

## Cover Page

**Order ID :** Q1062

**Project ID :** NWIRP Bethpage 112G08005-WE13

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

### Lab Sample Number

Q1062-01  
Q1062-02  
Q1062-03  
Q1062-04

### Client Sample Number

BP-VPB-190A-TB-20250107  
VPB190A-HYD-20250107  
BP-VPB-190A-EB-20250107  
BP-VPB-190A-GW-898-900

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: 1/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

**Tetra Tech NUS, Inc.**

**Project Name: NWIRP Bethpage 112G08005-WE13**

**Project Manager: Ernie Wu**

**Chemtech Project # Q1062**

**Test Name: VOCMS Group1**

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

4 Water samples were received on 01/09/2025.

### **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 met the requirements .

The Tuning criteria met requirements.

Sample BP-VPB-190A-GW-898-900 was analyzed with 10X dilution as sample contained much sediment and not allowing straight run.

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

Fax and Hardcopy data will not match for all samples as fax samples were analyzed in sequence VN011325 where QC was failing as a corrective action samples reanalyzed and reported in Hardcopy while, fax data Provided in Miscellaneous Section.

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



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Phone: 908 789 8900 Fax: 908 789 8922

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |



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

CHEMTECH PROJECT NUMBER: Q1062

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 met the requirements .                                                                                                                                                          |    |    | ✓   |
| 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:

Sample BP-VPB-190A-GW-898-900 was analyzed with 10X dilution as sample contained much sediment and not allowing straight run.

Fax and Hardcopy data will not match for all samples as fax samples were analyzed in sequence VN011325 where QC was failing as a corrective action samples reanalyzed and reported in Hardcopy while, fax data Provided in Miscellaneous Section.

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 #: Q1062

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: 01/17/2025

## LAB CHRONICLE

|                 |                      |                   |                               |
|-----------------|----------------------|-------------------|-------------------------------|
| <b>OrderID:</b> | Q1062                | <b>OrderDate:</b> | 1/10/2025 11:26:00 AM         |
| <b>Client:</b>  | Tetra Tech NUS, Inc. | <b>Project:</b>   | NWIRP Bethpage 112G08005-WE13 |
| <b>Contact:</b> | Ernie Wu             | <b>Location:</b>  | M11,VOA Ref. #3 Water         |

| LabID           | ClientID                            | Matrix       | Test         | Method   | Sample Date     | Prep Date | Anal Date | Received        |
|-----------------|-------------------------------------|--------------|--------------|----------|-----------------|-----------|-----------|-----------------|
| <b>Q1062-01</b> | <b>BP-VPB-190A-TB-202<br/>50107</b> | <b>Water</b> | VOCMS Group1 | 8260-Low | <b>01/07/25</b> |           | 01/15/25  | <b>01/09/25</b> |
| <b>Q1062-02</b> | <b>VPB190A-HYD-20250<br/>107</b>    | <b>Water</b> | VOCMS Group1 | 8260-Low | <b>01/07/25</b> |           | 01/15/25  | <b>01/09/25</b> |
| <b>Q1062-03</b> | <b>BP-VPB-190A-EB-202<br/>50107</b> | <b>Water</b> | VOCMS Group1 | 8260-Low | <b>01/07/25</b> |           | 01/15/25  | <b>01/09/25</b> |
| <b>Q1062-04</b> | <b>BP-VPB-190A-GW-898<br/>-900</b>  | <b>Water</b> | VOCMS Group1 | 8260-Low | <b>01/07/25</b> |           | 01/15/25  | <b>01/09/25</b> |



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**Hit Summary Sheet**  
**SW-846**

**SDG No.:** Q1062

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

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | LOD | RDL | Units |
|-----------|-----------|--------|-----------|---------------|---|-----|-----|-----|-------|
|-----------|-----------|--------|-----------|---------------|---|-----|-----|-----|-------|

**Client ID:**

0

**Total Voc :**

**Total Concentration:**



# QC SUMMARY

## Surrogate Summary

SDG No.: **Q1062**

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

Analytical Method: **SW8260-Low**

| Lab Sample ID | Client ID               | Parameter             | Spike | Result | RecoveryQual | Limits |      |
|---------------|-------------------------|-----------------------|-------|--------|--------------|--------|------|
|               |                         |                       |       |        |              | Low    | High |
| Q1062-01      | BP-VPB-190A-TB-20250107 | 1,2-Dichloroethane-d4 | 50    | 53.3   | 107          | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 50.0   | 100          | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 48.9   | 98           | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 45.9   | 92           | 85     | 114  |
| Q1062-02      | VPB190A-HYD-20250107    | 1,2-Dichloroethane-d4 | 50    | 53.2   | 106          | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 51.4   | 103          | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 49.2   | 98           | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 47.0   | 94           | 85     | 114  |
| Q1062-03      | BP-VPB-190A-EB-20250107 | 1,2-Dichloroethane-d4 | 50    | 53.6   | 107          | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 50.8   | 102          | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 50.0   | 100          | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 46.6   | 93           | 85     | 114  |
| Q1062-04      | BP-VPB-190A-GW-898-900  | 1,2-Dichloroethane-d4 | 50    | 52.8   | 106          | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 52.0   | 104          | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 49.3   | 99           | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 46.3   | 93           | 85     | 114  |
| VN0115WBL01   | VN0115WBL01             | 1,2-Dichloroethane-d4 | 50    | 55.1   | 110          | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 51.9   | 104          | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 50.1   | 100          | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 49.0   | 98           | 85     | 114  |
| VN0115WBS01   | VN0115WBS01             | 1,2-Dichloroethane-d4 | 50    | 47.6   | 95           | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 48.5   | 97           | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 50.4   | 101          | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 49.5   | 99           | 85     | 114  |
| VN0115WBSD0   | VN0115WBSD01            | 1,2-Dichloroethane-d4 | 50    | 48.9   | 98           | 81     | 118  |
|               |                         | Dibromofluoromethane  | 50    | 49.3   | 99           | 80     | 119  |
|               |                         | Toluene-d8            | 50    | 50.1   | 100          | 89     | 112  |
|               |                         | 4-Bromofluorobenzene  | 50    | 50.4   | 101          | 85     | 114  |

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1062

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085450.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|-----|----------------|-----|
| VN0115WBS01   | Chloromethane                  | 20    | 18.5   | ug/L | 93  |     |      | 50  | 139            |     |
|               | Vinyl chloride                 | 20    | 18.2   | ug/L | 91  |     |      | 58  | 137            |     |
|               | Bromomethane                   | 20    | 18.5   | ug/L | 93  |     |      | 53  | 141            |     |
|               | Chloroethane                   | 20    | 17.8   | ug/L | 89  |     |      | 60  | 138            |     |
|               | Trichlorofluoromethane         | 20    | 18.7   | ug/L | 94  |     |      | 65  | 141            |     |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 19.0   | ug/L | 95  |     |      | 70  | 136            |     |
|               | 1,1-Dichloroethene             | 20    | 18.6   | ug/L | 93  |     |      | 71  | 131            |     |
|               | Acetone                        | 100   | 87.7   | ug/L | 88  |     |      | 39  | 160            |     |
|               | Carbon disulfide               | 20    | 17.4   | ug/L | 87  |     |      | 64  | 133            |     |
|               | Methyl tert-butyl Ether        | 20    | 18.7   | ug/L | 94  |     |      | 71  | 124            |     |
|               | Methylene Chloride             | 20    | 18.2   | ug/L | 91  |     |      | 74  | 124            |     |
|               | trans-1,2-Dichloroethene       | 20    | 18.6   | ug/L | 93  |     |      | 75  | 124            |     |
|               | 1,1-Dichloroethane             | 20    | 18.6   | ug/L | 93  |     |      | 77  | 125            |     |
|               | 2-Butanone                     | 100   | 91.2   | ug/L | 91  |     |      | 56  | 143            |     |
|               | Carbon Tetrachloride           | 20    | 19.0   | ug/L | 95  |     |      | 72  | 136            |     |
|               | cis-1,2-Dichloroethene         | 20    | 18.7   | ug/L | 94  |     |      | 78  | 123            |     |
|               | Chloroform                     | 20    | 18.4   | ug/L | 92  |     |      | 79  | 124            |     |
|               | 1,1,1-Trichloroethane          | 20    | 18.6   | ug/L | 93  |     |      | 74  | 131            |     |
|               | Methylcyclohexane              | 20    | 19.8   | ug/L | 99  |     |      | 72  | 132            |     |
|               | Benzene                        | 20    | 19.2   | ug/L | 96  |     |      | 79  | 120            |     |
|               | 1,2-Dichloroethane             | 20    | 18.8   | ug/L | 94  |     |      | 73  | 128            |     |
|               | Trichloroethene                | 20    | 19.2   | ug/L | 96  |     |      | 79  | 123            |     |
|               | 1,2-Dichloropropane            | 20    | 18.9   | ug/L | 95  |     |      | 78  | 122            |     |
|               | Bromodichloromethane           | 20    | 19.8   | ug/L | 99  |     |      | 79  | 125            |     |
|               | 4-Methyl-2-Pentanone           | 100   | 95.3   | ug/L | 95  |     |      | 67  | 130            |     |
|               | Toluene                        | 20    | 20.1   | ug/L | 101 |     |      | 80  | 121            |     |
|               | t-1,3-Dichloropropene          | 20    | 19.0   | ug/L | 95  |     |      | 73  | 127            |     |
|               | cis-1,3-Dichloropropene        | 20    | 20.0   | ug/L | 100 |     |      | 75  | 124            |     |
|               | 1,1,2-Trichloroethane          | 20    | 18.9   | ug/L | 95  |     |      | 80  | 119            |     |
|               | 2-Hexanone                     | 100   | 96.5   | ug/L | 97  |     |      | 57  | 139            |     |
|               | Dibromochloromethane           | 20    | 19.1   | ug/L | 96  |     |      | 74  | 126            |     |
|               | Tetrachloroethene              | 20    | 20.1   | ug/L | 101 |     |      | 74  | 129            |     |
|               | Chlorobenzene                  | 20    | 19.3   | ug/L | 97  |     |      | 82  | 118            |     |
|               | Ethyl Benzene                  | 20    | 20.0   | ug/L | 100 |     |      | 79  | 121            |     |
|               | m/p-Xylenes                    | 40    | 41.3   | ug/L | 103 |     |      | 80  | 121            |     |
|               | o-Xylene                       | 20    | 20.2   | ug/L | 101 |     |      | 78  | 122            |     |
|               | Styrene                        | 20    | 20.4   | ug/L | 102 |     |      | 78  | 123            |     |
|               | Bromoform                      | 20    | 19.8   | ug/L | 99  |     |      | 66  | 130            |     |
|               | Isopropylbenzene               | 20    | 20.7   | ug/L | 104 |     |      | 72  | 131            |     |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 18.5   | ug/L | 93  |     |      | 71  | 121            |     |
|               | 1,3-Dichlorobenzene            | 20    | 19.6   | ug/L | 98  |     |      | 80  | 119            |     |
|               | 1,4-Dichlorobenzene            | 20    | 18.7   | ug/L | 94  |     |      | 79  | 118            |     |
|               | 1,2-Dichlorobenzene            | 20    | 18.9   | ug/L | 95  |     |      | 80  | 119            |     |



Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1062

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085451.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|-----|----------------|-----|
| VN0115WBSD01  | Chloromethane                  | 20    | 19.5   | ug/L | 98  | 5   |      | 50  | 139            | 20  |
|               | Vinyl chloride                 | 20    | 19.1   | ug/L | 96  | 5   |      | 58  | 137            | 20  |
|               | Bromomethane                   | 20    | 19.3   | ug/L | 97  | 4   |      | 53  | 141            | 20  |
|               | Chloroethane                   | 20    | 18.5   | ug/L | 93  | 4   |      | 60  | 138            | 20  |
|               | Trichlorofluoromethane         | 20    | 19.7   | ug/L | 99  | 5   |      | 65  | 141            | 20  |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 19.6   | ug/L | 98  | 3   |      | 70  | 136            | 20  |
|               | 1,1-Dichloroethene             | 20    | 19.3   | ug/L | 97  | 4   |      | 71  | 131            | 20  |
|               | Acetone                        | 100   | 94.9   | ug/L | 95  | 8   |      | 39  | 160            | 20  |
|               | Carbon disulfide               | 20    | 18.1   | ug/L | 91  | 4   |      | 64  | 133            | 20  |
|               | Methyl tert-butyl Ether        | 20    | 21.1   | ug/L | 106 | 12  |      | 71  | 124            | 20  |
|               | Methylene Chloride             | 20    | 20.1   | ug/L | 101 | 10  |      | 74  | 124            | 20  |
|               | trans-1,2-Dichloroethene       | 20    | 19.9   | ug/L | 100 | 7   |      | 75  | 124            | 20  |
|               | 1,1-Dichloroethane             | 20    | 20.0   | ug/L | 100 | 7   |      | 77  | 125            | 20  |
|               | 2-Butanone                     | 100   | 97.6   | ug/L | 98  | 7   |      | 56  | 143            | 20  |
|               | Carbon Tetrachloride           | 20    | 19.9   | ug/L | 100 | 5   |      | 72  | 136            | 20  |
|               | cis-1,2-Dichloroethene         | 20    | 19.7   | ug/L | 99  | 5   |      | 78  | 123            | 20  |
|               | Chloroform                     | 20    | 20.1   | ug/L | 101 | 9   |      | 79  | 124            | 20  |
|               | 1,1,1-Trichloroethane          | 20    | 19.9   | ug/L | 100 | 7   |      | 74  | 131            | 20  |
|               | Methylcyclohexane              | 20    | 20.0   | ug/L | 100 | 1   |      | 72  | 132            | 20  |
|               | Benzene                        | 20    | 20.1   | ug/L | 101 | 5   |      | 79  | 120            | 20  |
|               | 1,2-Dichloroethane             | 20    | 20.7   | ug/L | 104 | 10  |      | 73  | 128            | 20  |
|               | Trichloroethene                | 20    | 20.1   | ug/L | 101 | 5   |      | 79  | 123            | 20  |
|               | 1,2-Dichloropropane            | 20    | 20.2   | ug/L | 101 | 6   |      | 78  | 122            | 20  |
|               | Bromodichloromethane           | 20    | 20.9   | ug/L | 104 | 5   |      | 79  | 125            | 20  |
|               | 4-Methyl-2-Pentanone           | 100   | 100    | ug/L | 100 | 5   |      | 67  | 130            | 20  |
|               | Toluene                        | 20    | 21.5   | ug/L | 108 | 7   |      | 80  | 121            | 20  |
|               | t-1,3-Dichloropropene          | 20    | 20.3   | ug/L | 102 | 7   |      | 73  | 127            | 20  |
|               | cis-1,3-Dichloropropene        | 20    | 21.0   | ug/L | 105 | 5   |      | 75  | 124            | 20  |
|               | 1,1,2-Trichloroethane          | 20    | 20.9   | ug/L | 104 | 9   |      | 80  | 119            | 20  |
|               | 2-Hexanone                     | 100   | 100    | ug/L | 100 | 3   |      | 57  | 139            | 20  |
|               | Dibromochloromethane           | 20    | 20.2   | ug/L | 101 | 5   |      | 74  | 126            | 20  |
|               | Tetrachloroethene              | 20    | 20.7   | ug/L | 104 | 3   |      | 74  | 129            | 20  |
|               | Chlorobenzene                  | 20    | 19.5   | ug/L | 98  | 1   |      | 82  | 118            | 20  |
|               | Ethyl Benzene                  | 20    | 20.4   | ug/L | 102 | 2   |      | 79  | 121            | 20  |
|               | m/p-Xylenes                    | 40    | 42.5   | ug/L | 106 | 3   |      | 80  | 121            | 20  |
|               | o-Xylene                       | 20    | 20.9   | ug/L | 104 | 3   |      | 78  | 122            | 20  |
|               | Styrene                        | 20    | 20.8   | ug/L | 104 | 2   |      | 78  | 123            | 20  |
|               | Bromoform                      | 20    | 20.6   | ug/L | 103 | 4   |      | 66  | 130            | 20  |
|               | Isopropylbenzene               | 20    | 20.6   | ug/L | 103 | 1   |      | 72  | 131            | 20  |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 19.0   | ug/L | 95  | 2   |      | 71  | 121            | 20  |
|               | 1,3-Dichlorobenzene            | 20    | 20.1   | ug/L | 101 | 3   |      | 80  | 119            | 20  |
|               | 1,4-Dichlorobenzene            | 20    | 19.1   | ug/L | 96  | 2   |      | 79  | 118            | 20  |
|               | 1,2-Dichlorobenzene            | 20    | 19.0   | ug/L | 95  | 0   |      | 80  | 119            | 20  |

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0115WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1062

SAS No.: Q1062 SDG NO.: Q1062

Lab File ID: VN085449.D

Lab Sample ID: VN0115WBL01

Date Analyzed: 01/15/2025

Time Analyzed: 10:05

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 |
|-------------------------|------------------|----------------|------------------|
| VN0115WBS01             | VN0115WBS01      | VN085450.D     | 01/15/2025       |
| VN0115WBSD01            | VN0115WBSD01     | VN085451.D     | 01/15/2025       |
| BP-VPB-190A-GW-898-900  | Q1062-04         | VN085452.D     | 01/15/2025       |
| BP-VPB-190A-TB-20250107 | Q1062-01         | VN085453.D     | 01/15/2025       |
| BP-VPB-190A-EB-20250107 | Q1062-03         | VN085454.D     | 01/15/2025       |
| VPB190A-HYD-20250107    | Q1062-02         | VN085455.D     | 01/15/2025       |

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.: Q1062 SAS No.: Q1062 SDG NO.: Q1062  
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            |



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06  
Lab Code: CHEM Case No.: Q1062 SAS No.: Q1062 SDG NO.: Q1062  
Lab File ID: VN085446.D BFB Injection Date: 01/15/2025  
Instrument ID: MSVOA\_N BFB Injection Time: 08:25  
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            | 22.1                 |
| 75  | 30.0 - 60.0% of mass 95            | 56.6                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.7                  |
| 173 | Less than 2.0% of mass 174         | 1.1 ( 1.5 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 70.9                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.3 ( 7.5 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 70.4 ( 99.2 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 4.3 ( 6.1 ) 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       | VN085447.D     | 01/15/2025       | 09:03            |
| VN0115WBL01             | VN0115WBL01      | VN085449.D     | 01/15/2025       | 10:05            |
| VN0115WBS01             | VN0115WBS01      | VN085450.D     | 01/15/2025       | 10:29            |
| VN0115WBSD01            | VN0115WBSD01     | VN085451.D     | 01/15/2025       | 11:02            |
| BP-VPB-190A-GW-898-900  | Q1062-04         | VN085452.D     | 01/15/2025       | 11:26            |
| BP-VPB-190A-TB-20250107 | Q1062-01         | VN085453.D     | 01/15/2025       | 11:50            |
| BP-VPB-190A-EB-20250107 | Q1062-03         | VN085454.D     | 01/15/2025       | 12:14            |
| VPB190A-HYD-20250107    | Q1062-02         | VN085455.D     | 01/15/2025       | 12:37            |
| VSTDCCC050EC            | VSTDCCC050       | VN085463.D     | 01/15/2025       | 15:58            |

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06  
Lab Code: CHEM Case No.: Q1062 SAS No.: Q1062 SDG NO.: Q1062  
Lab File ID: VN085447.D Date Analyzed: 01/15/2025  
Instrument ID: MSVOA\_N Time Analyzed: 09:03  
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             | 218273        | 8.22  | 358609        | 9.09  | 316952        | 11.86  |
| UPPER LIMIT             | 436546        | 8.718 | 717218        | 9.594 | 633904        | 12.359 |
| LOWER LIMIT             | 109137        | 7.718 | 179305        | 8.594 | 158476        | 11.359 |
| EPA SAMPLE NO.          |               |       |               |       |               |        |
| BP-VPB-190A-TB-20250107 | 196038        | 8.22  | 355455        | 9.09  | 304386        | 11.87  |
| VPB190A-HYD-20250107    | 183777        | 8.22  | 332391        | 9.10  | 293220        | 11.87  |
| BP-VPB-190A-EB-20250107 | 185335        | 8.22  | 337105        | 9.10  | 298295        | 11.87  |
| BP-VPB-190A-GW-898-900  | 175474        | 8.22  | 316452        | 9.10  | 274227        | 11.87  |
| VN0115WBL01             | 195111        | 8.22  | 360723        | 9.10  | 319974        | 11.86  |
| VN0115WBS01             | 208834        | 8.22  | 350038        | 9.09  | 301633        | 11.87  |
| VN0115WBSD01            | 188898        | 8.22  | 323122        | 9.10  | 286298        | 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.: Q1062 SAS No.: Q1062 SDG NO.: Q1062  
 Lab File ID: VN085447.D Date Analyzed: 01/15/2025  
 Instrument ID: MSVOA\_N Time Analyzed: 09:03  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

|                         | IS4<br>AREA # | RT #   |  |  |  |  |
|-------------------------|---------------|--------|--|--|--|--|
| 12 HOUR STD             | 158347        | 13.788 |  |  |  |  |
| UPPER LIMIT             | 316694        | 14.288 |  |  |  |  |
| LOWER LIMIT             | 79173.5       | 13.288 |  |  |  |  |
| EPA SAMPLE NO.          |               |        |  |  |  |  |
| BP-VPB-190A-TB-20250107 | 119672        | 13.79  |  |  |  |  |
| VPB190A-HYD-20250107    | 116419        | 13.79  |  |  |  |  |
| BP-VPB-190A-EB-20250107 | 117680        | 13.79  |  |  |  |  |
| BP-VPB-190A-GW-898-900  | 107831        | 13.79  |  |  |  |  |
| VN0115WBL01             | 130534        | 13.79  |  |  |  |  |
| VN0115WBS01             | 141189        | 13.79  |  |  |  |  |
| VN0115WBSD01            | 136502        | 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: | 01/07/25     |    |  |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |  |
| Client Sample ID:  | BP-VPB-190A-TB-20250107       |        |      | SDG No.:        | Q1062        |    |  |
| Lab Sample ID:     | Q1062-01                      |        |      | 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 |
| VN085453.D        | 1         |           | 01/15/25 11:50 | VN011525      |

| 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: | 01/07/25                     |
| Project:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  | 01/09/25                     |
| Client Sample ID:  | BP-VPB-190A-TB-20250107                   | SDG No.:        | Q1062                        |
| Lab Sample ID:     | Q1062-01                                  | 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 |
| VN085453.D        | 1         |           | 01/15/25 11:50 | VN011525      |

| 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     | 53.3   |           | 81 - 118 |      | 107%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 50.0   |           | 80 - 119 |      | 100%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 48.9   |           | 89 - 112 |      | 98%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 45.9   |           | 85 - 114 |      | 92%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 196000 | 8.218     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 355000 | 9.094     |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 304000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 120000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                               |           |                 |              |    |
|--------------------|-------------------------------|-----------|-----------------|--------------|----|
| Client:            | Tetra Tech NUS, Inc.          |           | Date Collected: | 01/07/25     |    |
| Project:           | NWIRP Bethpage 112G08005-WE13 |           | Date Received:  | 01/09/25     |    |
| Client Sample ID:  | BP-VPB-190A-TB-20250107       |           | SDG No.:        | Q1062        |    |
| Lab Sample ID:     | Q1062-01                      |           | 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 |
| VN085453.D        | 1         |           | 01/15/25 11:50 | VN011525      |

| 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\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

Quant Time: Jan 16 00:55:57 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  | 196038   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 355455   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 304386   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 119672   | 50.000 | ug/l  | 0.00     |

|                             |        |                |          |        |          |      |
|-----------------------------|--------|----------------|----------|--------|----------|------|
| System Monitoring Compounds |        |                |          |        |          |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 168714   | 53.315 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 106.640% |      |
| 35) Dibromofluoromethane    | 8.159  | 113            | 123337   | 50.015 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 100.040% |      |
| 50) Toluene-d8              | 10.565 | 98             | 428715   | 48.931 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 97.860%  |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 137686   | 45.939 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 91.880%  |      |

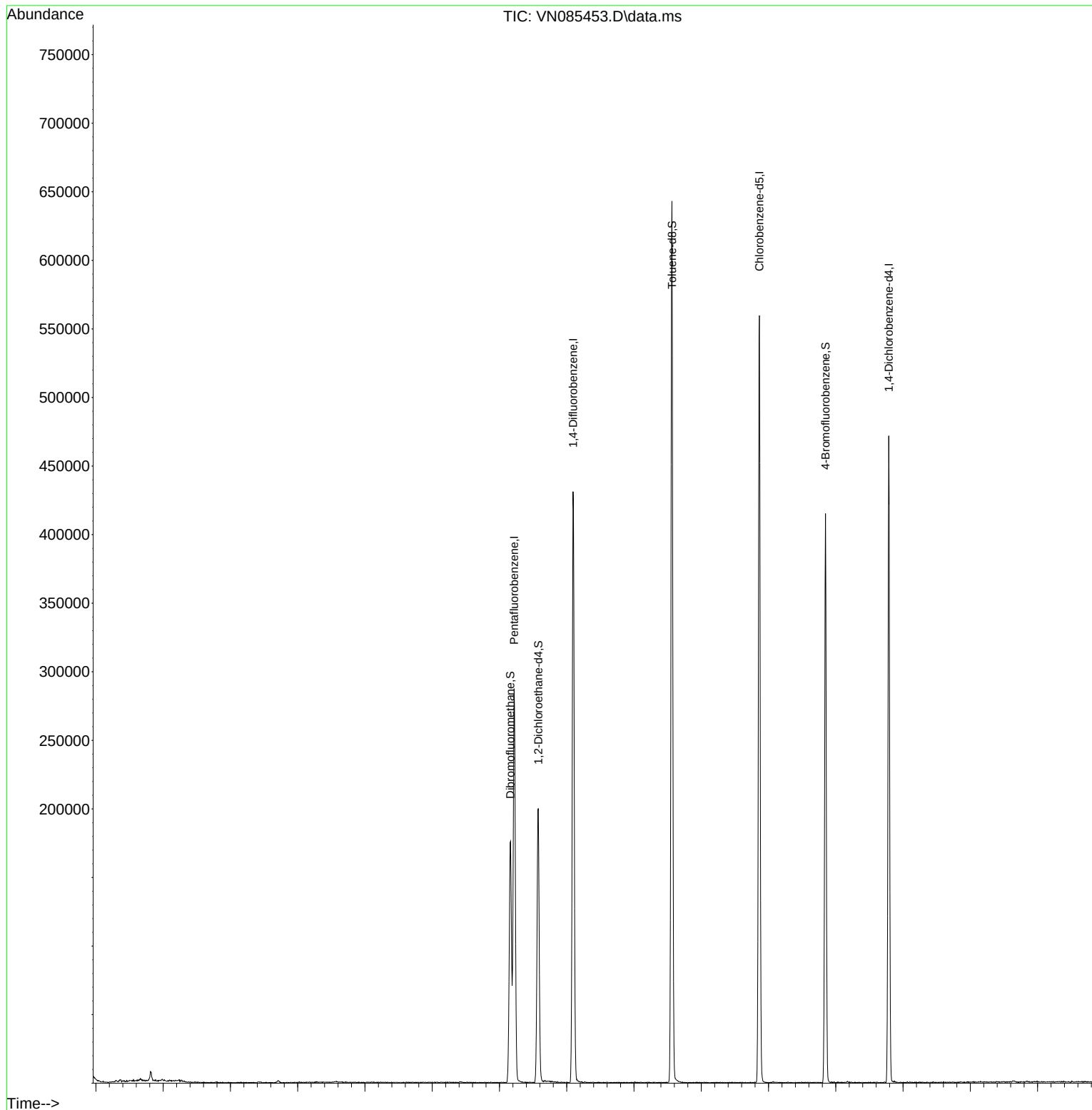
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

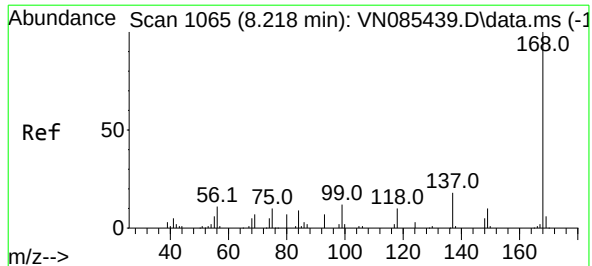
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

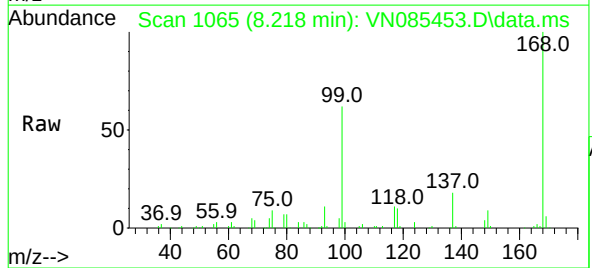
Quant Time: Jan 16 00:55:57 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



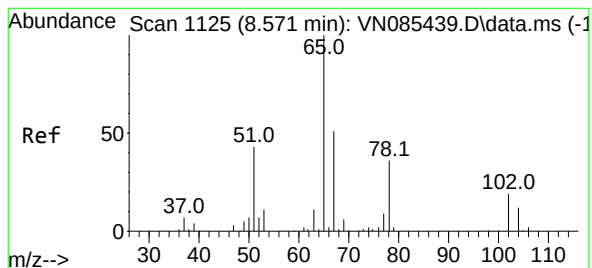
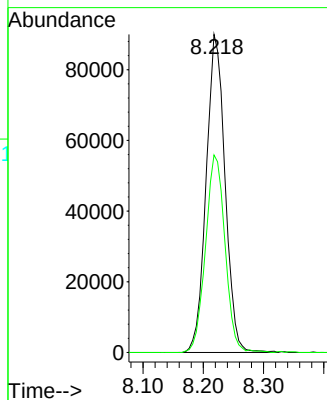
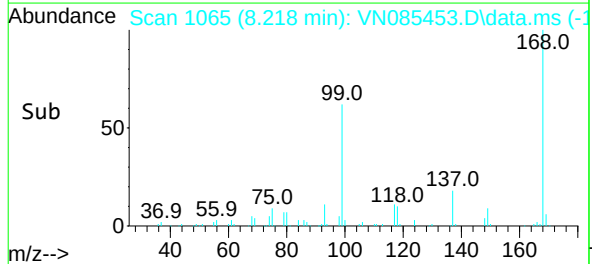


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085453.D  
Acq: 15 Jan 2025 11:50

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

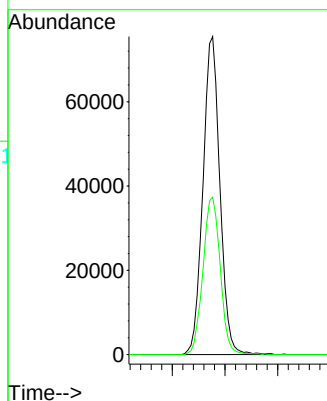
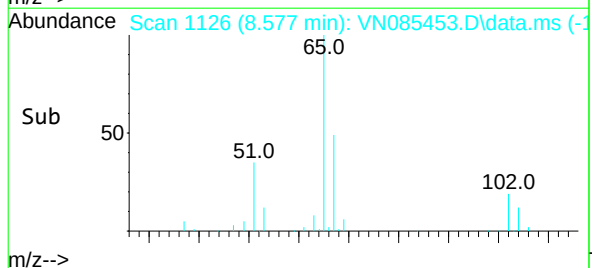
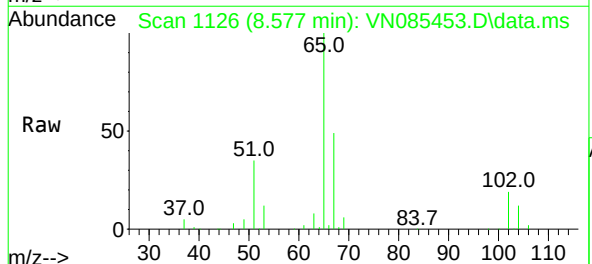


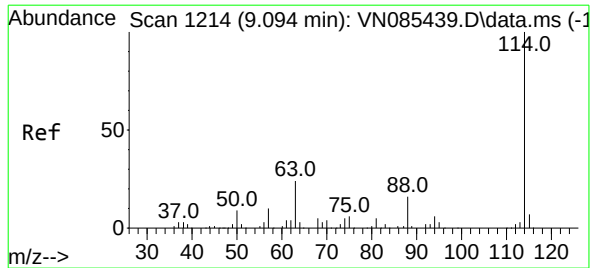
Tgt Ion:168 Resp: 196038  
Ion Ratio Lower Upper  
168 100  
99 62.1 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 53.315 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085453.D  
Acq: 15 Jan 2025 11:50

Tgt Ion: 65 Resp: 168714  
Ion Ratio Lower Upper  
65 100  
67 50.4 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: VN085453.D

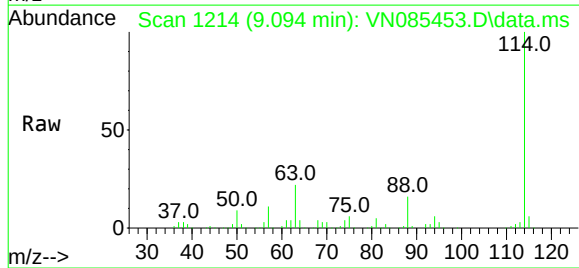
Acq: 15 Jan 2025 11:50

Instrument :

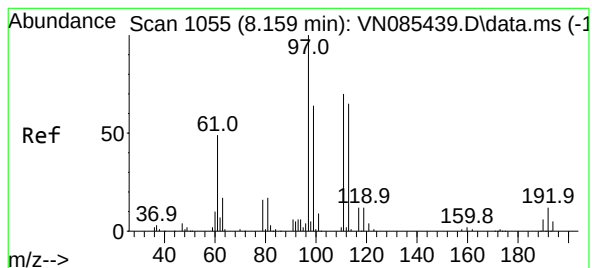
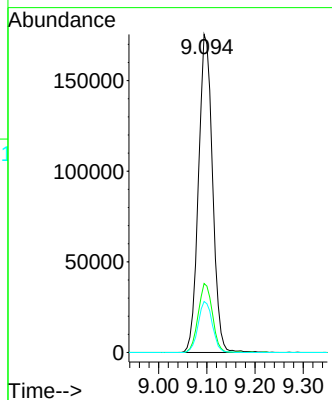
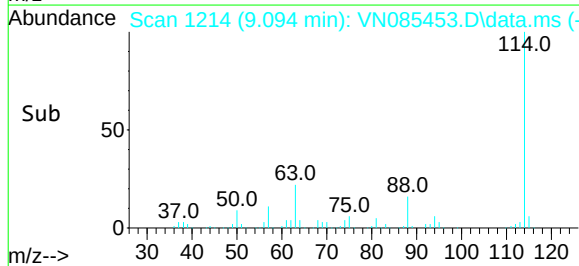
MSVOA\_N

ClientSampleId :

BP-VPB-190A-TB-20250107



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 355455 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 21.7  | 0.0   | 47.6   |
| 88       | 16.0  | 0.0   | 32.6   |



#35

Dibromofluoromethane

Concen: 50.015 ug/l

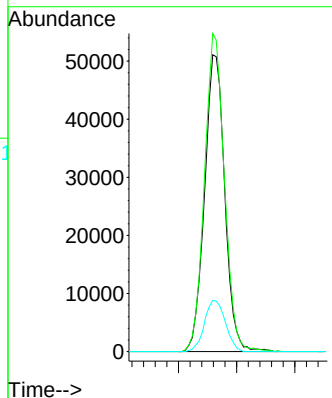
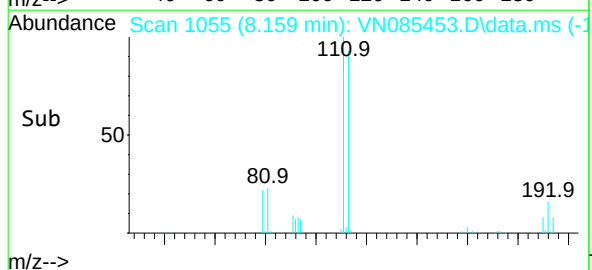
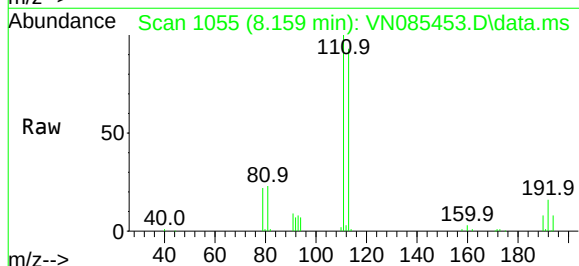
RT: 8.159 min Scan# 1055

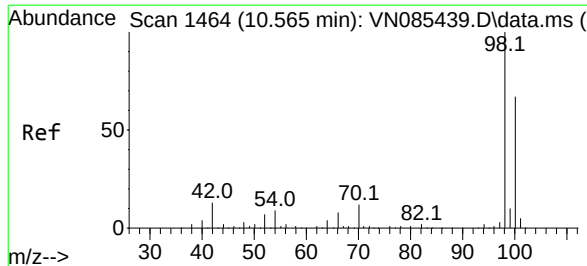
Delta R.T. -0.000 min

Lab File: VN085453.D

Acq: 15 Jan 2025 11:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 123337 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 105.8 | 82.7  | 124.1  |
| 192      | 17.9  | 14.3  | 21.5   |





#50

Toluene-d8

Concen: 48.931 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085453.D

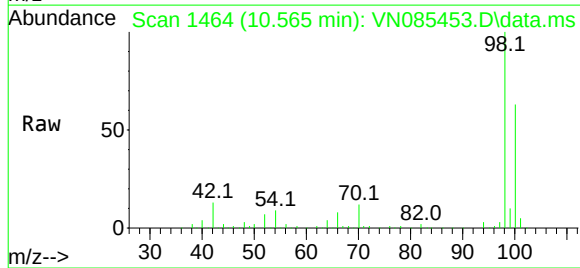
Acq: 15 Jan 2025 11:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-TB-20250107

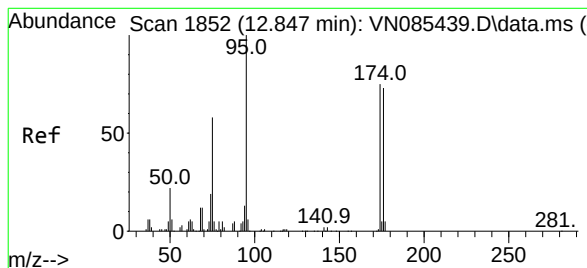
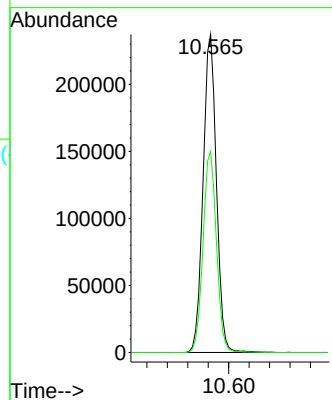
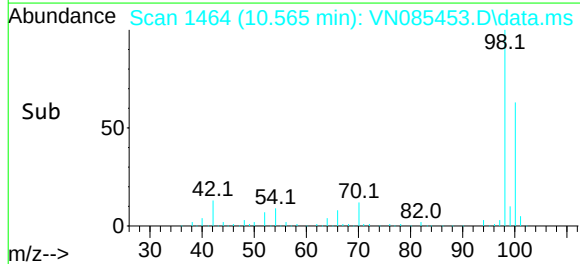


Tgt Ion: 98 Resp: 428715

Ion Ratio Lower Upper

98 100

100 63.8 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 45.939 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085453.D

Acq: 15 Jan 2025 11:50

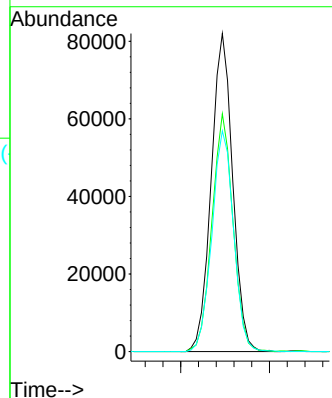
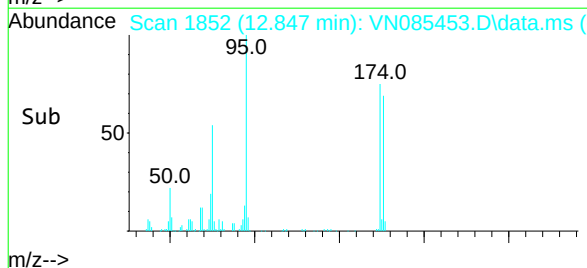
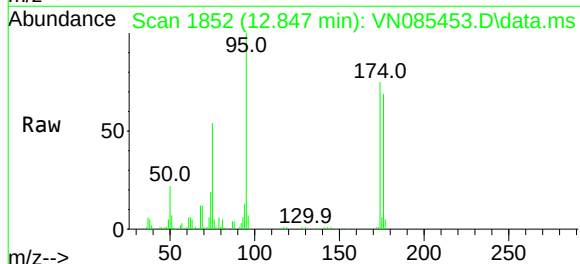
Tgt Ion: 95 Resp: 137686

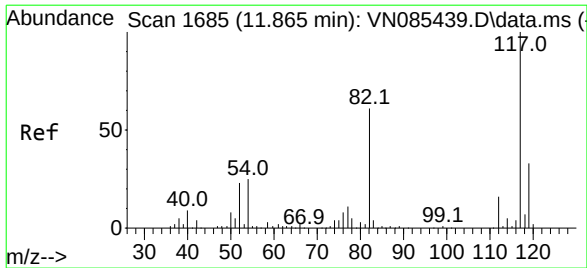
Ion Ratio Lower Upper

95 100

174 73.4 0.0 145.0

176 70.1 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN085453.D

Acq: 15 Jan 2025 11:50

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-TB-20250107

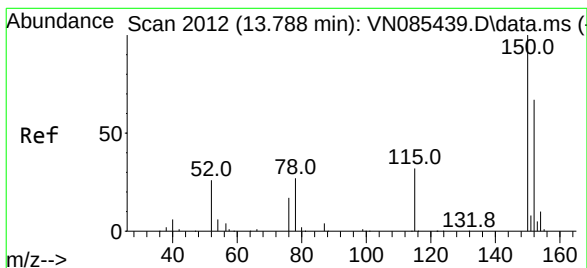
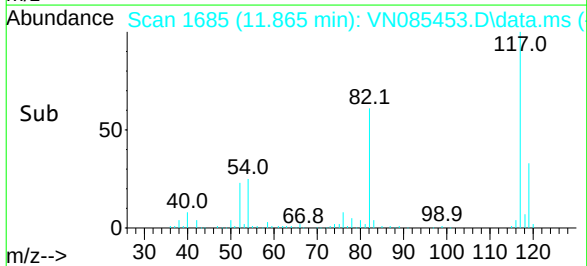
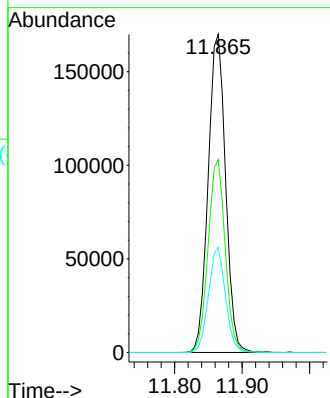
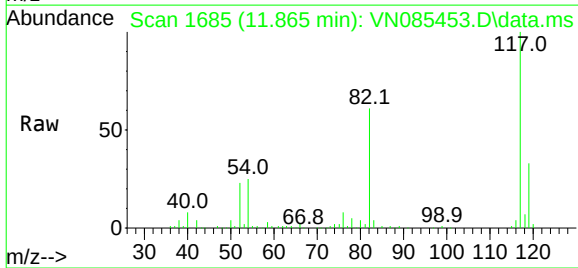
Tgt Ion:117 Resp: 304386

Ion Ratio Lower Upper

117 100

82 60.6 48.6 72.8

119 33.0 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: VN085453.D

Acq: 15 Jan 2025 11:50

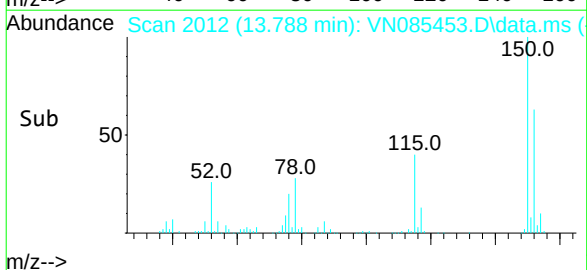
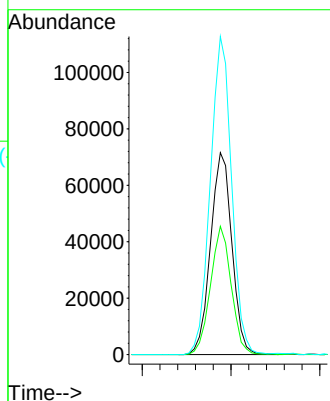
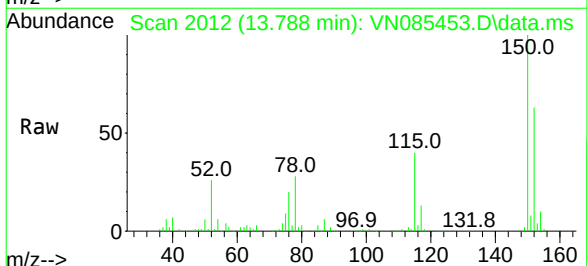
Tgt Ion:152 Resp: 119672

Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 156.9 0.0 343.6





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

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: VN085453.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         | 2.812       | 139           | 146         | 152          | rBV3     | 6669           | 12224         | 1.04%           | 0.202%        |
| 2         | 8.165       | 1045          | 1056        | 1060         | rBV      | 175882         | 418329        | 35.69%          | 6.925%        |
| 3         | 8.218       | 1060          | 1065        | 1077         | rVB      | 286274         | 633544        | 54.05%          | 10.487%       |
| 4         | 8.577       | 1116          | 1126        | 1139         | rBV      | 200025         | 449865        | 38.38%          | 7.447%        |
| 5         | 9.094       | 1206          | 1214        | 1225         | rBV      | 430827         | 877627        | 74.88%          | 14.528%       |
| 6         | 10.565      | 1455          | 1464        | 1480         | rBV      | 642571         | 1172114       | 100.00%         | 19.403%       |
| 7         | 11.865      | 1677          | 1685        | 1696         | rBV      | 559123         | 1001040       | 85.40%          | 16.571%       |
| 8         | 12.847      | 1845          | 1852        | 1862         | rBV      | 414847         | 697222        | 59.48%          | 11.541%       |
| 9         | 13.788      | 2004          | 2012        | 2021         | rBV      | 471684         | 779063        | 66.47%          | 12.896%       |

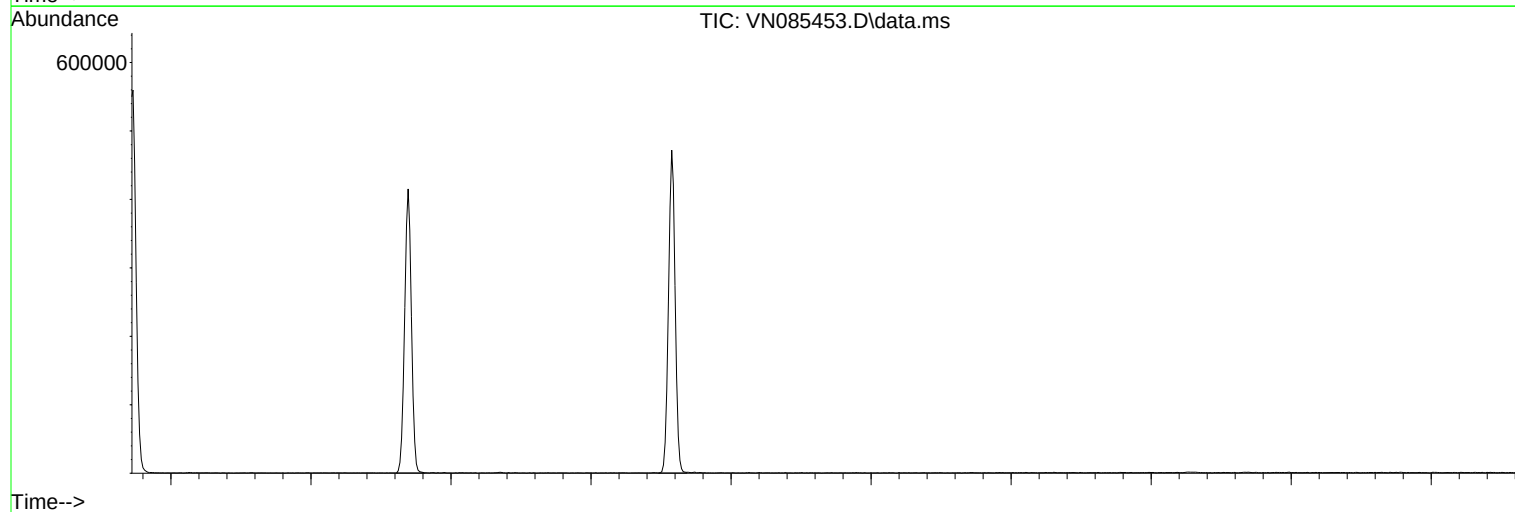
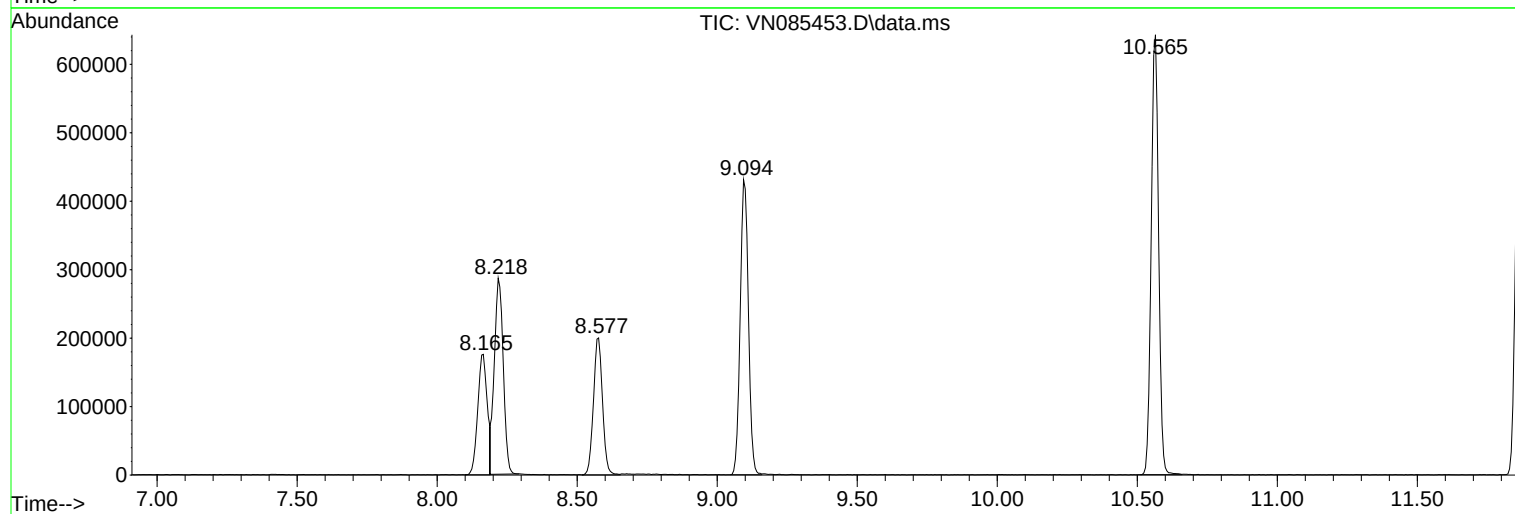
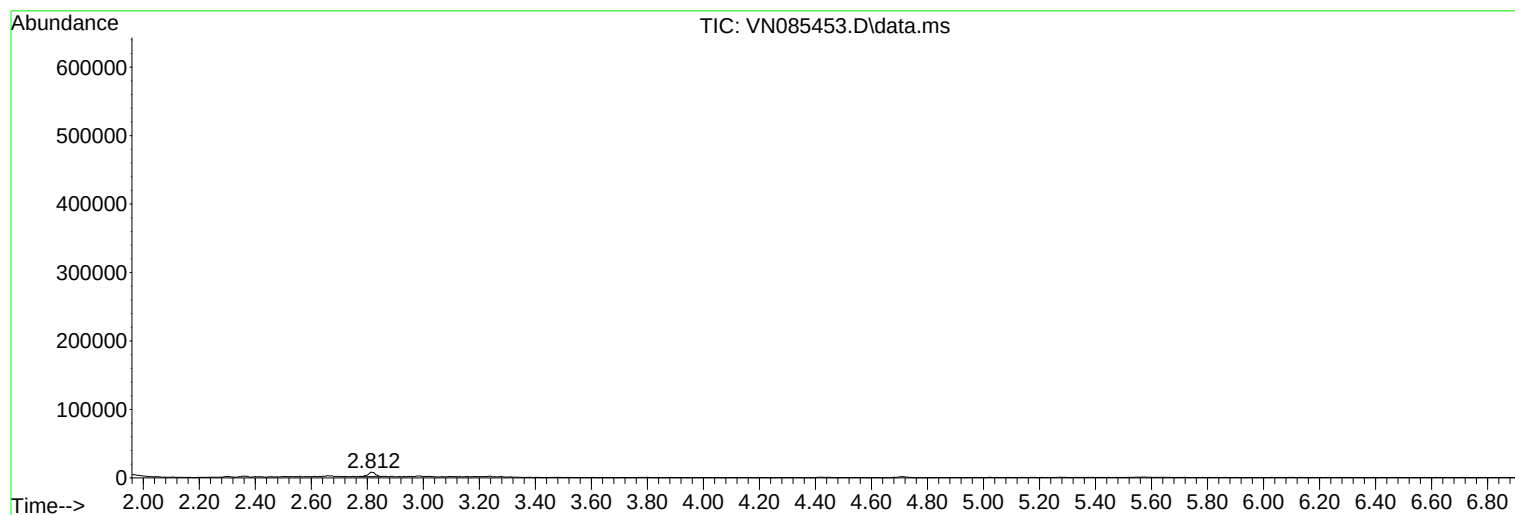
Sum of corrected areas: 6041028

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

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\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

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\VN011525\  
Data File : VN085453.D  
Acq On : 15 Jan 2025 11:50  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

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: | 01/07/25     |    |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |
| Client Sample ID:  | VPB190A-HYD-20250107          |        |      | SDG No.:        | Q1062        |    |
| Lab Sample ID:     | Q1062-02                      |        |      | 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 |
| VN085455.D        | 1         |           | 01/15/25 12:37 | VN011525      |

| 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: | 01/07/25     |    |  |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |  |
| Client Sample ID:  | VPB190A-HYD-20250107          |        |      | SDG No.:        | Q1062        |    |  |
| Lab Sample ID:     | Q1062-02                      |        |      | 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 |
| VN085455.D        | 1         |           | 01/15/25 12:37 | VN011525      |

| 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     | 53.2   |           | 81 - 118 |      | 106%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 51.4   |           | 80 - 119 |      | 103%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 49.2   |           | 89 - 112 |      | 98%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 47.1   |           | 85 - 114 |      | 94%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 184000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 332000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 293000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 116000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/07/25                     |
| Project:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  | 01/09/25                     |
| Client Sample ID:  | VPB190A-HYD-20250107                      | SDG No.:        | Q1062                        |
| Lab Sample ID:     | Q1062-02                                  | 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 |
| VN085455.D        | 1         |           | 01/15/25 12:37 | VN011525      |

| 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\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

Quant Time: Jan 16 00:56:42 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  | 183777   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 332391   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 293220   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 116419   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 157915   | 53.232   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 106.460% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 118493   | 51.385   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 102.780% |
| 50) Toluene-d8              | 10.565 | 98    | 403278   | 49.222   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 98.440%  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 131868   | 47.051   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 94.100%  |

| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

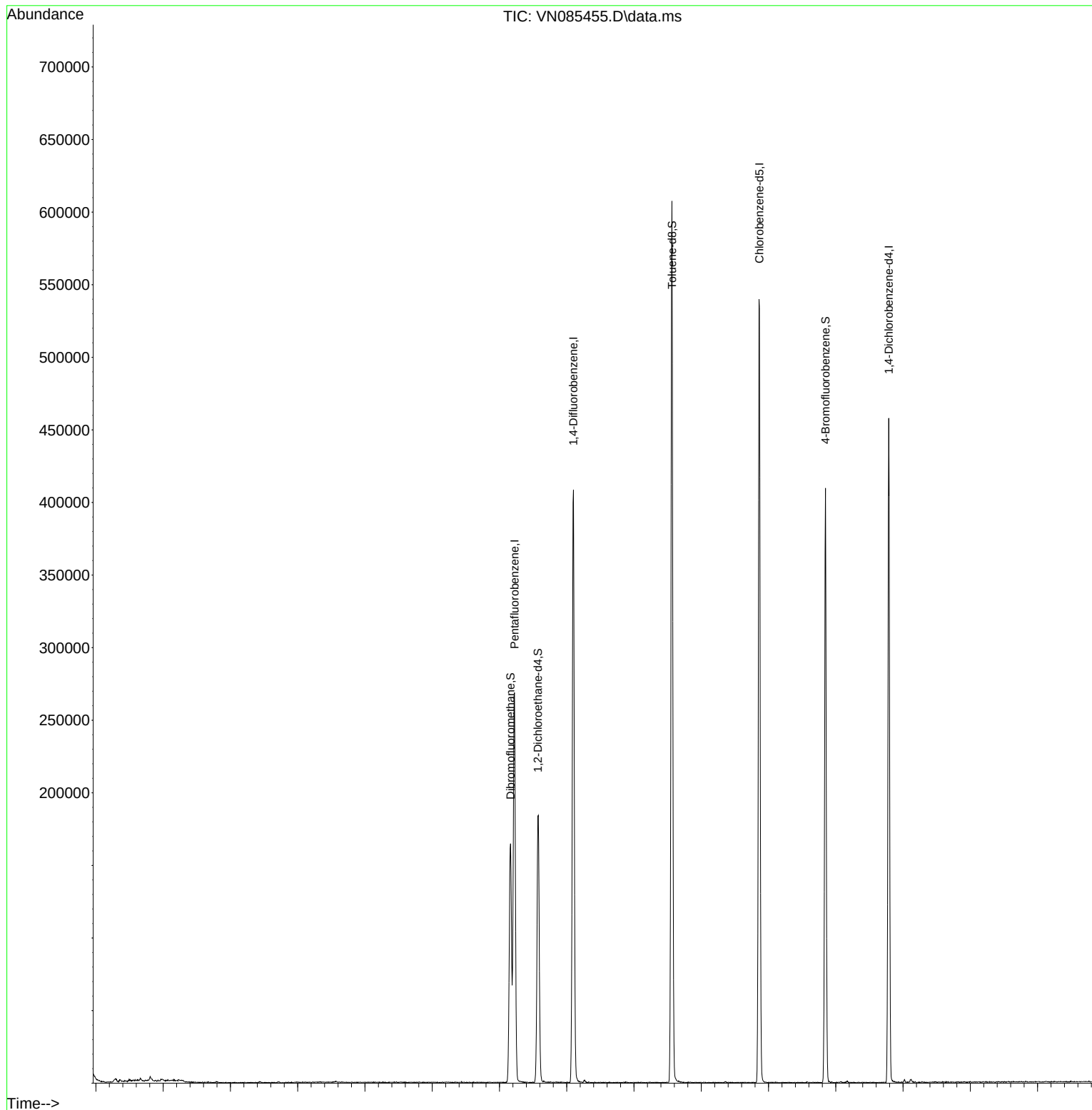
(#) = qualifier out of range (m) = manual integration (+) = signals summed

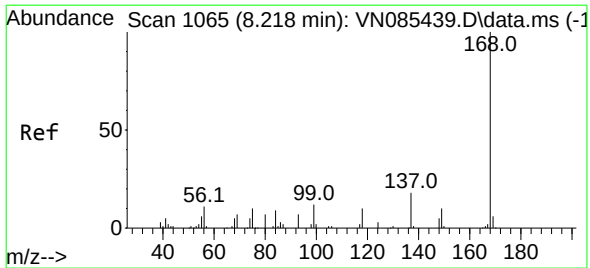


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

Quant Time: Jan 16 00:56:42 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

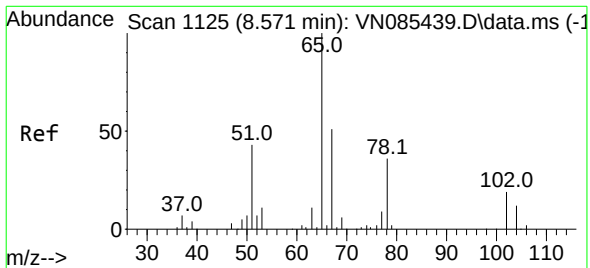
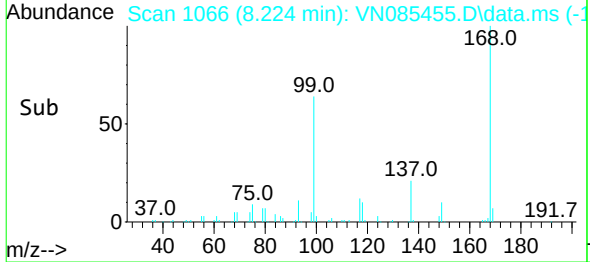
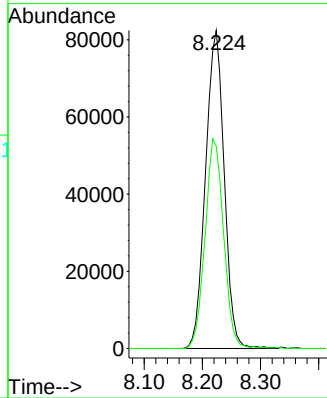
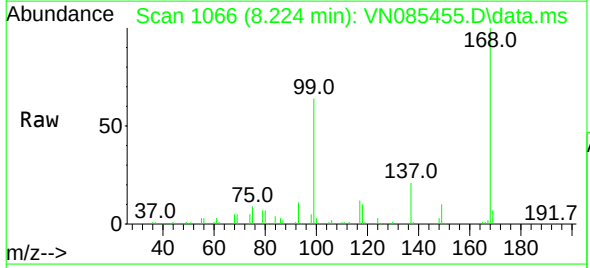




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085455.D  
Acq: 15 Jan 2025 12:37

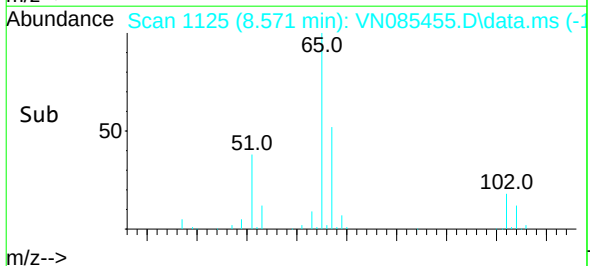
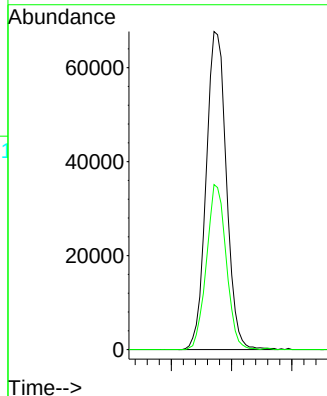
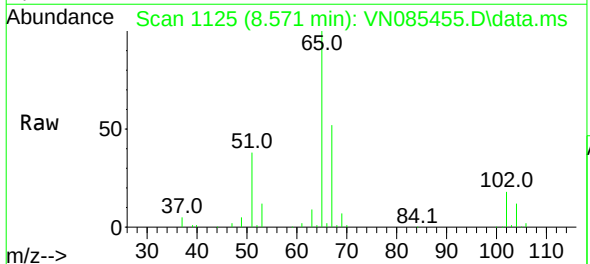
Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

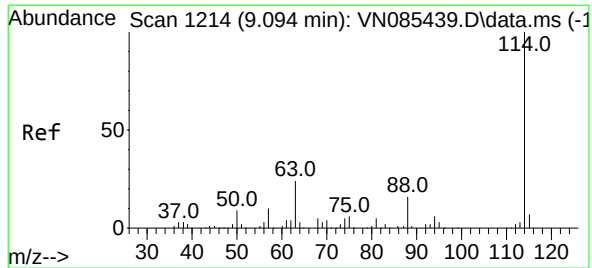
Tgt Ion:168 Resp: 183777  
Ion Ratio Lower Upper  
168 100  
99 63.6 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 53.232 ug/l  
RT: 8.571 min Scan# 1125  
Delta R.T. 0.000 min  
Lab File: VN085455.D  
Acq: 15 Jan 2025 12:37

Tgt Ion: 65 Resp: 157915  
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# 12

Delta R.T. 0.006 min

Lab File: VN085455.D

Acq: 15 Jan 2025 12:37

Instrument :

MSVOA\_N

ClientSampleId :

VPB190A-HYD-20250107

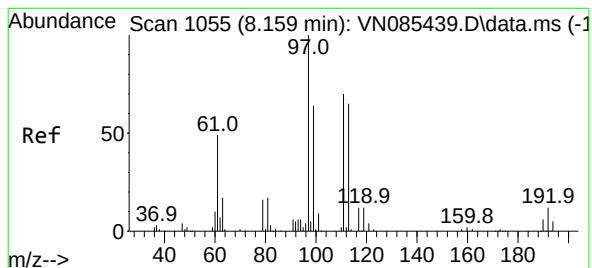
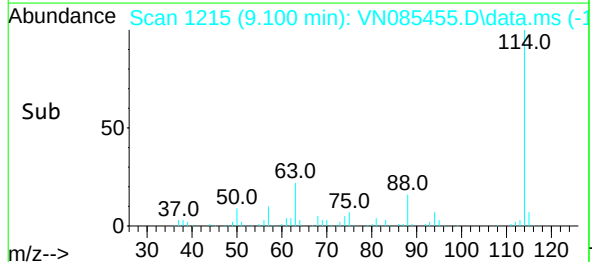
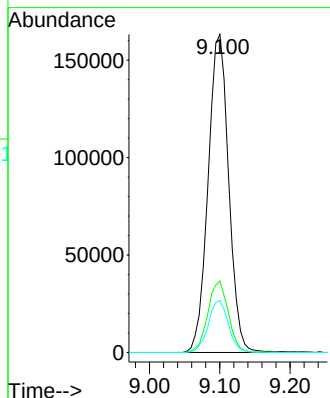
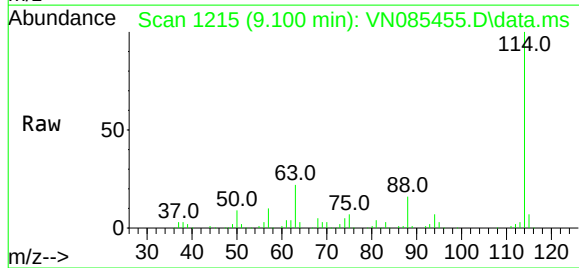
Tgt Ion:114 Resp: 332391

Ion Ratio Lower Upper

114 100

63 22.5 0.0 47.6

88 16.4 0.0 32.6



#35

Dibromofluoromethane

Concen: 51.385 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085455.D

Acq: 15 Jan 2025 12:37

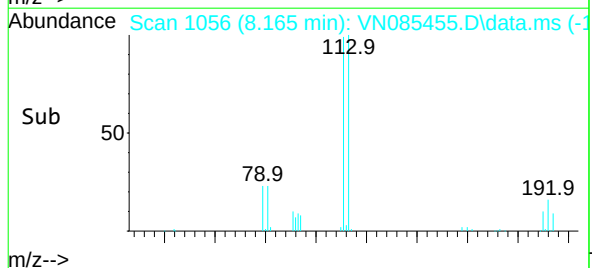
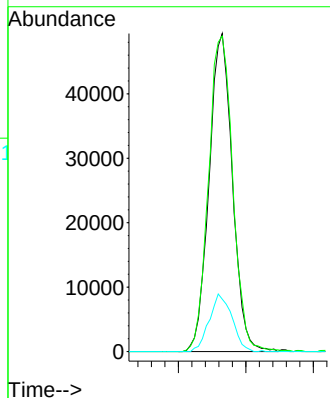
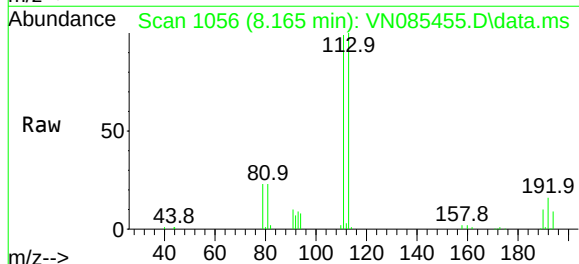
Tgt Ion:113 Resp: 118493

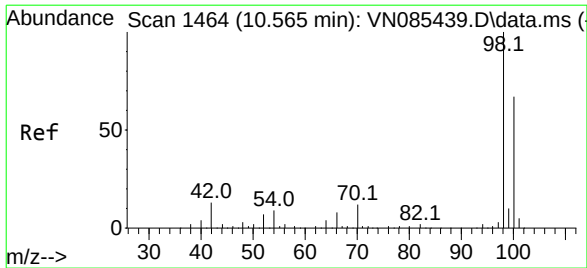
Ion Ratio Lower Upper

113 100

111 103.5 82.7 124.1

192 17.6 14.3 21.5





#50

Toluene-d8

Concen: 49.222 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085455.D

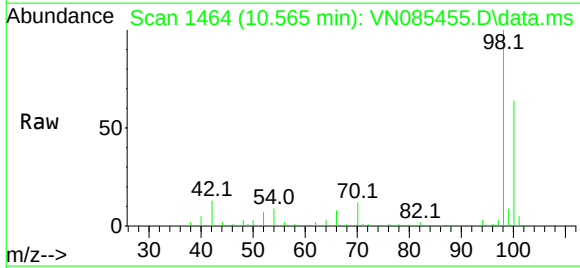
Acq: 15 Jan 2025 12:37

Instrument :

MSVOA\_N

ClientSampleId :

VPB190A-HYD-20250107

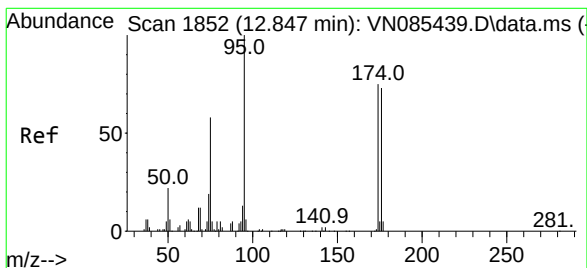
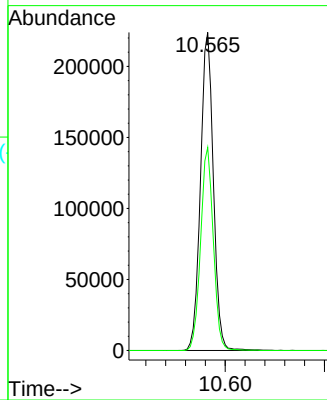
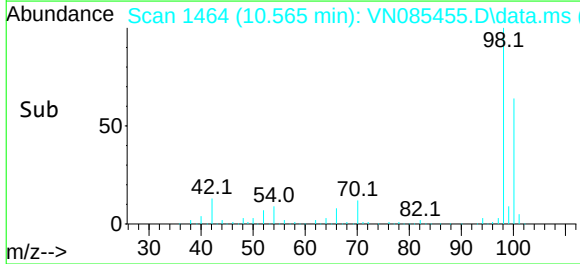


Tgt Ion: 98 Resp: 403278

Ion Ratio Lower Upper

98 100

100 63.1 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 47.051 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085455.D

Acq: 15 Jan 2025 12:37

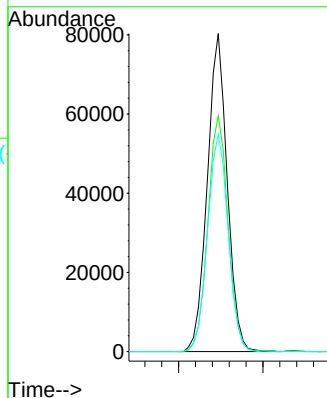
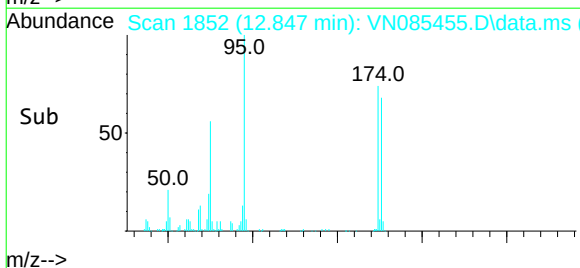
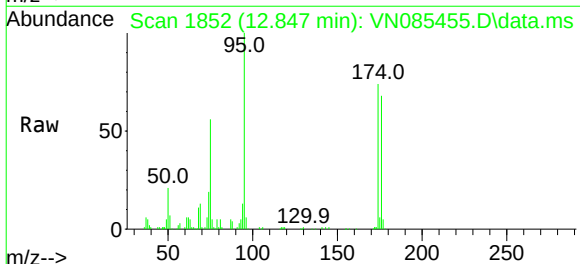
Tgt Ion: 95 Resp: 131868

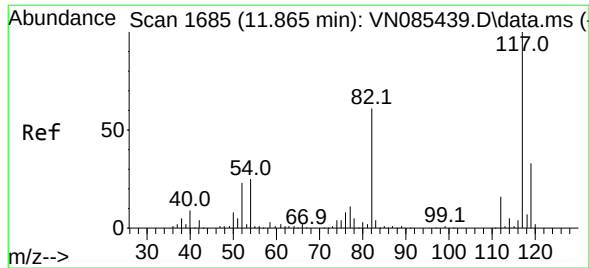
Ion Ratio Lower Upper

95 100

174 75.1 0.0 145.0

176 70.6 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: VN085455.D

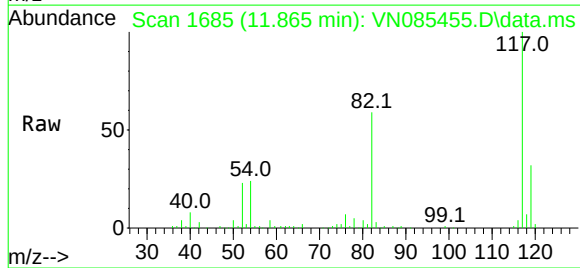
Acq: 15 Jan 2025 12:37

Instrument :

MSVOA\_N

ClientSampleId :

VPB190A-HYD-20250107



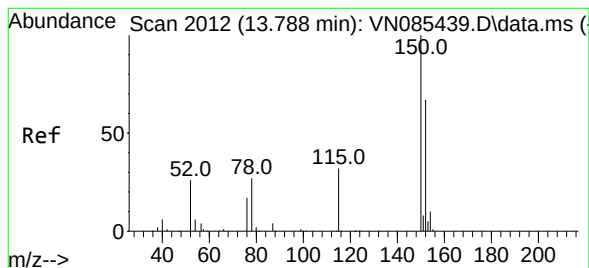
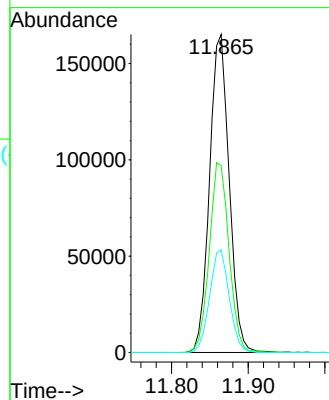
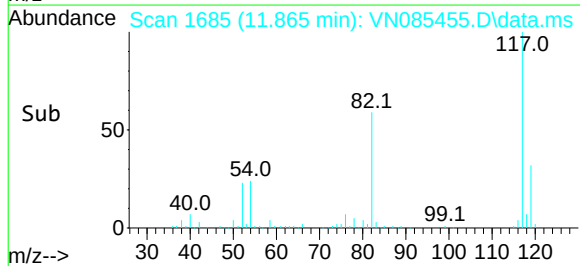
Tgt Ion:117 Resp: 293220

Ion Ratio Lower Upper

117 100

82 58.7 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# 2012

Delta R.T. 0.000 min

Lab File: VN085455.D

Acq: 15 Jan 2025 12:37

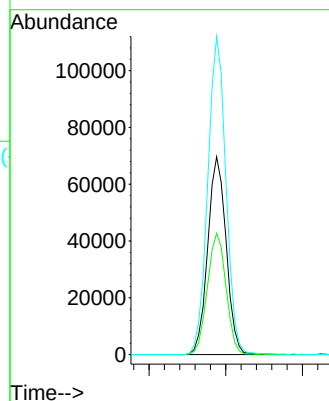
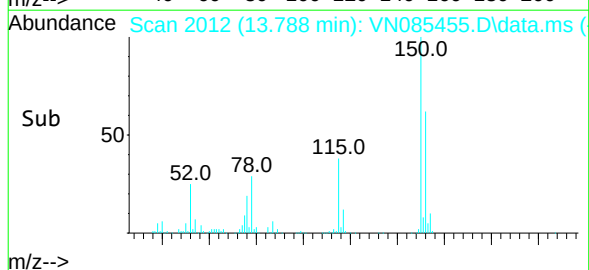
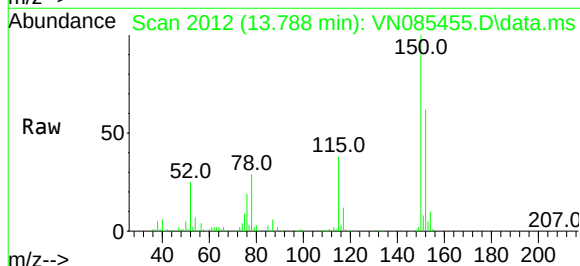
Tgt Ion:152 Resp: 116419

Ion Ratio Lower Upper

152 100

115 61.9 31.1 93.3

150 158.7 0.0 343.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

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: VN085455.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       | 1044          | 1056        | 1060         | rBV      | 164657         | 396665        | 36.23%          | 6.878%        |
| 2         | 8.224       | 1060          | 1066        | 1078         | rVB      | 267916         | 606613        | 55.41%          | 10.519%       |
| 3         | 8.577       | 1115          | 1126        | 1138         | rBV2     | 184168         | 427451        | 39.05%          | 7.412%        |
| 4         | 9.100       | 1205          | 1215        | 1229         | rBV      | 408227         | 833891        | 76.17%          | 14.460%       |
| 5         | 10.565      | 1455          | 1464        | 1480         | rBV      | 607078         | 1094727       | 100.00%         | 18.983%       |
| 6         | 11.859      | 1676          | 1684        | 1699         | rBV      | 539546         | 967457        | 88.37%          | 16.776%       |
| 7         | 12.847      | 1843          | 1852        | 1860         | rBV      | 409546         | 677593        | 61.90%          | 11.749%       |
| 8         | 13.788      | 2005          | 2012        | 2024         | rBV      | 457866         | 762624        | 69.66%          | 13.224%       |

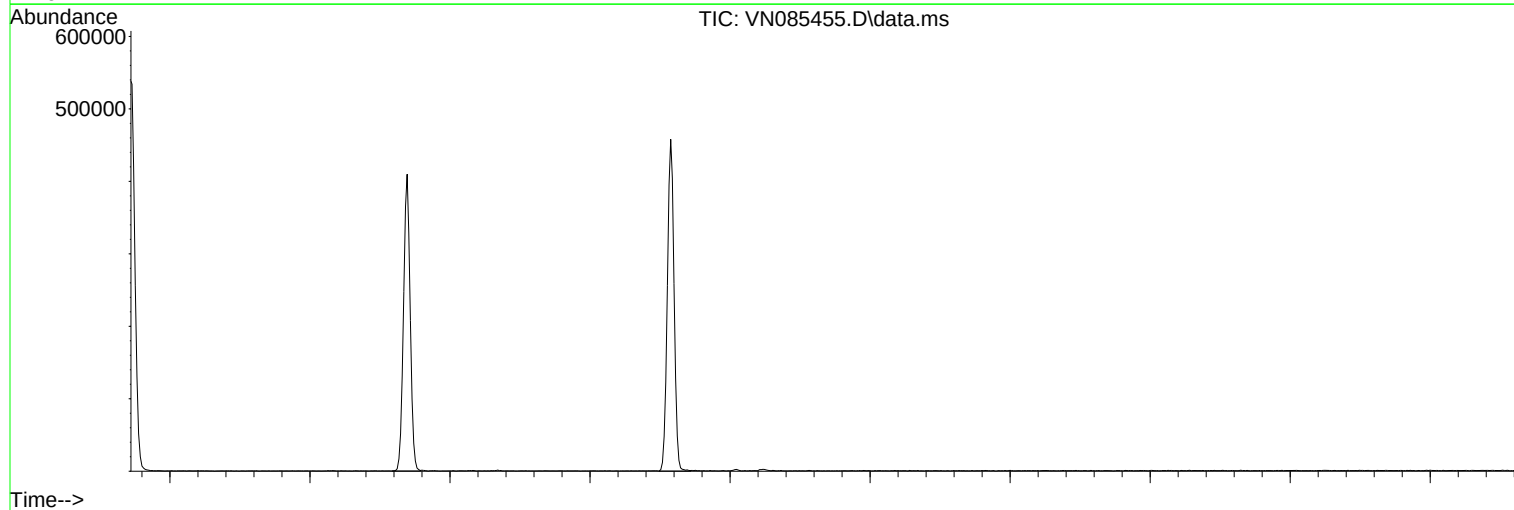
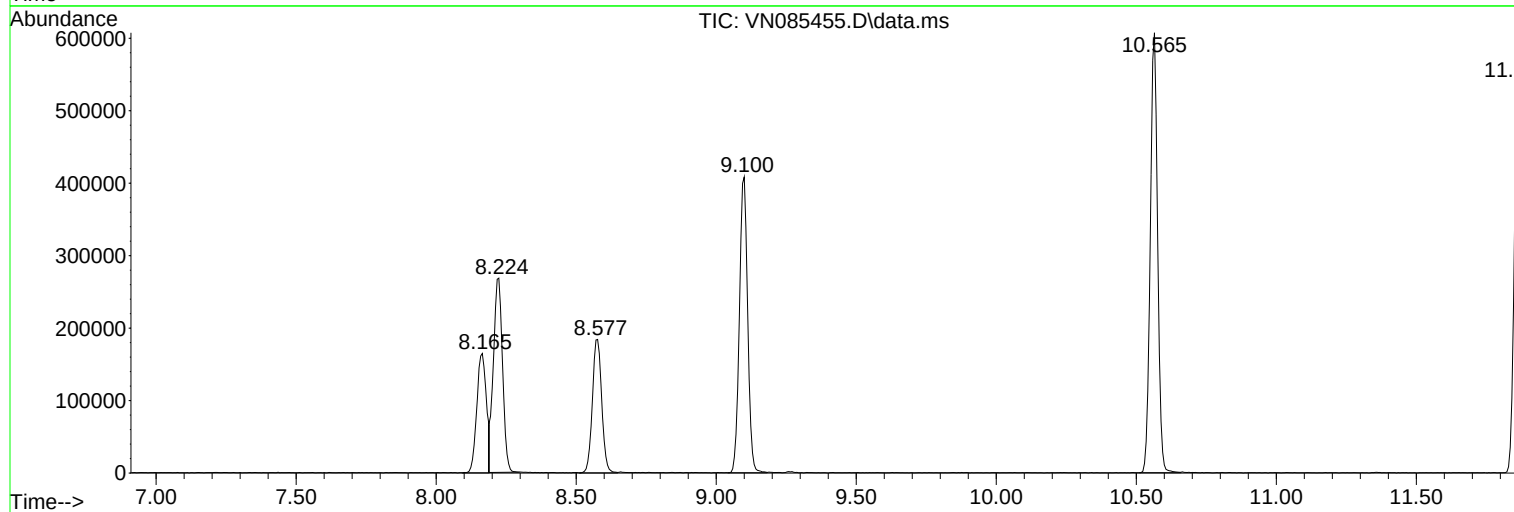
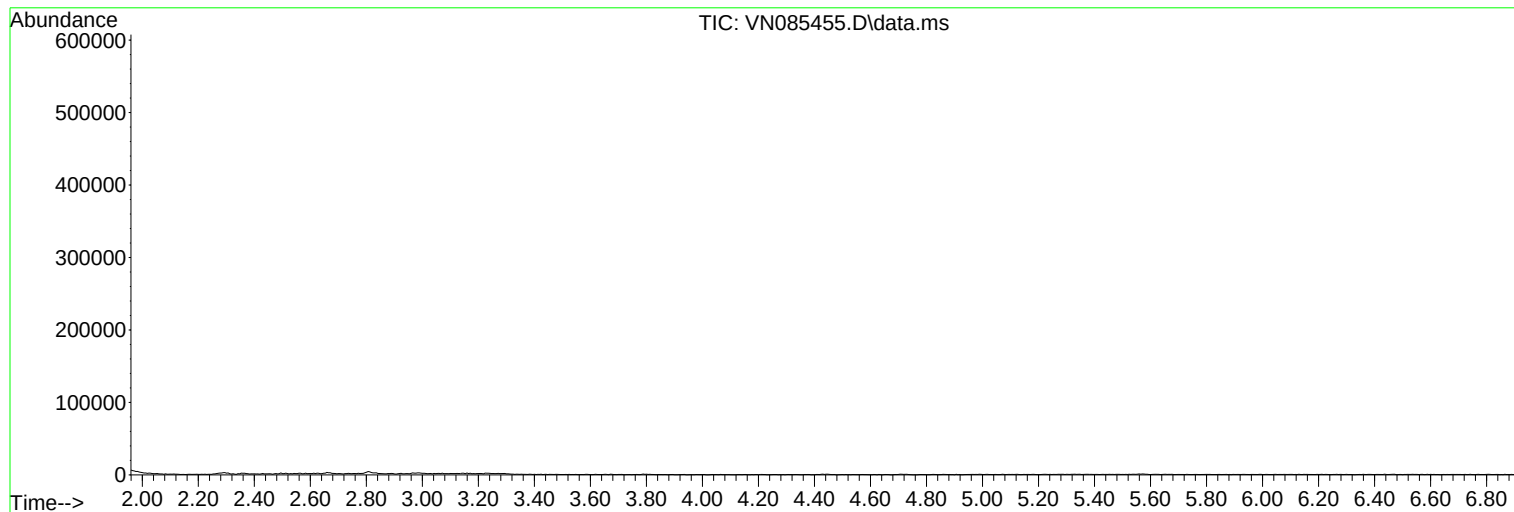
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Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

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\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

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\VN011525\  
Data File : VN085455.D  
Acq On : 15 Jan 2025 12:37  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

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: | 01/07/25     |    |  |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |  |
| Client Sample ID:  | BP-VPB-190A-EB-20250107       |        |      | SDG No.:        | Q1062        |    |  |
| Lab Sample ID:     | Q1062-03                      |        |      | 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 |
| VN085454.D        | 1         |           | 01/15/25 12:14 | VN011525      |

| 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: | 01/07/25     |    |  |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |  |
| Client Sample ID:  | BP-VPB-190A-EB-20250107       |        |      | SDG No.:        | Q1062        |    |  |
| Lab Sample ID:     | Q1062-03                      |        |      | 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 |
| VN085454.D        | 1         |           | 01/15/25 12:14 | VN011525      |

| 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     | 53.6   |           | 81 - 118 |      | 107%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 50.8   |           | 80 - 119 |      | 102%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 50.0   |           | 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        | 185000 | 8.224     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 337000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 298000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 118000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/07/25                     |
| Project:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  | 01/09/25                     |
| Client Sample ID:  | BP-VPB-190A-EB-20250107                   | SDG No.:        | Q1062                        |
| Lab Sample ID:     | Q1062-03                                  | 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 |
| VN085454.D        | 1         |           | 01/15/25 12:14 | VN011525      |

| 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\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

Quant Time: Jan 16 00:56:19 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

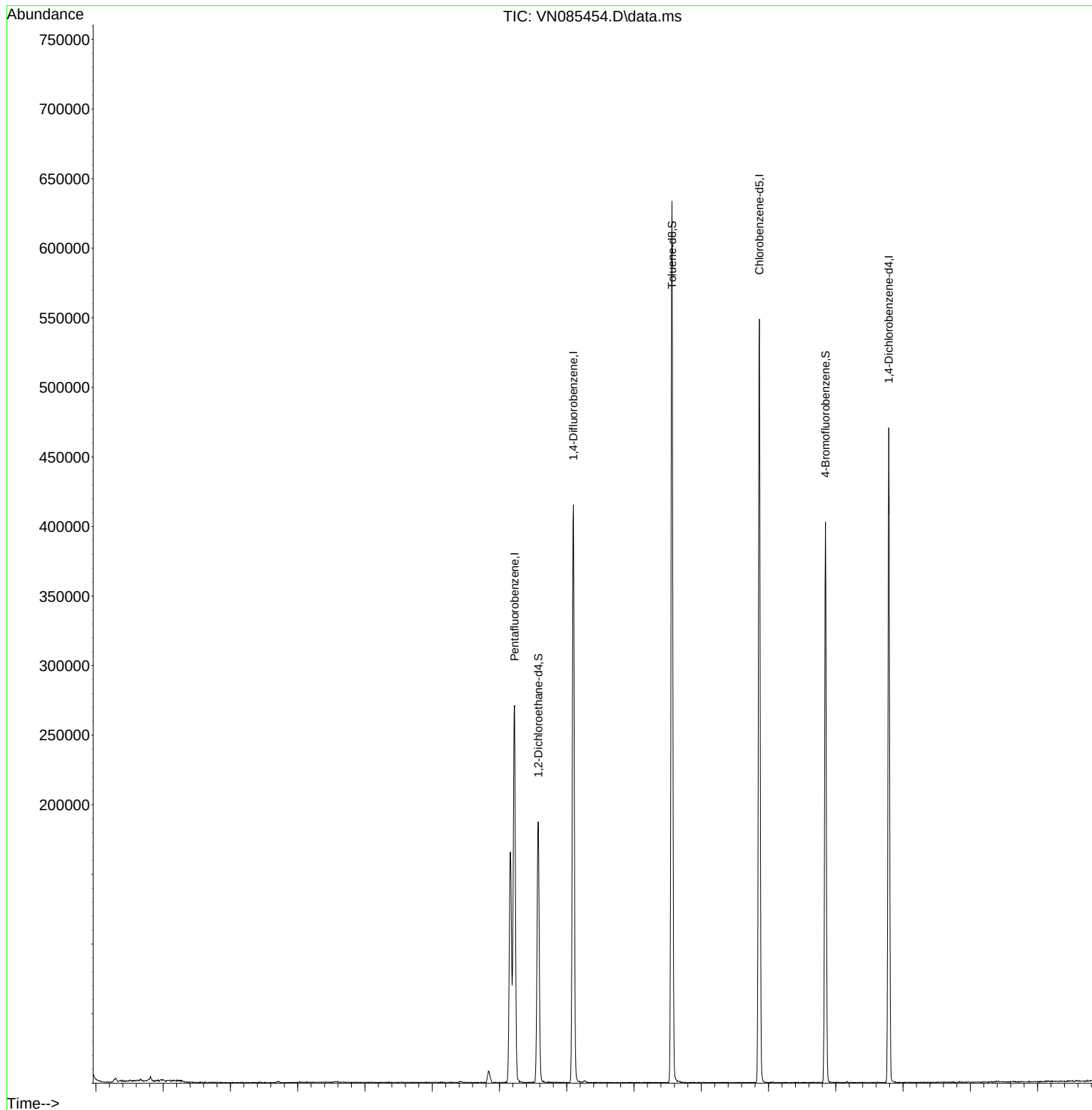
| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min)  |
|-----------------------------|--------|----------------|----------|--------|----------|-----------|
| -----                       |        |                |          |        |          |           |
| Internal Standards          |        |                |          |        |          |           |
| 1) Pentafluorobenzene       | 8.224  | 168            | 185335   | 50.000 | ug/l     | 0.00      |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 337105   | 50.000 | ug/l     | 0.00      |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 298295   | 50.000 | ug/l     | 0.00      |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 117680   | 50.000 | ug/l     | 0.00      |
| System Monitoring Compounds |        |                |          |        |          |           |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 160466   | 53.637 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 107.280% |           |
| 35) Dibromofluoromethane    | 8.159  | 113            | 118687   | 50.750 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 101.500% |           |
| 50) Toluene-d8              | 10.565 | 98             | 415115   | 49.958 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 99.920%  |           |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 132424   | 46.589 | ug/l     | 0.00      |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 93.180%  |           |
| Target Compounds            |        |                |          |        |          |           |
| 29) Tetrahydrofuran         | 7.835  | 42             | 5881     | 6.521  | ug/l     | Qvalue 97 |
| -----                       |        |                |          |        |          |           |

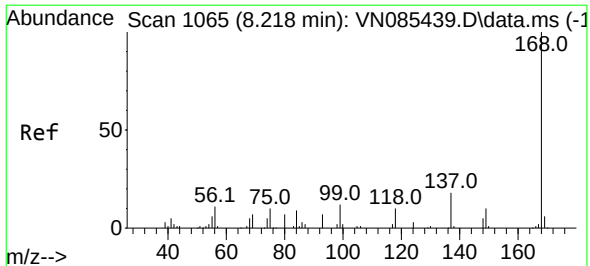
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

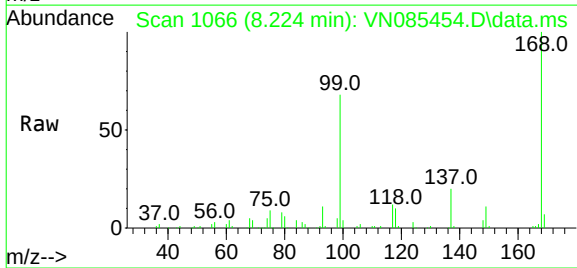
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



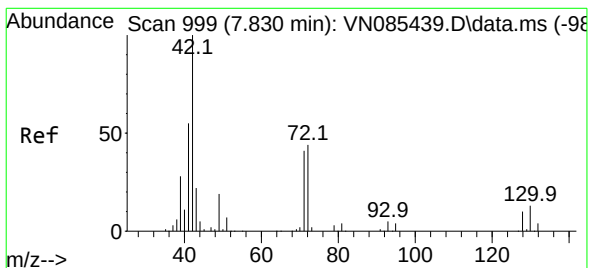
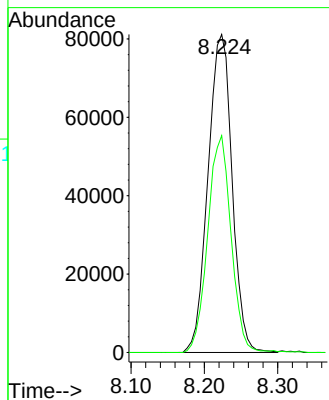
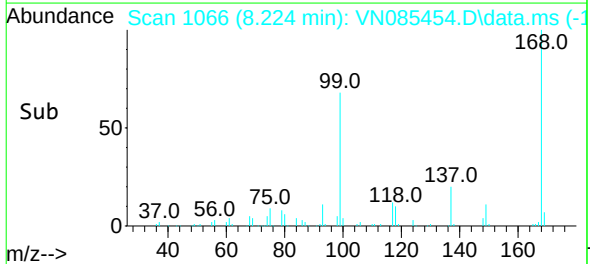


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085454.D  
Acq: 15 Jan 2025 12:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

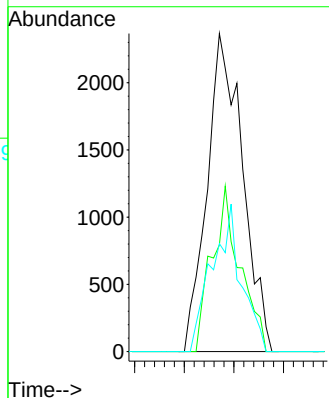
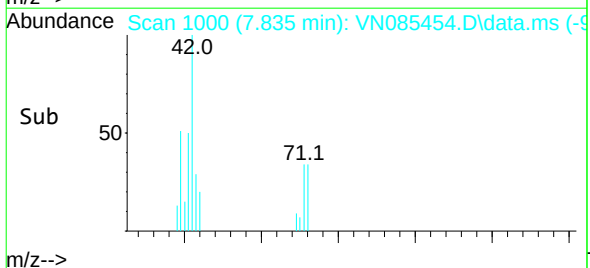
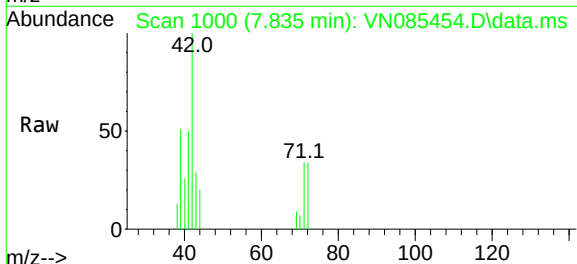


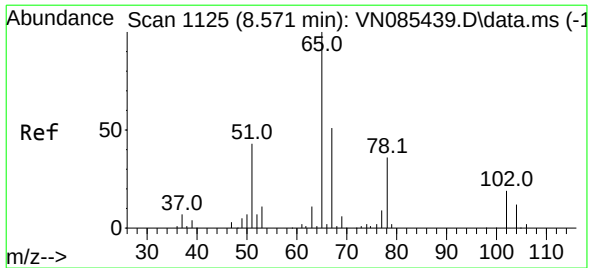
Tgt Ion:168 Resp: 185335  
Ion Ratio Lower Upper  
168 100  
99 68.2 53.6 80.4



#29  
Tetrahydrofuran  
Concen: 6.521 ug/l  
RT: 7.835 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085454.D  
Acq: 15 Jan 2025 12:14

Tgt Ion: 42 Resp: 5881  
Ion Ratio Lower Upper  
42 100  
72 41.1 34.2 51.2  
71 38.2 32.5 48.7

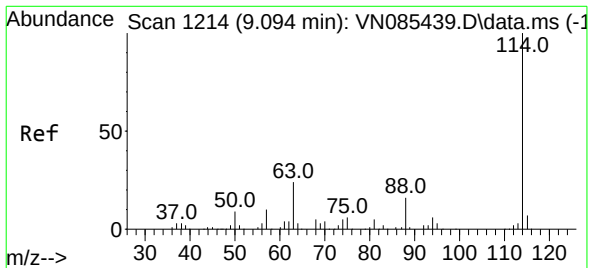
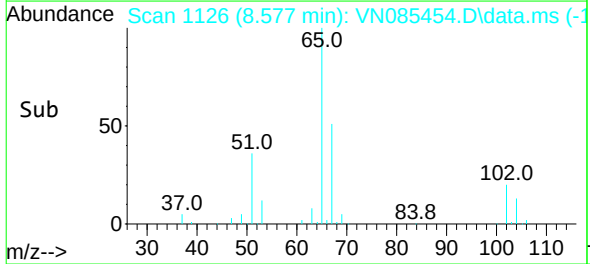
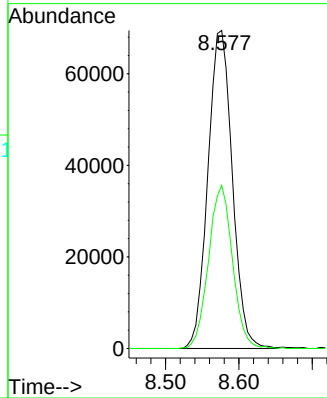
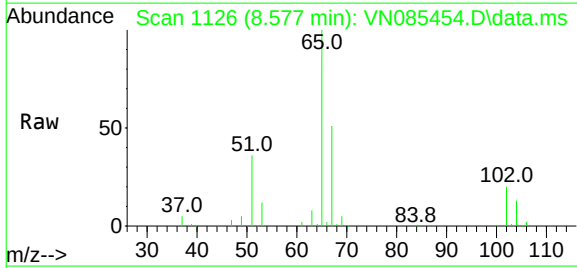




#33  
1,2-Dichloroethane-d4  
Concen: 53.637 ug/l  
RT: 8.577 min Scan# 111  
Delta R.T. 0.006 min  
Lab File: VN085454.D  
Acq: 15 Jan 2025 12:14

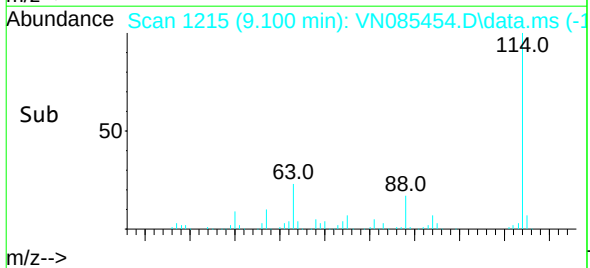
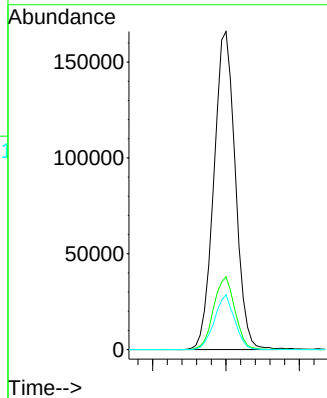
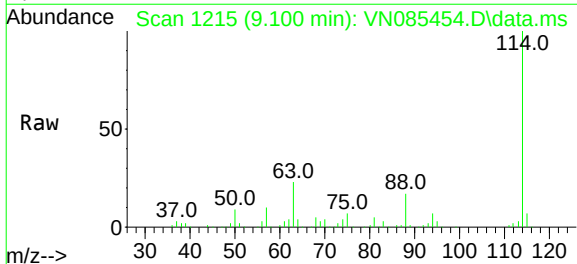
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

Tgt Ion: 65 Resp: 160466  
Ion Ratio Lower Upper  
65 100  
67 50.3 0.0 101.6

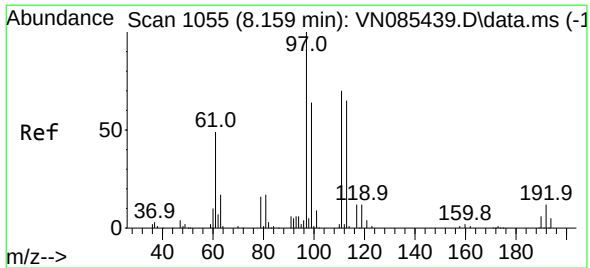


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085454.D  
Acq: 15 Jan 2025 12:14

Tgt Ion: 114 Resp: 337105  
Ion Ratio Lower Upper  
114 100  
63 22.9 0.0 47.6  
88 17.3 0.0 32.6







#35

Dibromofluoromethane

Concen: 50.750 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085454.D

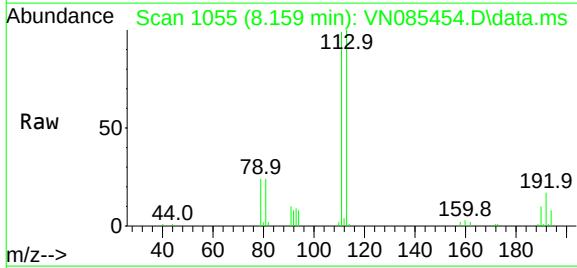
Acq: 15 Jan 2025 12:14

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-EB-20250107



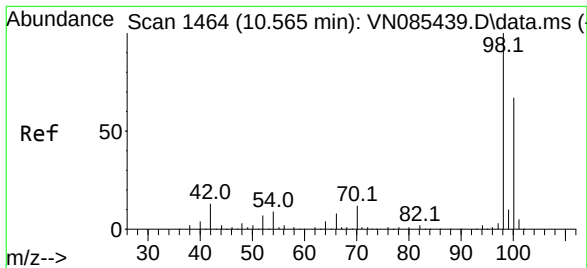
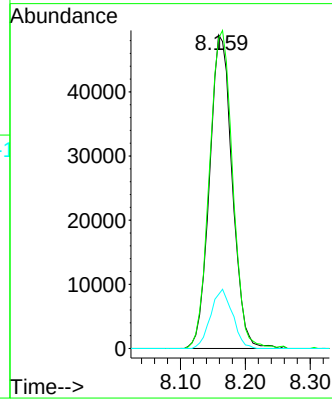
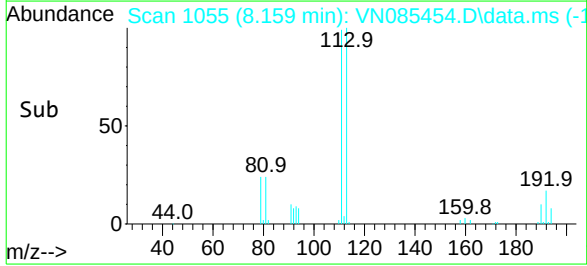
Tgt Ion: 113 Resp: 118687

Ion Ratio Lower Upper

113 100

111 103.8 82.7 124.1

192 18.2 14.3 21.5



#50

Toluene-d8

Concen: 49.958 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085454.D

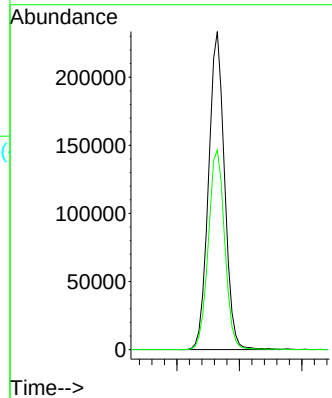
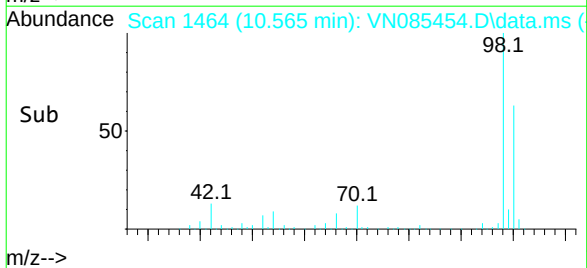
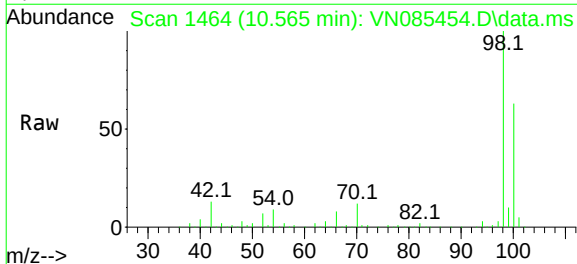
Acq: 15 Jan 2025 12:14

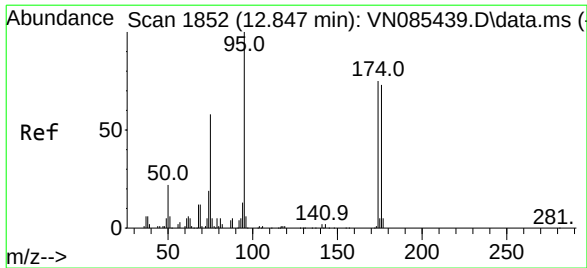
Tgt Ion: 98 Resp: 415115

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.4





#62

4-Bromofluorobenzene

Concen: 46.589 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085454.D

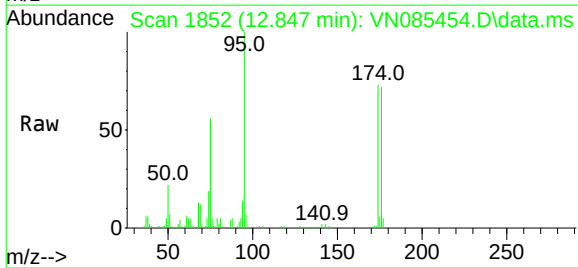
Acq: 15 Jan 2025 12:14

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-EB-20250107



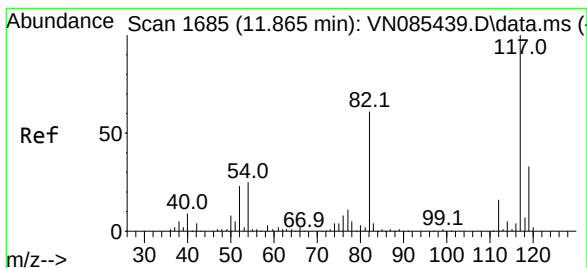
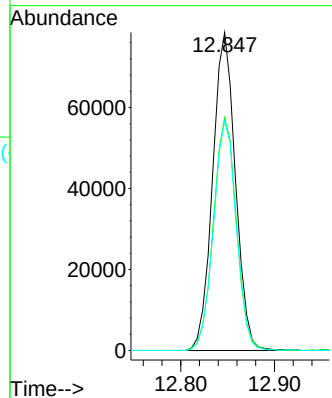
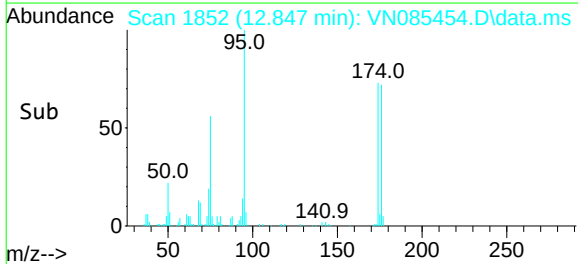
Tgt Ion: 95 Resp: 132424

Ion Ratio Lower Upper

95 100

174 74.1 0.0 145.0

176 72.4 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: VN085454.D

Acq: 15 Jan 2025 12:14

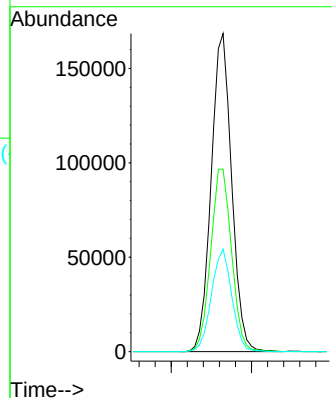
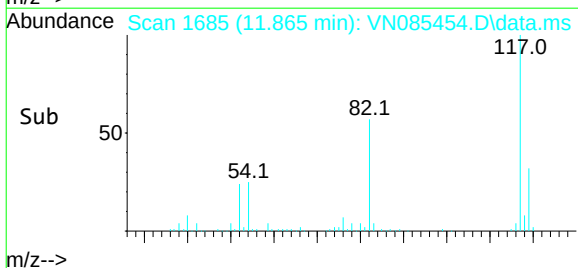
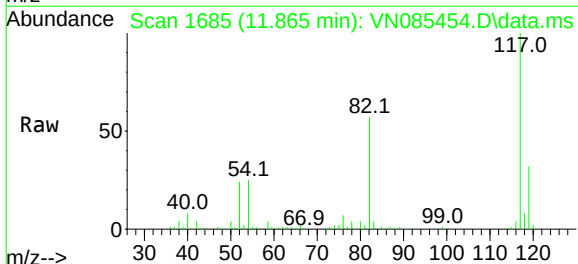
Tgt Ion: 117 Resp: 298295

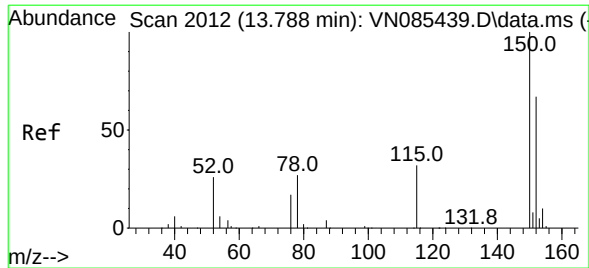
Ion Ratio Lower Upper

117 100

82 57.4 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: VN085454.D

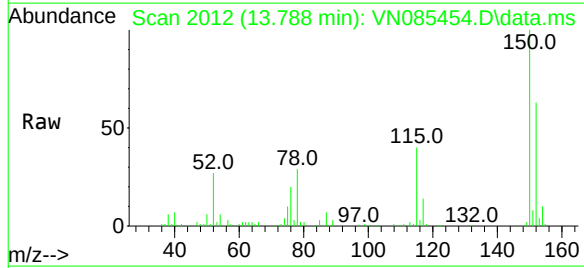
Acq: 15 Jan 2025 12:14

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-EB-20250107



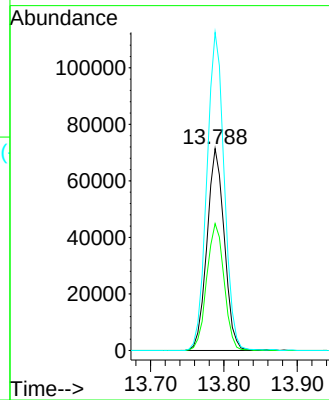
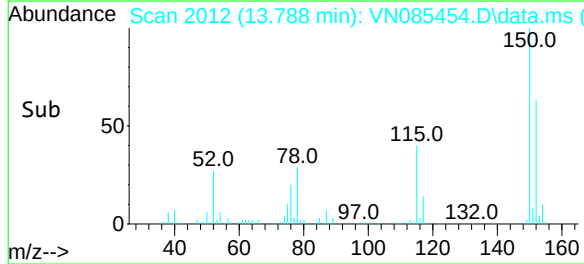
Tgt Ion:152 Resp: 117680

Ion Ratio Lower Upper

152 100

115 62.7 31.1 93.3

150 157.4 0.0 343.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

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: VN085454.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         | 7.835       | 992           | 1000        | 1011         | rBV4     | 8508           | 22583         | 1.98%           | 0.385%        |
| 2         | 8.159       | 1046          | 1055        | 1060         | rBV      | 165500         | 398963        | 35.07%          | 6.797%        |
| 3         | 8.224       | 1060          | 1066        | 1079         | rVB      | 270836         | 614082        | 53.98%          | 10.462%       |
| 4         | 8.577       | 1116          | 1126        | 1139         | rBV      | 187250         | 425831        | 37.43%          | 7.255%        |
| 5         | 9.100       | 1204          | 1215        | 1230         | rBV      | 415156         | 845739        | 74.34%          | 14.409%       |
| 6         | 10.565      | 1455          | 1464        | 1477         | rBV      | 633282         | 1137700       | 100.00%         | 19.383%       |
| 7         | 11.865      | 1676          | 1685        | 1698         | rBV      | 549003         | 977351        | 85.91%          | 16.651%       |
| 8         | 12.847      | 1845          | 1852        | 1862         | rBV      | 402935         | 679332        | 59.71%          | 11.574%       |
| 9         | 13.788      | 2005          | 2012        | 2028         | rBV      | 470615         | 768078        | 67.51%          | 13.086%       |

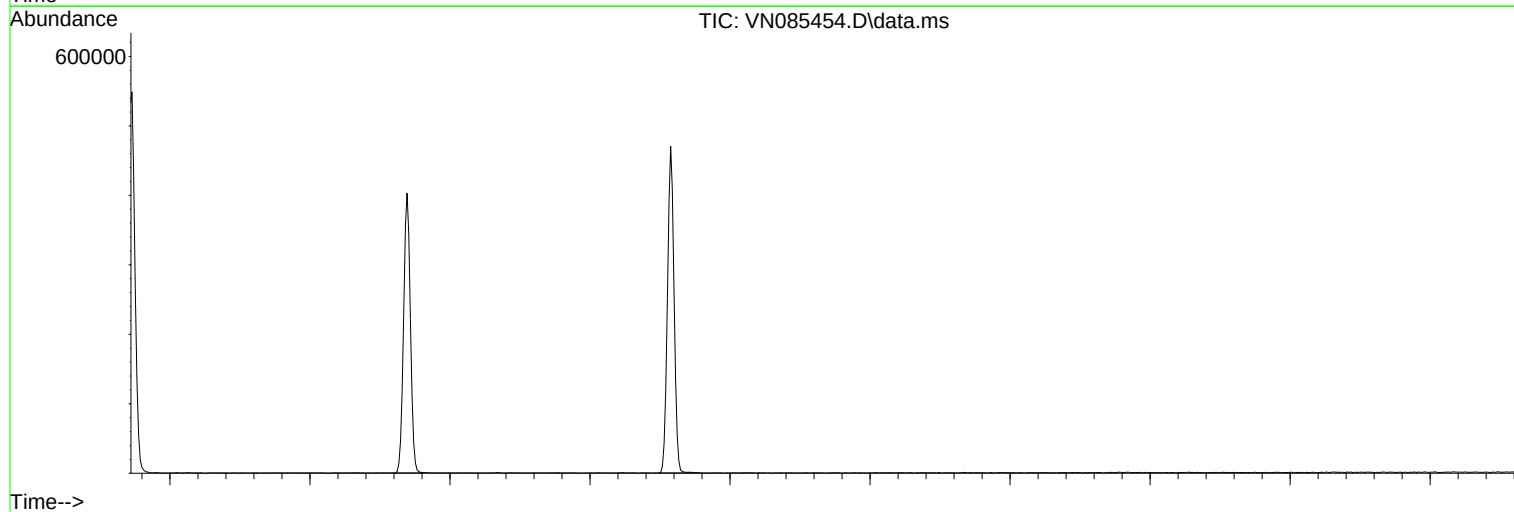
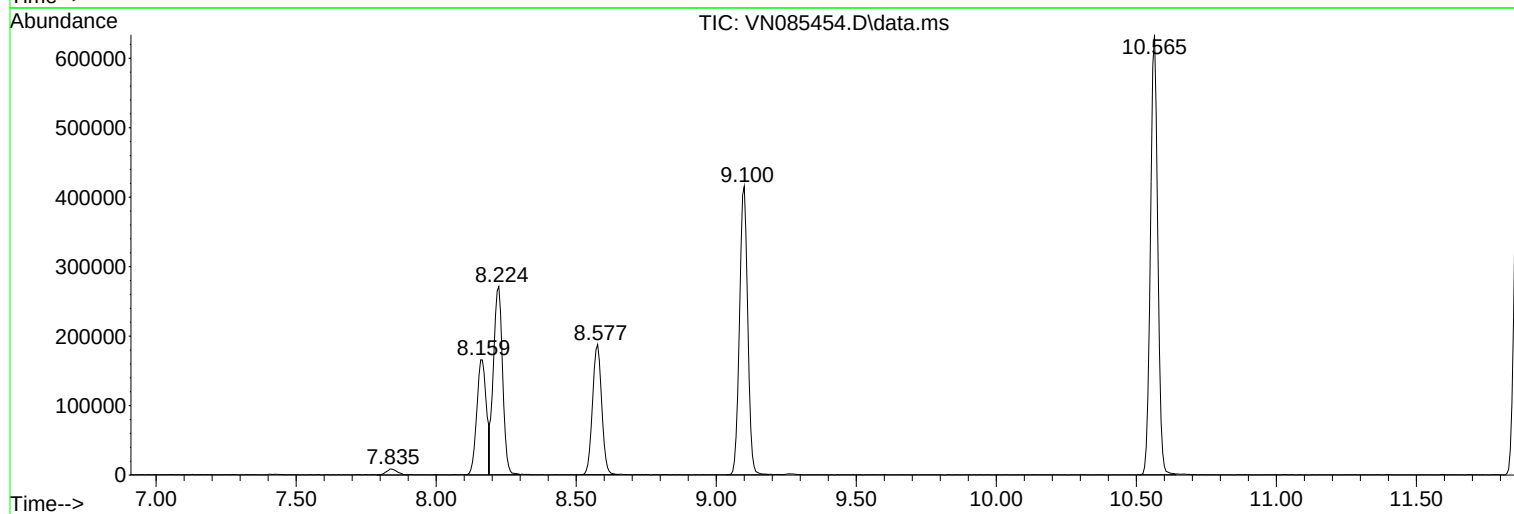
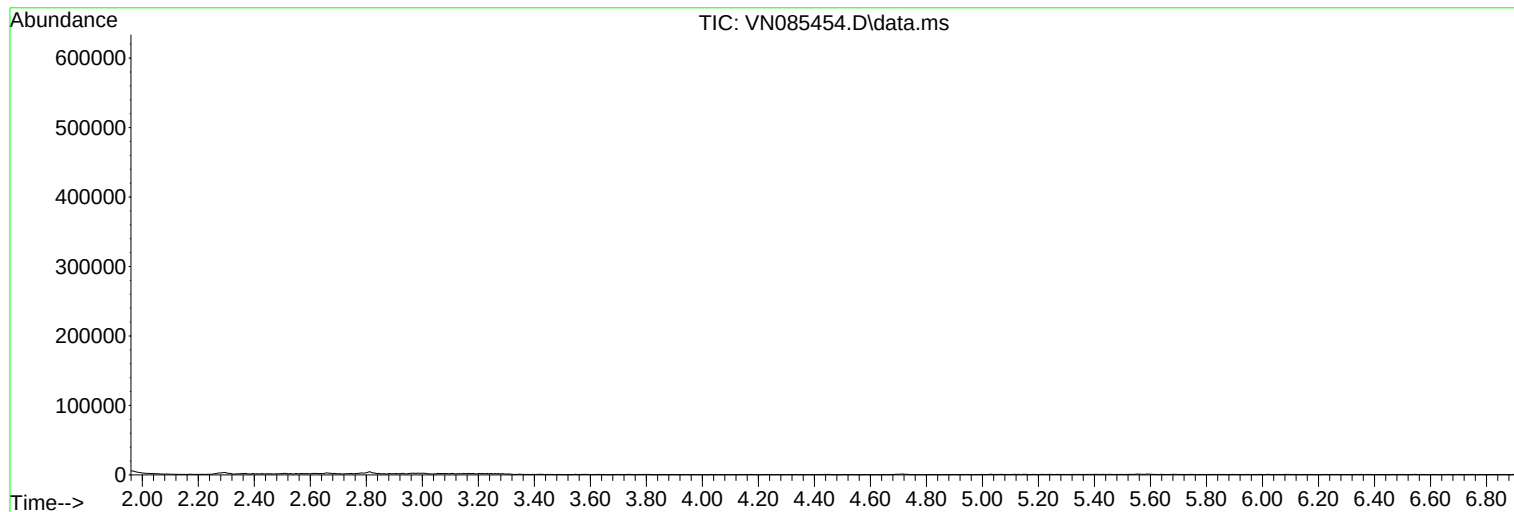
Sum of corrected areas: 5869659

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

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\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

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\VN011525\  
Data File : VN085454.D  
Acq On : 15 Jan 2025 12:14  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

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: | 01/07/25     |    |  |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  | 01/09/25     |    |  |
| Client Sample ID:  | BP-VPB-190A-GW-898-900        |        |      | SDG No.:        | Q1062        |    |  |
| Lab Sample ID:     | Q1062-04                      |        |      | 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 |
| VN085452.D        | 10        |           | 01/15/25 11:26 | VN011525      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 5.00  | U         | 3.50 | 5.00 | 10.0       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 7.50  | U         | 3.40 | 7.50 | 10.0       | ug/L  |
| 74-83-9        | Bromomethane                   | 37.5  | U         | 13.6 | 37.5 | 50.0       | ug/L  |
| 75-00-3        | Chloroethane                   | 7.50  | U         | 5.60 | 7.50 | 10.0       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 5.00  | U         | 3.40 | 5.00 | 10.0       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 5.00  | U         | 2.50 | 5.00 | 10.0       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 7.50  | U         | 2.60 | 7.50 | 10.0       | ug/L  |
| 67-64-1        | Acetone                        | 37.5  | U         | 13.9 | 37.5 | 50.0       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 7.50  | U         | 3.20 | 7.50 | 10.0       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 5.00  | U         | 1.60 | 5.00 | 10.0       | ug/L  |
| 75-09-2        | Methylene Chloride             | 5.00  | U         | 3.20 | 5.00 | 10.0       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 5.00  | U         | 2.50 | 5.00 | 10.0       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 5.00  | U         | 2.30 | 5.00 | 10.0       | ug/L  |
| 78-93-3        | 2-Butanone                     | 25.0  | U         | 13.0 | 25.0 | 50.0       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 5.00  | U         | 2.50 | 5.00 | 10.0       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 7.50  | U         | 2.50 | 7.50 | 10.0       | ug/L  |
| 67-66-3        | Chloroform                     | 5.00  | U         | 2.60 | 5.00 | 10.0       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 5.00  | U         | 1.90 | 5.00 | 10.0       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 5.00  | U         | 1.90 | 5.00 | 10.0       | ug/L  |
| 71-43-2        | Benzene                        | 5.00  | U         | 1.60 | 5.00 | 10.0       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 5.00  | U         | 2.40 | 5.00 | 10.0       | ug/L  |
| 79-01-6        | Trichloroethene                | 7.50  | U         | 3.20 | 7.50 | 10.0       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 5.00  | U         | 1.90 | 5.00 | 10.0       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 5.00  | U         | 2.40 | 5.00 | 10.0       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 25.0  | U         | 7.50 | 25.0 | 50.0       | ug/L  |
| 108-88-3       | Toluene                        | 5.00  | U         | 1.80 | 5.00 | 10.0       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 5.00  | U         | 2.10 | 5.00 | 10.0       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 5.00  | U         | 1.80 | 5.00 | 10.0       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 5.00  | U         | 2.10 | 5.00 | 10.0       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 25.0  | U         | 11.3 | 25.0 | 50.0       | ug/L  |



## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/07/25                     |
| Project:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  | 01/09/25                     |
| Client Sample ID:  | BP-VPB-190A-GW-898-900                    | SDG No.:        | Q1062                        |
| Lab Sample ID:     | Q1062-04                                  | 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 |
| VN085452.D        | 10        |           | 01/15/25 11:26 | VN011525      |

| CAS Number                            | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                              | Dibromochloromethane      | 5.00   | U         | 1.80     | 5.00 | 10.0       | ug/L    |
| 127-18-4                              | Tetrachloroethene         | 5.00   | U         | 2.50     | 5.00 | 10.0       | ug/L    |
| 108-90-7                              | Chlorobenzene             | 5.00   | U         | 1.30     | 5.00 | 10.0       | ug/L    |
| 100-41-4                              | Ethyl Benzene             | 5.00   | U         | 1.60     | 5.00 | 10.0       | ug/L    |
| 179601-23-1                           | m/p-Xylenes               | 10.0   | U         | 3.10     | 10.0 | 20.0       | ug/L    |
| 95-47-6                               | o-Xylene                  | 5.00   | U         | 1.40     | 5.00 | 10.0       | ug/L    |
| 100-42-5                              | Styrene                   | 5.00   | U         | 1.60     | 5.00 | 10.0       | ug/L    |
| 75-25-2                               | Bromoform                 | 5.00   | U         | 2.10     | 5.00 | 10.0       | ug/L    |
| 98-82-8                               | Isopropylbenzene          | 5.00   | U         | 1.30     | 5.00 | 10.0       | ug/L    |
| 79-34-5                               | 1,1,2,2-Tetrachloroethane | 5.00   | U         | 2.70     | 5.00 | 10.0       | ug/L    |
| 541-73-1                              | 1,3-Dichlorobenzene       | 5.00   | U         | 2.40     | 5.00 | 10.0       | ug/L    |
| 106-46-7                              | 1,4-Dichlorobenzene       | 5.00   | U         | 2.70     | 5.00 | 10.0       | ug/L    |
| 95-50-1                               | 1,2-Dichlorobenzene       | 5.00   | U         | 1.90     | 5.00 | 10.0       | ug/L    |
| <b>SURROGATES</b>                     |                           |        |           |          |      |            |         |
| 17060-07-0                            | 1,2-Dichloroethane-d4     | 52.8   |           | 81 - 118 |      | 106%       | SPK: 50 |
| 1868-53-7                             | Dibromofluoromethane      | 52.0   |           | 80 - 119 |      | 104%       | SPK: 50 |
| 2037-26-5                             | Toluene-d8                | 49.3   |           | 89 - 112 |      | 99%        | SPK: 50 |
| 460-00-4                              | 4-Bromofluorobenzene      | 46.3   |           | 85 - 114 |      | 93%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b>             |                           |        |           |          |      |            |         |
| 363-72-4                              | Pentafluorobenzene        | 175000 | 8.218     |          |      |            |         |
| 540-36-3                              | 1,4-Difluorobenzene       | 316000 | 9.1       |          |      |            |         |
| 3114-55-4                             | Chlorobenzene-d5          | 274000 | 11.865    |          |      |            |         |
| 3855-82-1                             | 1,4-Dichlorobenzene-d4    | 108000 | 13.788    |          |      |            |         |
| <b>TENTATIVE IDENTIFIED COMPOUNDS</b> |                           |        |           |          |      |            |         |
| 75-43-4                               | Dichlorofluoromethane     | N.D    |           |          |      |            |         |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Tetra Tech NUS, Inc.                      | Date Collected: | 01/07/25                     |
| Project:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  | 01/09/25                     |
| Client Sample ID:  | BP-VPB-190A-GW-898-900                    | SDG No.:        | Q1062                        |
| Lab Sample ID:     | Q1062-04                                  | 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 |
| VN085452.D        | 10        |           | 01/15/25 11:26 | VN011525      |

| 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\VN011525\  
 Data File : VN085452.D  
 Acq On : 15 Jan 2025 11:26  
 Operator : JC\MD  
 Sample : Q1062-04 10X  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-GW-898-900

Quant Time: Jan 16 00:55:29 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   | 175474   | 50.000   | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114   | 316452   | 50.000   | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117   | 274227   | 50.000   | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152   | 107831   | 50.000   | ug/l  | 0.00     |
| System Monitoring Compounds |        |       |          |          |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 149471   | 52.770   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =     | 105.540% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 114177   | 52.007   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =     | 104.020% |
| 50) Toluene-d8              | 10.565 | 98    | 384211   | 49.257   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =     | 98.520%  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 123439   | 46.262   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =     | 92.520%  |

Target Compounds Qvalue

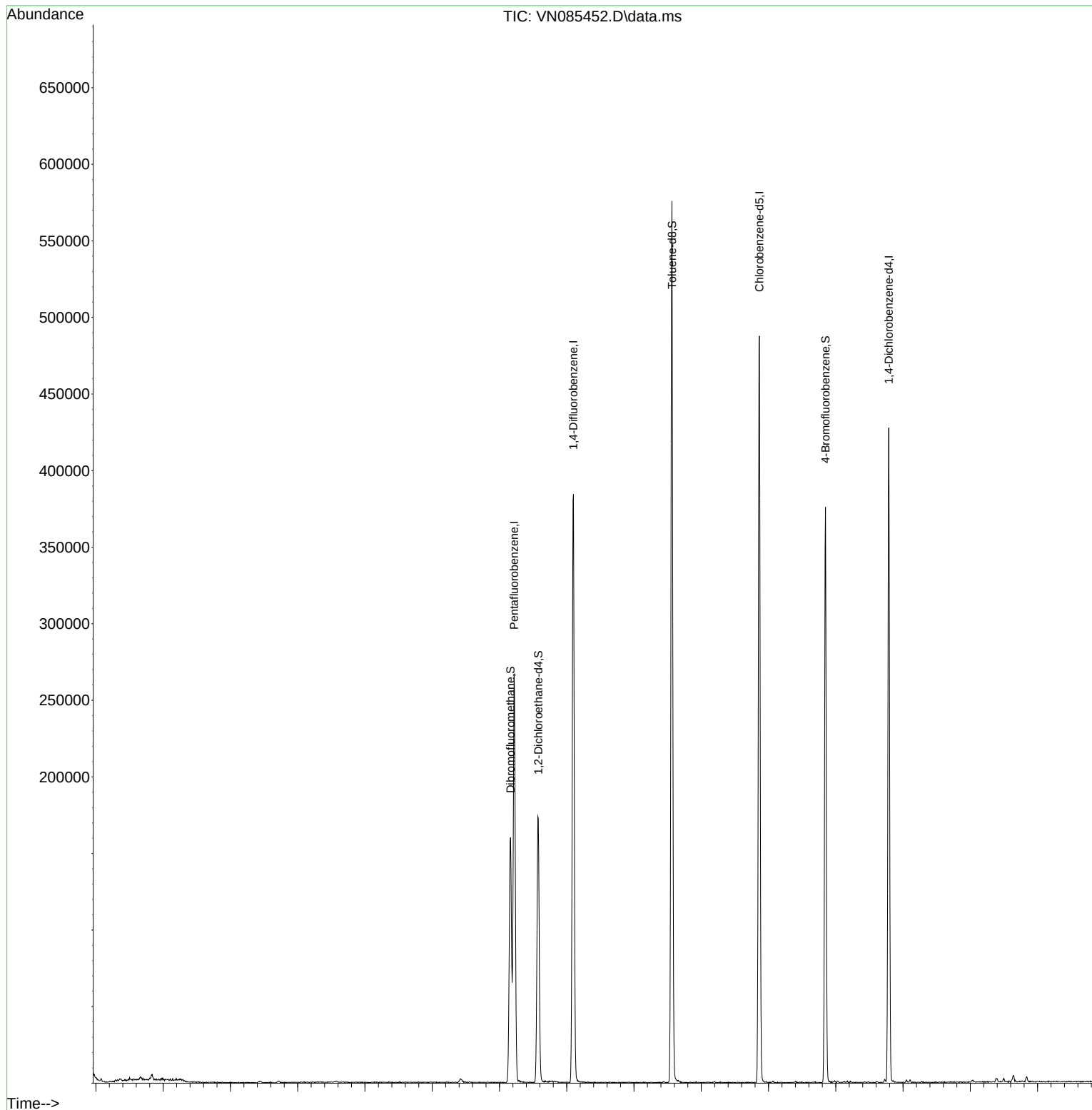
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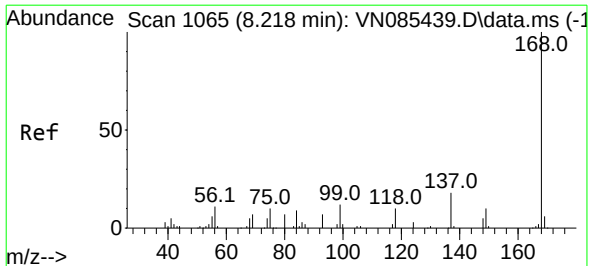
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085452.D  
Acq On : 15 Jan 2025 11:26  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

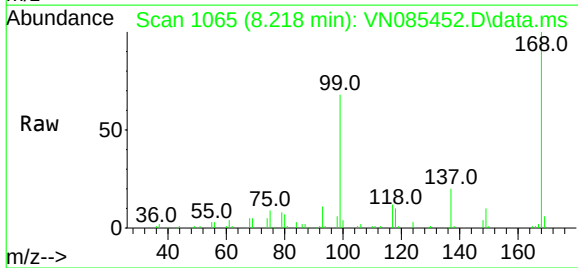
Quant Time: Jan 16 00:55:29 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



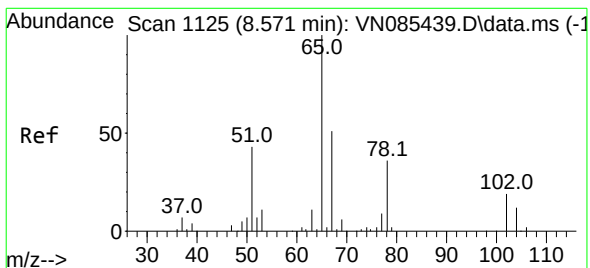
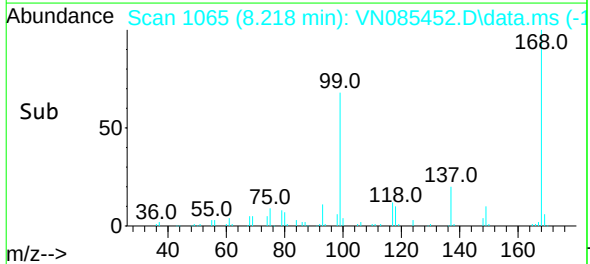
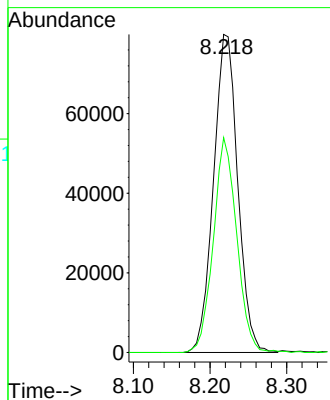


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085452.D  
Acq: 15 Jan 2025 11:26

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

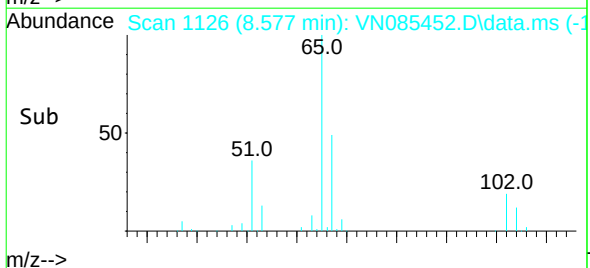
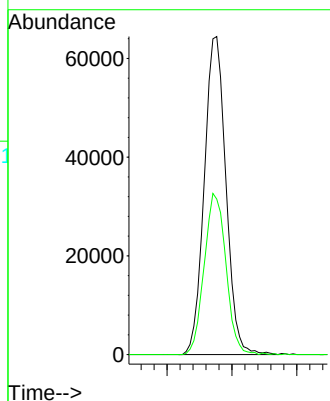
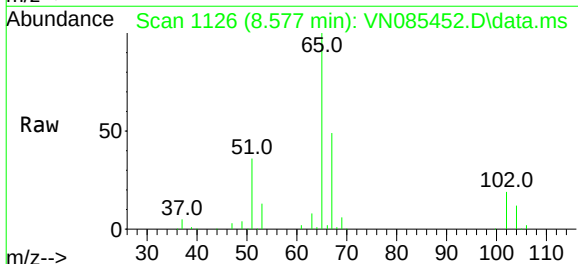


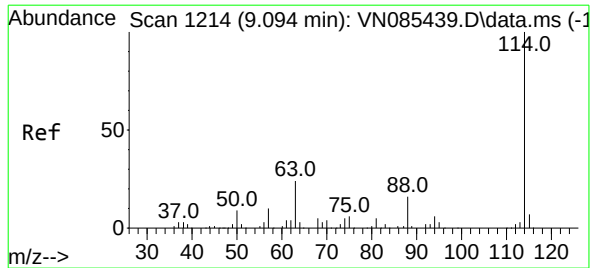
Tgt Ion:168 Resp: 175474  
Ion Ratio Lower Upper  
168 100  
99 67.5 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 52.770 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085452.D  
Acq: 15 Jan 2025 11:26

Tgt Ion: 65 Resp: 149471  
Ion Ratio Lower Upper  
65 100  
67 50.8 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: VN085452.D

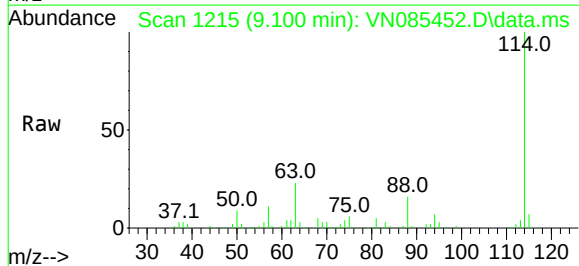
Acq: 15 Jan 2025 11:26

Instrument :

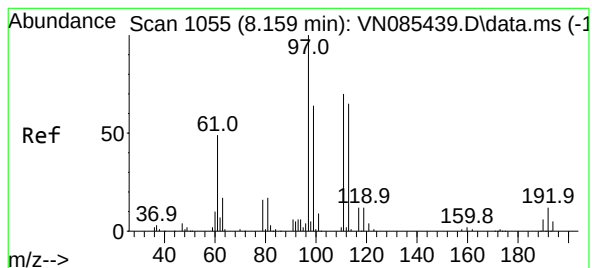
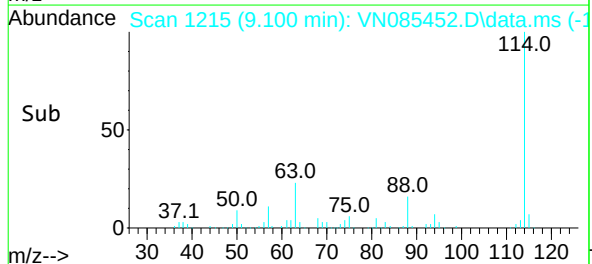
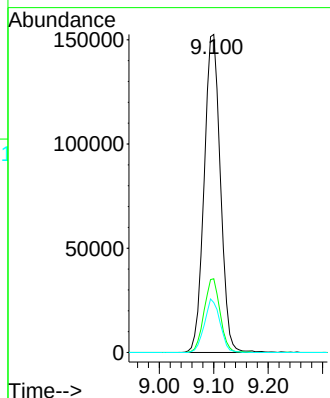
MSVOA\_N

ClientSampleId :

BP-VPB-190A-GW-898-900



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 316452 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 23.2  | 0.0   | 47.6   |
| 88       | 15.7  | 0.0   | 32.6   |



#35

Dibromofluoromethane

Concen: 52.007 ug/l

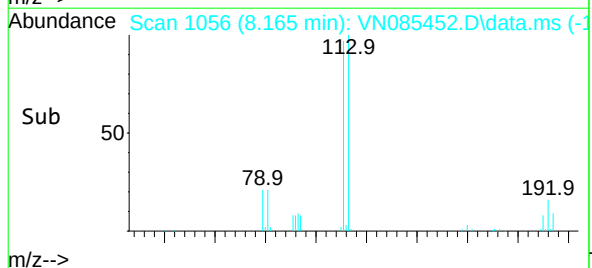
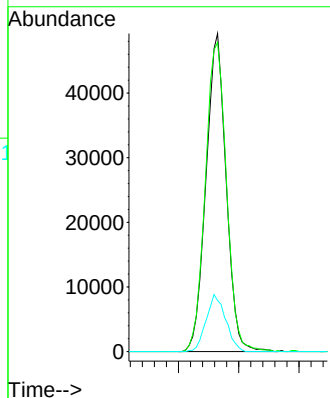
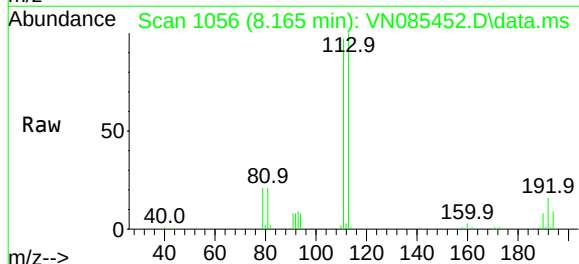
RT: 8.165 min Scan# 1056

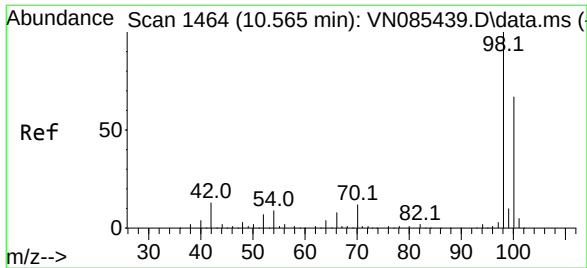
Delta R.T. 0.006 min

Lab File: VN085452.D

Acq: 15 Jan 2025 11:26

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 114177 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 102.3 | 82.7  | 124.1  |
| 192      | 17.4  | 14.3  | 21.5   |





#50

Toluene-d8

Concen: 49.257 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085452.D

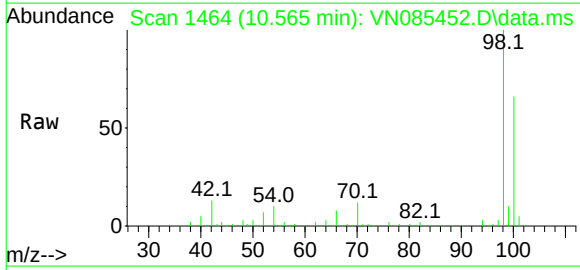
Acq: 15 Jan 2025 11:26

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-GW-898-900

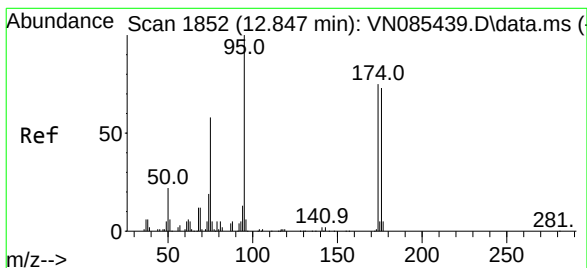
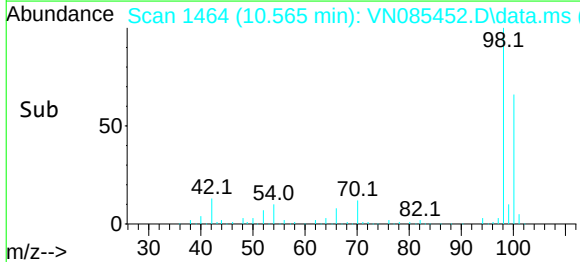
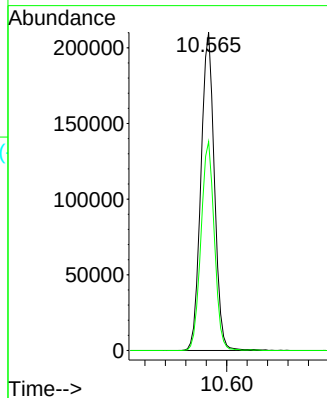


Tgt Ion: 98 Resp: 384211

Ion Ratio Lower Upper

98 100

100 65.2 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 46.262 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085452.D

Acq: 15 Jan 2025 11:26

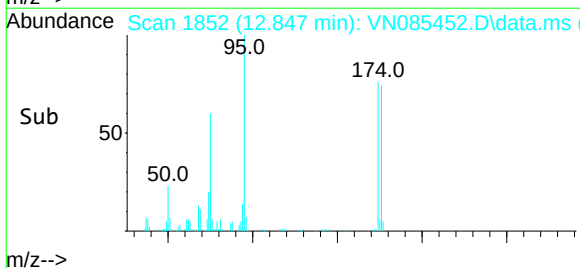
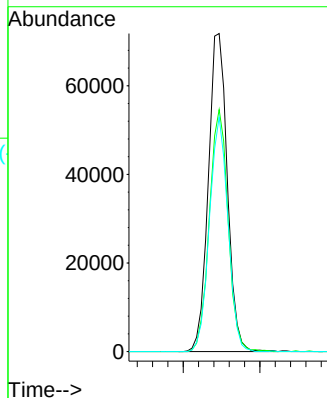
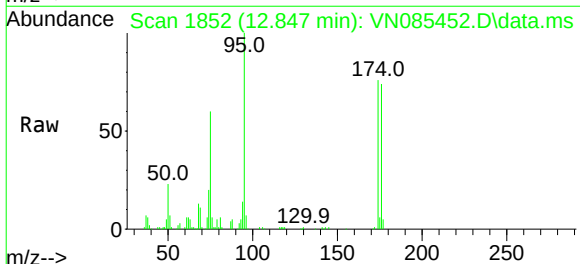
Tgt Ion: 95 Resp: 123439

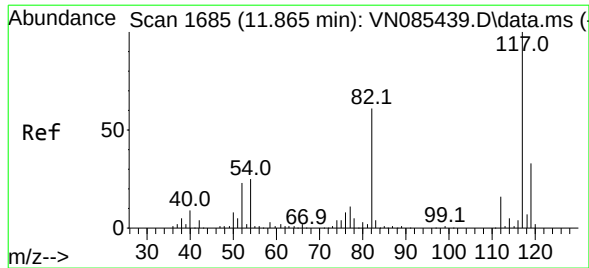
Ion Ratio Lower Upper

95 100

174 75.2 0.0 145.0

176 71.6 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: VN085452.D

Acq: 15 Jan 2025 11:26

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-GW-898-900

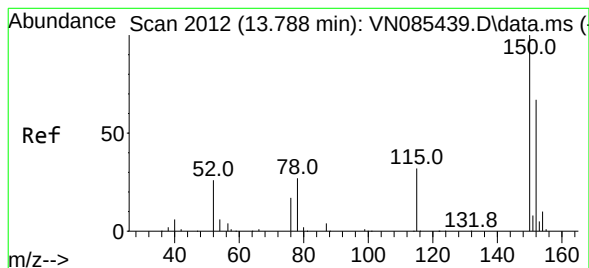
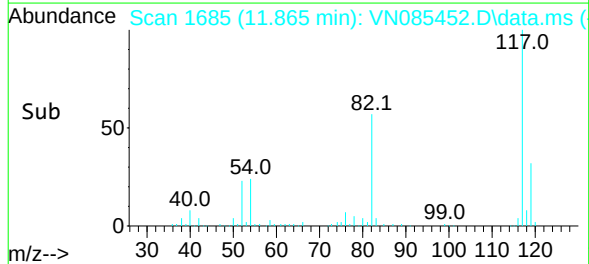
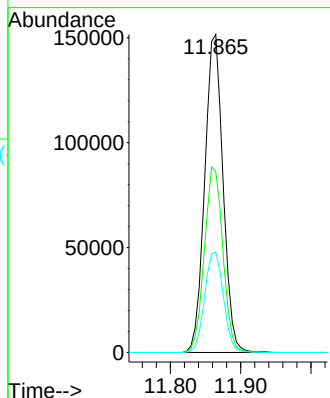
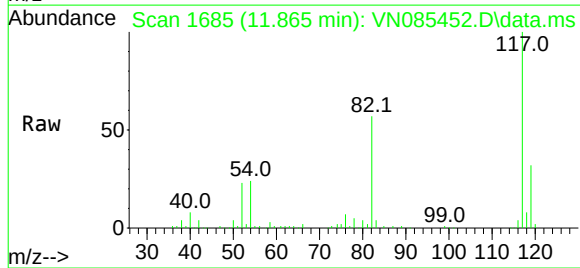
Tgt Ion:117 Resp: 274227

Ion Ratio Lower Upper

117 100

82 56.8 48.6 72.8

119 31.6 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085452.D

Acq: 15 Jan 2025 11:26

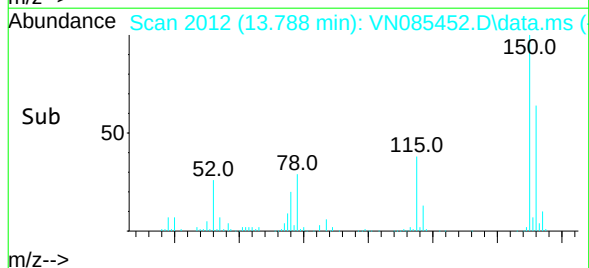
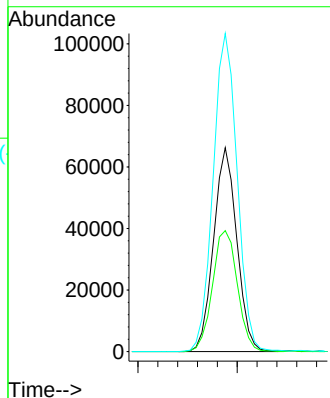
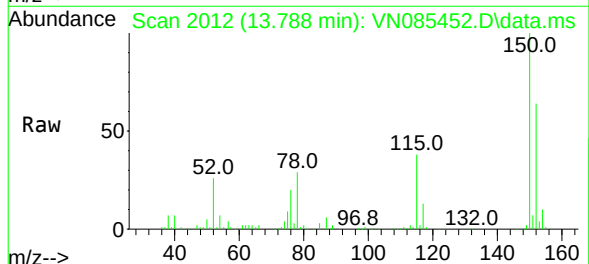
Tgt Ion:152 Resp: 107831

Ion Ratio Lower Upper

152 100

115 63.6 31.1 93.3

150 161.7 0.0 343.6





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085452.D  
Acq On : 15 Jan 2025 11:26  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

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: VN085452.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       | 1045          | 1056        | 1060         | rBV      | 160002         | 381798        | 36.03%          | 6.999%        |
| 2         | 8.218       | 1060          | 1065        | 1075         | rVB      | 266188         | 573730        | 54.15%          | 10.518%       |
| 3         | 8.571       | 1115          | 1125        | 1137         | rBV      | 173693         | 402386        | 37.98%          | 7.376%        |
| 4         | 9.100       | 1206          | 1215        | 1225         | rBV      | 384225         | 791898        | 74.74%          | 14.517%       |
| 5         | 10.565      | 1454          | 1464        | 1477         | rBV      | 575573         | 1059570       | 100.00%         | 19.424%       |
| 6         | 11.865      | 1677          | 1685        | 1699         | rBV      | 487436         | 898496        | 84.80%          | 16.471%       |
| 7         | 12.847      | 1844          | 1852        | 1861         | rBV      | 375524         | 631058        | 59.56%          | 11.568%       |
| 8         | 13.788      | 2005          | 2012        | 2022         | rBV      | 426837         | 716043        | 67.58%          | 13.126%       |

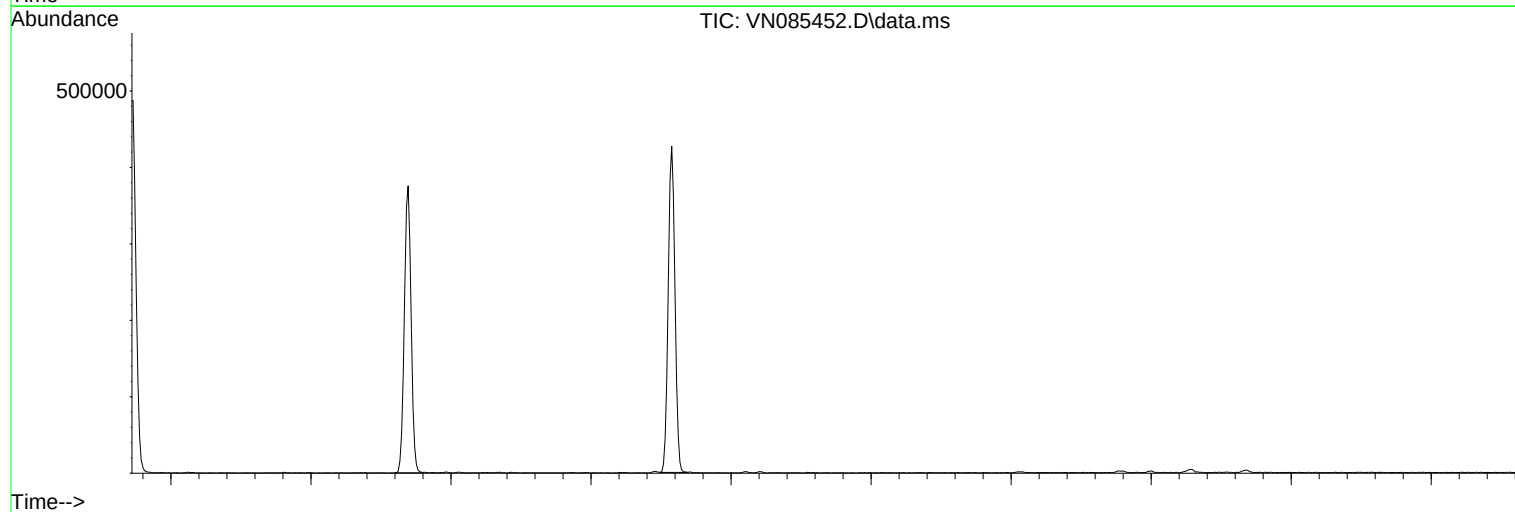
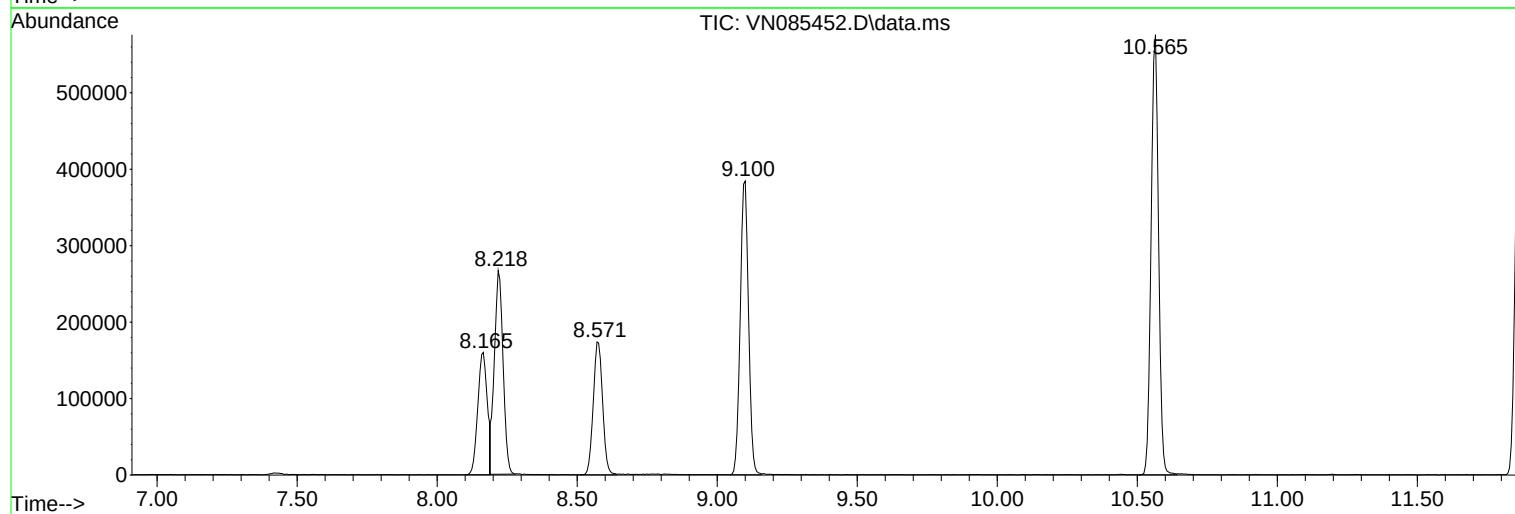
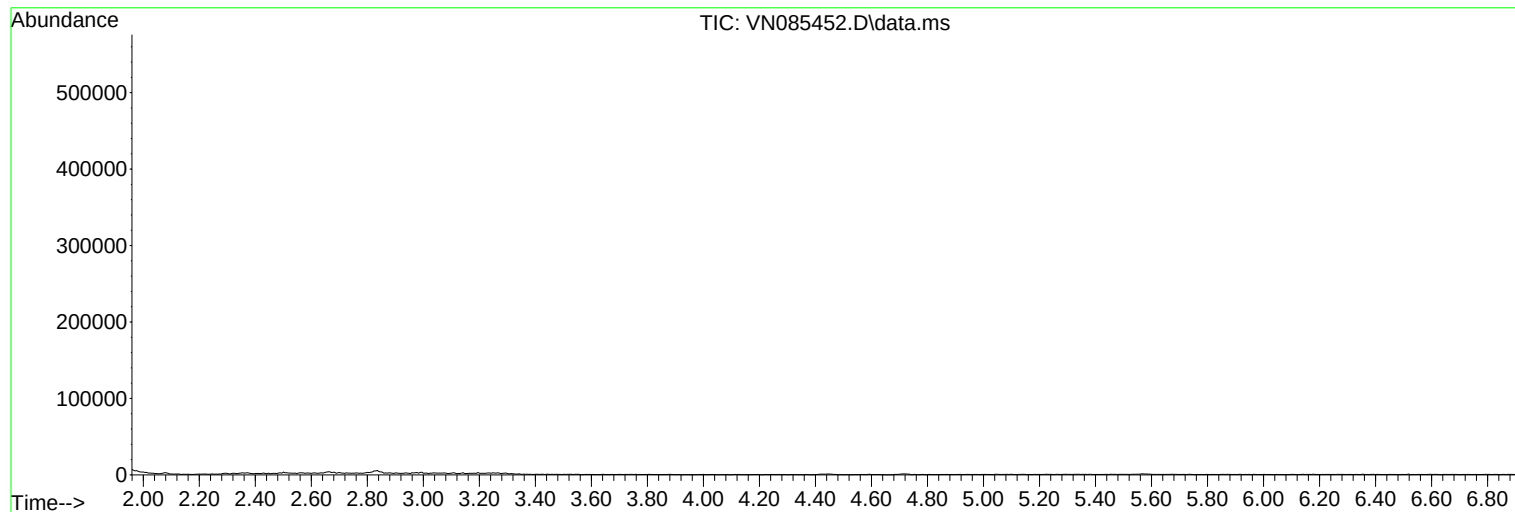
Sum of corrected areas: 5454979

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085452.D  
Acq On : 15 Jan 2025 11:26  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

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\VN011525\  
Data File : VN085452.D  
Acq On : 15 Jan 2025 11:26  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-190A-GW-898-900

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\VN011525\  
Data File : VN085452.D  
Acq On : 15 Jan 2025 11:26  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
BP-VPB-190A-GW-898-900

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.: Q1062 SAS No.: Q1062 SDG No.: Q1062  
 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.: Q1062 SAS No.: Q1062 SDG No.: Q1062  
 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      |

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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) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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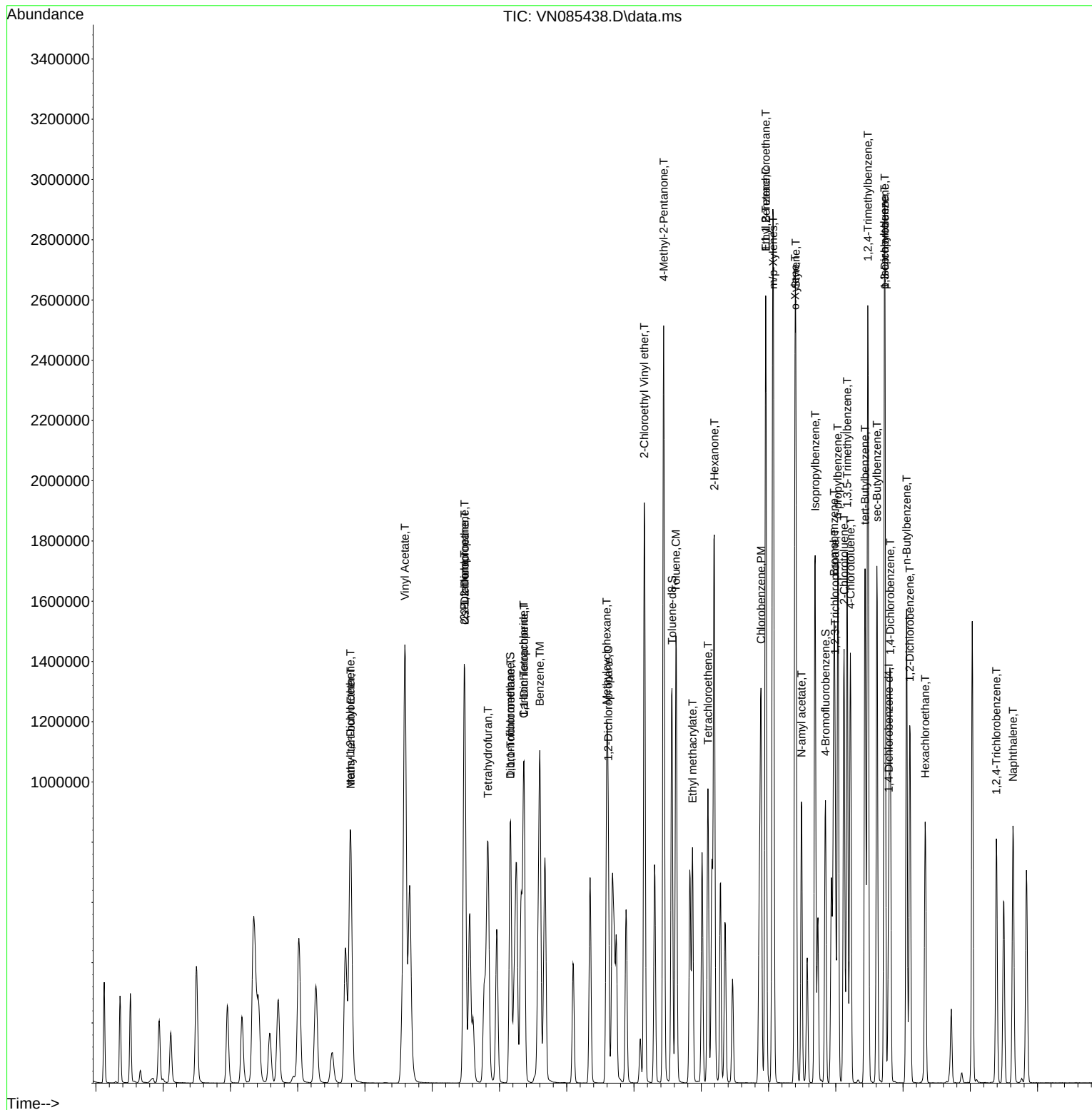
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Operator  : JC\MD  
Sample    : VSTDICC100  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 4   Sample Multiplier: 1
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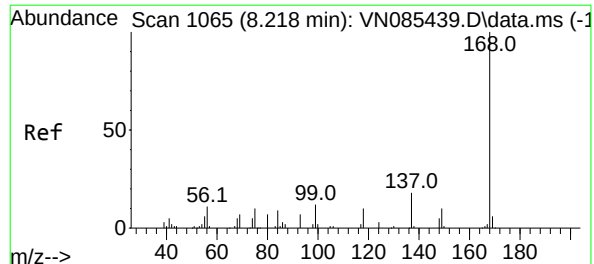
**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC100

## 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\M\$VOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





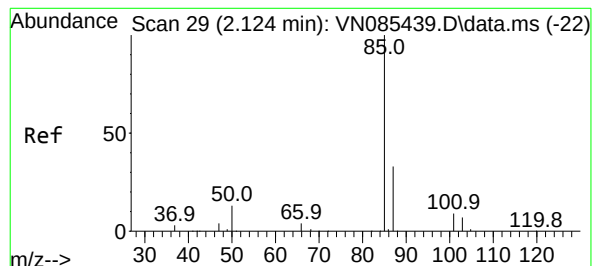
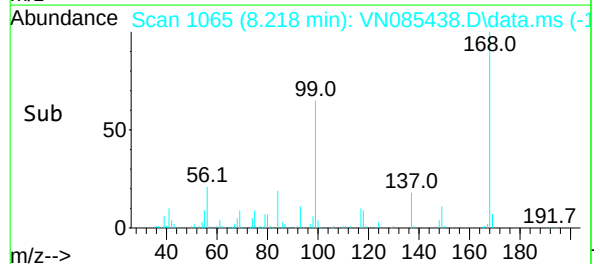
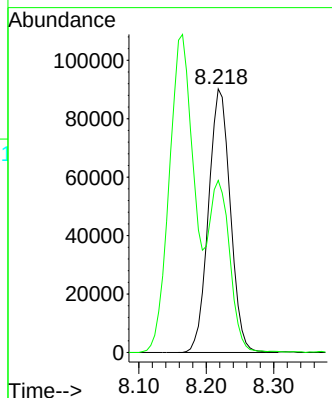
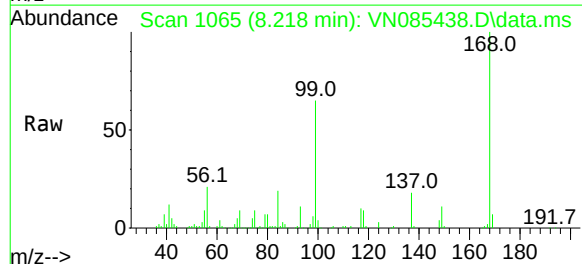
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Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

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

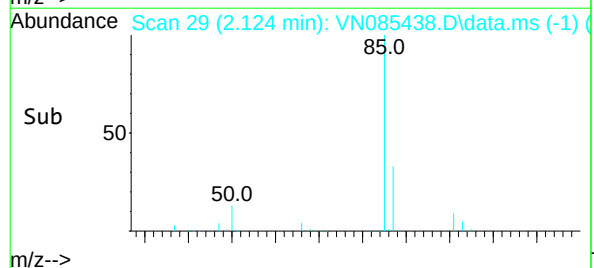
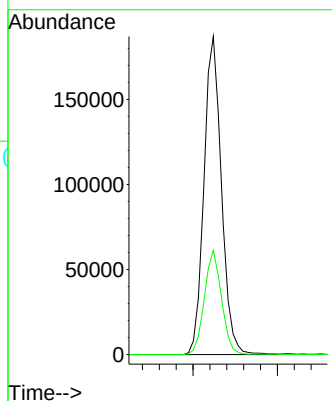
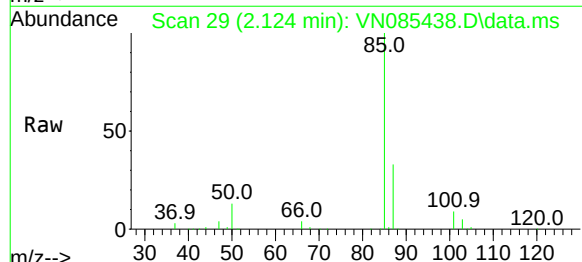
Manual Integrations  
APPROVED

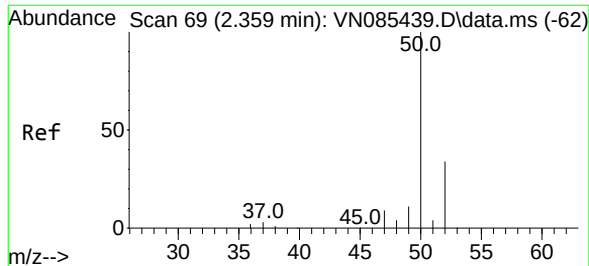
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

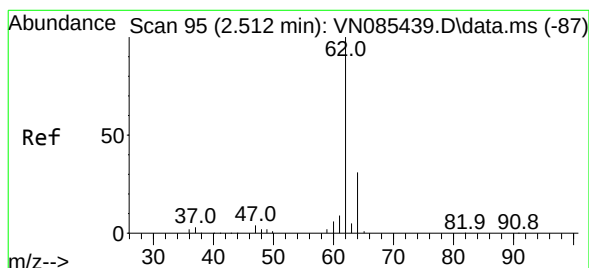
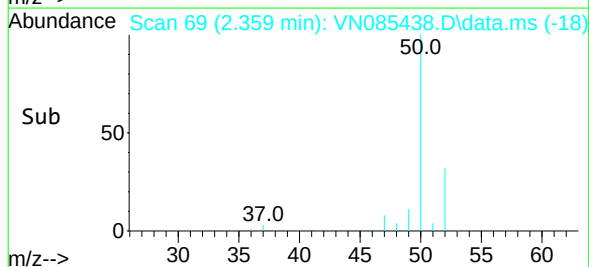
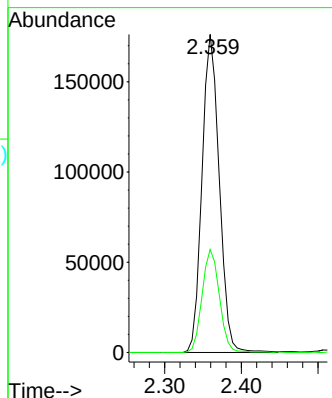
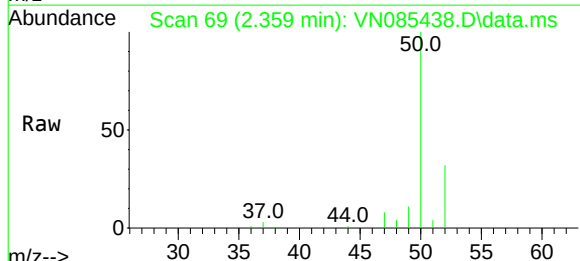
52 32.4 27.0 40.6

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

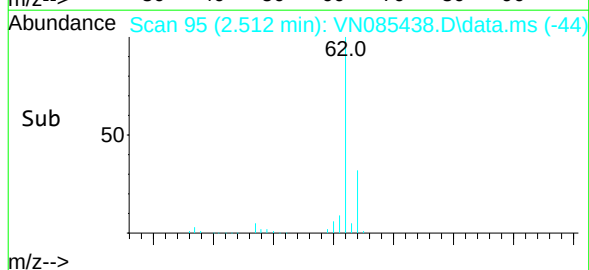
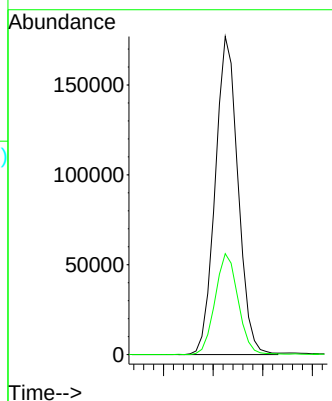
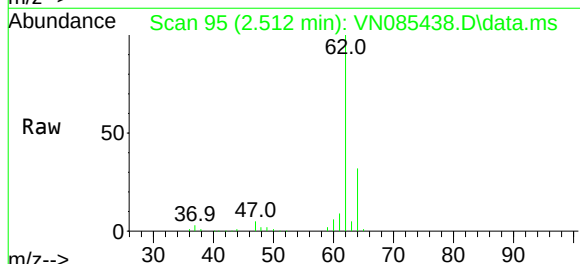
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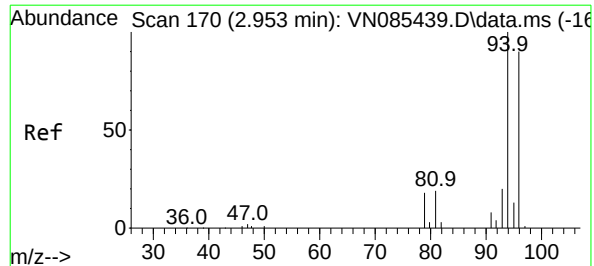
Tgt Ion: 62 Resp: 282361

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

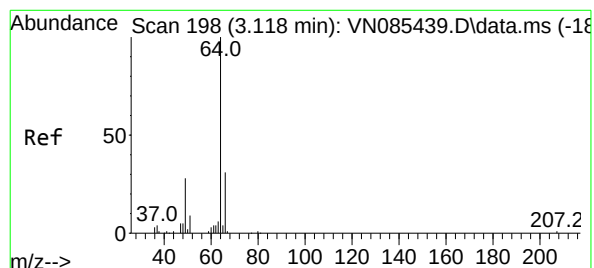
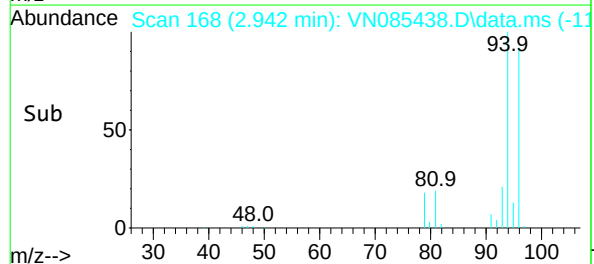
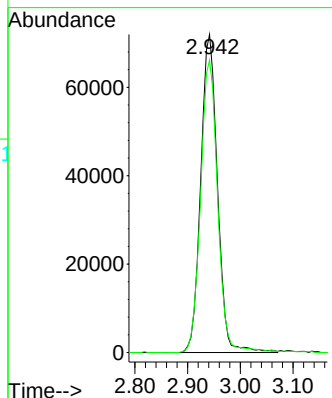
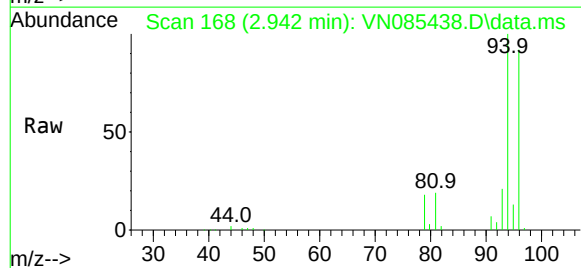
96 91.9 71.8 107.6

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

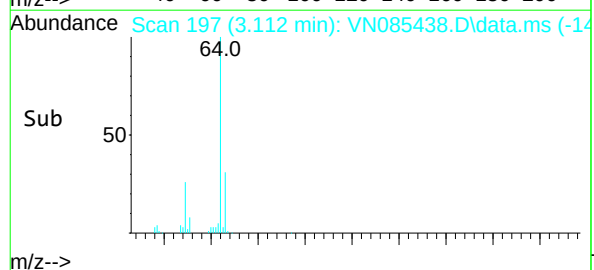
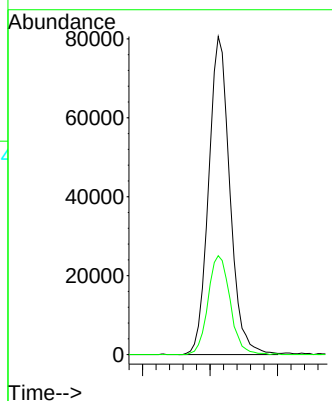
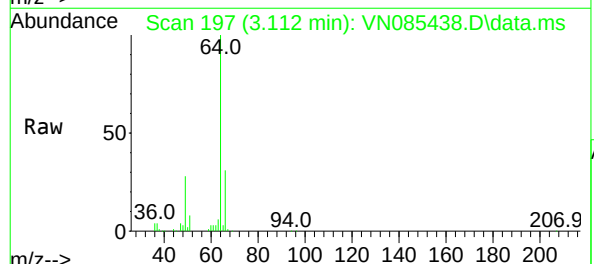
Acq: 14 Jan 2025 14:56

Tgt Ion: 64 Resp: 176111

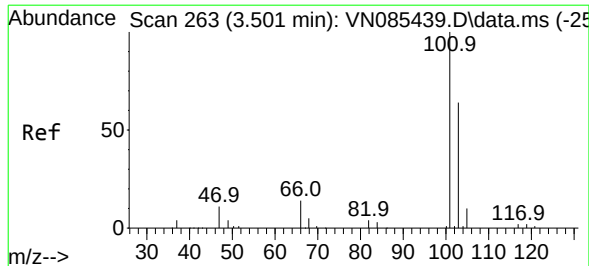
Ion Ratio Lower Upper

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

Tgt Ion:101 Resp: 423967

Ion Ratio Lower Upper

101 100

103 64.4 51.4 77.2

Instrument :

MSVOA\_N

ClientSampleId :

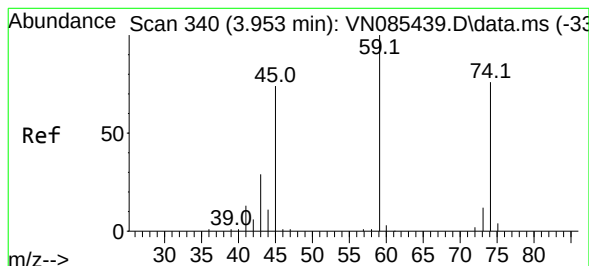
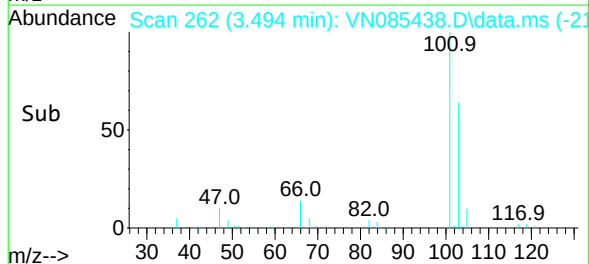
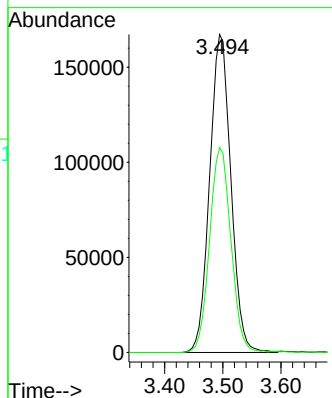
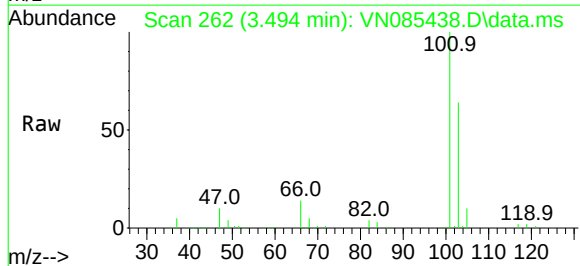
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 98.154 ug/l

RT: 3.953 min Scan# 340

Delta R.T. -0.000 min

Lab File: VN085438.D

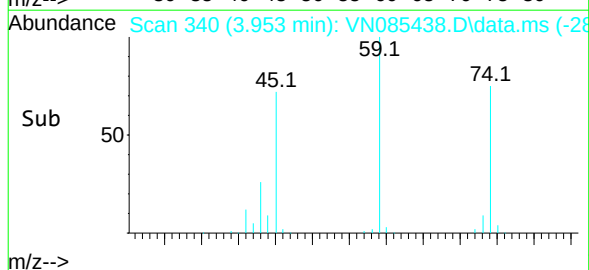
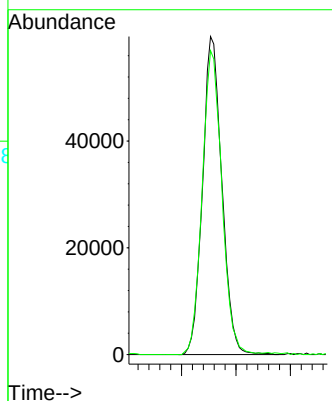
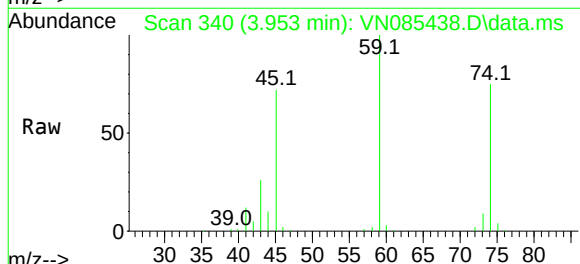
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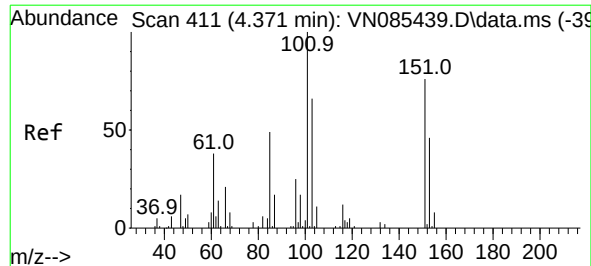
Tgt Ion: 74 Resp: 146889

Ion Ratio Lower Upper

74 100

45 97.4 49.7 149.1





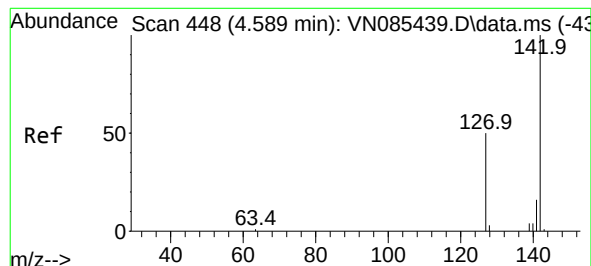
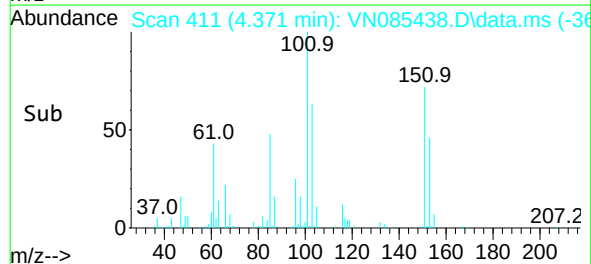
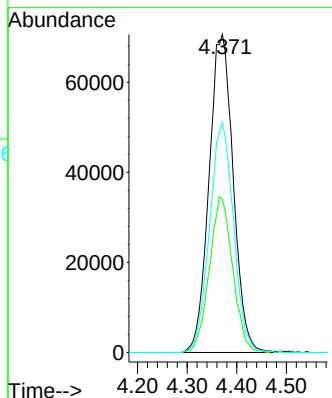
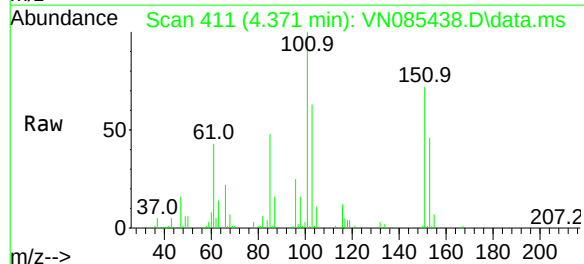
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 97.997 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

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

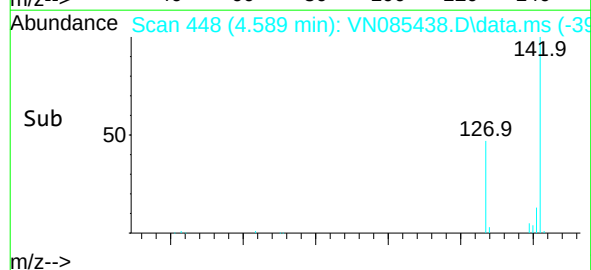
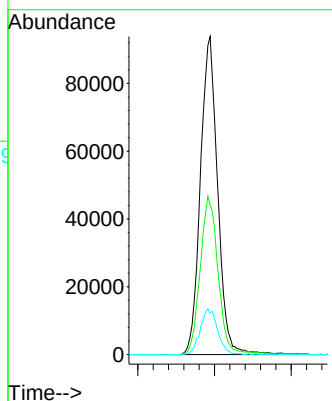
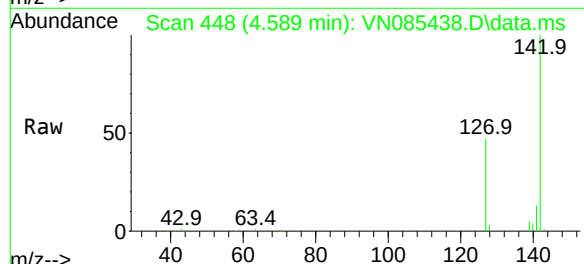
Manual Integrations  
APPROVED

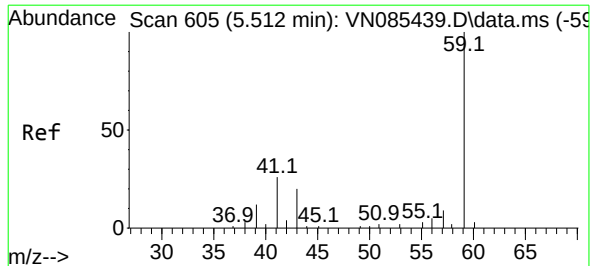
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

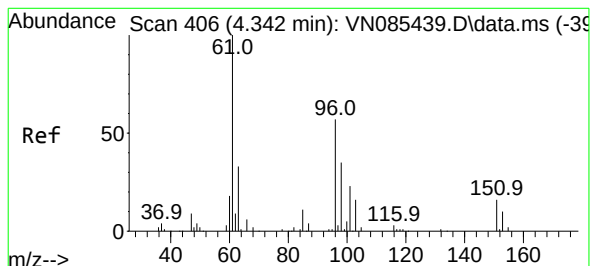
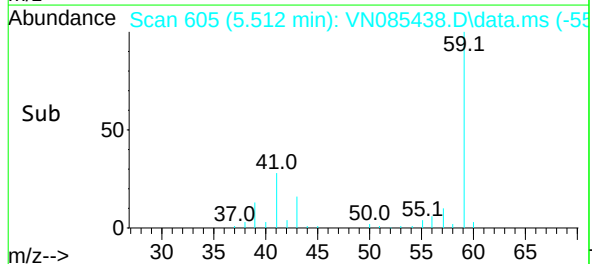
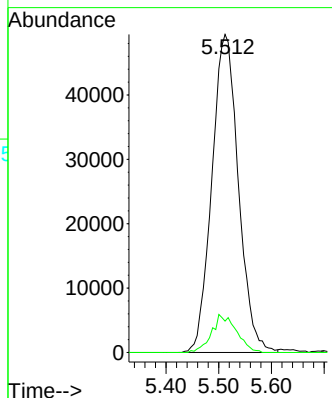
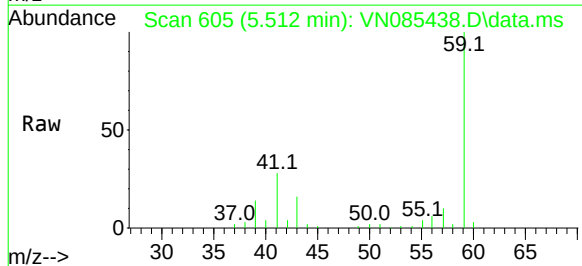
57 11.1 8.6 13.0

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

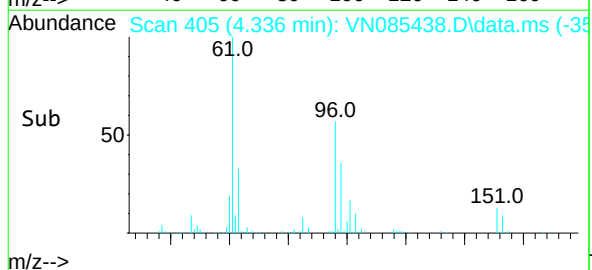
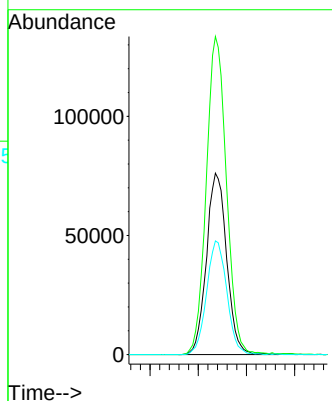
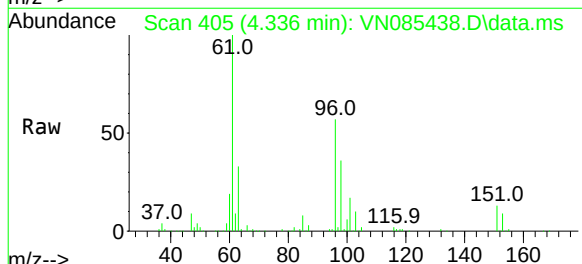
Tgt Ion: 96 Resp: 222117

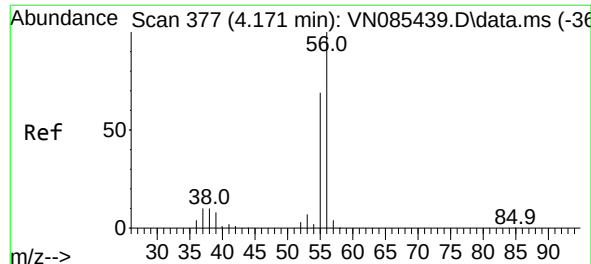
Ion Ratio Lower Upper

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

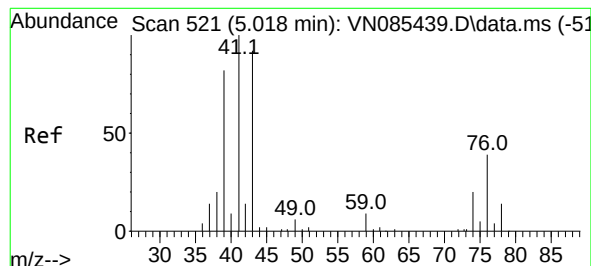
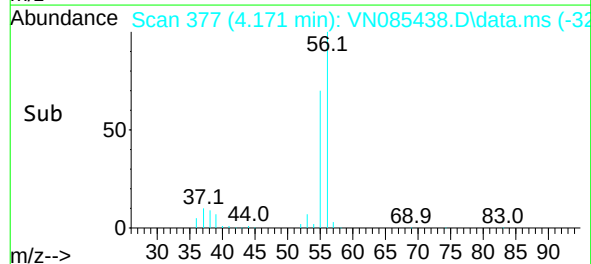
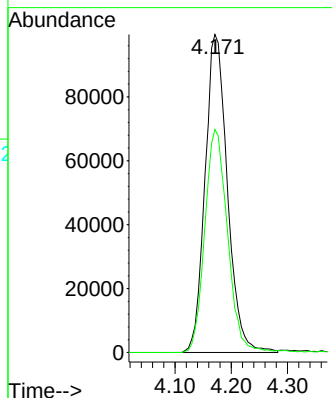
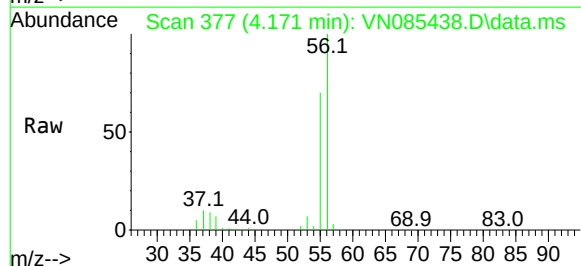
55 71.1 56.3 84.5

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

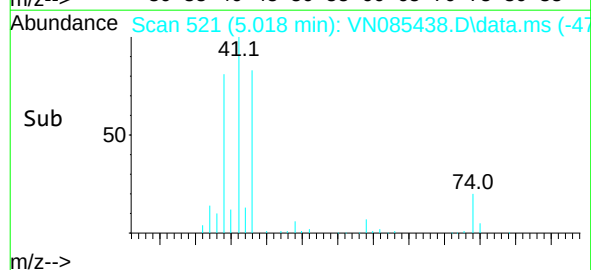
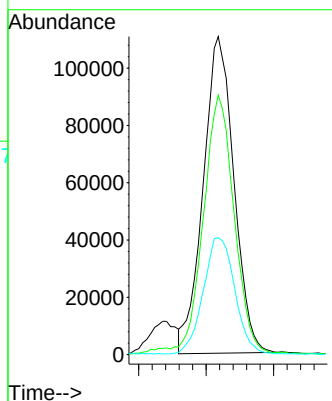
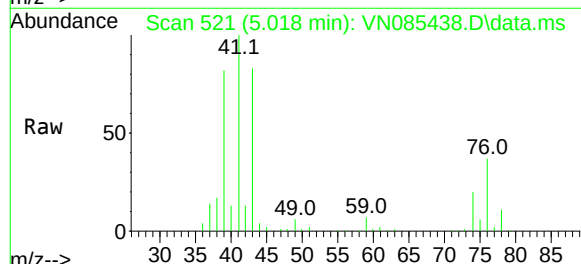
Tgt Ion: 41 Resp: 349717

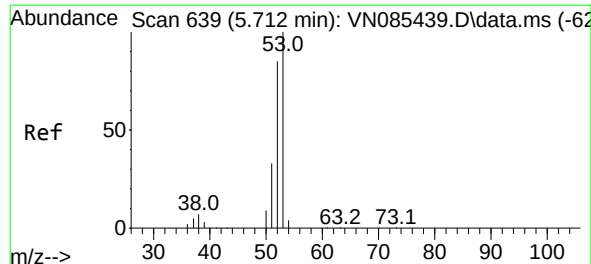
Ion Ratio Lower Upper

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 :

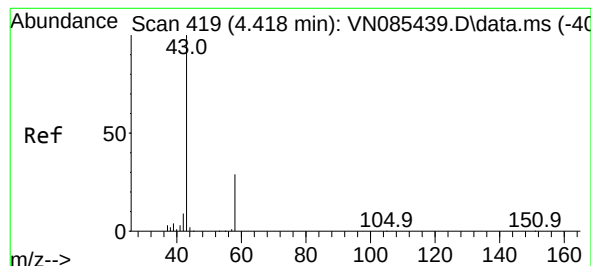
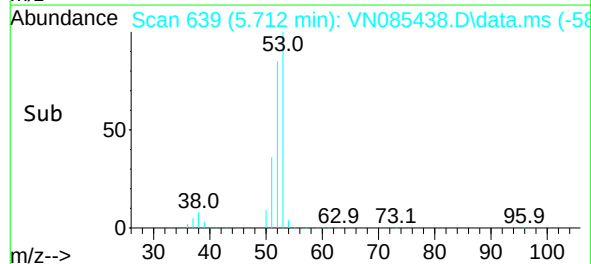
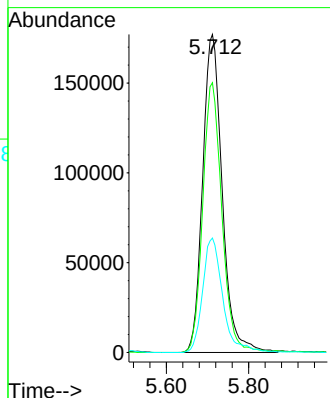
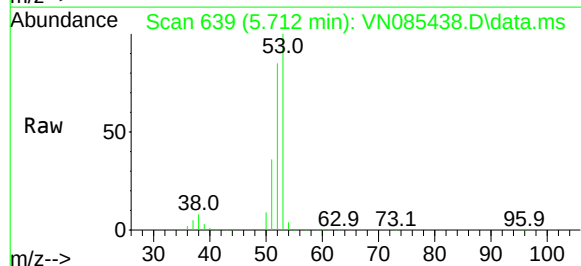
VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| 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

