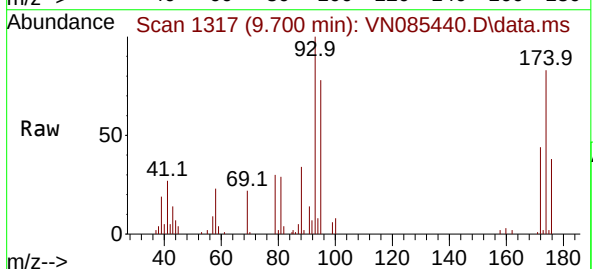
Tgt Ion: 93 Resp: 37721

Ion Ratio Lower Upper

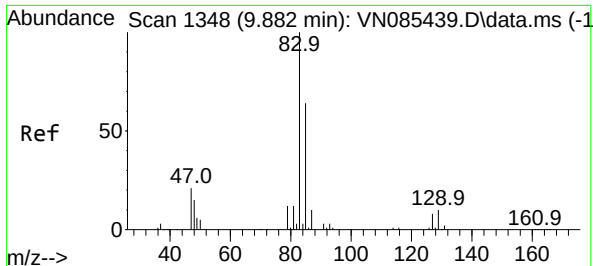
93 100

95 82.0 64.7 97.1

174 88.4 69.0 103.4



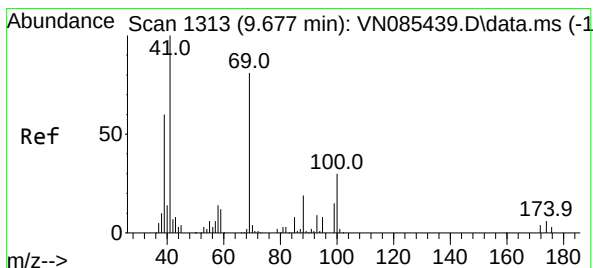
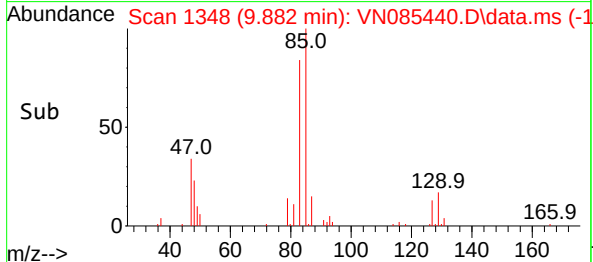
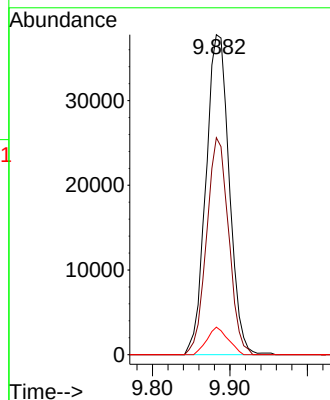
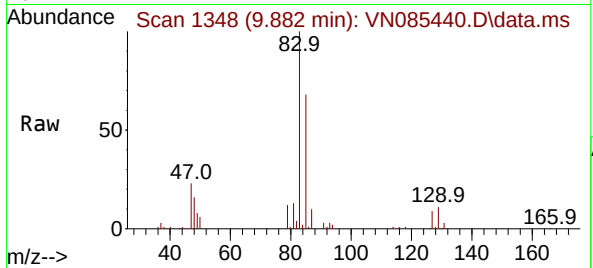




#47  
Bromodichloromethane  
Concen: 21.093 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

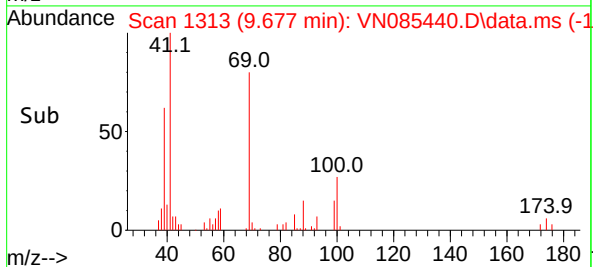
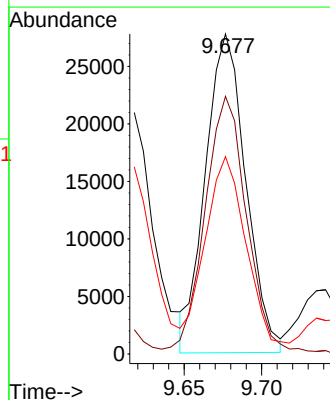
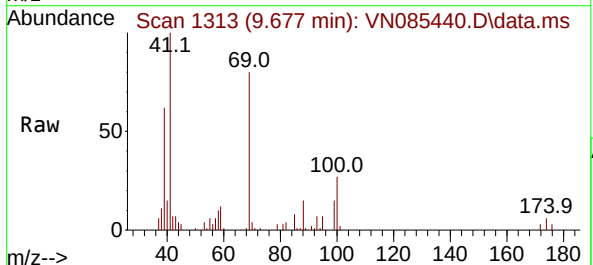
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

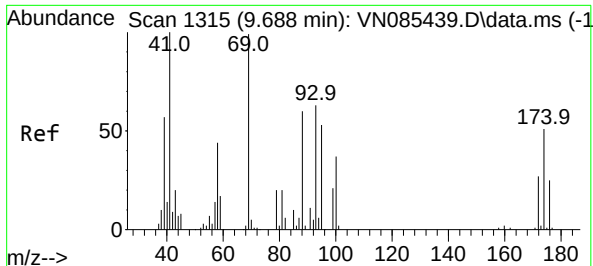
Tgt Ion: 83 Resp: 78918  
Ion Ratio Lower Upper  
83 100  
85 67.8 51.2 76.8  
127 8.6 6.5 9.7



#48  
Methyl methacrylate  
Concen: 20.808 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 50224  
Ion Ratio Lower Upper  
41 100  
69 84.3 64.7 97.1  
39 64.2 49.0 73.6





#49

1,4-Dioxane

Concen: 421.686 ug/l

RT: 9.688 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

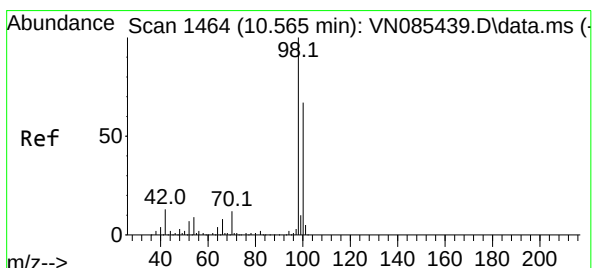
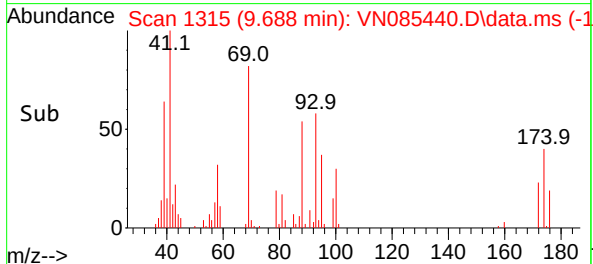
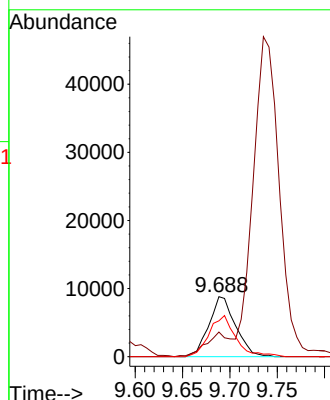
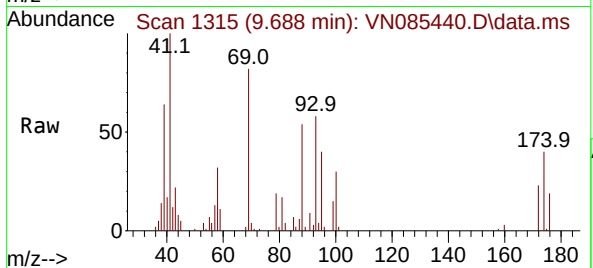
Tgt Ion: 88 Resp: 17140

Ion Ratio Lower Upper

88 100

43 34.9 26.6 39.8

58 69.0 59.5 89.3



#50

Toluene-d8

Concen: 19.581 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085440.D

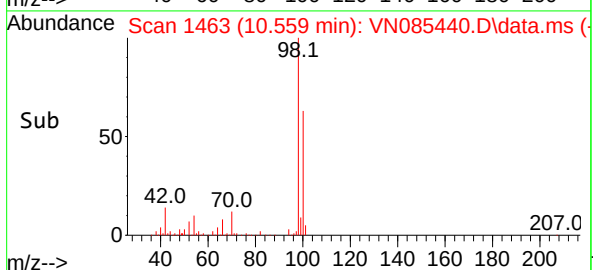
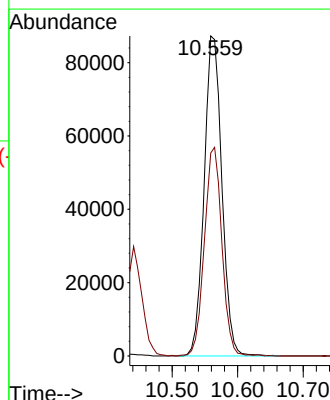
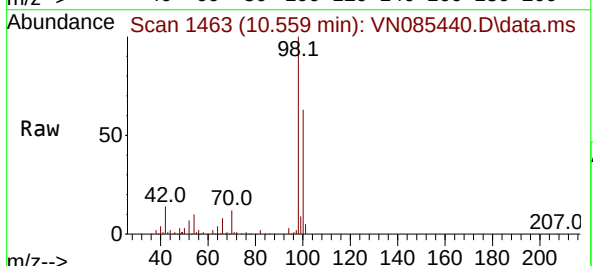
Acq: 14 Jan 2025 15:43

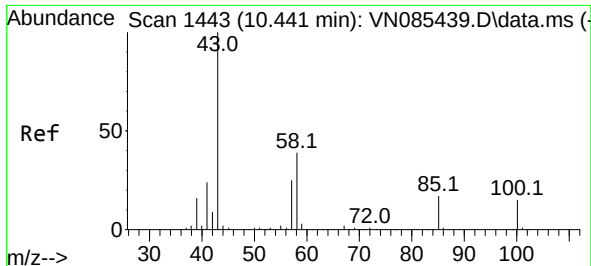
Tgt Ion: 98 Resp: 164391

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4

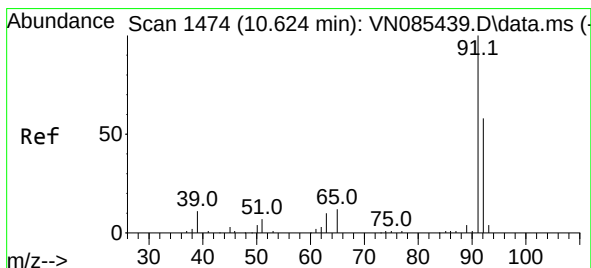
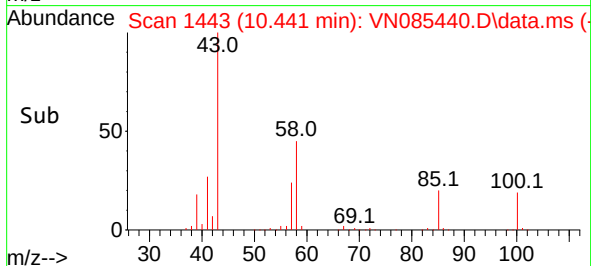
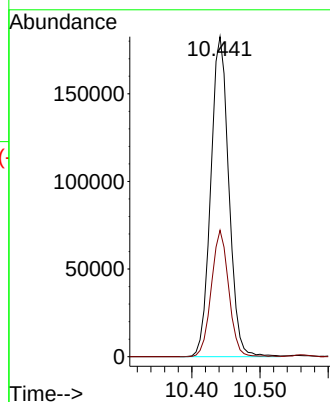
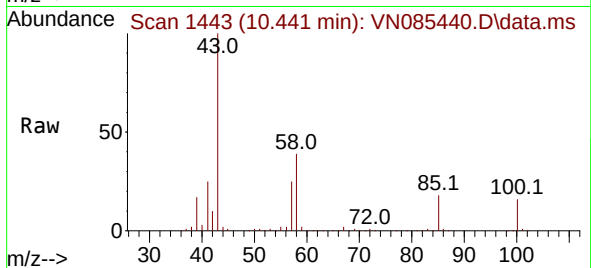




#51  
4-Methyl-2-Pentanone  
Concen: 108.249 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

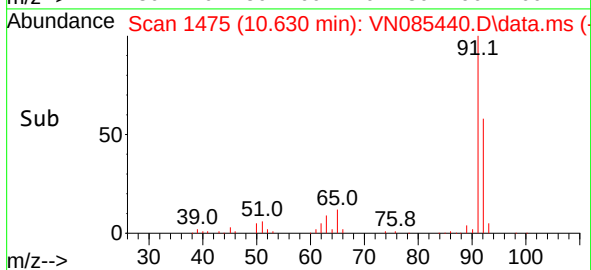
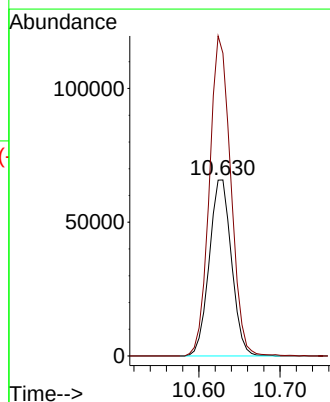
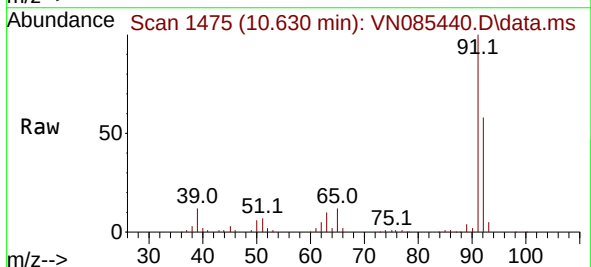
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

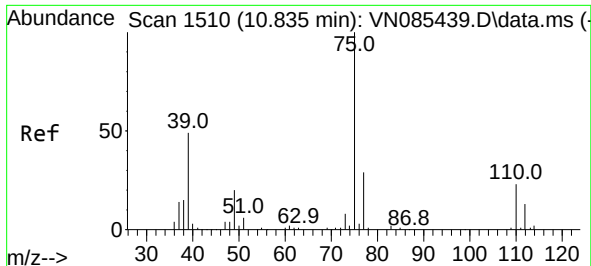
Tgt Ion: 43 Resp: 336911  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#52  
Toluene  
Concen: 21.680 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 92 Resp: 125172  
Ion Ratio Lower Upper  
92 100  
91 175.1 139.2 208.8

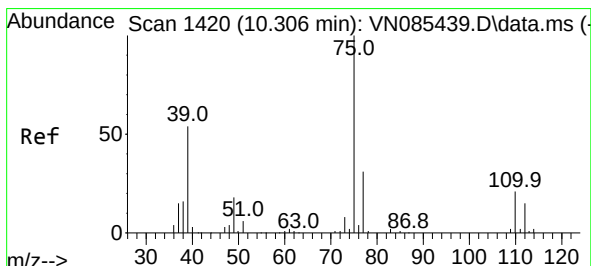
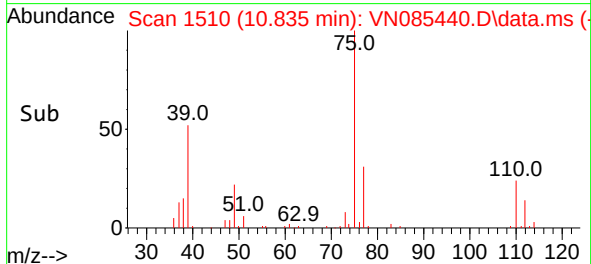
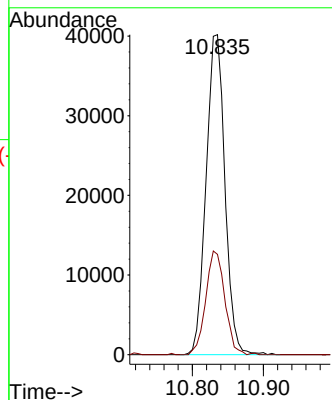
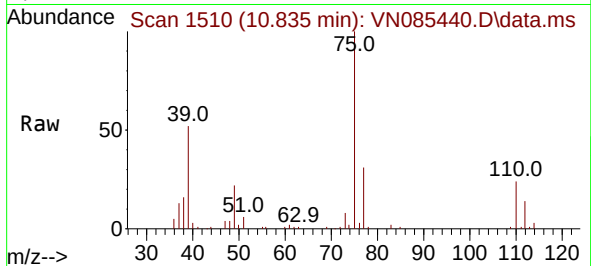




#53  
 t-1,3-Dichloropropene  
 Concen: 20.965 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

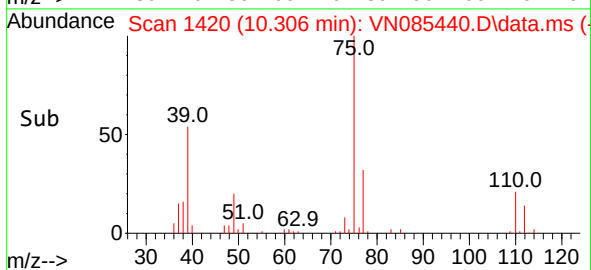
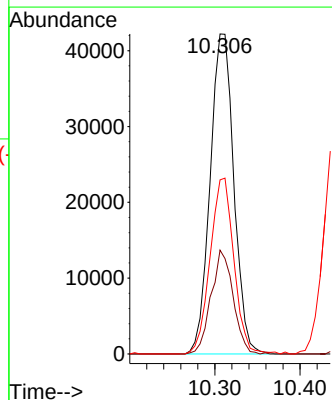
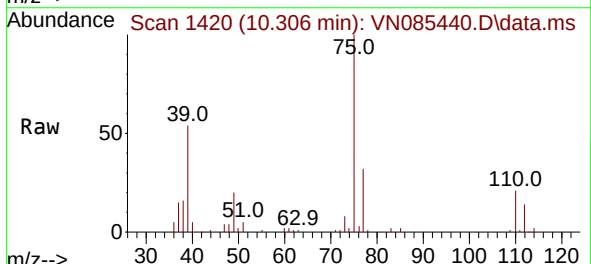
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

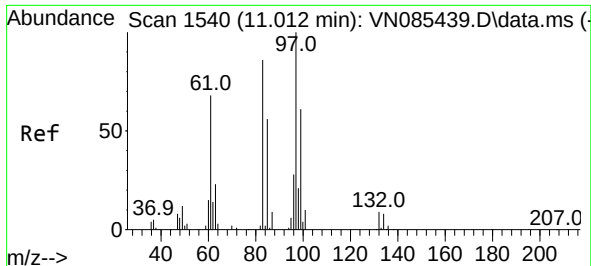
Tgt Ion: 75 Resp: 74129  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 21.684 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 81897  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 25.0 37.4  
 39 54.4 43.1 64.7

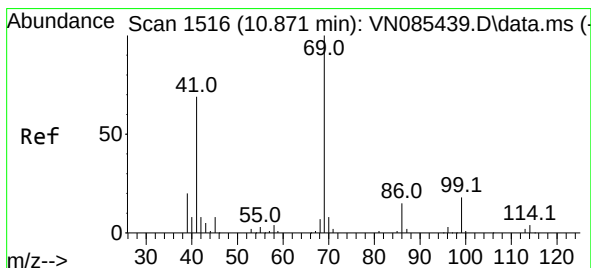
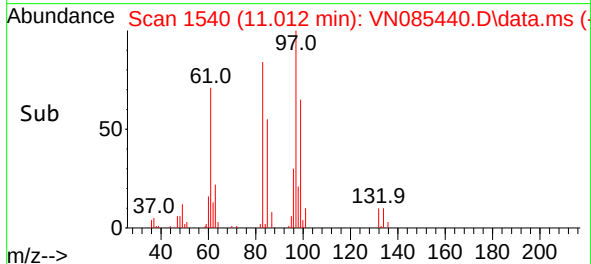
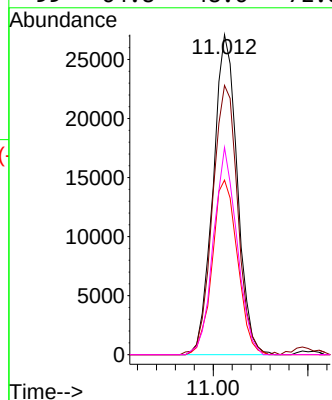
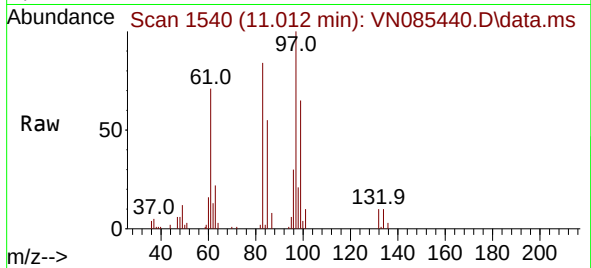




#55  
1,1,2-Trichloroethane  
Concen: 21.025 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

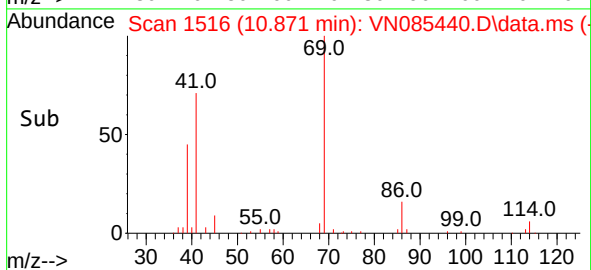
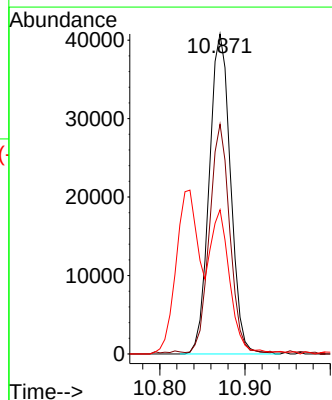
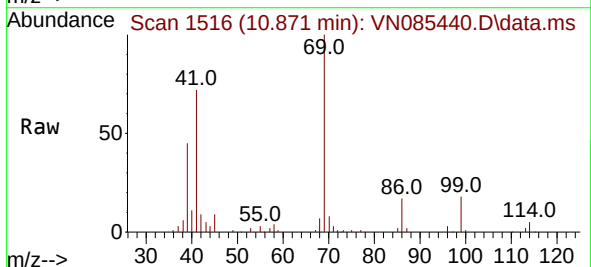
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

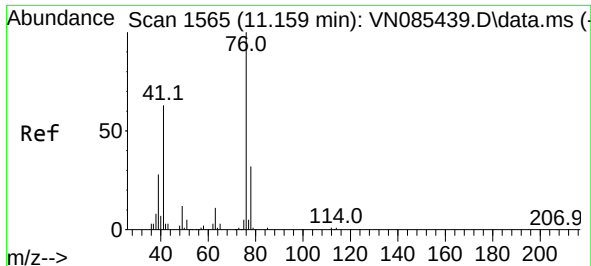
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 48039 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 84.1     | 69.0 103.6  |
| 85 54.6     | 44.6 66.8   |
| 99 64.8     | 48.6 72.8   |



#56  
Ethyl methacrylate  
Concen: 19.649 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

|             |             |
|-------------|-------------|
| Tgt Ion: 69 | Resp: 70934 |
| Ion Ratio   | Lower Upper |
| 69 100      |             |
| 41 67.6     | 54.6 82.0   |
| 39 41.7     | 32.4 48.6   |

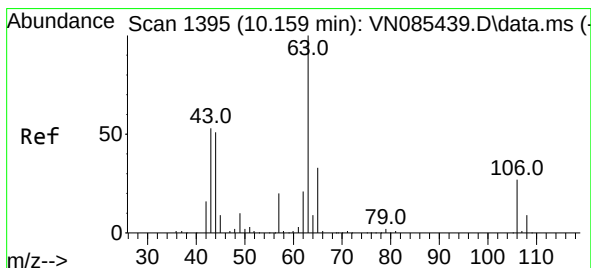
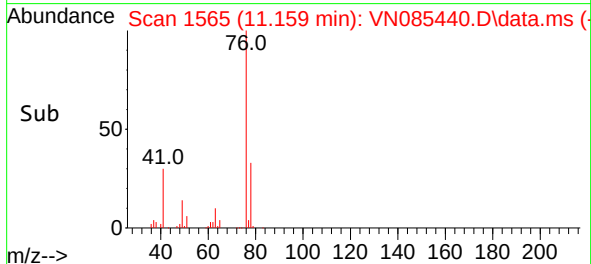
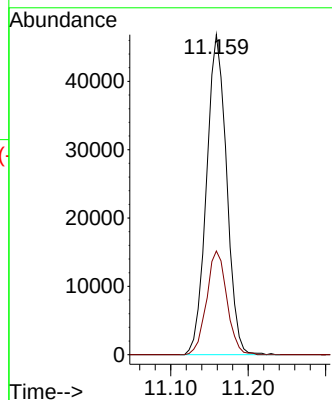
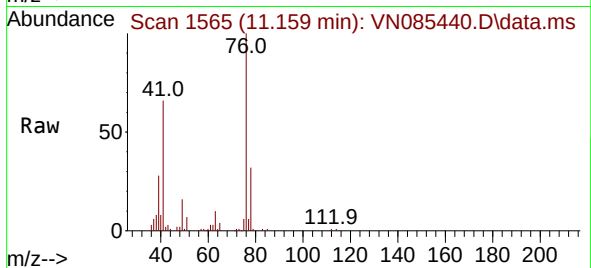




#57  
1,3-Dichloropropane  
Concen: 21.196 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

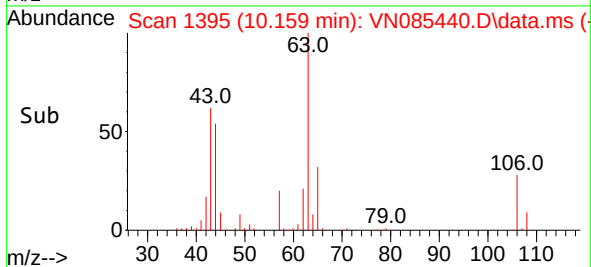
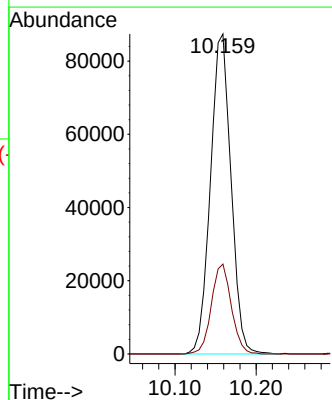
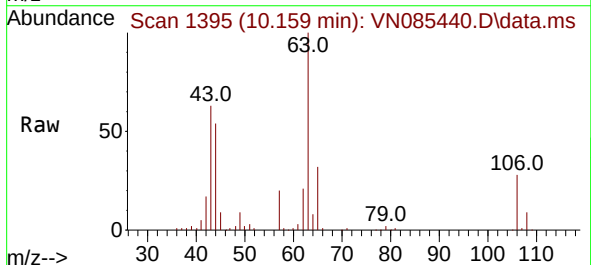
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

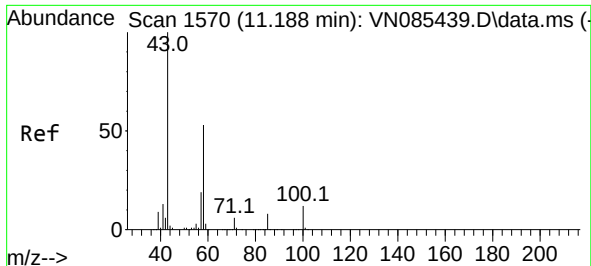
Tgt Ion: 76 Resp: 84210  
Ion Ratio Lower Upper  
76 100  
78 32.7 25.6 38.4



#58  
2-Chloroethyl Vinyl ether  
Concen: 105.991 ug/l  
RT: 10.159 min Scan# 1395  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 153681  
Ion Ratio Lower Upper  
63 100  
106 27.2 21.6 32.4

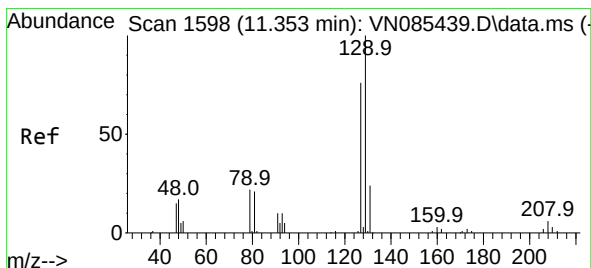
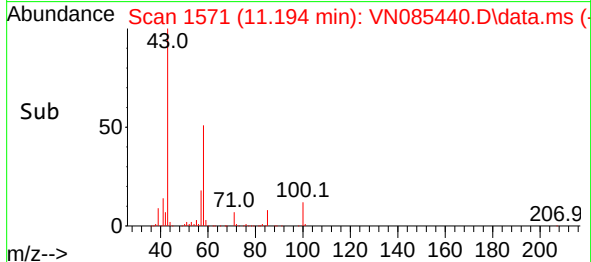
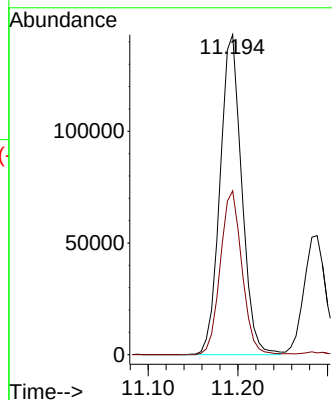
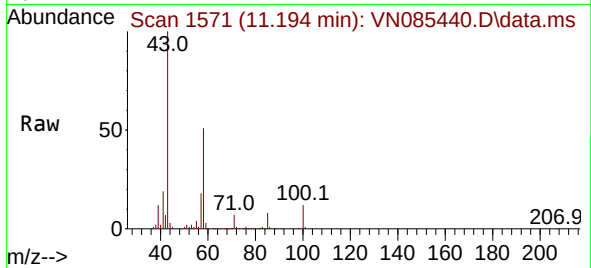




#59  
2-Hexanone  
Concen: 109.863 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

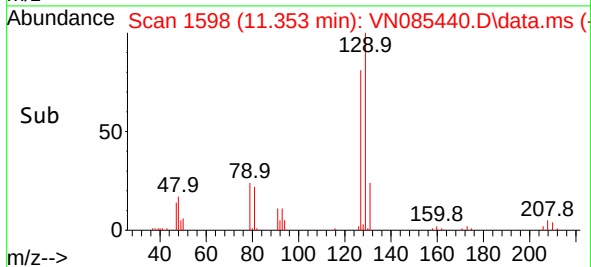
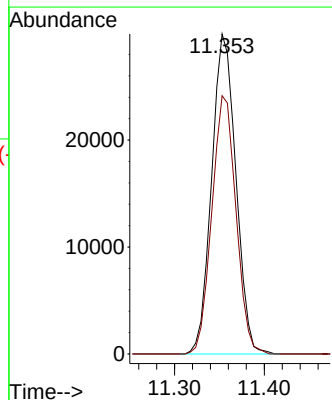
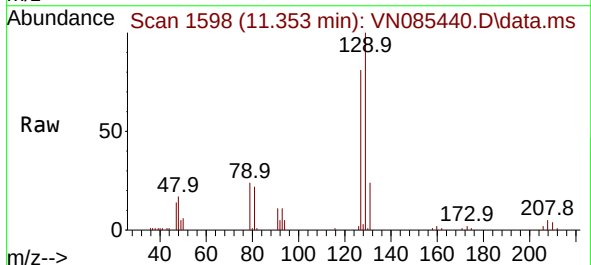
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

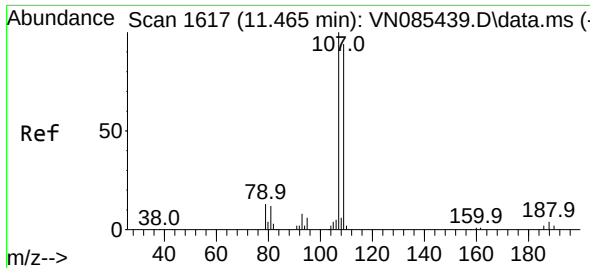
Tgt Ion: 43 Resp: 240595  
Ion Ratio Lower Upper  
43 100  
58 51.1 26.2 78.6



#60  
Dibromochloromethane  
Concen: 20.326 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:129 Resp: 56069  
Ion Ratio Lower Upper  
129 100  
127 80.4 38.6 115.8

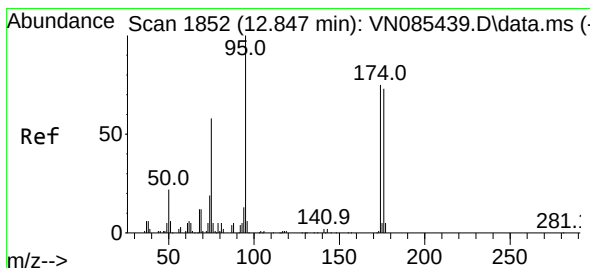
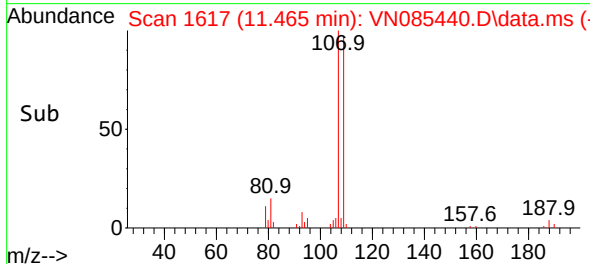
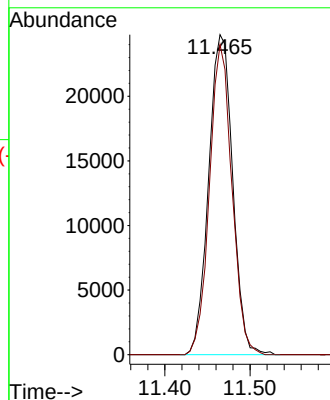
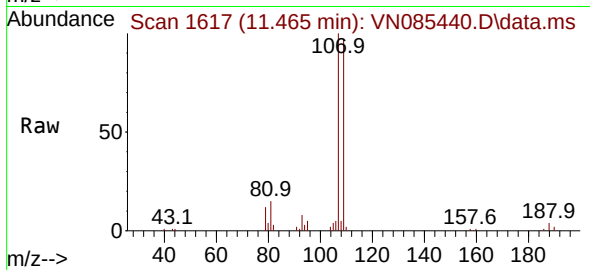




#61  
1,2-Dibromoethane  
Concen: 21.309 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

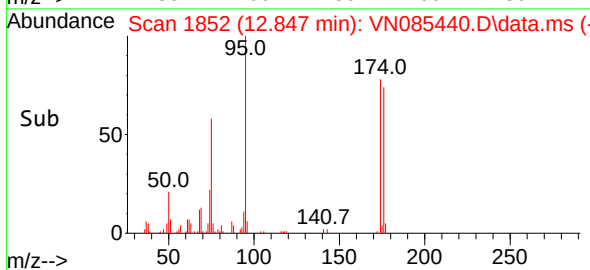
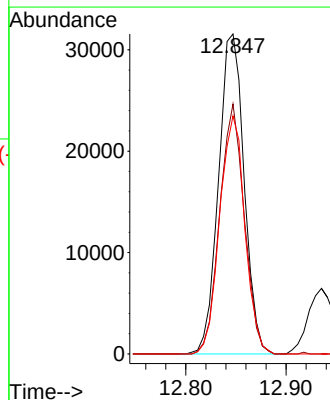
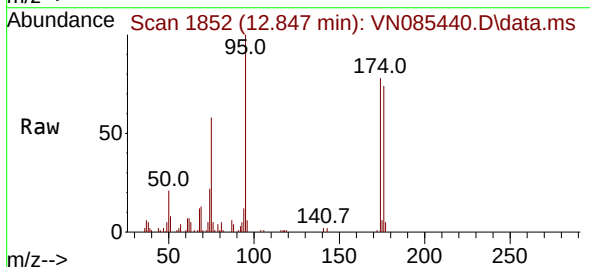
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion:107 Resp: 48465  
Ion Ratio Lower Upper  
107 100  
109 90.6 75.9 113.9

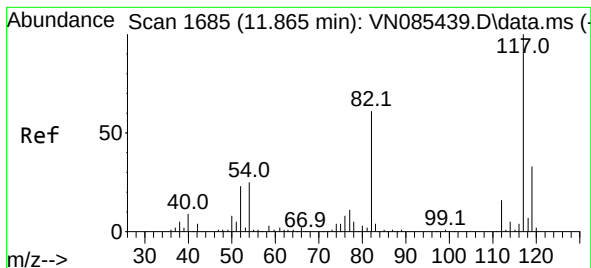


#62  
4-Bromofluorobenzene  
Concen: 19.430 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 95 Resp: 55798  
Ion Ratio Lower Upper  
95 100  
174 75.2 0.0 145.0  
176 73.2 0.0 142.4







#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

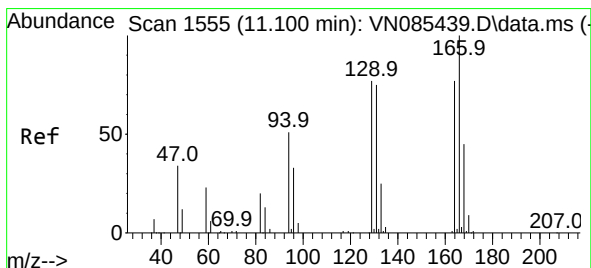
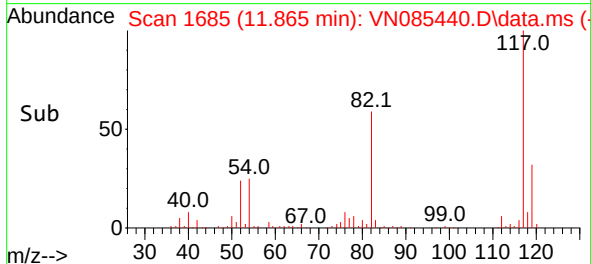
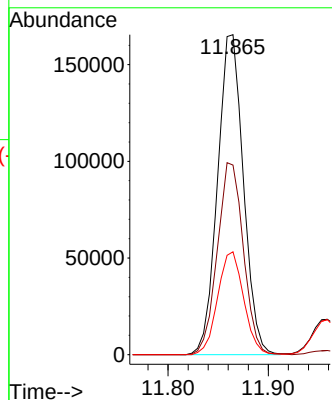
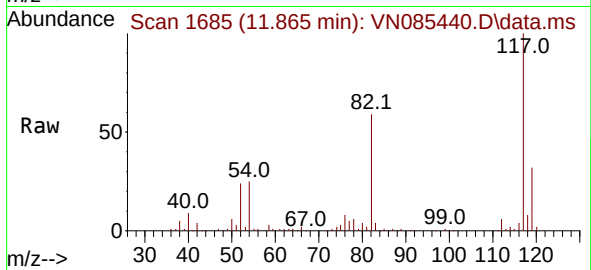
Tgt Ion:117 Resp: 296298

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

119 32.2 26.6 39.8



#64

Tetrachloroethene

Concen: 21.408 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:164 Resp: 43243

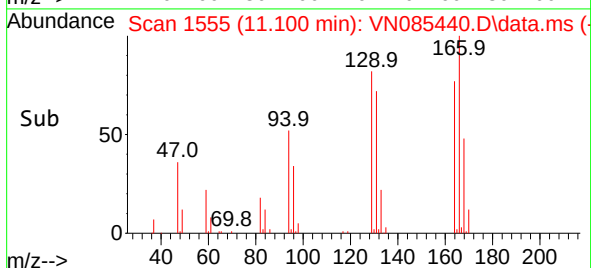
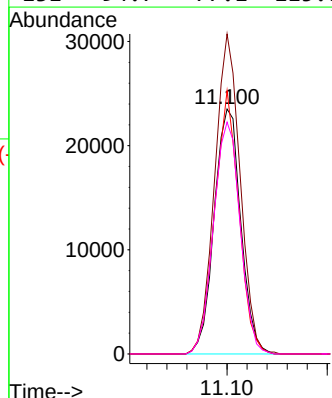
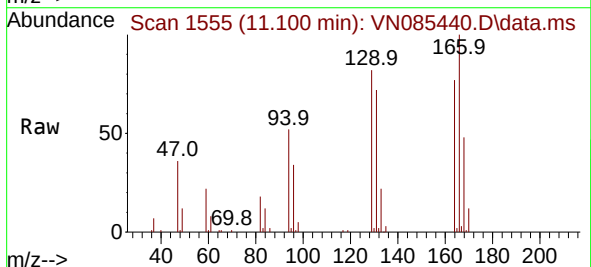
Ion Ratio Lower Upper

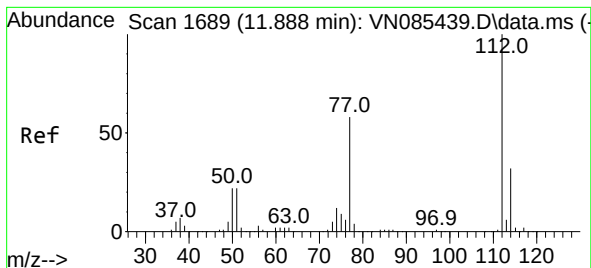
164 100

166 130.6 103.4 155.2

129 107.4 79.2 118.8

131 94.7 77.1 115.7

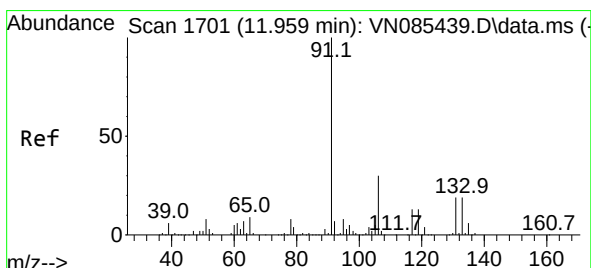
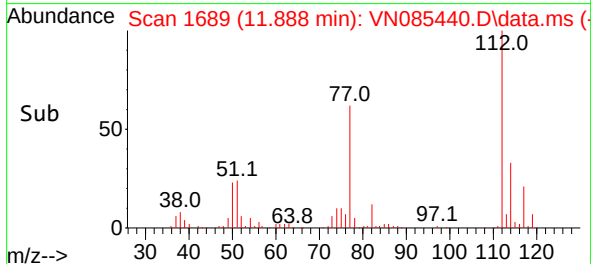
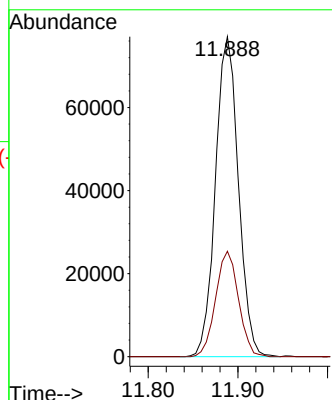
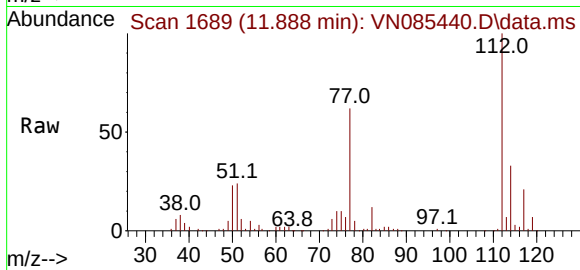




#65  
Chlorobenzene  
Concen: 21.077 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

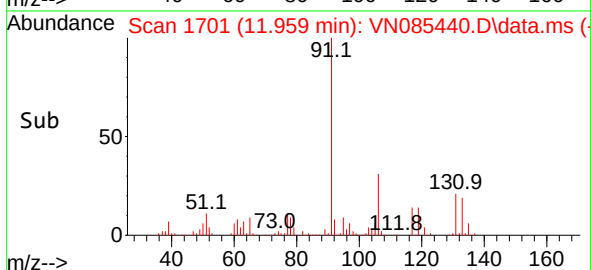
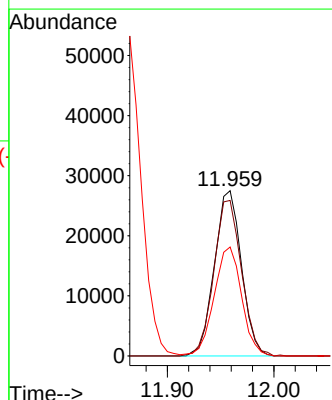
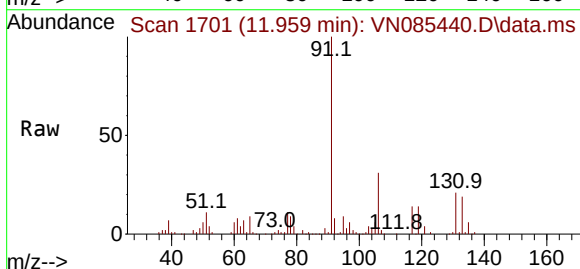
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

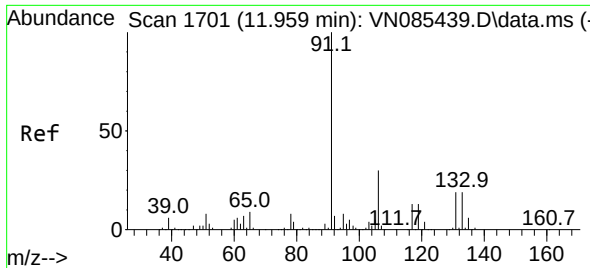
Tgt Ion:112 Resp: 136809  
Ion Ratio Lower Upper  
112 100  
114 32.9 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 20.304 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:131 Resp: 48370  
Ion Ratio Lower Upper  
131 100  
133 96.9 47.4 142.3  
119 67.2 33.1 99.5

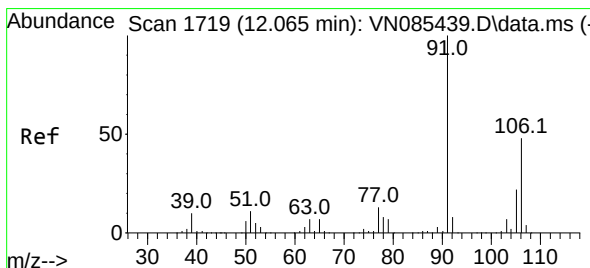
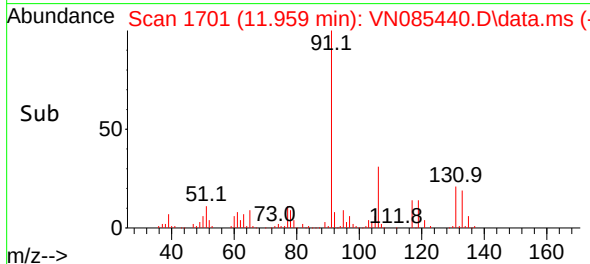
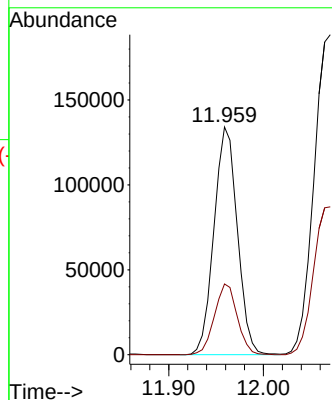
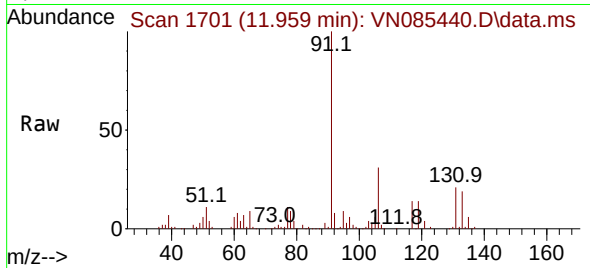




#67  
Ethyl Benzene  
Concen: 21.753 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

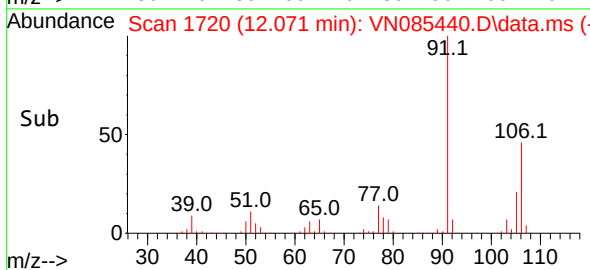
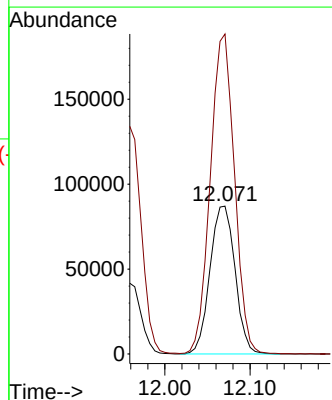
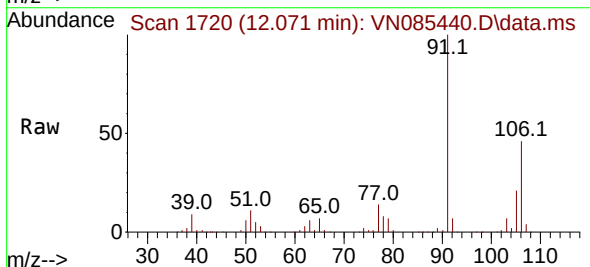
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

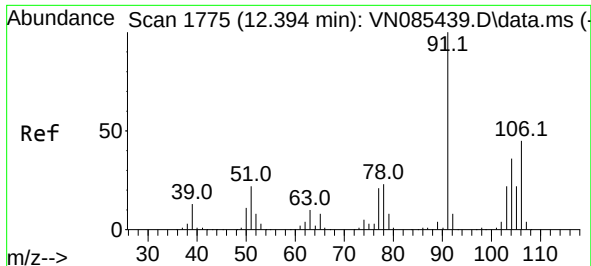
Tgt Ion: 91 Resp: 229978  
Ion Ratio Lower Upper  
91 100  
106 31.1 23.8 35.8



#68  
m/p-Xylenes  
Concen: 45.494 ug/l  
RT: 12.071 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 177755  
Ion Ratio Lower Upper  
106 100  
91 209.3 167.7 251.5

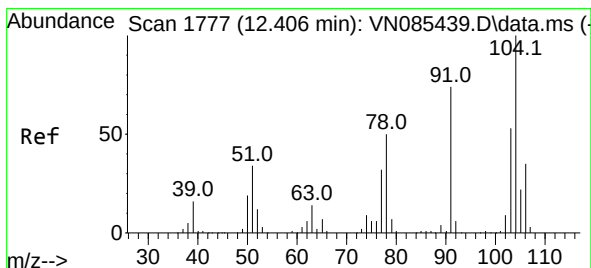
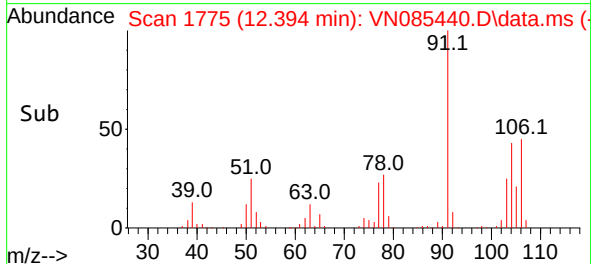
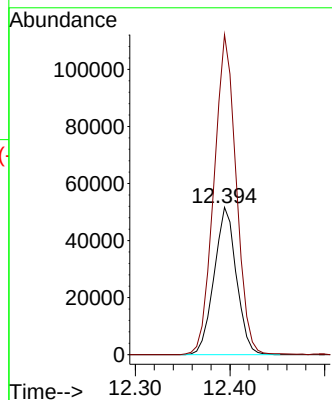
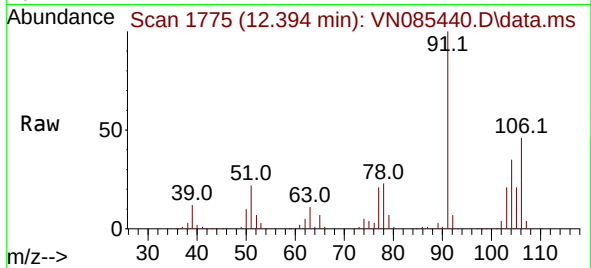




#69  
o-Xylene  
Concen: 22.643 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

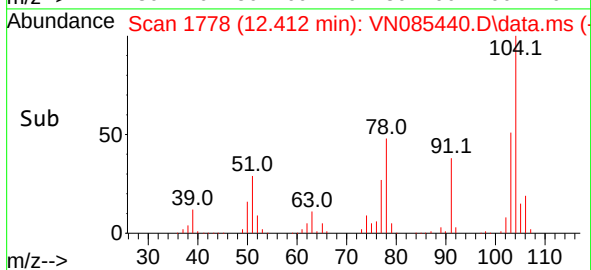
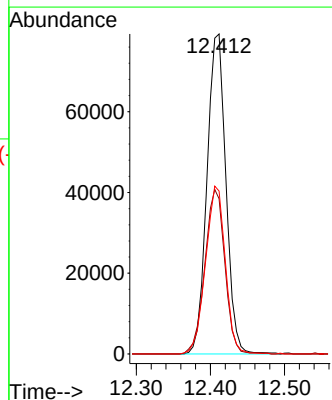
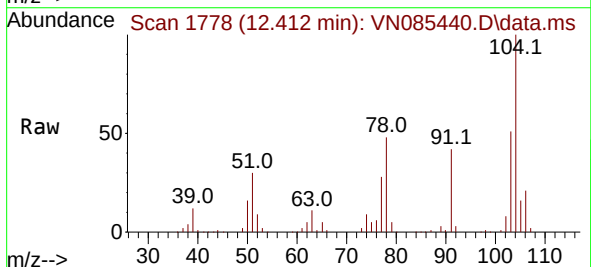
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

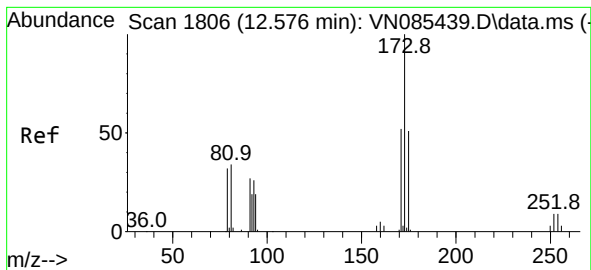
Tgt Ion:106 Resp: 84548  
Ion Ratio Lower Upper  
106 100  
91 217.0 110.4 331.2



#70  
Styrene  
Concen: 22.749 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion:104 Resp: 140581  
Ion Ratio Lower Upper  
104 100  
78 54.4 42.5 63.7  
103 54.8 43.8 65.8





#71

Bromoform

Concen: 21.683 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

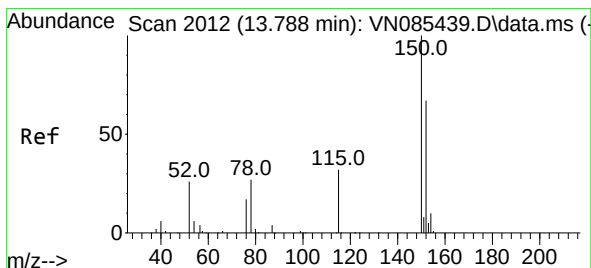
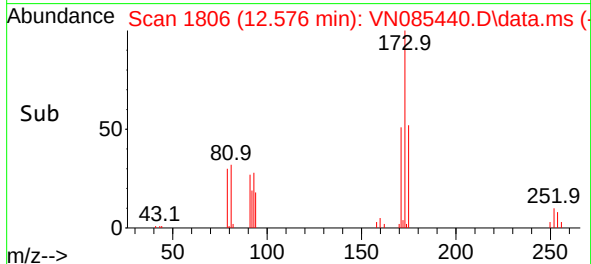
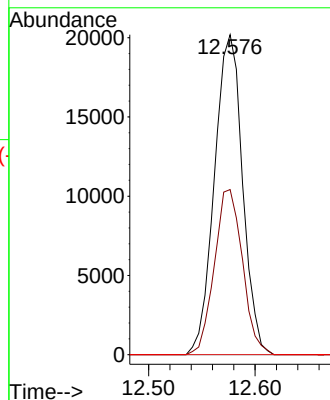
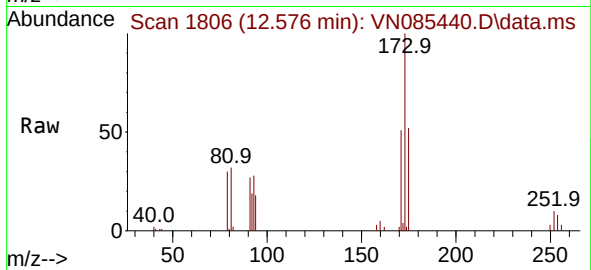
Tgt Ion:173 Resp: 36961

Ion Ratio Lower Upper

173 100

175 51.7 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 1212

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

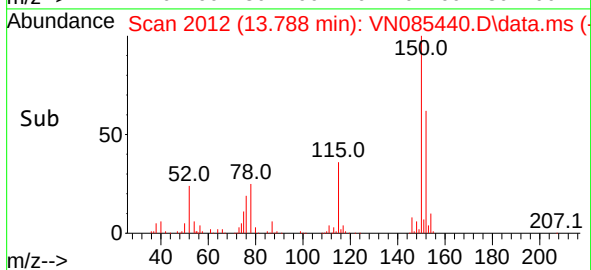
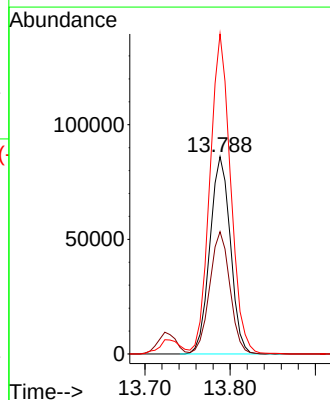
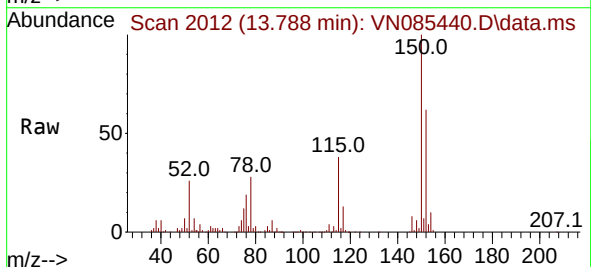
Tgt Ion:152 Resp: 143526

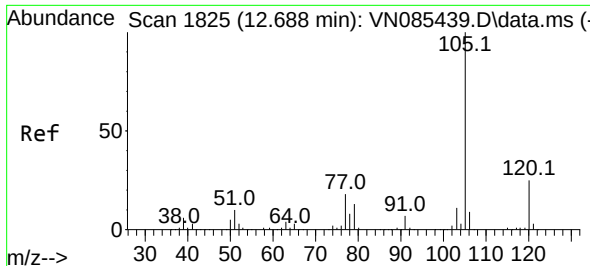
Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 163.9 0.0 343.6

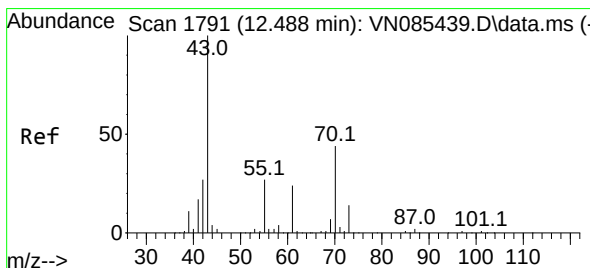
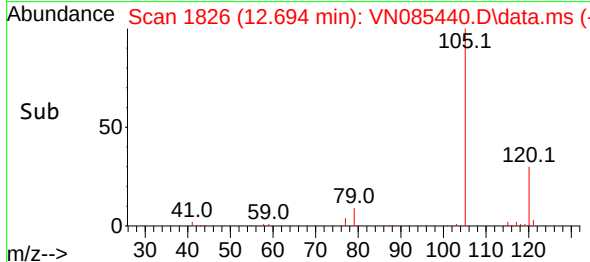
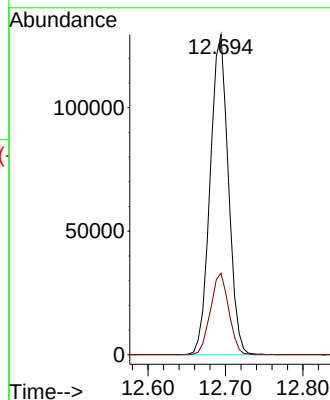
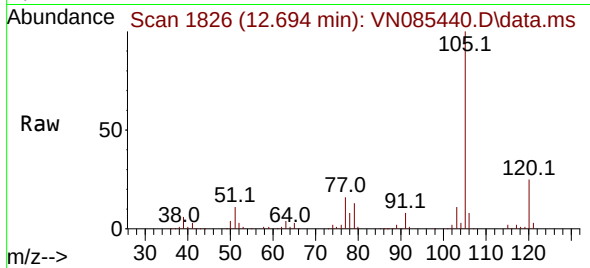




#73  
Isopropylbenzene  
Concen: 21.819 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

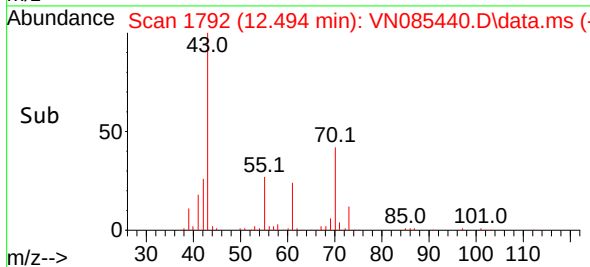
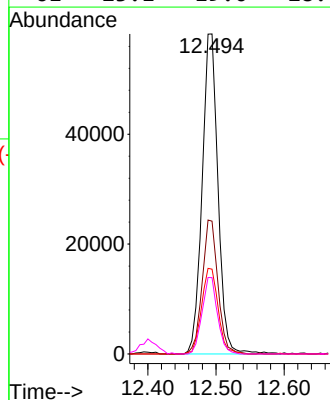
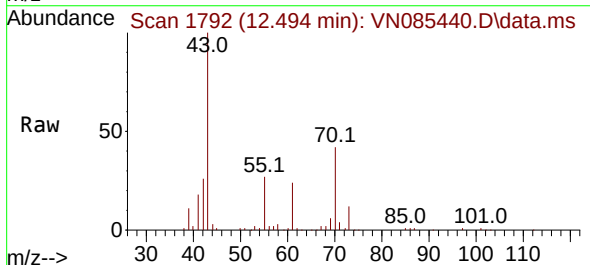
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

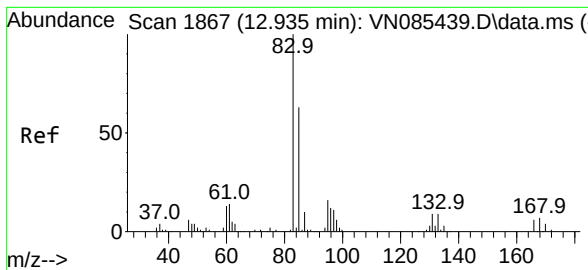
Tgt Ion:105 Resp: 211354  
Ion Ratio Lower Upper  
105 100  
120 25.5 12.8 38.3



#74  
N-ethyl acetate  
Concen: 21.656 ug/l  
RT: 12.494 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 94292  
Ion Ratio Lower Upper  
43 100  
70 41.4 34.0 51.0  
55 27.9 21.4 32.2  
61 23.1 19.0 28.4

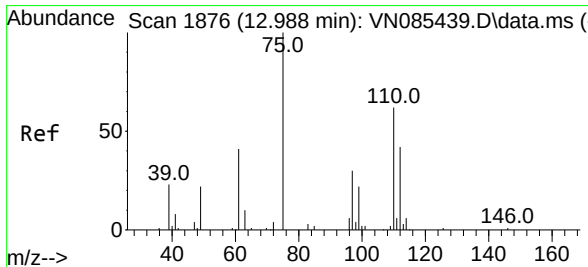
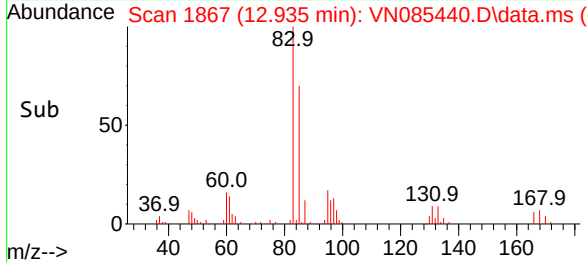
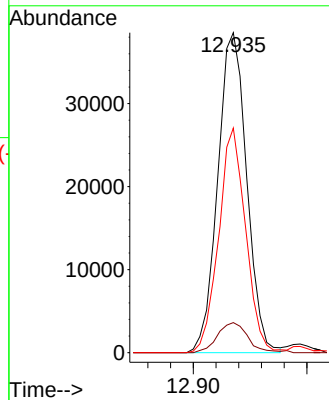
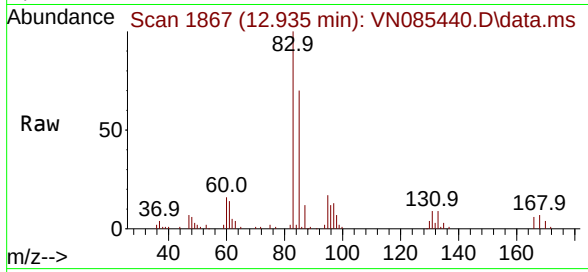




#75  
1,1,2,2-Tetrachloroethane  
Concen: 19.917 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

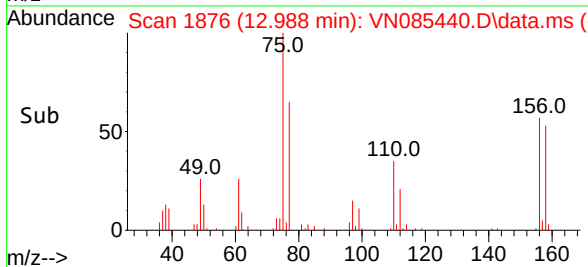
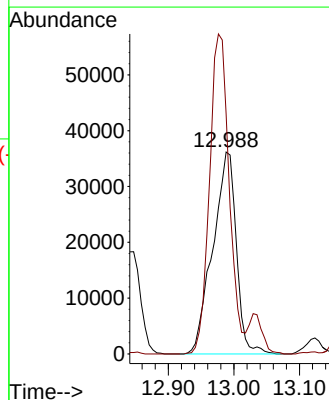
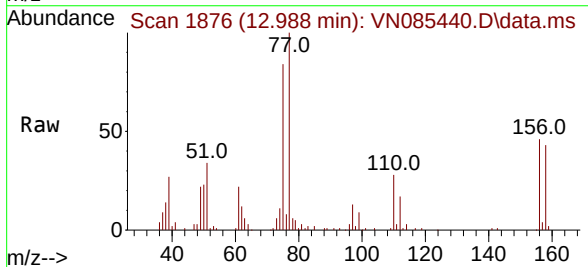
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MSVOA\_N  
ClientSampleId :  
VSTDICC020

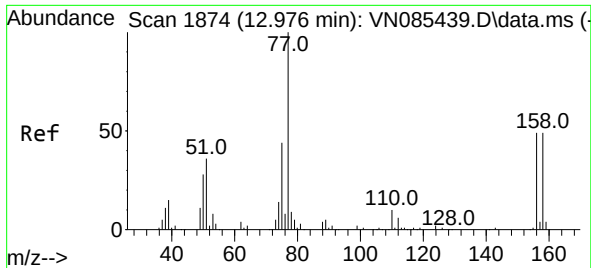
Tgt Ion: 83 Resp: 68151  
Ion Ratio Lower Upper  
83 100  
131 9.9 4.8 14.4  
85 65.5 32.2 96.6



#76  
1,2,3-Trichloropropane  
Concen: 30.902 ug/l  
RT: 12.988 min Scan# 1876  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 90004  
Ion Ratio Lower Upper  
75 100  
77 133.2 109.7 329.2

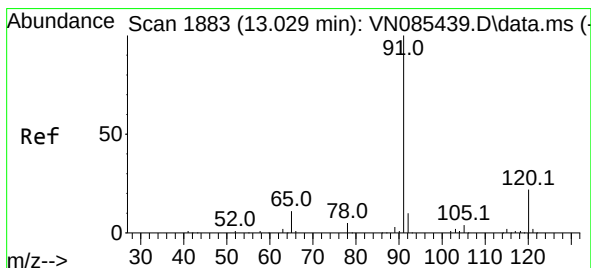
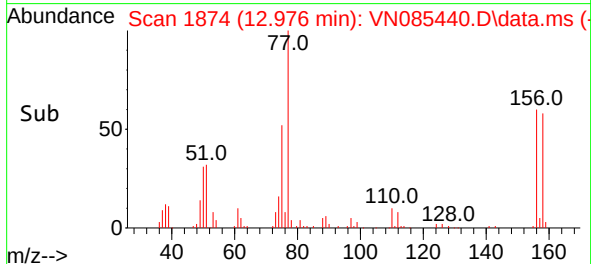
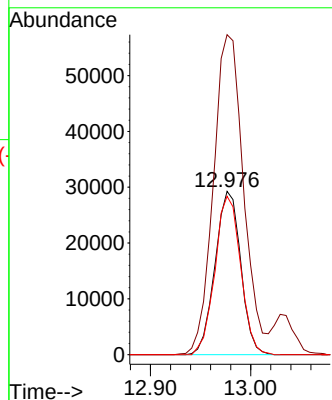
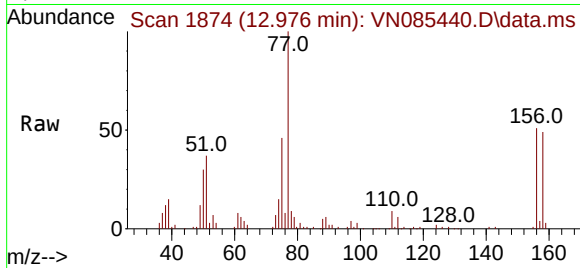




#77  
Bromobenzene  
Concen: 20.556 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

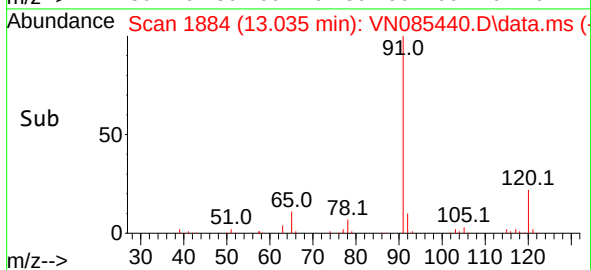
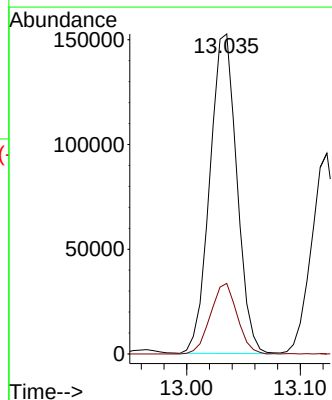
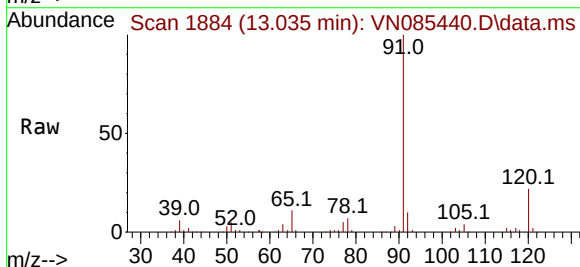
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion:156 Resp: 52022  
Ion Ratio Lower Upper  
156 100  
77 230.4 114.1 342.4  
158 97.0 48.9 146.8

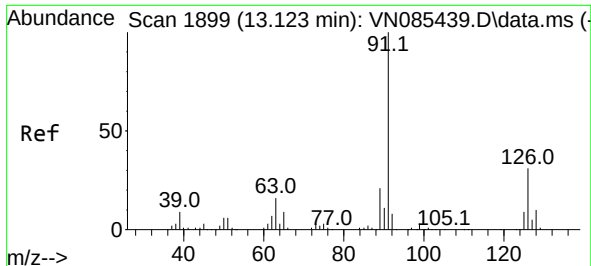


#78  
n-propylbenzene  
Concen: 22.028 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 252610  
Ion Ratio Lower Upper  
91 100  
120 21.8 10.9 32.6



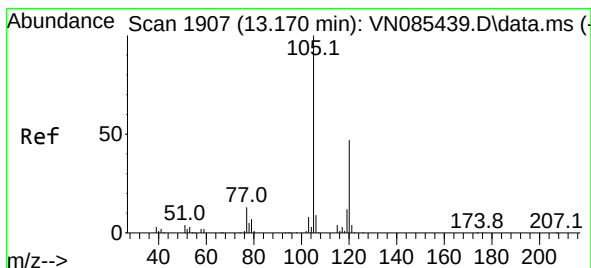
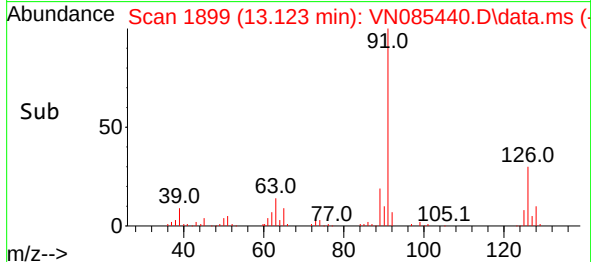
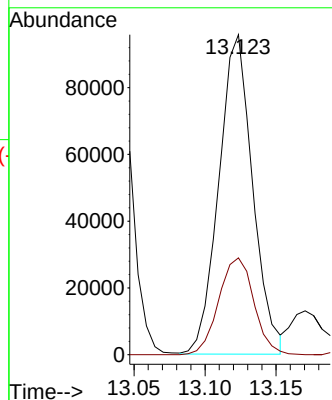
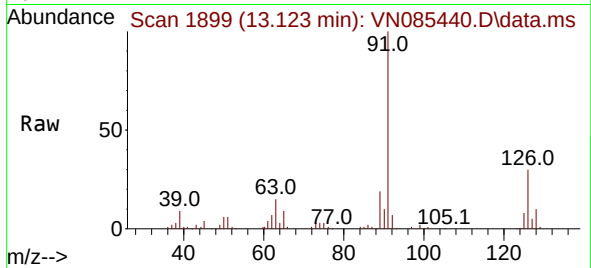




#79  
2-Chlorotoluene  
Concen: 21.358 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

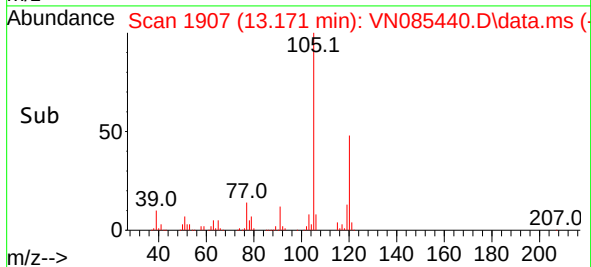
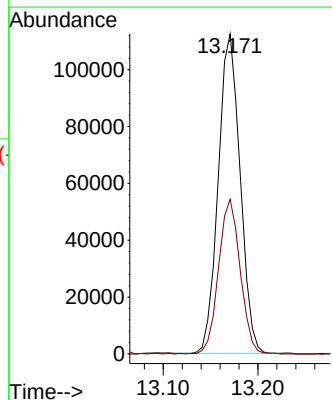
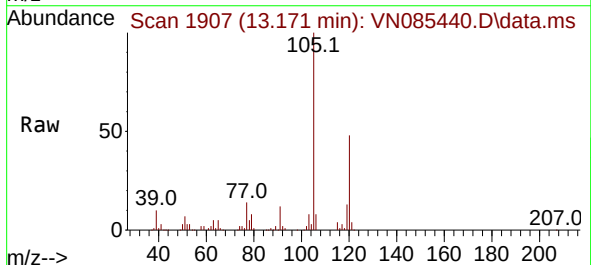
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MSVOA\_N  
ClientSampleId :  
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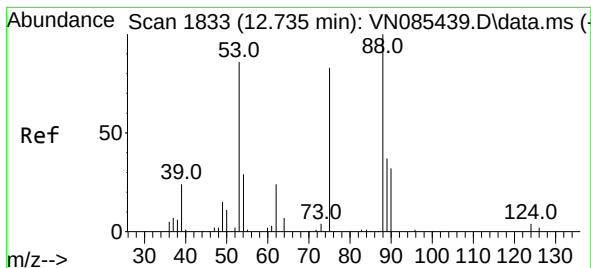
Tgt Ion: 91 Resp: 158511  
Ion Ratio Lower Upper  
91 100  
126 31.5 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 22.533 ug/l  
RT: 13.171 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 105 Resp: 180294  
Ion Ratio Lower Upper  
105 100  
120 47.9 23.9 71.7

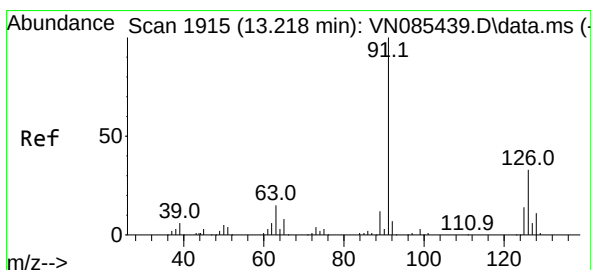
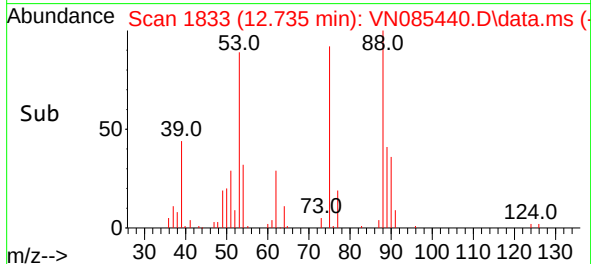
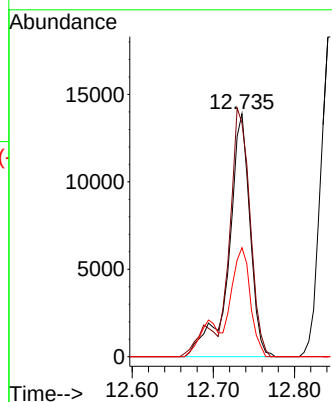
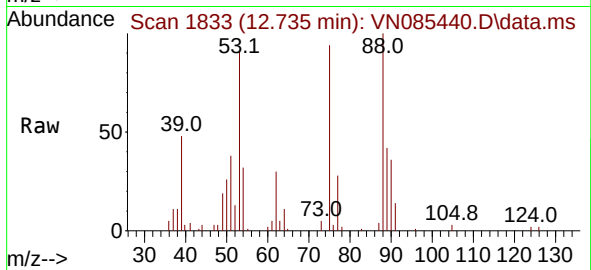




#81  
trans-1,4-Dichloro-2-butene  
Concen: 23.322 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

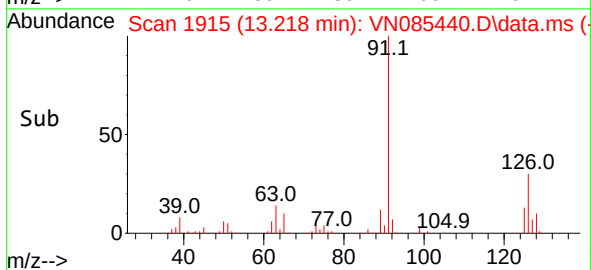
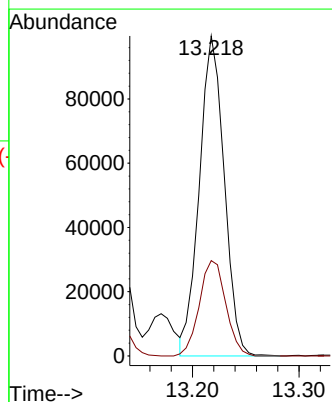
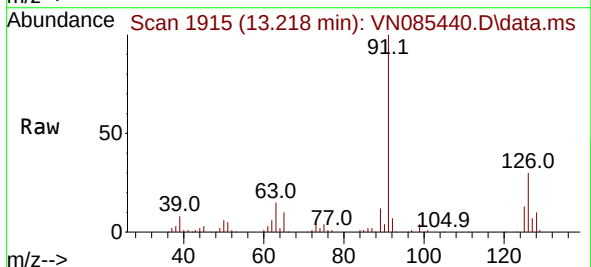
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ClientSampleId :  
VSTDIC020

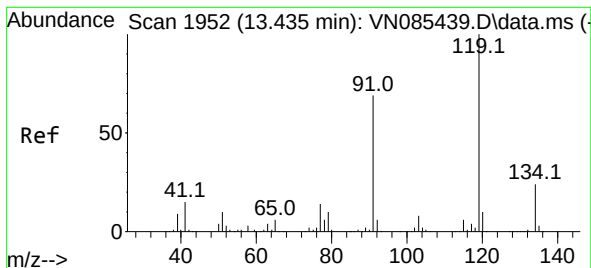
Tgt Ion: 75 Resp: 25146  
Ion Ratio Lower Upper  
75 100  
53 94.6 95.6 143.4#  
89 41.3 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 21.906 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 161880  
Ion Ratio Lower Upper  
91 100  
126 31.6 15.9 47.7





#83

tert-Butylbenzene

Concen: 21.958 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

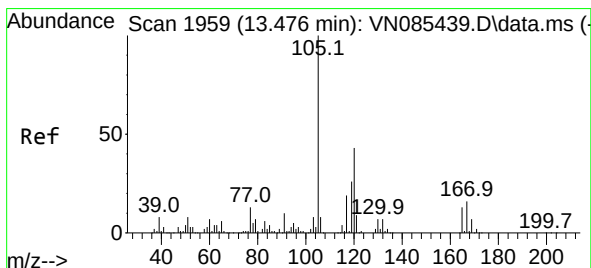
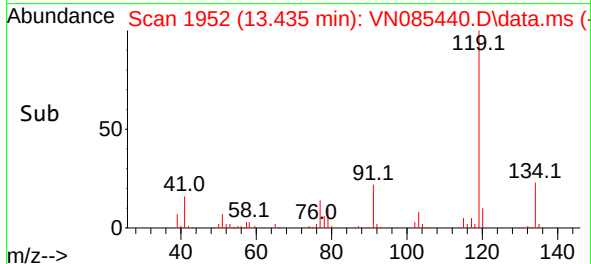
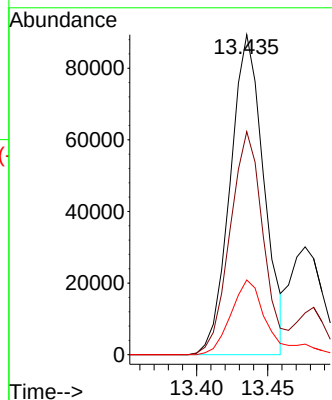
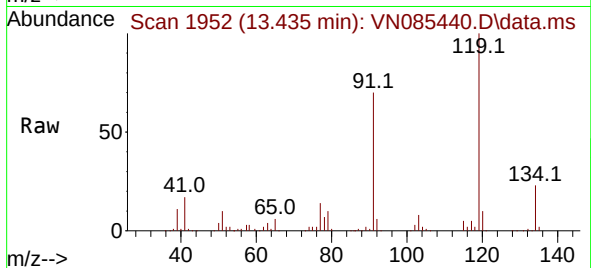
Tgt Ion:119 Resp: 147541

Ion Ratio Lower Upper

119 100

91 69.5 35.1 105.3

134 25.5 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 22.965 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085440.D

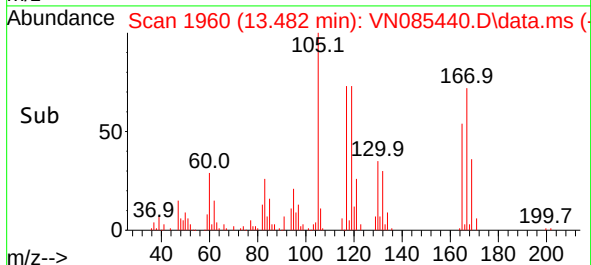
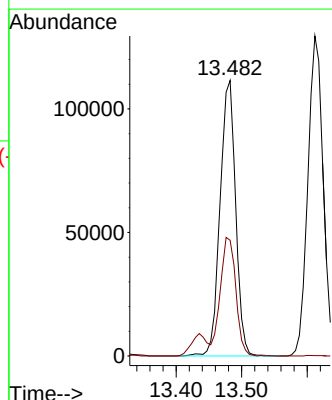
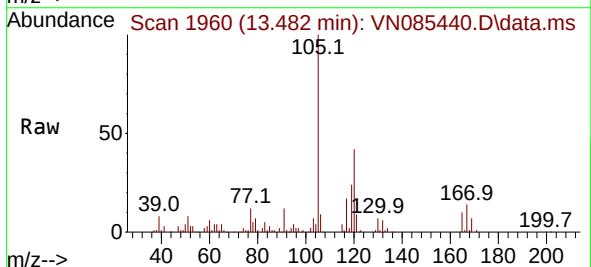
Acq: 14 Jan 2025 15:43

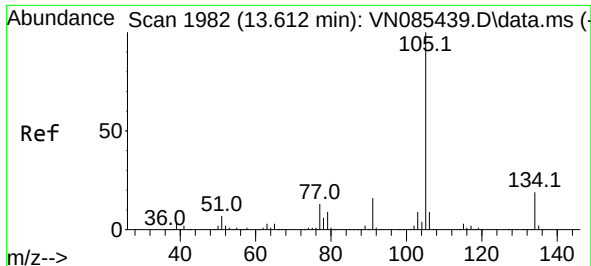
Tgt Ion:105 Resp: 183144

Ion Ratio Lower Upper

105 100

120 42.8 21.6 65.0

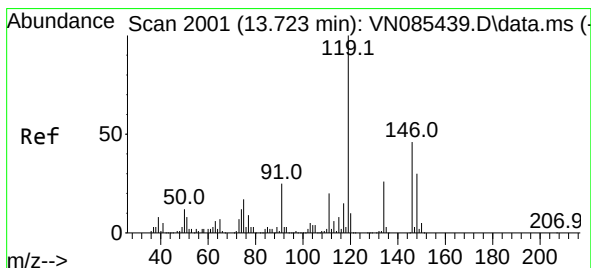
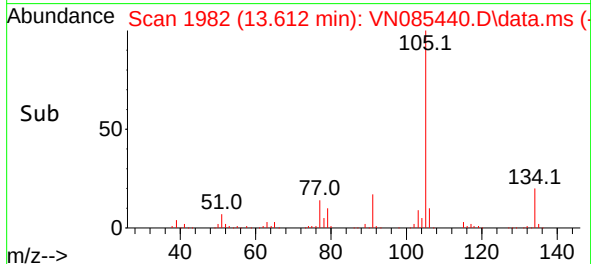
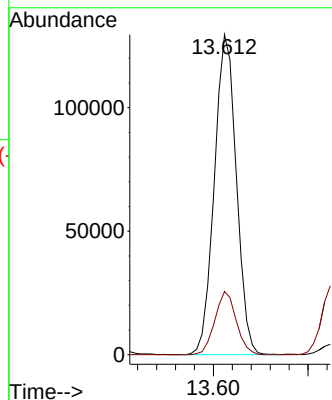
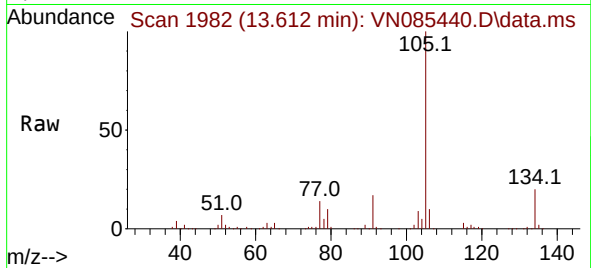




#85  
 sec-Butylbenzene  
 Concen: 22.457 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

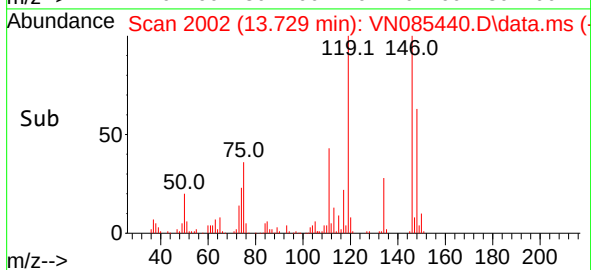
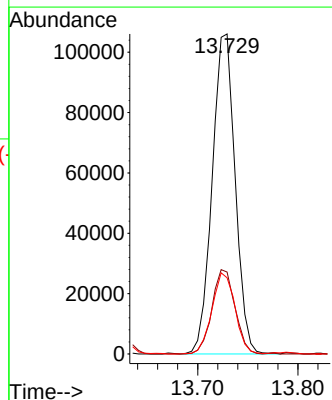
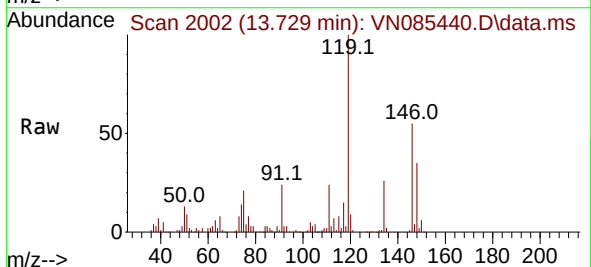
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

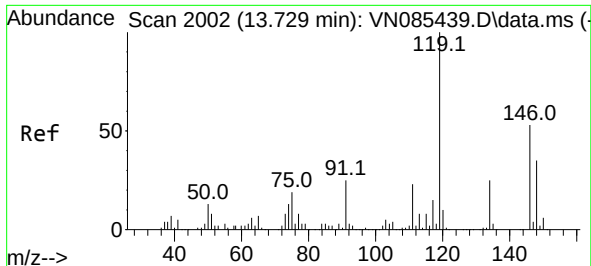
Tgt Ion:105 Resp: 209133  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 21.661 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion:119 Resp: 168888  
 Ion Ratio Lower Upper  
 119 100  
 134 26.4 12.7 38.0  
 91 25.5 12.7 38.1

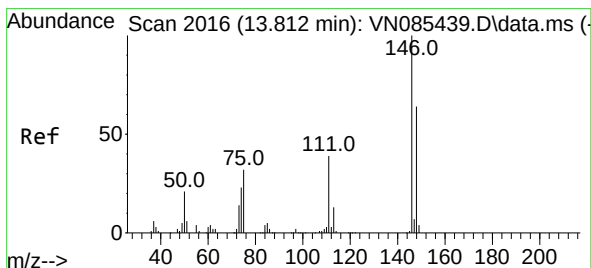
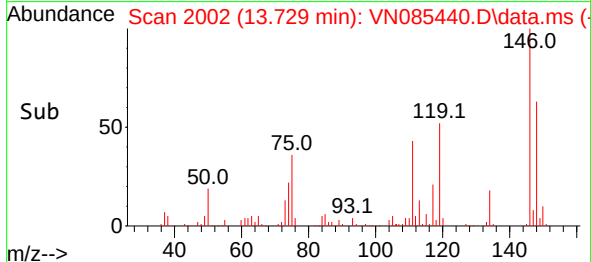
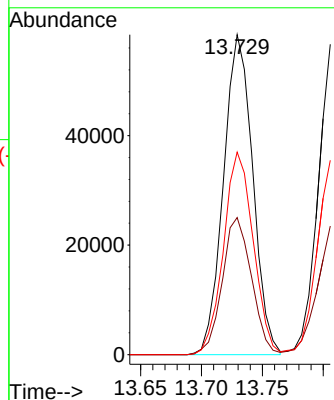
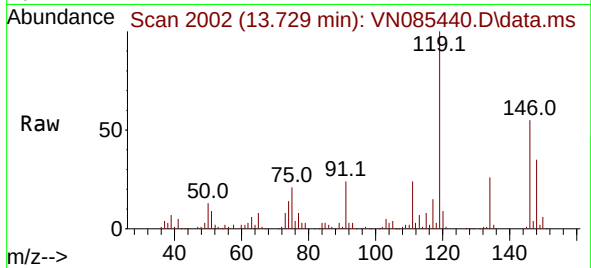




#87  
 1,3-Dichlorobenzene  
 Concen: 20.952 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

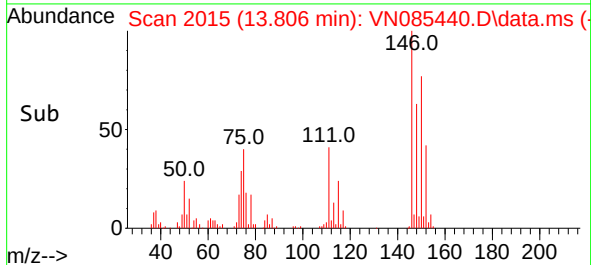
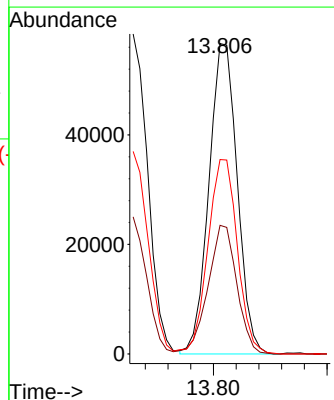
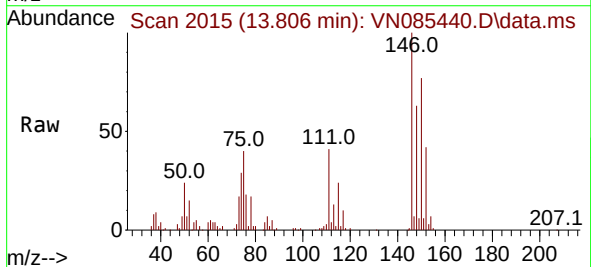
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

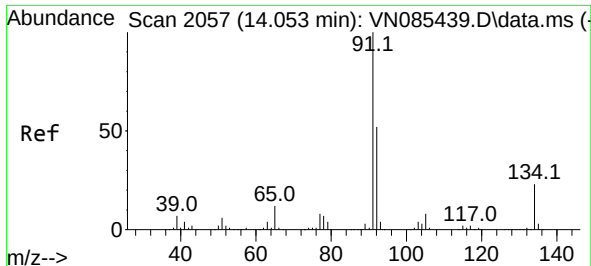
Tgt Ion:146 Resp: 97652  
 Ion Ratio Lower Upper  
 146 100  
 111 42.9 21.4 64.3  
 148 64.3 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 20.351 ug/l  
 RT: 13.806 min Scan# 2015  
 Delta R.T. -0.006 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 98321  
 Ion Ratio Lower Upper  
 146 100  
 111 42.2 21.3 63.7  
 148 65.1 32.4 97.0





#89

n-Butylbenzene

Concen: 21.355 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

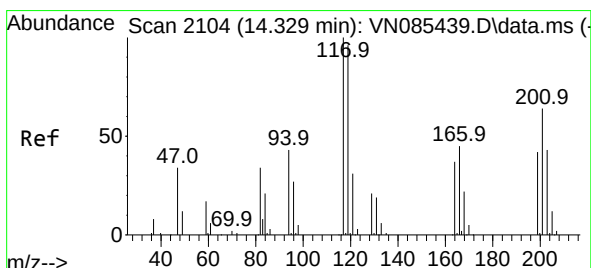
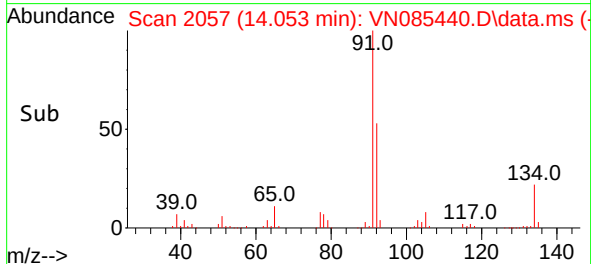
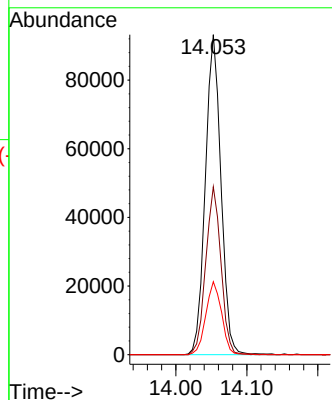
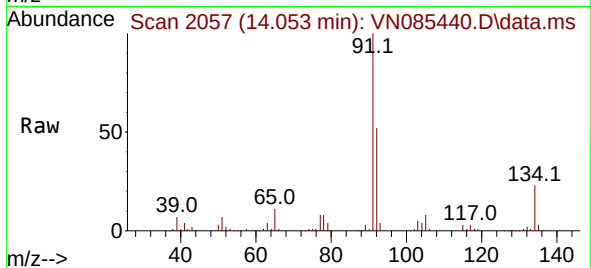
Tgt Ion: 91 Resp: 142673

Ion Ratio Lower Upper

91 100

92 51.0 25.8 77.3

134 23.0 11.7 35.1



#90

Hexachloroethane

Concen: 19.858 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. 0.000 min

Lab File: VN085440.D

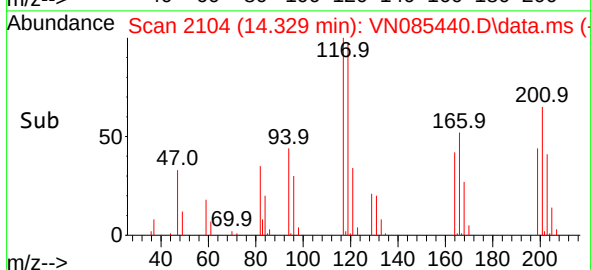
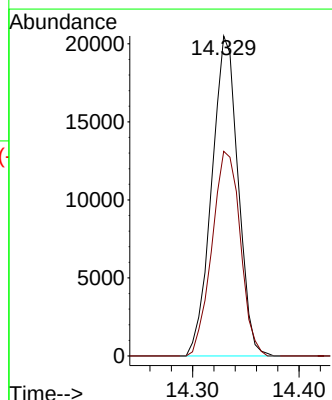
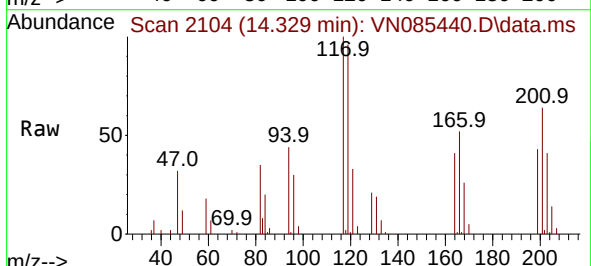
Acq: 14 Jan 2025 15:43

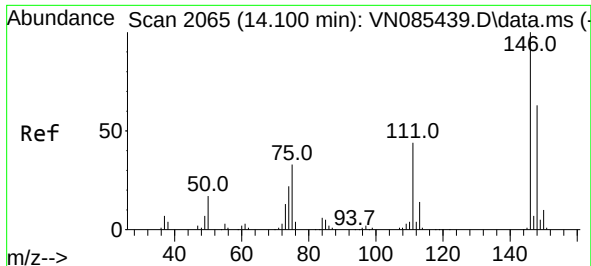
Tgt Ion: 117 Resp: 35205

Ion Ratio Lower Upper

117 100

201 68.8 33.7 101.0

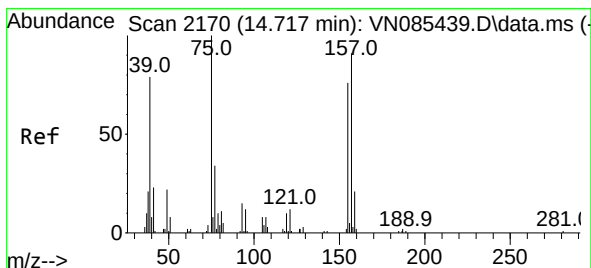
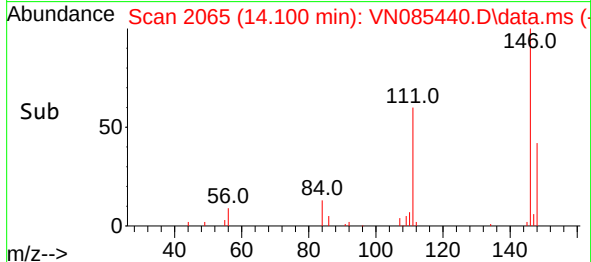
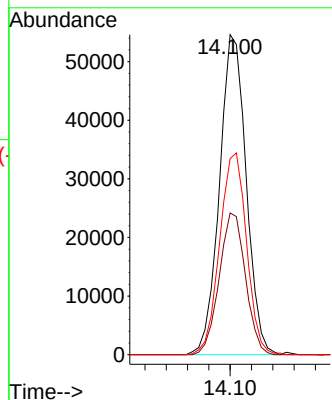
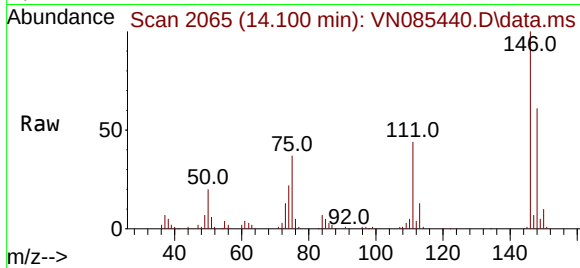




#91  
1,2-Dichlorobenzene  
Concen: 20.425 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

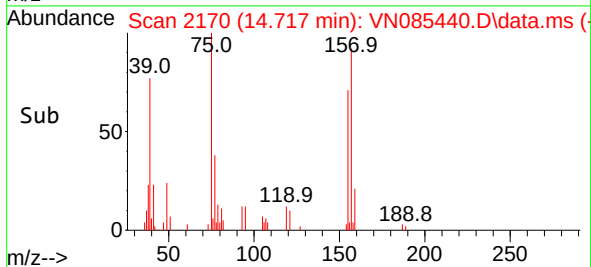
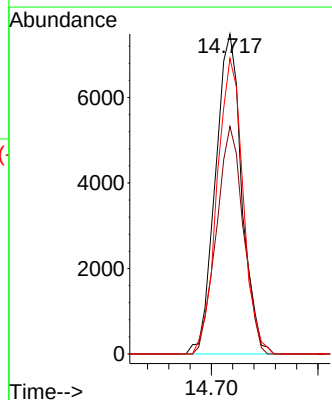
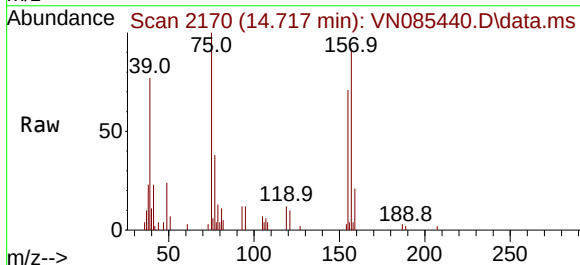
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

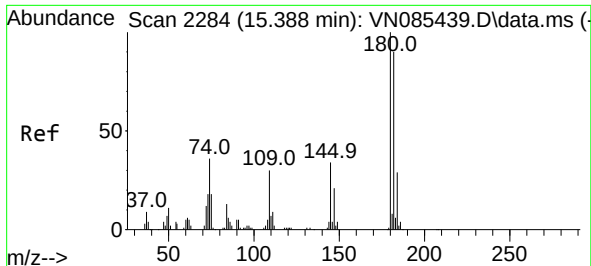
Tgt Ion:146 Resp: 94954  
Ion Ratio Lower Upper  
146 100  
111 43.5 21.7 65.1  
148 63.5 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 20.580 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 12859  
Ion Ratio Lower Upper  
75 100  
155 72.7 36.4 109.2  
157 90.9 45.4 136.1

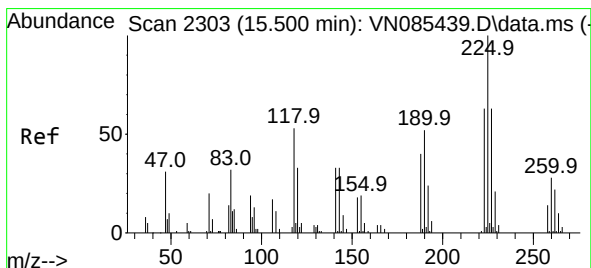
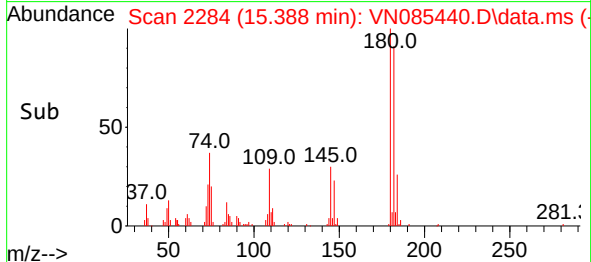
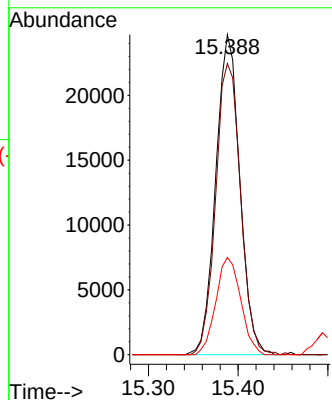
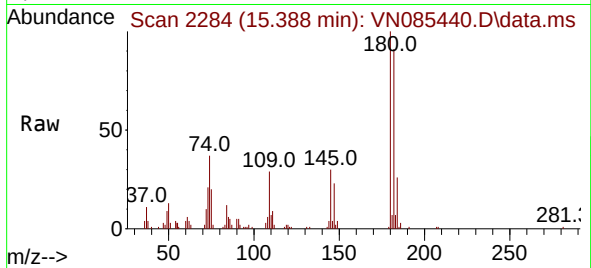




#93  
 1,2,4-Trichlorobenzene  
 Concen: 21.233 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

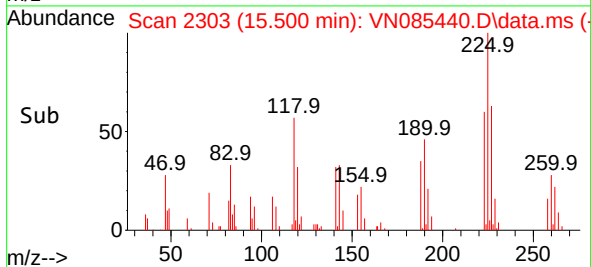
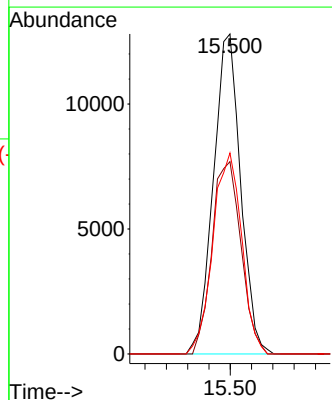
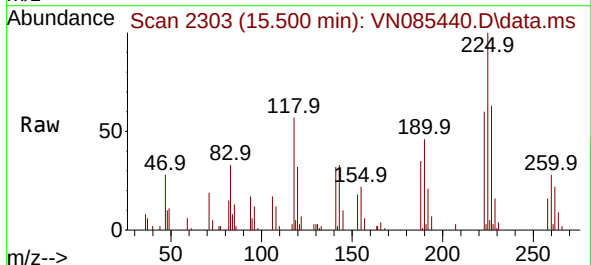
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

Tgt Ion:180 Resp: 45878  
 Ion Ratio Lower Upper  
 180 100  
 182 94.2 46.8 140.3  
 145 31.4 16.0 48.0

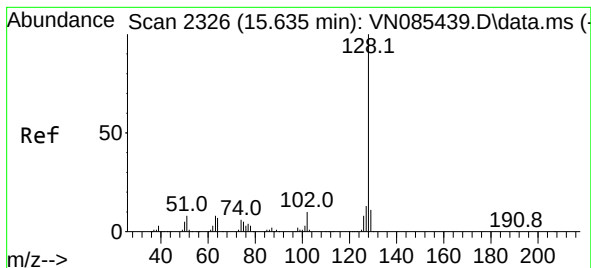


#94  
 Hexachlorobutadiene  
 Concen: 19.805 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

Tgt Ion:225 Resp: 22719  
 Ion Ratio Lower Upper  
 225 100  
 223 64.3 30.7 92.1  
 227 66.3 30.9 92.5







#95

Naphthalene

Concen: 20.906 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020

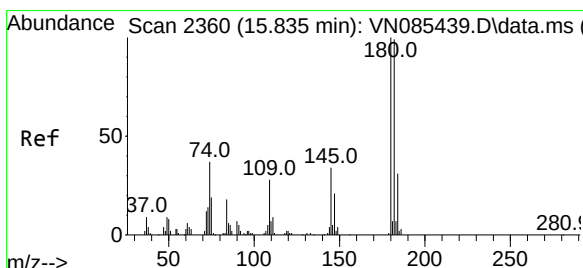
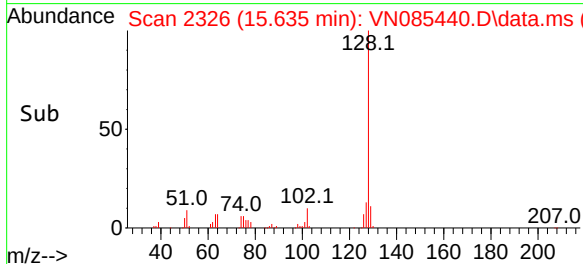
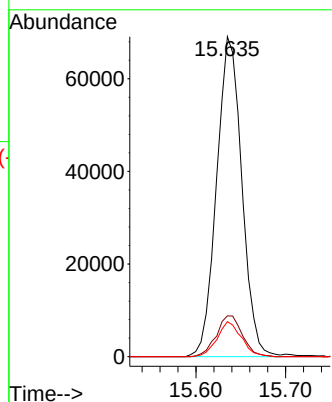
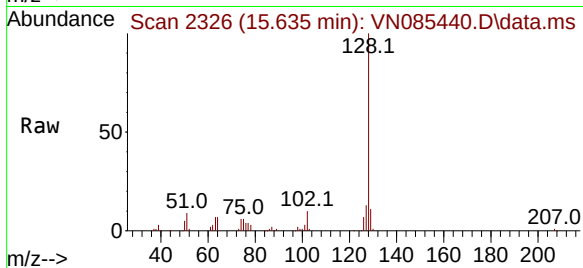
Tgt Ion:128 Resp: 134793

Ion Ratio Lower Upper

128 100

127 13.3 10.6 16.0

129 10.6 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 20.797 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

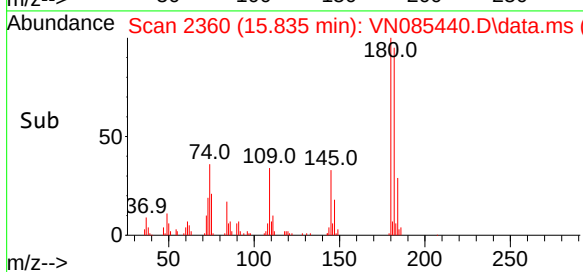
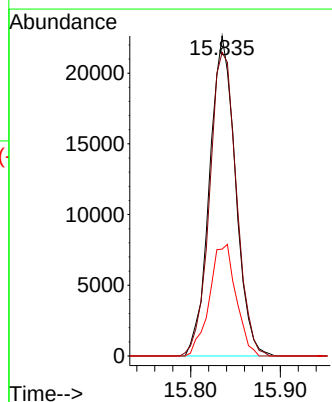
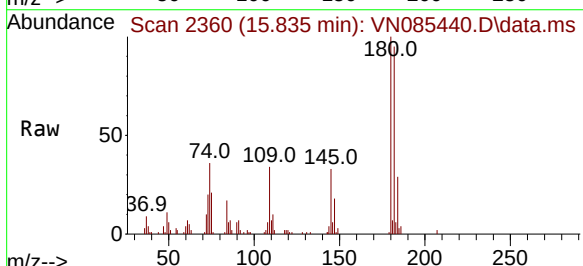
Tgt Ion:180 Resp: 45468

Ion Ratio Lower Upper

180 100

182 97.9 47.4 142.2

145 35.7 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085441.D  
 Acq On : 14 Jan 2025 16:07  
 Operator : JC\MD  
 Sample : VSTDIC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

Quant Time: Jan 15 01:44:05 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 195889   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 340403   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 294508   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 132934   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 29856    | 9.442    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 18.880%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 21110    | 8.939    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 17.880%# |
| 50) Toluene-d8              | 10.565 | 98    | 73223    | 8.727    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 17.460%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 24327    | 8.476    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 16.960%# |

|                              |       |     |        |        |        |     |
|------------------------------|-------|-----|--------|--------|--------|-----|
| Target Compounds             |       |     |        |        | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 26124  | 9.850  | ug/l   | 96  |
| 3) Chloromethane             | 2.359 | 50  | 27143  | 9.452  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.512 | 62  | 27862  | 9.653  | ug/l   | 100 |
| 5) Bromomethane              | 2.965 | 94  | 17139  | 9.830  | ug/l   | 87  |
| 6) Chloroethane              | 3.130 | 64  | 16791  | 9.175  | ug/l   | 96  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 40755  | 9.731  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.953 | 74  | 12415  | 8.581  | ug/l   | 94  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 22982  | 9.742  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.589 | 142 | 25085  | 9.286  | ug/l   | 99  |
| 11) Tert butyl alcohol       | 5.512 | 59  | 17962  | 49.608 | ug/l   | 97  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 20615  | 9.806  | ug/l   | 99  |
| 13) Acrolein                 | 4.177 | 56  | 25568  | 51.729 | ug/l   | 99  |
| 14) Allyl chloride           | 5.018 | 41  | 32240  | 9.451  | ug/l   | 97  |
| 15) Acrylonitrile            | 5.712 | 53  | 53959  | 46.918 | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 48475  | 47.446 | ug/l   | 98  |
| 17) Carbon Disulfide         | 4.712 | 76  | 60201  | 9.300  | ug/l # | 94  |
| 18) Methyl Acetate           | 5.030 | 43  | 30500  | 9.817  | ug/l   | 98  |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 65207  | 9.552  | ug/l   | 91  |
| 20) Methylene Chloride       | 5.277 | 84  | 23723  | 9.379  | ug/l   | 96  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 21127  | 9.403  | ug/l   | 97  |
| 22) Diisopropyl ether        | 6.671 | 45  | 71857  | 9.490  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.600 | 43  | 250575 | 47.125 | ug/l   | 98  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 43099  | 9.335  | ug/l   | 95  |
| 25) 2-Butanone               | 7.477 | 43  | 71191  | 47.350 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 36105  | 9.672  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.489 | 96  | 25049  | 9.466  | ug/l   | 97  |
| 28) Bromochloromethane       | 7.806 | 49  | 19037  | 8.863  | ug/l   | 97  |
| 29) Tetrahydrofuran          | 7.836 | 42  | 45641  | 47.881 | ug/l   | 98  |
| 30) Chloroform               | 7.965 | 83  | 45792  | 9.596  | ug/l   | 100 |
| 31) Cyclohexane              | 8.253 | 56  | 40211  | 10.020 | ug/l # | 93  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 39170  | 9.358  | ug/l   | 99  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 30015  | 9.056  | ug/l   | 97  |
| 37) Ethyl Acetate            | 7.559 | 43  | 30760  | 9.195  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 36015  | 9.492  | ug/l   | 94  |
| 39) Methylcyclohexane        | 9.594 | 83  | 27721  | 8.900  | ug/l   | 95  |
| 40) Benzene                  | 8.600 | 78  | 93680  | 9.407  | ug/l   | 96  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085441.D  
 Acq On : 14 Jan 2025 16:07  
 Operator : JC\MD  
 Sample : VSTDICC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC010

Quant Time: Jan 15 01:44:05 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 16859    | 9.686   | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 35569    | 9.483   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 48926    | 9.127   | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 21113    | 9.108   | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 22747    | 8.942   | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 17260    | 9.404   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.883  | 83   | 35020    | 9.365   | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.677  | 41   | 21873    | 9.067   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 7734     | 190.382 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 146990   | 47.254  | ug/l   | 98       |
| 52) Toluene                   | 10.630 | 92   | 54976    | 9.527   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 32780    | 9.276   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 35904    | 9.512   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 21060    | 9.222   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 28454    | 9.042   | ug/l   | 95       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 37768    | 9.512   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 63110    | 43.550  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 101318   | 46.291  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 25029    | 9.079   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 21055    | 9.263   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 19934    | 9.928   | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 61680    | 9.560   | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 21853    | 9.229   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.959 | 91   | 99248    | 9.445   | ug/l   | 97       |
| 68) m/p-Xylenes               | 12.065 | 106  | 72431    | 18.650  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 34382    | 9.264   | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 56285    | 9.163   | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 16071    | 9.485   | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 87003    | 9.697   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 37343    | 9.260   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 30770    | 9.709   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 39589    | 14.675  | ug/l   | 43       |
| 77) Bromobenzene              | 12.976 | 156  | 22784    | 9.720   | ug/l   | 97       |
| 78) n-propylbenzene           | 13.035 | 91   | 102262   | 9.628   | ug/l   | 98       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 68346    | 9.943   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 71656    | 9.669   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 9236     | 9.248   | ug/l   | 100      |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 66773    | 9.756   | ug/l   | 97       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 59455    | 9.553   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 72046    | 9.754   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 83662    | 9.699   | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 67556    | 9.674   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 41843    | 9.693   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 42728    | 9.549   | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 57632    | 9.314   | ug/l   | 97       |
| 90) Hexachloroethane          | 14.329 | 117  | 15261    | 9.294   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 40726    | 9.458   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 5639     | 9.744   | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 18720    | 9.354   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 10491    | 9.874   | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 52054    | 8.717   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 19450    | 9.605   | ug/l   | 96       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085441.D  
Acq On : 14 Jan 2025 16:07  
Operator : JC\MD  
Sample : VSTDICC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Quant Time: Jan 15 01:44:05 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

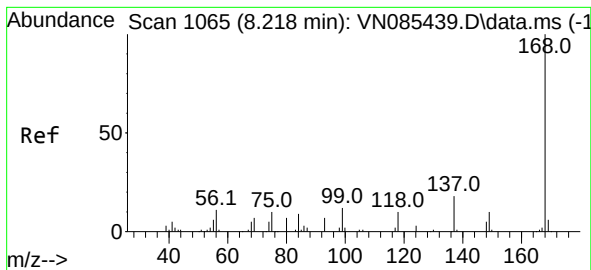
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC010

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC010

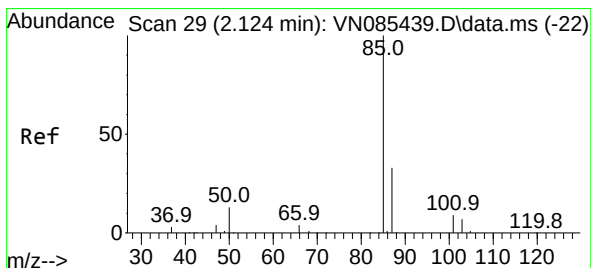
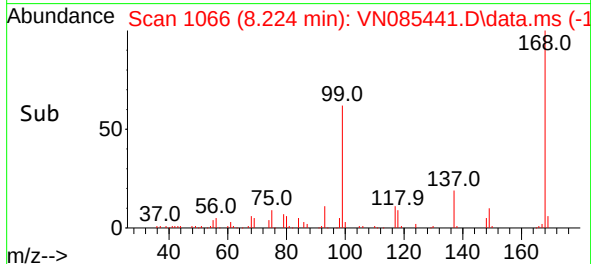
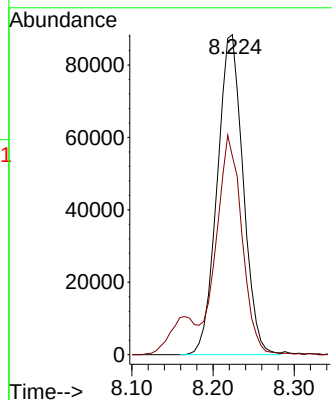
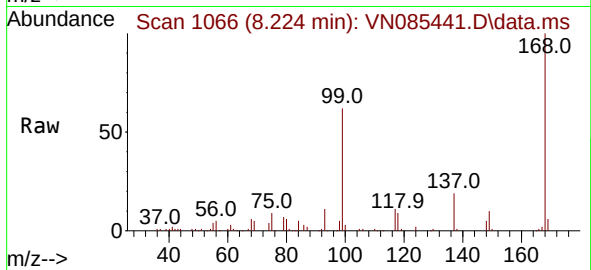




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

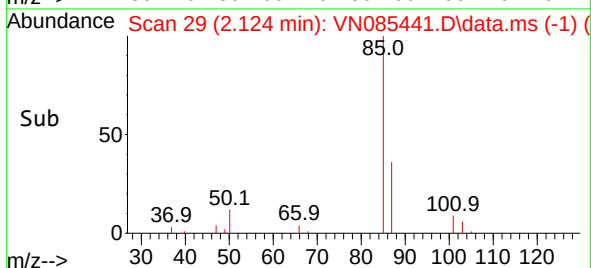
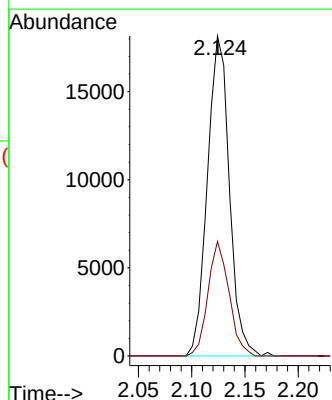
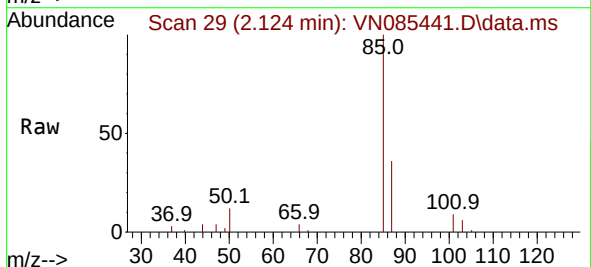
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

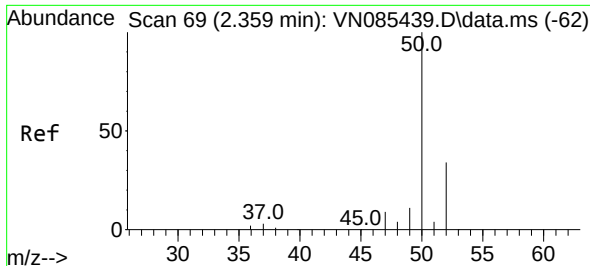
Tgt Ion:168 Resp: 195889  
Ion Ratio Lower Upper  
168 100  
99 61.7 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 9.850 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 85 Resp: 26124  
Ion Ratio Lower Upper  
85 100  
87 35.8 16.7 50.1

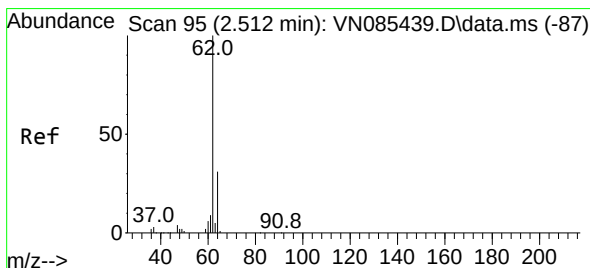
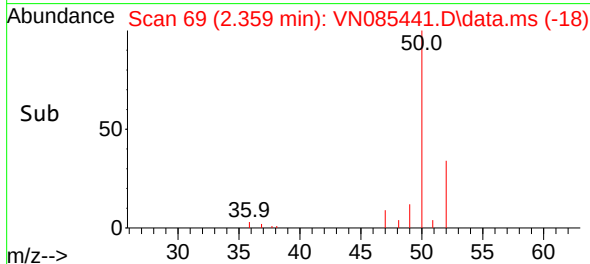
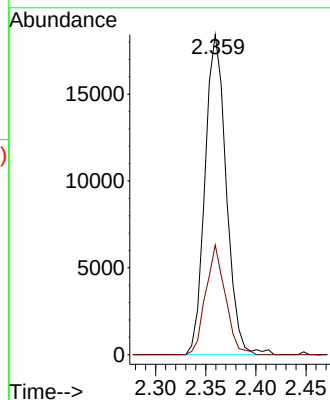
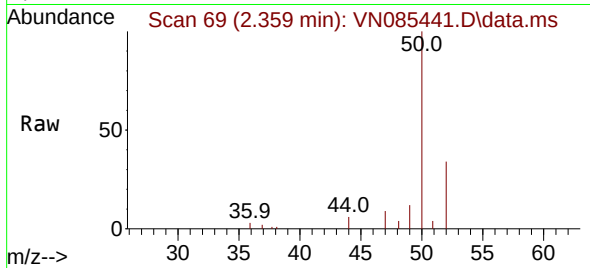




#3  
Chloromethane  
Concen: 9.452 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

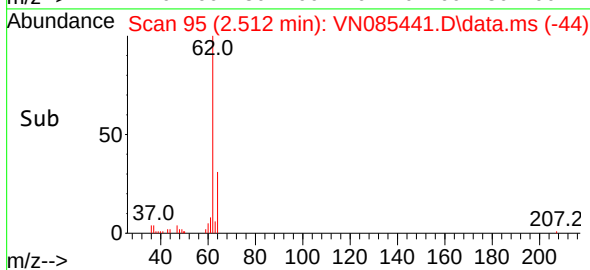
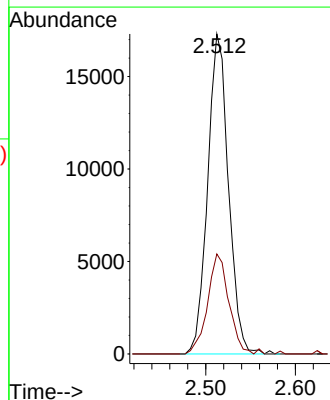
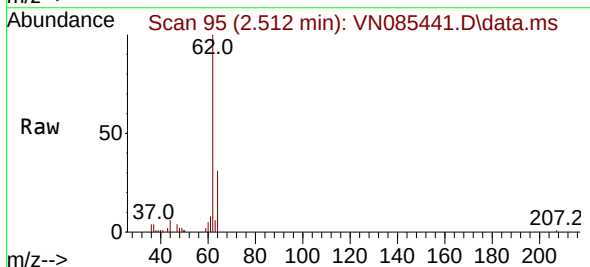
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

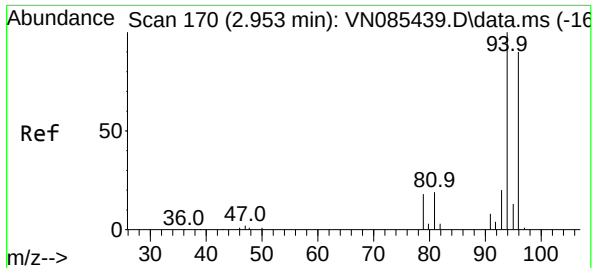
Tgt Ion: 50 Resp: 27143  
Ion Ratio Lower Upper  
50 100  
52 34.3 27.0 40.6



#4  
Vinyl Chloride  
Concen: 9.653 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 27862  
Ion Ratio Lower Upper  
62 100  
64 31.2 24.8 37.2

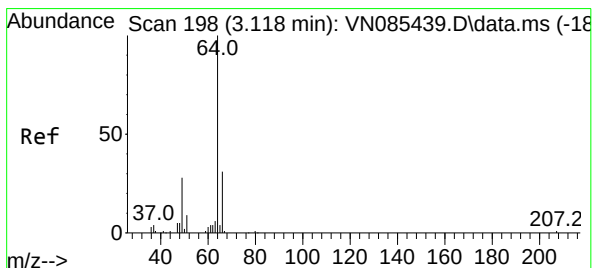
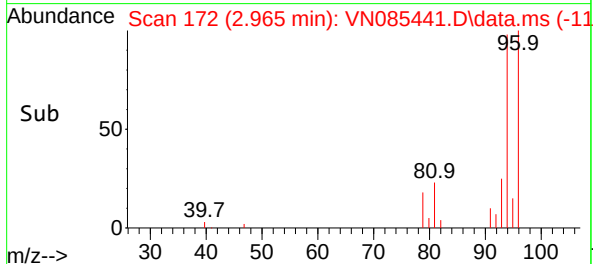
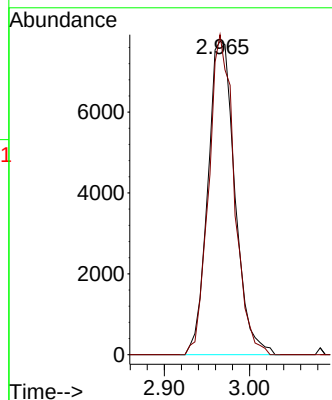
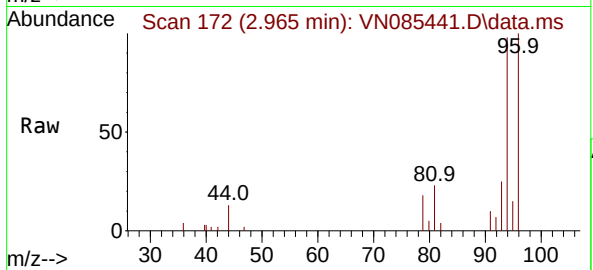




#5  
Bromomethane  
Concen: 9.830 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

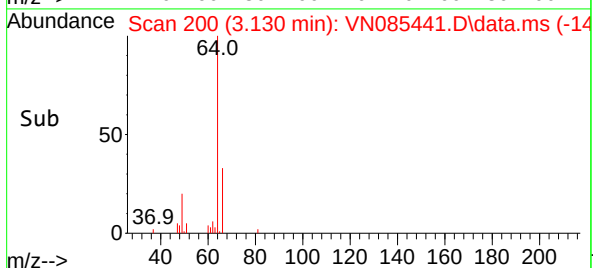
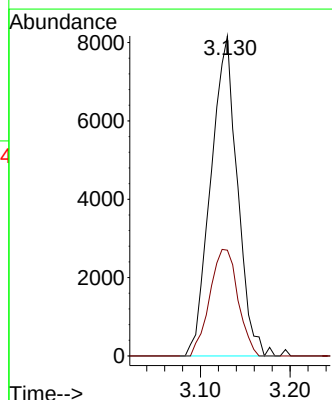
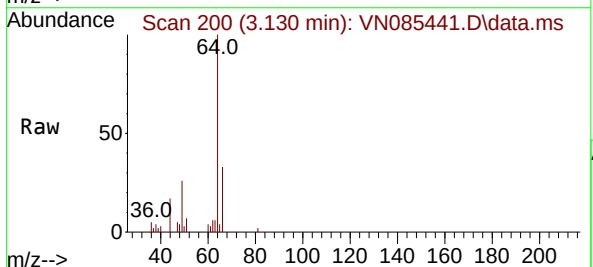
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion: 94 Resp: 17139  
Ion Ratio Lower Upper  
94 100  
96 102.1 71.8 107.6

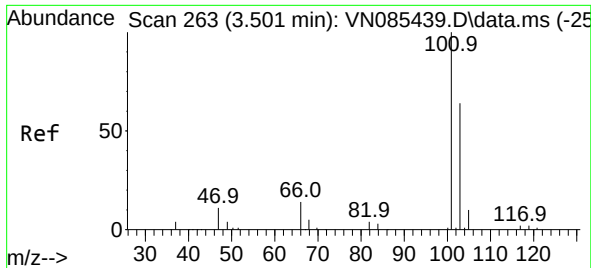


#6  
Chloroethane  
Concen: 9.175 ug/l  
RT: 3.130 min Scan# 200  
Delta R.T. 0.012 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 64 Resp: 16791  
Ion Ratio Lower Upper  
64 100  
66 33.1 24.6 36.8



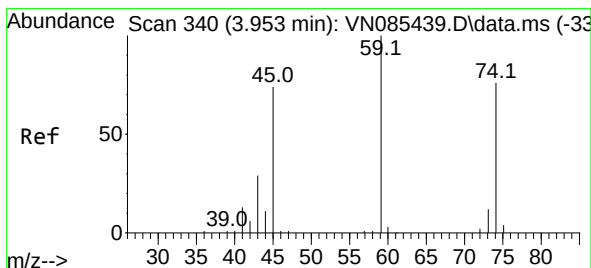
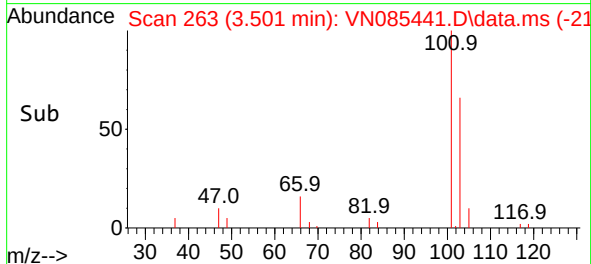
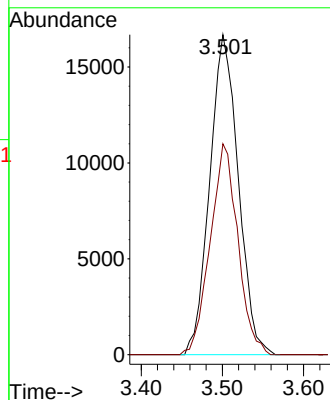
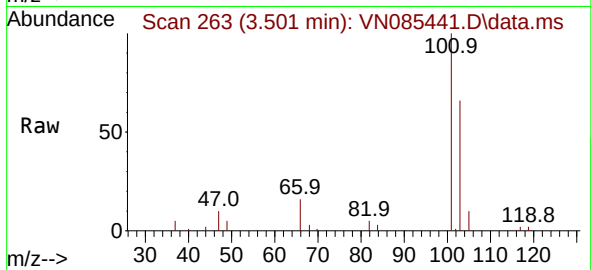




#7  
 Trichlorofluoromethane  
 Concen: 9.731 ug/l  
 RT: 3.501 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

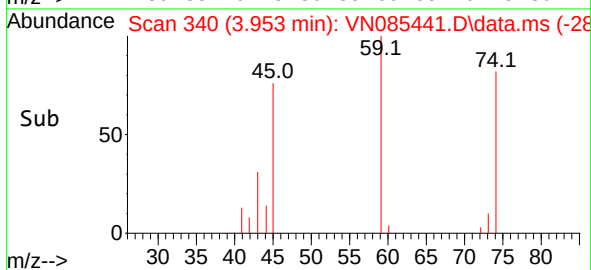
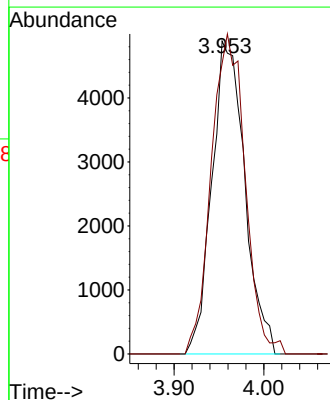
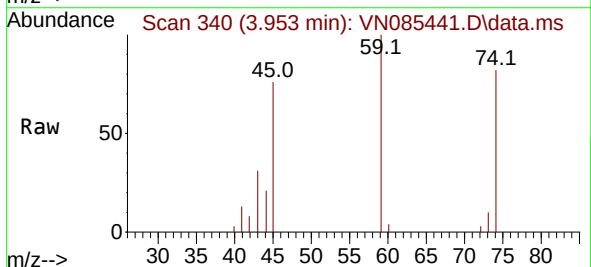
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 ClientSampleId :  
 VSTDIC010

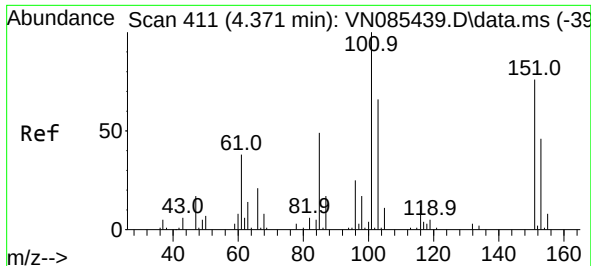
Tgt Ion:101 Resp: 40755  
 Ion Ratio Lower Upper  
 101 100  
 103 65.9 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 8.581 ug/l  
 RT: 3.953 min Scan# 340  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Tgt Ion: 74 Resp: 12415  
 Ion Ratio Lower Upper  
 74 100  
 45 105.3 49.7 149.1

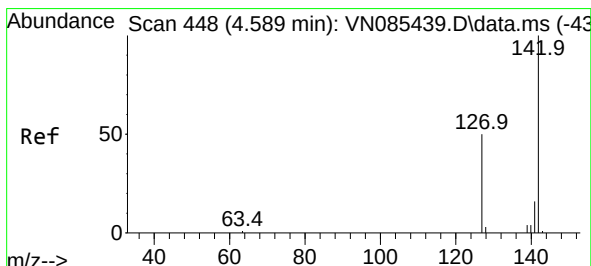
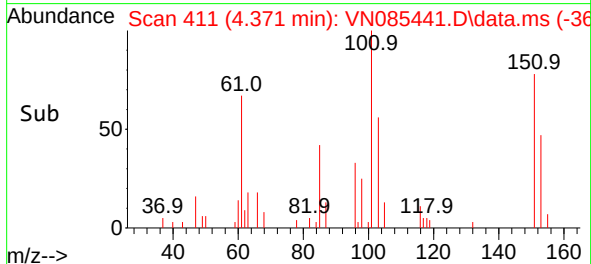
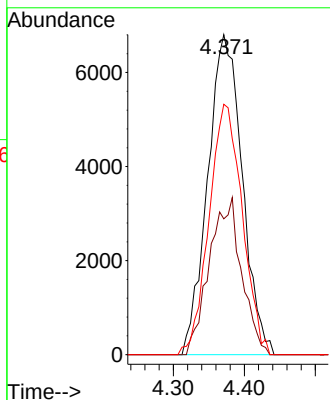
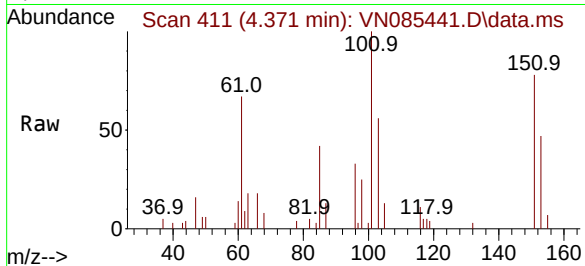




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.742 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

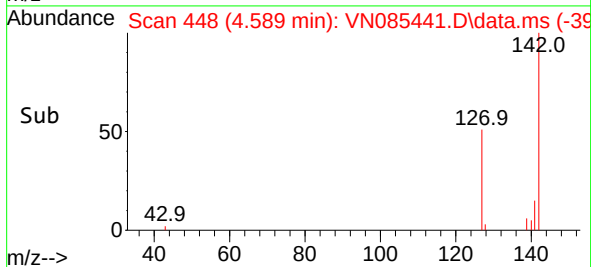
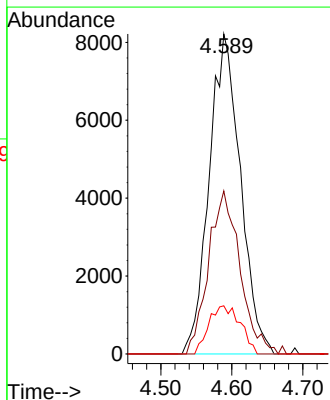
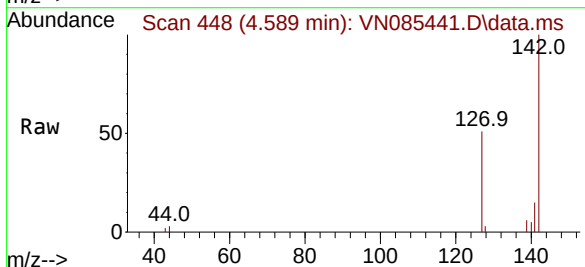
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

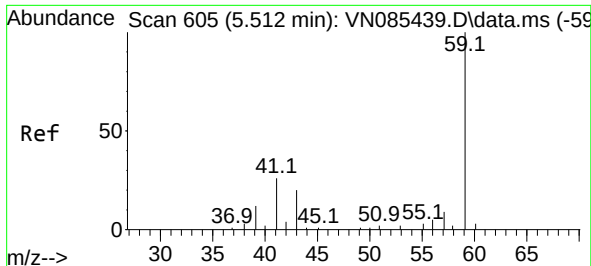
Tgt Ion:101 Resp: 22982  
Ion Ratio Lower Upper  
101 100  
85 45.8 37.8 56.8  
151 75.2 58.8 88.2



#10  
Methyl Iodide  
Concen: 9.286 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:142 Resp: 25085  
Ion Ratio Lower Upper  
142 100  
127 50.9 40.3 60.5  
141 15.0 12.8 19.2

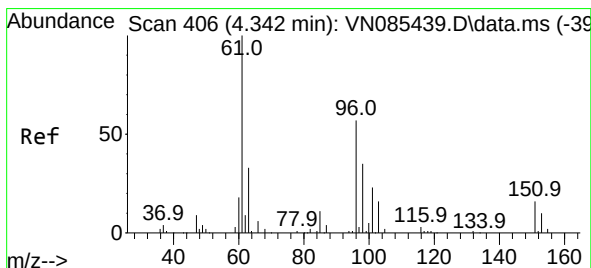
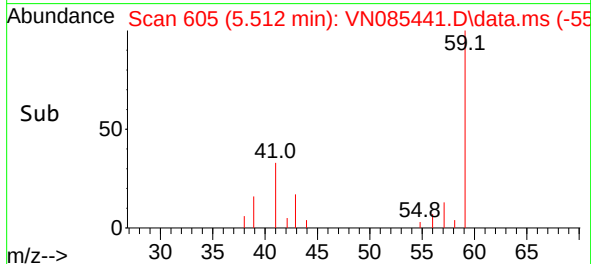
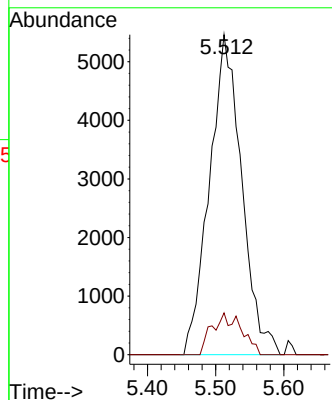
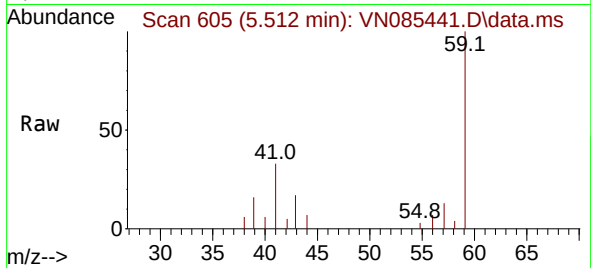




#11  
Tert butyl alcohol  
Concen: 49.608 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

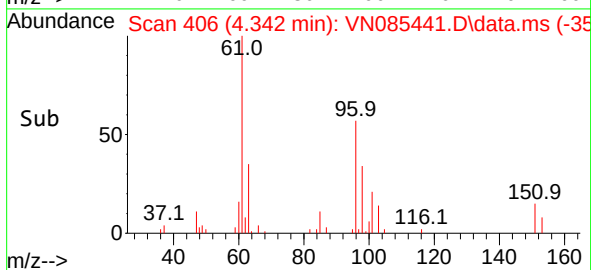
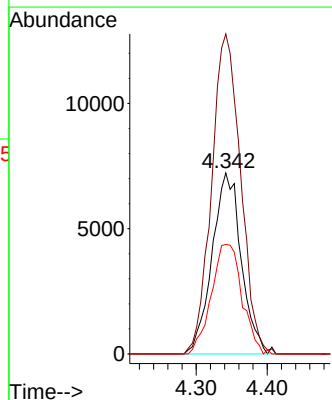
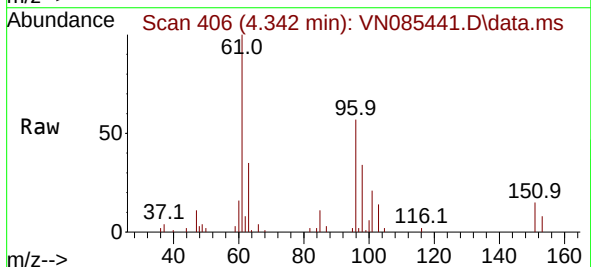
Instrument :  
MSVOA\_N  
ClientSampleId :  
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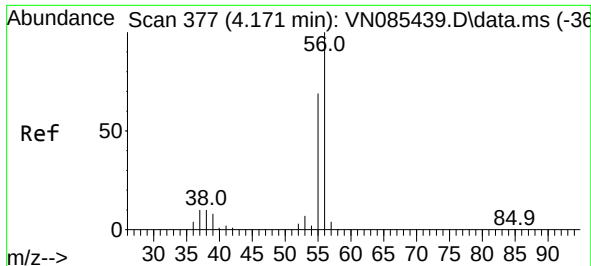
Tgt Ion: 59 Resp: 17962  
Ion Ratio Lower Upper  
59 100  
57 11.9 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 9.806 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 20615  
Ion Ratio Lower Upper  
96 100  
61 176.8 141.0 211.4  
98 60.5 49.0 73.6





#13

Acrolein

Concen: 51.729 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

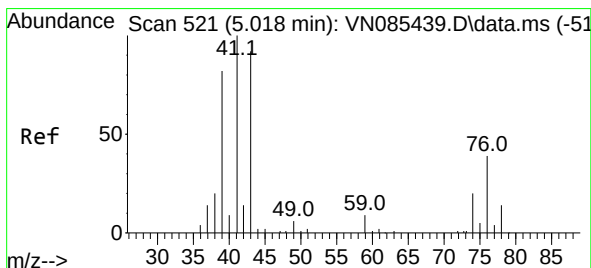
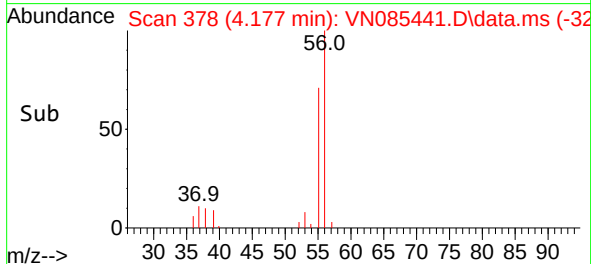
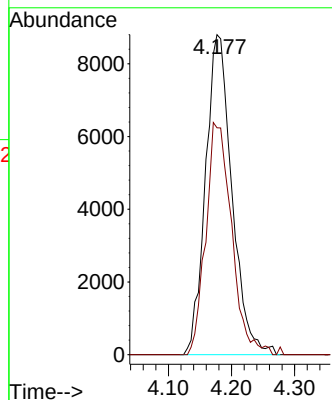
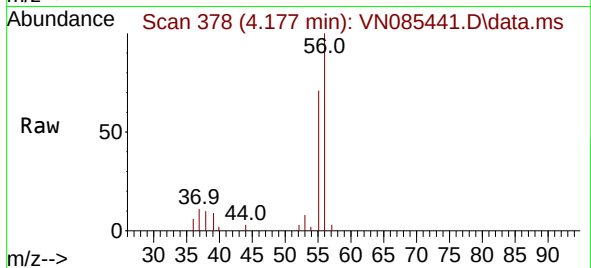
VSTDICC010

Tgt Ion: 56 Resp: 25568

Ion Ratio Lower Upper

56 100

55 70.9 56.3 84.5



#14

Allyl chloride

Concen: 9.451 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085441.D

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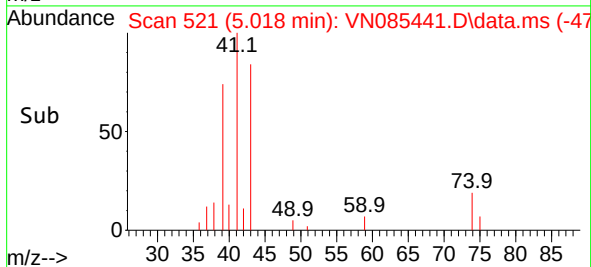
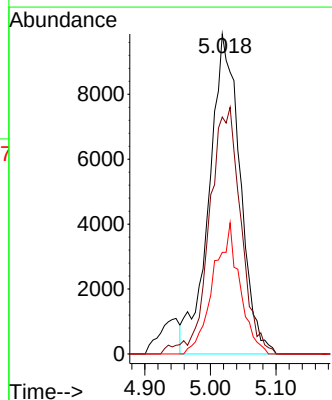
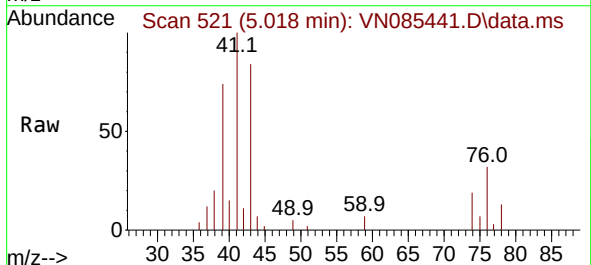
Tgt Ion: 41 Resp: 32240

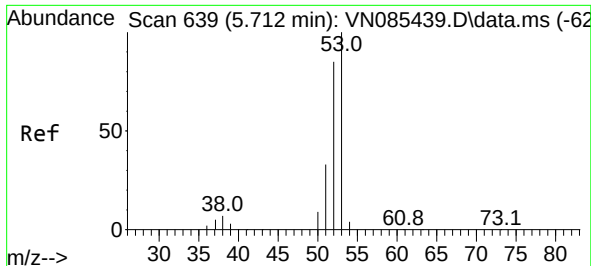
Ion Ratio Lower Upper

41 100

39 78.3 64.4 96.6

76 35.1 30.5 45.7

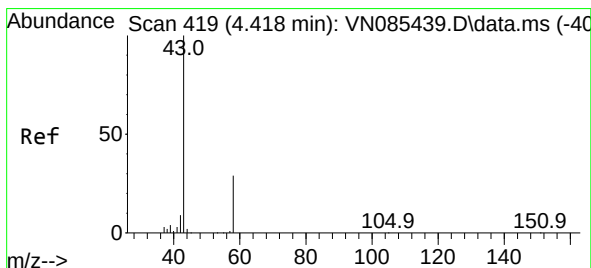
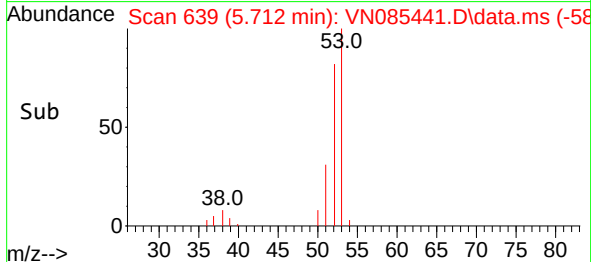
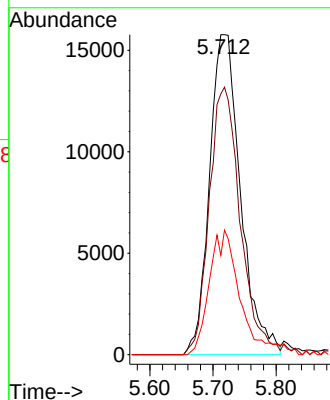
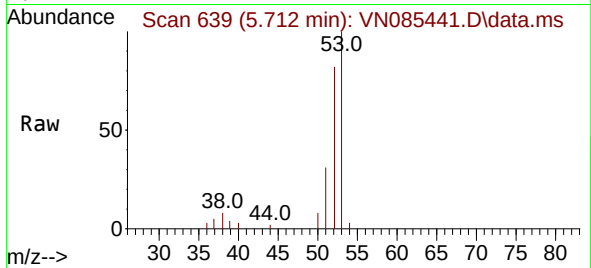




#15  
Acrylonitrile  
Concen: 46.918 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

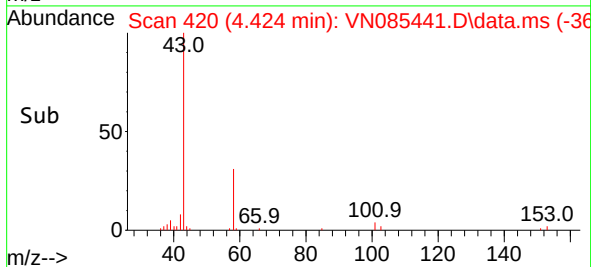
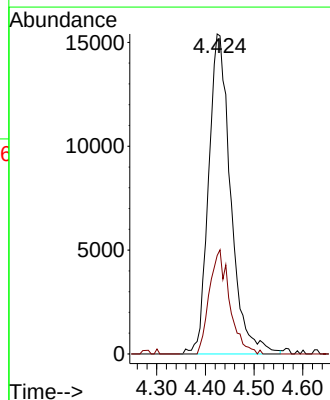
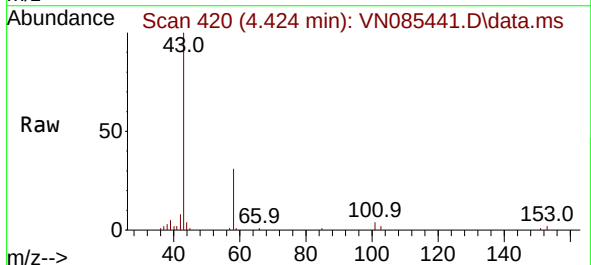
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

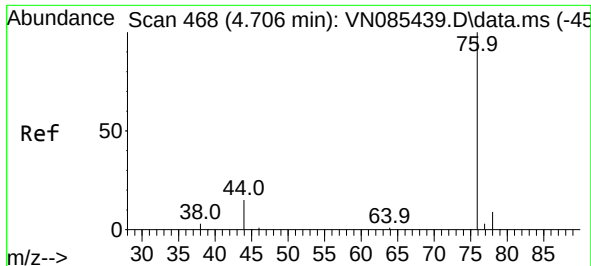
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 53959 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 83.3  | 65.5  | 98.3  |
| 51       | 38.8  | 29.8  | 44.8  |



#16  
Acetone  
Concen: 47.446 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 48475 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 30.8  | 23.8  | 35.6  |

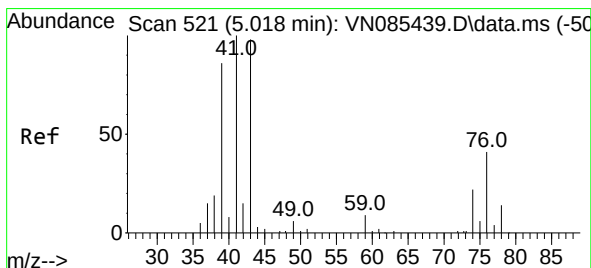
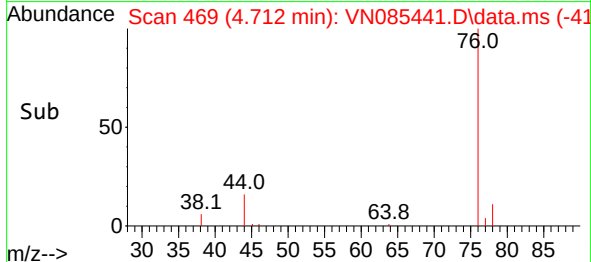
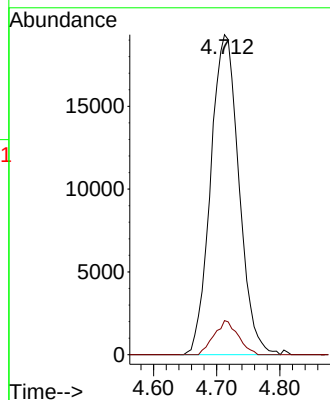
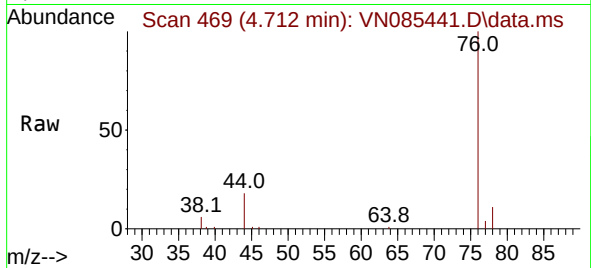




#17  
Carbon Disulfide  
Concen: 9.300 ug/l  
RT: 4.712 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

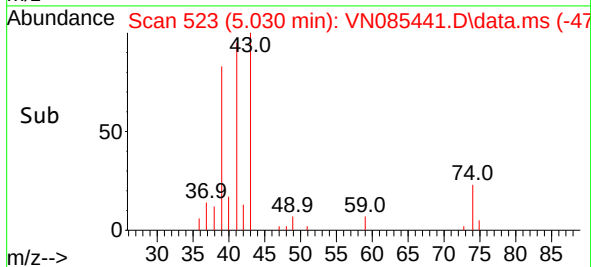
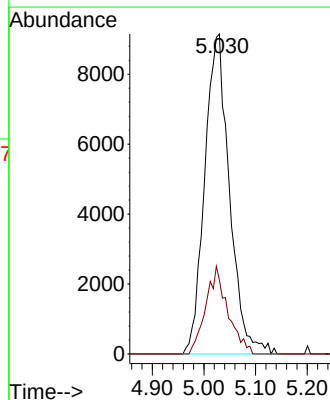
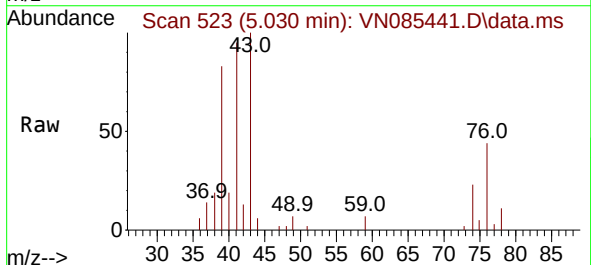
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ClientSampleId :  
VSTDIC010

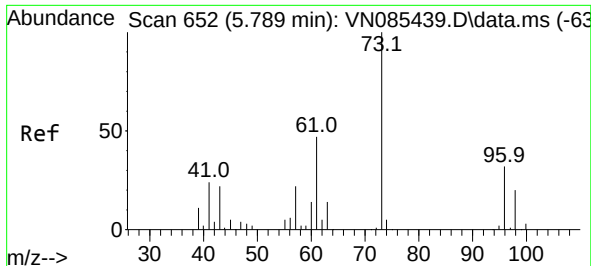
Tgt Ion: 76 Resp: 60201  
Ion Ratio Lower Upper  
76 100  
78 10.7 6.9 10.3#



#18  
Methyl Acetate  
Concen: 9.817 ug/l  
RT: 5.030 min Scan# 523  
Delta R.T. 0.012 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 30500  
Ion Ratio Lower Upper  
43 100  
74 24.3 18.6 28.0

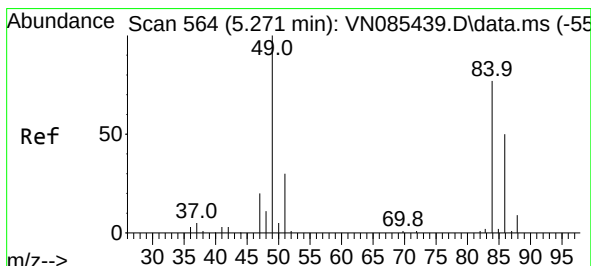
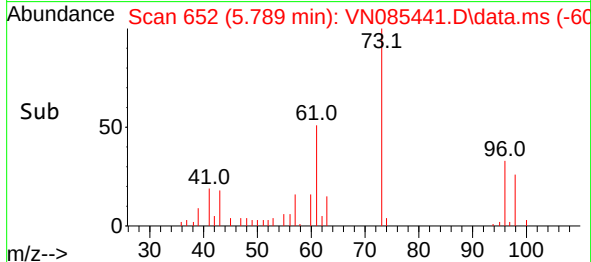
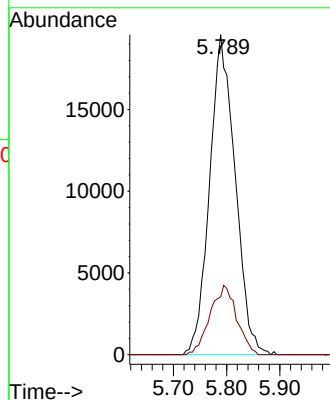
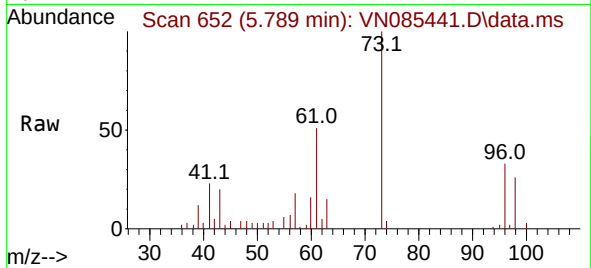




#19  
Methyl tert-butyl Ether  
Concen: 9.552 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

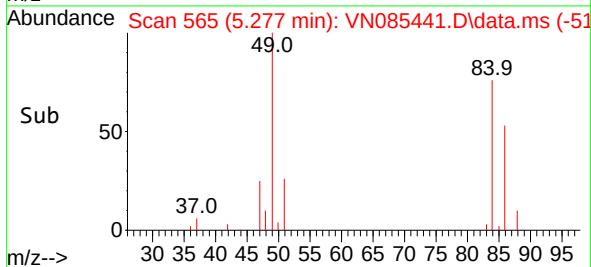
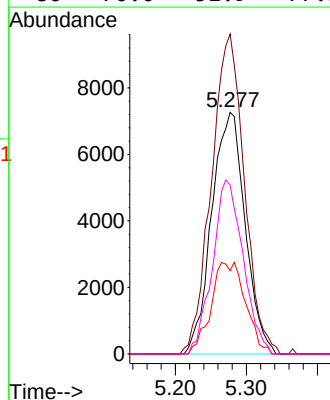
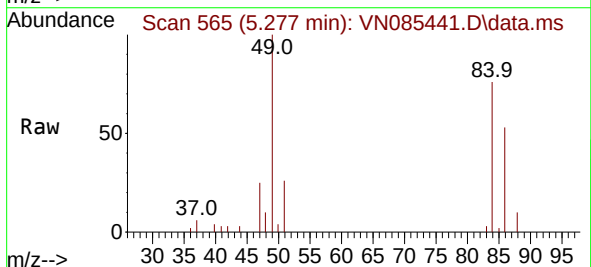
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ClientSampleId :  
VSTDICC010

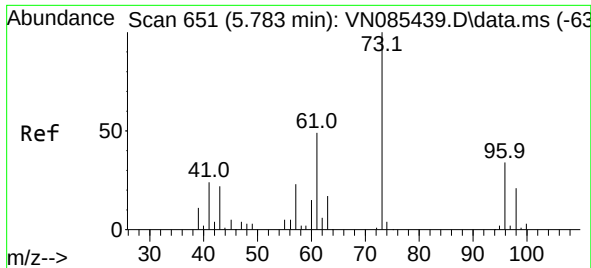
Tgt Ion: 73 Resp: 65207  
Ion Ratio Lower Upper  
73 100  
57 18.1 17.8 26.8



#20  
Methylene Chloride  
Concen: 9.379 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 84 Resp: 23723  
Ion Ratio Lower Upper  
84 100  
49 132.4 104.1 156.1  
51 34.4 31.0 46.4  
86 70.0 51.9 77.9

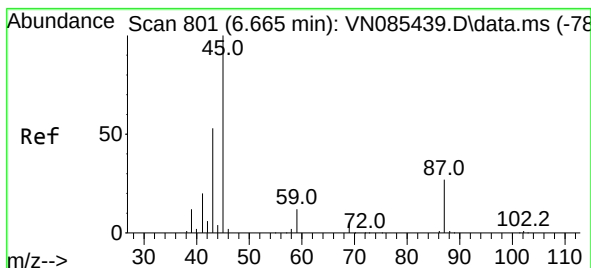
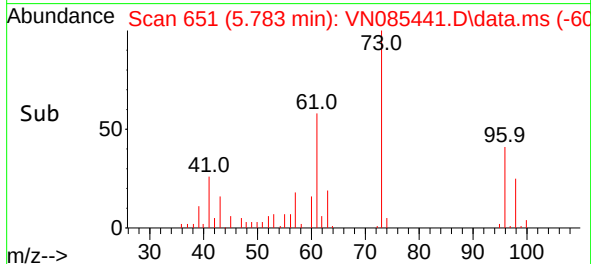
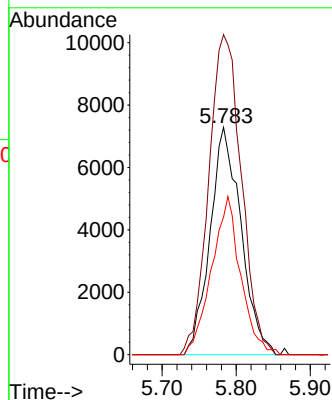
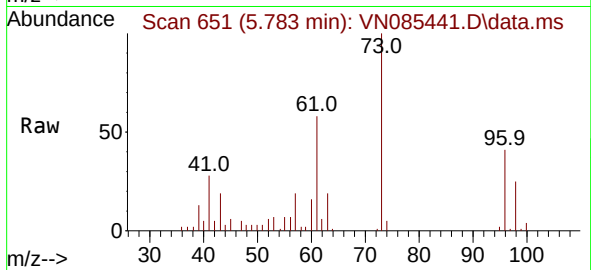




#21  
trans-1,2-Dichloroethene  
Concen: 9.403 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

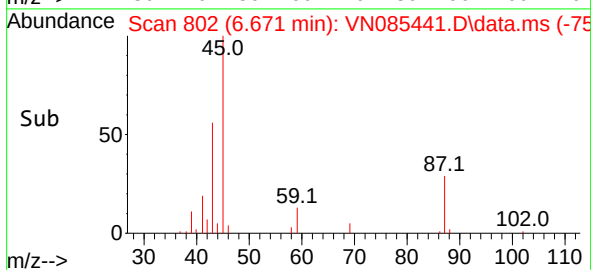
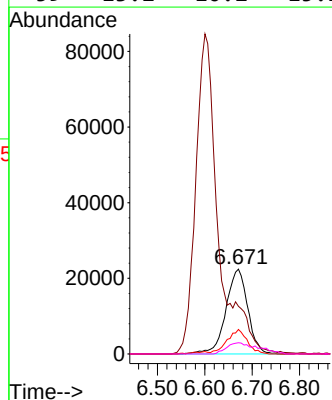
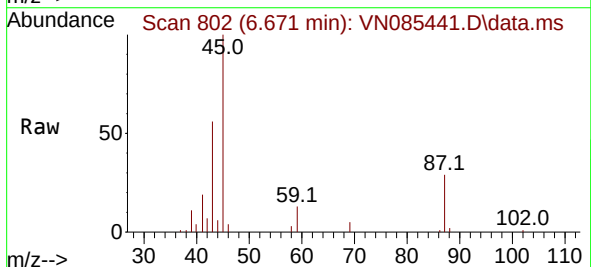
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion: 96 Resp: 21127  
Ion Ratio Lower Upper  
96 100  
61 140.8 115.7 173.5  
98 60.5 49.8 74.8

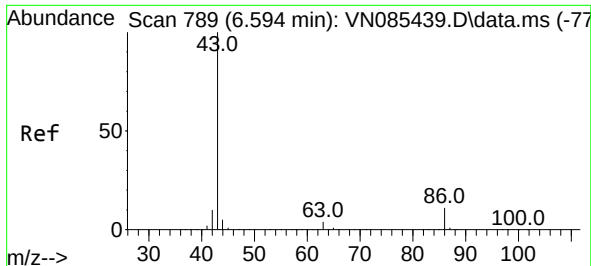


#22  
Diisopropyl ether  
Concen: 9.490 ug/l  
RT: 6.671 min Scan# 802  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 45 Resp: 71857  
Ion Ratio Lower Upper  
45 100  
43 53.2 45.0 67.6  
87 28.8 21.8 32.8  
59 13.2 10.2 15.2



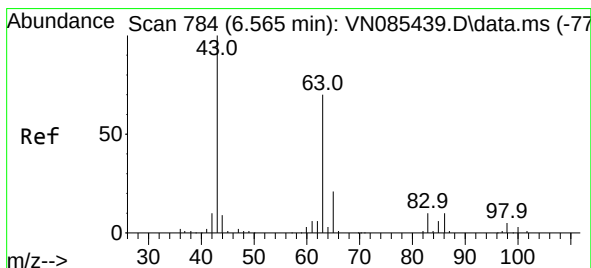
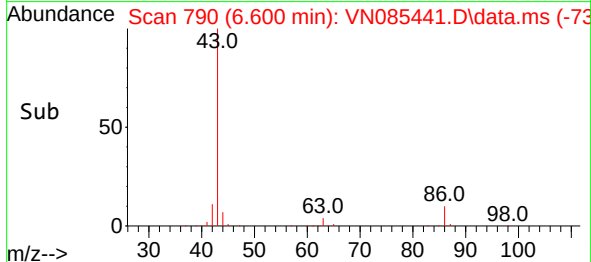
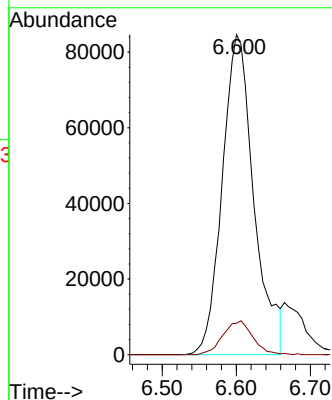
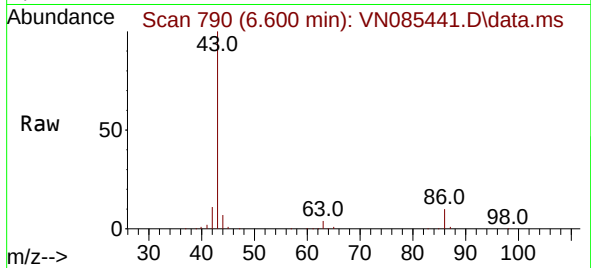




#23  
 Vinyl Acetate  
 Concen: 47.125 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

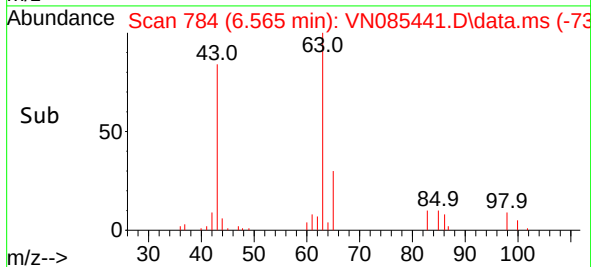
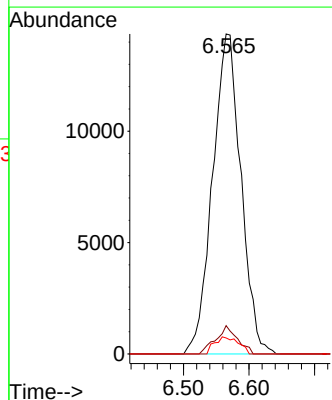
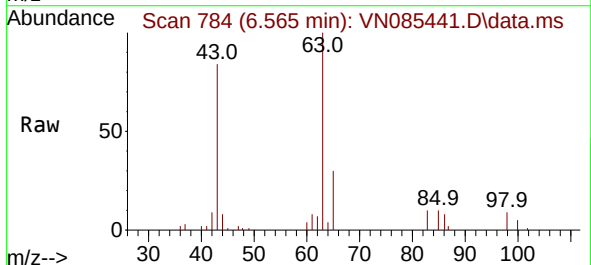
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 ClientSampleId :  
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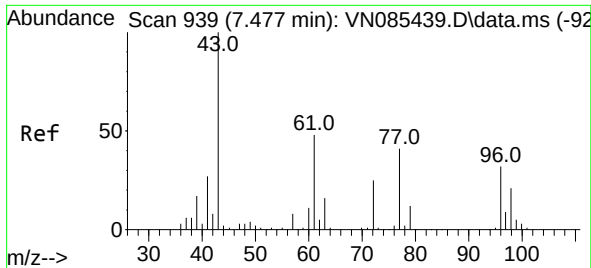
Tgt Ion: 43 Resp: 250575  
 Ion Ratio Lower Upper  
 43 100  
 86 9.8 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 9.335 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 43099  
 Ion Ratio Lower Upper  
 63 100  
 98 8.8 3.3 9.8  
 100 5.0 2.0 6.0

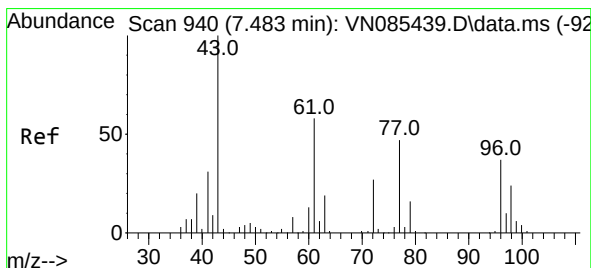
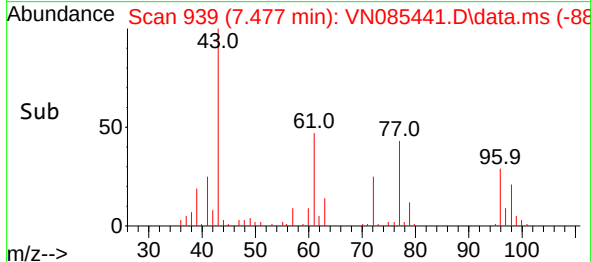
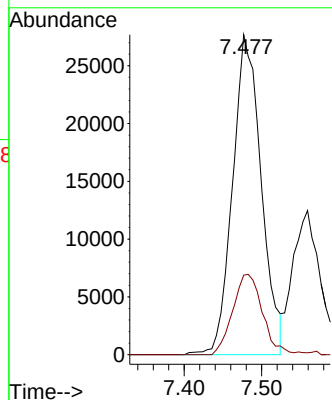
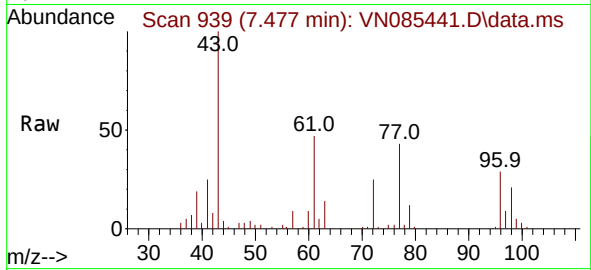




#25  
2-Butanone  
Concen: 47.350 ug/l  
RT: 7.477 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

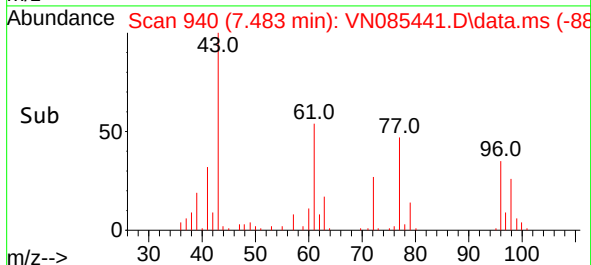
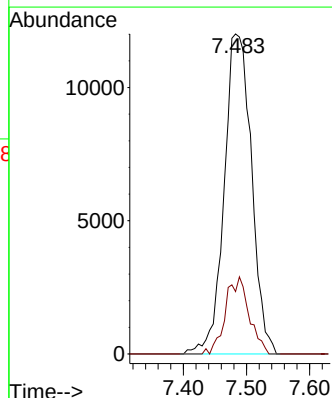
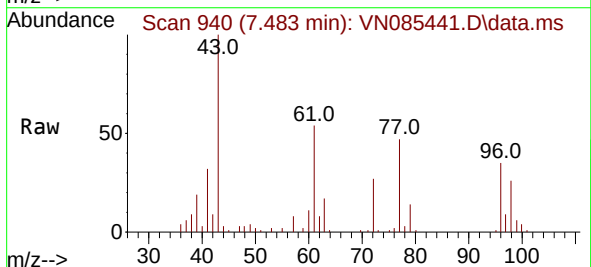
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ClientSampleId :  
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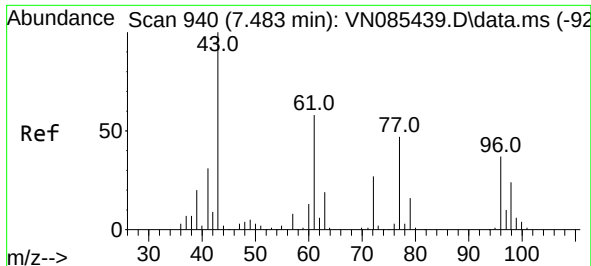
Tgt Ion: 43 Resp: 71191  
Ion Ratio Lower Upper  
43 100  
72 24.8 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 9.672 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 77 Resp: 36105  
Ion Ratio Lower Upper  
77 100  
97 20.8 10.7 32.1



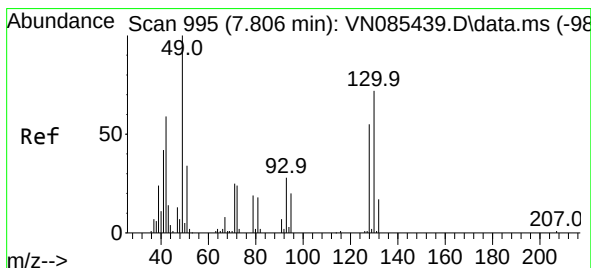
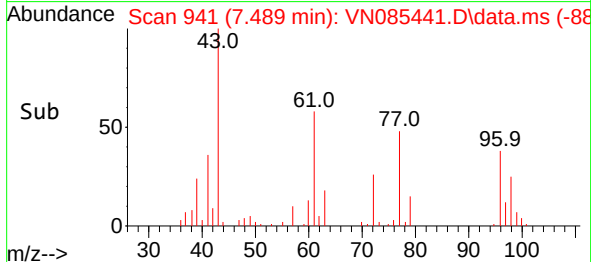
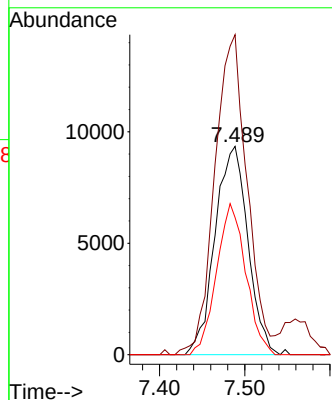
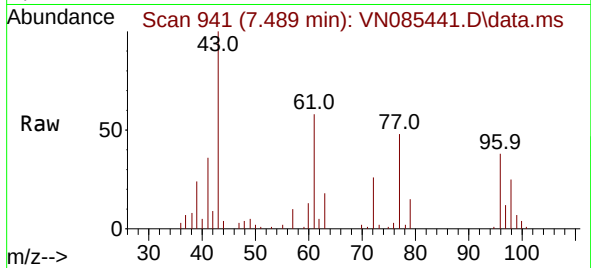


#27  
 cis-1,2-Dichloroethene  
 Concen: 9.466 ug/l  
 RT: 7.489 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

Tgt Ion: 96 Resp: 25049  

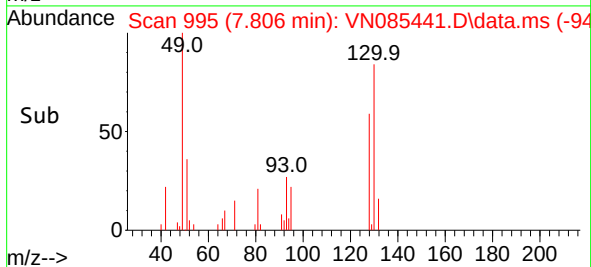
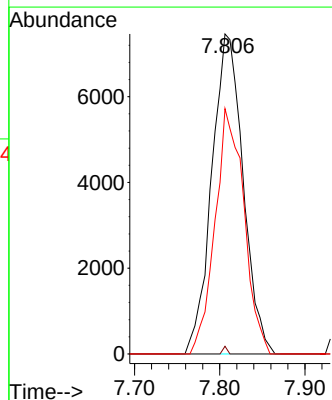
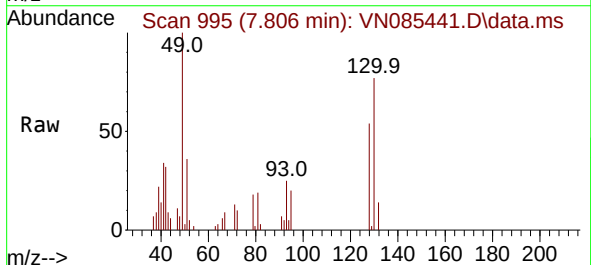
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 151.8 | 0.0   | 311.8 |
| 98  | 64.7  | 0.0   | 126.0 |

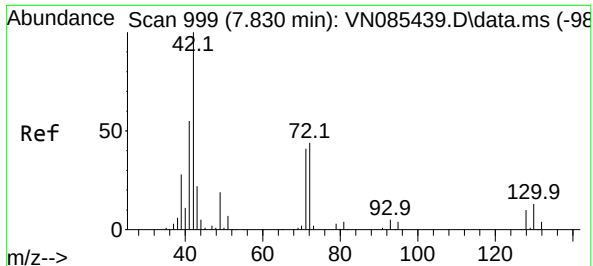


#28  
 Bromochloromethane  
 Concen: 8.863 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Tgt Ion: 49 Resp: 19037  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 129 | 0.3   | 0.0   | 4.4   |
| 130 | 70.8  | 55.0  | 82.4  |

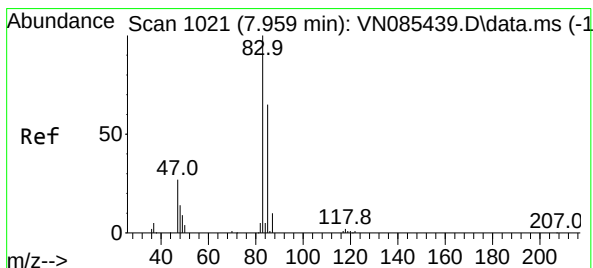
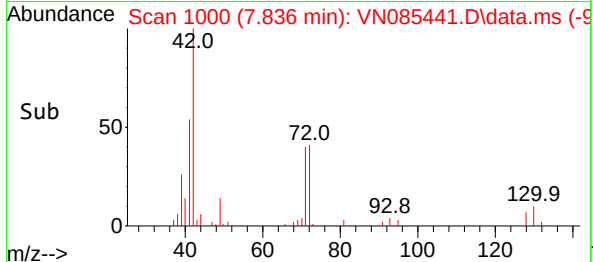
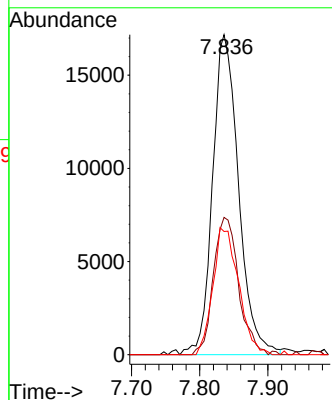
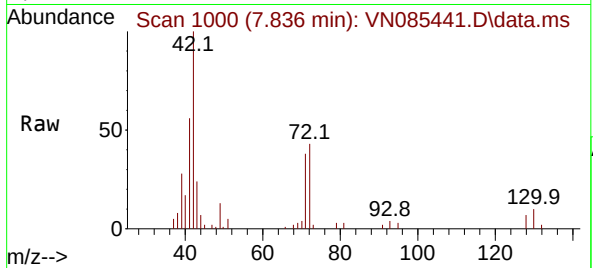




#29  
Tetrahydrofuran  
Concen: 47.881 ug/l  
RT: 7.836 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

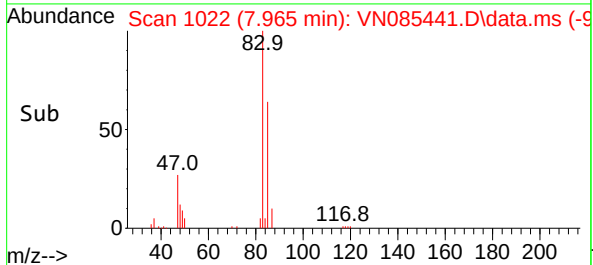
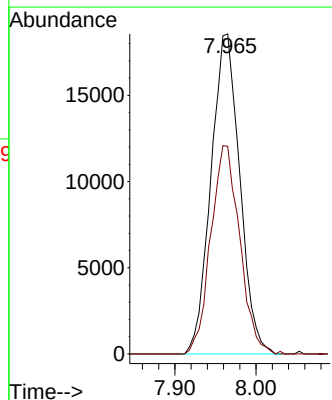
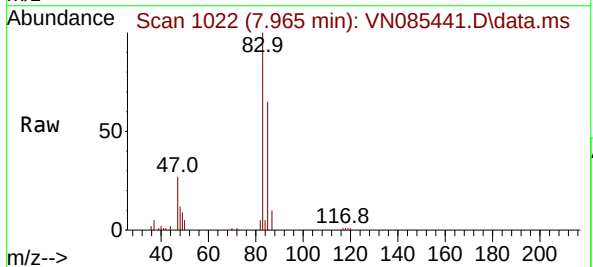
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

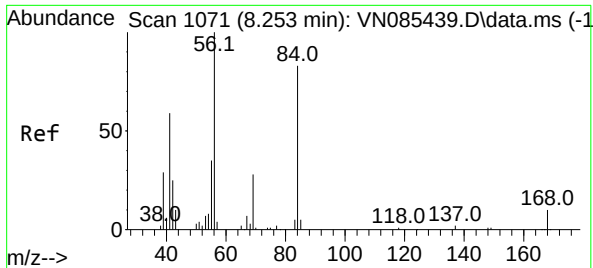
Tgt Ion: 42 Resp: 45641  
Ion Ratio Lower Upper  
42 100  
72 41.6 34.2 51.2  
71 39.2 32.5 48.7



#30  
Chloroform  
Concen: 9.596 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 45792  
Ion Ratio Lower Upper  
83 100  
85 64.9 51.8 77.6

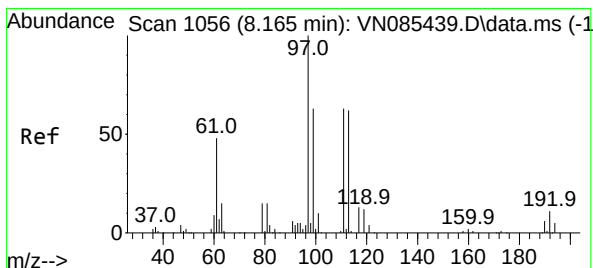
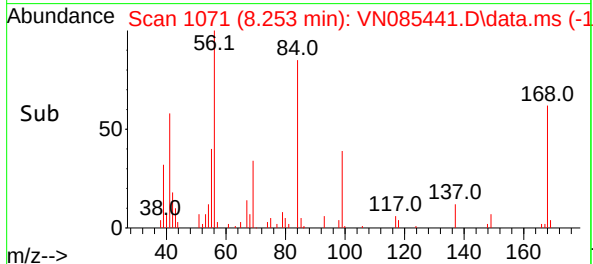
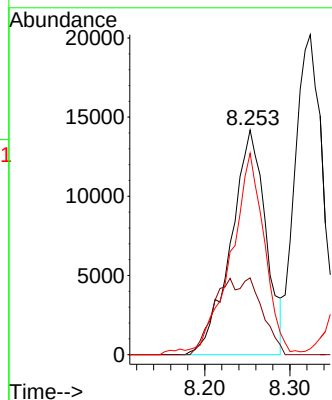
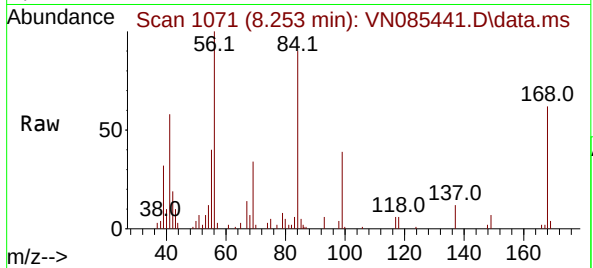




#31  
Cyclohexane  
Concen: 10.020 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

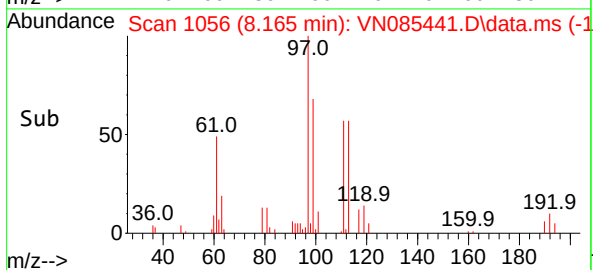
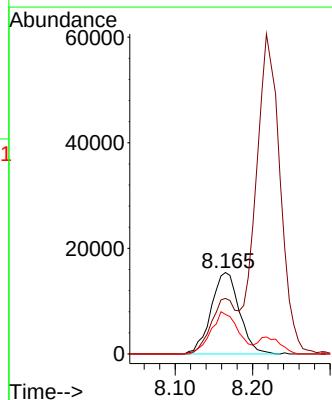
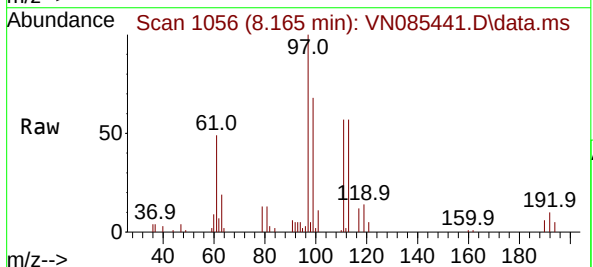
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

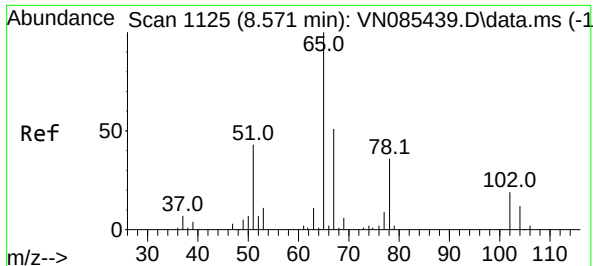
Tgt Ion: 56 Resp: 40211  
Ion Ratio Lower Upper  
56 100  
69 34.2 22.2 33.4#  
84 87.2 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 9.358 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 97 Resp: 39170  
Ion Ratio Lower Upper  
97 100  
99 62.6 49.8 74.6  
61 50.2 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 9.442 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

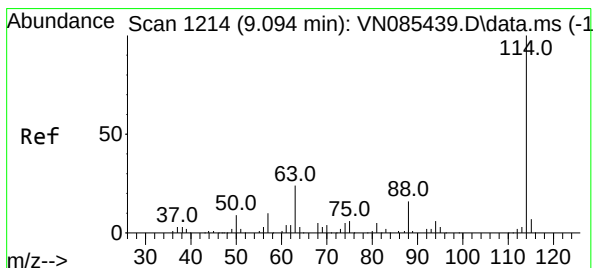
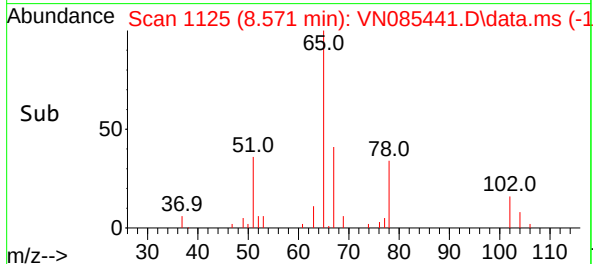
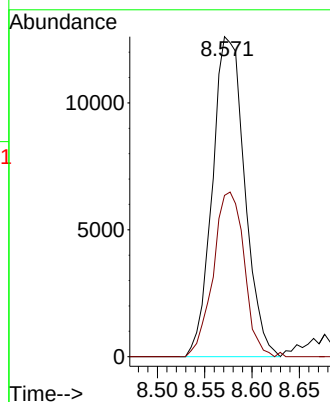
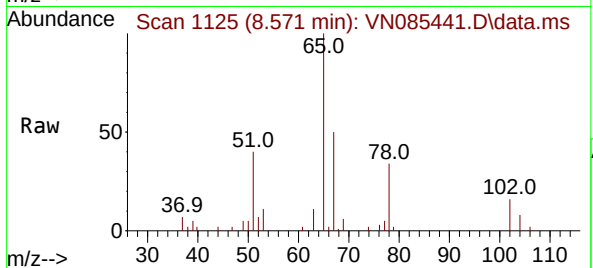
VSTDIC010

Tgt Ion: 65 Resp: 29856

Ion Ratio Lower Upper

65 100

67 49.5 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

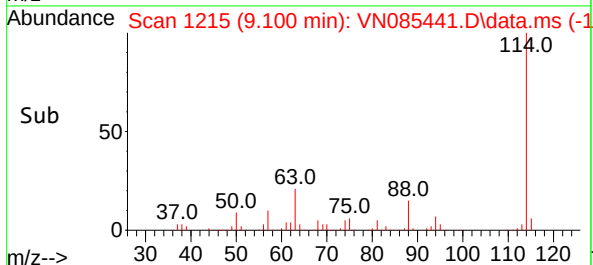
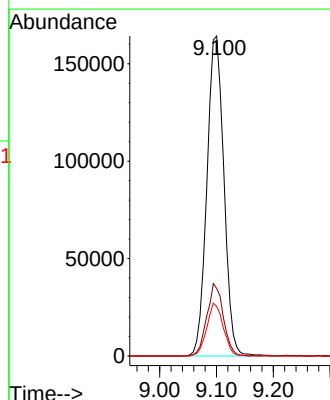
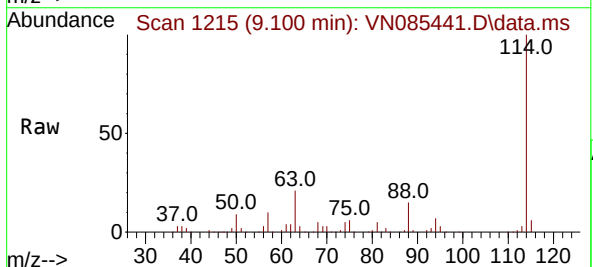
Tgt Ion: 114 Resp: 340403

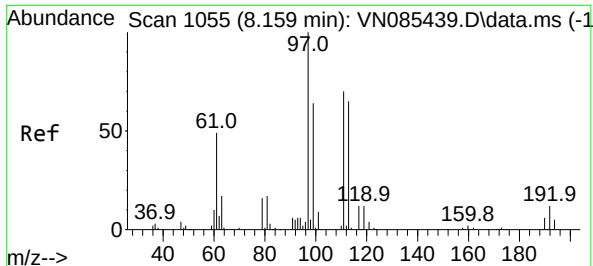
Ion Ratio Lower Upper

114 100

63 21.1 0.0 47.6

88 15.5 0.0 32.6





#35

Dibromofluoromethane

Concen: 8.939 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

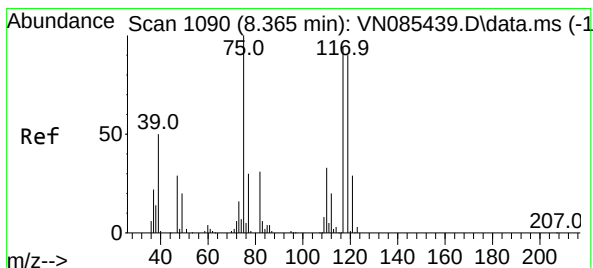
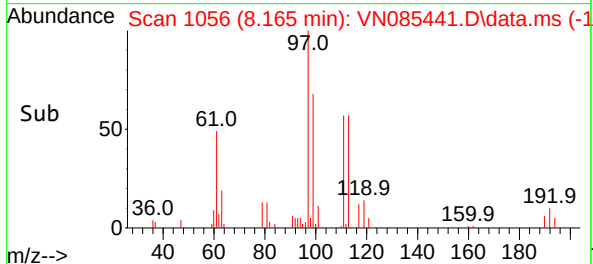
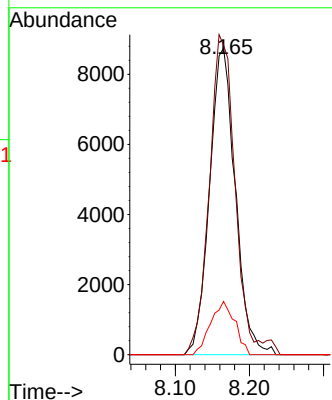
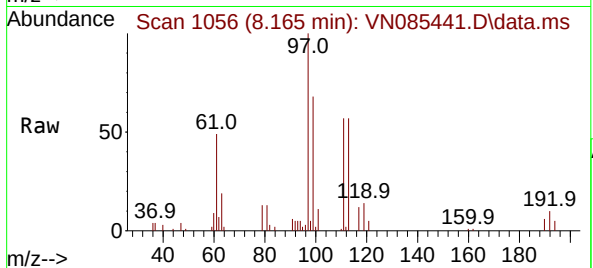
Tgt Ion:113 Resp: 21110

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

192 16.4 14.3 21.5



#36

1,1-Dichloropropene

Concen: 9.056 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

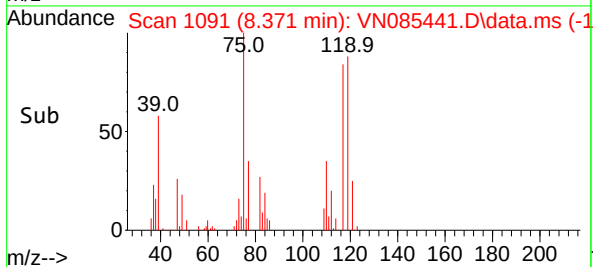
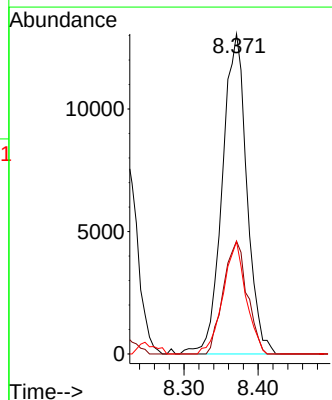
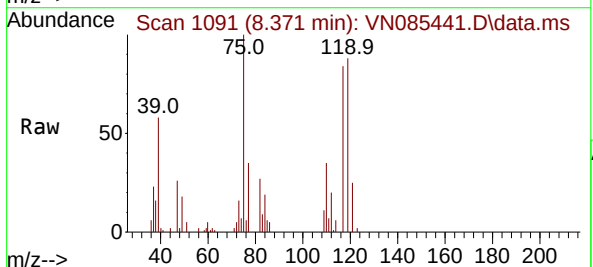
Tgt Ion: 75 Resp: 30015

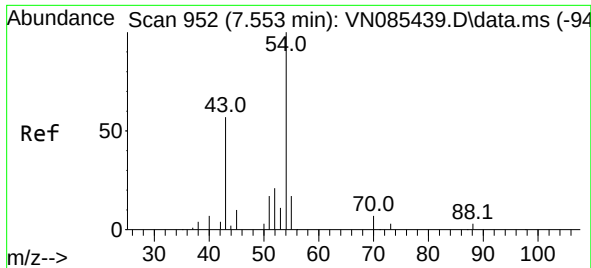
Ion Ratio Lower Upper

75 100

110 34.3 16.5 49.5

77 32.9 24.4 36.6

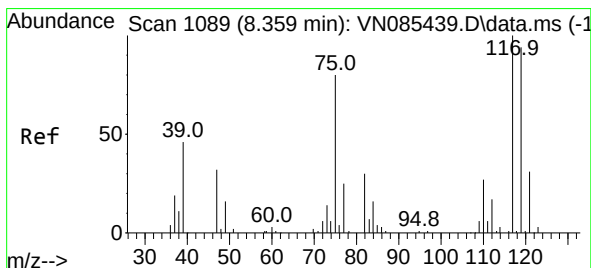
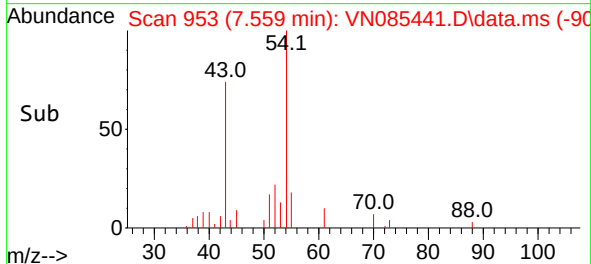
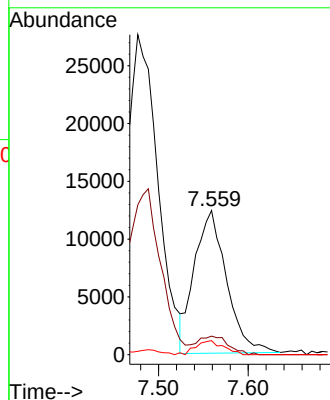
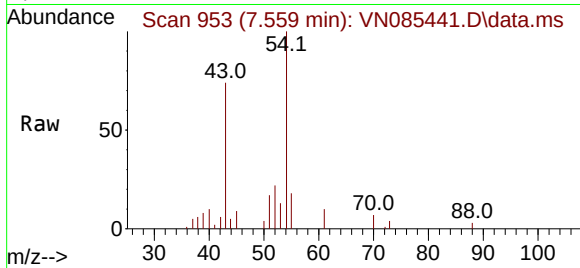




#37  
Ethyl Acetate  
Concen: 9.195 ug/l  
RT: 7.559 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

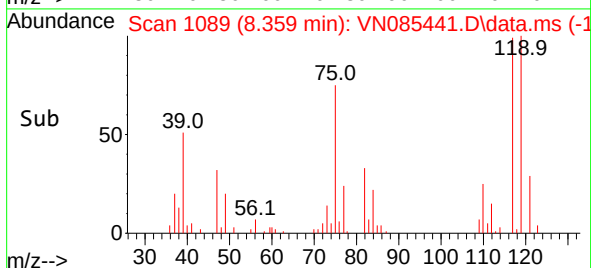
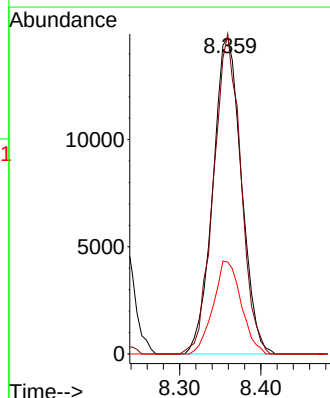
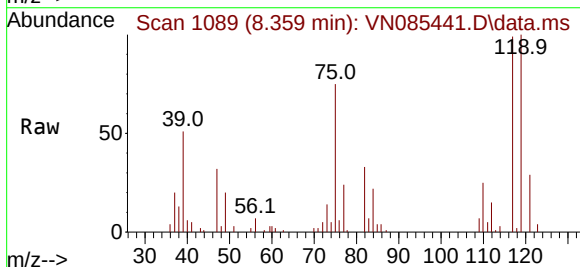
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion: 43 Resp: 30760  
Ion Ratio Lower Upper  
43 100  
61 12.2 10.9 16.3  
70 8.4 7.5 11.3

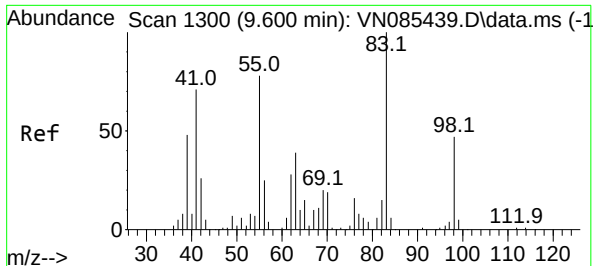


#38  
Carbon Tetrachloride  
Concen: 9.492 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 117 Resp: 36015  
Ion Ratio Lower Upper  
117 100  
119 101.2 75.4 113.2  
121 29.1 24.6 37.0







#39

Methylcyclohexane

Concen: 8.900 ug/l

RT: 9.594 min Scan# 1129

Delta R.T. -0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

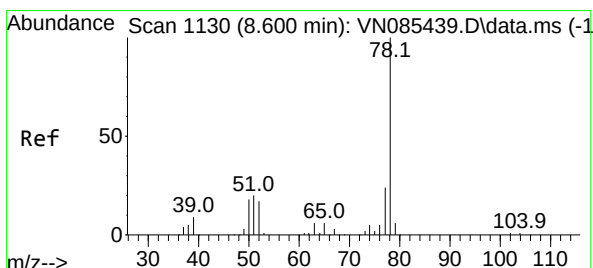
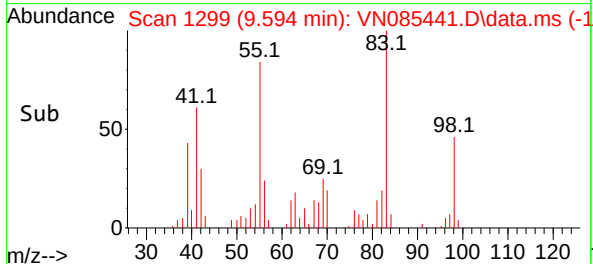
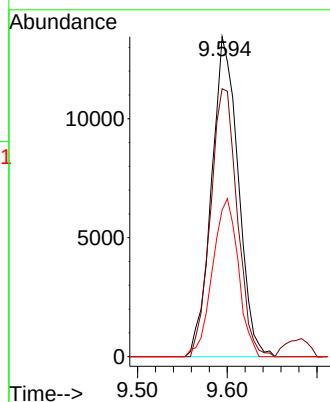
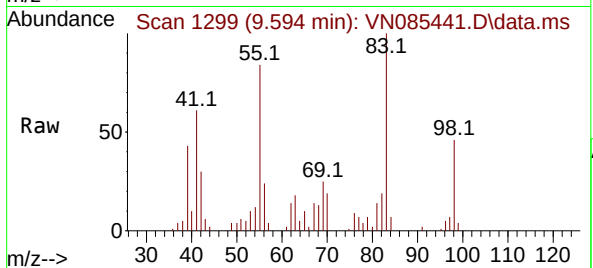
Tgt Ion: 83 Resp: 27721

Ion Ratio Lower Upper

83 100

55 83.8 62.6 94.0

98 45.8 37.7 56.5



#40

Benzene

Concen: 9.407 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085441.D

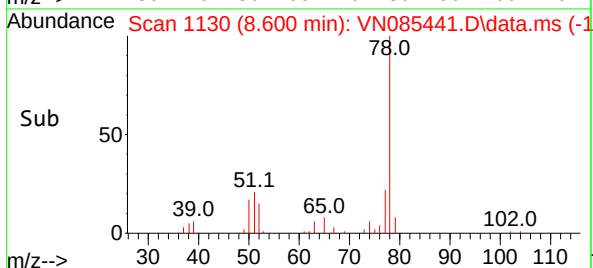
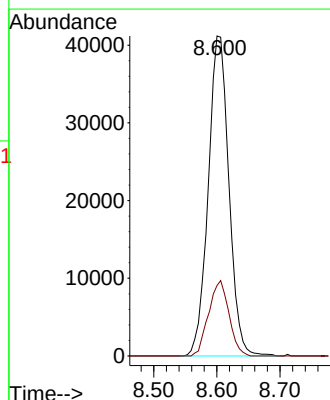
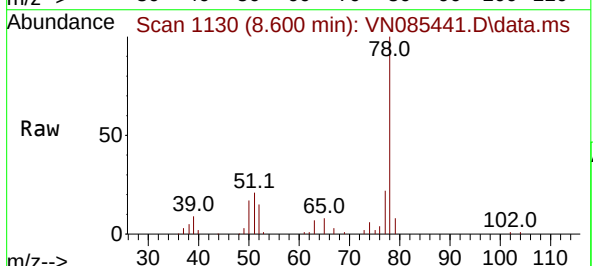
Acq: 14 Jan 2025 16:07

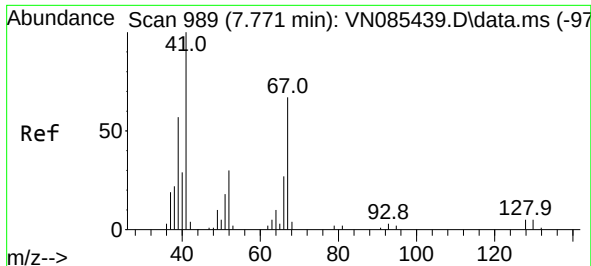
Tgt Ion: 78 Resp: 93680

Ion Ratio Lower Upper

78 100

77 22.0 19.0 28.6

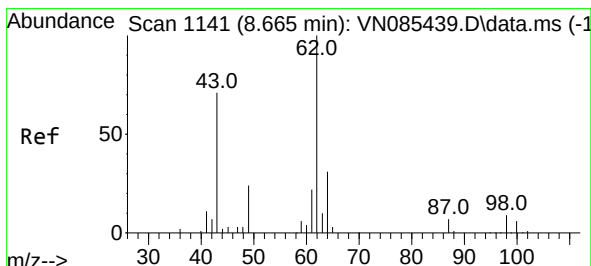
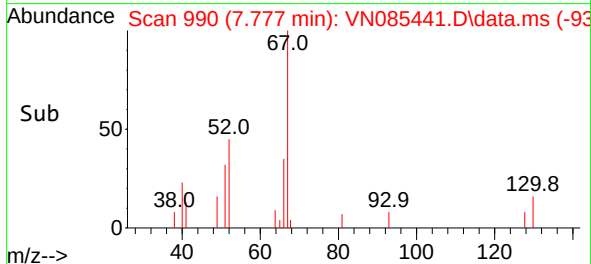
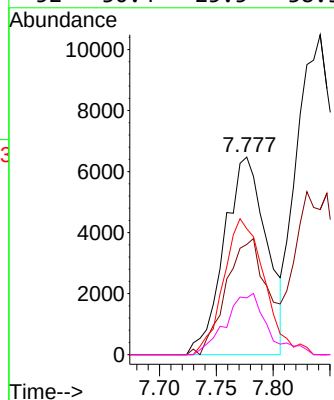
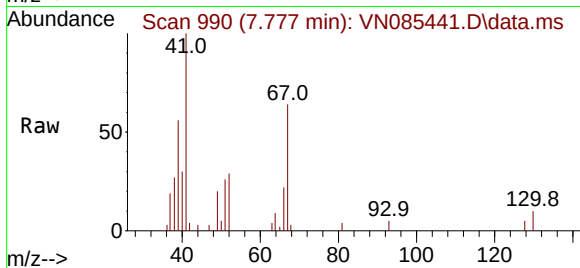




#41  
Methacrylonitrile  
Concen: 9.686 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

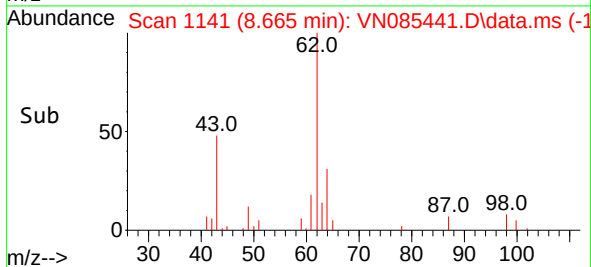
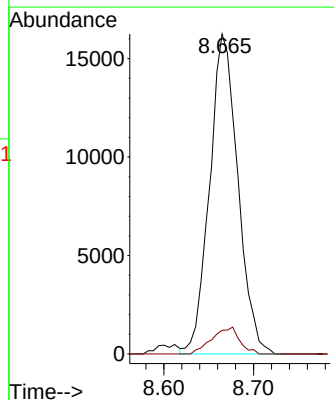
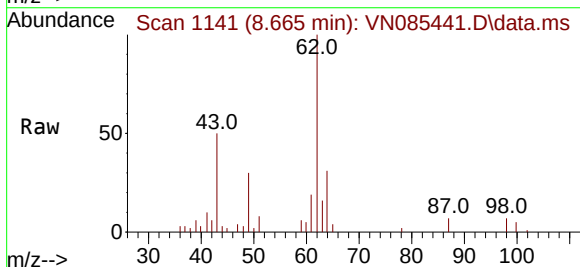
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

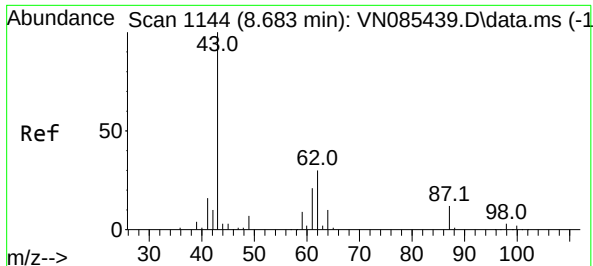
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 16859 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.3  | 46.0  | 69.0  |
| 67       | 66.2  | 57.4  | 86.2  |
| 52       | 30.4  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 9.483 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 35569 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.2   | 0.0   | 17.0  |

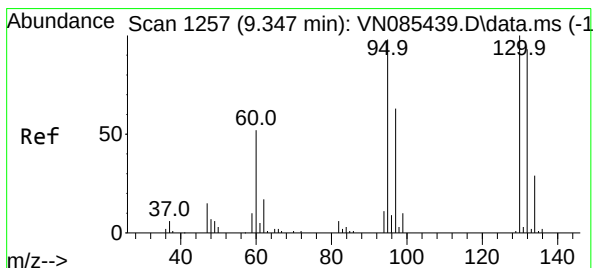
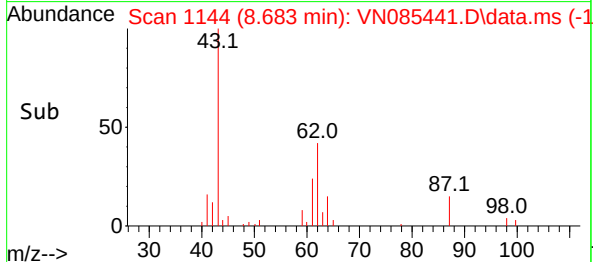
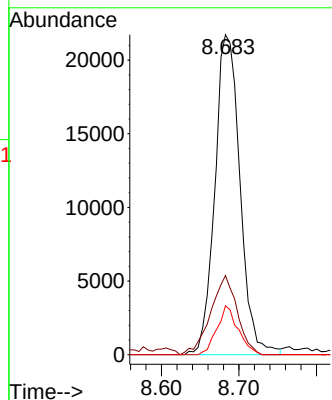
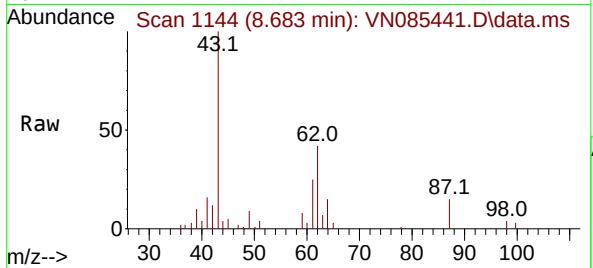




#43  
Isopropyl Acetate  
Concen: 9.127 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

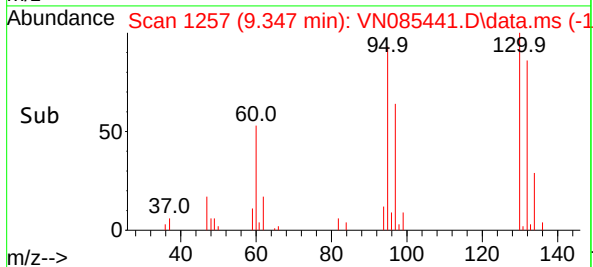
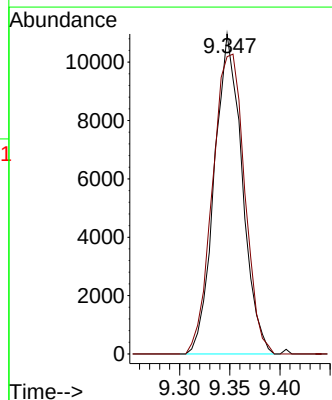
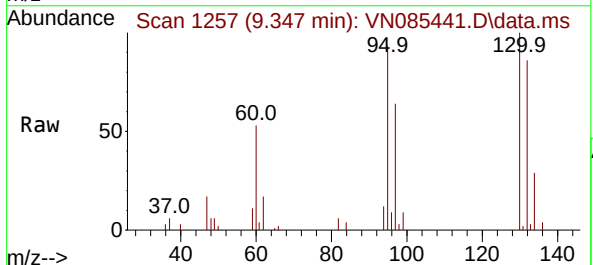
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

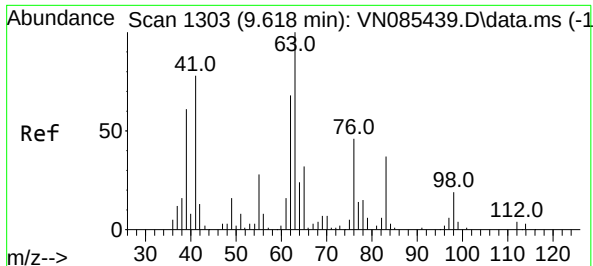
Tgt Ion: 43 Resp: 48926  
Ion Ratio Lower Upper  
43 100  
61 26.2 20.7 31.1  
87 12.8 9.8 14.8



#44  
Trichloroethene  
Concen: 9.108 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:130 Resp: 21113  
Ion Ratio Lower Upper  
130 100  
95 92.9 0.0 195.8





#45

1,2-Dichloropropane

Concen: 8.942 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

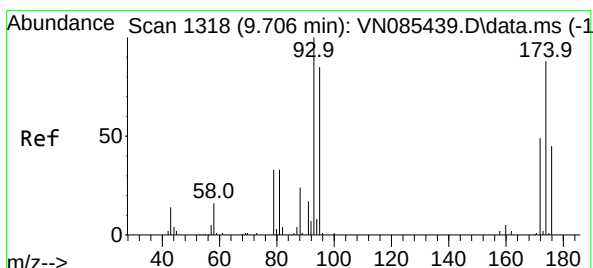
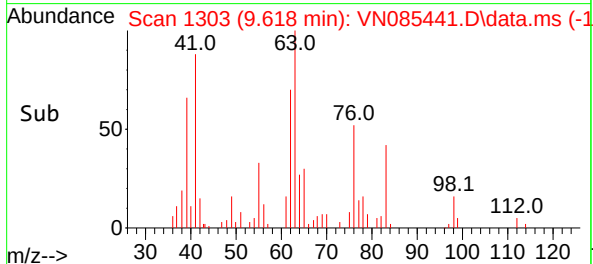
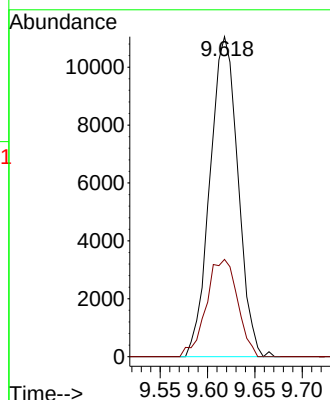
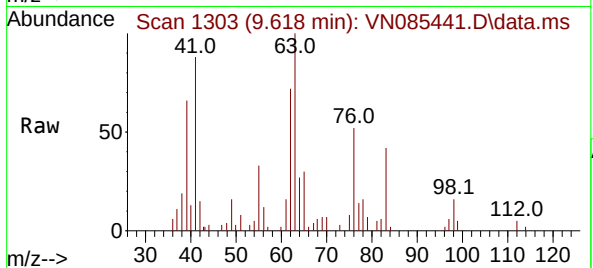
VSTDIC010

Tgt Ion: 63 Resp: 22747

Ion Ratio Lower Upper

63 100

65 30.4 25.6 38.4



#46

Dibromomethane

Concen: 9.404 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

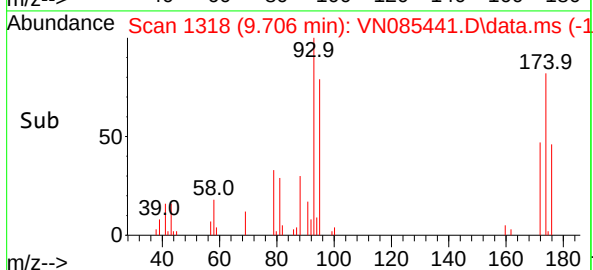
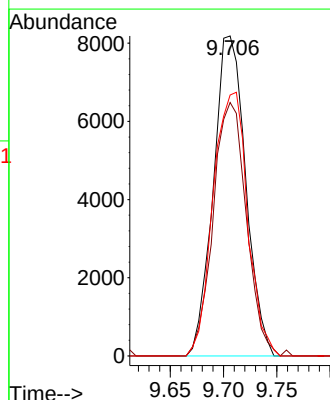
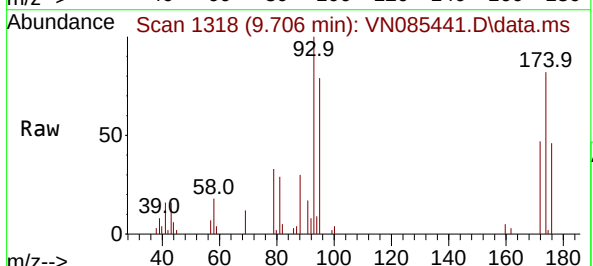
Tgt Ion: 93 Resp: 17260

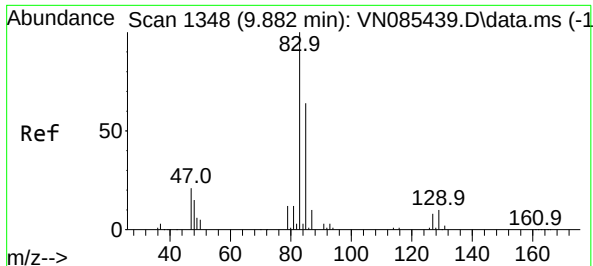
Ion Ratio Lower Upper

93 100

95 81.5 64.7 97.1

174 87.8 69.0 103.4





#47

Bromodichloromethane

Concen: 9.365 ug/l

RT: 9.883 min Scan# 1348

Delta R.T. 0.001 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

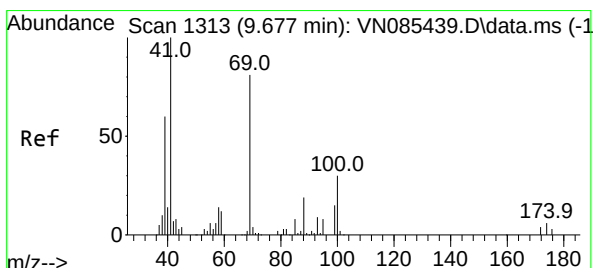
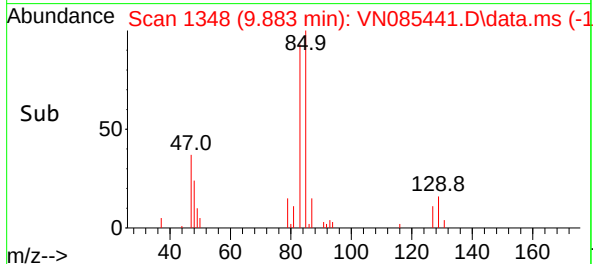
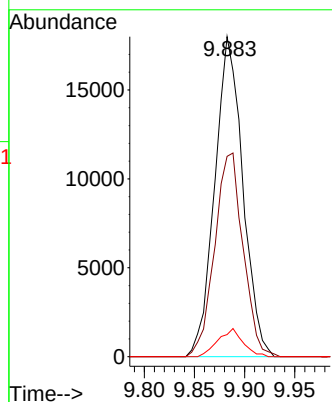
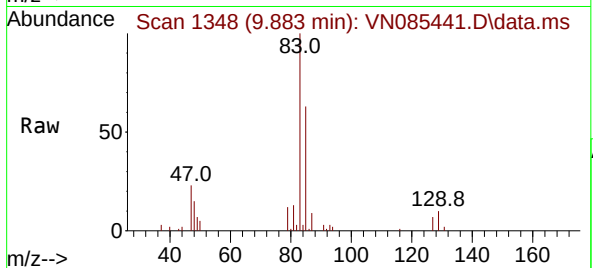
Tgt Ion: 83 Resp: 35020

Ion Ratio Lower Upper

83 100

85 62.6 51.2 76.8

127 6.9 6.5 9.7



#48

Methyl methacrylate

Concen: 9.067 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

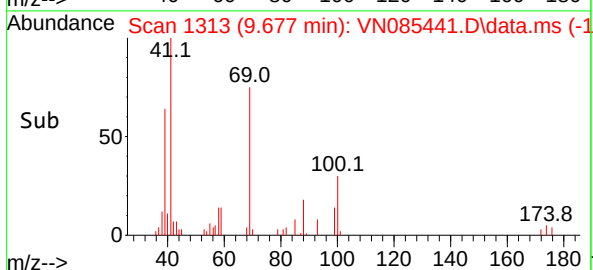
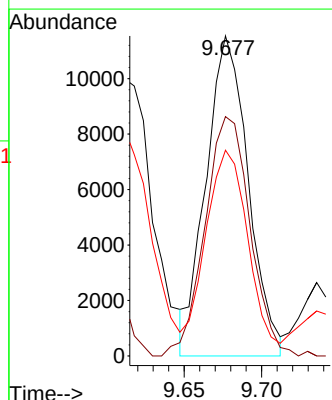
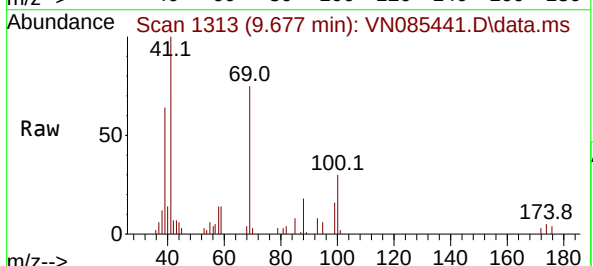
Tgt Ion: 41 Resp: 21873

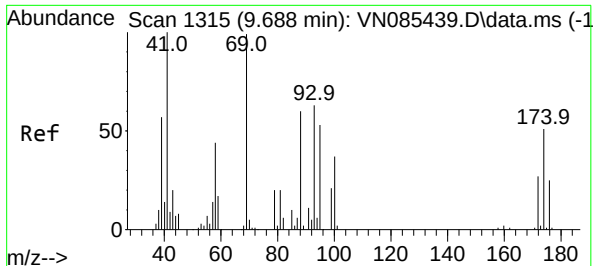
Ion Ratio Lower Upper

41 100

69 80.0 64.7 97.1

39 65.2 49.0 73.6





#49

1,4-Dioxane

Concen: 190.382 ug/l

RT: 9.694 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

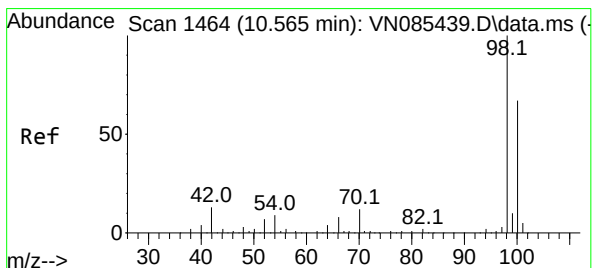
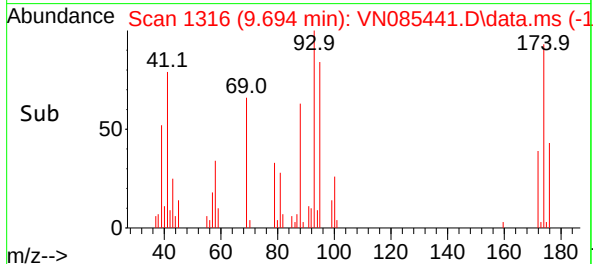
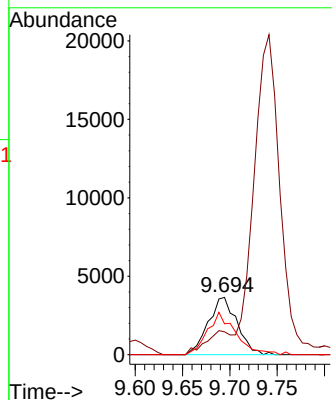
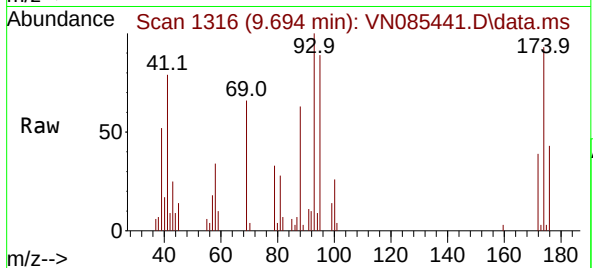
Tgt Ion: 88 Resp: 7734

Ion Ratio Lower Upper

88 100

43 35.2 26.6 39.8

58 73.3 59.5 89.3



#50

Toluene-d8

Concen: 8.727 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085441.D

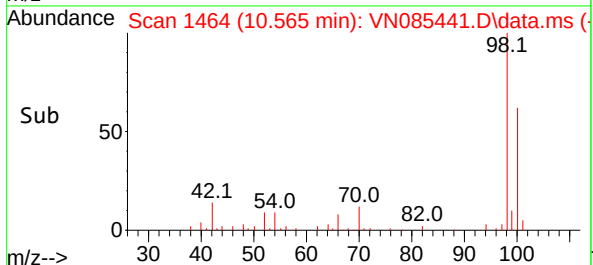
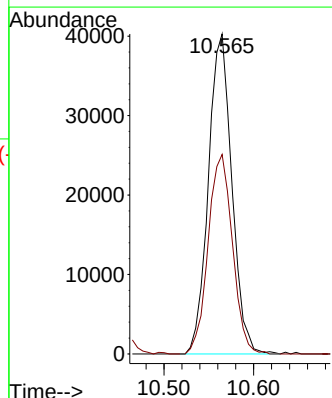
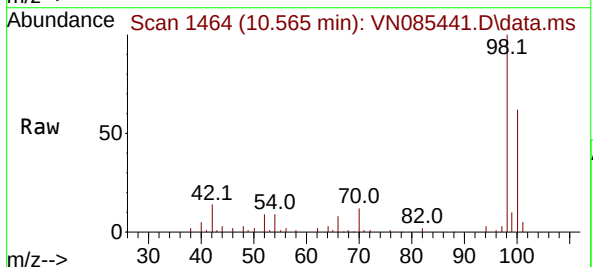
Acq: 14 Jan 2025 16:07

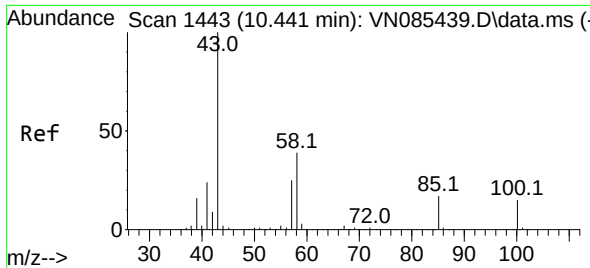
Tgt Ion: 98 Resp: 73223

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4

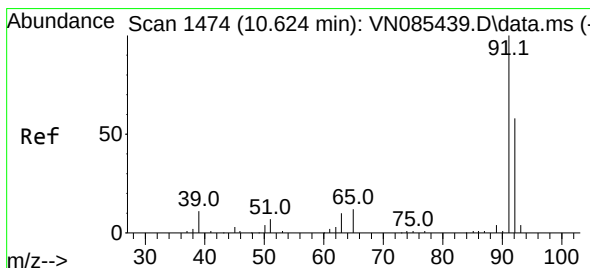
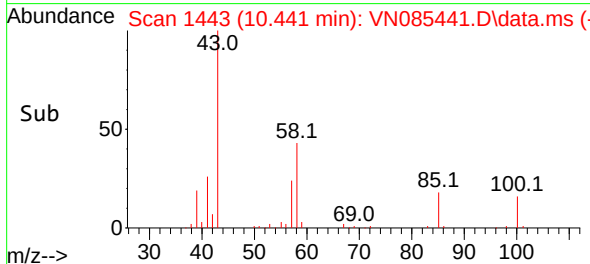
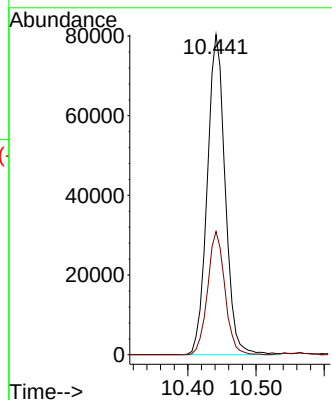
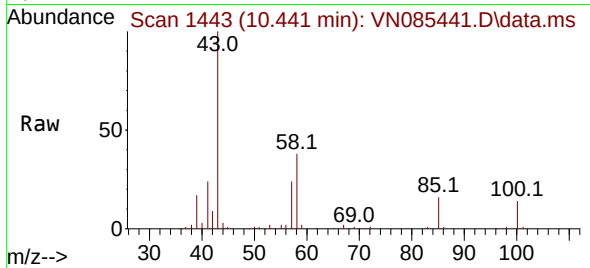




#51  
4-Methyl-2-Pentanone  
Concen: 47.254 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

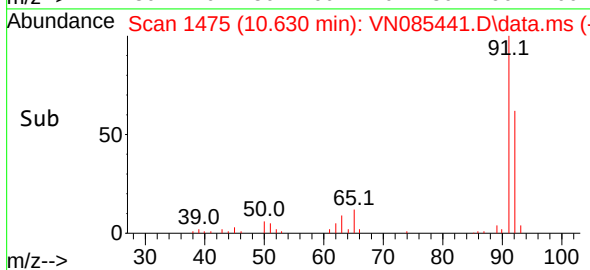
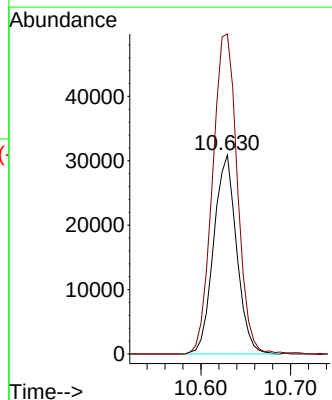
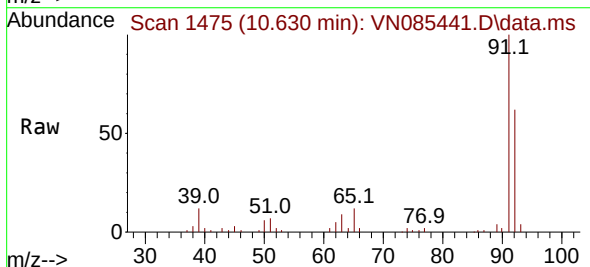
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

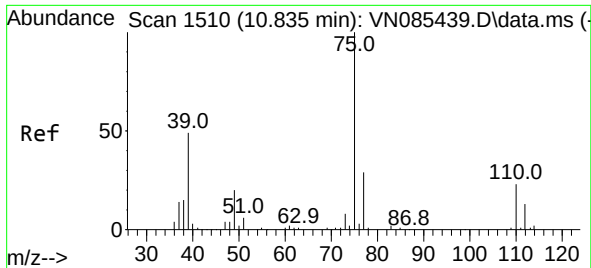
Tgt Ion: 43 Resp: 146990  
Ion Ratio Lower Upper  
43 100  
58 37.1 30.5 45.7



#52  
Toluene  
Concen: 9.527 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 92 Resp: 54976  
Ion Ratio Lower Upper  
92 100  
91 173.7 139.2 208.8

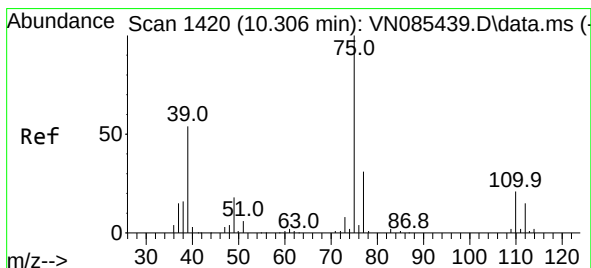
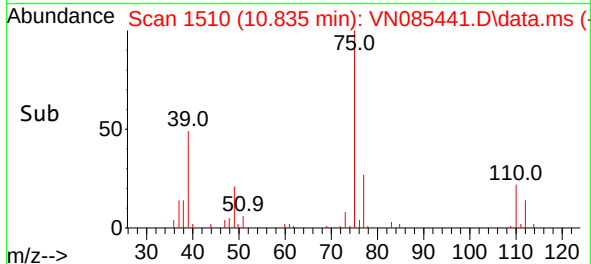
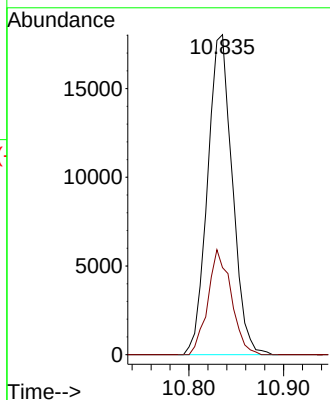
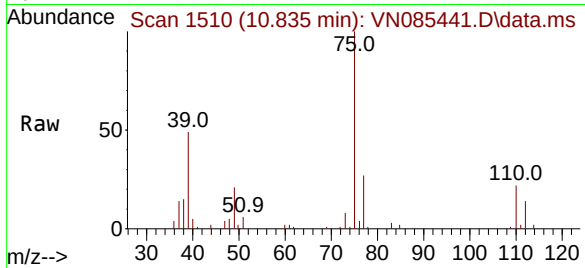




#53  
 t-1,3-Dichloropropene  
 Concen: 9.276 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

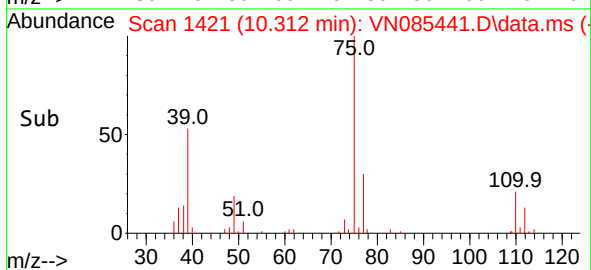
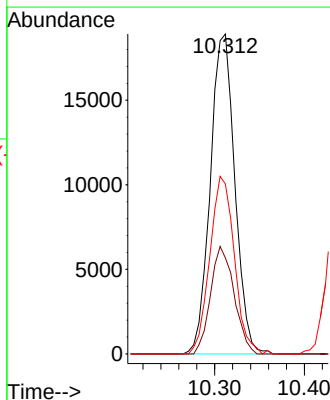
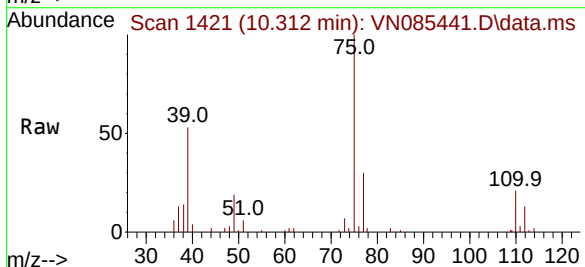
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

Tgt Ion: 75 Resp: 32780  
 Ion Ratio Lower Upper  
 75 100  
 77 27.2 23.5 35.3

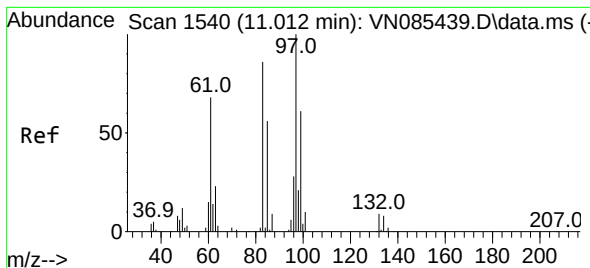


#54  
 cis-1,3-Dichloropropene  
 Concen: 9.512 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 35904  
 Ion Ratio Lower Upper  
 75 100  
 77 30.0 25.0 37.4  
 39 53.1 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 9.222 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

Tgt Ion: 97 Resp: 21060

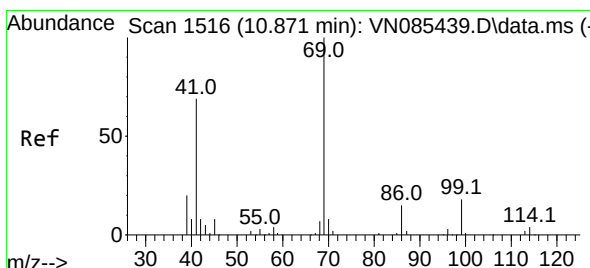
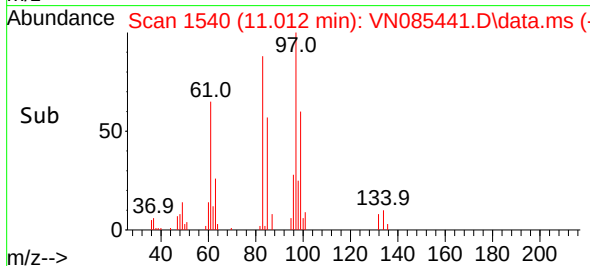
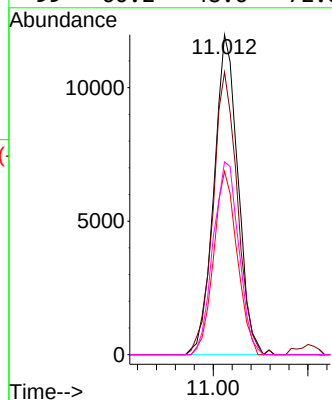
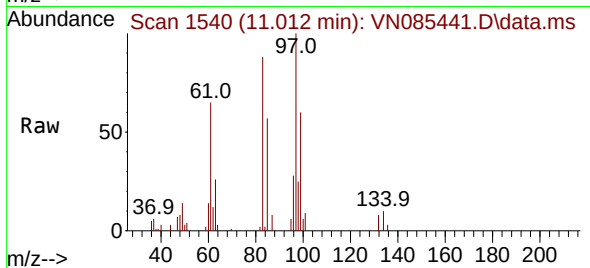
Ion Ratio Lower Upper

97 100

83 88.3 69.0 103.6

85 57.3 44.6 66.8

99 60.2 48.6 72.8



#56

Ethyl methacrylate

Concen: 9.042 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

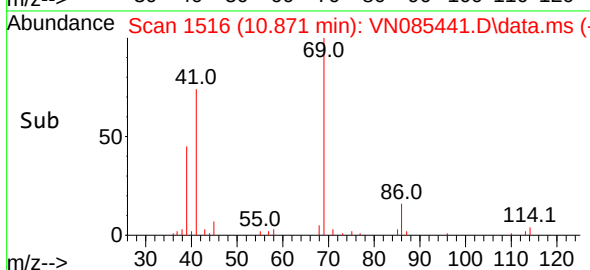
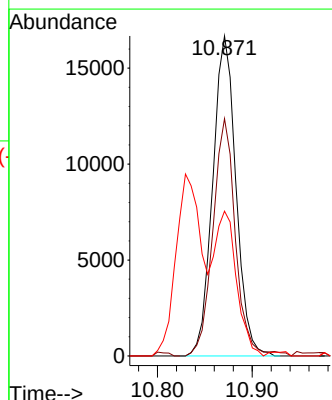
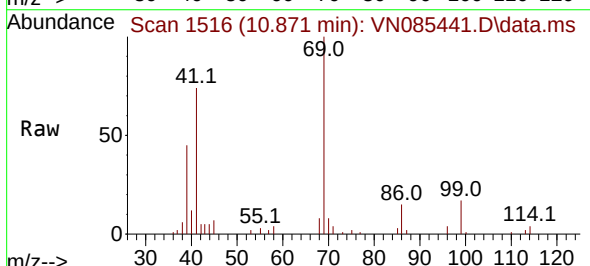
Tgt Ion: 69 Resp: 28454

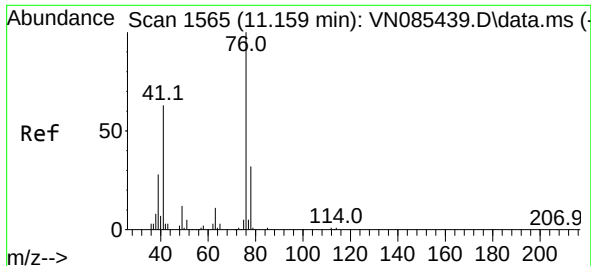
Ion Ratio Lower Upper

69 100

41 72.1 54.6 82.0

39 43.4 32.4 48.6





#57

1,3-Dichloropropane

Concen: 9.512 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

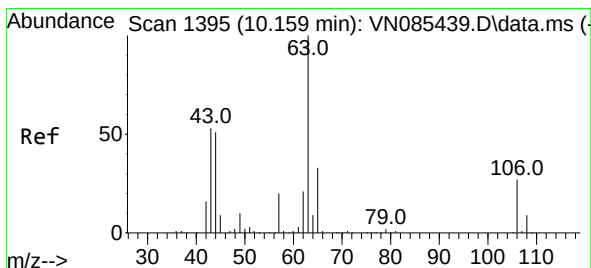
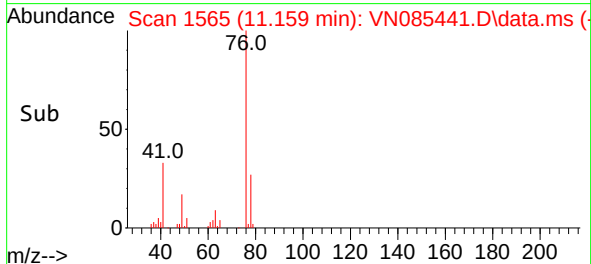
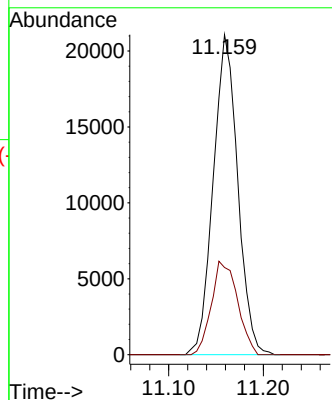
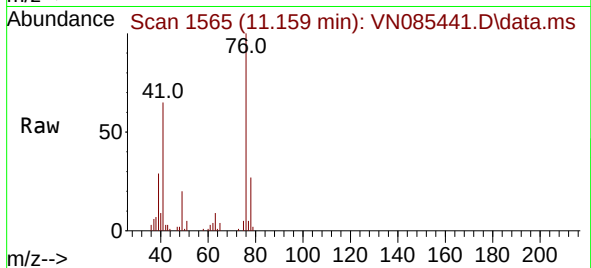
VSTDIC010

Tgt Ion: 76 Resp: 37768

Ion Ratio Lower Upper

76 100

78 31.1 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 43.550 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085441.D

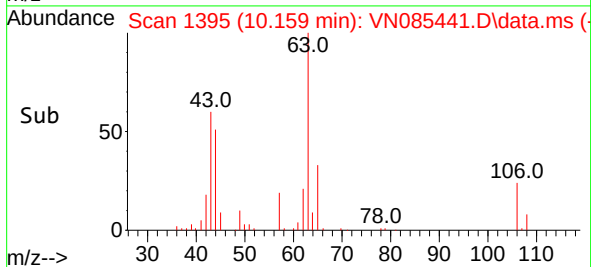
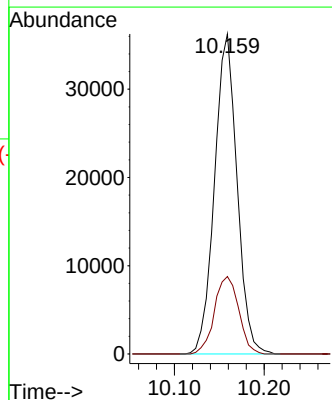
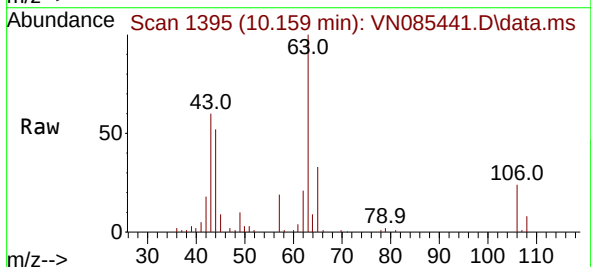
Acq: 14 Jan 2025 16:07

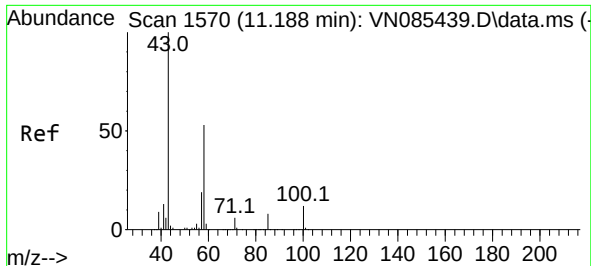
Tgt Ion: 63 Resp: 63110

Ion Ratio Lower Upper

63 100

106 26.1 21.6 32.4





#59

2-Hexanone

Concen: 46.291 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

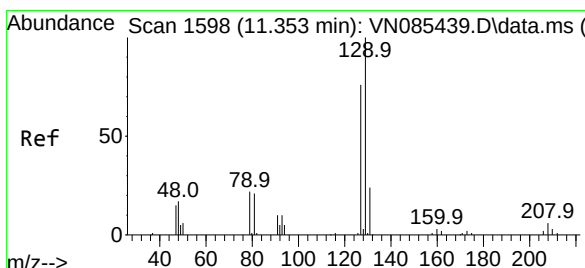
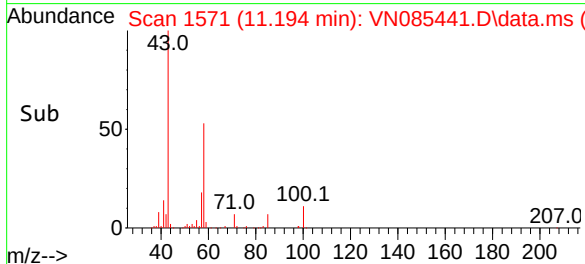
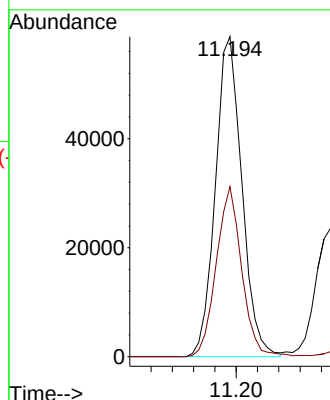
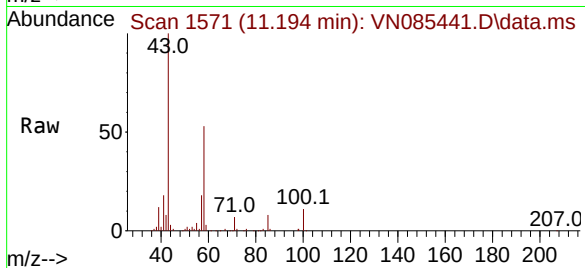
VSTDICC010

Tgt Ion: 43 Resp: 101318

Ion Ratio Lower Upper

43 100

58 50.9 26.2 78.6



#60

Dibromochloromethane

Concen: 9.079 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085441.D

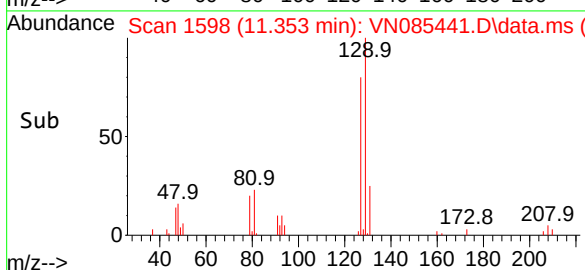
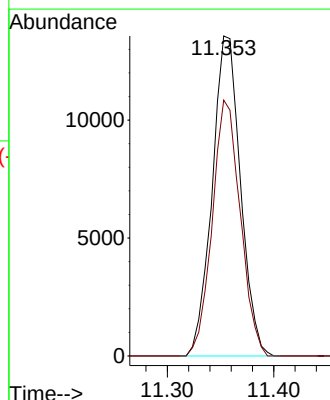
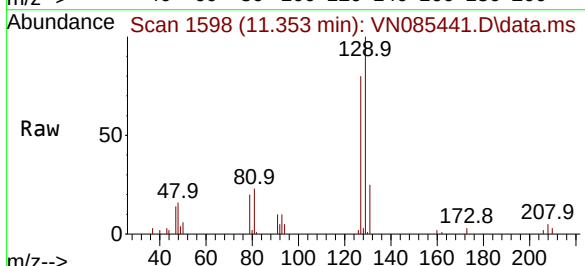
Acq: 14 Jan 2025 16:07

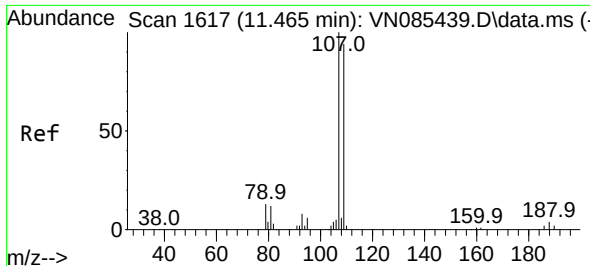
Tgt Ion:129 Resp: 25029

Ion Ratio Lower Upper

129 100

127 79.1 38.6 115.8

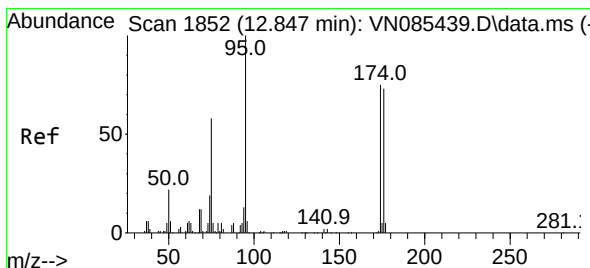
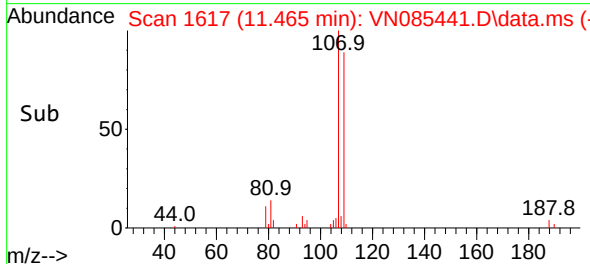
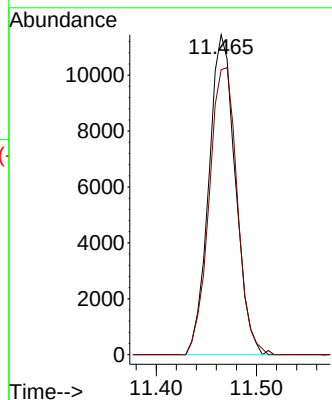
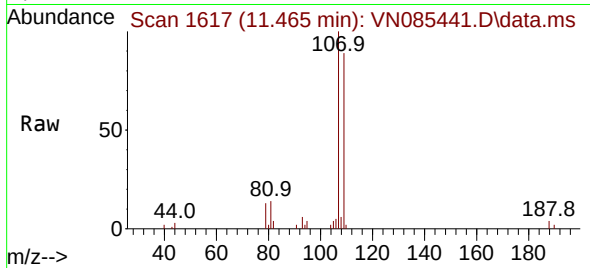




#61  
1,2-Dibromoethane  
Concen: 9.263 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

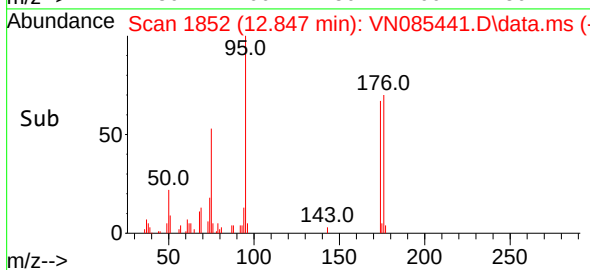
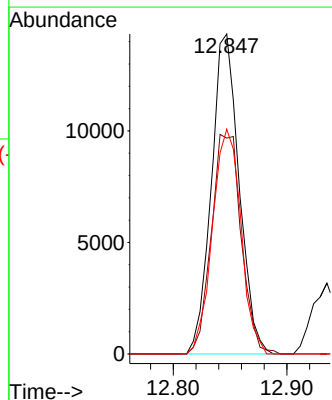
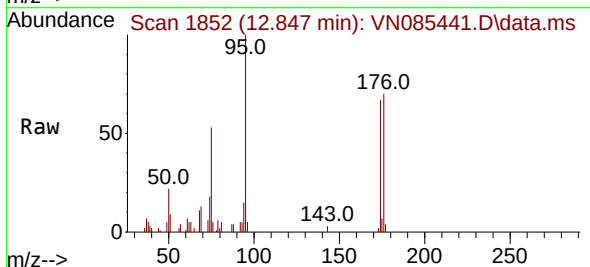
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

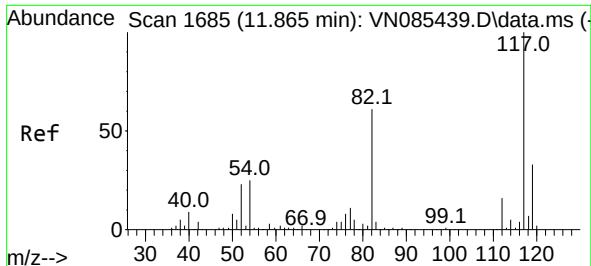
Tgt Ion:107 Resp: 21055  
Ion Ratio Lower Upper  
107 100  
109 94.6 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 8.476 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 95 Resp: 24327  
Ion Ratio Lower Upper  
95 100  
174 73.9 0.0 145.0  
176 72.1 0.0 142.4

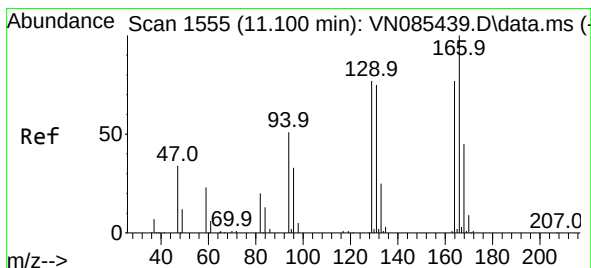
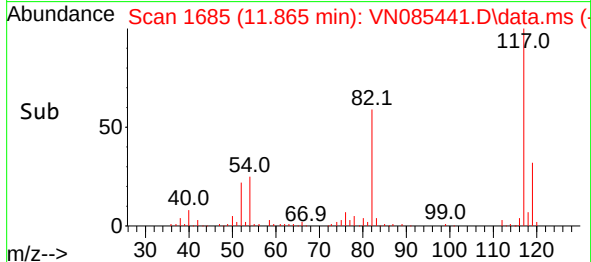
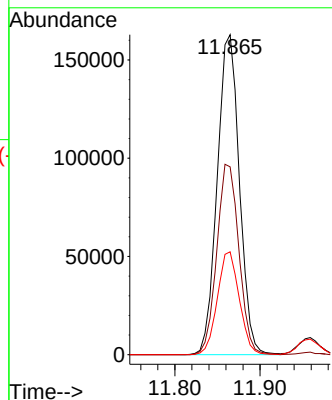
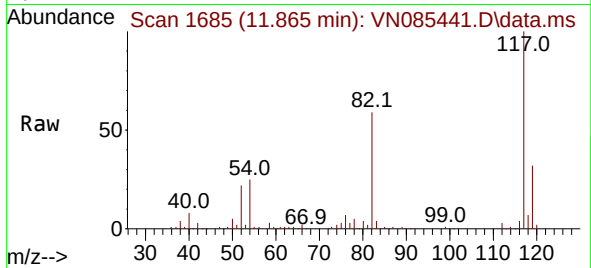




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

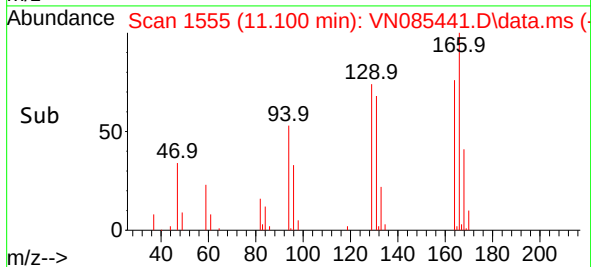
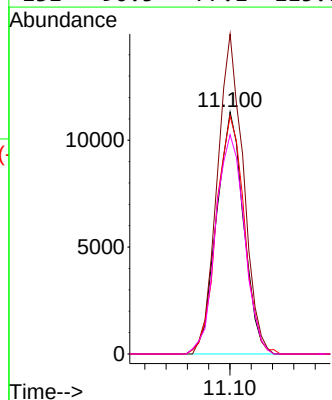
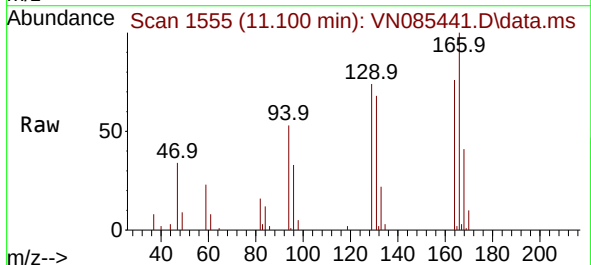
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

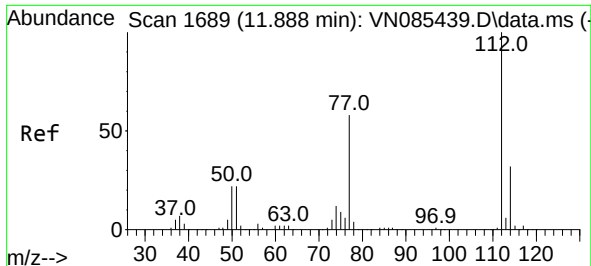
Tgt Ion:117 Resp: 294508  
Ion Ratio Lower Upper  
117 100  
82 58.7 48.6 72.8  
119 32.2 26.6 39.8



#64  
Tetrachloroethene  
Concen: 9.928 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:164 Resp: 19934  
Ion Ratio Lower Upper  
164 100  
166 132.2 103.4 155.2  
129 98.3 79.2 118.8  
131 90.5 77.1 115.7

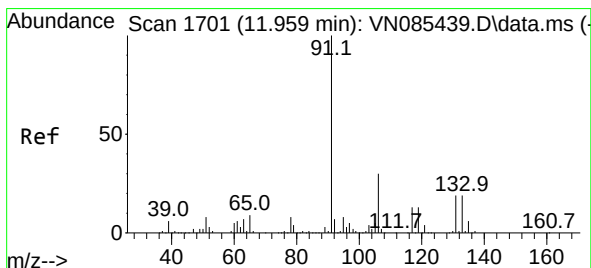
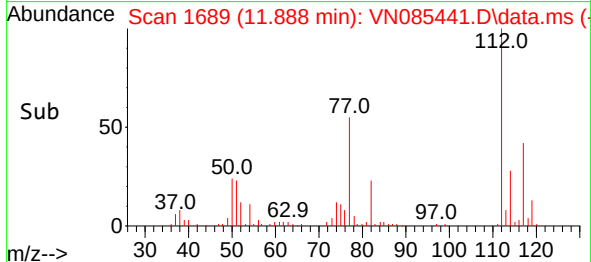
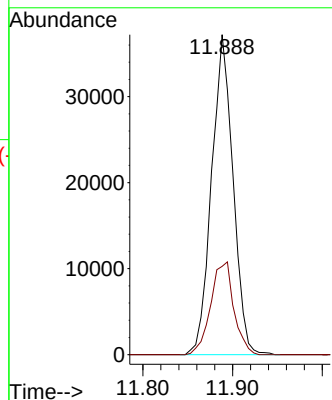
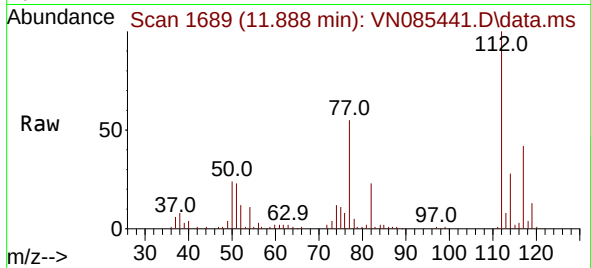




#65  
Chlorobenzene  
Concen: 9.560 ug/l  
RT: 11.888 min Scan# 111  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

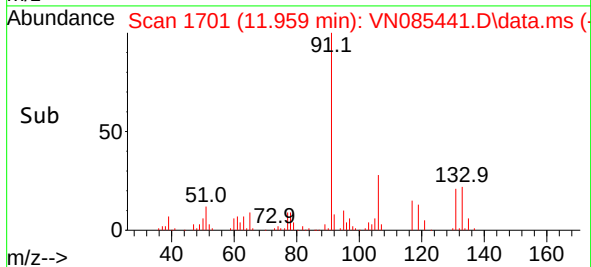
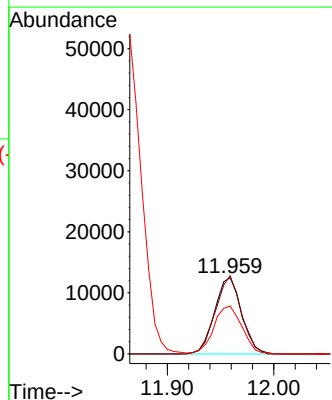
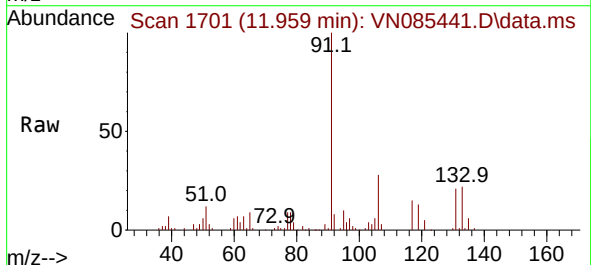
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

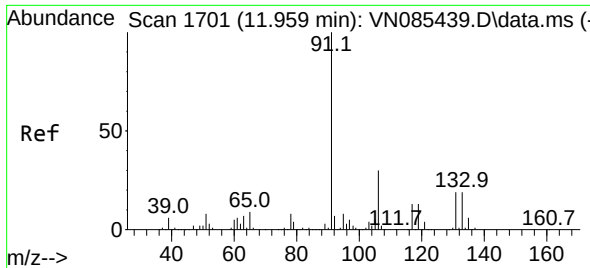
Tgt Ion:112 Resp: 61680  
Ion Ratio Lower Upper  
112 100  
114 27.6 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 9.229 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:131 Resp: 21853  
Ion Ratio Lower Upper  
131 100  
133 98.5 47.4 142.3  
119 66.0 33.1 99.5

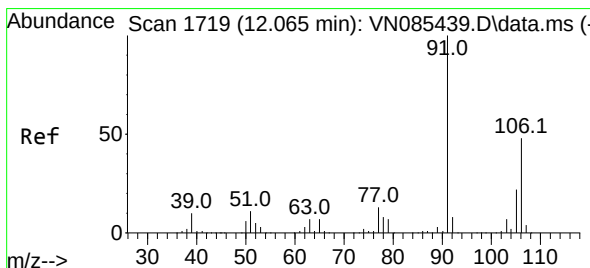
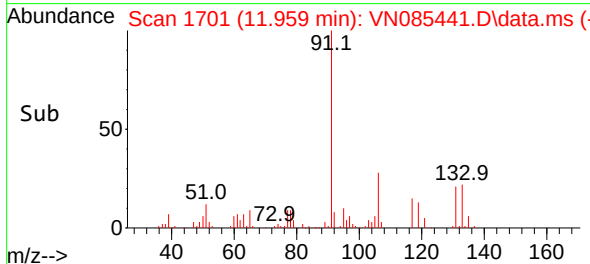
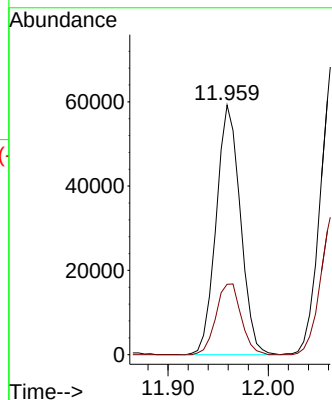
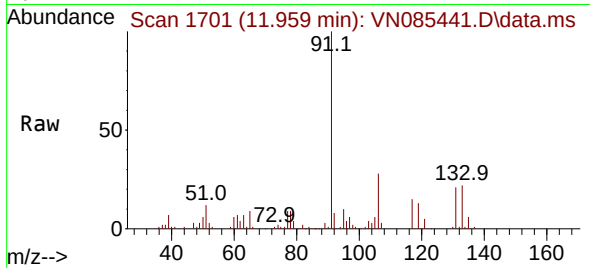




#67  
Ethyl Benzene  
Concen: 9.445 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

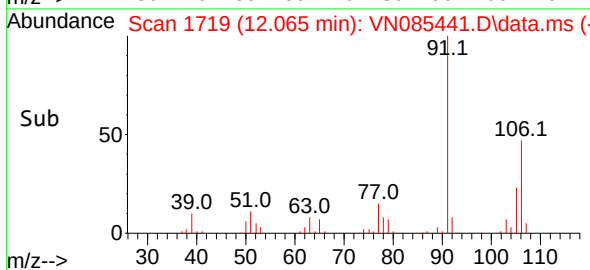
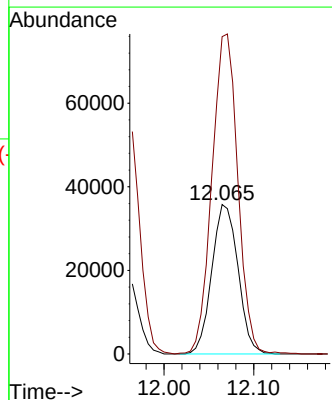
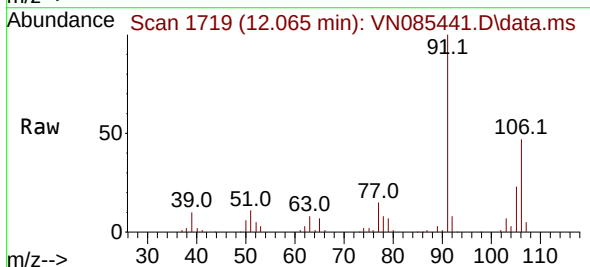
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

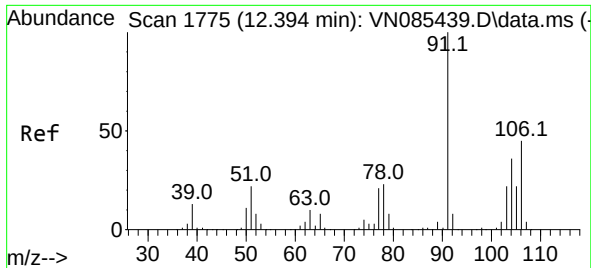
Tgt Ion: 91 Resp: 99248  
Ion Ratio Lower Upper  
91 100  
106 28.2 23.8 35.8



#68  
m/p-Xylenes  
Concen: 18.650 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:106 Resp: 72431  
Ion Ratio Lower Upper  
106 100  
91 211.7 167.7 251.5

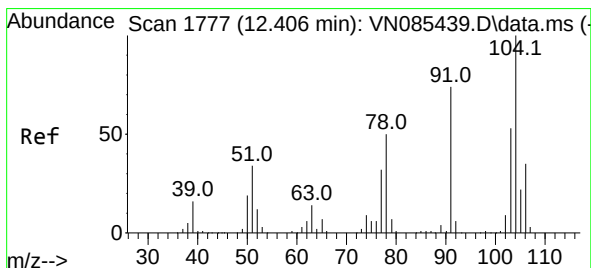
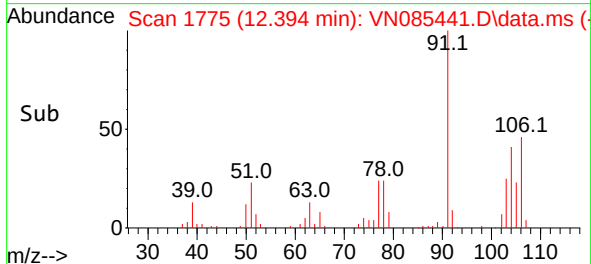
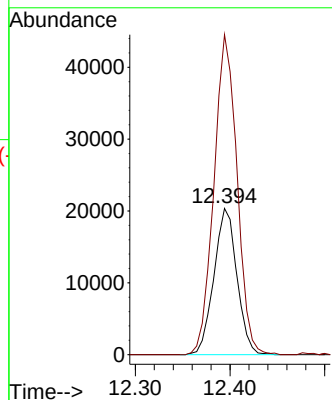
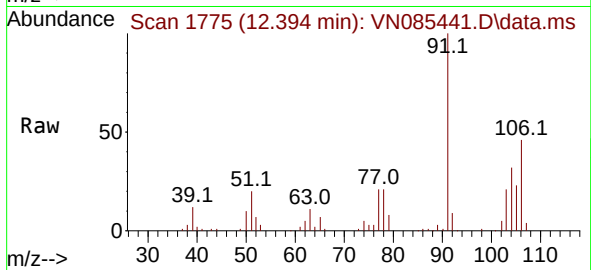




#69  
o-Xylene  
Concen: 9.264 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

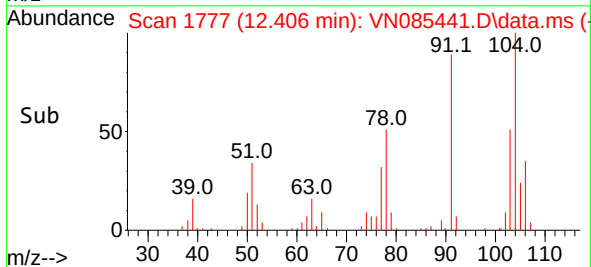
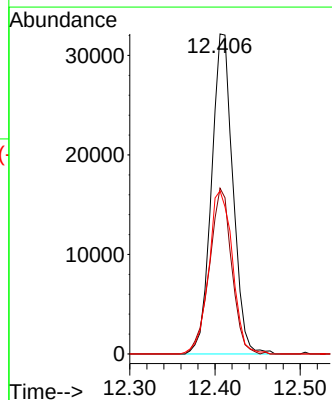
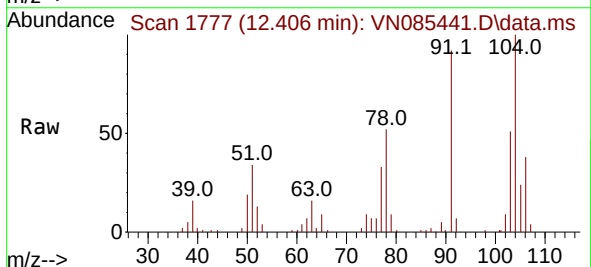
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion:106 Resp: 34382  
Ion Ratio Lower Upper  
106 100  
91 219.5 110.4 331.2

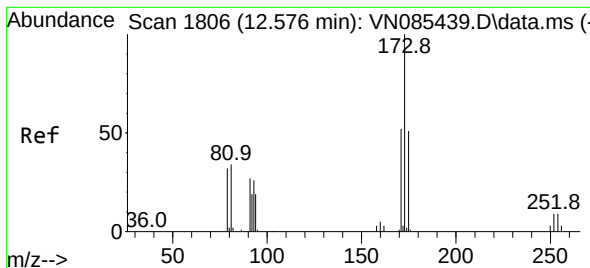


#70  
Styrene  
Concen: 9.163 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:104 Resp: 56285  
Ion Ratio Lower Upper  
104 100  
78 53.8 42.5 63.7  
103 56.8 43.8 65.8







#71

Bromoform

Concen: 9.485 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

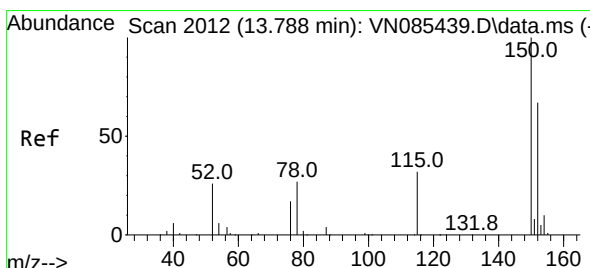
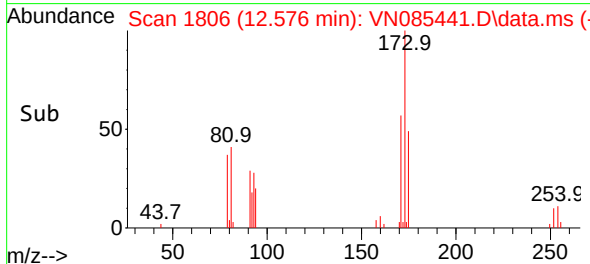
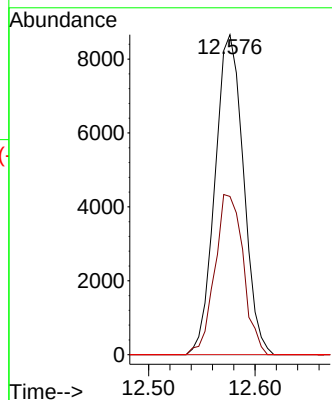
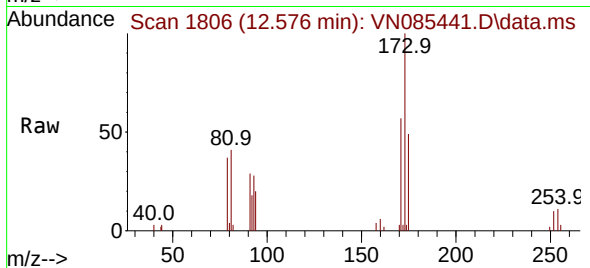
Tgt Ion:173 Resp: 16071

Ion Ratio Lower Upper

173 100

175 50.0 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 1212

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

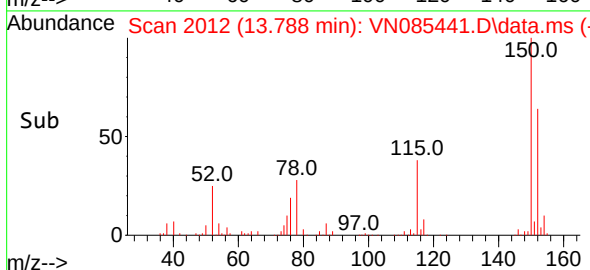
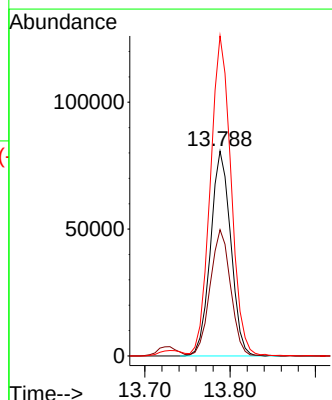
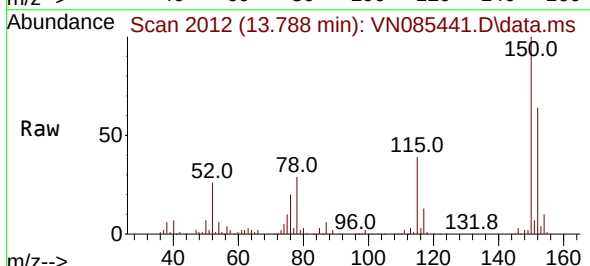
Tgt Ion:152 Resp: 132934

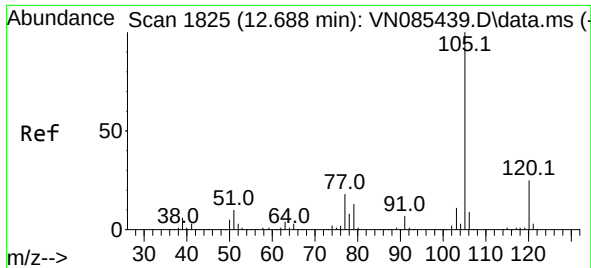
Ion Ratio Lower Upper

152 100

115 62.3 31.1 93.3

150 159.8 0.0 343.6

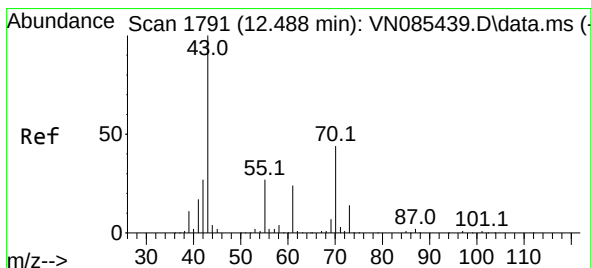
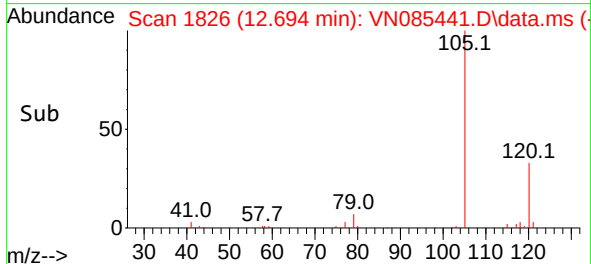
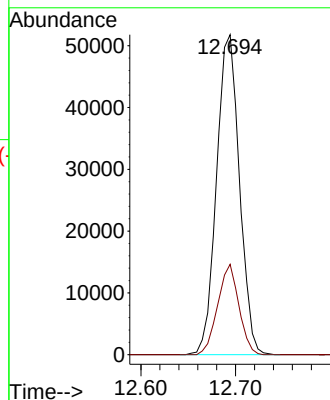
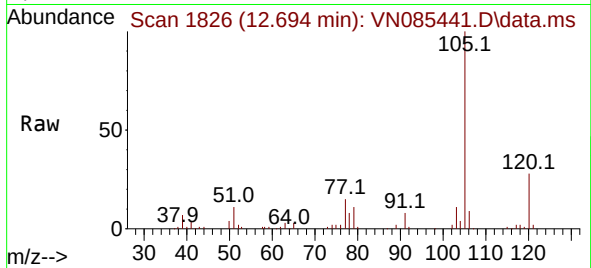




#73  
Isopropylbenzene  
Concen: 9.697 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

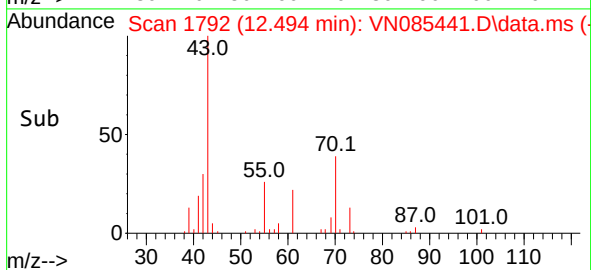
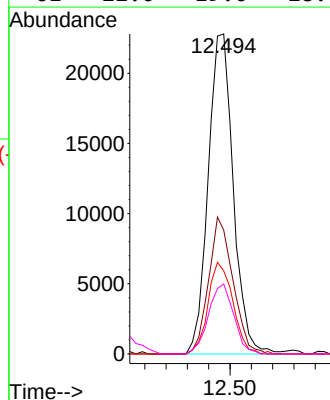
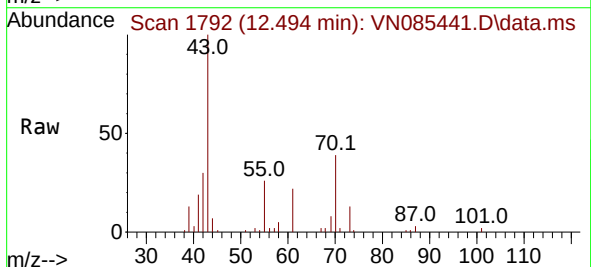
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

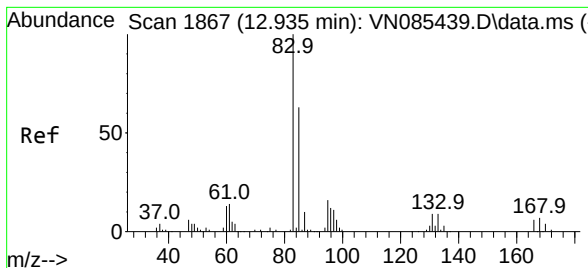
Tgt Ion:105 Resp: 87003  
Ion Ratio Lower Upper  
105 100  
120 26.1 12.8 38.3



#74  
N-ethyl acetate  
Concen: 9.260 ug/l  
RT: 12.494 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 37343  
Ion Ratio Lower Upper  
43 100  
70 41.4 34.0 51.0  
55 28.5 21.4 32.2  
61 22.0 19.0 28.4

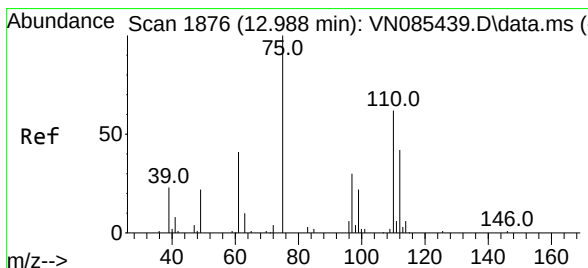
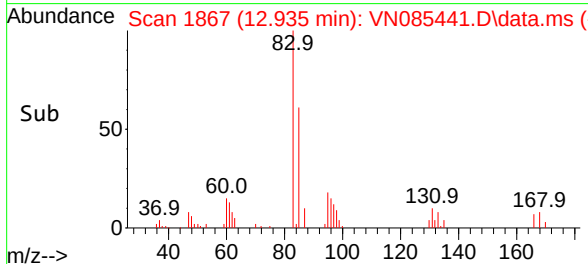
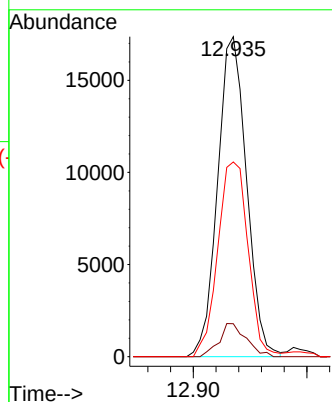
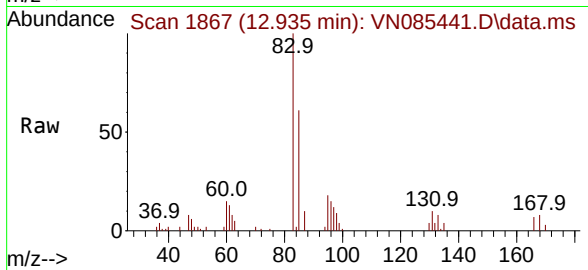




#75  
1,1,2,2-Tetrachloroethane  
Concen: 9.709 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

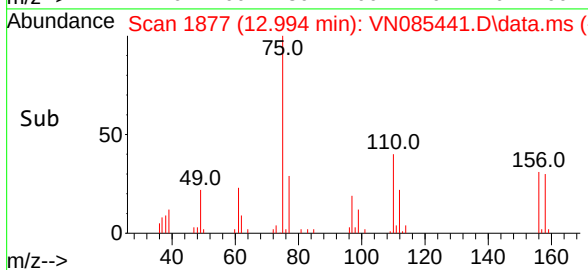
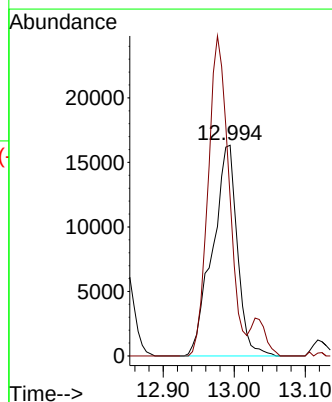
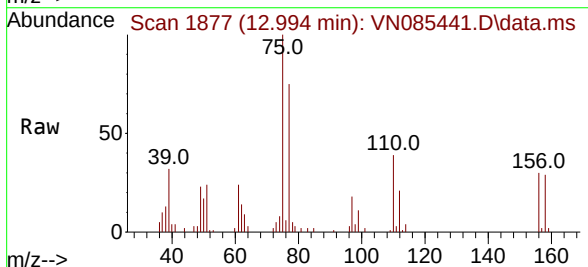
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

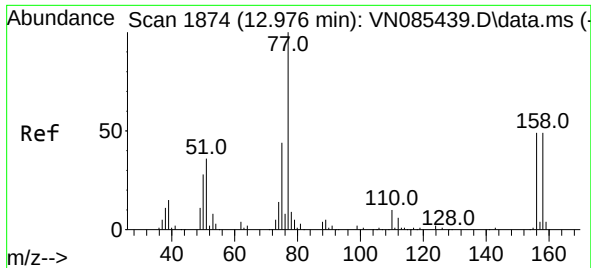
Tgt Ion: 83 Resp: 30770  
Ion Ratio Lower Upper  
83 100  
131 9.6 4.8 14.4  
85 63.6 32.2 96.6



#76  
1,2,3-Trichloropropane  
Concen: 14.675 ug/l  
RT: 12.994 min Scan# 1877  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 39589  
Ion Ratio Lower Upper  
75 100  
77 127.6 109.7 329.2

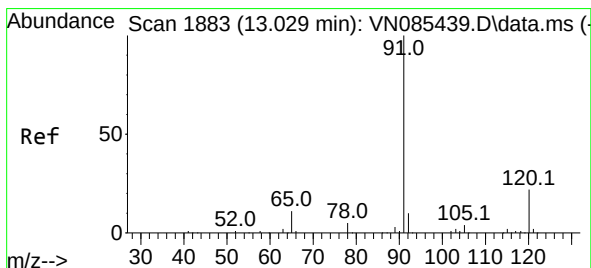
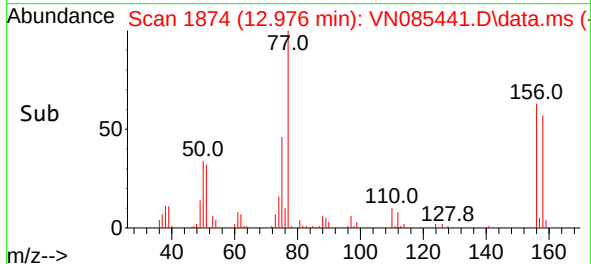
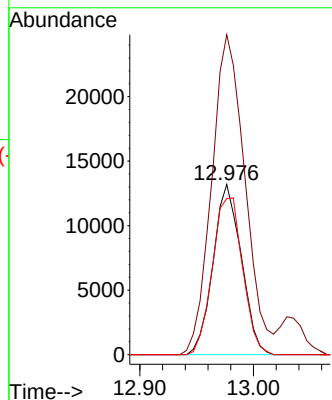
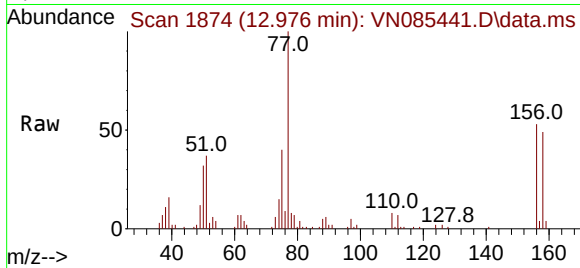




#77  
Bromobenzene  
Concen: 9.720 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

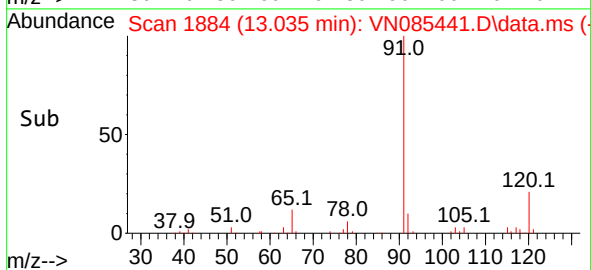
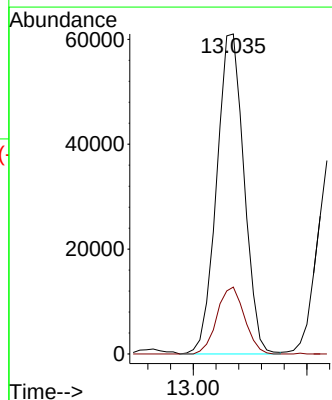
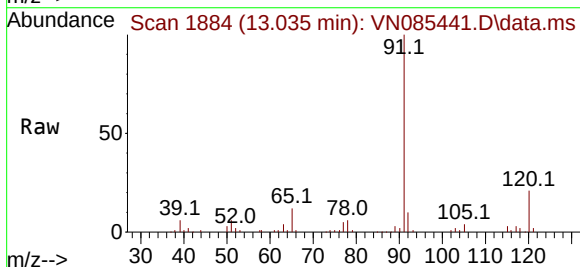
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ClientSampleId :  
VSTDIC010

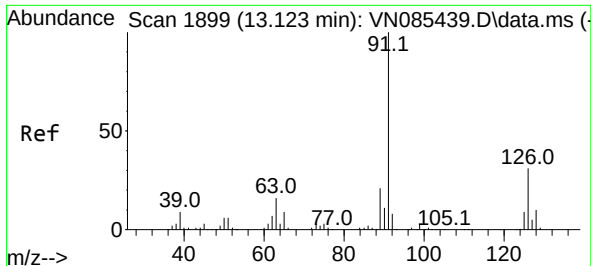
Tgt Ion:156 Resp: 22784  
Ion Ratio Lower Upper  
156 100  
77 221.6 114.1 342.4  
158 98.7 48.9 146.8



#78  
n-propylbenzene  
Concen: 9.628 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 102262  
Ion Ratio Lower Upper  
91 100  
120 20.9 10.9 32.6





#79

2-Chlorotoluene

Concen: 9.943 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

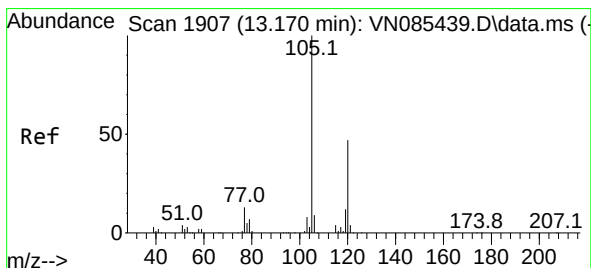
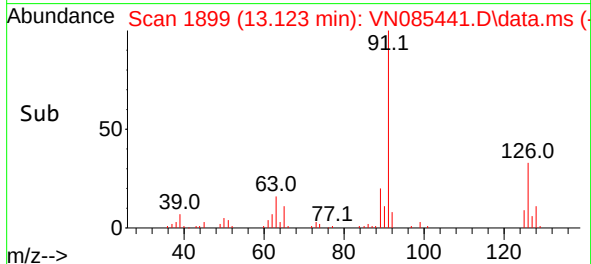
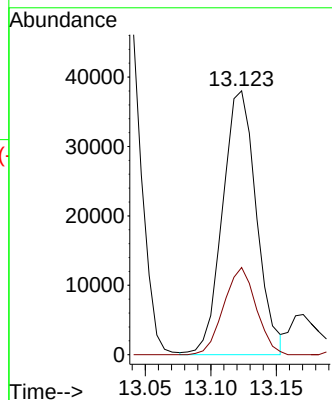
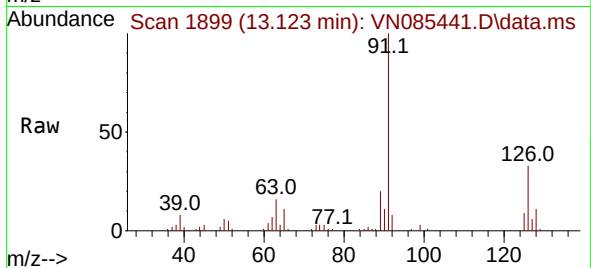
VSTDIC010

Tgt Ion: 91 Resp: 68346

Ion Ratio Lower Upper

91 100

126 31.5 15.7 47.1



#80

1,3,5-Trimethylbenzene

Concen: 9.669 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085441.D

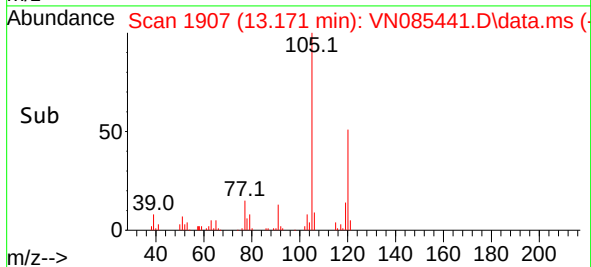
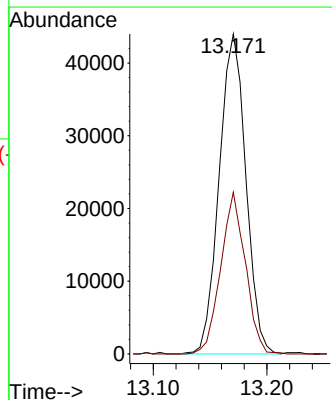
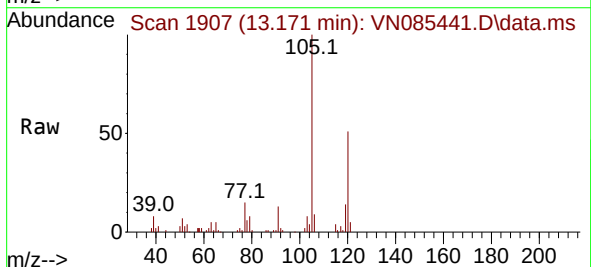
Acq: 14 Jan 2025 16:07

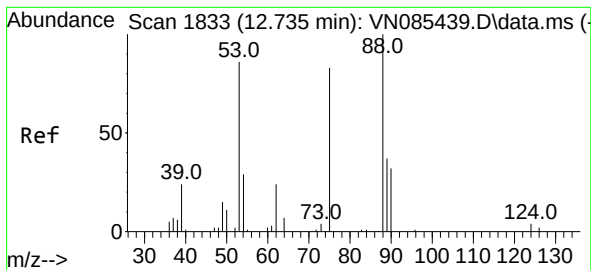
Tgt Ion: 105 Resp: 71656

Ion Ratio Lower Upper

105 100

120 46.8 23.9 71.7

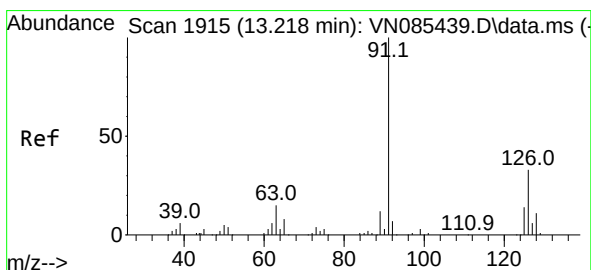
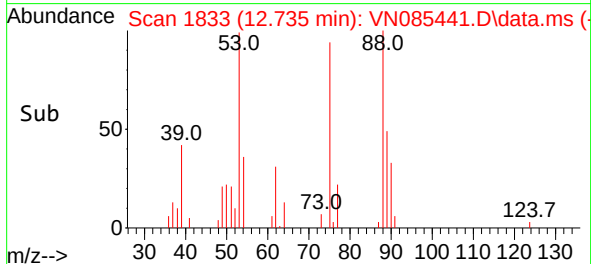
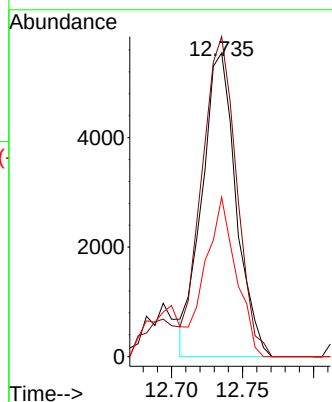
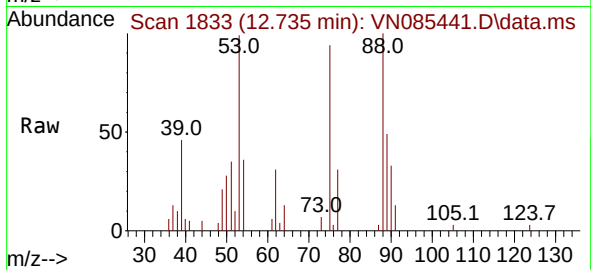




#81  
trans-1,4-Dichloro-2-butene  
Concen: 9.248 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

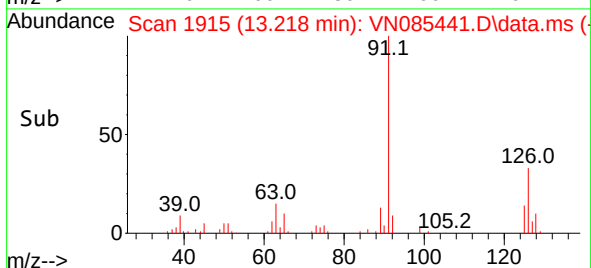
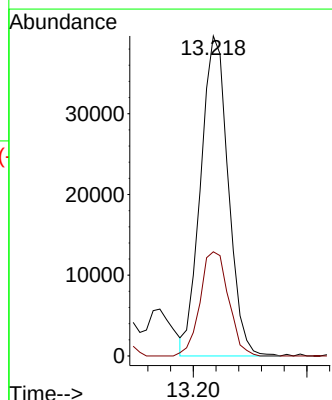
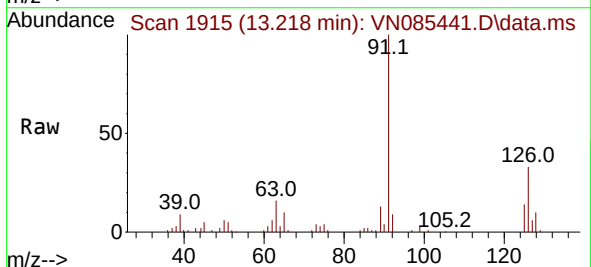
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

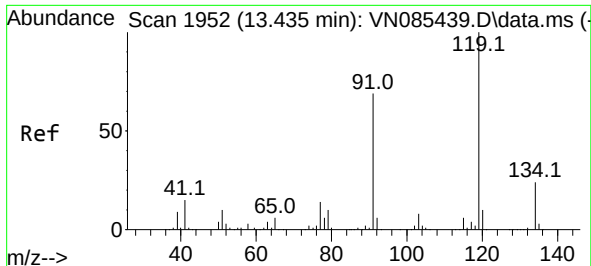
Tgt Ion: 75 Resp: 9236  
Ion Ratio Lower Upper  
75 100  
53 119.6 95.6 143.4  
89 46.6 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 9.756 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 66773  
Ion Ratio Lower Upper  
91 100  
126 33.6 15.9 47.7

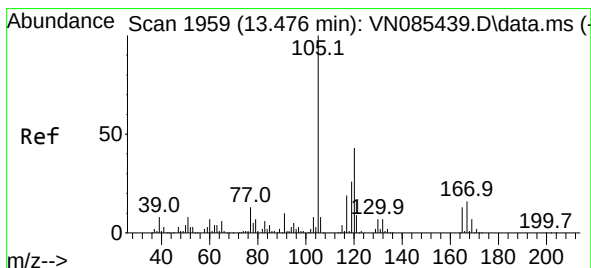
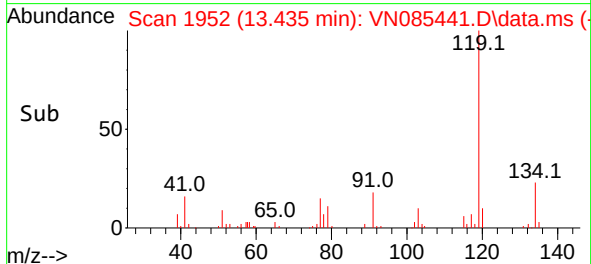
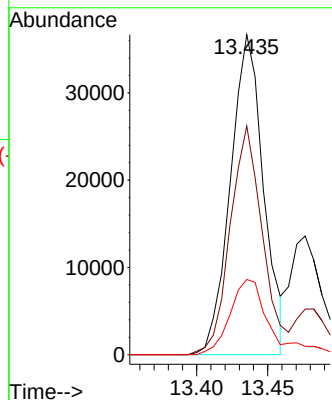
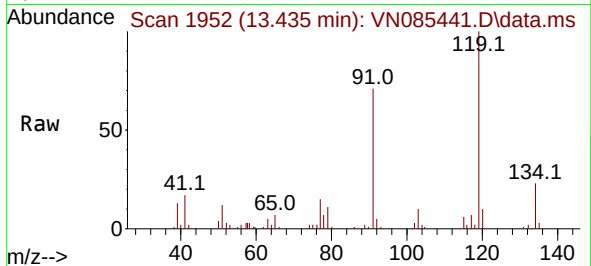




#83  
tert-Butylbenzene  
Concen: 9.553 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

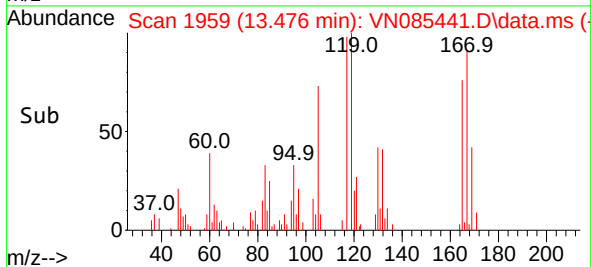
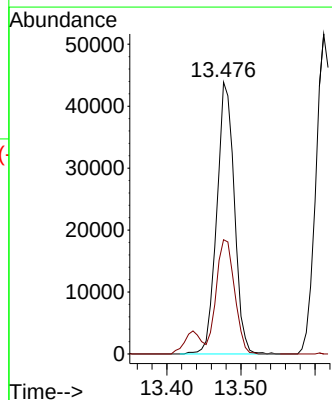
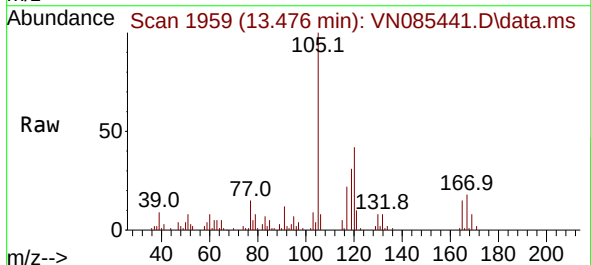
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

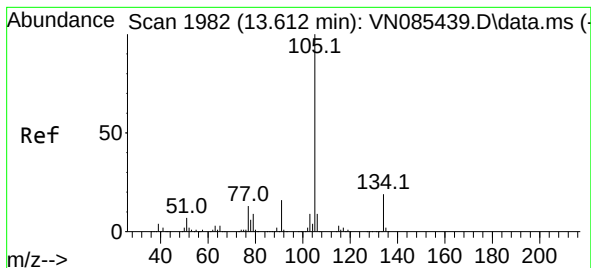
Tgt Ion:119 Resp: 59455  
Ion Ratio Lower Upper  
119 100  
91 70.0 35.1 105.3  
134 27.8 12.0 36.1



#84  
1,2,4-Trimethylbenzene  
Concen: 9.754 ug/l  
RT: 13.476 min Scan# 1959  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 72046  
Ion Ratio Lower Upper  
105 100  
120 43.8 21.6 65.0





#85

sec-Butylbenzene

Concen: 9.699 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

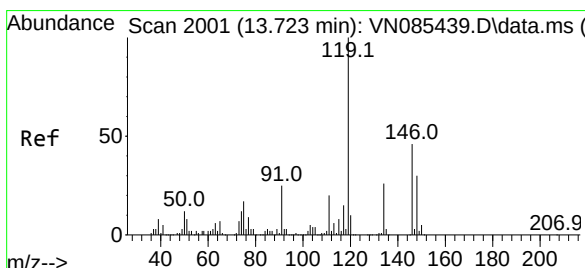
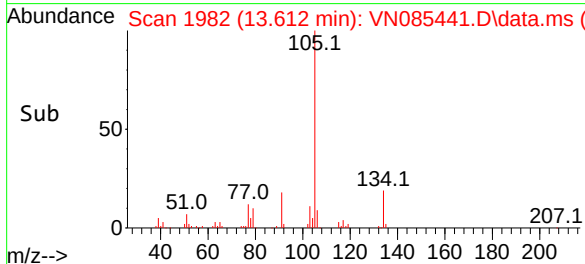
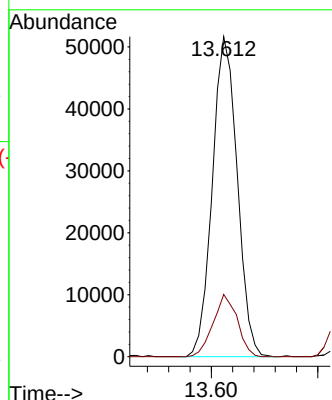
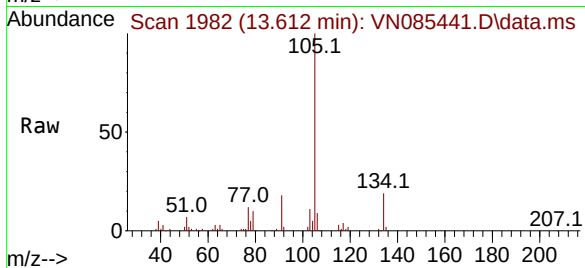
VSTDICC010

Tgt Ion:105 Resp: 83662

Ion Ratio Lower Upper

105 100

134 18.9 9.7 28.9



#86

p-Isopropyltoluene

Concen: 9.674 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

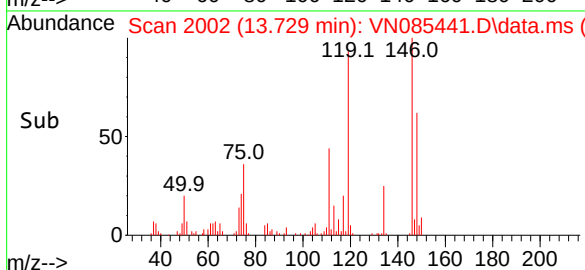
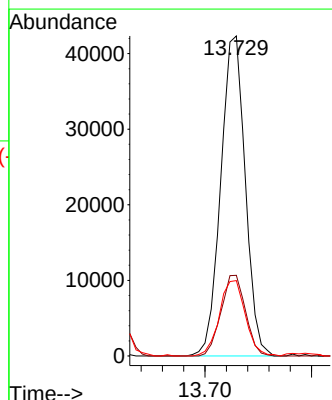
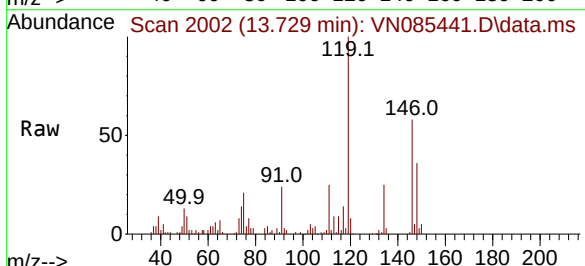
Tgt Ion:119 Resp: 67556

Ion Ratio Lower Upper

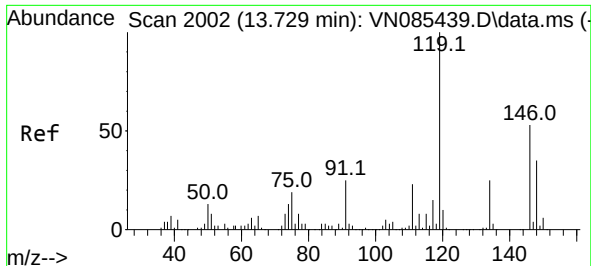
119 100

134 25.2 12.7 38.0

91 25.0 12.7 38.1



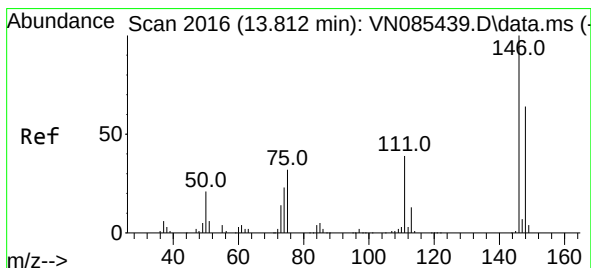
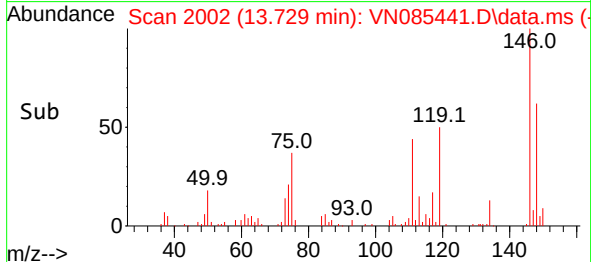
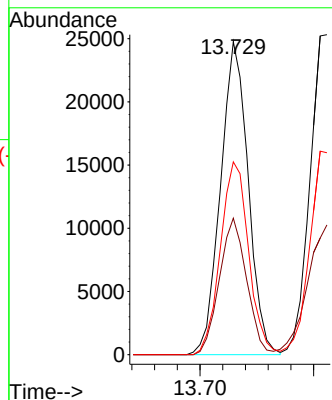
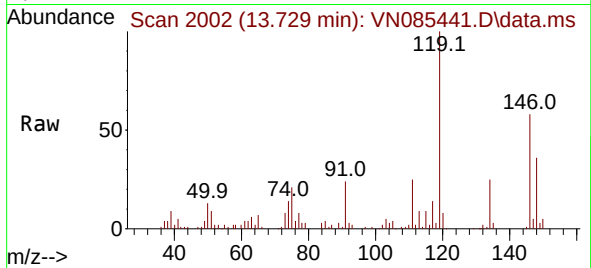




#87  
 1,3-Dichlorobenzene  
 Concen: 9.693 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

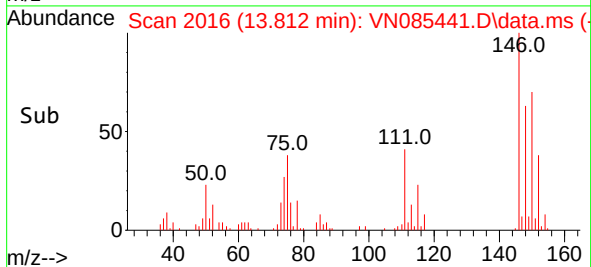
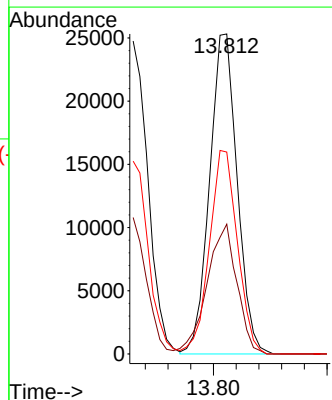
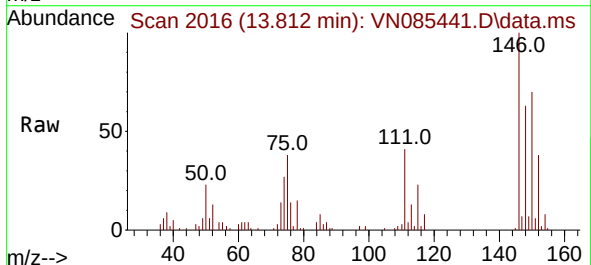
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

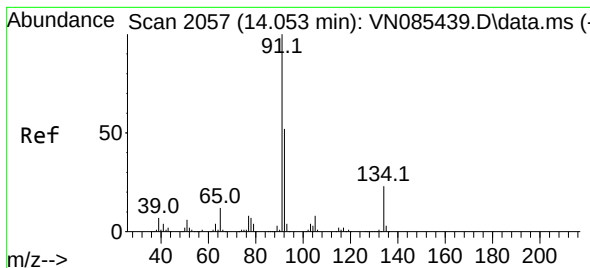
Tgt Ion:146 Resp: 41843  
 Ion Ratio Lower Upper  
 146 100  
 111 43.1 21.4 64.3  
 148 63.0 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 9.549 ug/l  
 RT: 13.812 min Scan# 2016  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 42728  
 Ion Ratio Lower Upper  
 146 100  
 111 44.0 21.3 63.7  
 148 64.6 32.4 97.0





#89

n-Butylbenzene

Concen: 9.314 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

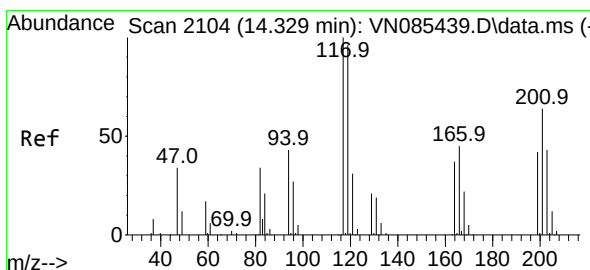
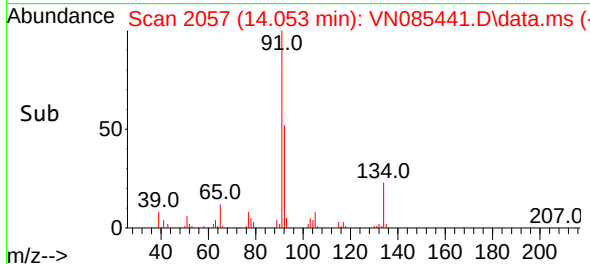
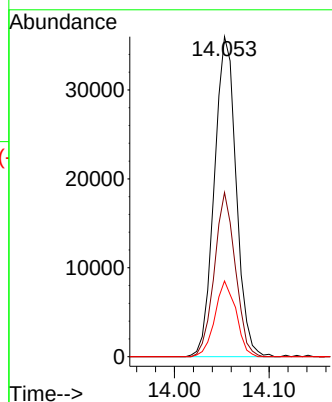
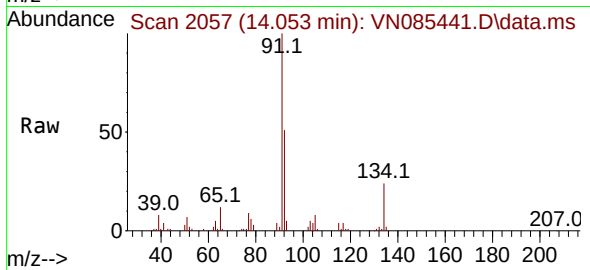
Tgt Ion: 91 Resp: 57632

Ion Ratio Lower Upper

91 100

92 49.2 25.8 77.3

134 22.8 11.7 35.1



#90

Hexachloroethane

Concen: 9.294 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. 0.000 min

Lab File: VN085441.D

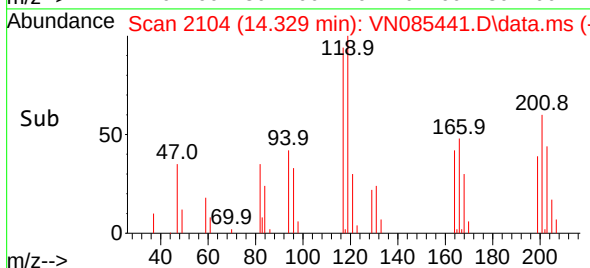
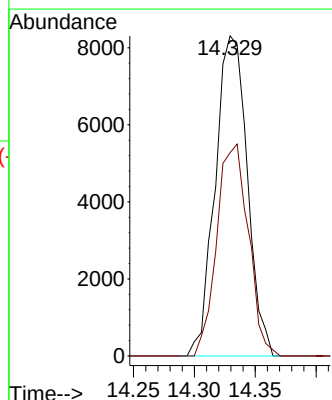
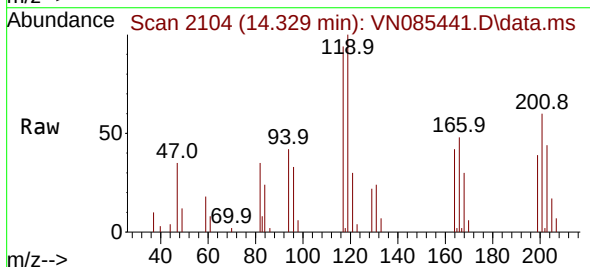
Acq: 14 Jan 2025 16:07

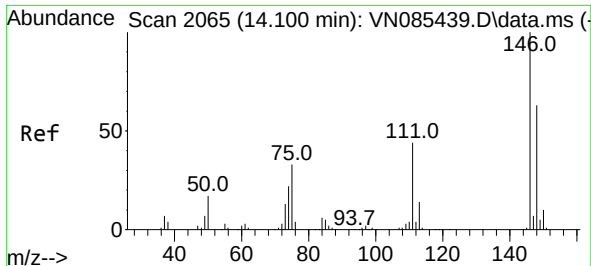
Tgt Ion: 117 Resp: 15261

Ion Ratio Lower Upper

117 100

201 65.0 33.7 101.0

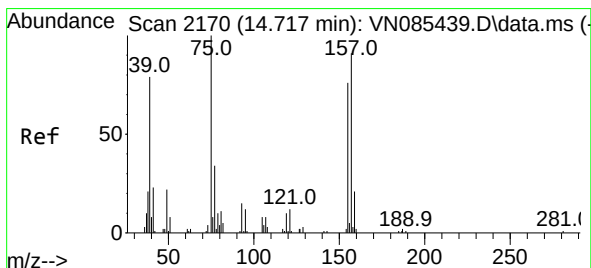
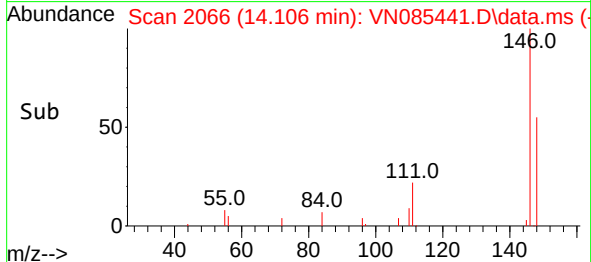
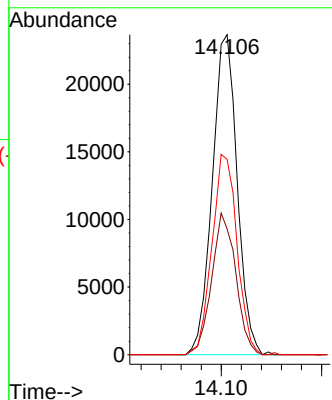
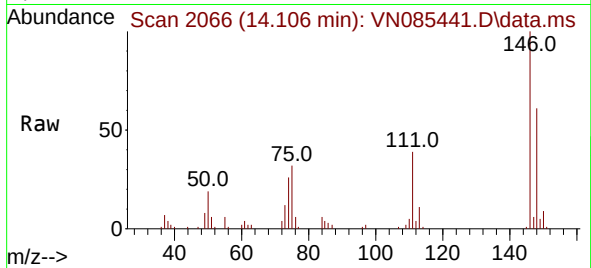




#91  
1,2-Dichlorobenzene  
Concen: 9.458 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

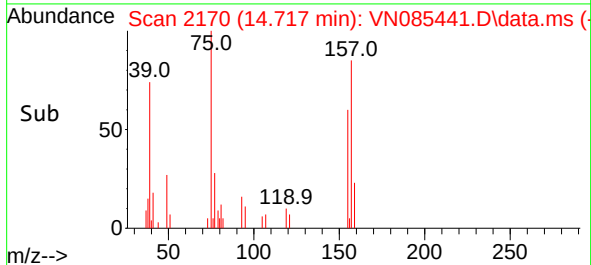
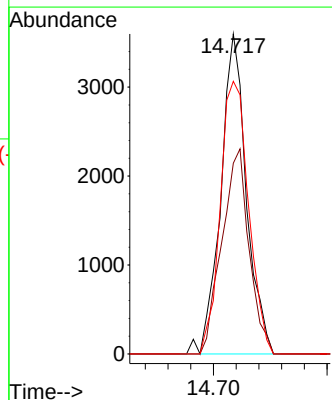
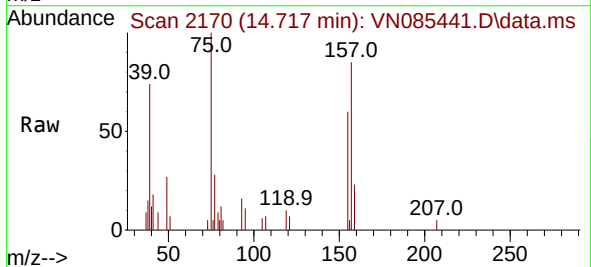
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

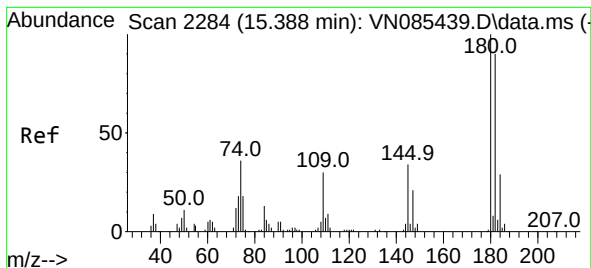
Tgt Ion:146 Resp: 40726  
Ion Ratio Lower Upper  
146 100  
111 42.9 21.7 65.1  
148 62.9 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 9.744 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 5639  
Ion Ratio Lower Upper  
75 100  
155 67.9 36.4 109.2  
157 94.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 9.354 ug/l

RT: 15.388 min Scan# 21

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

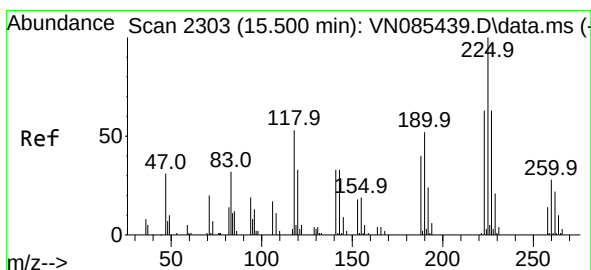
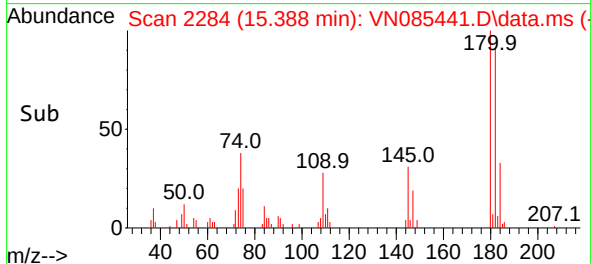
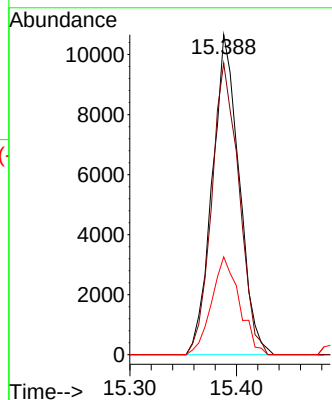
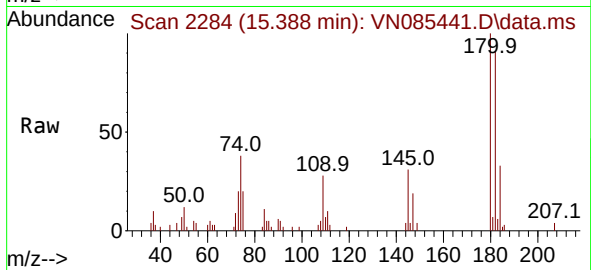
Tgt Ion:180 Resp: 18720

Ion Ratio Lower Upper

180 100

182 92.4 46.8 140.3

145 31.7 16.0 48.0



#94

Hexachlorobutadiene

Concen: 9.874 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

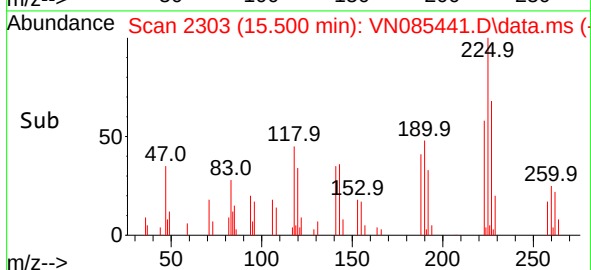
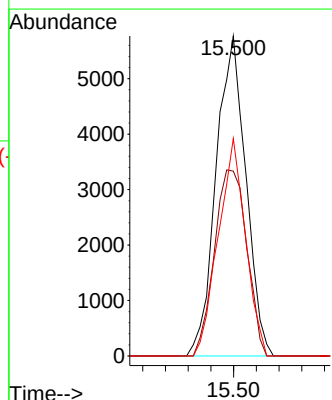
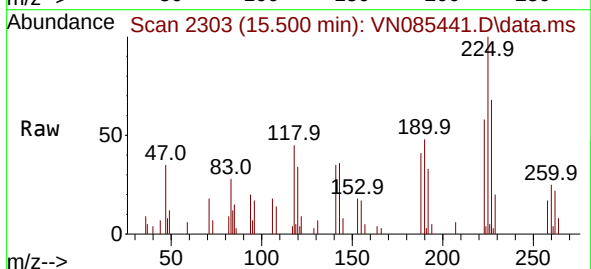
Tgt Ion:225 Resp: 10491

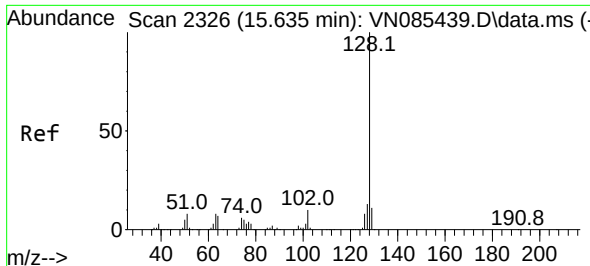
Ion Ratio Lower Upper

225 100

223 63.3 30.7 92.1

227 62.1 30.9 92.5

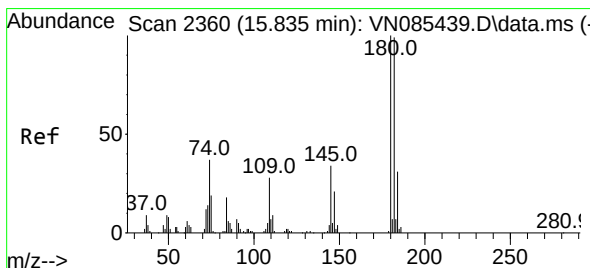
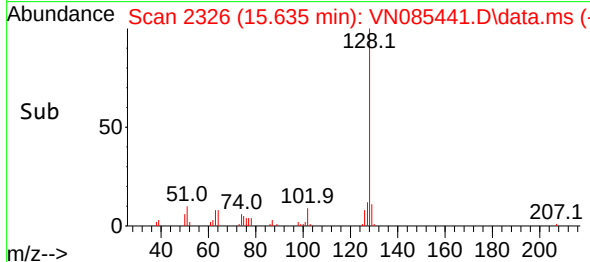
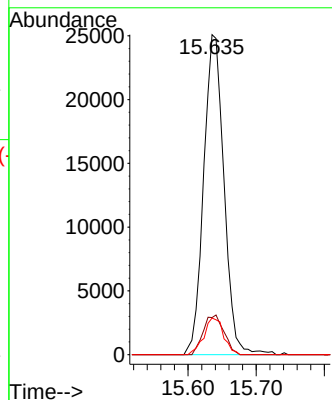
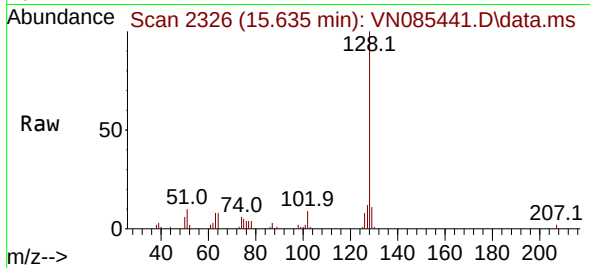




#95  
Naphthalene  
Concen: 8.717 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

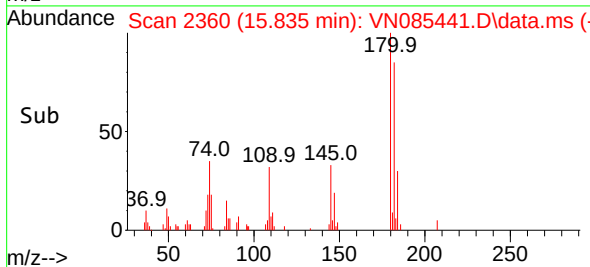
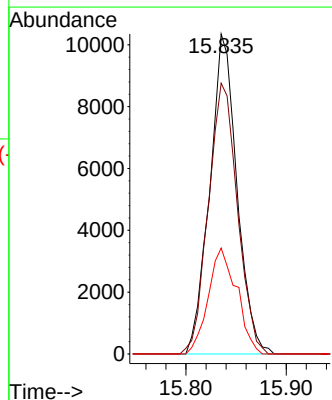
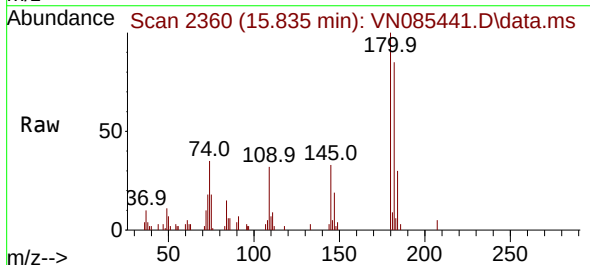
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Tgt Ion:128 Resp: 52054  
Ion Ratio Lower Upper  
128 100  
127 12.6 10.6 16.0  
129 11.2 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 9.605 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Tgt Ion:180 Resp: 19450  
Ion Ratio Lower Upper  
180 100  
182 90.3 47.4 142.2  
145 34.7 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085442.D  
 Acq On : 14 Jan 2025 16:31  
 Operator : JC\MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Quant Time: Jan 15 01:45:08 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Pentafluorobenzene        | 8.218  | 168   | 186556   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.100  | 114   | 324413   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865 | 117   | 282203   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.788 | 152   | 126086   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.577  | 65    | 17046    | 5.660    | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 74 - 125 | Recovery | =      | 11.320%# |
| 35) Dibromofluoromethane     | 8.165  | 113   | 12102    | 5.377    | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 75 - 124 | Recovery | =      | 10.760%# |
| 50) Toluene-d8               | 10.565 | 98    | 41328    | 5.168    | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 86 - 113 | Recovery | =      | 10.340%# |
| 62) 4-Bromofluorobenzene     | 12.847 | 95    | 13520    | 4.943    | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 77 - 121 | Recovery | =      | 9.880%#  |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124  | 85    | 13199    | 5.225    | ug/l   | 97       |
| 3) Chloromethane             | 2.359  | 50    | 14526    | 5.311    | ug/l   | 96       |
| 4) Vinyl Chloride            | 2.512  | 62    | 14564    | 5.298    | ug/l   | 98       |
| 5) Bromomethane              | 2.953  | 94    | 9788     | 5.895    | ug/l   | 98       |
| 6) Chloroethane              | 3.124  | 64    | 9430     | 5.411    | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.501  | 101   | 20098    | 5.039    | ug/l   | 92       |
| 8) Diethyl Ether             | 3.959  | 74    | 6652     | 4.828    | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 4.365  | 101   | 11917    | 5.305    | ug/l   | 97       |
| 10) Methyl Iodide            | 4.583  | 142   | 12331    | 4.793    | ug/l   | 99       |
| 11) Tert butyl alcohol       | 5.518  | 59    | 9075     | 26.318   | ug/l # | 94       |
| 12) 1,1-Dichloroethene       | 4.342  | 96    | 10429    | 5.209    | ug/l   | 96       |
| 13) Acrolein                 | 4.171  | 56    | 9430     | 20.033   | ug/l   | 97       |
| 14) Allyl chloride           | 5.030  | 41    | 16741    | 5.153    | ug/l   | 97       |
| 15) Acrylonitrile            | 5.718  | 53    | 27869    | 25.445   | ug/l   | 97       |
| 16) Acetone                  | 4.430  | 43    | 25122    | 25.819   | ug/l   | 97       |
| 17) Carbon Disulfide         | 4.706  | 76    | 32068    | 5.202    | ug/l   | 96       |
| 18) Methyl Acetate           | 5.024  | 43    | 15106    | 5.106    | ug/l   | 97       |
| 19) Methyl tert-butyl Ether  | 5.800  | 73    | 31439    | 4.836    | ug/l   | 94       |
| 20) Methylene Chloride       | 5.271  | 84    | 12981    | 5.389    | ug/l # | 83       |
| 21) trans-1,2-Dichloroethene | 5.783  | 96    | 10614    | 4.960    | ug/l # | 78       |
| 22) Diisopropyl ether        | 6.665  | 45    | 35785    | 4.962    | ug/l # | 96       |
| 23) Vinyl Acetate            | 6.600  | 43    | 139425   | 27.533   | ug/l   | 96       |
| 24) 1,1-Dichloroethane       | 6.565  | 63    | 22865    | 5.200    | ug/l   | 99       |
| 25) 2-Butanone               | 7.483  | 43    | 36127    | 25.231   | ug/l   | 99       |
| 26) 2,2-Dichloropropane      | 7.488  | 77    | 18398    | 5.175    | ug/l   | 100      |
| 27) cis-1,2-Dichloroethene   | 7.488  | 96    | 12477    | 4.951    | ug/l   | 99       |
| 28) Bromochloromethane       | 7.806  | 49    | 11096    | 5.424    | ug/l   | 99       |
| 29) Tetrahydrofuran          | 7.841  | 42    | 21983    | 24.215   | ug/l   | 99       |
| 30) Chloroform               | 7.959  | 83    | 23384    | 5.146    | ug/l   | 98       |
| 31) Cyclohexane              | 8.247  | 56    | 22343    | 5.846    | ug/l # | 92       |
| 32) 1,1,1-Trichloroethane    | 8.159  | 97    | 21416    | 5.372    | ug/l   | 91       |
| 36) 1,1-Dichloropropene      | 8.371  | 75    | 15886    | 5.029    | ug/l   | 96       |
| 37) Ethyl Acetate            | 7.553  | 43    | 15336    | 4.810    | ug/l   | 100      |
| 38) Carbon Tetrachloride     | 8.359  | 117   | 18317    | 5.065    | ug/l   | 96       |
| 39) Methylcyclohexane        | 9.600  | 83    | 14175    | 4.776    | ug/l   | 98       |
| 40) Benzene                  | 8.600  | 78    | 47833    | 5.040    | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085442.D  
 Acq On : 14 Jan 2025 16:31  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Quant Time: Jan 15 01:45:08 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 7380     | 4.449  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 18628    | 5.211  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 24792    | 4.853  | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 11133    | 5.039  | ug/l   | 86       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 12591    | 5.194  | ug/l   | 92       |
| 46) Dibromomethane            | 9.700  | 93   | 8230     | 4.705  | ug/l   | 91       |
| 47) Bromodichloromethane      | 9.888  | 83   | 18456    | 5.179  | ug/l # | 96       |
| 48) Methyl methacrylate       | 9.677  | 41   | 10574    | 4.599  | ug/l   | 95       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 3619     | 93.477 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 71889    | 24.250 | ug/l   | 98       |
| 52) Toluene                   | 10.629 | 92   | 27098    | 4.928  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 17099    | 5.077  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 17440    | 4.848  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 11311    | 5.197  | ug/l   | 96       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 14094    | 5.627  | ug/l   | 94       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 18945    | 5.006  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 33210    | 24.047 | ug/l   | 97       |
| 59) 2-Hexanone                | 11.194 | 43   | 49021    | 23.501 | ug/l   | 94       |
| 60) Dibromochloromethane      | 11.353 | 129  | 13635    | 5.190  | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 10419    | 4.810  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 9756     | 5.071  | ug/l   | 91       |
| 65) Chlorobenzene             | 11.888 | 112  | 31312    | 5.065  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 11620    | 5.121  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 48216    | 4.789  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.065 | 106  | 34771    | 9.344  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 16419    | 4.617  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 26218    | 4.454  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 8017     | 4.938  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 39811    | 4.678  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 17577    | 4.595  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 15483    | 5.151  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 18624    | 7.279  | ug/l   | 48       |
| 77) Bromobenzene              | 12.982 | 156  | 11091    | 4.989  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 45450    | 4.512  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 31932    | 4.898  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 31891    | 4.537  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 4229     | 4.465  | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 31976    | 4.926  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 27597    | 4.675  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 32054    | 4.575  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 38148    | 4.663  | ug/l   | 98       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 29856    | 4.584  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 20876    | 5.099  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 21982    | 5.179  | ug/l   | 97       |
| 89) n-Butylbenzene            | 14.053 | 91   | 27437    | 4.675  | ug/l   | 96       |
| 90) Hexachloroethane          | 14.329 | 117  | 7767     | 4.987  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 20177    | 4.940  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.729 | 75   | 2872     | 5.232  | ug/l   | 90       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 9037     | 4.761  | ug/l   | 94       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 5563     | 5.520  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 25047    | 4.422  | ug/l   | 96       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 8737     | 4.549  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085442.D  
Acq On : 14 Jan 2025 16:31  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

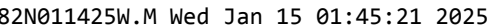
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

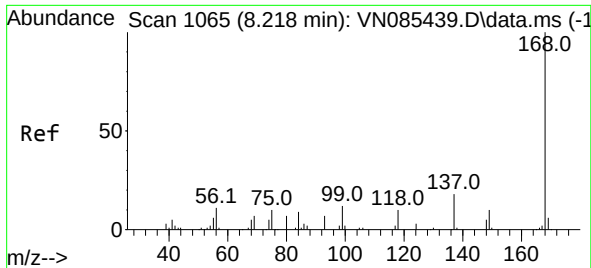
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 15 01:45:08 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

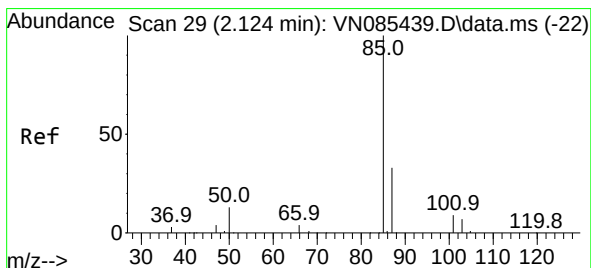
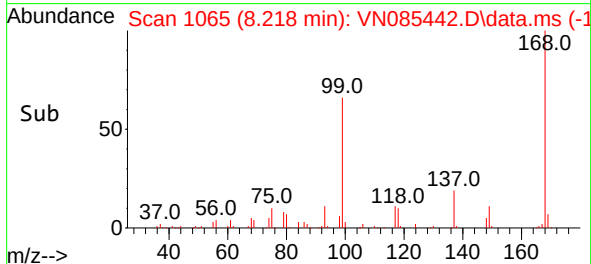
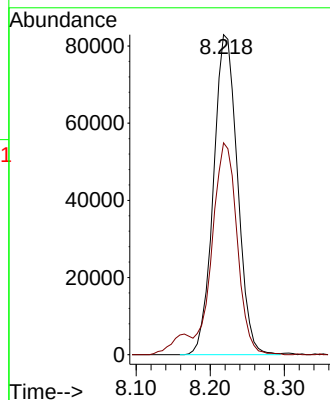
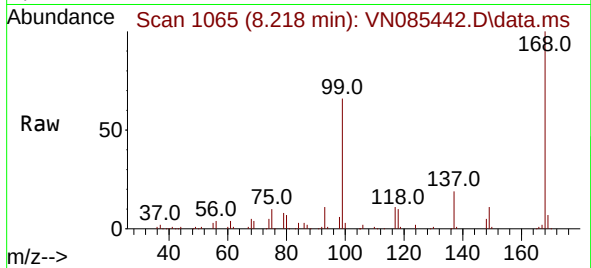




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

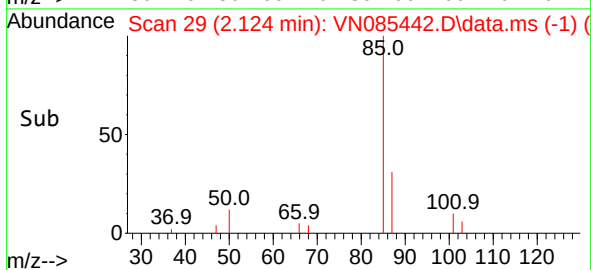
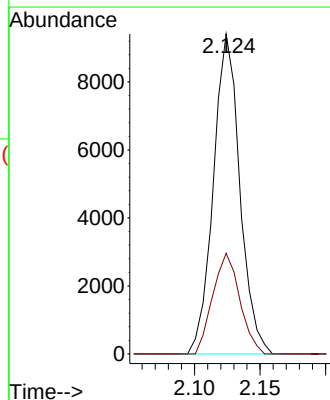
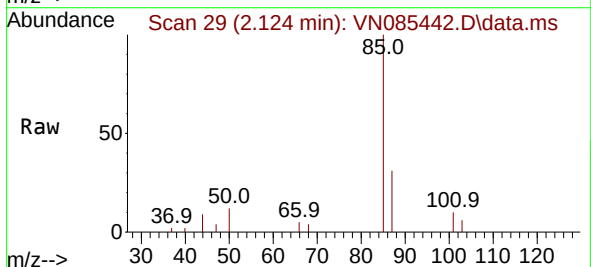
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

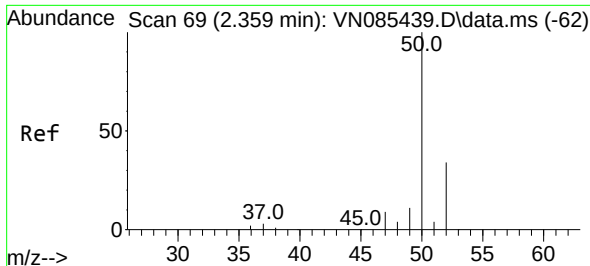
Tgt Ion:168 Resp: 186556  
Ion Ratio Lower Upper  
168 100  
99 65.9 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 5.225 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 85 Resp: 13199  
Ion Ratio Lower Upper  
85 100  
87 31.5 16.7 50.1

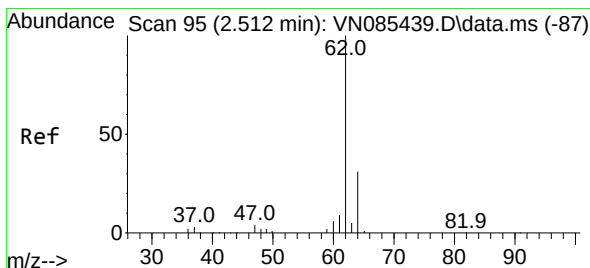
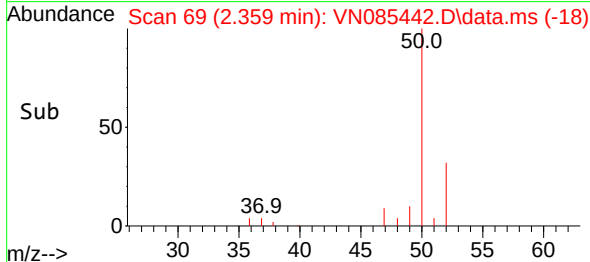
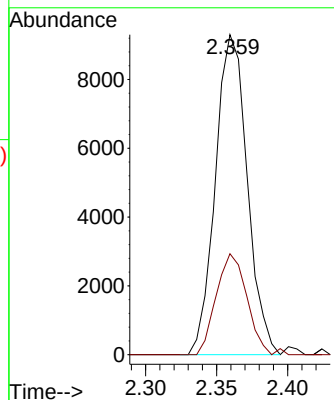
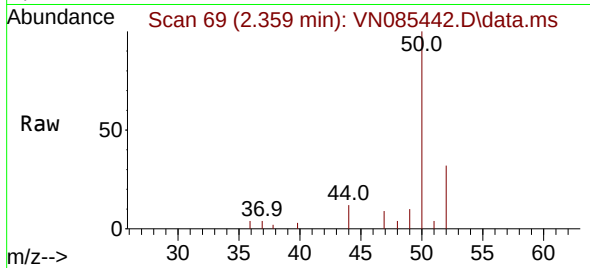




#3  
Chloromethane  
Concen: 5.311 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

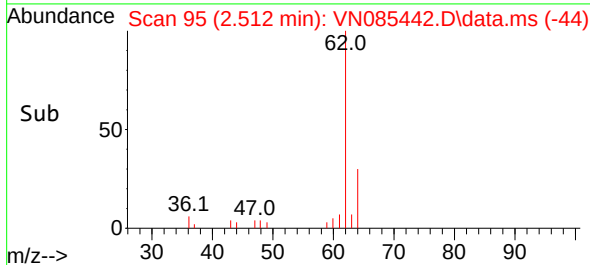
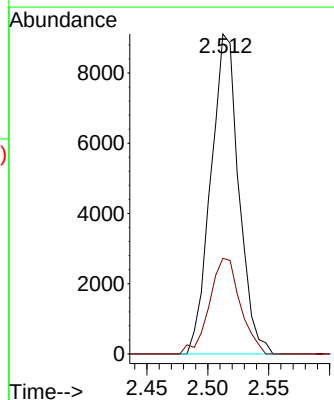
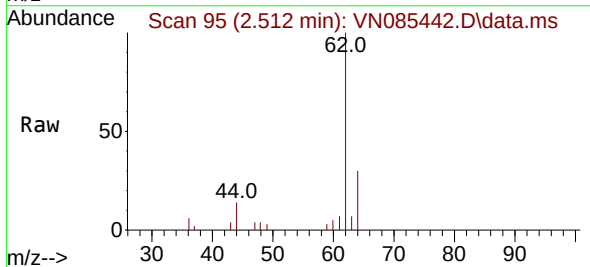
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

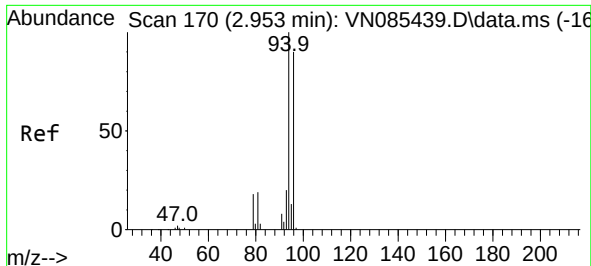
Tgt Ion: 50 Resp: 14526  
Ion Ratio Lower Upper  
50 100  
52 31.6 27.0 40.6



#4  
Vinyl Chloride  
Concen: 5.298 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 14564  
Ion Ratio Lower Upper  
62 100  
64 29.9 24.8 37.2

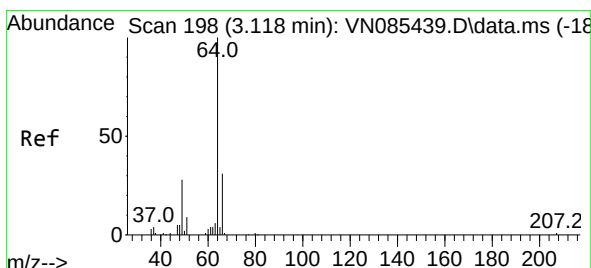
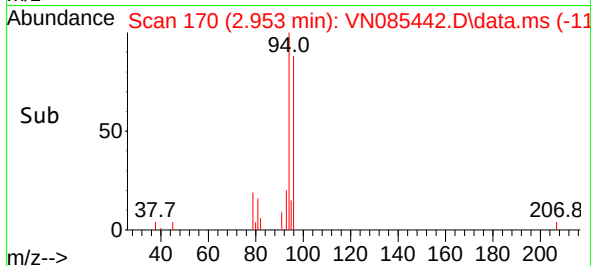
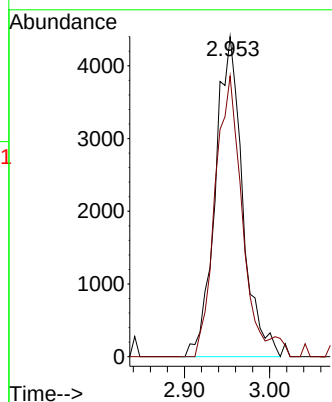
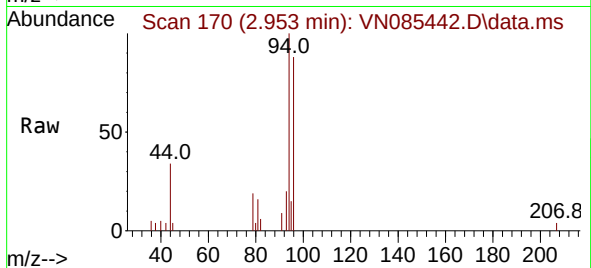




#5  
Bromomethane  
Concen: 5.895 ug/l  
RT: 2.953 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

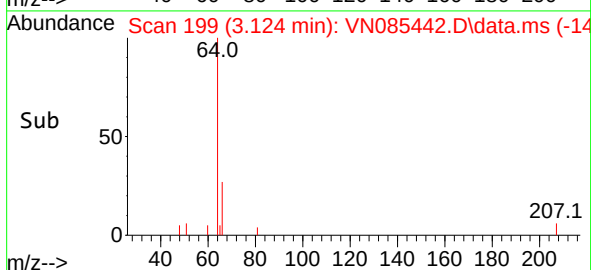
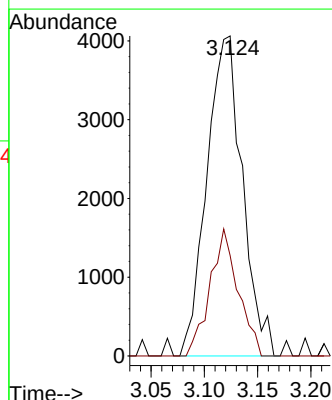
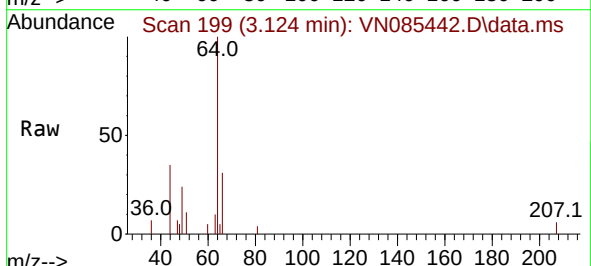
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MSVOA\_N  
ClientSampleId :  
VSTDICC005

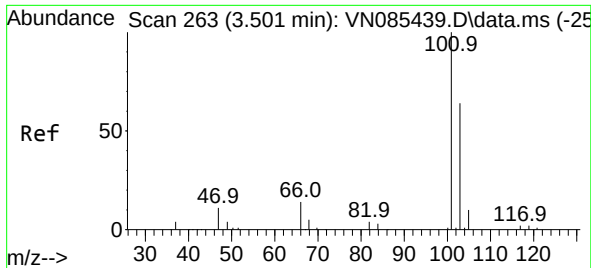
Tgt Ion: 94 Resp: 9788  
Ion Ratio Lower Upper  
94 100  
96 87.7 71.8 107.6



#6  
Chloroethane  
Concen: 5.411 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 64 Resp: 9430  
Ion Ratio Lower Upper  
64 100  
66 31.4 24.6 36.8

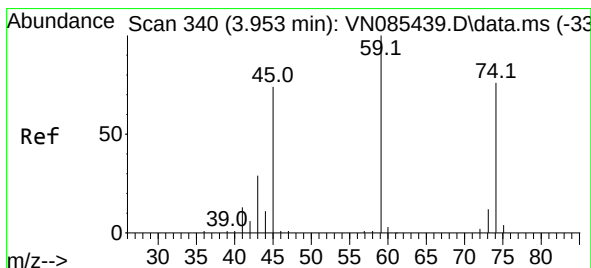
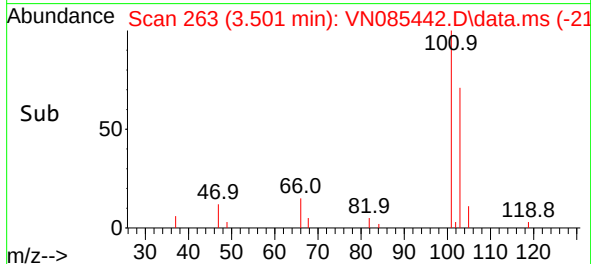
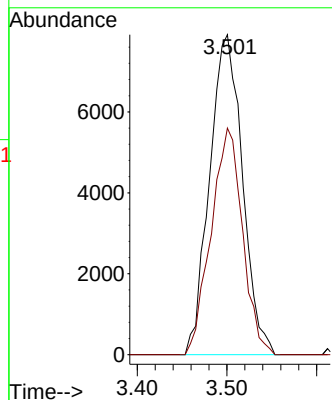
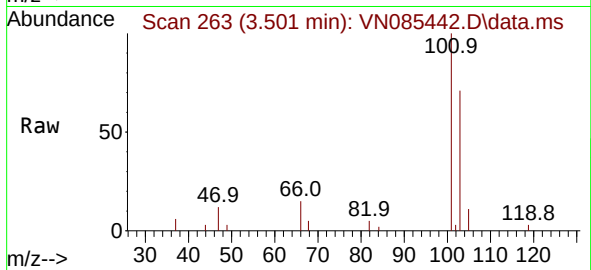




#7  
 Trichlorofluoromethane  
 Concen: 5.039 ug/l  
 RT: 3.501 min Scan# 209  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

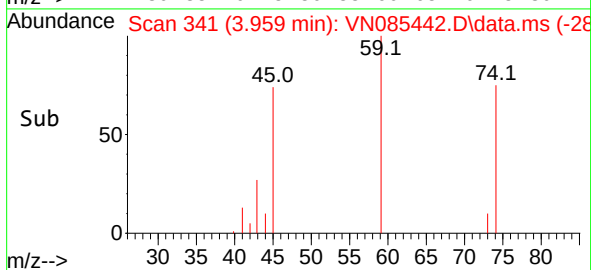
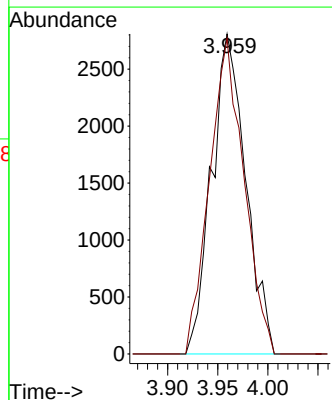
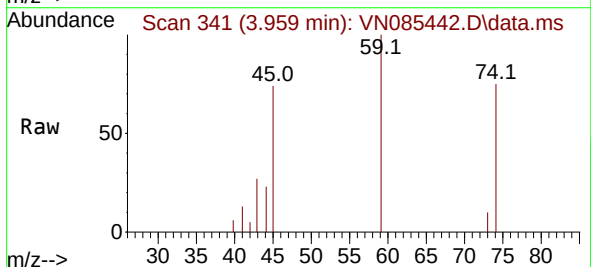
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

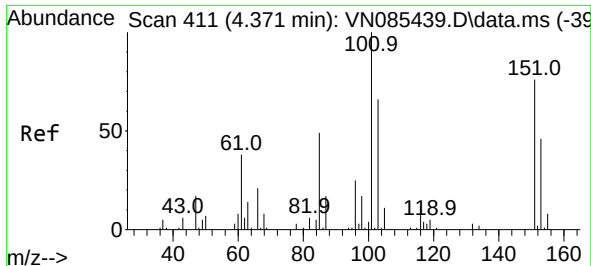
Tgt Ion:101 Resp: 20098  
 Ion Ratio Lower Upper  
 101 100  
 103 70.8 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 4.828 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion: 74 Resp: 6652  
 Ion Ratio Lower Upper  
 74 100  
 45 99.5 49.7 149.1

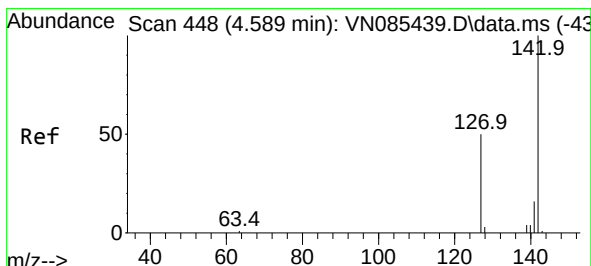
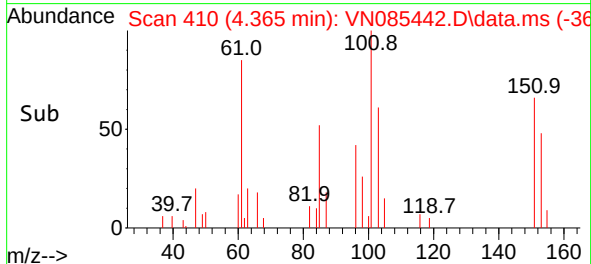
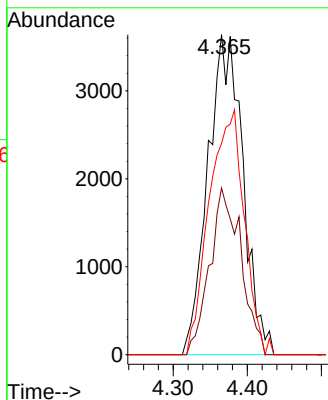
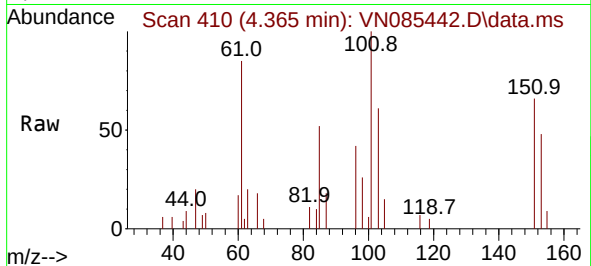




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 5.305 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

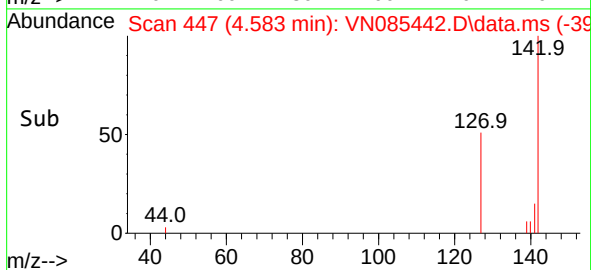
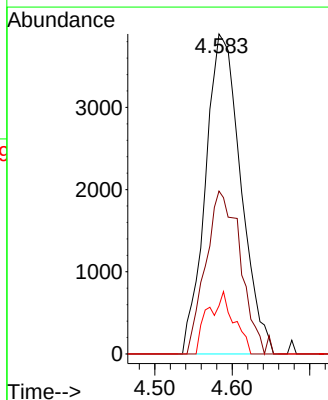
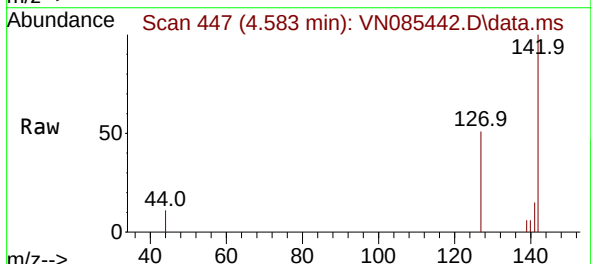
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

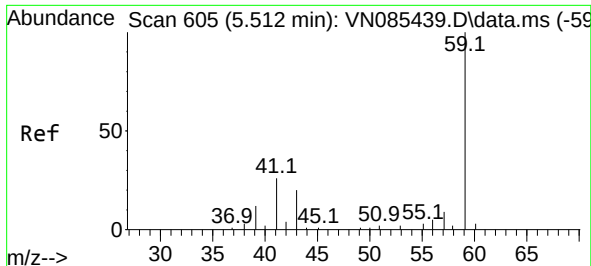
Tgt Ion:101 Resp: 11917  
Ion Ratio Lower Upper  
101 100  
85 46.5 37.8 56.8  
151 76.7 58.8 88.2



#10  
Methyl Iodide  
Concen: 4.793 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion:142 Resp: 12331  
Ion Ratio Lower Upper  
142 100  
127 50.9 40.3 60.5  
141 15.0 12.8 19.2

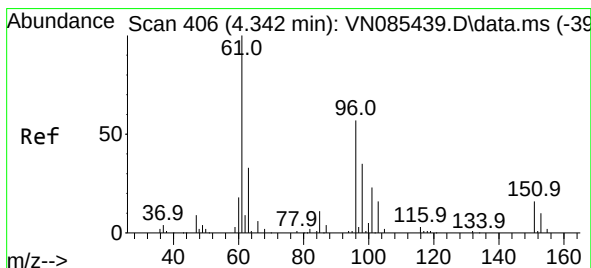
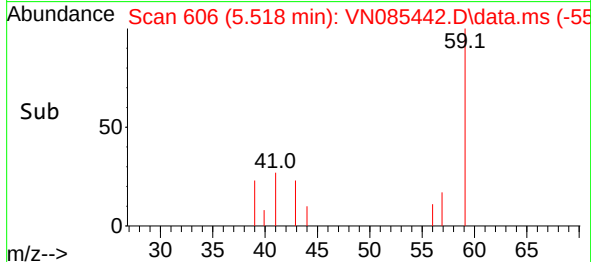
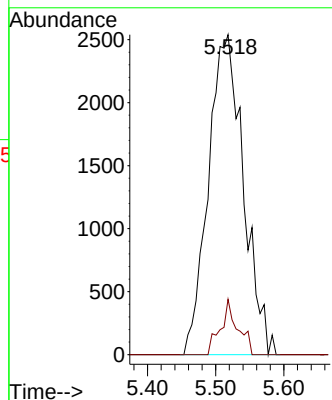
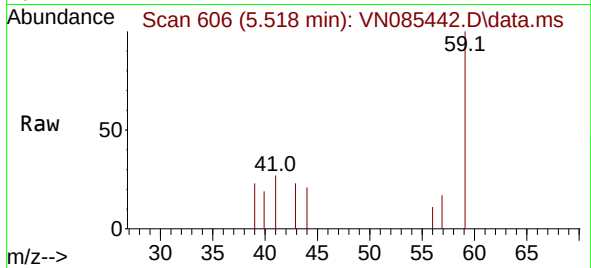




#11  
Tert butyl alcohol  
Concen: 26.318 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

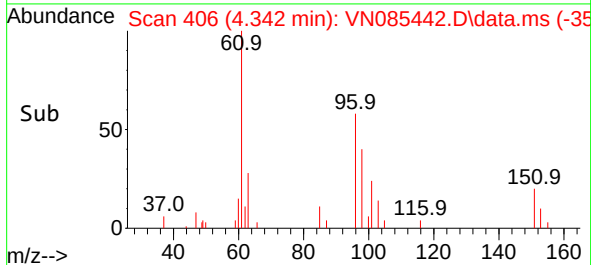
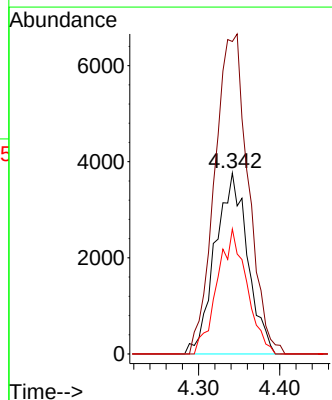
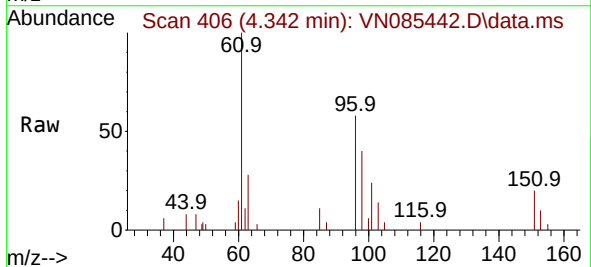
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

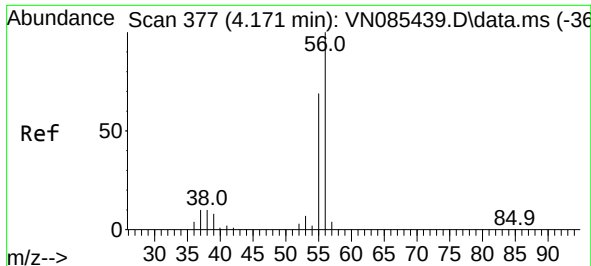
Tgt Ion: 59 Resp: 9075  
Ion Ratio Lower Upper  
59 100  
57 8.5 8.6 13.0#



#12  
1,1-Dichloroethene  
Concen: 5.209 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 10429  
Ion Ratio Lower Upper  
96 100  
61 172.7 141.0 211.4  
98 69.0 49.0 73.6





#13

Acrolein

Concen: 20.033 ug/l

RT: 4.171 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

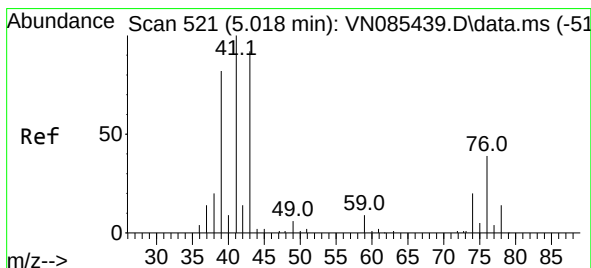
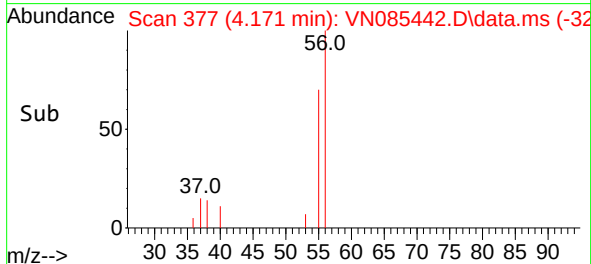
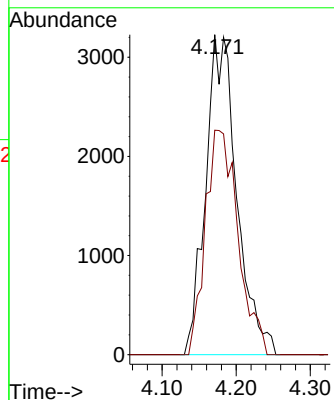
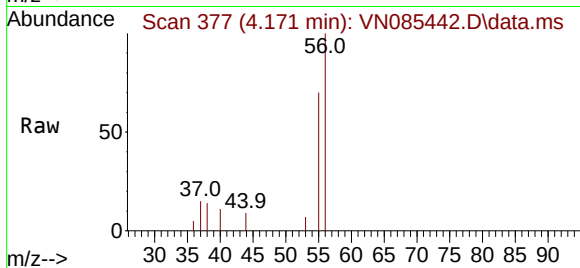
VSTDICC005

Tgt Ion: 56 Resp: 9430

Ion Ratio Lower Upper

56 100

55 73.2 56.3 84.5



#14

Allyl chloride

Concen: 5.153 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

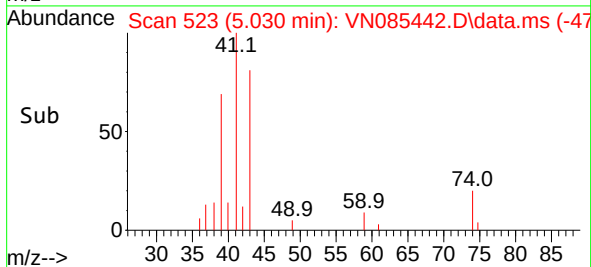
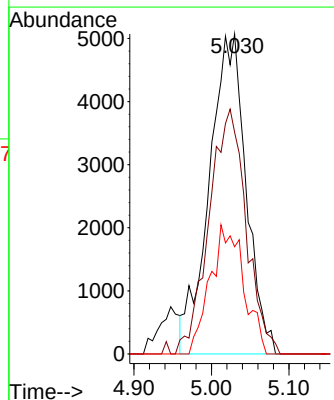
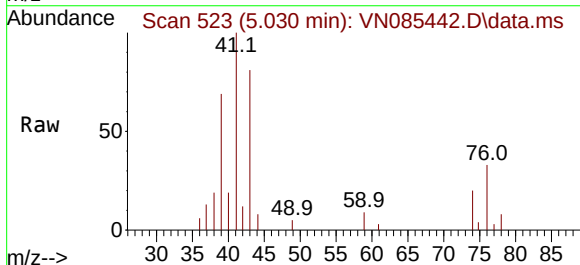
Tgt Ion: 41 Resp: 16741

Ion Ratio Lower Upper

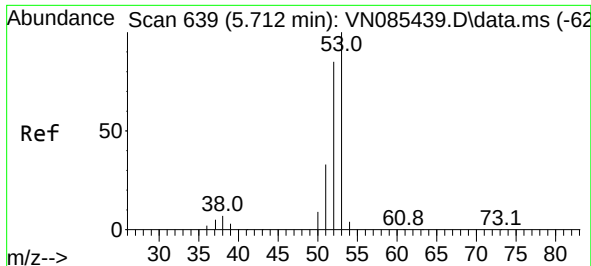
41 100

39 77.4 64.4 96.6

76 36.6 30.5 45.7



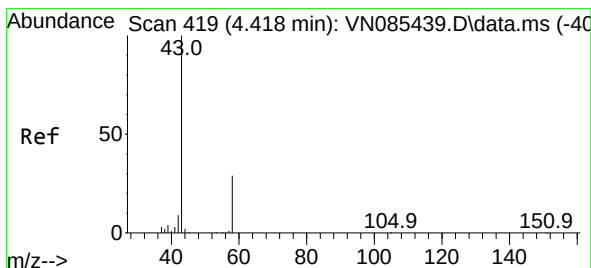
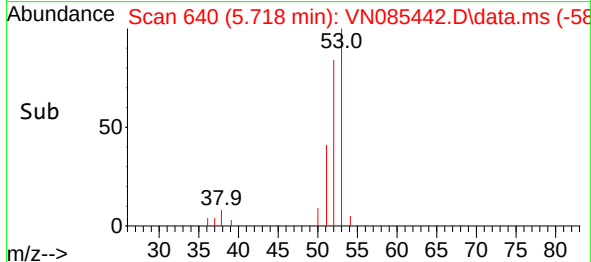
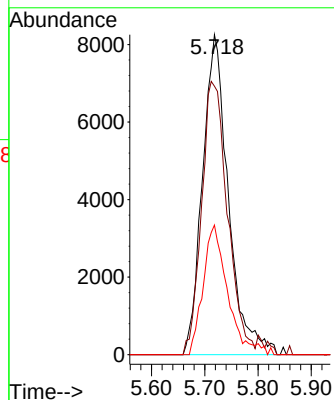
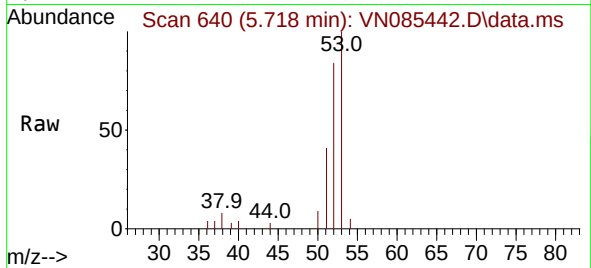




#15  
Acrylonitrile  
Concen: 25.445 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

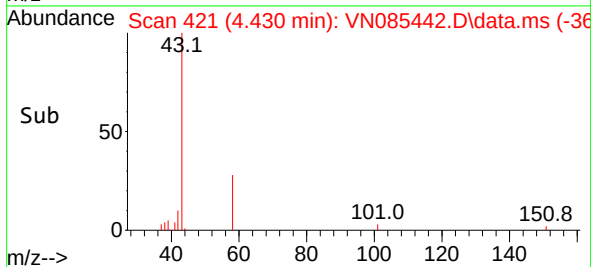
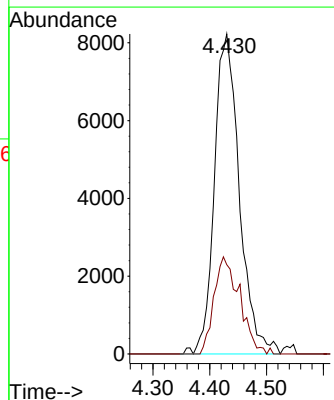
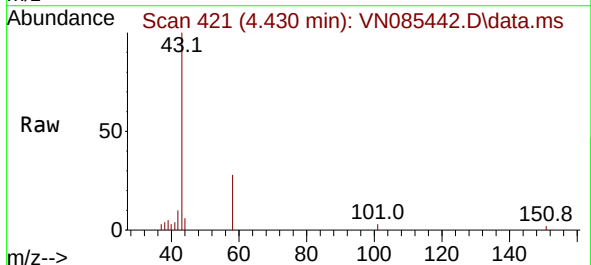
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

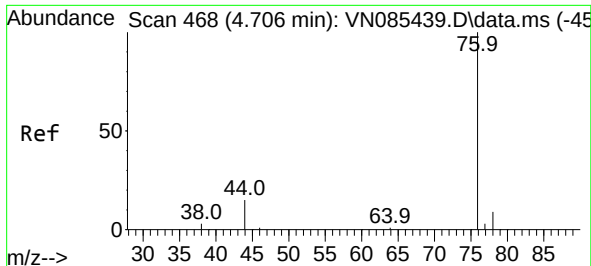
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 27869 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 85.5  | 65.5  | 98.3  |
| 51       | 38.5  | 29.8  | 44.8  |



#16  
Acetone  
Concen: 25.819 ug/l  
RT: 4.430 min Scan# 421  
Delta R.T. 0.012 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 25122 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 27.9  | 23.8  | 35.6  |

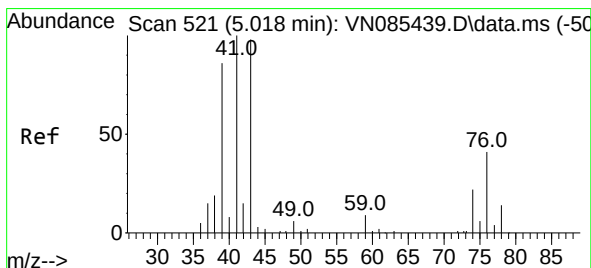
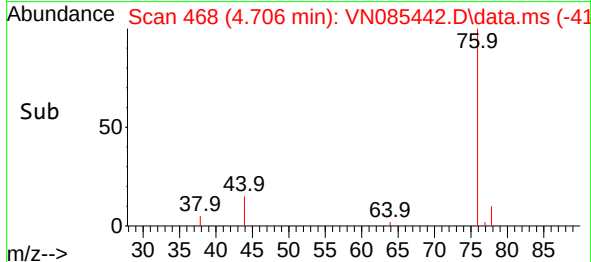
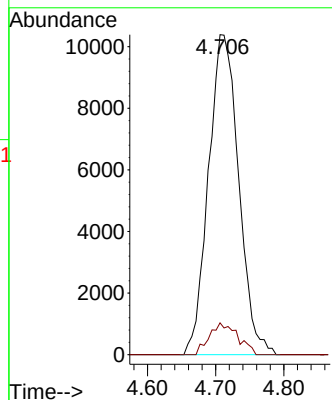
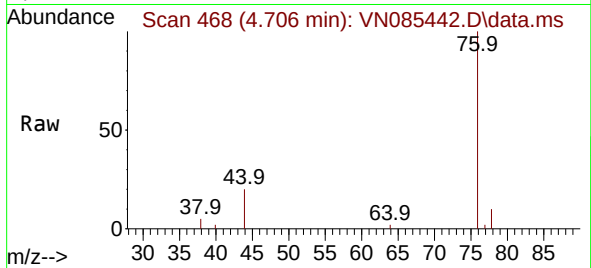




#17  
Carbon Disulfide  
Concen: 5.202 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

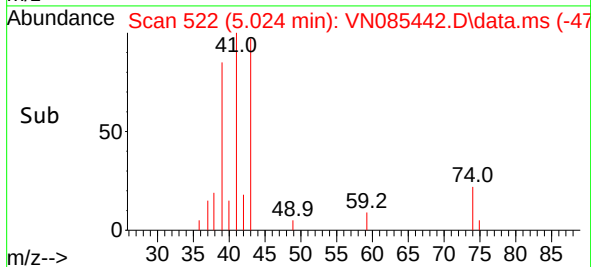
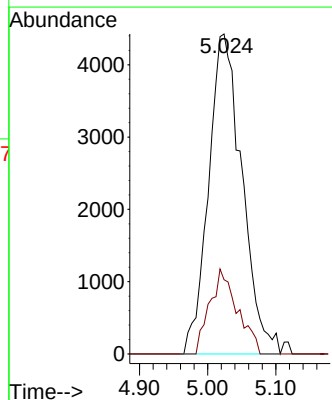
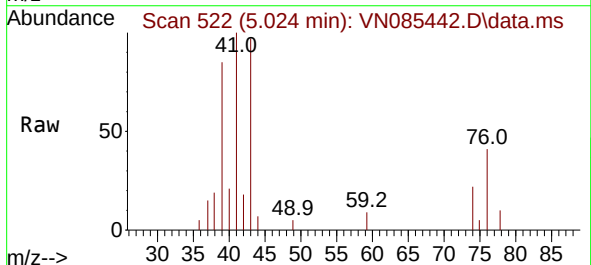
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

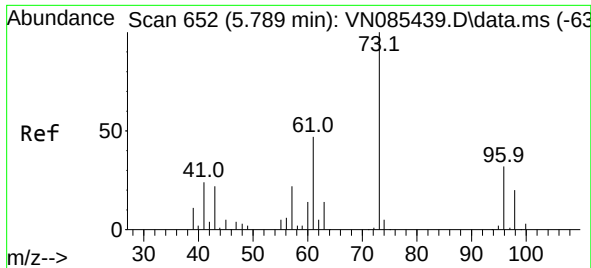
Tgt Ion: 76 Resp: 32068  
Ion Ratio Lower Upper  
76 100  
78 9.9 6.9 10.3



#18  
Methyl Acetate  
Concen: 5.106 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 15106  
Ion Ratio Lower Upper  
43 100  
74 22.0 18.6 28.0

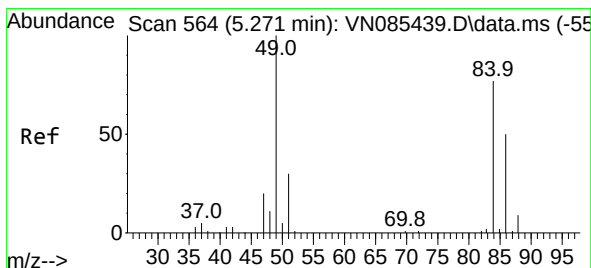
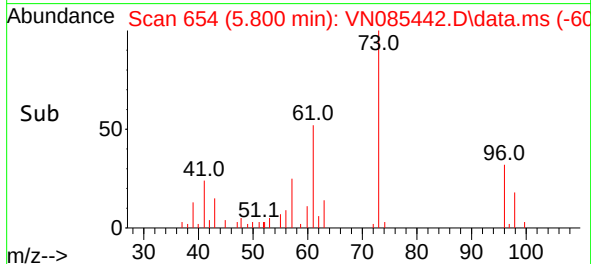
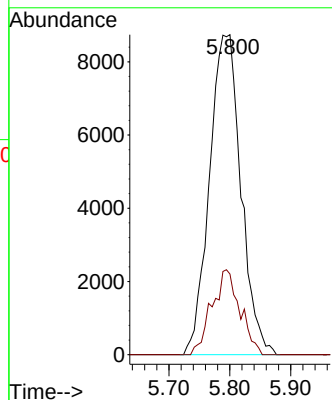
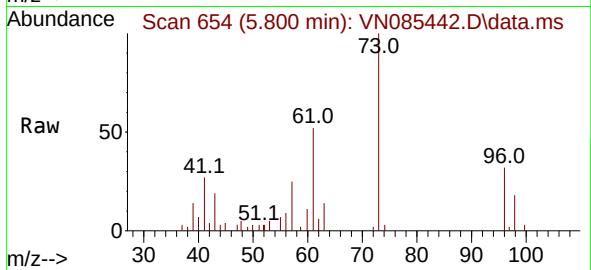




#19  
Methyl tert-butyl Ether  
Concen: 4.836 ug/l  
RT: 5.800 min Scan# 61  
Delta R.T. 0.012 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

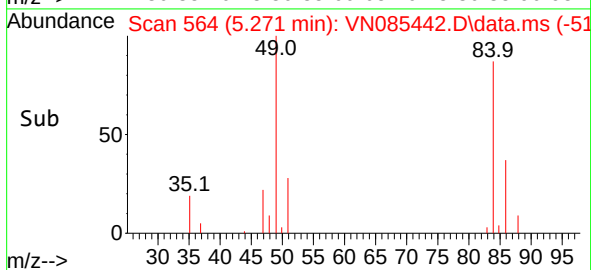
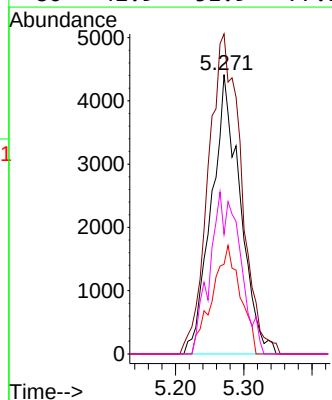
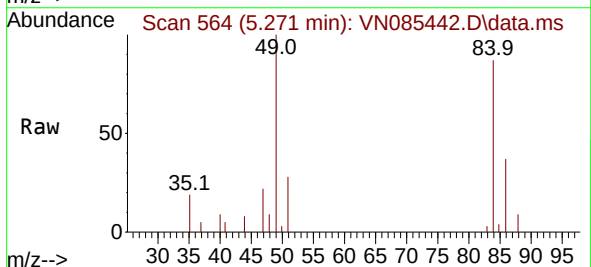
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

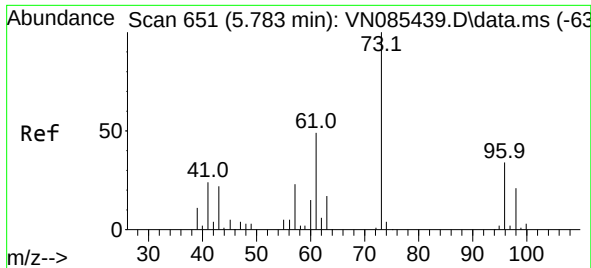
Tgt Ion: 73 Resp: 31439  
Ion Ratio Lower Upper  
73 100  
57 25.2 17.8 26.8



#20  
Methylene Chloride  
Concen: 5.389 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 84 Resp: 12981  
Ion Ratio Lower Upper  
84 100  
49 114.5 104.1 156.1  
51 32.1 31.0 46.4  
86 42.9 51.9 77.9#

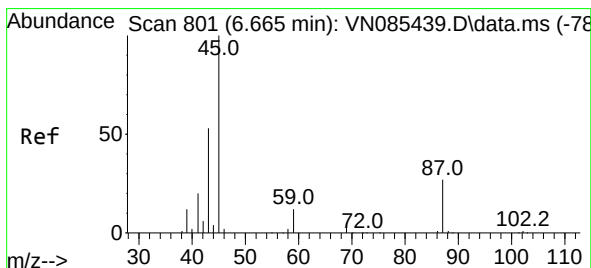
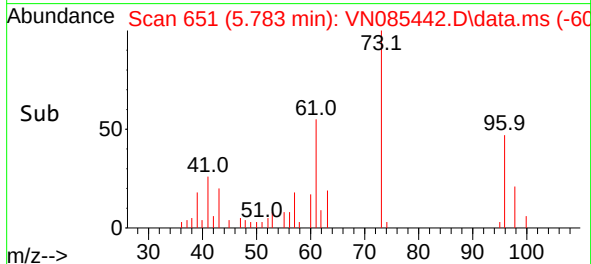
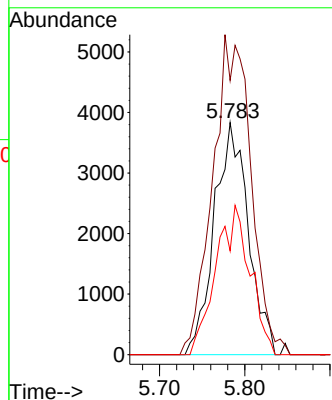
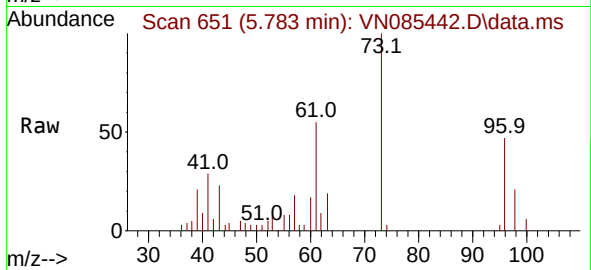




#21  
trans-1,2-Dichloroethene  
Concen: 4.960 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

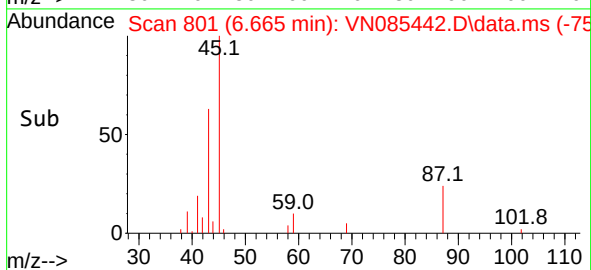
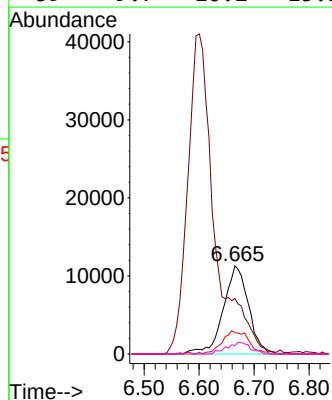
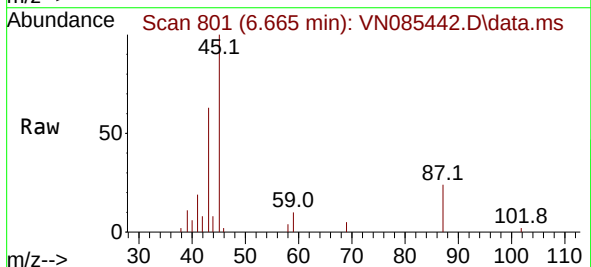
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

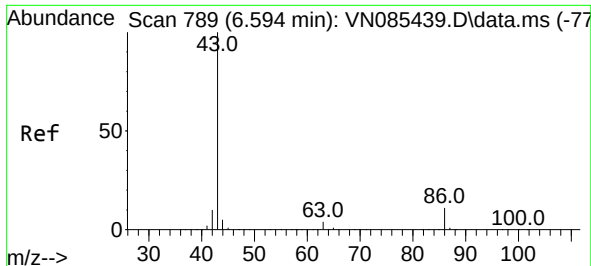
Tgt Ion: 96 Resp: 10614  
Ion Ratio Lower Upper  
96 100  
61 118.1 115.7 173.5  
98 44.7 49.8 74.8#



#22  
Diisopropyl ether  
Concen: 4.962 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 45 Resp: 35785  
Ion Ratio Lower Upper  
45 100  
43 58.3 45.0 67.6  
87 24.2 21.8 32.8  
59 9.7 10.2 15.2#

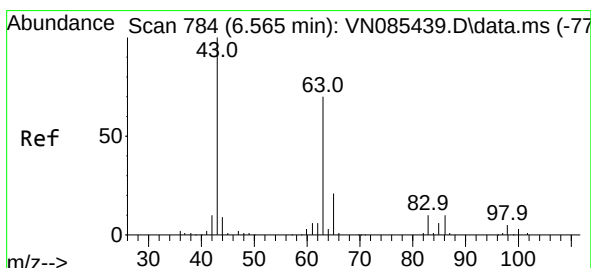
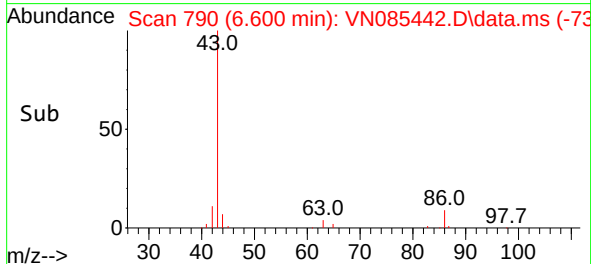
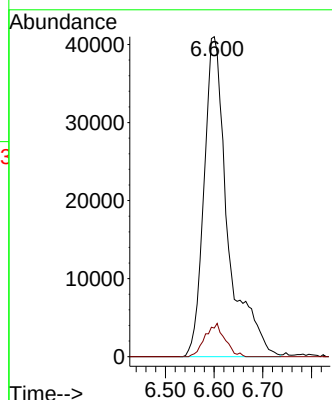
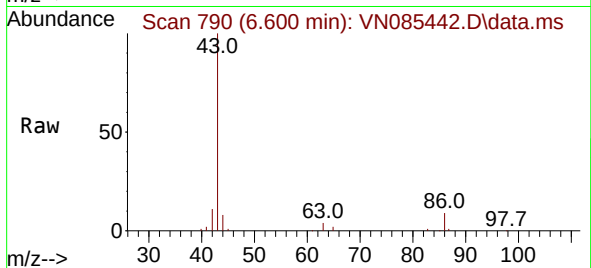




#23  
 Vinyl Acetate  
 Concen: 27.533 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

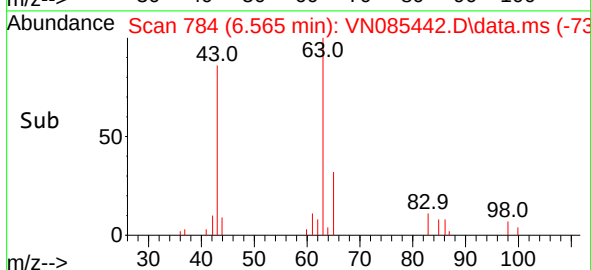
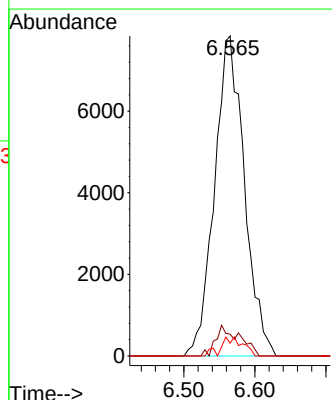
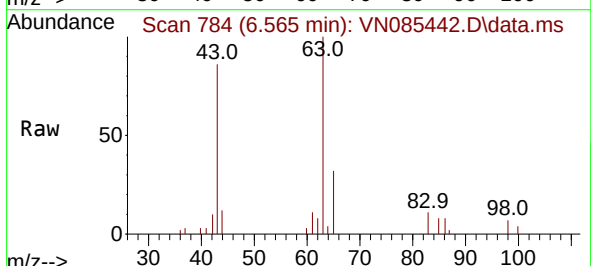
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

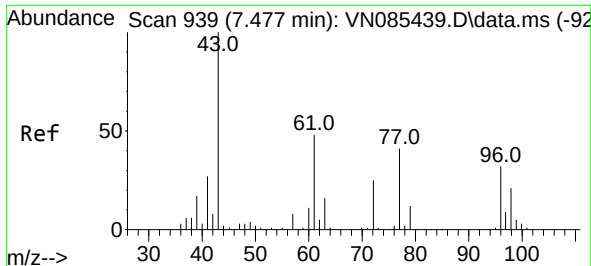
Tgt Ion: 43 Resp: 139425  
 Ion Ratio Lower Upper  
 43 100  
 86 9.0 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 5.200 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 22865  
 Ion Ratio Lower Upper  
 63 100  
 98 6.8 3.3 9.8  
 100 4.0 2.0 6.0

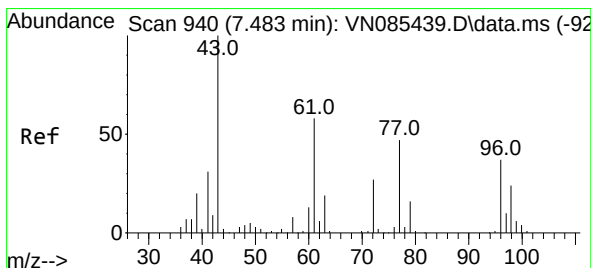
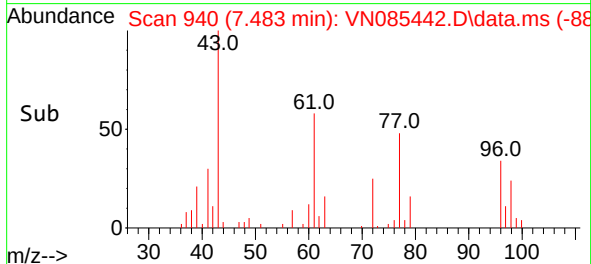
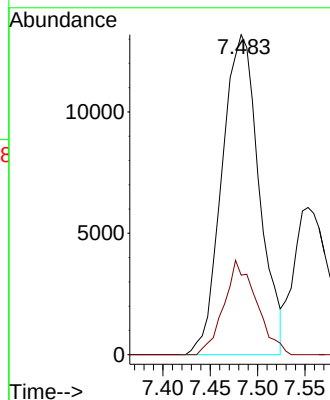
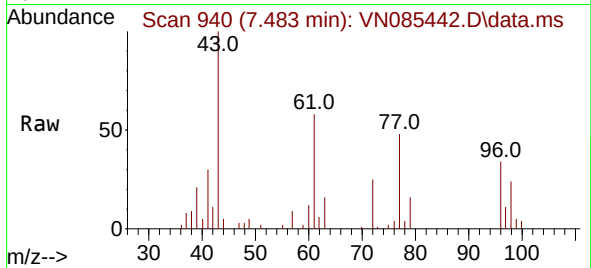




#25  
2-Butanone  
Concen: 25.231 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

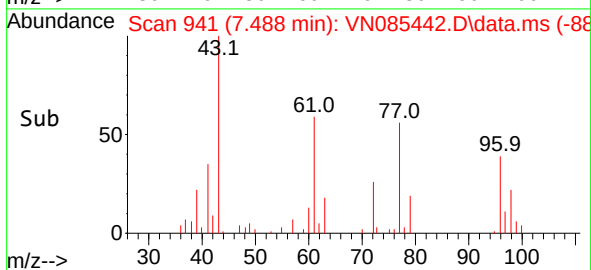
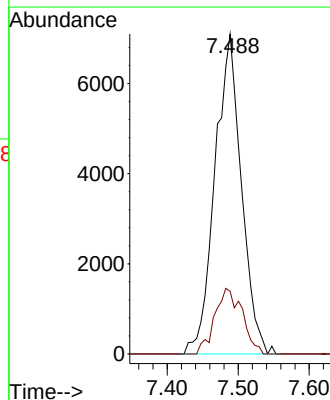
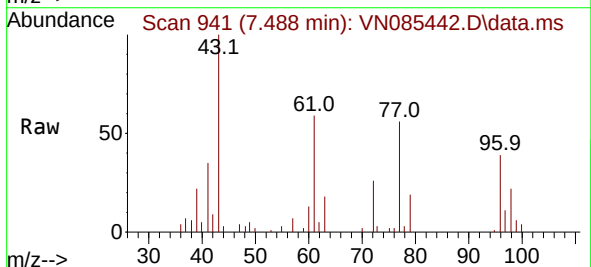
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

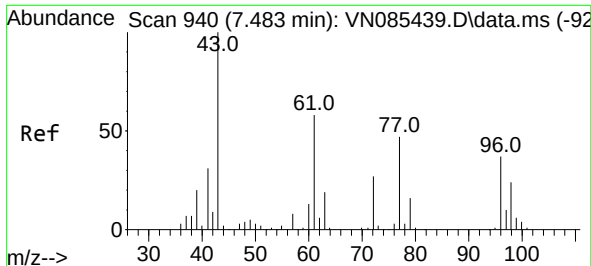
Tgt Ion: 43 Resp: 36127  
Ion Ratio Lower Upper  
43 100  
72 24.9 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 5.175 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 77 Resp: 18398  
Ion Ratio Lower Upper  
77 100  
97 21.2 10.7 32.1



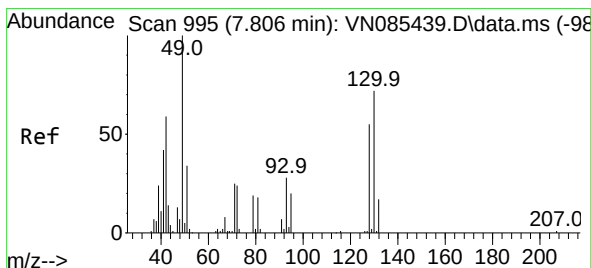
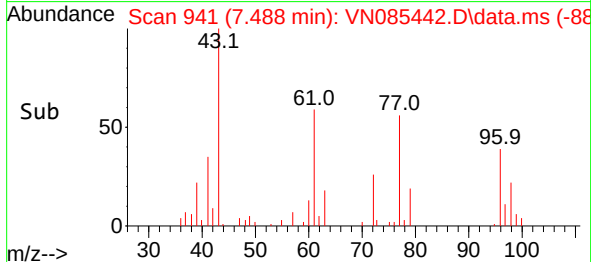
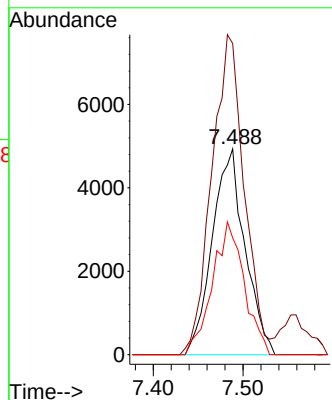
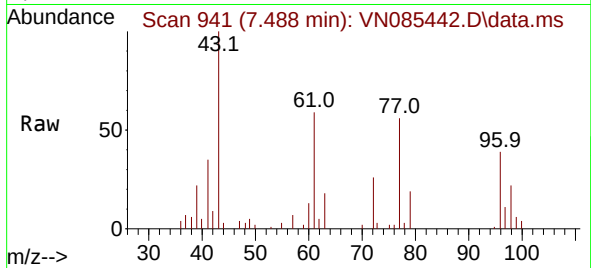


#27  
 cis-1,2-Dichloroethene  
 Concen: 4.951 ug/l  
 RT: 7.488 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Tgt Ion: 96 Resp: 12477  

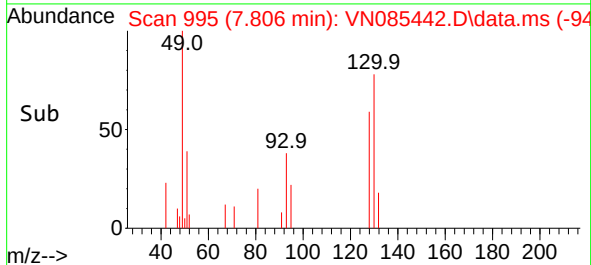
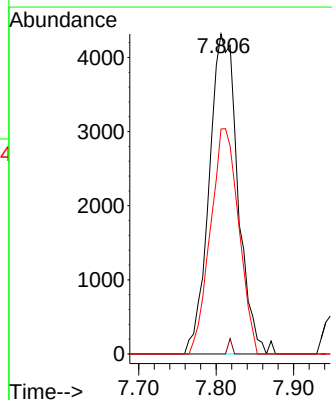
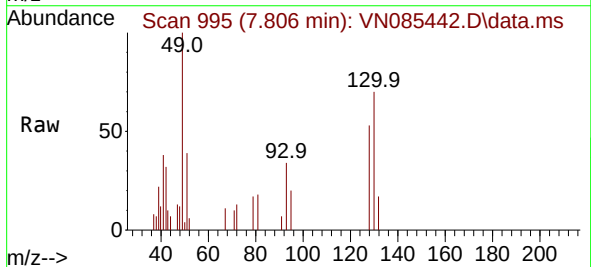
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 154.5 | 0.0   | 311.8 |
| 98  | 62.8  | 0.0   | 126.0 |

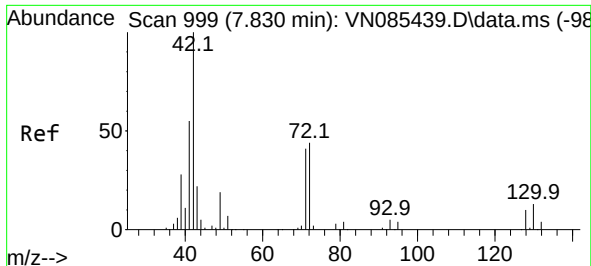


#28  
 Bromochloromethane  
 Concen: 5.424 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion: 49 Resp: 11096  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 129 | 0.7   | 0.0   | 4.4   |
| 130 | 69.5  | 55.0  | 82.4  |

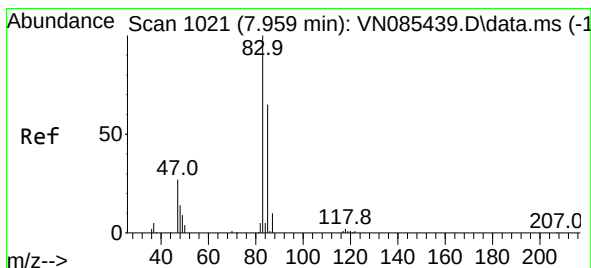
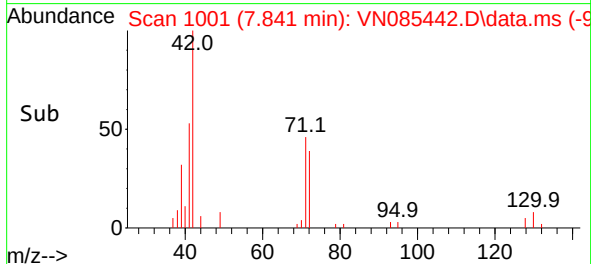
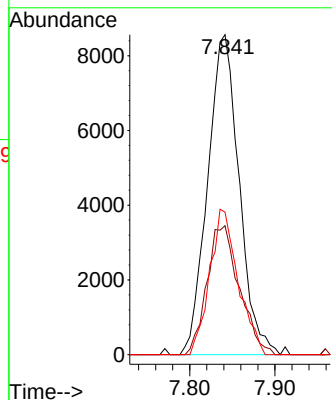
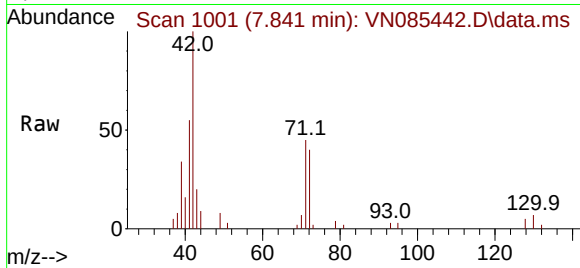




#29  
Tetrahydrofuran  
Concen: 24.215 ug/l  
RT: 7.841 min Scan# 1001  
Delta R.T. 0.012 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

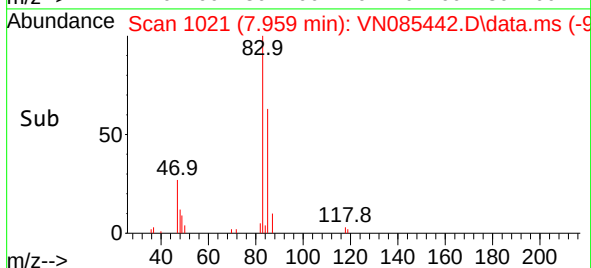
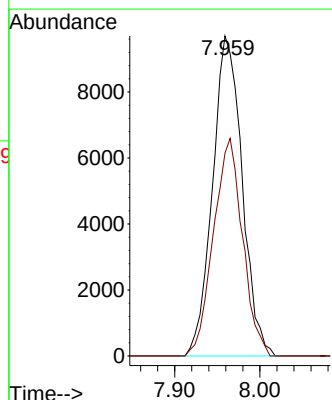
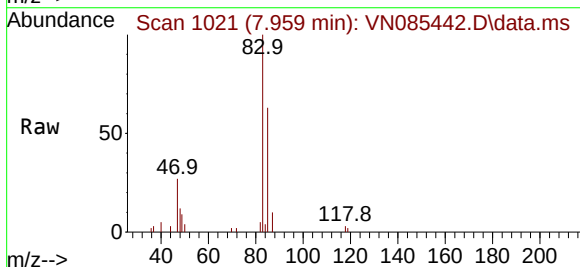
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion: 42 Resp: 21983  
Ion Ratio Lower Upper  
42 100  
72 41.5 34.2 51.2  
71 41.0 32.5 48.7

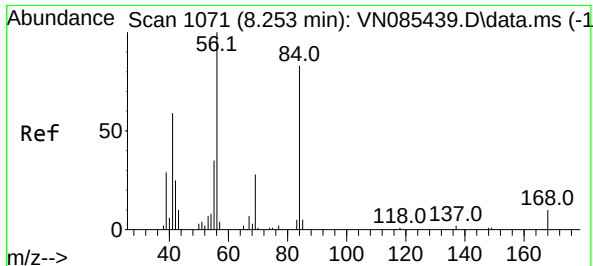


#30  
Chloroform  
Concen: 5.146 ug/l  
RT: 7.959 min Scan# 1021  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 23384  
Ion Ratio Lower Upper  
83 100  
85 63.4 51.8 77.6



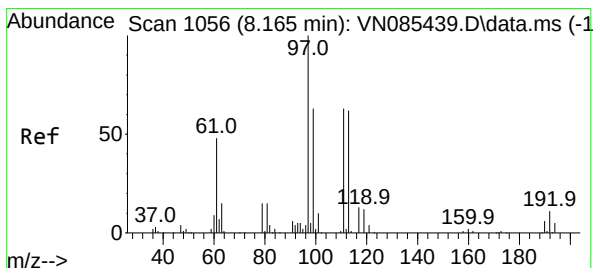
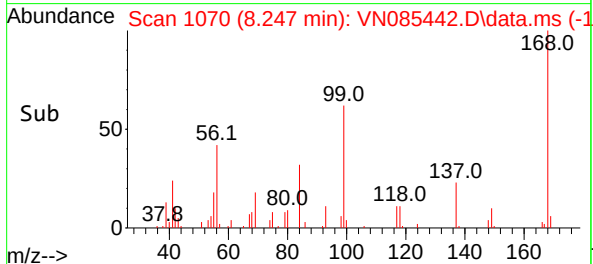
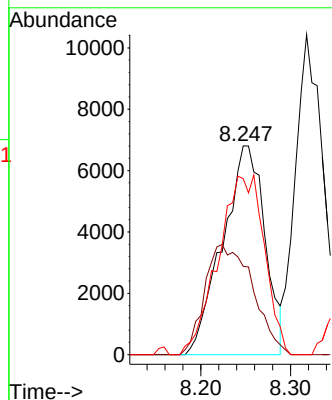
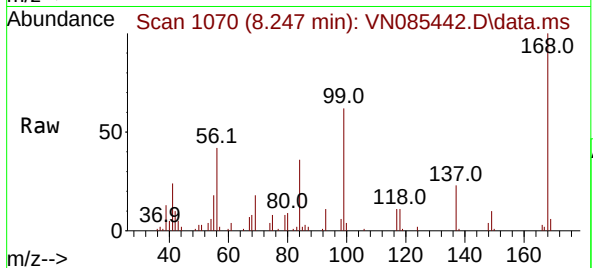




#31  
Cyclohexane  
Concen: 5.846 ug/l  
RT: 8.247 min Scan# 1070  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

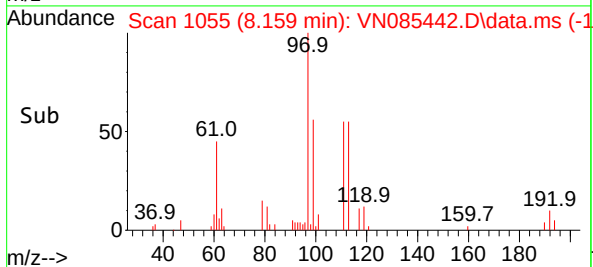
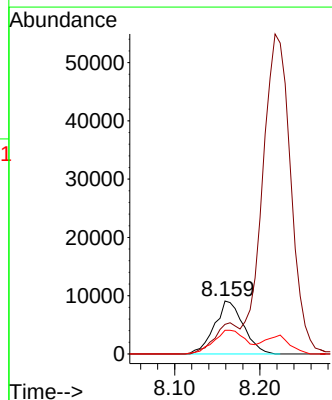
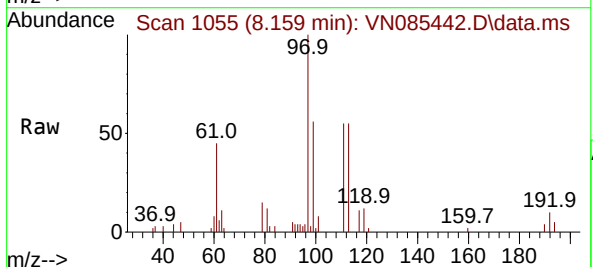
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

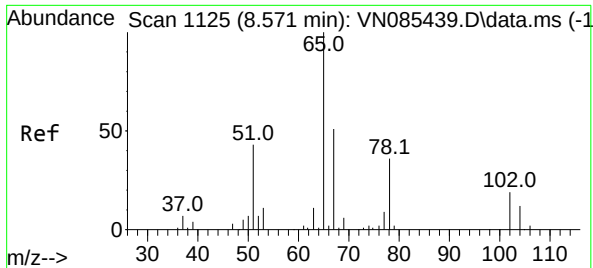
Tgt Ion: 56 Resp: 22343  
Ion Ratio Lower Upper  
56 100  
69 42.3 22.2 33.4#  
84 84.3 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 5.372 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 97 Resp: 21416  
Ion Ratio Lower Upper  
97 100  
99 50.5 49.8 74.6  
61 50.1 41.4 62.2

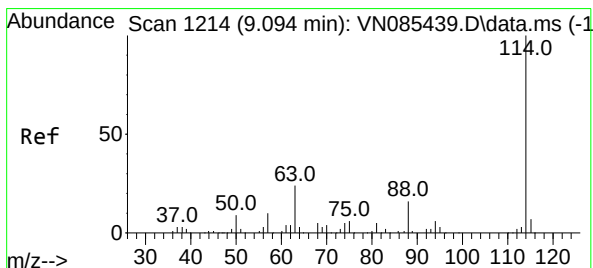
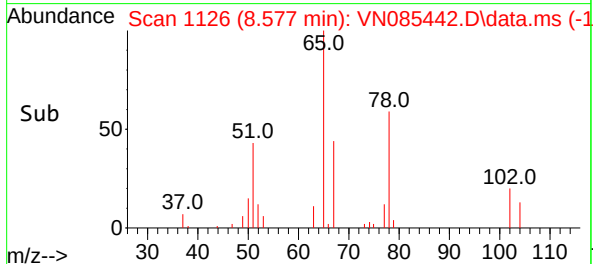
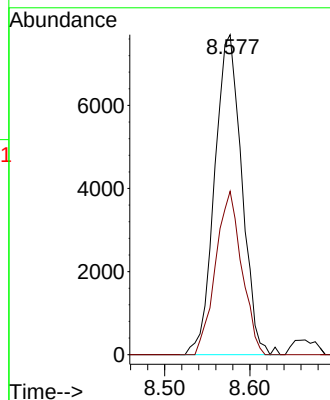
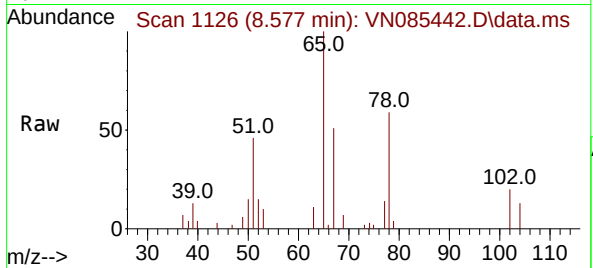




#33  
 1,2-Dichloroethane-d4  
 Concen: 5.660 ug/l  
 RT: 8.577 min Scan# 1125  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

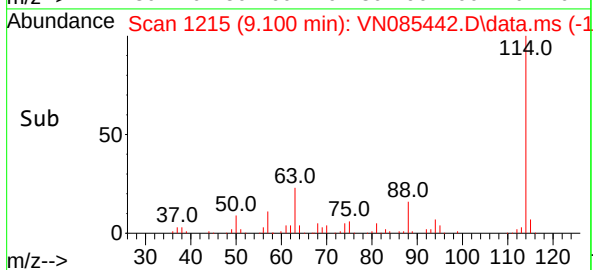
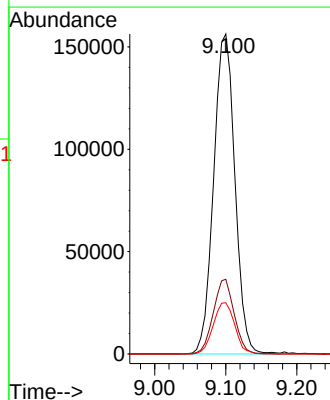
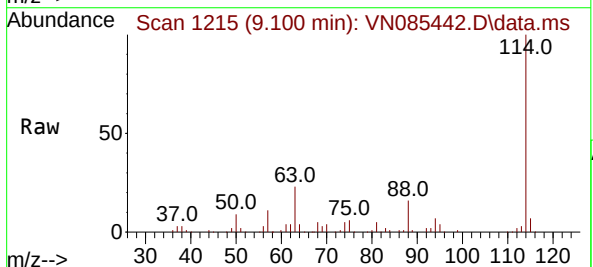
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

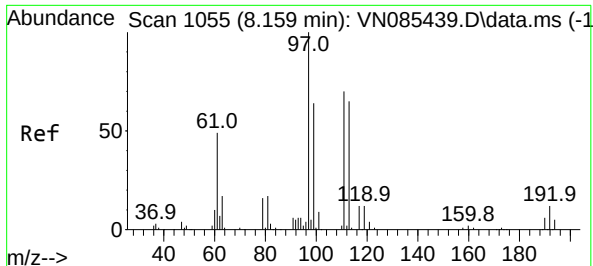
Tgt Ion: 65 Resp: 17046  
 Ion Ratio Lower Upper  
 65 100  
 67 49.2 0.0 101.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion: 114 Resp: 324413  
 Ion Ratio Lower Upper  
 114 100  
 63 23.3 0.0 47.6  
 88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 5.377 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

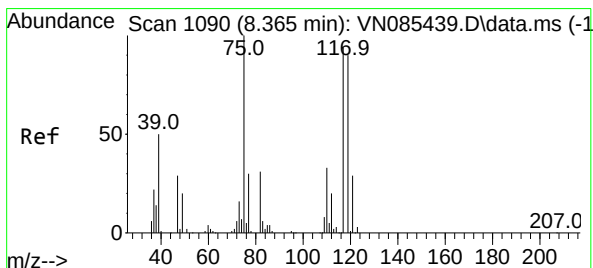
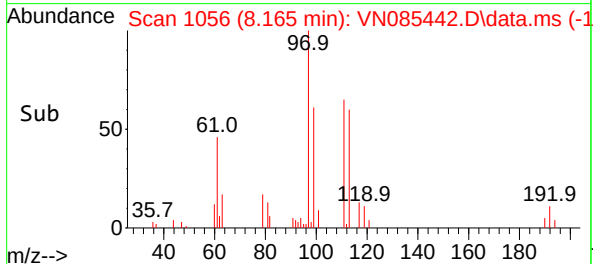
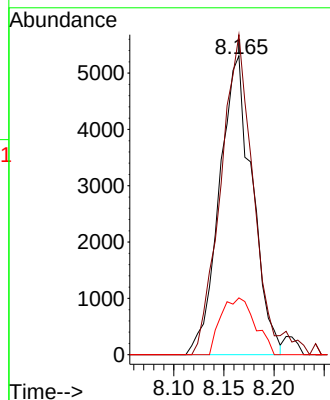
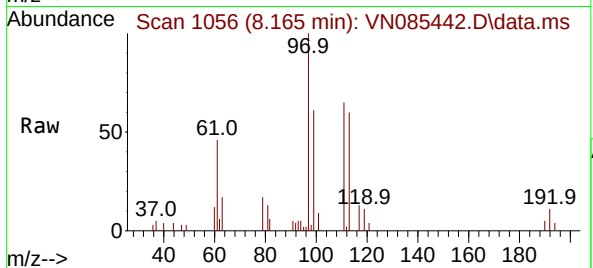
Tgt Ion:113 Resp: 12102

Ion Ratio Lower Upper

113 100

111 107.4 82.7 124.1

192 19.7 14.3 21.5



#36

1,1-Dichloropropene

Concen: 5.029 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

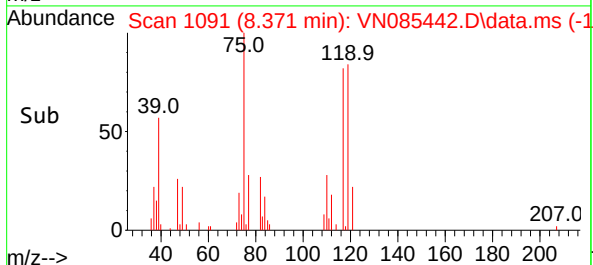
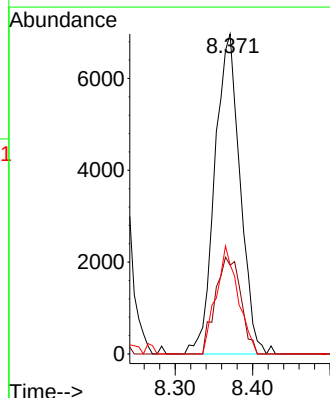
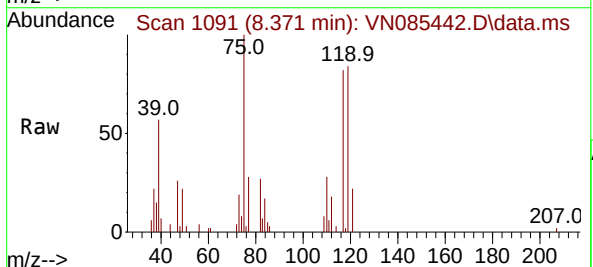
Tgt Ion: 75 Resp: 15886

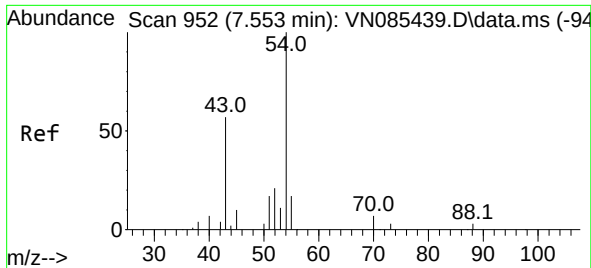
Ion Ratio Lower Upper

75 100

110 30.3 16.5 49.5

77 29.2 24.4 36.6

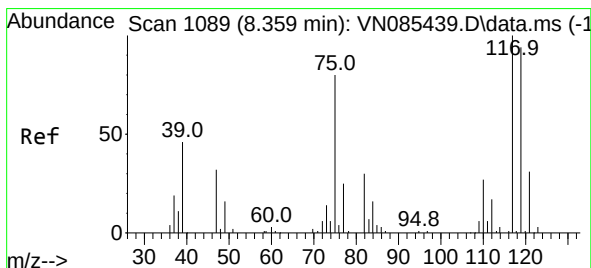
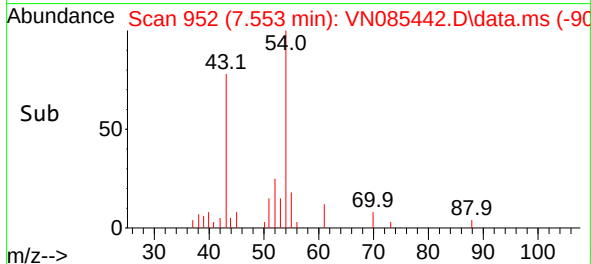
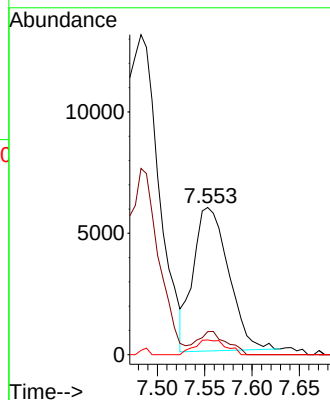
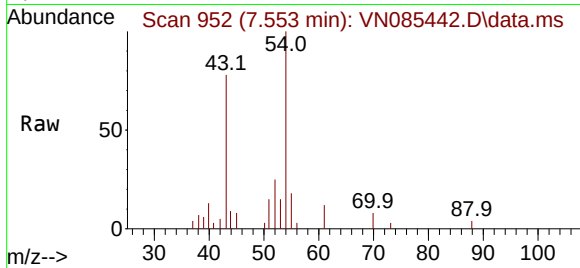




#37  
Ethyl Acetate  
Concen: 4.810 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

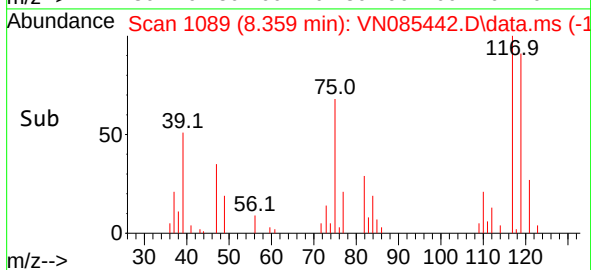
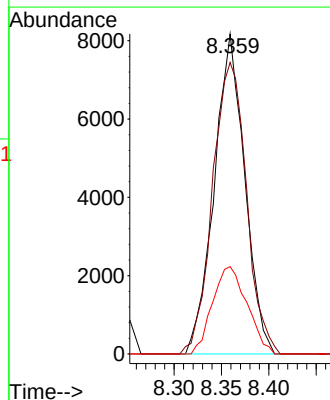
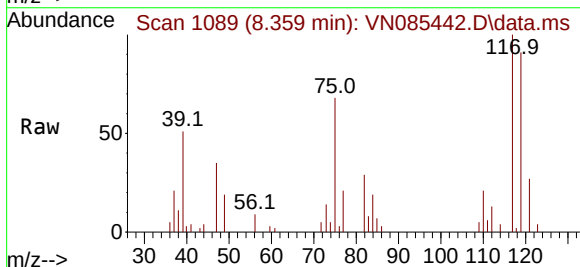
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

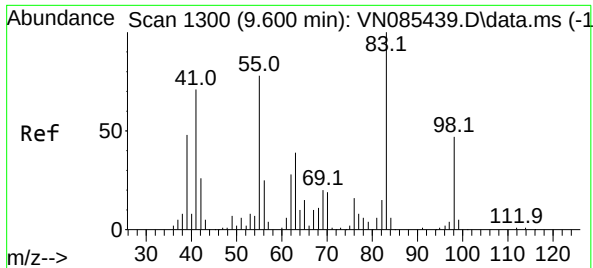
Tgt Ion: 43 Resp: 15336  
Ion Ratio Lower Upper  
43 100  
61 13.5 10.9 16.3  
70 9.2 7.5 11.3



#38  
Carbon Tetrachloride  
Concen: 5.065 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 117 Resp: 18317  
Ion Ratio Lower Upper  
117 100  
119 91.1 75.4 113.2  
121 27.3 24.6 37.0

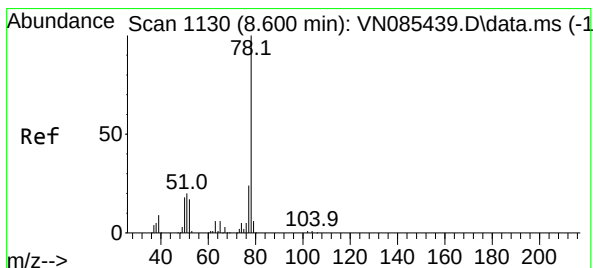
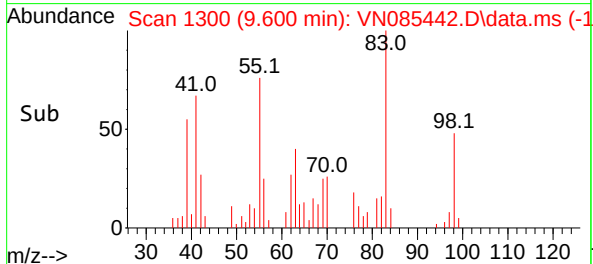
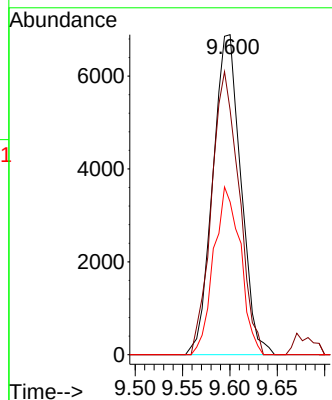
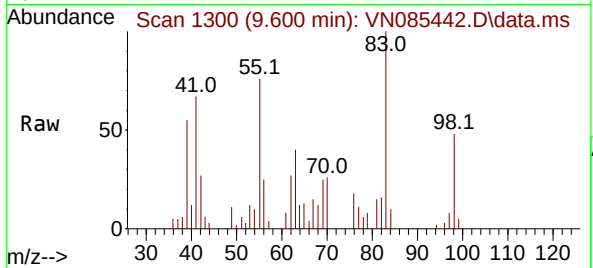




#39  
Methylcyclohexane  
Concen: 4.776 ug/l  
RT: 9.600 min Scan# 1130  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

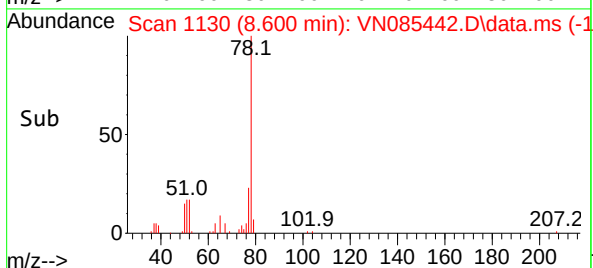
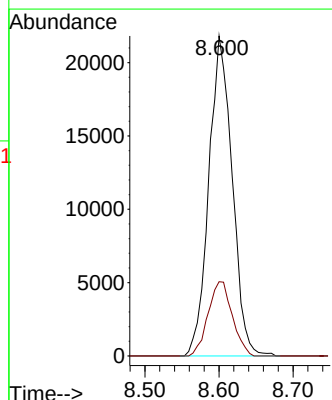
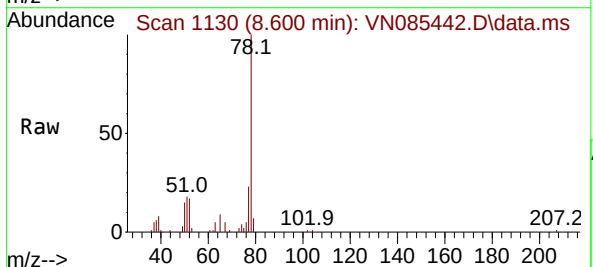
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

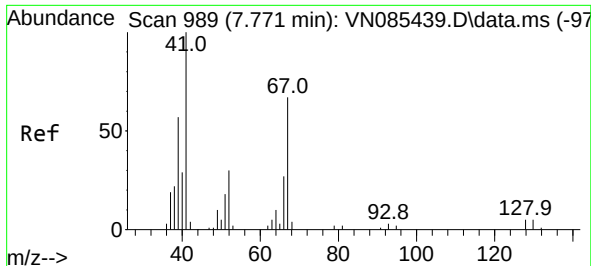
Tgt Ion: 83 Resp: 14175  
Ion Ratio Lower Upper  
83 100  
55 76.5 62.6 94.0  
98 47.7 37.7 56.5



#40  
Benzene  
Concen: 5.040 ug/l  
RT: 8.600 min Scan# 1130  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 78 Resp: 47833  
Ion Ratio Lower Upper  
78 100  
77 23.2 19.0 28.6

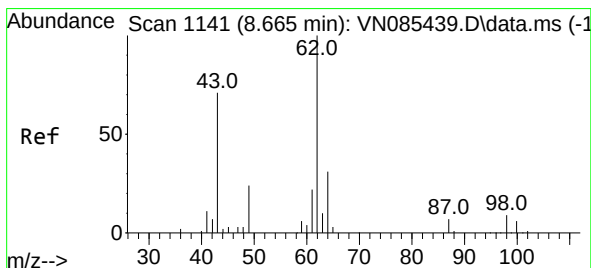
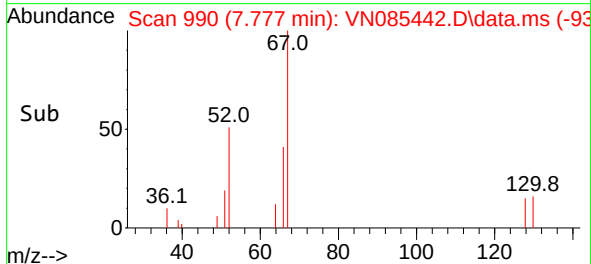
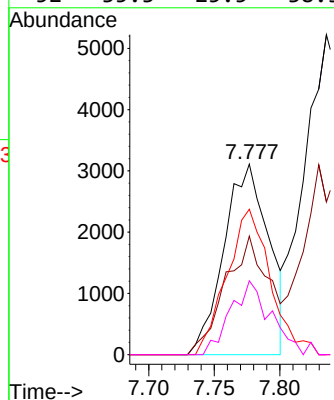
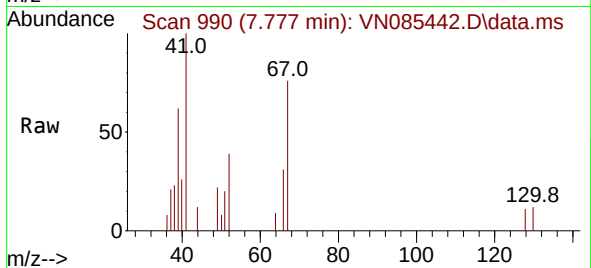




#41  
Methacrylonitrile  
Concen: 4.449 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

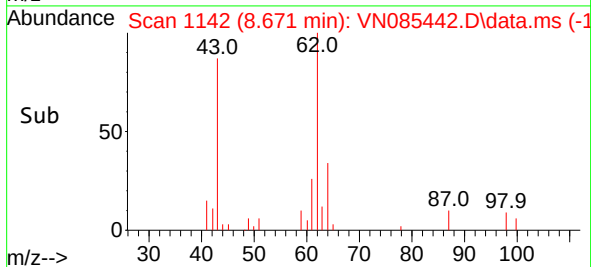
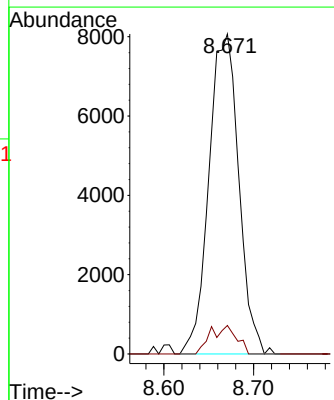
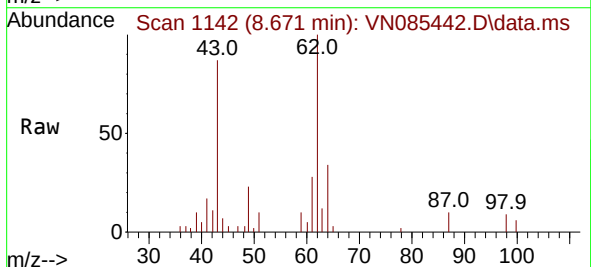
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

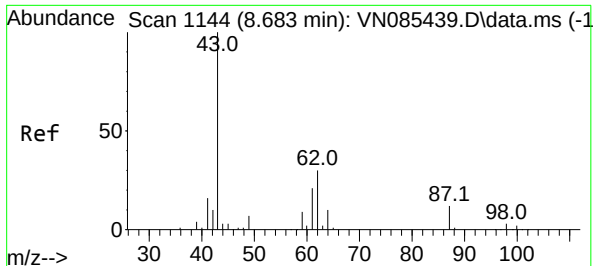
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 7380  |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 60.5     | 46.0 69.0   |
| 67 74.6     | 57.4 86.2   |
| 52 35.3     | 25.5 38.3   |



#42  
1,2-Dichloroethane  
Concen: 5.211 ug/l  
RT: 8.671 min Scan# 1142  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

|             |             |
|-------------|-------------|
| Tgt Ion: 62 | Resp: 18628 |
| Ion Ratio   | Lower Upper |
| 62 100      |             |
| 98 7.8      | 0.0 17.0    |

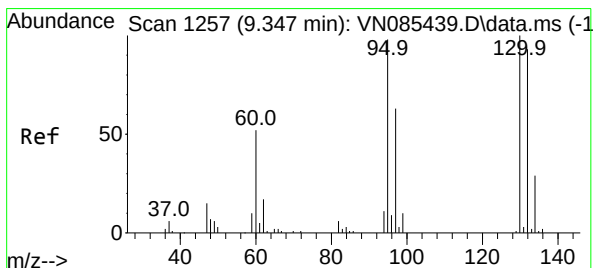
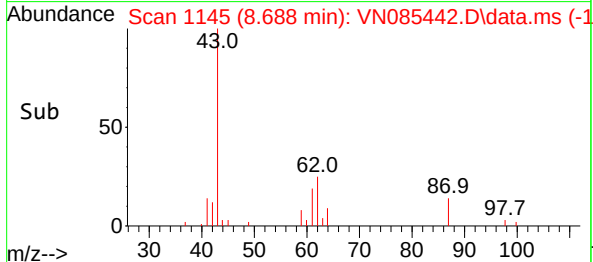
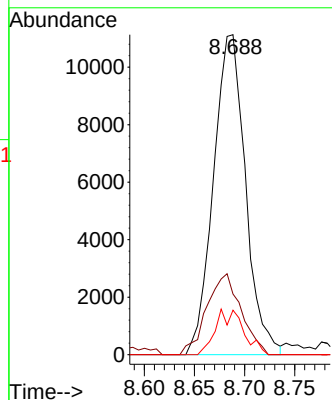
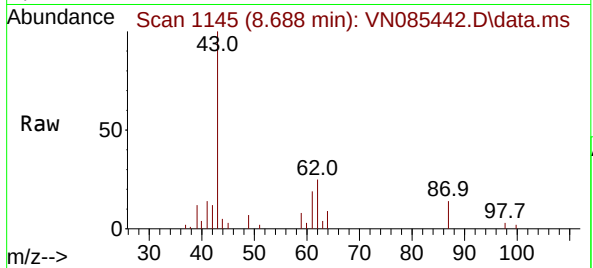




#43  
Isopropyl Acetate  
Concen: 4.853 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

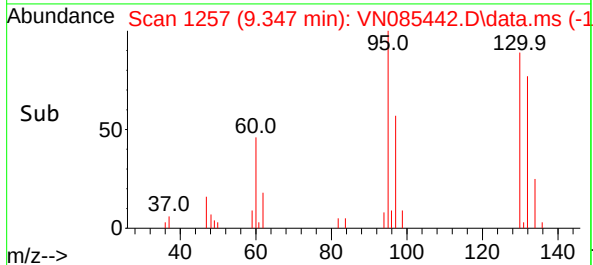
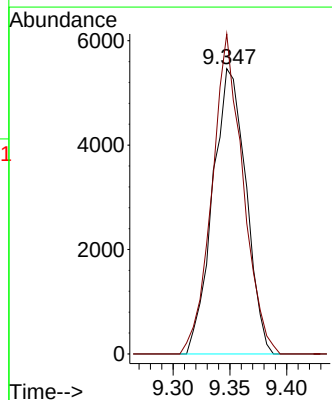
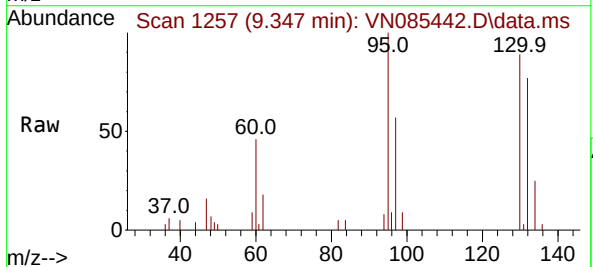
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

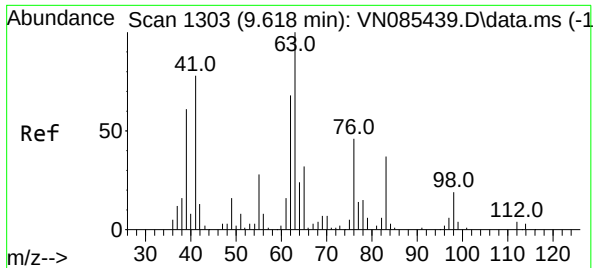
Tgt Ion: 43 Resp: 24792  
Ion Ratio Lower Upper  
43 100  
61 27.0 20.7 31.1  
87 12.3 9.8 14.8



#44  
Trichloroethene  
Concen: 5.039 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion:130 Resp: 11133  
Ion Ratio Lower Upper  
130 100  
95 112.2 0.0 195.8





#45

1,2-Dichloropropane

Concen: 5.194 ug/l

RT: 9.618 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

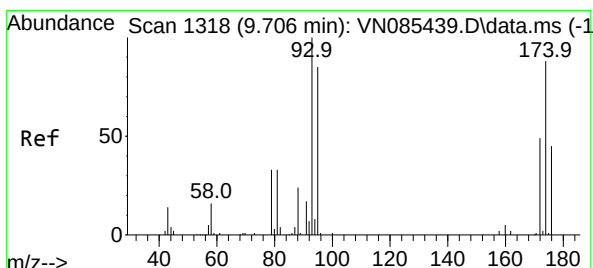
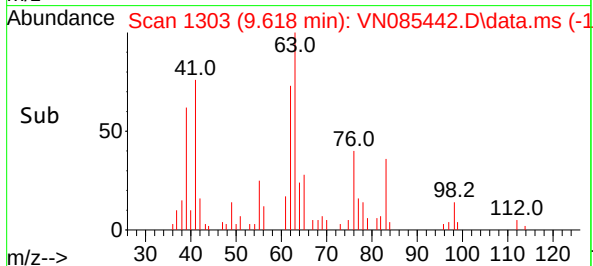
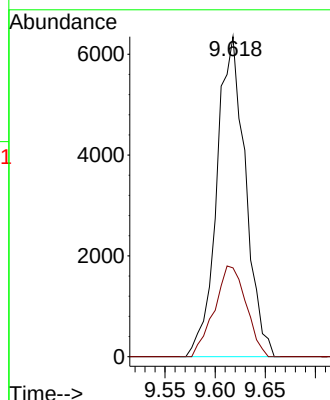
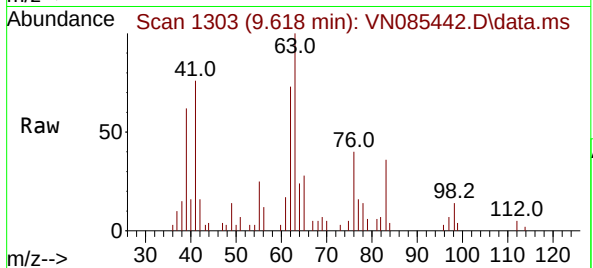
VSTDIC005

Tgt Ion: 63 Resp: 12591

Ion Ratio Lower Upper

63 100

65 27.8 25.6 38.4



#46

Dibromomethane

Concen: 4.705 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

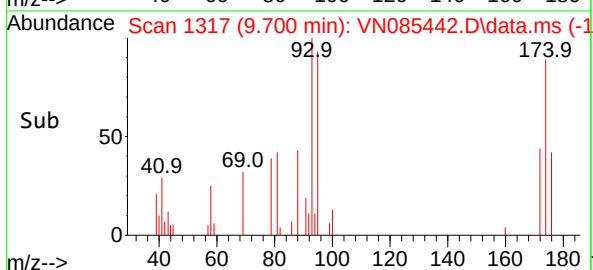
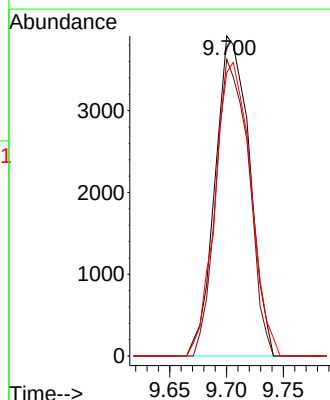
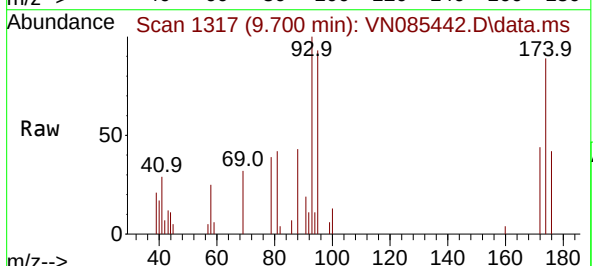
Tgt Ion: 93 Resp: 8230

Ion Ratio Lower Upper

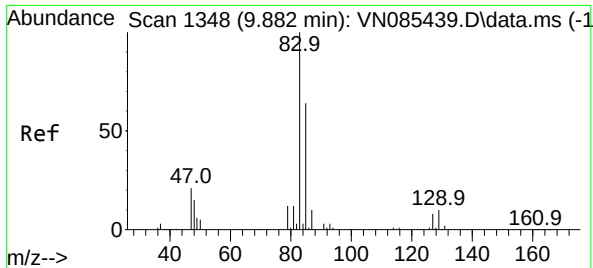
93 100

95 88.7 64.7 97.1

174 95.0 69.0 103.4



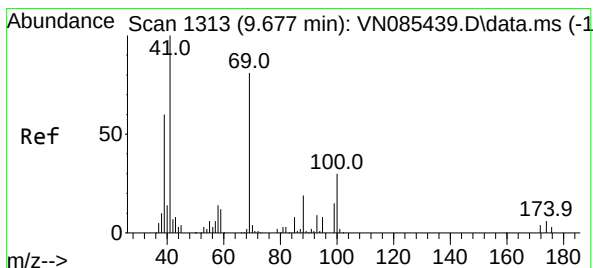
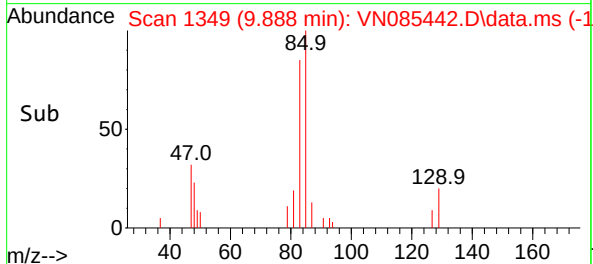
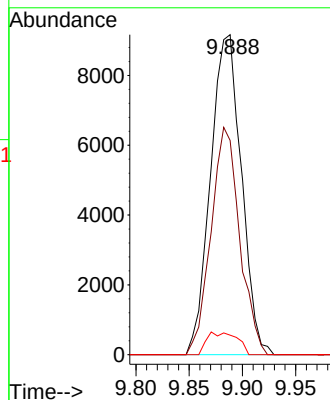
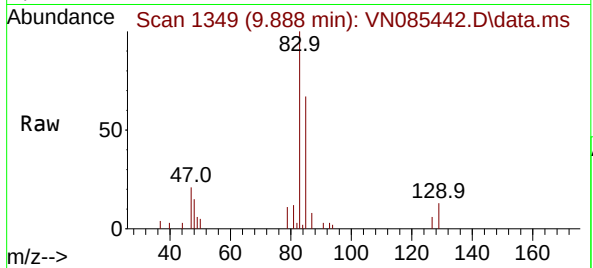




#47  
Bromodichloromethane  
Concen: 5.179 ug/l  
RT: 9.888 min Scan# 1348  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

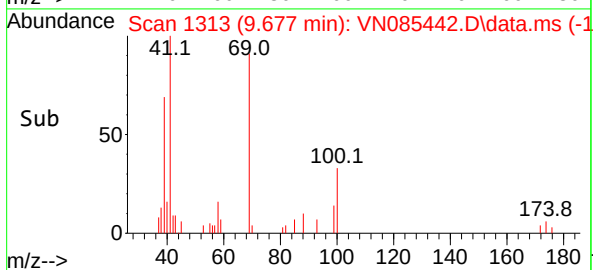
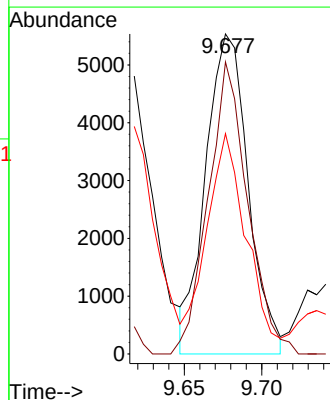
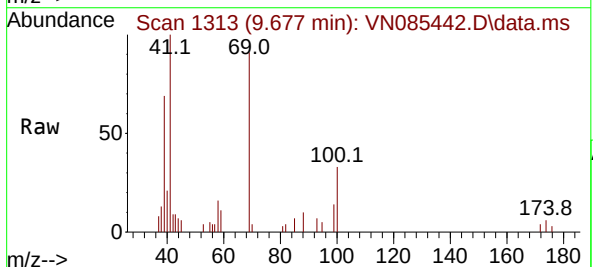
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

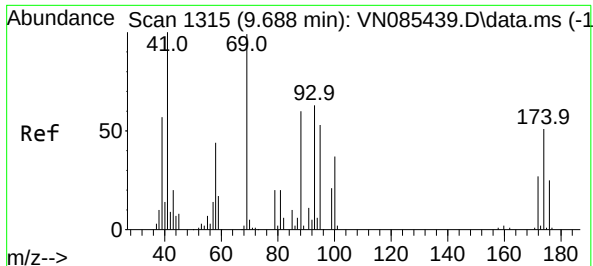
Tgt Ion: 83 Resp: 18456  
Ion Ratio Lower Upper  
83 100  
85 67.0 51.2 76.8  
127 6.1 6.5 9.7#



#48  
Methyl methacrylate  
Concen: 4.599 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 10574  
Ion Ratio Lower Upper  
41 100  
69 84.9 64.7 97.1  
39 65.3 49.0 73.6





#49

1,4-Dioxane

Concen: 93.477 ug/l

RT: 9.694 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

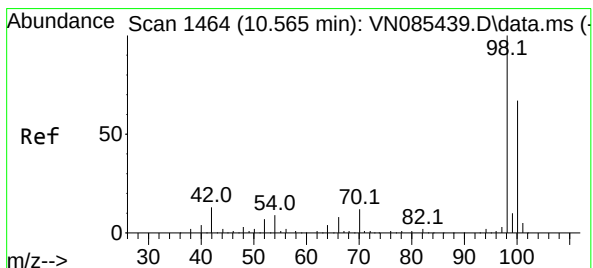
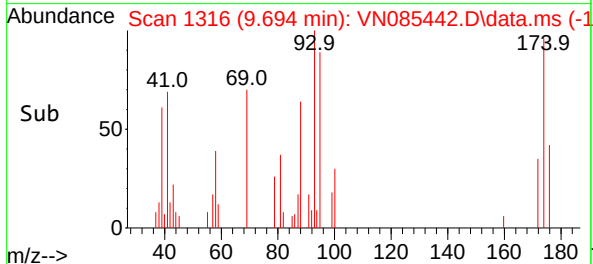
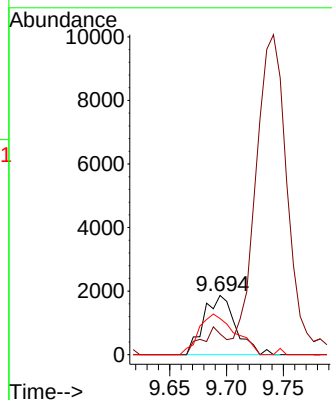
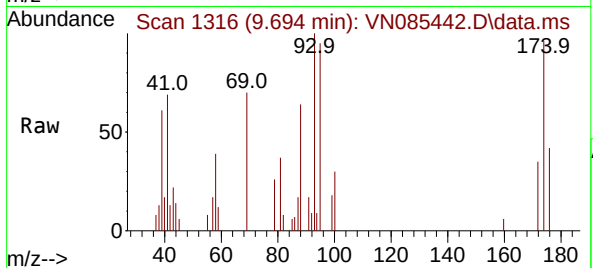
Tgt Ion: 88 Resp: 3619

Ion Ratio Lower Upper

88 100

43 32.3 26.6 39.8

58 77.9 59.5 89.3



#50

Toluene-d8

Concen: 5.168 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085442.D

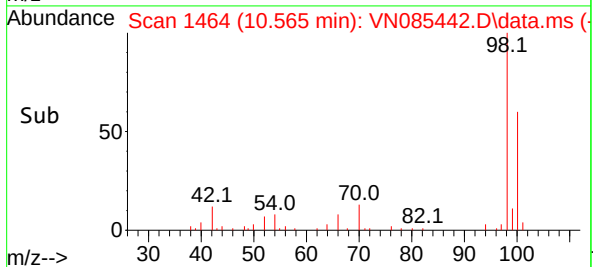
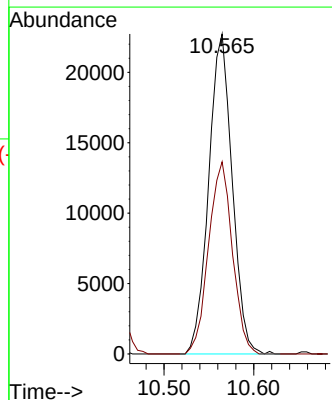
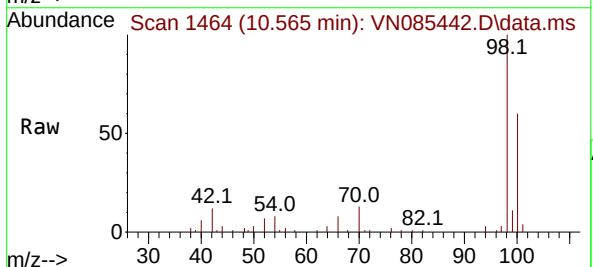
Acq: 14 Jan 2025 16:31

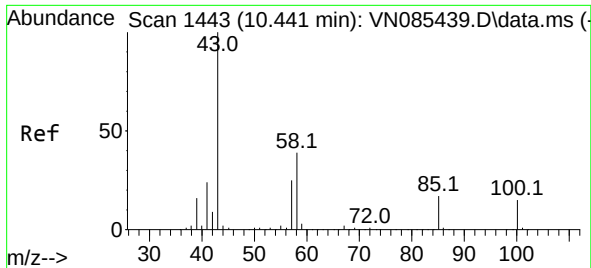
Tgt Ion: 98 Resp: 41328

Ion Ratio Lower Upper

98 100

100 60.9 52.2 78.4

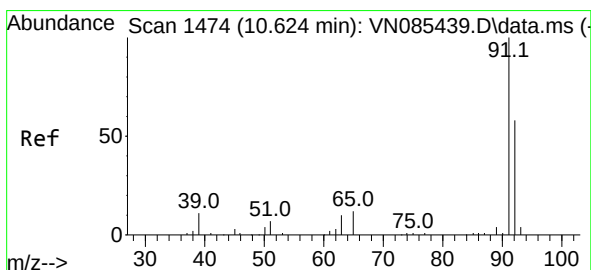
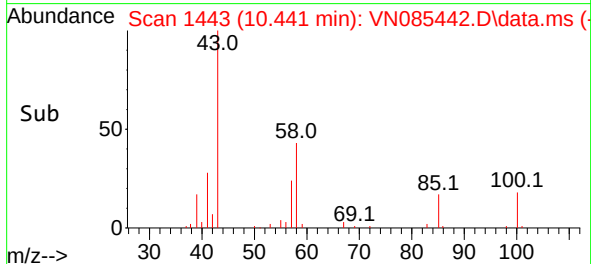
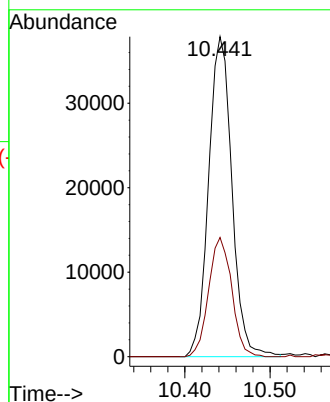
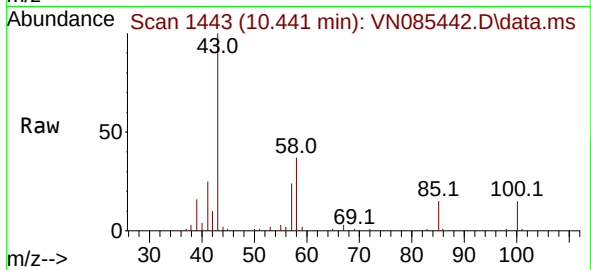




#51  
4-Methyl-2-Pentanone  
Concen: 24.250 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

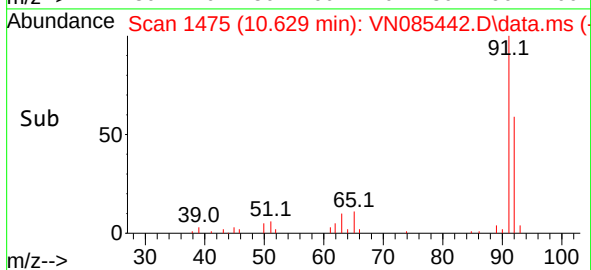
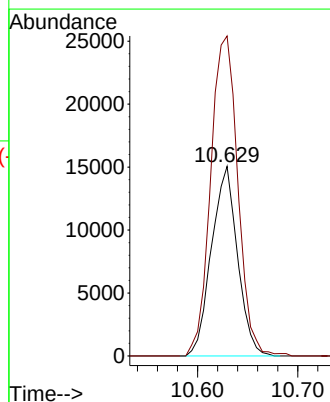
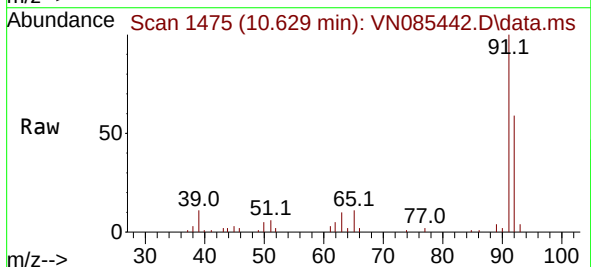
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

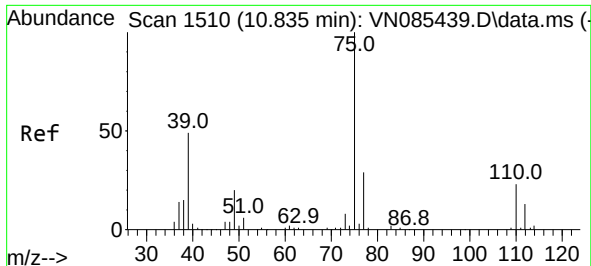
Tgt Ion: 43 Resp: 71889  
Ion Ratio Lower Upper  
43 100  
58 36.9 30.5 45.7



#52  
Toluene  
Concen: 4.928 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 92 Resp: 27098  
Ion Ratio Lower Upper  
92 100  
91 176.4 139.2 208.8

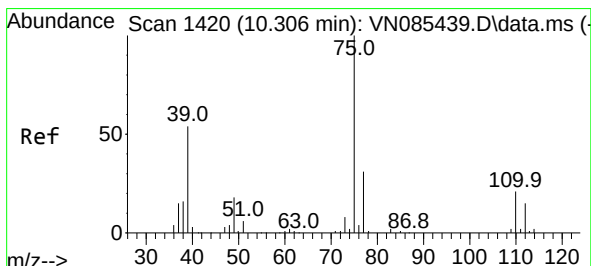
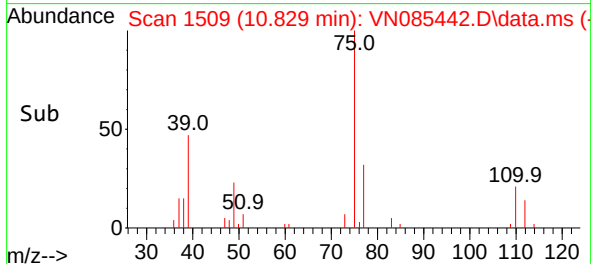
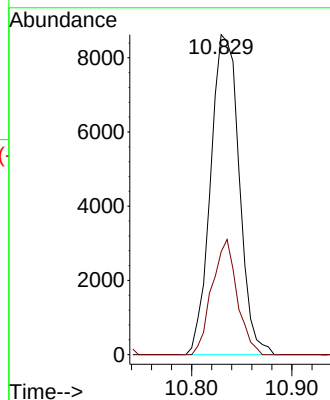
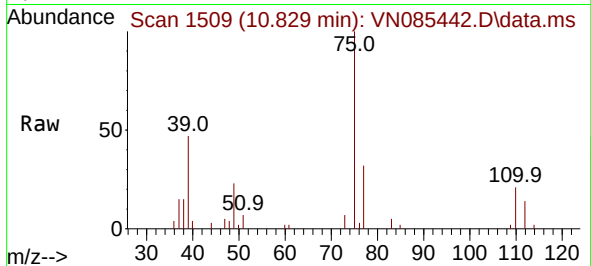




#53  
 t-1,3-Dichloropropene  
 Concen: 5.077 ug/l  
 RT: 10.829 min Scan# 1510  
 Delta R.T. -0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

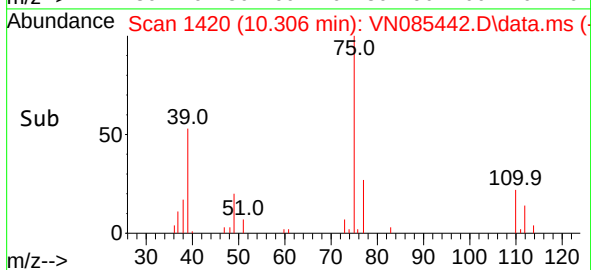
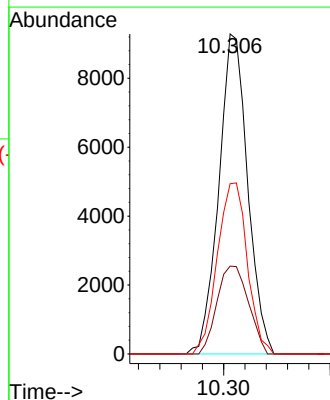
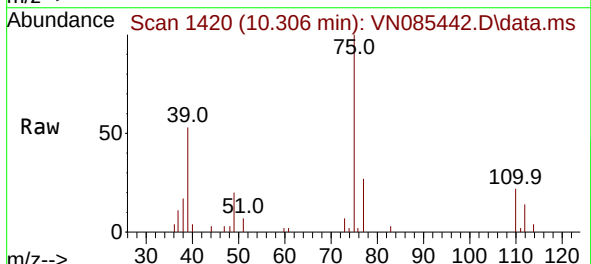
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

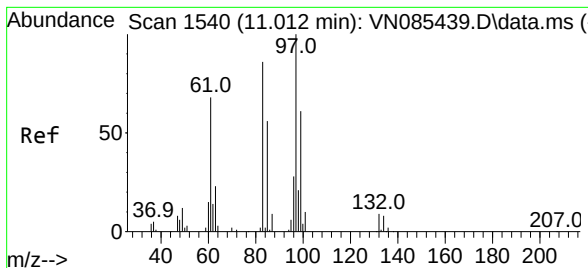
Tgt Ion: 75 Resp: 17099  
 Ion Ratio Lower Upper  
 75 100  
 77 32.2 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 4.848 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 17440  
 Ion Ratio Lower Upper  
 75 100  
 77 27.5 25.0 37.4  
 39 53.2 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 5.197 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 97 Resp: 11311

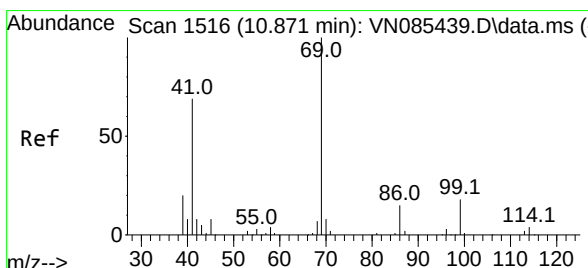
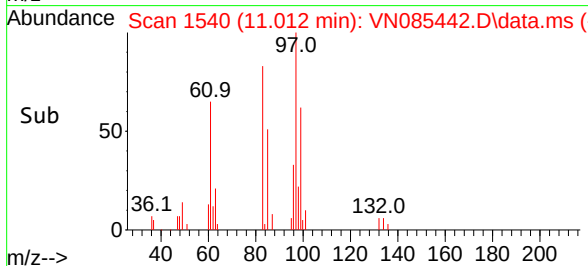
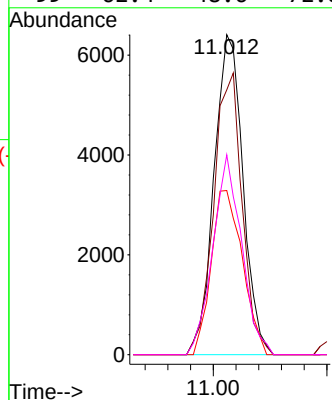
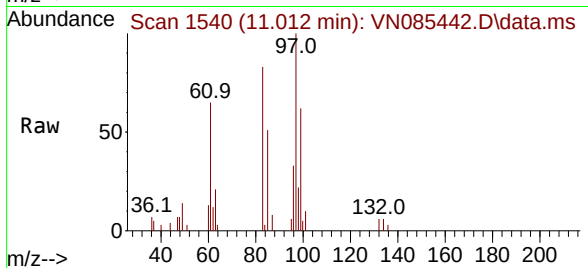
Ion Ratio Lower Upper

97 100

83 82.7 69.0 103.6

85 51.3 44.6 66.8

99 62.4 48.6 72.8



#56

Ethyl methacrylate

Concen: 5.627 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

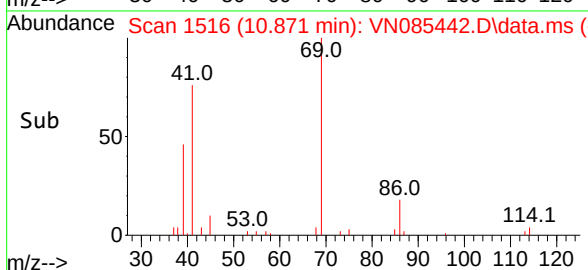
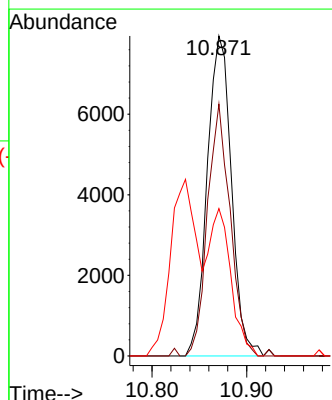
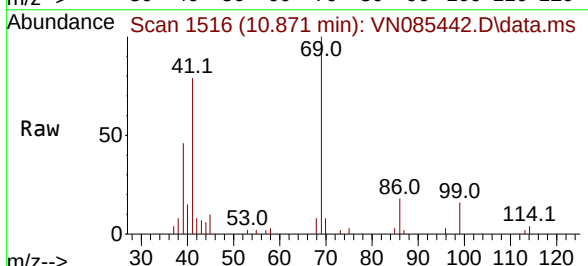
Tgt Ion: 69 Resp: 14094

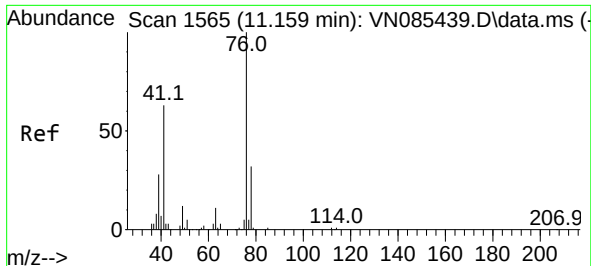
Ion Ratio Lower Upper

69 100

41 73.8 54.6 82.0

39 42.6 32.4 48.6





#57

1,3-Dichloropropane

Concen: 5.006 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

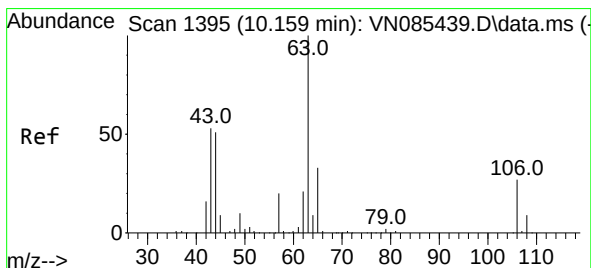
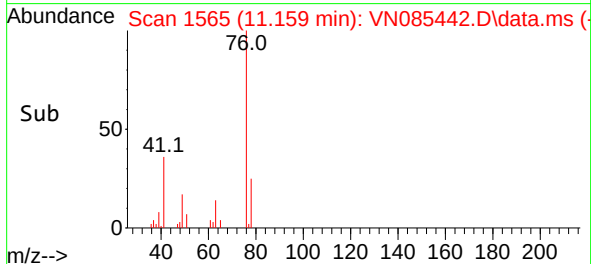
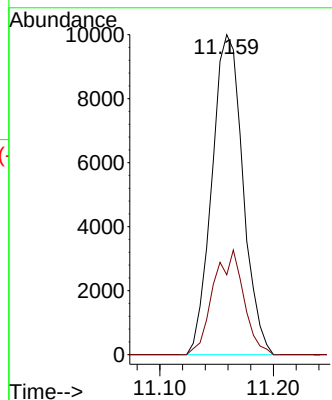
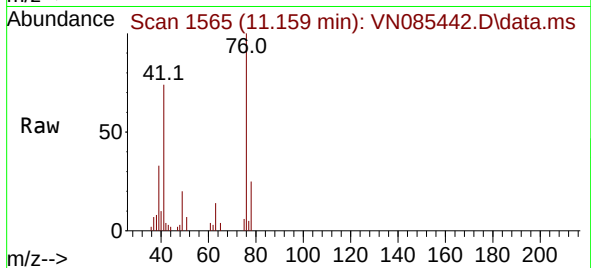
VSTDIC005

Tgt Ion: 76 Resp: 18945

Ion Ratio Lower Upper

76 100

78 32.2 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 24.047 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085442.D

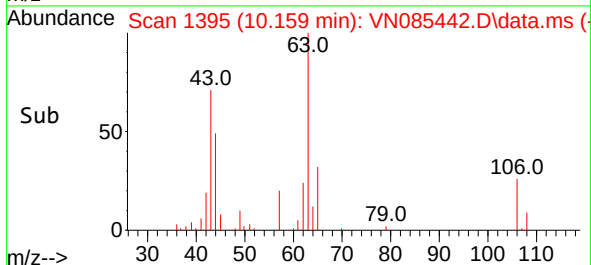
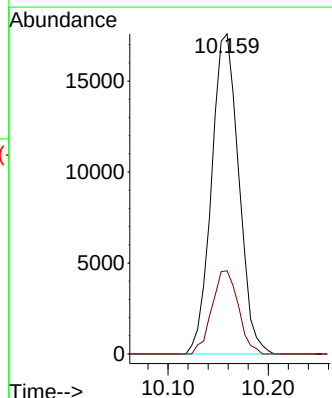
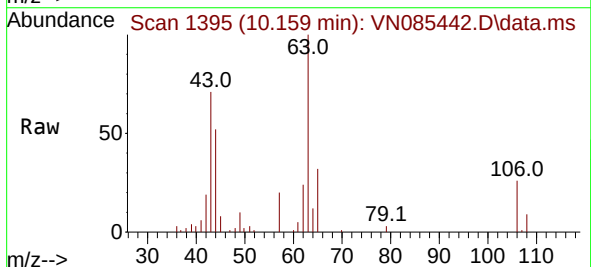
Acq: 14 Jan 2025 16:31

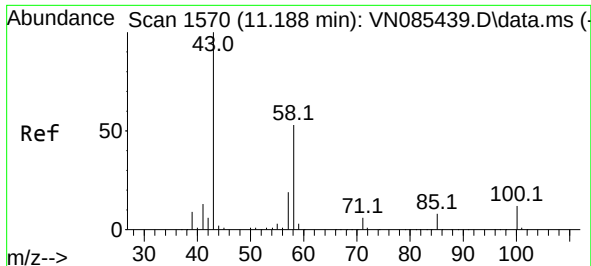
Tgt Ion: 63 Resp: 33210

Ion Ratio Lower Upper

63 100

106 25.2 21.6 32.4

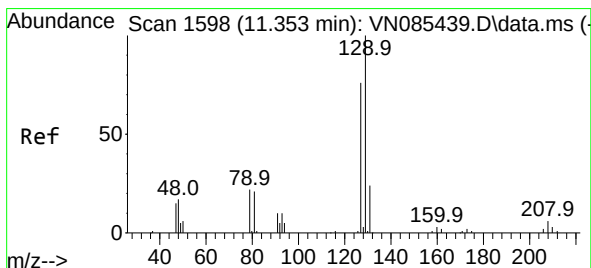
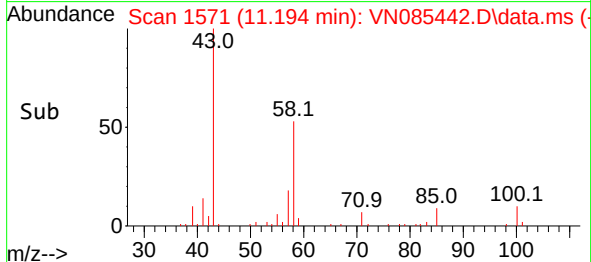
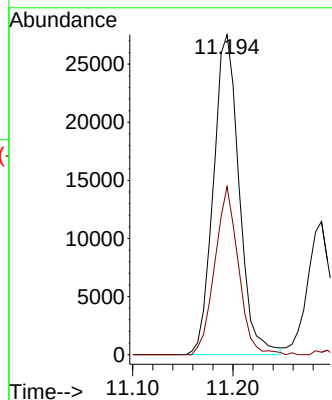
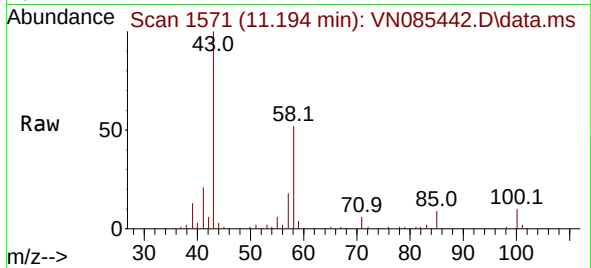