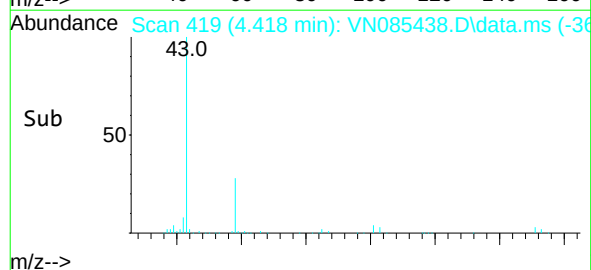
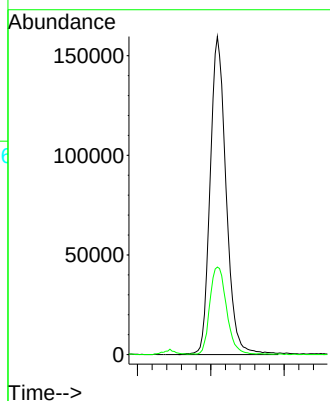
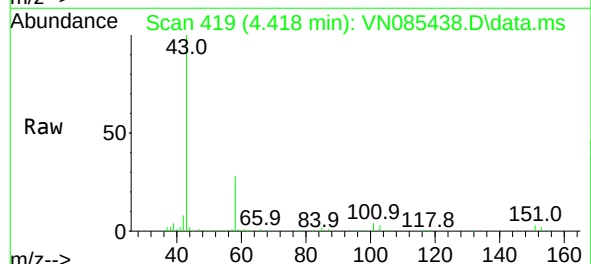
RT: 4.418 min Scan# 419

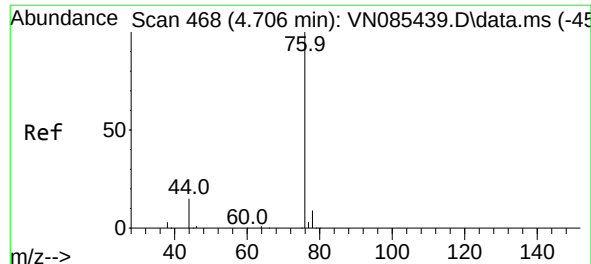
Delta R.T. -0.000 min

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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion: 76 Resp: 630294

Ion Ratio Lower Upper

76 100

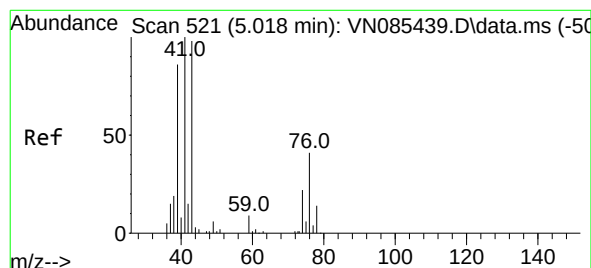
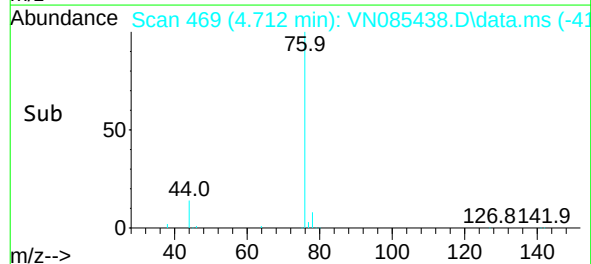
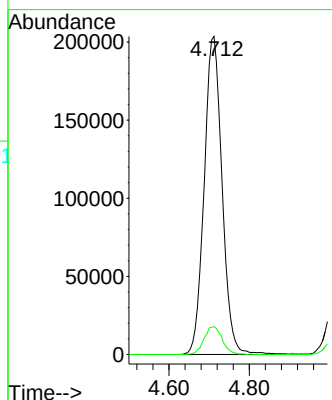
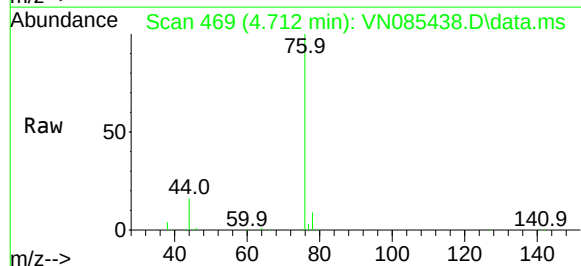
78 8.7 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 94.674 ug/l

RT: 5.012 min Scan# 520

Delta R.T. -0.006 min

Lab File: VN085438.D

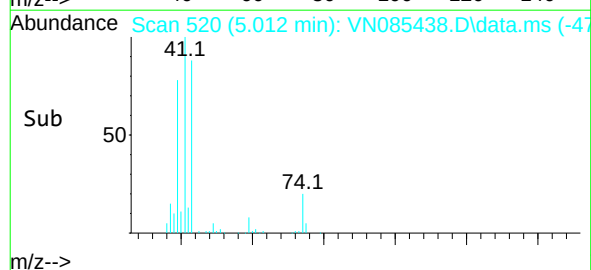
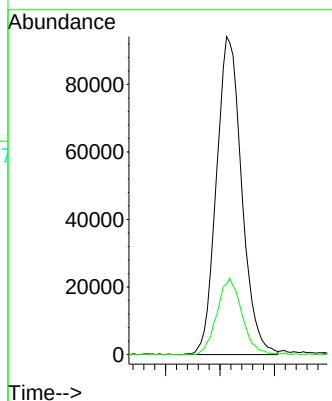
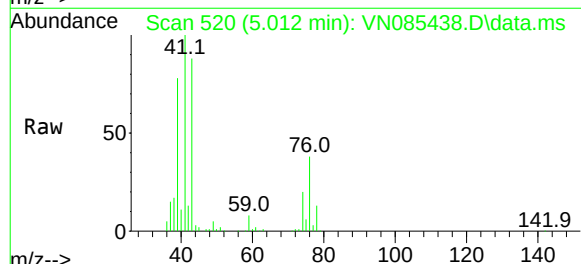
Acq: 14 Jan 2025 14:56

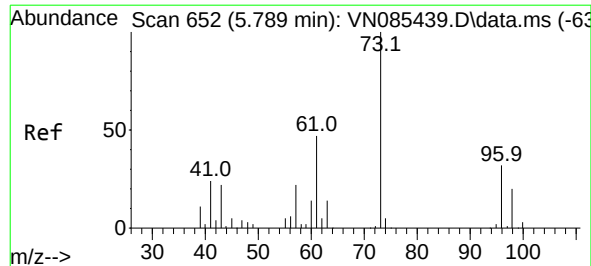
Tgt Ion: 43 Resp: 304226

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

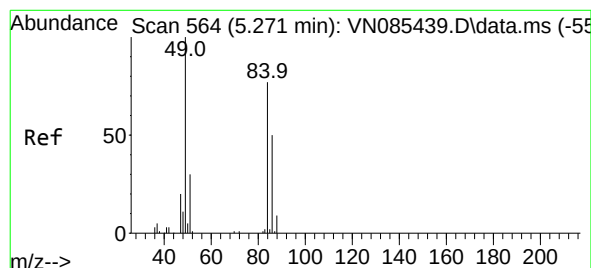
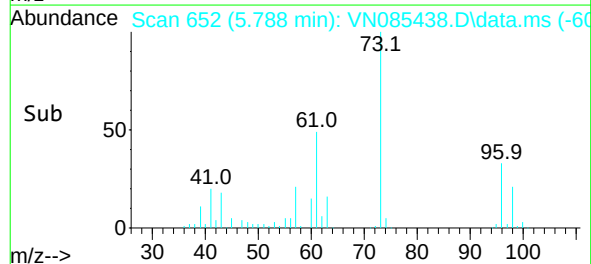
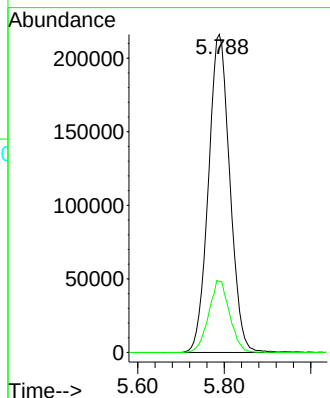
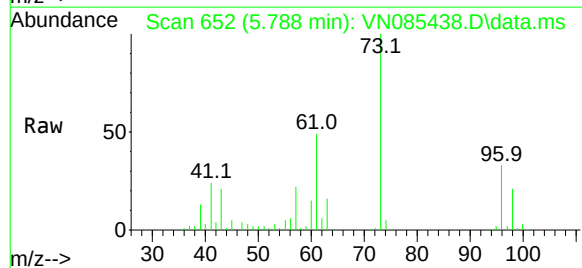
57 22.3 17.8 26.8

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

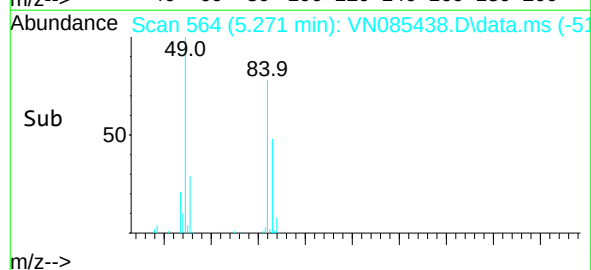
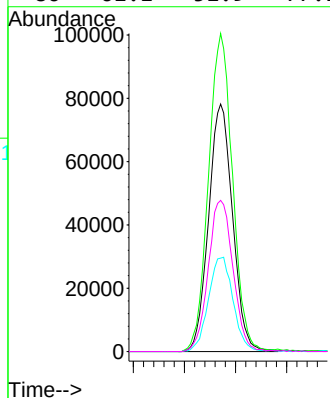
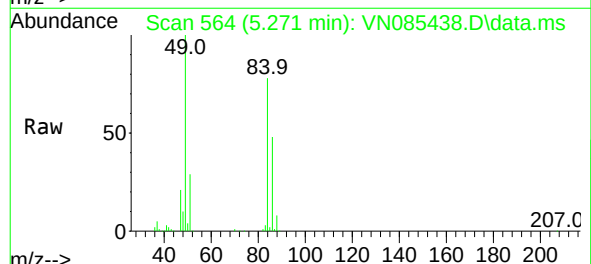
Ion Ratio Lower Upper

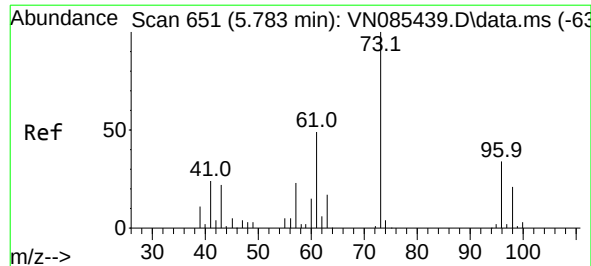
84 100

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

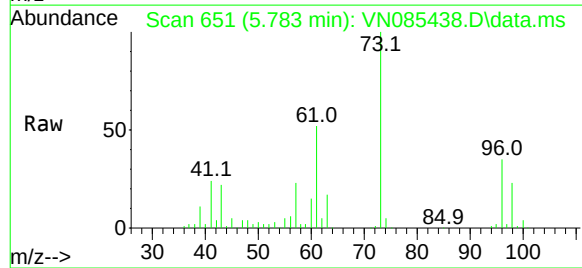
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100



Tgt Ion: 96 Resp: 231503

Ion Ratio Lower Upper

96 100

61 148.3 115.7 173.5

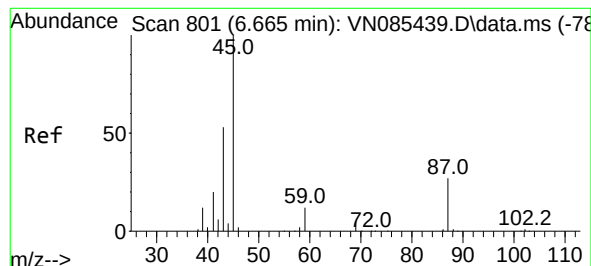
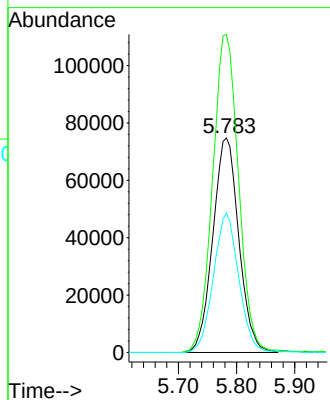
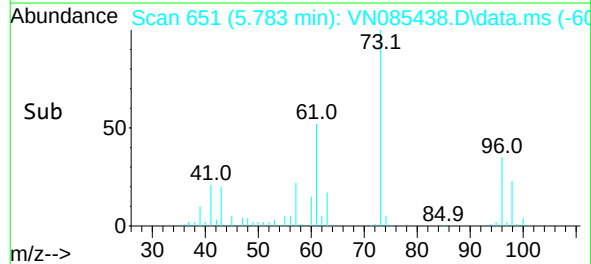
98 65.0 49.8 74.8

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

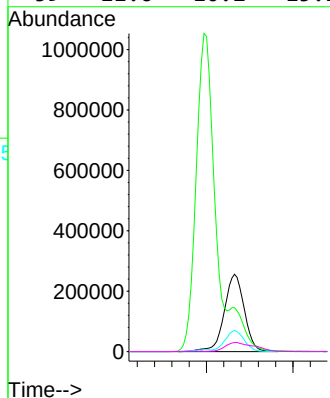
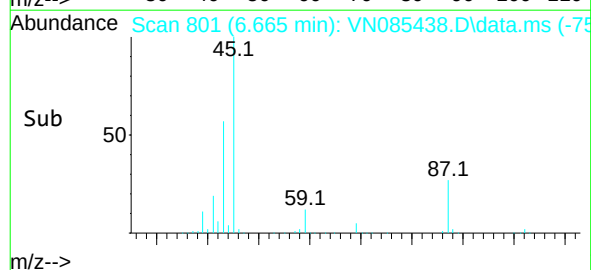
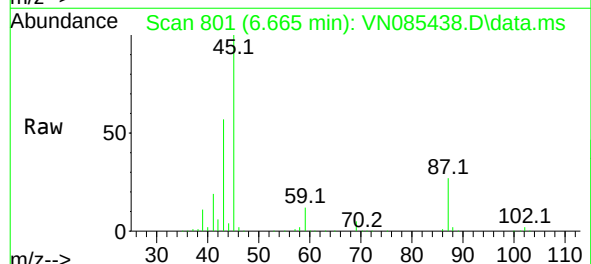
Ion Ratio Lower Upper

45 100

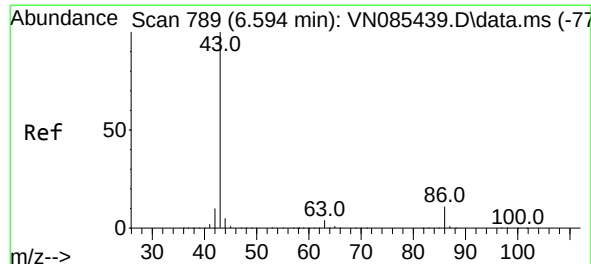
43 55.7 45.0 67.6

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

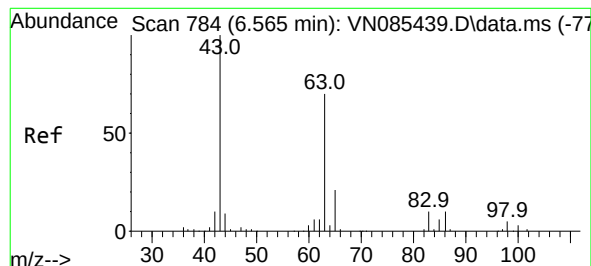
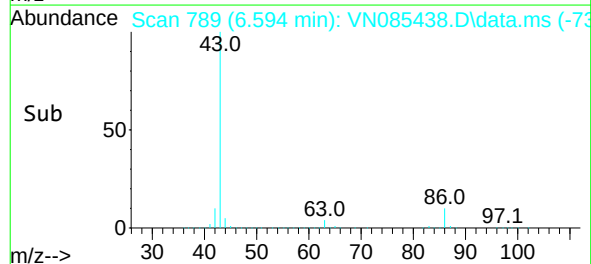
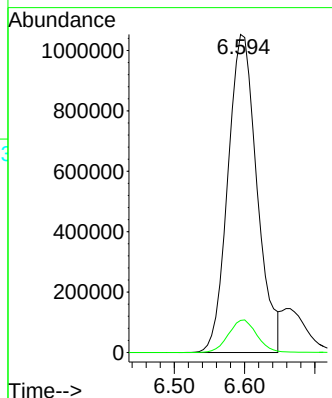
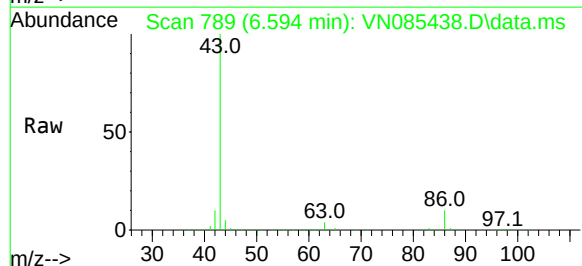
86 10.1 8.4 12.6

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

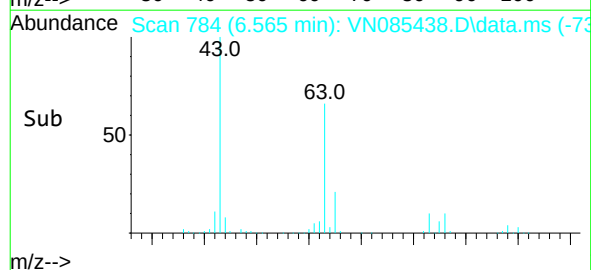
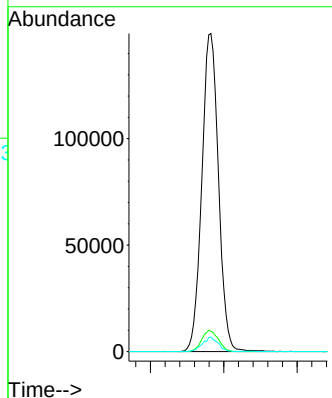
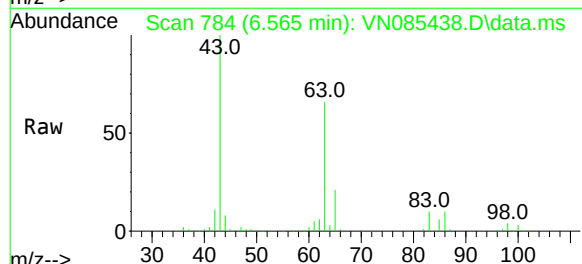
Tgt Ion: 63 Resp: 471831

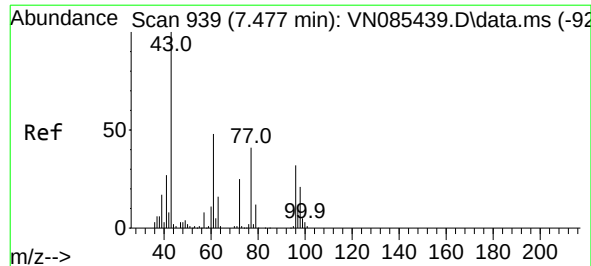
Ion Ratio Lower Upper

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 :

VSTDIC100

Tgt Ion: 43 Resp: 764979

Ion Ratio Lower Upper

43 100

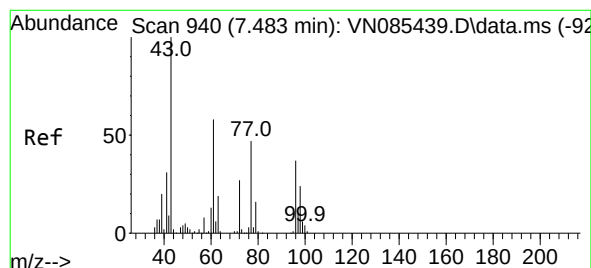
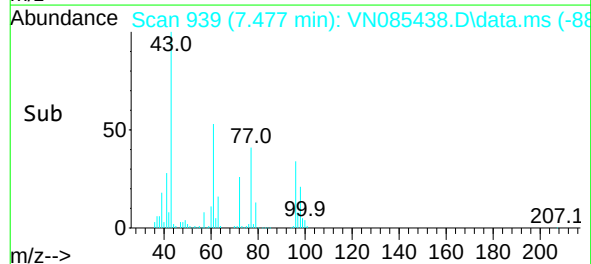
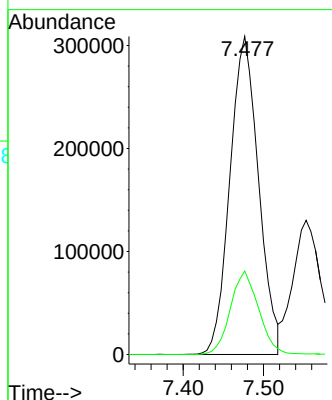
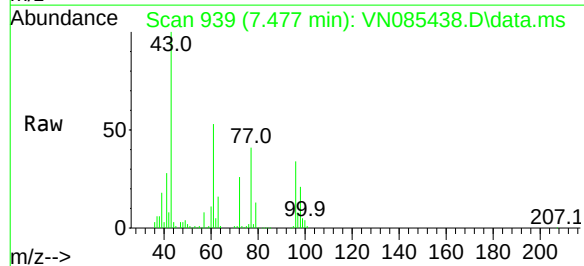
72 26.3 20.2 30.4

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

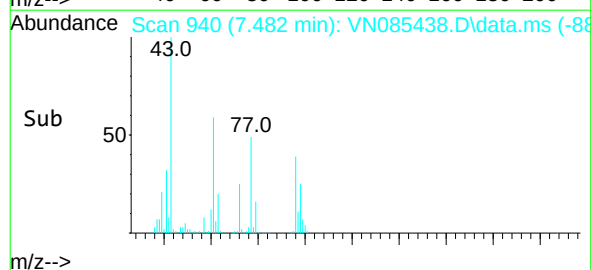
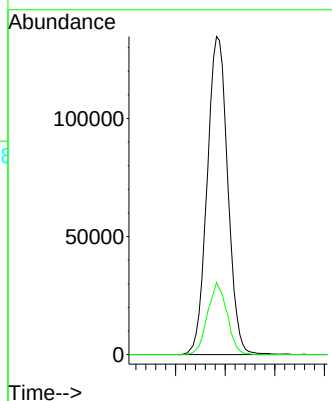
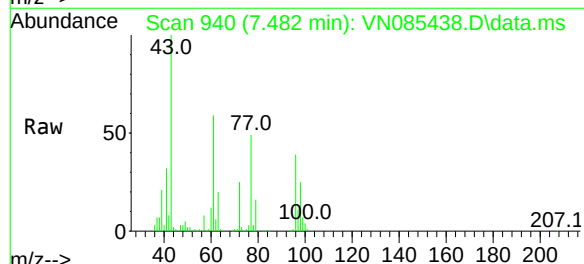
Acq: 14 Jan 2025 14:56

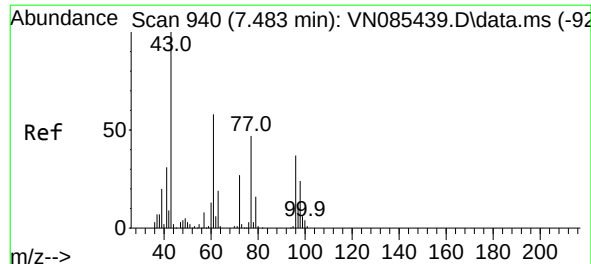
Tgt Ion: 77 Resp: 388140

Ion Ratio Lower Upper

77 100

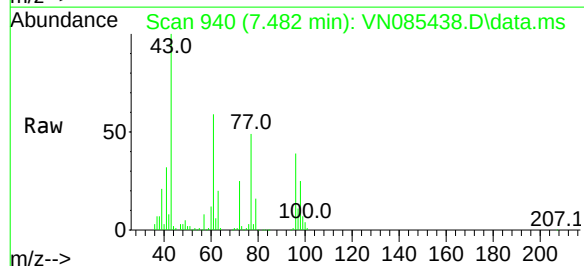
97 21.4 10.7 32.1





#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

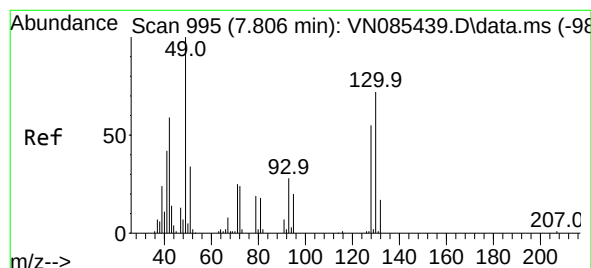
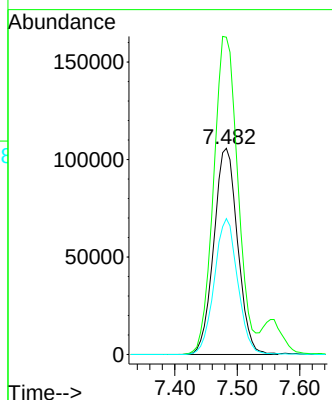
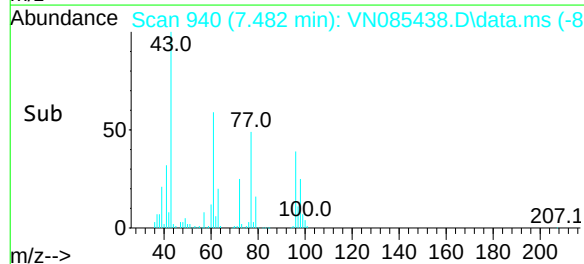
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100



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

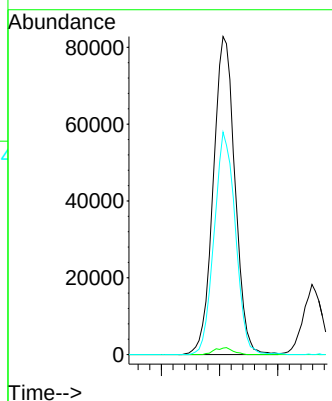
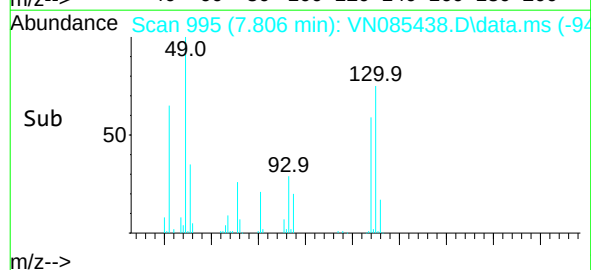
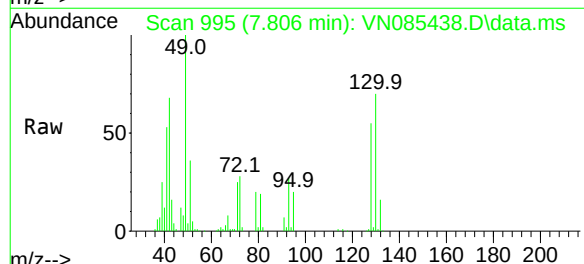
Manual Integrations  
APPROVED

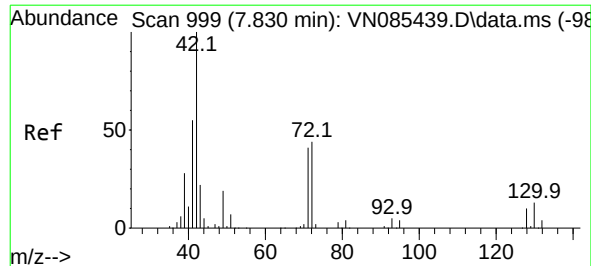
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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 :

VSTDICC100

Tgt Ion: 42 Resp: 503459

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

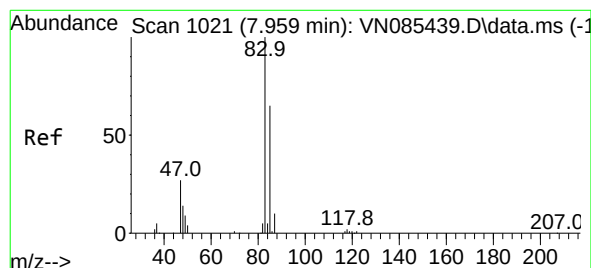
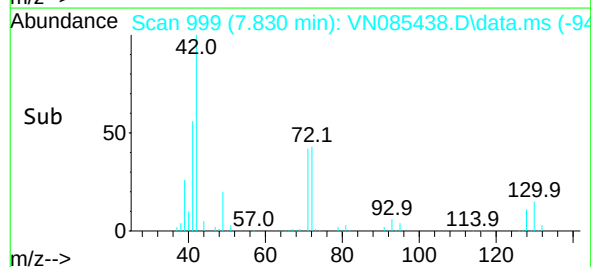
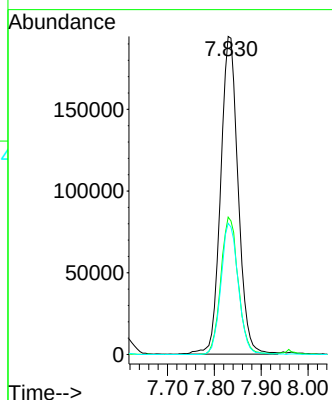
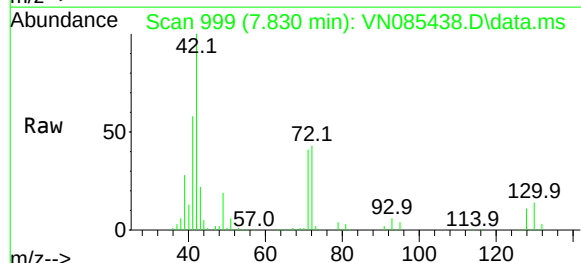
71 40.9 32.5 48.7

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

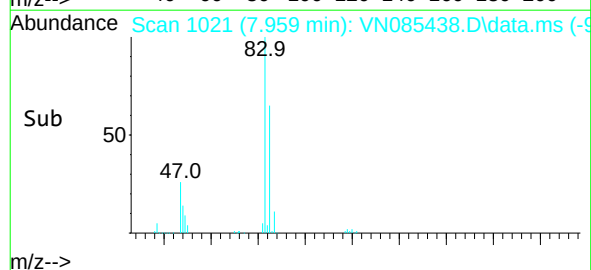
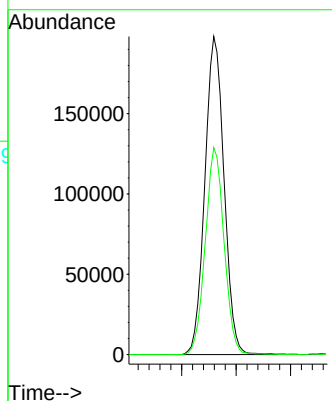
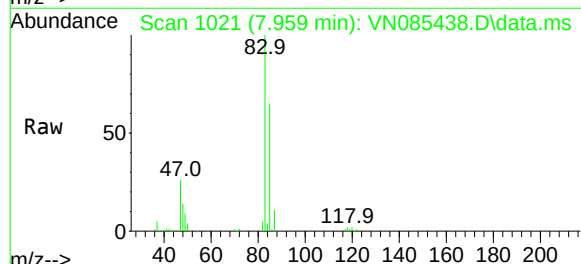
Acq: 14 Jan 2025 14:56

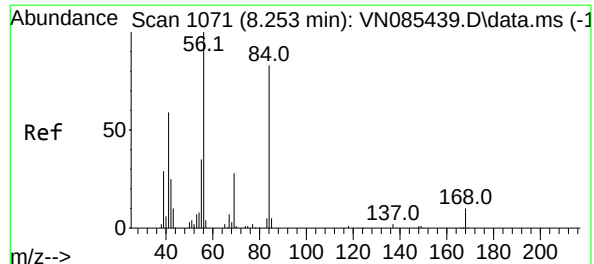
Tgt Ion: 83 Resp: 484941

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

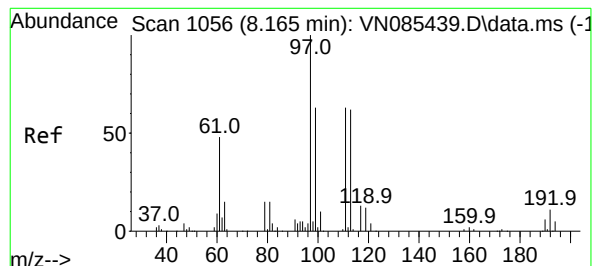
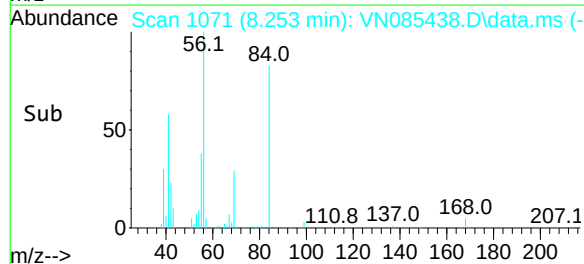
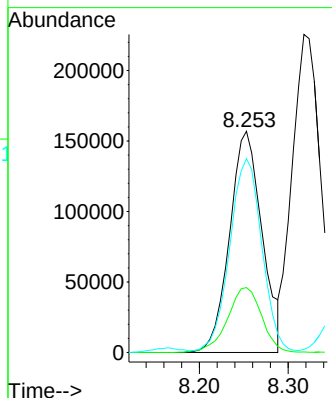
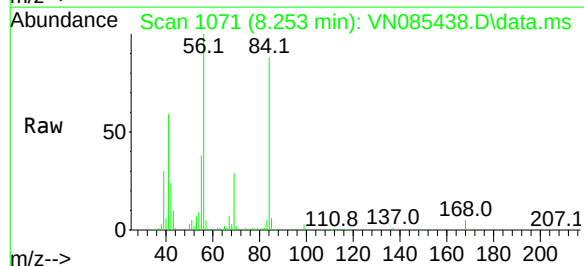
84 86.4 66.4 99.6

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

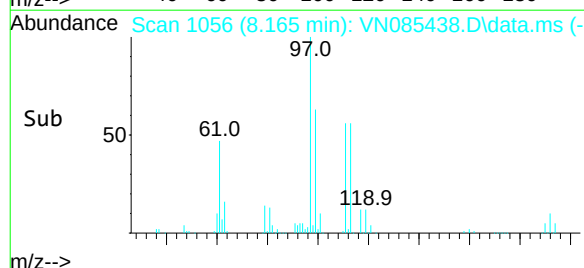
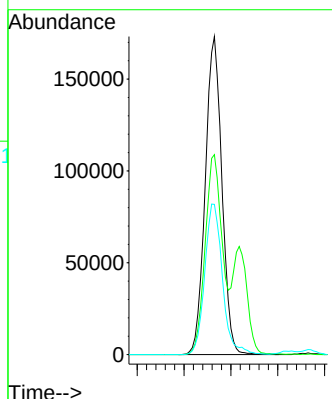
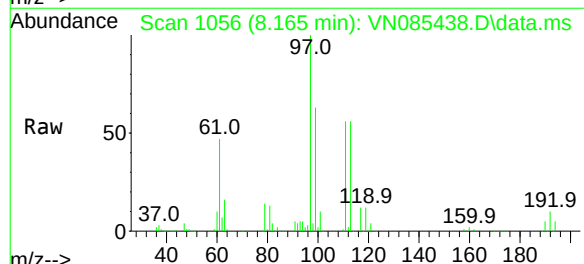
Tgt Ion: 97 Resp: 426782

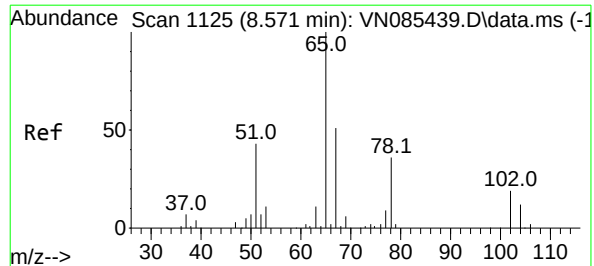
Ion Ratio Lower Upper

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

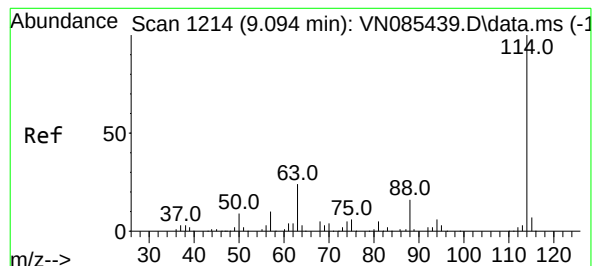
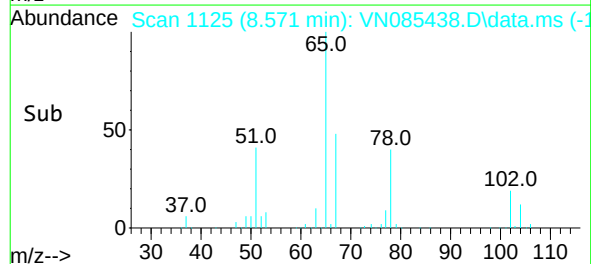
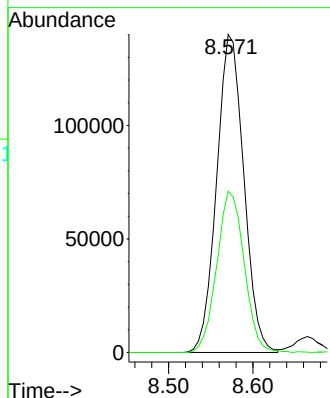
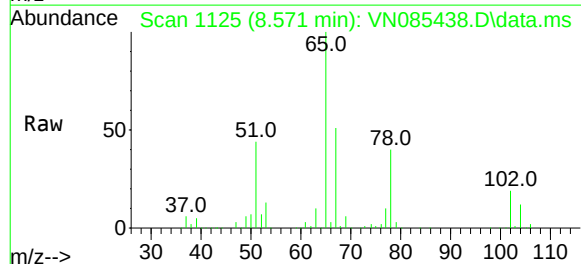
67 51.1 0.0 101.6

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

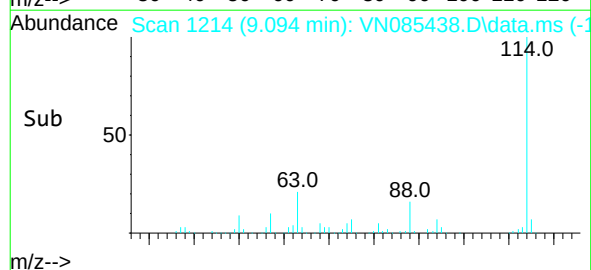
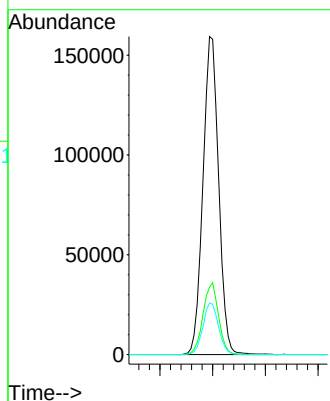
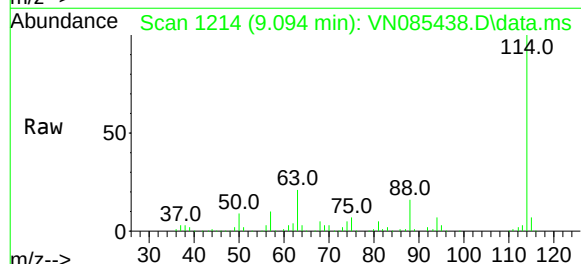
Tgt Ion:114 Resp: 329363

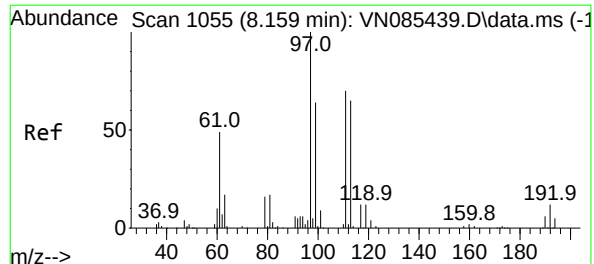
Ion Ratio Lower Upper

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

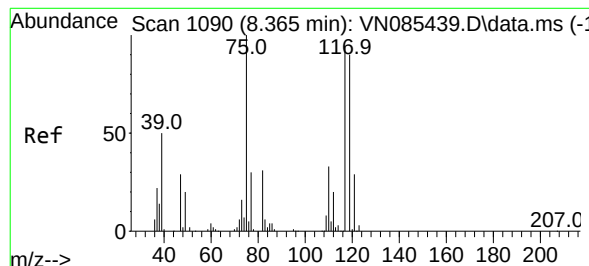
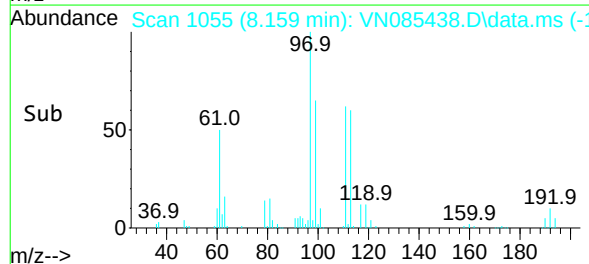
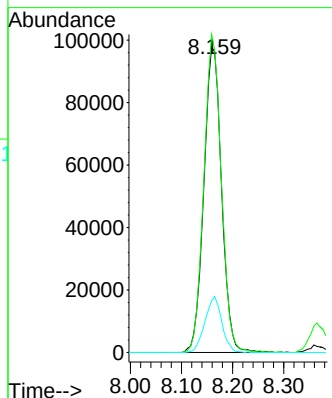
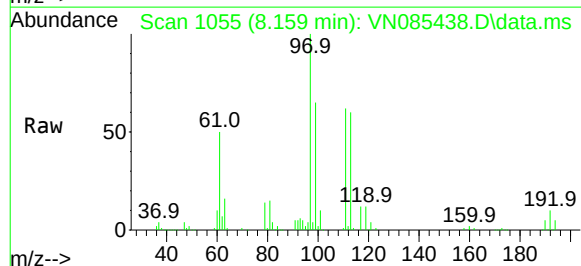
192 17.4 14.3 21.5

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

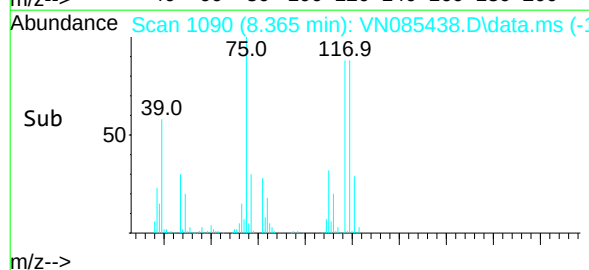
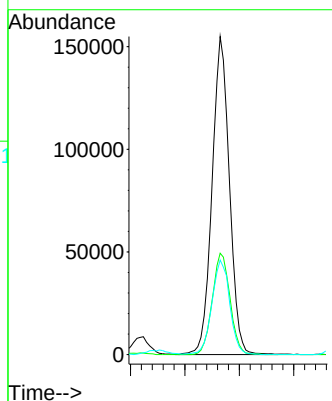
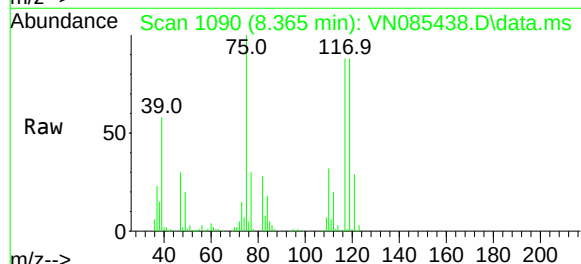
Tgt Ion: 75 Resp: 342961

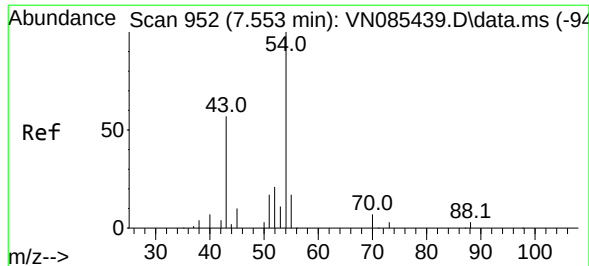
Ion Ratio Lower Upper

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# 952

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

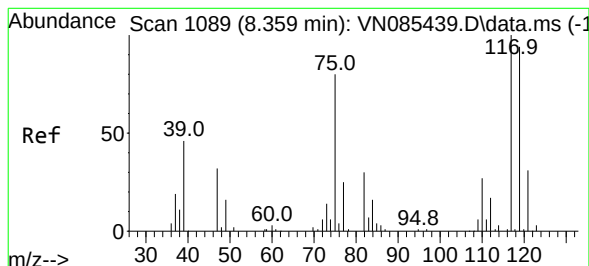
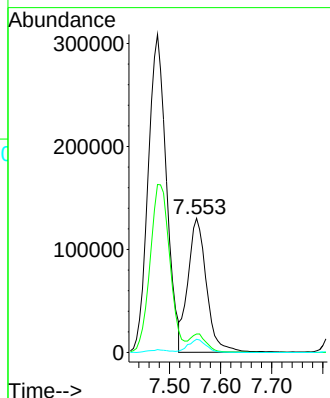
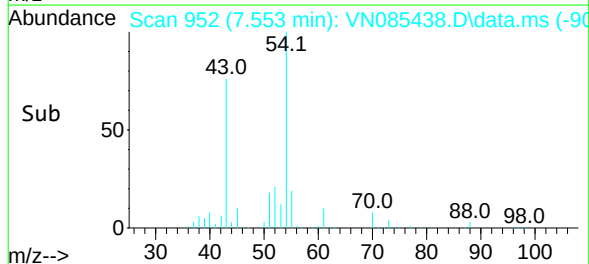
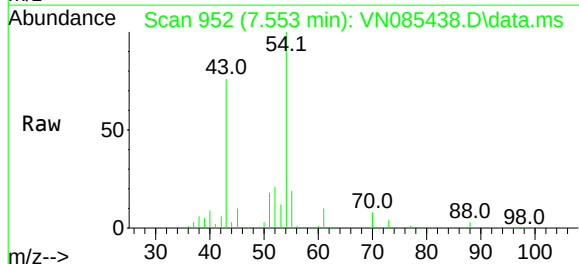
70 9.6 7.5 11.3

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

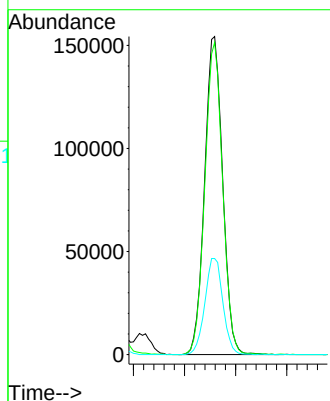
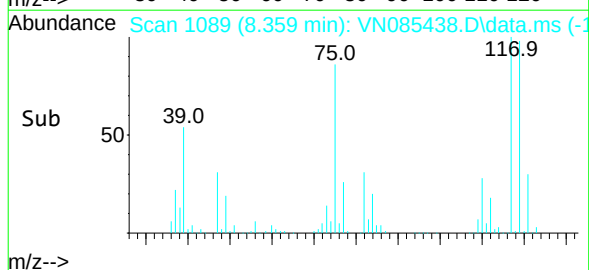
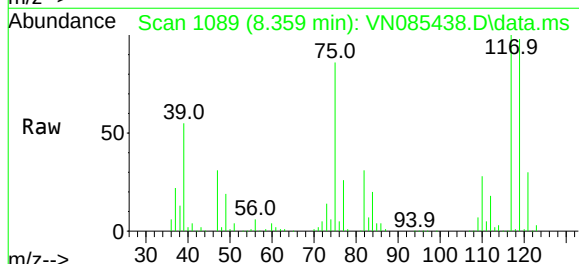
Tgt Ion:117 Resp: 378390

Ion Ratio Lower Upper

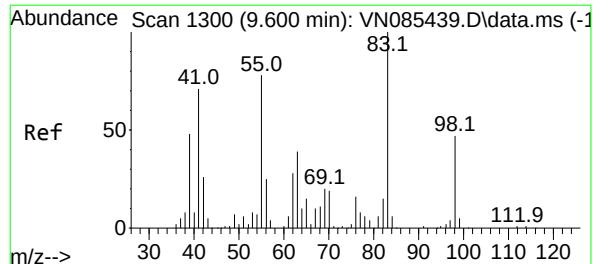
117 100

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 :

VSTDIC100

Tgt Ion: 83 Resp: 371734

Ion Ratio Lower Upper

83 100

55 79.3 62.6 94.0

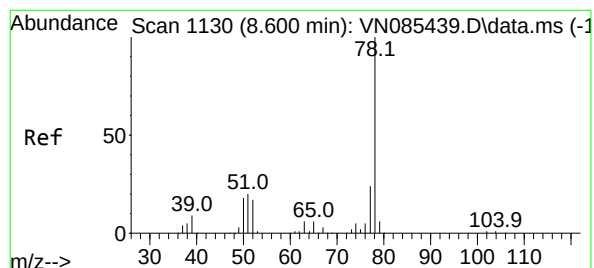
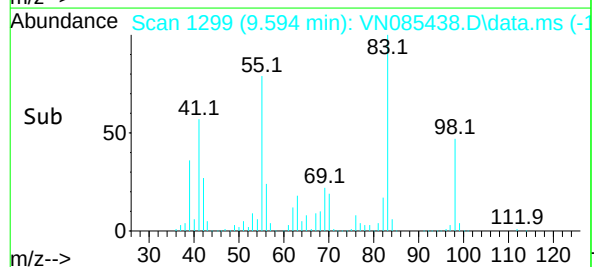
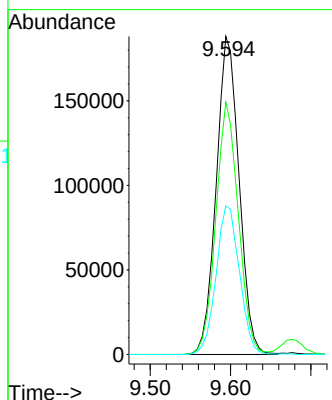
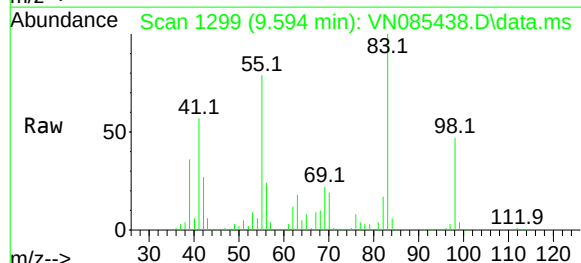
98 46.7 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 106.001 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085438.D

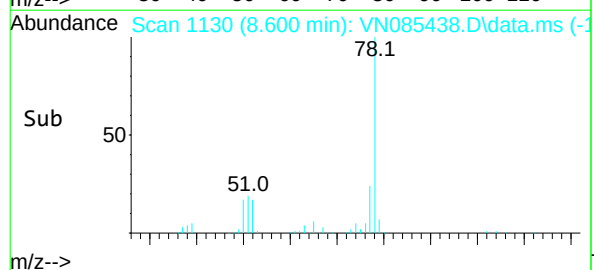
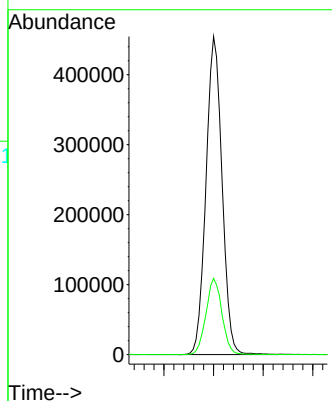
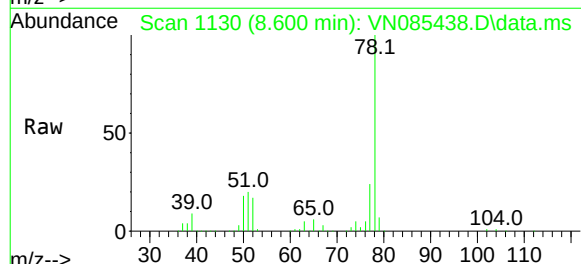
Acq: 14 Jan 2025 14:56

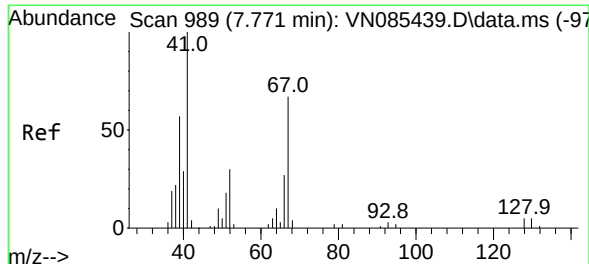
Tgt Ion: 78 Resp: 1021393

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6





#41

Methacrylonitrile

Concen: 109.454 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

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

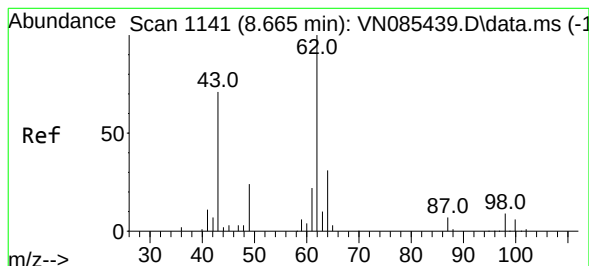
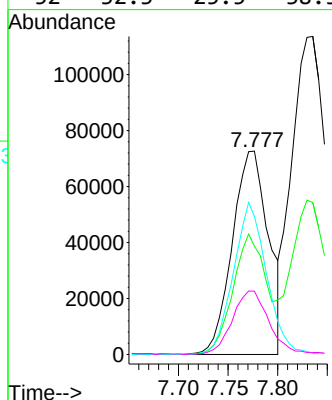
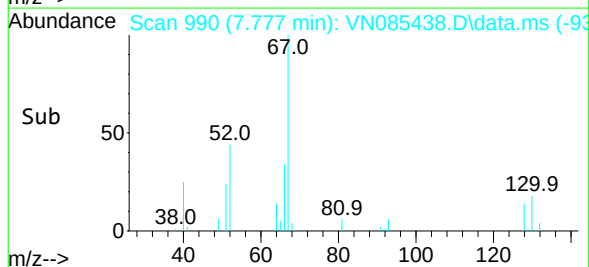
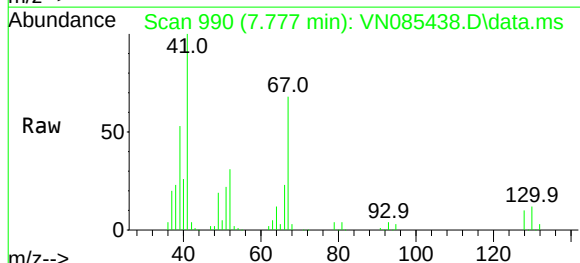
52 32.3 25.5 38.3

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

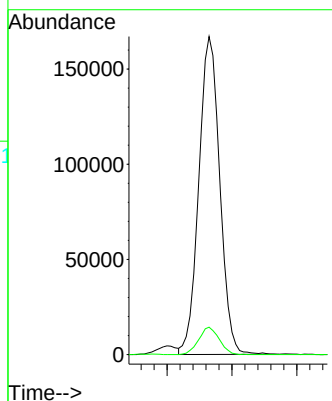
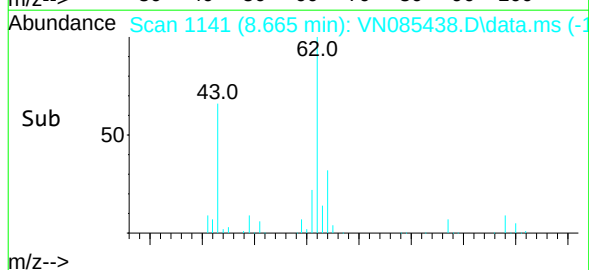
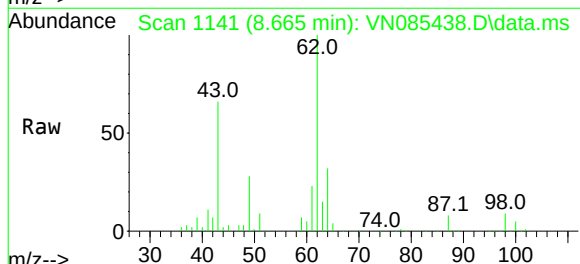
Acq: 14 Jan 2025 14:56

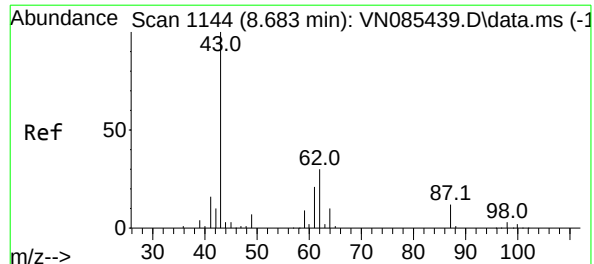
Tgt Ion: 62 Resp: 374938

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

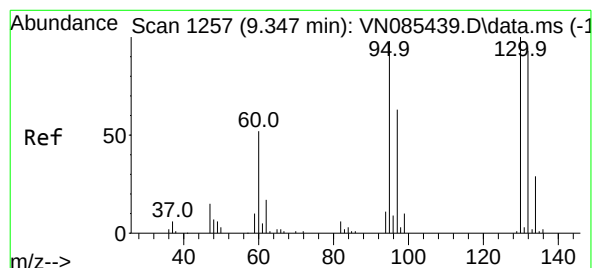
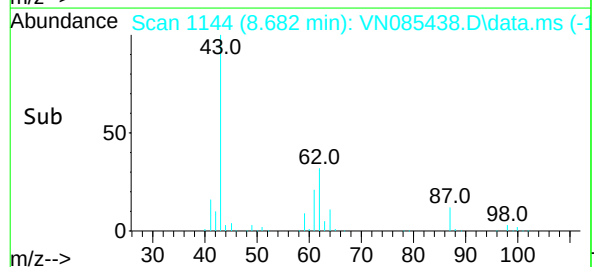
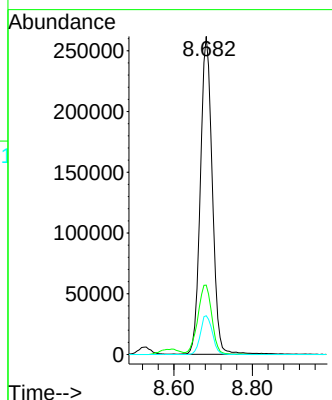
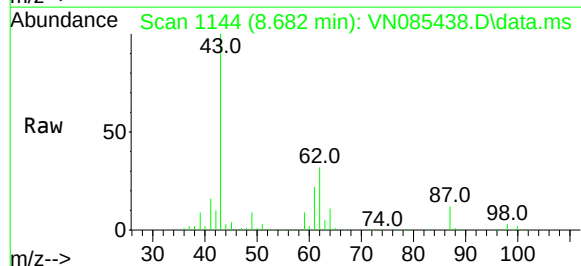
87 12.2 9.8 14.8

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

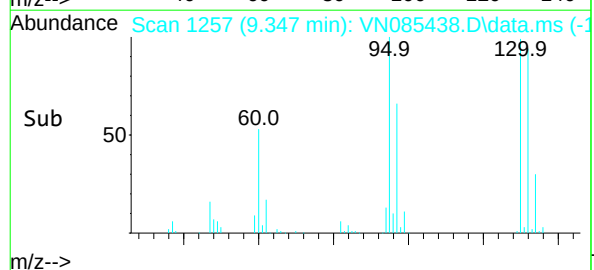
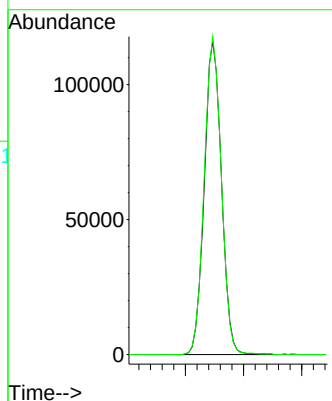
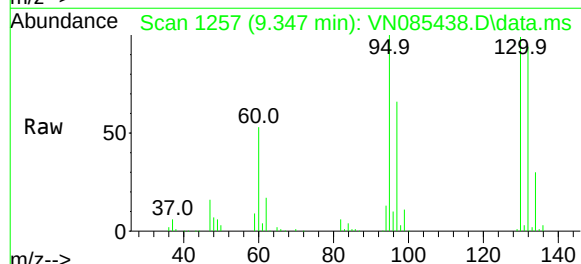
Acq: 14 Jan 2025 14:56

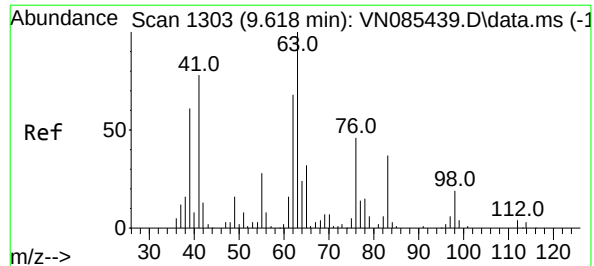
Tgt Ion:130 Resp: 238296

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

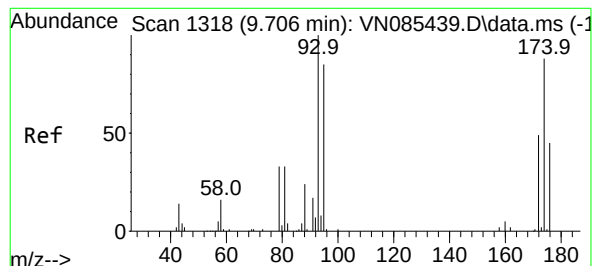
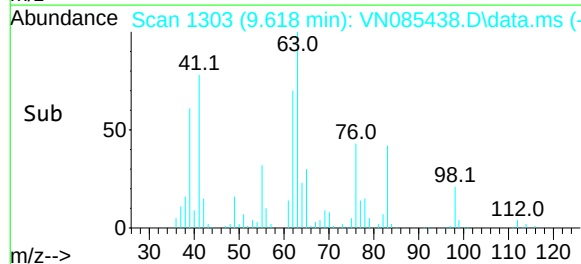
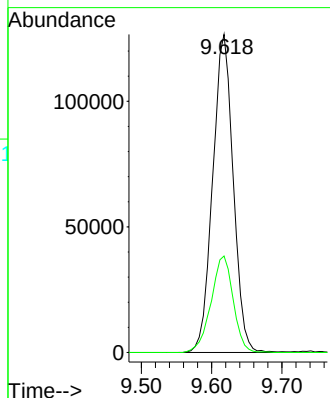
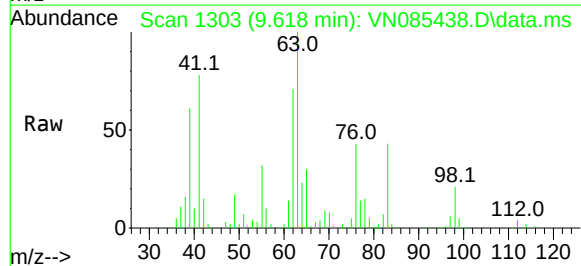
65 30.3 25.6 38.4

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

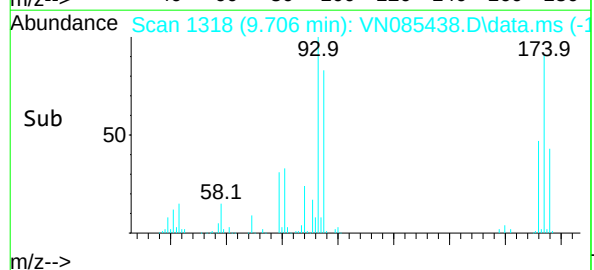
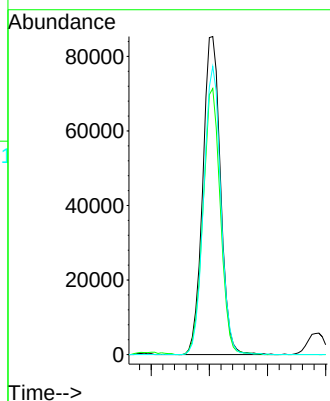
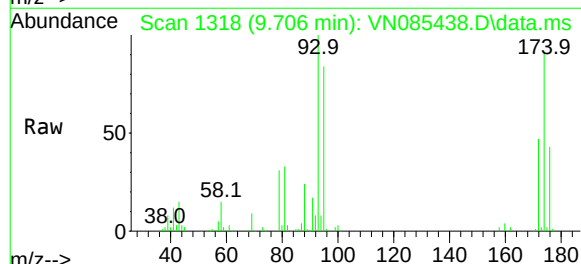
Tgt Ion: 93 Resp: 180990

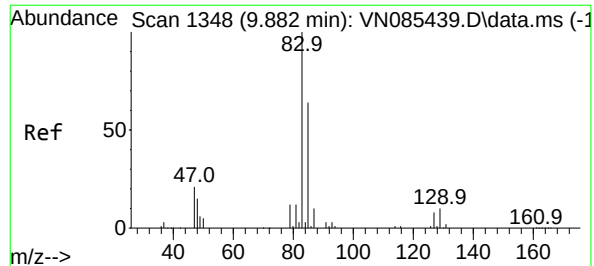
Ion Ratio Lower Upper

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

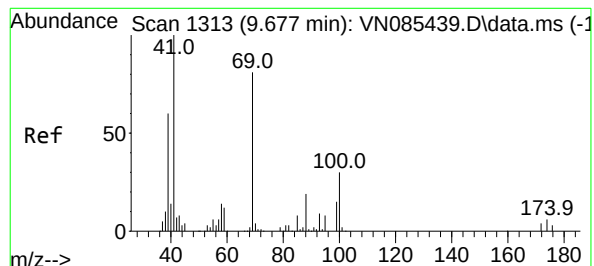
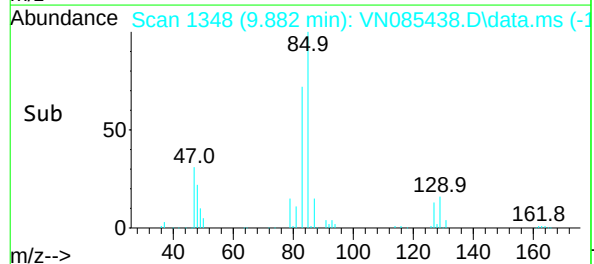
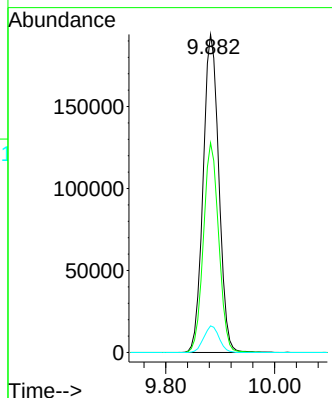
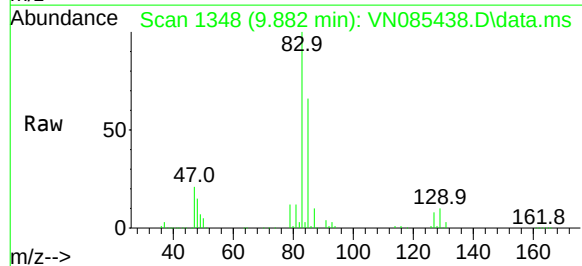
ClientSampleId :

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

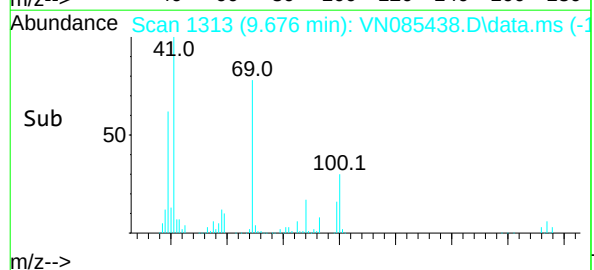
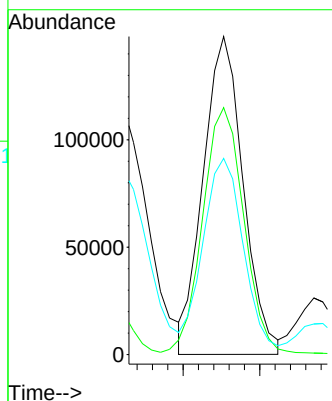
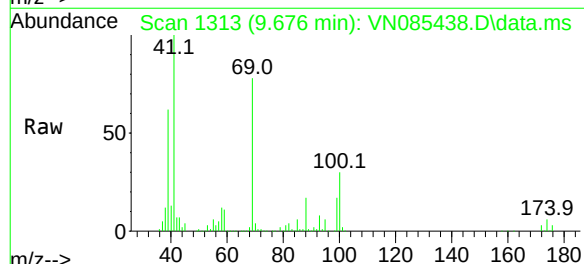
RT: 9.676 min Scan# 1313

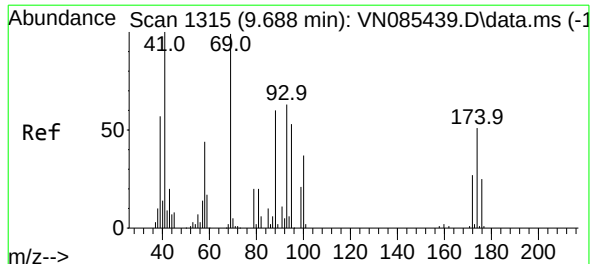
Delta R.T. -0.001 min

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

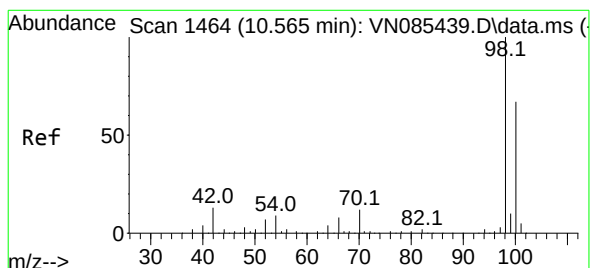
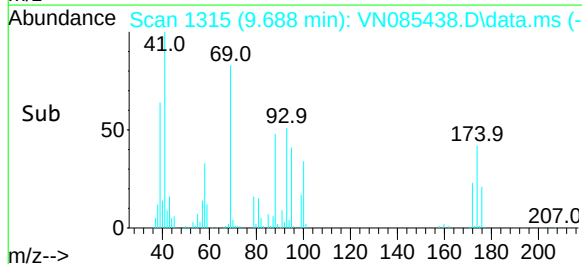
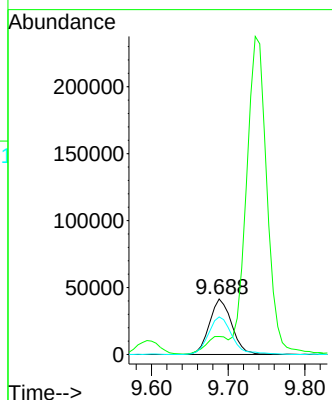
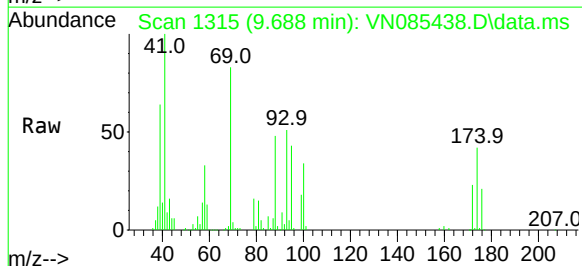
58 72.1 59.5 89.3

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

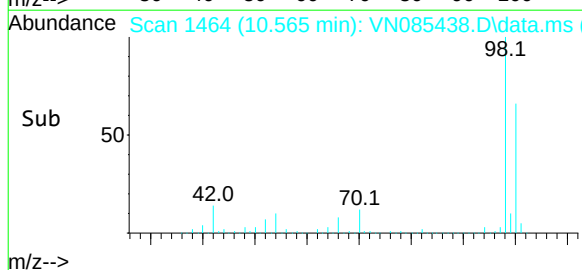
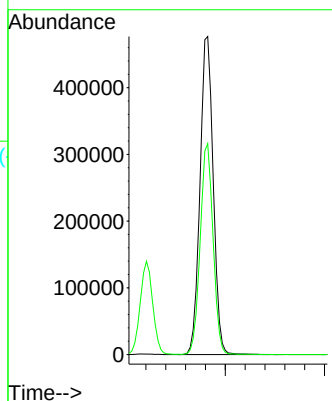
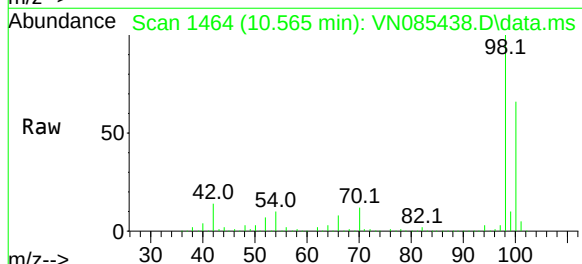
Acq: 14 Jan 2025 14:56

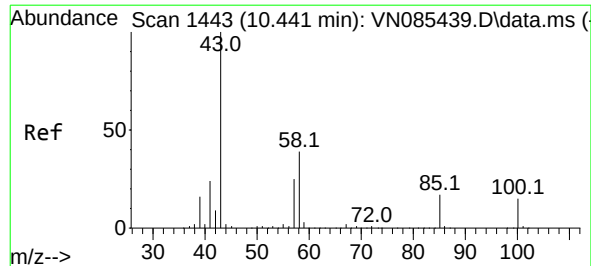
Tgt Ion: 98 Resp: 881956

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





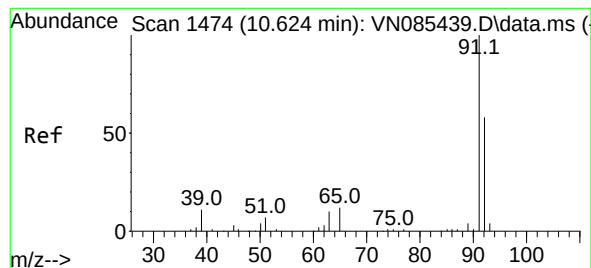
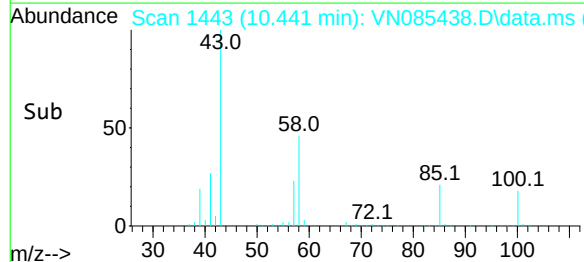
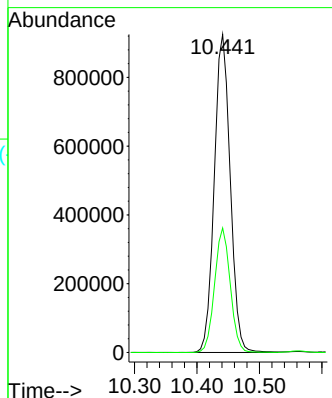
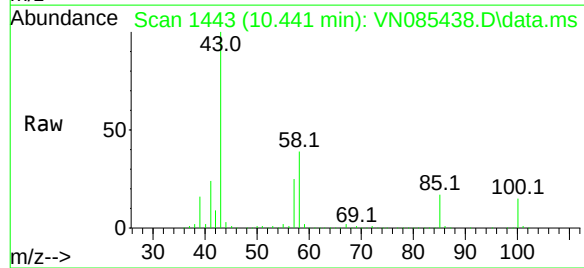
#51  
4-Methyl-2-Pentanone  
Concen: 546.159 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

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

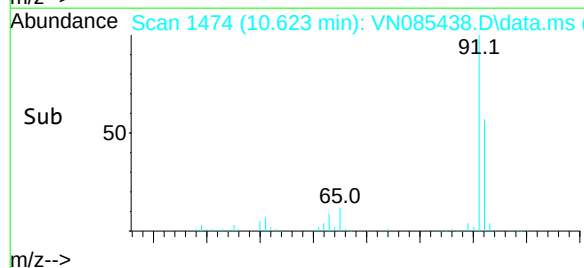
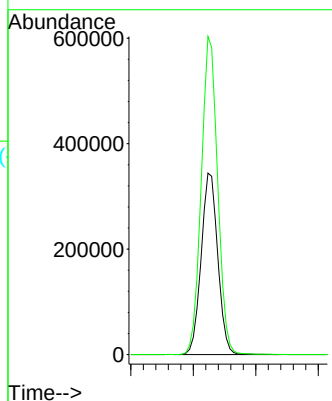
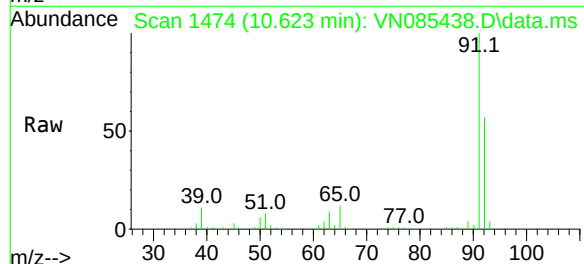
Manual Integrations  
APPROVED

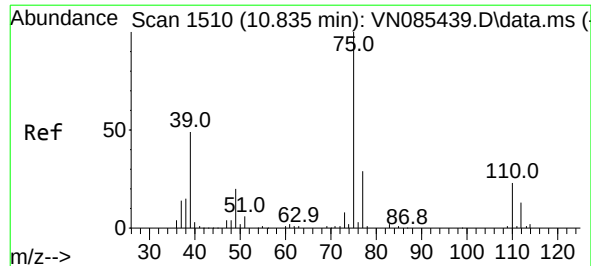
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

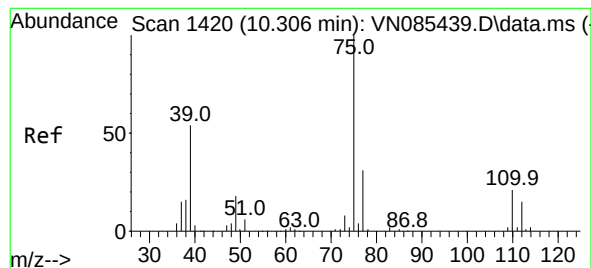
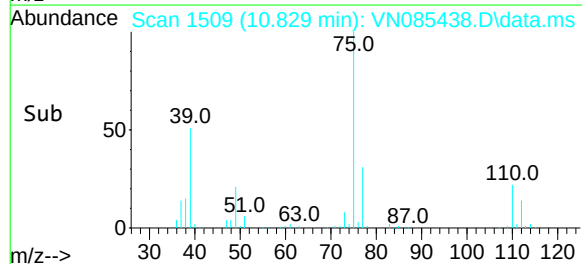
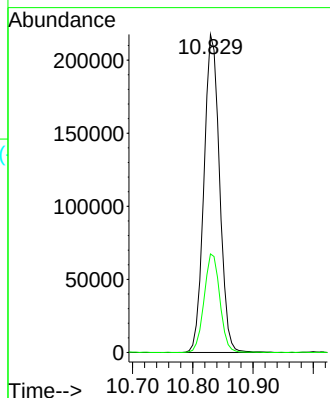
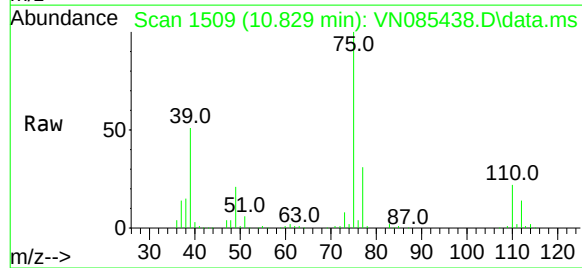
77 31.0 23.5 35.3

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

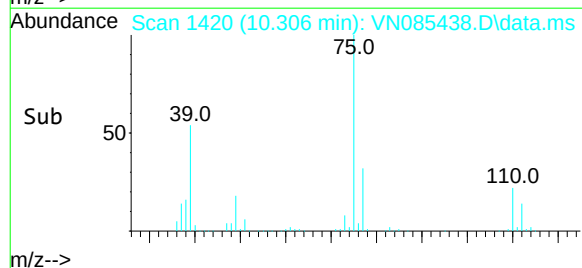
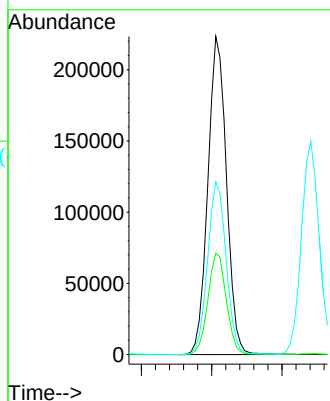
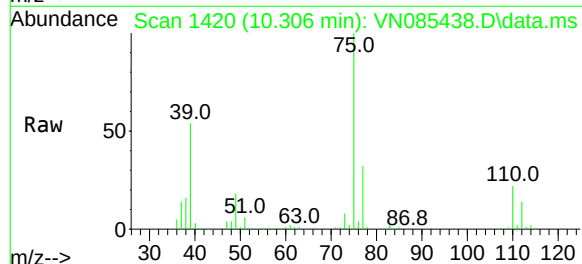
Tgt Ion: 75 Resp: 410403

Ion Ratio Lower Upper

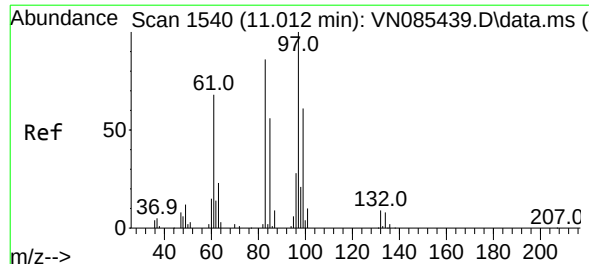
75 100

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

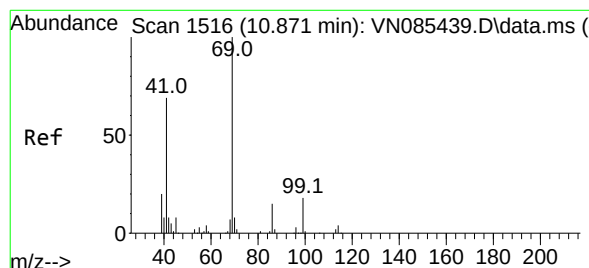
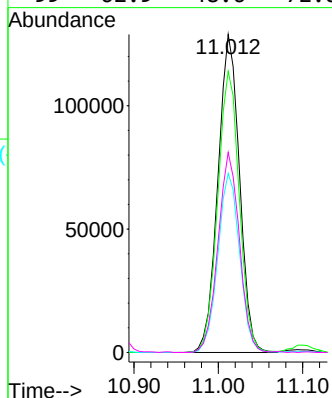
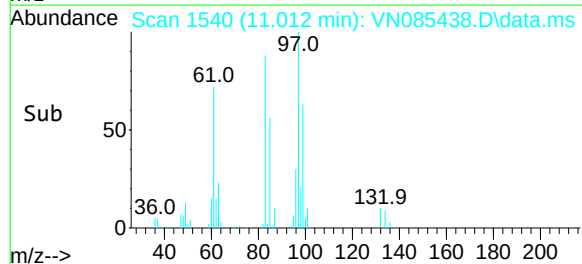
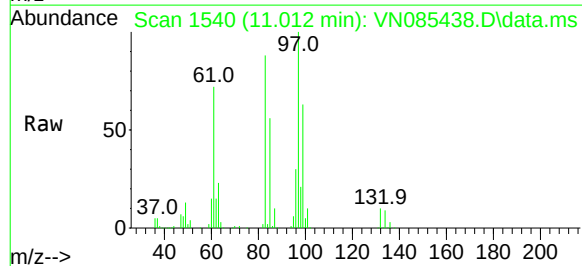
99 62.9 48.6 72.8

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

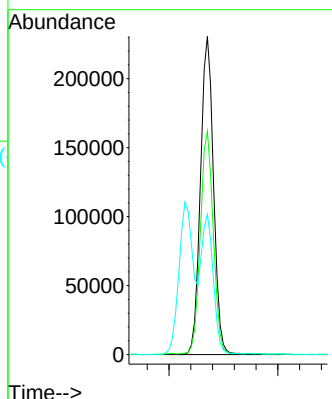
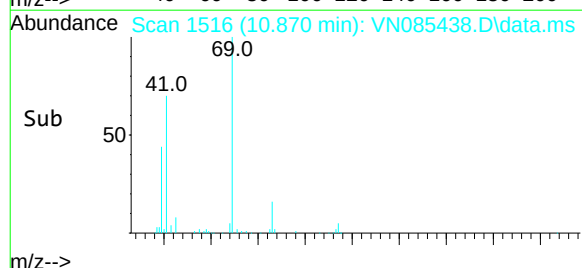
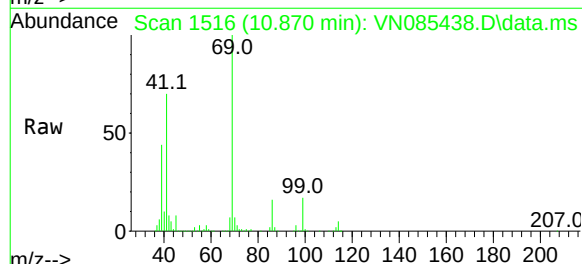
Tgt Ion: 69 Resp: 383663

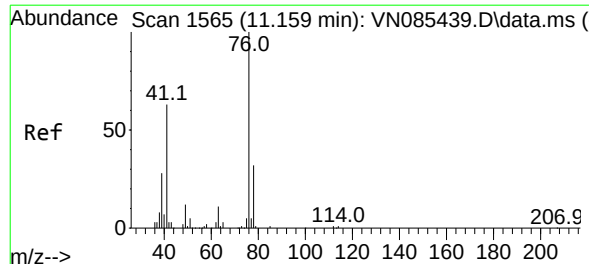
Ion Ratio Lower Upper

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# 15

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

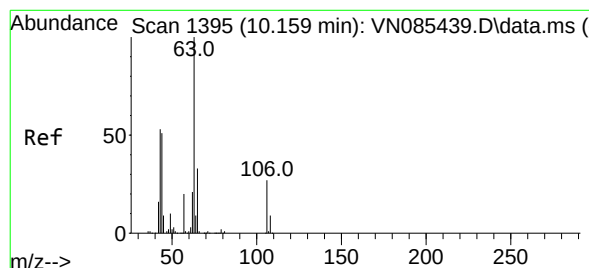
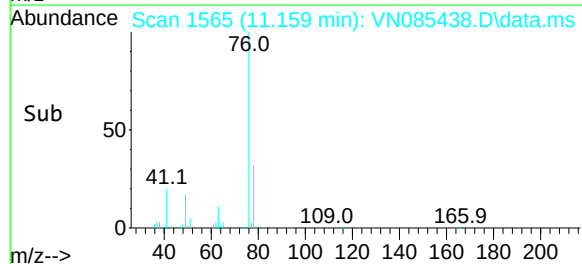
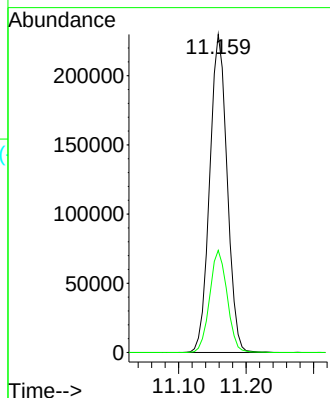
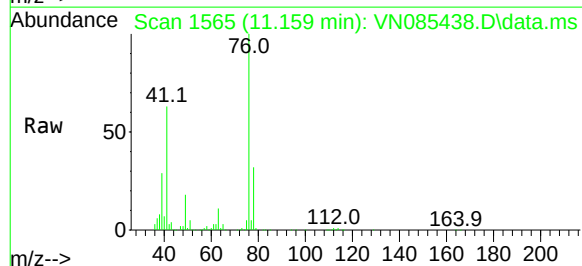
78 32.2 25.6 38.4

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

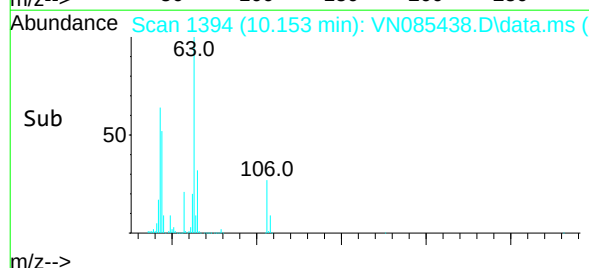
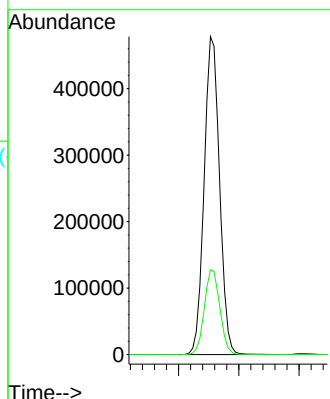
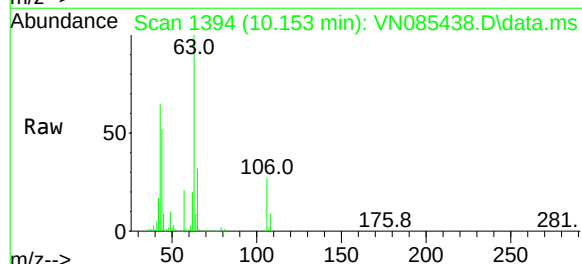
Acq: 14 Jan 2025 14:56

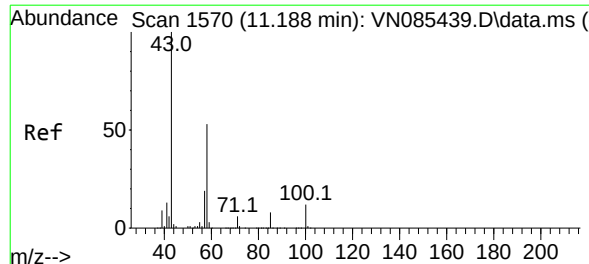
Tgt Ion: 63 Resp: 848636

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 :

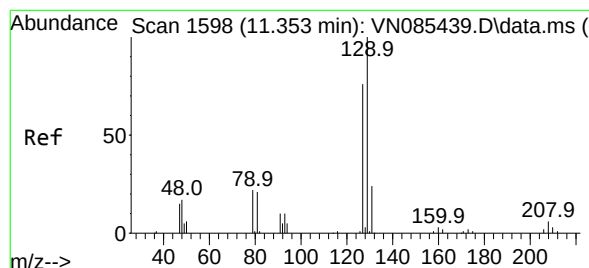
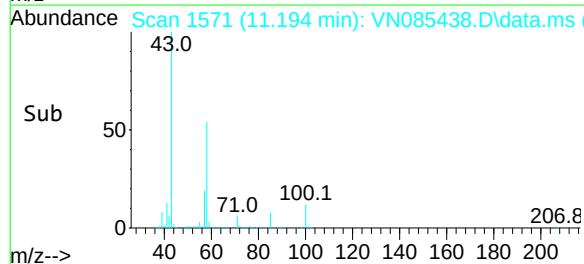
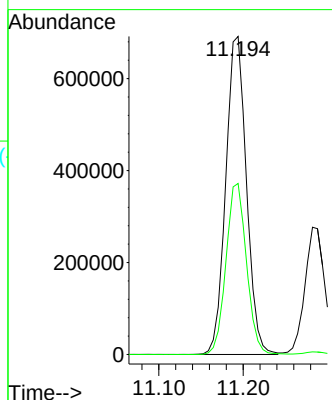
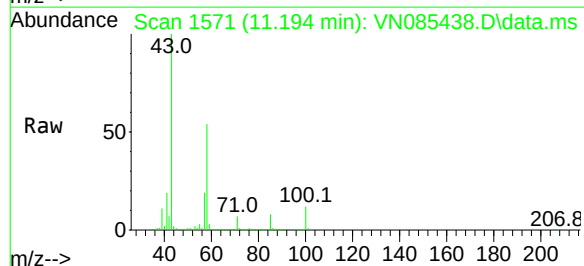
VSTDICC100

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

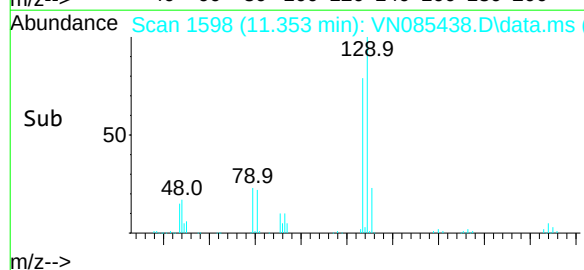
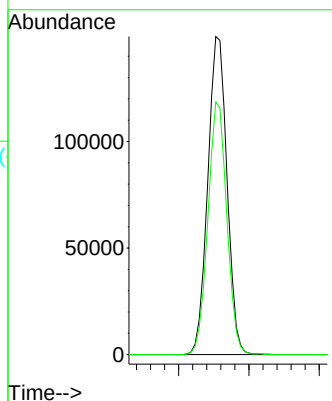
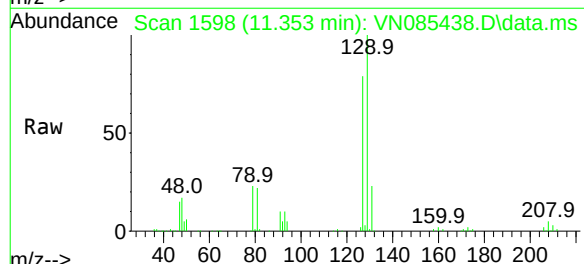
Acq: 14 Jan 2025 14:56

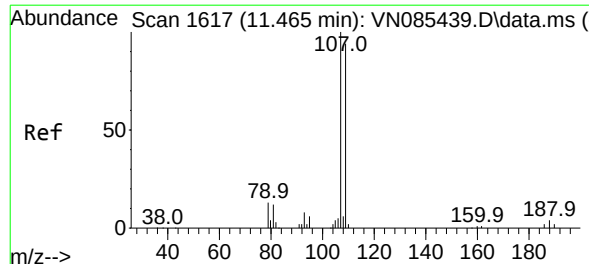
Tgt Ion:129 Resp: 283361

Ion Ratio Lower Upper

129 100

127 78.1 38.6 115.8





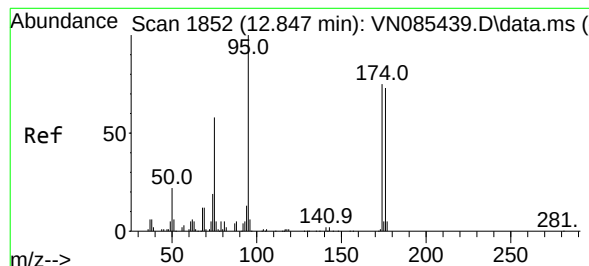
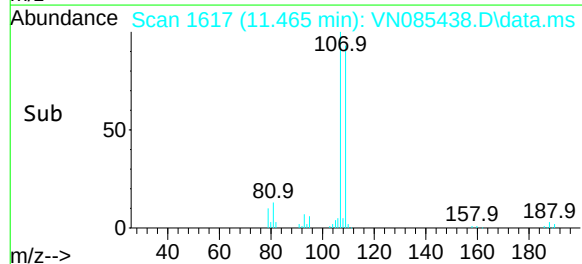
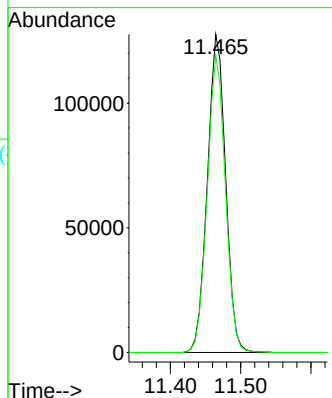
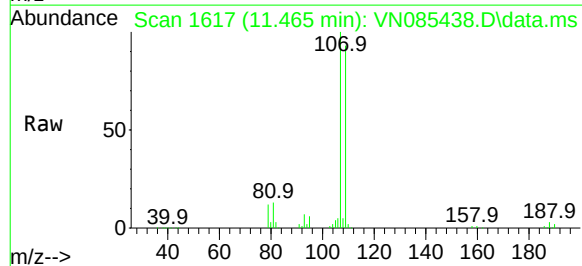
#61  
1,2-Dibromoethane  
Concen: 104.623 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

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

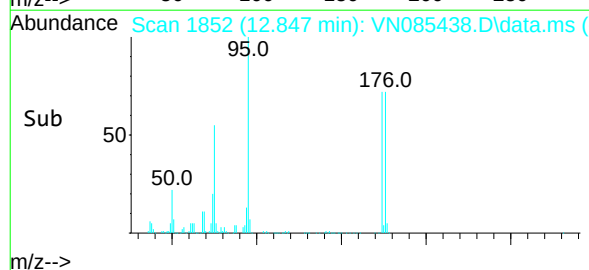
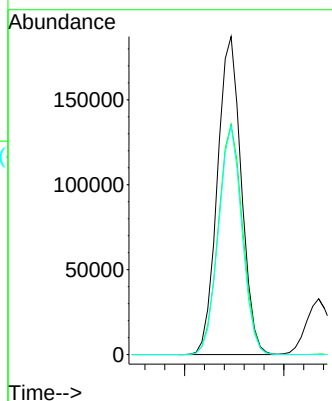
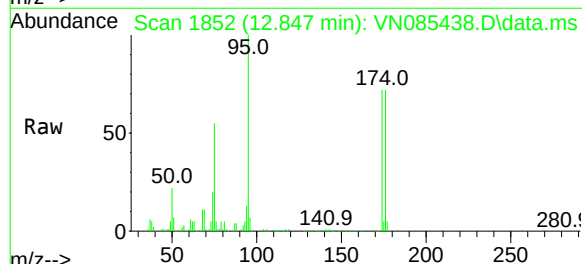
Manual Integrations  
APPROVED

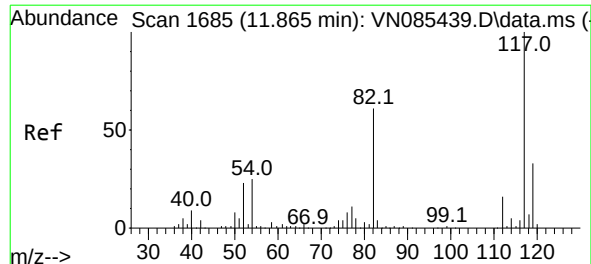
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#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

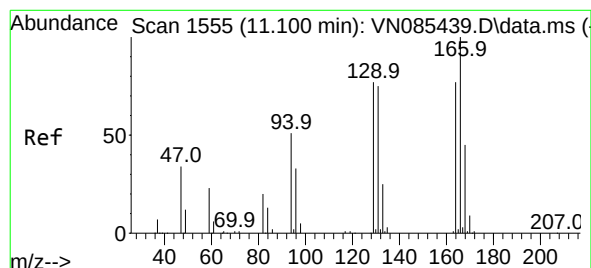
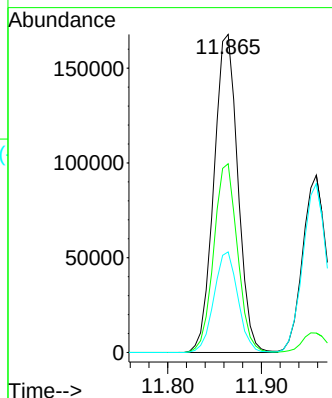
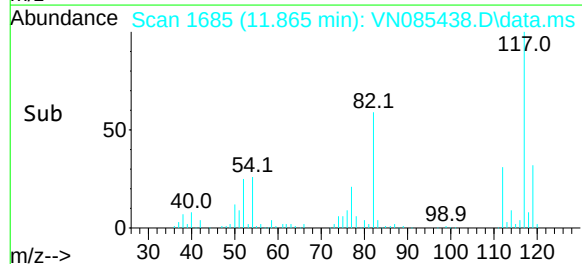
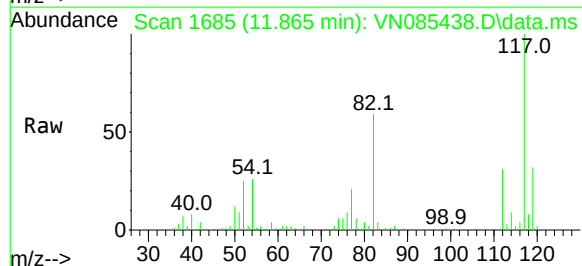
119 31.6 26.6 39.8

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

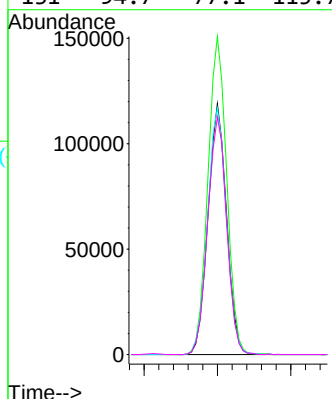
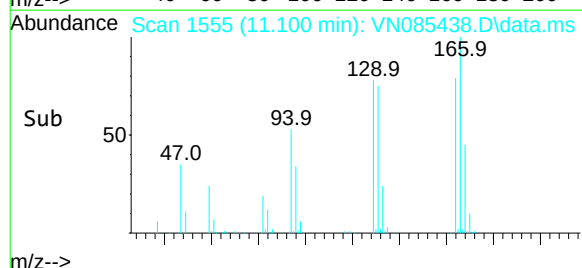
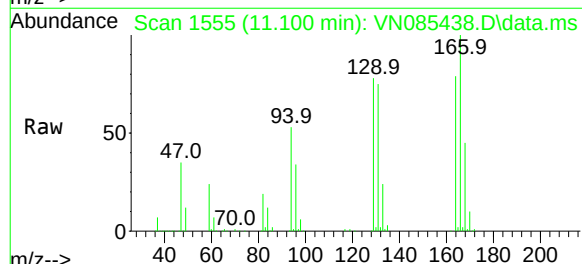
Ion Ratio Lower Upper

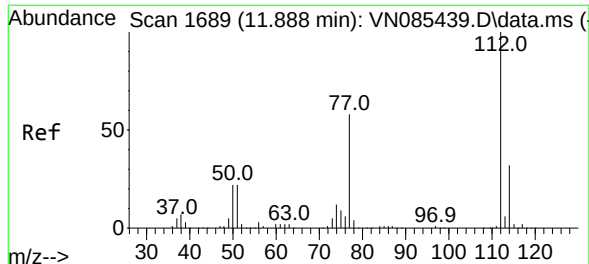
164 100

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

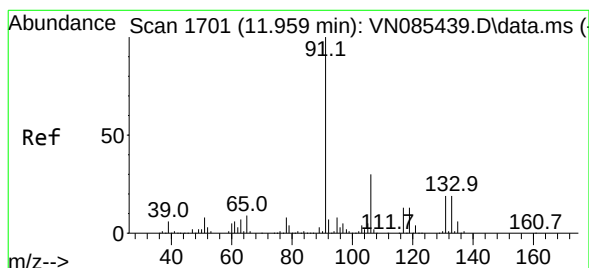
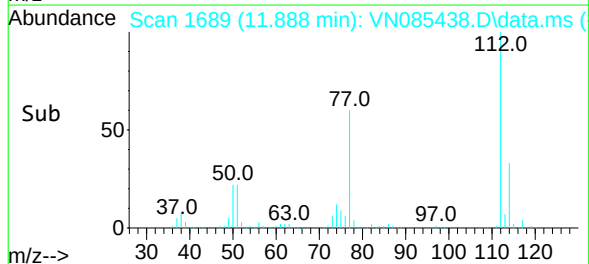
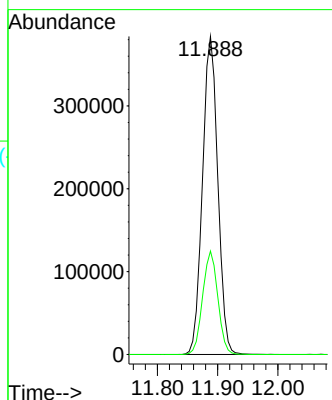
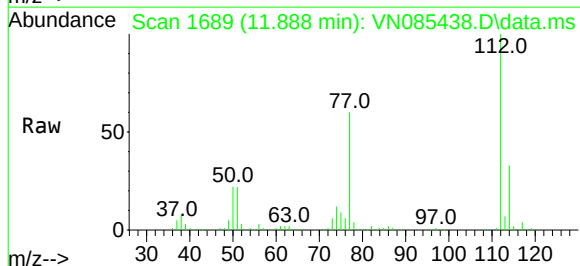
114 32.5 25.3 37.9

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

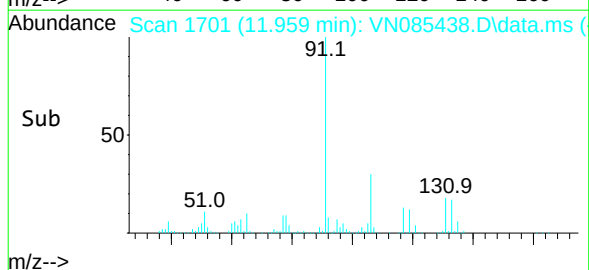
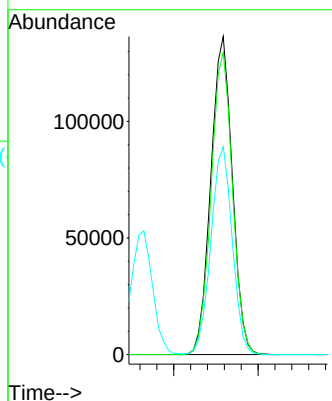
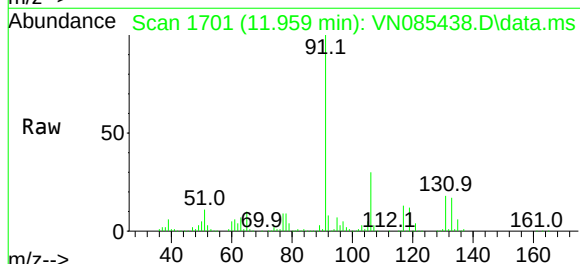
Tgt Ion:131 Resp: 241593

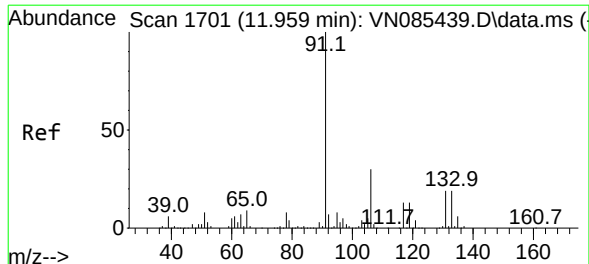
Ion Ratio Lower Upper

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

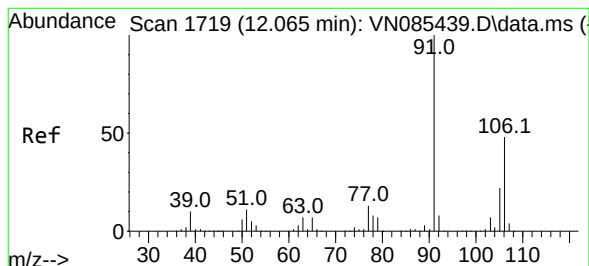
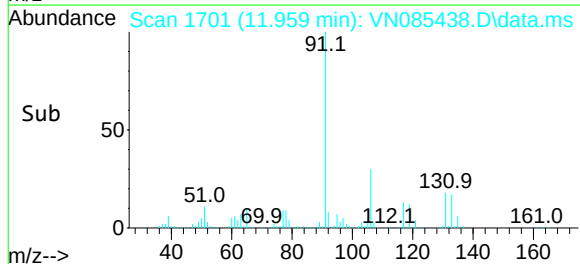
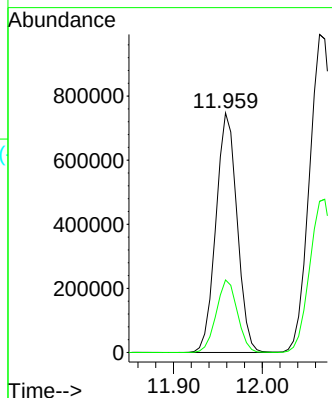
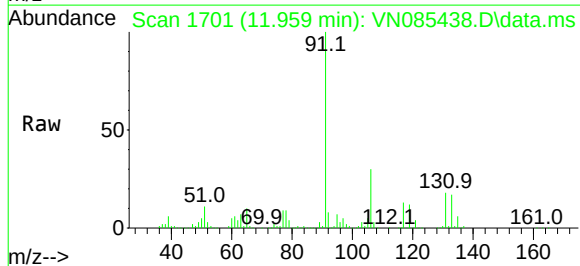
106 30.3 23.8 35.8

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

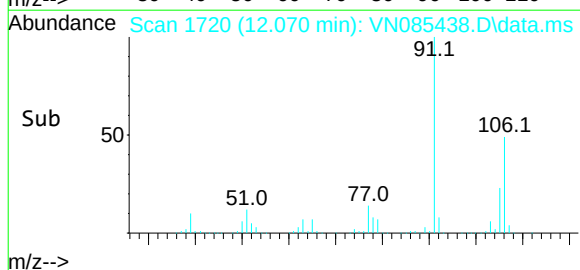
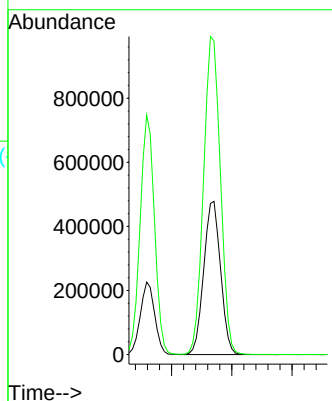
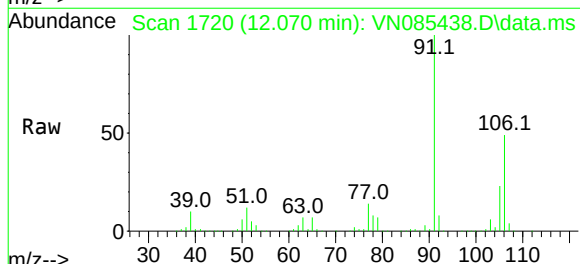
Acq: 14 Jan 2025 14:56

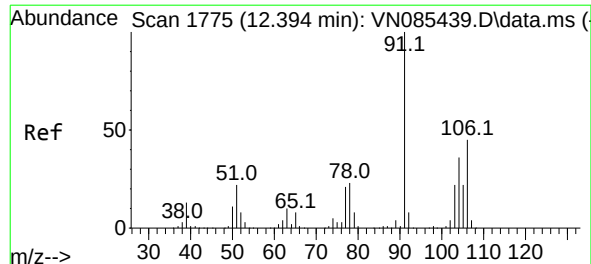
Tgt Ion:106 Resp: 927244

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 :

VSTDIC100

Tgt Ion:106 Resp: 441279

Ion Ratio Lower Upper

106 100

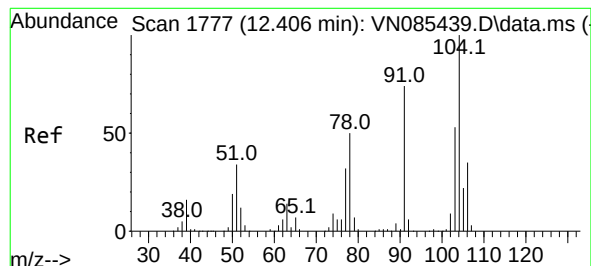
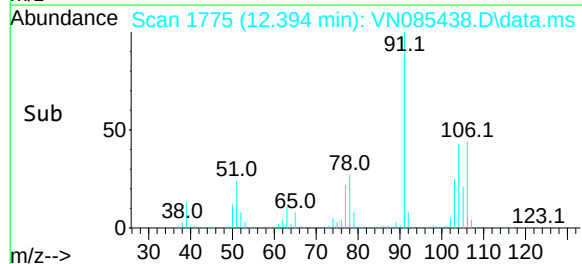
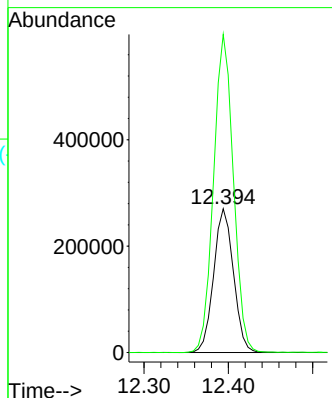
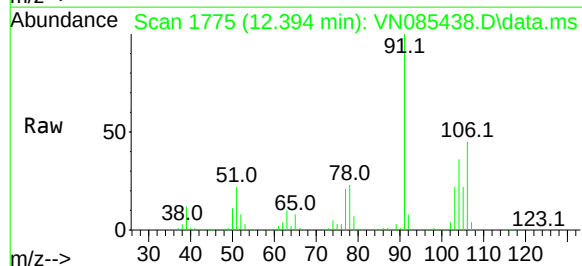
91 221.3 110.4 331.2

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

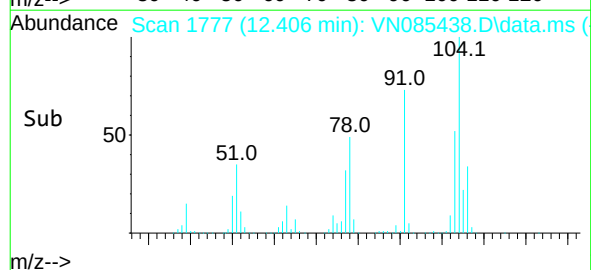
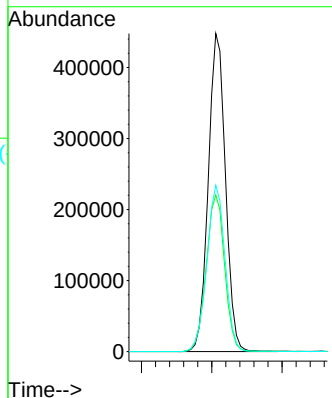
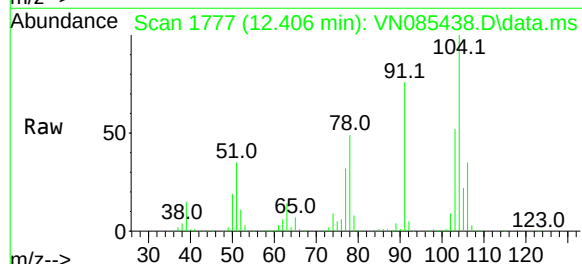
Tgt Ion:104 Resp: 760136

Ion Ratio Lower Upper

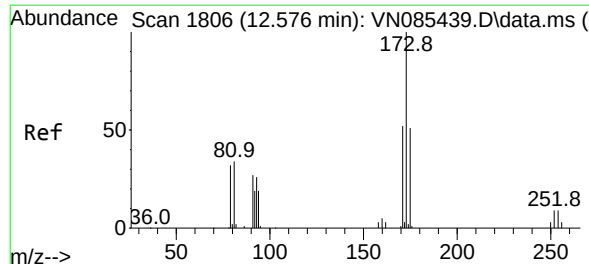
104 100

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# 1806

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

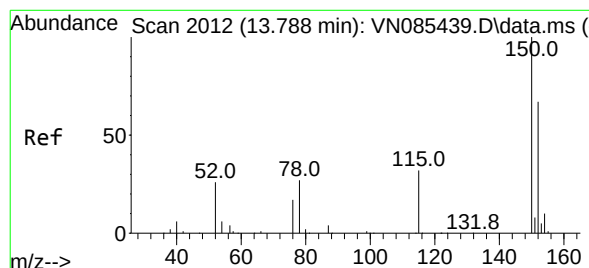
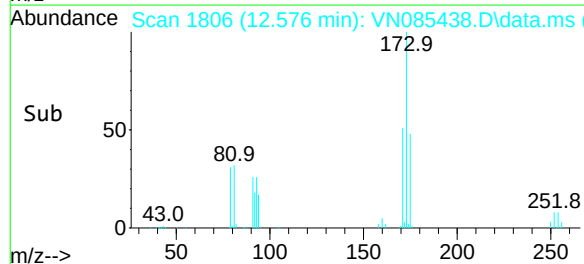
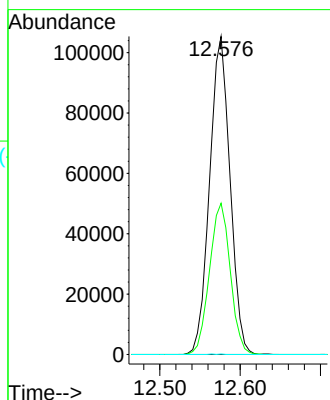
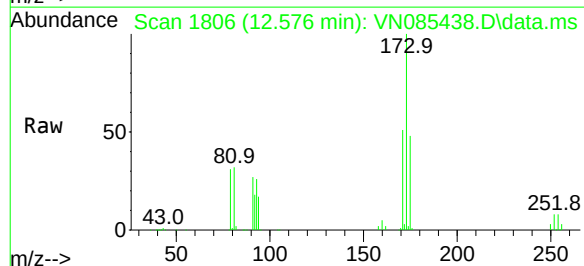
VSTDIC100

|           |       |       |        |
|-----------|-------|-------|--------|
| 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

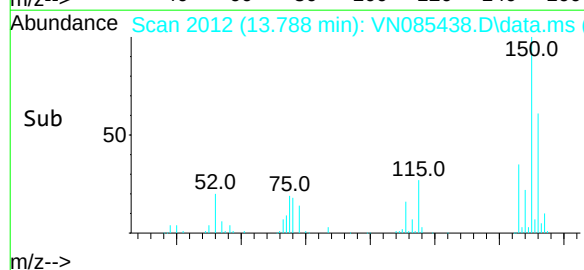
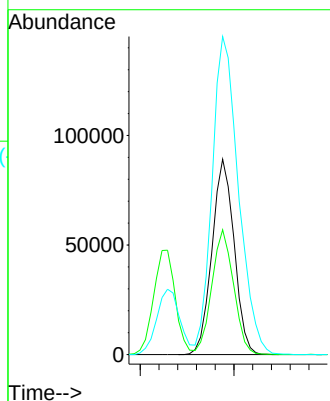
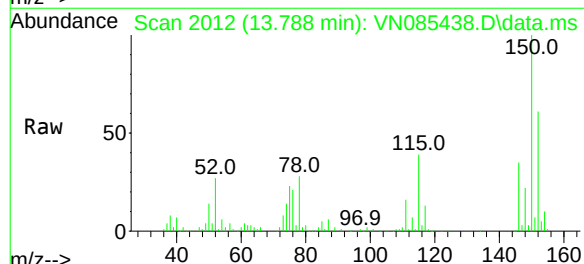
RT: 13.788 min Scan# 2012

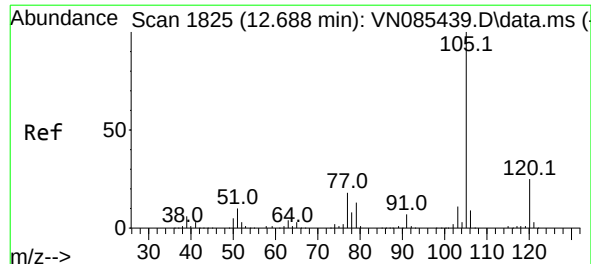
Delta R.T. -0.000 min

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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC100

Tgt Ion:105 Resp: 1146752

Ion Ratio Lower Upper

105 100

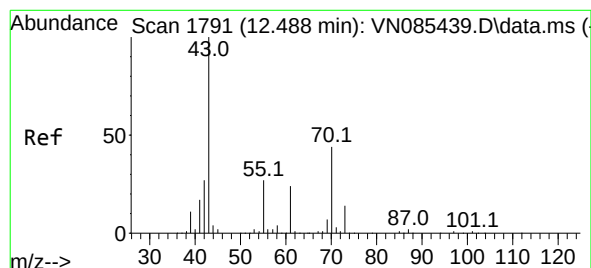
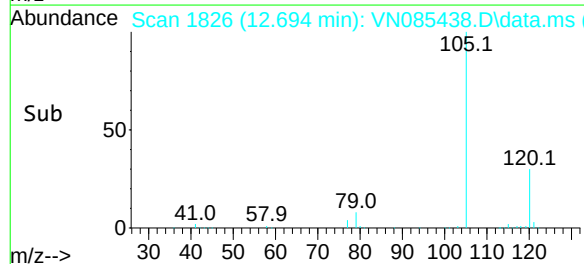
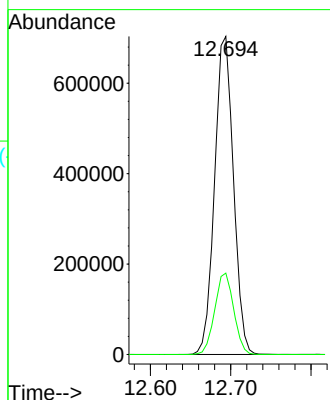
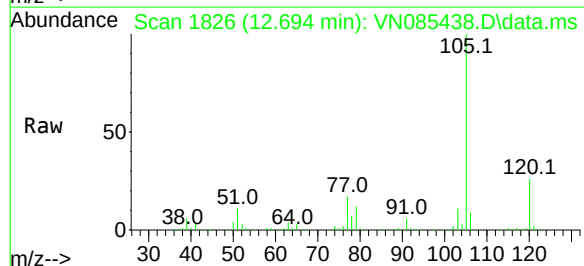
120 25.7 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 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

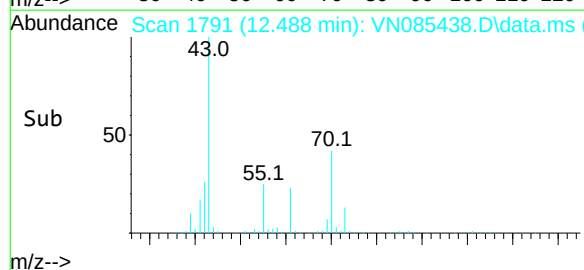
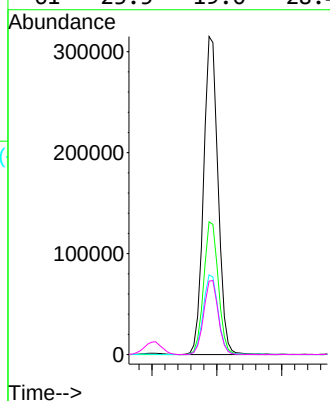
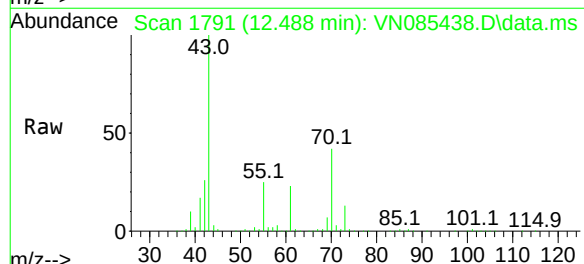
Ion Ratio Lower Upper

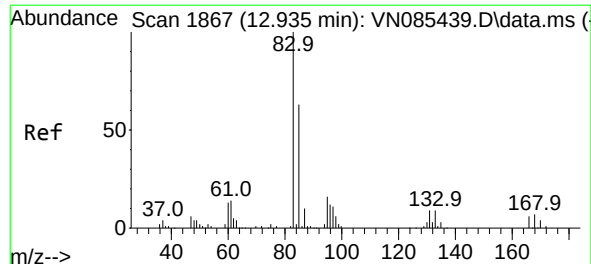
43 100

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 :

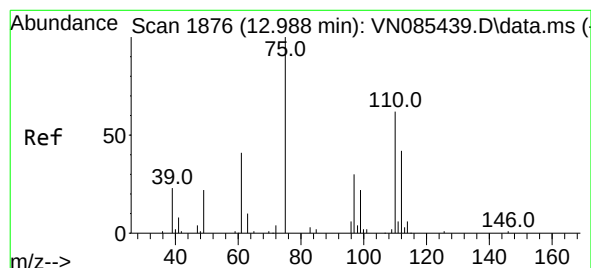
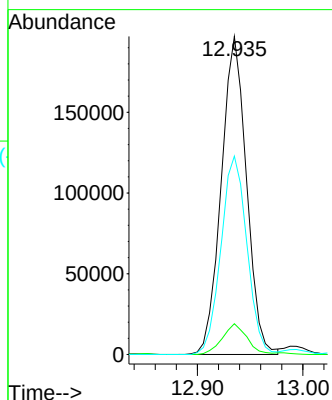
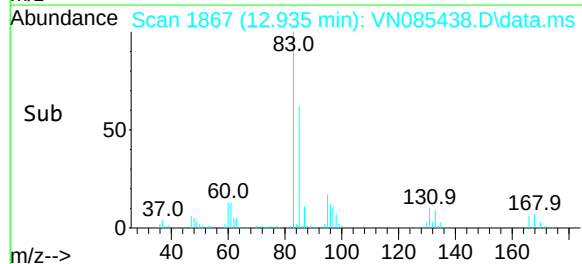
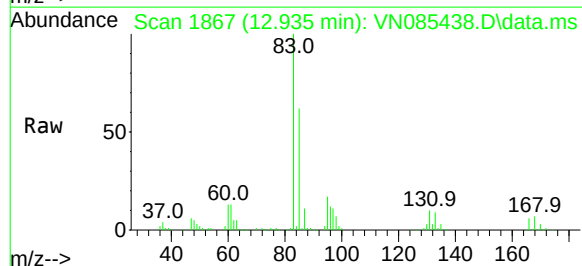
VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| 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

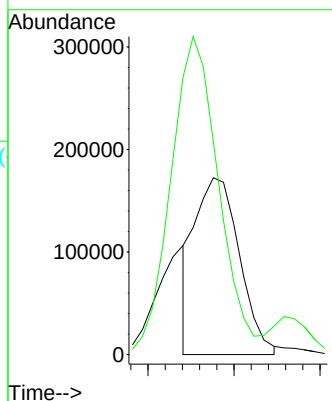
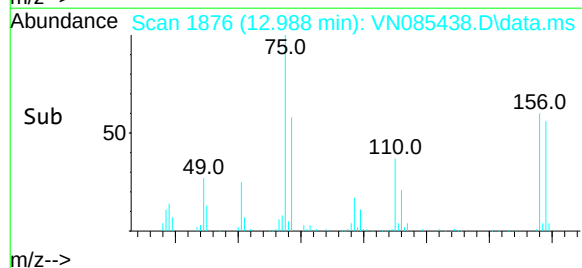
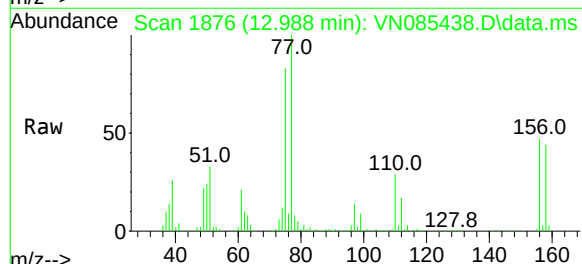
RT: 12.988 min Scan# 1876

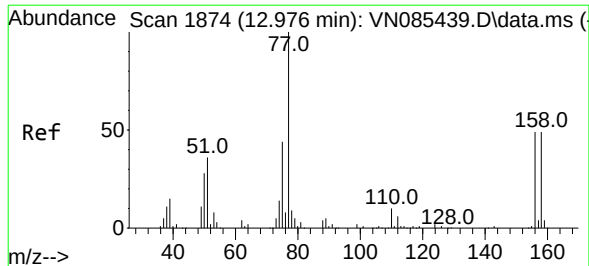
Delta R.T. -0.000 min

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

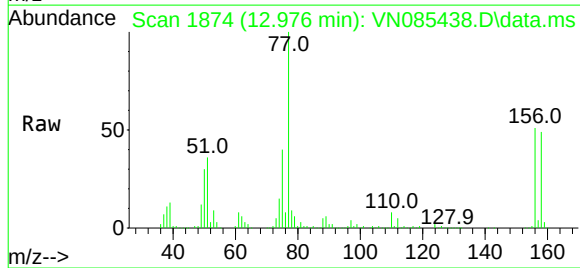
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100



Tgt Ion:156 Resp: 268616

Ion Ratio Lower Upper

156 100

77 222.4 114.1 342.4

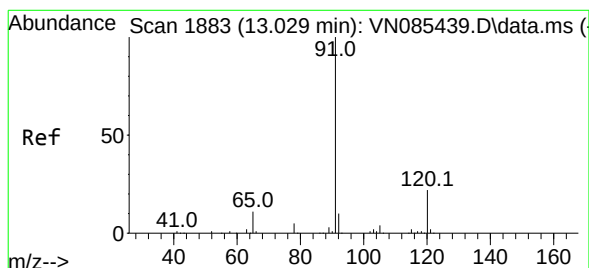
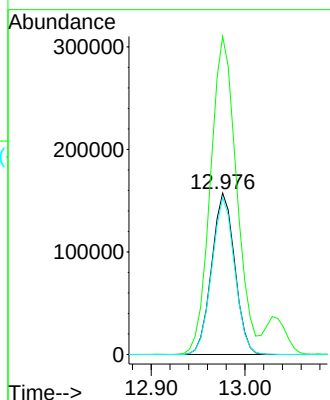
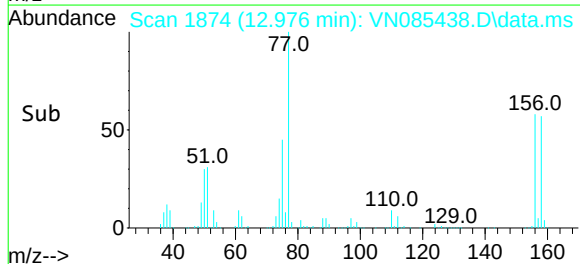
158 96.3 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

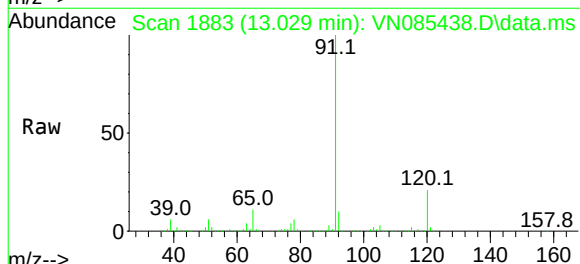
Concen: 118.600 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

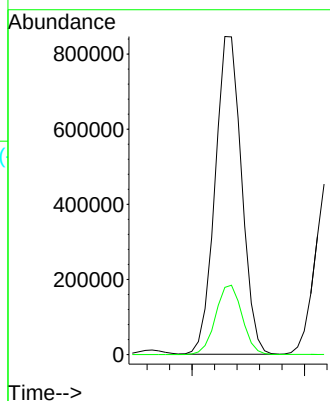
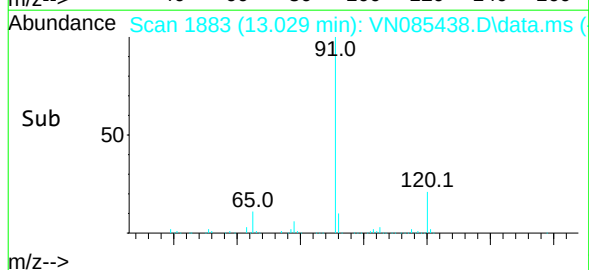


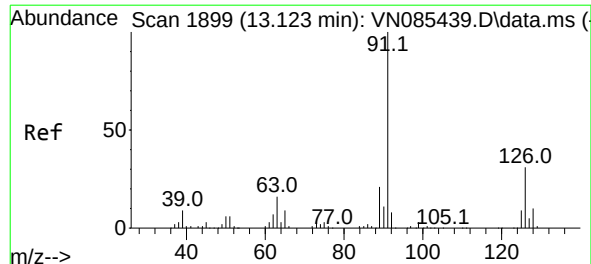
Tgt Ion: 91 Resp: 1385353

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

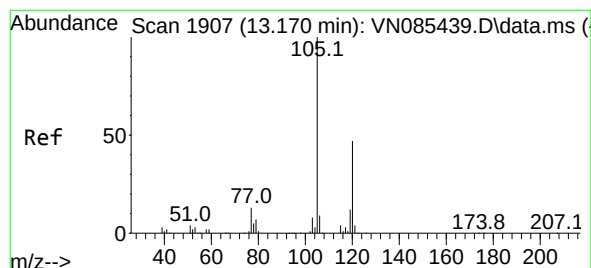
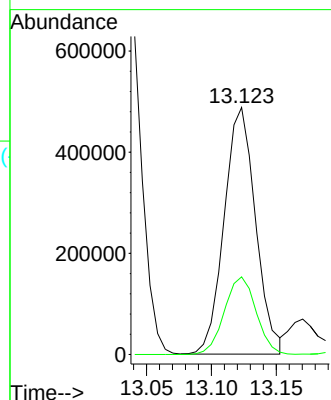
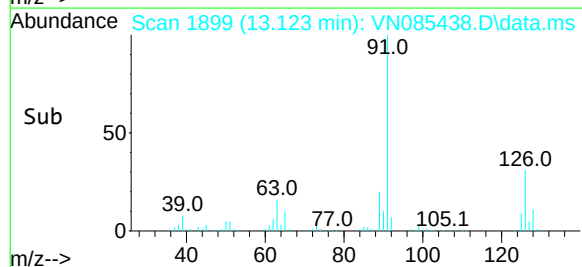
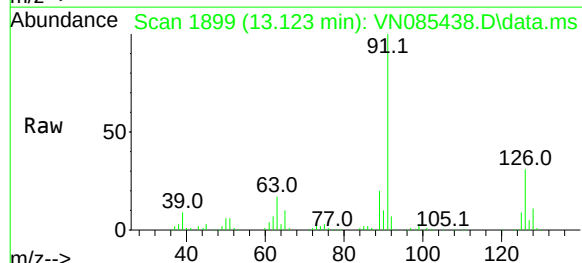
126 31.8 15.7 47.1

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

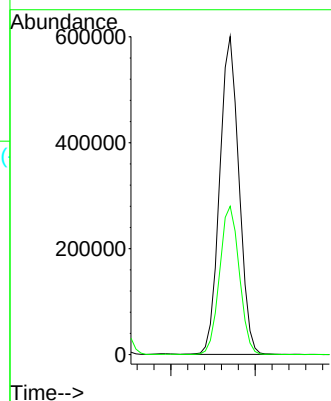
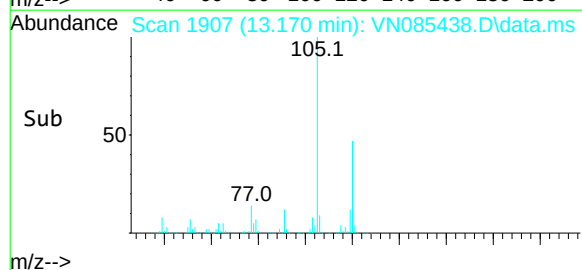
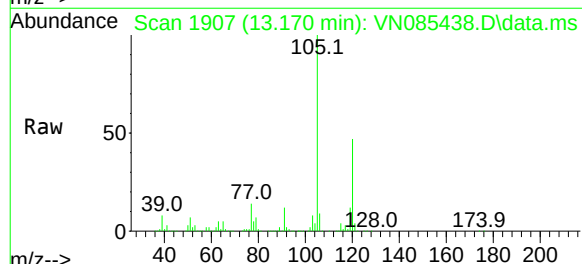
Acq: 14 Jan 2025 14:56

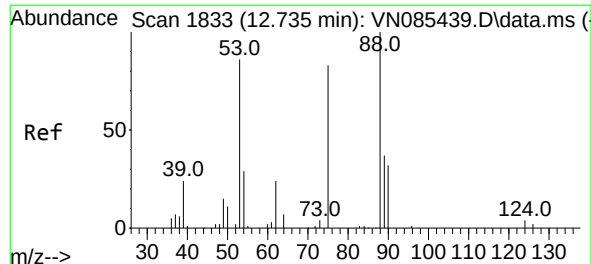
Tgt Ion:105 Resp: 953066

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

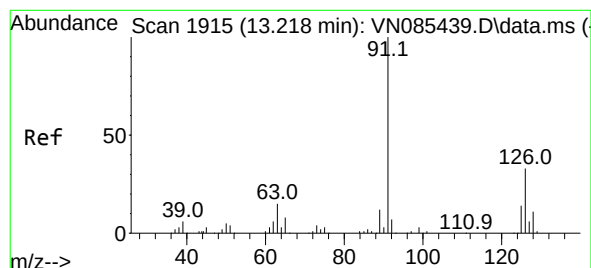
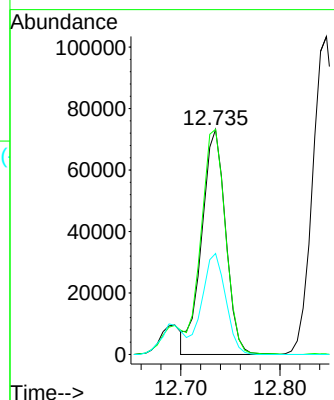
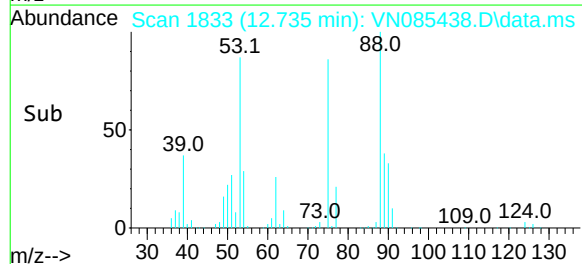
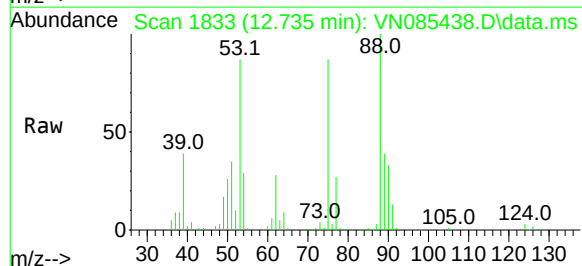
89 44.4 37.0 55.6

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

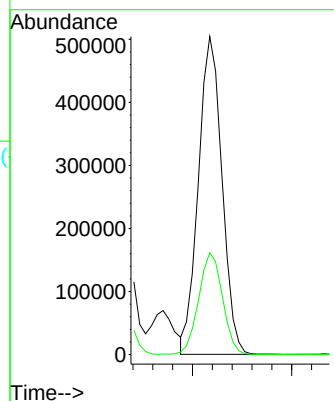
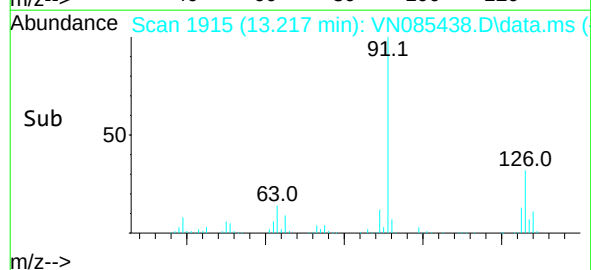
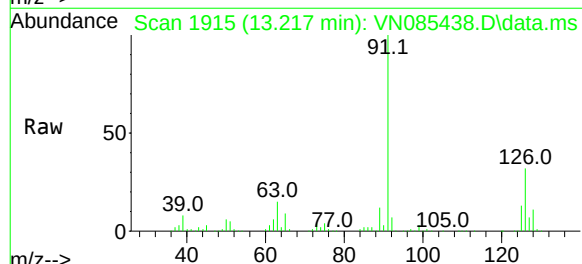
Acq: 14 Jan 2025 14:56

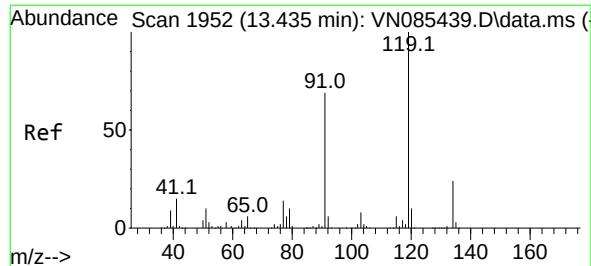
Tgt Ion: 91 Resp: 832317

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

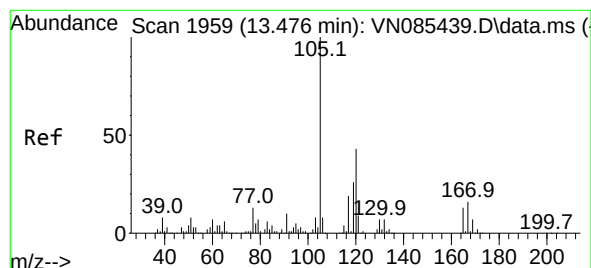
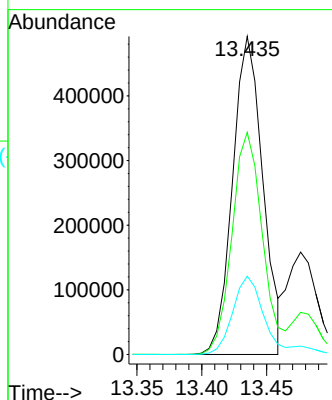
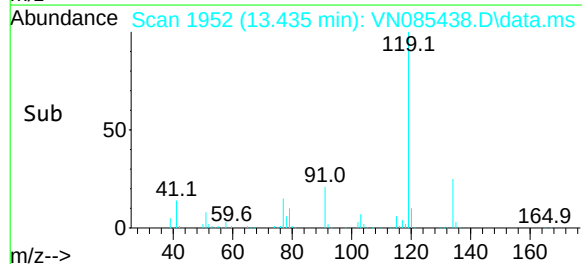
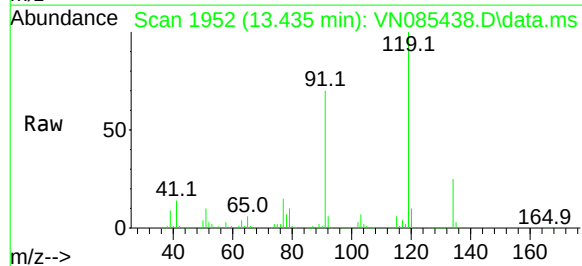
134 26.6 12.0 36.1

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

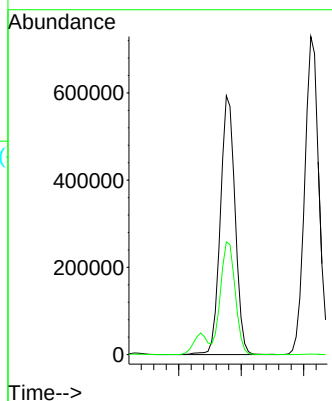
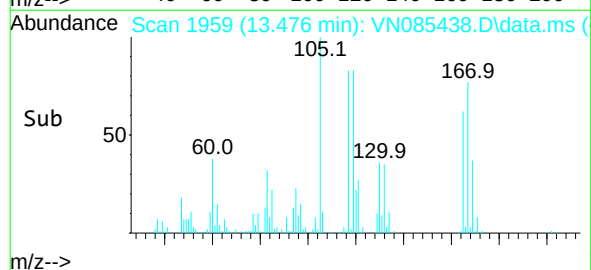
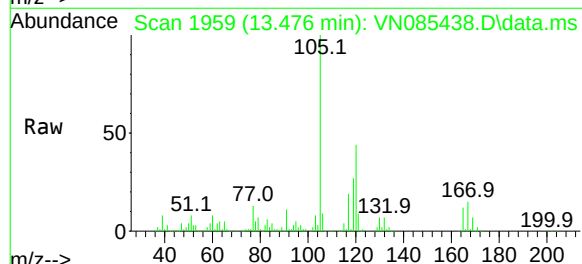
Acq: 14 Jan 2025 14:56

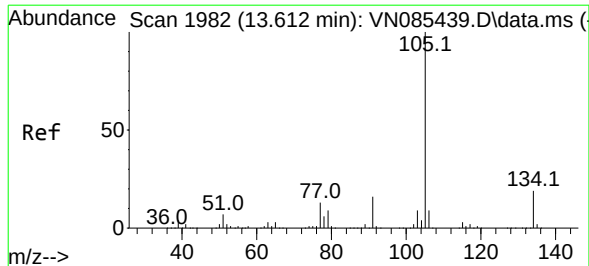
Tgt Ion:105 Resp: 971729

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

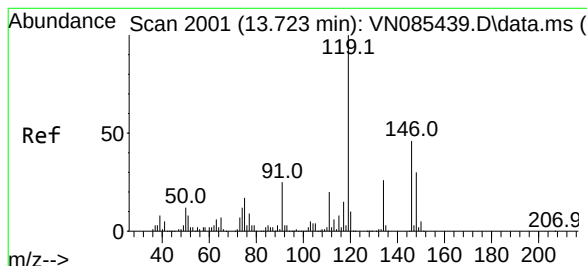
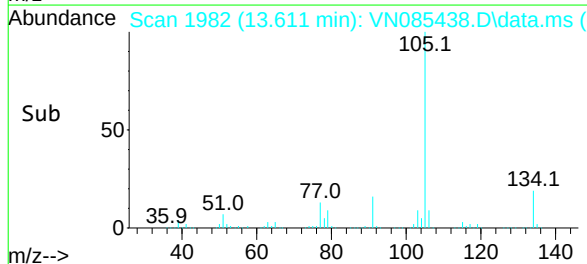
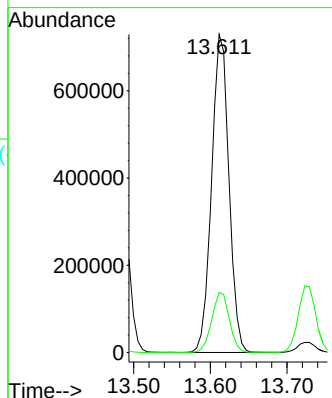
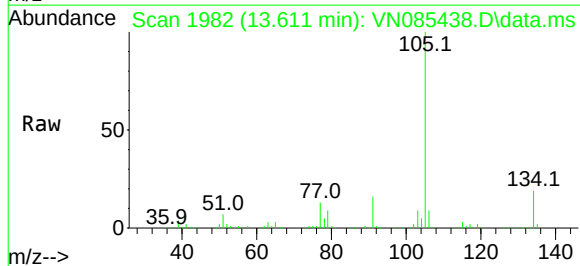
134 19.2 9.7 28.9

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

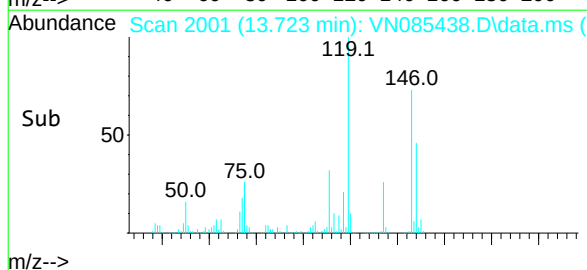
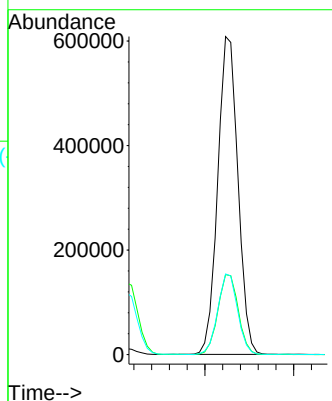
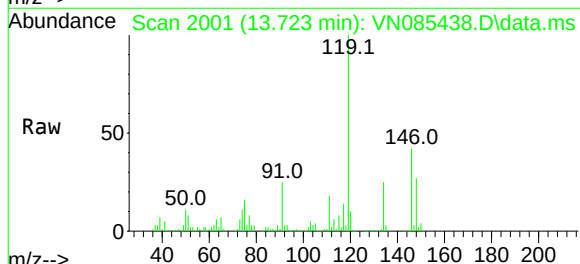
Tgt Ion:119 Resp: 960747

Ion Ratio Lower Upper

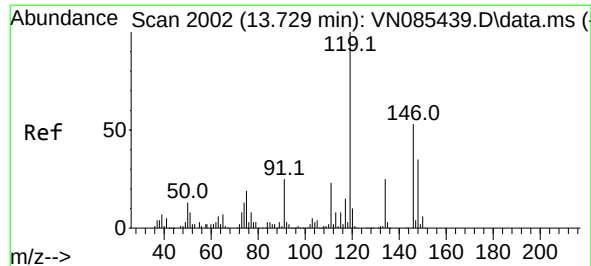
119 100

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 :

VSTDIC100

Tgt Ion:146 Resp: 502960

Ion Ratio Lower Upper

146 100

111 42.8 21.4 64.3

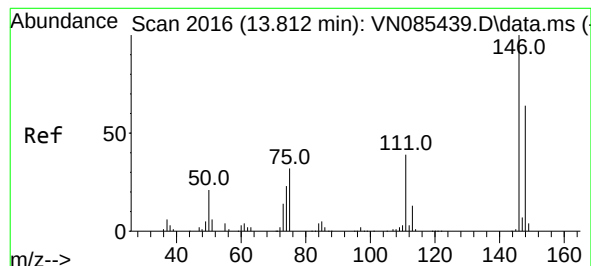
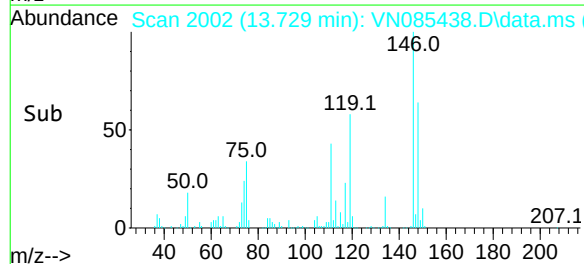
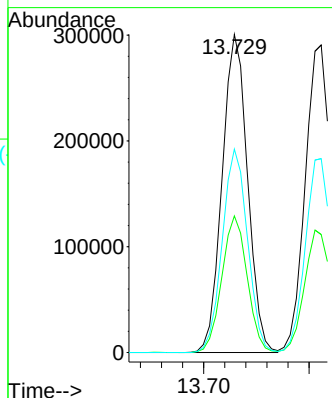
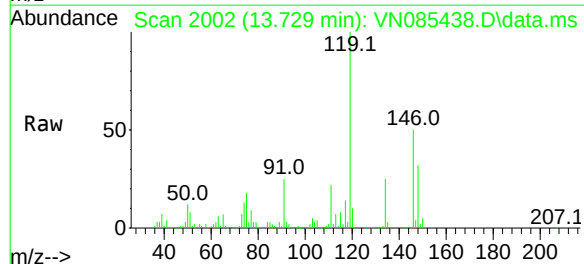
148 63.6 32.3 96.9

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

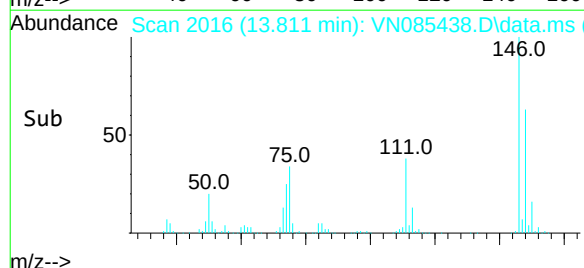
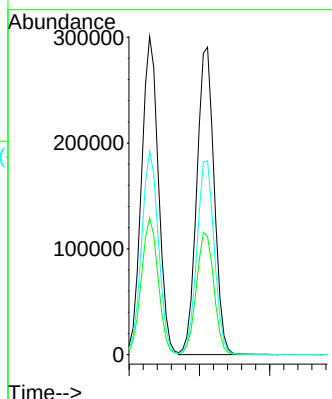
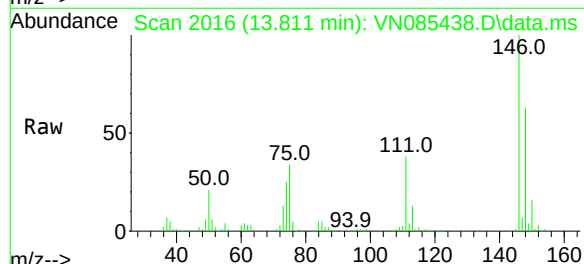
Tgt Ion:146 Resp: 498709

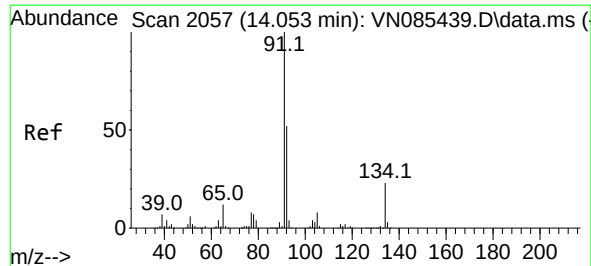
Ion Ratio Lower Upper

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 :

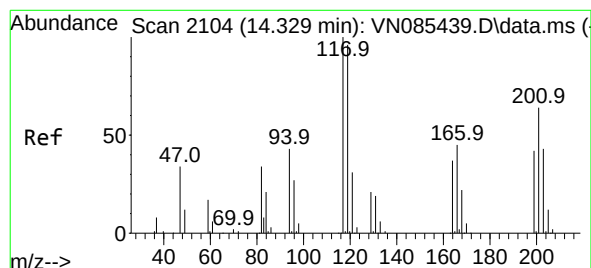
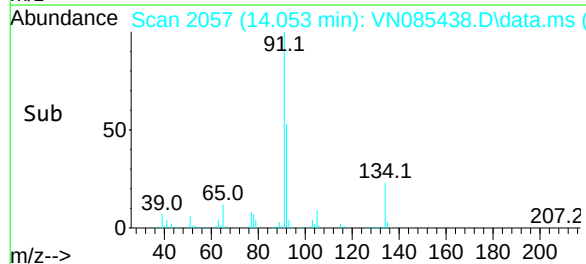
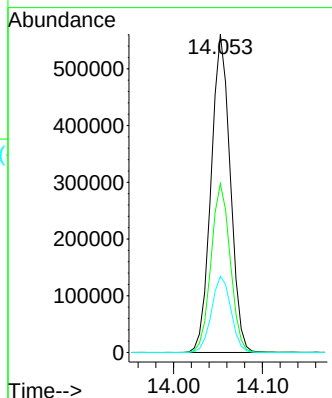
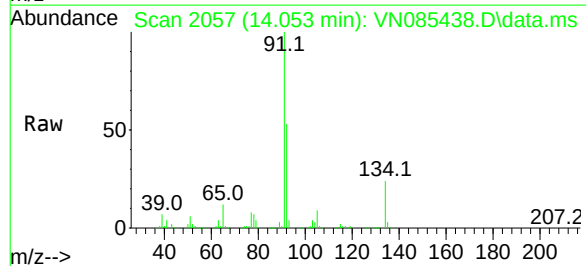
VSTDIC100

|          |       |       |        |
|----------|-------|-------|--------|
| 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

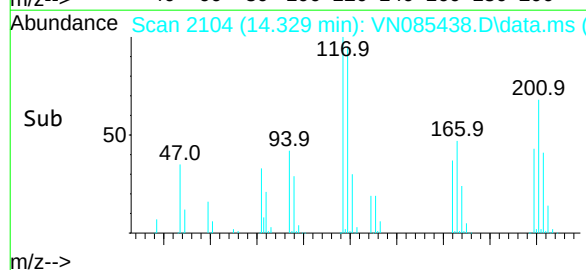
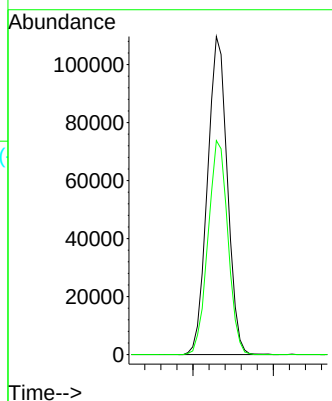
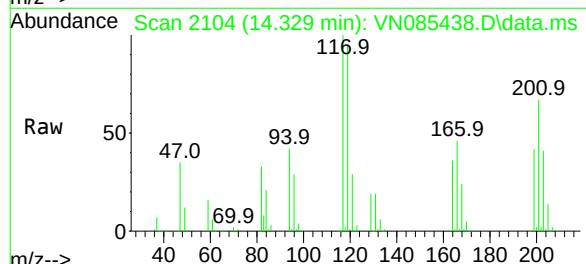
RT: 14.329 min Scan# 2104

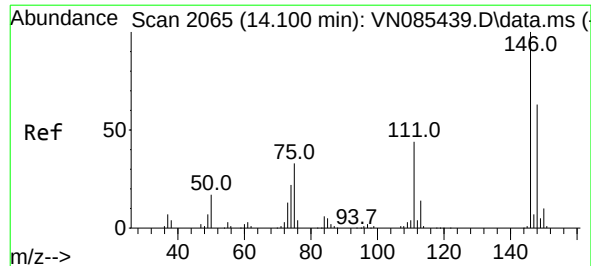
Delta R.T. -0.000 min

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  |





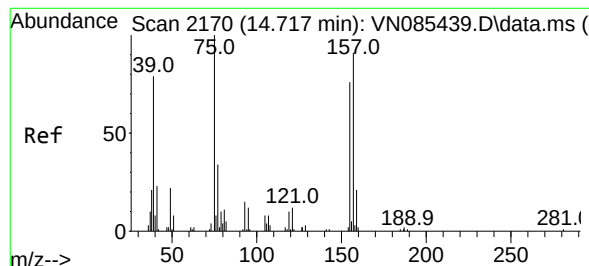
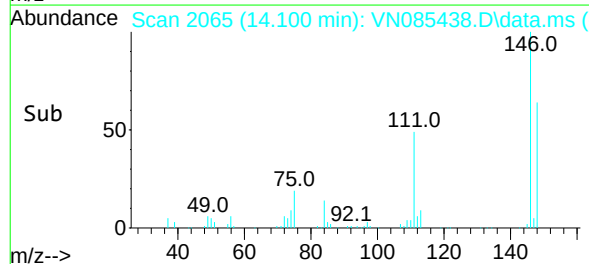
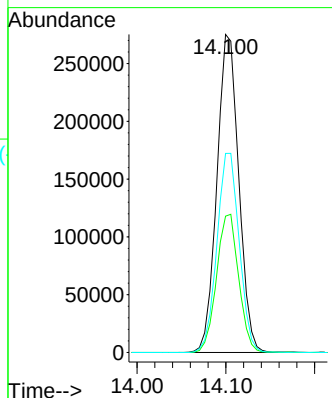
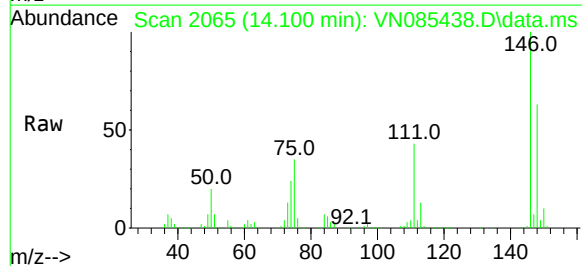
#91  
1,2-Dichlorobenzene  
Concen: 99.445 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

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

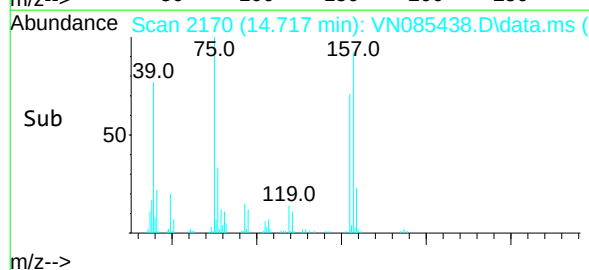
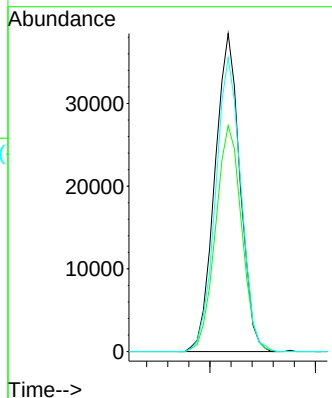
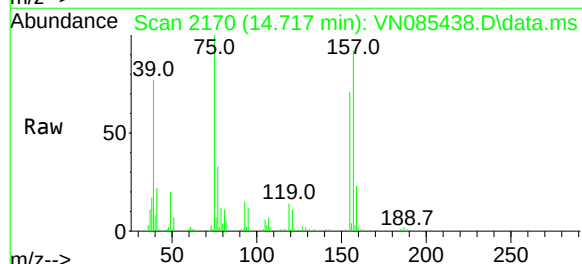
Manual Integrations  
APPROVED

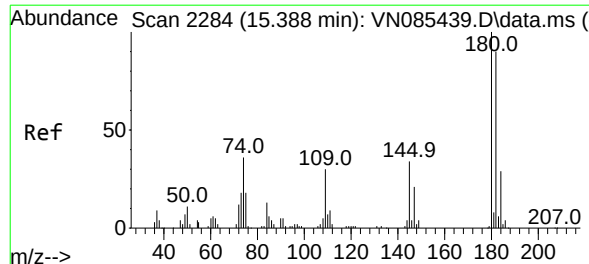
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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 :

VSTDIC100

Tgt Ion:180 Resp: 250787

Ion Ratio Lower Upper

180 100

182 94.9 46.8 140.3

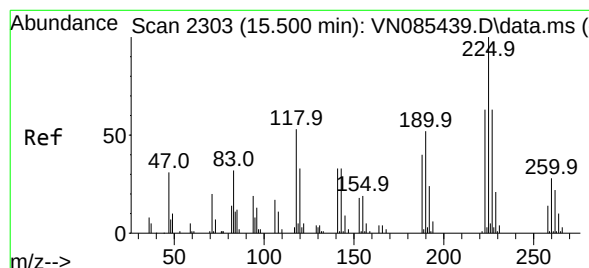
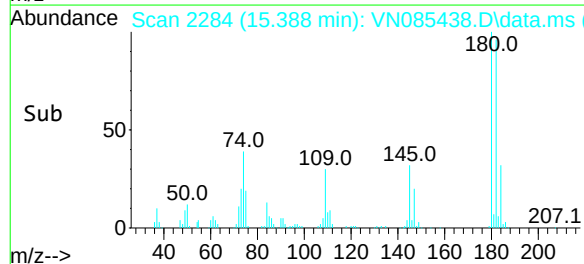
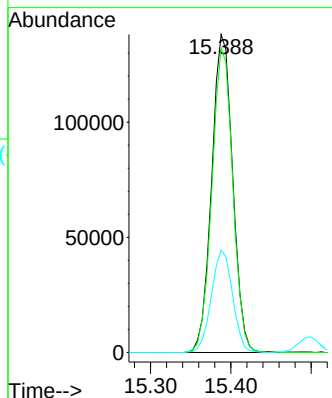
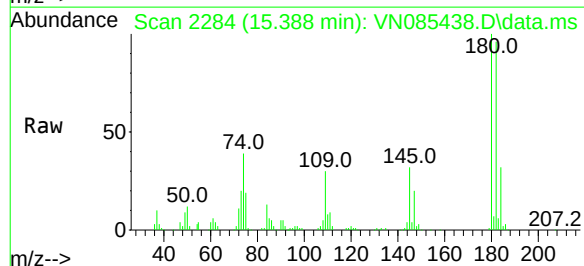
145 32.6 16.0 48.0

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

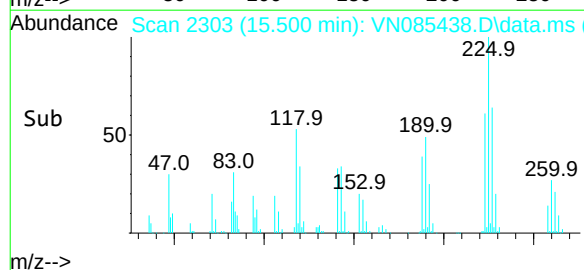
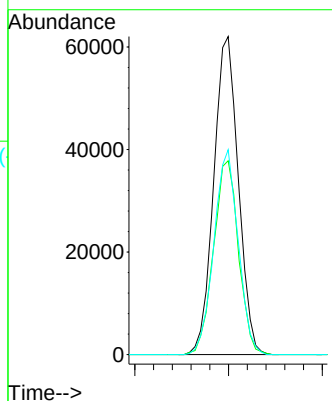
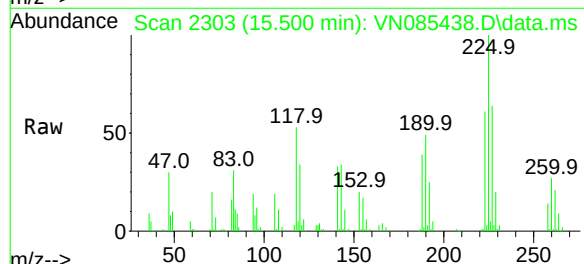
Tgt Ion:225 Resp: 112899

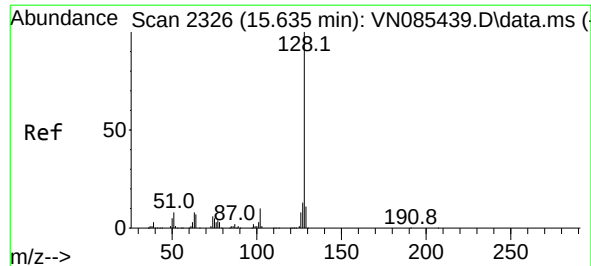
Ion Ratio Lower Upper

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

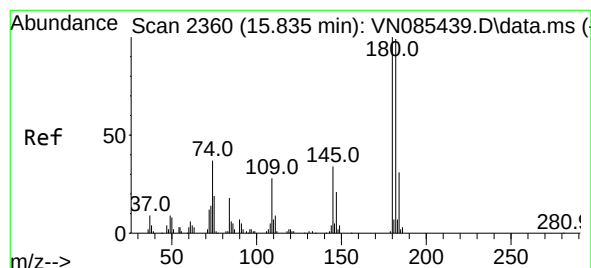
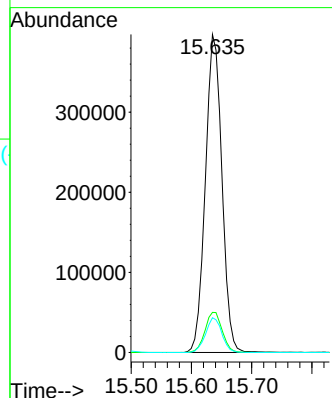
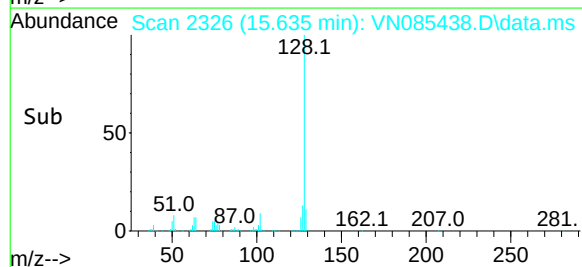
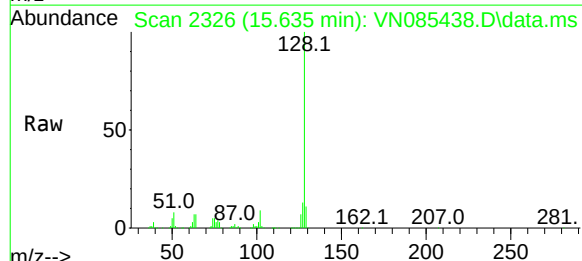
129 10.8 8.8 13.2

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

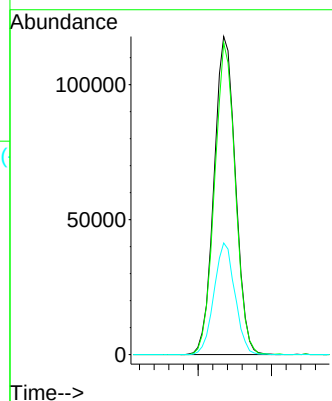
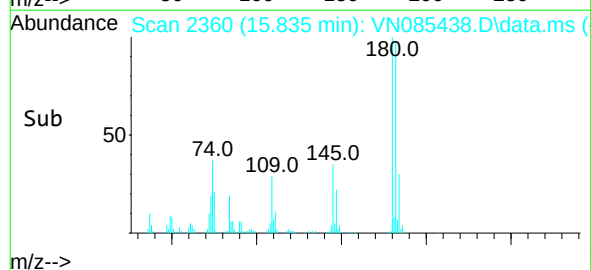
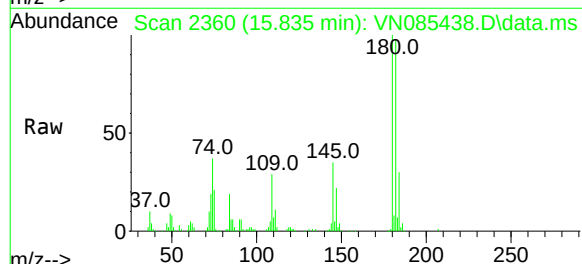
Tgt Ion:180 Resp: 238860

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



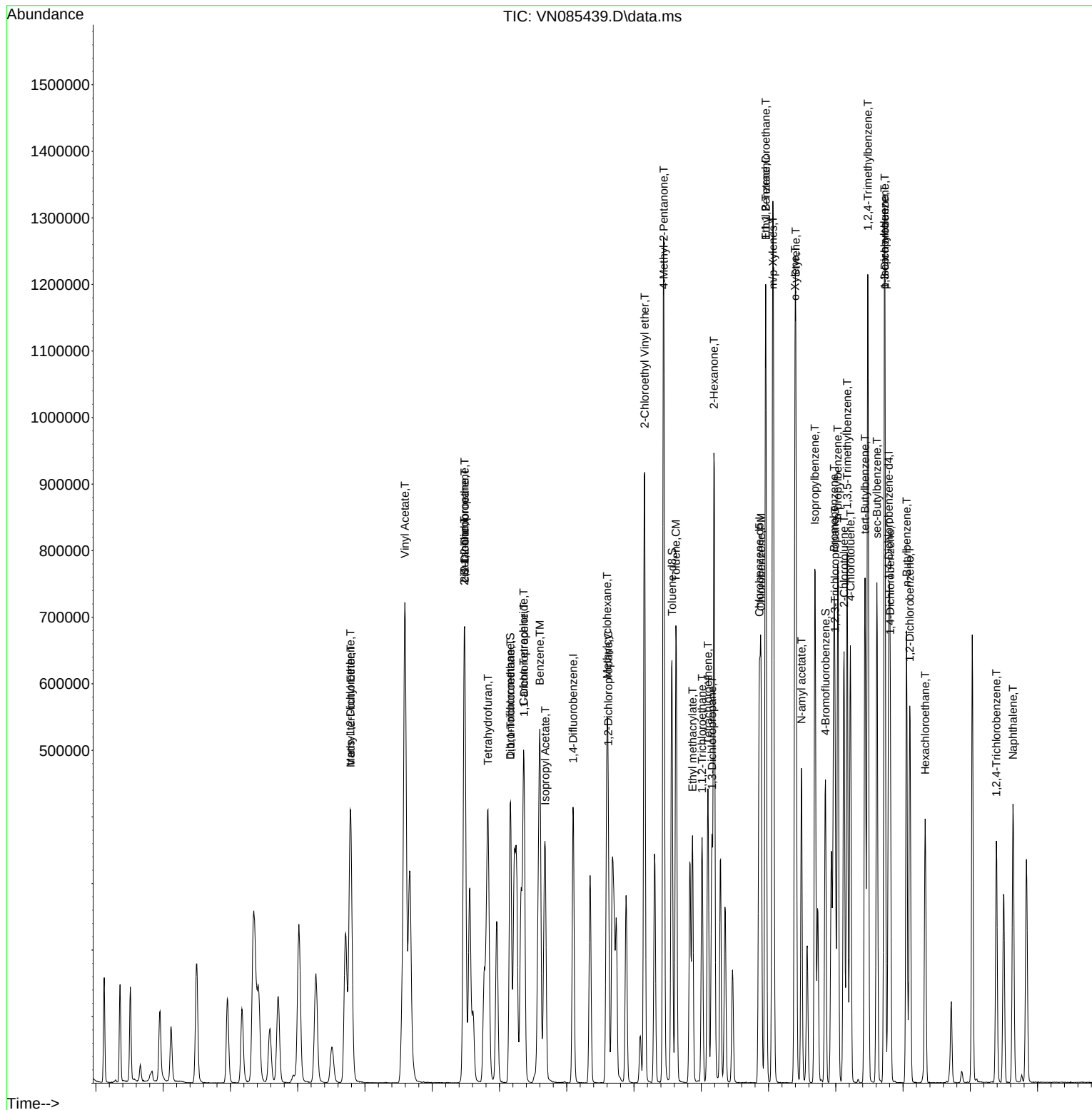
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Data File : VN085439.D  
Acq On : 14 Jan 2025 15:19  
Operator : JC\MD  
Sample : VSTDICCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

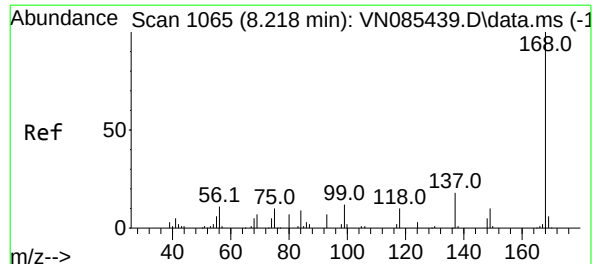
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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





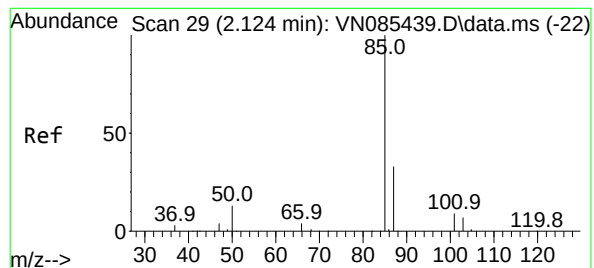
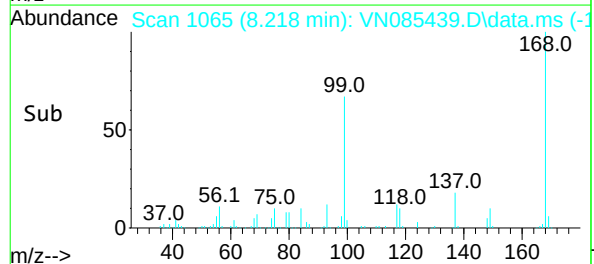
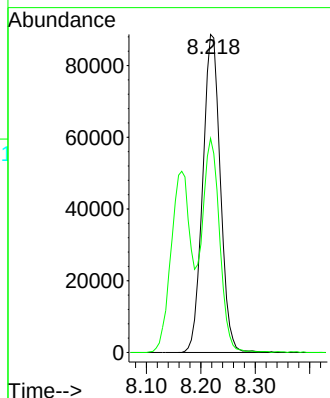
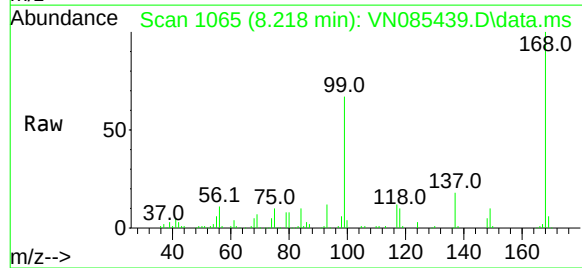
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

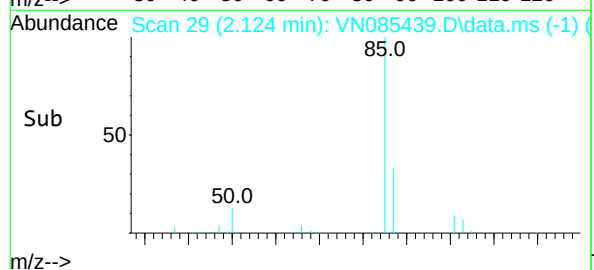
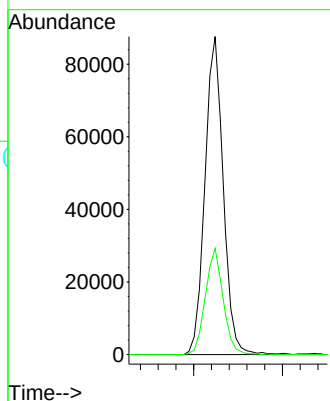
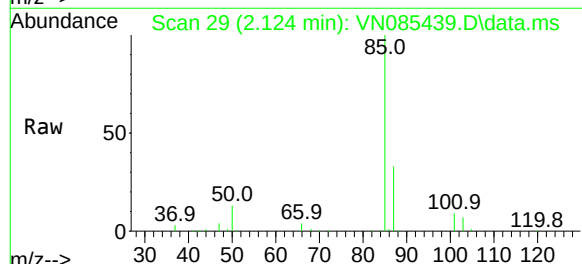
Manual Integrations  
APPROVED

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

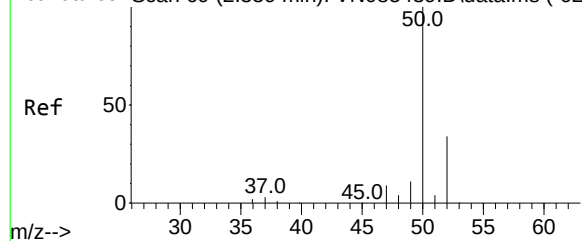


#2  
Dichlorodifluoromethane  
Concen: 46.486 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

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

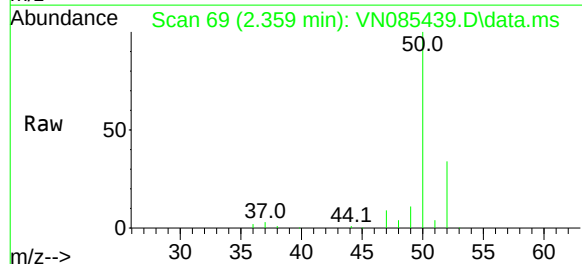
52 33.8 27.0 40.6

Manual Integrations

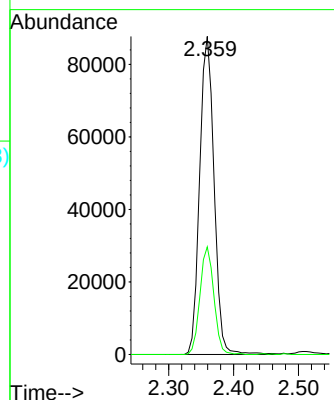
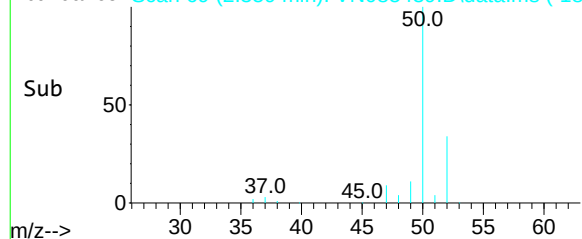
APPROVED

Reviewed By :John Carlone 01/15/2025

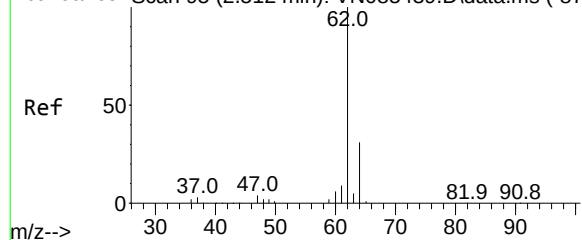
Supervised By :Mahesh Dadoda 01/15/2025



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

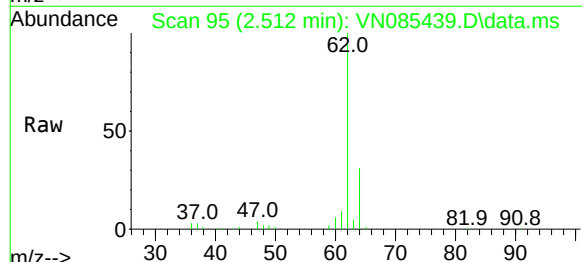
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 136831

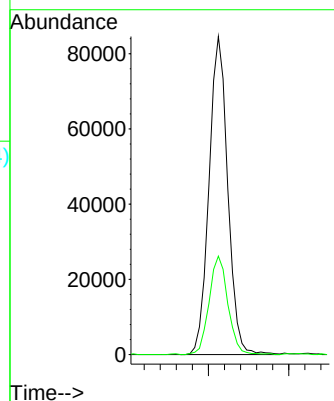
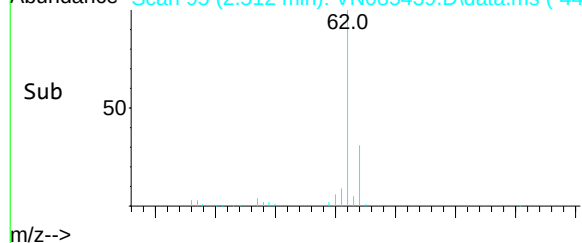
Ion Ratio Lower Upper

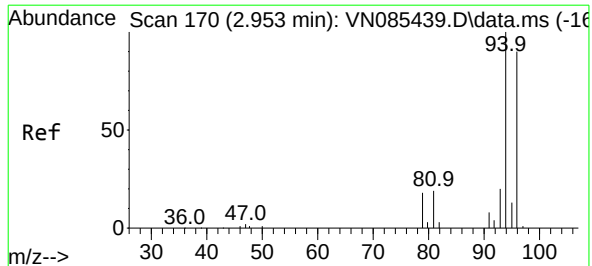
62 100

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

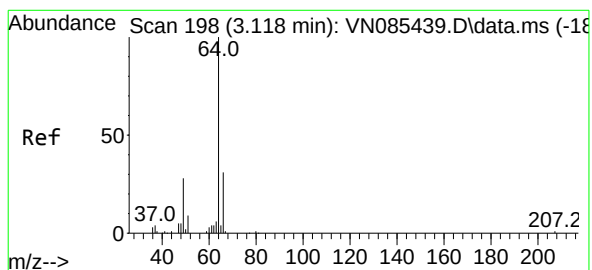
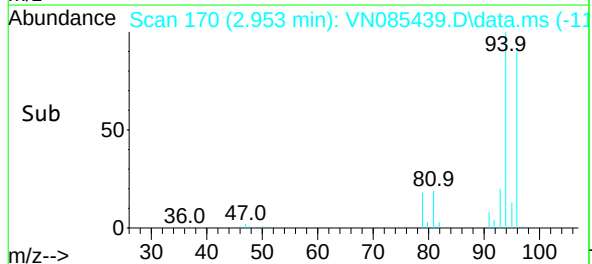
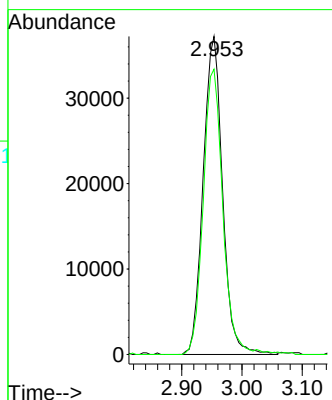
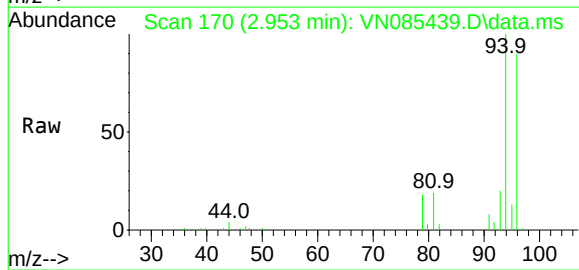
96 89.7 71.8 107.6

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

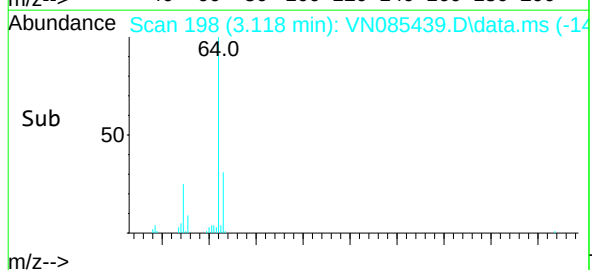
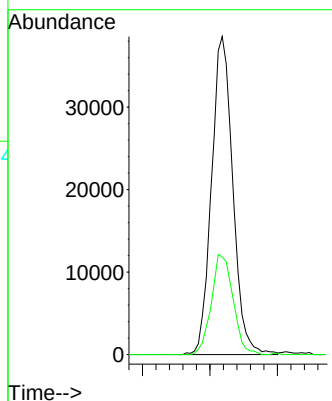
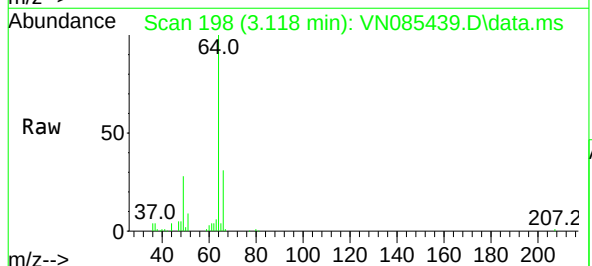
Acq: 14 Jan 2025 15:19

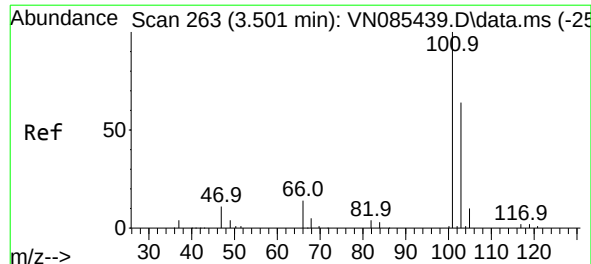
Tgt Ion: 64 Resp: 84517

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

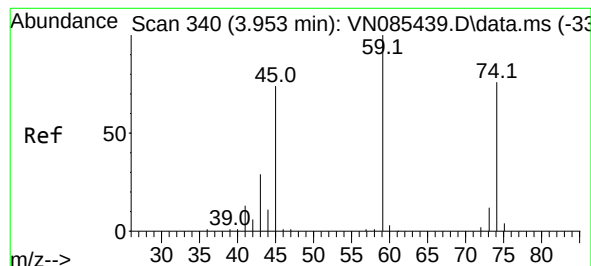
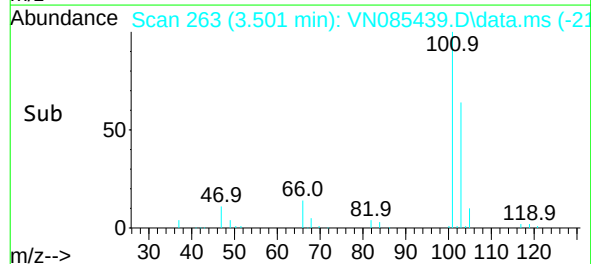
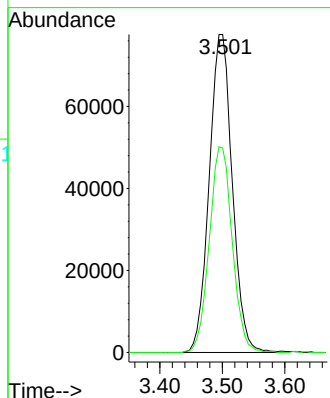
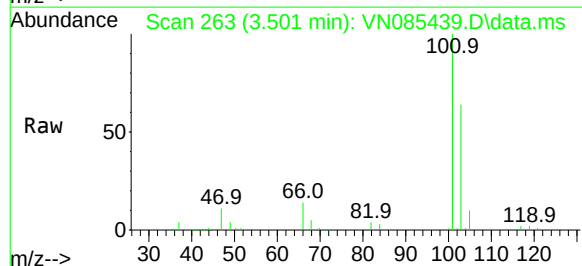
103 64.3 51.4 77.2

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

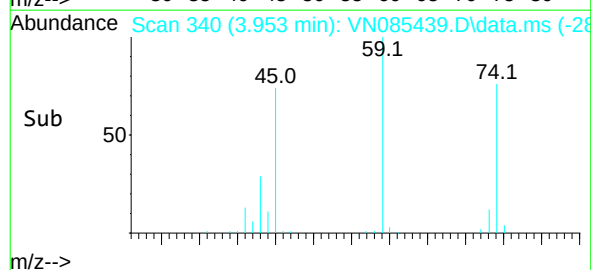
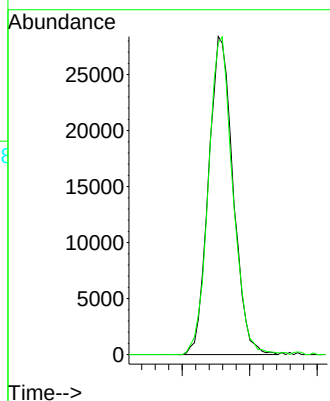
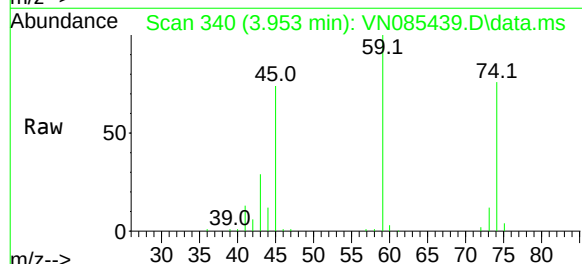
Acq: 14 Jan 2025 15:19

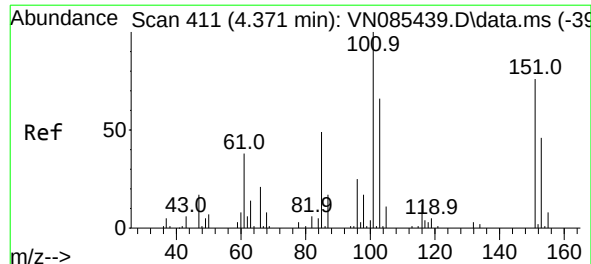
Tgt Ion: 74 Resp: 71764

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

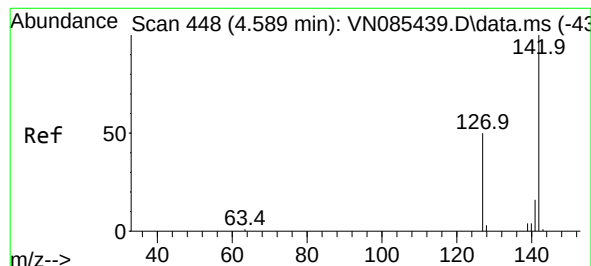
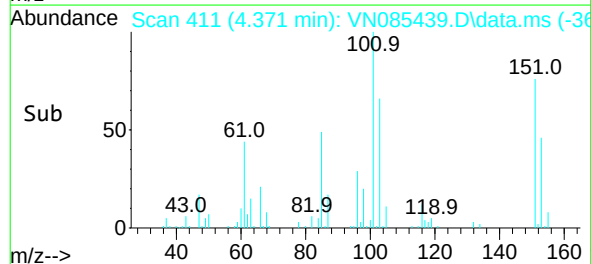
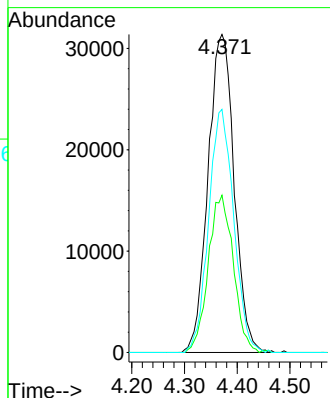
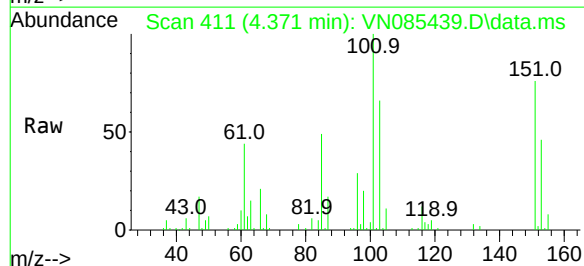
151 73.5 58.8 88.2

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

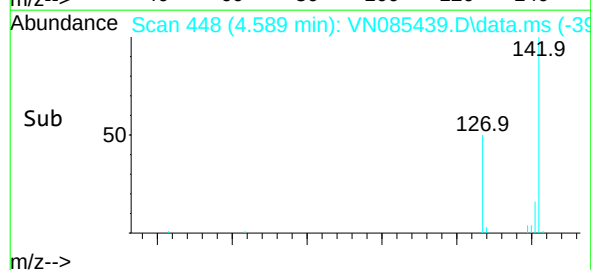
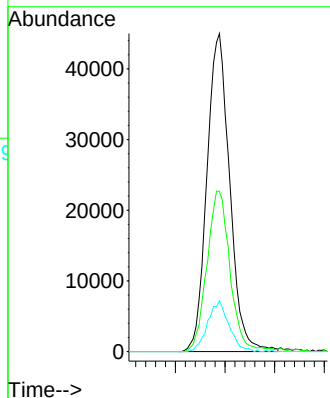
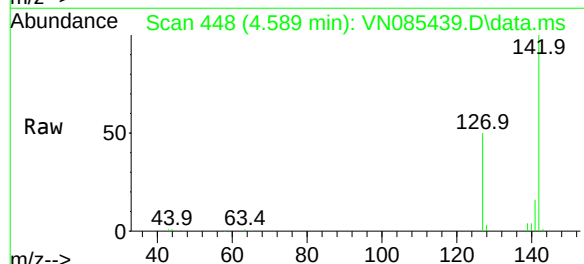
Tgt Ion:142 Resp: 143383

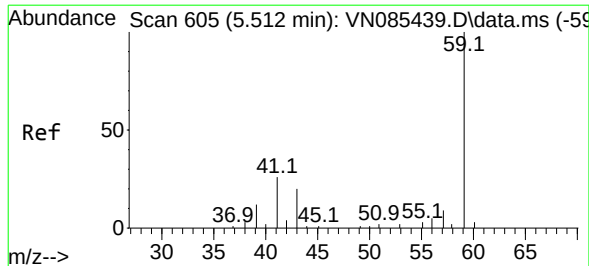
Ion Ratio Lower Upper

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

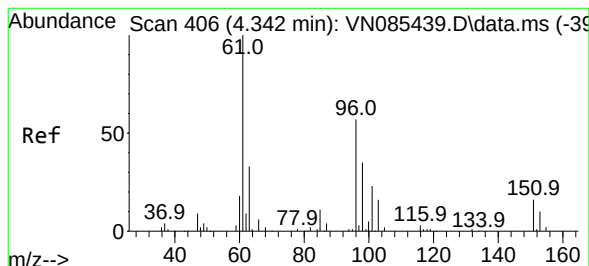
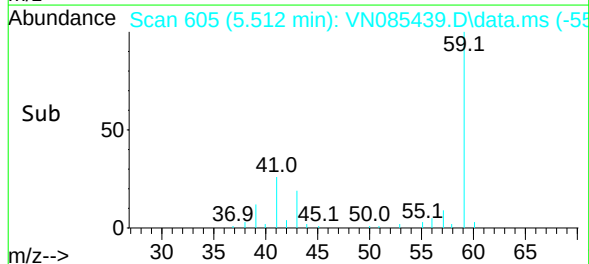
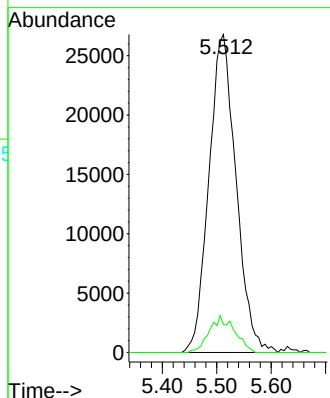
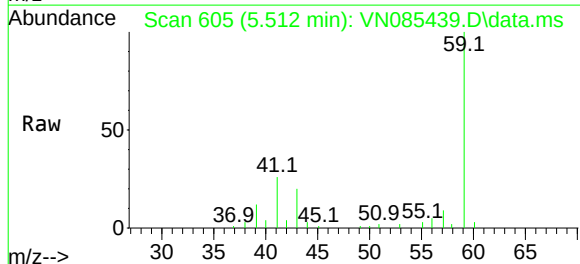
57 10.8 8.6 13.0