#59  
2-Hexanone  
Concen: 23.501 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

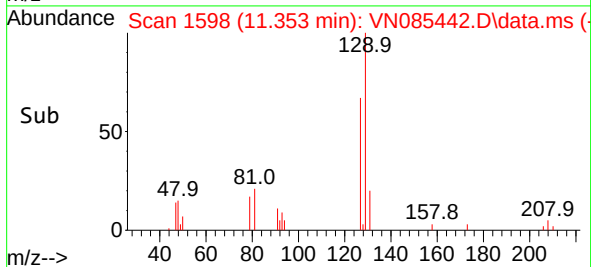
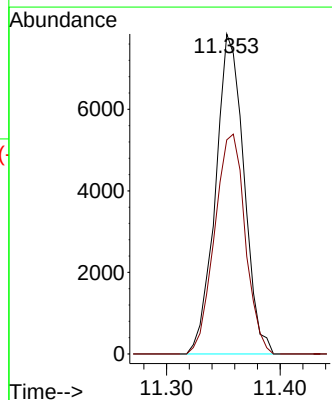
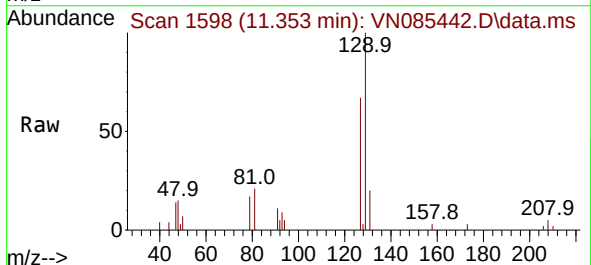
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

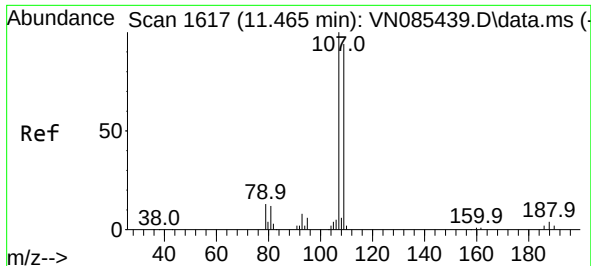
Tgt Ion: 43 Resp: 49021  
Ion Ratio Lower Upper  
43 100  
58 48.3 26.2 78.6



#60  
Dibromochloromethane  
Concen: 5.190 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 129 Resp: 13635  
Ion Ratio Lower Upper  
129 100  
127 73.9 38.6 115.8

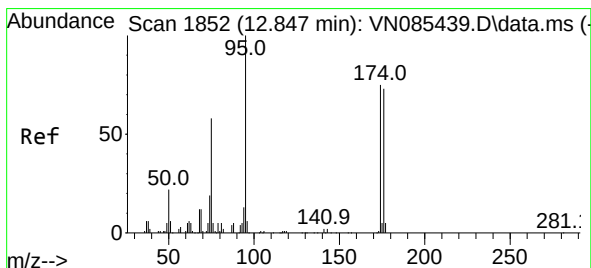
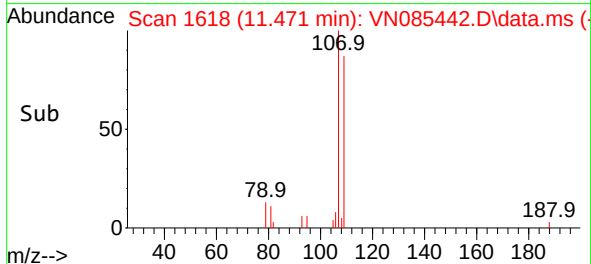
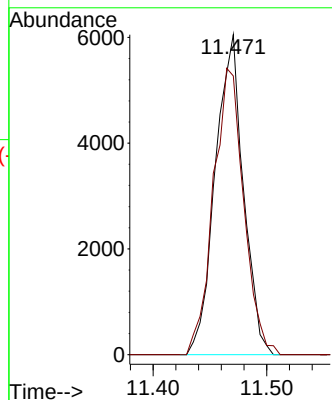
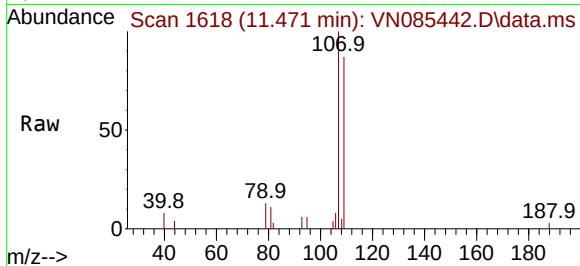




#61  
1,2-Dibromoethane  
Concen: 4.810 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

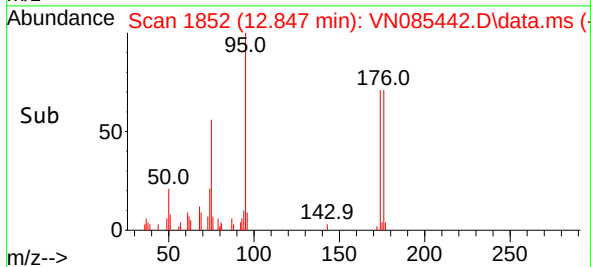
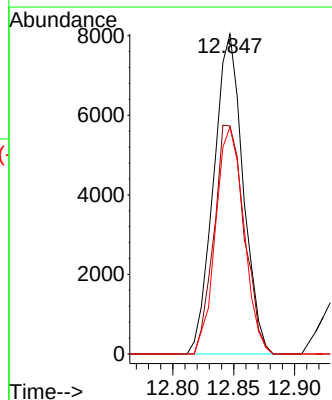
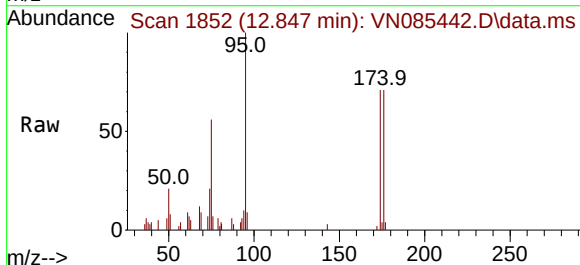
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion:107 Resp: 10419  
Ion Ratio Lower Upper  
107 100  
109 96.8 75.9 113.9

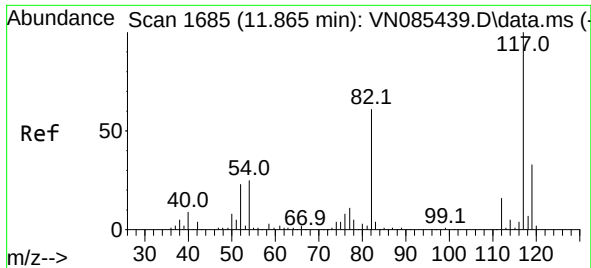


#62  
4-Bromofluorobenzene  
Concen: 4.943 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 95 Resp: 13520  
Ion Ratio Lower Upper  
95 100  
174 73.2 0.0 145.0  
176 68.0 0.0 142.4



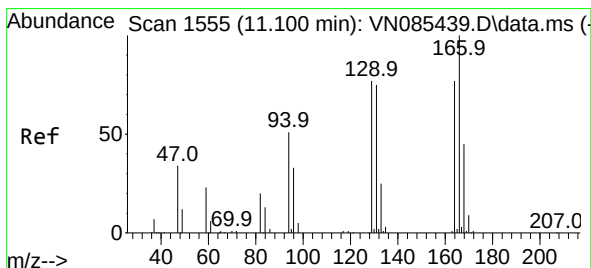
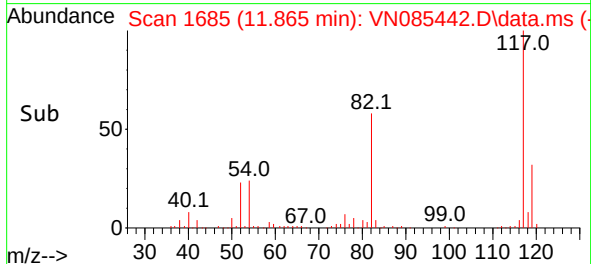
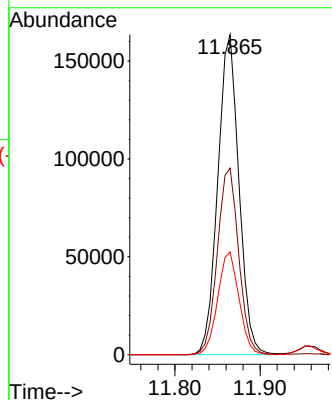
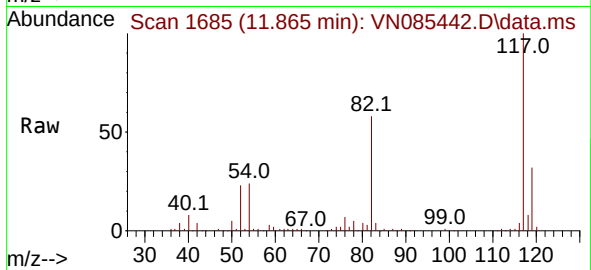




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

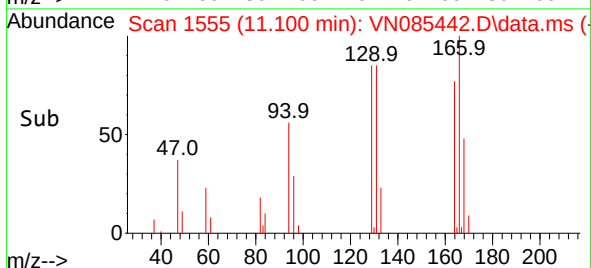
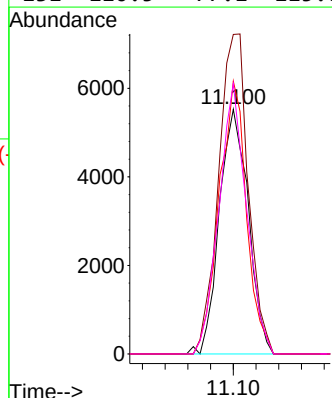
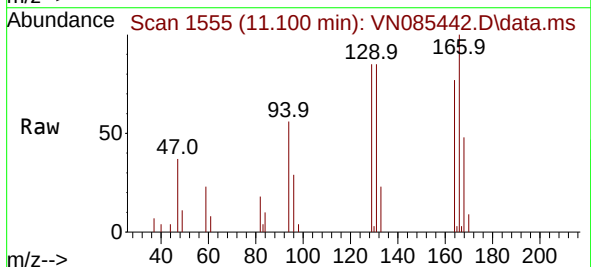
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

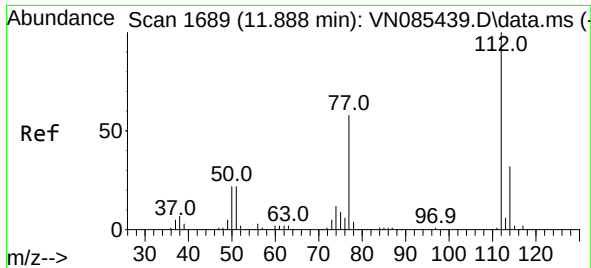
Tgt Ion:117 Resp: 282203  
Ion Ratio Lower Upper  
117 100  
82 58.3 48.6 72.8  
119 32.1 26.6 39.8



#64  
Tetrachloroethene  
Concen: 5.071 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion:164 Resp: 9756  
Ion Ratio Lower Upper  
164 100  
166 130.6 103.4 155.2  
129 111.5 79.2 118.8  
131 110.5 77.1 115.7

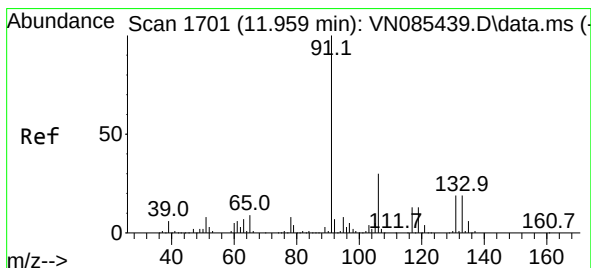
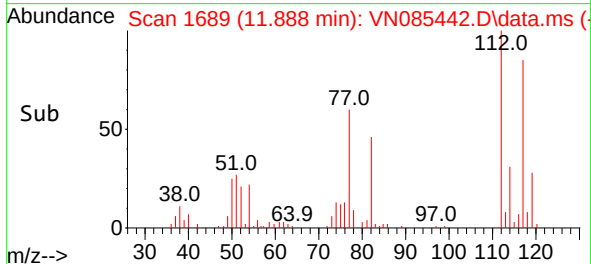
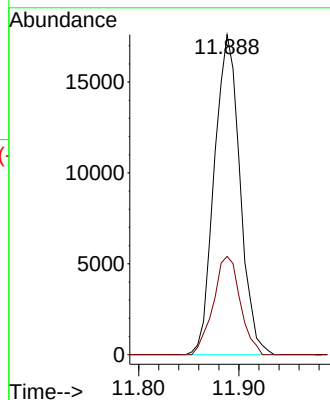
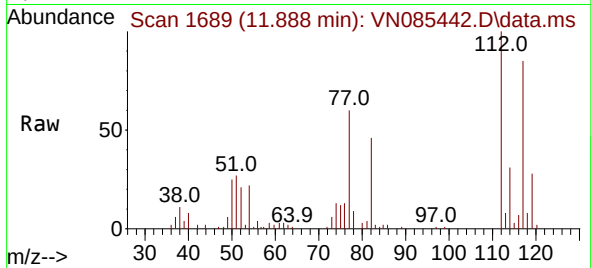




#65  
Chlorobenzene  
Concen: 5.065 ug/l  
RT: 11.888 min Scan# 1112  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

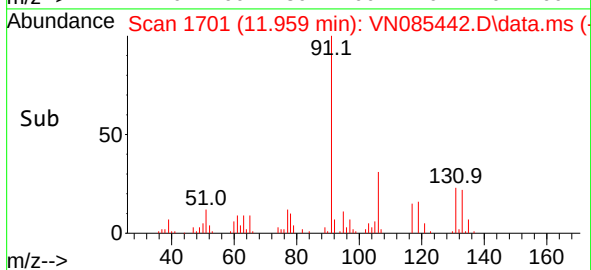
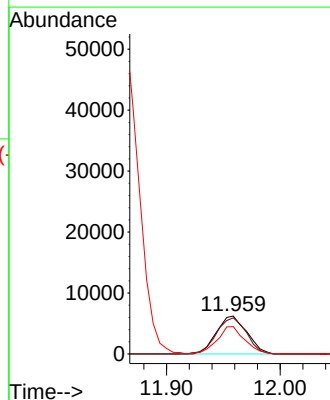
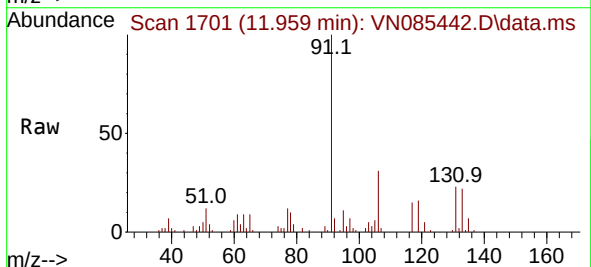
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

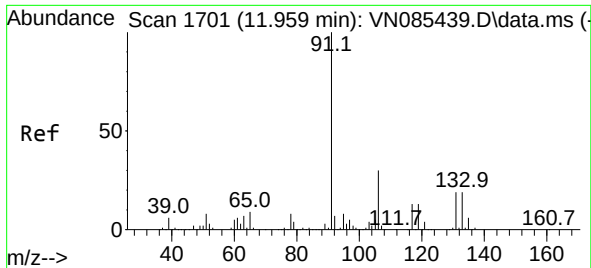
Tgt Ion:112 Resp: 31312  
Ion Ratio Lower Upper  
112 100  
114 30.7 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 5.121 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion:131 Resp: 11620  
Ion Ratio Lower Upper  
131 100  
133 92.7 47.4 142.3  
119 65.0 33.1 99.5

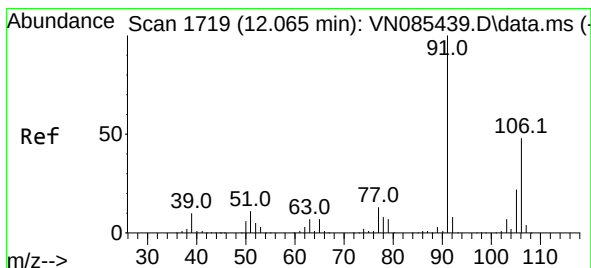
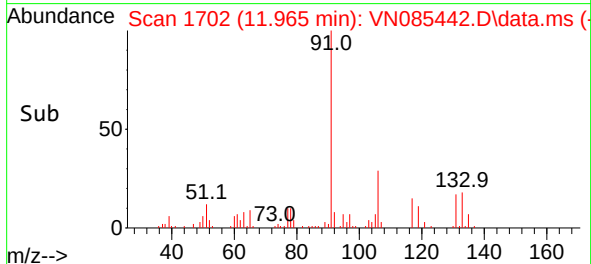
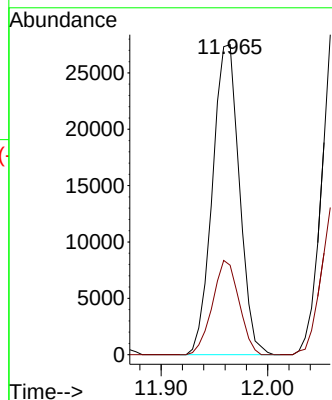
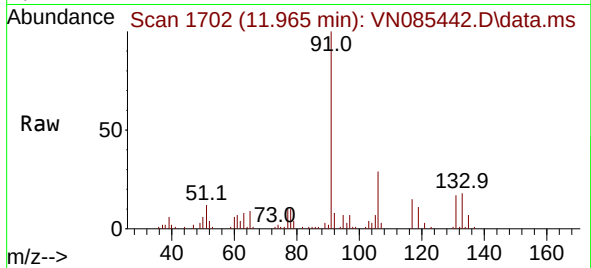




#67  
Ethyl Benzene  
Concen: 4.789 ug/l  
RT: 11.965 min Scan# 1701  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

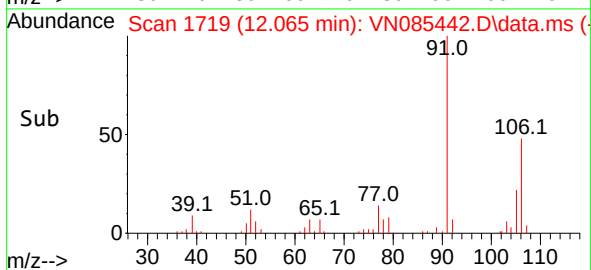
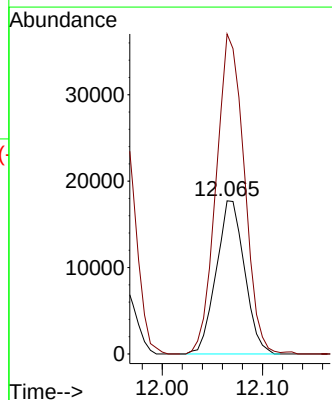
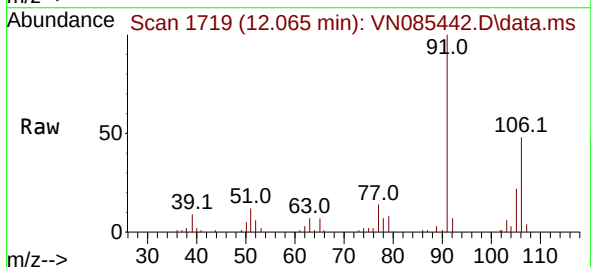
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

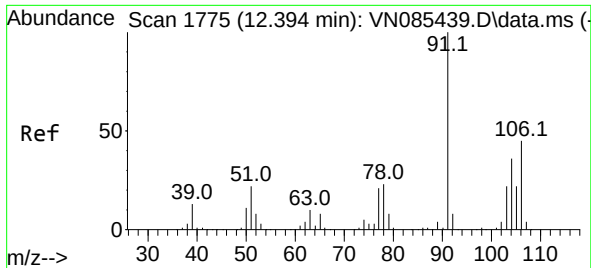
Tgt Ion: 91 Resp: 48216  
Ion Ratio Lower Upper  
91 100  
106 28.9 23.8 35.8



#68  
m/p-Xylenes  
Concen: 9.344 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 106 Resp: 34771  
Ion Ratio Lower Upper  
106 100  
91 207.9 167.7 251.5

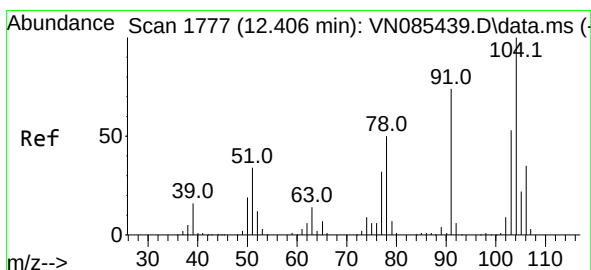
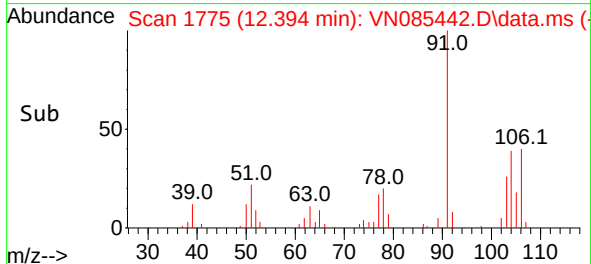
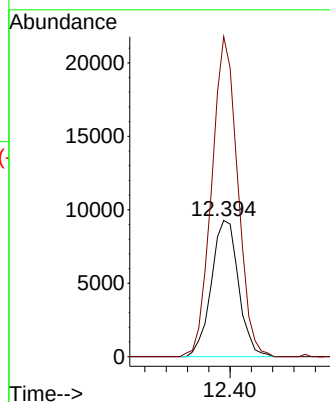
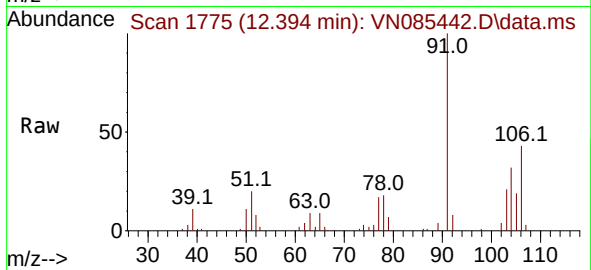




#69  
o-Xylene  
Concen: 4.617 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

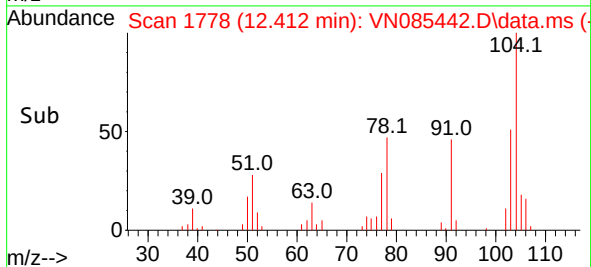
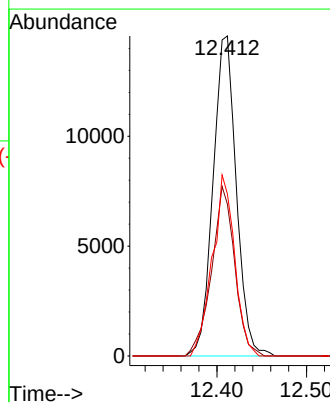
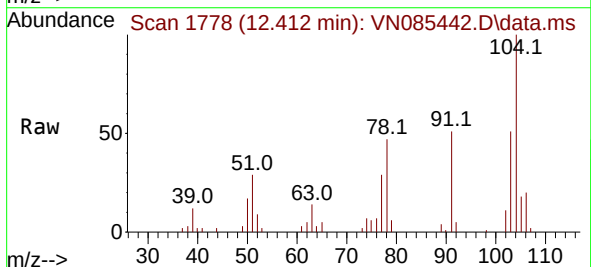
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

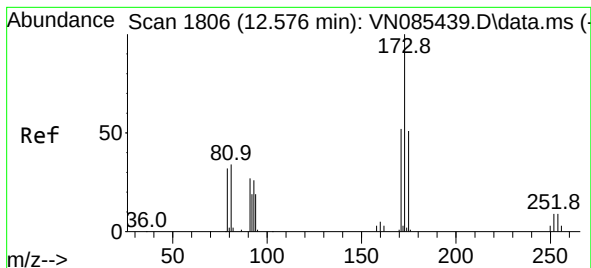
Tgt Ion:106 Resp: 16419  
Ion Ratio Lower Upper  
106 100  
91 224.0 110.4 331.2



#70  
Styrene  
Concen: 4.454 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion:104 Resp: 26218  
Ion Ratio Lower Upper  
104 100  
78 52.6 42.5 63.7  
103 54.2 43.8 65.8





#71

Bromoform

Concen: 4.938 ug/l

RT: 12.576 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005

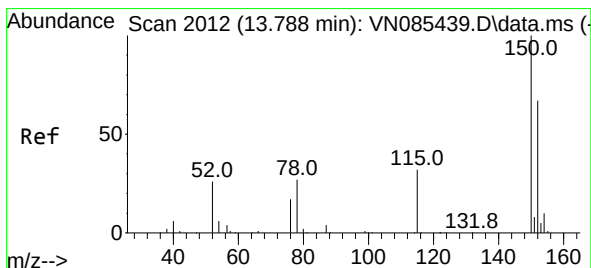
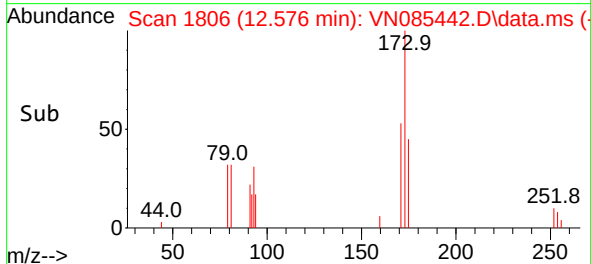
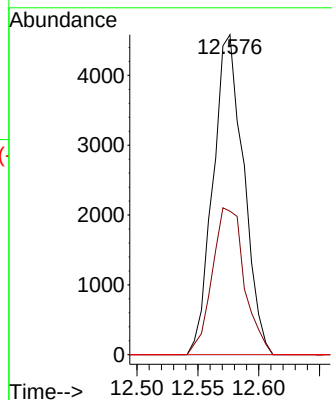
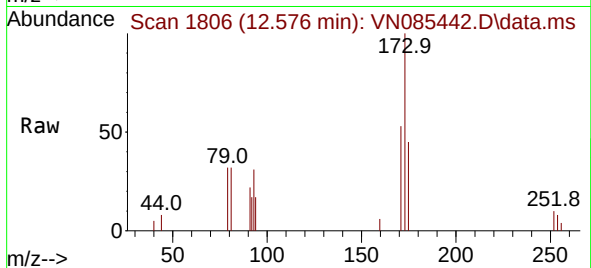
Tgt Ion:173 Resp: 8017

Ion Ratio Lower Upper

173 100

175 48.3 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

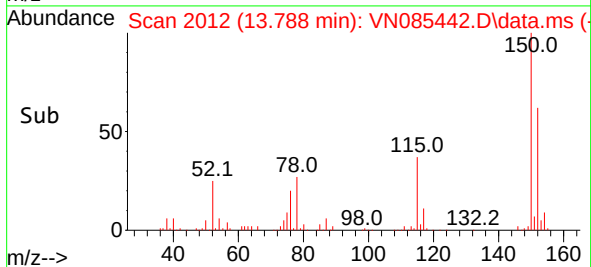
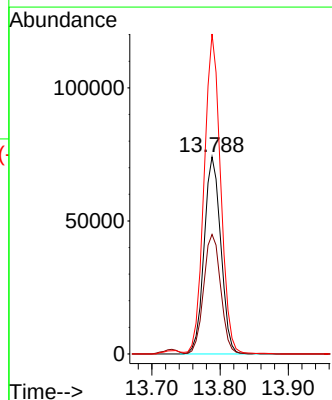
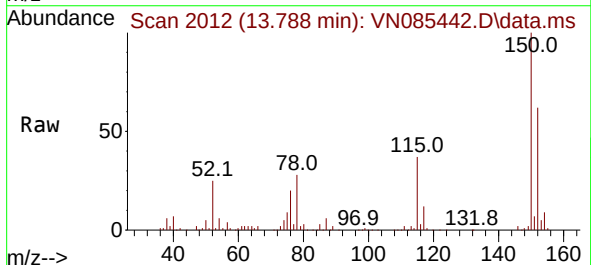
Tgt Ion:152 Resp: 126086

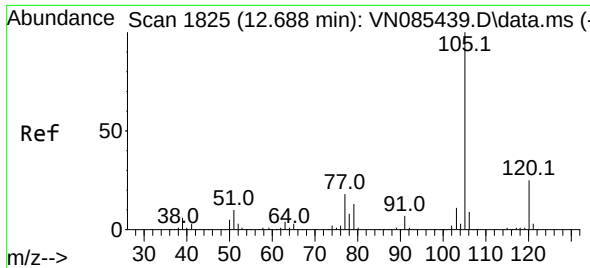
Ion Ratio Lower Upper

152 100

115 62.0 31.1 93.3

150 160.7 0.0 343.6

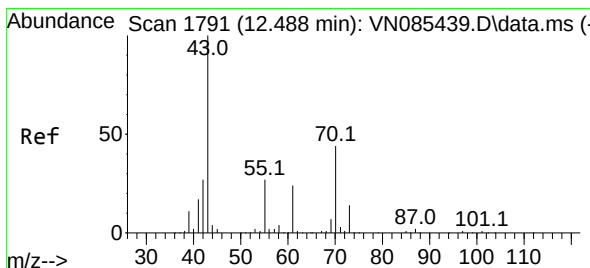
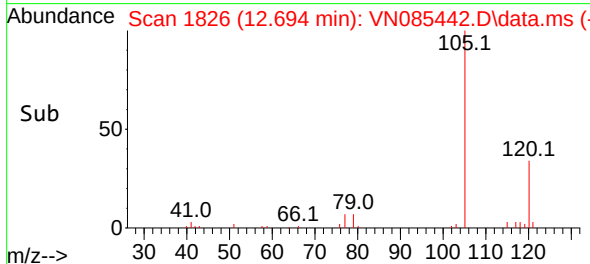
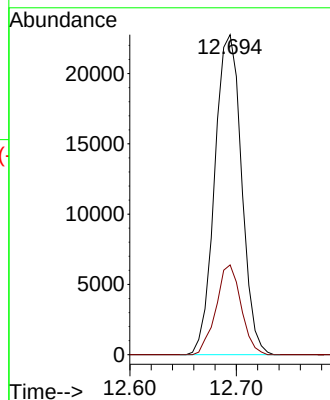
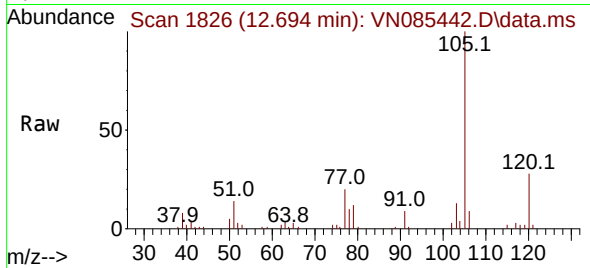




#73  
Isopropylbenzene  
Concen: 4.678 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

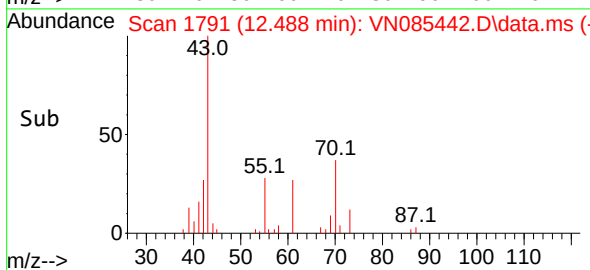
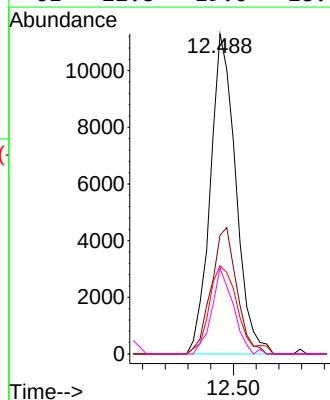
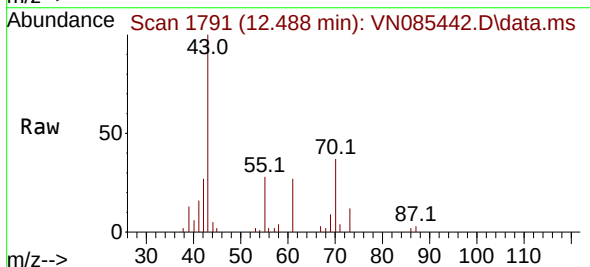
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

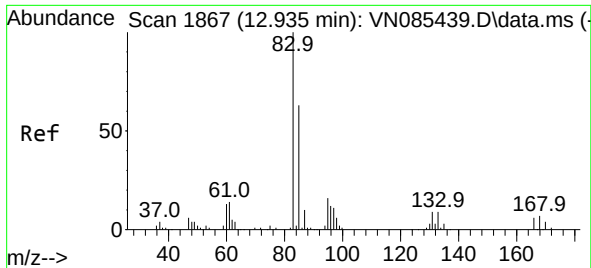
Tgt Ion:105 Resp: 39811  
Ion Ratio Lower Upper  
105 100  
120 26.1 12.8 38.3



#74  
N-ethyl acetate  
Concen: 4.595 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 17577  
Ion Ratio Lower Upper  
43 100  
70 39.5 34.0 51.0  
55 30.8 21.4 32.2  
61 22.8 19.0 28.4

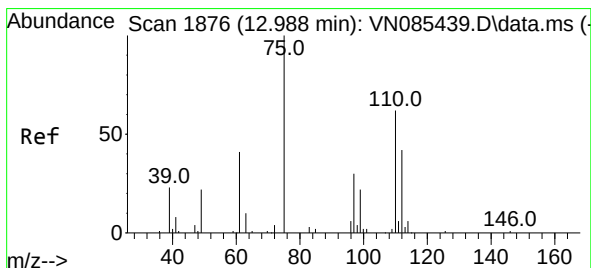
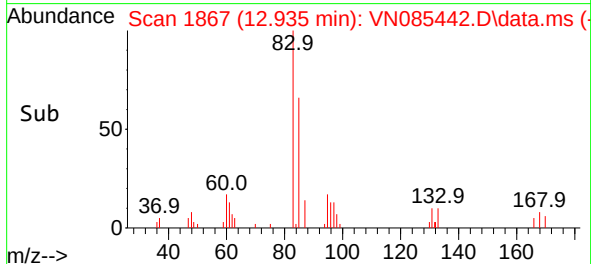
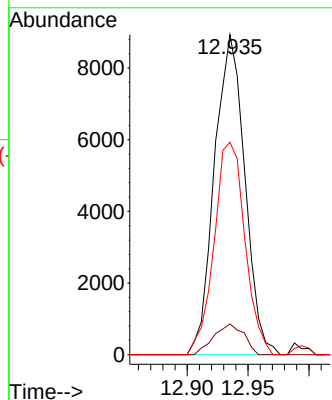
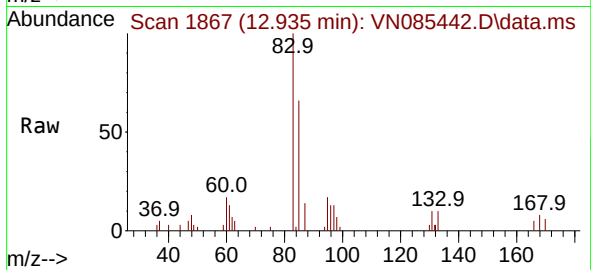




#75  
1,1,2,2-Tetrachloroethane  
Concen: 5.151 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

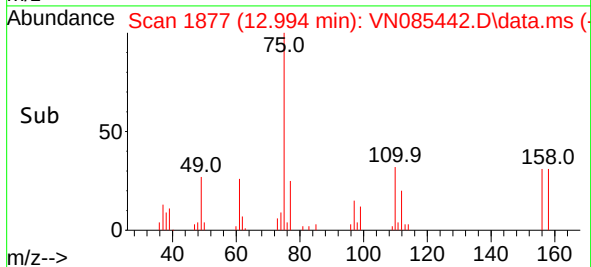
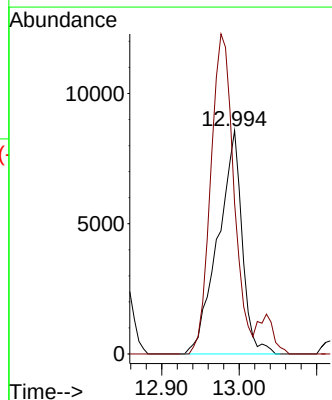
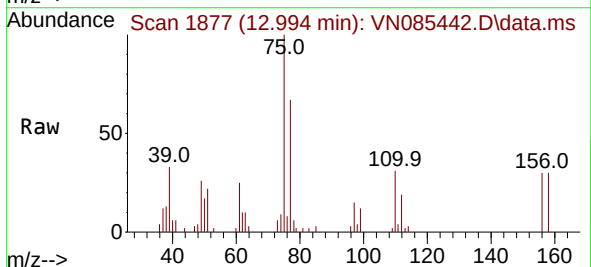
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

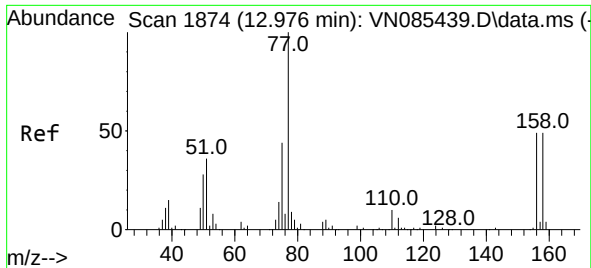
Tgt Ion: 83 Resp: 15483  
Ion Ratio Lower Upper  
83 100  
131 9.5 4.8 14.4  
85 67.5 32.2 96.6



#76  
1,2,3-Trichloropropane  
Concen: 7.279 ug/l  
RT: 12.994 min Scan# 1877  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 18624  
Ion Ratio Lower Upper  
75 100  
77 136.7 109.7 329.2

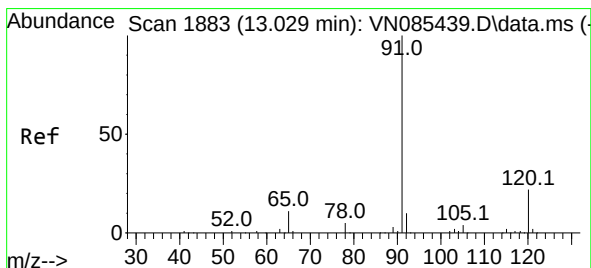
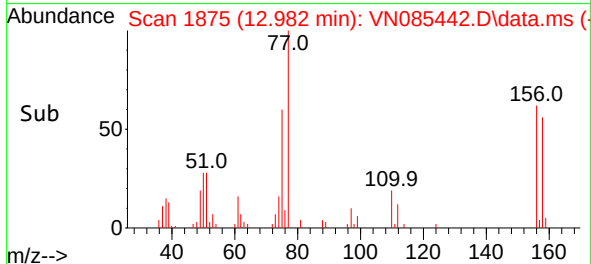
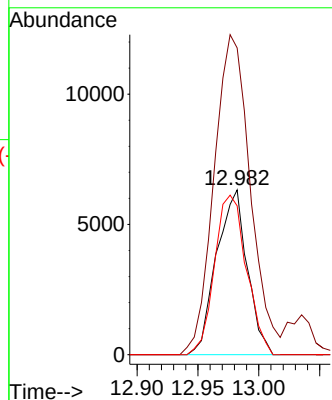
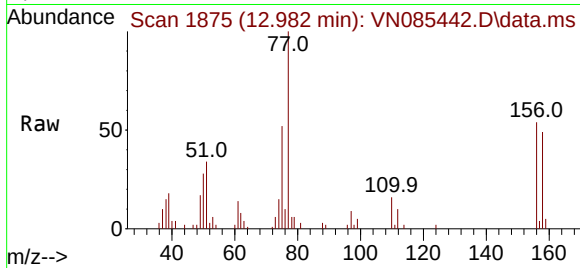




#77  
Bromobenzene  
Concen: 4.989 ug/l  
RT: 12.982 min Scan# 1875  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

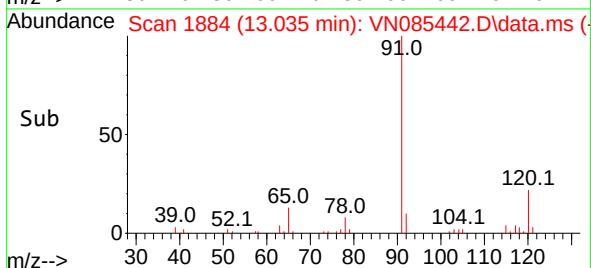
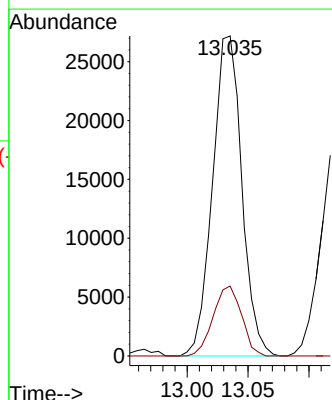
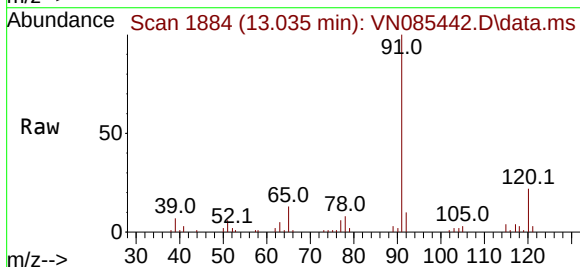
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion:156 Resp: 11091  
Ion Ratio Lower Upper  
156 100  
77 229.5 114.1 342.4  
158 100.8 48.9 146.8

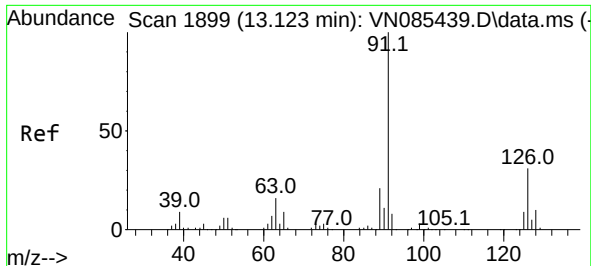


#78  
n-propylbenzene  
Concen: 4.512 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 45450  
Ion Ratio Lower Upper  
91 100  
120 21.1 10.9 32.6



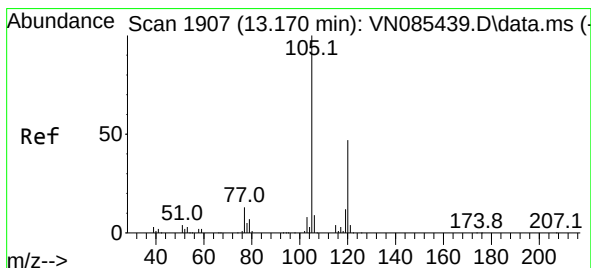
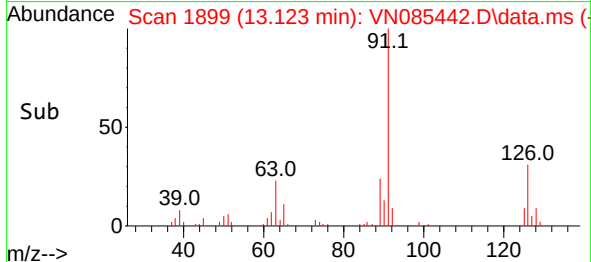
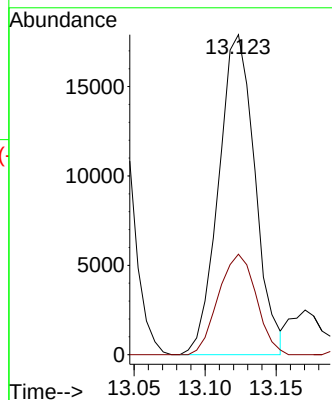
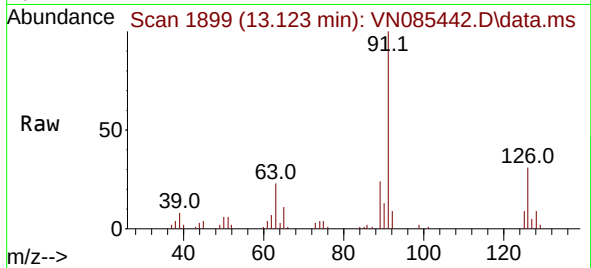




#79  
2-Chlorotoluene  
Concen: 4.898 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

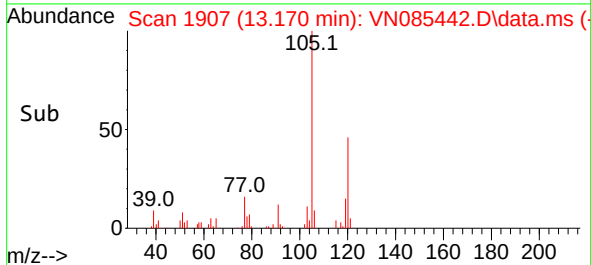
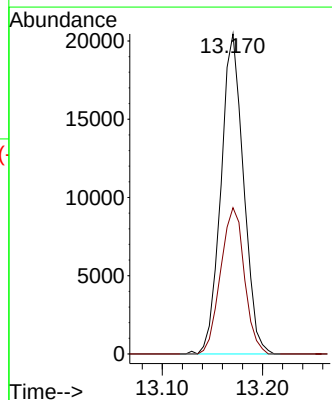
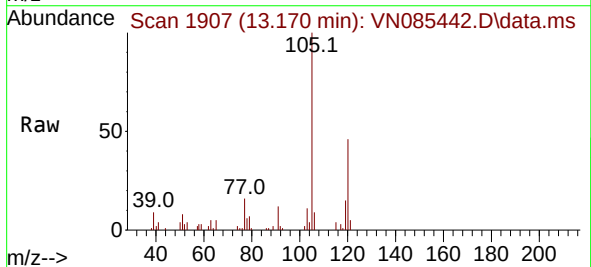
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

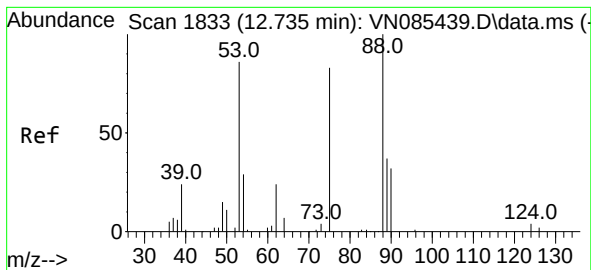
Tgt Ion: 91 Resp: 31932  
Ion Ratio Lower Upper  
91 100  
126 32.6 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 4.537 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 105 Resp: 31891  
Ion Ratio Lower Upper  
105 100  
120 48.1 23.9 71.7

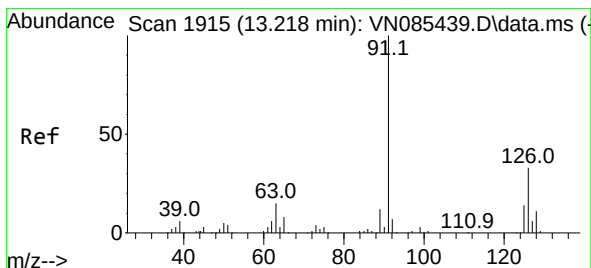
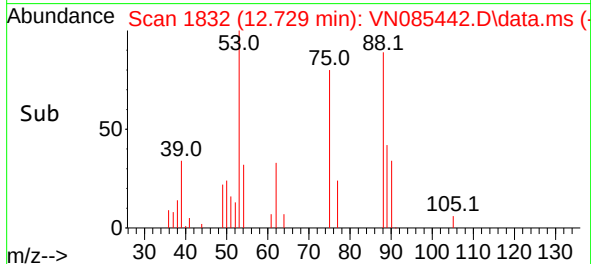
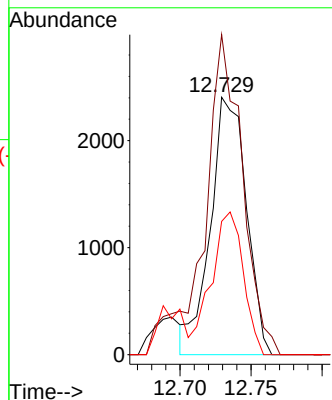
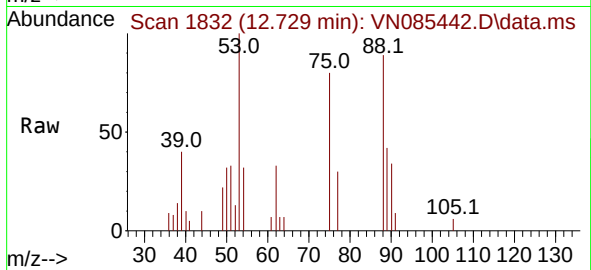




#81  
trans-1,4-Dichloro-2-butene  
Concen: 4.465 ug/l  
RT: 12.729 min Scan# 1832  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

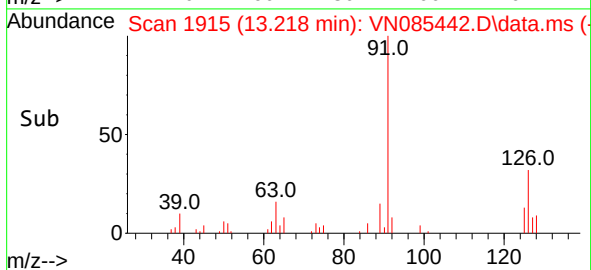
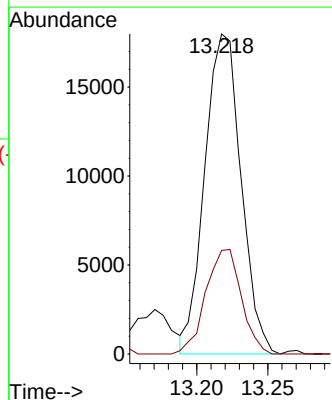
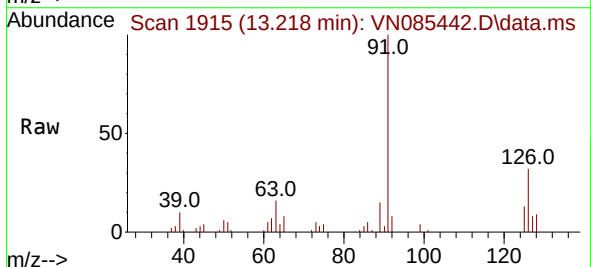
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

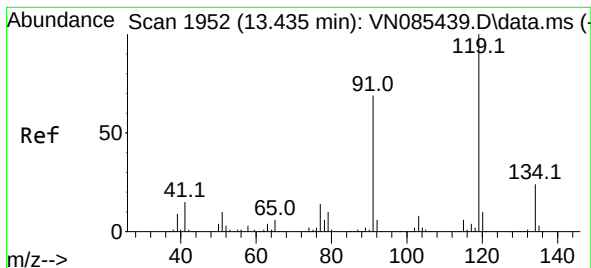
Tgt Ion: 75 Resp: 4229  
Ion Ratio Lower Upper  
75 100  
53 132.6 95.6 143.4  
89 49.7 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 4.926 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 31976  
Ion Ratio Lower Upper  
91 100  
126 31.9 15.9 47.7





#83

tert-Butylbenzene

Concen: 4.675 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

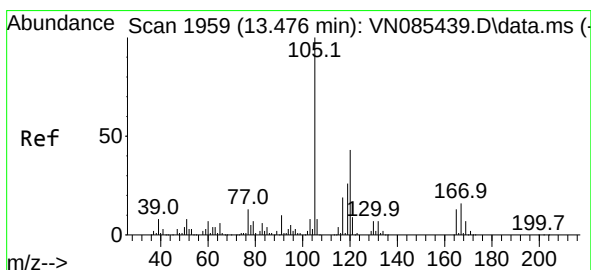
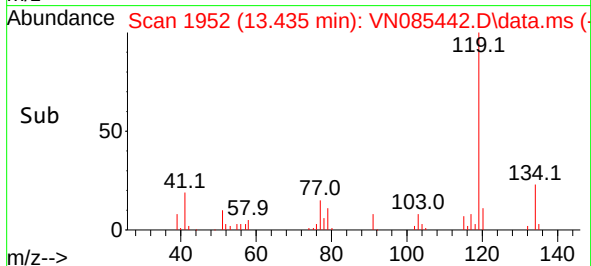
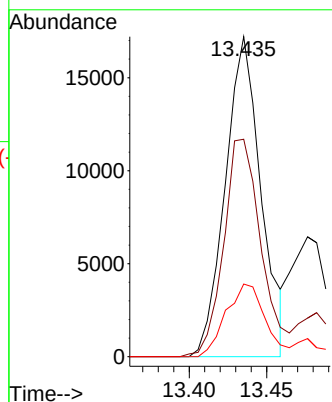
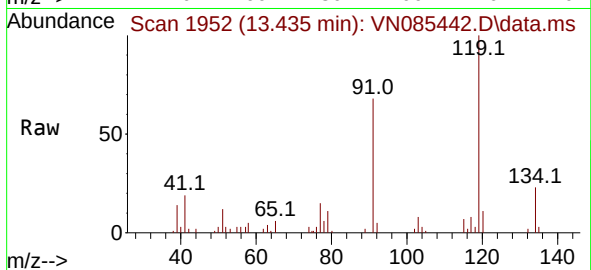
Tgt Ion:119 Resp: 27597

Ion Ratio Lower Upper

119 100

91 71.1 35.1 105.3

134 24.8 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 4.575 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085442.D

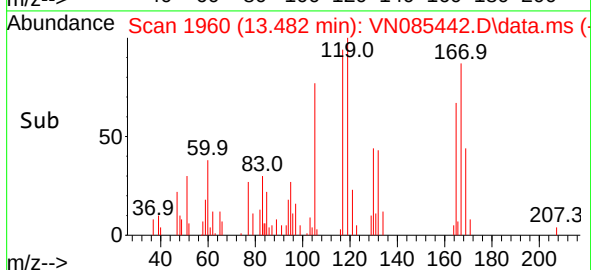
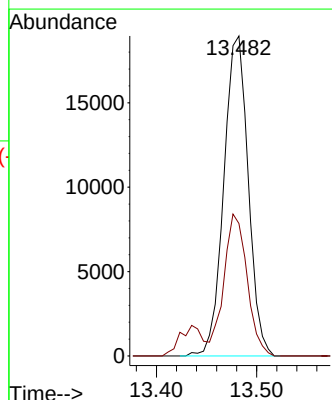
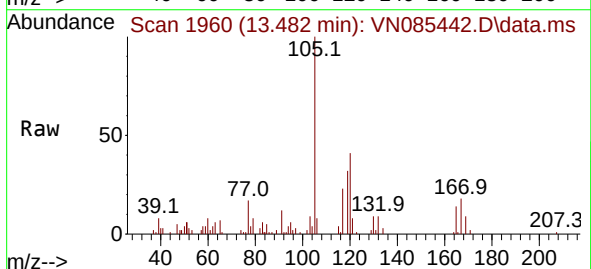
Acq: 14 Jan 2025 16:31

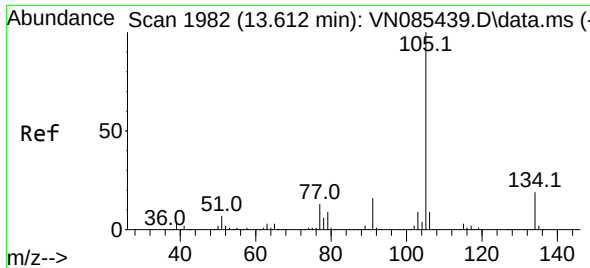
Tgt Ion:105 Resp: 32054

Ion Ratio Lower Upper

105 100

120 42.0 21.6 65.0

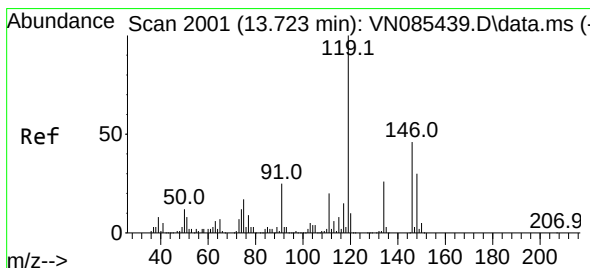
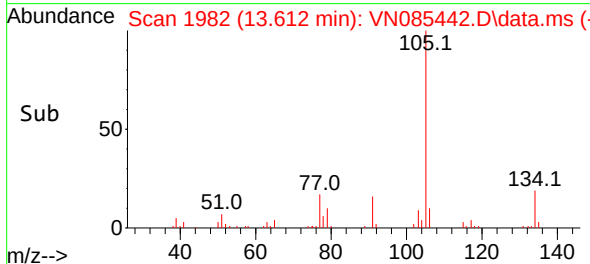
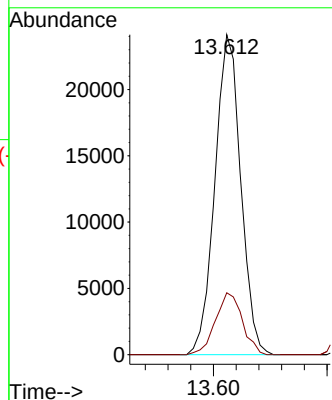
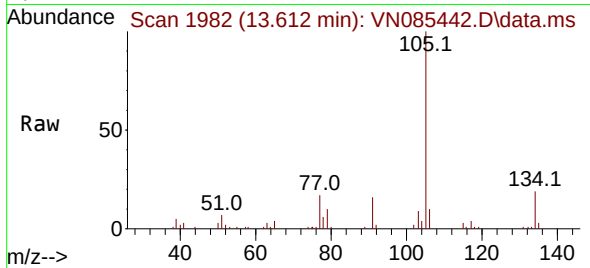




#85  
 sec-Butylbenzene  
 Concen: 4.663 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

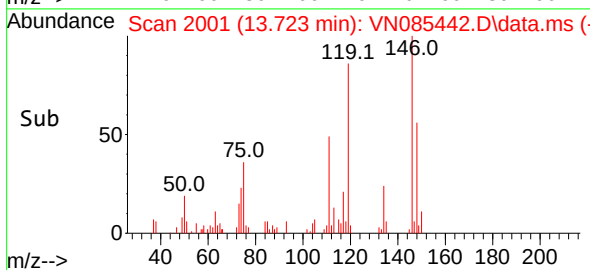
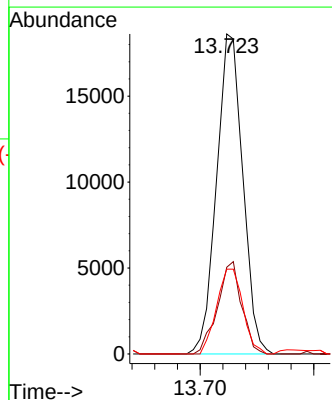
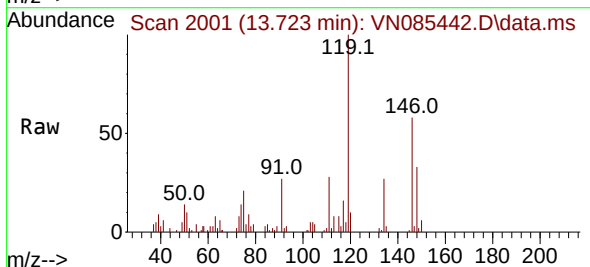
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

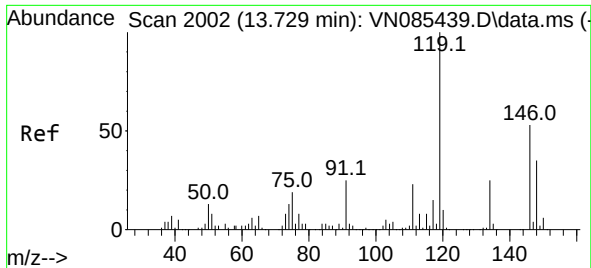
Tgt Ion:105 Resp: 38148  
 Ion Ratio Lower Upper  
 105 100  
 134 20.1 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 4.584 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion:119 Resp: 29856  
 Ion Ratio Lower Upper  
 119 100  
 134 26.5 12.7 38.0  
 91 26.5 12.7 38.1

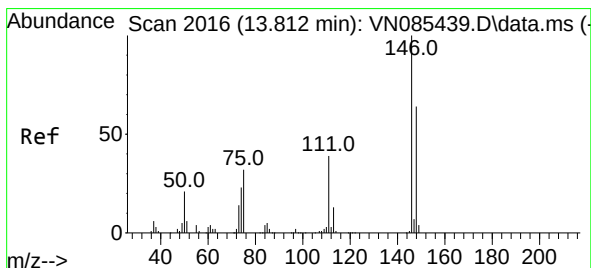
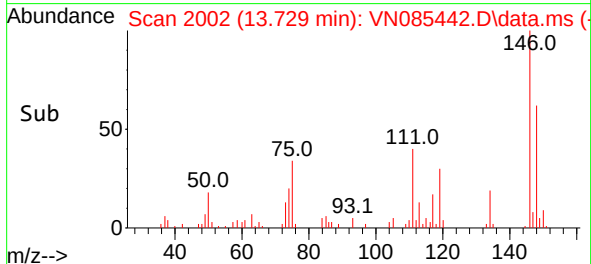
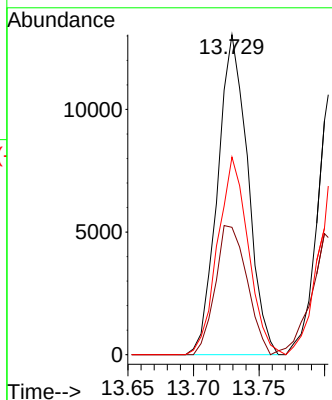
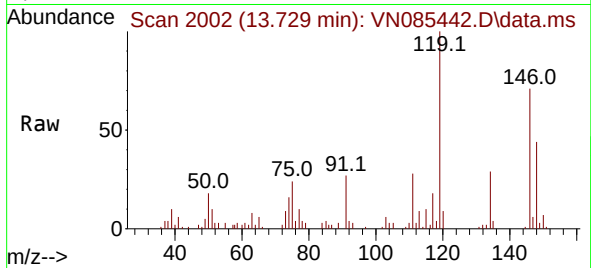




#87  
 1,3-Dichlorobenzene  
 Concen: 5.099 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

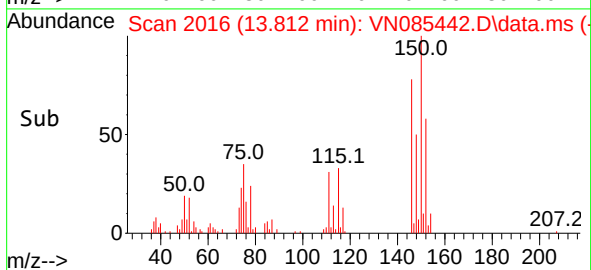
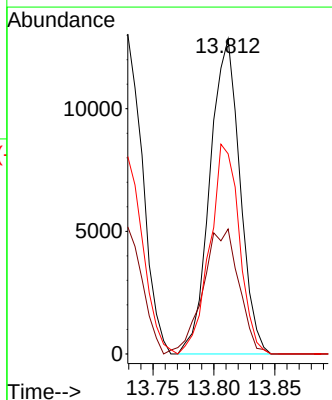
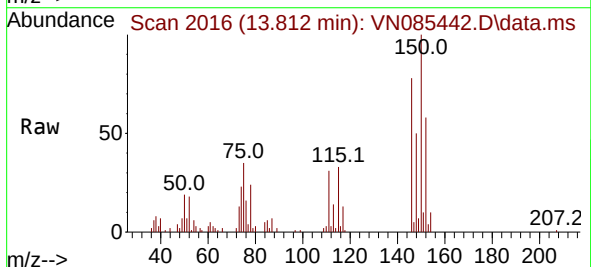
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

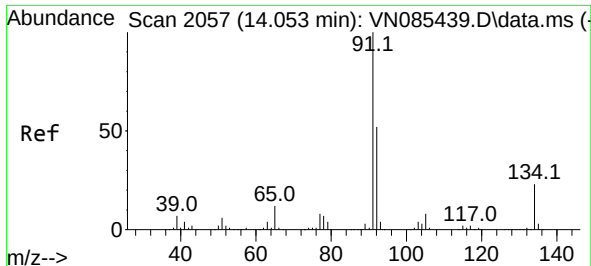
Tgt Ion:146 Resp: 20876  
 Ion Ratio Lower Upper  
 146 100  
 111 42.3 21.4 64.3  
 148 62.7 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 5.179 ug/l  
 RT: 13.812 min Scan# 2016  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 21982  
 Ion Ratio Lower Upper  
 146 100  
 111 47.1 21.3 63.7  
 148 65.5 32.4 97.0





#89

n-Butylbenzene

Concen: 4.675 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

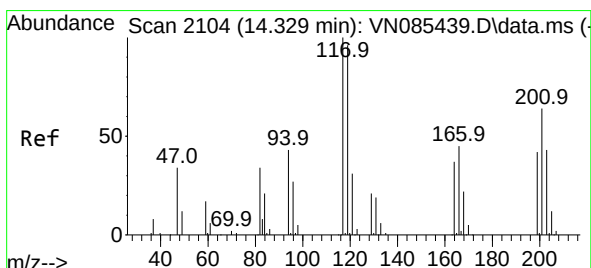
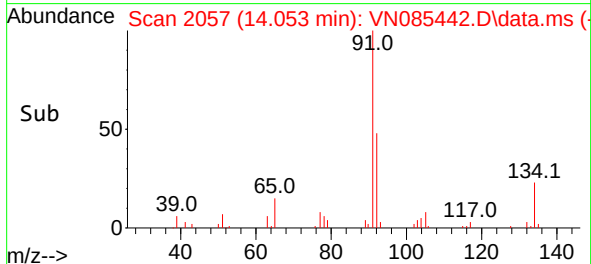
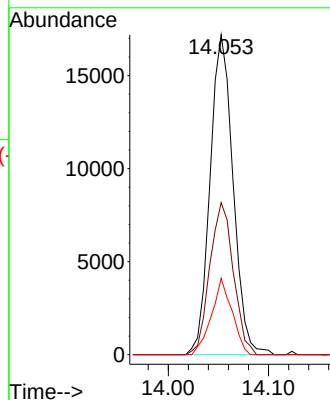
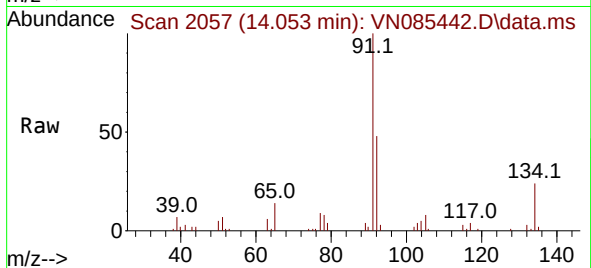
Tgt Ion: 91 Resp: 27437

Ion Ratio Lower Upper

91 100

92 48.7 25.8 77.3

134 21.4 11.7 35.1



#90

Hexachloroethane

Concen: 4.987 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. 0.000 min

Lab File: VN085442.D

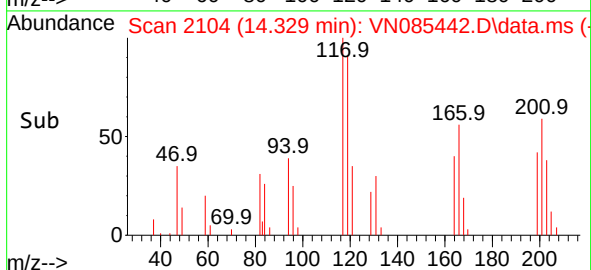
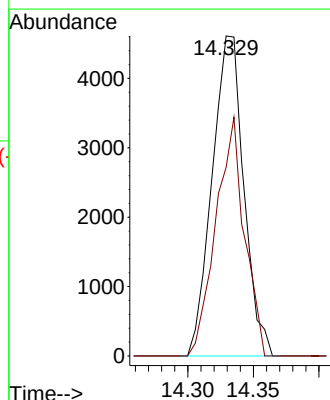
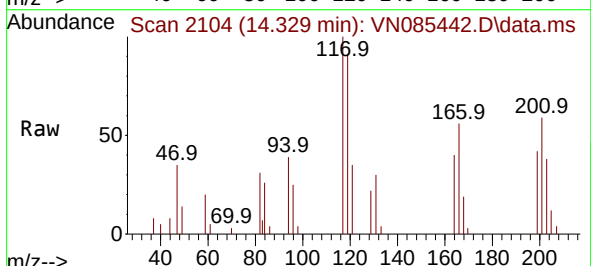
Acq: 14 Jan 2025 16:31

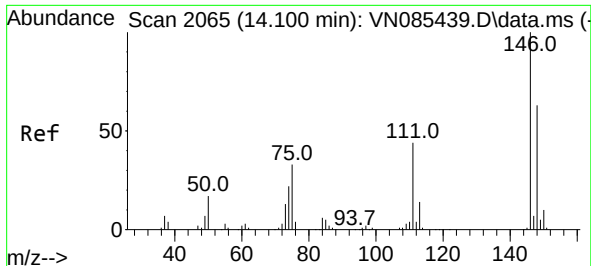
Tgt Ion: 117 Resp: 7767

Ion Ratio Lower Upper

117 100

201 66.9 33.7 101.0





#91

1,2-Dichlorobenzene

Concen: 4.940 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

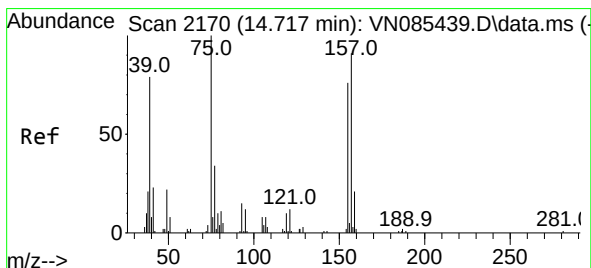
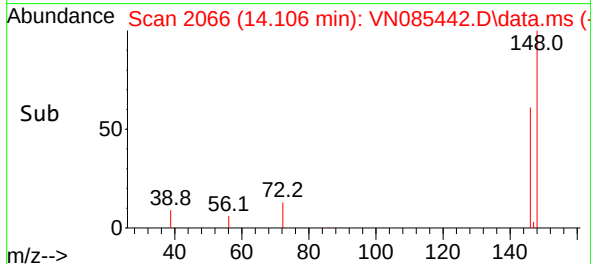
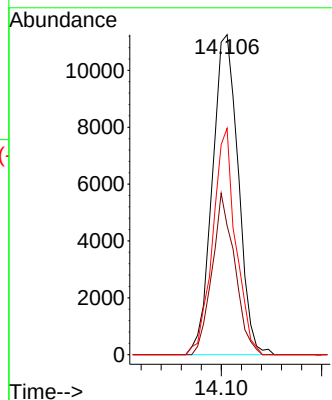
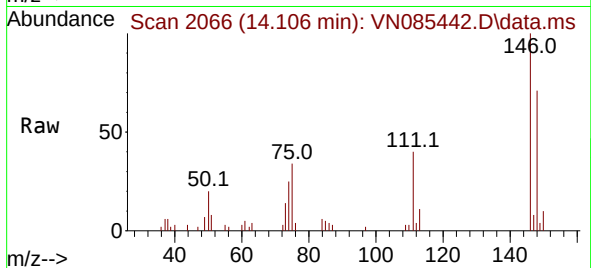
Tgt Ion:146 Resp: 20177

Ion Ratio Lower Upper

146 100

111 44.0 21.7 65.1

148 62.8 31.4 94.2



#92

1,2-Dibromo-3-Chloropropane

Concen: 5.232 ug/l

RT: 14.729 min Scan# 2172

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

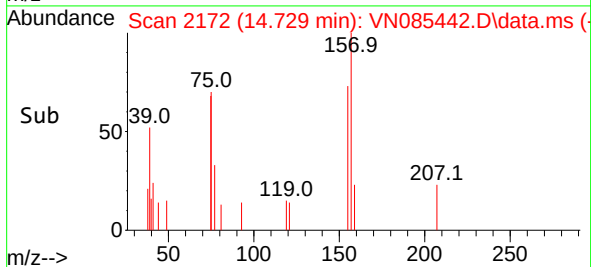
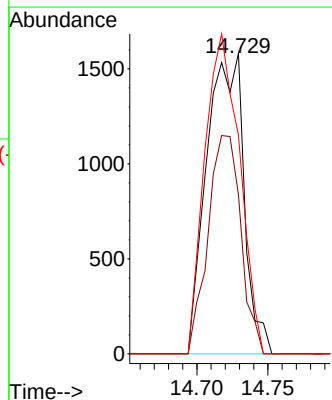
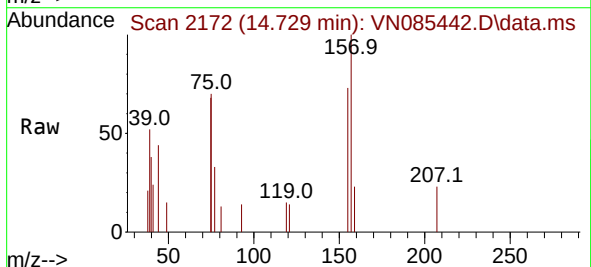
Tgt Ion: 75 Resp: 2872

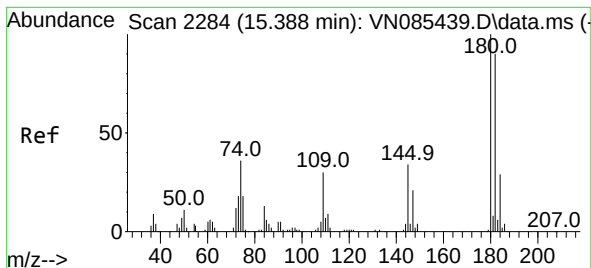
Ion Ratio Lower Upper

75 100

155 64.2 36.4 109.2

157 99.8 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 4.761 ug/l

RT: 15.388 min Scan# 21

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

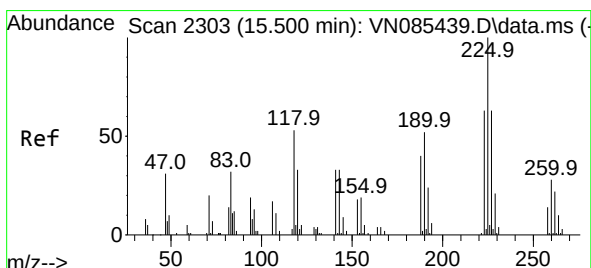
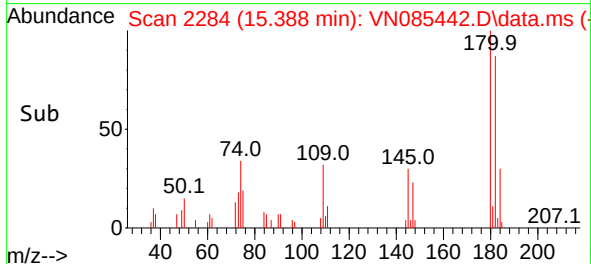
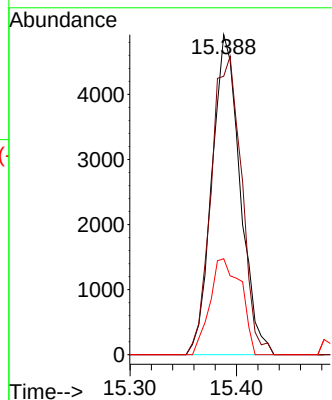
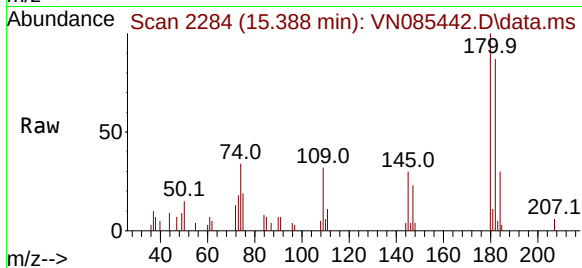
Tgt Ion:180 Resp: 9037

Ion Ratio Lower Upper

180 100

182 100.5 46.8 140.3

145 33.0 16.0 48.0



#94

Hexachlorobutadiene

Concen: 5.520 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

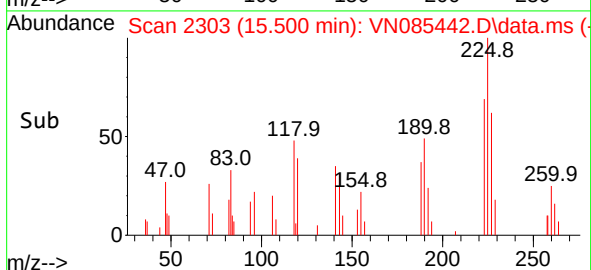
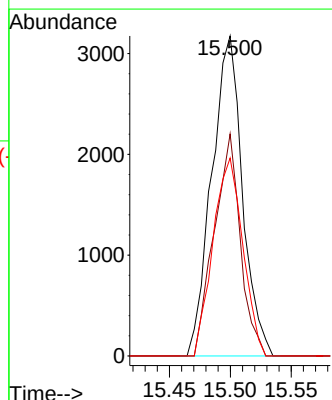
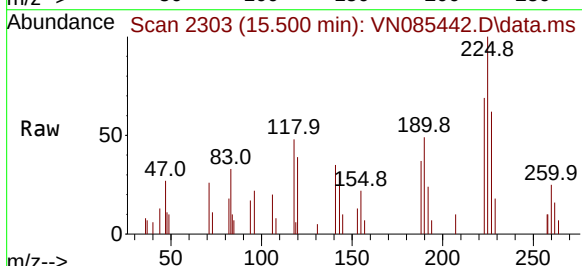
Tgt Ion:225 Resp: 5563

Ion Ratio Lower Upper

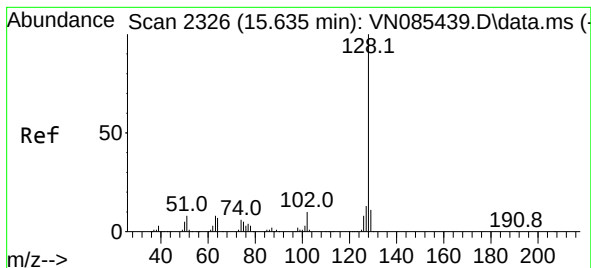
225 100

223 59.2 30.7 92.1

227 60.1 30.9 92.5







#95

Naphthalene

Concen: 4.422 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

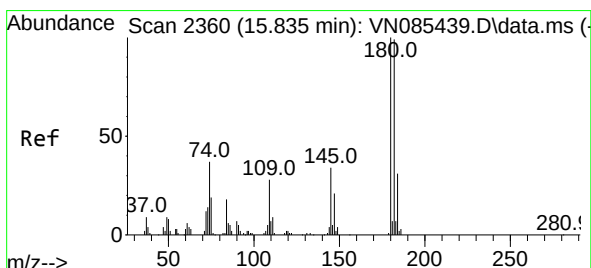
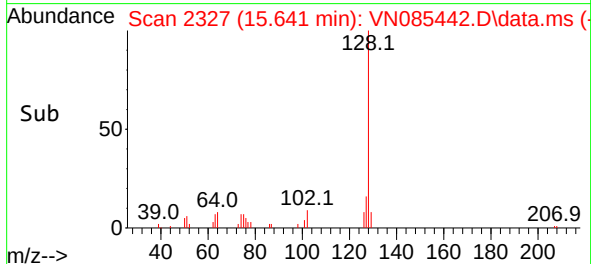
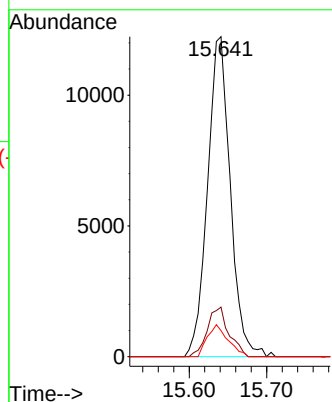
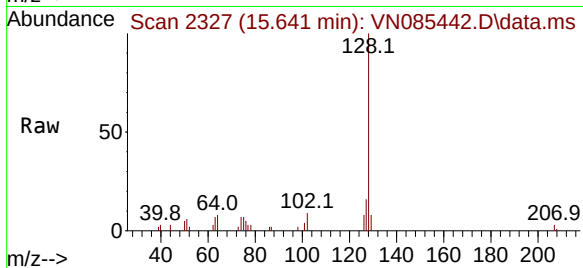
Tgt Ion:128 Resp: 25047

Ion Ratio Lower Upper

128 100

127 14.7 10.6 16.0

129 9.1 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 4.549 ug/l

RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

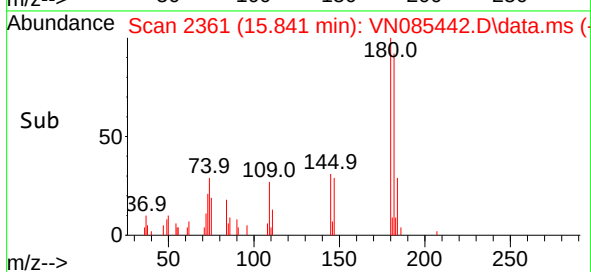
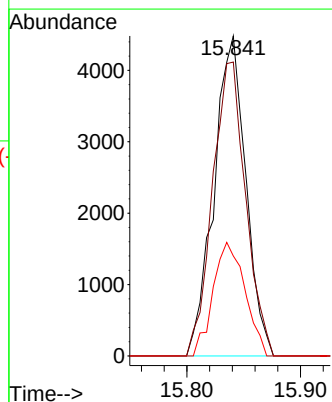
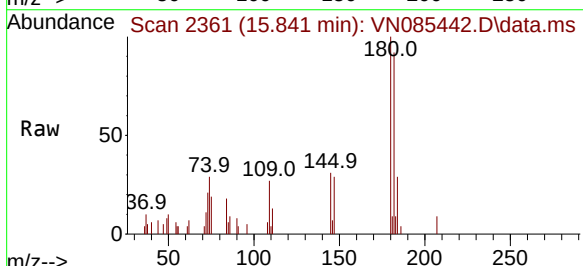
Tgt Ion:180 Resp: 8737

Ion Ratio Lower Upper

180 100

182 95.6 47.4 142.2

145 35.5 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085443.D  
 Acq On : 14 Jan 2025 17:19  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Quant Time: Jan 15 01:46:03 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 166880   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 302938   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 256851   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 99539    | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 3273     | 1.215    | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 2.440%# |
| 35) Dibromofluoromethane    | 8.159  | 113   | 2258     | 1.074    | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 2.140%# |
| 50) Toluene-d8              | 10.565 | 98    | 7164     | 0.959    | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 1.920%# |
| 62) 4-Bromofluorobenzene    | 12.841 | 95    | 2428     | 0.951    | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 1.900%# |

|                              |       |     |       |        |        |    |
|------------------------------|-------|-----|-------|--------|--------|----|
| Target Compounds             |       |     |       | Qvalue |        |    |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 2382  | 1.054  | ug/l   | 91 |
| 3) Chloromethane             | 2.359 | 50  | 2801  | 1.145  | ug/l   | 93 |
| 4) Vinyl Chloride            | 2.512 | 62  | 2732  | 1.111  | ug/l # | 81 |
| 5) Bromomethane              | 2.971 | 94  | 2279  | 1.534  | ug/l   | 97 |
| 6) Chloroethane              | 3.124 | 64  | 1809  | 1.160  | ug/l   | 94 |
| 7) Trichlorofluoromethane    | 3.512 | 101 | 3860  | 1.082  | ug/l   | 88 |
| 8) Diethyl Ether             | 3.953 | 74  | 1526  | 1.238  | ug/l   | 81 |
| 9) 1,1,2-Trichlorotrifluo... | 4.359 | 101 | 1308  | 0.651  | ug/l # | 68 |
| 10) Methyl Iodide            | 4.600 | 142 | 2478  | 1.077  | ug/l # | 87 |
| 11) Tert butyl alcohol       | 5.512 | 59  | 1314  | 4.260  | ug/l # | 71 |
| 12) 1,1-Dichloroethene       | 4.330 | 96  | 1660  | 0.927  | ug/l # | 67 |
| 13) Acrolein                 | 4.177 | 56  | 1510  | 3.586  | ug/l   | 86 |
| 14) Allyl chloride           | 5.024 | 41  | 3179  | 1.094  | ug/l # | 85 |
| 15) Acrylonitrile            | 5.718 | 53  | 4967  | 5.070  | ug/l # | 70 |
| 16) Acetone                  | 4.436 | 43  | 5102  | 5.862  | ug/l   | 92 |
| 17) Carbon Disulfide         | 4.706 | 76  | 6601  | 1.197  | ug/l # | 87 |
| 18) Methyl Acetate           | 5.030 | 43  | 2908  | 1.099  | ug/l # | 80 |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 5156  | 0.887  | ug/l # | 87 |
| 20) Methylene Chloride       | 5.265 | 84  | 2190  | 1.016  | ug/l # | 87 |
| 21) trans-1,2-Dichloroethene | 5.794 | 96  | 2110  | 1.102  | ug/l # | 66 |
| 22) Diisopropyl ether        | 6.677 | 45  | 5691  | 0.882  | ug/l # | 88 |
| 23) Vinyl Acetate            | 6.606 | 43  | 22593 | 4.988  | ug/l   | 98 |
| 24) 1,1-Dichloroethane       | 6.553 | 63  | 2873  | 0.730  | ug/l # | 84 |
| 25) 2-Butanone               | 7.483 | 43  | 5203  | 4.062  | ug/l # | 90 |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 3104  | 0.976  | ug/l   | 92 |
| 27) cis-1,2-Dichloroethene   | 7.477 | 96  | 2185  | 0.969  | ug/l   | 92 |
| 28) Bromochloromethane       | 7.812 | 49  | 2082  | 1.138  | ug/l # | 89 |
| 29) Tetrahydrofuran          | 7.835 | 42  | 3693  | 4.548  | ug/l   | 98 |
| 30) Chloroform               | 7.965 | 83  | 4250  | 1.045  | ug/l # | 80 |
| 31) Cyclohexane              | 8.218 | 56  | 7152  | 2.092  | ug/l # | 1  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 3678  | 1.031  | ug/l # | 56 |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 3084  | 1.046  | ug/l # | 84 |
| 37) Ethyl Acetate            | 7.553 | 43  | 911   | 0.306  | ug/l # | 88 |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 3436  | 1.018  | ug/l   | 90 |
| 39) Methylcyclohexane        | 9.600 | 83  | 2403  | 0.867  | ug/l # | 87 |
| 40) Benzene                  | 8.606 | 78  | 8480  | 0.957  | ug/l   | 91 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085443.D  
 Acq On : 14 Jan 2025 17:19  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Quant Time: Jan 15 01:46:03 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 01:28:51 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 1458     | 0.941  | ug/l # | 76       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 3131     | 0.938  | ug/l   | 91       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 4803     | 1.007  | ug/l # | 87       |
| 44) Trichloroethene           | 9.347  | 130  | 2133     | 1.034  | ug/l   | 71       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 2246     | 0.992  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 1769     | 1.083  | ug/l   | 92       |
| 47) Bromodichloromethane      | 9.882  | 83   | 2935     | 0.882  | ug/l   | 90       |
| 48) Methyl methacrylate       | 9.677  | 41   | 1886     | 0.878  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 673      | 18.616 | ug/l # | 47       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 11523    | 4.163  | ug/l   | 93       |
| 52) Toluene                   | 10.618 | 92   | 4180     | 0.814  | ug/l   | 93       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 2522     | 0.802  | ug/l   | 92       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 2725     | 0.811  | ug/l # | 83       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 1901     | 0.935  | ug/l   | 91       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 1923     | 2.471  | ug/l # | 88       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 3113     | 0.881  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 4929     | 3.822  | ug/l   | 91       |
| 59) 2-Hexanone                | 11.194 | 43   | 7905     | 4.058  | ug/l   | 87       |
| 60) Dibromochloromethane      | 11.359 | 129  | 2339     | 0.953  | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 2022     | 1.000  | ug/l   | 90       |
| 64) Tetrachloroethene         | 11.106 | 164  | 1658     | 0.947  | ug/l # | 83       |
| 65) Chlorobenzene             | 11.888 | 112  | 5401     | 0.960  | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 2185     | 1.058  | ug/l # | 64       |
| 67) Ethyl Benzene             | 11.959 | 91   | 7347     | 0.802  | ug/l   | 94       |
| 68) m/p-Xylenes               | 12.070 | 106  | 5059     | 1.494  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 2478     | 0.766  | ug/l   | 97       |
| 70) Styrene                   | 12.406 | 104  | 3812     | 0.712  | ug/l   | 99       |
| 71) Bromoform                 | 12.582 | 173  | 1208     | 0.818  | ug/l # | 88       |
| 73) Isopropylbenzene          | 12.688 | 105  | 5506     | 0.820  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.494 | 43   | 2716     | 0.899  | ug/l # | 87       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 2616     | 1.102  | ug/l # | 96       |
| 76) 1,2,3-Trichloropropane    | 12.982 | 75   | 3212     | 1.590  | ug/l   | 42       |
| 77) Bromobenzene              | 12.976 | 156  | 1733     | 0.987  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.029 | 91   | 6424     | 0.808  | ug/l   | 93       |
| 79) 2-Chlorotoluene           | 13.117 | 91   | 4483     | 0.871  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene    | 13.165 | 105  | 4301     | 0.775  | ug/l   | 90       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 695      | 0.929  | ug/l # | 76       |
| 82) 4-Chlorotoluene           | 13.223 | 91   | 4268     | 0.833  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 3753     | 0.805  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 3758     | 0.679  | ug/l   | 93       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 4614     | 0.714  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 3538     | 0.716  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.723 | 146  | 3038     | 0.940  | ug/l   | 95       |
| 88) 1,4-Dichlorobenzene       | 13.723 | 146  | 3038     | 0.907  | ug/l   | 95       |
| 89) n-Butylbenzene            | 14.053 | 91   | 3527     | 0.761  | ug/l   | 93       |
| 90) Hexachloroethane          | 14.341 | 117  | 1355     | 1.102  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 3515     | 1.090  | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75   | 402      | 0.928  | ug/l   | 74       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 1310     | 0.874  | ug/l # | 80       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 822      | 1.033  | ug/l   | 89       |
| 95) Naphthalene               | 15.641 | 128  | 4210     | 0.941  | ug/l # | 90       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 1494     | 0.985  | ug/l # | 86       |

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Data File : VN085443.D  
Acq On : 14 Jan 2025 17:19  
Operator : JC\MD  
Sample : VSTDICC001  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

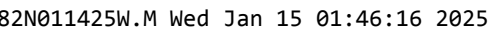
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MSVOA\_N  
ClientSampleId :  
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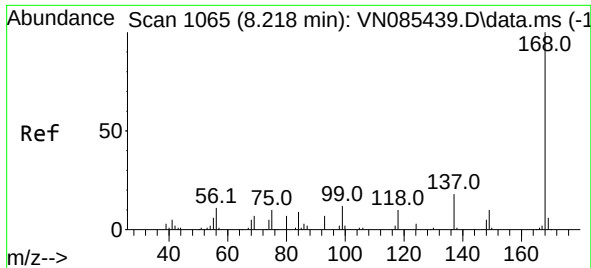
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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

Quant Time: Jan 15 01:46:03 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

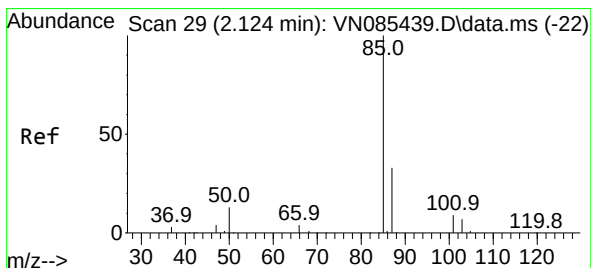
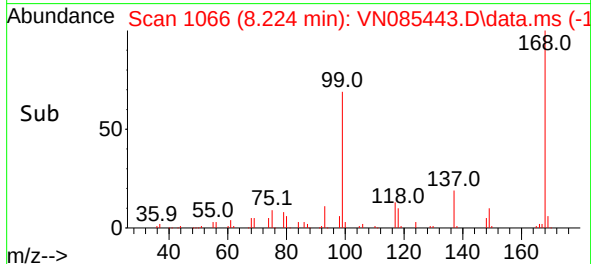
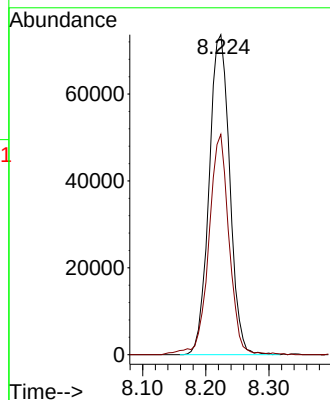
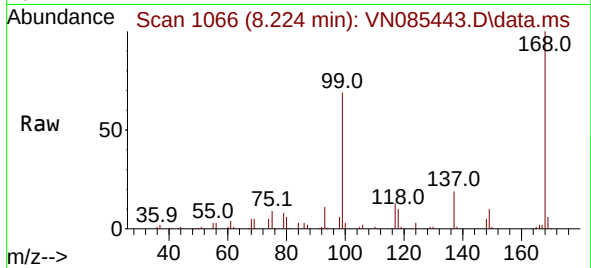




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

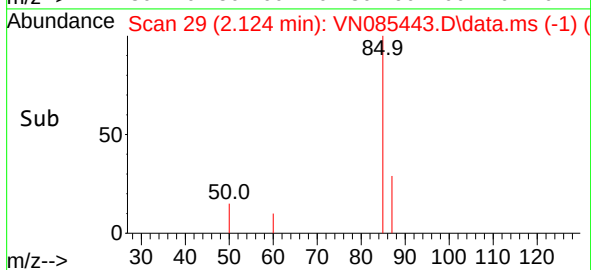
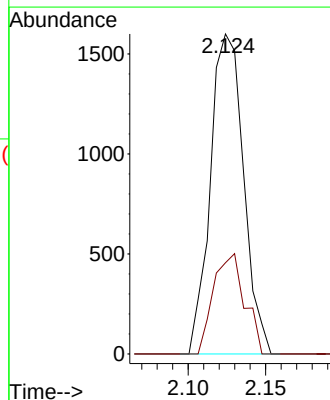
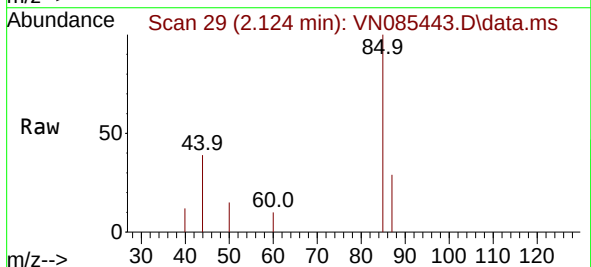
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MSVOA\_N  
ClientSampleId :  
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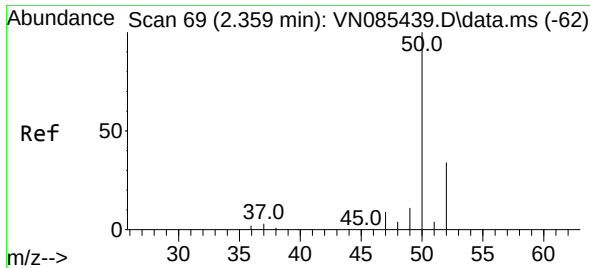
Tgt Ion:168 Resp: 166880  
Ion Ratio Lower Upper  
168 100  
99 68.6 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 1.054 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 85 Resp: 2382  
Ion Ratio Lower Upper  
85 100  
87 28.5 16.7 50.1

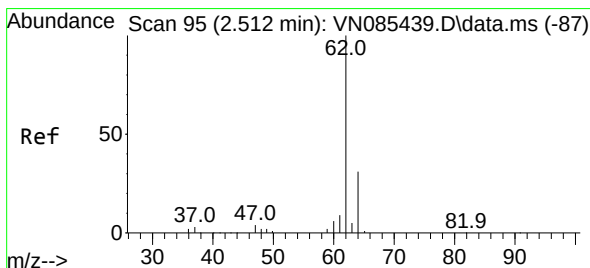
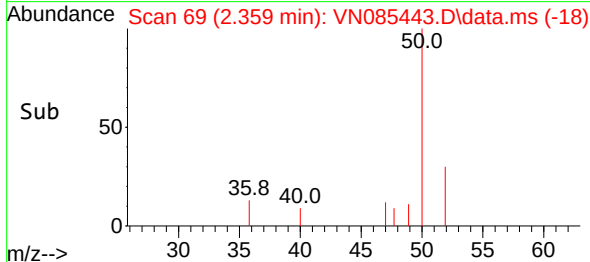
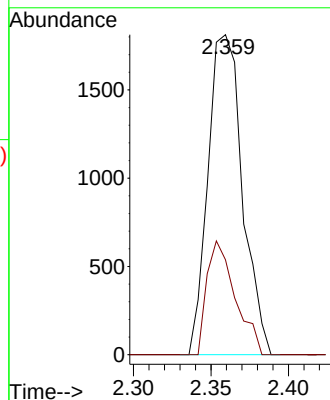
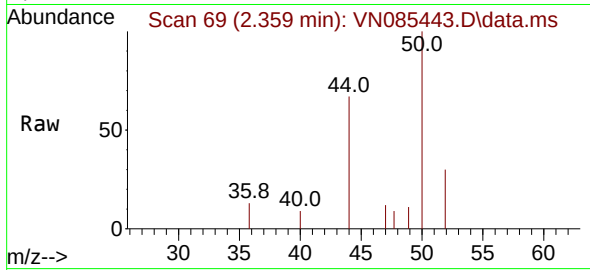




#3  
Chloromethane  
Concen: 1.145 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

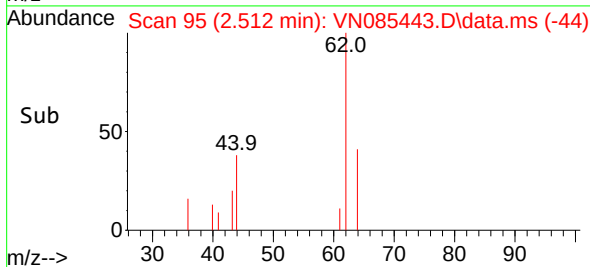
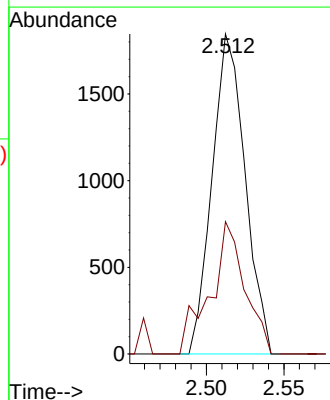
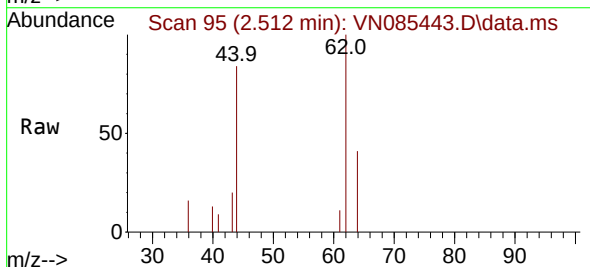
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ClientSampleId :  
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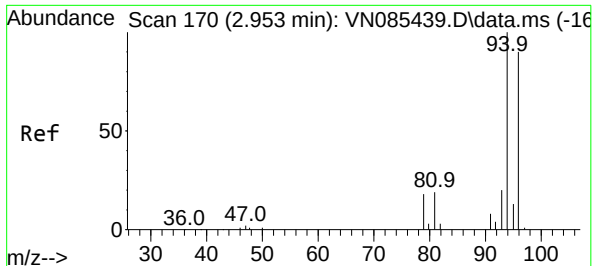
Tgt Ion: 50 Resp: 2801  
Ion Ratio Lower Upper  
50 100  
52 29.7 27.0 40.6



#4  
Vinyl Chloride  
Concen: 1.111 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 62 Resp: 2732  
Ion Ratio Lower Upper  
62 100  
64 41.4 24.8 37.2#

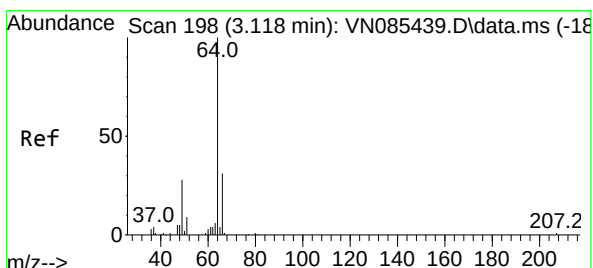
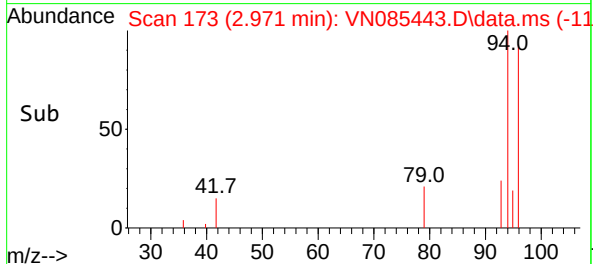
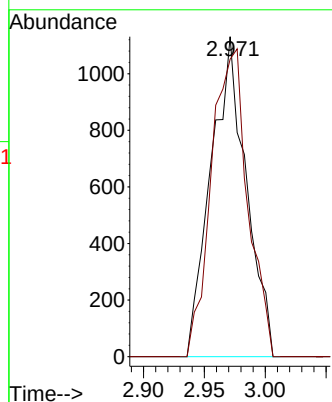
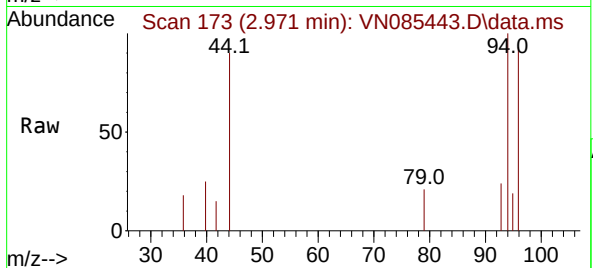




#5  
Bromomethane  
Concen: 1.534 ug/l  
RT: 2.971 min Scan# 11  
Delta R.T. 0.018 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

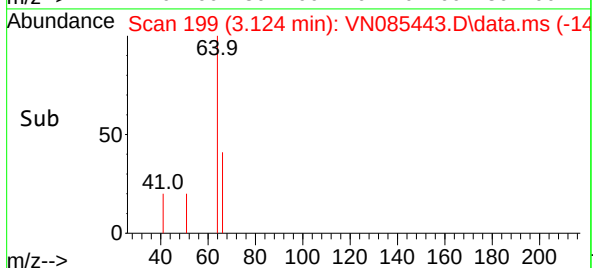
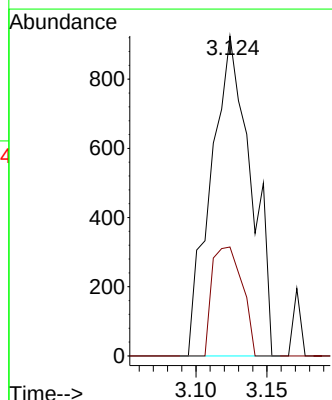
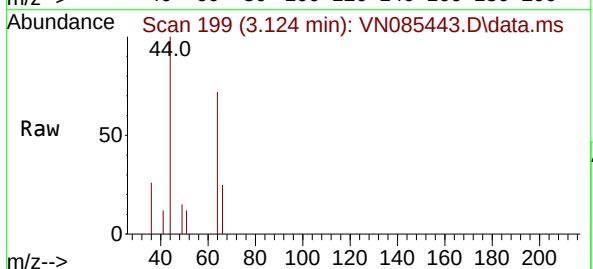
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001

Tgt Ion: 94 Resp: 2279  
Ion Ratio Lower Upper  
94 100  
96 92.9 71.8 107.6

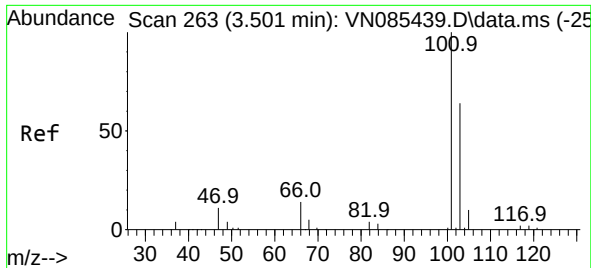


#6  
Chloroethane  
Concen: 1.160 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 64 Resp: 1809  
Ion Ratio Lower Upper  
64 100  
66 34.1 24.6 36.8



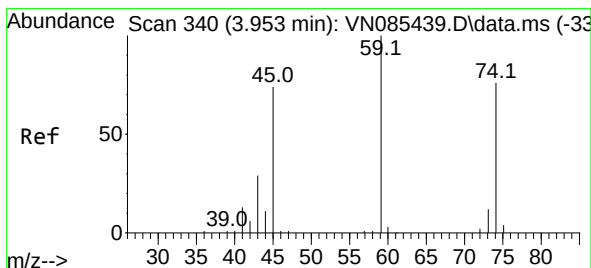
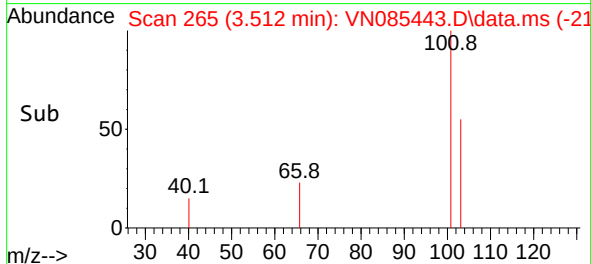
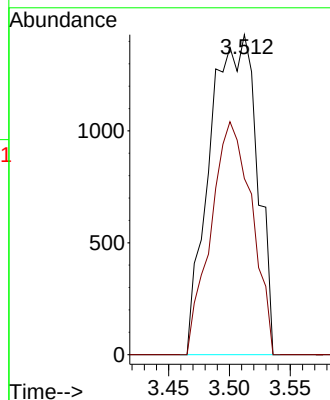
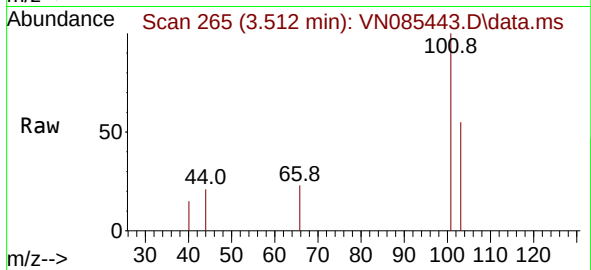




#7  
 Trichlorofluoromethane  
 Concen: 1.082 ug/l  
 RT: 3.512 min Scan# 21  
 Delta R.T. 0.012 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

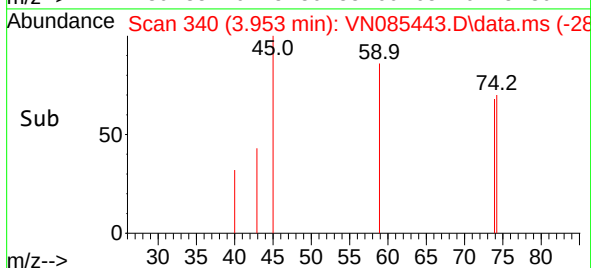
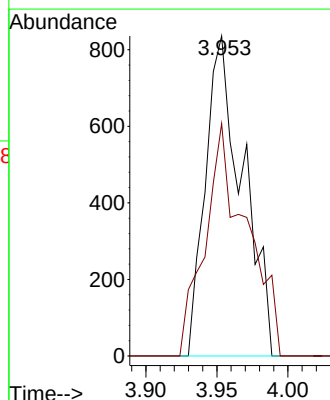
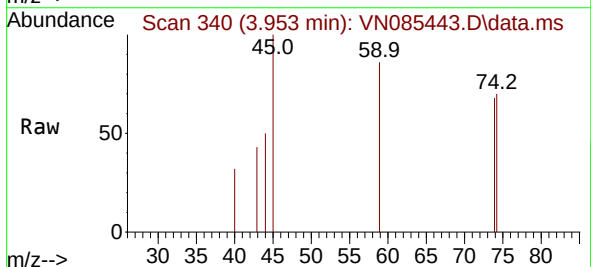
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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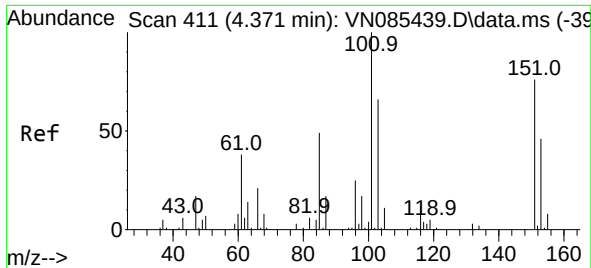
Tgt Ion:101 Resp: 3860  
 Ion Ratio Lower Upper  
 101 100  
 103 55.0 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 1.238 ug/l  
 RT: 3.953 min Scan# 340  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion: 74 Resp: 1526  
 Ion Ratio Lower Upper  
 74 100  
 45 80.9 49.7 149.1

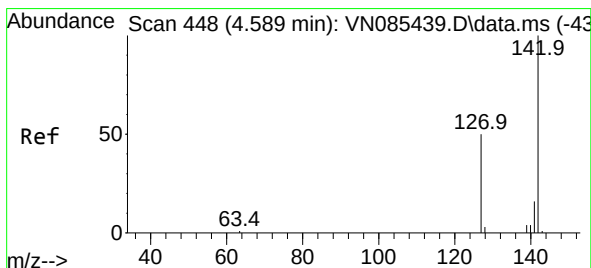
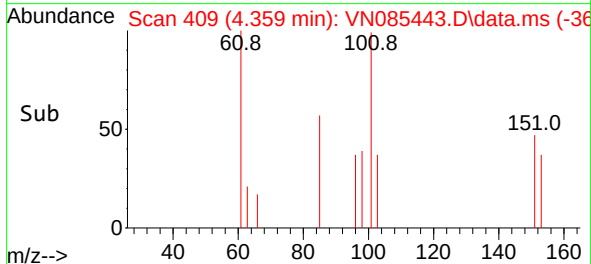
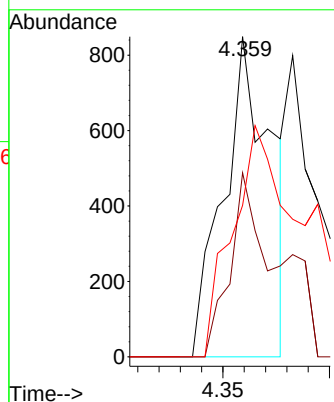
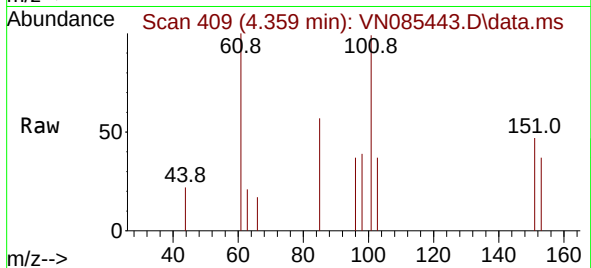




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.651 ug/l  
RT: 4.359 min Scan# 409  
Delta R.T. -0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

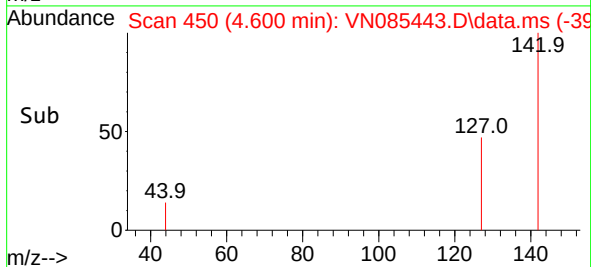
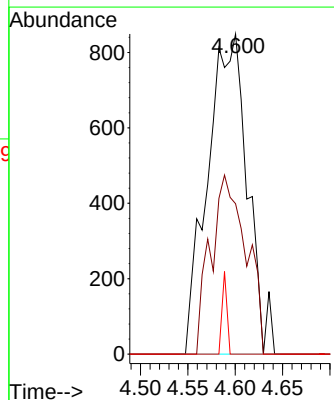
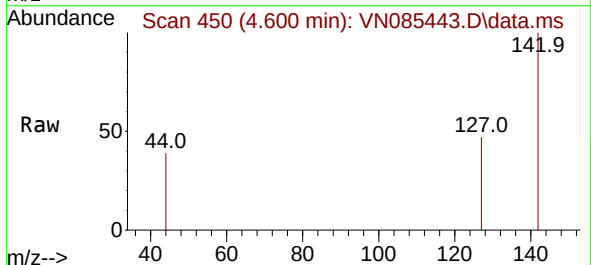
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

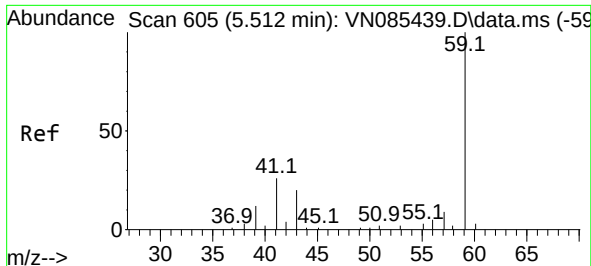
Tgt Ion:101 Resp: 1308  
Ion Ratio Lower Upper  
101 100  
85 58.3 37.8 56.8#  
151 109.4 58.8 88.2#



#10  
Methyl Iodide  
Concen: 1.077 ug/l  
RT: 4.600 min Scan# 450  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:142 Resp: 2478  
Ion Ratio Lower Upper  
142 100  
127 47.0 40.3 60.5  
141 0.0 12.8 19.2#

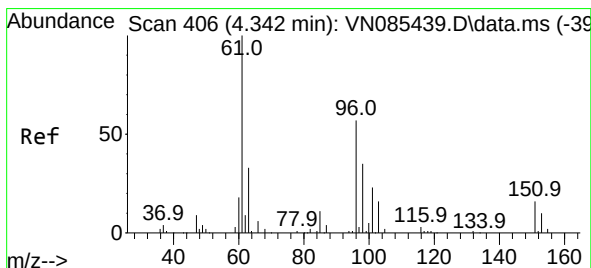
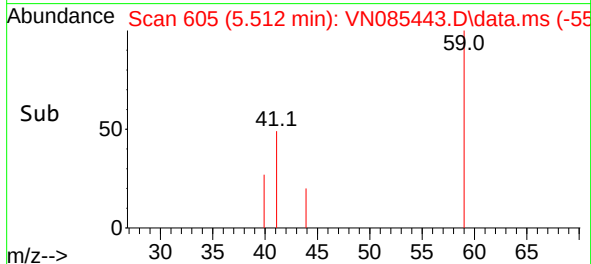
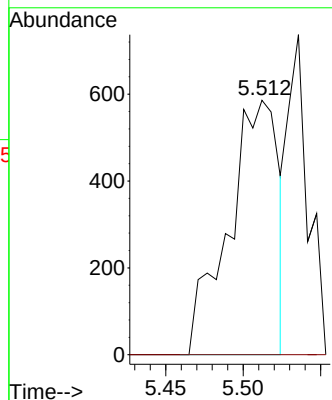
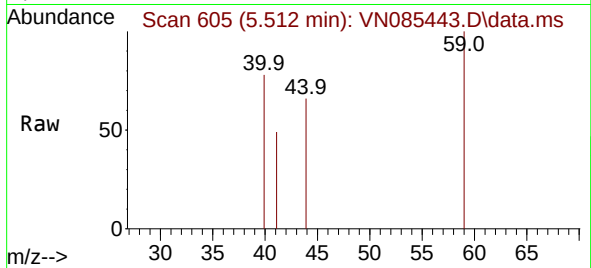




#11  
Tert butyl alcohol  
Concen: 4.260 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

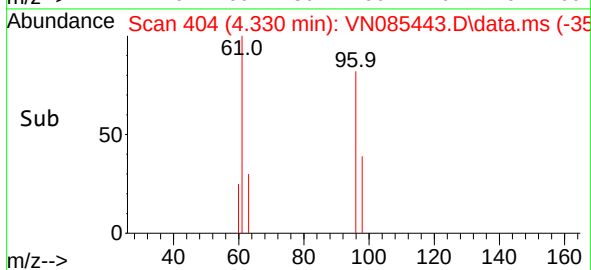
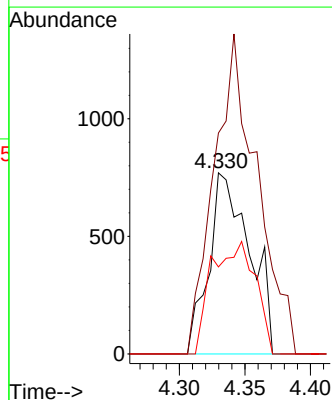
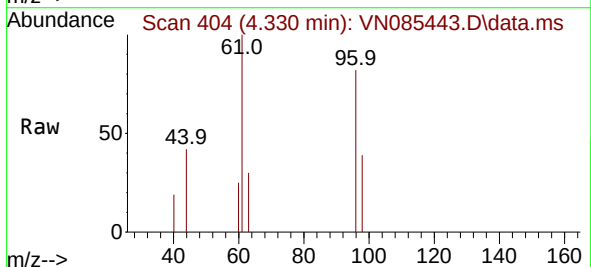
Instrument : MSVOA\_N  
ClientSampleId : VSTDIC001

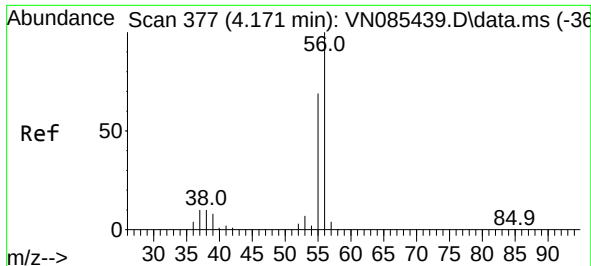
Tgt Ion: 59 Resp: 1314  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.6 13.0#



#12  
1,1-Dichloroethene  
Concen: 0.927 ug/l  
RT: 4.330 min Scan# 404  
Delta R.T. -0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 1660  
Ion Ratio Lower Upper  
96 100  
61 122.1 141.0 211.4#  
98 48.1 49.0 73.6#





#13

Acrolein

Concen: 3.586 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

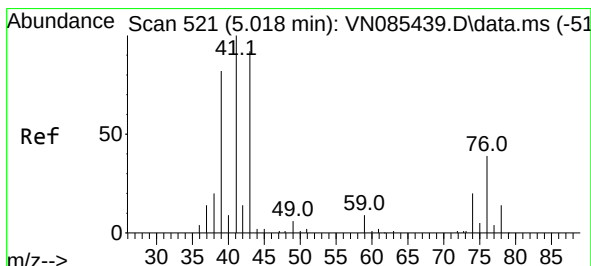
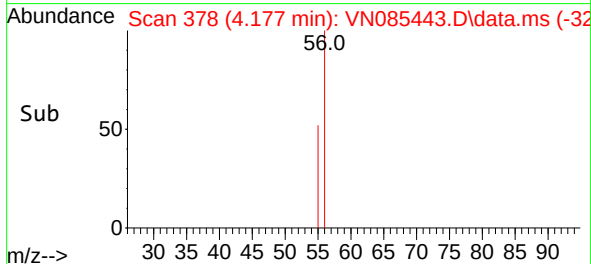
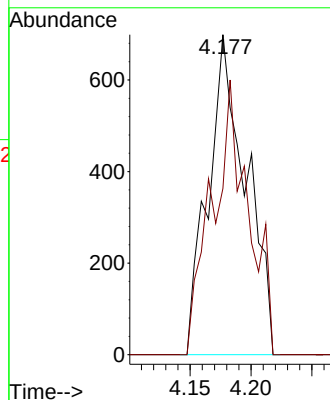
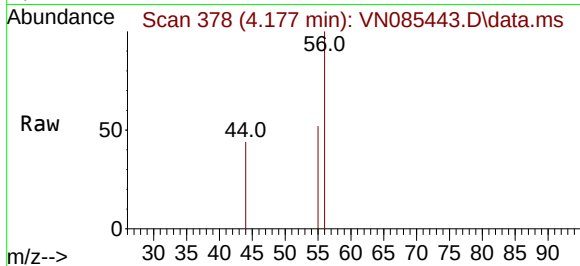
VSTDICC001

Tgt Ion: 56 Resp: 1510

Ion Ratio Lower Upper

56 100

55 81.8 56.3 84.5



#14

Allyl chloride

Concen: 1.094 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

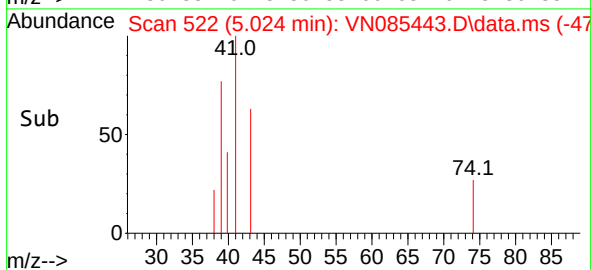
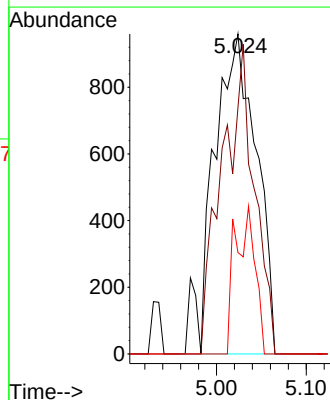
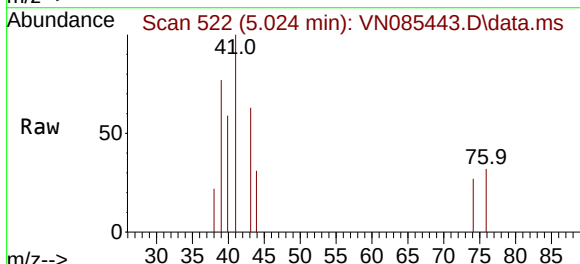
Tgt Ion: 41 Resp: 3179

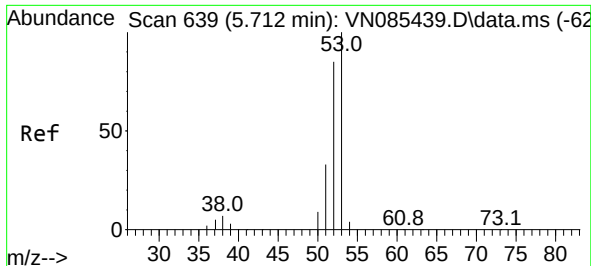
Ion Ratio Lower Upper

41 100

39 73.1 64.4 96.6

76 21.4 30.5 45.7#

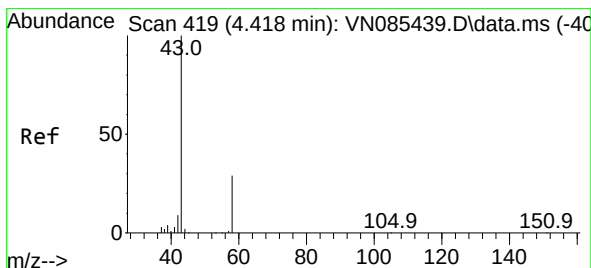
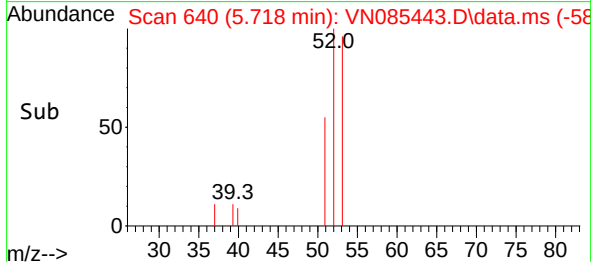
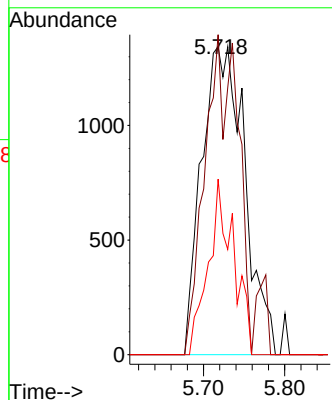
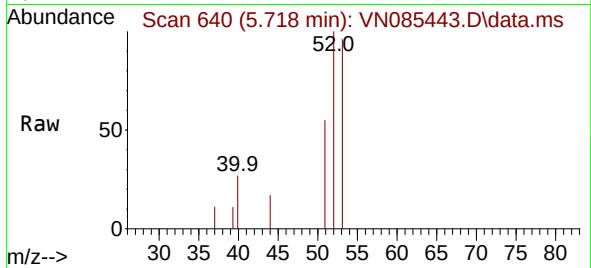




#15  
Acrylonitrile  
Concen: 5.070 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

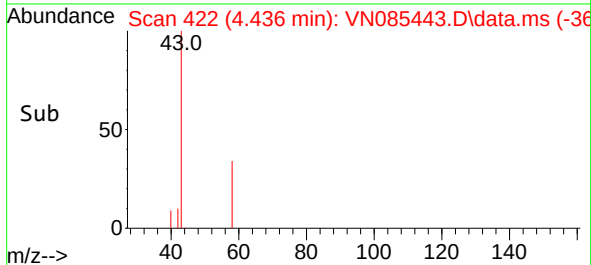
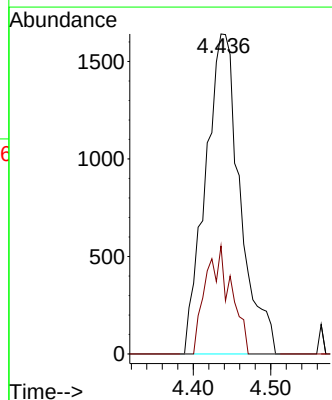
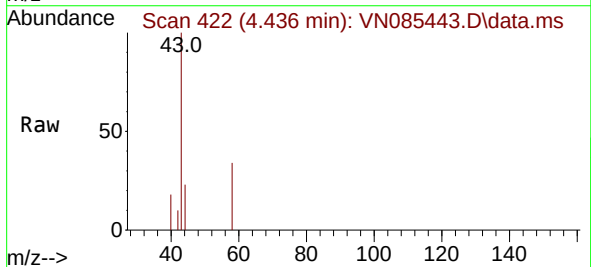
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

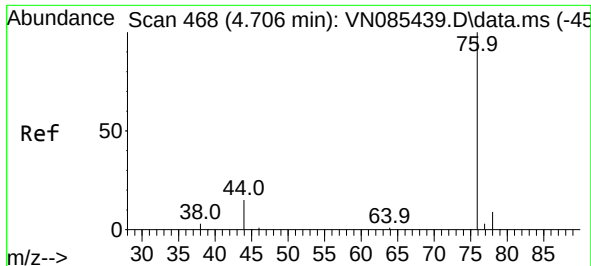
Tgt Ion: 53 Resp: 4967  
Ion Ratio Lower Upper  
53 100  
52 45.1 65.5 98.3#  
51 33.3 29.8 44.8



#16  
Acetone  
Concen: 5.862 ug/l  
RT: 4.436 min Scan# 422  
Delta R.T. 0.018 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 5102  
Ion Ratio Lower Upper  
43 100  
58 33.8 23.8 35.6

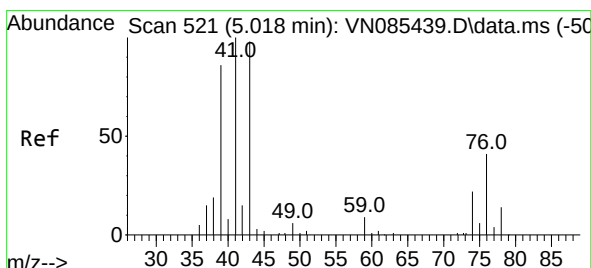
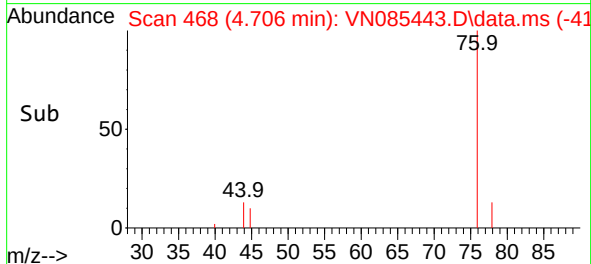
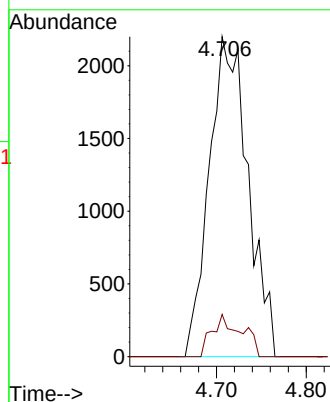
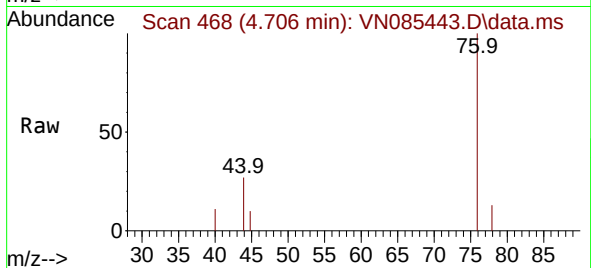




#17  
Carbon Disulfide  
Concen: 1.197 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

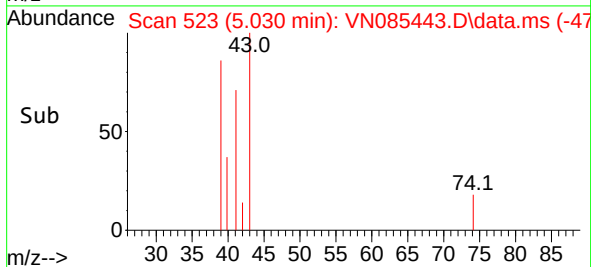
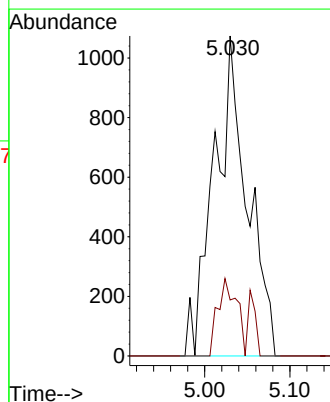
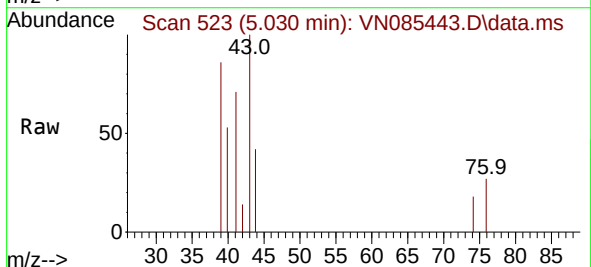
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001

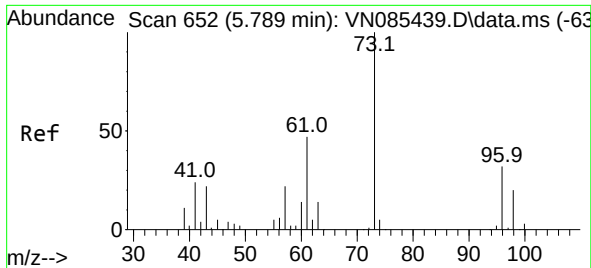
Tgt Ion: 76 Resp: 6601  
Ion Ratio Lower Upper  
76 100  
78 13.2 6.9 10.3#



#18  
Methyl Acetate  
Concen: 1.099 ug/l  
RT: 5.030 min Scan# 523  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2908  
Ion Ratio Lower Upper  
43 100  
74 13.8 18.6 28.0#

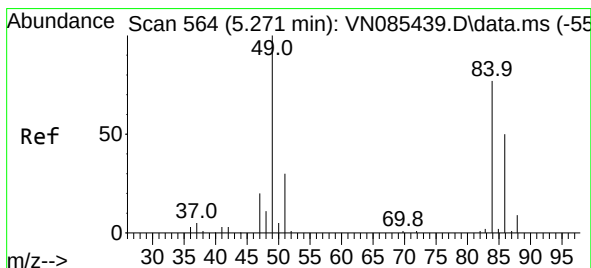
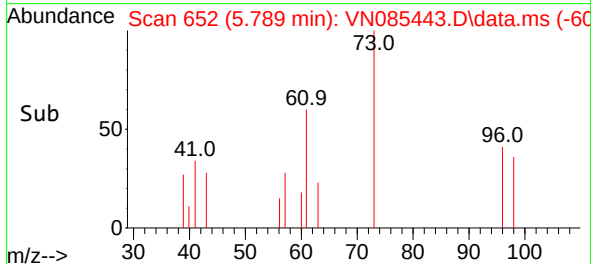
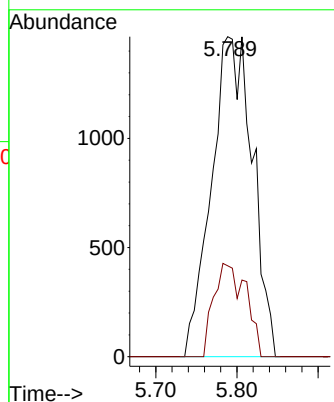
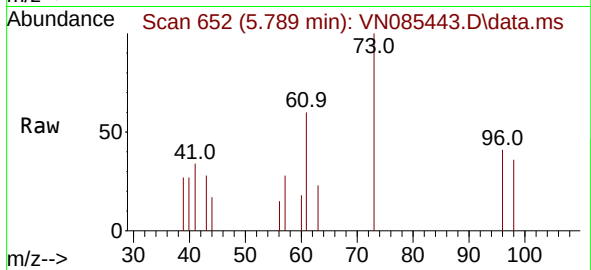




#19  
Methyl tert-butyl Ether  
Concen: 0.887 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

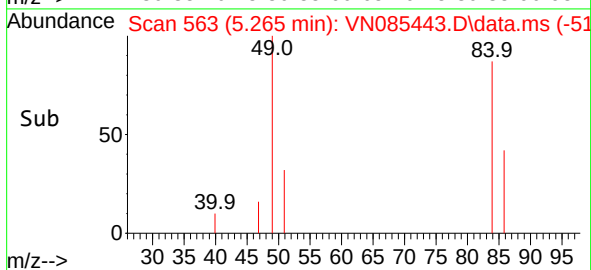
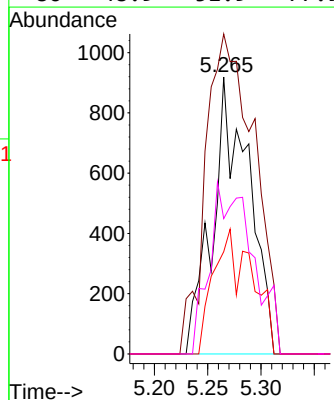
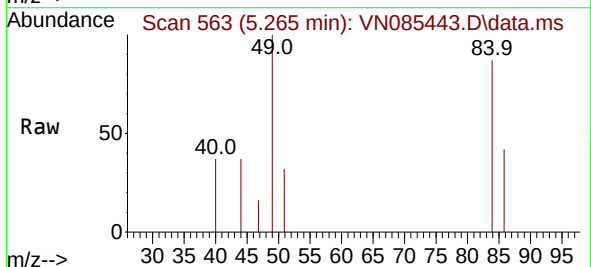
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

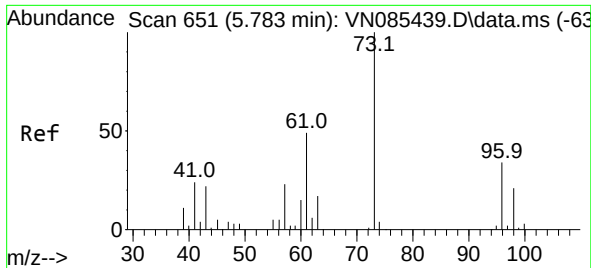
Tgt Ion: 73 Resp: 5156  
Ion Ratio Lower Upper  
73 100  
57 28.4 17.8 26.8#



#20  
Methylene Chloride  
Concen: 1.016 ug/l  
RT: 5.265 min Scan# 563  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 84 Resp: 2190  
Ion Ratio Lower Upper  
84 100  
49 115.6 104.1 156.1  
51 36.9 31.0 46.4  
86 48.9 51.9 77.9#

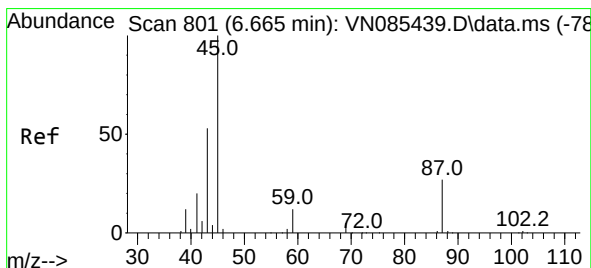
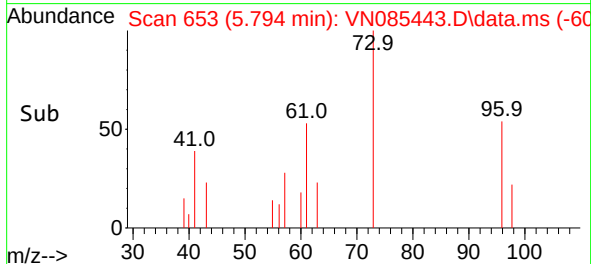
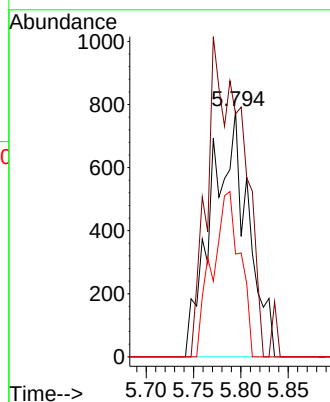
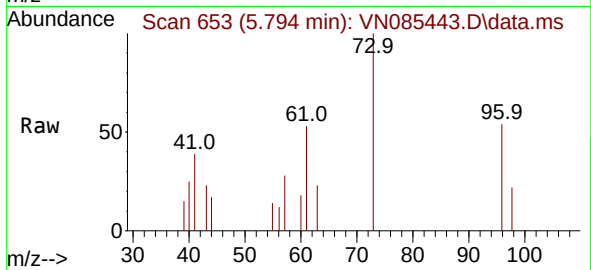




#21  
trans-1,2-Dichloroethene  
Concen: 1.102 ug/l  
RT: 5.794 min Scan# 610  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

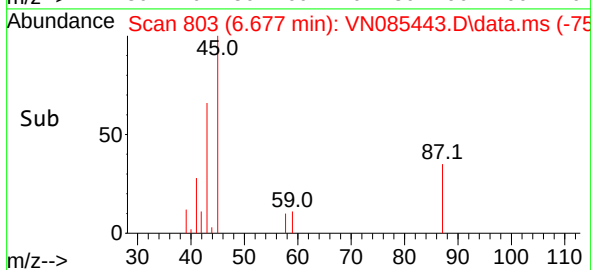
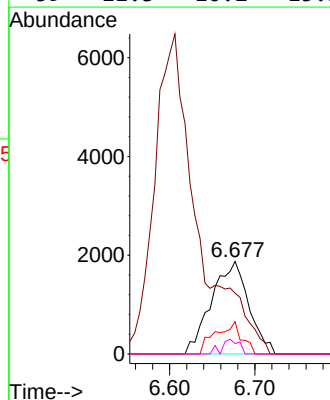
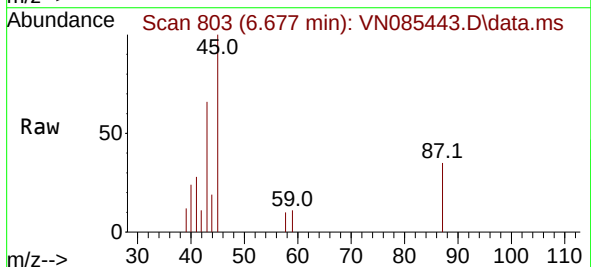
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion: 96 Resp: 2110  
Ion Ratio Lower Upper  
96 100  
61 98.7 115.7 173.5#  
98 41.8 49.8 74.8#

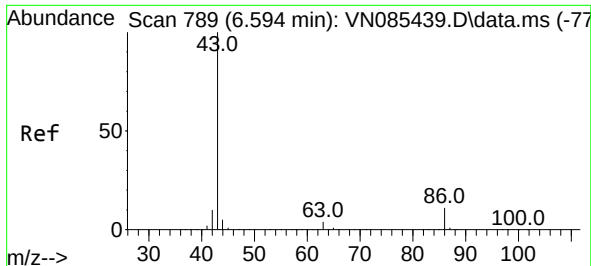


#22  
Diisopropyl ether  
Concen: 0.882 ug/l  
RT: 6.677 min Scan# 803  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 45 Resp: 5691  
Ion Ratio Lower Upper  
45 100  
43 65.9 45.0 67.6  
87 35.0 21.8 32.8#  
59 11.3 10.2 15.2



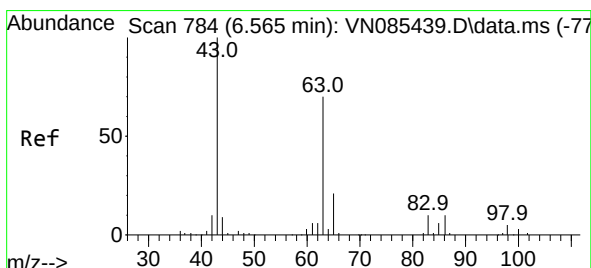
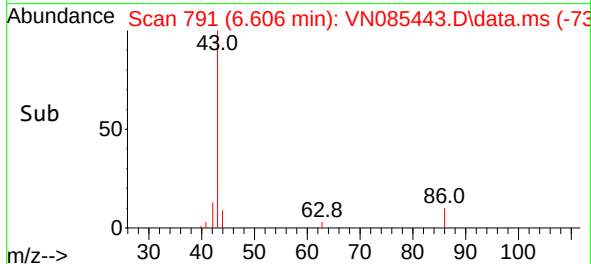
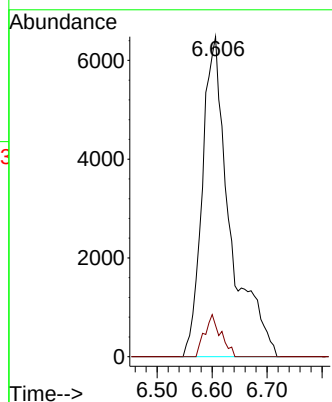
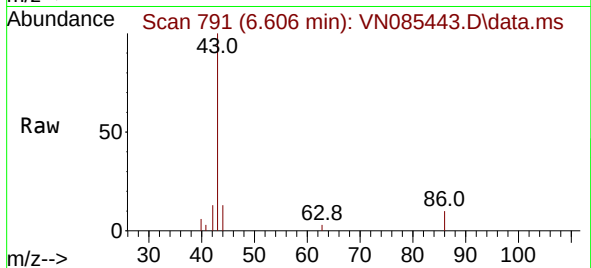




#23  
 Vinyl Acetate  
 Concen: 4.988 ug/l  
 RT: 6.606 min Scan# 791  
 Delta R.T. 0.012 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

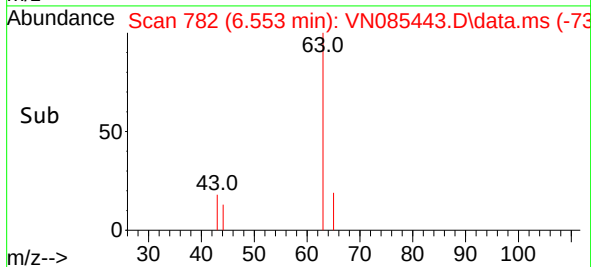
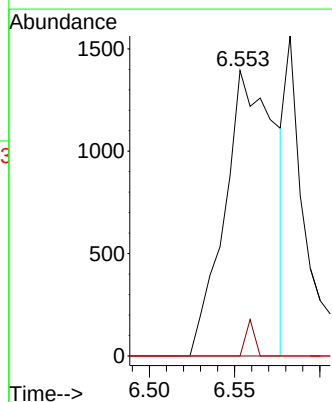
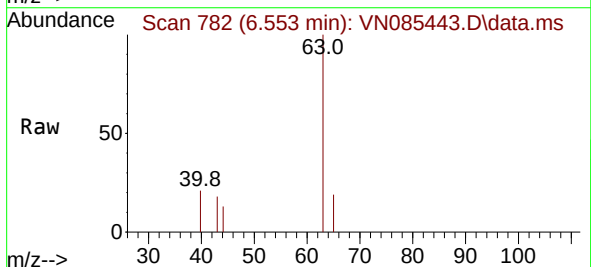
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

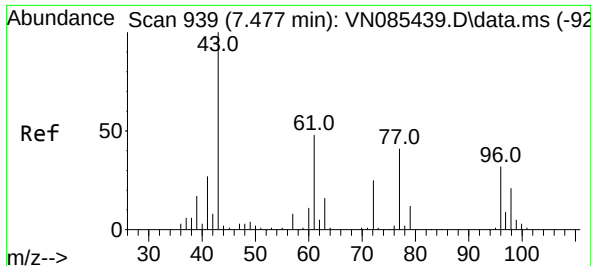
Tgt Ion: 43 Resp: 22593  
 Ion Ratio Lower Upper  
 43 100  
 86 9.8 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 0.730 ug/l  
 RT: 6.553 min Scan# 782  
 Delta R.T. -0.012 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 2873  
 Ion Ratio Lower Upper  
 63 100  
 98 0.0 3.3 9.8#  
 100 0.0 2.0 6.0#

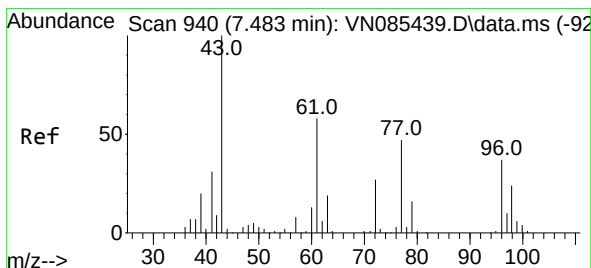
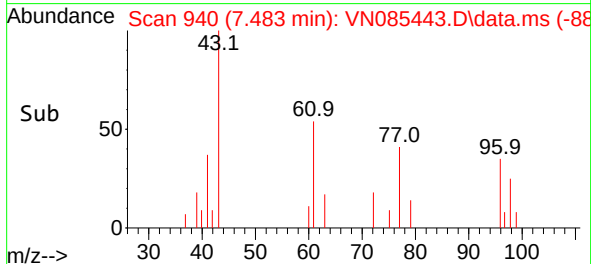
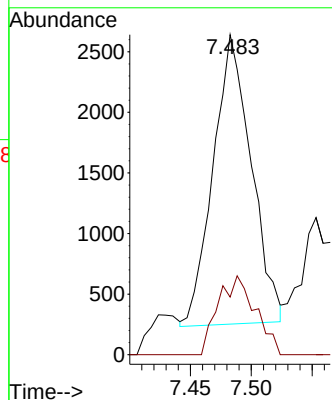
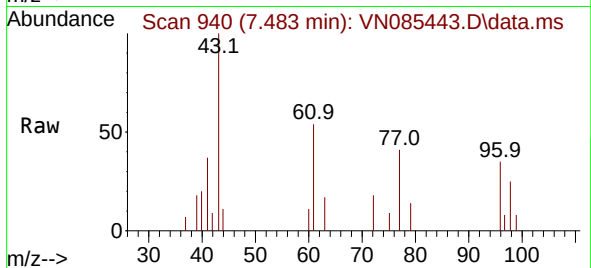




#25  
2-Butanone  
Concen: 4.062 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

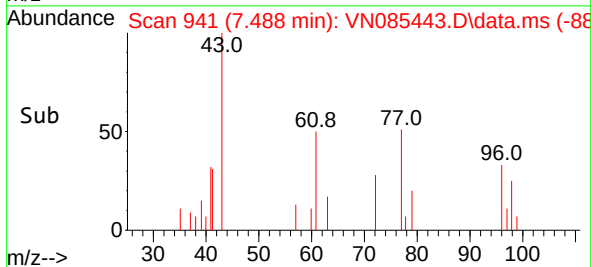
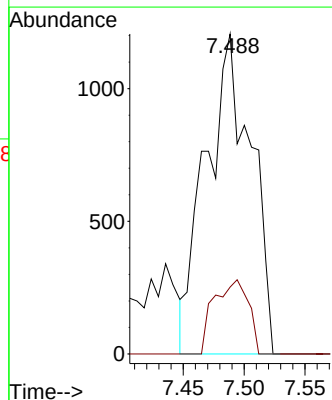
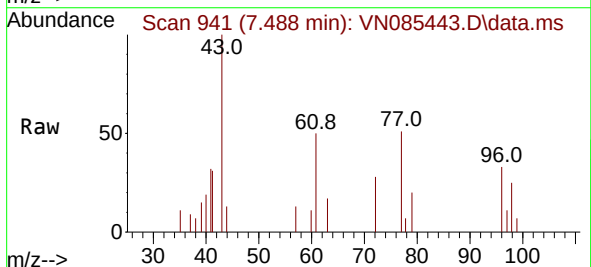
Instrument :  
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ClientSampleId :  
VSTDIC001

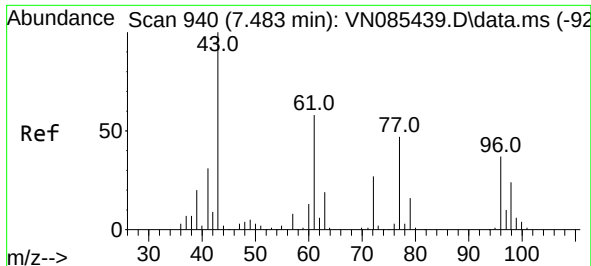
Tgt Ion: 43 Resp: 5203  
Ion Ratio Lower Upper  
43 100  
72 20.1 20.2 30.4#



#26  
2,2-Dichloropropane  
Concen: 0.976 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 77 Resp: 3104  
Ion Ratio Lower Upper  
77 100  
97 17.7 10.7 32.1



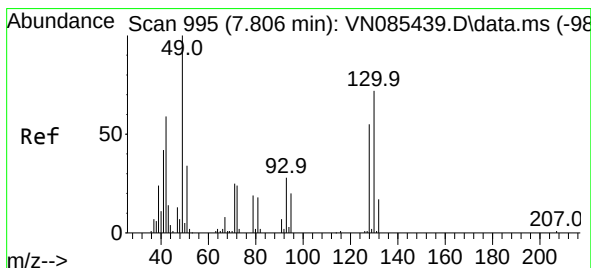
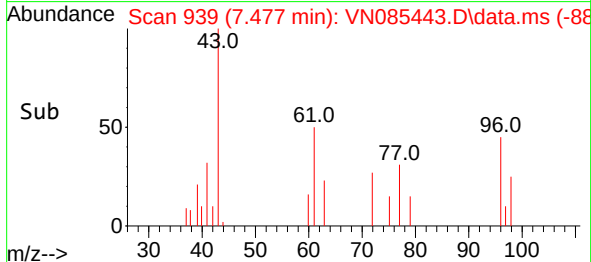
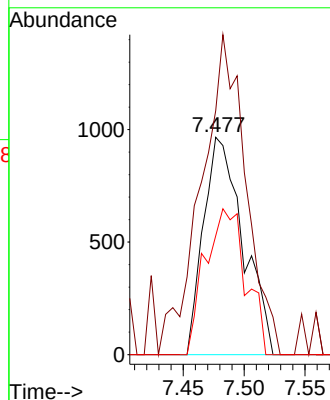
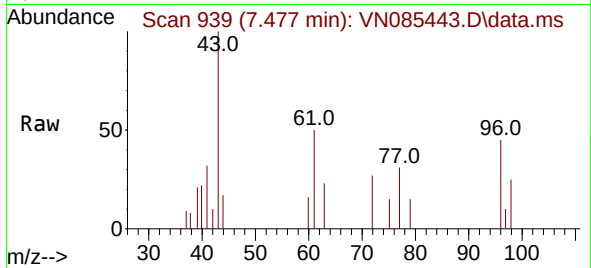


#27  
 cis-1,2-Dichloroethene  
 Concen: 0.969 ug/l  
 RT: 7.477 min Scan# 91  
 Delta R.T. -0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

Tgt Ion: 96 Resp: 2185  

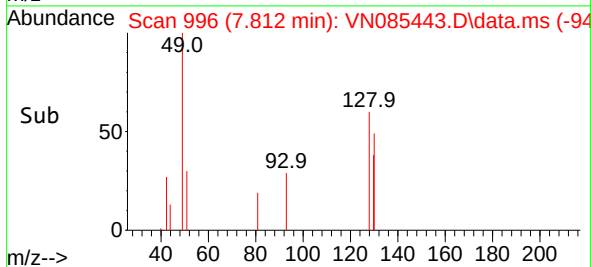
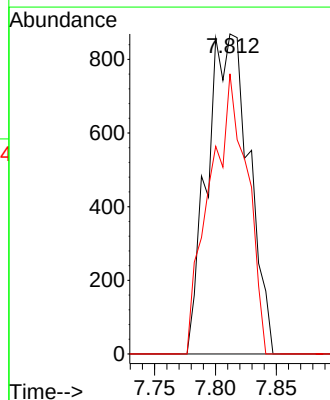
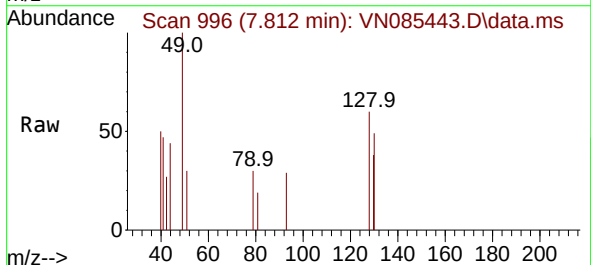
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 166.1 | 0.0   | 311.8 |
| 98  | 68.7  | 0.0   | 126.0 |

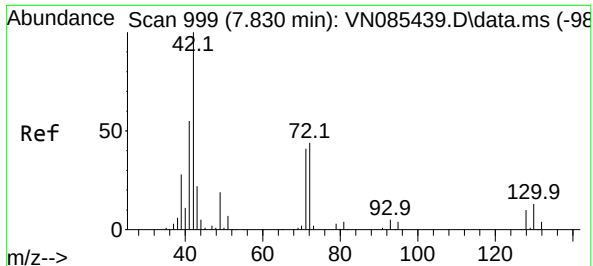


#28  
 Bromochloromethane  
 Concen: 1.138 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion: 49 Resp: 2082  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 129 | 0.0   | 0.0   | 4.4   |
| 130 | 78.0  | 55.0  | 82.4  |





#29

Tetrahydrofuran

Concen: 4.548 ug/l

RT: 7.835 min Scan# 1000

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

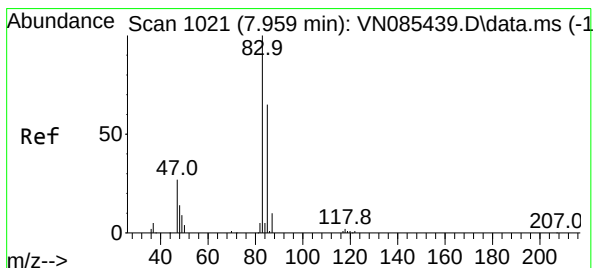
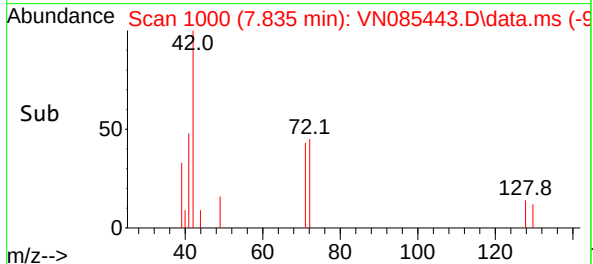
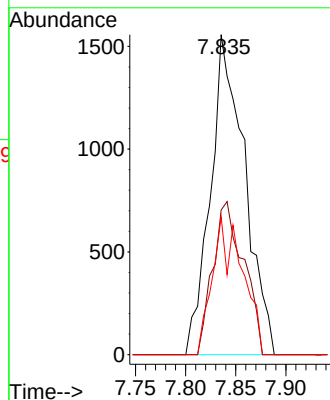
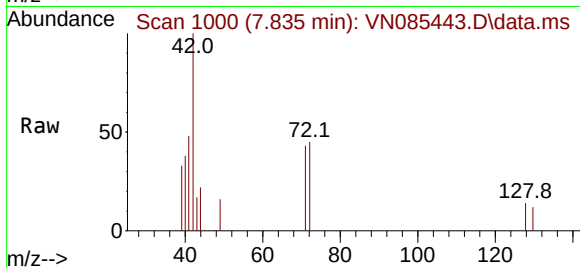
Tgt Ion: 42 Resp: 3693

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

71 37.9 32.5 48.7



#30

Chloroform

Concen: 1.045 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085443.D

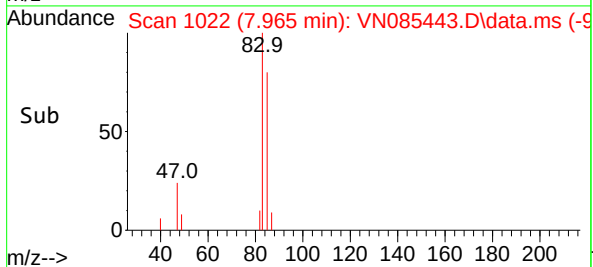
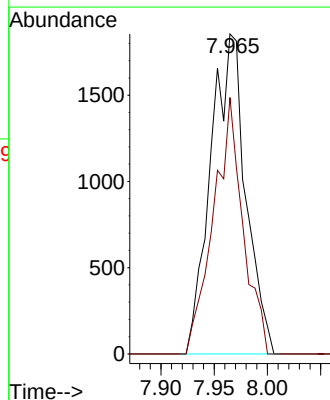
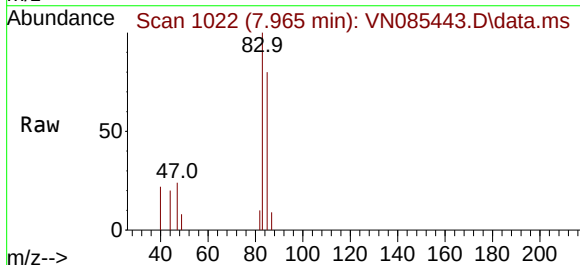
Acq: 14 Jan 2025 17:19

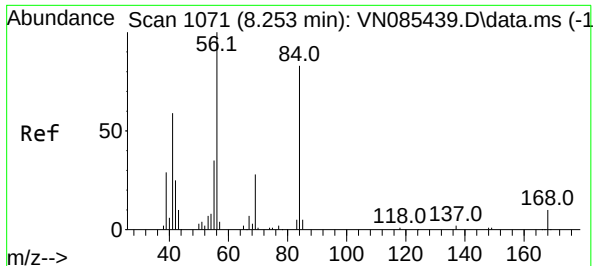
Tgt Ion: 83 Resp: 4250

Ion Ratio Lower Upper

83 100

85 80.2 51.8 77.6#

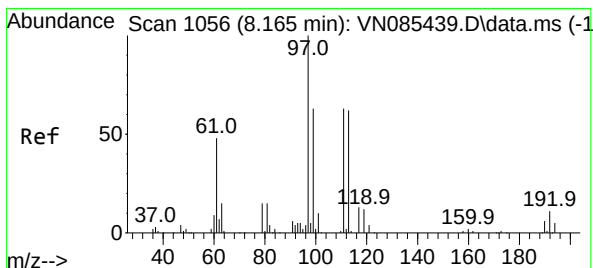
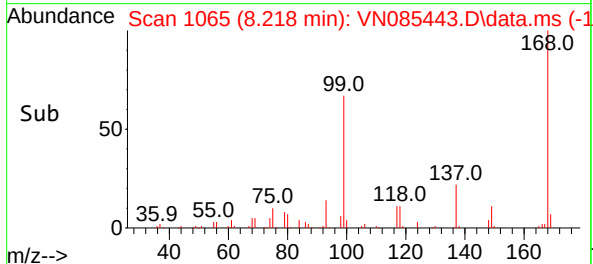
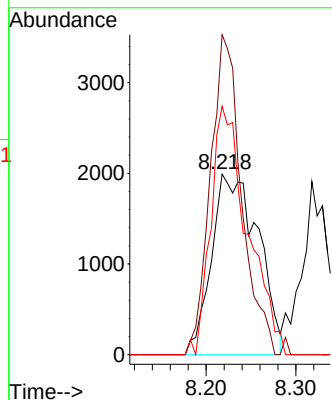
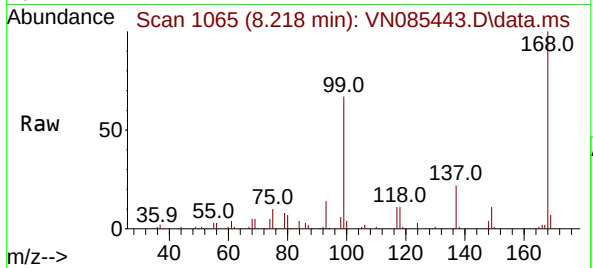




#31  
Cyclohexane  
Concen: 2.092 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.035 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

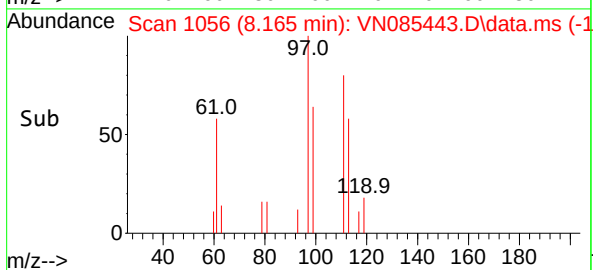
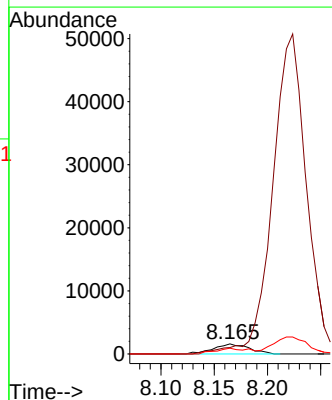
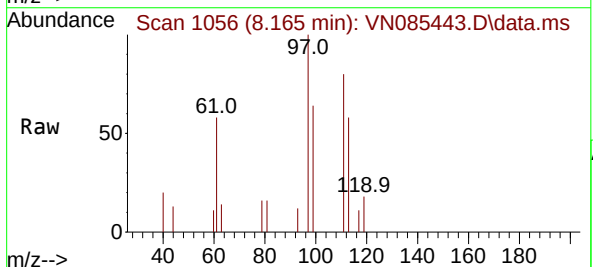
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

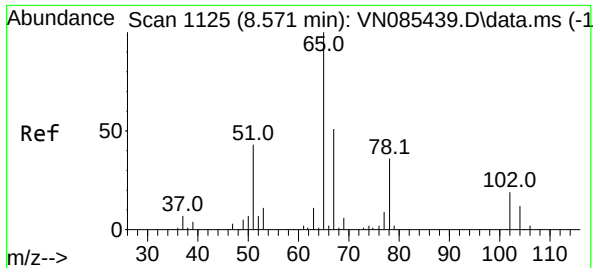
Tgt Ion: 56 Resp: 7152  
Ion Ratio Lower Upper  
56 100  
69 177.3 22.2 33.4#  
84 137.6 66.4 99.6#



#32  
1,1,1-Trichloroethane  
Concen: 1.031 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 3678  
Ion Ratio Lower Upper  
97 100  
99 0.0 49.8 74.6#  
61 52.2 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 1.215 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

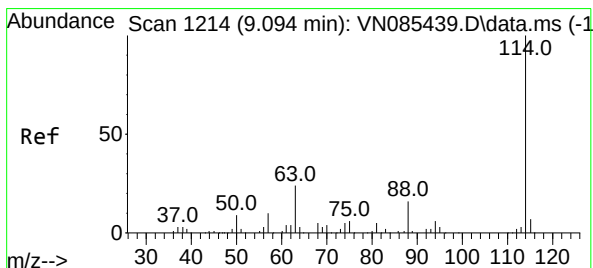
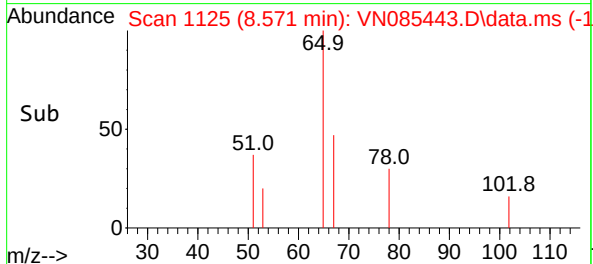
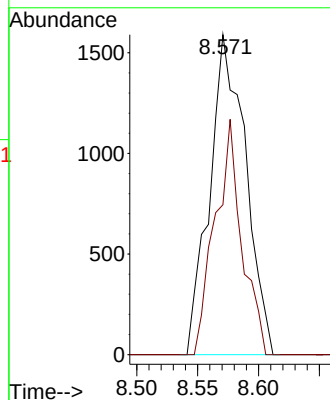
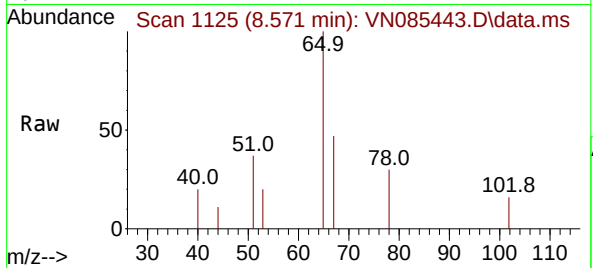
VSTDIC001

Tgt Ion: 65 Resp: 3273

Ion Ratio Lower Upper

65 100

67 54.5 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

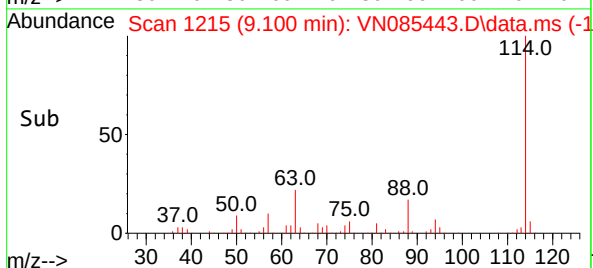
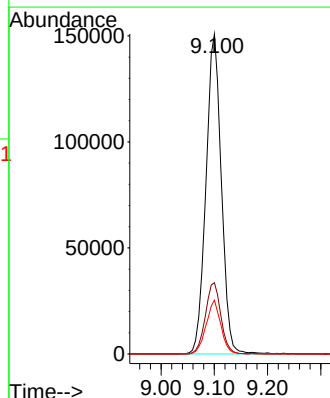
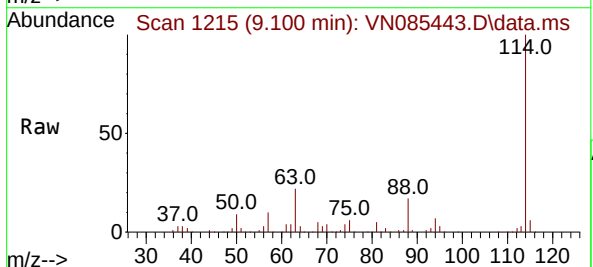
Tgt Ion: 114 Resp: 302938

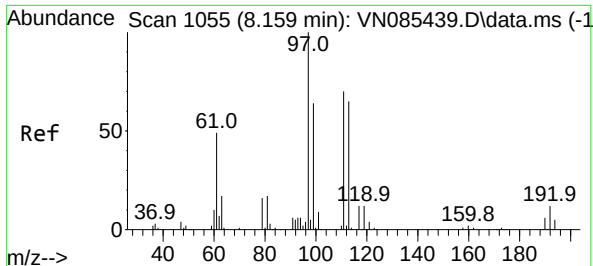
Ion Ratio Lower Upper

114 100

63 22.3 0.0 47.6

88 16.8 0.0 32.6





#35

Dibromofluoromethane

Concen: 1.074 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

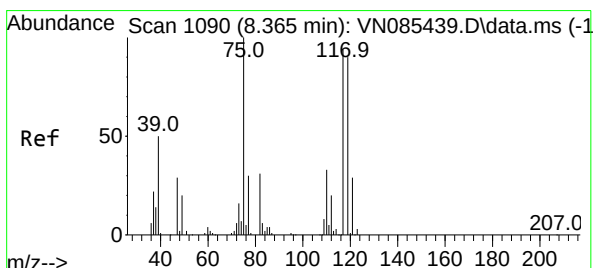
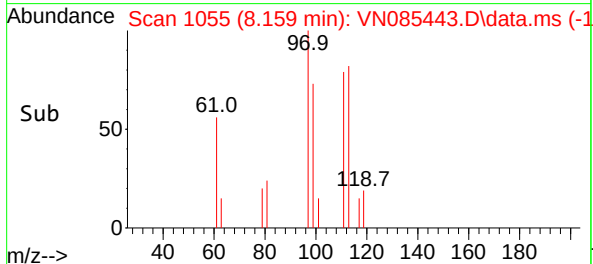
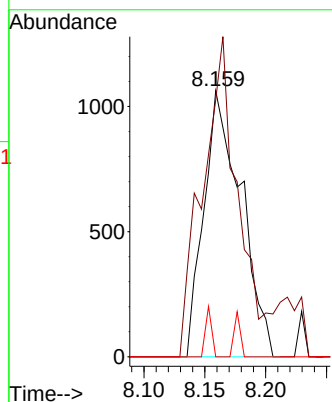
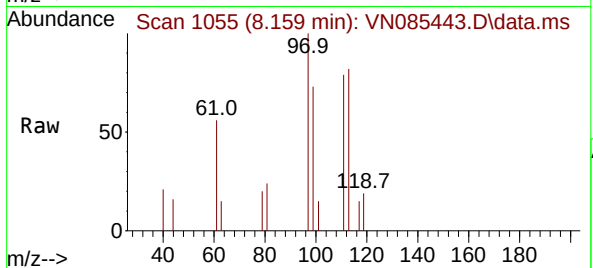
Tgt Ion:113 Resp: 2258

Ion Ratio Lower Upper

113 100

111 116.7 82.7 124.1

192 3.1 14.3 21.5#



#36

1,1-Dichloropropene

Concen: 1.046 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

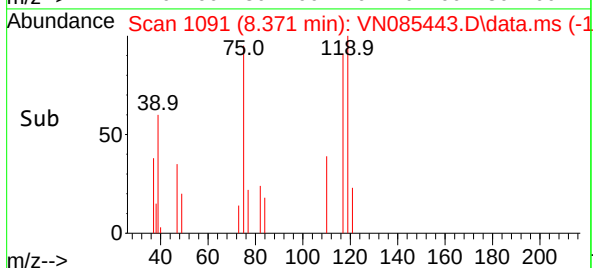
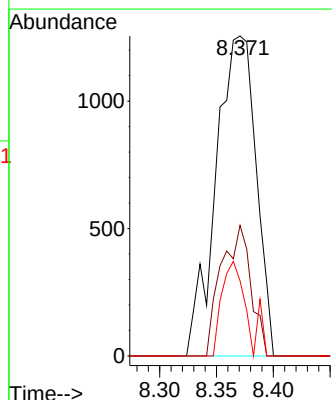
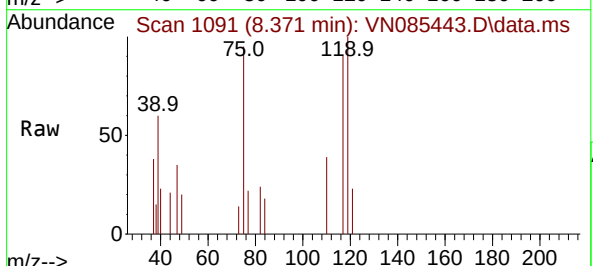
Tgt Ion: 75 Resp: 3084

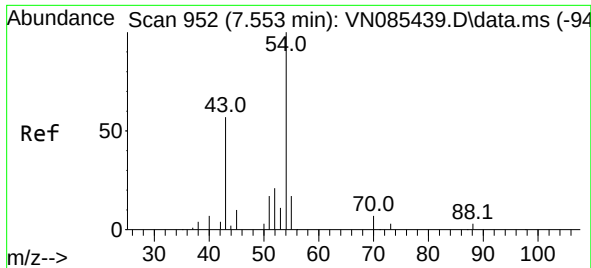
Ion Ratio Lower Upper

75 100

110 30.1 16.5 49.5

77 15.9 24.4 36.6#

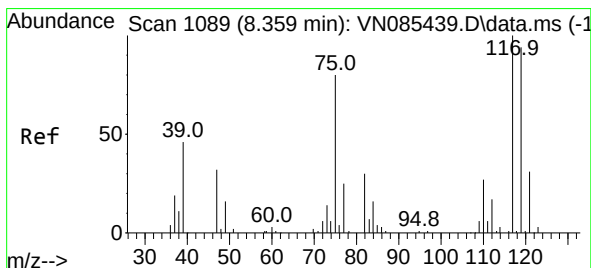
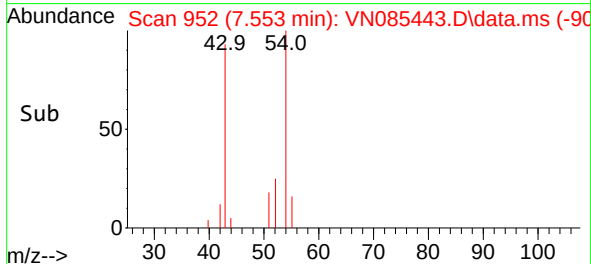
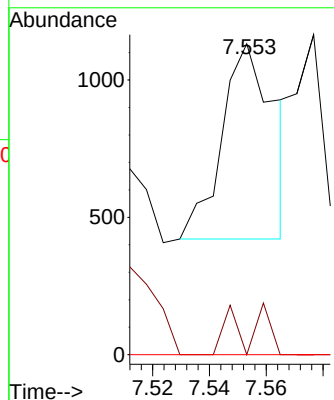
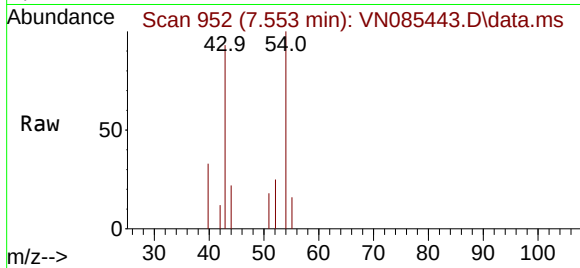




#37  
Ethyl Acetate  
Concen: 0.306 ug/l  
RT: 7.553 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

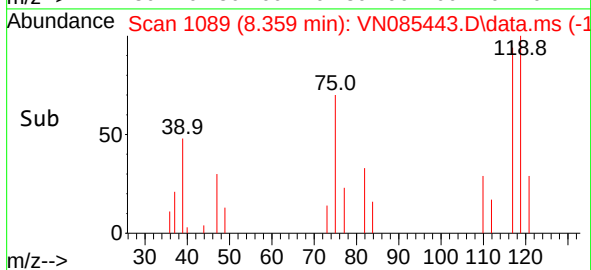
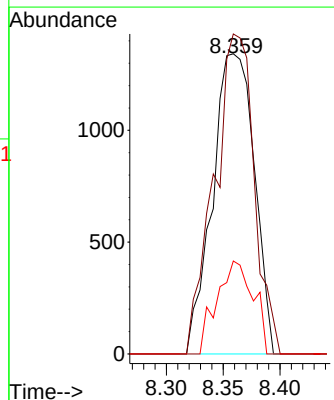
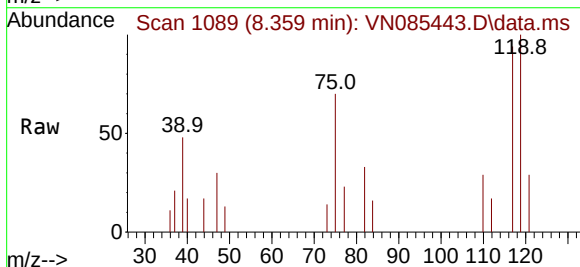
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 911   |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 61 14.3     | 10.9 16.3   |
| 70 0.0      | 7.5 11.3#   |

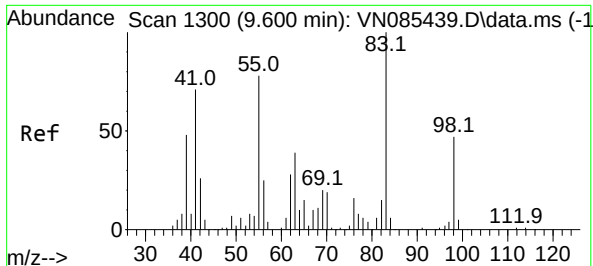


#38  
Carbon Tetrachloride  
Concen: 1.018 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

|             |       |       |       |
|-------------|-------|-------|-------|
| Tgt Ion:117 | Resp: | 3436  |       |
| Ion         | Ratio | Lower | Upper |
| 117         | 100   |       |       |
| 119         | 106.6 | 75.4  | 113.2 |
| 121         | 31.0  | 24.6  | 37.0  |







#39

Methylcyclohexane

Concen: 0.867 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

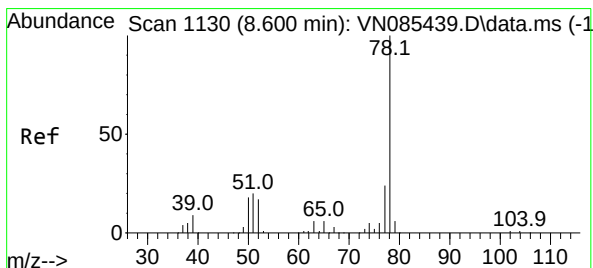
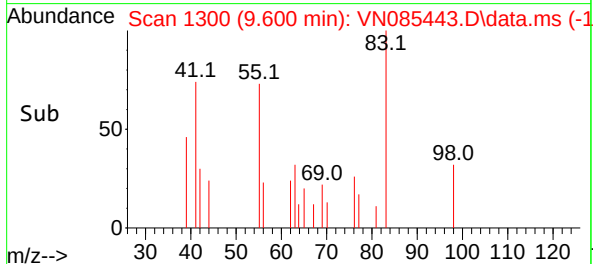
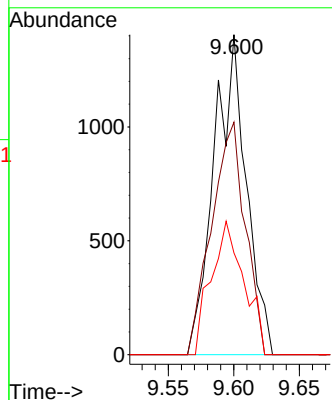
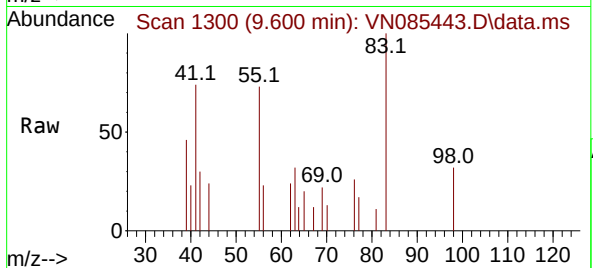
Tgt Ion: 83 Resp: 2403

Ion Ratio Lower Upper

83 100

55 72.7 62.6 94.0

98 31.8 37.7 56.5#



#40

Benzene

Concen: 0.957 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085443.D

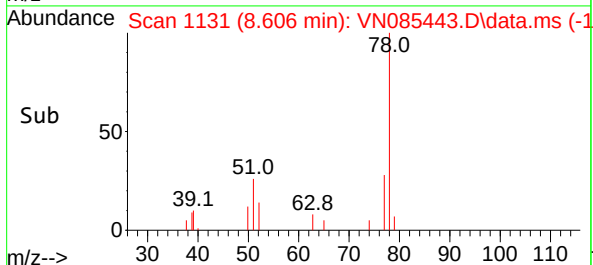
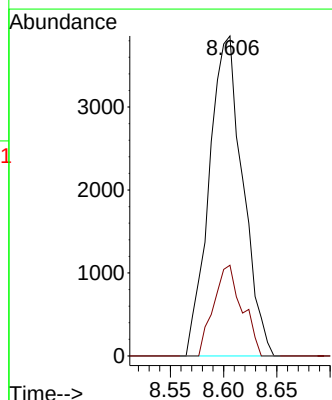
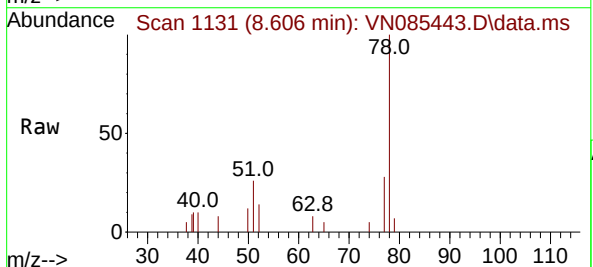
Acq: 14 Jan 2025 17:19

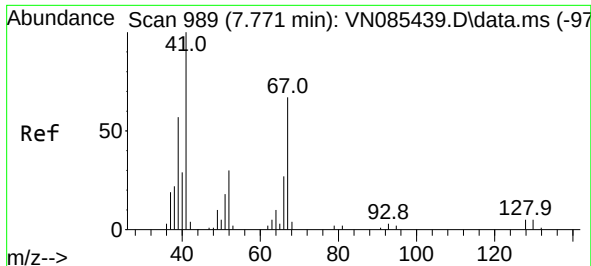
Tgt Ion: 78 Resp: 8480

Ion Ratio Lower Upper

78 100

77 28.3 19.0 28.6

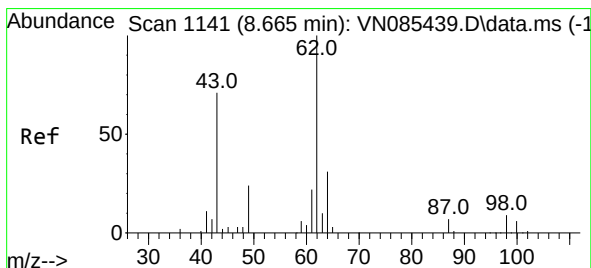
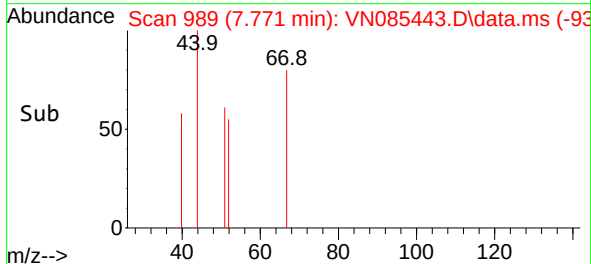
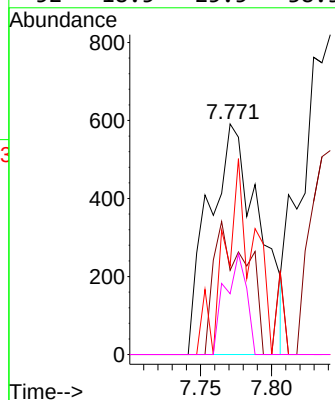
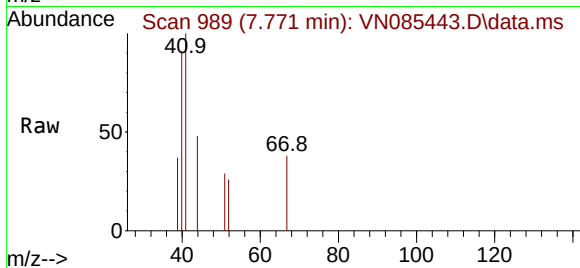




#41  
Methacrylonitrile  
Concen: 0.941 ug/l  
RT: 7.771 min Scan# 989  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

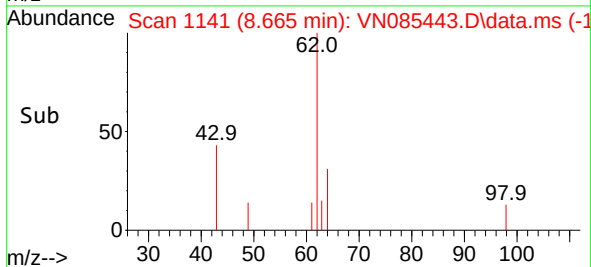
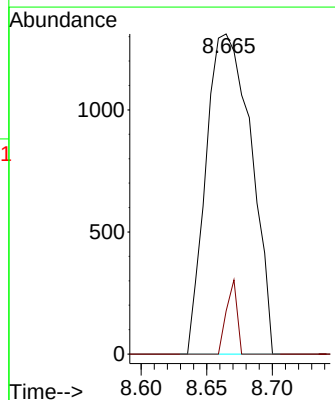
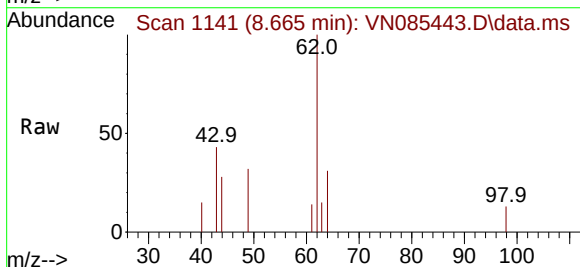
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

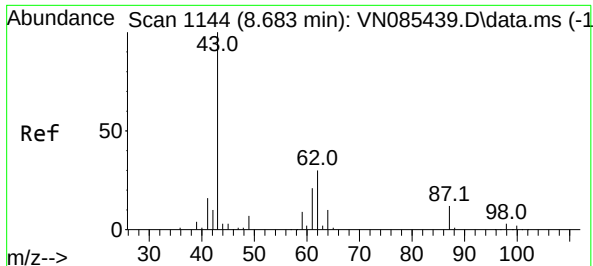
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 1458  |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 37.6     | 46.0 69.0#  |
| 67 53.8     | 57.4 86.2#  |
| 52 18.5     | 25.5 38.3#  |



#42  
1,2-Dichloroethane  
Concen: 0.938 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

|             |             |
|-------------|-------------|
| Tgt Ion: 62 | Resp: 3131  |
| Ion Ratio   | Lower Upper |
| 62 100      |             |
| 98 5.4      | 0.0 17.0    |





#43

Isopropyl Acetate

Concen: 1.007 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

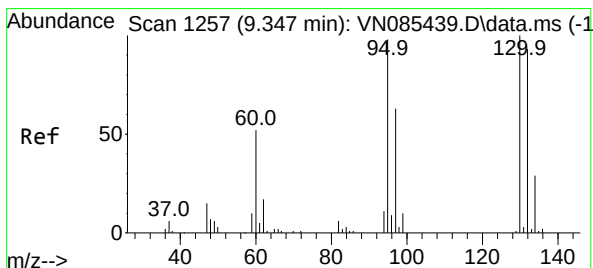
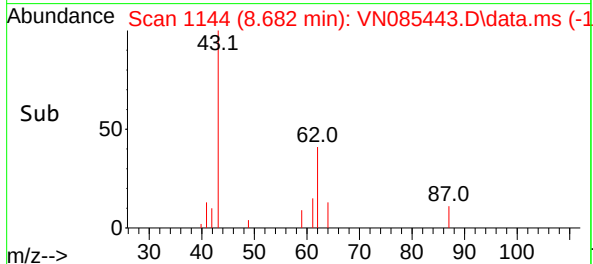
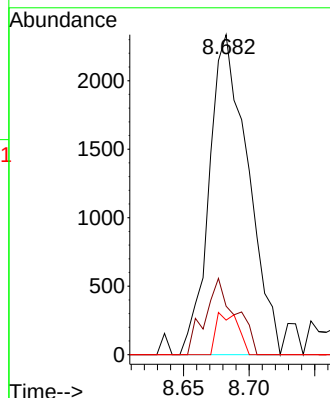
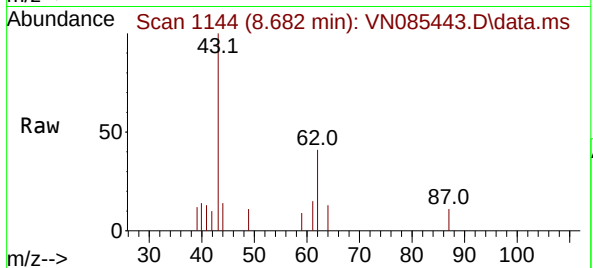
Tgt Ion: 43 Resp: 4803

Ion Ratio Lower Upper

43 100

61 18.9 20.7 31.1#

87 7.3 9.8 14.8#



#44

Trichloroethene

Concen: 1.034 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085443.D

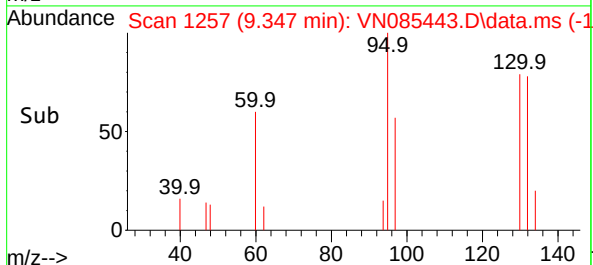
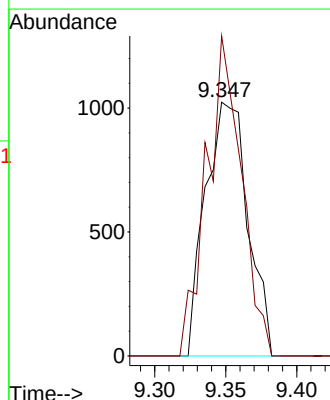
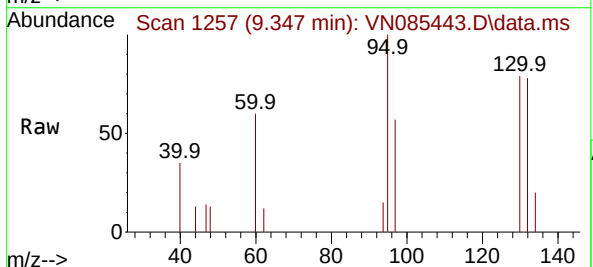
Acq: 14 Jan 2025 17:19

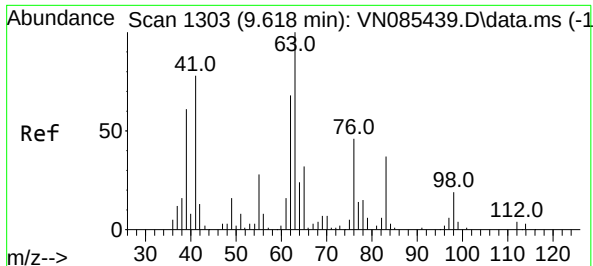
Tgt Ion:130 Resp: 2133

Ion Ratio Lower Upper

130 100

95 126.1 0.0 195.8





#45

1,2-Dichloropropane

Concen: 0.992 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

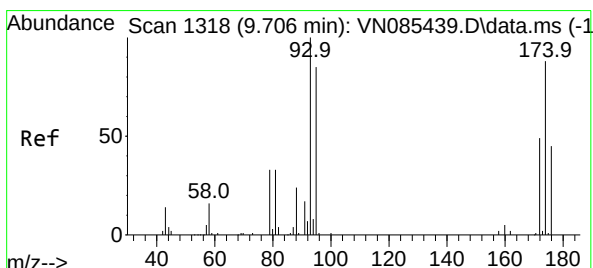
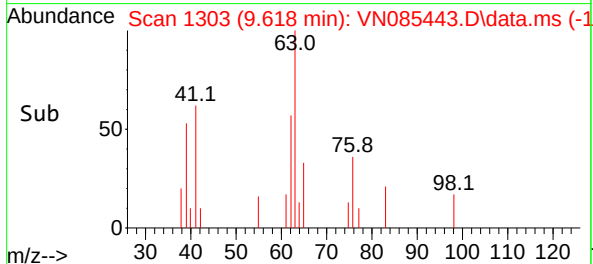
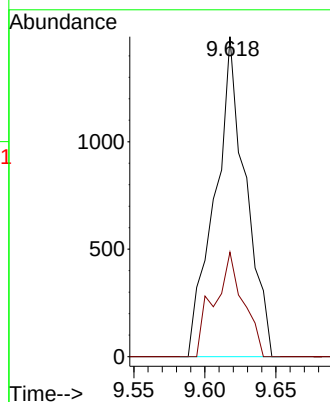
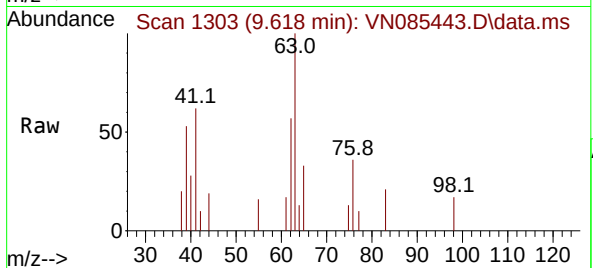
VSTDIC001

Tgt Ion: 63 Resp: 2246

Ion Ratio Lower Upper

63 100

65 32.6 25.6 38.4



#46

Dibromomethane

Concen: 1.083 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

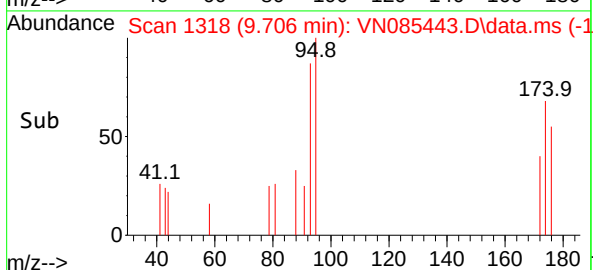
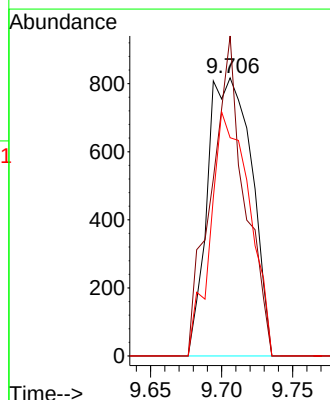
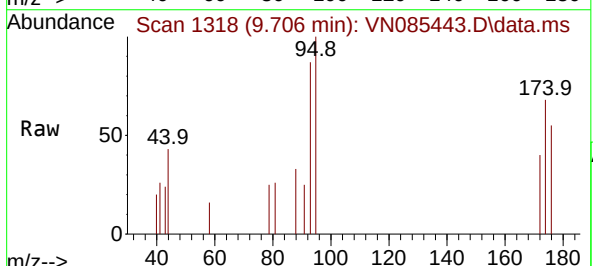
Tgt Ion: 93 Resp: 1769

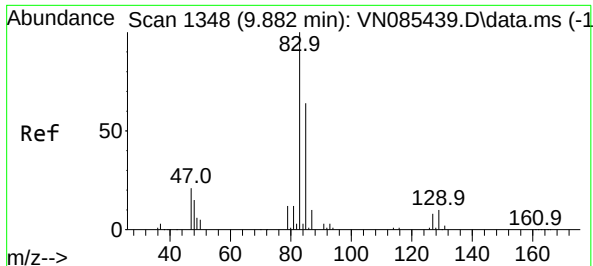
Ion Ratio Lower Upper

93 100

95 86.5 64.7 97.1

174 77.4 69.0 103.4





#47

Bromodichloromethane

Concen: 0.882 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

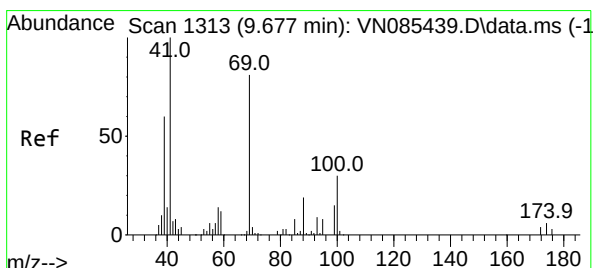
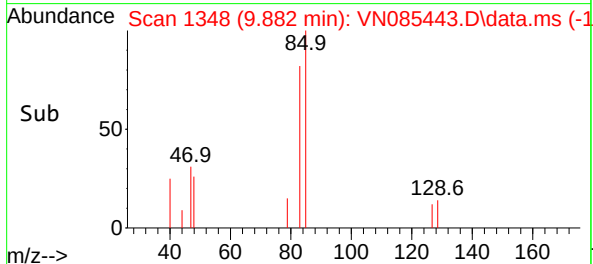
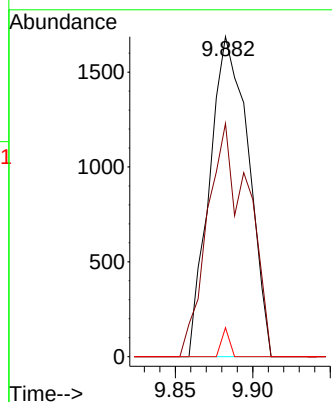
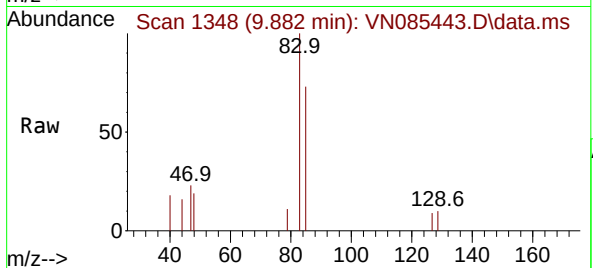
Tgt Ion: 83 Resp: 2935

Ion Ratio Lower Upper

83 100

85 72.9 51.2 76.8

127 9.0 6.5 9.7



#48

Methyl methacrylate

Concen: 0.878 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

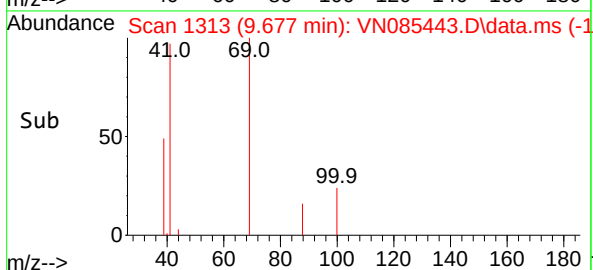
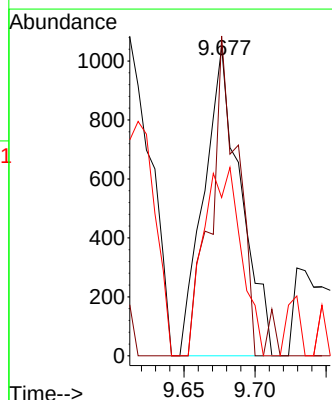
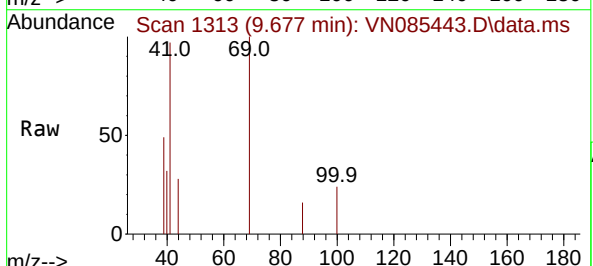
Tgt Ion: 41 Resp: 1886

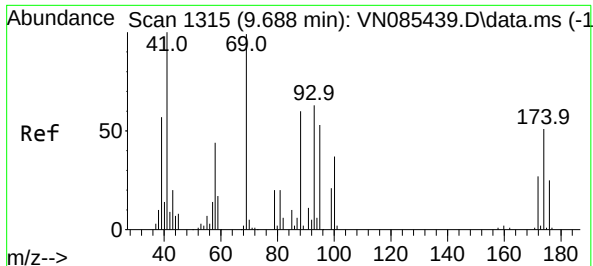
Ion Ratio Lower Upper

41 100

69 76.2 64.7 97.1

39 62.8 49.0 73.6





#49

1,4-Dioxane

Concen: 18.616 ug/l

RT: 9.688 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

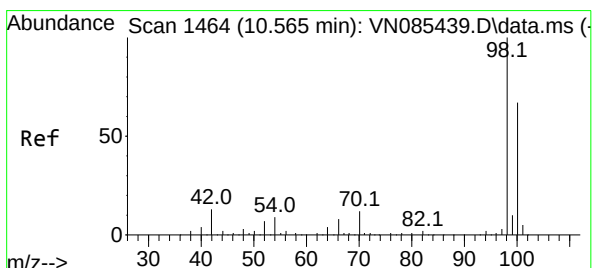
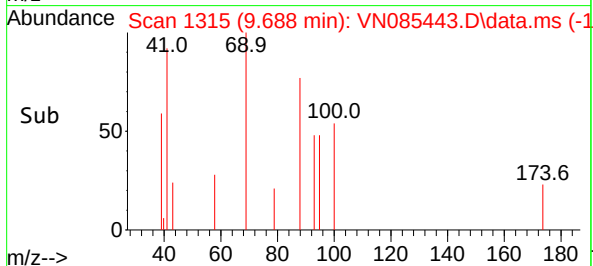
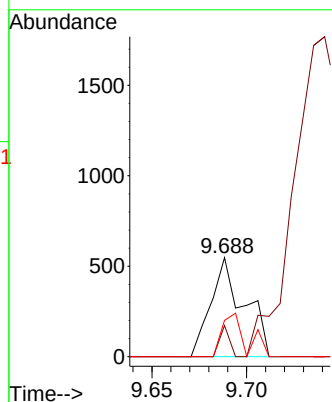
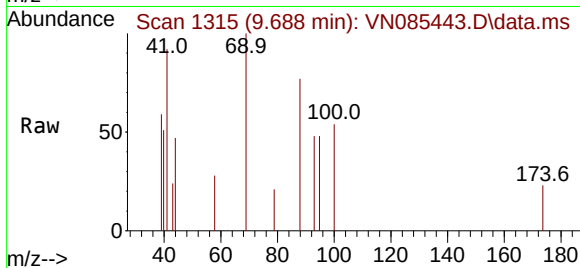
Tgt Ion: 88 Resp: 673

Ion Ratio Lower Upper

88 100

43 0.0 26.6 39.8#

58 31.1 59.5 89.3#



#50

Toluene-d8

Concen: 0.959 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085443.D

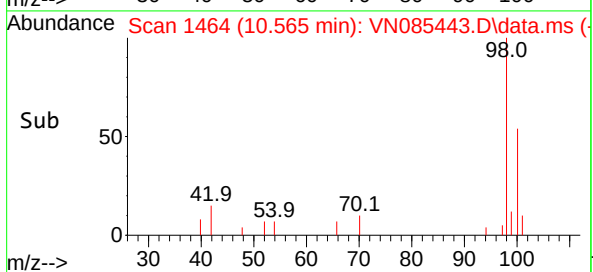
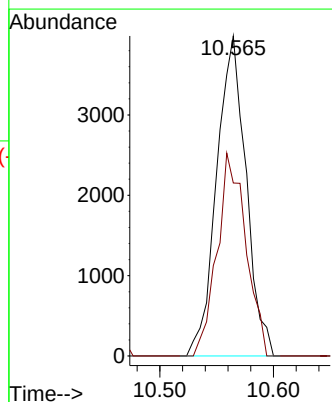
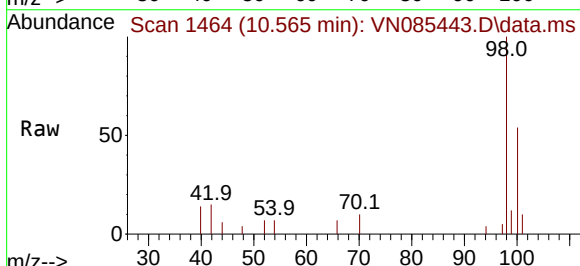
Acq: 14 Jan 2025 17:19

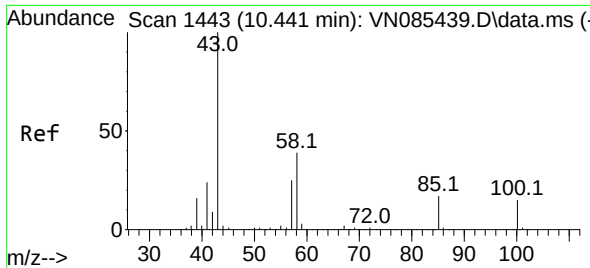
Tgt Ion: 98 Resp: 7164

Ion Ratio Lower Upper

98 100

100 61.9 52.2 78.4

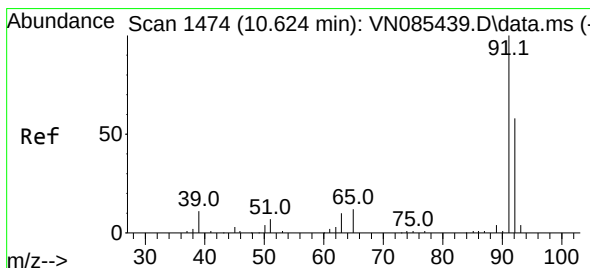
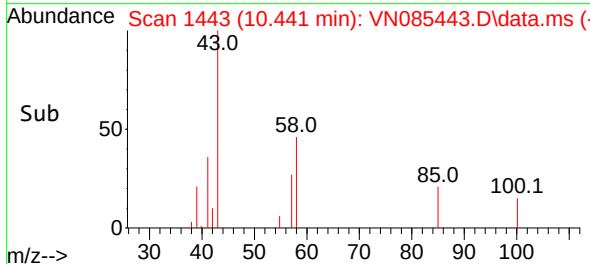
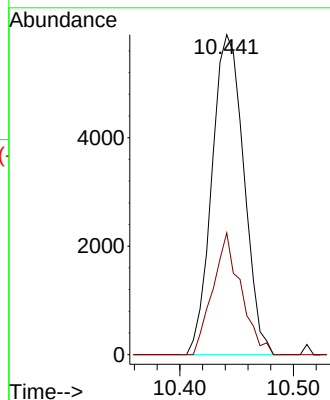
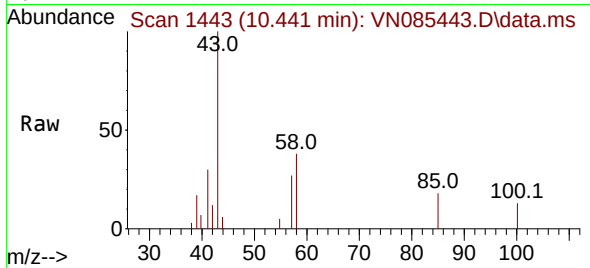




#51  
4-Methyl-2-Pentanone  
Concen: 4.163 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

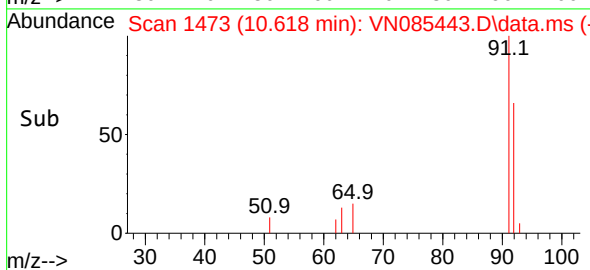
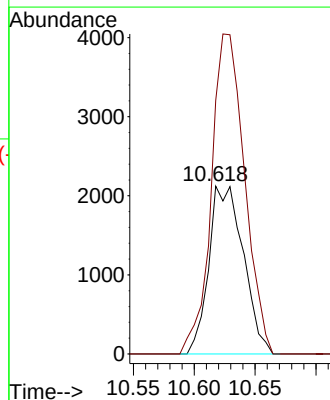
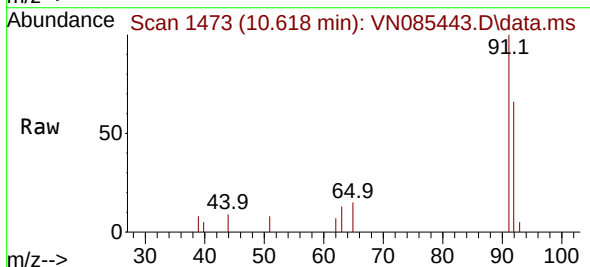
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

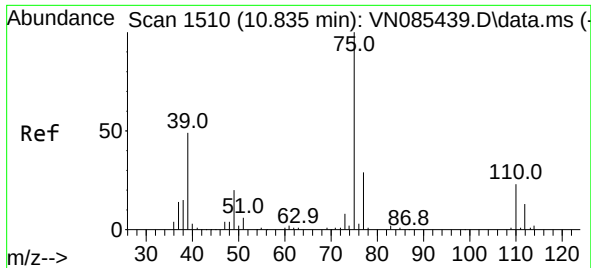
Tgt Ion: 43 Resp: 11523  
Ion Ratio Lower Upper  
43 100  
58 33.6 30.5 45.7



#52  
Toluene  
Concen: 0.814 ug/l  
RT: 10.618 min Scan# 1473  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 92 Resp: 4180  
Ion Ratio Lower Upper  
92 100  
91 183.9 139.2 208.8

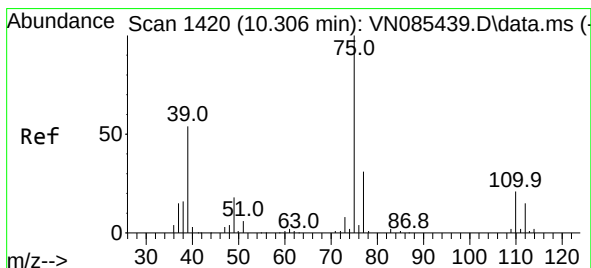
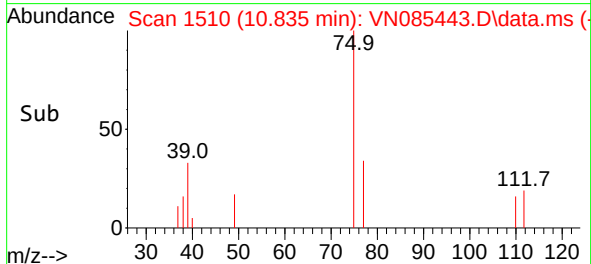
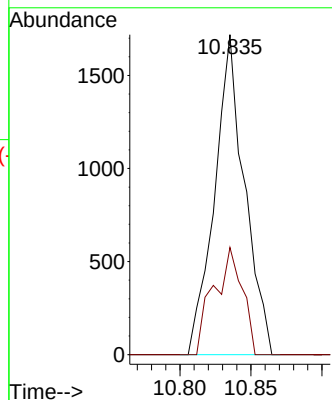
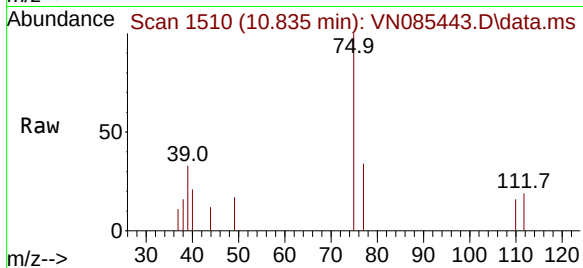




#53  
 t-1,3-Dichloropropene  
 Concen: 0.802 ug/l  
 RT: 10.835 min Scan# 11  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

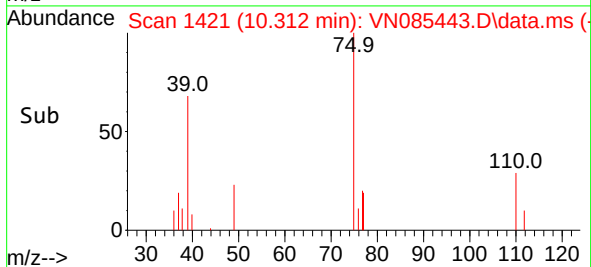
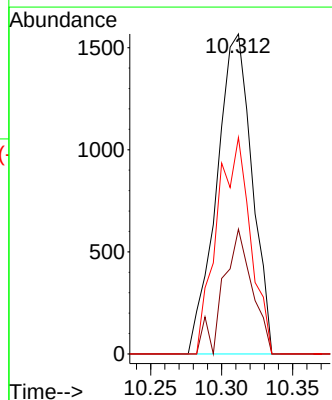
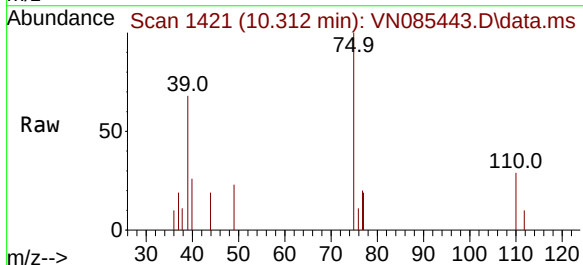
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

Tgt Ion: 75 Resp: 2522  
 Ion Ratio Lower Upper  
 75 100  
 77 33.5 23.5 35.3

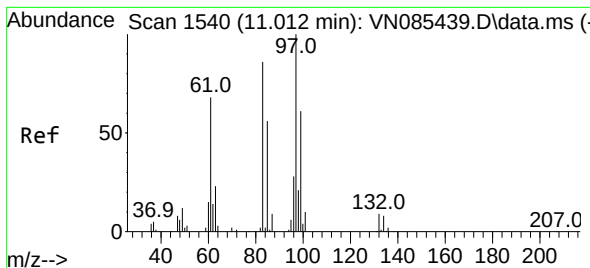


#54  
 cis-1,3-Dichloropropene  
 Concen: 0.811 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2725  
 Ion Ratio Lower Upper  
 75 100  
 77 39.0 25.0 37.4#  
 39 67.6 43.1 64.7#







#55

1,1,2-Trichloroethane

Concen: 0.935 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 97 Resp: 1901

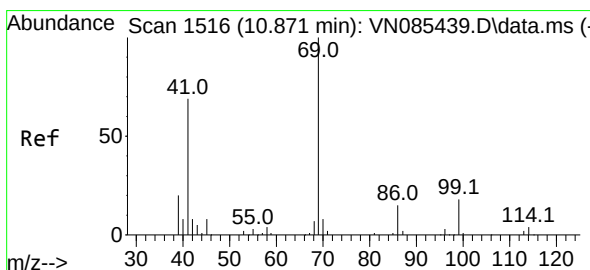
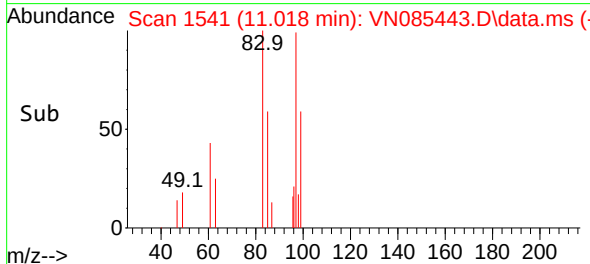
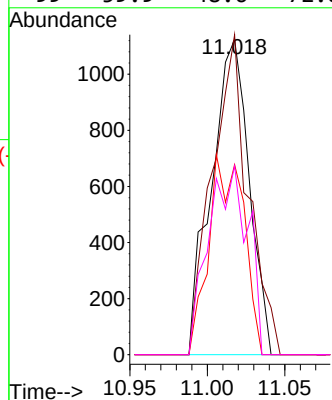
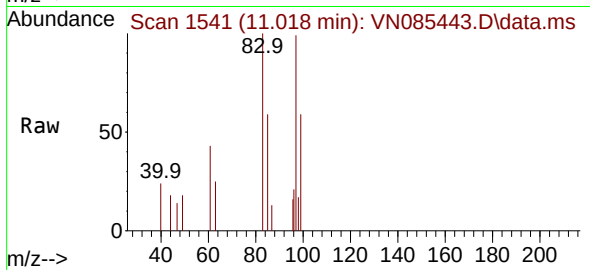
Ion Ratio Lower Upper

97 100

83 101.5 69.0 103.6

85 60.3 44.6 66.8

99 59.9 48.6 72.8



#56

Ethyl methacrylate

Concen: 2.471 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

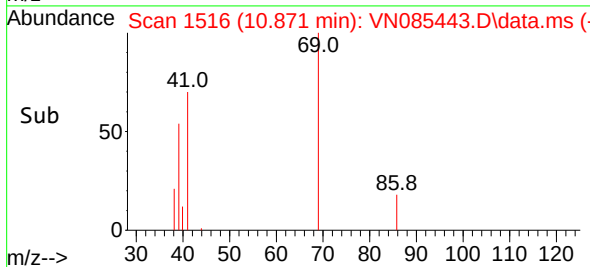
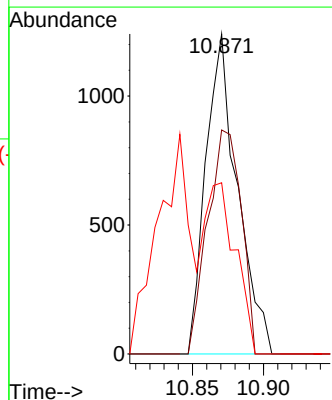
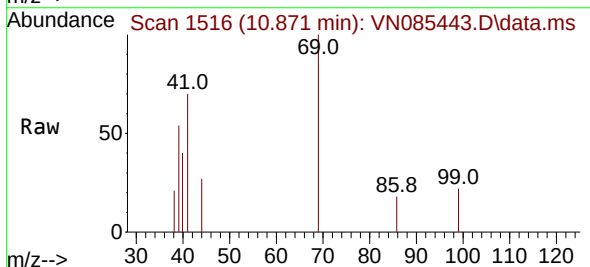
Tgt Ion: 69 Resp: 1923

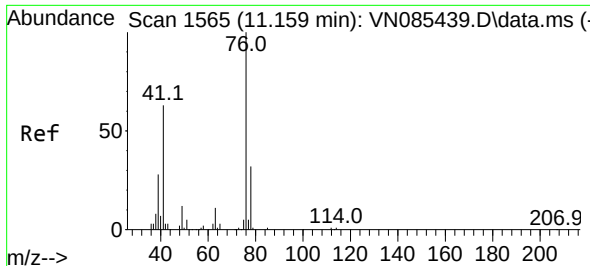
Ion Ratio Lower Upper

69 100

41 74.4 54.6 82.0

39 52.4 32.4 48.6#





#57

1,3-Dichloropropane

Concen: 0.881 ug/l

RT: 11.165 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

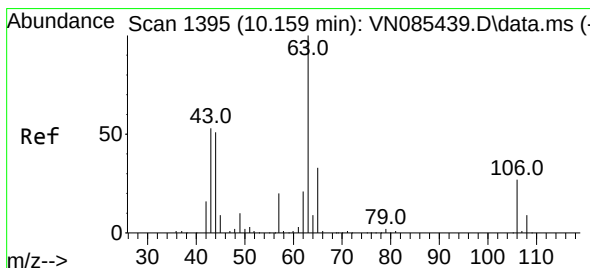
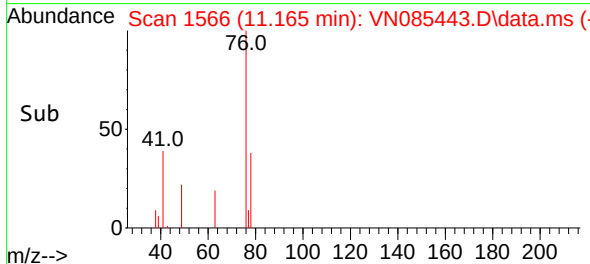
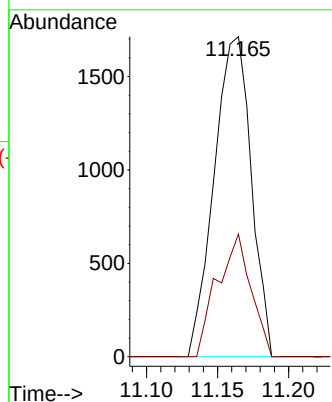
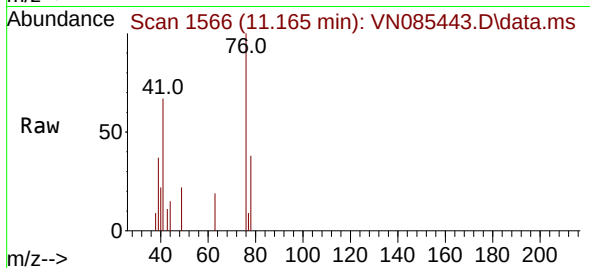
VSTDIC001

Tgt Ion: 76 Resp: 3113

Ion Ratio Lower Upper

76 100

78 34.9 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 3.822 ug/l

RT: 10.153 min Scan# 1394

Delta R.T. -0.006 min

Lab File: VN085443.D

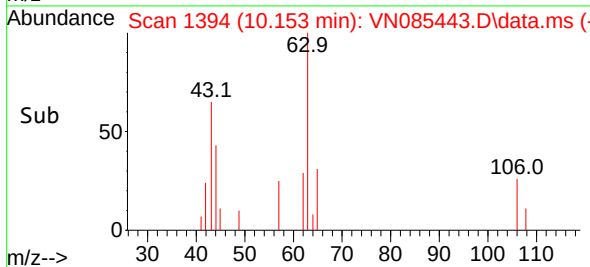
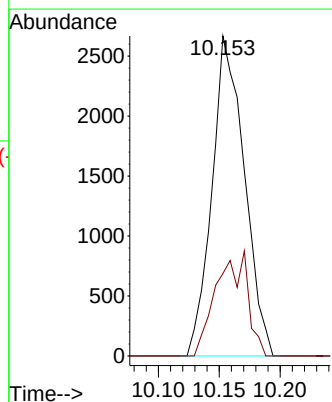
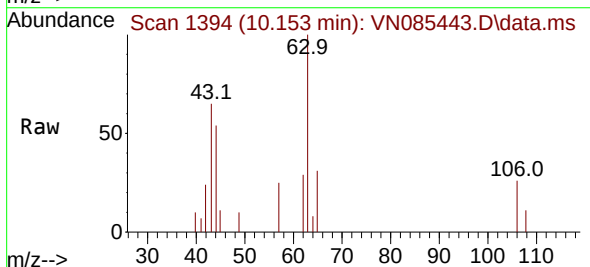
Acq: 14 Jan 2025 17:19

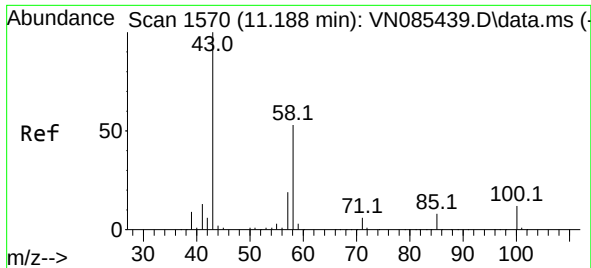
Tgt Ion: 63 Resp: 4929

Ion Ratio Lower Upper

63 100

106 31.7 21.6 32.4

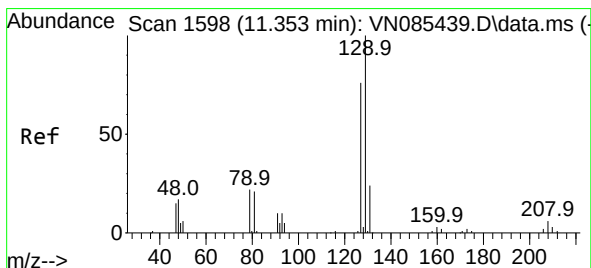
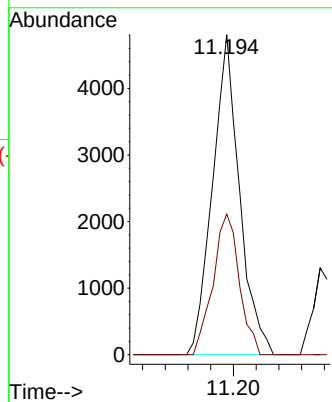
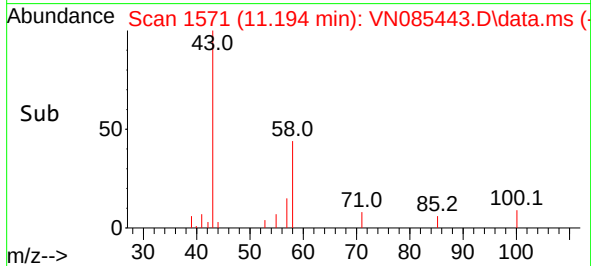
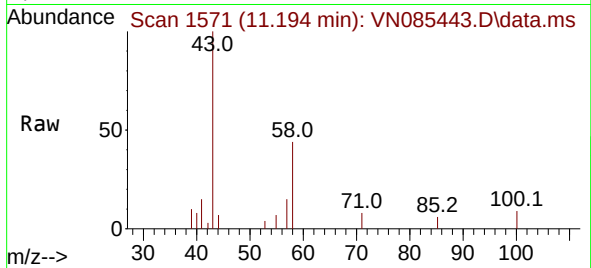




#59  
2-Hexanone  
Concen: 4.058 ug/l  
RT: 11.194 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

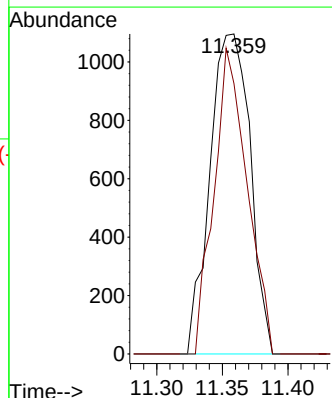
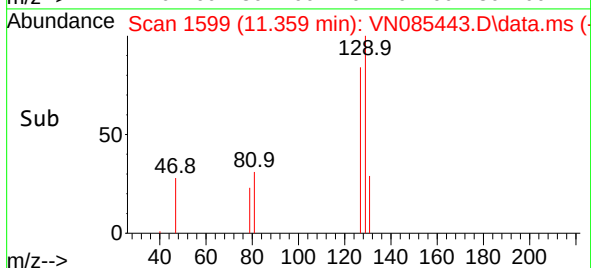
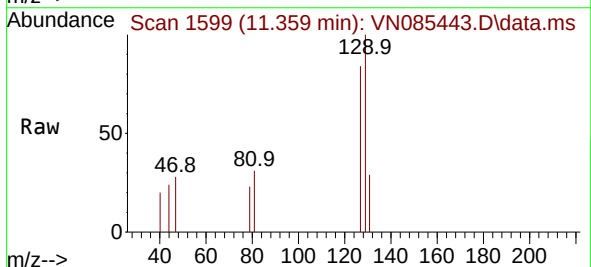
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

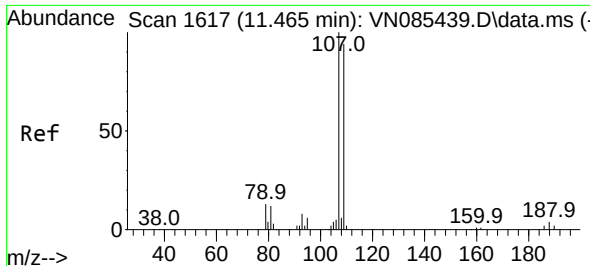
Tgt Ion: 43 Resp: 7905  
Ion Ratio Lower Upper  
43 100  
58 42.9 26.2 78.6



#60  
Dibromochloromethane  
Concen: 0.953 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 129 Resp: 2339  
Ion Ratio Lower Upper  
129 100  
127 78.9 38.6 115.8

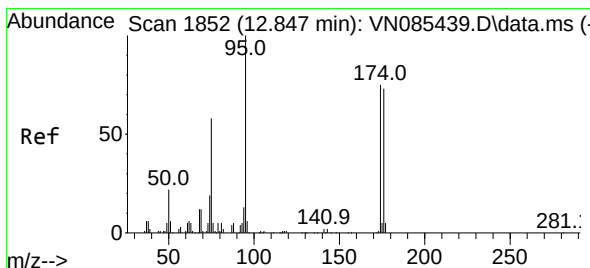
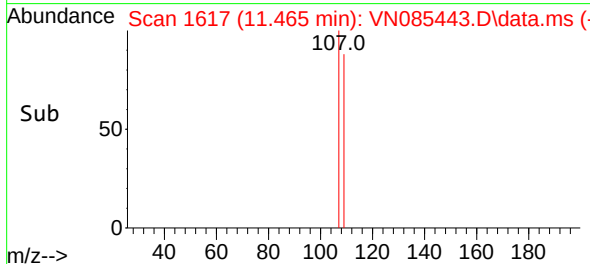
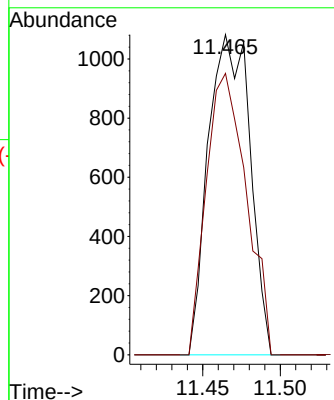
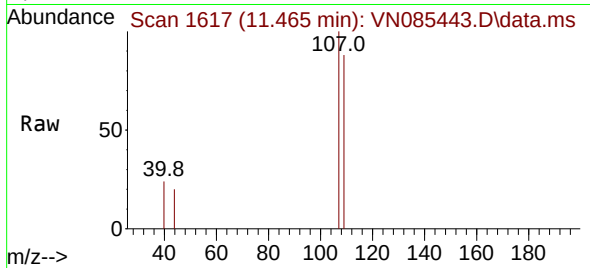




#61  
1,2-Dibromoethane  
Concen: 1.000 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

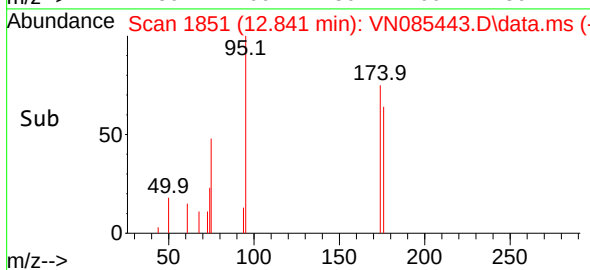
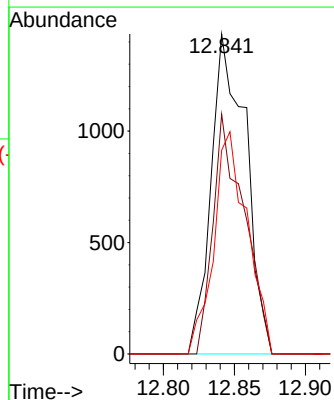
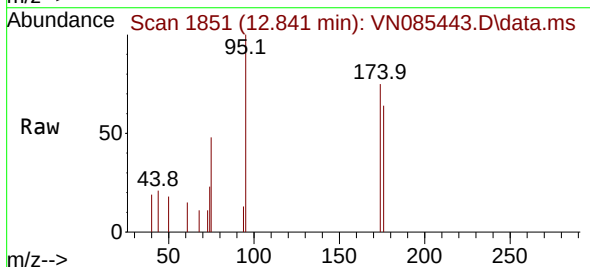
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ClientSampleId :  
VSTDIC001

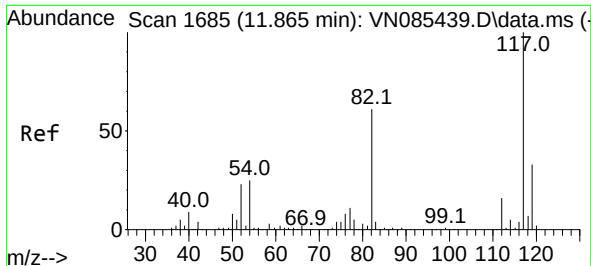
Tgt Ion:107 Resp: 2022  
Ion Ratio Lower Upper  
107 100  
109 84.8 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 0.951 ug/l  
RT: 12.841 min Scan# 1851  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 95 Resp: 2428  
Ion Ratio Lower Upper  
95 100  
174 67.5 0.0 145.0  
176 67.3 0.0 142.4

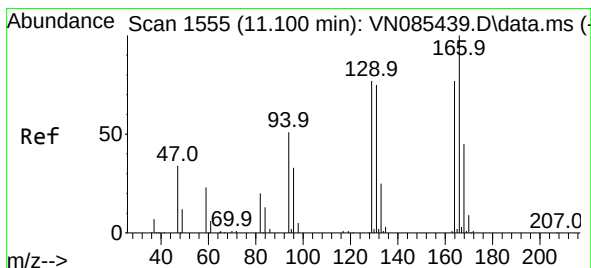
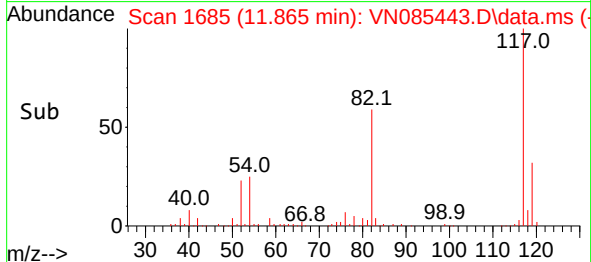
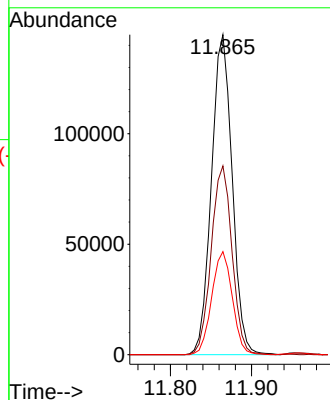
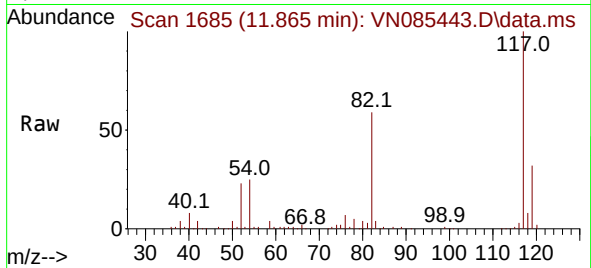




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

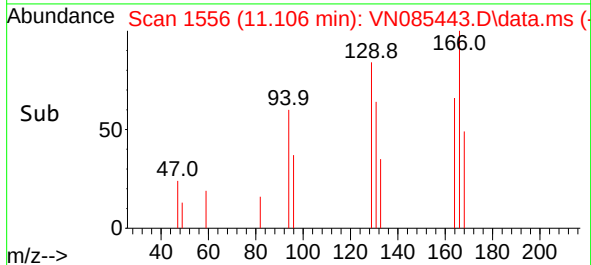
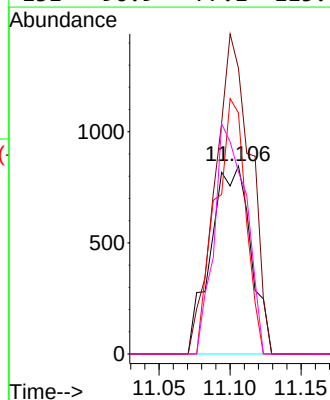
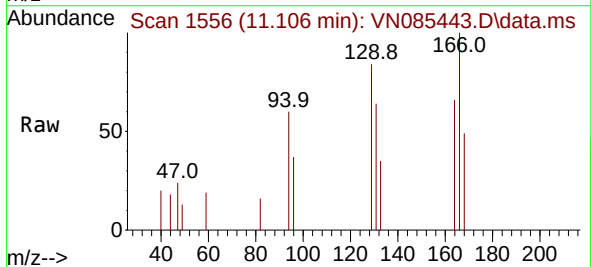
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ClientSampleId :  
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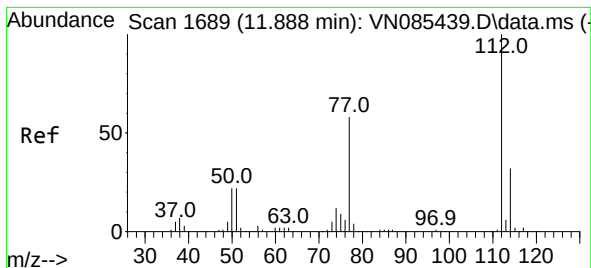
Tgt Ion:117 Resp: 256851  
Ion Ratio Lower Upper  
117 100  
82 59.0 48.6 72.8  
119 32.2 26.6 39.8



#64  
Tetrachloroethene  
Concen: 0.947 ug/l  
RT: 11.106 min Scan# 1556  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:164 Resp: 1658  
Ion Ratio Lower Upper  
164 100  
166 152.1 103.4 155.2  
129 128.3 79.2 118.8#  
131 96.9 77.1 115.7

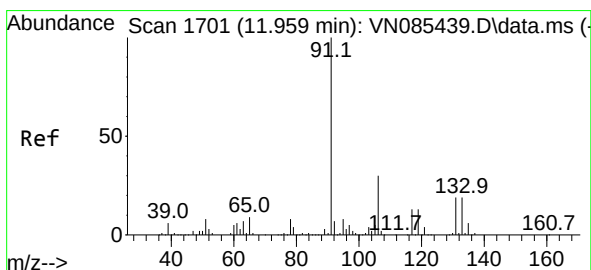
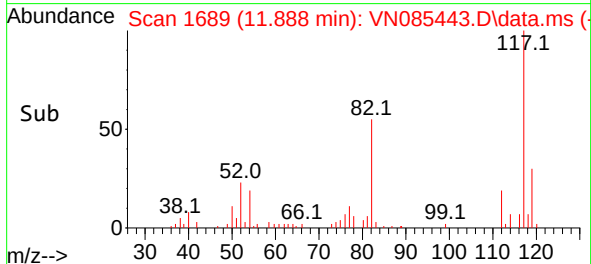
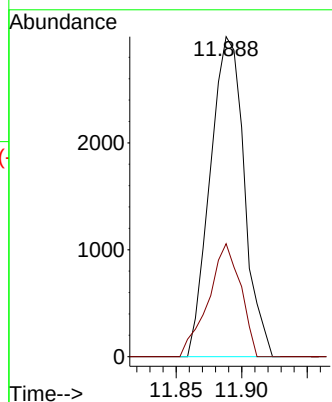
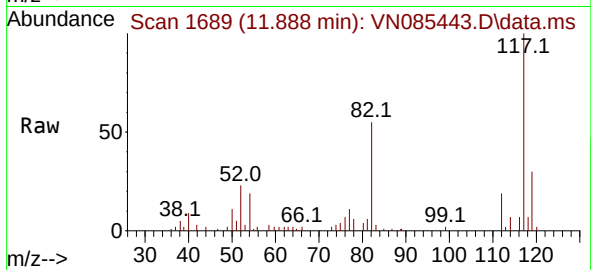




#65  
Chlorobenzene  
Concen: 0.960 ug/l  
RT: 11.888 min Scan# 1170  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

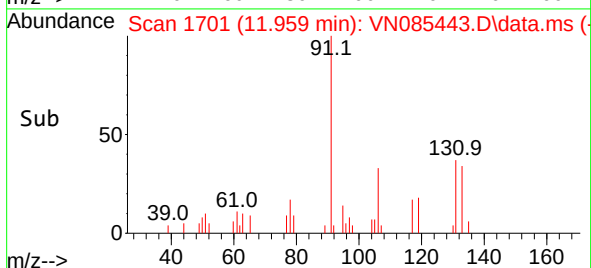
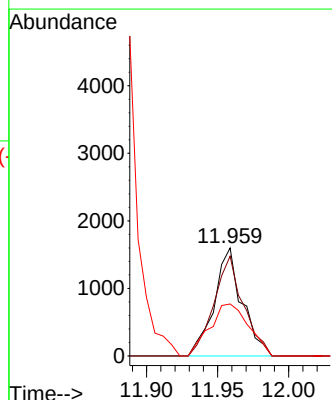
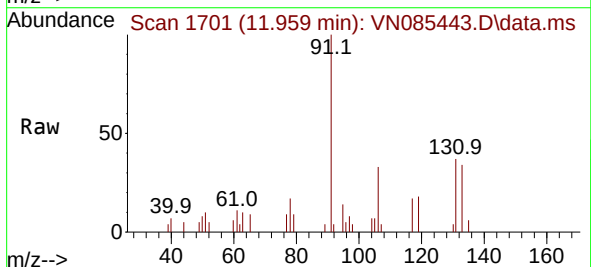
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

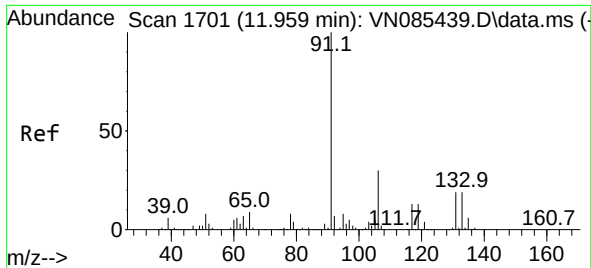
Tgt Ion:112 Resp: 5401  
Ion Ratio Lower Upper  
112 100  
114 35.3 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 1.058 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:131 Resp: 2185  
Ion Ratio Lower Upper  
131 100  
133 97.7 47.4 142.3  
119 0.0 33.1 99.5#

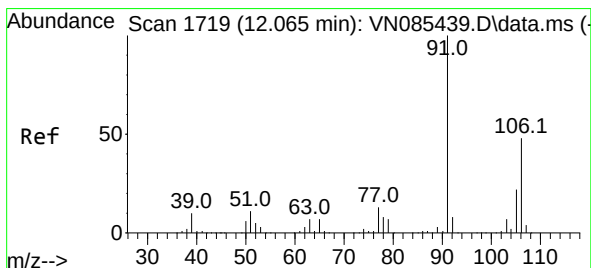
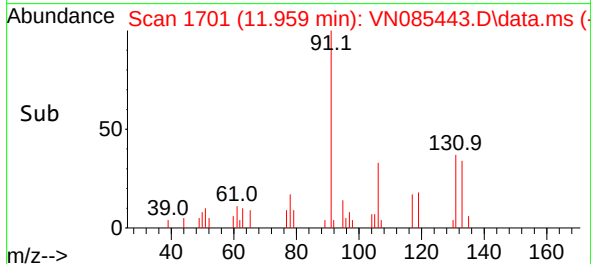
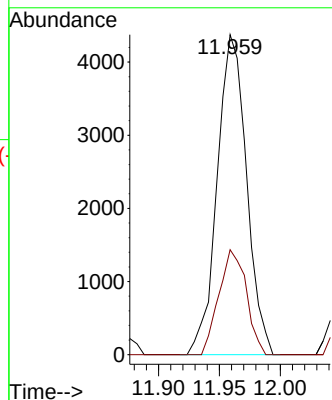
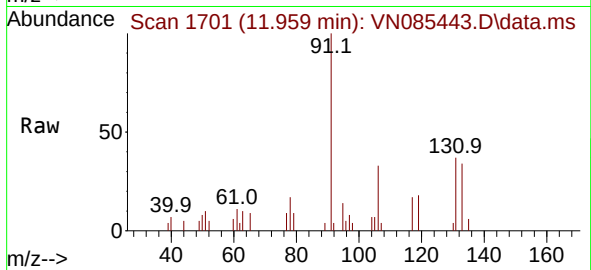




#67  
Ethyl Benzene  
Concen: 0.802 ug/l  
RT: 11.959 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

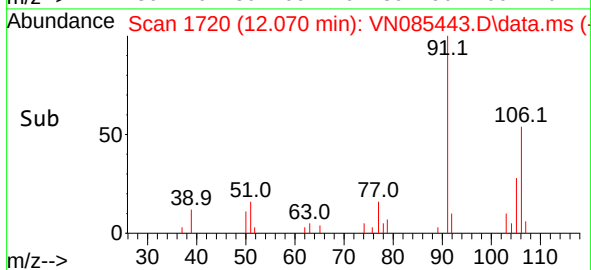
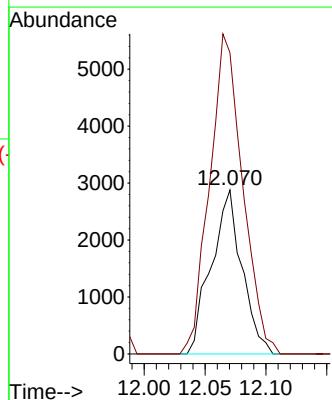
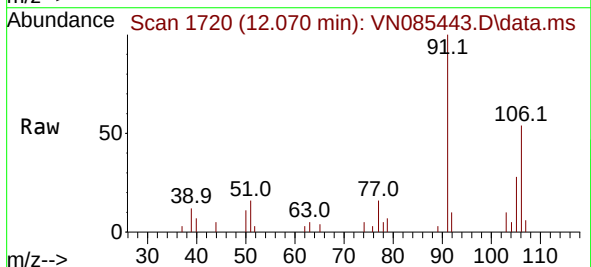
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

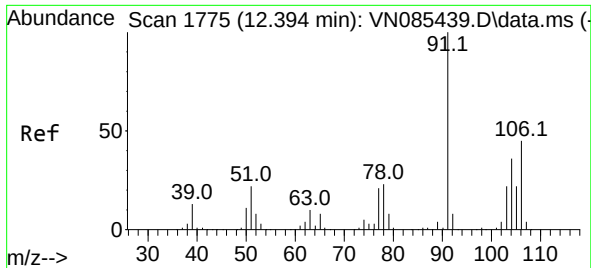
Tgt Ion: 91 Resp: 7347  
Ion Ratio Lower Upper  
91 100  
106 32.8 23.8 35.8



#68  
m/p-Xylenes  
Concen: 1.494 ug/l  
RT: 12.070 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 5059  
Ion Ratio Lower Upper  
106 100  
91 209.3 167.7 251.5

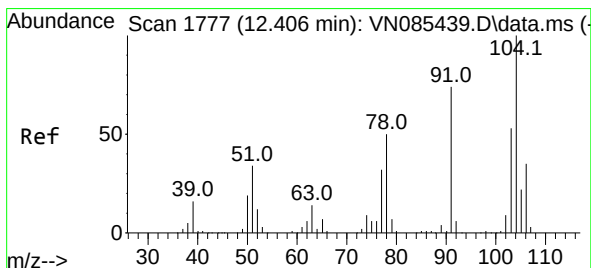
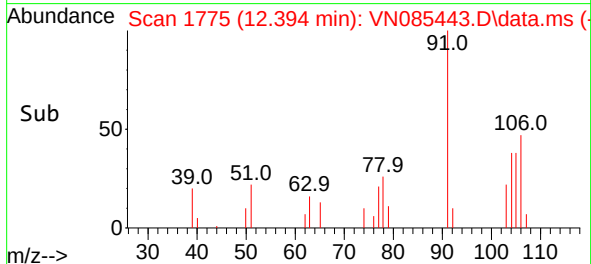
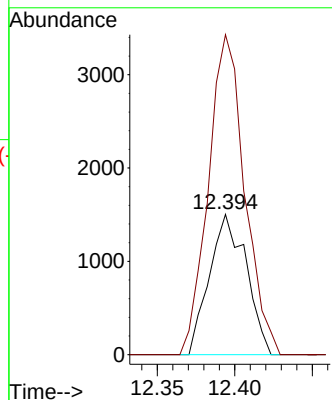
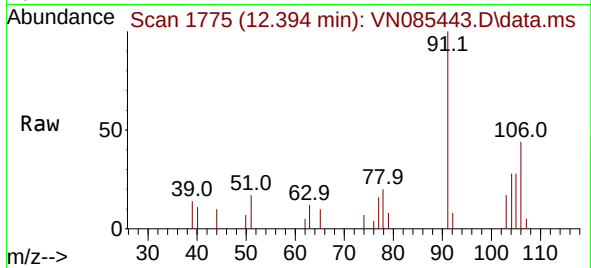




#69  
o-Xylene  
Concen: 0.766 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

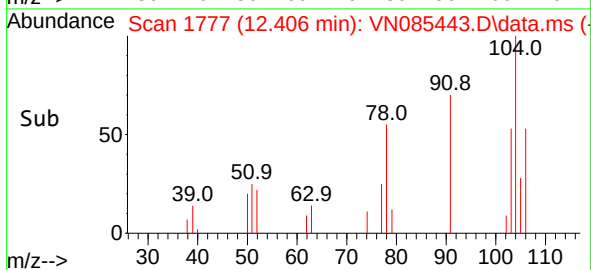
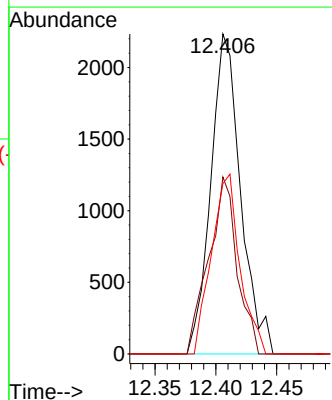
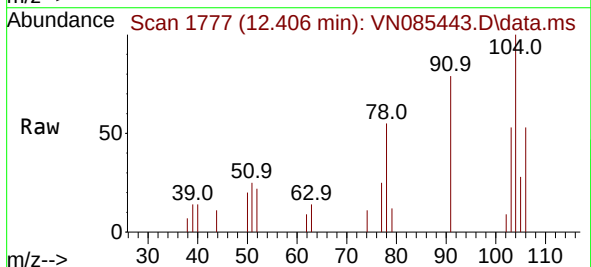
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion:106 Resp: 2478  
Ion Ratio Lower Upper  
106 100  
91 225.4 110.4 331.2

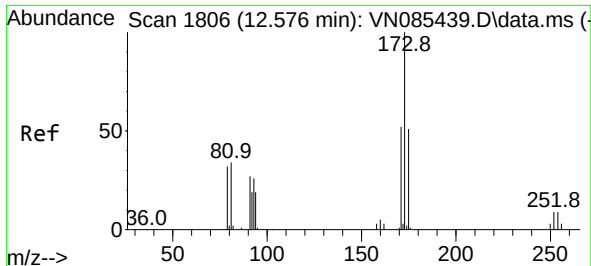


#70  
Styrene  
Concen: 0.712 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:104 Resp: 3812  
Ion Ratio Lower Upper  
104 100  
78 52.9 42.5 63.7  
103 53.7 43.8 65.8



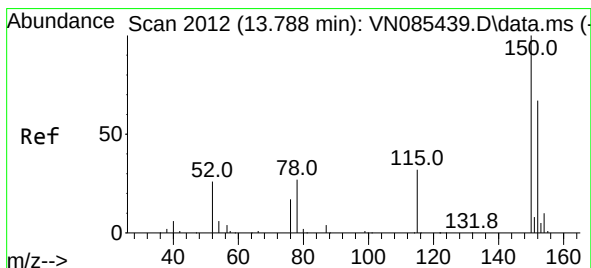
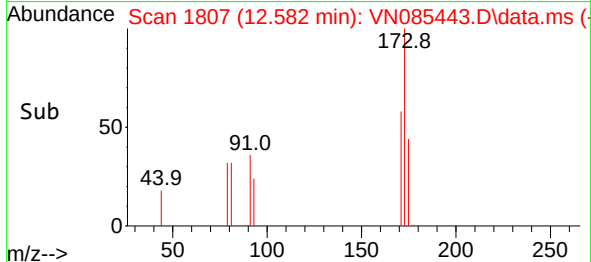
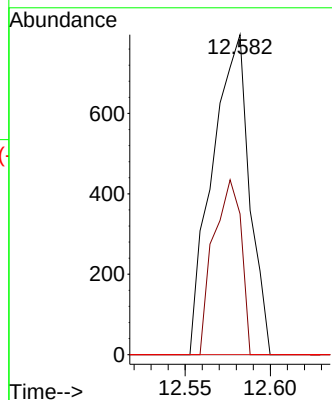
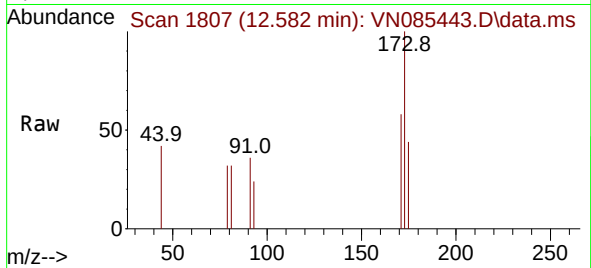




#71  
Bromoform  
Concen: 0.818 ug/l  
RT: 12.582 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

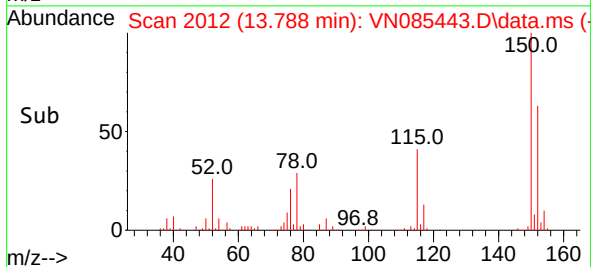
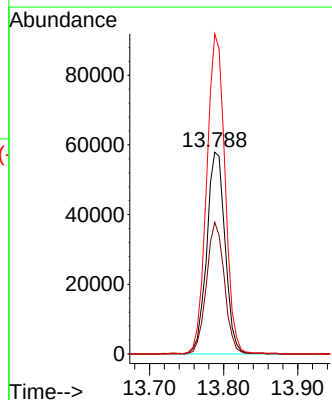
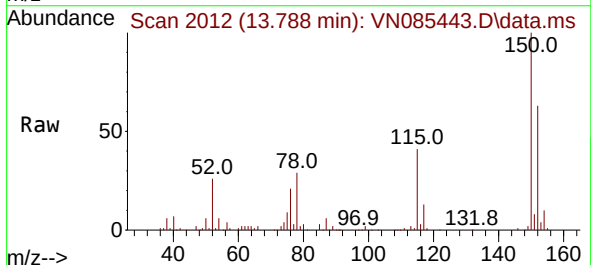
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

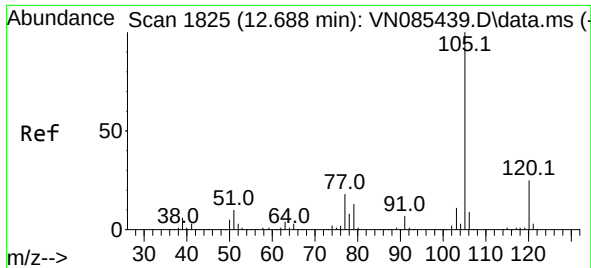
Tgt Ion:173 Resp: 1208  
Ion Ratio Lower Upper  
173 100  
175 40.7 24.4 73.2  
254 0.0 0.0 0.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:152 Resp: 99539  
Ion Ratio Lower Upper  
152 100  
115 63.8 31.1 93.3  
150 158.5 0.0 343.6

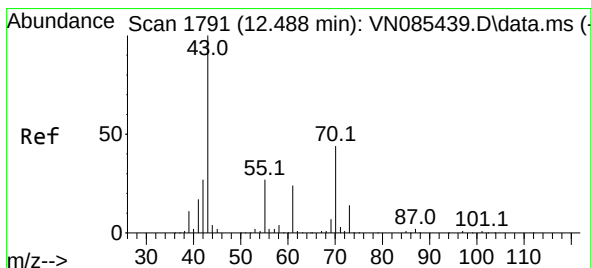
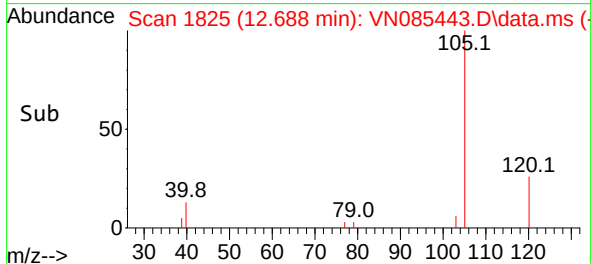
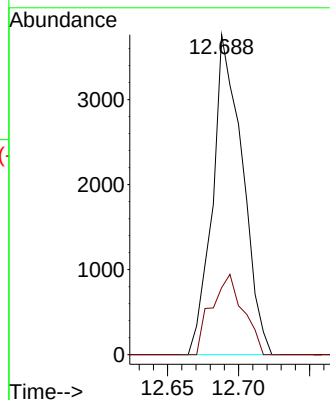
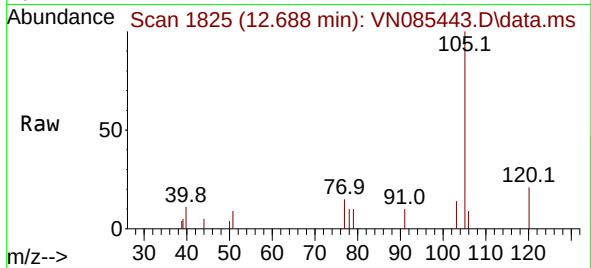




#73  
Isopropylbenzene  
Concen: 0.820 ug/l  
RT: 12.688 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

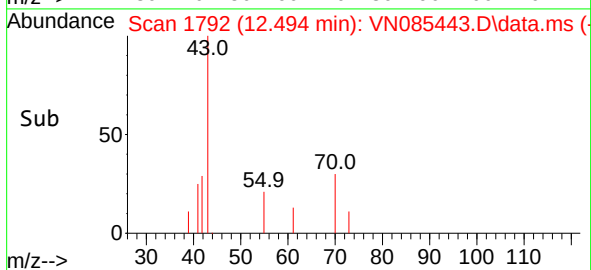
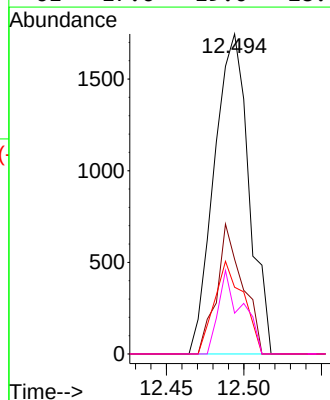
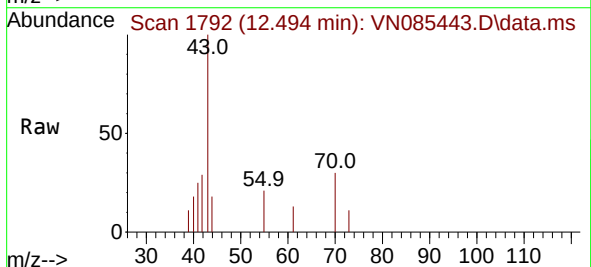
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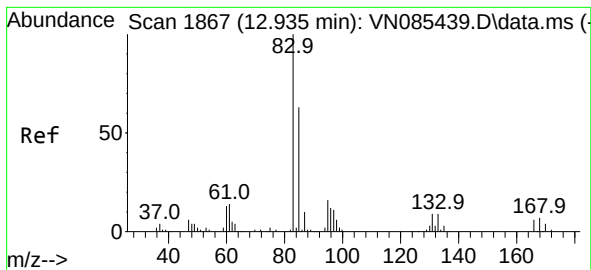
Tgt Ion:105 Resp: 5506  
Ion Ratio Lower Upper  
105 100  
120 26.7 12.8 38.3



#74  
N-ethyl acetate  
Concen: 0.899 ug/l  
RT: 12.494 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2716  
Ion Ratio Lower Upper  
43 100  
70 30.4 34.0 51.0#  
55 24.2 21.4 32.2  
61 17.6 19.0 28.4#

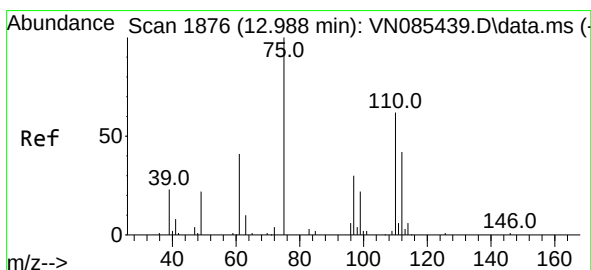
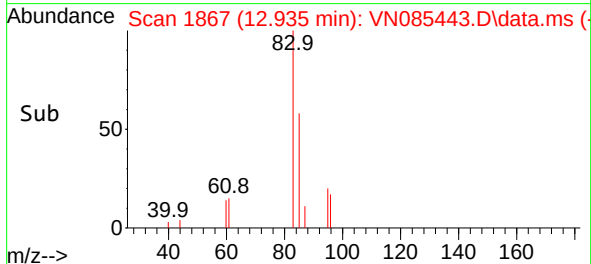
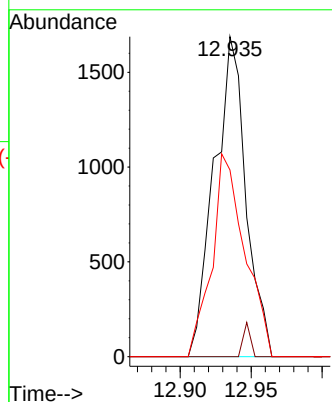
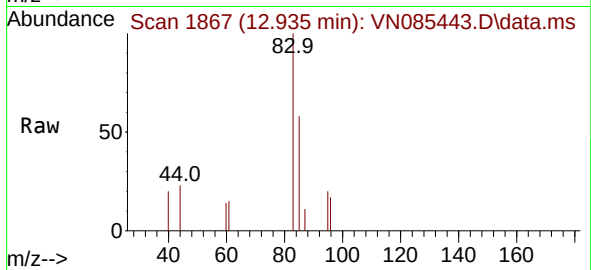




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 1.102 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

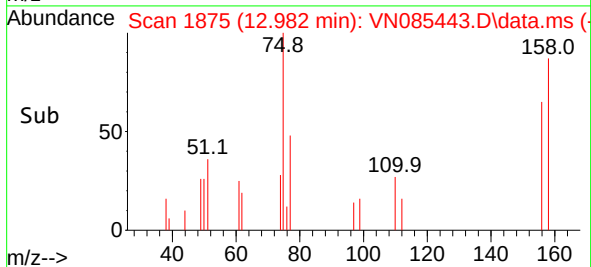
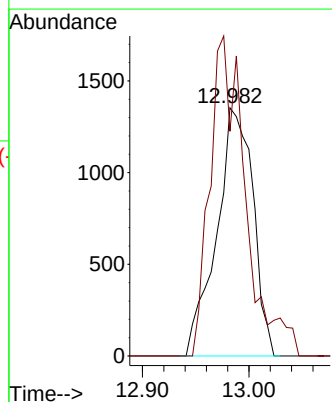
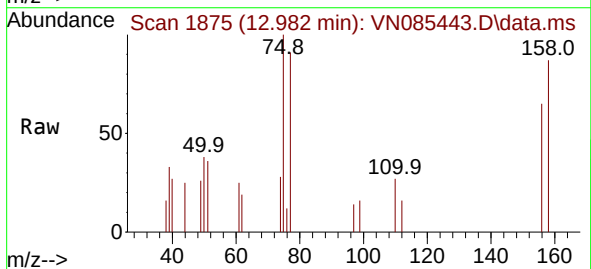
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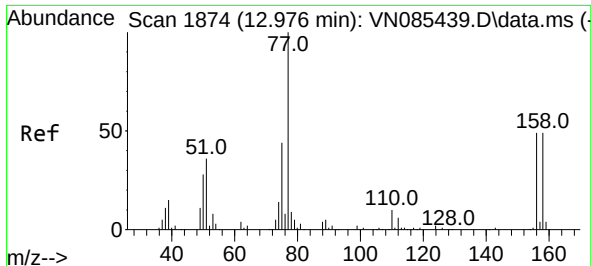
Tgt Ion: 83 Resp: 2616  
 Ion Ratio Lower Upper  
 83 100  
 131 2.4 4.8 14.4#  
 85 65.7 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 1.590 ug/l  
 RT: 12.982 min Scan# 1875  
 Delta R.T. -0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 3212  
 Ion Ratio Lower Upper  
 75 100  
 77 126.0 109.7 329.2

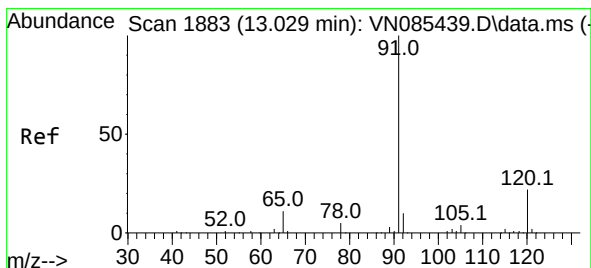
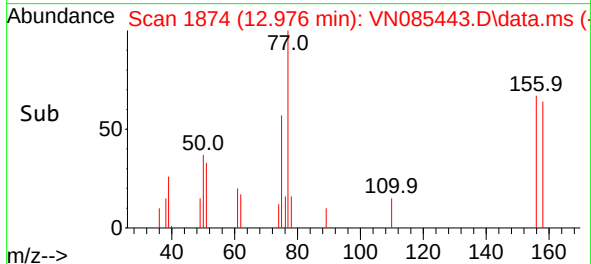
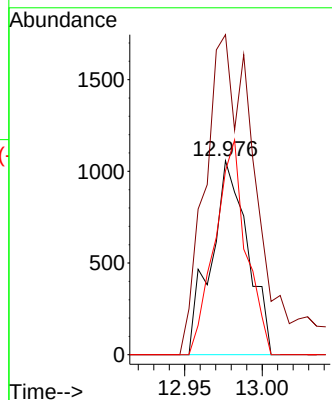
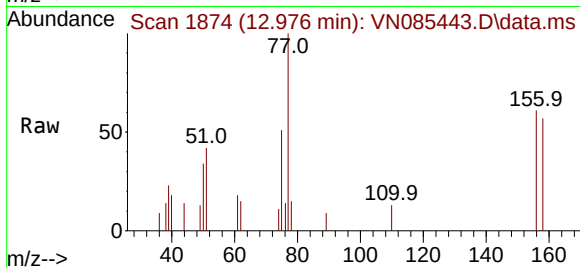




#77  
Bromobenzene  
Concen: 0.987 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

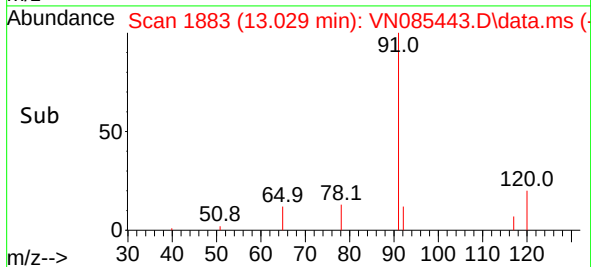
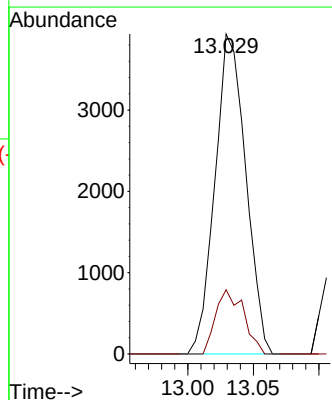
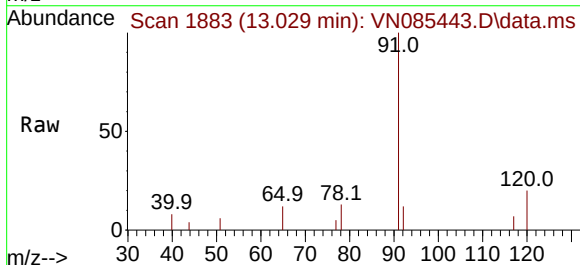
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

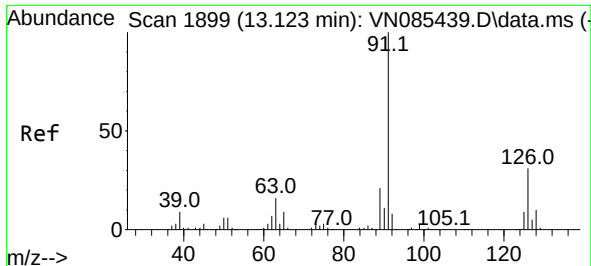
Tgt Ion:156 Resp: 1733  
Ion Ratio Lower Upper  
156 100  
77 233.6 114.1 342.4  
158 94.9 48.9 146.8



#78  
n-propylbenzene  
Concen: 0.808 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 6424  
Ion Ratio Lower Upper  
91 100  
120 18.2 10.9 32.6

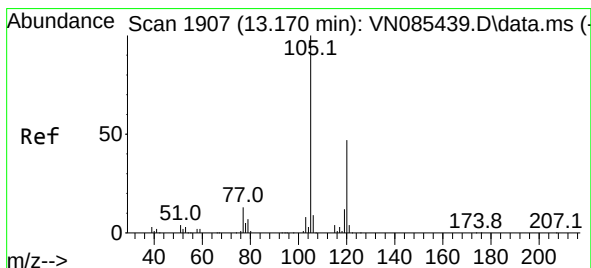
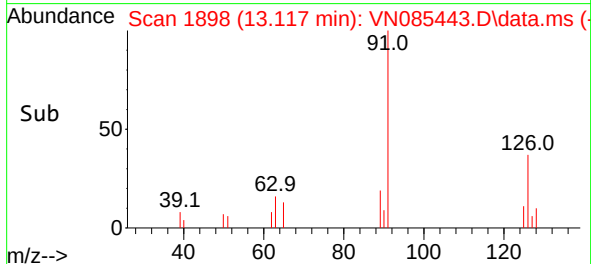
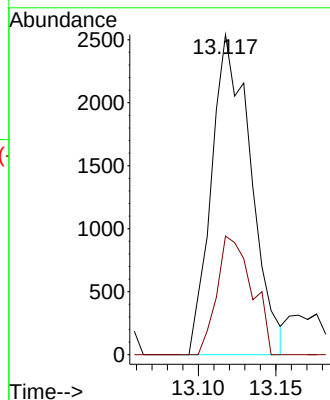
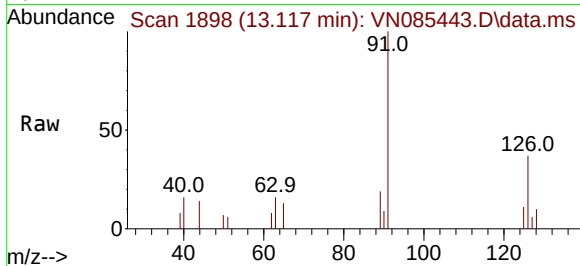




#79  
2-Chlorotoluene  
Concen: 0.871 ug/l  
RT: 13.117 min Scan# 1898  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

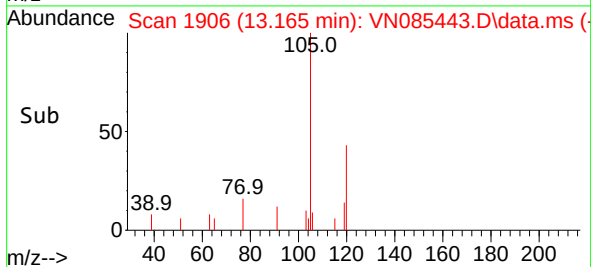
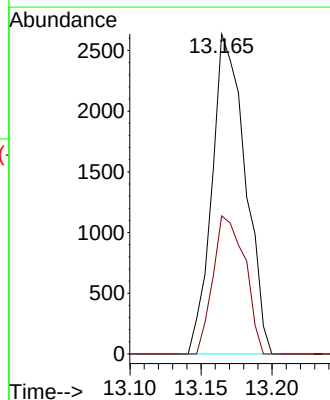
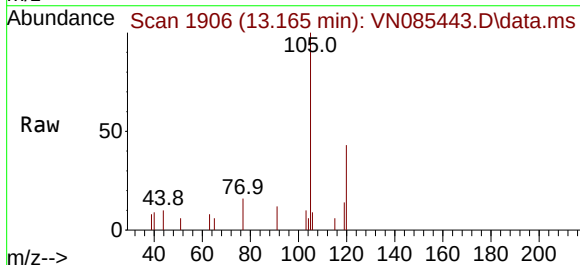
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

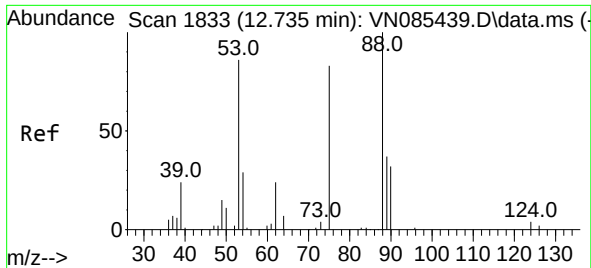
Tgt Ion: 91 Resp: 4483  
Ion Ratio Lower Upper  
91 100  
126 32.9 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 0.775 ug/l  
RT: 13.165 min Scan# 1906  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 105 Resp: 4301  
Ion Ratio Lower Upper  
105 100  
120 41.2 23.9 71.7

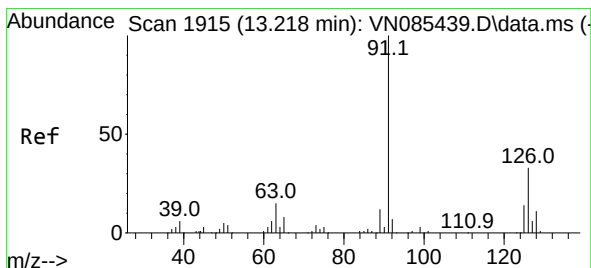
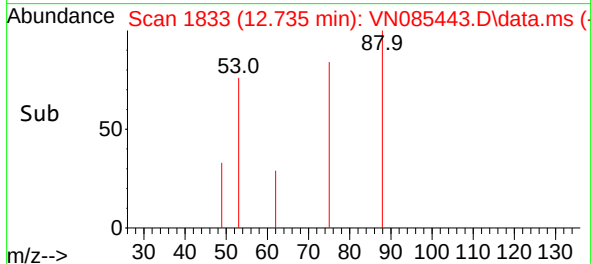
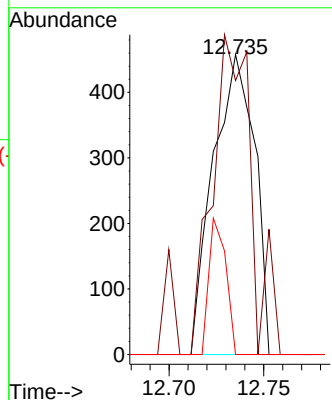
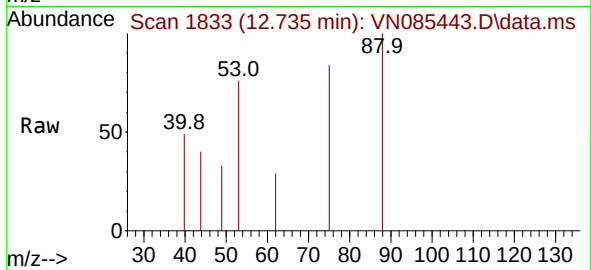




#81  
trans-1,4-Dichloro-2-butene  
Concen: 0.929 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

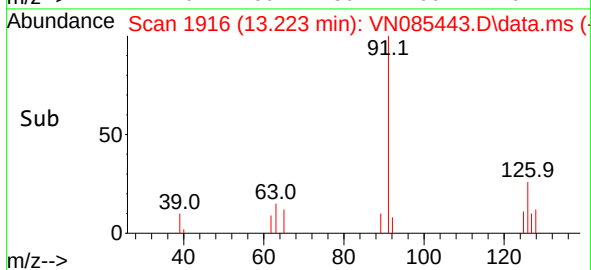
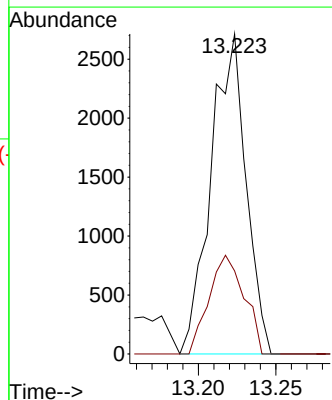
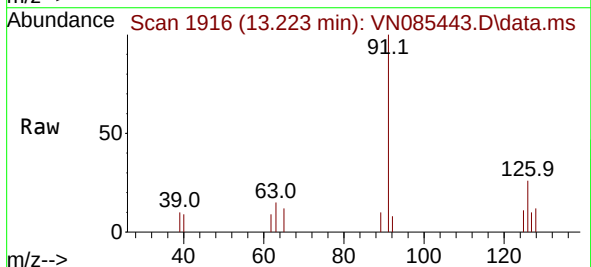
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

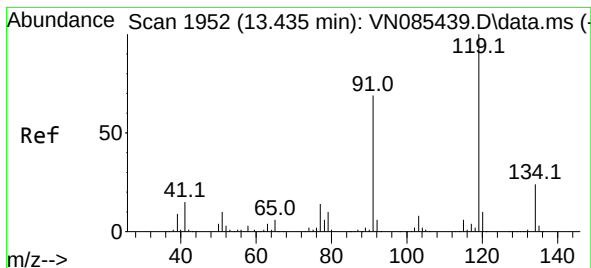
Tgt Ion: 75 Resp: 695  
Ion Ratio Lower Upper  
75 100  
53 101.2 95.6 143.4  
89 18.6 37.0 55.6#



#82  
4-Chlorotoluene  
Concen: 0.833 ug/l  
RT: 13.223 min Scan# 1916  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 4268  
Ion Ratio Lower Upper  
91 100  
126 31.0 15.9 47.7





#83

tert-Butylbenzene

Concen: 0.805 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

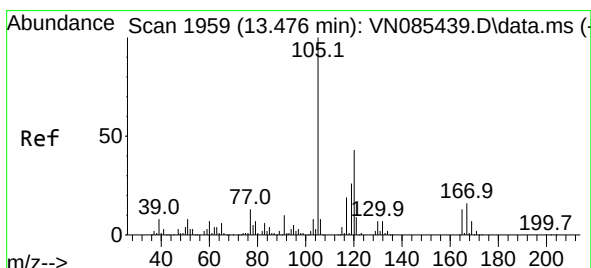
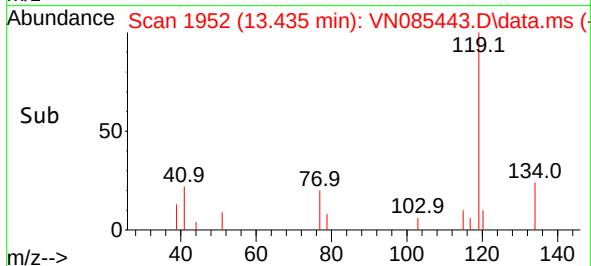
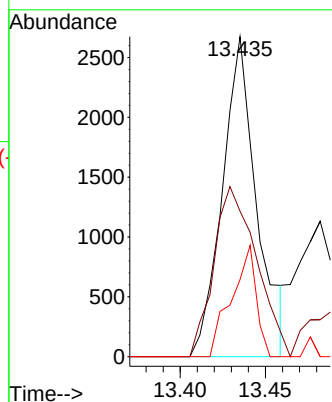
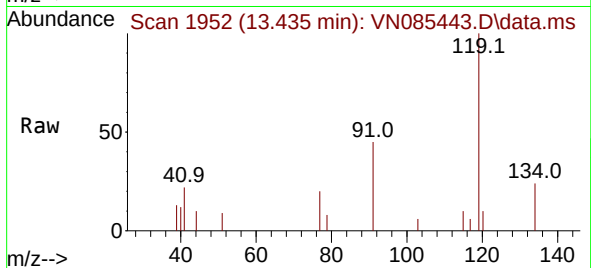
Tgt Ion:119 Resp: 3753

Ion Ratio Lower Upper

119 100

91 65.9 35.1 105.3

134 24.9 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 0.679 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085443.D

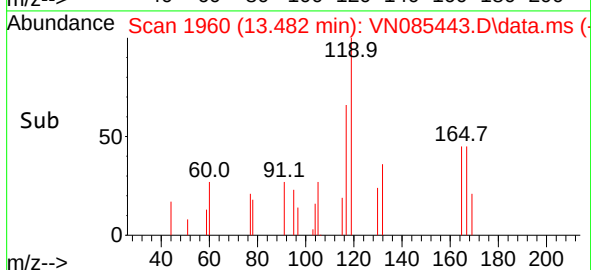
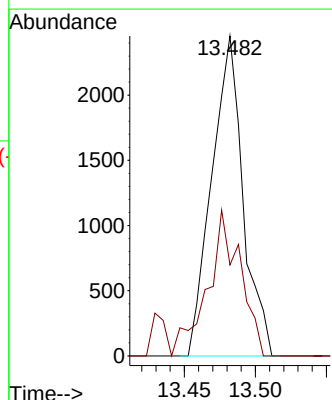
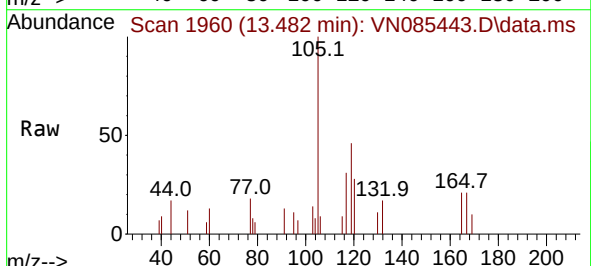
Acq: 14 Jan 2025 17:19

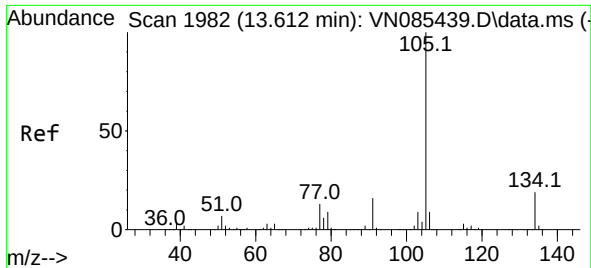
Tgt Ion:105 Resp: 3758

Ion Ratio Lower Upper

105 100

120 47.7 21.6 65.0

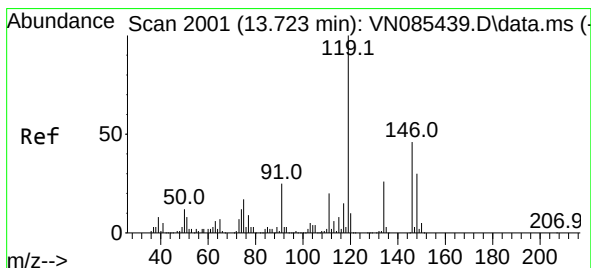
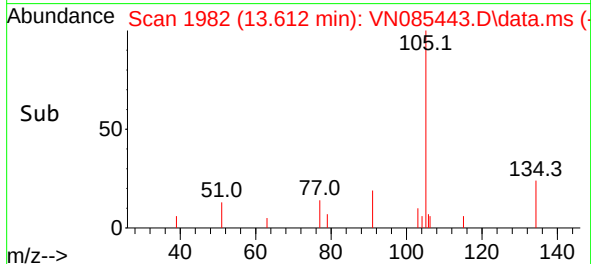
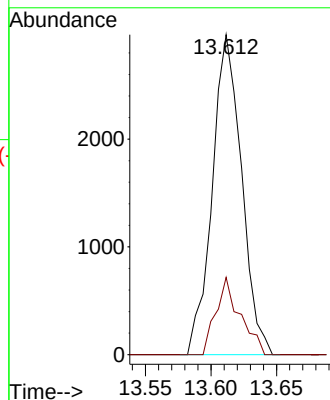
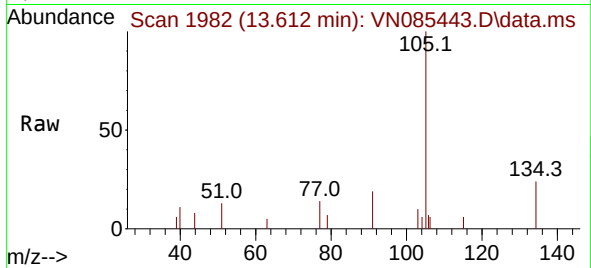




#85  
 sec-Butylbenzene  
 Concen: 0.714 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

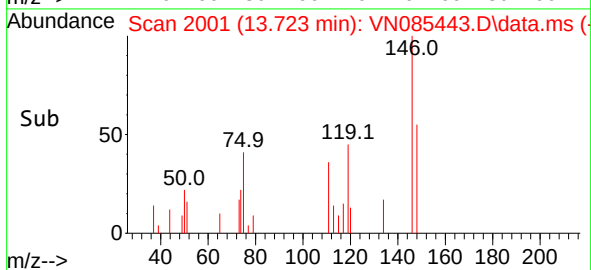
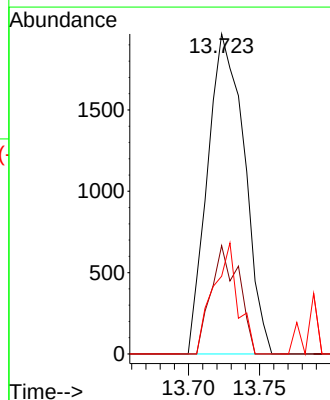
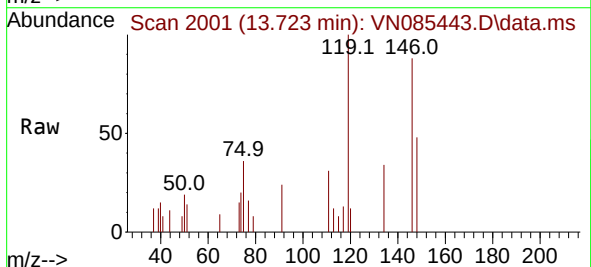
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

Tgt Ion:105 Resp: 4614  
 Ion Ratio Lower Upper  
 105 100  
 134 19.9 9.7 28.9

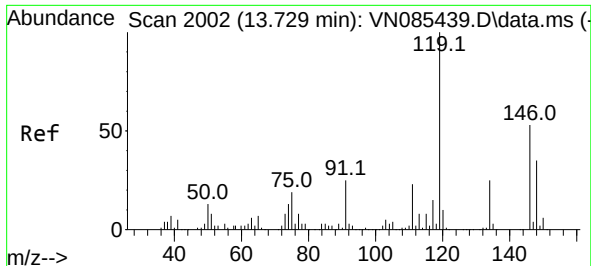


#86  
 p-Isopropyltoluene  
 Concen: 0.716 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion:119 Resp: 3538  
 Ion Ratio Lower Upper  
 119 100  
 134 25.6 12.7 38.0  
 91 23.2 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 0.940 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

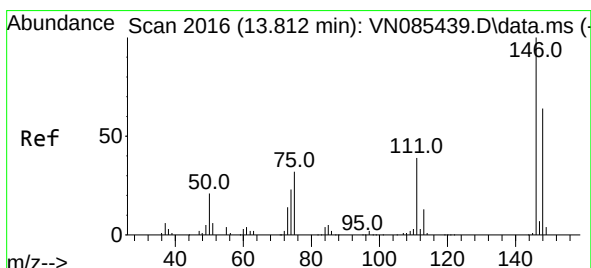
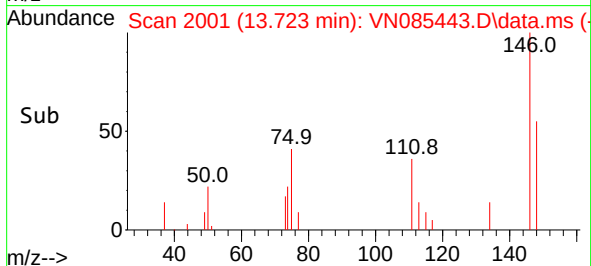
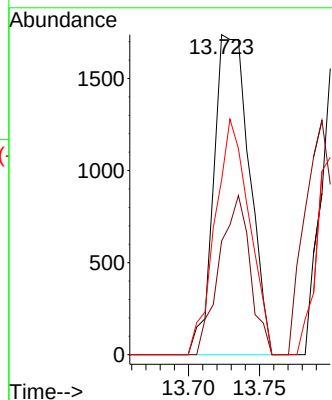
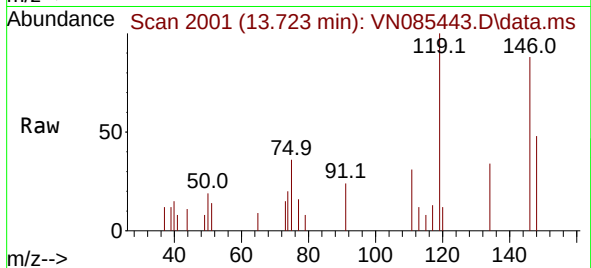
Tgt Ion:146 Resp: 3038

Ion Ratio Lower Upper

146 100

111 43.0 21.4 64.3

148 70.9 32.3 96.9



#88

1,4-Dichlorobenzene

Concen: 0.907 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. -0.088 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

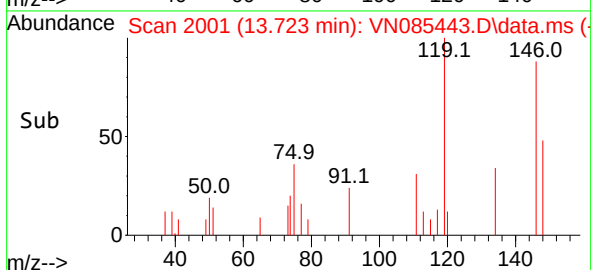
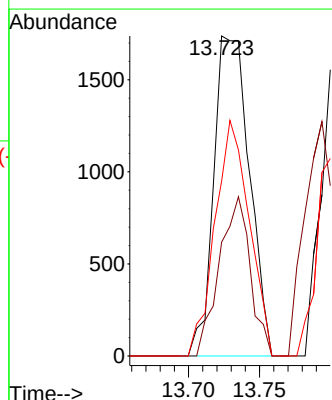
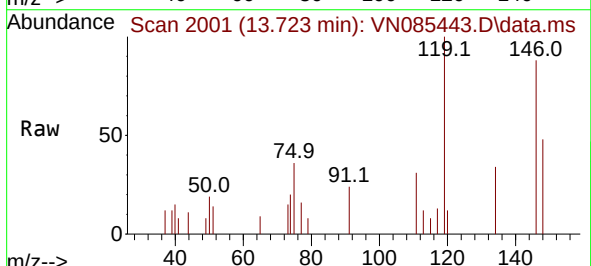
Tgt Ion:146 Resp: 3038

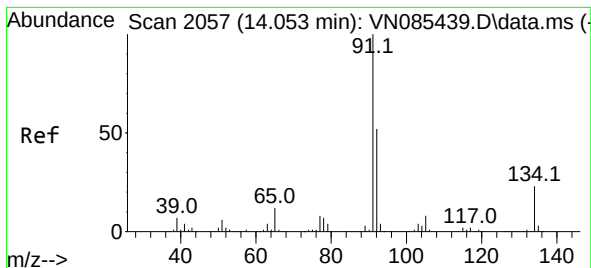
Ion Ratio Lower Upper

146 100

111 43.0 21.3 63.7

148 70.9 32.4 97.0





#89

n-Butylbenzene

Concen: 0.761 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

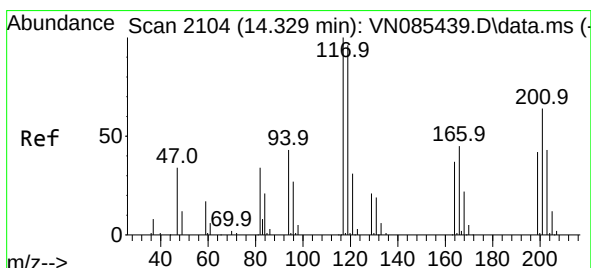
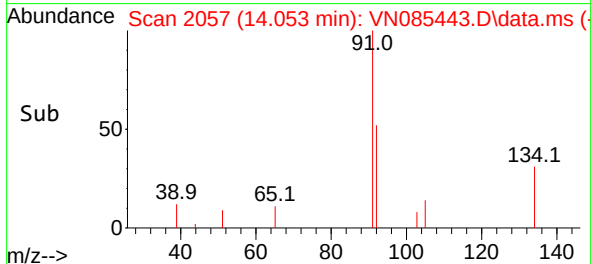
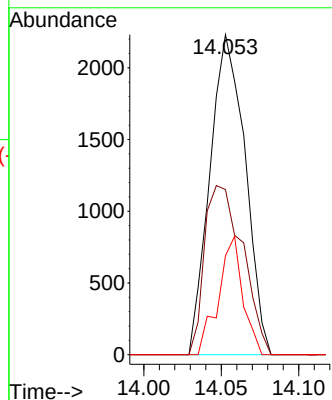
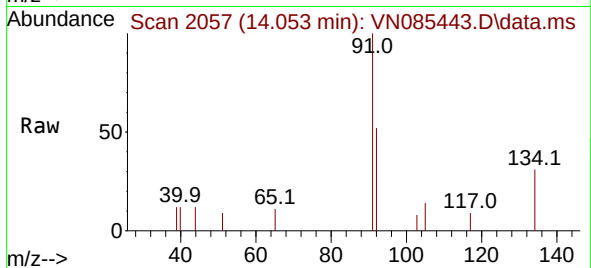
Tgt Ion: 91 Resp: 3527

Ion Ratio Lower Upper

91 100

92 57.2 25.8 77.3

134 25.5 11.7 35.1



#90

Hexachloroethane

Concen: 1.102 ug/l

RT: 14.341 min Scan# 2106

Delta R.T. 0.012 min

Lab File: VN085443.D

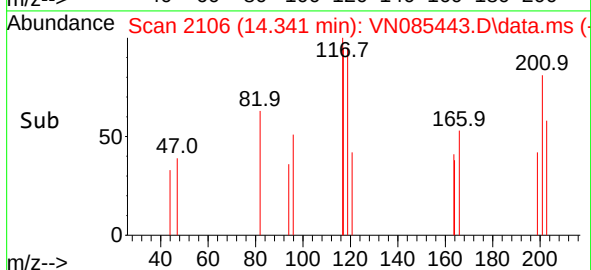
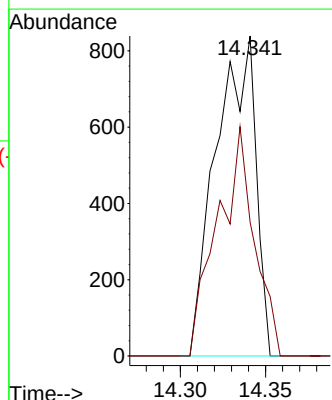
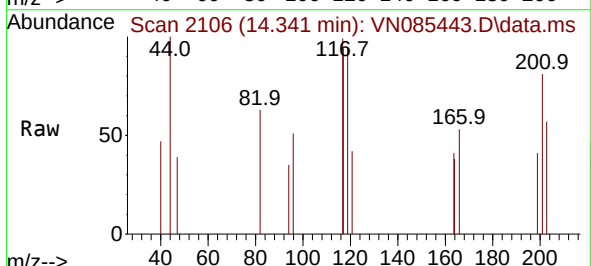
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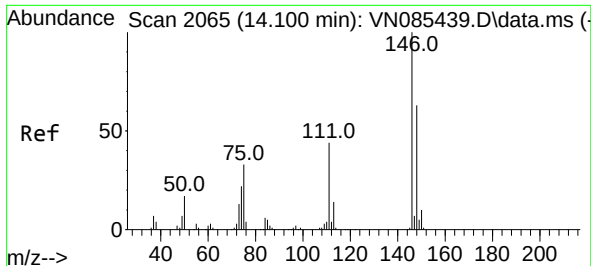
Tgt Ion: 117 Resp: 1355

Ion Ratio Lower Upper

117 100

201 66.5 33.7 101.0





#91

1,2-Dichlorobenzene

Concen: 1.090 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

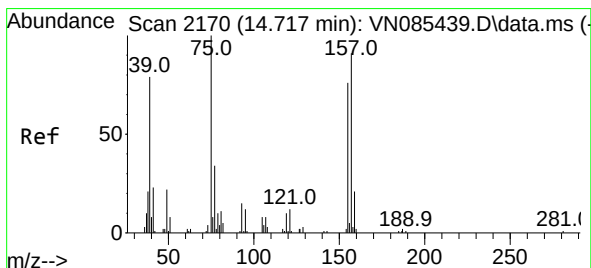
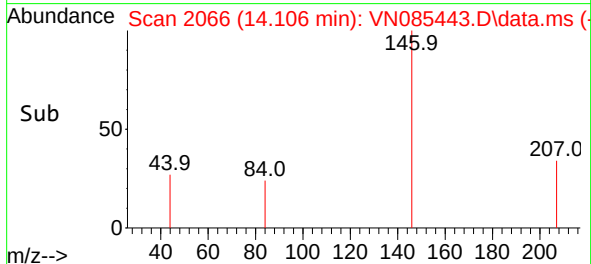
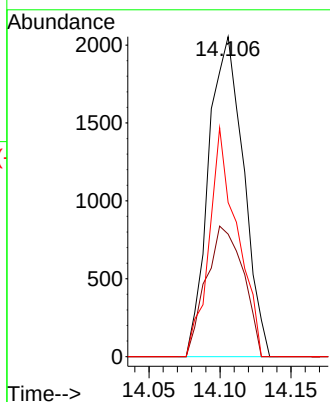
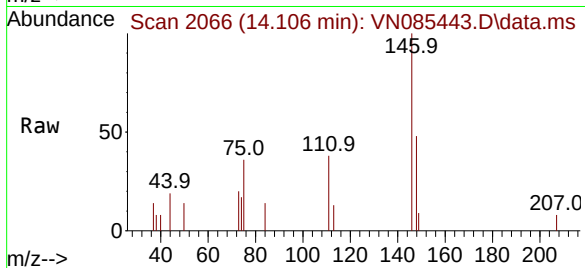
Tgt Ion:146 Resp: 3515

Ion Ratio Lower Upper

146 100

111 43.4 21.7 65.1

148 57.8 31.4 94.2



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.928 ug/l

RT: 14.711 min Scan# 2169

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

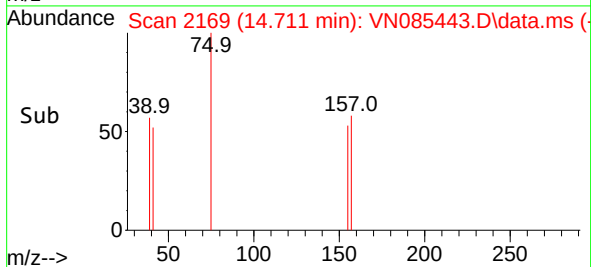
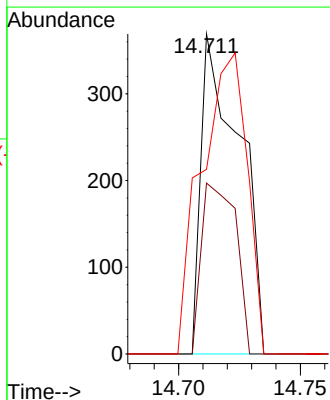
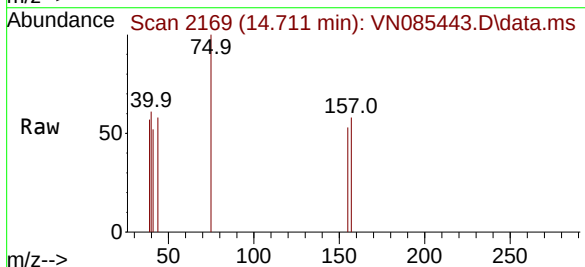
Tgt Ion: 75 Resp: 402

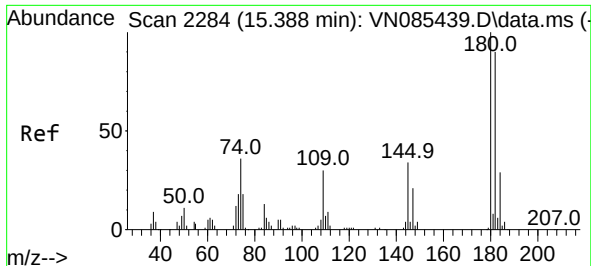
Ion Ratio Lower Upper

75 100

155 48.0 36.4 109.2

157 112.7 45.4 136.1

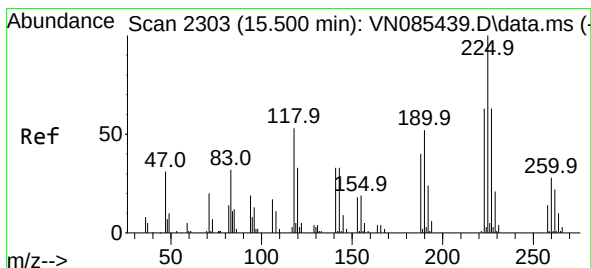
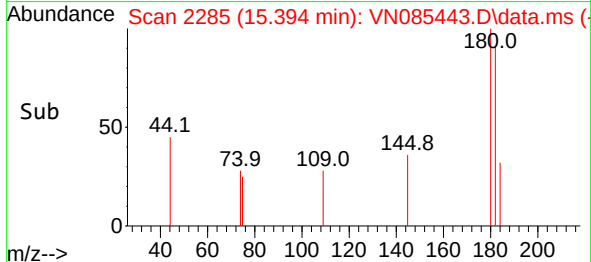
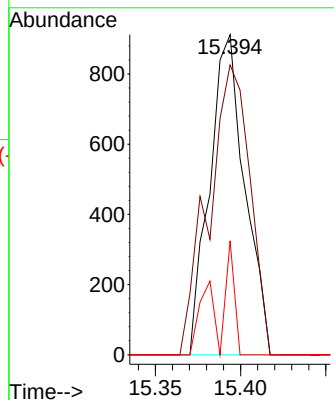
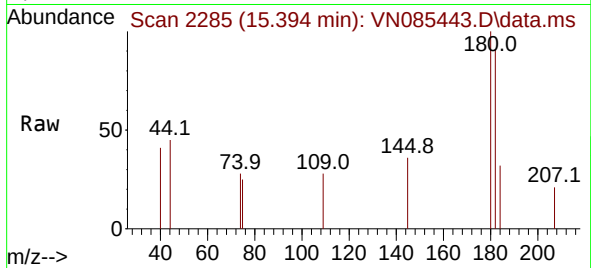




#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.874 ug/l  
 RT: 15.394 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

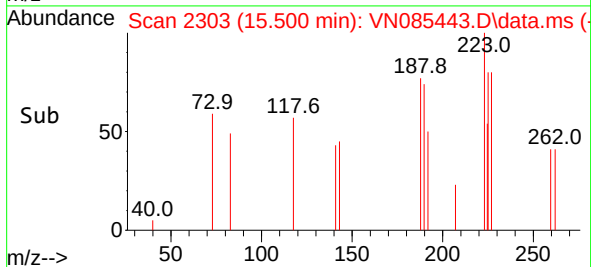
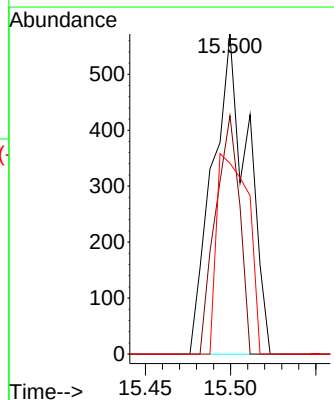
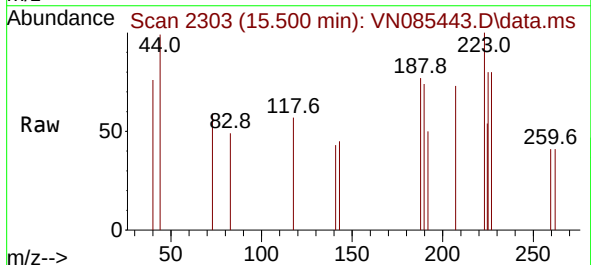
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

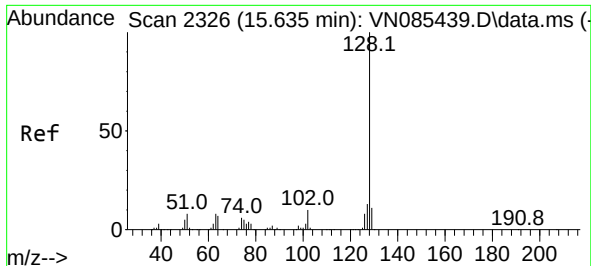
Tgt Ion:180 Resp: 1310  
 Ion Ratio Lower Upper  
 180 100  
 182 106.3 46.8 140.3  
 145 9.7 16.0 48.0#



#94  
 Hexachlorobutadiene  
 Concen: 1.033 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

Tgt Ion:225 Resp: 822  
 Ion Ratio Lower Upper  
 225 100  
 223 50.7 30.7 92.1  
 227 55.7 30.9 92.5

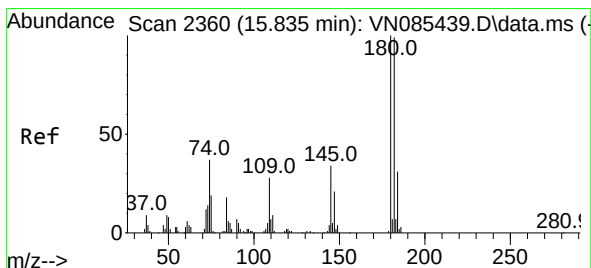
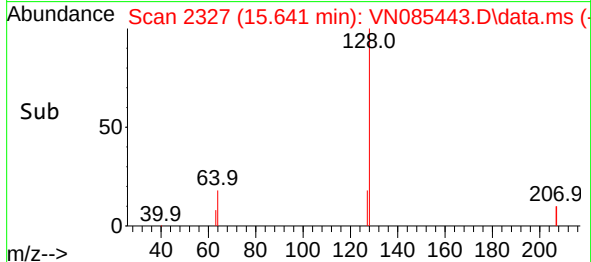
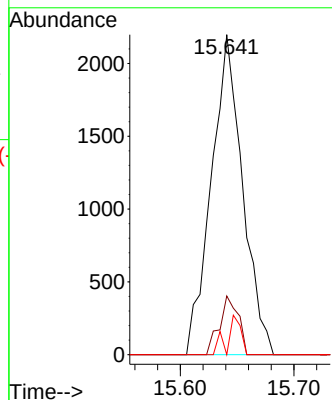
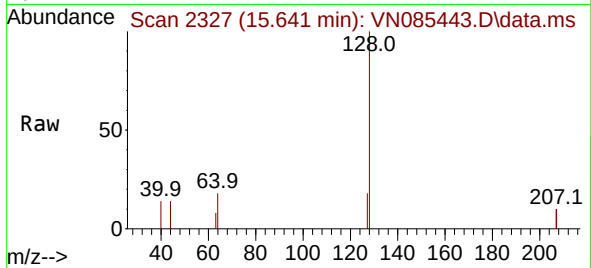




#95  
Naphthalene  
Concen: 0.941 ug/l  
RT: 15.641 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

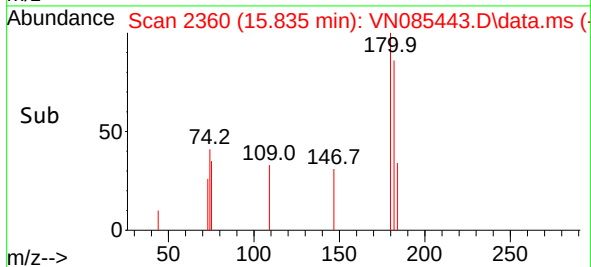
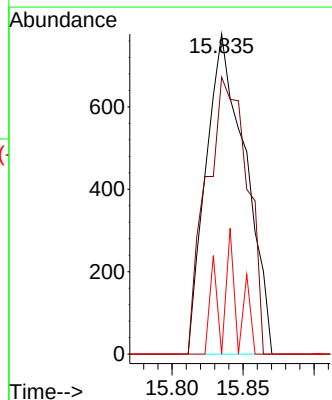
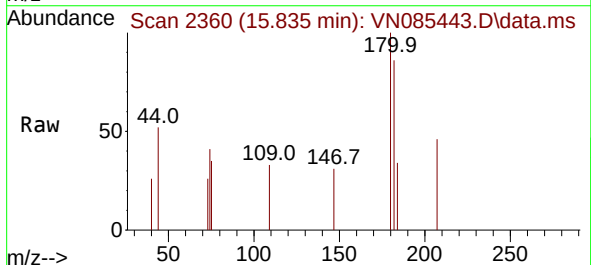
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion:128 Resp: 4210  
Ion Ratio Lower Upper  
128 100  
127 11.1 10.6 16.0  
129 5.3 8.8 13.2#



#96  
1,2,3-Trichlorobenzene  
Concen: 0.985 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion:180 Resp: 1494  
Ion Ratio Lower Upper  
180 100  
182 90.2 47.4 142.2  
145 11.8 16.9 50.7#



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Pentafluorobenzene        | 8.218  | 168   | 219757   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.094  | 114   | 370487   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865 | 117   | 320948   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.788 | 152   | 158525   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.571  | 65    | 176594   | 49.782   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 74 - 125 | Recovery | =      | 99.560%  |
| 35) Dibromofluoromethane     | 8.165  | 113   | 130487   | 50.768   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 75 - 124 | Recovery | =      | 101.540% |
| 50) Toluene-d8               | 10.565 | 98    | 477630   | 52.302   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 86 - 113 | Recovery | =      | 104.600% |
| 62) 4-Bromofluorobenzene     | 12.847 | 95    | 165249   | 52.899   | ug/l   | 0.00     |
| Spiked Amount                | 50.000 | Range | 77 - 121 | Recovery | =      | 105.800% |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124  | 85    | 130242   | 43.772   | ug/l   | 100      |
| 3) Chloromethane             | 2.360  | 50    | 138152   | 42.883   | ug/l   | 99       |
| 4) Vinyl Chloride            | 2.513  | 62    | 138316   | 42.715   | ug/l   | 99       |
| 5) Bromomethane              | 2.954  | 94    | 80019    | 40.910   | ug/l   | 91       |
| 6) Chloroethane              | 3.124  | 64    | 86837    | 42.299   | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.501  | 101   | 206526   | 43.956   | ug/l   | 99       |
| 8) Diethyl Ether             | 3.959  | 74    | 69545    | 42.846   | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 4.371  | 101   | 118310   | 44.706   | ug/l   | 98       |
| 10) Methyl Iodide            | 4.595  | 142   | 140190   | 46.259   | ug/l   | 98       |
| 11) Tert butyl alcohol       | 5.518  | 59    | 83933    | 206.633  | ug/l   | 99       |
| 12) 1,1-Dichloroethene       | 4.342  | 96    | 106880   | 45.317   | ug/l   | 98       |
| 13) Acrolein                 | 4.177  | 56    | 135720   | 244.765  | ug/l   | 99       |
| 14) Allyl chloride           | 5.024  | 41    | 170308   | 44.501   | ug/l   | 99       |
| 15) Acrylonitrile            | 5.712  | 53    | 294062   | 227.920  | ug/l   | 99       |
| 16) Acetone                  | 4.418  | 43    | 245248   | 213.971  | ug/l   | 98       |
| 17) Carbon Disulfide         | 4.712  | 76    | 300215   | 41.342   | ug/l   | 100      |
| 18) Methyl Acetate           | 5.018  | 43    | 156938   | 45.028   | ug/l   | 100      |
| 19) Methyl tert-butyl Ether  | 5.795  | 73    | 365819   | 47.768   | ug/l   | 100      |
| 20) Methylene Chloride       | 5.271  | 84    | 122059   | 43.017   | ug/l   | 98       |
| 21) trans-1,2-Dichloroethene | 5.783  | 96    | 112597   | 44.672   | ug/l   | 93       |
| 22) Diisopropyl ether        | 6.665  | 45    | 399206   | 46.996   | ug/l   | 99       |
| 23) Vinyl Acetate            | 6.601  | 43    | 1471068  | 247.459  | ug/l   | 100      |
| 24) 1,1-Dichloroethane       | 6.571  | 63    | 228489   | 44.114   | ug/l   | 98       |
| 25) 2-Butanone               | 7.477  | 43    | 386125   | 228.924  | ug/l   | 100      |
| 26) 2,2-Dichloropropane      | 7.489  | 77    | 199303   | 47.593   | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene   | 7.483  | 96    | 134920   | 45.446   | ug/l   | 98       |
| 28) Bromochloromethane       | 7.812  | 49    | 106323   | 44.122   | ug/l   | 100      |
| 29) Tetrahydrofuran          | 7.836  | 42    | 255650   | 239.065  | ug/l   | 99       |
| 30) Chloroform               | 7.965  | 83    | 235923   | 44.071   | ug/l   | 98       |
| 31) Cyclohexane              | 8.253  | 56    | 193034   | 42.878   | ug/l   | 93       |
| 32) 1,1,1-Trichloroethane    | 8.165  | 97    | 208172   | 44.332   | ug/l   | 99       |
| 36) 1,1-Dichloropropene      | 8.365  | 75    | 161834   | 44.863   | ug/l   | 98       |
| 37) Ethyl Acetate            | 7.559  | 43    | 160656   | 44.123   | ug/l   | 97       |
| 38) Carbon Tetrachloride     | 8.359  | 117   | 183592   | 44.456   | ug/l   | 99       |
| 39) Methylcyclohexane        | 9.600  | 83    | 168431   | 49.687   | ug/l   | 98       |
| 40) Benzene                  | 8.600  | 78    | 494871   | 45.657   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 89326    | 47.155  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 185663   | 45.481  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.683  | 43   | 265107   | 45.440  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 110058   | 43.622  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 123876   | 44.744  | ug/l   | 97       |
| 46) Dibromomethane            | 9.700  | 93   | 88325    | 44.214  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.889  | 83   | 185808   | 45.655  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 131142   | 49.948  | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.689  | 88   | 35051    | 792.760 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 832426   | 245.877 | ug/l   | 99       |
| 52) Toluene                   | 10.630 | 92   | 301911   | 48.073  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.830 | 75   | 183680   | 47.757  | ug/l   | 94       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 196307   | 47.783  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 114757   | 46.173  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 182170   | 43.762  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 202583   | 46.877  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 403949   | 256.116 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 598433   | 251.213 | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.353 | 129  | 137831   | 45.935  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 110926   | 44.837  | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 98211    | 44.886  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 322723   | 45.901  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 115379   | 44.712  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 577059   | 50.391  | ug/l   | 97       |
| 68) m/p-Xylenes               | 12.071 | 106  | 437367   | 103.341 | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 210698   | 52.093  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 355459   | 53.103  | ug/l   | 100      |
| 71) Bromoform                 | 12.577 | 173  | 90693    | 49.119  | ug/l # | 100      |
| 73) Isopropylbenzene          | 12.694 | 105  | 534428   | 49.951  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 234342   | 48.730  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 164882   | 43.627  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 221480   | 68.739  | ug/l   | 44       |
| 77) Bromobenzene              | 12.977 | 156  | 128968   | 46.138  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.029 | 91   | 645977   | 51.001  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.124 | 91   | 392404   | 47.870  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 456048   | 51.604  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 66842    | 56.127  | ug/l   | 86       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 398110   | 48.776  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 378478   | 50.997  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.477 | 105  | 457340   | 51.922  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 532578   | 51.777  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 440284   | 47.795  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 236387   | 45.920  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 235319   | 44.102  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 373227   | 50.578  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 88538    | 45.215  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 231646   | 45.113  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75   | 31899    | 46.221  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 109157   | 45.739  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 53358    | 42.112  | ug/l   | 99       |
| 95) Naphthalene               | 15.641 | 128  | 335535   | 47.116  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 107583   | 44.551  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085445.D  
Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

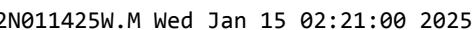
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

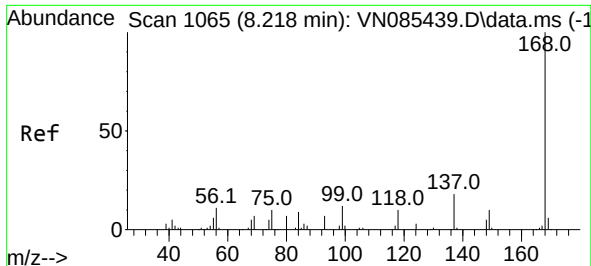
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 15 02:20:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

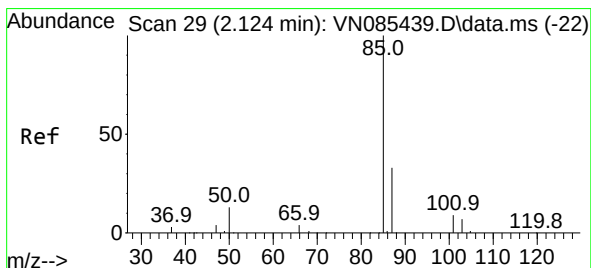
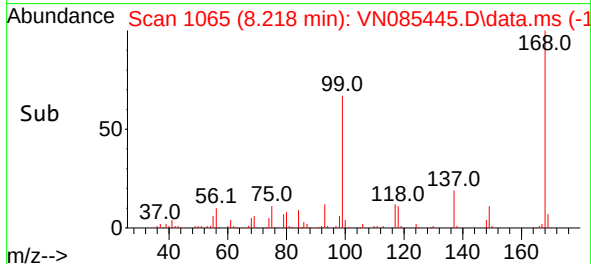
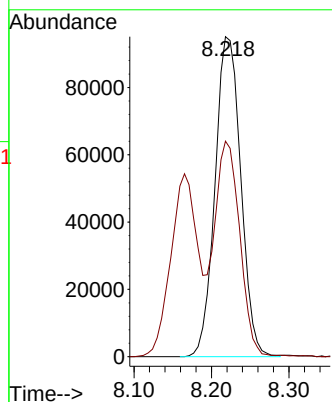
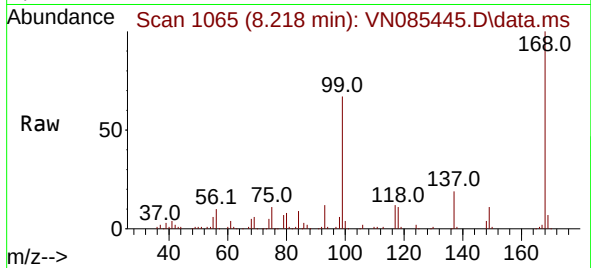




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

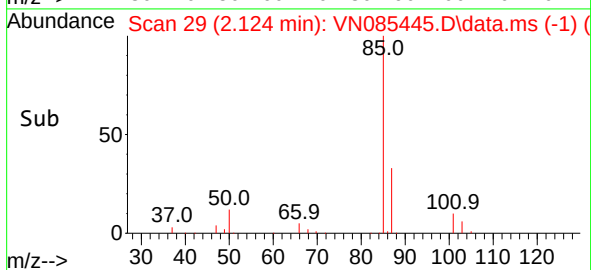
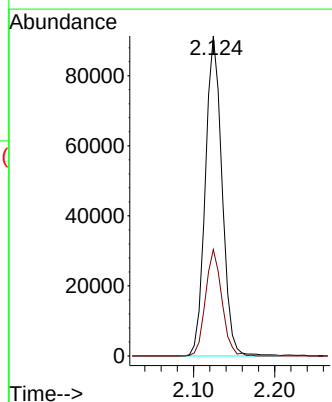
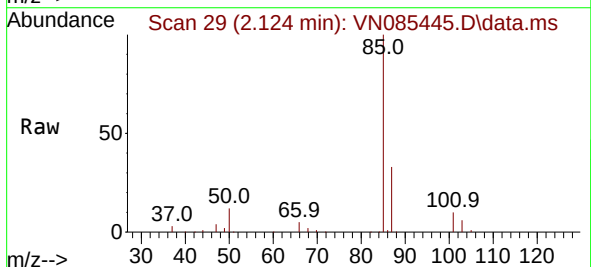
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICV011425

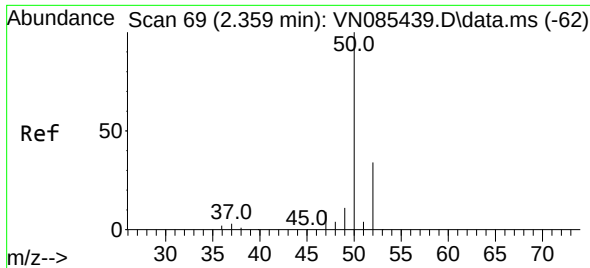
Tgt Ion:168 Resp: 219757  
Ion Ratio Lower Upper  
168 100  
99 66.9 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 43.772 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 85 Resp: 130242  
Ion Ratio Lower Upper  
85 100  
87 33.2 16.7 50.1

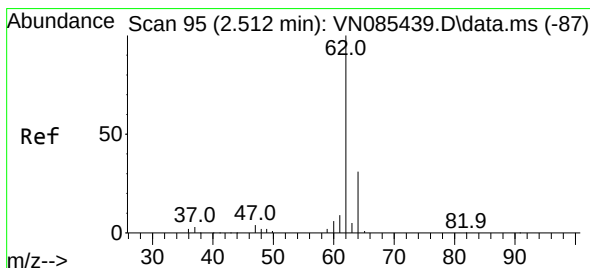
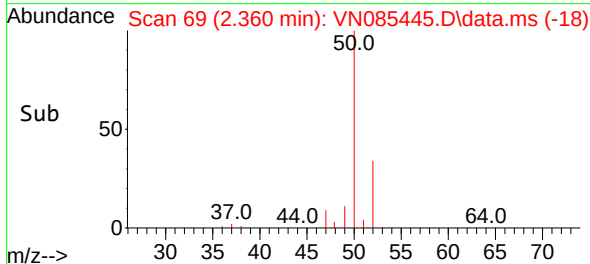
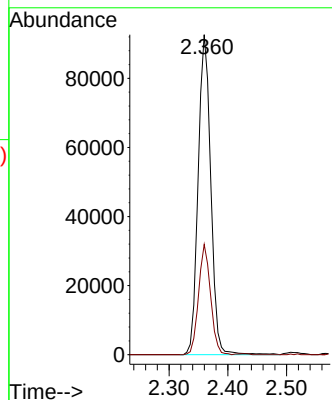
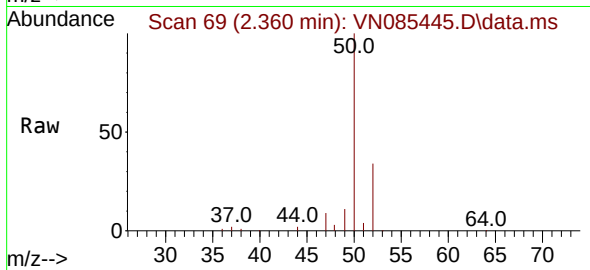




#3  
Chloromethane  
Concen: 42.883 ug/l  
RT: 2.360 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

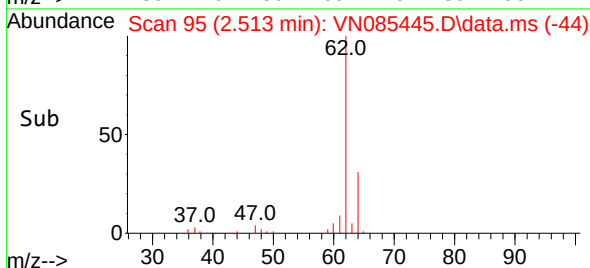
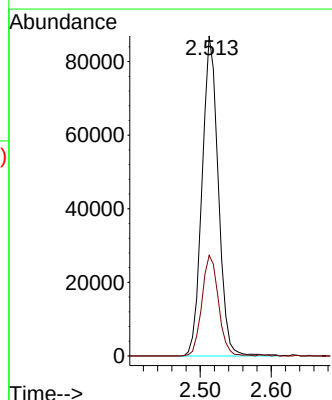
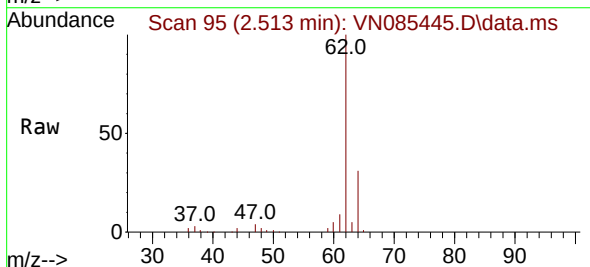
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

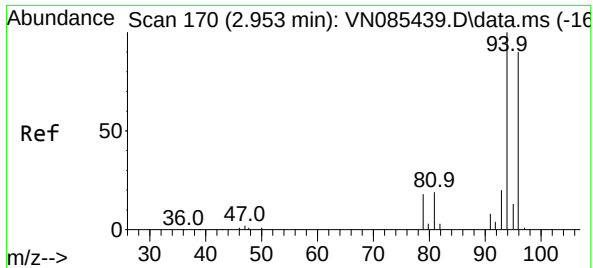
Tgt Ion: 50 Resp: 138152  
Ion Ratio Lower Upper  
50 100  
52 34.4 27.0 40.6



#4  
Vinyl Chloride  
Concen: 42.715 ug/l  
RT: 2.513 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 62 Resp: 138316  
Ion Ratio Lower Upper  
62 100  
64 31.4 24.8 37.2

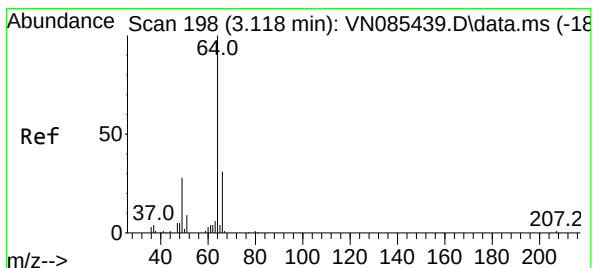
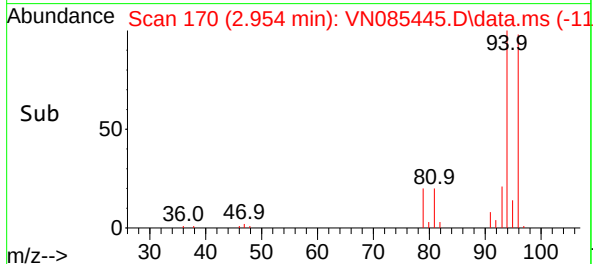
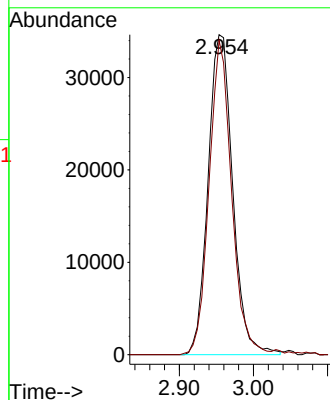
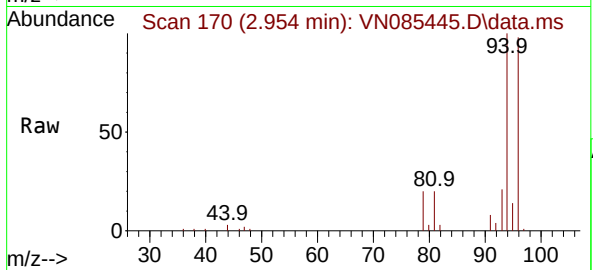




#5  
Bromomethane  
Concen: 40.910 ug/l  
RT: 2.954 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

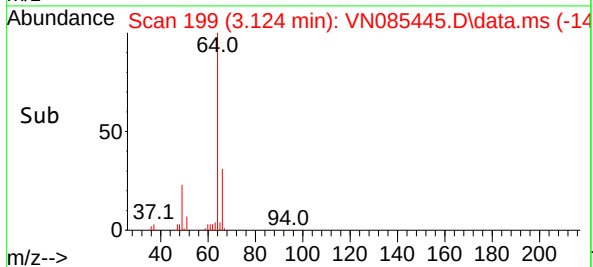
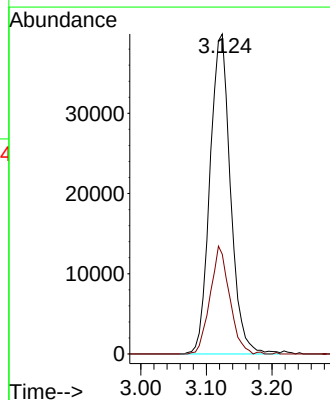
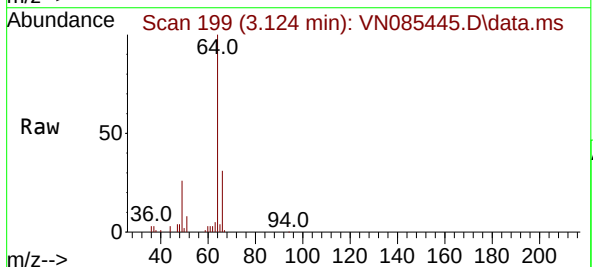
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

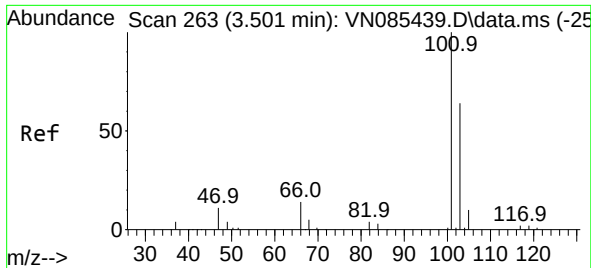
Tgt Ion: 94 Resp: 80019  
Ion Ratio Lower Upper  
94 100  
96 98.2 71.8 107.6



#6  
Chloroethane  
Concen: 42.299 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 64 Resp: 86837  
Ion Ratio Lower Upper  
64 100  
66 31.1 24.6 36.8

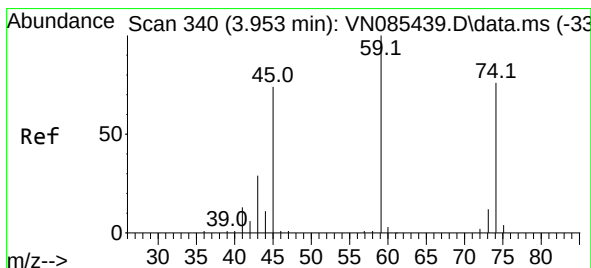
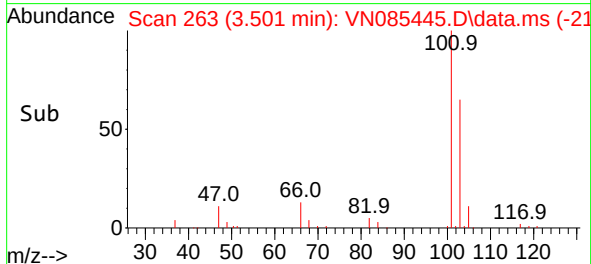
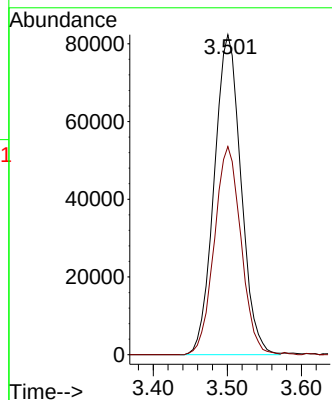
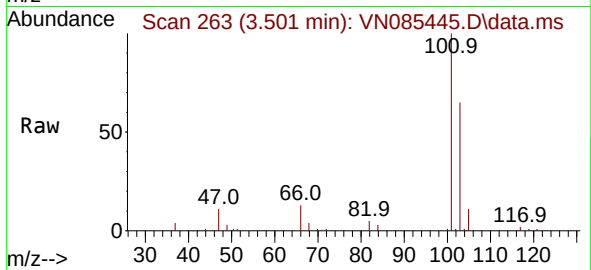




#7  
 Trichlorofluoromethane  
 Concen: 43.956 ug/l  
 RT: 3.501 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

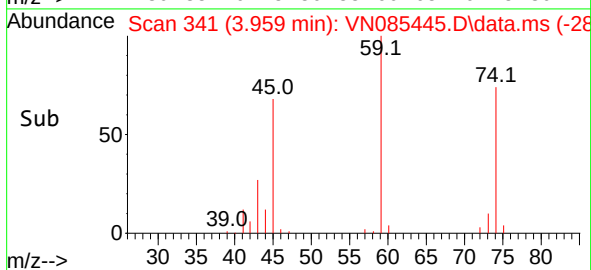
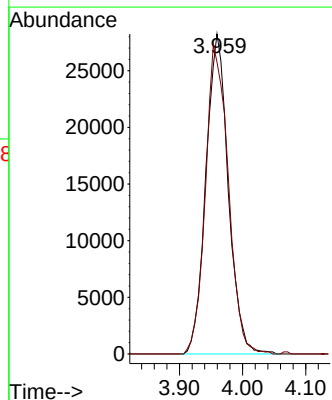
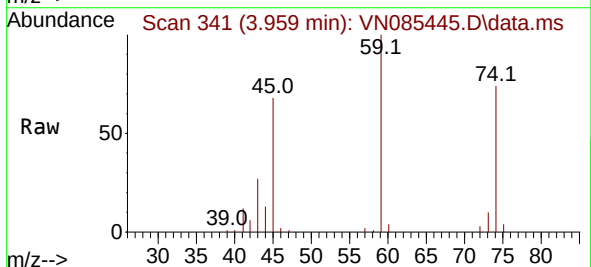
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

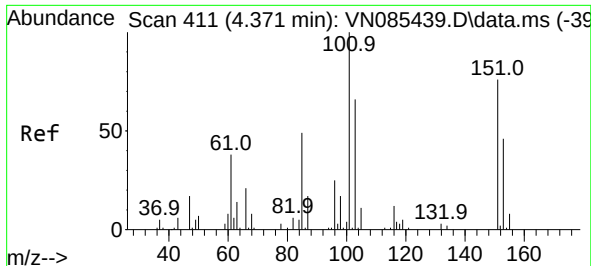
Tgt Ion:101 Resp: 206526  
 Ion Ratio Lower Upper  
 101 100  
 103 65.1 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 42.846 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 74 Resp: 69545  
 Ion Ratio Lower Upper  
 74 100  
 45 99.0 49.7 149.1

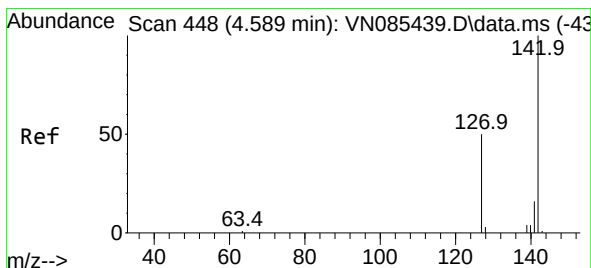
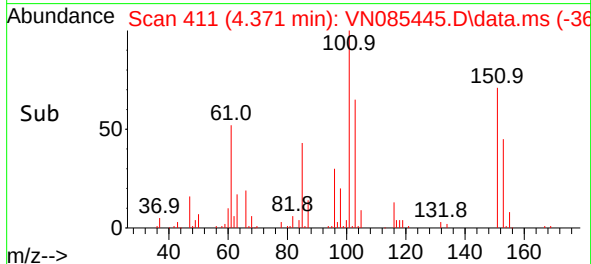
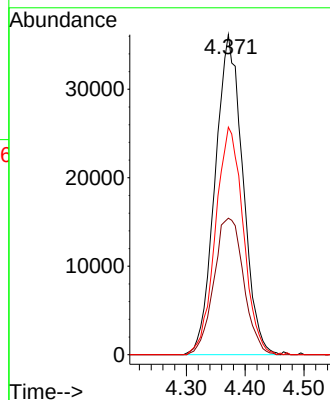
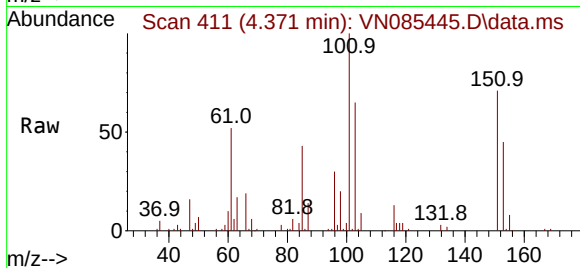




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 44.706 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

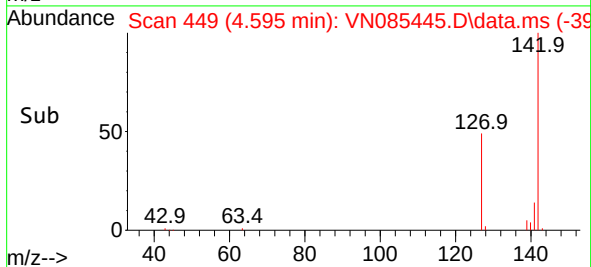
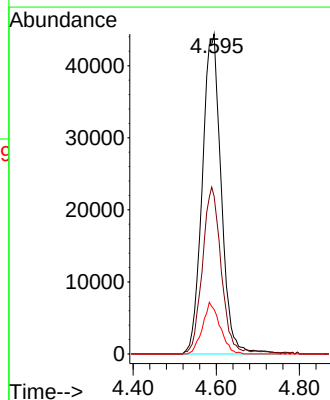
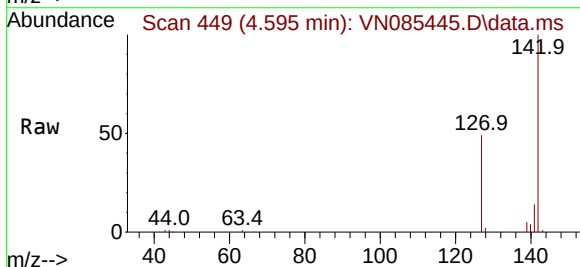
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

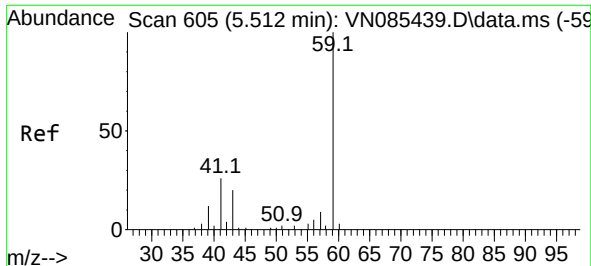
Tgt Ion:101 Resp: 118310  
Ion Ratio Lower Upper  
101 100  
85 45.9 37.8 56.8  
151 71.5 58.8 88.2



#10  
Methyl Iodide  
Concen: 46.259 ug/l  
RT: 4.595 min Scan# 449  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:142 Resp: 140190  
Ion Ratio Lower Upper  
142 100  
127 49.2 40.3 60.5  
141 13.9 12.8 19.2

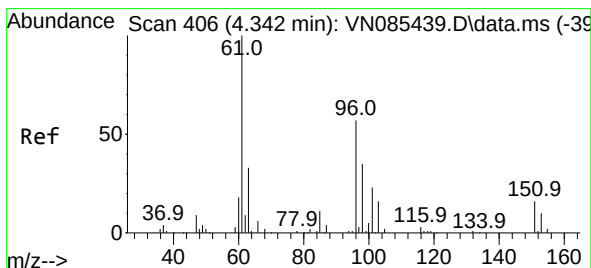
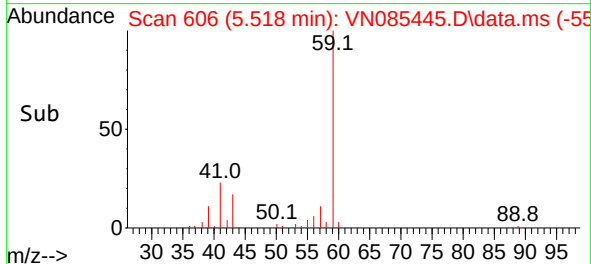
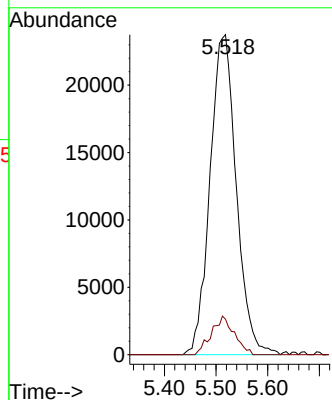
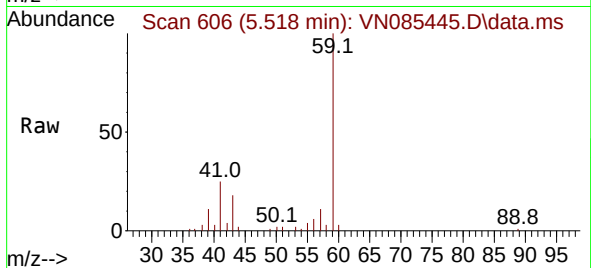




#11  
Tert butyl alcohol  
Concen: 206.633 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

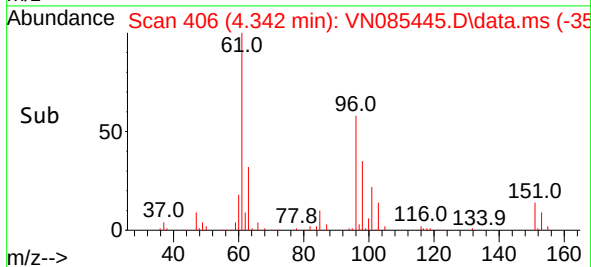
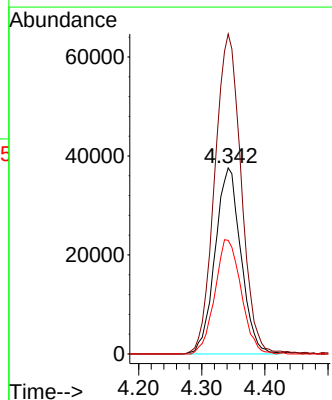
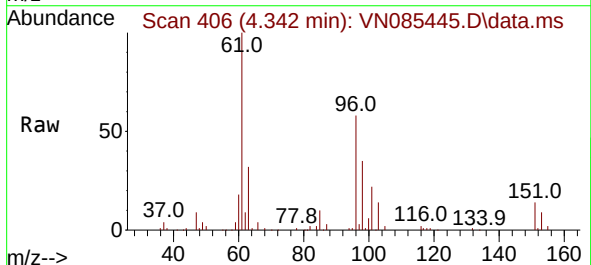
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICV\_VN011425

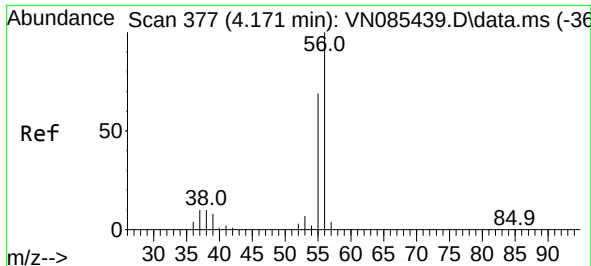
Tgt Ion: 59 Resp: 83933  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 45.317 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 106880  
Ion Ratio Lower Upper  
96 100  
61 171.9 141.0 211.4  
98 61.0 49.0 73.6

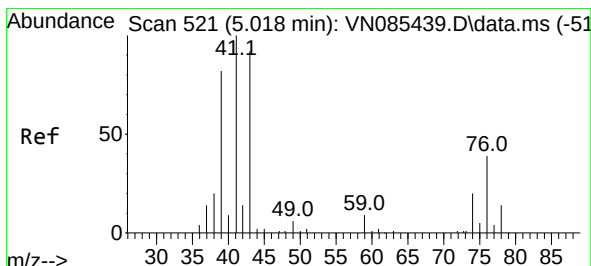
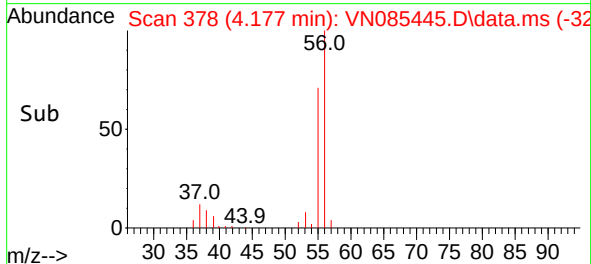
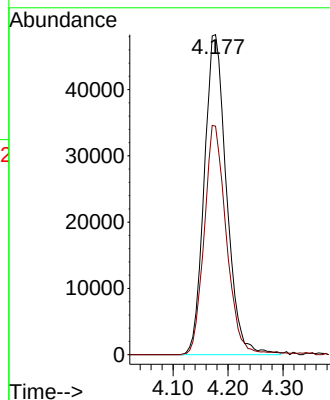
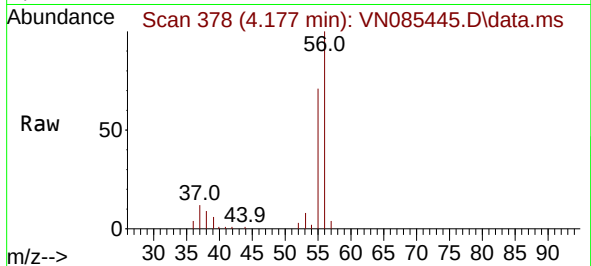




#13  
Acrolein  
Concen: 244.765 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

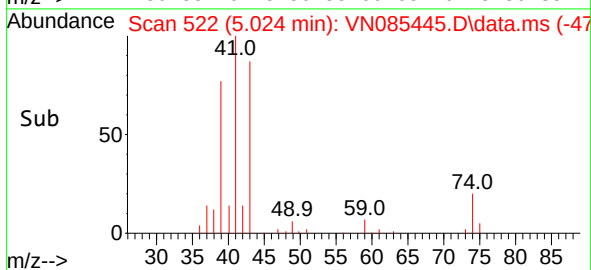
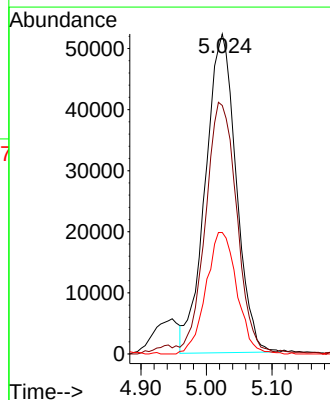
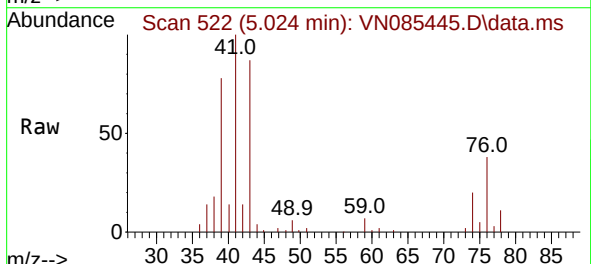
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 56 Resp: 135720  
Ion Ratio Lower Upper  
56 100  
55 70.9 56.3 84.5

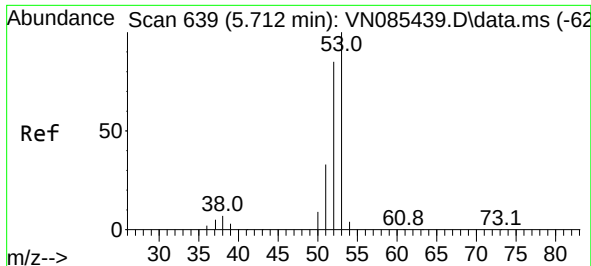


#14  
Allyl chloride  
Concen: 44.501 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 170308  
Ion Ratio Lower Upper  
41 100  
39 78.9 64.4 96.6  
76 38.2 30.5 45.7



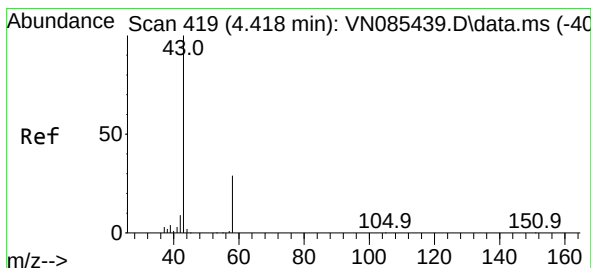
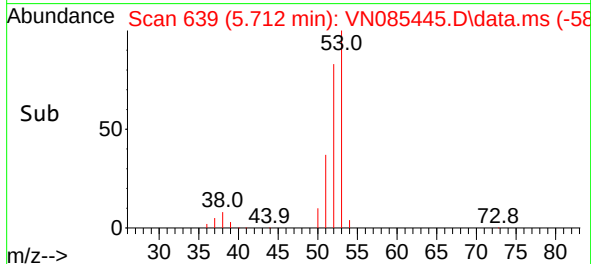
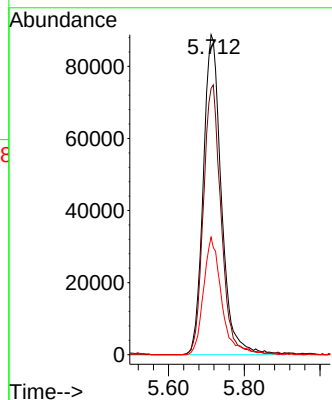
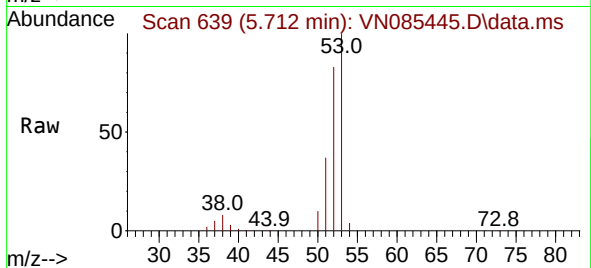




#15  
Acrylonitrile  
Concen: 227.920 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

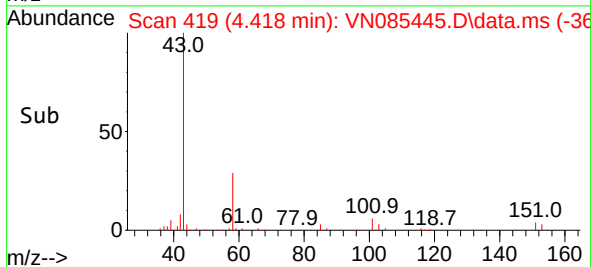
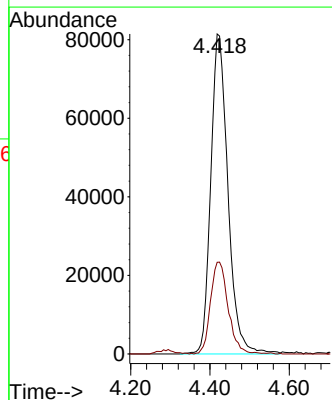
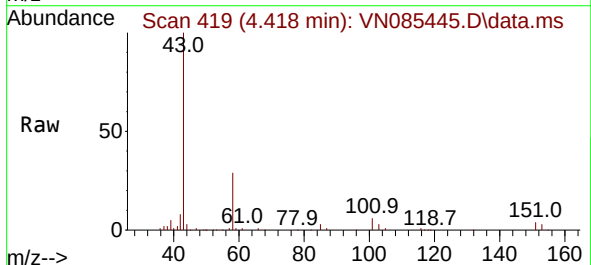
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

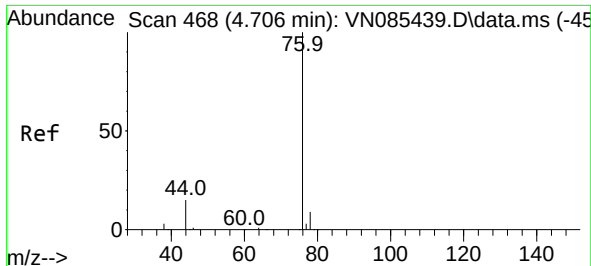
Tgt Ion: 53 Resp: 294062  
Ion Ratio Lower Upper  
53 100  
52 82.7 65.5 98.3  
51 36.8 29.8 44.8



#16  
Acetone  
Concen: 213.971 ug/l  
RT: 4.418 min Scan# 419  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 245248  
Ion Ratio Lower Upper  
43 100  
58 28.4 23.8 35.6

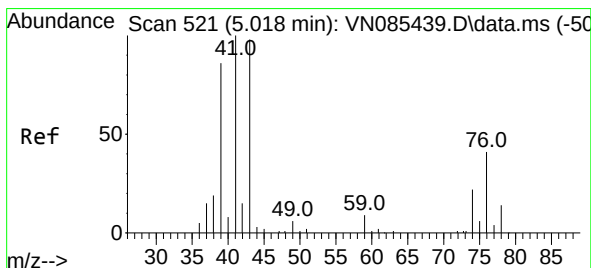
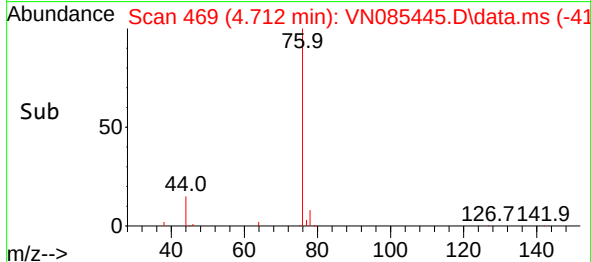
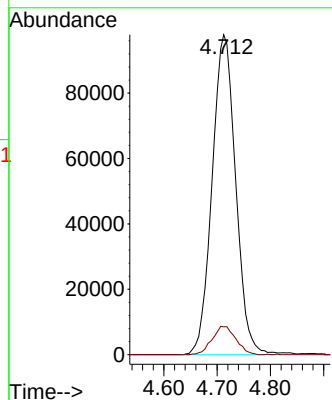
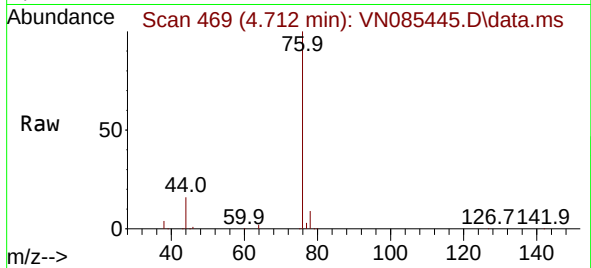




#17  
Carbon Disulfide  
Concen: 41.342 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

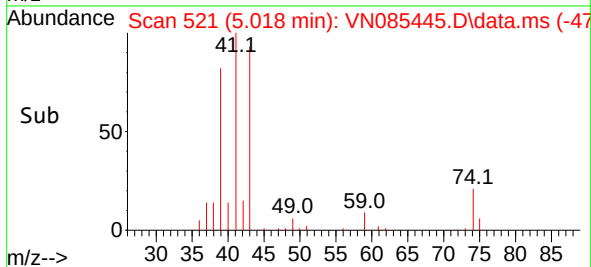
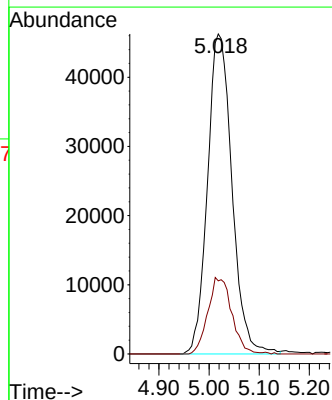
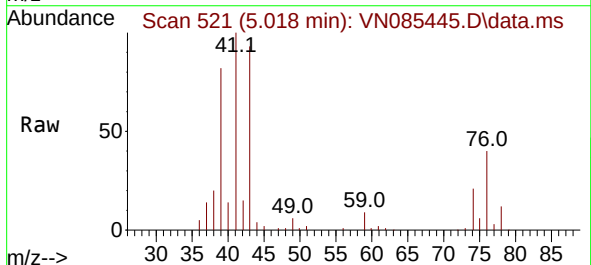
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

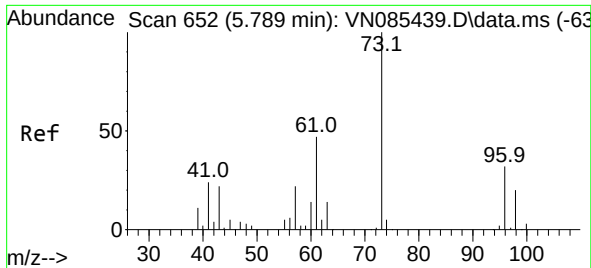
Tgt Ion: 76 Resp: 300215  
Ion Ratio Lower Upper  
76 100  
78 8.7 6.9 10.3



#18  
Methyl Acetate  
Concen: 45.028 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 156938  
Ion Ratio Lower Upper  
43 100  
74 23.4 18.6 28.0

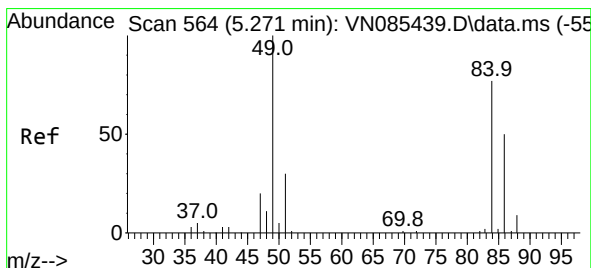
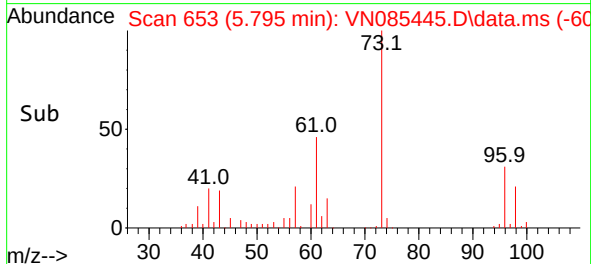
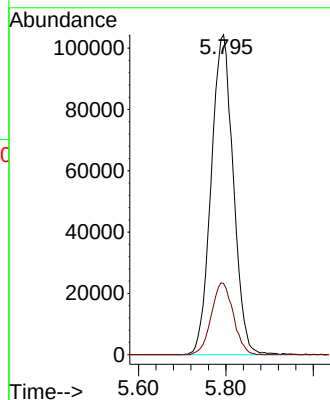
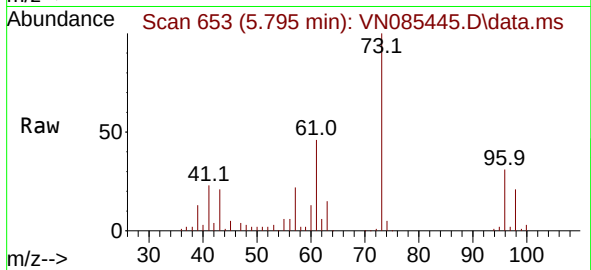




#19  
Methyl tert-butyl Ether  
Concen: 47.768 ug/l  
RT: 5.795 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

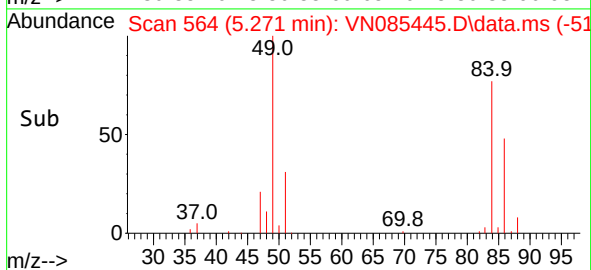
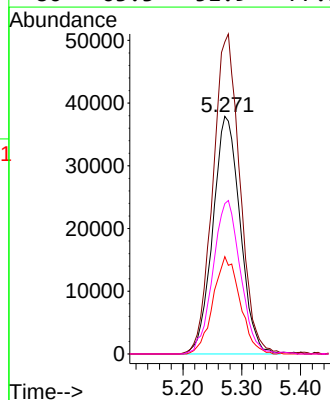
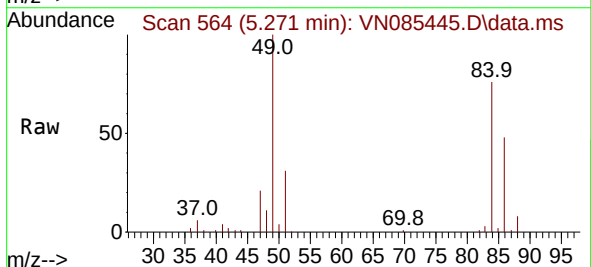
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVNVN011425

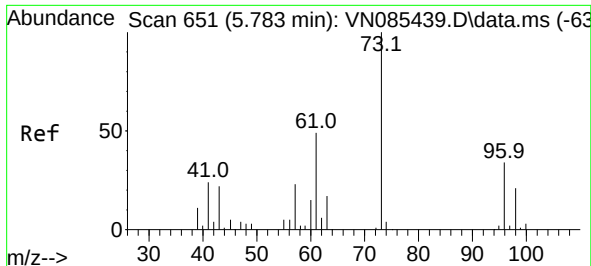
Tgt Ion: 73 Resp: 365819  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



#20  
Methylene Chloride  
Concen: 43.017 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 84 Resp: 122059  
Ion Ratio Lower Upper  
84 100  
49 131.3 104.1 156.1  
51 41.0 31.0 46.4  
86 63.3 51.9 77.9

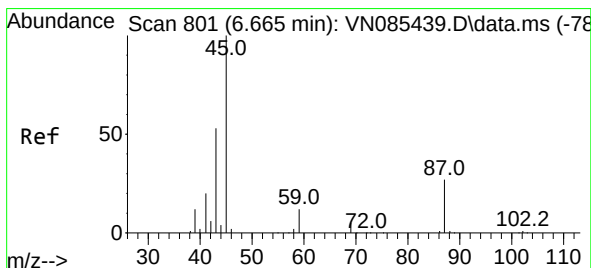
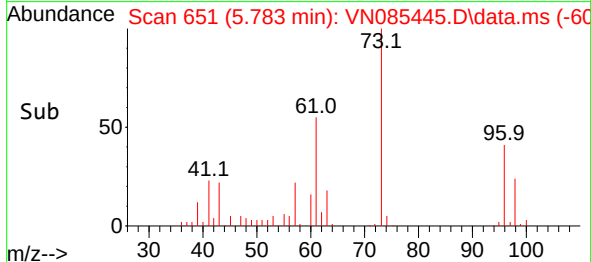
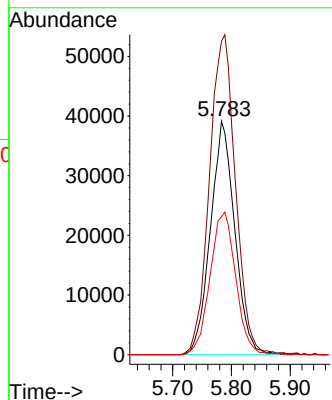
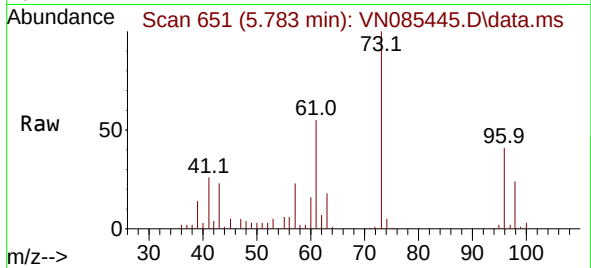




#21  
trans-1,2-Dichloroethene  
Concen: 44.672 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

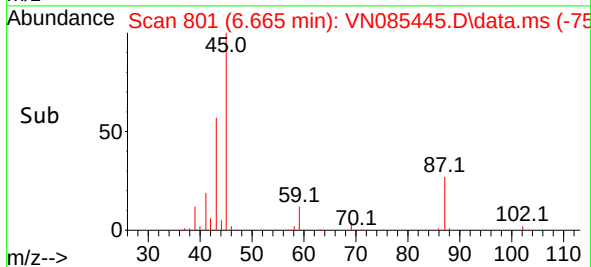
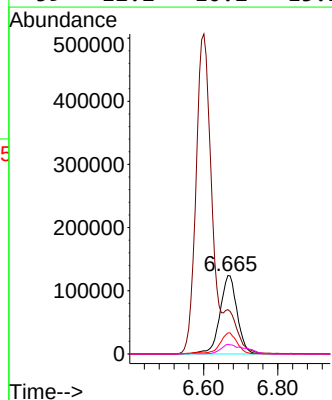
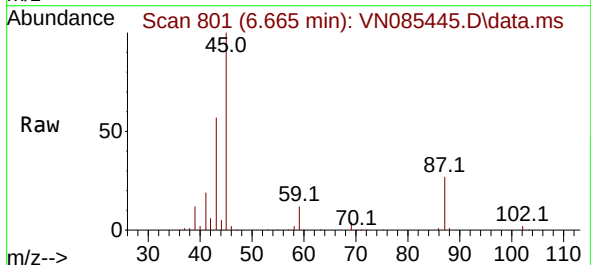
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVNV011425

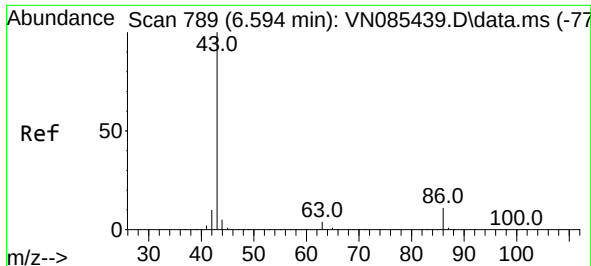
Tgt Ion: 96 Resp: 112597  
Ion Ratio Lower Upper  
96 100  
61 134.3 115.7 173.5  
98 59.1 49.8 74.8



#22  
Diisopropyl ether  
Concen: 46.996 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 45 Resp: 399206  
Ion Ratio Lower Upper  
45 100  
43 56.0 45.0 67.6  
87 26.8 21.8 32.8  
59 12.2 10.2 15.2

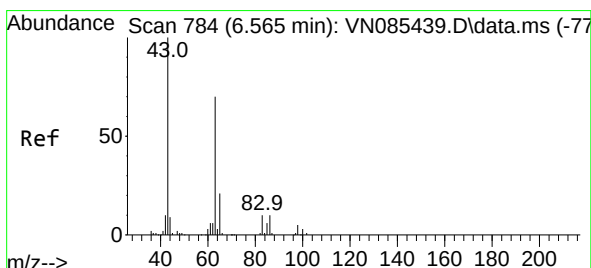
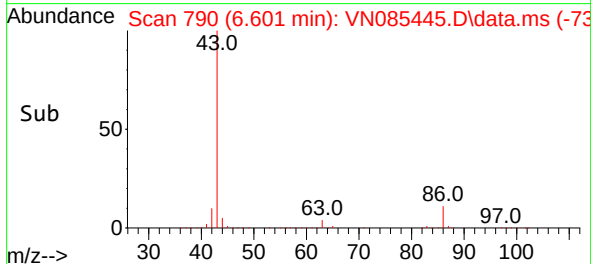
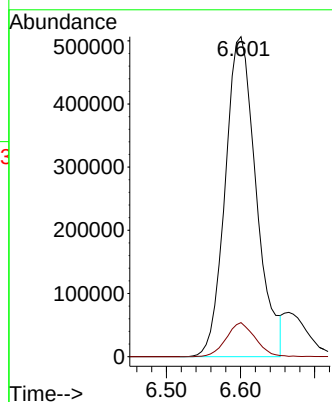
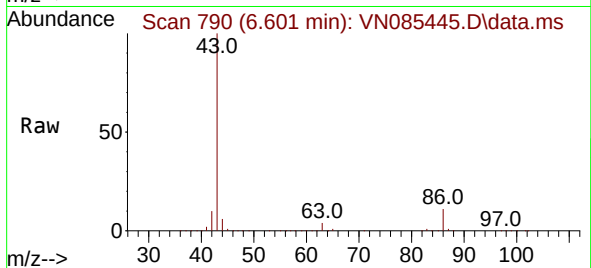




#23  
 Vinyl Acetate  
 Concen: 247.459 ug/l  
 RT: 6.601 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

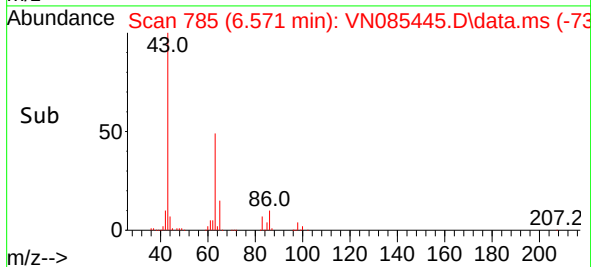
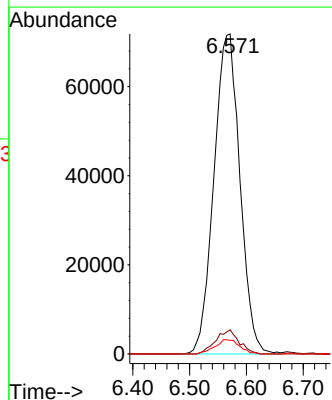
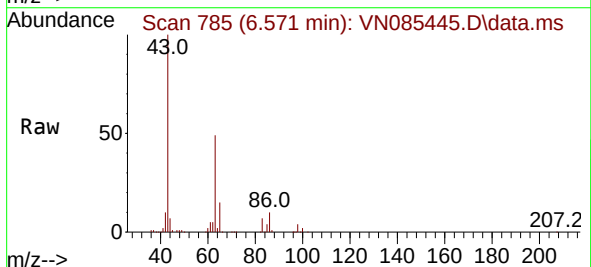
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

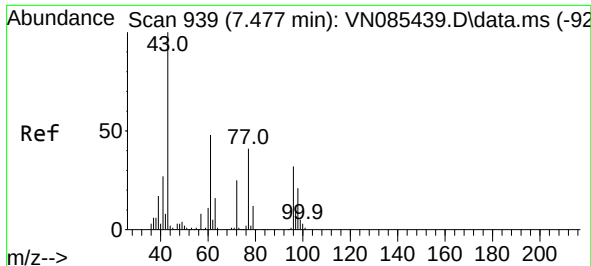
Tgt Ion: 43 Resp: 1471068  
 Ion Ratio Lower Upper  
 43 100  
 86 10.7 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 44.114 ug/l  
 RT: 6.571 min Scan# 785  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 228489  
 Ion Ratio Lower Upper  
 63 100  
 98 7.5 3.3 9.8  
 100 4.2 2.0 6.0

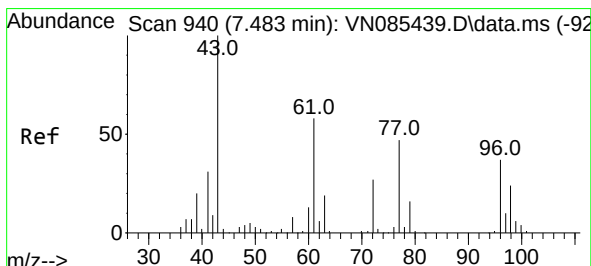
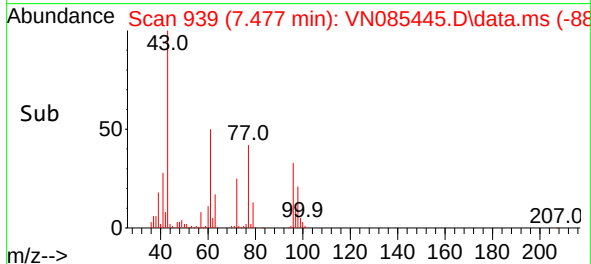
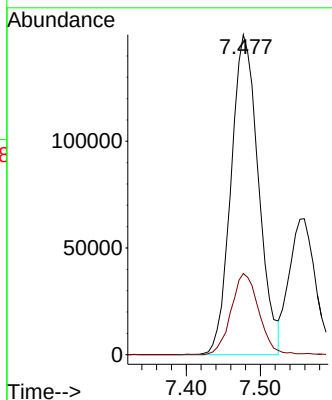
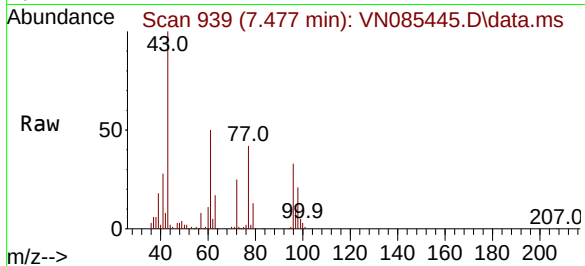




#25  
2-Butanone  
Concen: 228.924 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

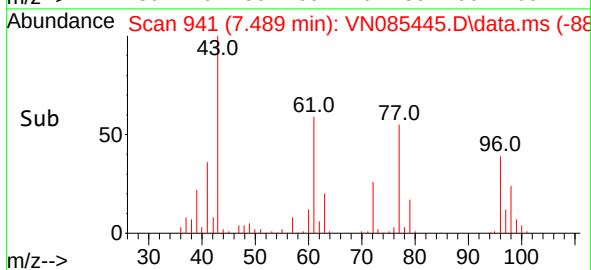
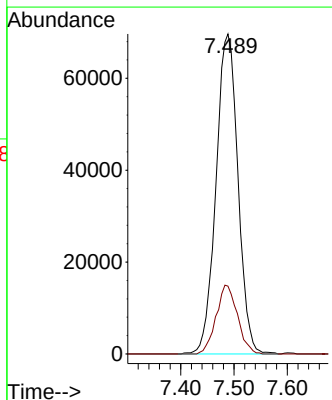
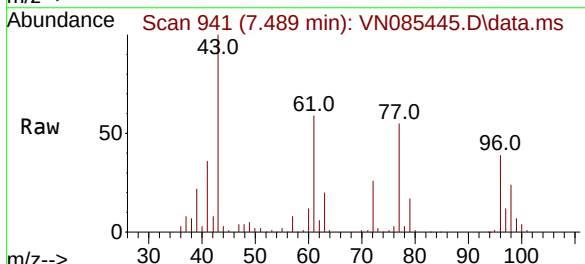
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

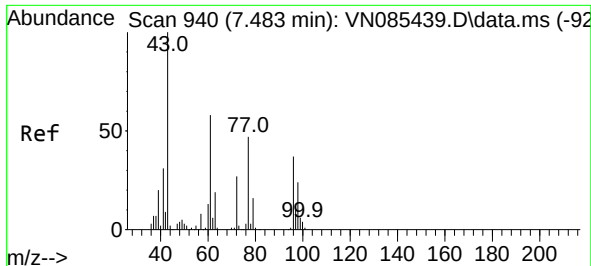
Tgt Ion: 43 Resp: 386125  
Ion Ratio Lower Upper  
43 100  
72 25.4 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 47.593 ug/l  
RT: 7.489 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 77 Resp: 199303  
Ion Ratio Lower Upper  
77 100  
97 20.9 10.7 32.1

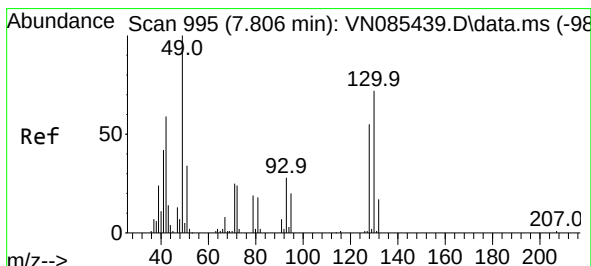
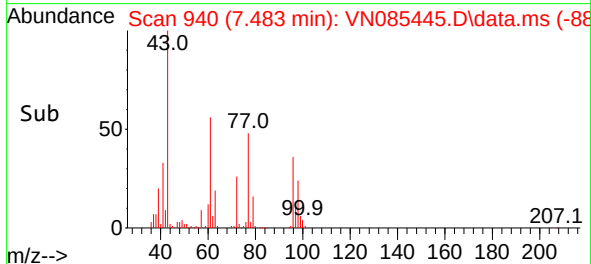
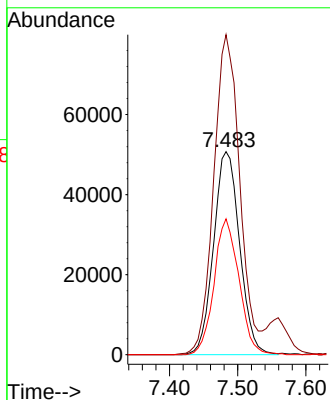
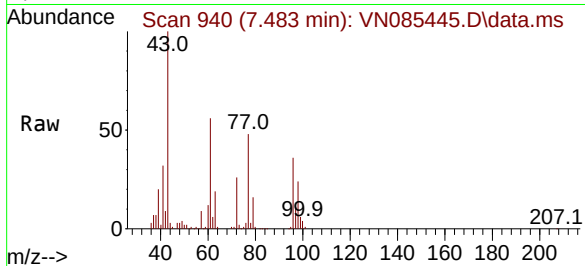




#27  
 cis-1,2-Dichloroethene  
 Concen: 45.446 ug/l  
 RT: 7.483 min Scan# 941  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

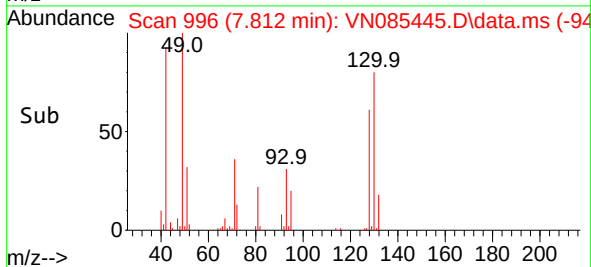
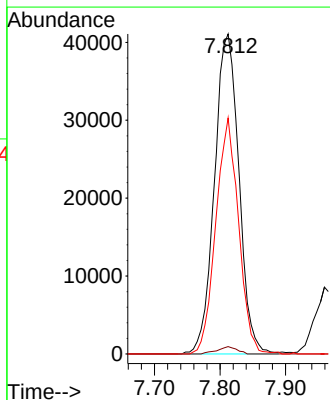
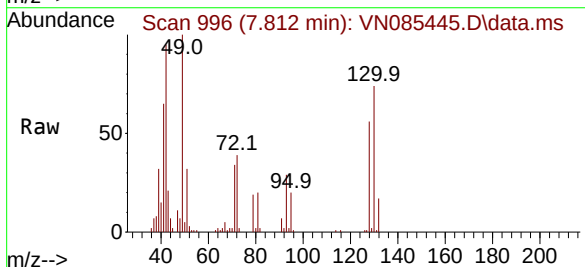
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

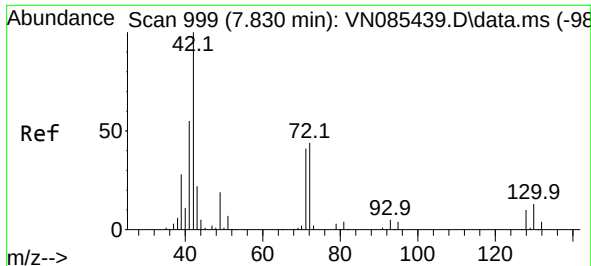
Tgt Ion: 96 Resp: 134920  
 Ion Ratio Lower Upper  
 96 100  
 61 158.0 0.0 311.8  
 98 64.1 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 44.122 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 49 Resp: 106323  
 Ion Ratio Lower Upper  
 49 100  
 129 1.8 0.0 4.4  
 130 68.6 55.0 82.4

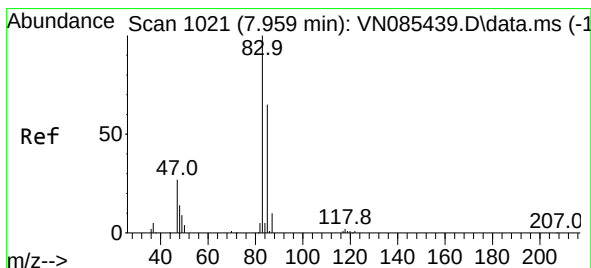
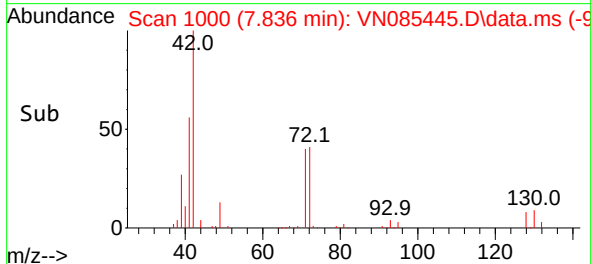
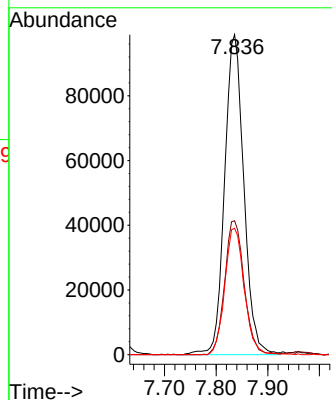
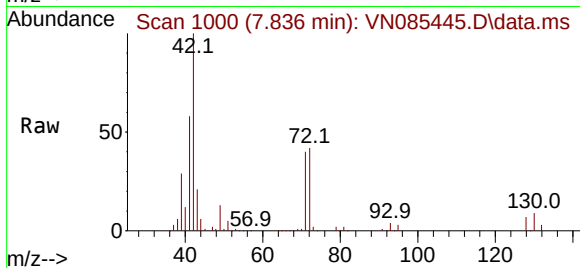




#29  
Tetrahydrofuran  
Concen: 239.065 ug/l  
RT: 7.836 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

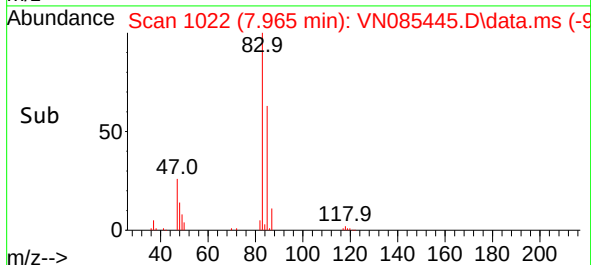
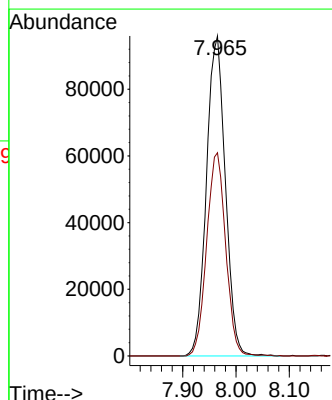
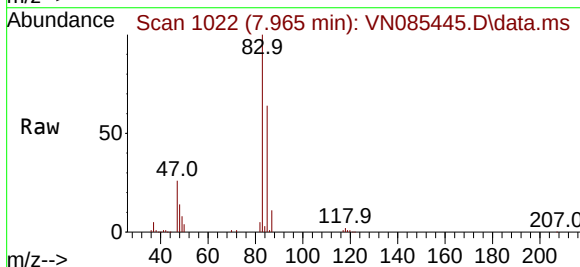
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 42 Resp: 255650  
Ion Ratio Lower Upper  
42 100  
72 42.5 34.2 51.2  
71 39.9 32.5 48.7

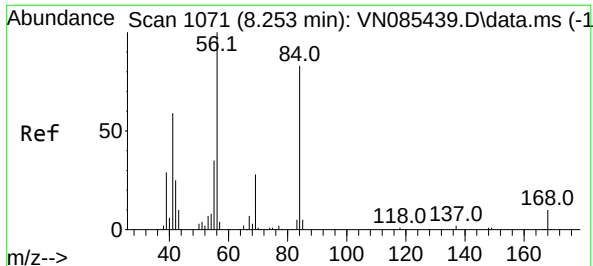


#30  
Chloroform  
Concen: 44.071 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 235923  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.8 77.6



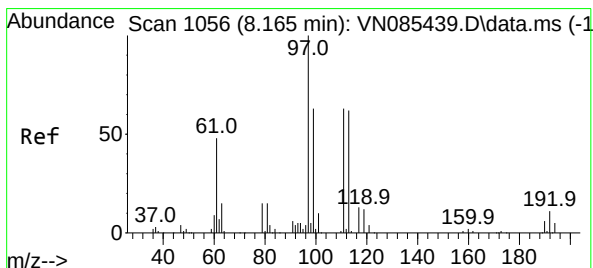
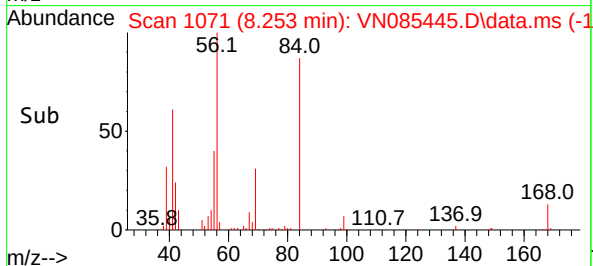
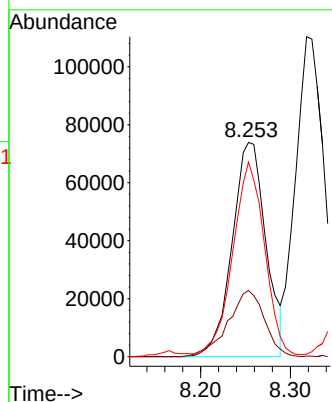
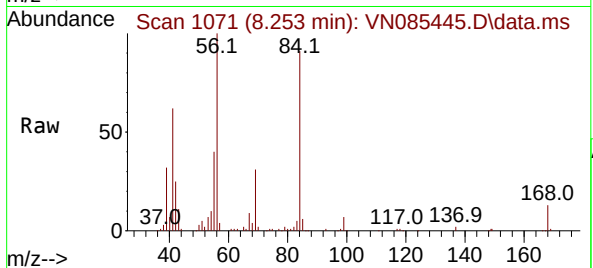




#31  
Cyclohexane  
Concen: 42.878 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

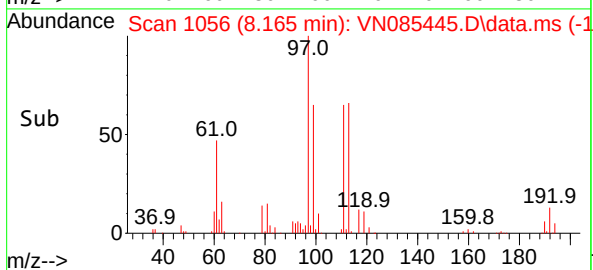
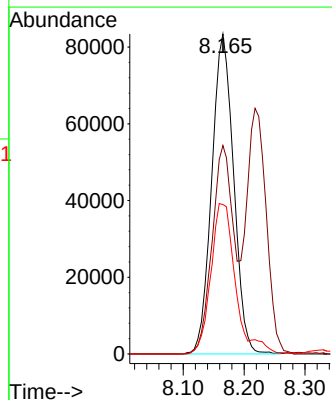
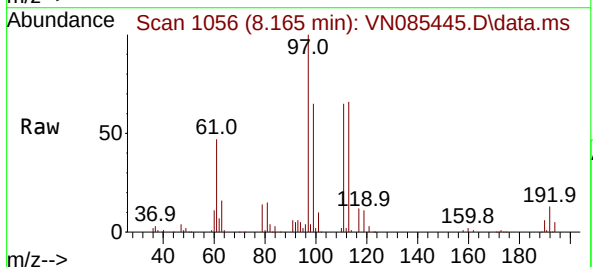
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

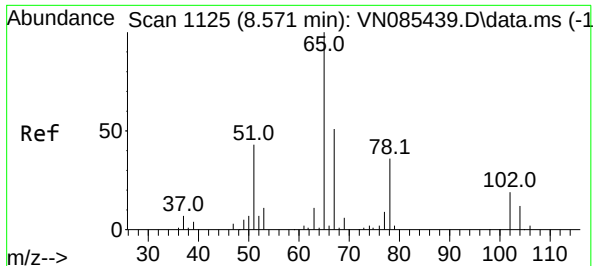
Tgt Ion: 56 Resp: 193034  
Ion Ratio Lower Upper  
56 100  
69 30.5 22.2 33.4  
84 89.4 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 44.332 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 97 Resp: 208172  
Ion Ratio Lower Upper  
97 100  
99 61.8 49.8 74.6  
61 52.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 49.782 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

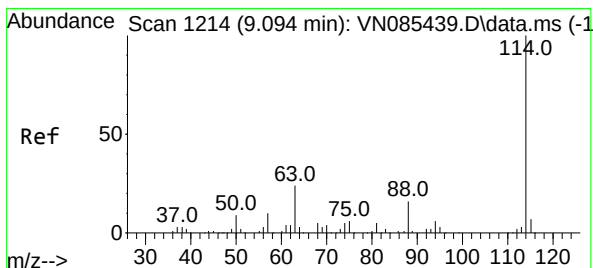
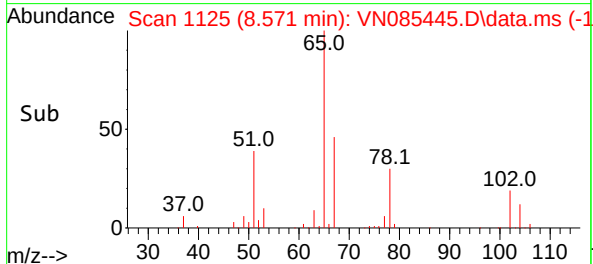
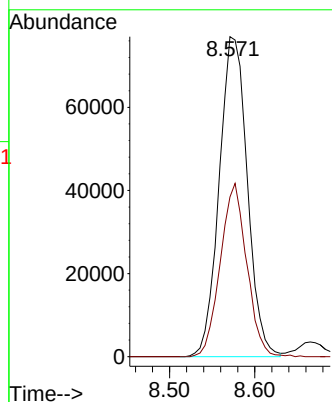
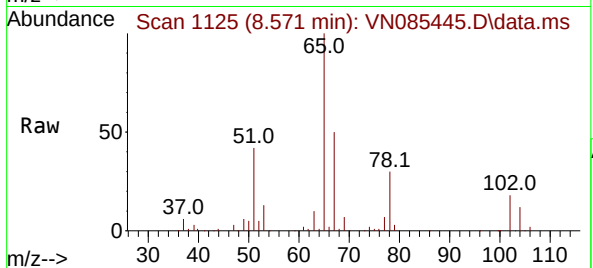
ICVVN011425

Tgt Ion: 65 Resp: 176594

Ion Ratio Lower Upper

65 100

67 50.9 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

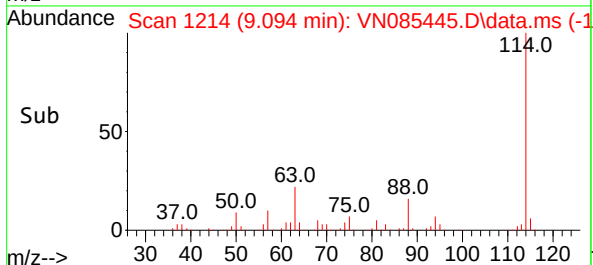
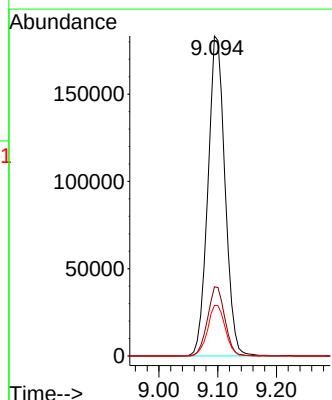
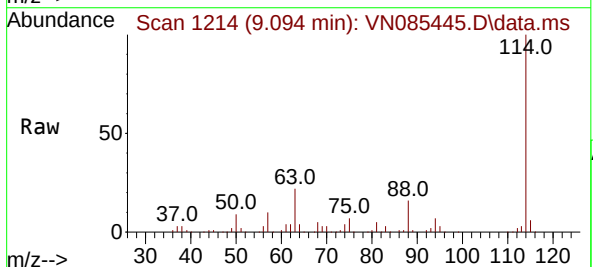
Tgt Ion: 114 Resp: 370487

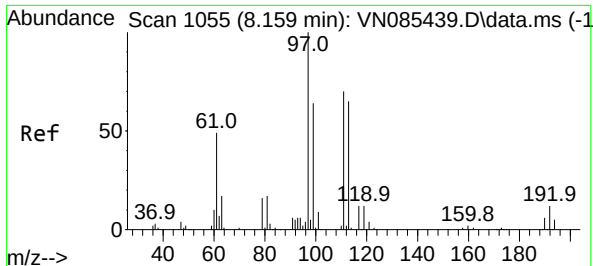
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 15.8 0.0 32.6

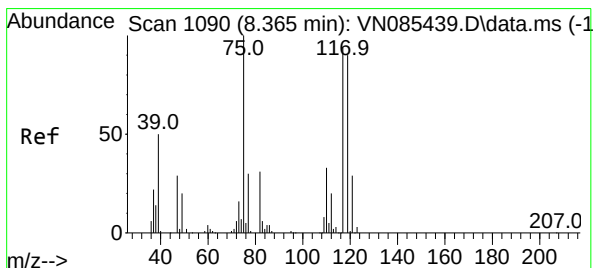
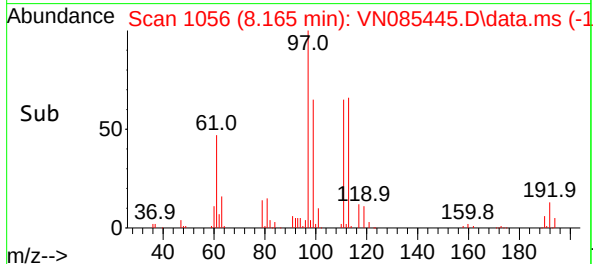
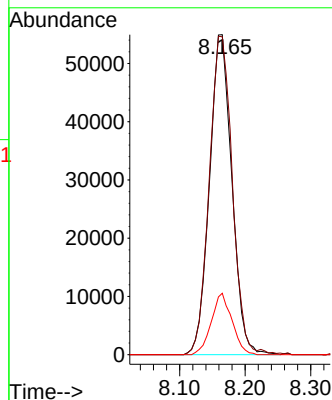
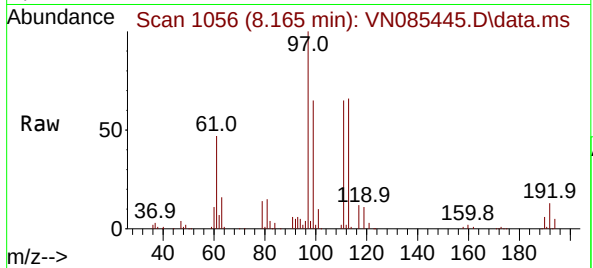




#35  
Dibromofluoromethane  
Concen: 50.768 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

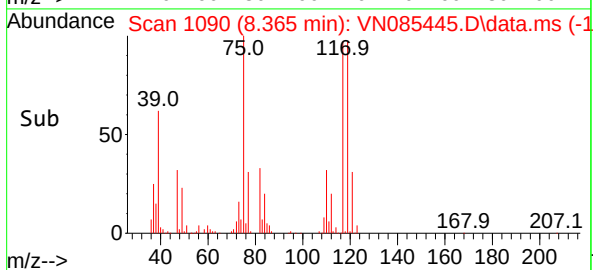
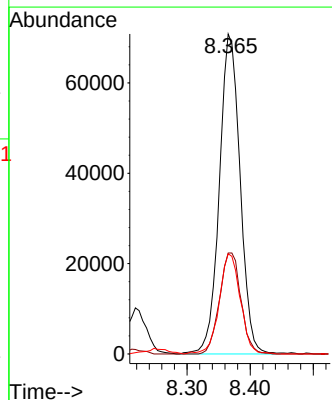
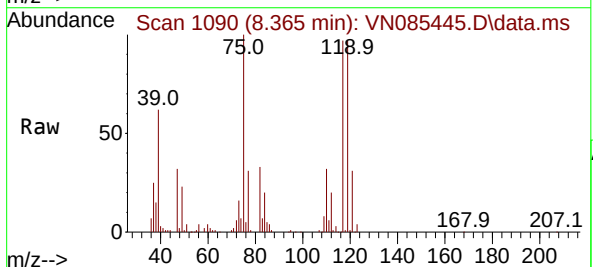
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

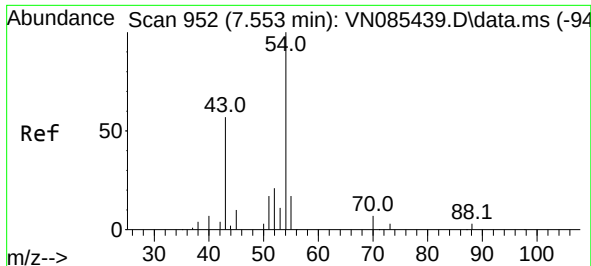
Tgt Ion:113 Resp: 130487  
Ion Ratio Lower Upper  
113 100  
111 102.5 82.7 124.1  
192 17.7 14.3 21.5



#36  
1,1-Dichloropropene  
Concen: 44.863 ug/l  
RT: 8.365 min Scan# 1090  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 161834  
Ion Ratio Lower Upper  
75 100  
110 32.4 16.5 49.5  
77 31.8 24.4 36.6





#37

Ethyl Acetate

Concen: 44.123 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

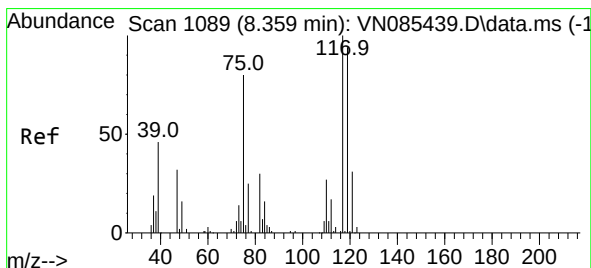
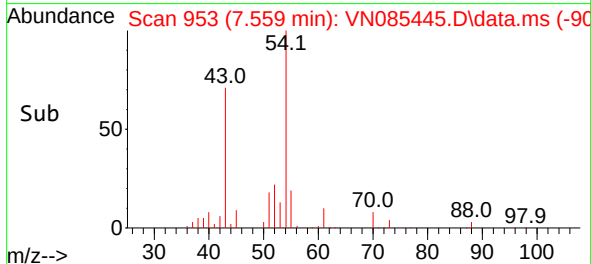
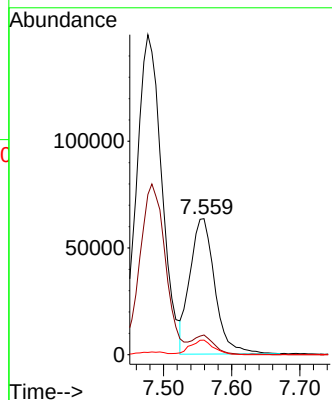
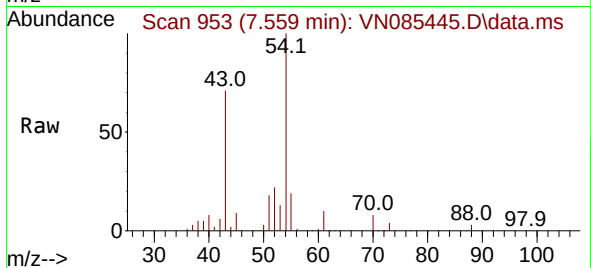
Tgt Ion: 43 Resp: 160656

Ion Ratio Lower Upper

43 100

61 11.9 10.9 16.3

70 10.2 7.5 11.3



#38

Carbon Tetrachloride

Concen: 44.456 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

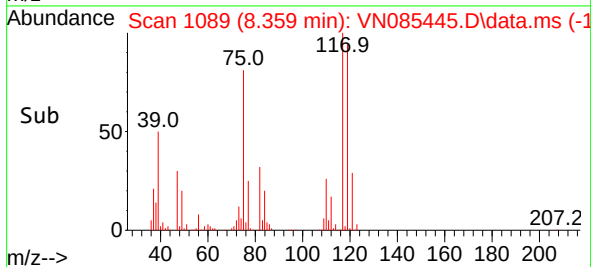
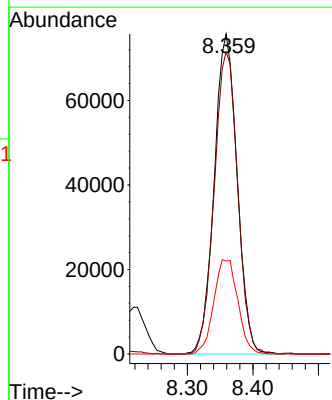
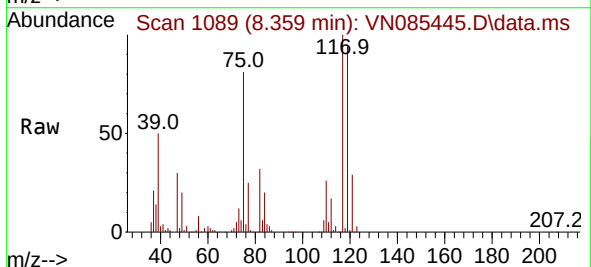
Tgt Ion: 117 Resp: 183592

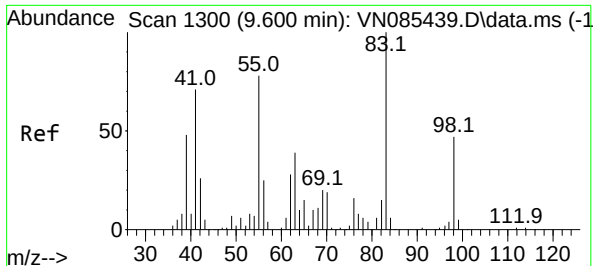
Ion Ratio Lower Upper

117 100

119 94.4 75.4 113.2

121 29.0 24.6 37.0





#39

Methylcyclohexane

Concen: 49.687 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

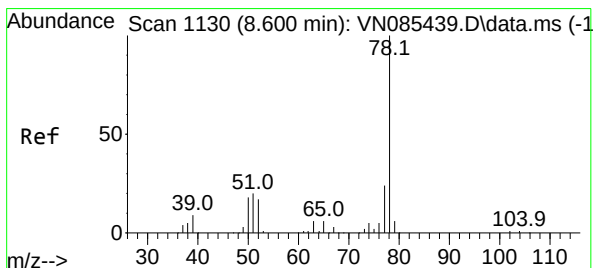
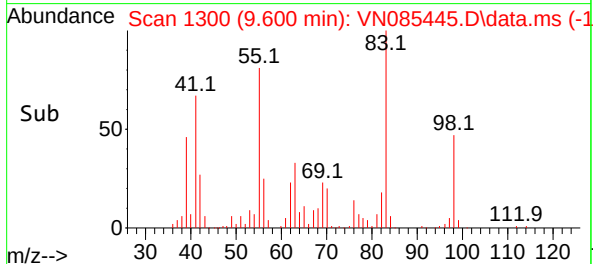
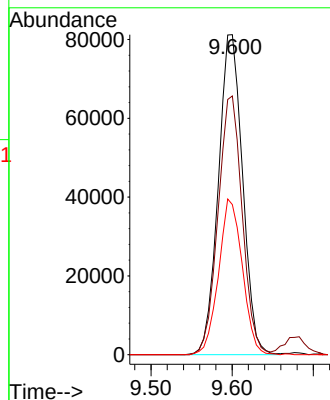
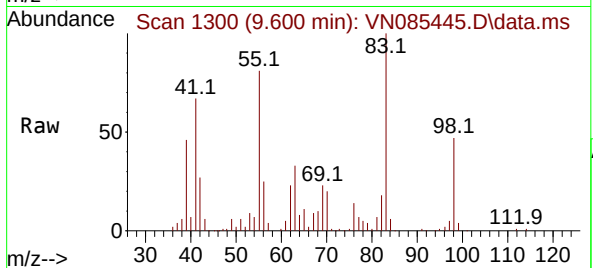
Tgt Ion: 83 Resp: 168431

Ion Ratio Lower Upper

83 100

55 80.9 62.6 94.0

98 46.9 37.7 56.5



#40

Benzene

Concen: 45.657 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085445.D

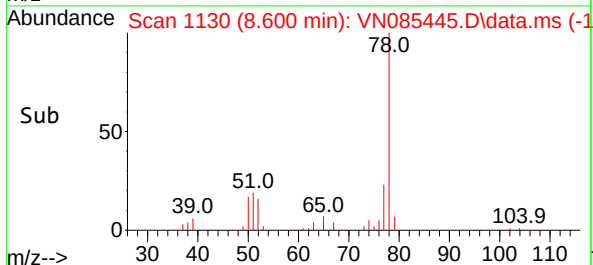
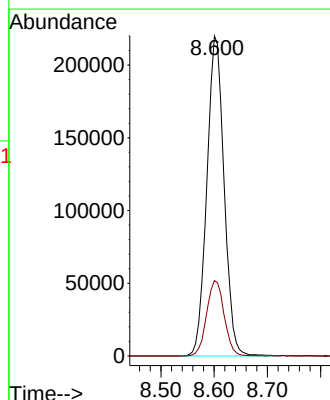
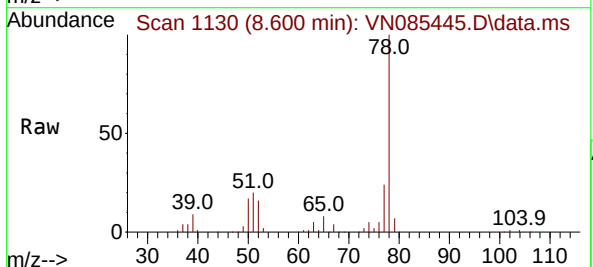
Acq: 14 Jan 2025 18:06

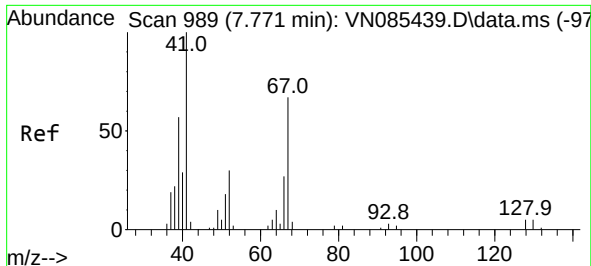
Tgt Ion: 78 Resp: 494871

Ion Ratio Lower Upper

78 100

77 23.5 19.0 28.6

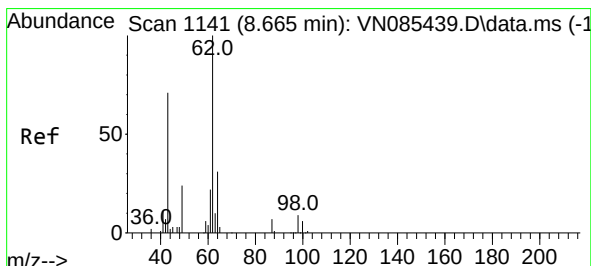
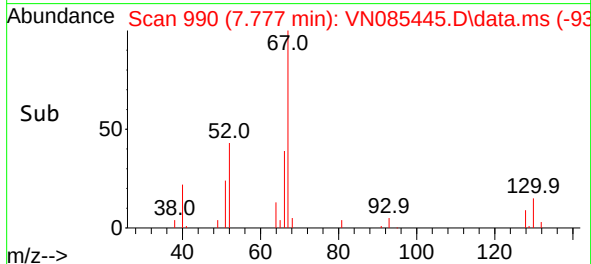
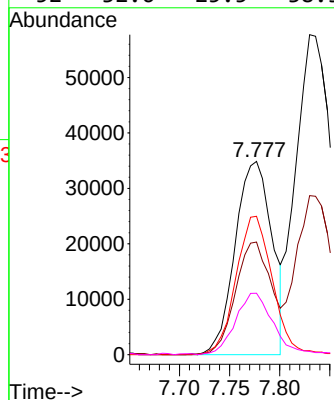
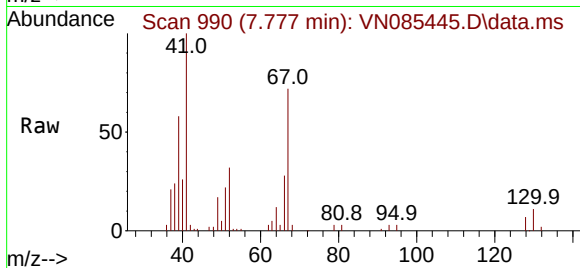




#41  
Methacrylonitrile  
Concen: 47.155 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

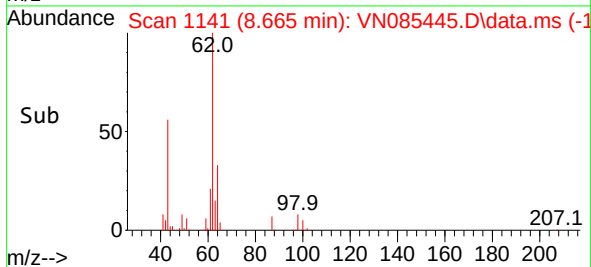
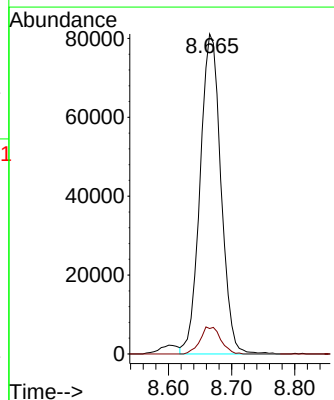
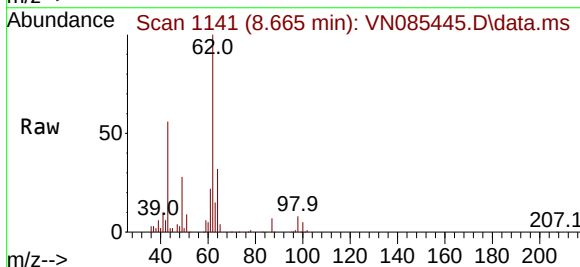
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

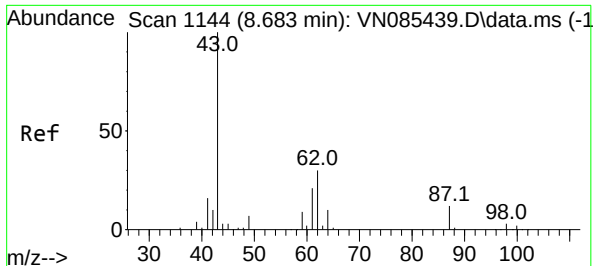
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 89326 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.6  | 46.0  | 69.0  |
| 67       | 70.9  | 57.4  | 86.2  |
| 52       | 32.6  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 45.481 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 185663 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.3   | 0.0   | 17.0   |

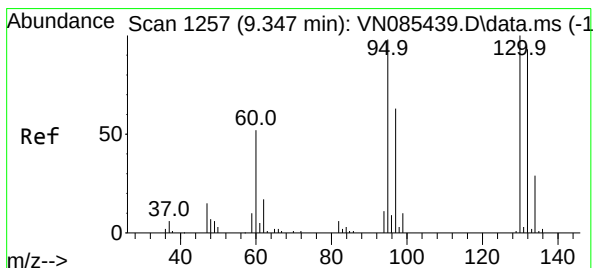
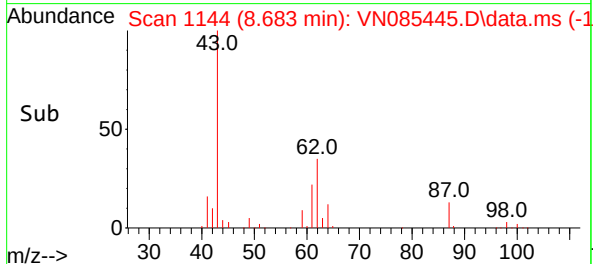
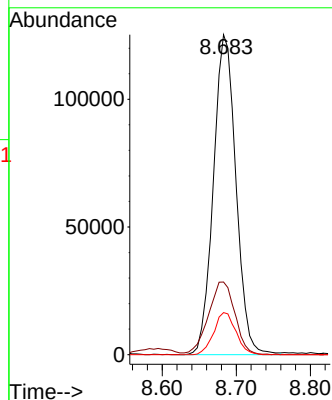
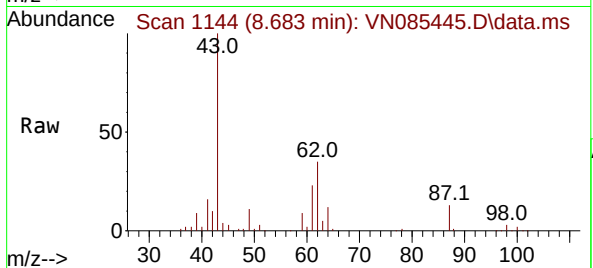




#43  
Isopropyl Acetate  
Concen: 45.440 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

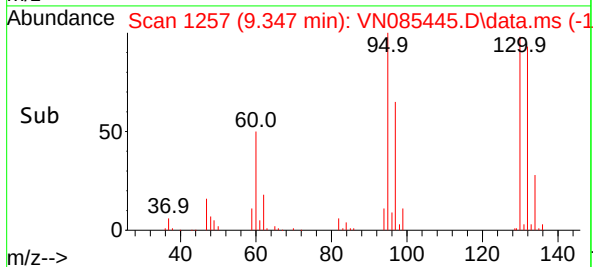
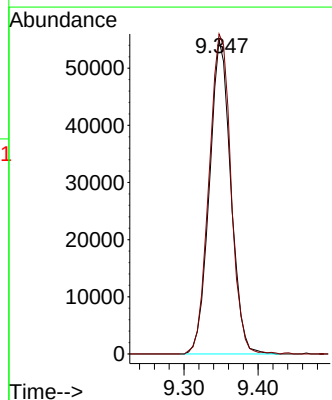
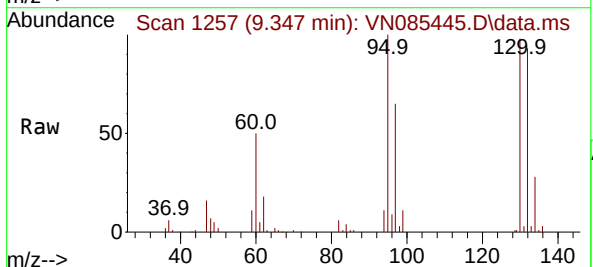
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

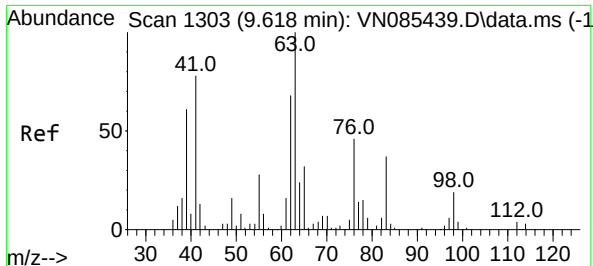
Tgt Ion: 43 Resp: 265107  
Ion Ratio Lower Upper  
43 100  
61 26.7 20.7 31.1  
87 12.9 9.8 14.8



#44  
Trichloroethene  
Concen: 43.622 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 130 Resp: 110058  
Ion Ratio Lower Upper  
130 100  
95 101.9 0.0 195.8





#45

1,2-Dichloropropane

Concen: 44.744 ug/l

RT: 9.618 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

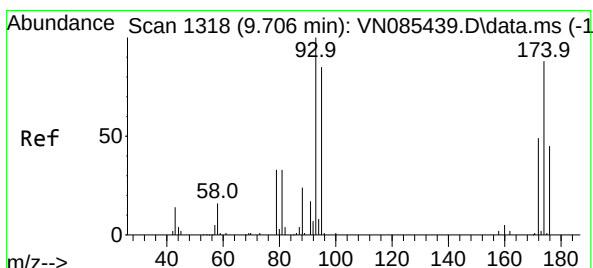
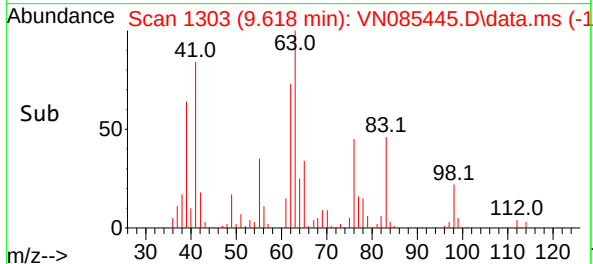
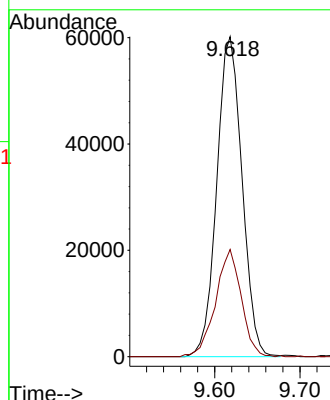
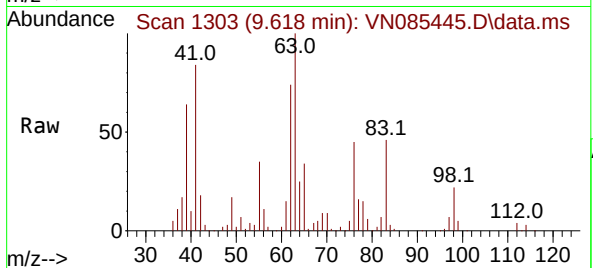
ICVVN011425

Tgt Ion: 63 Resp: 123876

Ion Ratio Lower Upper

63 100

65 33.5 25.6 38.4



#46

Dibromomethane

Concen: 44.214 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

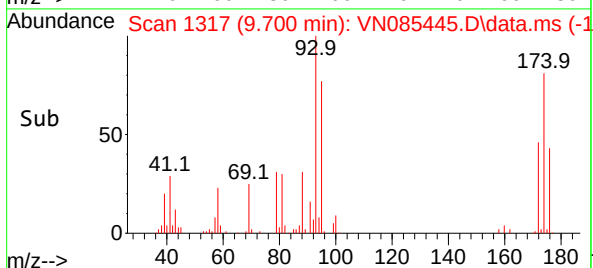
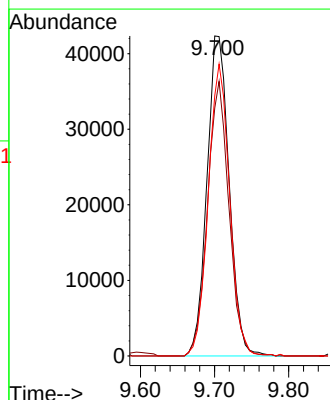
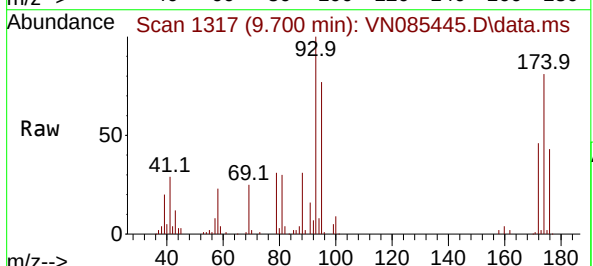
Tgt Ion: 93 Resp: 88325

Ion Ratio Lower Upper

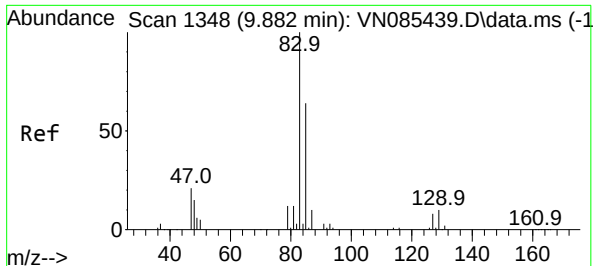
93 100

95 82.9 64.7 97.1

174 88.0 69.0 103.4



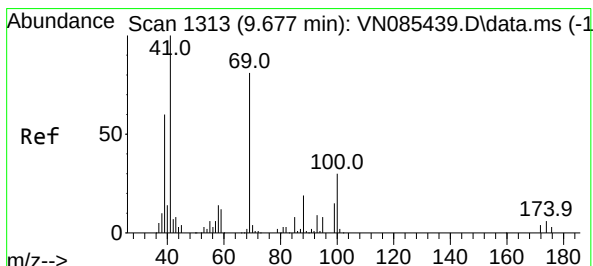
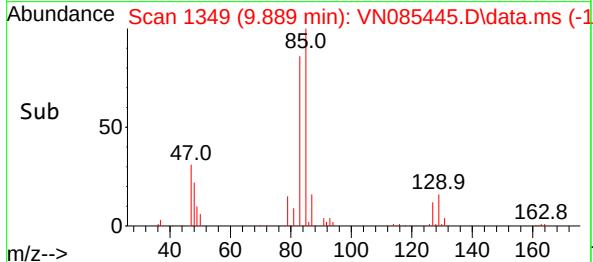
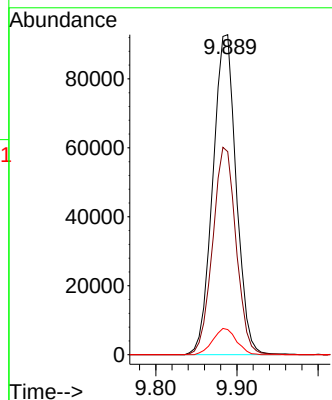
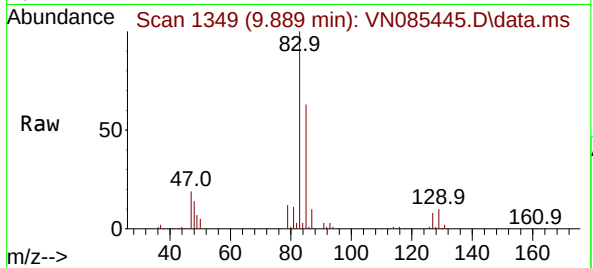




#47  
Bromodichloromethane  
Concen: 45.655 ug/l  
RT: 9.889 min Scan# 1349  
Delta R.T. 0.007 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

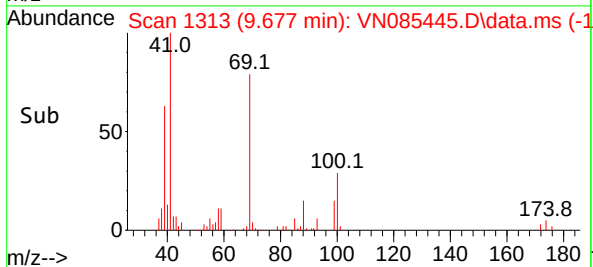
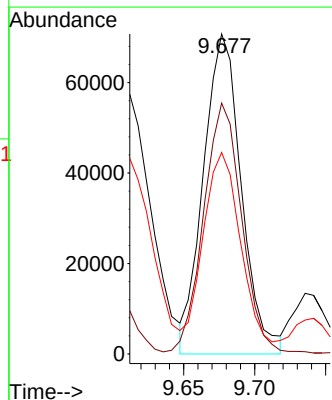
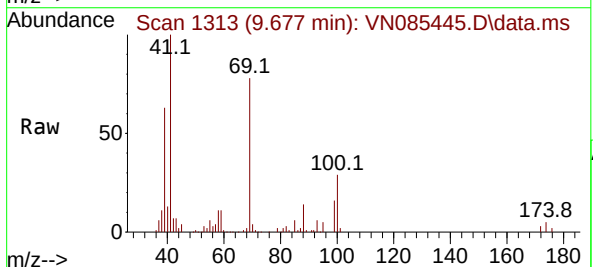
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

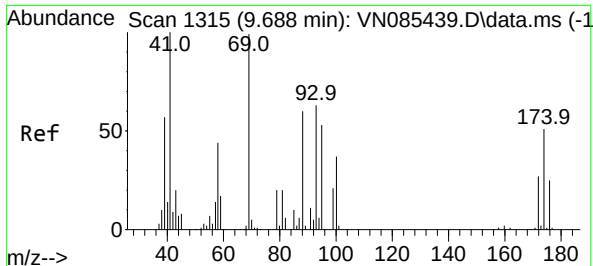
Tgt Ion: 83 Resp: 185808  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.2 76.8  
127 7.8 6.5 9.7



#48  
Methyl methacrylate  
Concen: 49.948 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 131142  
Ion Ratio Lower Upper  
41 100  
69 78.6 64.7 97.1  
39 63.3 49.0 73.6





#49

1,4-Dioxane

Concen: 792.760 ug/l

RT: 9.689 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

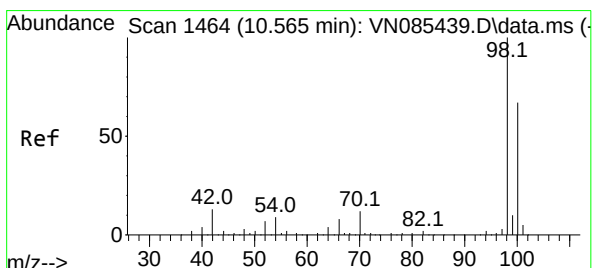
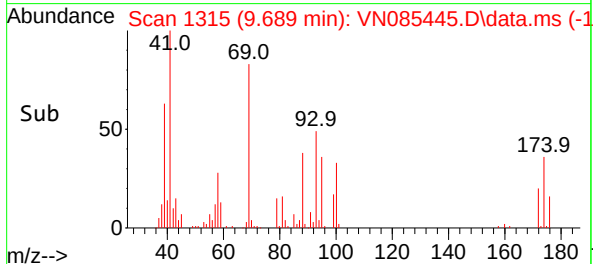
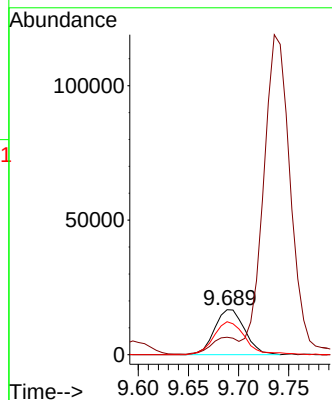
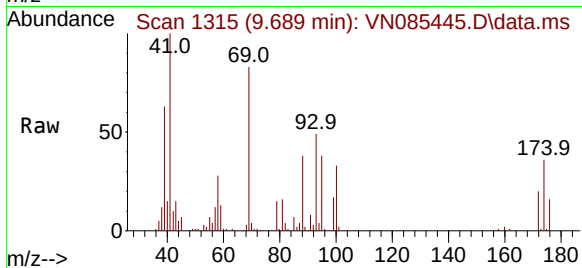
Tgt Ion: 88 Resp: 35051

Ion Ratio Lower Upper

88 100

43 33.8 26.6 39.8

58 76.1 59.5 89.3



#50

Toluene-d8

Concen: 52.302 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085445.D

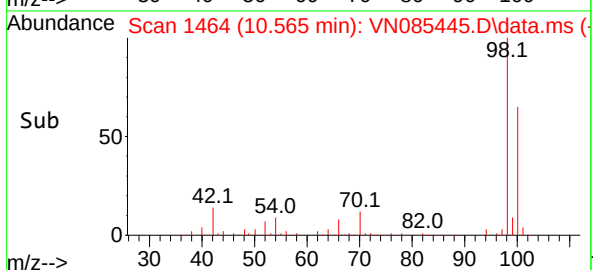
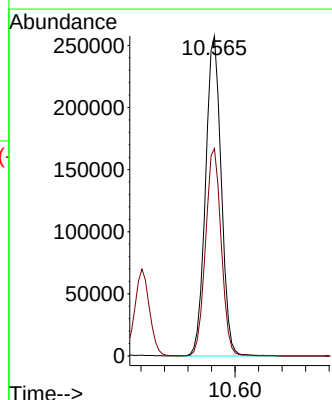
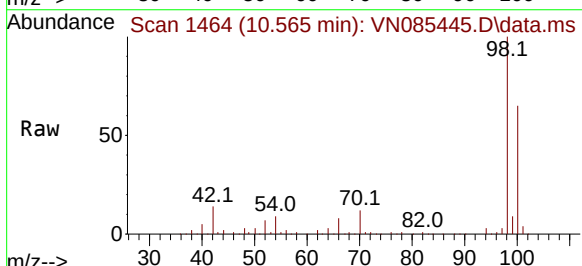
Acq: 14 Jan 2025 18:06

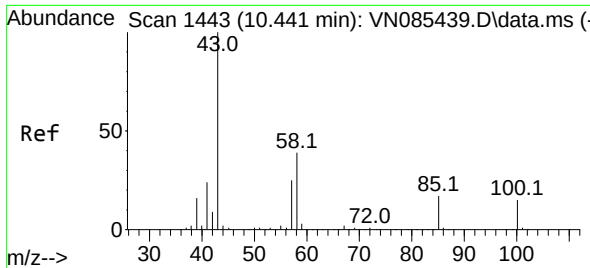
Tgt Ion: 98 Resp: 477630

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4

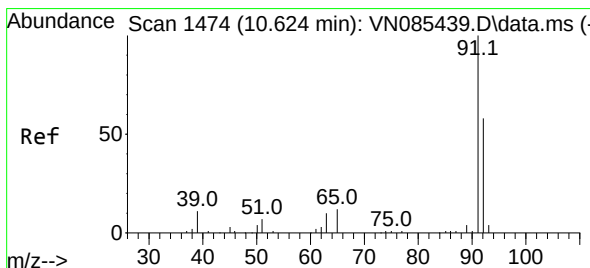
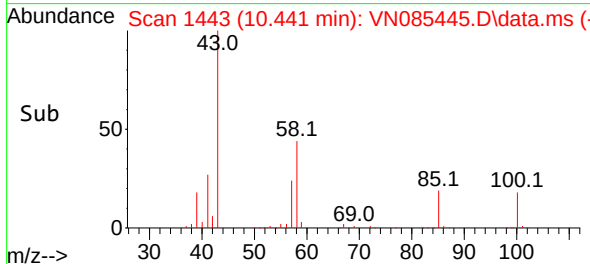
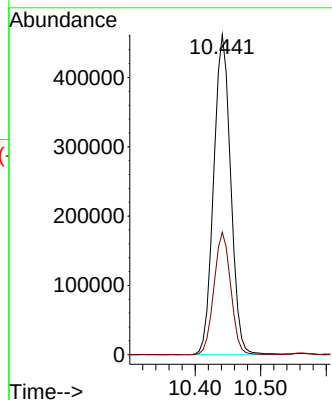
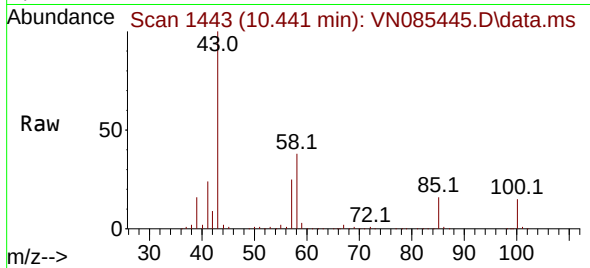




#51  
4-Methyl-2-Pentanone  
Concen: 245.877 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

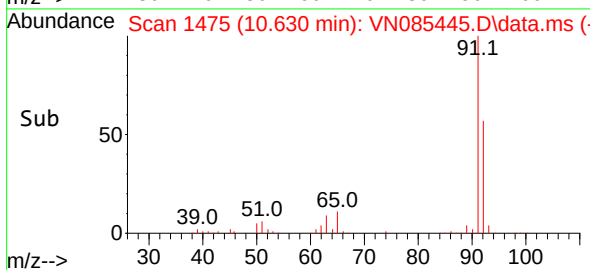
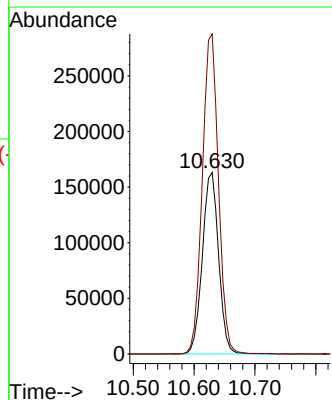
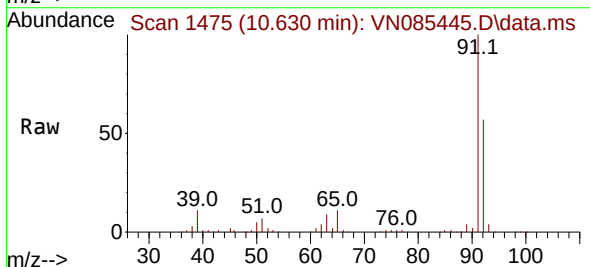
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

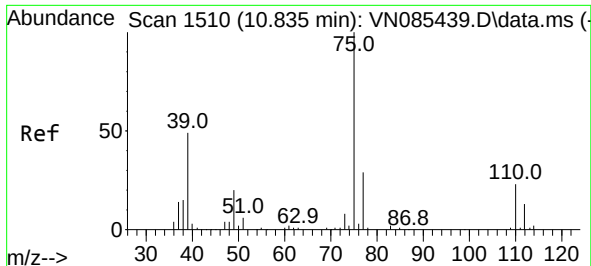
Tgt Ion: 43 Resp: 832426  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7



#52  
Toluene  
Concen: 48.073 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 92 Resp: 301911  
Ion Ratio Lower Upper  
92 100  
91 175.7 139.2 208.8

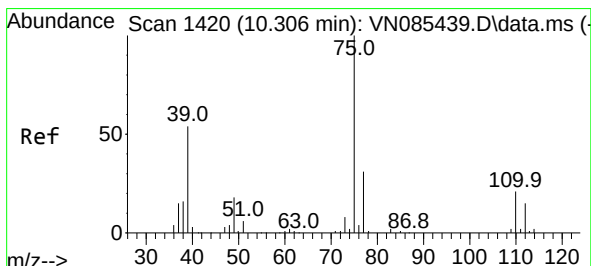
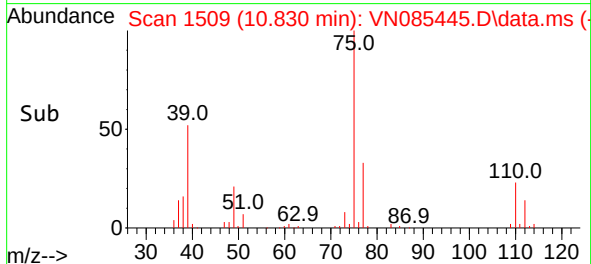
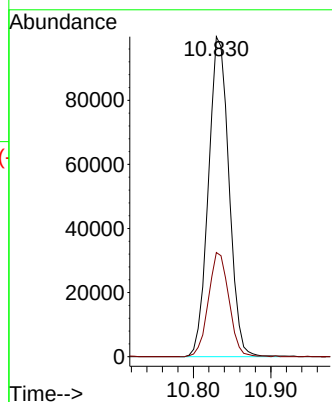
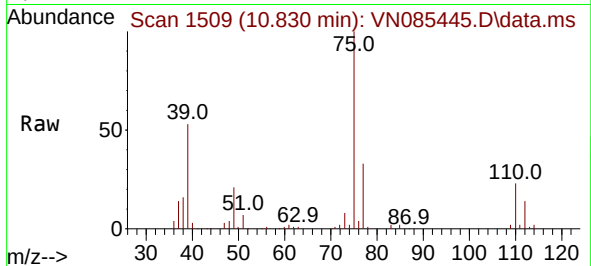




#53  
 t-1,3-Dichloropropene  
 Concen: 47.757 ug/l  
 RT: 10.830 min Scan# 11  
 Delta R.T. -0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

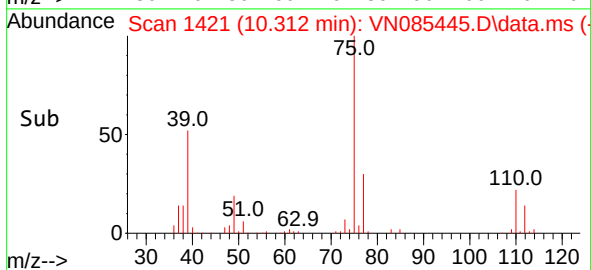
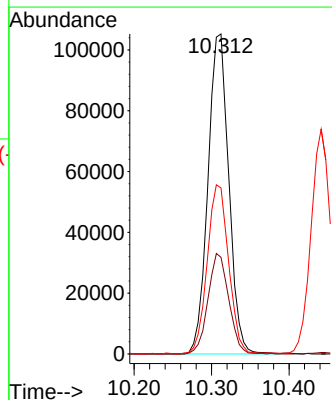
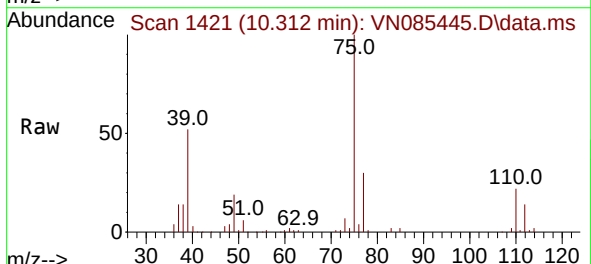
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

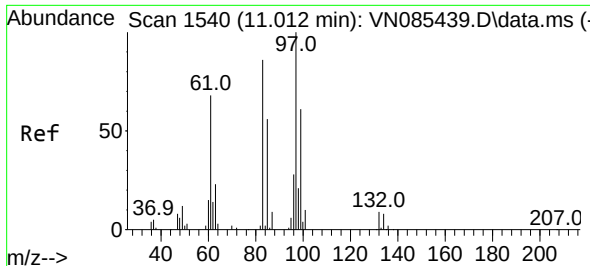
Tgt Ion: 75 Resp: 183680  
 Ion Ratio Lower Upper  
 75 100  
 77 32.6 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 47.783 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 196307  
 Ion Ratio Lower Upper  
 75 100  
 77 30.2 25.0 37.4  
 39 51.9 43.1 64.7

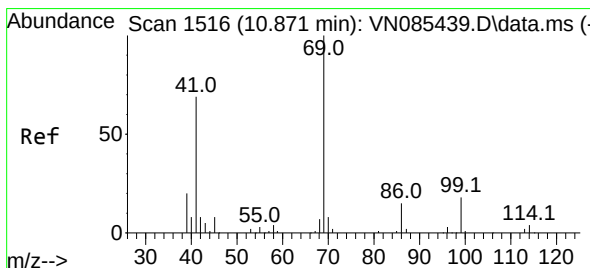
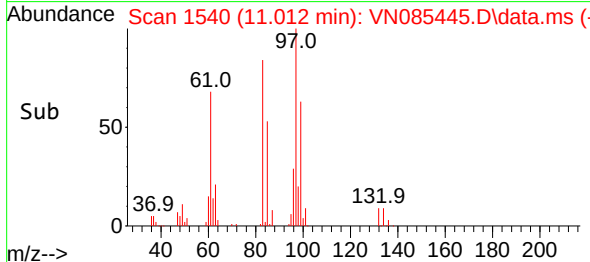
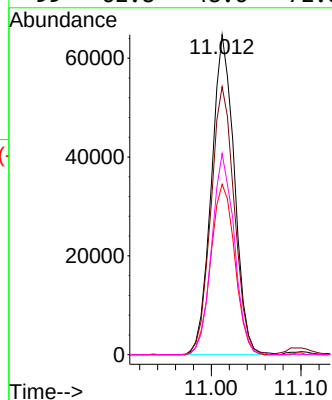
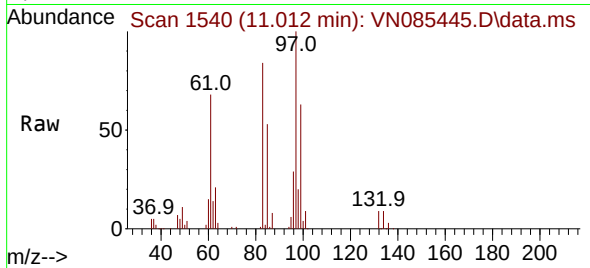




#55  
1,1,2-Trichloroethane  
Concen: 46.173 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

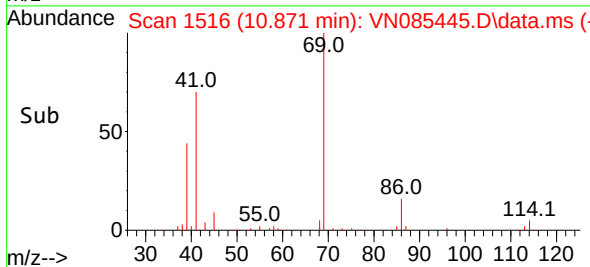
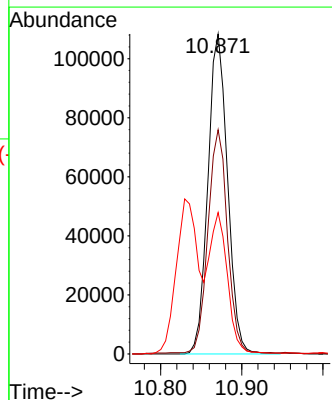
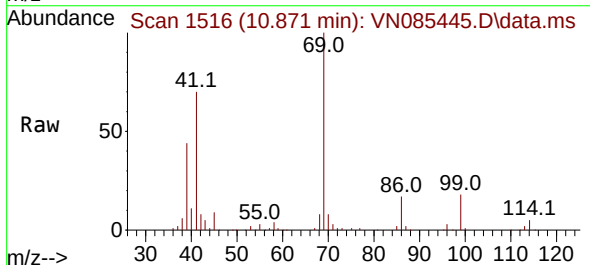
Instrument : MSVOA\_N  
ClientSampleId : ICVVN011425

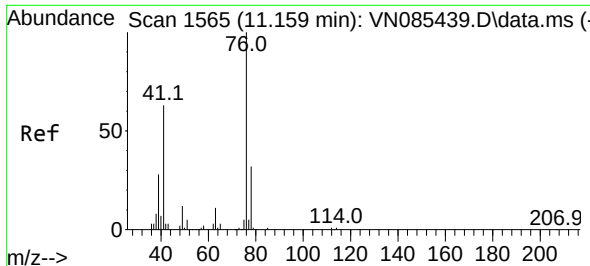
|             |              |
|-------------|--------------|
| Tgt Ion: 97 | Resp: 114757 |
| Ion Ratio   | Lower Upper  |
| 97 100      |              |
| 83 83.7     | 69.0 103.6   |
| 85 53.2     | 44.6 66.8    |
| 99 62.8     | 48.6 72.8    |



#56  
Ethyl methacrylate  
Concen: 43.762 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

|             |              |
|-------------|--------------|
| Tgt Ion: 69 | Resp: 182170 |
| Ion Ratio   | Lower Upper  |
| 69 100      |              |
| 41 70.4     | 54.6 82.0    |
| 39 40.2     | 32.4 48.6    |

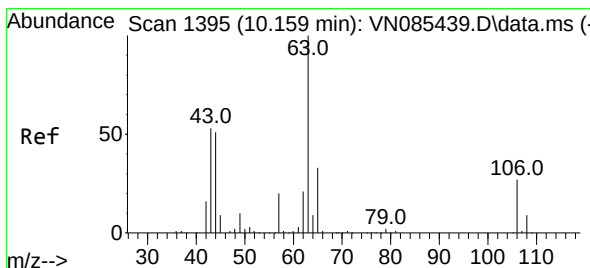
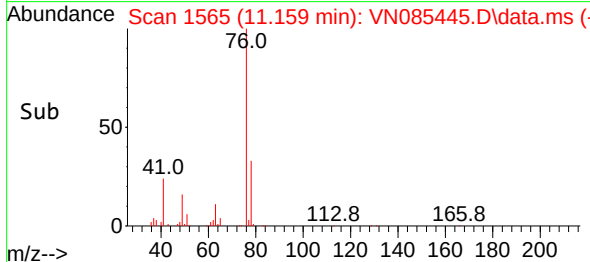
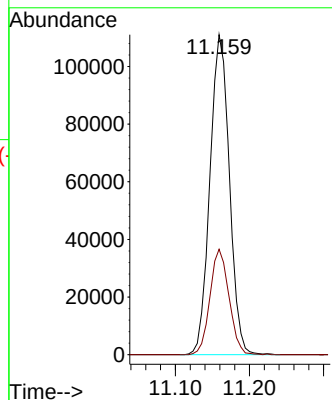
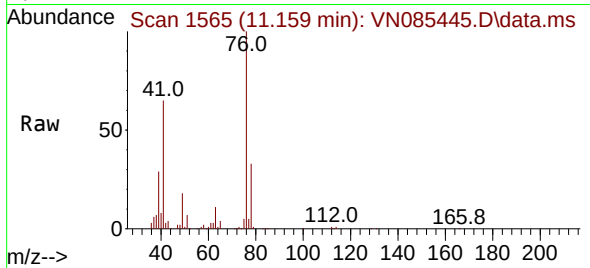




#57  
1,3-Dichloropropane  
Concen: 46.877 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

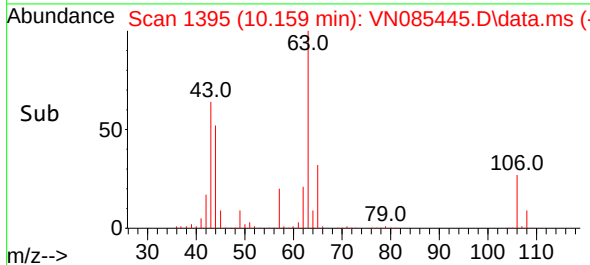
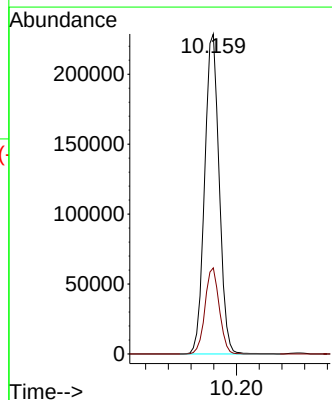
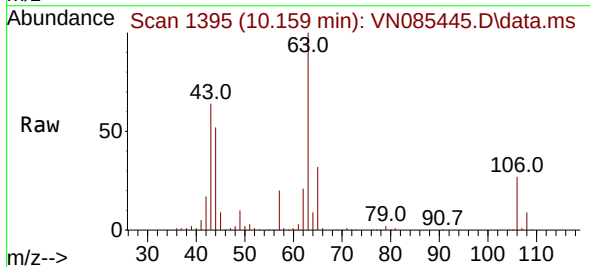
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

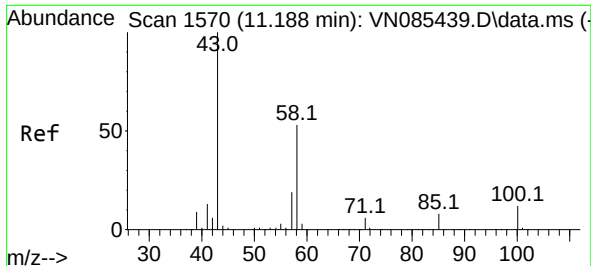
Tgt Ion: 76 Resp: 202583  
Ion Ratio Lower Upper  
76 100  
78 32.1 25.6 38.4



#58  
2-Chloroethyl Vinyl ether  
Concen: 256.116 ug/l  
RT: 10.159 min Scan# 1395  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 403949  
Ion Ratio Lower Upper  
63 100  
106 26.4 21.6 32.4

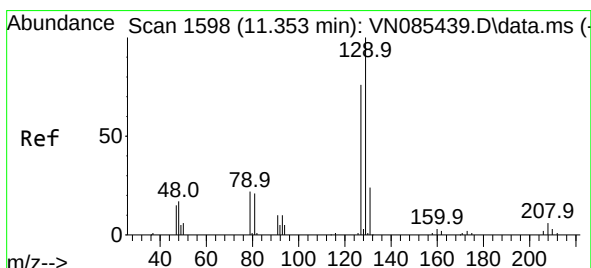
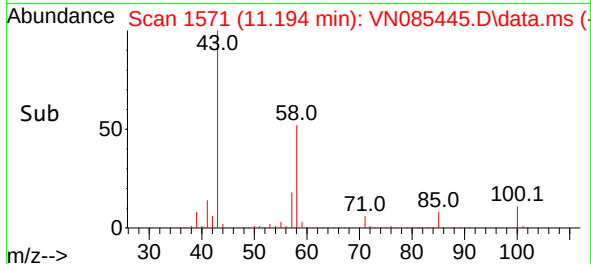
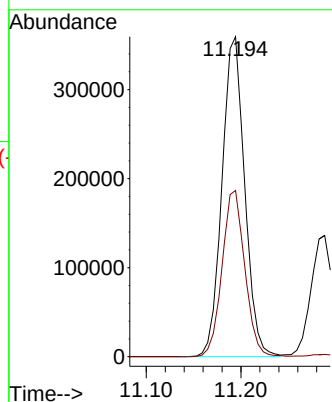
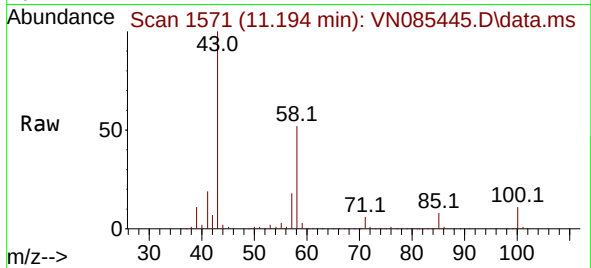




#59  
2-Hexanone  
Concen: 251.213 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

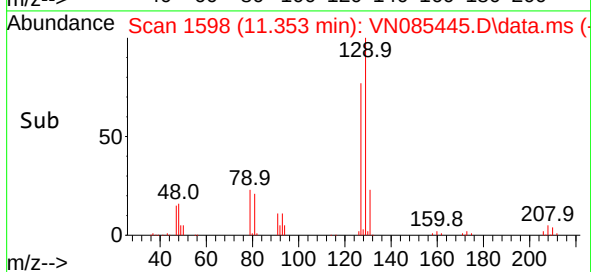
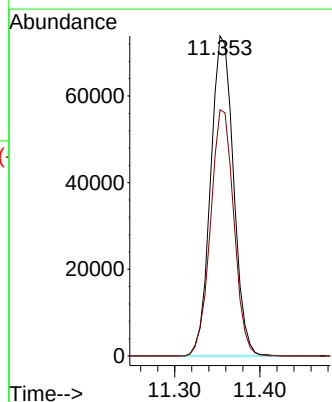
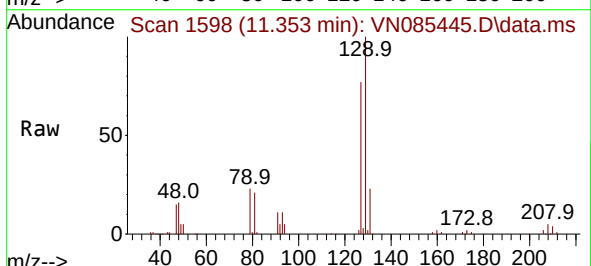
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

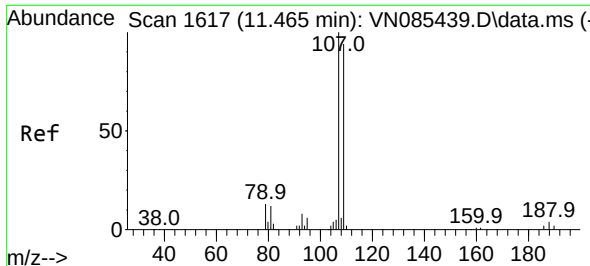
Tgt Ion: 43 Resp: 598433  
Ion Ratio Lower Upper  
43 100  
58 52.1 26.2 78.6



#60  
Dibromochloromethane  
Concen: 45.935 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:129 Resp: 137831  
Ion Ratio Lower Upper  
129 100  
127 78.1 38.6 115.8

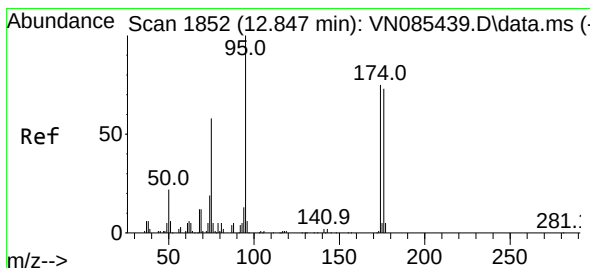
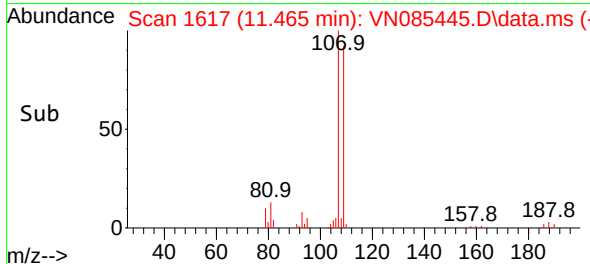
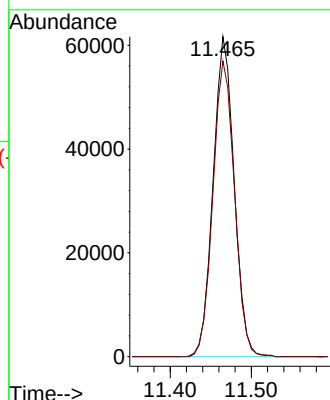
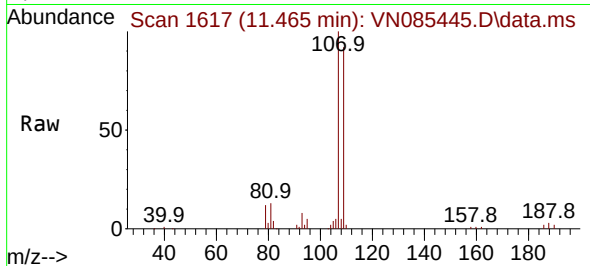




#61  
1,2-Dibromoethane  
Concen: 44.837 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

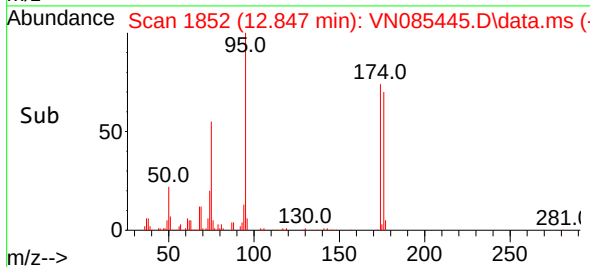
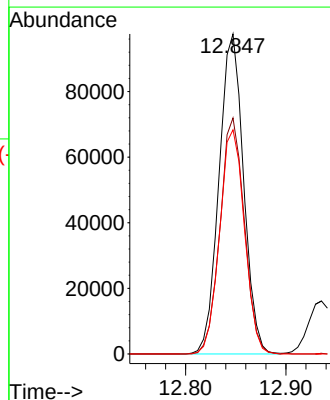
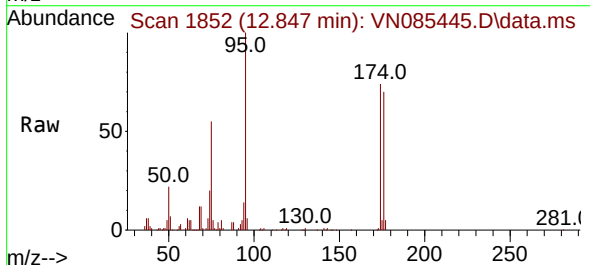
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion:107 Resp: 110926  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9

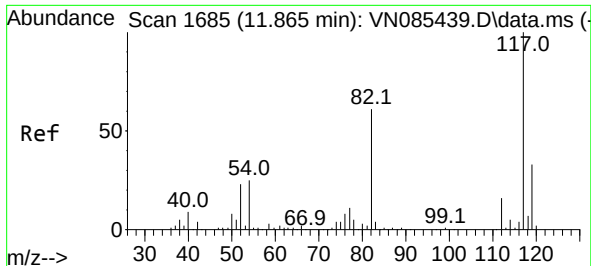


#62  
4-Bromofluorobenzene  
Concen: 52.899 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 95 Resp: 165249  
Ion Ratio Lower Upper  
95 100  
174 73.1 0.0 145.0  
176 70.8 0.0 142.4



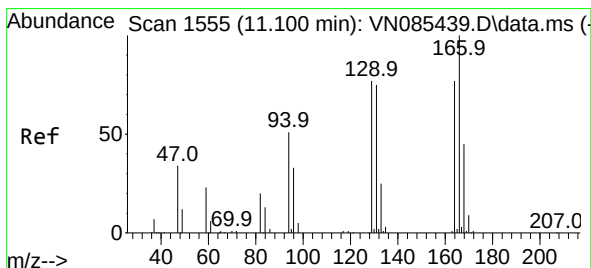
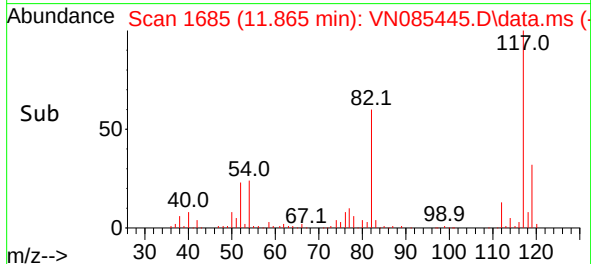
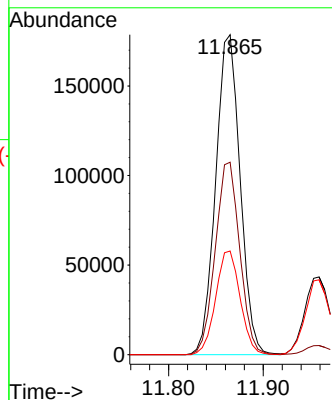
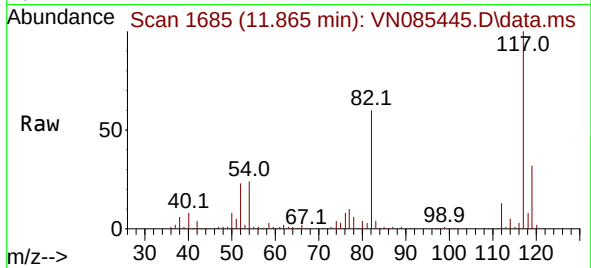




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

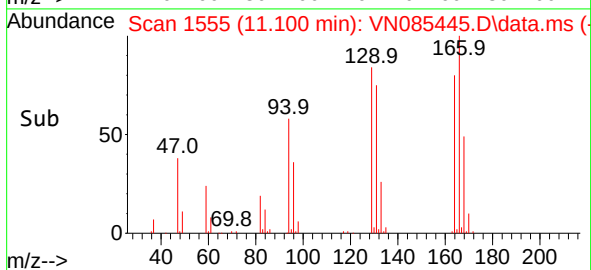
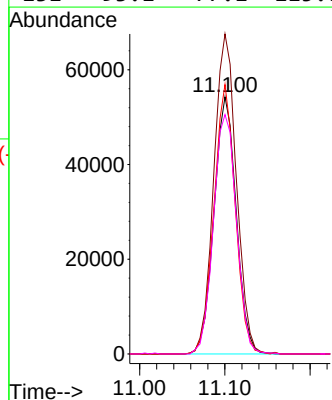
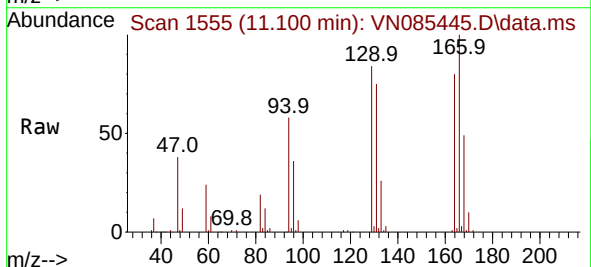
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

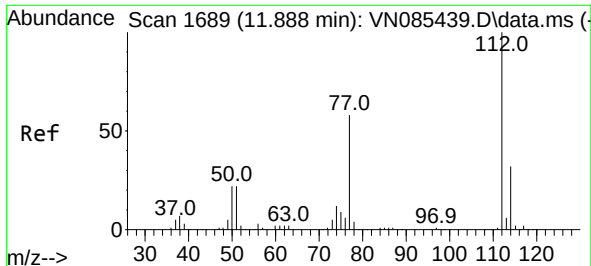
Tgt Ion:117 Resp: 320948  
Ion Ratio Lower Upper  
117 100  
82 60.1 48.6 72.8  
119 32.4 26.6 39.8



#64  
Tetrachloroethene  
Concen: 44.886 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:164 Resp: 98211  
Ion Ratio Lower Upper  
164 100  
166 124.4 103.4 155.2  
129 104.8 79.2 118.8  
131 93.1 77.1 115.7

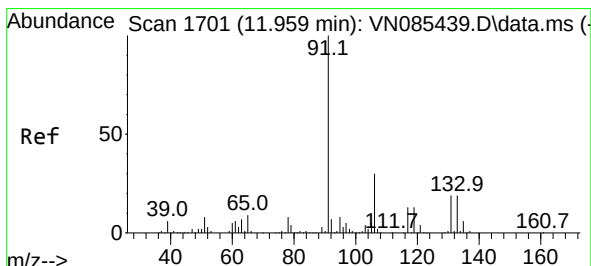
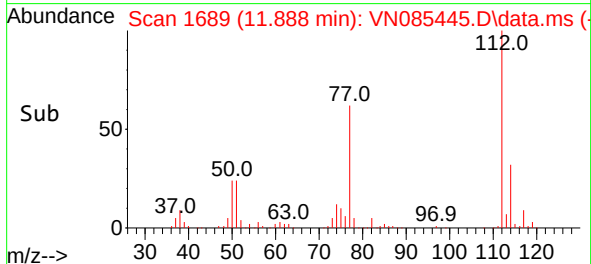
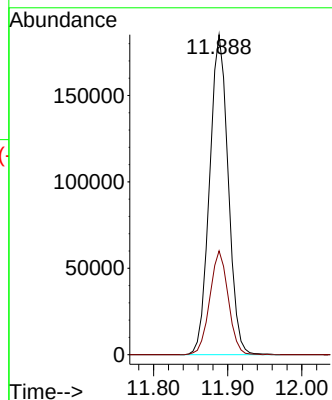
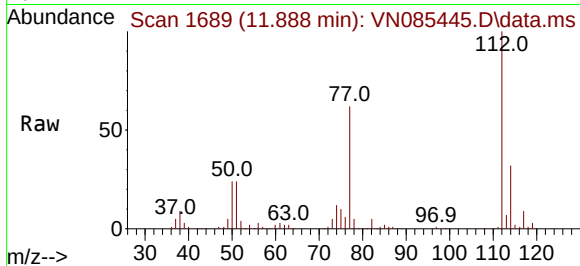




#65  
Chlorobenzene  
Concen: 45.901 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

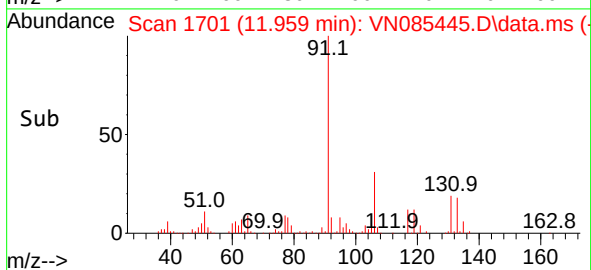
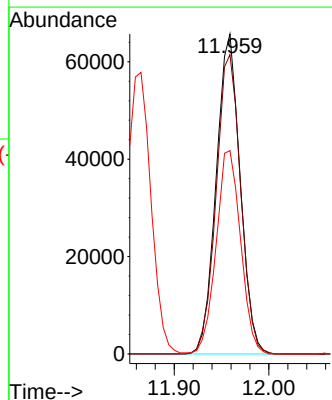
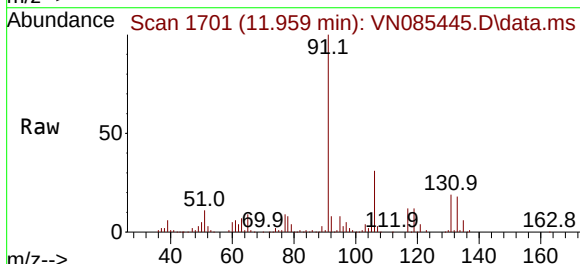
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

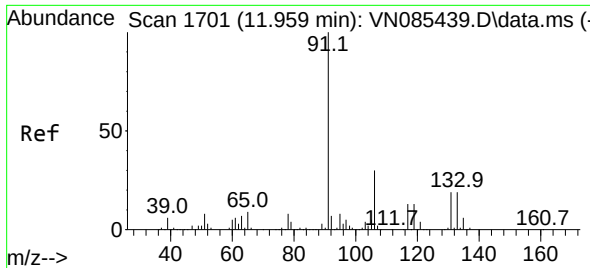
Tgt Ion:112 Resp: 322723  
Ion Ratio Lower Upper  
112 100  
114 32.4 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 44.712 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:131 Resp: 115379  
Ion Ratio Lower Upper  
131 100  
133 95.8 47.4 142.3  
119 65.2 33.1 99.5

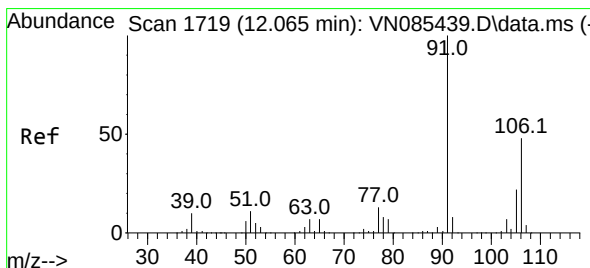
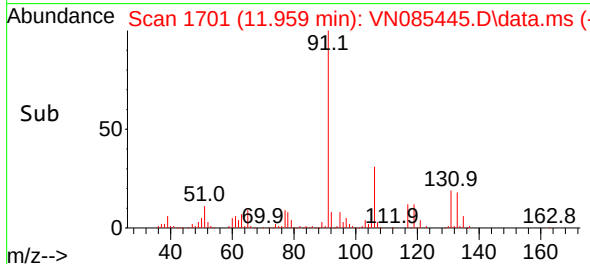
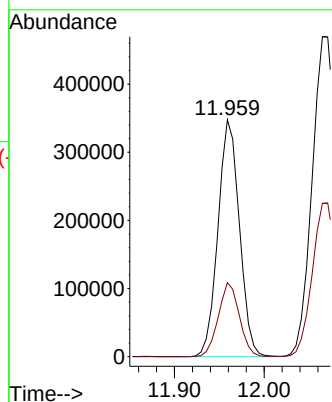
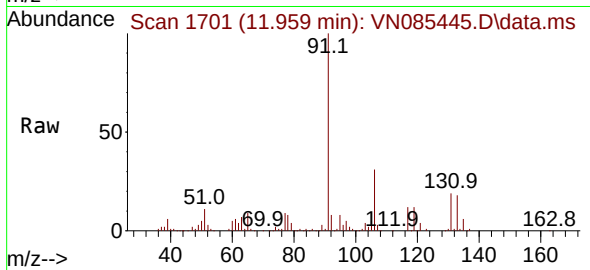




#67  
Ethyl Benzene  
Concen: 50.391 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

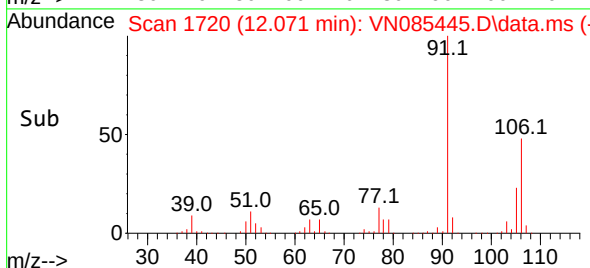
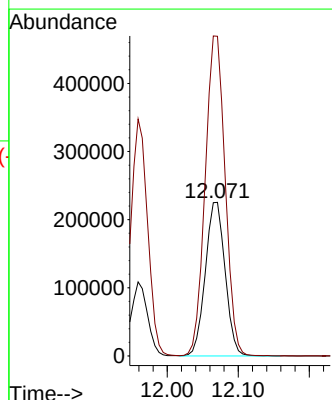
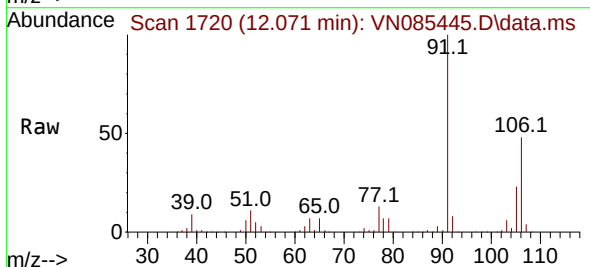
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

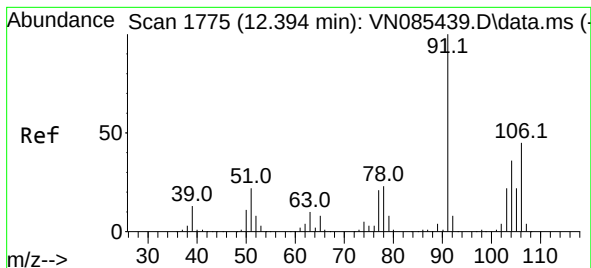
Tgt Ion: 91 Resp: 577059  
Ion Ratio Lower Upper  
91 100  
106 31.2 23.8 35.8



#68  
m/p-Xylenes  
Concen: 103.341 ug/l  
RT: 12.071 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion:106 Resp: 437367  
Ion Ratio Lower Upper  
106 100  
91 210.1 167.7 251.5





#69

o-Xylene

Concen: 52.093 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

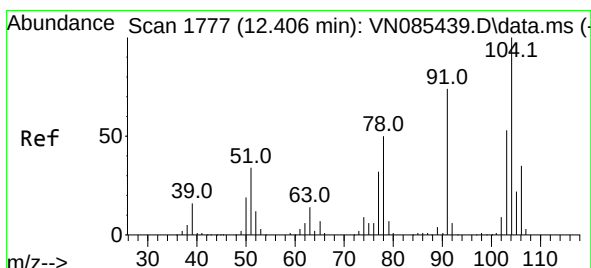
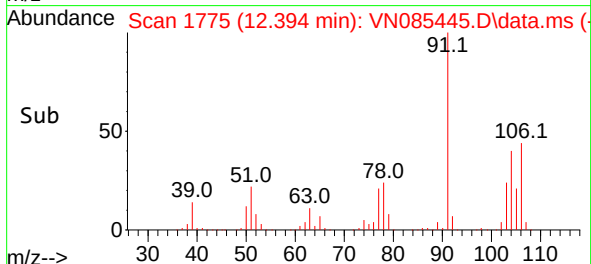
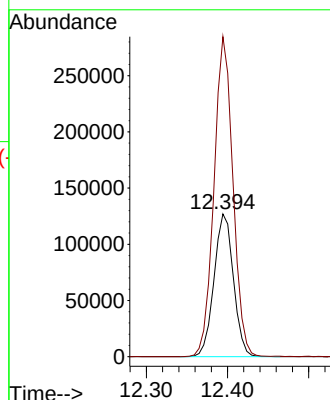
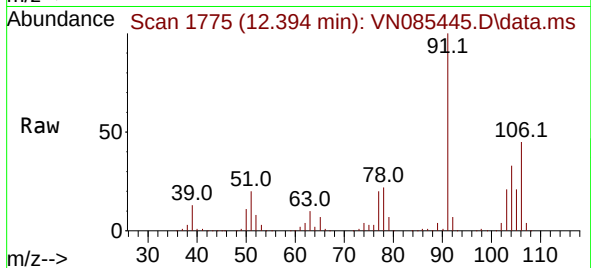
ICVVN011425

Tgt Ion:106 Resp: 210698

Ion Ratio Lower Upper

106 100

91 219.9 110.4 331.2



#70

Styrene

Concen: 53.103 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

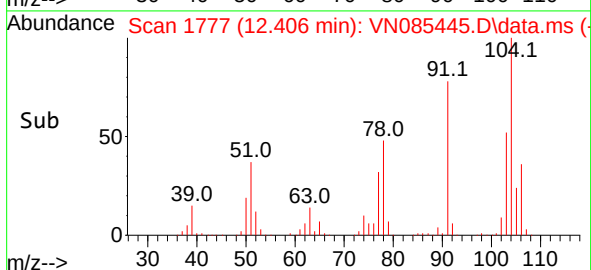
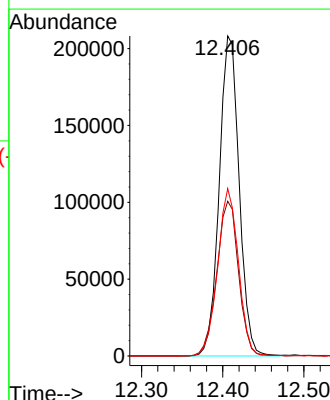
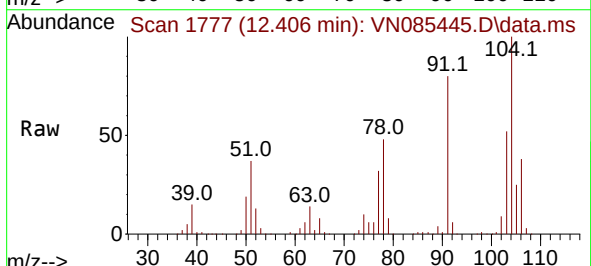
Tgt Ion:104 Resp: 355459