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

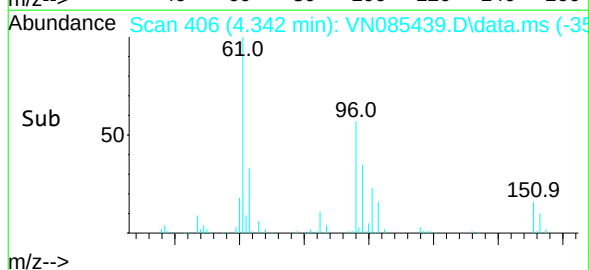
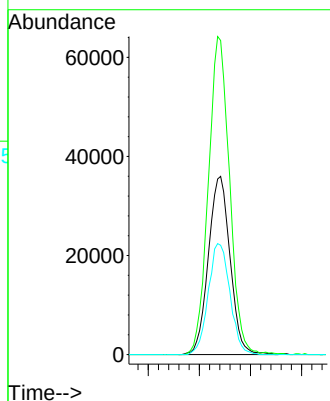
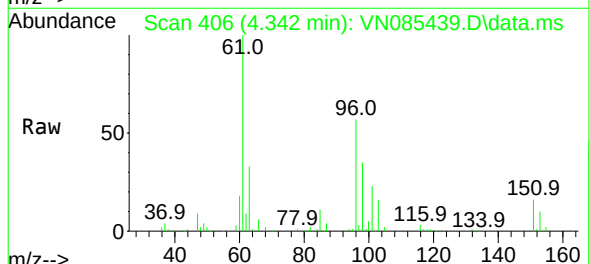
Tgt Ion: 96 Resp: 106247

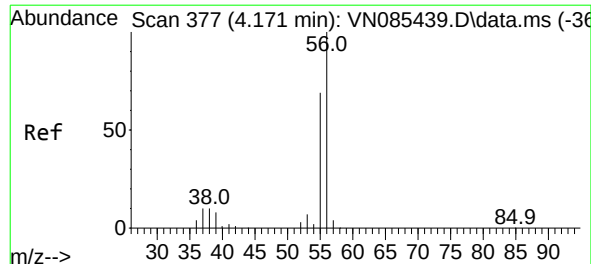
Ion Ratio Lower Upper

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

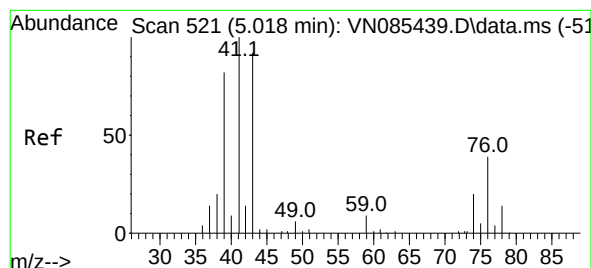
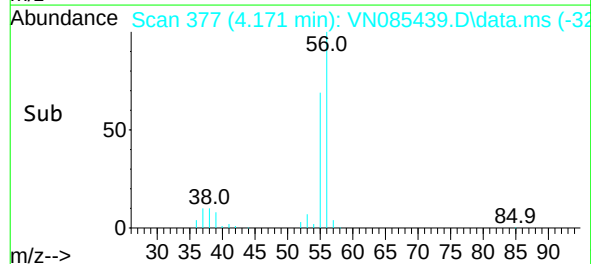
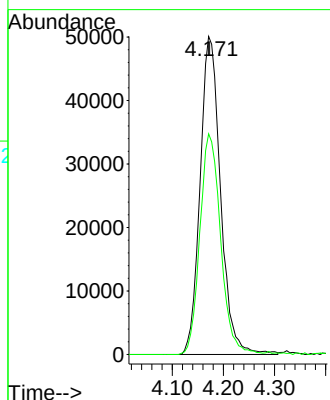
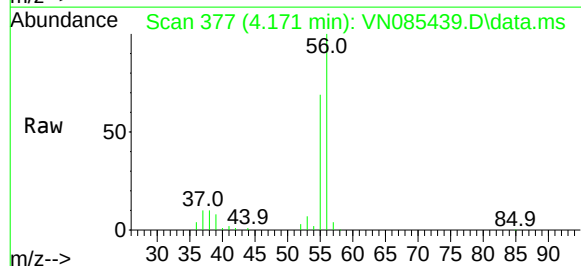
55 70.4 56.3 84.5

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

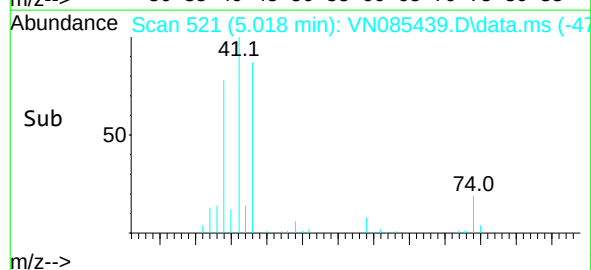
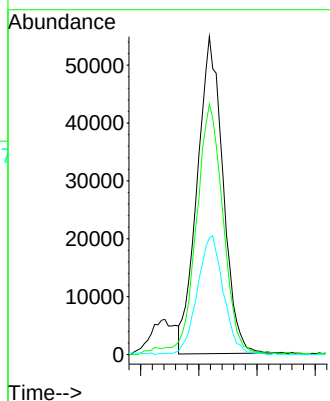
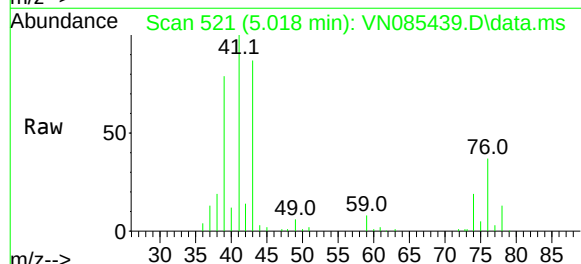
Tgt Ion: 41 Resp: 168654

Ion Ratio Lower Upper

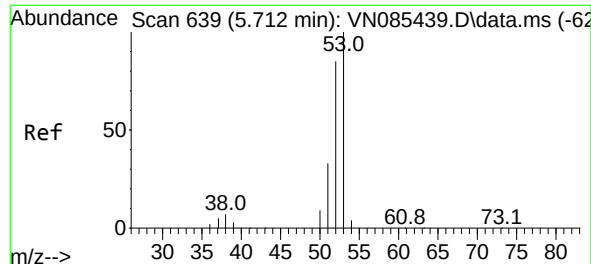
41 100

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

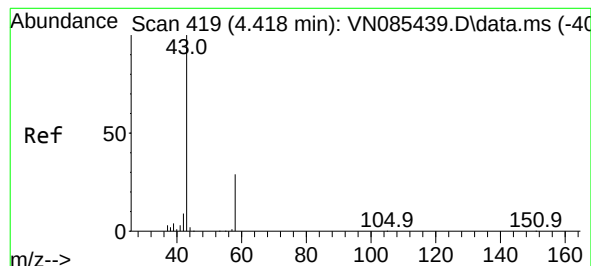
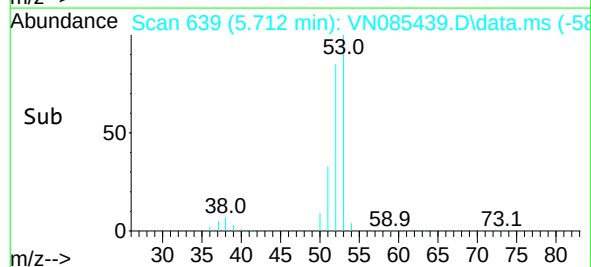
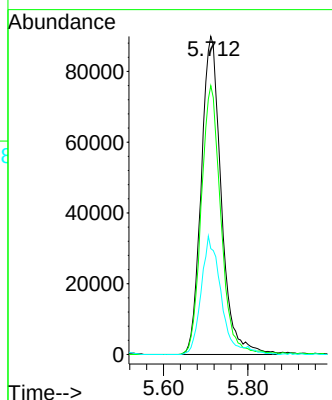
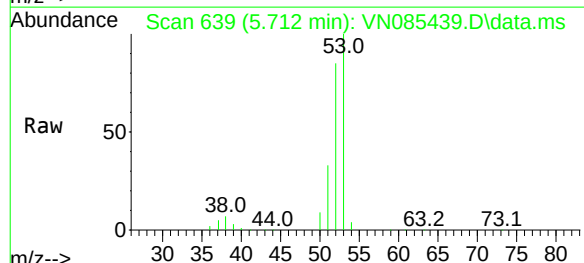
ClientSampleId :

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

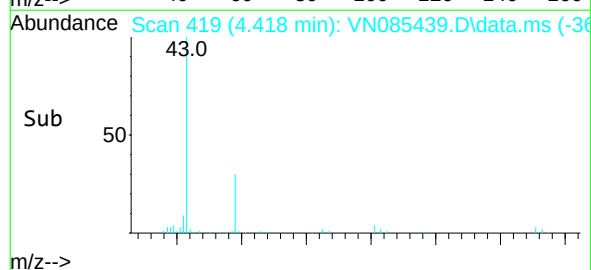
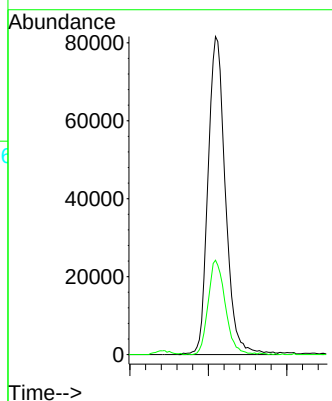
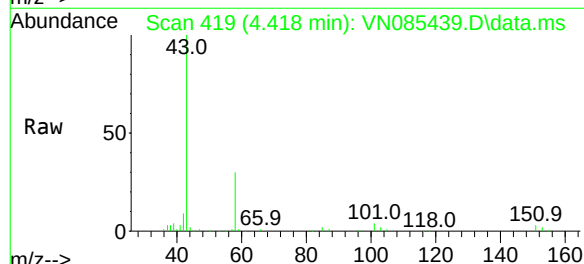
RT: 4.418 min Scan# 419

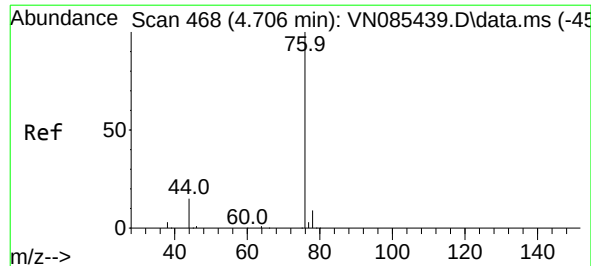
Delta R.T. 0.000 min

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

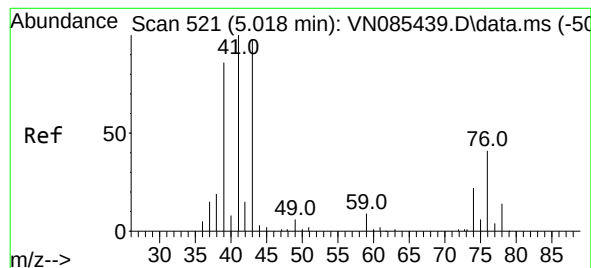
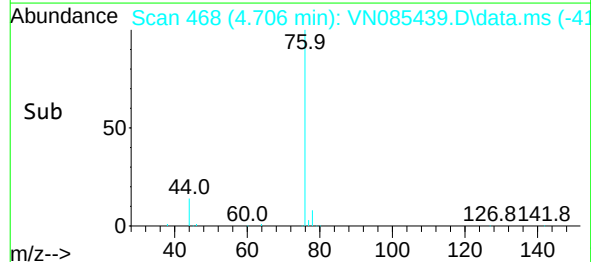
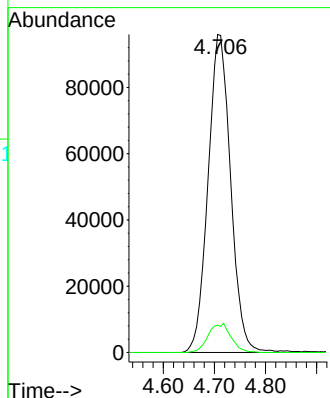
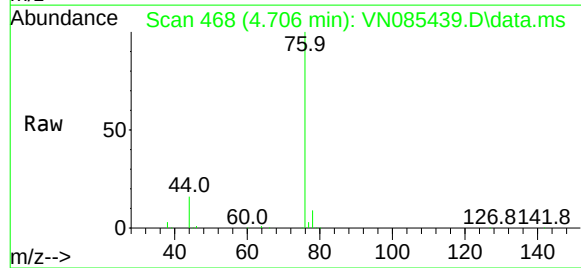
78 8.6 6.9 10.3

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

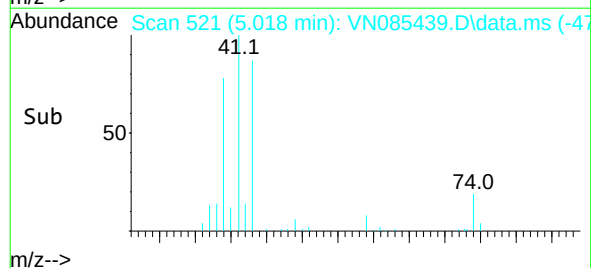
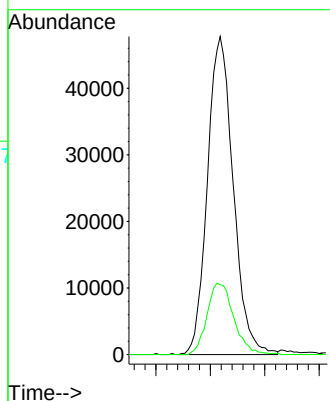
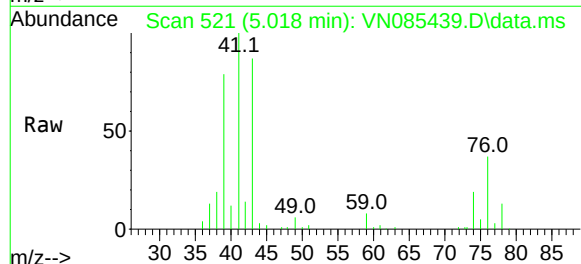
Acq: 14 Jan 2025 15:19

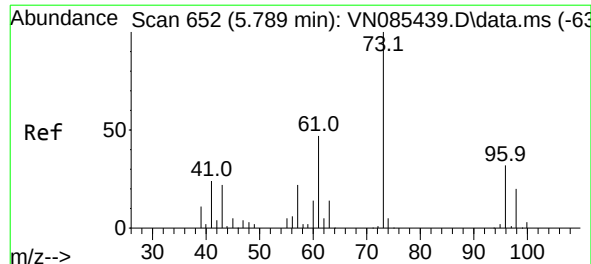
Tgt Ion: 43 Resp: 157485

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

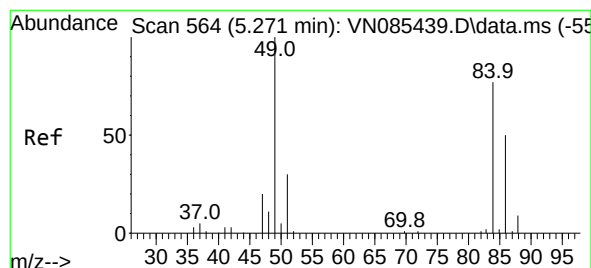
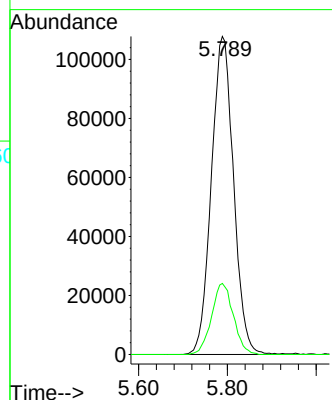
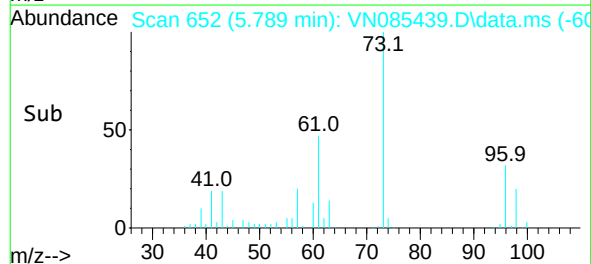
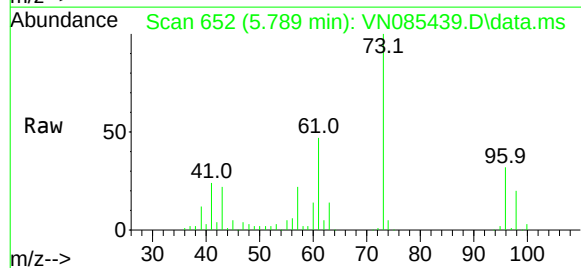
57 22.3 17.8 26.8

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

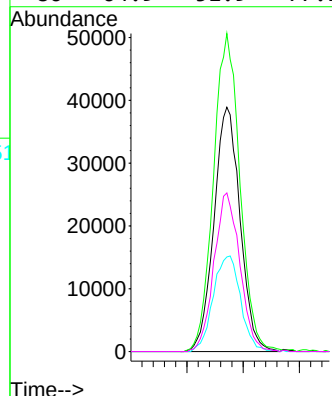
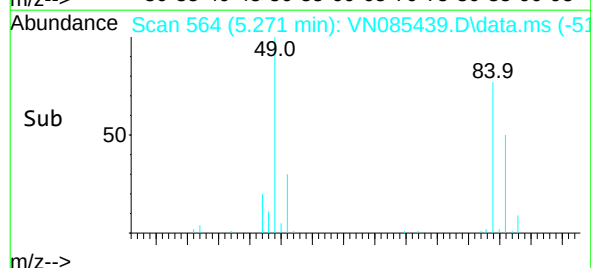
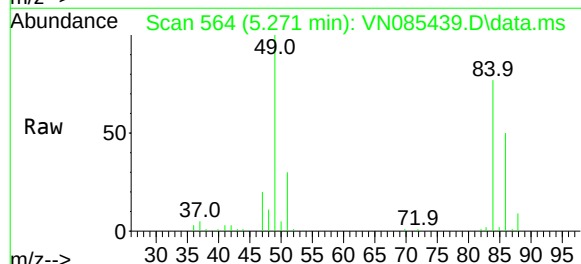
Ion Ratio Lower Upper

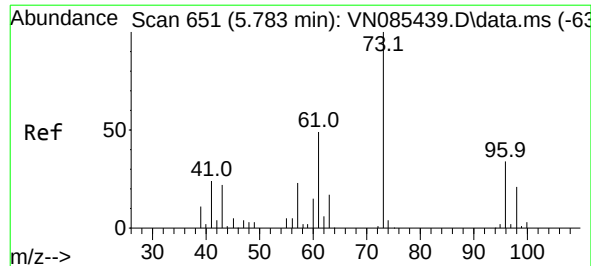
84 100

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

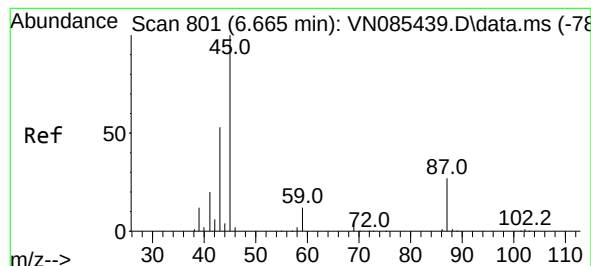
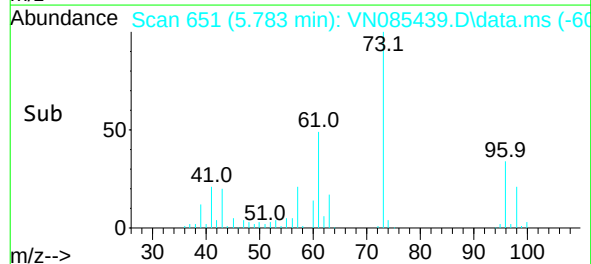
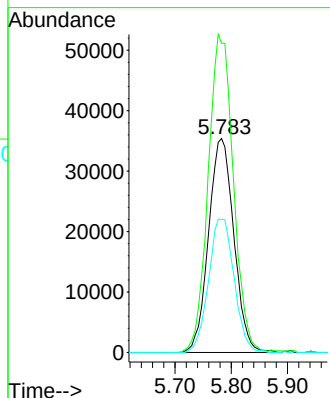
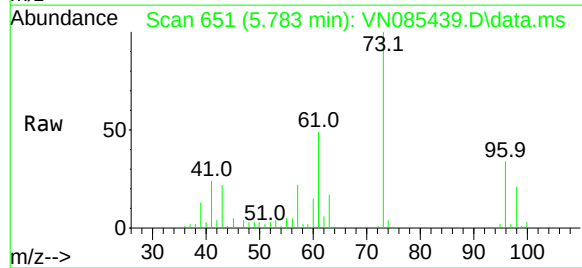
98 62.3 49.8 74.8

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

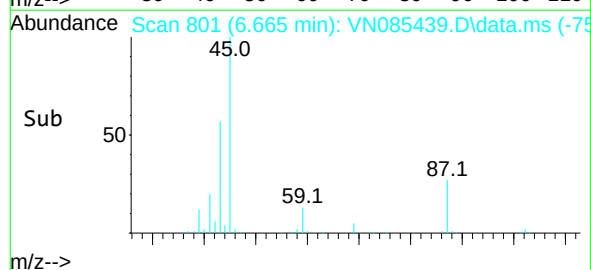
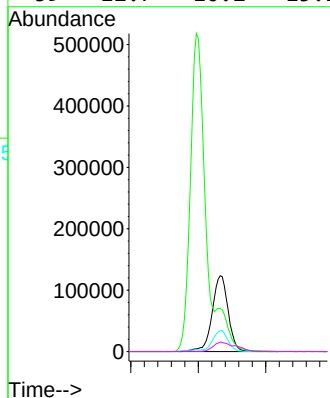
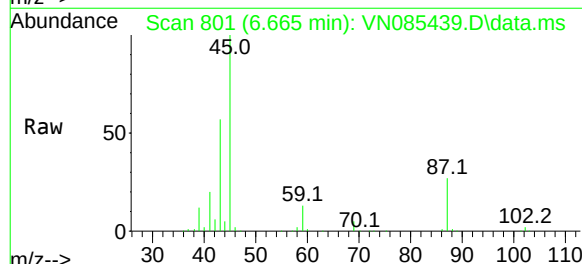
Ion Ratio Lower Upper

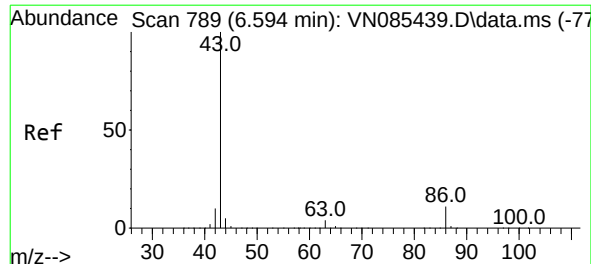
45 100

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

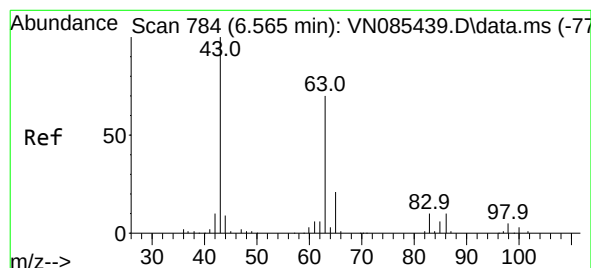
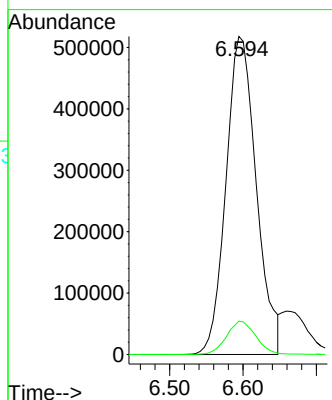
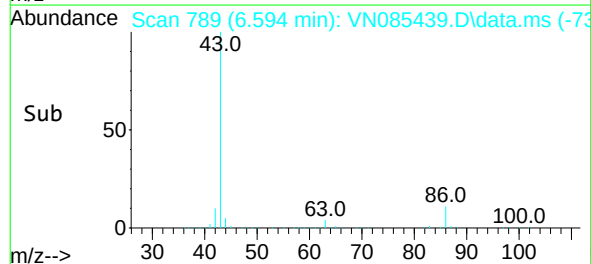
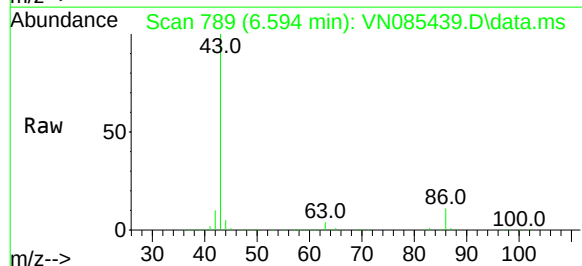
86 10.5 8.4 12.6

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

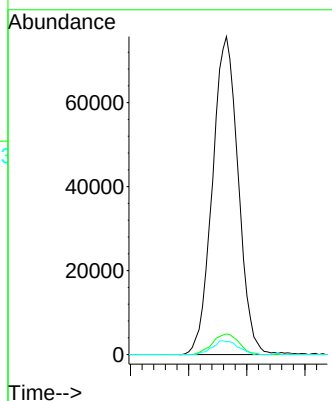
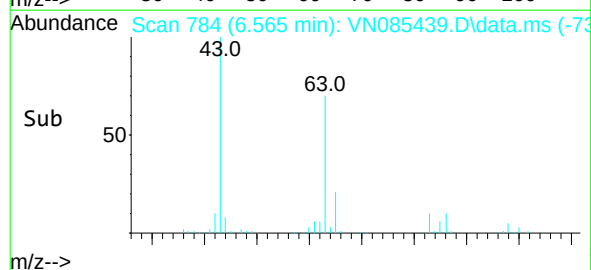
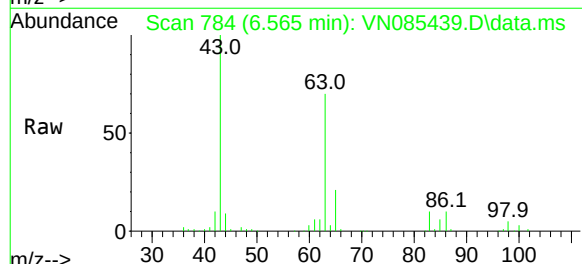
Tgt Ion: 63 Resp: 233336

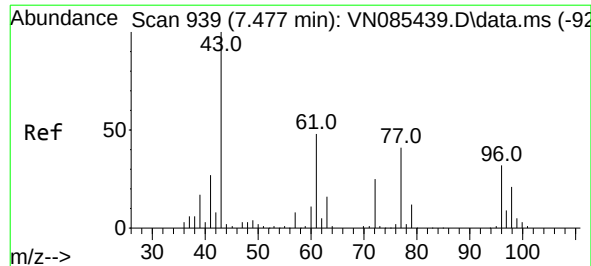
Ion Ratio Lower Upper

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 :

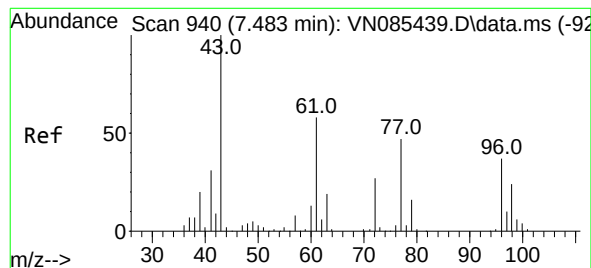
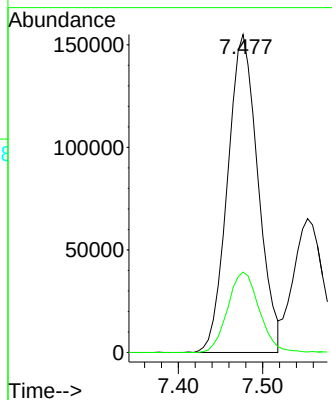
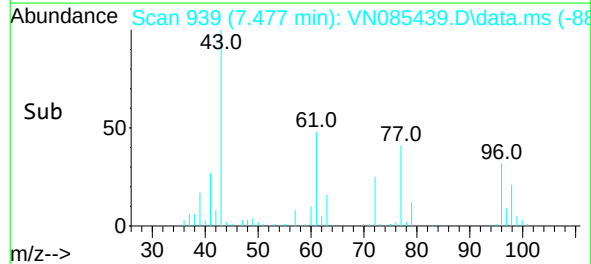
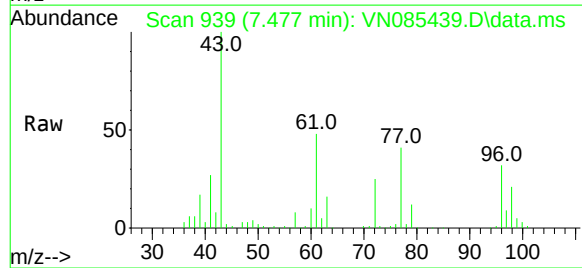
VSTDICCC050

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

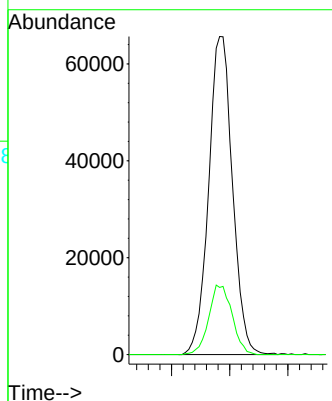
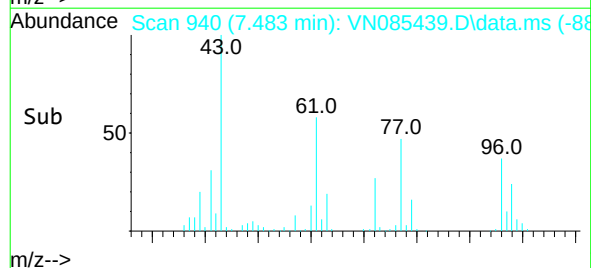
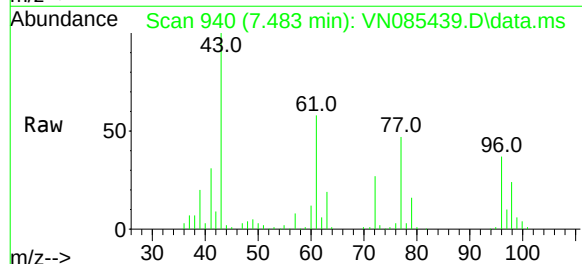
Acq: 14 Jan 2025 15:19

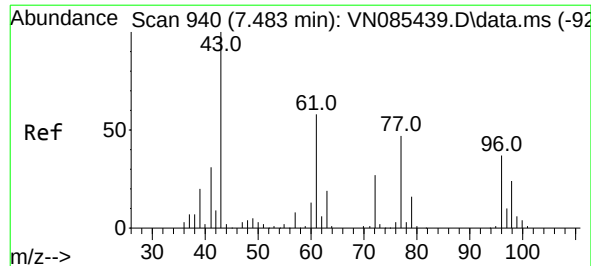
Tgt Ion: 77 Resp: 186591

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

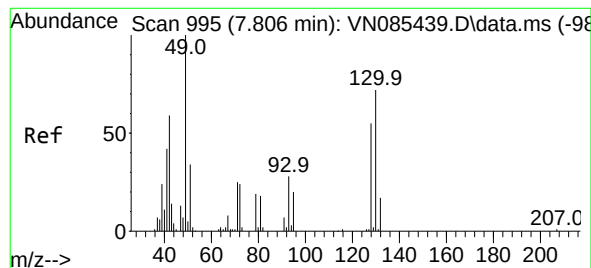
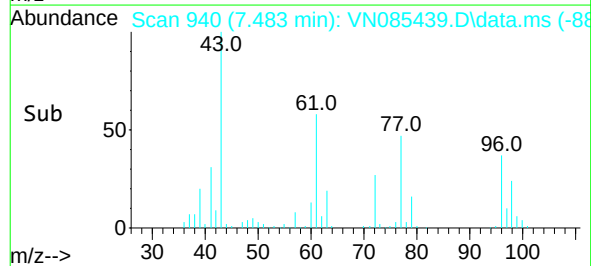
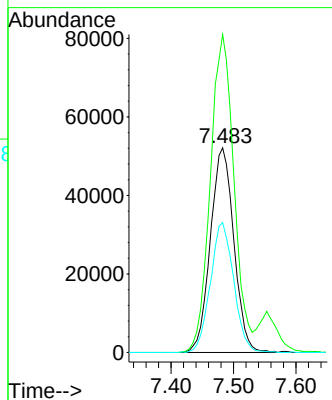
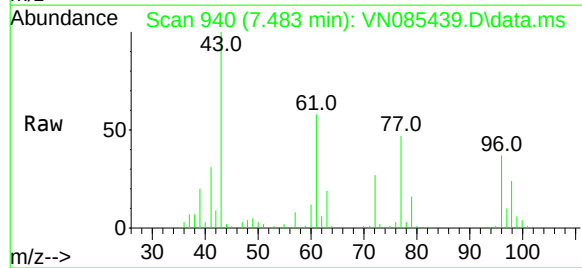
98 63.0 0.0 126.0

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

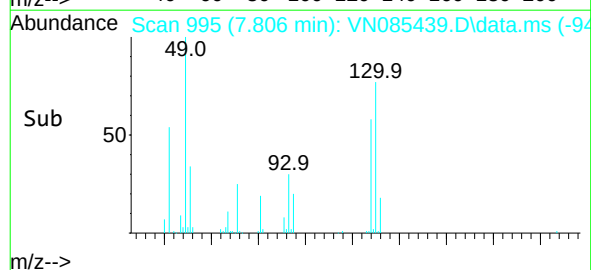
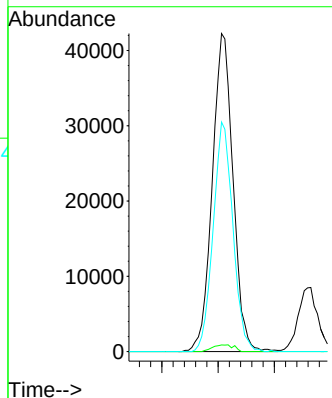
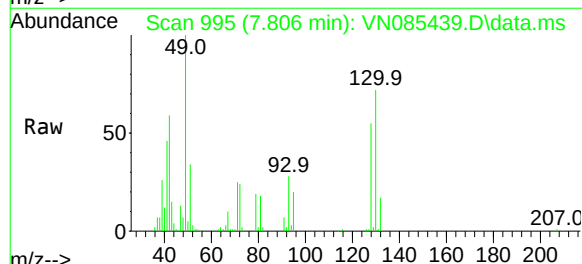
Tgt Ion: 49 Resp: 108148

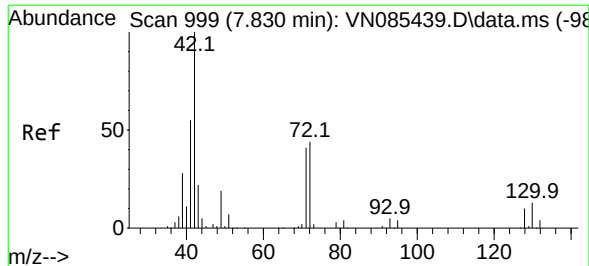
Ion Ratio Lower Upper

49 100

129 2.2 0.0 4.4

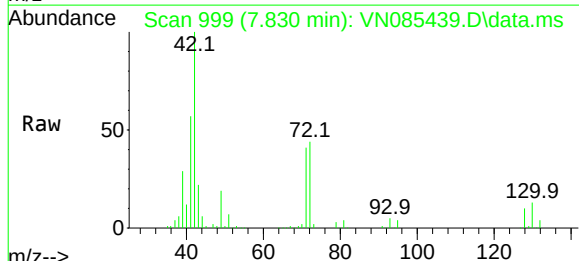
130 68.7 55.0 82.4





#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

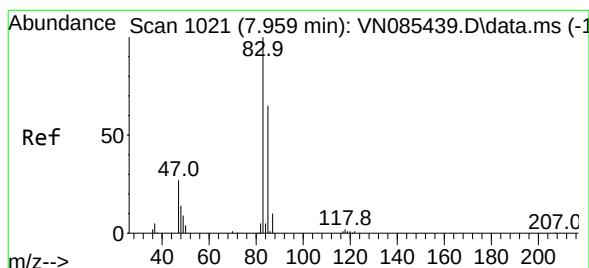
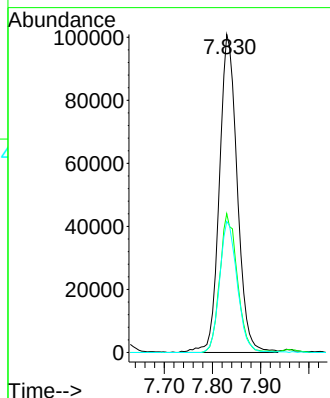
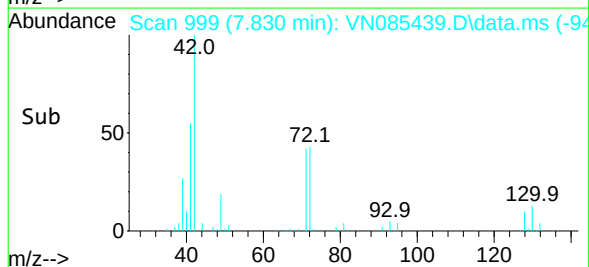
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050



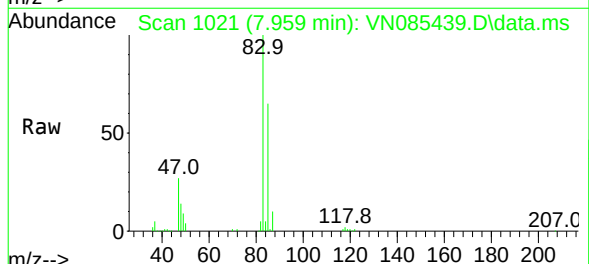
Tgt Ion: 42 Resp: 259683  
Ion Ratio Lower Upper  
42 100  
72 42.7 34.2 51.2  
71 40.6 32.5 48.7

Manual Integrations  
APPROVED

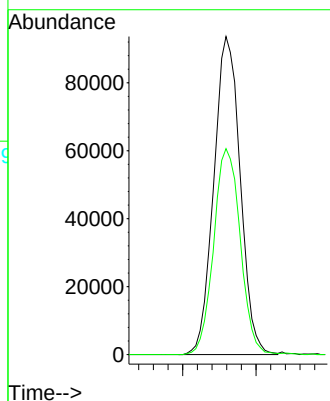
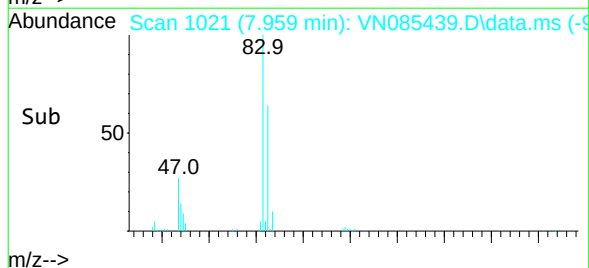
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



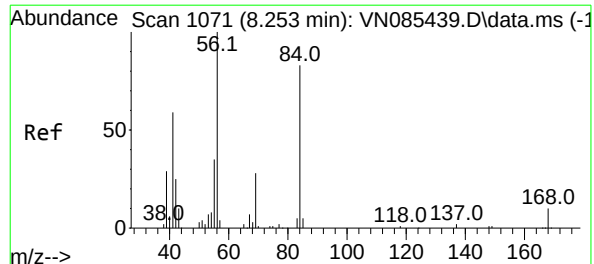
#30  
Chloroform  
Concen: 48.229 ug/l  
RT: 7.959 min Scan# 1021  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19



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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 56 Resp: 175588

Ion Ratio Lower Upper

56 100

69 27.8 22.2 33.4

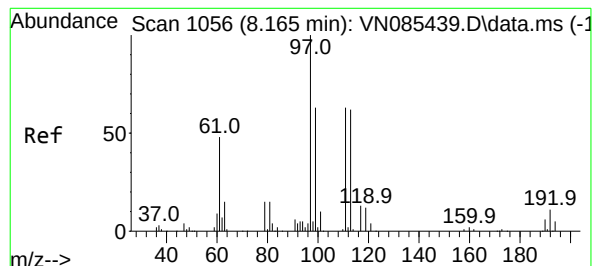
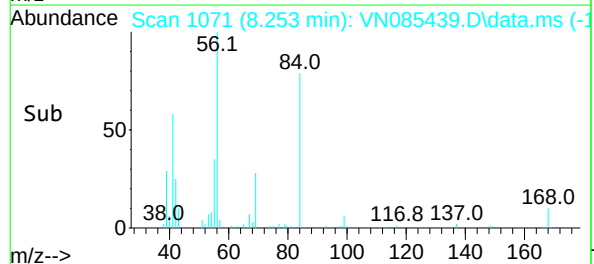
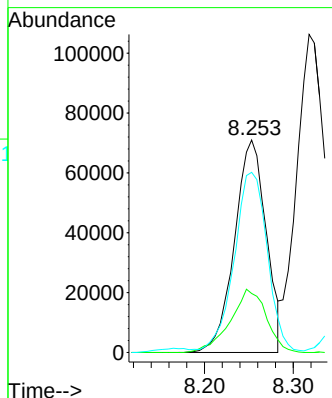
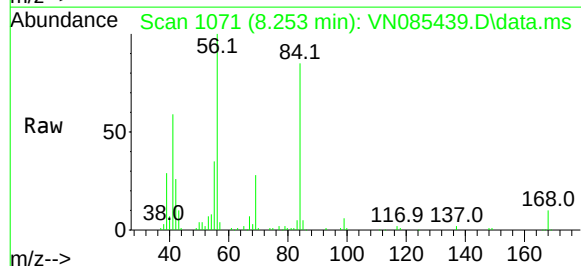
84 83.0 66.4 99.6

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

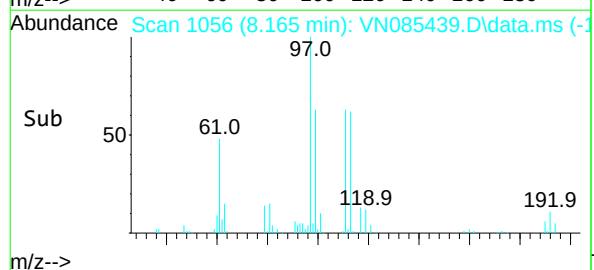
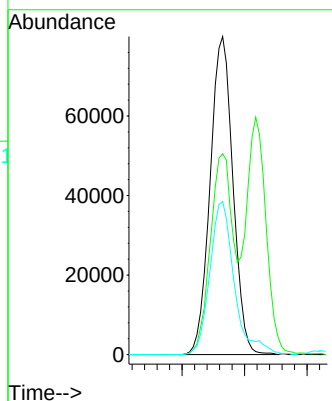
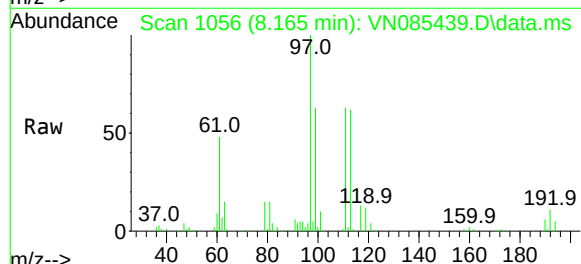
Tgt Ion: 97 Resp: 202590

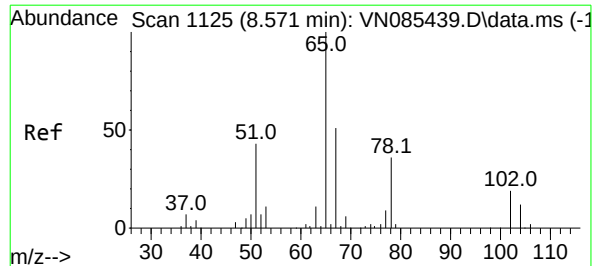
Ion Ratio Lower Upper

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

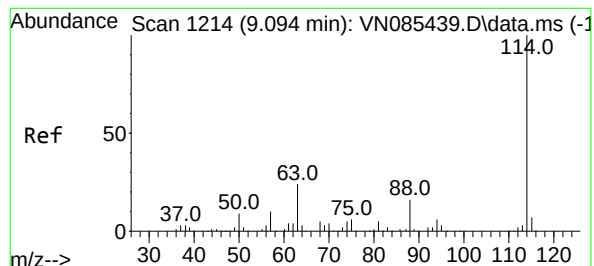
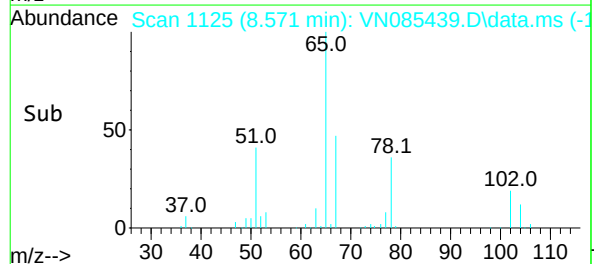
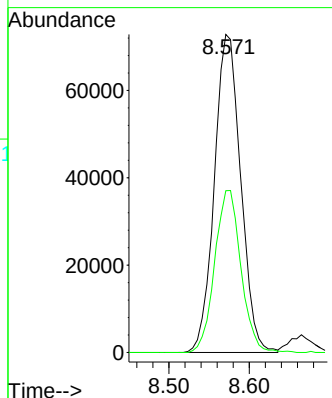
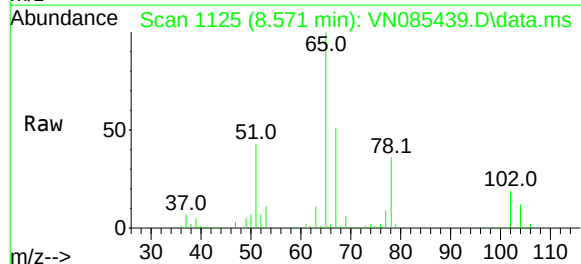
67 50.8 0.0 101.6

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

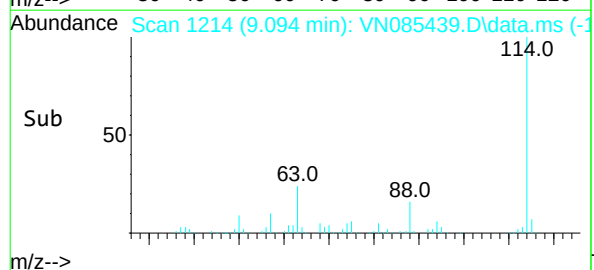
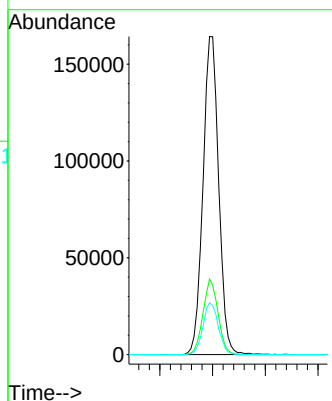
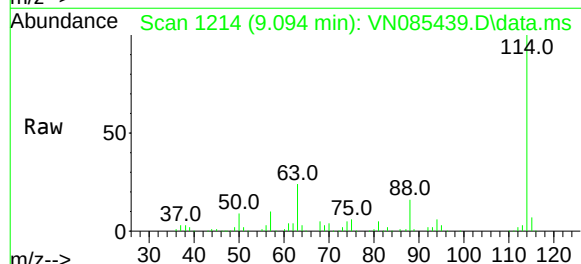
Tgt Ion:114 Resp: 339872

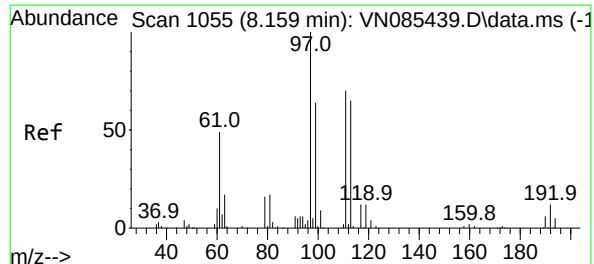
Ion Ratio Lower Upper

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

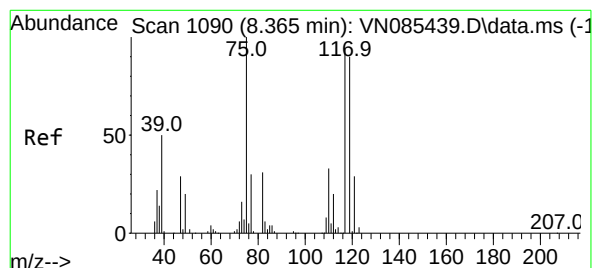
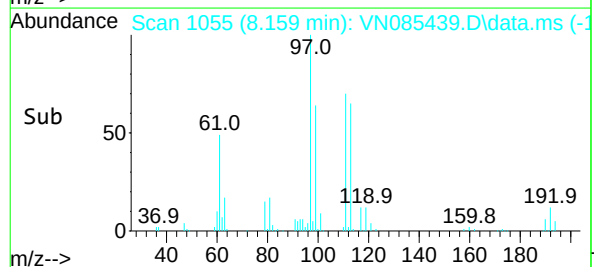
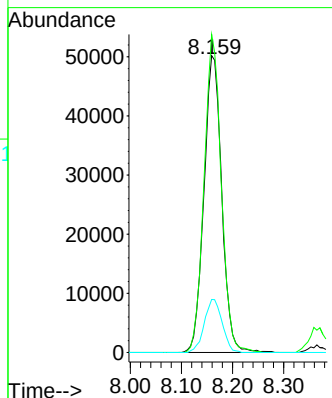
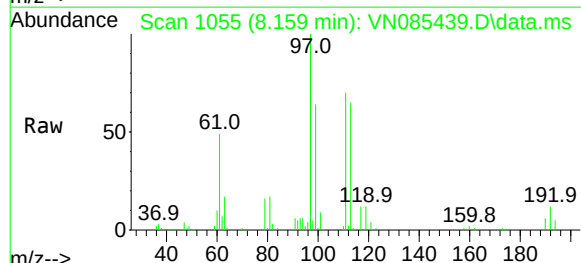
192 17.9 14.3 21.5

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

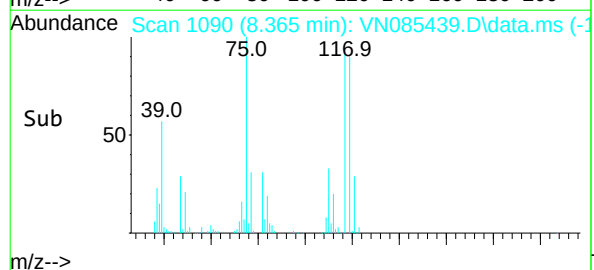
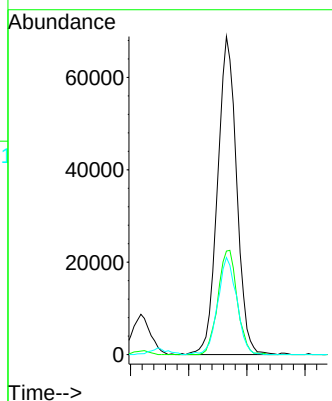
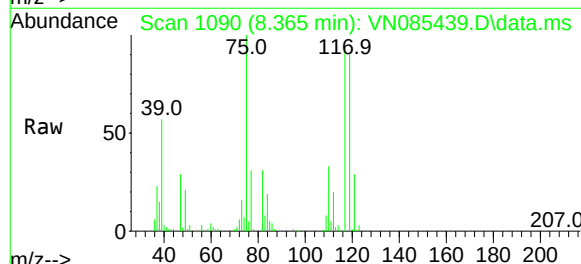
Tgt Ion: 75 Resp: 157031

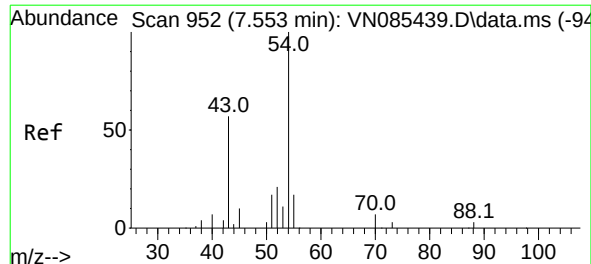
Ion Ratio Lower Upper

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

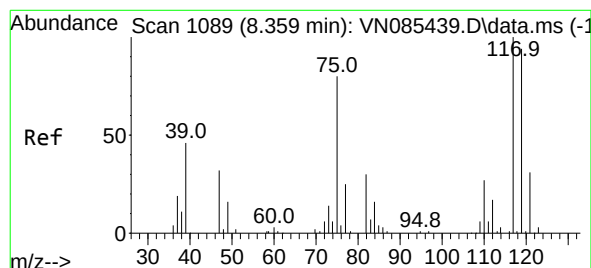
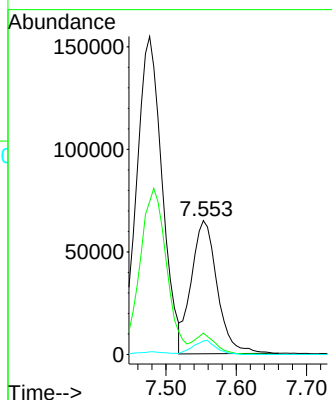
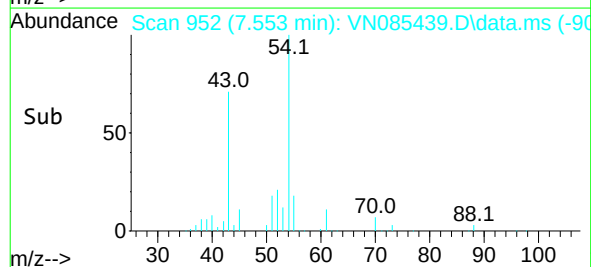
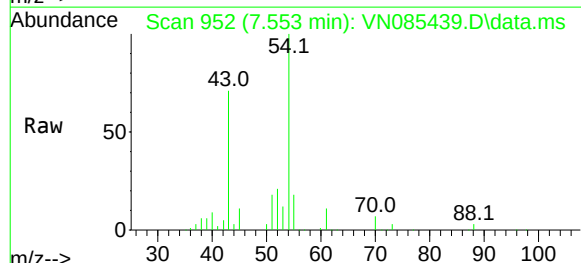
70 9.4 7.5 11.3

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

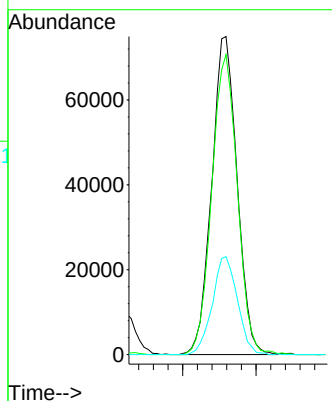
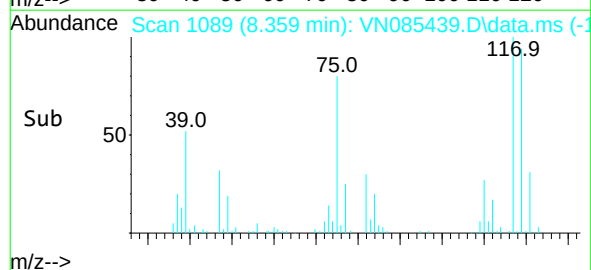
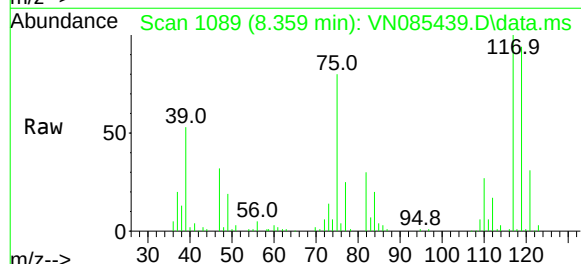
Tgt Ion:117 Resp: 180199

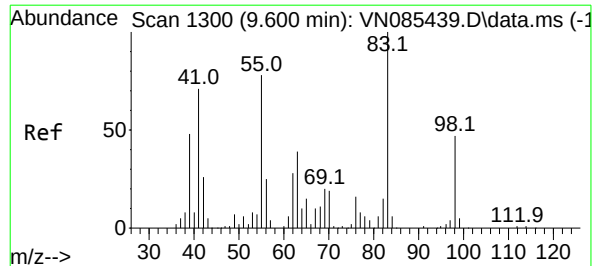
Ion Ratio Lower Upper

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# 1300

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

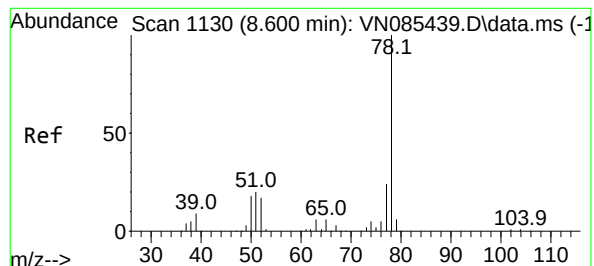
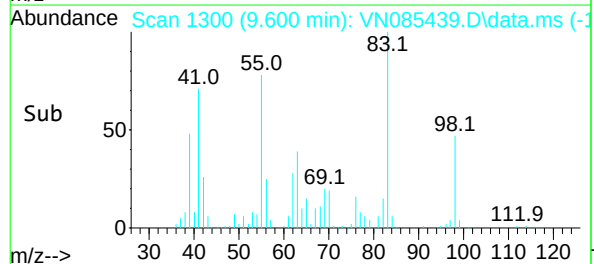
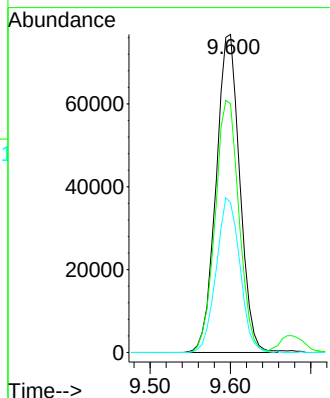
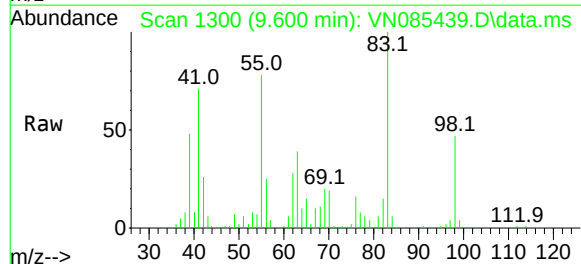
ClientSampleId :

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

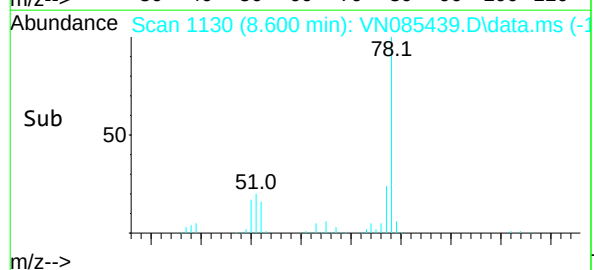
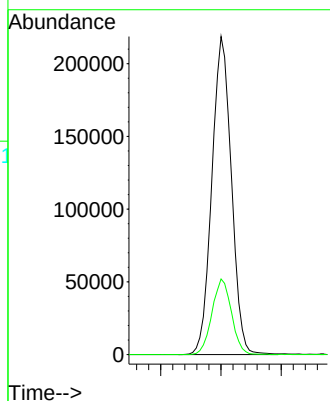
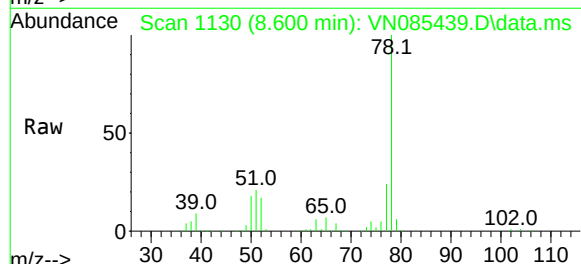
RT: 8.600 min Scan# 1130

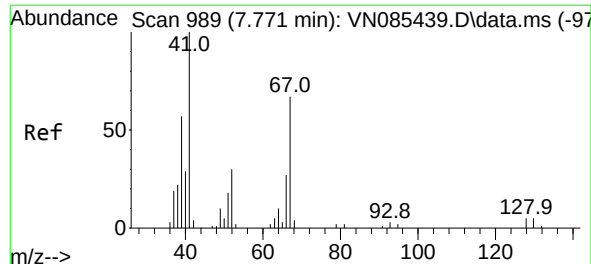
Delta R.T. 0.000 min

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

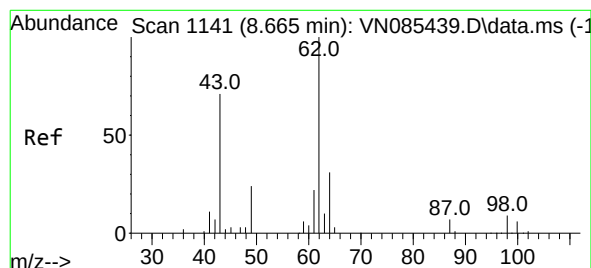
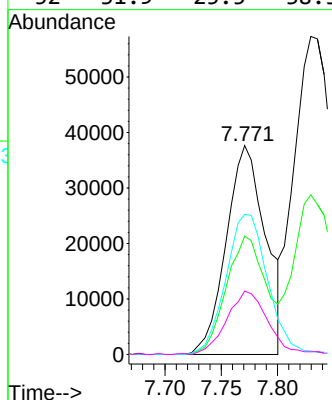
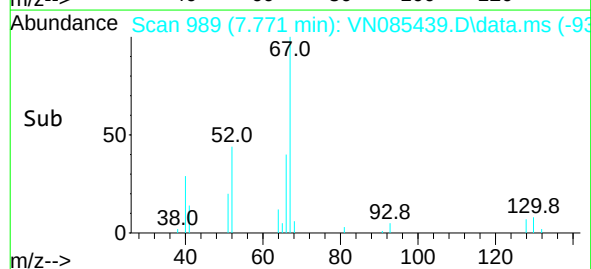
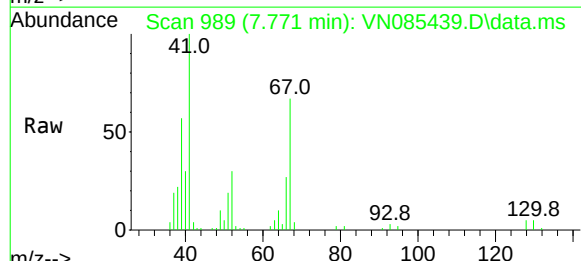
52 31.9 25.5 38.3

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

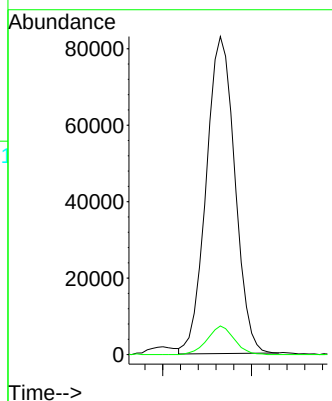
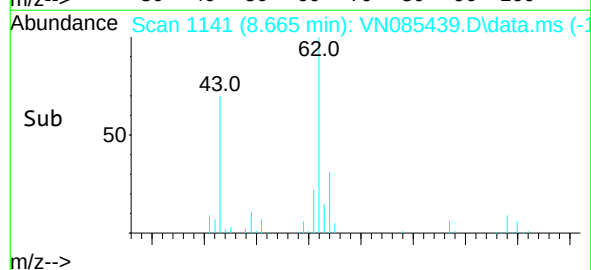
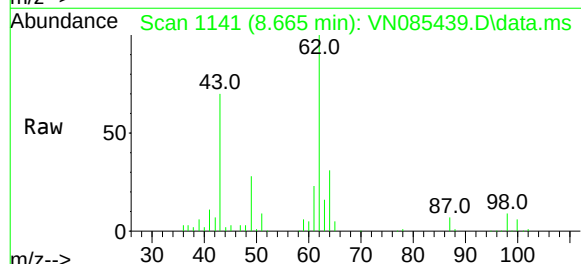
Acq: 14 Jan 2025 15:19

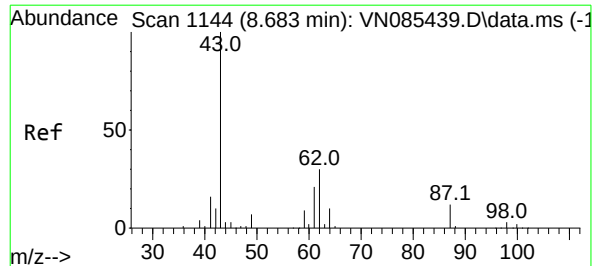
Tgt Ion: 62 Resp: 186065

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

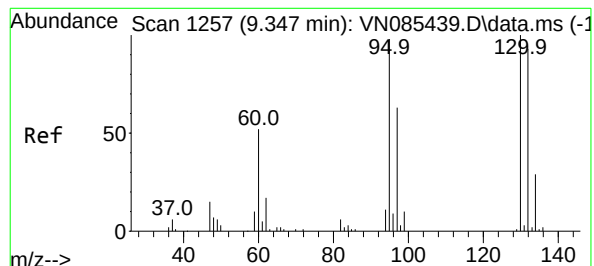
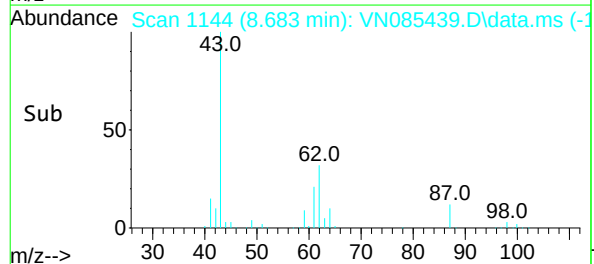
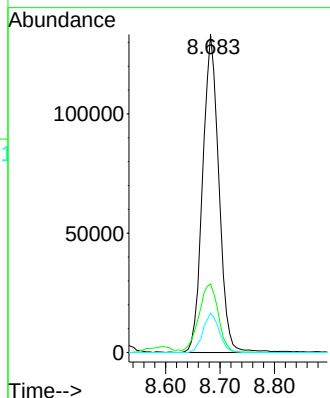
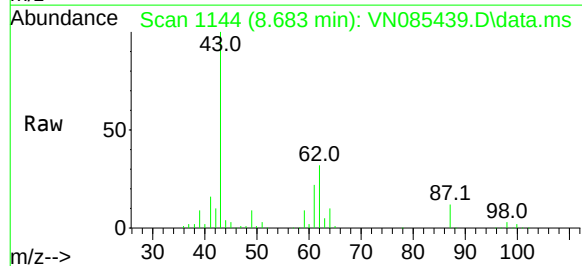
87 12.3 9.8 14.8

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

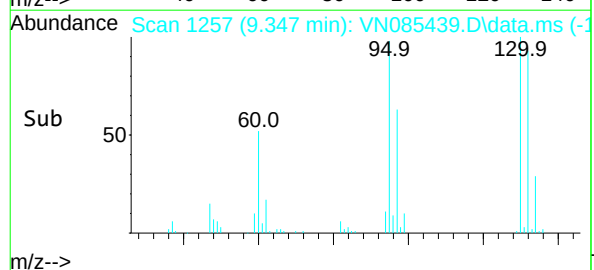
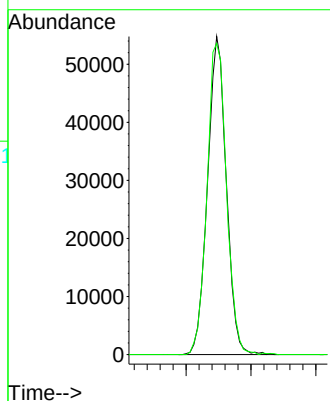
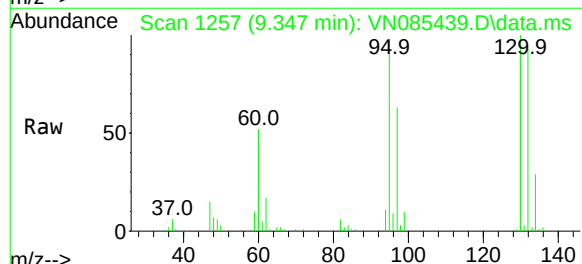
Acq: 14 Jan 2025 15:19

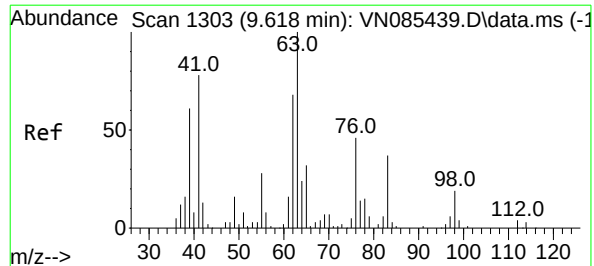
Tgt Ion:130 Resp: 109953

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

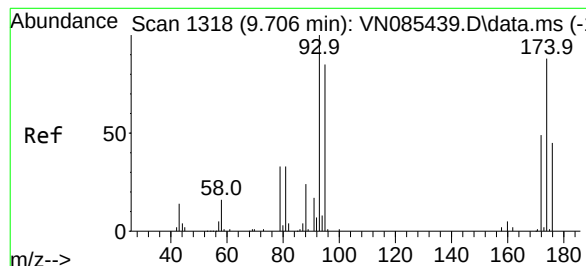
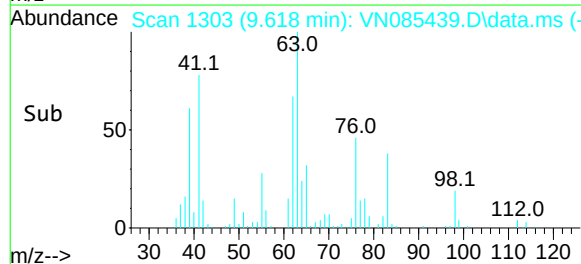
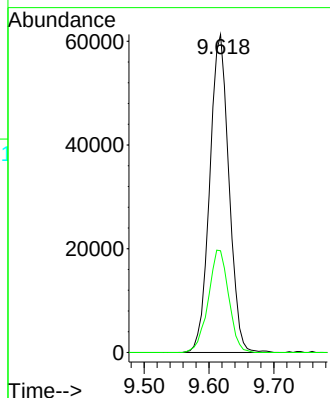
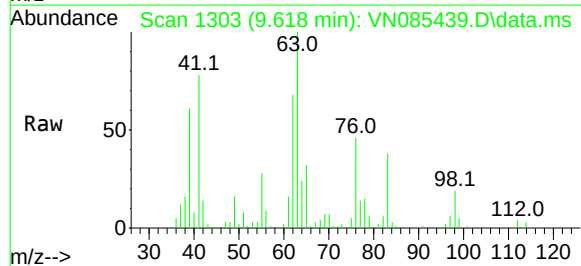
65 32.0 25.6 38.4

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

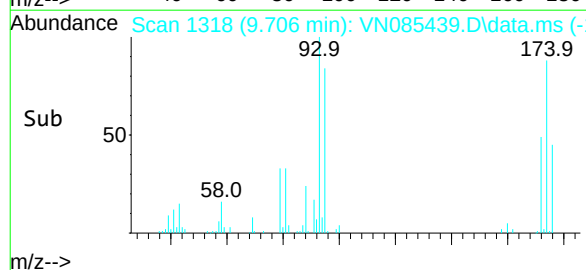
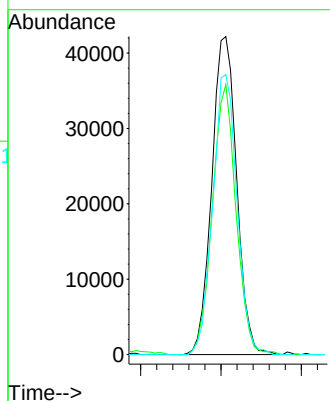
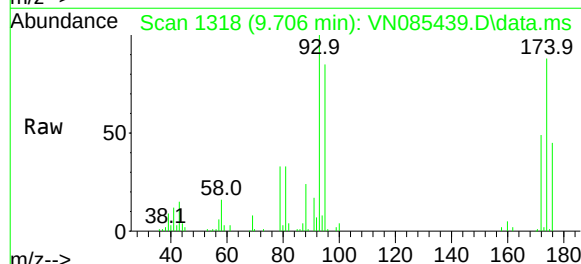
Tgt Ion: 93 Resp: 90670

Ion Ratio Lower Upper

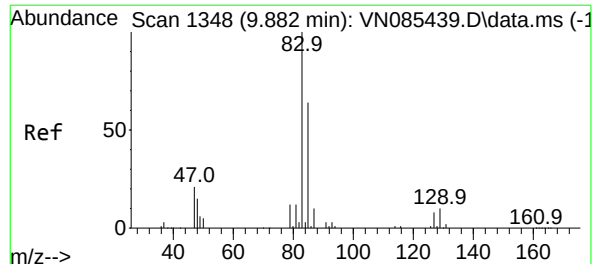
93 100

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

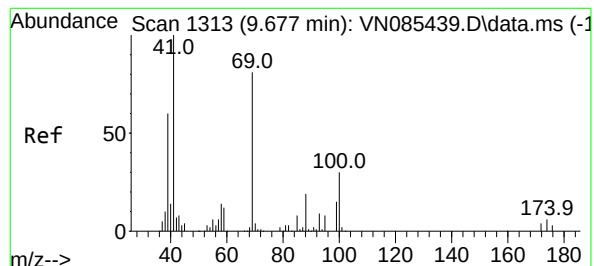
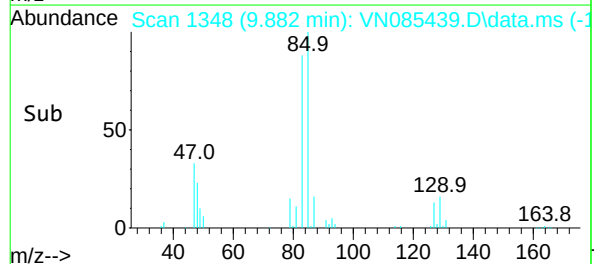
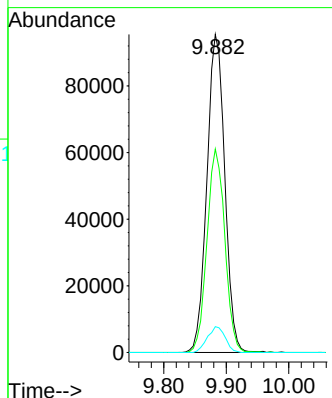
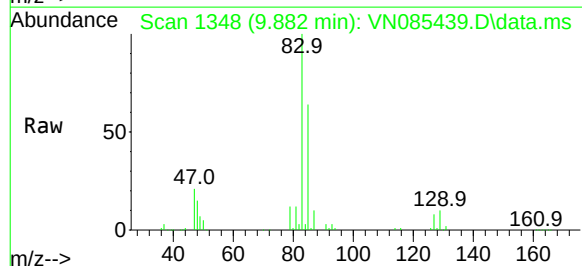
ClientSampleId :

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  
APPROVED

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



#48

Methyl methacrylate

Concen: 55.385 ug/l

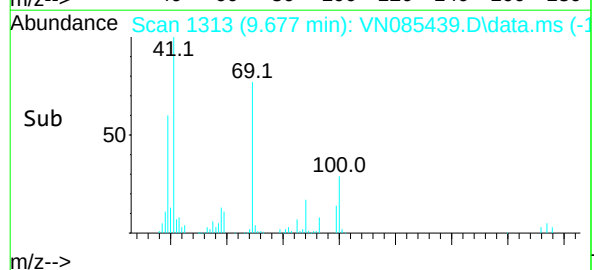
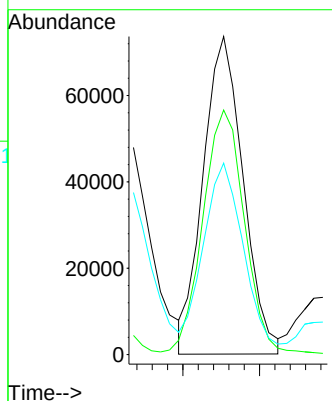
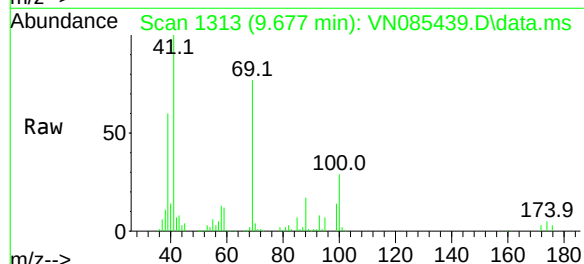
RT: 9.677 min Scan# 1313

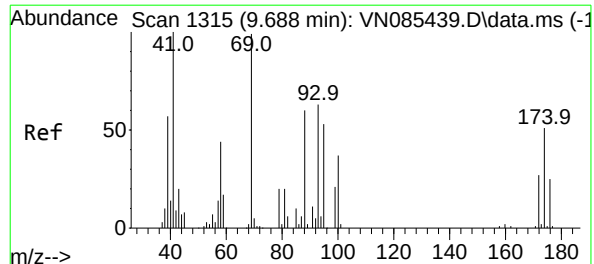
Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

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





#49

1,4-Dioxane

Concen: 1061.334 ug/l

RT: 9.688 min Scan# 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

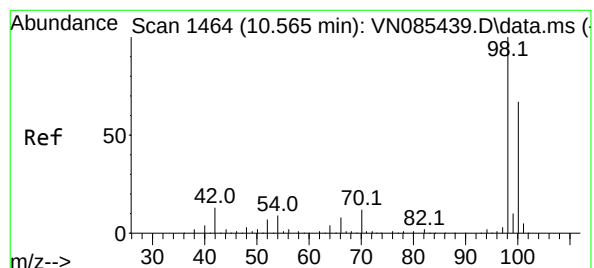
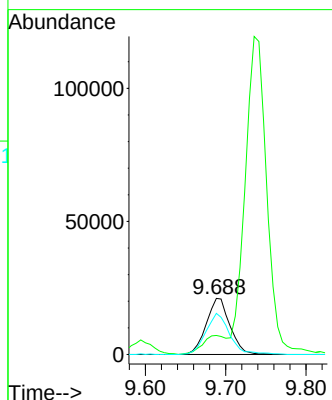
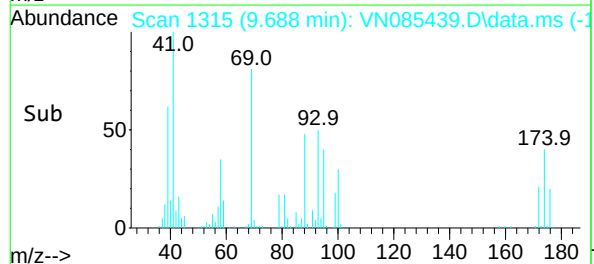
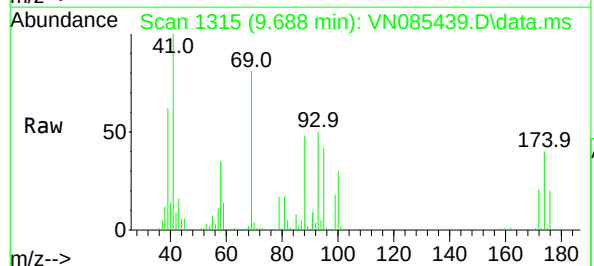
58 74.4 59.5 89.3

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

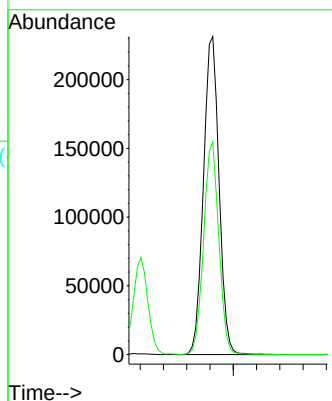
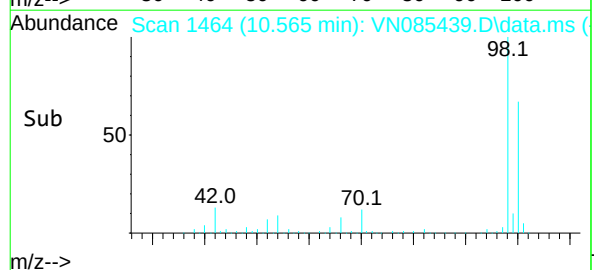
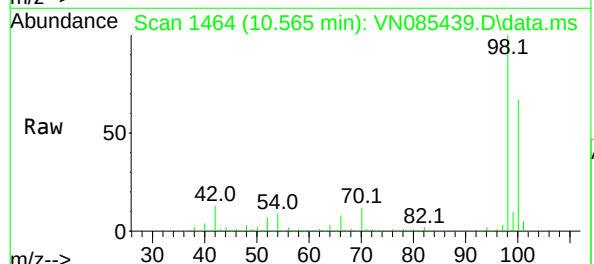
Acq: 14 Jan 2025 15:19

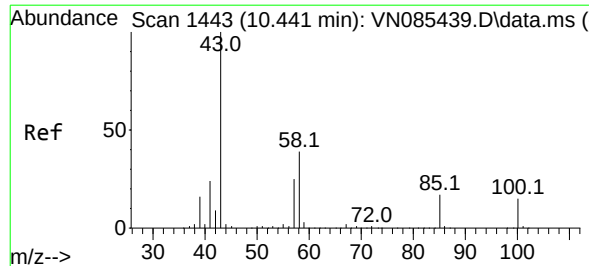
Tgt Ion: 98 Resp: 430698

Ion Ratio Lower Upper

98 100

100 65.3 52.2 78.4





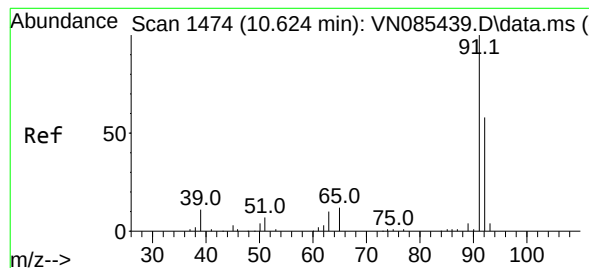
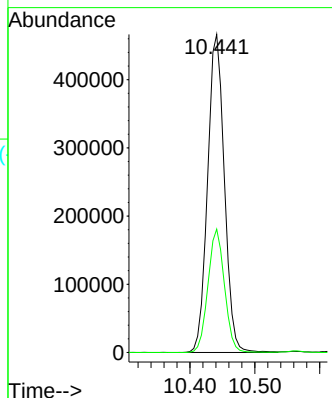
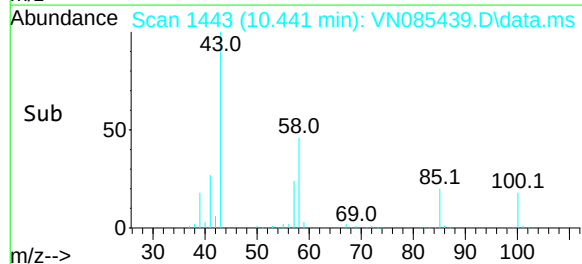
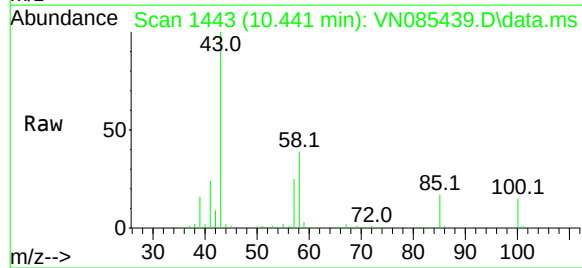
#51  
4-Methyl-2-Pentanone  
Concen: 269.403 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

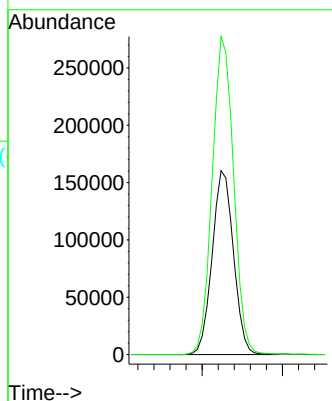
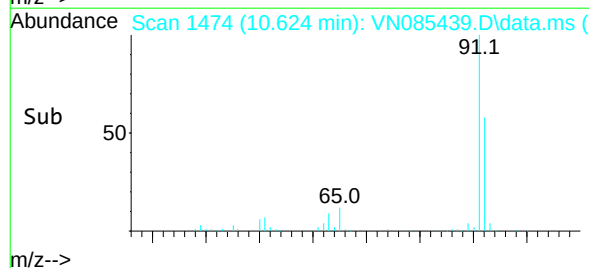
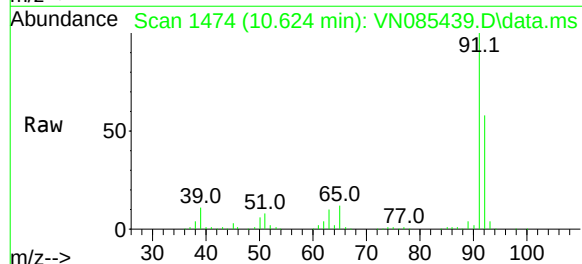
Manual Integrations  
APPROVED

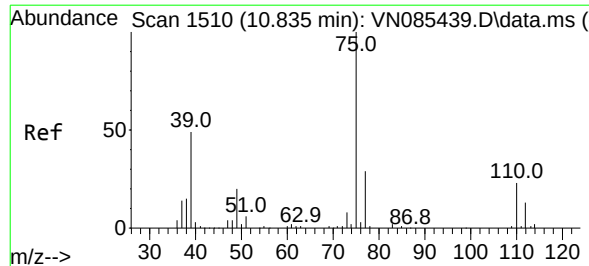
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

Tgt Ion: 75 Resp: 187439

Ion Ratio Lower Upper

75 100

77 29.4 23.5 35.3

Instrument :

MSVOA\_N

ClientSampleId :

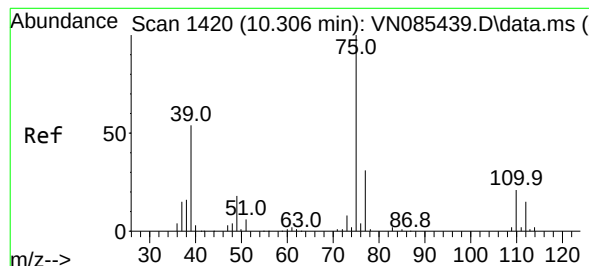
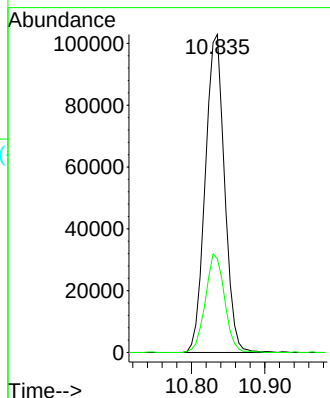
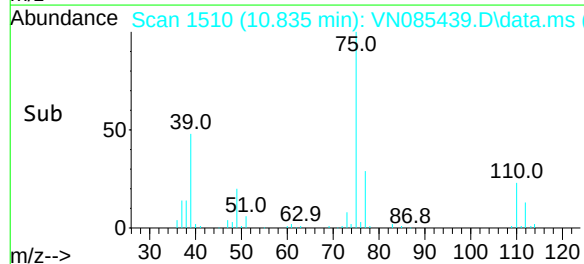
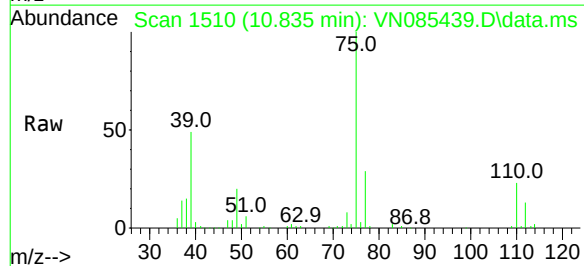
VSTDICCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 53.006 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

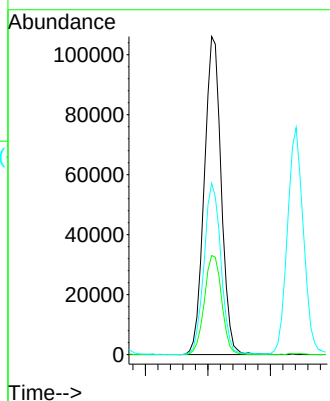
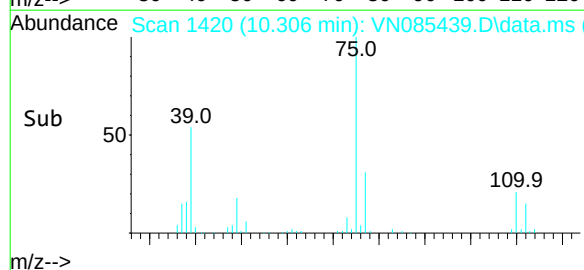
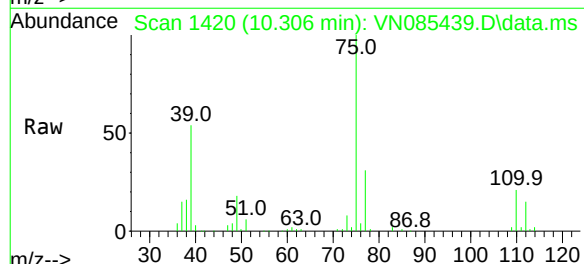
Tgt Ion: 75 Resp: 199771

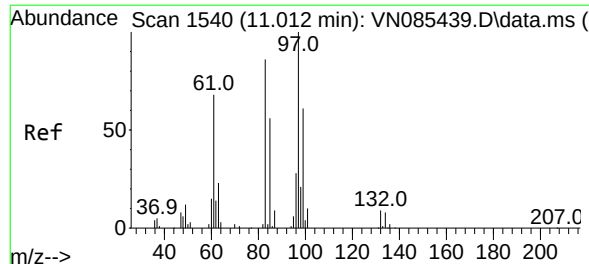
Ion Ratio Lower Upper

75 100

77 31.2 25.0 37.4

39 53.9 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 50.641 ug/l

RT: 11.012 min Scan# 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

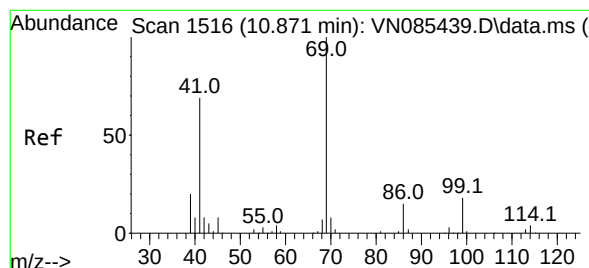
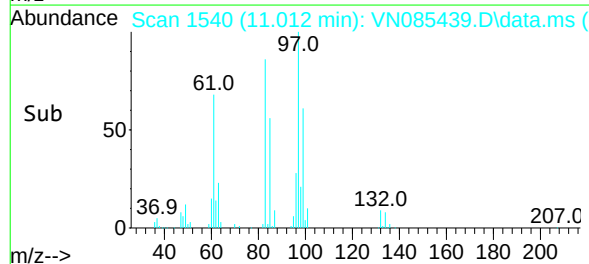
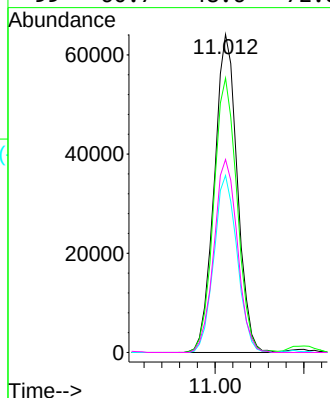
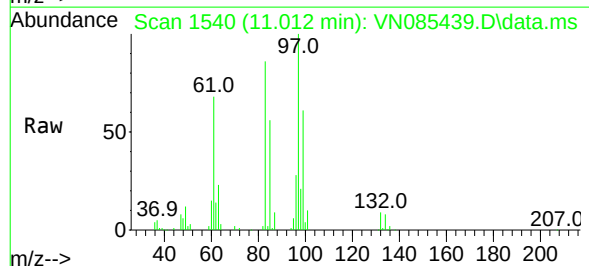
99 60.7 48.6 72.8

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

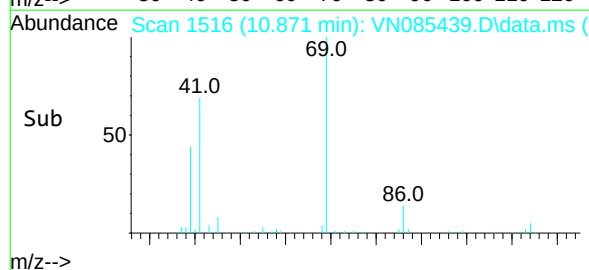
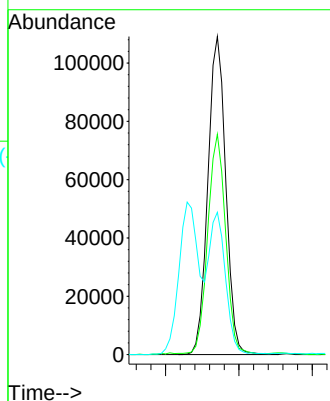
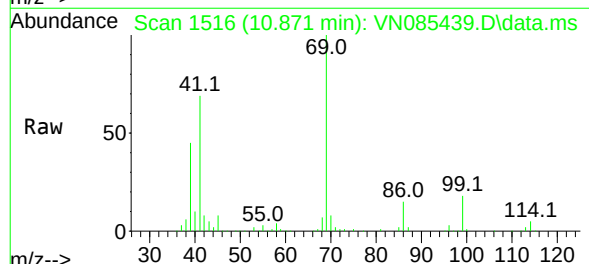
Tgt Ion: 69 Resp: 184775

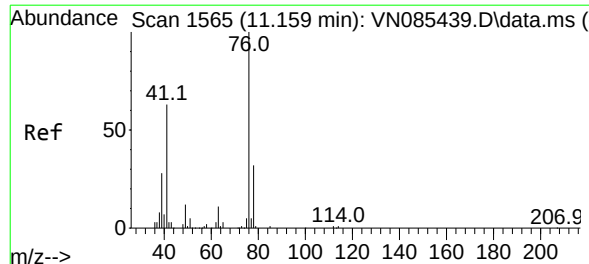
Ion Ratio Lower Upper

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

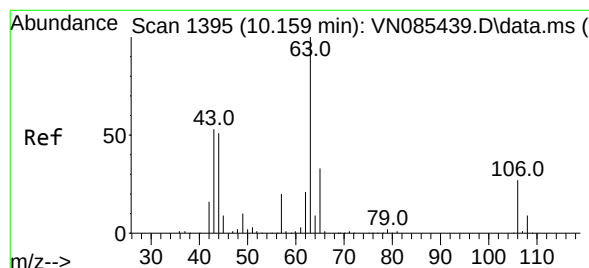
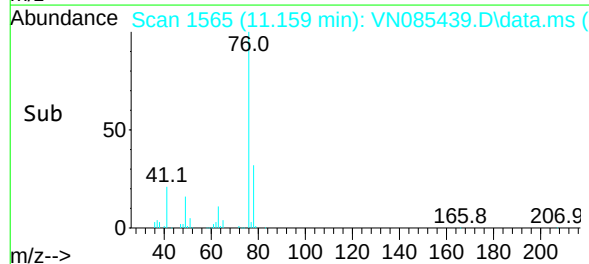
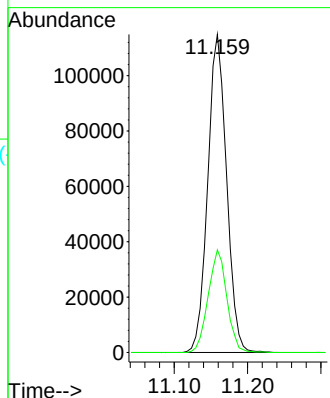
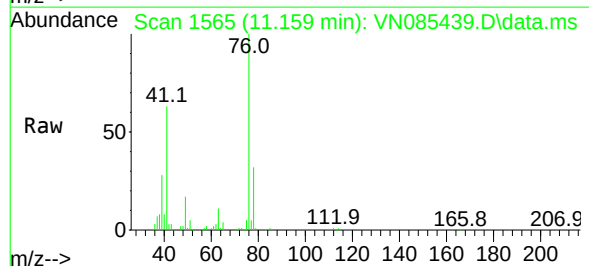
78 32.0 25.6 38.4

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

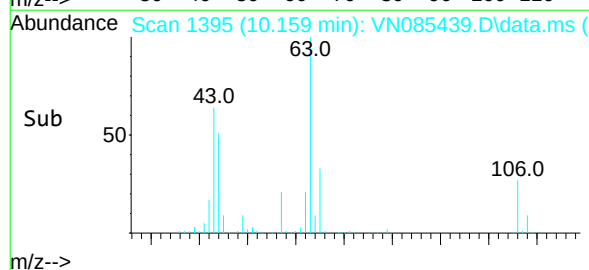
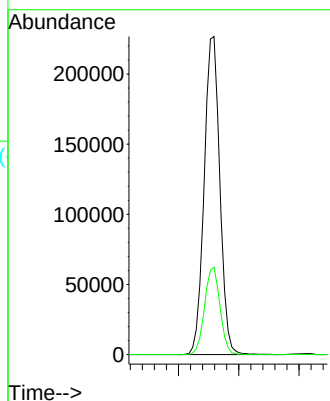
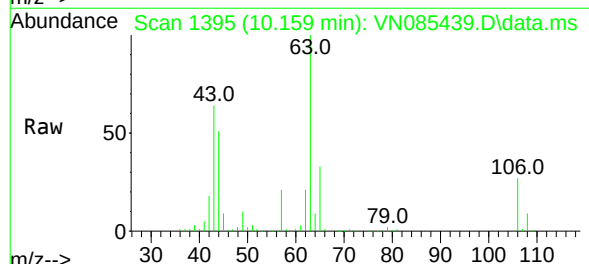
Acq: 14 Jan 2025 15:19

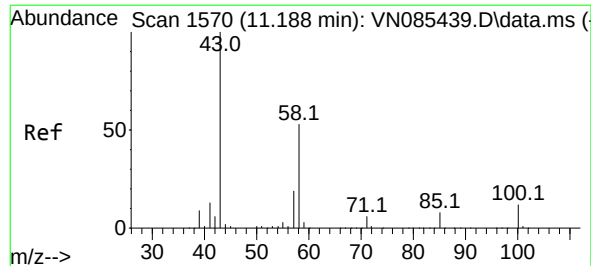
Tgt Ion: 63 Resp: 409594

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

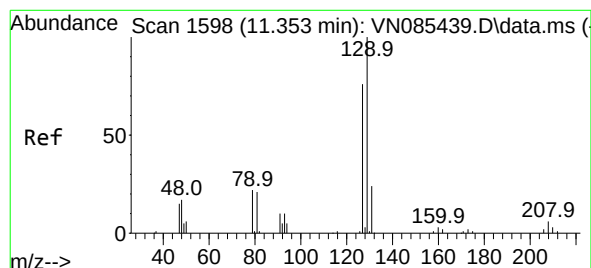
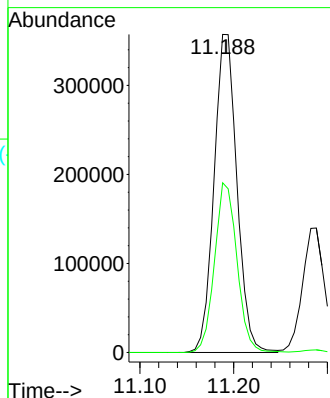
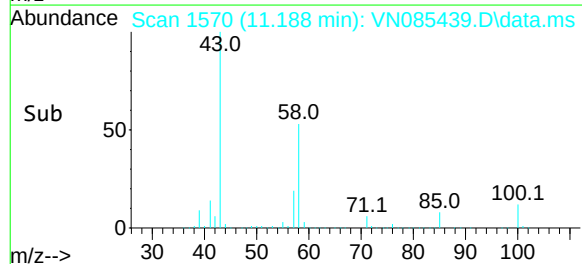
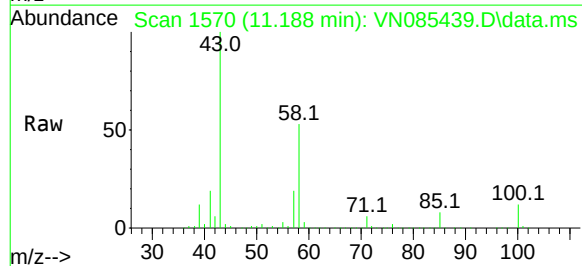
58 52.4 26.2 78.6

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

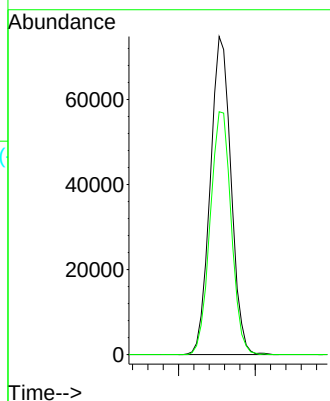
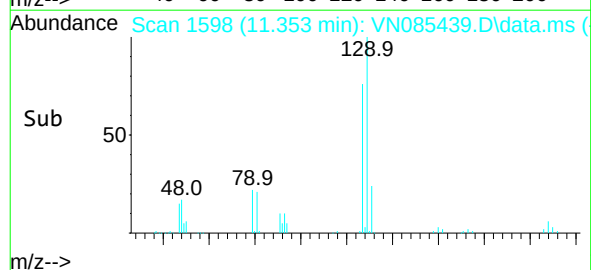
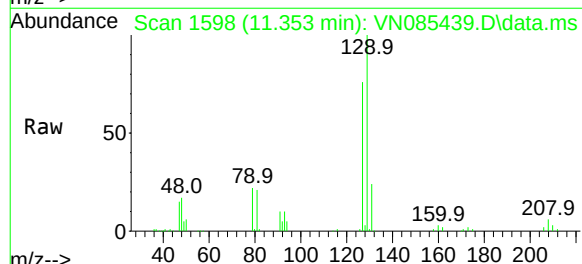
Acq: 14 Jan 2025 15:19

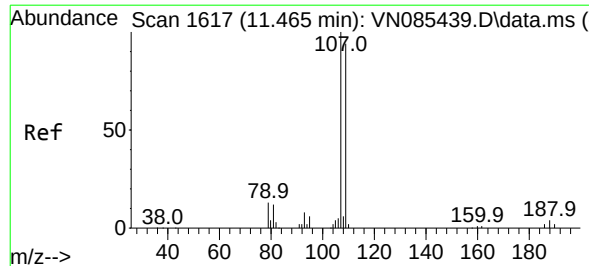
Tgt Ion:129 Resp: 140704

Ion Ratio Lower Upper

129 100

127 77.2 38.6 115.8





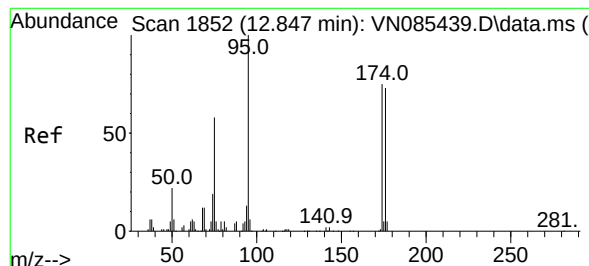
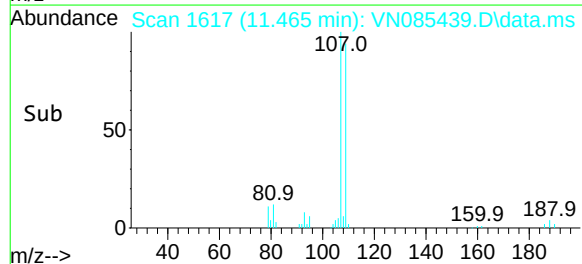
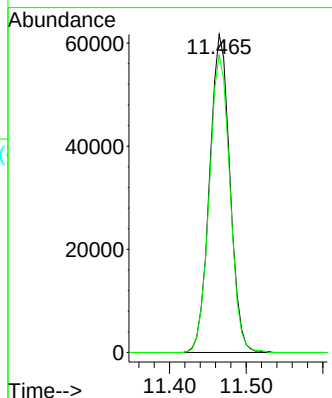
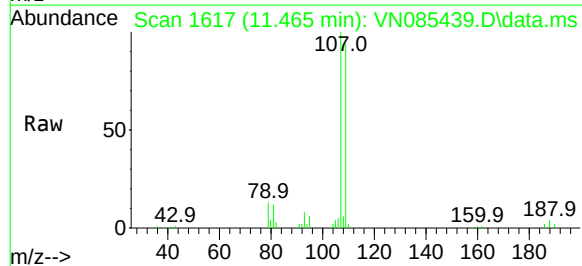
#61  
1,2-Dibromoethane  
Concen: 50.028 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

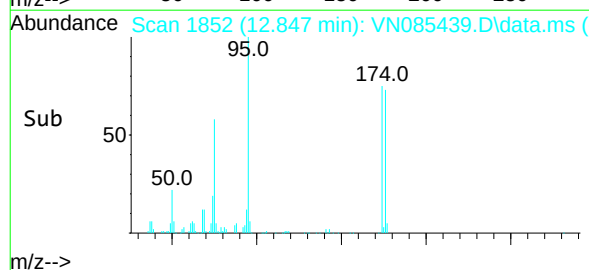
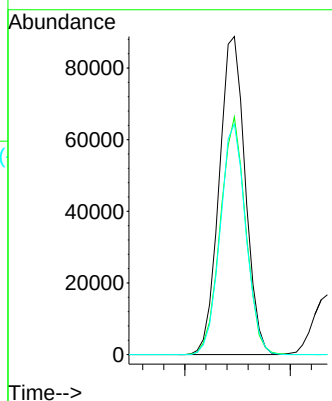
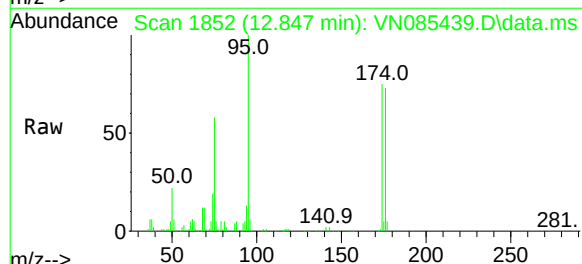
Manual Integrations  
APPROVED

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

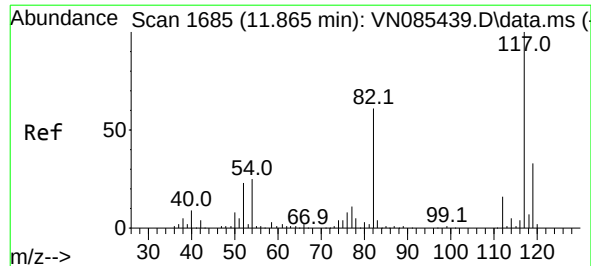


#62  
4-Bromofluorobenzene  
Concen: 53.239 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

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

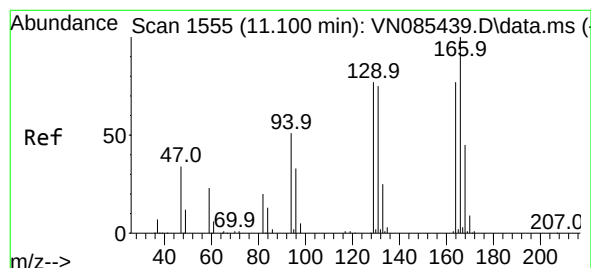
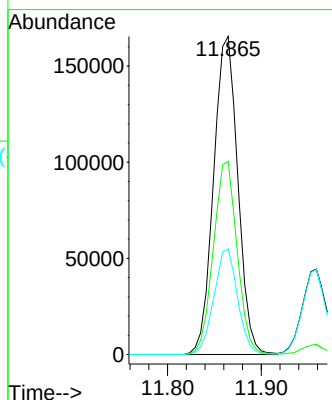
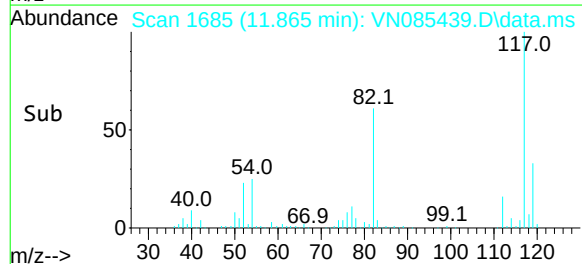
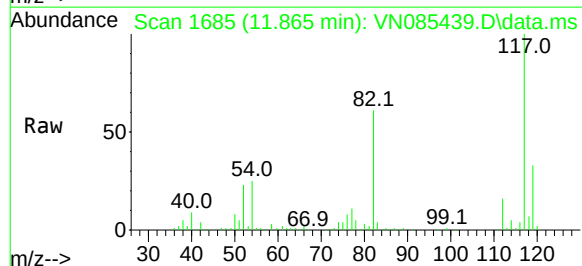
119 33.2 26.6 39.8

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

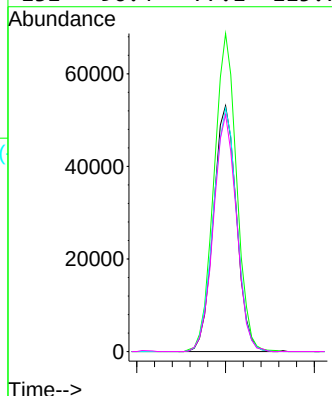
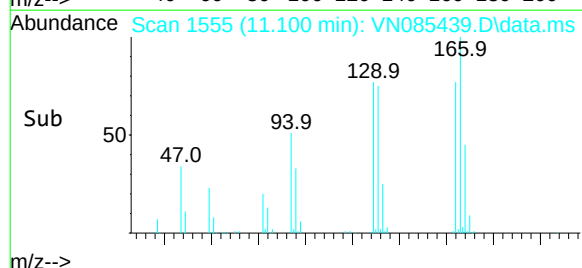
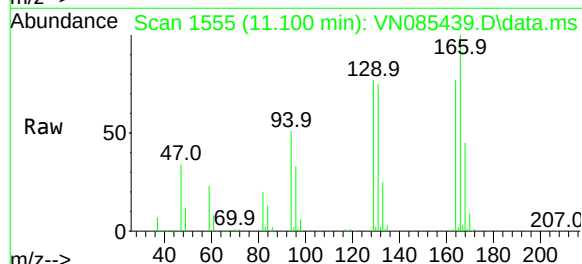
Ion Ratio Lower Upper

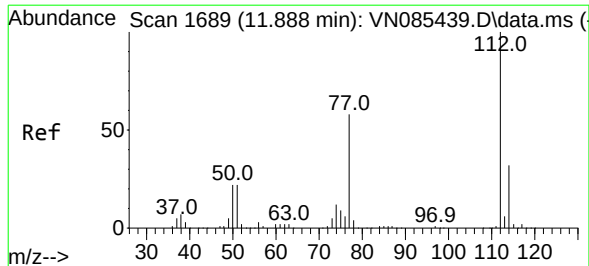
164 100

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

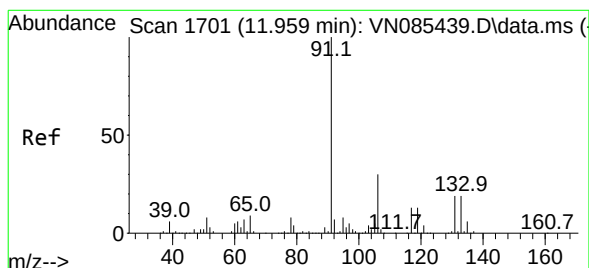
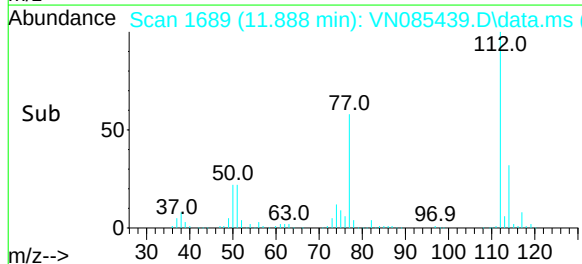
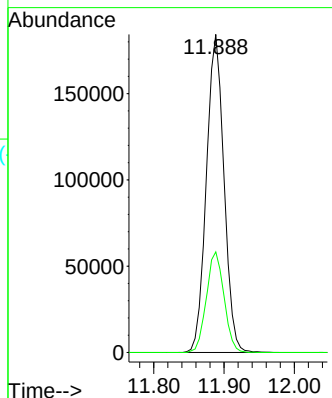
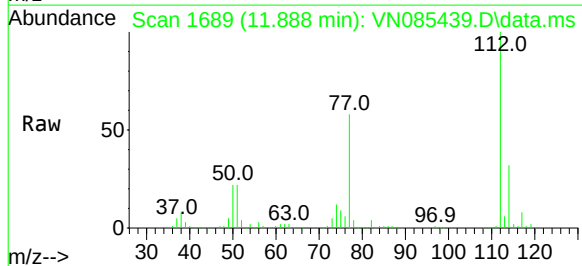
114 31.6 25.3 37.9

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

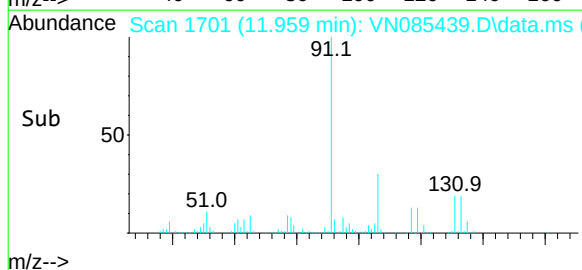
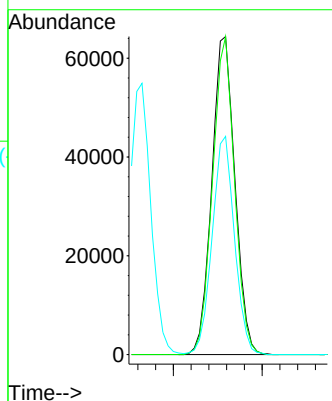
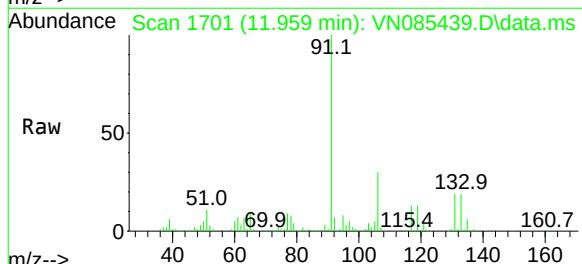
Tgt Ion:131 Resp: 116488

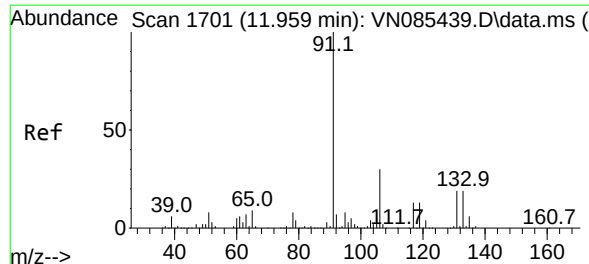
Ion Ratio Lower Upper

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

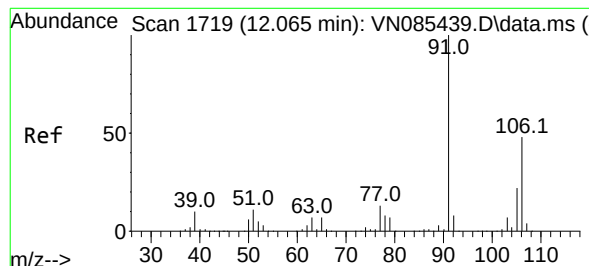
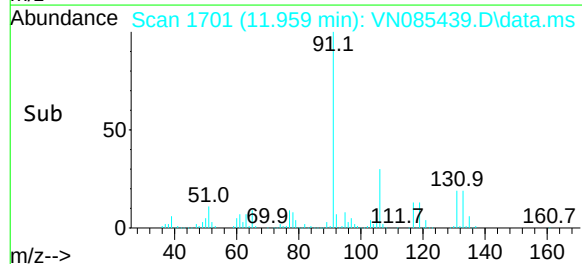
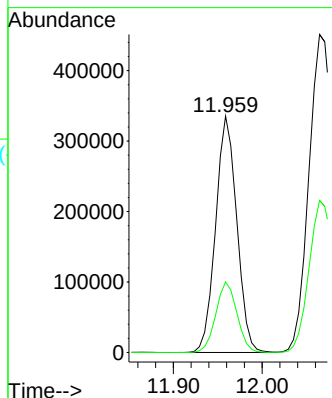
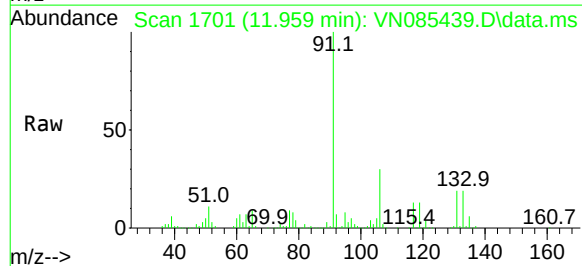
106 29.8 23.8 35.8

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

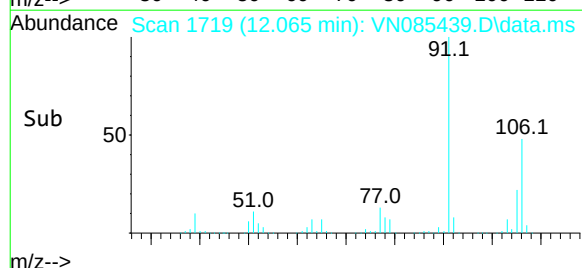
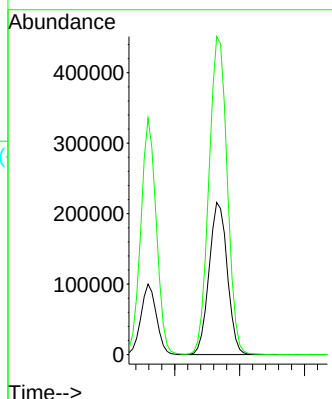
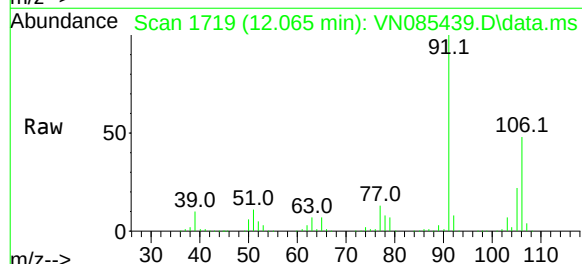
Acq: 14 Jan 2025 15:19

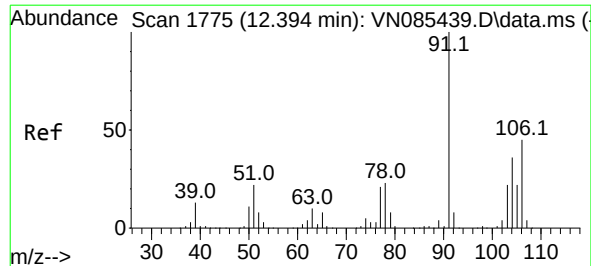
Tgt Ion:106 Resp: 420702

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

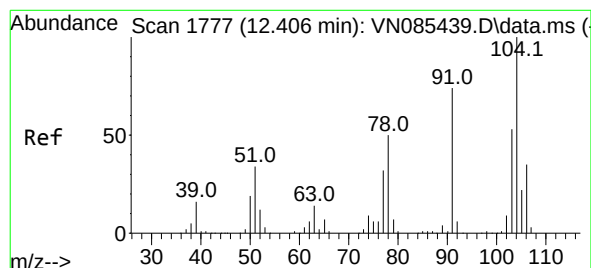
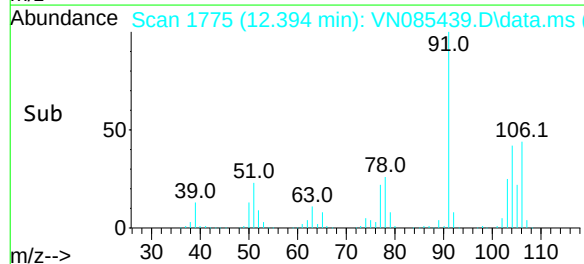
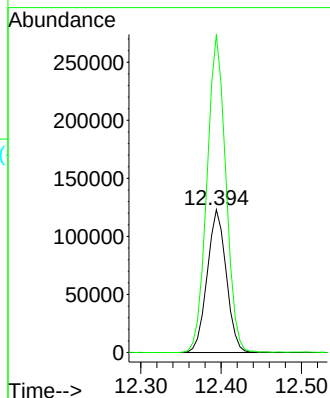
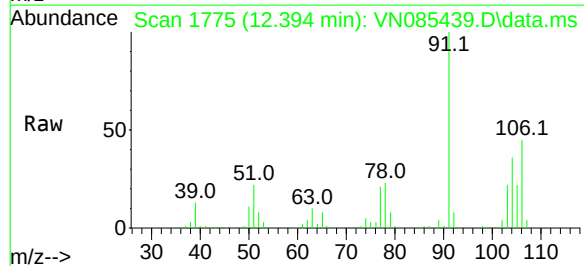
91 220.8 110.4 331.2

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

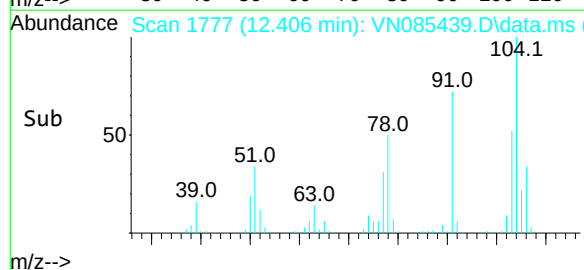
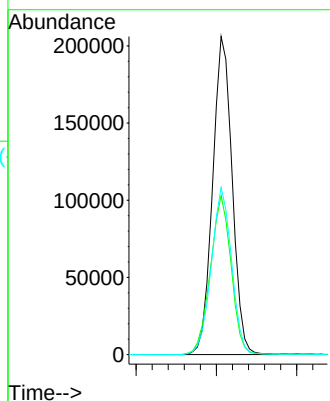
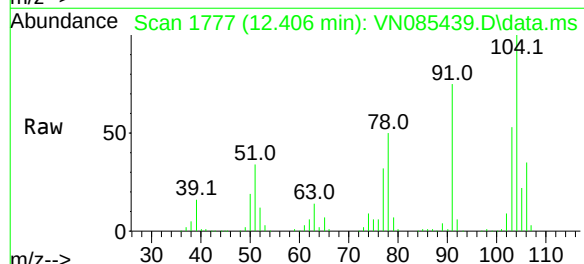
Tgt Ion:104 Resp: 348720

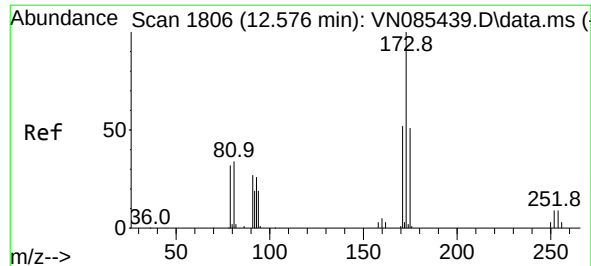
Ion Ratio Lower Upper

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

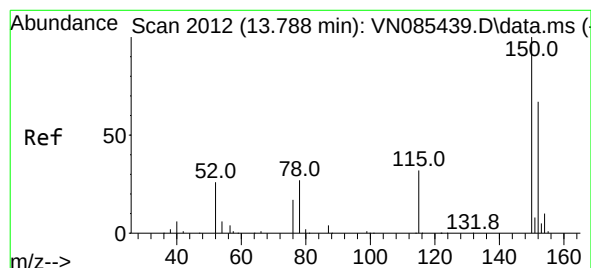
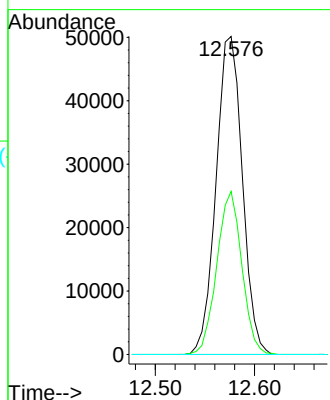
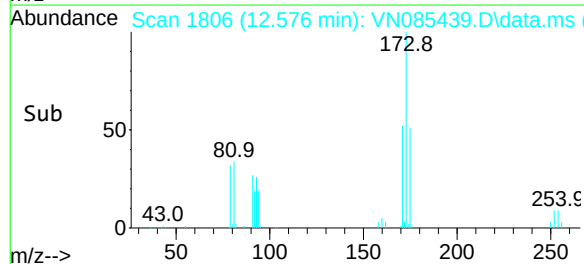
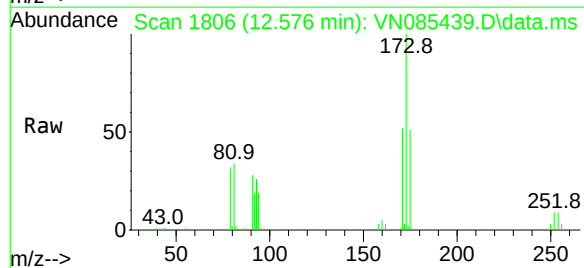
ClientSampleId :

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

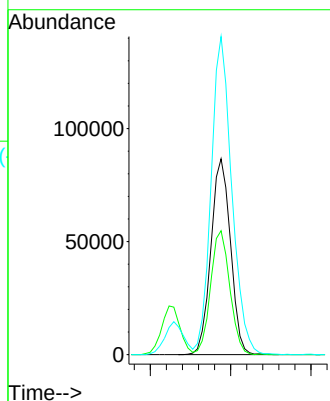
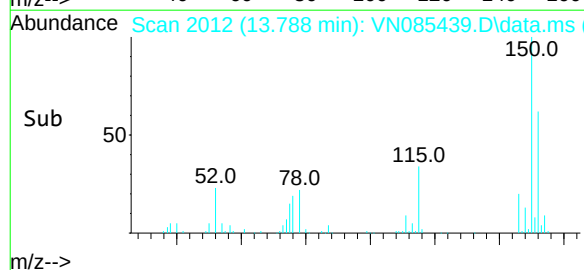
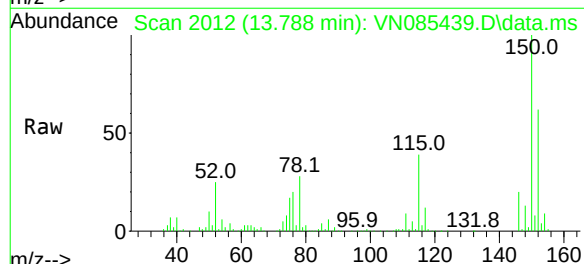
RT: 13.788 min Scan# 2012

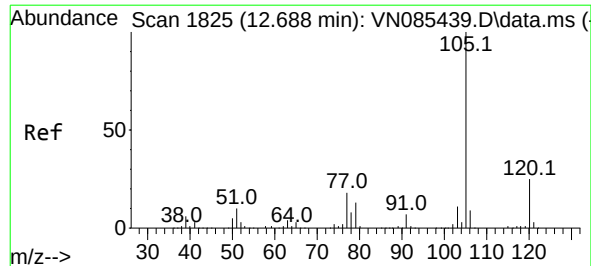
Delta R.T. 0.000 min

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

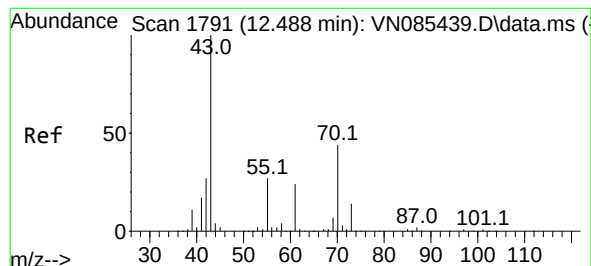
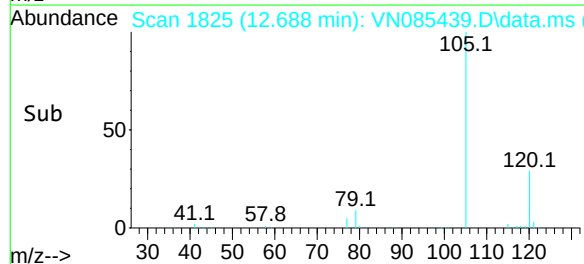
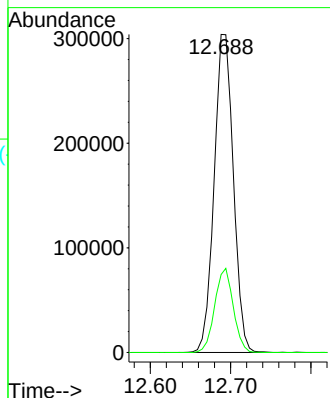
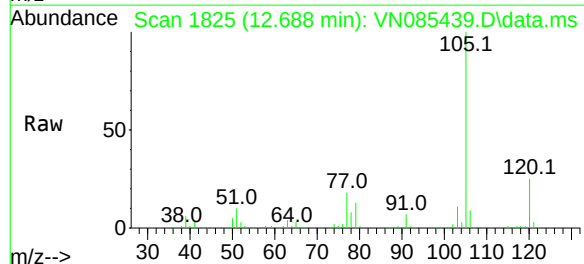
120 25.5 12.8 38.3

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

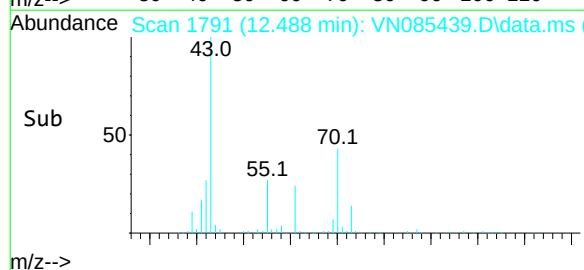
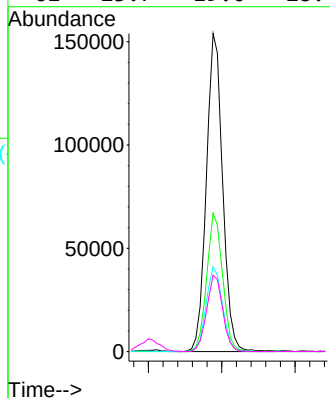
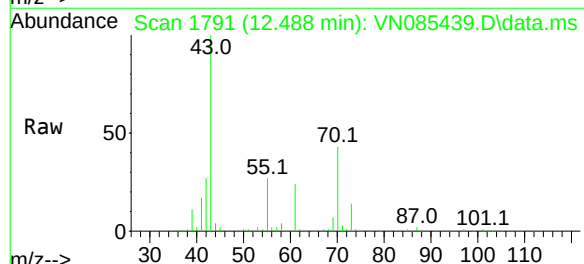
Ion Ratio Lower Upper

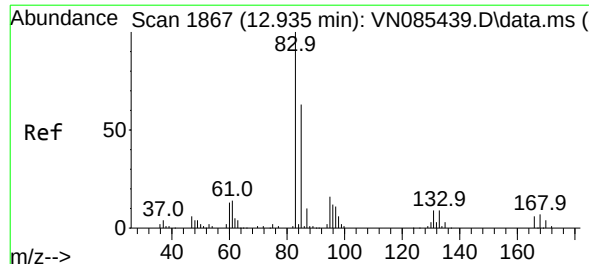
43 100

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

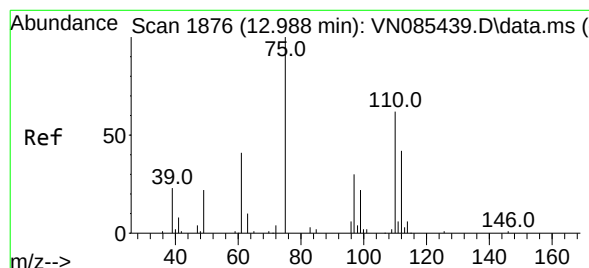
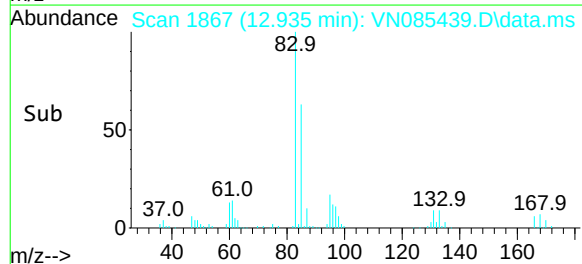
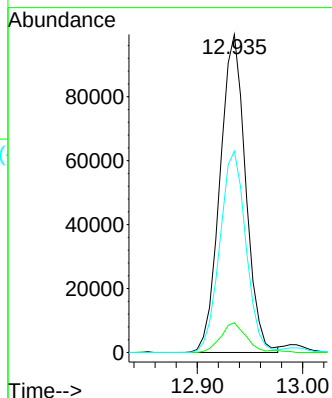
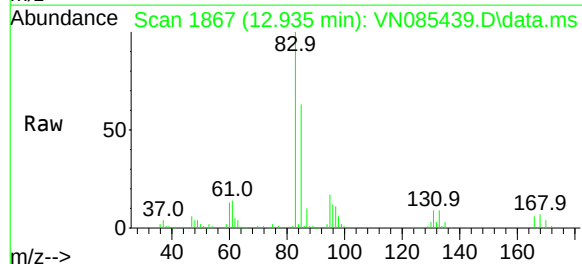
ClientSampleId :

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

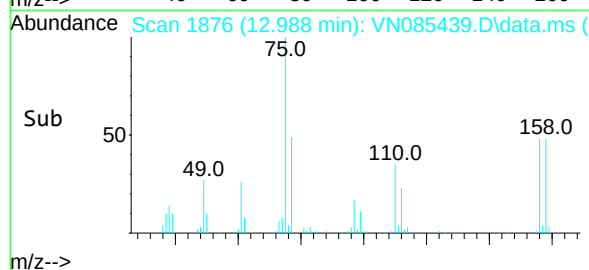
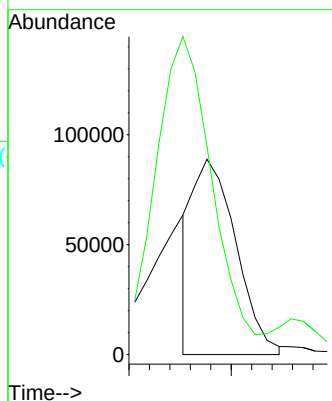
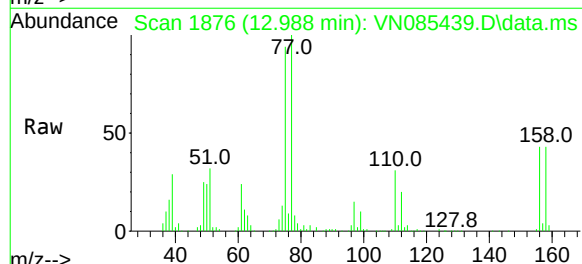
RT: 12.988 min Scan# 1876

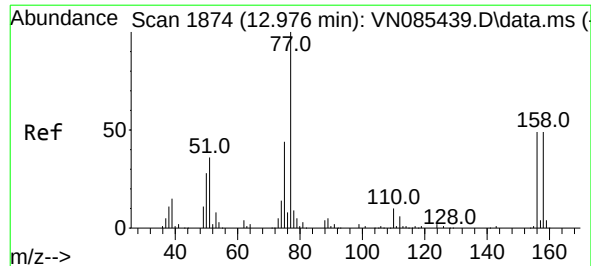
Delta R.T. 0.000 min

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

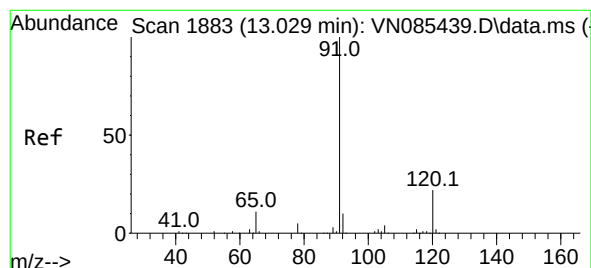
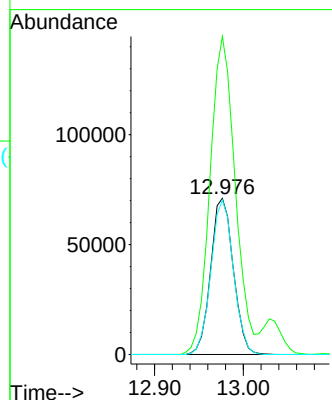
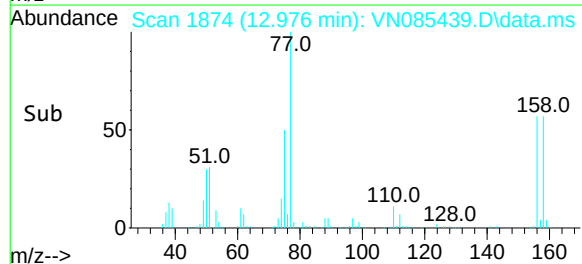
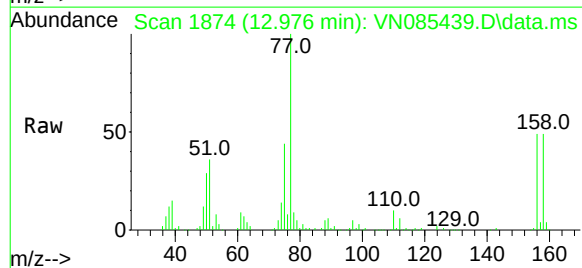
ClientSampleId :

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

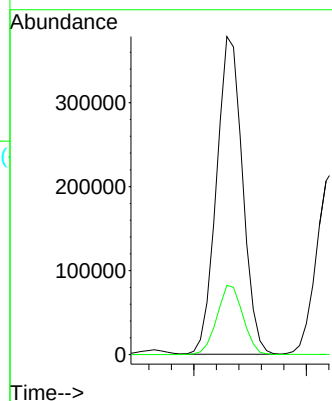
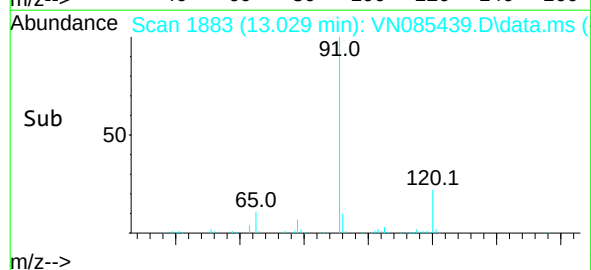
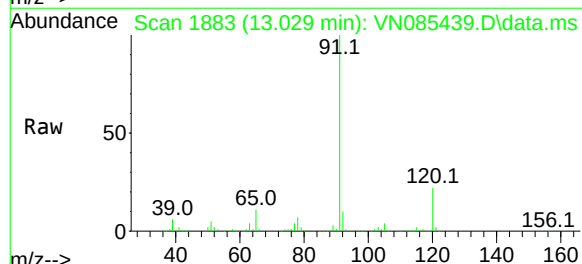
RT: 13.029 min Scan# 1883

Delta R.T. 0.000 min

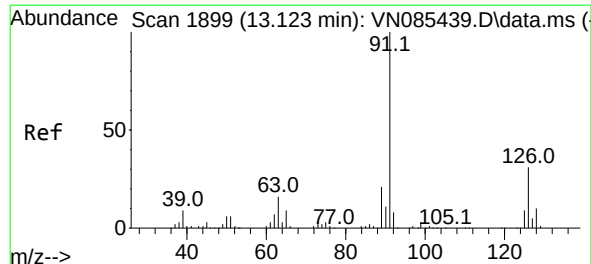
Lab File: VN085439.D

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

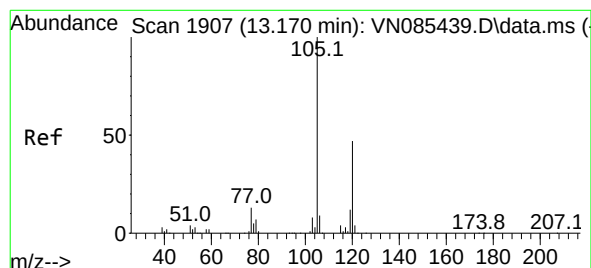
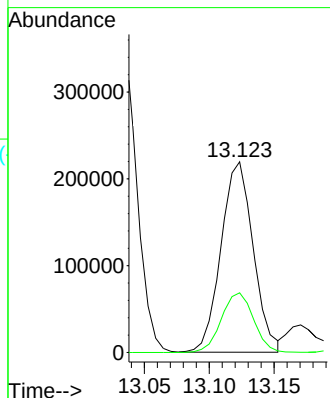
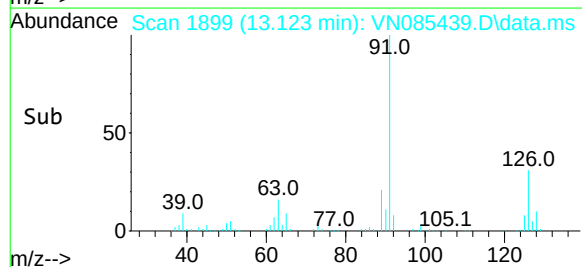
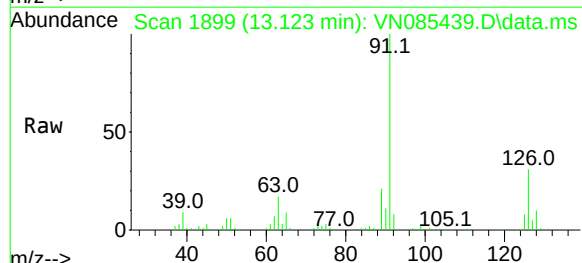
126 31.4 15.7 47.1

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

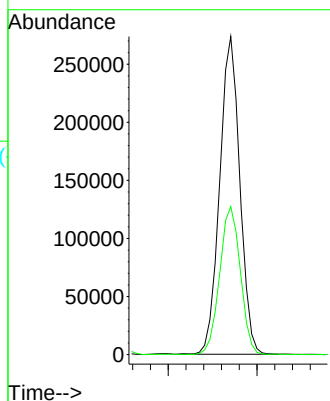
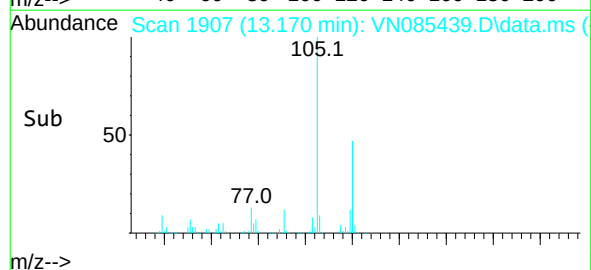
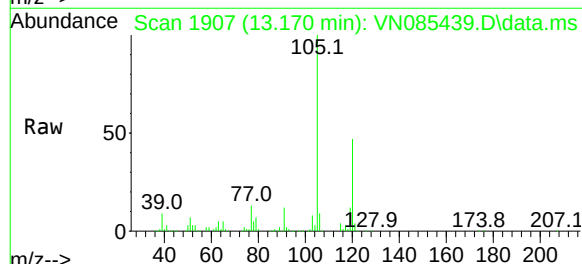
Acq: 14 Jan 2025 15:19

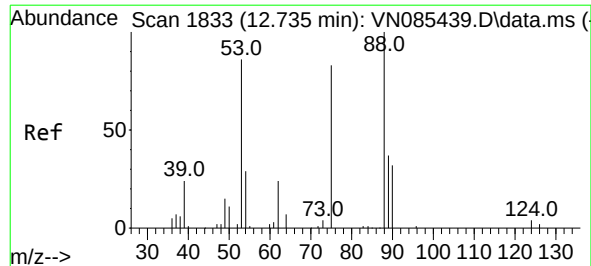
Tgt Ion:105 Resp: 431021

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 :

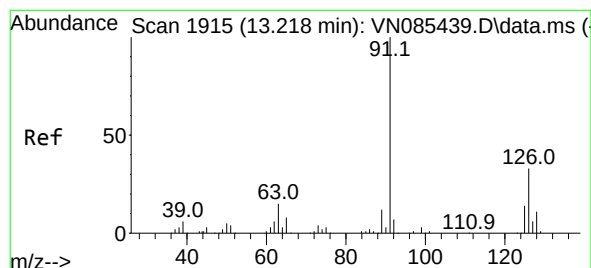
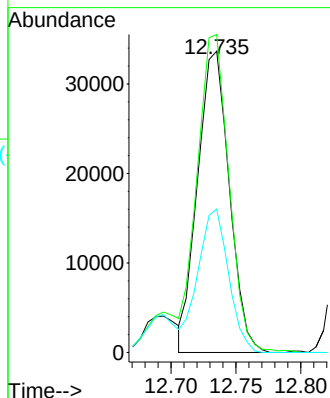
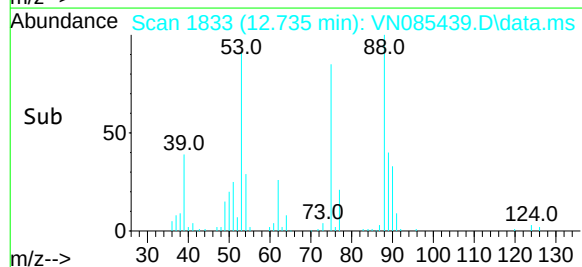
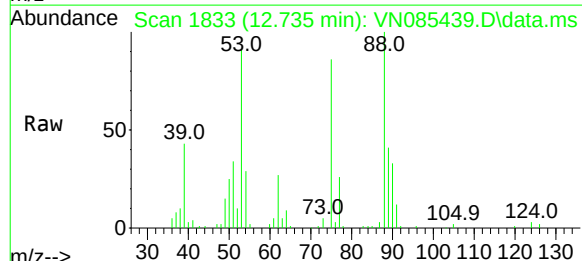
VSTDICCC050

|          |       |       |       |
|----------|-------|-------|-------|
| 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

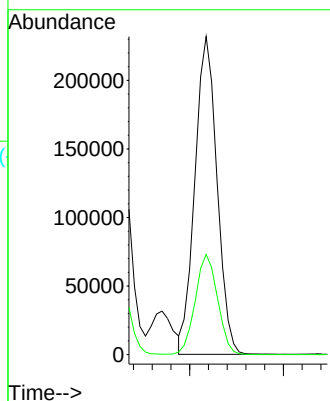
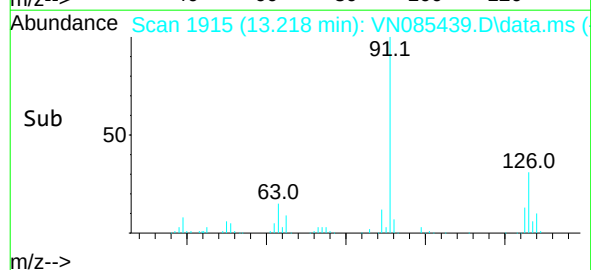
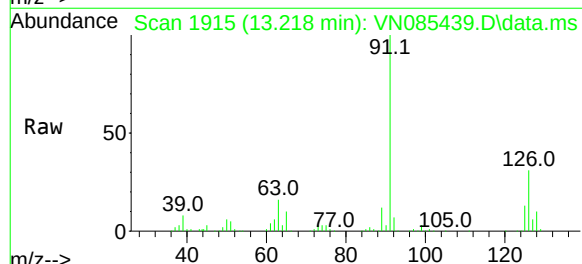
RT: 13.218 min Scan# 1915

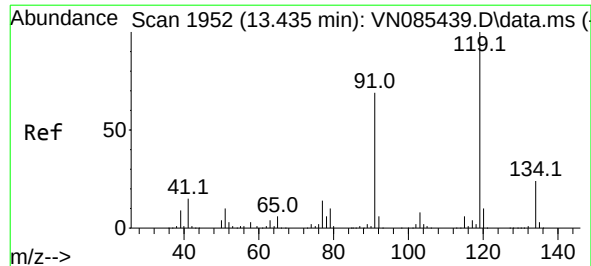
Delta R.T. 0.000 min

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

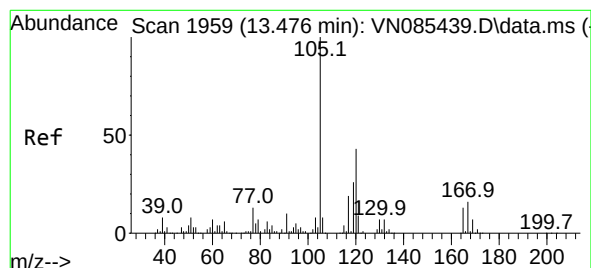
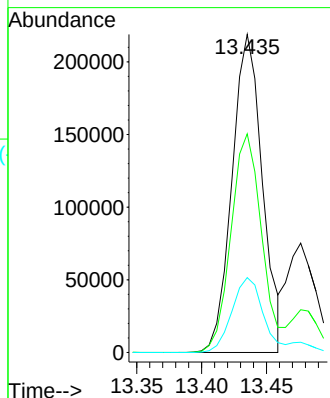
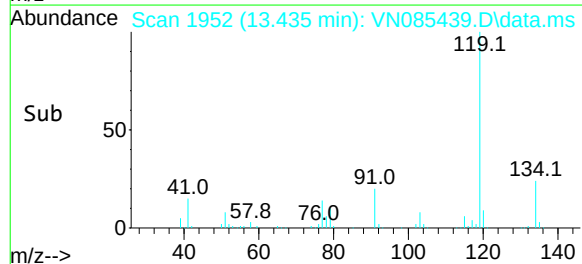
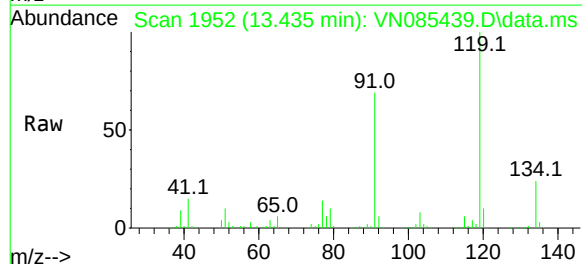
134 24.1 12.0 36.1

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

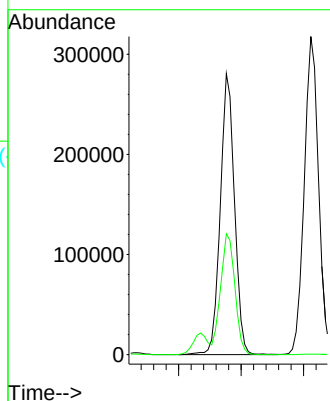
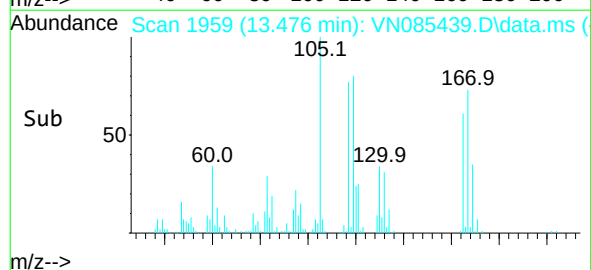
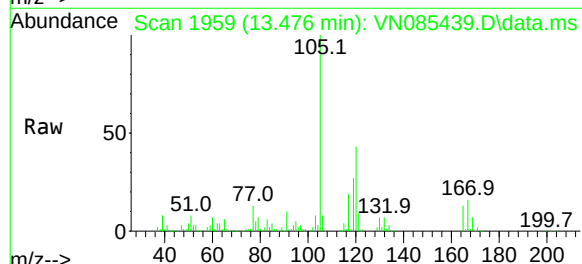
Acq: 14 Jan 2025 15:19

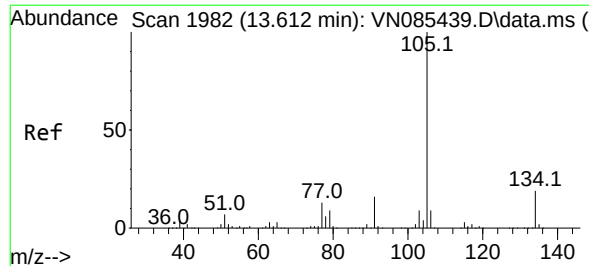
Tgt Ion:105 Resp: 442175

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# 19

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

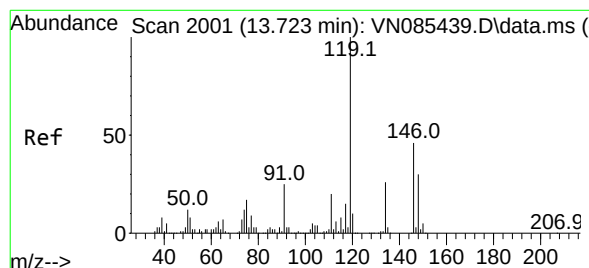
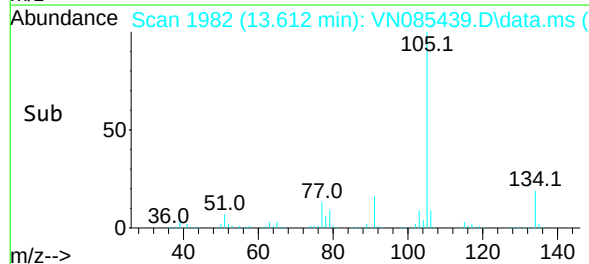
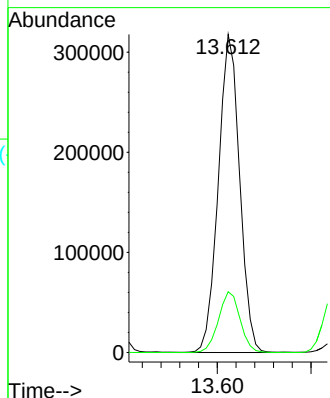
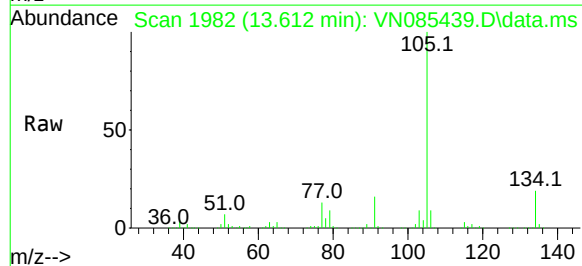
134 19.3 9.7 28.9

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

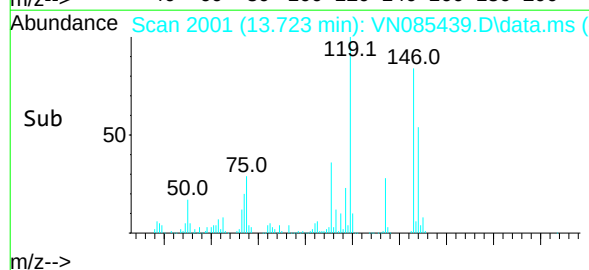
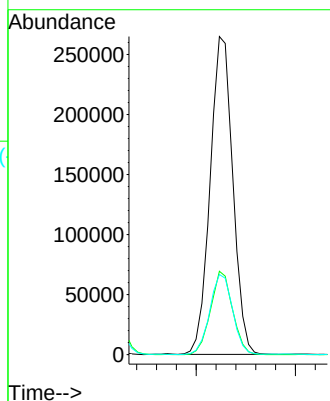
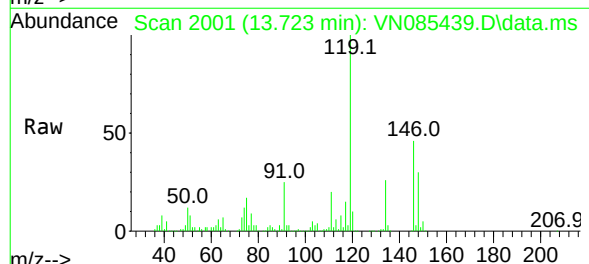
Tgt Ion:119 Resp: 421052

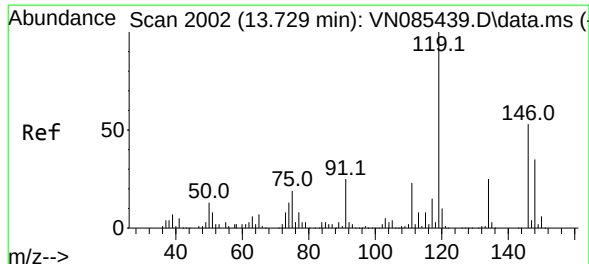
Ion Ratio Lower Upper

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

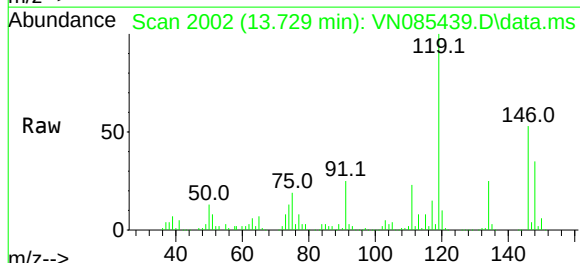
Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

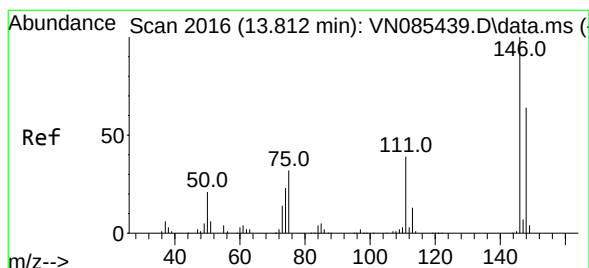
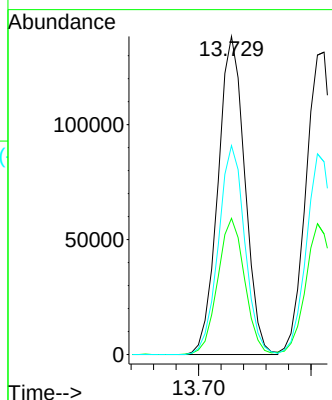
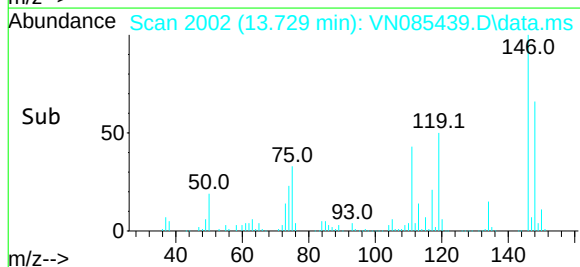
VSTDICCC050



|          |       |       |        |
|----------|-------|-------|--------|
| 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

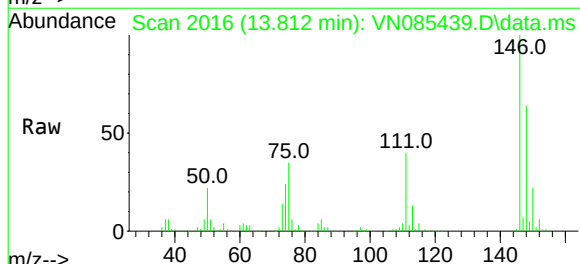
Concen: 46.416 ug/l

RT: 13.812 min Scan# 2016

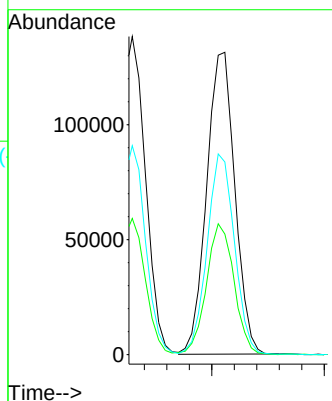
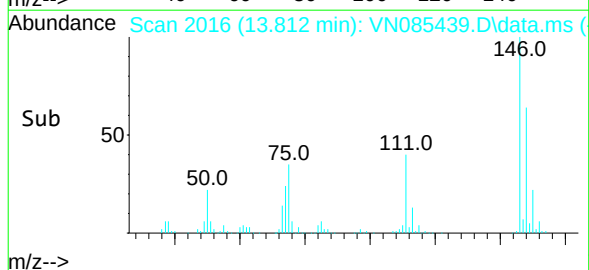
Delta R.T. 0.000 min

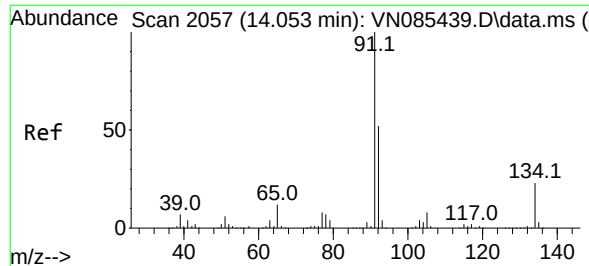
Lab File: VN085439.D

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 :

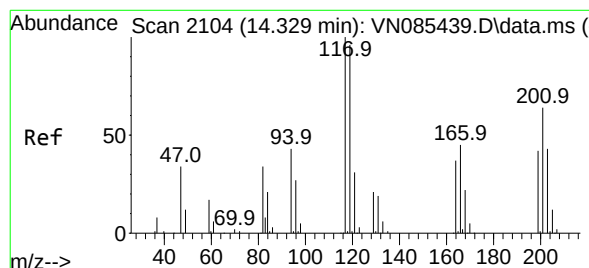
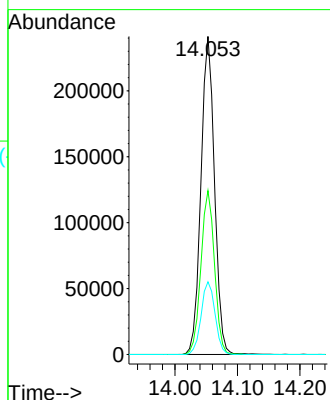
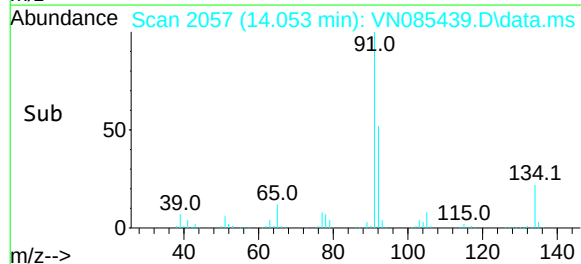
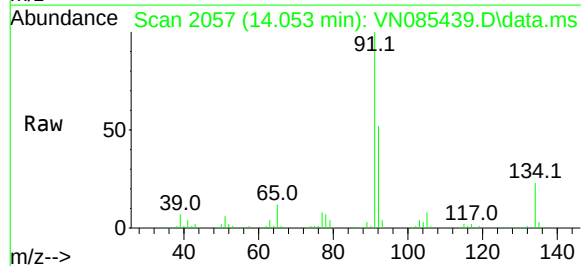
VSTDICCC050

|          |       |       |        |
|----------|-------|-------|--------|
| 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

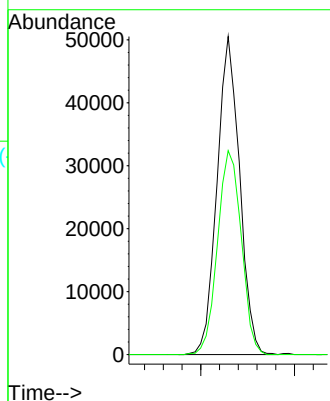
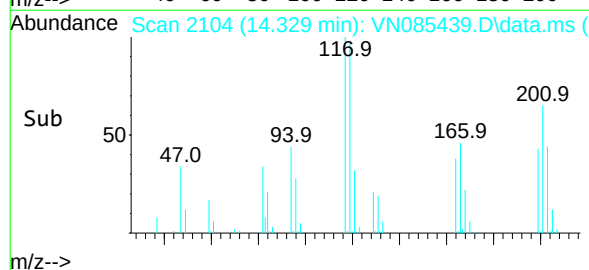
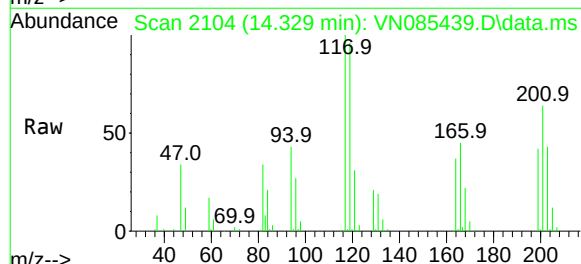
RT: 14.329 min Scan# 2104

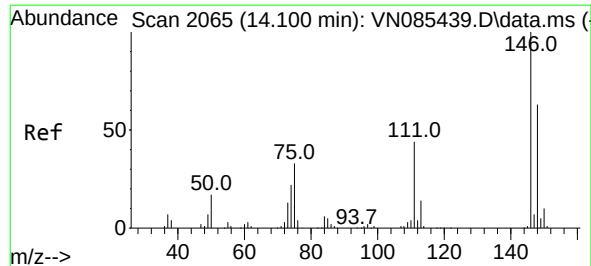
Delta R.T. 0.000 min

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

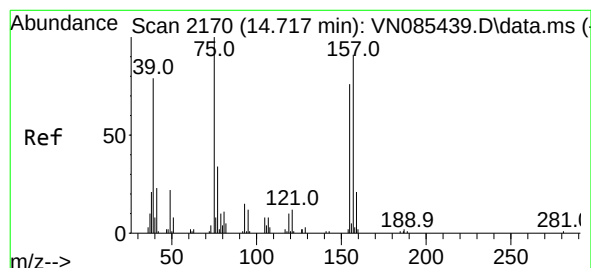
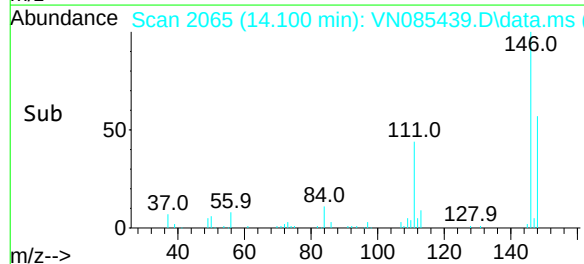
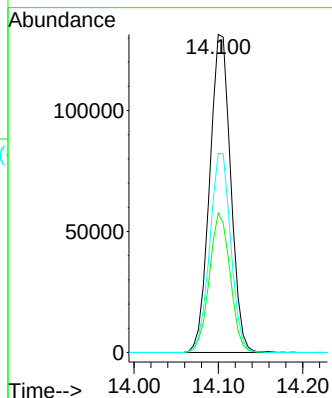
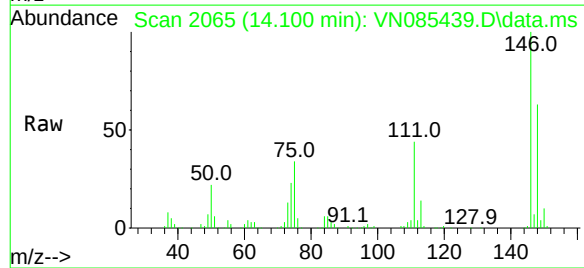
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 228024 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 43.4  | 21.7  | 65.1   |
| 148      | 62.8  | 31.4  | 94.2   |

## 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

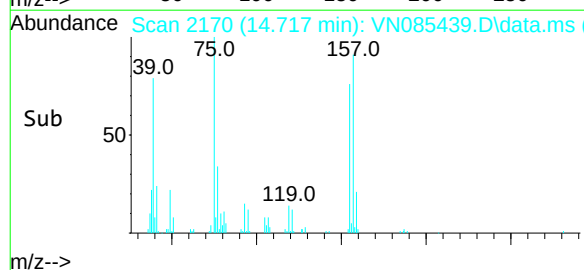
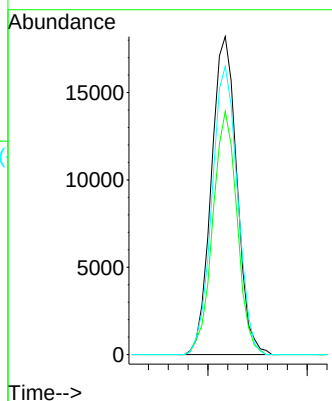
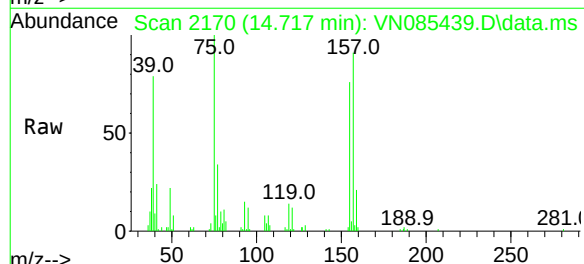
RT: 14.717 min Scan# 2170

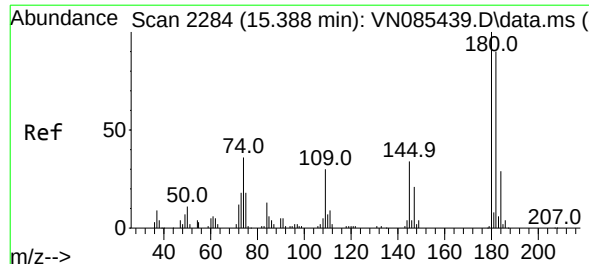
Delta R.T. 0.000 min

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

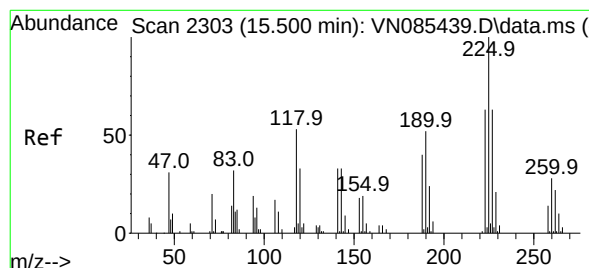
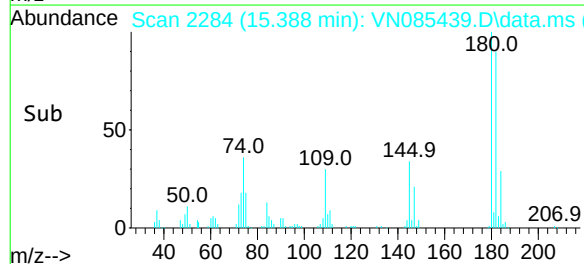
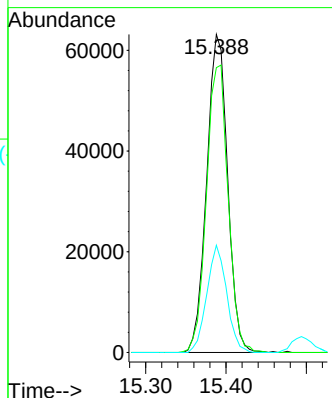
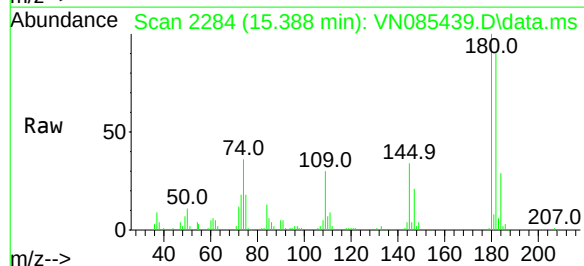
ClientSampleId :

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

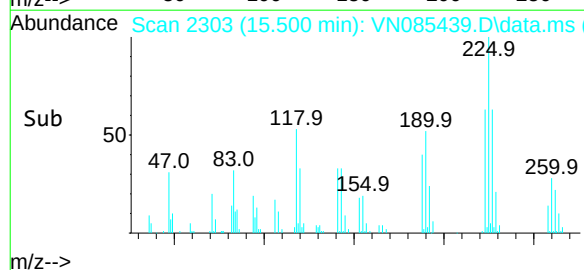
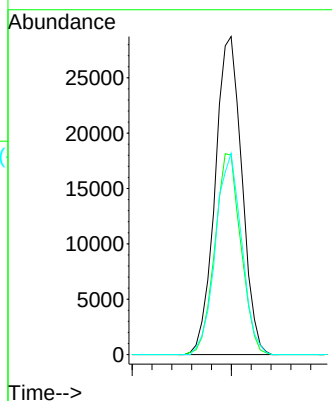
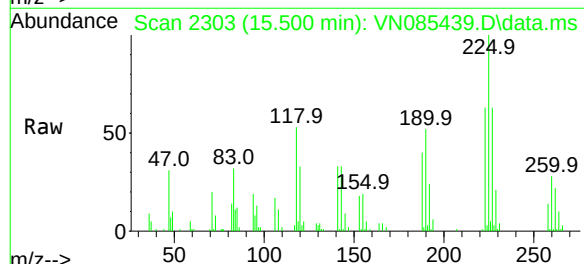
RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

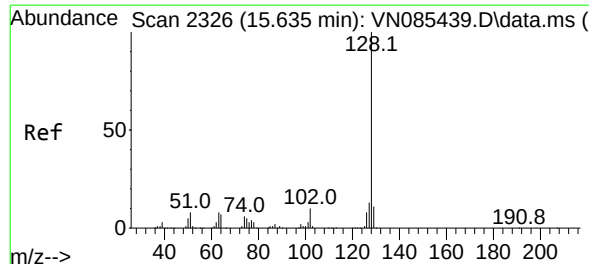
Lab File: VN085439.D

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

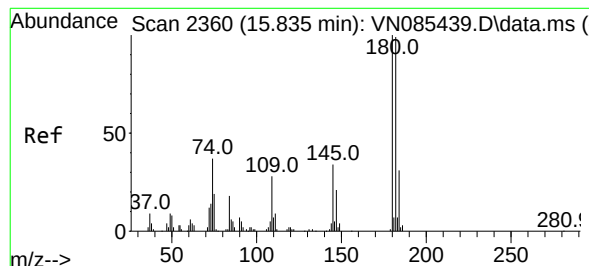
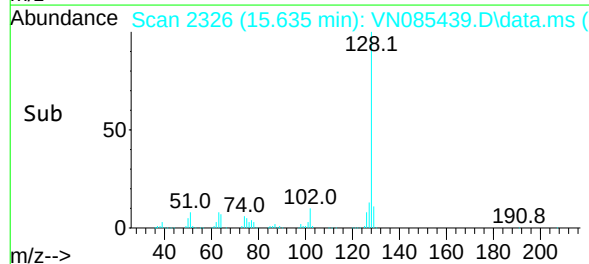
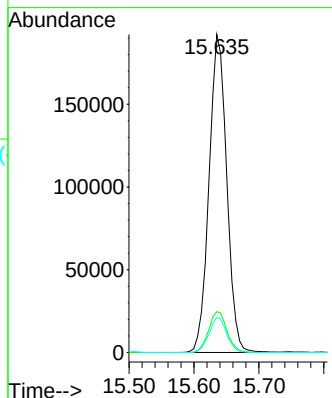
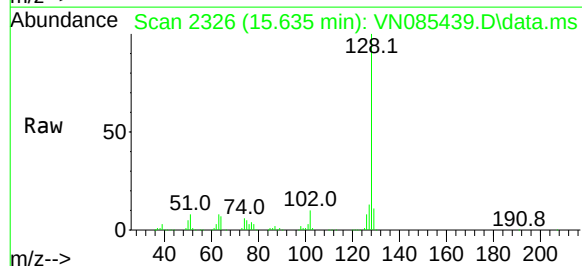
ClientSampleId :

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

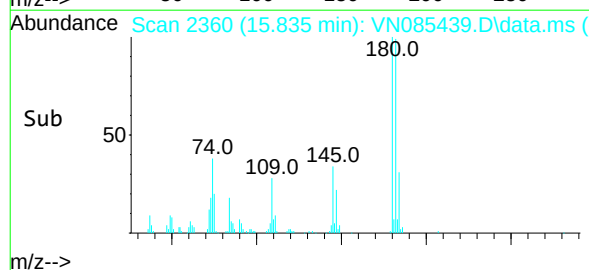
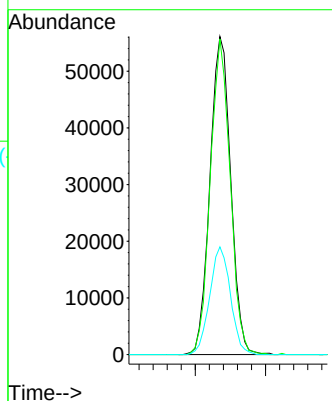
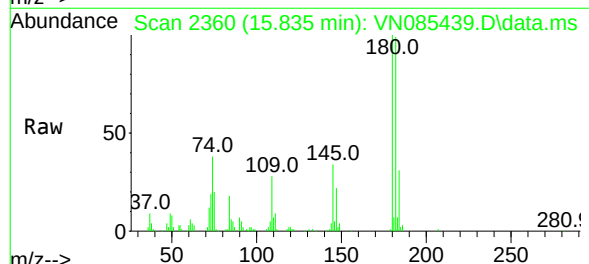
RT: 15.835 min Scan# 2360

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

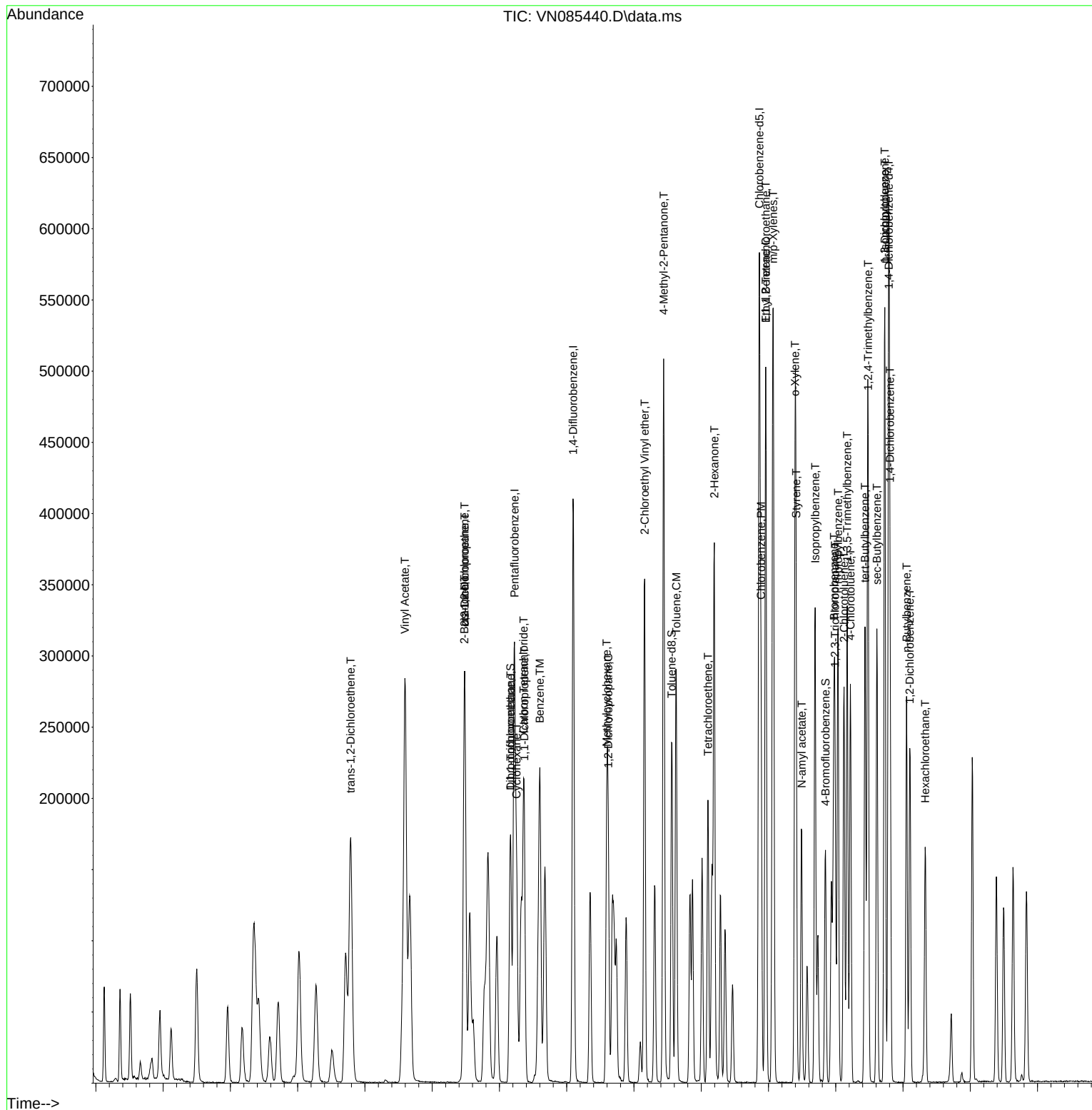
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Acq On : 14 Jan 2025 15:43  
Operator : JC\MD  
Sample : VSTDICC020  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

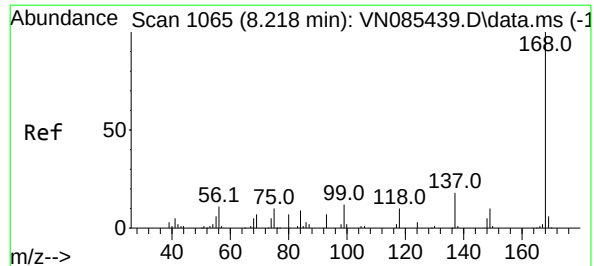
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

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

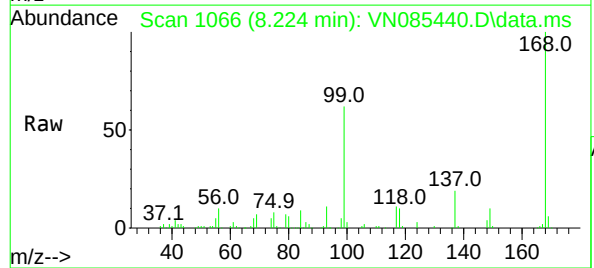
Quant Time: Jan 15 01:43:07 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration





#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

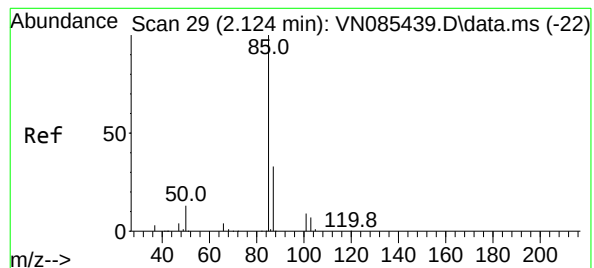
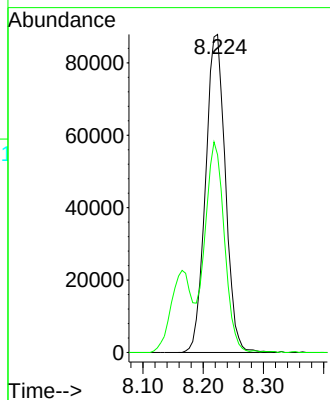
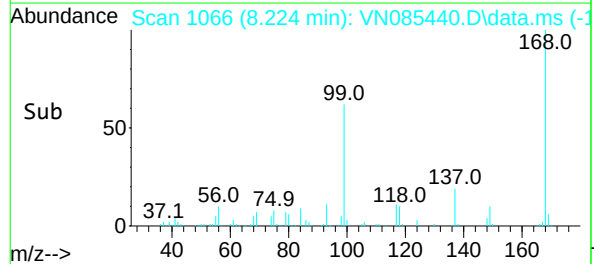
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020



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

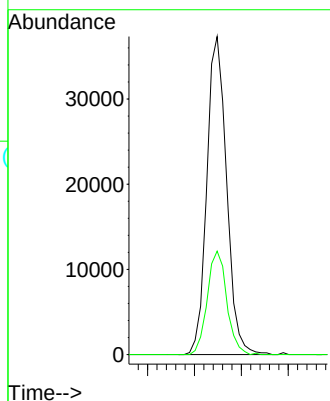
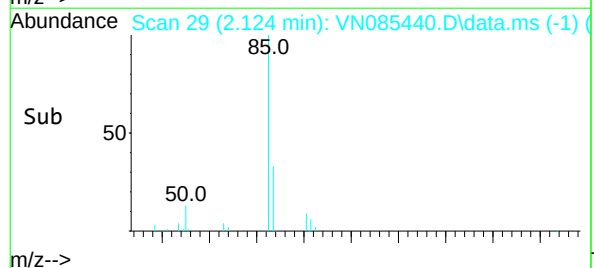
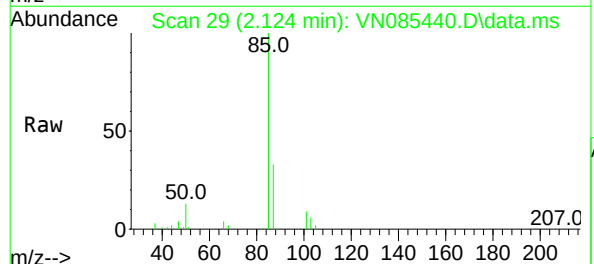
Manual Integrations  
APPROVED

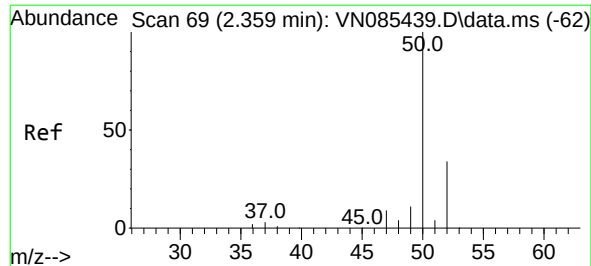
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



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

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





#3

Chloromethane

Concen: 19.848 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion: 50 Resp: 58426

Ion Ratio Lower Upper

50 100

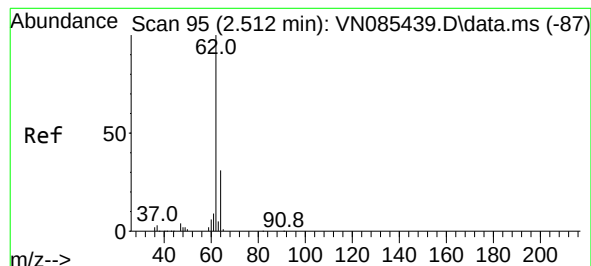
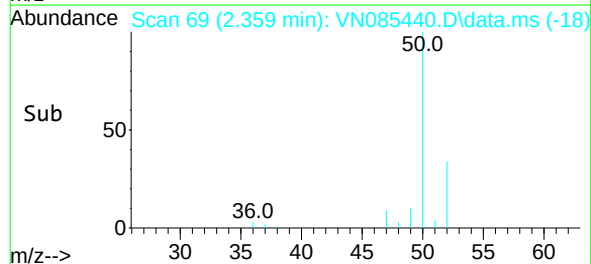
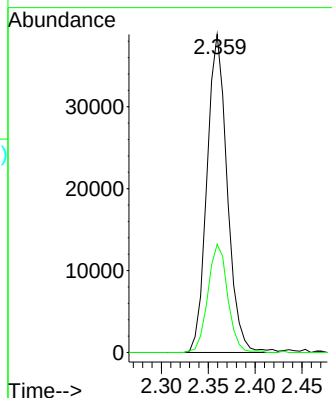
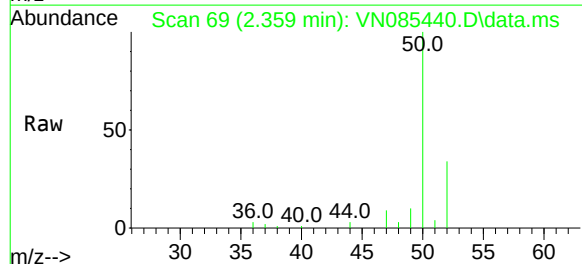
52 34.0 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 19.739 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085440.D

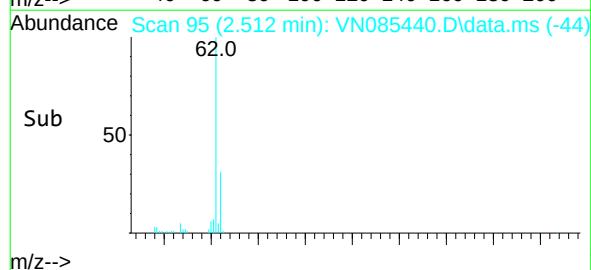
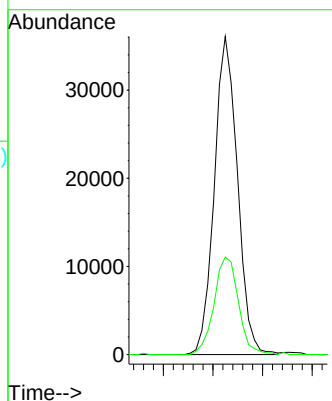
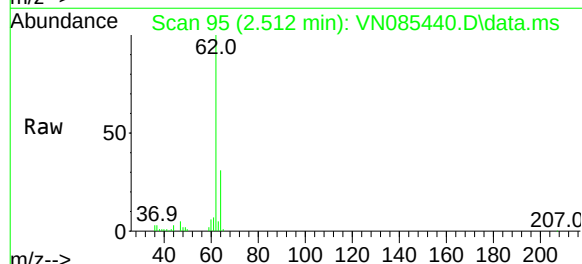
Acq: 14 Jan 2025 15:43

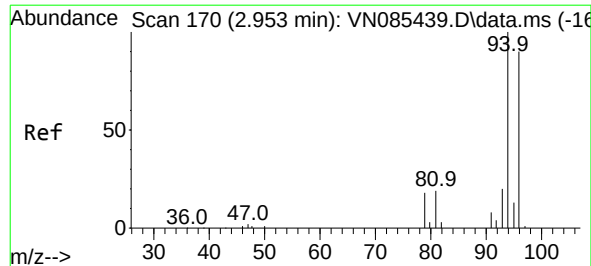
Tgt Ion: 62 Resp: 58403

Ion Ratio Lower Upper

62 100

64 30.7 24.8 37.2





#5

Bromomethane

Concen: 20.389 ug/l

RT: 2.954 min Scan# 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

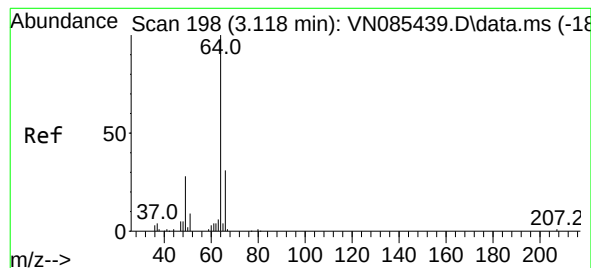
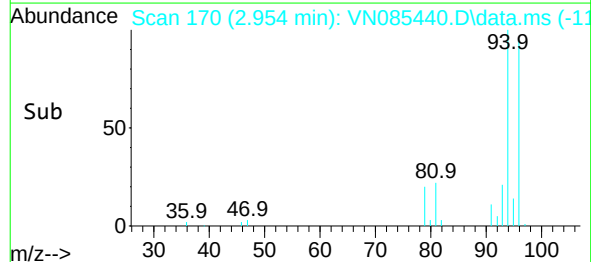
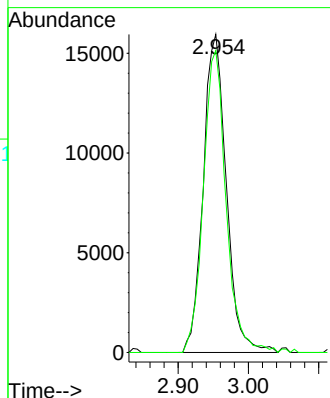
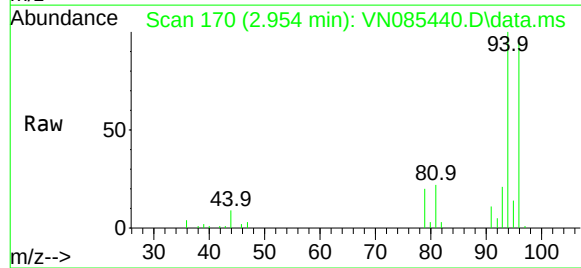
96 94.9 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 20.041 ug/l

RT: 3.118 min Scan# 198

Delta R.T. 0.000 min

Lab File: VN085440.D

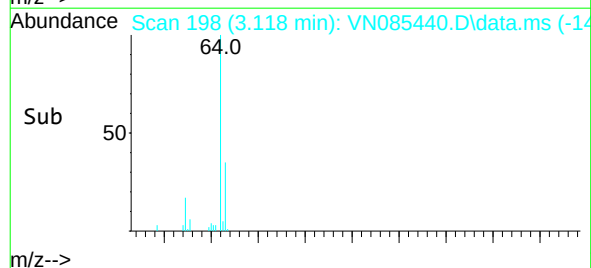
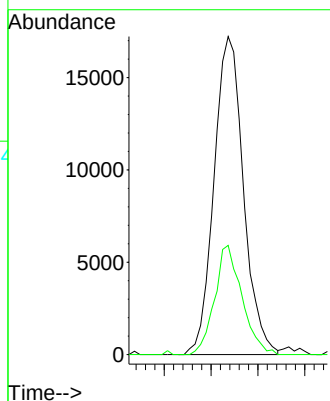
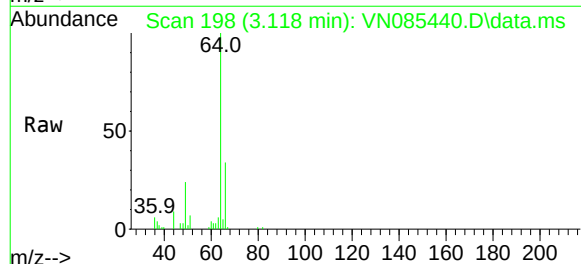
Acq: 14 Jan 2025 15:43

Tgt Ion: 64 Resp: 37594

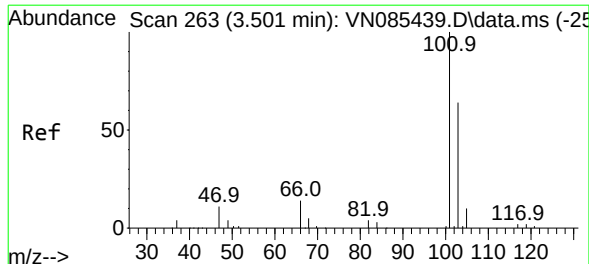
Ion Ratio Lower Upper

64 100

66 34.3 24.6 36.8







#7

Trichlorofluoromethane

Concen: 20.526 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085440.D

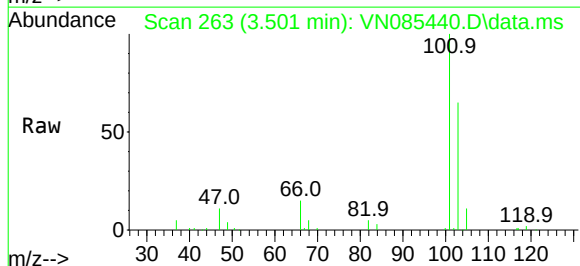
Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