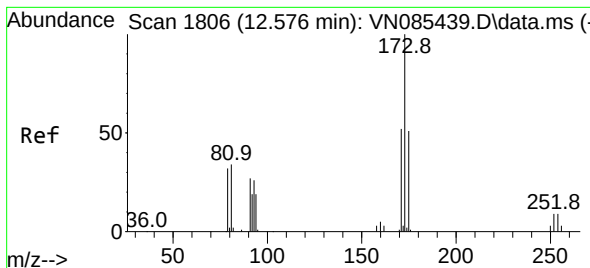
Ion Ratio Lower Upper

104 100

78 52.8 42.5 63.7

103 54.5 43.8 65.8





#71

Bromoform

Concen: 49.119 ug/l

RT: 12.577 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

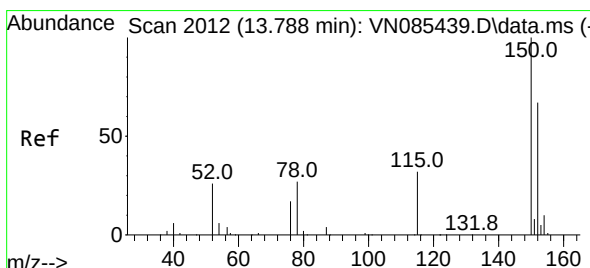
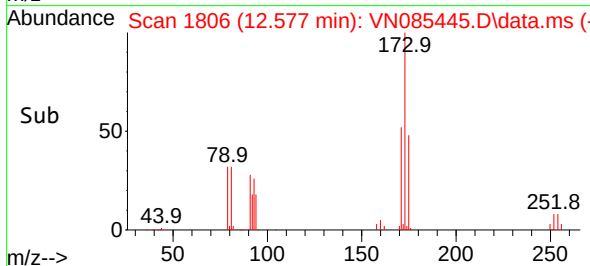
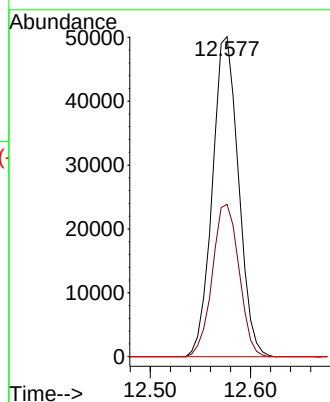
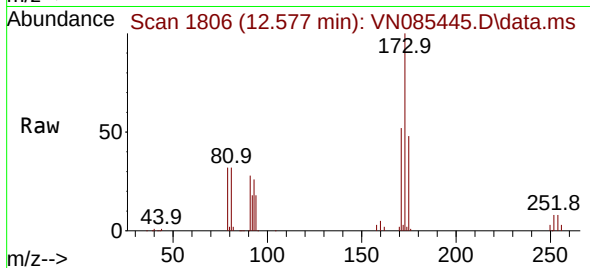
Tgt Ion:173 Resp: 90693

Ion Ratio Lower Upper

173 100

175 48.7 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

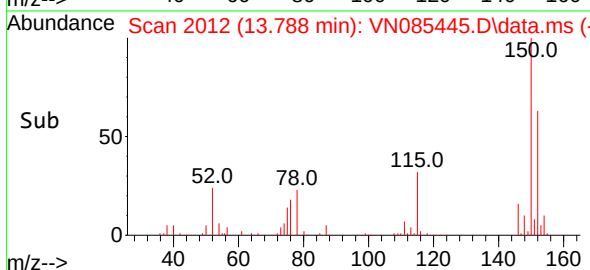
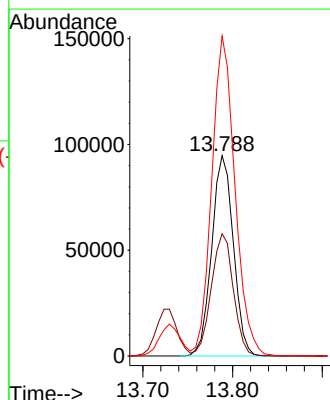
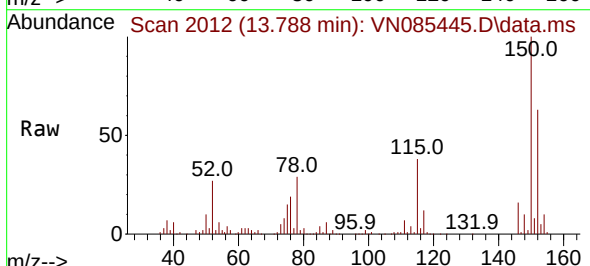
Tgt Ion:152 Resp: 158525

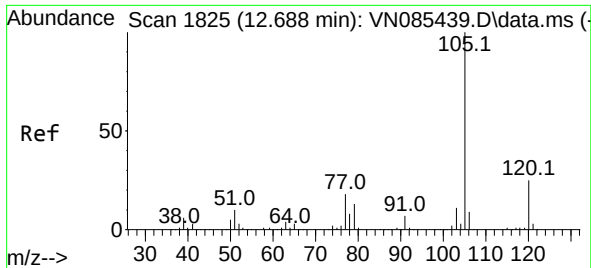
Ion Ratio Lower Upper

152 100

115 62.2 31.1 93.3

150 171.0 0.0 343.6

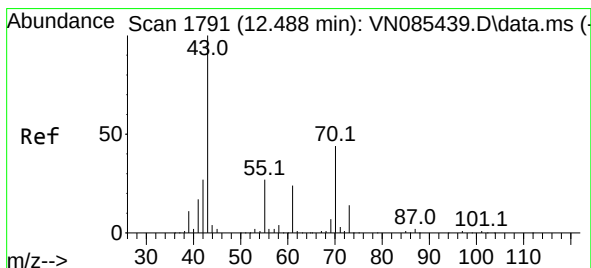
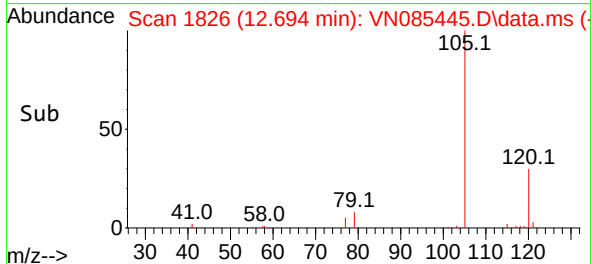
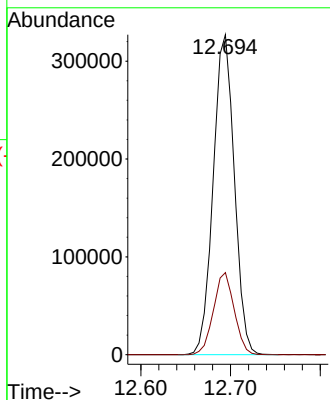
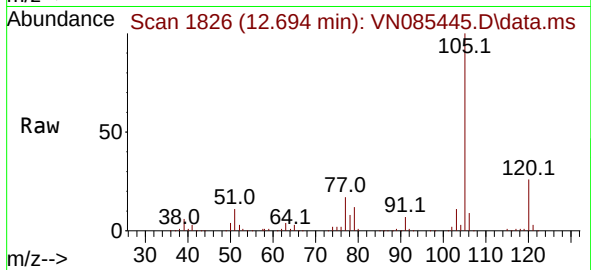




#73  
Isopropylbenzene  
Concen: 49.951 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

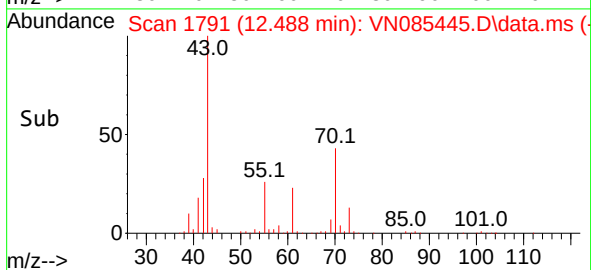
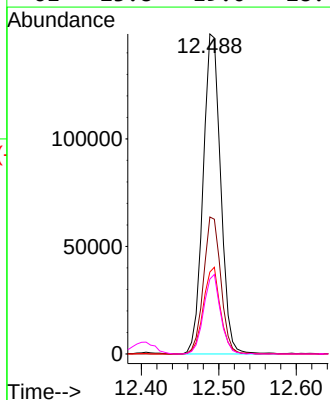
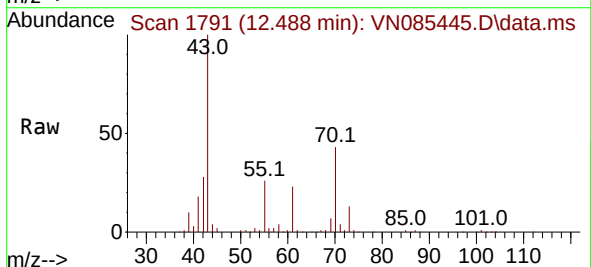
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

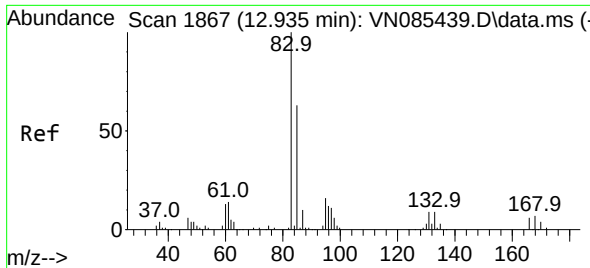
Tgt Ion:105 Resp: 534428  
Ion Ratio Lower Upper  
105 100  
120 25.2 12.8 38.3



#74  
N-ethyl acetate  
Concen: 48.730 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 234342  
Ion Ratio Lower Upper  
43 100  
70 42.2 34.0 51.0  
55 26.5 21.4 32.2  
61 23.8 19.0 28.4

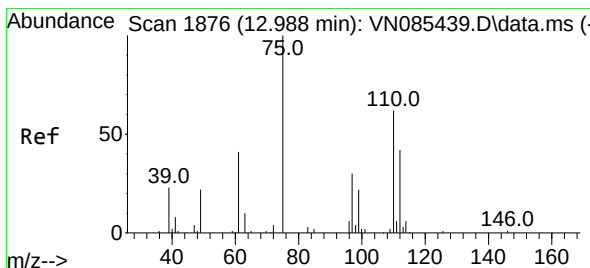
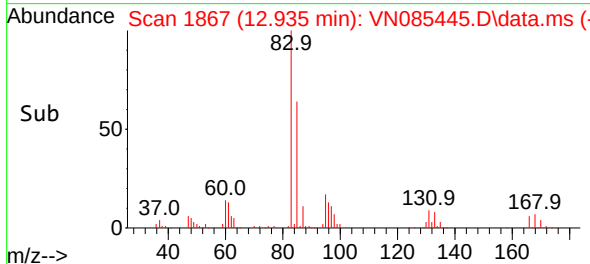
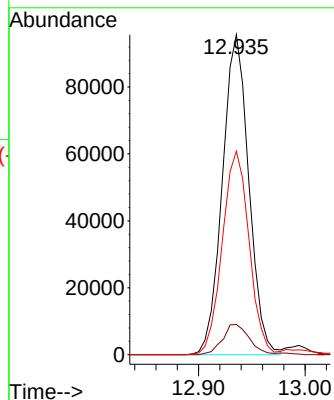
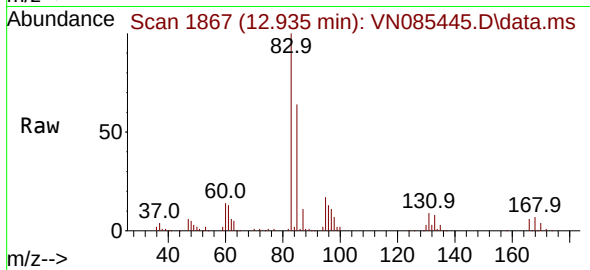




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 43.627 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

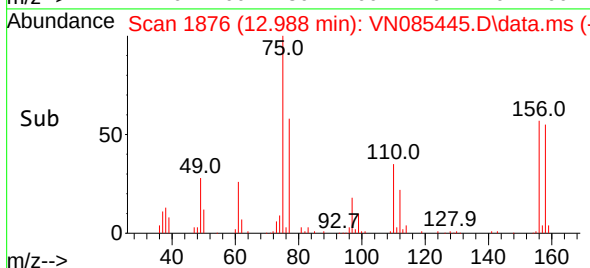
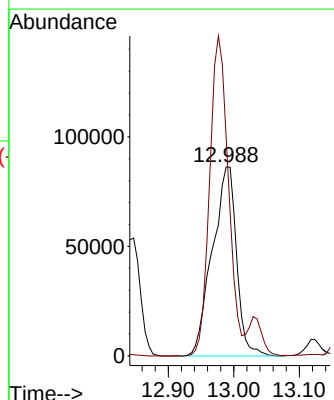
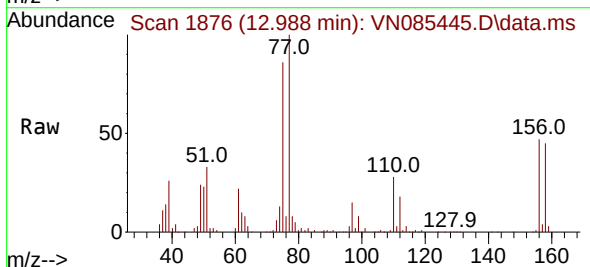
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

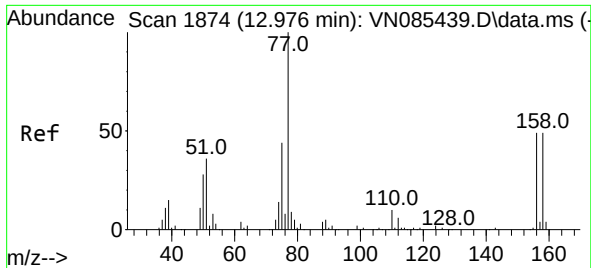
Tgt Ion: 83 Resp: 164882  
 Ion Ratio Lower Upper  
 83 100  
 131 9.9 4.8 14.4  
 85 64.6 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 68.739 ug/l  
 RT: 12.988 min Scan# 1876  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 221480  
 Ion Ratio Lower Upper  
 75 100  
 77 130.3 109.7 329.2

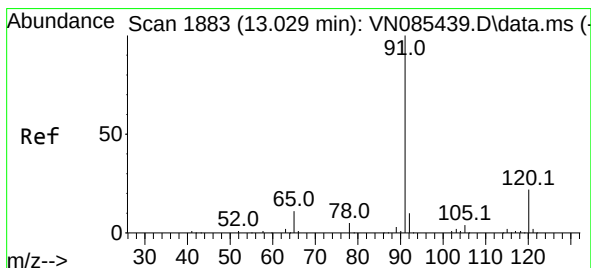
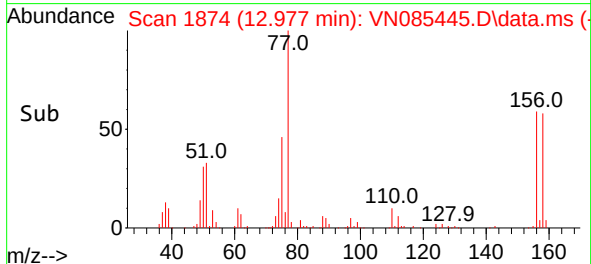
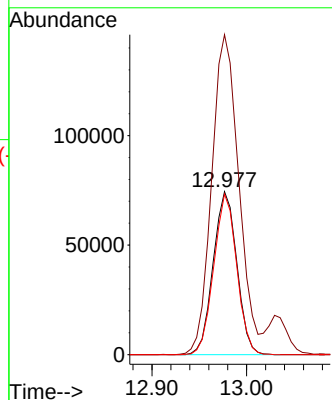
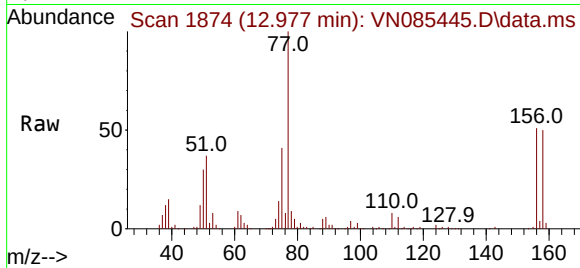




#77  
Bromobenzene  
Concen: 46.138 ug/l  
RT: 12.977 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

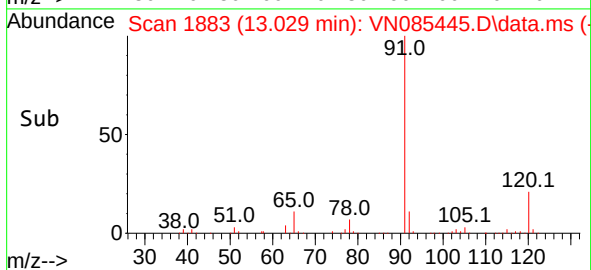
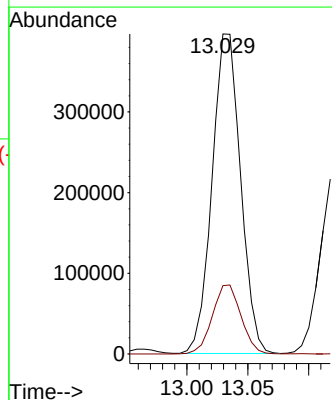
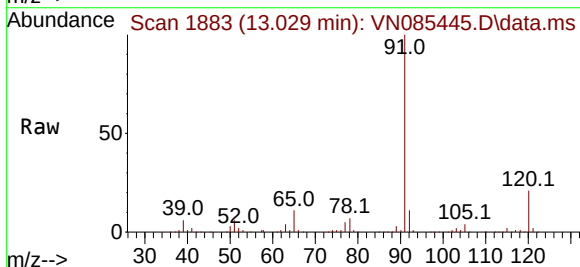
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion:156 Resp: 128968  
Ion Ratio Lower Upper  
156 100  
77 223.8 114.1 342.4  
158 95.7 48.9 146.8

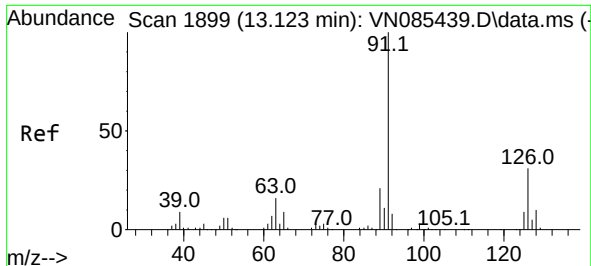


#78  
n-propylbenzene  
Concen: 51.001 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 645977  
Ion Ratio Lower Upper  
91 100  
120 21.7 10.9 32.6



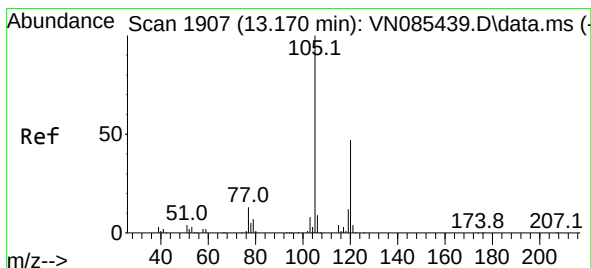
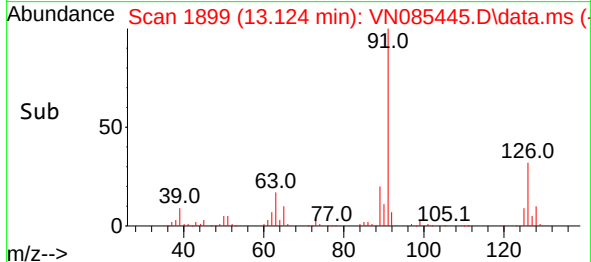
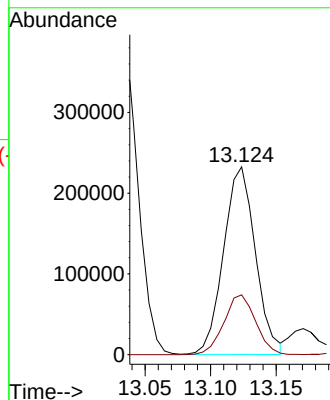
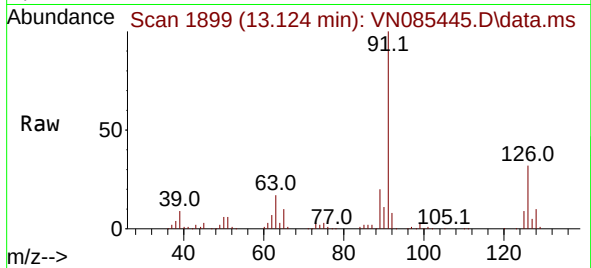




#79  
2-Chlorotoluene  
Concen: 47.870 ug/l  
RT: 13.124 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

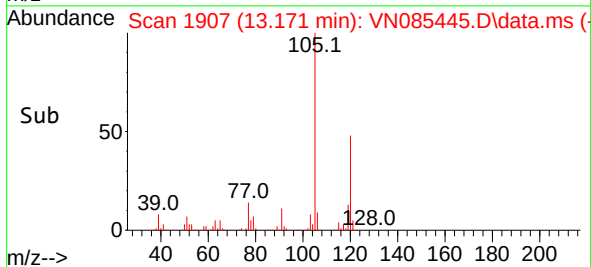
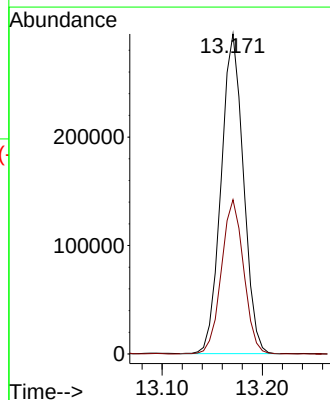
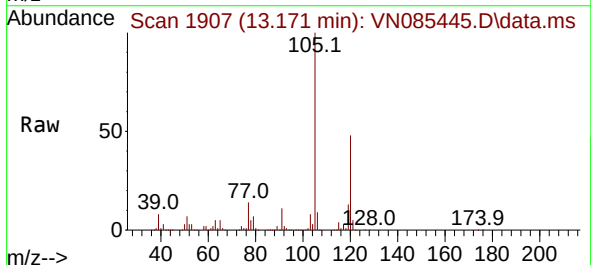
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

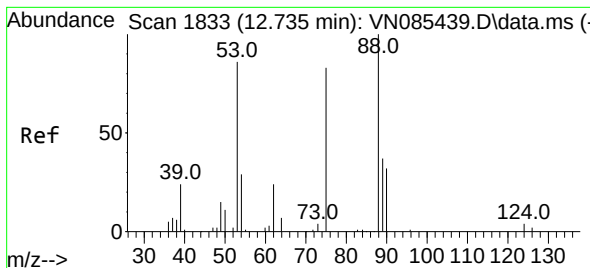
Tgt Ion: 91 Resp: 392404  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 51.604 ug/l  
RT: 13.171 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 105 Resp: 456048  
Ion Ratio Lower Upper  
105 100  
120 48.1 23.9 71.7

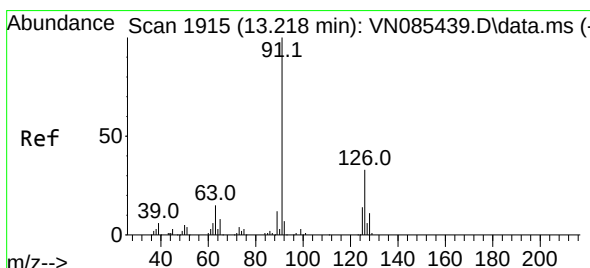
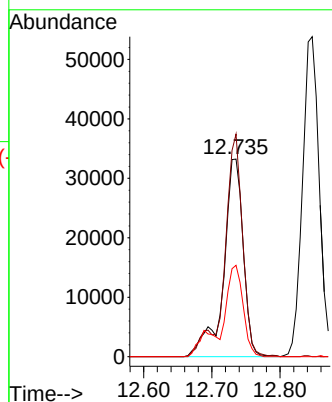
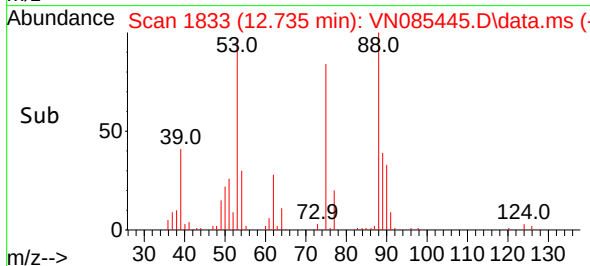
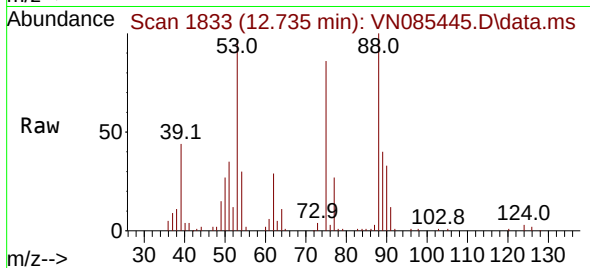




#81  
trans-1,4-Dichloro-2-butene  
Concen: 56.127 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

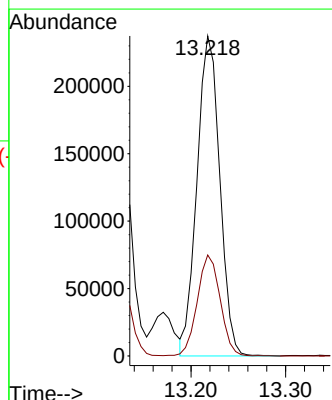
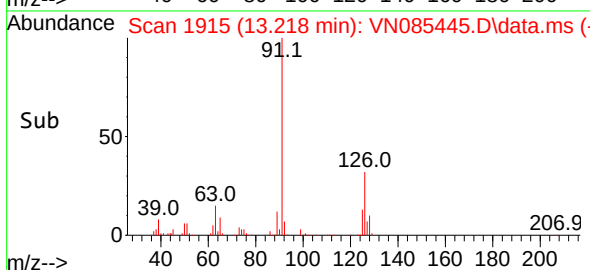
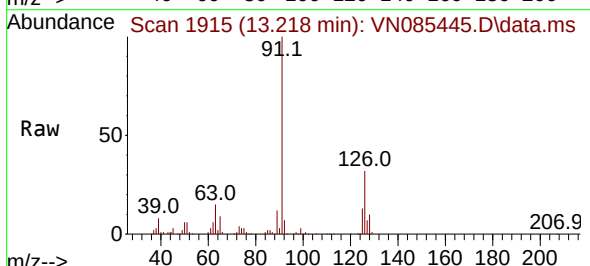
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

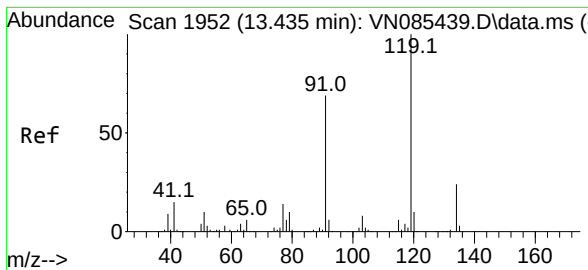
Tgt Ion: 75 Resp: 66842  
Ion Ratio Lower Upper  
75 100  
53 103.5 95.6 143.4  
89 38.0 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 48.776 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 398110  
Ion Ratio Lower Upper  
91 100  
126 31.6 15.9 47.7

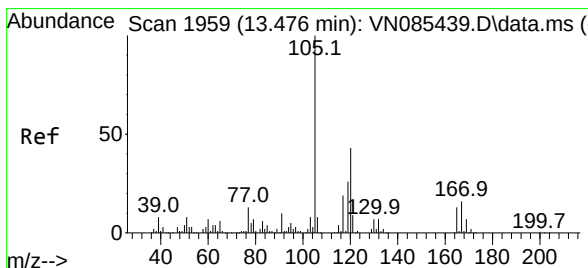
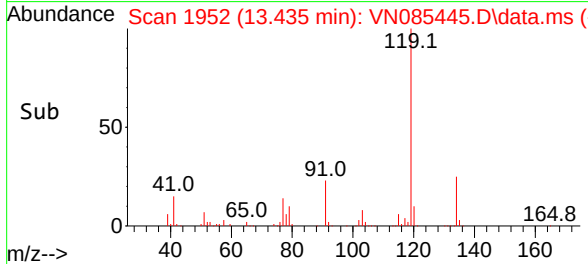
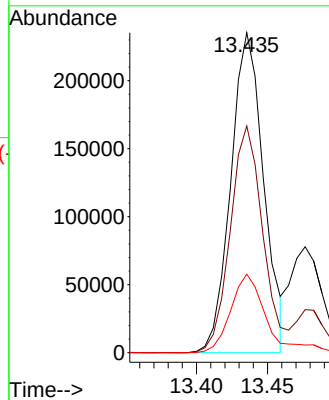
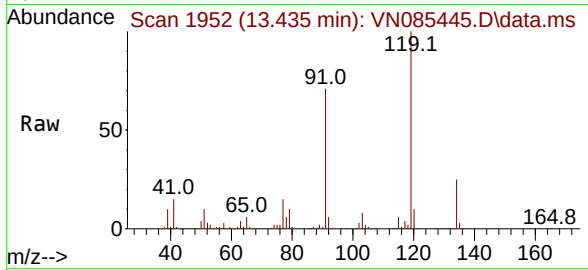




#83  
 tert-Butylbenzene  
 Concen: 50.997 ug/l  
 RT: 13.435 min Scan# 1952  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

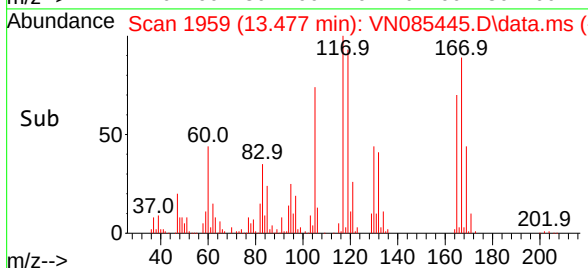
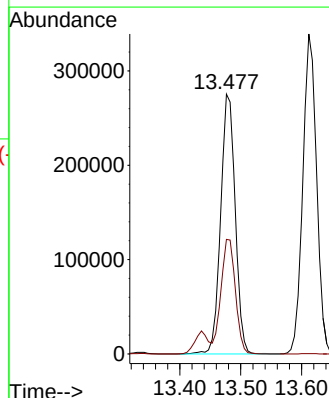
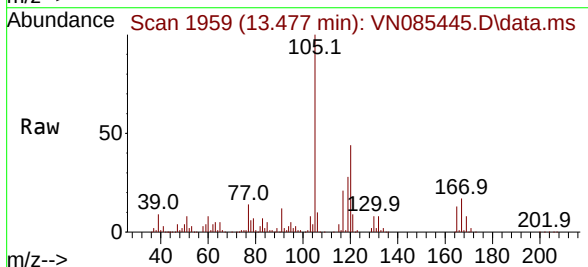
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

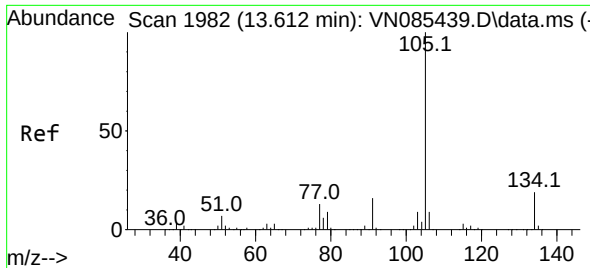
Tgt Ion:119 Resp: 378478  
 Ion Ratio Lower Upper  
 119 100  
 91 70.6 35.1 105.3  
 134 26.7 12.0 36.1



#84  
 1,2,4-Trimethylbenzene  
 Concen: 51.922 ug/l  
 RT: 13.477 min Scan# 1959  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 457340  
 Ion Ratio Lower Upper  
 105 100  
 120 43.6 21.6 65.0

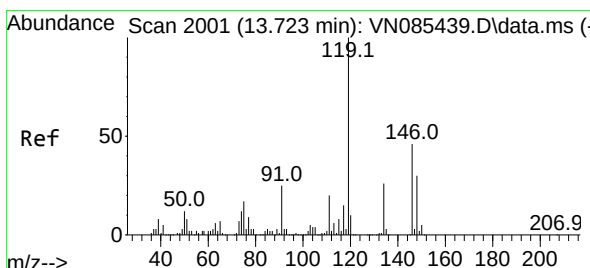
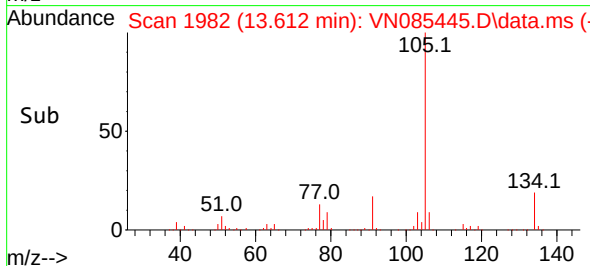
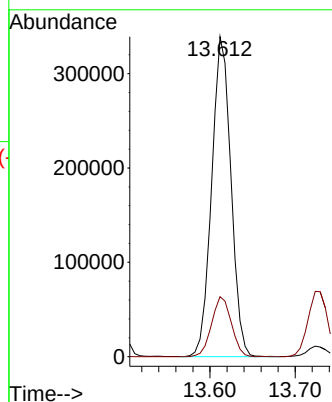
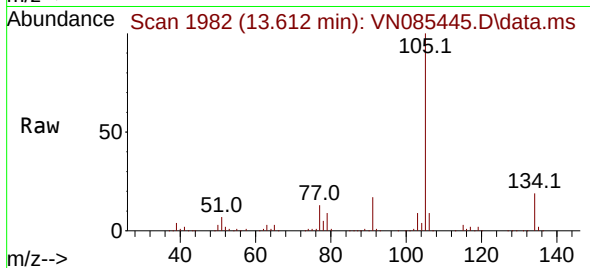




#85  
 sec-Butylbenzene  
 Concen: 51.777 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

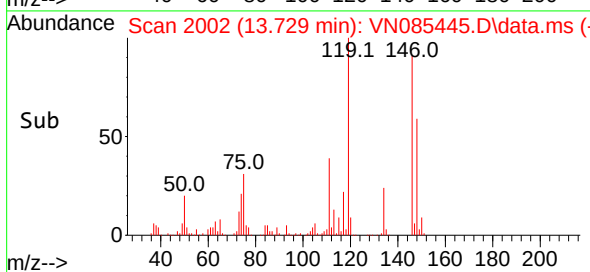
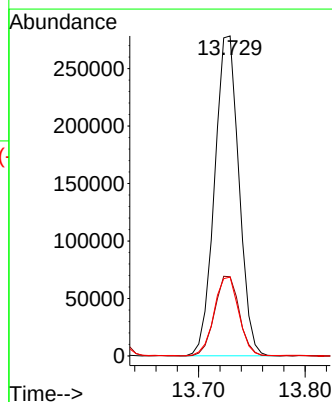
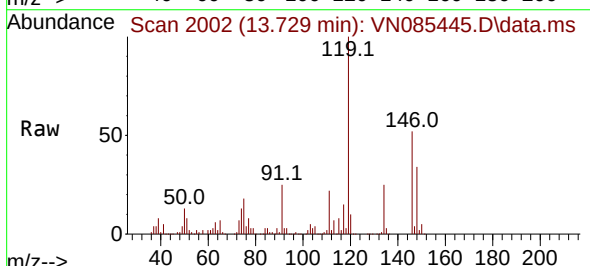
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

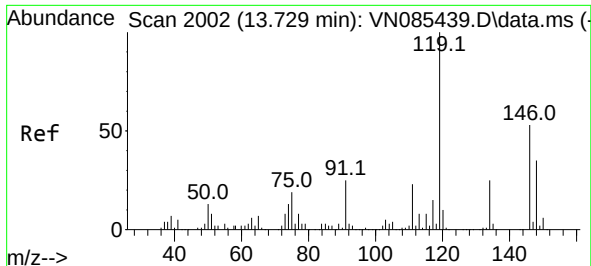
Tgt Ion:105 Resp: 532578  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 47.795 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion:119 Resp: 440284  
 Ion Ratio Lower Upper  
 119 100  
 134 25.3 12.7 38.0  
 91 25.0 12.7 38.1

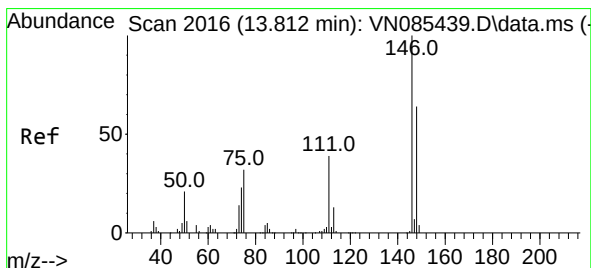
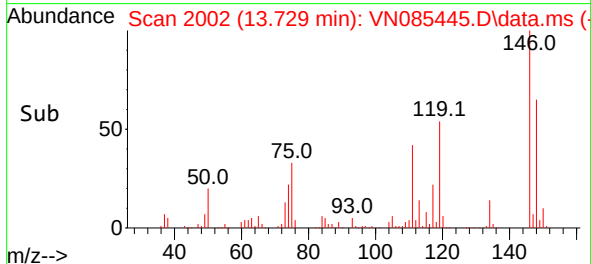
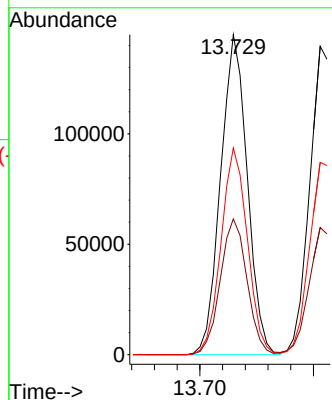
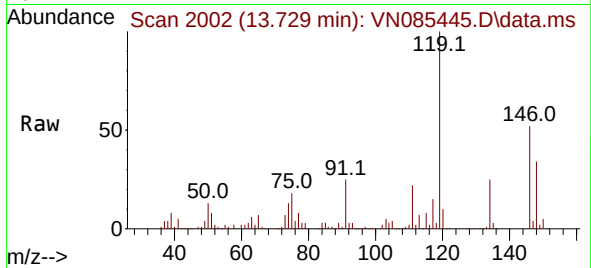




#87  
 1,3-Dichlorobenzene  
 Concen: 45.920 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

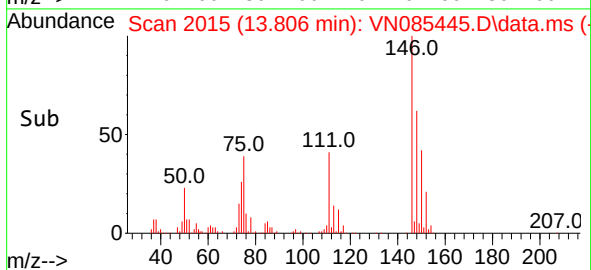
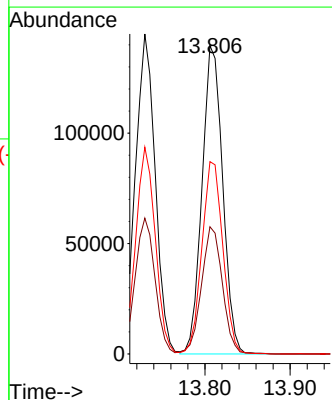
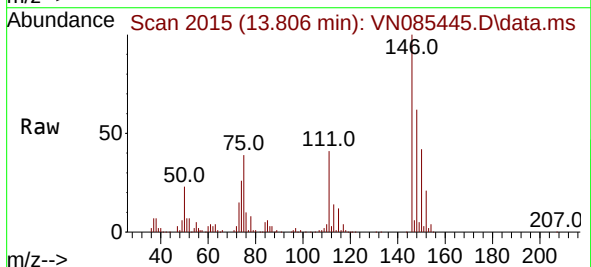
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

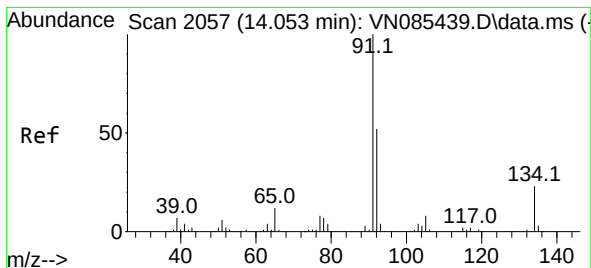
Tgt Ion:146 Resp: 236387  
 Ion Ratio Lower Upper  
 146 100  
 111 42.6 21.4 64.3  
 148 63.8 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 44.102 ug/l  
 RT: 13.806 min Scan# 2015  
 Delta R.T. -0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 235319  
 Ion Ratio Lower Upper  
 146 100  
 111 41.9 21.3 63.7  
 148 63.5 32.4 97.0





#89

n-Butylbenzene

Concen: 50.578 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

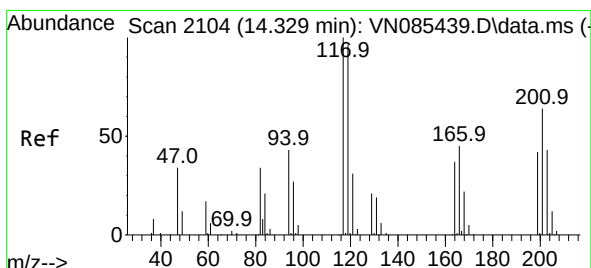
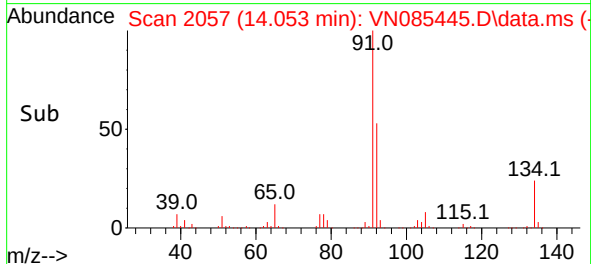
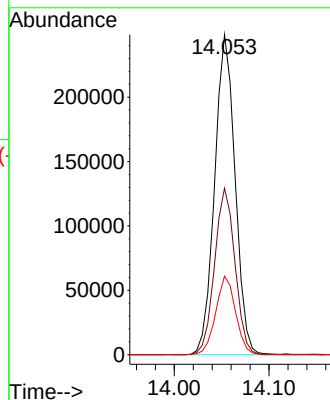
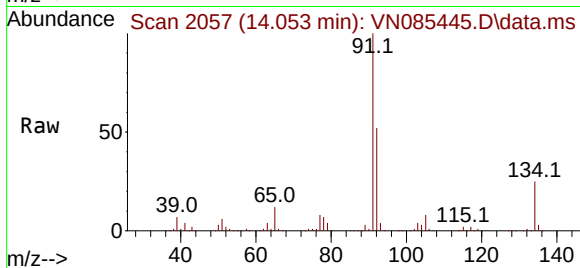
Tgt Ion: 91 Resp: 373227

Ion Ratio Lower Upper

91 100

92 51.9 25.8 77.3

134 23.8 11.7 35.1



#90

Hexachloroethane

Concen: 45.215 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. 0.000 min

Lab File: VN085445.D

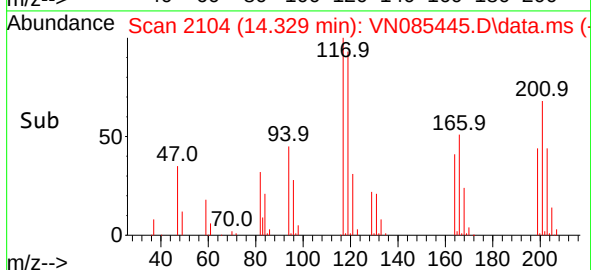
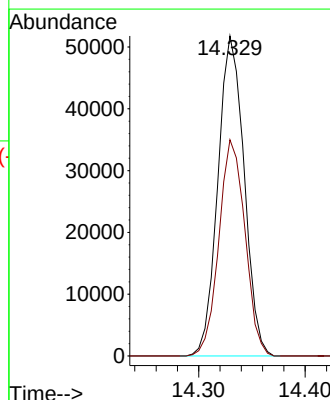
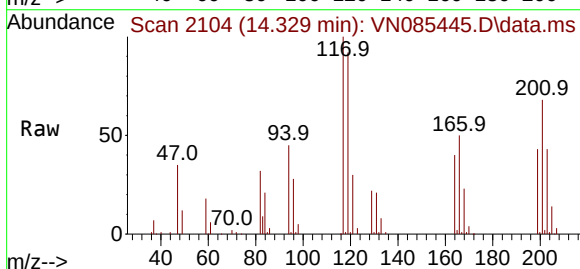
Acq: 14 Jan 2025 18:06

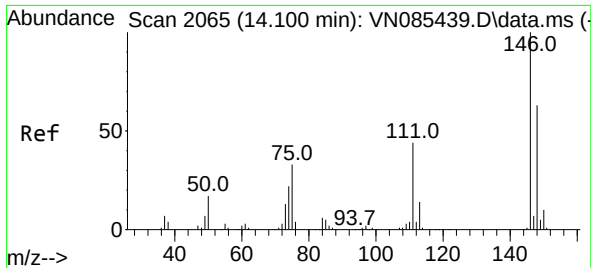
Tgt Ion: 117 Resp: 88538

Ion Ratio Lower Upper

117 100

201 67.2 33.7 101.0

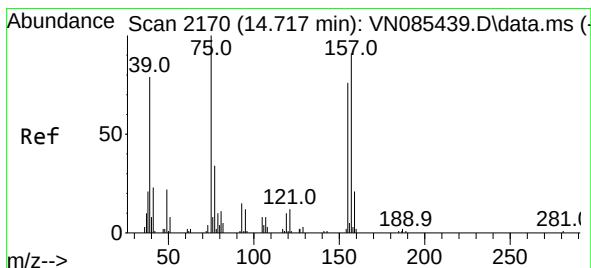
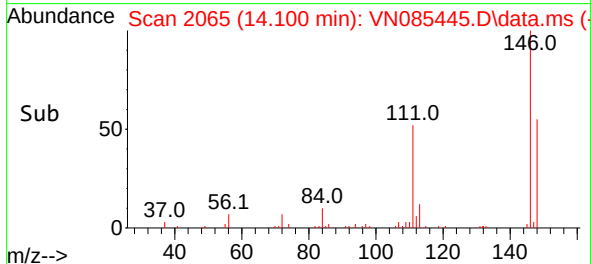
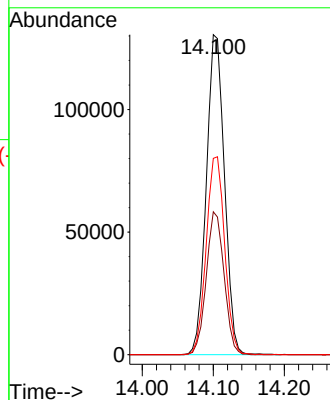
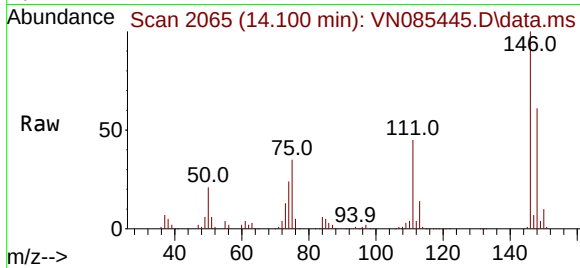




#91  
 1,2-Dichlorobenzene  
 Concen: 45.113 ug/l  
 RT: 14.100 min Scan# 2065  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

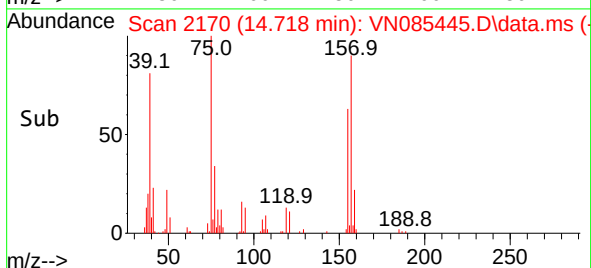
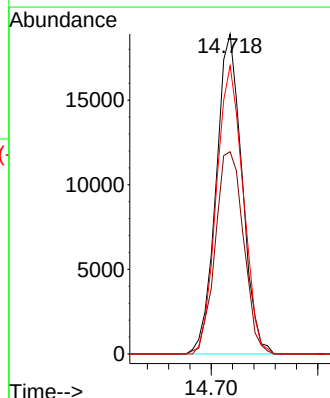
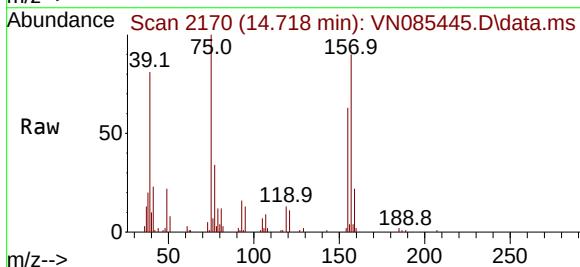
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

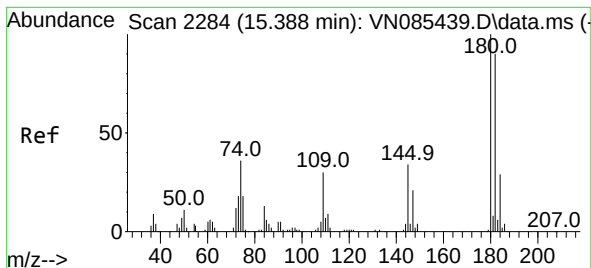
Tgt Ion:146 Resp: 231646  
 Ion Ratio Lower Upper  
 146 100  
 111 43.9 21.7 65.1  
 148 63.1 31.4 94.2



#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 46.221 ug/l  
 RT: 14.718 min Scan# 2170  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 31899  
 Ion Ratio Lower Upper  
 75 100  
 155 69.0 36.4 109.2  
 157 92.3 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 45.739 ug/l

RT: 15.388 min Scan# 21

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

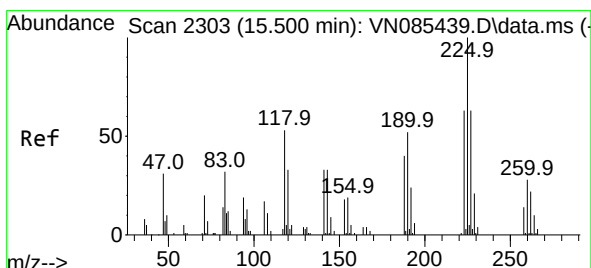
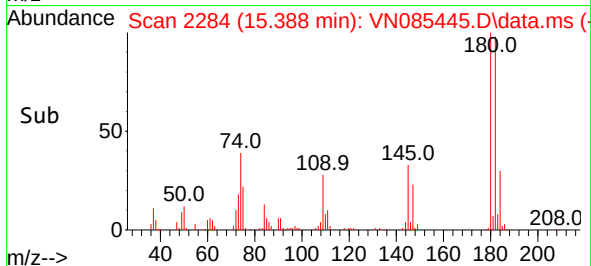
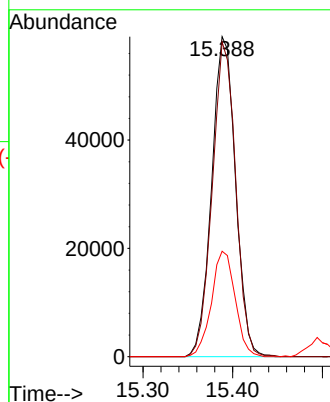
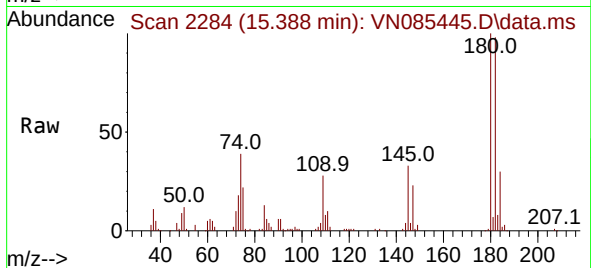
Tgt Ion:180 Resp: 109157

Ion Ratio Lower Upper

180 100

182 96.3 46.8 140.3

145 32.7 16.0 48.0



#94

Hexachlorobutadiene

Concen: 42.112 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

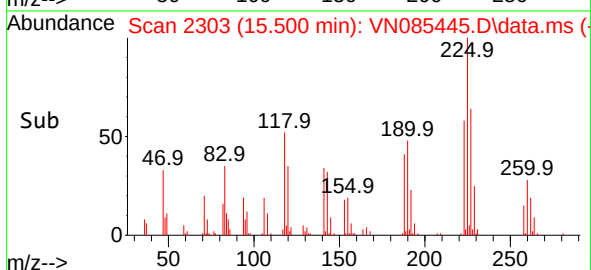
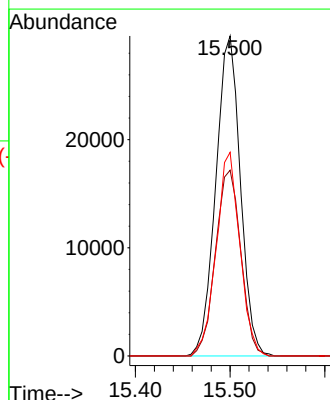
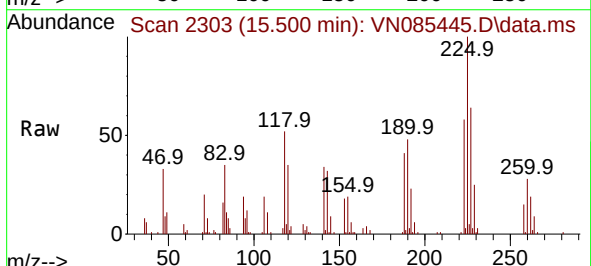
Tgt Ion:225 Resp: 53358

Ion Ratio Lower Upper

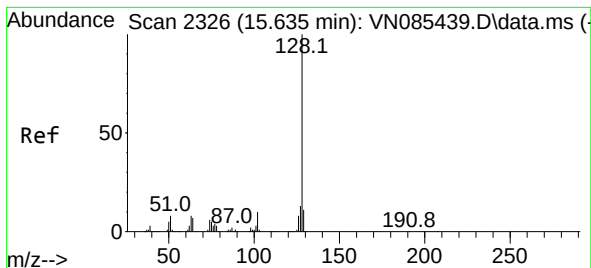
225 100

223 59.8 30.7 92.1

227 61.2 30.9 92.5







#95

Naphthalene

Concen: 47.116 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

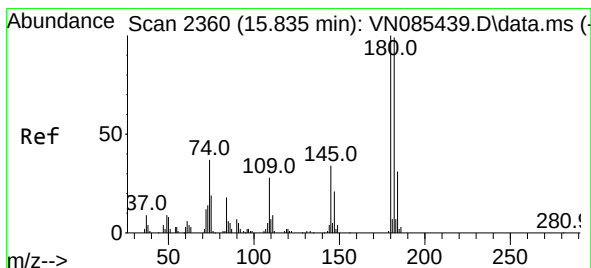
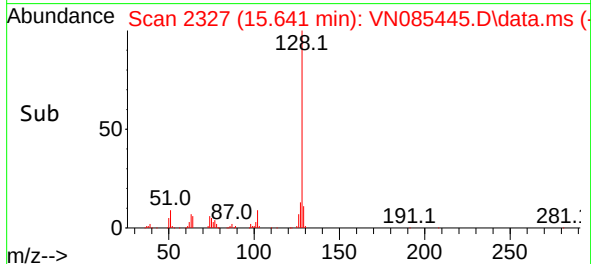
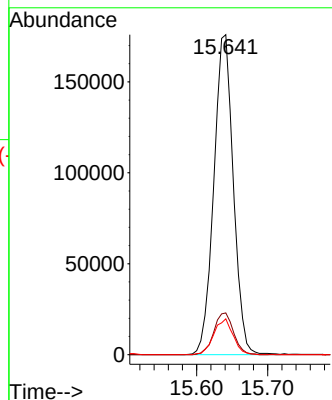
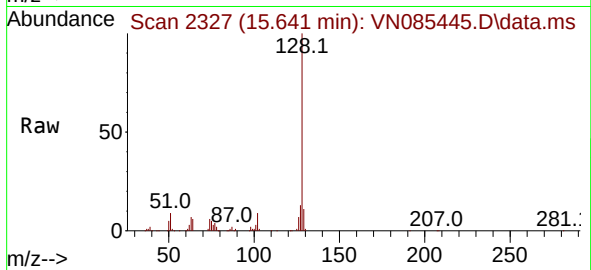
Tgt Ion:128 Resp: 335535

Ion Ratio Lower Upper

128 100

127 13.2 10.6 16.0

129 11.1 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 44.551 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

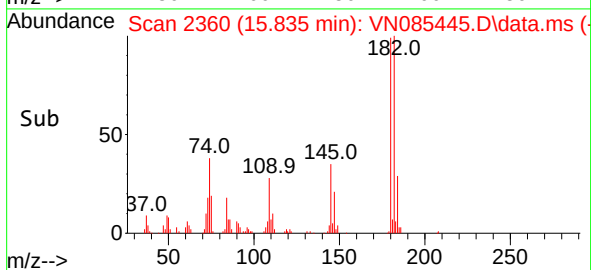
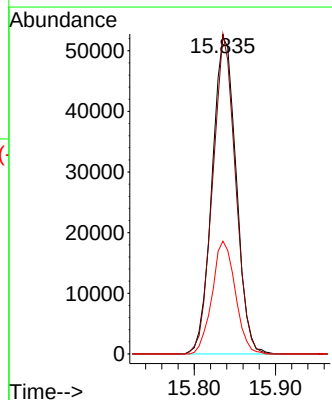
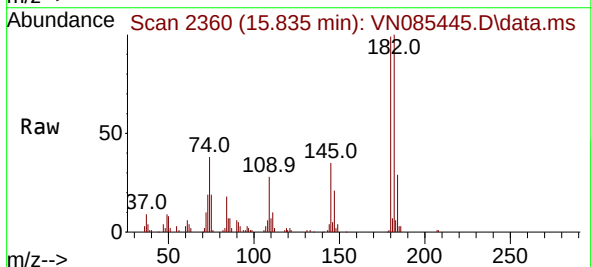
Tgt Ion:180 Resp: 107583

Ion Ratio Lower Upper

180 100

182 95.6 47.4 142.2

145 34.3 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 203638   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 333806   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 302551   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 155713   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 158323   | 48.164   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 96.320%  |
| 35) Dibromofluoromethane    | 8.159  | 113   | 118662   | 51.240   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 102.480% |
| 50) Toluene-d8              | 10.565 | 98    | 432537   | 52.569   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 105.140% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 155870   | 55.379   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 110.760% |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 126280  | 45.800  | ug/l   | 98  |
| 3) Chloromethane             | 2.359 | 50  | 130825  | 43.823  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.512 | 62  | 135494  | 45.155  | ug/l   | 98  |
| 5) Bromomethane              | 2.948 | 94  | 79311   | 43.757  | ug/l   | 98  |
| 6) Chloroethane              | 3.118 | 64  | 89399   | 46.993  | ug/l   | 100 |
| 7) Trichlorofluoromethane    | 3.495 | 101 | 218167  | 50.109  | ug/l   | 99  |
| 8) Diethyl Ether             | 3.959 | 74  | 73428   | 48.819  | ug/l   | 97  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 125888  | 51.335  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.583 | 142 | 144081  | 51.306  | ug/l   | 97  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 110319  | 293.091 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 107139  | 49.022  | ug/l   | 98  |
| 13) Acrolein                 | 4.171 | 56  | 134509  | 261.783 | ug/l   | 100 |
| 14) Allyl chloride           | 5.018 | 41  | 172649  | 48.683  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.712 | 53  | 312035  | 260.994 | ug/l   | 99  |
| 16) Acetone                  | 4.418 | 43  | 267575  | 251.929 | ug/l   | 97  |
| 17) Carbon Disulfide         | 4.712 | 76  | 283263  | 42.095  | ug/l   | 98  |
| 18) Methyl Acetate           | 5.018 | 43  | 174889  | 54.151  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 395014  | 55.663  | ug/l   | 98  |
| 20) Methylene Chloride       | 5.277 | 84  | 131284  | 49.931  | ug/l   | 99  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 116065  | 49.692  | ug/l   | 97  |
| 22) Diisopropyl ether        | 6.665 | 45  | 426926  | 54.237  | ug/l   | 98  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1520538 | 276.027 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 244849  | 51.014  | ug/l   | 98  |
| 25) 2-Butanone               | 7.477 | 43  | 406723  | 260.223 | ug/l   | 100 |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 223673  | 57.640  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 142501  | 51.799  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.812 | 49  | 101613  | 45.505  | ug/l   | 98  |
| 29) Tetrahydrofuran          | 7.830 | 42  | 272222  | 274.712 | ug/l   | 100 |
| 30) Chloroform               | 7.959 | 83  | 254209  | 51.246  | ug/l   | 100 |
| 31) Cyclohexane              | 8.253 | 56  | 189607  | 45.451  | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 225078  | 51.727  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 170755  | 52.537  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 173618  | 52.923  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 200977  | 54.013  | ug/l   | 99  |
| 39) Methylcyclohexane        | 9.600 | 83  | 171154  | 56.039  | ug/l   | 99  |
| 40) Benzene                  | 8.600 | 78  | 525669  | 53.828  | ug/l   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085526.D  
 Acq On : 28 Jan 2025 09:53  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Quant Time: Jan 29 00:33:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 95095    | 55.717   | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 195201   | 53.072   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.683  | 43   | 287826   | 54.755   | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 119734   | 52.672   | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 135814   | 54.447   | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 95715    | 53.179   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.883  | 83   | 204517   | 55.774   | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 136479   | 57.693   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 40607    | 1019.345 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 892528   | 292.599  | ug/l   | 100      |
| 52) Toluene                   | 10.630 | 92   | 325356   | 57.499   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.830 | 75   | 204105   | 58.899   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 213245   | 57.610   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 125068   | 55.851   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 191924   | 50.844   | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 219323   | 56.327   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 426978   | 300.465  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 643969   | 300.034  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 153599   | 56.815   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 122098   | 54.776   | ug/l   | 97       |
| 64) Tetrachloroethene         | 11.100 | 164  | 109264   | 52.974   | ug/l   | 98       |
| 65) Chlorobenzene             | 11.888 | 112  | 354308   | 53.457   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 130012   | 53.447   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 621051   | 57.531   | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.065 | 106  | 475266   | 119.124  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 223578   | 58.639   | ug/l   | 100      |
| 70) Styrene                   | 12.406 | 104  | 387081   | 61.343   | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 101032   | 58.046   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 581759   | 55.357   | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 249973   | 52.919   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 182235   | 49.089   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 238136   | 75.243   | ug/l   | 47       |
| 77) Bromobenzene              | 12.976 | 156  | 138788   | 50.547   | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 701218   | 56.362   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 424851   | 52.764   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 494666   | 56.984   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 63601    | 54.370   | ug/l   | 92       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 432608   | 53.960   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 405613   | 55.641   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 501298   | 57.941   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 580942   | 57.499   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 491281   | 53.532   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 264631   | 52.335   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 264719   | 50.507   | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 420498   | 58.013   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 97383    | 50.630   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 255916   | 50.739   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 34993    | 51.620   | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 127164   | 54.246   | ug/l   | 100      |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 63906    | 51.348   | ug/l   | 99       |
| 95) Naphthalene               | 15.641 | 128  | 367063   | 52.473   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 121516   | 51.230   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085526.D  
Acq On : 28 Jan 2025 09:53  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

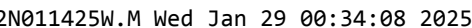
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

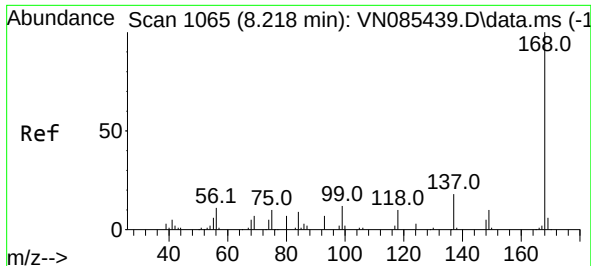
Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

Quant Time: Jan 29 00:33:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

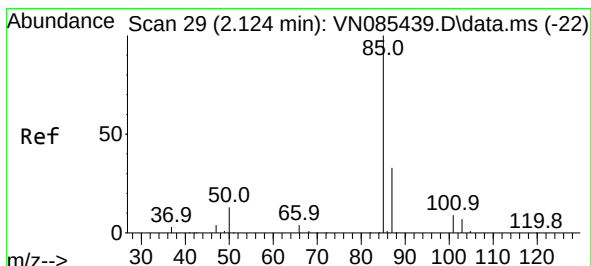
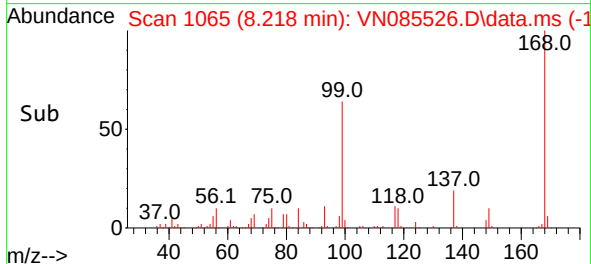
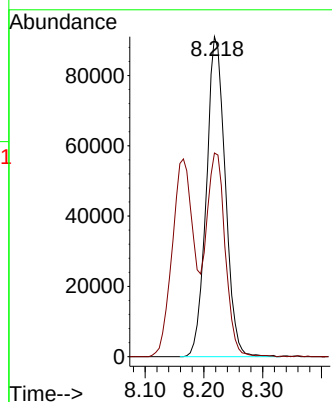
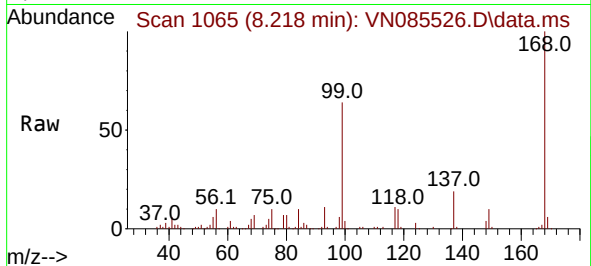




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

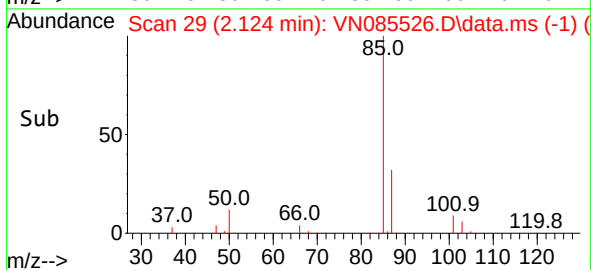
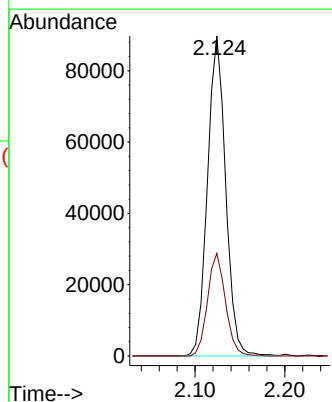
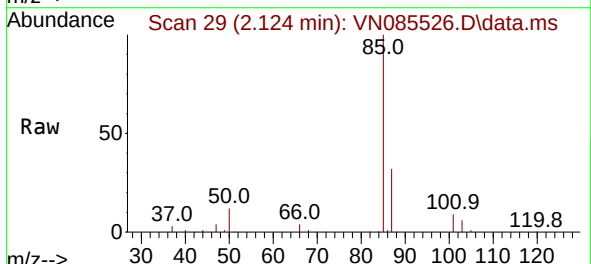
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

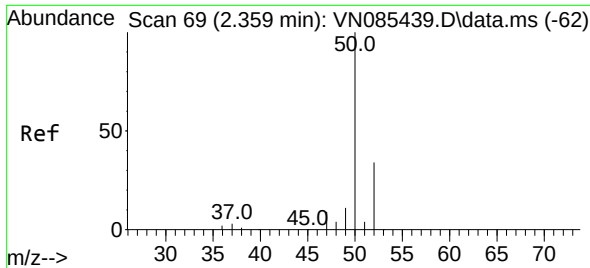
Tgt Ion:168 Resp: 203638  
Ion Ratio Lower Upper  
168 100  
99 63.5 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 45.800 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 85 Resp: 126280  
Ion Ratio Lower Upper  
85 100  
87 32.1 16.7 50.1

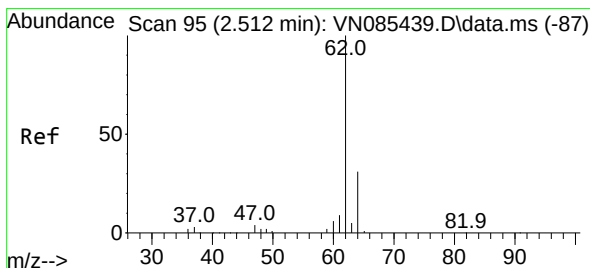
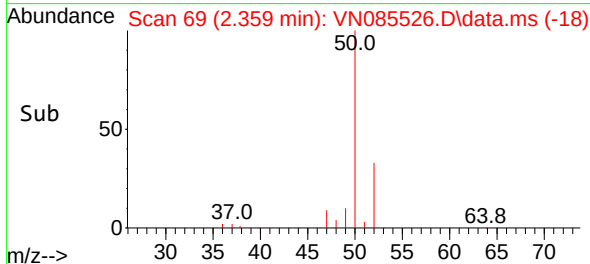
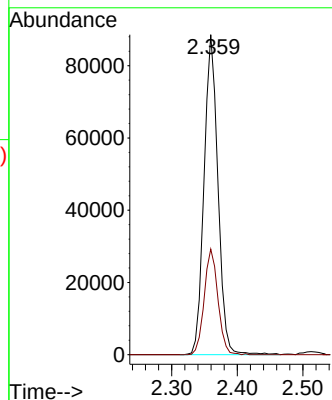
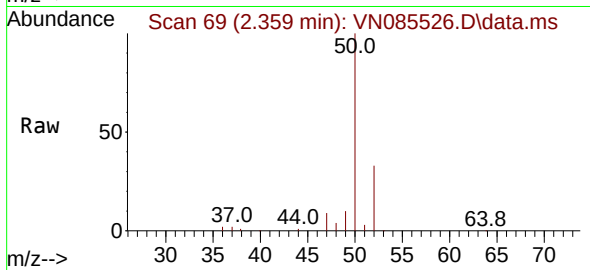




#3  
 Chloromethane  
 Concen: 43.823 ug/l  
 RT: 2.359 min Scan# 69  
 Delta R.T. 0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

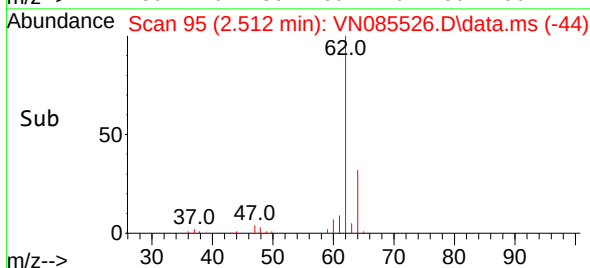
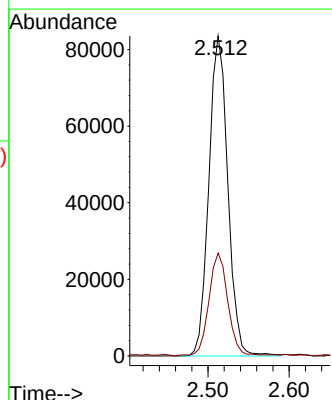
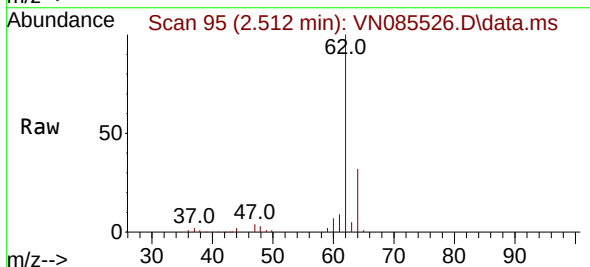
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

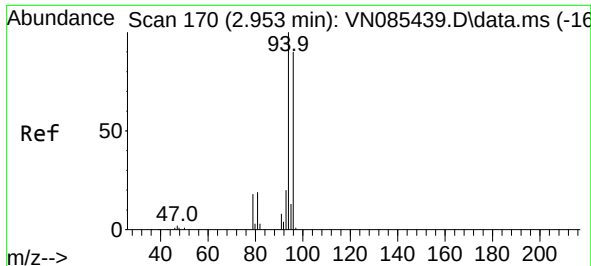
Tgt Ion: 50 Resp: 130825  
 Ion Ratio Lower Upper  
 50 100  
 52 33.0 27.0 40.6



#4  
 Vinyl Chloride  
 Concen: 45.155 ug/l  
 RT: 2.512 min Scan# 95  
 Delta R.T. 0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

Tgt Ion: 62 Resp: 135494  
 Ion Ratio Lower Upper  
 62 100  
 64 31.9 24.8 37.2

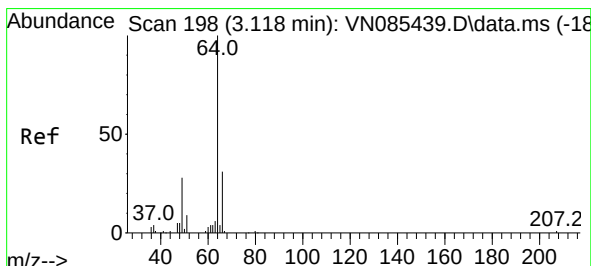
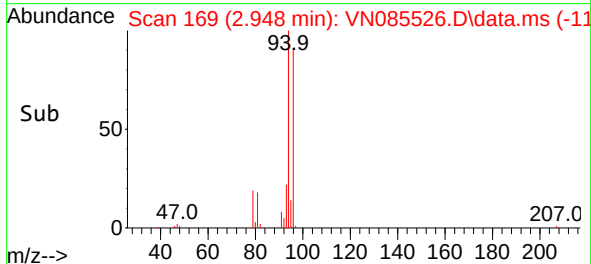
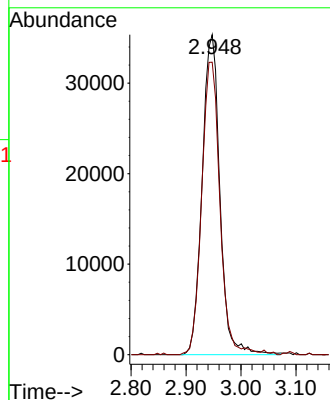
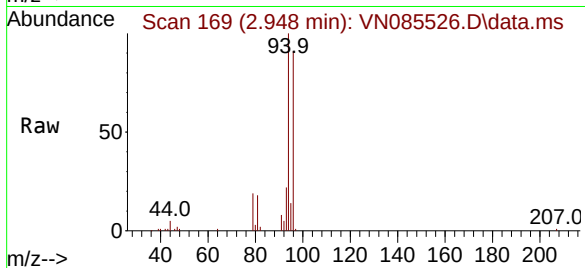




#5  
Bromomethane  
Concen: 43.757 ug/l  
RT: 2.948 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

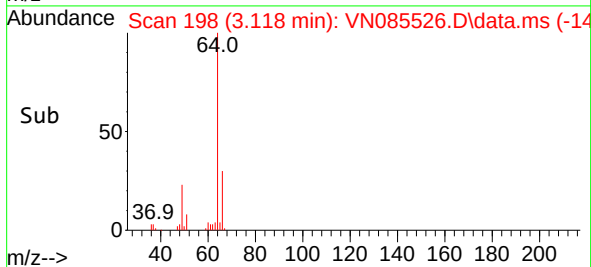
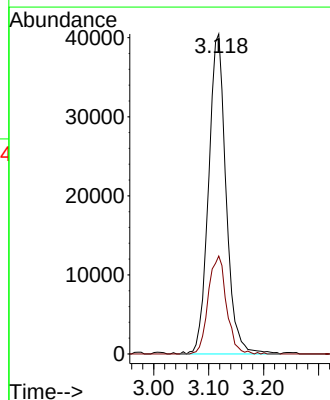
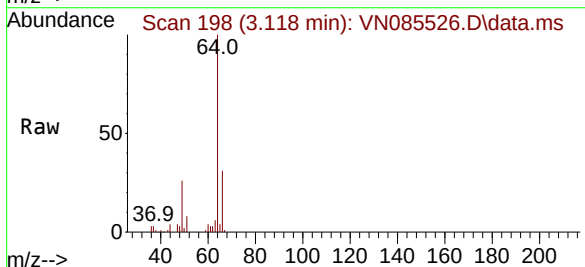
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 94 Resp: 79311  
Ion Ratio Lower Upper  
94 100  
96 91.4 71.8 107.6

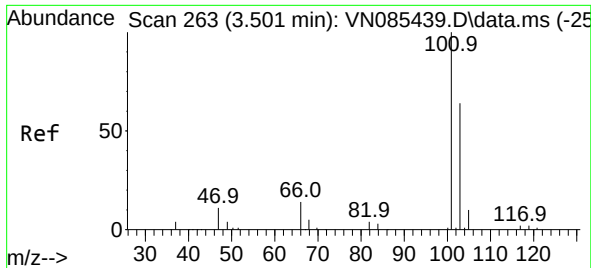


#6  
Chloroethane  
Concen: 46.993 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 64 Resp: 89399  
Ion Ratio Lower Upper  
64 100  
66 30.6 24.6 36.8



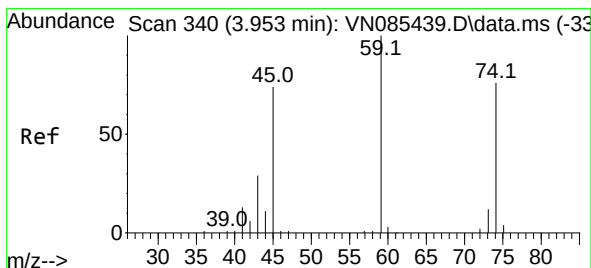
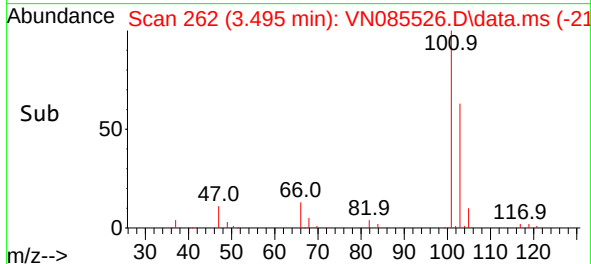
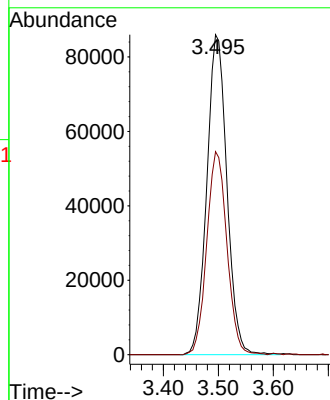
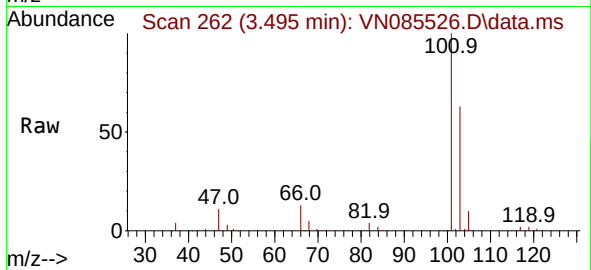




#7  
 Trichlorofluoromethane  
 Concen: 50.109 ug/l  
 RT: 3.495 min Scan# 210  
 Delta R.T. -0.006 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

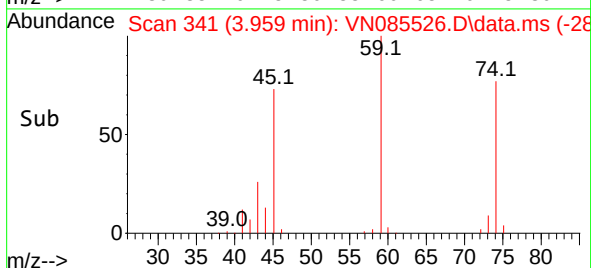
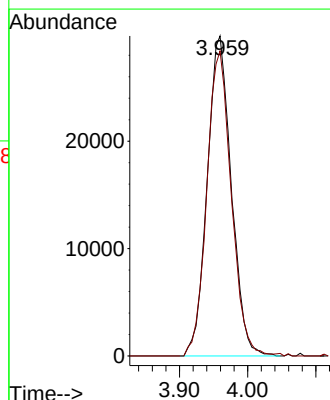
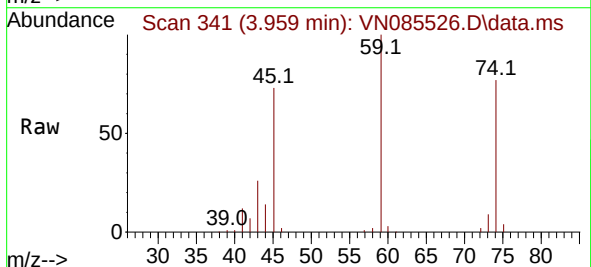
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

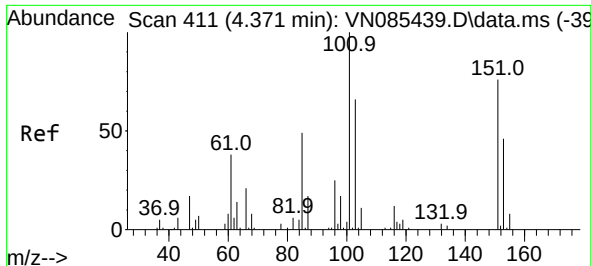
Tgt Ion:101 Resp: 218167  
 Ion Ratio Lower Upper  
 101 100  
 103 63.5 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 48.819 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

Tgt Ion: 74 Resp: 73428  
 Ion Ratio Lower Upper  
 74 100  
 45 96.9 49.7 149.1

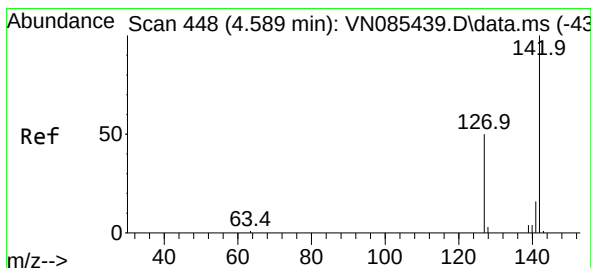
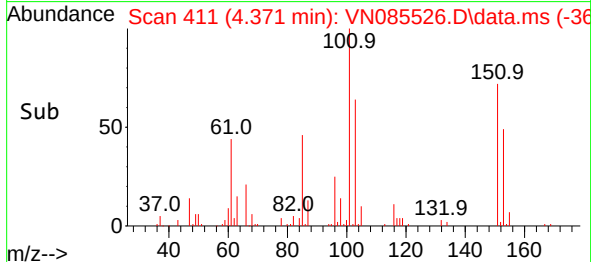
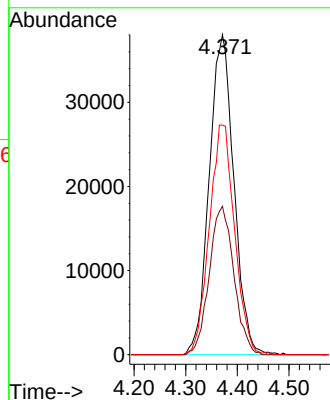
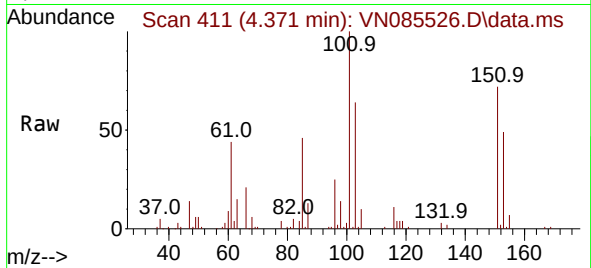




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 51.335 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

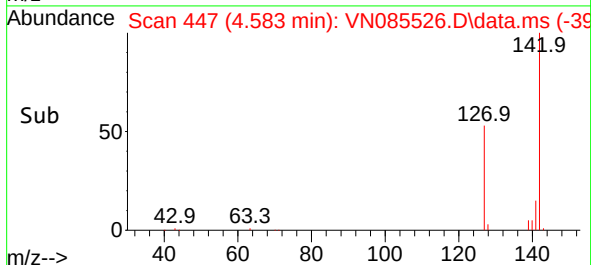
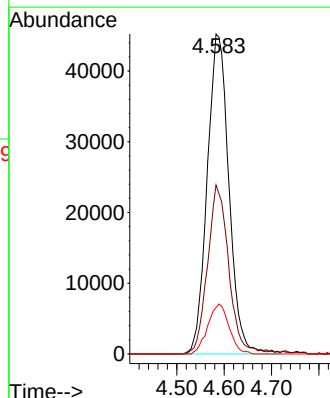
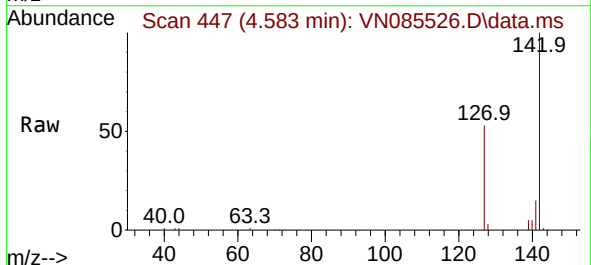
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

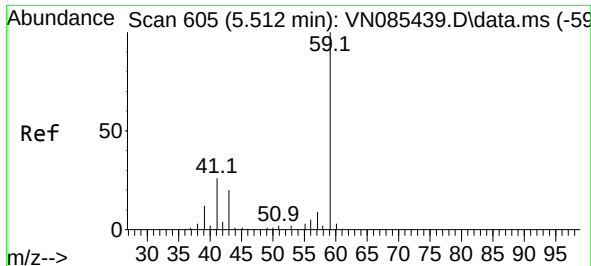
Tgt Ion:101 Resp: 125888  
Ion Ratio Lower Upper  
101 100  
85 46.4 37.8 56.8  
151 73.8 58.8 88.2



#10  
Methyl Iodide  
Concen: 51.306 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:142 Resp: 144081  
Ion Ratio Lower Upper  
142 100  
127 52.8 40.3 60.5  
141 14.5 12.8 19.2

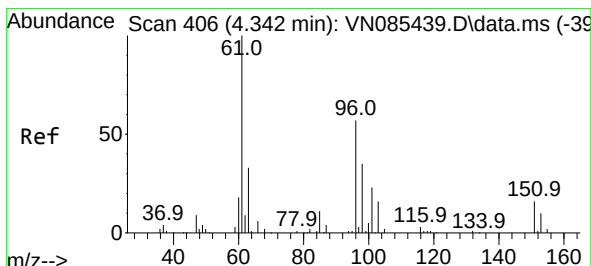
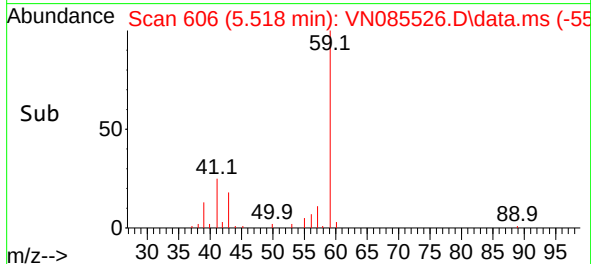
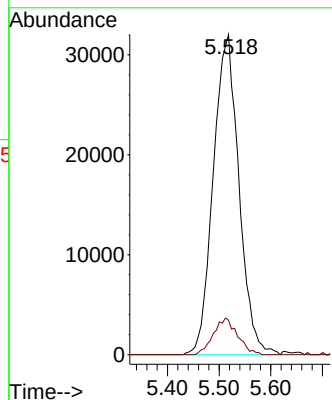
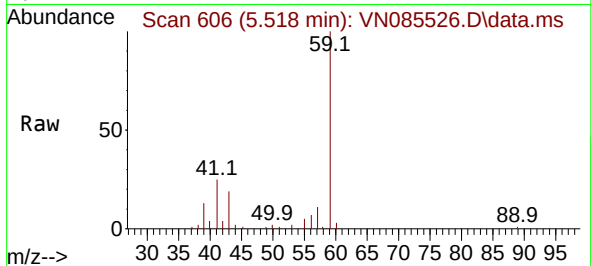




#11  
Tert butyl alcohol  
Concen: 293.091 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

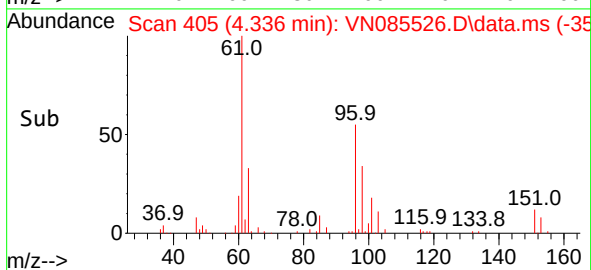
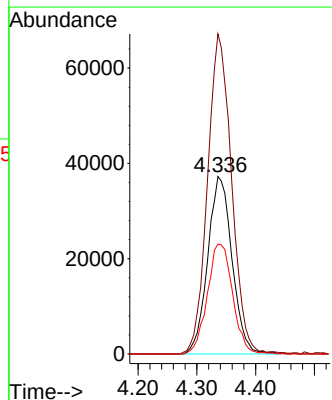
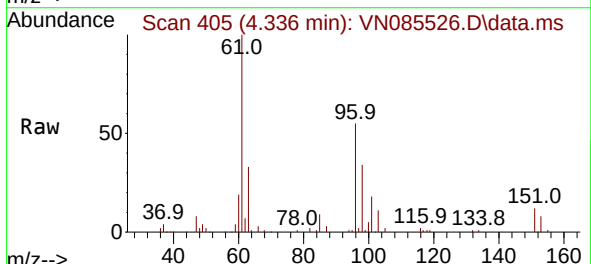
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

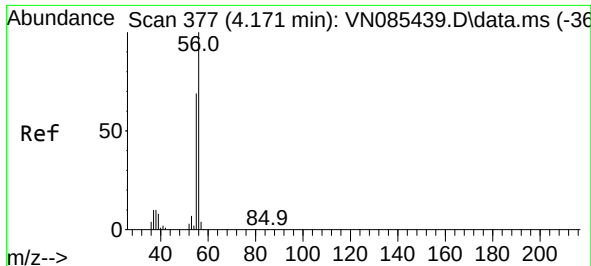
Tgt Ion: 59 Resp: 110319  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 49.022 ug/l  
RT: 4.336 min Scan# 405  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 96 Resp: 107139  
Ion Ratio Lower Upper  
96 100  
61 180.3 141.0 211.4  
98 61.9 49.0 73.6





#13

Acrolein

Concen: 261.783 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

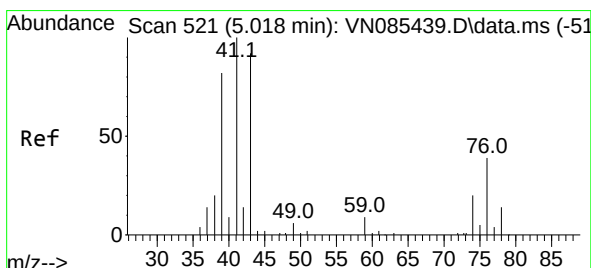
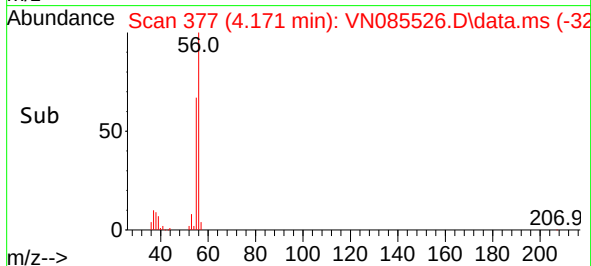
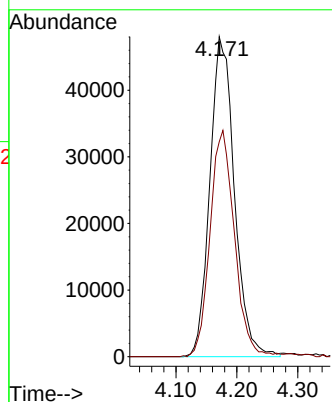
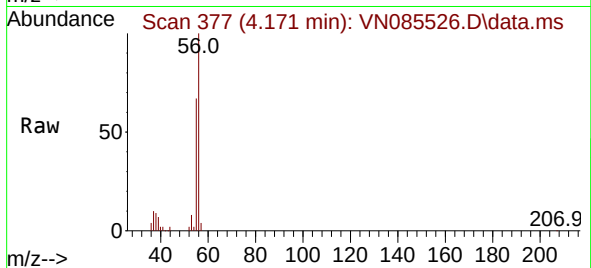
VSTDCCC050

Tgt Ion: 56 Resp: 134509

Ion Ratio Lower Upper

56 100

55 70.5 56.3 84.5



#14

Allyl chloride

Concen: 48.683 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

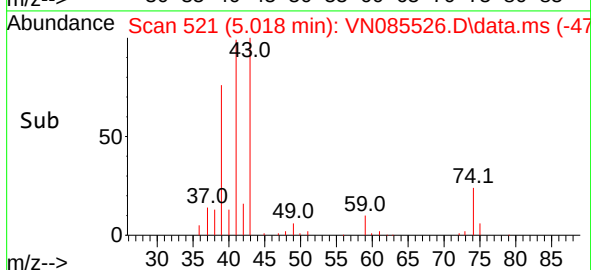
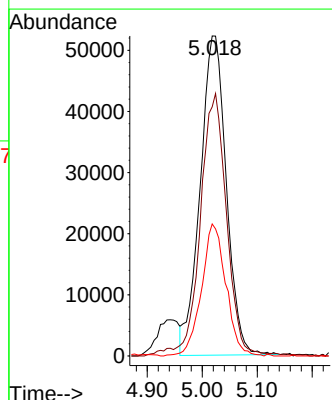
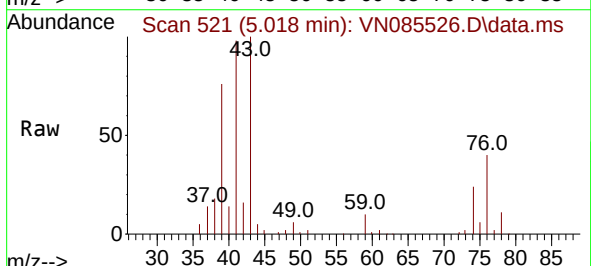
Tgt Ion: 41 Resp: 172649

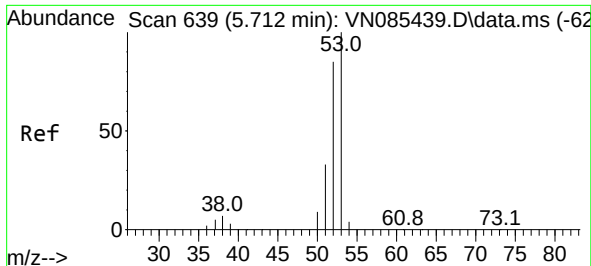
Ion Ratio Lower Upper

41 100

39 82.7 64.4 96.6

76 38.6 30.5 45.7

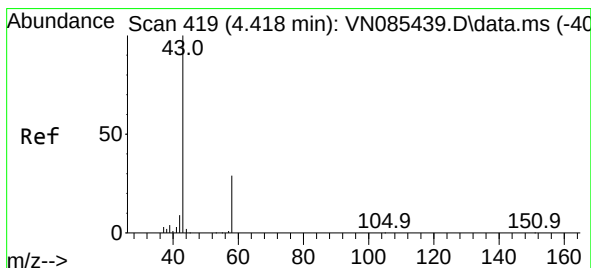
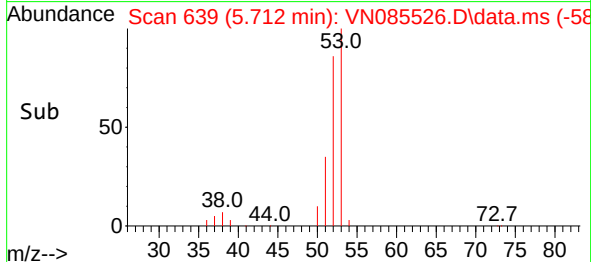
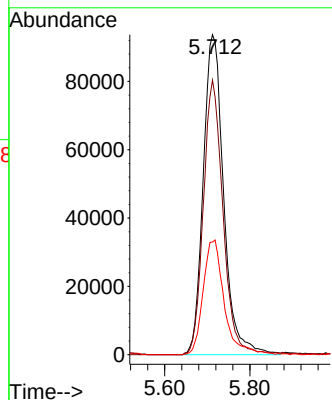
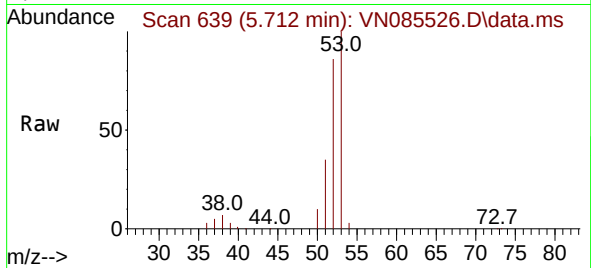




#15  
Acrylonitrile  
Concen: 260.994 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

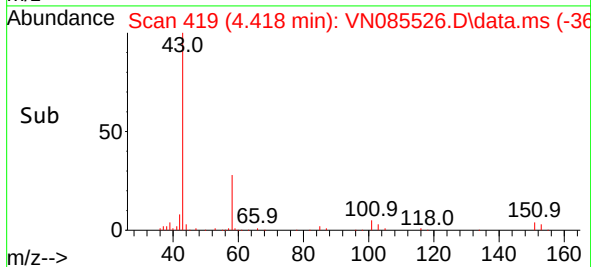
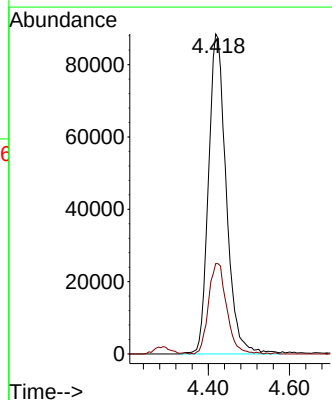
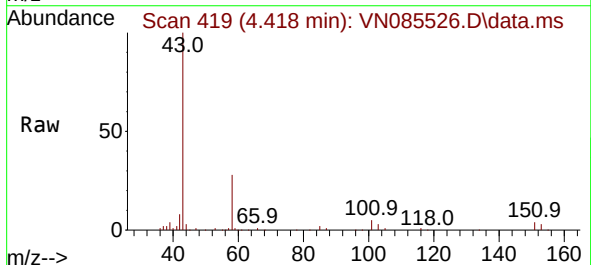
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

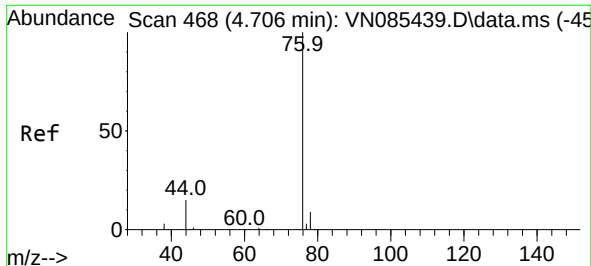
Tgt Ion: 53 Resp: 312035  
Ion Ratio Lower Upper  
53 100  
52 82.4 65.5 98.3  
51 36.9 29.8 44.8



#16  
Acetone  
Concen: 251.929 ug/l  
RT: 4.418 min Scan# 419  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 43 Resp: 267575  
Ion Ratio Lower Upper  
43 100  
58 28.2 23.8 35.6

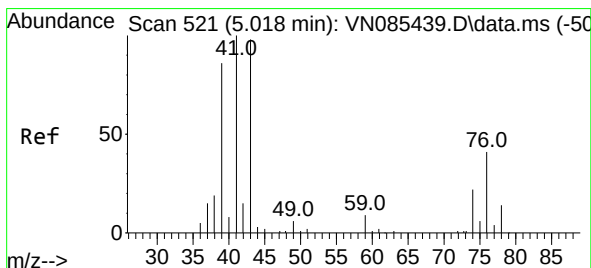
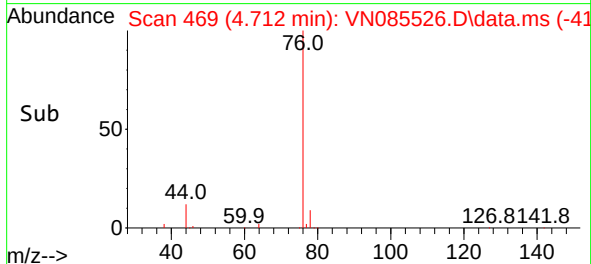
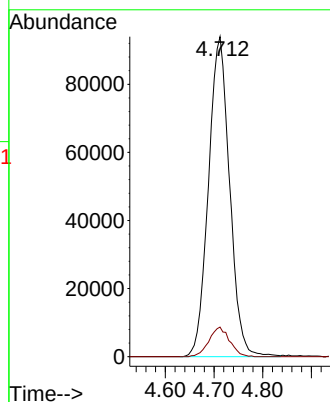
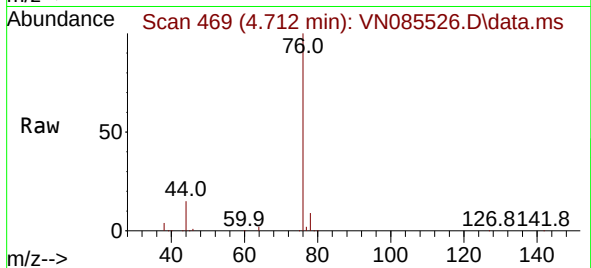




#17  
Carbon Disulfide  
Concen: 42.095 ug/l  
RT: 4.712 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

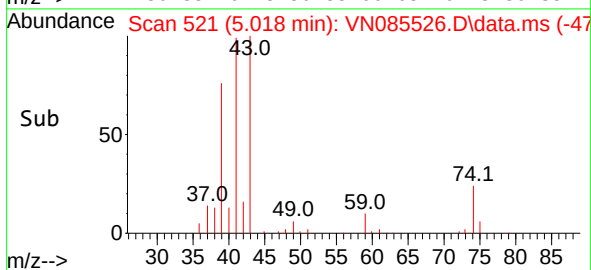
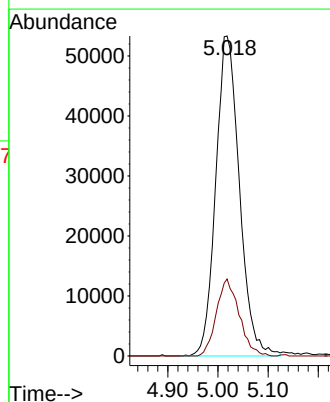
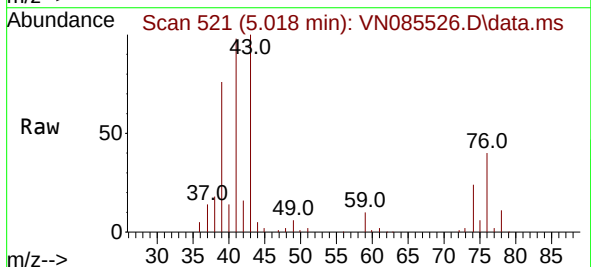
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

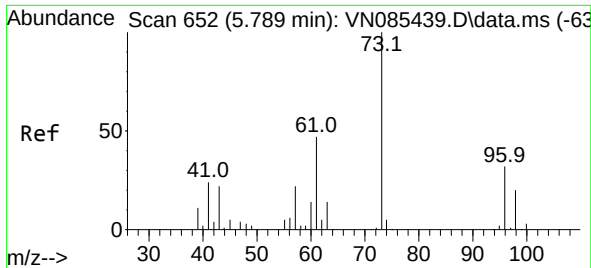
Tgt Ion: 76 Resp: 283263  
Ion Ratio Lower Upper  
76 100  
78 9.2 6.9 10.3



#18  
Methyl Acetate  
Concen: 54.151 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 43 Resp: 174889  
Ion Ratio Lower Upper  
43 100  
74 23.1 18.6 28.0

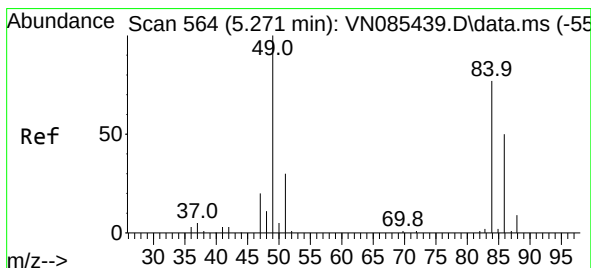
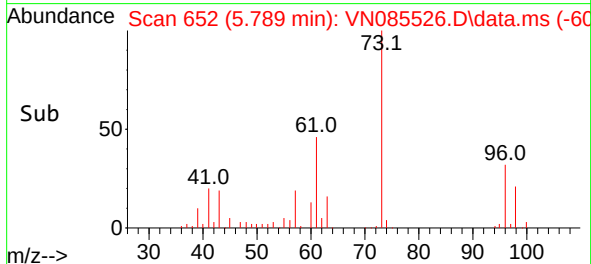
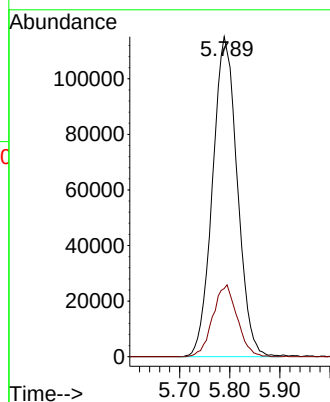
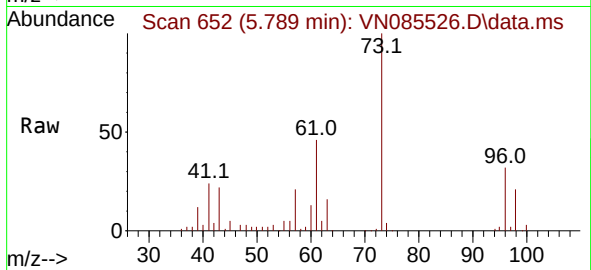




#19  
Methyl tert-butyl Ether  
Concen: 55.663 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

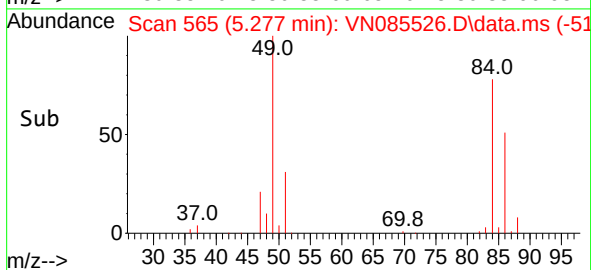
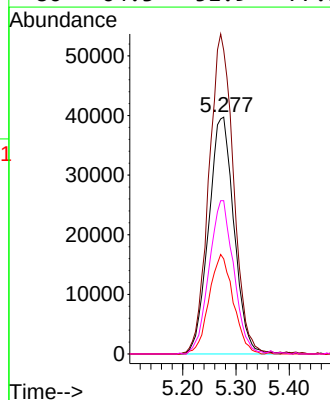
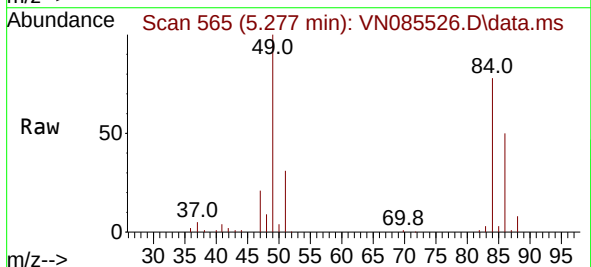
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

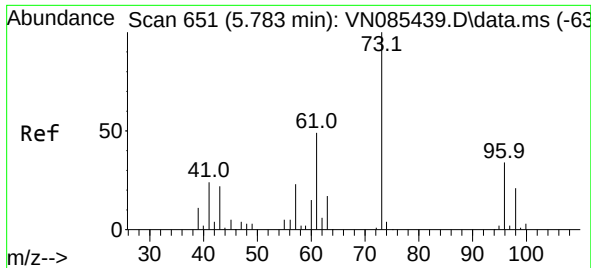
Tgt Ion: 73 Resp: 395014  
Ion Ratio Lower Upper  
73 100  
57 21.3 17.8 26.8



#20  
Methylene Chloride  
Concen: 49.931 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 84 Resp: 131284  
Ion Ratio Lower Upper  
84 100  
49 128.3 104.1 156.1  
51 40.2 31.0 46.4  
86 64.3 51.9 77.9

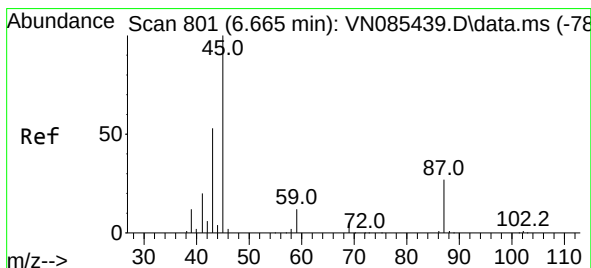
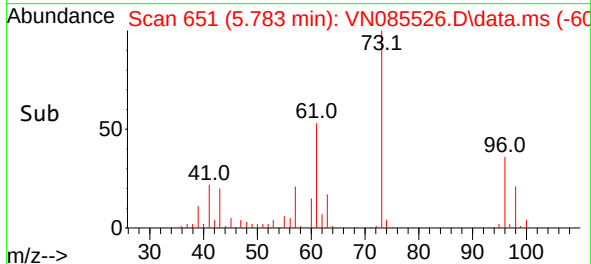
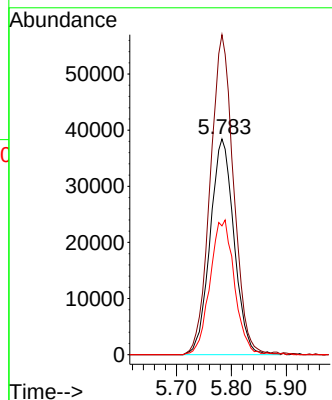
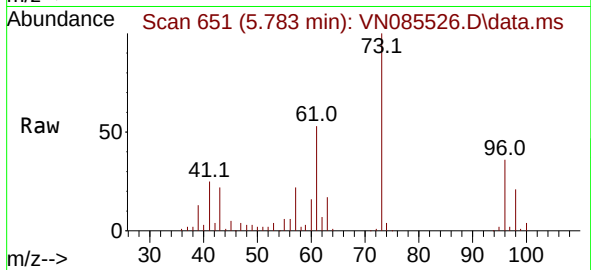




#21  
trans-1,2-Dichloroethene  
Concen: 49.692 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

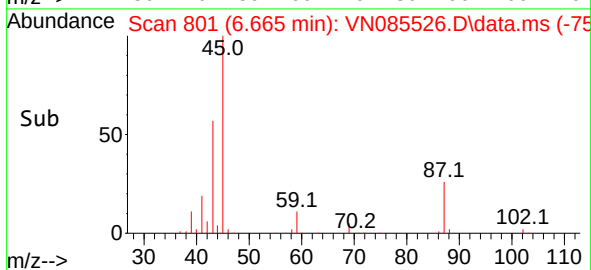
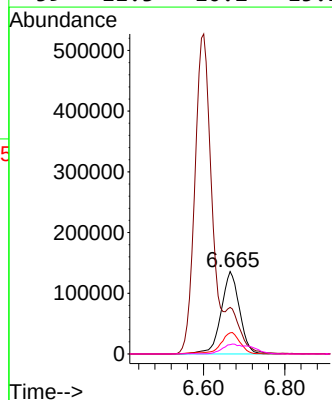
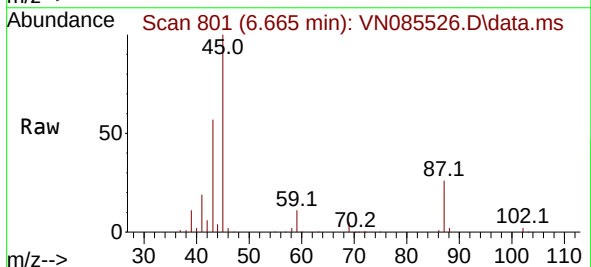
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 96 Resp: 116065  
Ion Ratio Lower Upper  
96 100  
61 148.4 115.7 173.5  
98 59.7 49.8 74.8

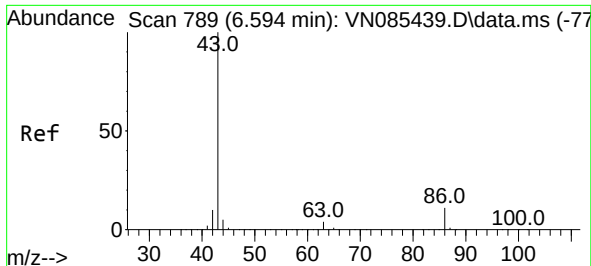


#22  
Diisopropyl ether  
Concen: 54.237 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 45 Resp: 426926  
Ion Ratio Lower Upper  
45 100  
43 55.8 45.0 67.6  
87 25.6 21.8 32.8  
59 11.3 10.2 15.2



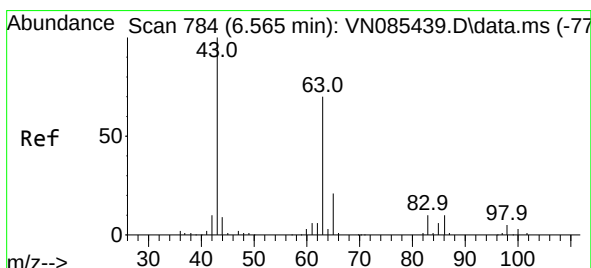
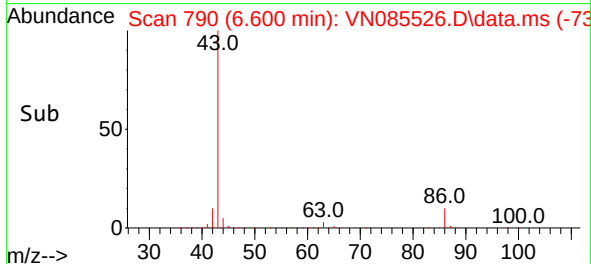
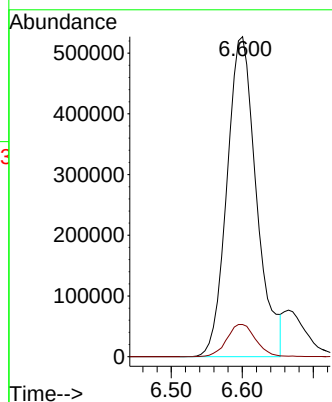
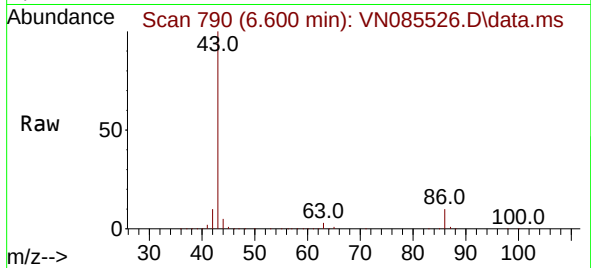




#23  
 Vinyl Acetate  
 Concen: 276.027 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

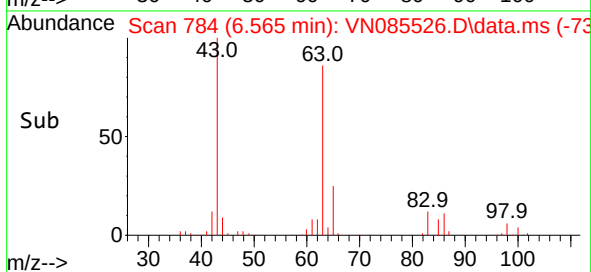
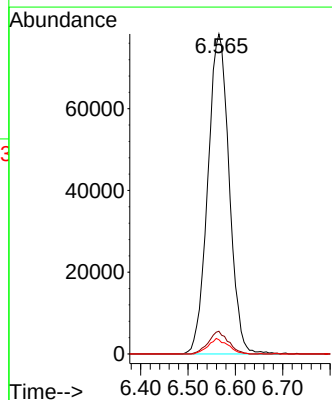
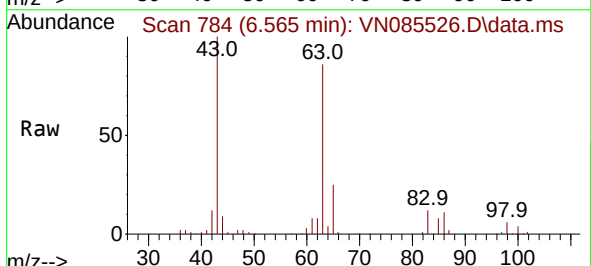
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

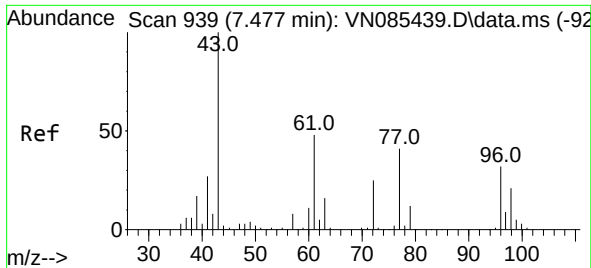
Tgt Ion: 43 Resp: 1520538  
 Ion Ratio Lower Upper  
 43 100  
 86 10.1 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 51.014 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. 0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

Tgt Ion: 63 Resp: 244849  
 Ion Ratio Lower Upper  
 63 100  
 98 7.1 3.3 9.8  
 100 4.4 2.0 6.0

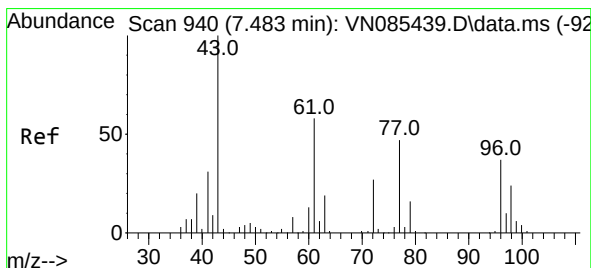
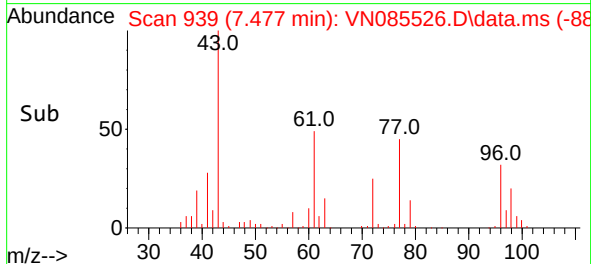
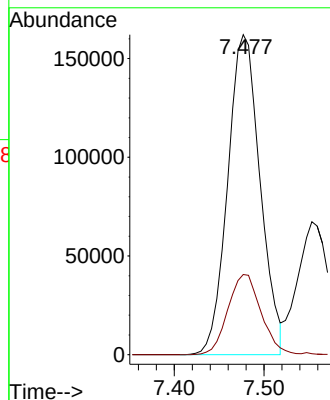
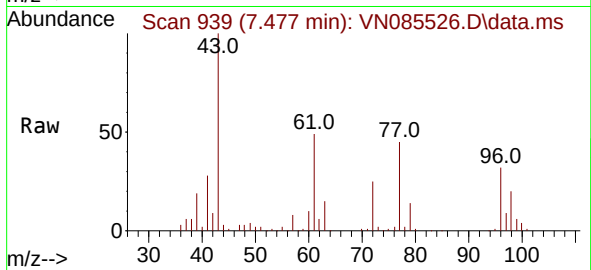




#25  
2-Butanone  
Concen: 260.223 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

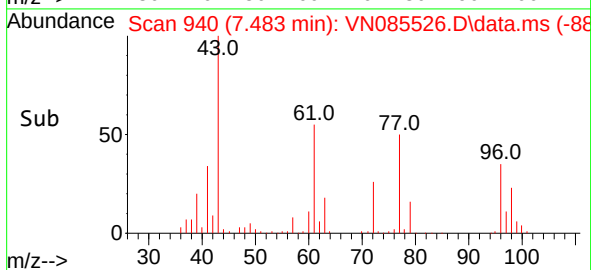
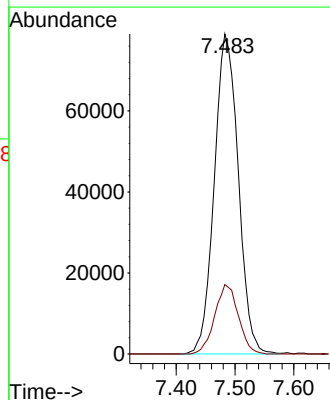
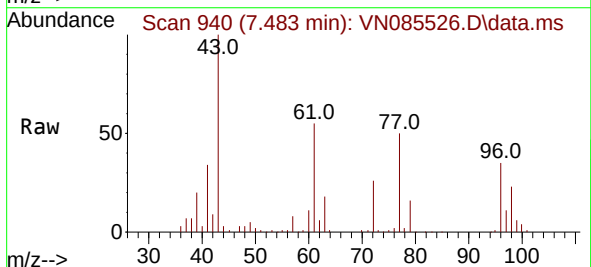
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

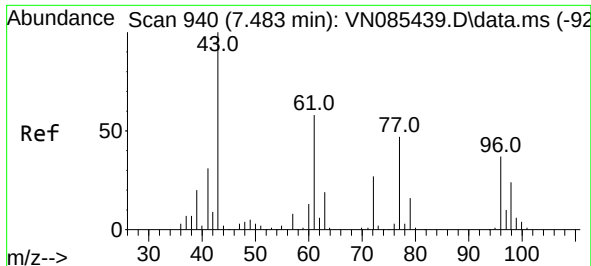
Tgt Ion: 43 Resp: 406723  
Ion Ratio Lower Upper  
43 100  
72 25.0 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 57.640 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 77 Resp: 223673  
Ion Ratio Lower Upper  
77 100  
97 21.3 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 51.799 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

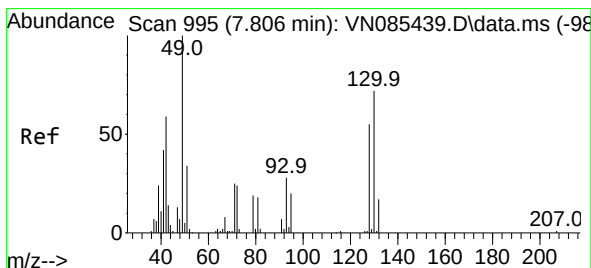
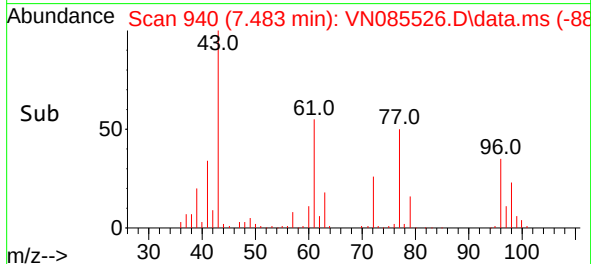
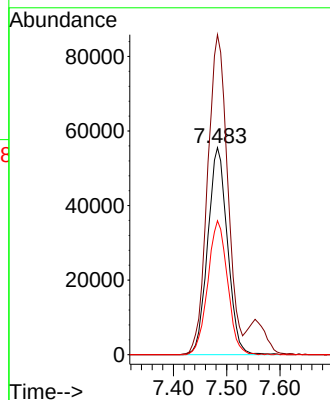
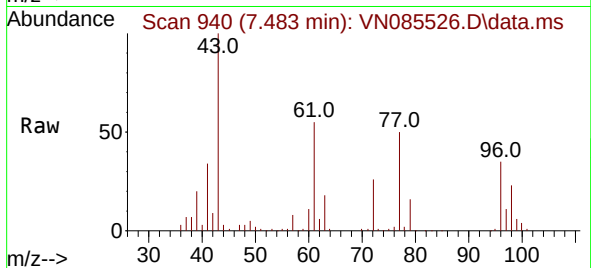
Tgt Ion: 96 Resp: 142501

Ion Ratio Lower Upper

96 100

61 157.2 0.0 311.8

98 64.9 0.0 126.0



#28

Bromochloromethane

Concen: 45.505 ug/l

RT: 7.812 min Scan# 996

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

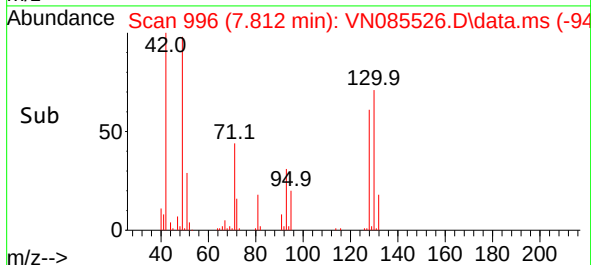
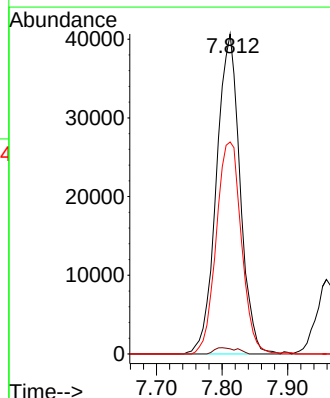
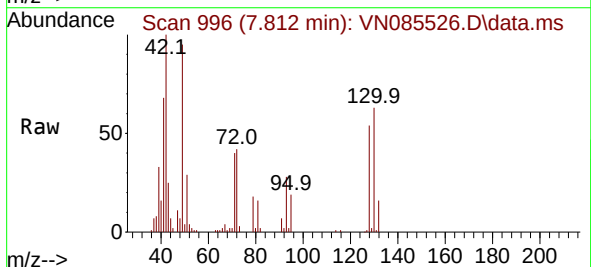
Tgt Ion: 49 Resp: 101613

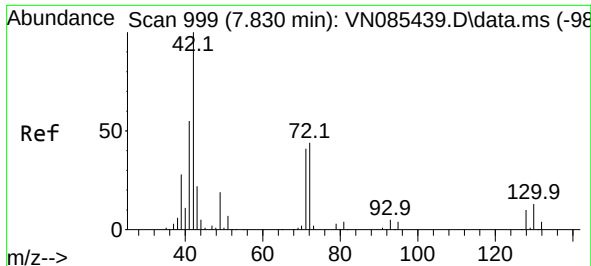
Ion Ratio Lower Upper

49 100

129 1.9 0.0 4.4

130 70.7 55.0 82.4

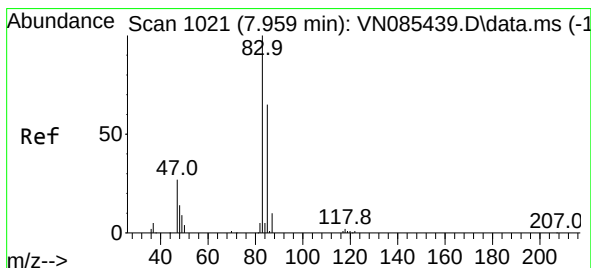
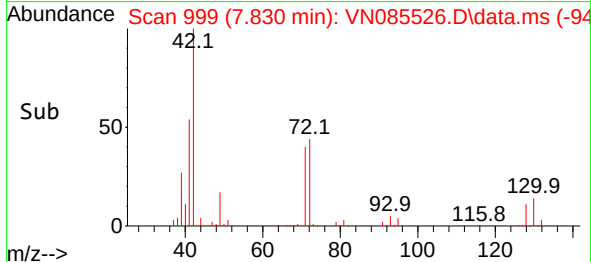
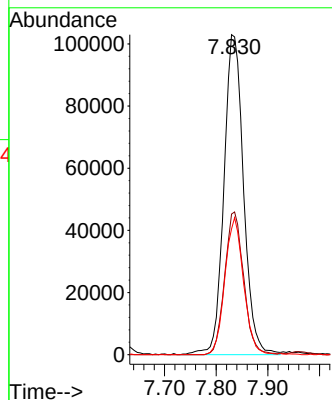
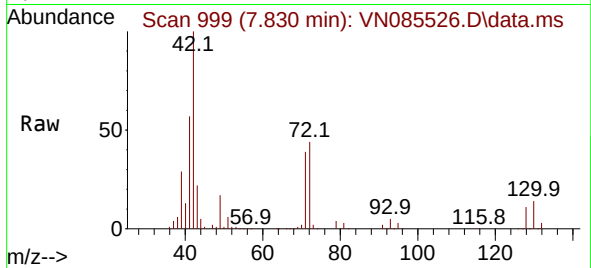




#29  
Tetrahydrofuran  
Concen: 274.712 ug/l  
RT: 7.830 min Scan# 999  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

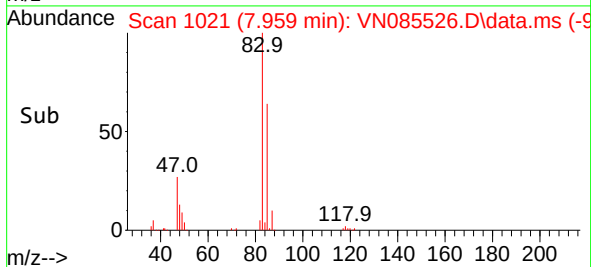
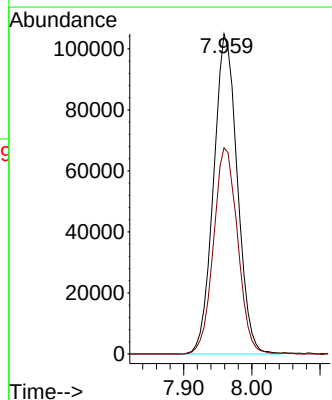
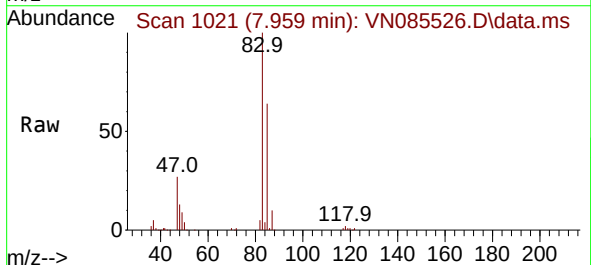
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

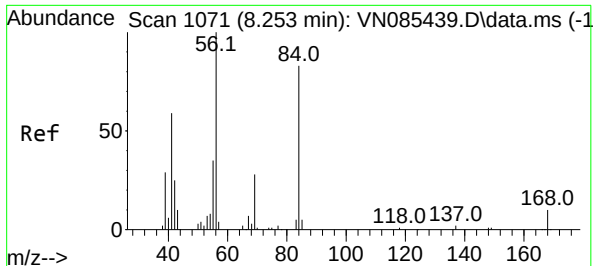
Tgt Ion: 42 Resp: 272222  
Ion Ratio Lower Upper  
42 100  
72 43.0 34.2 51.2  
71 40.6 32.5 48.7



#30  
Chloroform  
Concen: 51.246 ug/l  
RT: 7.959 min Scan# 1021  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 83 Resp: 254209  
Ion Ratio Lower Upper  
83 100  
85 64.5 51.8 77.6

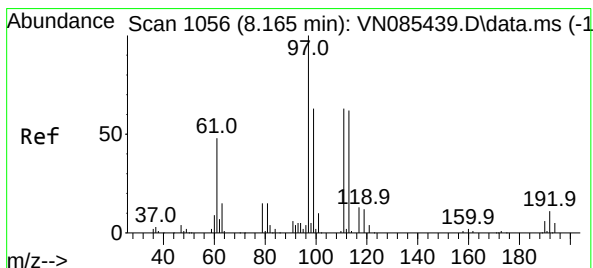
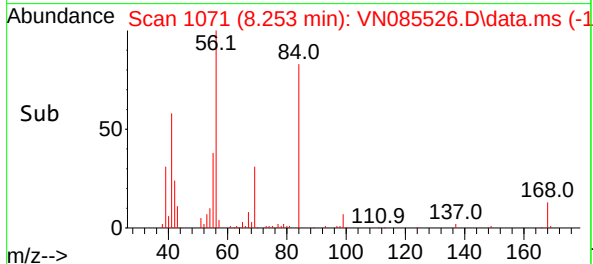
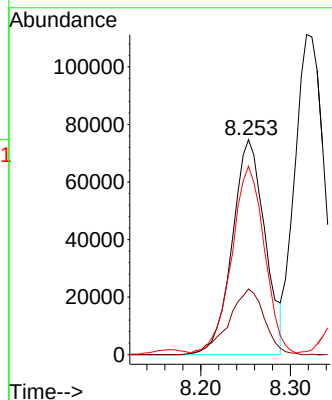
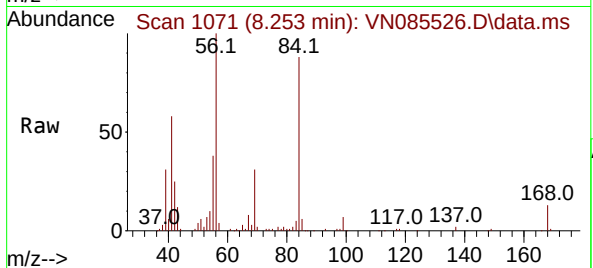




#31  
Cyclohexane  
Concen: 45.451 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

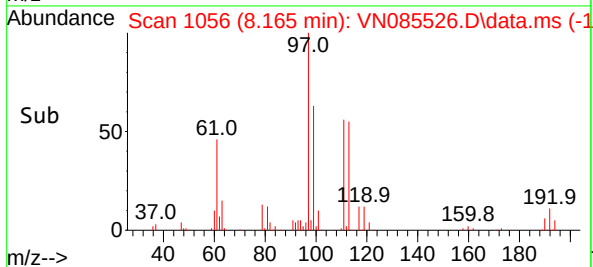
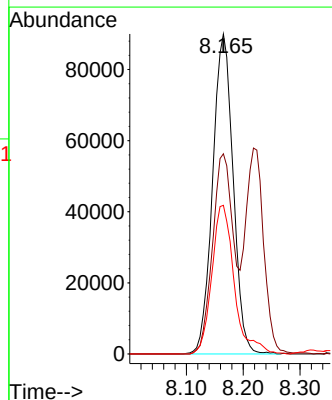
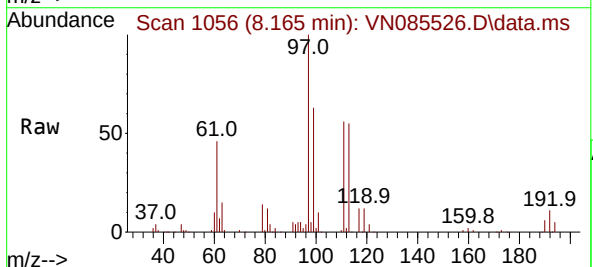
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

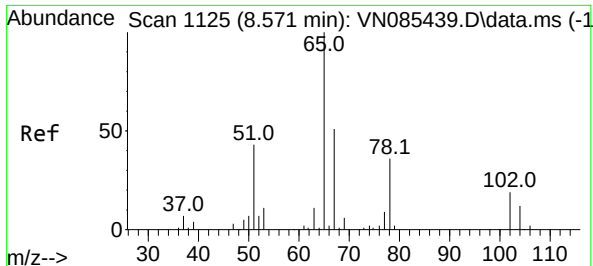
Tgt Ion: 56 Resp: 189607  
Ion Ratio Lower Upper  
56 100  
69 30.2 22.2 33.4  
84 85.8 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 51.727 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 97 Resp: 225078  
Ion Ratio Lower Upper  
97 100  
99 64.9 49.8 74.6  
61 50.9 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 48.164 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

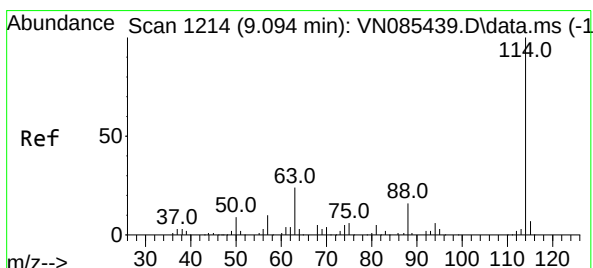
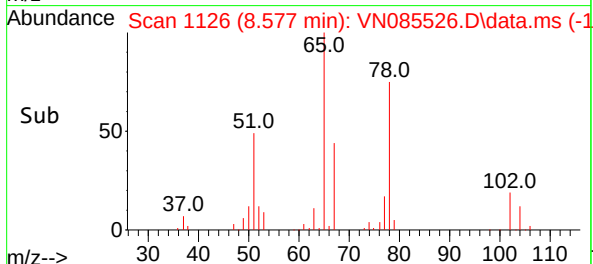
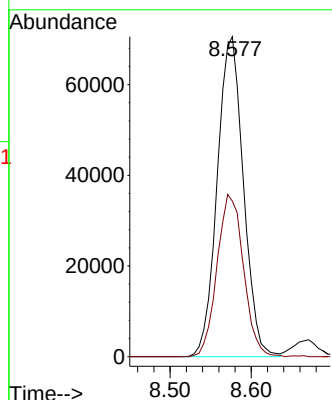
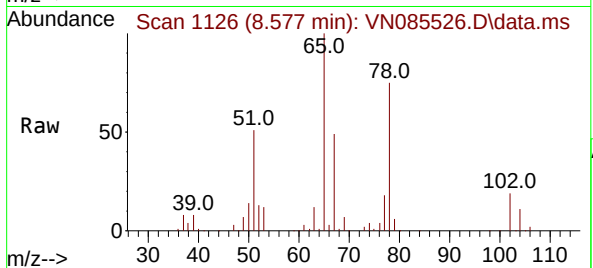
VSTDCCC050

Tgt Ion: 65 Resp: 158323

Ion Ratio Lower Upper

65 100

67 51.1 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

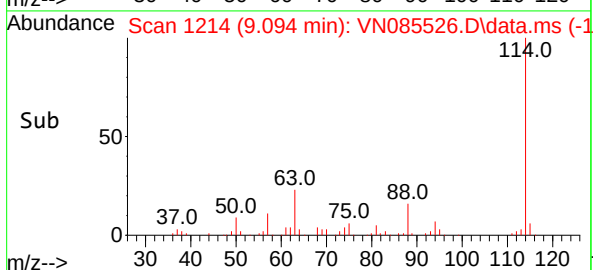
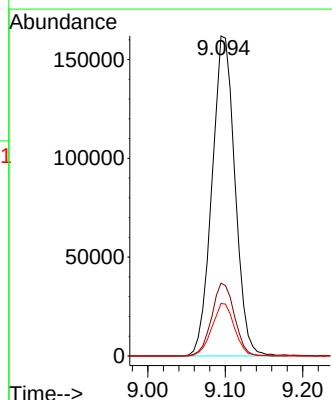
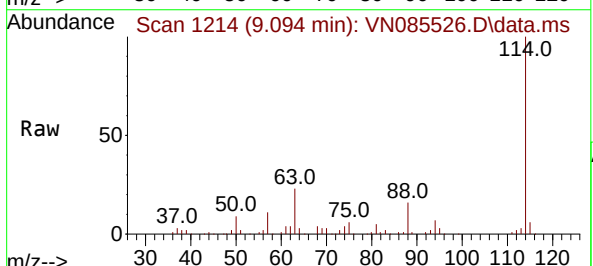
Tgt Ion: 114 Resp: 333806

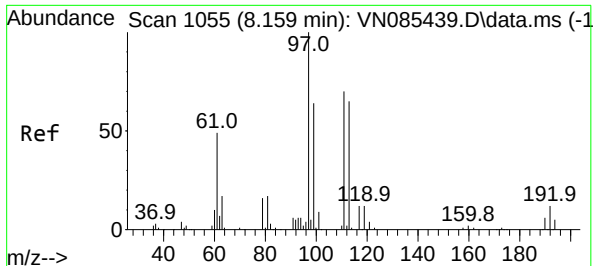
Ion Ratio Lower Upper

114 100

63 22.7 0.0 47.6

88 16.4 0.0 32.6

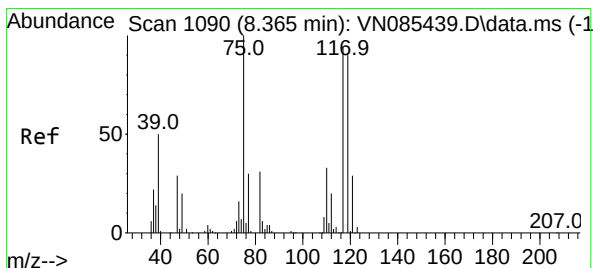
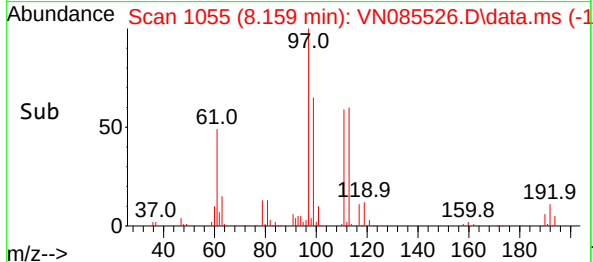
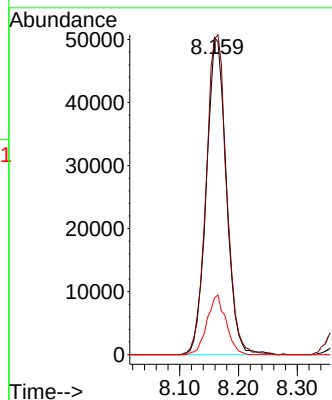
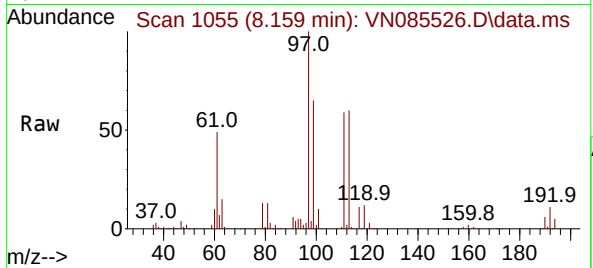




#35  
Dibromofluoromethane  
Concen: 51.240 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

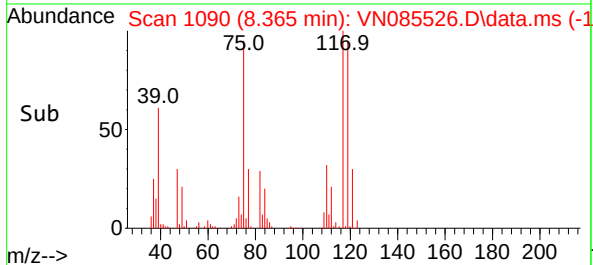
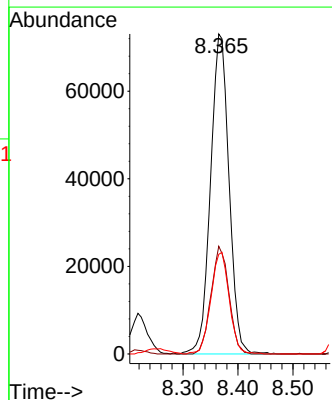
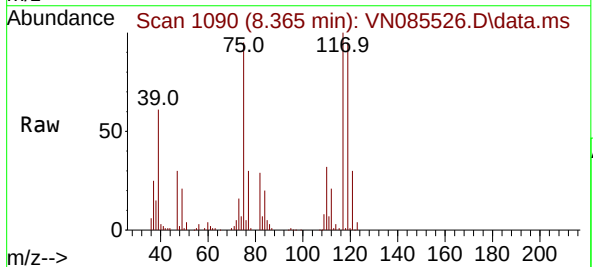
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

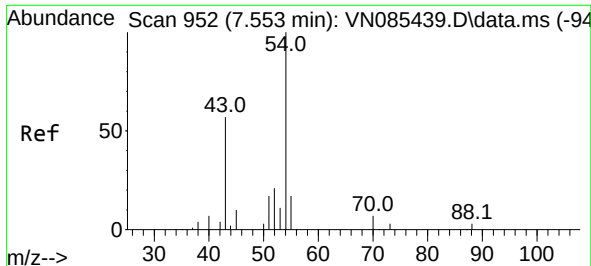
Tgt Ion:113 Resp: 118662  
Ion Ratio Lower Upper  
113 100  
111 103.2 82.7 124.1  
192 18.0 14.3 21.5



#36  
1,1-Dichloropropene  
Concen: 52.537 ug/l  
RT: 8.365 min Scan# 1090  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 75 Resp: 170755  
Ion Ratio Lower Upper  
75 100  
110 32.6 16.5 49.5  
77 31.6 24.4 36.6





#37

Ethyl Acetate

Concen: 52.923 ug/l

RT: 7.553 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

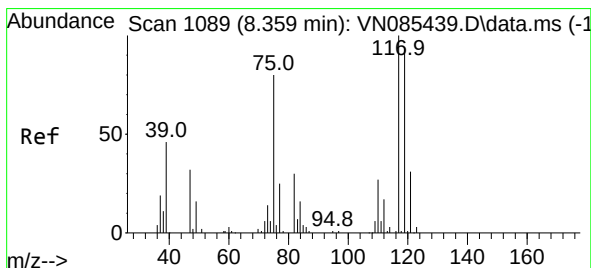
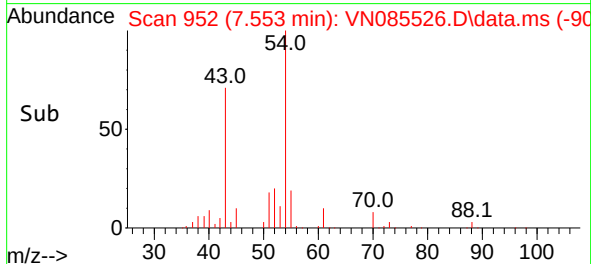
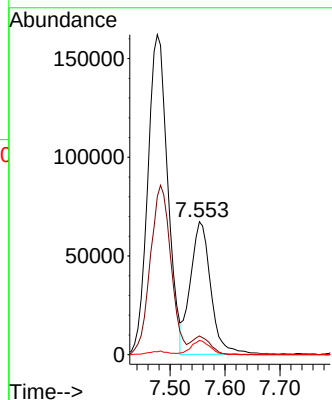
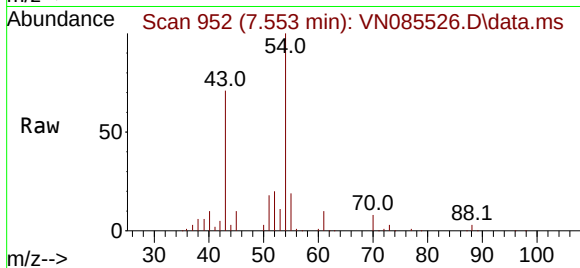
Tgt Ion: 43 Resp: 173618

Ion Ratio Lower Upper

43 100

61 11.8 10.9 16.3

70 10.0 7.5 11.3



#38

Carbon Tetrachloride

Concen: 54.013 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

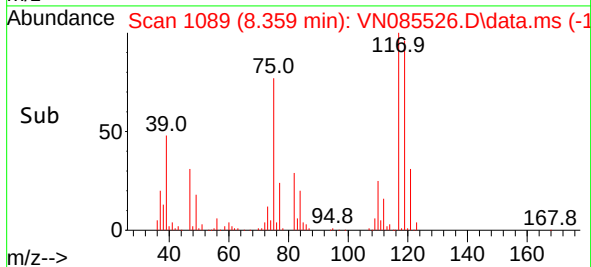
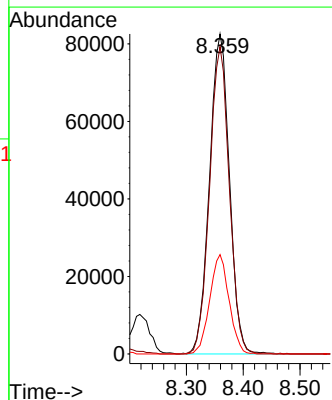
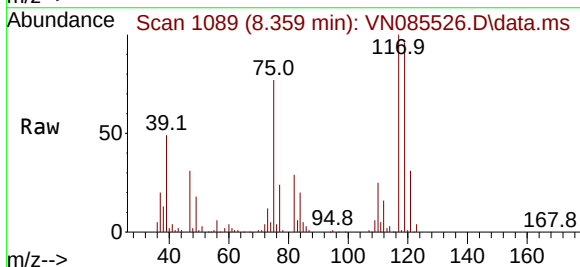
Tgt Ion: 117 Resp: 200977

Ion Ratio Lower Upper

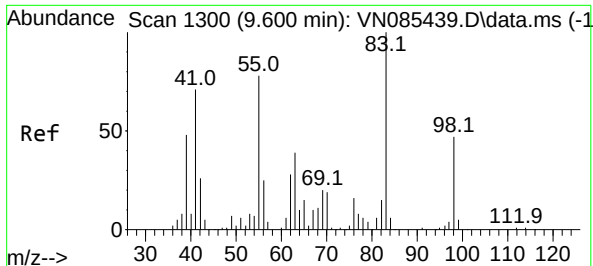
117 100

119 96.0 75.4 113.2

121 31.1 24.6 37.0







#39

Methylcyclohexane

Concen: 56.039 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

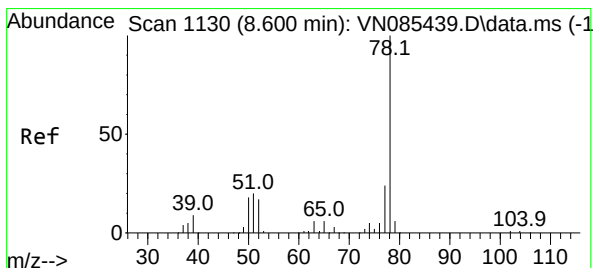
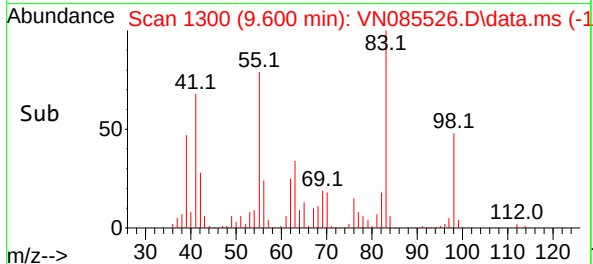
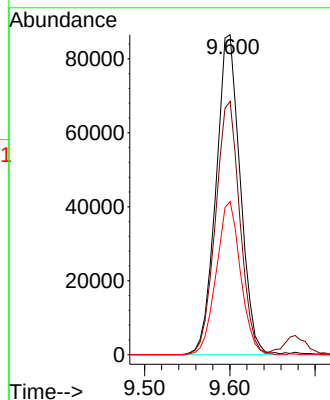
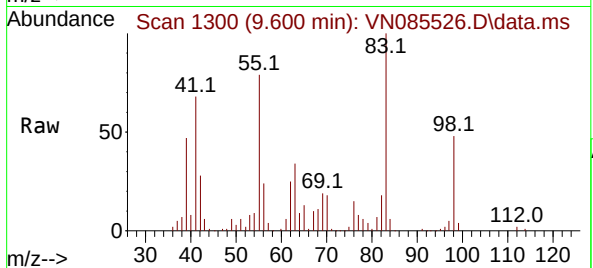
Tgt Ion: 83 Resp: 171154

Ion Ratio Lower Upper

83 100

55 79.2 62.6 94.0

98 47.9 37.7 56.5



#40

Benzene

Concen: 53.828 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085526.D

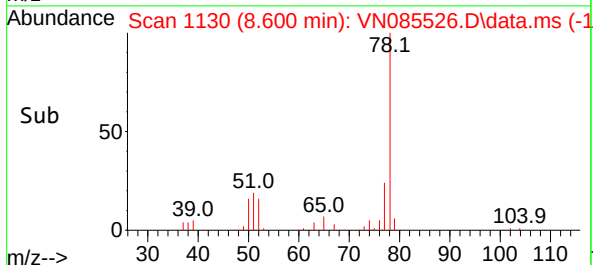
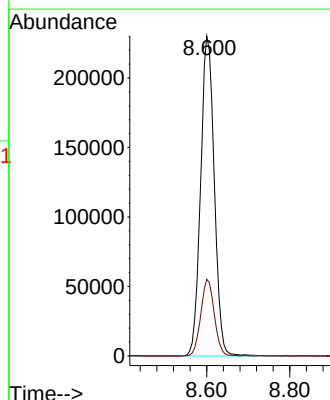
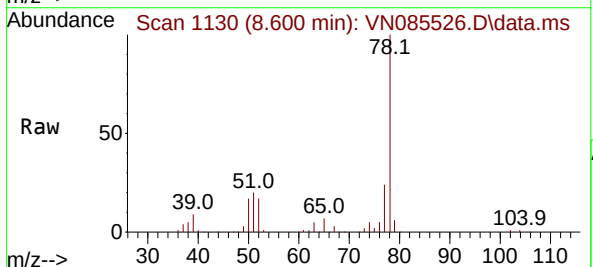
Acq: 28 Jan 2025 09:53

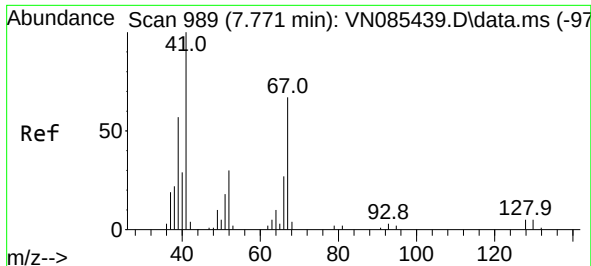
Tgt Ion: 78 Resp: 525669

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6

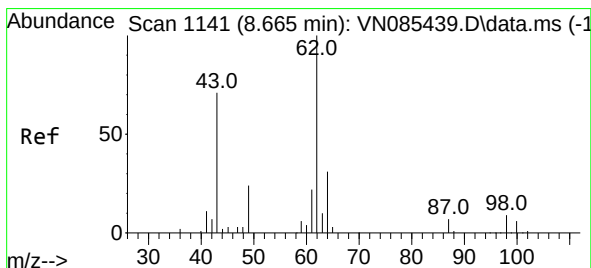
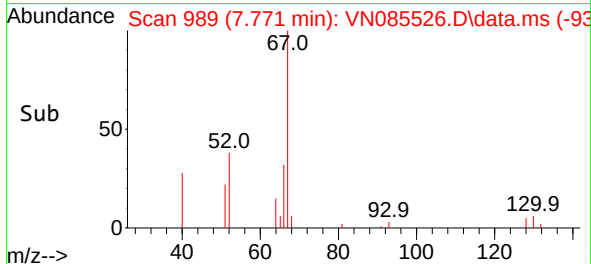
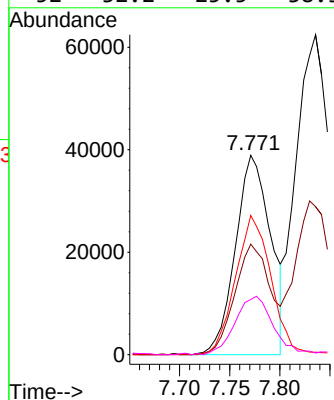
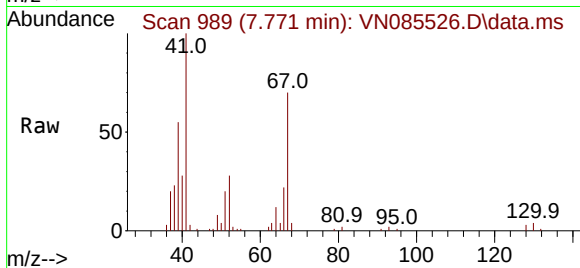




#41  
Methacrylonitrile  
Concen: 55.717 ug/l  
RT: 7.771 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

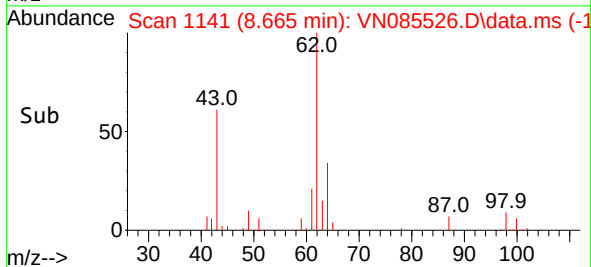
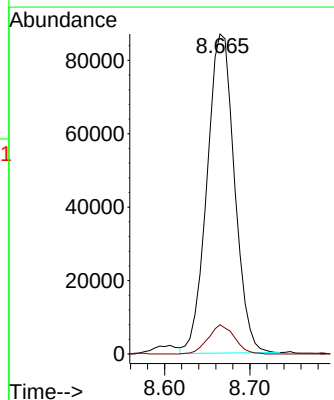
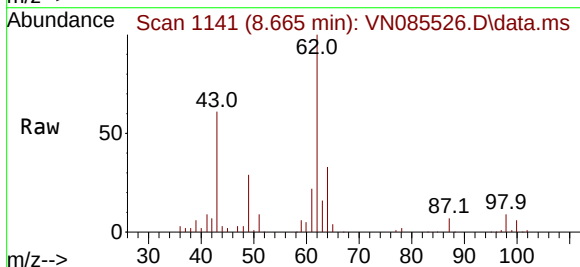
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

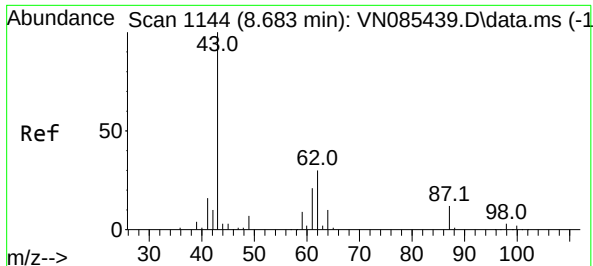
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 95095 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.3  | 46.0  | 69.0  |
| 67       | 71.1  | 57.4  | 86.2  |
| 52       | 32.2  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 53.072 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 195201 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.8   | 0.0   | 17.0   |

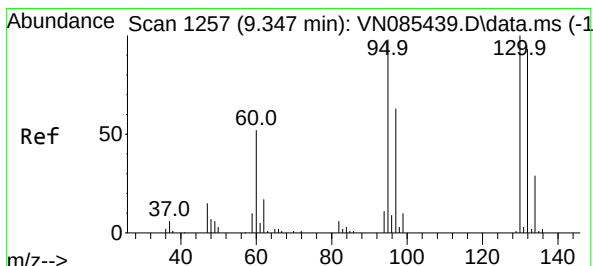
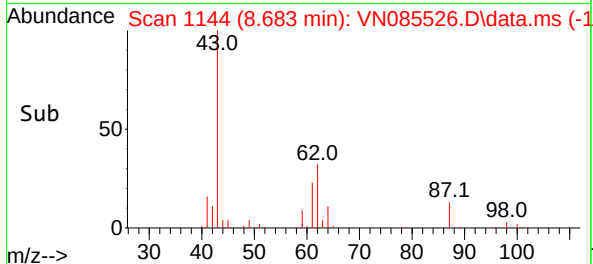
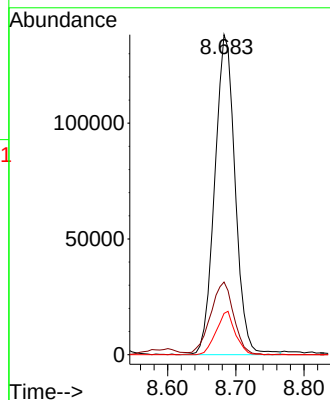
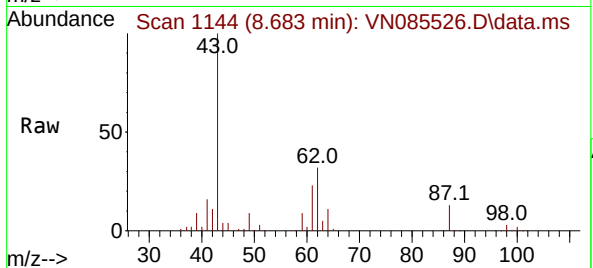




#43  
Isopropyl Acetate  
Concen: 54.755 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

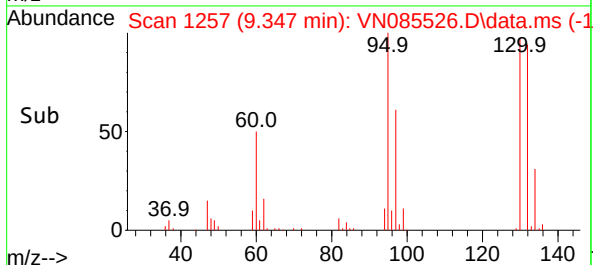
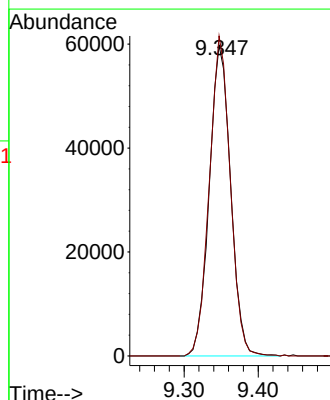
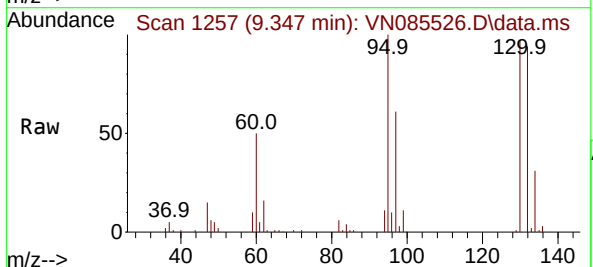
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

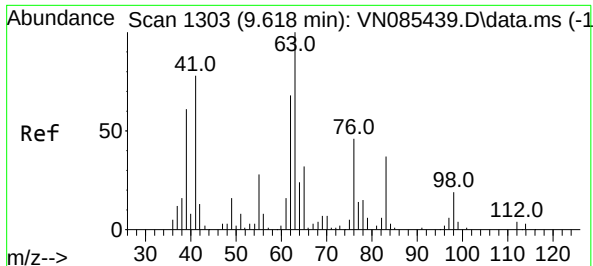
Tgt Ion: 43 Resp: 287826  
Ion Ratio Lower Upper  
43 100  
61 25.9 20.7 31.1  
87 12.6 9.8 14.8



#44  
Trichloroethene  
Concen: 52.672 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:130 Resp: 119734  
Ion Ratio Lower Upper  
130 100  
95 103.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 54.447 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

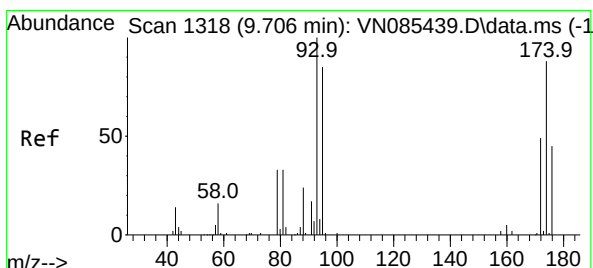
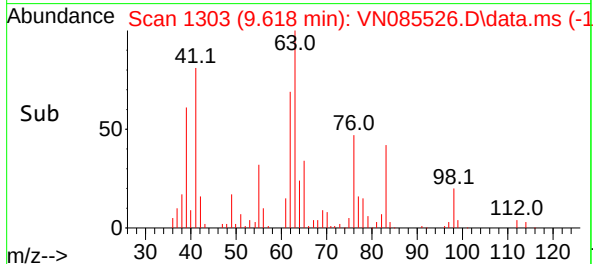
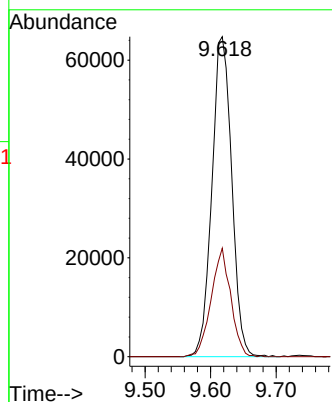
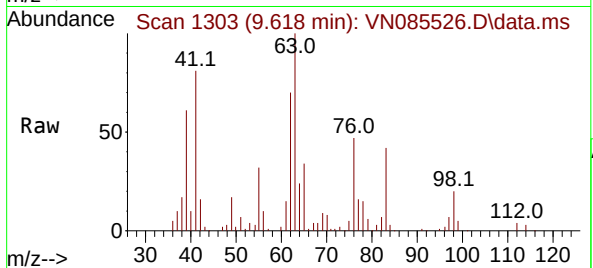
VSTDCCC050

Tgt Ion: 63 Resp: 135814

Ion Ratio Lower Upper

63 100

65 33.9 25.6 38.4



#46

Dibromomethane

Concen: 53.179 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

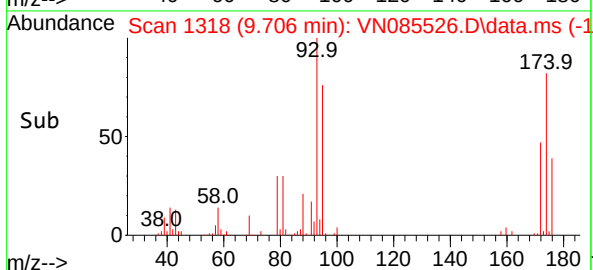
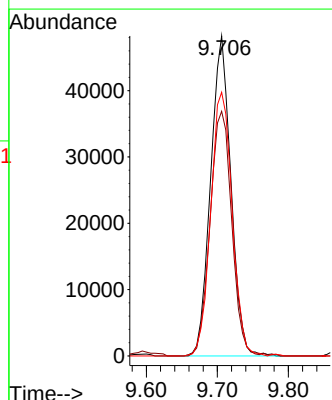
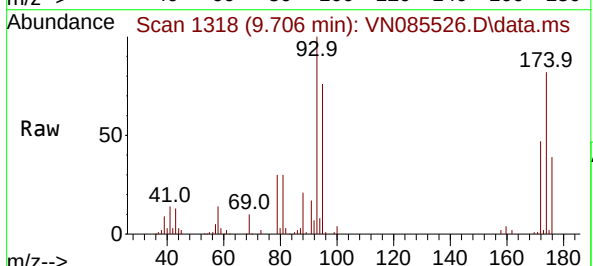
Tgt Ion: 93 Resp: 95715

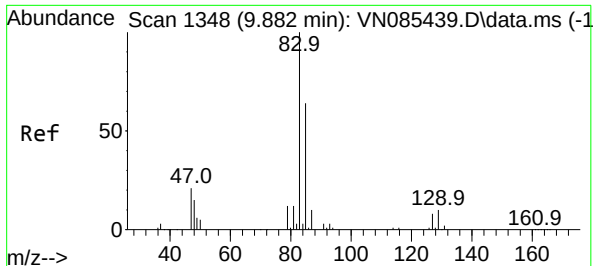
Ion Ratio Lower Upper

93 100

95 81.2 64.7 97.1

174 87.0 69.0 103.4





#47

Bromodichloromethane

Concen: 55.774 ug/l

RT: 9.883 min Scan# 1

Delta R.T. 0.001 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

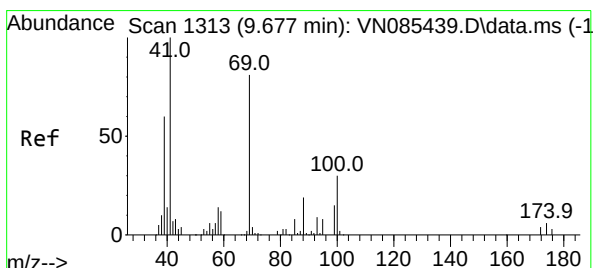
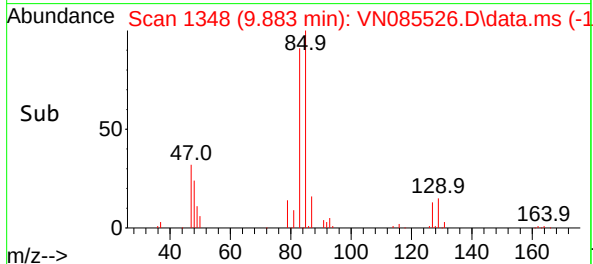
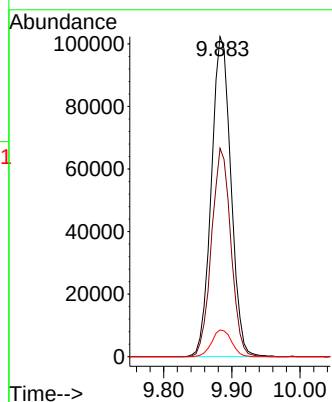
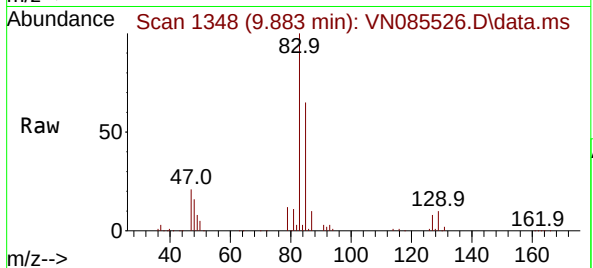
Tgt Ion: 83 Resp: 204517

Ion Ratio Lower Upper

83 100

85 65.1 51.2 76.8

127 8.4 6.5 9.7



#48

Methyl methacrylate

Concen: 57.693 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

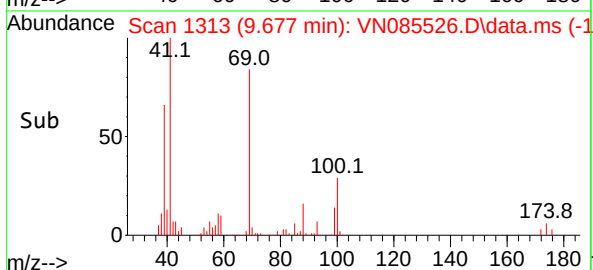
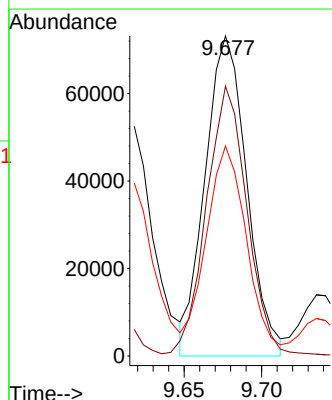
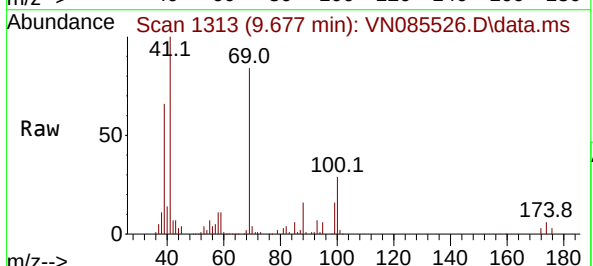
Tgt Ion: 41 Resp: 136479

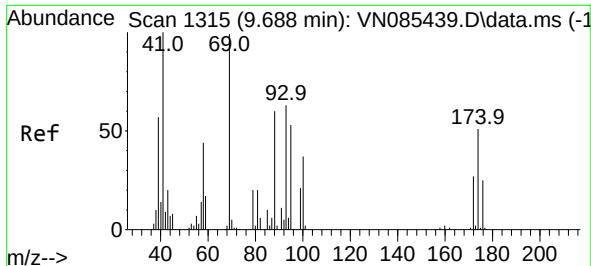
Ion Ratio Lower Upper

41 100

69 83.2 64.7 97.1

39 64.1 49.0 73.6





#49

1,4-Dioxane

Concen: 1019.345 ug/l

RT: 9.688 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

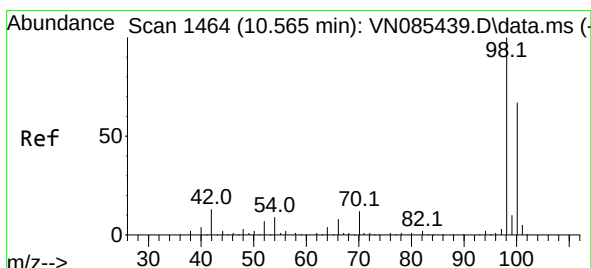
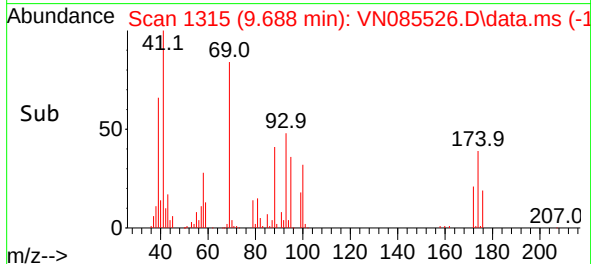
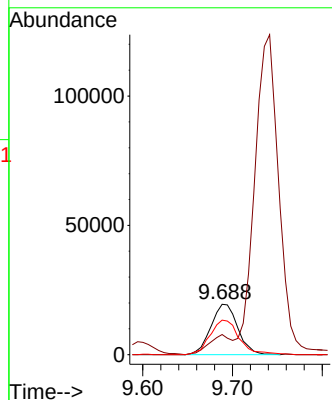
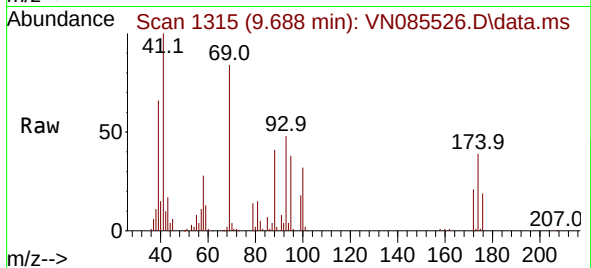
Tgt Ion: 88 Resp: 40607

Ion Ratio Lower Upper

88 100

43 33.0 26.6 39.8

58 74.6 59.5 89.3



#50

Toluene-d8

Concen: 52.569 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085526.D

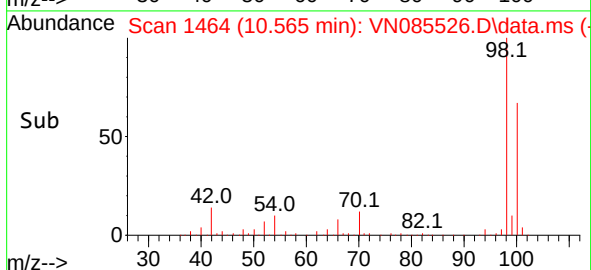
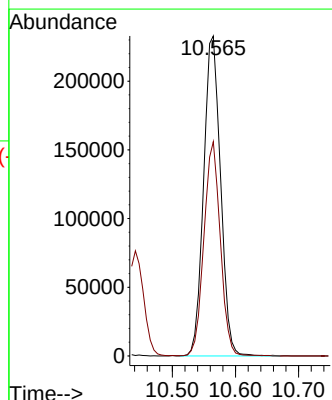
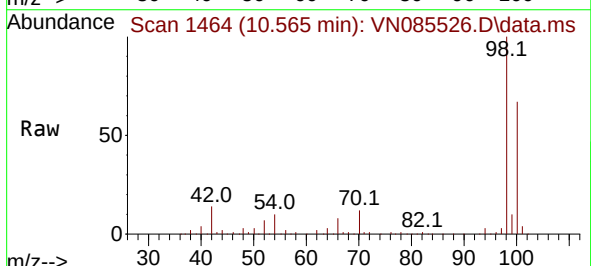
Acq: 28 Jan 2025 09:53

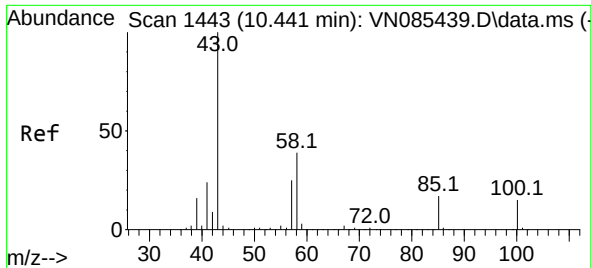
Tgt Ion: 98 Resp: 432537

Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.4

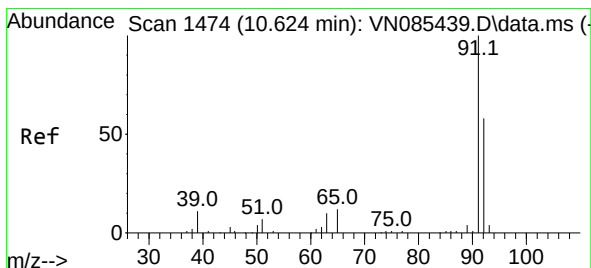
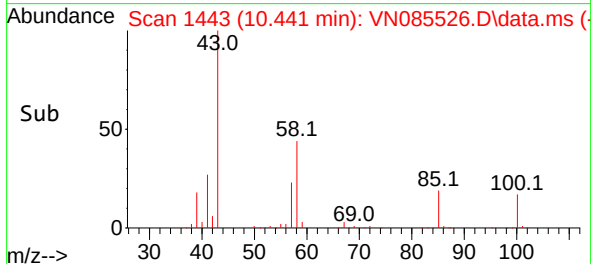
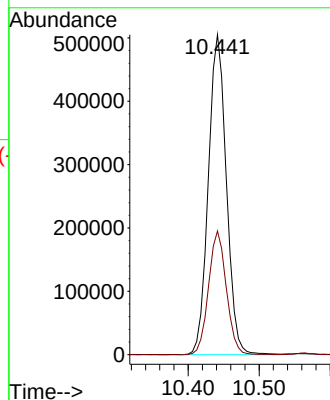
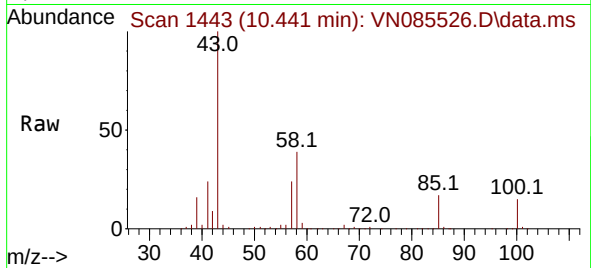




#51  
4-Methyl-2-Pentanone  
Concen: 292.599 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

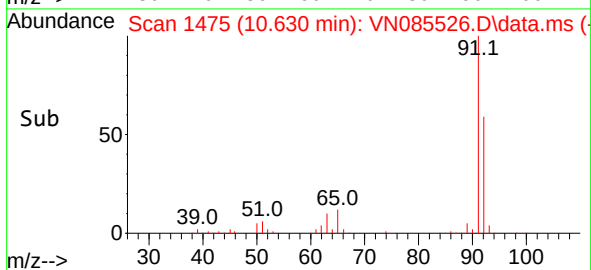
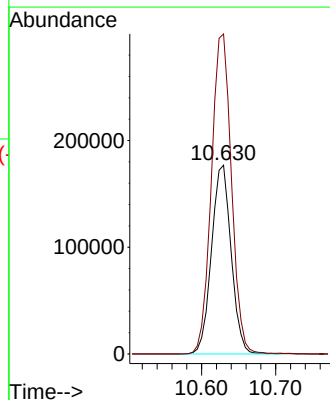
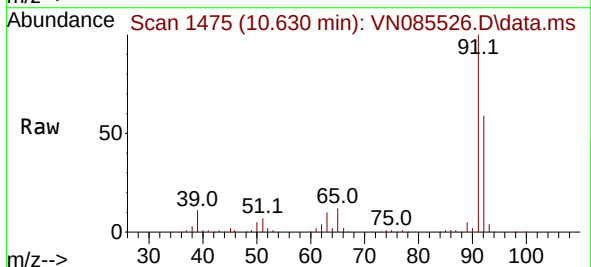
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

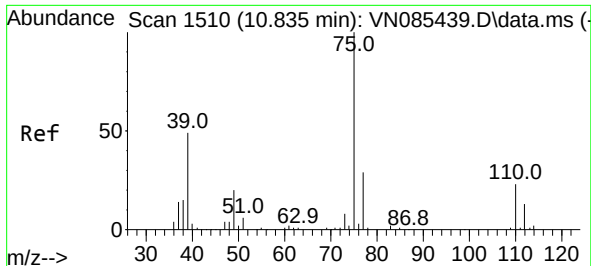
Tgt Ion: 43 Resp: 892528  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#52  
Toluene  
Concen: 57.499 ug/l  
RT: 10.630 min Scan# 1475  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 92 Resp: 325356  
Ion Ratio Lower Upper  
92 100  
91 173.6 139.2 208.8

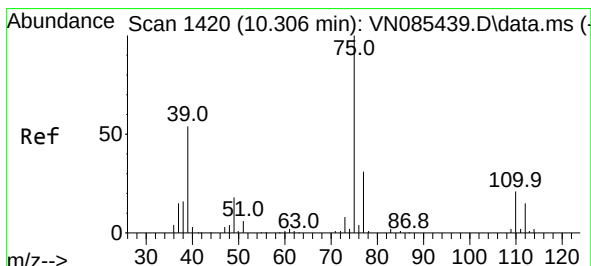
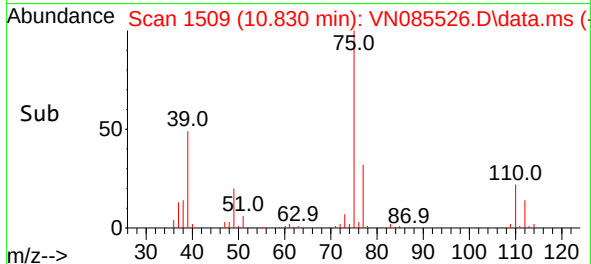
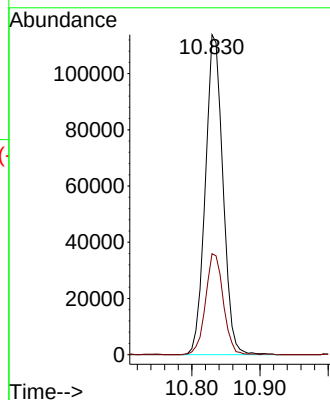
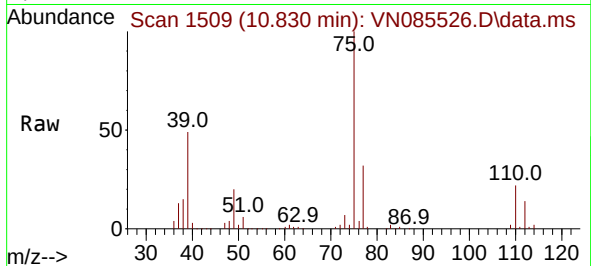




#53  
t-1,3-Dichloropropene  
Concen: 58.899 ug/l  
RT: 10.830 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

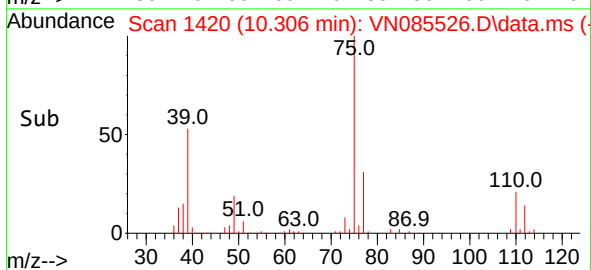
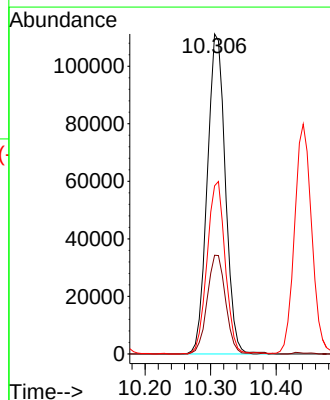
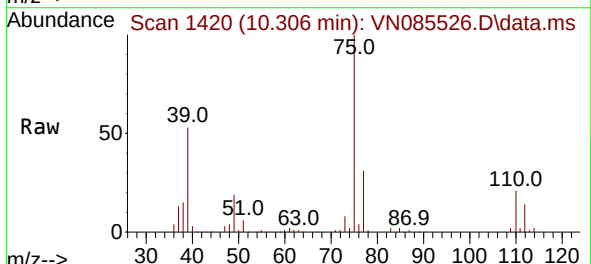
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 75 Resp: 204105  
Ion Ratio Lower Upper  
75 100  
77 31.6 23.5 35.3

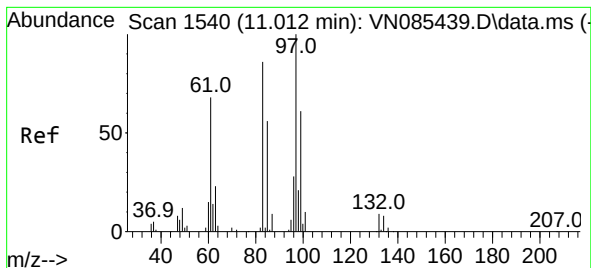


#54  
cis-1,3-Dichloropropene  
Concen: 57.610 ug/l  
RT: 10.306 min Scan# 1420  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 75 Resp: 213245  
Ion Ratio Lower Upper  
75 100  
77 30.8 25.0 37.4  
39 52.6 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 55.851 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 97 Resp: 125068

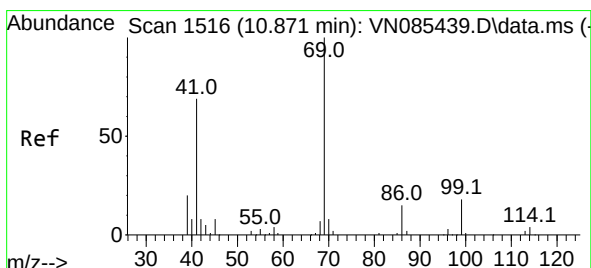
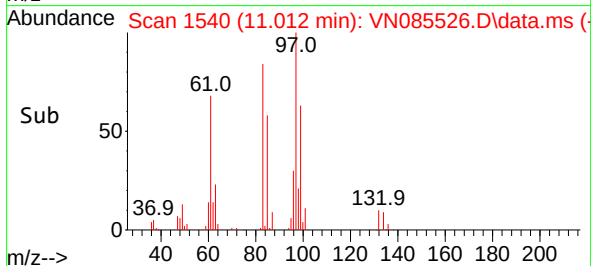
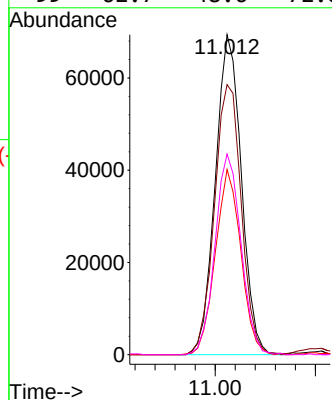
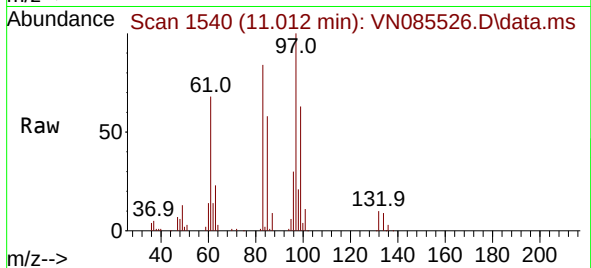
Ion Ratio Lower Upper

97 100

83 84.4 69.0 103.6

85 57.9 44.6 66.8

99 62.7 48.6 72.8



#56

Ethyl methacrylate

Concen: 50.844 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

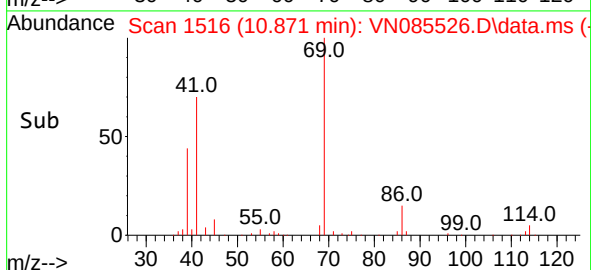
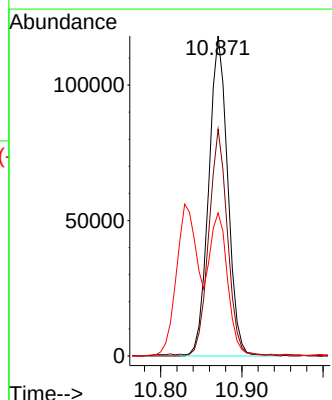
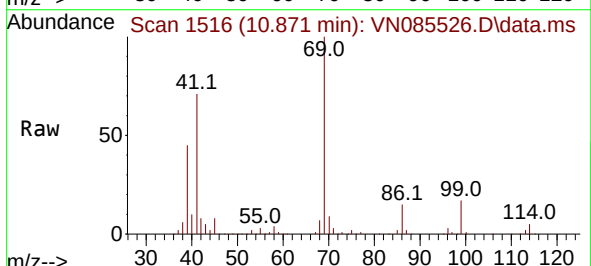
Tgt Ion: 69 Resp: 191924

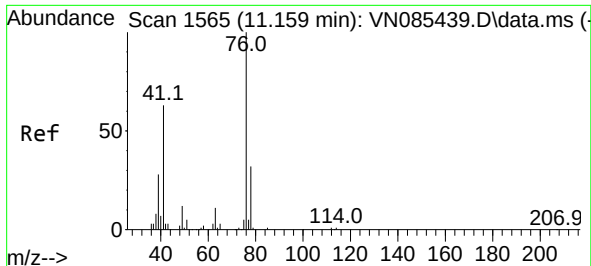
Ion Ratio Lower Upper

69 100

41 68.4 54.6 82.0

39 42.2 32.4 48.6





#57

1,3-Dichloropropane

Concen: 56.327 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

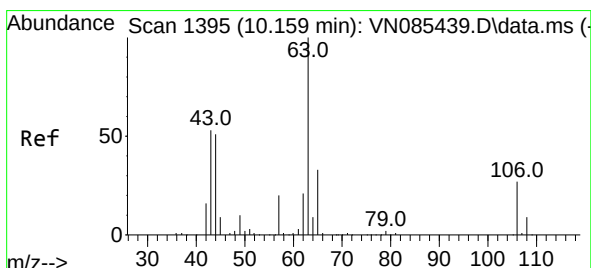
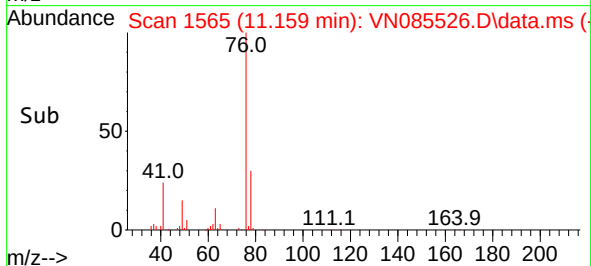
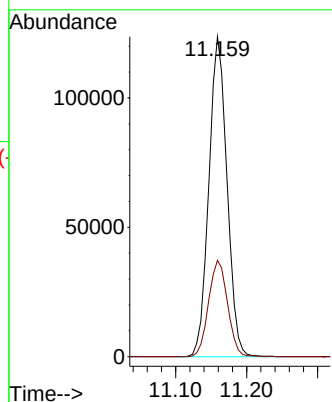
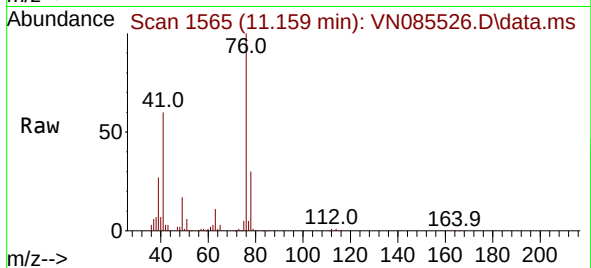
VSTDCCC050

Tgt Ion: 76 Resp: 219323

Ion Ratio Lower Upper

76 100

78 31.5 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 300.465 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085526.D

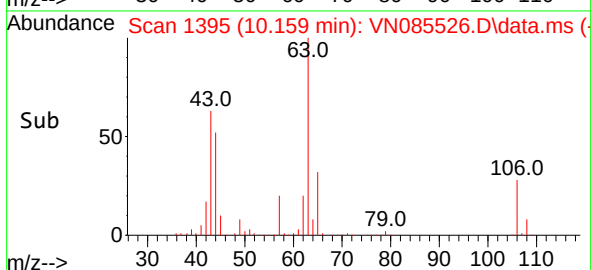
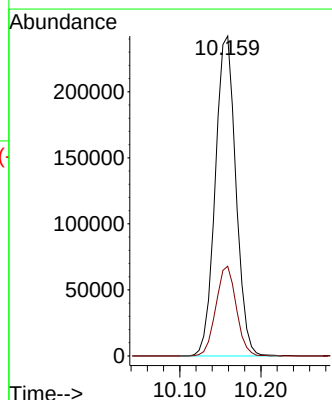
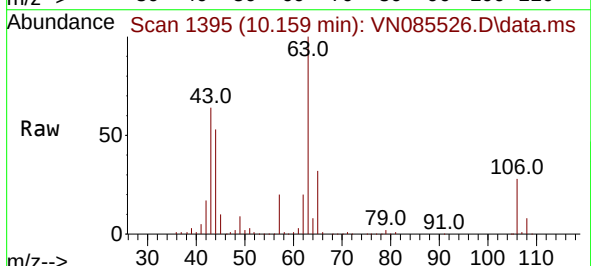
Acq: 28 Jan 2025 09:53

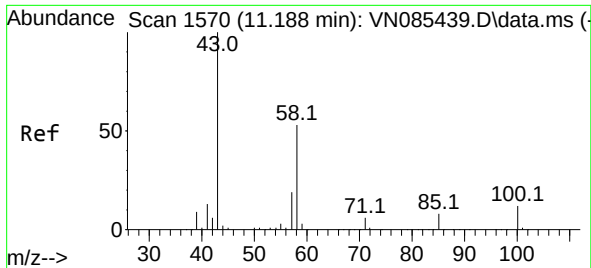
Tgt Ion: 63 Resp: 426978

Ion Ratio Lower Upper

63 100

106 27.8 21.6 32.4

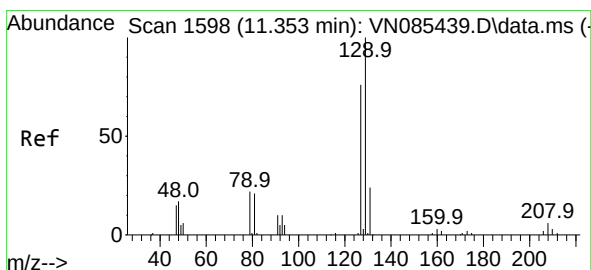
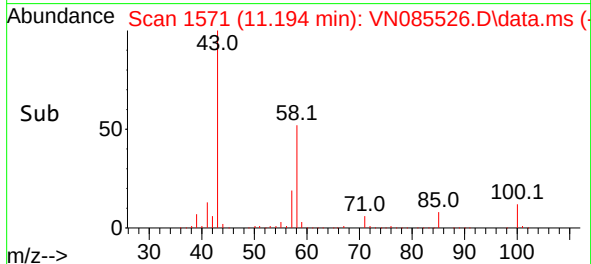
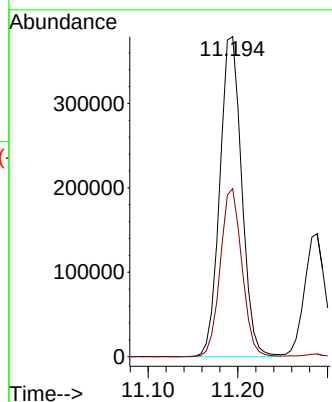
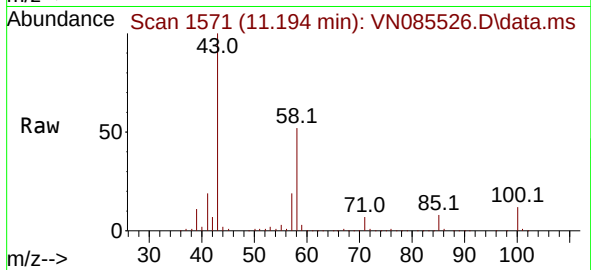




#59  
2-Hexanone  
Concen: 300.034 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

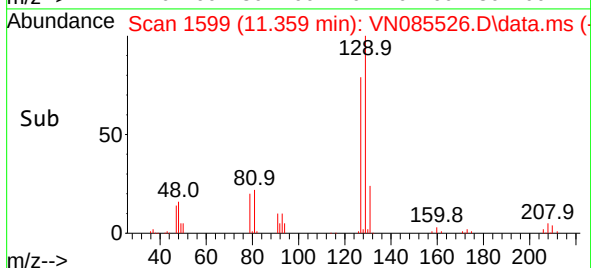
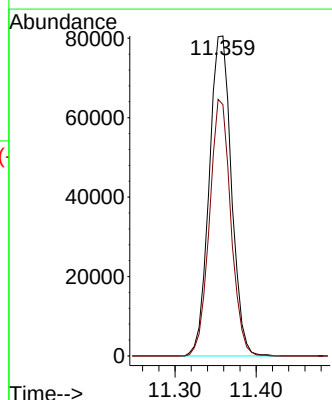
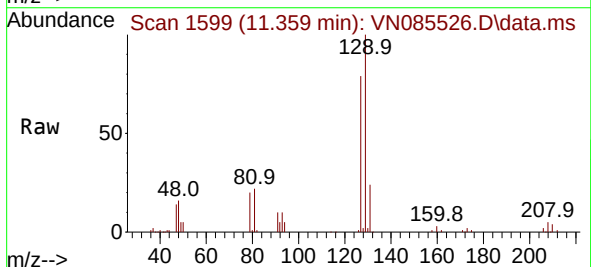
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

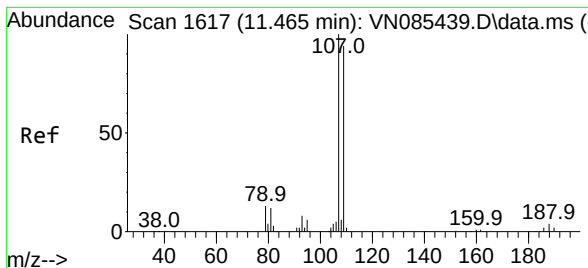
Tgt Ion: 43 Resp: 643969  
Ion Ratio Lower Upper  
43 100  
58 51.8 26.2 78.6



#60  
Dibromochloromethane  
Concen: 56.815 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 129 Resp: 153599  
Ion Ratio Lower Upper  
129 100  
127 76.7 38.6 115.8

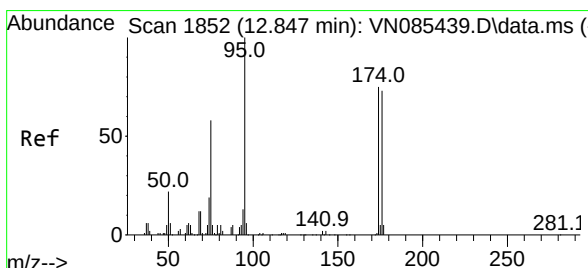
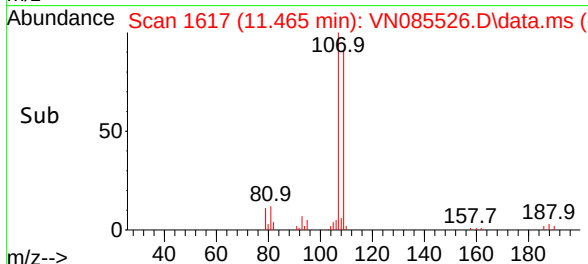
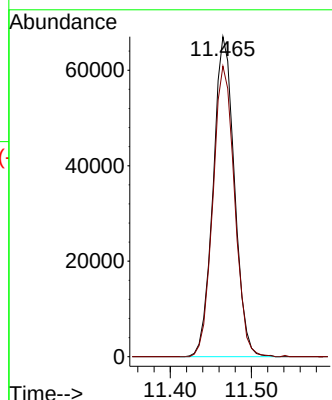
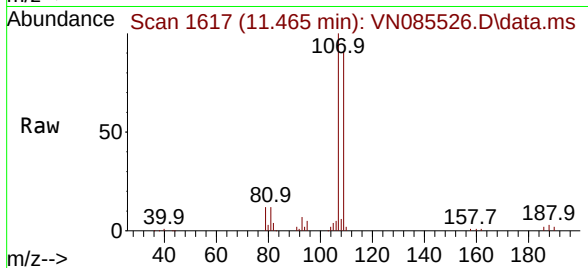




#61  
1,2-Dibromoethane  
Concen: 54.776 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

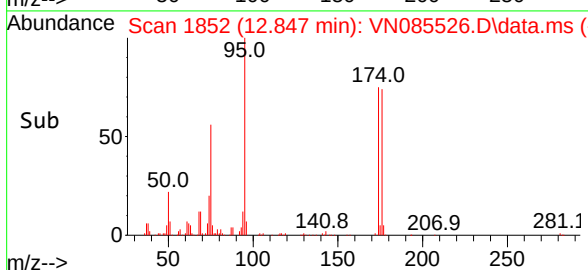
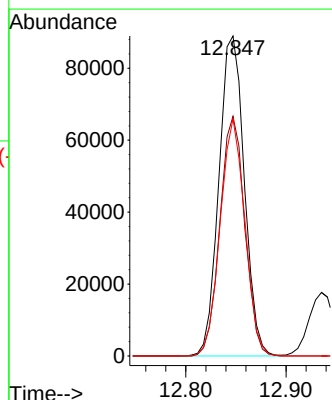
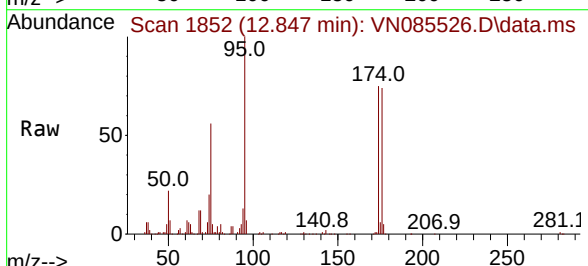
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

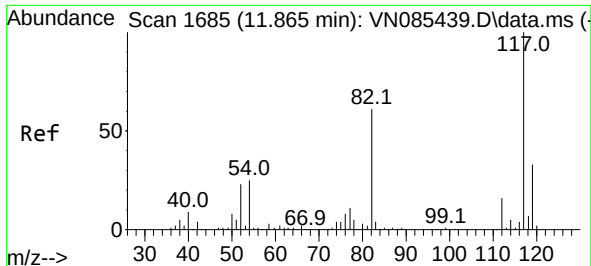
Tgt Ion:107 Resp: 122098  
Ion Ratio Lower Upper  
107 100  
109 92.4 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 55.379 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 95 Resp: 155870  
Ion Ratio Lower Upper  
95 100  
174 73.4 0.0 145.0  
176 71.9 0.0 142.4

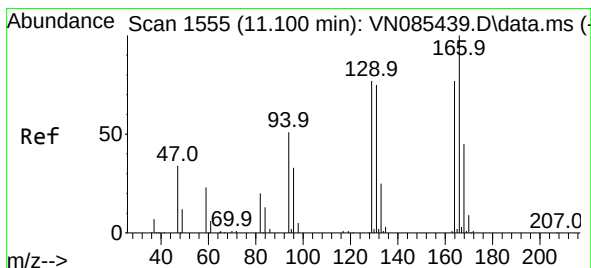
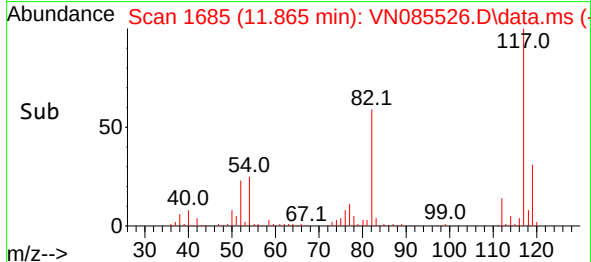
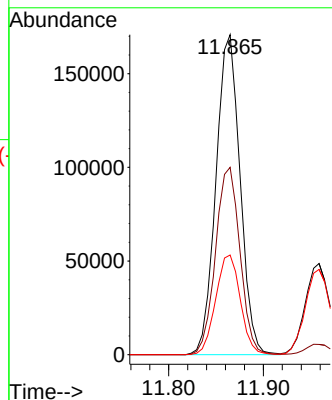
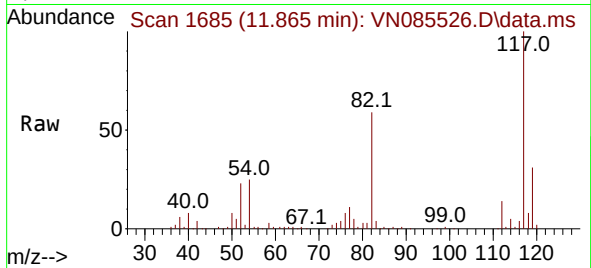




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

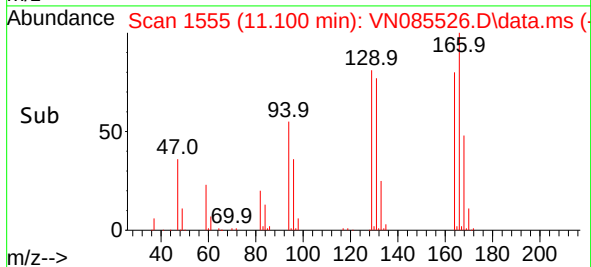
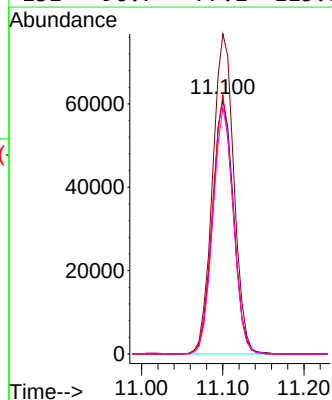
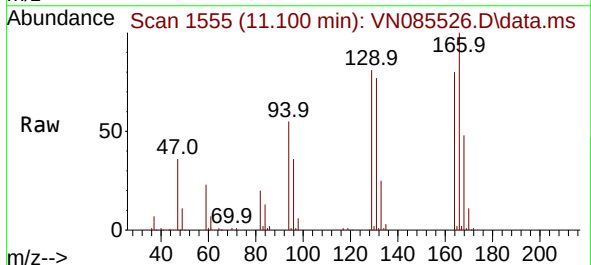
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

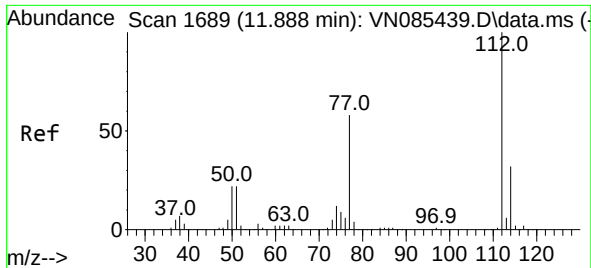
Tgt Ion:117 Resp: 302551  
Ion Ratio Lower Upper  
117 100  
82 58.5 48.6 72.8  
119 31.2 26.6 39.8



#64  
Tetrachloroethene  
Concen: 52.974 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:164 Resp: 109264  
Ion Ratio Lower Upper  
164 100  
166 125.7 103.4 155.2  
129 101.8 79.2 118.8  
131 96.7 77.1 115.7

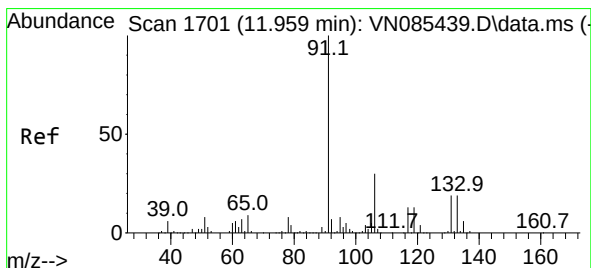
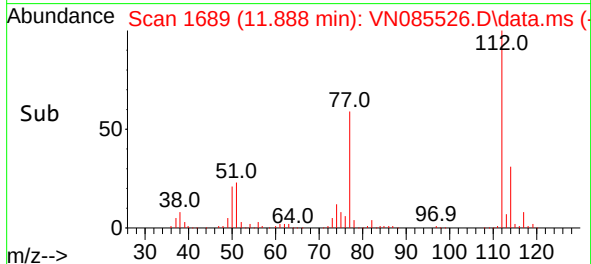
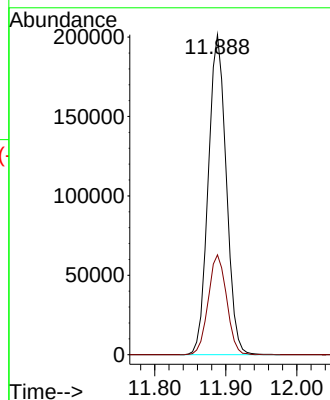
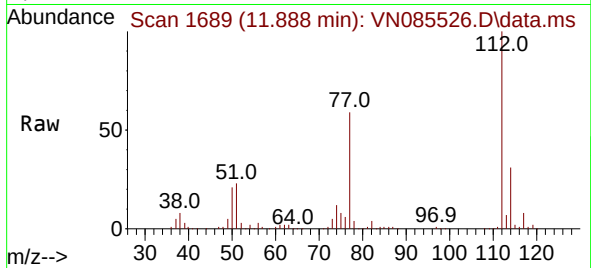




#65  
Chlorobenzene  
Concen: 53.457 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

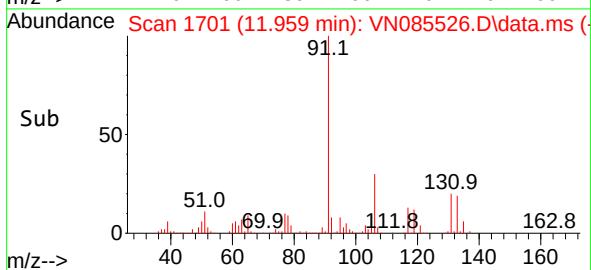
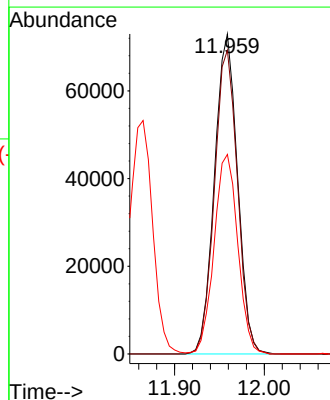
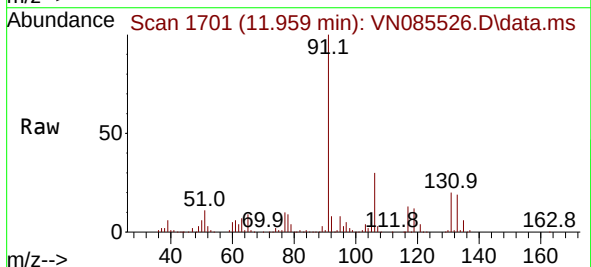
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

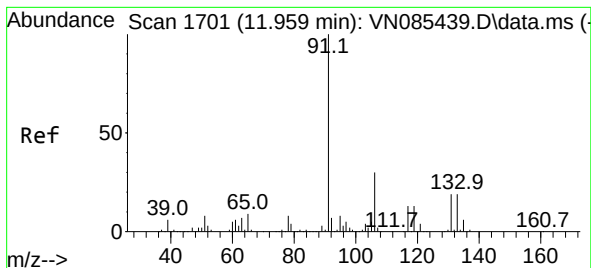
Tgt Ion:112 Resp: 354308  
Ion Ratio Lower Upper  
112 100  
114 31.2 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 53.447 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:131 Resp: 130012  
Ion Ratio Lower Upper  
131 100  
133 95.0 47.4 142.3  
119 64.2 33.1 99.5





#67

Ethyl Benzene

Concen: 57.531 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

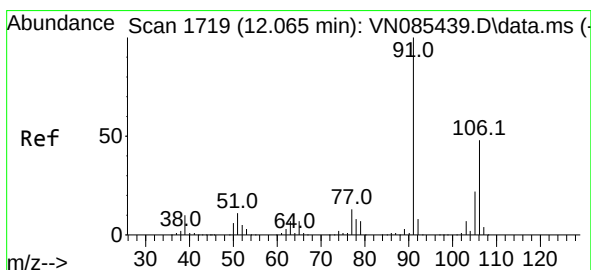
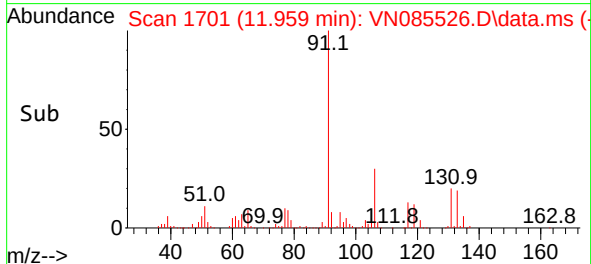
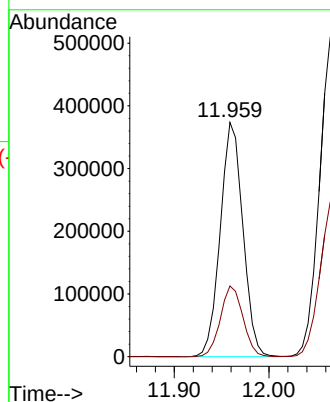
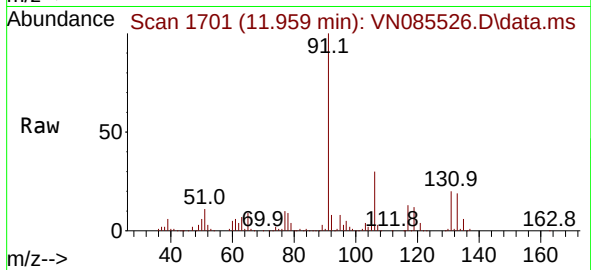
VSTDCCC050

Tgt Ion: 91 Resp: 621051

Ion Ratio Lower Upper

91 100

106 30.2 23.8 35.8



#68

m/p-Xylenes

Concen: 119.124 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085526.D

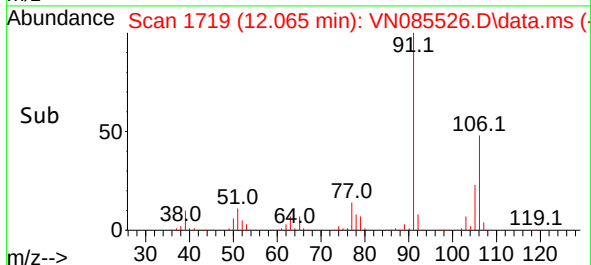
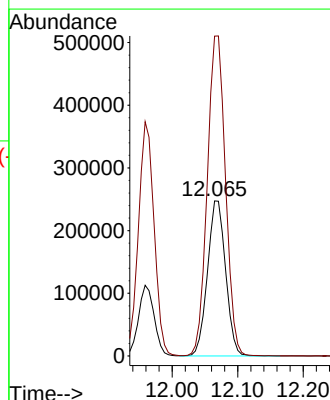
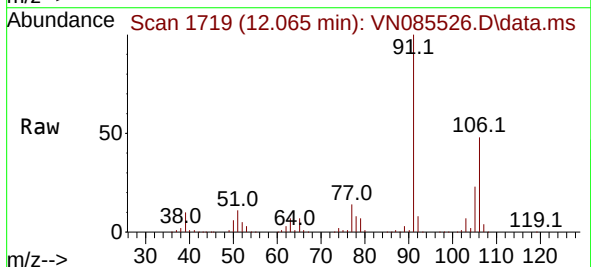
Acq: 28 Jan 2025 09:53

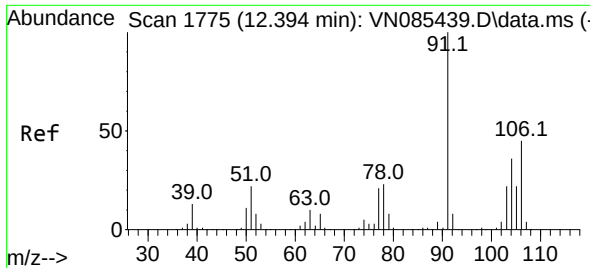
Tgt Ion: 106 Resp: 475266

Ion Ratio Lower Upper

106 100

91 207.6 167.7 251.5

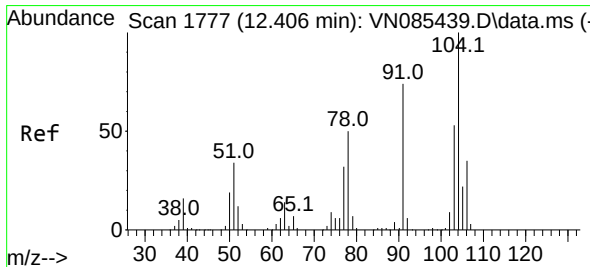
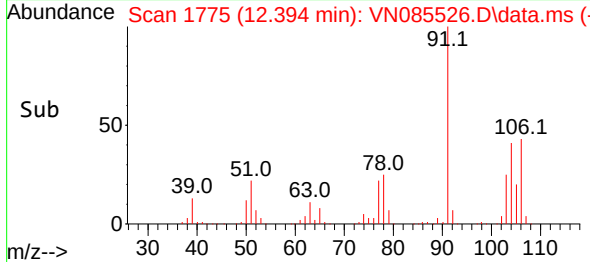
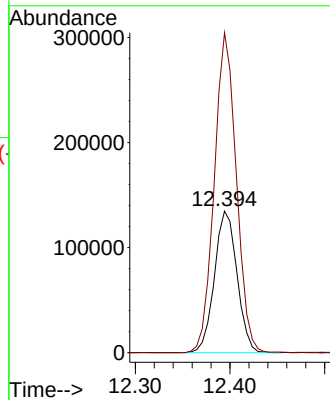
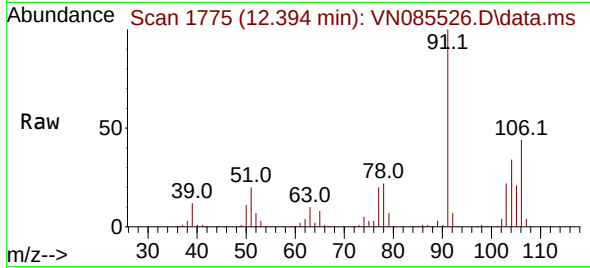




#69  
o-Xylene  
Concen: 58.639 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

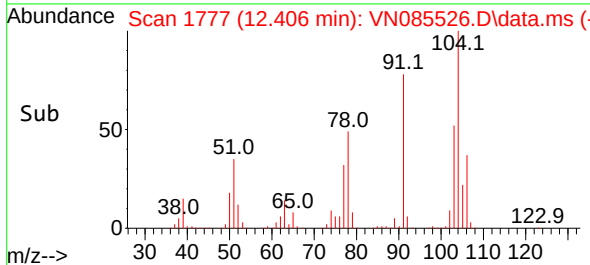
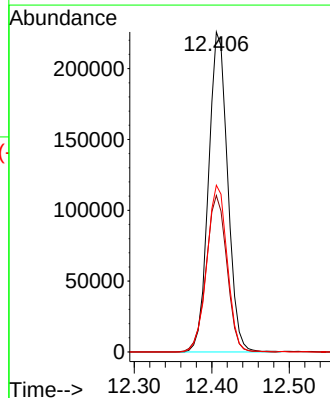
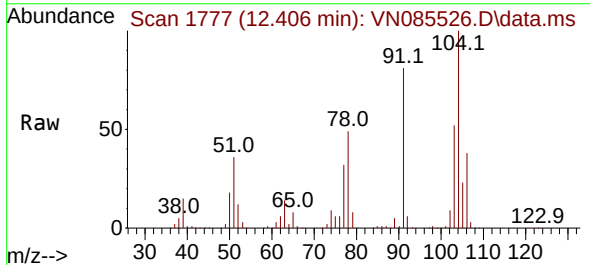
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:106 Resp: 223578  
Ion Ratio Lower Upper  
106 100  
91 220.9 110.4 331.2

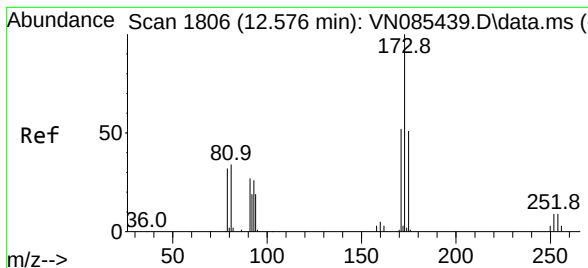


#70  
Styrene  
Concen: 61.343 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion:104 Resp: 387081  
Ion Ratio Lower Upper  
104 100  
78 52.7 42.5 63.7  
103 55.4 43.8 65.8







#71

Bromoform

Concen: 58.046 ug/l

RT: 12.576 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

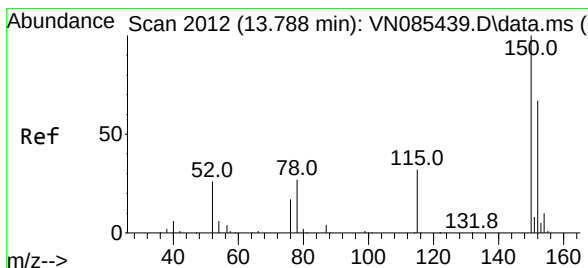
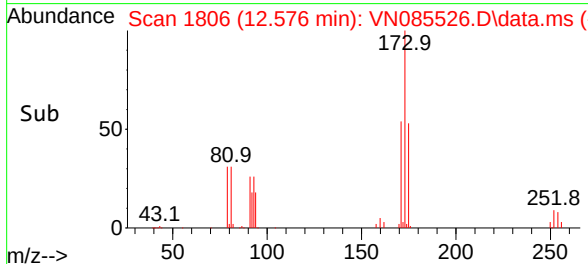
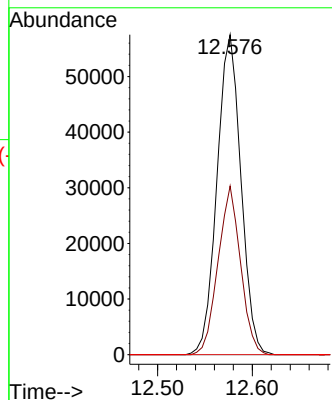
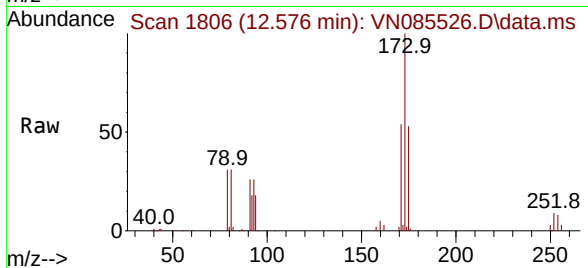
Tgt Ion:173 Resp: 101032

Ion Ratio Lower Upper

173 100

175 49.5 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

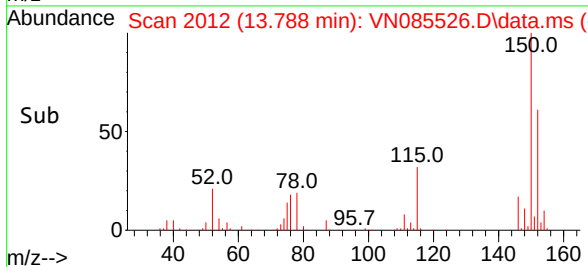
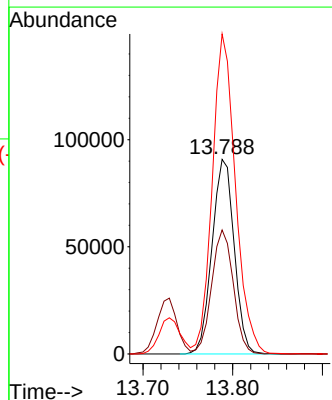
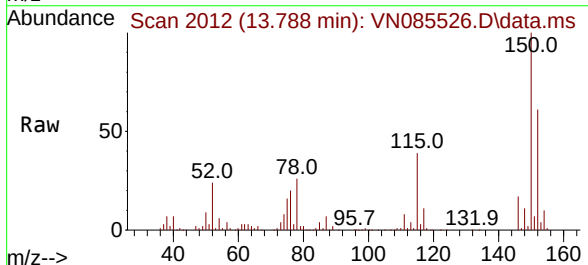
Tgt Ion:152 Resp: 155713

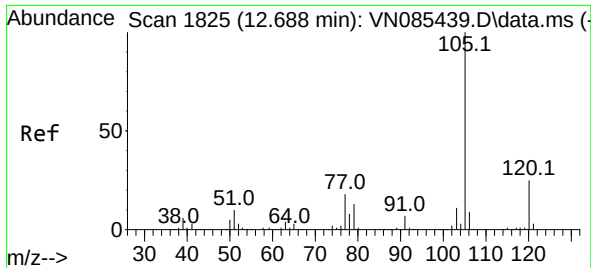
Ion Ratio Lower Upper

152 100

115 62.3 31.1 93.3

150 172.0 0.0 343.6

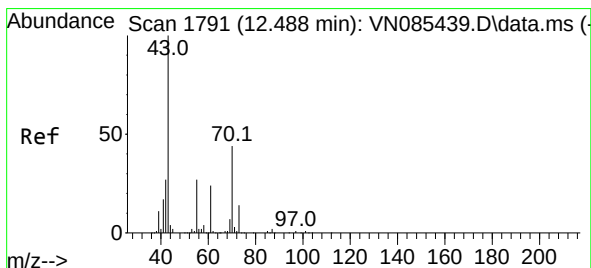
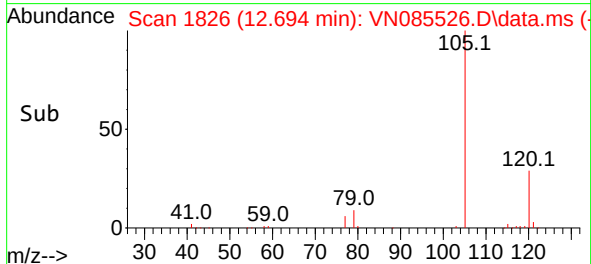
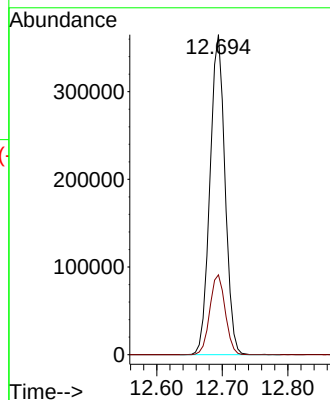
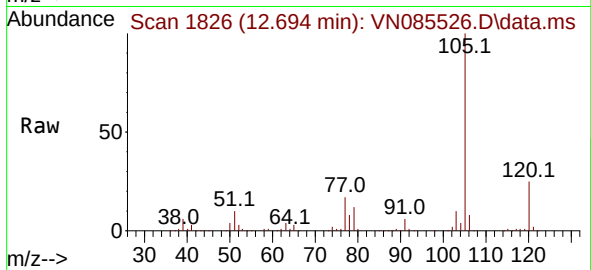




#73  
Isopropylbenzene  
Concen: 55.357 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

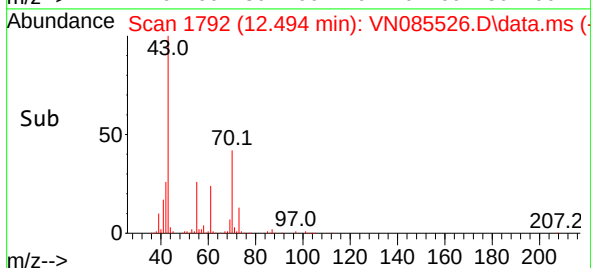
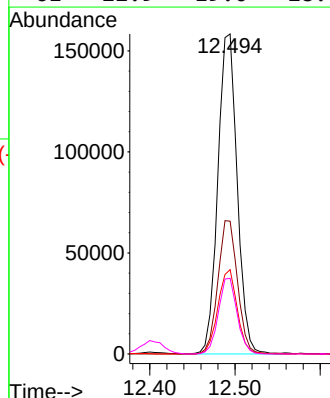
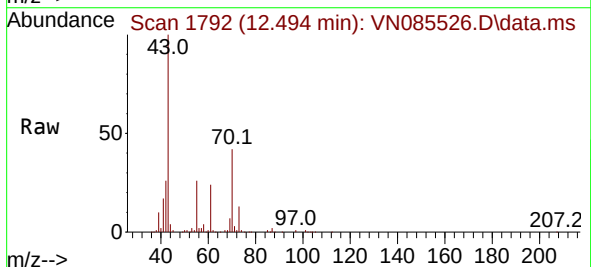
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

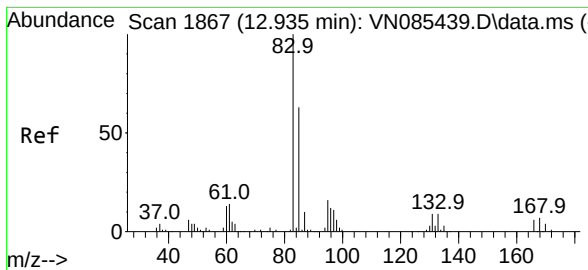
Tgt Ion:105 Resp: 581759  
Ion Ratio Lower Upper  
105 100  
120 25.5 12.8 38.3



#74  
N-ethyl acetate  
Concen: 52.919 ug/l  
RT: 12.494 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 43 Resp: 249973  
Ion Ratio Lower Upper  
43 100  
70 42.1 34.0 51.0  
55 26.4 21.4 32.2  
61 22.9 19.0 28.4

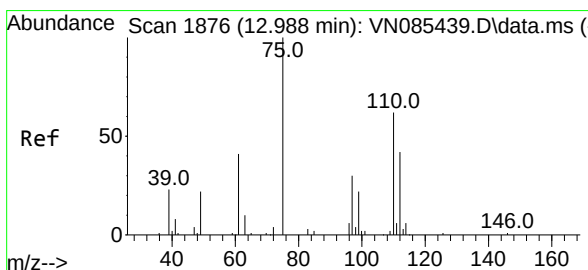
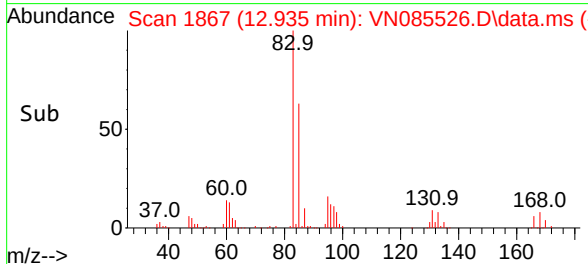
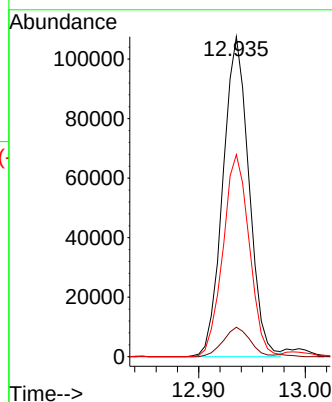
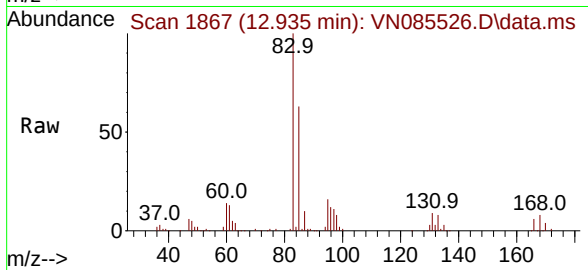




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 49.089 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

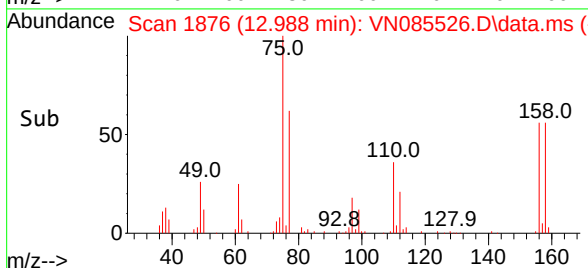
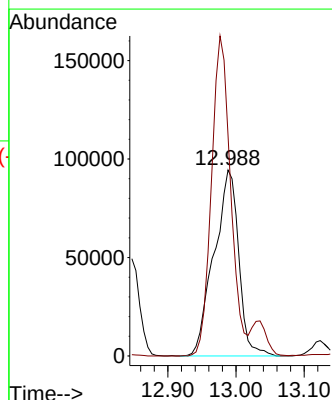
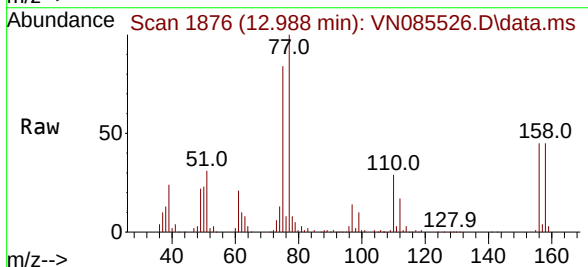
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

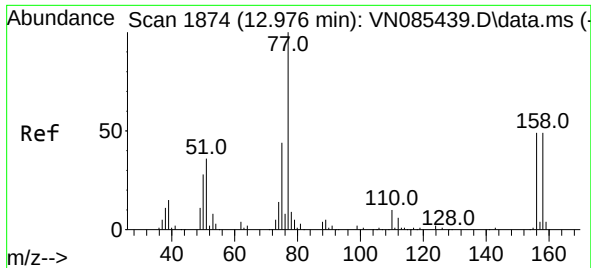
Tgt Ion: 83 Resp: 182235  
 Ion Ratio Lower Upper  
 83 100  
 131 9.9 4.8 14.4  
 85 63.9 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 75.243 ug/l  
 RT: 12.988 min Scan# 1876  
 Delta R.T. 0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

Tgt Ion: 75 Resp: 238136  
 Ion Ratio Lower Upper  
 75 100  
 77 133.8 109.7 329.2

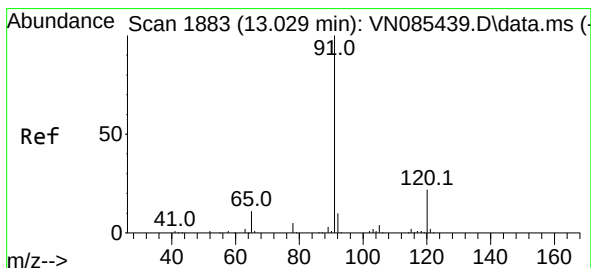
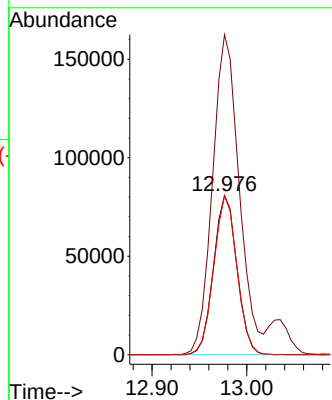
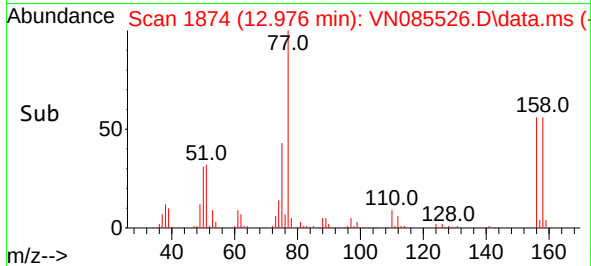
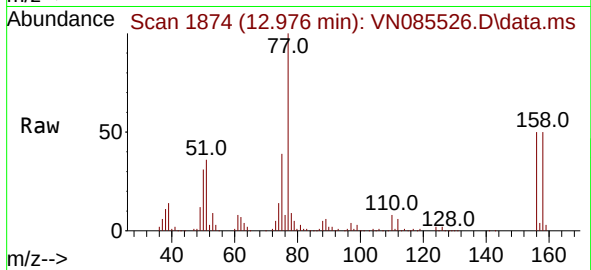




#77  
Bromobenzene  
Concen: 50.547 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

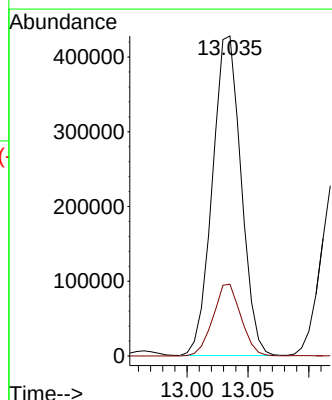
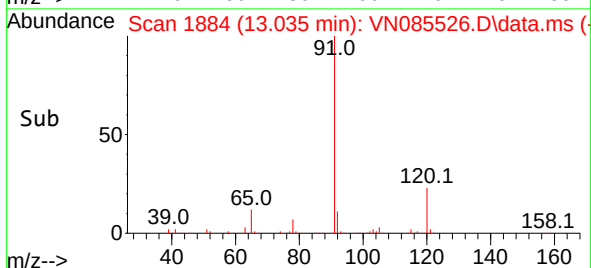
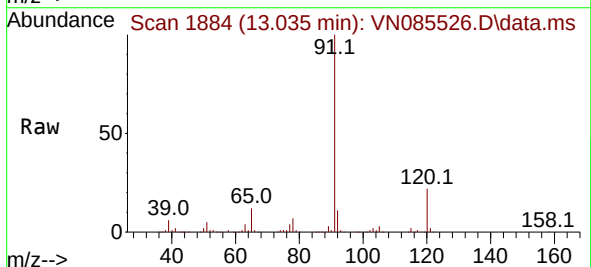
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

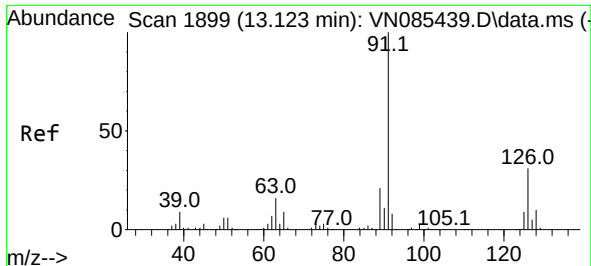
Tgt Ion:156 Resp: 138788  
Ion Ratio Lower Upper  
156 100  
77 229.6 114.1 342.4  
158 98.7 48.9 146.8



#78  
n-propylbenzene  
Concen: 56.362 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 91 Resp: 701218  
Ion Ratio Lower Upper  
91 100  
120 21.9 10.9 32.6

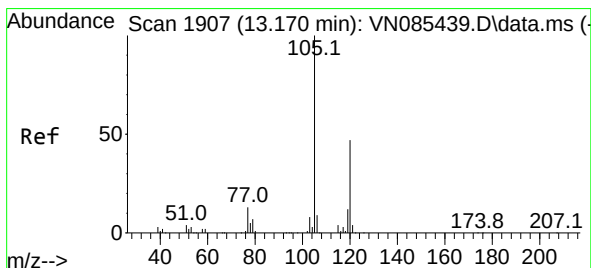
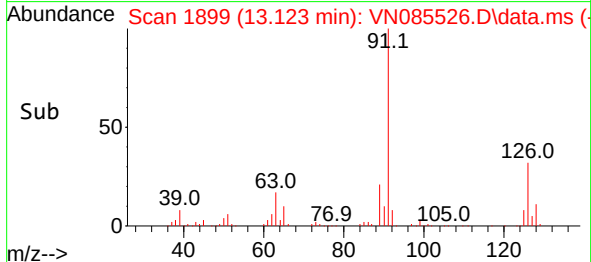
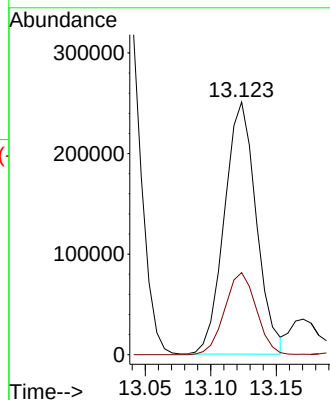
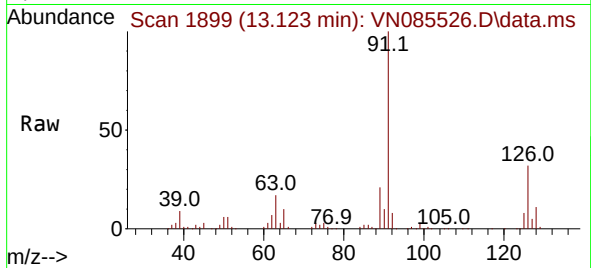




#79  
2-Chlorotoluene  
Concen: 52.764 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

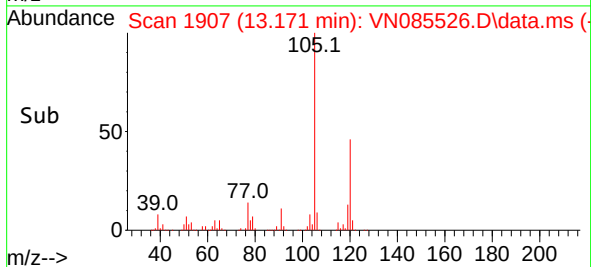
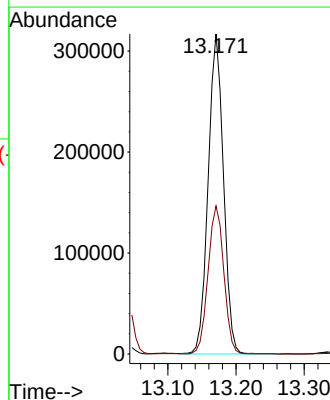
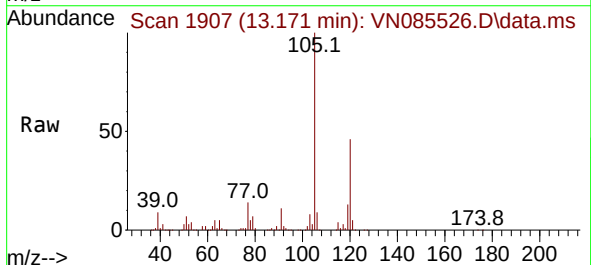
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

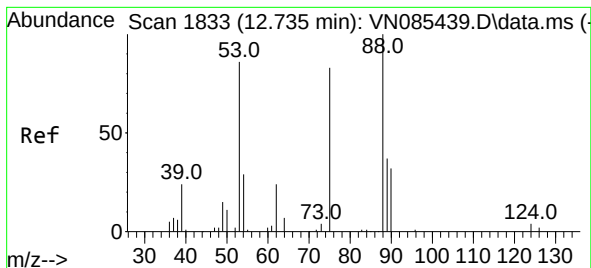
Tgt Ion: 91 Resp: 424851  
Ion Ratio Lower Upper  
91 100  
126 32.2 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 56.984 ug/l  
RT: 13.171 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 105 Resp: 494666  
Ion Ratio Lower Upper  
105 100  
120 47.7 23.9 71.7

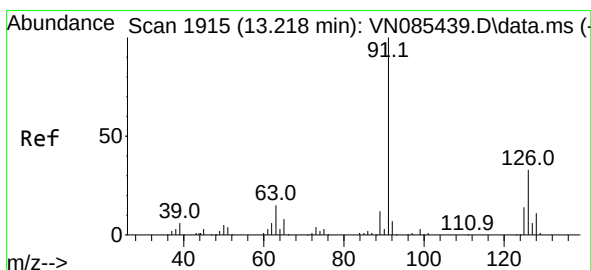
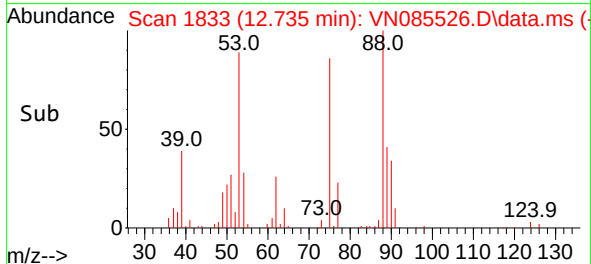
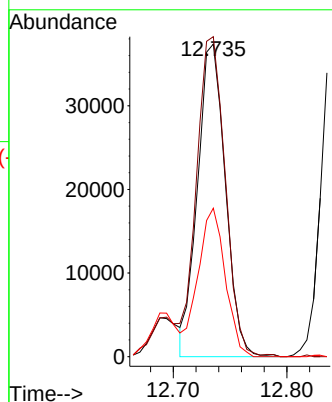
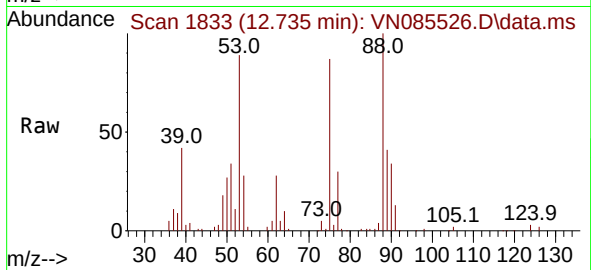




#81  
trans-1,4-Dichloro-2-butene  
Concen: 54.370 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

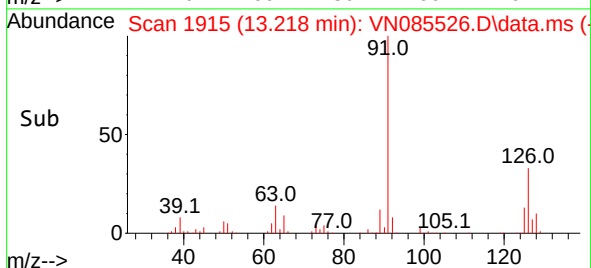
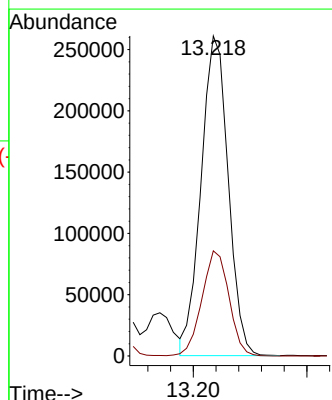
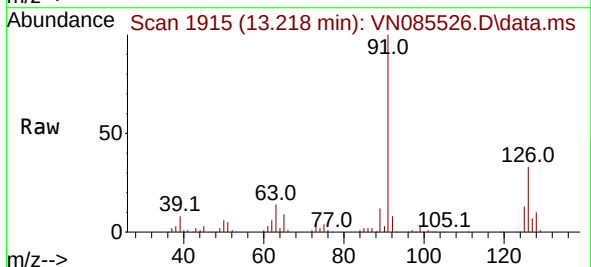
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

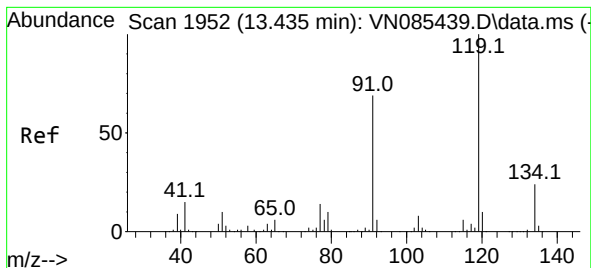
Tgt Ion: 75 Resp: 63601  
Ion Ratio Lower Upper  
75 100  
53 107.1 95.6 143.4  
89 46.8 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 53.960 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 91 Resp: 432608  
Ion Ratio Lower Upper  
91 100  
126 32.8 15.9 47.7





#83

tert-Butylbenzene

Concen: 55.641 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

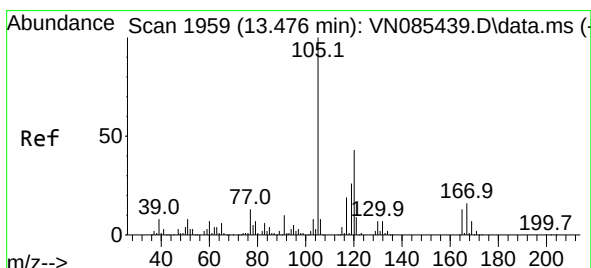
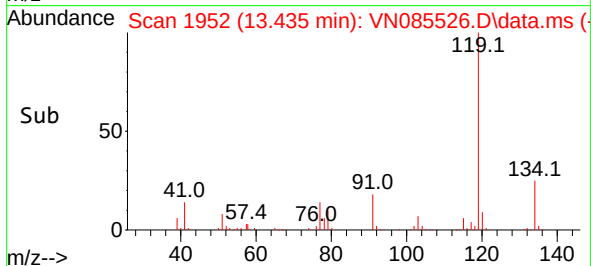
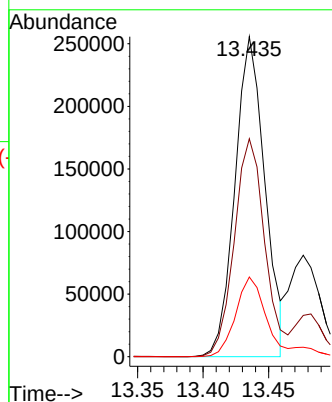
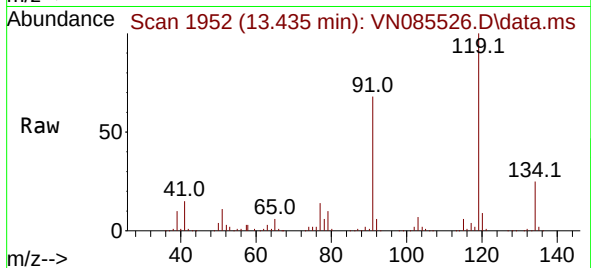
Tgt Ion:119 Resp: 405613

Ion Ratio Lower Upper

119 100

91 69.8 35.1 105.3

134 27.3 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 57.941 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085526.D

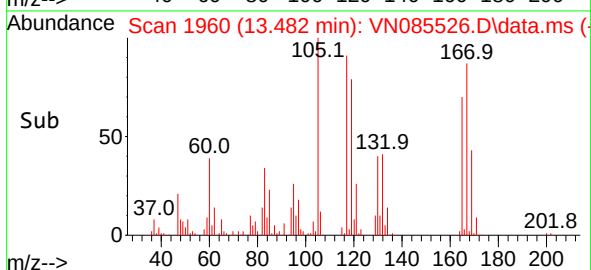
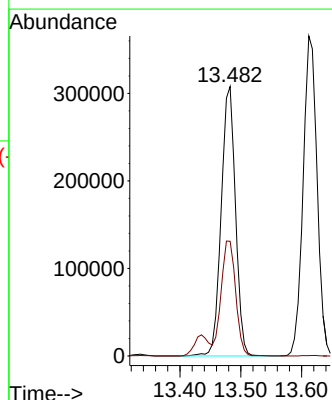
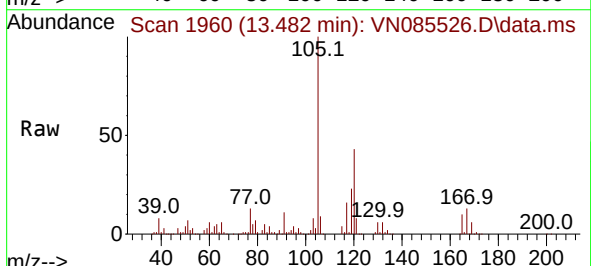
Acq: 28 Jan 2025 09:53

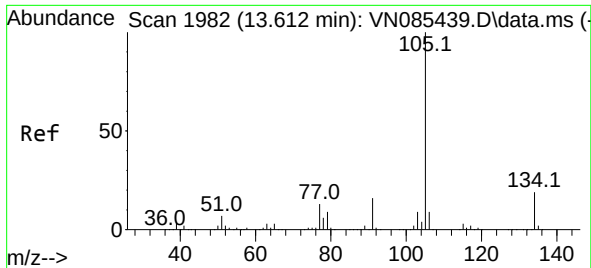
Tgt Ion:105 Resp: 501298

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0

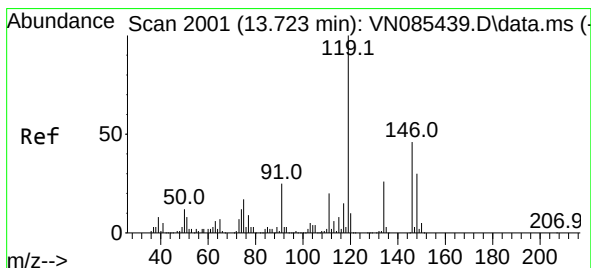
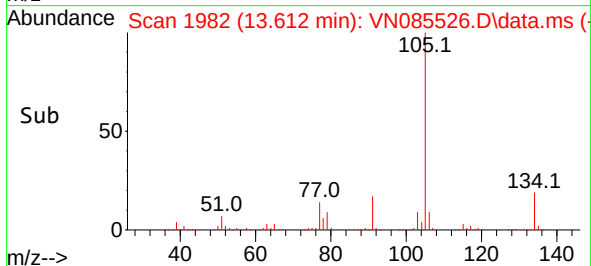
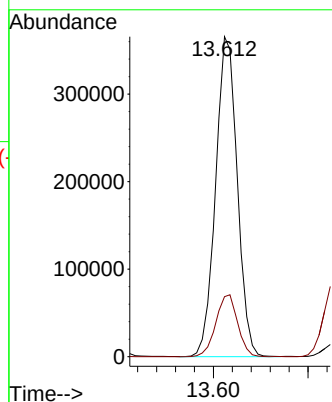
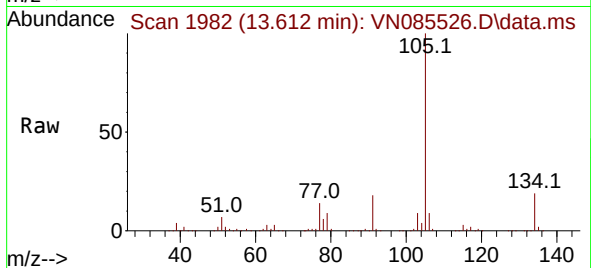




#85  
 sec-Butylbenzene  
 Concen: 57.499 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

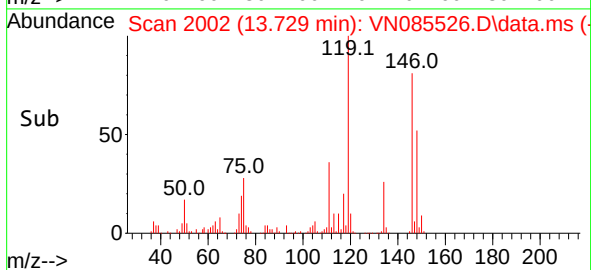
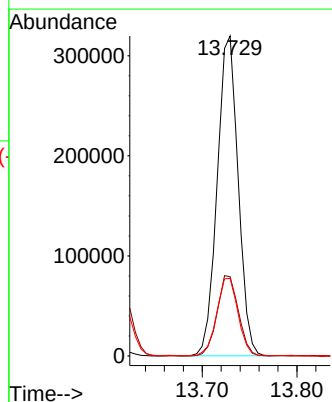
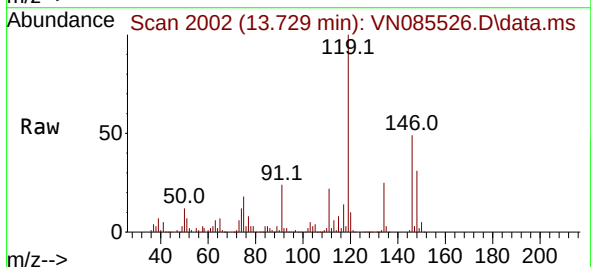
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Tgt Ion:105 Resp: 580942  
 Ion Ratio Lower Upper  
 105 100  
 134 19.4 9.7 28.9

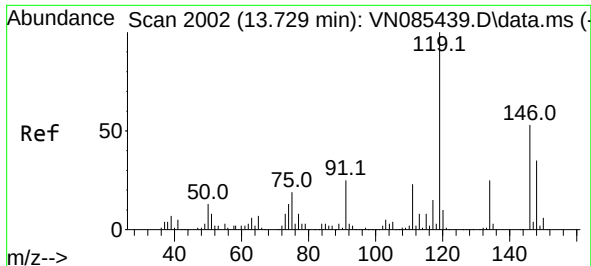


#86  
 p-Isopropyltoluene  
 Concen: 53.532 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085526.D  
 Acq: 28 Jan 2025 09:53

Tgt Ion:119 Resp: 491281  
 Ion Ratio Lower Upper  
 119 100  
 134 25.5 12.7 38.0  
 91 24.7 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 52.335 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

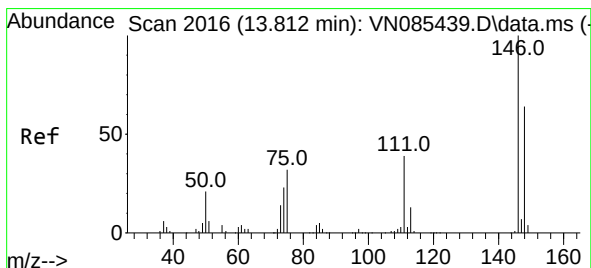
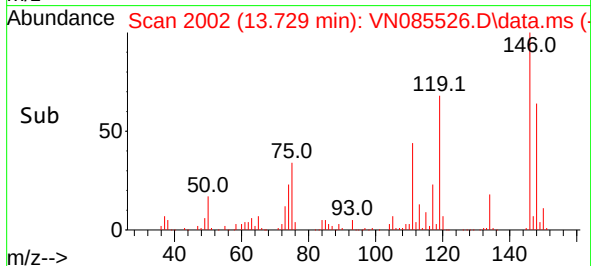
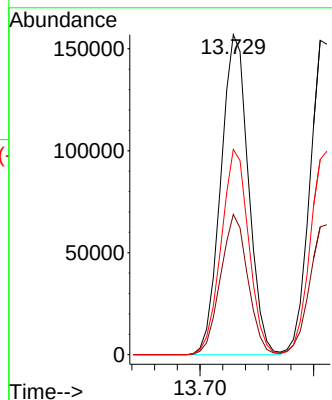
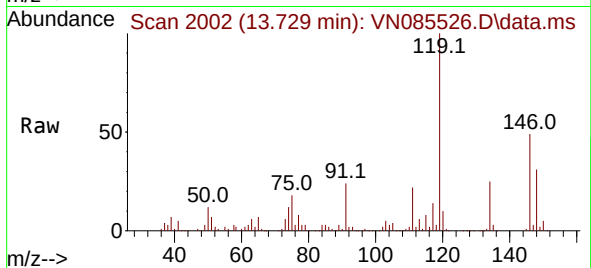
Tgt Ion:146 Resp: 264631

Ion Ratio Lower Upper

146 100

111 43.3 21.4 64.3

148 64.1 32.3 96.9



#88

1,4-Dichlorobenzene

Concen: 50.507 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

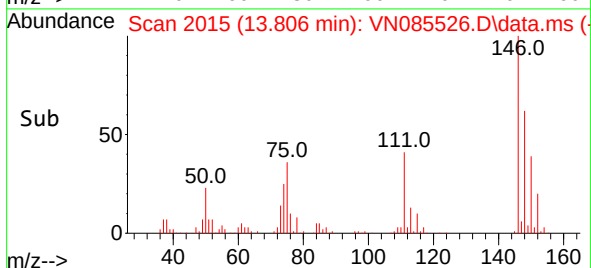
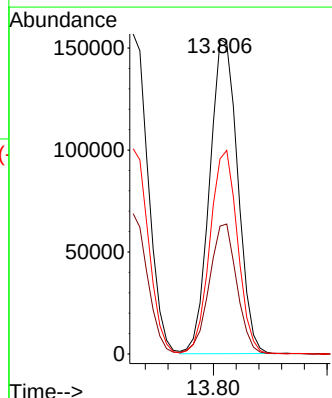
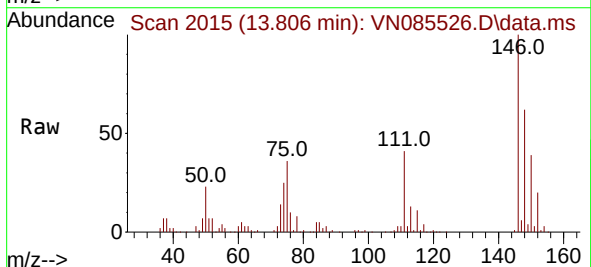
Tgt Ion:146 Resp: 264719

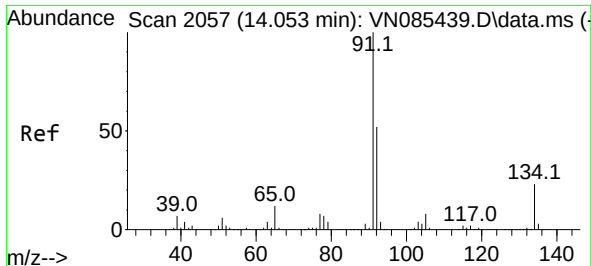
Ion Ratio Lower Upper

146 100

111 40.8 21.3 63.7

148 63.7 32.4 97.0

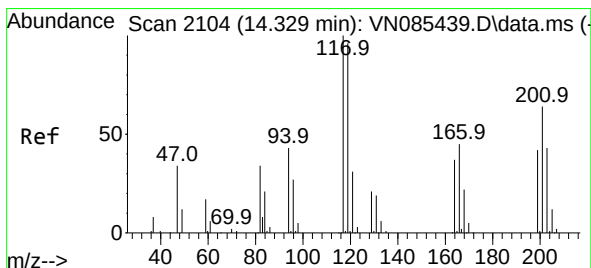
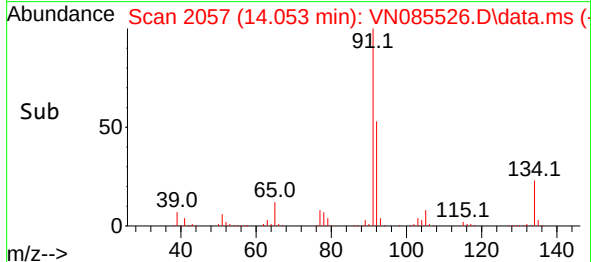
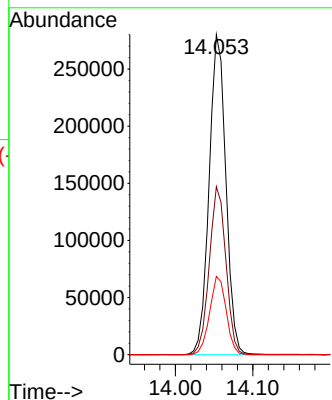
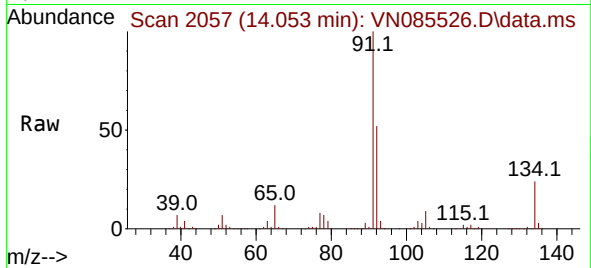




#89  
n-Butylbenzene  
Concen: 58.013 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

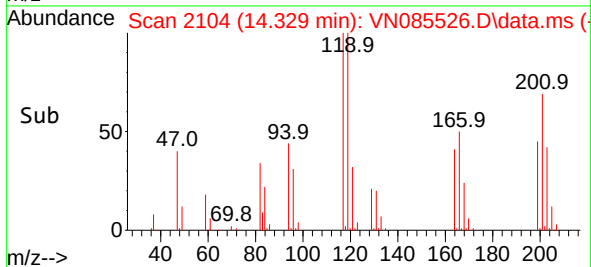
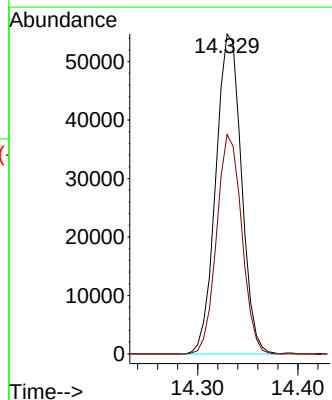
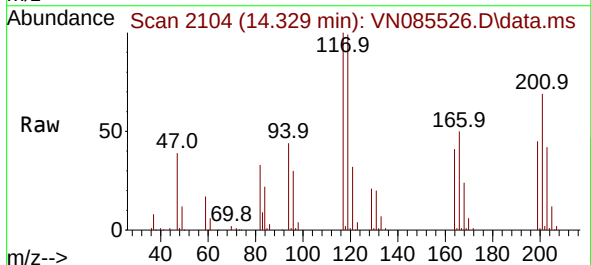
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

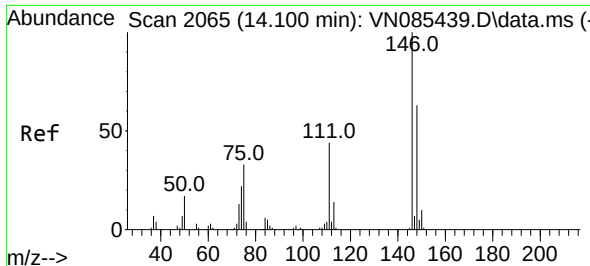
Tgt Ion: 91 Resp: 420498  
Ion Ratio Lower Upper  
91 100  
92 52.1 25.8 77.3  
134 24.2 11.7 35.1



#90  
Hexachloroethane  
Concen: 50.630 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

Tgt Ion: 117 Resp: 97383  
Ion Ratio Lower Upper  
117 100  
201 67.0 33.7 101.0

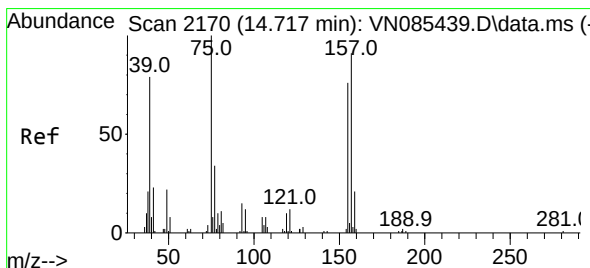
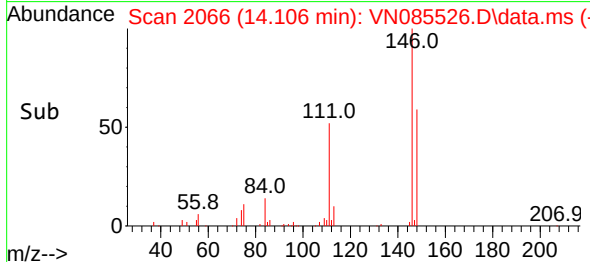
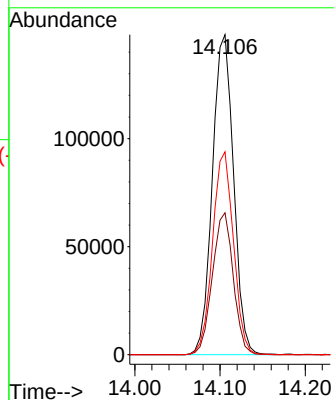
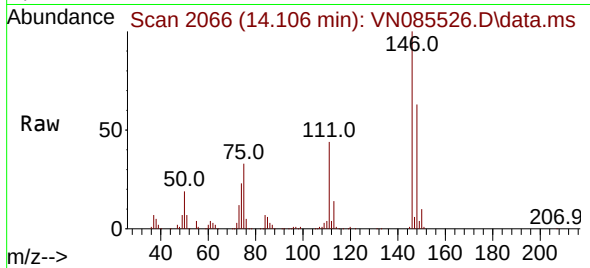




#91  
1,2-Dichlorobenzene  
Concen: 50.739 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

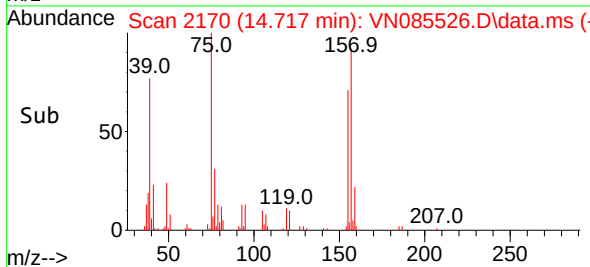
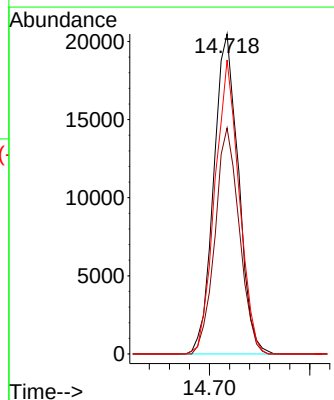
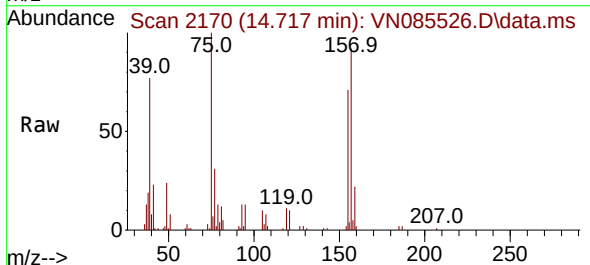
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050

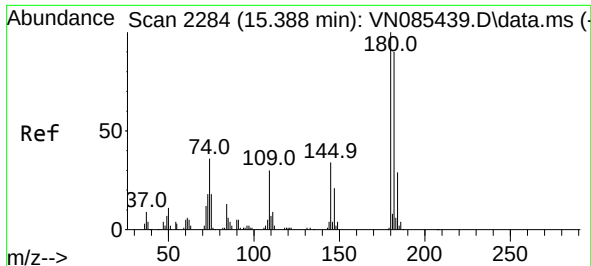
Tgt Ion:146 Resp: 255916  
Ion Ratio Lower Upper  
146 100  
111 43.8 21.7 65.1  
148 62.7 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 51.620 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

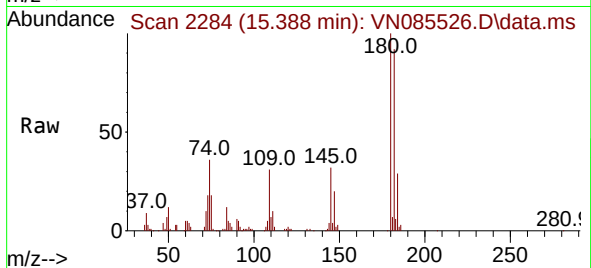
Tgt Ion: 75 Resp: 34993  
Ion Ratio Lower Upper  
75 100  
155 69.5 36.4 109.2  
157 90.0 45.4 136.1



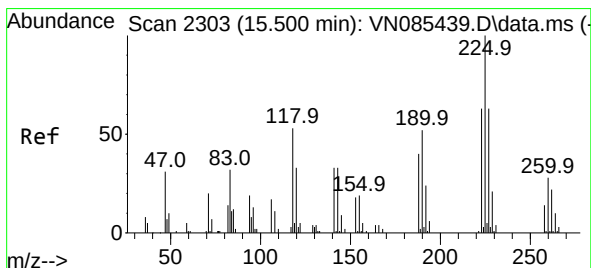
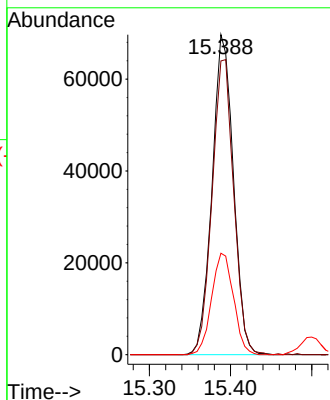
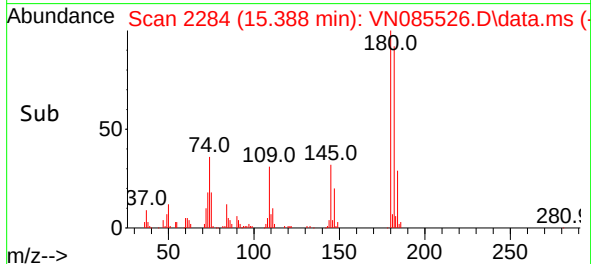


#93  
1,2,4-Trichlorobenzene  
Concen: 54.246 ug/l  
RT: 15.388 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53

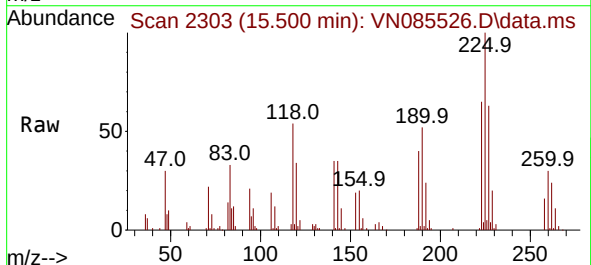
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



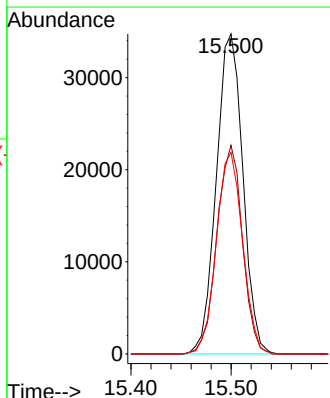
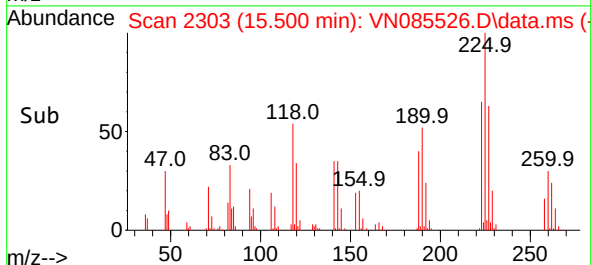
Tgt Ion:180 Resp: 127164  
Ion Ratio Lower Upper  
180 100  
182 93.6 46.8 140.3  
145 32.5 16.0 48.0

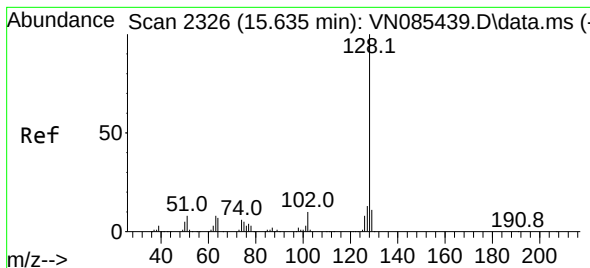


#94  
Hexachlorobutadiene  
Concen: 51.348 ug/l  
RT: 15.500 min Scan# 2303  
Delta R.T. 0.000 min  
Lab File: VN085526.D  
Acq: 28 Jan 2025 09:53



Tgt Ion:225 Resp: 63906  
Ion Ratio Lower Upper  
225 100  
223 62.8 30.7 92.1  
227 62.3 30.9 92.5





#95

Naphthalene

Concen: 52.473 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

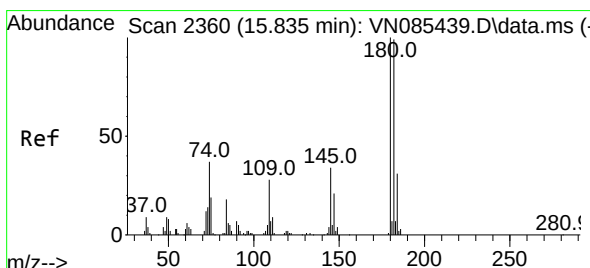
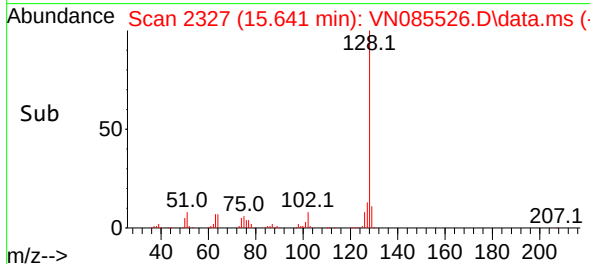
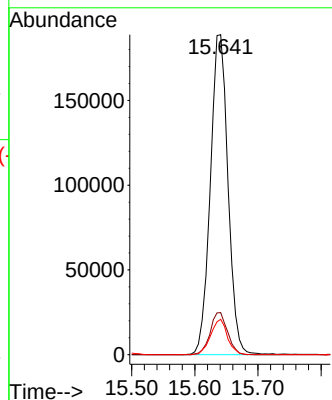
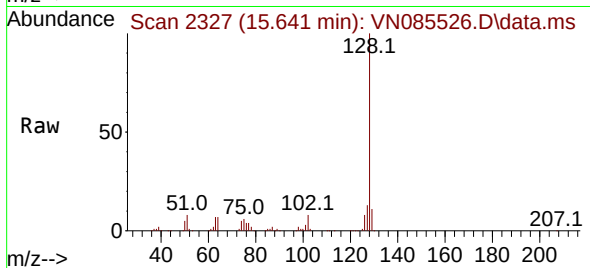
Tgt Ion:128 Resp: 367063

Ion Ratio Lower Upper

128 100

127 12.9 10.6 16.0

129 10.5 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 51.230 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085526.D

Acq: 28 Jan 2025 09:53

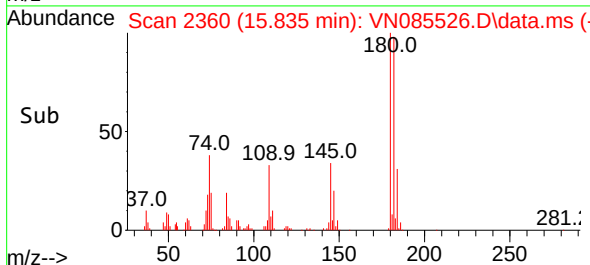
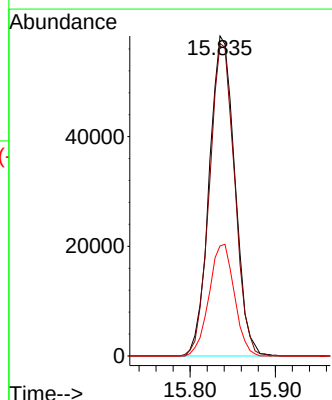
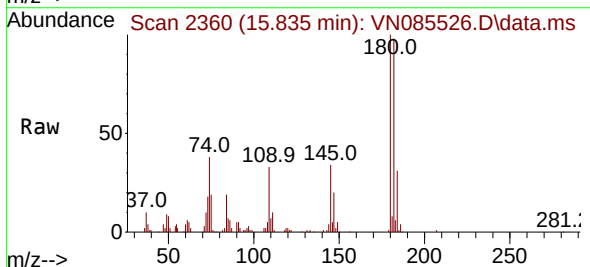
Tgt Ion:180 Resp: 121516

Ion Ratio Lower Upper

180 100

182 96.0 47.4 142.2

145 34.5 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085529.D  
 Acq On : 28 Jan 2025 11:15  
 Operator : JC\MD  
 Sample : VN0128WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

Quant Time: Jan 29 00:35:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 185562   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 307569   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 271043   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 126721   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| System Monitoring Compounds |        |       |          |          |            |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 153168   | 51.135   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 102.280% |      |
| 35) Dibromofluoromethane    | 8.165  | 113   | 113571   | 53.225   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 106.460% |      |
| 50) Toluene-d8              | 10.565 | 98    | 410056   | 54.088   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 108.180% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 134929   | 52.029   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 104.060% |      |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 45881  | 18.261  | ug/l   | 99  |
| 3) Chloromethane             | 2.359 | 50  | 46936  | 17.254  | ug/l   | 98  |
| 4) Vinyl Chloride            | 2.512 | 62  | 49715  | 18.182  | ug/l   | 98  |
| 5) Bromomethane              | 2.965 | 94  | 32217  | 19.506  | ug/l   | 93  |
| 6) Chloroethane              | 3.118 | 64  | 34288  | 19.780  | ug/l   | 95  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 82151  | 20.707  | ug/l   | 94  |
| 8) Diethyl Ether             | 3.959 | 74  | 26345  | 19.222  | ug/l   | 98  |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 45774  | 20.484  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.589 | 142 | 50026  | 19.549  | ug/l   | 95  |
| 11) Tert butyl alcohol       | 5.512 | 59  | 37334  | 108.849 | ug/l   | 99  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 37952  | 19.057  | ug/l   | 93  |
| 13) Acrolein                 | 4.177 | 56  | 39646  | 84.676  | ug/l   | 98  |
| 14) Allyl chloride           | 5.024 | 41  | 59056  | 18.275  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.712 | 53  | 116207 | 106.667 | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 101360 | 104.730 | ug/l   | 94  |
| 17) Carbon Disulfide         | 4.706 | 76  | 100344 | 16.364  | ug/l   | 98  |
| 18) Methyl Acetate           | 5.018 | 43  | 66988  | 22.762  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 135056 | 20.885  | ug/l   | 97  |
| 20) Methylene Chloride       | 5.277 | 84  | 47487  | 19.820  | ug/l   | 96  |
| 21) trans-1,2-Dichloroethene | 5.789 | 96  | 40233  | 18.903  | ug/l   | 94  |
| 22) Diisopropyl ether        | 6.671 | 45  | 147403 | 20.550  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.600 | 43  | 516002 | 102.796 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 87952  | 20.110  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 153642 | 107.876 | ug/l   | 98  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 78263  | 22.133  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.488 | 96  | 49822  | 19.875  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.812 | 49  | 32851  | 16.145  | ug/l   | 96  |
| 29) Tetrahydrofuran          | 7.836 | 42  | 102010 | 112.971 | ug/l   | 99  |
| 30) Chloroform               | 7.965 | 83  | 92905  | 20.553  | ug/l   | 93  |
| 31) Cyclohexane              | 8.253 | 56  | 67069  | 17.643  | ug/l   | 98  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 80919  | 20.408  | ug/l   | 97  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 58916  | 19.673  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 62638  | 20.722  | ug/l   | 98  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 70429  | 20.543  | ug/l   | 97  |
| 39) Methylcyclohexane        | 9.600 | 83  | 53089  | 18.865  | ug/l   | 96  |
| 40) Benzene                  | 8.606 | 78  | 186111 | 20.683  | ug/l   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085529.D  
 Acq On : 28 Jan 2025 11:15  
 Operator : JC\MD  
 Sample : VN0128WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

Quant Time: Jan 29 00:35:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 33670    | 21.410  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 71068    | 20.970  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 105036   | 21.686  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 42674    | 20.374  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 47674    | 20.743  | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 33823    | 20.395  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 73309    | 21.697  | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.677  | 41   | 47567    | 21.823  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 15432    | 420.430 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 324778   | 115.555 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 113994   | 21.864  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 68322    | 21.398  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 73429    | 21.530  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 45212    | 21.912  | ug/l   | 94       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 62727    | 19.281  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78623    | 21.915  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 114984   | 87.817  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 234494   | 118.574 | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.359 | 129  | 52835    | 21.210  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 42361    | 20.625  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 40019    | 21.658  | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 122235   | 20.586  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 46034    | 21.124  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 201123   | 20.797  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.071 | 106  | 154069   | 43.106  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 71535    | 20.943  | ug/l   | 100      |
| 70) Styrene                   | 12.412 | 104  | 120125   | 21.250  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 35108    | 22.516  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 178577   | 20.880  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.488 | 43   | 80633    | 20.975  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 65405    | 21.649  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 82646    | 32.088  | ug/l   | 45       |
| 77) Bromobenzene              | 12.976 | 156  | 47665    | 21.332  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 217855   | 21.517  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 138138   | 21.081  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 154258   | 21.836  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 21965    | 23.073  | ug/l   | 87       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 139420   | 21.369  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 124147   | 20.926  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 155548   | 22.092  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 178351   | 21.691  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 143953   | 20.952  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 85729    | 20.833  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 84406    | 19.789  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 115181   | 19.526  | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 30558    | 19.522  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 83529    | 20.350  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12961    | 23.494  | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 36081    | 18.913  | ug/l   | 95       |
| 94) Hexachlorobutadiene       | 15.494 | 225  | 20163    | 19.907  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 104713   | 18.394  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 36634    | 18.978  | ug/l   | 98       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085529.D  
Acq On : 28 Jan 2025 11:15  
Operator : JC\MD  
Sample : VN0128WBS01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Quant Time: Jan 29 00:35:38 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

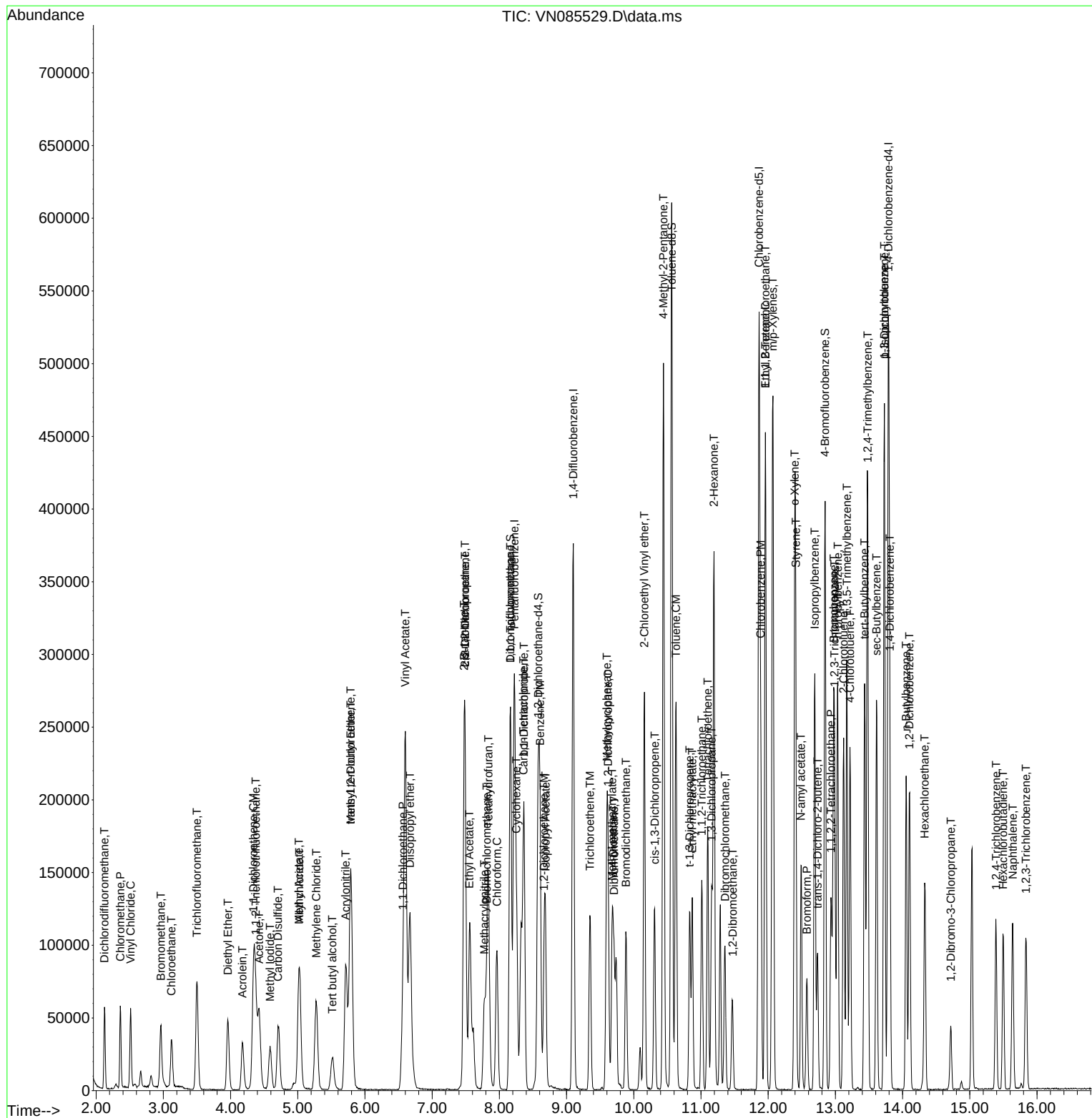
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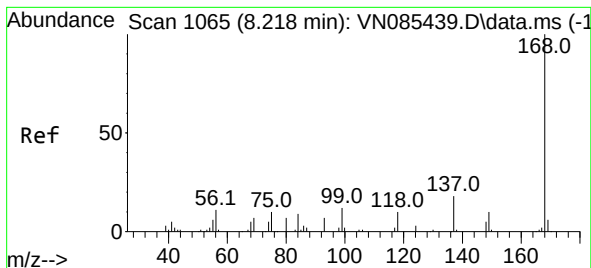


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085529.D  
 Acq On : 28 Jan 2025 11:15  
 Operator : JC\MD  
 Sample : VN0128WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

Quant Time: Jan 29 00:35:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

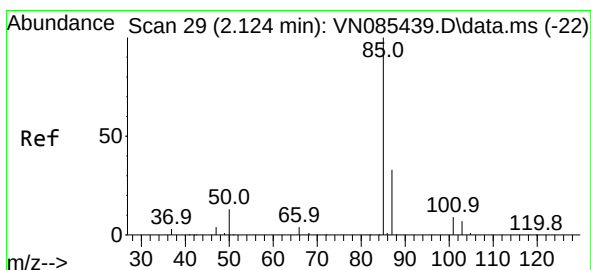
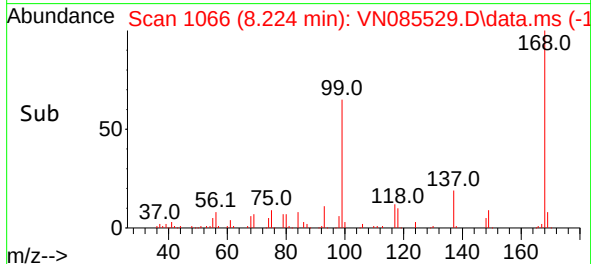
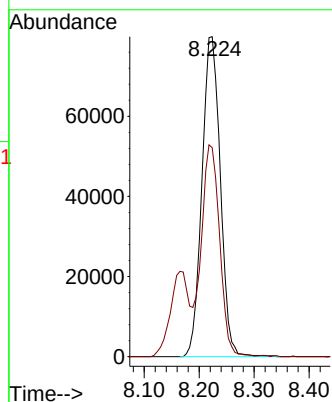
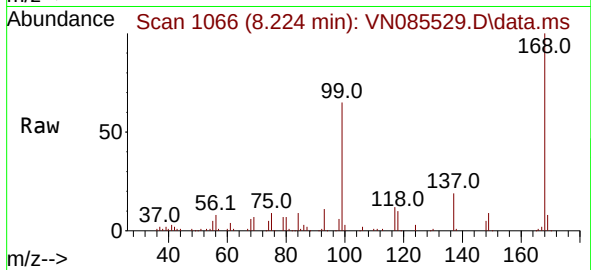




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

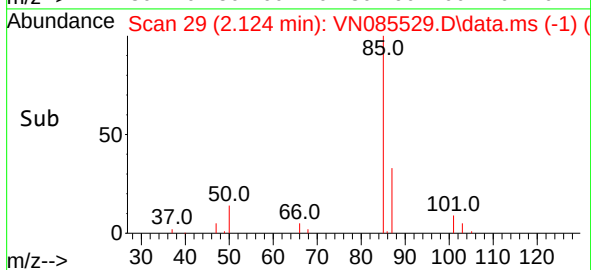
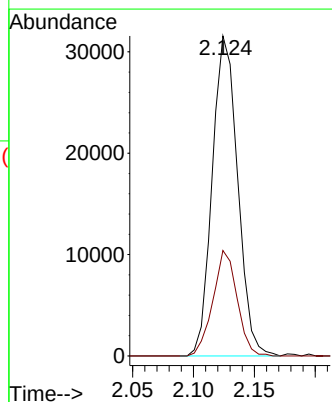
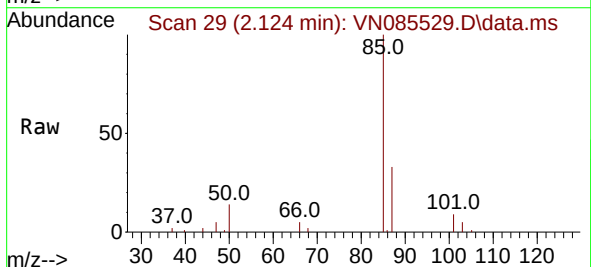
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

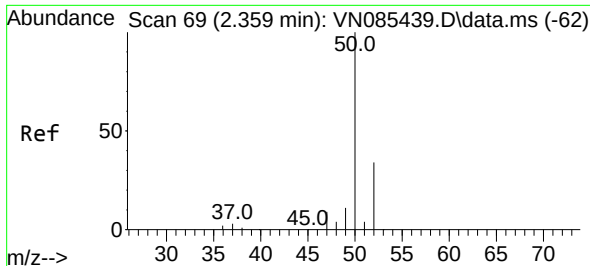
Tgt Ion:168 Resp: 185562  
Ion Ratio Lower Upper  
168 100  
99 65.3 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 18.261 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 85 Resp: 45881  
Ion Ratio Lower Upper  
85 100  
87 33.0 16.7 50.1

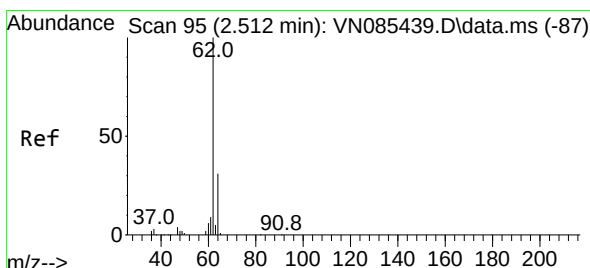
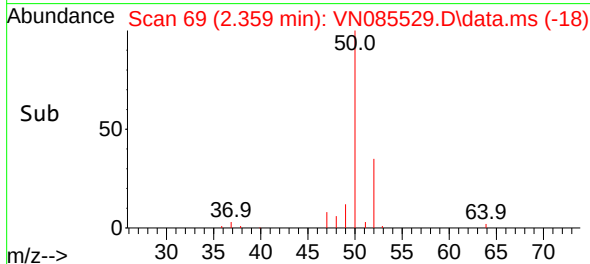
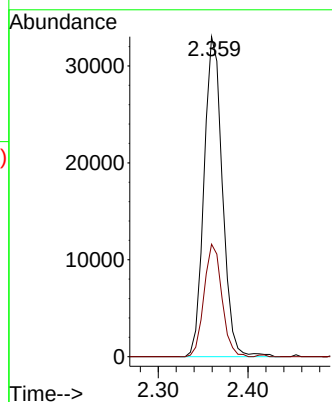
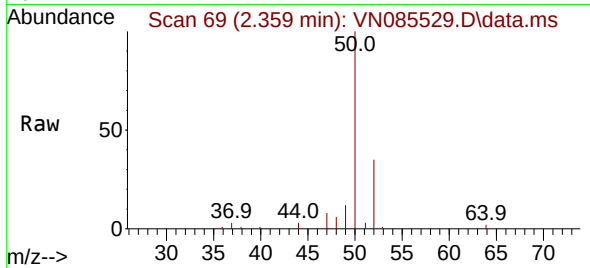




#3  
Chloromethane  
Concen: 17.254 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

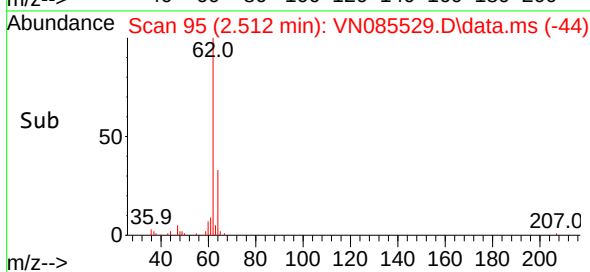
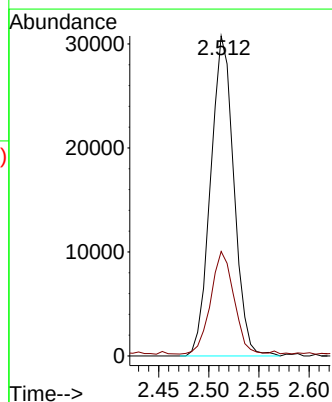
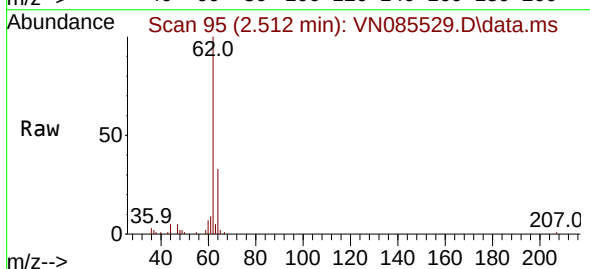
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

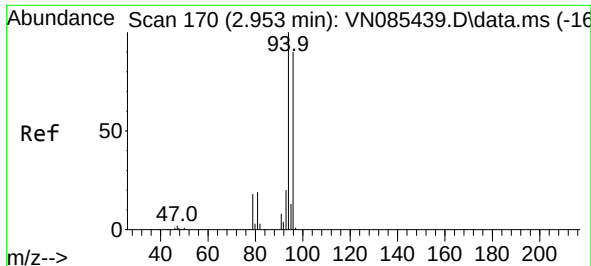
Tgt Ion: 50 Resp: 46936  
Ion Ratio Lower Upper  
50 100  
52 35.2 27.0 40.6



#4  
Vinyl Chloride  
Concen: 18.182 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 62 Resp: 49715  
Ion Ratio Lower Upper  
62 100  
64 32.1 24.8 37.2

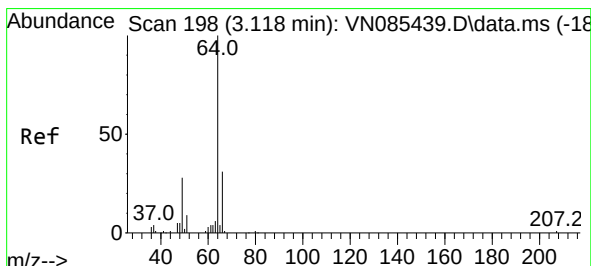
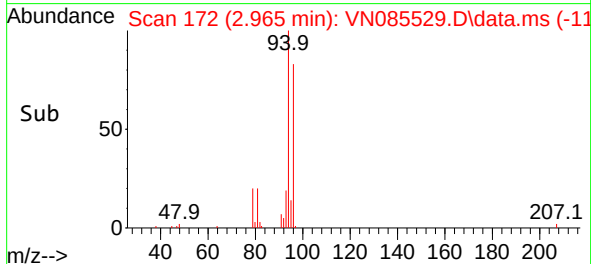
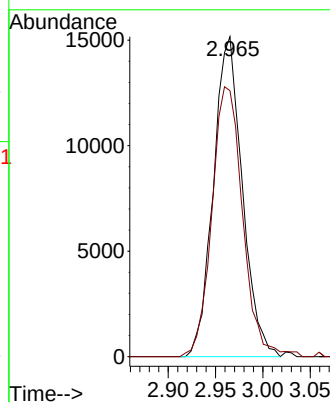
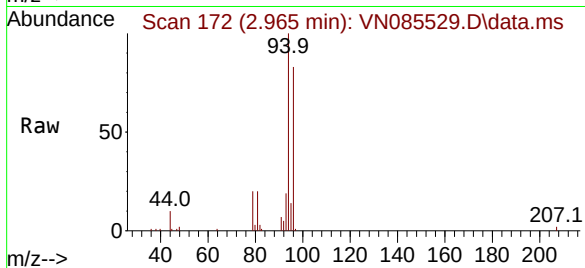




#5  
Bromomethane  
Concen: 19.506 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

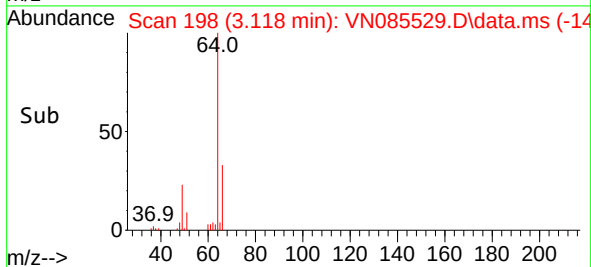
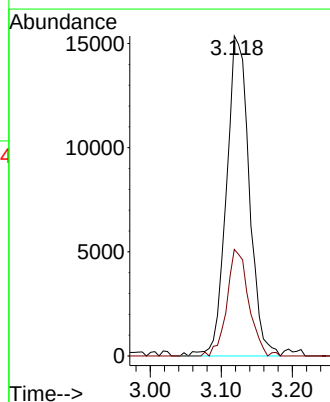
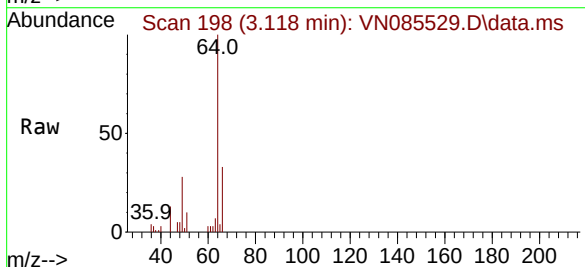
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

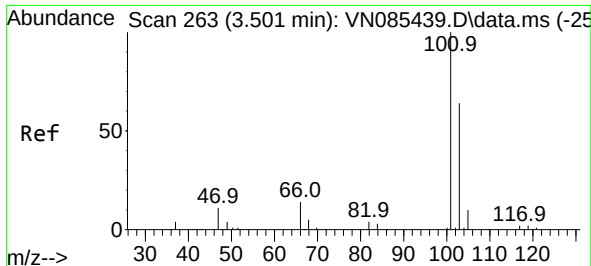
Tgt Ion: 94 Resp: 32217  
Ion Ratio Lower Upper  
94 100  
96 83.2 71.8 107.6



#6  
Chloroethane  
Concen: 19.780 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 64 Resp: 34288  
Ion Ratio Lower Upper  
64 100  
66 33.3 24.6 36.8

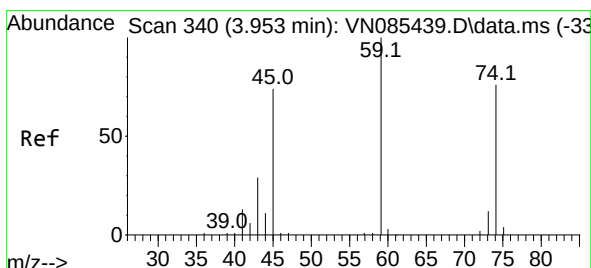
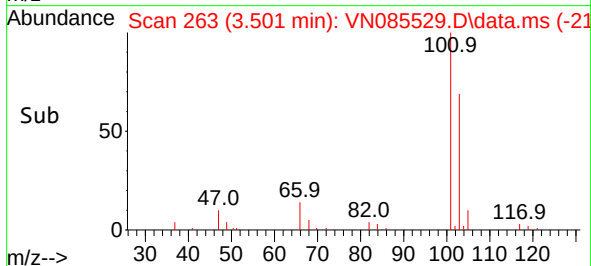
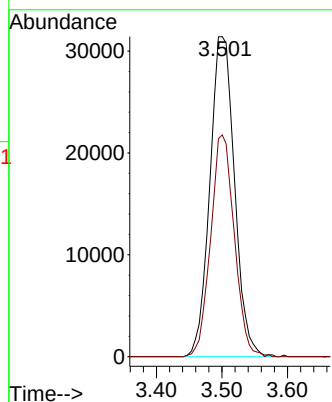
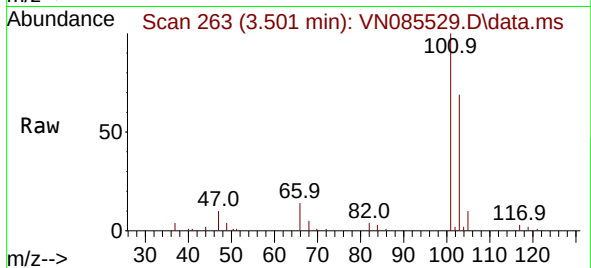




#7  
 Trichlorofluoromethane  
 Concen: 20.707 ug/l  
 RT: 3.501 min Scan# 210  
 Delta R.T. 0.000 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

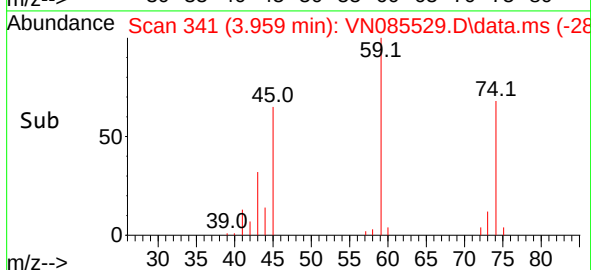
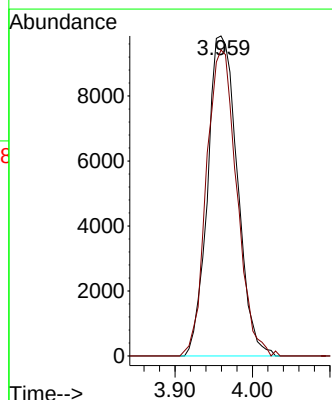
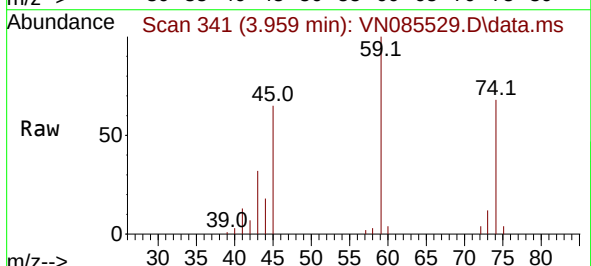
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

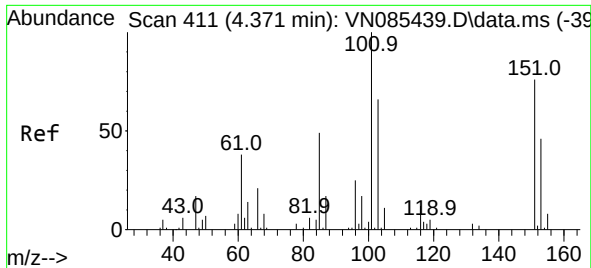
Tgt Ion:101 Resp: 82151  
 Ion Ratio Lower Upper  
 101 100  
 103 69.3 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 19.222 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion: 74 Resp: 26345  
 Ion Ratio Lower Upper  
 74 100  
 45 97.4 49.7 149.1

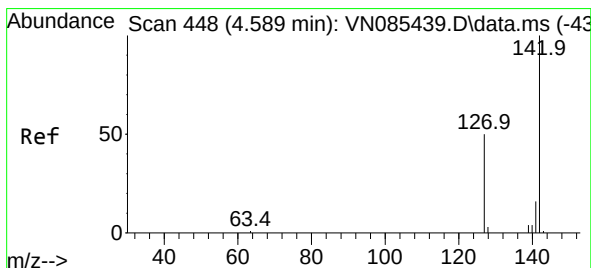
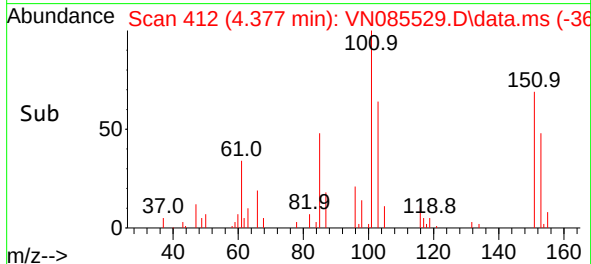
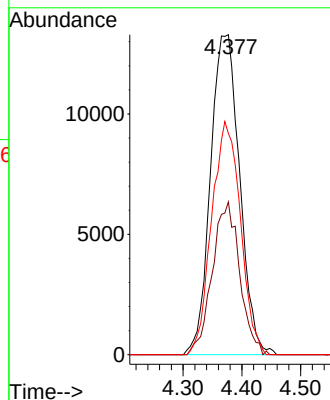
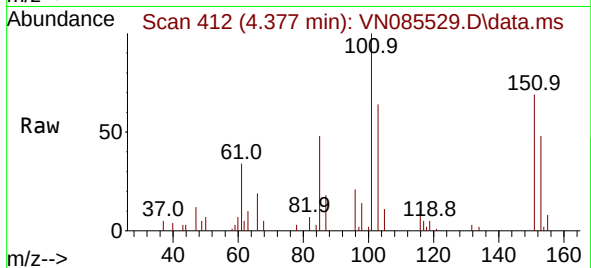




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.484 ug/l  
RT: 4.377 min Scan# 411  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

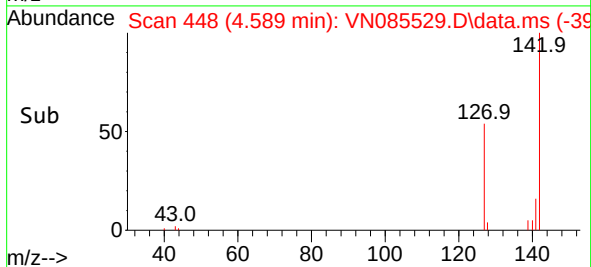
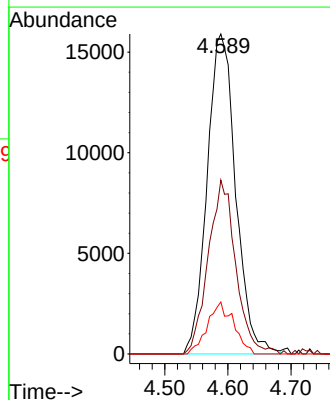
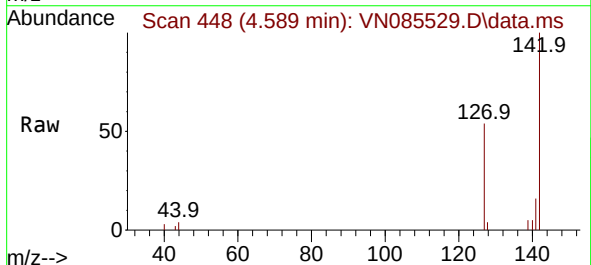
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

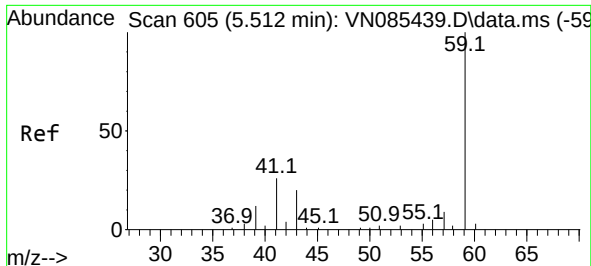
Tgt Ion:101 Resp: 45774  
Ion Ratio Lower Upper  
101 100  
85 44.9 37.8 56.8  
151 72.0 58.8 88.2



#10  
Methyl Iodide  
Concen: 19.549 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:142 Resp: 50026  
Ion Ratio Lower Upper  
142 100  
127 54.4 40.3 60.5  
141 16.2 12.8 19.2

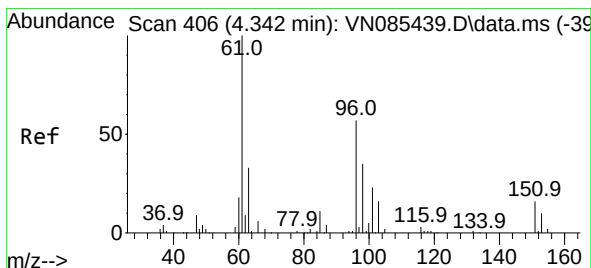
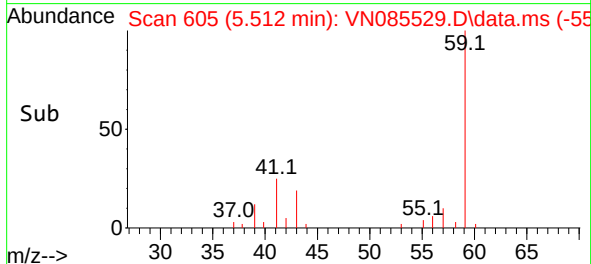
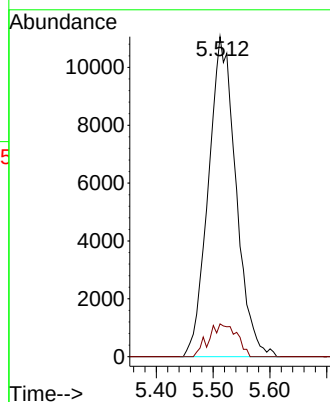
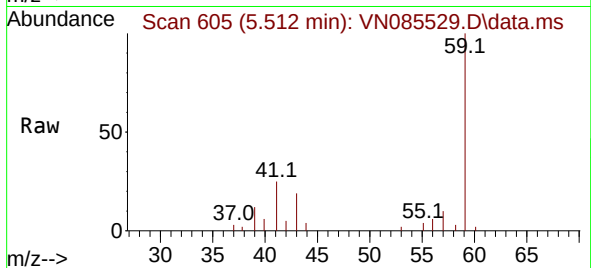




#11  
Tert butyl alcohol  
Concen: 108.849 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

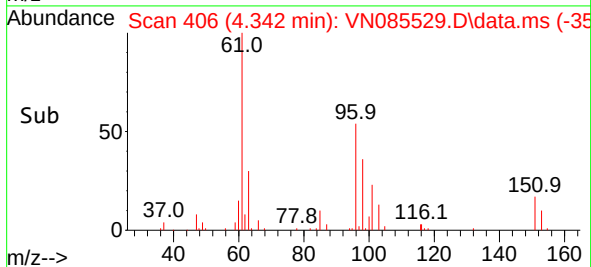
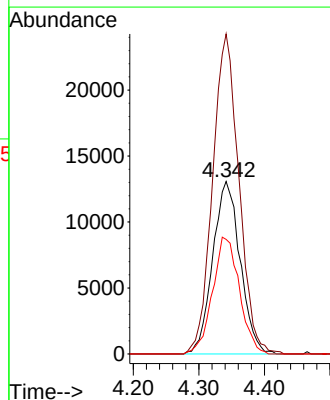
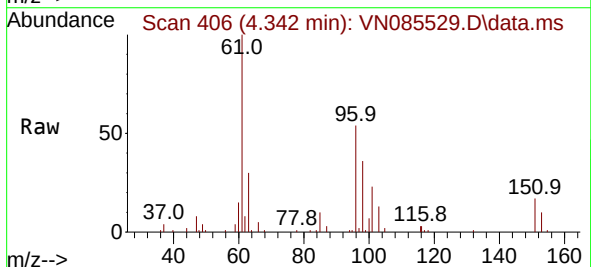
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

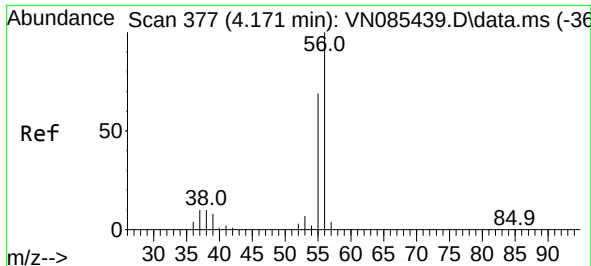
Tgt Ion: 59 Resp: 37334  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 19.057 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 96 Resp: 37952  
Ion Ratio Lower Upper  
96 100  
61 185.5 141.0 211.4  
98 66.4 49.0 73.6

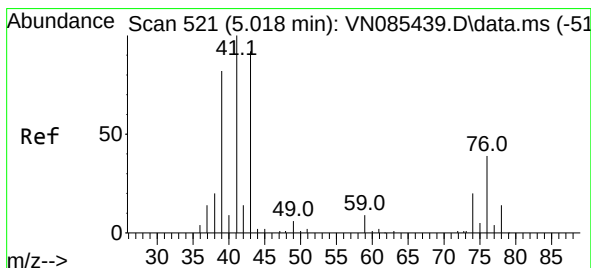
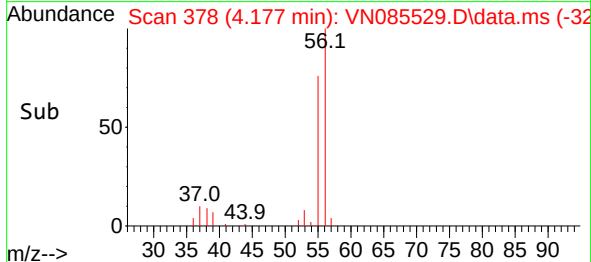
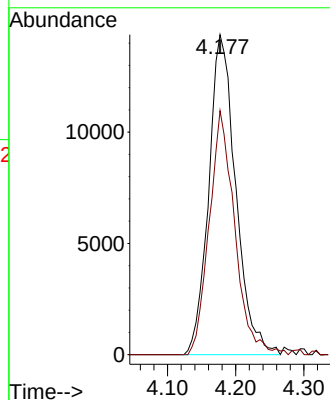
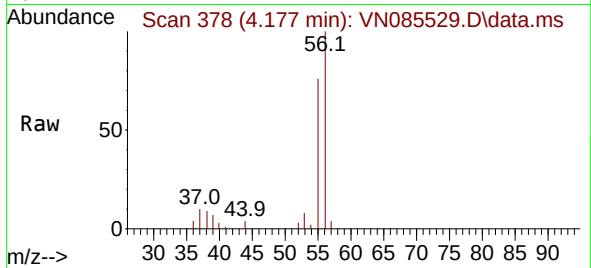




#13  
Acrolein  
Concen: 84.676 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

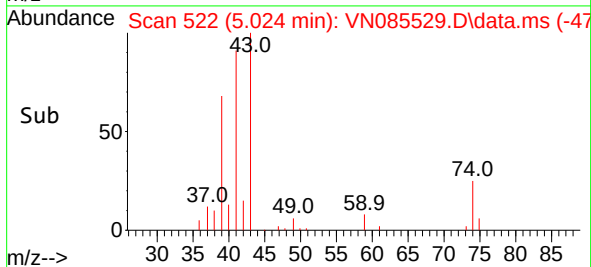
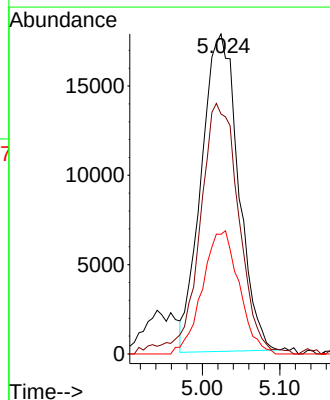
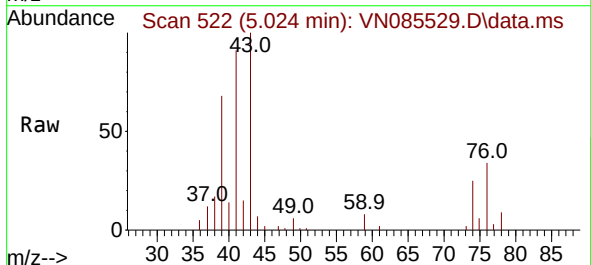
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion: 56 Resp: 39646  
Ion Ratio Lower Upper  
56 100  
55 71.9 56.3 84.5

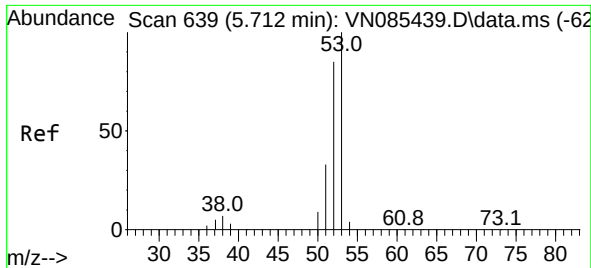


#14  
Allyl chloride  
Concen: 18.275 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 41 Resp: 59056  
Ion Ratio Lower Upper  
41 100  
39 83.5 64.4 96.6  
76 38.4 30.5 45.7



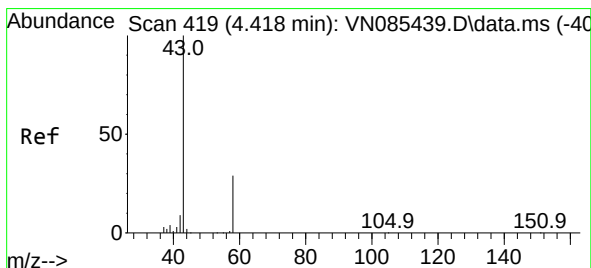
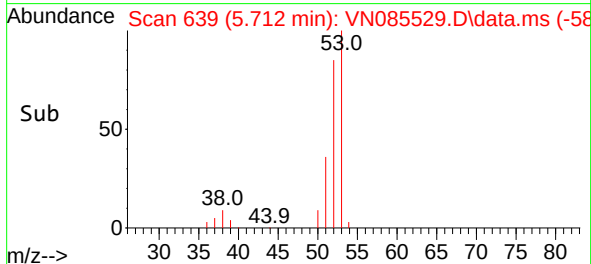
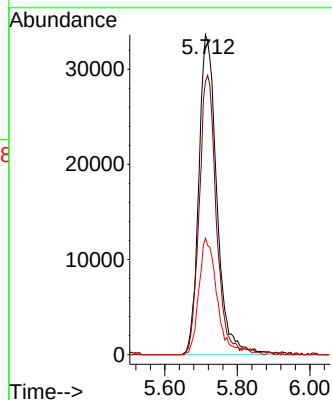
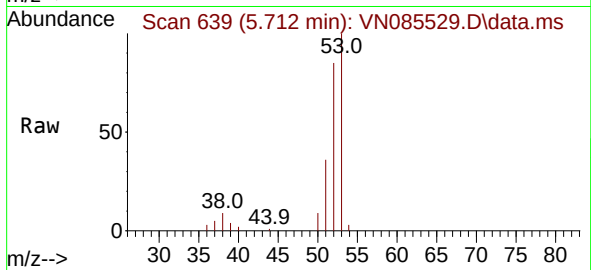




#15  
Acrylonitrile  
Concen: 106.667 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

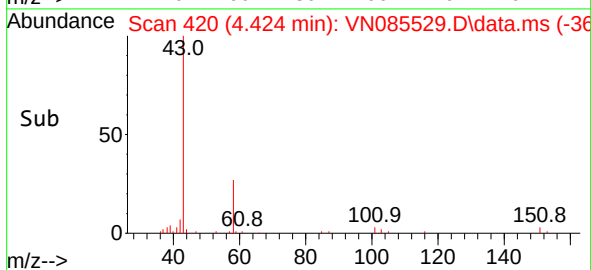
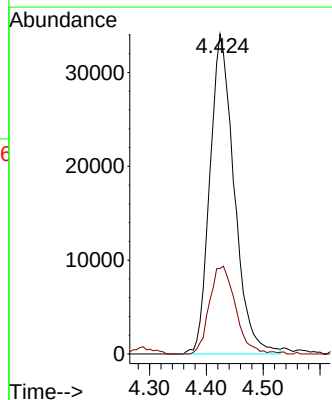
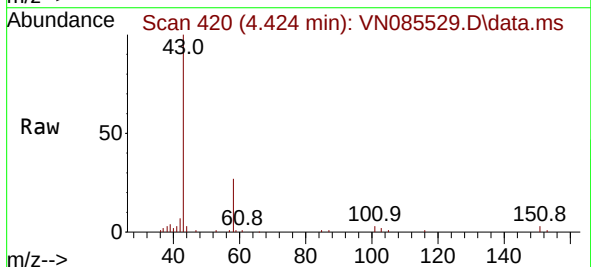
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

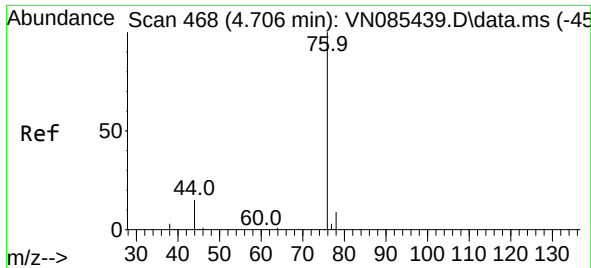
Tgt Ion: 53 Resp: 116207  
Ion Ratio Lower Upper  
53 100  
52 83.3 65.5 98.3  
51 36.3 29.8 44.8



#16  
Acetone  
Concen: 104.730 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 43 Resp: 101360  
Ion Ratio Lower Upper  
43 100  
58 26.7 23.8 35.6

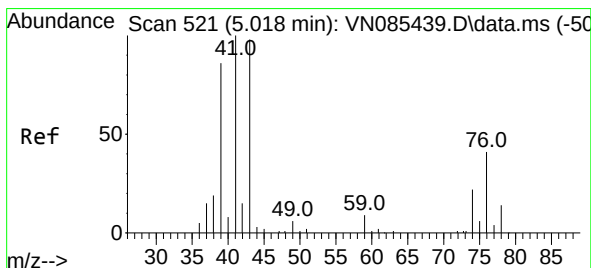
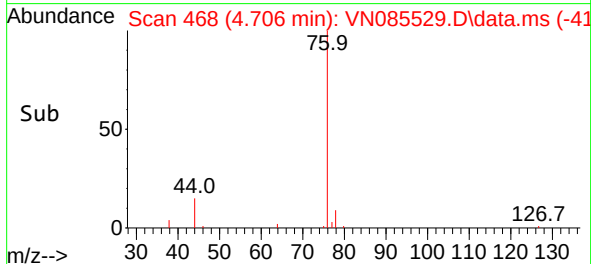
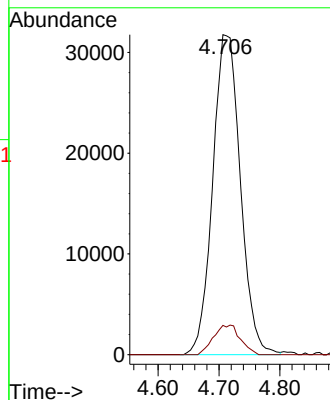
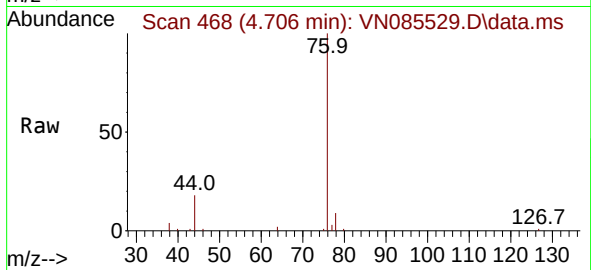




#17  
Carbon Disulfide  
Concen: 16.364 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

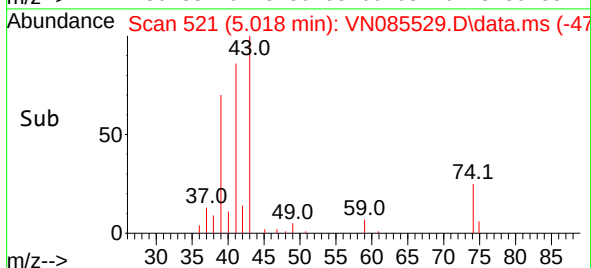
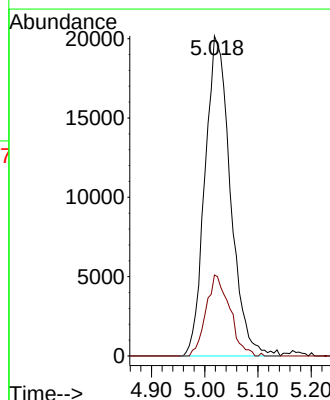
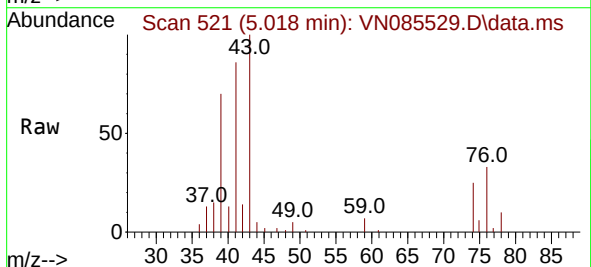
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

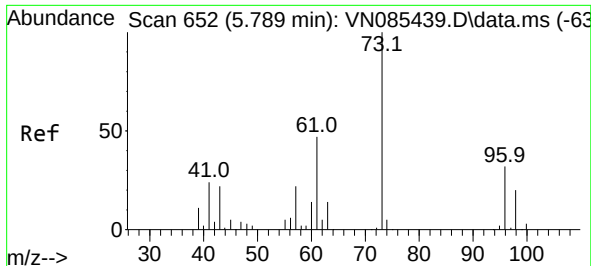
Tgt Ion: 76 Resp: 100344  
Ion Ratio Lower Upper  
76 100  
78 9.2 6.9 10.3



#18  
Methyl Acetate  
Concen: 22.762 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 43 Resp: 66988  
Ion Ratio Lower Upper  
43 100  
74 23.6 18.6 28.0

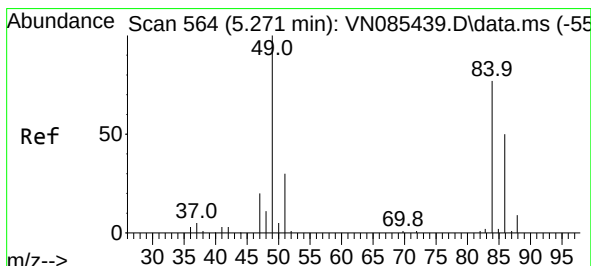
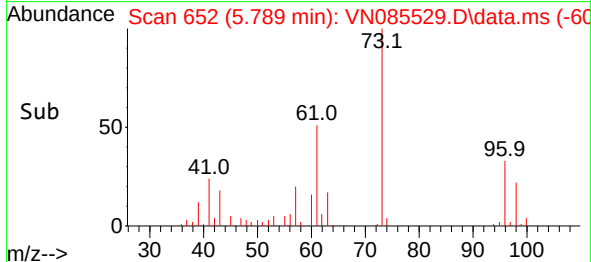
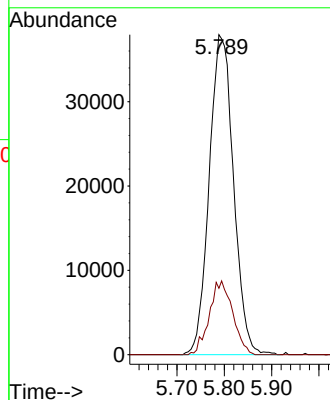
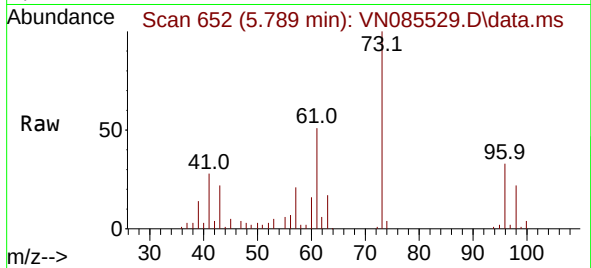




#19  
Methyl tert-butyl Ether  
Concen: 20.885 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

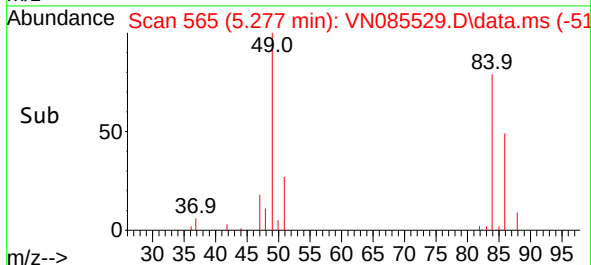
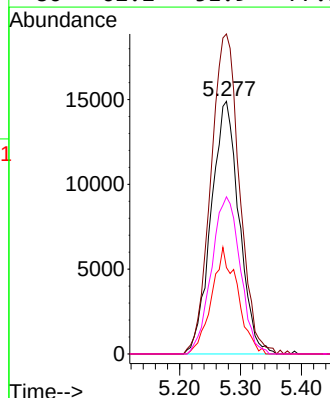
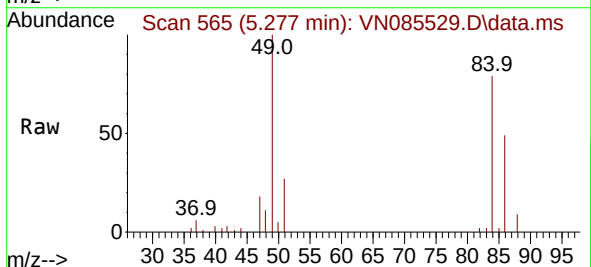
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

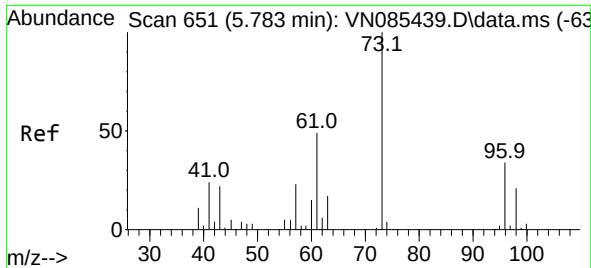
Tgt Ion: 73 Resp: 135056  
Ion Ratio Lower Upper  
73 100  
57 20.8 17.8 26.8



#20  
Methylene Chloride  
Concen: 19.820 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 84 Resp: 47487  
Ion Ratio Lower Upper  
84 100  
49 126.6 104.1 156.1  
51 34.2 31.0 46.4  
86 62.2 51.9 77.9

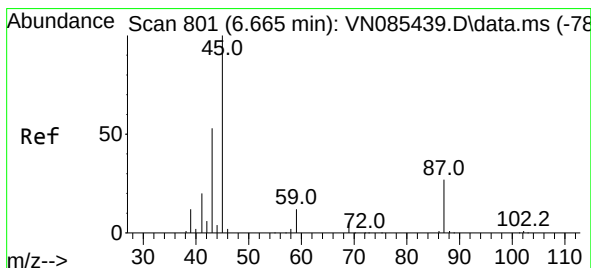
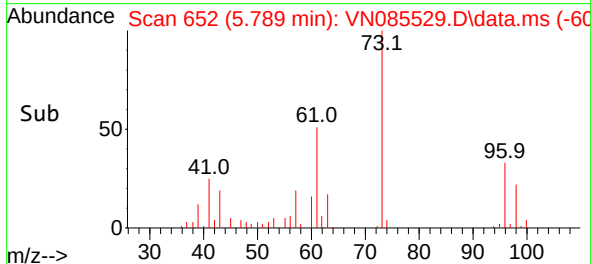
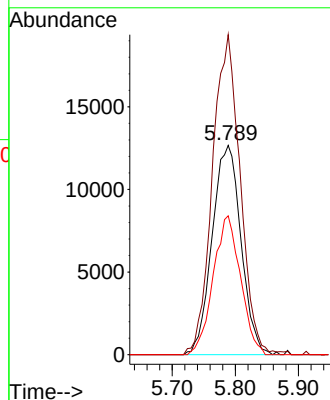
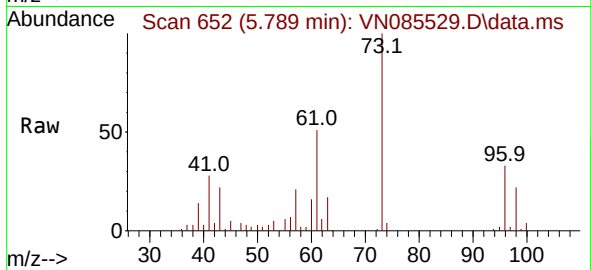




#21  
trans-1,2-Dichloroethene  
Concen: 18.903 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

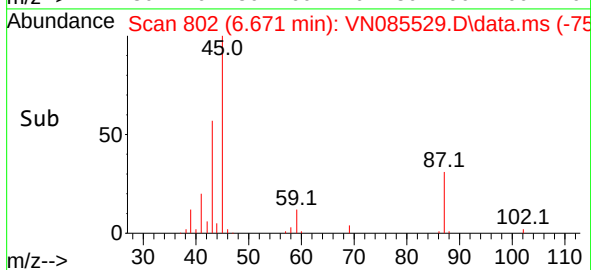
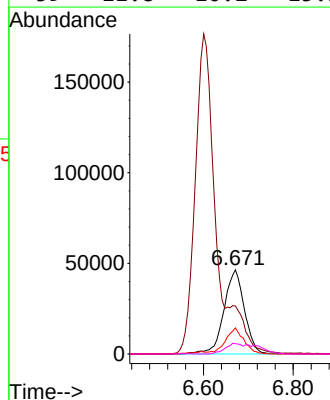
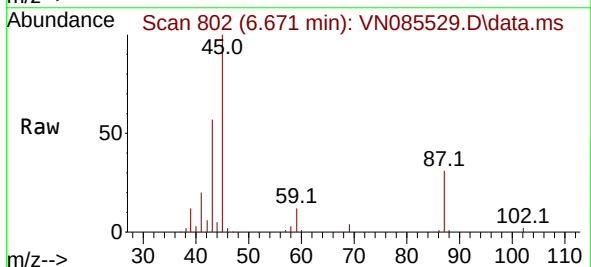
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

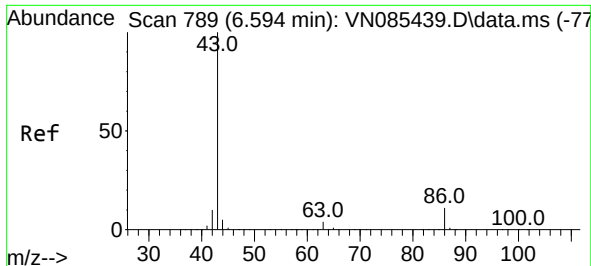
Tgt Ion: 96 Resp: 40233  
Ion Ratio Lower Upper  
96 100  
61 152.9 115.7 173.5  
98 66.4 49.8 74.8



#22  
Diisopropyl ether  
Concen: 20.550 ug/l  
RT: 6.671 min Scan# 802  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 45 Resp: 147403  
Ion Ratio Lower Upper  
45 100  
43 55.8 45.0 67.6  
87 31.0 21.8 32.8  
59 11.8 10.2 15.2

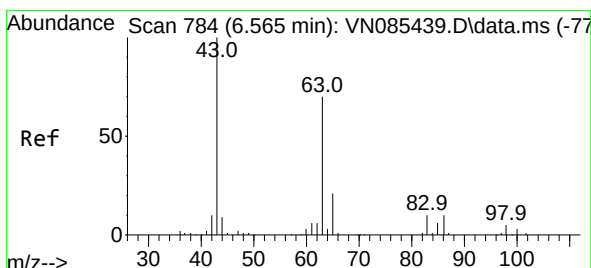
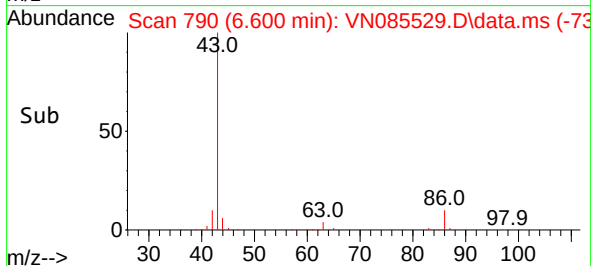
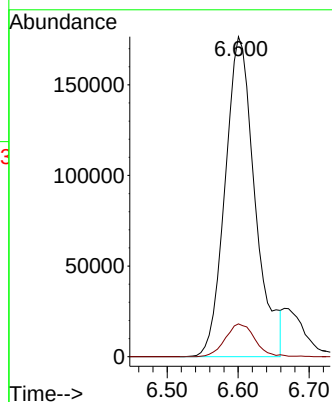
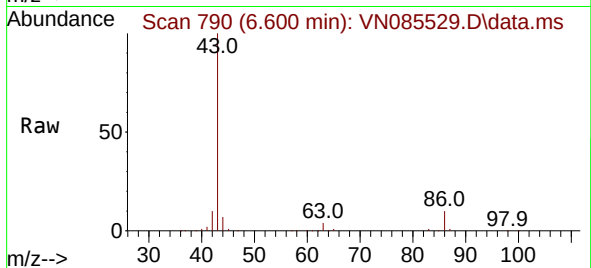




#23  
 Vinyl Acetate  
 Concen: 102.796 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

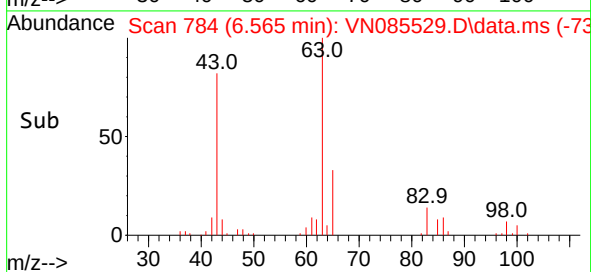
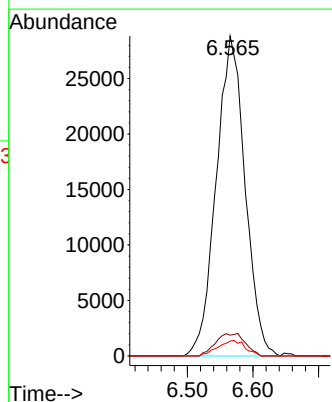
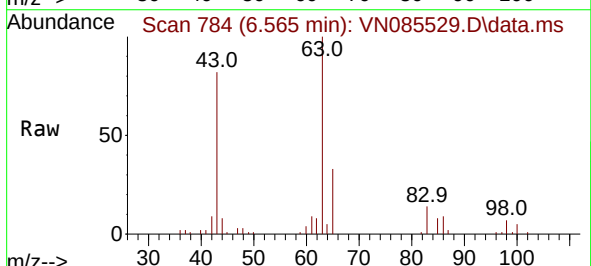
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

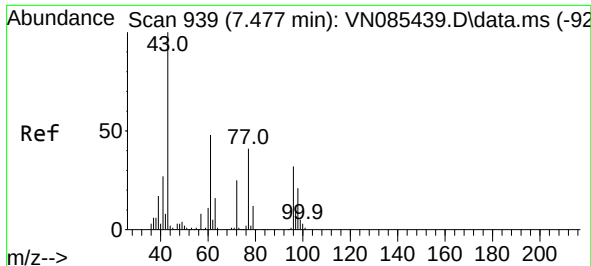
Tgt Ion: 43 Resp: 516002  
 Ion Ratio Lower Upper  
 43 100  
 86 10.2 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 20.110 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion: 63 Resp: 87952  
 Ion Ratio Lower Upper  
 63 100  
 98 6.5 3.3 9.8  
 100 4.7 2.0 6.0

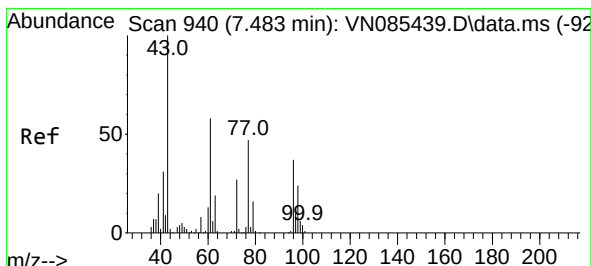
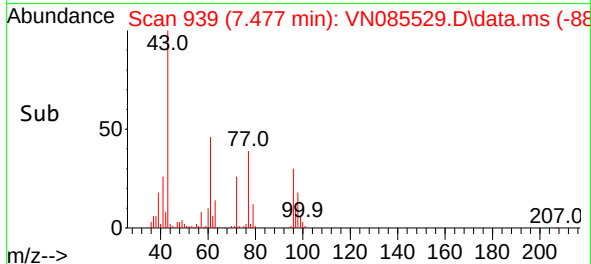
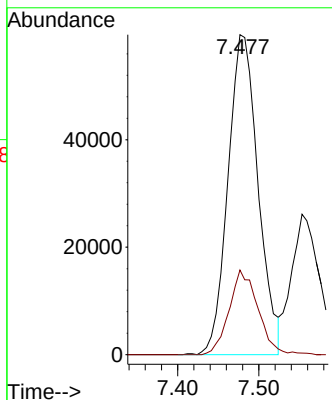
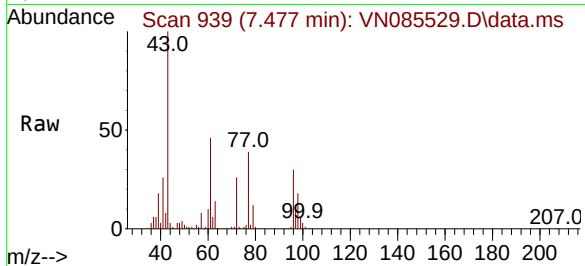




#25  
2-Butanone  
Concen: 107.876 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

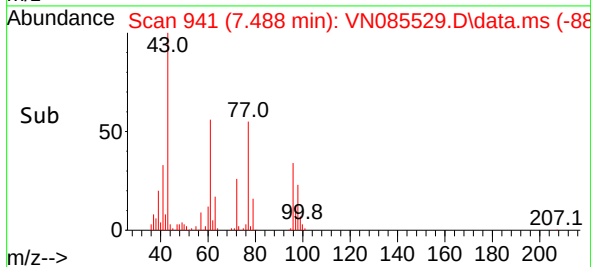
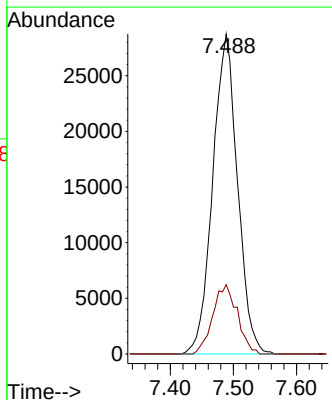
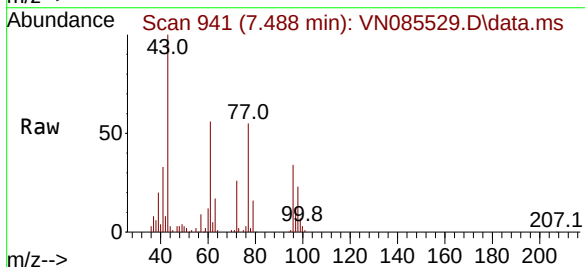
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

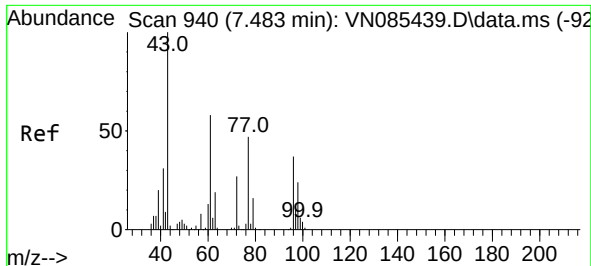
Tgt Ion: 43 Resp: 153642  
Ion Ratio Lower Upper  
43 100  
72 26.4 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 22.133 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 77 Resp: 78263  
Ion Ratio Lower Upper  
77 100  
97 21.4 10.7 32.1

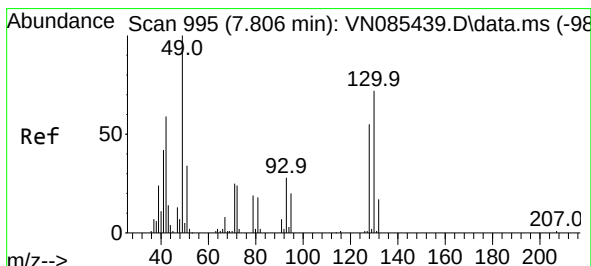
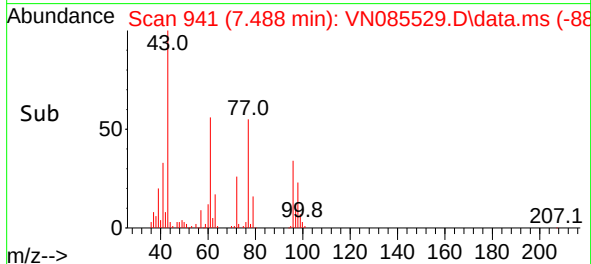
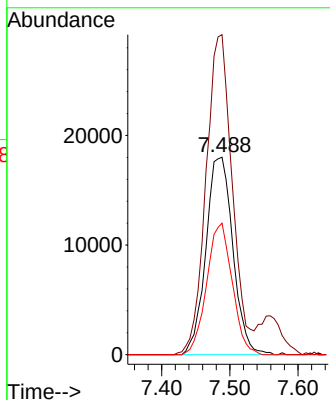
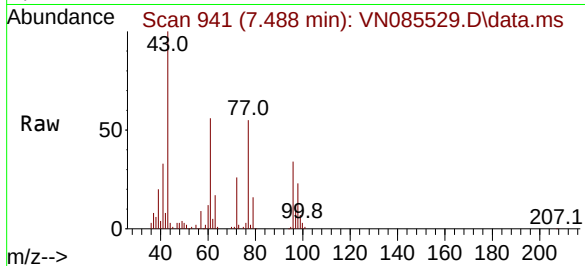




#27  
 cis-1,2-Dichloroethene  
 Concen: 19.875 ug/l  
 RT: 7.488 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

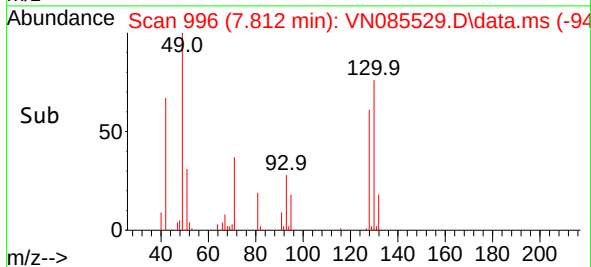
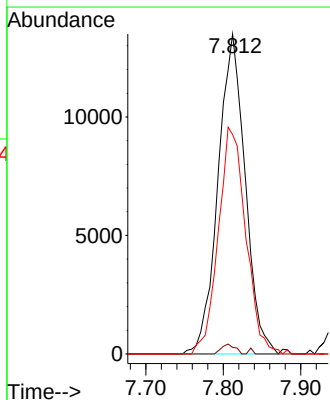
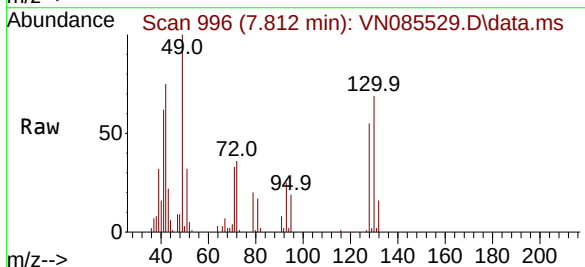
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

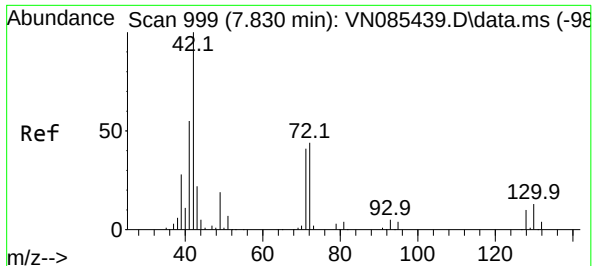
Tgt Ion: 96 Resp: 49822  
 Ion Ratio Lower Upper  
 96 100  
 61 157.4 0.0 311.8  
 98 62.7 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 16.145 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion: 49 Resp: 32851  
 Ion Ratio Lower Upper  
 49 100  
 129 1.5 0.0 4.4  
 130 72.0 55.0 82.4





#29

Tetrahydrofuran

Concen: 112.971 ug/l

RT: 7.836 min Scan# 1000

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

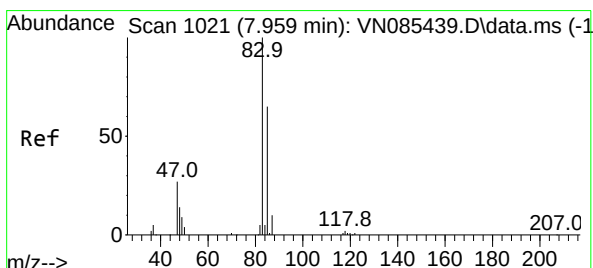
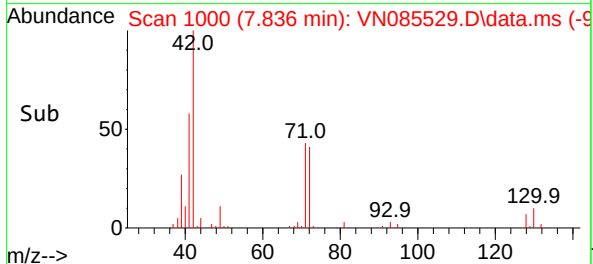
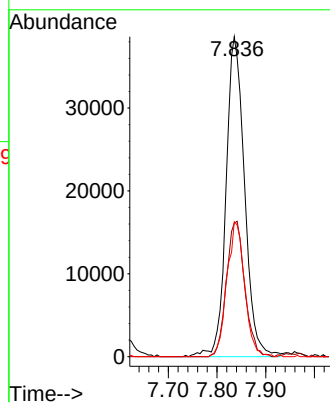
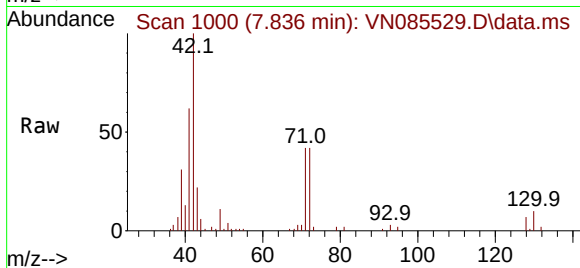
Tgt Ion: 42 Resp: 102010

Ion Ratio Lower Upper

42 100

72 41.9 34.2 51.2

71 40.5 32.5 48.7



#30

Chloroform

Concen: 20.553 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085529.D

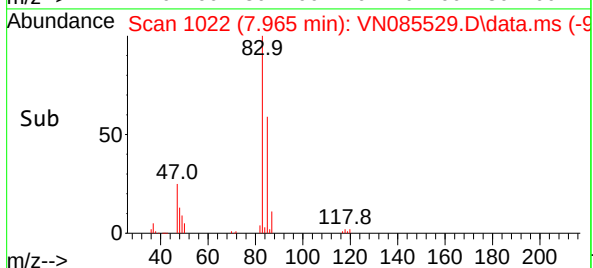
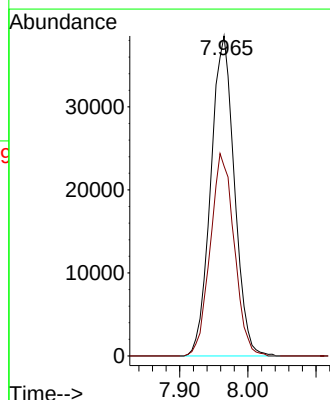
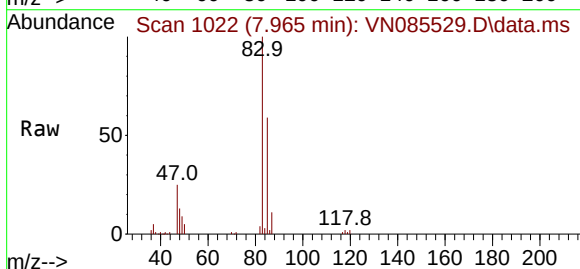
Acq: 28 Jan 2025 11:15

Tgt Ion: 83 Resp: 92905

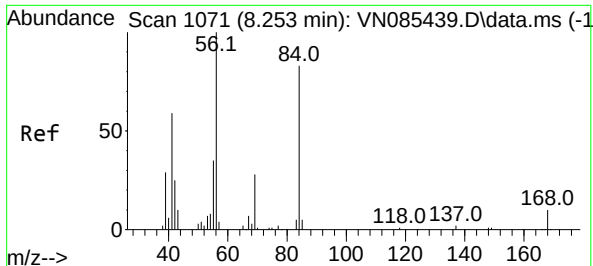
Ion Ratio Lower Upper

83 100

85 59.4 51.8 77.6



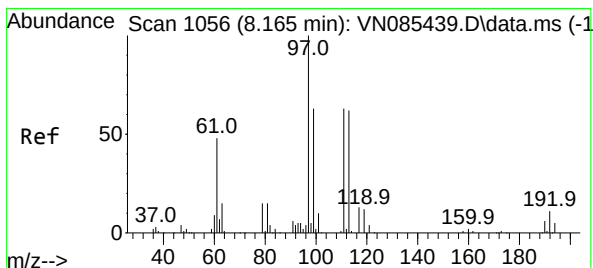
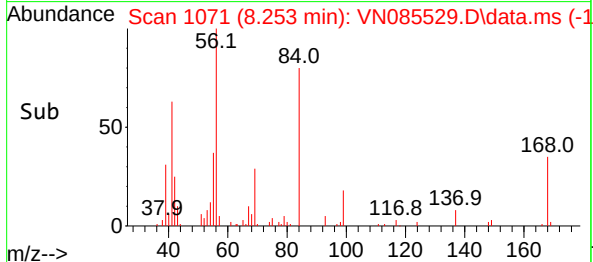
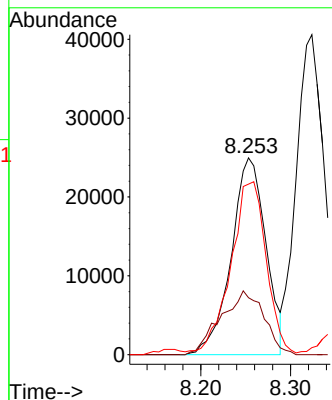
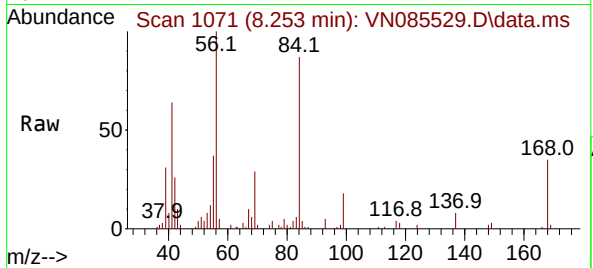




#31  
Cyclohexane  
Concen: 17.643 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

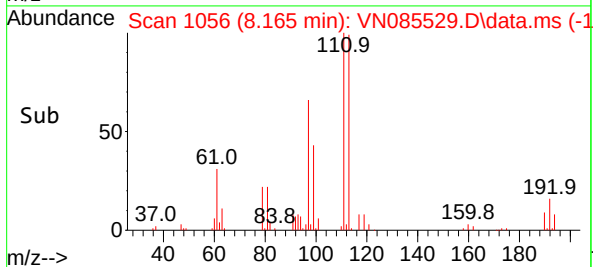
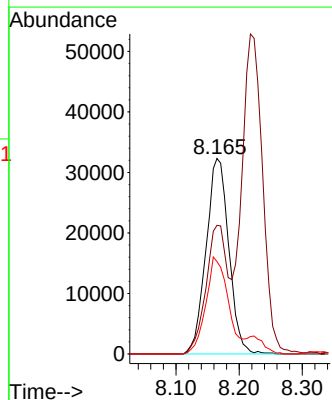
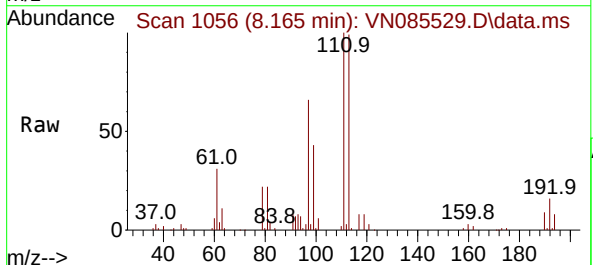
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

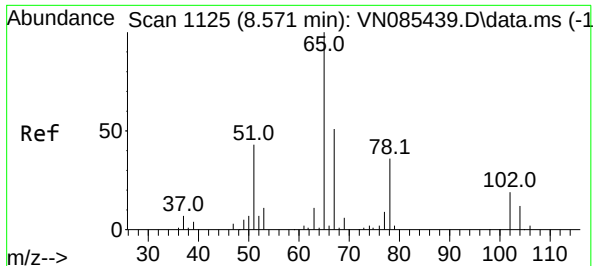
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 67069 |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 29.0  | 22.2  | 33.4  |
| 84       | 84.8  | 66.4  | 99.6  |



#32  
1,1,1-Trichloroethane  
Concen: 20.408 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 80919 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.9  | 49.8  | 74.6  |
| 61       | 48.7  | 41.4  | 62.2  |





#33

1,2-Dichloroethane-d4

Concen: 51.135 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

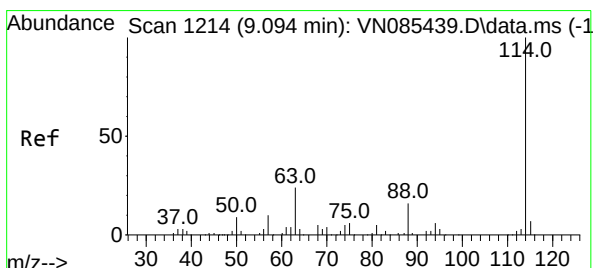
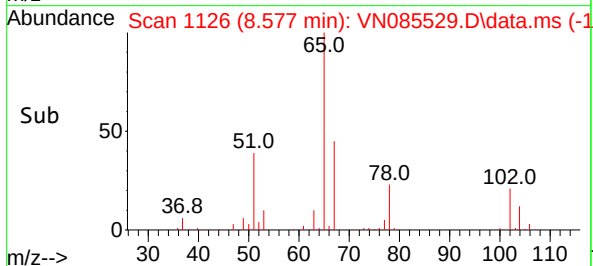
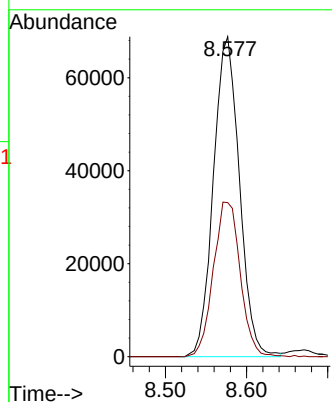
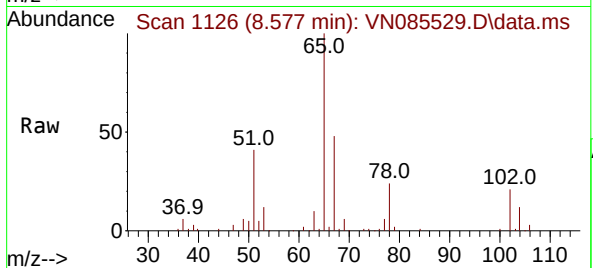
VN0128WBS01

Tgt Ion: 65 Resp: 153168

Ion Ratio Lower Upper

65 100

67 50.0 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

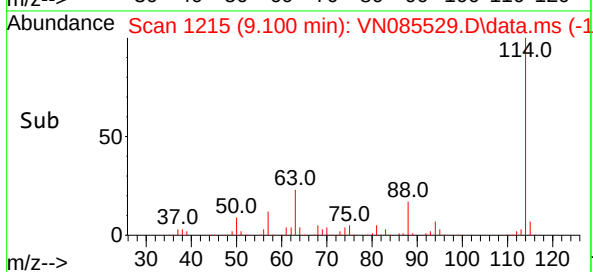
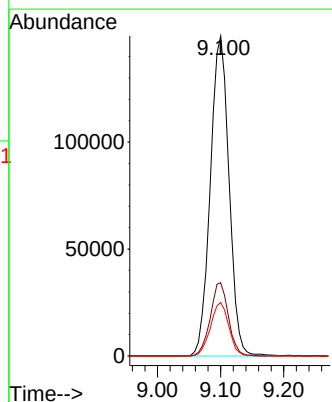
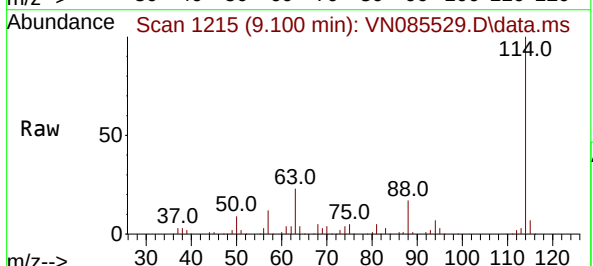
Tgt Ion: 114 Resp: 307569

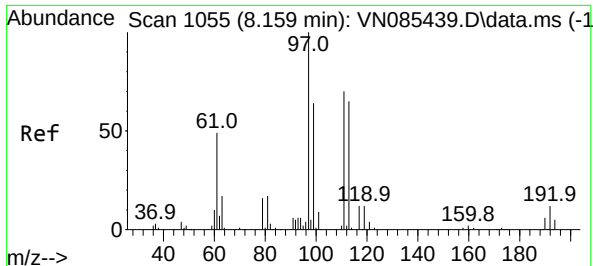
Ion Ratio Lower Upper

114 100

63 22.9 0.0 47.6

88 16.7 0.0 32.6





#35

Dibromofluoromethane

Concen: 53.225 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

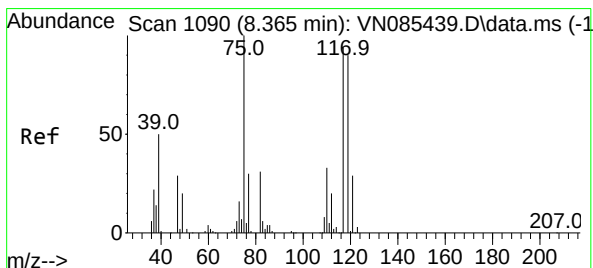
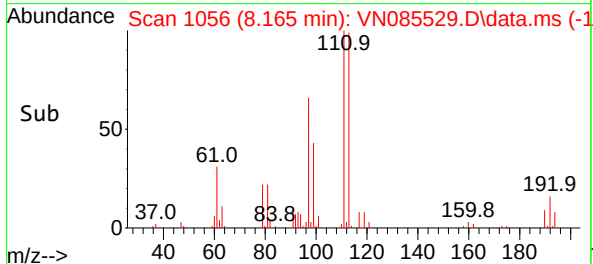
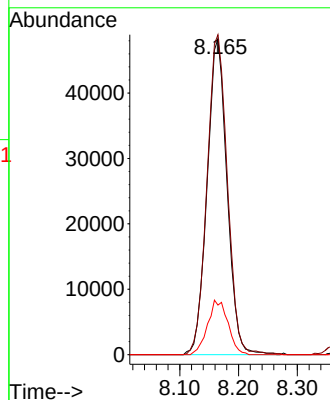
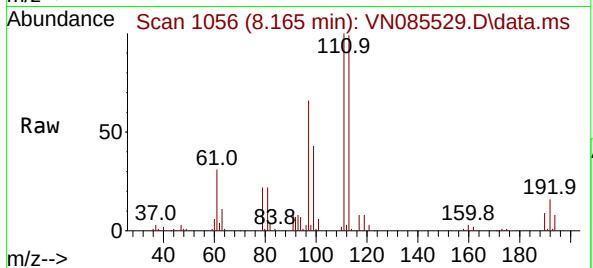
Tgt Ion:113 Resp: 113571

Ion Ratio Lower Upper

113 100

111 103.6 82.7 124.1

192 17.7 14.3 21.5



#36

1,1-Dichloropropene

Concen: 19.673 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

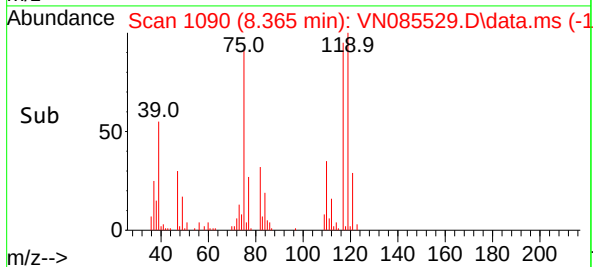
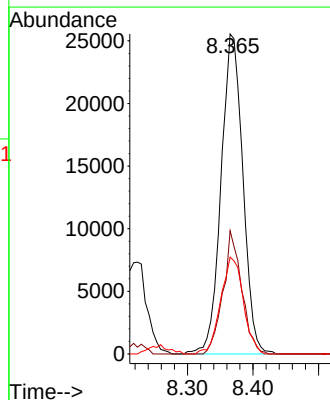
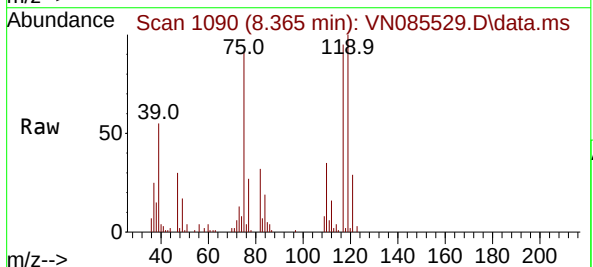
Tgt Ion: 75 Resp: 58916

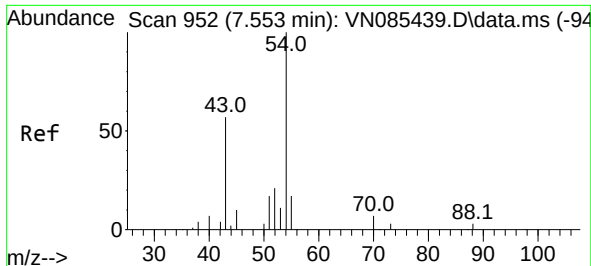
Ion Ratio Lower Upper

75 100

110 33.1 16.5 49.5

77 31.4 24.4 36.6

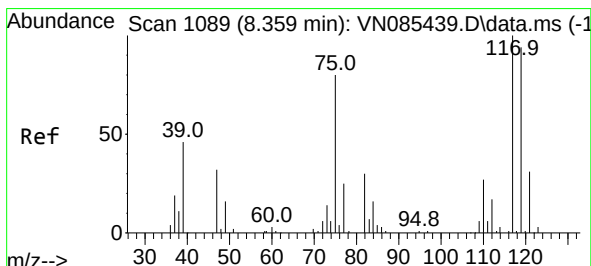
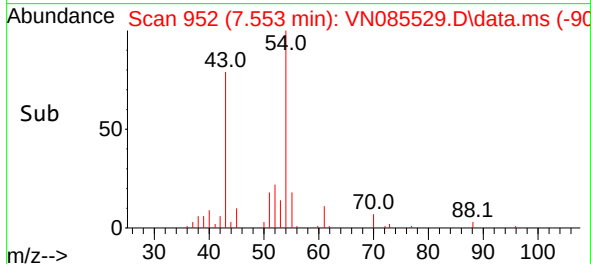
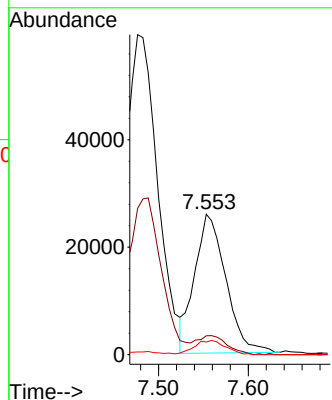
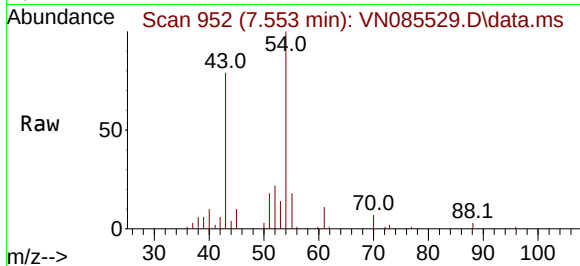




#37  
Ethyl Acetate  
Concen: 20.722 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

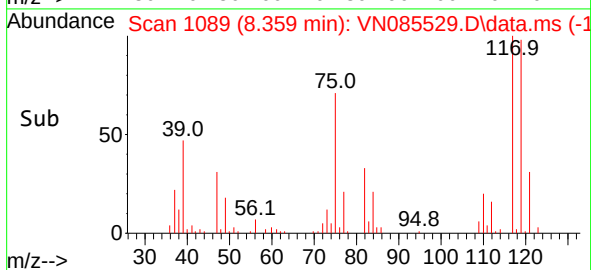
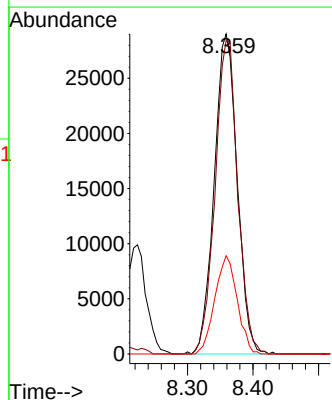
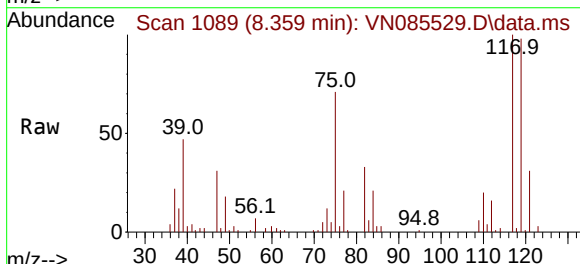
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

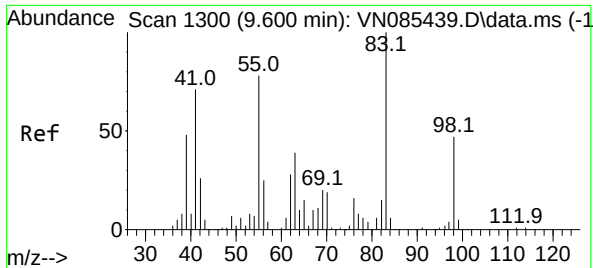
Tgt Ion: 43 Resp: 62638  
Ion Ratio Lower Upper  
43 100  
61 13.1 10.9 16.3  
70 10.3 7.5 11.3



#38  
Carbon Tetrachloride  
Concen: 20.543 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 117 Resp: 70429  
Ion Ratio Lower Upper  
117 100  
119 97.9 75.4 113.2  
121 30.7 24.6 37.0





#39

Methylcyclohexane

Concen: 18.865 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

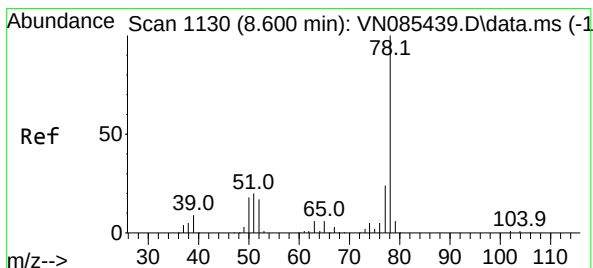
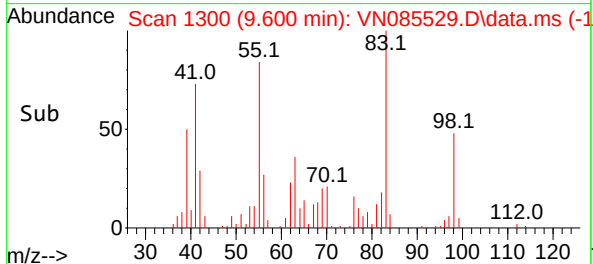
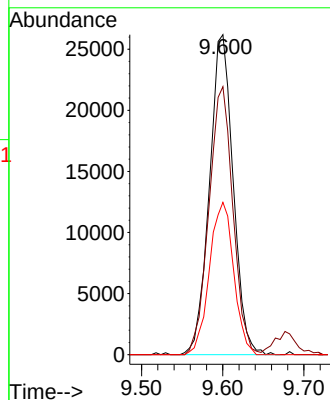
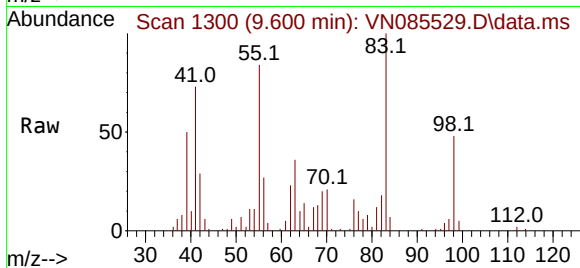
Tgt Ion: 83 Resp: 53089

Ion Ratio Lower Upper

83 100

55 83.8 62.6 94.0

98 47.6 37.7 56.5



#40

Benzene

Concen: 20.683 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085529.D

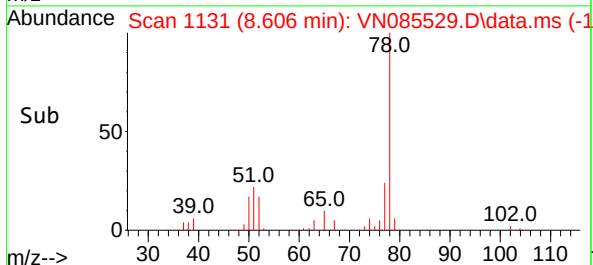
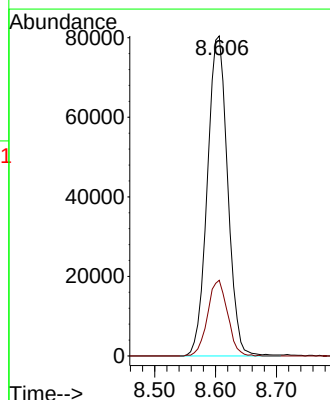
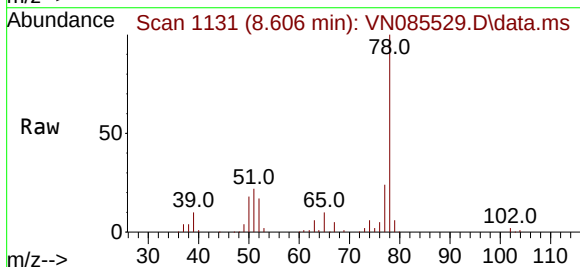
Acq: 28 Jan 2025 11:15

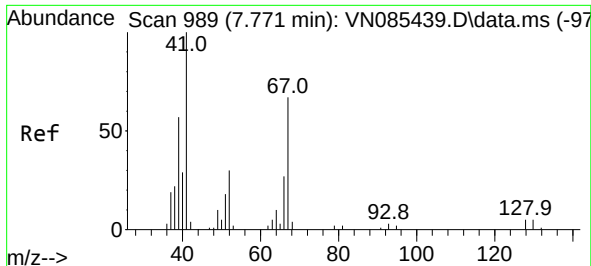
Tgt Ion: 78 Resp: 186111

Ion Ratio Lower Upper

78 100

77 23.7 19.0 28.6

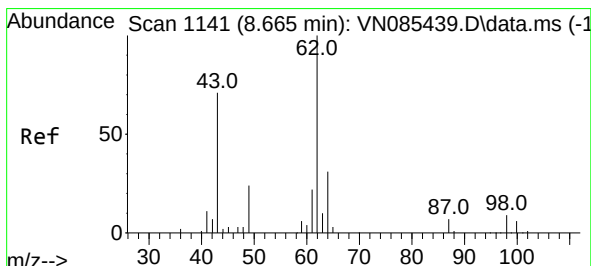
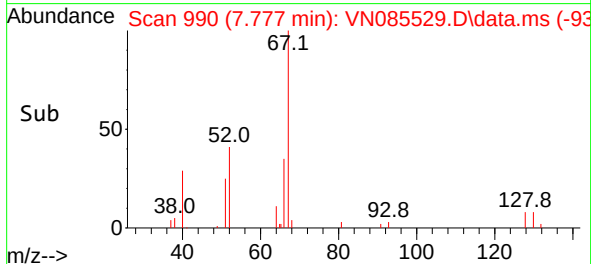
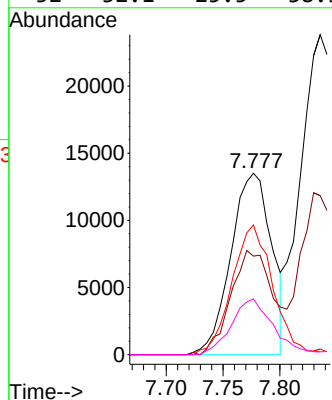
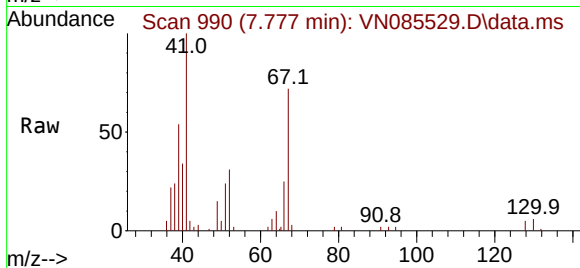




#41  
Methacrylonitrile  
Concen: 21.410 ug/l  
RT: 7.777 min Scan# 989  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

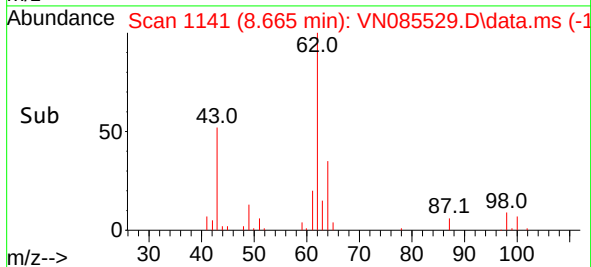
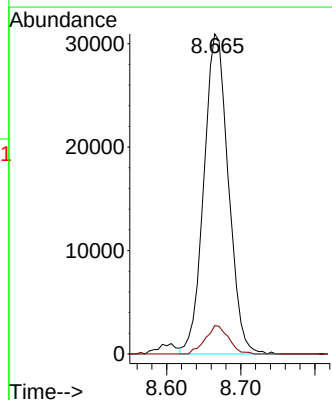
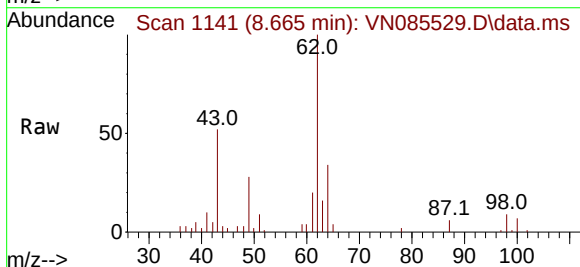
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

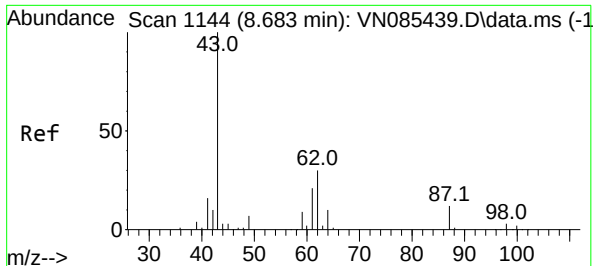
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 33670 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 60.5  | 46.0  | 69.0  |
| 67       | 71.9  | 57.4  | 86.2  |
| 52       | 32.1  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 20.970 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 71068 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.4   | 0.0   | 17.0  |

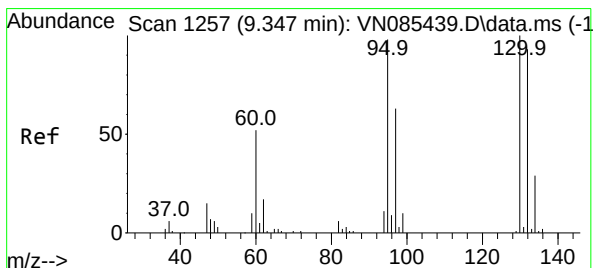
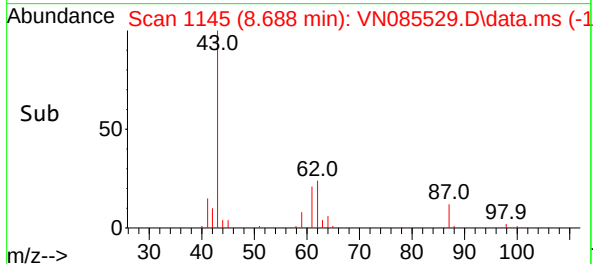
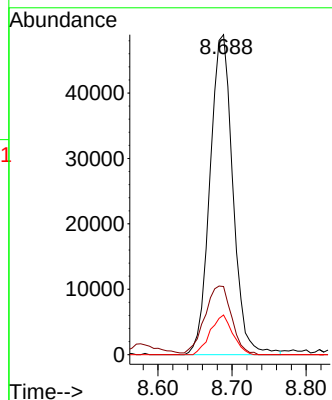
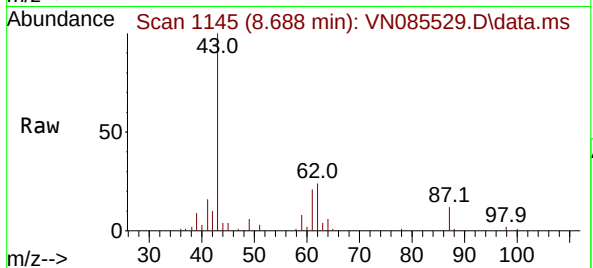




#43  
Isopropyl Acetate  
Concen: 21.686 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

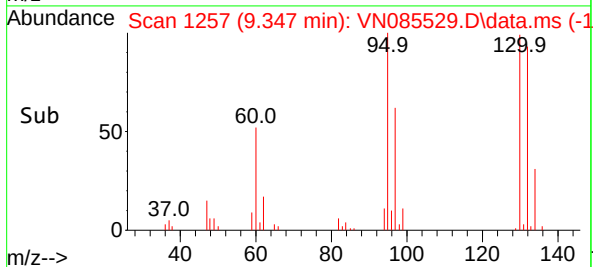
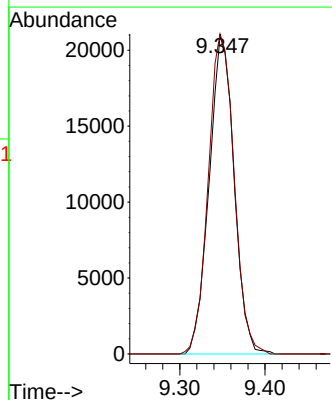
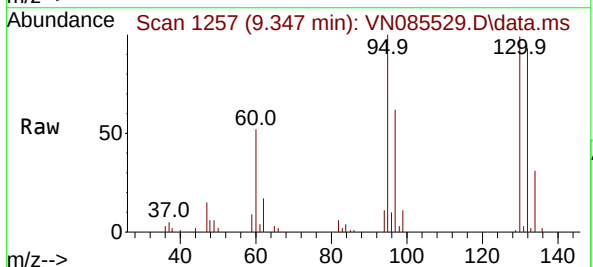
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

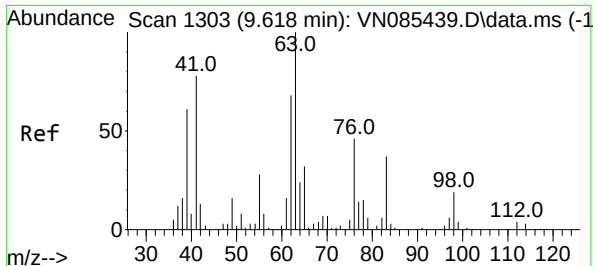
Tgt Ion: 43 Resp: 105036  
Ion Ratio Lower Upper  
43 100  
61 25.2 20.7 31.1  
87 12.1 9.8 14.8



#44  
Trichloroethene  
Concen: 20.374 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:130 Resp: 42674  
Ion Ratio Lower Upper  
130 100  
95 100.5 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.743 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

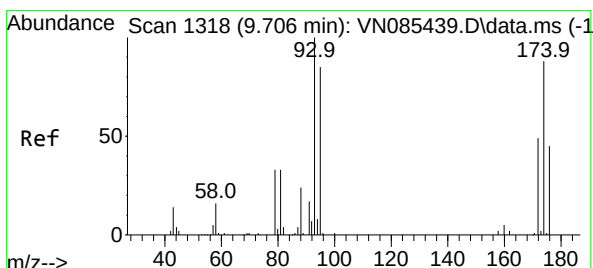
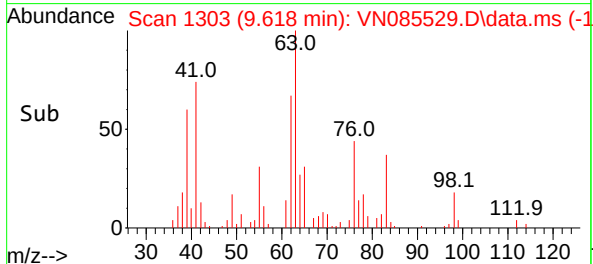
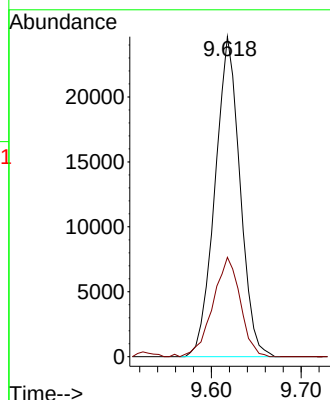
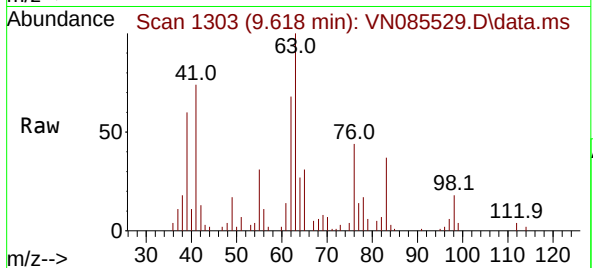
VN0128WBS01

Tgt Ion: 63 Resp: 47674

Ion Ratio Lower Upper

63 100

65 31.1 25.6 38.4



#46

Dibromomethane

Concen: 20.395 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

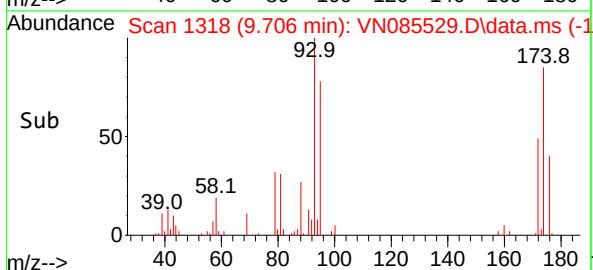
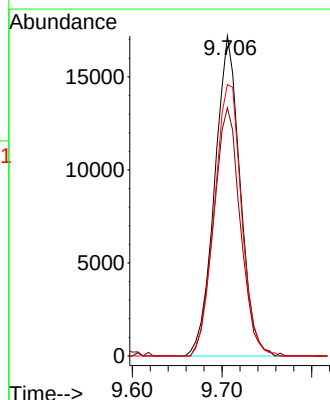
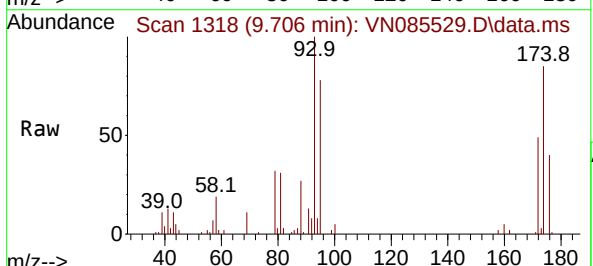
Tgt Ion: 93 Resp: 33823

Ion Ratio Lower Upper

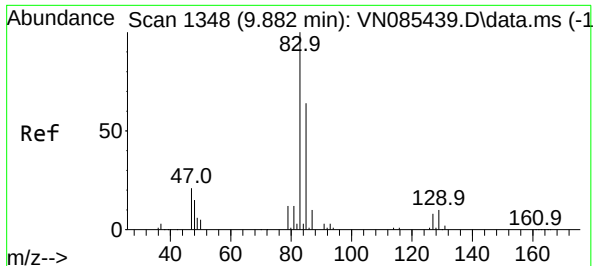
93 100

95 81.5 64.7 97.1

174 90.4 69.0 103.4



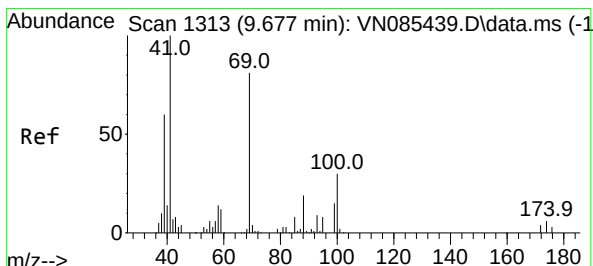
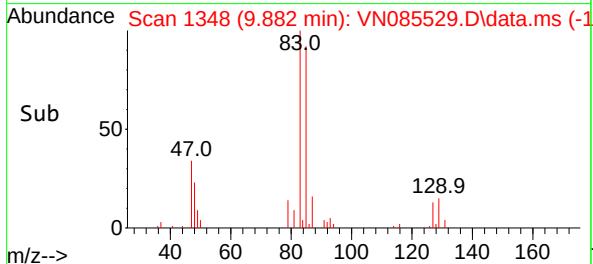
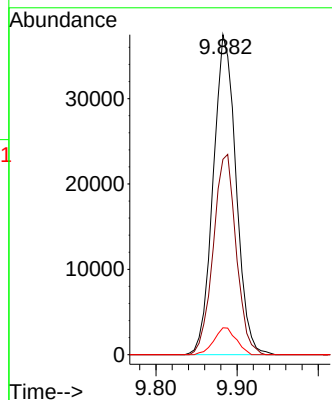
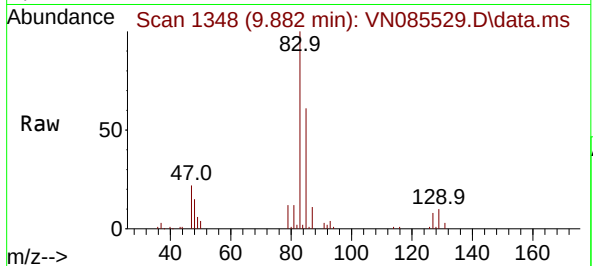




#47  
Bromodichloromethane  
Concen: 21.697 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

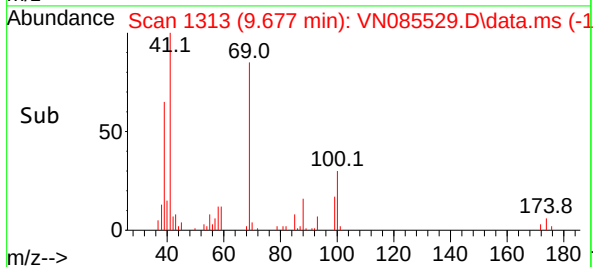
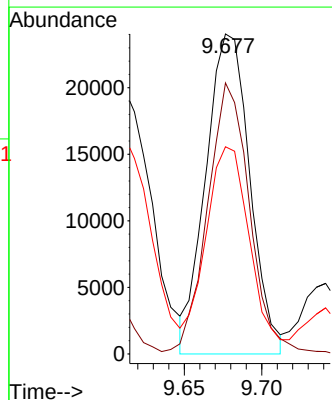
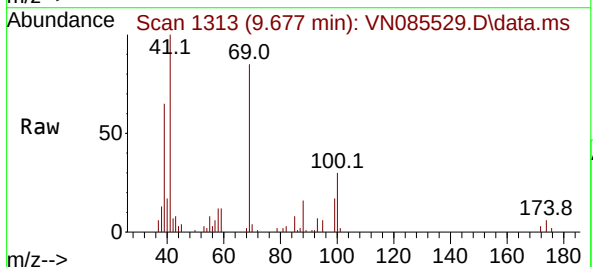
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

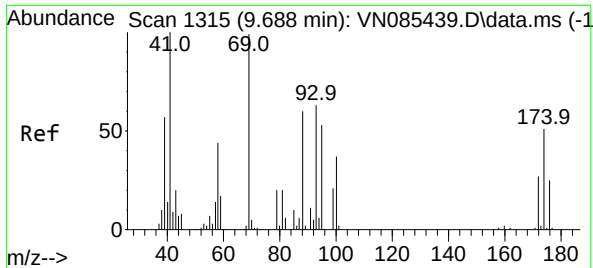
Tgt Ion: 83 Resp: 73309  
Ion Ratio Lower Upper  
83 100  
85 61.0 51.2 76.8  
127 8.4 6.5 9.7



#48  
Methyl methacrylate  
Concen: 21.823 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 41 Resp: 47567  
Ion Ratio Lower Upper  
41 100  
69 81.0 64.7 97.1  
39 65.5 49.0 73.6

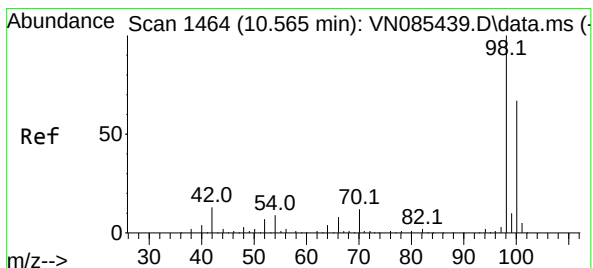
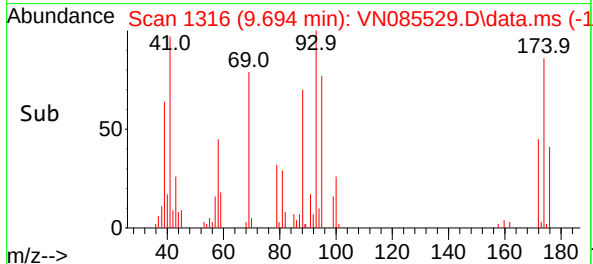
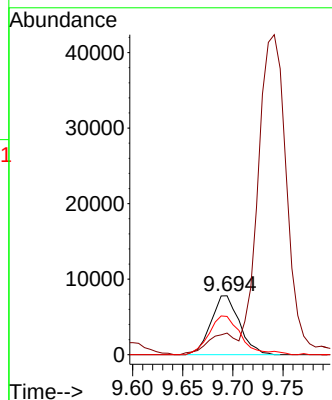
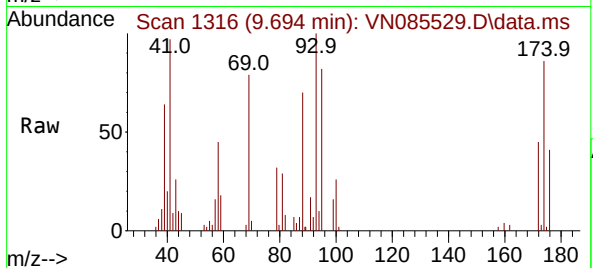




#49  
1,4-Dioxane  
Concen: 420.430 ug/l  
RT: 9.694 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

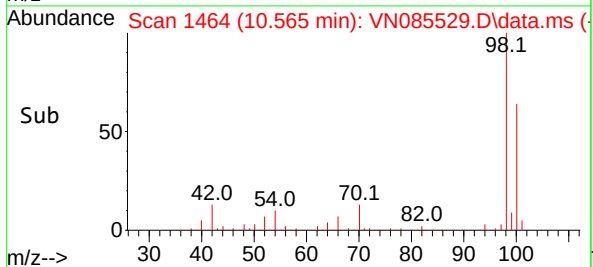
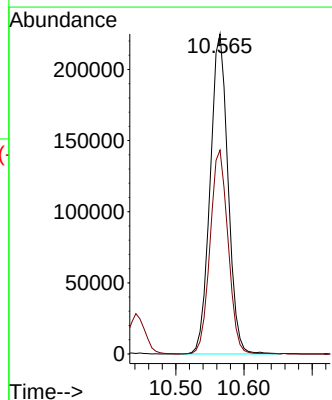
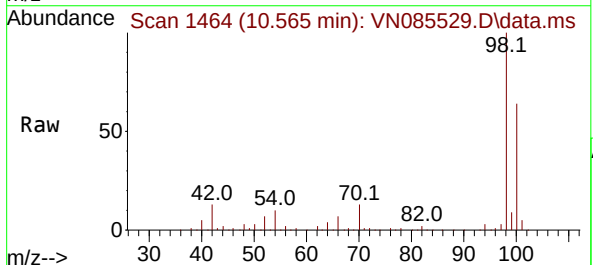
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

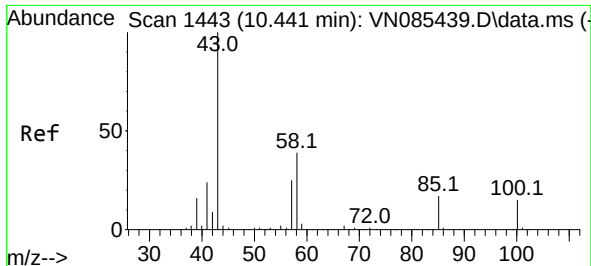
Tgt Ion: 88 Resp: 15432  
Ion Ratio Lower Upper  
88 100  
43 37.0 26.6 39.8  
58 74.0 59.5 89.3



#50  
Toluene-d8  
Concen: 54.088 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 98 Resp: 410056  
Ion Ratio Lower Upper  
98 100  
100 64.1 52.2 78.4

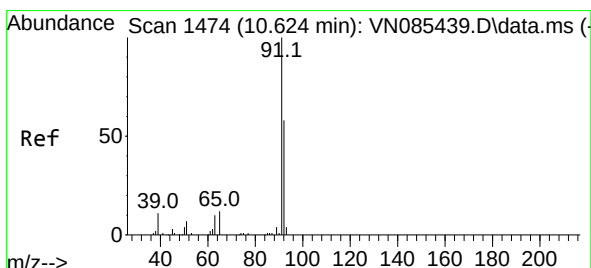
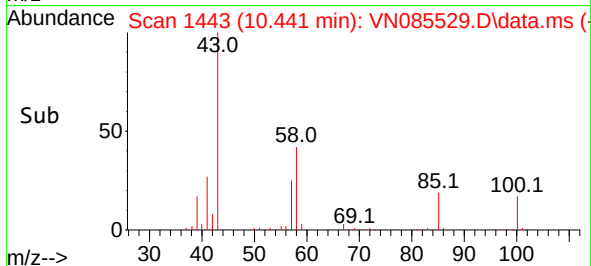
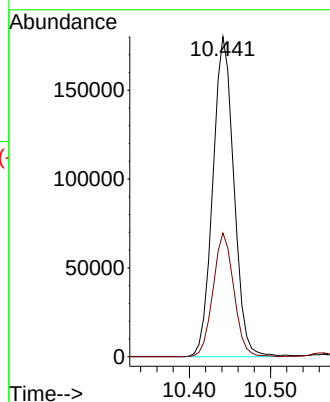
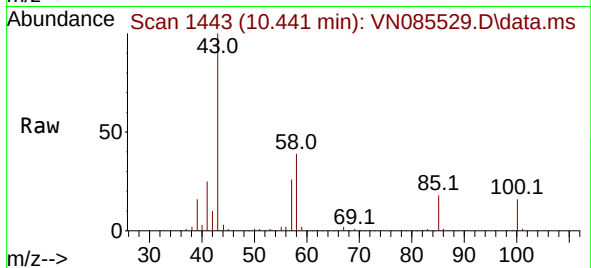




#51  
4-Methyl-2-Pentanone  
Concen: 115.555 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

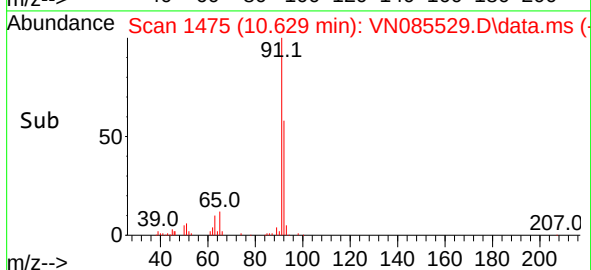
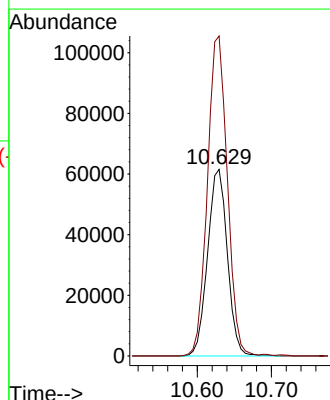
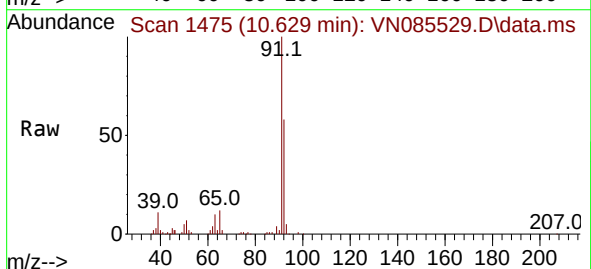
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

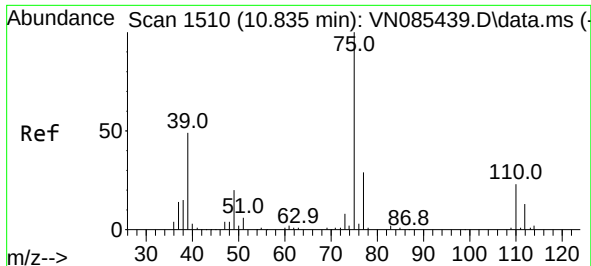
Tgt Ion: 43 Resp: 324778  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#52  
Toluene  
Concen: 21.864 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 92 Resp: 113994  
Ion Ratio Lower Upper  
92 100  
91 172.4 139.2 208.8

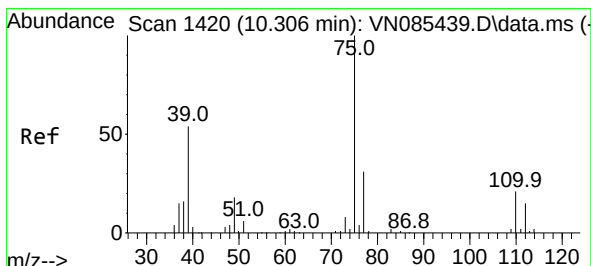
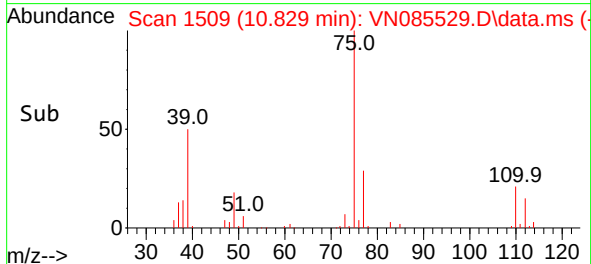
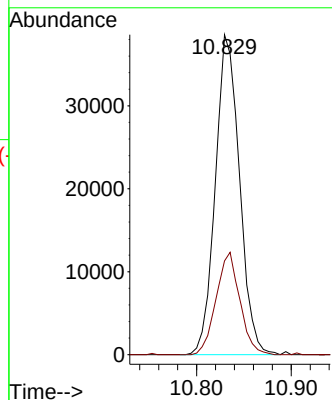
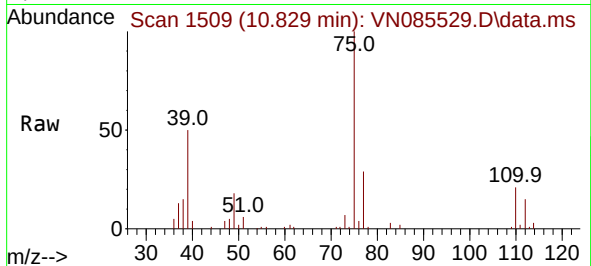




#53  
t-1,3-Dichloropropene  
Concen: 21.398 ug/l  
RT: 10.829 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

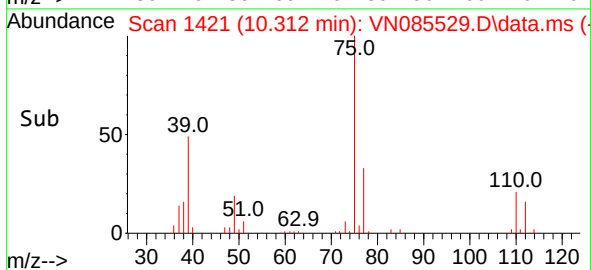
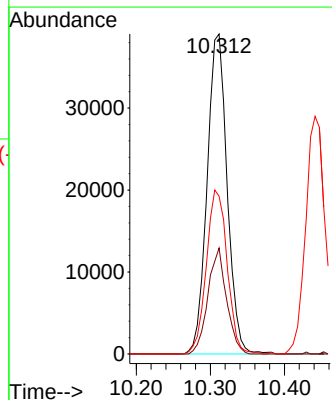
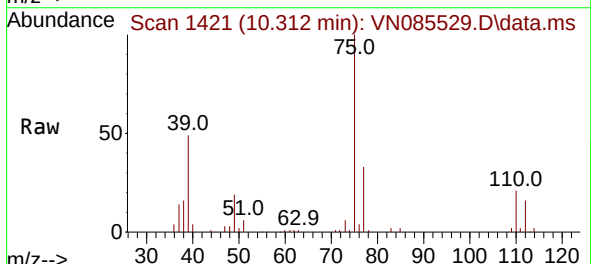
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

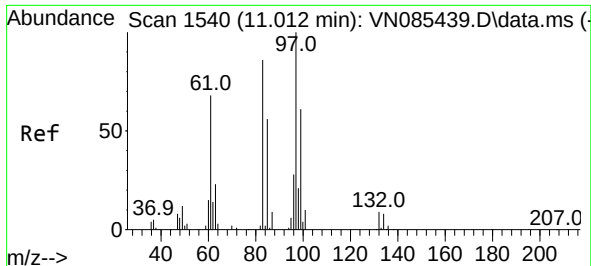
Tgt Ion: 75 Resp: 68322  
Ion Ratio Lower Upper  
75 100  
77 29.3 23.5 35.3



#54  
cis-1,3-Dichloropropene  
Concen: 21.530 ug/l  
RT: 10.312 min Scan# 1421  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 75 Resp: 73429  
Ion Ratio Lower Upper  
75 100  
77 33.1 25.0 37.4  
39 49.3 43.1 64.7

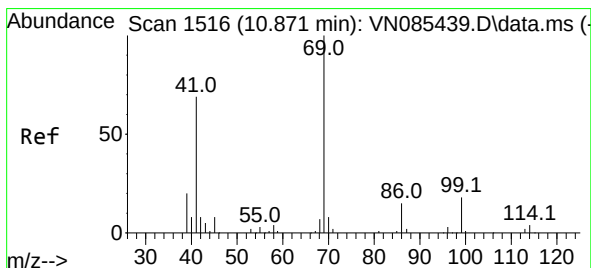
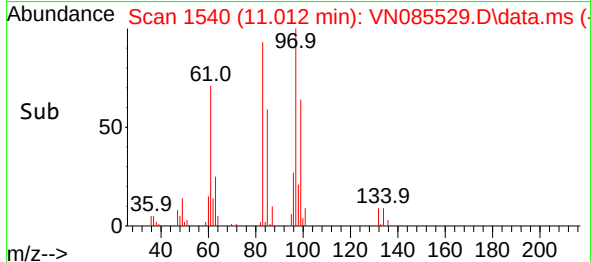
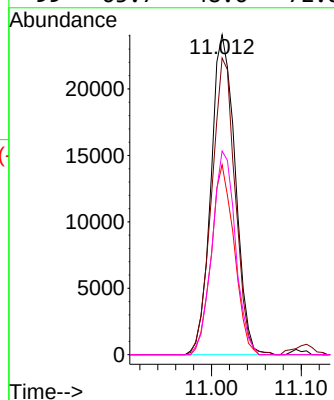
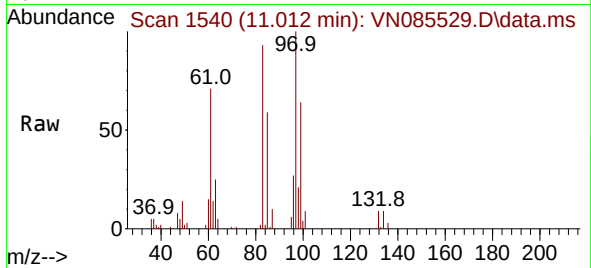




#55  
1,1,2-Trichloroethane  
Concen: 21.912 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

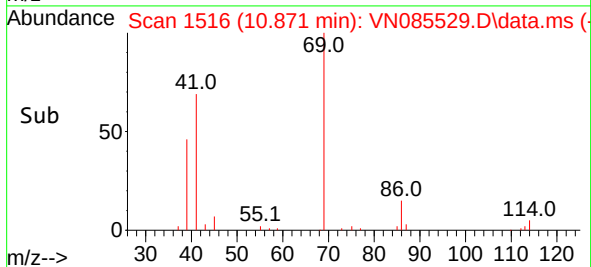
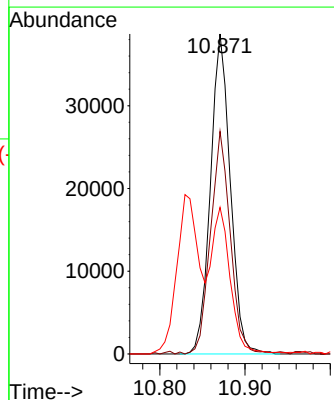
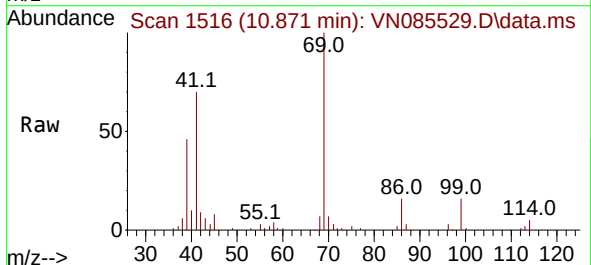
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

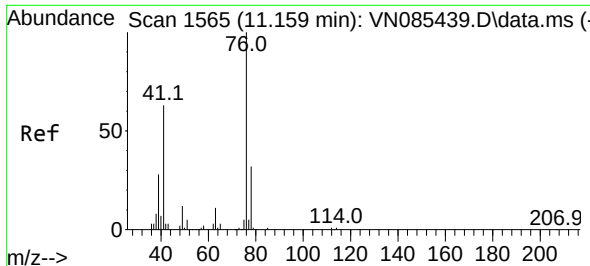
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 45212 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 92.7     | 69.0 103.6  |
| 85 59.4     | 44.6 66.8   |
| 99 63.7     | 48.6 72.8   |



#56  
Ethyl methacrylate  
Concen: 19.281 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

|             |             |
|-------------|-------------|
| Tgt Ion: 69 | Resp: 62727 |
| Ion Ratio   | Lower Upper |
| 69 100      |             |
| 41 69.3     | 54.6 82.0   |
| 39 42.9     | 32.4 48.6   |





#57

1,3-Dichloropropane

Concen: 21.915 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

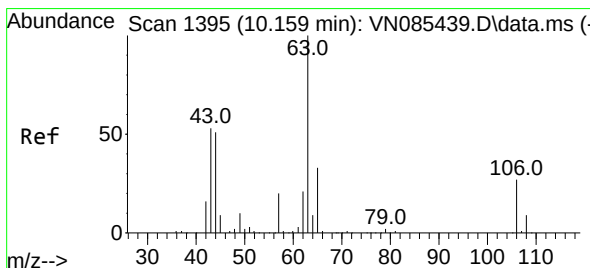
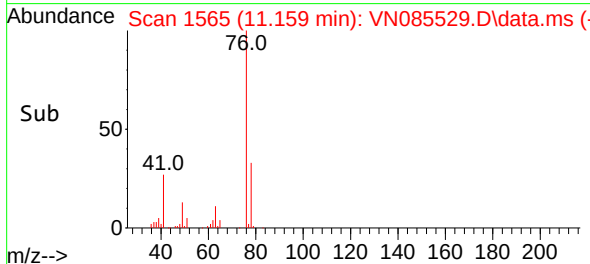
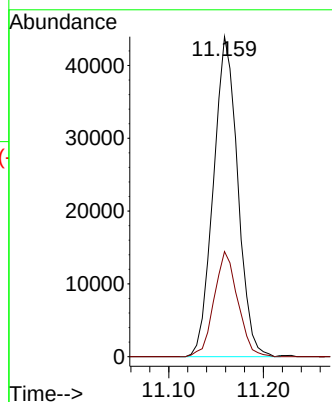
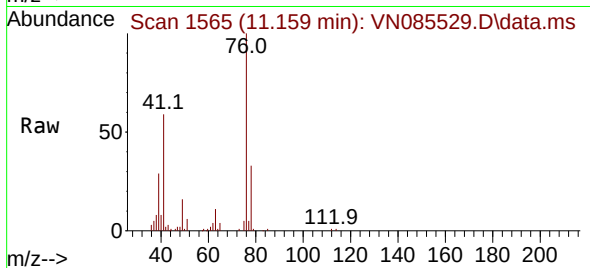
VN0128WBS01

Tgt Ion: 76 Resp: 78623

Ion Ratio Lower Upper

76 100

78 32.0 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 87.817 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085529.D

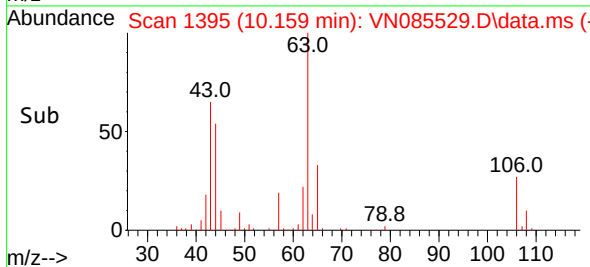
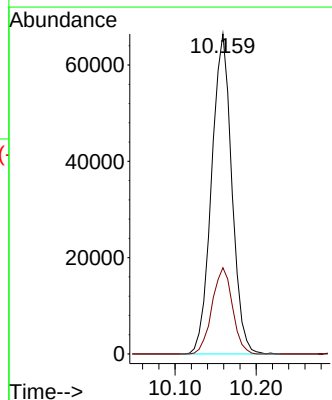
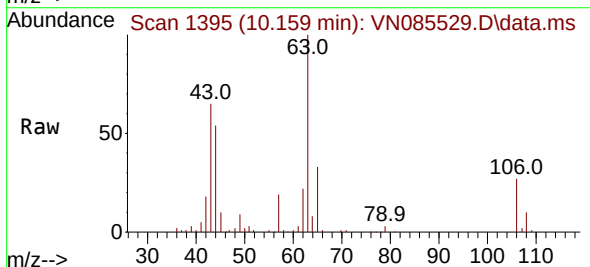
Acq: 28 Jan 2025 11:15

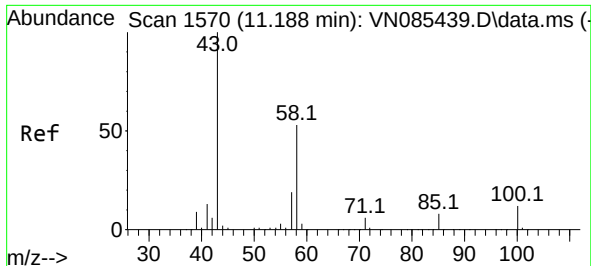
Tgt Ion: 63 Resp: 114984

Ion Ratio Lower Upper

63 100

106 27.1 21.6 32.4

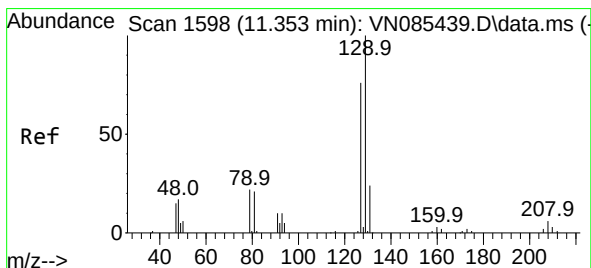
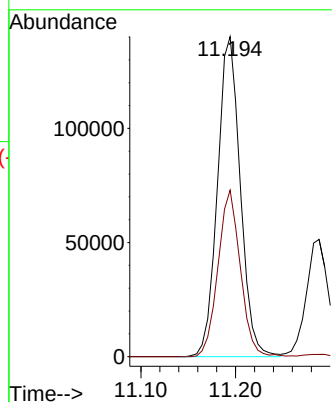
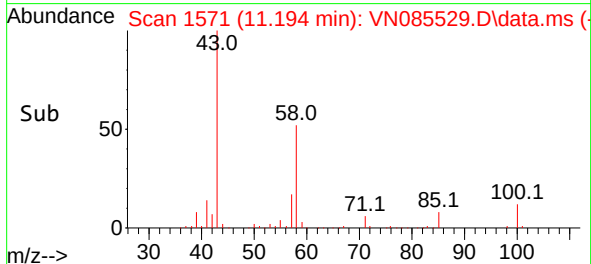
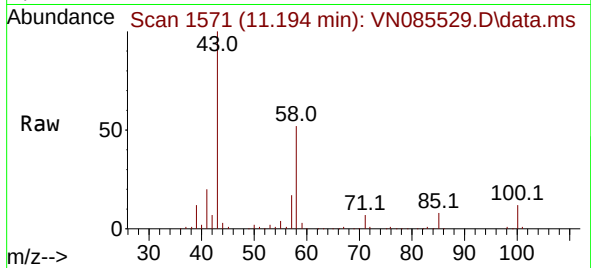




#59  
2-Hexanone  
Concen: 118.574 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

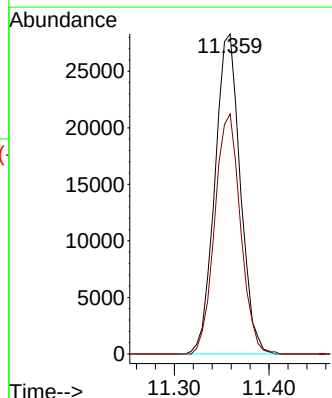
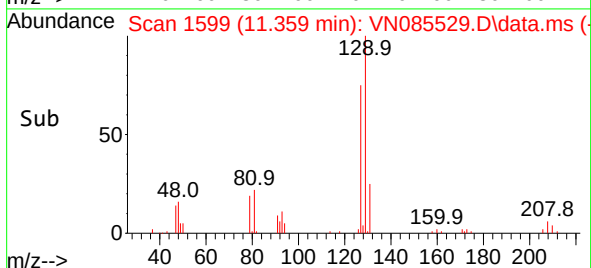
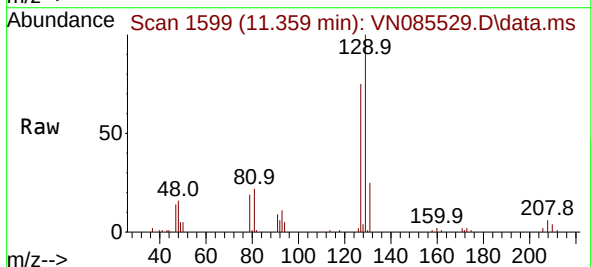
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

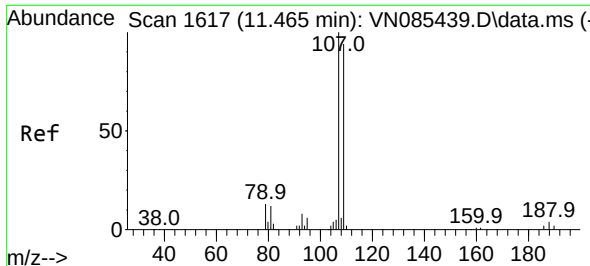
Tgt Ion: 43 Resp: 234494  
Ion Ratio Lower Upper  
43 100  
58 51.0 26.2 78.6



#60  
Dibromochloromethane  
Concen: 21.210 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 129 Resp: 52835  
Ion Ratio Lower Upper  
129 100  
127 75.9 38.6 115.8

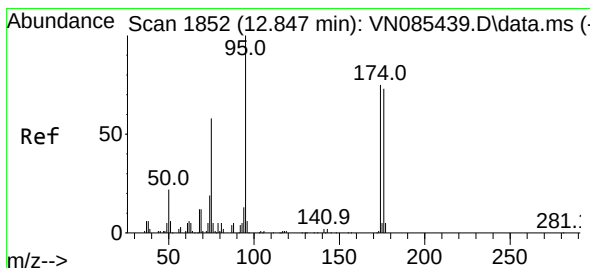
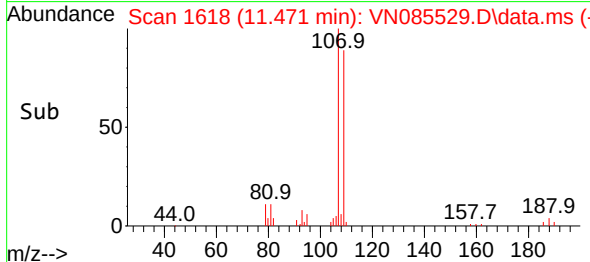
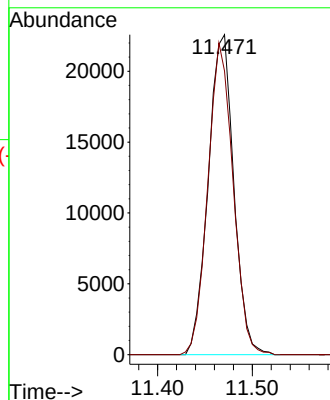
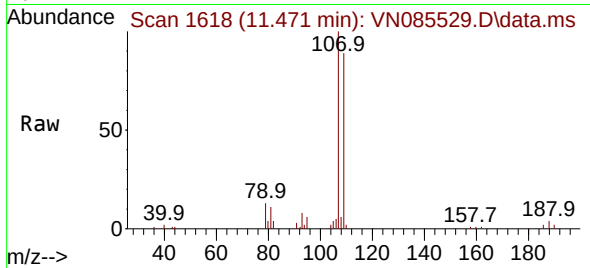




#61  
1,2-Dibromoethane  
Concen: 20.625 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

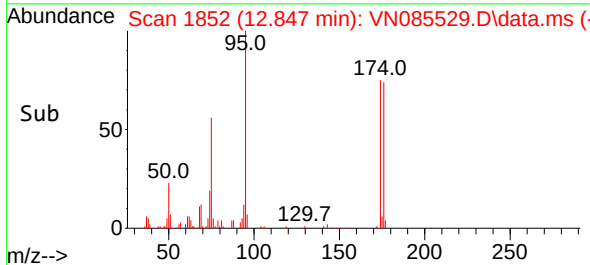
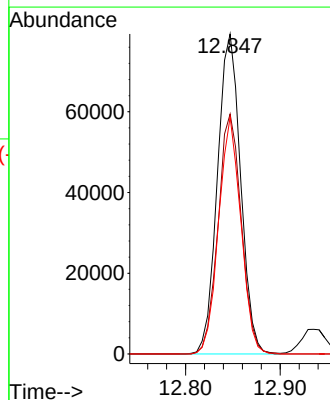
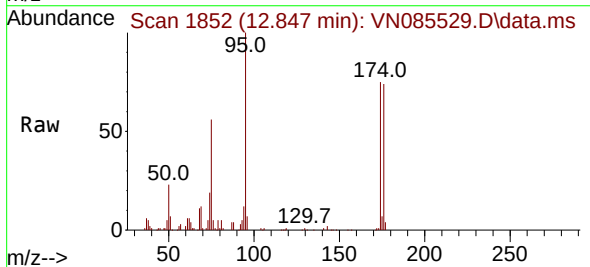
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion:107 Resp: 42361  
Ion Ratio Lower Upper  
107 100  
109 95.9 75.9 113.9

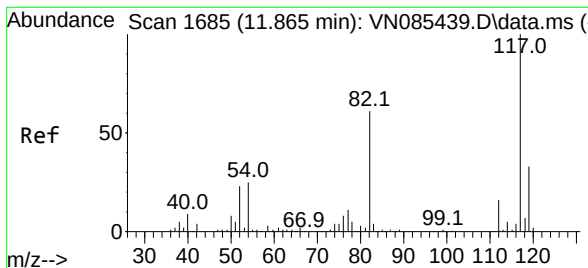


#62  
4-Bromofluorobenzene  
Concen: 52.029 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 95 Resp: 134929  
Ion Ratio Lower Upper  
95 100  
174 75.1 0.0 145.0  
176 70.9 0.0 142.4



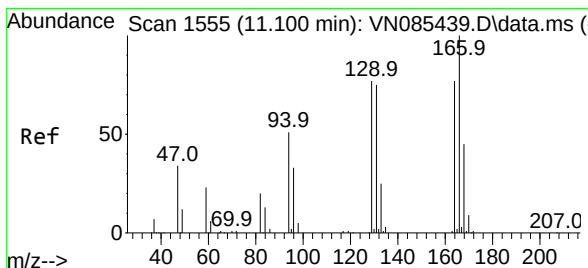
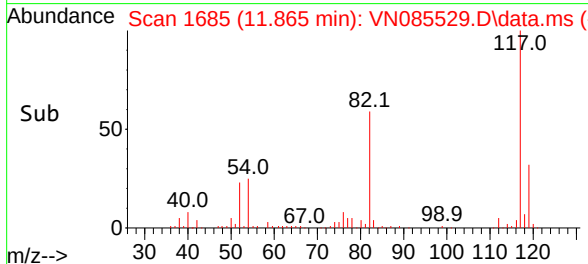
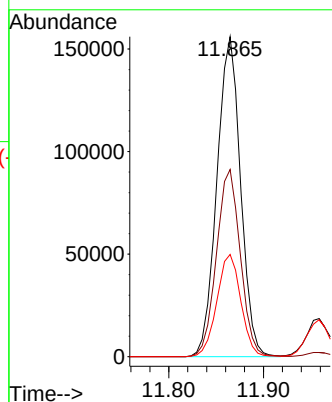
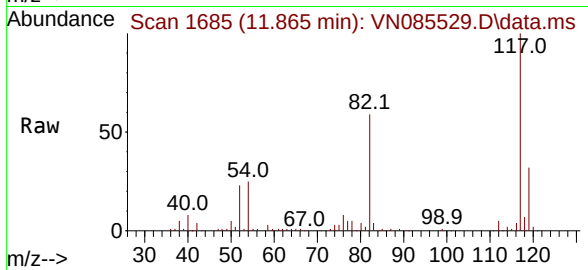




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1170  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

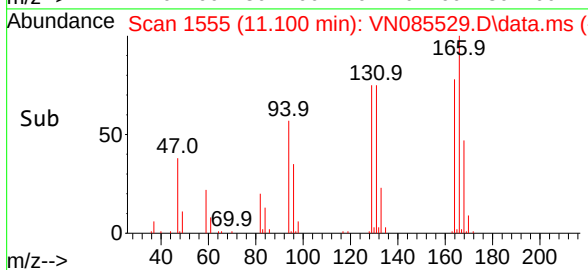
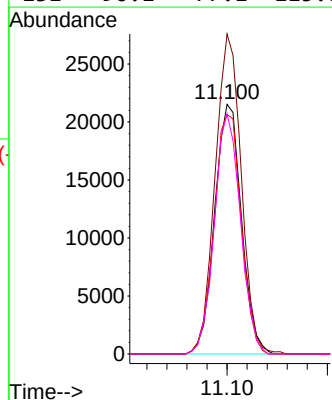
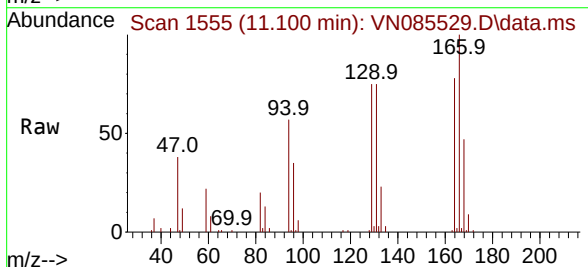
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

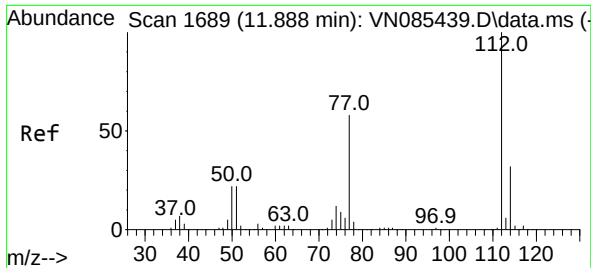
Tgt Ion:117 Resp: 271043  
Ion Ratio Lower Upper  
117 100  
82 58.5 48.6 72.8  
119 31.9 26.6 39.8



#64  
Tetrachloroethene  
Concen: 21.658 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:164 Resp: 40019  
Ion Ratio Lower Upper  
164 100  
166 128.2 103.4 155.2  
129 95.9 79.2 118.8  
131 96.1 77.1 115.7

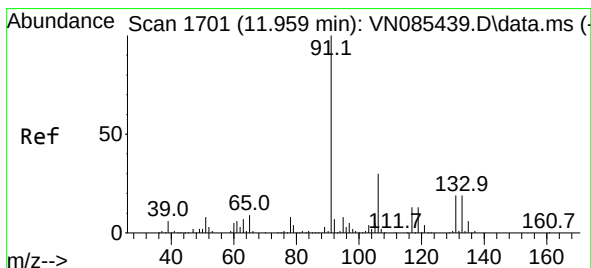
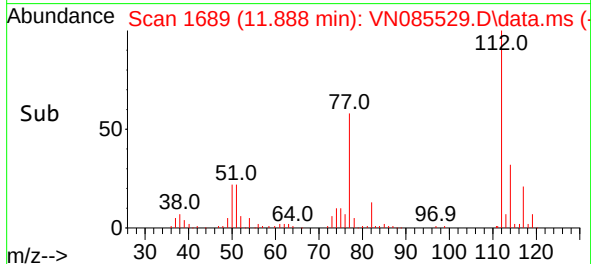
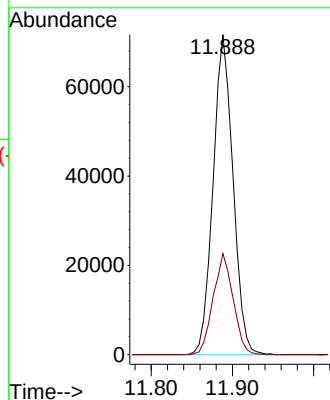
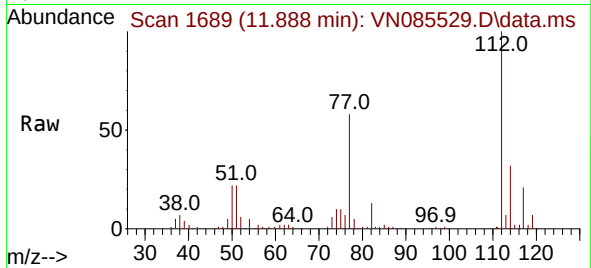




#65  
Chlorobenzene  
Concen: 20.586 ug/l  
RT: 11.888 min Scan# 111  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

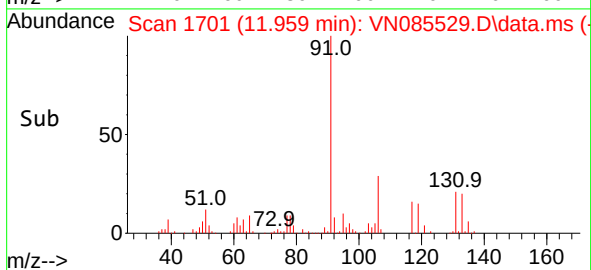
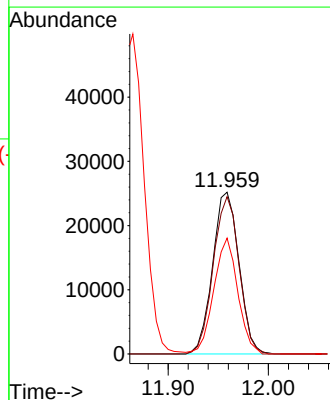
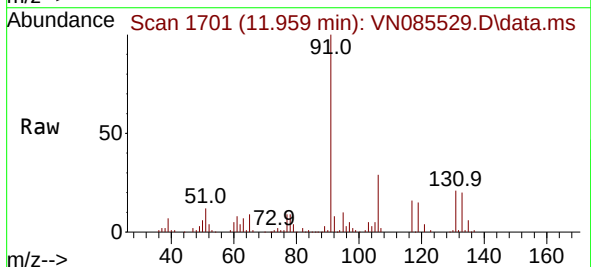
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

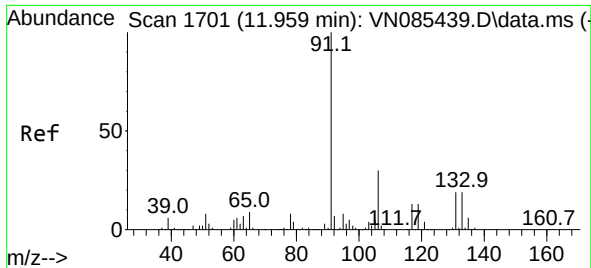
Tgt Ion:112 Resp: 122235  
Ion Ratio Lower Upper  
112 100  
114 31.6 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 21.124 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:131 Resp: 46034  
Ion Ratio Lower Upper  
131 100  
133 95.1 47.4 142.3  
119 65.4 33.1 99.5

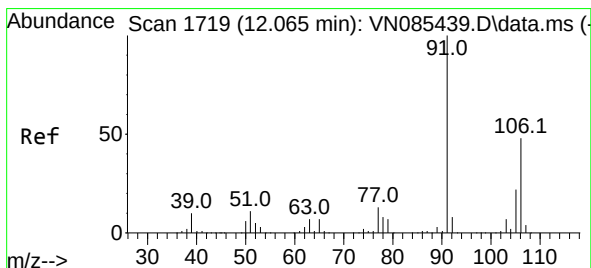
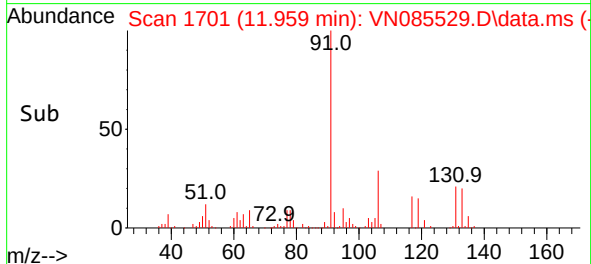
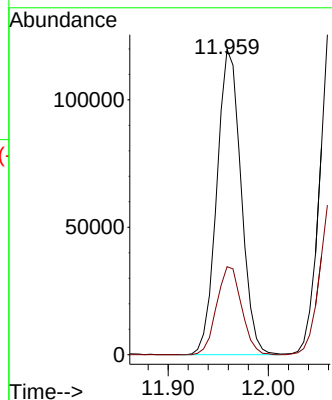
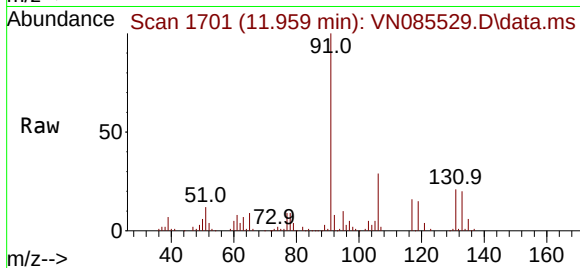




#67  
Ethyl Benzene  
Concen: 20.797 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

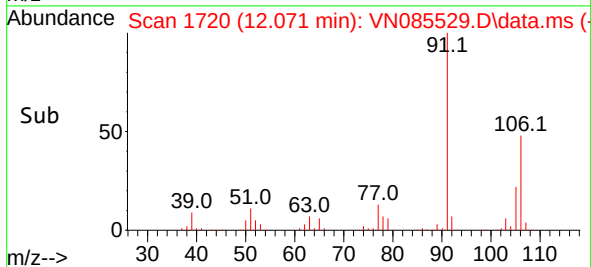
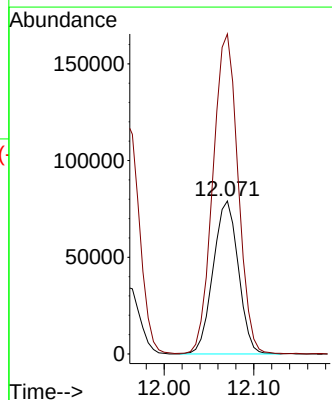
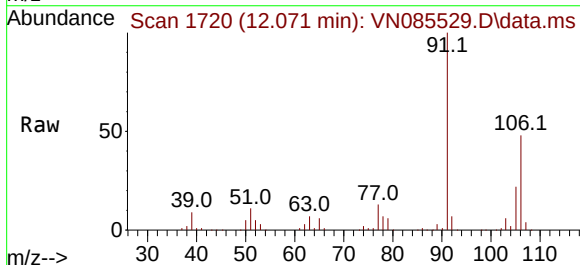
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

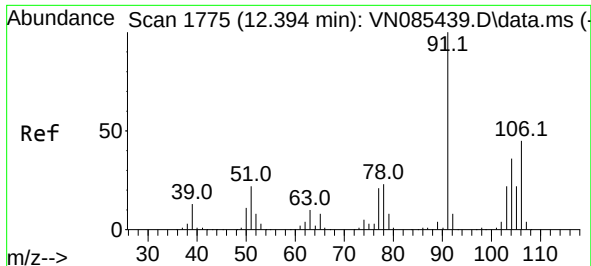
Tgt Ion: 91 Resp: 201123  
Ion Ratio Lower Upper  
91 100  
106 28.8 23.8 35.8



#68  
m/p-Xylenes  
Concen: 43.106 ug/l  
RT: 12.071 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:106 Resp: 154069  
Ion Ratio Lower Upper  
106 100  
91 208.4 167.7 251.5

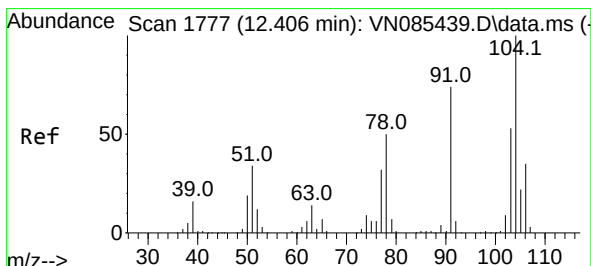
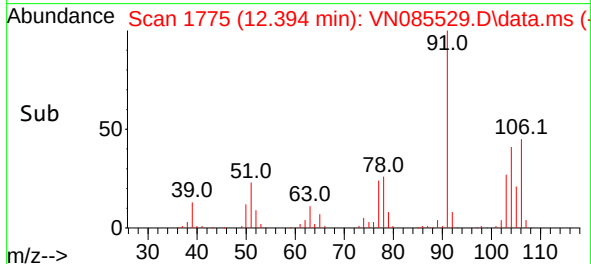
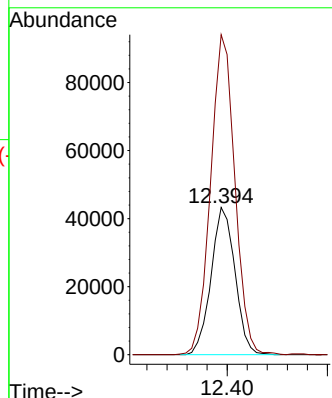
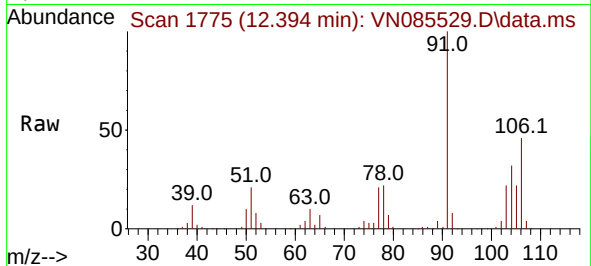




#69  
o-Xylene  
Concen: 20.943 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

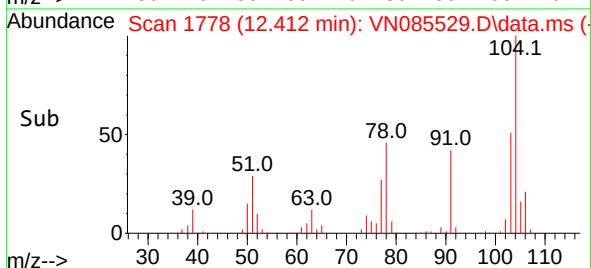
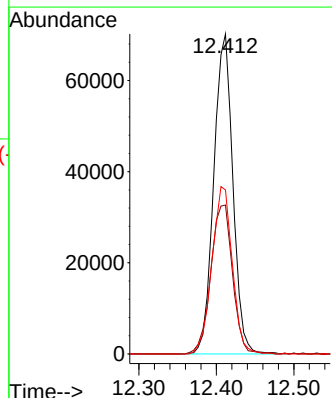
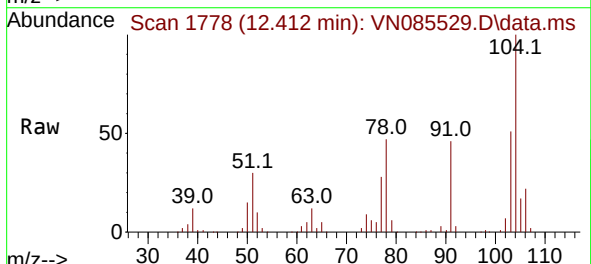
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

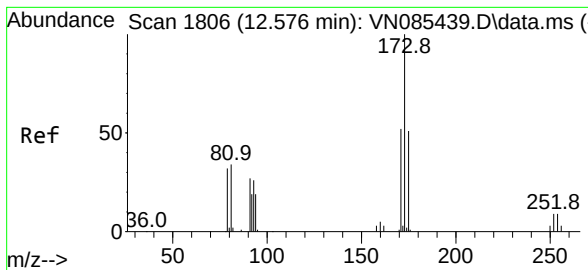
Tgt Ion:106 Resp: 71535  
Ion Ratio Lower Upper  
106 100  
91 220.7 110.4 331.2



#70  
Styrene  
Concen: 21.250 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:104 Resp: 120125  
Ion Ratio Lower Upper  
104 100  
78 53.0 42.5 63.7  
103 55.9 43.8 65.8

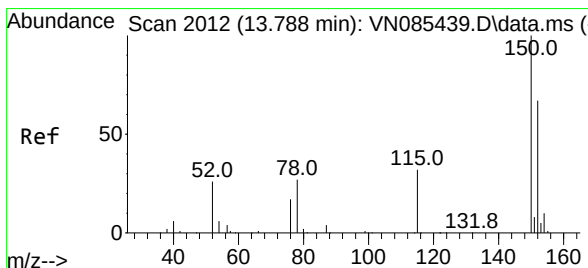
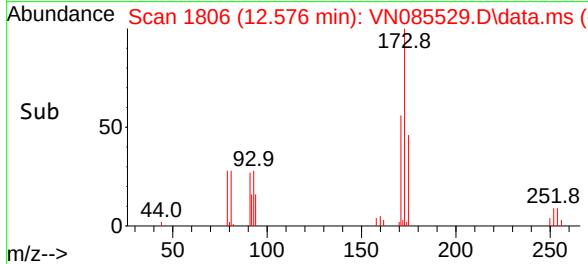
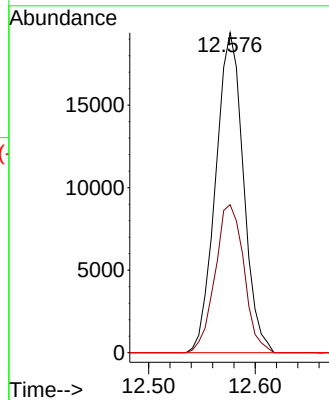
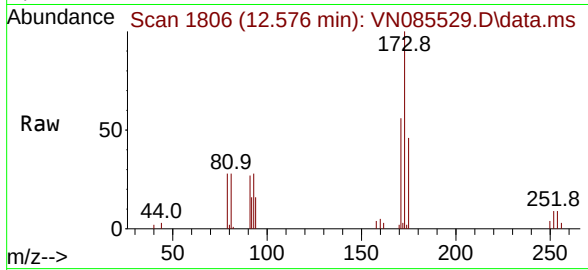




#71  
Bromoform  
Concen: 22.516 ug/l  
RT: 12.576 min Scan# 1806  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

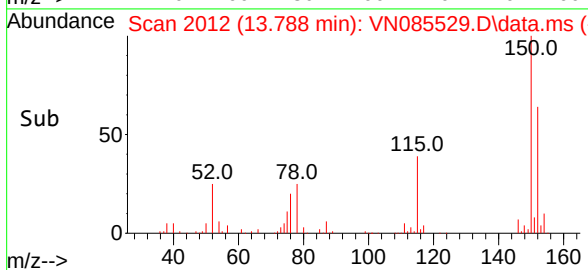
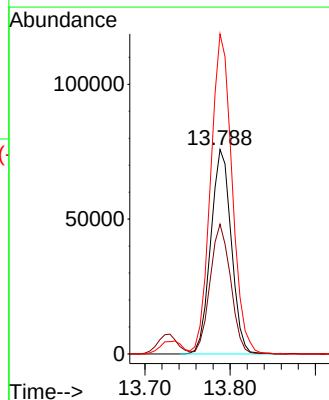
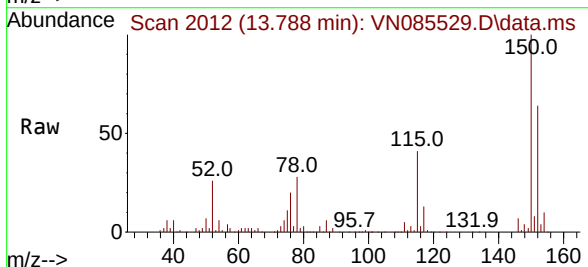
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

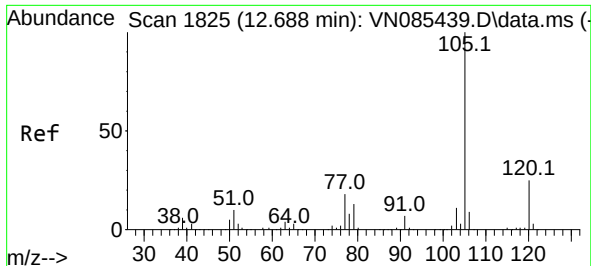
Tgt Ion:173 Resp: 35108  
Ion Ratio Lower Upper  
173 100  
175 48.0 24.4 73.2  
254 0.0 0.0 0.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:152 Resp: 126721  
Ion Ratio Lower Upper  
152 100  
115 63.7 31.1 93.3  
150 163.7 0.0 343.6

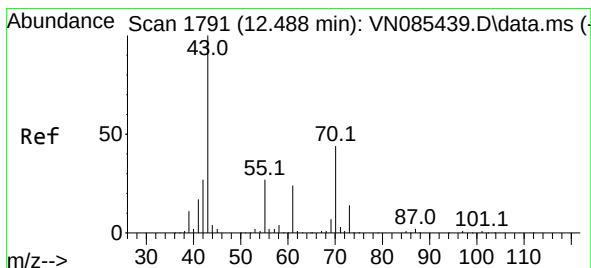
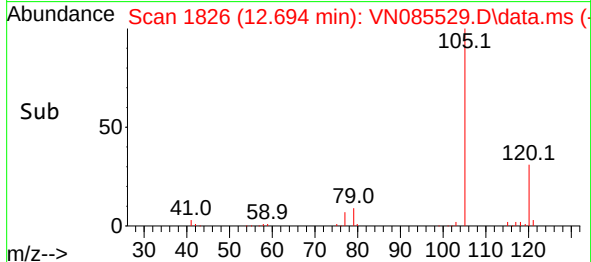
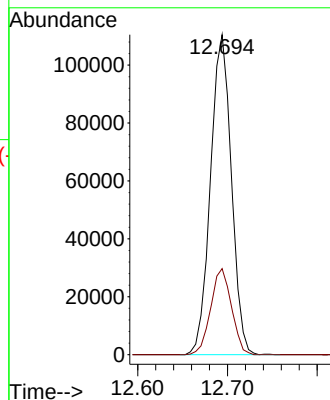
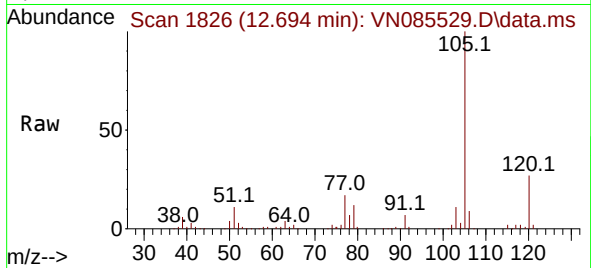




#73  
Isopropylbenzene  
Concen: 20.880 ug/l  
RT: 12.694 min Scan# 1825  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

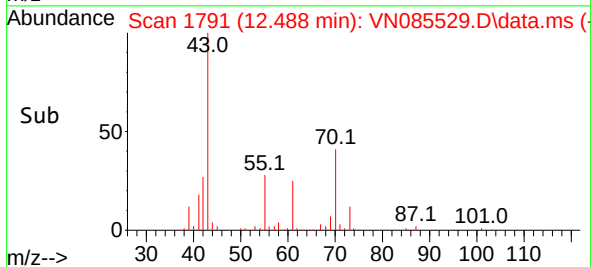
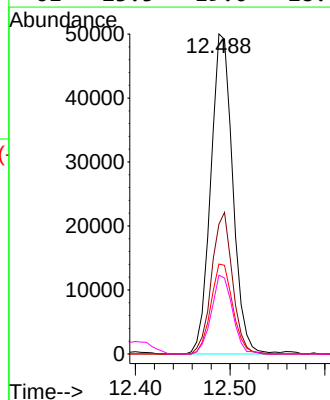
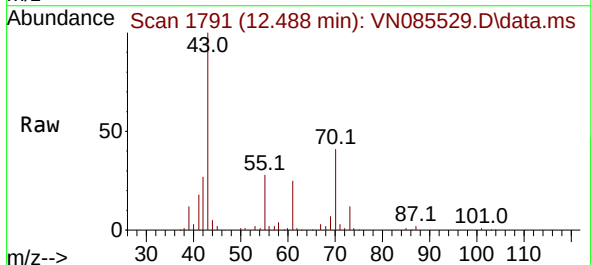
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

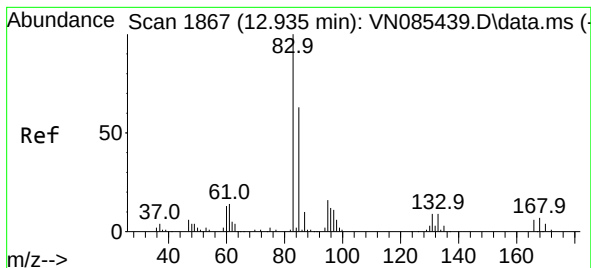
Tgt Ion:105 Resp: 178577  
Ion Ratio Lower Upper  
105 100  
120 26.7 12.8 38.3



#74  
N-ethyl acetate  
Concen: 20.975 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 43 Resp: 80633  
Ion Ratio Lower Upper  
43 100  
70 41.7 34.0 51.0  
55 28.0 21.4 32.2  
61 23.5 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 21.649 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

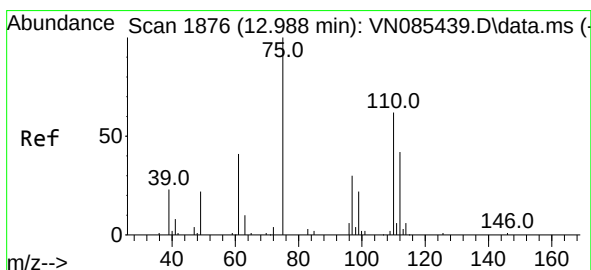
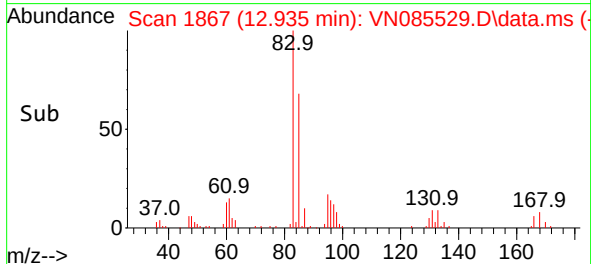
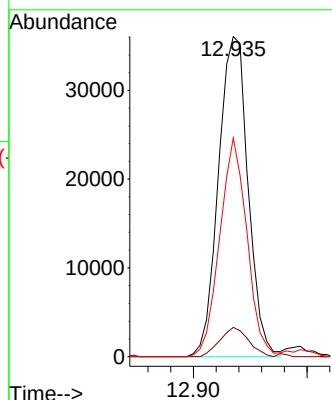
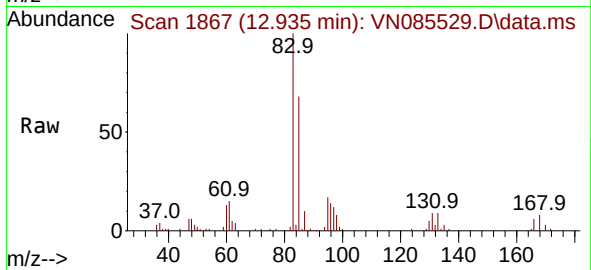
Tgt Ion: 83 Resp: 65405

Ion Ratio Lower Upper

83 100

131 8.8 4.8 14.4

85 62.7 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 32.088 ug/l

RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

Lab File: VN085529.D

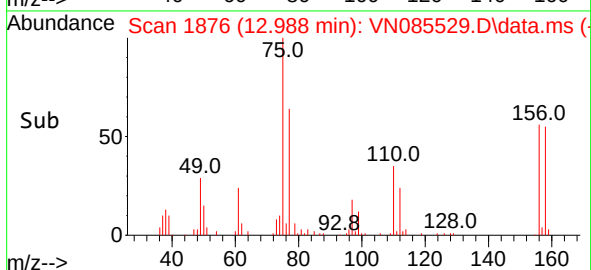
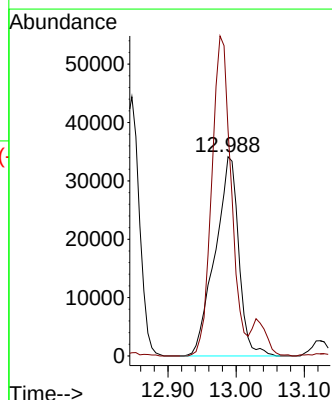
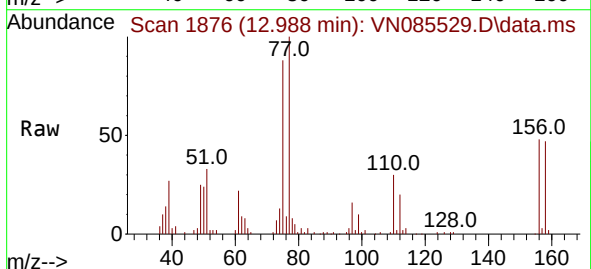
Acq: 28 Jan 2025 11:15

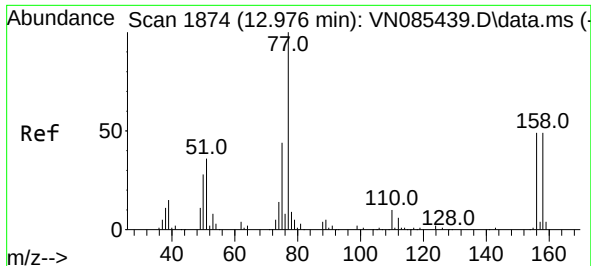
Tgt Ion: 75 Resp: 82646

Ion Ratio Lower Upper

75 100

77 131.7 109.7 329.2

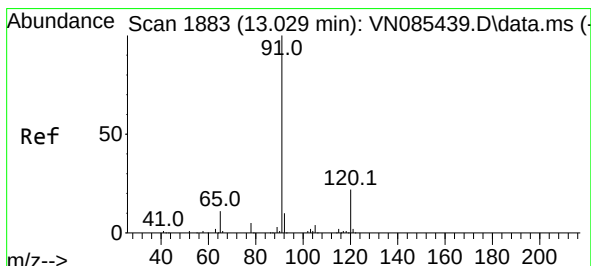
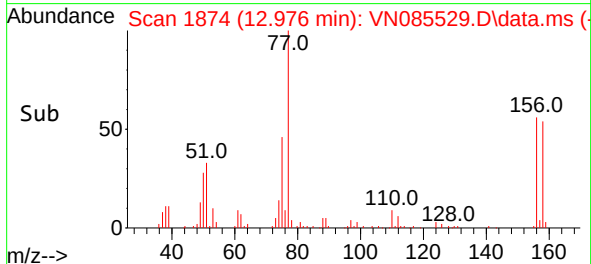
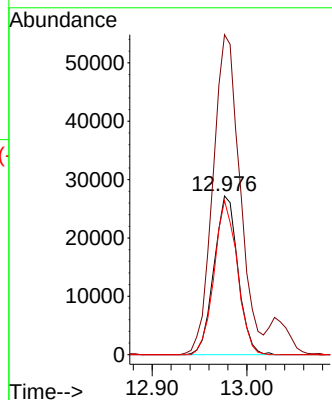
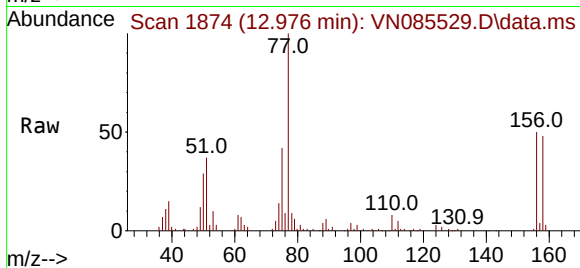




#77  
Bromobenzene  
Concen: 21.332 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

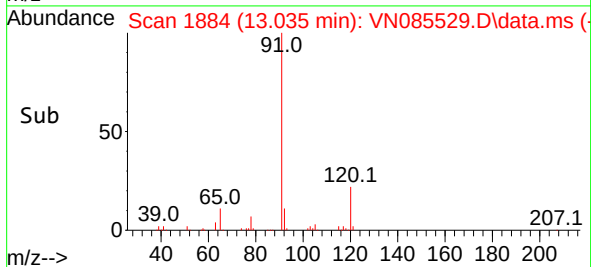
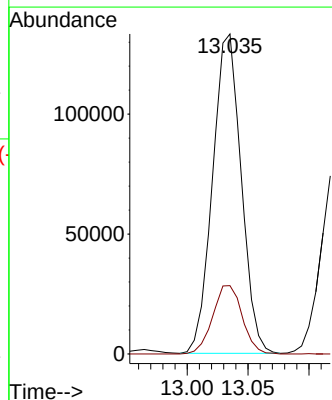
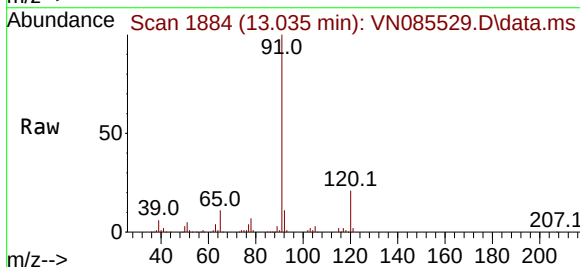
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

Tgt Ion:156 Resp: 47665  
Ion Ratio Lower Upper  
156 100  
77 228.4 114.1 342.4  
158 94.0 48.9 146.8

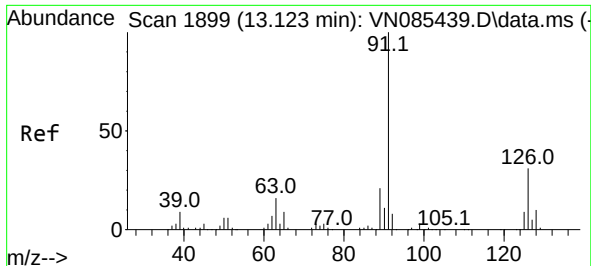


#78  
n-propylbenzene  
Concen: 21.517 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 91 Resp: 217855  
Ion Ratio Lower Upper  
91 100  
120 22.1 10.9 32.6







#79

2-Chlorotoluene

Concen: 21.081 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

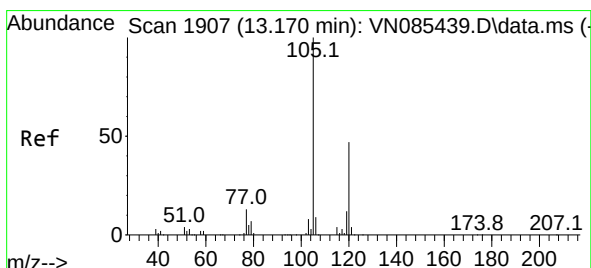
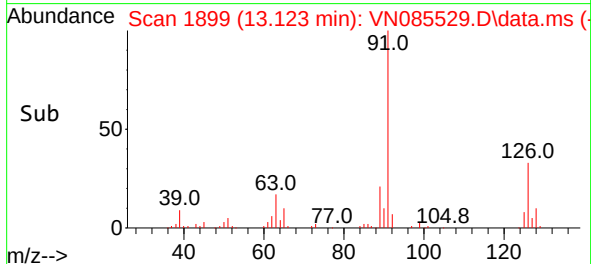
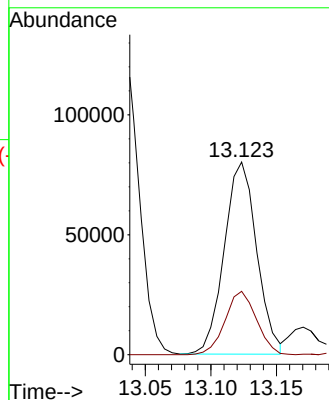
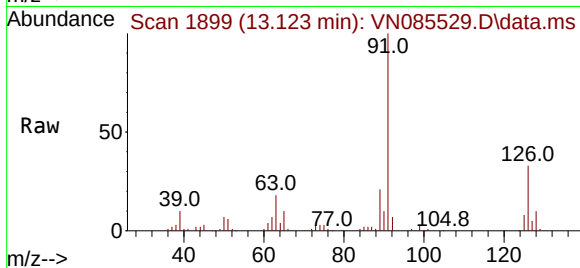
VN0128WBS01

Tgt Ion: 91 Resp: 138138

Ion Ratio Lower Upper

91 100

126 31.9 15.7 47.1



#80

1,3,5-Trimethylbenzene

Concen: 21.836 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085529.D

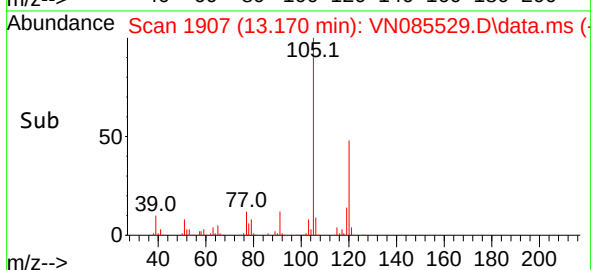
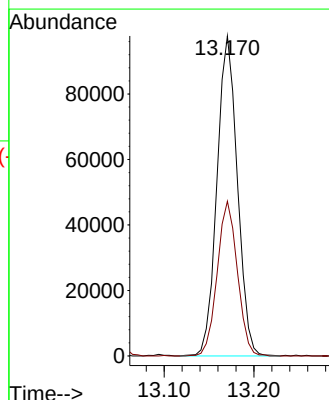
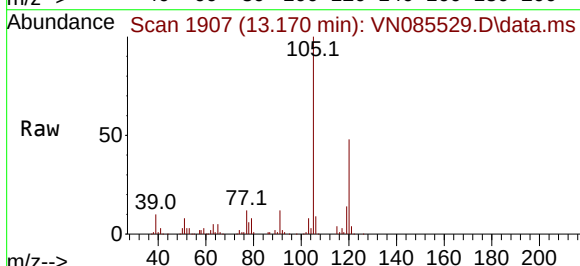
Acq: 28 Jan 2025 11:15

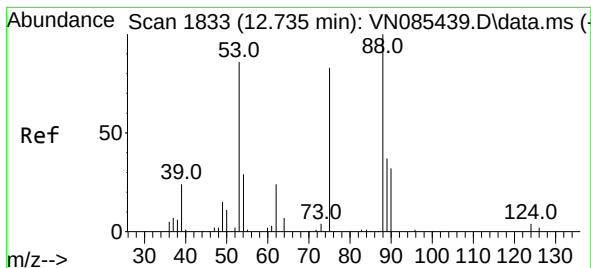
Tgt Ion:105 Resp: 154258

Ion Ratio Lower Upper

105 100

120 47.7 23.9 71.7

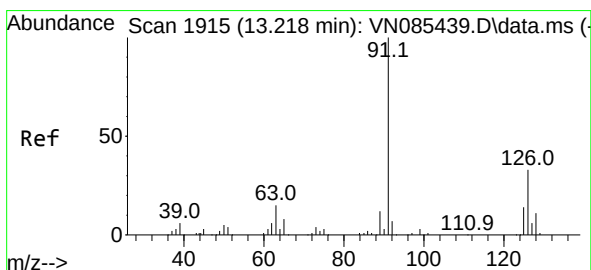
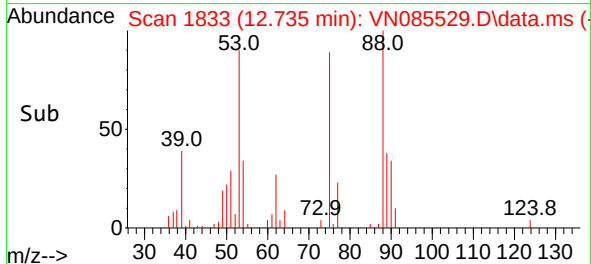
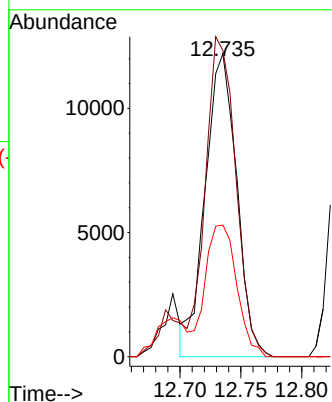
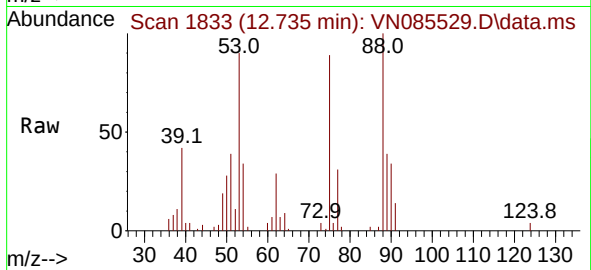




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 23.073 ug/l  
 RT: 12.735 min Scan# 1833  
 Delta R.T. 0.000 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

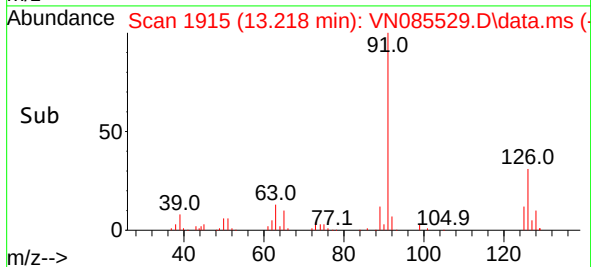
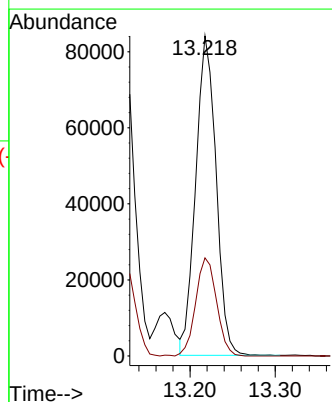
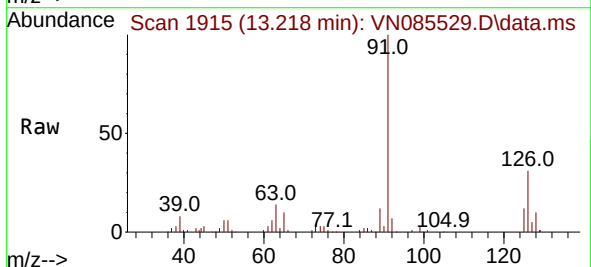
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

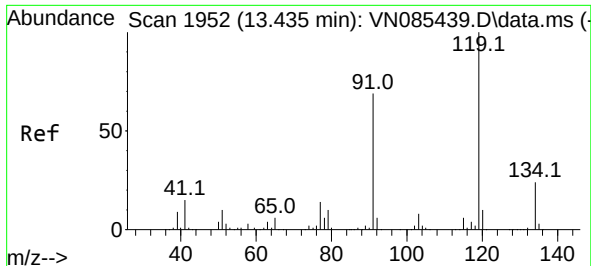
Tgt Ion: 75 Resp: 21965  
 Ion Ratio Lower Upper  
 75 100  
 53 101.0 95.6 143.4  
 89 44.0 37.0 55.6



#82  
 4-Chlorotoluene  
 Concen: 21.369 ug/l  
 RT: 13.218 min Scan# 1915  
 Delta R.T. 0.000 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion: 91 Resp: 139420  
 Ion Ratio Lower Upper  
 91 100  
 126 31.6 15.9 47.7