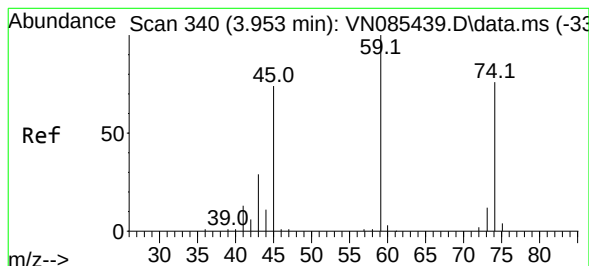
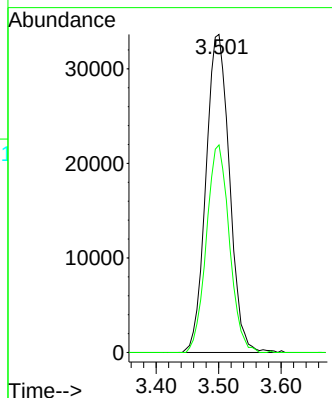
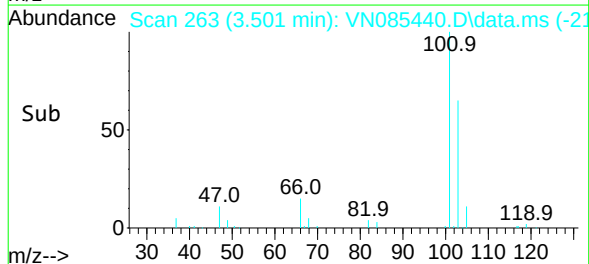
VSTDICC020



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

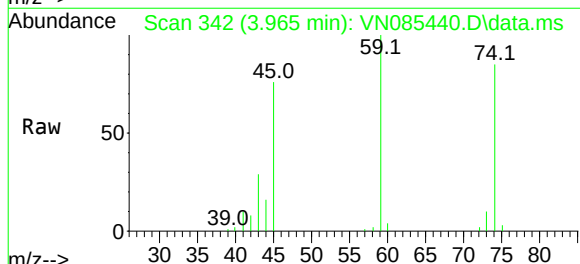
Concen: 19.647 ug/l

RT: 3.965 min Scan# 342

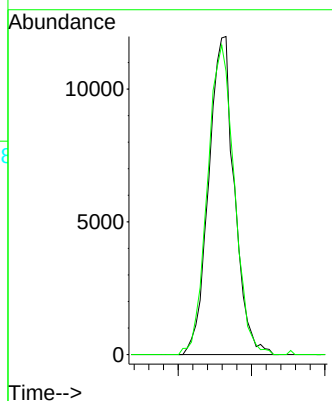
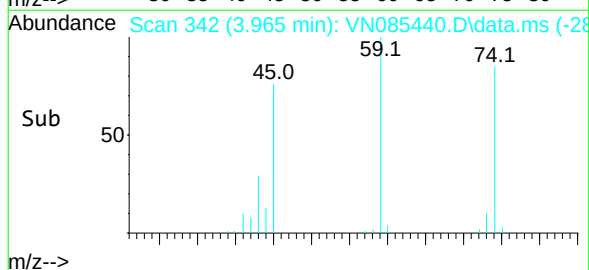
Delta R.T. 0.012 min

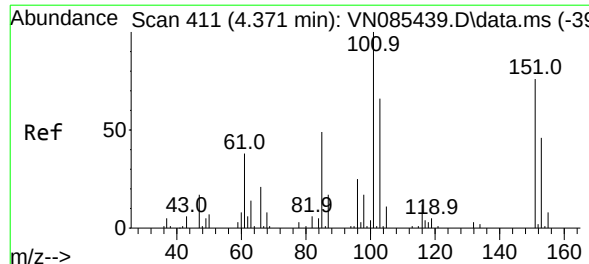
Lab File: VN085440.D

Acq: 14 Jan 2025 15:43



Tgt Ion: 74 Resp: 29138  
Ion Ratio Lower Upper  
74 100  
45 101.8 49.7 149.1





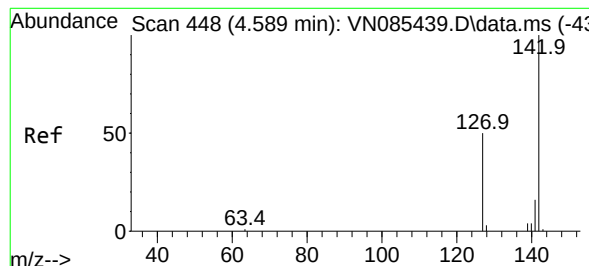
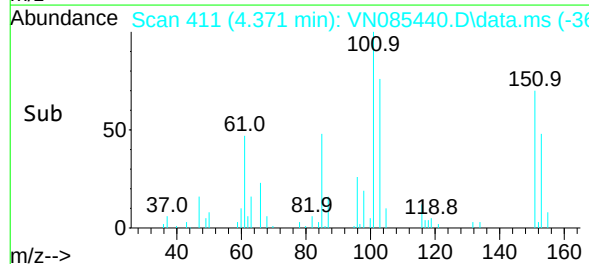
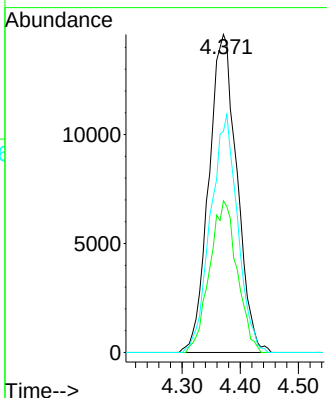
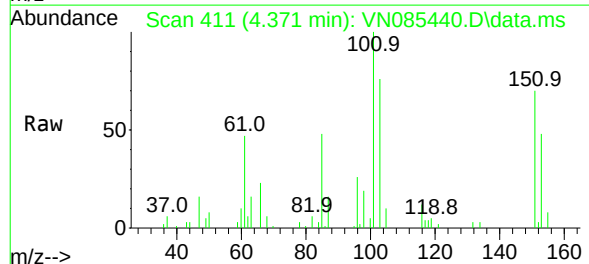
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 20.237 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

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  |

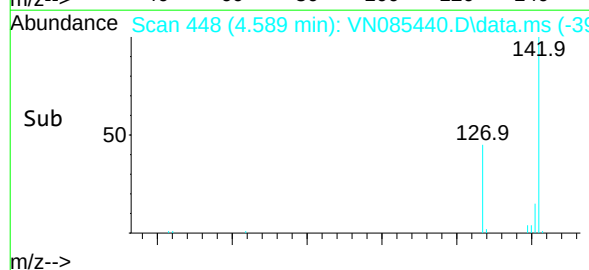
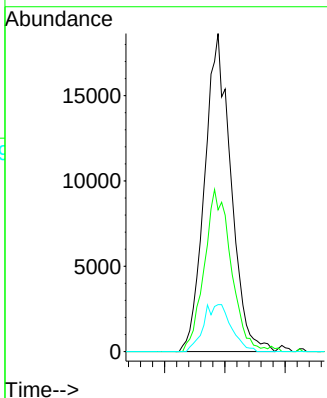
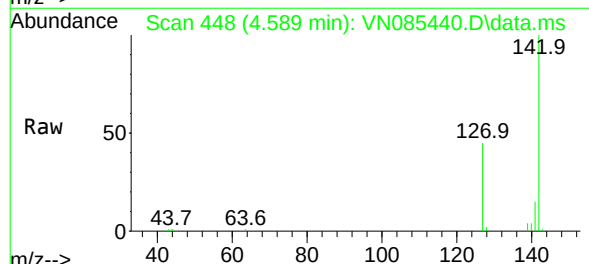
Manual Integrations  
APPROVED

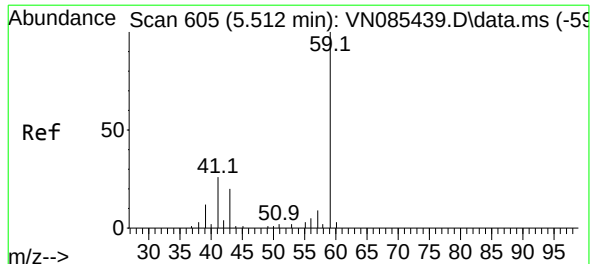
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



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

| Tgt Ion                                    | 142  | Resp | 56567 |
|--------------------------------------------|------|------|-------|
| Ion Ratio <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 :

VSTDIC020

Tgt Ion: 59 Resp: 37984

Ion Ratio Lower Upper

59 100

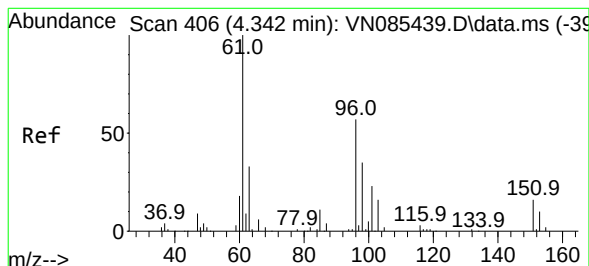
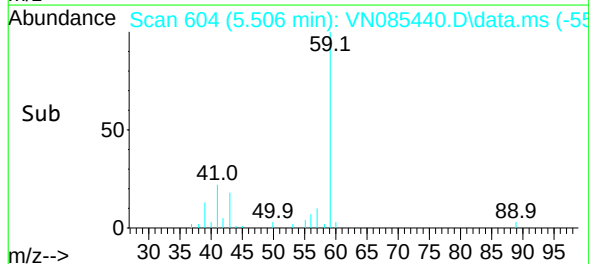
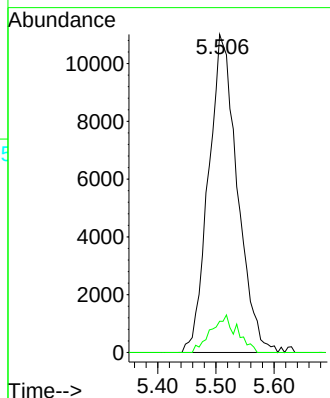
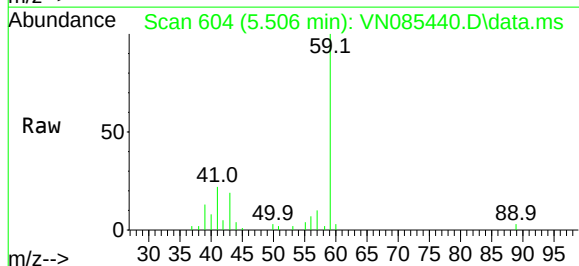
57 10.7 8.6 13.0

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

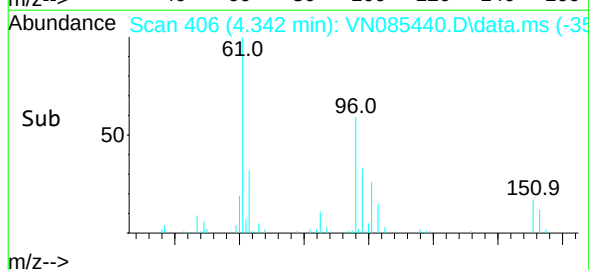
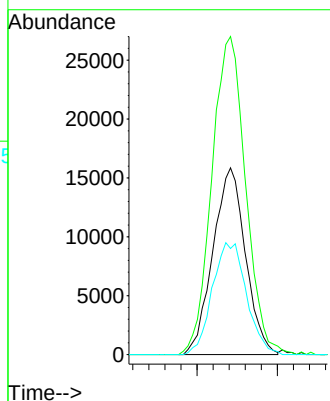
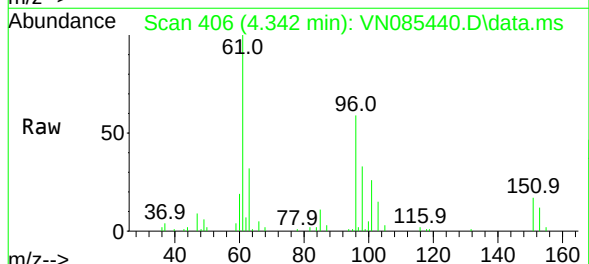
Tgt Ion: 96 Resp: 44670

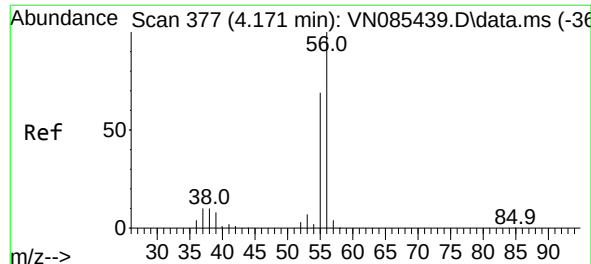
Ion Ratio Lower Upper

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

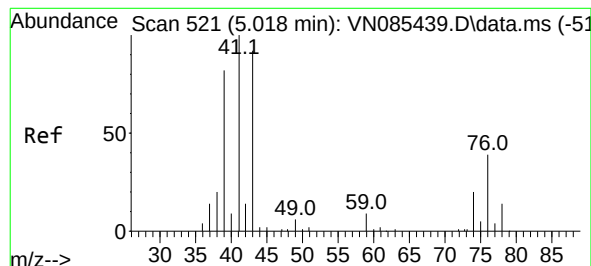
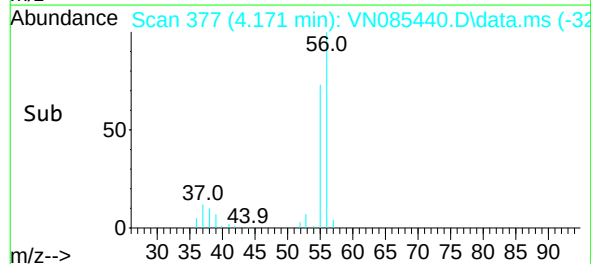
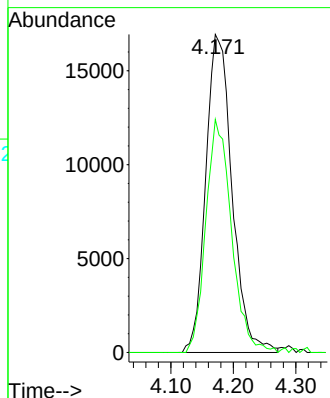
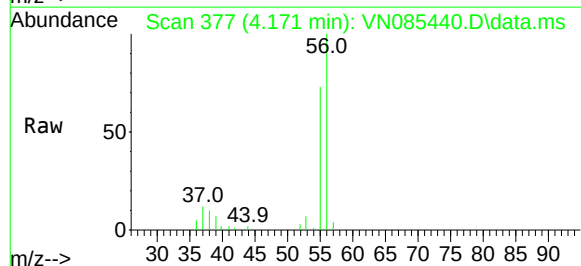
55 71.4 56.3 84.5

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

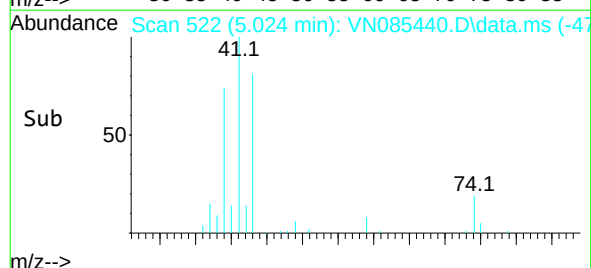
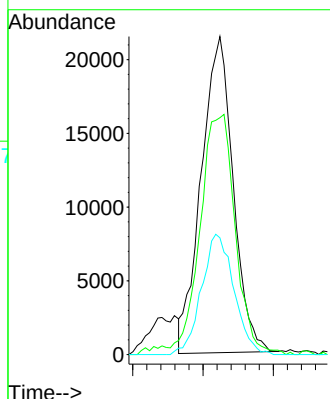
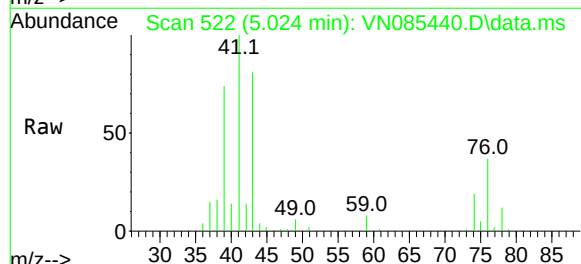
Tgt Ion: 41 Resp: 67705

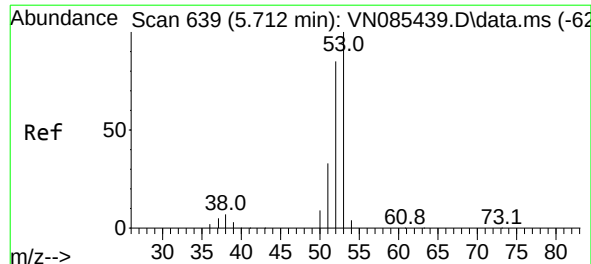
Ion Ratio Lower Upper

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

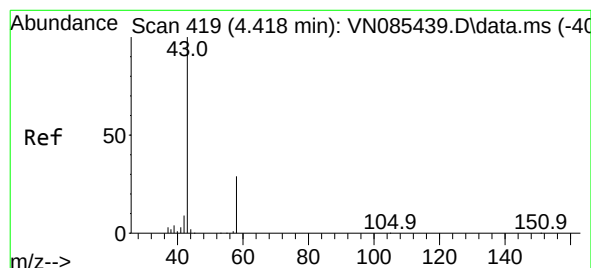
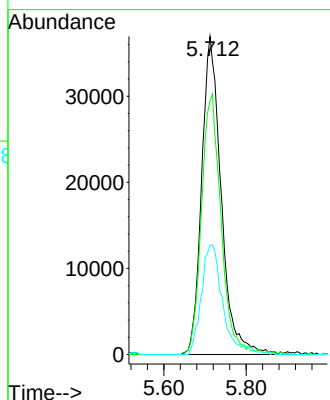
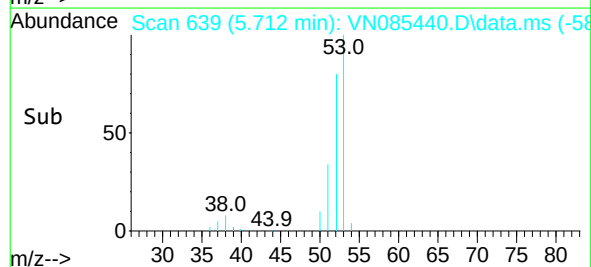
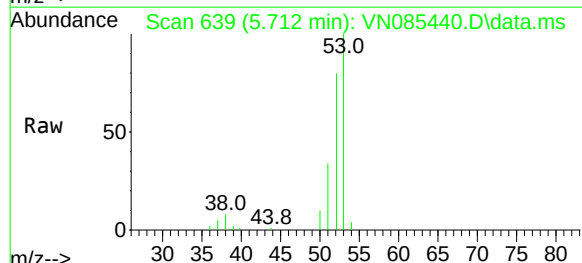
51 36.1 29.8 44.8

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

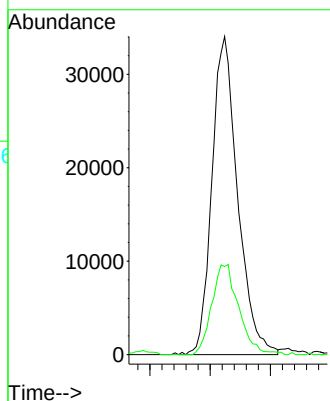
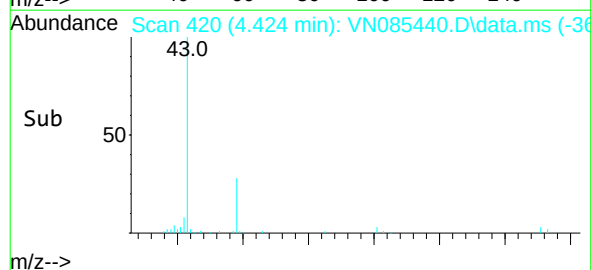
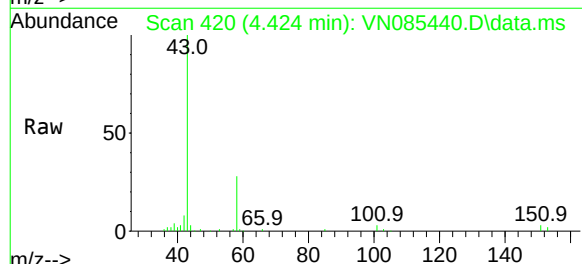
Acq: 14 Jan 2025 15:43

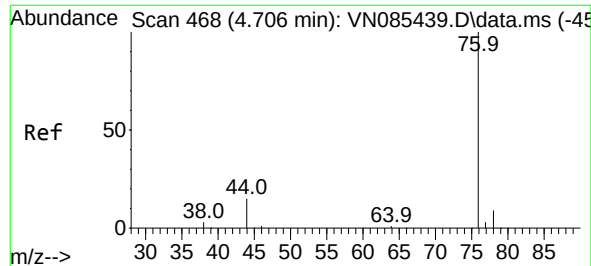
Tgt Ion: 43 Resp: 101065

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

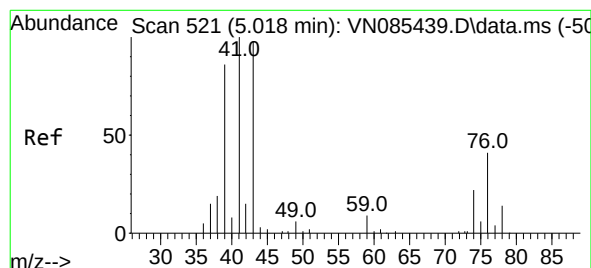
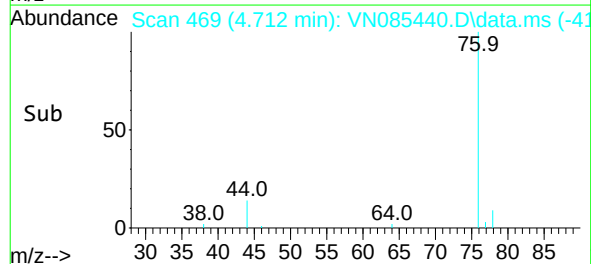
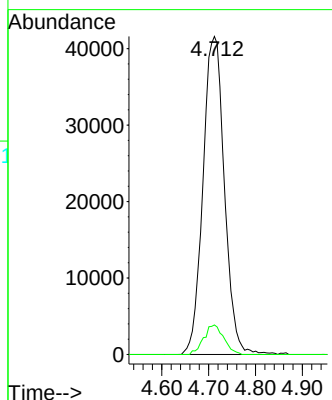
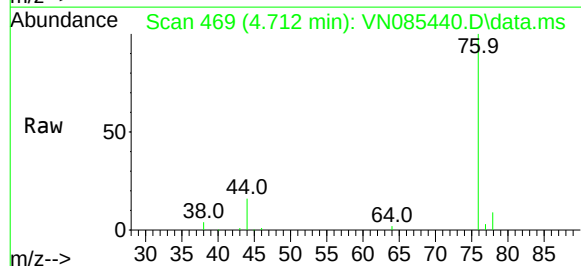
78 9.3 6.9 10.3

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

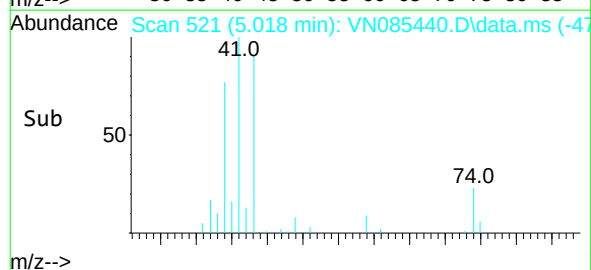
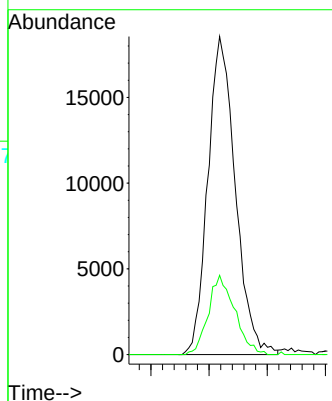
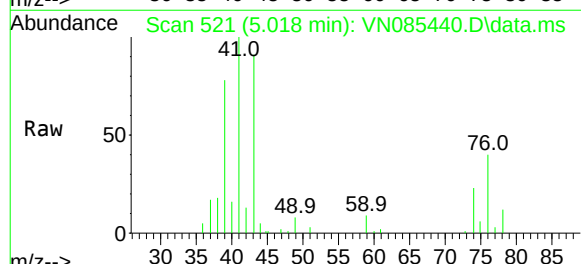
Acq: 14 Jan 2025 15:43

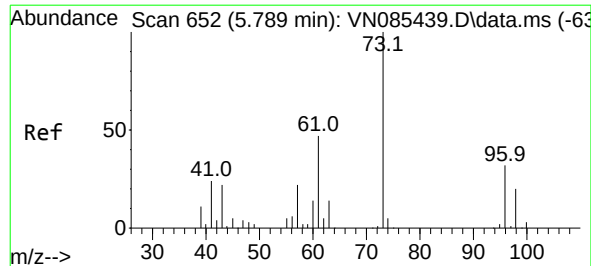
Tgt Ion: 43 Resp: 60873

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

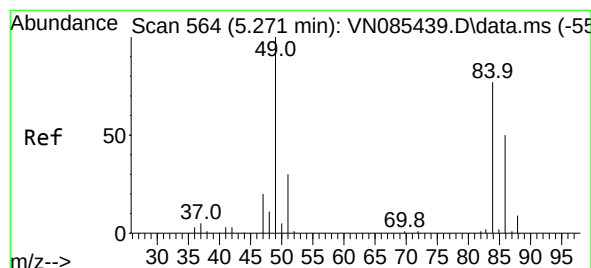
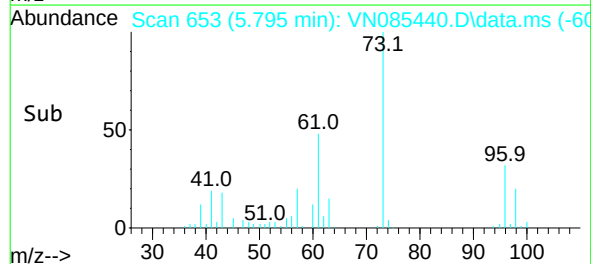
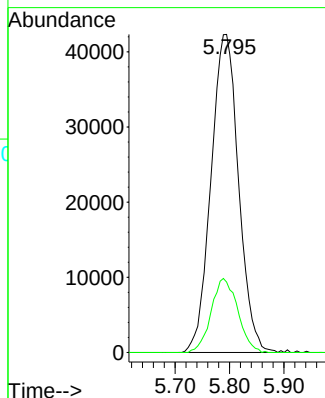
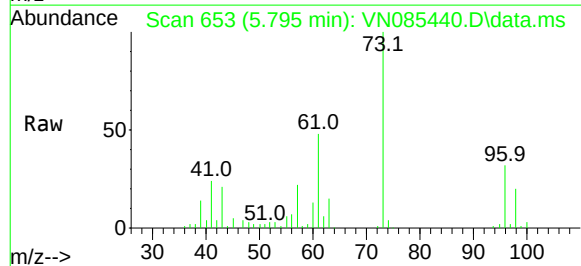
57 22.1 17.8 26.8

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

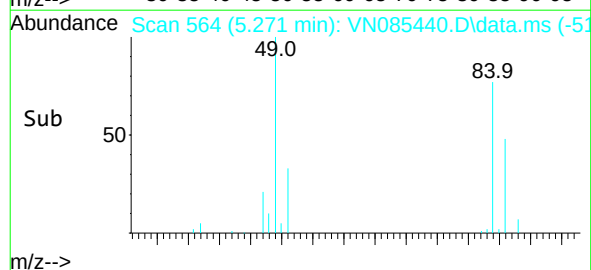
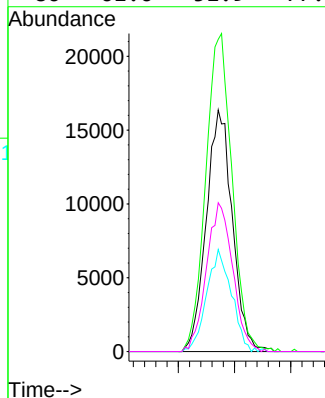
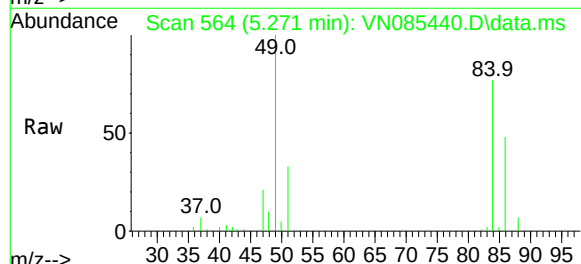
Ion Ratio Lower Upper

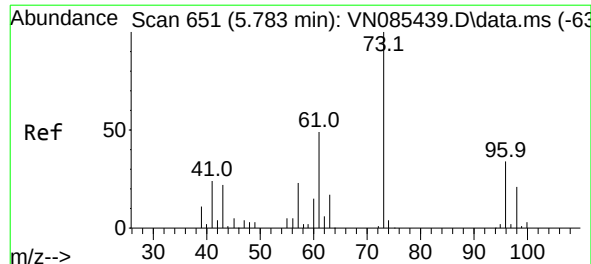
84 100

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 :

VSTDIC020

Tgt Ion: 96 Resp: 46115

Ion Ratio Lower Upper

96 100

61 146.1 115.7 173.5

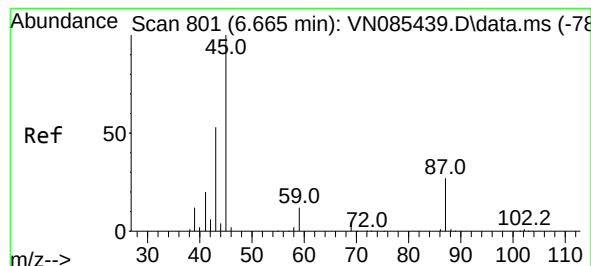
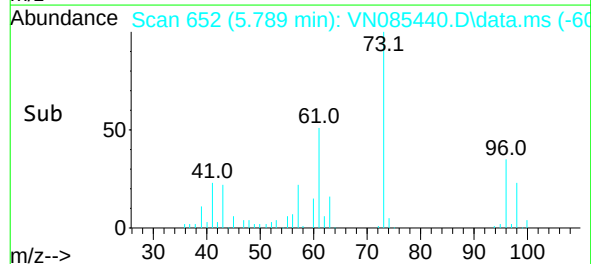
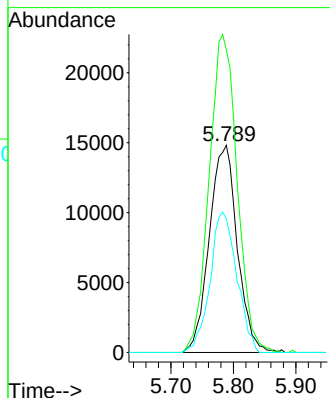
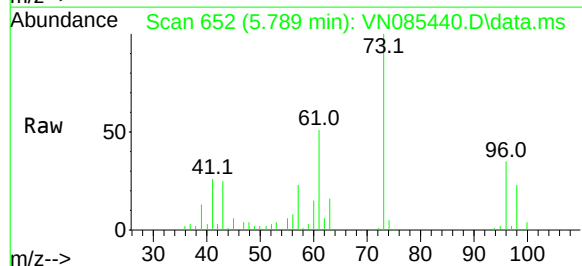
98 64.5 49.8 74.8

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

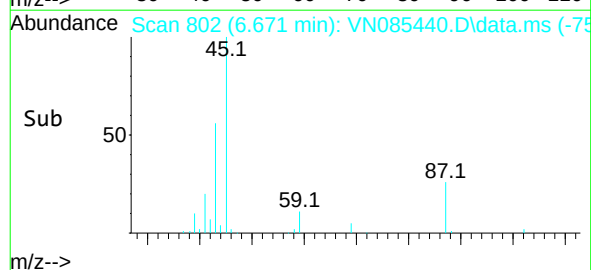
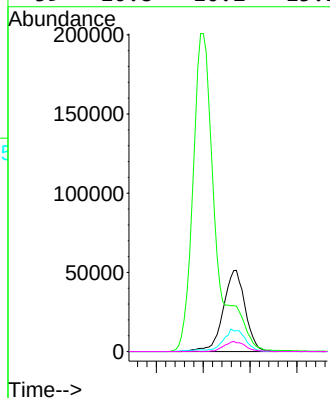
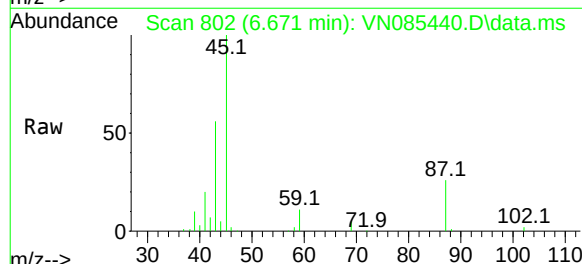
Ion Ratio Lower Upper

45 100

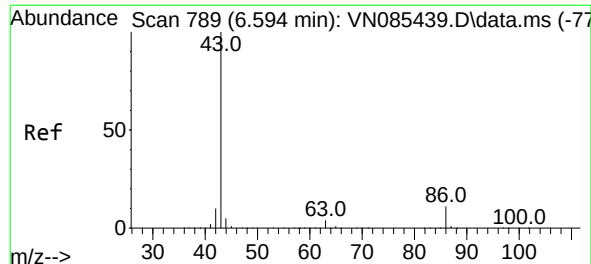
43 54.3 45.0 67.6

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

Tgt Ion: 43 Resp: 588567

Ion Ratio Lower Upper

43 100

86 10.1 8.4 12.6

Instrument :

MSVOA\_N

ClientSampleId :

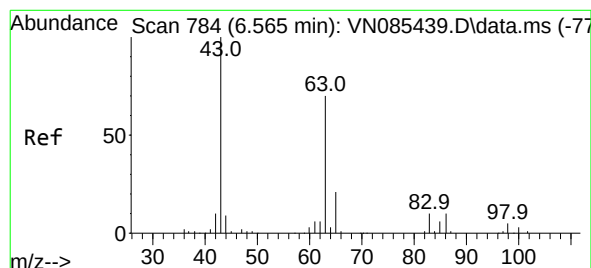
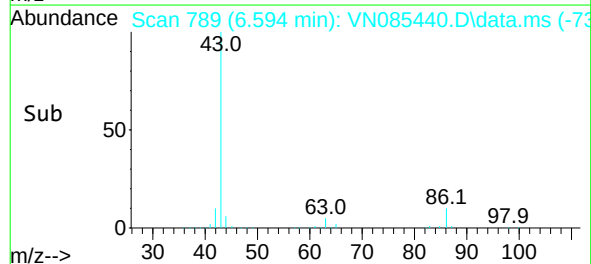
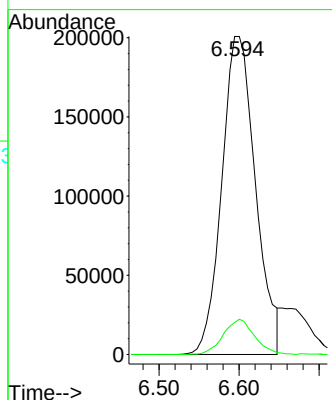
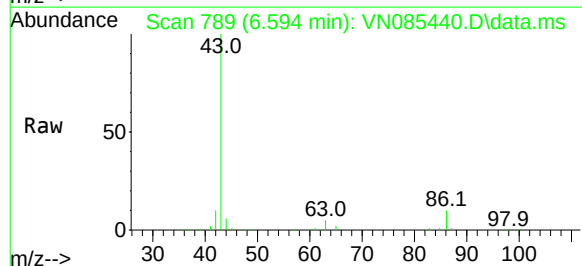
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 20.469 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

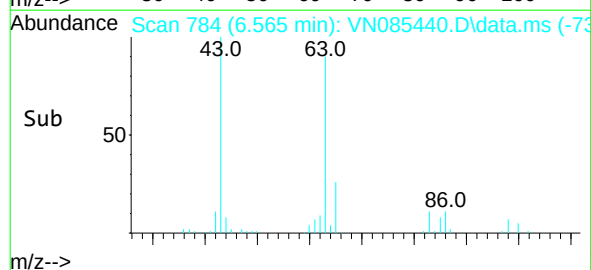
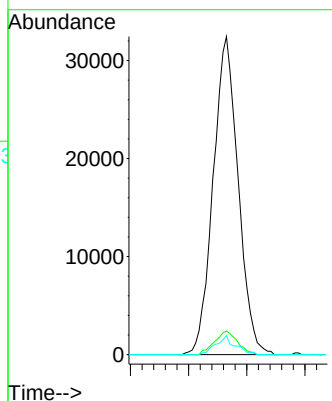
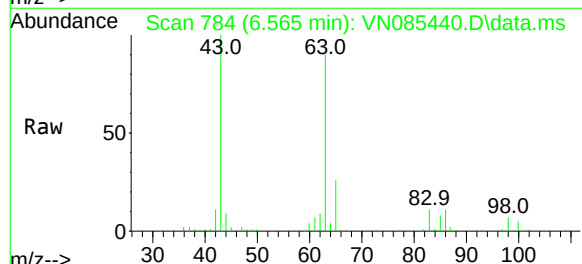
Tgt Ion: 63 Resp: 96875

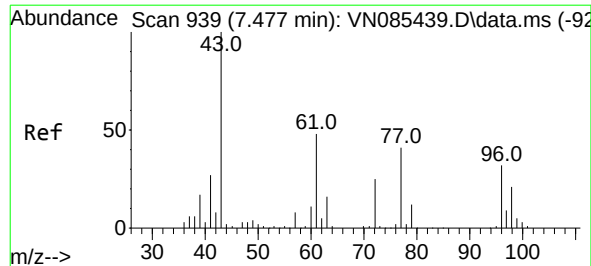
Ion Ratio Lower Upper

63 100

98 7.4 3.3 9.8

100 6.0 2.0 6.0#





#25

2-Butanone

Concen: 103.786 ug/l

RT: 7.477 min Scan# 93

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 159952

Ion Ratio Lower Upper

43 100

72 24.1 20.2 30.4

Instrument :

MSVOA\_N

ClientSampleId :

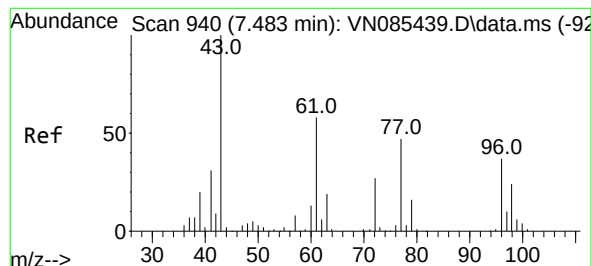
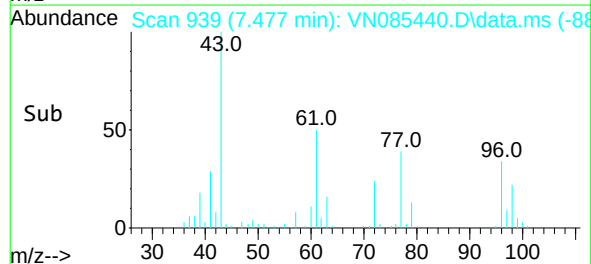
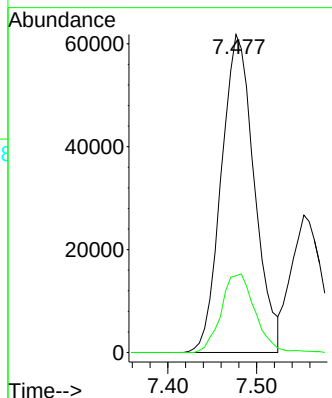
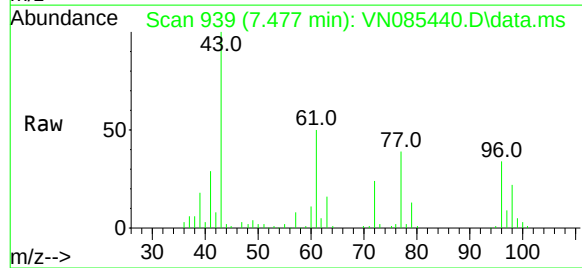
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 20.684 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085440.D

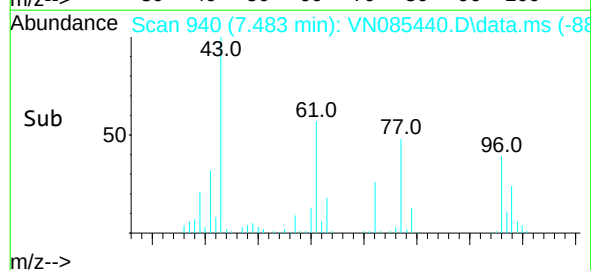
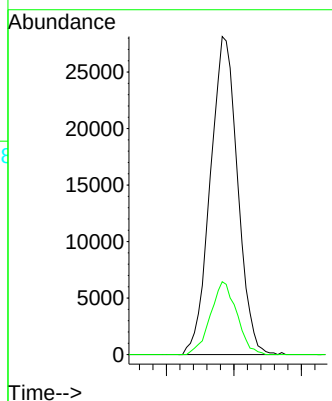
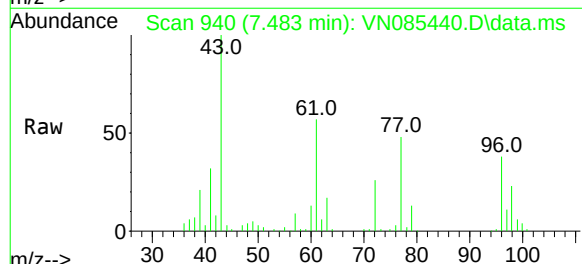
Acq: 14 Jan 2025 15:43

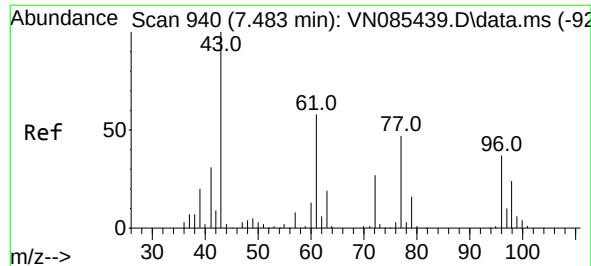
Tgt Ion: 77 Resp: 79145

Ion Ratio Lower Upper

77 100

97 22.0 10.7 32.1





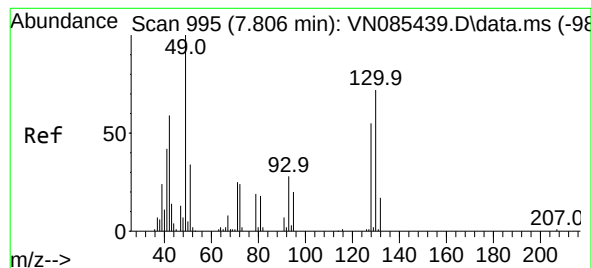
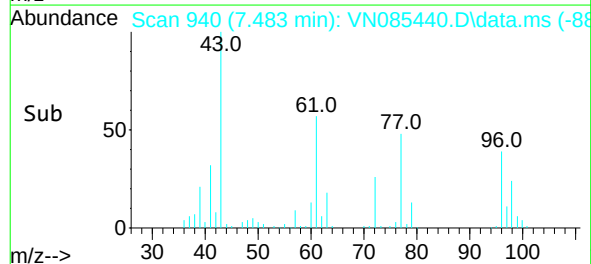
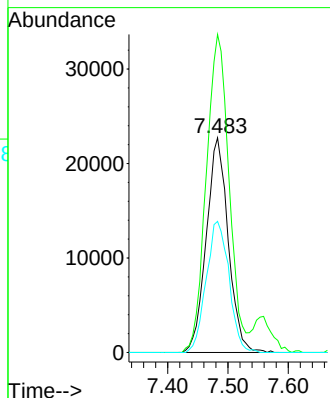
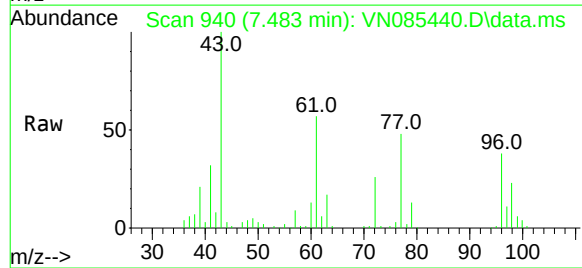
#27  
cis-1,2-Dichloroethene  
Concen: 21.180 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

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

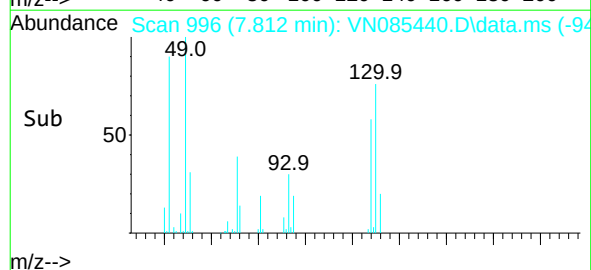
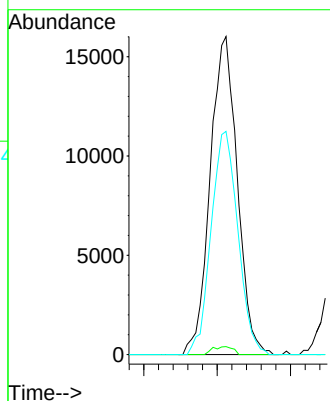
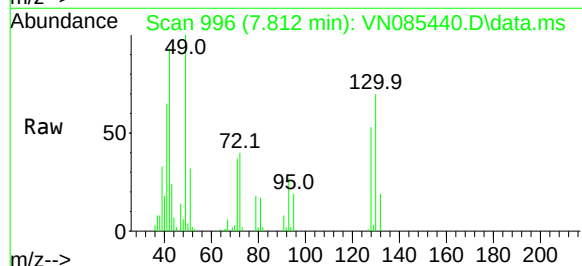
Manual Integrations  
APPROVED

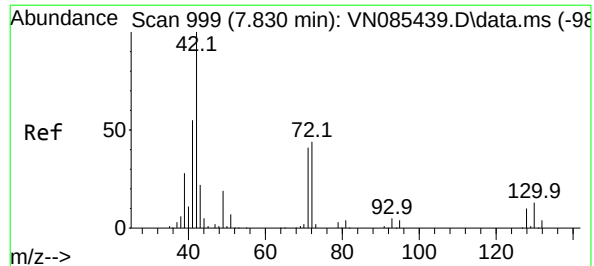
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

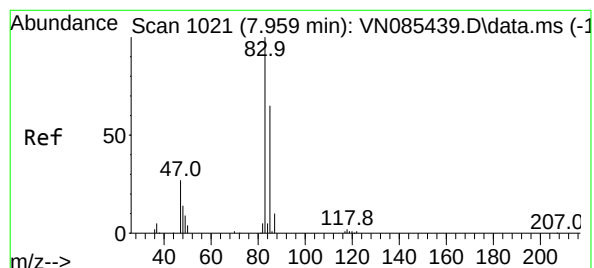
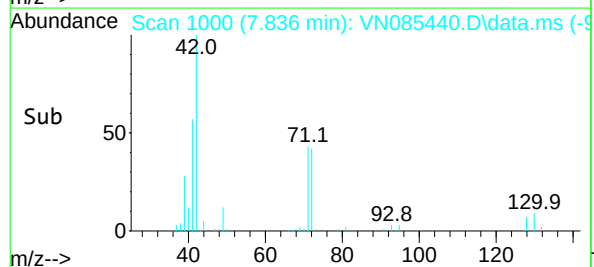
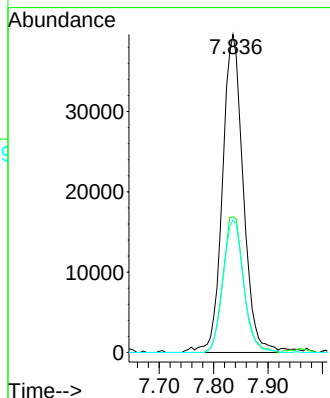
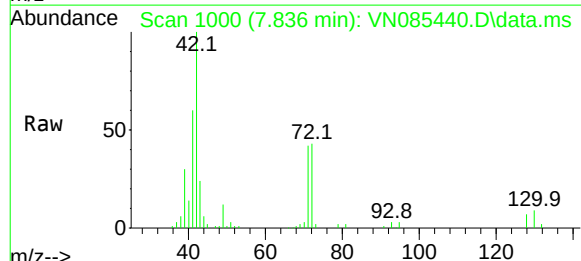
71 41.4 32.5 48.7

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

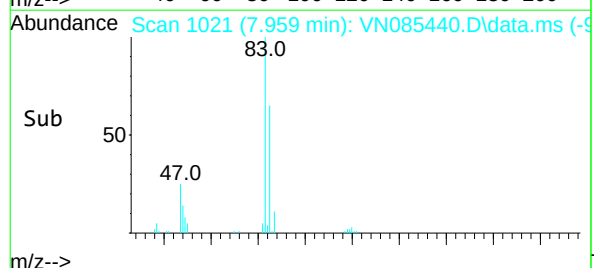
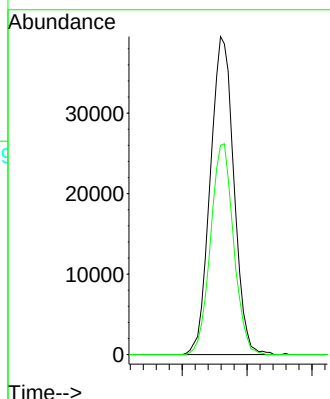
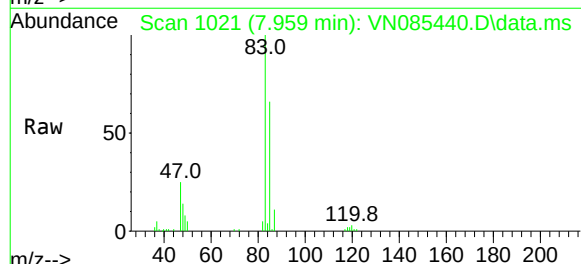
Acq: 14 Jan 2025 15:43

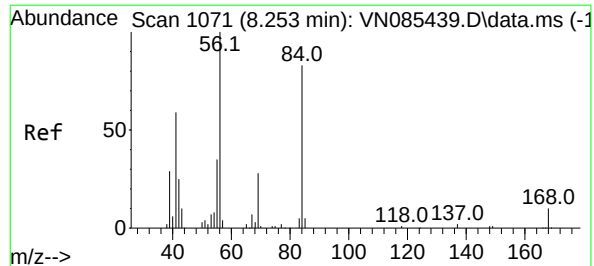
Tgt Ion: 83 Resp: 99655

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

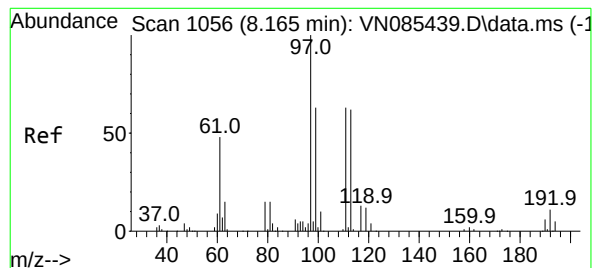
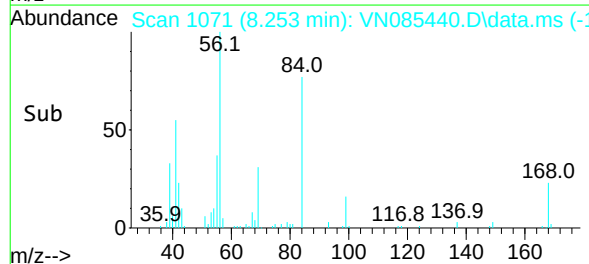
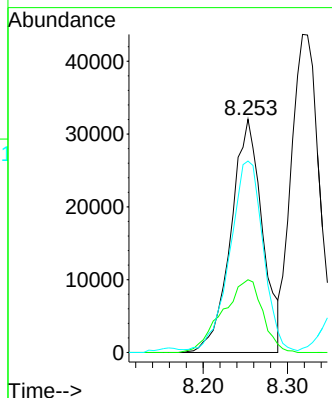
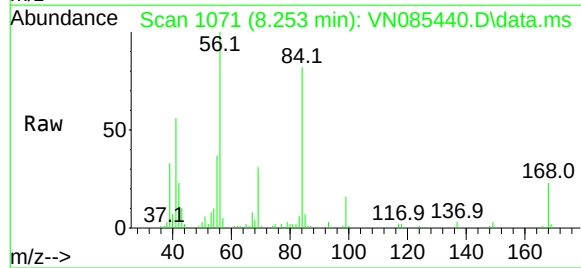
84 80.8 66.4 99.6

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

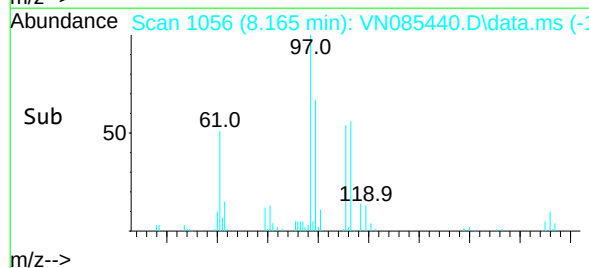
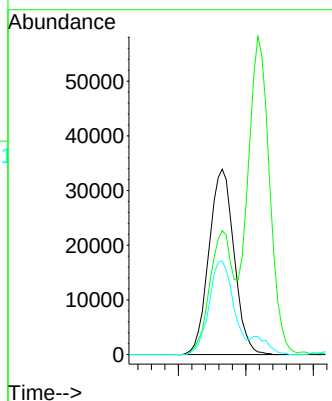
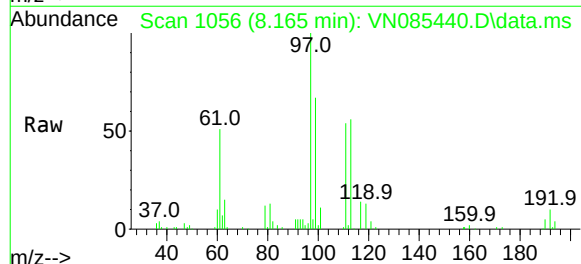
Tgt Ion: 97 Resp: 87659

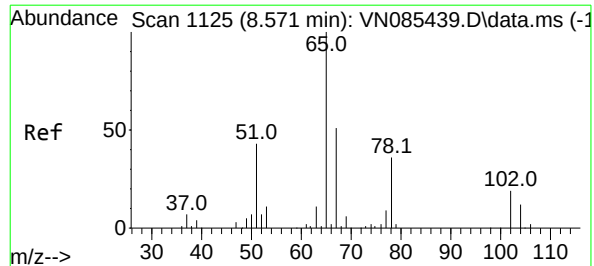
Ion Ratio Lower Upper

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

Tgt Ion: 65 Resp: 60593

Ion Ratio Lower Upper

65 100

67 51.2 0.0 101.6

Instrument :

MSVOA\_N

ClientSampleId :

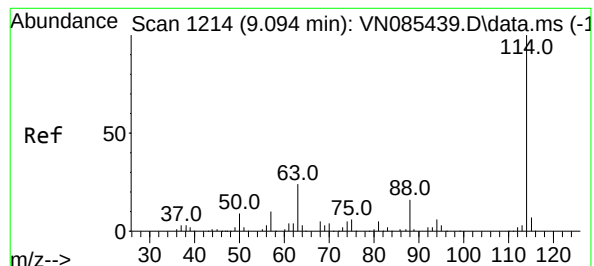
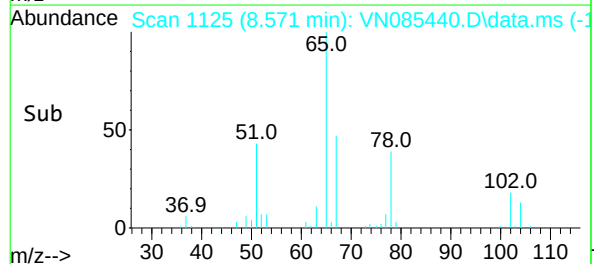
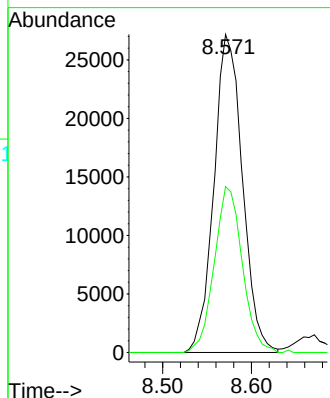
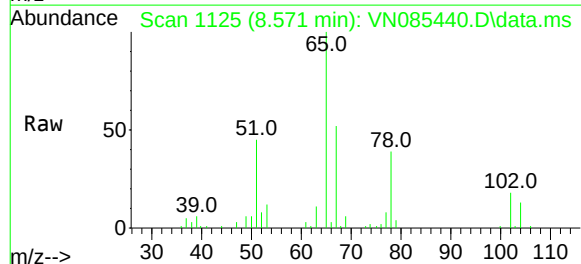
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

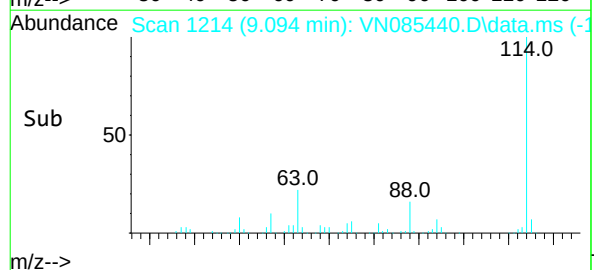
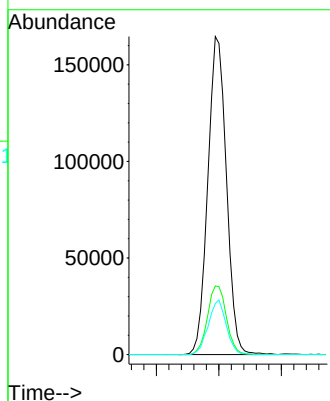
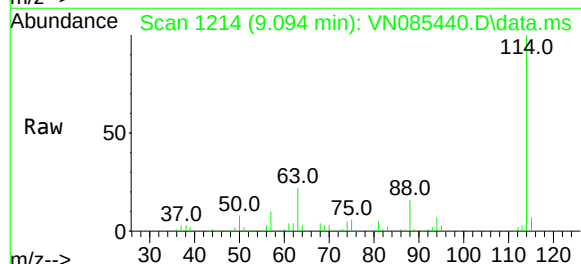
Tgt Ion:114 Resp: 340593

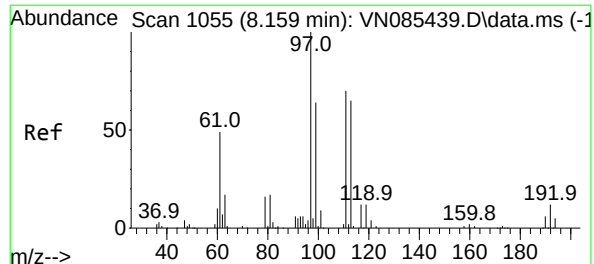
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 19.322 ug/l

RT: 8.165 min Scan# 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

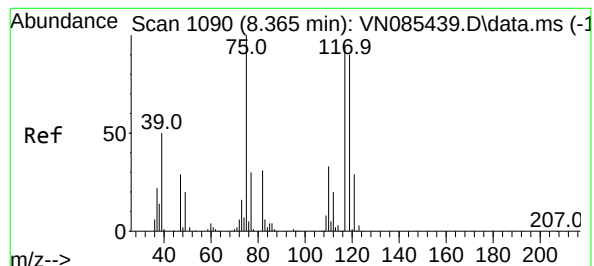
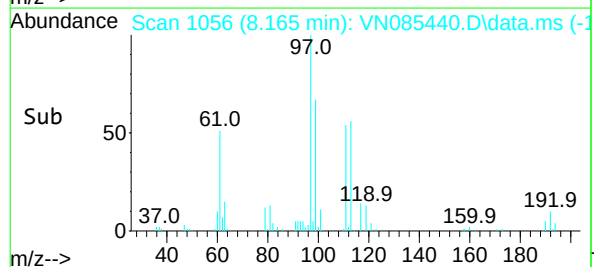
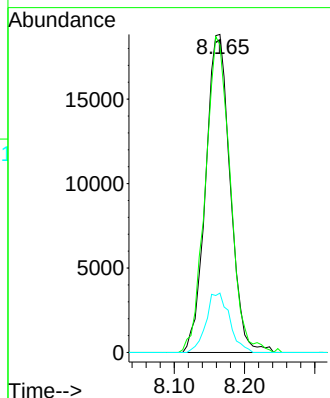
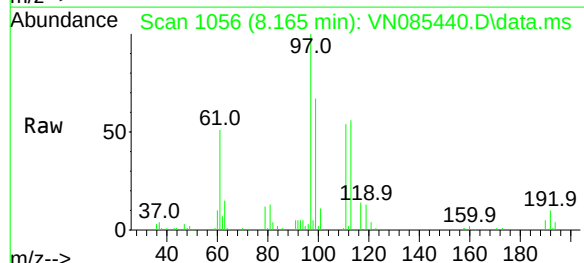
192 17.9 14.3 21.5

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

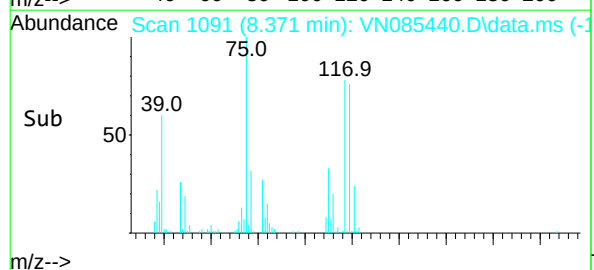
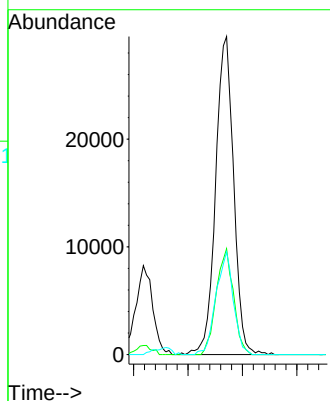
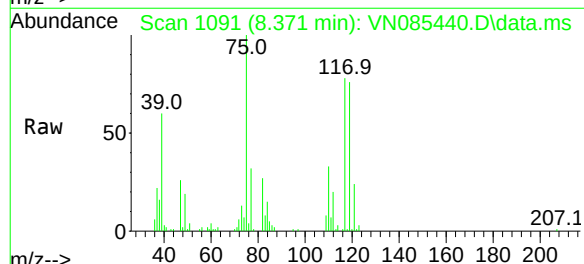
Tgt Ion: 75 Resp: 67949

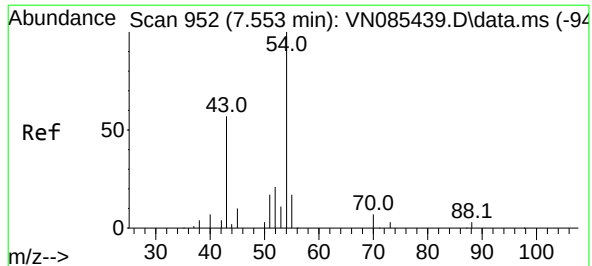
Ion Ratio Lower Upper

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

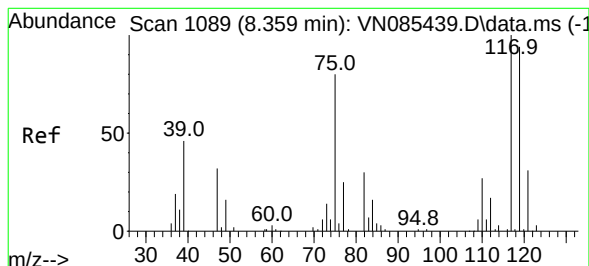
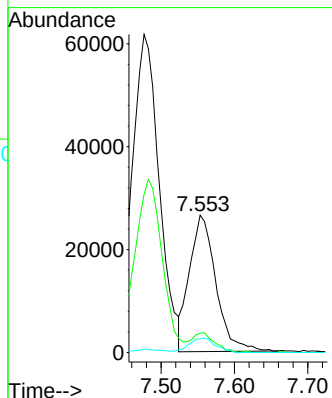
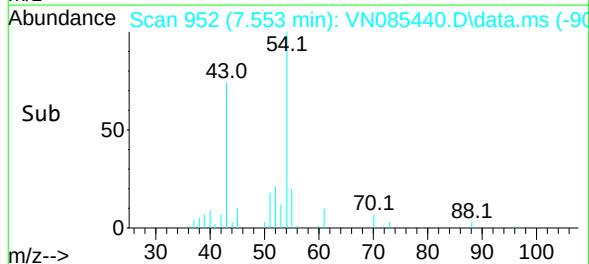
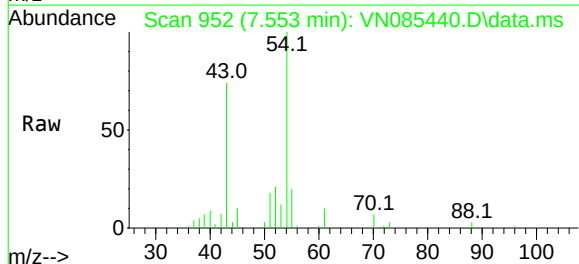
70 10.6 7.5 11.3

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

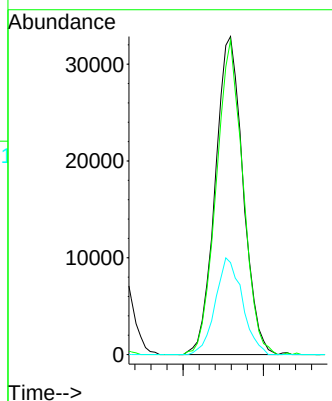
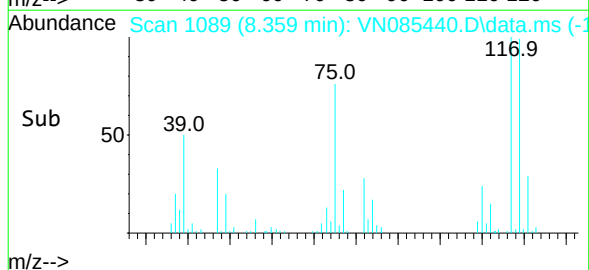
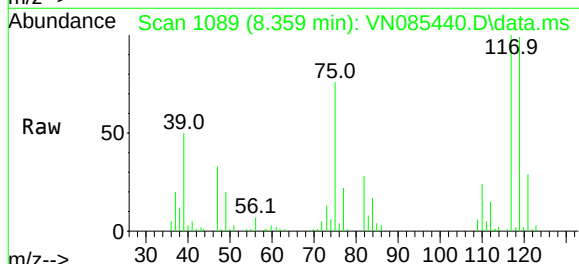
Tgt Ion:117 Resp: 78842

Ion Ratio Lower Upper

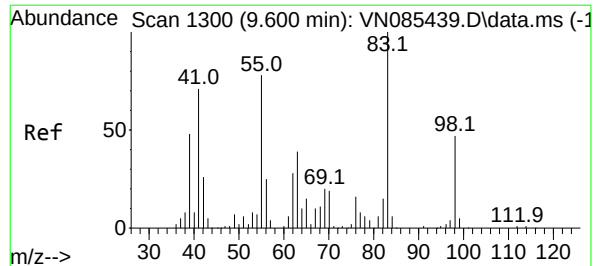
117 100

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# 1299

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

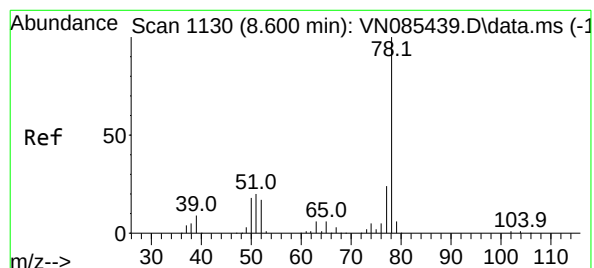
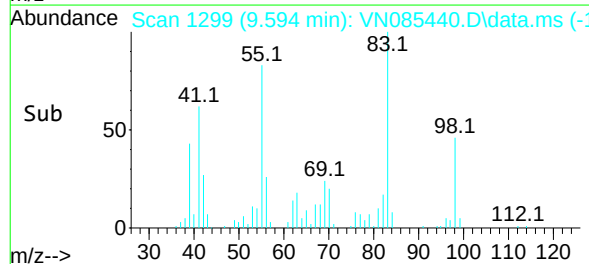
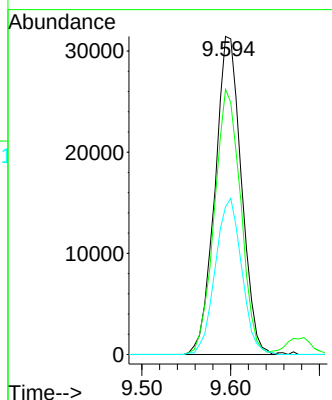
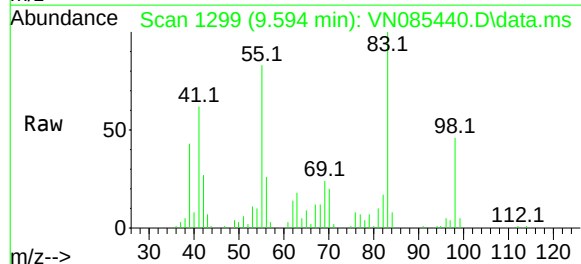
ClientSampleId :

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

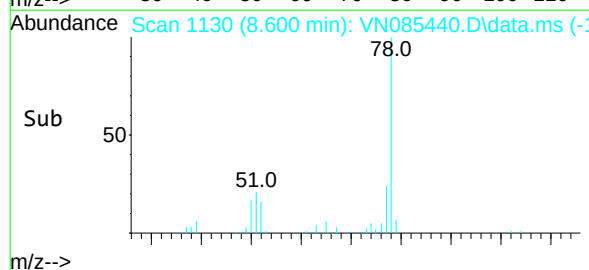
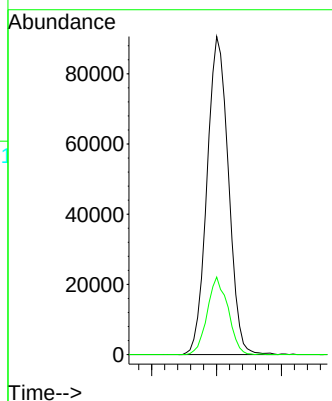
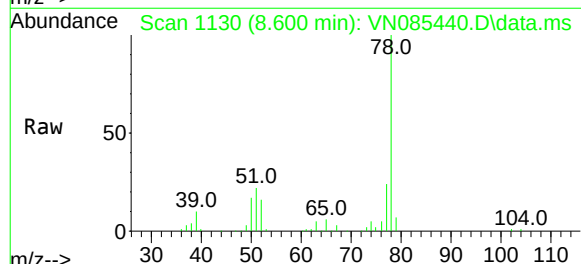
RT: 8.600 min Scan# 1130

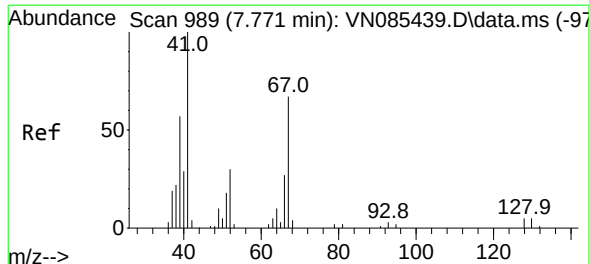
Delta R.T. 0.000 min

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

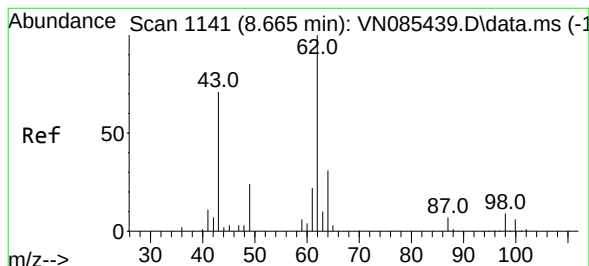
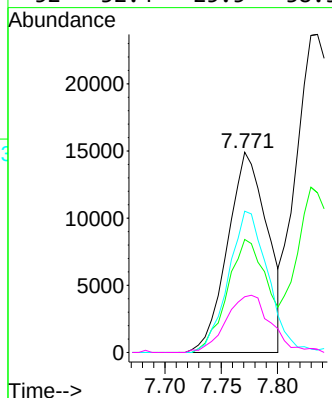
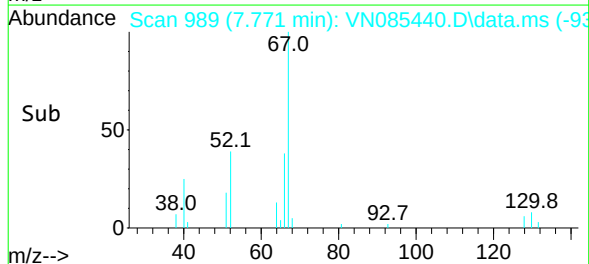
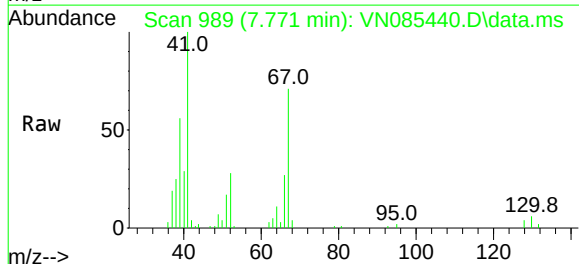
52 32.4 25.5 38.3

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

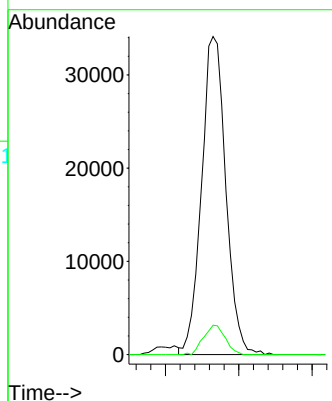
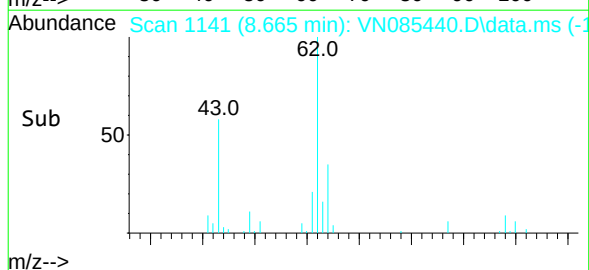
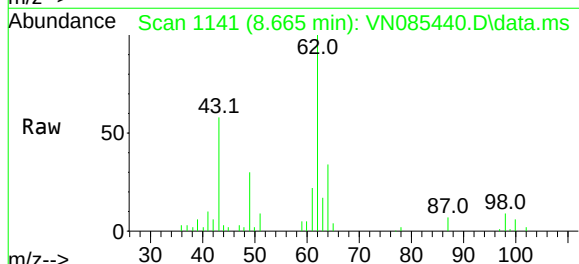
Acq: 14 Jan 2025 15:43

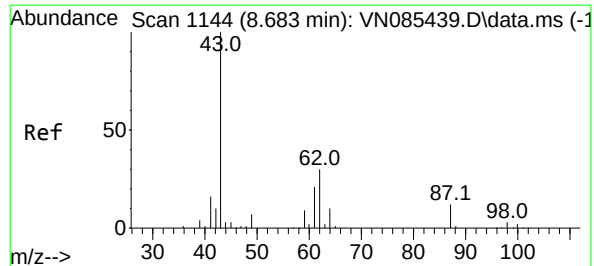
Tgt Ion: 62 Resp: 78402

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

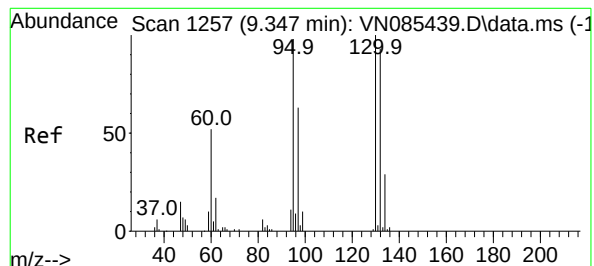
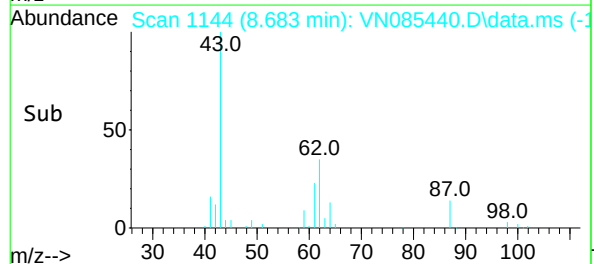
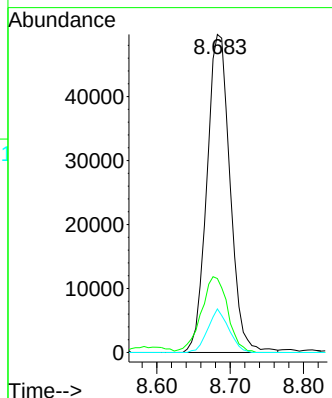
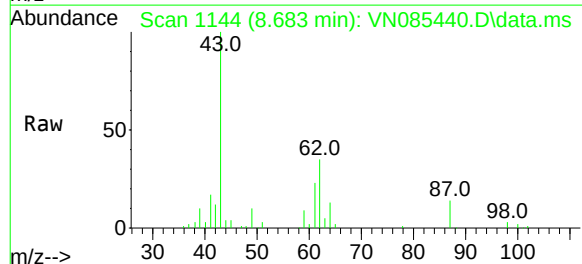
ClientSampleId :

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

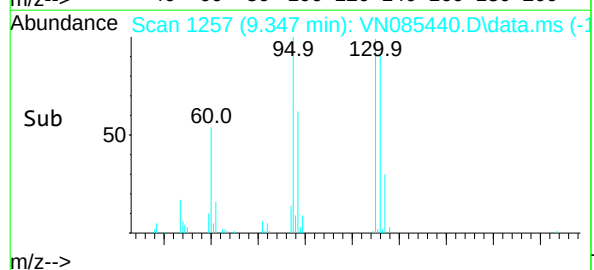
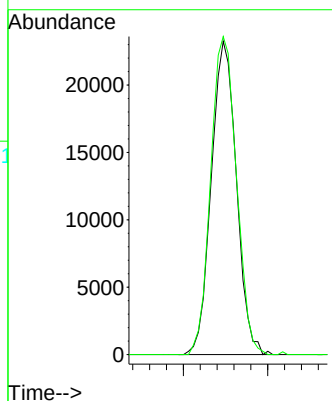
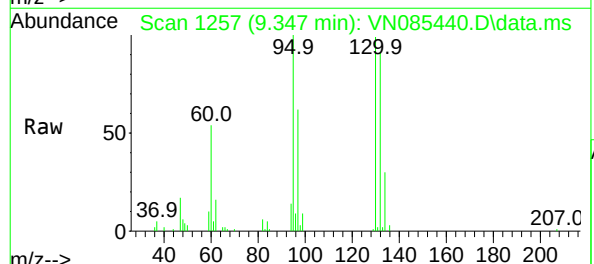
RT: 9.347 min Scan# 1257

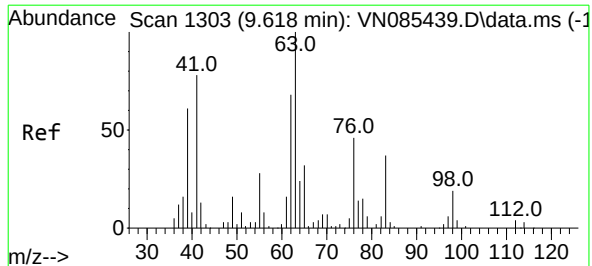
Delta R.T. 0.000 min

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

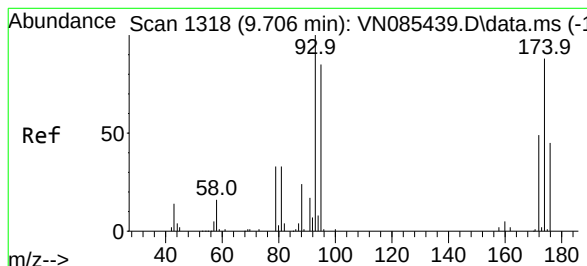
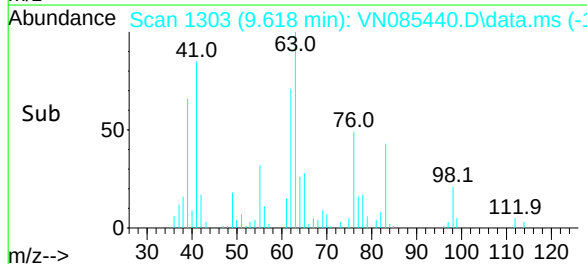
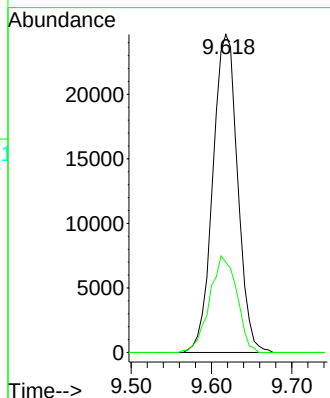
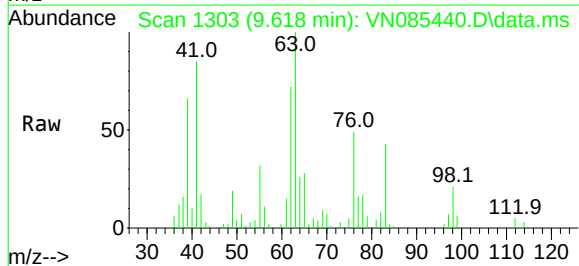
65 28.3 25.6 38.4

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

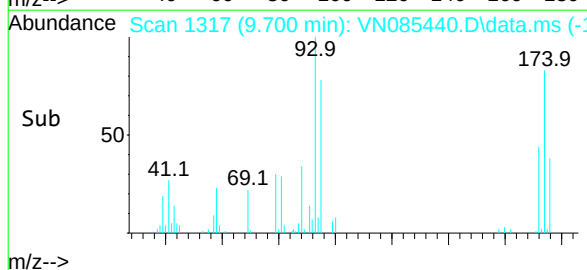
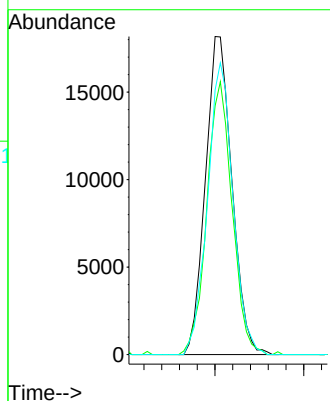
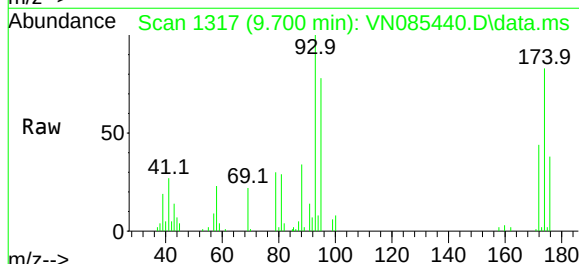
Tgt Ion: 93 Resp: 37721

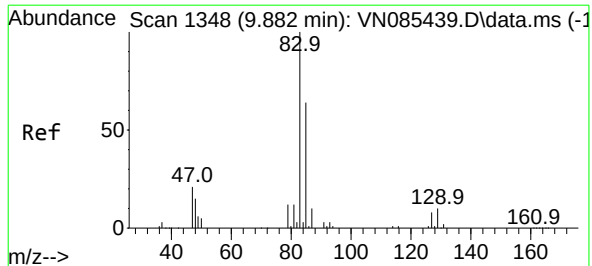
Ion Ratio Lower Upper

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

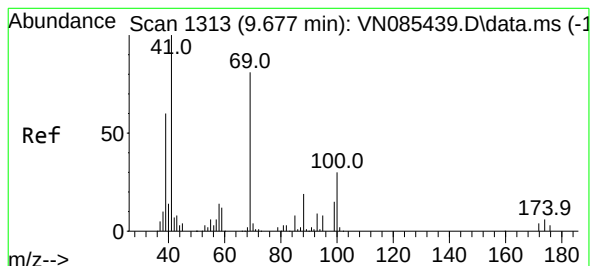
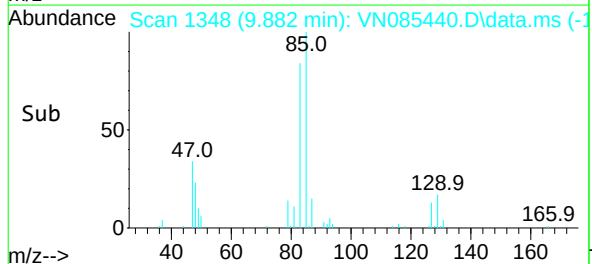
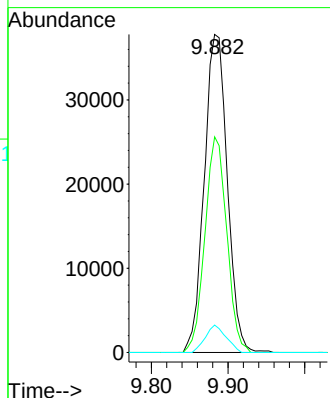
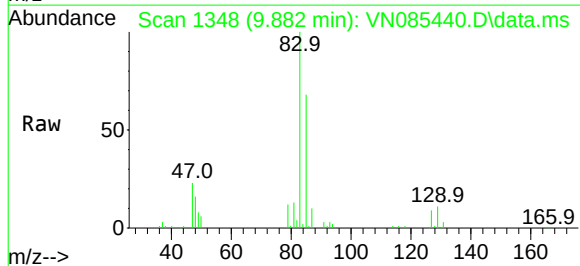
127 8.6 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 20.808 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

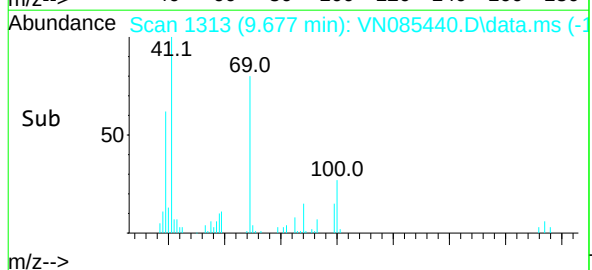
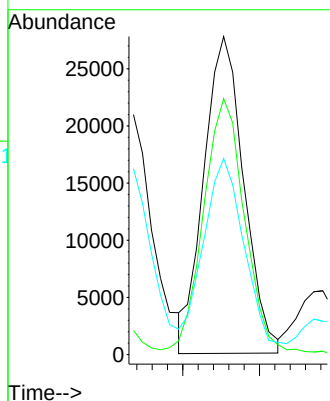
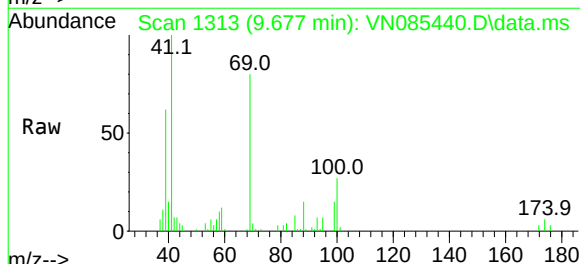
Tgt Ion: 41 Resp: 50224

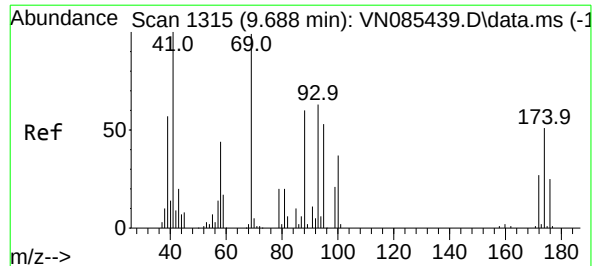
Ion Ratio Lower Upper

41 100

69 84.3 64.7 97.1

39 64.2 49.0 73.6





#49

1,4-Dioxane

Concen: 421.686 ug/l

RT: 9.688 min Scan# 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

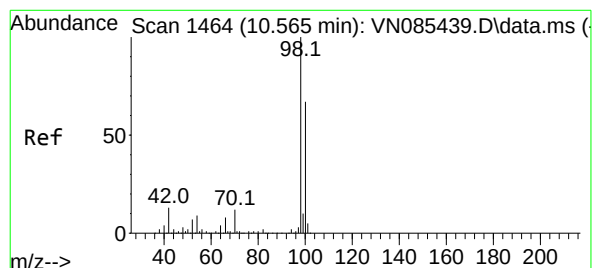
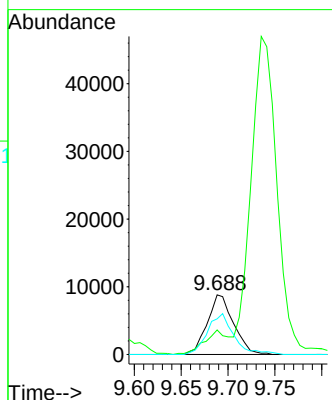
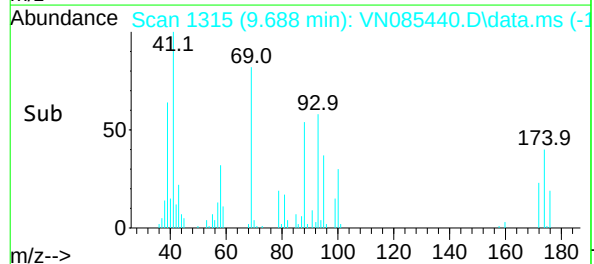
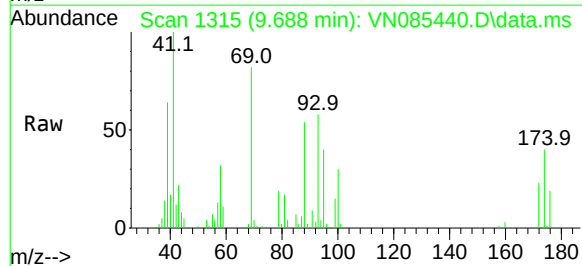
58 69.0 59.5 89.3

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

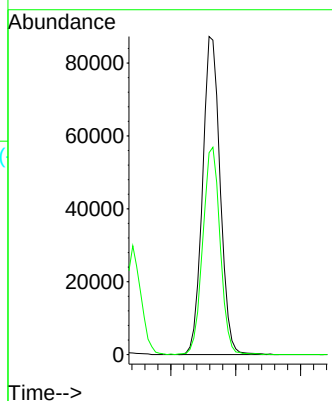
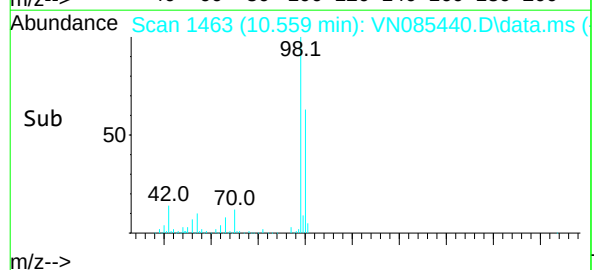
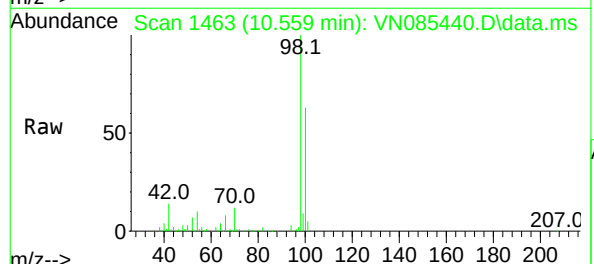
Acq: 14 Jan 2025 15:43

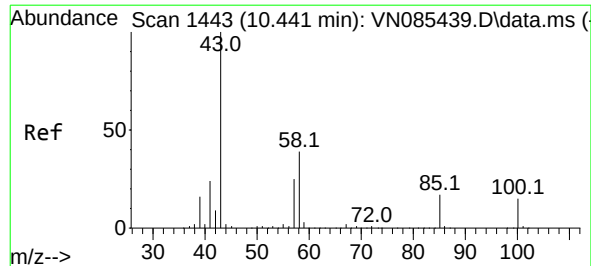
Tgt Ion: 98 Resp: 164391

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4





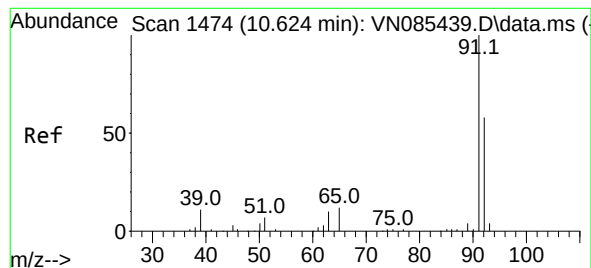
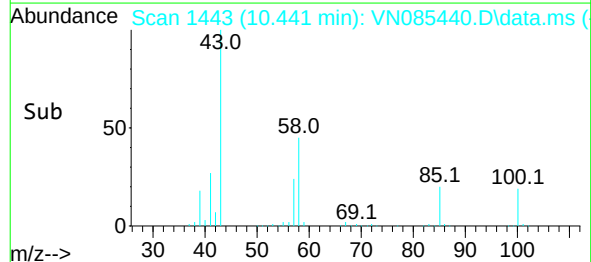
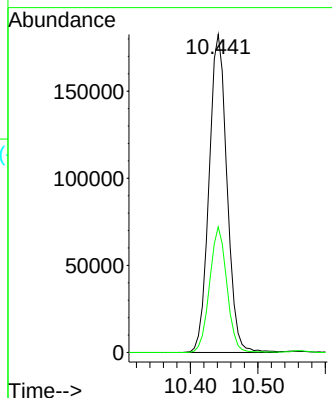
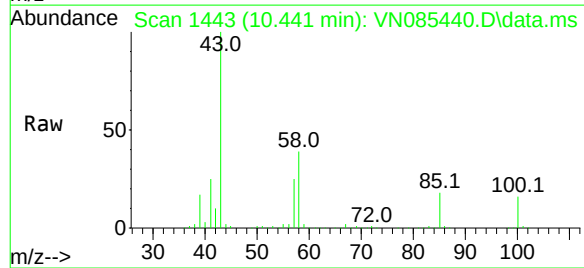
#51  
4-Methyl-2-Pentanone  
Concen: 108.249 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

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

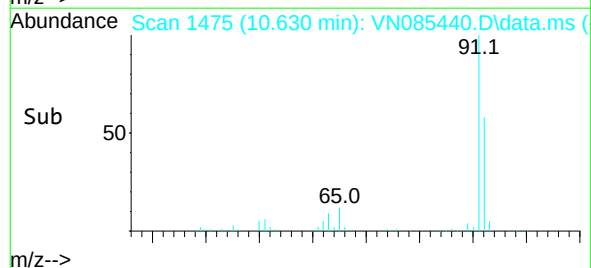
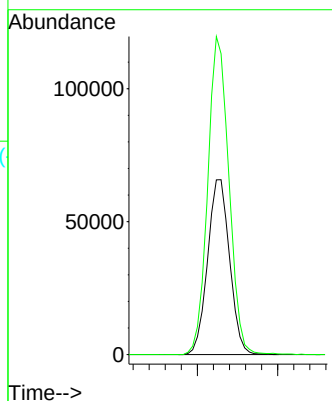
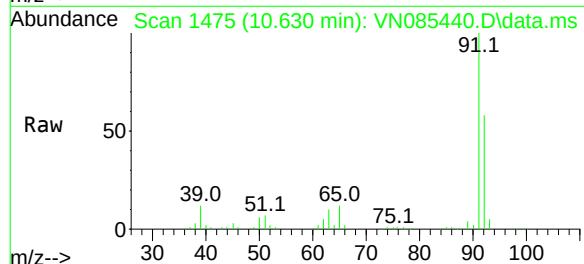
Manual Integrations  
APPROVED

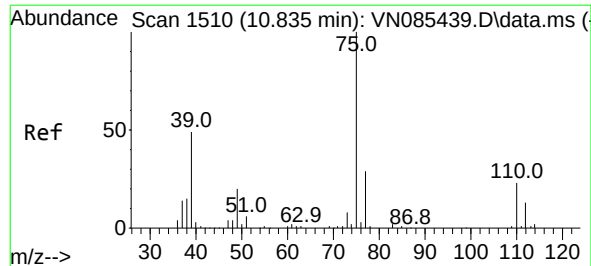
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#52  
Toluene  
Concen: 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

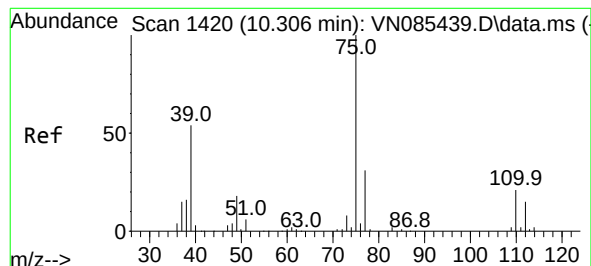
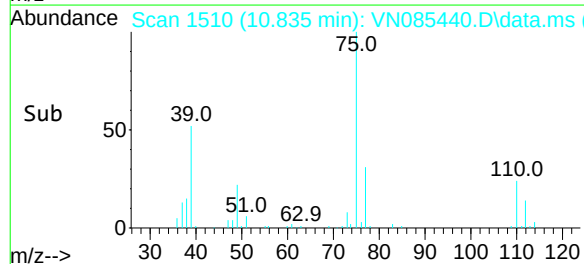
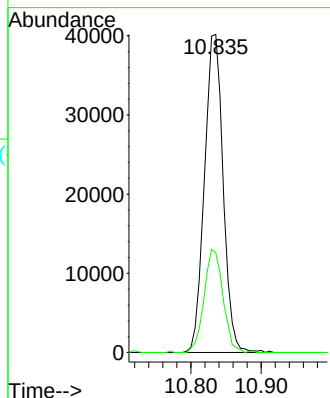
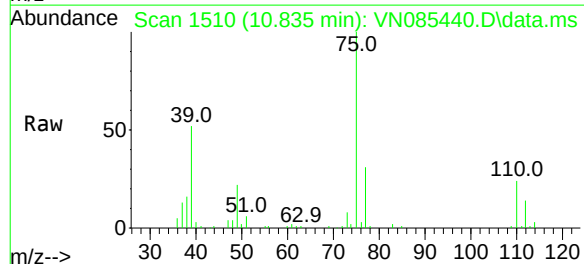
77 31.4 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 21.684 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

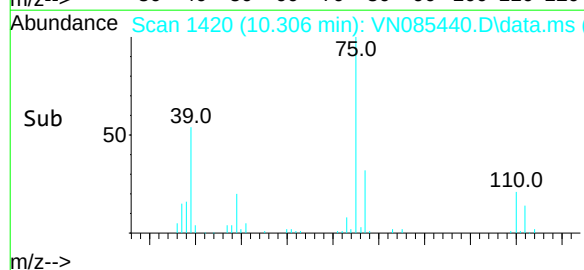
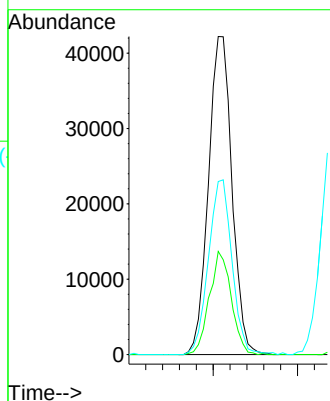
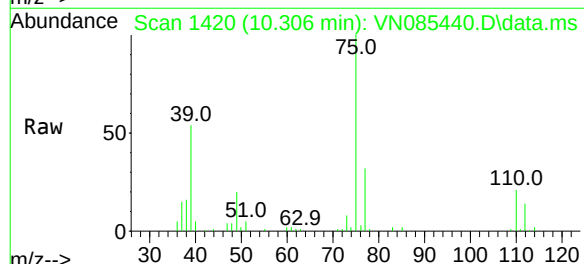
Tgt Ion: 75 Resp: 81897

Ion Ratio Lower Upper

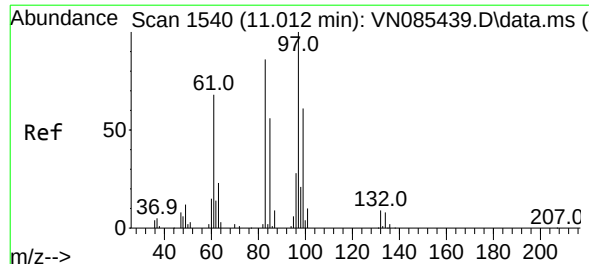
75 100

77 32.4 25.0 37.4

39 54.4 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 21.025 ug/l

RT: 11.012 min Scan# 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

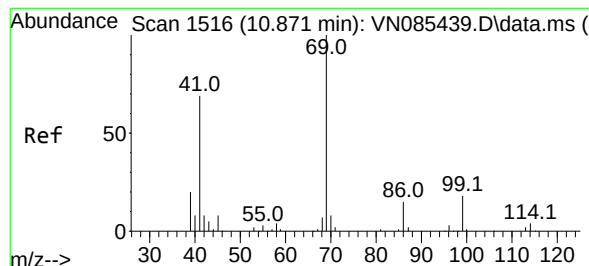
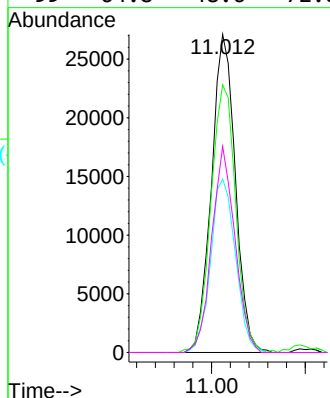
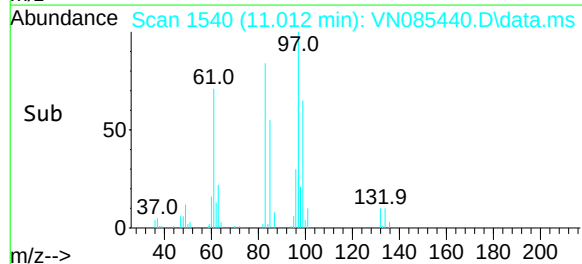
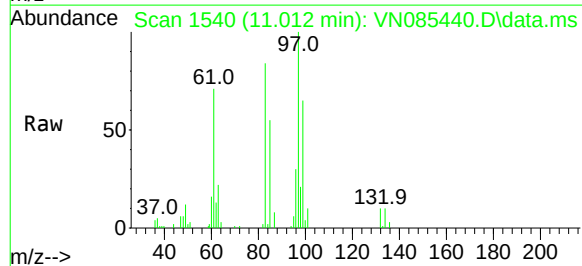
99 64.8 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 19.649 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

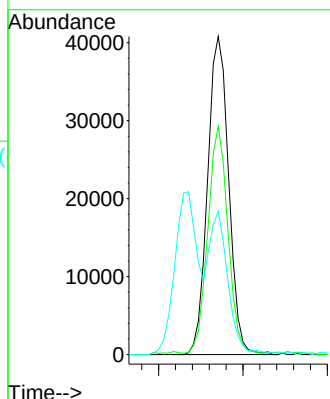
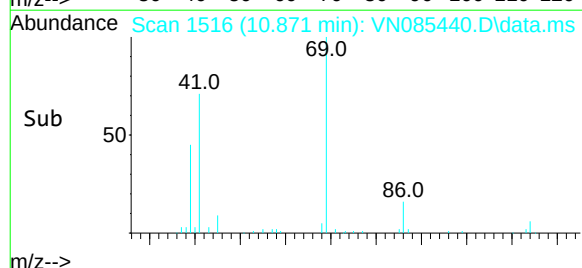
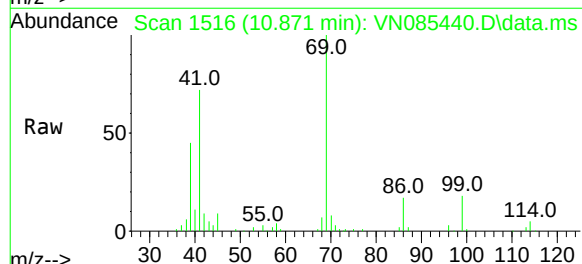
Tgt Ion: 69 Resp: 70934

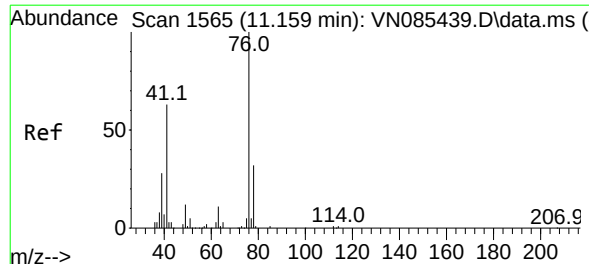
Ion Ratio Lower Upper

69 100

41 67.6 54.6 82.0

39 41.7 32.4 48.6





#57

1,3-Dichloropropane

Concen: 21.196 ug/l

RT: 11.159 min Scan# 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

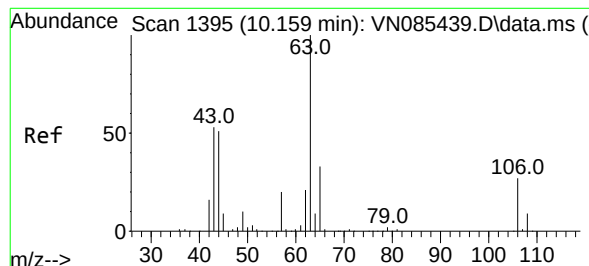
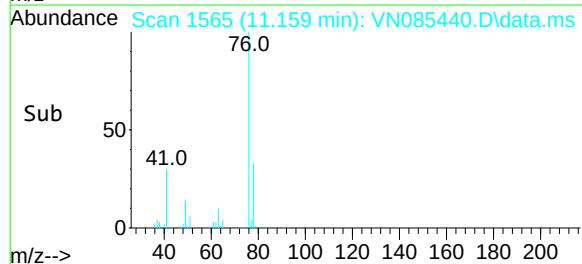
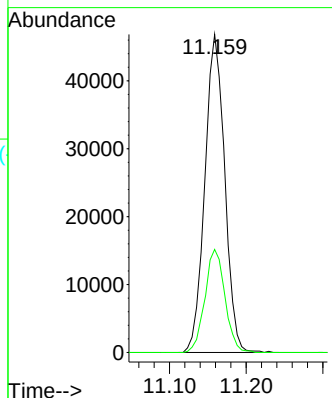
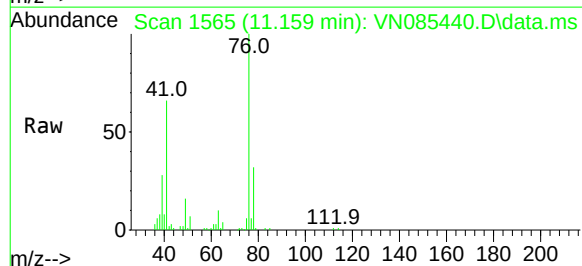
78 32.7 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 105.991 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085440.D

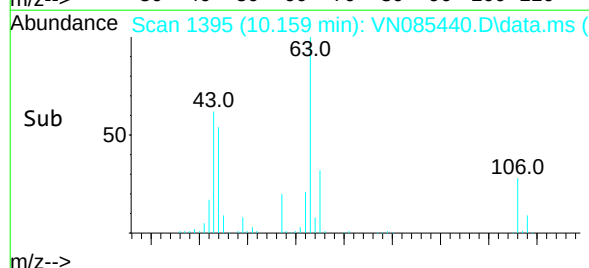
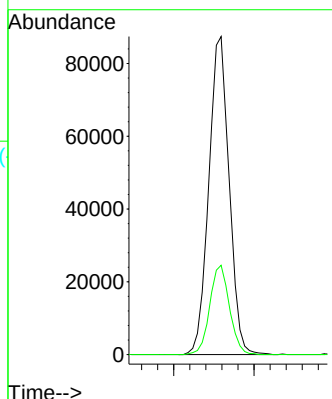
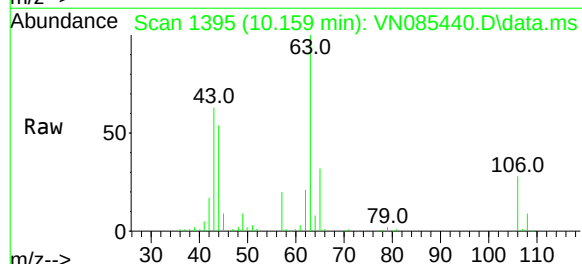
Acq: 14 Jan 2025 15:43

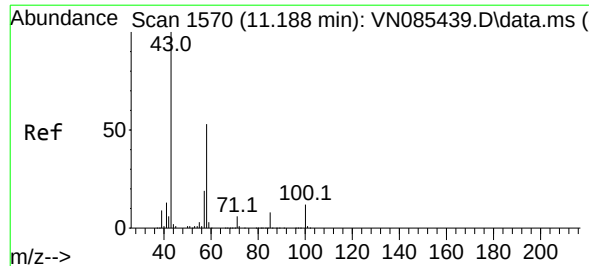
Tgt Ion: 63 Resp: 153681

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 109.863 ug/l

RT: 11.194 min Scan# 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

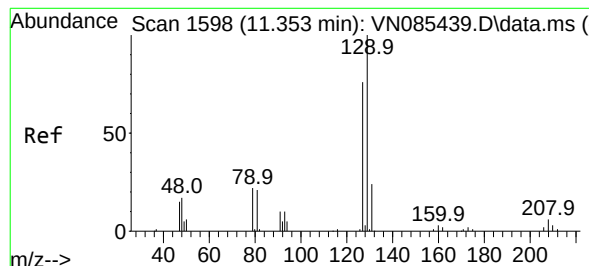
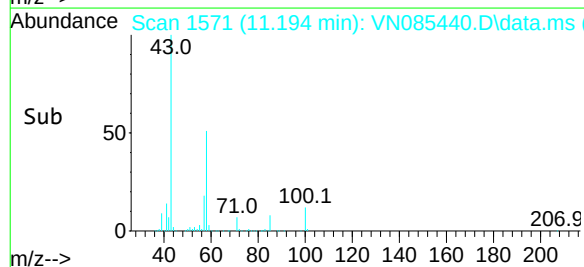
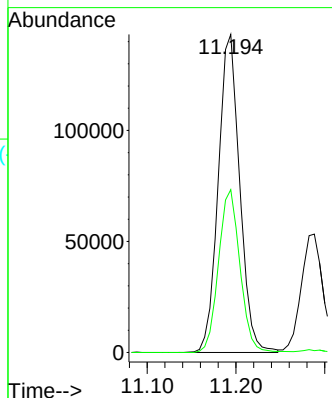
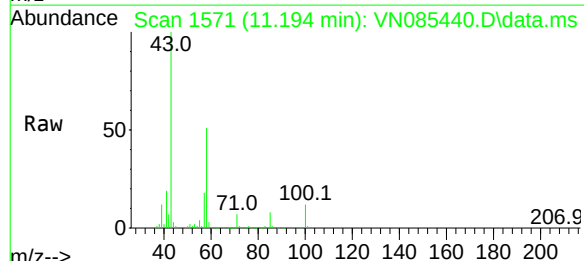
58 51.1 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 20.326 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085440.D

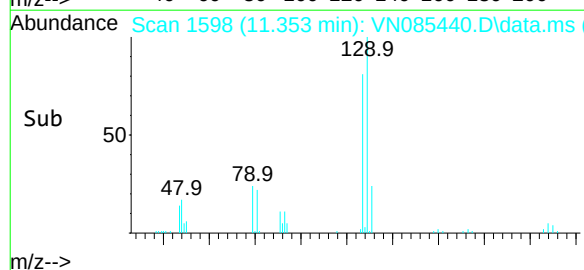
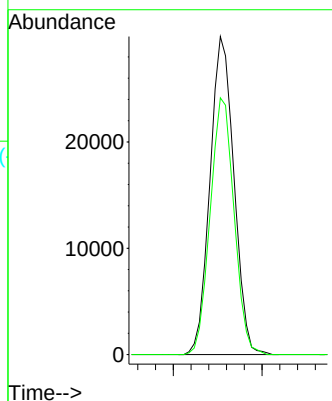
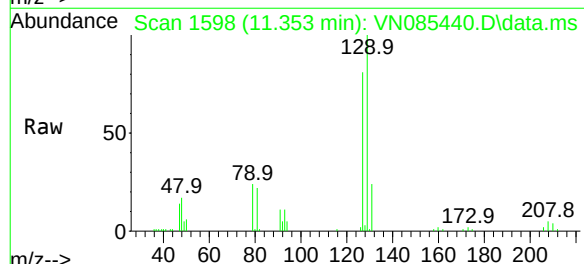
Acq: 14 Jan 2025 15:43

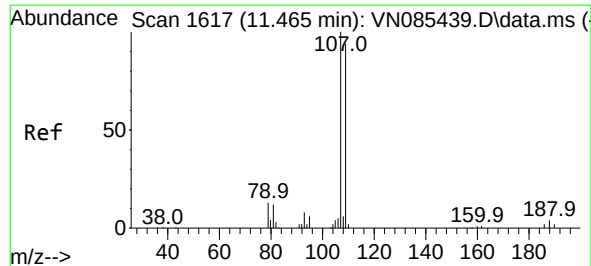
Tgt Ion:129 Resp: 56069

Ion Ratio Lower Upper

129 100

127 80.4 38.6 115.8





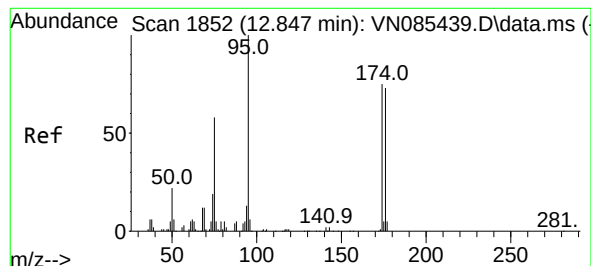
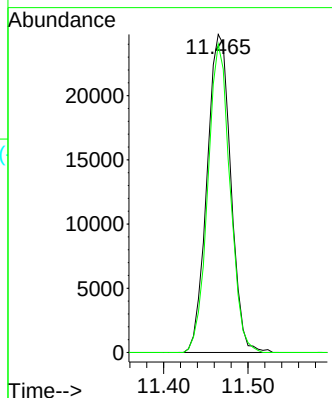
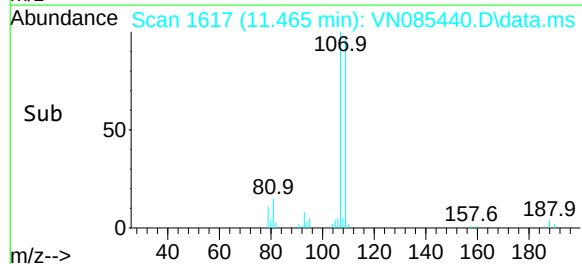
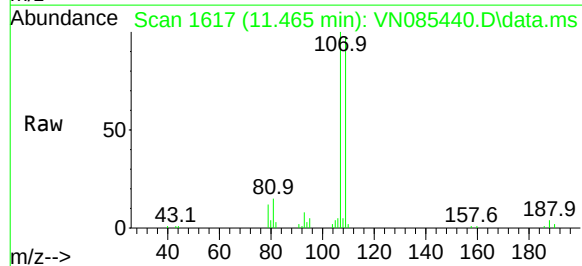
#61  
1,2-Dibromoethane  
Concen: 21.309 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

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

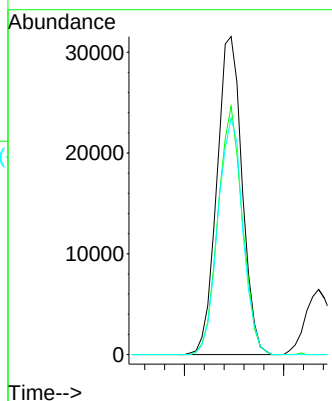
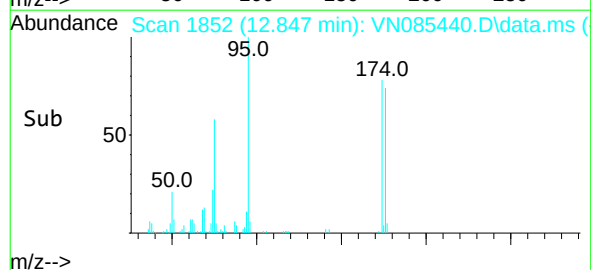
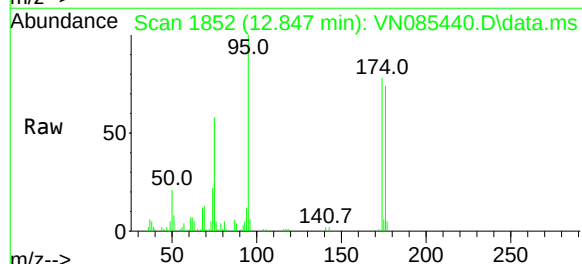
Manual Integrations  
APPROVED

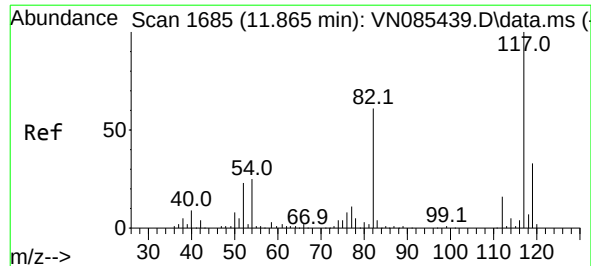
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



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

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





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 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

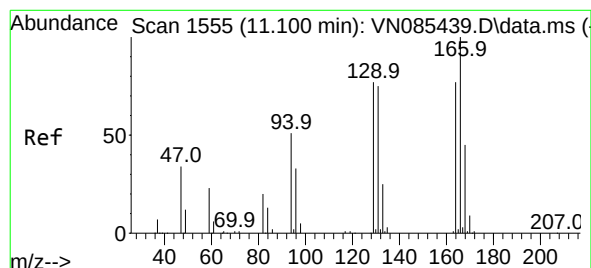
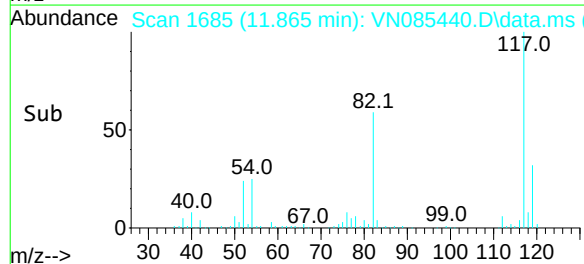
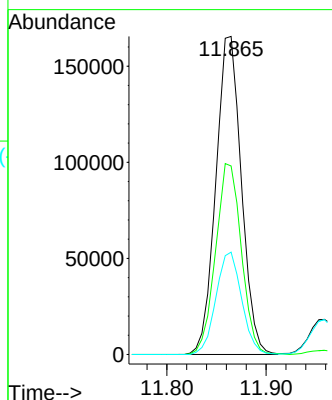
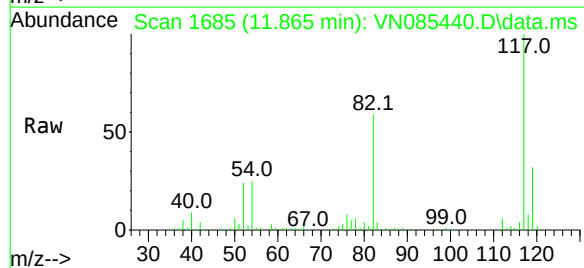
119 32.2 26.6 39.8

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

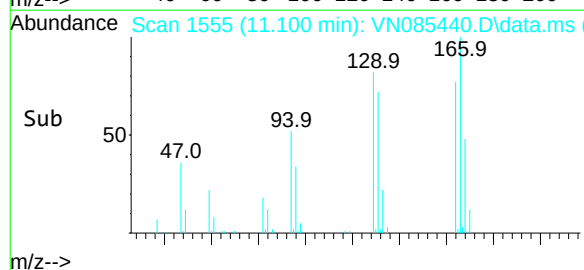
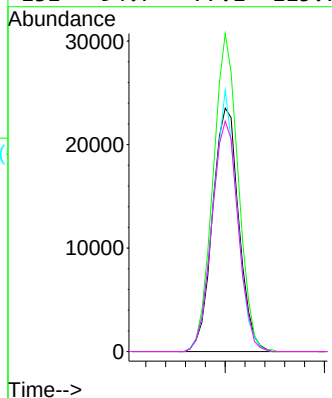
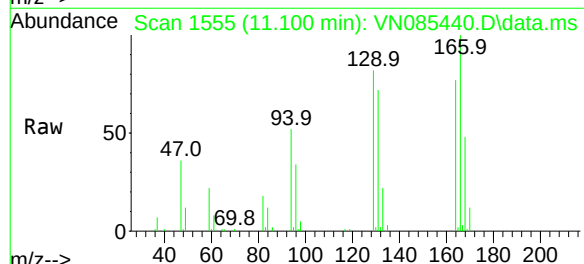
Ion Ratio Lower Upper

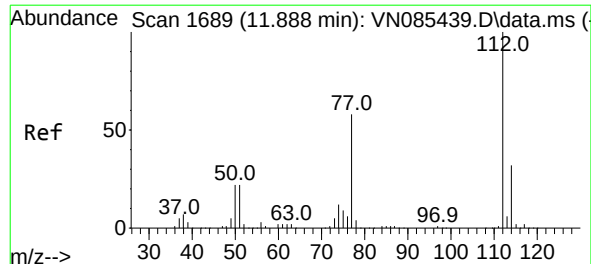
164 100

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

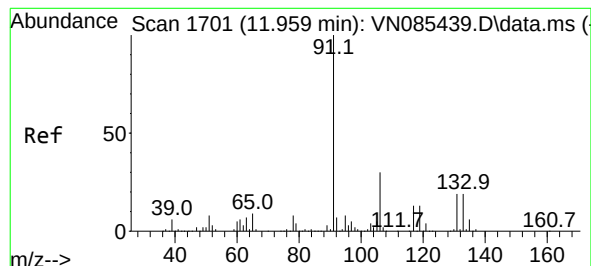
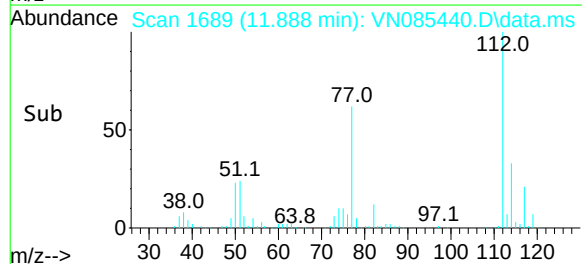
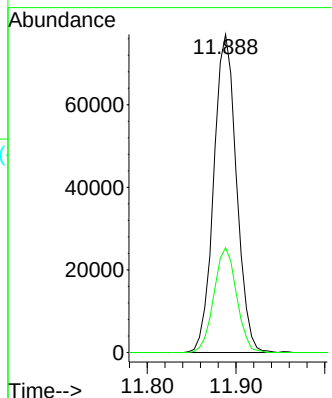
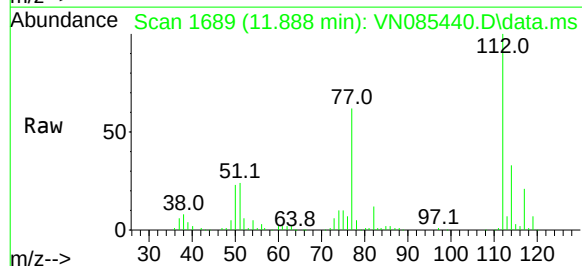
114 32.9 25.3 37.9

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

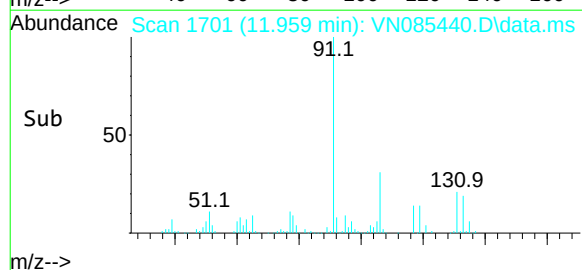
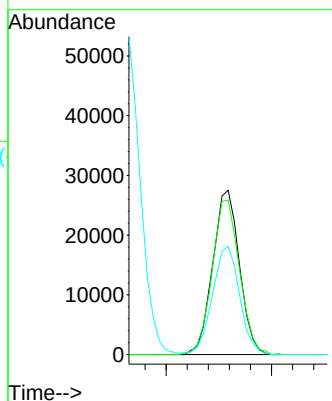
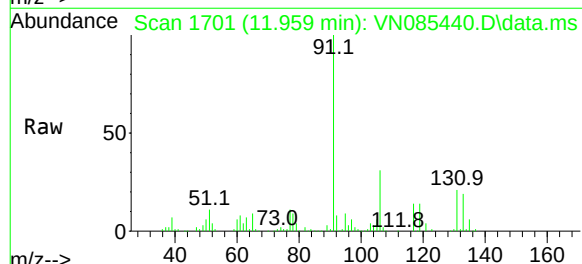
Tgt Ion:131 Resp: 48370

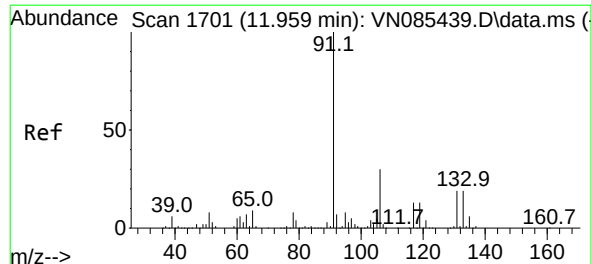
Ion Ratio Lower Upper

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# 17

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

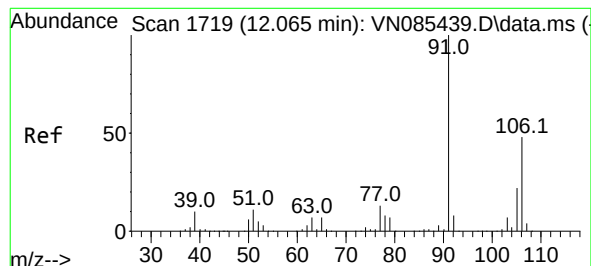
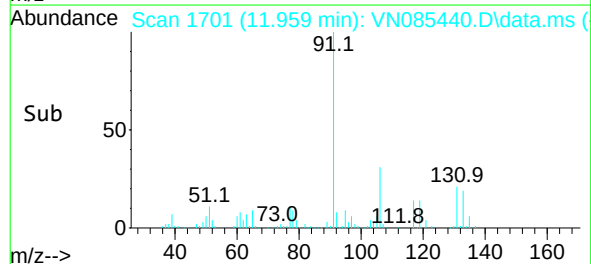
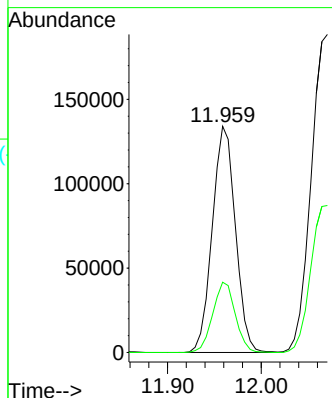
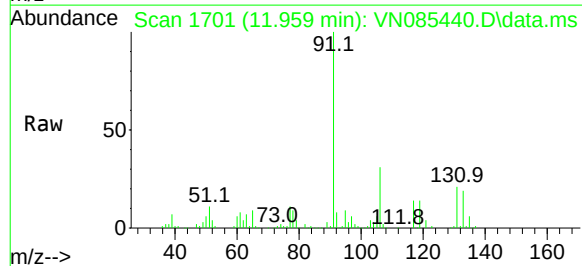
106 31.1 23.8 35.8

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

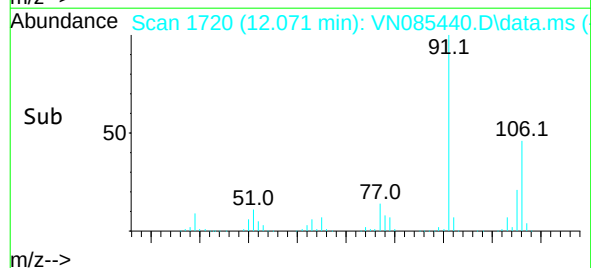
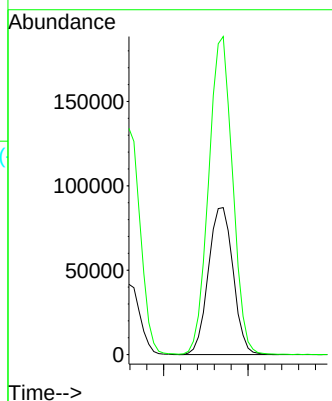
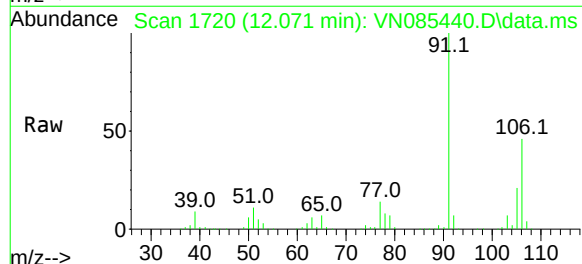
Acq: 14 Jan 2025 15:43

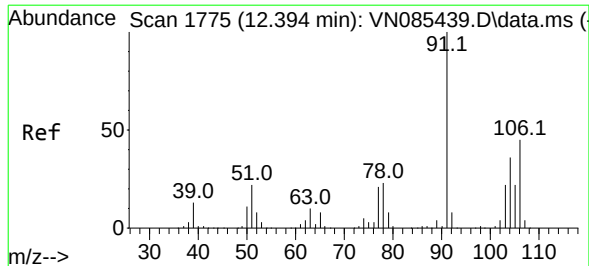
Tgt Ion:106 Resp: 177755

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

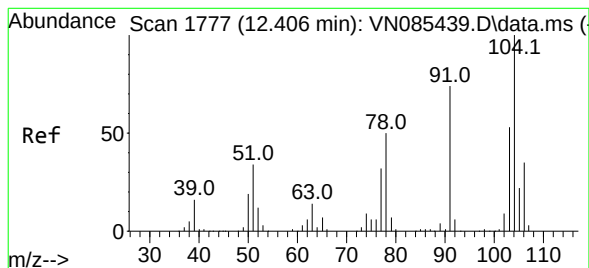
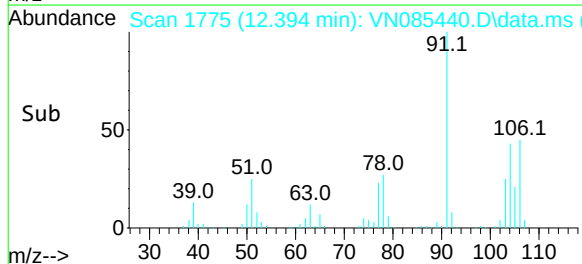
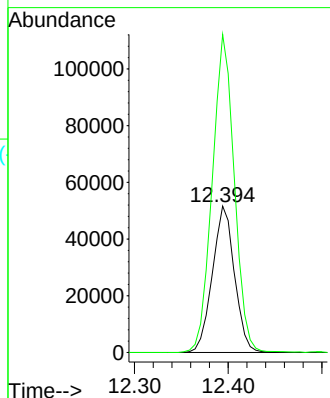
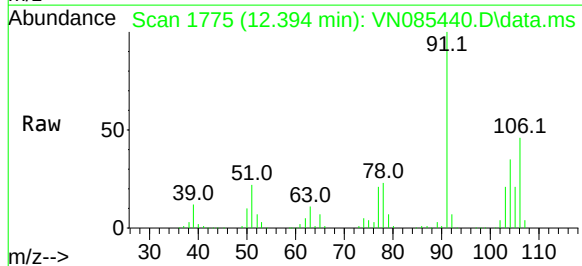
91 217.0 110.4 331.2

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

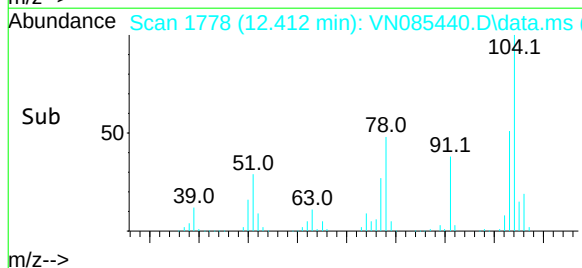
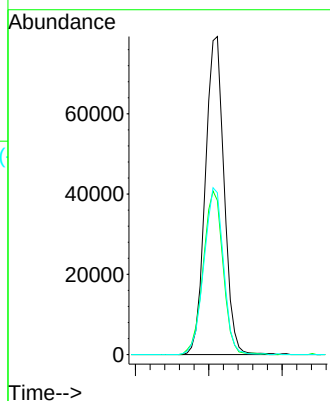
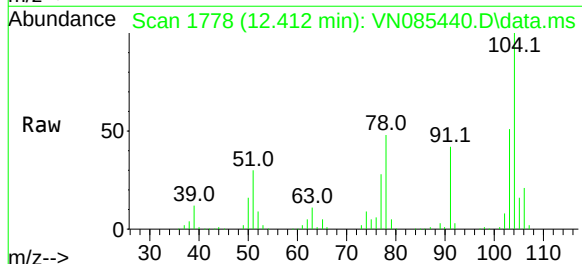
Tgt Ion:104 Resp: 140581

Ion Ratio Lower Upper

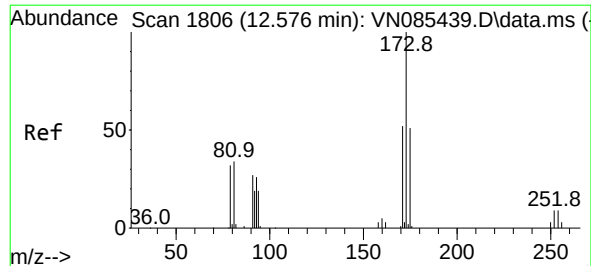
104 100

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

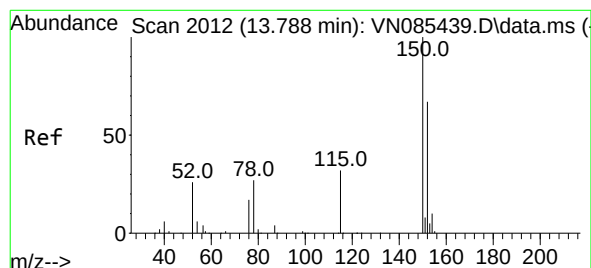
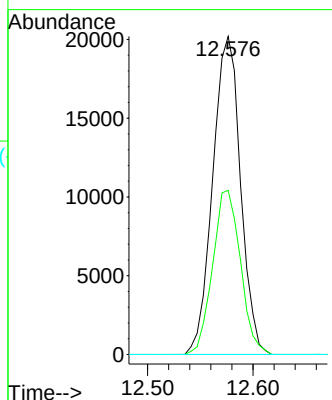
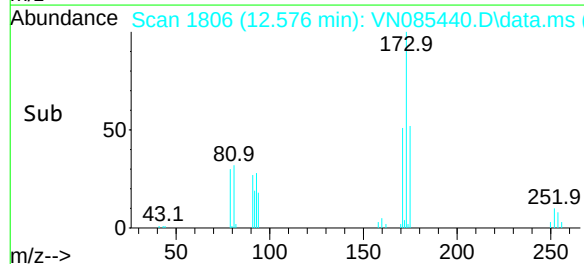
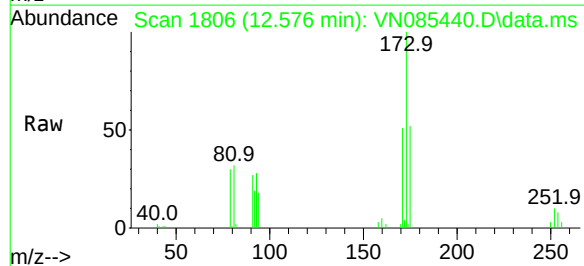
ClientSampleId :

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

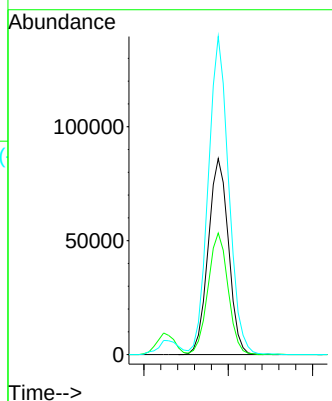
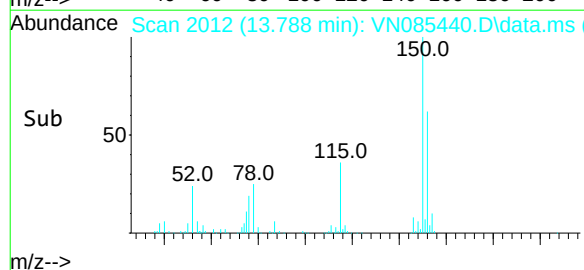
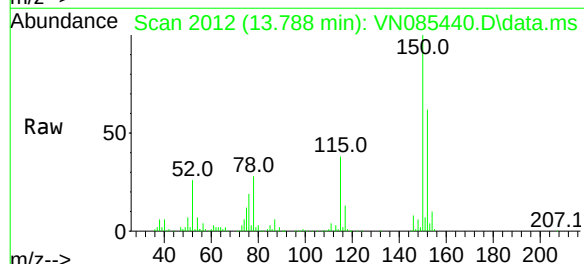
RT: 13.788 min Scan# 2012

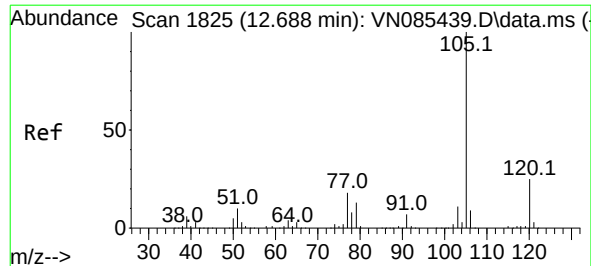
Delta R.T. 0.000 min

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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC020

Tgt Ion:105 Resp: 211354

Ion Ratio Lower Upper

105 100

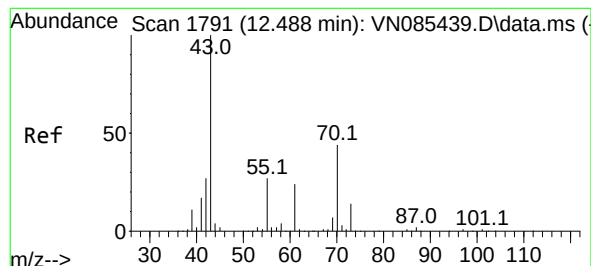
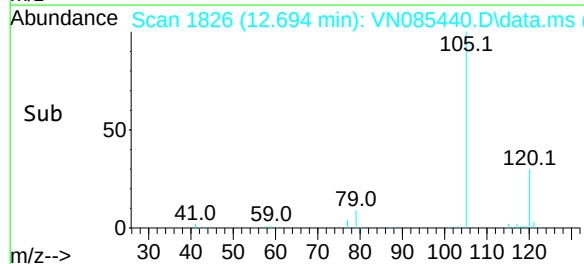
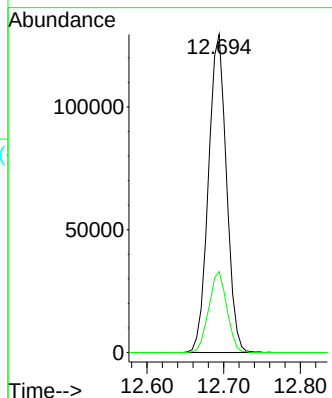
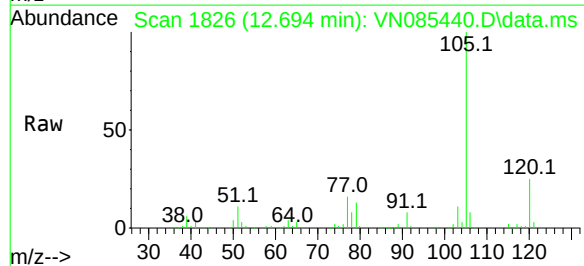
120 25.5 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 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

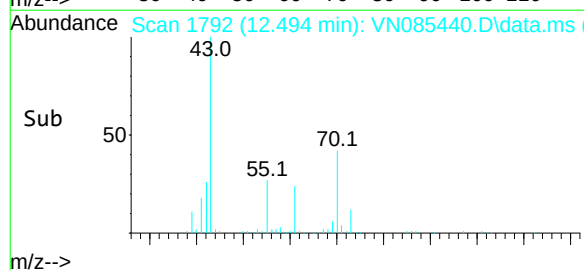
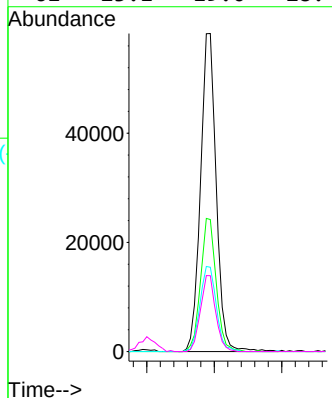
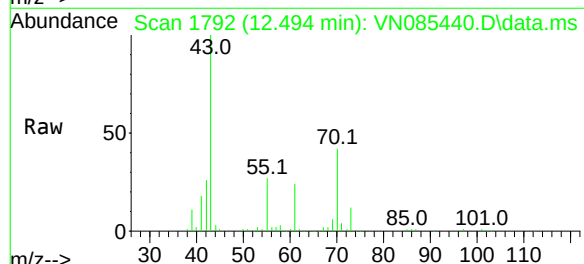
Ion Ratio Lower Upper

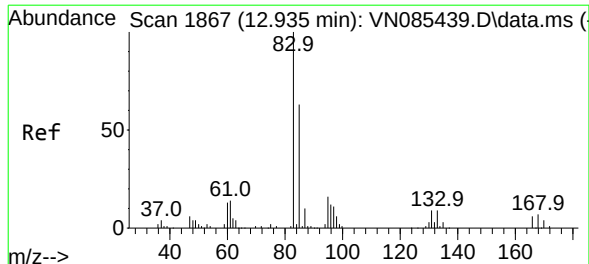
43 100

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 :

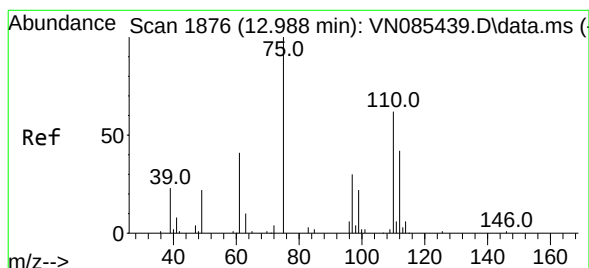
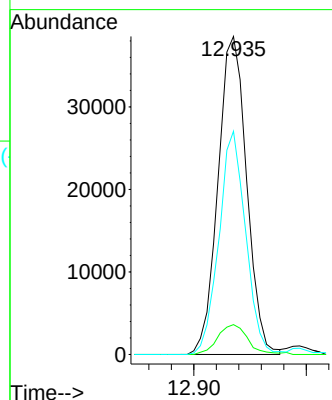
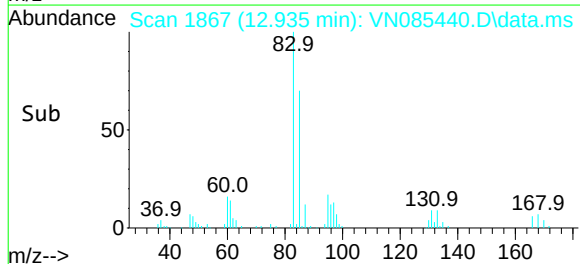
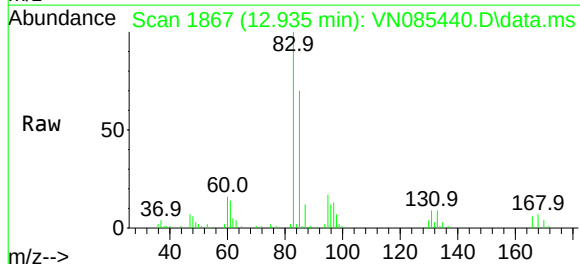
VSTDICC020

|          |       |       |       |
|----------|-------|-------|-------|
| 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

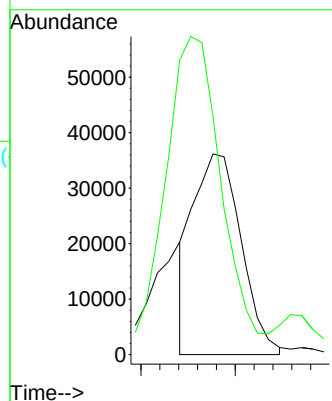
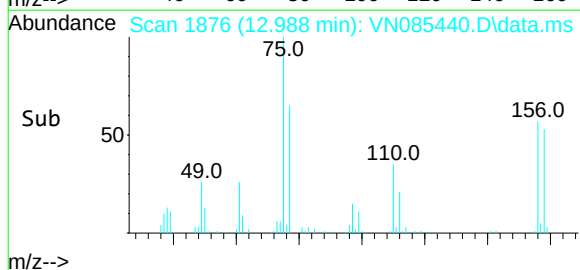
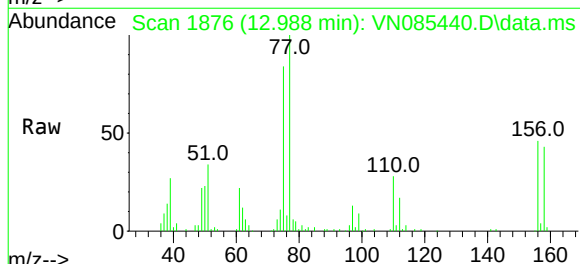
RT: 12.988 min Scan# 1876

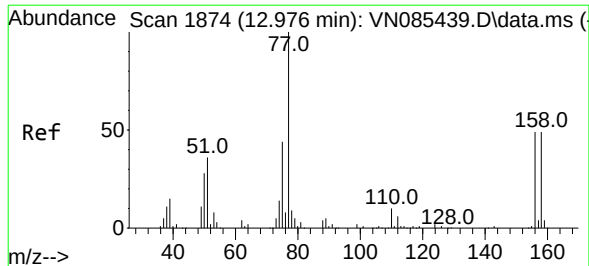
Delta R.T. 0.000 min

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

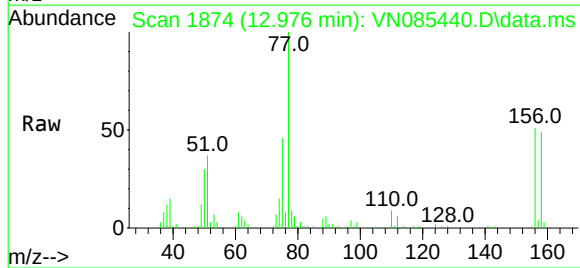
Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC020



Tgt Ion:156 Resp: 52022

Ion Ratio Lower Upper

156 100

77 230.4 114.1 342.4

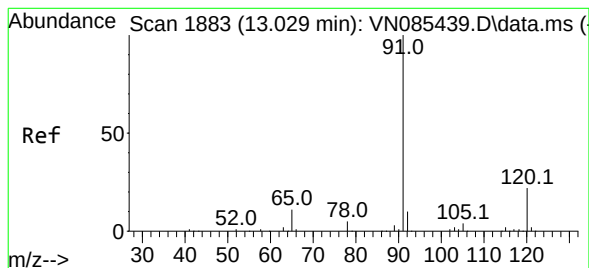
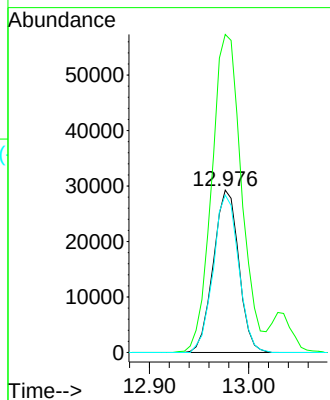
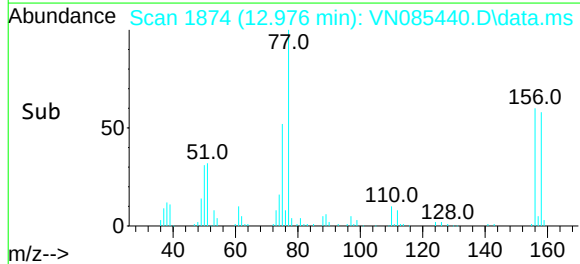
158 97.0 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

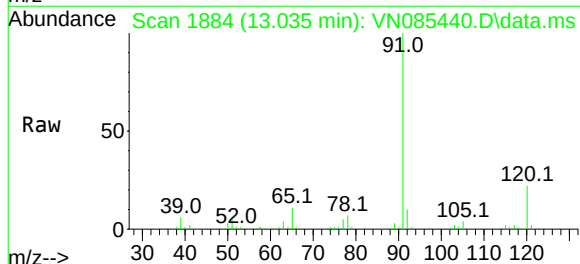
Concen: 22.028 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

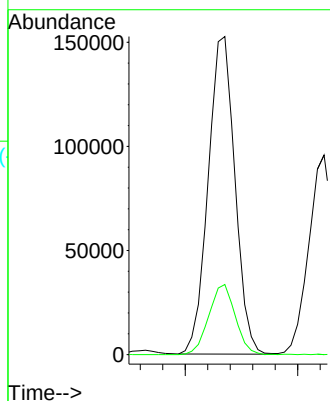
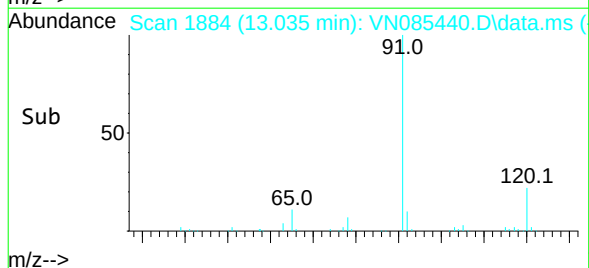


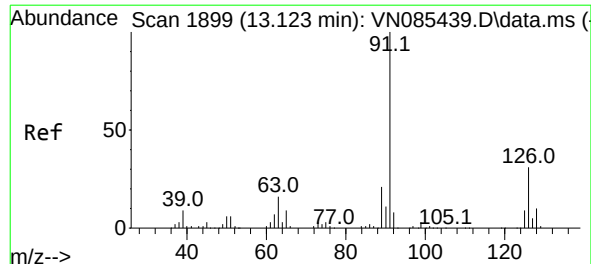
Tgt Ion: 91 Resp: 252610

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 :

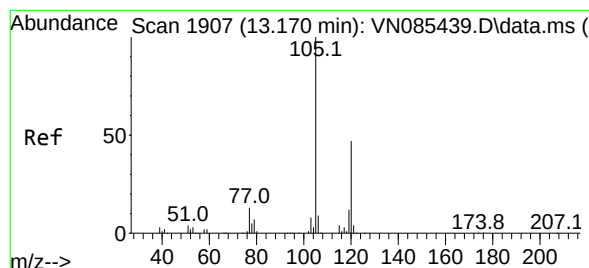
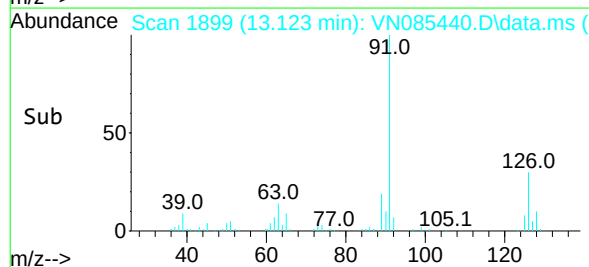
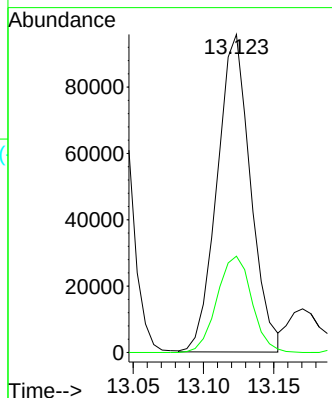
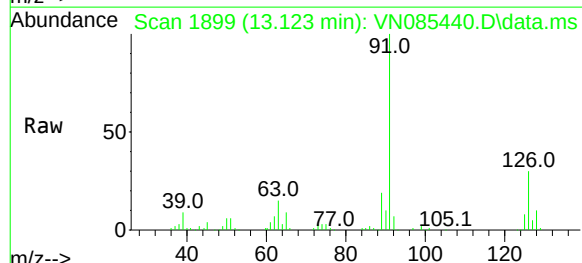
VSTDIC020

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

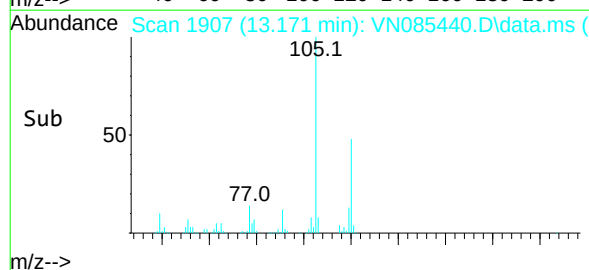
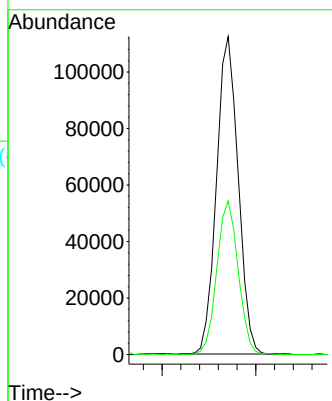
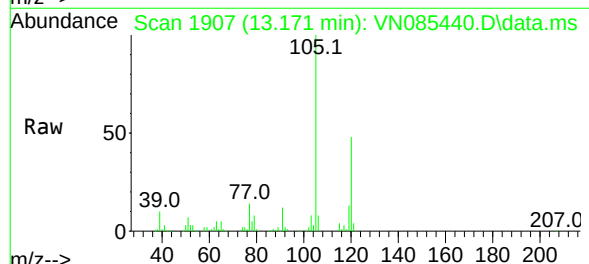
Acq: 14 Jan 2025 15:43

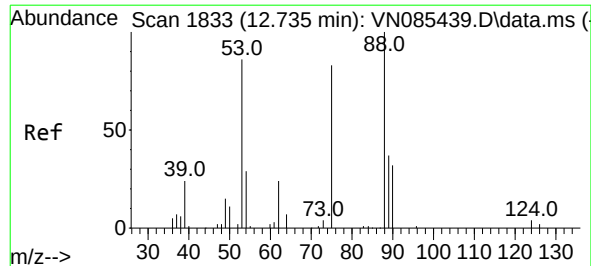
Tgt Ion:105 Resp: 180294

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

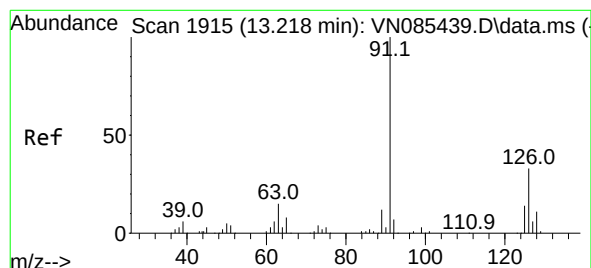
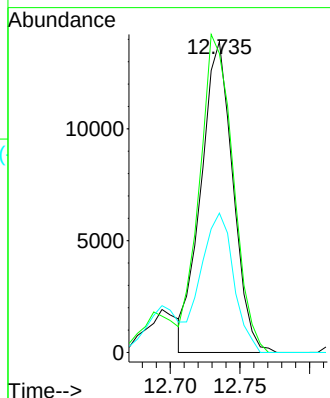
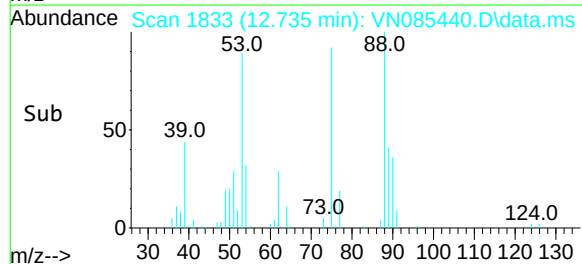
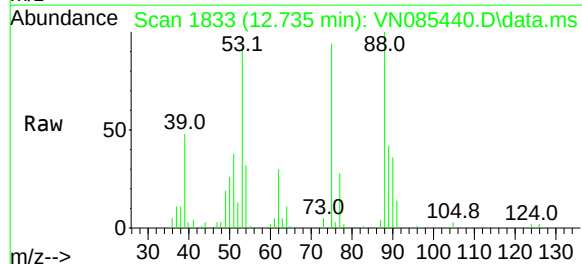
89 46.9 37.0 55.6

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

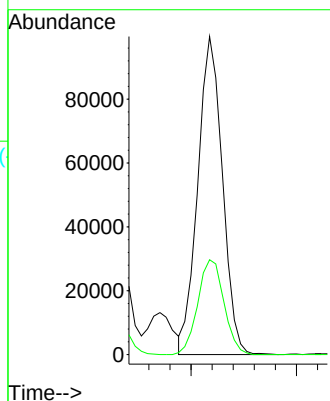
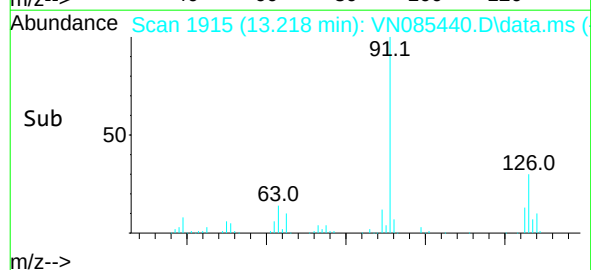
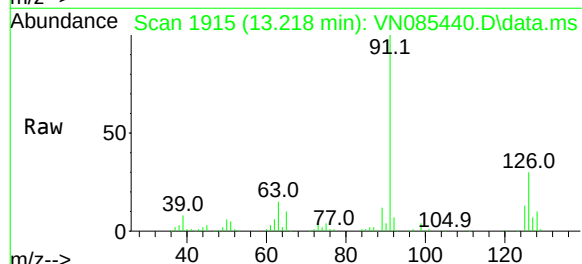
Acq: 14 Jan 2025 15:43

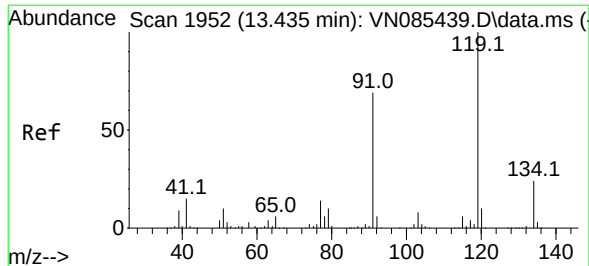
Tgt Ion: 91 Resp: 161880

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

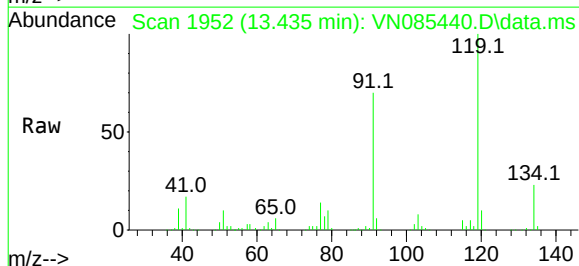
Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

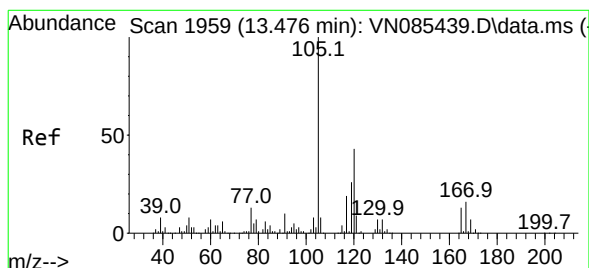
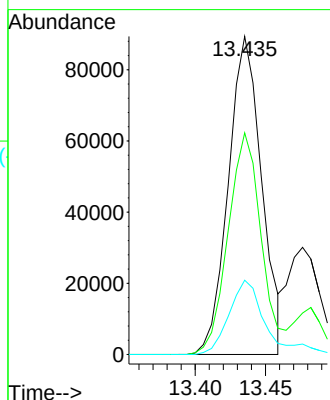
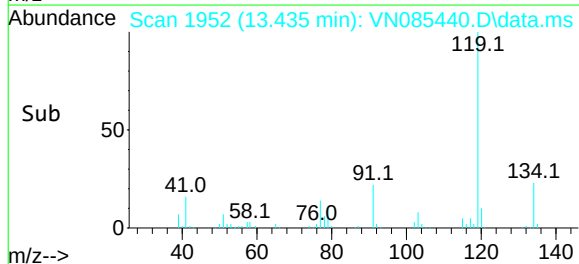
VSTDICC020



|          |       |       |        |
|----------|-------|-------|--------|
| 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

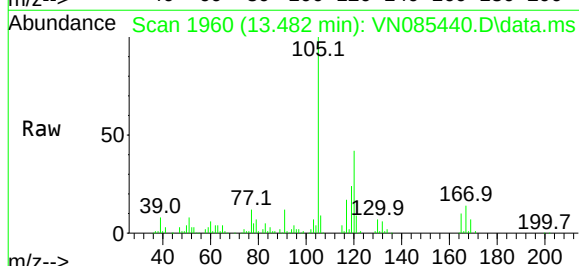
Concen: 22.965 ug/l

RT: 13.482 min Scan# 1960

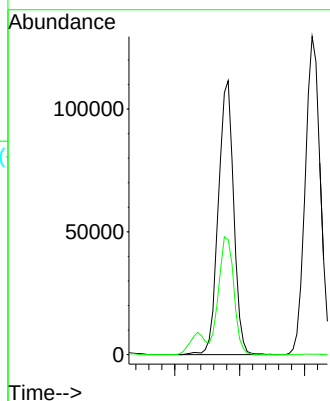
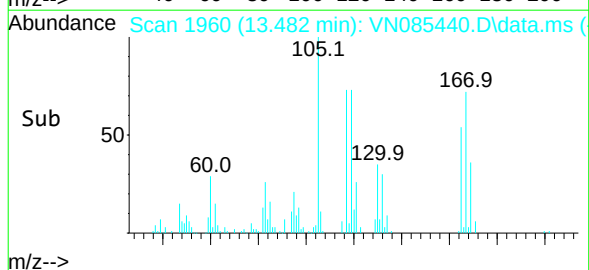
Delta R.T. 0.006 min

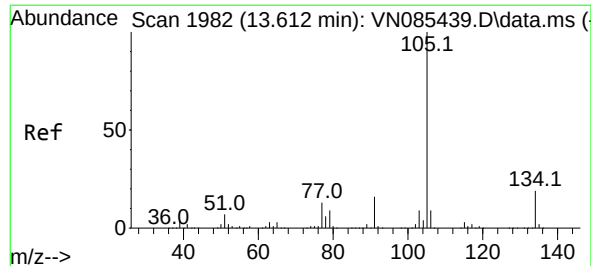
Lab File: VN085440.D

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

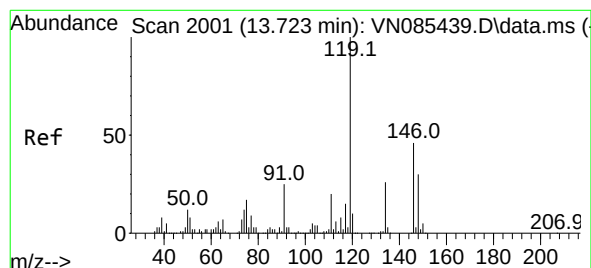
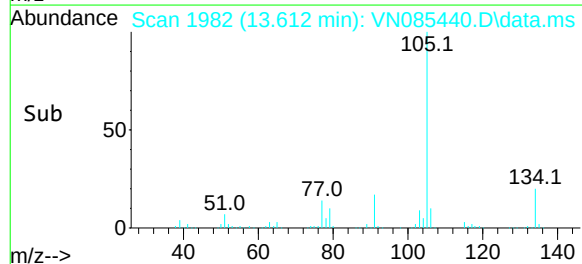
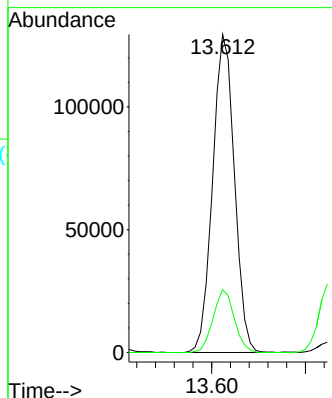
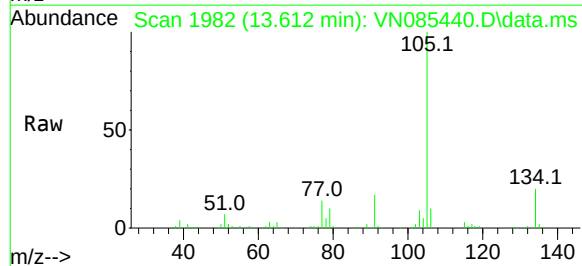
134 19.2 9.7 28.9

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

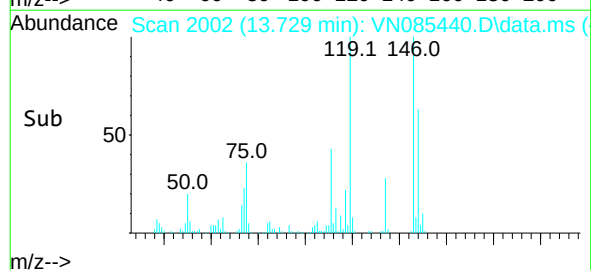
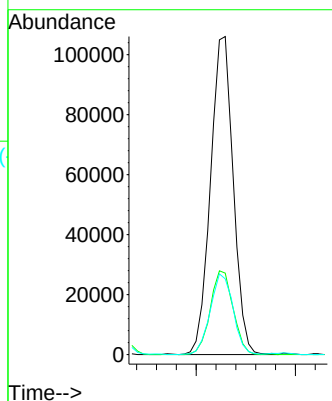
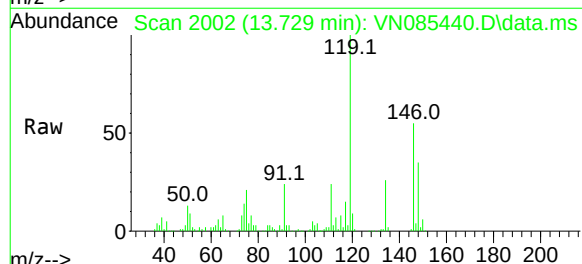
Tgt Ion:119 Resp: 168888

Ion Ratio Lower Upper

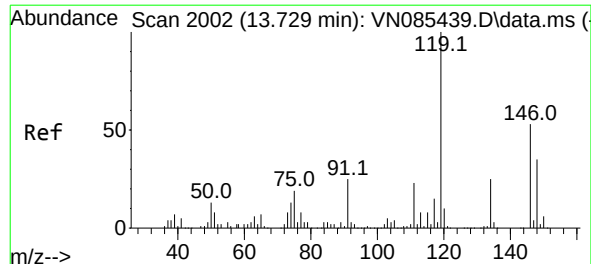
119 100

134 26.4 12.7 38.0

91 25.5 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 20.952 ug/l

RT: 13.729 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

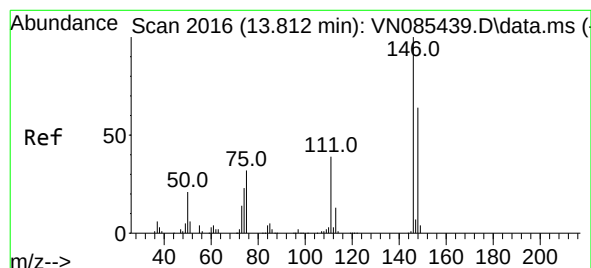
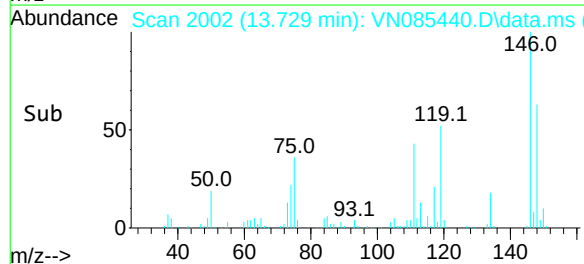
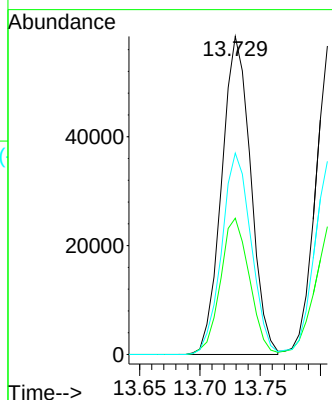
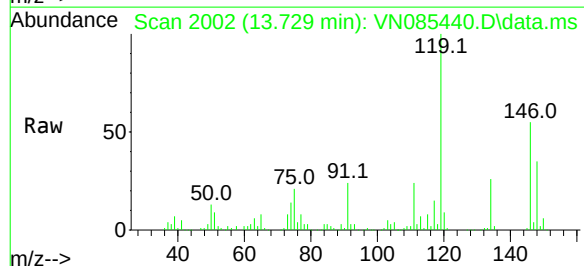
ClientSampleId :

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  |

Manual Integrations  
APPROVED

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



#88

1,4-Dichlorobenzene

Concen: 20.351 ug/l

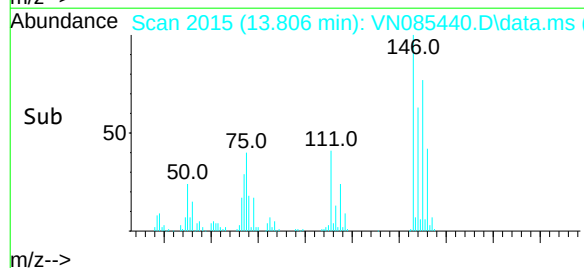
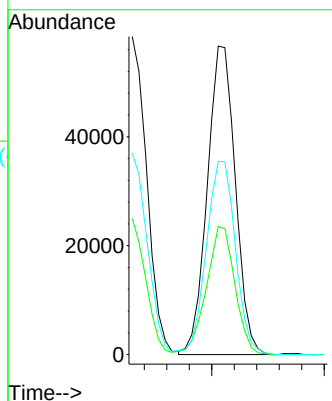
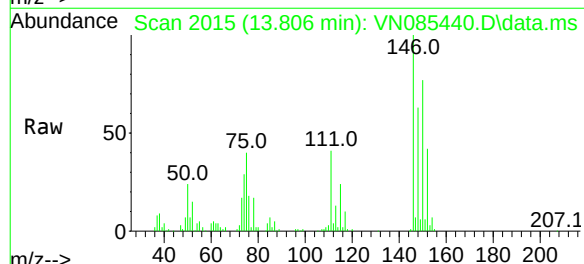
RT: 13.806 min Scan# 2015

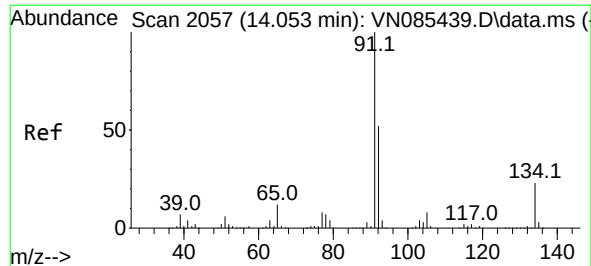
Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

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





#89

n-Butylbenzene

Concen: 21.355 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA\_N

ClientSampleId :

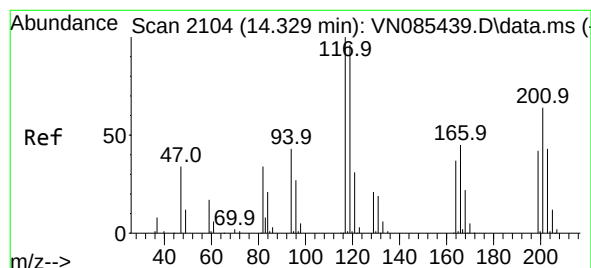
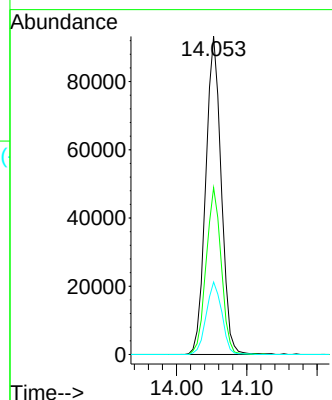
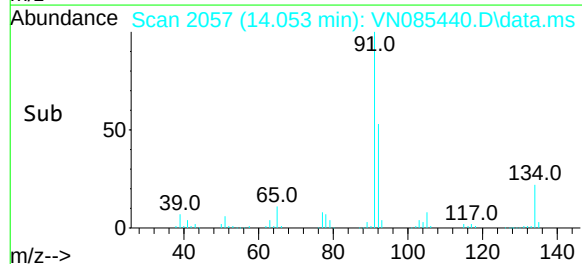
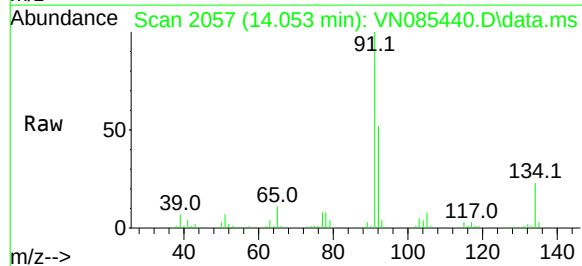
VSTDICC020

|           |       |       |        |
|-----------|-------|-------|--------|
| 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

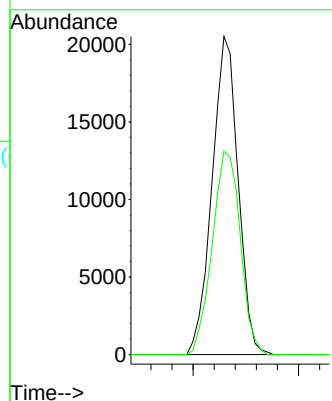
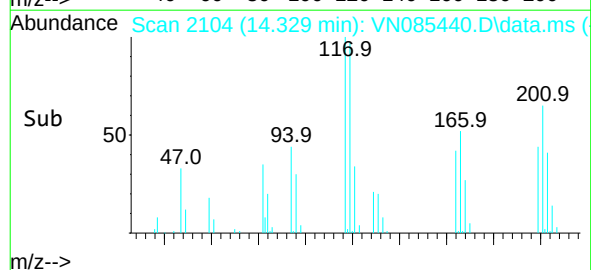
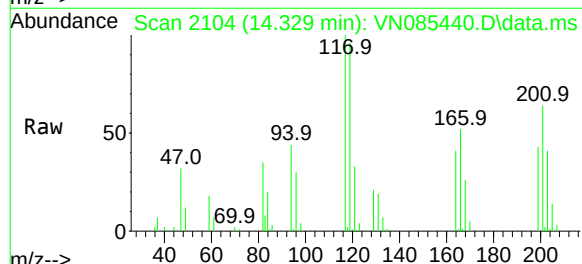
RT: 14.329 min Scan# 2104

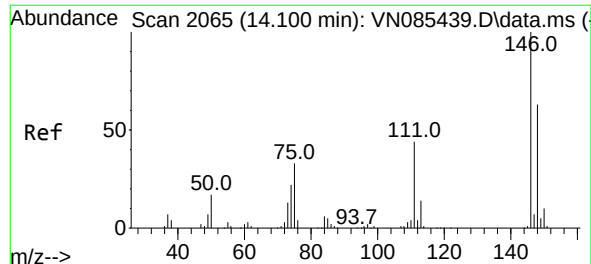
Delta R.T. 0.000 min

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 :

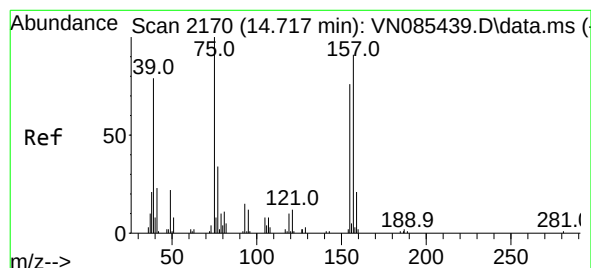
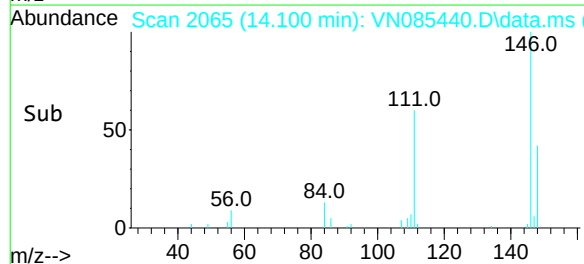
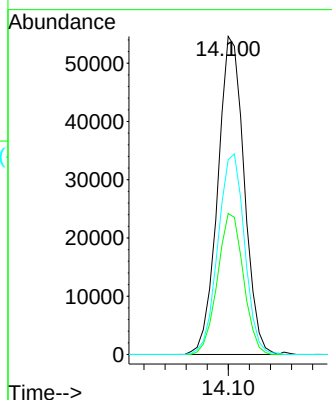
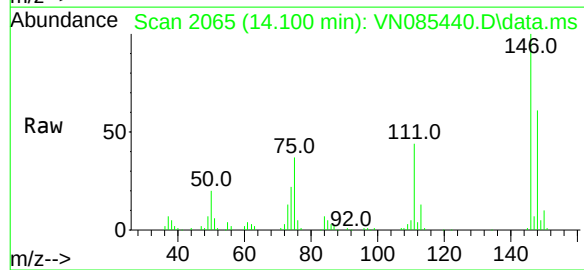
VSTDIC020

|          |       |       |       |
|----------|-------|-------|-------|
| 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

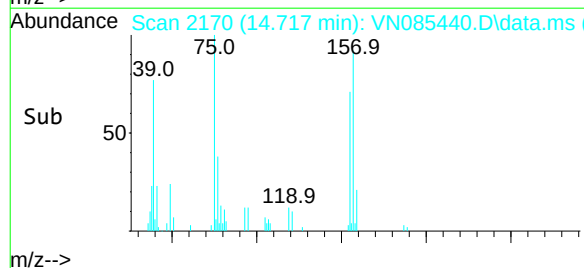
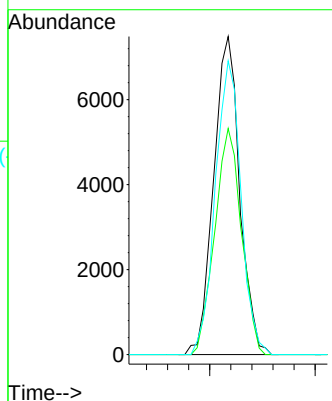
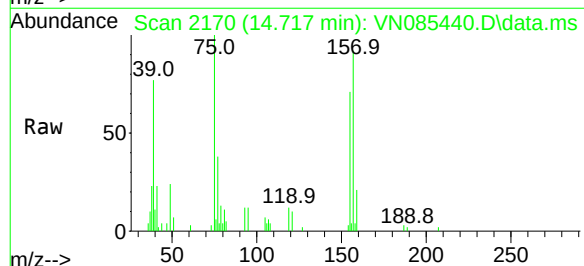
RT: 14.717 min Scan# 2170

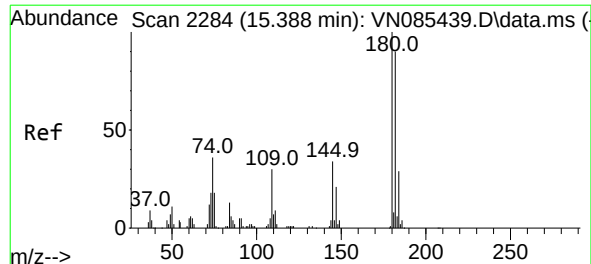
Delta R.T. 0.000 min

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

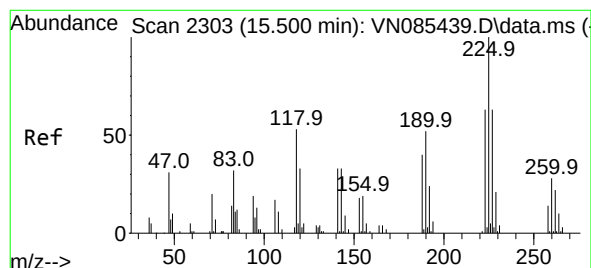
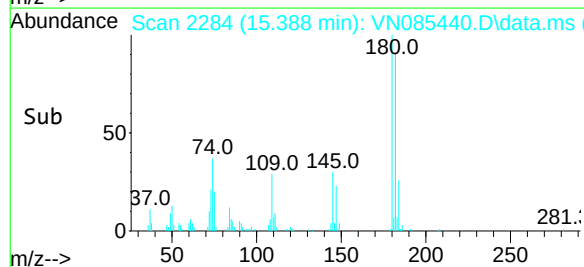
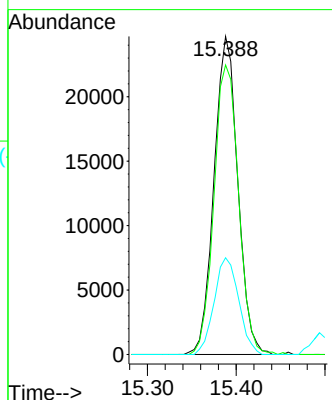
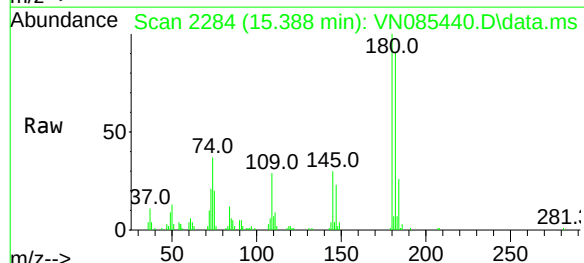
145 31.4 16.0 48.0

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

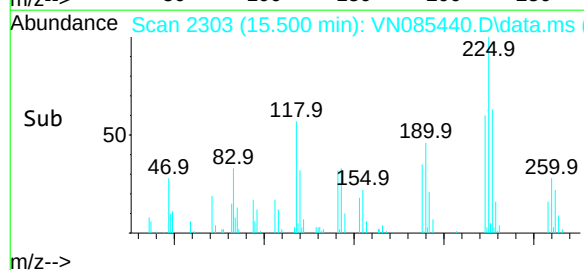
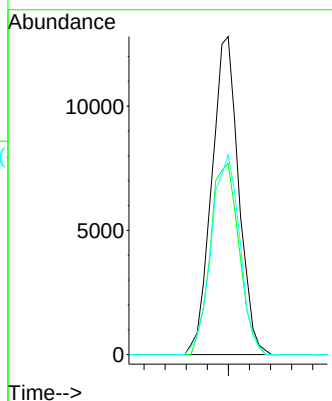
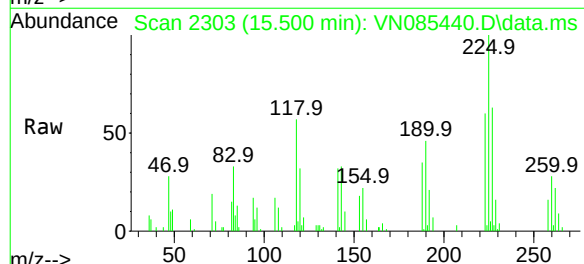
Tgt Ion:225 Resp: 22719

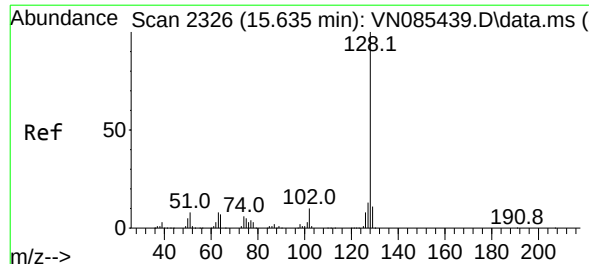
Ion Ratio Lower Upper

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

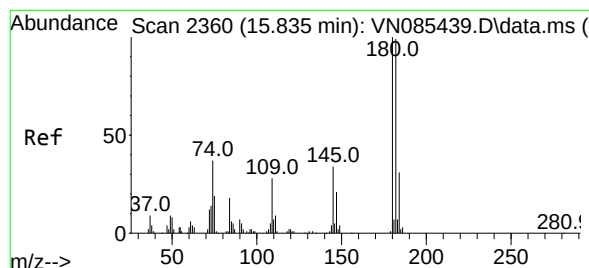
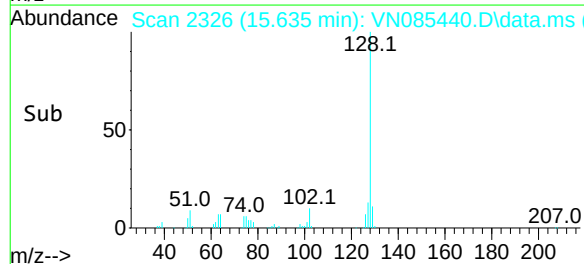
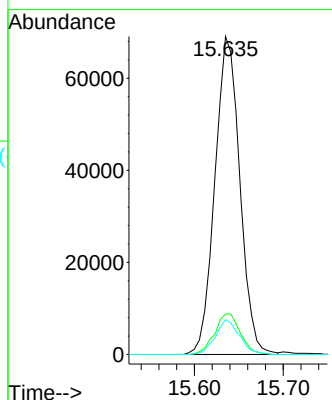
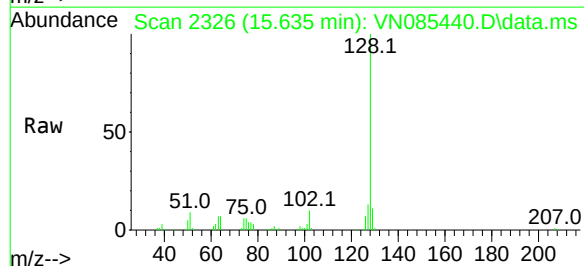
ClientSampleId :

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

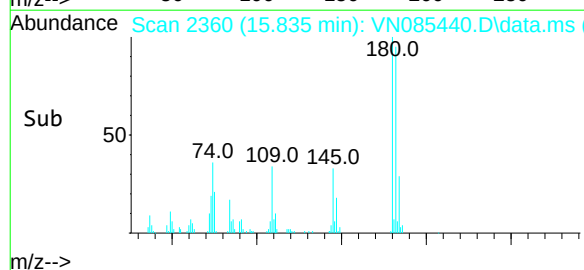
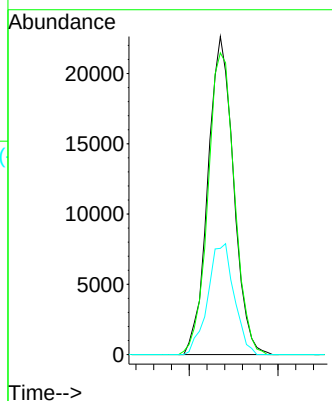
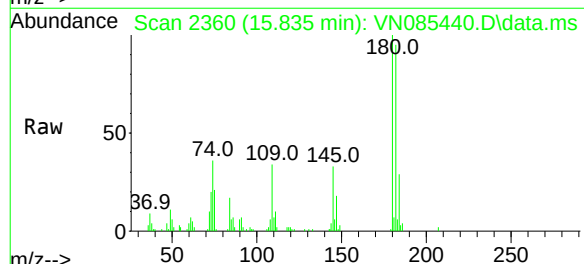
RT: 15.835 min Scan# 2360

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

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

### Manual Integrations APPROVED

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

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

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

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

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

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



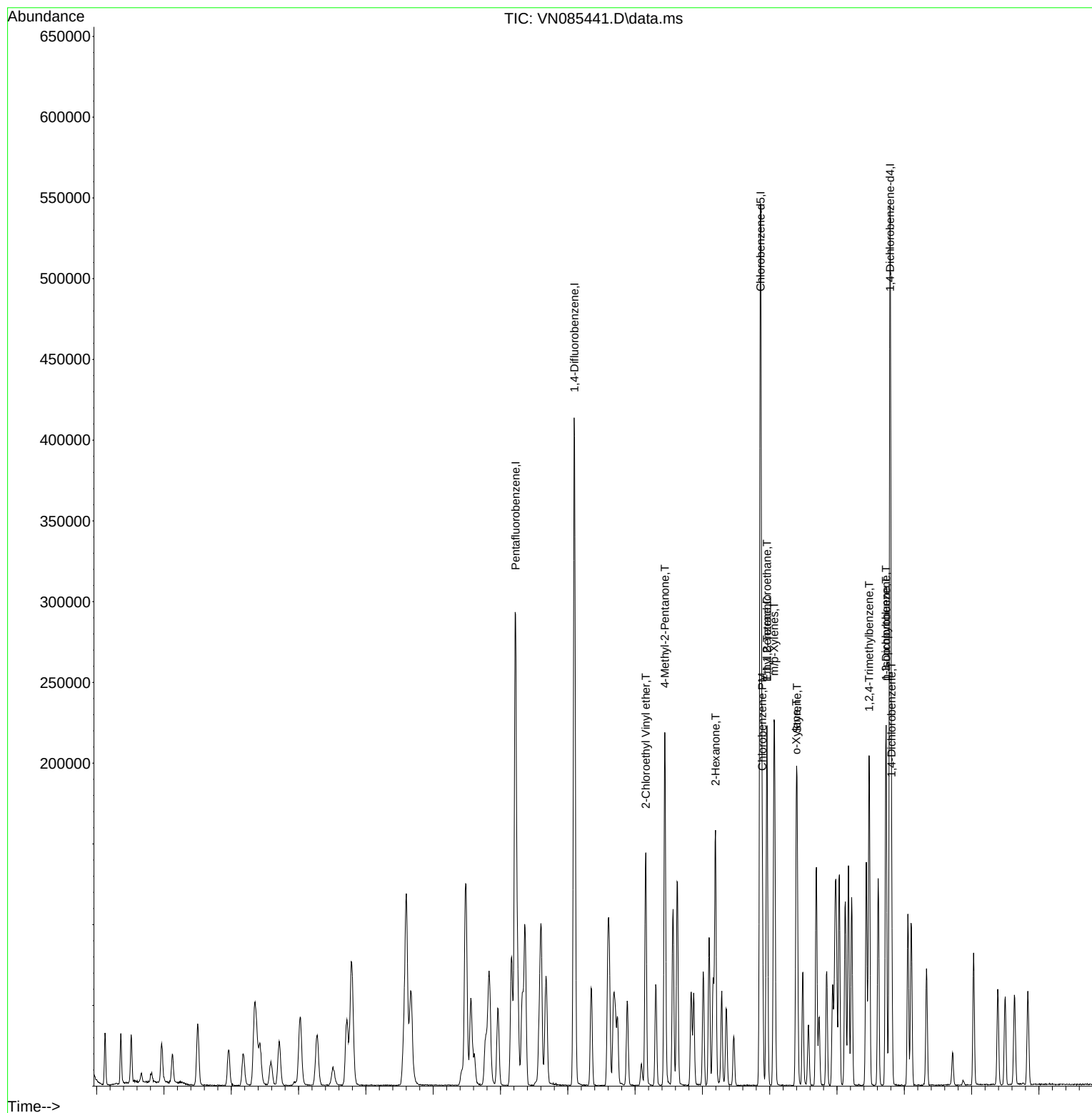
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085441.D  
Acq On : 14 Jan 2025 16:07  
Operator : JC\MD  
Sample : VSTDIC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

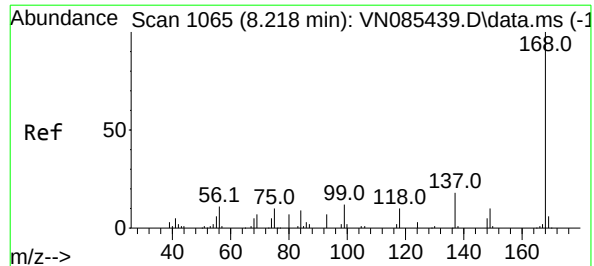
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

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





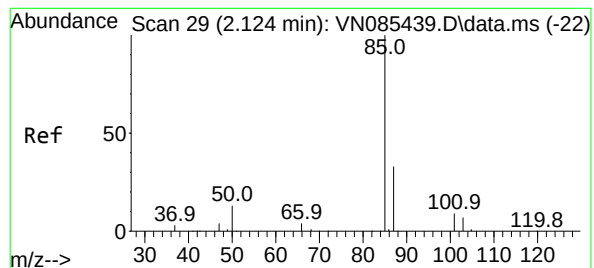
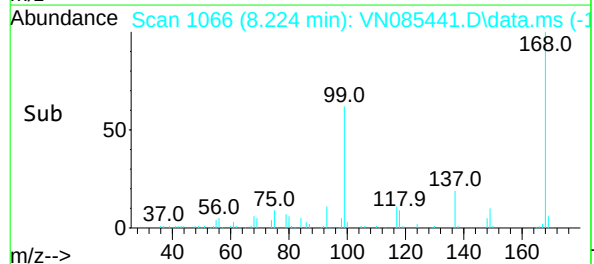
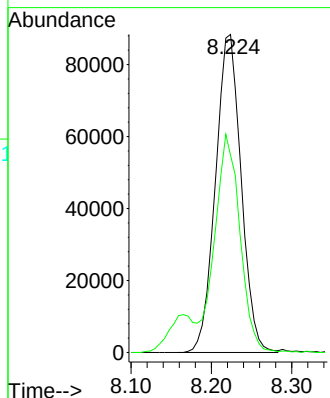
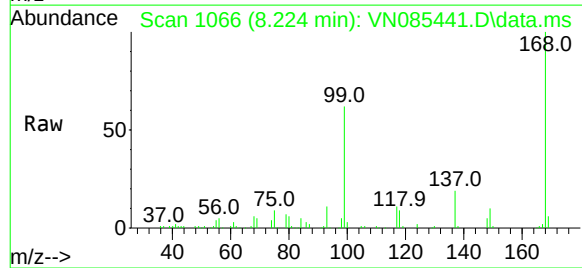
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

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

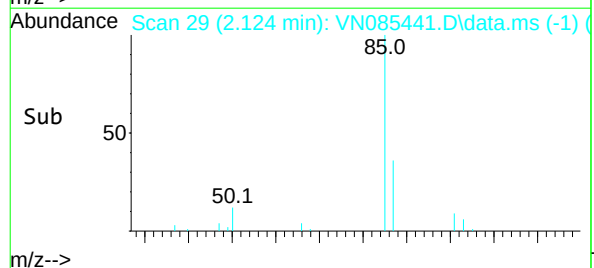
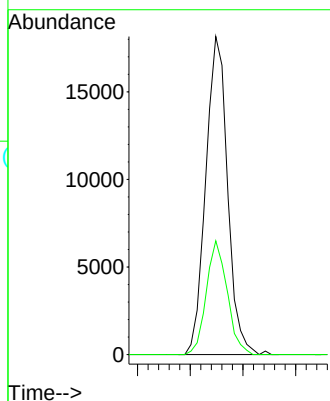
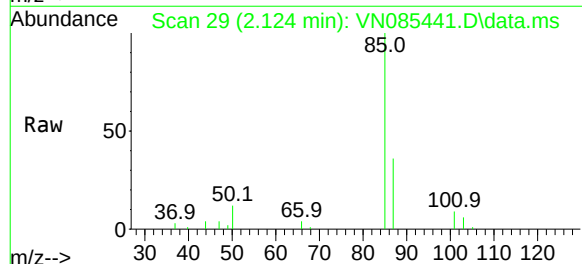
Manual Integrations  
APPROVED