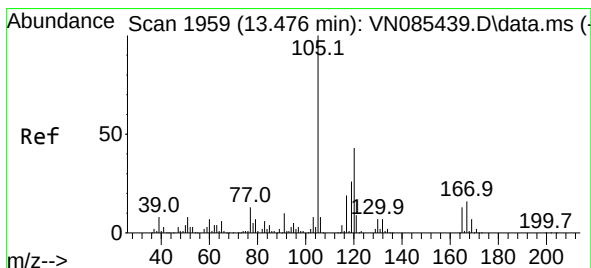
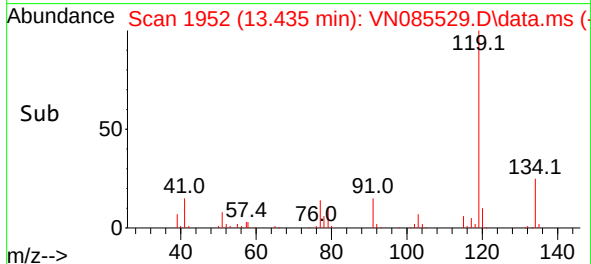
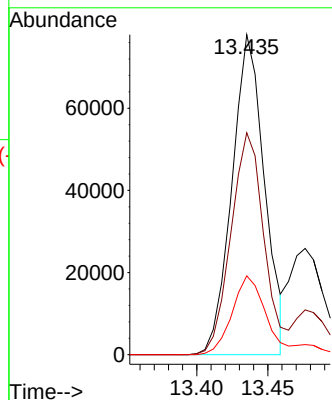
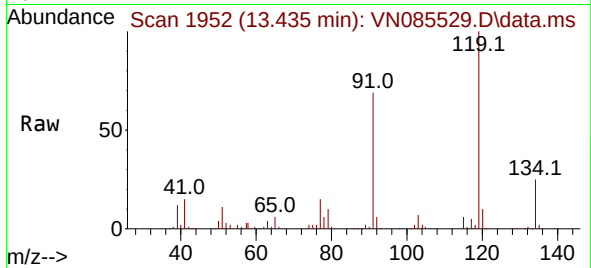




#83  
tert-Butylbenzene  
Concen: 20.926 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

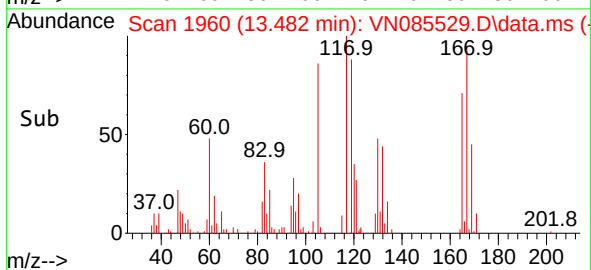
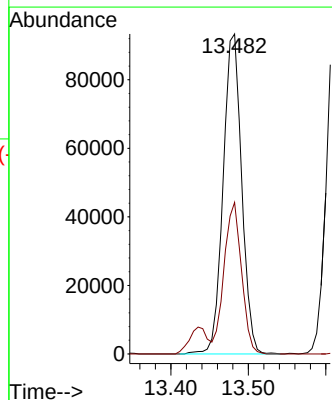
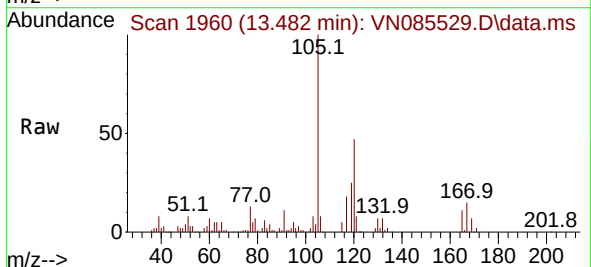
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

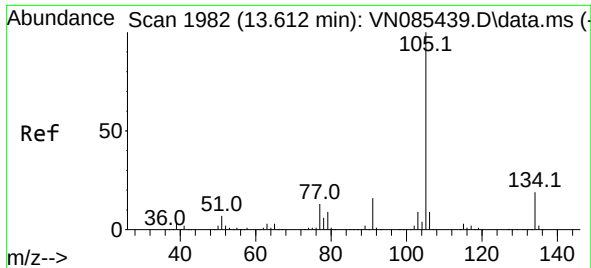
Tgt Ion:119 Resp: 124147  
Ion Ratio Lower Upper  
119 100  
91 71.0 35.1 105.3  
134 27.7 12.0 36.1



#84  
1,2,4-Trimethylbenzene  
Concen: 22.092 ug/l  
RT: 13.482 min Scan# 1960  
Delta R.T. 0.006 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion:105 Resp: 155548  
Ion Ratio Lower Upper  
105 100  
120 44.5 21.6 65.0

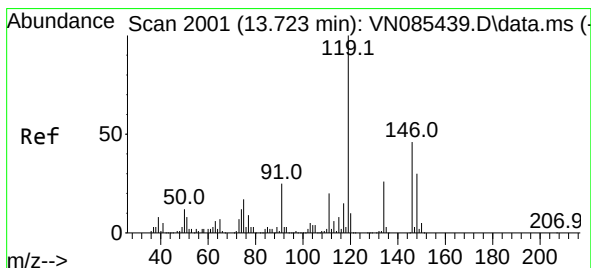
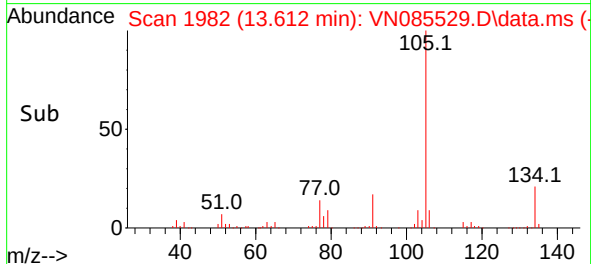
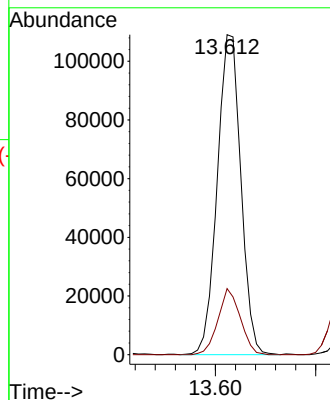
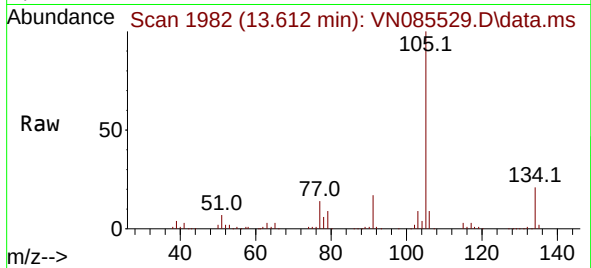




#85  
 sec-Butylbenzene  
 Concen: 21.691 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

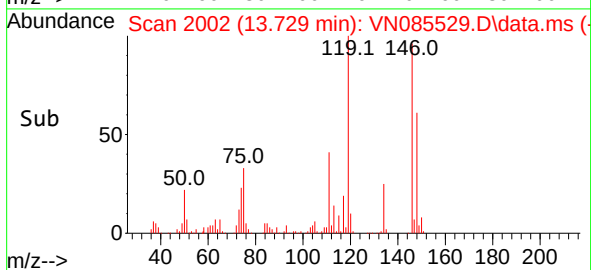
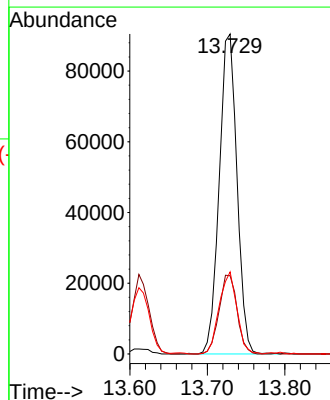
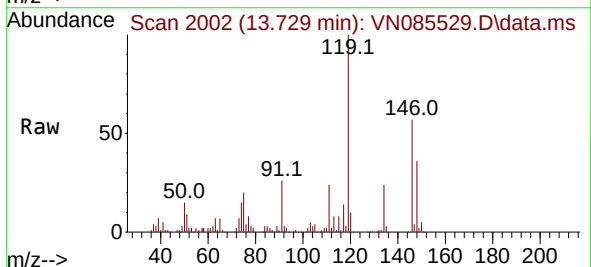
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

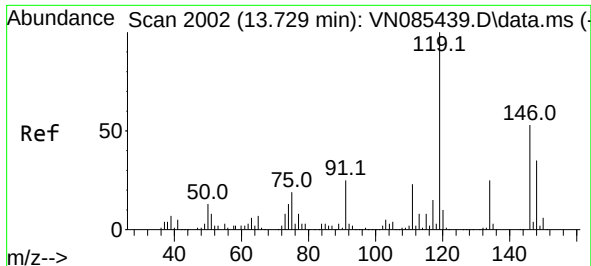
Tgt Ion:105 Resp: 178351  
 Ion Ratio Lower Upper  
 105 100  
 134 19.5 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 20.952 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion:119 Resp: 143953  
 Ion Ratio Lower Upper  
 119 100  
 134 25.1 12.7 38.0  
 91 25.5 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 20.833 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

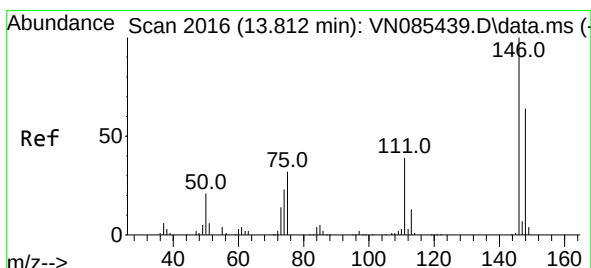
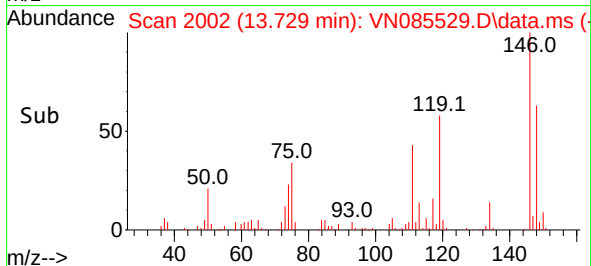
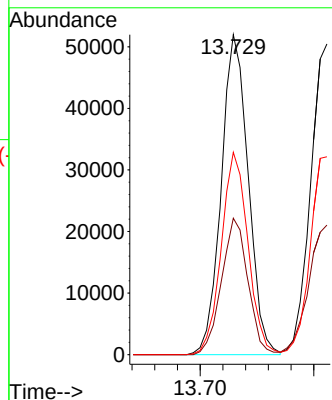
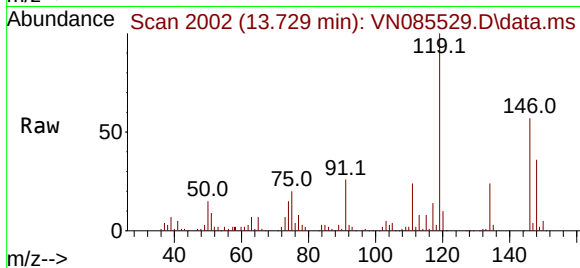
Tgt Ion:146 Resp: 85729

Ion Ratio Lower Upper

146 100

111 41.8 21.4 64.3

148 62.6 32.3 96.9



#88

1,4-Dichlorobenzene

Concen: 19.789 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. 0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

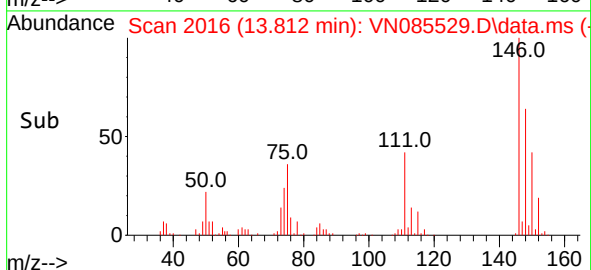
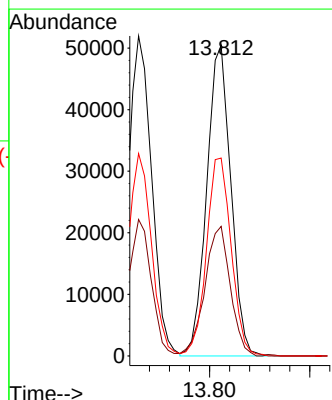
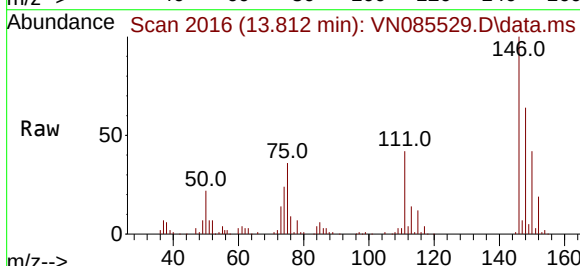
Tgt Ion:146 Resp: 84406

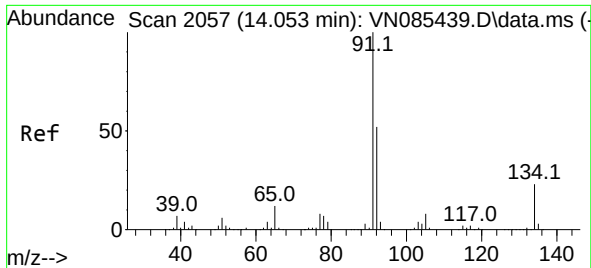
Ion Ratio Lower Upper

146 100

111 43.9 21.3 63.7

148 65.4 32.4 97.0

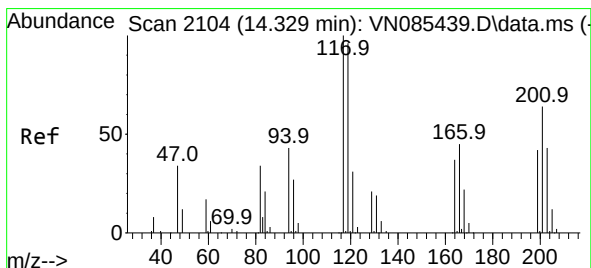
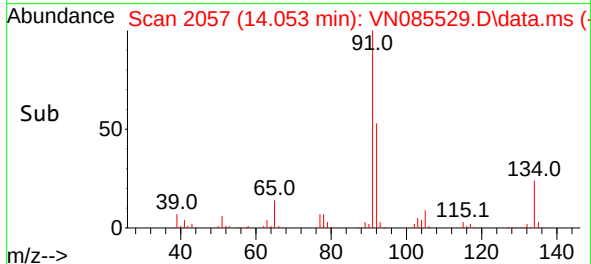
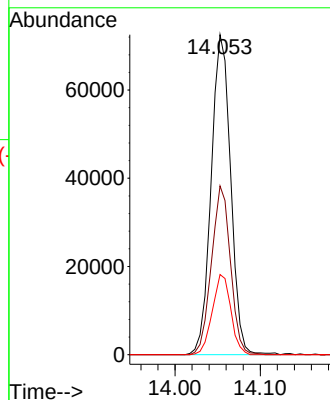
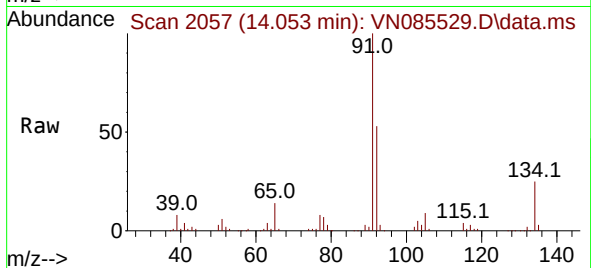




#89  
n-Butylbenzene  
Concen: 19.526 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

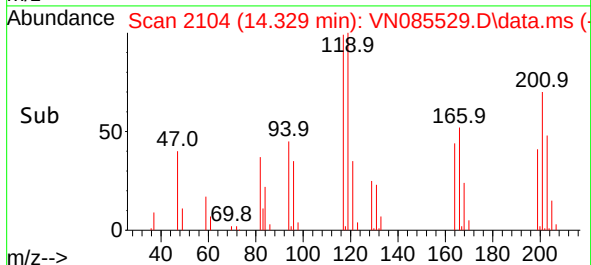
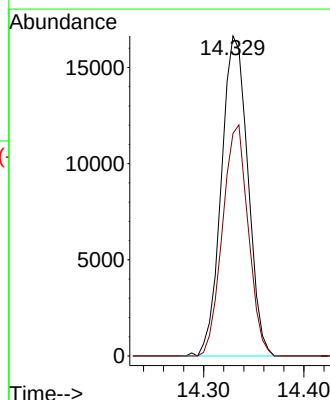
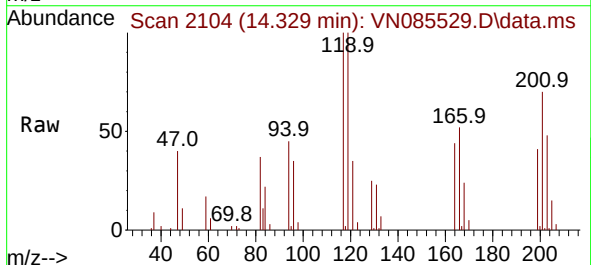
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

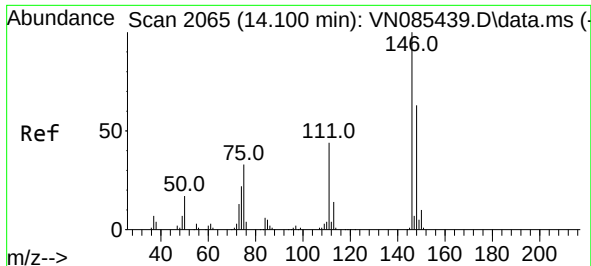
Tgt Ion: 91 Resp: 115181  
Ion Ratio Lower Upper  
91 100  
92 51.5 25.8 77.3  
134 23.8 11.7 35.1



#90  
Hexachloroethane  
Concen: 19.522 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 117 Resp: 30558  
Ion Ratio Lower Upper  
117 100  
201 70.0 33.7 101.0

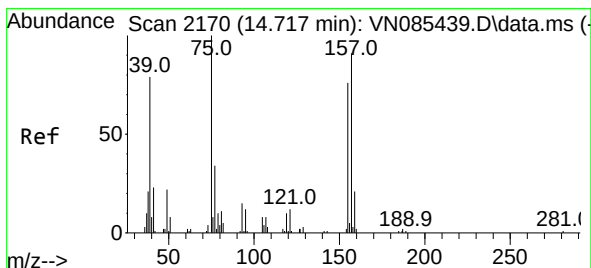
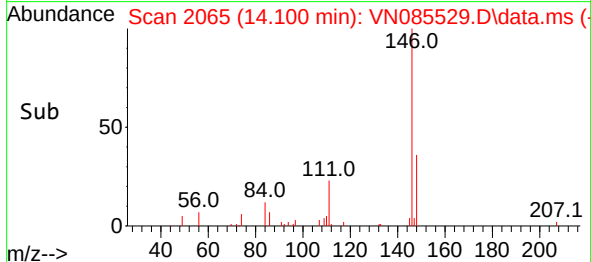
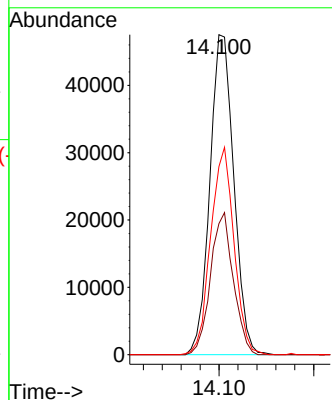
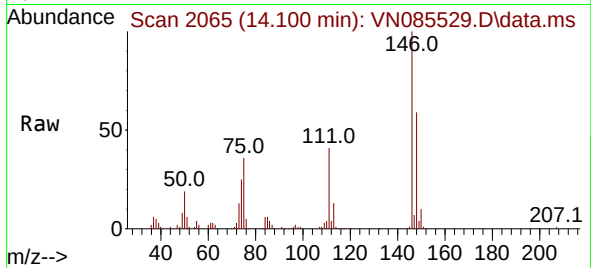




#91  
1,2-Dichlorobenzene  
Concen: 20.350 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

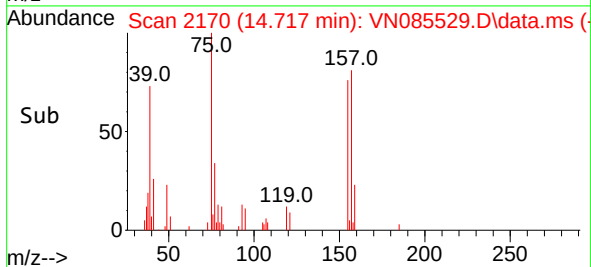
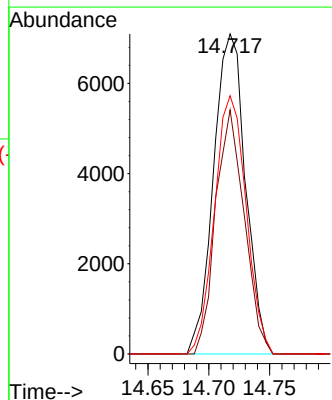
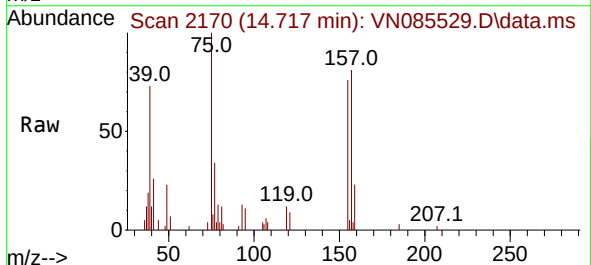
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBS01

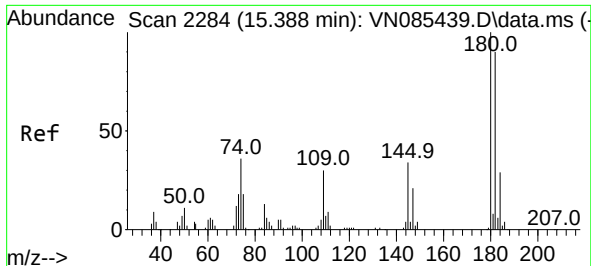
Tgt Ion:146 Resp: 83529  
Ion Ratio Lower Upper  
146 100  
111 42.3 21.7 65.1  
148 63.4 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 23.494 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085529.D  
Acq: 28 Jan 2025 11:15

Tgt Ion: 75 Resp: 12961  
Ion Ratio Lower Upper  
75 100  
155 68.3 36.4 109.2  
157 79.8 45.4 136.1

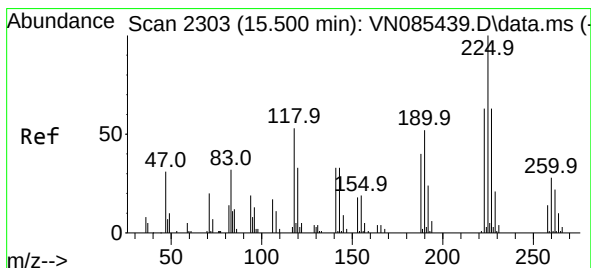
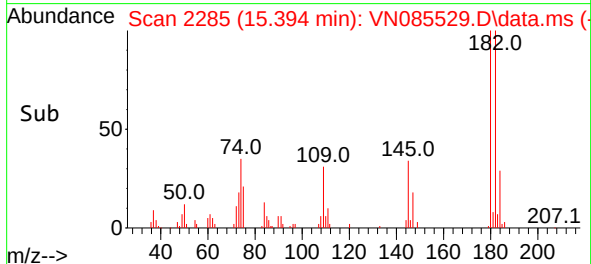
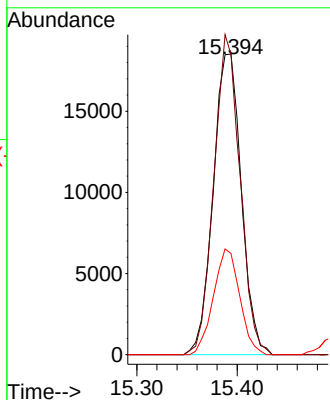
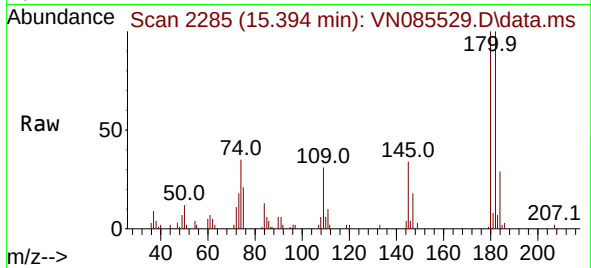




#93  
 1,2,4-Trichlorobenzene  
 Concen: 18.913 ug/l  
 RT: 15.394 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

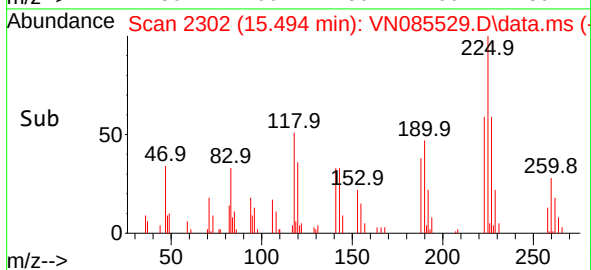
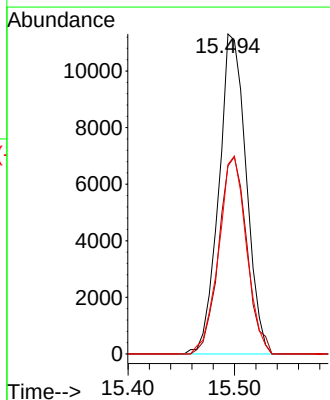
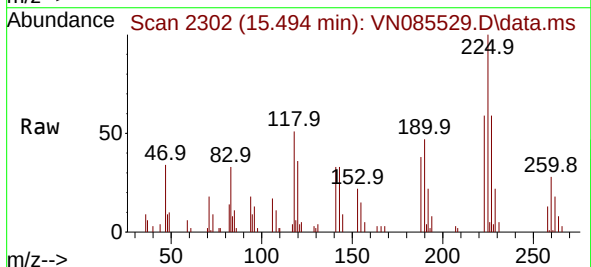
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBS01

Tgt Ion:180 Resp: 36081  
 Ion Ratio Lower Upper  
 180 100  
 182 99.0 46.8 140.3  
 145 32.9 16.0 48.0

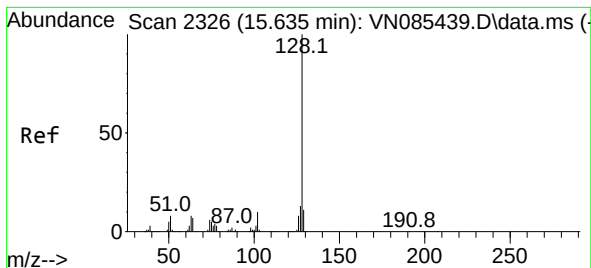


#94  
 Hexachlorobutadiene  
 Concen: 19.907 ug/l  
 RT: 15.494 min Scan# 2302  
 Delta R.T. -0.006 min  
 Lab File: VN085529.D  
 Acq: 28 Jan 2025 11:15

Tgt Ion:225 Resp: 20163  
 Ion Ratio Lower Upper  
 225 100  
 223 63.1 30.7 92.1  
 227 62.5 30.9 92.5







#95

Naphthalene

Concen: 18.394 ug/l

RT: 15.641 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBS01

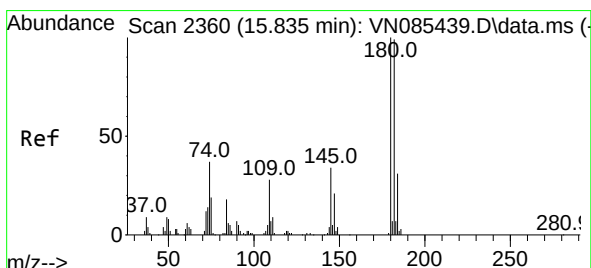
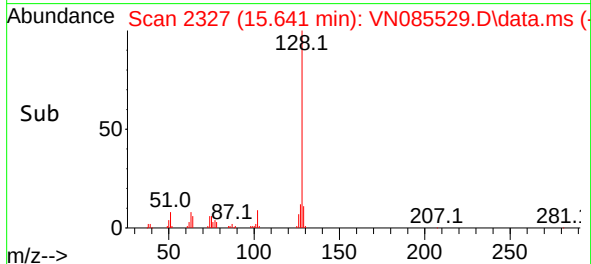
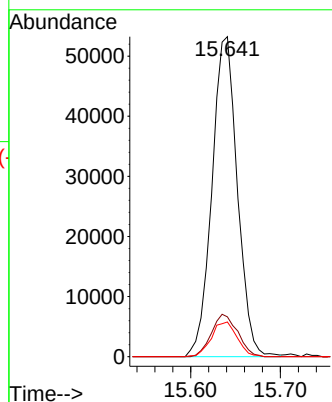
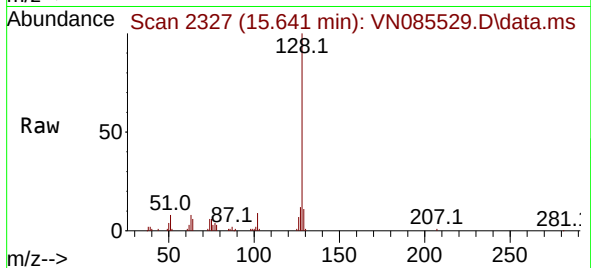
Tgt Ion:128 Resp: 104713

Ion Ratio Lower Upper

128 100

127 13.6 10.6 16.0

129 11.0 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 18.978 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085529.D

Acq: 28 Jan 2025 11:15

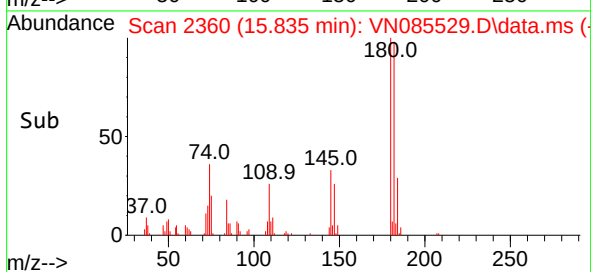
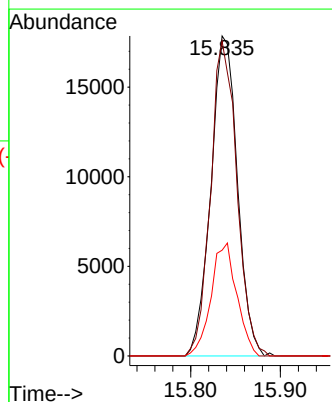
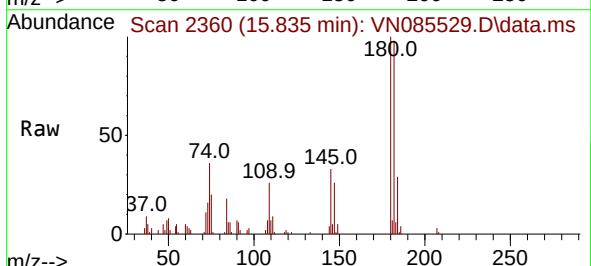
Tgt Ion:180 Resp: 36634

Ion Ratio Lower Upper

180 100

182 97.1 47.4 142.2

145 34.3 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085530.D  
 Acq On : 28 Jan 2025 11:48  
 Operator : JC\MD  
 Sample : VN0128WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Quant Time: Jan 29 00:36:31 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 182154   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 309854   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 273221   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 127977   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| System Monitoring Compounds |        |       |          |          |            |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 147838   | 50.279   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 100.560% |      |
| 35) Dibromofluoromethane    | 8.165  | 113   | 107958   | 50.222   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 100.440% |      |
| 50) Toluene-d8              | 10.565 | 98    | 390099   | 51.076   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 102.160% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 133187   | 50.978   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 101.960% |      |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 43993  | 17.838  | ug/l   | 98  |
| 3) Chloromethane             | 2.359 | 50  | 47315  | 17.719  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.512 | 62  | 47895  | 17.844  | ug/l   | 98  |
| 5) Bromomethane              | 2.959 | 94  | 29197  | 18.008  | ug/l   | 93  |
| 6) Chloroethane              | 3.118 | 64  | 33369  | 19.610  | ug/l   | 98  |
| 7) Trichlorofluoromethane    | 3.501 | 101 | 75960  | 19.504  | ug/l   | 99  |
| 8) Diethyl Ether             | 3.965 | 74  | 26094  | 19.395  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 44549  | 20.309  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.583 | 142 | 50174  | 19.974  | ug/l   | 99  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 39612  | 117.652 | ug/l   | 98  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 38078  | 19.478  | ug/l   | 96  |
| 13) Acrolein                 | 4.183 | 56  | 40971  | 89.143  | ug/l   | 96  |
| 14) Allyl chloride           | 5.024 | 41  | 61288  | 19.320  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.718 | 53  | 117305 | 109.689 | ug/l   | 97  |
| 16) Acetone                  | 4.424 | 43  | 102700 | 108.100 | ug/l   | 95  |
| 17) Carbon Disulfide         | 4.712 | 76  | 97539  | 16.205  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.024 | 43  | 67889  | 23.500  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.795 | 73  | 139282 | 21.942  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.277 | 84  | 46285  | 19.680  | ug/l   | 93  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 39520  | 18.916  | ug/l   | 94  |
| 22) Diisopropyl ether        | 6.665 | 45  | 150475 | 21.371  | ug/l   | 98  |
| 23) Vinyl Acetate            | 6.600 | 43  | 520716 | 105.676 | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 87788  | 20.448  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 154236 | 110.320 | ug/l   | 96  |
| 26) 2,2-Dichloropropane      | 7.489 | 77  | 75260  | 21.682  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 49722  | 20.206  | ug/l   | 98  |
| 28) Bromochloromethane       | 7.812 | 49  | 33640  | 16.842  | ug/l   | 97  |
| 29) Tetrahydrofuran          | 7.841 | 42  | 101879 | 114.937 | ug/l   | 100 |
| 30) Chloroform               | 7.965 | 83  | 91378  | 20.593  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 65567  | 17.571  | ug/l   | 98  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 78366  | 20.134  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 57513  | 19.063  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 64941  | 21.326  | ug/l   | 99  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 69210  | 20.038  | ug/l   | 96  |
| 39) Methylcyclohexane        | 9.600 | 83  | 52898  | 18.659  | ug/l   | 99  |
| 40) Benzene                  | 8.606 | 78  | 183341 | 20.225  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085530.D  
 Acq On : 28 Jan 2025 11:48  
 Operator : JC\MD  
 Sample : VN0128WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Quant Time: Jan 29 00:36:31 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 33920    | 21.410  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 73450    | 21.514  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.683  | 43   | 105226   | 21.565  | ug/l   | 100      |
| 44) Trichloroethene           | 9.353  | 130  | 40907    | 19.386  | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 47937    | 20.703  | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 35054    | 20.981  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 73992    | 21.738  | ug/l   | 95       |
| 48) Methyl methacrylate       | 9.677  | 41   | 48128    | 21.918  | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 17249    | 466.467 | ug/l # | 80       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 334158   | 118.016 | ug/l   | 100      |
| 52) Toluene                   | 10.624 | 92   | 113049   | 21.523  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 69056    | 21.468  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 74974    | 21.821  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 44789    | 21.547  | ug/l   | 92       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 65671    | 19.962  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78972    | 21.850  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 129996   | 98.550  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 235784   | 118.347 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 54955    | 21.899  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 43841    | 21.189  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 39045    | 20.962  | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 123448   | 20.625  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 47119    | 21.449  | ug/l   | 97       |
| 67) Ethyl Benzene             | 11.959 | 91   | 200961   | 20.614  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.071 | 106  | 156444   | 43.421  | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 71566    | 20.785  | ug/l   | 98       |
| 70) Styrene                   | 12.412 | 104  | 121646   | 21.347  | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 35363    | 22.498  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 183110   | 21.200  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 84761    | 21.833  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 66402    | 21.763  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 84360    | 32.432  | ug/l   | 43       |
| 77) Bromobenzene              | 12.976 | 156  | 47394    | 21.002  | ug/l   | 100      |
| 78) n-propylbenzene           | 13.035 | 91   | 222149   | 21.726  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 143547   | 21.691  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 155679   | 21.820  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 21365    | 22.223  | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 141708   | 21.506  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 126399   | 21.097  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 158115   | 22.236  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 176846   | 21.297  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 144432   | 20.822  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 87193    | 20.981  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 87963    | 20.420  | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 121076   | 20.324  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 31810    | 20.123  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 84554    | 20.397  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 12008    | 21.553  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 37673    | 19.554  | ug/l   | 96       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 20093    | 19.644  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 110672   | 19.250  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 39684    | 20.356  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085530.D  
Acq On : 28 Jan 2025 11:48  
Operator : JC\MD  
Sample : VN0128WBSD01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

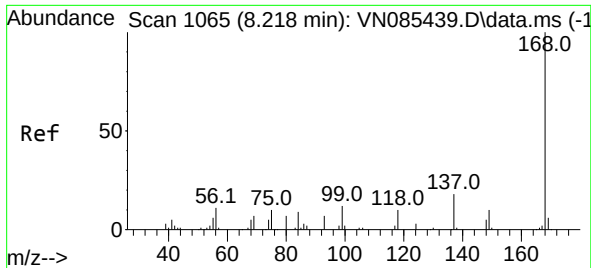
Quant Time: Jan 29 00:36:31 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

Quant Time: Jan 29 00:36:31 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

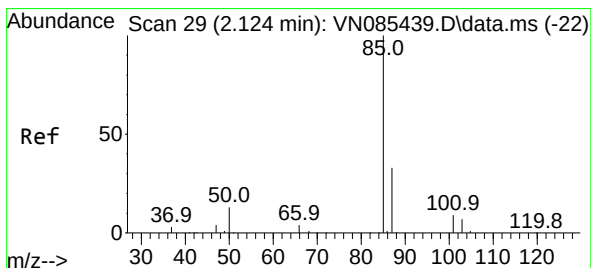
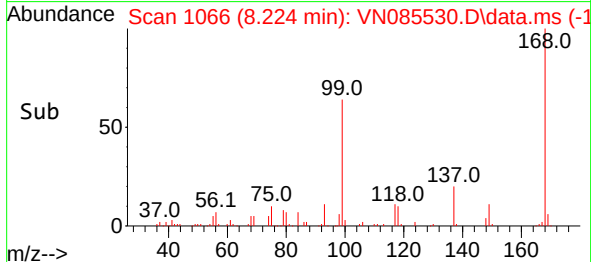
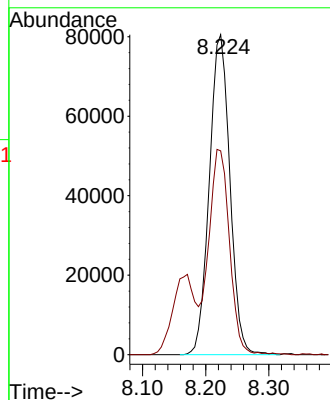
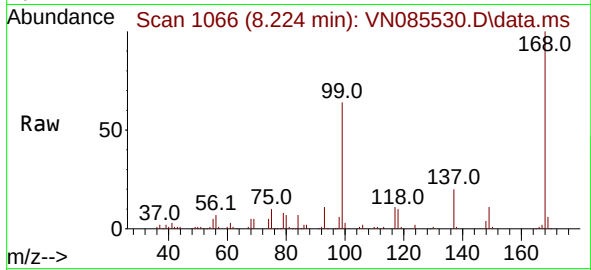




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

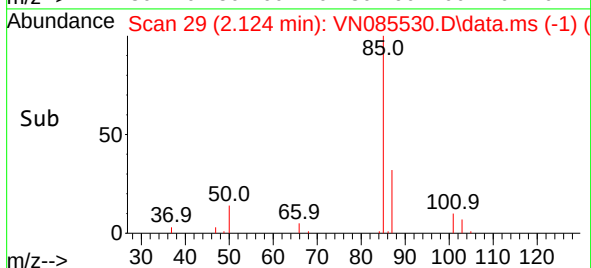
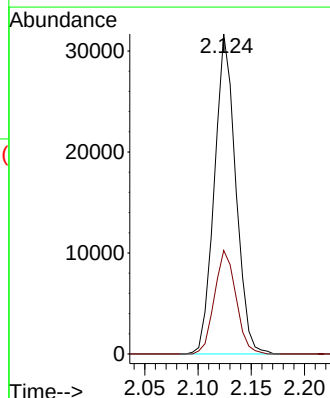
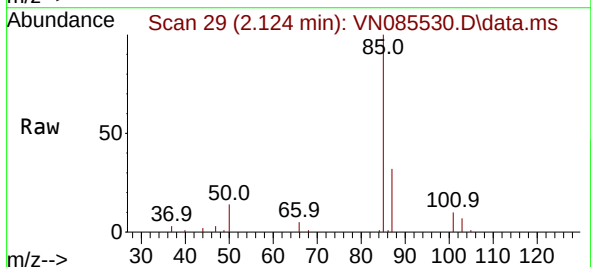
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

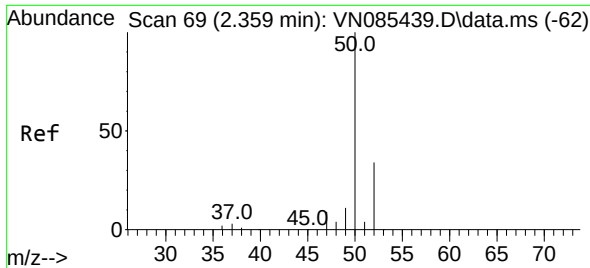
Tgt Ion:168 Resp: 182154  
Ion Ratio Lower Upper  
168 100  
99 63.5 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 17.838 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 85 Resp: 43993  
Ion Ratio Lower Upper  
85 100  
87 32.3 16.7 50.1

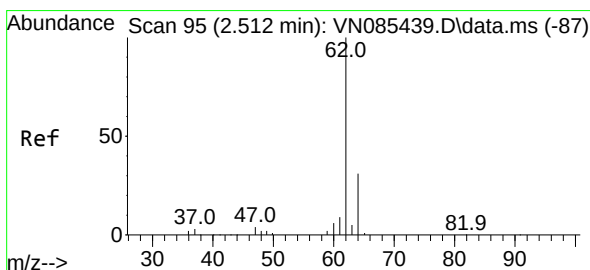
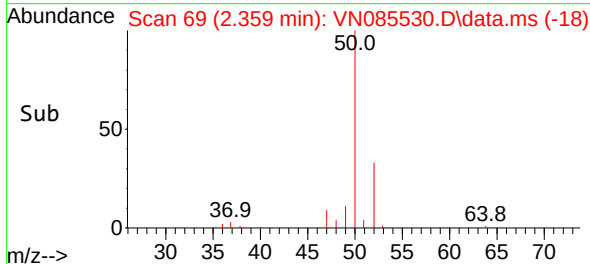
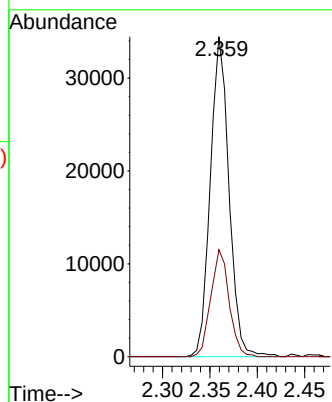
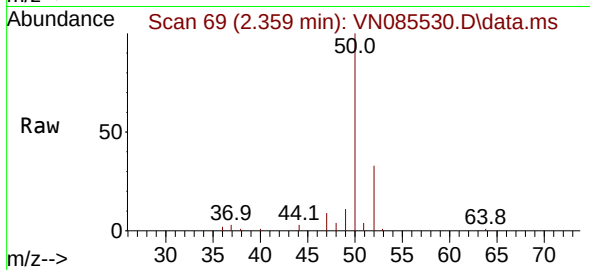




#3  
 Chloromethane  
 Concen: 17.719 ug/l  
 RT: 2.359 min Scan# 69  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

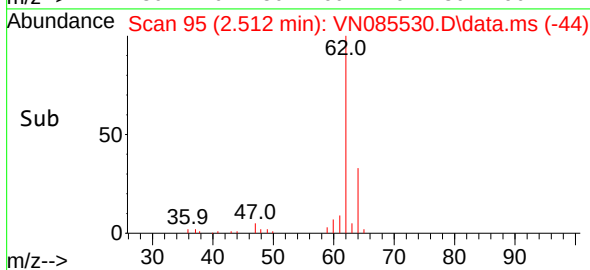
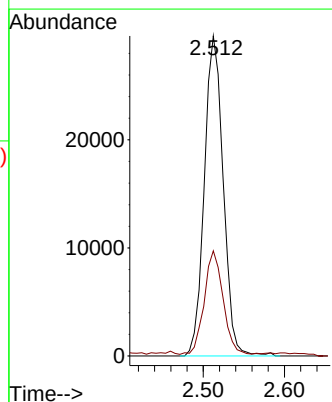
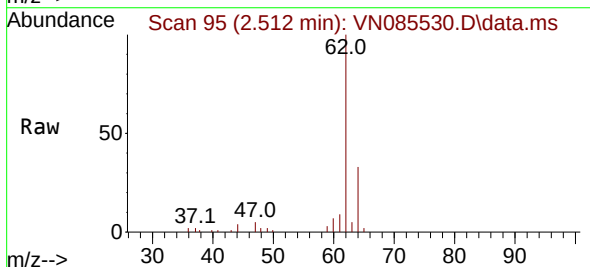
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

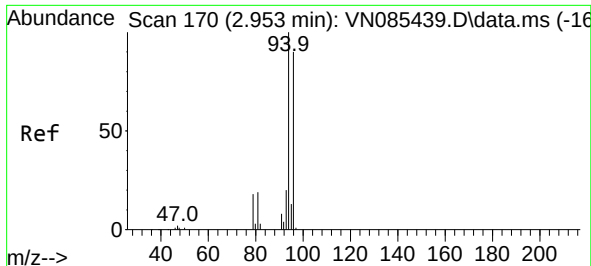
Tgt Ion: 50 Resp: 47315  
 Ion Ratio Lower Upper  
 50 100  
 52 33.4 27.0 40.6



#4  
 Vinyl Chloride  
 Concen: 17.844 ug/l  
 RT: 2.512 min Scan# 95  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 62 Resp: 47895  
 Ion Ratio Lower Upper  
 62 100  
 64 32.3 24.8 37.2

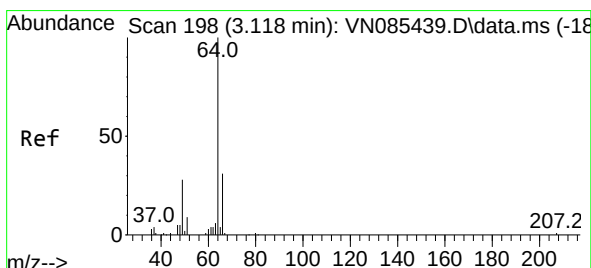
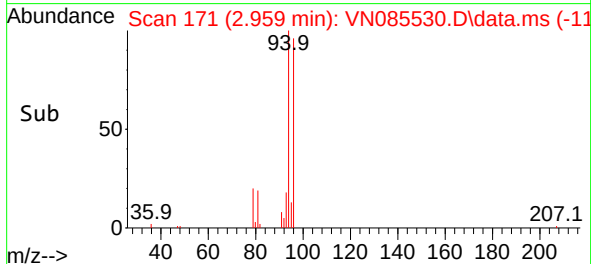
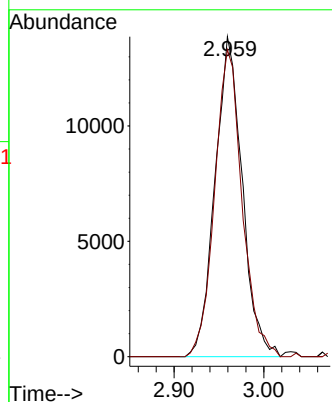
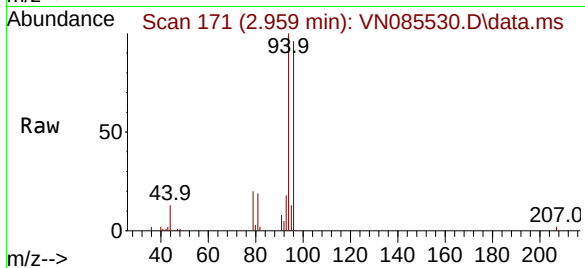




#5  
Bromomethane  
Concen: 18.008 ug/l  
RT: 2.959 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

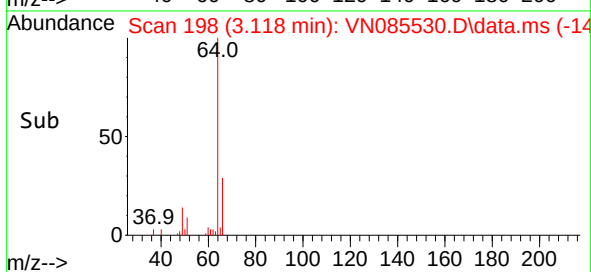
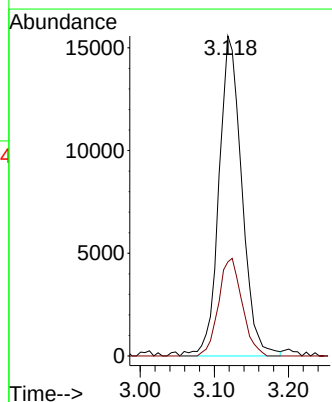
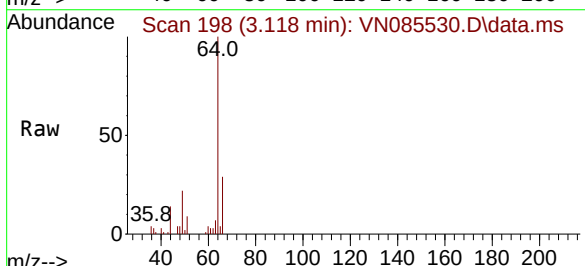
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 94 Resp: 29197  
Ion Ratio Lower Upper  
94 100  
96 95.9 71.8 107.6

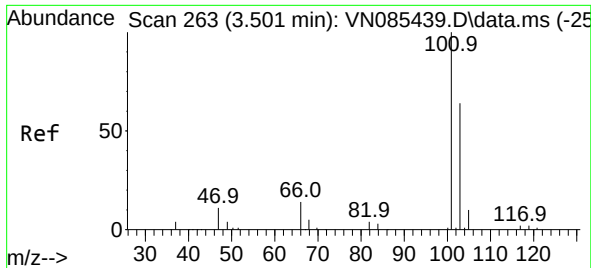


#6  
Chloroethane  
Concen: 19.610 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 64 Resp: 33369  
Ion Ratio Lower Upper  
64 100  
66 29.4 24.6 36.8



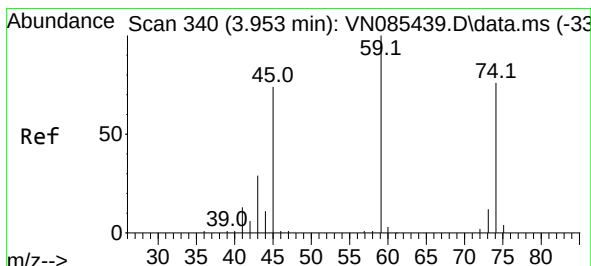
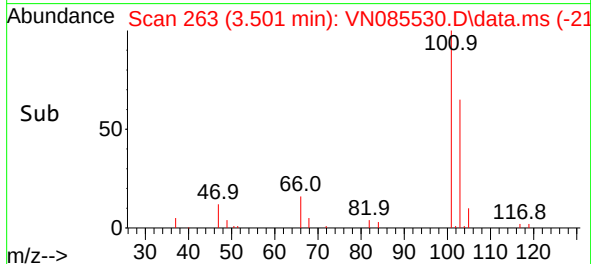
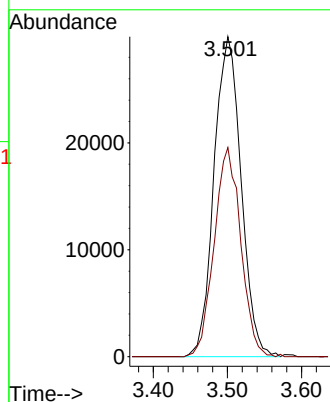
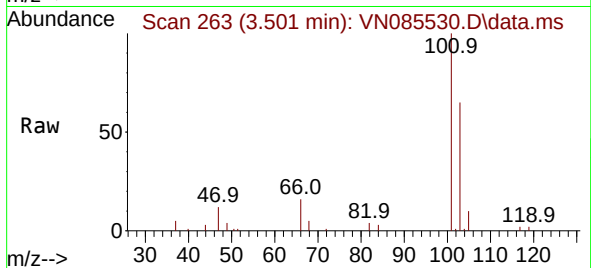




#7  
 Trichlorofluoromethane  
 Concen: 19.504 ug/l  
 RT: 3.501 min Scan# 210  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

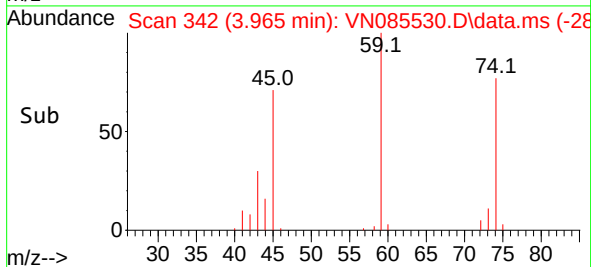
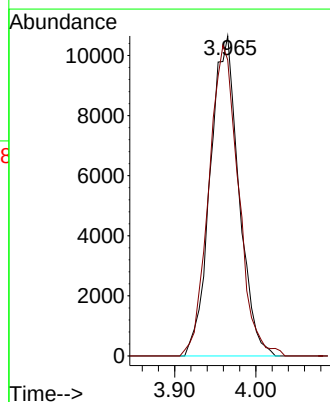
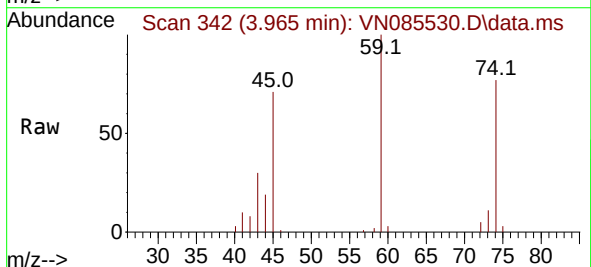
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

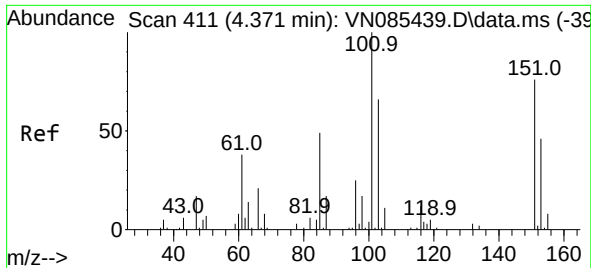
Tgt Ion:101 Resp: 75960  
 Ion Ratio Lower Upper  
 101 100  
 103 65.4 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 19.395 ug/l  
 RT: 3.965 min Scan# 342  
 Delta R.T. 0.012 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 74 Resp: 26094  
 Ion Ratio Lower Upper  
 74 100  
 45 100.4 49.7 149.1

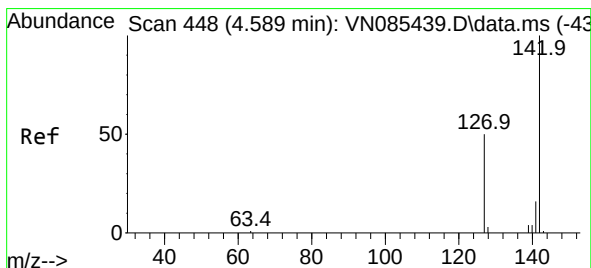
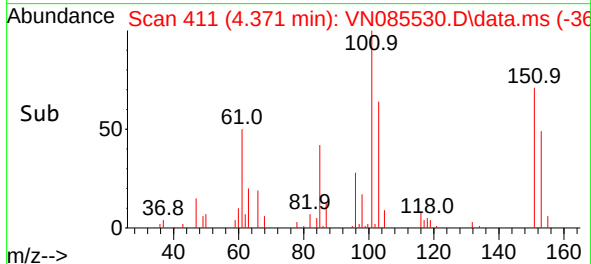
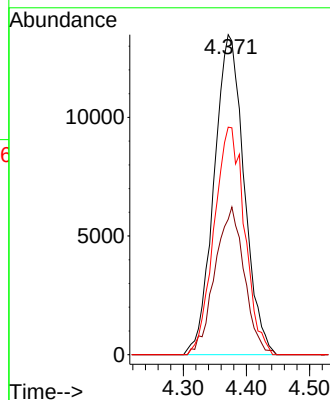
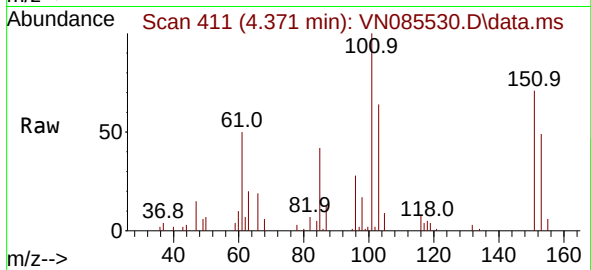




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.309 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

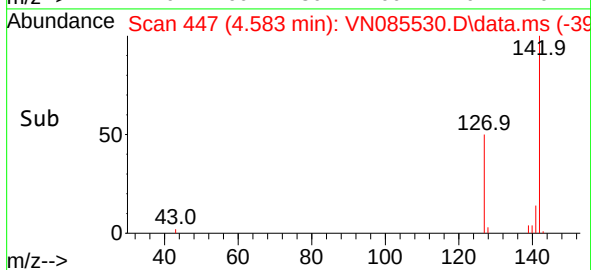
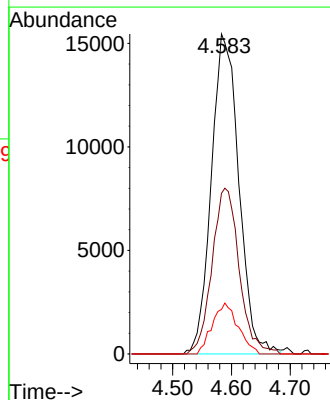
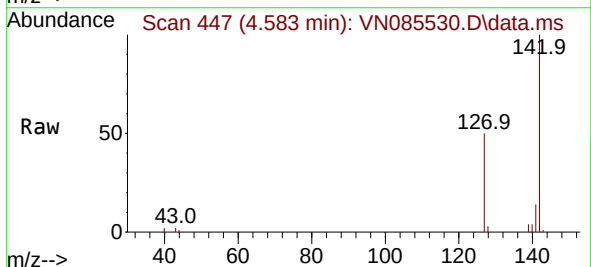
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

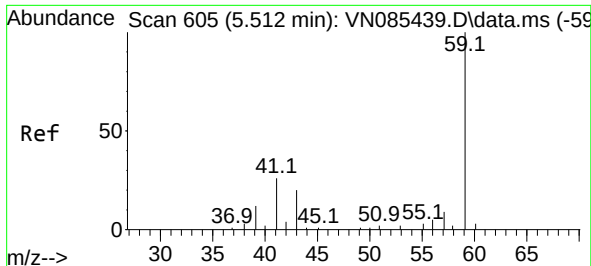
Tgt Ion:101 Resp: 44549  
Ion Ratio Lower Upper  
101 100  
85 45.2 37.8 56.8  
151 72.2 58.8 88.2



#10  
Methyl Iodide  
Concen: 19.974 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:142 Resp: 50174  
Ion Ratio Lower Upper  
142 100  
127 50.2 40.3 60.5  
141 13.9 12.8 19.2

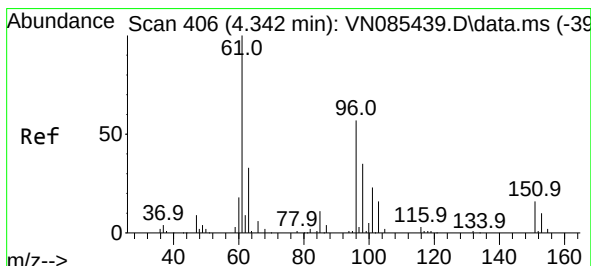
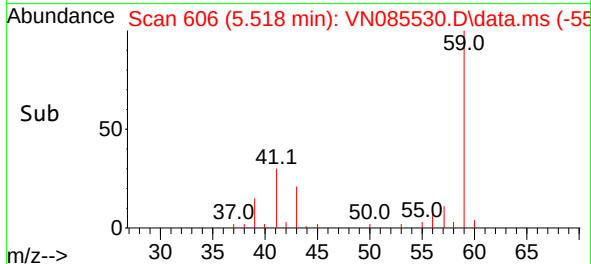
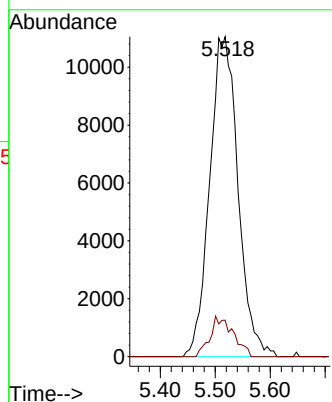
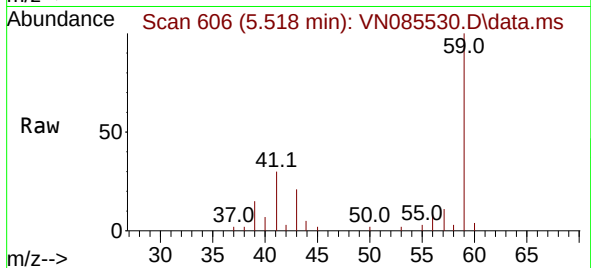




#11  
Tert butyl alcohol  
Concen: 117.652 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

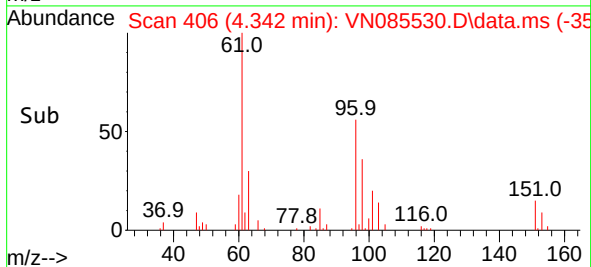
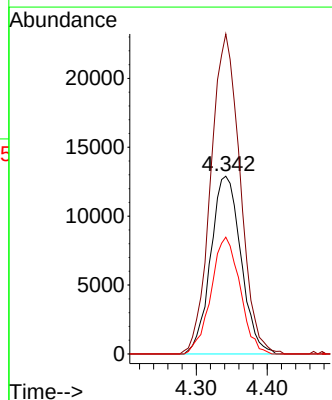
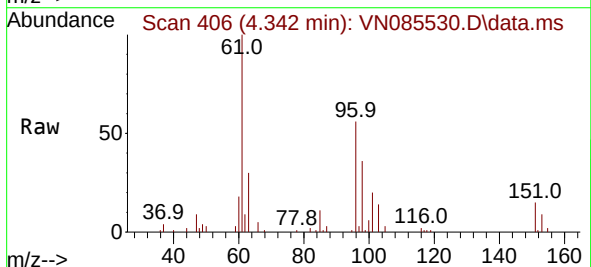
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

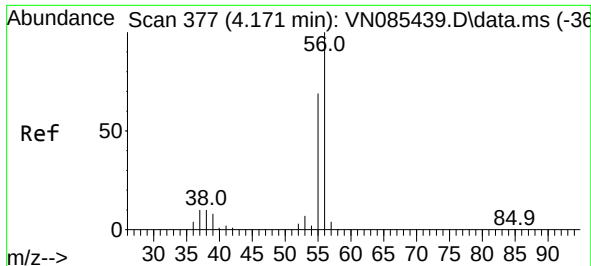
Tgt Ion: 59 Resp: 39612  
Ion Ratio Lower Upper  
59 100  
57 10.2 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 19.478 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 96 Resp: 38078  
Ion Ratio Lower Upper  
96 100  
61 180.1 141.0 211.4  
98 65.7 49.0 73.6





#13

Acrolein

Concen: 89.143 ug/l

RT: 4.183 min Scan# 31

Delta R.T. 0.012 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

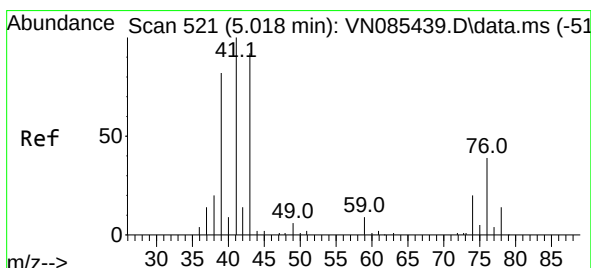
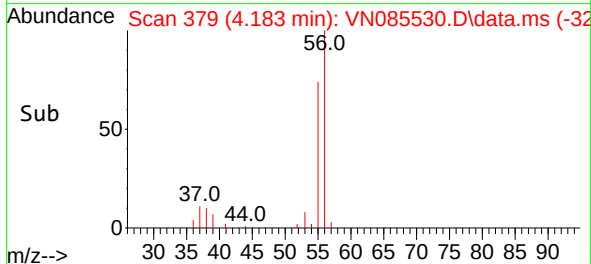
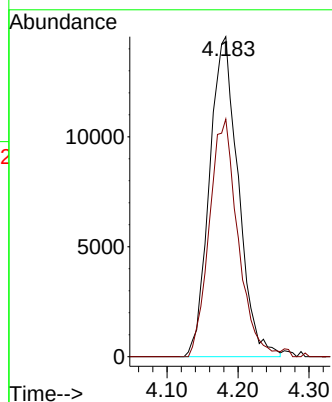
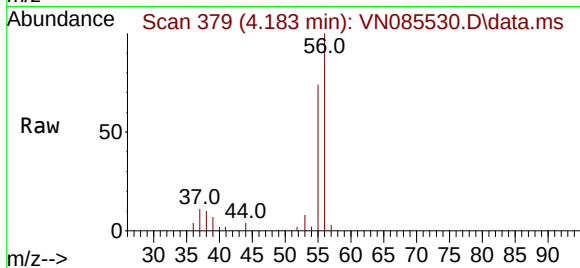
VN0128WBSD01

Tgt Ion: 56 Resp: 40971

Ion Ratio Lower Upper

56 100

55 73.7 56.3 84.5



#14

Allyl chloride

Concen: 19.320 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

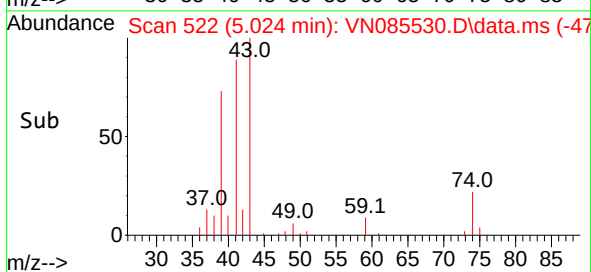
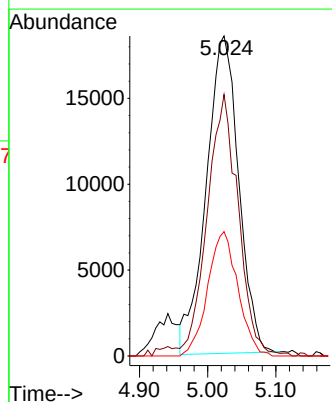
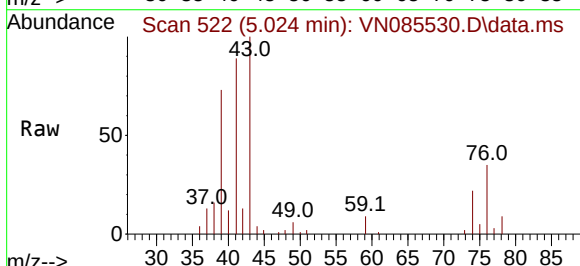
Tgt Ion: 41 Resp: 61288

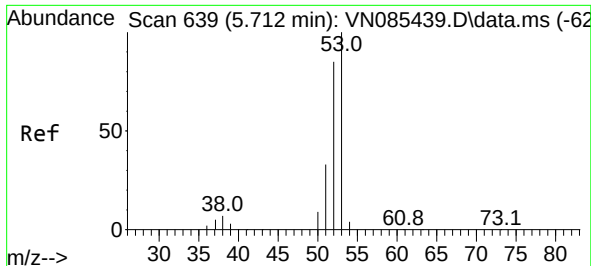
Ion Ratio Lower Upper

41 100

39 78.5 64.4 96.6

76 36.5 30.5 45.7



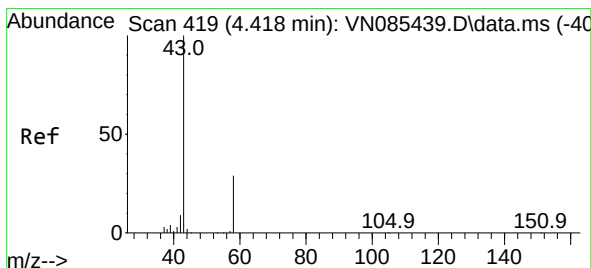
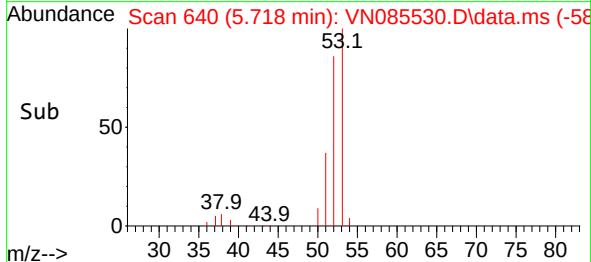
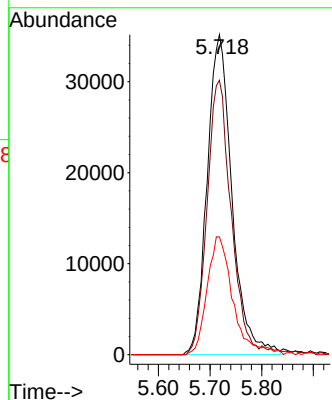
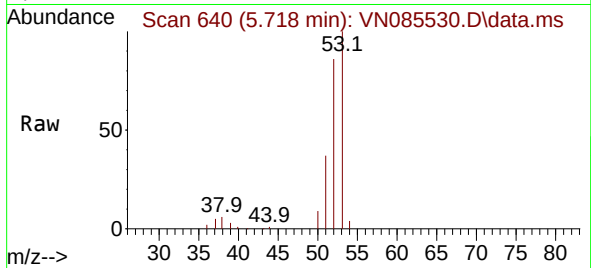


#15  
Acrylonitrile  
Concen: 109.689 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 53 Resp: 117305

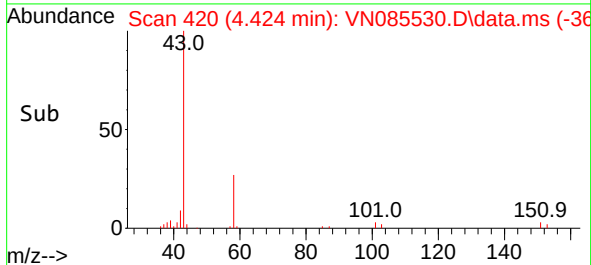
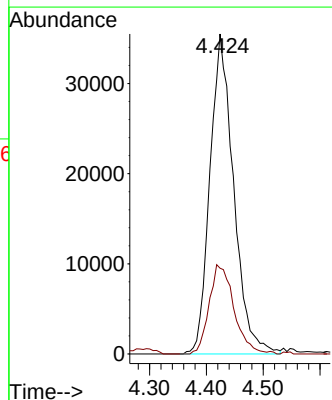
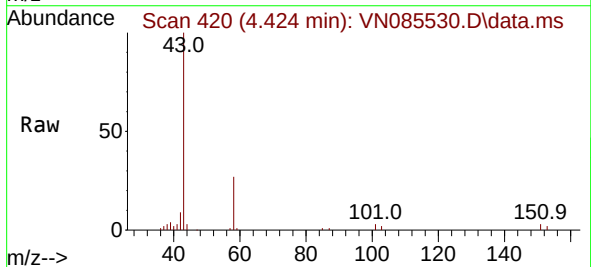
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 53  | 100   |       |       |
| 52  | 84.6  | 65.5  | 98.3  |
| 51  | 38.2  | 29.8  | 44.8  |

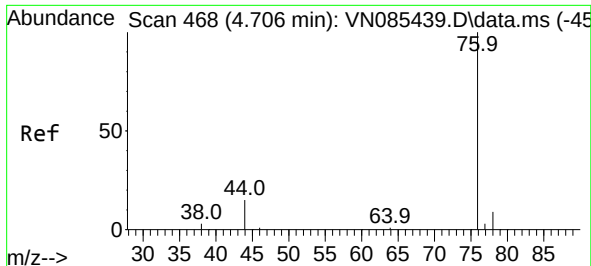


#16  
Acetone  
Concen: 108.100 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 43 Resp: 102700

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 26.8  | 23.8  | 35.6  |

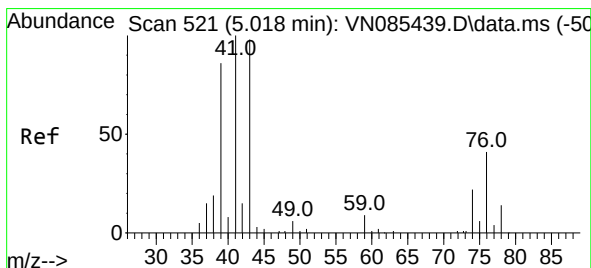
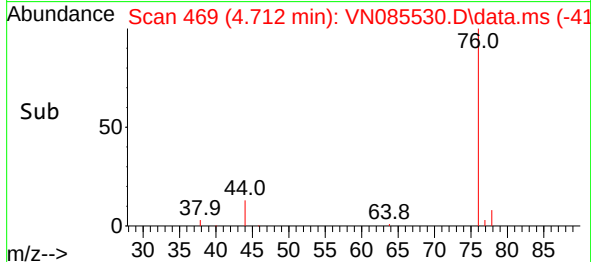
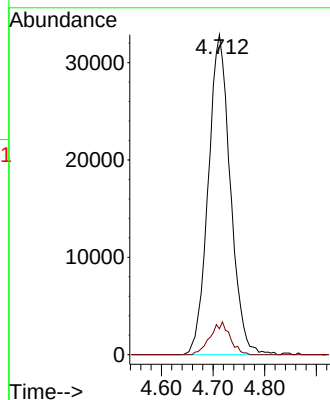
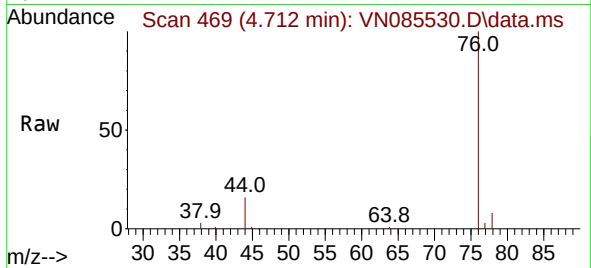




#17  
Carbon Disulfide  
Concen: 16.205 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

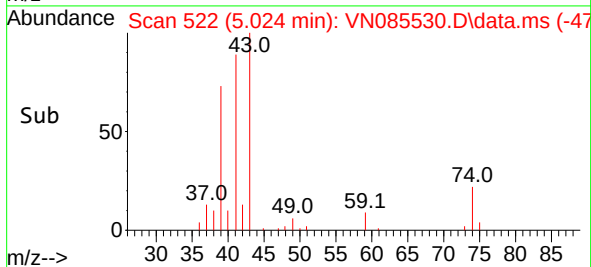
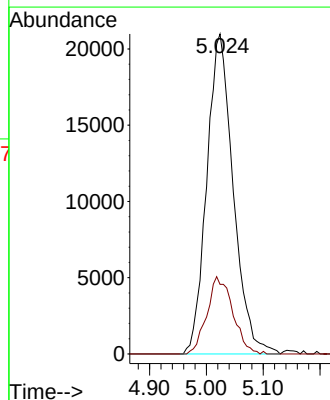
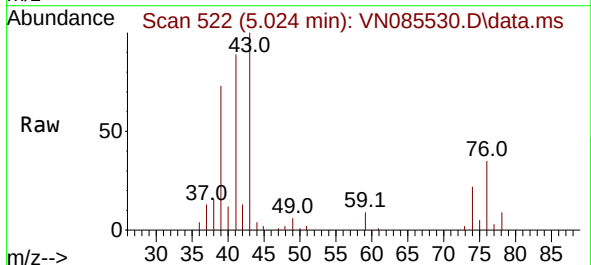
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

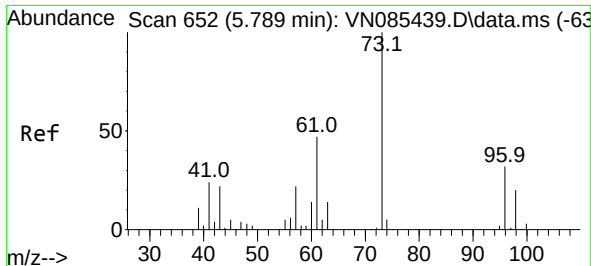
Tgt Ion: 76 Resp: 97539  
Ion Ratio Lower Upper  
76 100  
78 8.1 6.9 10.3



#18  
Methyl Acetate  
Concen: 23.500 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 43 Resp: 67889  
Ion Ratio Lower Upper  
43 100  
74 23.5 18.6 28.0

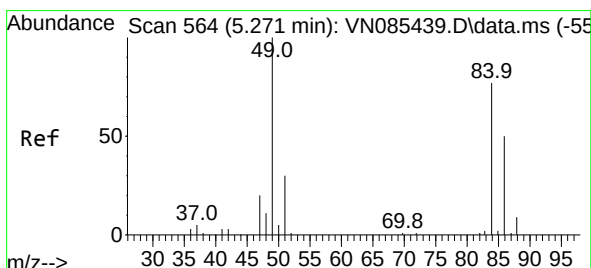
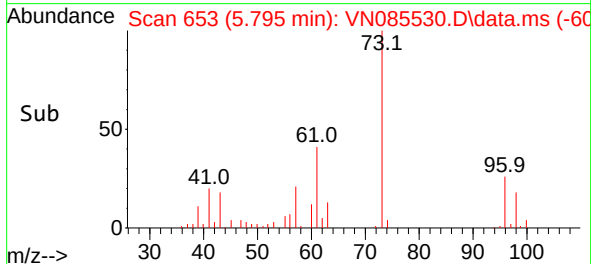
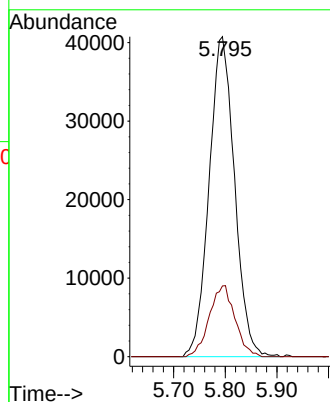
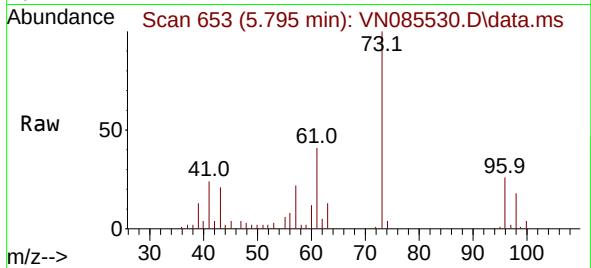




#19  
Methyl tert-butyl Ether  
Concen: 21.942 ug/l  
RT: 5.795 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

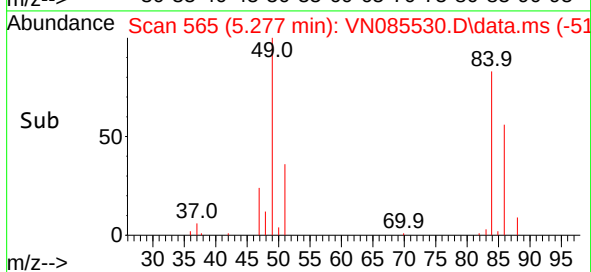
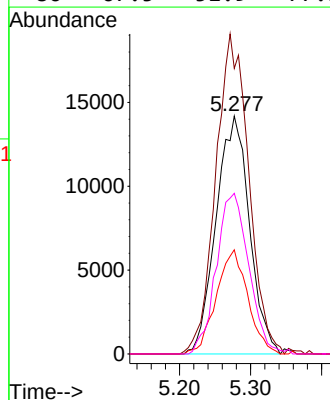
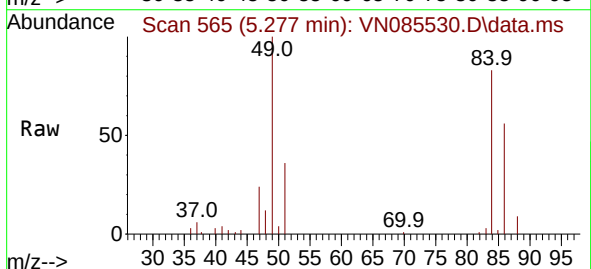
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

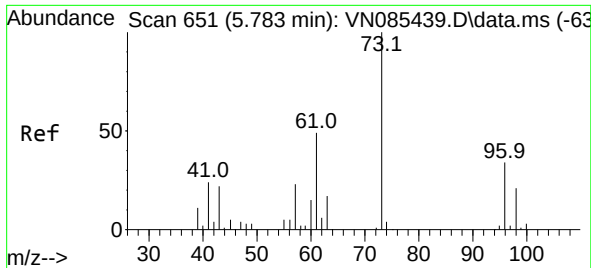
Tgt Ion: 73 Resp: 139282  
Ion Ratio Lower Upper  
73 100  
57 22.1 17.8 26.8



#20  
Methylene Chloride  
Concen: 19.680 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 84 Resp: 46285  
Ion Ratio Lower Upper  
84 100  
49 120.0 104.1 156.1  
51 43.7 31.0 46.4  
86 67.5 51.9 77.9

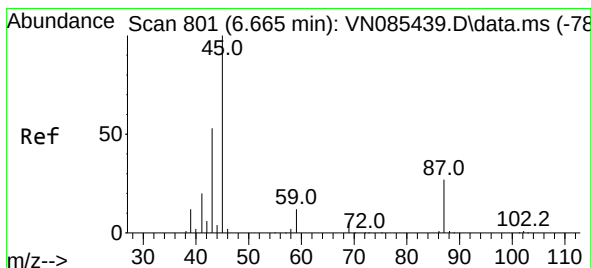
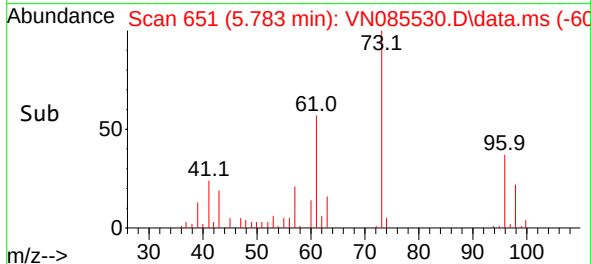
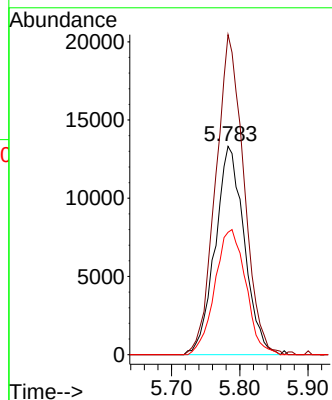
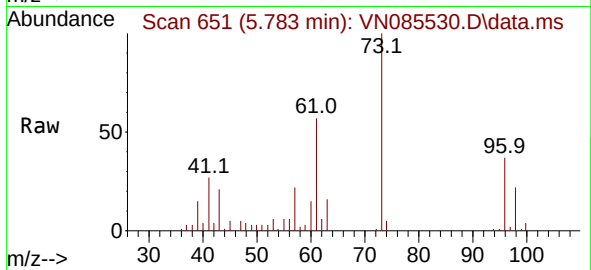




#21  
trans-1,2-Dichloroethene  
Concen: 18.916 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

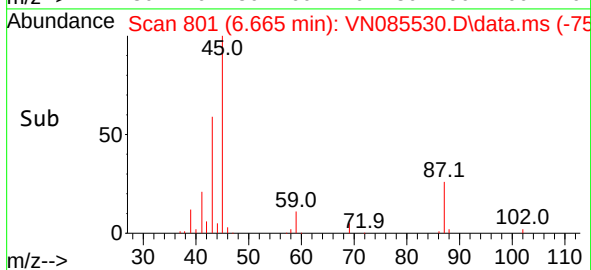
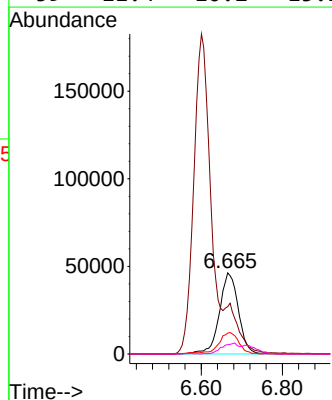
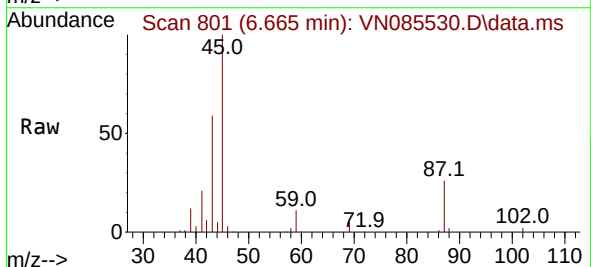
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 96 Resp: 39520  
Ion Ratio Lower Upper  
96 100  
61 153.6 115.7 173.5  
98 58.7 49.8 74.8

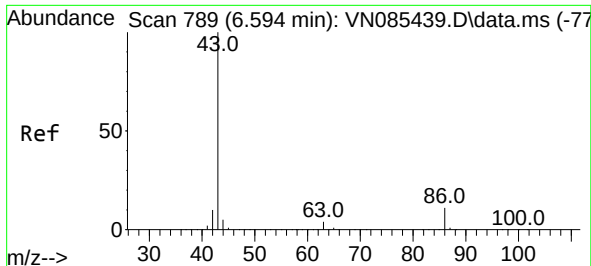


#22  
Diisopropyl ether  
Concen: 21.371 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 45 Resp: 150475  
Ion Ratio Lower Upper  
45 100  
43 57.5 45.0 67.6  
87 25.7 21.8 32.8  
59 11.4 10.2 15.2



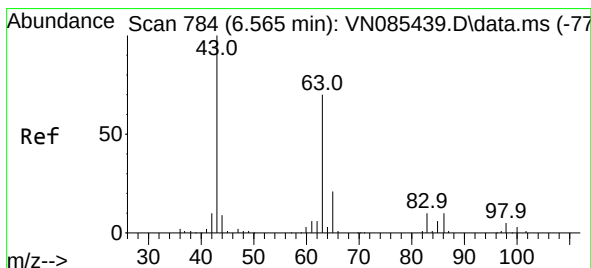
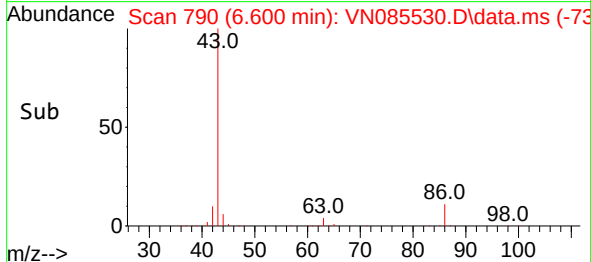
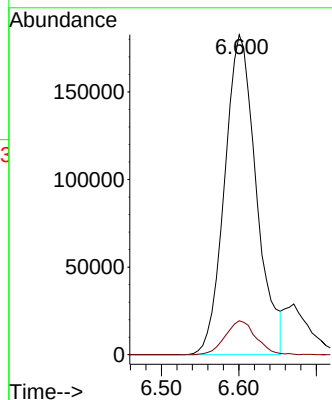
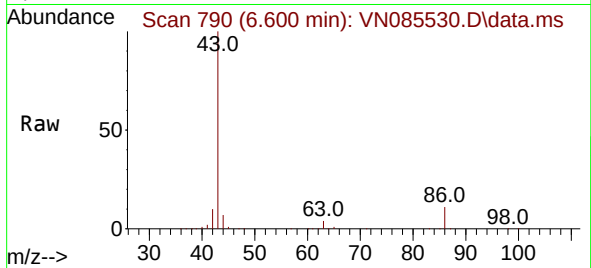




#23  
 Vinyl Acetate  
 Concen: 105.676 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

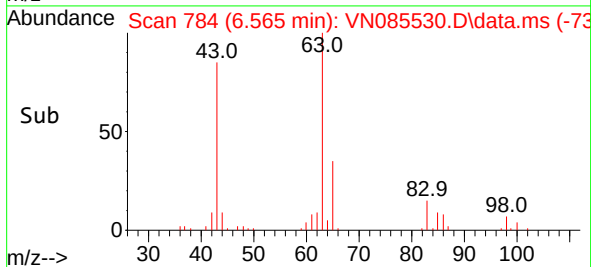
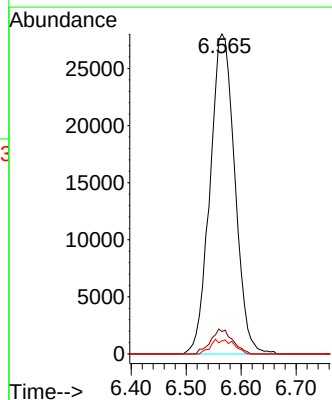
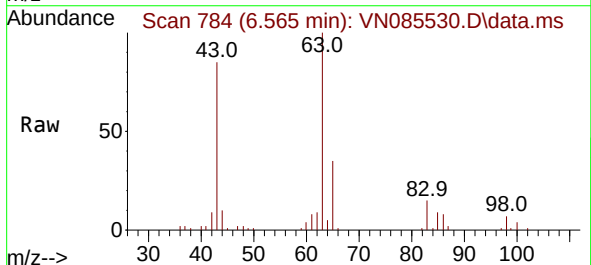
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

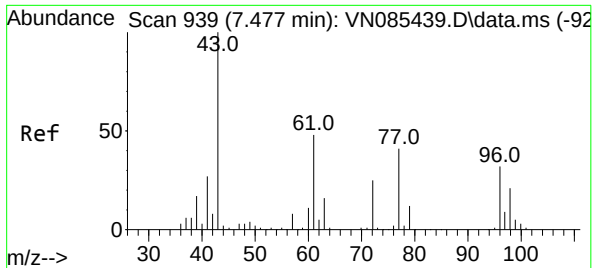
Tgt Ion: 43 Resp: 520716  
 Ion Ratio Lower Upper  
 43 100  
 86 10.6 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 20.448 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 63 Resp: 87788  
 Ion Ratio Lower Upper  
 63 100  
 98 7.0 3.3 9.8  
 100 4.1 2.0 6.0

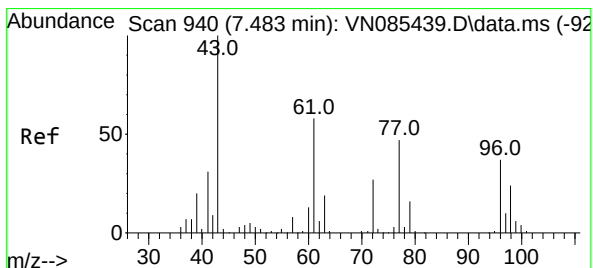
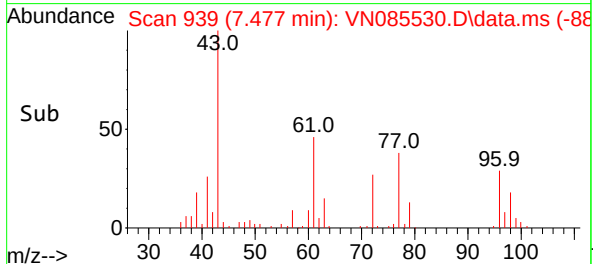
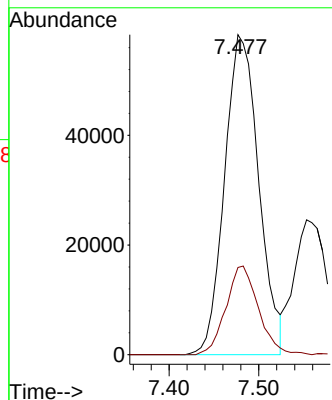
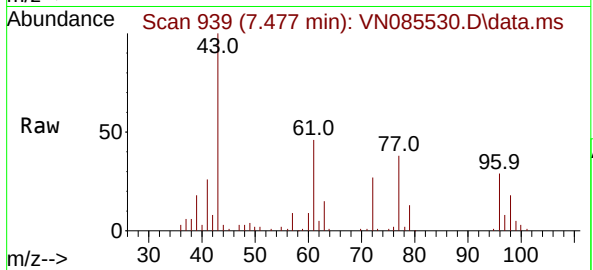




#25  
2-Butanone  
Concen: 110.320 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

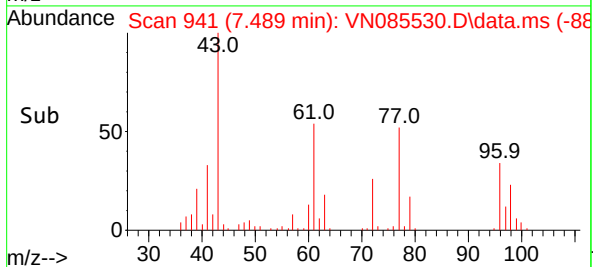
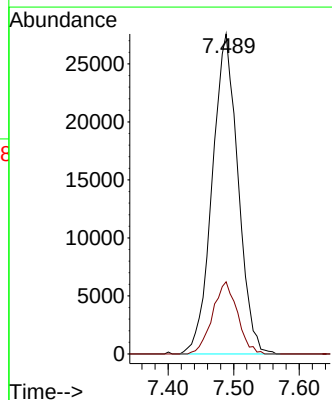
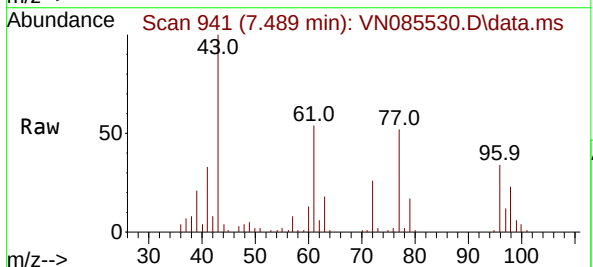
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

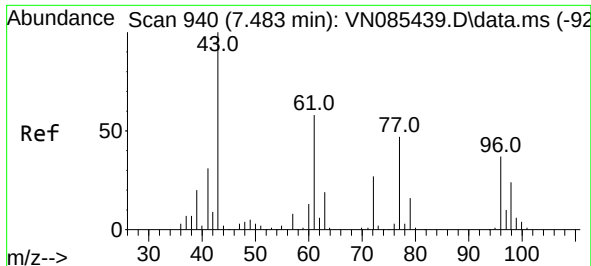
Tgt Ion: 43 Resp: 154236  
Ion Ratio Lower Upper  
43 100  
72 27.2 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 21.682 ug/l  
RT: 7.489 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 77 Resp: 75260  
Ion Ratio Lower Upper  
77 100  
97 21.8 10.7 32.1

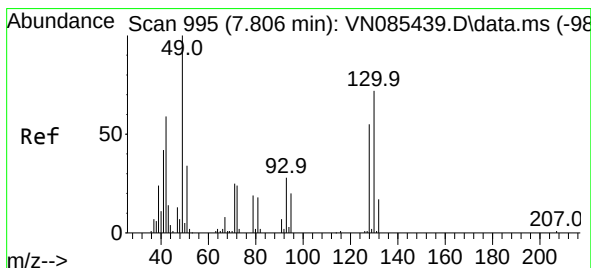
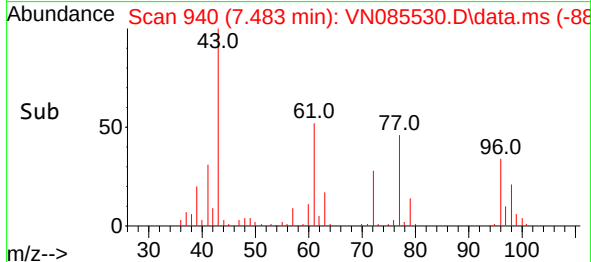
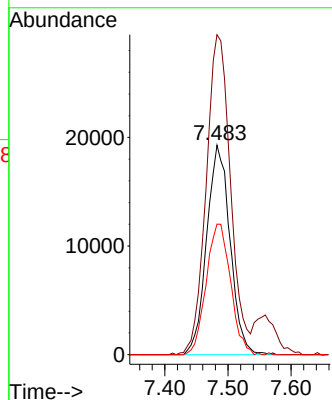
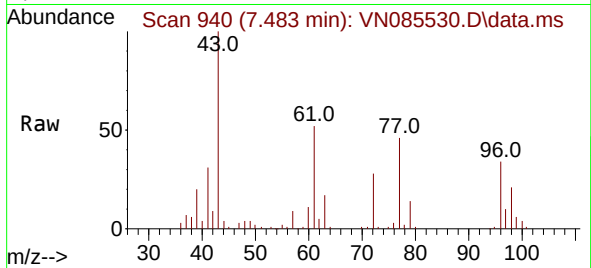




#27  
 cis-1,2-Dichloroethene  
 Concen: 20.206 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

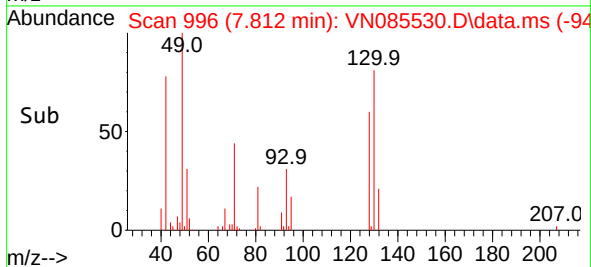
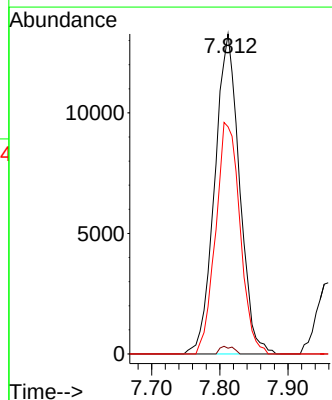
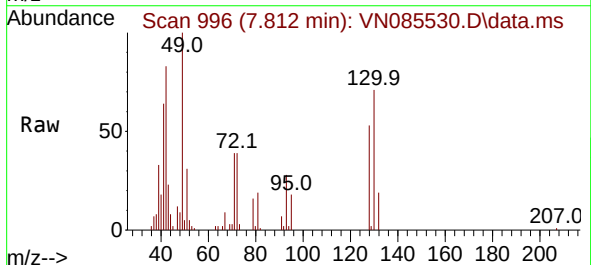
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

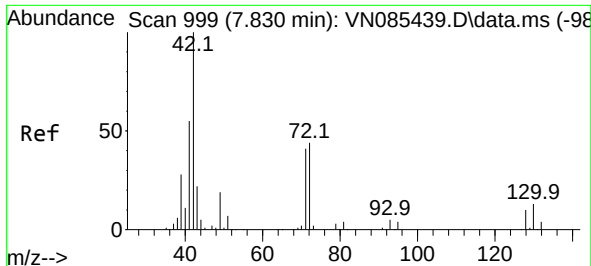
Tgt Ion: 96 Resp: 49722  
 Ion Ratio Lower Upper  
 96 100  
 61 158.8 0.0 311.8  
 98 64.8 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 16.842 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 49 Resp: 33640  
 Ion Ratio Lower Upper  
 49 100  
 129 1.3 0.0 4.4  
 130 71.1 55.0 82.4





#29

Tetrahydrofuran

Concen: 114.937 ug/l

RT: 7.841 min Scan# 1001

Delta R.T. 0.012 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

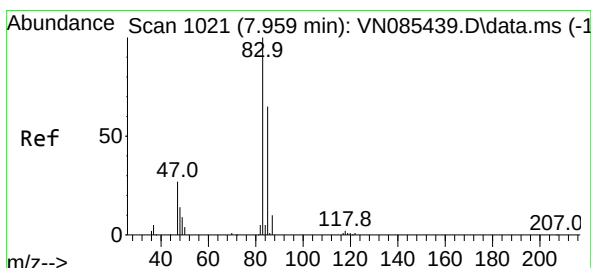
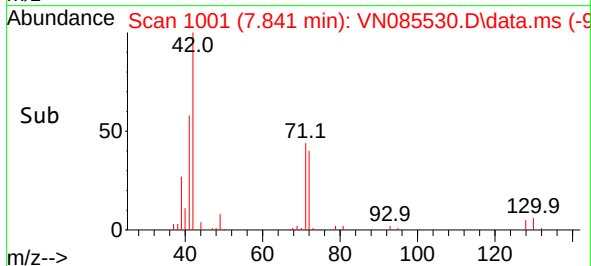
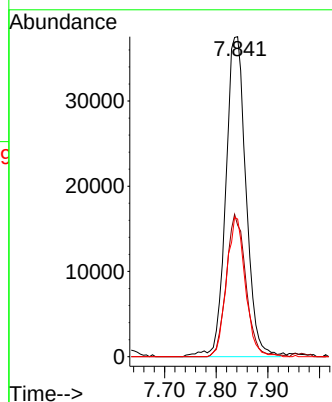
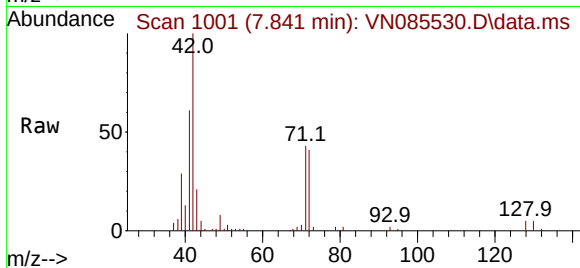
Tgt Ion: 42 Resp: 101879

Ion Ratio Lower Upper

42 100

72 43.2 34.2 51.2

71 40.7 32.5 48.7



#30

Chloroform

Concen: 20.593 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085530.D

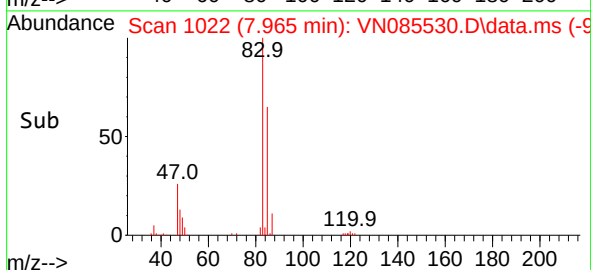
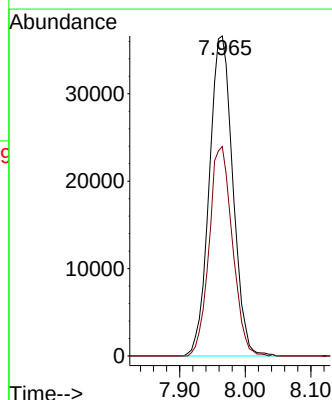
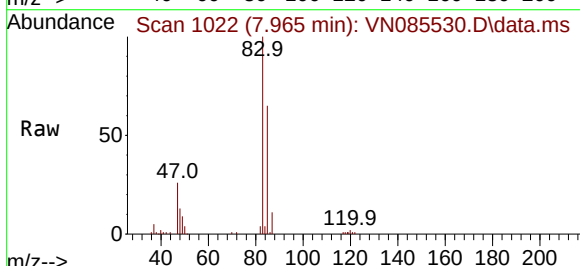
Acq: 28 Jan 2025 11:48

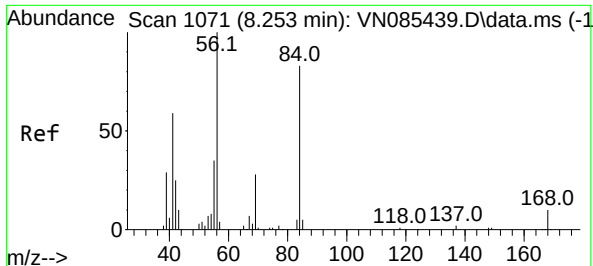
Tgt Ion: 83 Resp: 91378

Ion Ratio Lower Upper

83 100

85 65.4 51.8 77.6

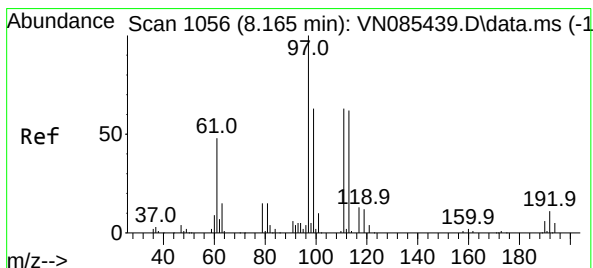
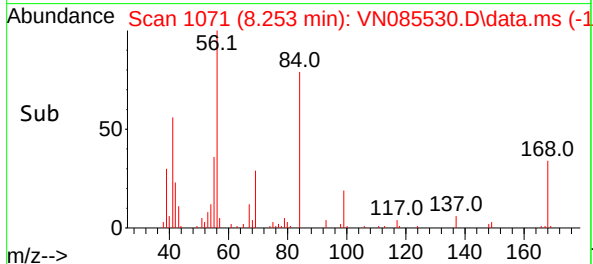
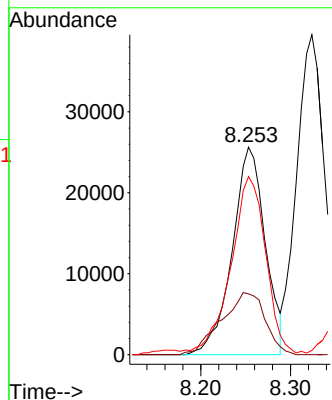
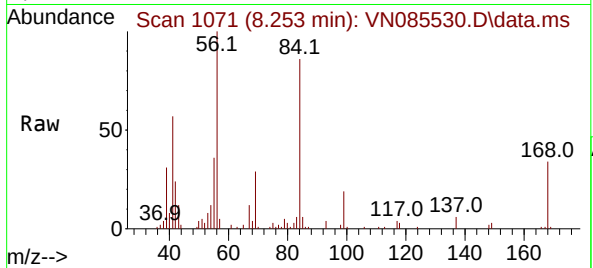




#31  
Cyclohexane  
Concen: 17.571 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

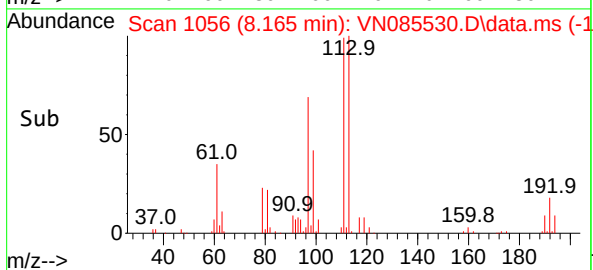
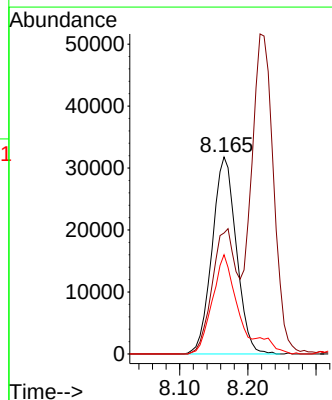
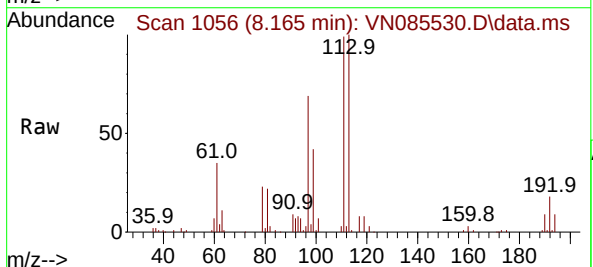
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

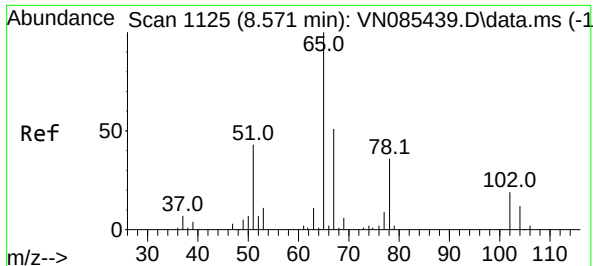
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 56    | Resp: | 65567 |
| Ion Ratio | Lower | Upper |       |
| 56        | 100   |       |       |
| 69        | 29.3  | 22.2  | 33.4  |
| 84        | 84.2  | 66.4  | 99.6  |



#32  
1,1,1-Trichloroethane  
Concen: 20.134 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 97    | Resp: | 78366 |
| Ion Ratio | Lower | Upper |       |
| 97        | 100   |       |       |
| 99        | 63.6  | 49.8  | 74.6  |
| 61        | 50.8  | 41.4  | 62.2  |





#33

1,2-Dichloroethane-d4

Concen: 50.279 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

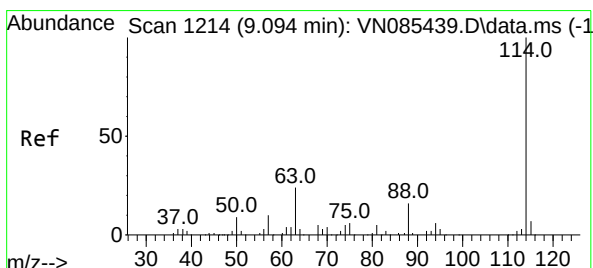
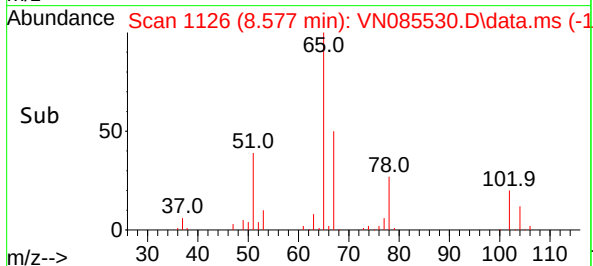
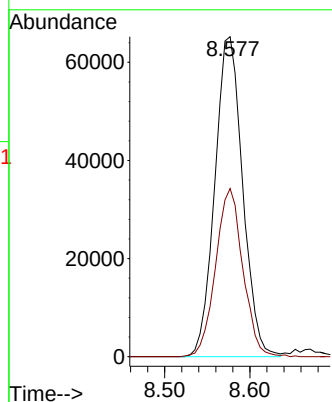
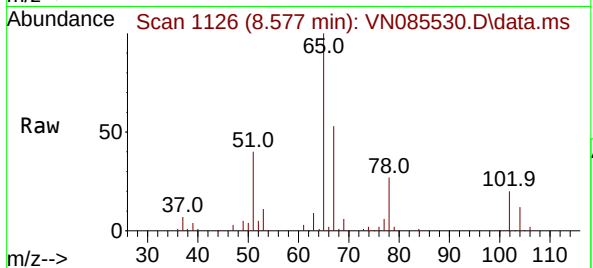
VN0128WBSD01

Tgt Ion: 65 Resp: 147838

Ion Ratio Lower Upper

65 100

67 51.5 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

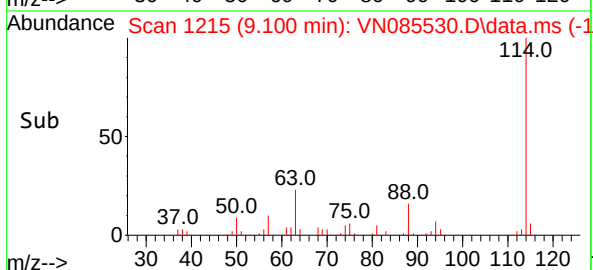
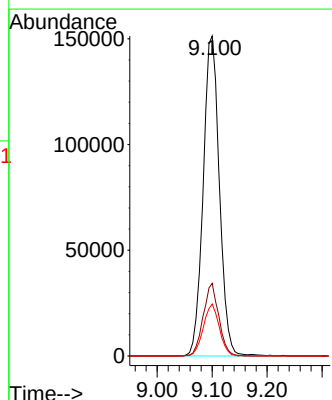
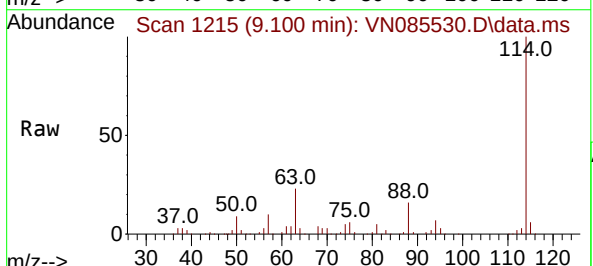
Tgt Ion: 114 Resp: 309854

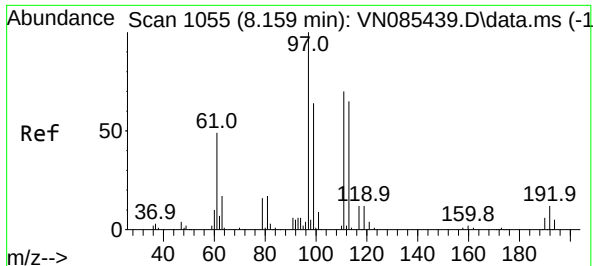
Ion Ratio Lower Upper

114 100

63 22.7 0.0 47.6

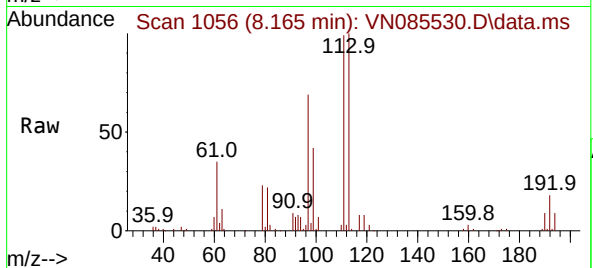
88 16.2 0.0 32.6



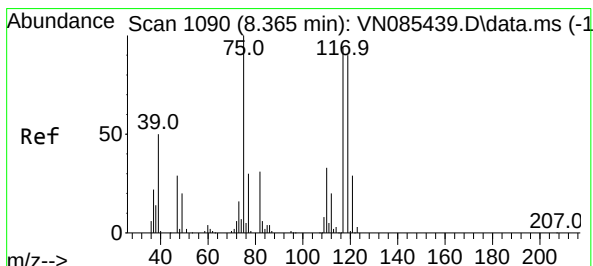
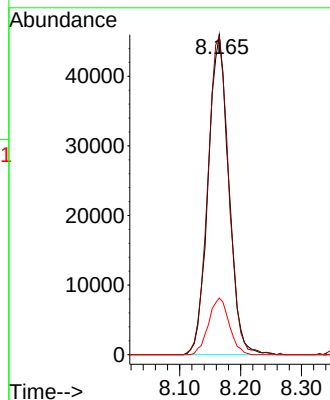
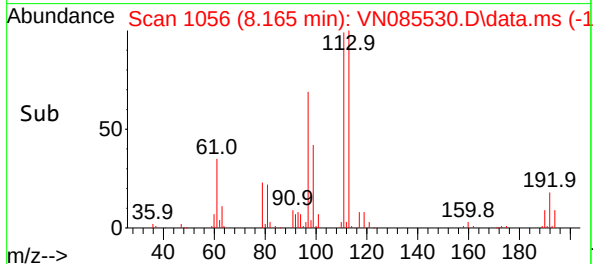


#35  
Dibromofluoromethane  
Concen: 50.222 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

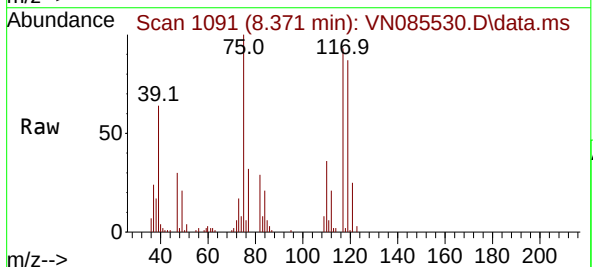
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01



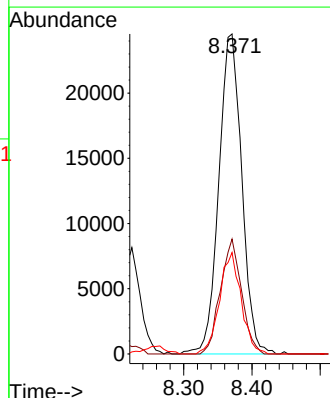
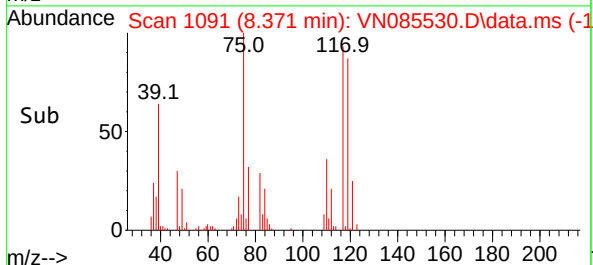
Tgt Ion:113 Resp: 107958  
Ion Ratio Lower Upper  
113 100  
111 101.5 82.7 124.1  
192 17.7 14.3 21.5

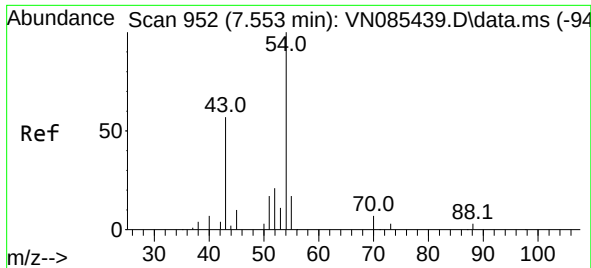


#36  
1,1-Dichloropropene  
Concen: 19.063 ug/l  
RT: 8.371 min Scan# 1091  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48



Tgt Ion: 75 Resp: 57513  
Ion Ratio Lower Upper  
75 100  
110 33.1 16.5 49.5  
77 29.9 24.4 36.6

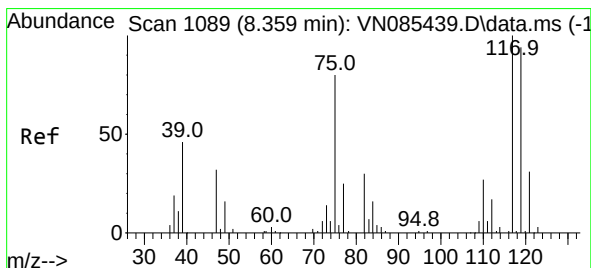
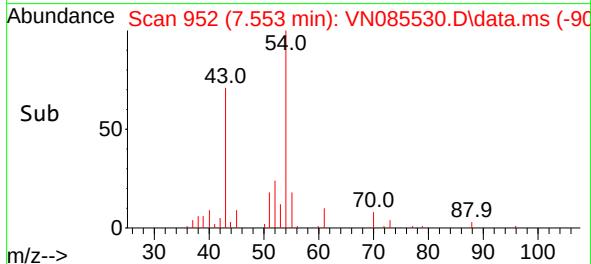
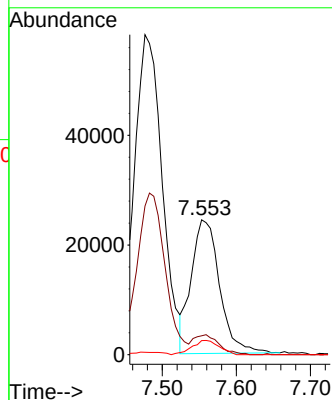
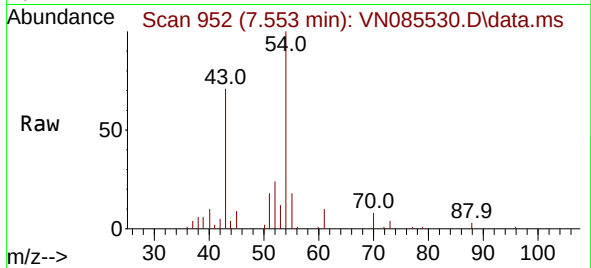




#37  
Ethyl Acetate  
Concen: 21.326 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

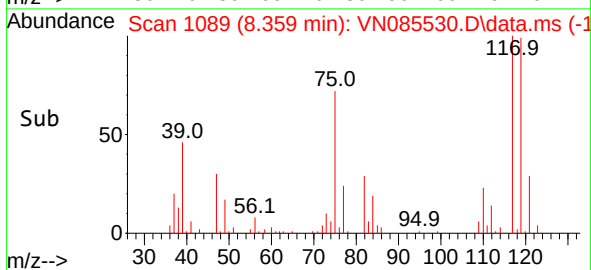
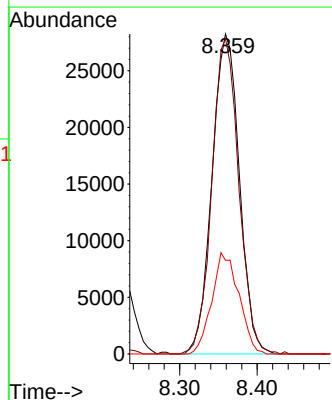
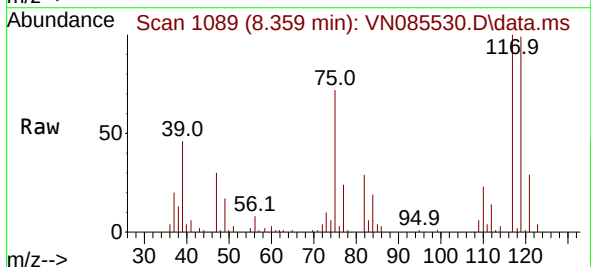
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion: 43 Resp: 64941  
Ion Ratio Lower Upper  
43 100  
61 13.2 10.9 16.3  
70 10.2 7.5 11.3

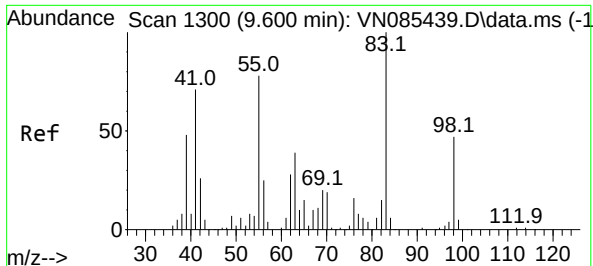


#38  
Carbon Tetrachloride  
Concen: 20.038 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 117 Resp: 69210  
Ion Ratio Lower Upper  
117 100  
119 98.5 75.4 113.2  
121 29.3 24.6 37.0







#39

Methylcyclohexane

Concen: 18.659 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

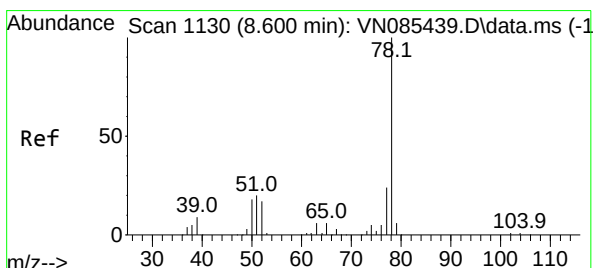
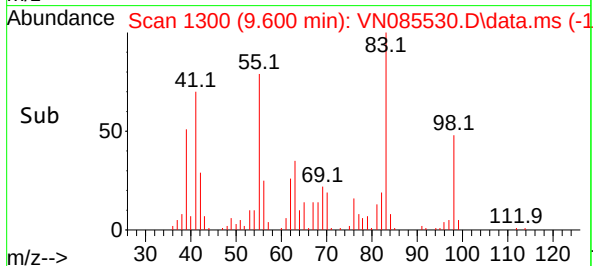
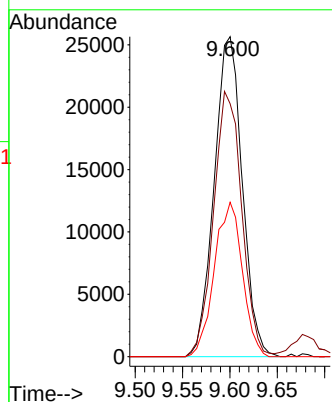
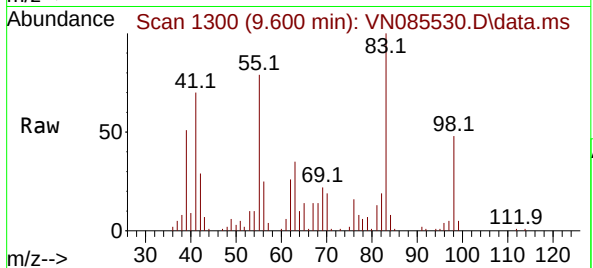
Tgt Ion: 83 Resp: 52898

Ion Ratio Lower Upper

83 100

55 79.0 62.6 94.0

98 48.2 37.7 56.5



#40

Benzene

Concen: 20.225 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085530.D

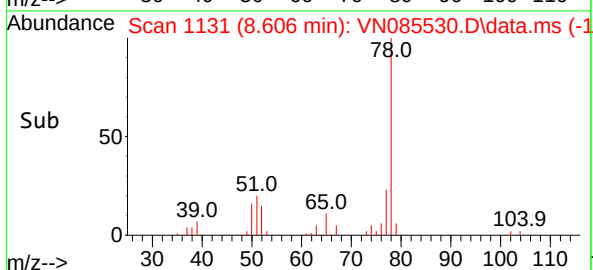
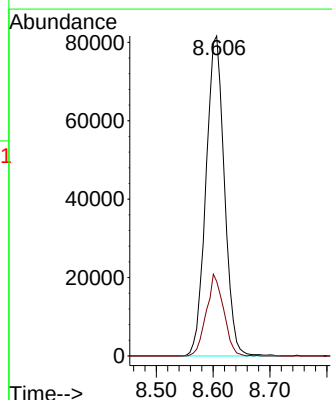
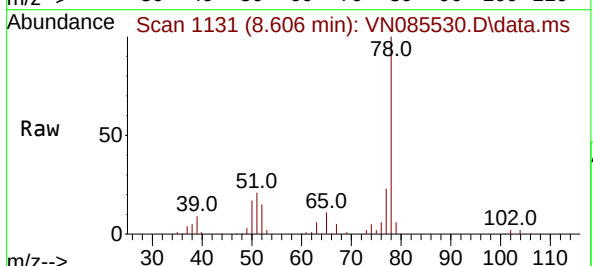
Acq: 28 Jan 2025 11:48

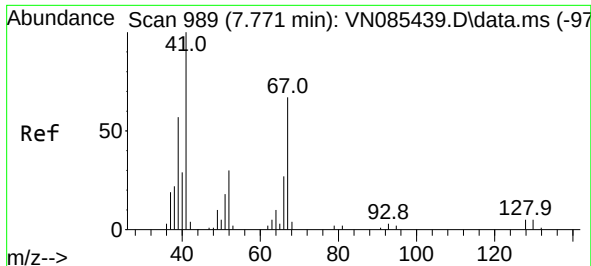
Tgt Ion: 78 Resp: 183341

Ion Ratio Lower Upper

78 100

77 23.3 19.0 28.6

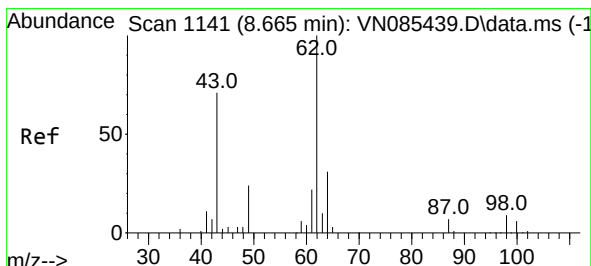
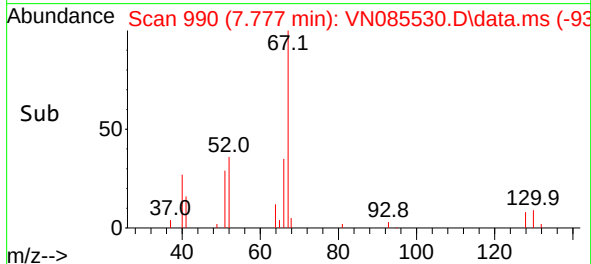
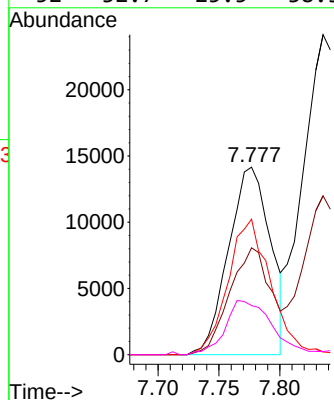
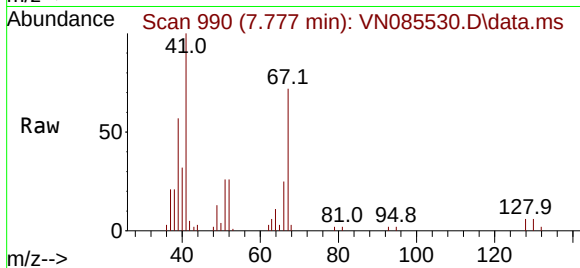




#41  
Methacrylonitrile  
Concen: 21.410 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

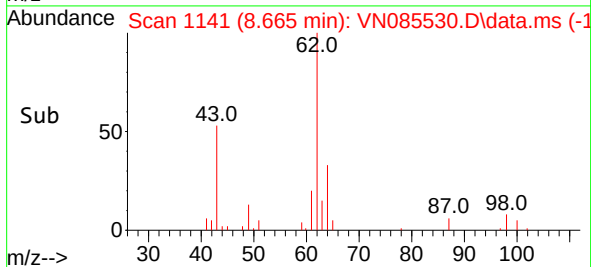
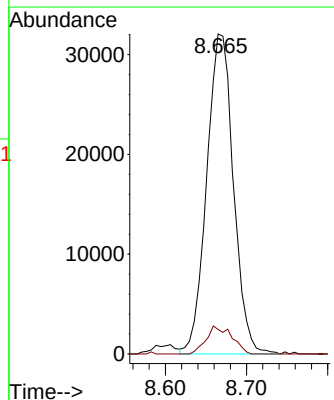
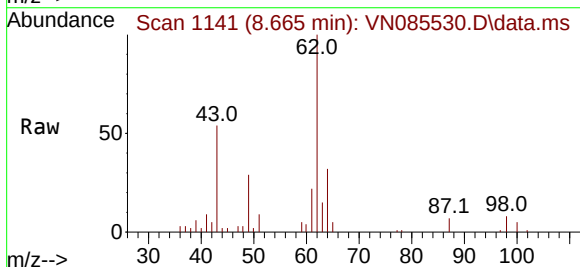
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

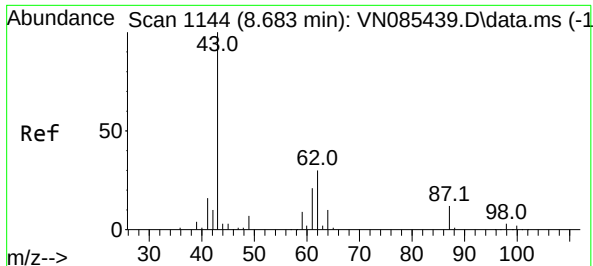
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 33920 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 55.6  | 46.0  | 69.0  |
| 67       | 73.8  | 57.4  | 86.2  |
| 52       | 32.7  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 21.514 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 73450 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.4   | 0.0   | 17.0  |

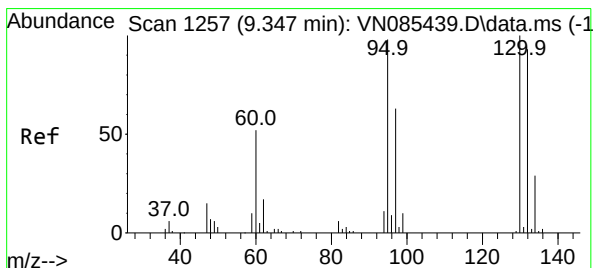
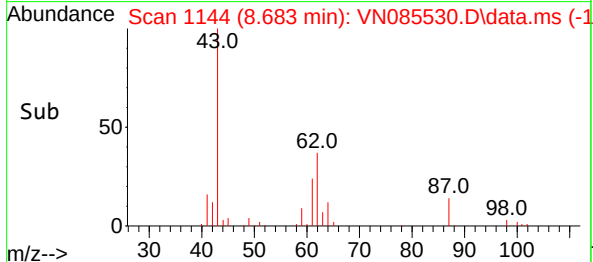
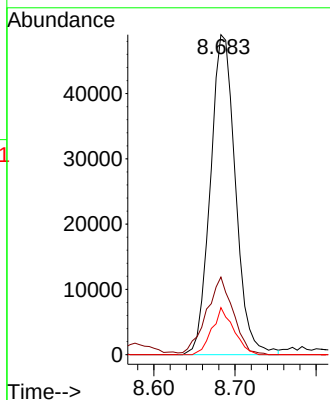
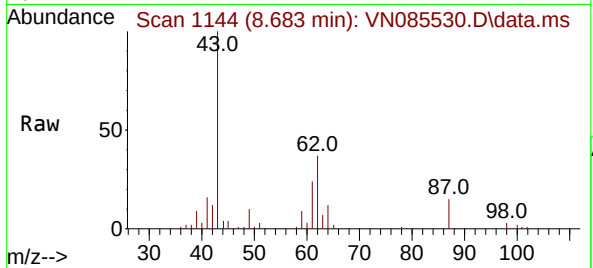




#43  
Isopropyl Acetate  
Concen: 21.565 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

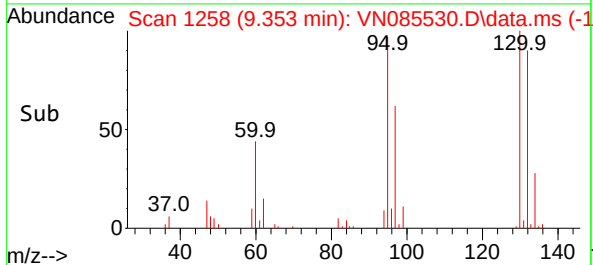
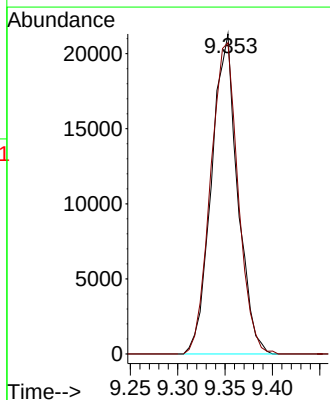
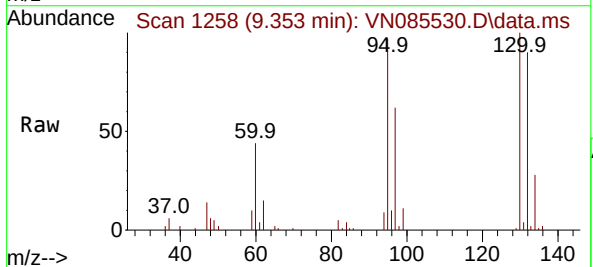
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

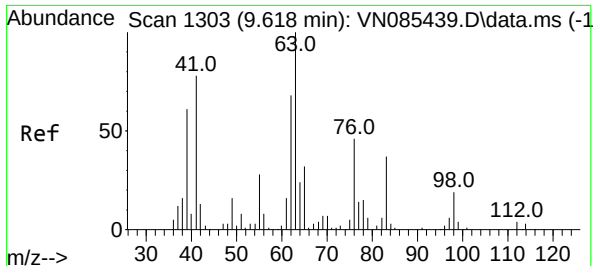
Tgt Ion: 43 Resp: 105226  
Ion Ratio Lower Upper  
43 100  
61 26.0 20.7 31.1  
87 12.7 9.8 14.8



#44  
Trichloroethene  
Concen: 19.386 ug/l  
RT: 9.353 min Scan# 1258  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:130 Resp: 40907  
Ion Ratio Lower Upper  
130 100  
95 97.3 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.703 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

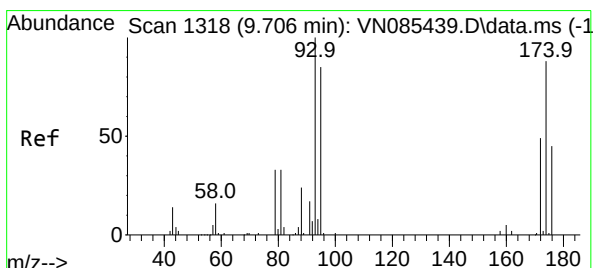
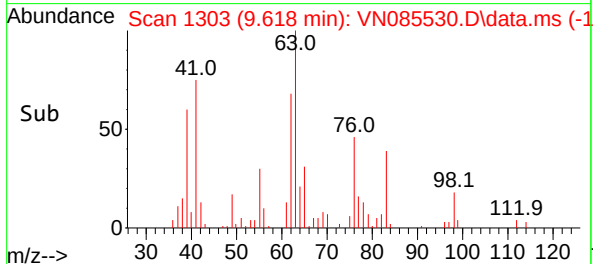
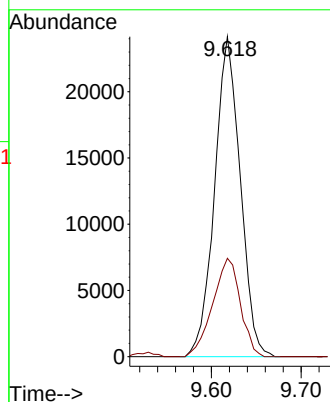
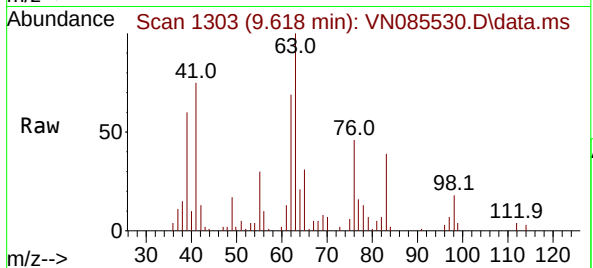
VN0128WBSD01

Tgt Ion: 63 Resp: 47937

Ion Ratio Lower Upper

63 100

65 30.8 25.6 38.4



#46

Dibromomethane

Concen: 20.981 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

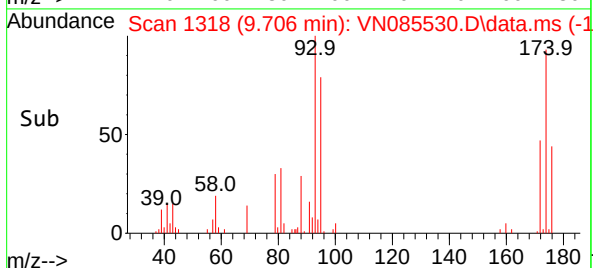
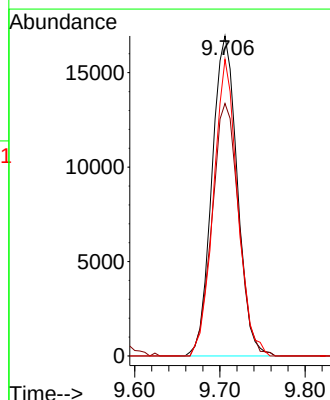
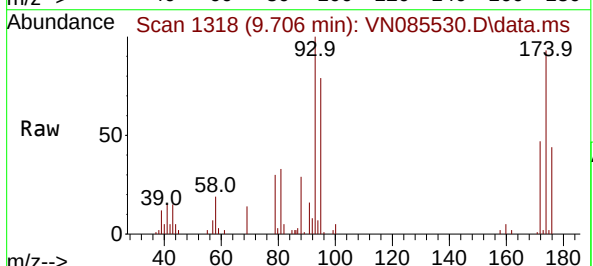
Tgt Ion: 93 Resp: 35054

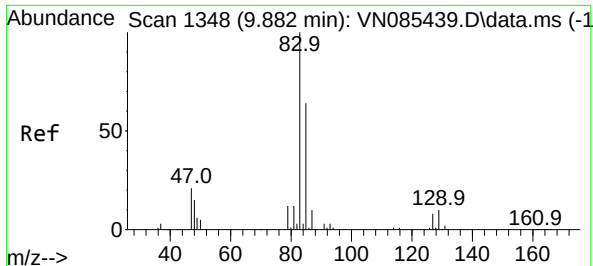
Ion Ratio Lower Upper

93 100

95 82.8 64.7 97.1

174 88.1 69.0 103.4

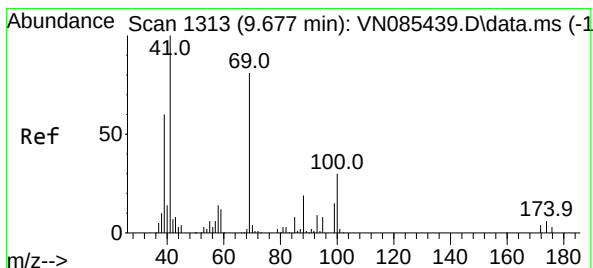
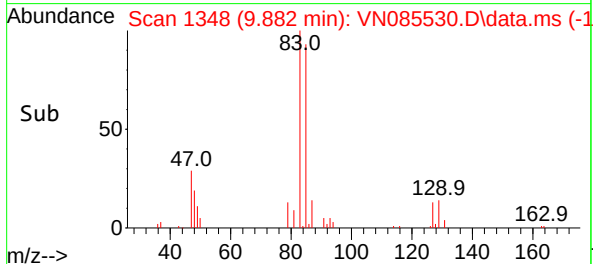
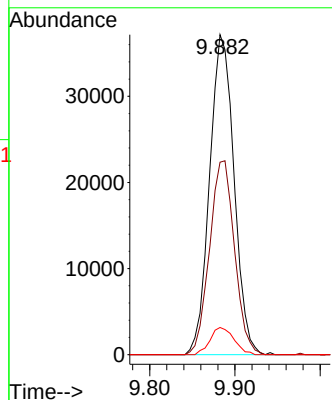
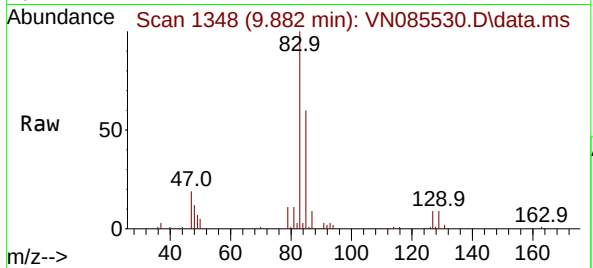




#47  
Bromodichloromethane  
Concen: 21.738 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

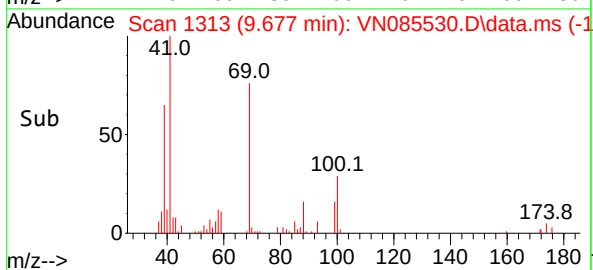
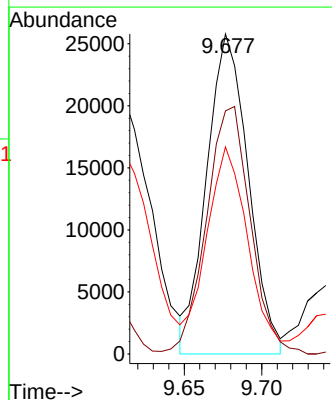
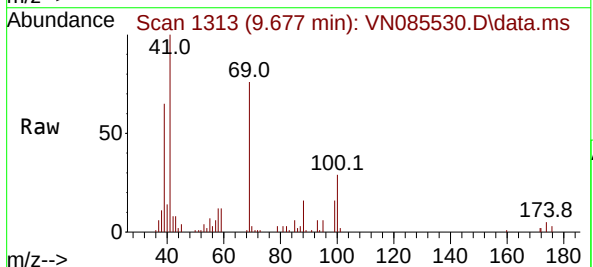
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

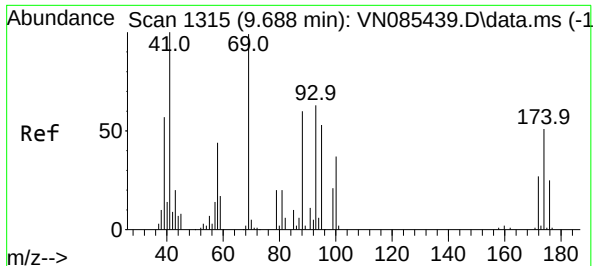
Tgt Ion: 83 Resp: 73992  
Ion Ratio Lower Upper  
83 100  
85 60.1 51.2 76.8  
127 8.5 6.5 9.7



#48  
Methyl methacrylate  
Concen: 21.918 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 41 Resp: 48128  
Ion Ratio Lower Upper  
41 100  
69 81.9 64.7 97.1  
39 65.4 49.0 73.6





#49

1,4-Dioxane

Concen: 466.467 ug/l

RT: 9.688 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

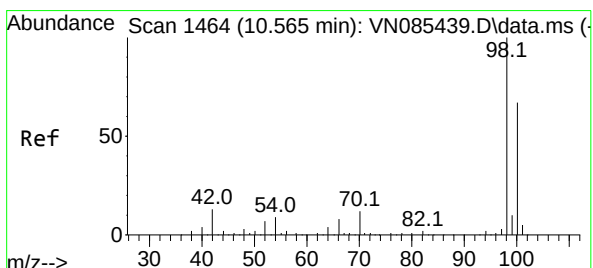
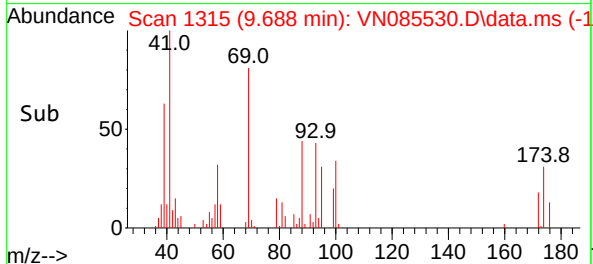
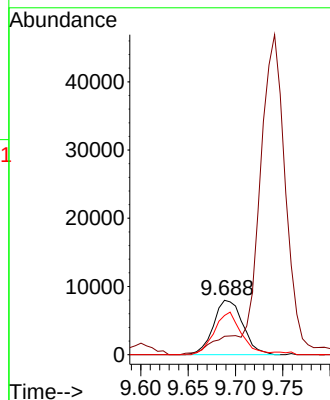
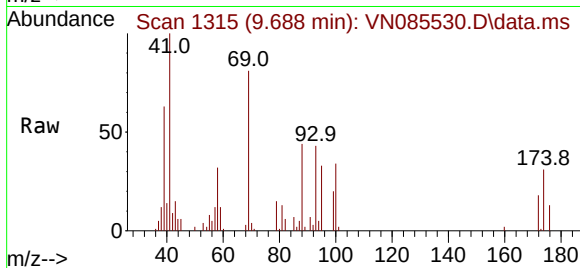
Tgt Ion: 88 Resp: 17249

Ion Ratio Lower Upper

88 100

43 0.0 26.6 39.8#

58 72.4 59.5 89.3



#50

Toluene-d8

Concen: 51.076 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085530.D

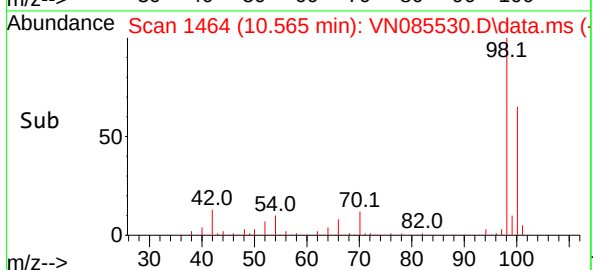
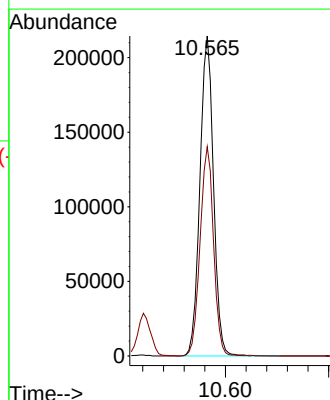
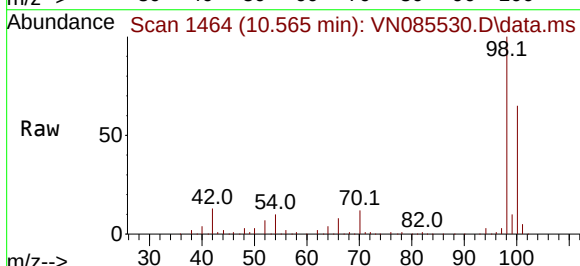
Acq: 28 Jan 2025 11:48

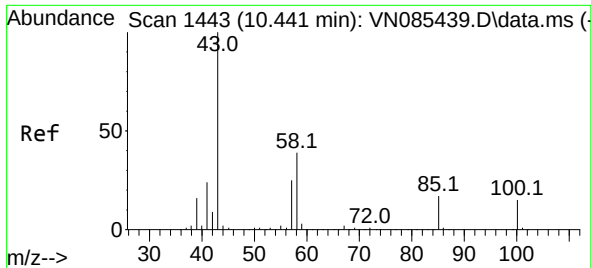
Tgt Ion: 98 Resp: 390099

Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.4

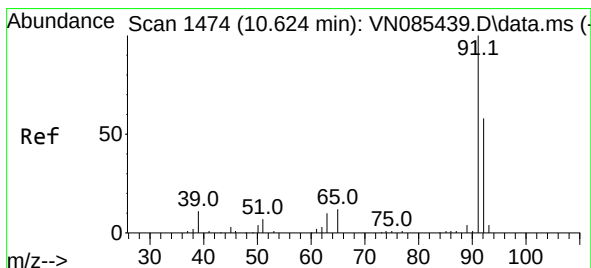
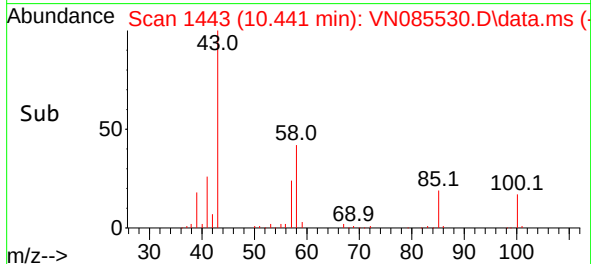
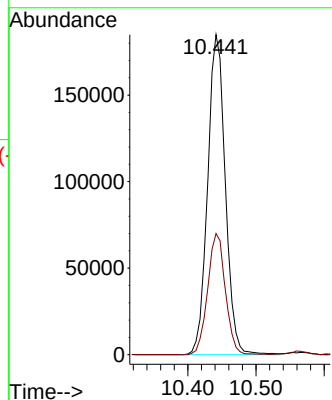
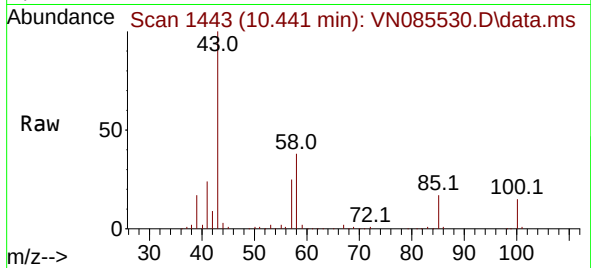




#51  
4-Methyl-2-Pentanone  
Concen: 118.016 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

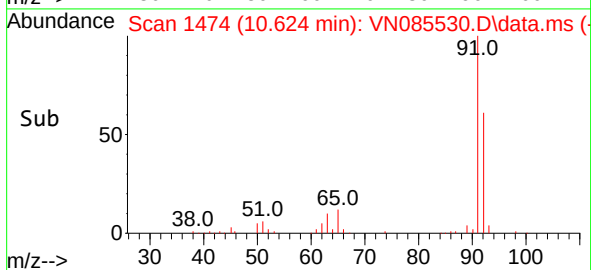
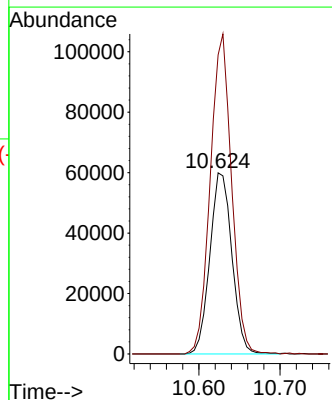
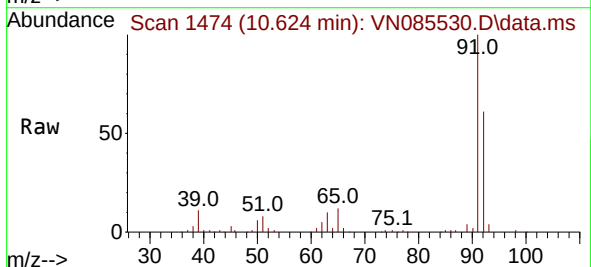
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

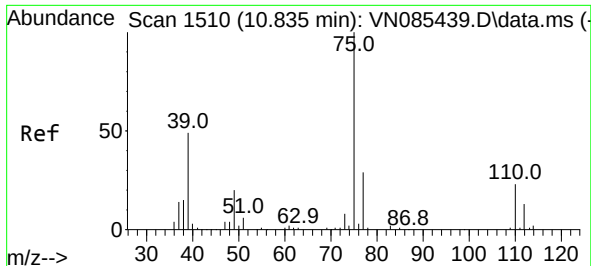
Tgt Ion: 43 Resp: 334158  
Ion Ratio Lower Upper  
43 100  
58 37.9 30.5 45.7



#52  
Toluene  
Concen: 21.523 ug/l  
RT: 10.624 min Scan# 1474  
Delta R.T. -0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 92 Resp: 113049  
Ion Ratio Lower Upper  
92 100  
91 170.5 139.2 208.8

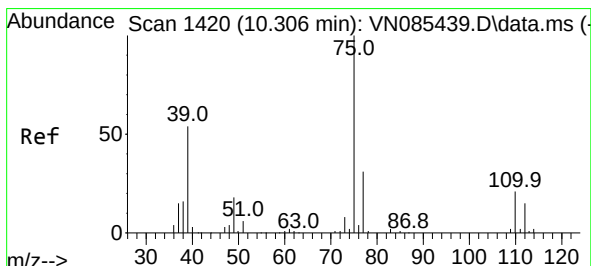
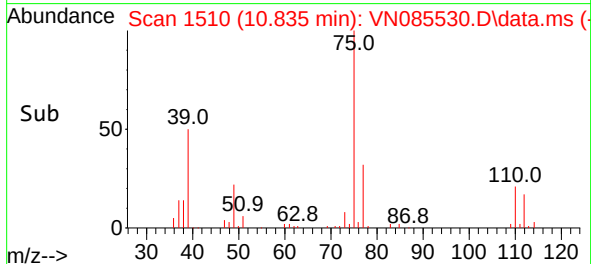
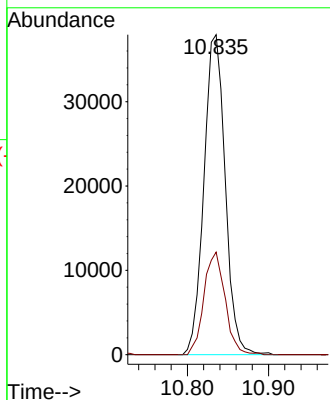
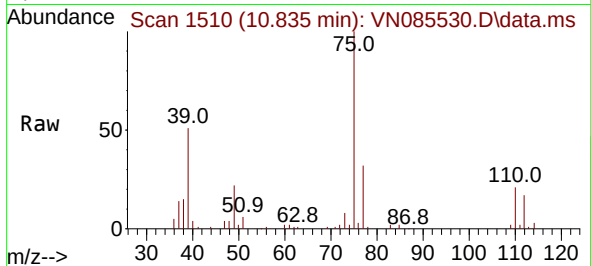




#53  
 t-1,3-Dichloropropene  
 Concen: 21.468 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

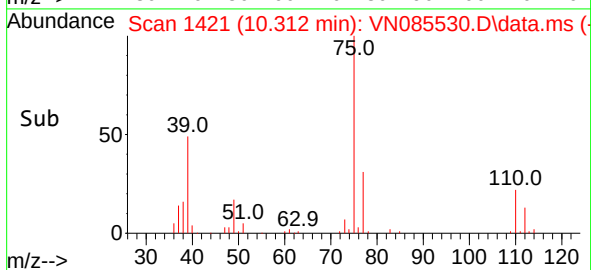
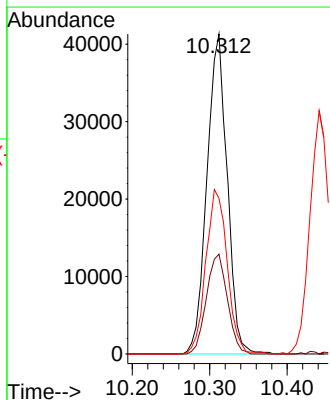
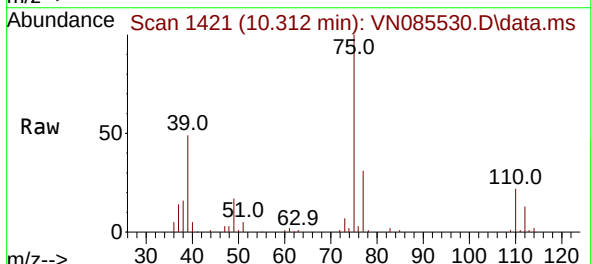
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Tgt Ion: 75 Resp: 69056  
 Ion Ratio Lower Upper  
 75 100  
 77 32.1 23.5 35.3

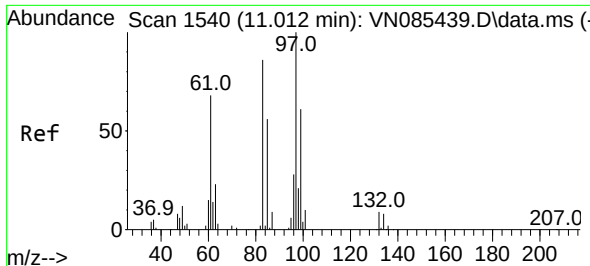


#54  
 cis-1,3-Dichloropropene  
 Concen: 21.821 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 75 Resp: 74974  
 Ion Ratio Lower Upper  
 75 100  
 77 31.2 25.0 37.4  
 39 48.6 43.1 64.7



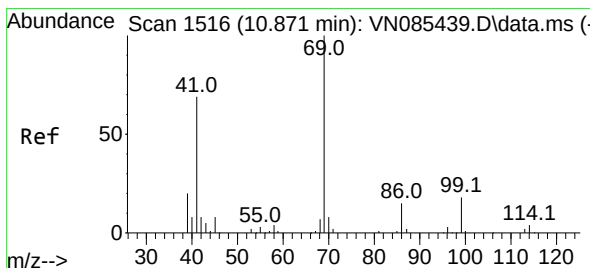
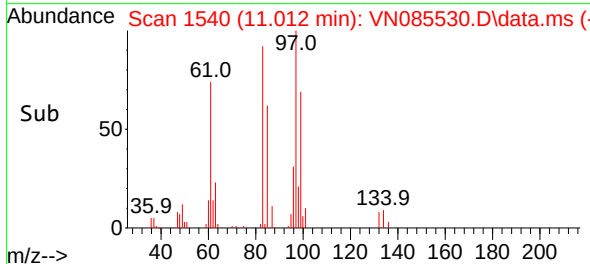
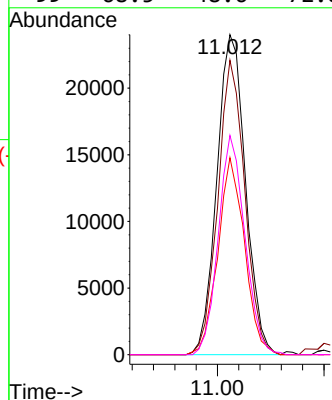
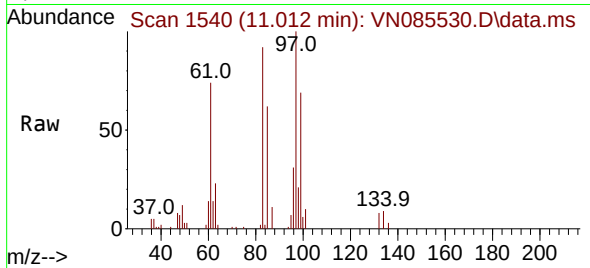




#55  
1,1,2-Trichloroethane  
Concen: 21.547 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

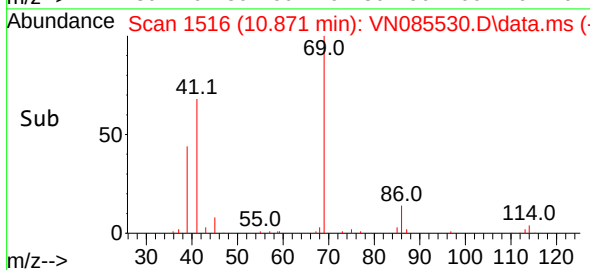
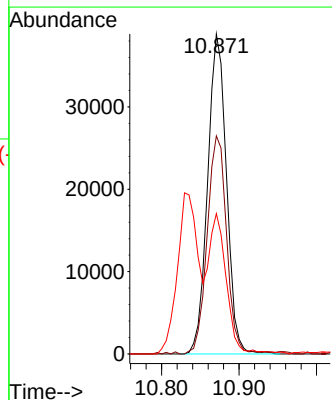
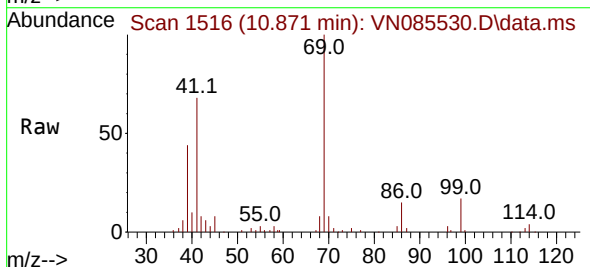
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

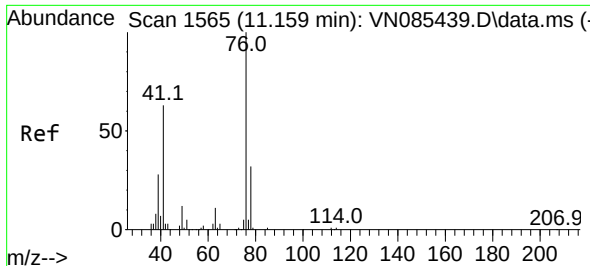
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 44789 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 92.0  | 69.0  | 103.6 |
| 85       | 61.6  | 44.6  | 66.8  |
| 99       | 68.5  | 48.6  | 72.8  |



#56  
Ethyl methacrylate  
Concen: 19.962 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 69    | Resp: | 65671 |
| Ion      | Ratio | Lower | Upper |
| 69       | 100   |       |       |
| 41       | 70.1  | 54.6  | 82.0  |
| 39       | 41.9  | 32.4  | 48.6  |





#57

1,3-Dichloropropane

Concen: 21.850 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

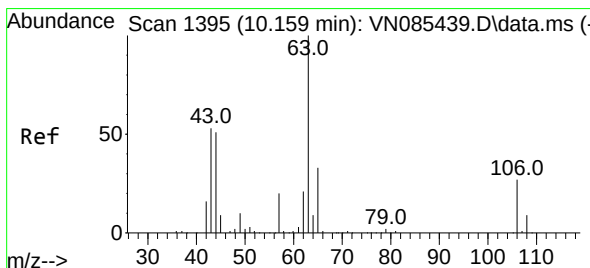
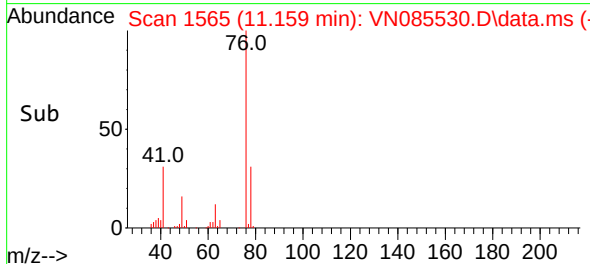
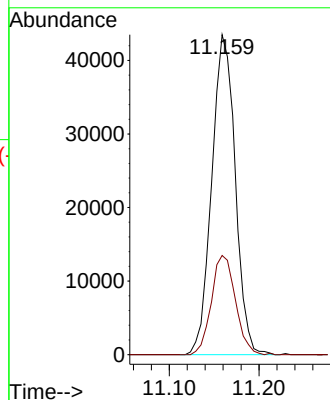
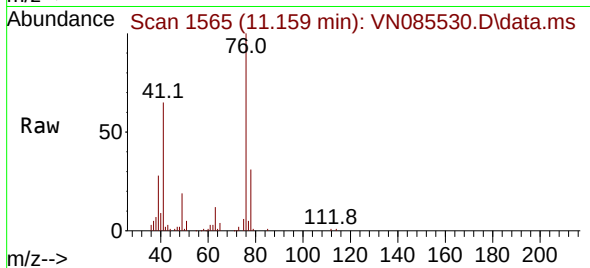
VN0128WBSD01

Tgt Ion: 76 Resp: 78972

Ion Ratio Lower Upper

76 100

78 31.8 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 98.550 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085530.D

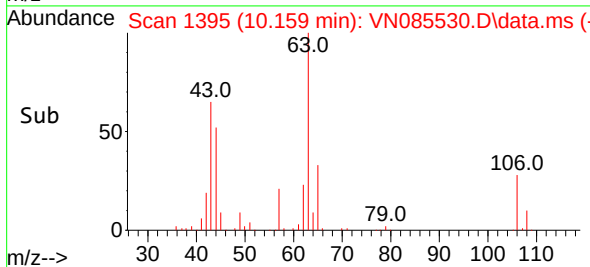
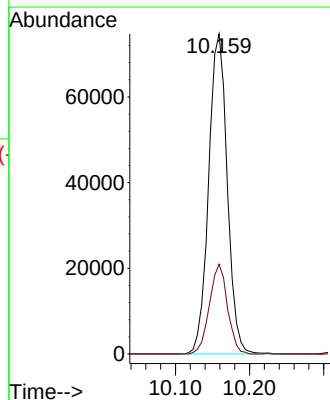
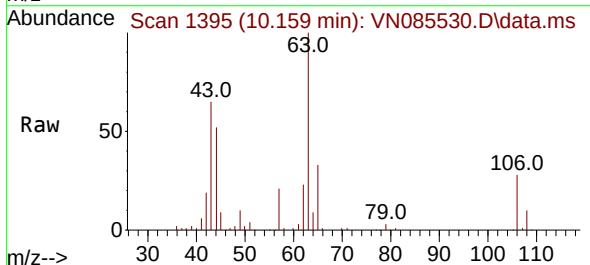
Acq: 28 Jan 2025 11:48

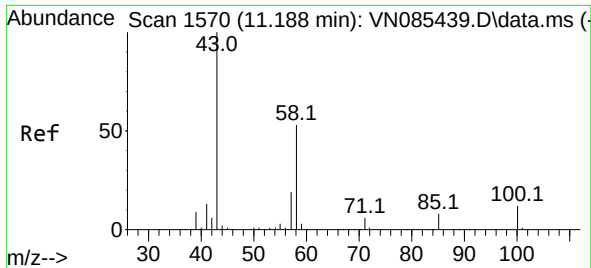
Tgt Ion: 63 Resp: 129996

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4

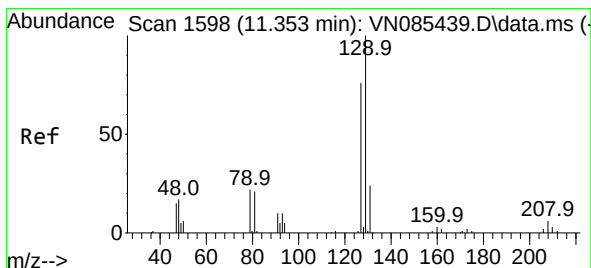
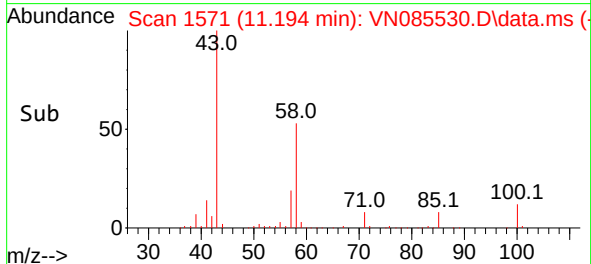
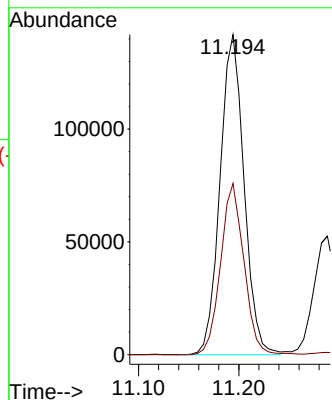
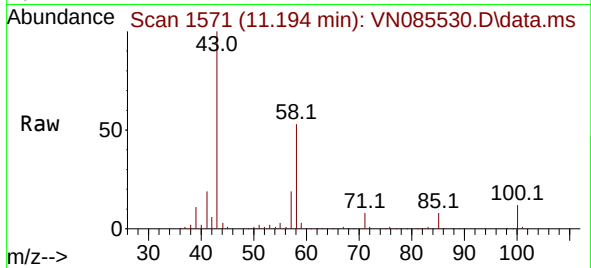




#59  
2-Hexanone  
Concen: 118.347 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

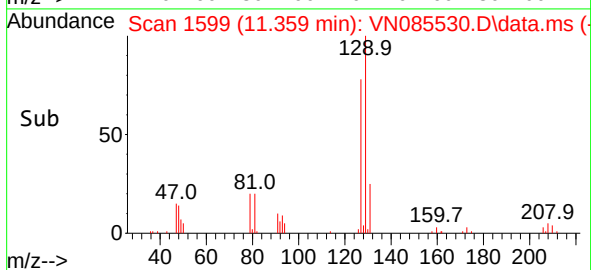
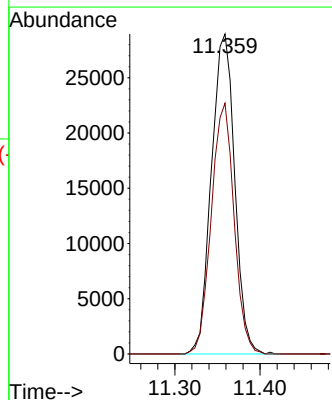
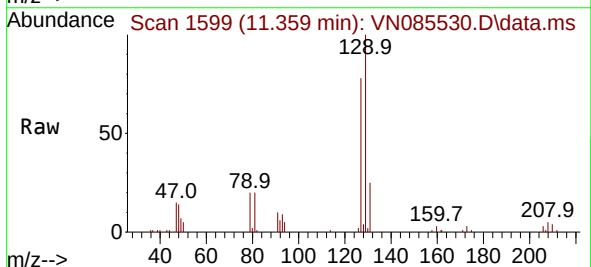
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

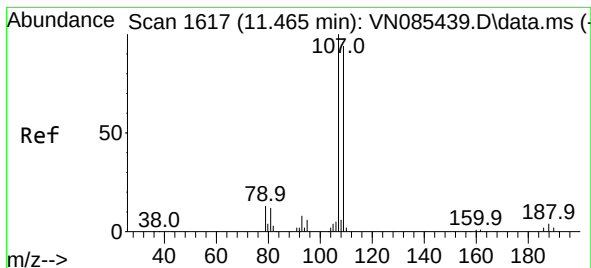
Tgt Ion: 43 Resp: 235784  
Ion Ratio Lower Upper  
43 100  
58 52.0 26.2 78.6



#60  
Dibromochloromethane  
Concen: 21.899 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 129 Resp: 54955  
Ion Ratio Lower Upper  
129 100  
127 76.6 38.6 115.8

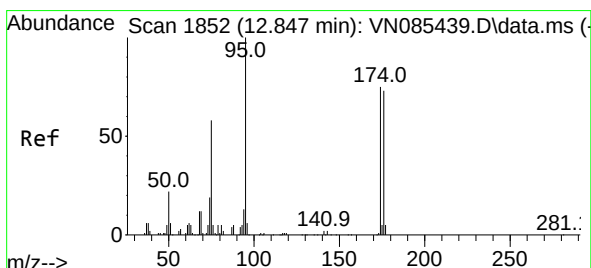
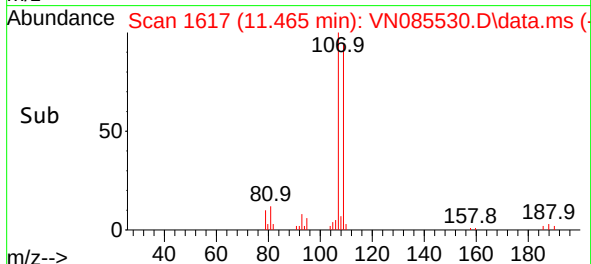
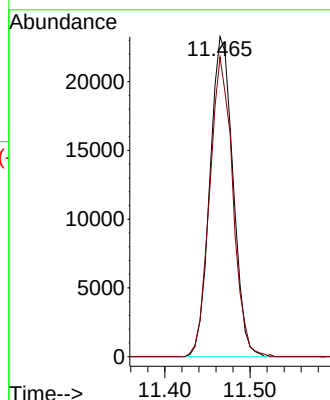
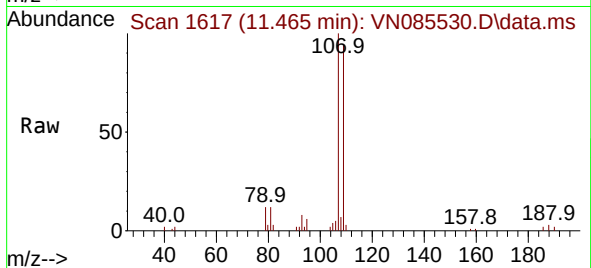




#61  
1,2-Dibromoethane  
Concen: 21.189 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

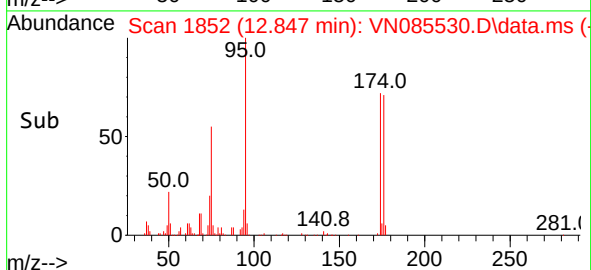
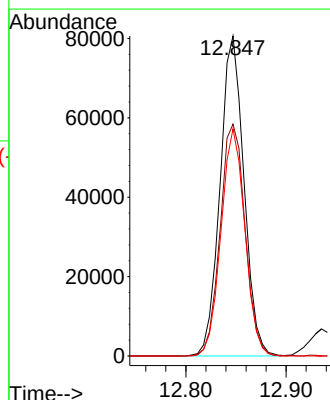
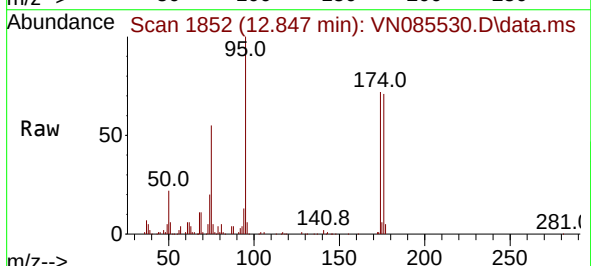
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

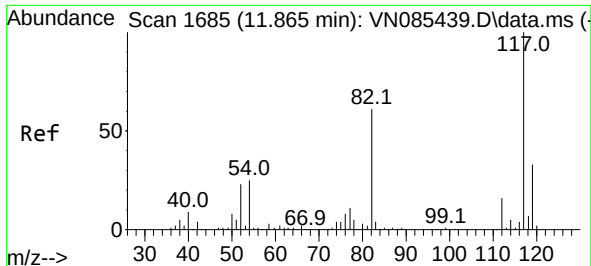
Tgt Ion:107 Resp: 43841  
Ion Ratio Lower Upper  
107 100  
109 93.3 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 50.978 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 95 Resp: 133187  
Ion Ratio Lower Upper  
95 100  
174 75.7 0.0 145.0  
176 70.9 0.0 142.4

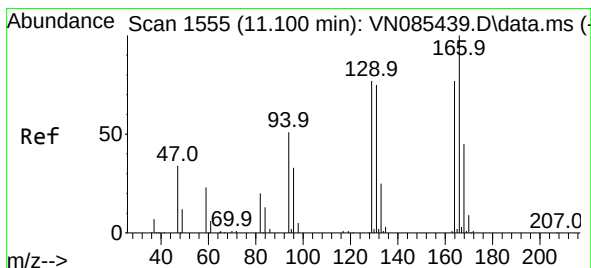
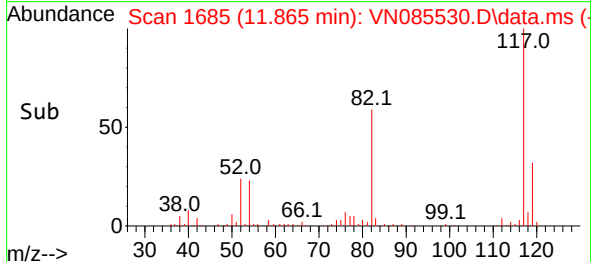
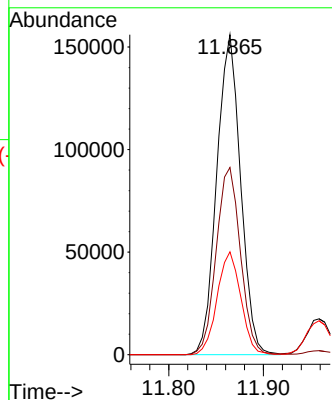
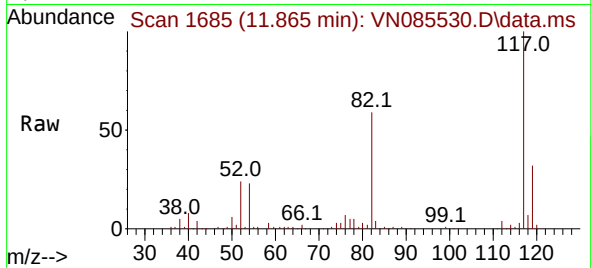




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1170  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

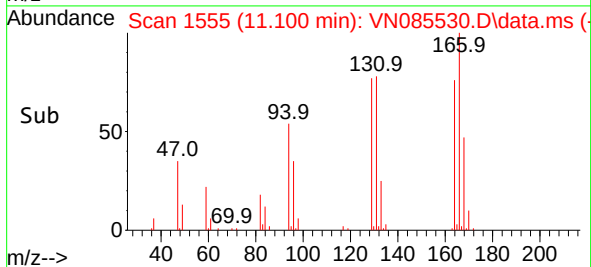
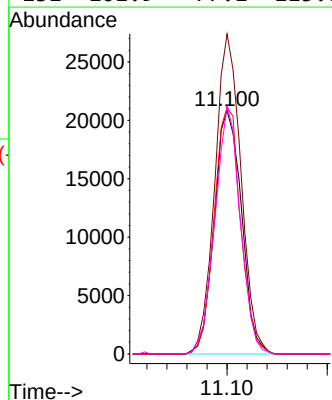
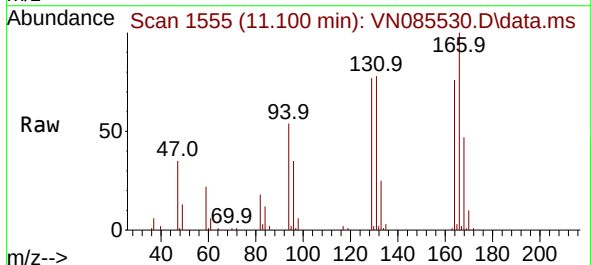
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

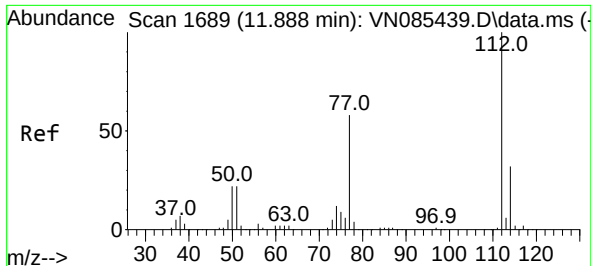
Tgt Ion:117 Resp: 273221  
Ion Ratio Lower Upper  
117 100  
82 58.5 48.6 72.8  
119 32.2 26.6 39.8



#64  
Tetrachloroethene  
Concen: 20.962 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:164 Resp: 39045  
Ion Ratio Lower Upper  
164 100  
166 131.5 103.4 155.2  
129 101.5 79.2 118.8  
131 101.9 77.1 115.7

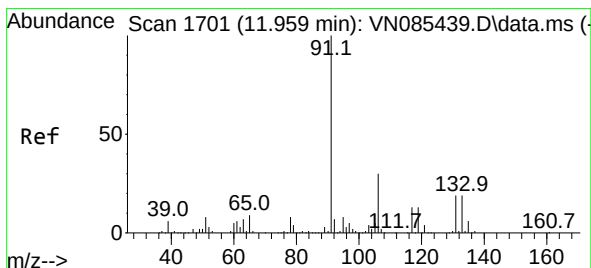
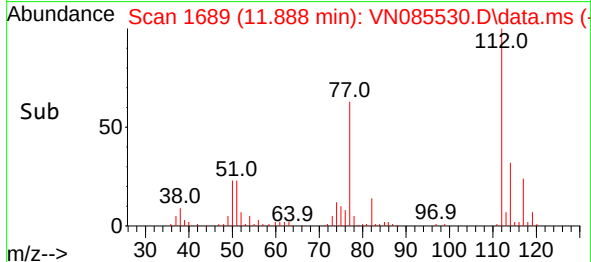
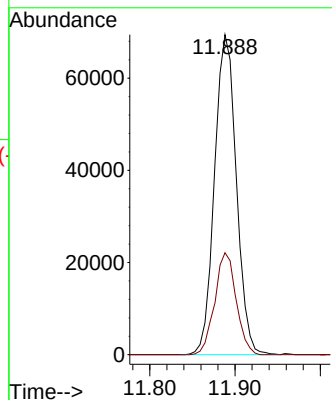
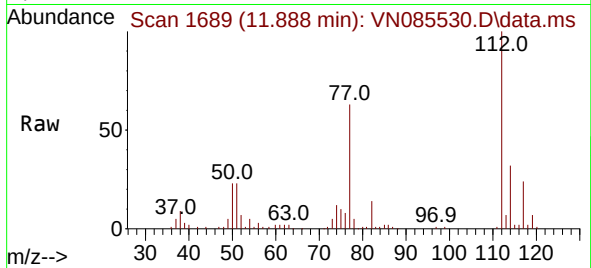




#65  
Chlorobenzene  
Concen: 20.625 ug/l  
RT: 11.888 min Scan# 111  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

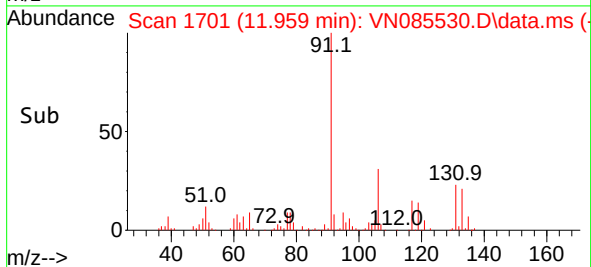
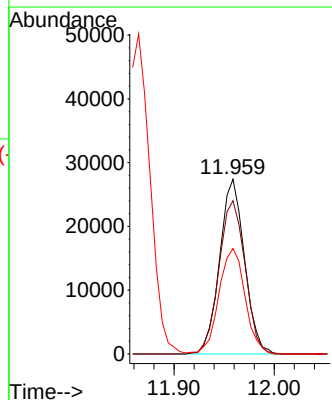
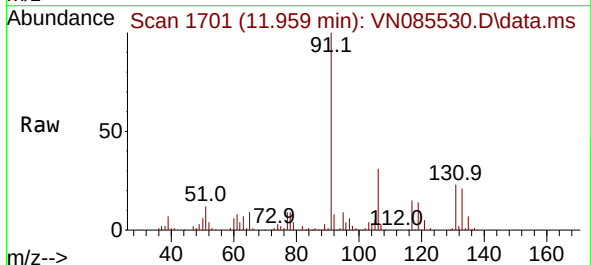
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

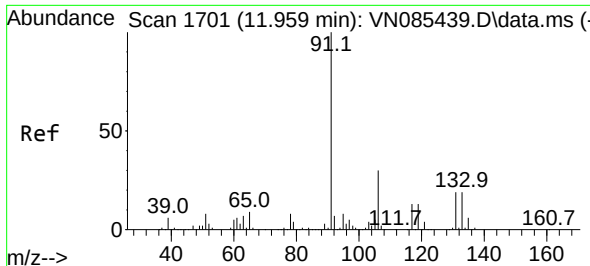
Tgt Ion:112 Resp: 123448  
Ion Ratio Lower Upper  
112 100  
114 31.9 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 21.449 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:131 Resp: 47119  
Ion Ratio Lower Upper  
131 100  
133 92.4 47.4 142.3  
119 63.4 33.1 99.5

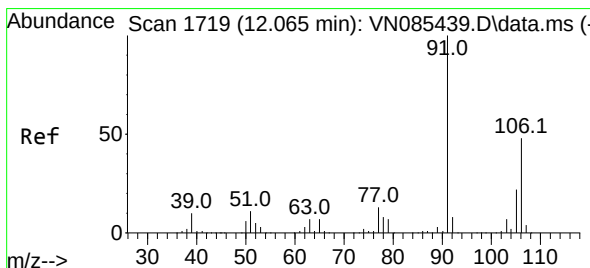
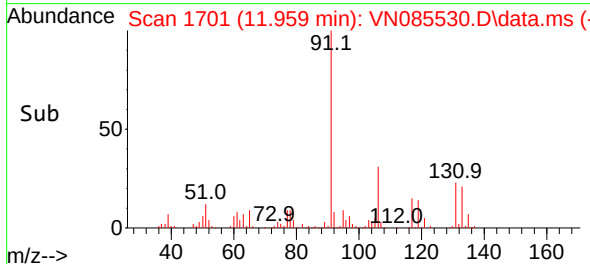
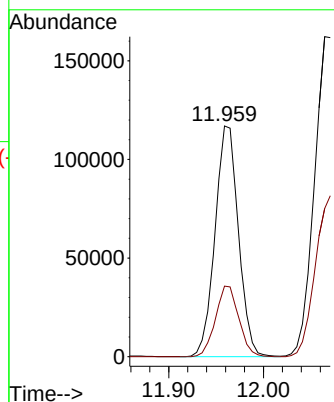
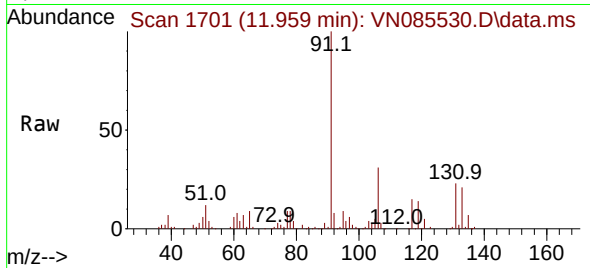




#67  
Ethyl Benzene  
Concen: 20.614 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

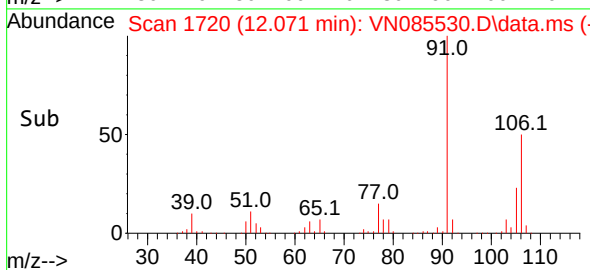
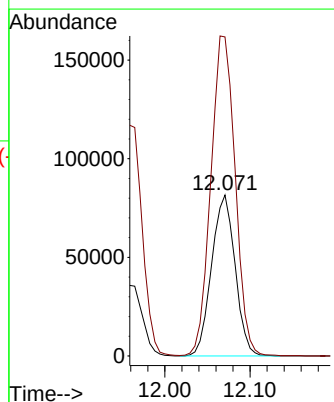
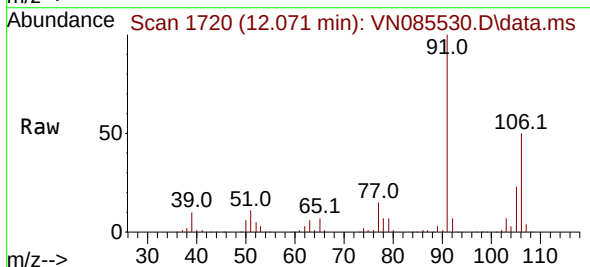
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

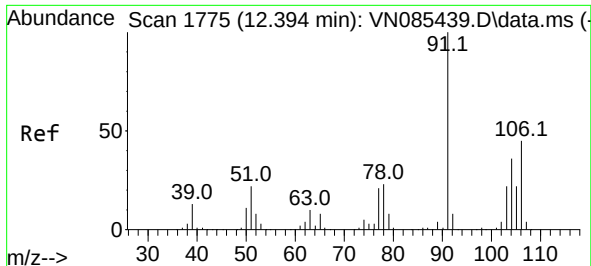
Tgt Ion: 91 Resp: 200961  
Ion Ratio Lower Upper  
91 100  
106 30.6 23.8 35.8



#68  
m/p-Xylenes  
Concen: 43.421 ug/l  
RT: 12.071 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:106 Resp: 156444  
Ion Ratio Lower Upper  
106 100  
91 206.6 167.7 251.5

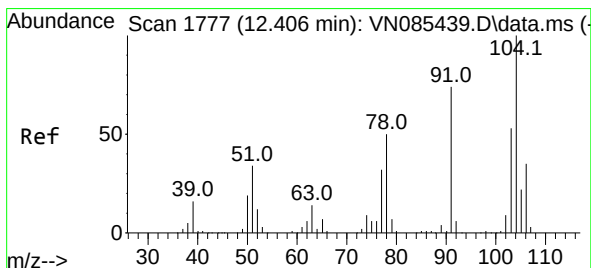
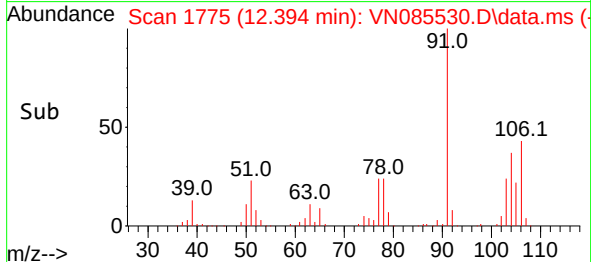
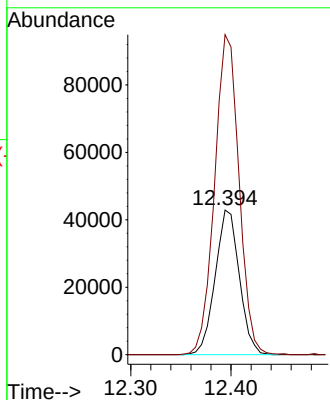
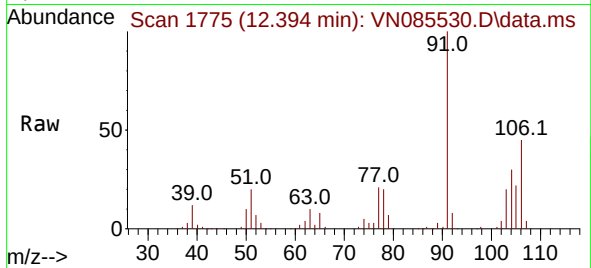




#69  
o-Xylene  
Concen: 20.785 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

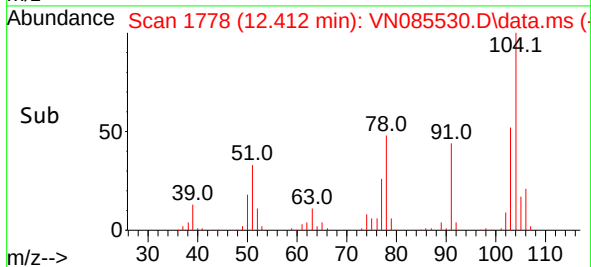
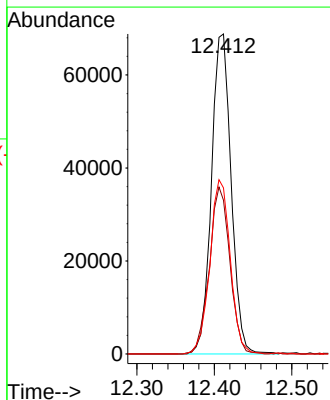
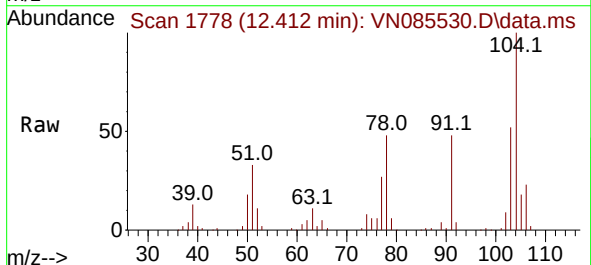
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion:106 Resp: 71566  
Ion Ratio Lower Upper  
106 100  
91 224.0 110.4 331.2

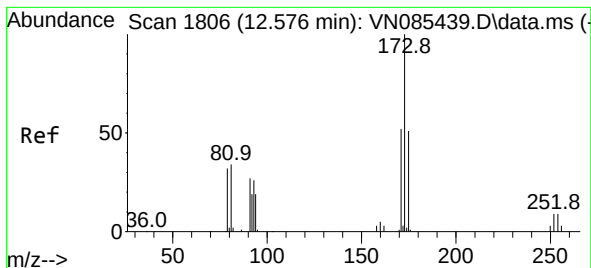


#70  
Styrene  
Concen: 21.347 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:104 Resp: 121646  
Ion Ratio Lower Upper  
104 100  
78 54.5 42.5 63.7  
103 56.3 43.8 65.8







#71

Bromoform

Concen: 22.498 ug/l

RT: 12.576 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

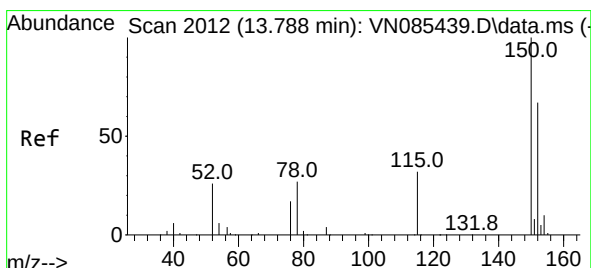
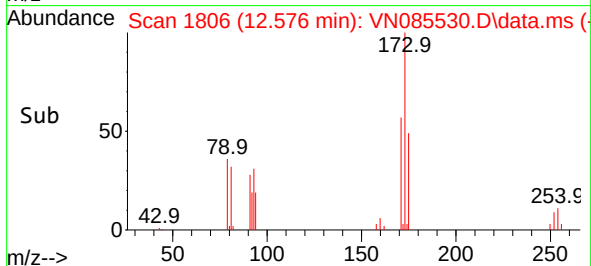
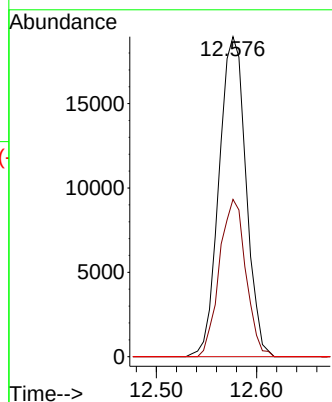
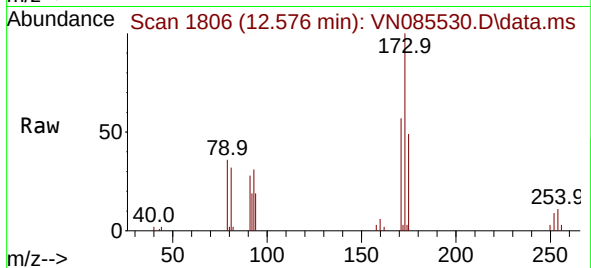
Tgt Ion:173 Resp: 35363

Ion Ratio Lower Upper

173 100

175 48.3 24.4 73.2

254 0.0 0.0 0.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

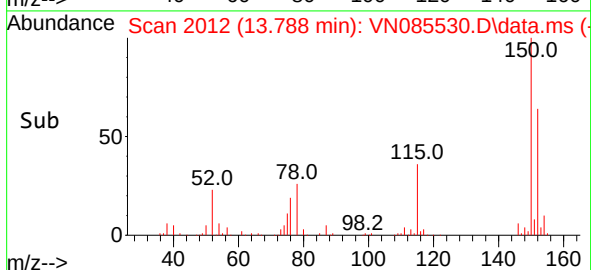
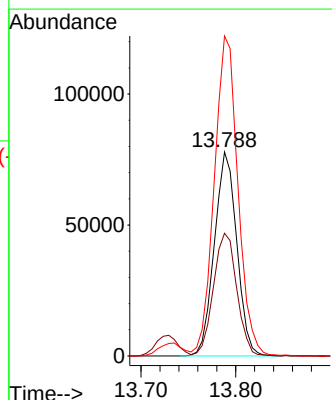
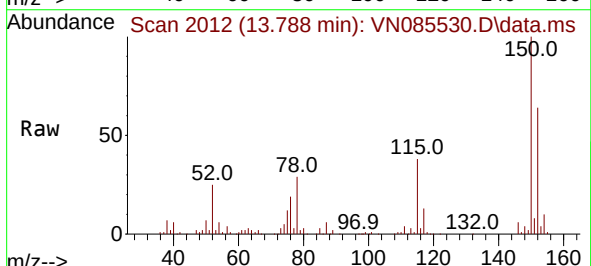
Tgt Ion:152 Resp: 127977

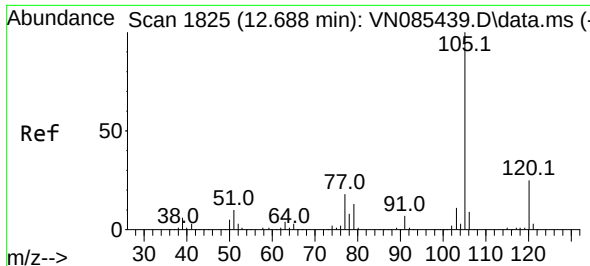
Ion Ratio Lower Upper

152 100

115 62.9 31.1 93.3

150 165.8 0.0 343.6

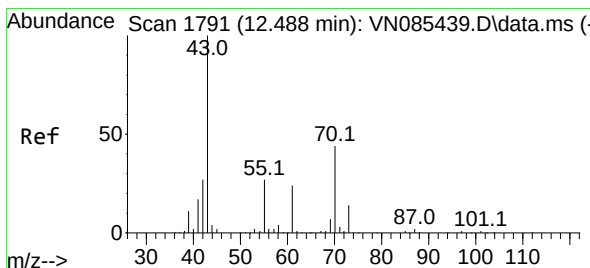
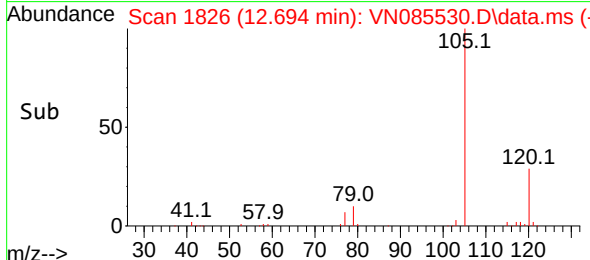
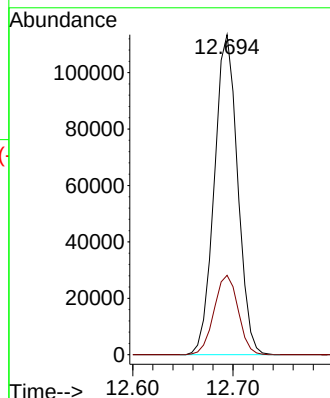
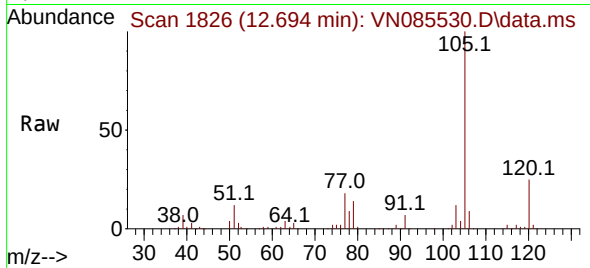




#73  
Isopropylbenzene  
Concen: 21.200 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

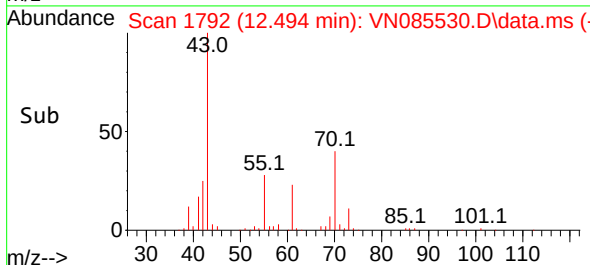
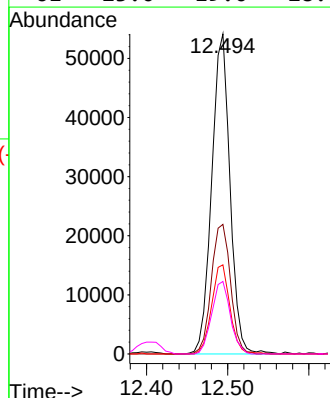
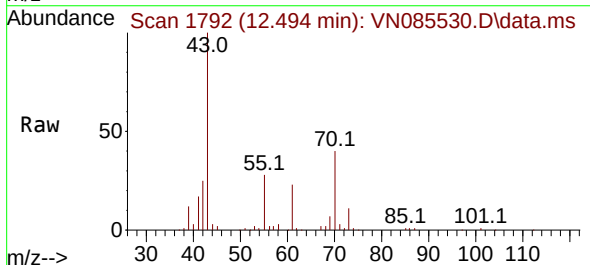
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

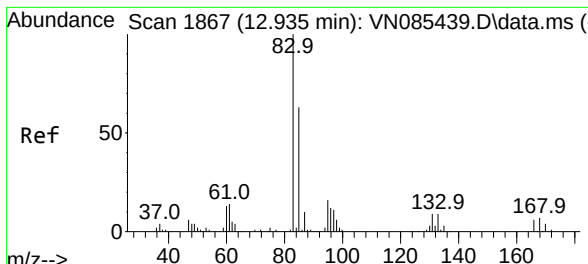
Tgt Ion:105 Resp: 183110  
Ion Ratio Lower Upper  
105 100  
120 25.6 12.8 38.3



#74  
N-ethyl acetate  
Concen: 21.833 ug/l  
RT: 12.494 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 43 Resp: 84761  
Ion Ratio Lower Upper  
43 100  
70 42.4 34.0 51.0  
55 27.8 21.4 32.2  
61 23.0 19.0 28.4

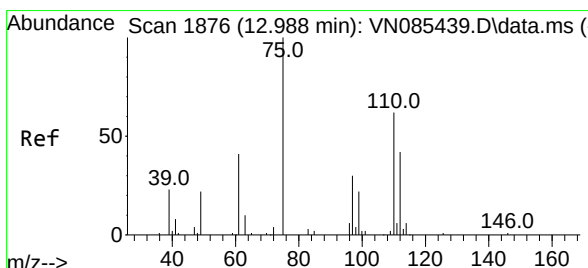
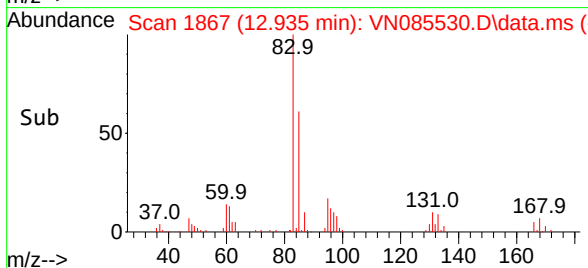
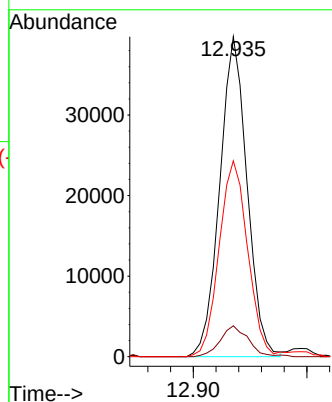
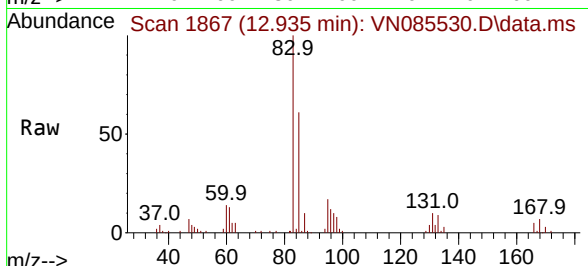




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 21.763 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

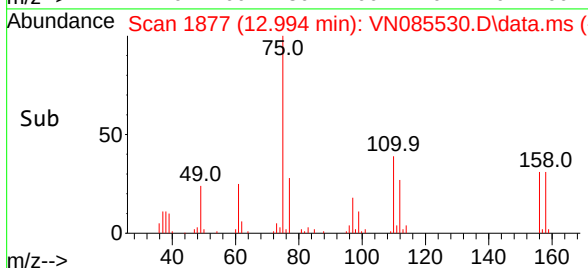
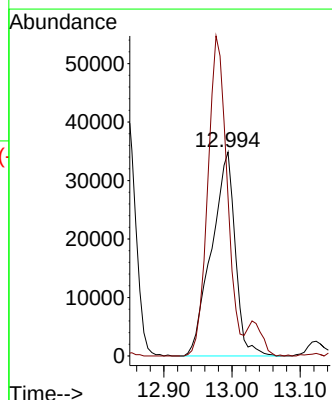
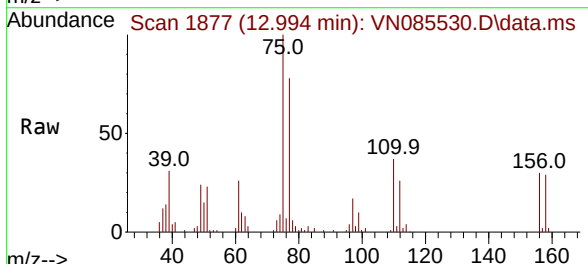
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

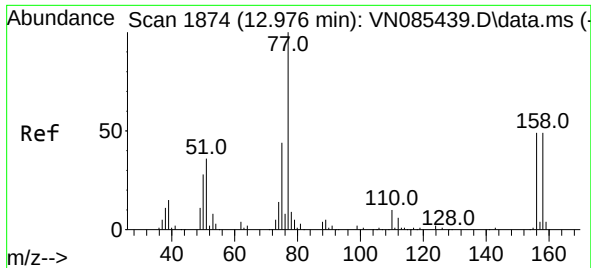
Tgt Ion: 83 Resp: 66402  
 Ion Ratio Lower Upper  
 83 100  
 131 9.9 4.8 14.4  
 85 64.2 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 32.432 ug/l  
 RT: 12.994 min Scan# 1877  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion: 75 Resp: 84360  
 Ion Ratio Lower Upper  
 75 100  
 77 128.3 109.7 329.2

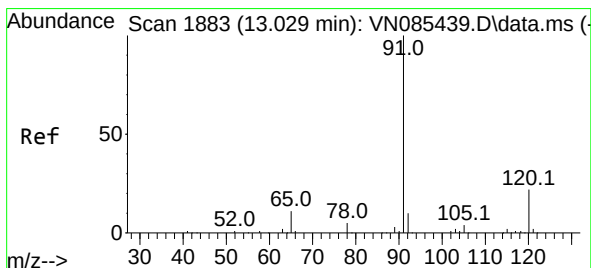
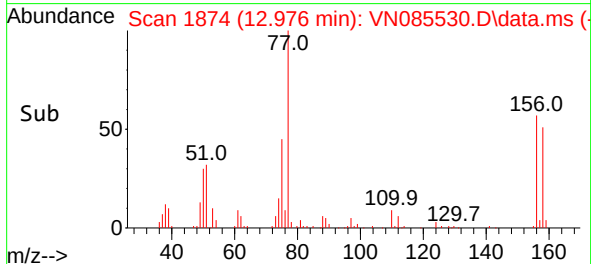
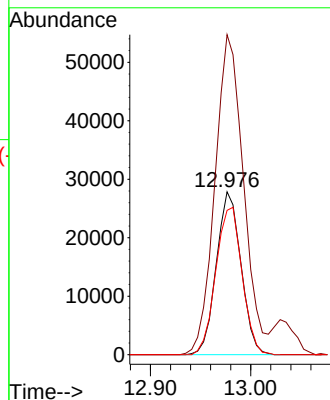
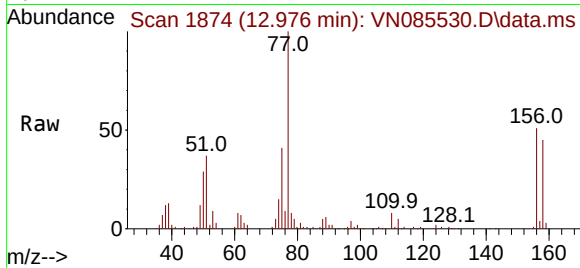




#77  
Bromobenzene  
Concen: 21.002 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

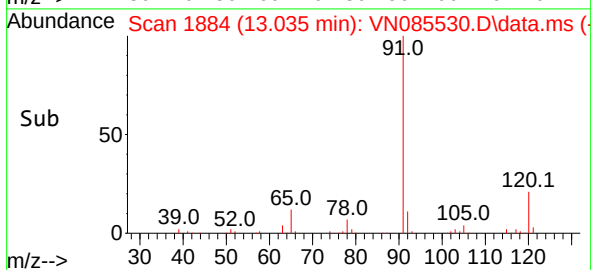
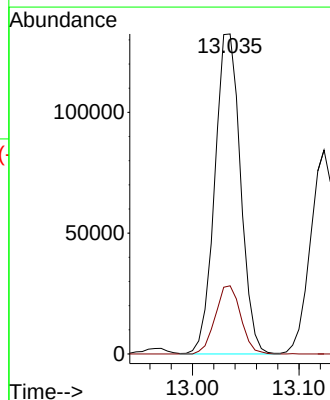
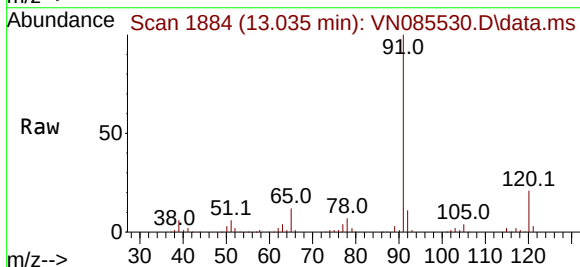
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

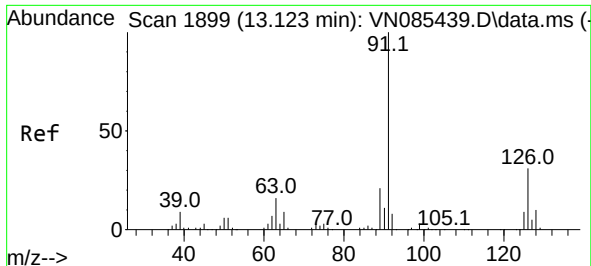
Tgt Ion:156 Resp: 47394  
Ion Ratio Lower Upper  
156 100  
77 228.3 114.1 342.4  
158 96.4 48.9 146.8



#78  
n-propylbenzene  
Concen: 21.726 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 91 Resp: 222149  
Ion Ratio Lower Upper  
91 100  
120 21.0 10.9 32.6

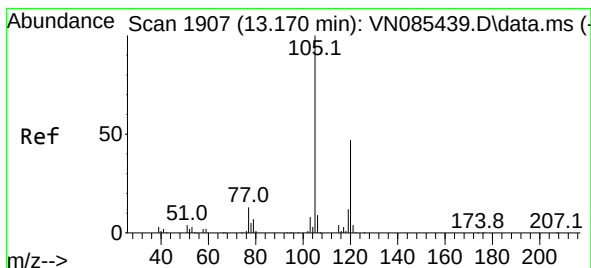
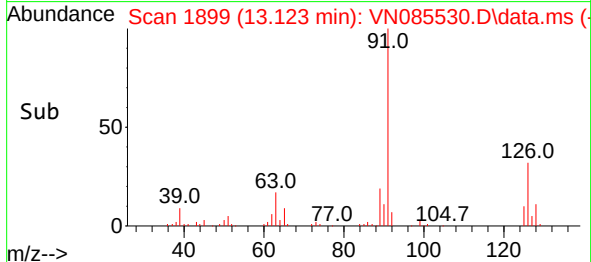
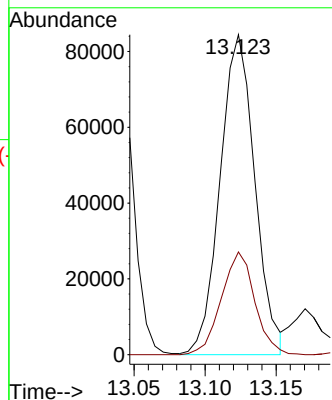
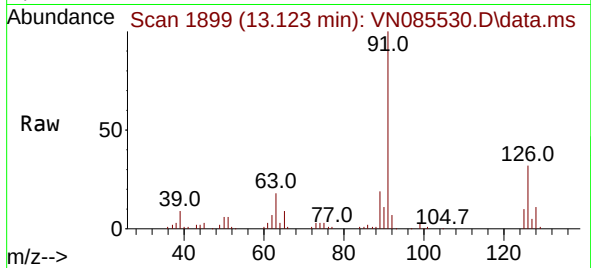




#79  
2-Chlorotoluene  
Concen: 21.691 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

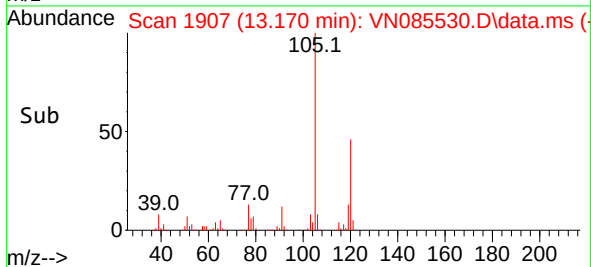
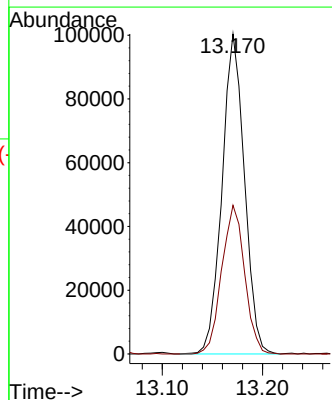
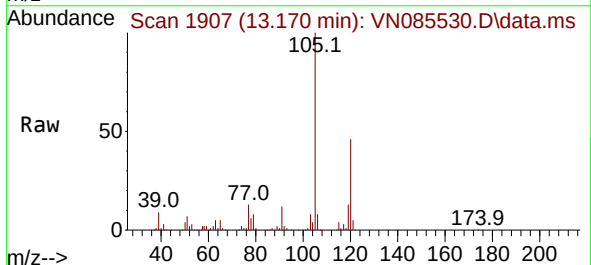
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

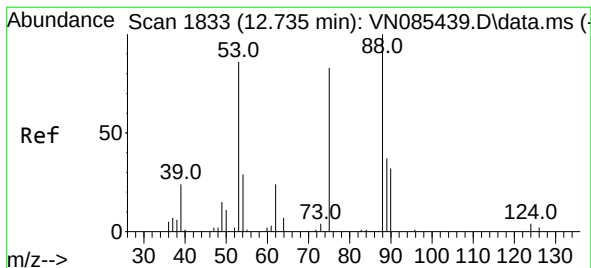
Tgt Ion: 91 Resp: 143547  
Ion Ratio Lower Upper  
91 100  
126 30.9 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 21.820 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:105 Resp: 155679  
Ion Ratio Lower Upper  
105 100  
120 47.5 23.9 71.7

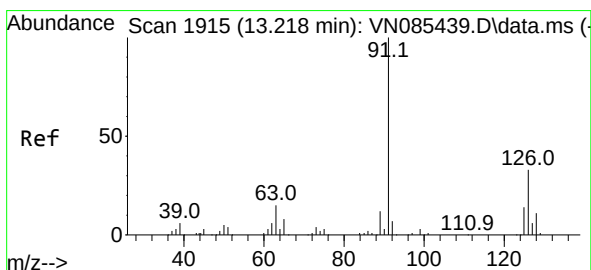
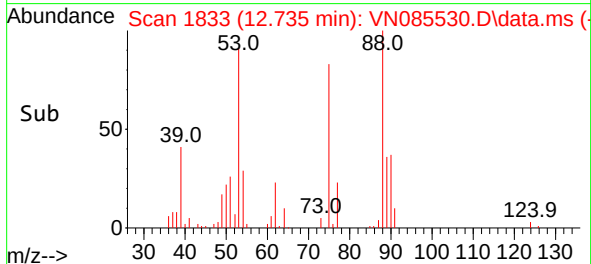
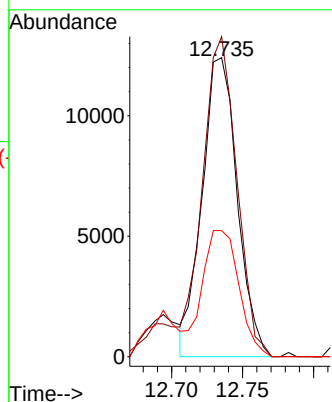
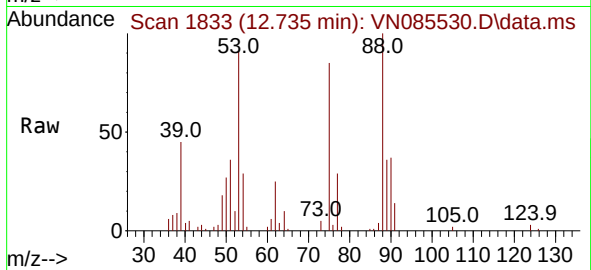




#81  
trans-1,4-Dichloro-2-butene  
Concen: 22.223 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

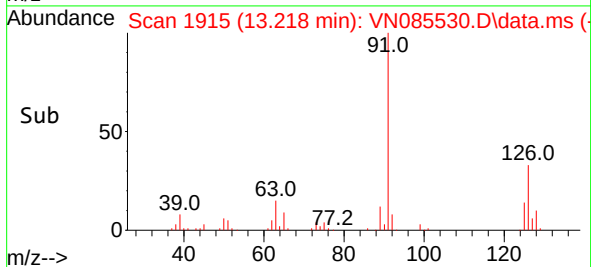
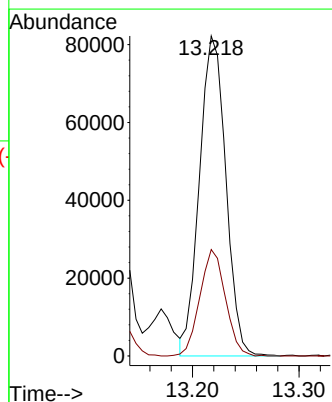
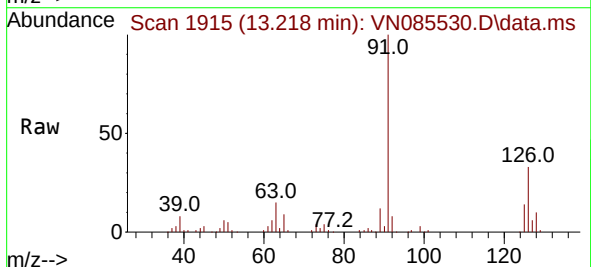
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ClientSampleId :  
VN0128WBSD01

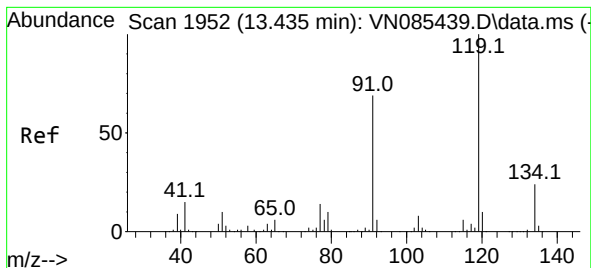
Tgt Ion: 75 Resp: 21365  
Ion Ratio Lower Upper  
75 100  
53 115.4 95.6 143.4  
89 44.8 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 21.506 ug/l  
RT: 13.218 min Scan# 1915  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 91 Resp: 141708  
Ion Ratio Lower Upper  
91 100  
126 32.2 15.9 47.7





#83

tert-Butylbenzene

Concen: 21.097 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

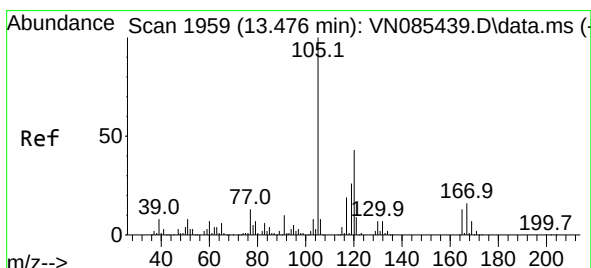
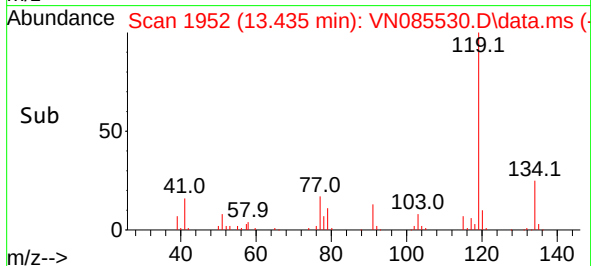
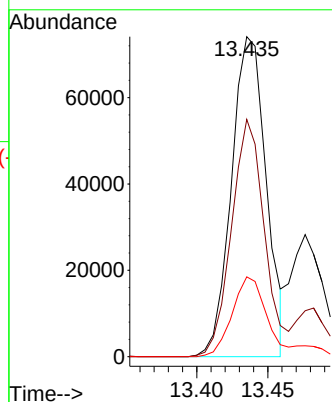
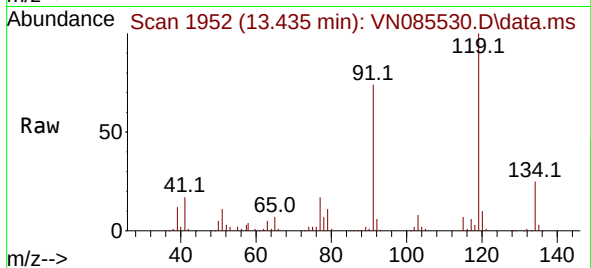
Tgt Ion:119 Resp: 126399

Ion Ratio Lower Upper

119 100

91 70.5 35.1 105.3

134 27.3 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 22.236 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085530.D

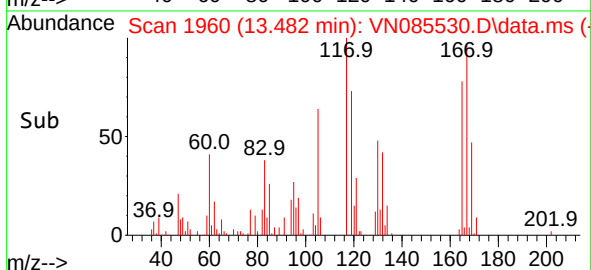
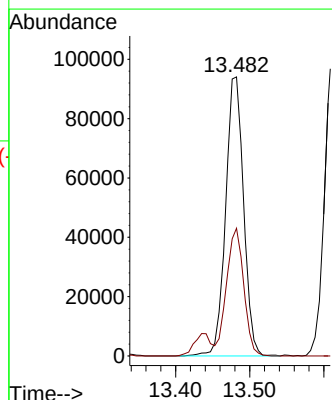
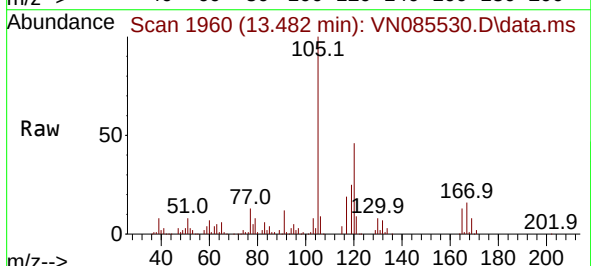
Acq: 28 Jan 2025 11:48

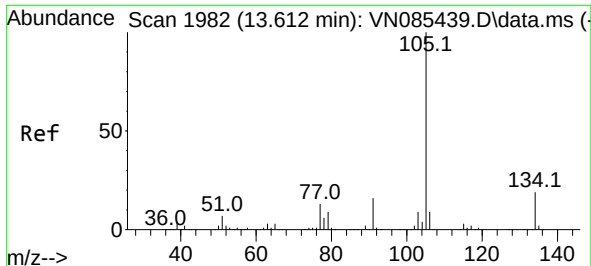
Tgt Ion:105 Resp: 158115

Ion Ratio Lower Upper

105 100

120 43.9 21.6 65.0

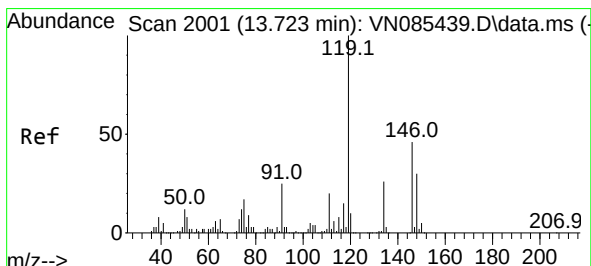
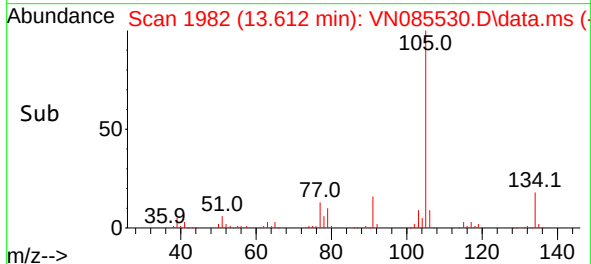
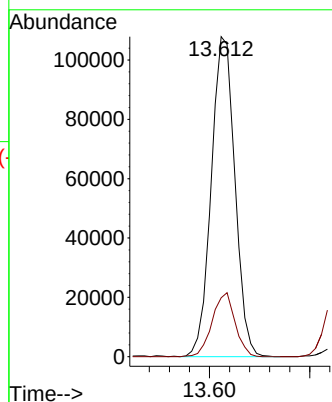
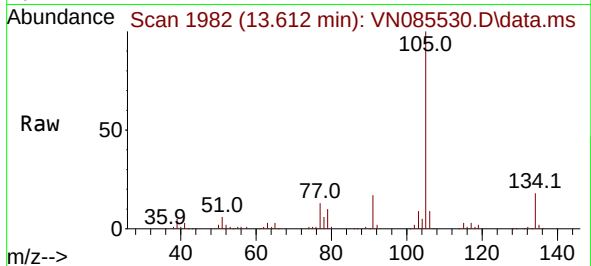




#85  
 sec-Butylbenzene  
 Concen: 21.297 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

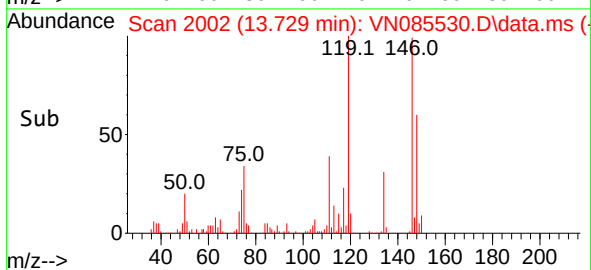
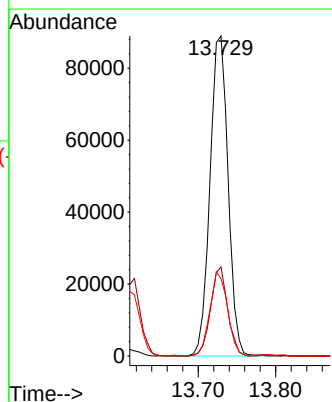
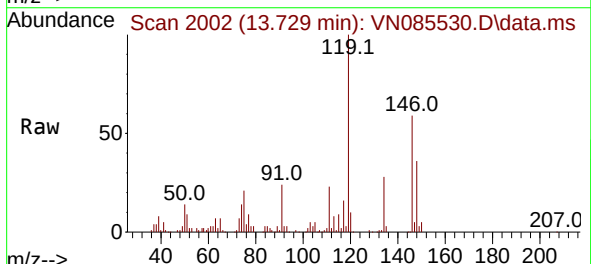
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Tgt Ion:105 Resp: 176846  
 Ion Ratio Lower Upper  
 105 100  
 134 19.3 9.7 28.9

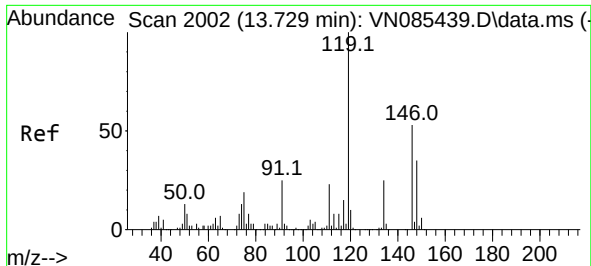


#86  
 p-Isopropyltoluene  
 Concen: 20.822 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion:119 Resp: 144432  
 Ion Ratio Lower Upper  
 119 100  
 134 26.1 12.7 38.0  
 91 25.6 12.7 38.1



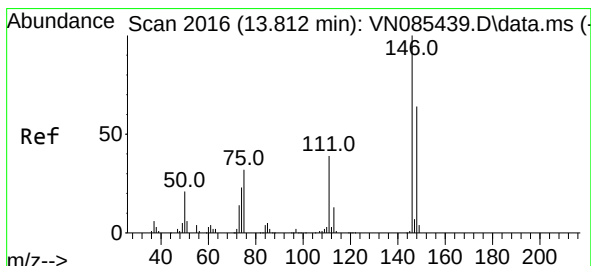
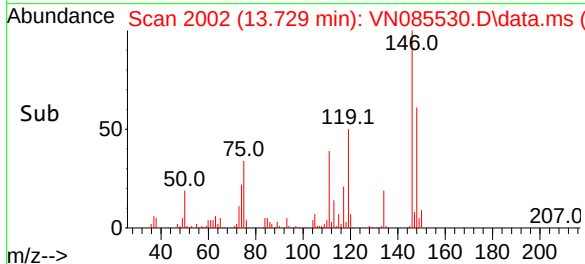
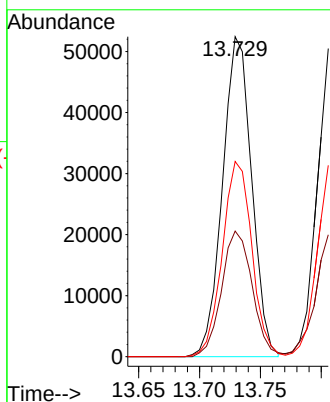
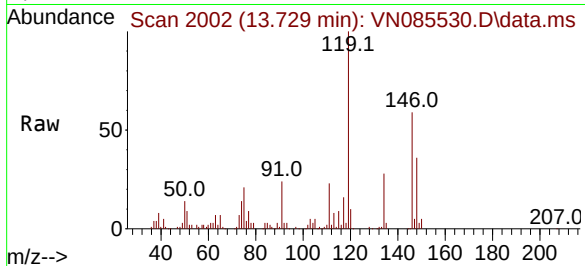




#87  
 1,3-Dichlorobenzene  
 Concen: 20.981 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

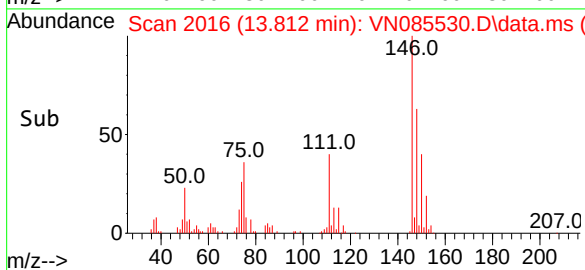
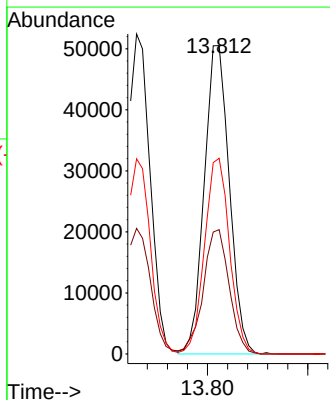
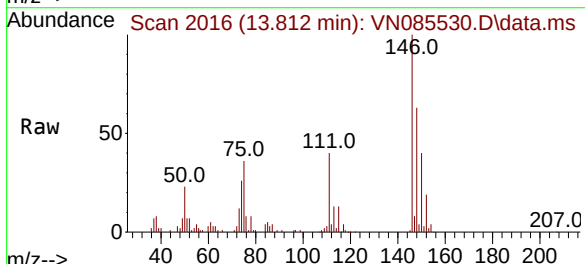
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

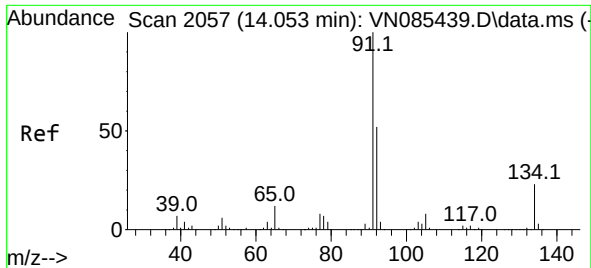
Tgt Ion:146 Resp: 87193  
 Ion Ratio Lower Upper  
 146 100  
 111 41.4 21.4 64.3  
 148 62.2 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 20.420 ug/l  
 RT: 13.812 min Scan# 2016  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion:146 Resp: 87963  
 Ion Ratio Lower Upper  
 146 100  
 111 41.6 21.3 63.7  
 148 63.2 32.4 97.0

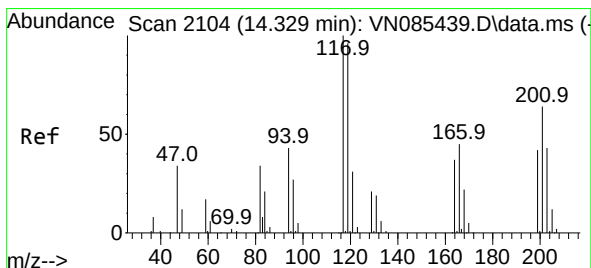
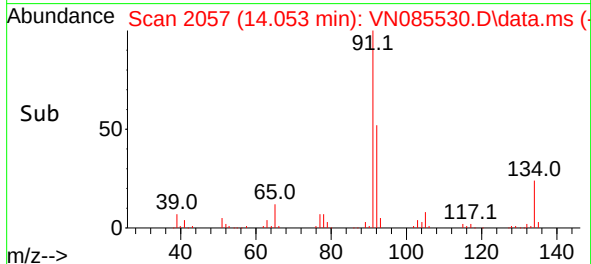
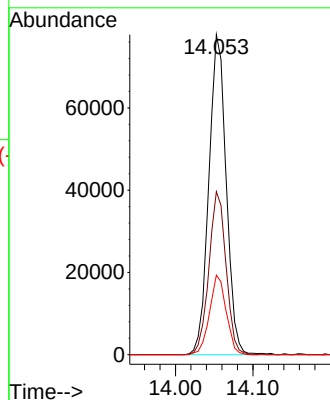
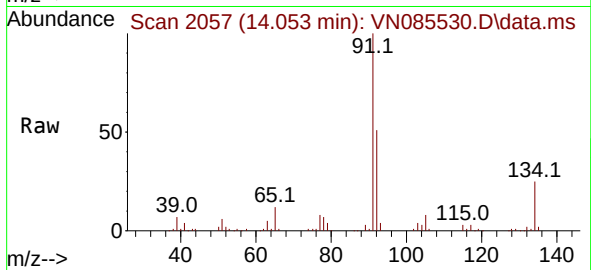




#89  
n-Butylbenzene  
Concen: 20.324 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

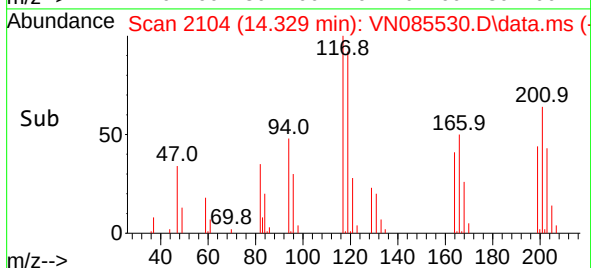
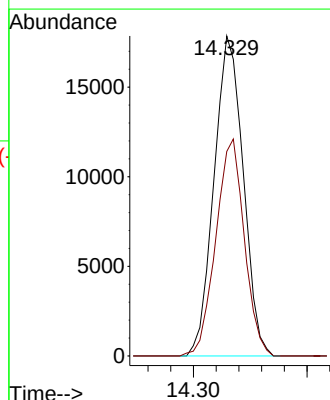
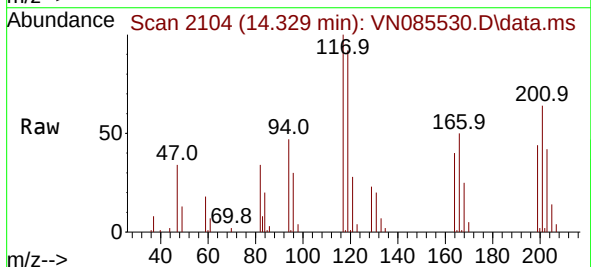
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

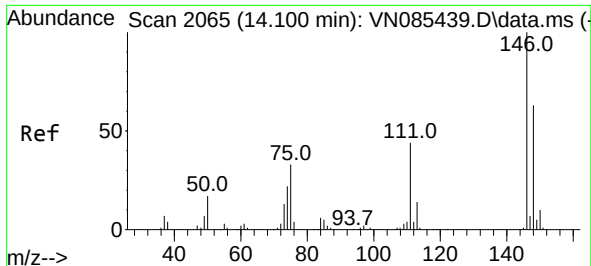
Tgt Ion: 91 Resp: 121076  
Ion Ratio Lower Upper  
91 100  
92 50.3 25.8 77.3  
134 23.8 11.7 35.1



#90  
Hexachloroethane  
Concen: 20.123 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion: 117 Resp: 31810  
Ion Ratio Lower Upper  
117 100  
201 66.3 33.7 101.0





#91

1,2-Dichlorobenzene

Concen: 20.397 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.006 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

Instrument :

MSVOA\_N

ClientSampleId :

VN0128WBSD01

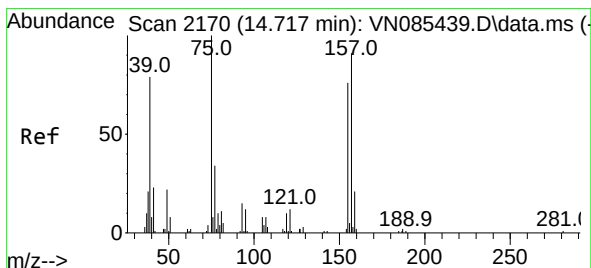
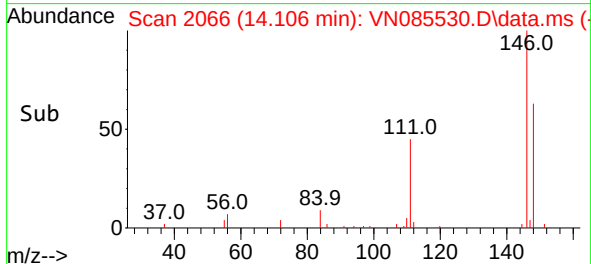
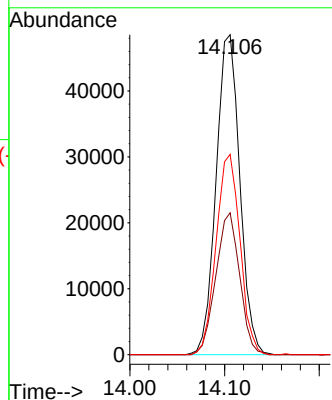
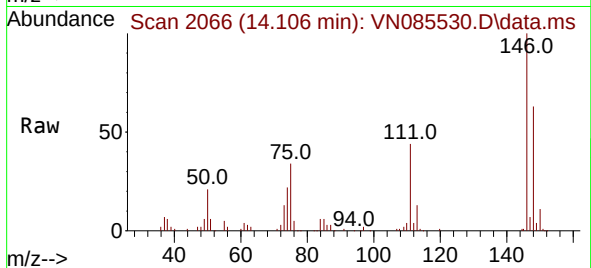
Tgt Ion:146 Resp: 84554

Ion Ratio Lower Upper

146 100

111 44.6 21.7 65.1

148 63.0 31.4 94.2



#92

1,2-Dibromo-3-Chloropropane

Concen: 21.553 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN085530.D

Acq: 28 Jan 2025 11:48

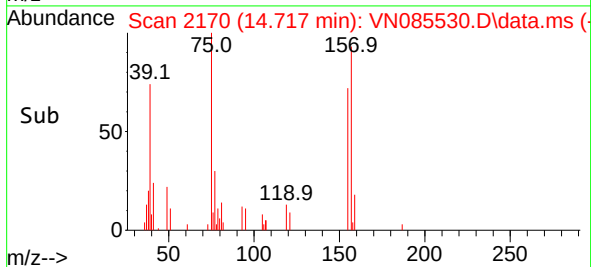
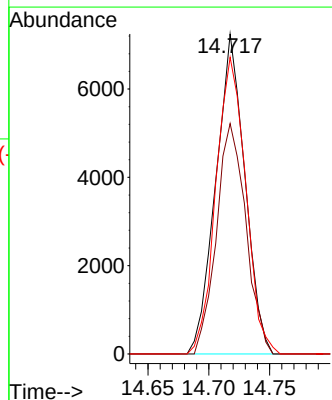
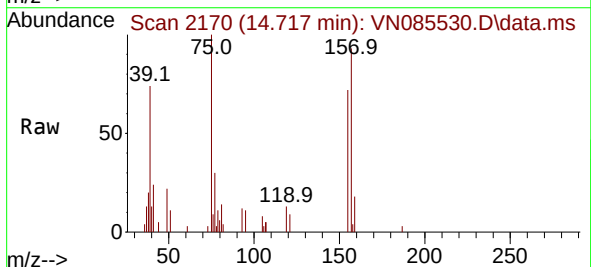
Tgt Ion: 75 Resp: 12008

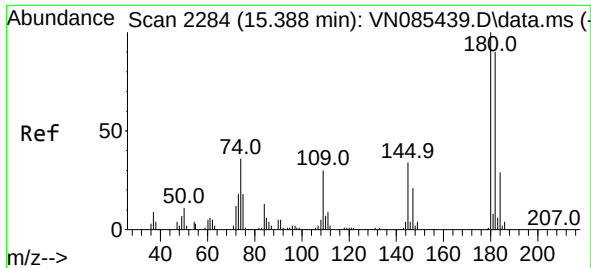
Ion Ratio Lower Upper

75 100

155 73.1 36.4 109.2

157 95.1 45.4 136.1

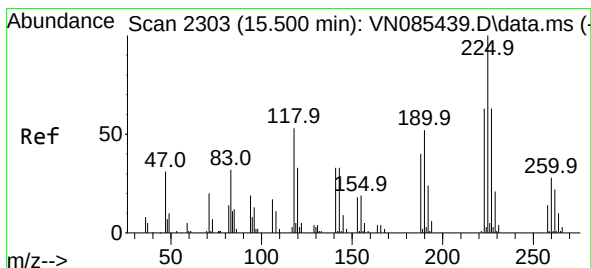
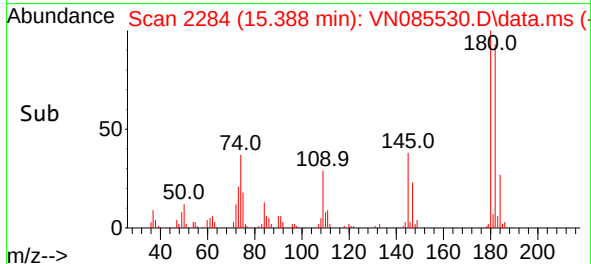
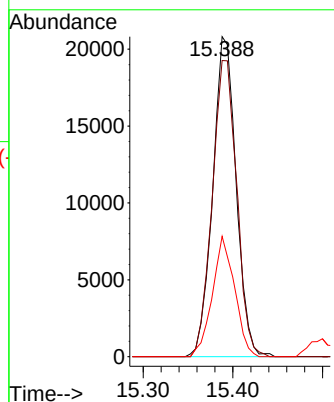
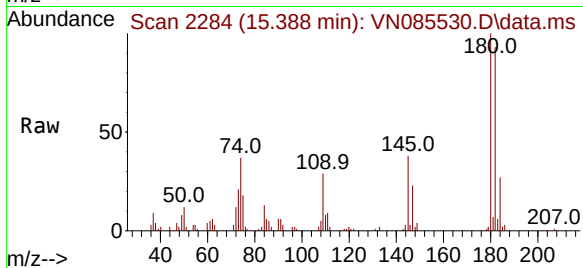




#93  
 1,2,4-Trichlorobenzene  
 Concen: 19.554 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

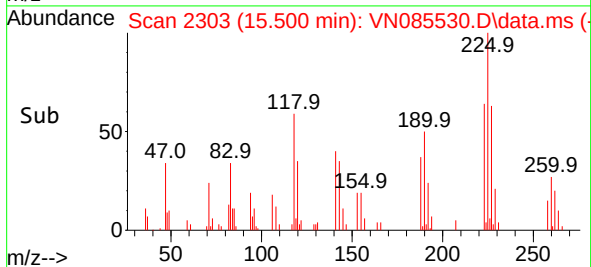
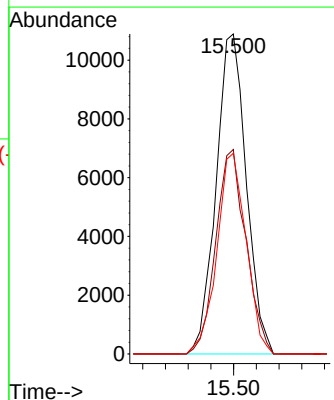
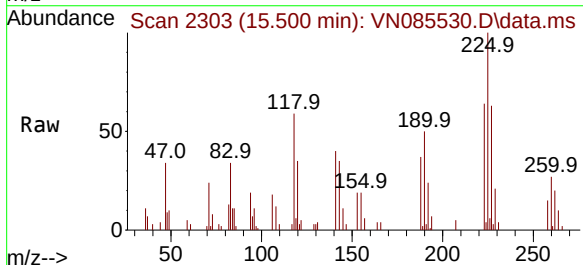
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

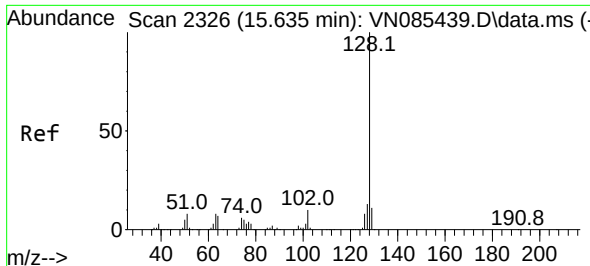
Tgt Ion:180 Resp: 37673  
 Ion Ratio Lower Upper  
 180 100  
 182 96.9 46.8 140.3  
 145 35.9 16.0 48.0



#94  
 Hexachlorobutadiene  
 Concen: 19.644 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.000 min  
 Lab File: VN085530.D  
 Acq: 28 Jan 2025 11:48

Tgt Ion:225 Resp: 20093  
 Ion Ratio Lower Upper  
 225 100  
 223 63.7 30.7 92.1  
 227 60.8 30.9 92.5

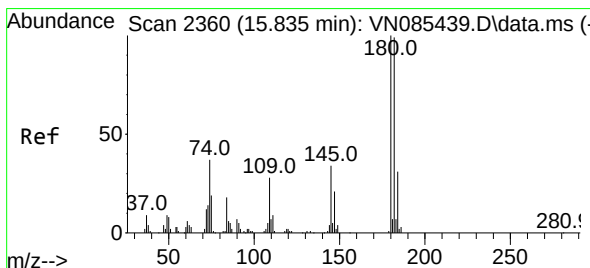
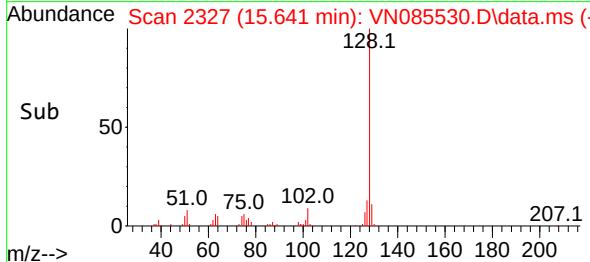
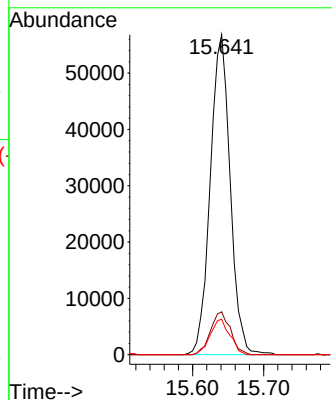
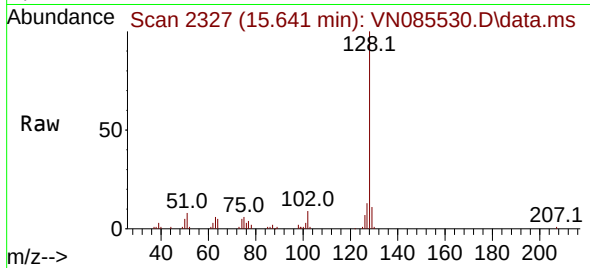




#95  
Naphthalene  
Concen: 19.250 ug/l  
RT: 15.641 min Scan# 2327  
Delta R.T. 0.006 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

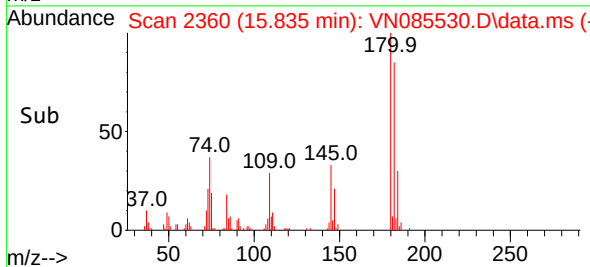
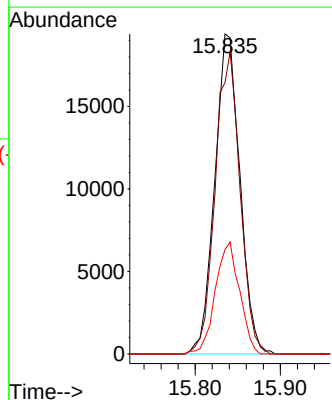
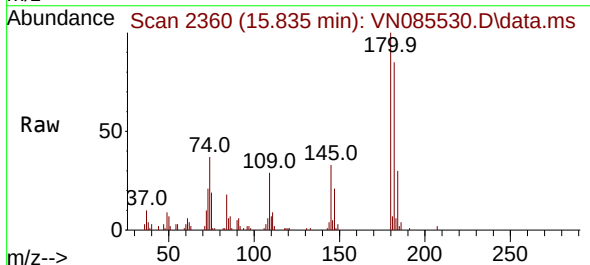
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Tgt Ion:128 Resp: 110672  
Ion Ratio Lower Upper  
128 100  
127 13.4 10.6 16.0  
129 11.0 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 20.356 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. 0.000 min  
Lab File: VN085530.D  
Acq: 28 Jan 2025 11:48

Tgt Ion:180 Resp: 39684  
Ion Ratio Lower Upper  
180 100  
182 93.4 47.4 142.2  
145 33.7 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Quant Time: Jan 29 00:43:14 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 187799   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 314055   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 286739   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 143565   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |             |      |
|-----------------------------|--------|-------|----------|----------|-------------|------|
| System Monitoring Compounds |        |       |          |          |             |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 165633   | 54.638   | ug/l        | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 109.280%  |      |
| 35) Dibromofluoromethane    | 8.165  | 113   | 120592   | 55.349   | ug/l        | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 110.700%  |      |
| 50) Toluene-d8              | 10.565 | 98    | 438659   | 56.666   | ug/l        | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 113.340%# |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 157860   | 59.614   | ug/l        | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 119.220%  |      |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 109169  | 42.934  | ug/l   | 94  |
| 3) Chloromethane             | 2.359 | 50  | 113732  | 41.310  | ug/l   | 100 |
| 4) Vinyl Chloride            | 2.512 | 62  | 120445  | 43.525  | ug/l   | 98  |
| 5) Bromomethane              | 2.936 | 94  | 67919   | 40.633  | ug/l   | 97  |
| 6) Chloroethane              | 3.106 | 64  | 80051   | 45.629  | ug/l   | 97  |
| 7) Trichlorofluoromethane    | 3.495 | 101 | 194108  | 48.343  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.959 | 74  | 65944   | 47.541  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 110829  | 49.006  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 128917  | 49.778  | ug/l   | 98  |
| 11) Tert butyl alcohol       | 5.518 | 59  | 122061  | 351.637 | ug/l   | 99  |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 98130   | 48.687  | ug/l   | 97  |
| 13) Acrolein                 | 4.177 | 56  | 129555  | 273.407 | ug/l   | 100 |
| 14) Allyl chloride           | 5.024 | 41  | 155852  | 47.653  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.712 | 53  | 310806  | 281.891 | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 267295  | 272.891 | ug/l   | 99  |
| 17) Carbon Disulfide         | 4.712 | 76  | 245541  | 39.567  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.018 | 43  | 178998  | 60.097  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 358554  | 54.787  | ug/l   | 99  |
| 20) Methylene Chloride       | 5.271 | 84  | 119628  | 49.335  | ug/l   | 97  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 103142  | 47.884  | ug/l   | 97  |
| 22) Diisopropyl ether        | 6.671 | 45  | 392245  | 54.034  | ug/l   | 99  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1454703 | 286.348 | ug/l   | 98  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 222797  | 50.334  | ug/l   | 98  |
| 25) 2-Butanone               | 7.482 | 43  | 423099  | 293.531 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 189076  | 52.834  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 130214  | 51.325  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.812 | 49  | 89552   | 43.487  | ug/l   | 98  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 275635  | 301.616 | ug/l   | 100 |
| 30) Chloroform               | 7.965 | 83  | 232517  | 50.826  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 166703  | 43.331  | ug/l   | 97  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 202362  | 50.429  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 152437  | 49.851  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.559 | 43  | 171657  | 55.616  | ug/l   | 98  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 179826  | 51.368  | ug/l   | 98  |
| 39) Methylcyclohexane        | 9.600 | 83  | 143759  | 50.030  | ug/l   | 98  |
| 40) Benzene                  | 8.606 | 78  | 470586  | 51.218  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
 Data File : VN085546.D  
 Acq On : 28 Jan 2025 18:14  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Quant Time: Jan 29 00:43:14 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 97709    | 60.848   | ug/l   | 97       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 179469   | 51.863   | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 345380   | 69.836   | ug/l # | 91       |
| 44) Trichloroethene           | 9.347  | 130  | 106986   | 50.023   | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 122928   | 52.380   | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 87054    | 51.408   | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.888  | 83   | 188980   | 54.778   | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.676  | 41   | 134702   | 60.523   | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 46510    | 1240.952 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 906426   | 315.843  | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 289726   | 54.423   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 182074   | 55.846   | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 188960   | 54.260   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 115272   | 54.714   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 183142   | 51.541   | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 203386   | 55.519   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 389176   | 291.087  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 659035   | 326.364  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 139526   | 54.855   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.470 | 107  | 112753   | 53.765   | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 88612    | 45.330   | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 315889   | 50.289   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 117993   | 51.180   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 555215   | 54.268   | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.070 | 106  | 423444   | 111.987  | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 199877   | 55.313   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 347052   | 58.032   | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 92343    | 55.980   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 518634   | 53.526   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 244112   | 56.051   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 176292   | 51.507   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 228606   | 78.343   | ug/l   | 42       |
| 77) Bromobenzene              | 12.976 | 156  | 127032   | 50.181   | ug/l   | 100      |
| 78) n-propylbenzene           | 13.035 | 91   | 616293   | 53.728   | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 384370   | 51.776   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 432662   | 54.059   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 61346    | 56.880   | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 383756   | 51.917   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 354690   | 52.772   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 443501   | 55.598   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.617 | 105  | 504931   | 54.205   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 422476   | 50.325   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 233419   | 50.068   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 229722   | 47.539   | ug/l   | 100      |
| 89) n-Butylbenzene            | 14.053 | 91   | 351230   | 52.557   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 86748    | 48.917   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 228524   | 49.142   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 34650    | 55.439   | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 108928   | 50.399   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 49834    | 43.430   | ug/l   | 95       |
| 95) Naphthalene               | 15.641 | 128  | 342729   | 53.141   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 107618   | 49.210   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012825\  
Data File : VN085546.D  
Acq On : 28 Jan 2025 18:14  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Quant Time: Jan 29 00:43:14 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

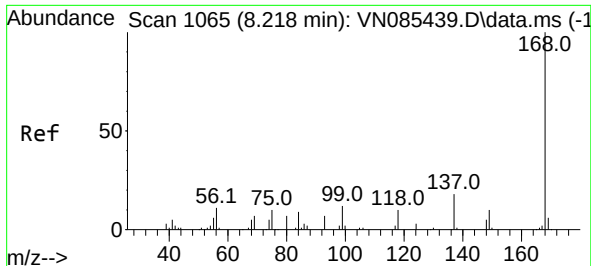
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 29 00:43:14 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

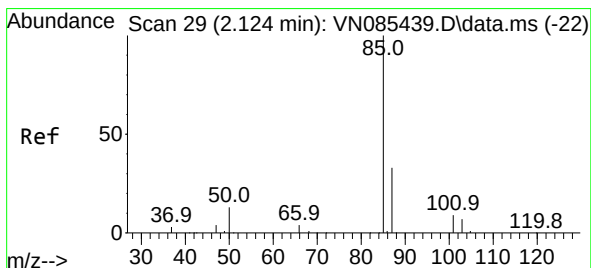
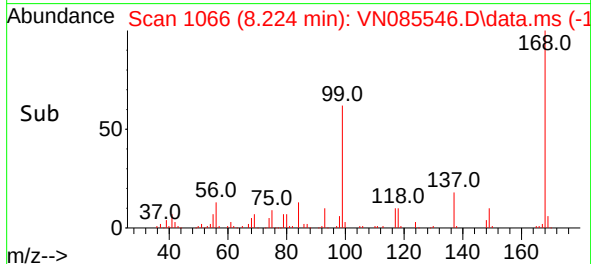
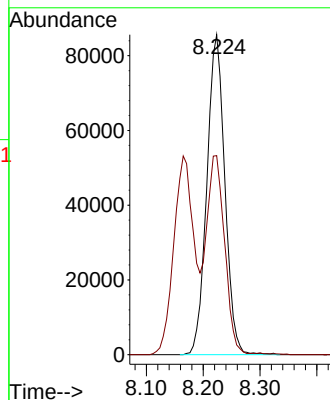
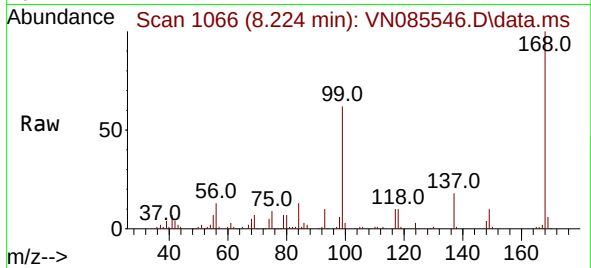




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

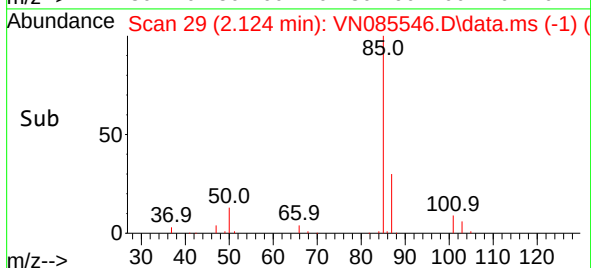
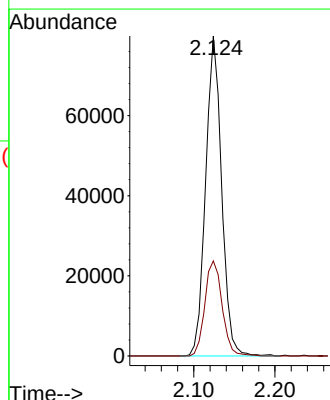
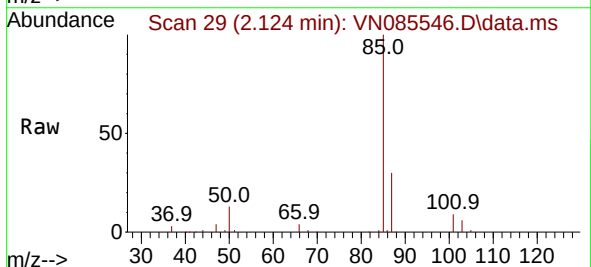
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

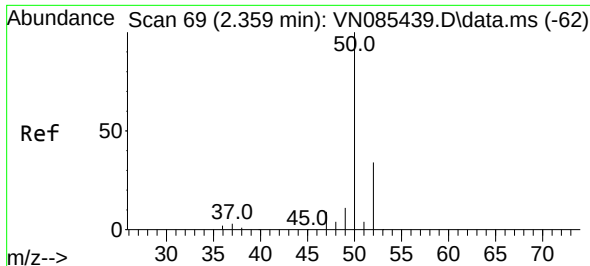
Tgt Ion:168 Resp: 187799  
Ion Ratio Lower Upper  
168 100  
99 62.0 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 42.934 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 85 Resp: 109169  
Ion Ratio Lower Upper  
85 100  
87 29.7 16.7 50.1

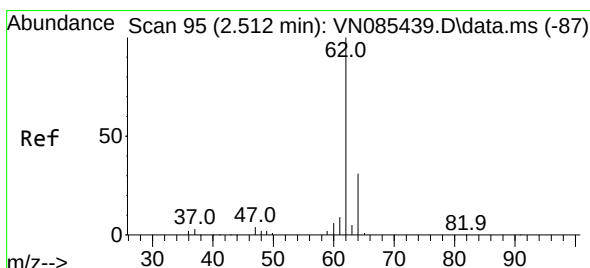
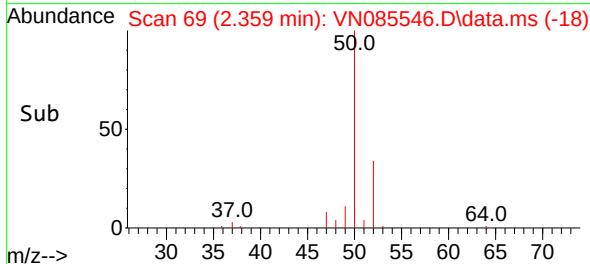
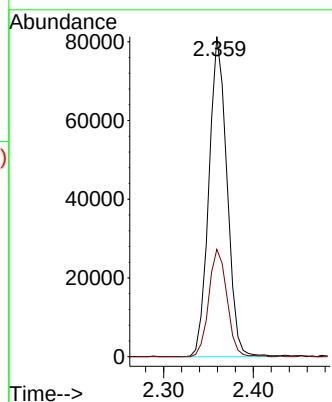
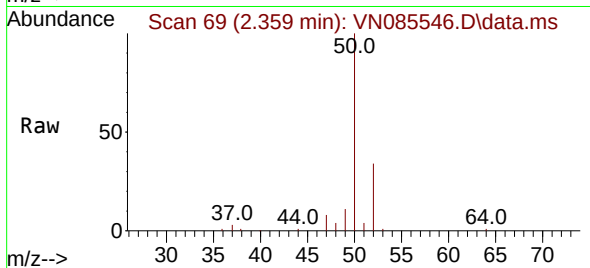




#3  
Chloromethane  
Concen: 41.310 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

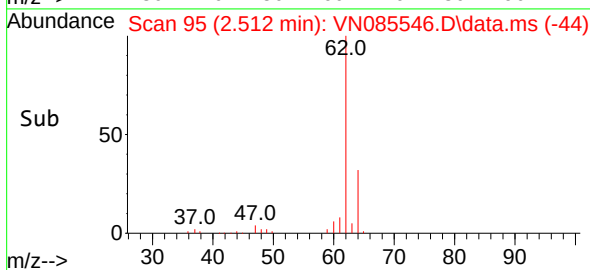
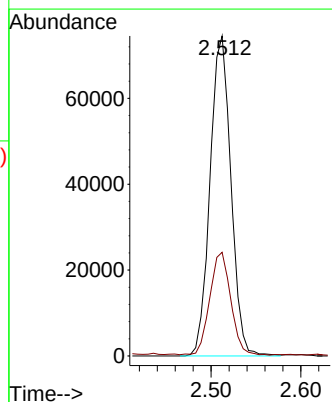
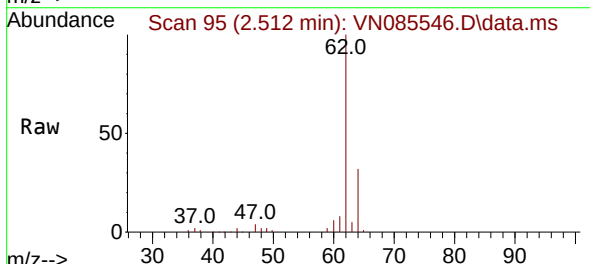
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

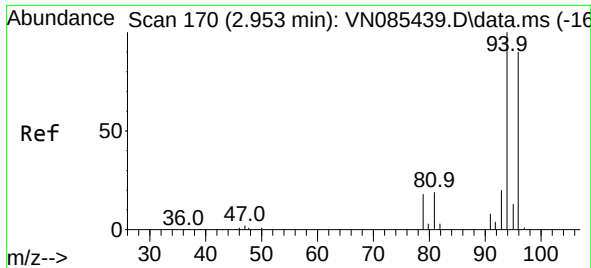
Tgt Ion: 50 Resp: 113732  
Ion Ratio Lower Upper  
50 100  
52 33.6 27.0 40.6



#4  
Vinyl Chloride  
Concen: 43.525 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 62 Resp: 120445  
Ion Ratio Lower Upper  
62 100  
64 32.0 24.8 37.2

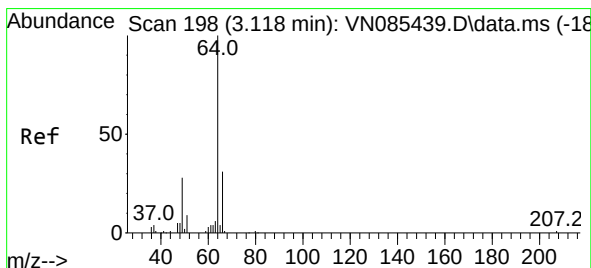
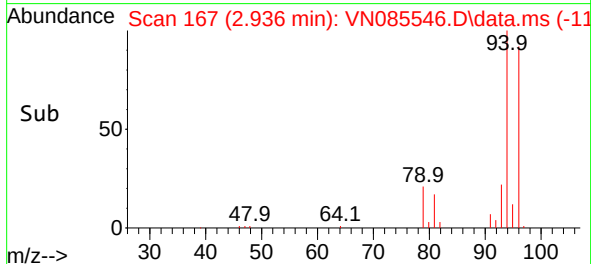
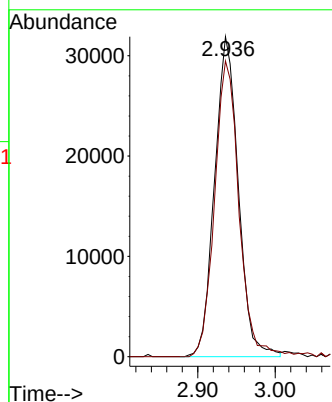
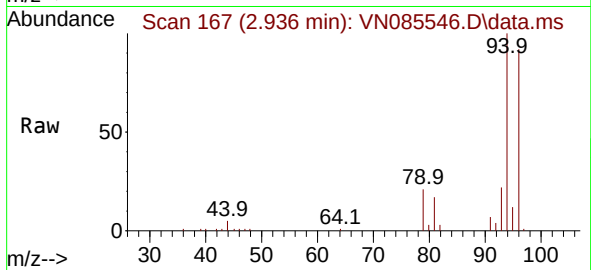




#5  
Bromomethane  
Concen: 40.633 ug/l  
RT: 2.936 min Scan# 11  
Delta R.T. -0.018 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

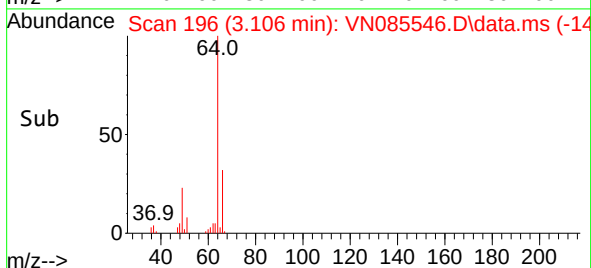
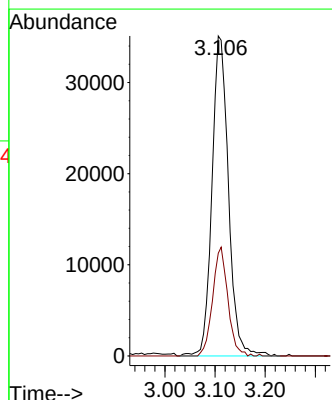
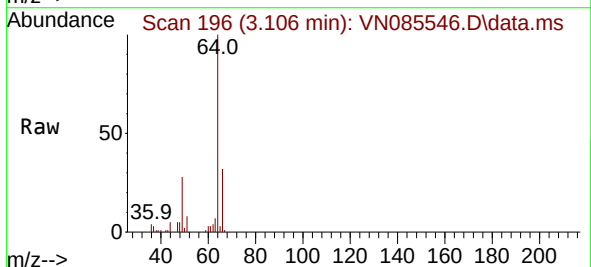
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

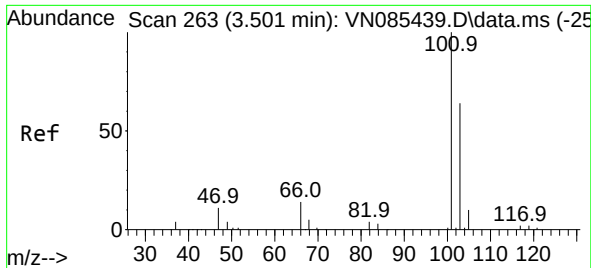
Tgt Ion: 94 Resp: 67919  
Ion Ratio Lower Upper  
94 100  
96 92.4 71.8 107.6



#6  
Chloroethane  
Concen: 45.629 ug/l  
RT: 3.106 min Scan# 196  
Delta R.T. -0.012 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 64 Resp: 80051  
Ion Ratio Lower Upper  
64 100  
66 32.1 24.6 36.8

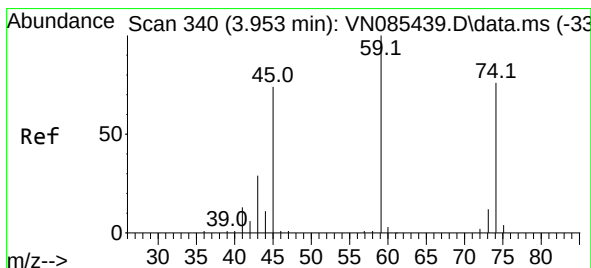
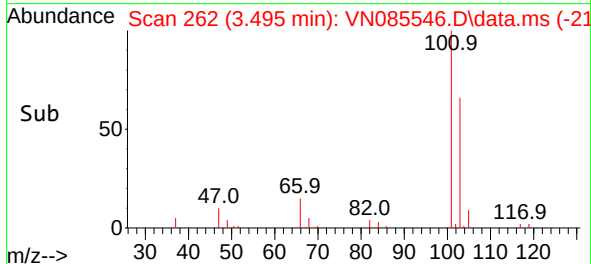
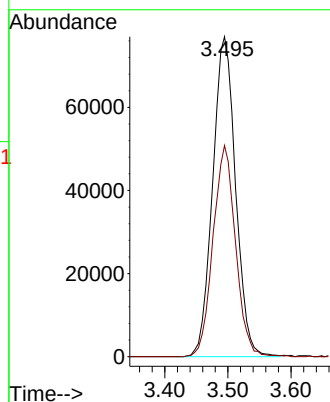
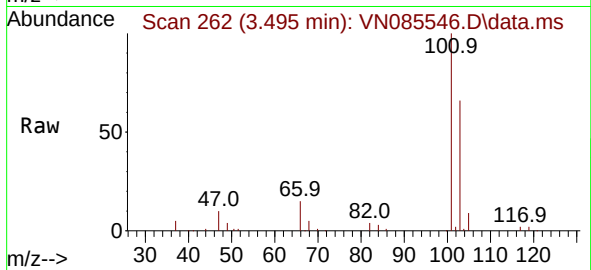




#7  
 Trichlorofluoromethane  
 Concen: 48.343 ug/l  
 RT: 3.495 min Scan# 210  
 Delta R.T. -0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

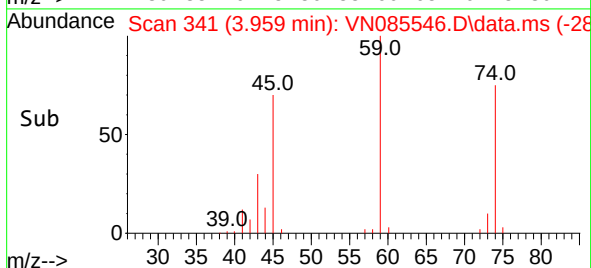
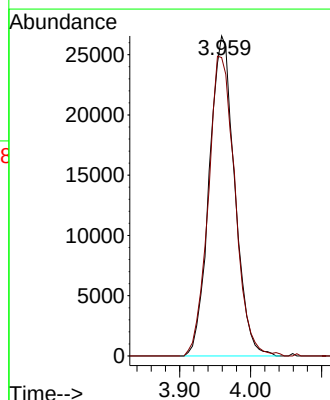
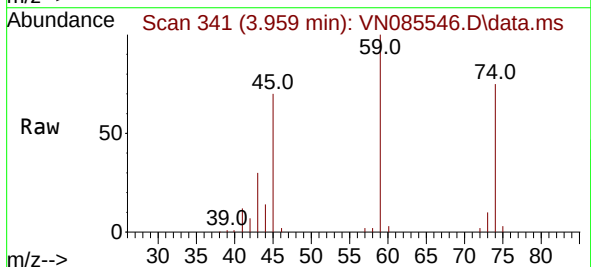
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

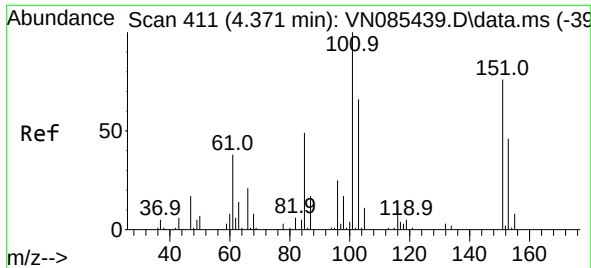
Tgt Ion:101 Resp: 194108  
 Ion Ratio Lower Upper  
 101 100  
 103 66.0 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 47.541 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion: 74 Resp: 65944  
 Ion Ratio Lower Upper  
 74 100  
 45 98.3 49.7 149.1

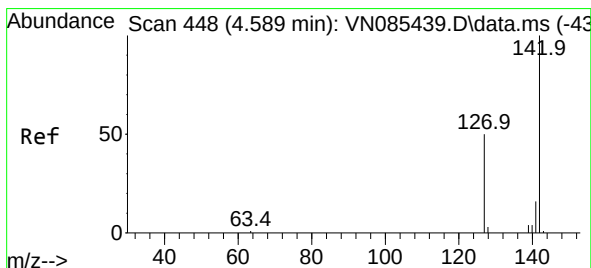
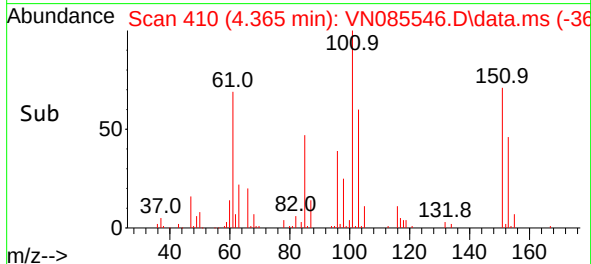
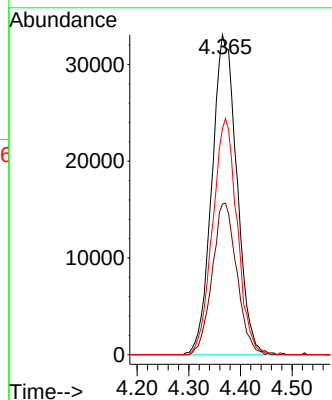
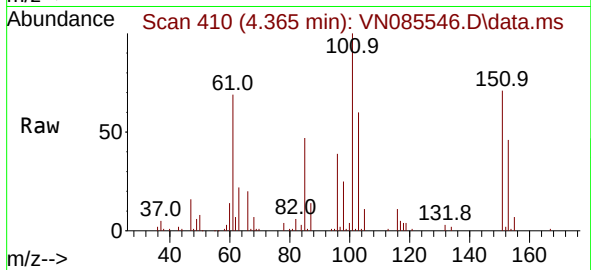




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 49.006 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

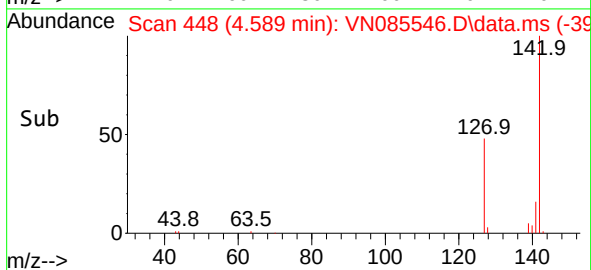
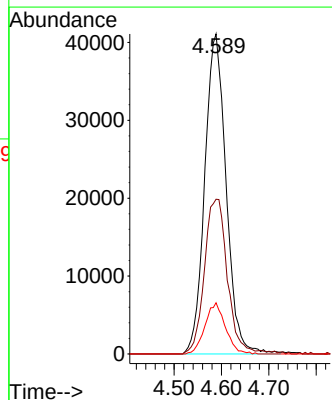
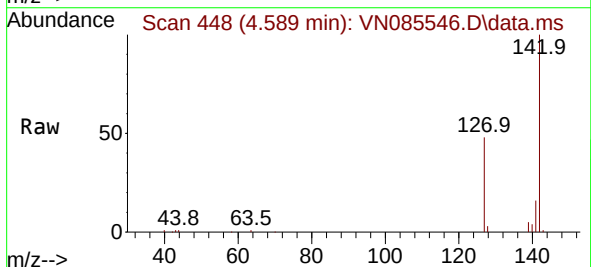
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

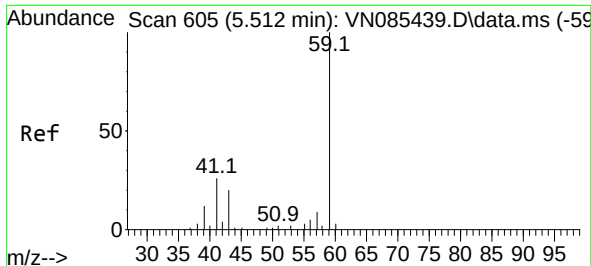
Tgt Ion:101 Resp: 110829  
Ion Ratio Lower Upper  
101 100  
85 46.6 37.8 56.8  
151 72.6 58.8 88.2



#10  
Methyl Iodide  
Concen: 49.778 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:142 Resp: 128917  
Ion Ratio Lower Upper  
142 100  
127 48.3 40.3 60.5  
141 16.0 12.8 19.2

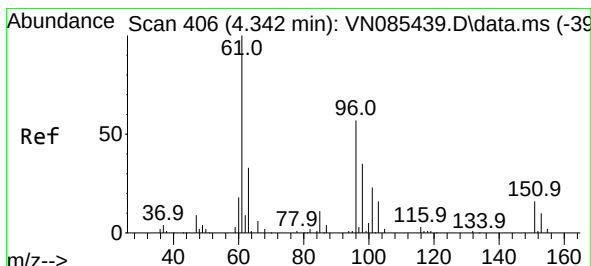
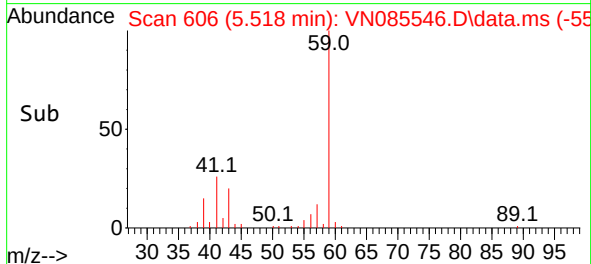
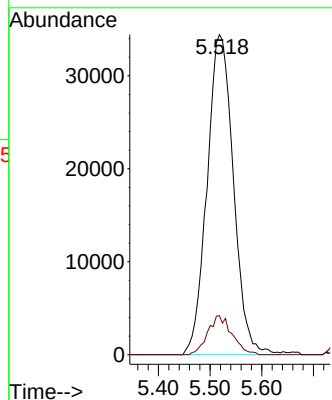
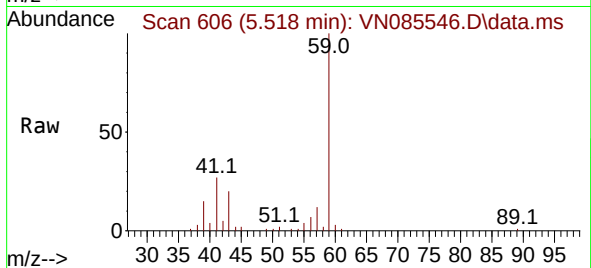




#11  
Tert butyl alcohol  
Concen: 351.637 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

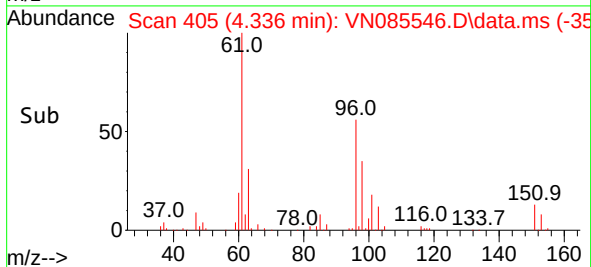
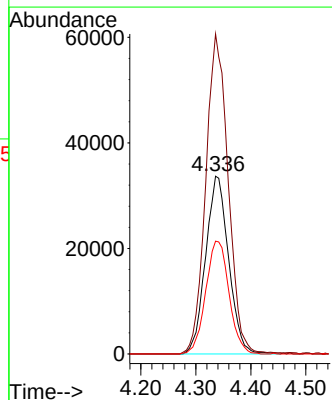
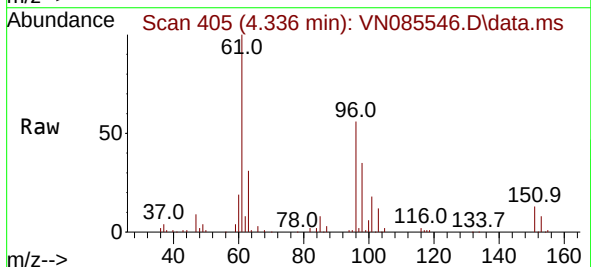
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

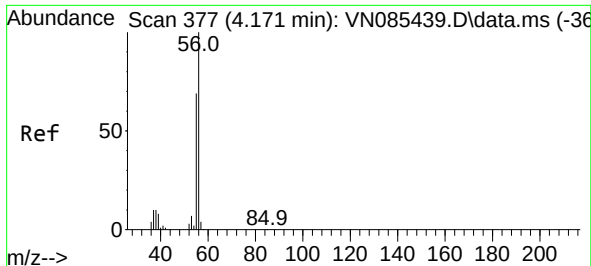
Tgt Ion: 59 Resp: 122061  
Ion Ratio Lower Upper  
59 100  
57 11.2 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 48.687 ug/l  
RT: 4.336 min Scan# 405  
Delta R.T. -0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 96 Resp: 98130  
Ion Ratio Lower Upper  
96 100  
61 180.0 141.0 211.4  
98 63.4 49.0 73.6

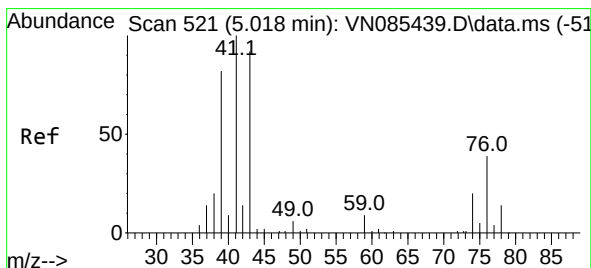
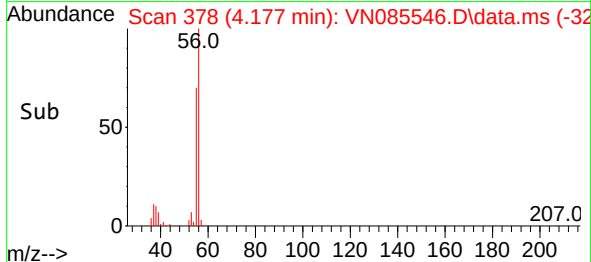
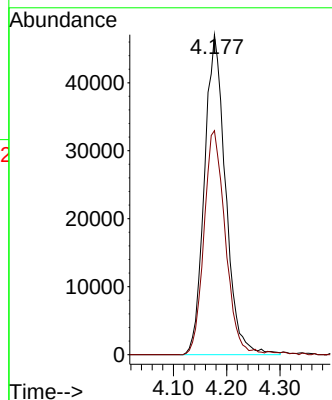
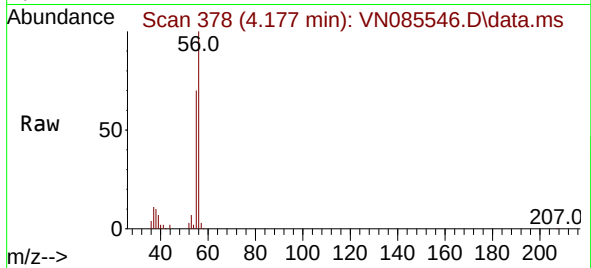




#13  
Acrolein  
Concen: 273.407 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

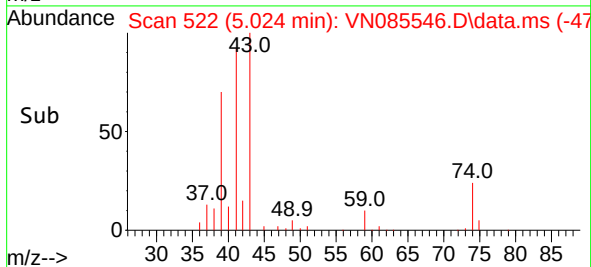
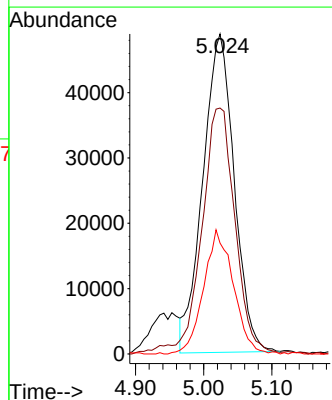
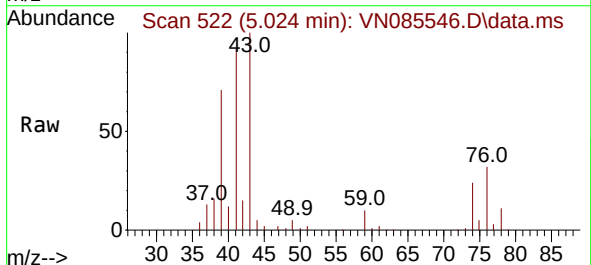
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 56 Resp: 129555  
Ion Ratio Lower Upper  
56 100  
55 70.6 56.3 84.5

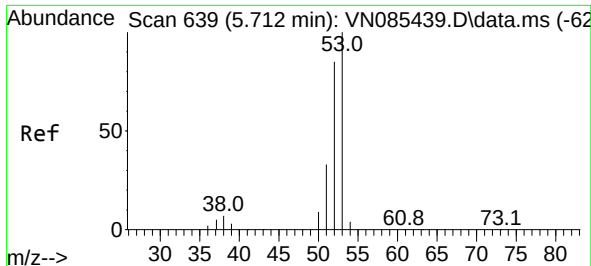


#14  
Allyl chloride  
Concen: 47.653 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 41 Resp: 155852  
Ion Ratio Lower Upper  
41 100  
39 82.2 64.4 96.6  
76 37.0 30.5 45.7



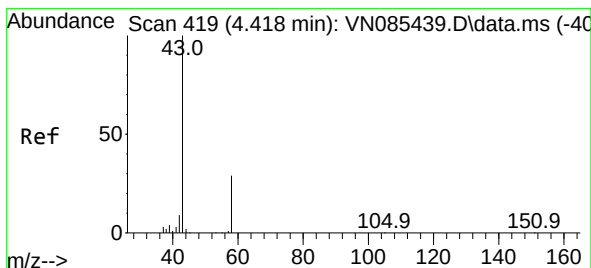
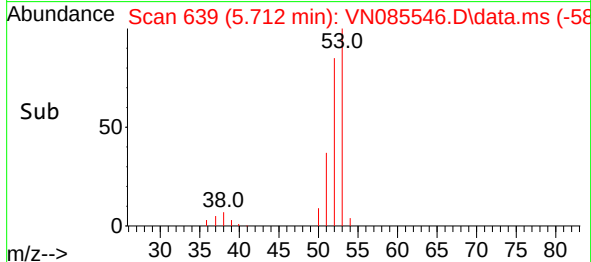
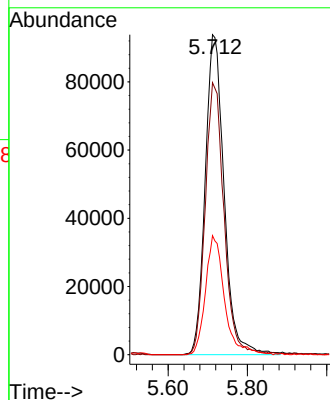
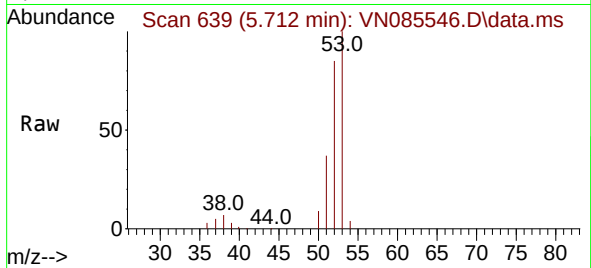




#15  
Acrylonitrile  
Concen: 281.891 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

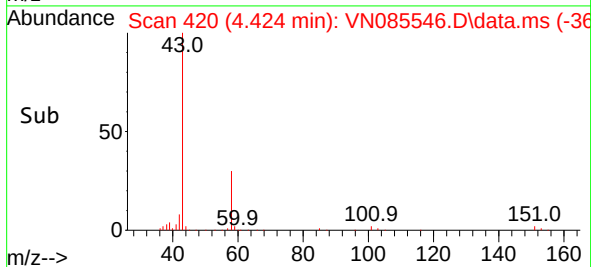
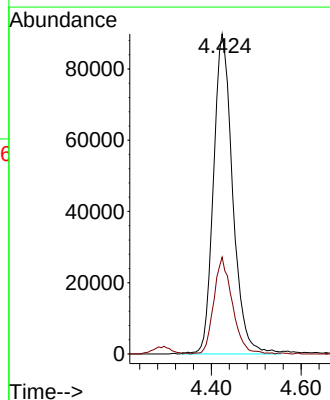
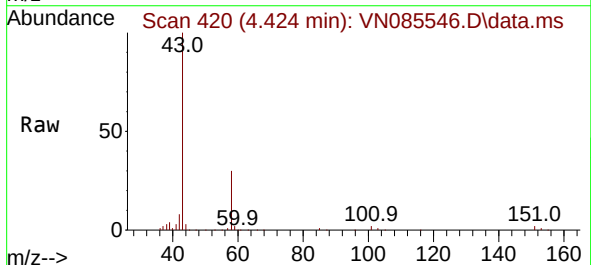
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

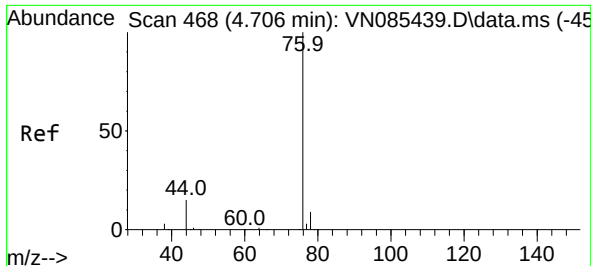
Tgt Ion: 53 Resp: 310806  
Ion Ratio Lower Upper  
53 100  
52 83.9 65.5 98.3  
51 37.3 29.8 44.8



#16  
Acetone  
Concen: 272.891 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 43 Resp: 267295  
Ion Ratio Lower Upper  
43 100  
58 30.0 23.8 35.6

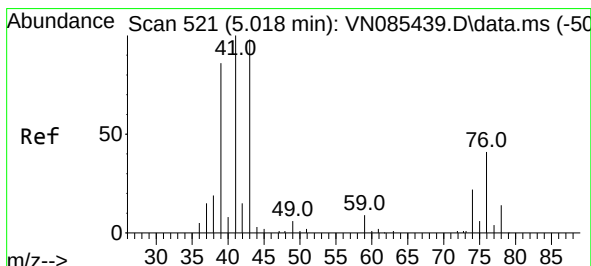
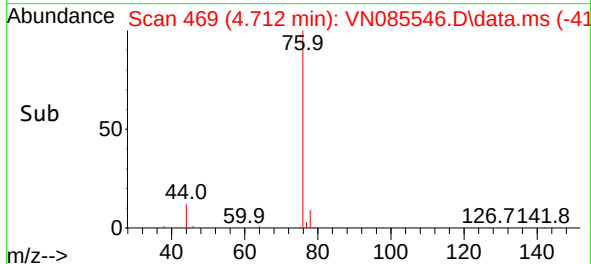
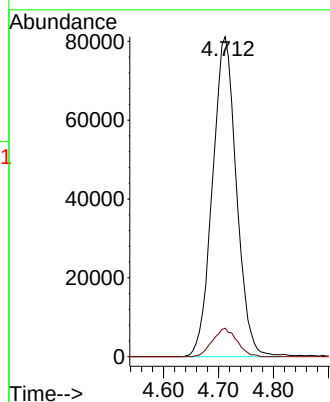
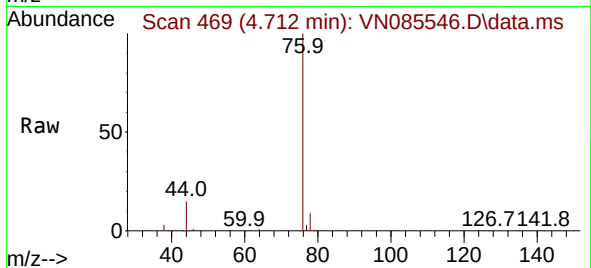




#17  
Carbon Disulfide  
Concen: 39.567 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

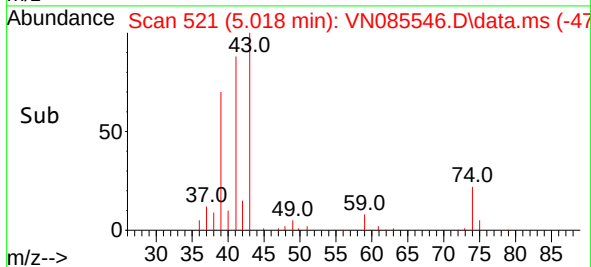
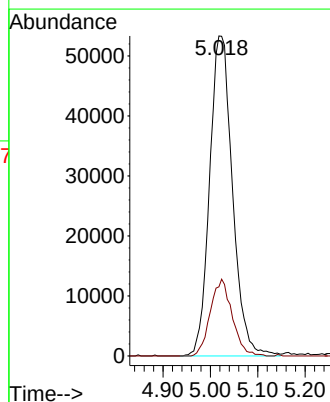
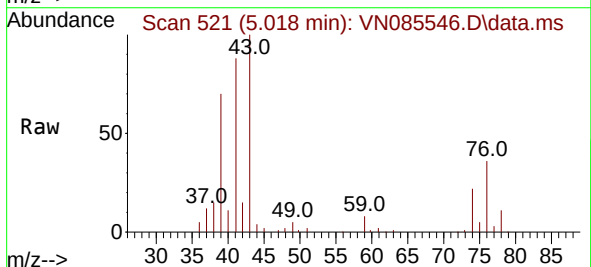
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

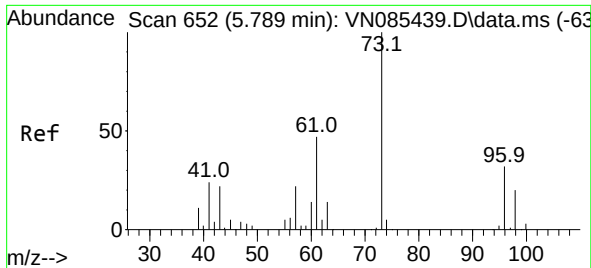
Tgt Ion: 76 Resp: 245541  
Ion Ratio Lower Upper  
76 100  
78 8.9 6.9 10.3



#18  
Methyl Acetate  
Concen: 60.097 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 43 Resp: 178998  
Ion Ratio Lower Upper  
43 100  
74 22.9 18.6 28.0

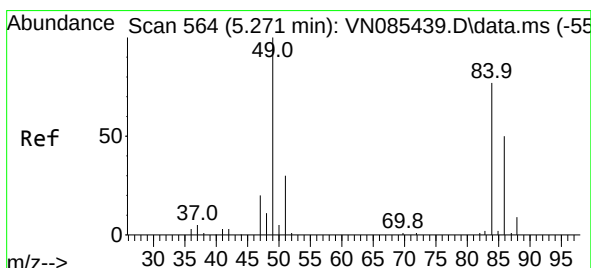
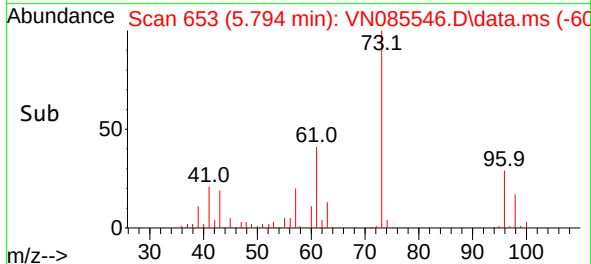
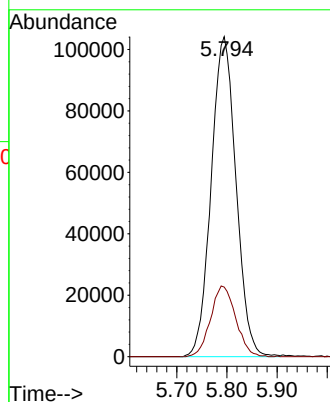
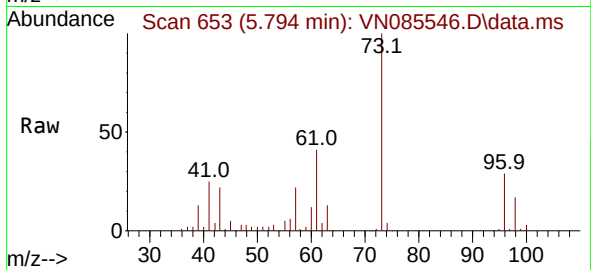




#19  
Methyl tert-butyl Ether  
Concen: 54.787 ug/l  
RT: 5.794 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

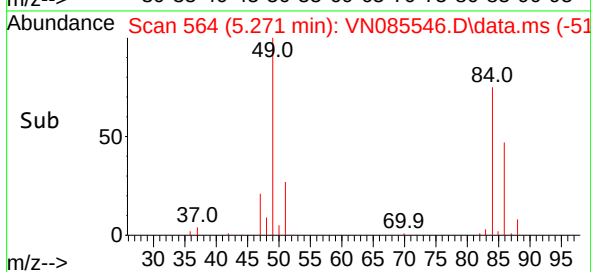
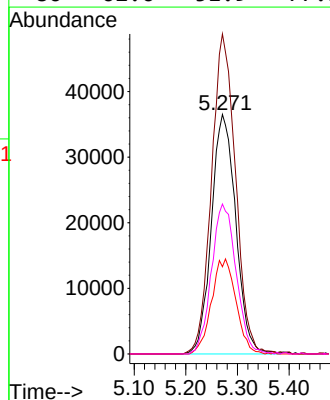
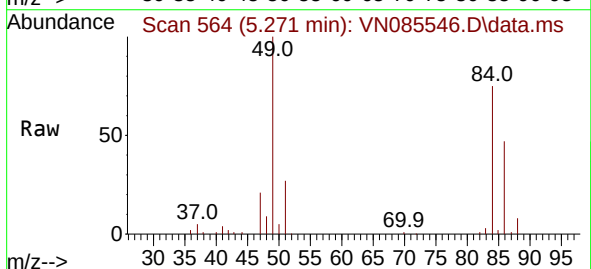
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

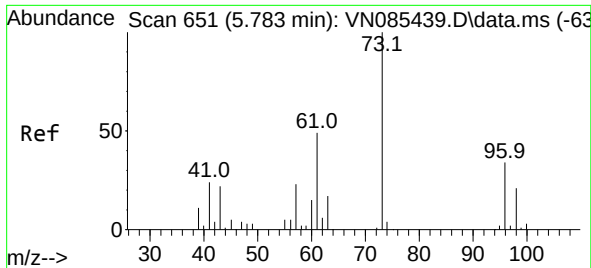
Tgt Ion: 73 Resp: 358554  
Ion Ratio Lower Upper  
73 100  
57 21.7 17.8 26.8



#20  
Methylene Chloride  
Concen: 49.335 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 84 Resp: 119628  
Ion Ratio Lower Upper  
84 100  
49 133.6 104.1 156.1  
51 36.4 31.0 46.4  
86 62.6 51.9 77.9

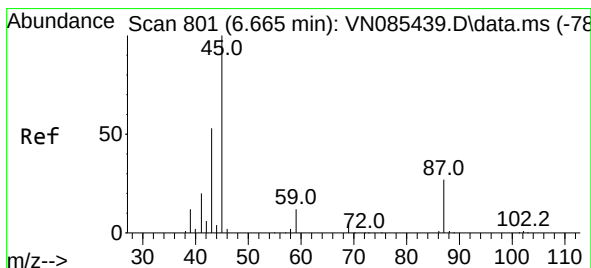
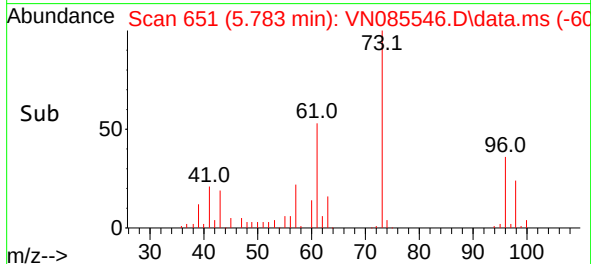
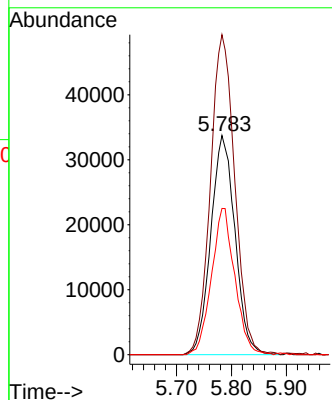
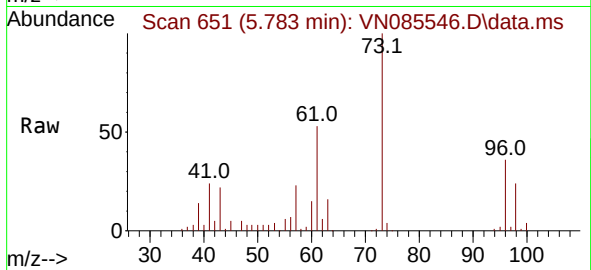




#21  
trans-1,2-Dichloroethene  
Concen: 47.884 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

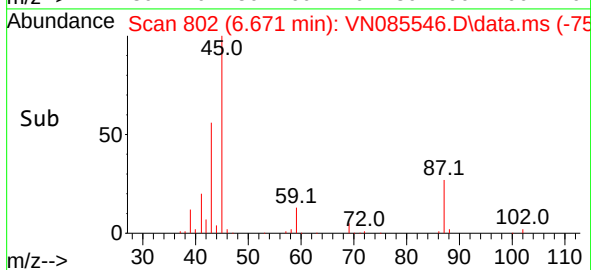
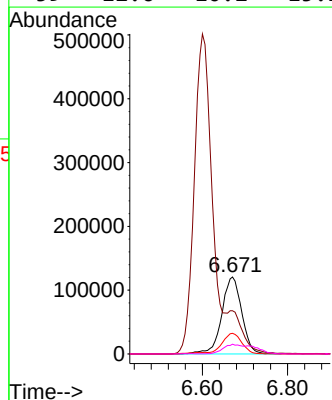
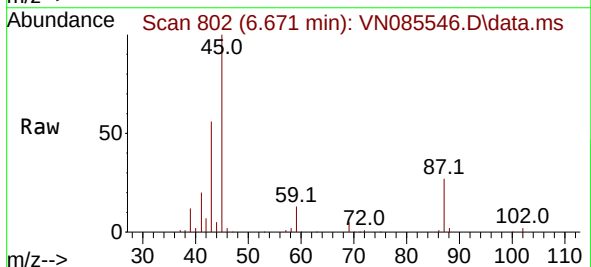
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

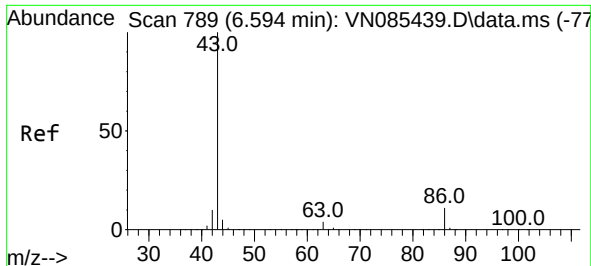
Tgt Ion: 96 Resp: 103142  
Ion Ratio Lower Upper  
96 100  
61 146.0 115.7 173.5  
98 66.8 49.8 74.8



#22  
Diisopropyl ether  
Concen: 54.034 ug/l  
RT: 6.671 min Scan# 802  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 45 Resp: 392245  
Ion Ratio Lower Upper  
45 100  
43 54.9 45.0 67.6  
87 26.8 21.8 32.8  
59 12.6 10.2 15.2

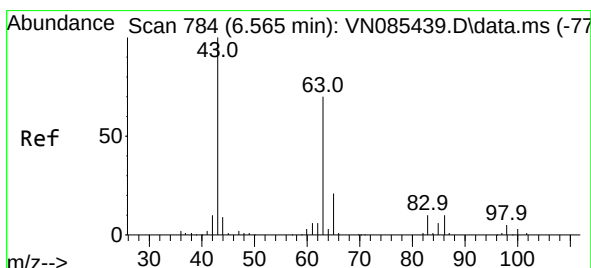
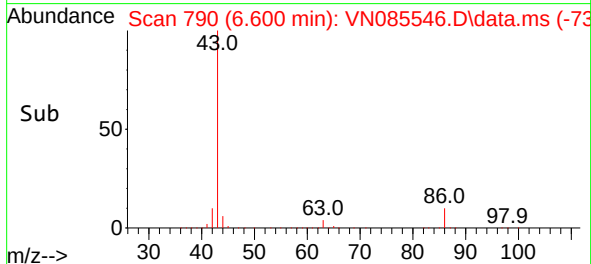
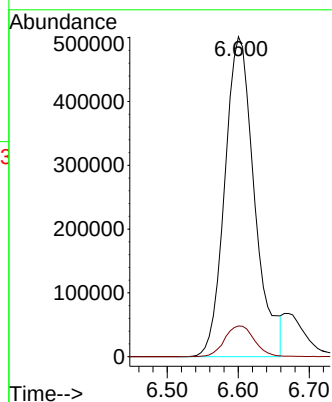
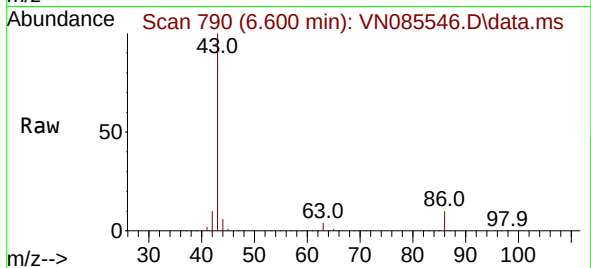




#23  
 Vinyl Acetate  
 Concen: 286.348 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

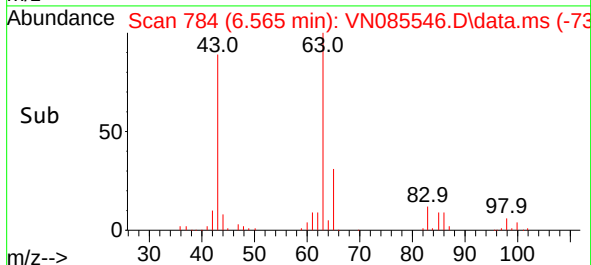
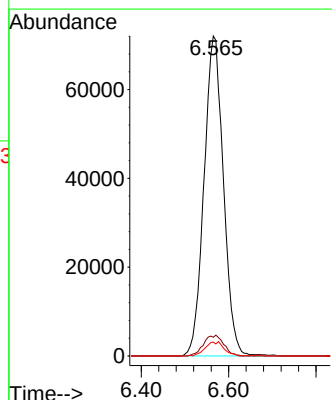
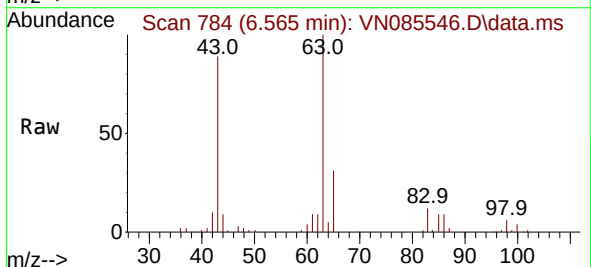
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

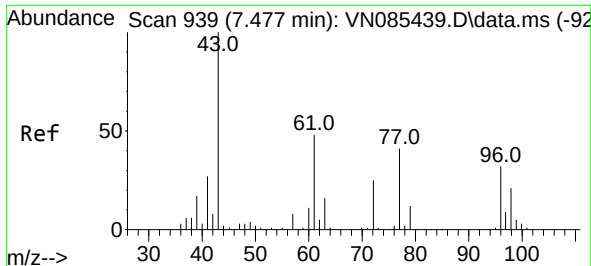
Tgt Ion: 43 Resp: 1454703  
 Ion Ratio Lower Upper  
 43 100  
 86 9.6 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 50.334 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion: 63 Resp: 222797  
 Ion Ratio Lower Upper  
 63 100  
 98 5.9 3.3 9.8  
 100 4.4 2.0 6.0

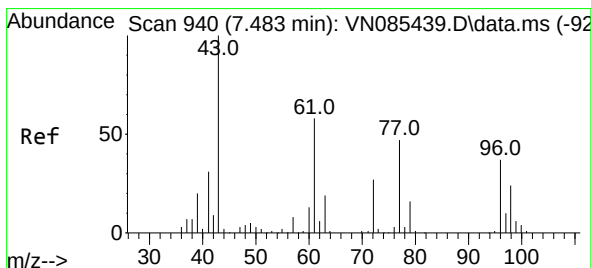
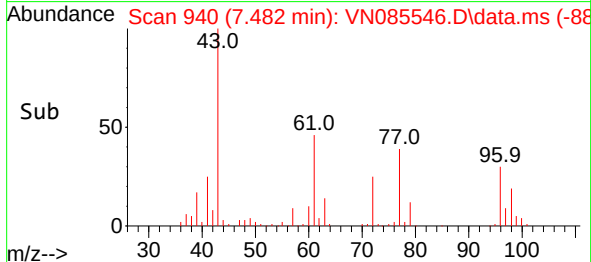
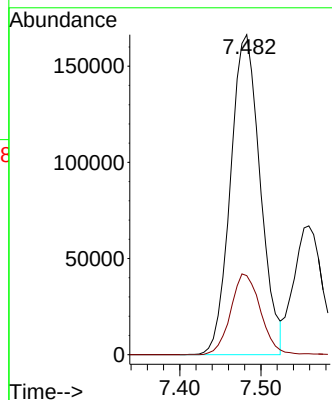
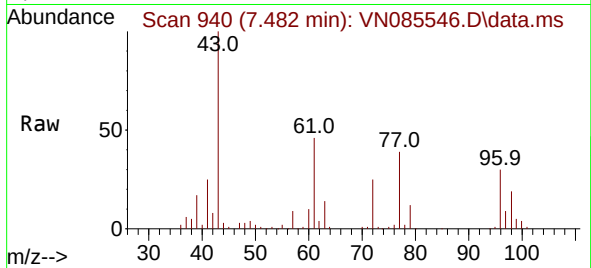




#25  
2-Butanone  
Concen: 293.531 ug/l  
RT: 7.482 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

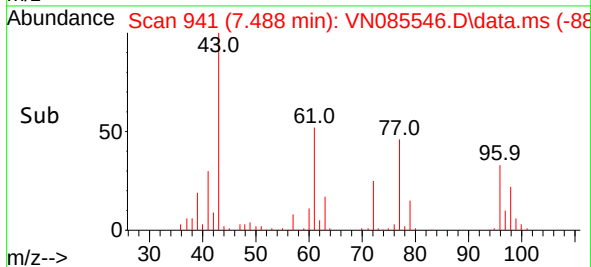
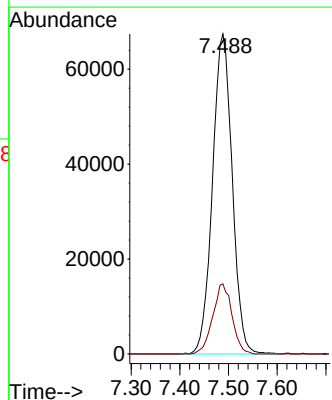
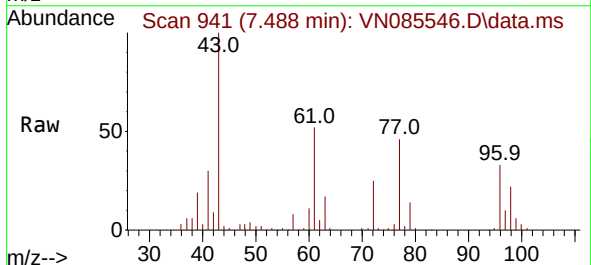
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

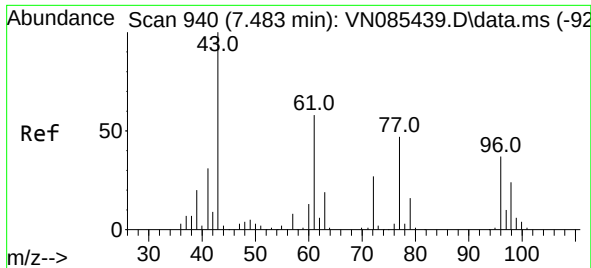
Tgt Ion: 43 Resp: 423099  
Ion Ratio Lower Upper  
43 100  
72 24.7 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 52.834 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 77 Resp: 189076  
Ion Ratio Lower Upper  
77 100  
97 21.4 10.7 32.1

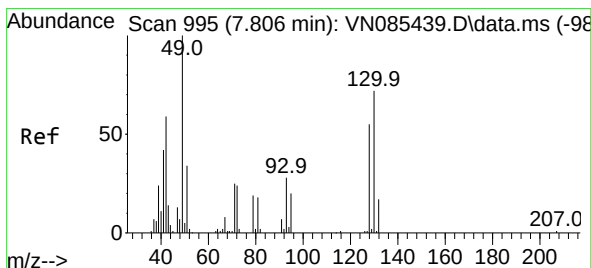
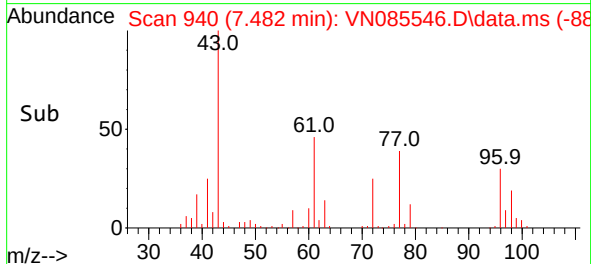
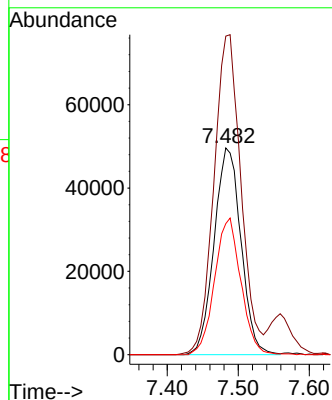
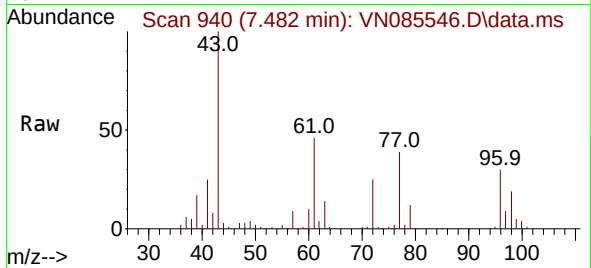




#27  
 cis-1,2-Dichloroethene  
 Concen: 51.325 ug/l  
 RT: 7.482 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

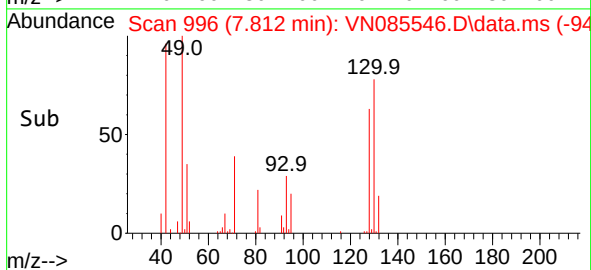
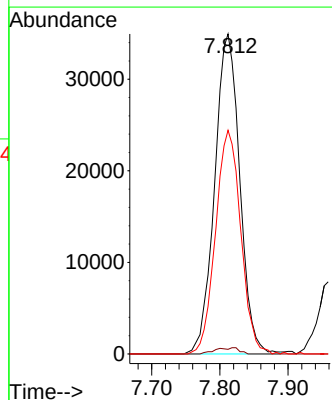
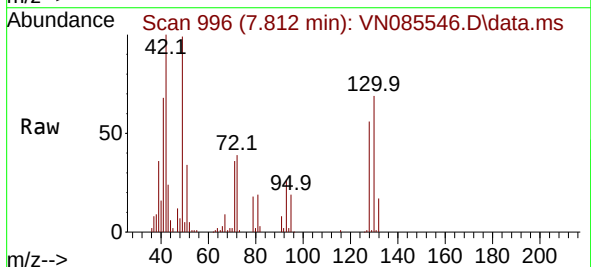
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

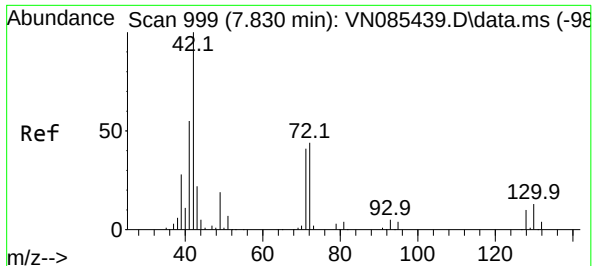
Tgt Ion: 96 Resp: 130214  
 Ion Ratio Lower Upper  
 96 100  
 61 155.9 0.0 311.8  
 98 64.7 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 43.487 ug/l  
 RT: 7.812 min Scan# 996  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion: 49 Resp: 89552  
 Ion Ratio Lower Upper  
 49 100  
 129 1.9 0.0 4.4  
 130 70.3 55.0 82.4





#29

Tetrahydrofuran

Concen: 301.616 ug/l

RT: 7.835 min Scan# 1000

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

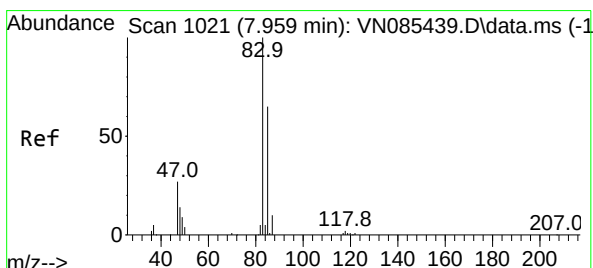
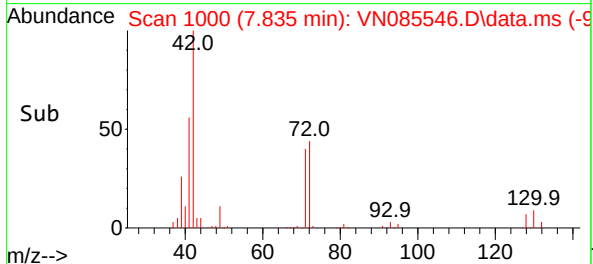
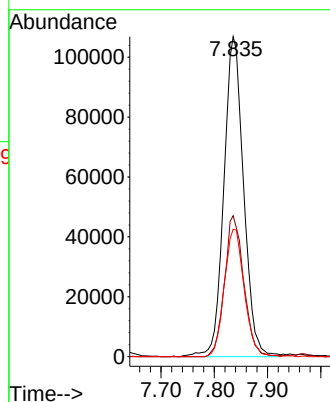
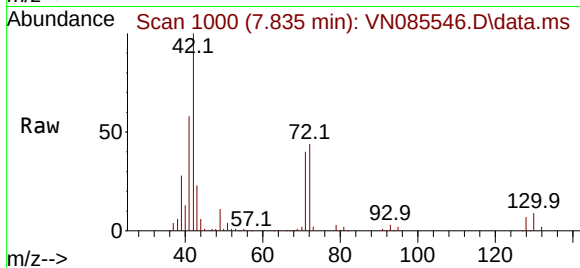
Tgt Ion: 42 Resp: 275635

Ion Ratio Lower Upper

42 100

72 42.8 34.2 51.2

71 40.1 32.5 48.7



#30

Chloroform

Concen: 50.826 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085546.D

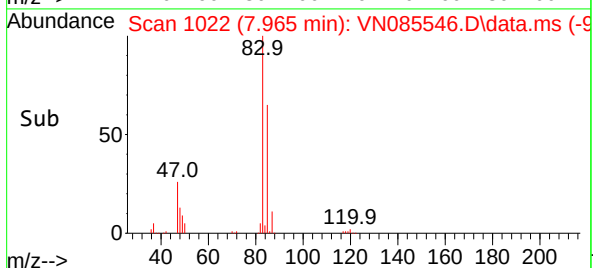
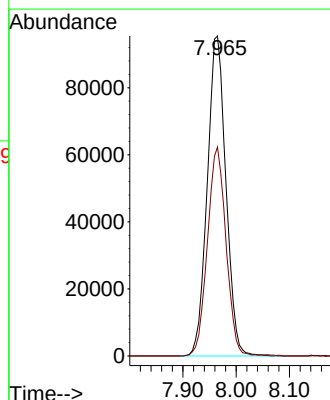
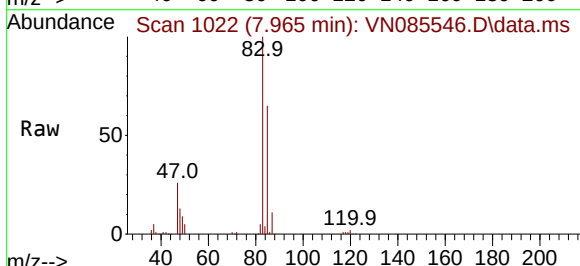
Acq: 28 Jan 2025 18:14

Tgt Ion: 83 Resp: 232517

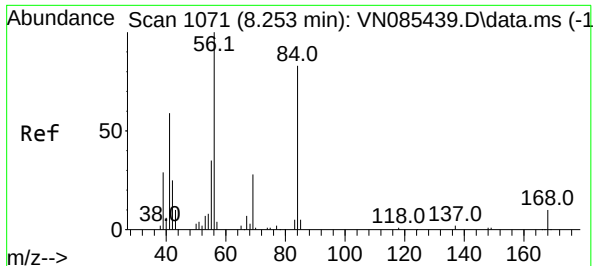
Ion Ratio Lower Upper

83 100

85 65.3 51.8 77.6

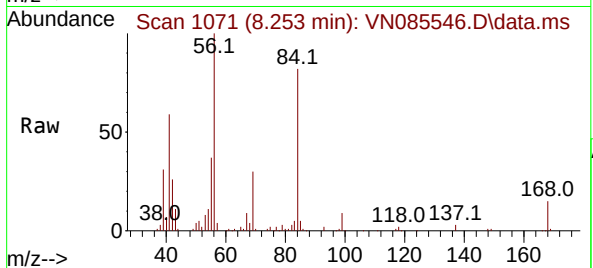




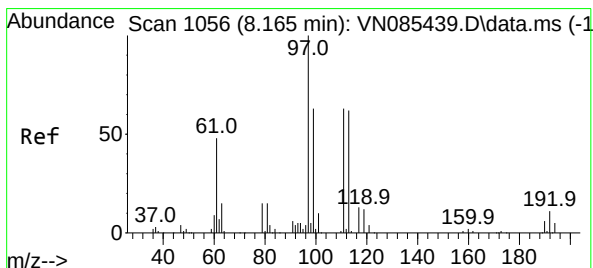
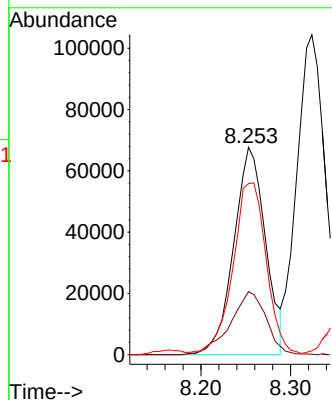
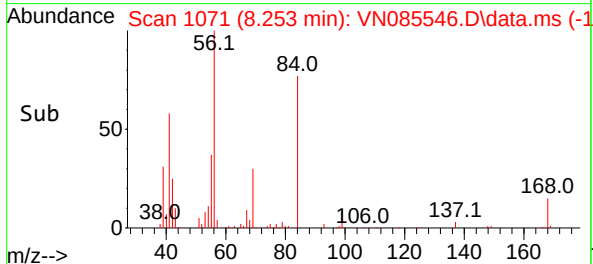


#31  
Cyclohexane  
Concen: 43.331 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

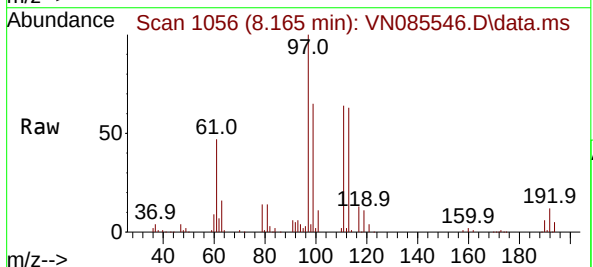
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



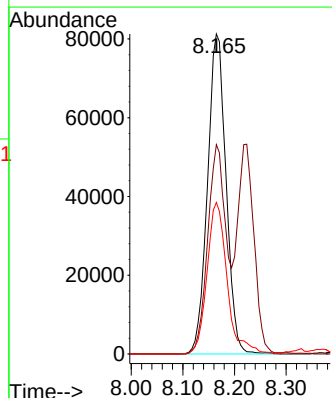
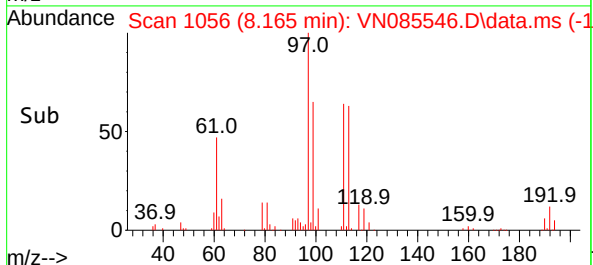
Tgt Ion: 56 Resp: 166703  
Ion Ratio Lower Upper  
56 100  
69 29.8 22.2 33.4  
84 80.6 66.4 99.6

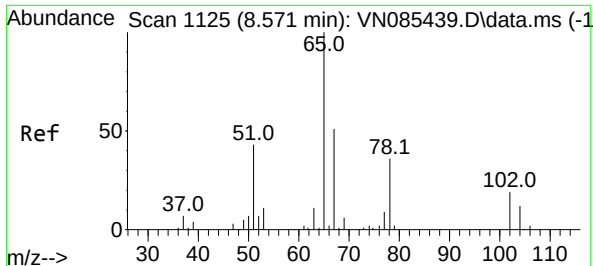


#32  
1,1,1-Trichloroethane  
Concen: 50.429 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14



Tgt Ion: 97 Resp: 202362  
Ion Ratio Lower Upper  
97 100  
99 65.0 49.8 74.6  
61 51.3 41.4 62.2

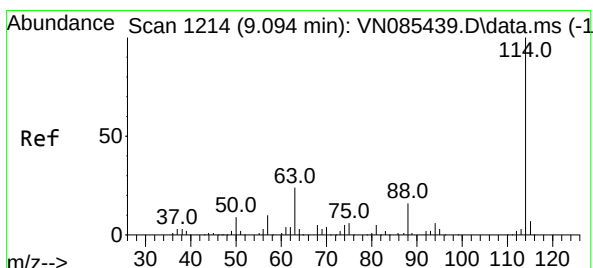
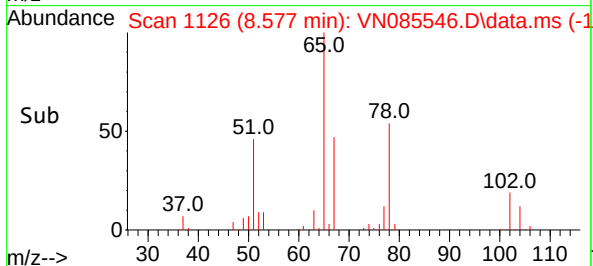
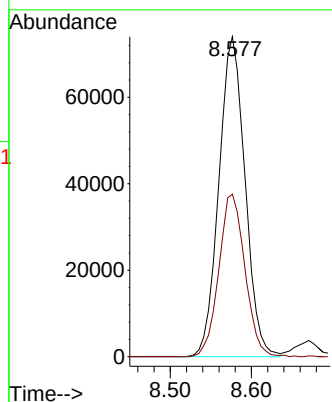
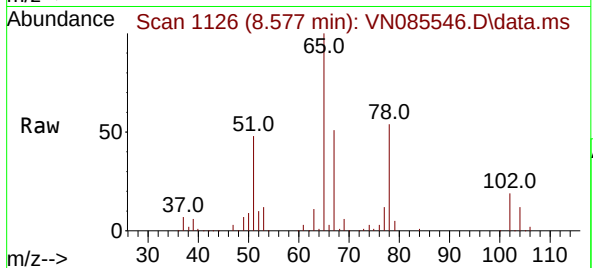




#33  
 1,2-Dichloroethane-d4  
 Concen: 54.638 ug/l  
 RT: 8.577 min Scan# 1125  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

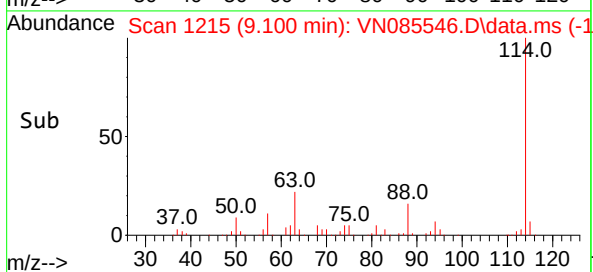
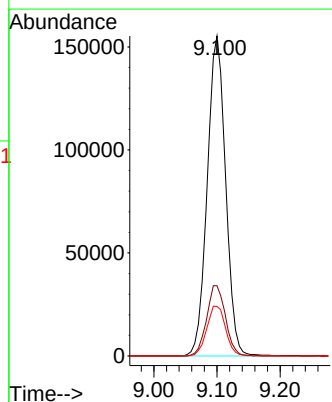
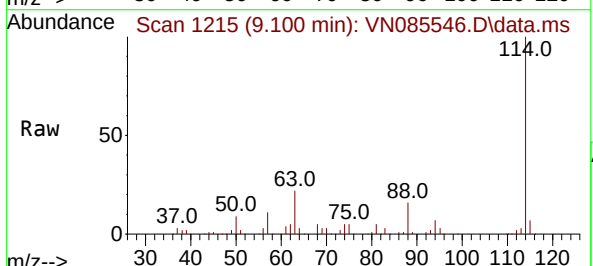
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

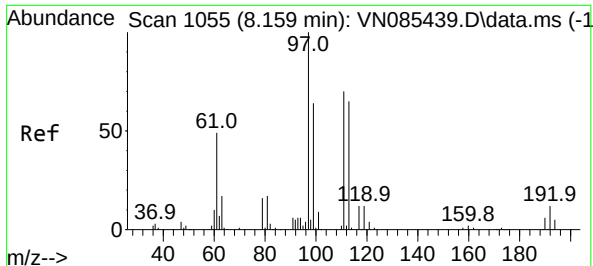
Tgt Ion: 65 Resp: 165633  
 Ion Ratio Lower Upper  
 65 100  
 67 50.7 0.0 101.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion: 114 Resp: 314055  
 Ion Ratio Lower Upper  
 114 100  
 63 22.0 0.0 47.6  
 88 15.5 0.0 32.6

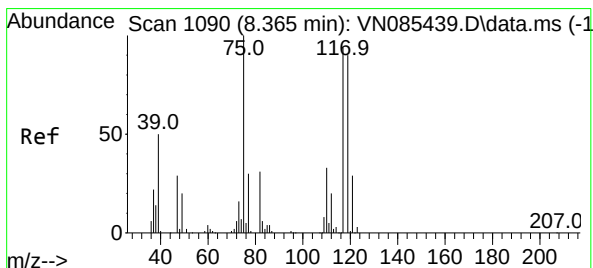
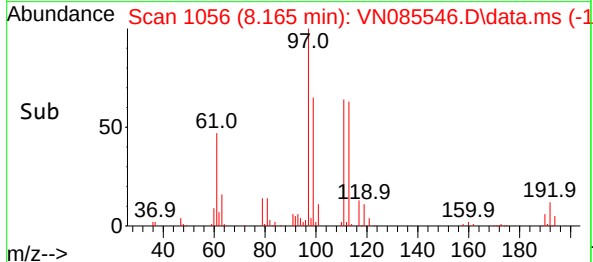
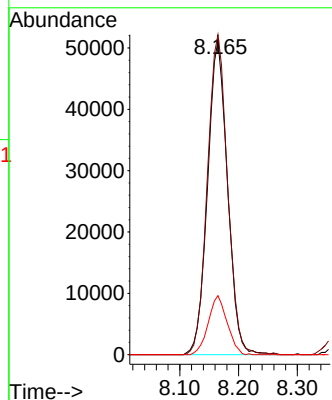
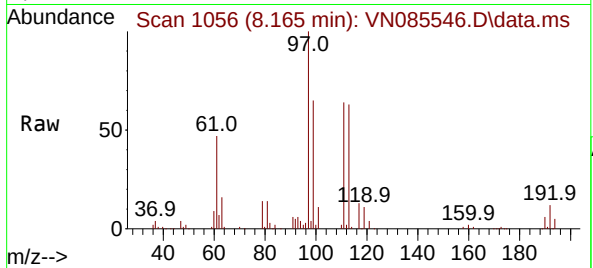




#35  
Dibromofluoromethane  
Concen: 55.349 ug/l  
RT: 8.165 min Scan# 1055  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

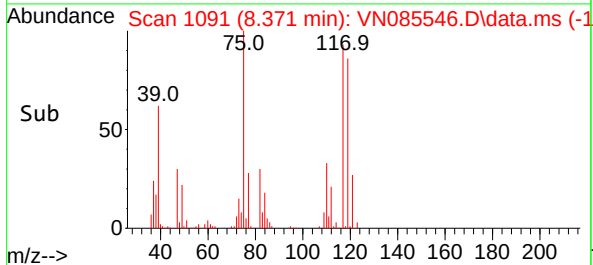
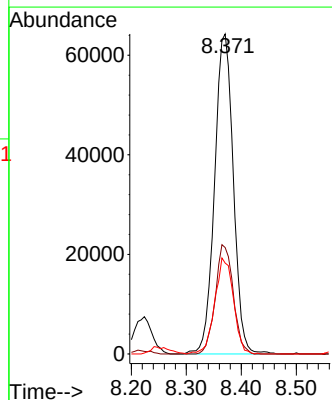
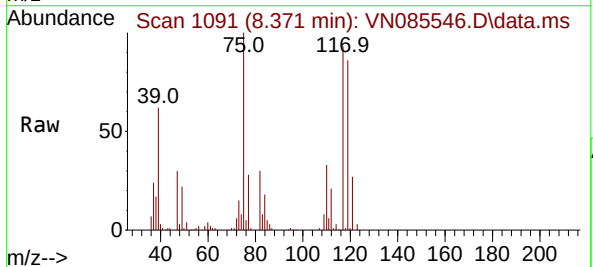
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

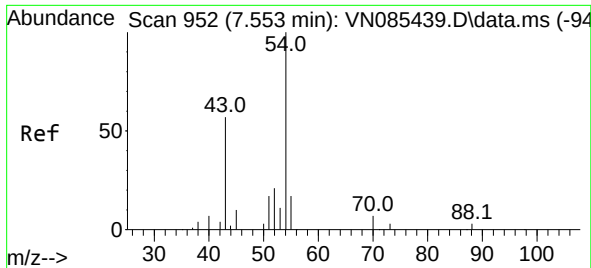
Tgt Ion:113 Resp: 120592  
Ion Ratio Lower Upper  
113 100  
111 102.9 82.7 124.1  
192 17.8 14.3 21.5



#36  
1,1-Dichloropropene  
Concen: 49.851 ug/l  
RT: 8.371 min Scan# 1091  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 75 Resp: 152437  
Ion Ratio Lower Upper  
75 100  
110 32.6 16.5 49.5  
77 29.9 24.4 36.6





#37

Ethyl Acetate

Concen: 55.616 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

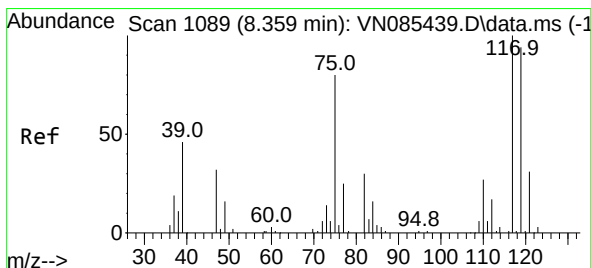
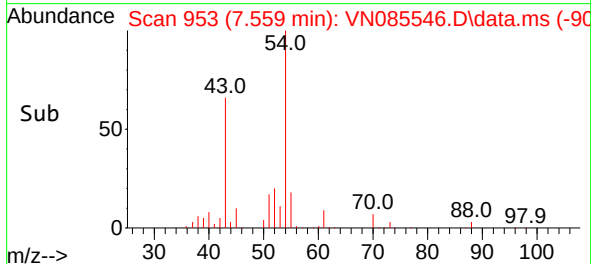
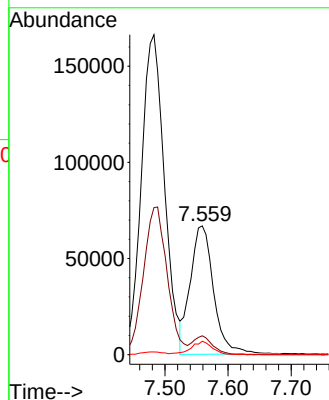
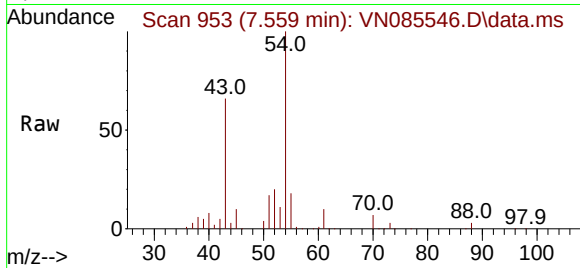
Tgt Ion: 43 Resp: 171657

Ion Ratio Lower Upper

43 100

61 12.5 10.9 16.3

70 9.5 7.5 11.3



#38

Carbon Tetrachloride

Concen: 51.368 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

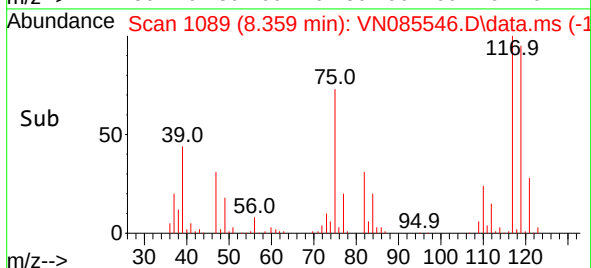
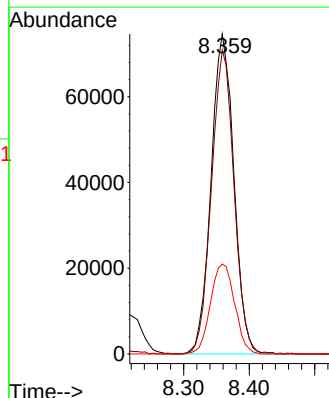
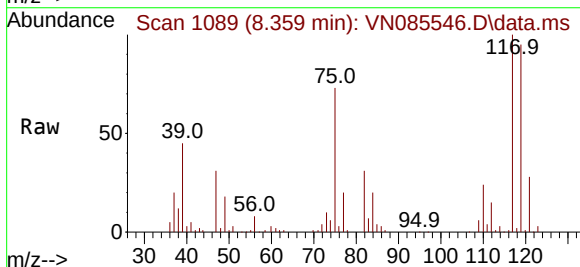
Tgt Ion: 117 Resp: 179826

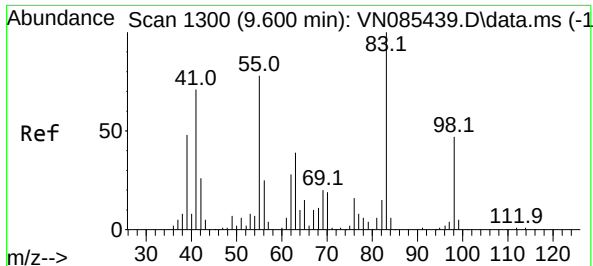
Ion Ratio Lower Upper

117 100

119 95.0 75.4 113.2

121 28.1 24.6 37.0





#39

Methylcyclohexane

Concen: 50.030 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

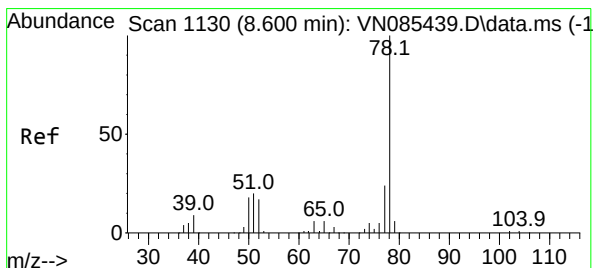
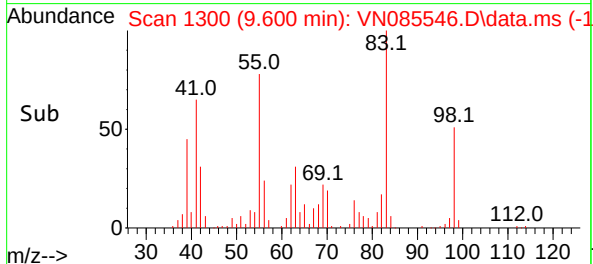
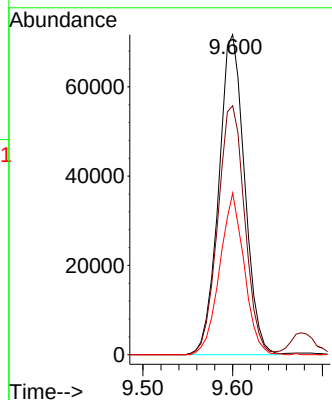
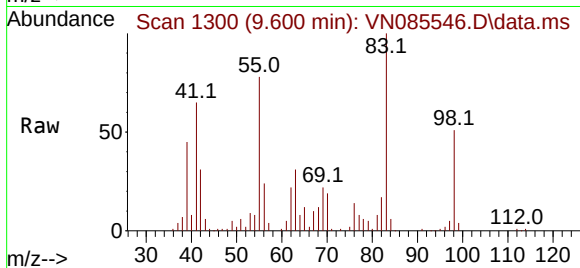
Tgt Ion: 83 Resp: 143759

Ion Ratio Lower Upper

83 100

55 77.8 62.6 94.0

98 50.5 37.7 56.5



#40

Benzene

Concen: 51.218 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085546.D

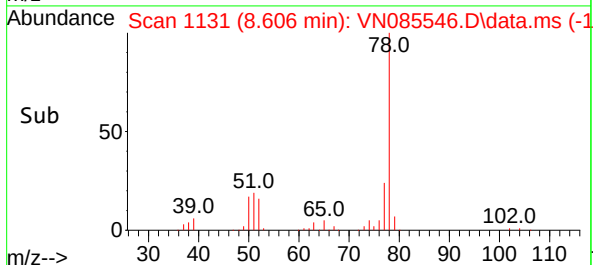
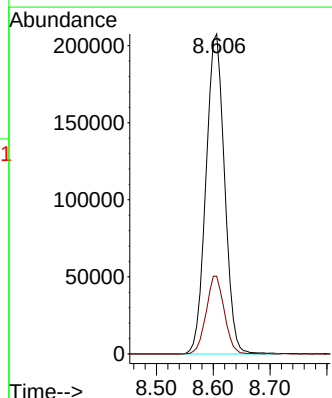
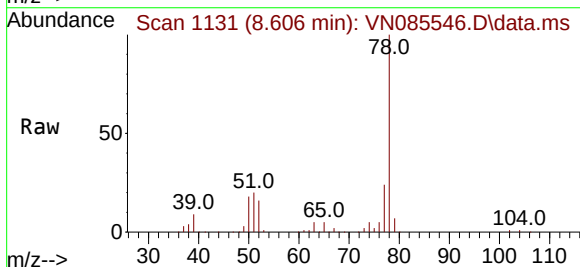
Acq: 28 Jan 2025 18:14

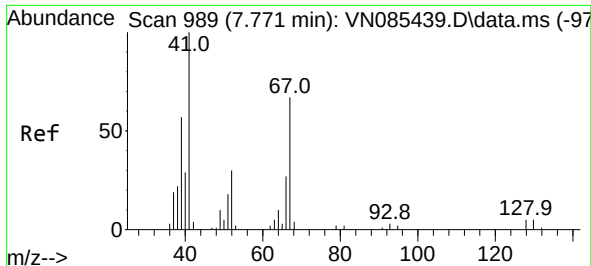
Tgt Ion: 78 Resp: 470586

Ion Ratio Lower Upper

78 100

77 24.3 19.0 28.6

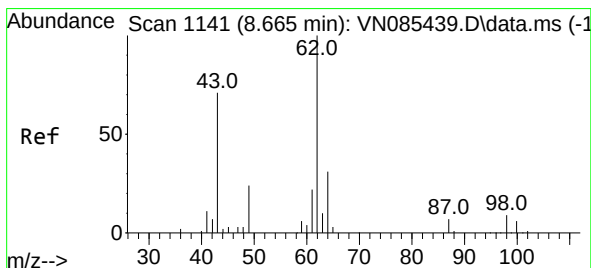
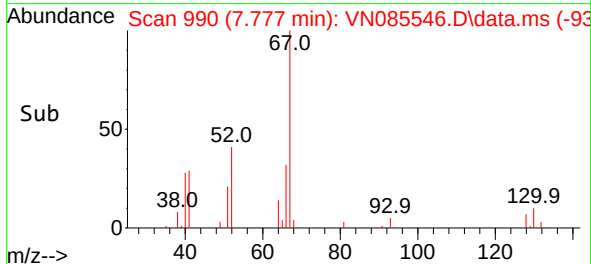
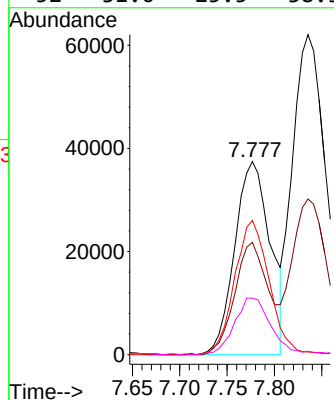
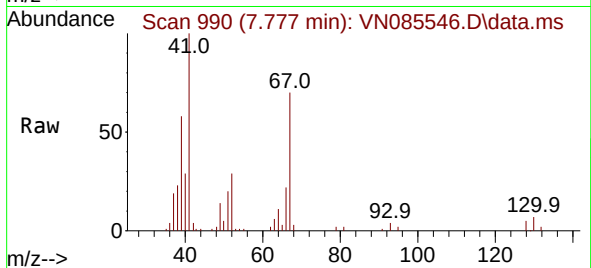




#41  
Methacrylonitrile  
Concen: 60.848 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

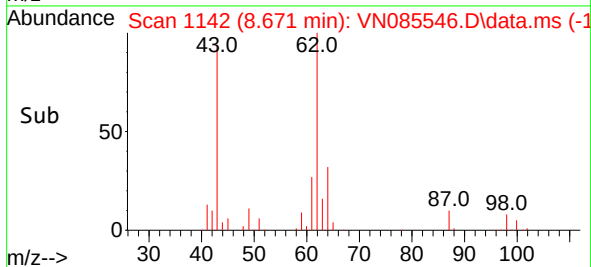
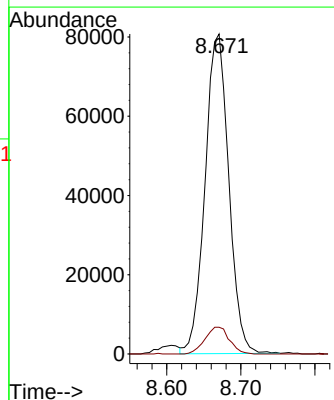
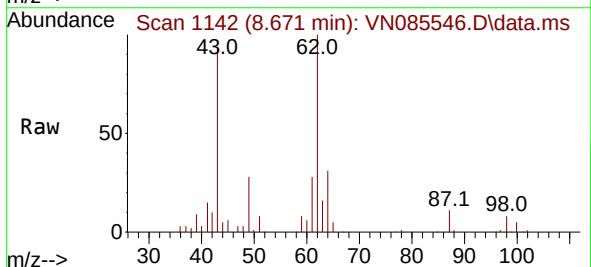
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

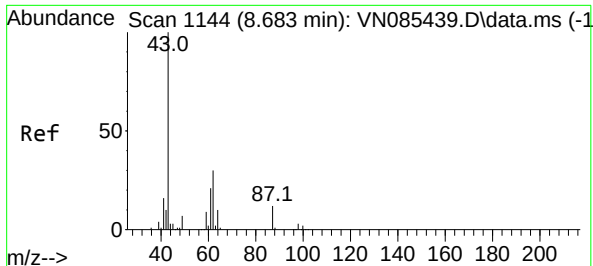
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 97709 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.4  | 46.0  | 69.0  |
| 67       | 68.0  | 57.4  | 86.2  |
| 52       | 31.0  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 51.863 ug/l  
RT: 8.671 min Scan# 1142  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 179469 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.6   | 0.0   | 17.0   |

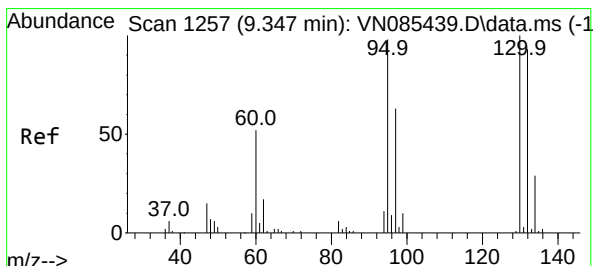
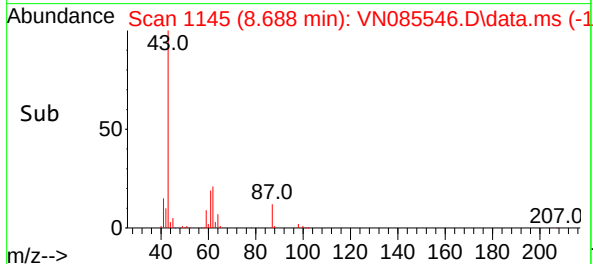
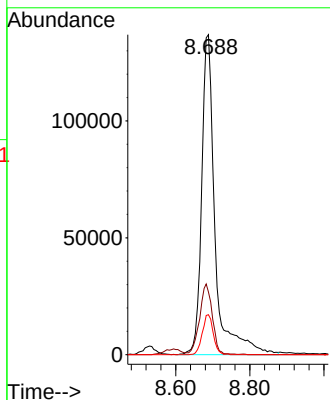
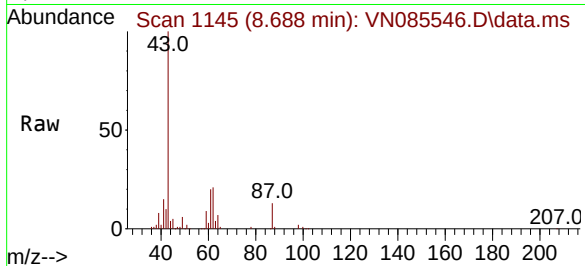




#43  
Isopropyl Acetate  
Concen: 69.836 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

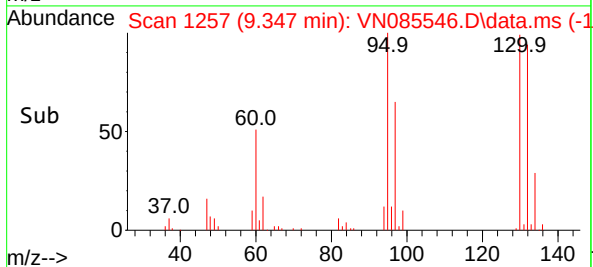
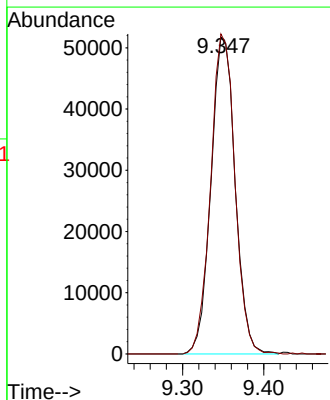
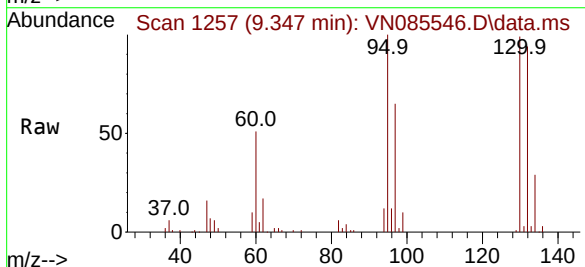
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

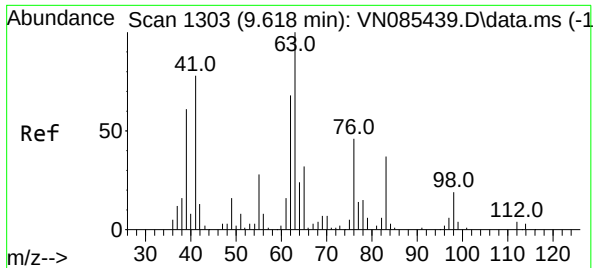
Tgt Ion: 43 Resp: 345380  
Ion Ratio Lower Upper  
43 100  
61 20.6 20.7 31.1#  
87 10.2 9.8 14.8



#44  
Trichloroethene  
Concen: 50.023 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 130 Resp: 106986  
Ion Ratio Lower Upper  
130 100  
95 101.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 52.380 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

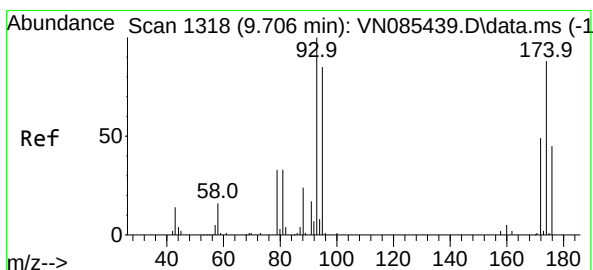
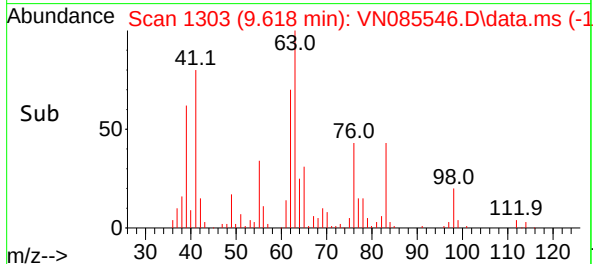
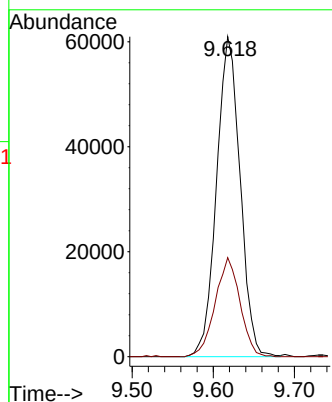
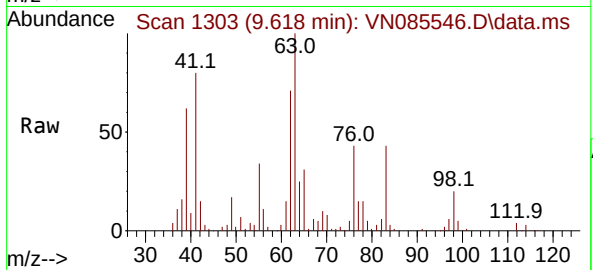
VSTDCCC050EC

Tgt Ion: 63 Resp: 122928

Ion Ratio Lower Upper

63 100

65 31.0 25.6 38.4



#46

Dibromomethane

Concen: 51.408 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

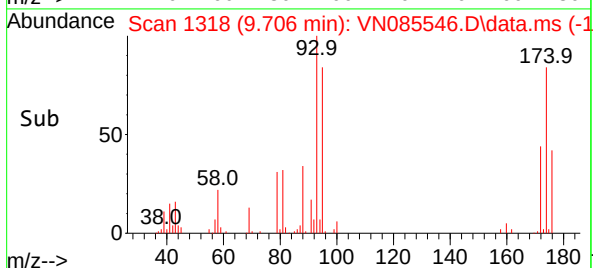
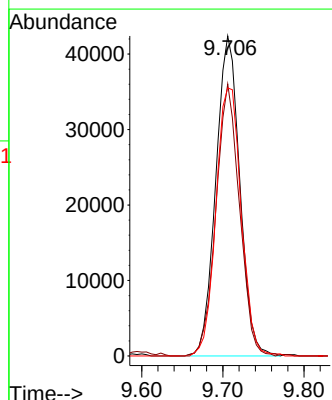
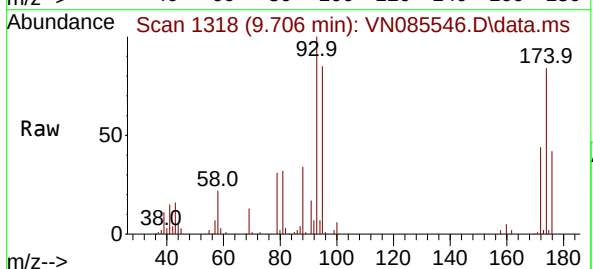
Tgt Ion: 93 Resp: 87054

Ion Ratio Lower Upper

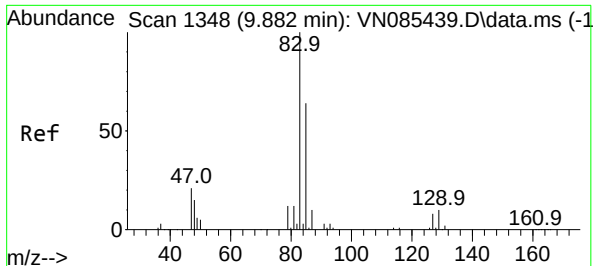
93 100

95 83.2 64.7 97.1

174 88.2 69.0 103.4



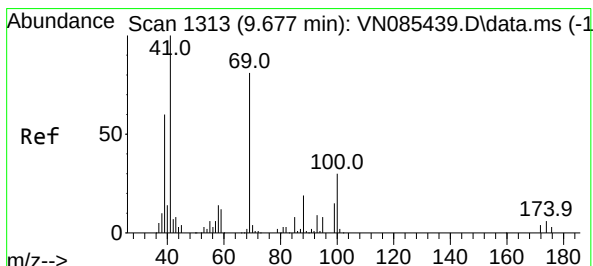
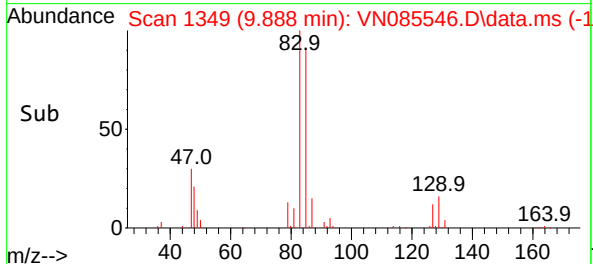
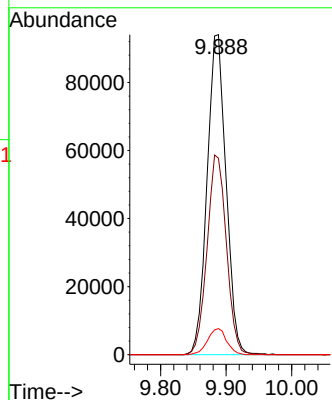
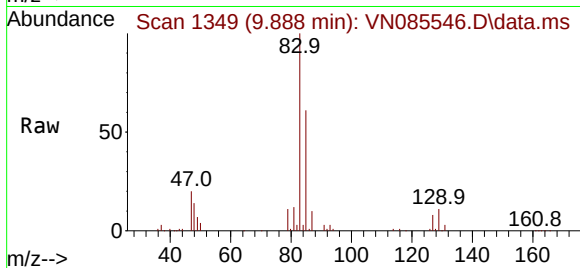




#47  
Bromodichloromethane  
Concen: 54.778 ug/l  
RT: 9.888 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

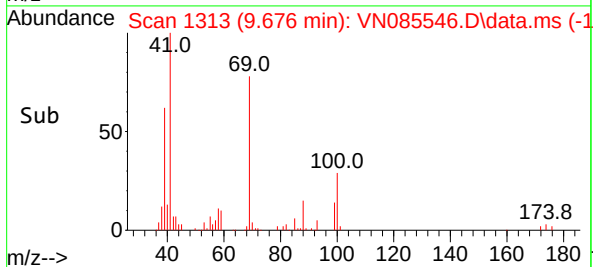
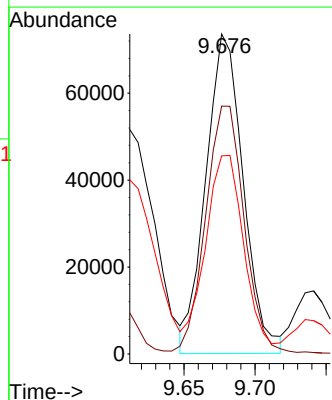
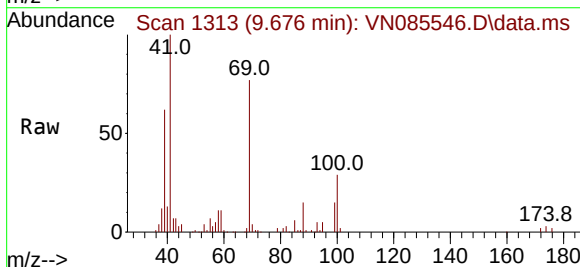
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

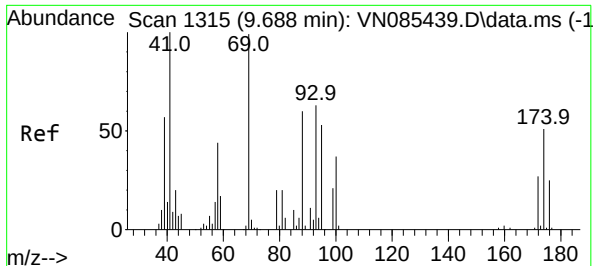
Tgt Ion: 83 Resp: 188980  
Ion Ratio Lower Upper  
83 100  
85 61.4 51.2 76.8  
127 8.1 6.5 9.7



#48  
Methyl methacrylate  
Concen: 60.523 ug/l  
RT: 9.676 min Scan# 1313  
Delta R.T. -0.001 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 41 Resp: 134702  
Ion Ratio Lower Upper  
41 100  
69 80.5 64.7 97.1  
39 64.5 49.0 73.6





#49

1,4-Dioxane

Concen: 1240.952 ug/l

RT: 9.694 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

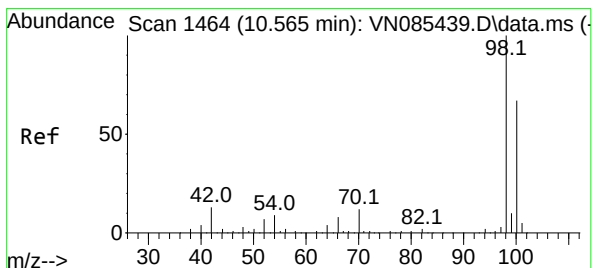
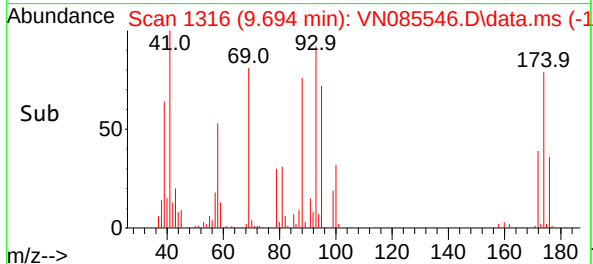
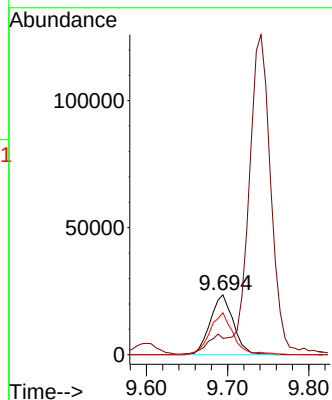
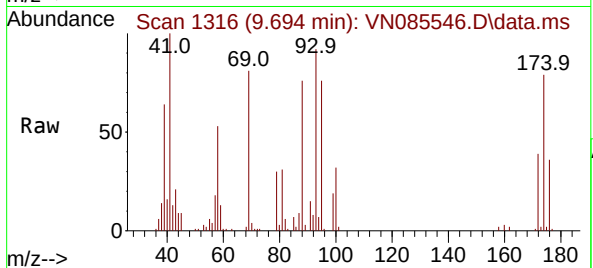
Tgt Ion: 88 Resp: 46510

Ion Ratio Lower Upper

88 100

43 23.4 26.6 39.8#

58 71.6 59.5 89.3



#50

Toluene-d8

Concen: 56.666 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085546.D

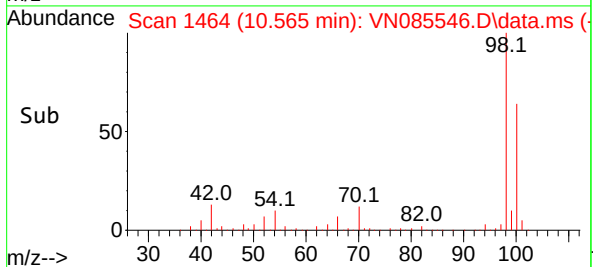
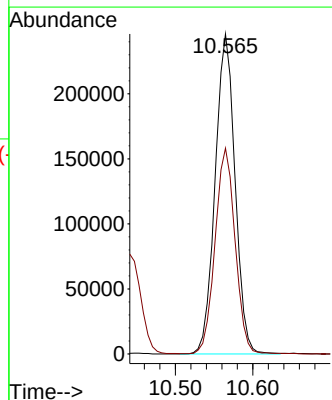
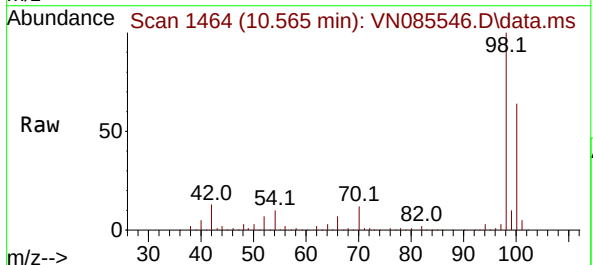
Acq: 28 Jan 2025 18:14

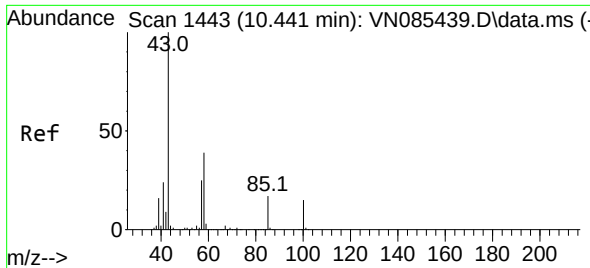
Tgt Ion: 98 Resp: 438659

Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.4

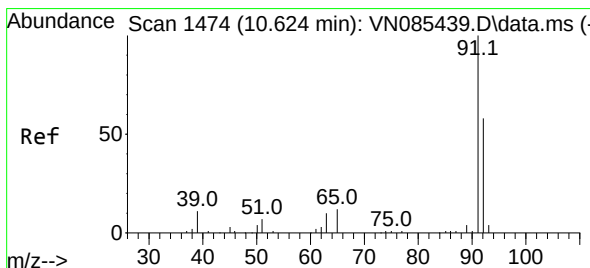
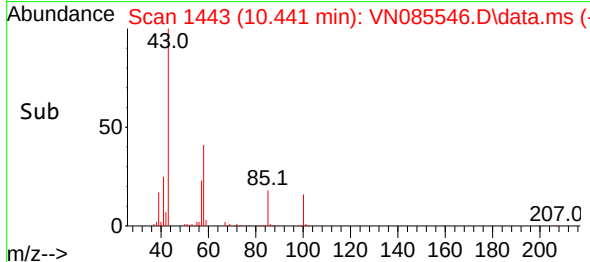
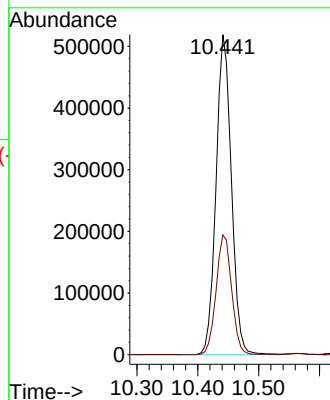
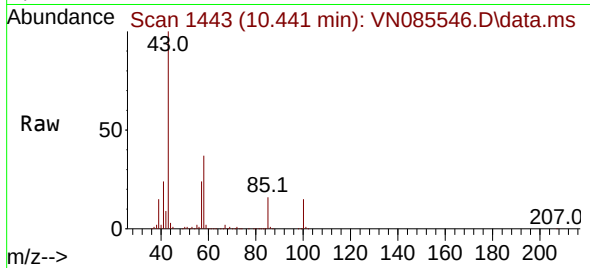




#51  
4-Methyl-2-Pentanone  
Concen: 315.843 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

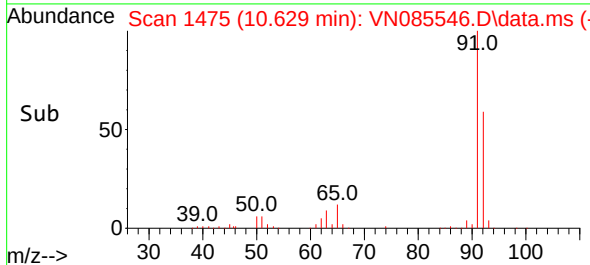
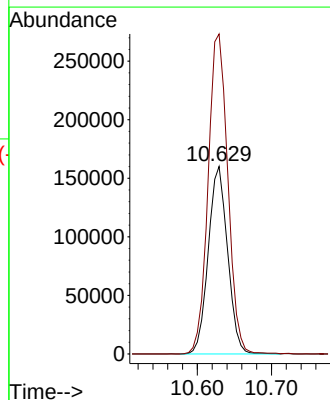
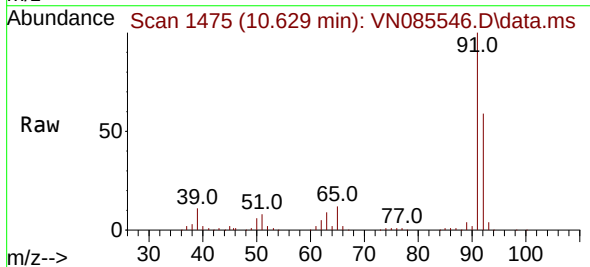
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

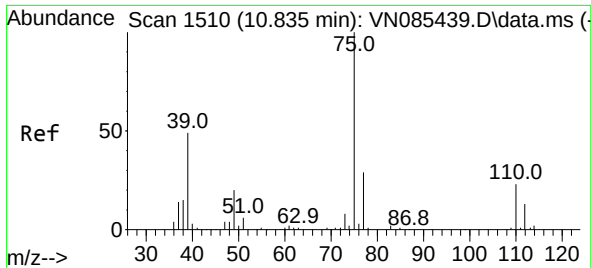
Tgt Ion: 43 Resp: 906426  
Ion Ratio Lower Upper  
43 100  
58 38.0 30.5 45.7



#52  
Toluene  
Concen: 54.423 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 92 Resp: 289726  
Ion Ratio Lower Upper  
92 100  
91 174.4 139.2 208.8

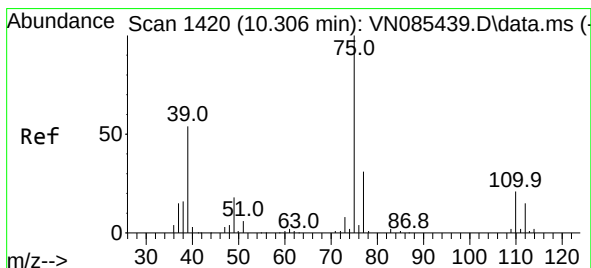
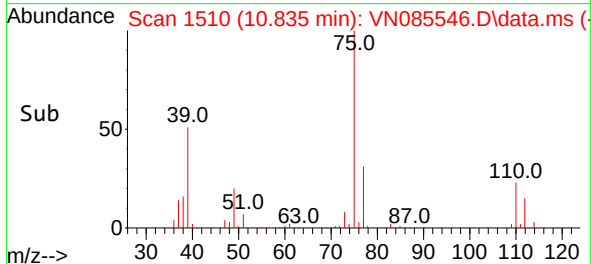
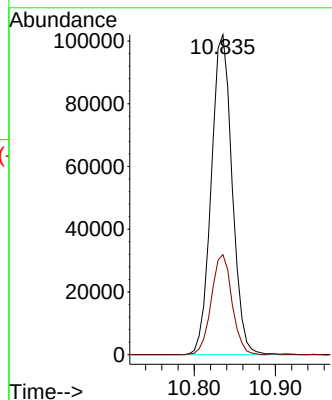
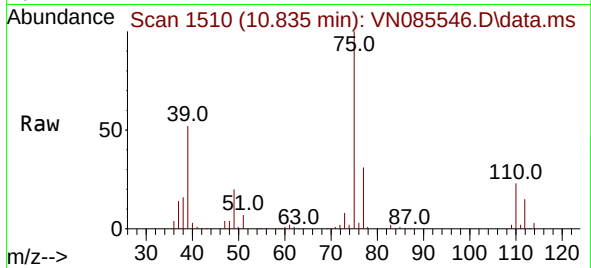




#53  
 t-1,3-Dichloropropene  
 Concen: 55.846 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

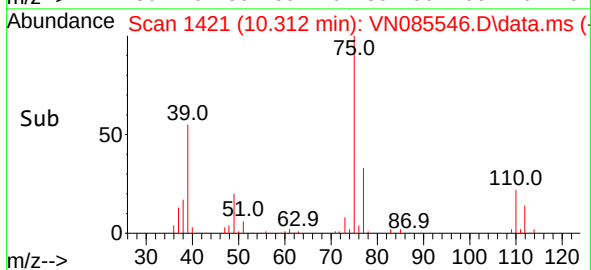
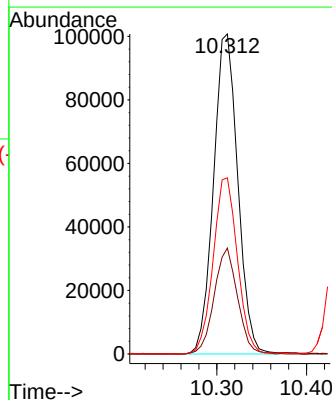
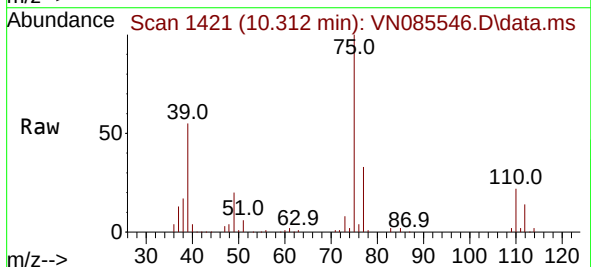
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

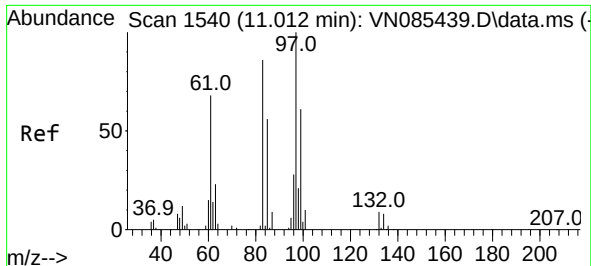
Tgt Ion: 75 Resp: 182074  
 Ion Ratio Lower Upper  
 75 100  
 77 31.2 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 54.260 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion: 75 Resp: 188960  
 Ion Ratio Lower Upper  
 75 100  
 77 33.1 25.0 37.4  
 39 55.1 43.1 64.7



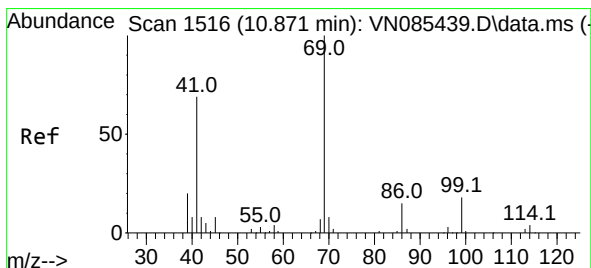
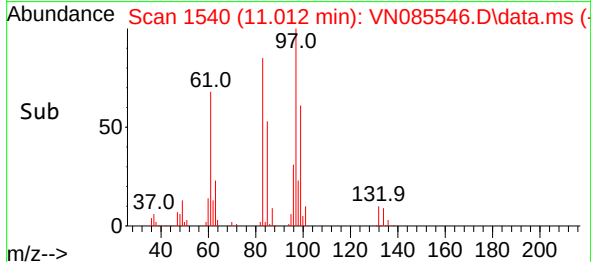
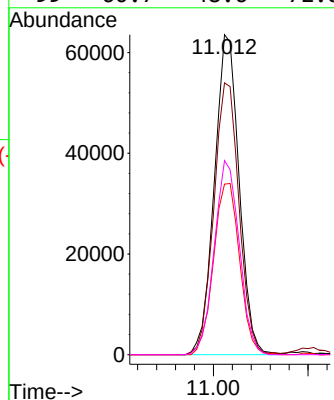
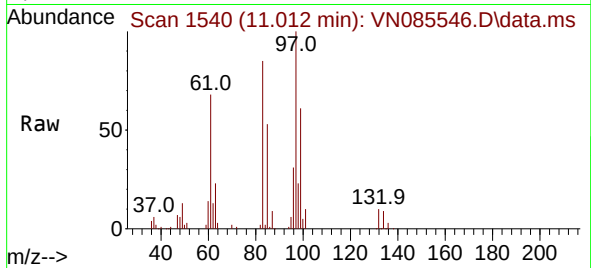


#55  
1,1,2-Trichloroethane  
Concen: 54.714 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 97 Resp: 115272

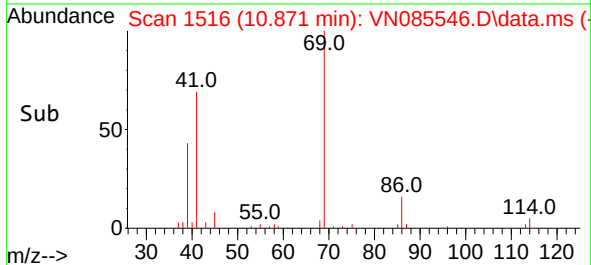
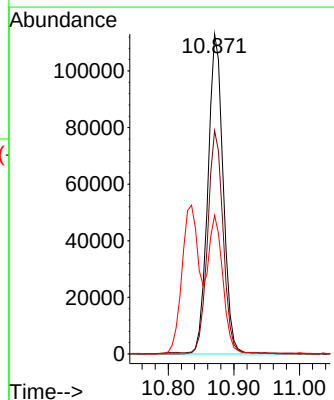
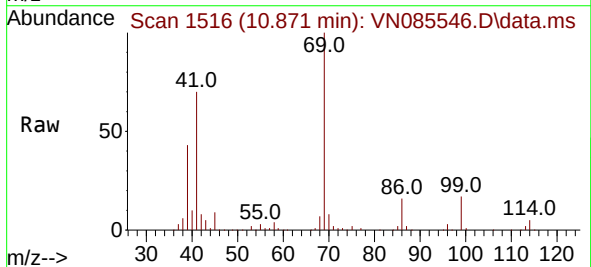
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 85.0  | 69.0  | 103.6 |
| 85  | 53.3  | 44.6  | 66.8  |
| 99  | 60.7  | 48.6  | 72.8  |

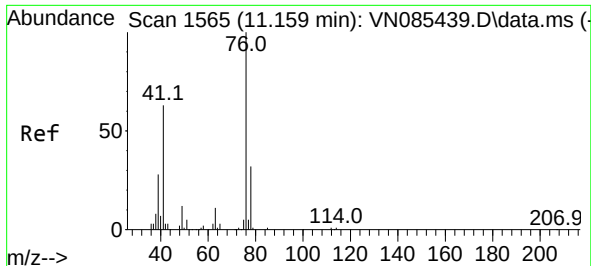


#56  
Ethyl methacrylate  
Concen: 51.541 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 69 Resp: 183142

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 69.8  | 54.6  | 82.0  |
| 39  | 41.8  | 32.4  | 48.6  |





#57

1,3-Dichloropropane

Concen: 55.519 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

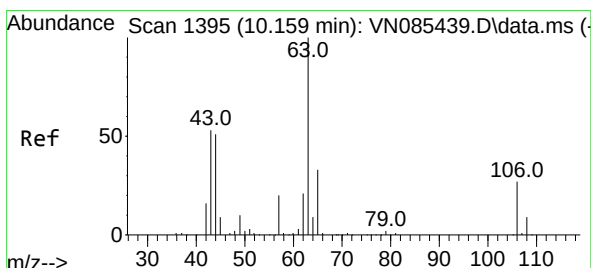
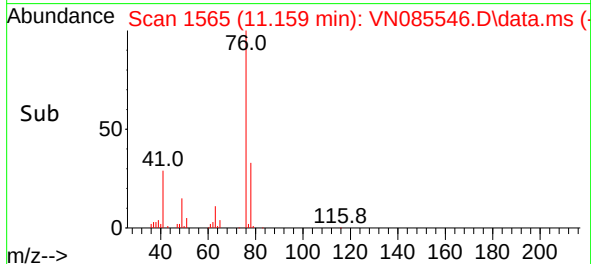
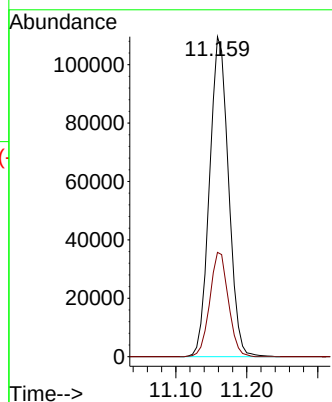
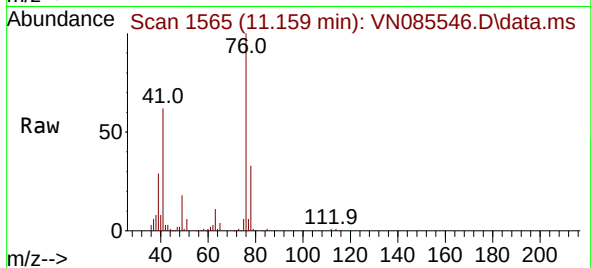
VSTDCCC050EC

Tgt Ion: 76 Resp: 203386

Ion Ratio Lower Upper

76 100

78 31.9 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 291.087 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085546.D

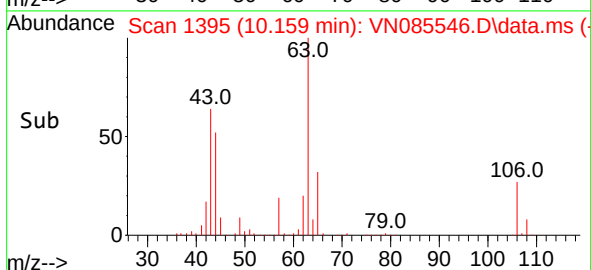
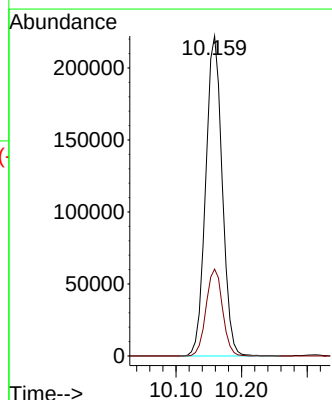
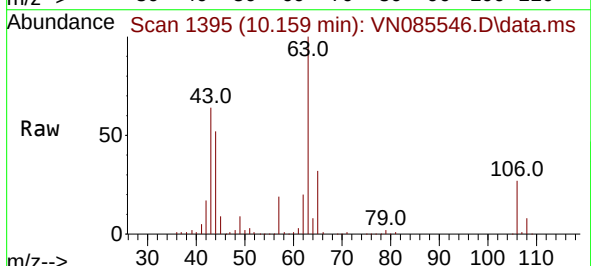
Acq: 28 Jan 2025 18:14

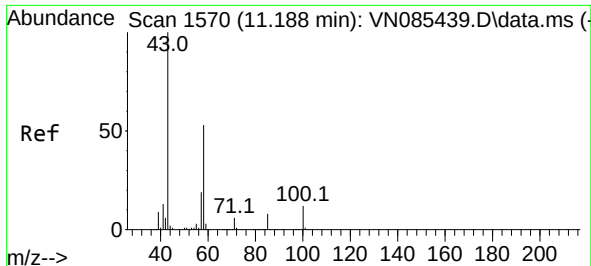
Tgt Ion: 63 Resp: 389176

Ion Ratio Lower Upper

63 100

106 27.0 21.6 32.4

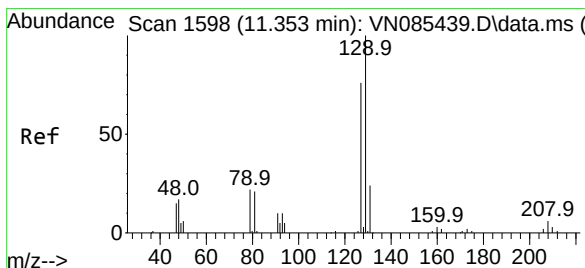
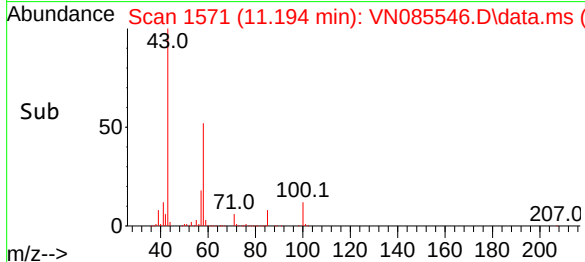
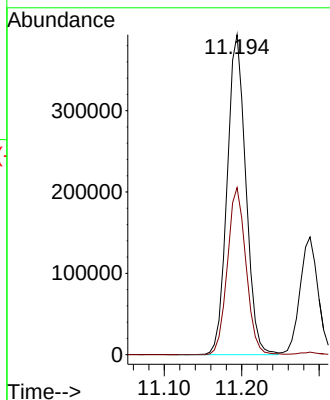
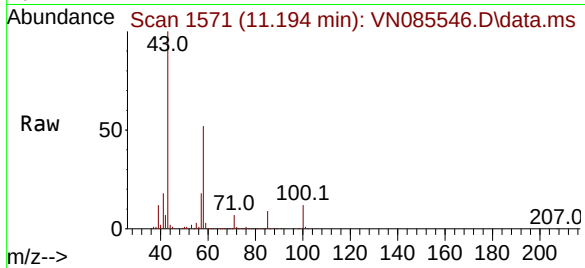




#59  
2-Hexanone  
Concen: 326.364 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

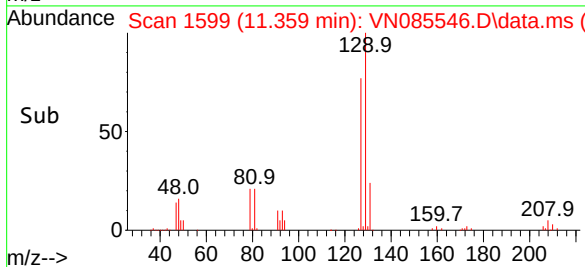
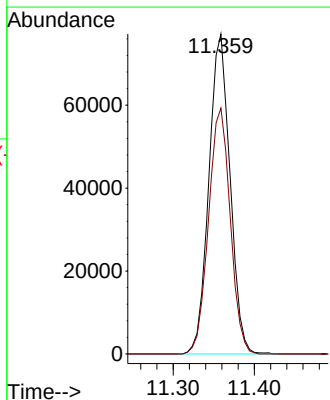
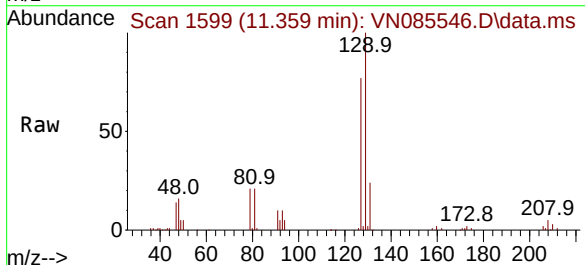
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

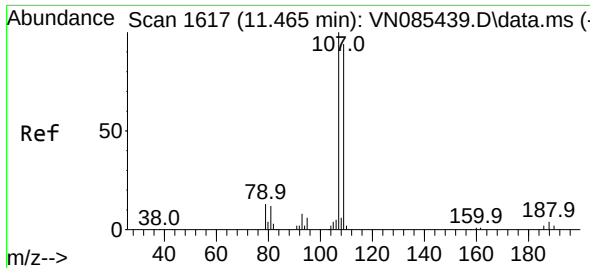
Tgt Ion: 43 Resp: 659035  
Ion Ratio Lower Upper  
43 100  
58 52.0 26.2 78.6



#60  
Dibromochloromethane  
Concen: 54.855 ug/l  
RT: 11.359 min Scan# 1599  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:129 Resp: 139526  
Ion Ratio Lower Upper  
129 100  
127 78.8 38.6 115.8

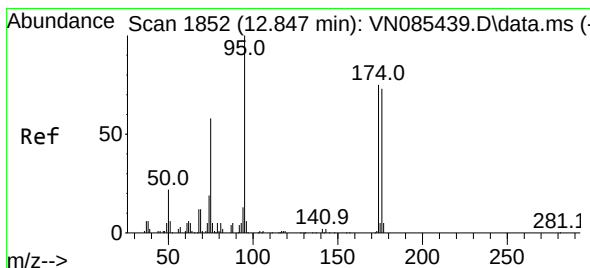
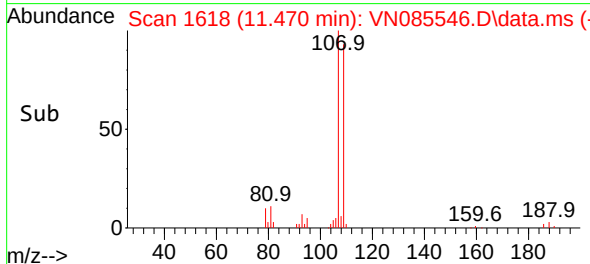
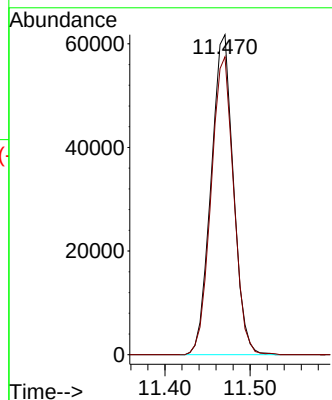
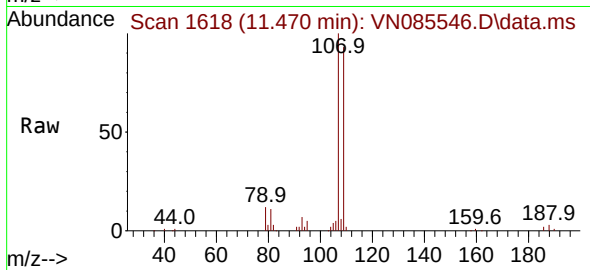




#61  
1,2-Dibromoethane  
Concen: 53.765 ug/l  
RT: 11.470 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

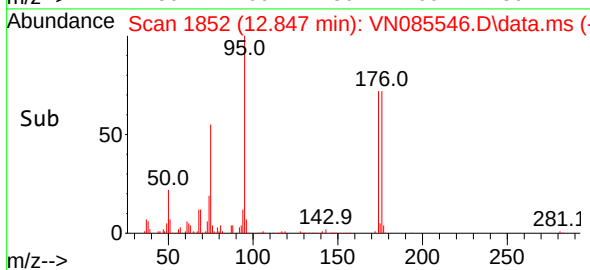
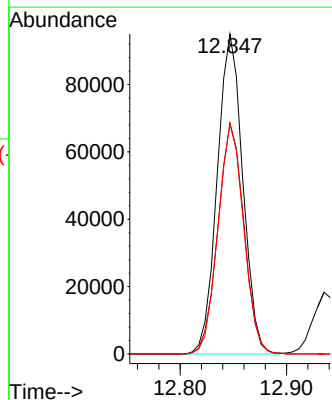
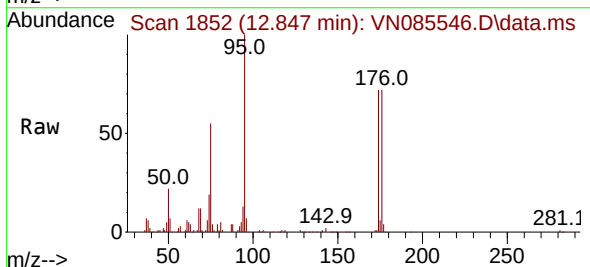
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:107 Resp: 112753  
Ion Ratio Lower Upper  
107 100  
109 94.2 75.9 113.9

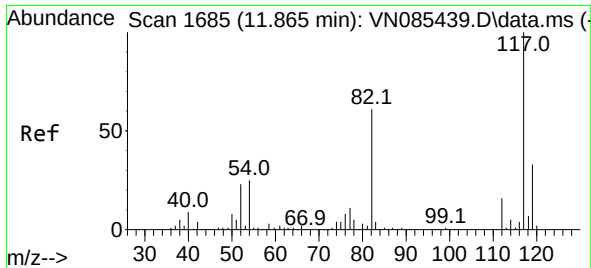


#62  
4-Bromofluorobenzene  
Concen: 59.614 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 95 Resp: 157860  
Ion Ratio Lower Upper  
95 100  
174 73.2 0.0 145.0  
176 72.3 0.0 142.4



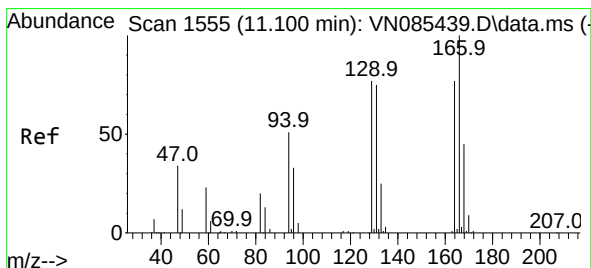
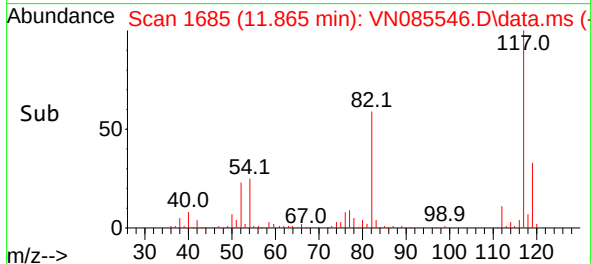
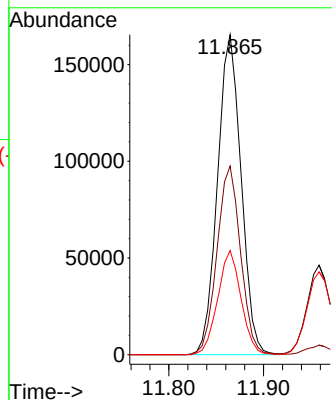
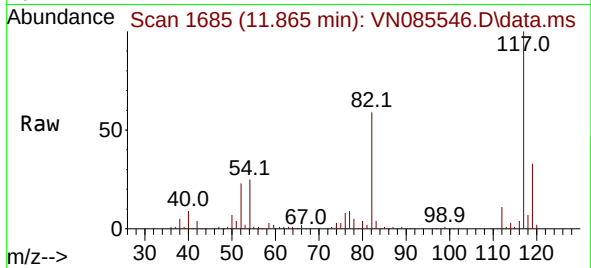




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

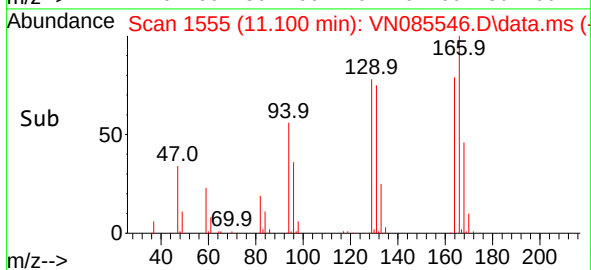
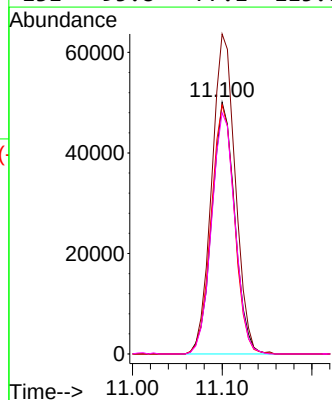
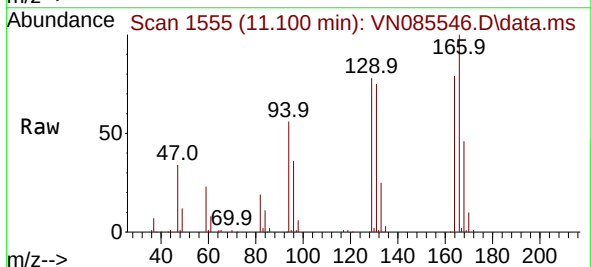
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

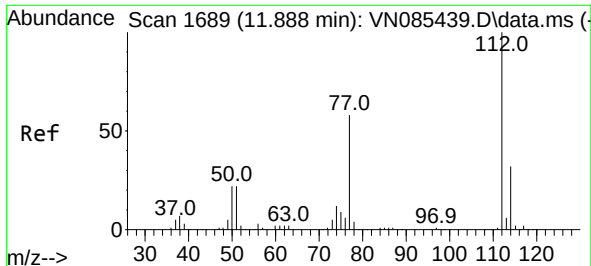
Tgt Ion:117 Resp: 286739  
Ion Ratio Lower Upper  
117 100  
82 59.0 48.6 72.8  
119 32.6 26.6 39.8



#64  
Tetrachloroethene  
Concen: 45.330 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:164 Resp: 88612  
Ion Ratio Lower Upper  
164 100  
166 127.2 103.4 155.2  
129 99.0 79.2 118.8  
131 95.8 77.1 115.7

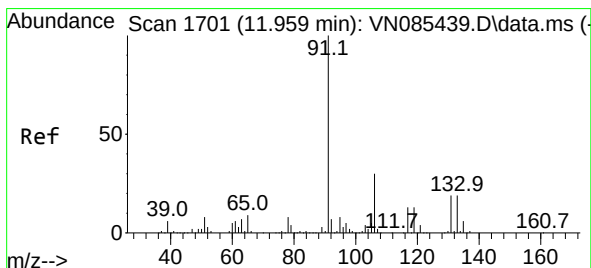
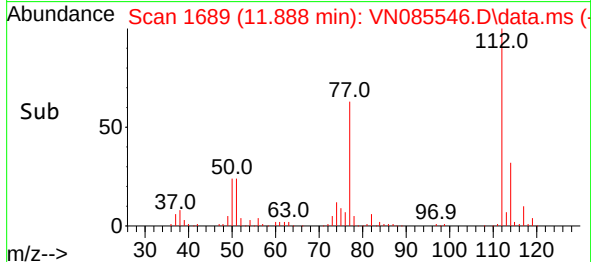
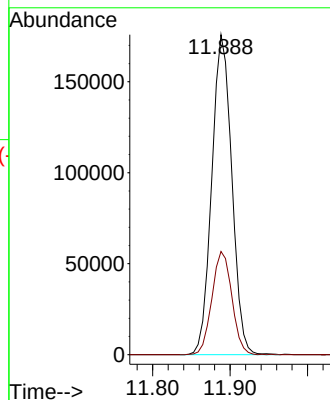
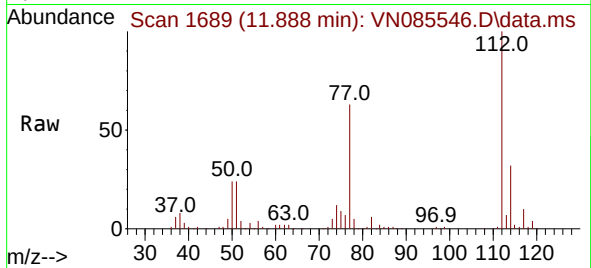




#65  
Chlorobenzene  
Concen: 50.289 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

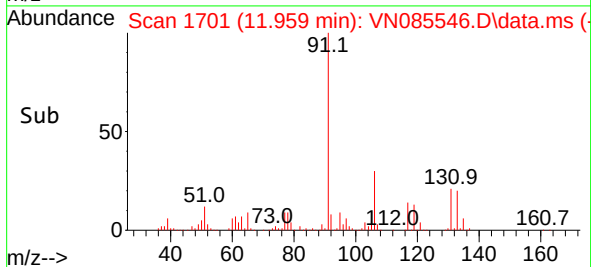
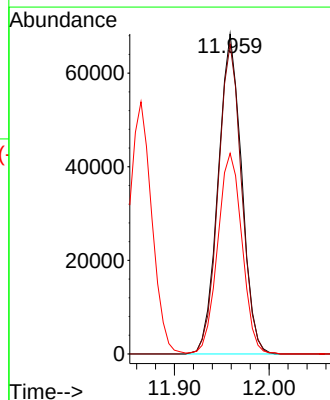
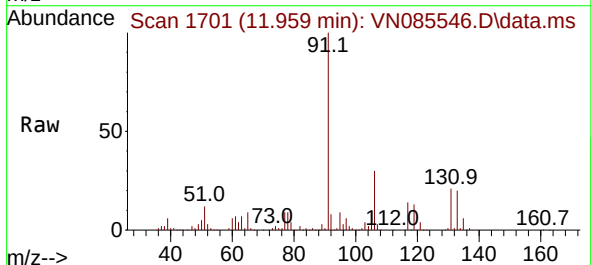
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

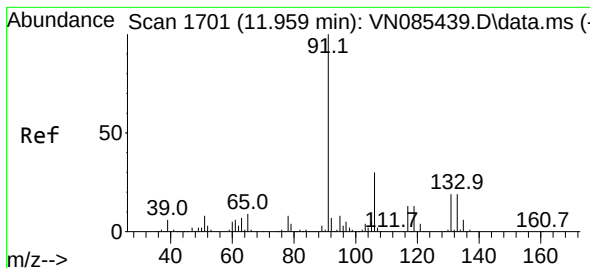
Tgt Ion:112 Resp: 315889  
Ion Ratio Lower Upper  
112 100  
114 32.3 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 51.180 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:131 Resp: 117993  
Ion Ratio Lower Upper  
131 100  
133 96.4 47.4 142.3  
119 65.0 33.1 99.5





#67

Ethyl Benzene

Concen: 54.268 ug/l

RT: 11.965 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

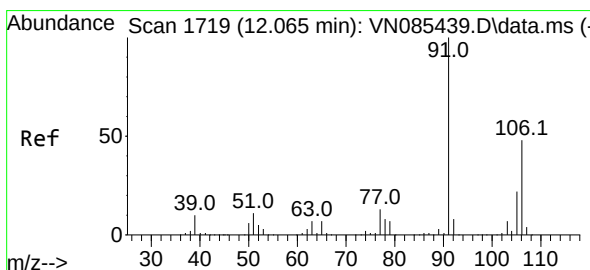
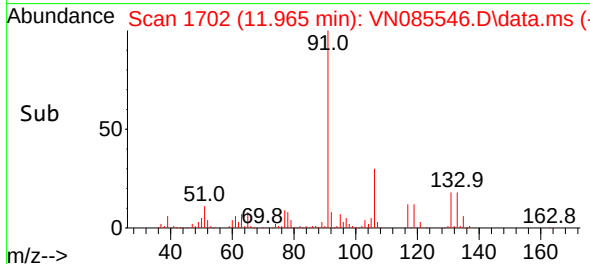
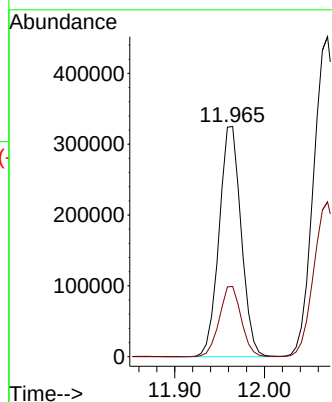
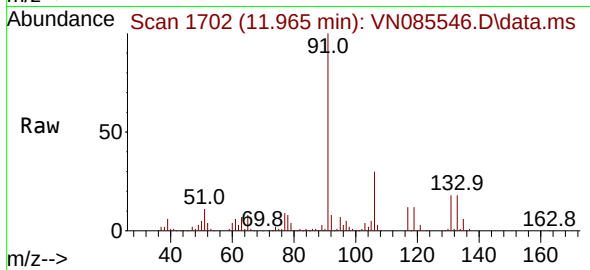
VSTDCCC050EC

Tgt Ion: 91 Resp: 555215

Ion Ratio Lower Upper

91 100

106 30.5 23.8 35.8



#68

m/p-Xylenes

Concen: 111.987 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085546.D

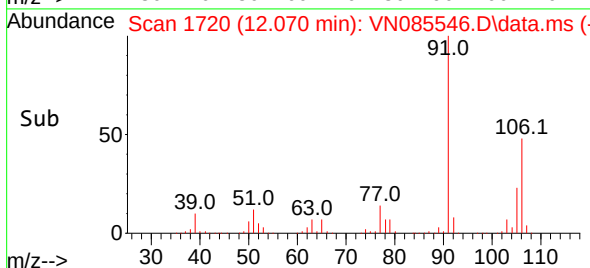
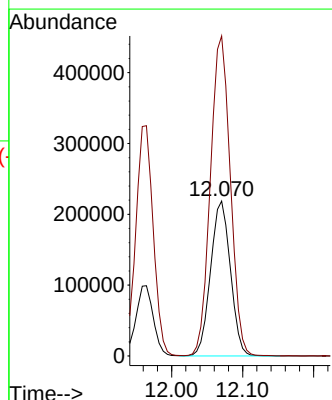
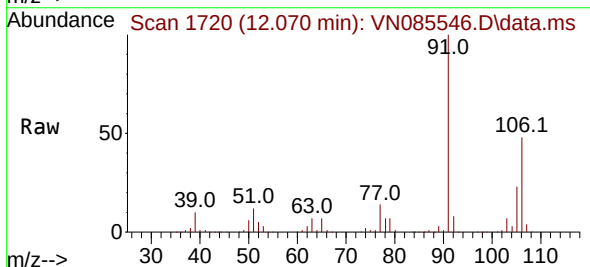
Acq: 28 Jan 2025 18:14

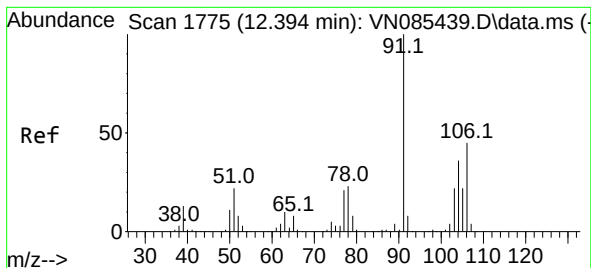
Tgt Ion:106 Resp: 423444

Ion Ratio Lower Upper

106 100

91 207.7 167.7 251.5





#69

o-Xylene

Concen: 55.313 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

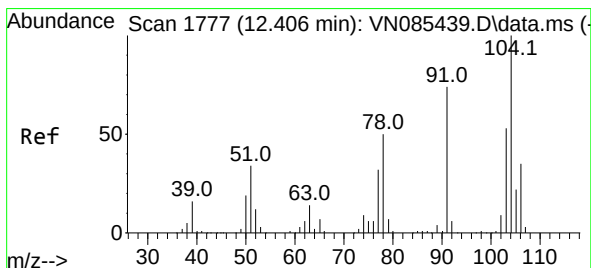
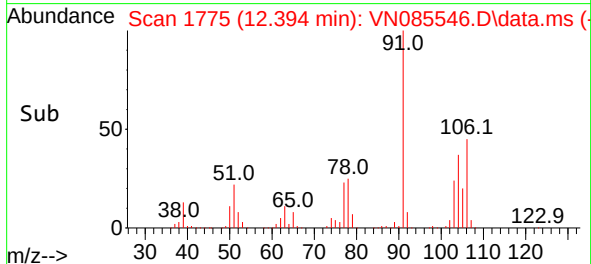
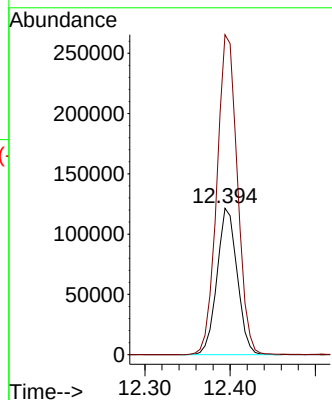
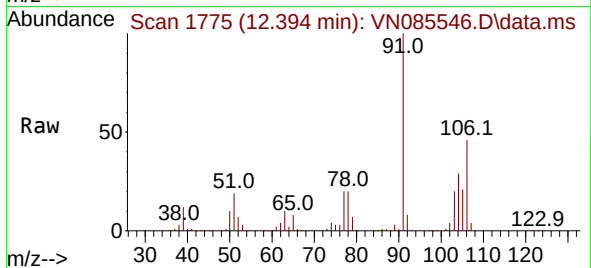
VSTDCCC050EC

Tgt Ion:106 Resp: 199877

Ion Ratio Lower Upper

106 100

91 222.8 110.4 331.2



#70

Styrene

Concen: 58.032 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

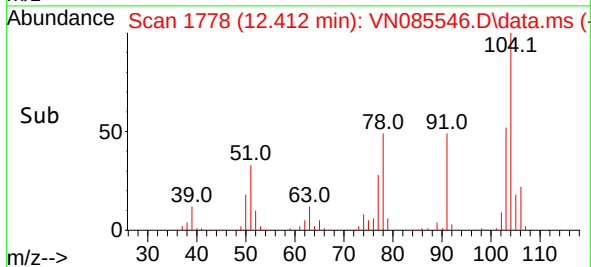
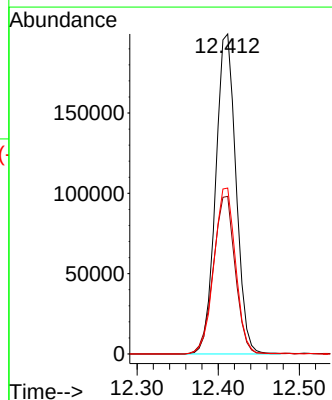
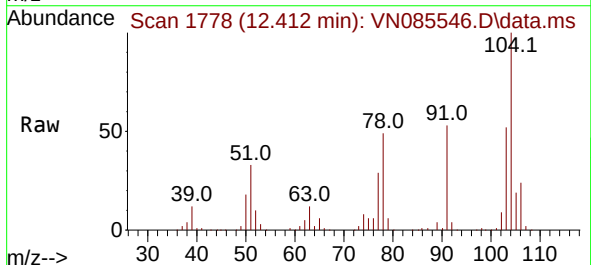
Tgt Ion:104 Resp: 347052

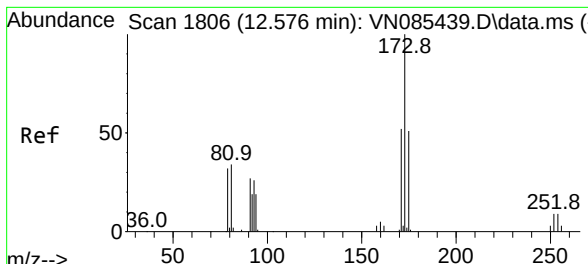
Ion Ratio Lower Upper

104 100

78 53.0 42.5 63.7

103 55.1 43.8 65.8

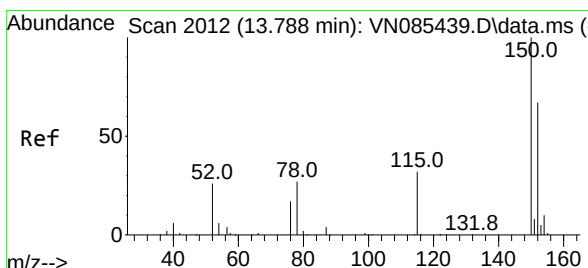
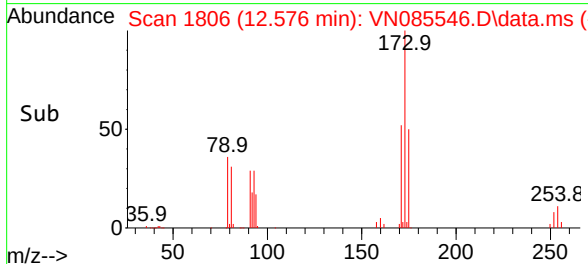
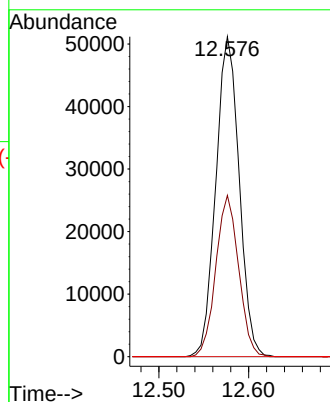
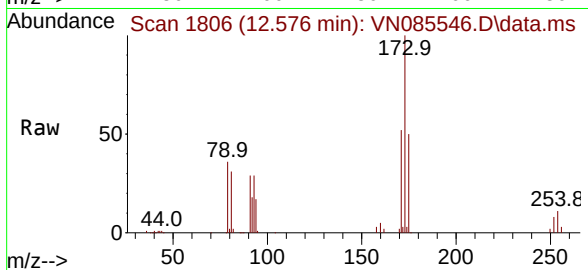




#71  
 Bromoform  
 Concen: 55.980 ug/l  
 RT: 12.576 min Scan# 1806  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

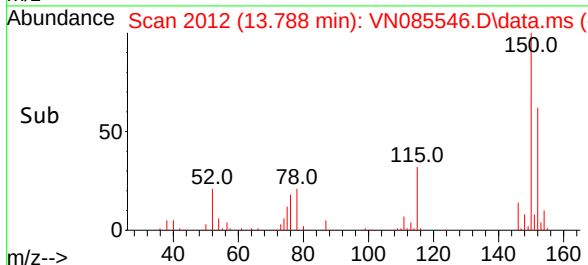
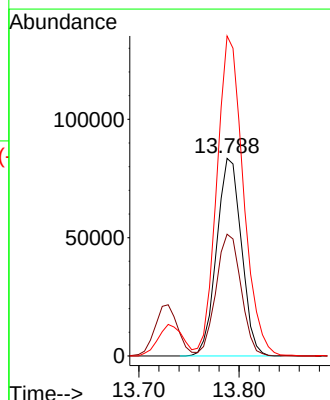
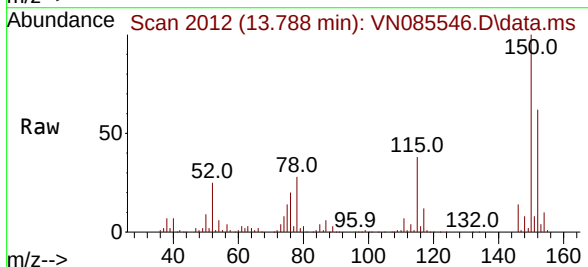
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

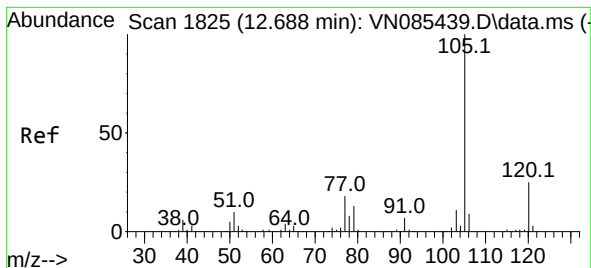
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 92343 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 49.3  | 24.4  | 73.2  |
| 254       | 0.0   | 0.0   | 0.0   |



#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.788 min Scan# 2012  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 143565 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 62.2  | 31.1  | 93.3   |
| 150       | 173.3 | 0.0   | 343.6  |





#73

Isopropylbenzene

Concen: 53.526 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

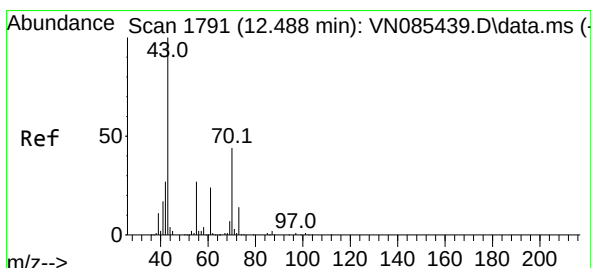
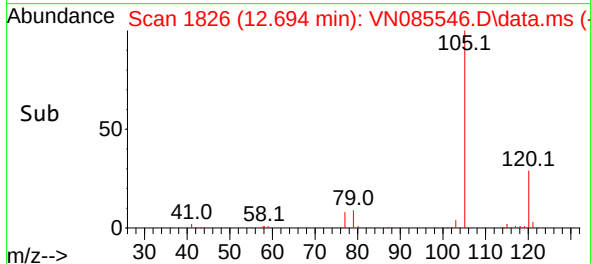
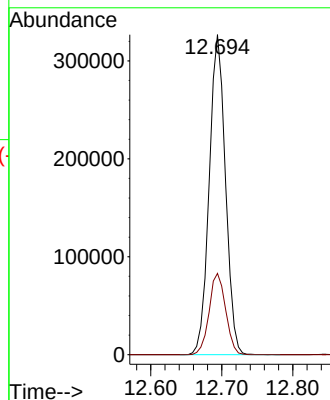
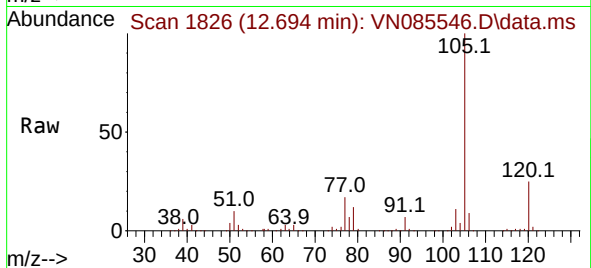
VSTDCCC050EC

Tgt Ion:105 Resp: 518634

Ion Ratio Lower Upper

105 100

120 25.8 12.8 38.3



#74

N-ethyl acetate

Concen: 56.051 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Tgt Ion: 43 Resp: 244112

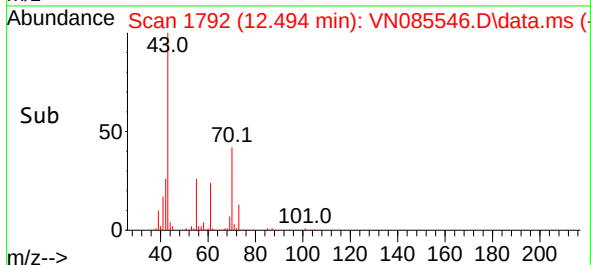
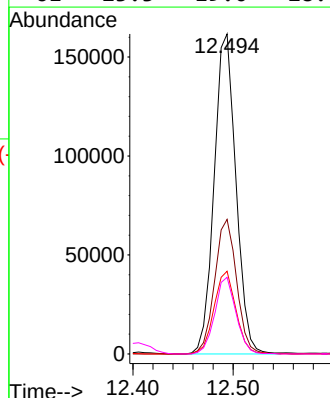
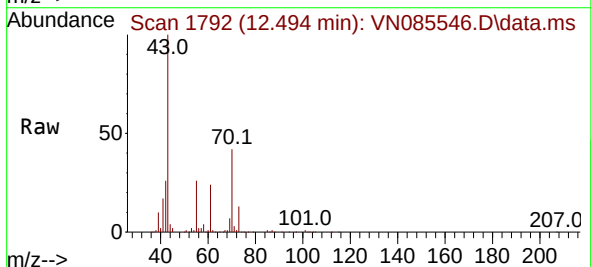
Ion Ratio Lower Upper

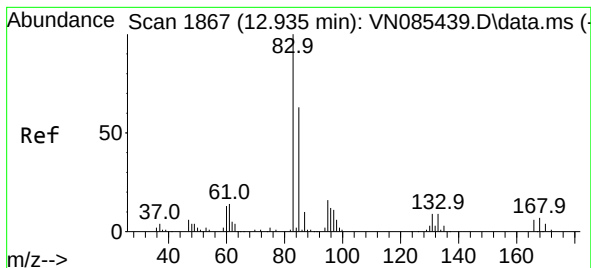
43 100

70 42.5 34.0 51.0

55 26.1 21.4 32.2

61 23.3 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 51.507 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

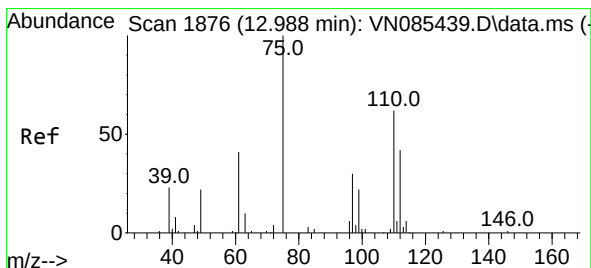
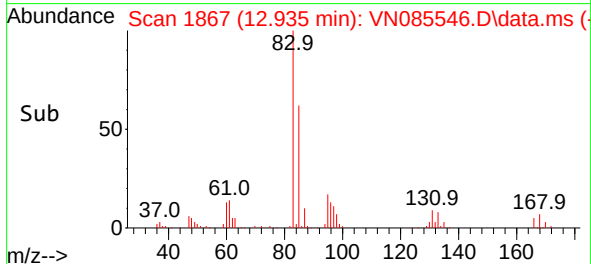
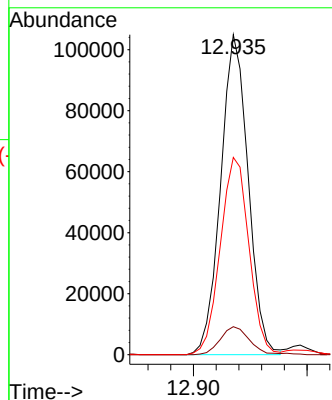
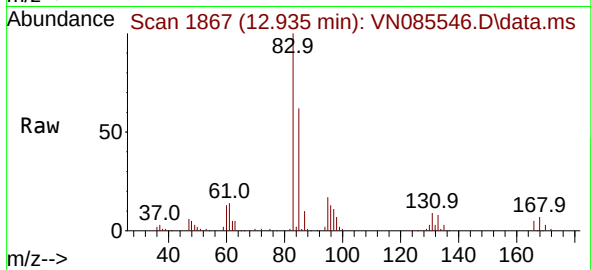
Tgt Ion: 83 Resp: 176292

Ion Ratio Lower Upper

83 100

131 9.4 4.8 14.4

85 64.2 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 78.343 ug/l

RT: 12.994 min Scan# 1877

Delta R.T. 0.006 min

Lab File: VN085546.D

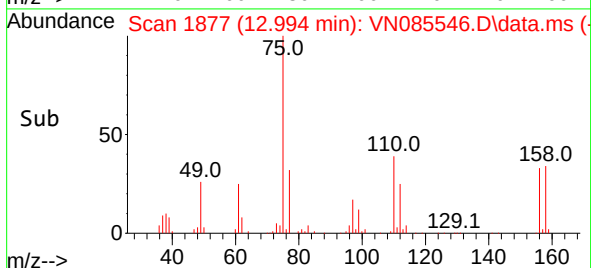
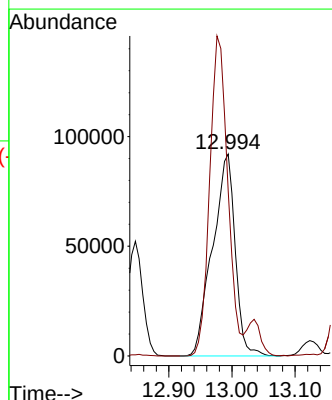
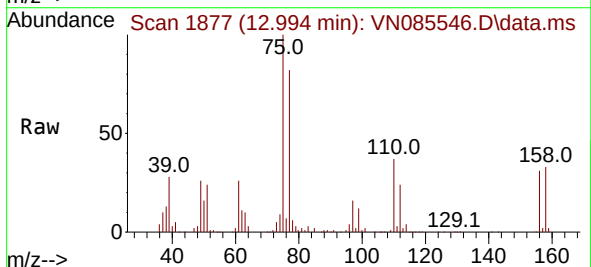
Acq: 28 Jan 2025 18:14

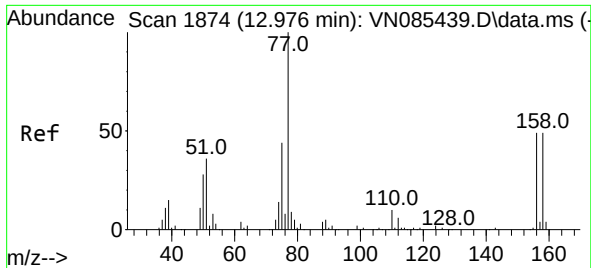
Tgt Ion: 75 Resp: 228606

Ion Ratio Lower Upper

75 100

77 127.2 109.7 329.2

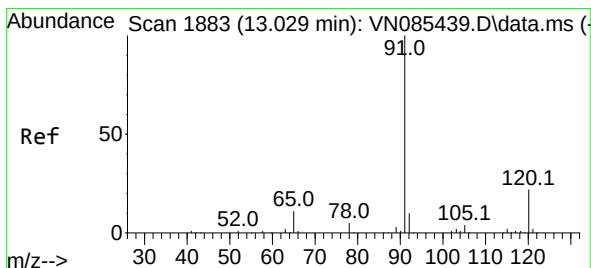
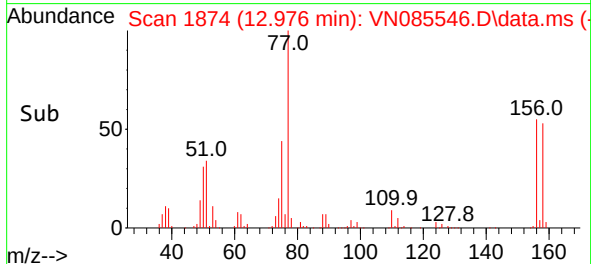
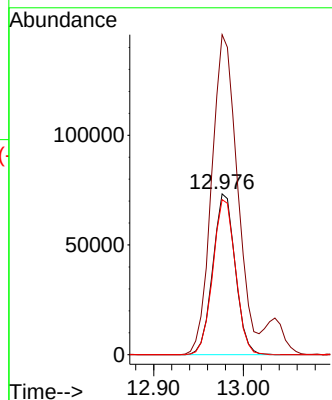
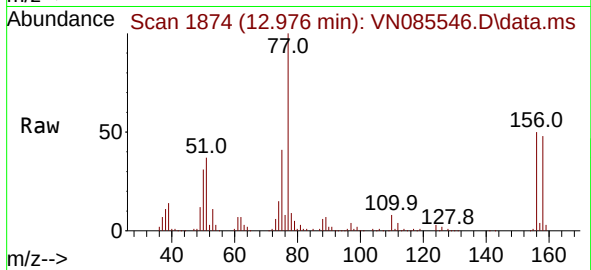




#77  
Bromobenzene  
Concen: 50.181 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

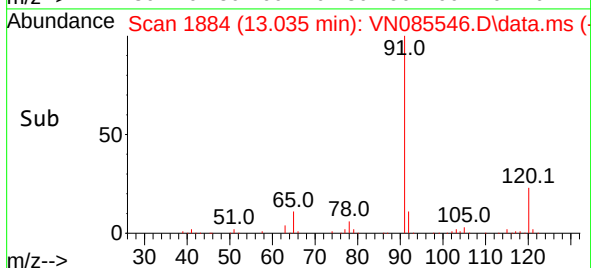
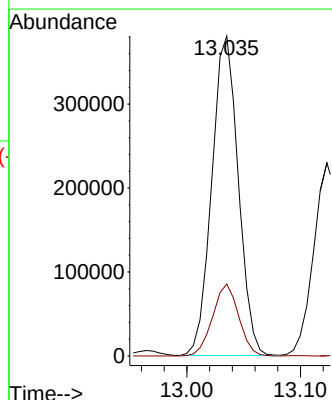
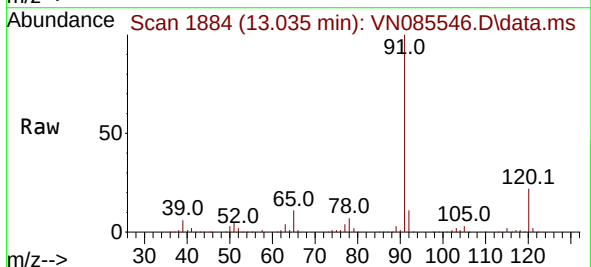
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:156 Resp: 127032  
Ion Ratio Lower Upper  
156 100  
77 228.8 114.1 342.4  
158 97.3 48.9 146.8

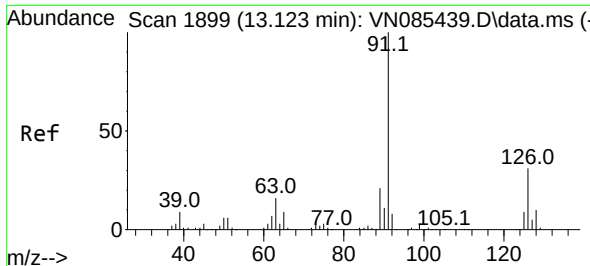


#78  
n-propylbenzene  
Concen: 53.728 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 91 Resp: 616293  
Ion Ratio Lower Upper  
91 100  
120 22.1 10.9 32.6



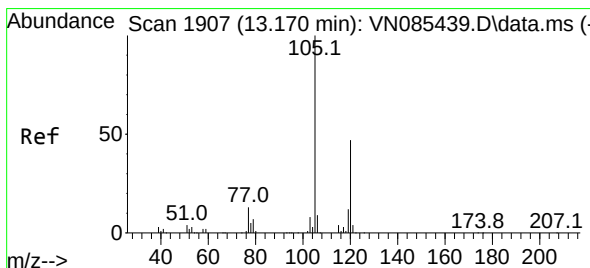
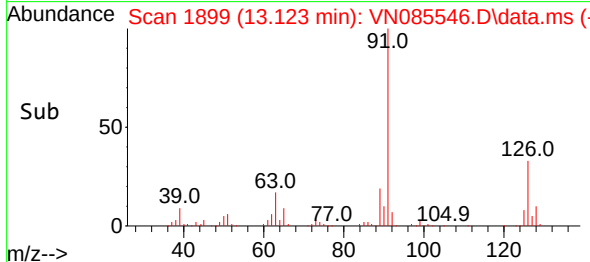
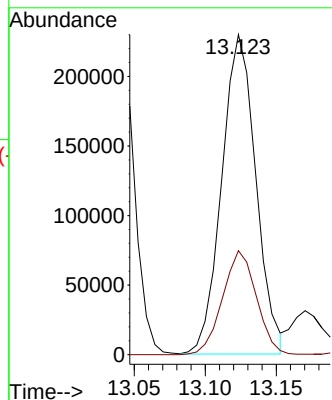
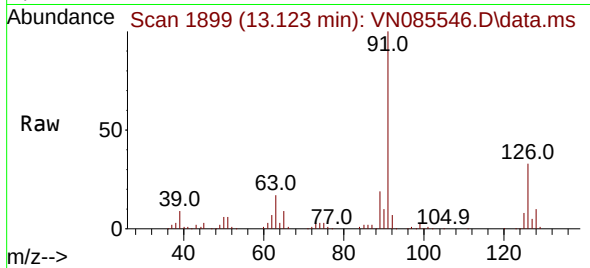




#79  
2-Chlorotoluene  
Concen: 51.776 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

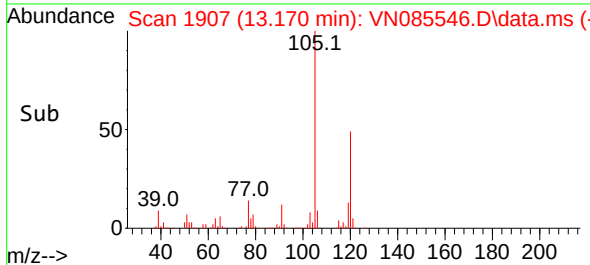
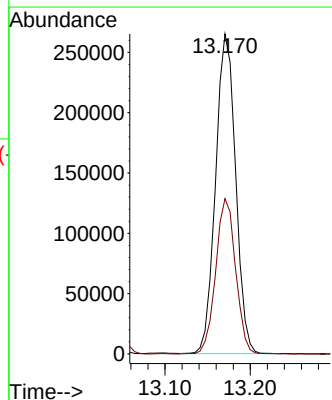
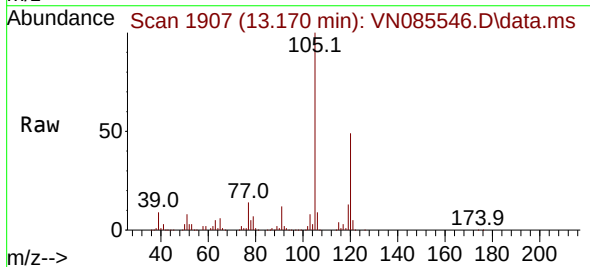
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

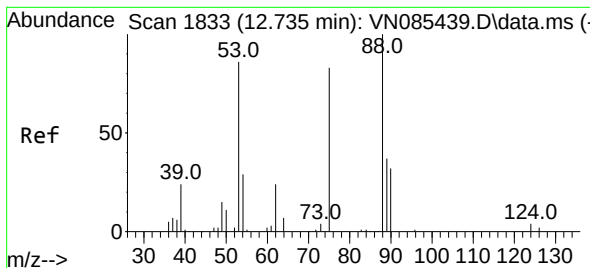
Tgt Ion: 91 Resp: 384370  
Ion Ratio Lower Upper  
91 100  
126 32.3 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 54.059 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 105 Resp: 432662  
Ion Ratio Lower Upper  
105 100  
120 48.3 23.9 71.7

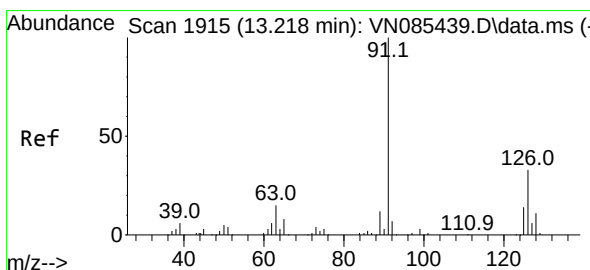
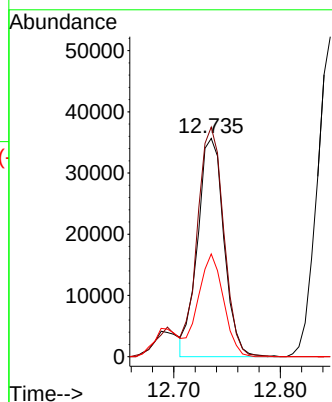
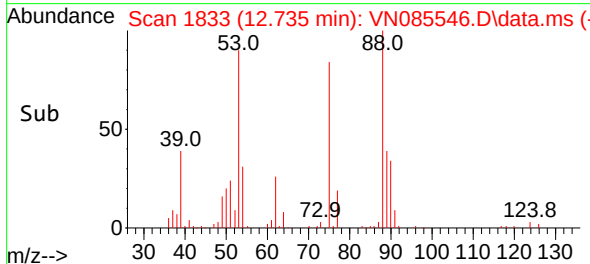
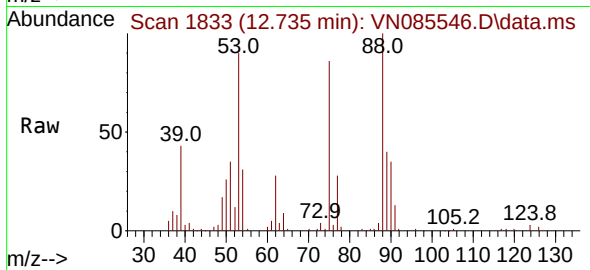




#81  
trans-1,4-Dichloro-2-butene  
Concen: 56.880 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

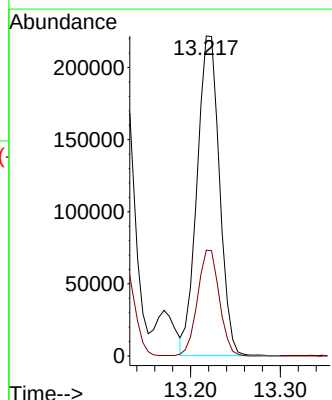
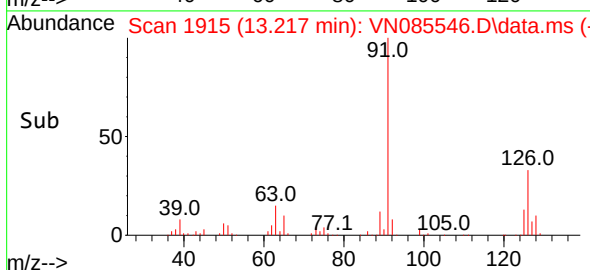
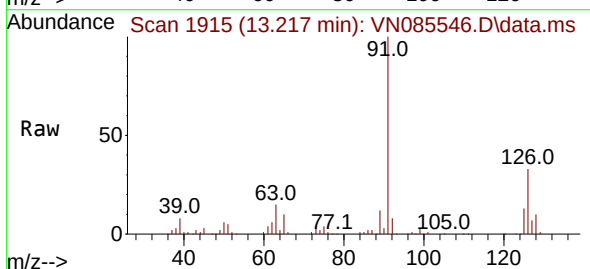
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

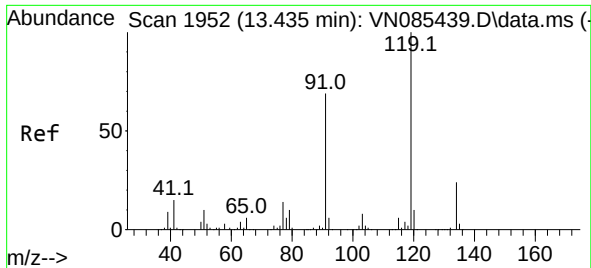
Tgt Ion: 75 Resp: 61346  
Ion Ratio Lower Upper  
75 100  
53 105.0 95.6 143.4  
89 45.8 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 51.917 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 91 Resp: 383756  
Ion Ratio Lower Upper  
91 100  
126 32.3 15.9 47.7

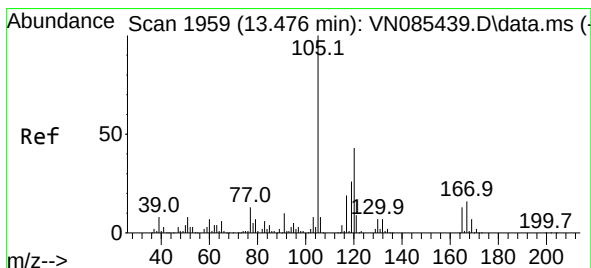
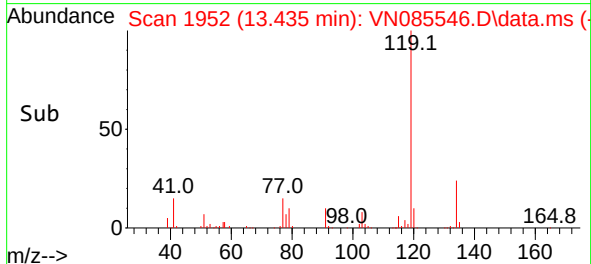
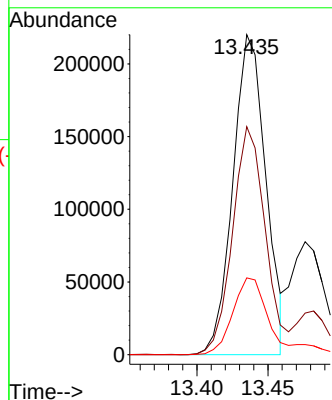
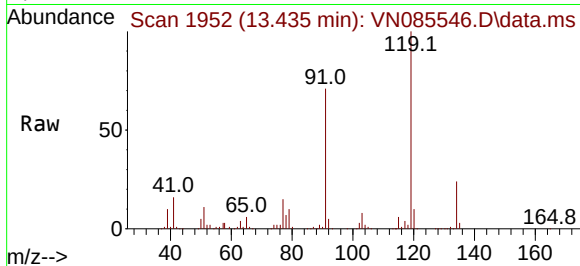




#83  
 tert-Butylbenzene  
 Concen: 52.772 ug/l  
 RT: 13.435 min Scan# 1952  
 Delta R.T. -0.000 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

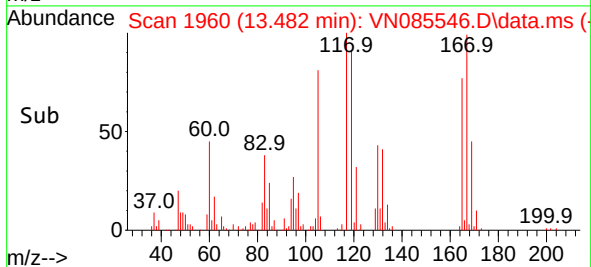
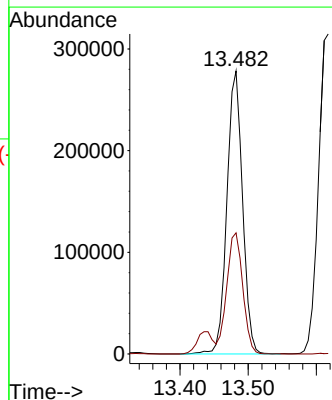
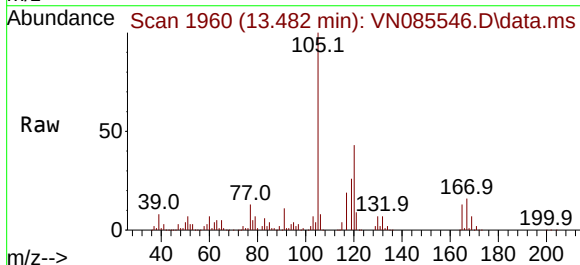
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

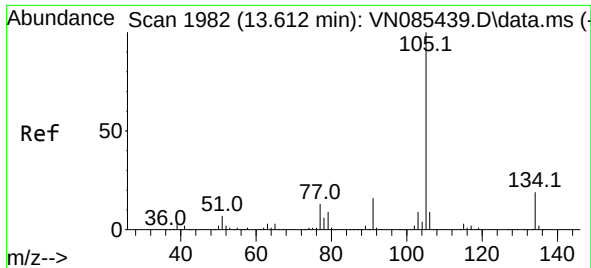
Tgt Ion:119 Resp: 354690  
 Ion Ratio Lower Upper  
 119 100  
 91 71.2 35.1 105.3  
 134 27.6 12.0 36.1



#84  
 1,2,4-Trimethylbenzene  
 Concen: 55.598 ug/l  
 RT: 13.482 min Scan# 1960  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion:105 Resp: 443501  
 Ion Ratio Lower Upper  
 105 100  
 120 44.0 21.6 65.0

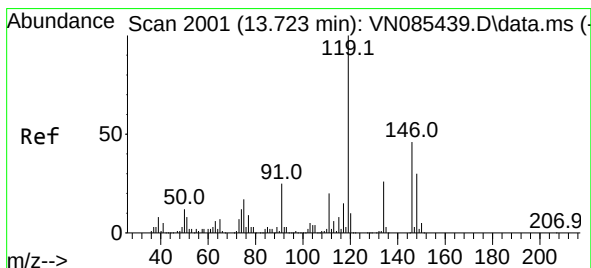
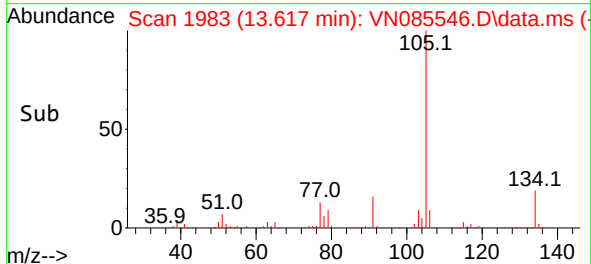
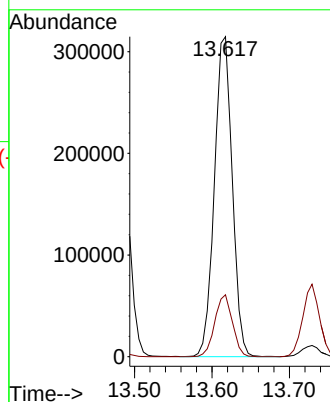
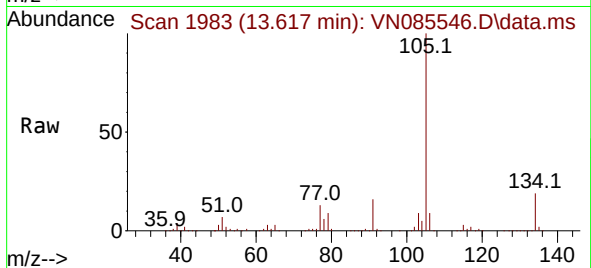




#85  
 sec-Butylbenzene  
 Concen: 54.205 ug/l  
 RT: 13.617 min Scan# 1983  
 Delta R.T. 0.005 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

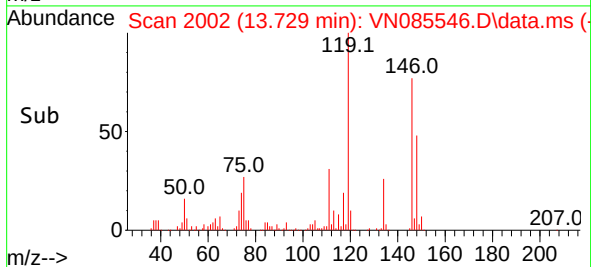
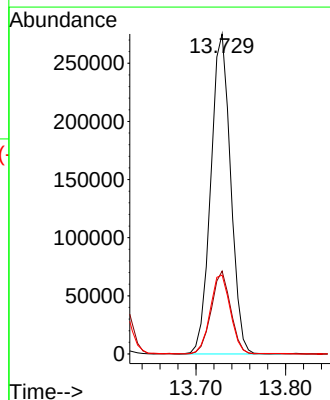
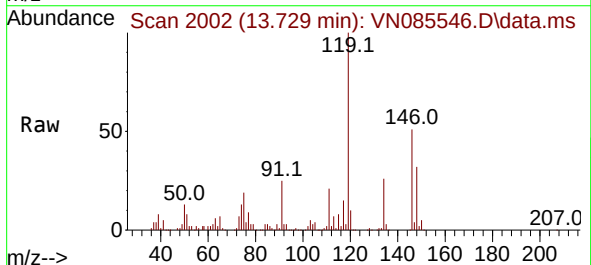
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

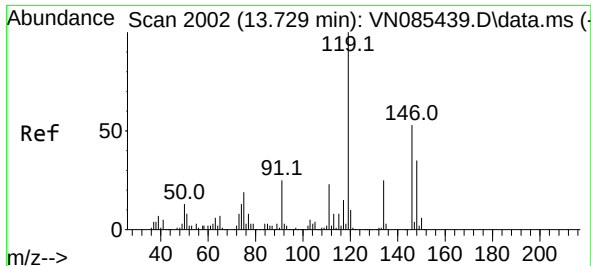
Tgt Ion:105 Resp: 504931  
 Ion Ratio Lower Upper  
 105 100  
 134 19.1 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 50.325 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085546.D  
 Acq: 28 Jan 2025 18:14

Tgt Ion:119 Resp: 422476  
 Ion Ratio Lower Upper  
 119 100  
 134 25.2 12.7 38.0  
 91 25.0 12.7 38.1

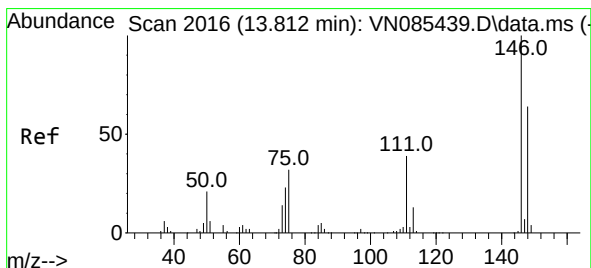
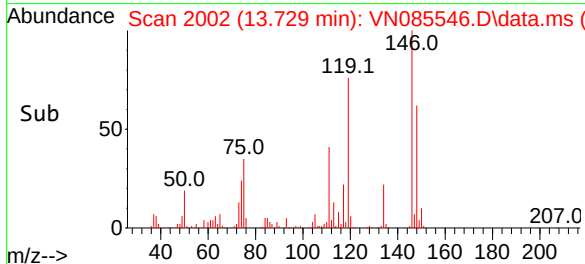
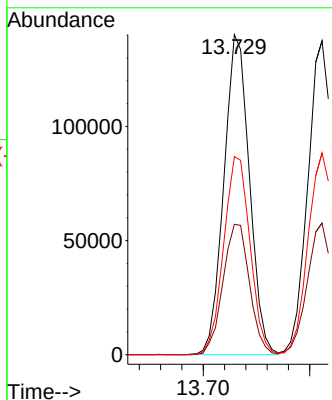
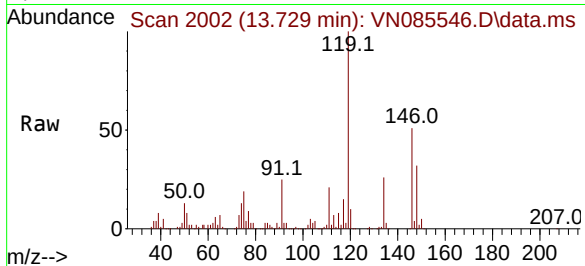




#87  
1,3-Dichlorobenzene  
Concen: 50.068 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

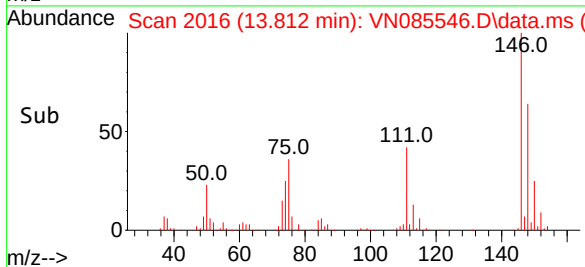
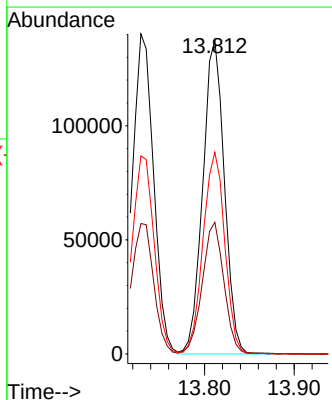
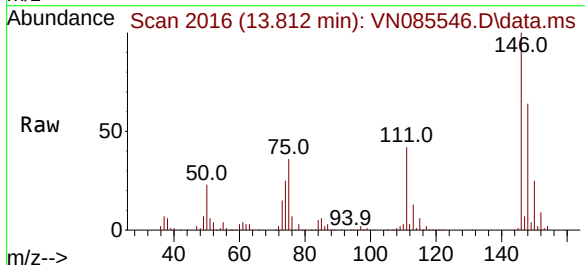
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

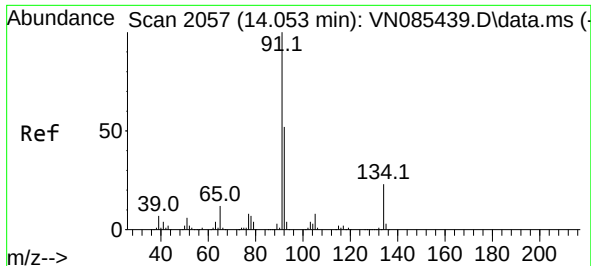
Tgt Ion:146 Resp: 233419  
Ion Ratio Lower Upper  
146 100  
111 42.4 21.4 64.3  
148 64.2 32.3 96.9



#88  
1,4-Dichlorobenzene  
Concen: 47.539 ug/l  
RT: 13.812 min Scan# 2016  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:146 Resp: 229722  
Ion Ratio Lower Upper  
146 100  
111 42.1 21.3 63.7  
148 64.8 32.4 97.0

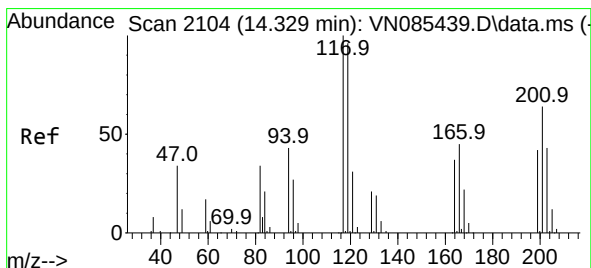
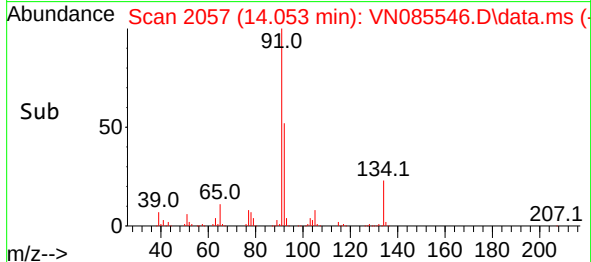
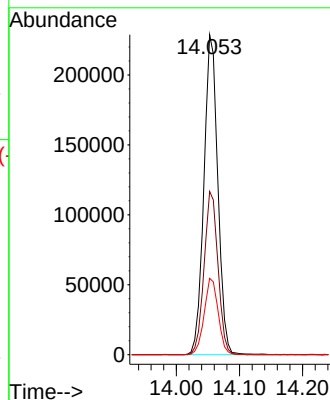
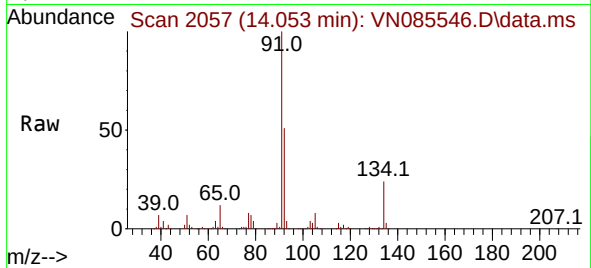




#89  
n-Butylbenzene  
Concen: 52.557 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

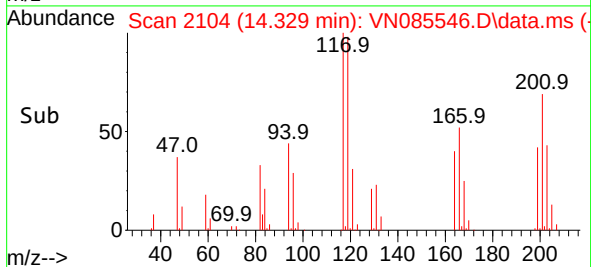
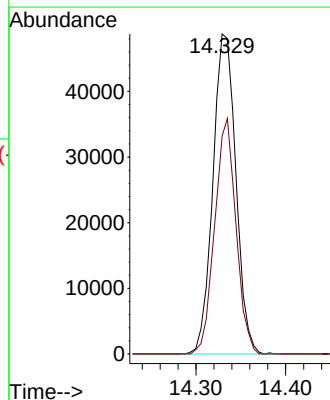
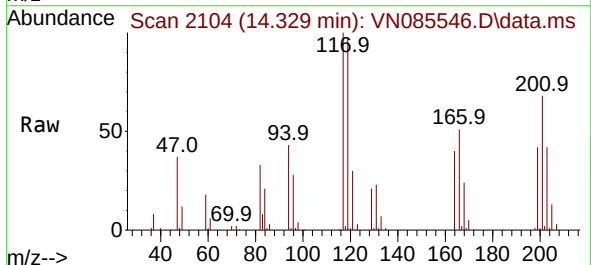
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

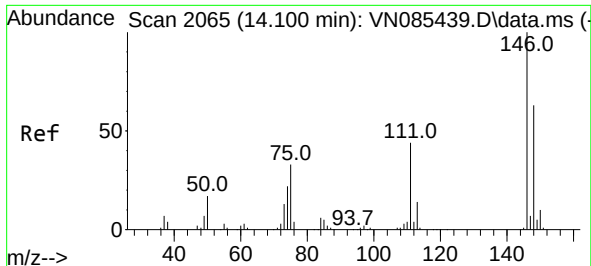
Tgt Ion: 91 Resp: 351230  
Ion Ratio Lower Upper  
91 100  
92 50.9 25.8 77.3  
134 24.0 11.7 35.1



#90  
Hexachloroethane  
Concen: 48.917 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion: 117 Resp: 86748  
Ion Ratio Lower Upper  
117 100  
201 68.1 33.7 101.0





#91

1,2-Dichlorobenzene

Concen: 49.142 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.006 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

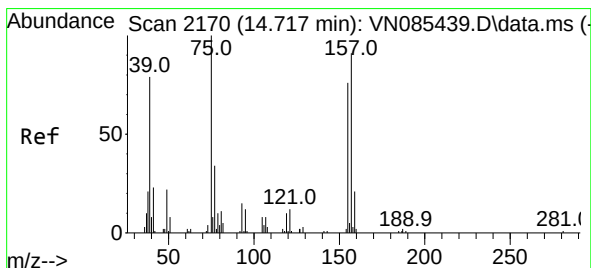
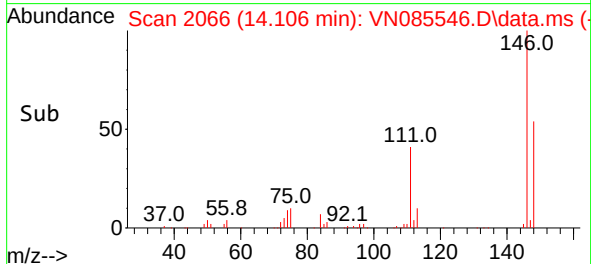
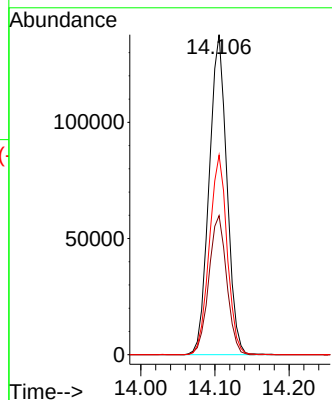
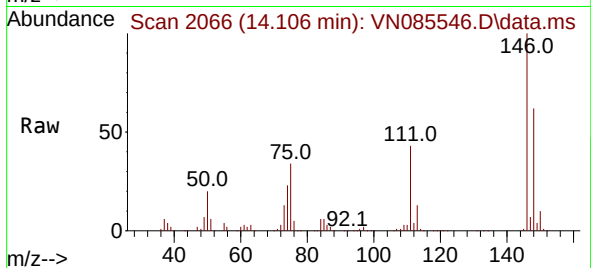
Tgt Ion:146 Resp: 228524

Ion Ratio Lower Upper

146 100

111 43.9 21.7 65.1

148 62.5 31.4 94.2



#92

1,2-Dibromo-3-Chloropropane

Concen: 55.439 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

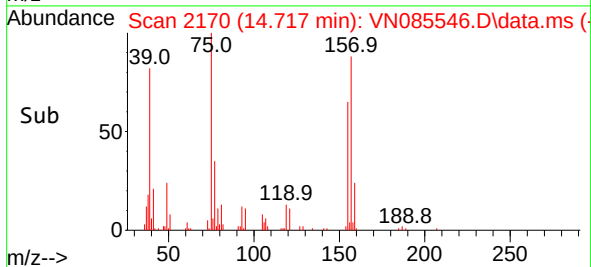
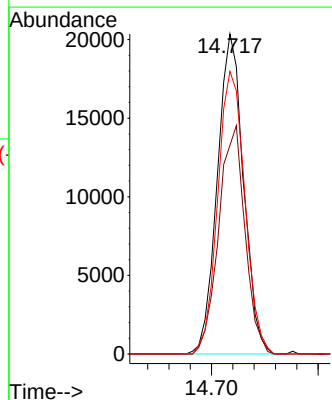
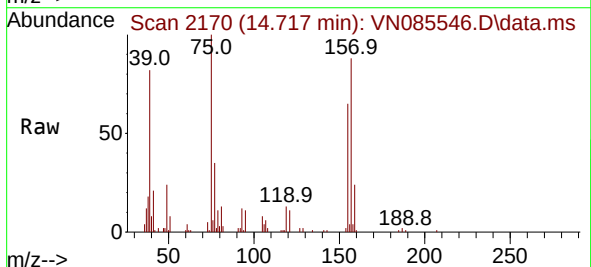
Tgt Ion: 75 Resp: 34650

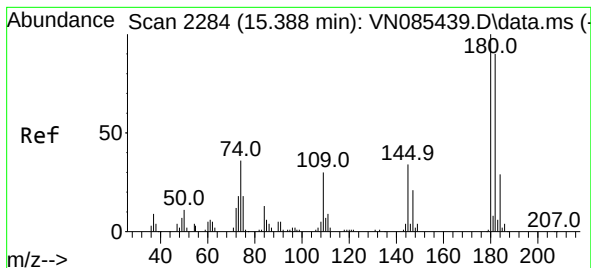
Ion Ratio Lower Upper

75 100

155 71.7 36.4 109.2

157 91.5 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 50.399 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

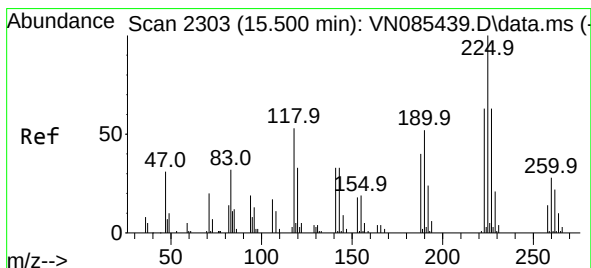
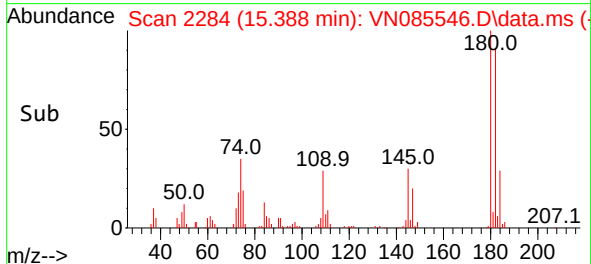
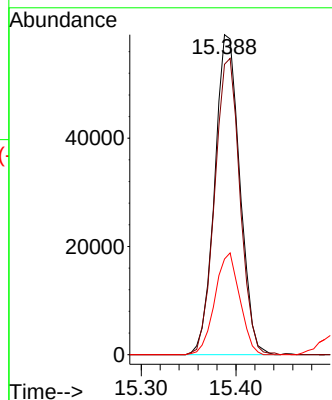
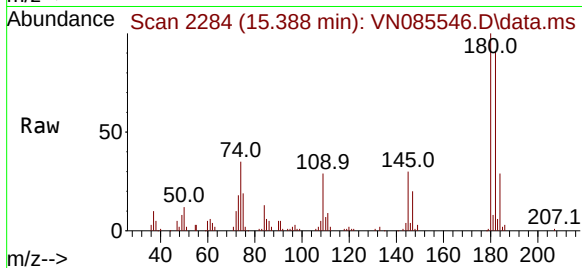
Tgt Ion:180 Resp: 108928

Ion Ratio Lower Upper

180 100

182 92.9 46.8 140.3

145 31.5 16.0 48.0



#94

Hexachlorobutadiene

Concen: 43.430 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085546.D

Acq: 28 Jan 2025 18:14

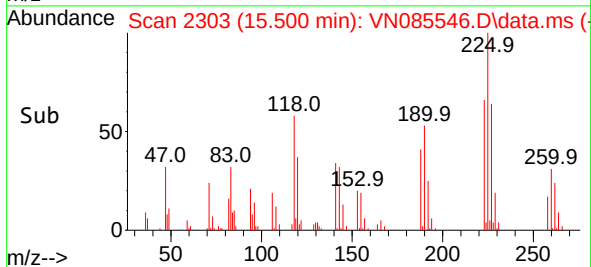
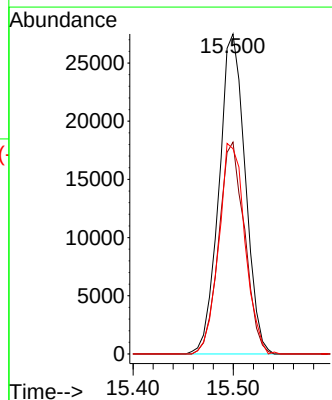
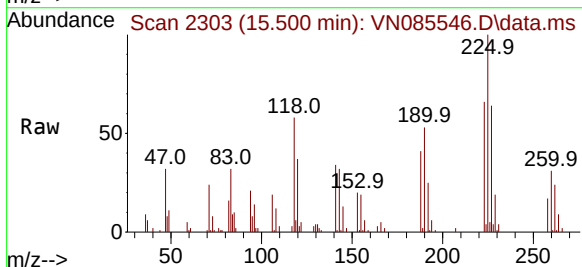
Tgt Ion:225 Resp: 49834

Ion Ratio Lower Upper

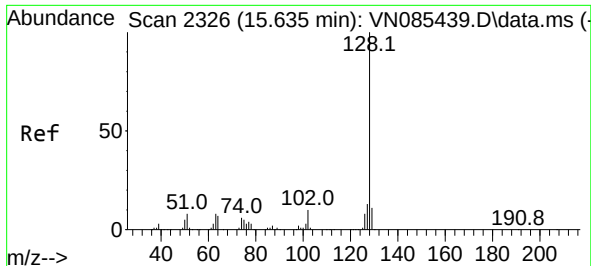
225 100

223 65.2 30.7 92.1

227 65.8 30.9 92.5



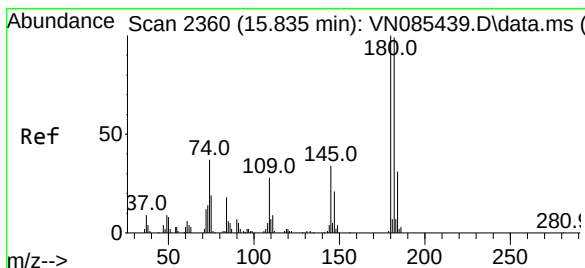
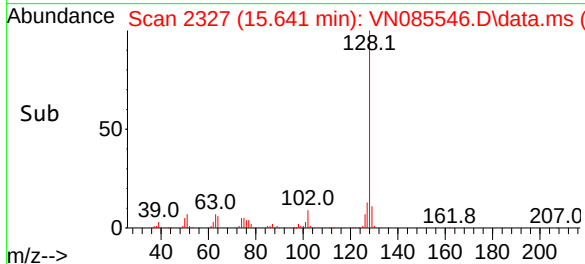
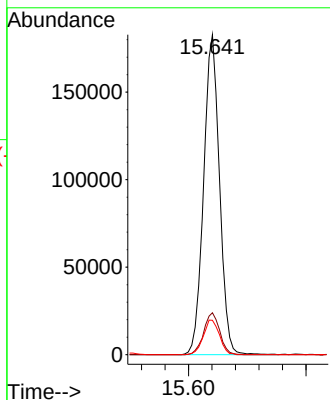
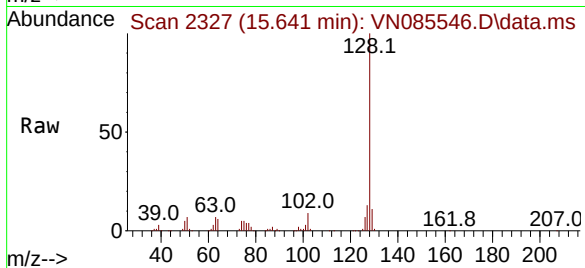




#95  
Naphthalene  
Concen: 53.141 ug/l  
RT: 15.641 min Scan# 2326  
Delta R.T. 0.006 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:128 Resp: 342729  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.6 16.0  
129 11.0 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 49.210 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. -0.000 min  
Lab File: VN085546.D  
Acq: 28 Jan 2025 18:14

Tgt Ion:180 Resp: 107618  
Ion Ratio Lower Upper  
180 100  
182 95.6 47.4 142.2  
145 34.4 16.9 50.7