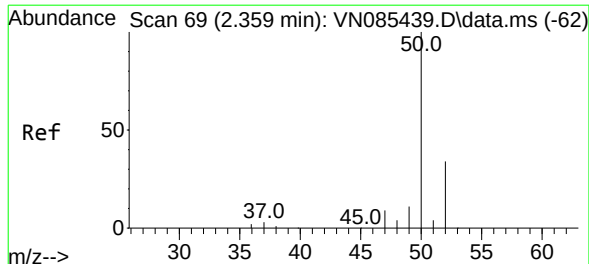
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

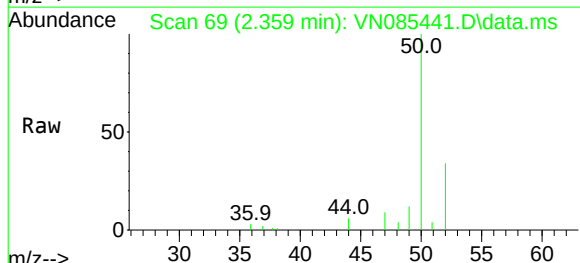
Tgt Ion: 85 Resp: 26124  
Ion Ratio Lower Upper  
85 100  
87 35.8 16.7 50.1





#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

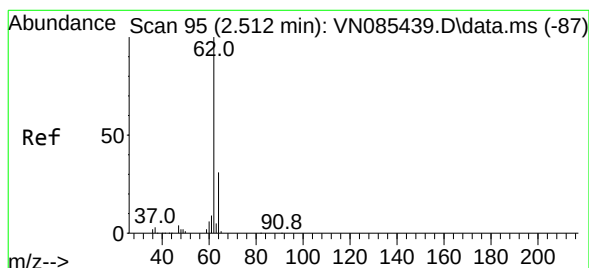
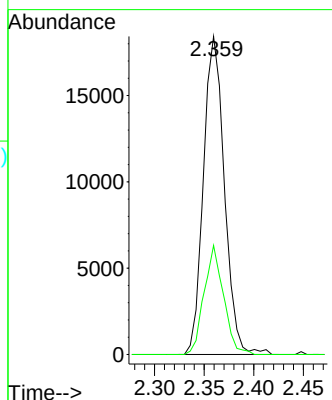
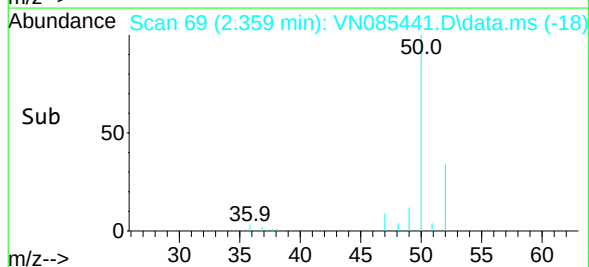
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010



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

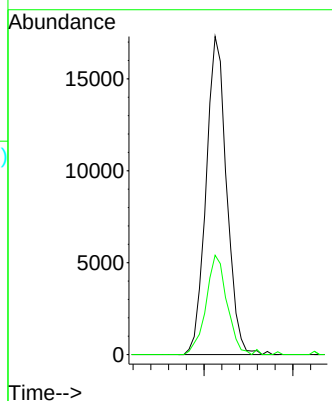
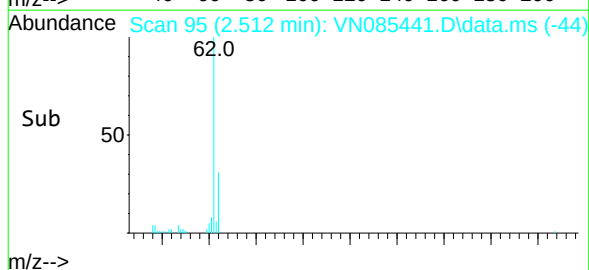
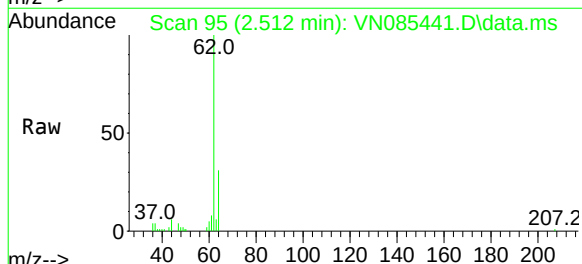
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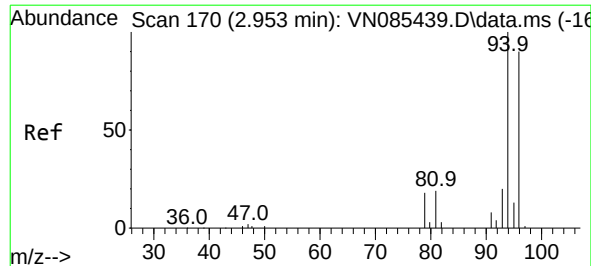
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

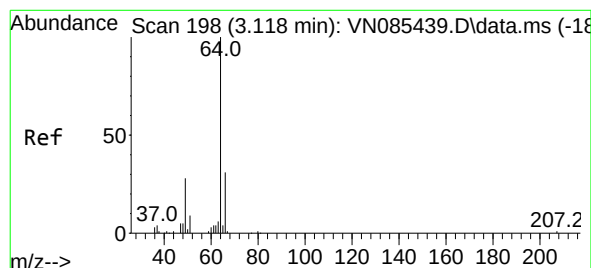
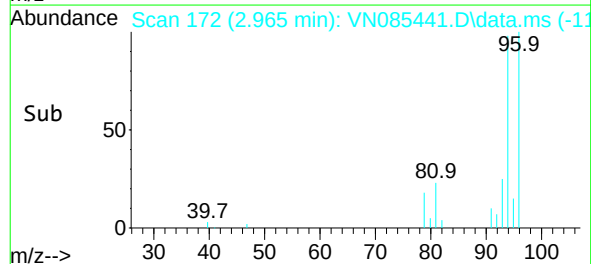
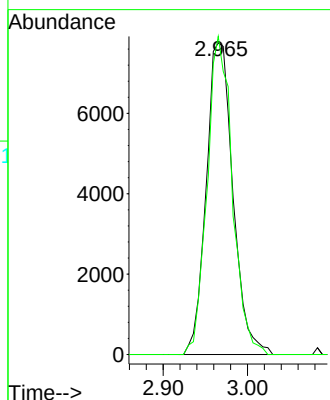
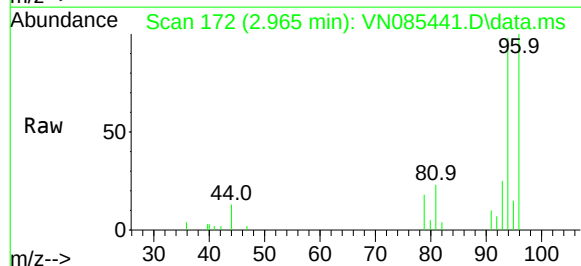
96 102.1 71.8 107.6

Manual Integrations

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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

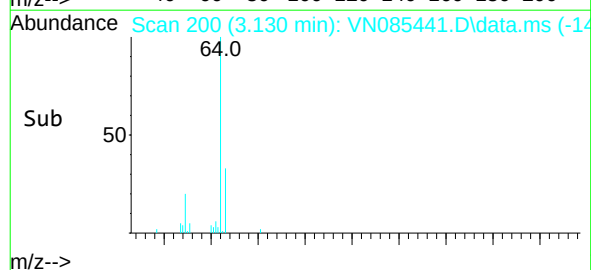
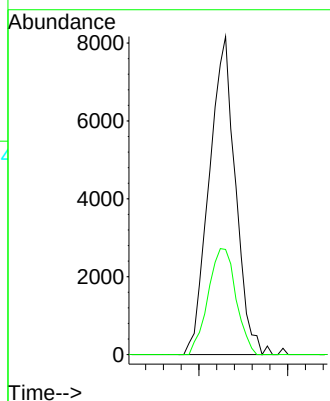
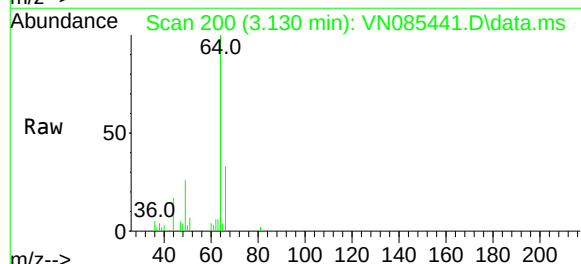
Acq: 14 Jan 2025 16:07

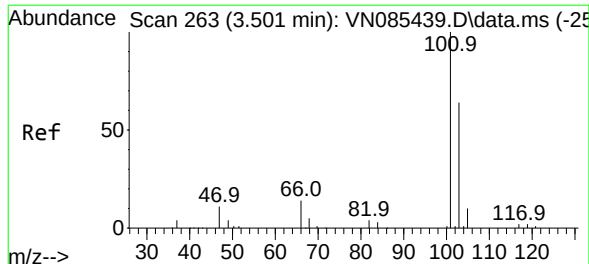
Tgt Ion: 64 Resp: 16791

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

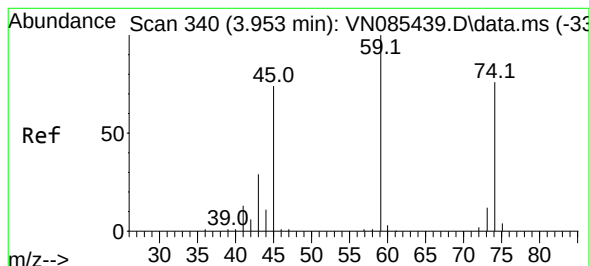
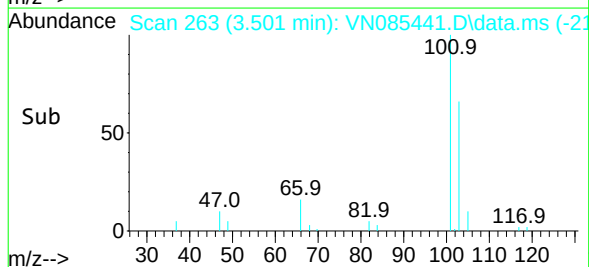
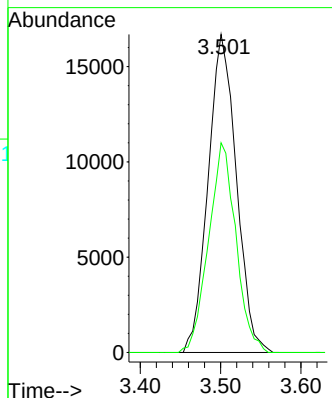
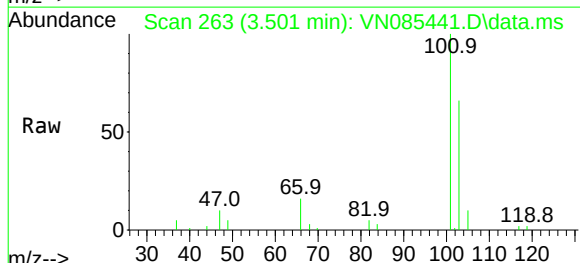
103 65.9 51.4 77.2

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

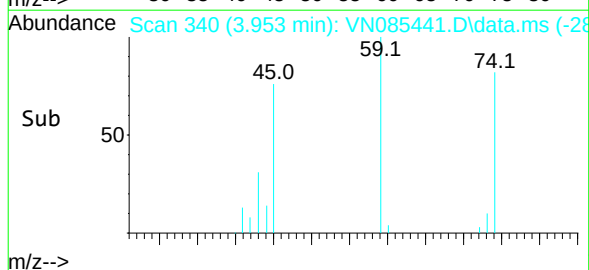
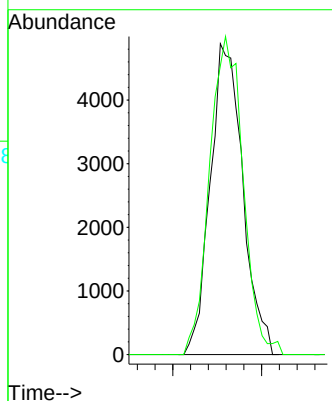
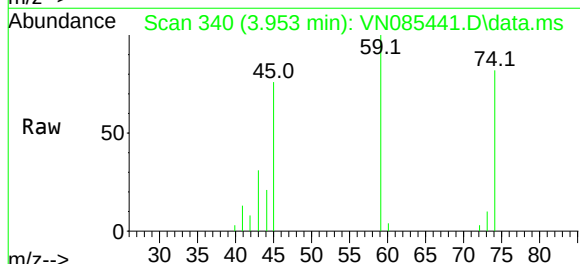
Acq: 14 Jan 2025 16:07

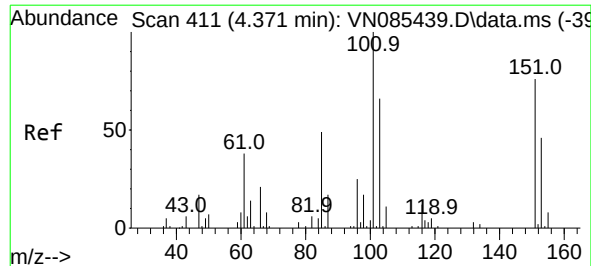
Tgt Ion: 74 Resp: 12415

Ion Ratio Lower Upper

74 100

45 105.3 49.7 149.1





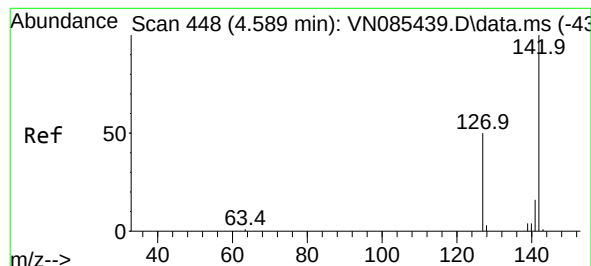
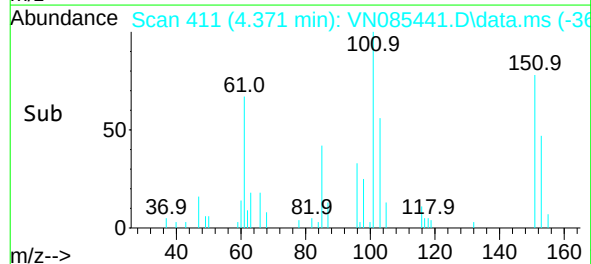
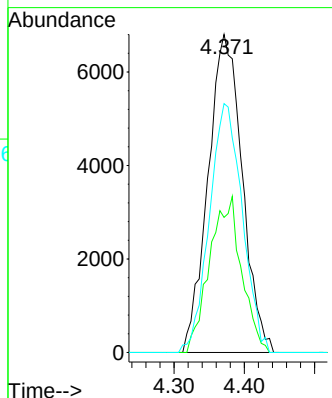
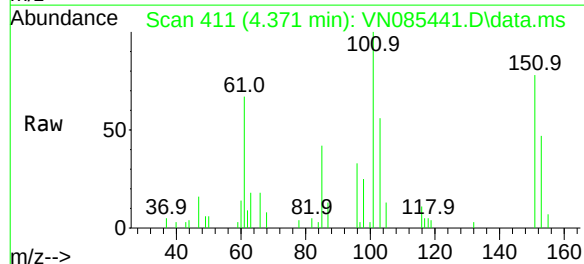
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.742 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

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

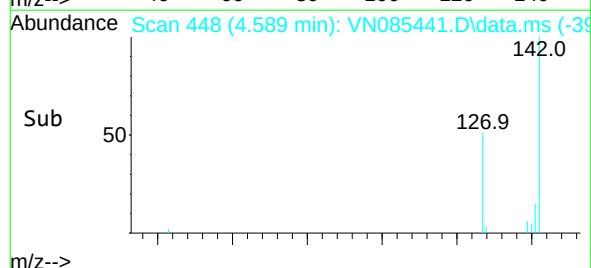
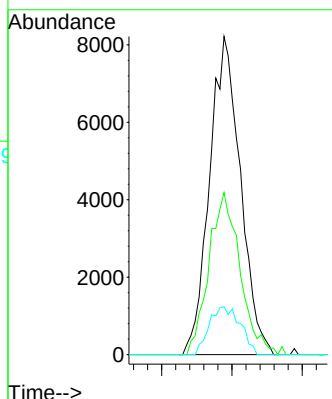
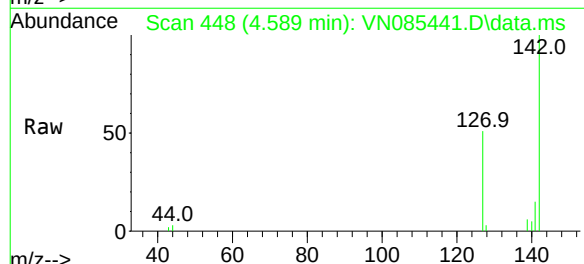
Manual Integrations  
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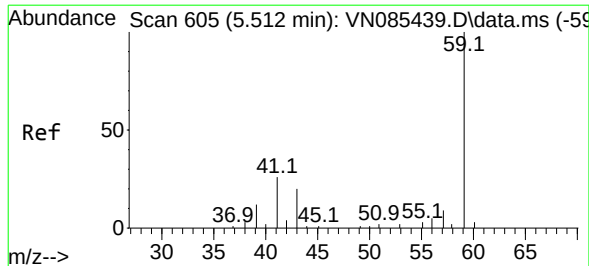
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

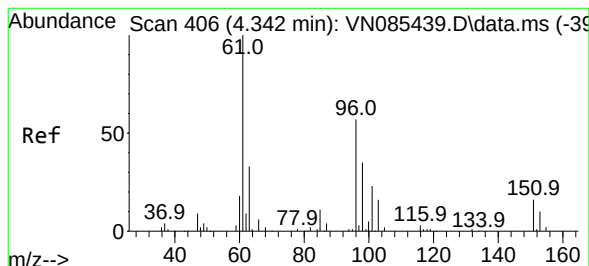
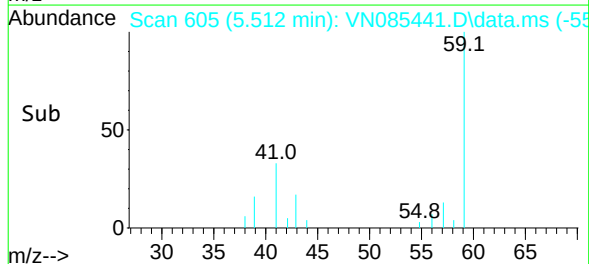
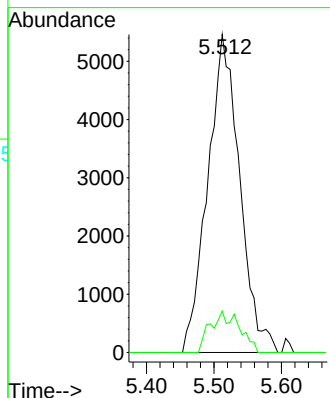
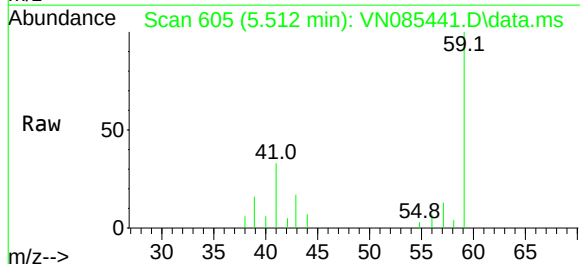
57 11.9 8.6 13.0

Manual Integrations

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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

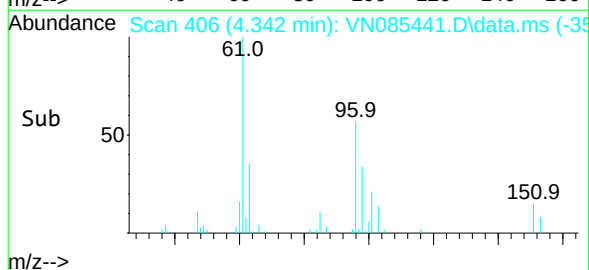
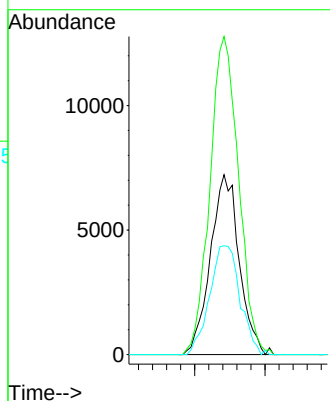
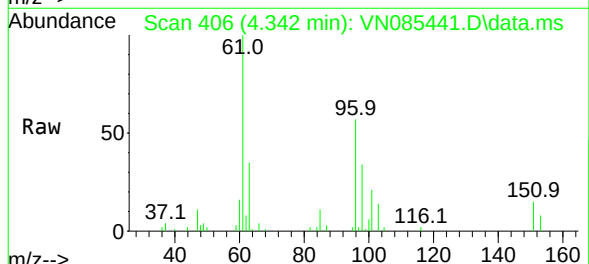
Tgt Ion: 96 Resp: 20615

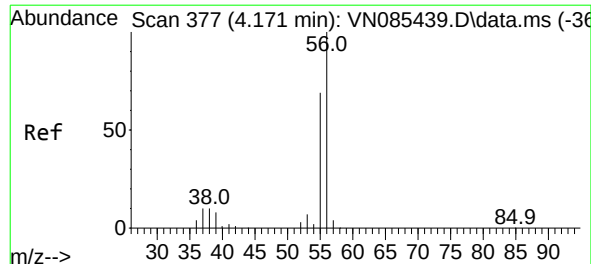
Ion Ratio Lower Upper

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

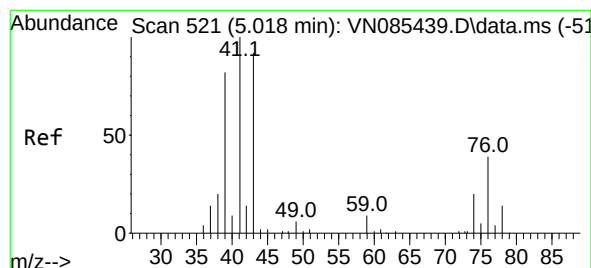
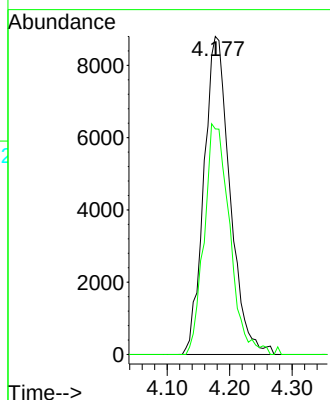
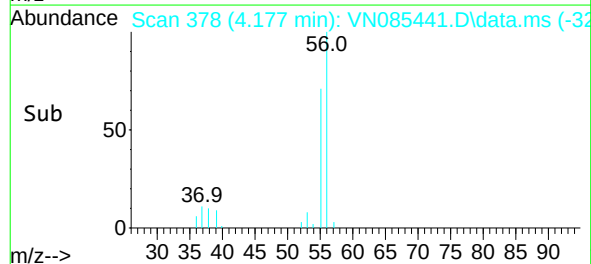
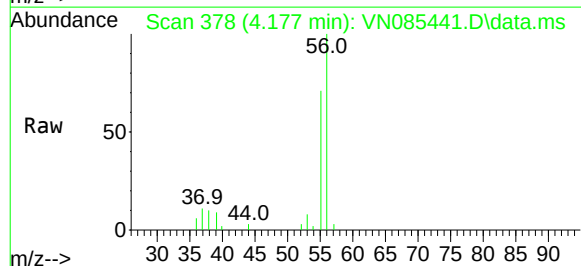
55 70.9 56.3 84.5

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

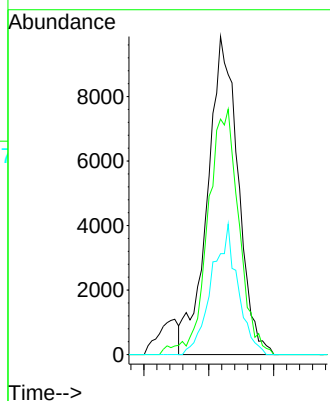
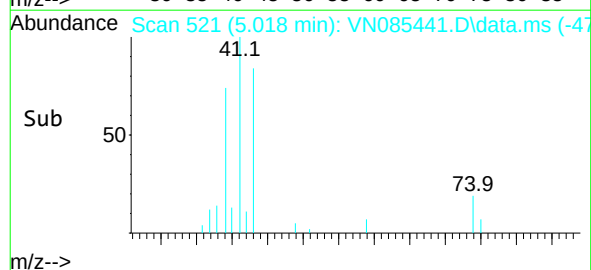
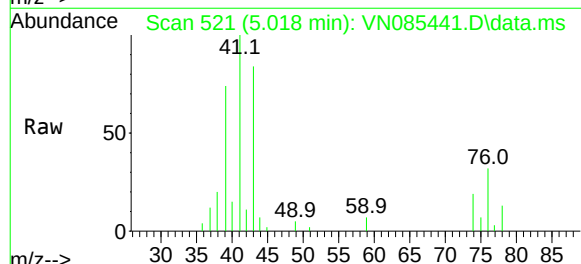
Tgt Ion: 41 Resp: 32240

Ion Ratio Lower Upper

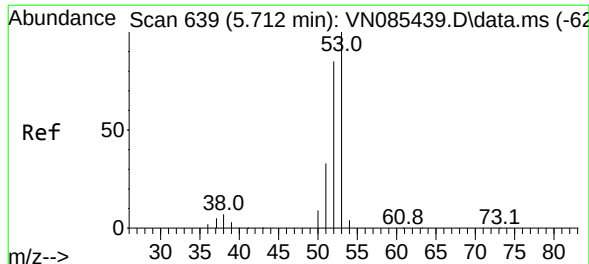
41 100

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

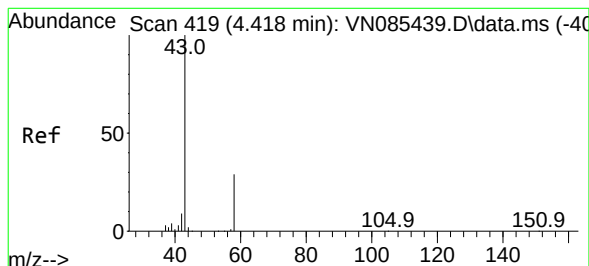
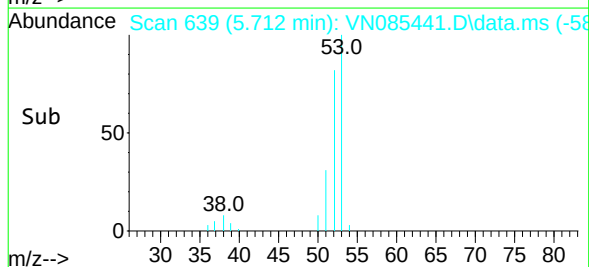
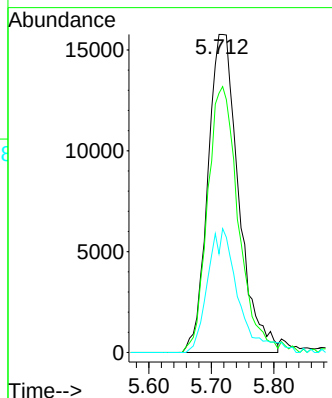
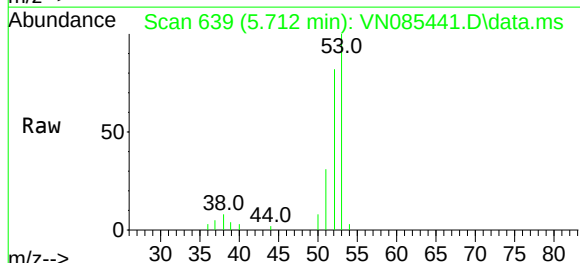
ClientSampleId :

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  |

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



#16

Acetone

Concen: 47.446 ug/l

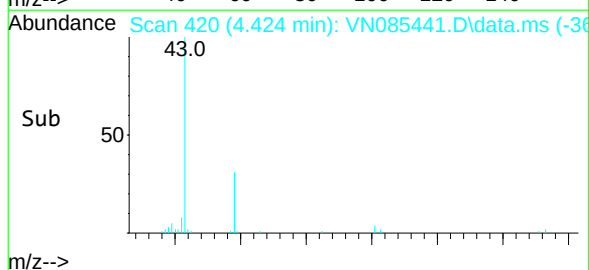
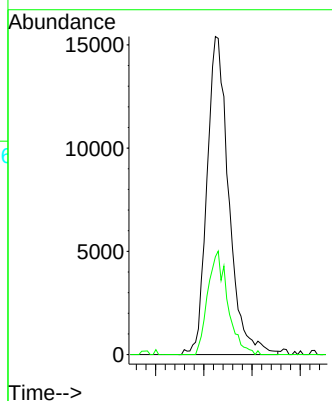
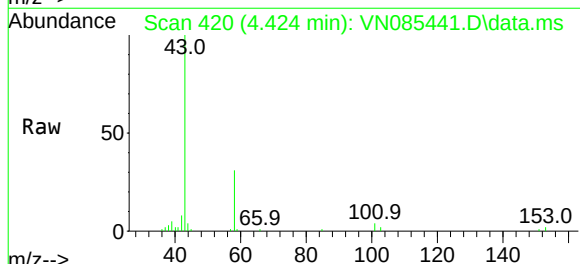
RT: 4.424 min Scan# 420

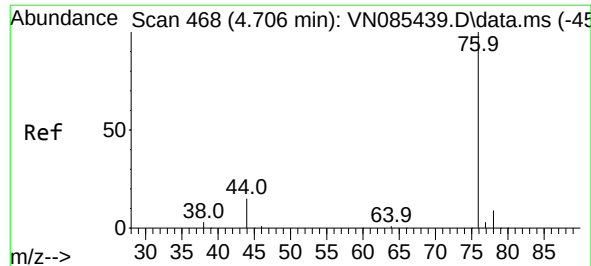
Delta R.T. 0.006 min

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 :

VSTDIC010

Tgt Ion: 76 Resp: 60201

Ion Ratio Lower Upper

76 100

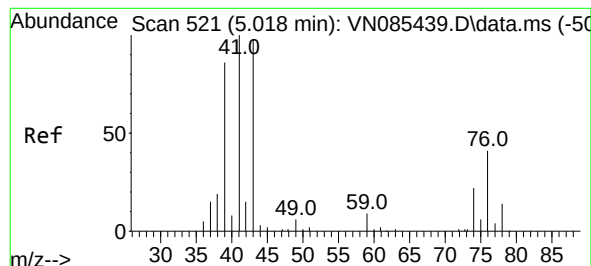
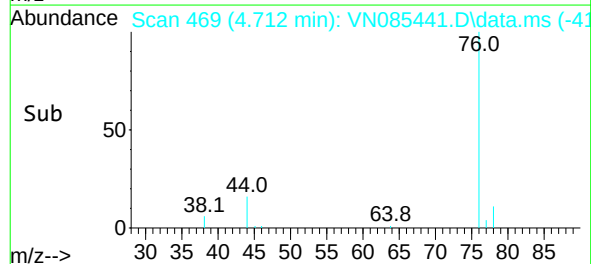
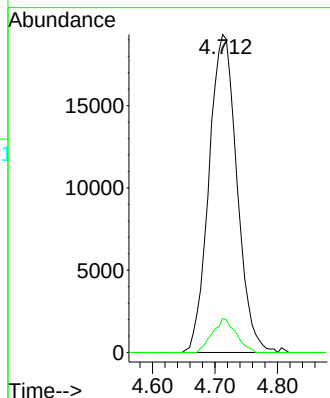
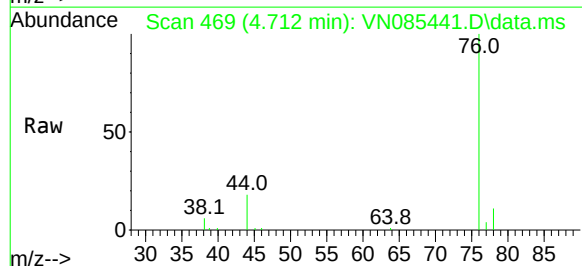
78 10.7 6.9 10.3#

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

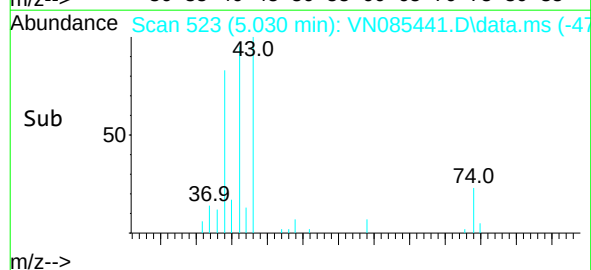
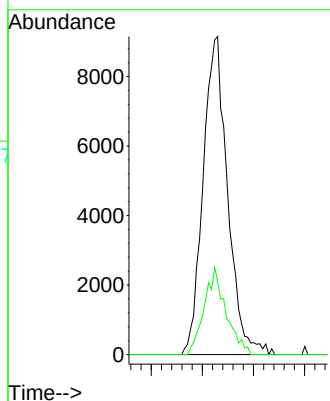
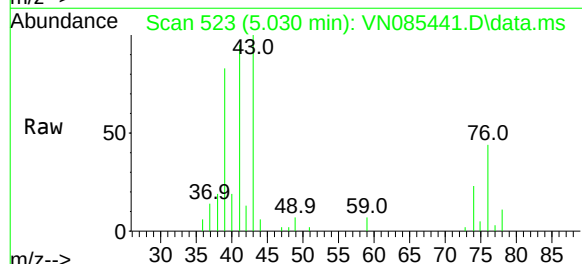
Acq: 14 Jan 2025 16:07

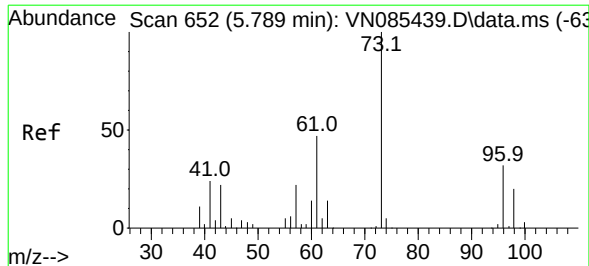
Tgt Ion: 43 Resp: 30500

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

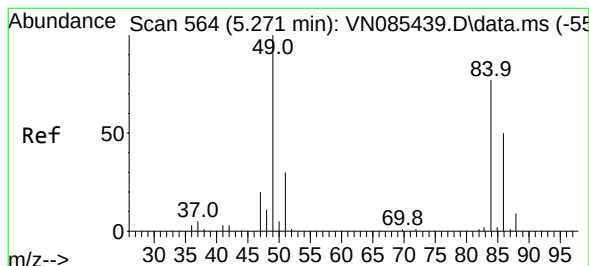
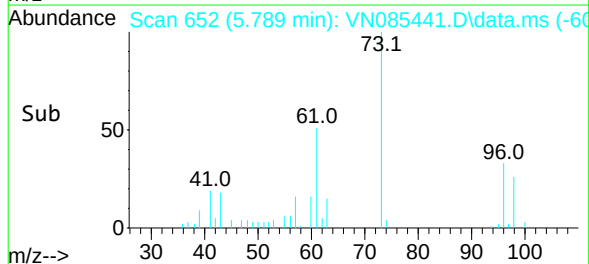
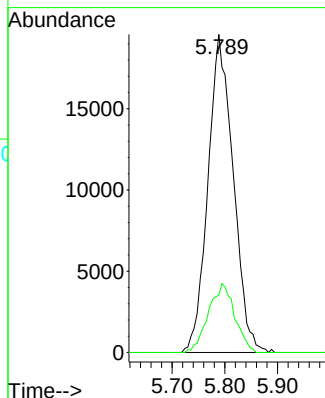
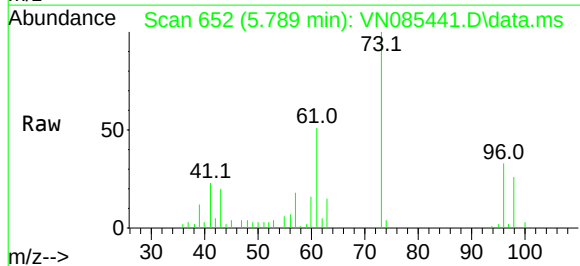
57 18.1 17.8 26.8

Manual Integrations

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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

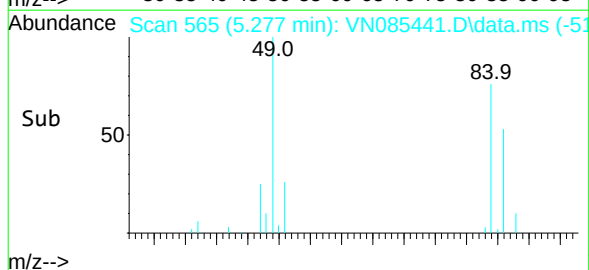
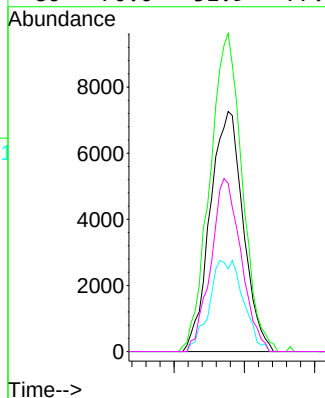
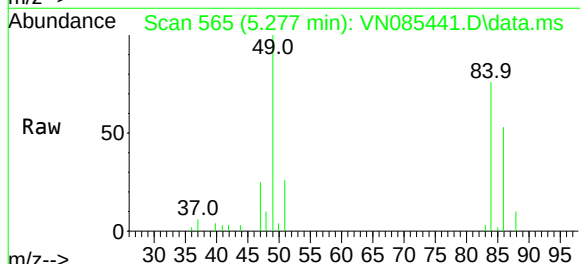
Ion Ratio Lower Upper

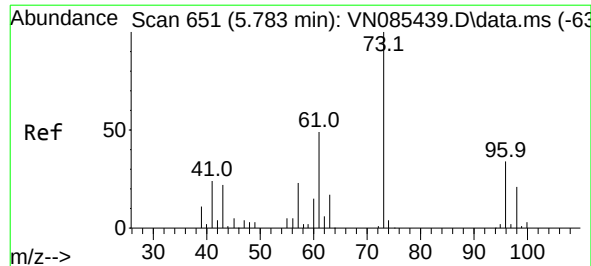
84 100

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

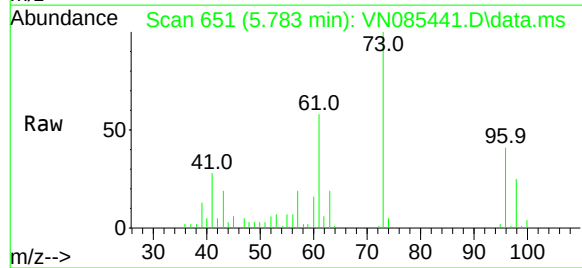
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

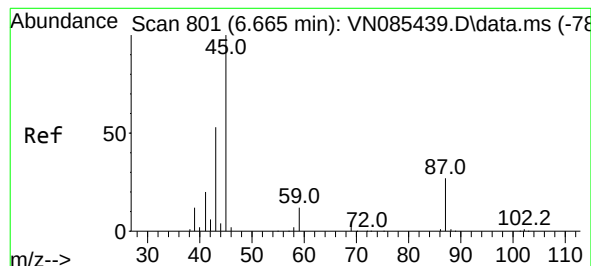
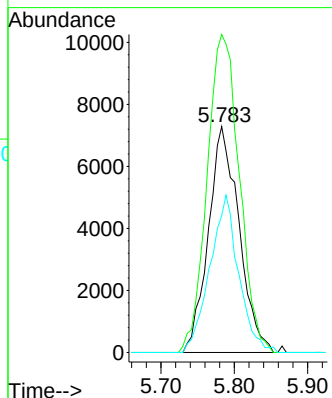
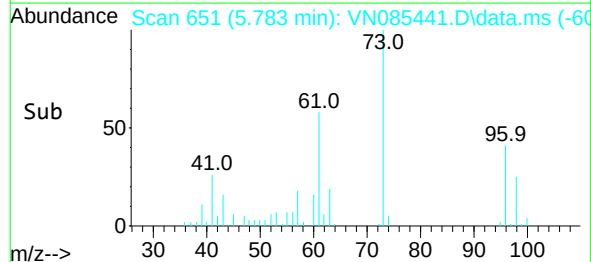
VSTDIC010



| 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

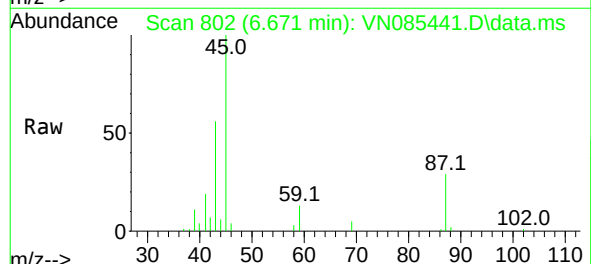
Concen: 9.490 ug/l

RT: 6.671 min Scan# 802

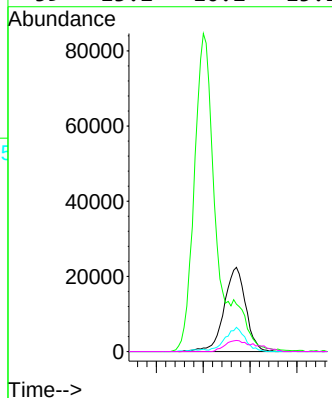
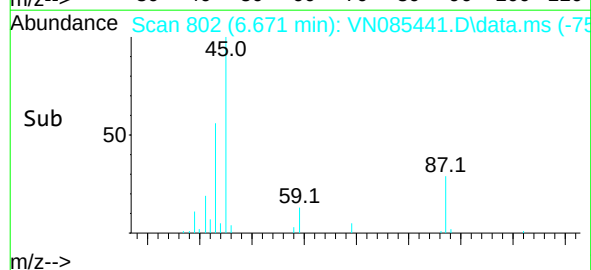
Delta R.T. 0.006 min

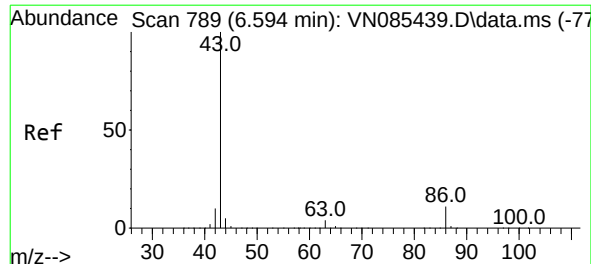
Lab File: VN085441.D

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

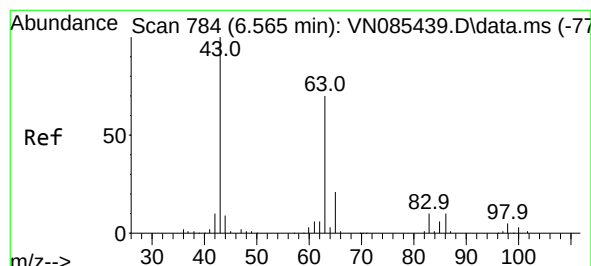
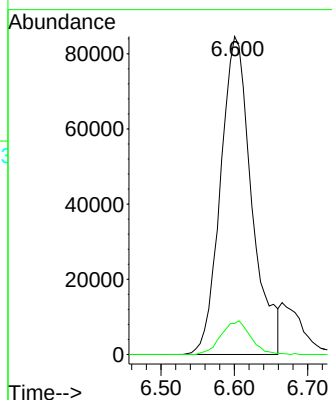
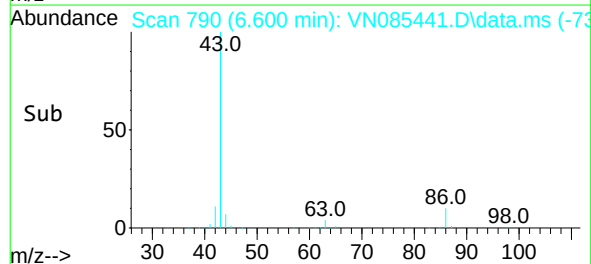
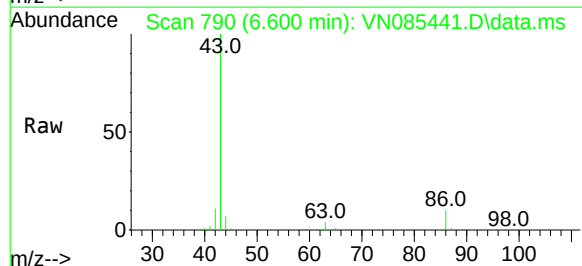
86 9.8 8.4 12.6

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

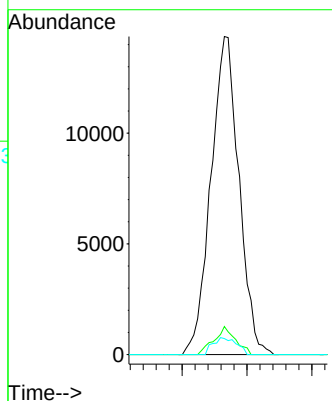
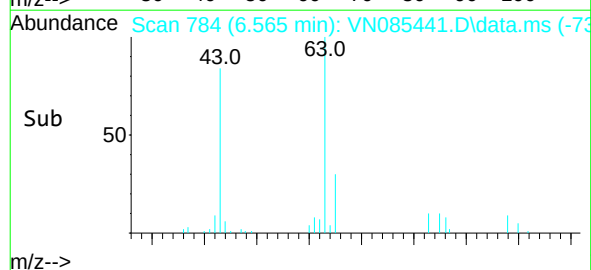
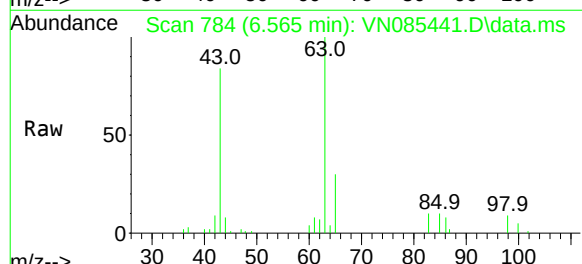
Tgt Ion: 63 Resp: 43099

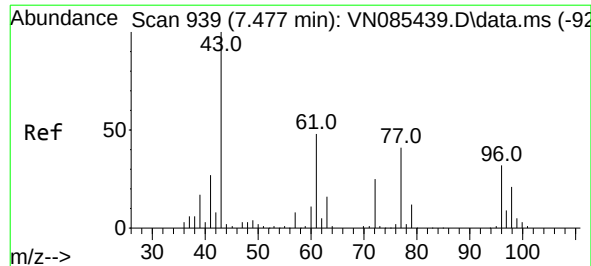
Ion Ratio Lower Upper

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# 93

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: 71191

Ion Ratio Lower Upper

43 100

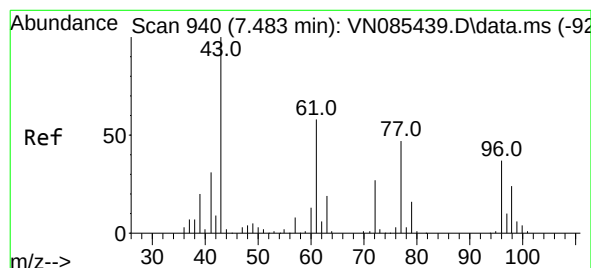
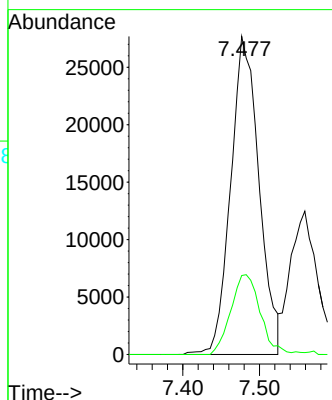
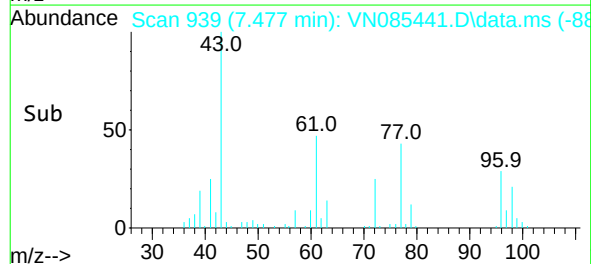
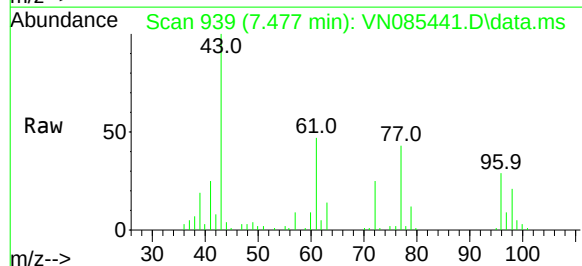
72 24.8 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 9.672 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085441.D

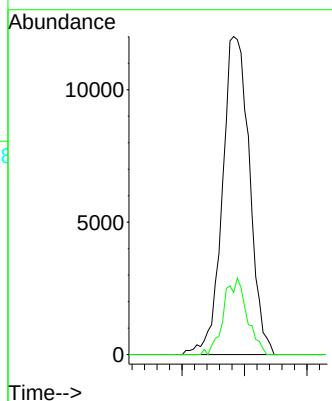
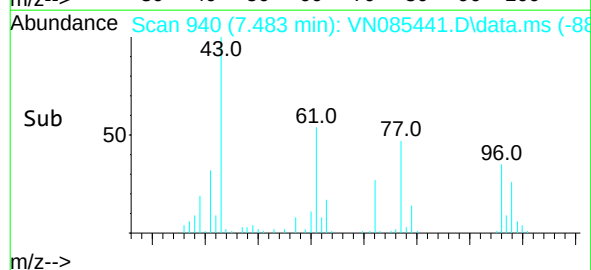
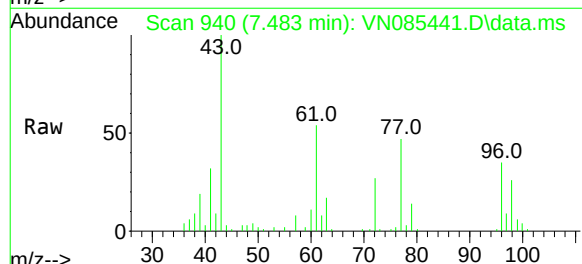
Acq: 14 Jan 2025 16:07

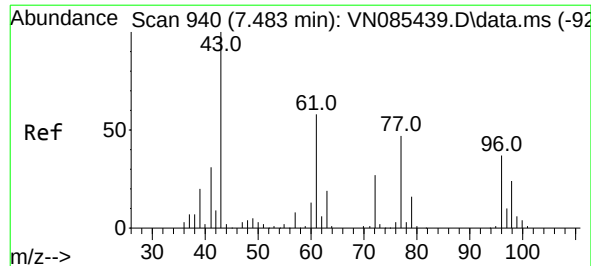
Tgt Ion: 77 Resp: 36105

Ion Ratio Lower Upper

77 100

97 20.8 10.7 32.1





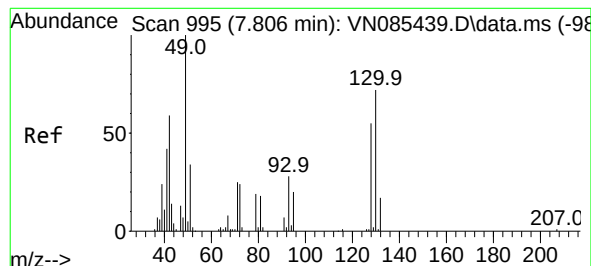
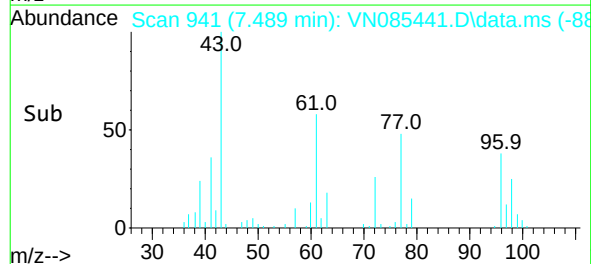
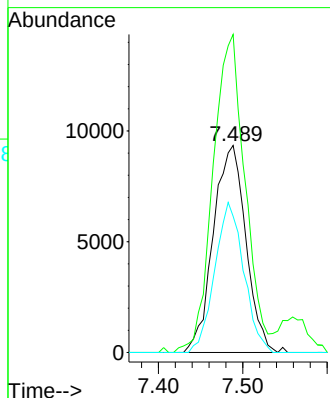
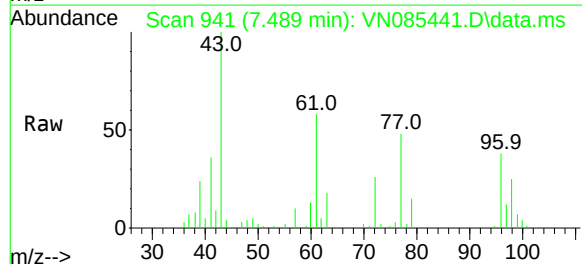
#27  
 cis-1,2-Dichloroethene  
 Concen: 9.466 ug/l  
 RT: 7.489 min Scan# 940  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 151.8 | 0.0   | 311.8 |
| 98      | 64.7  | 0.0   | 126.0 |

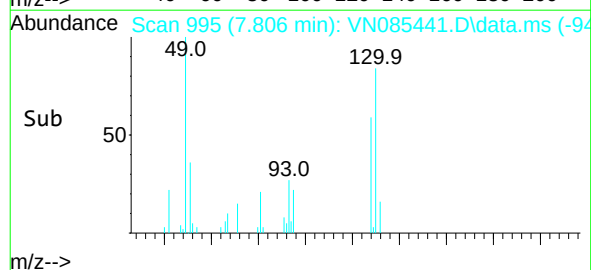
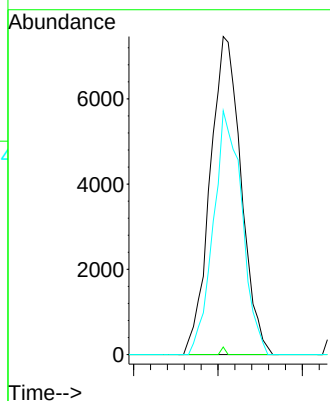
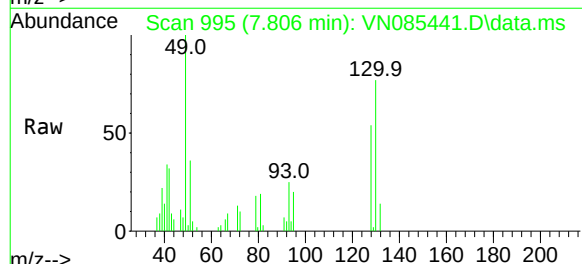
Manual Integrations  
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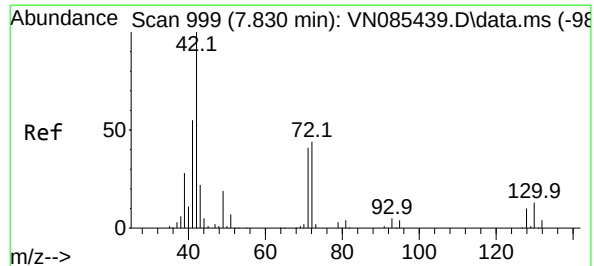
Reviewed By :John Carlone 01/15/2025  
 Supervised By :Mahesh Dadoda 01/15/2025



#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 | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 129     | 0.3   | 0.0   | 4.4   |
| 130     | 70.8  | 55.0  | 82.4  |





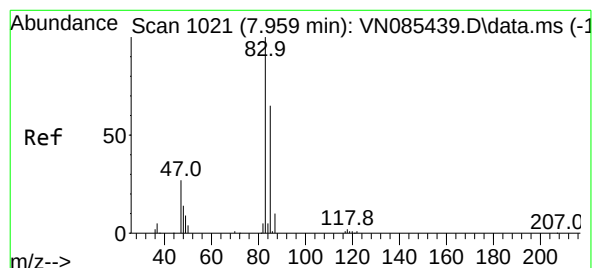
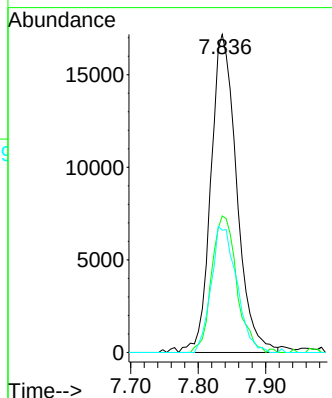
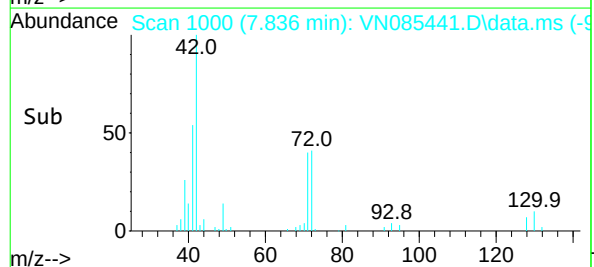
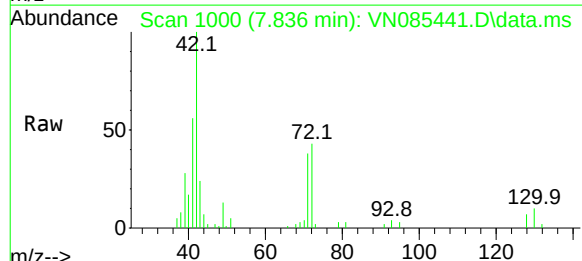
#29  
Tetrahydrofuran  
Concen: 47.881 ug/l  
RT: 7.836 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

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

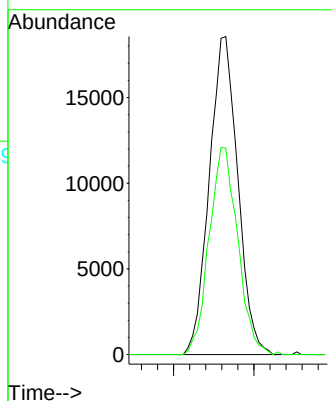
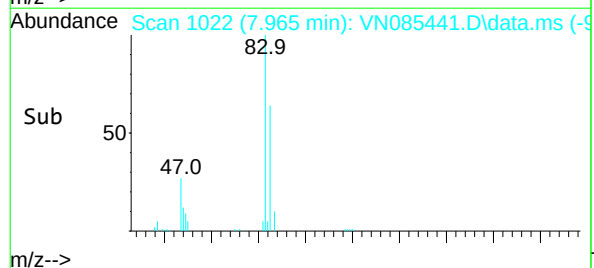
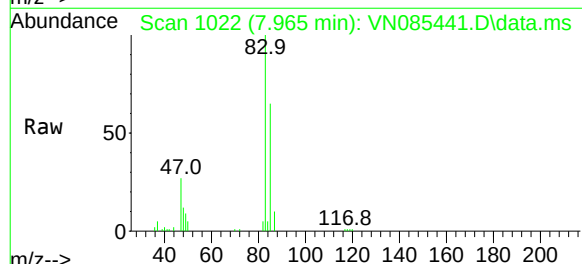
Manual Integrations  
APPROVED

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

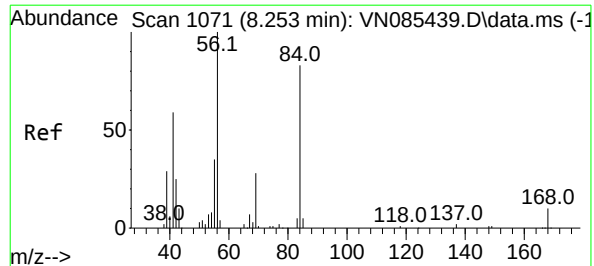


#30  
Chloroform  
Concen: 9.596 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

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

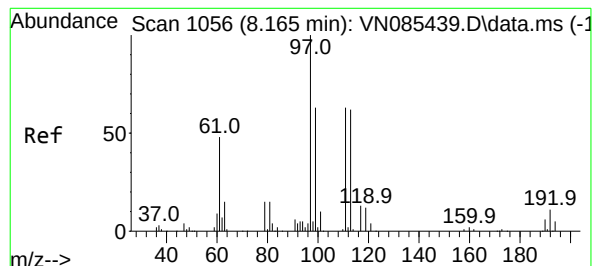
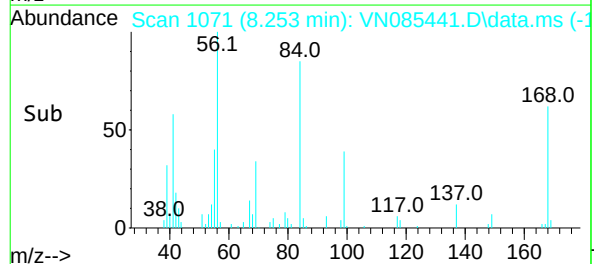
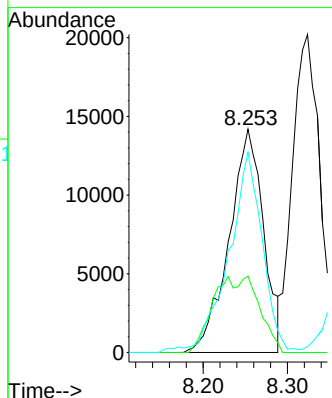
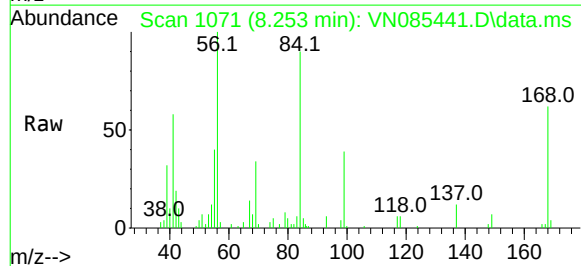
84 87.2 66.4 99.6

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

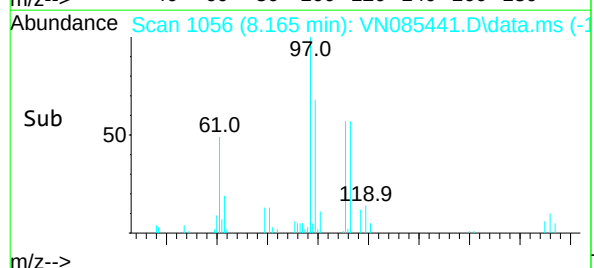
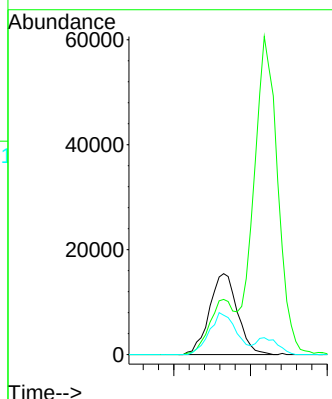
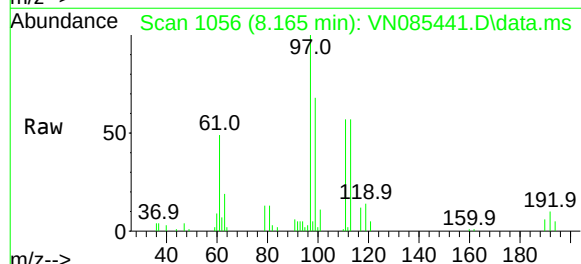
Tgt Ion: 97 Resp: 39170

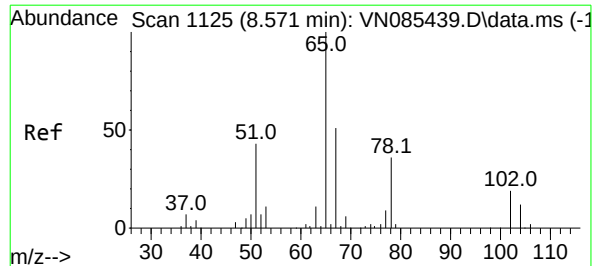
Ion Ratio Lower Upper

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# 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

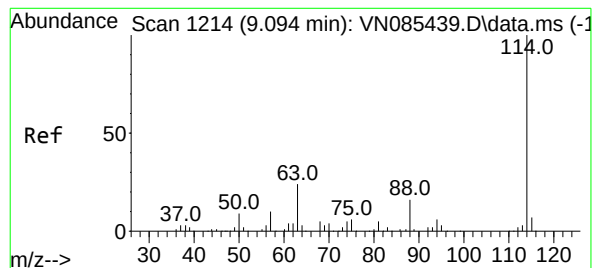
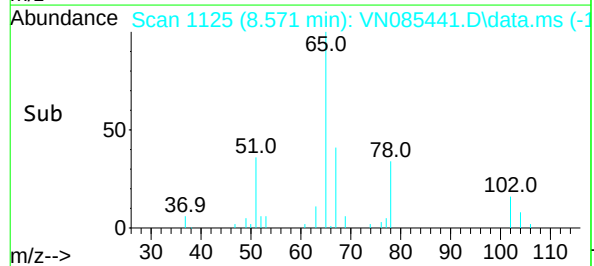
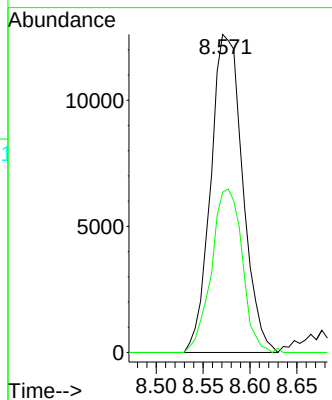
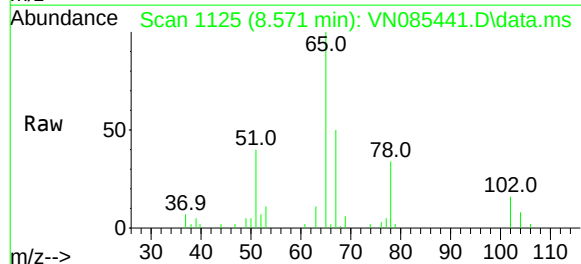
67 49.5 0.0 101.6

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

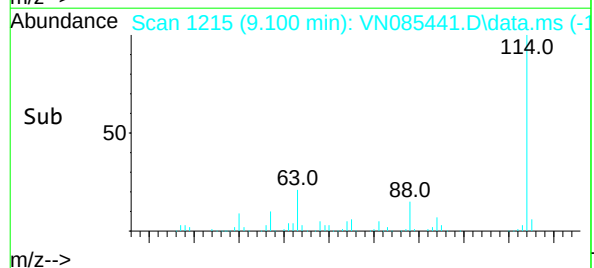
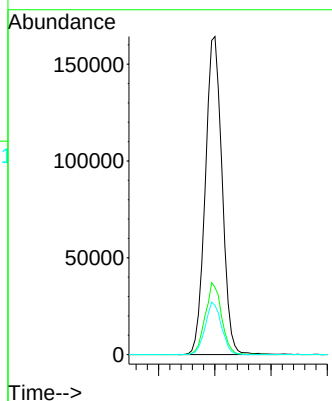
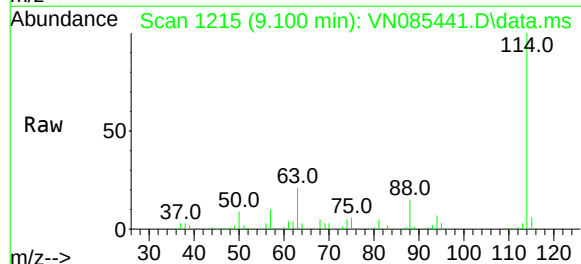
Tgt Ion:114 Resp: 340403

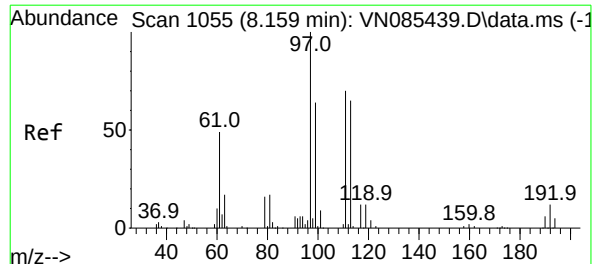
Ion Ratio Lower Upper

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# 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

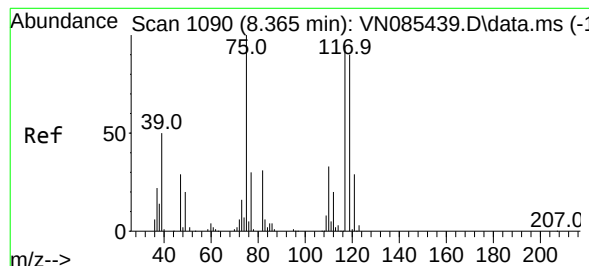
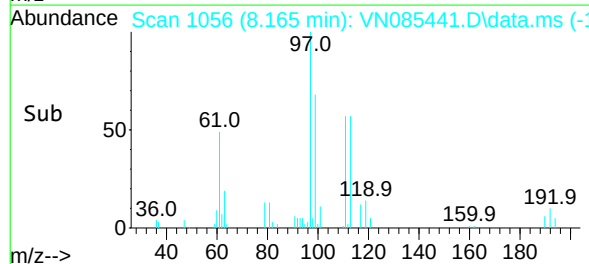
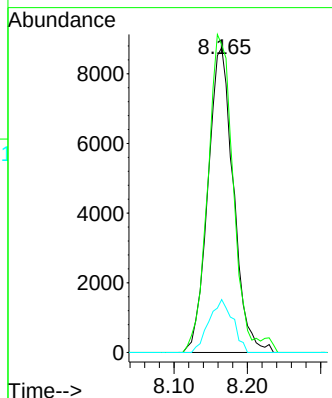
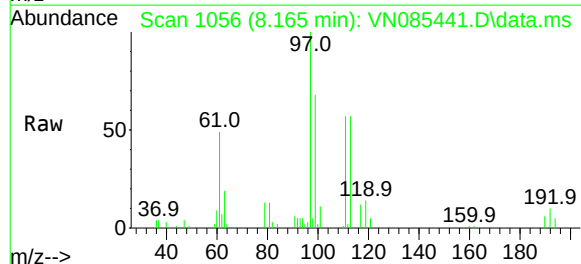
192 16.4 14.3 21.5

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

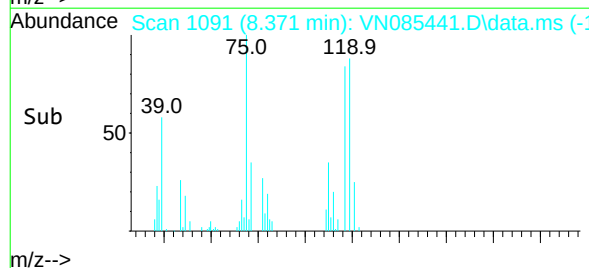
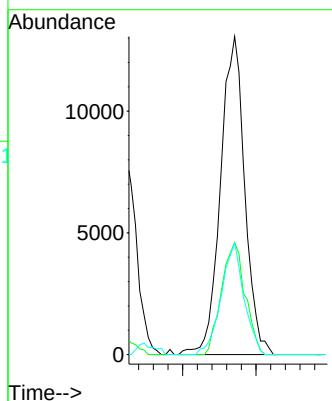
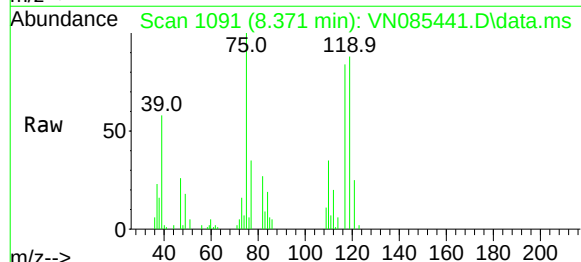
Tgt Ion: 75 Resp: 30015

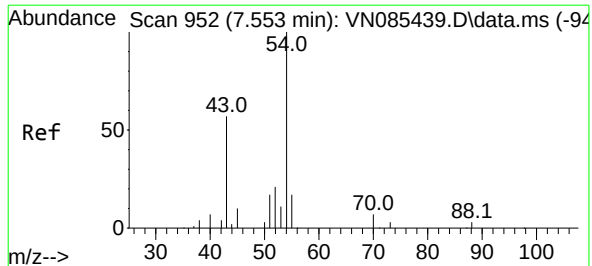
Ion Ratio Lower Upper

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# 952

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

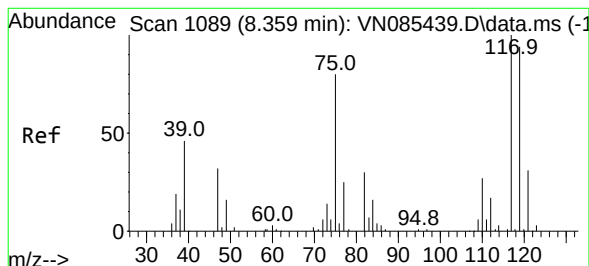
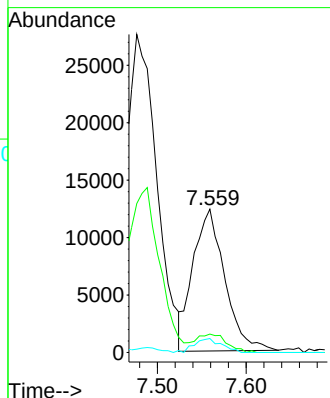
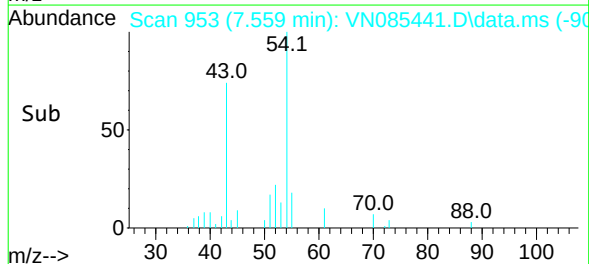
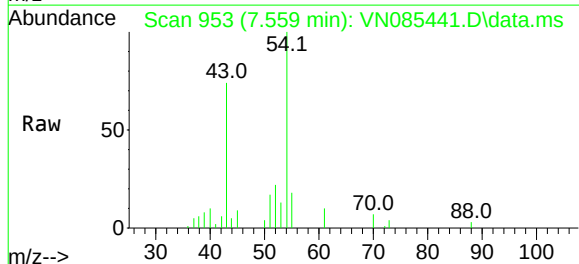
ClientSampleId :

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

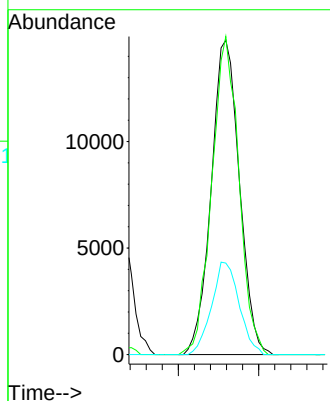
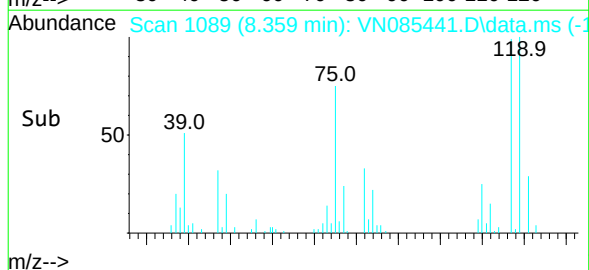
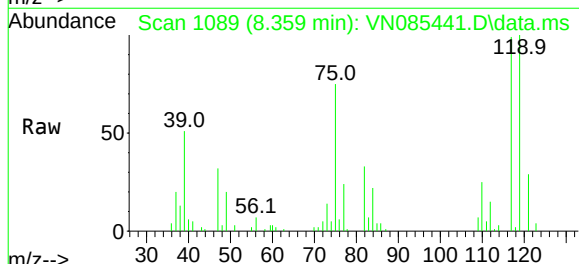
RT: 8.359 min Scan# 1089

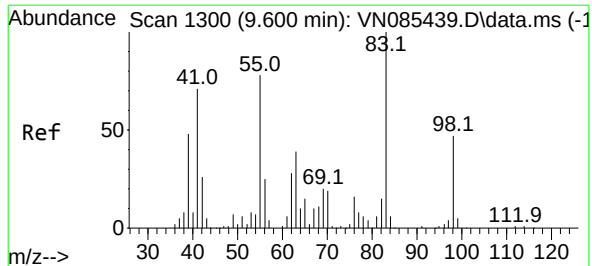
Delta R.T. 0.000 min

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

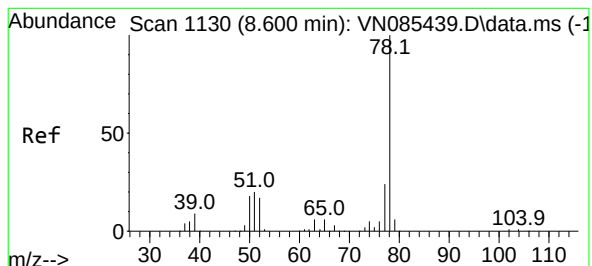
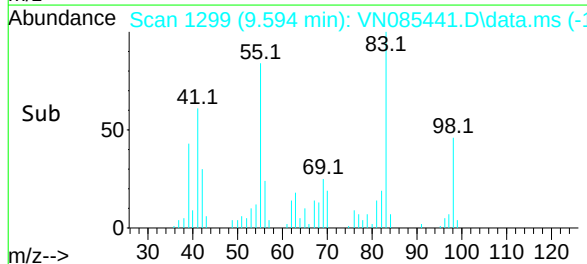
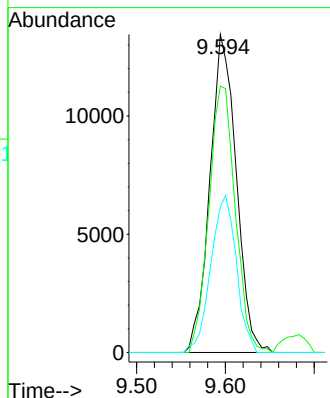
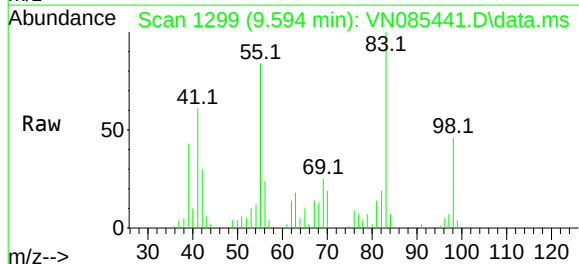
98 45.8 37.7 56.5

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

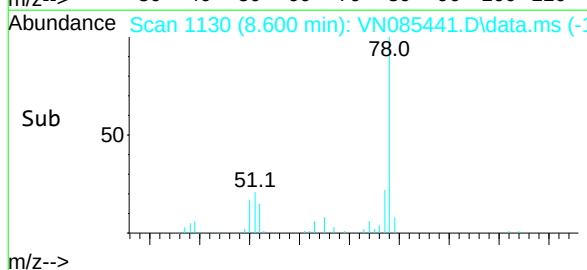
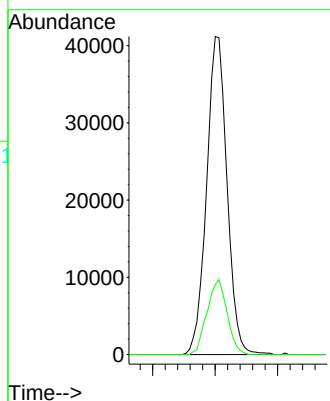
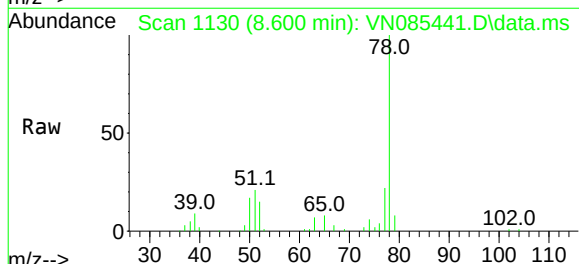
Acq: 14 Jan 2025 16:07

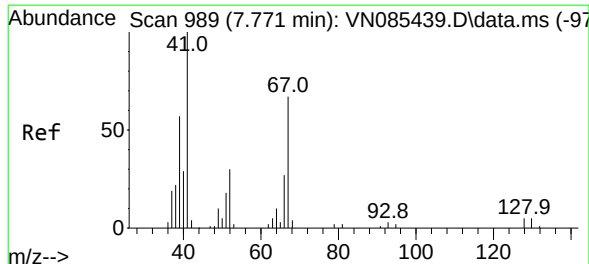
Tgt Ion: 78 Resp: 93680

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 :

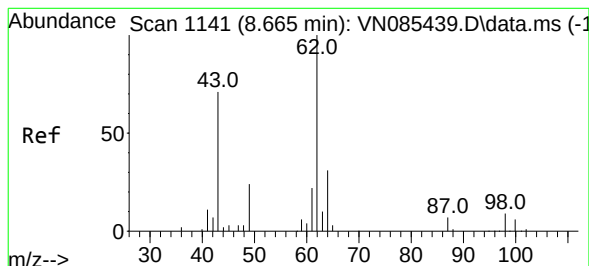
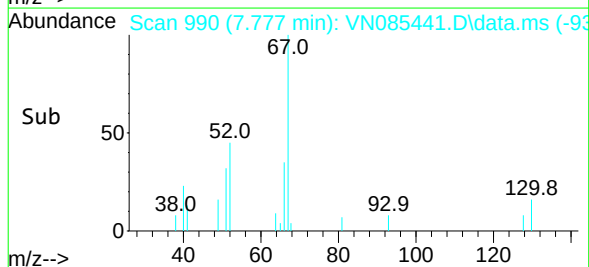
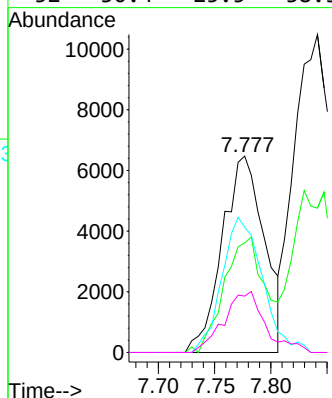
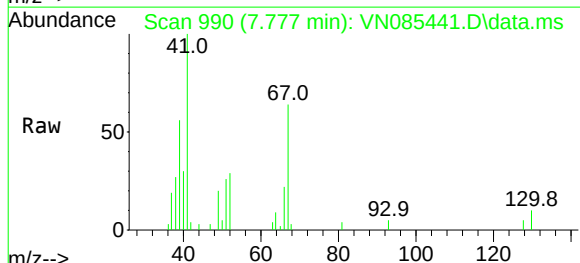
VSTDICC010

|          |       |       |       |
|----------|-------|-------|-------|
| 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

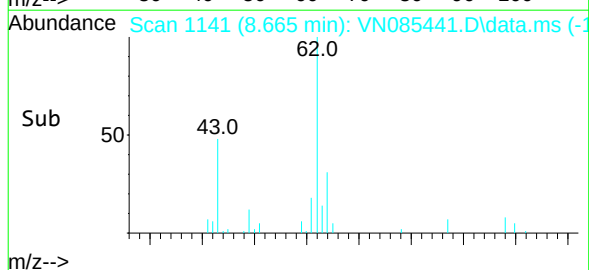
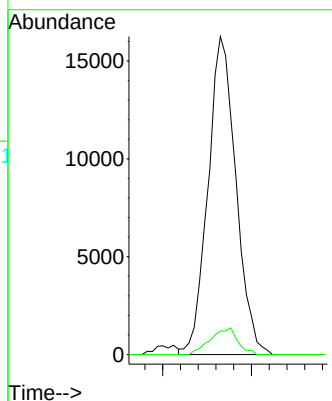
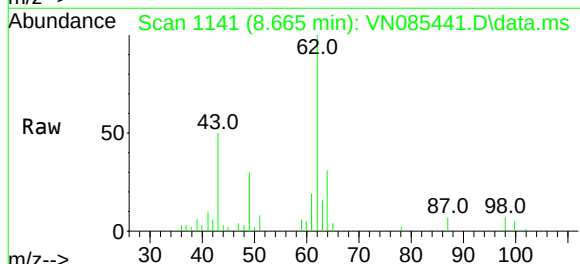
RT: 8.665 min Scan# 1141

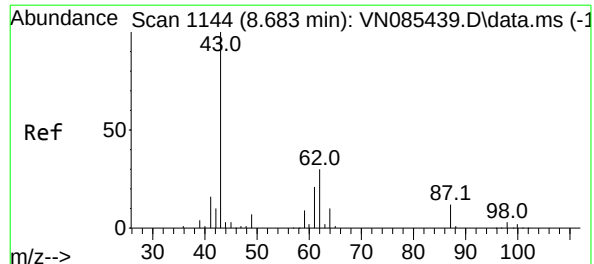
Delta R.T. 0.000 min

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

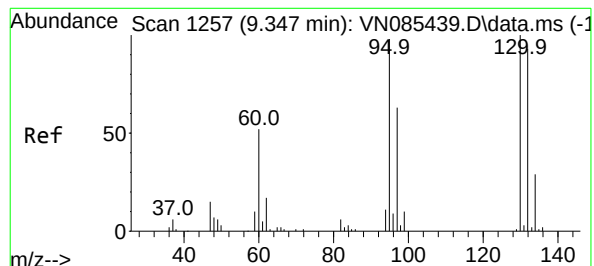
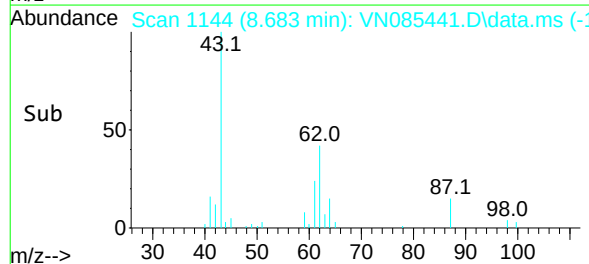
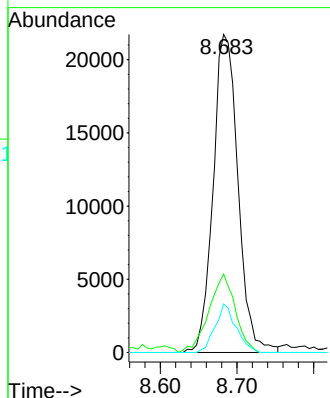
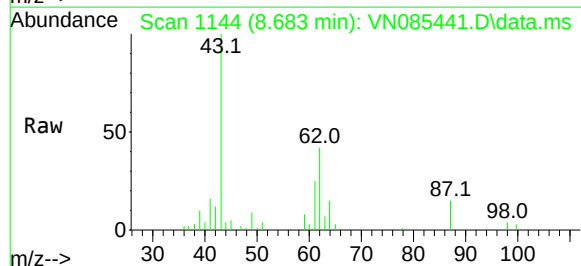
87 12.8 9.8 14.8

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

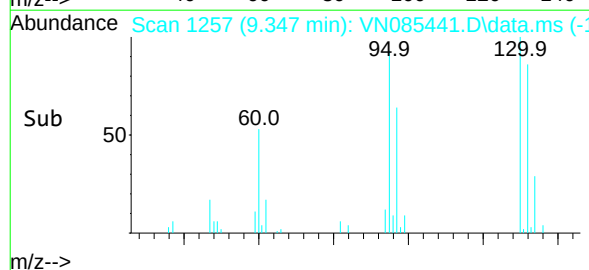
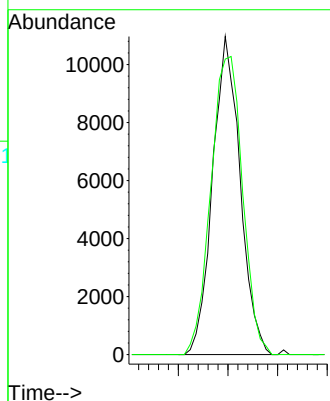
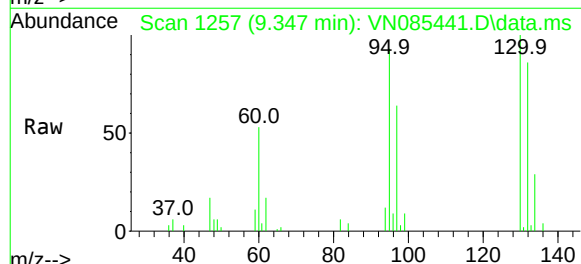
Acq: 14 Jan 2025 16:07

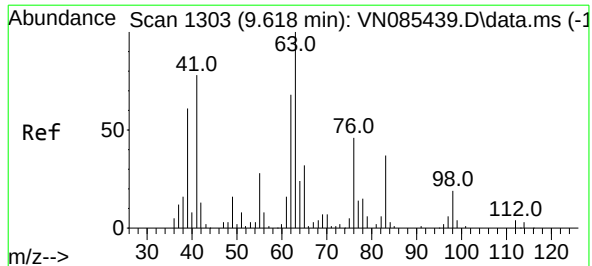
Tgt Ion:130 Resp: 21113

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

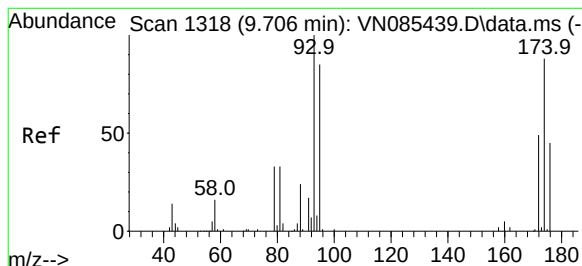
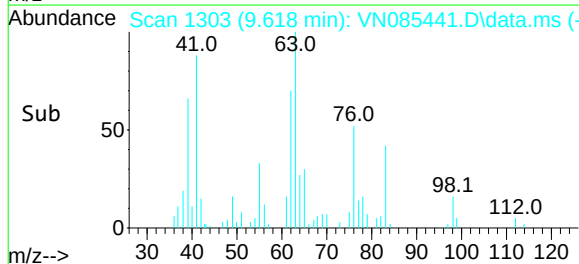
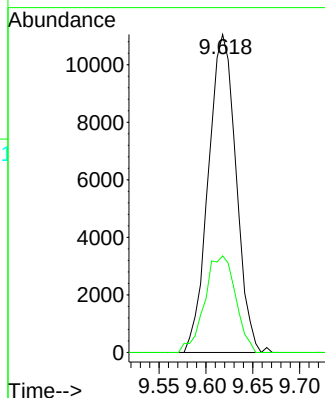
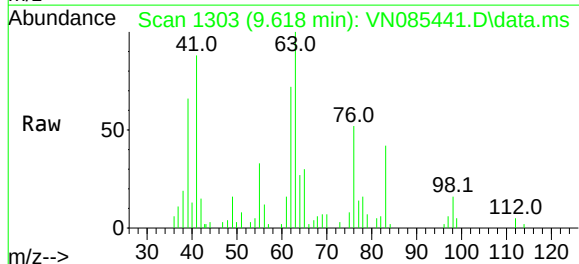
65 30.4 25.6 38.4

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

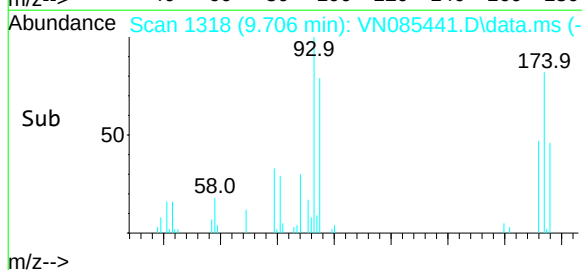
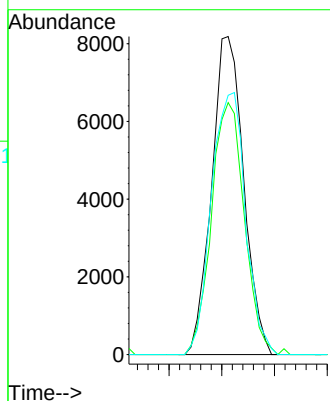
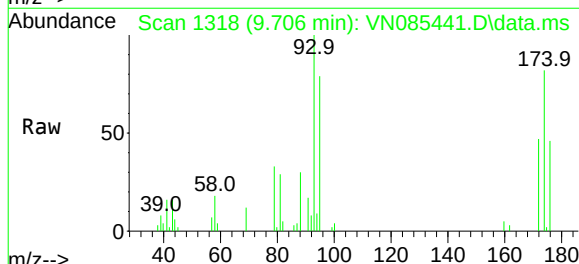
Tgt Ion: 93 Resp: 17260

Ion Ratio Lower Upper

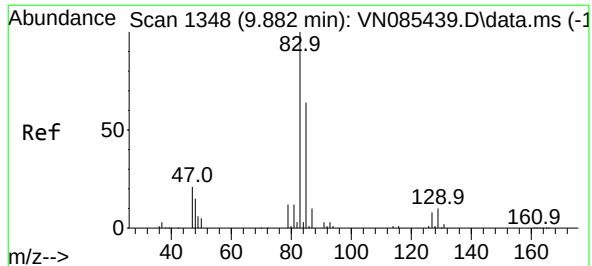
93 100

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 :

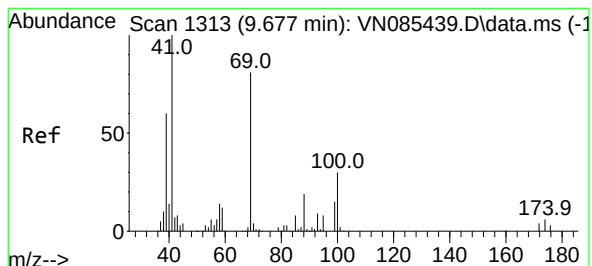
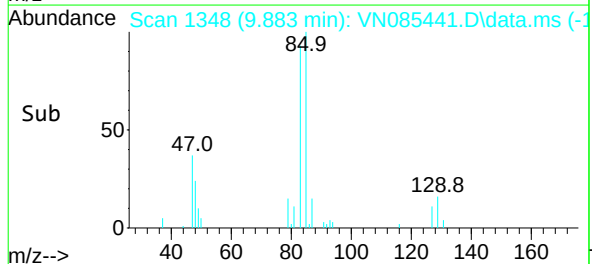
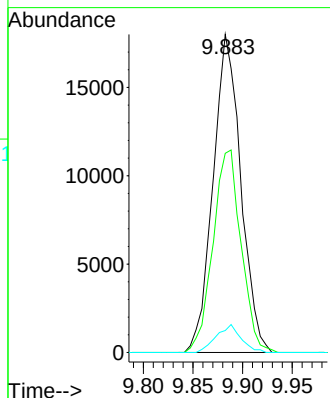
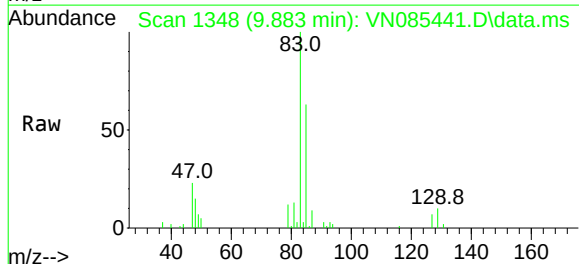
VSTDIC010

|          |       |       |       |
|----------|-------|-------|-------|
| 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

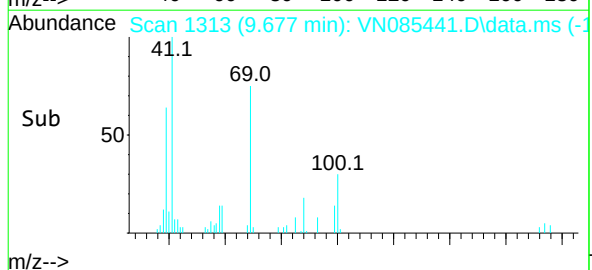
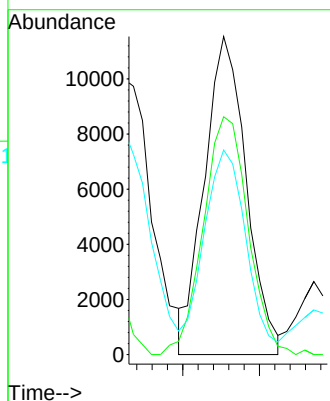
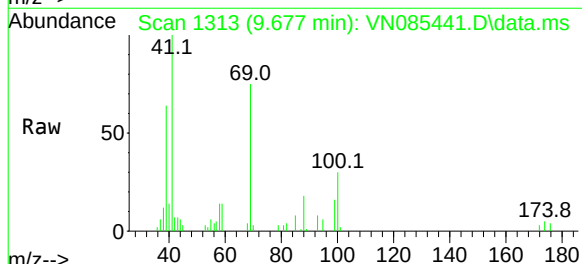
RT: 9.677 min Scan# 1313

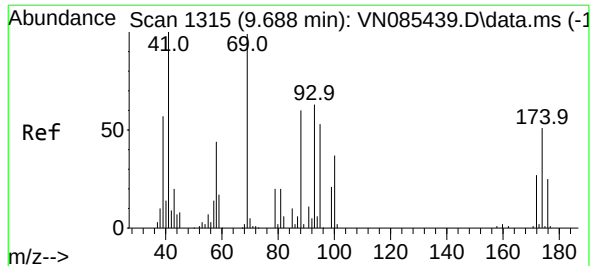
Delta R.T. -0.000 min

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

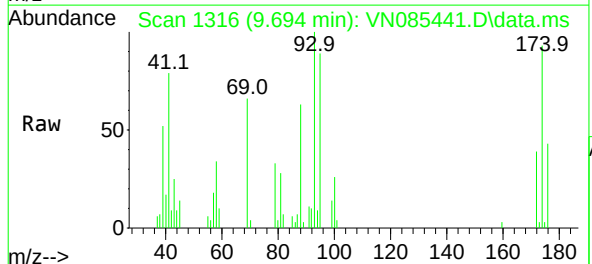
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010



Tgt Ion: 88 Resp: 7734

Ion Ratio Lower Upper

88 100

43 35.2 26.6 39.8

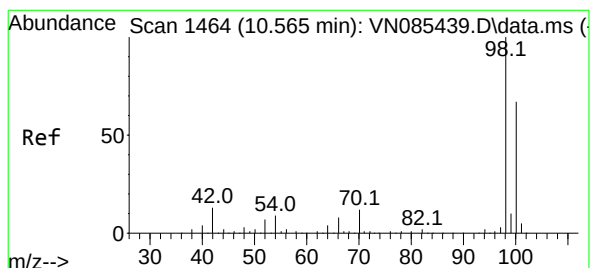
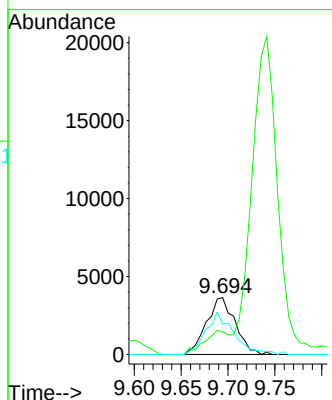
58 73.3 59.5 89.3

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

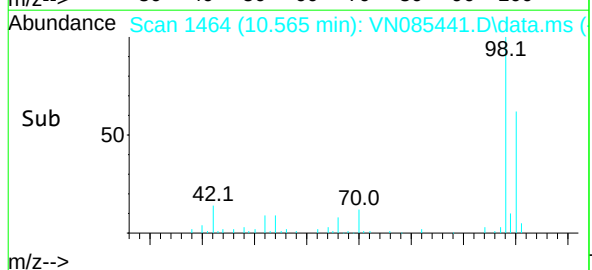
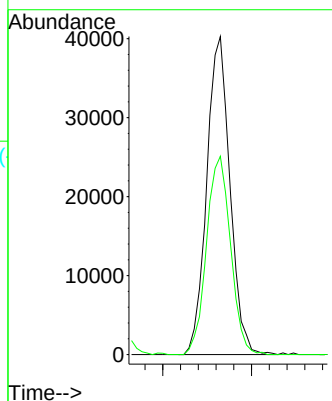
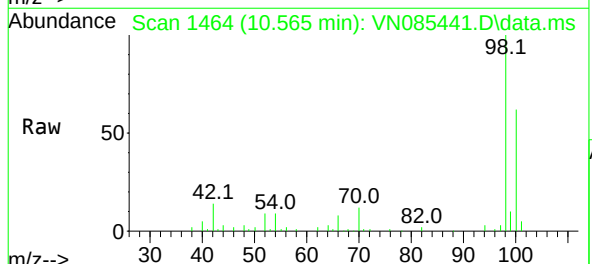
Acq: 14 Jan 2025 16:07

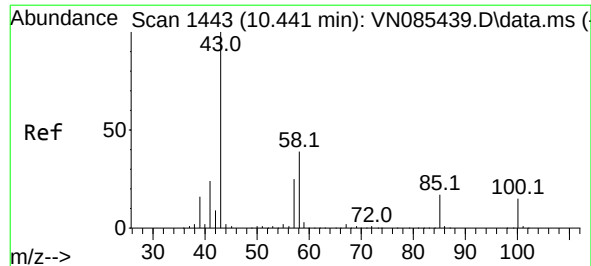
Tgt Ion: 98 Resp: 73223

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





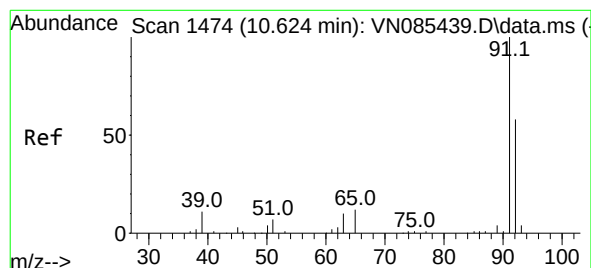
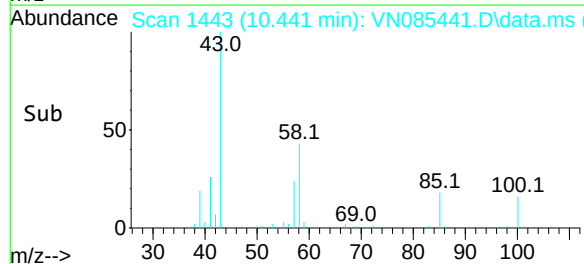
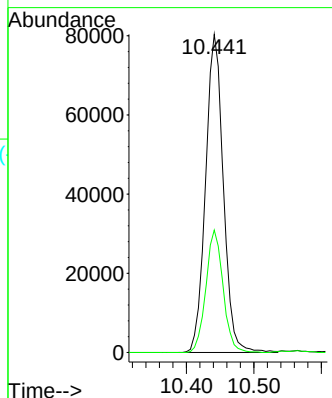
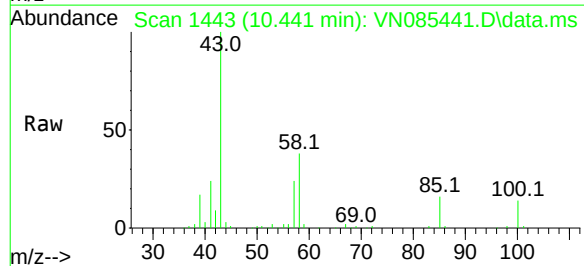
#51  
4-Methyl-2-Pentanone  
Concen: 47.254 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Tgt Ion: 43 Resp: 146996  
Ion Ratio Lower Upper  
43 100  
58 37.1 30.5 45.7

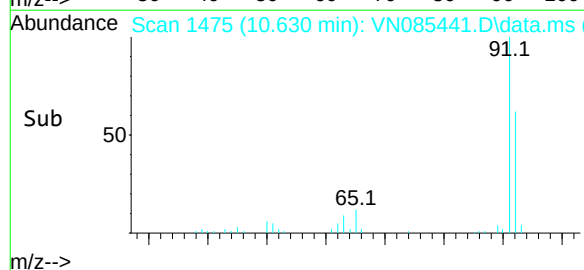
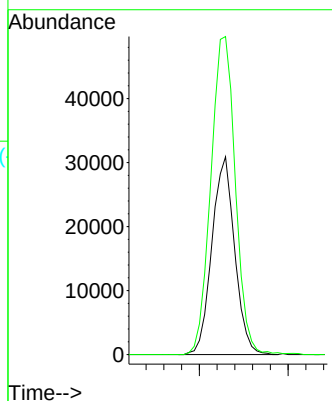
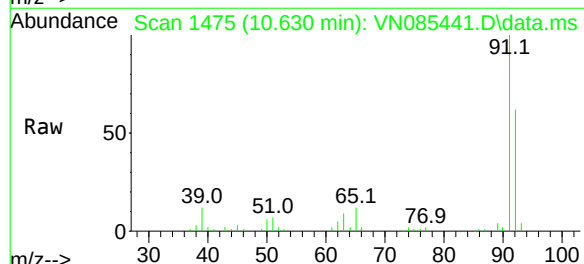
Manual Integrations  
APPROVED

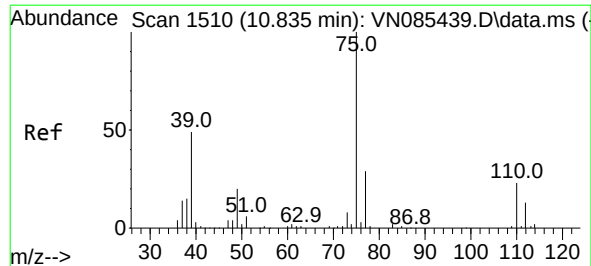
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

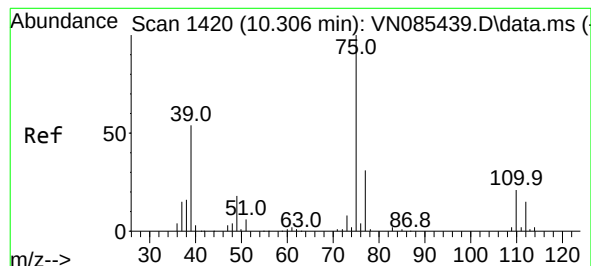
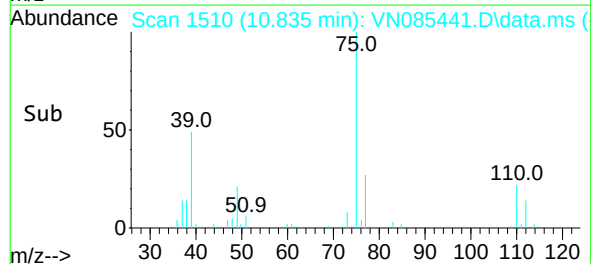
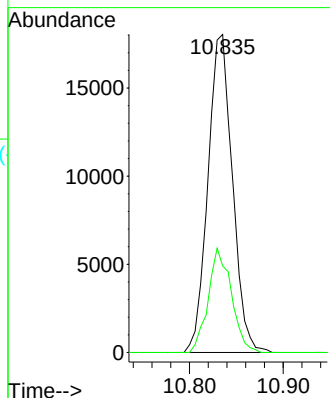
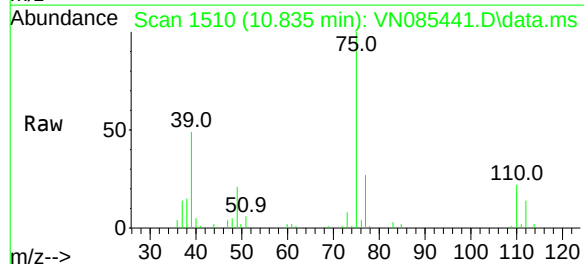
77 27.2 23.5 35.3

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

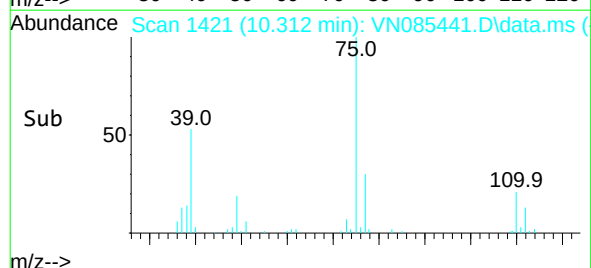
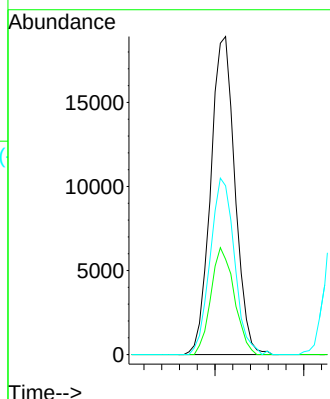
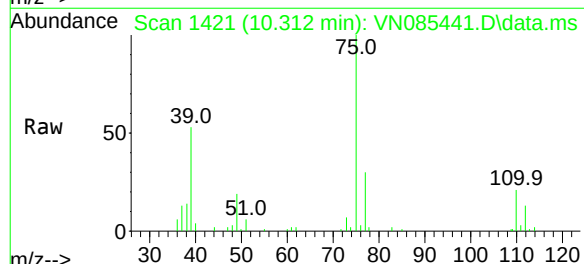
Tgt Ion: 75 Resp: 35904

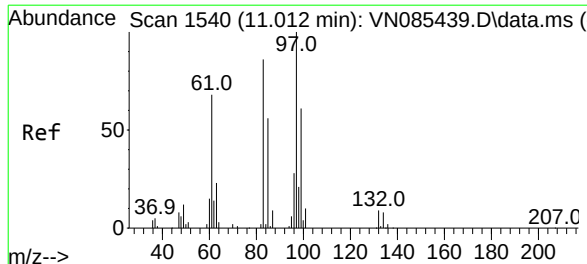
Ion Ratio Lower Upper

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

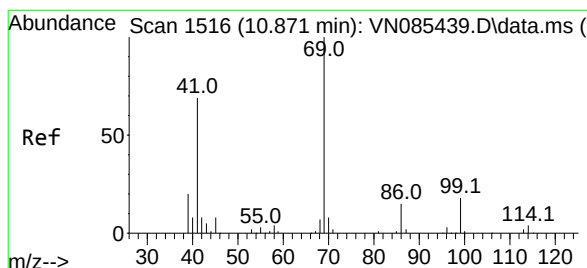
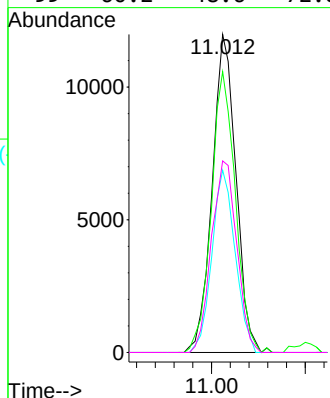
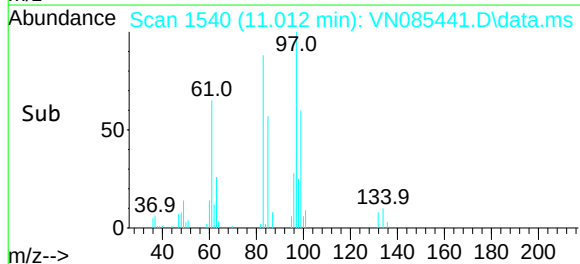
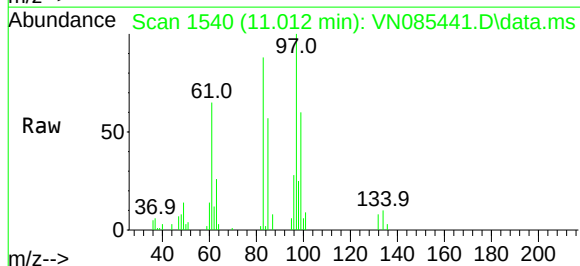
99 60.2 48.6 72.8

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

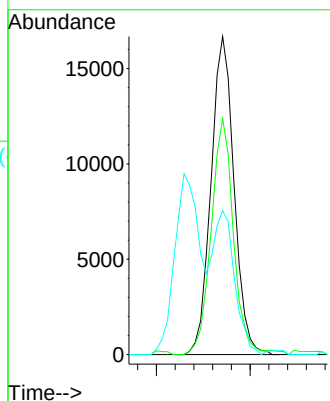
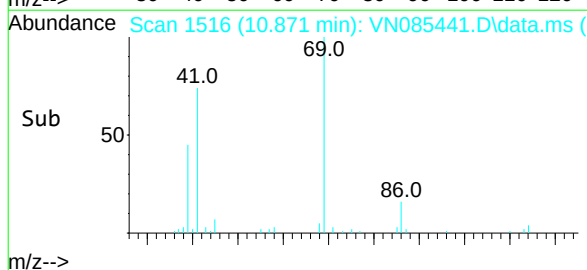
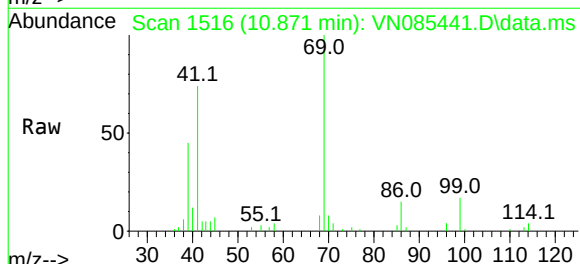
Tgt Ion: 69 Resp: 28454

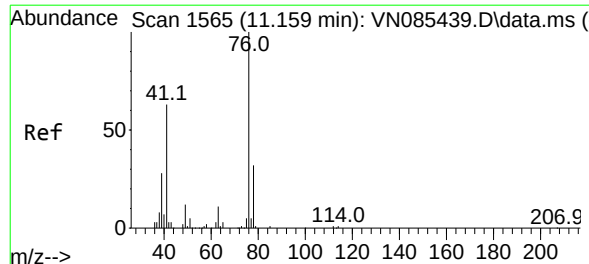
Ion Ratio Lower Upper

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

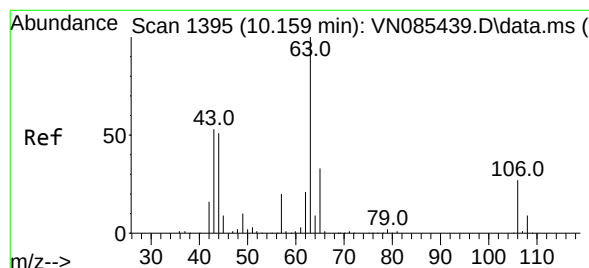
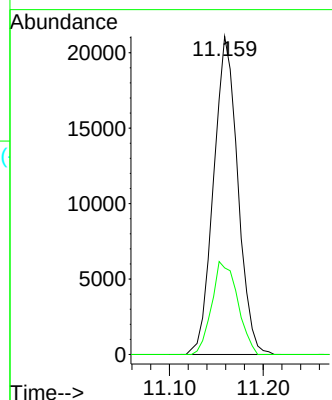
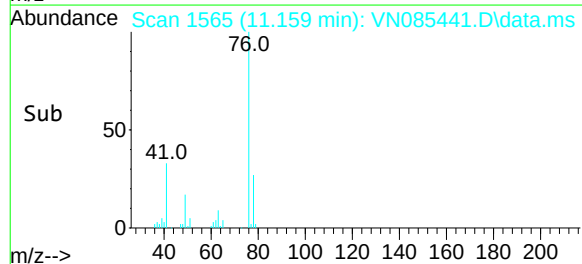
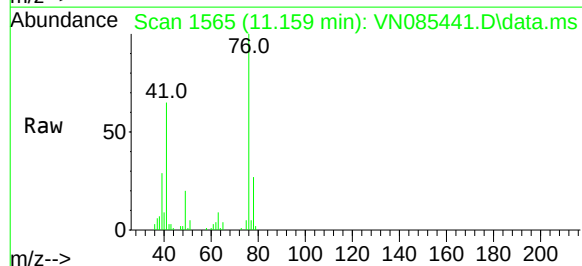
78 31.1 25.6 38.4

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

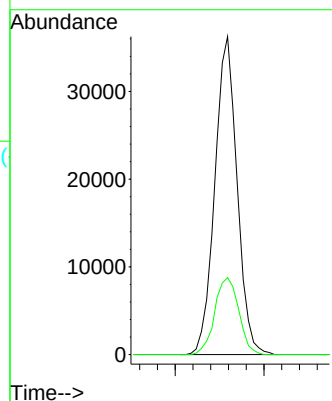
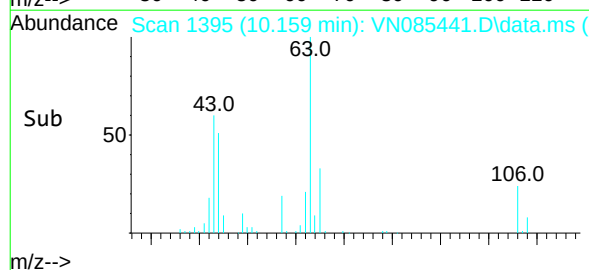
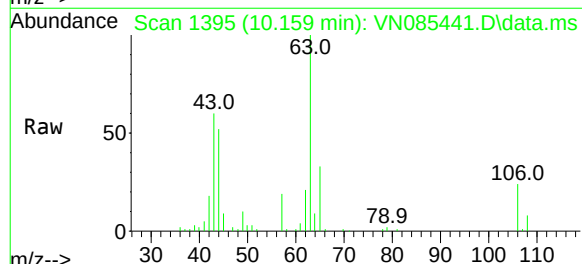
Acq: 14 Jan 2025 16:07

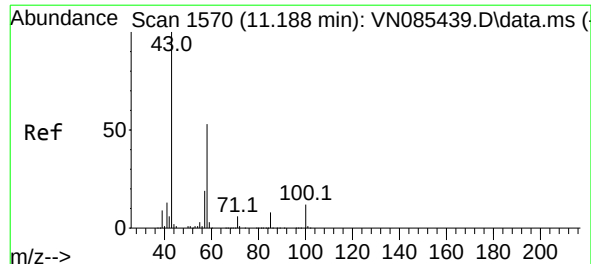
Tgt Ion: 63 Resp: 63110

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# 15

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

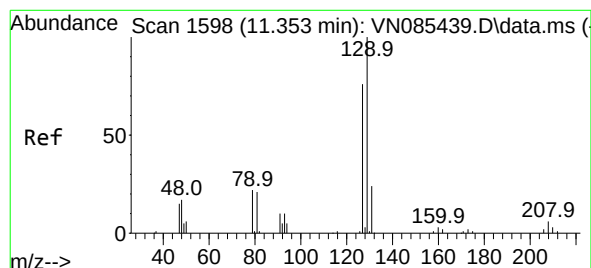
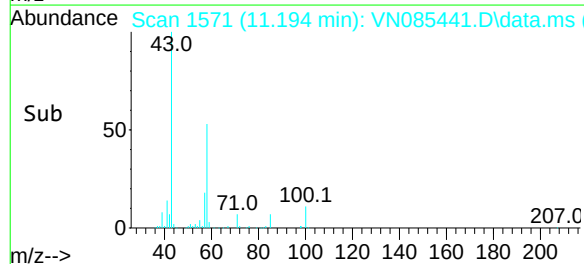
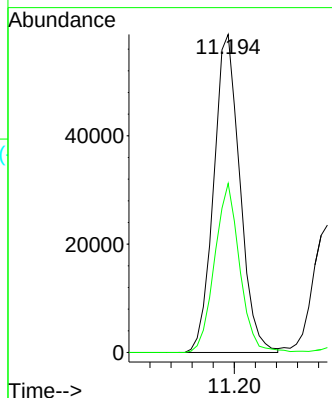
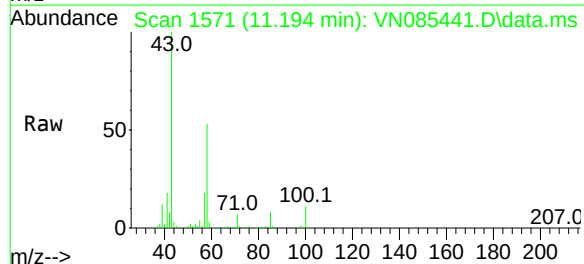
58 50.9 26.2 78.6

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

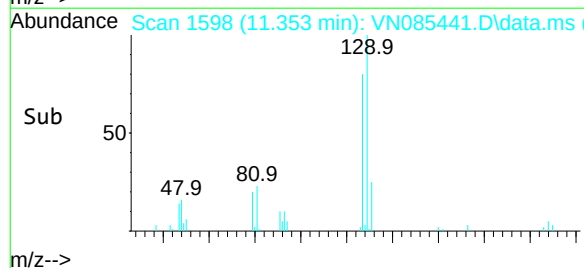
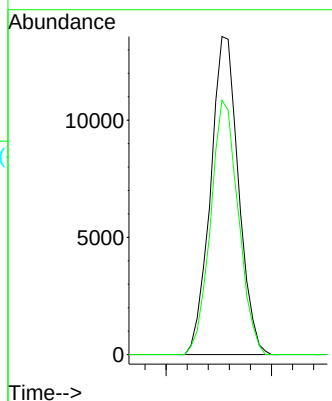
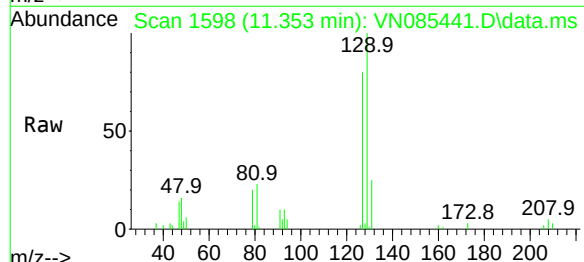
Acq: 14 Jan 2025 16:07

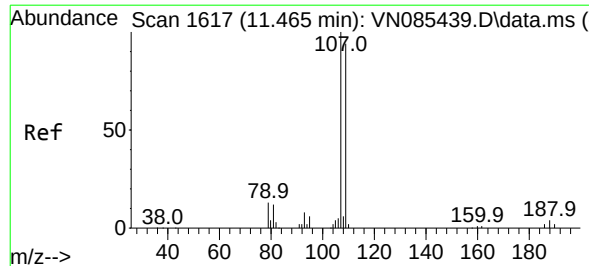
Tgt Ion:129 Resp: 25029

Ion Ratio Lower Upper

129 100

127 79.1 38.6 115.8





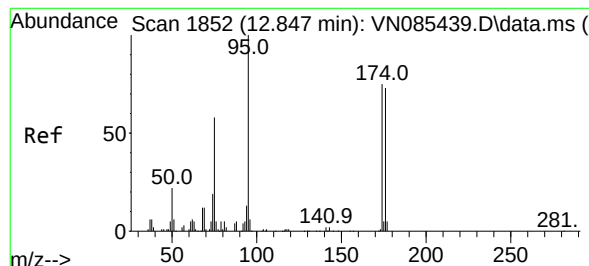
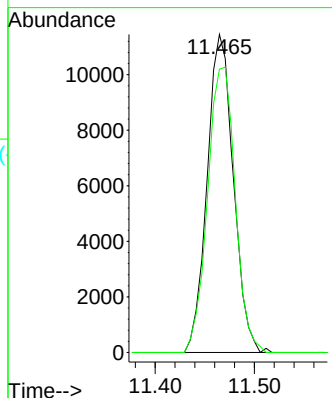
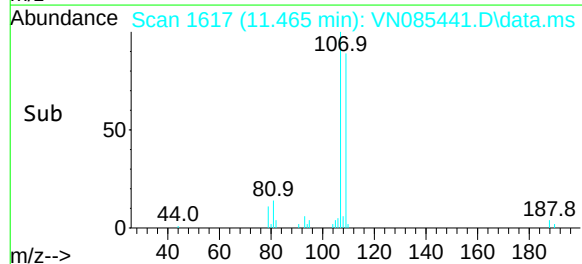
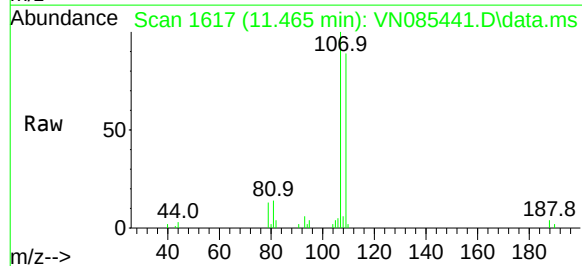
#61  
1,2-Dibromoethane  
Concen: 9.263 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

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

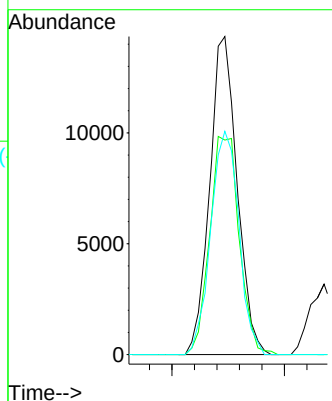
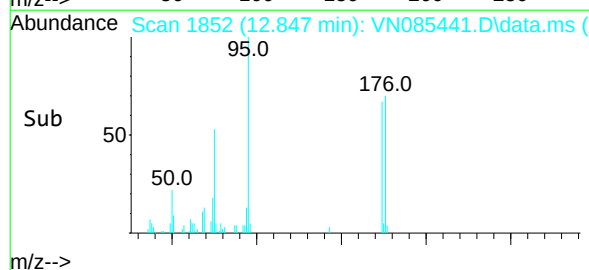
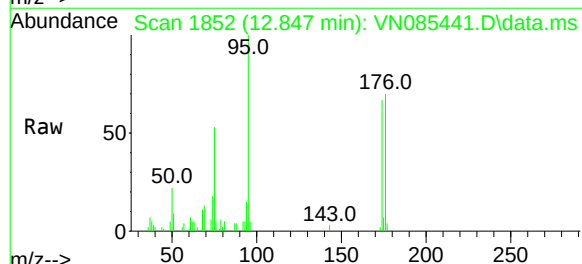
Manual Integrations  
APPROVED

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

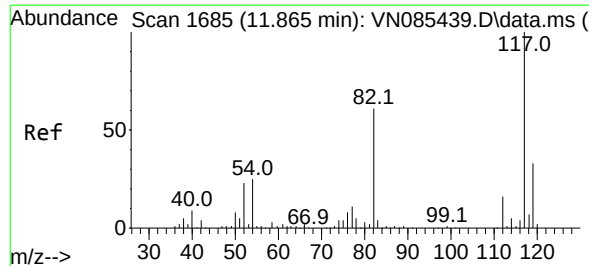


#62  
4-Bromofluorobenzene  
Concen: 8.476 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

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







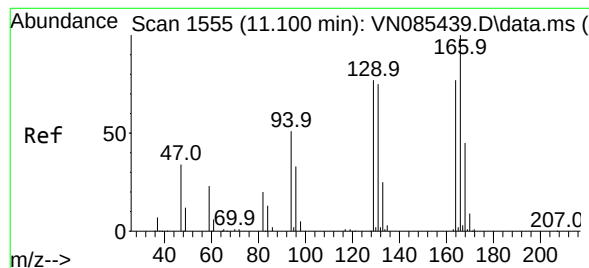
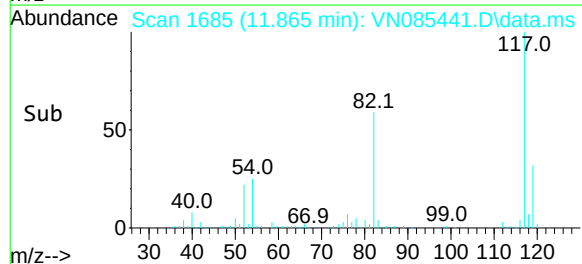
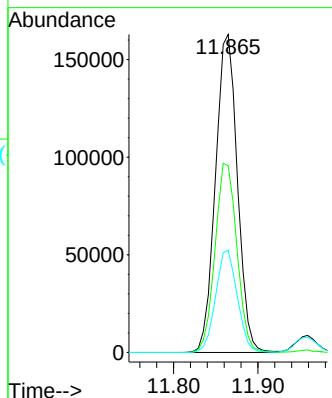
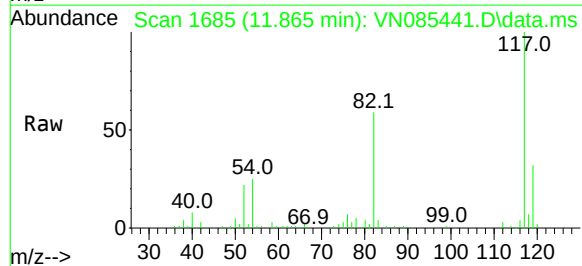
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

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

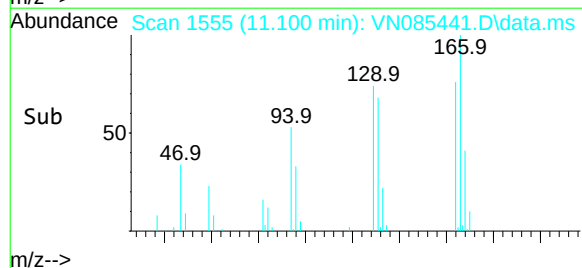
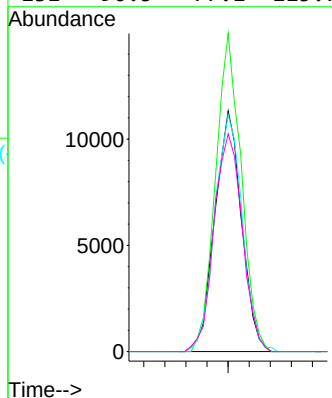
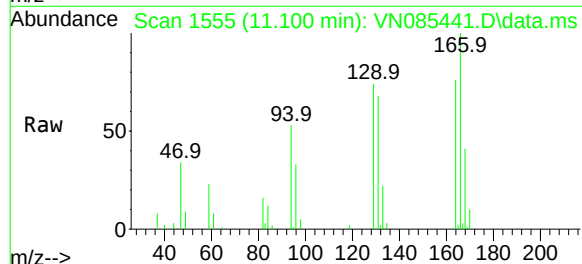
Manual Integrations  
APPROVED

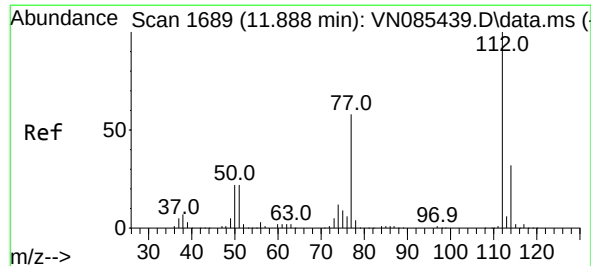
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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 | 166   | 129   | 131   |
|-----------|-----|-------|-------|-------|
| Ion Ratio | 100 | 132.2 | 98.3  | 90.5  |
| Lower     |     | 103.4 | 79.2  | 77.1  |
| Upper     |     | 155.2 | 118.8 | 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

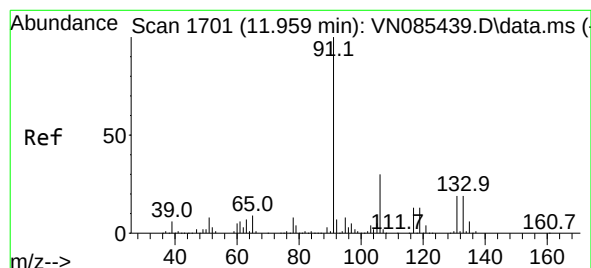
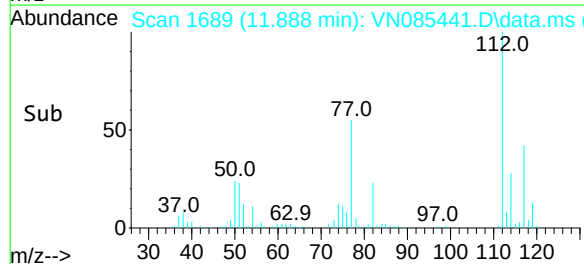
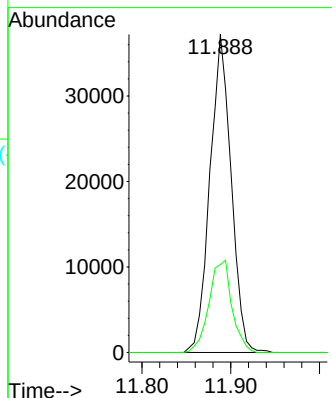
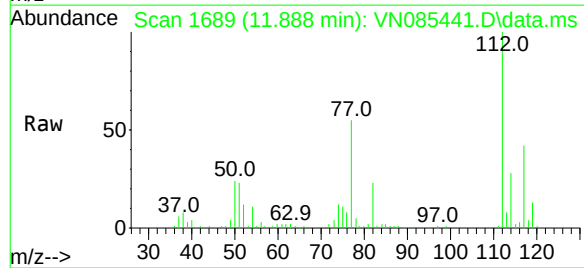
114 27.6 25.3 37.9

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

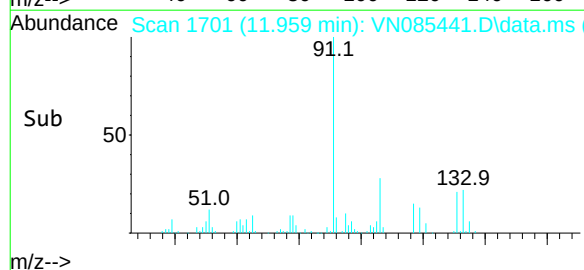
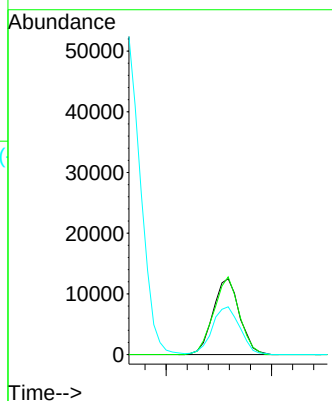
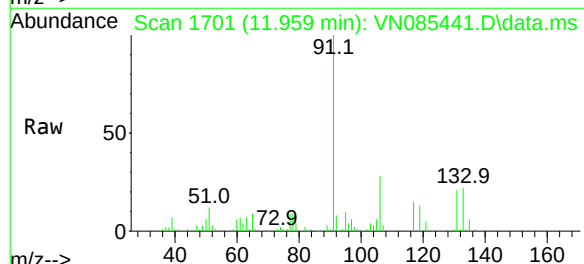
Tgt Ion:131 Resp: 21853

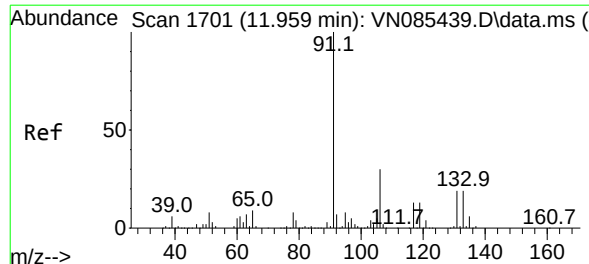
Ion Ratio Lower Upper

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

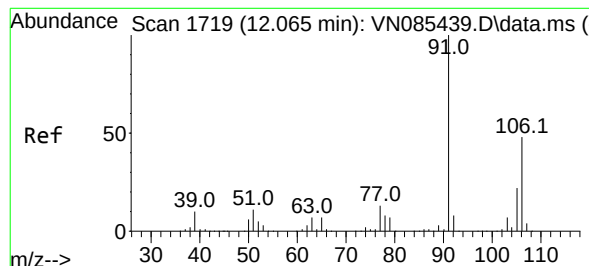
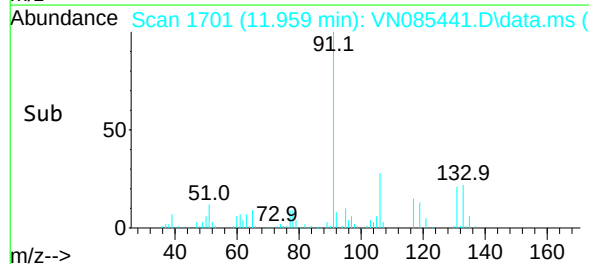
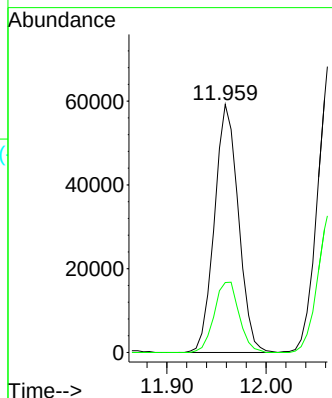
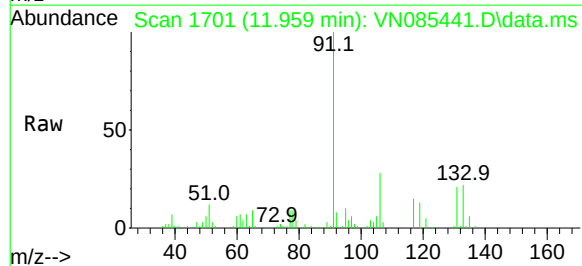
106 28.2 23.8 35.8

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

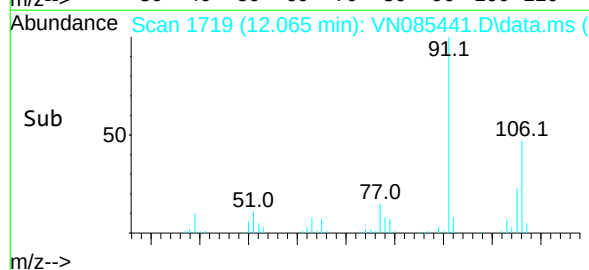
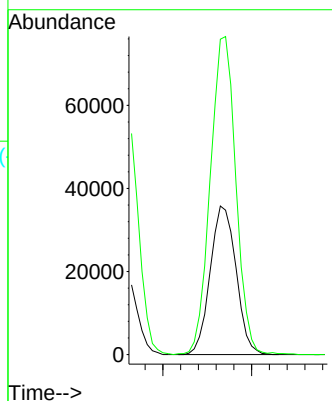
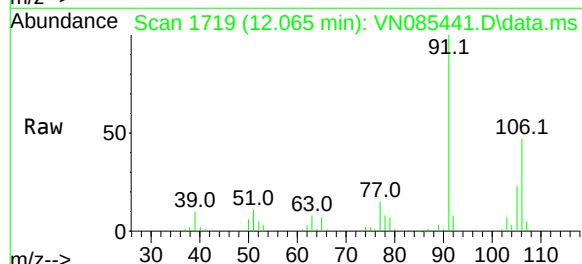
Acq: 14 Jan 2025 16:07

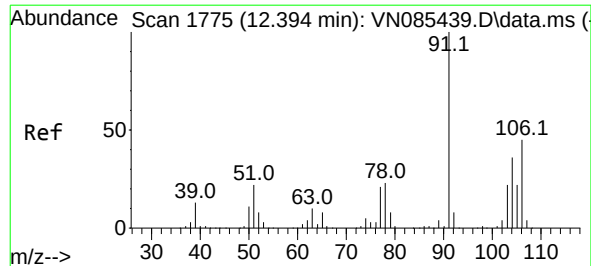
Tgt Ion:106 Resp: 72431

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

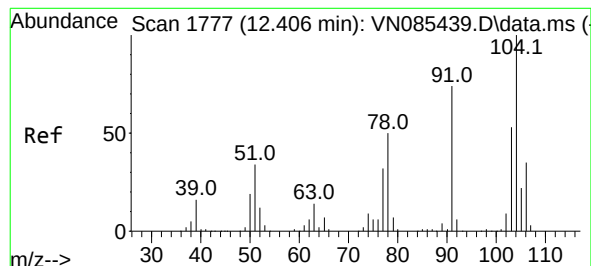
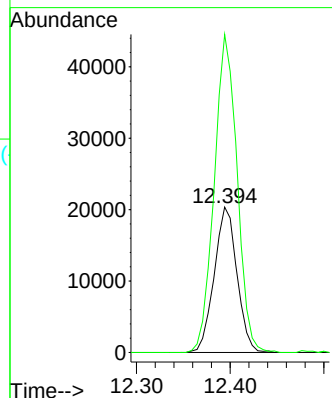
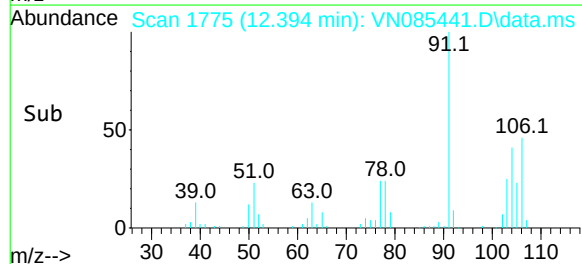
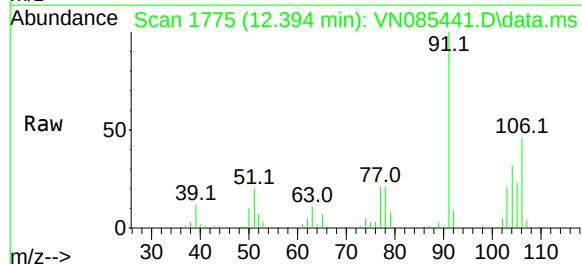
91 219.5 110.4 331.2

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

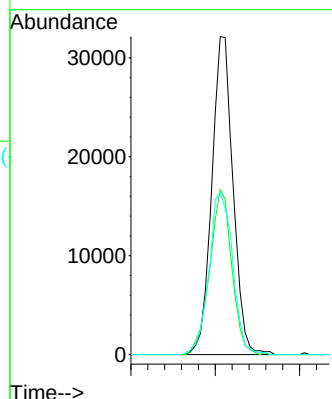
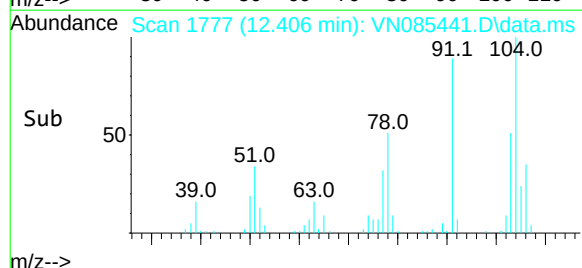
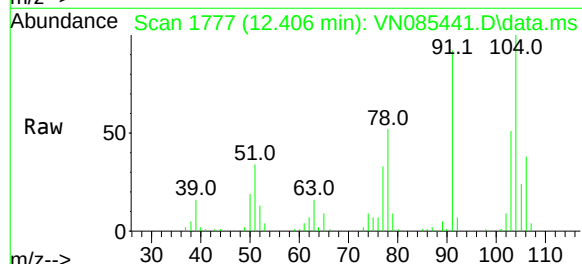
Tgt Ion:104 Resp: 56285

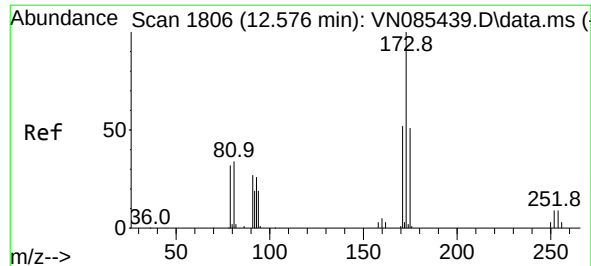
Ion Ratio Lower Upper

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

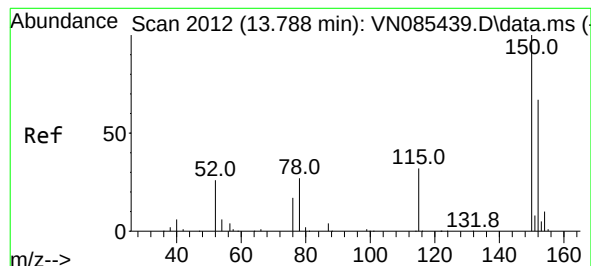
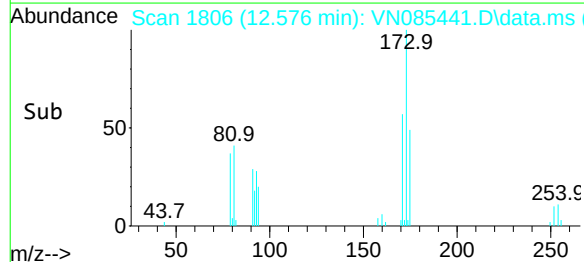
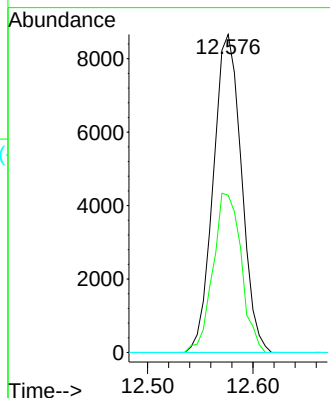
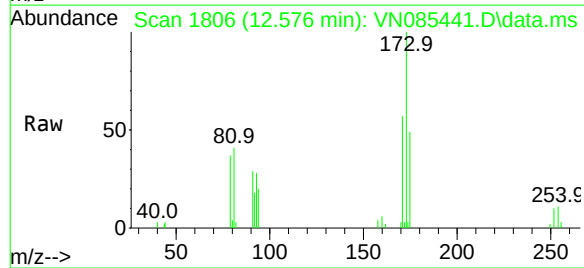
ClientSampleId :

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

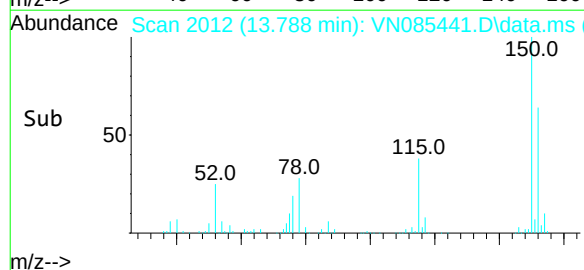
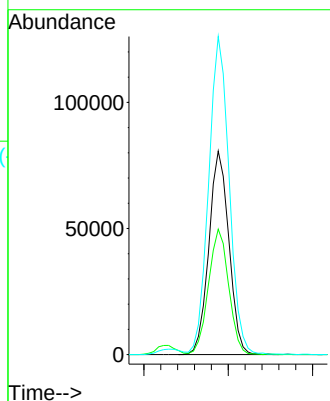
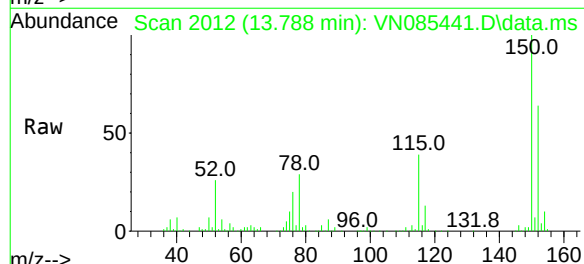
RT: 13.788 min Scan# 2012

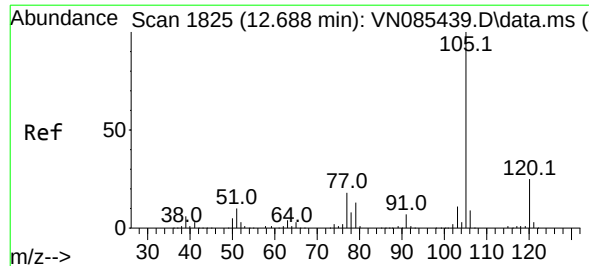
Delta R.T. 0.000 min

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

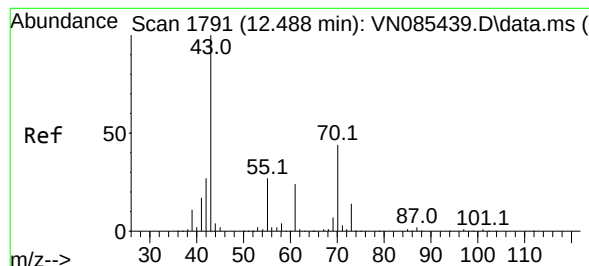
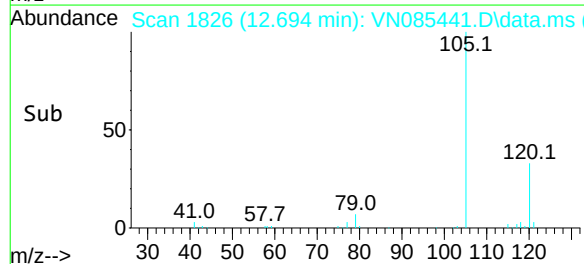
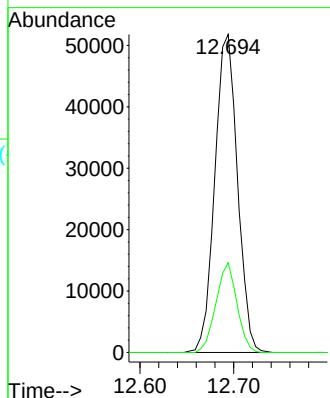
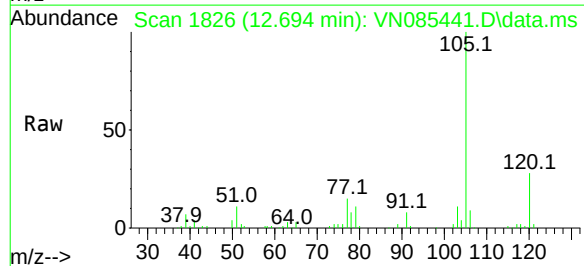
120 26.1 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-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

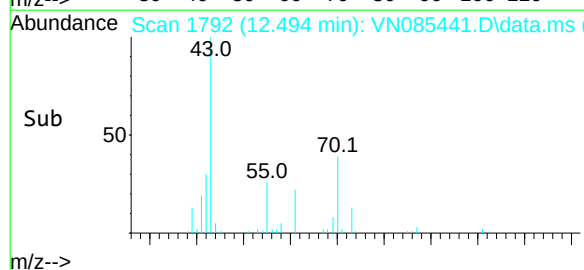
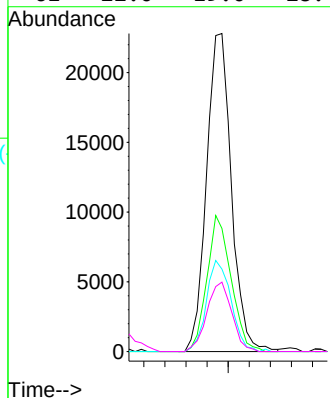
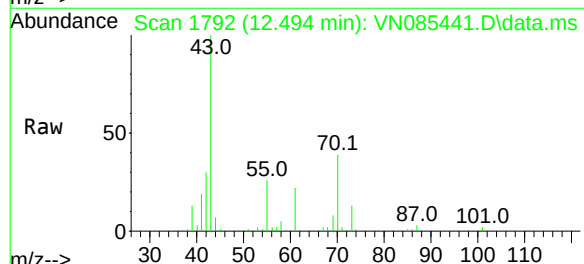
Ion Ratio Lower Upper

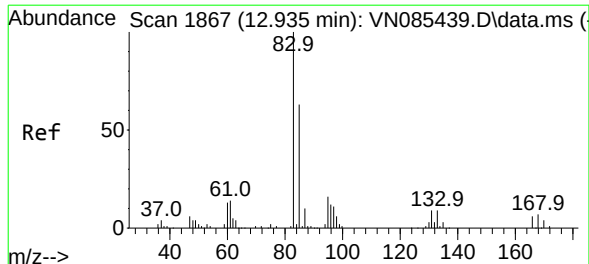
43 100

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# 18

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

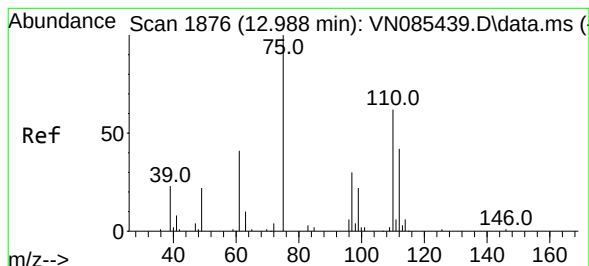
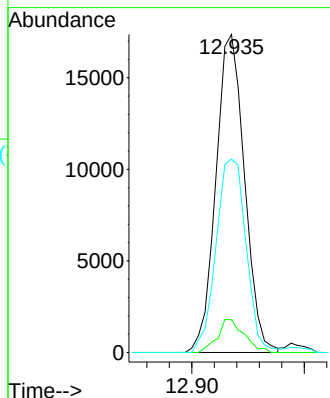
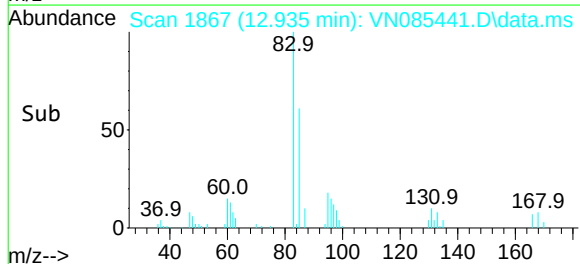
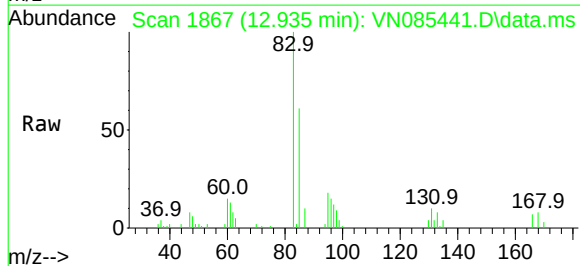
VSTDIC010

|          |       |       |       |
|----------|-------|-------|-------|
| 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

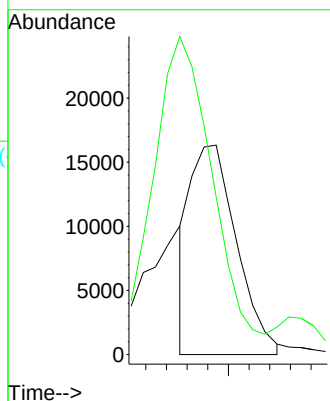
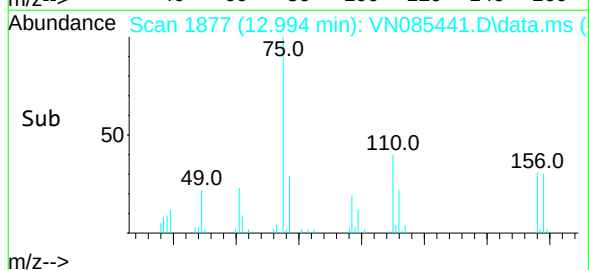
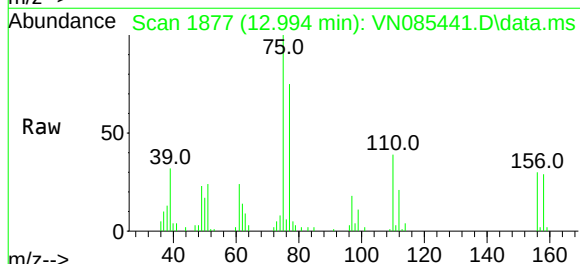
RT: 12.994 min Scan# 1877

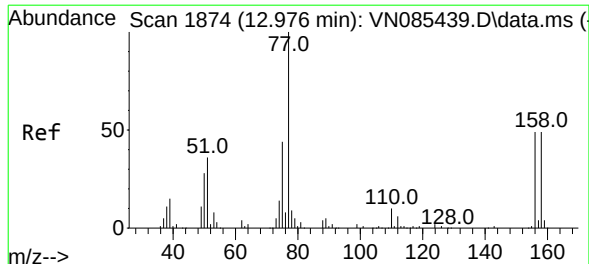
Delta R.T. 0.006 min

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

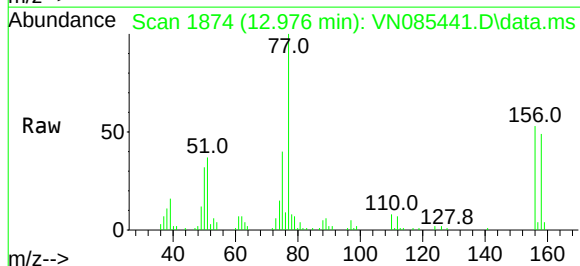
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

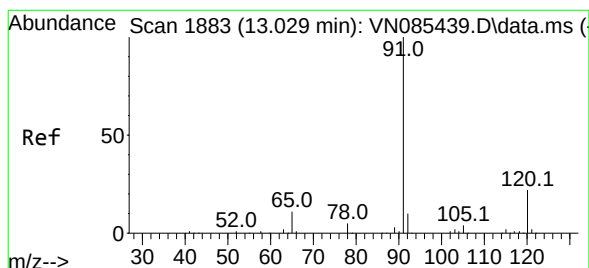
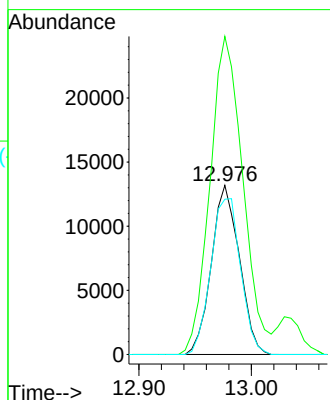
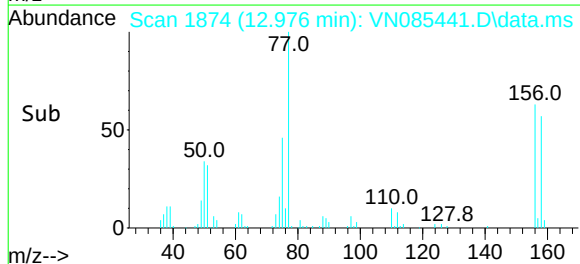
VSTDIC010



|          |       |       |       |
|----------|-------|-------|-------|
| 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

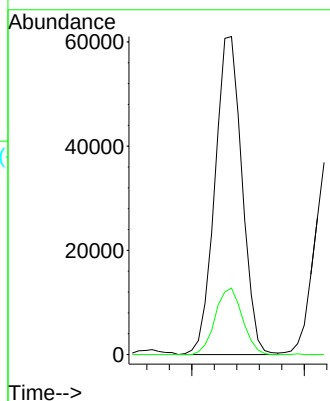
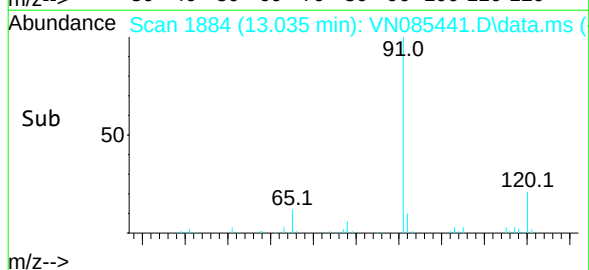
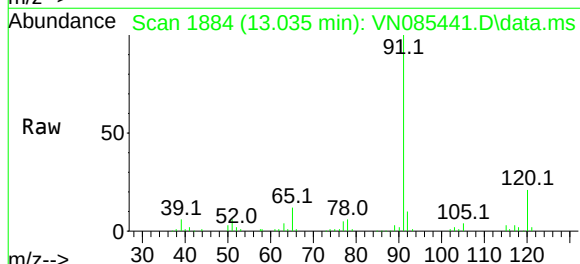
RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

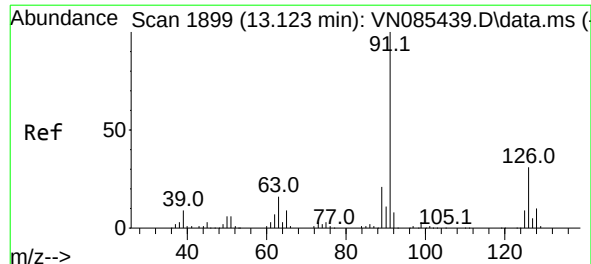
Lab File: VN085441.D

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

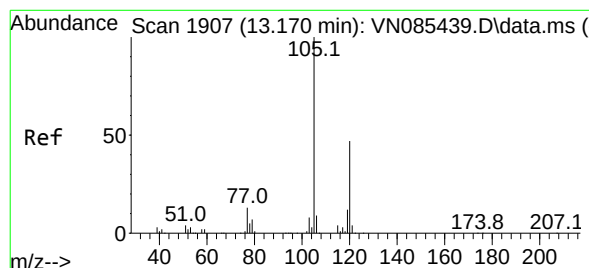
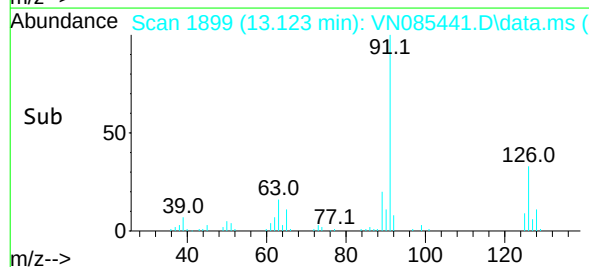
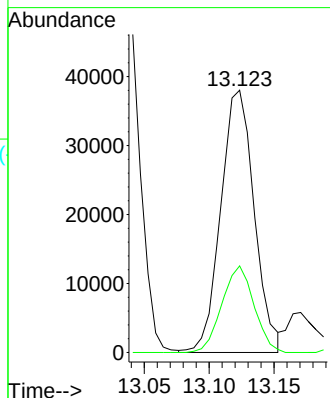
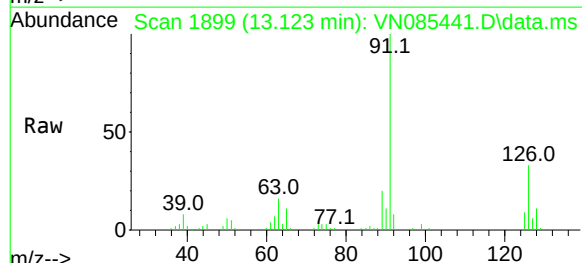
126 31.5 15.7 47.1

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

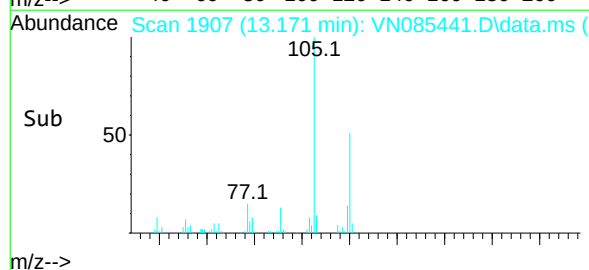
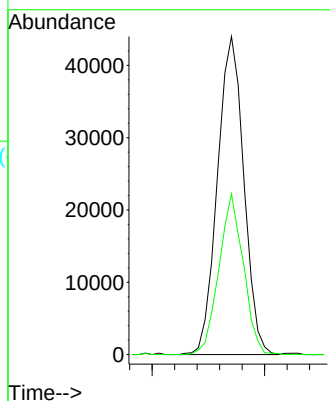
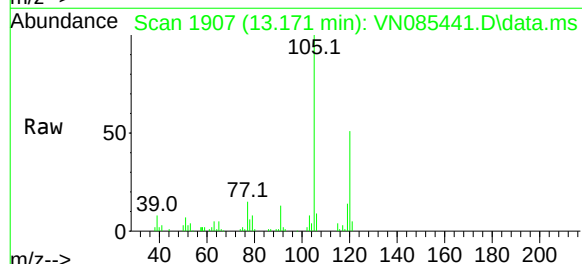
Acq: 14 Jan 2025 16:07

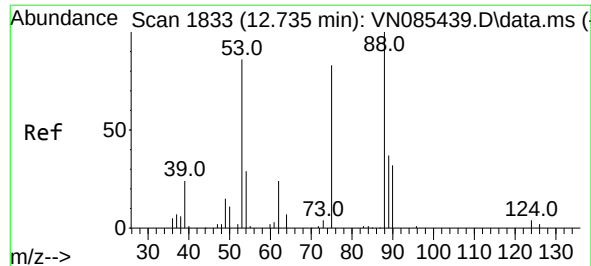
Tgt Ion:105 Resp: 71656

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

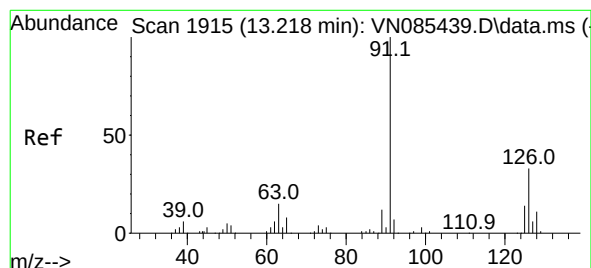
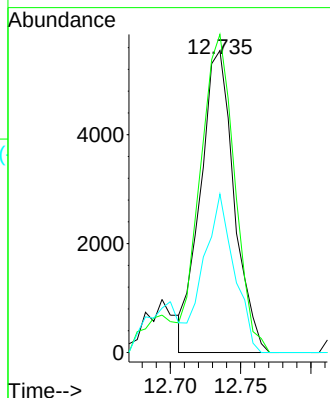
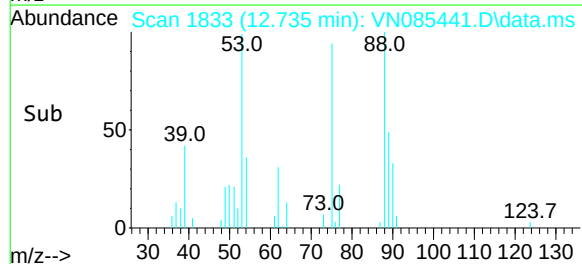
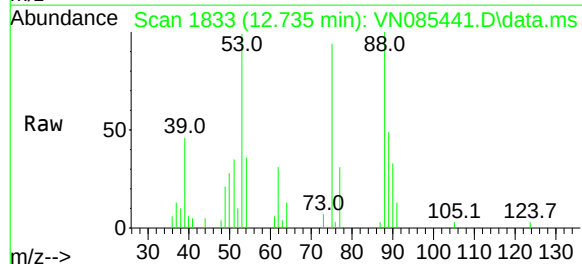
ClientSampleId :

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

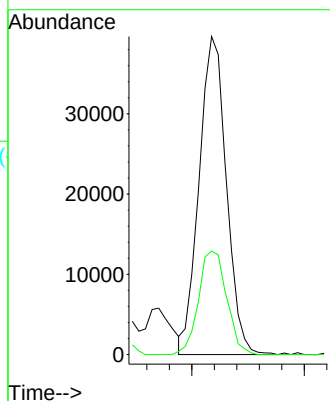
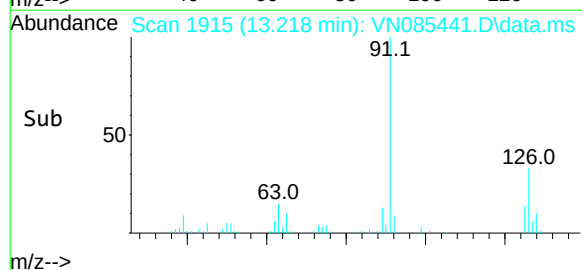
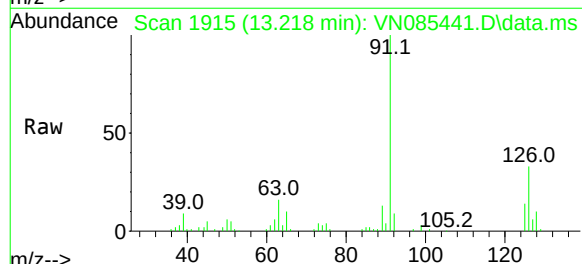
RT: 13.218 min Scan# 1915

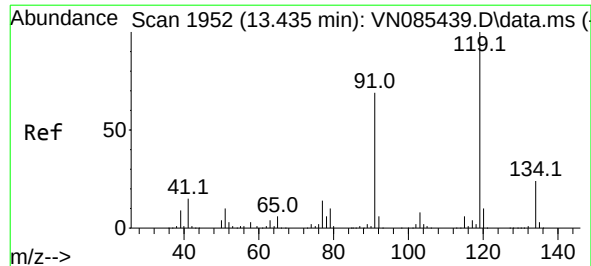
Delta R.T. 0.000 min

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

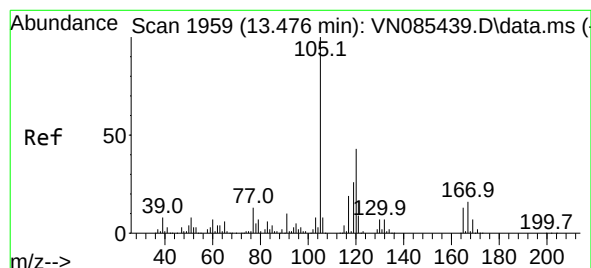
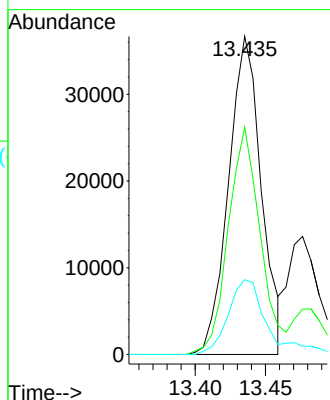
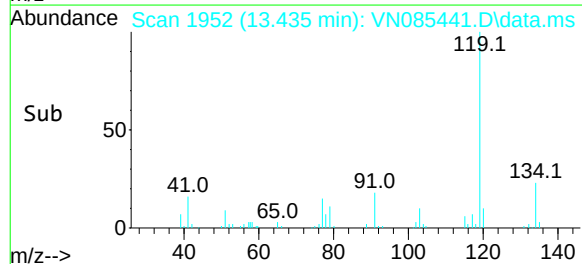
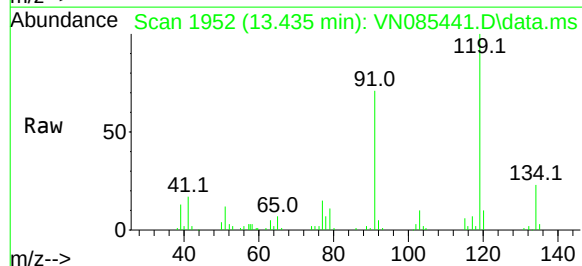
134 27.8 12.0 36.1

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

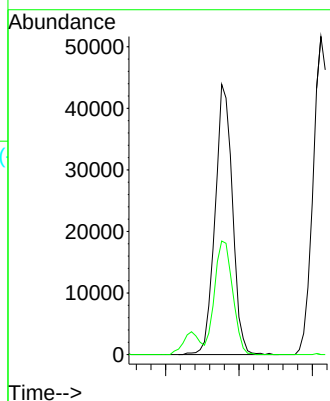
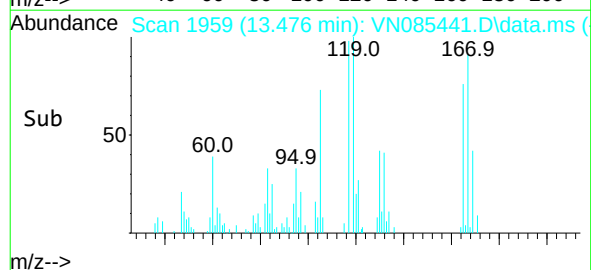
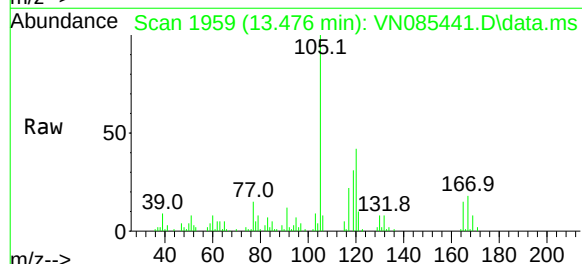
Acq: 14 Jan 2025 16:07

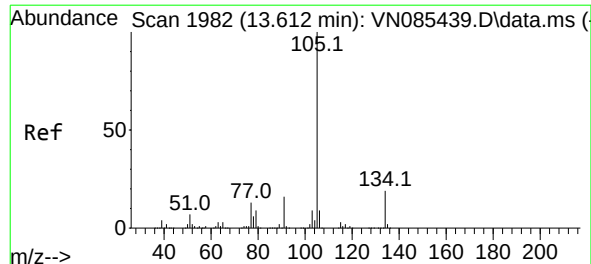
Tgt Ion:105 Resp: 72046

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 :

VSTDICC010

Tgt Ion:105 Resp: 83662

Ion Ratio Lower Upper

105 100

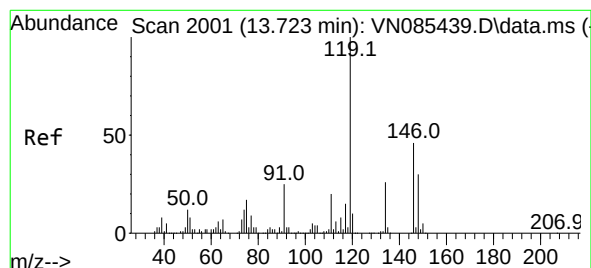
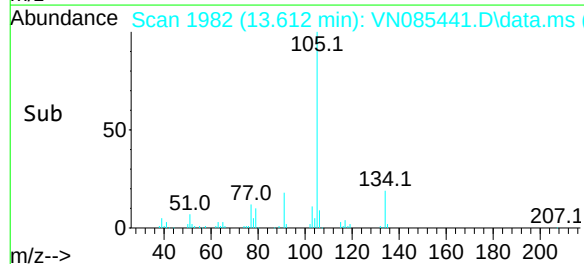
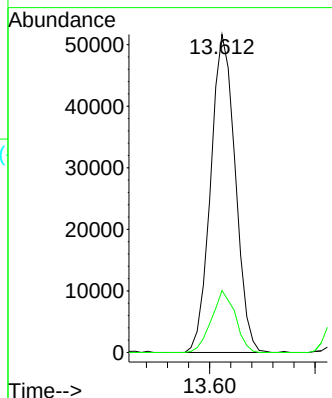
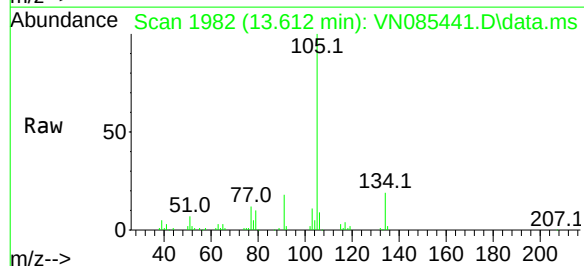
134 18.9 9.7 28.9

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

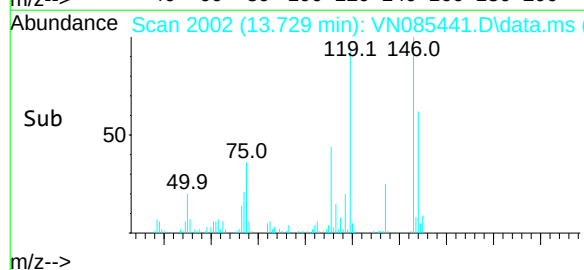
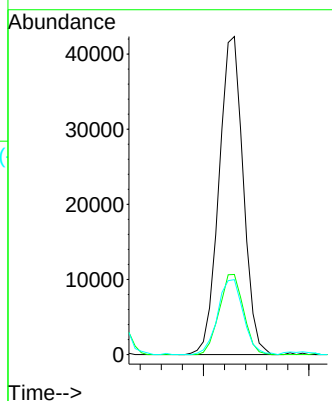
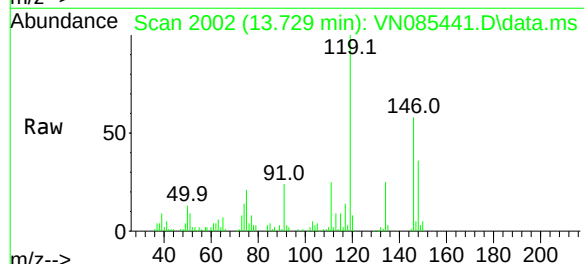
Tgt Ion:119 Resp: 67556

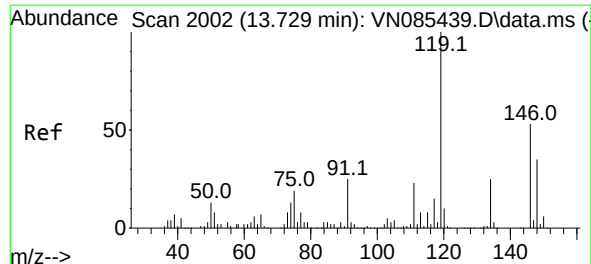
Ion Ratio Lower Upper

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

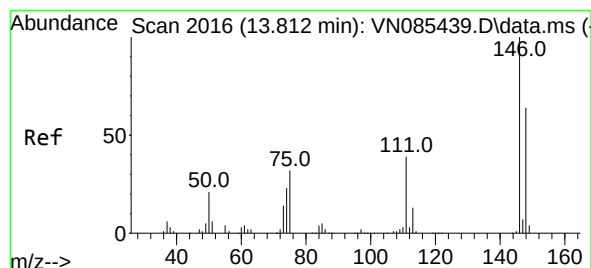
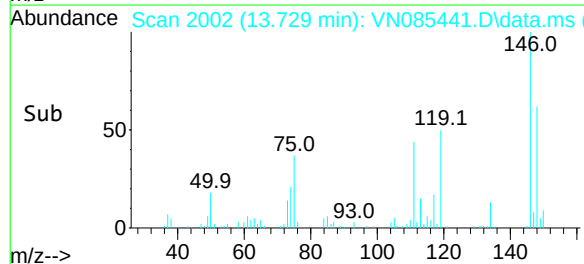
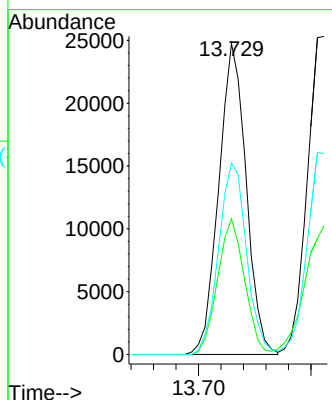
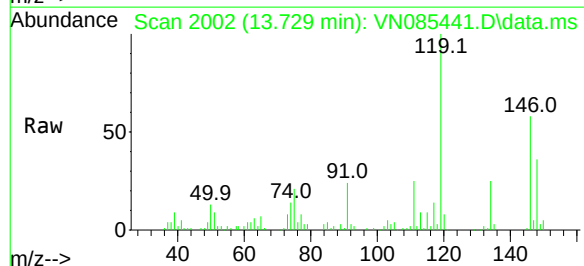
ClientSampleId :

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

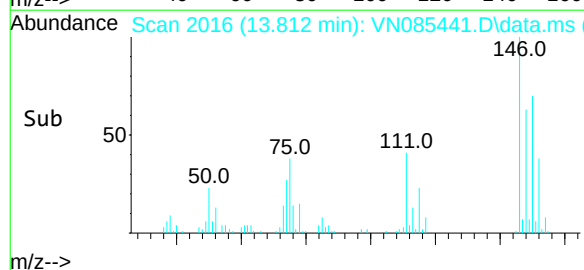
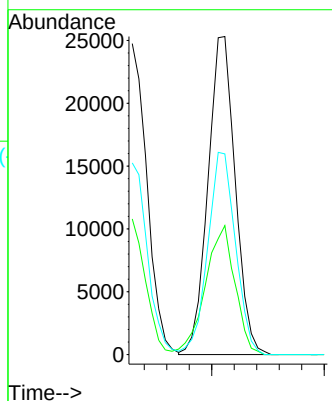
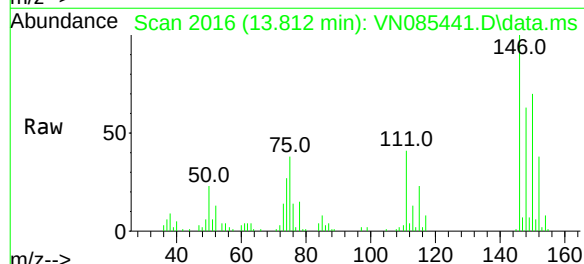
RT: 13.812 min Scan# 2016

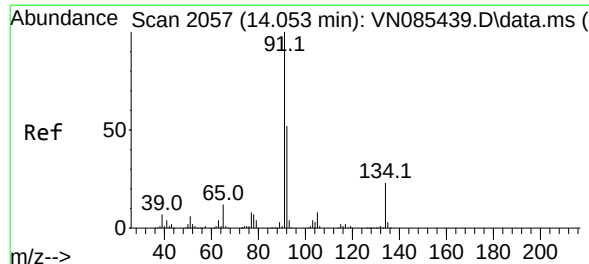
Delta R.T. 0.000 min

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

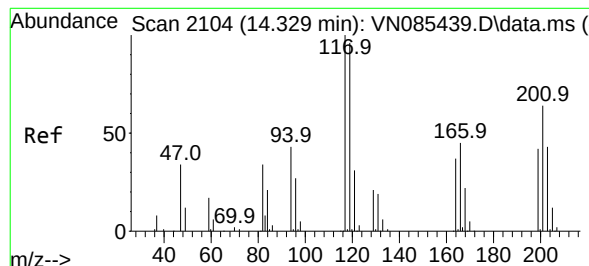
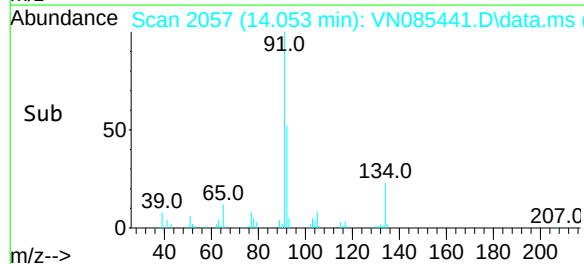
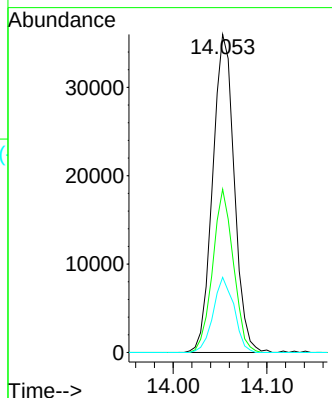
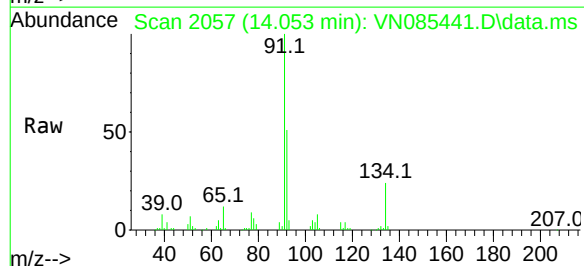
ClientSampleId :

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

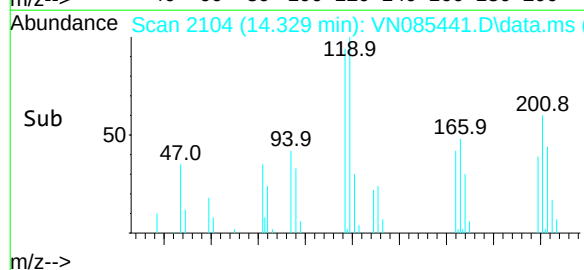
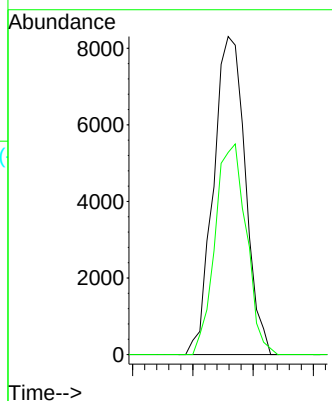
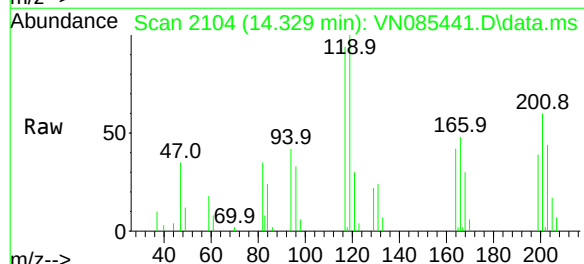
RT: 14.329 min Scan# 2104

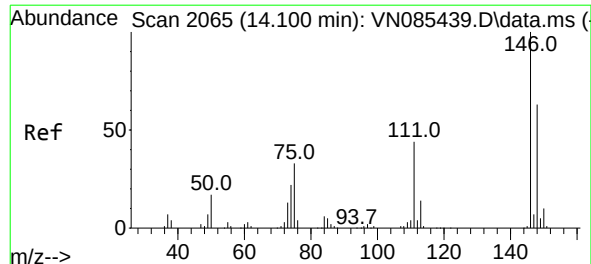
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

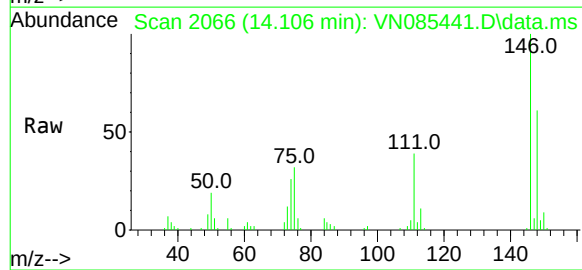
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 117   | Resp: | 15261 |
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 201       | 65.0  | 33.7  | 101.0 |





#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

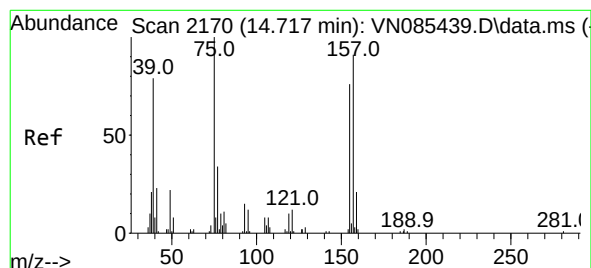
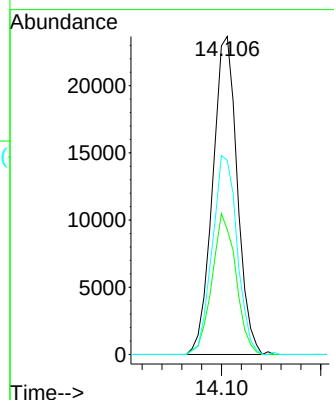
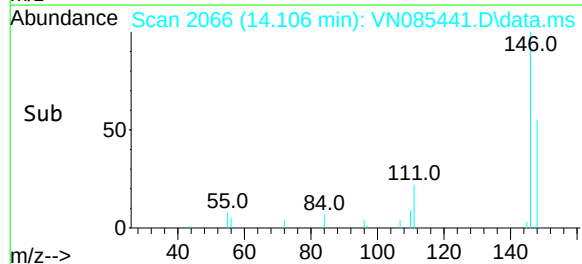
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010



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

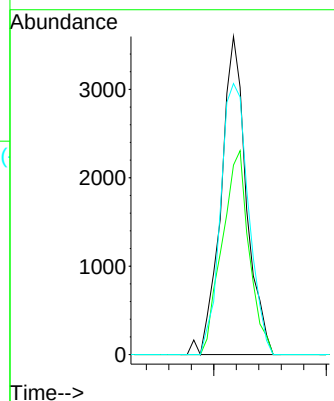
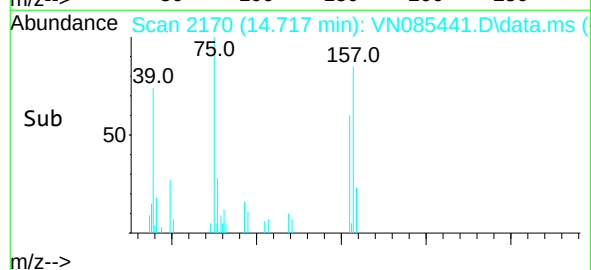
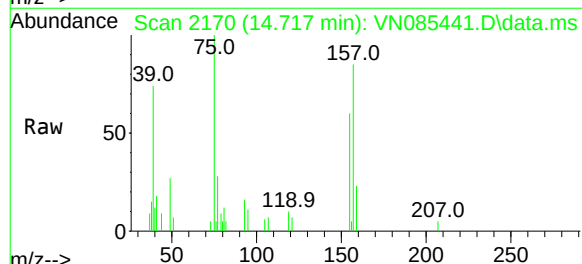
Manual Integrations  
APPROVED

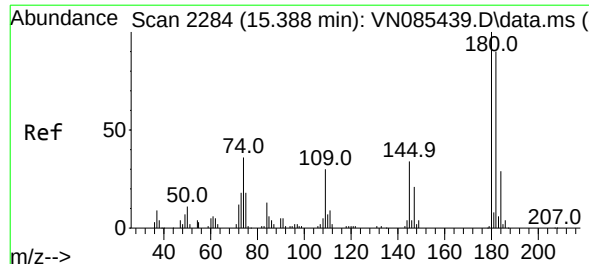
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#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

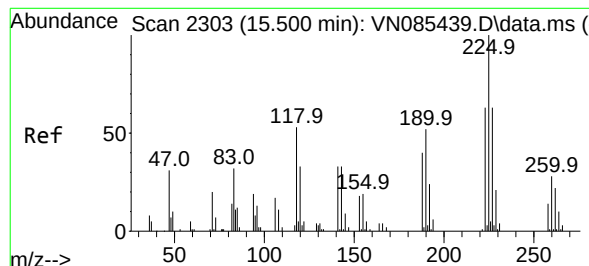
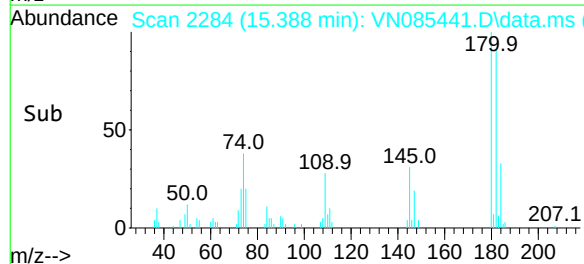
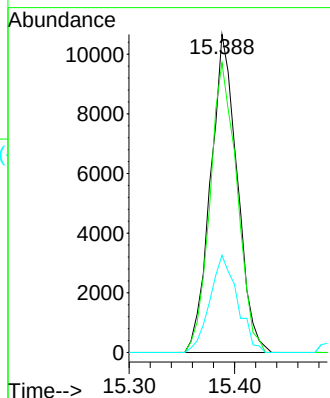
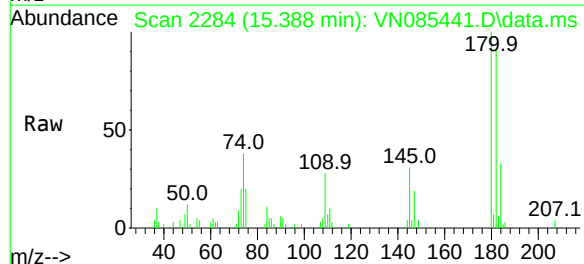
145 31.7 16.0 48.0

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

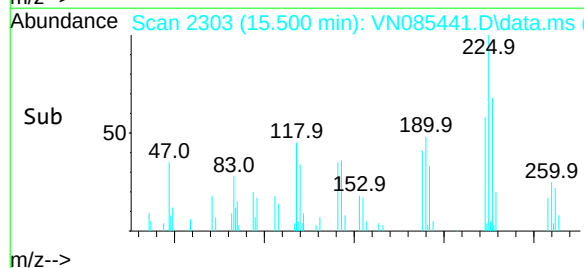
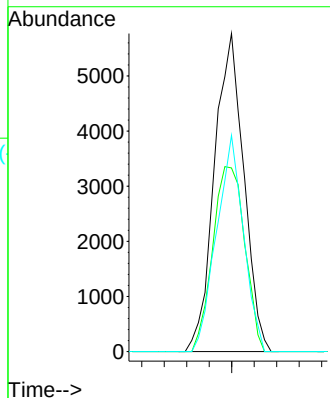
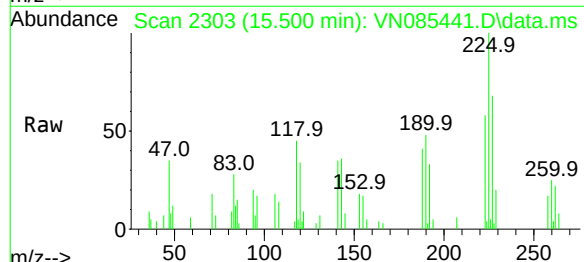
Tgt Ion:225 Resp: 10491

Ion Ratio Lower Upper

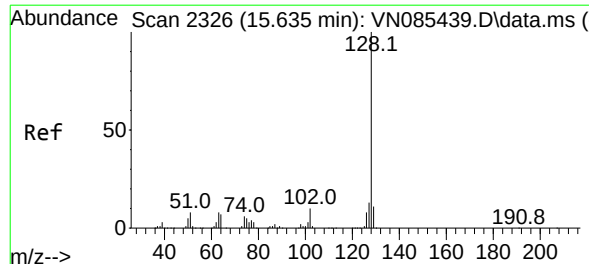
225 100

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 :

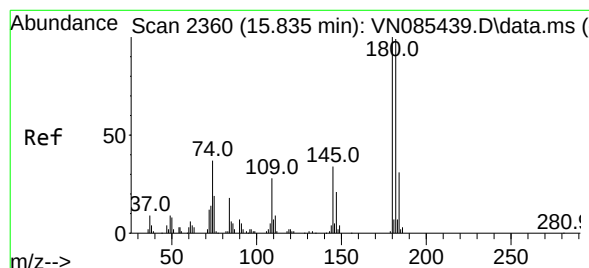
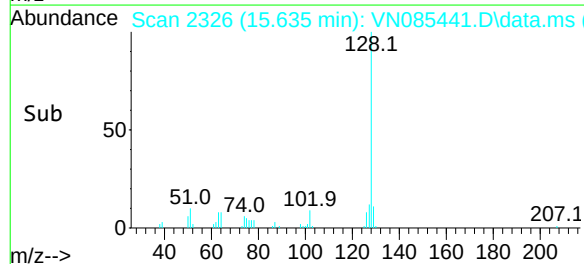
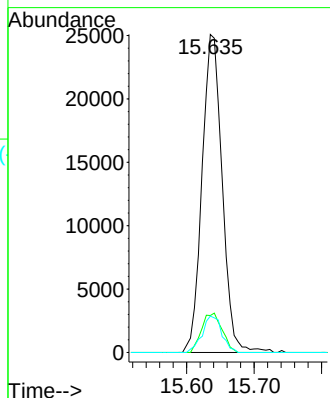
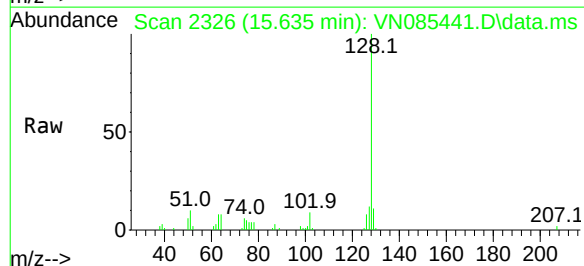
VSTDICC010

|           |       |       |       |
|-----------|-------|-------|-------|
| 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

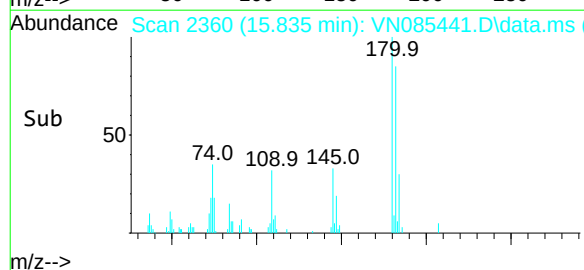
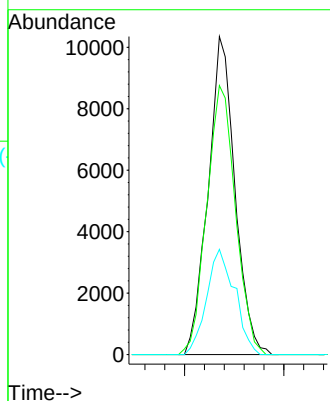
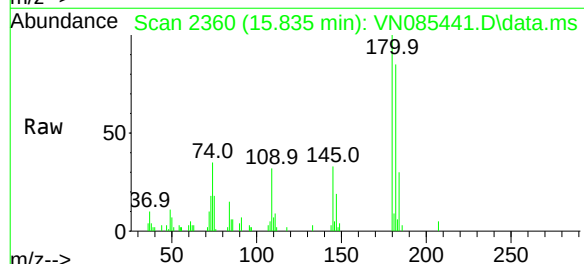
RT: 15.835 min Scan# 2360

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) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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

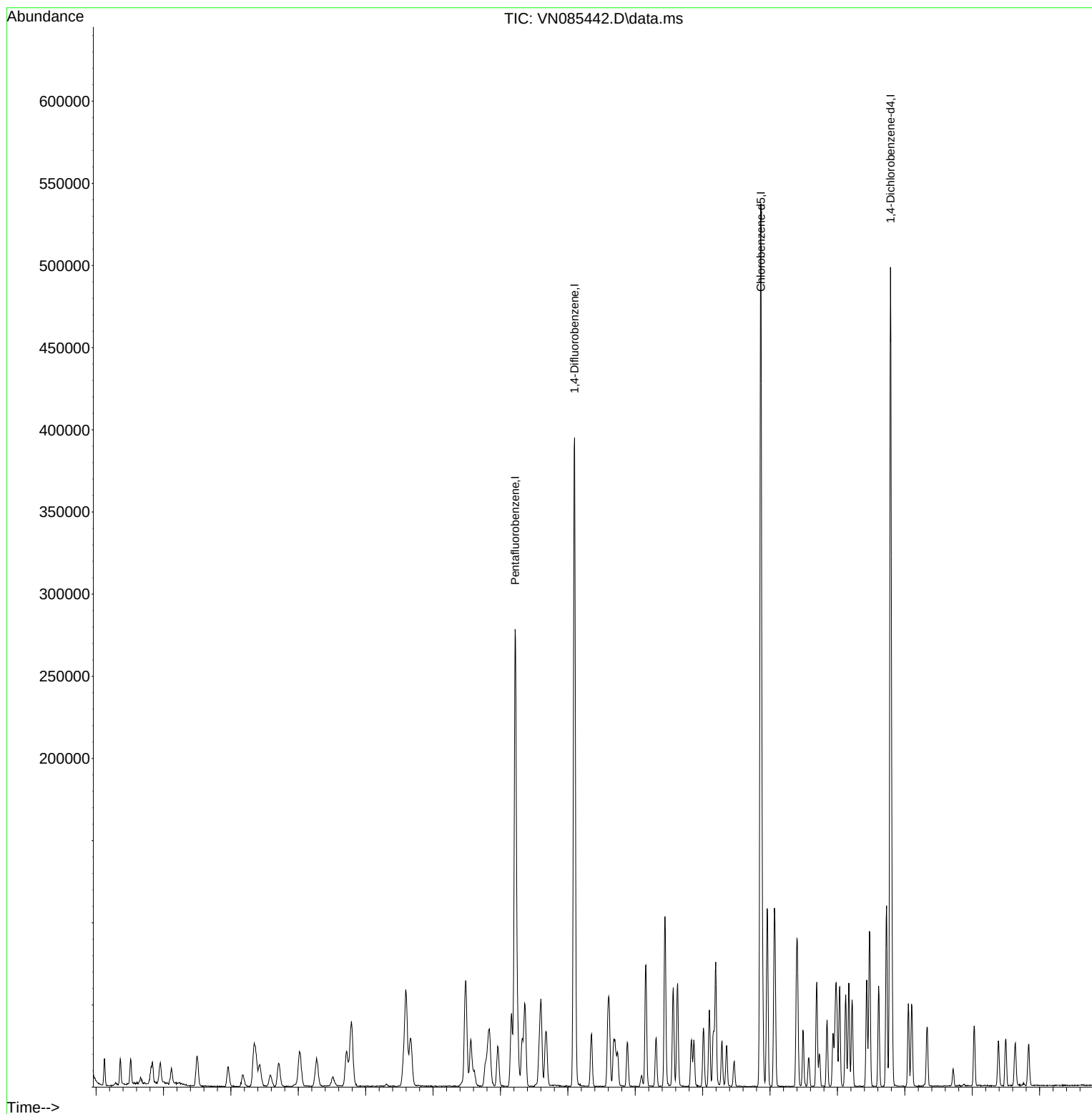
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Acq On : 14 Jan 2025 16:31  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

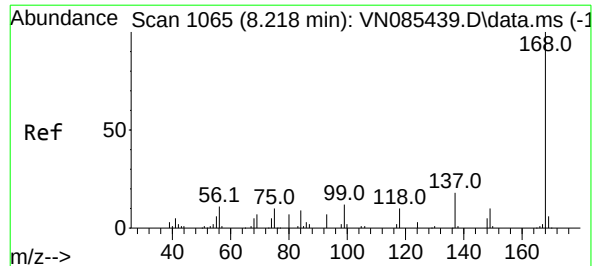
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

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





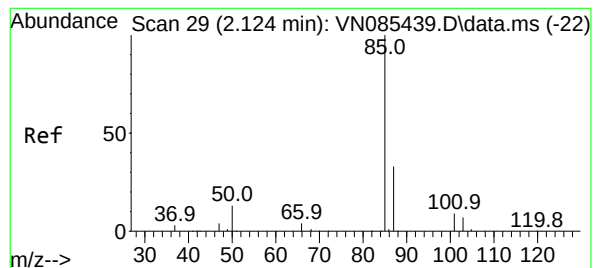
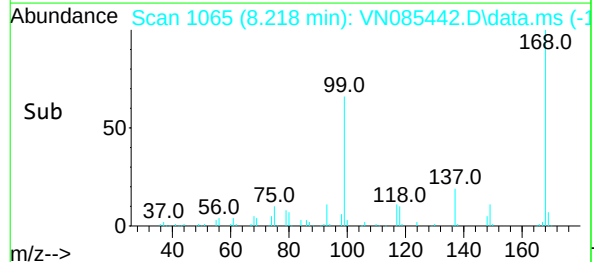
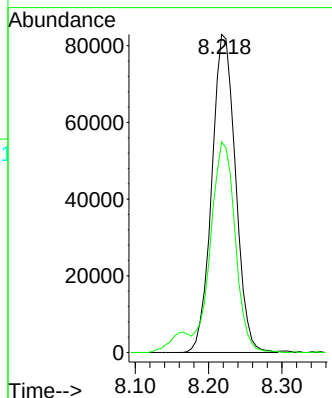
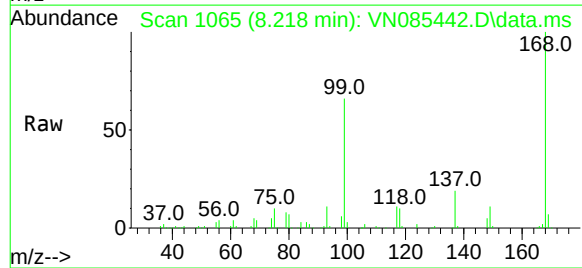
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

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

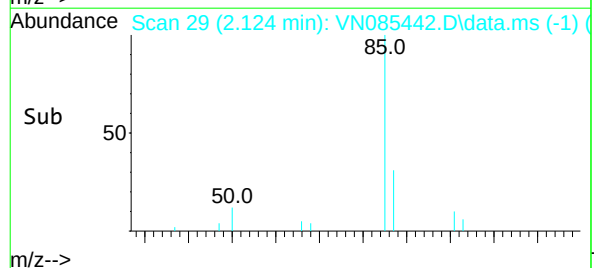
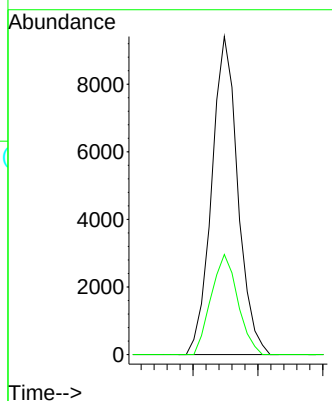
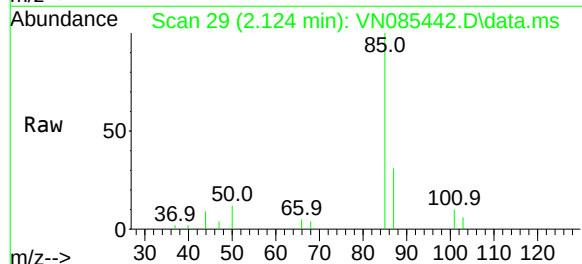
Manual Integrations  
APPROVED

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

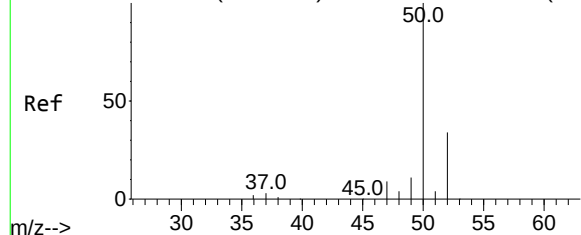


#2  
Dichlorodifluoromethane  
Concen: 5.225 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

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

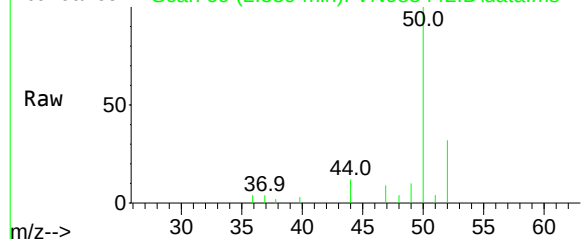
Instrument :

MSVOA\_N

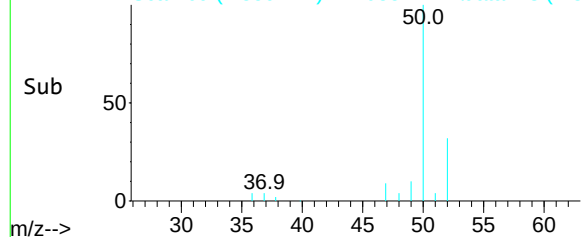
ClientSampleId :

VSTDIC005

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



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



Tgt Ion: 50 Resp: 14526

Ion Ratio Lower Upper

50 100

52 31.6 27.0 40.6

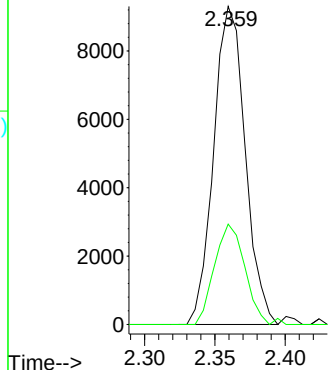
Manual Integrations

APPROVED

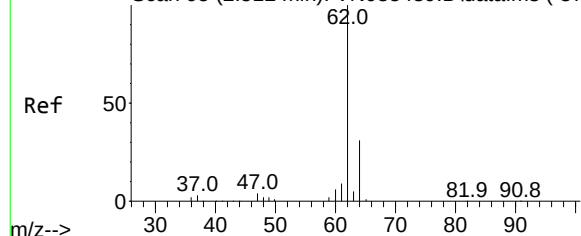
Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

Abundance



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

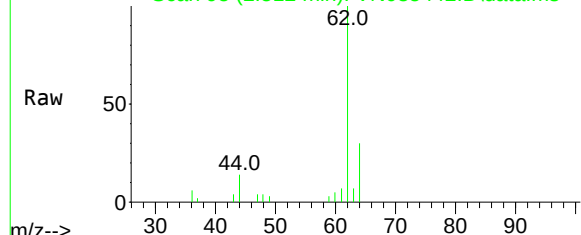
Tgt Ion: 62 Resp: 14564

Ion Ratio Lower Upper

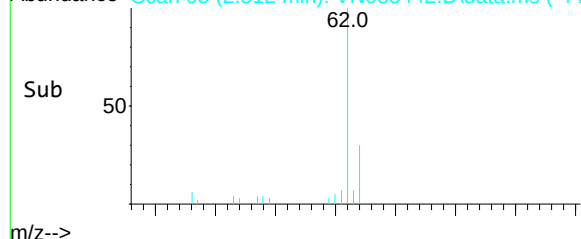
62 100

64 29.9 24.8 37.2

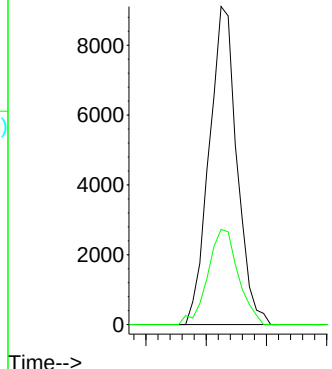
Abundance Scan 95 (2.512 min): VN085442.D\data.ms

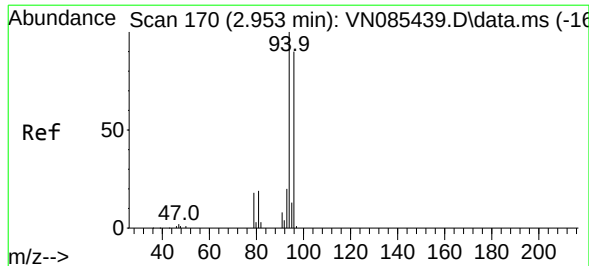


Abundance Scan 95 (2.512 min): VN085442.D\data.ms (-44)



Abundance





#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

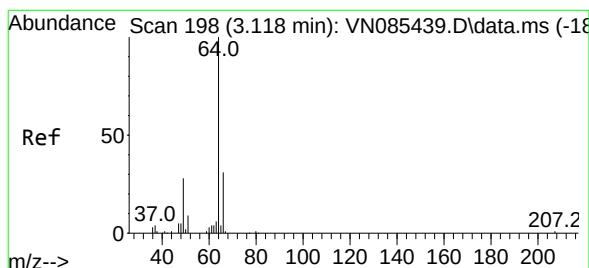
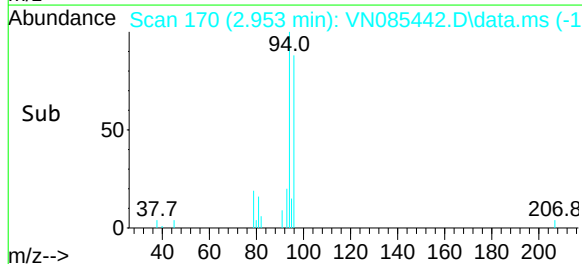
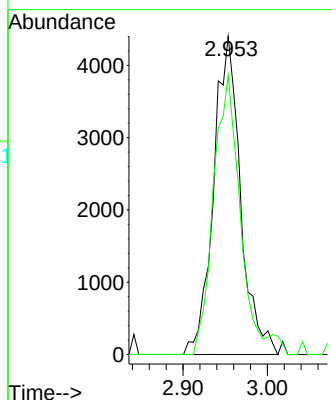
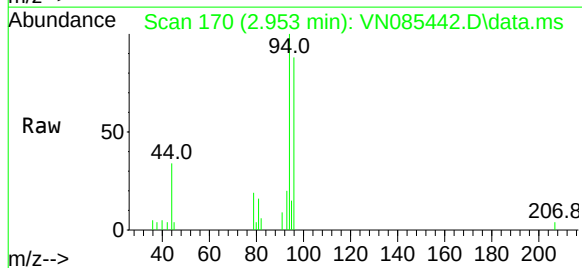
96 87.7 71.8 107.6

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

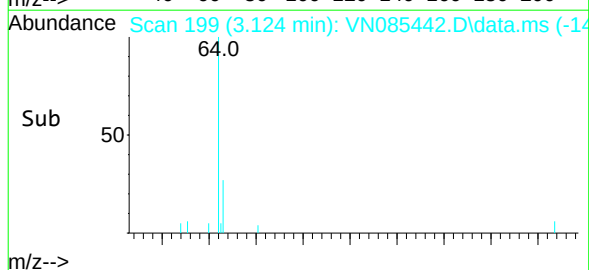
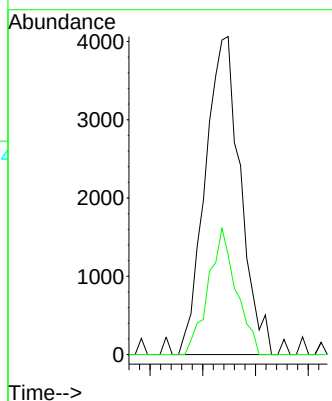
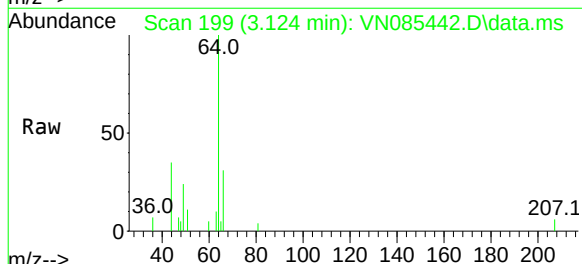
Acq: 14 Jan 2025 16:31

Tgt Ion: 64 Resp: 9430

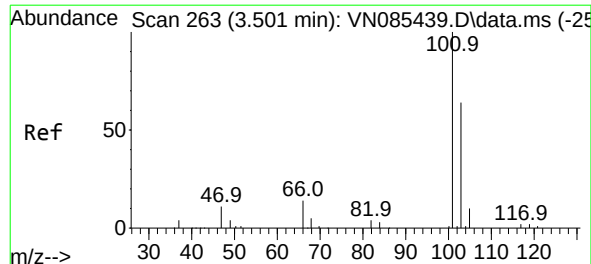
Ion Ratio Lower Upper

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 :

VSTDIC005

Tgt Ion:101 Resp: 20098

Ion Ratio Lower Upper

101 100

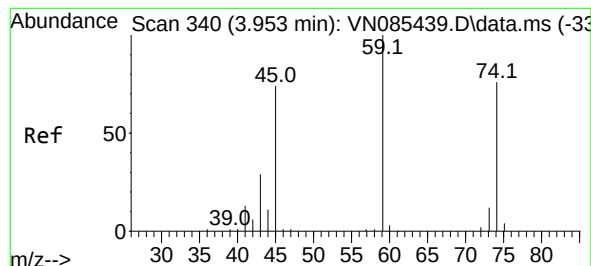
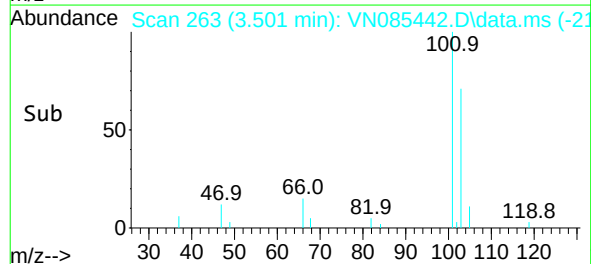
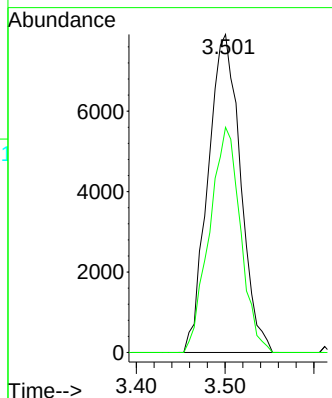
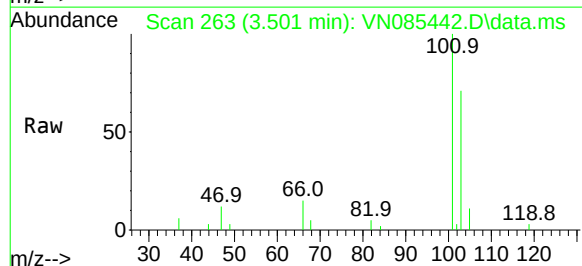
103 70.8 51.4 77.2

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

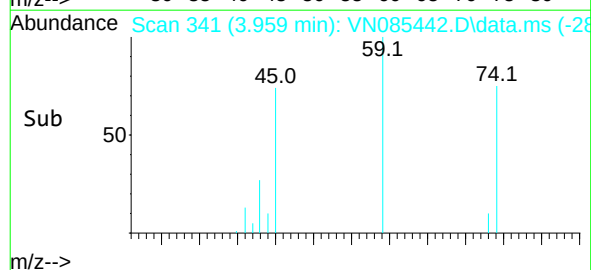
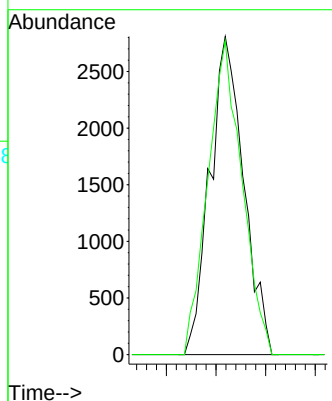
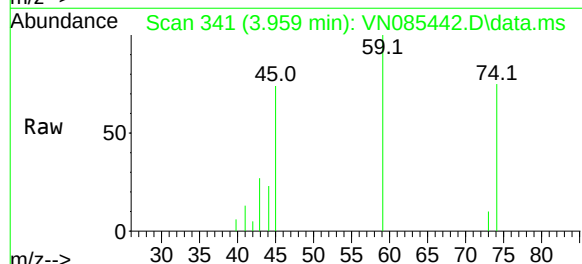
Acq: 14 Jan 2025 16:31

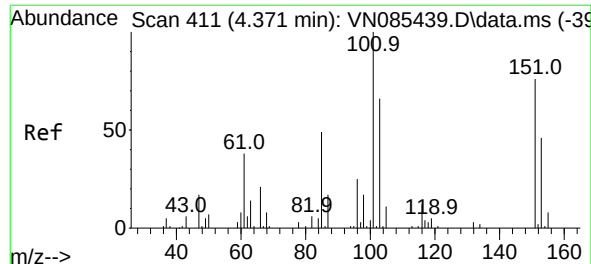
Tgt Ion: 74 Resp: 6652

Ion Ratio Lower Upper

74 100

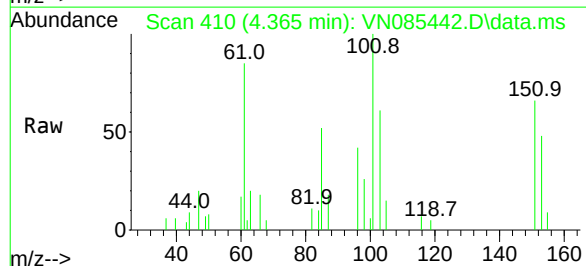
45 99.5 49.7 149.1





#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

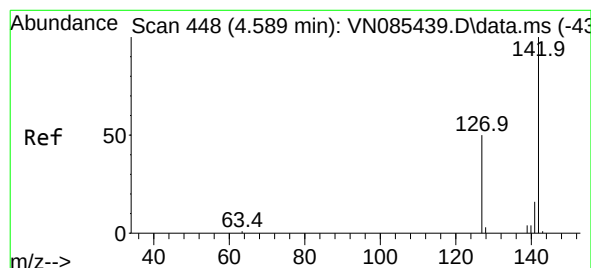
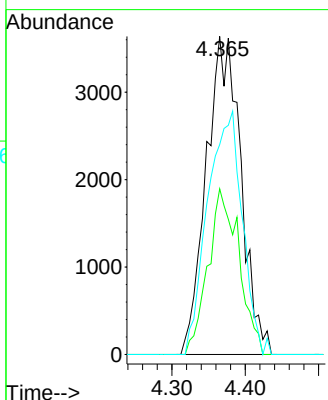
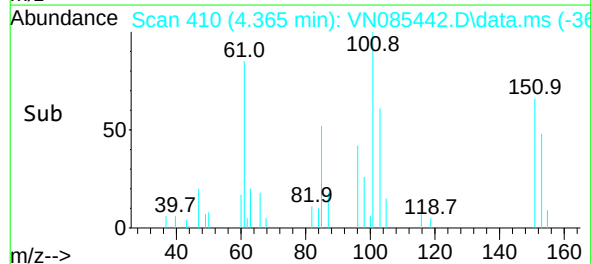
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005



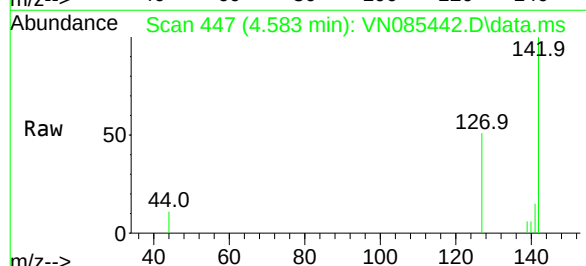
Tgt Ion:101 Resp: 11917  
Ion Ratio Lower Upper  
101 100  
85 46.5 37.8 56.8  
151 76.7 58.8 88.2

Manual Integrations  
APPROVED

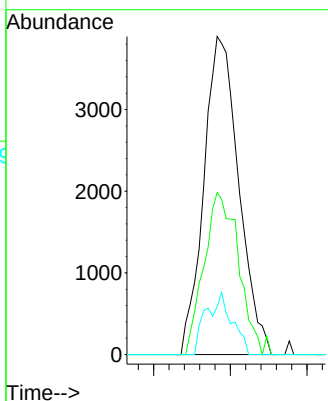
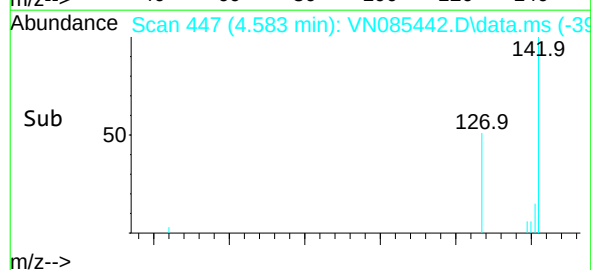
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

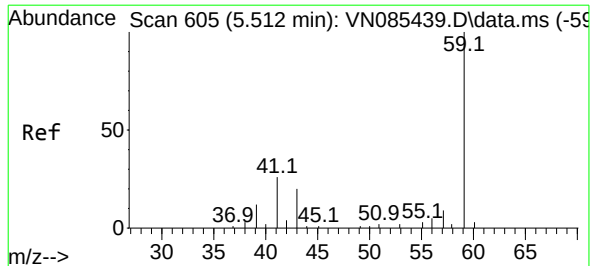


#10  
Methyl Iodide  
Concen: 4.793 ug/l  
RT: 4.583 min Scan# 447  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31



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

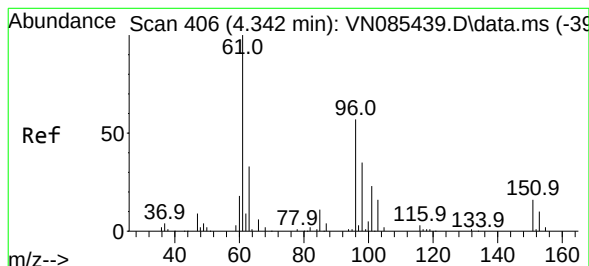
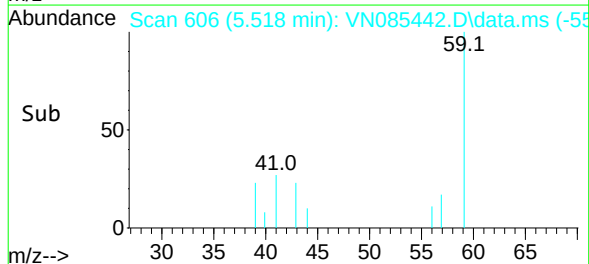
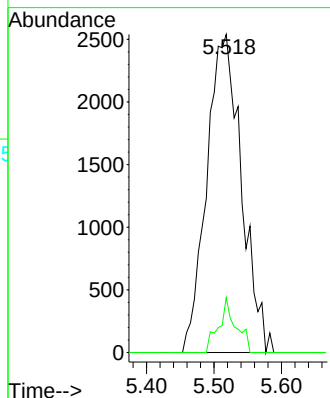
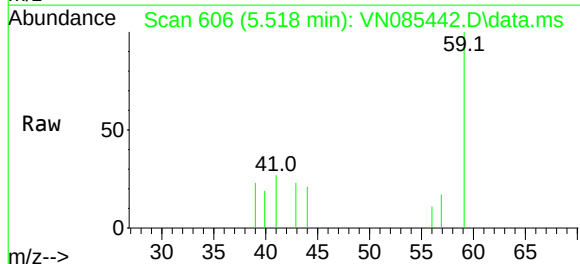
57 8.5 8.6 13.0#

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

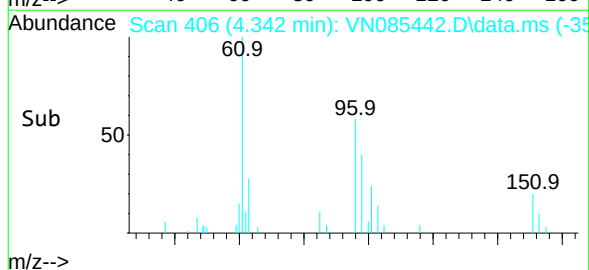
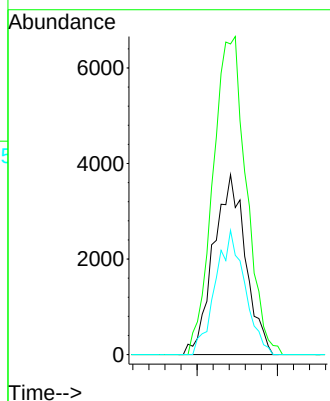
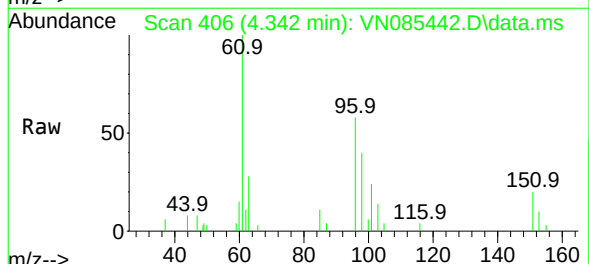
Tgt Ion: 96 Resp: 10429

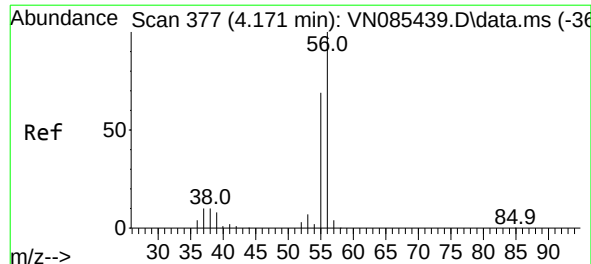
Ion Ratio Lower Upper

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

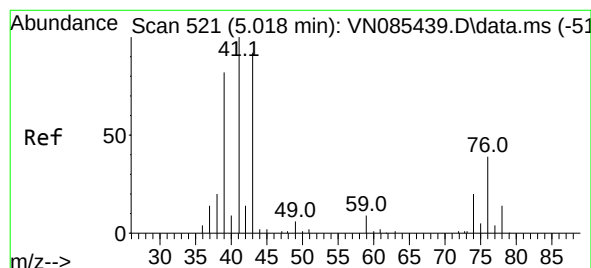
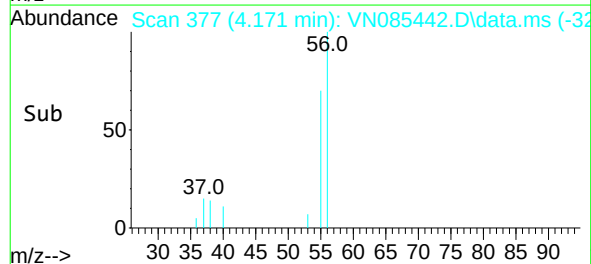
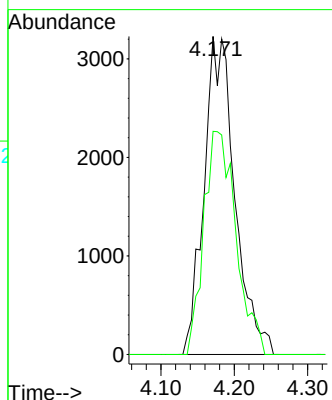
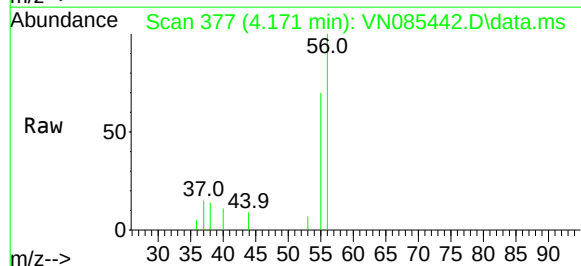
55 73.2 56.3 84.5

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

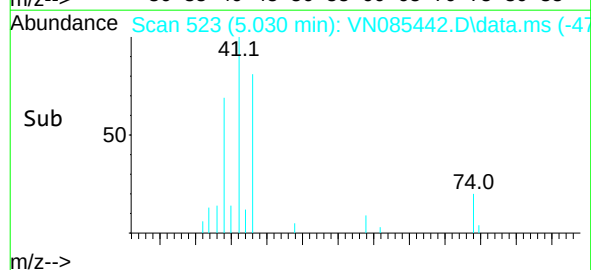
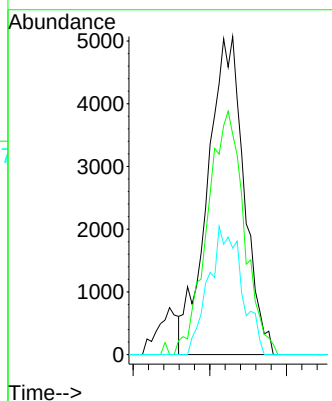
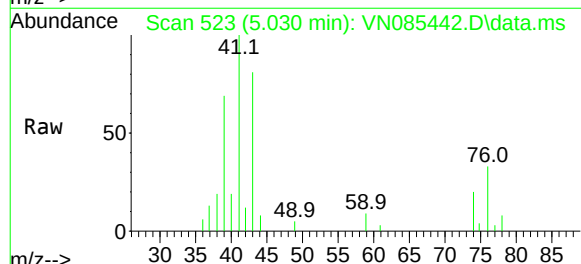
Tgt Ion: 41 Resp: 16741

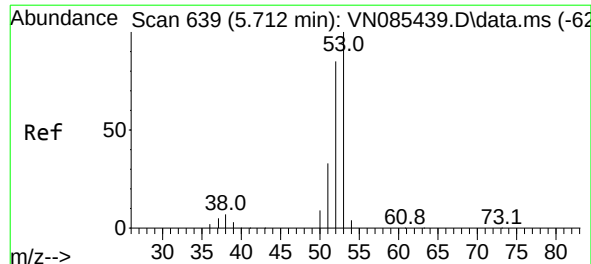
Ion Ratio Lower Upper

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

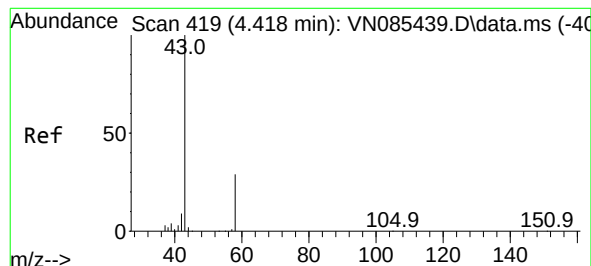
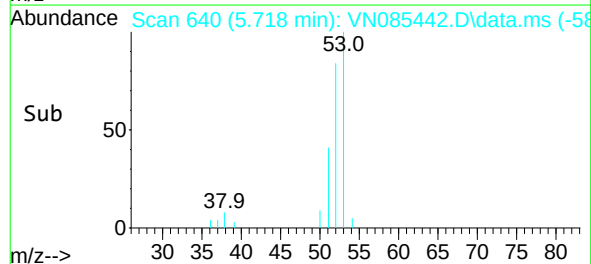
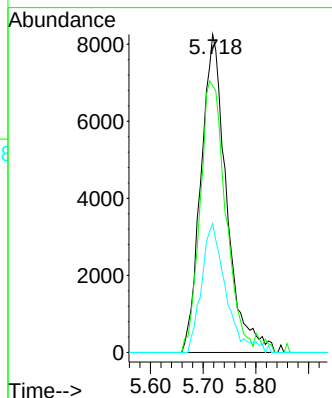
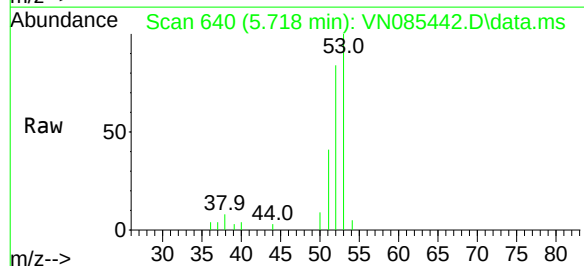
ClientSampleId :

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

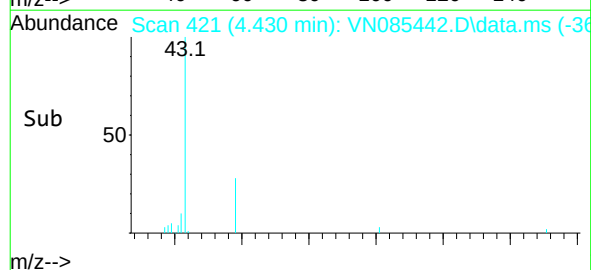
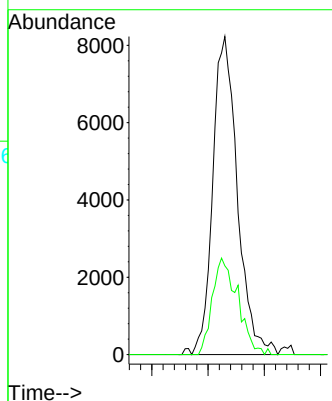
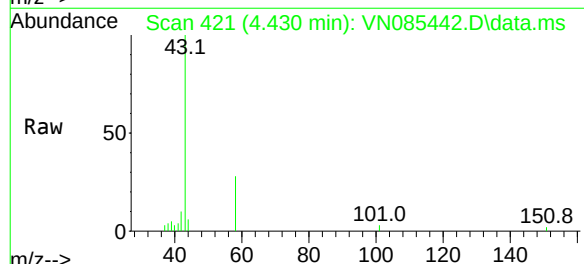
RT: 4.430 min Scan# 421

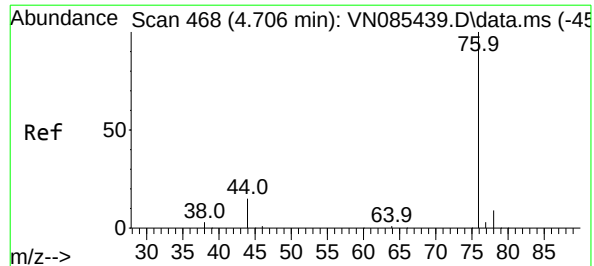
Delta R.T. 0.012 min

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

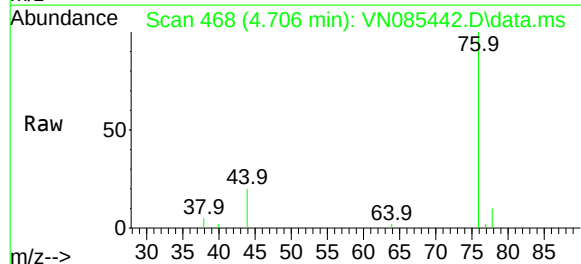
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC005



Tgt Ion: 76 Resp: 32068

Ion Ratio Lower Upper

76 100

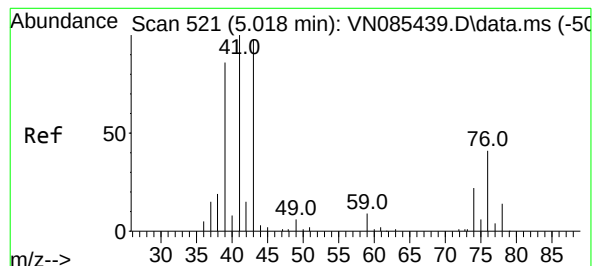
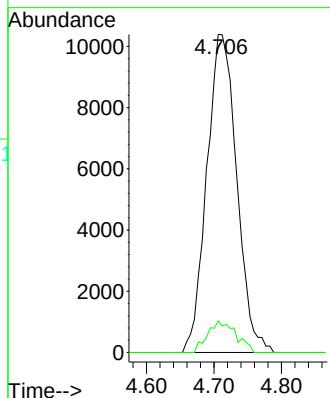
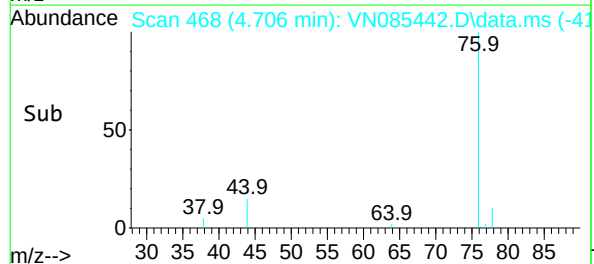
78 9.9 6.9 10.3

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

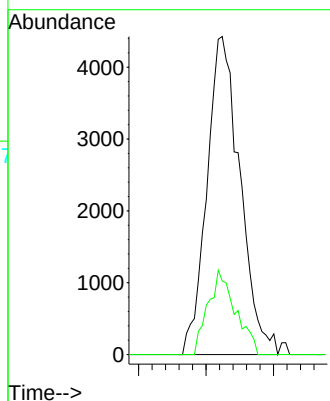
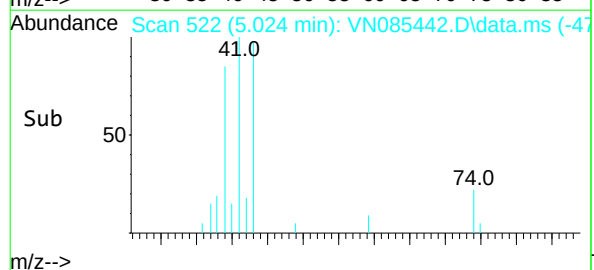
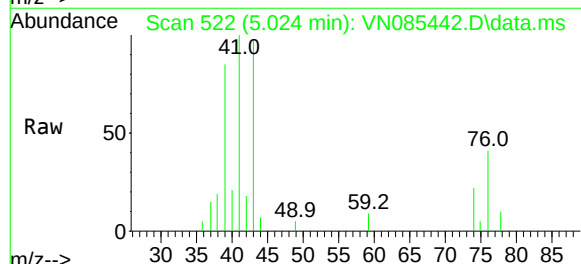
Acq: 14 Jan 2025 16:31

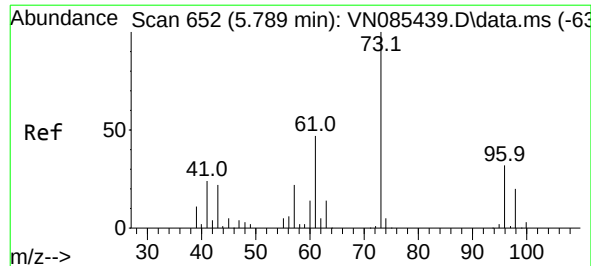
Tgt Ion: 43 Resp: 15106

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

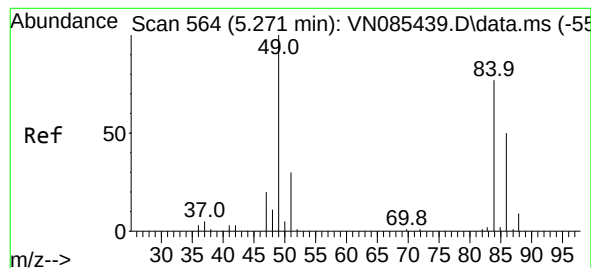
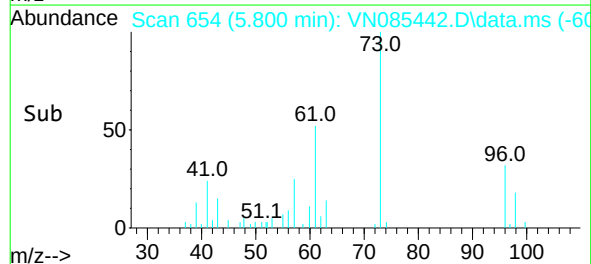
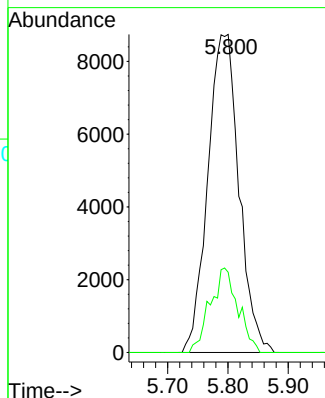
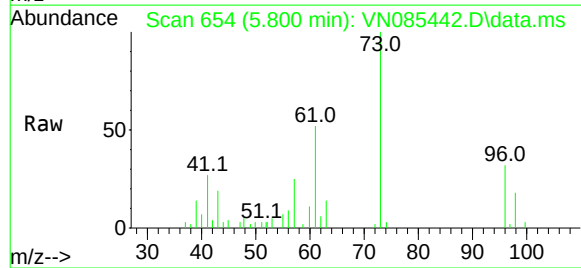
57 25.2 17.8 26.8

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

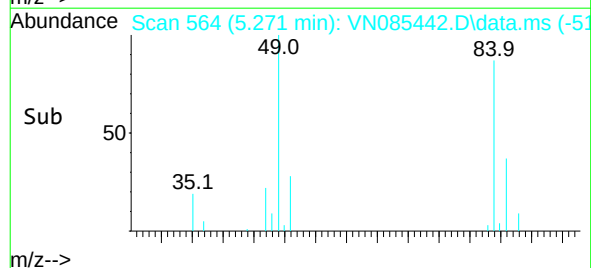
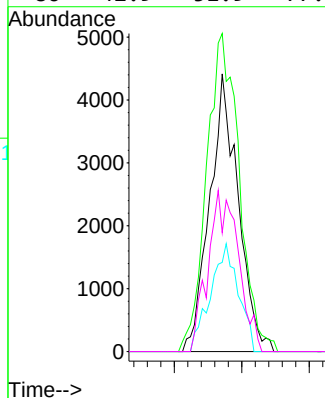
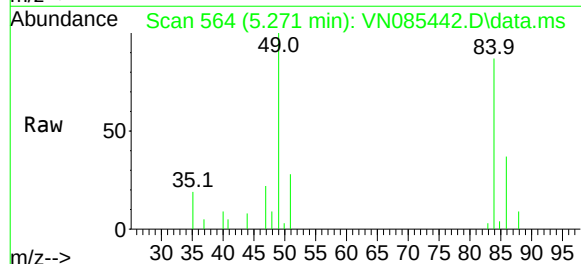
Ion Ratio Lower Upper

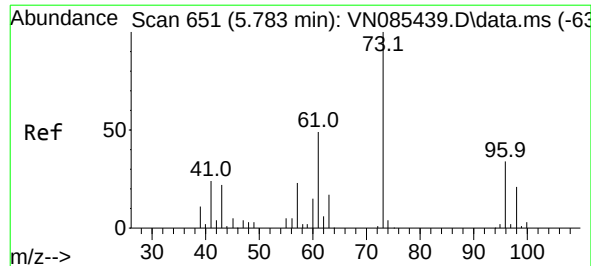
84 100

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

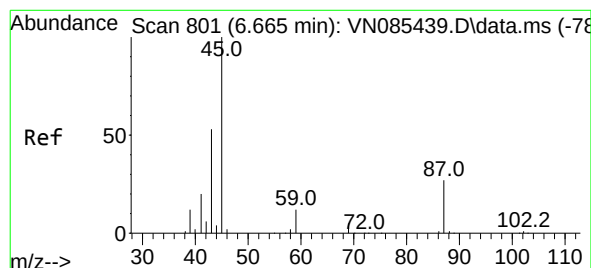
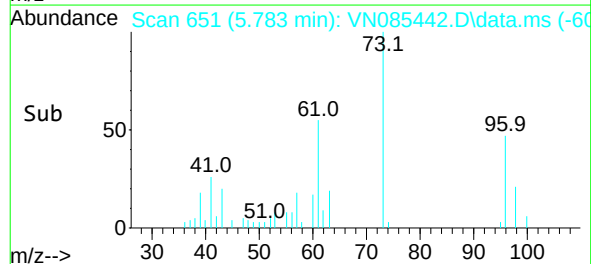
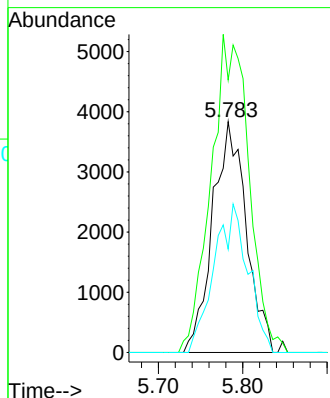
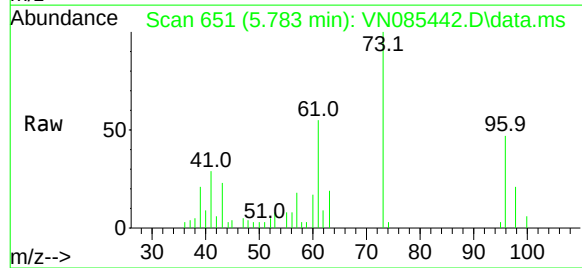
98 44.7 49.8 74.8#

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

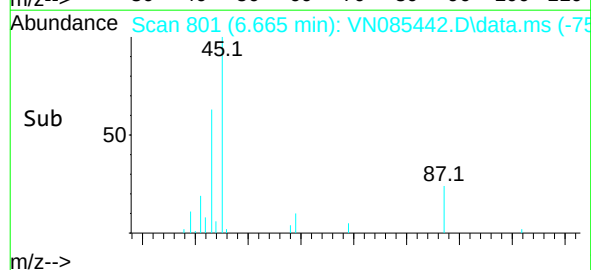
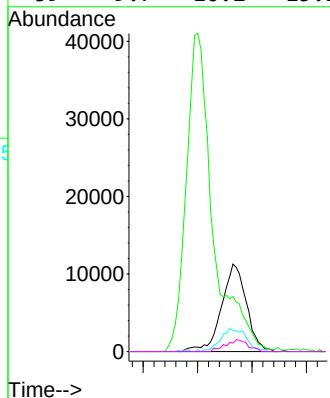
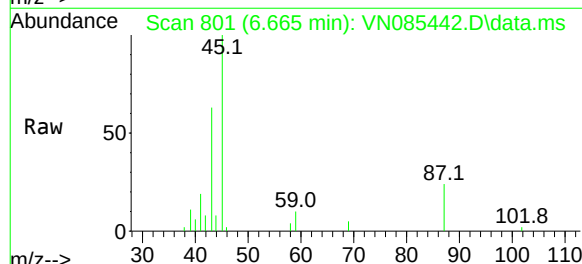
Ion Ratio Lower Upper

45 100

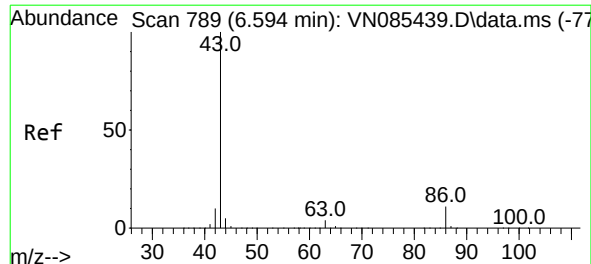
43 58.3 45.0 67.6

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

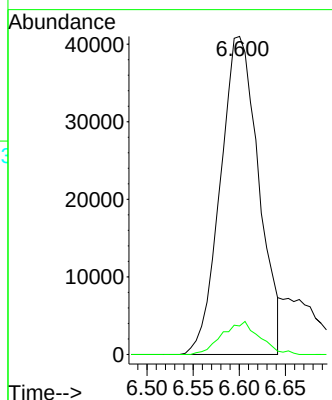
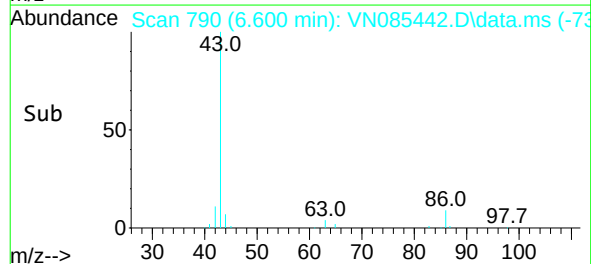
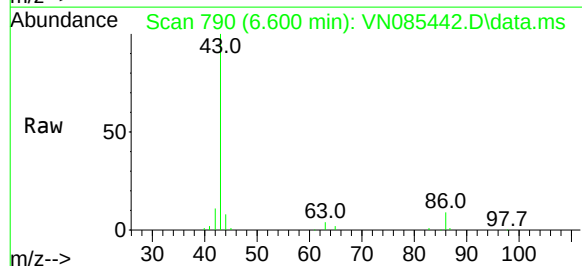
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 118439

Ion Ratio Lower Upper

43 100

86 9.0 8.4 12.6



Instrument :

MSVOA\_N

ClientSampleId :

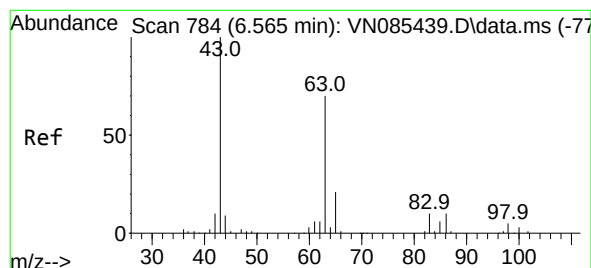
VSTDICC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 5.200 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

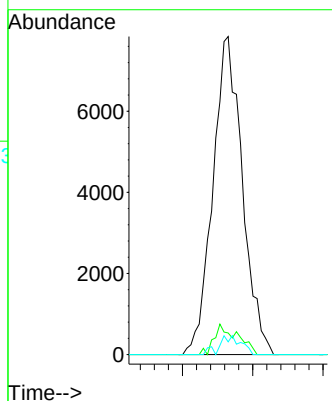
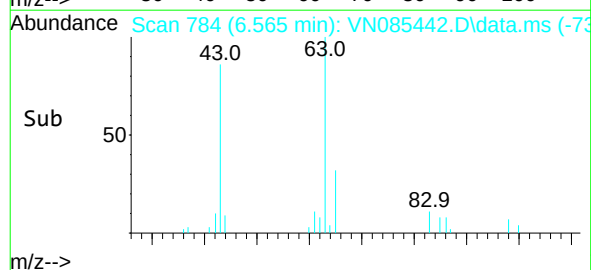
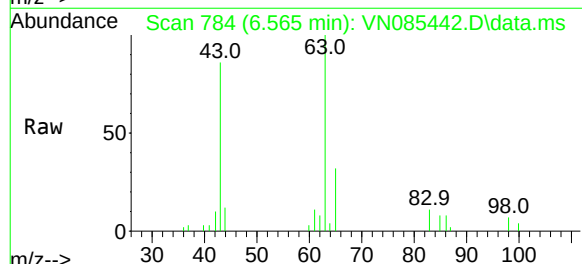
Tgt Ion: 63 Resp: 22865

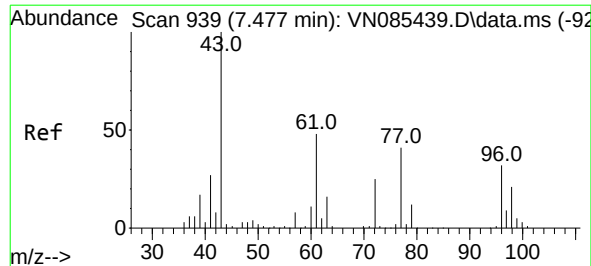
Ion Ratio Lower Upper

63 100

98 6.8 3.3 9.8

100 4.0 2.0 6.0





#25

2-Butanone

Concen: 25.231 ug/l

RT: 7.483 min Scan# 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 :

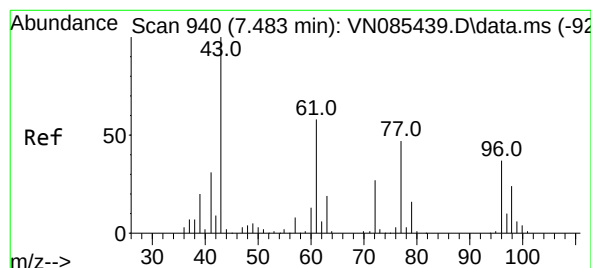
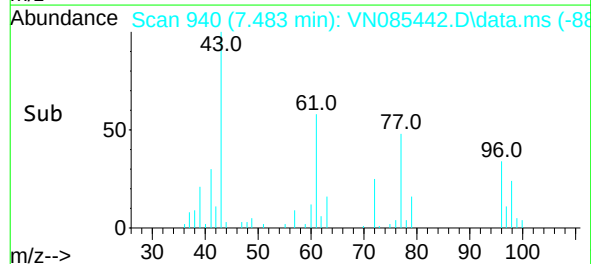
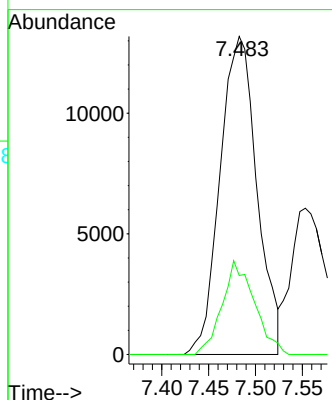
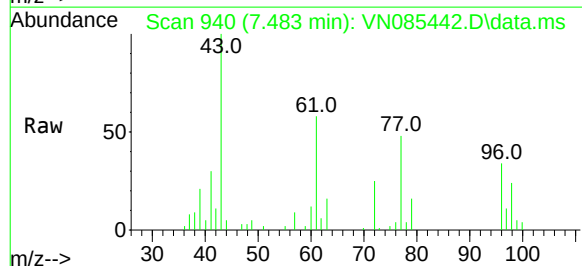
VSTDICC005

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

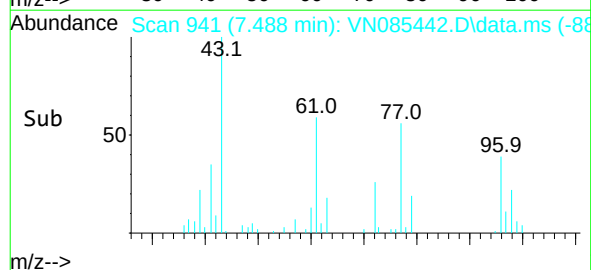
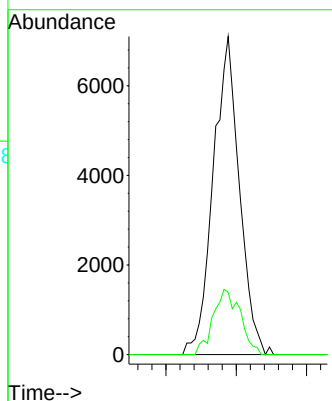
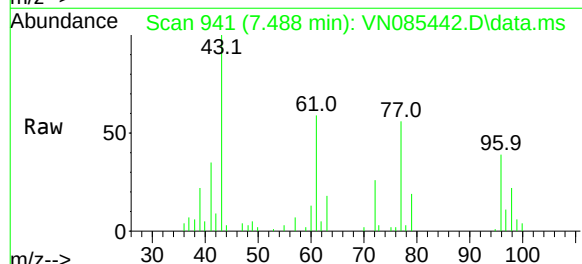
Acq: 14 Jan 2025 16:31

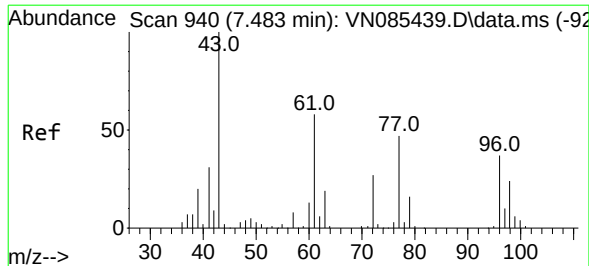
Tgt Ion: 77 Resp: 18398

Ion Ratio Lower Upper

77 100

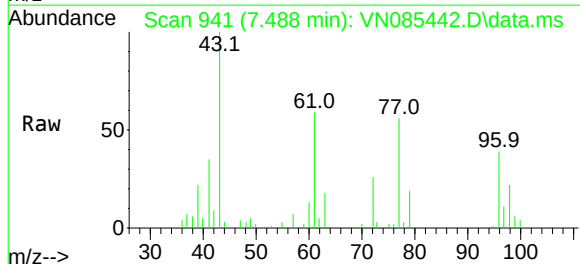
97 21.2 10.7 32.1





#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

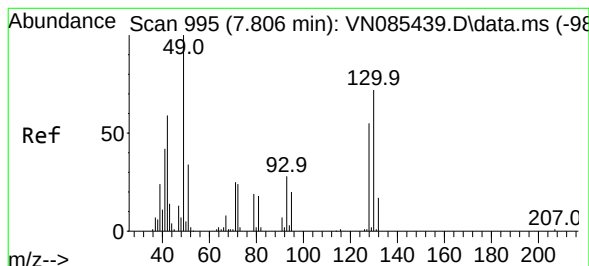
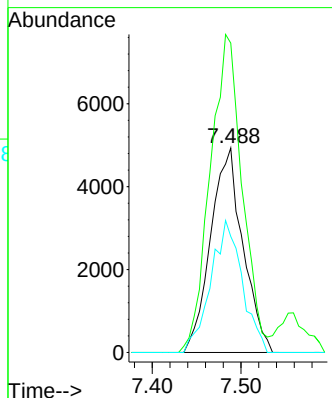
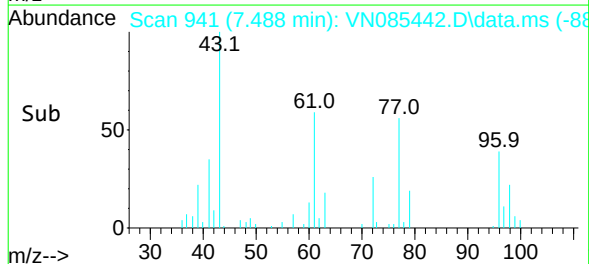
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005



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

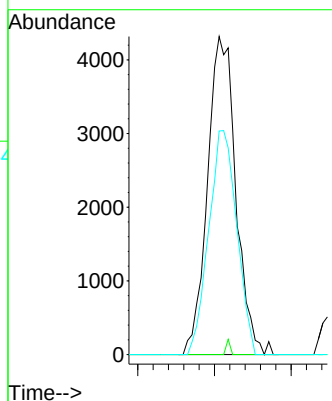
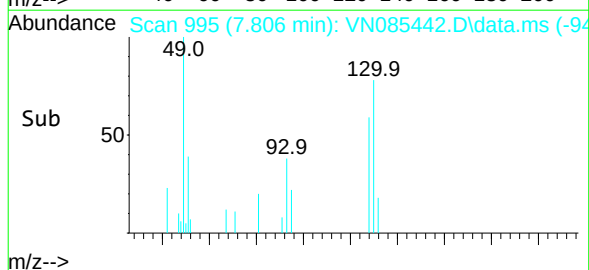
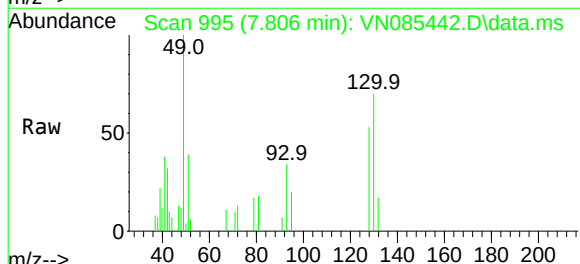
Manual Integrations  
APPROVED

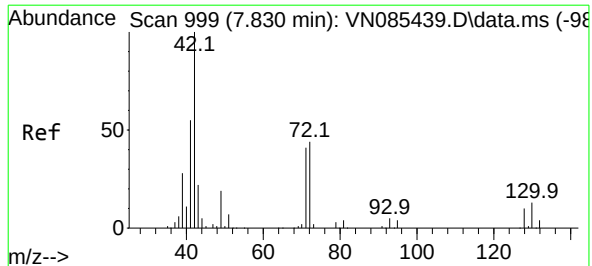
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

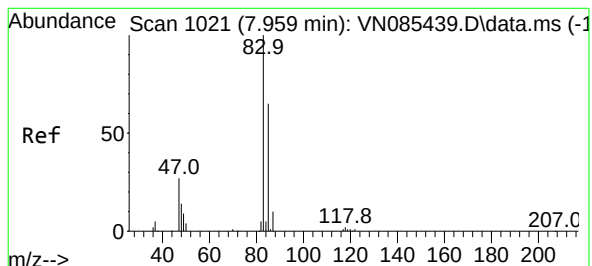
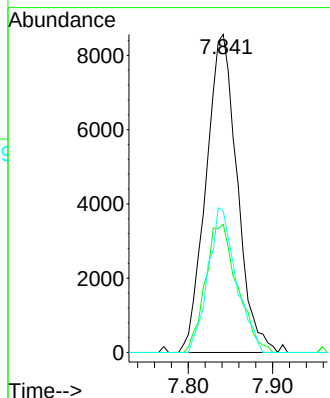
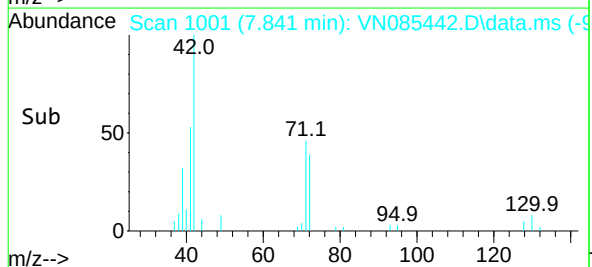
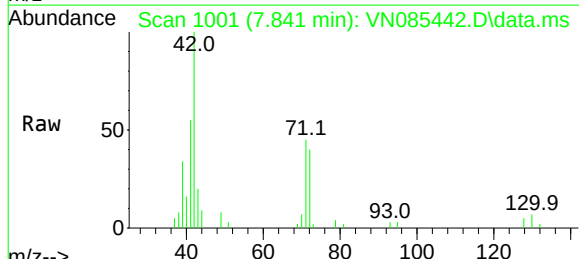
71 41.0 32.5 48.7

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

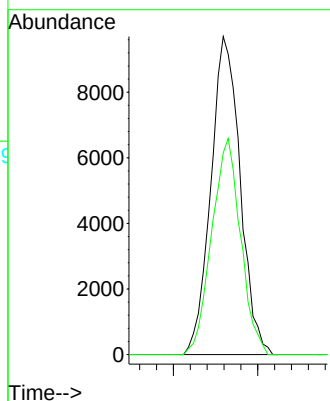
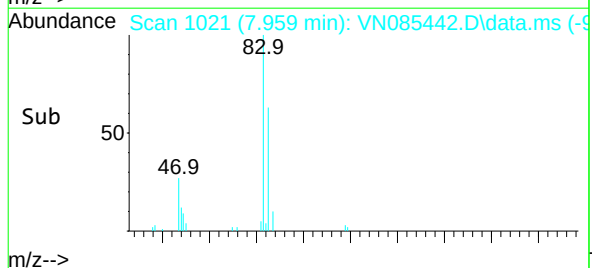
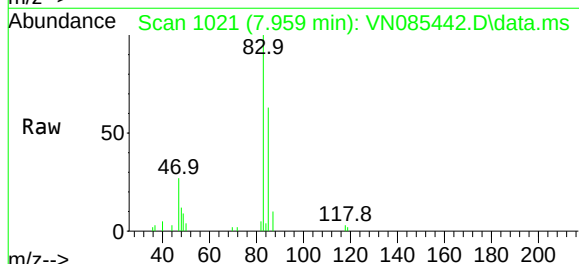
Acq: 14 Jan 2025 16:31

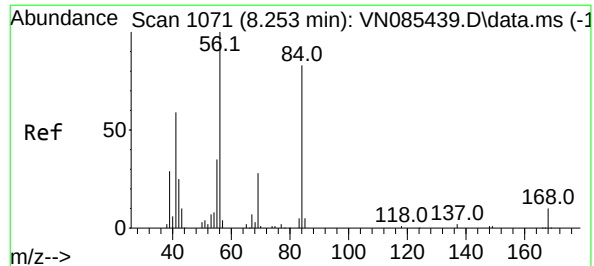
Tgt Ion: 83 Resp: 23384

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

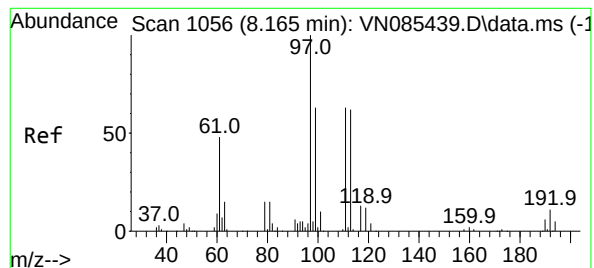
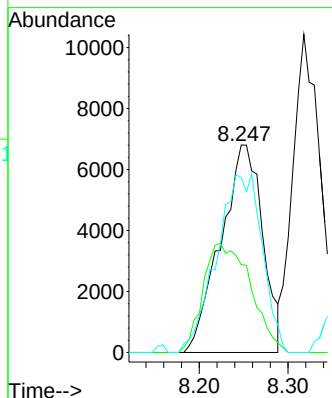
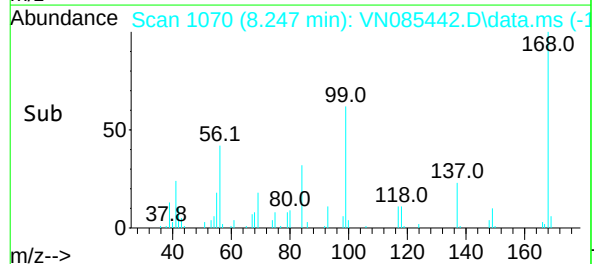
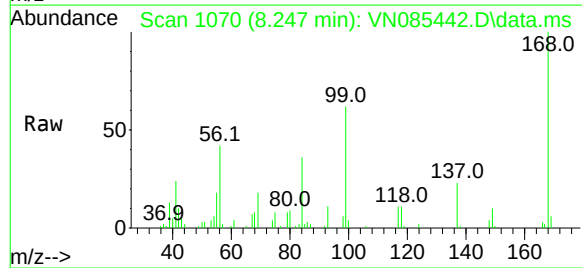
84 84.3 66.4 99.6

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

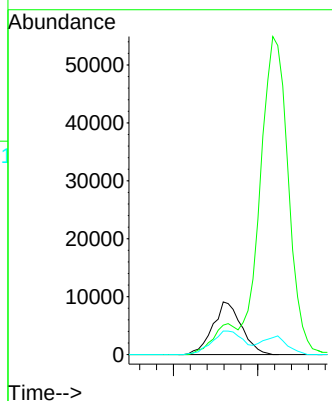
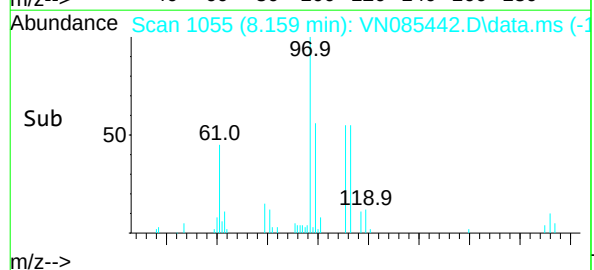
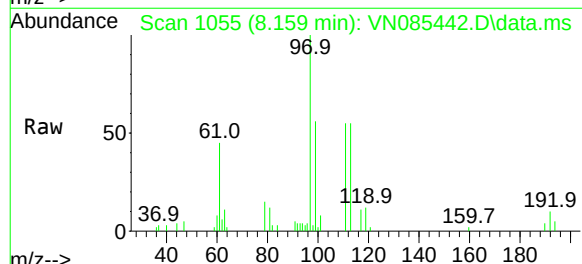
Tgt Ion: 97 Resp: 21416

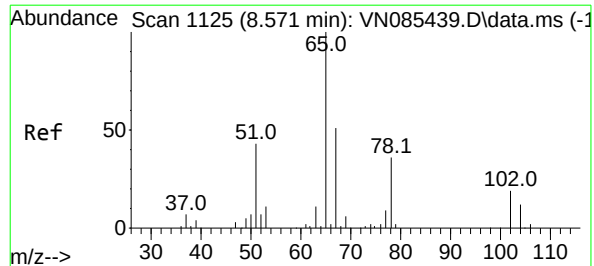
Ion Ratio Lower Upper

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

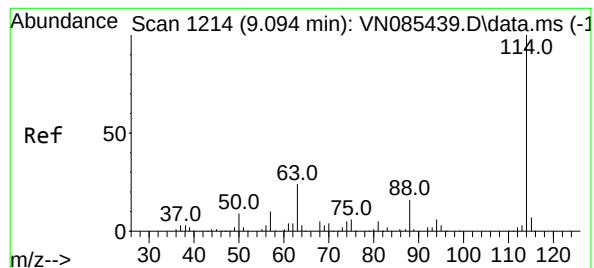
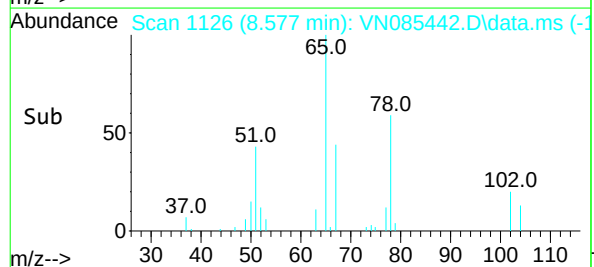
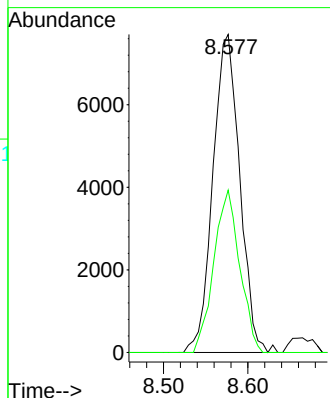
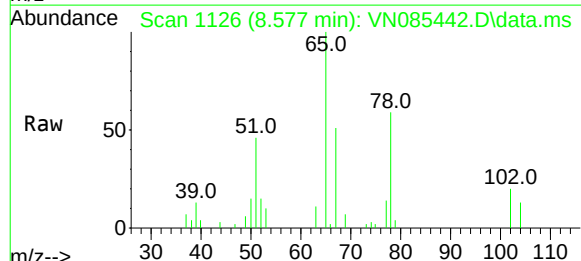
67 49.2 0.0 101.6

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

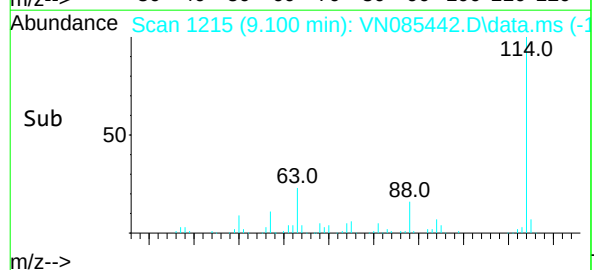
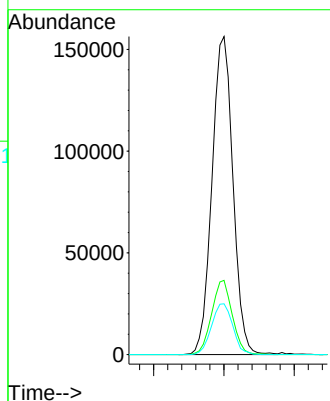
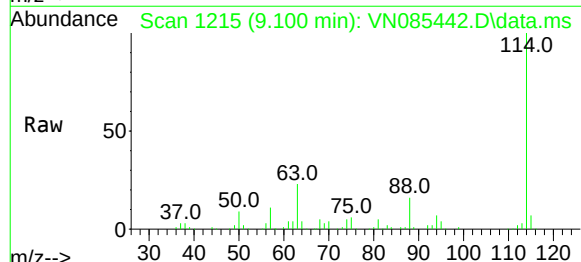
Tgt Ion:114 Resp: 324413

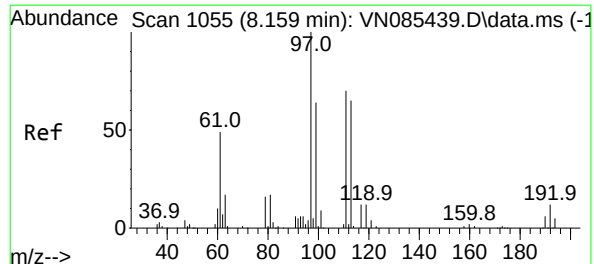
Ion Ratio Lower Upper

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

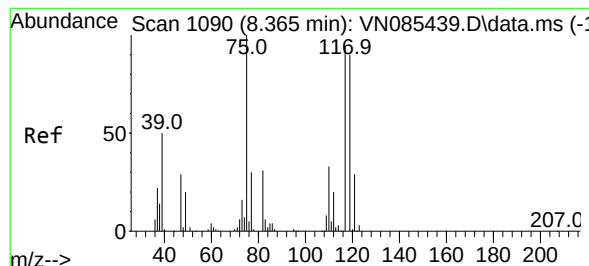
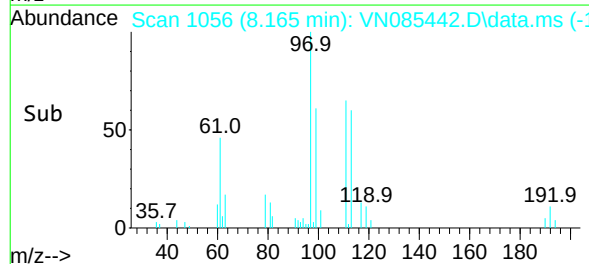
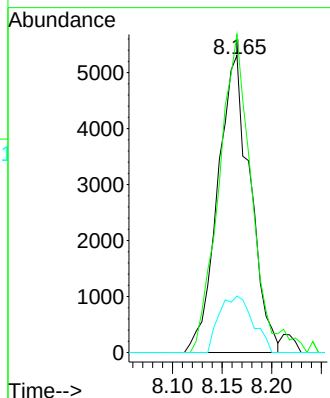
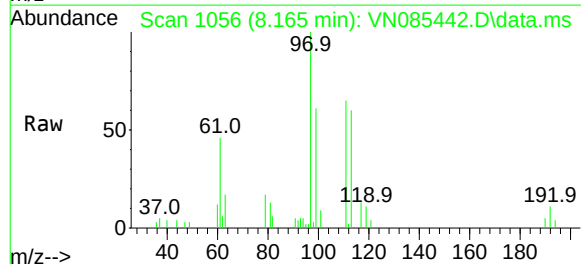
192 19.7 14.3 21.5

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

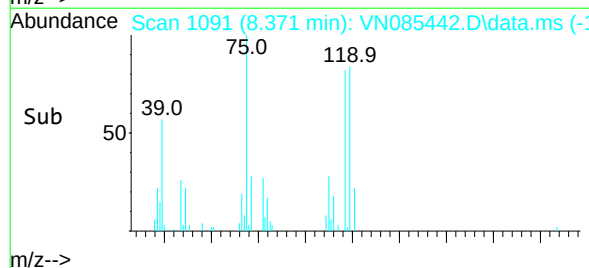
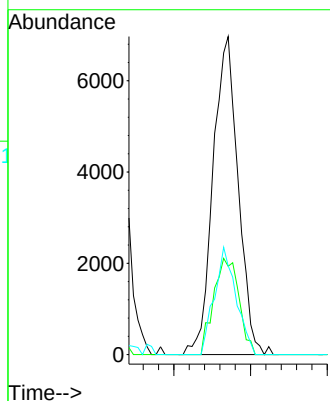
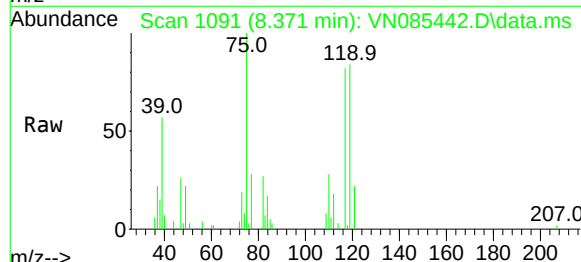
Tgt Ion: 75 Resp: 15886

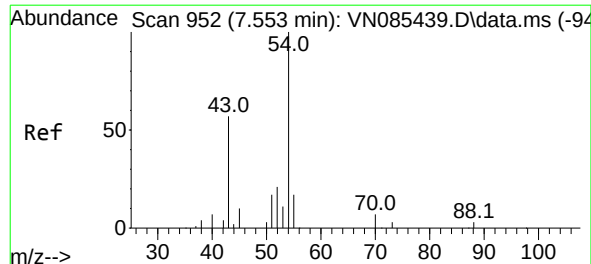
Ion Ratio Lower Upper

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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 16879

Ion Ratio Lower Upper

43 100

61 12.3 10.9 16.3

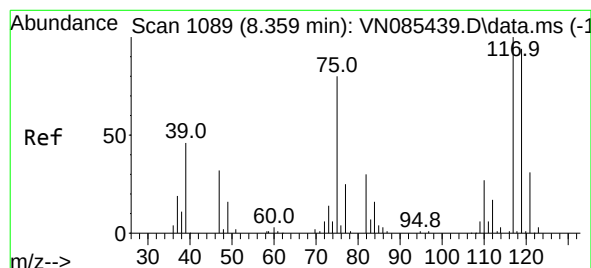
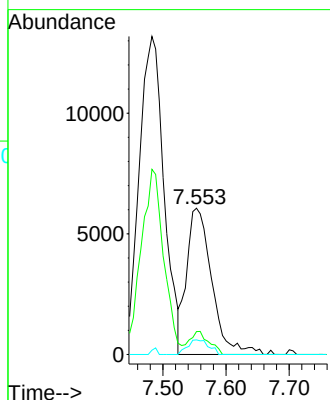
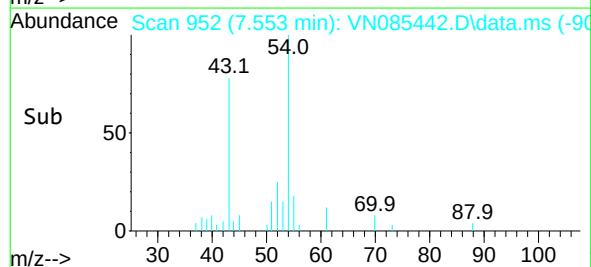
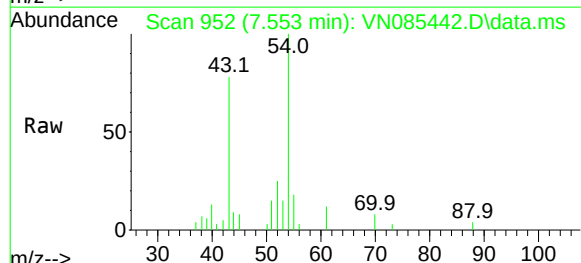
70 8.4 7.5 11.3

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

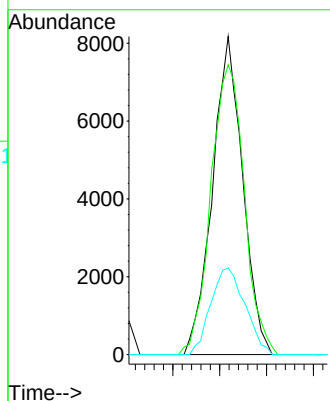
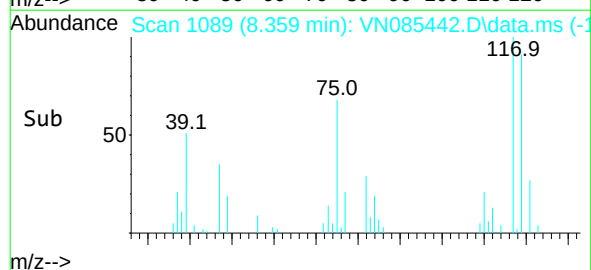
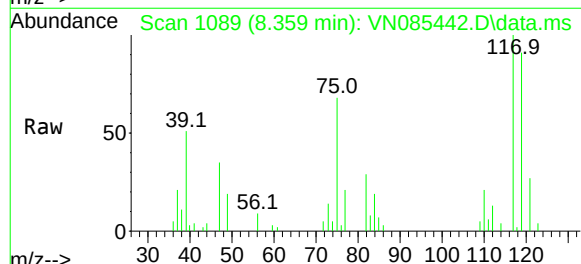
Tgt Ion:117 Resp: 18317

Ion Ratio Lower Upper

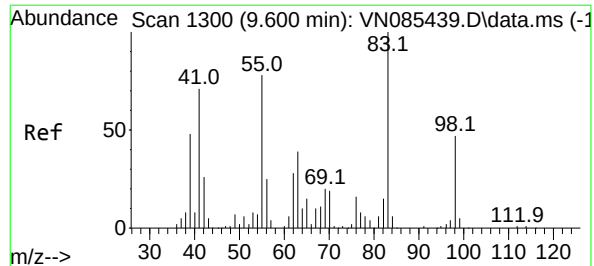
117 100

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

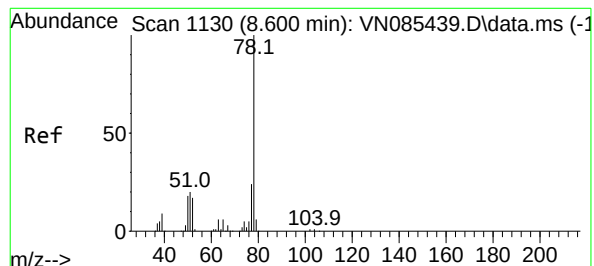
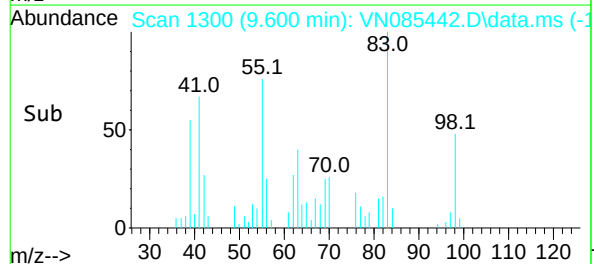
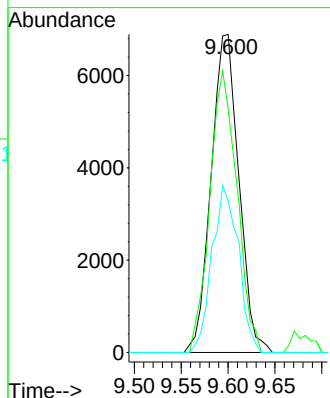
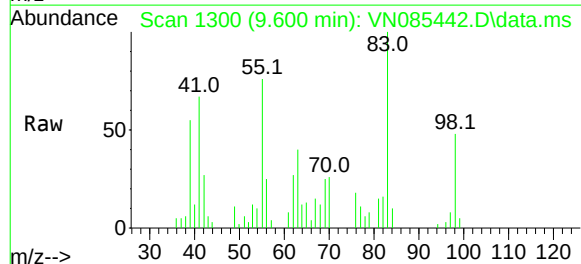
ClientSampleId :

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  |

Manual Integrations  
APPROVED

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



#40

Benzene

Concen: 5.040 ug/l

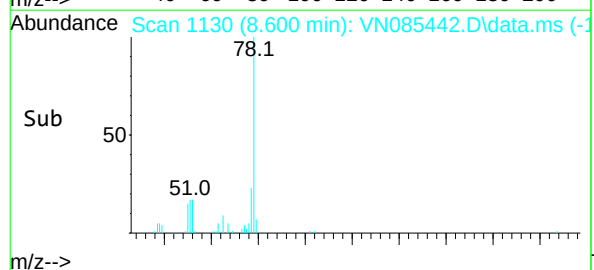
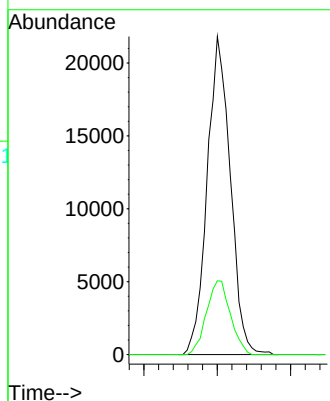
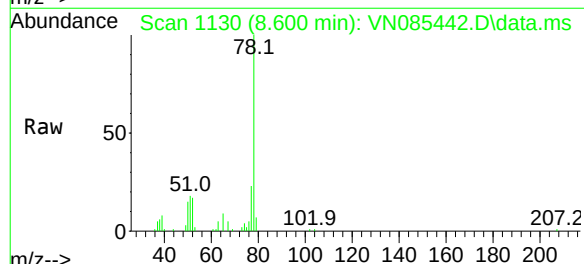
RT: 8.600 min Scan# 1130

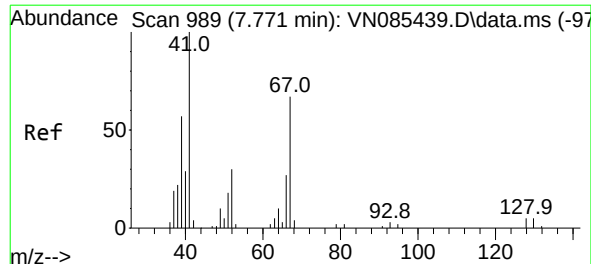
Delta R.T. -0.000 min

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

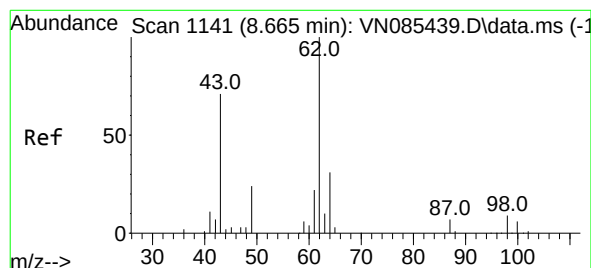
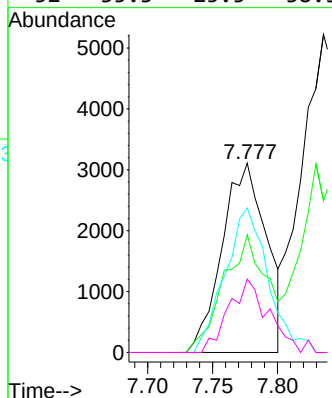
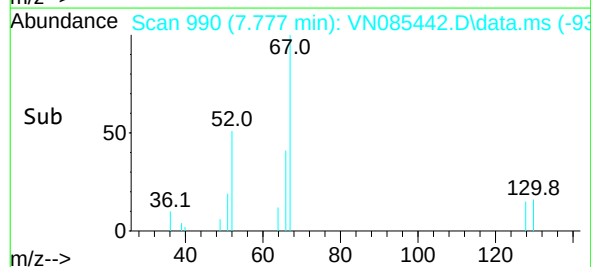
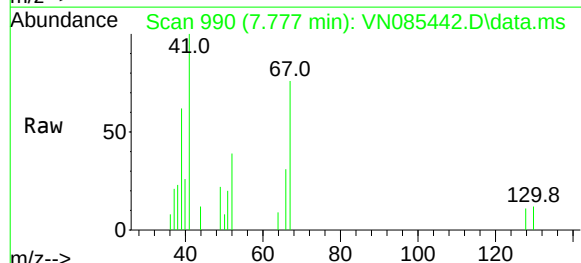
52 35.3 25.5 38.3

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

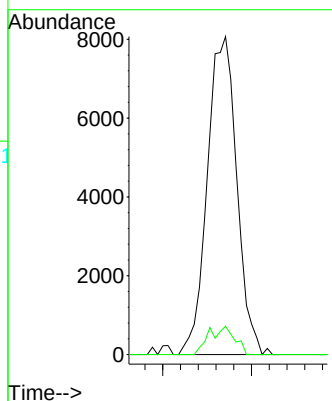
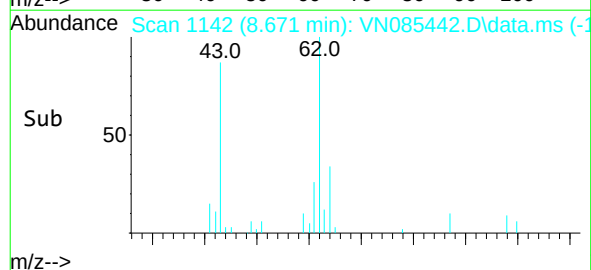
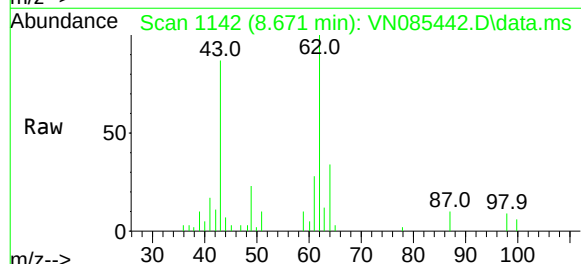
Acq: 14 Jan 2025 16:31

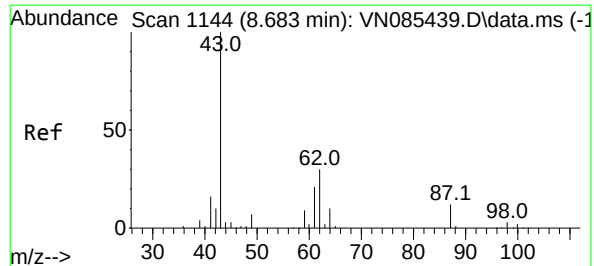
Tgt Ion: 62 Resp: 18628

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

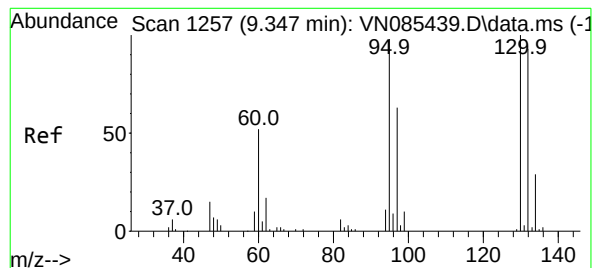
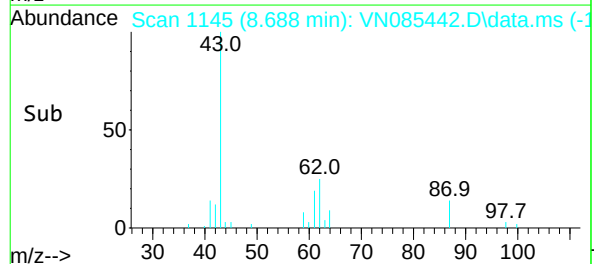
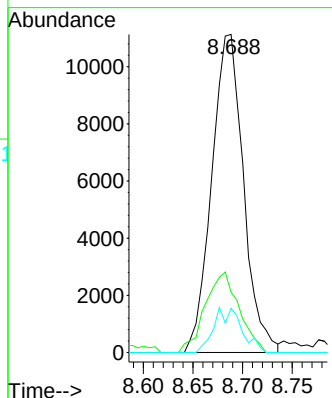
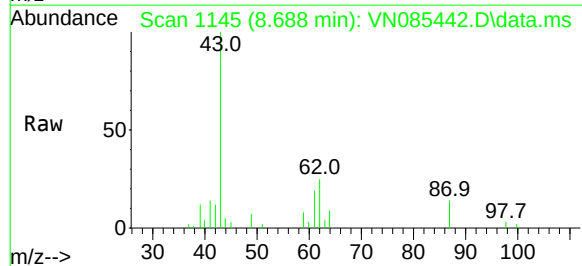
ClientSampleId :

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

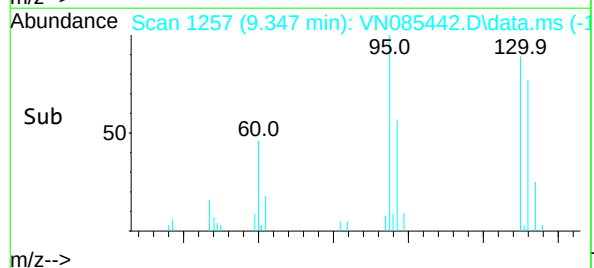
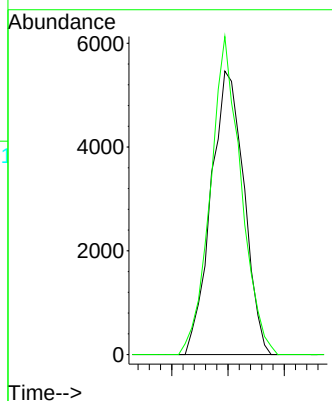
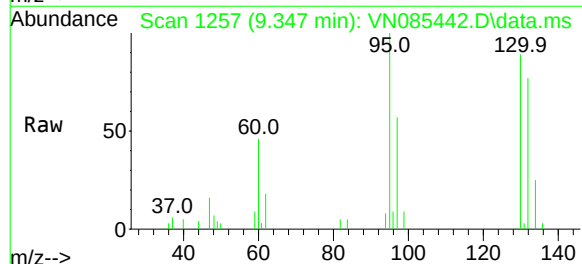
RT: 9.347 min Scan# 1257

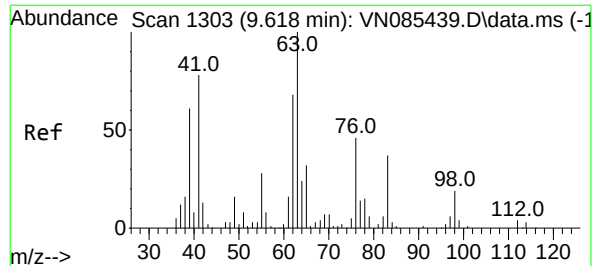
Delta R.T. 0.000 min

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 :

VSTDIC005

Tgt Ion: 63 Resp: 12591

Ion Ratio Lower Upper

63 100

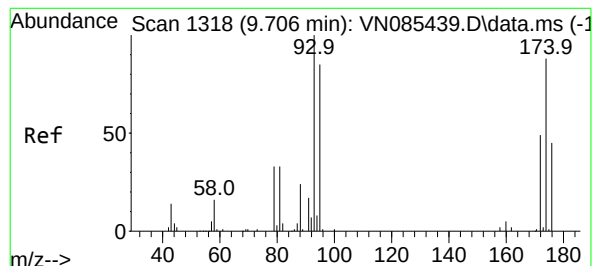
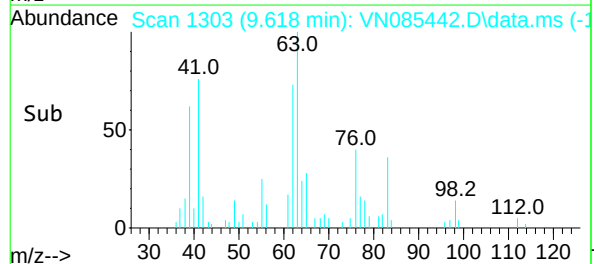
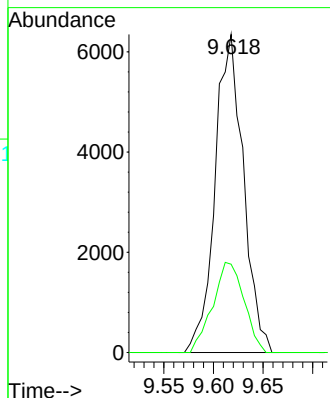
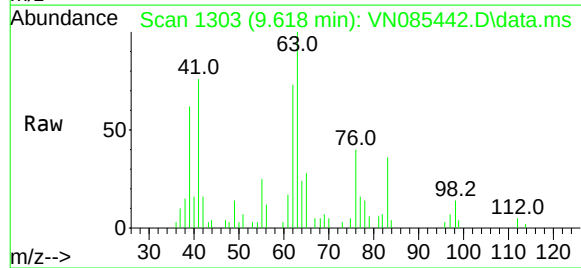
65 27.8 25.6 38.4

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

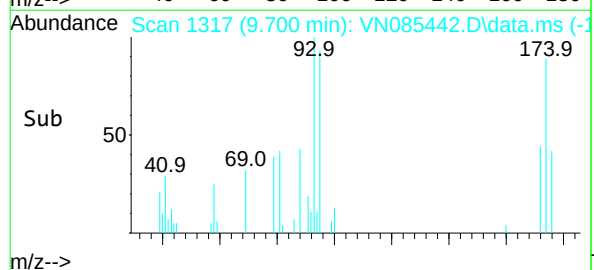
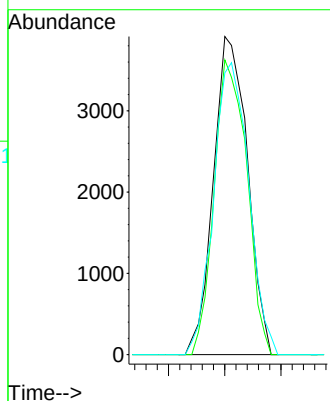
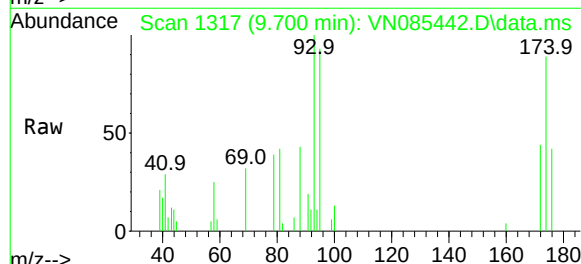
Tgt Ion: 93 Resp: 8230

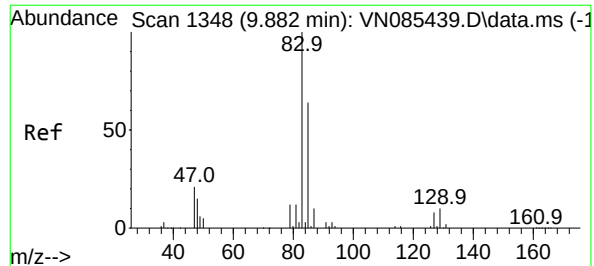
Ion Ratio Lower Upper

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

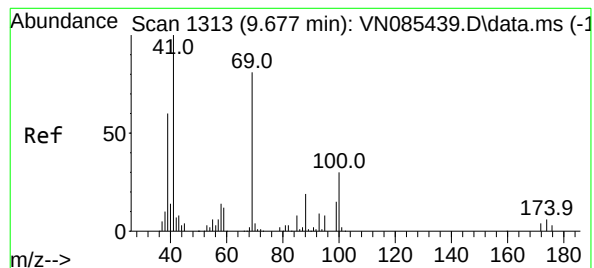
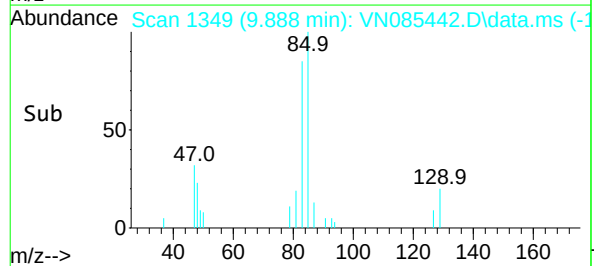
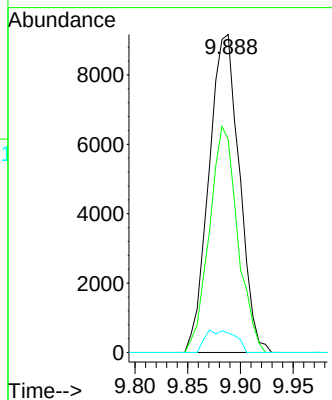
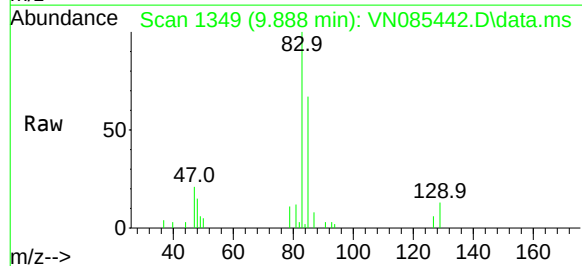
ClientSampleId :

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



#48

Methyl methacrylate

Concen: 4.599 ug/l

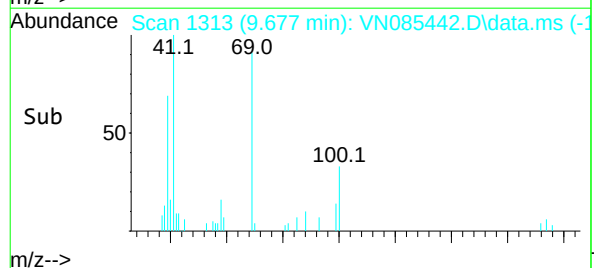
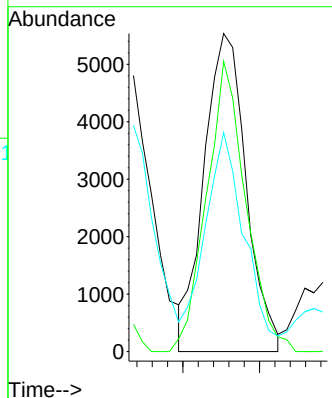
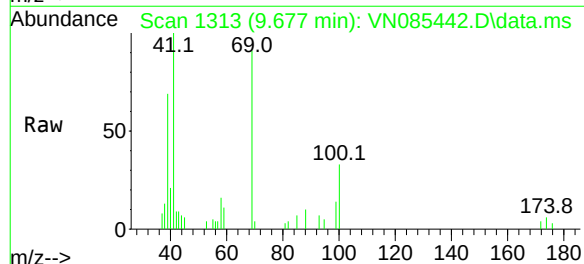
RT: 9.677 min Scan# 1313

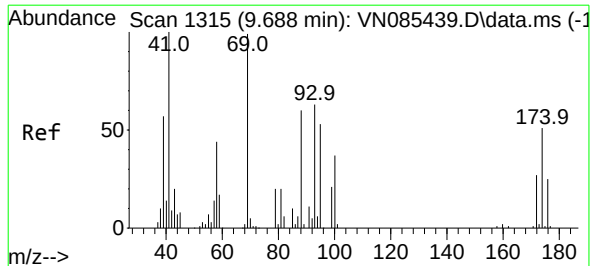
Delta R.T. -0.000 min

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

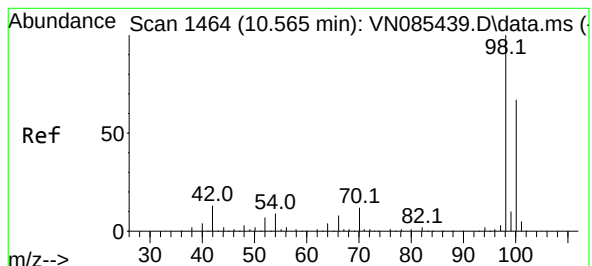
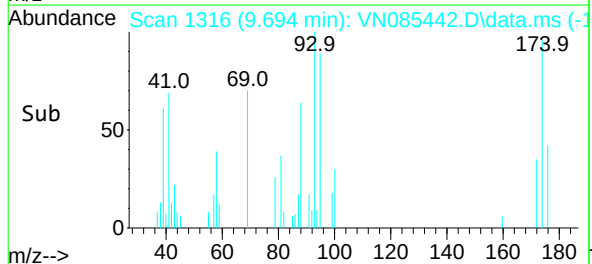
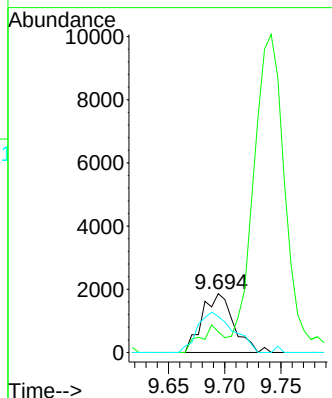
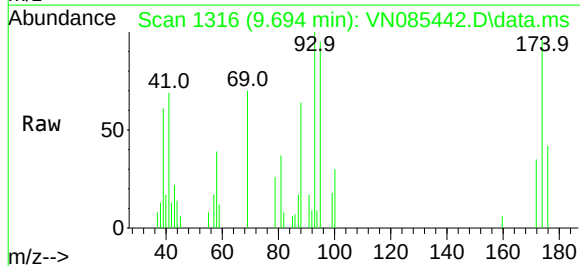
58 77.9 59.5 89.3

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

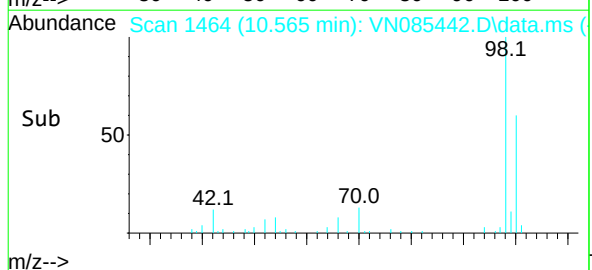
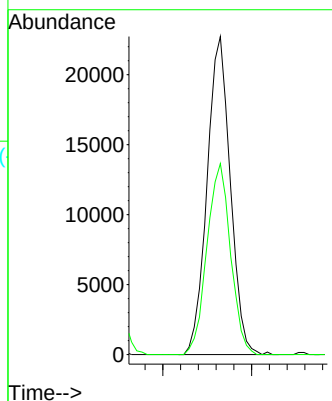
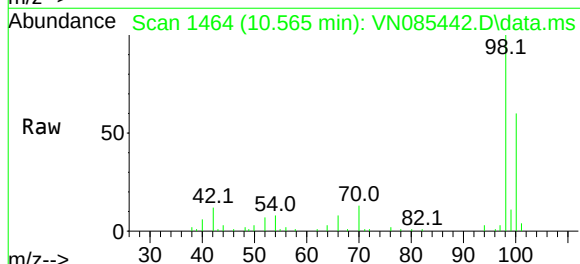
Acq: 14 Jan 2025 16:31

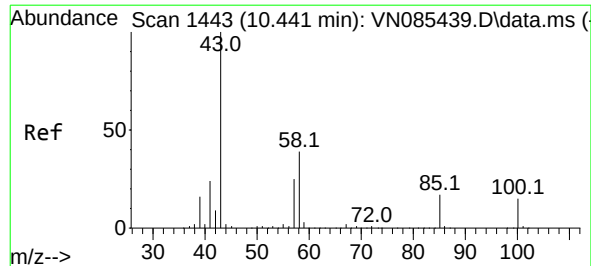
Tgt Ion: 98 Resp: 41328

Ion Ratio Lower Upper

98 100

100 60.9 52.2 78.4





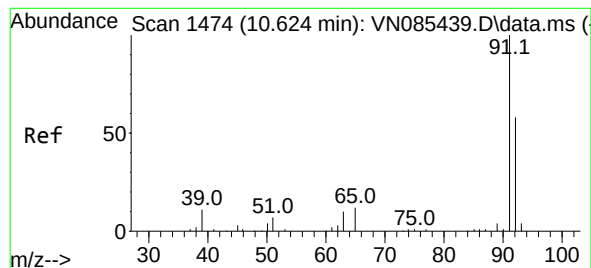
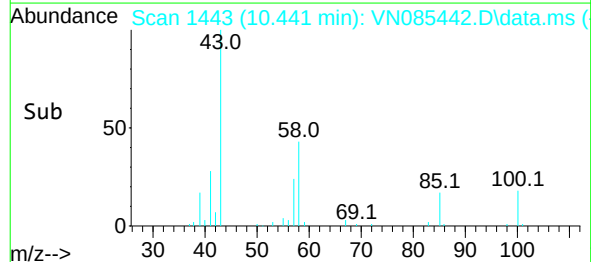
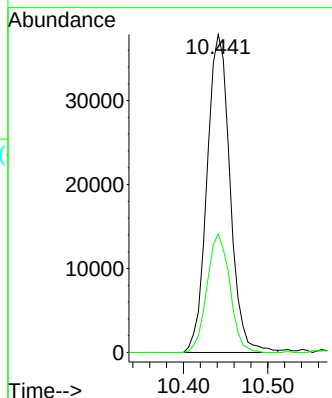
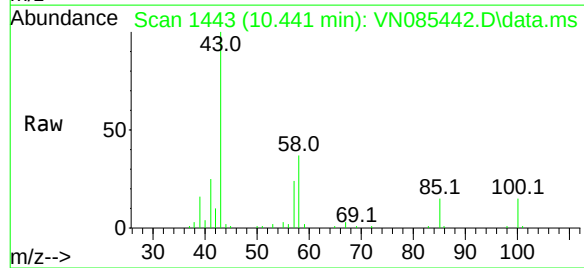
#51  
4-Methyl-2-Pentanone  
Concen: 24.250 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

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

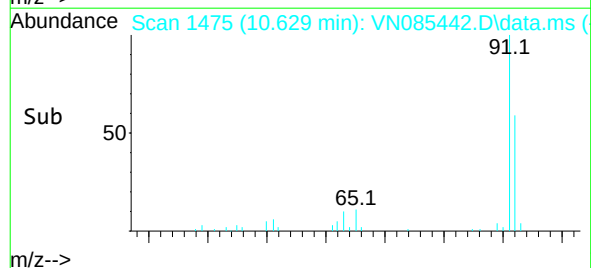
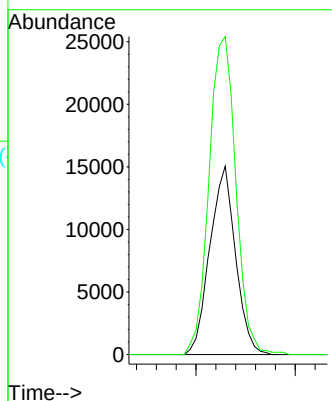
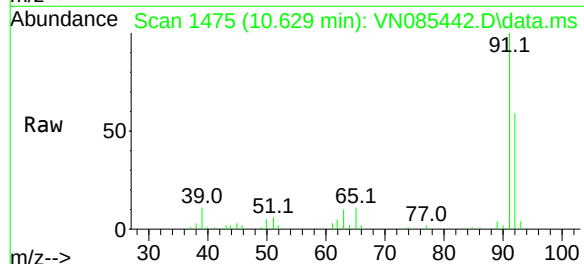
Manual Integrations  
APPROVED

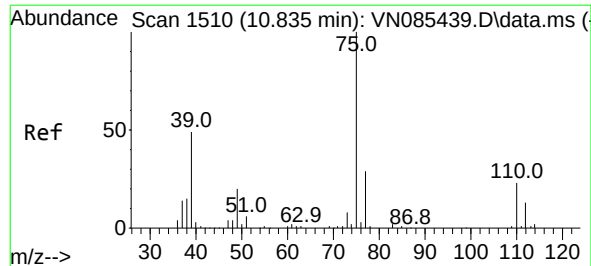
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

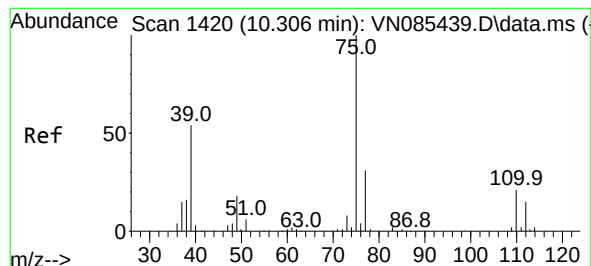
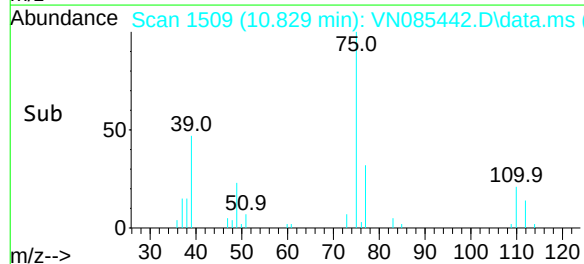
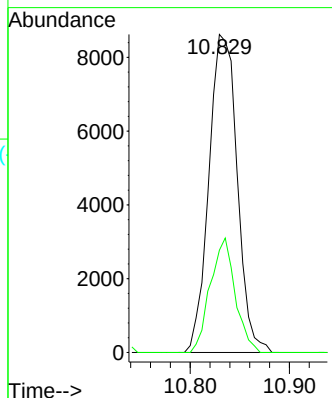
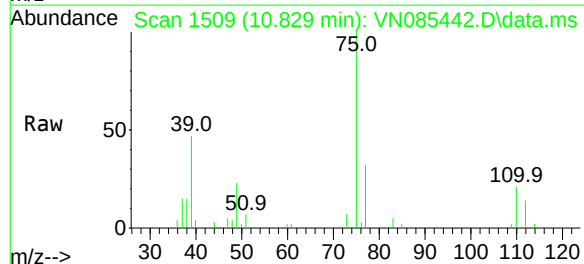
77 32.2 23.5 35.3

Manual Integrations

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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

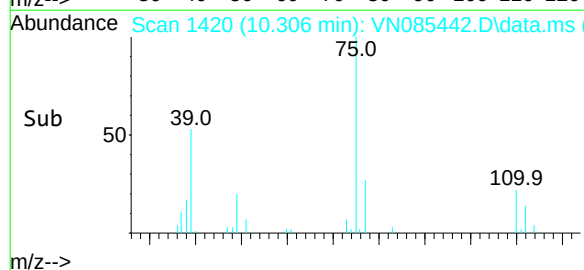
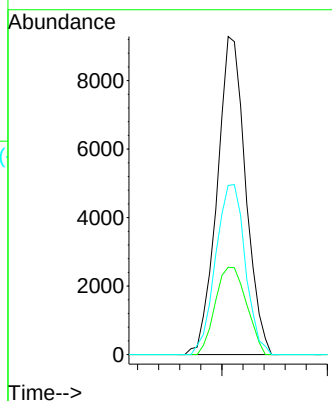
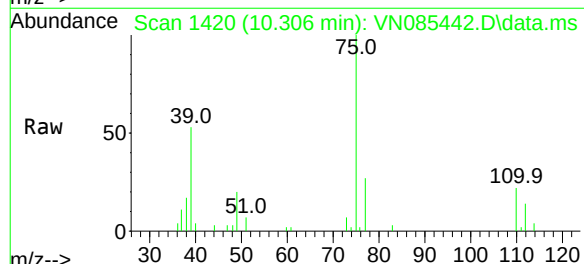
Tgt Ion: 75 Resp: 17440

Ion Ratio Lower Upper

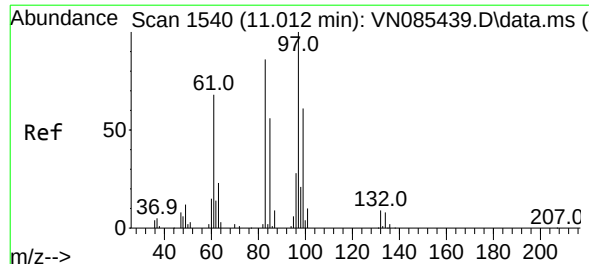
75 100

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

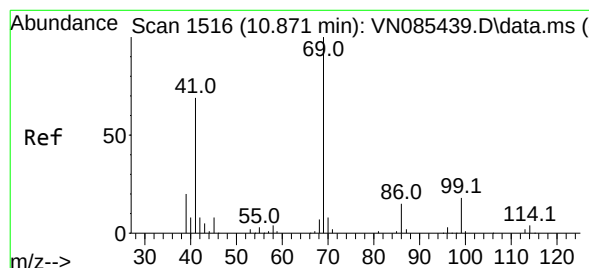
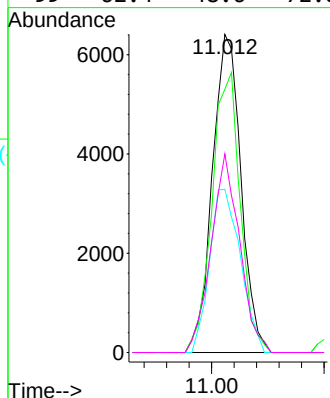
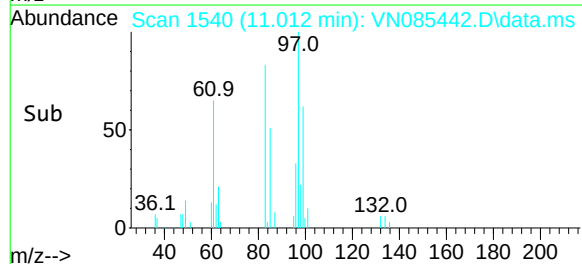
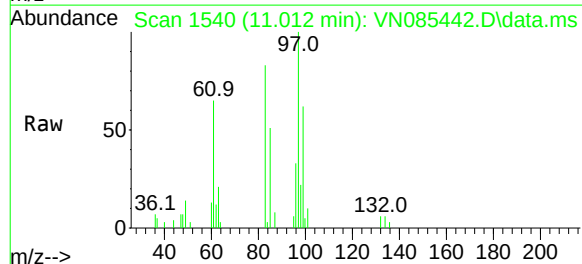
99 62.4 48.6 72.8

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

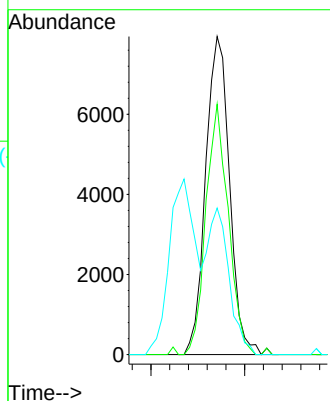
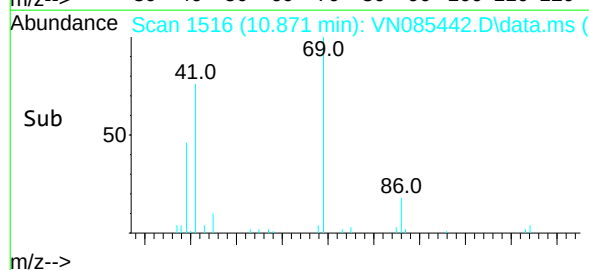
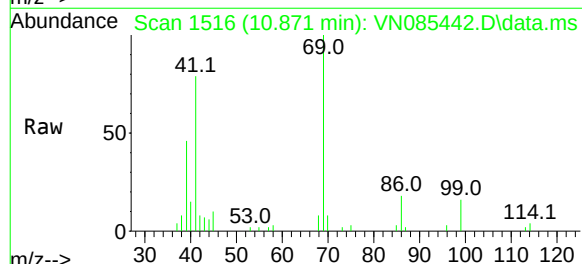
Tgt Ion: 69 Resp: 14094

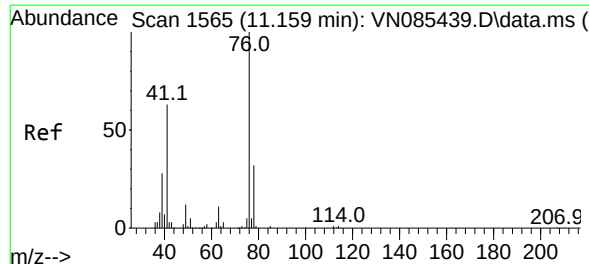
Ion Ratio Lower Upper

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

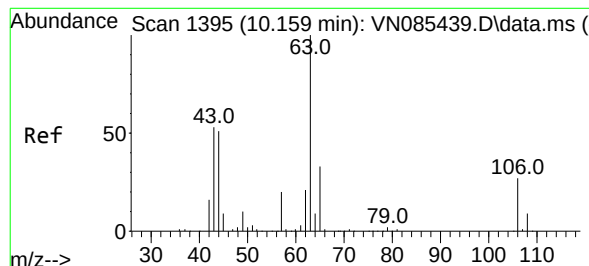
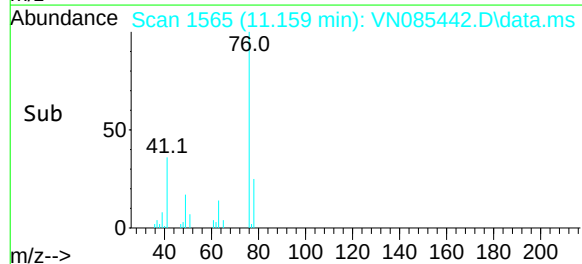
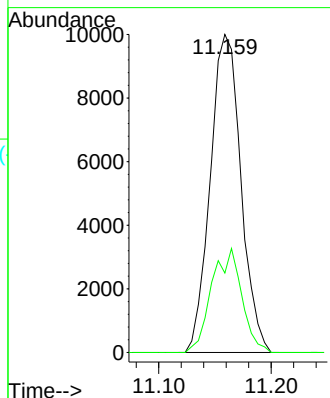
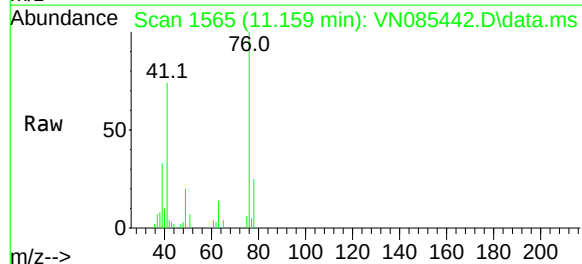
78 32.2 25.6 38.4

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

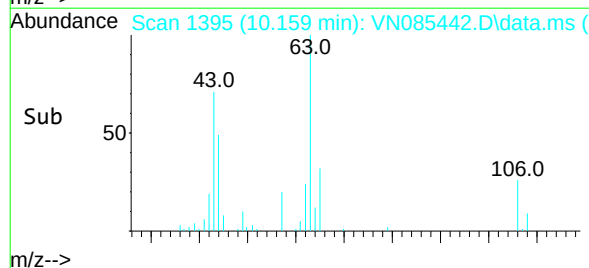
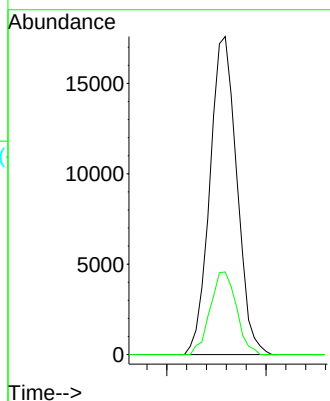
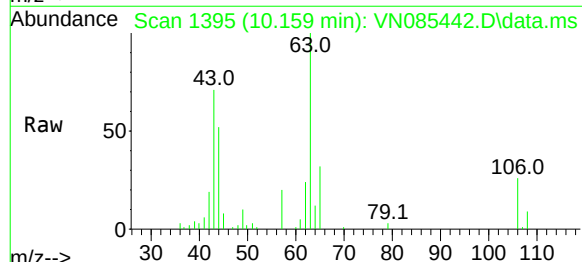
Acq: 14 Jan 2025 16:31

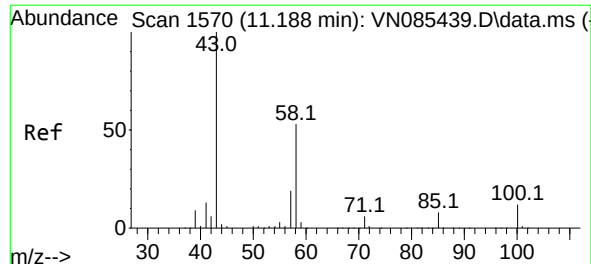
Tgt Ion: 63 Resp: 33210

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

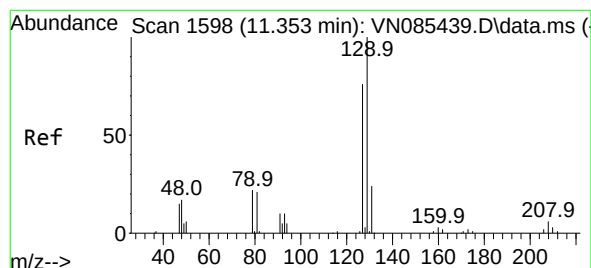
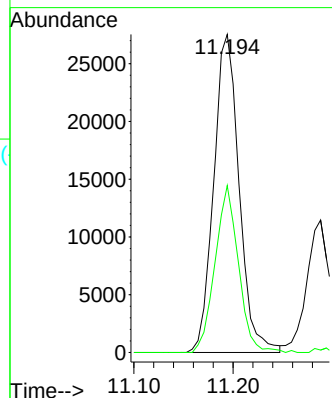
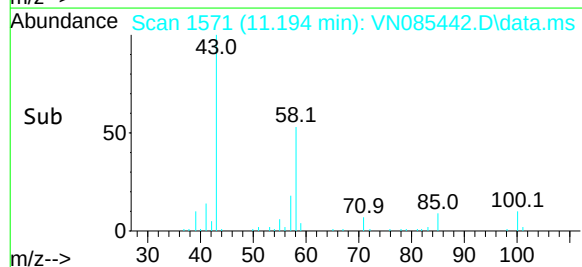
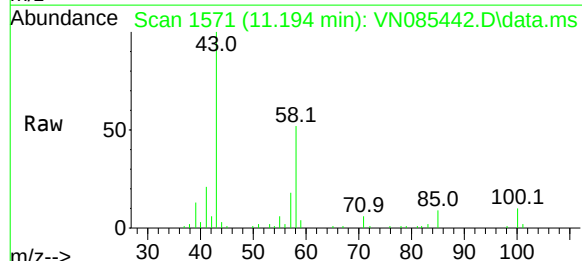
58 48.3 26.2 78.6

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

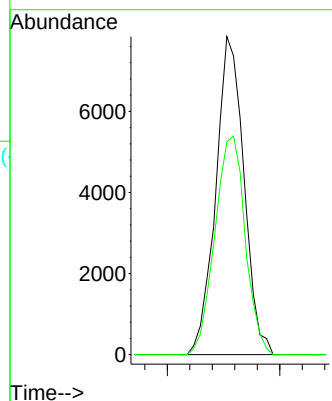
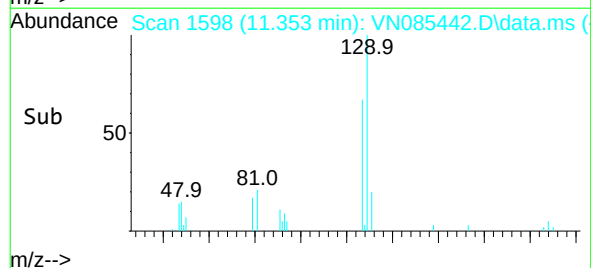
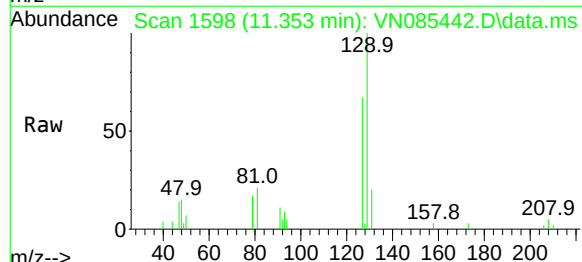
Acq: 14 Jan 2025 16:31

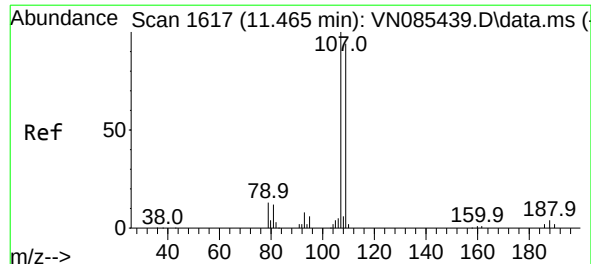
Tgt Ion:129 Resp: 13635

Ion Ratio Lower Upper

129 100

127 73.9 38.6 115.8





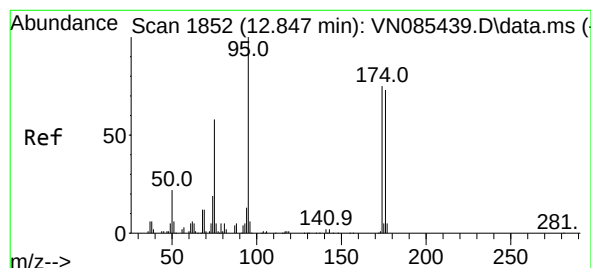
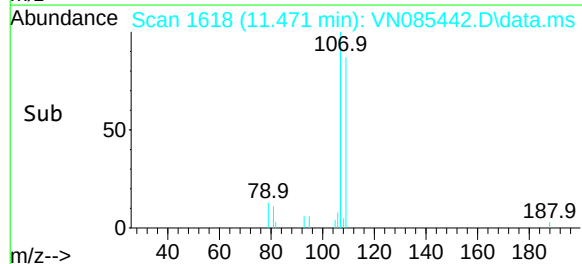
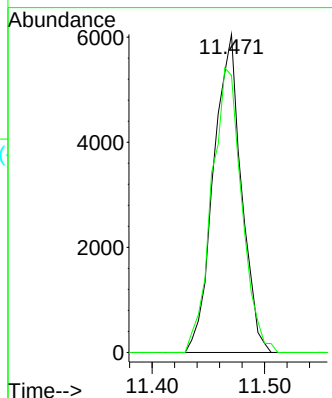
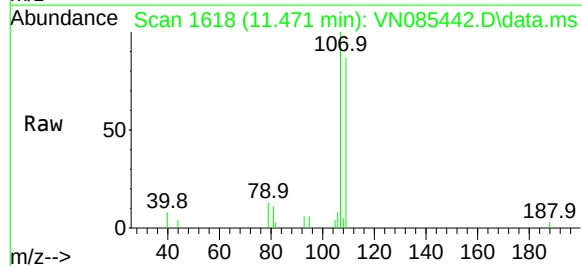
#61  
1,2-Dibromoethane  
Concen: 4.810 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

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

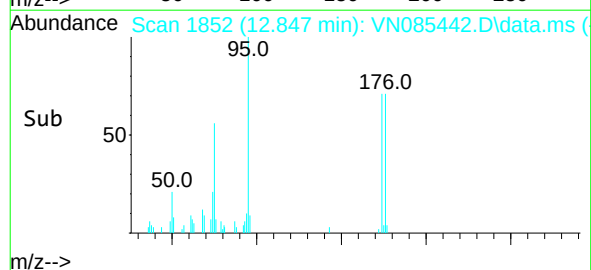
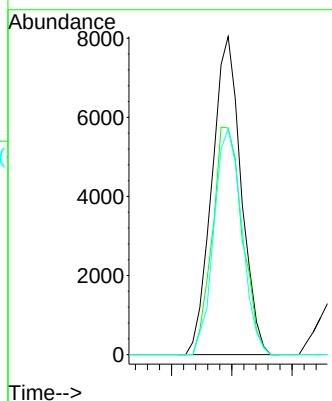
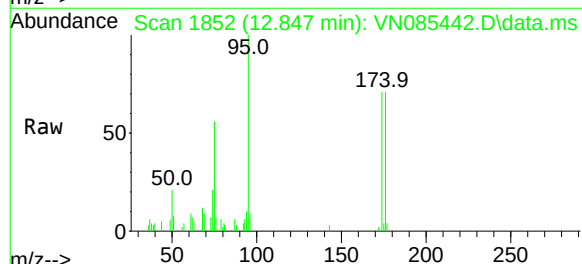
Manual Integrations  
APPROVED

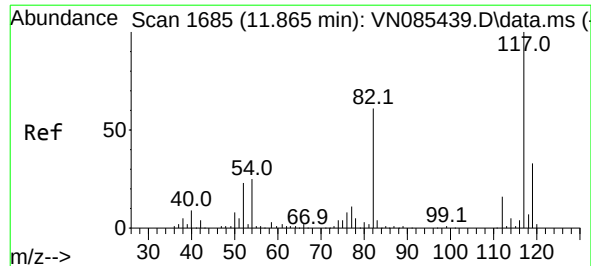
Reviewed By : John Carlone 01/15/2025  
Supervised By : Mahesh Dadoda 01/15/2025



#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

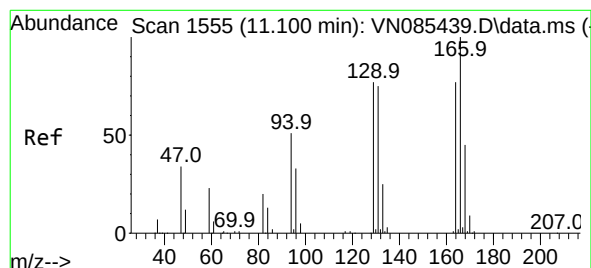
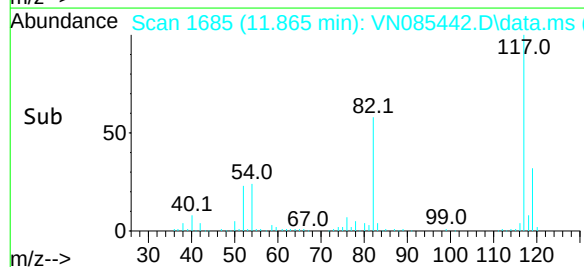
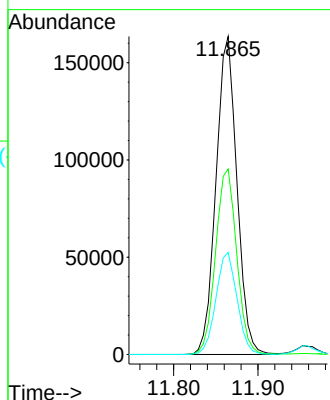
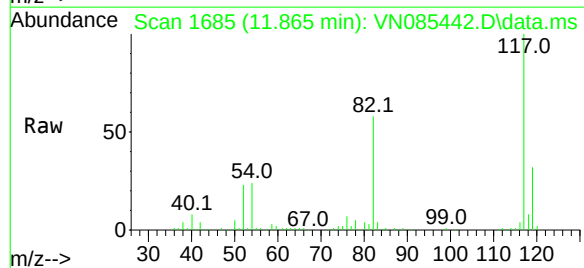
119 32.1 26.6 39.8

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

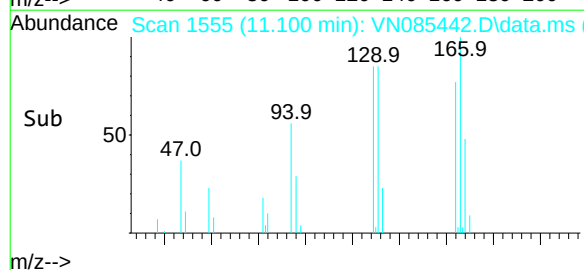
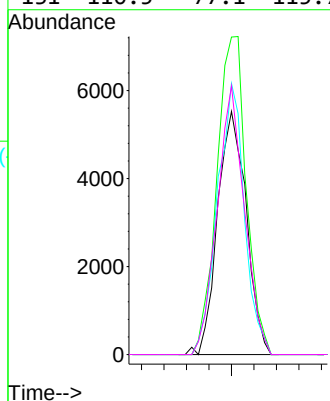
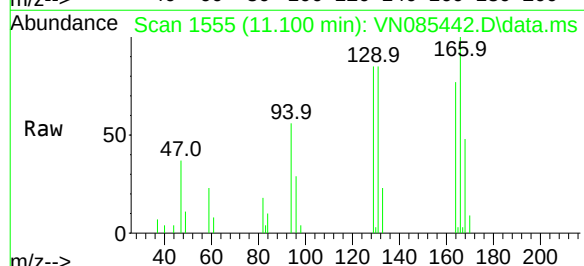
Ion Ratio Lower Upper

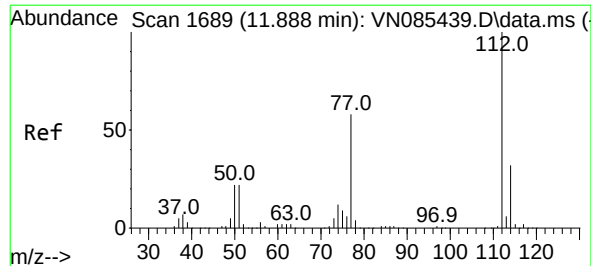
164 100

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

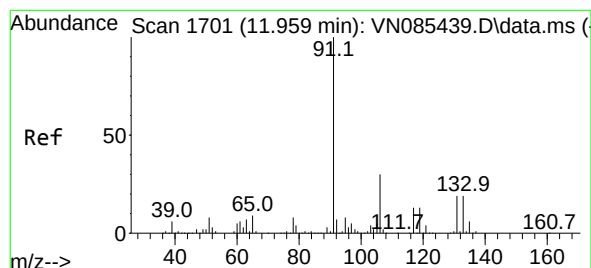
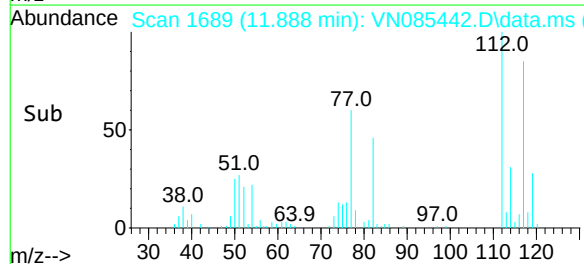
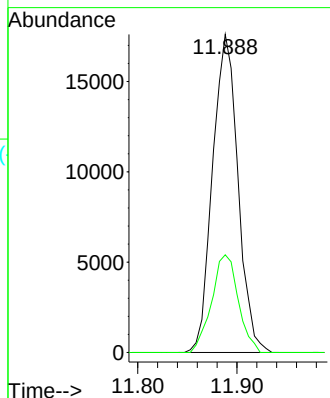
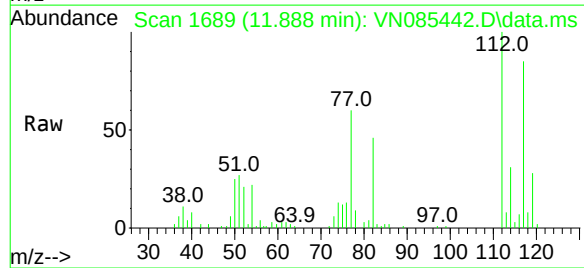
114 30.7 25.3 37.9

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

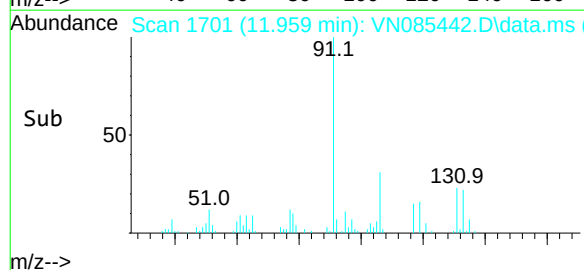
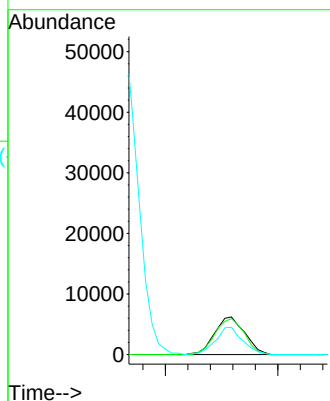
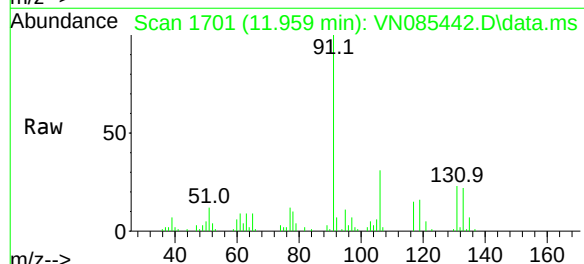
Tgt Ion:131 Resp: 11620

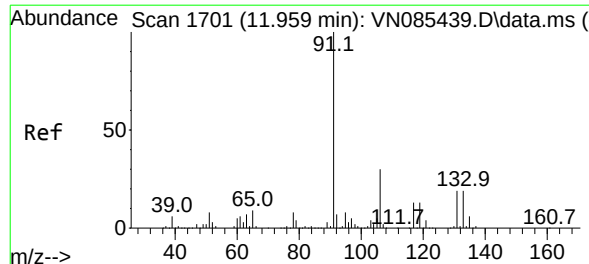
Ion Ratio Lower Upper

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

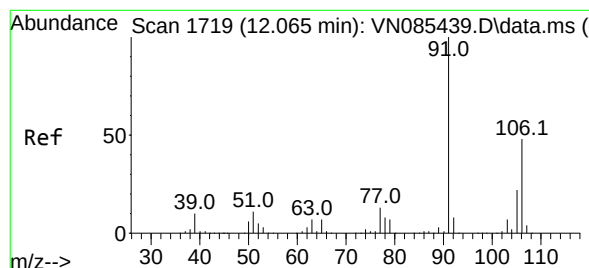
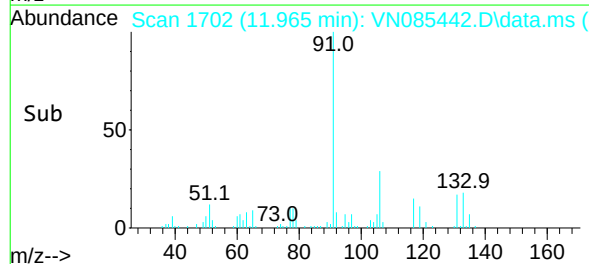
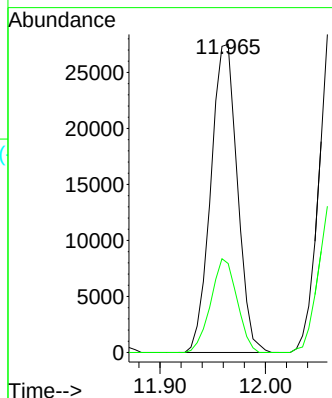
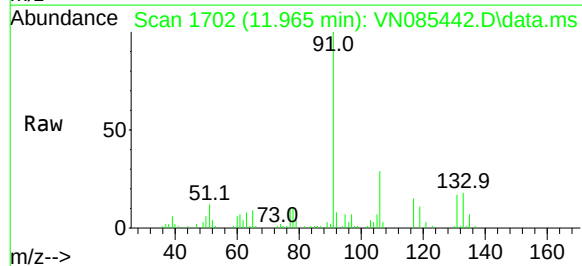
106 28.9 23.8 35.8

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

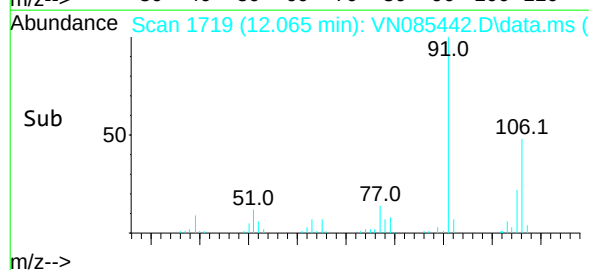
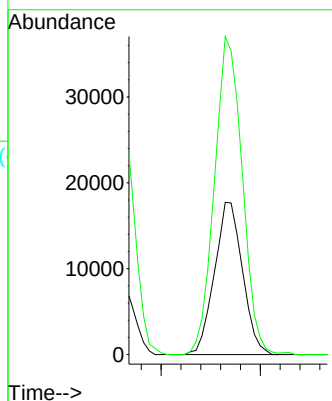
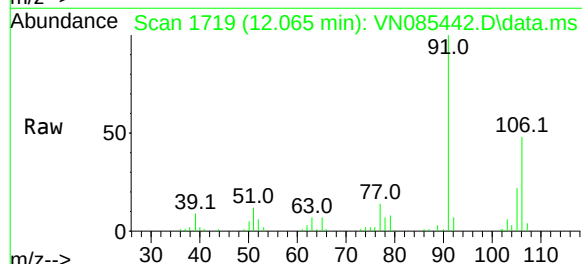
Acq: 14 Jan 2025 16:31

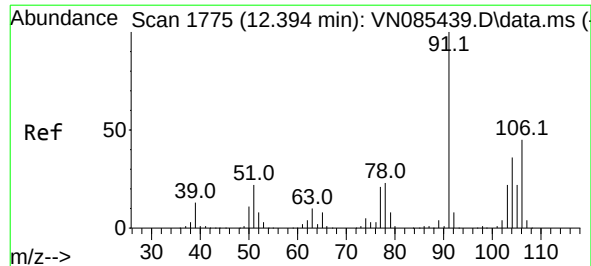
Tgt Ion:106 Resp: 34771

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

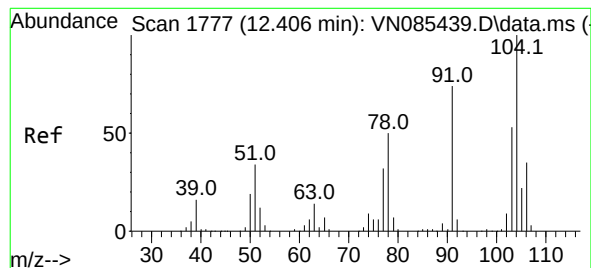
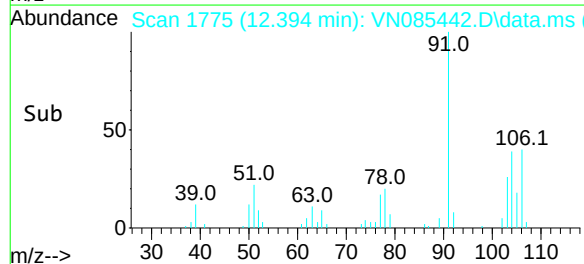
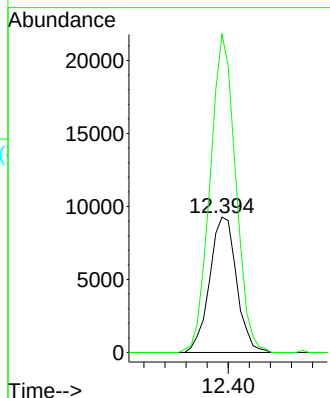
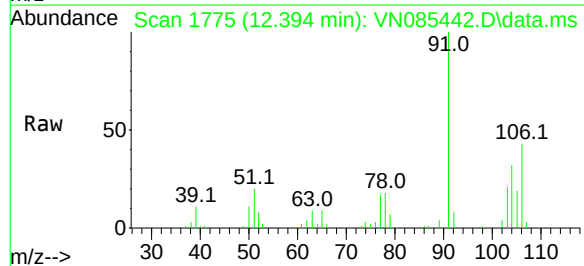
91 224.0 110.4 331.2

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

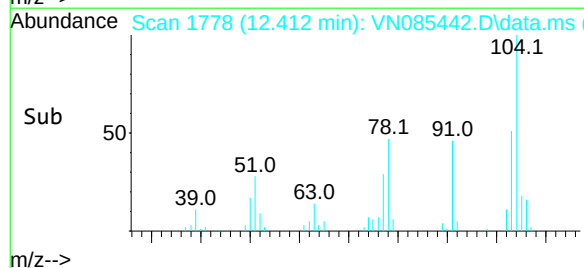
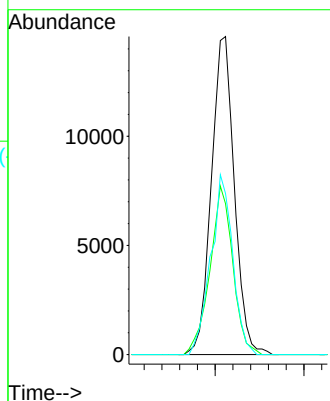
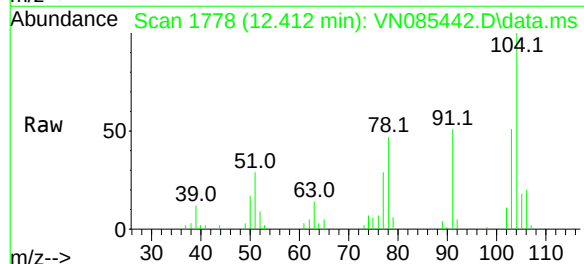
Tgt Ion:104 Resp: 26218

Ion Ratio Lower Upper

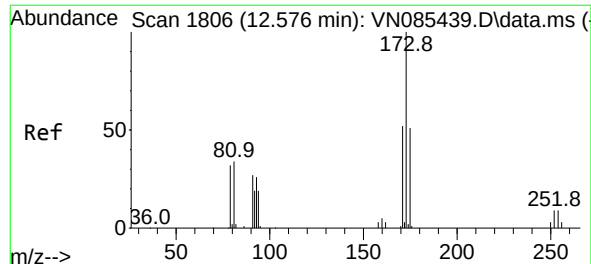
104 100

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

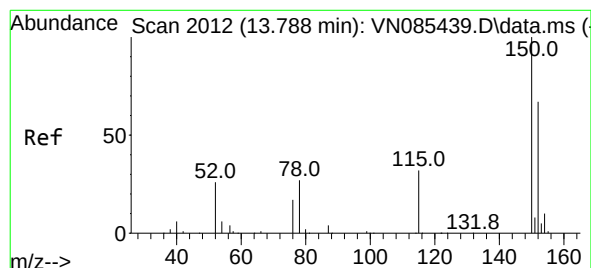
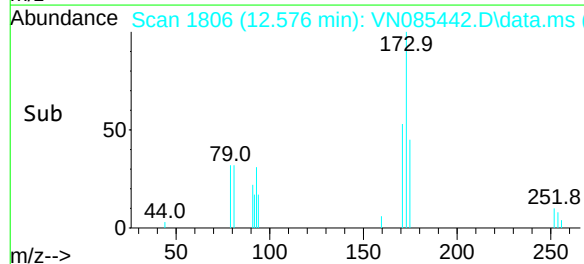
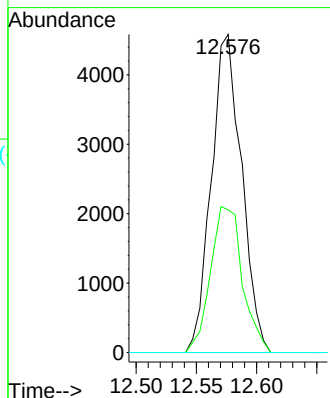
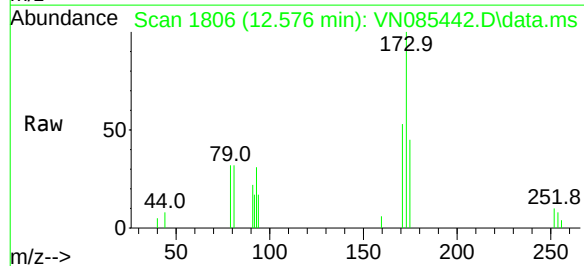
ClientSampleId :

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

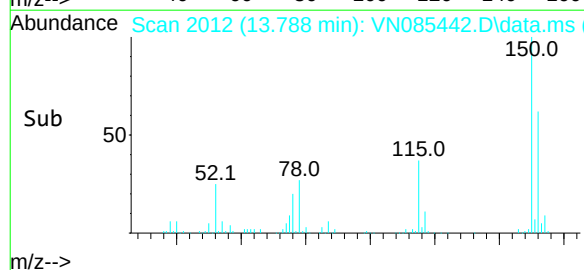
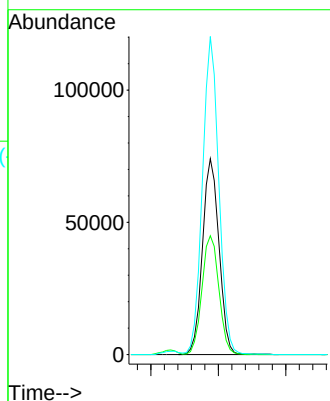
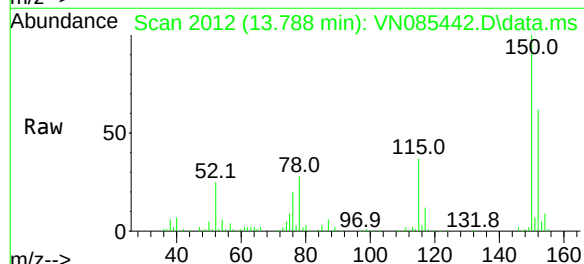
RT: 13.788 min Scan# 2012

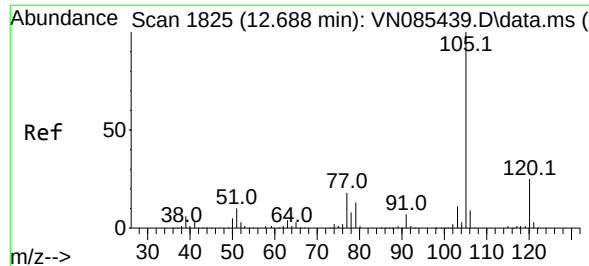
Delta R.T. 0.000 min

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

Tgt Ion: 105 Resp: 39811

Ion Ratio Lower Upper

105 100

120 26.1 12.8 38.3

Instrument :

MSVOA\_N

ClientSampleId :

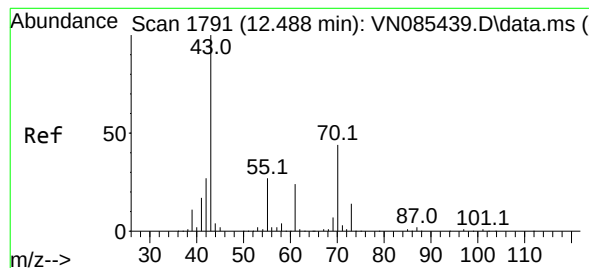
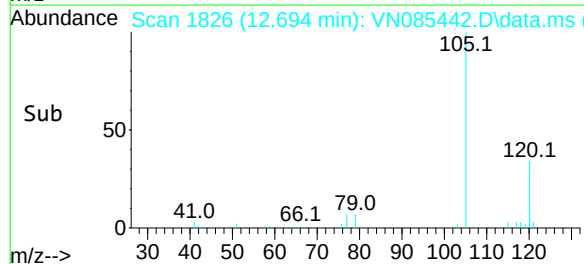
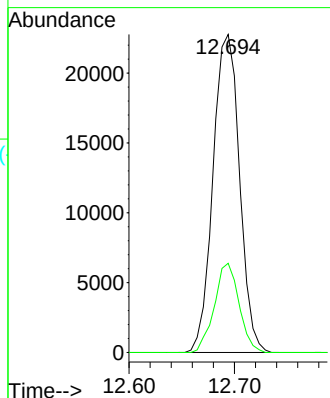
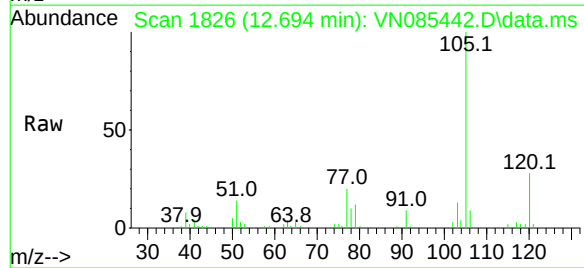
VSTDIC005

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

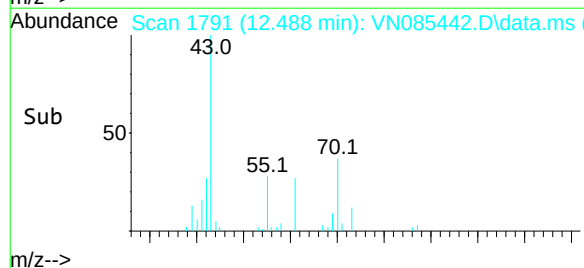
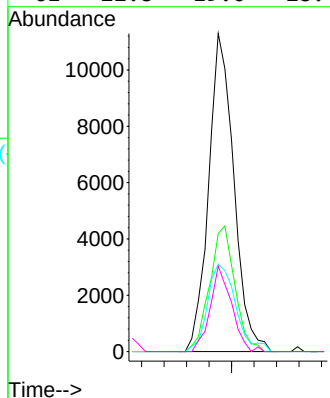
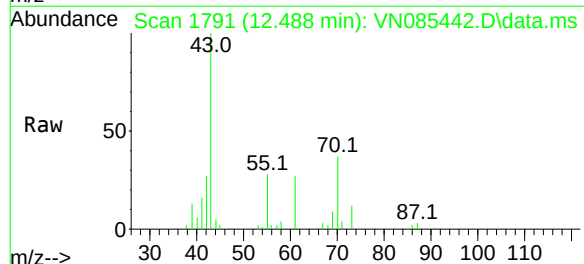
Ion Ratio Lower Upper

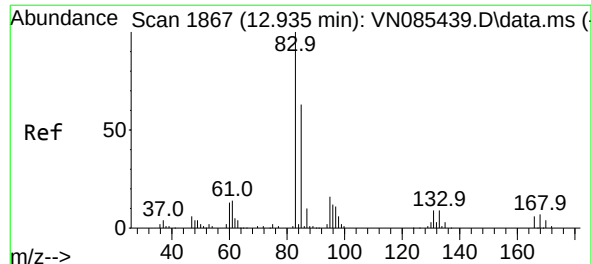
43 100

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 :

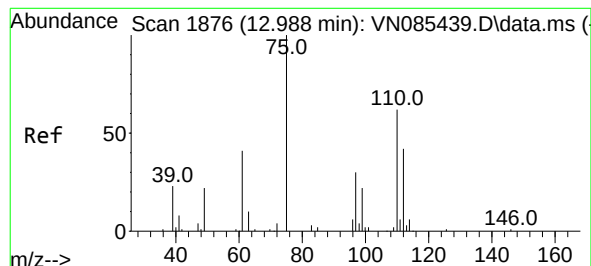
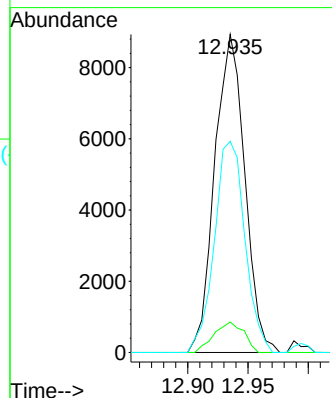
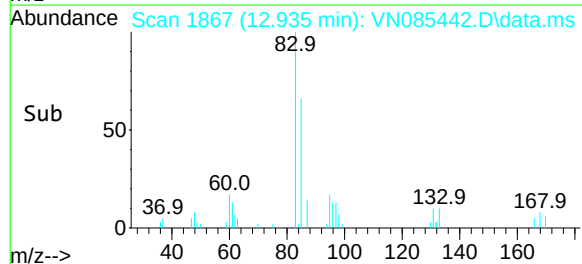
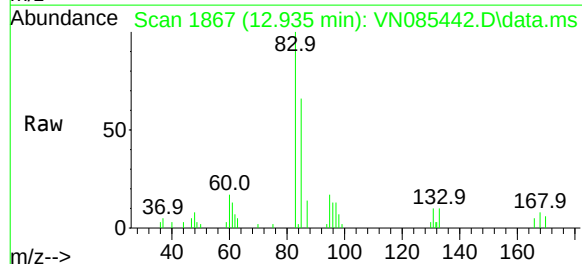
VSTDIC005

|          |       |       |       |
|----------|-------|-------|-------|
| 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

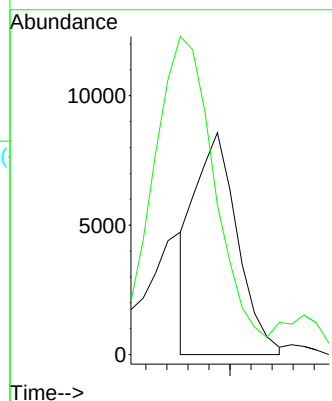
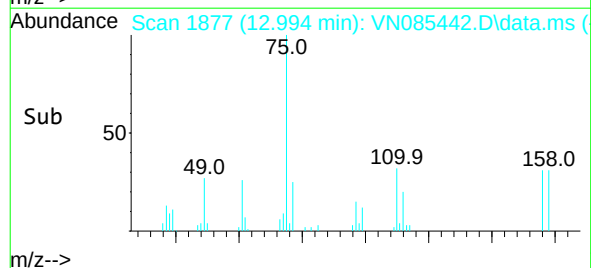
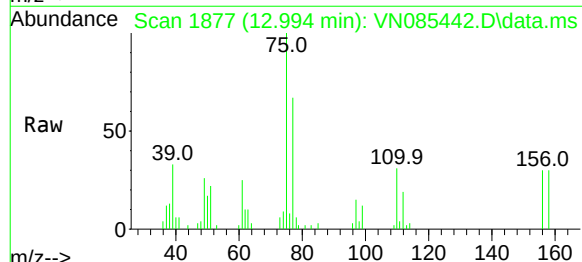
RT: 12.994 min Scan# 1877

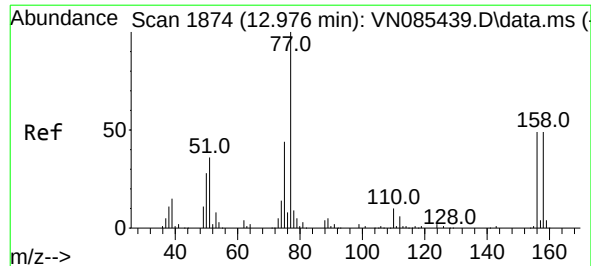
Delta R.T. 0.006 min

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

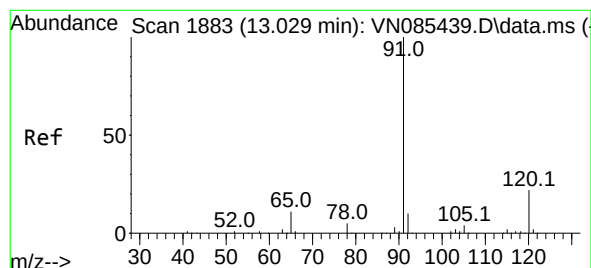
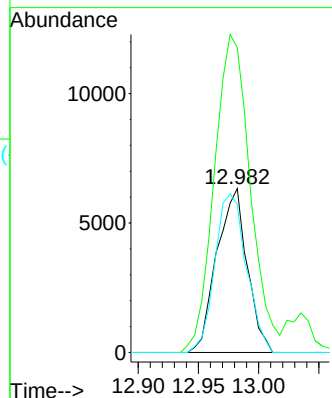
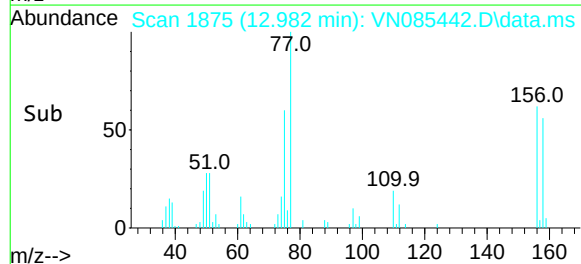
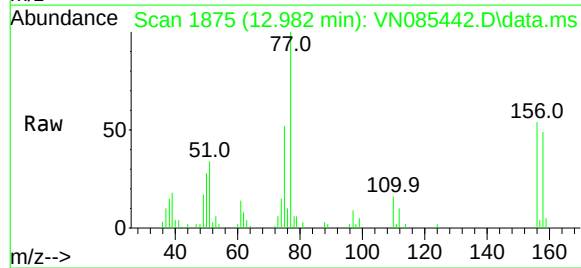
158 100.8 48.9 146.8

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

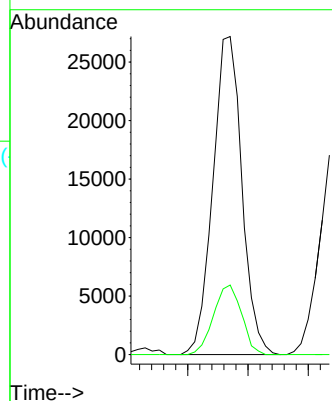
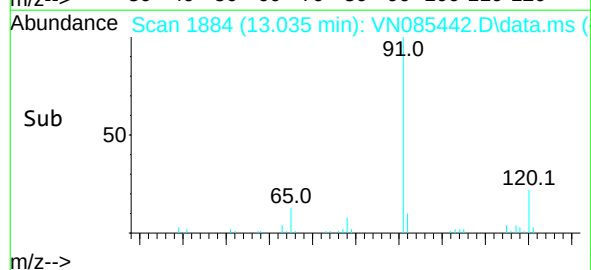
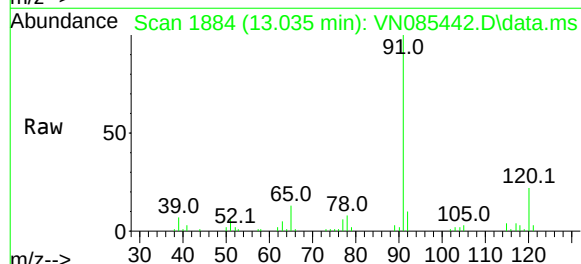
Acq: 14 Jan 2025 16:31

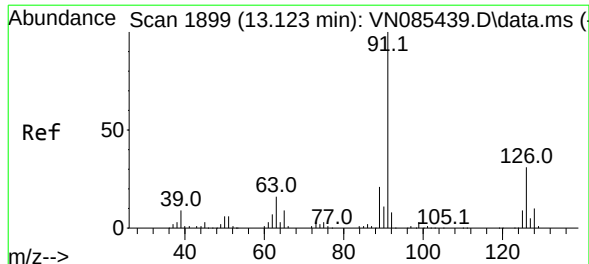
Tgt Ion: 91 Resp: 45450

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

Tgt Ion: 91 Resp: 31932

Ion Ratio Lower Upper

91 100

126 32.6 15.7 47.1

Instrument :

MSVOA\_N

ClientSampleId :

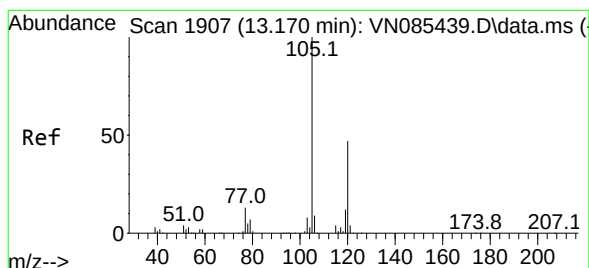
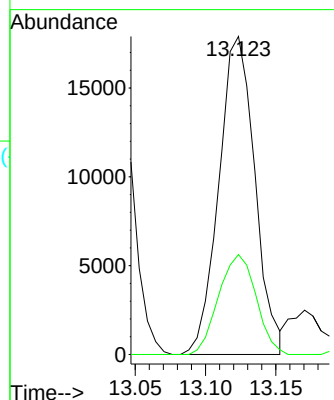
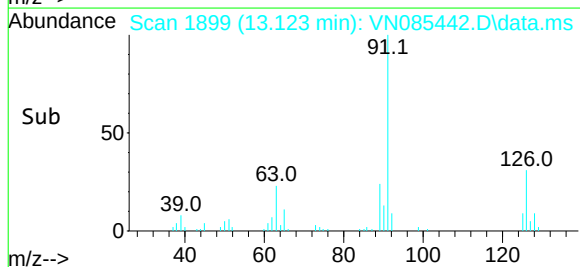
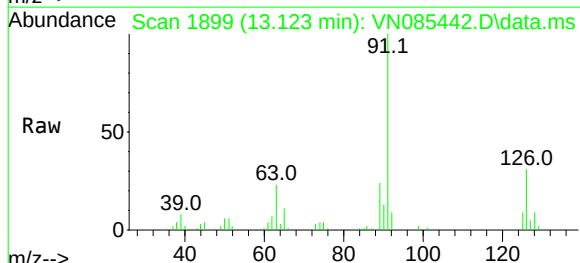
VSTDIC005

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

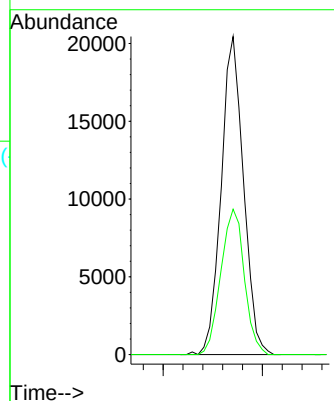
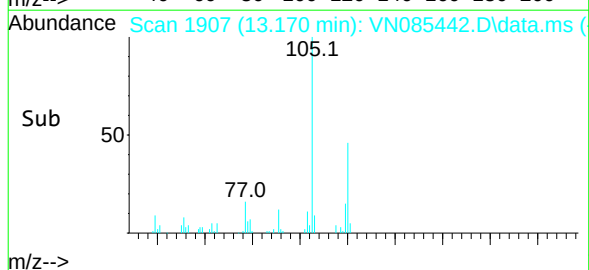
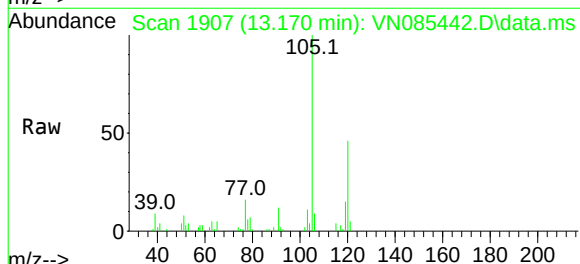
Acq: 14 Jan 2025 16:31

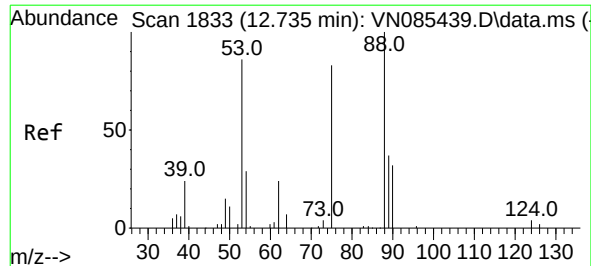
Tgt Ion:105 Resp: 31891

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

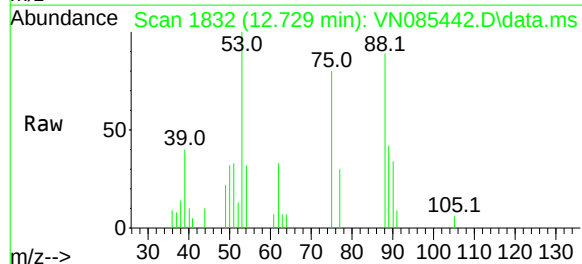
Acq: 14 Jan 2025 16:31

Instrument :

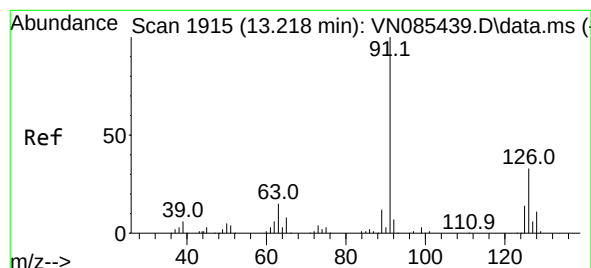
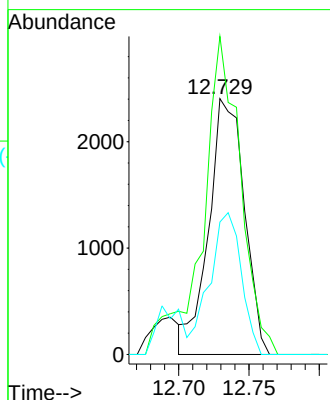
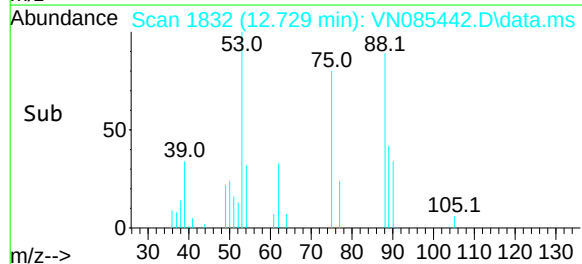
MSVOA\_N

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

#82

4-Chlorotoluene

Concen: 4.926 ug/l

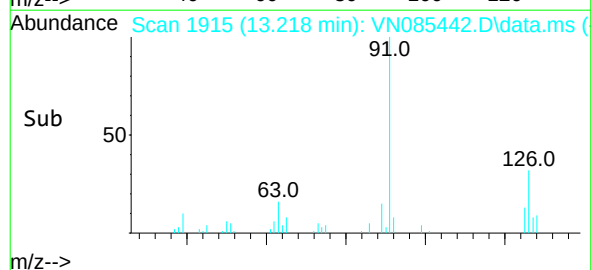
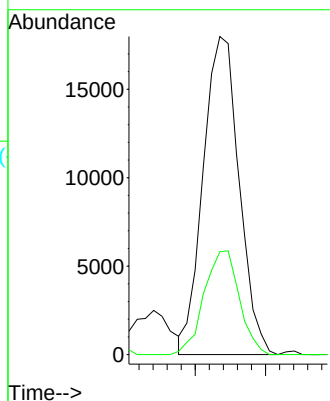
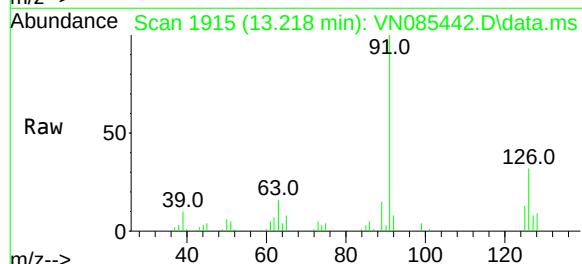
RT: 13.218 min Scan# 1915

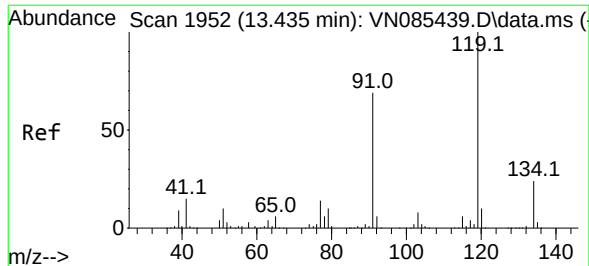
Delta R.T. 0.000 min

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

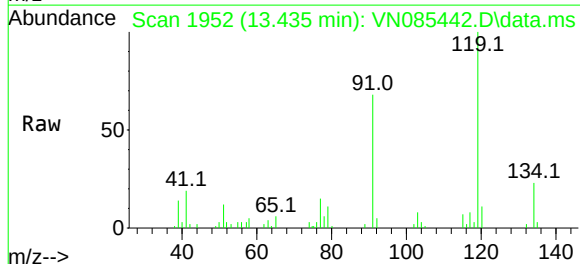
Acq: 14 Jan 2025 16:31

Instrument :

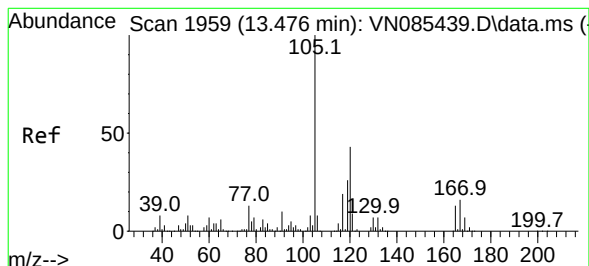
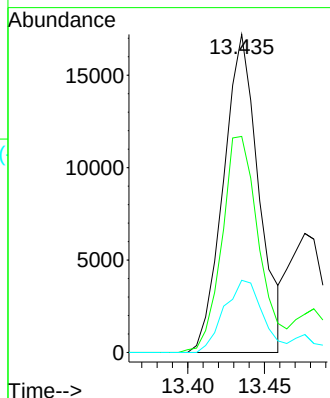
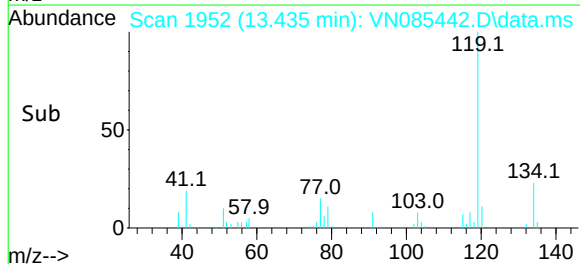
MSVOA\_N

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

#84

1,2,4-Trimethylbenzene

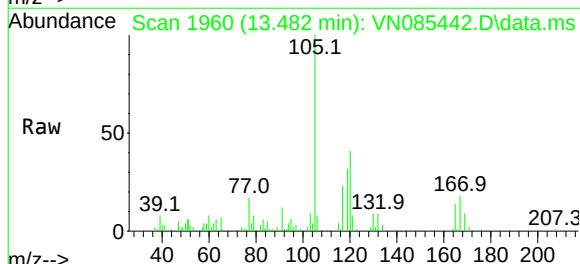
Concen: 4.575 ug/l

RT: 13.482 min Scan# 1960

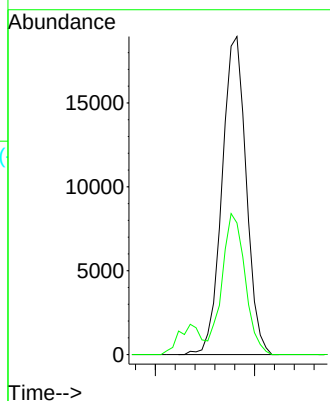
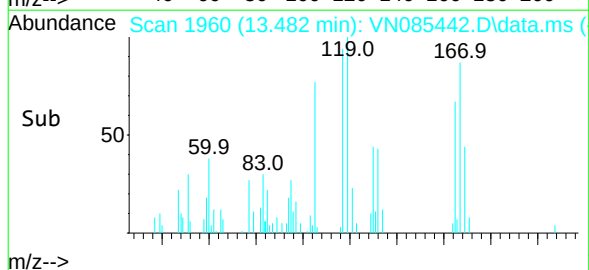
Delta R.T. 0.006 min

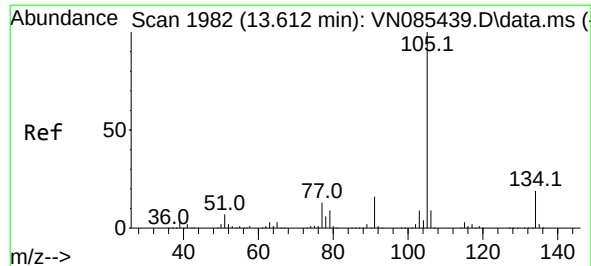
Lab File: VN085442.D

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

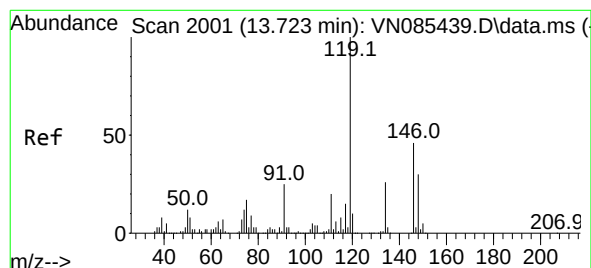
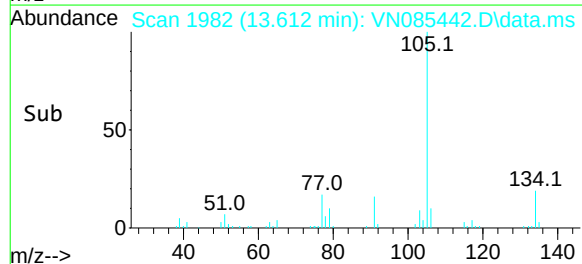
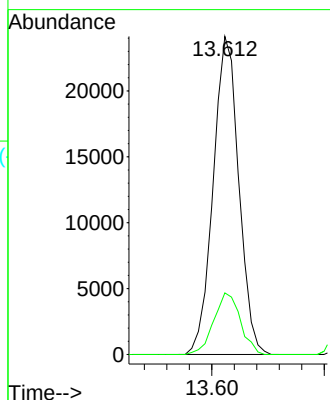
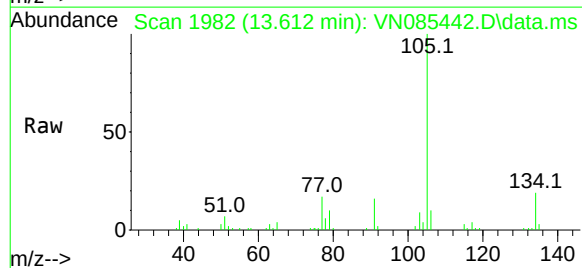
134 20.1 9.7 28.9

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

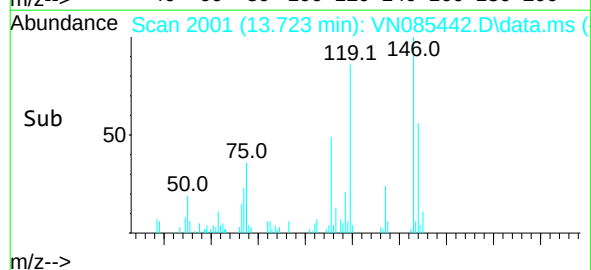
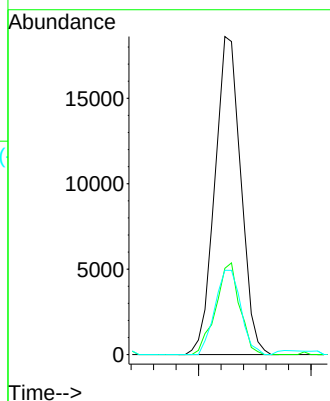
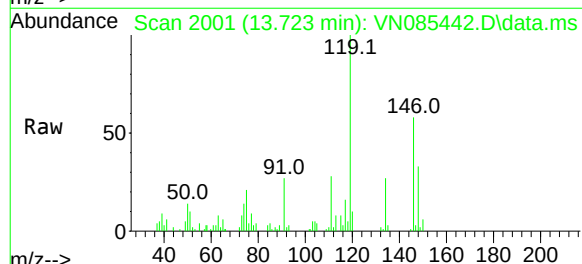
Tgt Ion:119 Resp: 29856

Ion Ratio Lower Upper

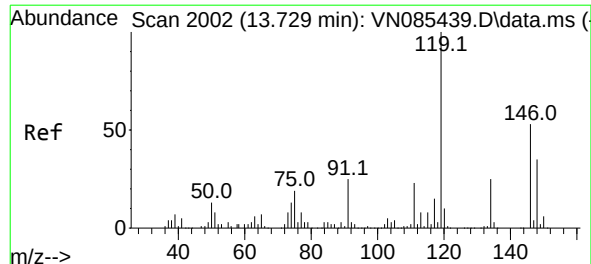
119 100

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

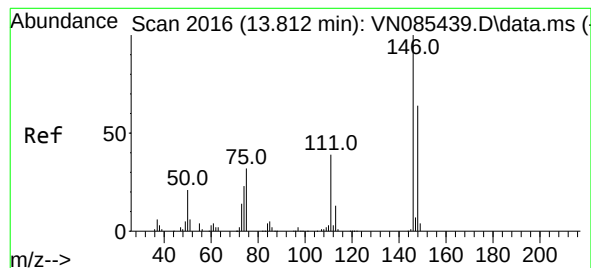
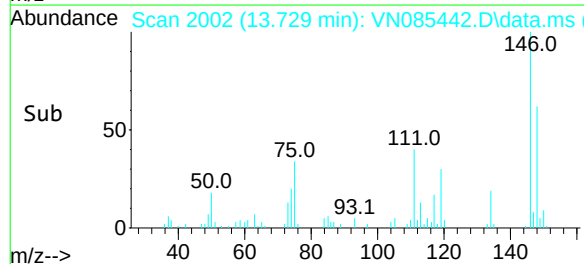
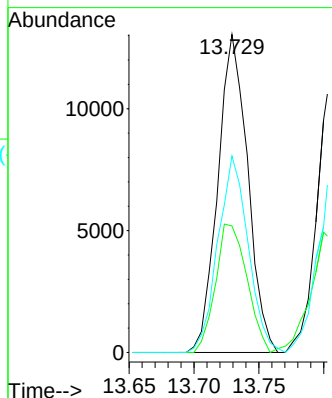
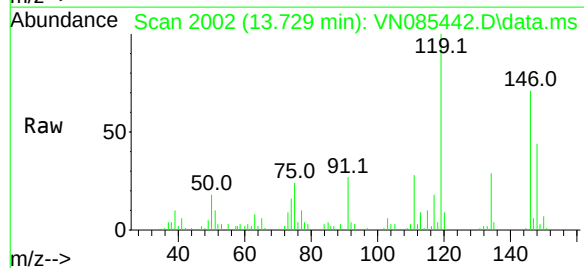
148 62.7 32.3 96.9

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

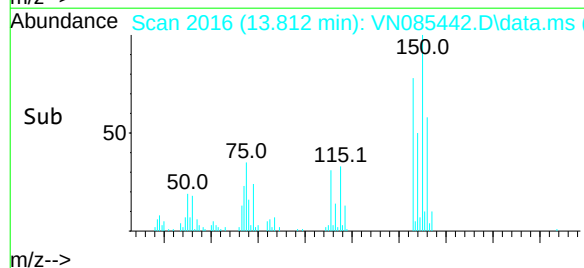
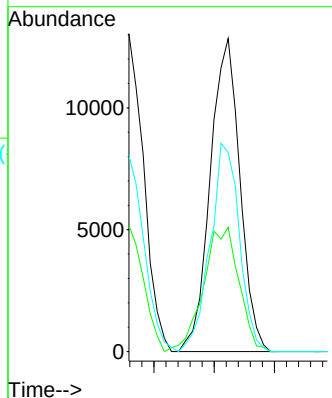
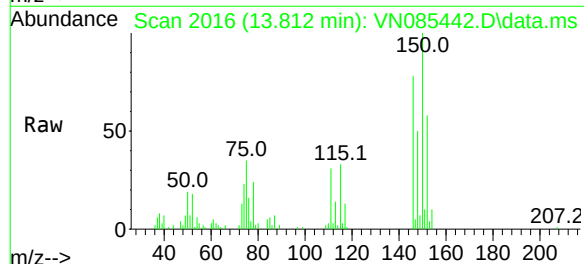
Tgt Ion:146 Resp: 21982

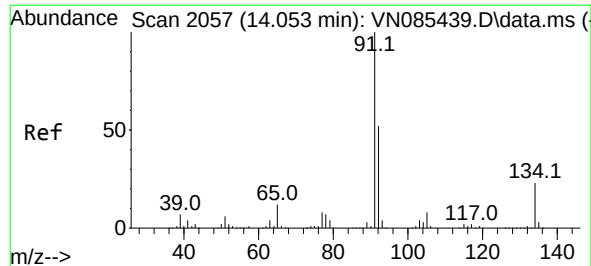
Ion Ratio Lower Upper

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

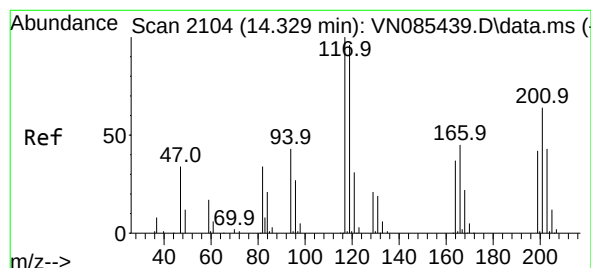
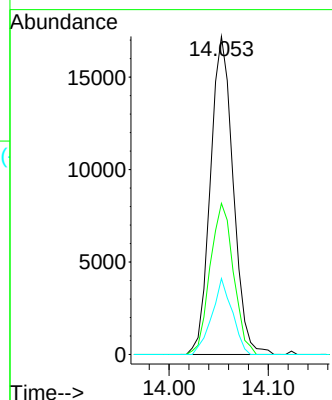
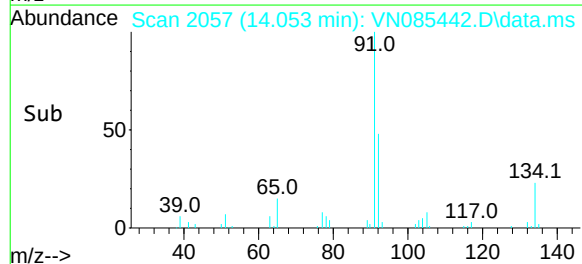
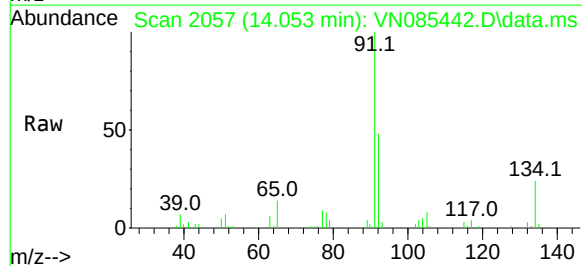
ClientSampleId :

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

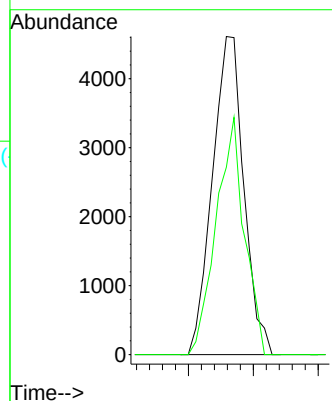
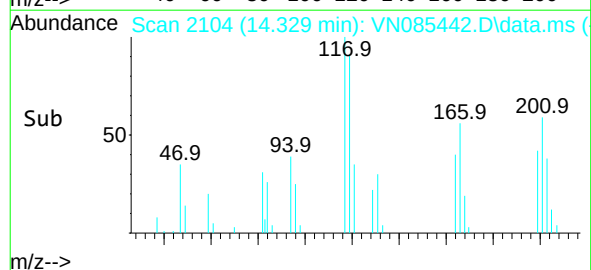
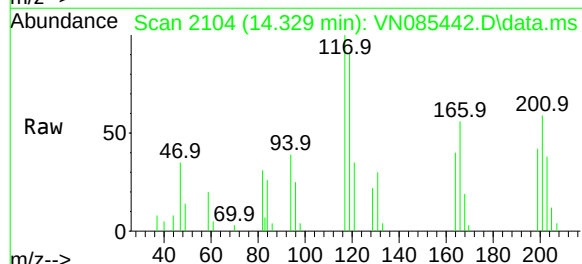
RT: 14.329 min Scan# 2104

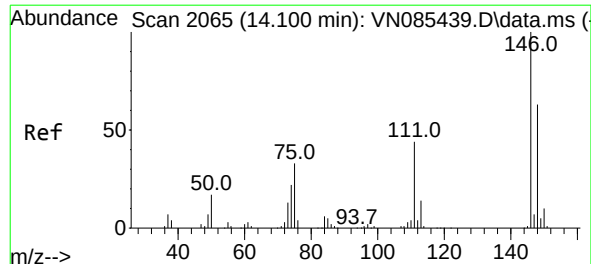
Delta R.T. 0.000 min

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

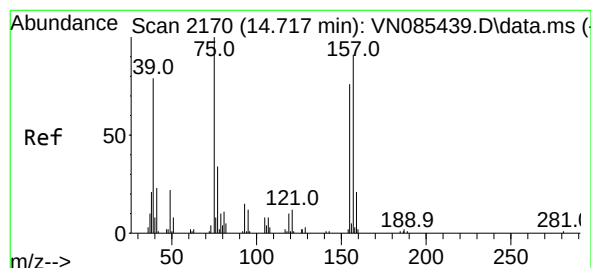
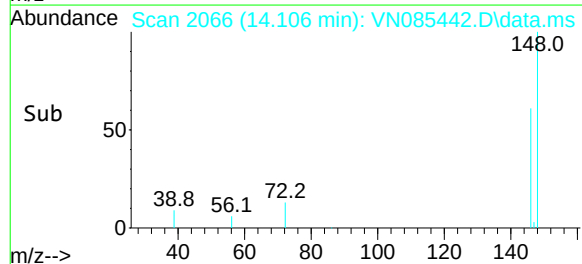
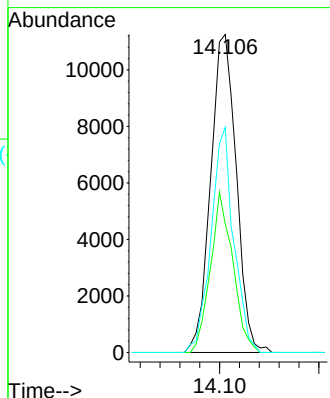
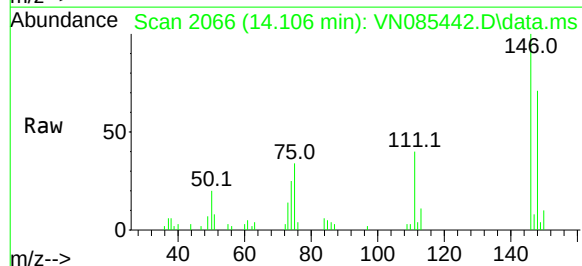
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 20177 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 111       | 44.0  | 21.7  | 65.1  |
| 148       | 62.8  | 31.4  | 94.2  |

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

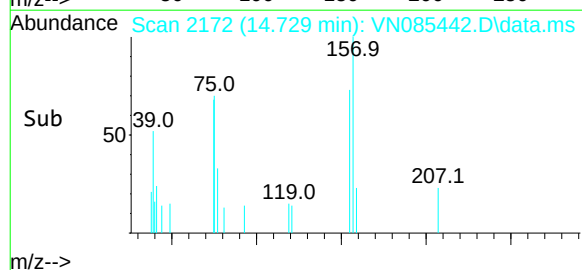
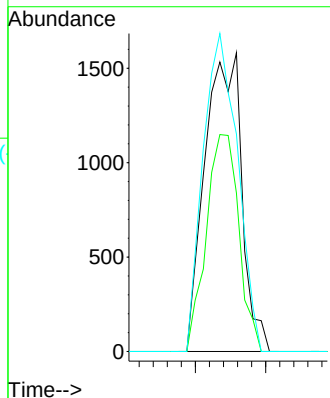
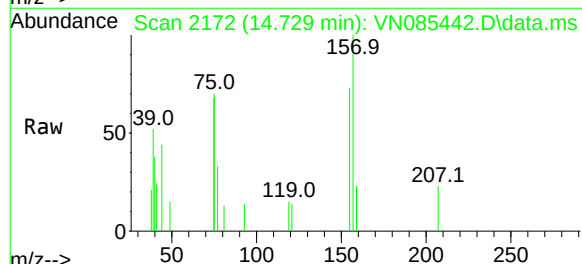
RT: 14.729 min Scan# 2172

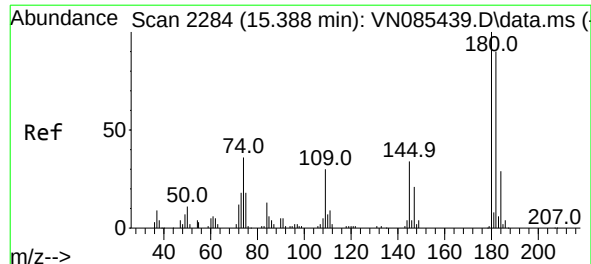
Delta R.T. 0.012 min

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 :

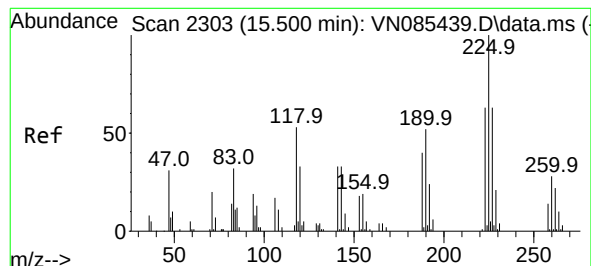
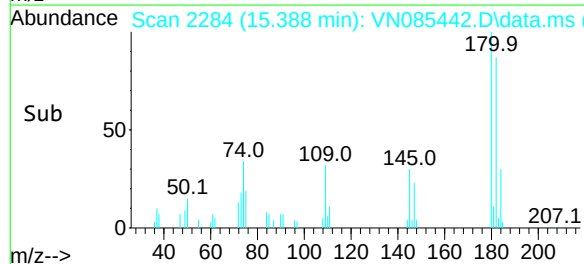
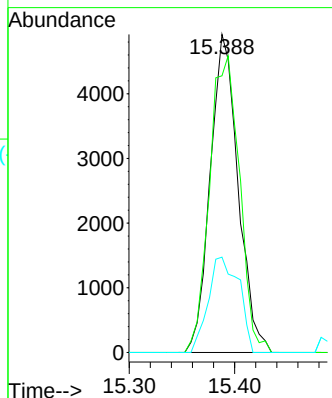
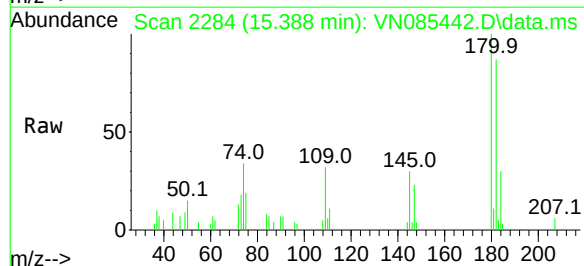
VSTDIC005

|     |         |       |       |
|-----|---------|-------|-------|
| 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

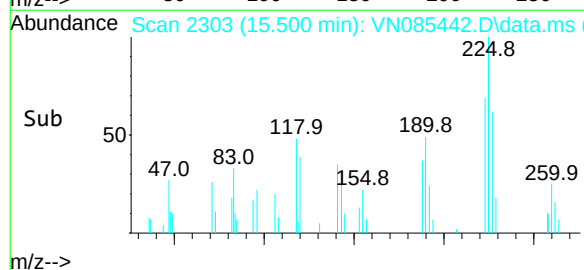
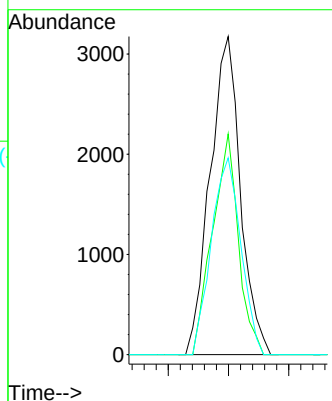
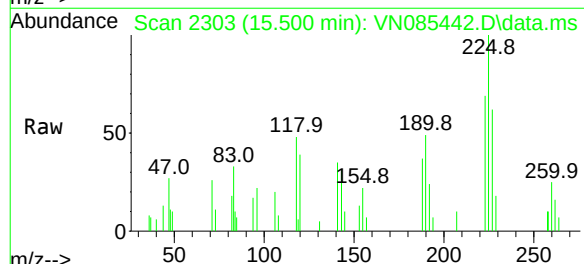
RT: 15.500 min Scan# 2303

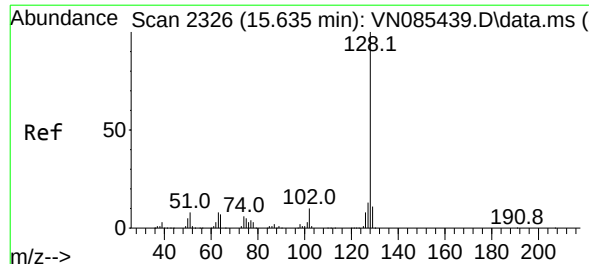
Delta R.T. 0.000 min

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# 2326

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

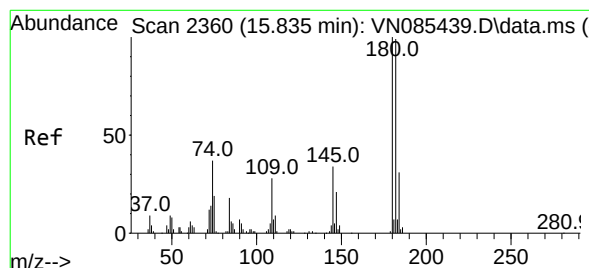
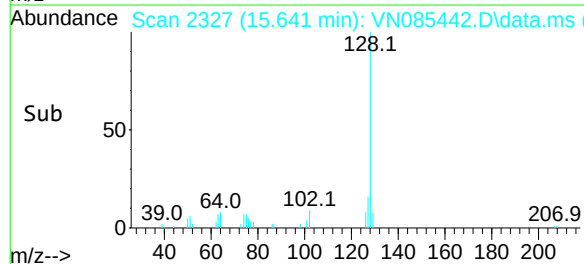
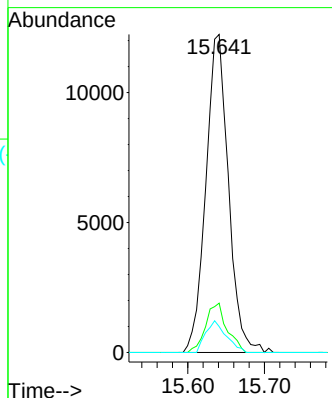
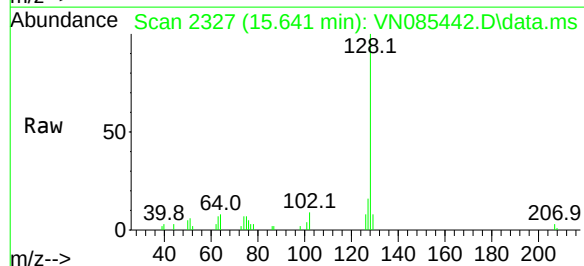
ClientSampleId :

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

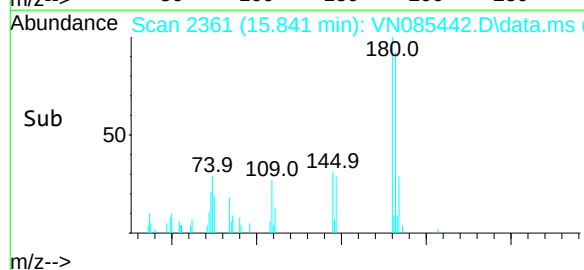
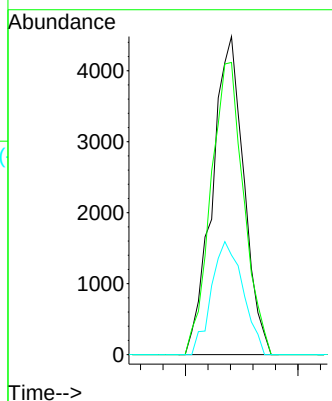
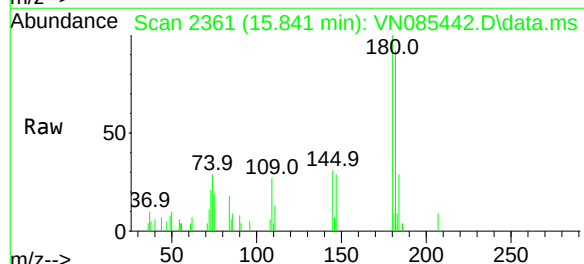
RT: 15.841 min Scan# 2361

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

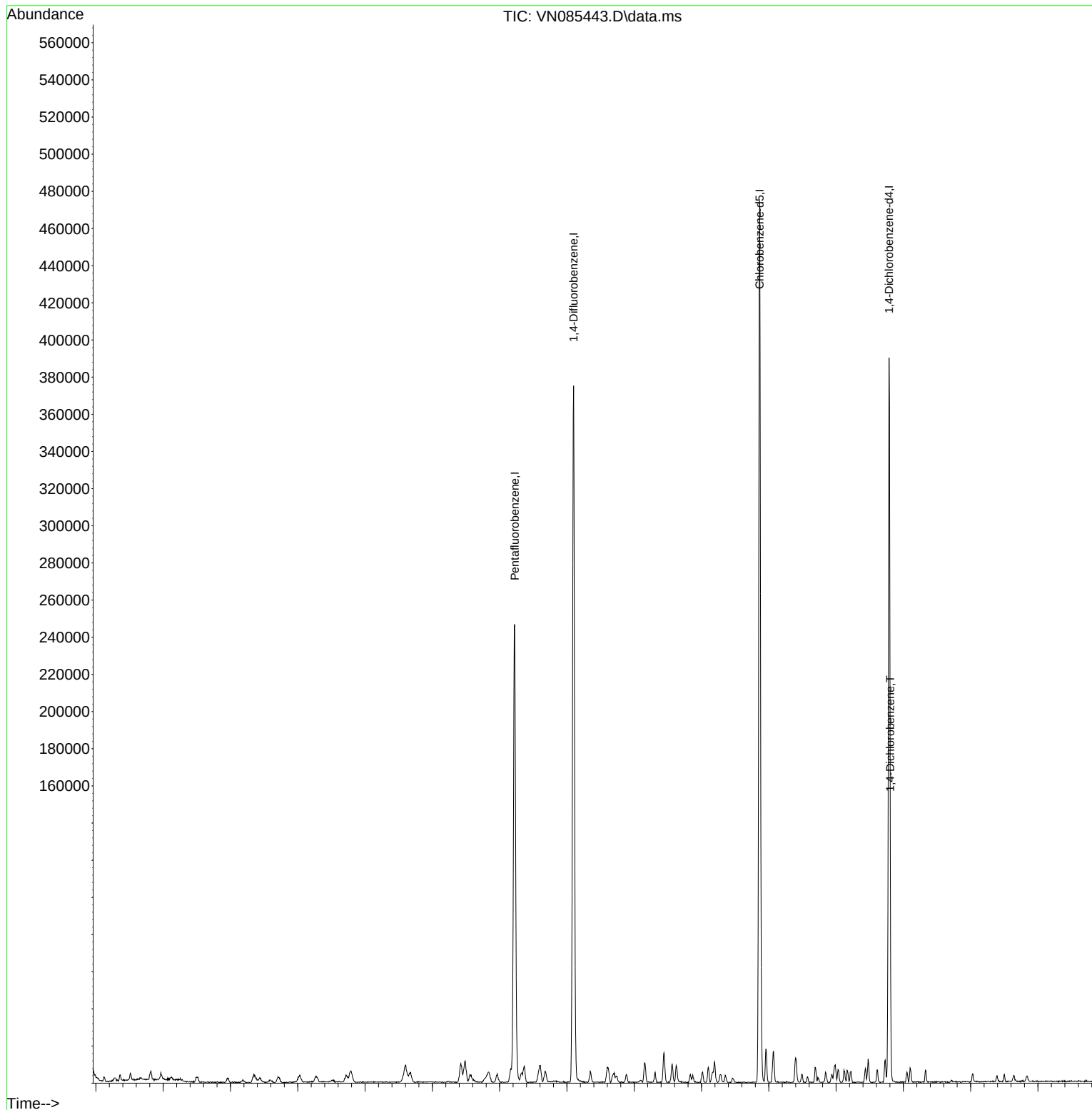
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Data File : VN085443.D  
Acq On : 14 Jan 2025 17:19  
Operator : JC\MD  
Sample : VSTDIC001  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

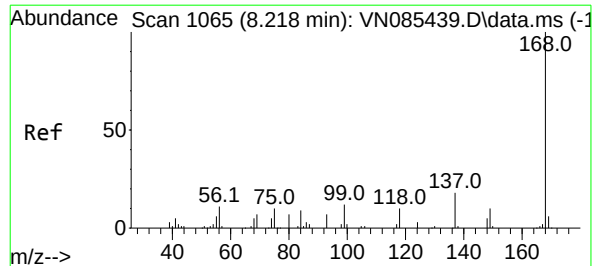
Manual Integrations  
APPROVED

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







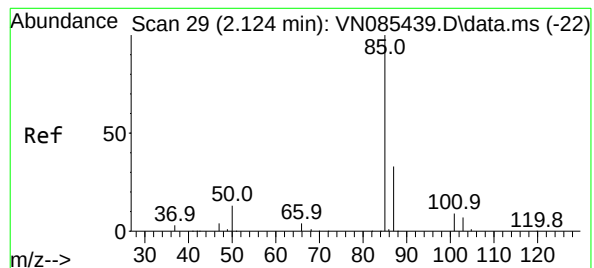
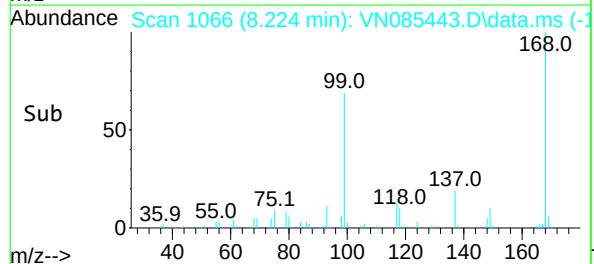
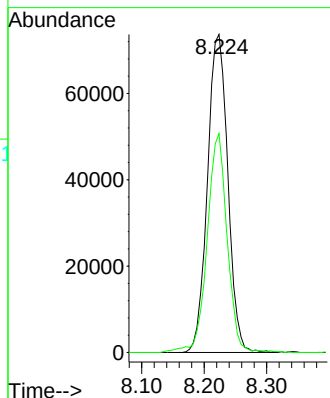
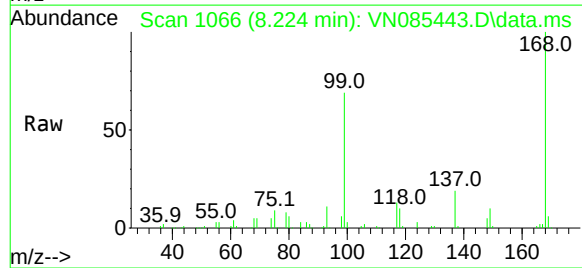
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

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

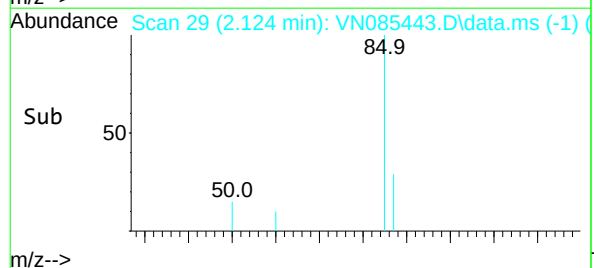
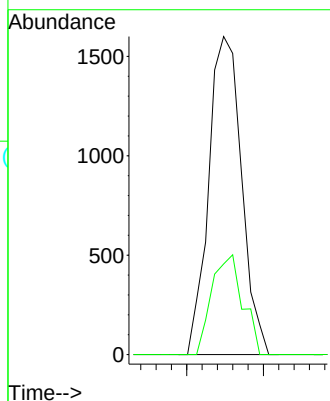
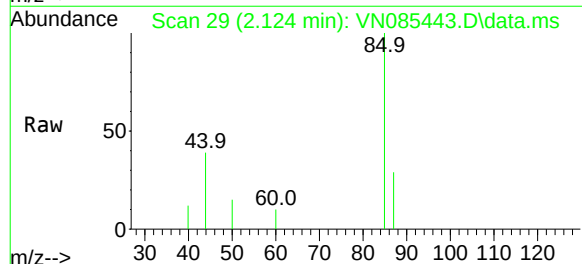
Manual Integrations  
APPROVED

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

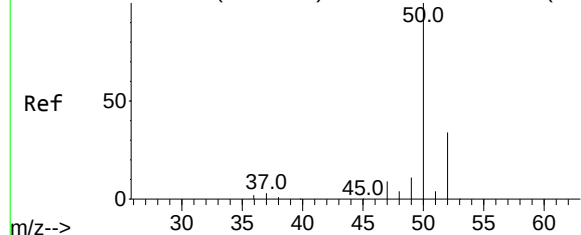


#2  
Dichlorodifluoromethane  
Concen: 1.054 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

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

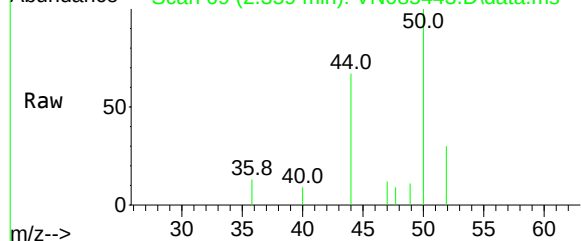
Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

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



Tgt Ion: 50 Resp: 2801

Ion Ratio Lower Upper

50 100

52 29.7 27.0 40.6

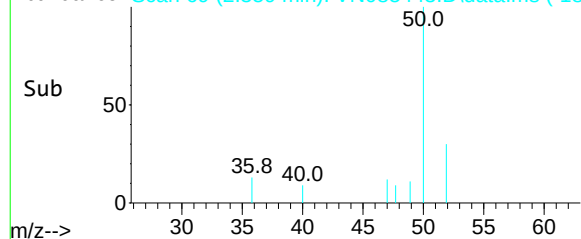
Manual Integrations

APPROVED

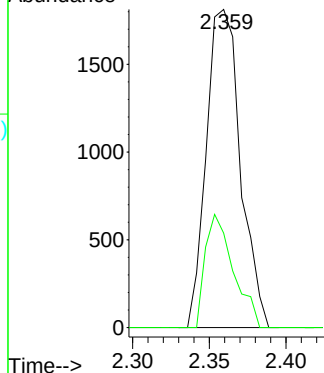
Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

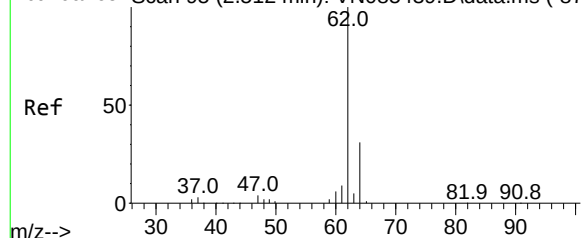
Abundance Scan 69 (2.359 min): VN085443.D\data.ms (-18)



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

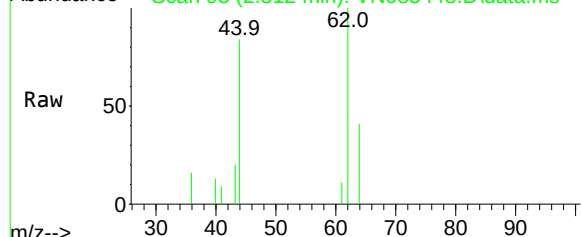
Tgt Ion: 62 Resp: 2732

Ion Ratio Lower Upper

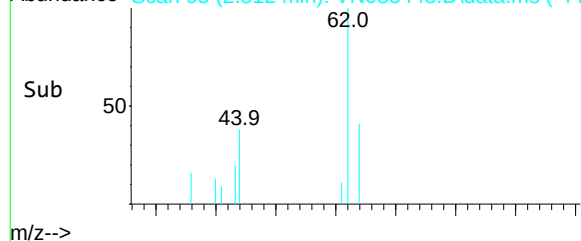
62 100

64 41.4 24.8 37.2

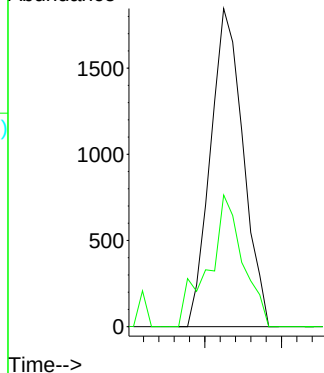
Abundance Scan 95 (2.512 min): VN085443.D\data.ms

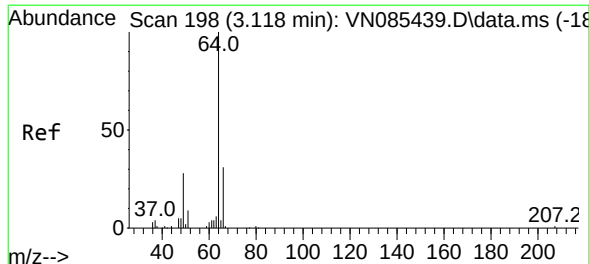


Abundance Scan 95 (2.512 min): VN085443.D\data.ms (-44)



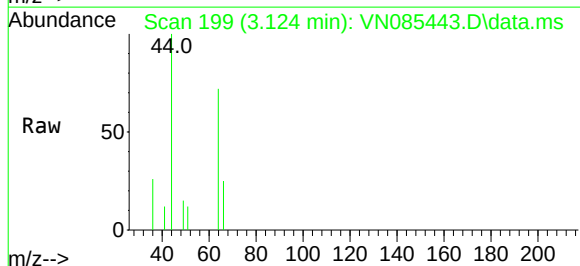
Abundance





#6  
Chloroethane  
Concen: 1.160 ug/l  
RT: 3.124 min Scan# 198  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

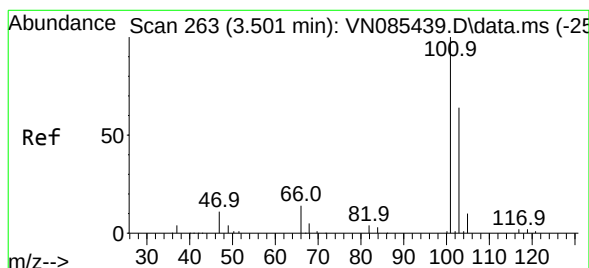
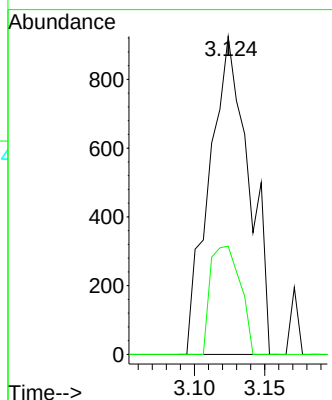
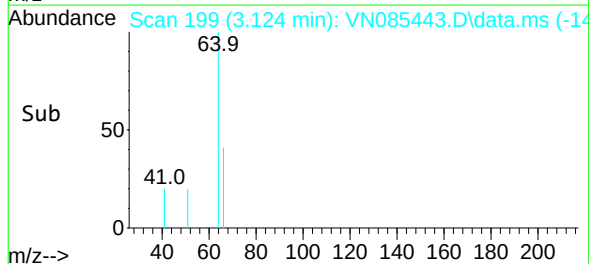
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001



Tgt Ion: 64 Resp: 1809  
Ion Ratio Lower Upper  
64 100  
66 34.1 24.6 36.8

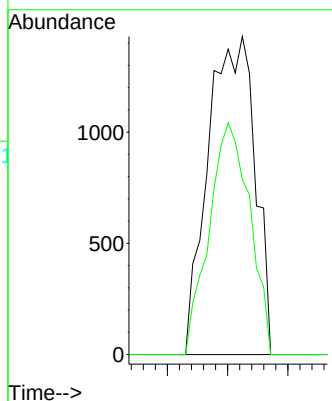
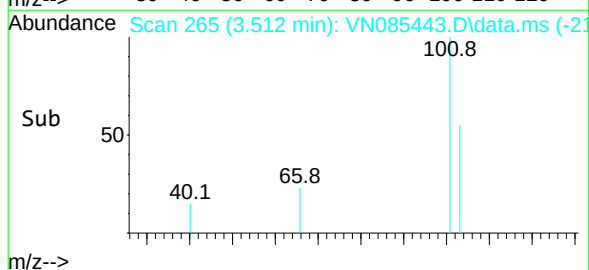
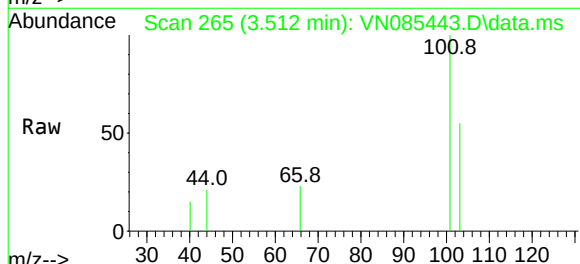
Manual Integrations  
APPROVED

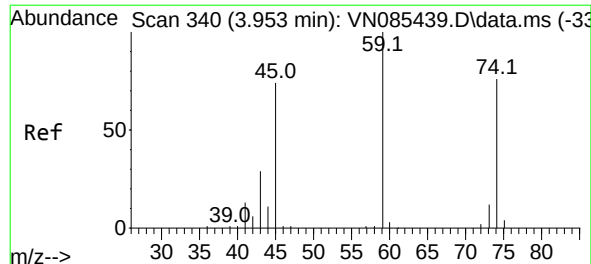
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

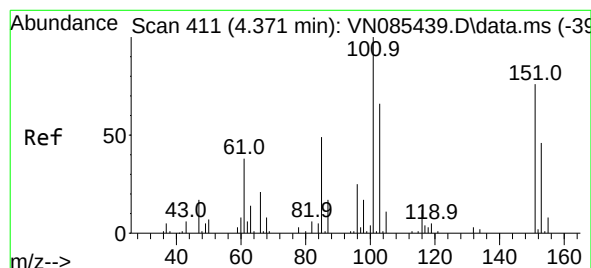
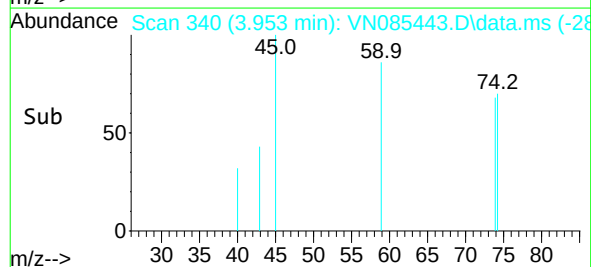
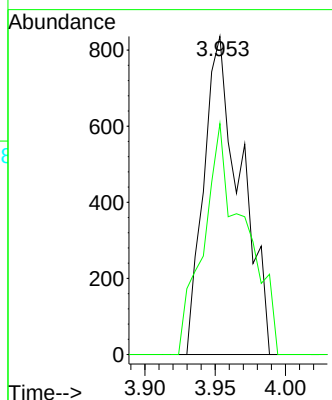
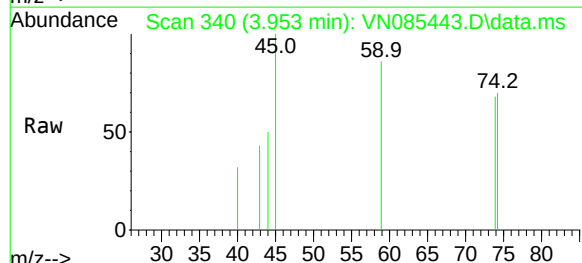
45 80.9 49.7 149.1

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

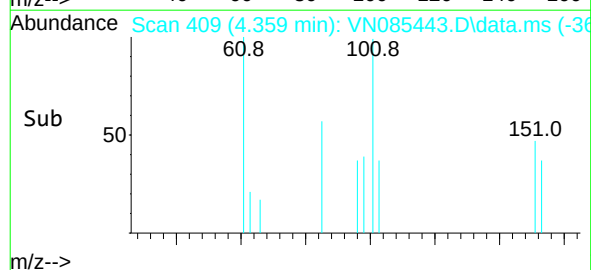
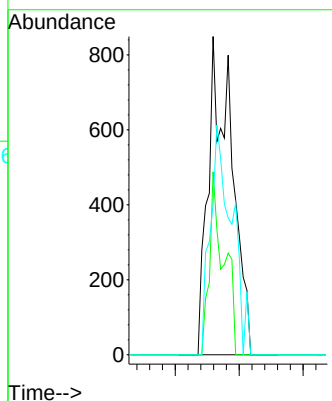
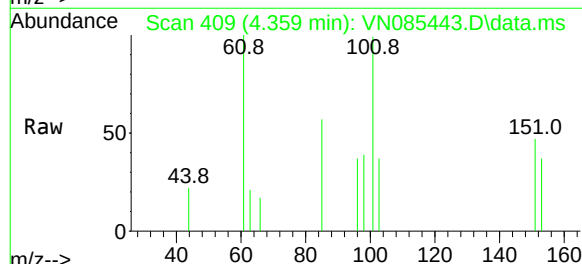
Tgt Ion:101 Resp: 2156

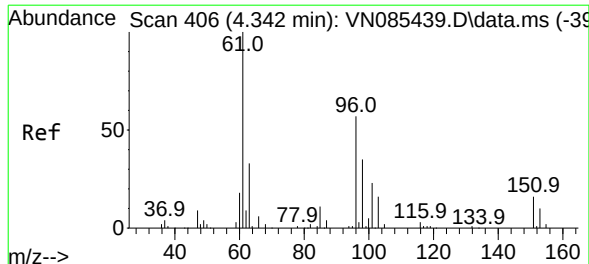
Ion Ratio Lower Upper

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

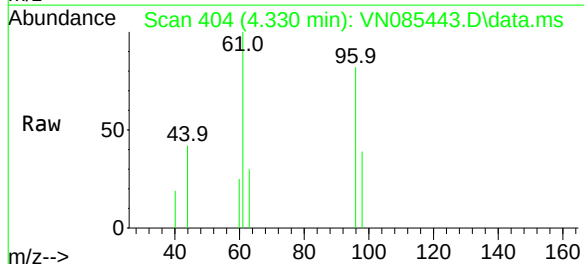
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

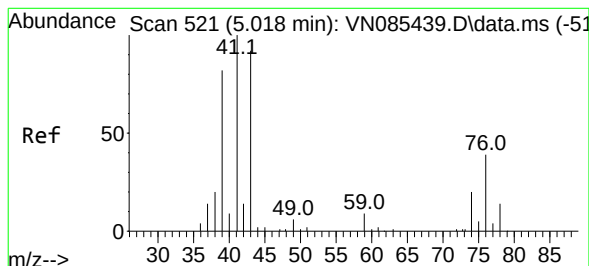
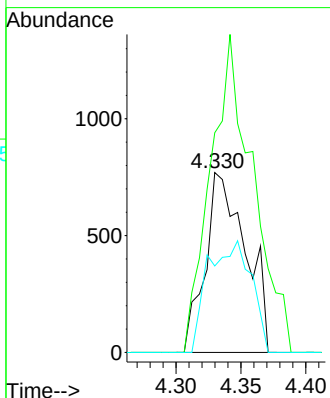
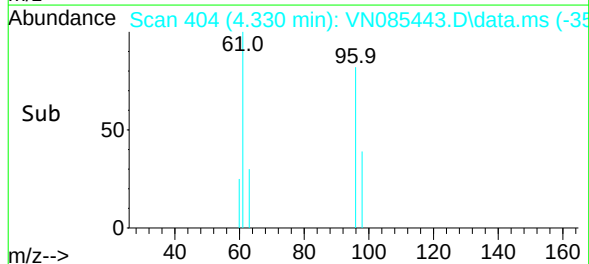
VSTDIC001



|          |       |       |        |
|----------|-------|-------|--------|
| 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

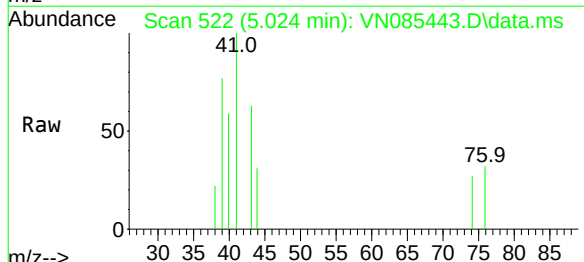
Concen: 1.094 ug/l

RT: 5.024 min Scan# 522

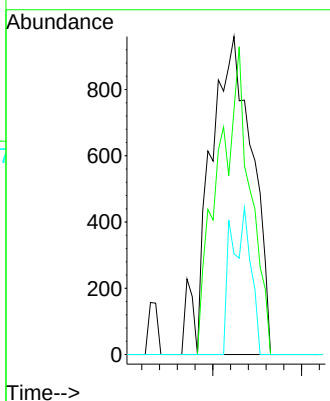
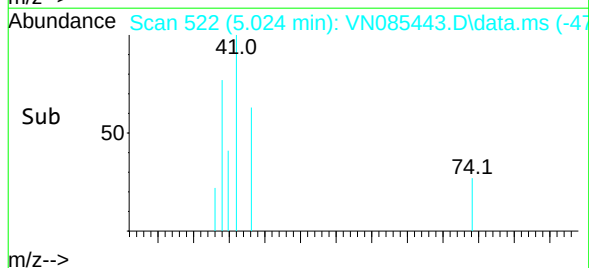
Delta R.T. 0.006 min

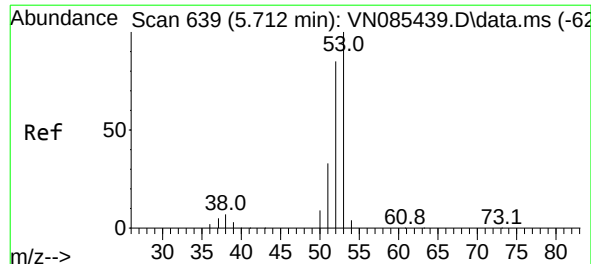
Lab File: VN085443.D

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

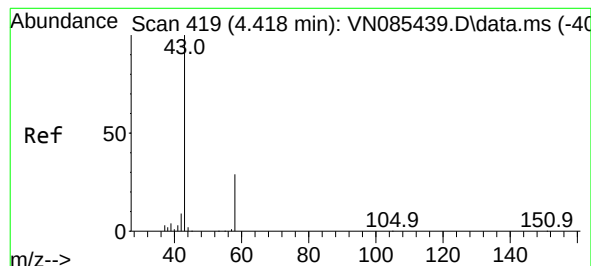
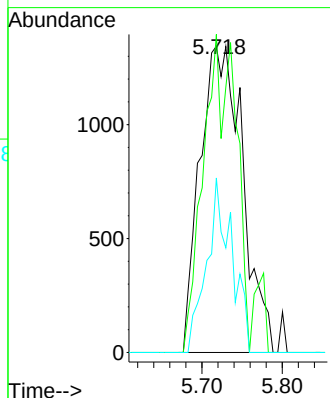
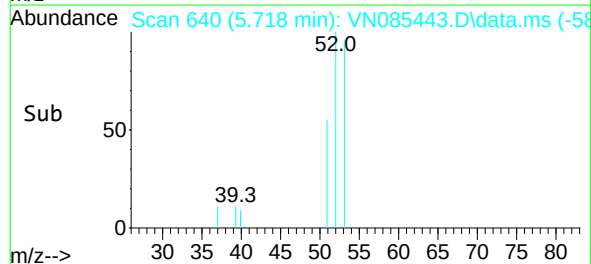
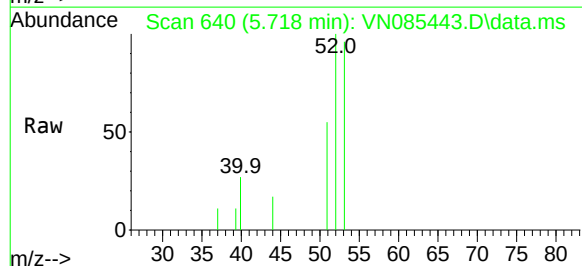
ClientSampleId :

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

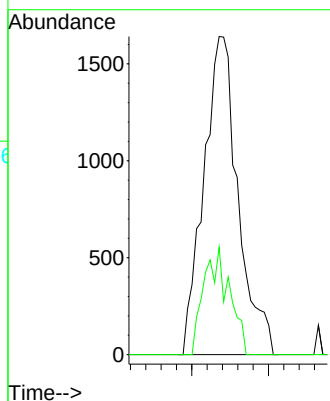
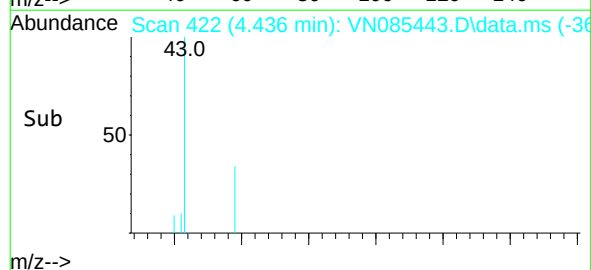
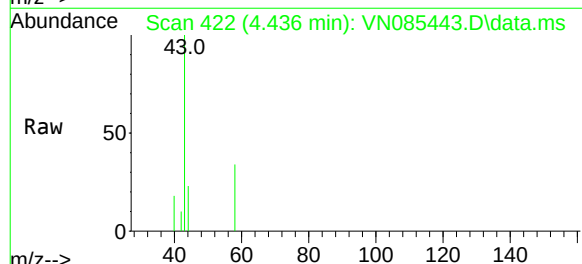
RT: 4.436 min Scan# 422

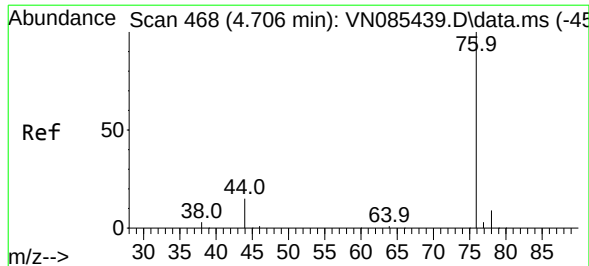
Delta R.T. 0.018 min

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

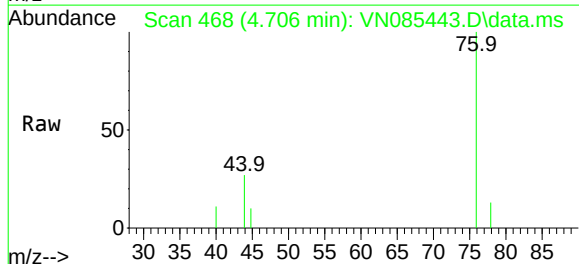
Acq: 14 Jan 2025 17:19

Instrument :

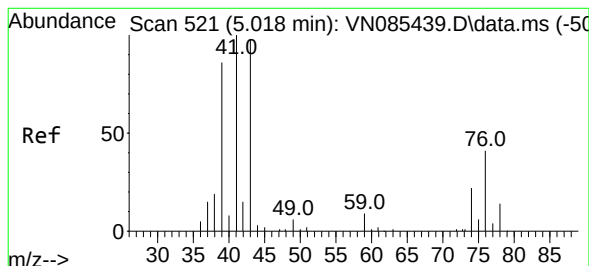
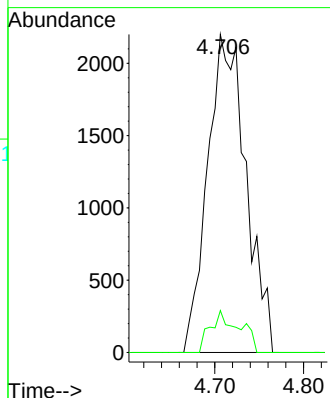
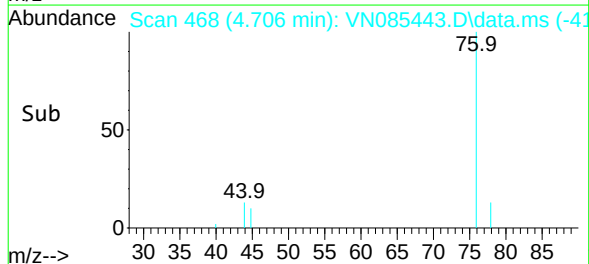
MSVOA\_N

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

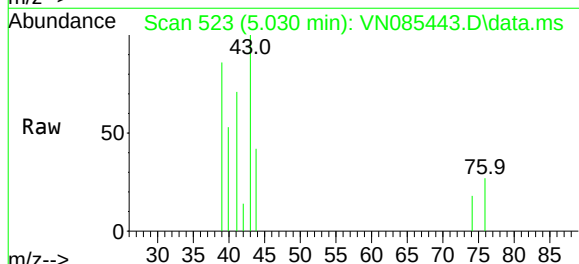
Concen: 1.099 ug/l

RT: 5.030 min Scan# 523

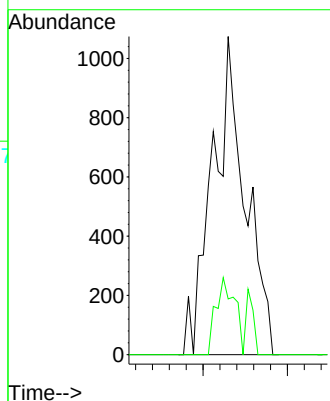
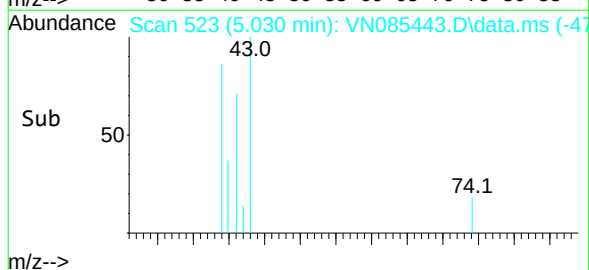
Delta R.T. 0.012 min

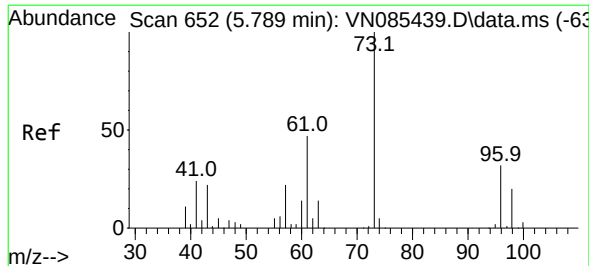
Lab File: VN085443.D

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 MSVOA\_N

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

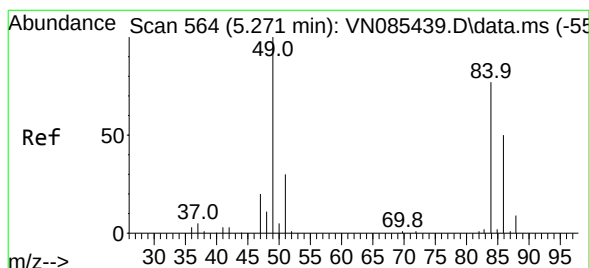
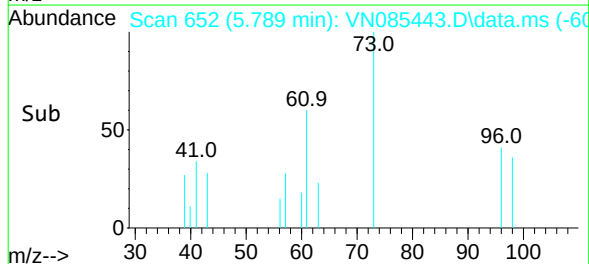
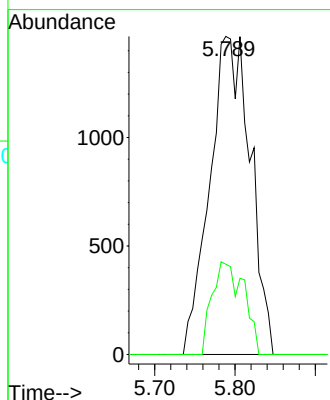
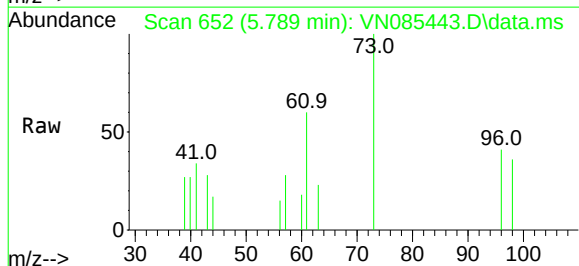
57 28.4 17.8 26.8#

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

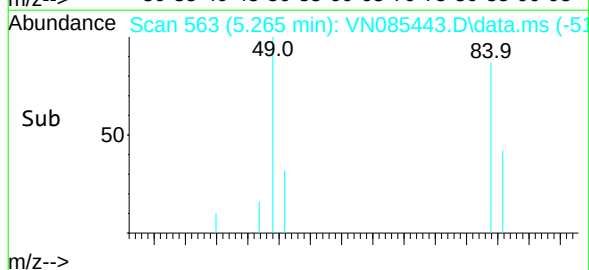
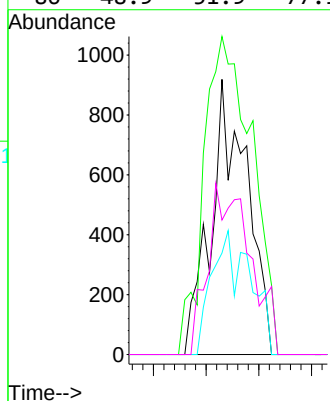
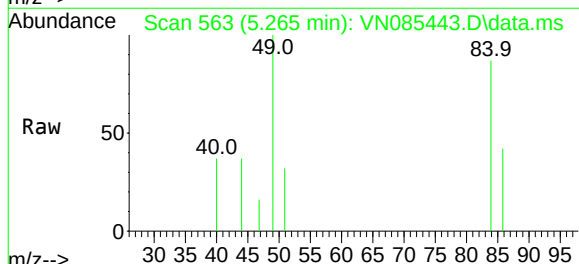
Ion Ratio Lower Upper

84 100

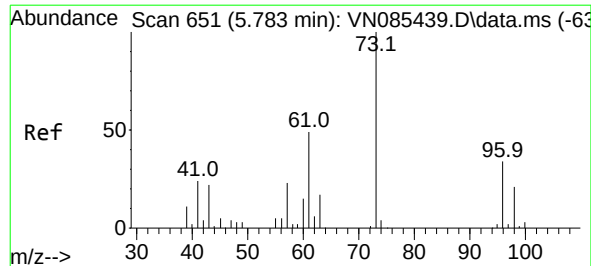
49 115.6 104.1 156.1

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#

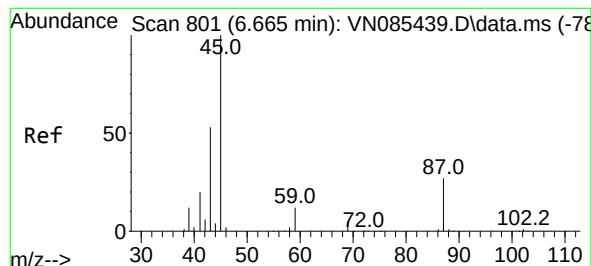
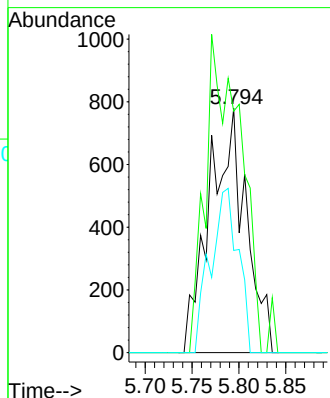
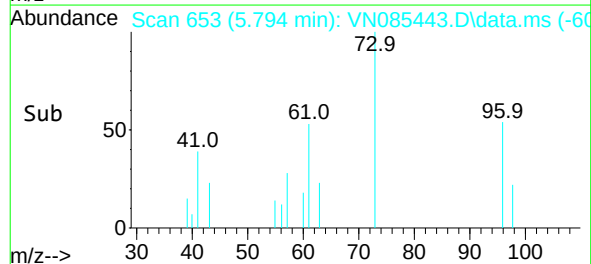
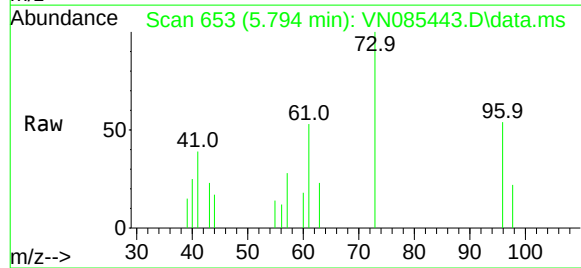
98 41.8 49.8 74.8#

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

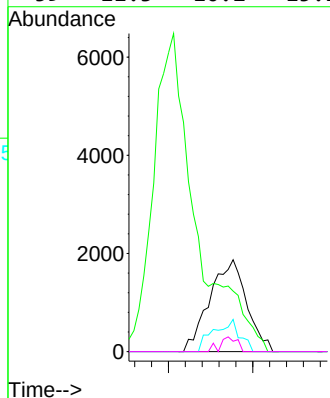
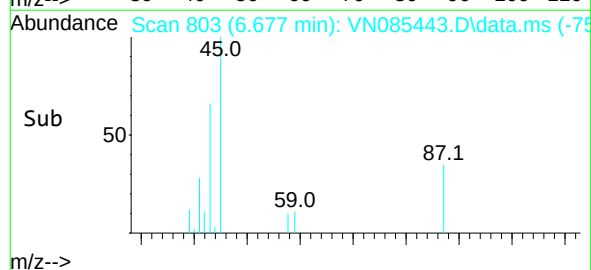
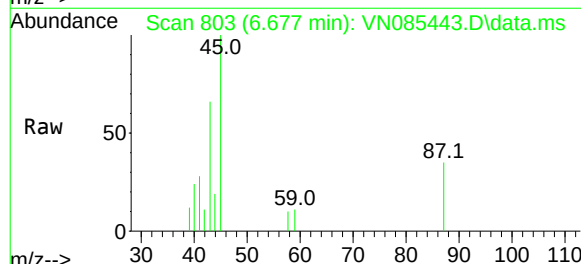
Ion Ratio Lower Upper

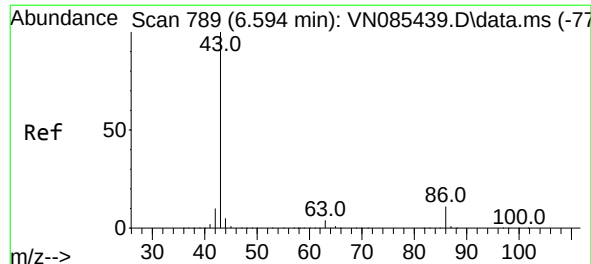
45 100

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

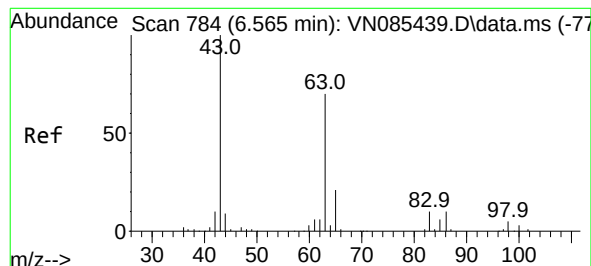
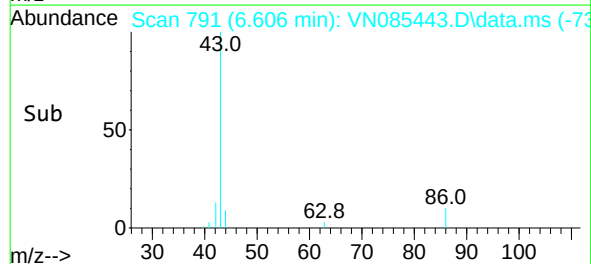
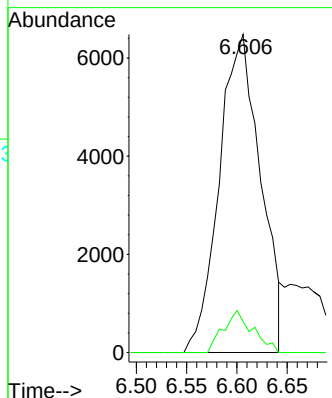
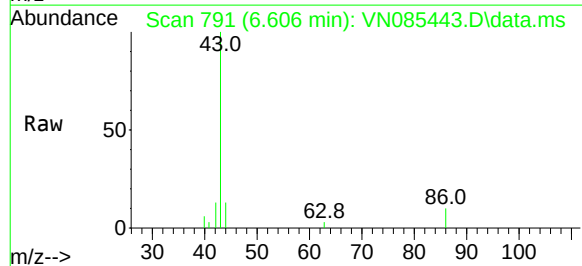
86 9.8 8.4 12.6

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

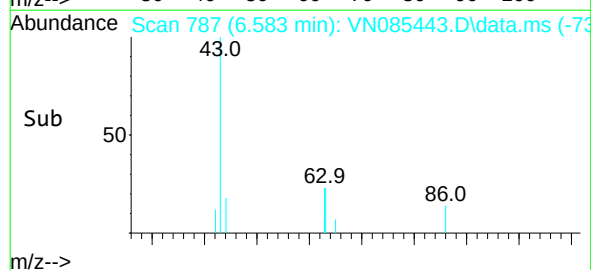
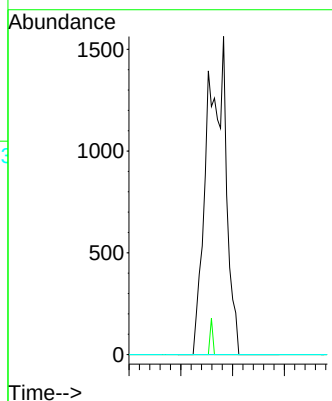
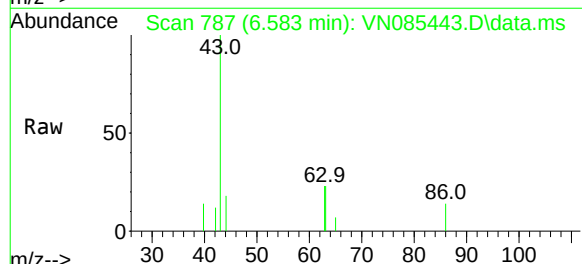
Tgt Ion: 63 Resp: 4020

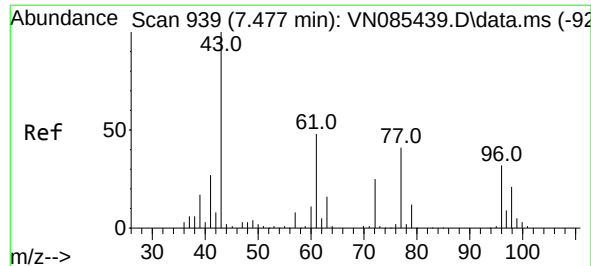
Ion Ratio Lower Upper

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 :

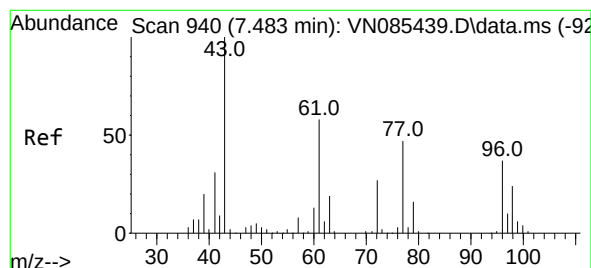
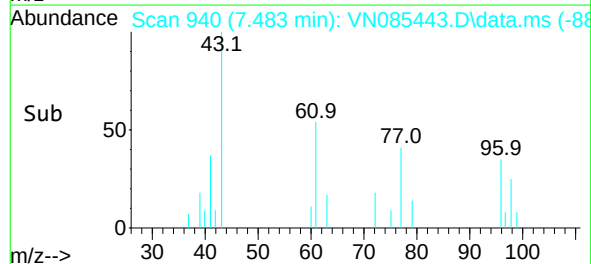
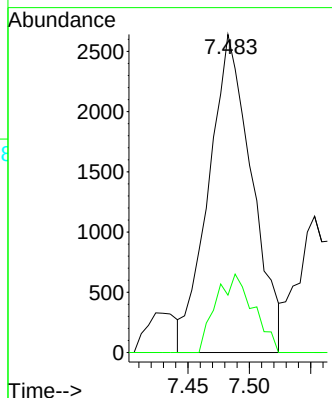
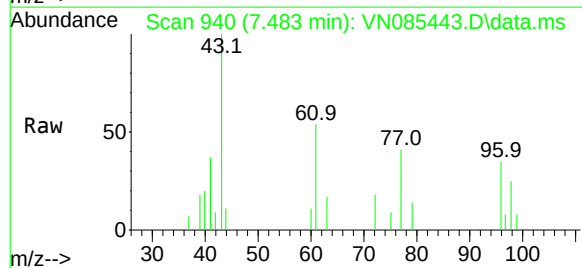
VSTDIC001

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

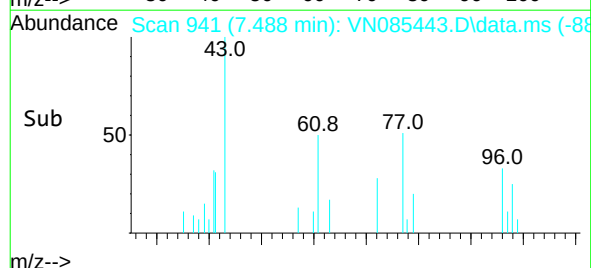
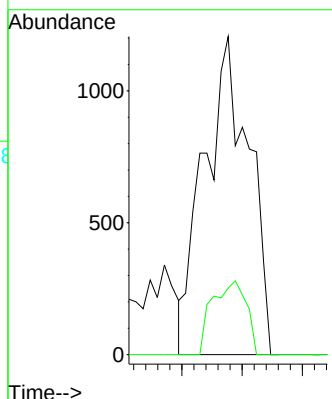
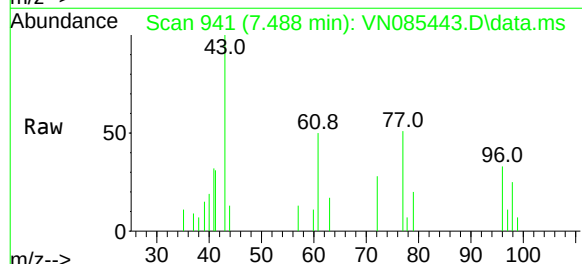
Acq: 14 Jan 2025 17:19

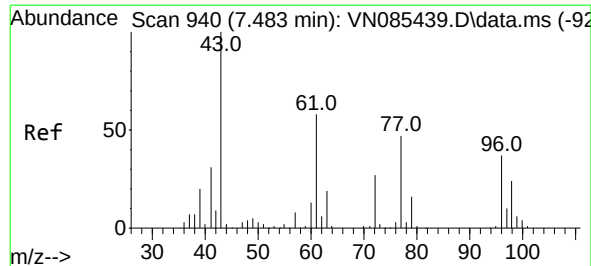
Tgt Ion: 77 Resp: 3104

Ion Ratio Lower Upper

77 100

97 17.7 10.7 32.1





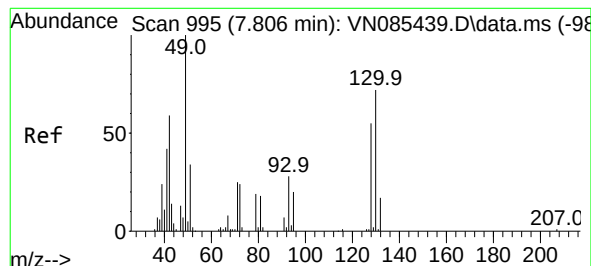
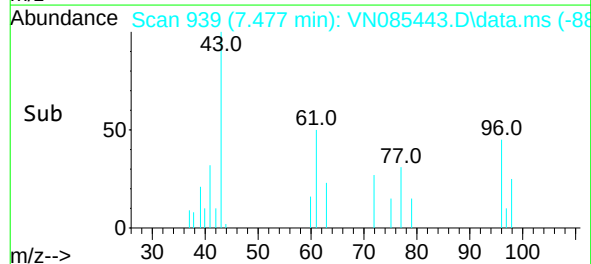
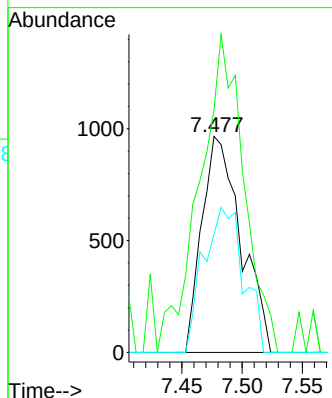
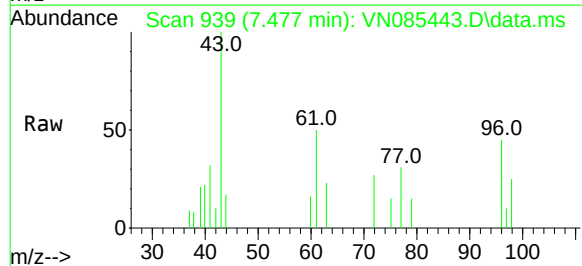
#27  
cis-1,2-Dichloroethene  
Concen: 0.969 ug/l  
RT: 7.477 min Scan# 935  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 166.1 | 0.0   | 311.8 |
| 98      | 68.7  | 0.0   | 126.0 |

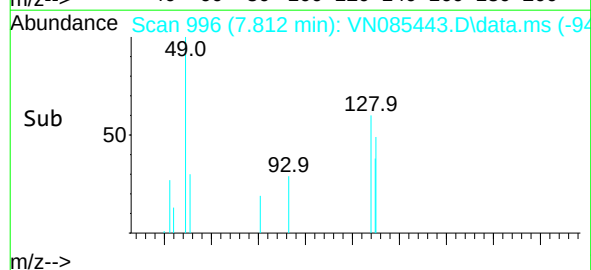
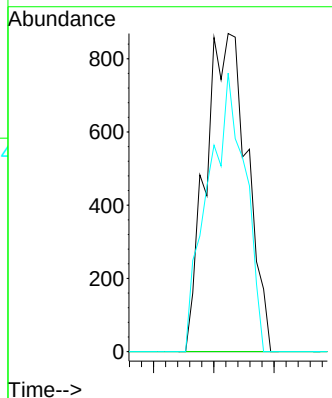
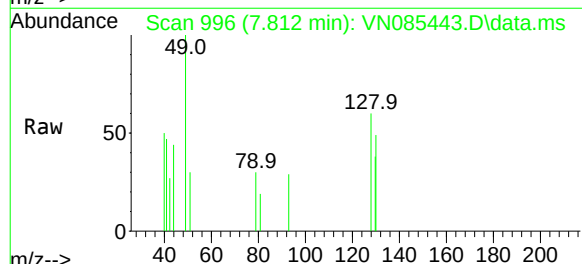
Manual Integrations  
APPROVED

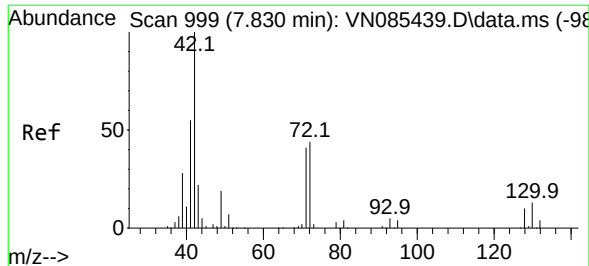
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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 | 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 :

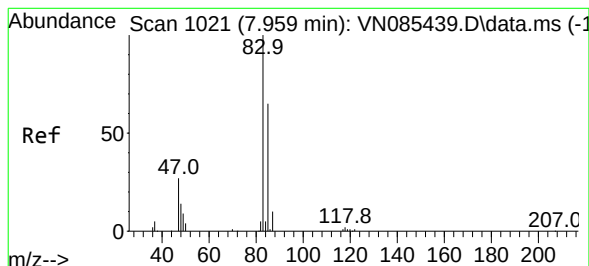
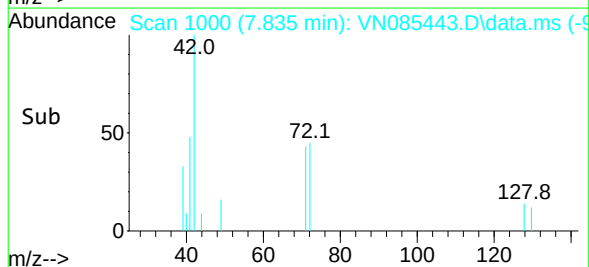
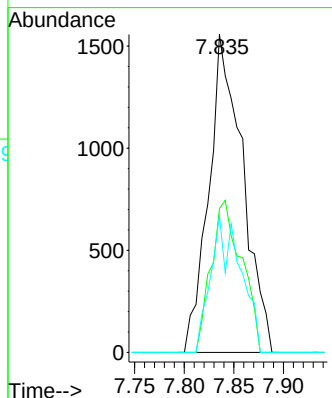
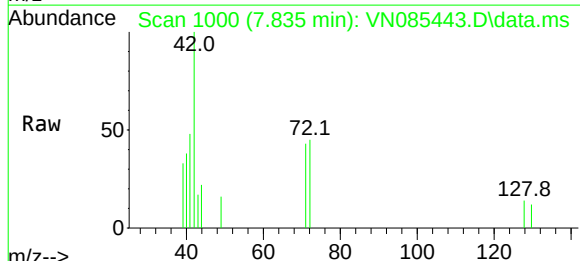
VSTDIC001

|          |       |       |       |
|----------|-------|-------|-------|
| 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

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



#30

Chloroform

Concen: 1.045 ug/l

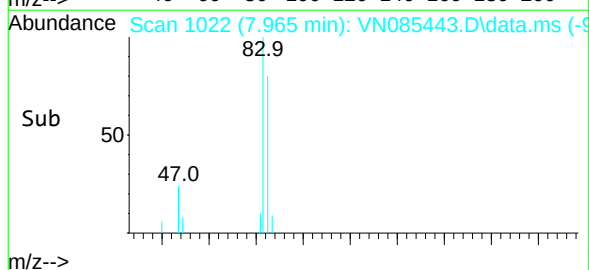
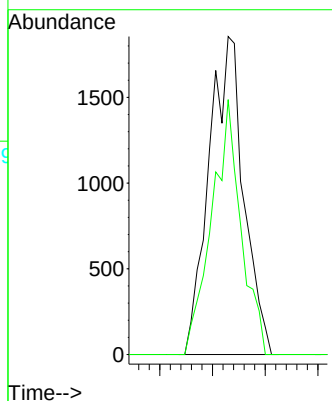
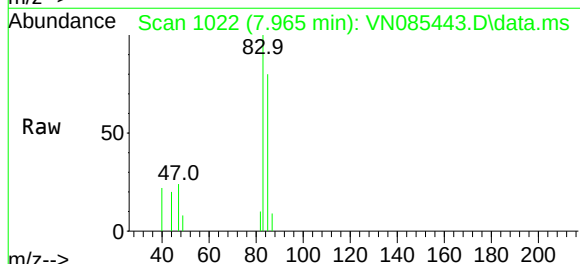
RT: 7.965 min Scan# 1022

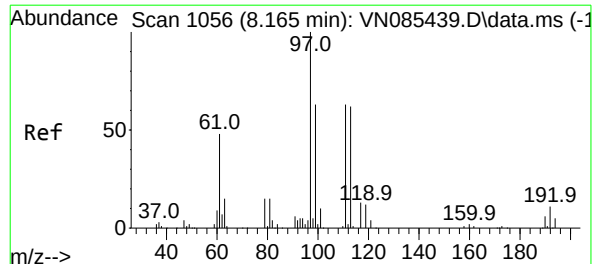
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

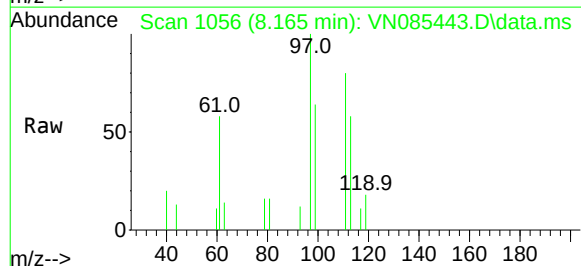
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 4250  |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 80.2  | 51.8  | 77.6  |





#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

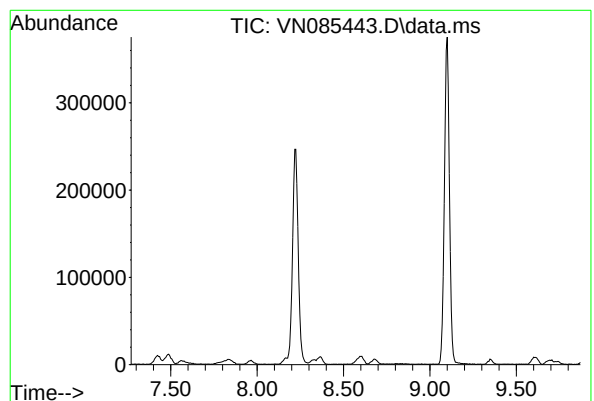
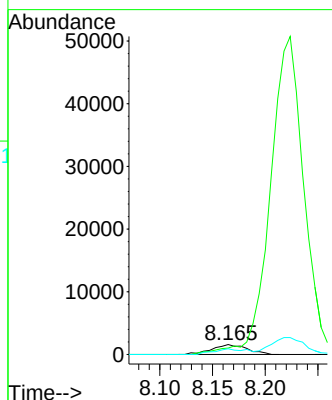
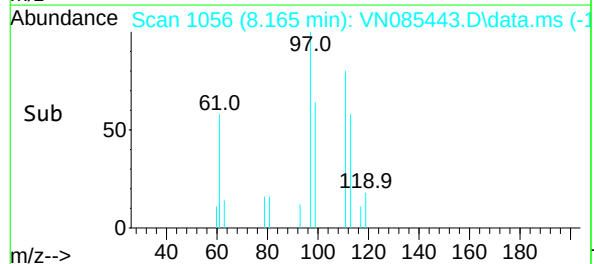
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001



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

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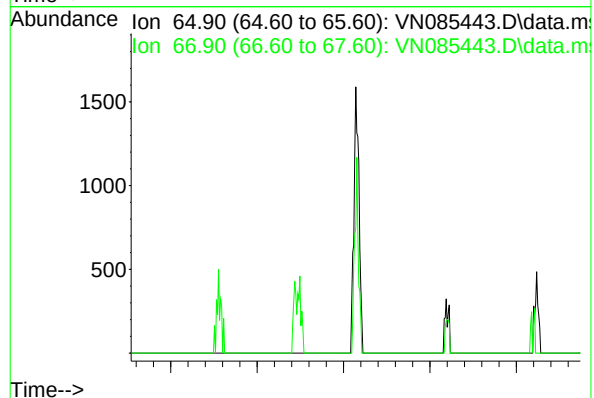
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025

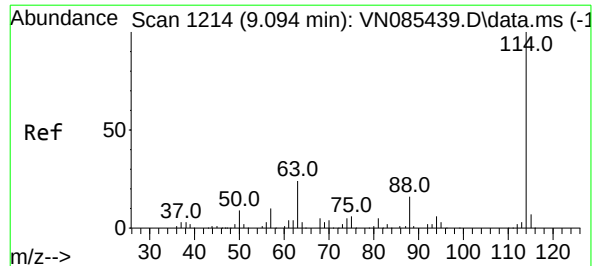


#33  
1,2-Dichloroethane-d4  
Concen: 0.000 ug/l  
Expected RT: 8.57 min

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 :

VSTDIC001

Tgt Ion:114 Resp: 302938

Ion Ratio Lower Upper

114 100

63 22.3 0.0 47.6

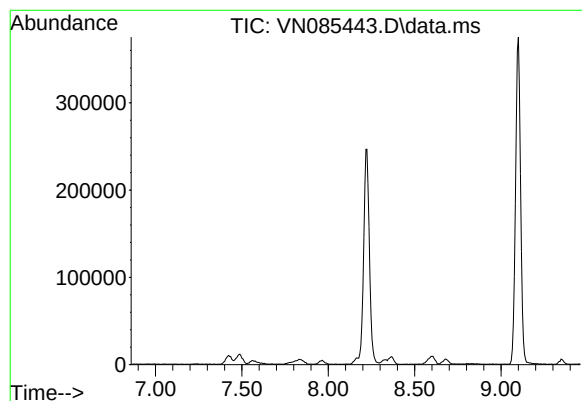
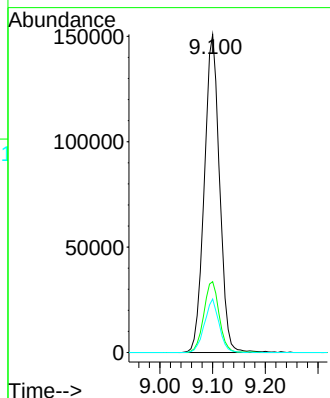
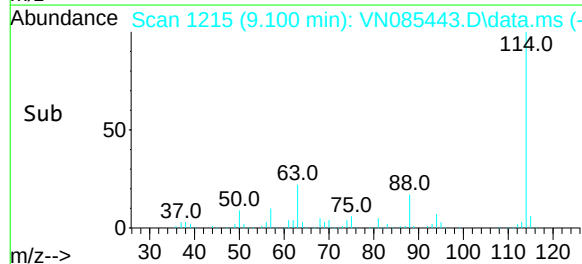
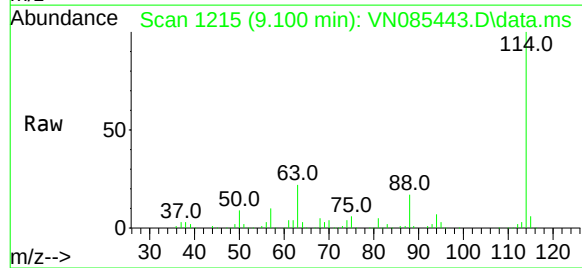
88 16.8 0.0 32.6

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

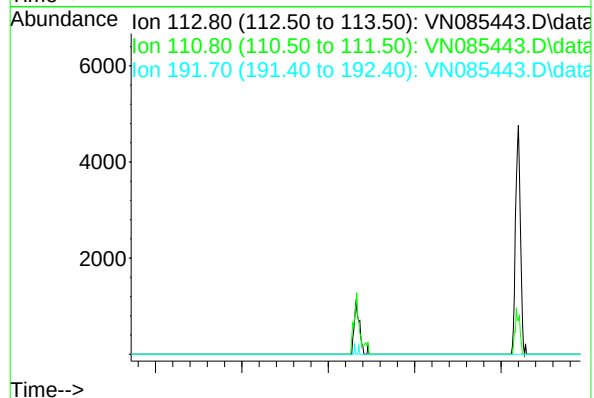
Tgt Ion: 113

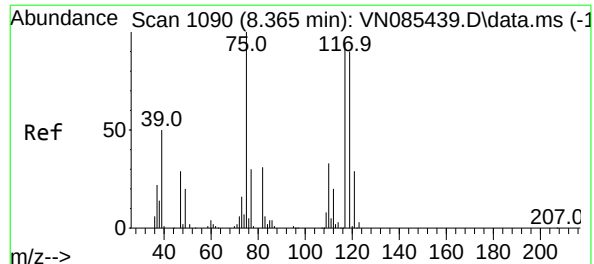
Sig Exp Ratio

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

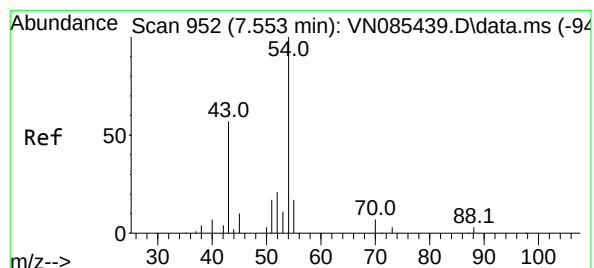
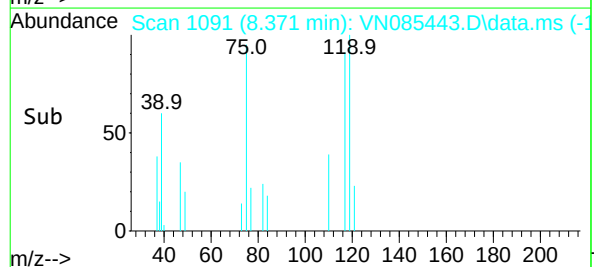
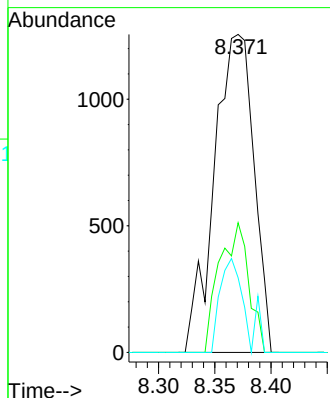
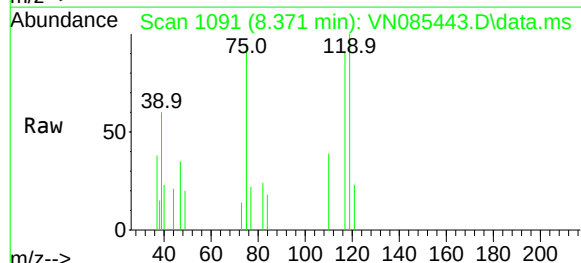
77 15.9 24.4 36.6#

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

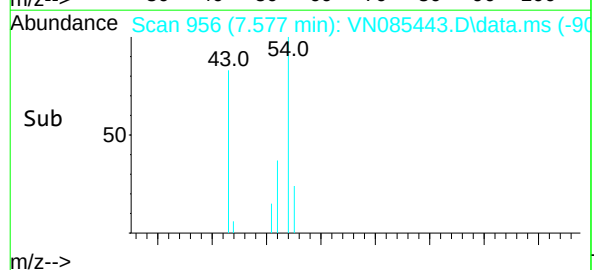
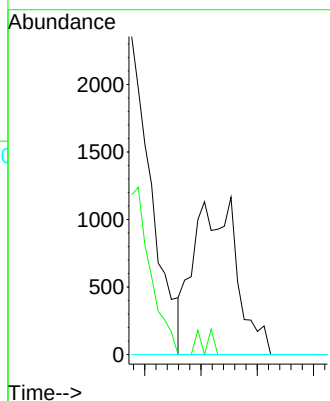
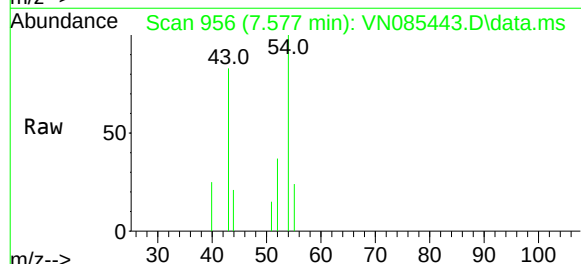
Tgt Ion: 43 Resp: 3056

Ion Ratio Lower Upper

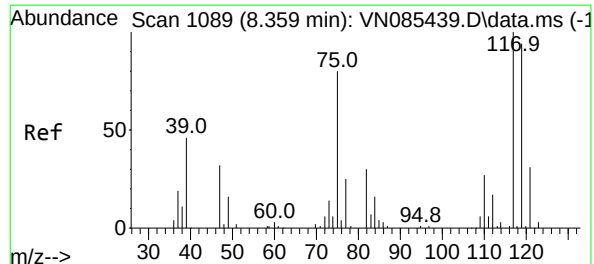
43 100

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

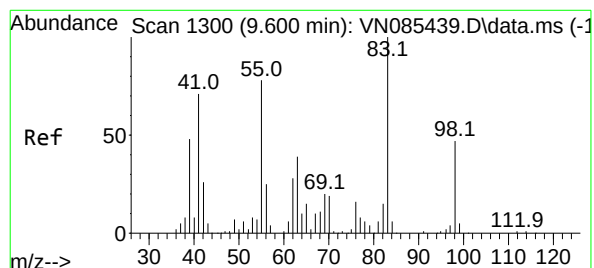
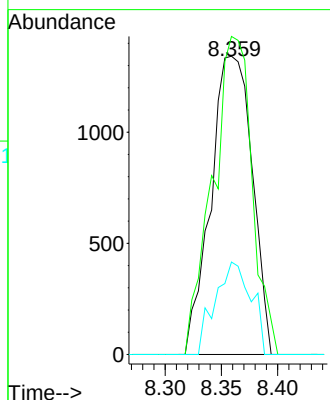
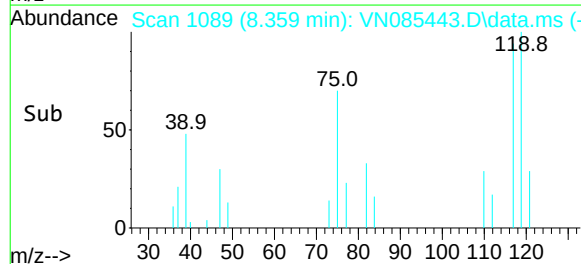
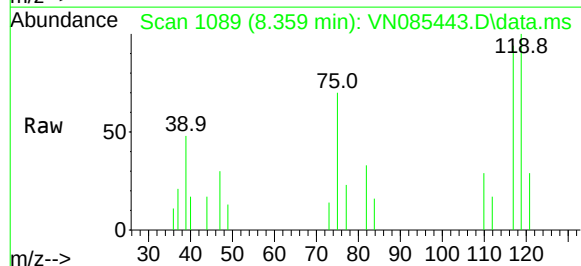
121 31.0 24.6 37.0

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

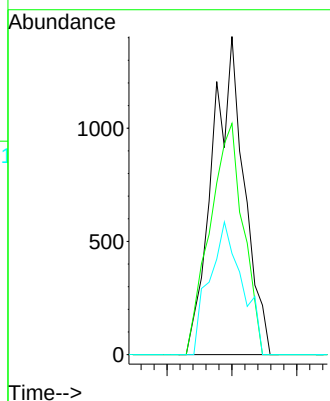
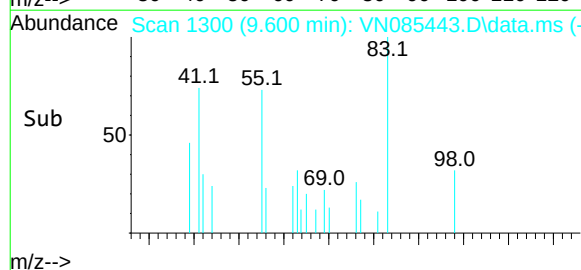
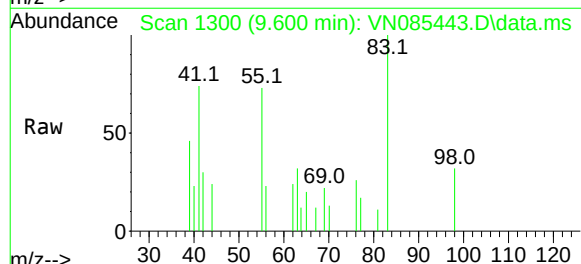
Tgt Ion: 83 Resp: 2403

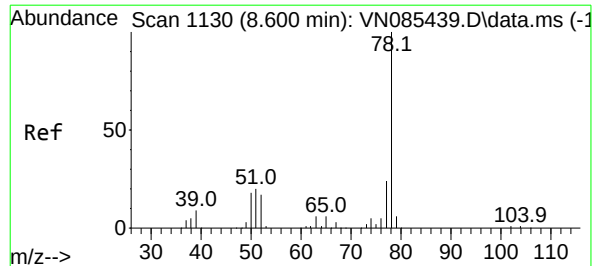
Ion Ratio Lower Upper

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

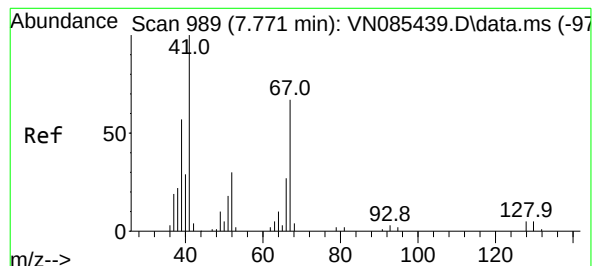
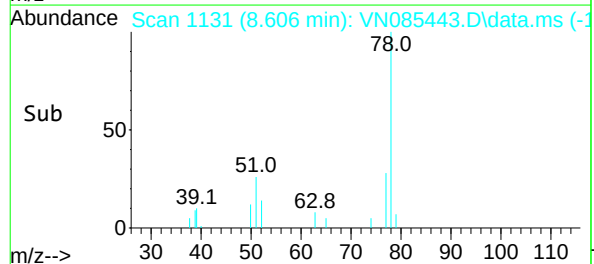
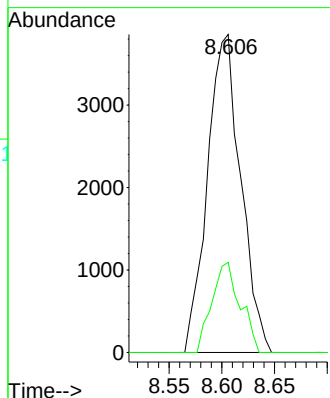
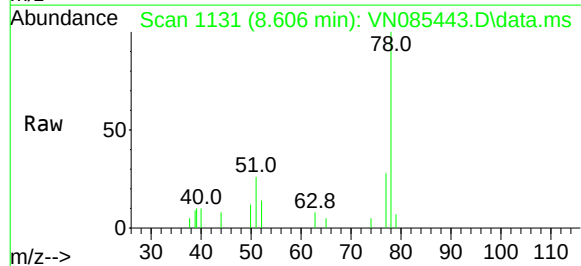
77 28.3 19.0 28.6

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

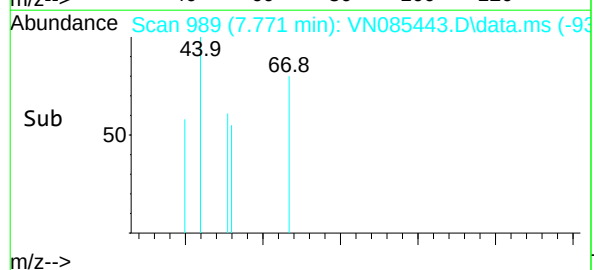
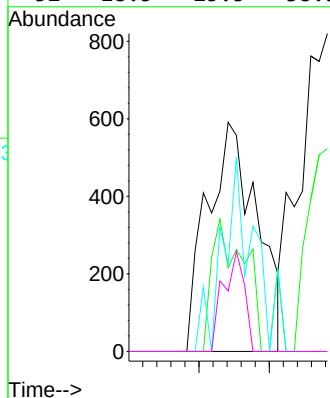
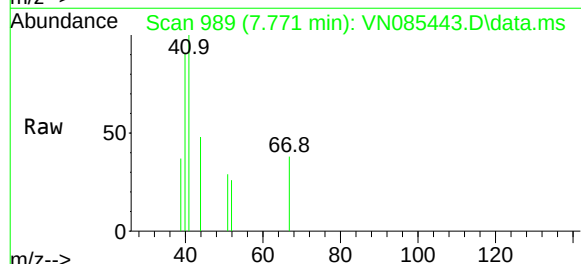
Ion Ratio Lower Upper

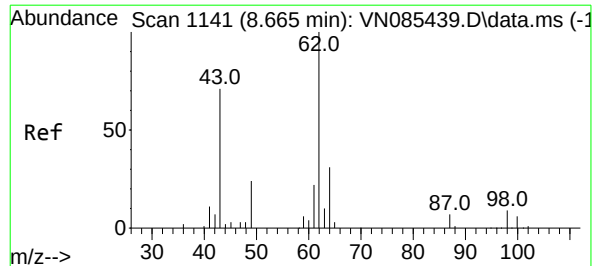
41 100

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

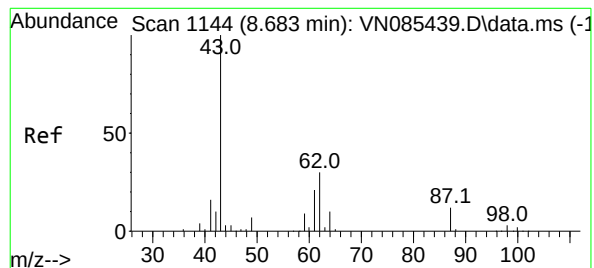
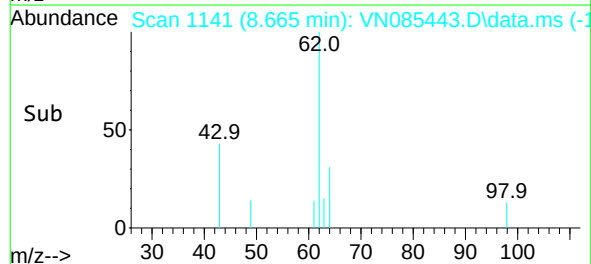
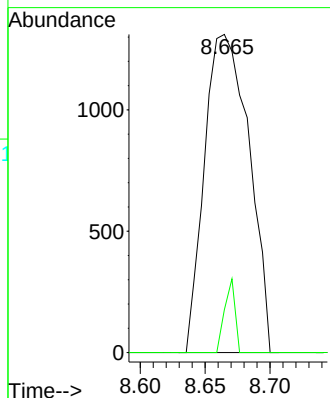
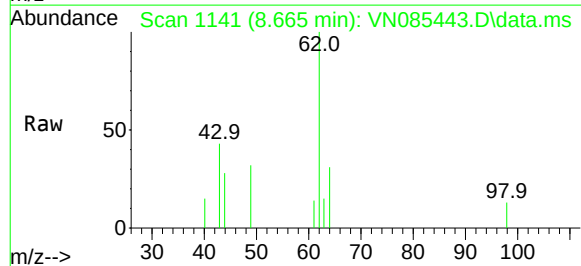
98 5.4 0.0 17.0

Manual Integrations

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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

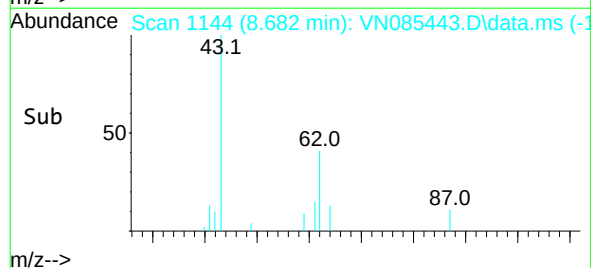
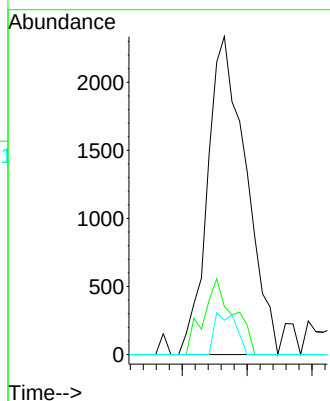
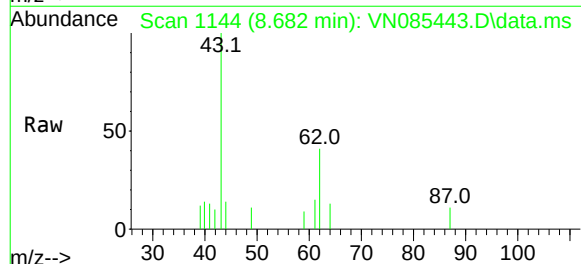
Tgt Ion: 43 Resp: 4803

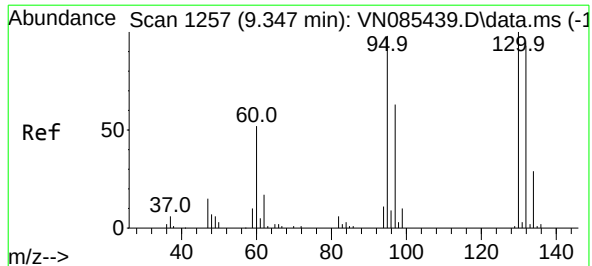
Ion Ratio Lower Upper

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

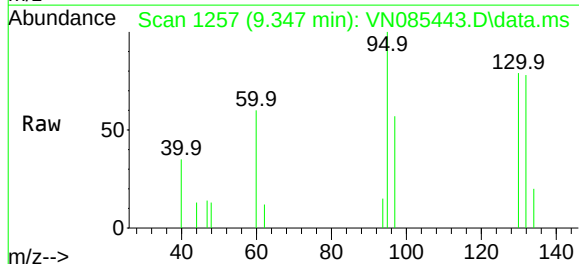
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001



Tgt Ion:130 Resp: 2133

Ion Ratio Lower Upper

130 100

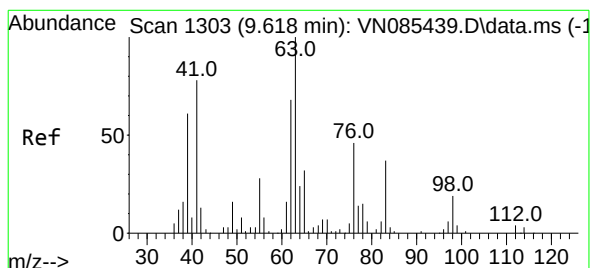
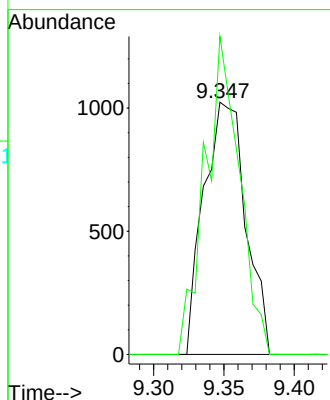
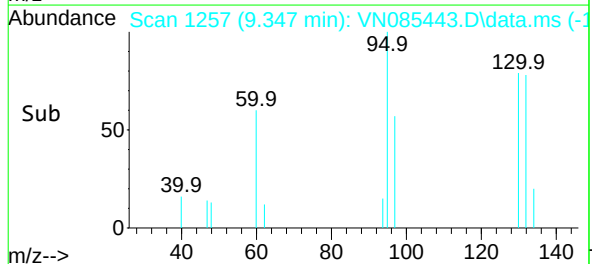
95 126.1 0.0 195.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#45

1,2-Dichloropropane

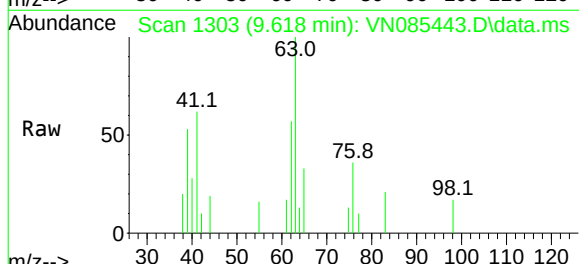
Concen: 0.992 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

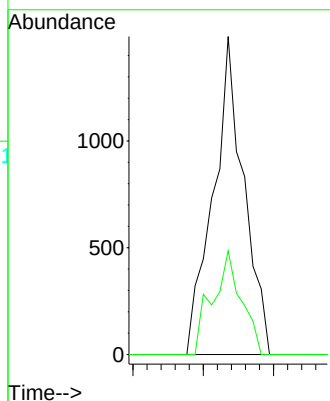
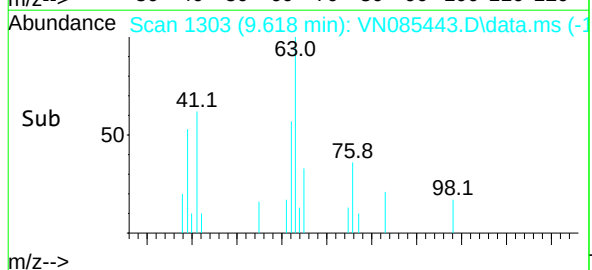


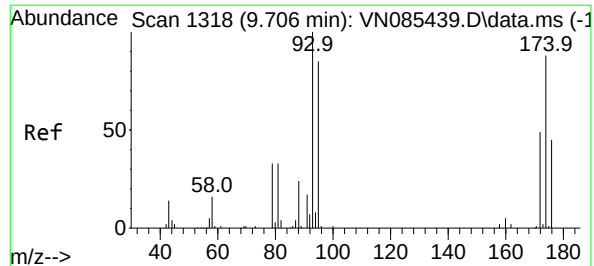
Tgt Ion: 63 Resp: 2246

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

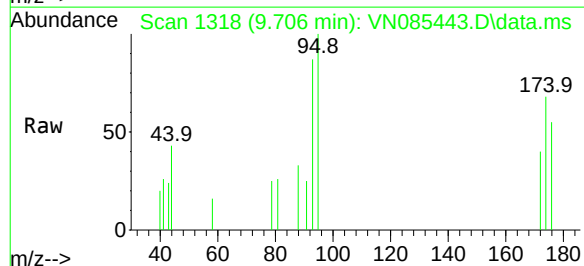
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

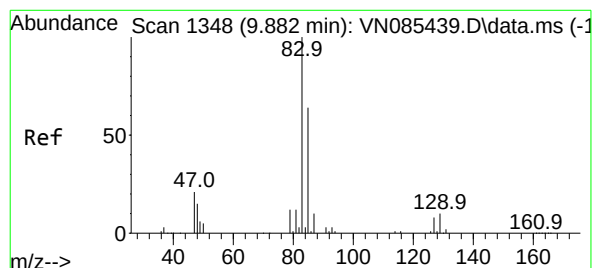
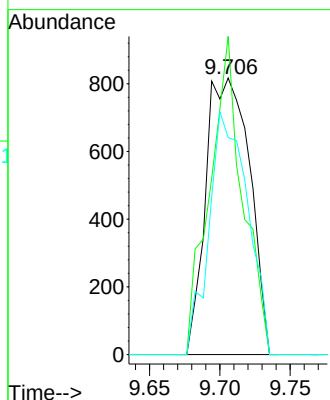
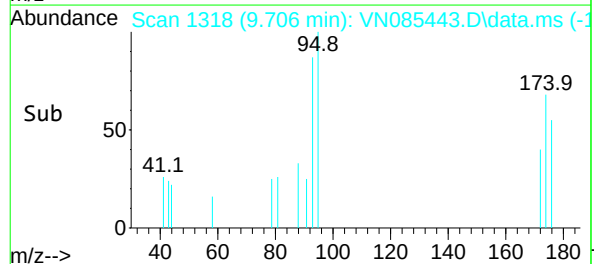
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| 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

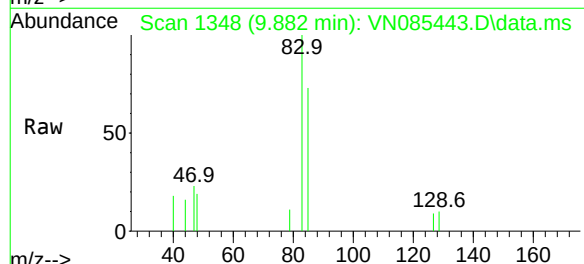
Concen: 0.882 ug/l

RT: 9.882 min Scan# 1348

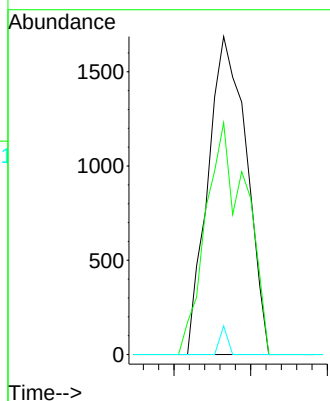
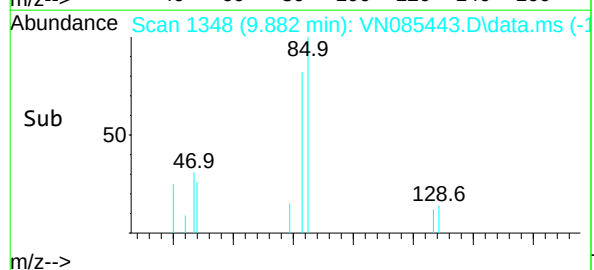
Delta R.T. 0.000 min

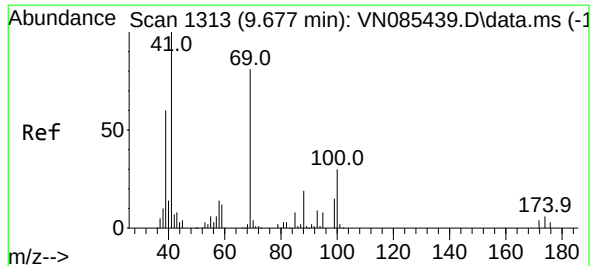
Lab File: VN085443.D

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

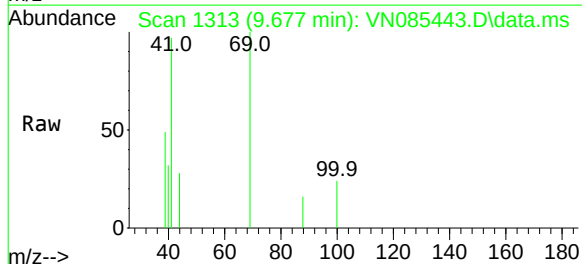
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

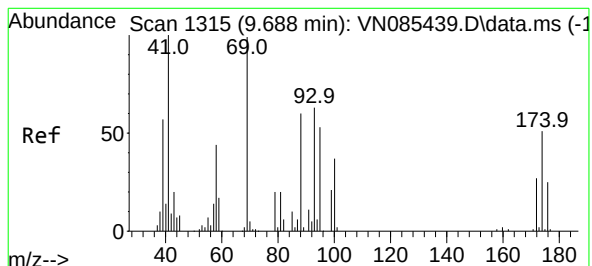
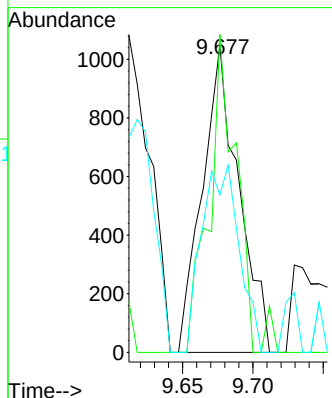
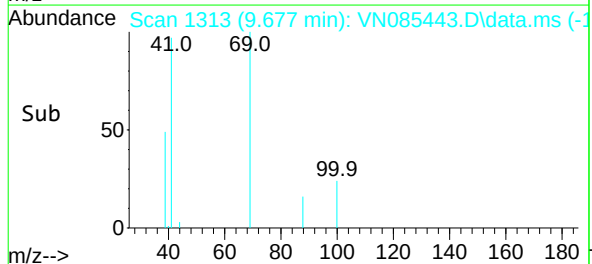
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| 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  |

Manual Integrations  
APPROVED

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



#49

1,4-Dioxane

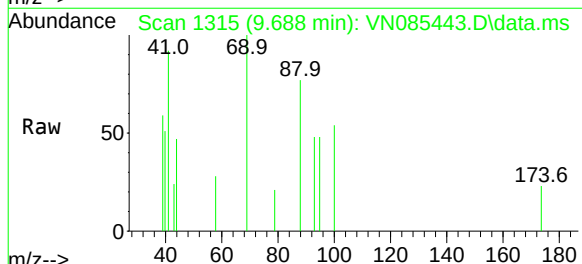
Concen: 18.616 ug/l

RT: 9.688 min Scan# 1315

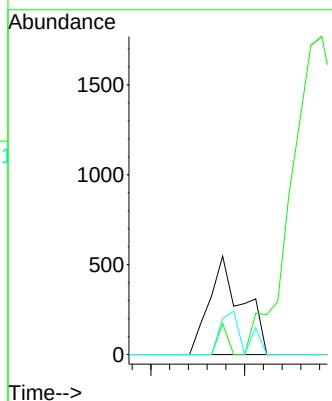
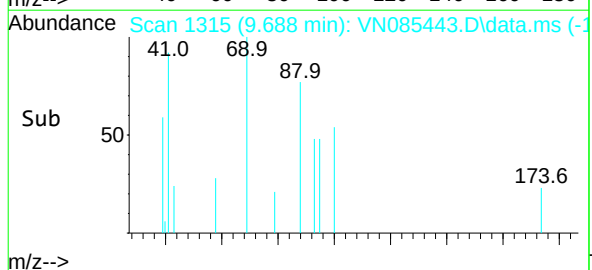
Delta R.T. -0.000 min

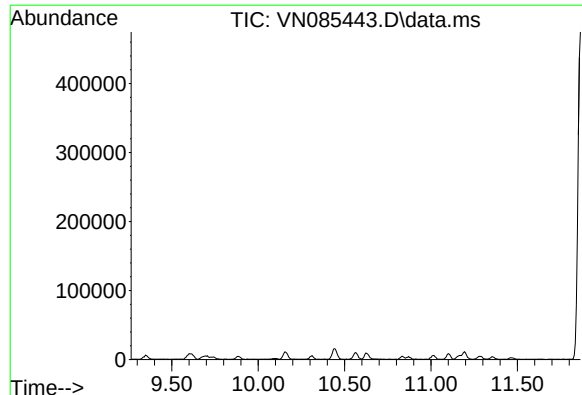
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 673   |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 43       | 0.0   | 26.6  | 39.8# |
| 58       | 31.1  | 59.5  | 89.3# |





#50

Toluene-d8

Concen: 0.000 ug/l

Expected RT: 10.56 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 98

Sig Exp Ratio

|     |      |
|-----|------|
| 98  | 100  |
| 100 | 65.3 |

Instrument :

MSVOA\_N

ClientSampleId :

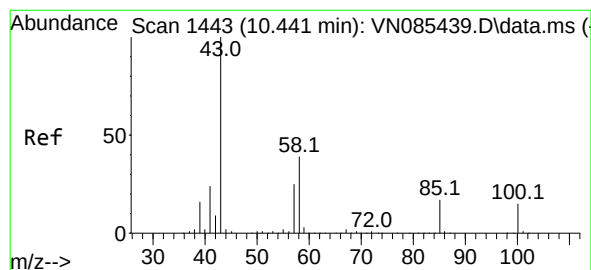
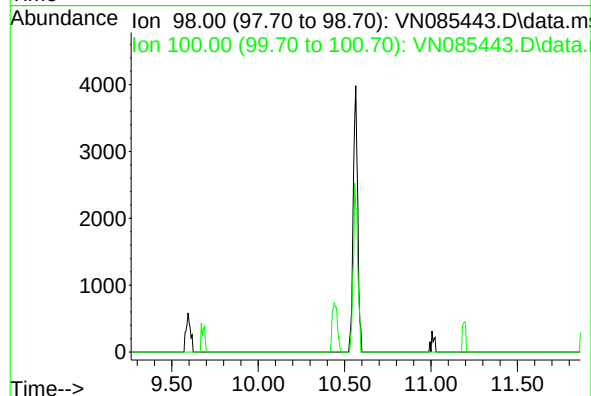
VSTDICC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#51

4-Methyl-2-Pentanone

Concen: 4.163 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. 0.000 min

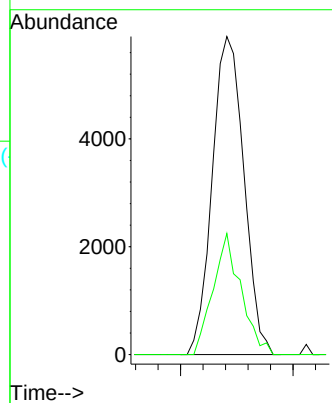
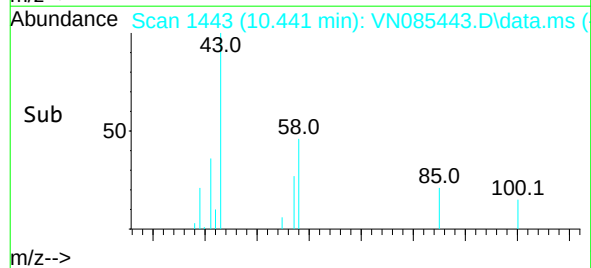
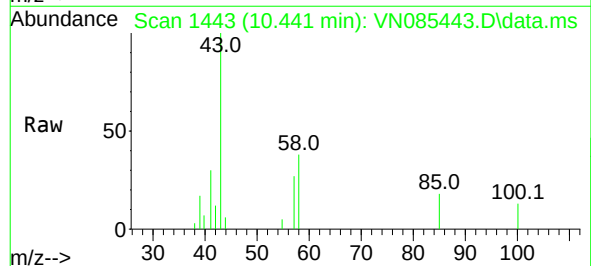
Lab File: VN085443.D

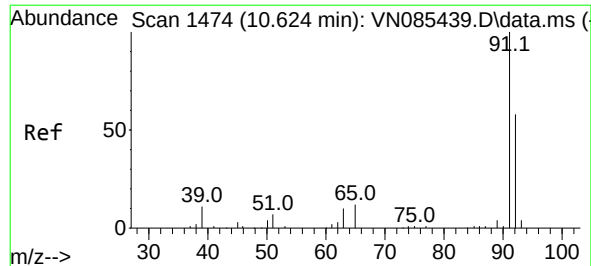
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 11523

Ion Ratio Lower Upper

|    |      |      |      |
|----|------|------|------|
| 43 | 100  |      |      |
| 58 | 33.6 | 30.5 | 45.7 |





#52

Toluene

Concen: 0.814 ug/l

RT: 10.618 min Scan# 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

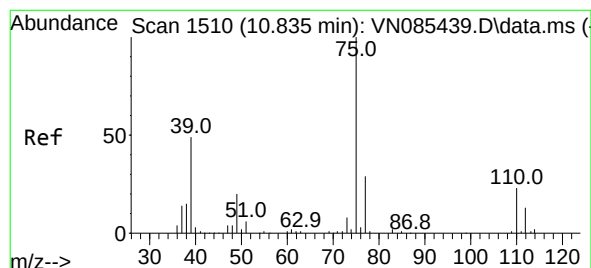
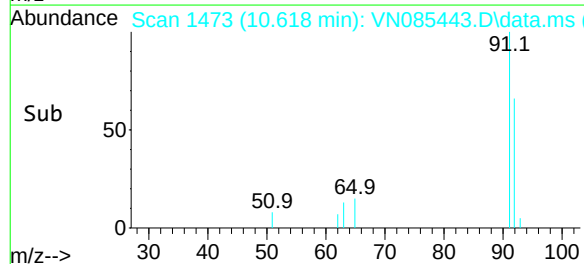
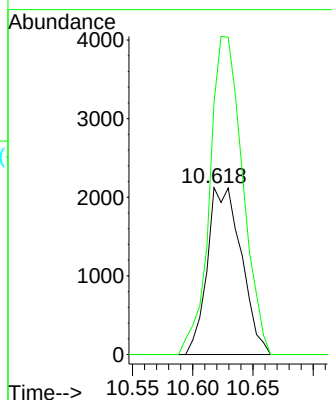
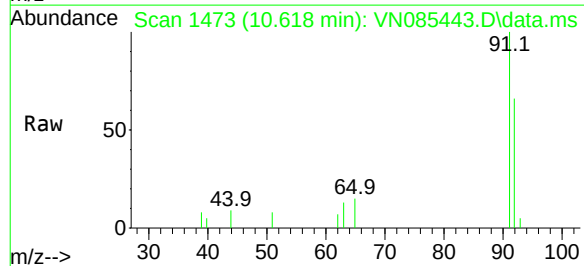
91 183.9 139.2 208.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#53

t-1,3-Dichloropropene

Concen: 0.802 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN085443.D

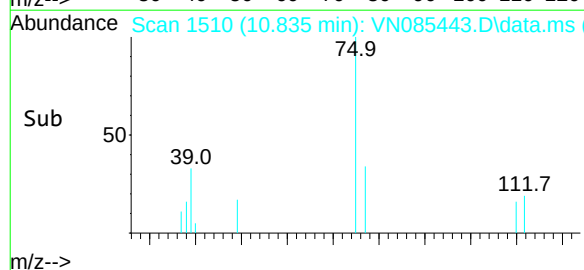
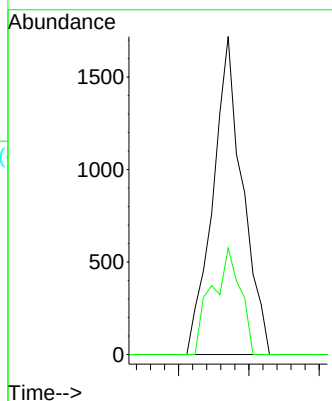
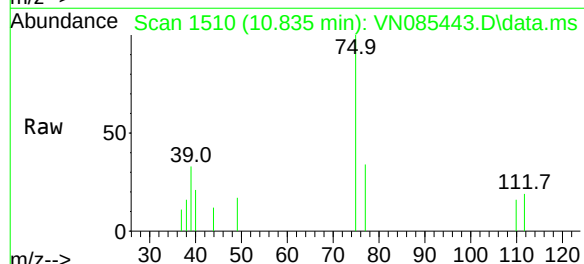
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2522

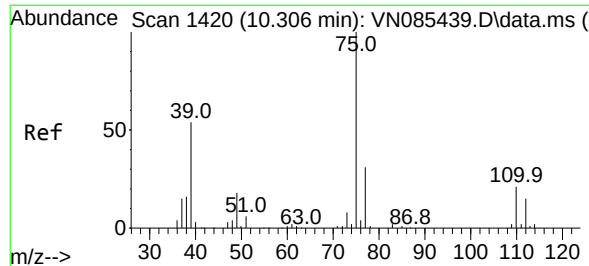
Ion Ratio Lower Upper

75 100

77 33.5 23.5 35.3







#54

cis-1,3-Dichloropropene

Concen: 0.811 ug/l

RT: 10.312 min Scan# 14

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion: 75 Resp: 2725

Ion Ratio Lower Upper

75 100

77 39.0 25.0 37.4#

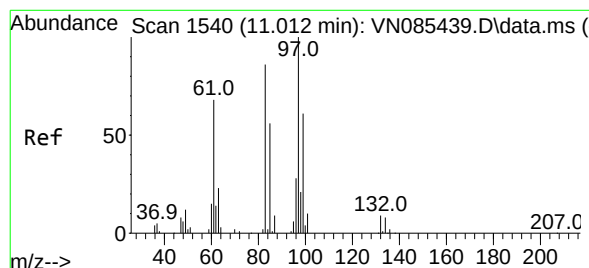
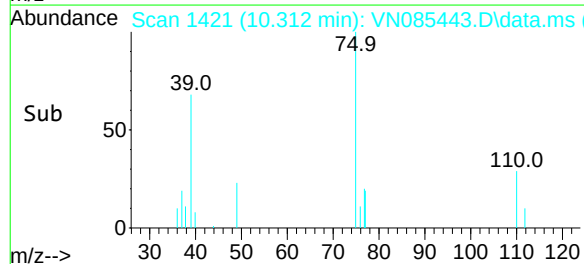
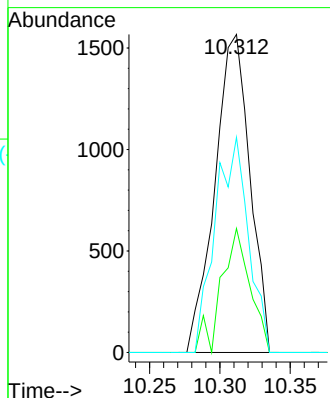
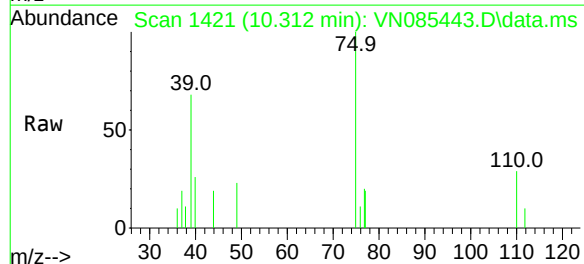
39 67.6 43.1 64.7#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#55

1,1,2-Trichloroethane

Concen: 0.935 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 1901

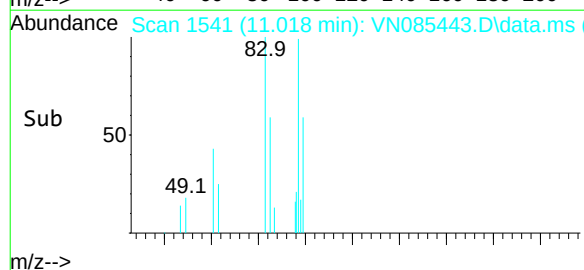
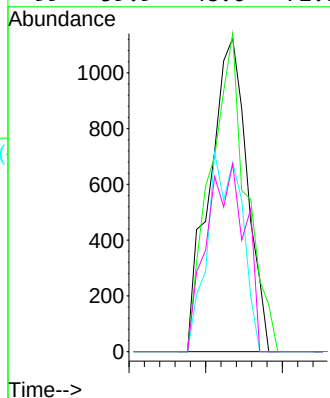
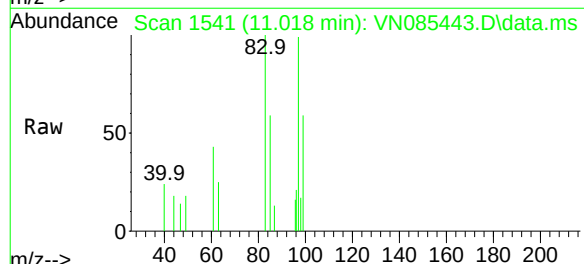
Ion Ratio Lower Upper

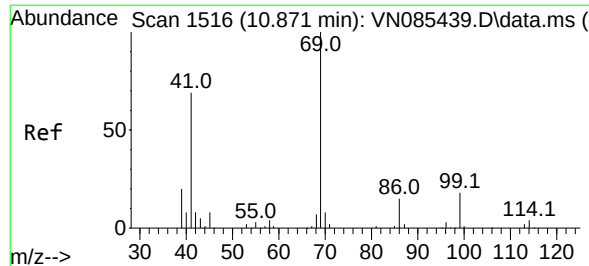
97 100

83 101.5 69.0 103.6

85 60.3 44.6 66.8

99 59.9 48.6 72.8





#56

Ethyl methacrylate

Concen: 2.471 ug/l

RT: 10.871 min Scan# 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

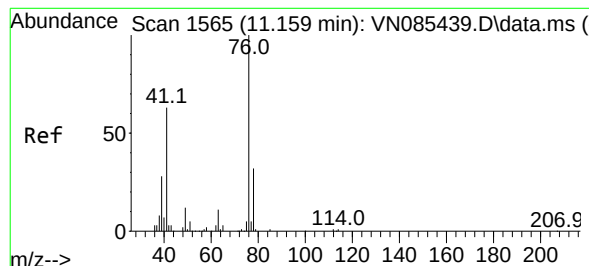
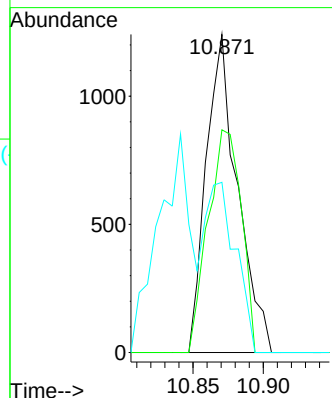
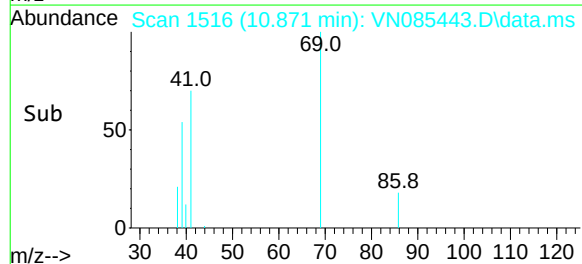
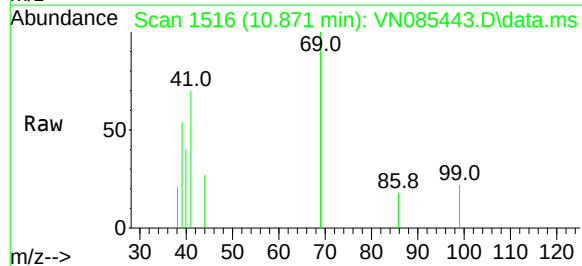
39 52.4 32.4 48.6#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#57

1,3-Dichloropropane

Concen: 0.881 ug/l

RT: 11.165 min Scan# 1566

Delta R.T. 0.006 min

Lab File: VN085443.D

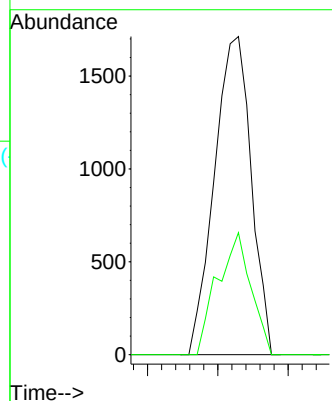
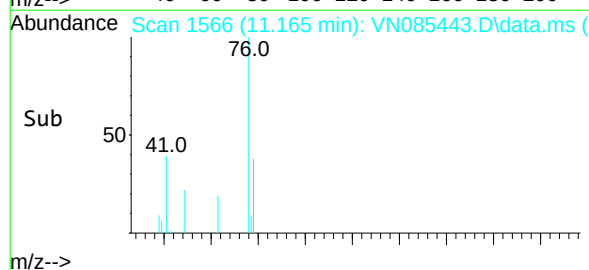
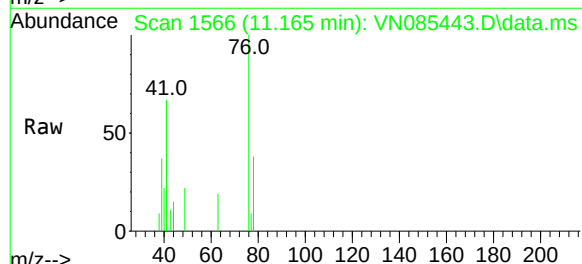
Acq: 14 Jan 2025 17:19

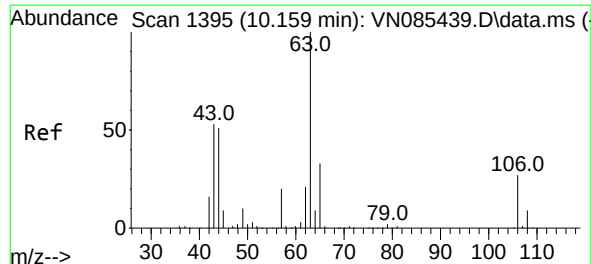
Tgt Ion: 76 Resp: 3113

Ion Ratio Lower Upper

76 100

78 34.9 25.6 38.4





#58

2-Chloroethyl Vinyl ether

Concen: 3.822 ug/l

RT: 10.153 min Scan# 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

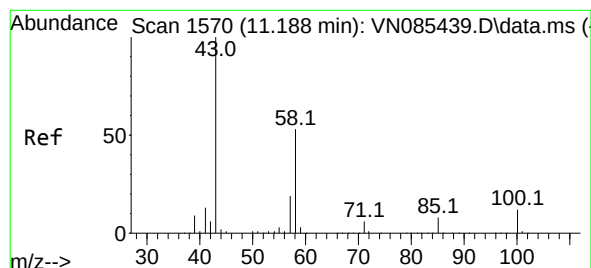
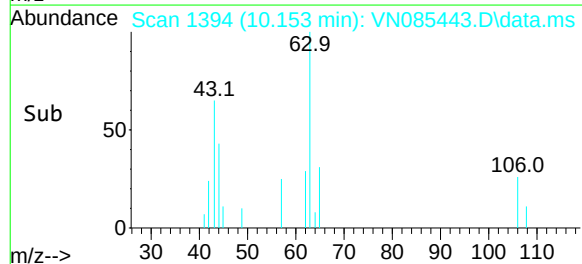
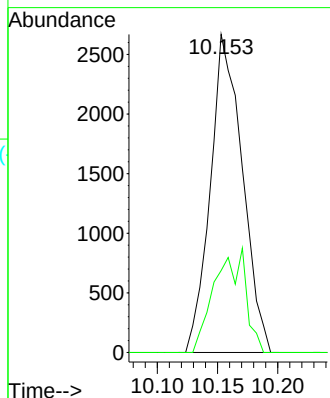
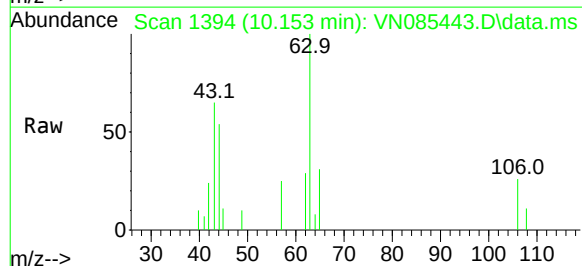
106 31.7 21.6 32.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#59

2-Hexanone

Concen: 4.058 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085443.D

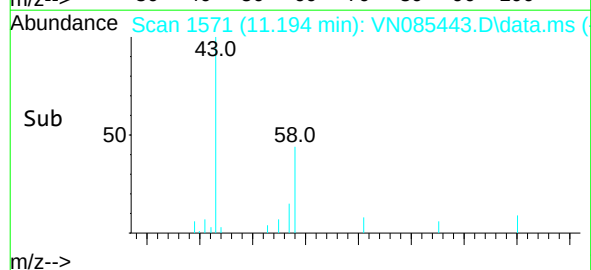
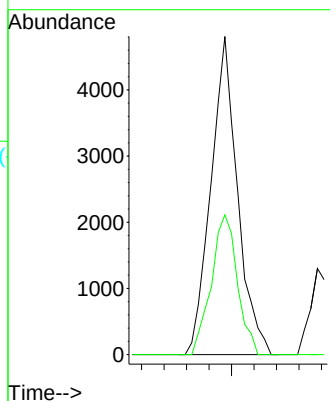
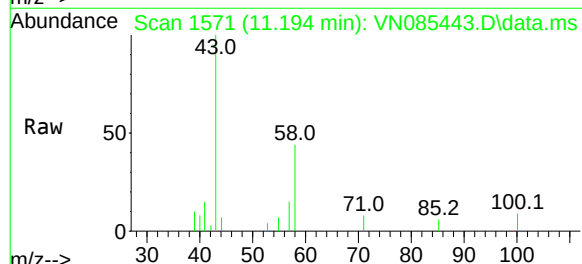
Acq: 14 Jan 2025 17:19

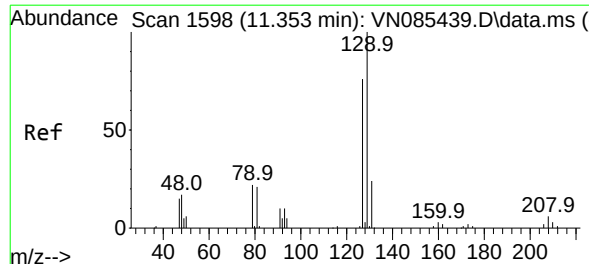
Tgt Ion: 43 Resp: 7905

Ion Ratio Lower Upper

43 100

58 42.9 26.2 78.6





#60

Dibromochloromethane

Concen: 0.953 ug/l

RT: 11.359 min Scan# 1598

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

Tgt Ion:129 Resp: 2339

Ion Ratio Lower Upper

129 100

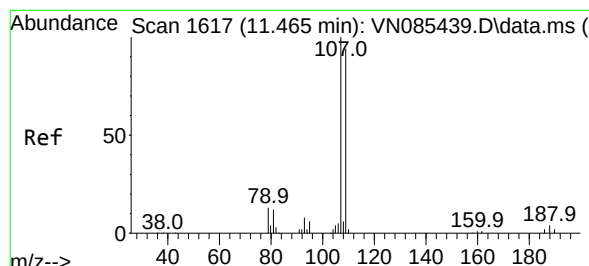
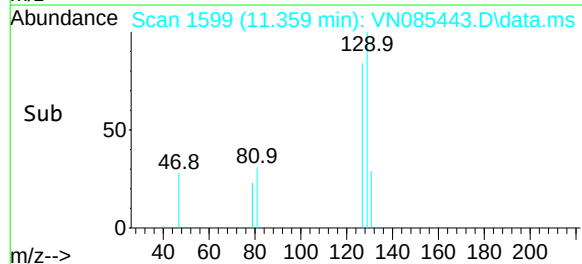
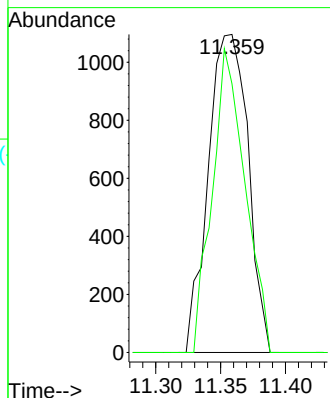
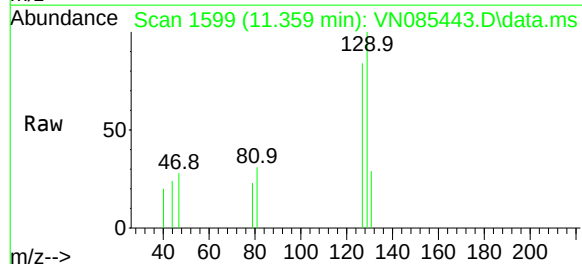
127 78.9 38.6 115.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#61

1,2-Dibromoethane

Concen: 1.000 ug/l

RT: 11.465 min Scan# 1617

Delta R.T. -0.000 min

Lab File: VN085443.D

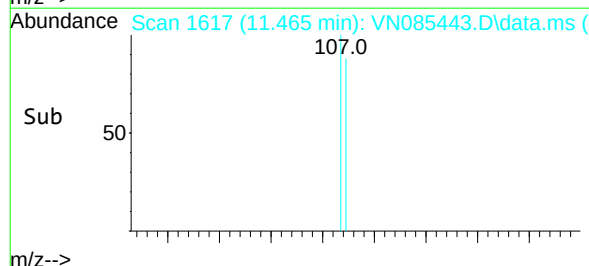
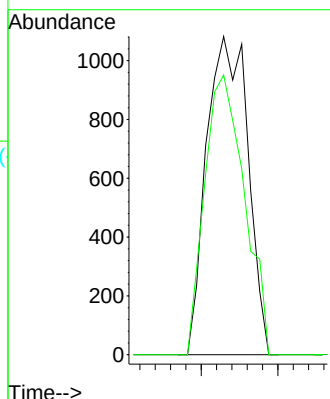
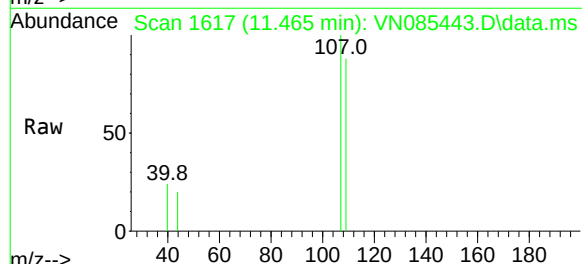
Acq: 14 Jan 2025 17:19

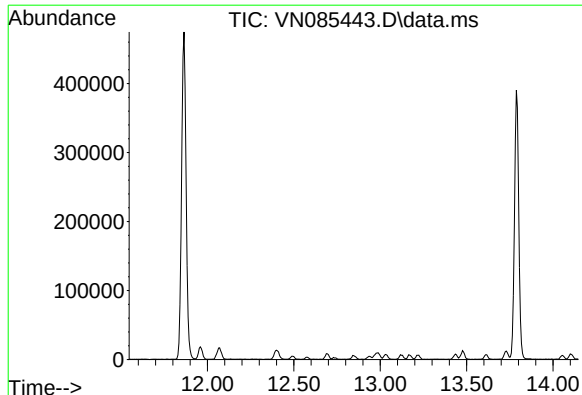
Tgt Ion:107 Resp: 2022

Ion Ratio Lower Upper

107 100

109 84.8 75.9 113.9





#62

4-Bromofluorobenzene

Concen: 0.000 ug/l

Expected RT: 12.85 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 95

Sig Exp Ratio

95 100

174 72.5

176 71.2

Instrument :

MSVOA\_N

ClientSampleId :

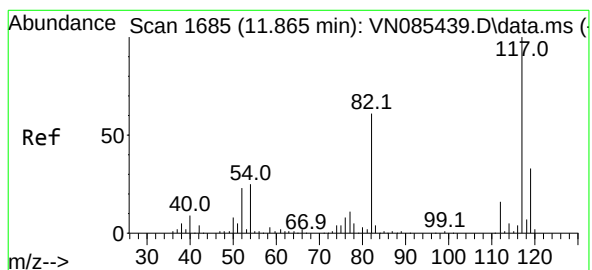
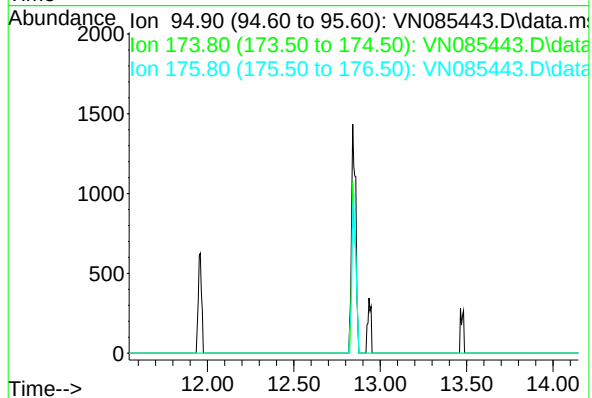
VSTDICC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

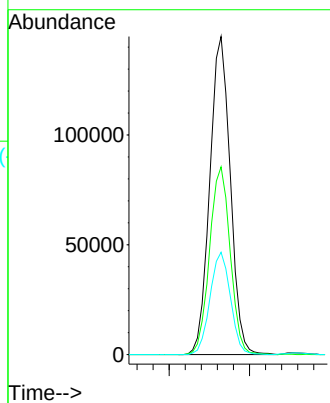
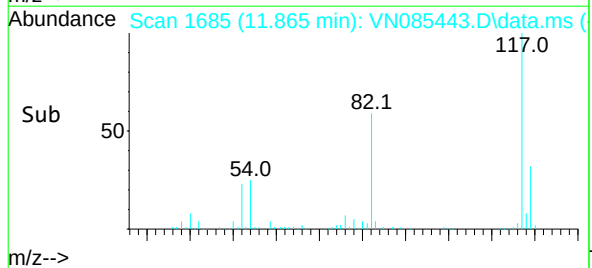
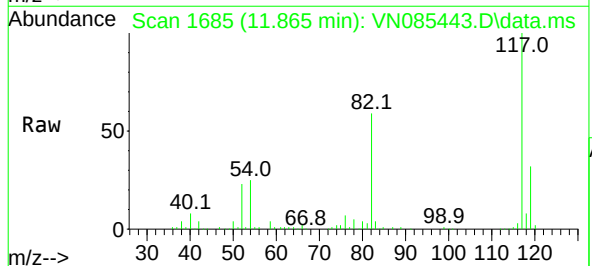
Tgt Ion:117 Resp: 256851

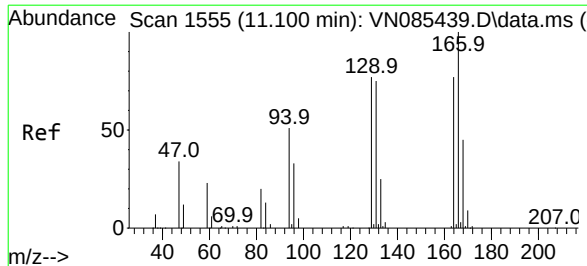
Ion Ratio Lower Upper

117 100

82 59.0 48.6 72.8

119 32.2 26.6 39.8





#64

Tetrachloroethene

Concen: 0.947 ug/l

RT: 11.106 min Scan# 1555

Delta R.T. 0.006 min

Lab File: VN085443.D

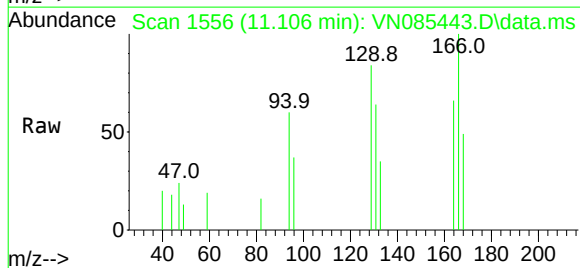
Acq: 14 Jan 2025 17:19

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#

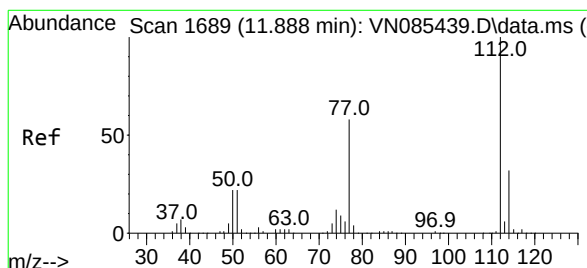
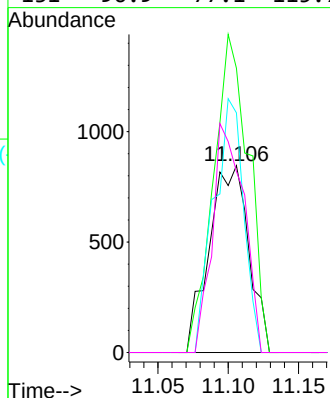
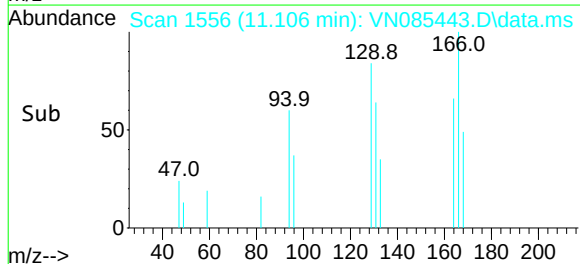
131 96.9 77.1 115.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#65

Chlorobenzene

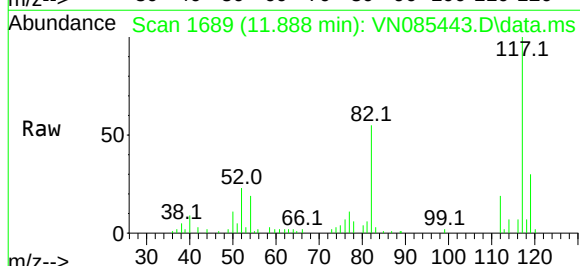
Concen: 0.960 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

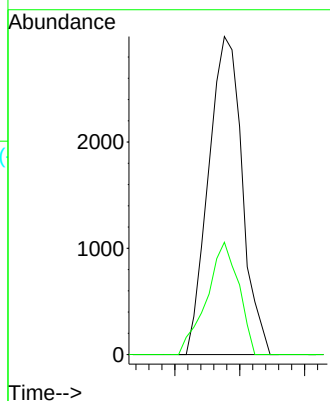
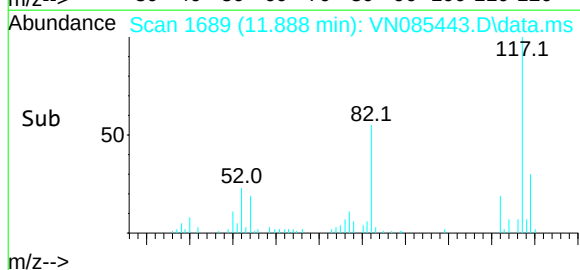


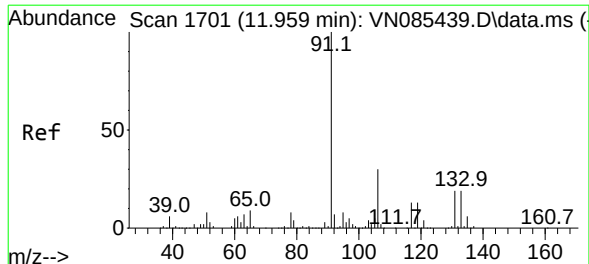
Tgt Ion:112 Resp: 5401

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

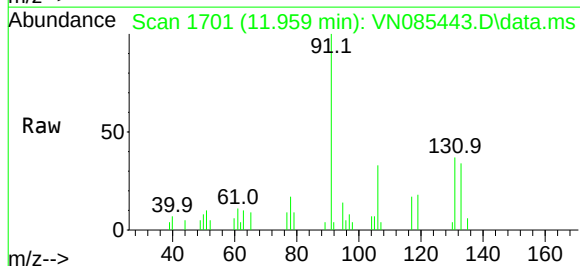
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001



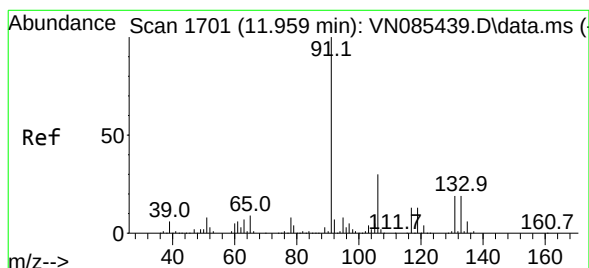
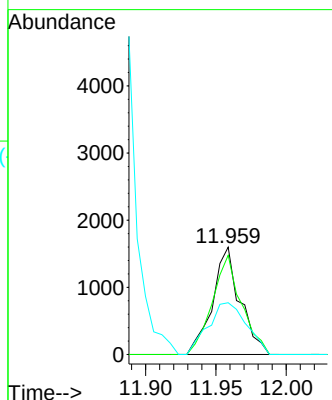
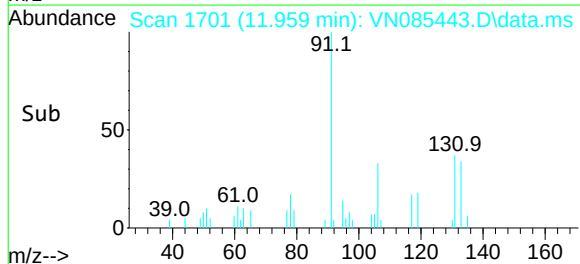
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 131   | Resp: | 2185  |
| Ion Ratio | Lower | Upper |       |
| 131       | 100   |       |       |
| 133       | 97.7  | 47.4  | 142.3 |
| 119       | 0.0   | 33.1  | 99.5  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#67

Ethyl Benzene

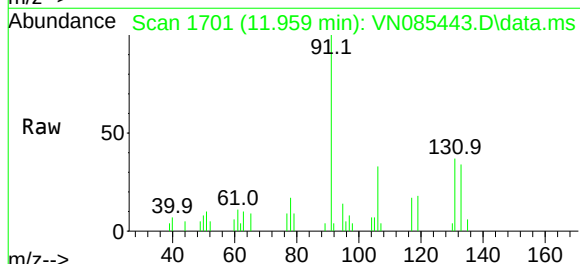
Concen: 0.802 ug/l

RT: 11.959 min Scan# 1701

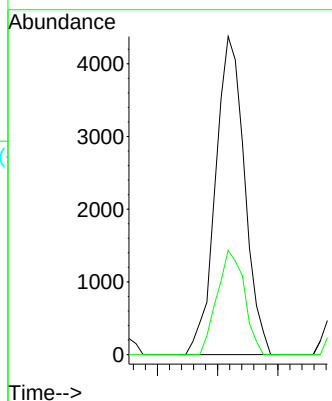
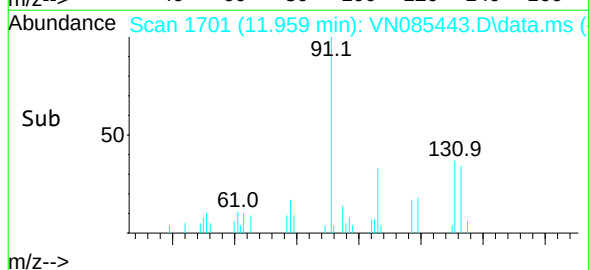
Delta R.T. -0.000 min

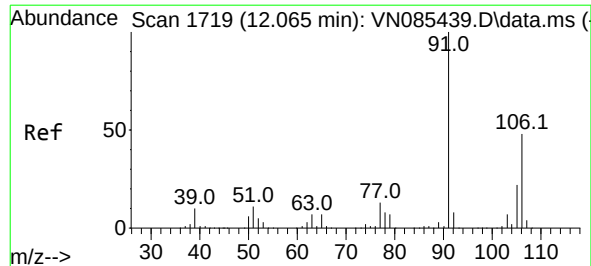
Lab File: VN085443.D

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

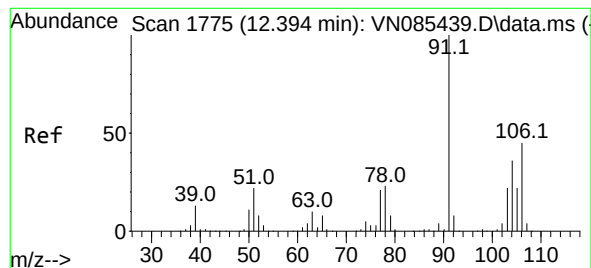
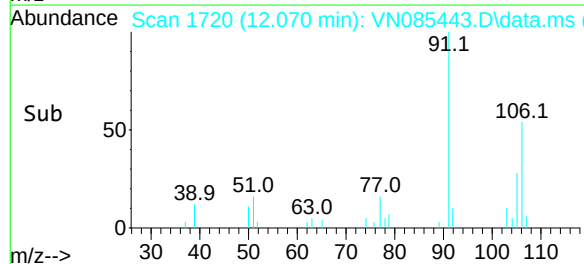
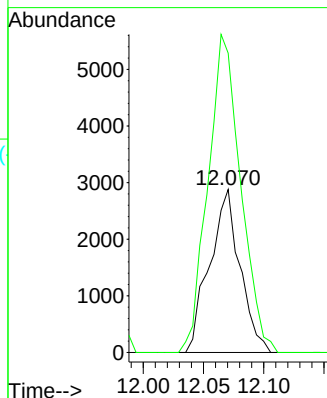
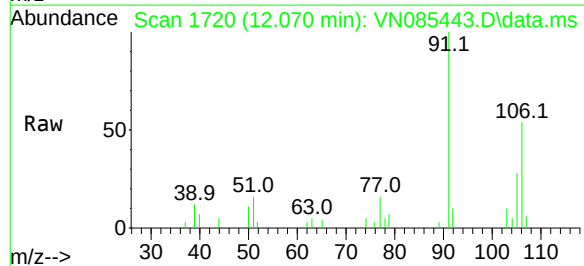
91 209.3 167.7 251.5

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

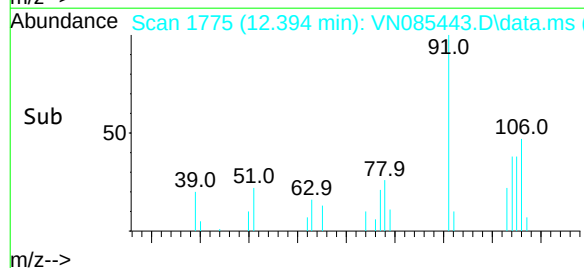
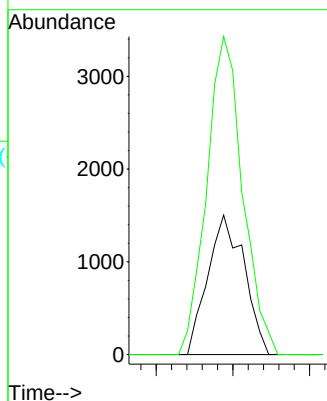
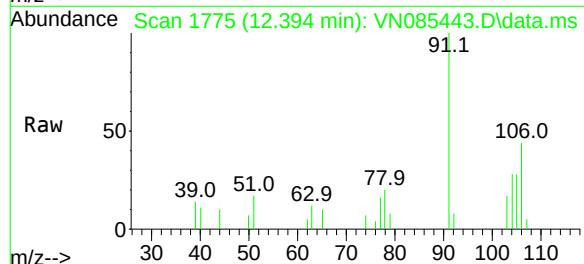
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 2478

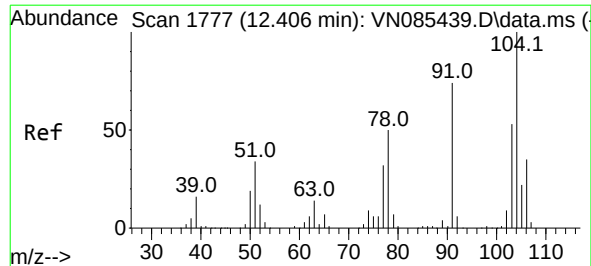
Ion Ratio Lower Upper

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 :

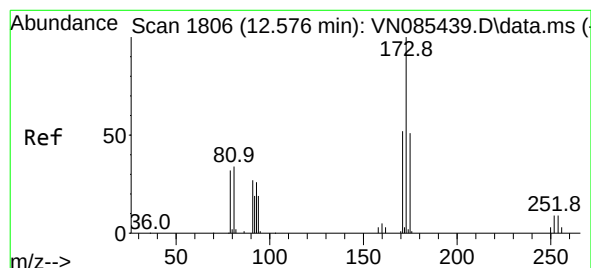
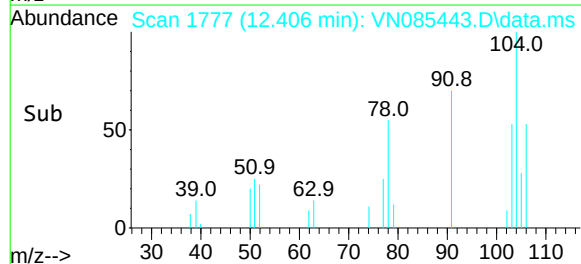
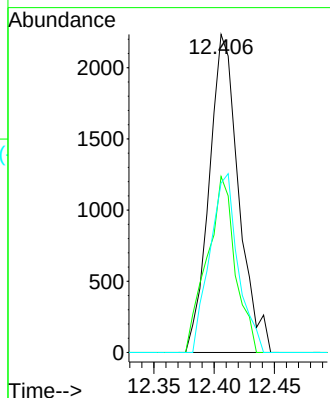
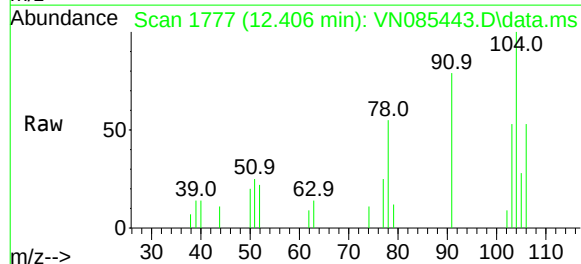
VSTDIC001

|           |       |       |      |
|-----------|-------|-------|------|
| 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

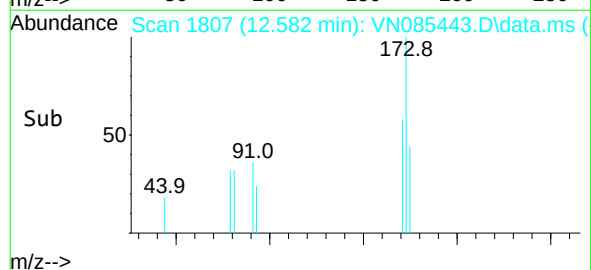
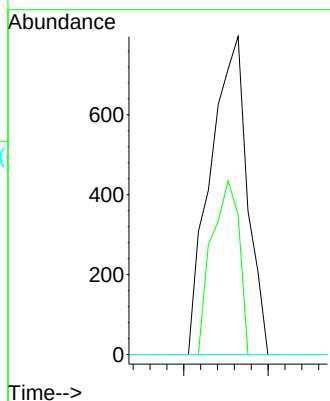
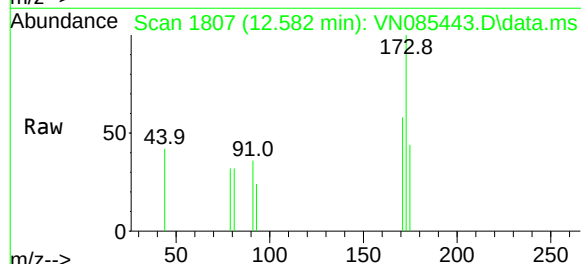
RT: 12.582 min Scan# 1807

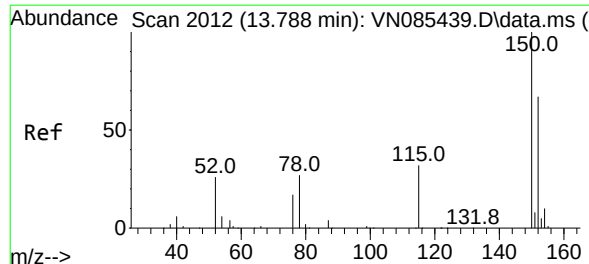
Delta R.T. 0.006 min

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

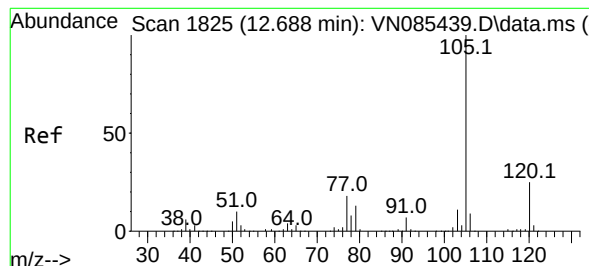
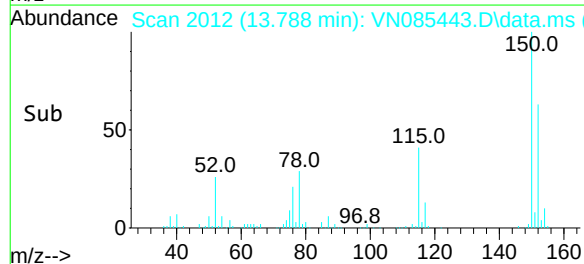
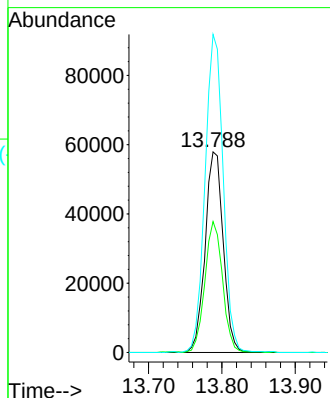
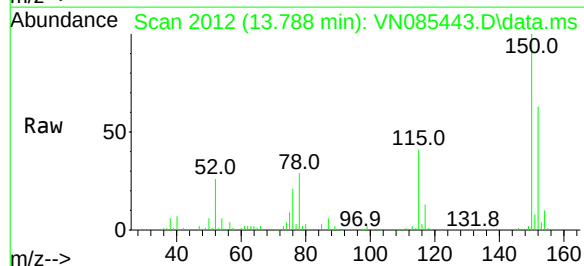
150 158.5 0.0 343.6

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

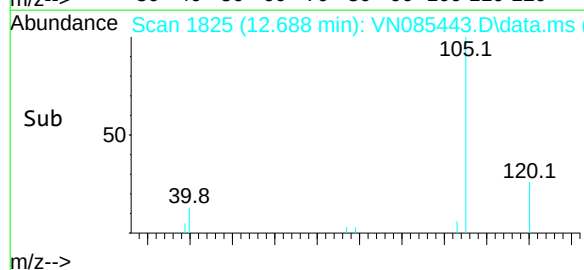
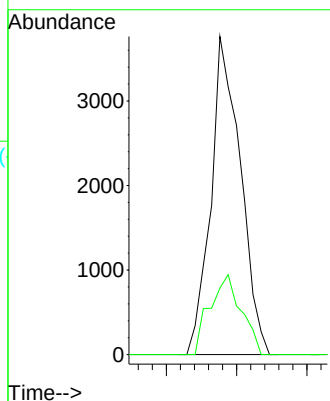
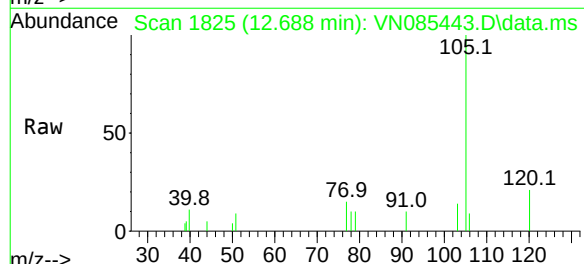
Acq: 14 Jan 2025 17:19

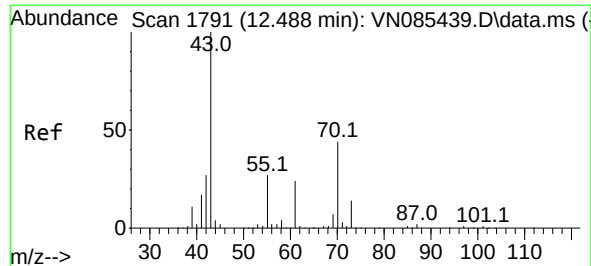
Tgt Ion:105 Resp: 5506

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

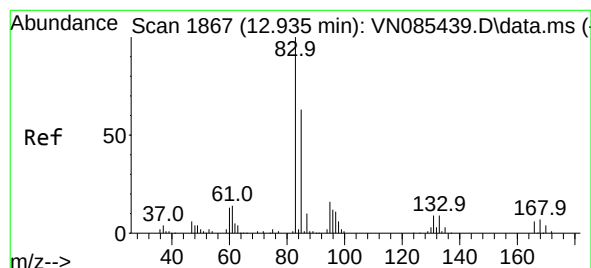
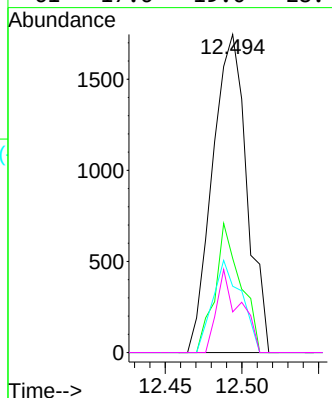
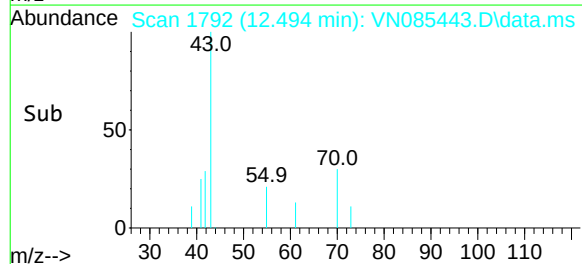
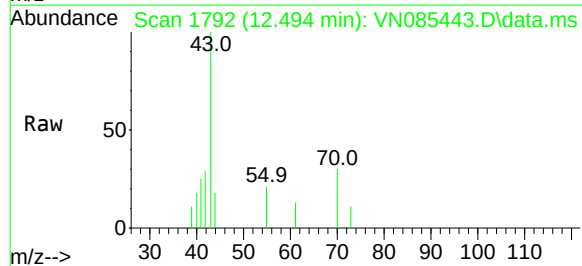
61 17.6 19.0 28.4#

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

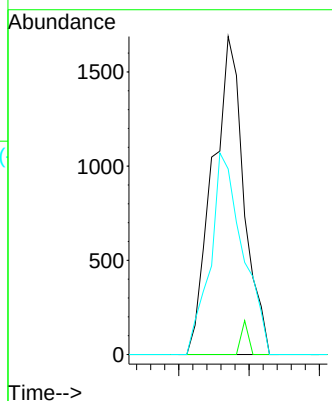
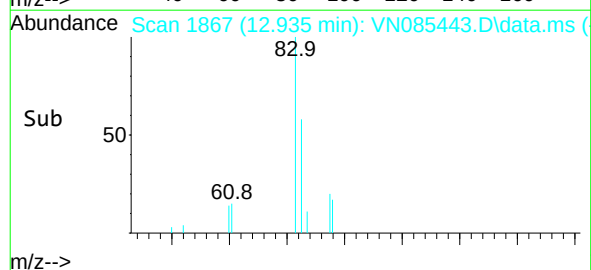
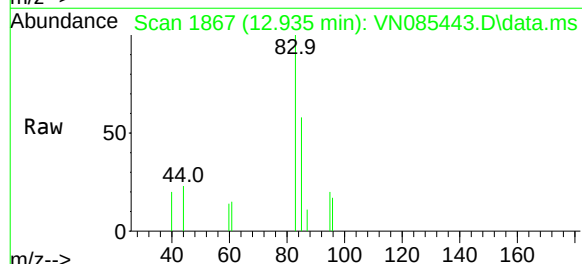
Tgt Ion: 83 Resp: 2616

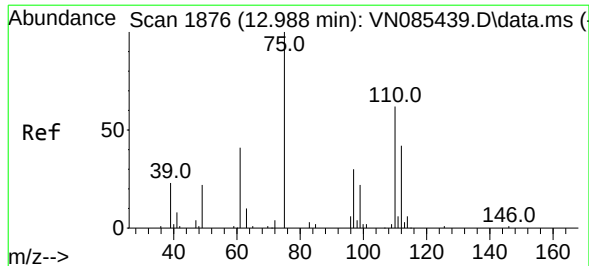
Ion Ratio Lower Upper

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

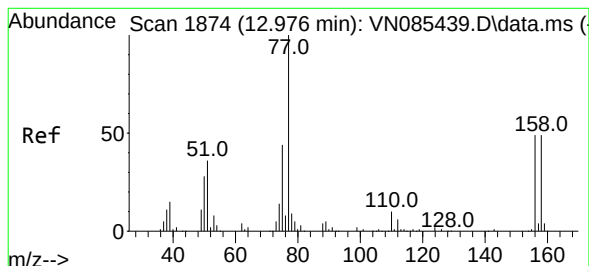
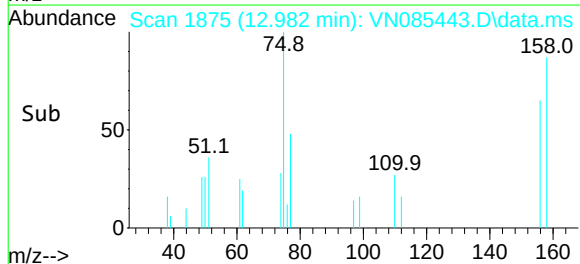
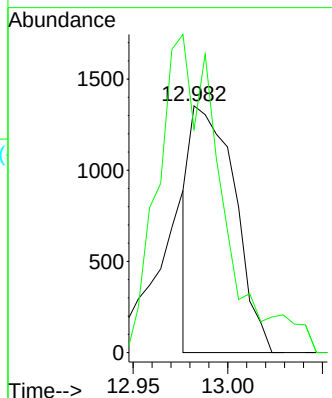
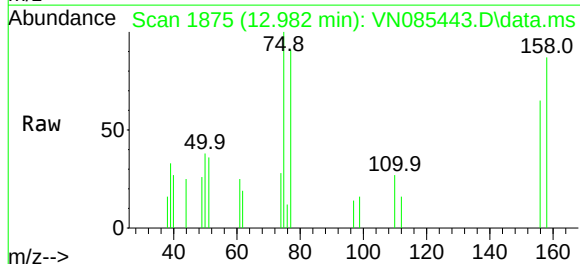
77 184.2 109.7 329.2

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

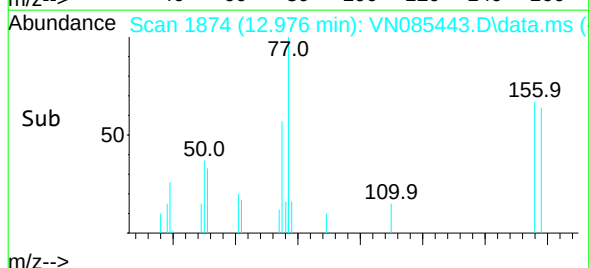
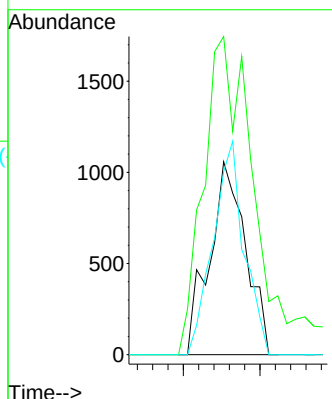
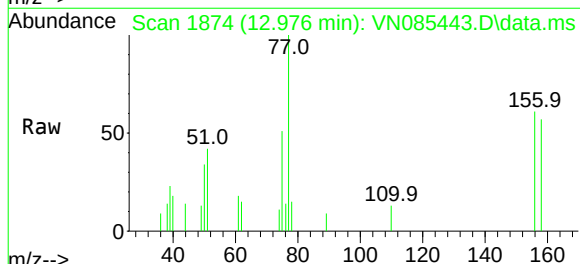
Tgt Ion:156 Resp: 1733

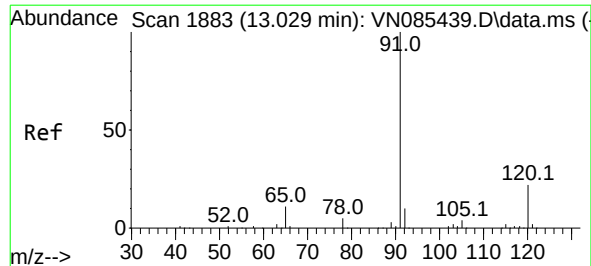
Ion Ratio Lower Upper

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

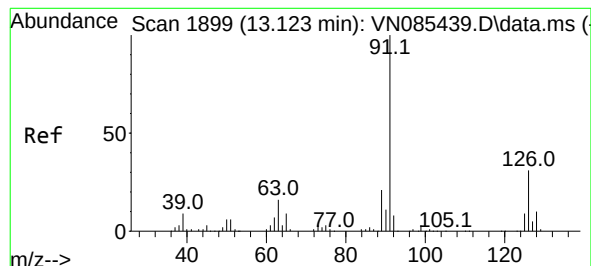
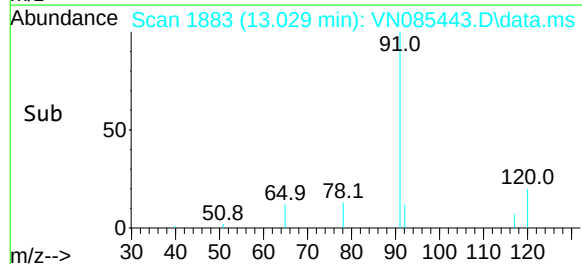
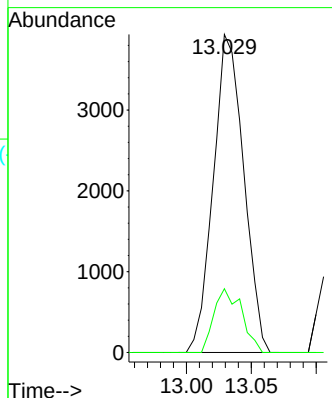
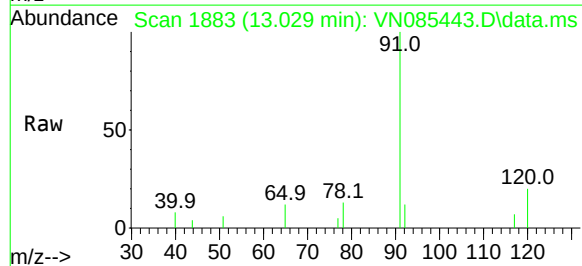
120 18.2 10.9 32.6

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

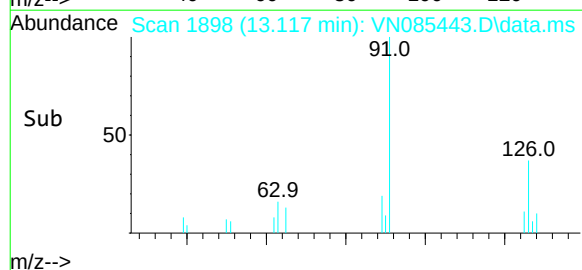
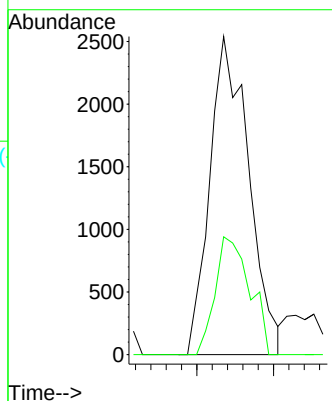
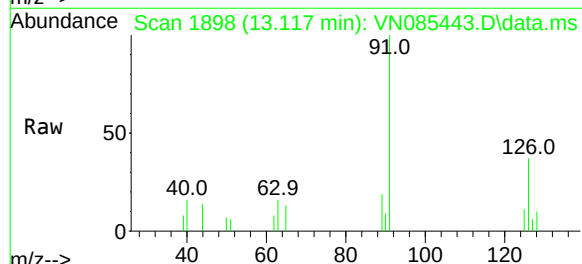
Acq: 14 Jan 2025 17:19

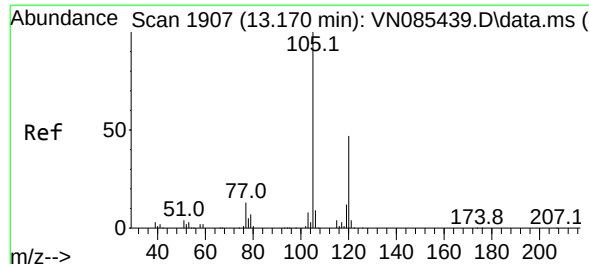
Tgt Ion: 91 Resp: 4483

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

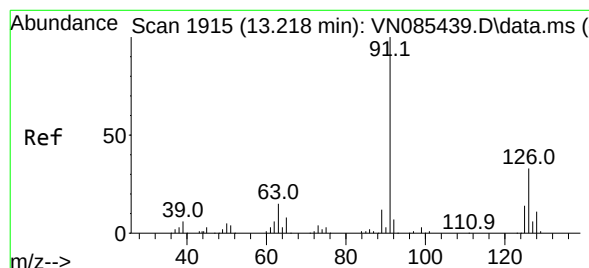
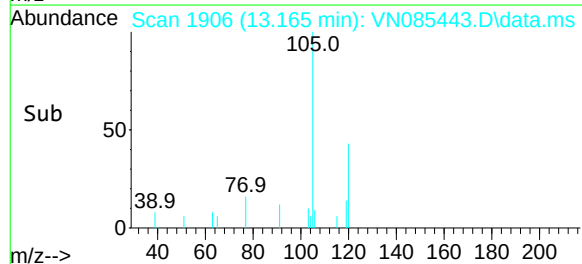
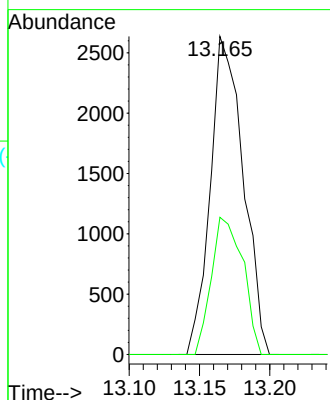
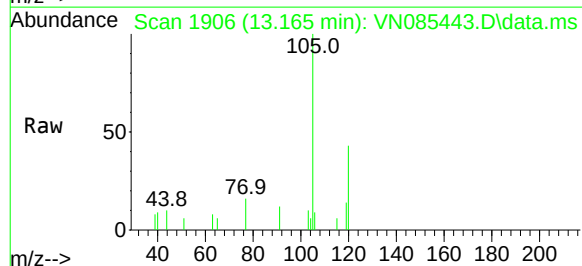
120 41.2 23.9 71.7

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

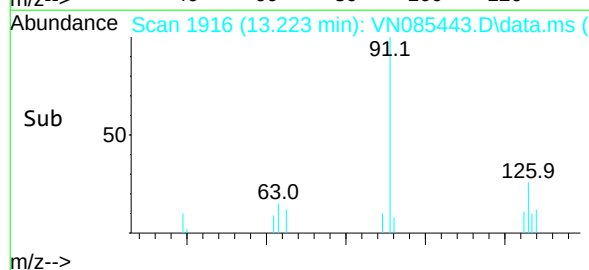
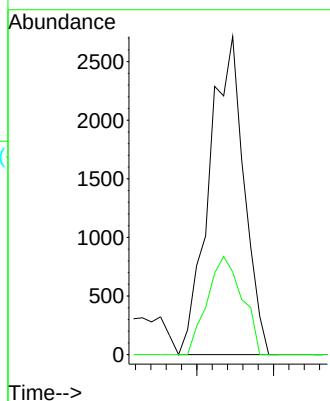
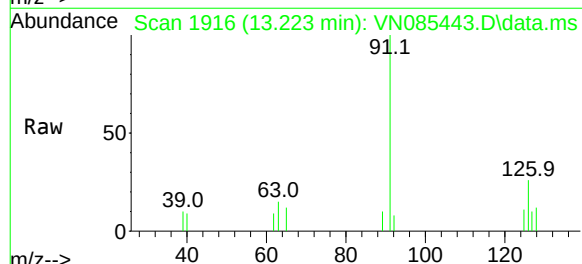
Acq: 14 Jan 2025 17:19

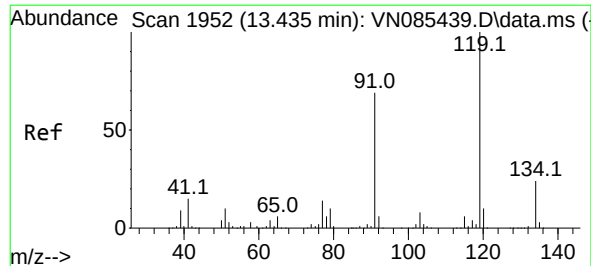
Tgt Ion: 91 Resp: 4268

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# 1952

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

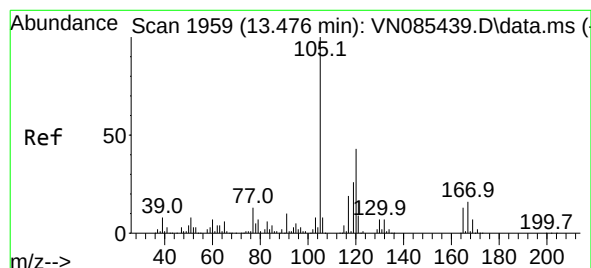
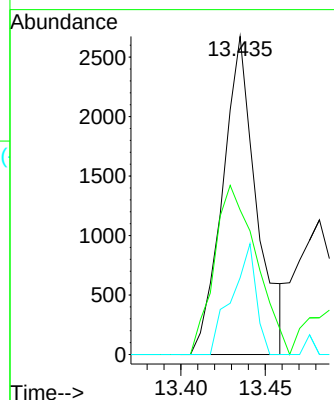
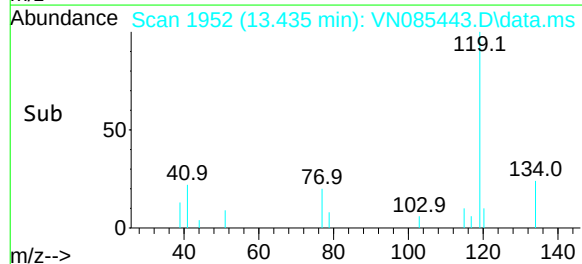
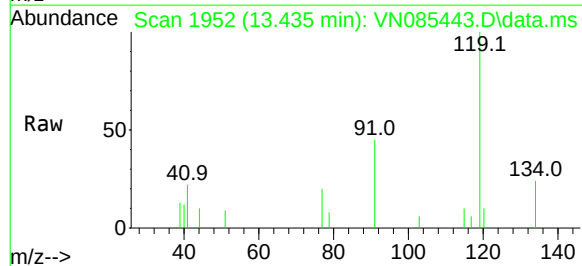
ClientSampleId :

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  |

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

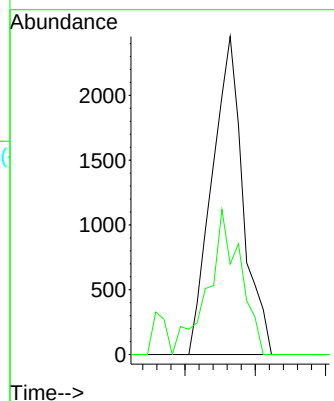
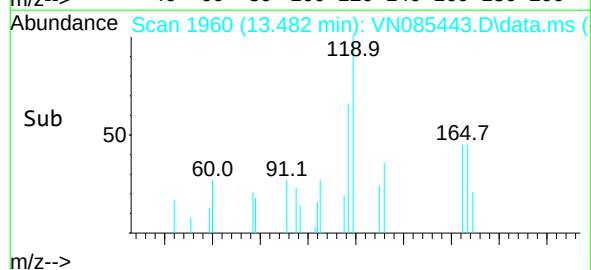
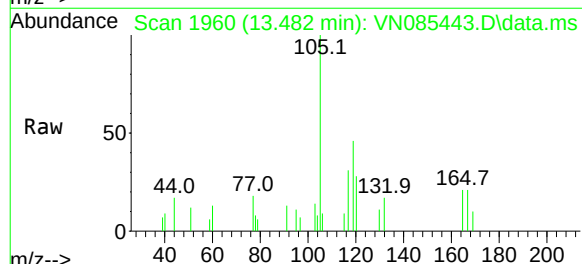
RT: 13.482 min Scan# 1960

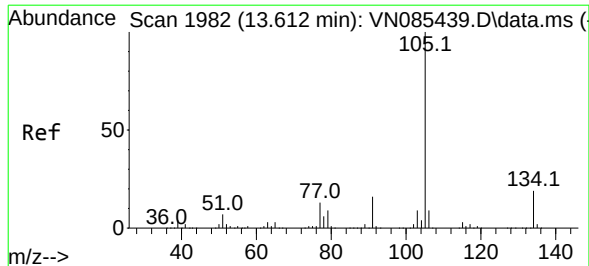
Delta R.T. 0.006 min

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# 1982

Delta R.T. -0.000 min

Lab File: VN085443.D

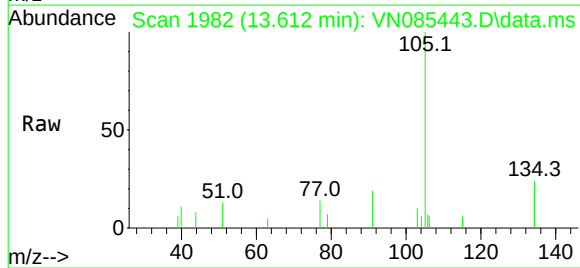
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

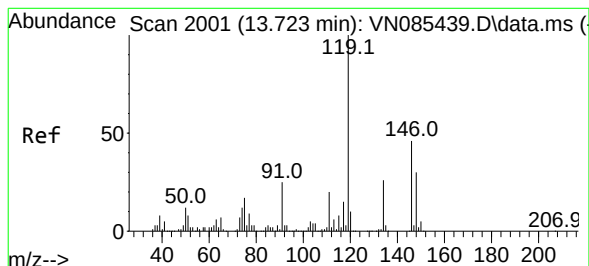
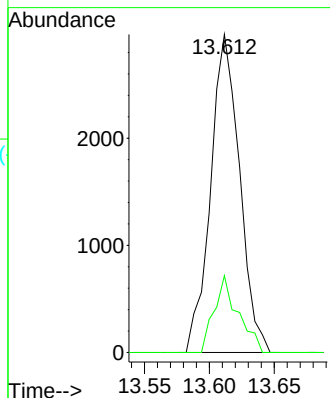
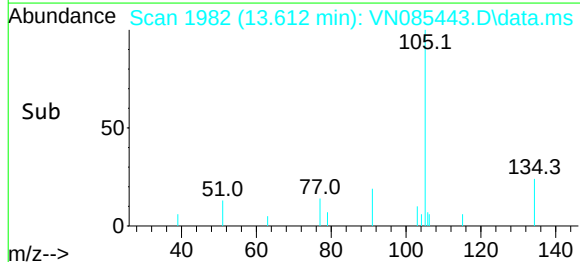
VSTDICC001



| Tgt 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

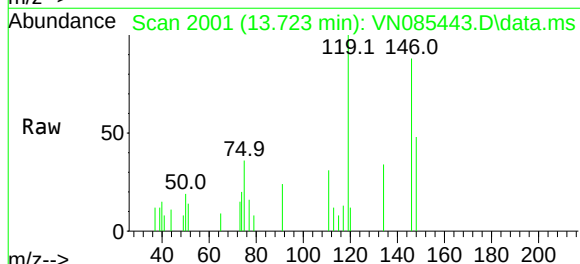
Concen: 0.716 ug/l

RT: 13.723 min Scan# 2001

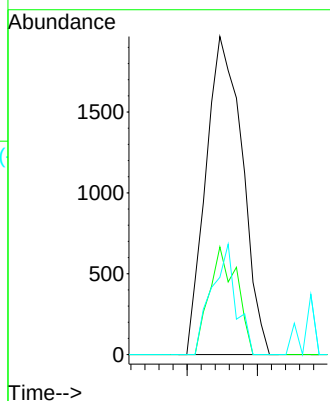
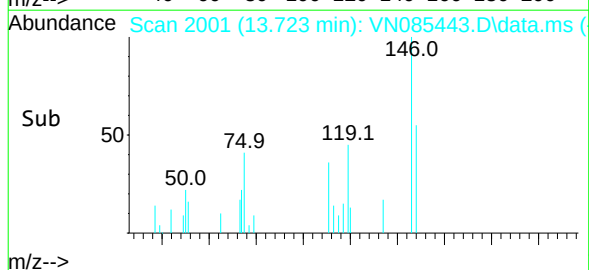
Delta R.T. 0.000 min

Lab File: VN085443.D

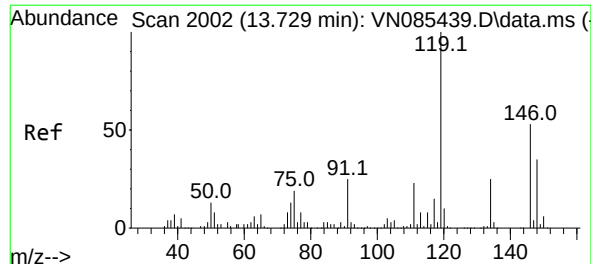
Acq: 14 Jan 2025 17:19



| Tgt Ion | 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

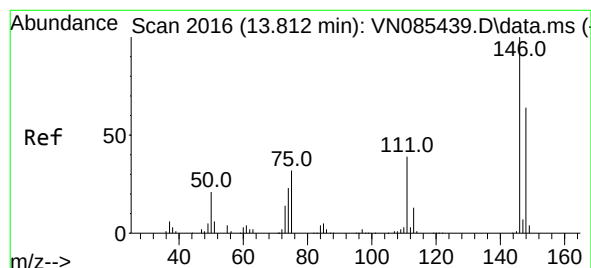
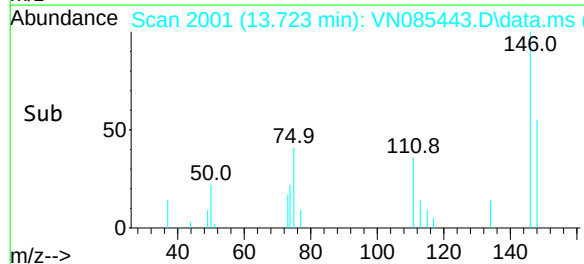
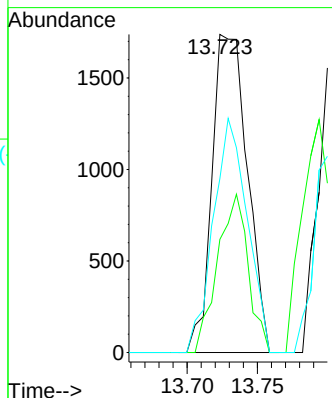
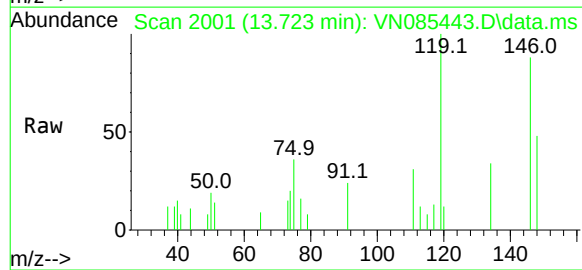
ClientSampleId :

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

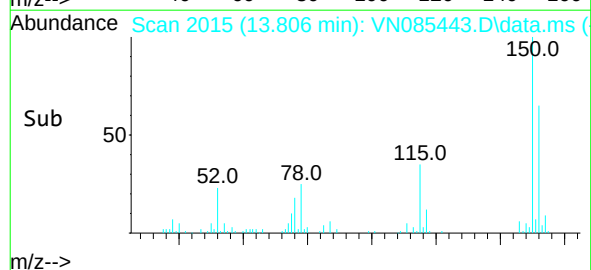
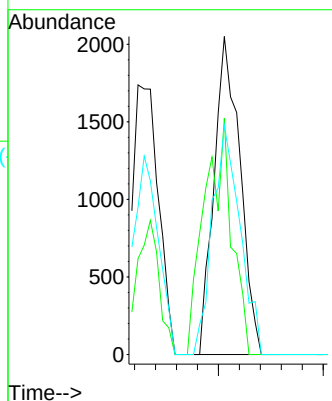
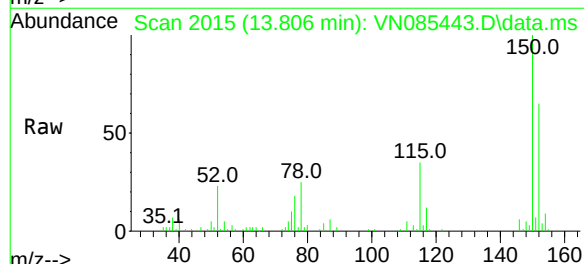
RT: 13.806 min Scan# 2015

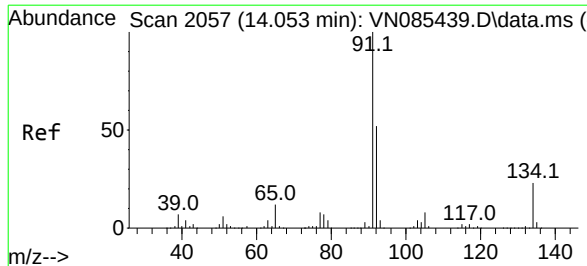
Delta R.T. -0.006 min

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

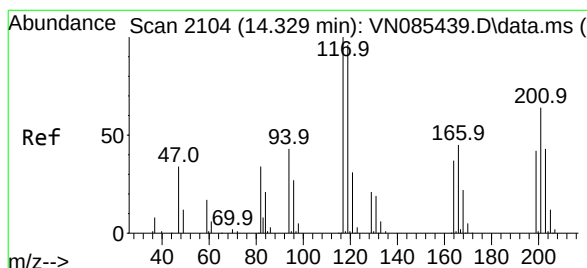
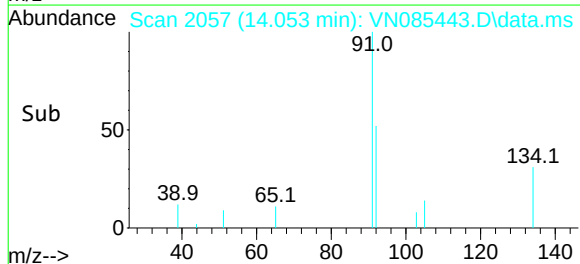
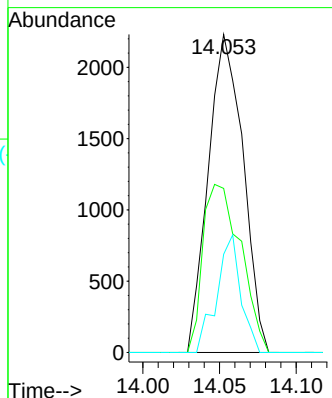
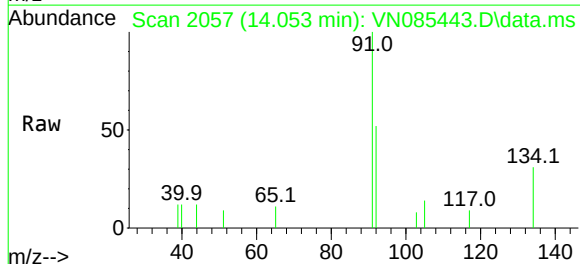
ClientSampleId :

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

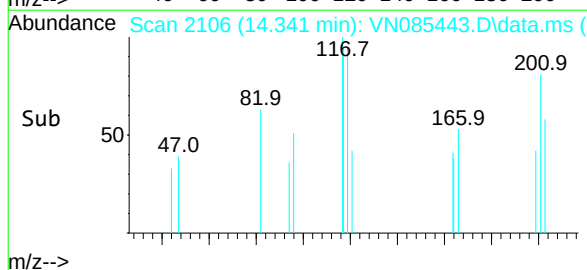
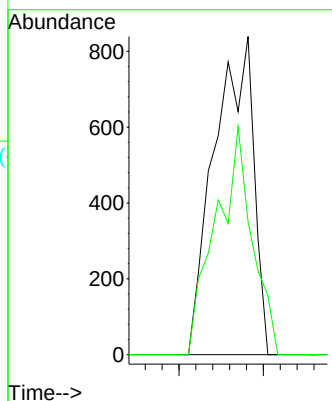
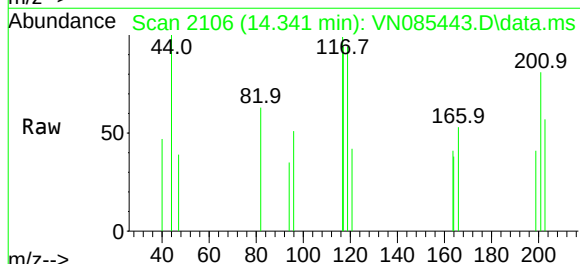
RT: 14.341 min Scan# 2106

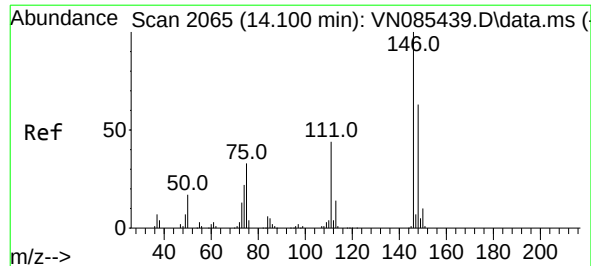
Delta R.T. 0.012 min

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 :

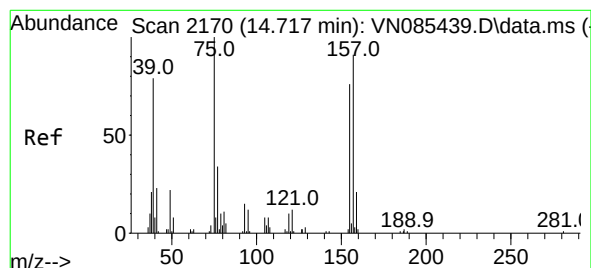
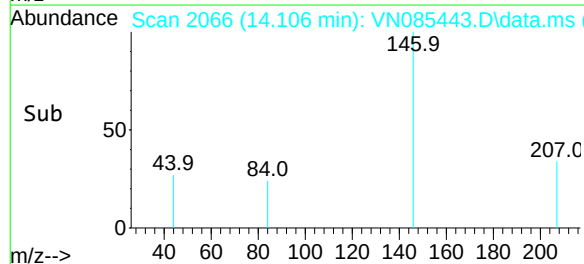
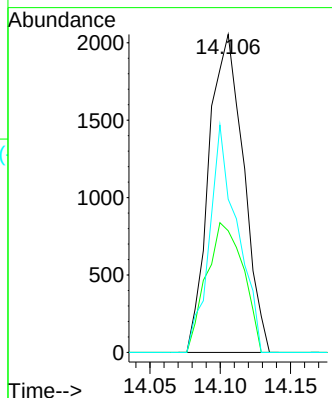
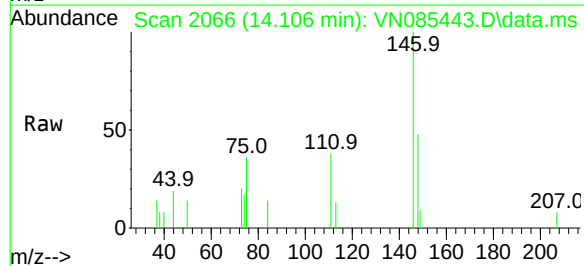
VSTDIC001

|           |       |       |      |
|-----------|-------|-------|------|
| 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

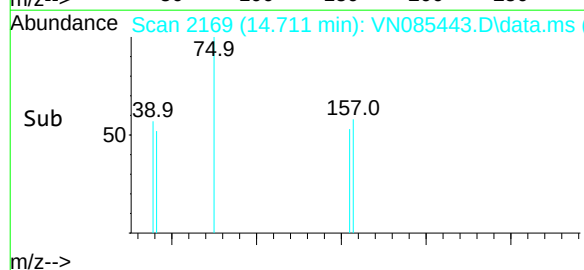
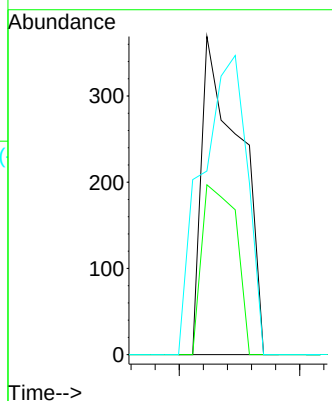
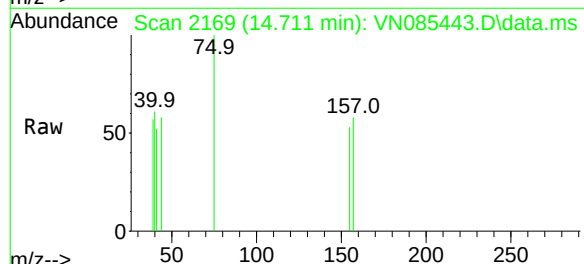
RT: 14.711 min Scan# 2169

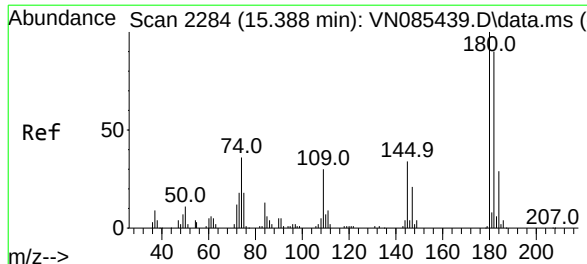
Delta R.T. -0.006 min

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

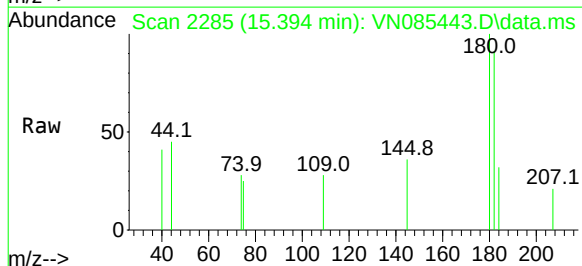
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

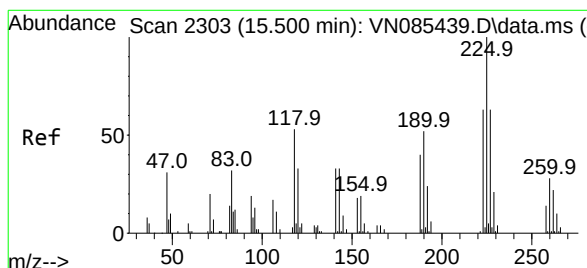
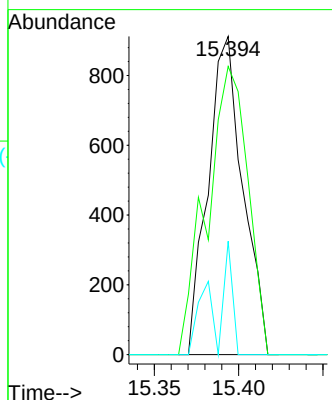
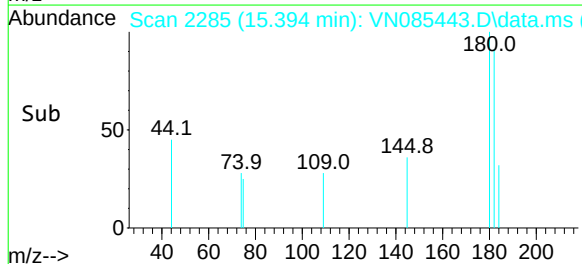
VSTDIC001



|          |       |       |       |
|----------|-------|-------|-------|
| 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

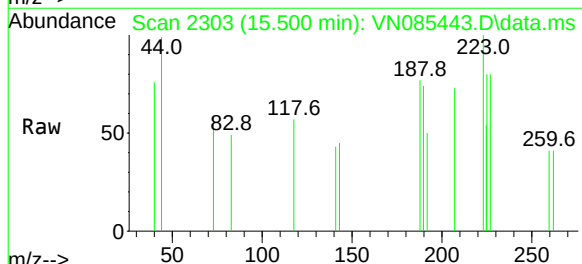
Concen: 1.033 ug/l

RT: 15.500 min Scan# 2303

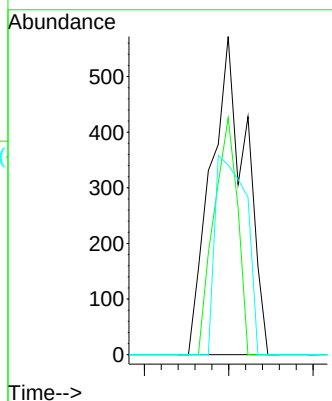
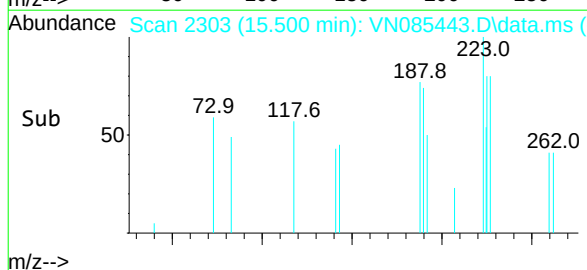
Delta R.T. -0.000 min

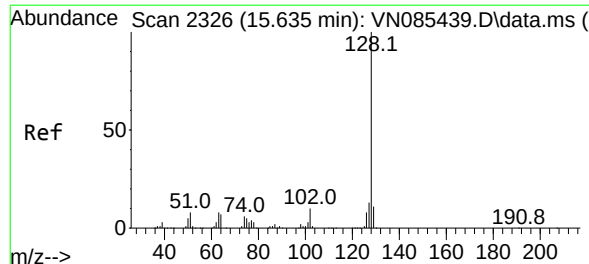
Lab File: VN085443.D

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

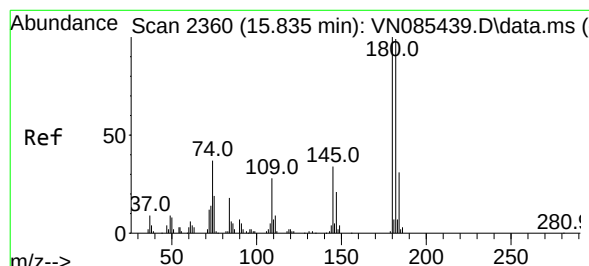
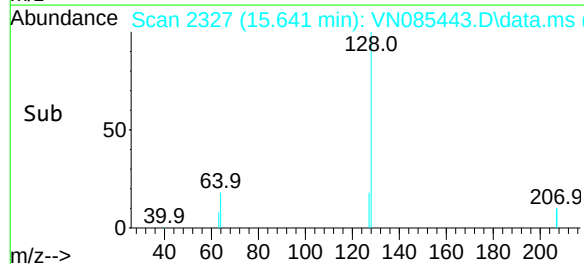
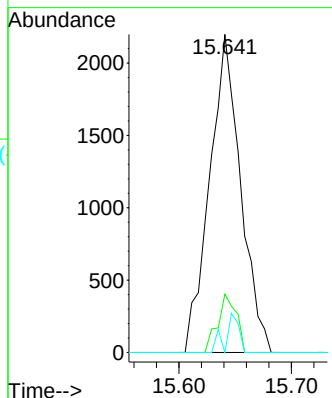
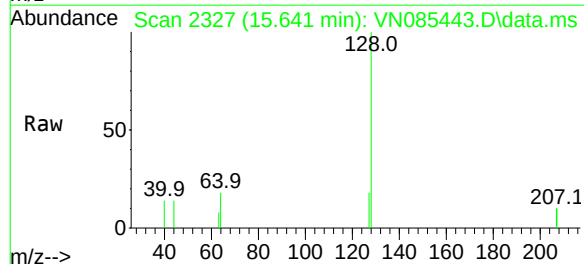
ClientSampleId :

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

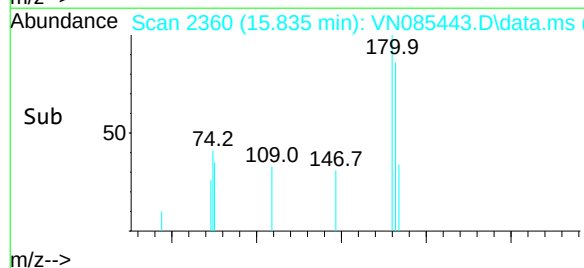
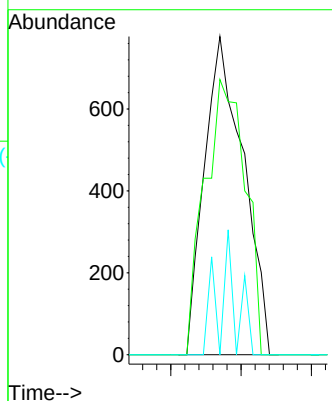
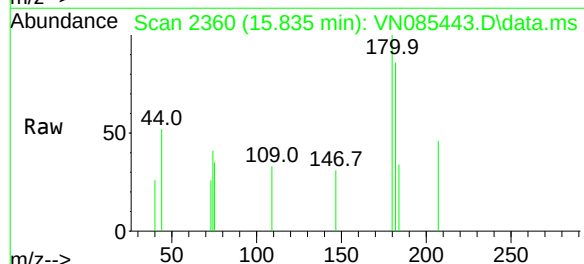
RT: 15.835 min Scan# 2360

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) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



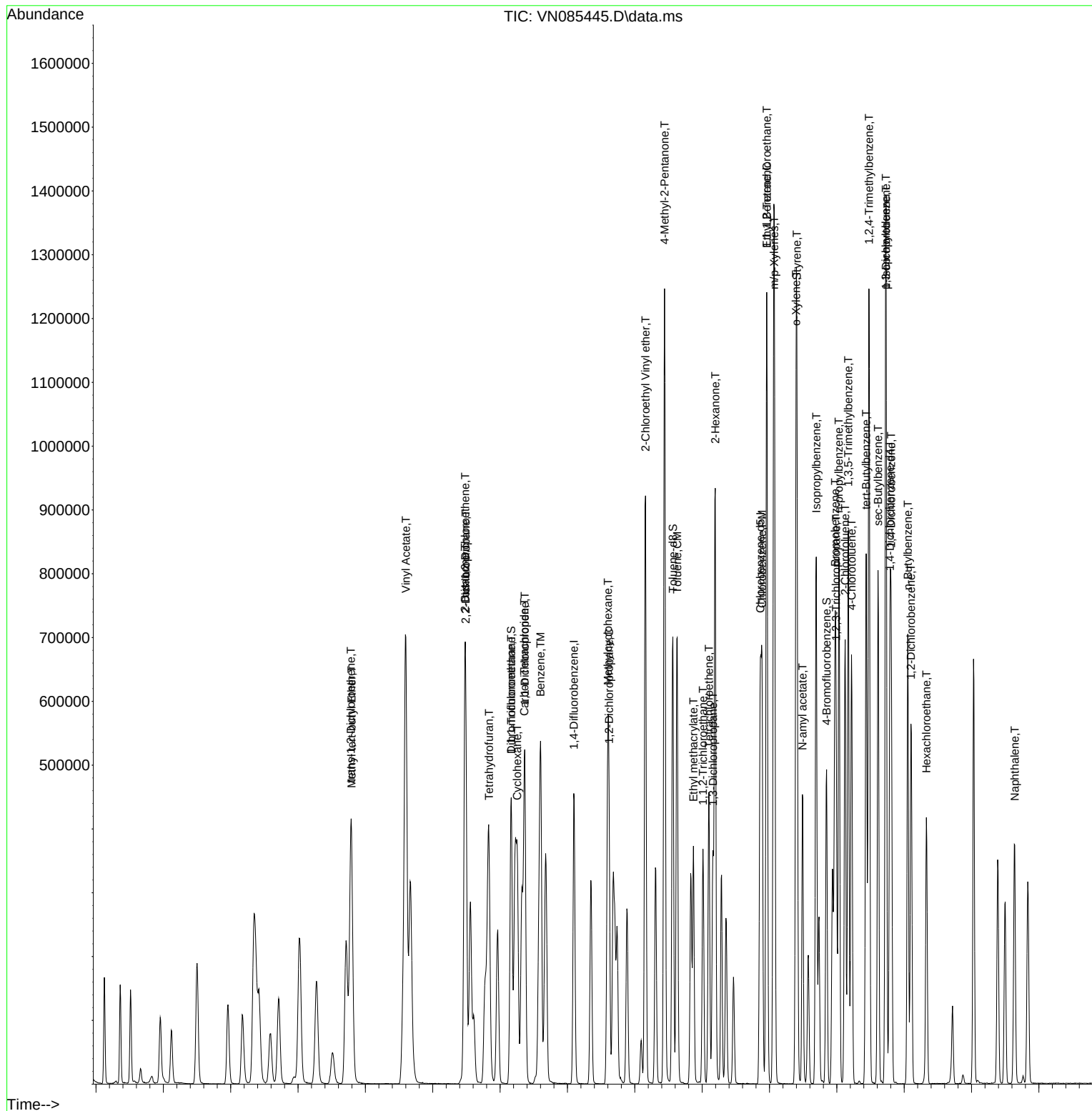
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Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

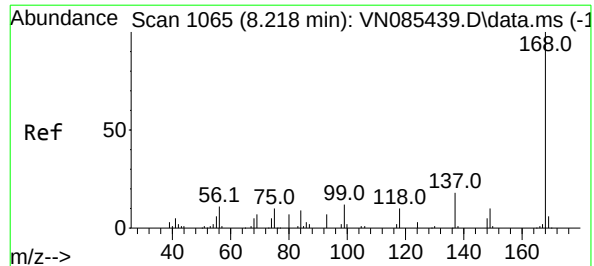
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Manual Integrations  
APPROVED

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

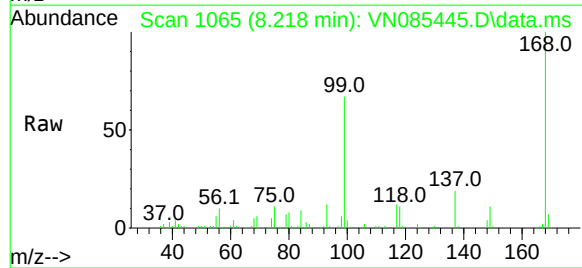
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#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

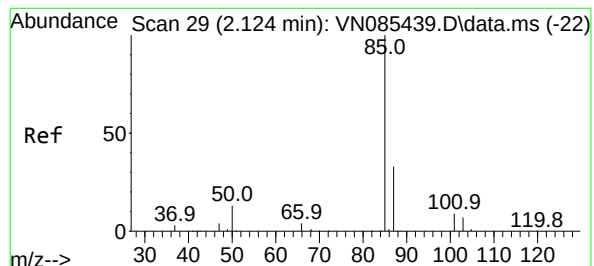
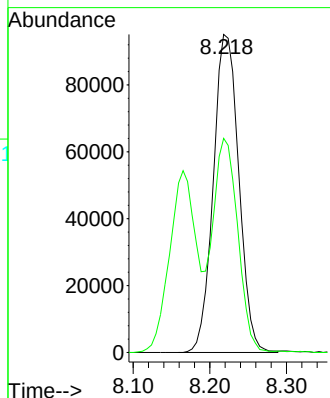
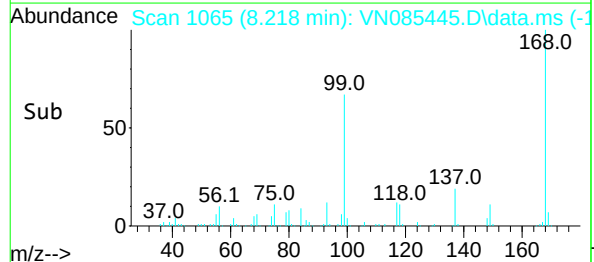
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion:168 Resp: 219757  
Ion Ratio Lower Upper  
168 100  
99 66.9 53.6 80.4

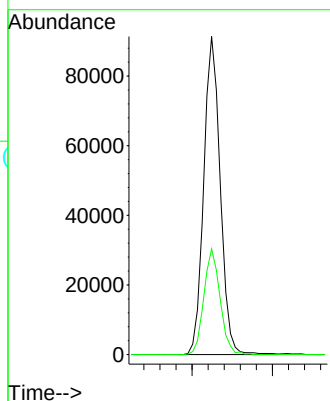
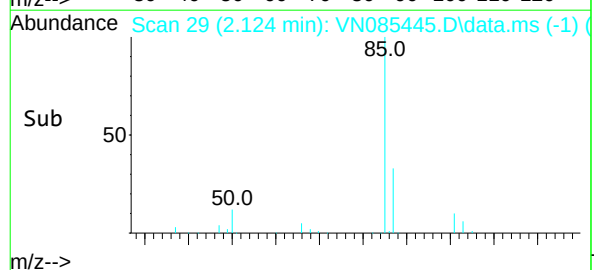
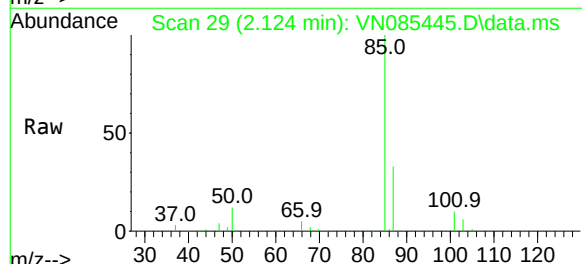
Manual Integrations  
APPROVED

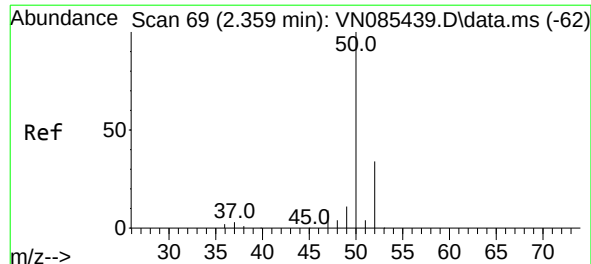
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

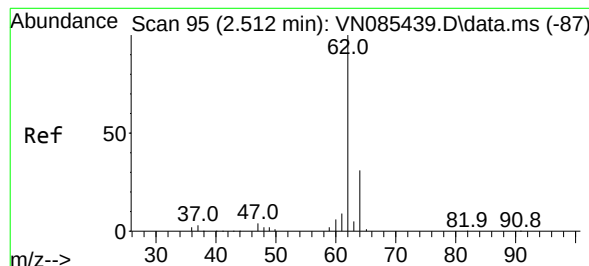
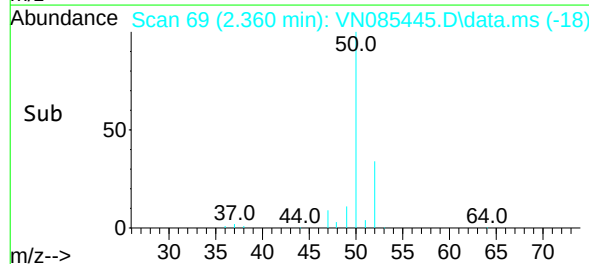
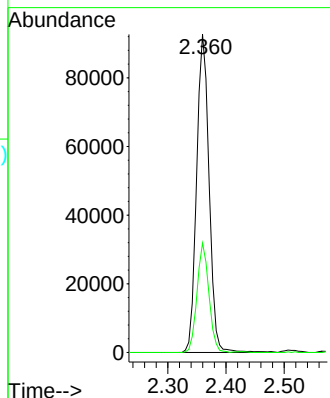
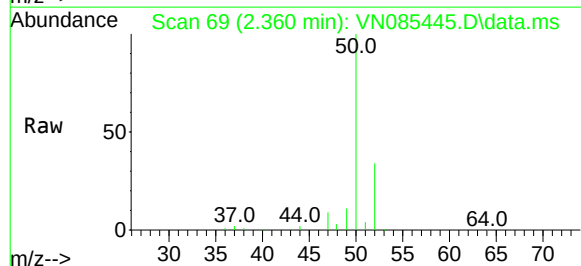
52 34.4 27.0 40.6

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

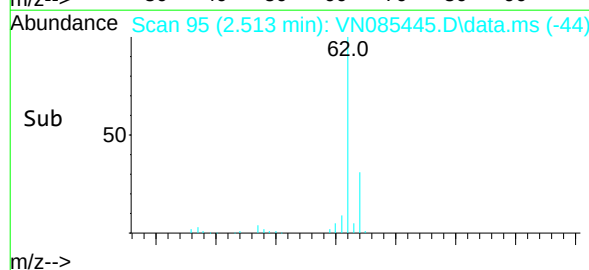
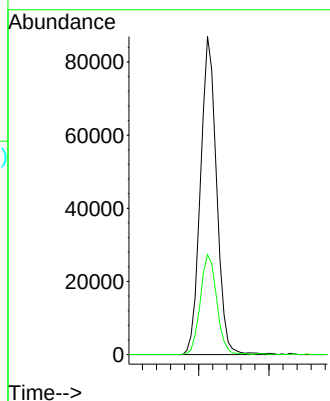
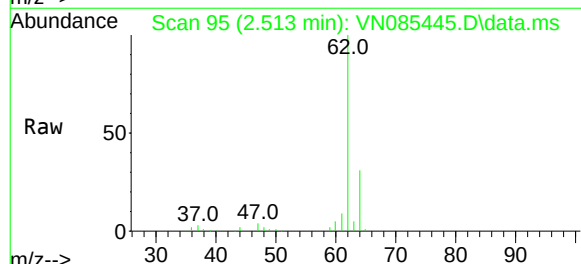
Acq: 14 Jan 2025 18:06

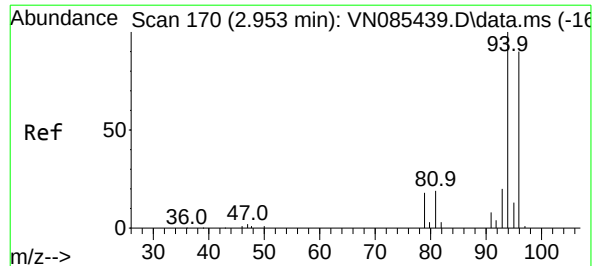
Tgt Ion: 62 Resp: 138316

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# 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

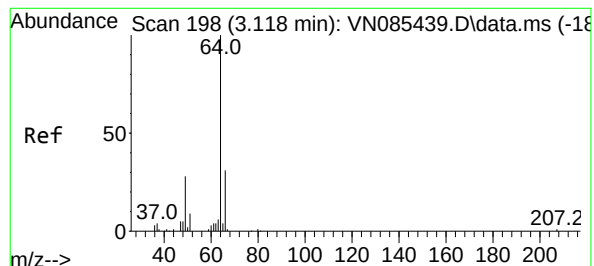
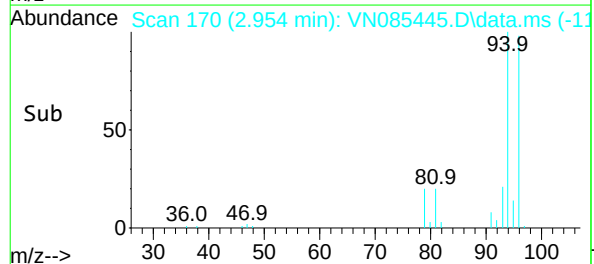
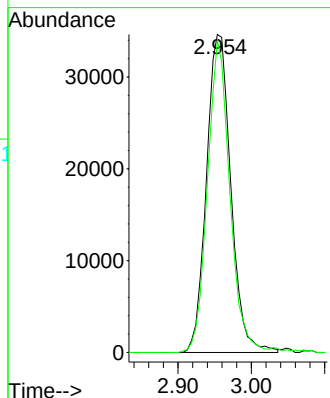
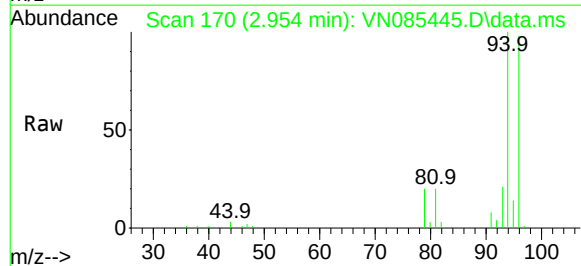
96 98.2 71.8 107.6

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

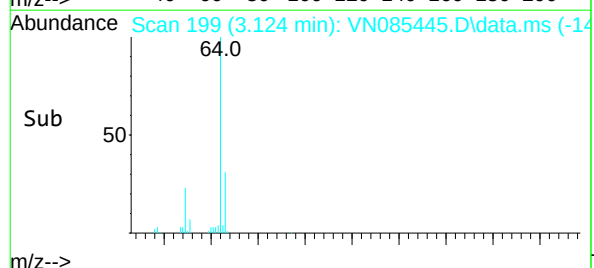
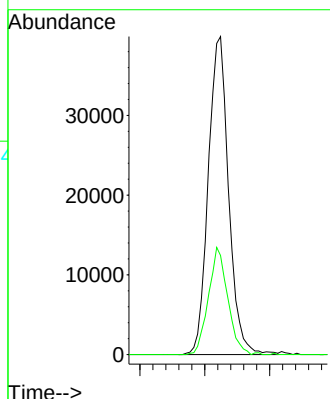
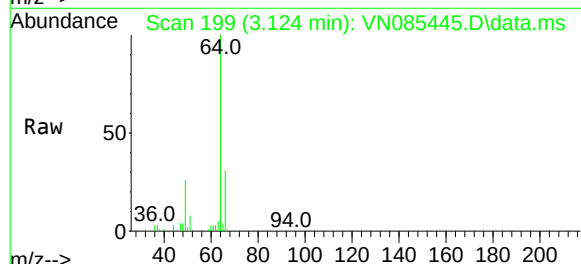
Acq: 14 Jan 2025 18:06

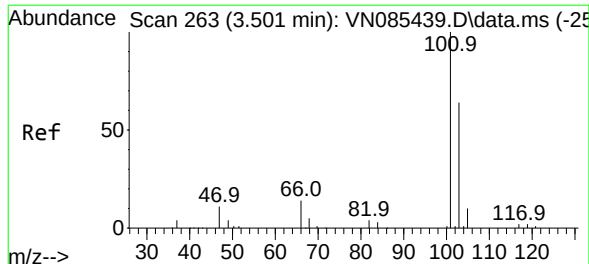
Tgt Ion: 64 Resp: 86837

Ion Ratio Lower Upper

64 100

66 31.1 24.6 36.8





#7

Trichlorofluoromethane

Concen: 43.956 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion:101 Resp: 206526

Ion Ratio Lower Upper

101 100

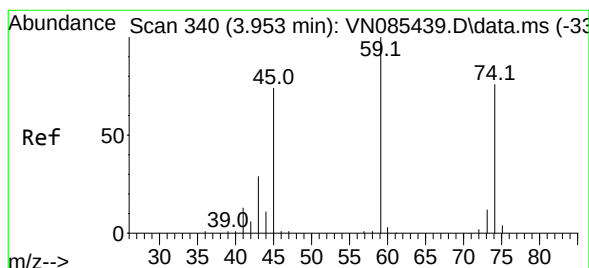
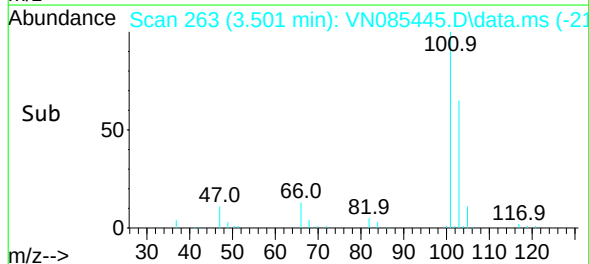
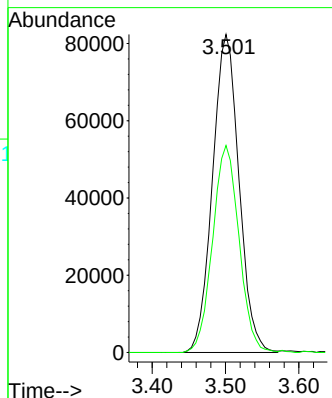
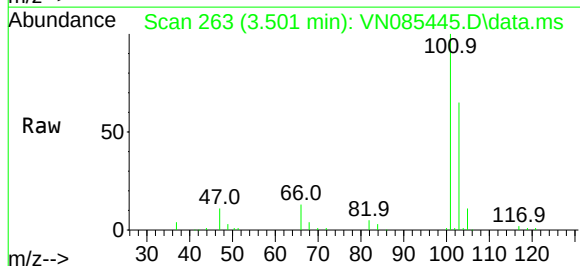
103 65.1 51.4 77.2

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

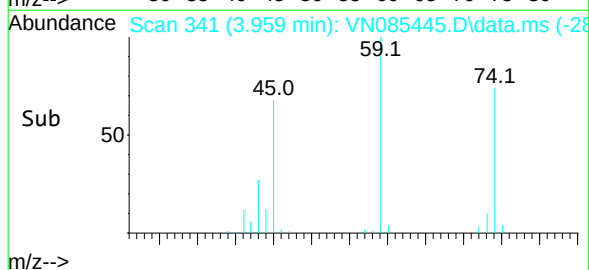
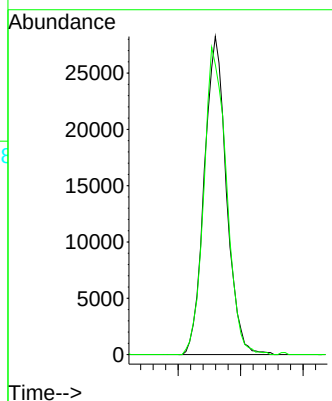
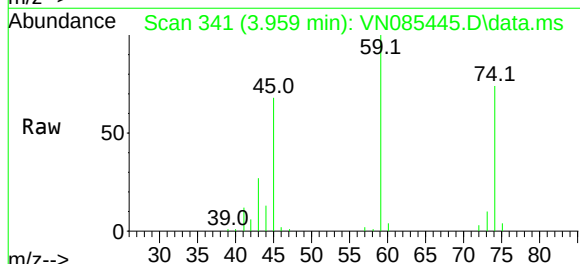
Acq: 14 Jan 2025 18:06

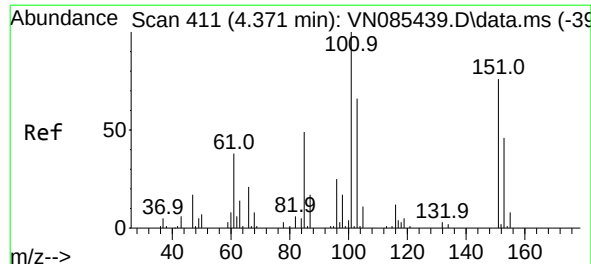
Tgt Ion: 74 Resp: 69545

Ion Ratio Lower Upper

74 100

45 99.0 49.7 149.1





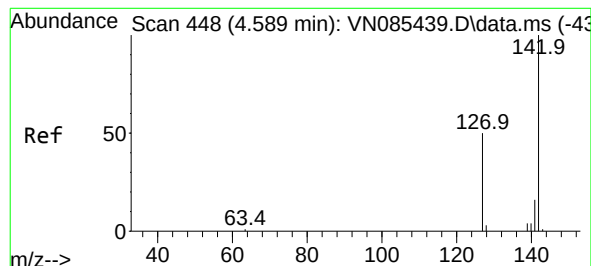
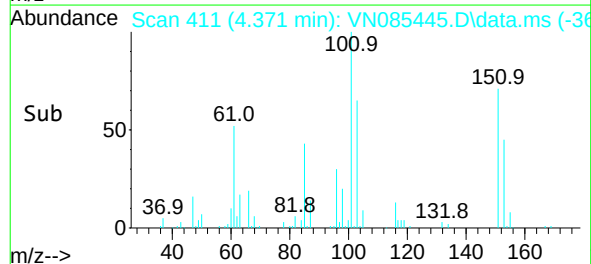
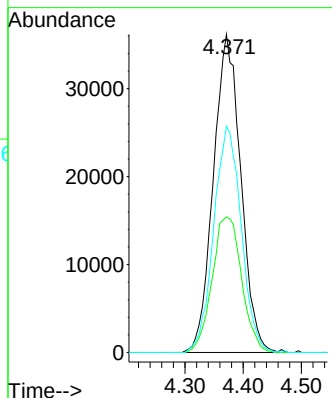
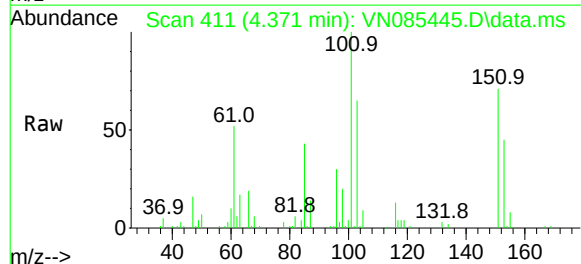
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 44.706 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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

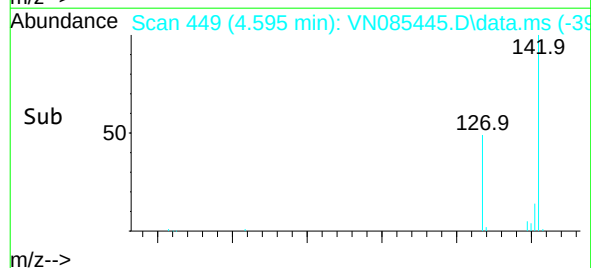
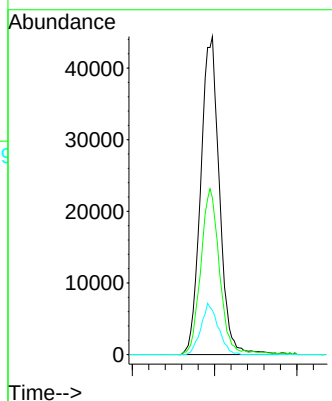
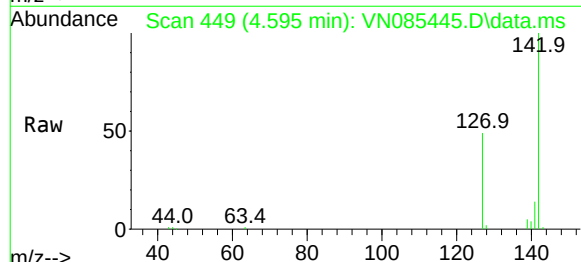
Manual Integrations  
APPROVED

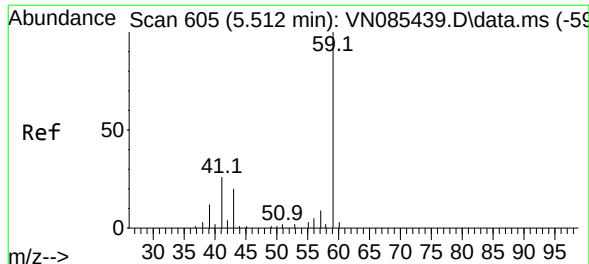
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

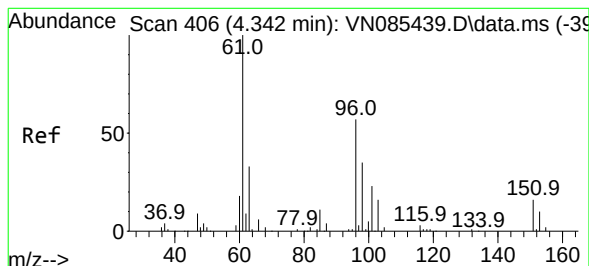
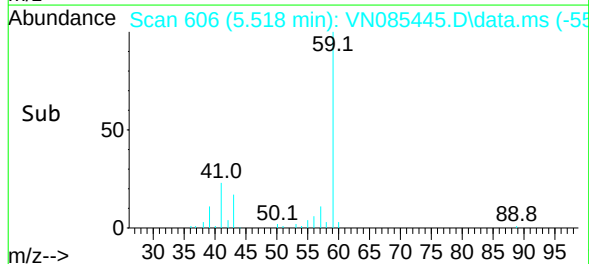
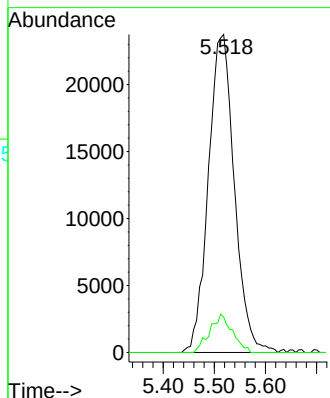
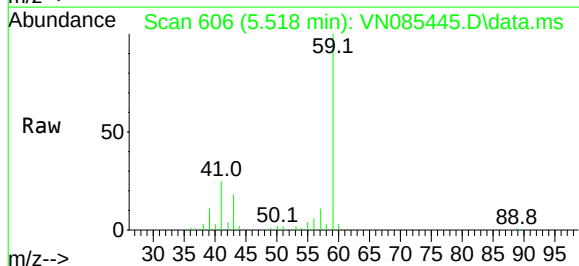
57 10.4 8.6 13.0

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

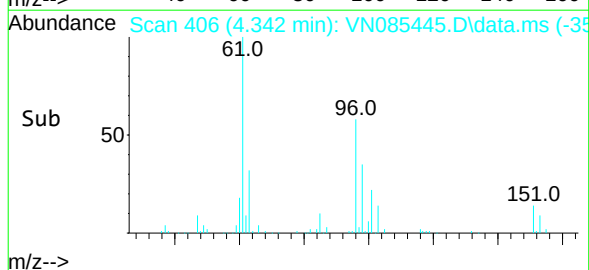
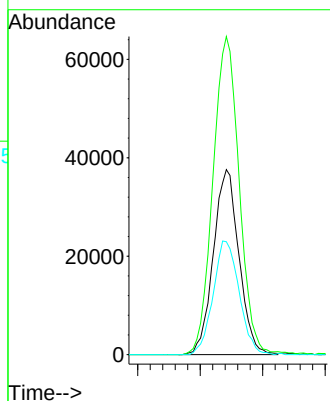
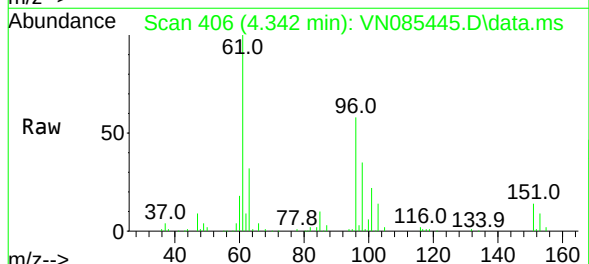
Tgt Ion: 96 Resp: 106880

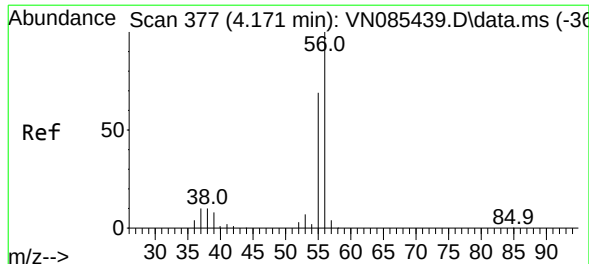
Ion Ratio Lower Upper

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

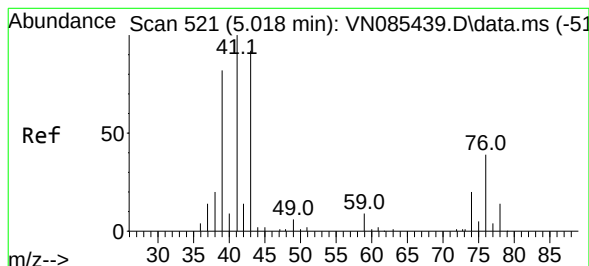
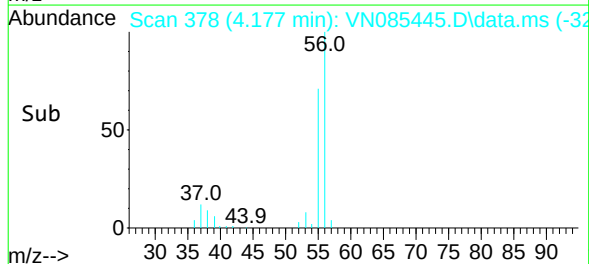
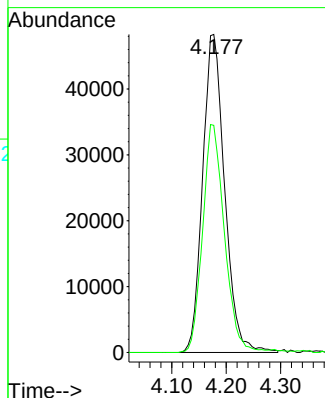
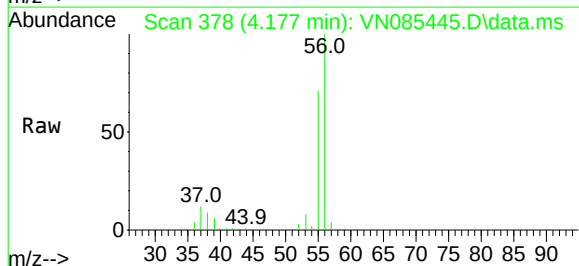
55 70.9 56.3 84.5

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

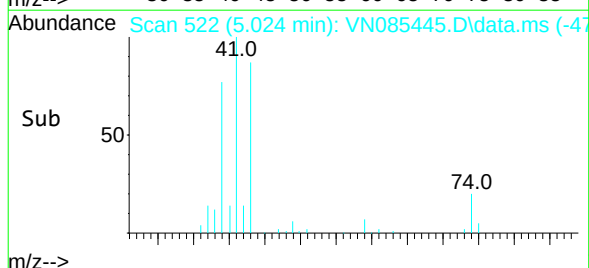
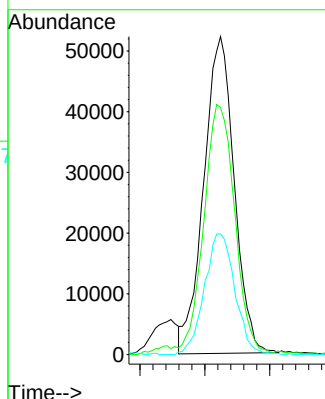
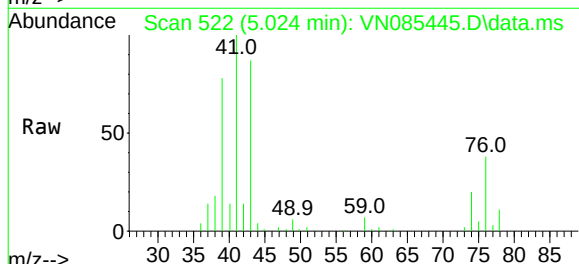
Tgt Ion: 41 Resp: 170308

Ion Ratio Lower Upper

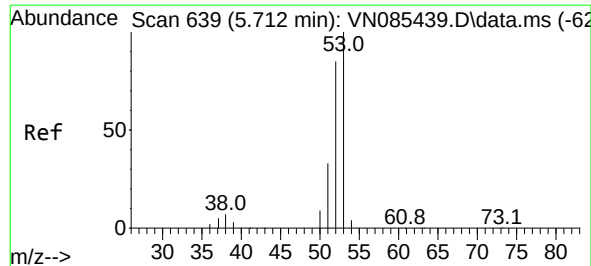
41 100

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

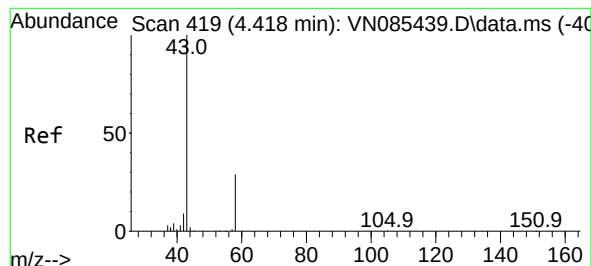
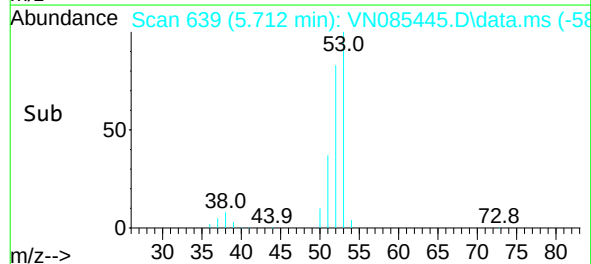
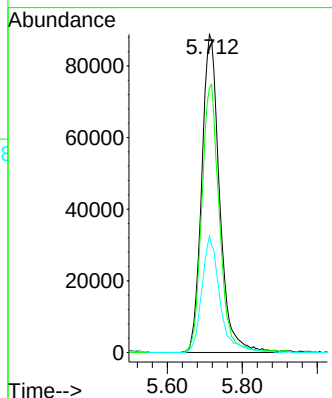
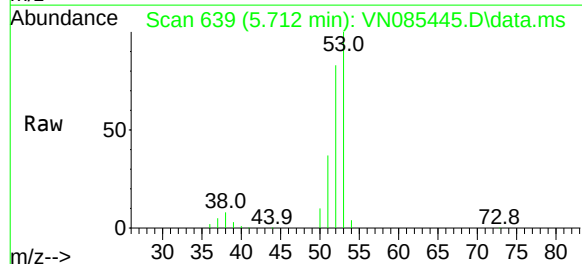
51 36.8 29.8 44.8

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

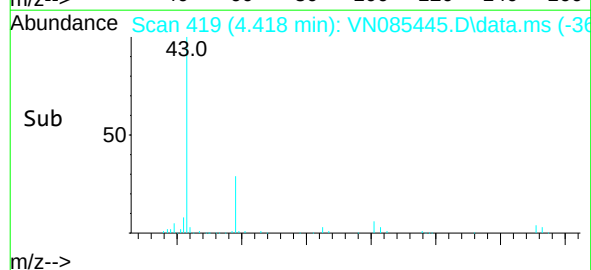
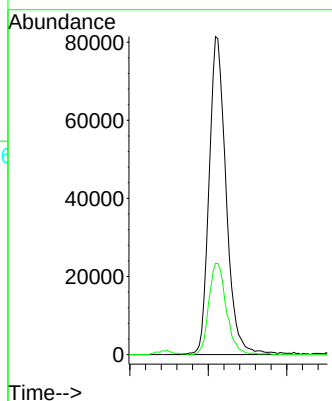
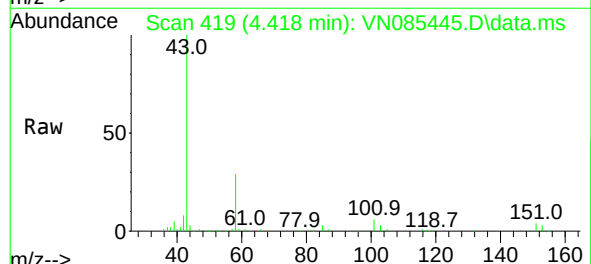
Acq: 14 Jan 2025 18:06

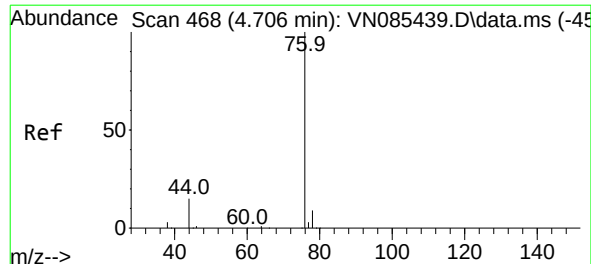
Tgt Ion: 43 Resp: 245248

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

Instrument :

MSVOA\_N

ClientSampleId :

ICVVN011425

Tgt Ion: 76 Resp: 300215

Ion Ratio Lower Upper

76 100

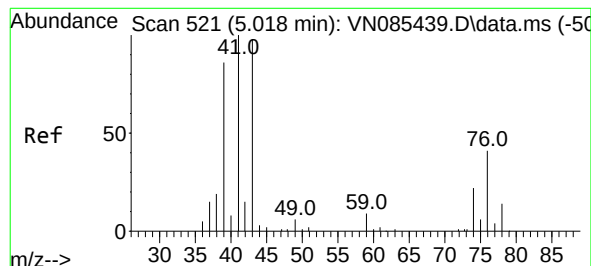
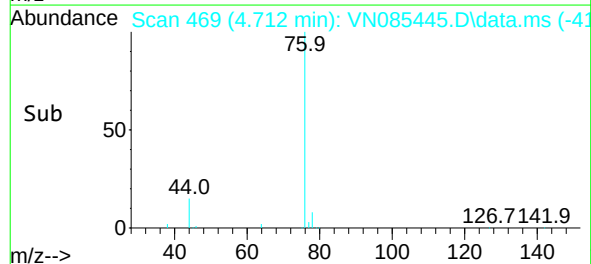
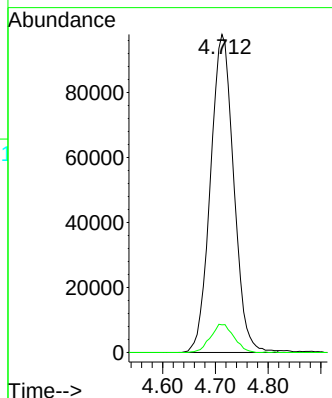
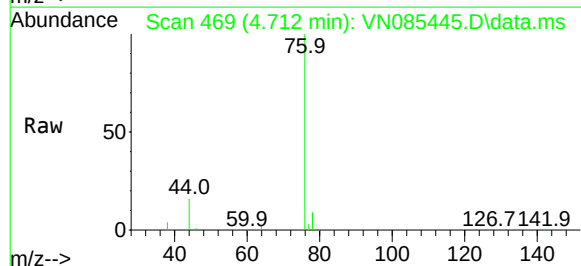
78 8.7 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 45.028 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085445.D

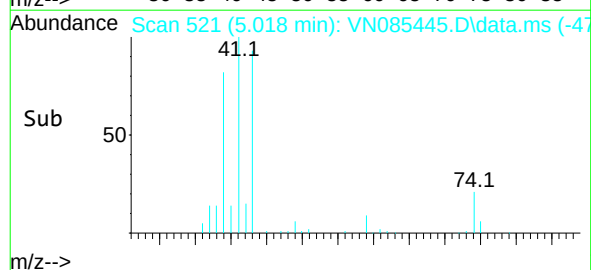
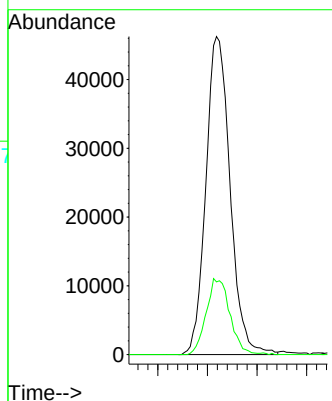
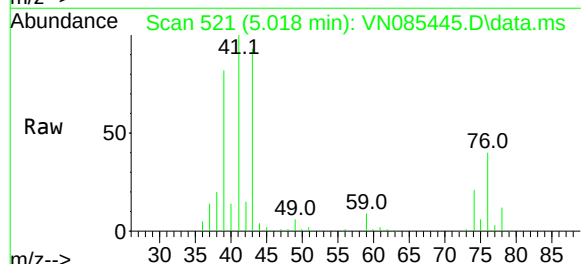
Acq: 14 Jan 2025 18:06

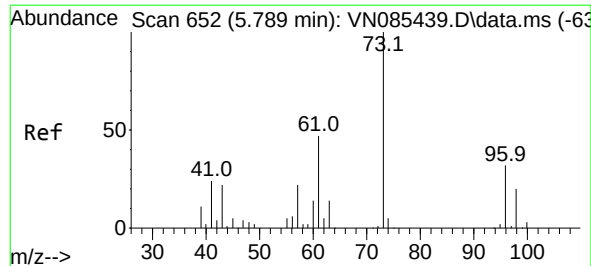
Tgt Ion: 43 Resp: 156938

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

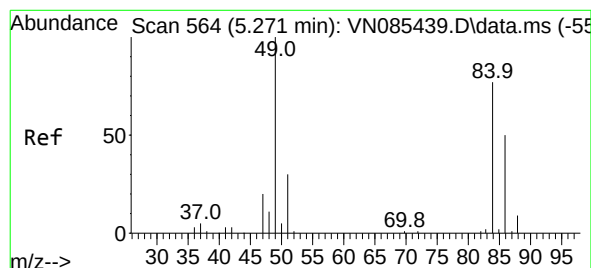
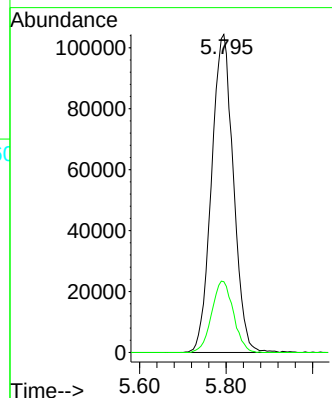
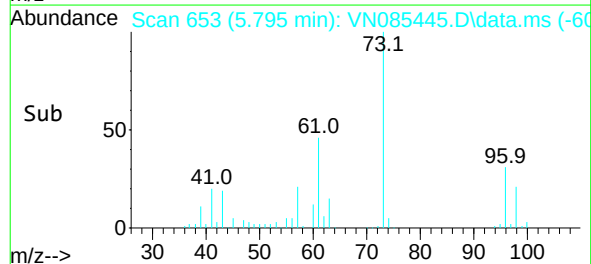
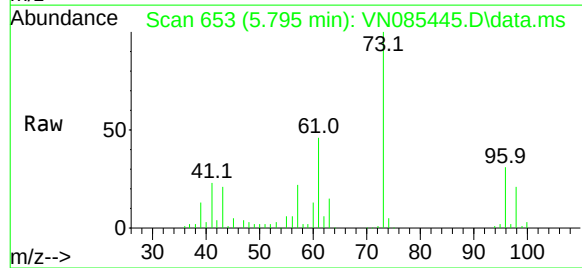
57 22.3 17.8 26.8

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

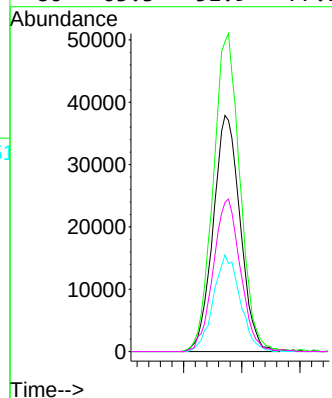
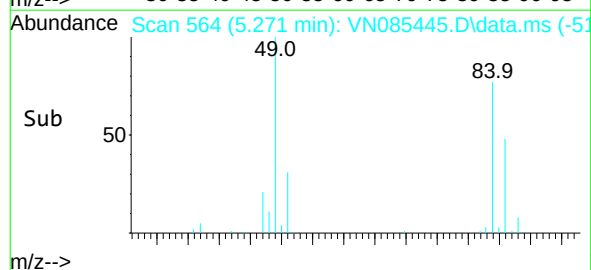
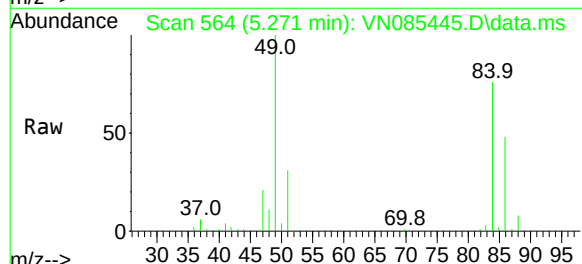
Ion Ratio Lower Upper

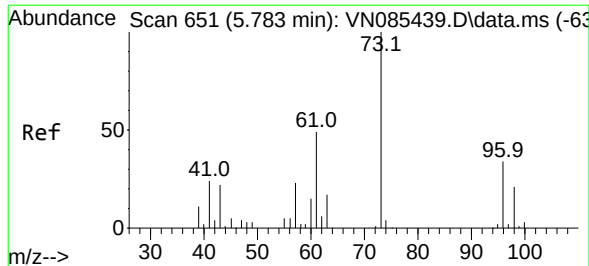
84 100

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

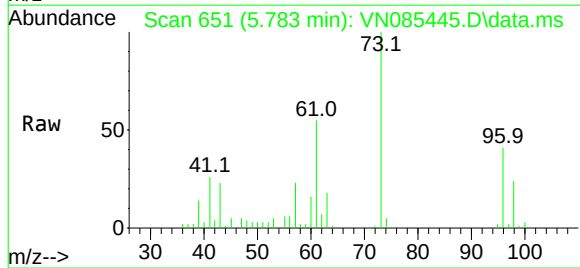
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

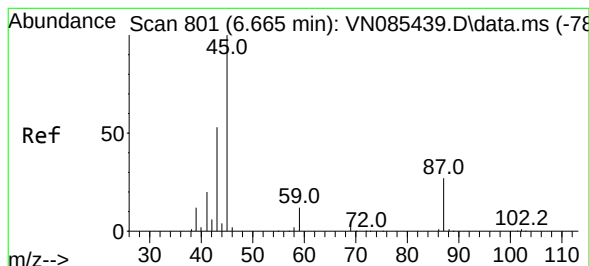
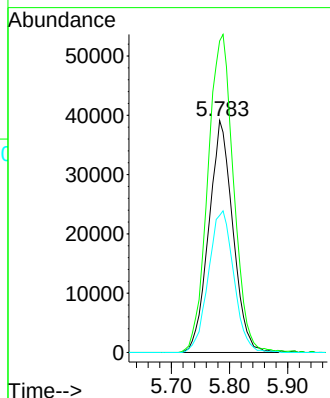
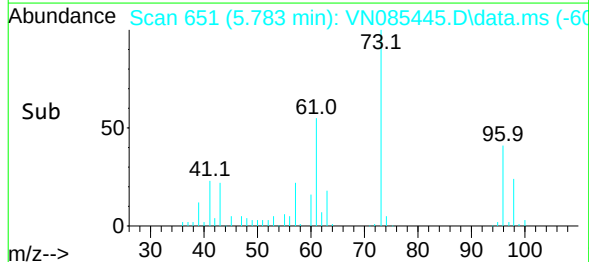
ICVVN011425



| 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

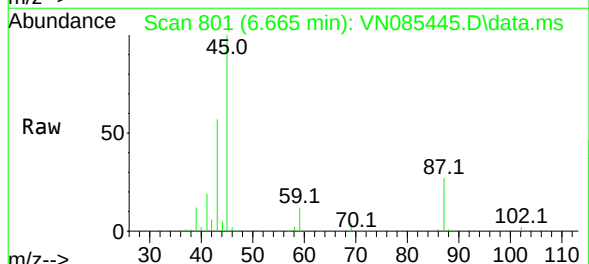
Concen: 46.996 ug/l

RT: 6.665 min Scan# 801

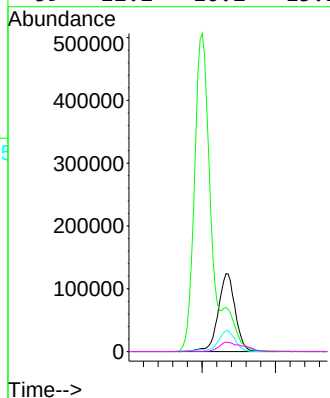
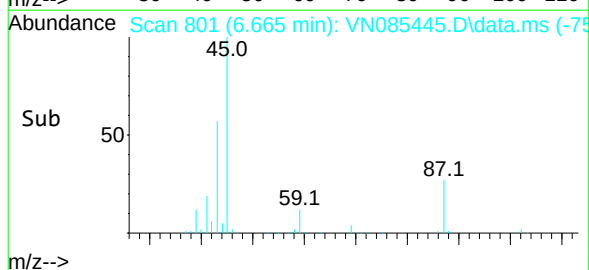
Delta R.T. 0.000 min

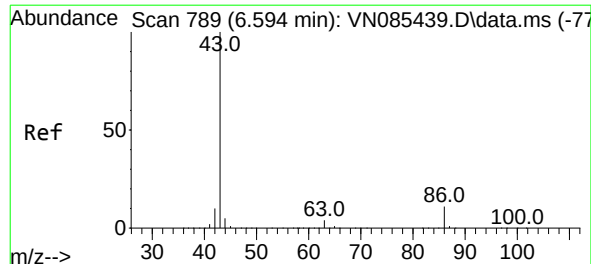
Lab File: VN085445.D

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# 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

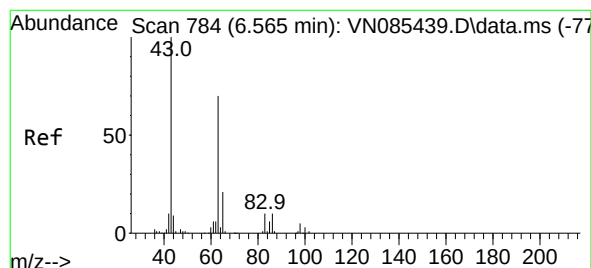
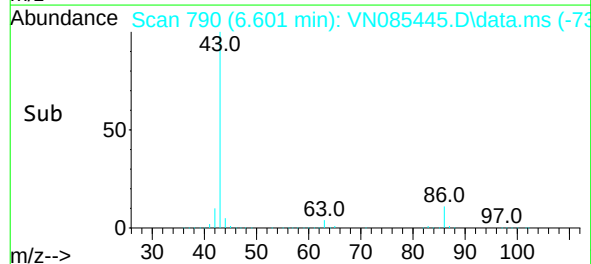
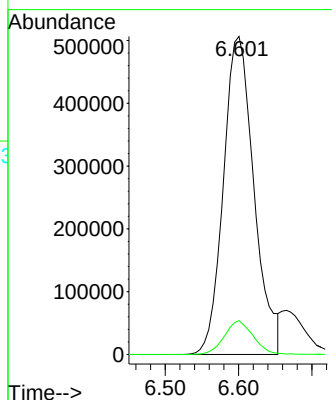
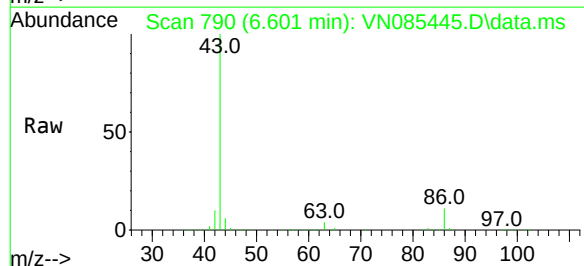
86 10.7 8.4 12.6

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

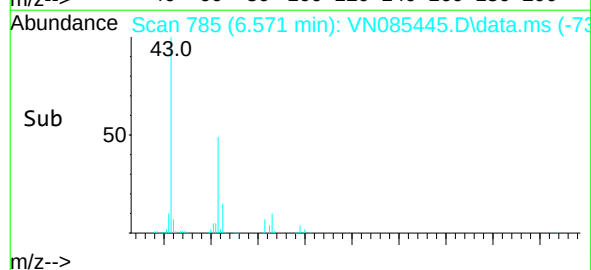
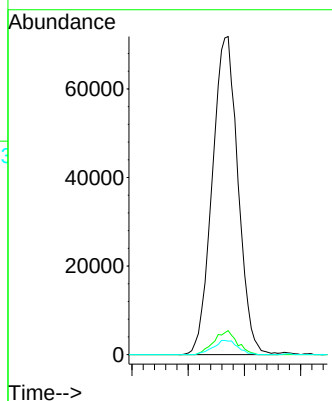
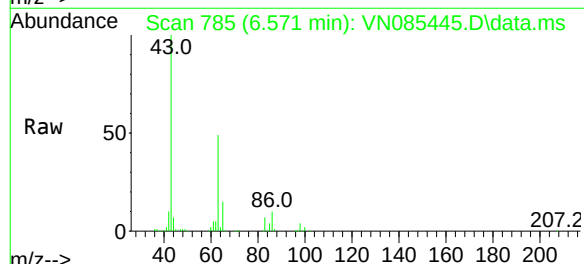
Tgt Ion: 63 Resp: 228489

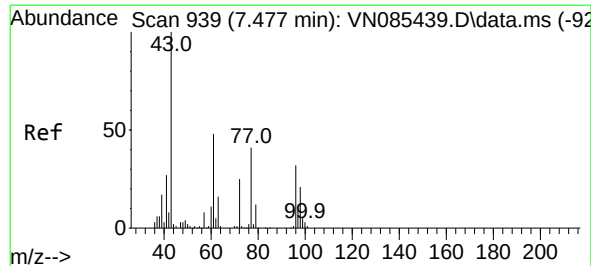
Ion Ratio Lower Upper

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

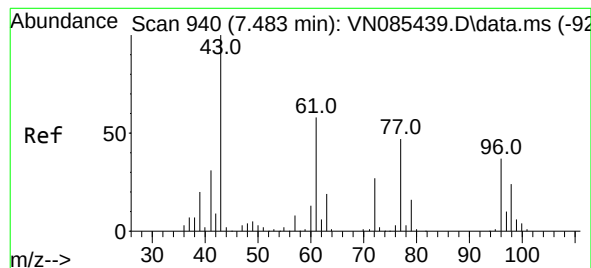
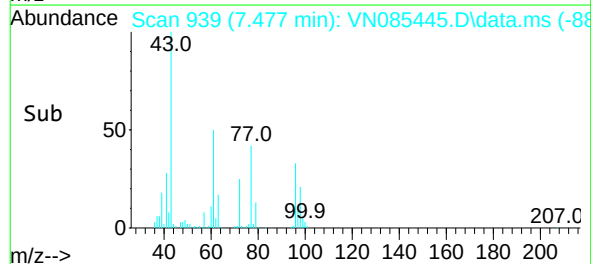
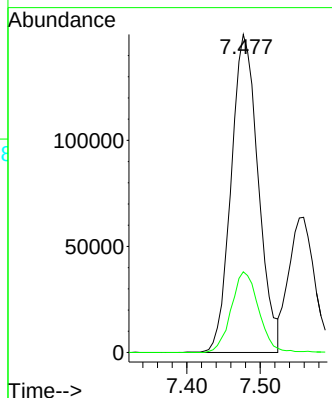
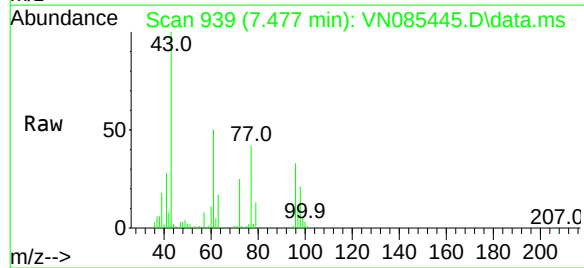
72 25.4 20.2 30.4

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

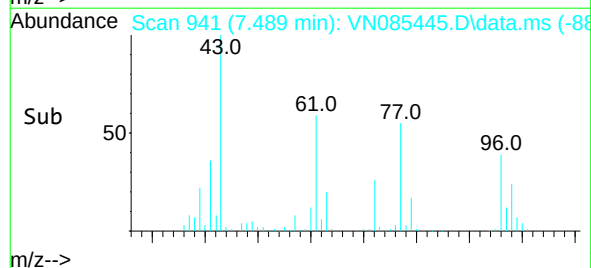
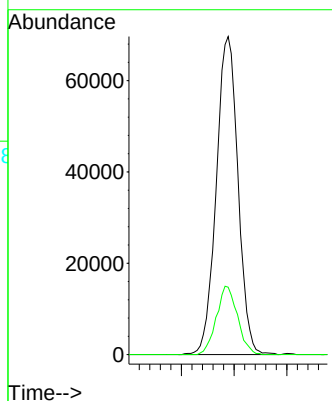
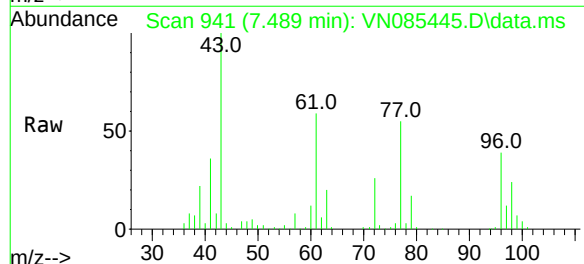
Acq: 14 Jan 2025 18:06

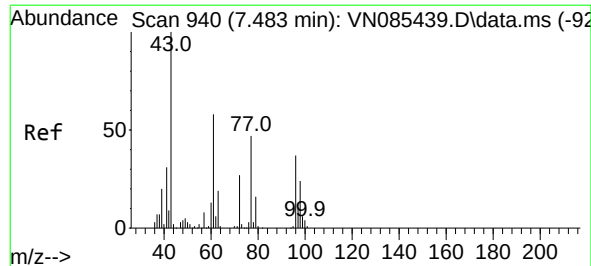
Tgt Ion: 77 Resp: 199303

Ion Ratio Lower Upper

77 100

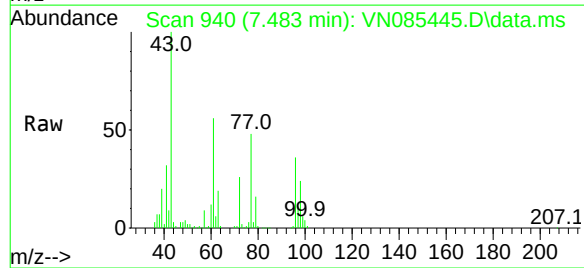
97 20.9 10.7 32.1





#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

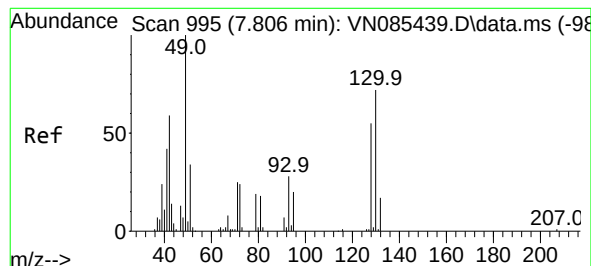
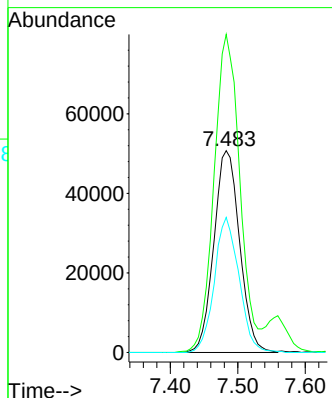
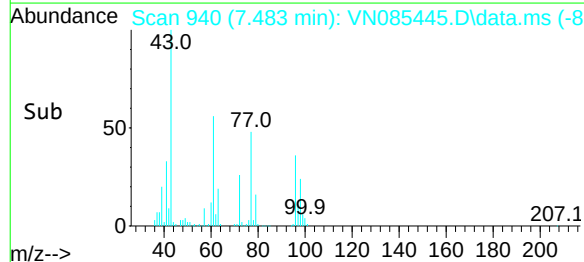
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



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

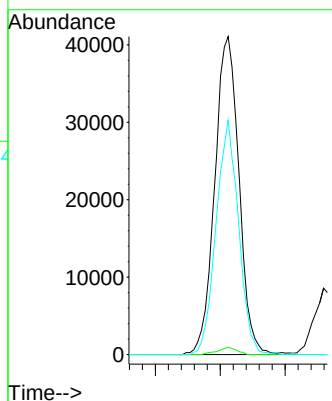
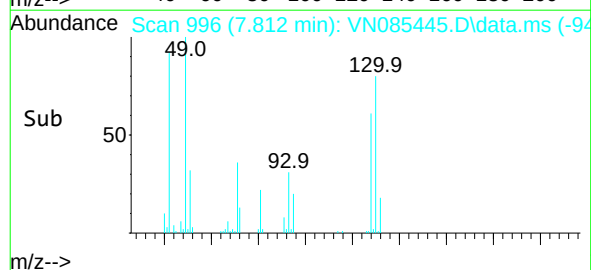
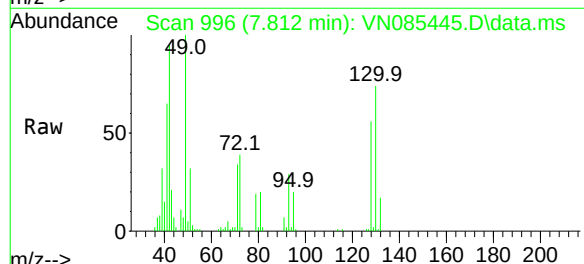
Manual Integrations  
APPROVED

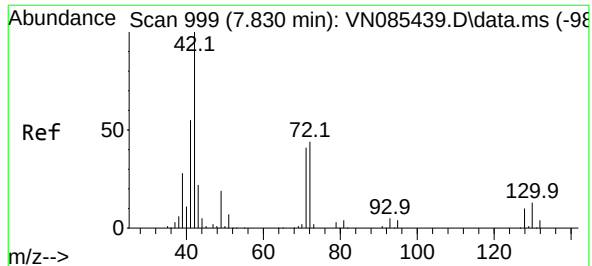
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

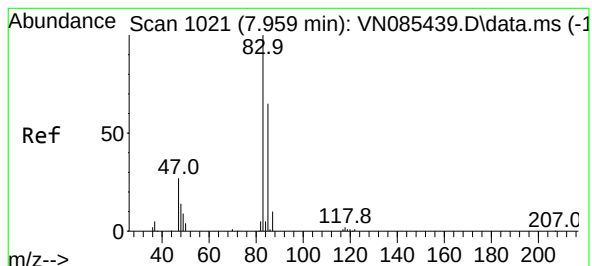
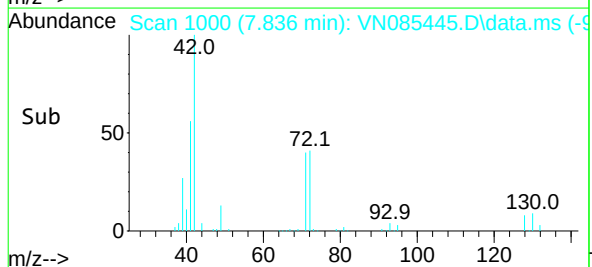
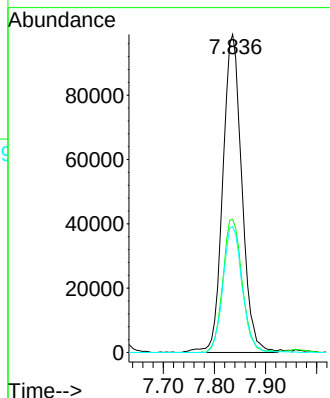
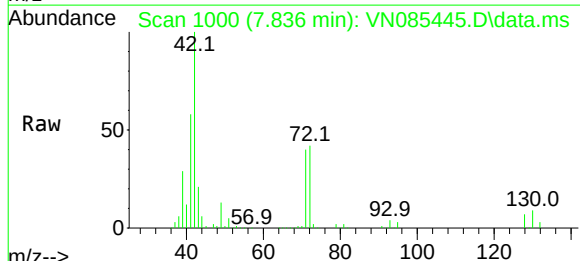
71 39.9 32.5 48.7

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

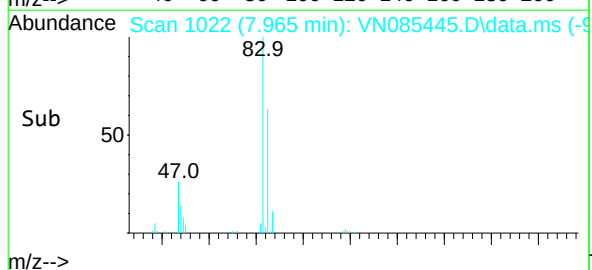
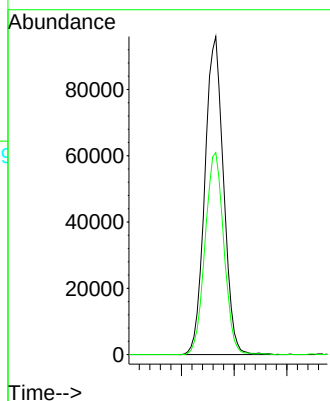
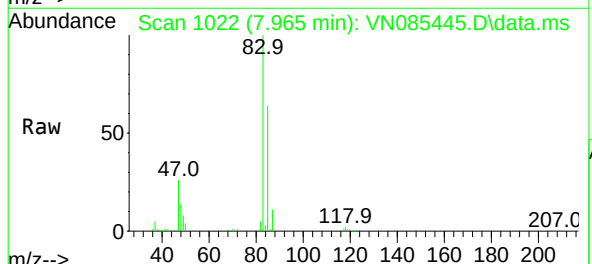
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 235923

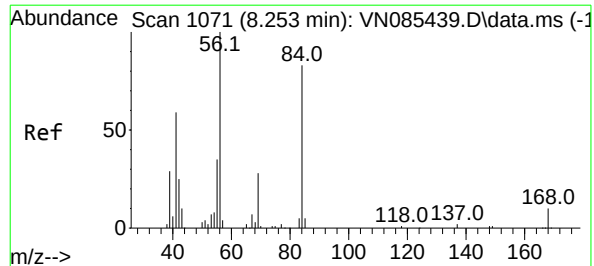
Ion Ratio Lower Upper

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

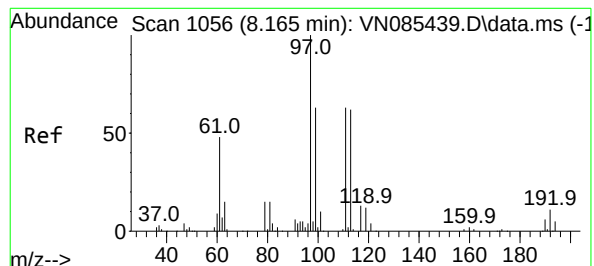
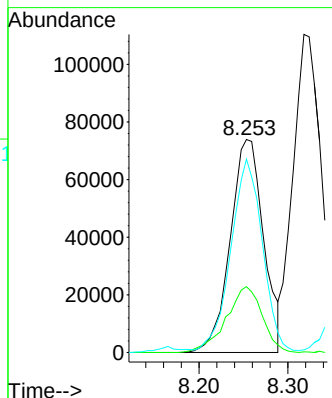
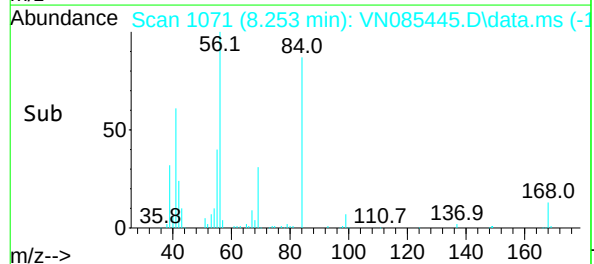
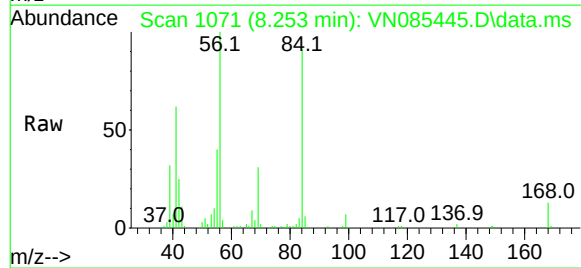
84 89.4 66.4 99.6

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

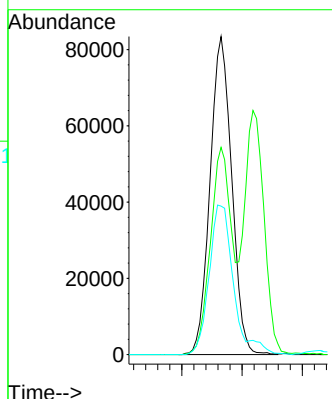
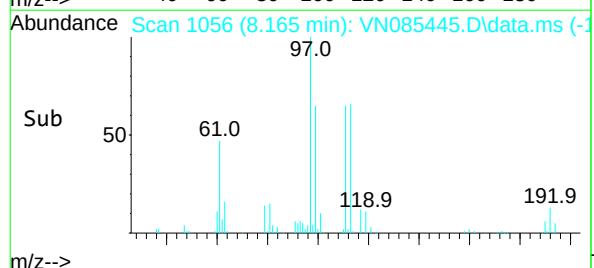
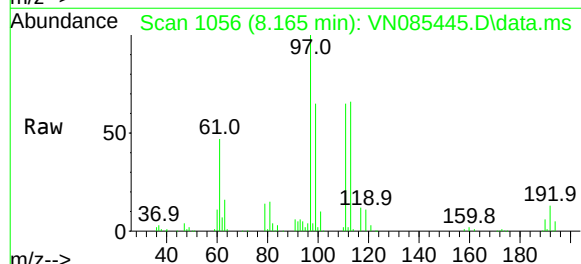
Tgt Ion: 97 Resp: 208172

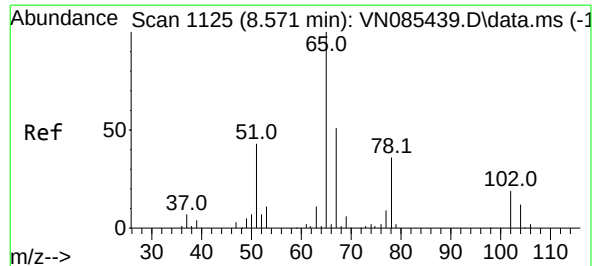
Ion Ratio Lower Upper

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

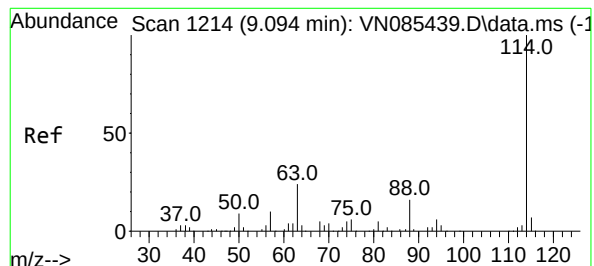
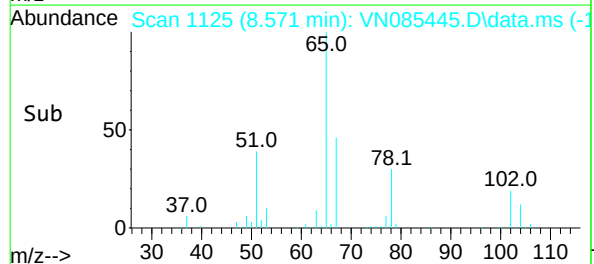
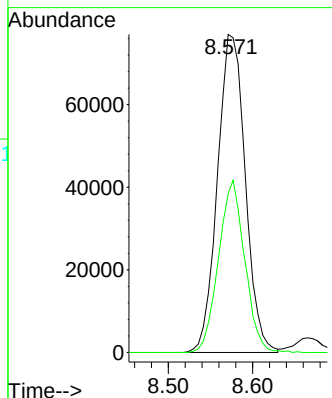
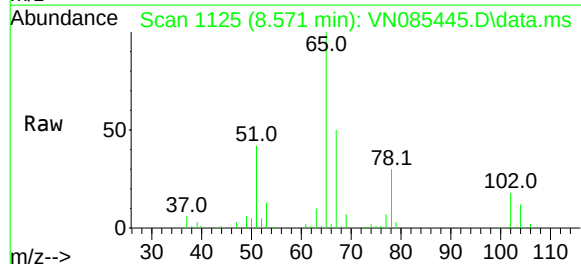
67 50.9 0.0 101.6

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

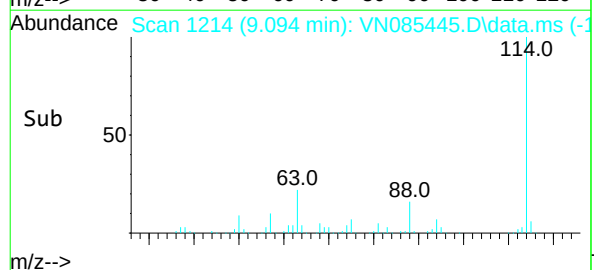
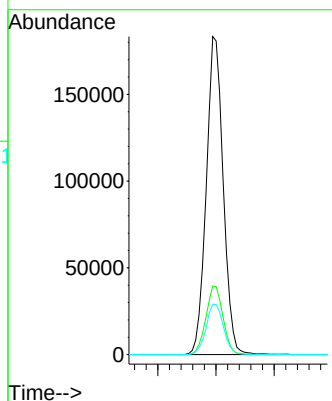
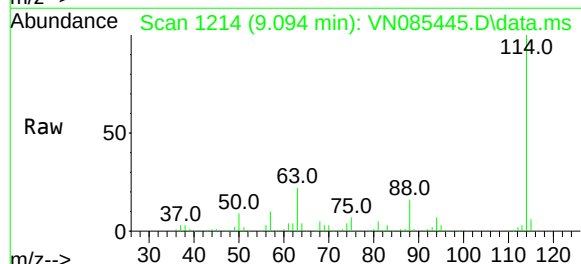
Tgt Ion:114 Resp: 370487

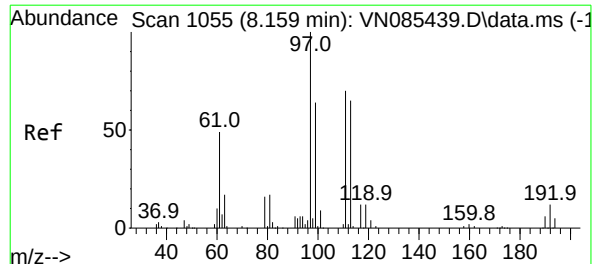
Ion Ratio Lower Upper

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

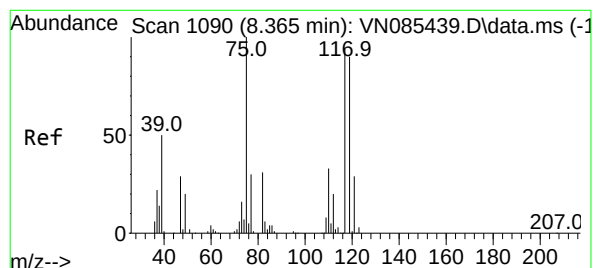
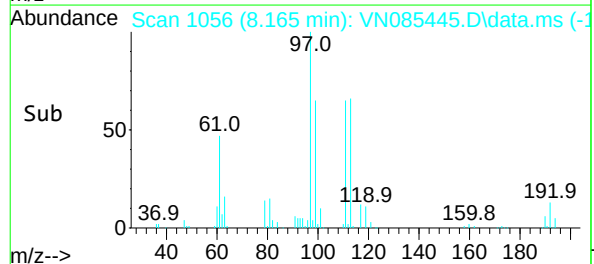
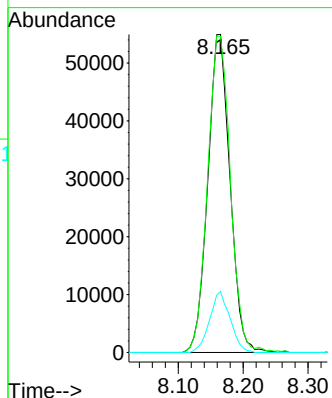
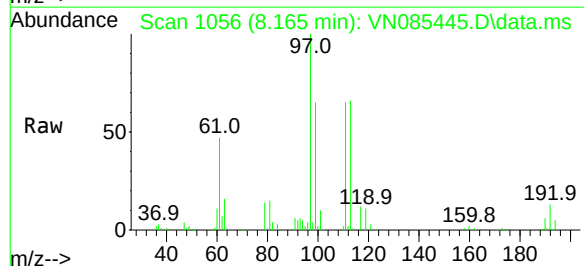
192 17.7 14.3 21.5

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

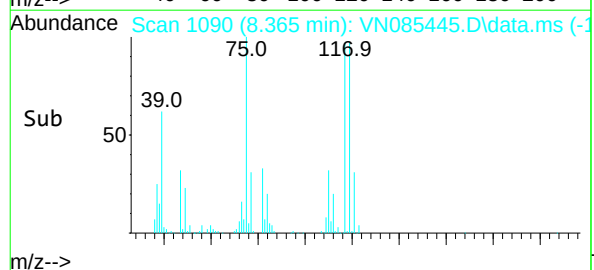
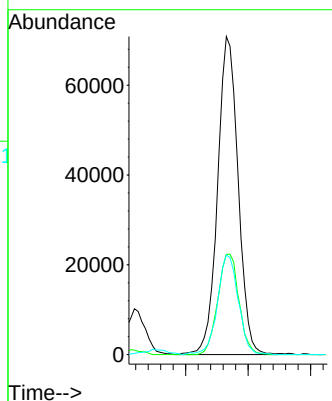
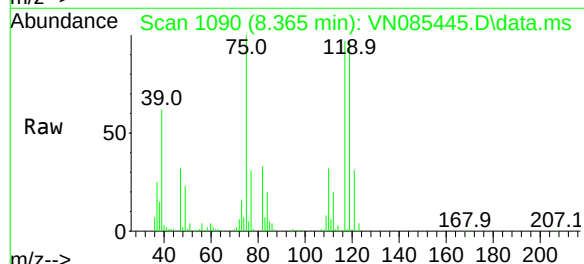
Tgt Ion: 75 Resp: 161834

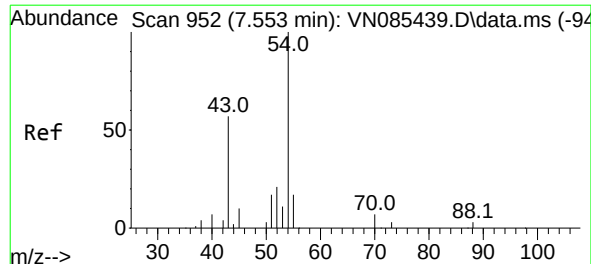
Ion Ratio Lower Upper

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

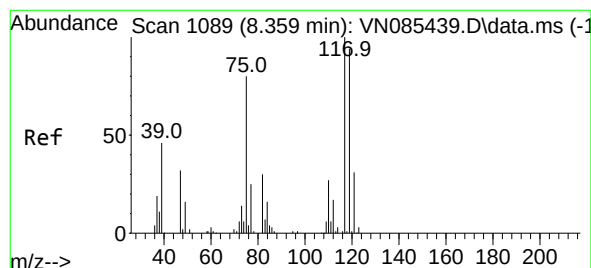
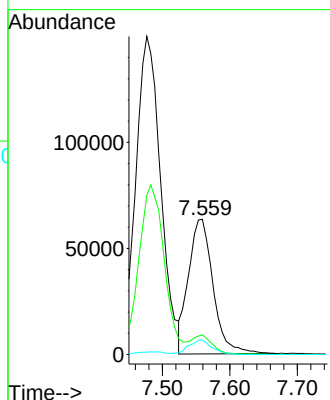
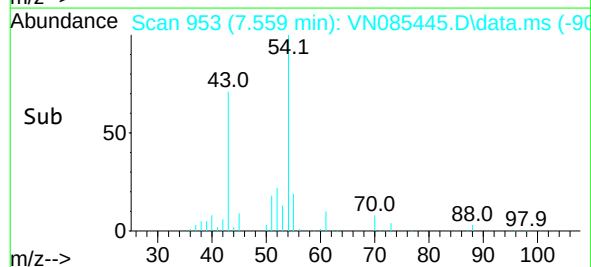
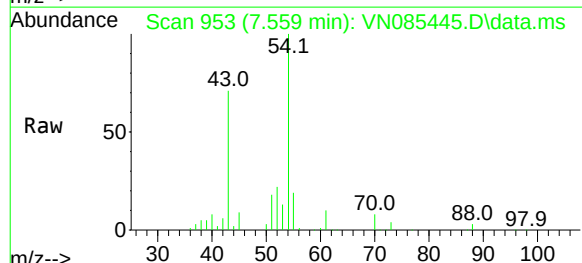
70 10.2 7.5 11.3

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

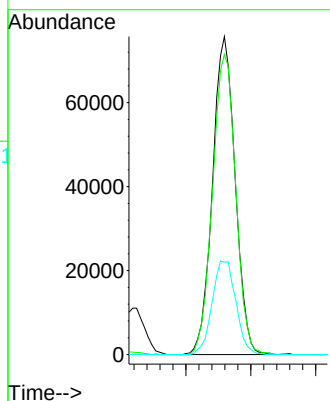
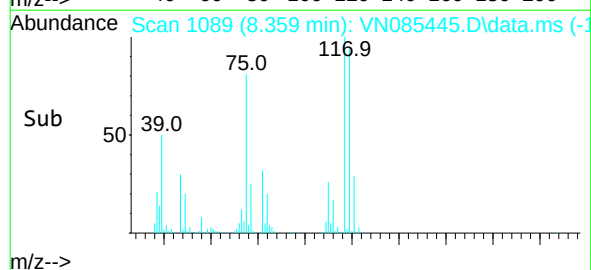
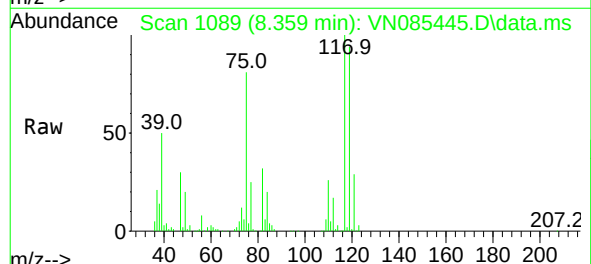
Tgt Ion:117 Resp: 183592

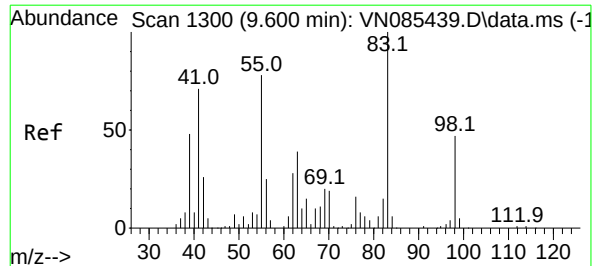
Ion Ratio Lower Upper

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

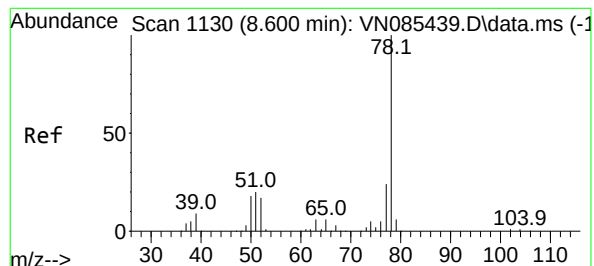
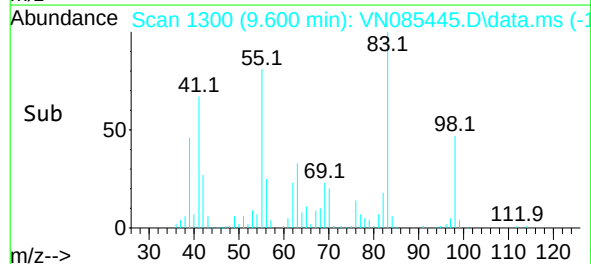
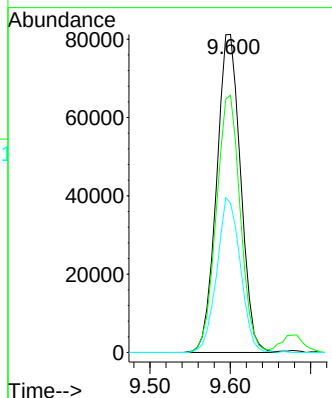
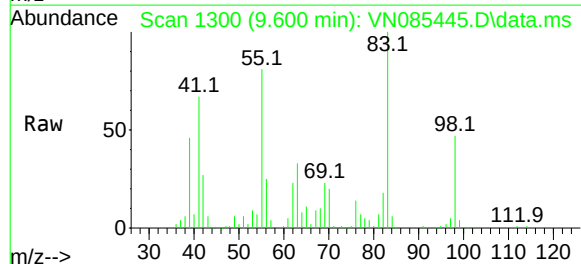
98 46.9 37.7 56.5

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

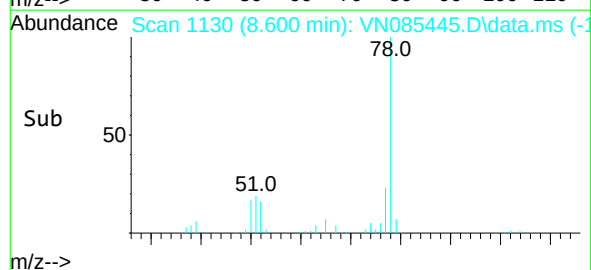
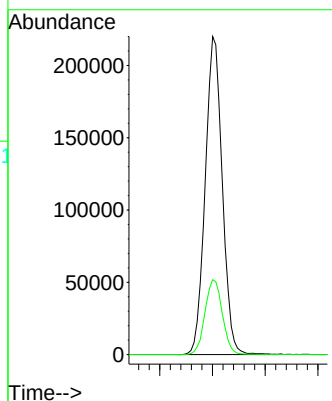
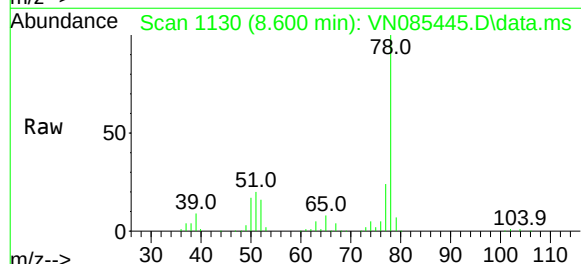
Acq: 14 Jan 2025 18:06

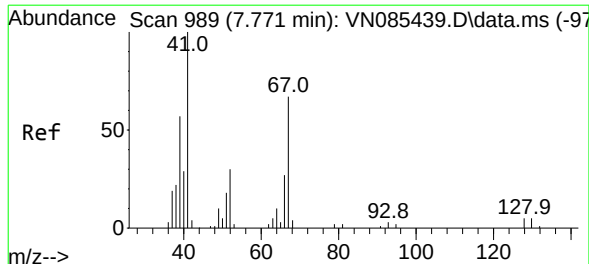
Tgt Ion: 78 Resp: 494871

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

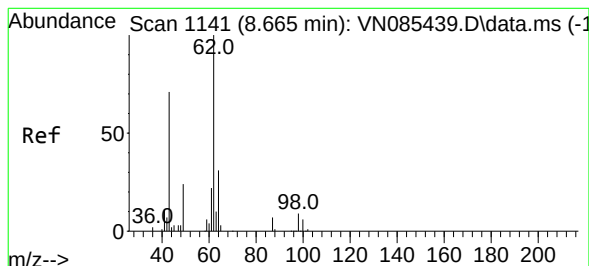
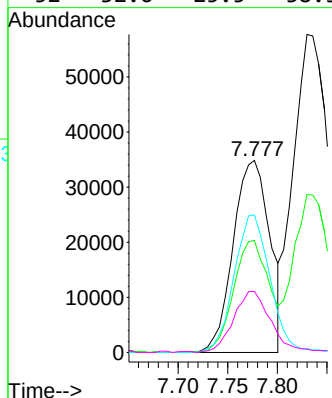
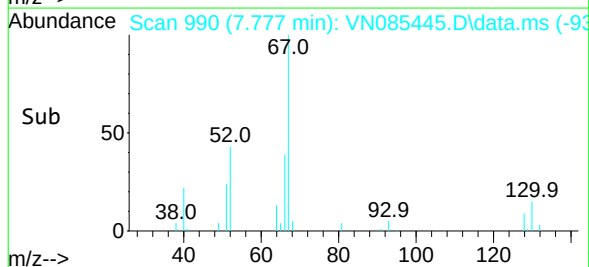
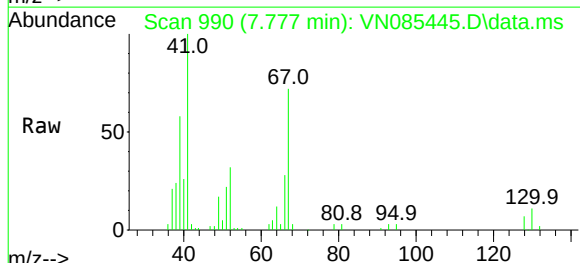
52 32.6 25.5 38.3

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

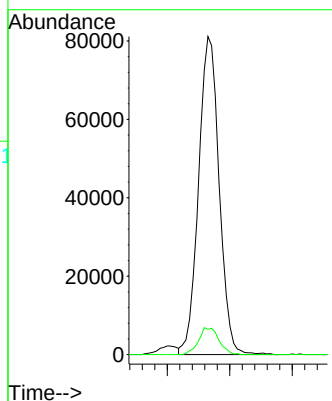
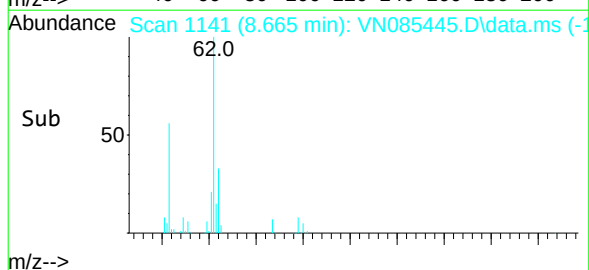
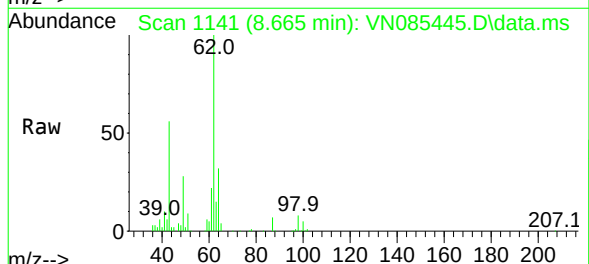
Acq: 14 Jan 2025 18:06

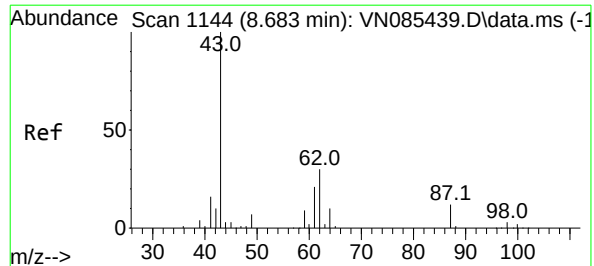
Tgt Ion: 62 Resp: 185663

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# 11

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

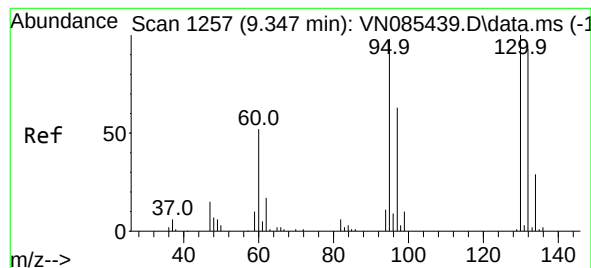
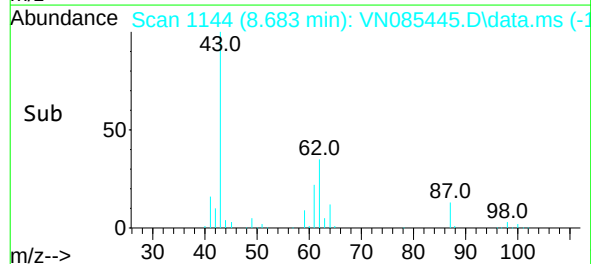
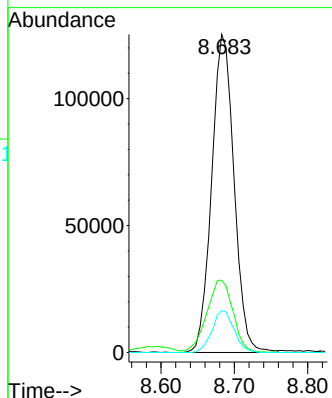
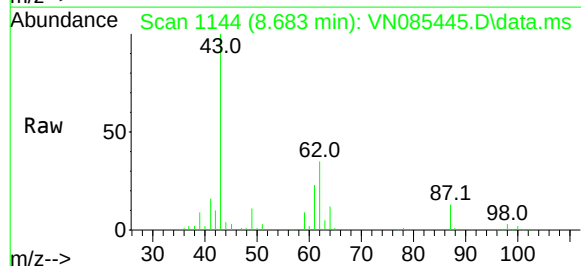
87 12.9 9.8 14.8

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

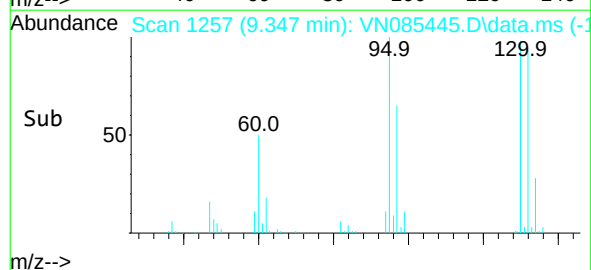
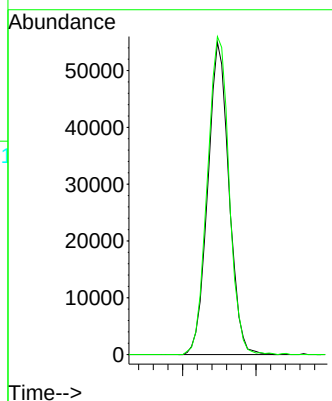
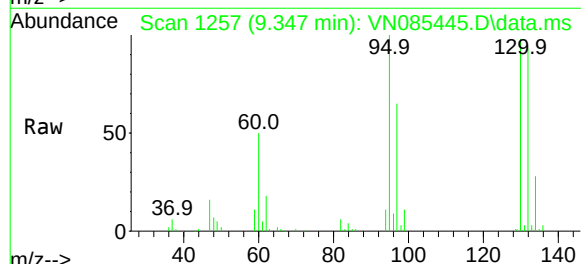
Acq: 14 Jan 2025 18:06

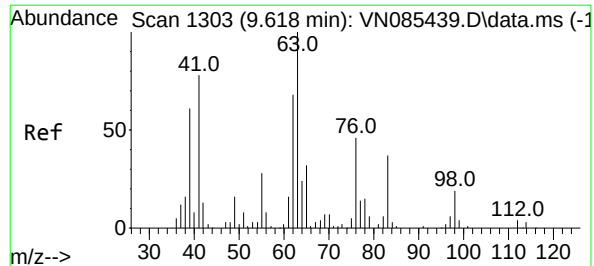
Tgt Ion:130 Resp: 110058

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

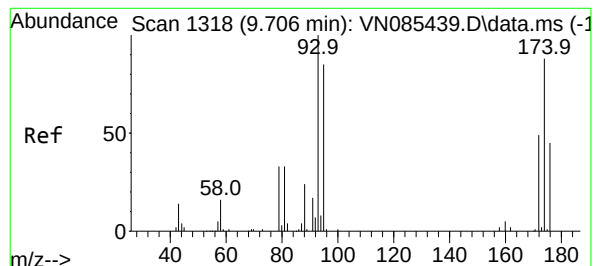
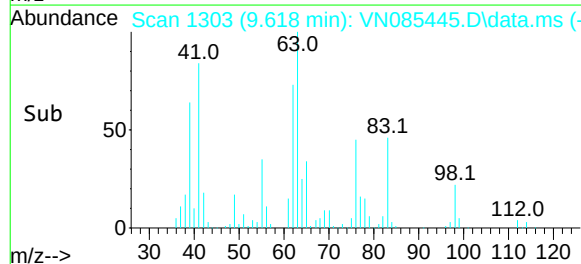
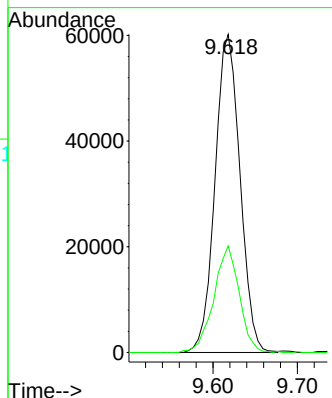
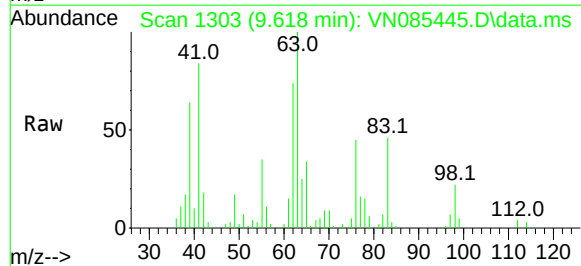
65 33.5 25.6 38.4

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

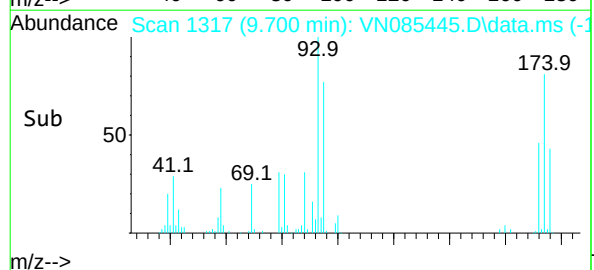
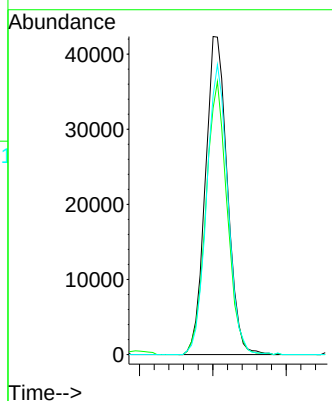
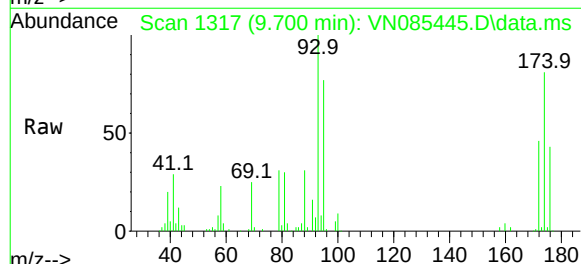
Tgt Ion: 93 Resp: 88325

Ion Ratio Lower Upper

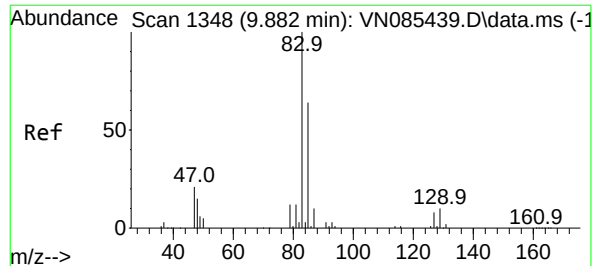
93 100

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

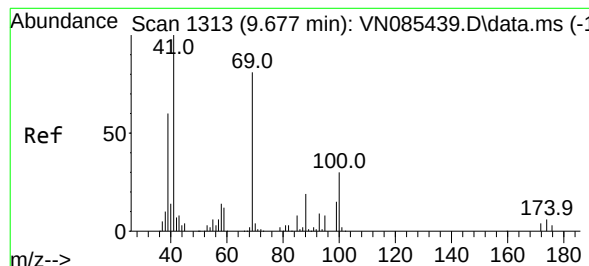
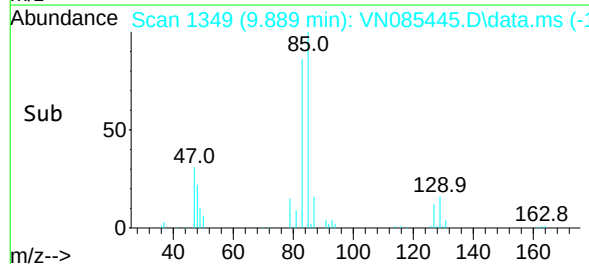
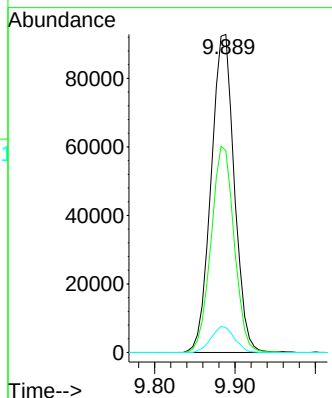
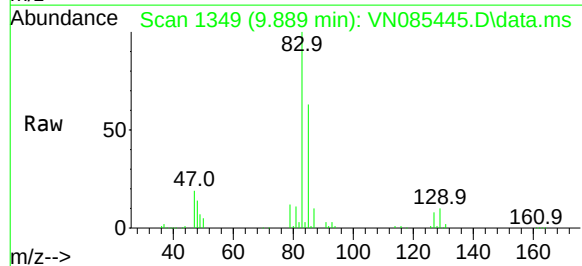
127 7.8 6.5 9.7

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

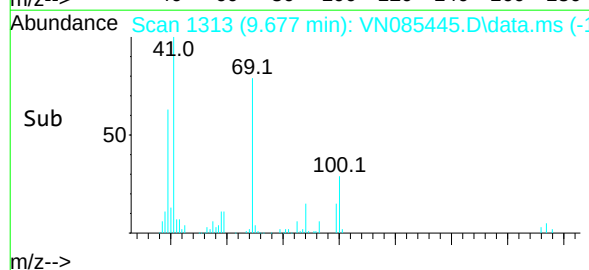
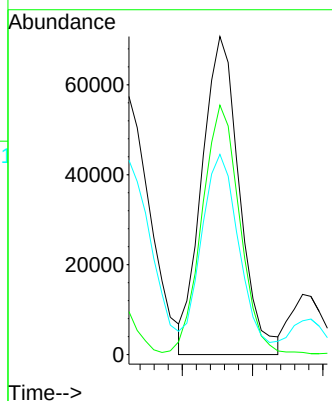
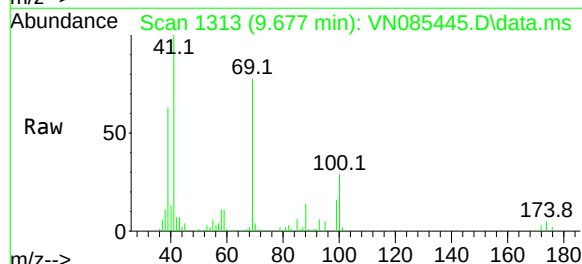
Tgt Ion: 41 Resp: 131142

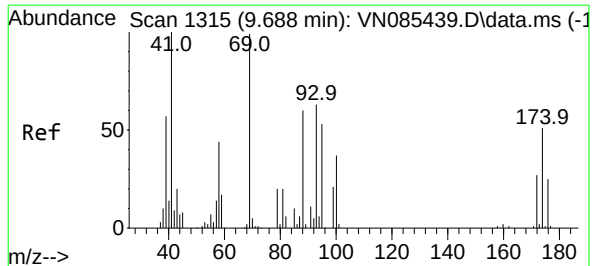
Ion Ratio Lower Upper

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

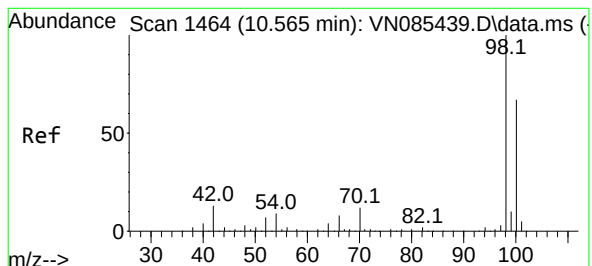
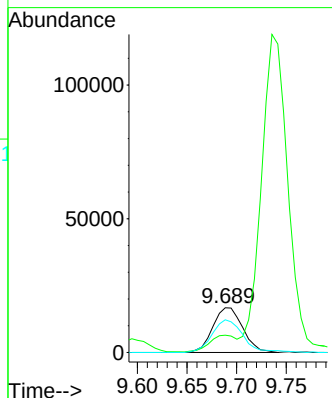
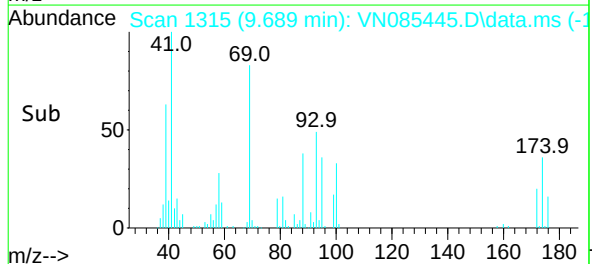
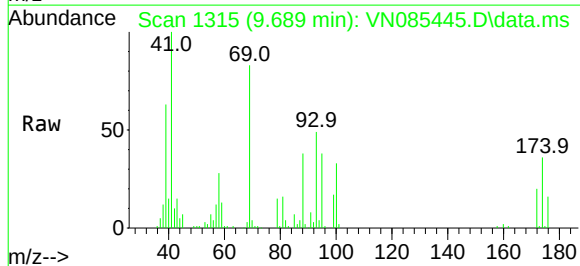
58 76.1 59.5 89.3

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

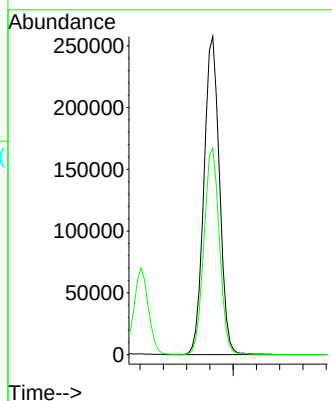
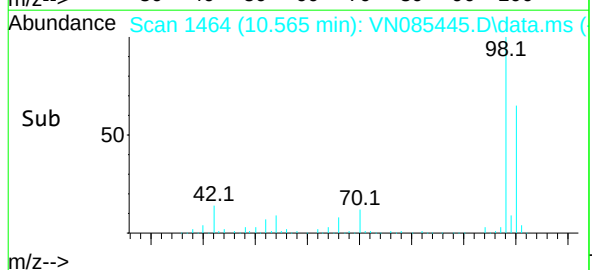
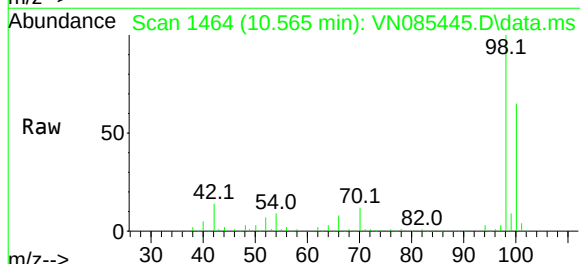
Acq: 14 Jan 2025 18:06

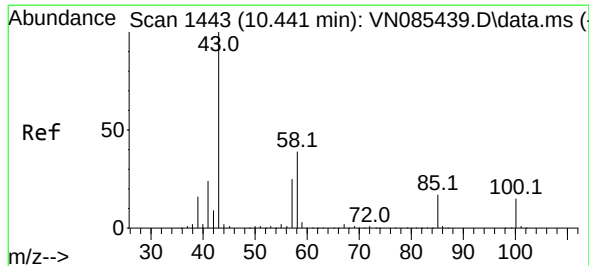
Tgt Ion: 98 Resp: 477630

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4





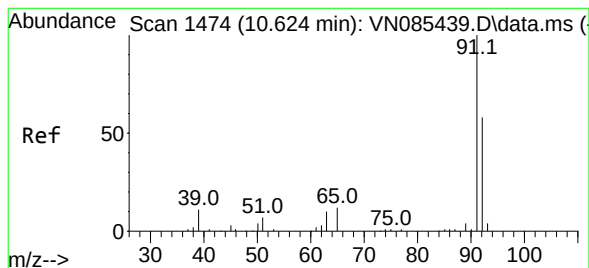
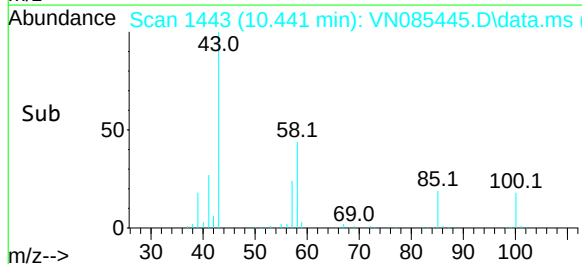
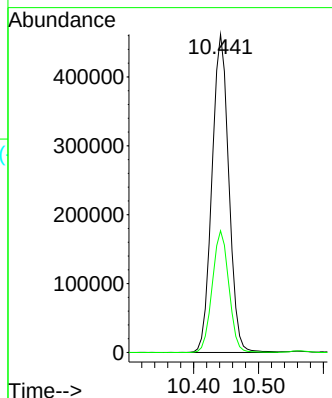
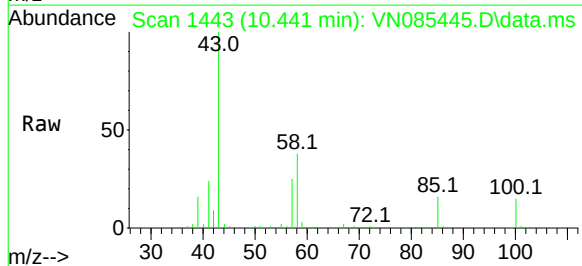
#51  
4-Methyl-2-Pentanone  
Concen: 245.877 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 43 Resp: 832426  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7

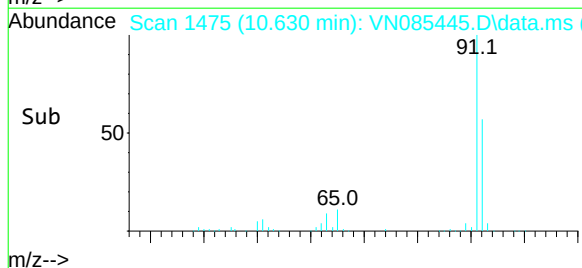
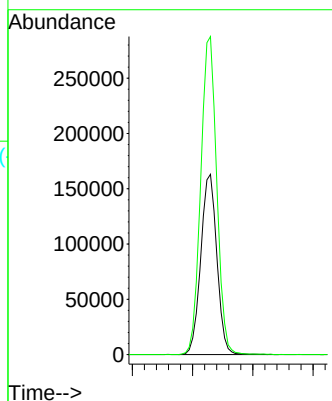
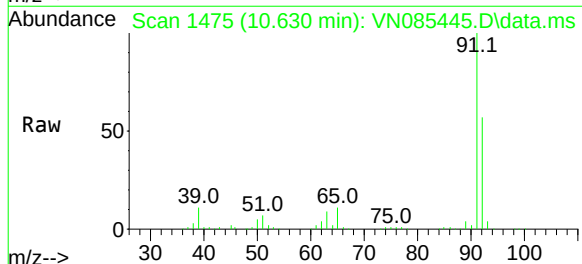
Manual Integrations  
APPROVED

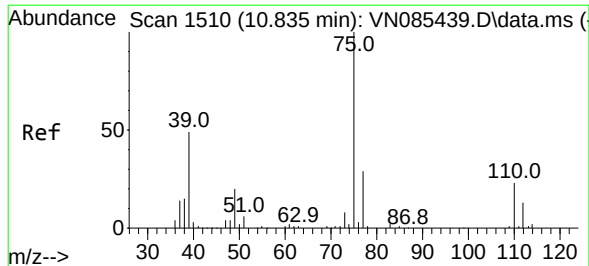
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

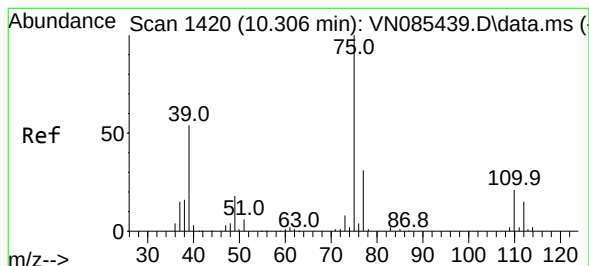
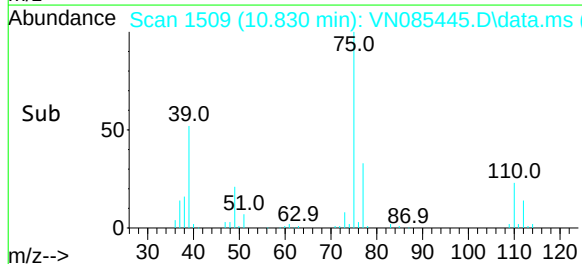
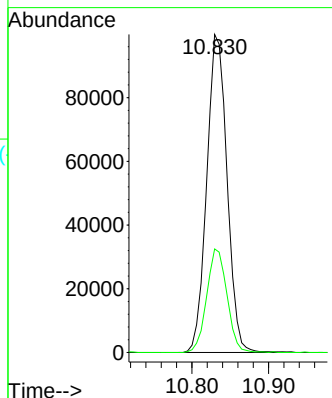
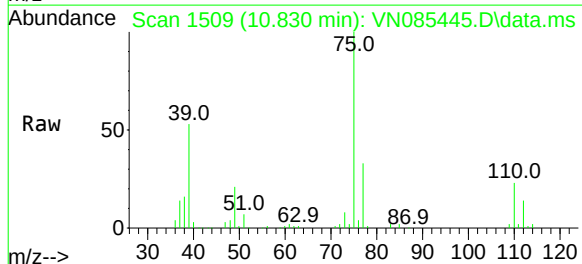
77 32.6 23.5 35.3

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

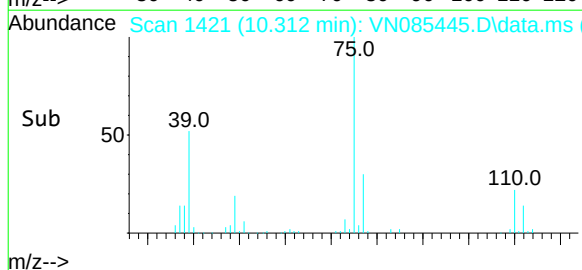
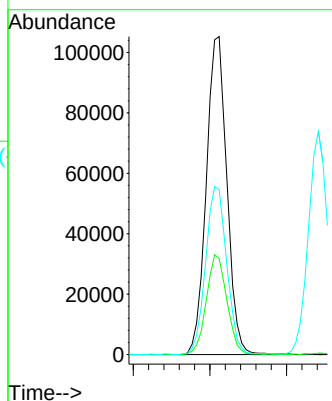
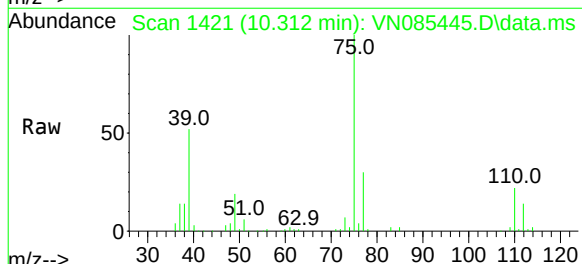
Tgt Ion: 75 Resp: 196307

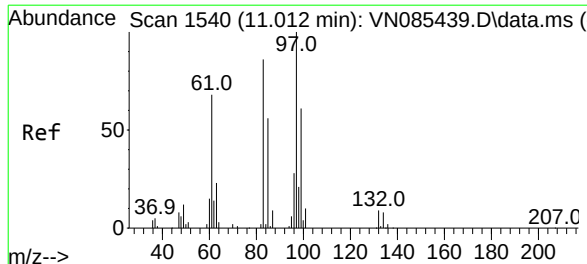
Ion Ratio Lower Upper

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# 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

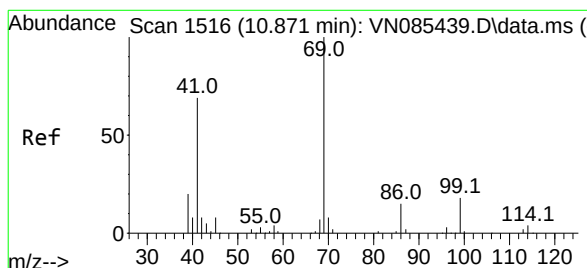
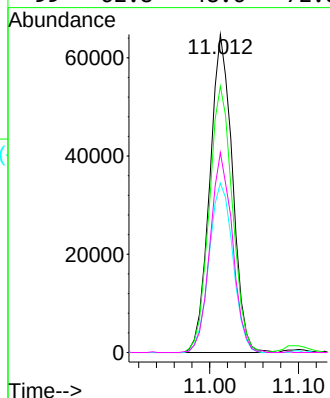
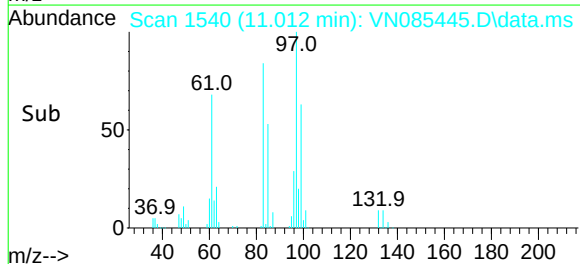
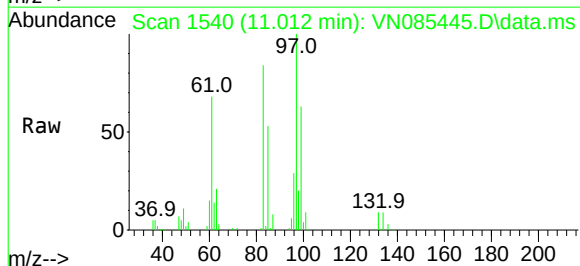
99 62.8 48.6 72.8

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

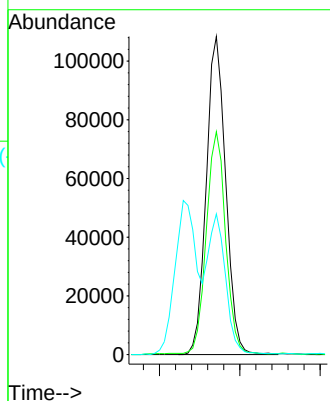
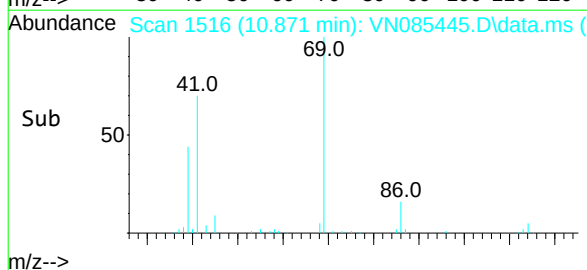
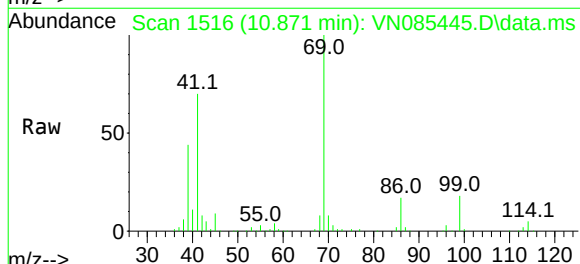
Tgt Ion: 69 Resp: 182170

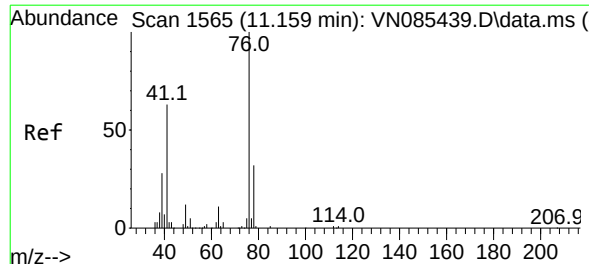
Ion Ratio Lower Upper

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

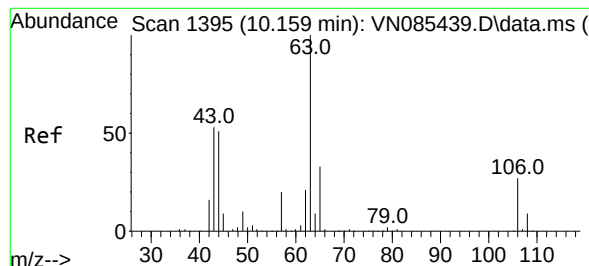
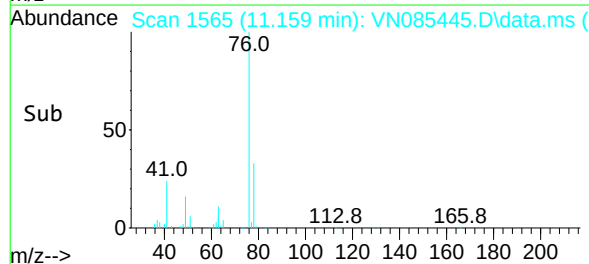
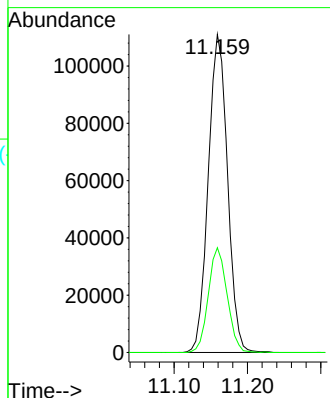
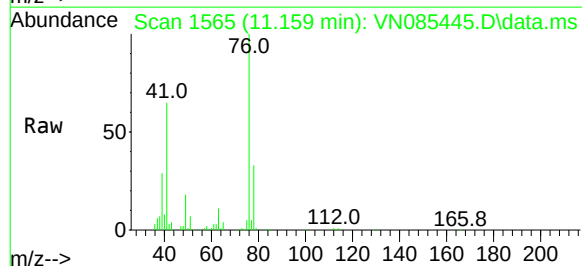
78 32.1 25.6 38.4

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

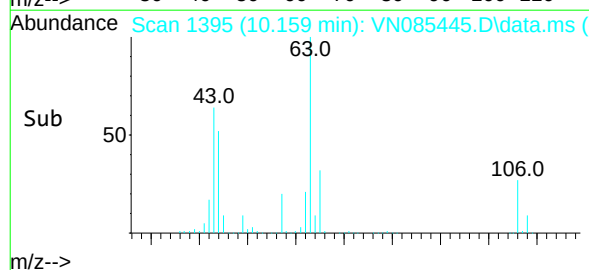
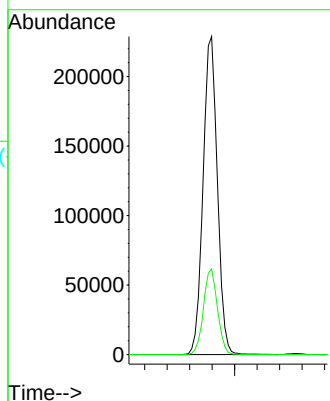
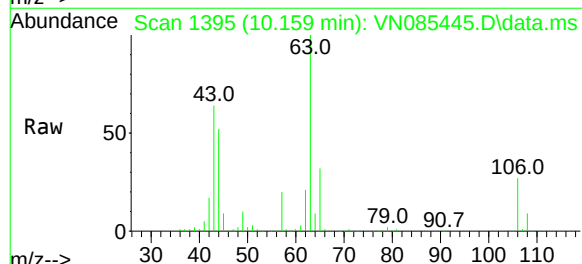
Acq: 14 Jan 2025 18:06

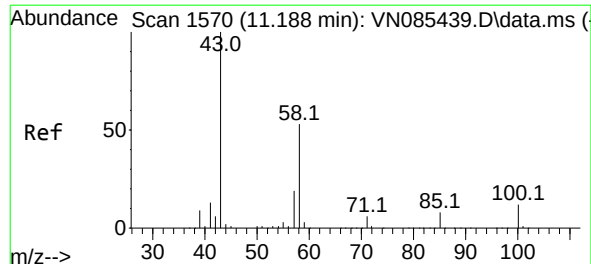
Tgt Ion: 63 Resp: 403949

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

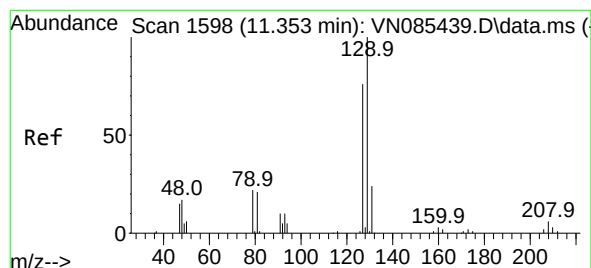
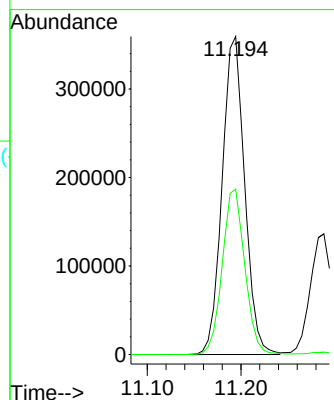
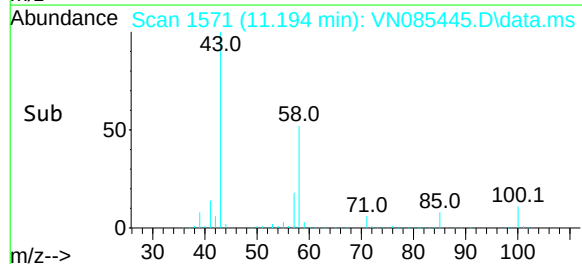
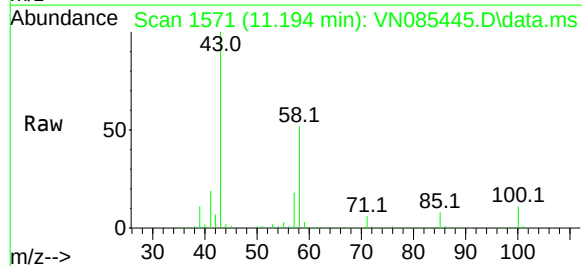
58 52.1 26.2 78.6

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

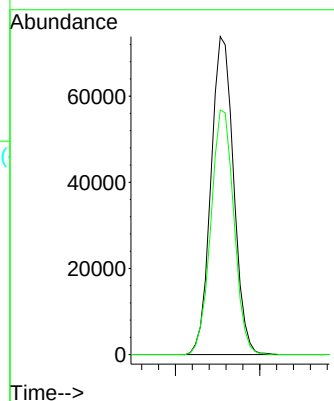
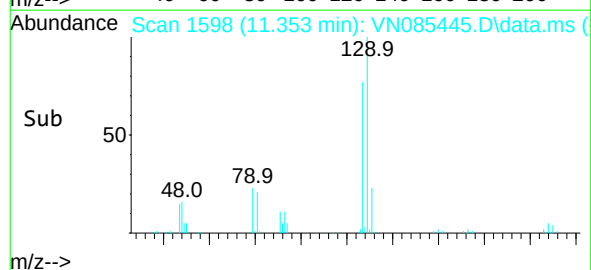
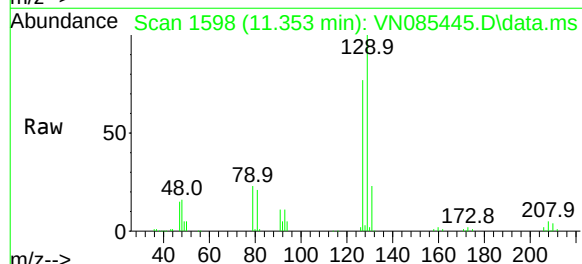
Acq: 14 Jan 2025 18:06

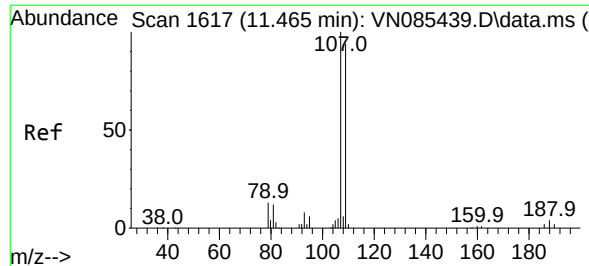
Tgt Ion:129 Resp: 137831

Ion Ratio Lower Upper

129 100

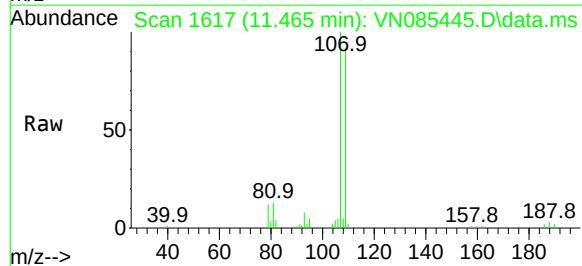
127 78.1 38.6 115.8





#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

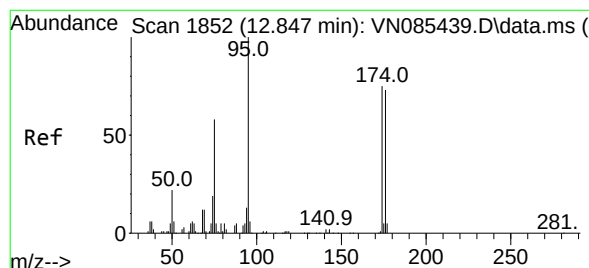
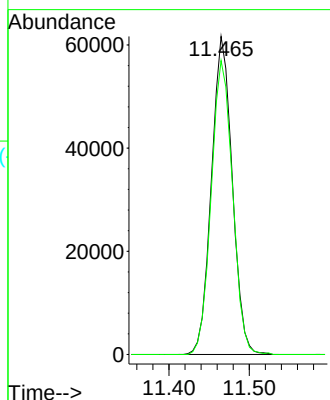
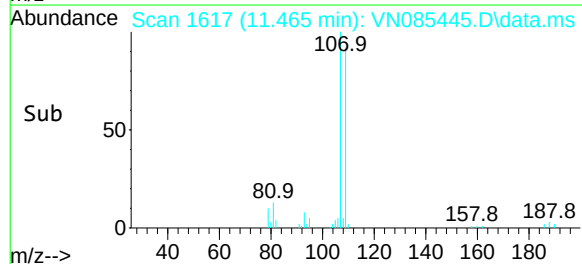
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



Tgt Ion: 107 Resp: 110926  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9

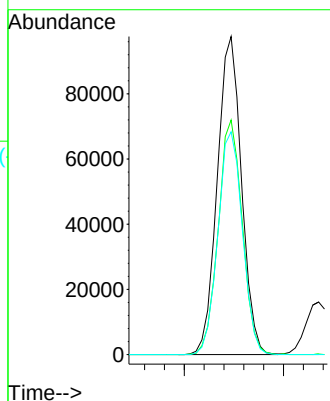
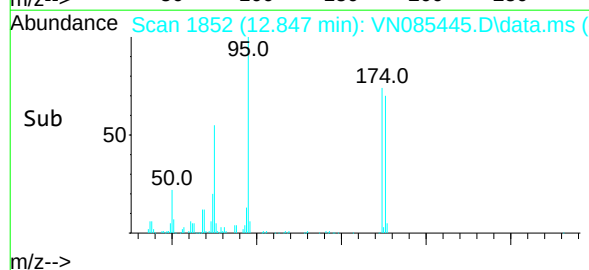
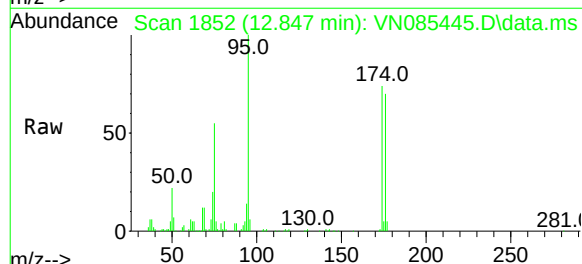
Manual Integrations  
APPROVED

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

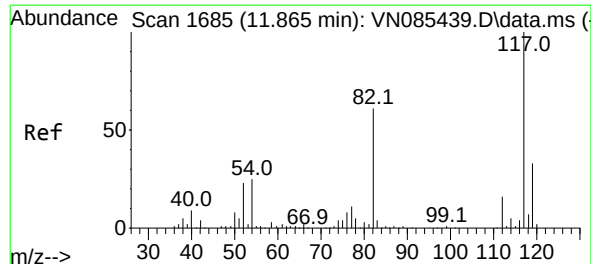


#62  
4-Bromofluorobenzene  
Concen: 52.899 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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

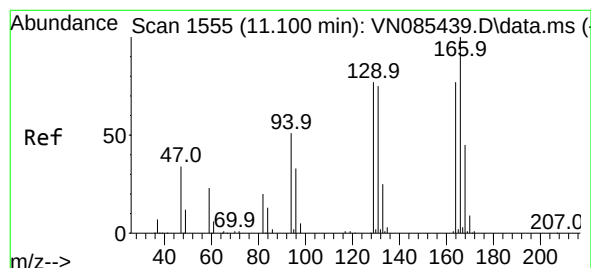
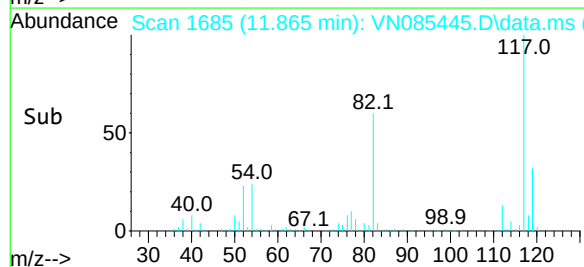
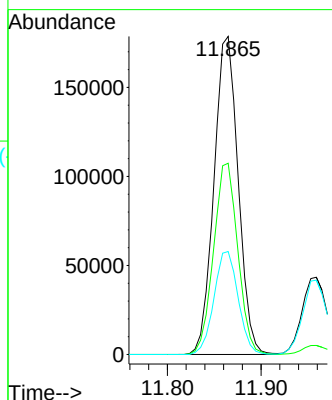
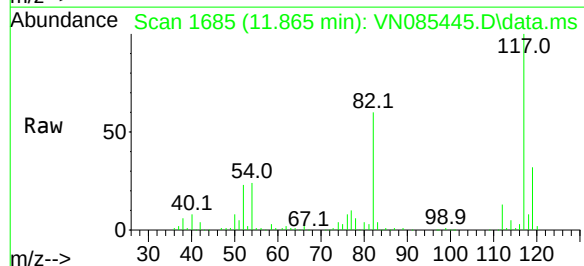
119 32.4 26.6 39.8

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

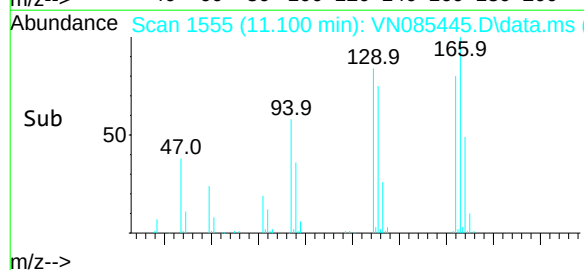
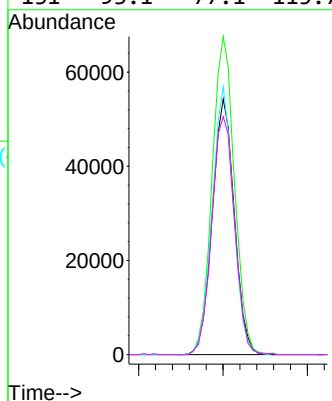
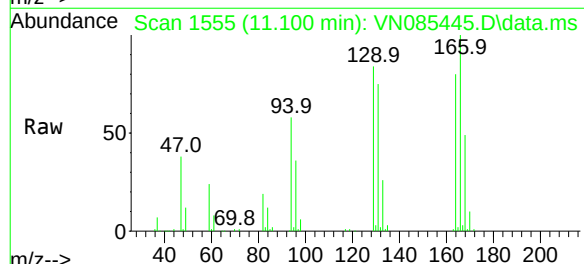
Ion Ratio Lower Upper

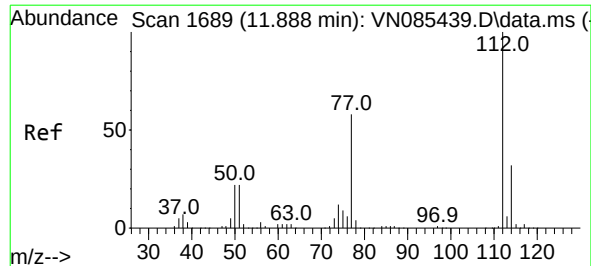
164 100

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

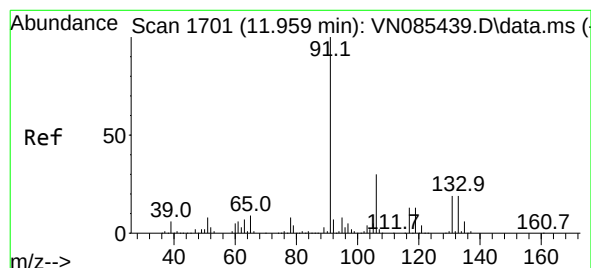
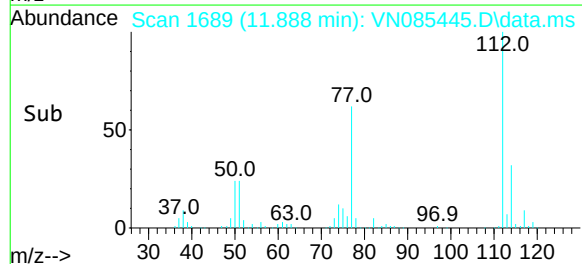
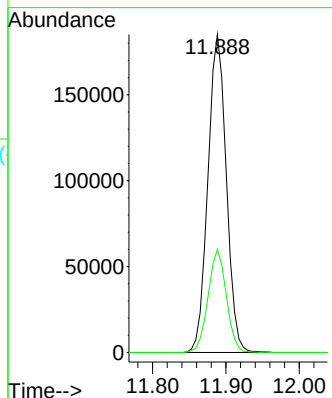
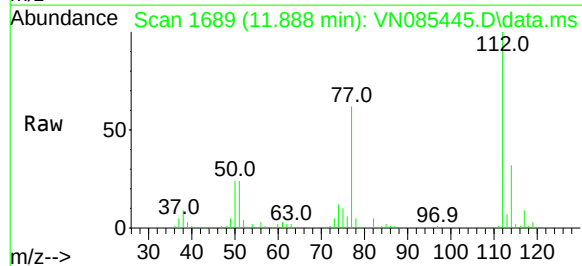
114 32.4 25.3 37.9

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

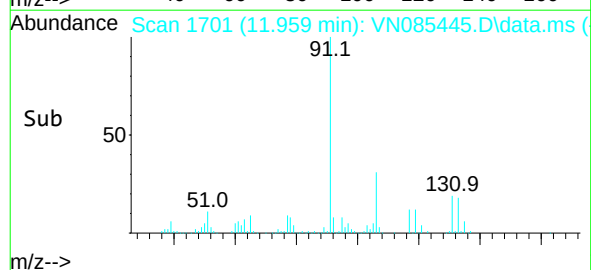
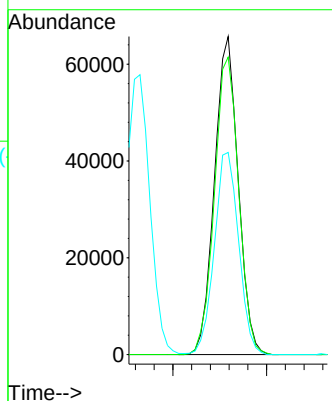
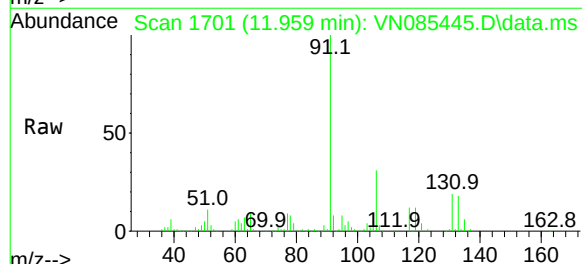
Tgt Ion:131 Resp: 115379

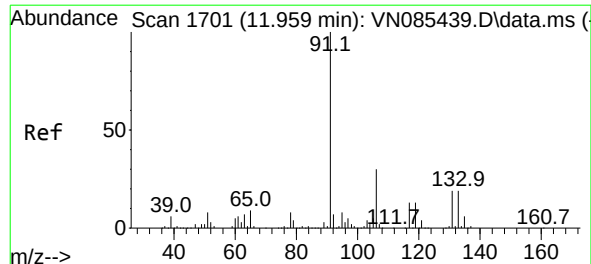
Ion Ratio Lower Upper

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

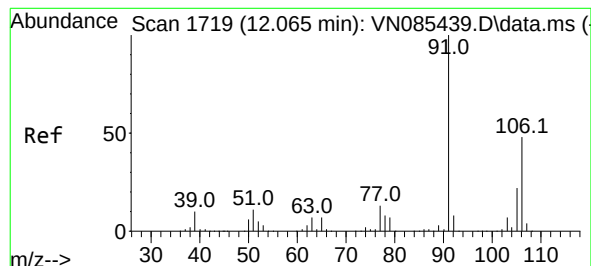
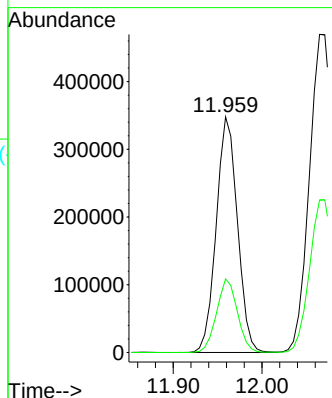
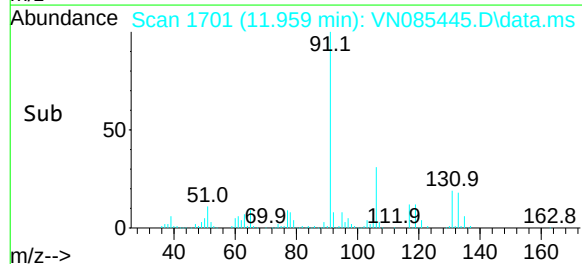
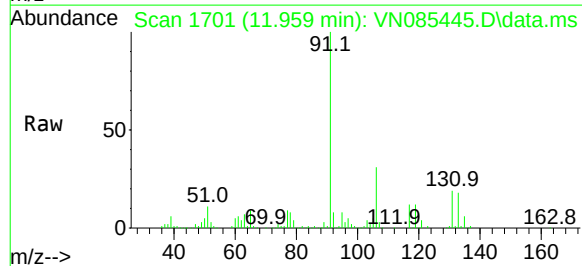
106 31.2 23.8 35.8

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

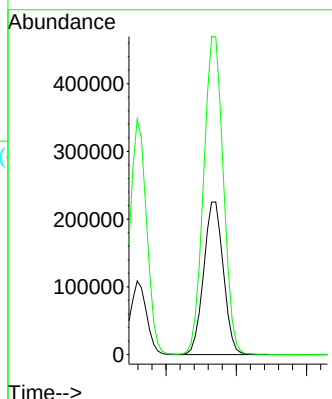
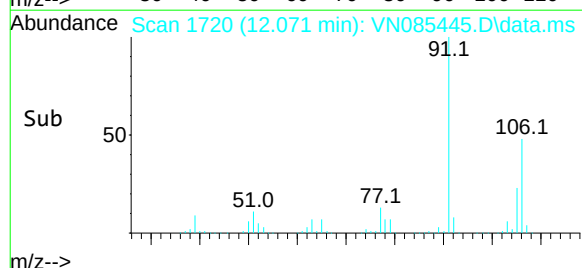
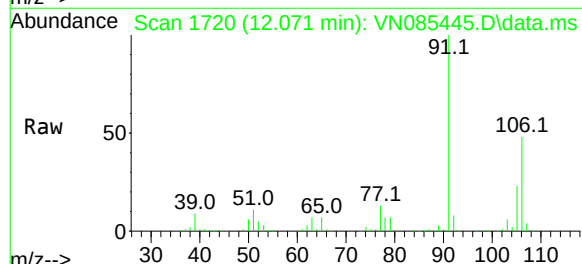
Acq: 14 Jan 2025 18:06

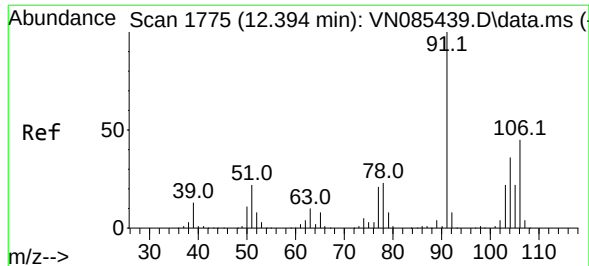
Tgt Ion:106 Resp: 437367

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

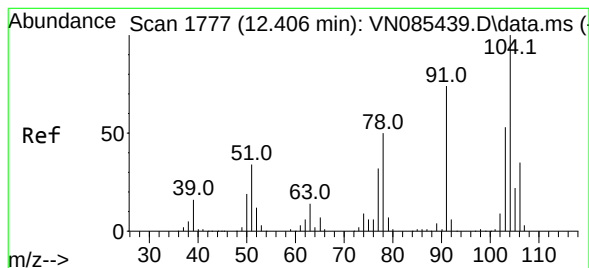
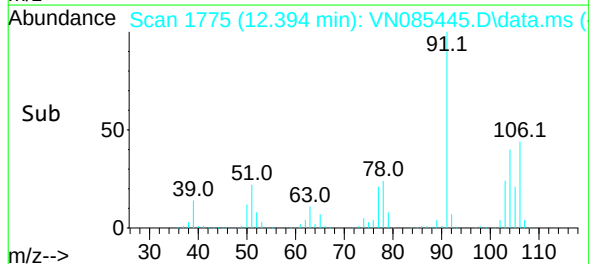
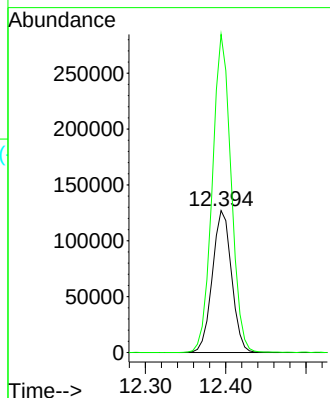
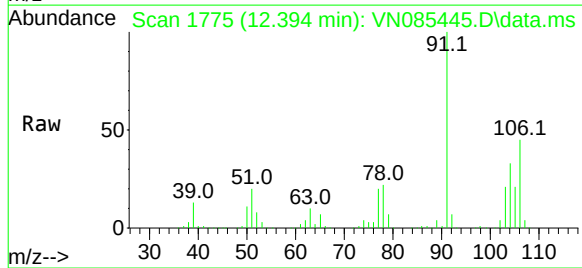
91 219.9 110.4 331.2

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

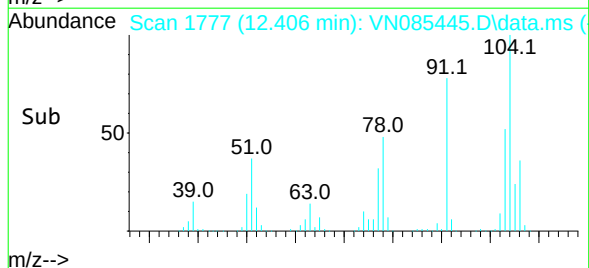
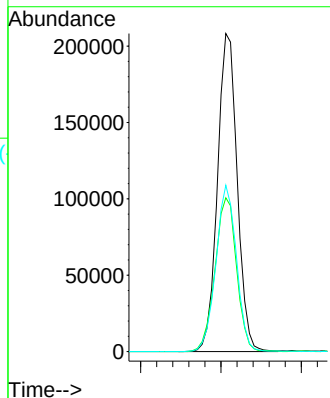
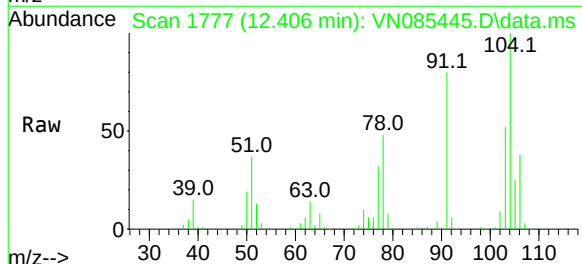
Tgt Ion:104 Resp: 355459

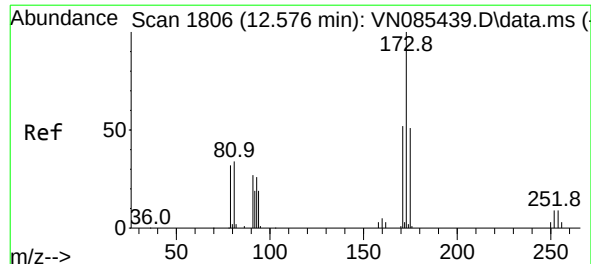
Ion Ratio Lower Upper

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

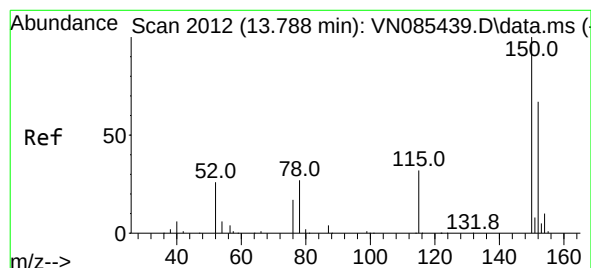
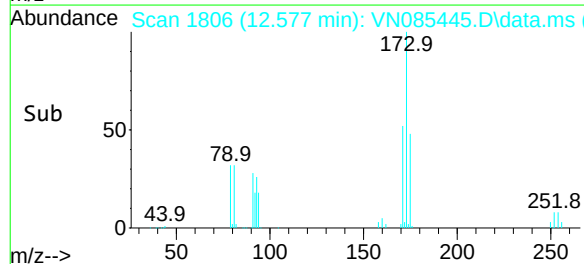
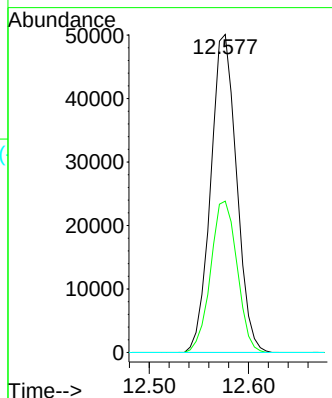
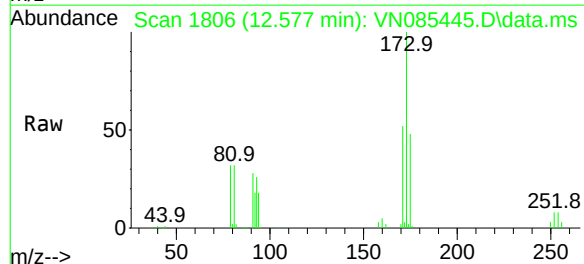
ClientSampleId :

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

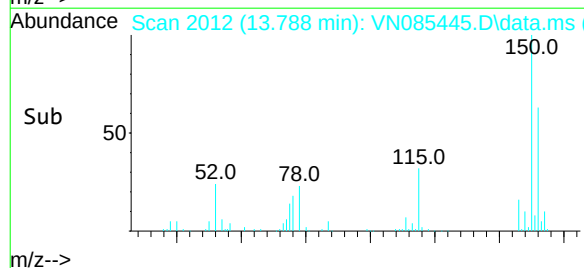
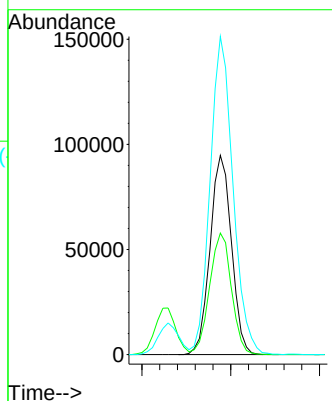
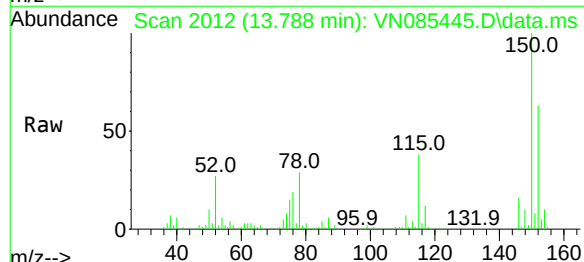
RT: 13.788 min Scan# 2012

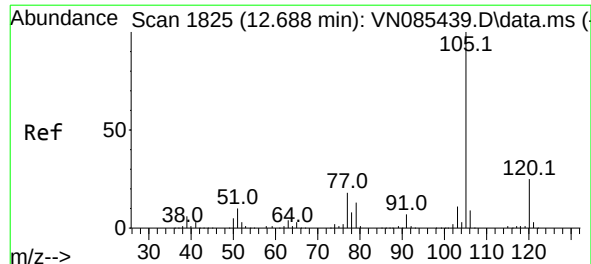
Delta R.T. 0.000 min

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

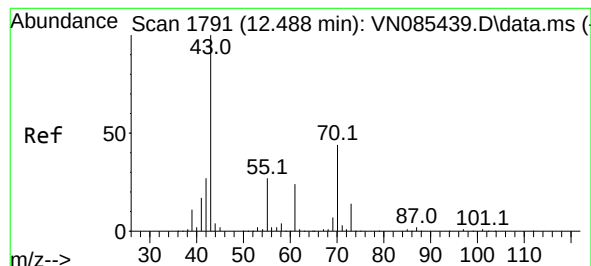
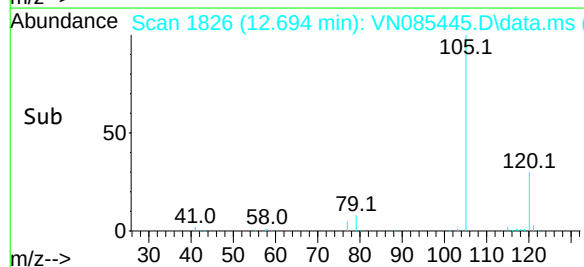
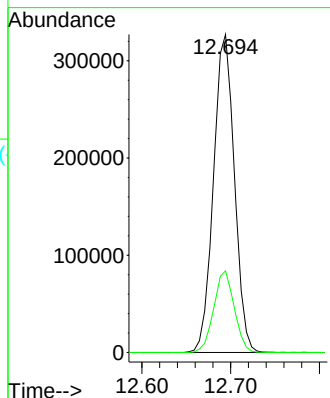
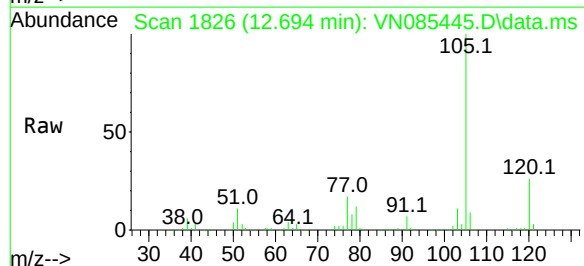
120 25.2 12.8 38.3

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

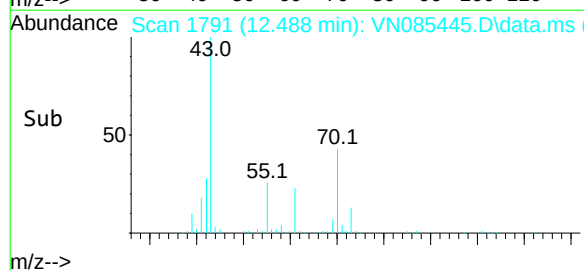
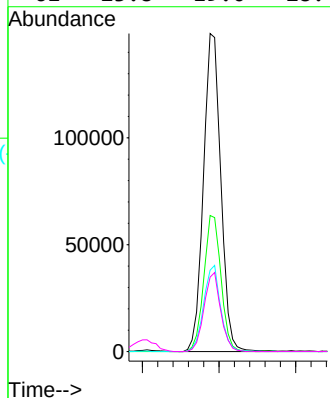
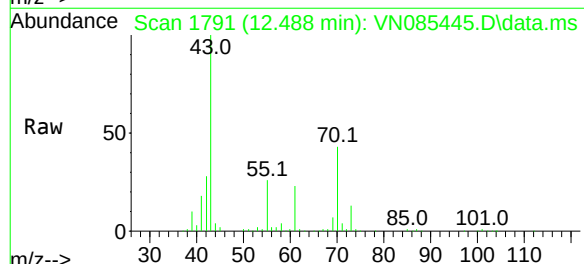
Ion Ratio Lower Upper

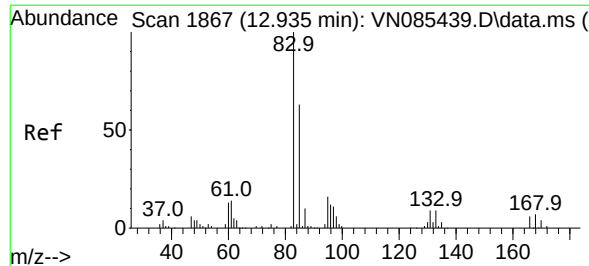
43 100

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# 18

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

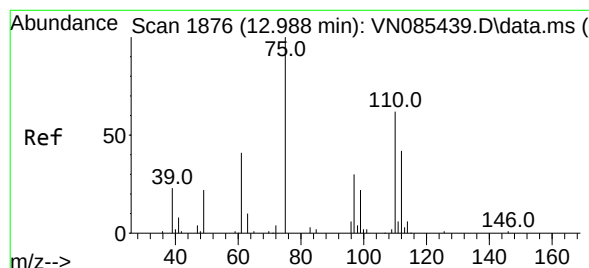
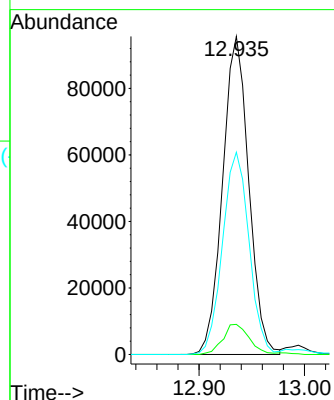
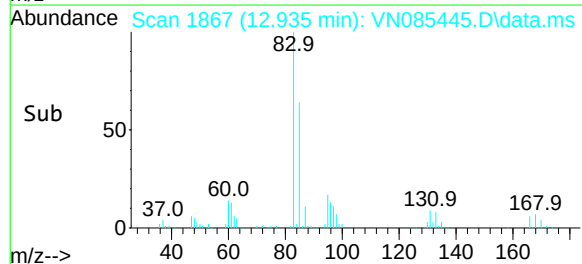
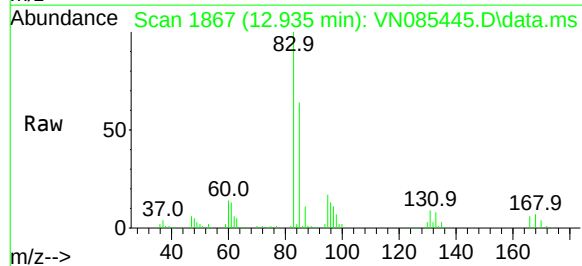
ICVVN011425

|          |       |       |        |
|----------|-------|-------|--------|
| 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

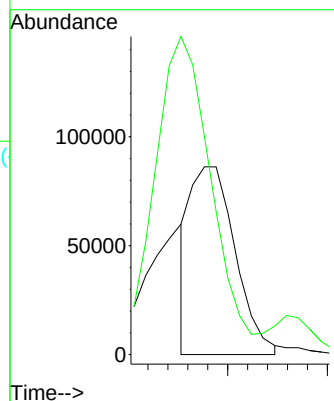
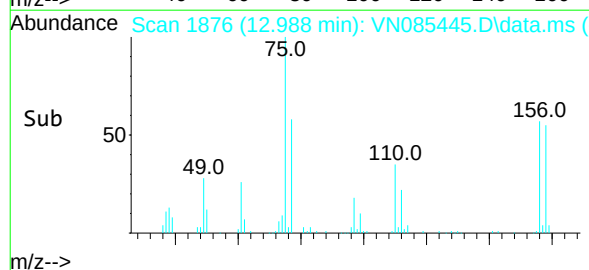
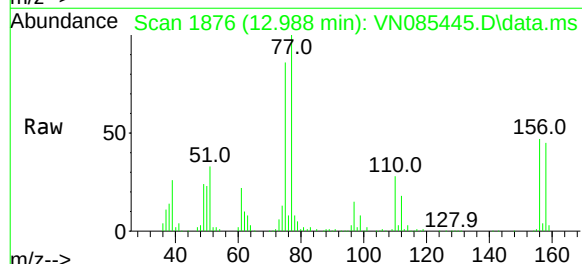
RT: 12.988 min Scan# 1876

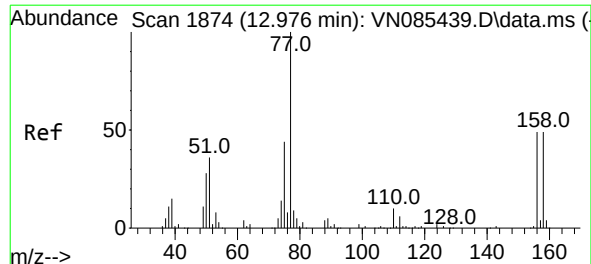
Delta R.T. 0.000 min

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

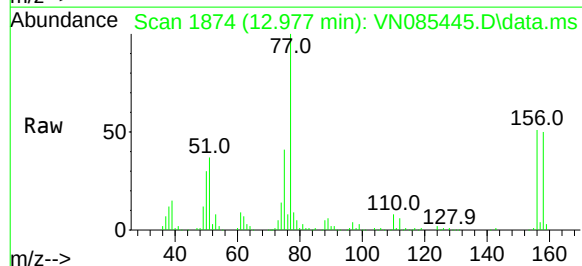
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

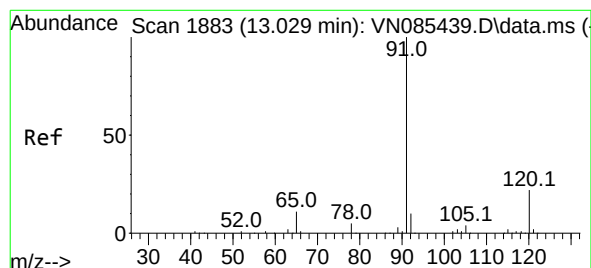
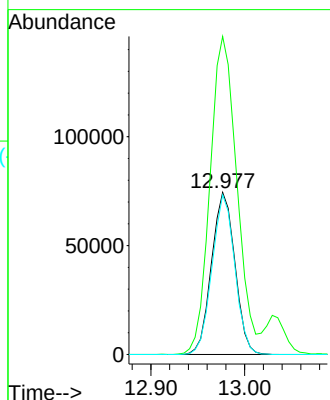
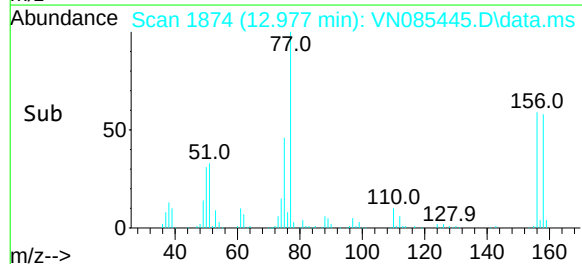
ICVVN011425



| Tgt Ion   | 156   | Resp  | 128968 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | 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

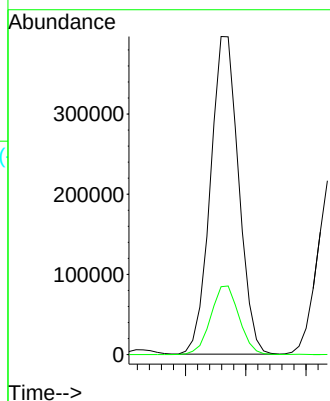
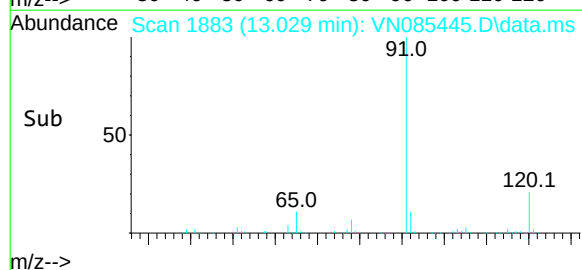
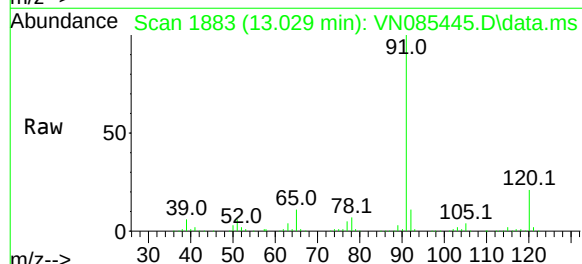
RT: 13.029 min Scan# 1883

Delta R.T. 0.000 min

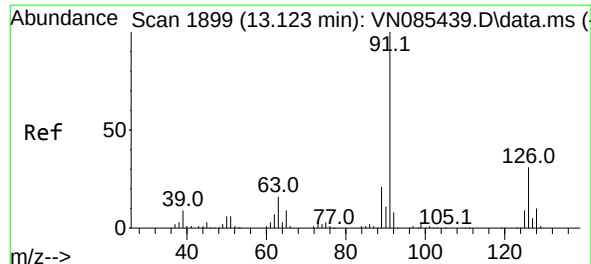
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

| Tgt Ion   | 91   | Resp  | 645977 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | 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

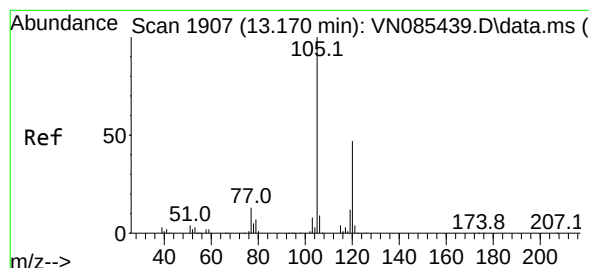
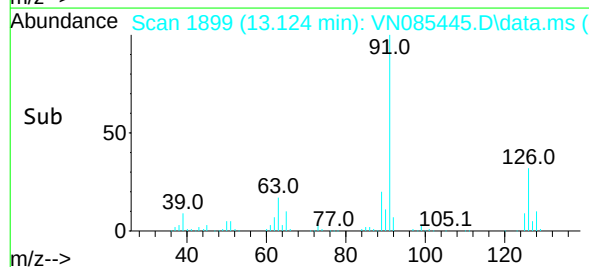
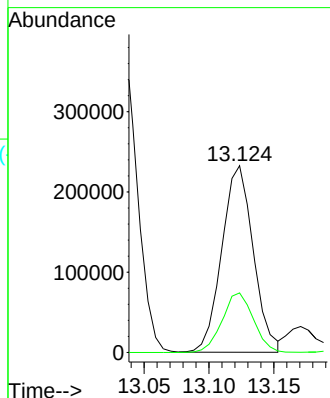
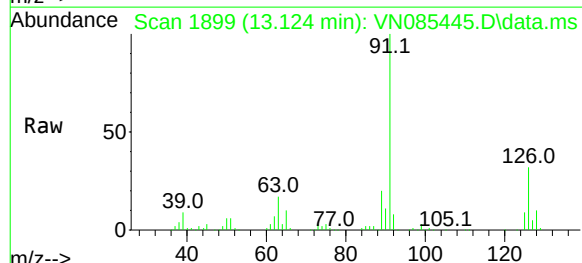
126 31.8 15.7 47.1

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

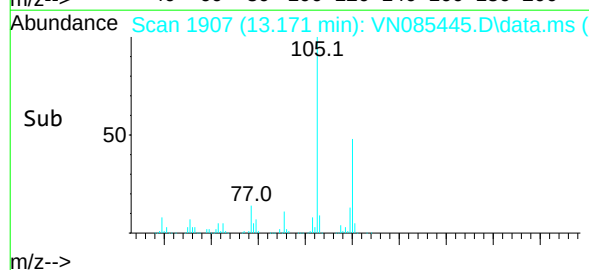
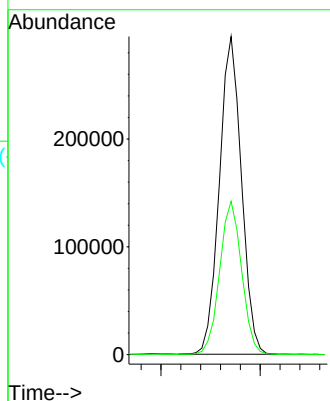
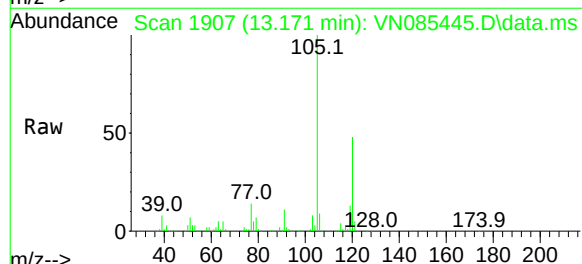
Acq: 14 Jan 2025 18:06

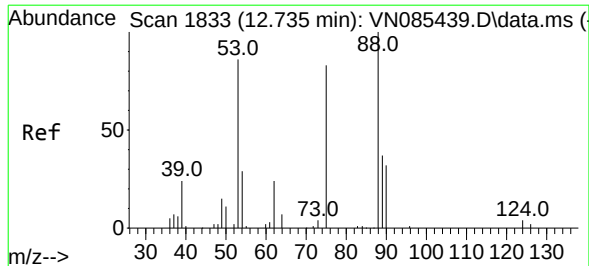
Tgt Ion:105 Resp: 456048

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

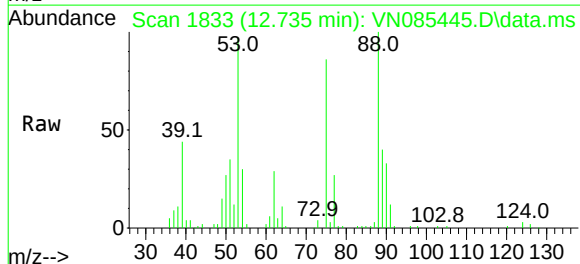
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

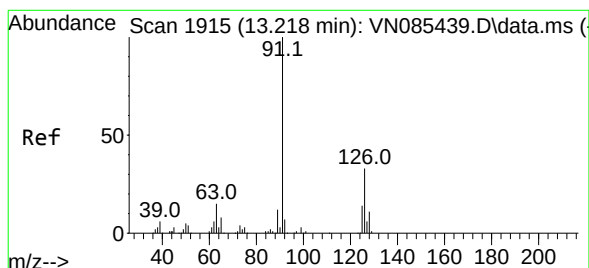
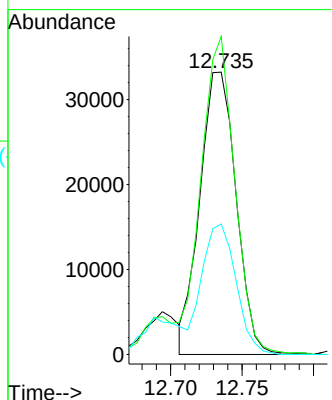
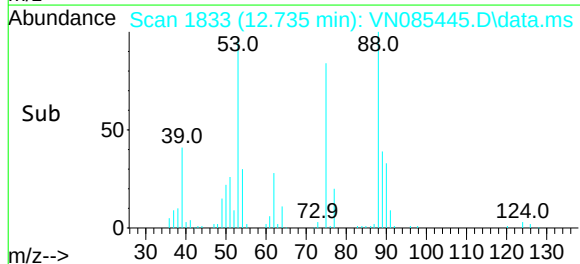
ICVVN011425



| 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

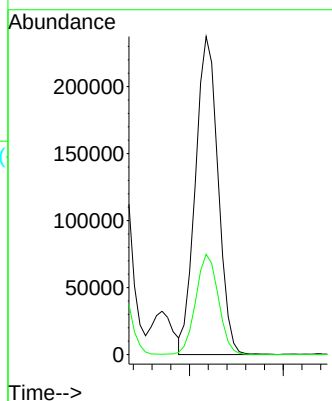
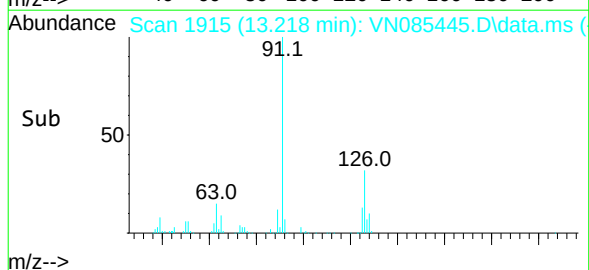
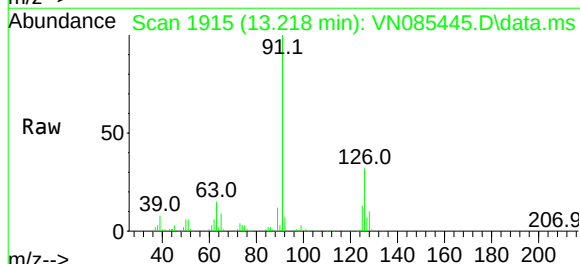
RT: 13.218 min Scan# 1915

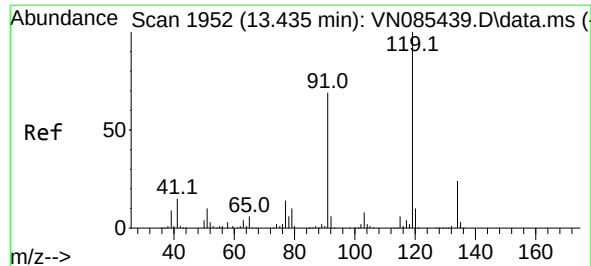
Delta R.T. 0.000 min

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

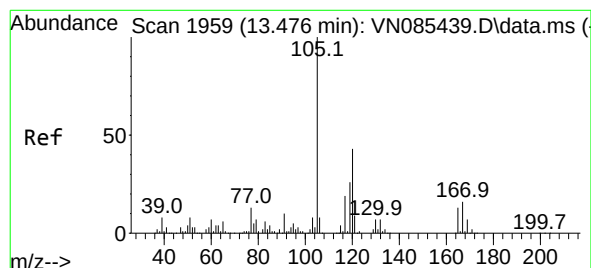
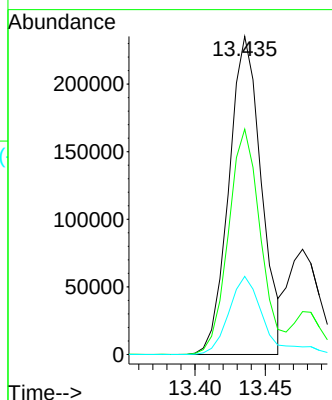
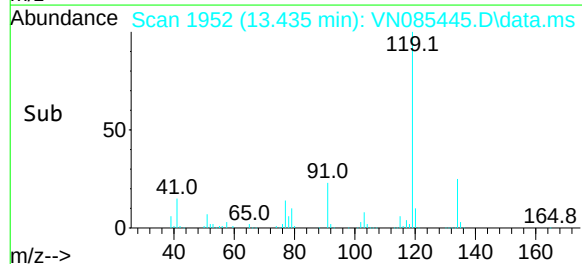
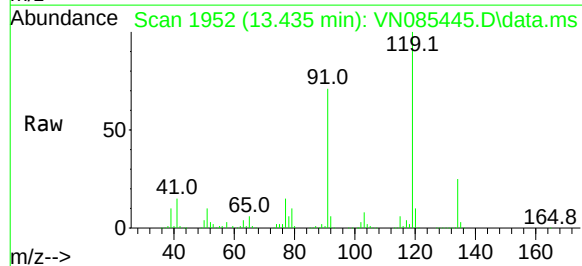
134 26.7 12.0 36.1

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

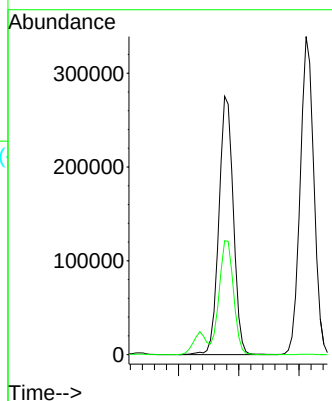
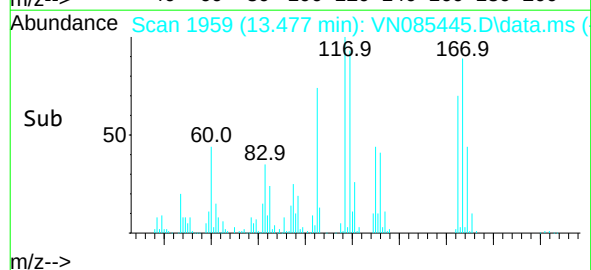
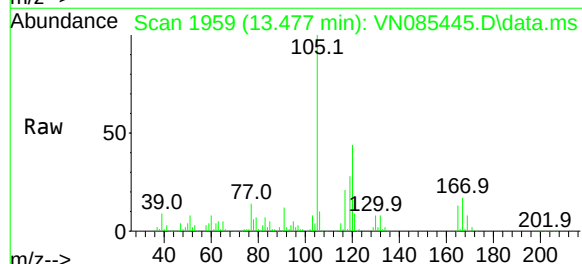
Acq: 14 Jan 2025 18:06

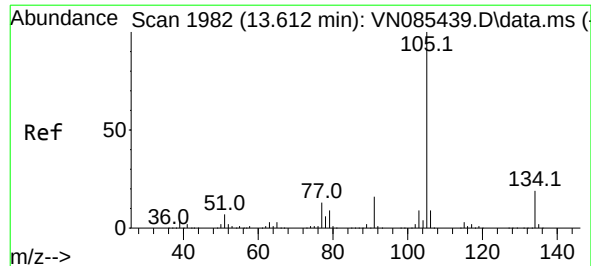
Tgt Ion:105 Resp: 457340

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

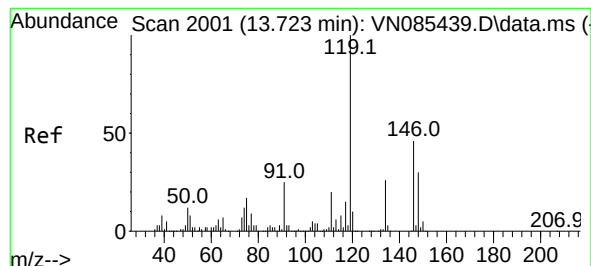
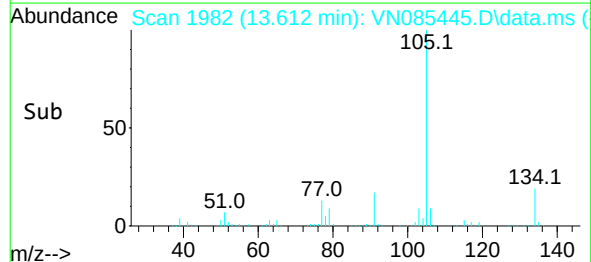
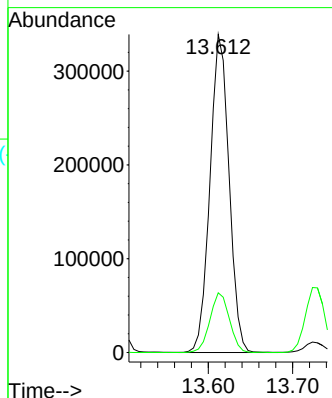
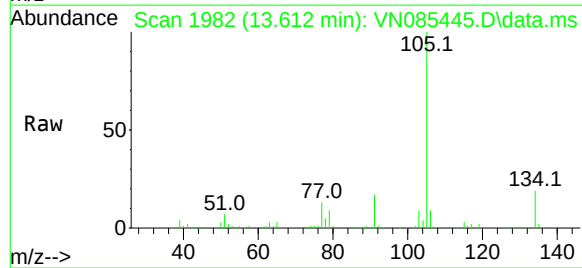
134 19.2 9.7 28.9

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

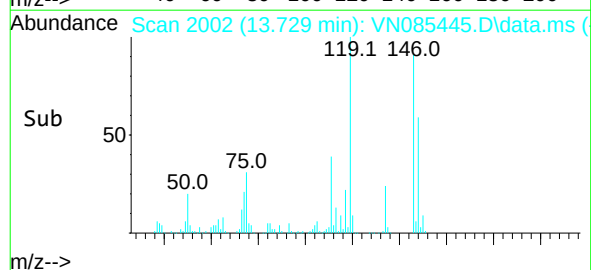
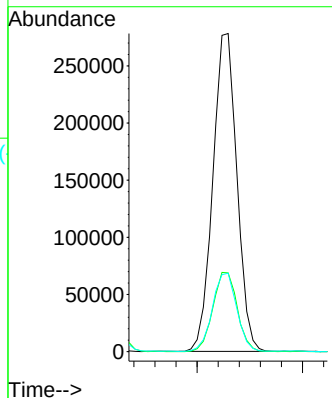
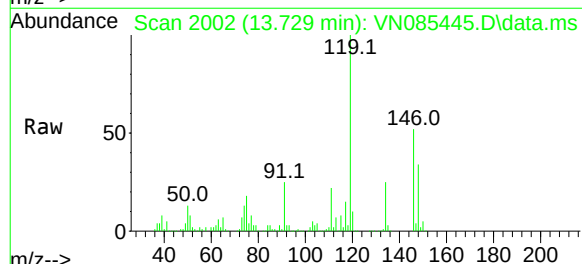
Tgt Ion:119 Resp: 440284

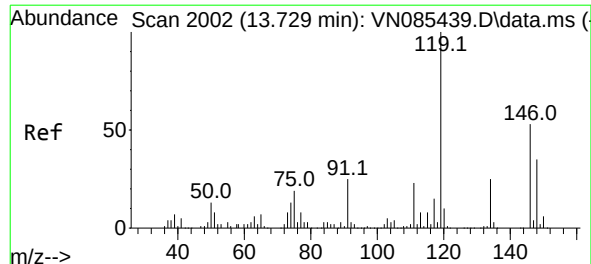
Ion Ratio Lower Upper

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

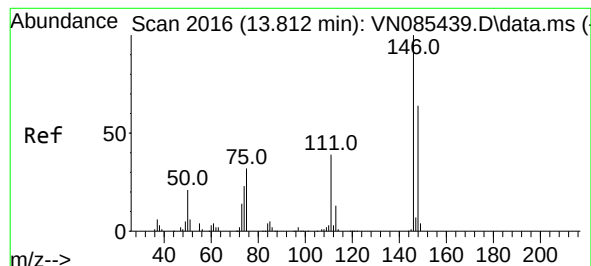
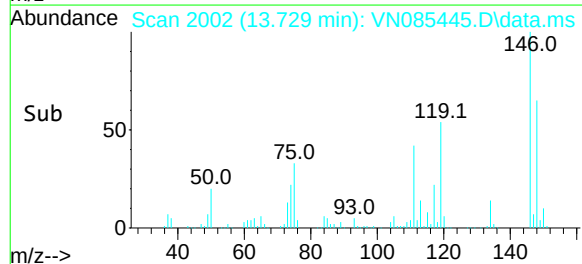
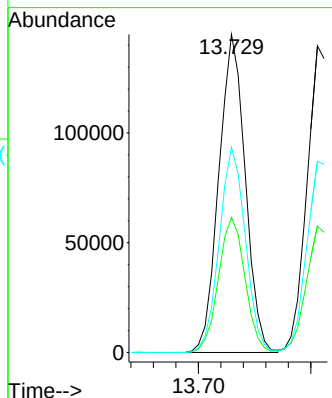
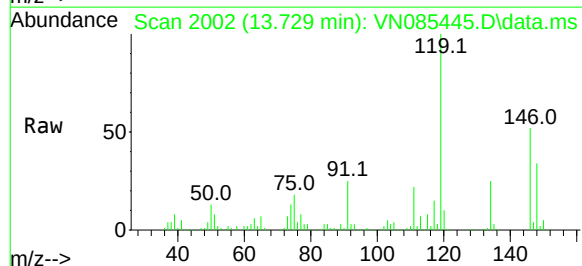
ClientSampleId :

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

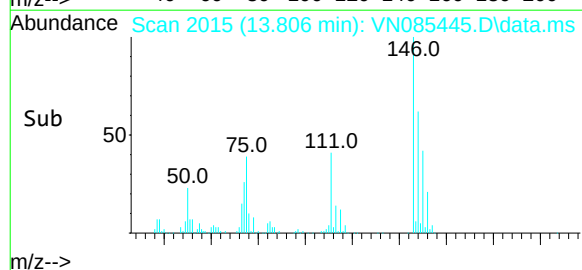
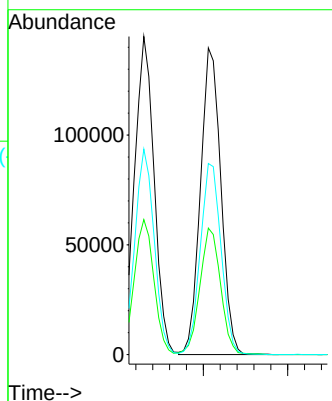
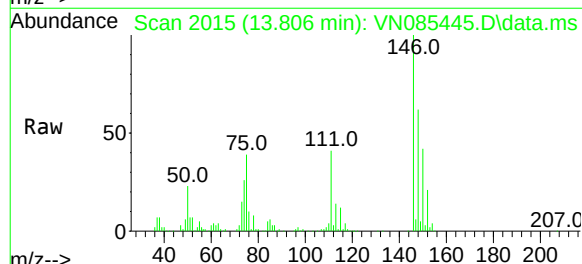
RT: 13.806 min Scan# 2015

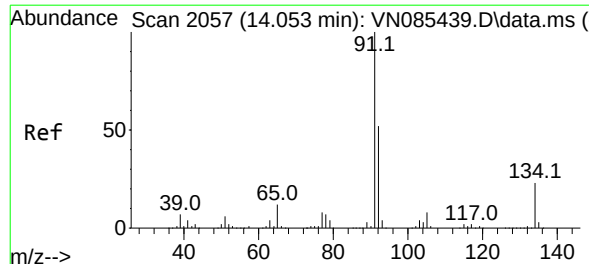
Delta R.T. -0.006 min

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   |





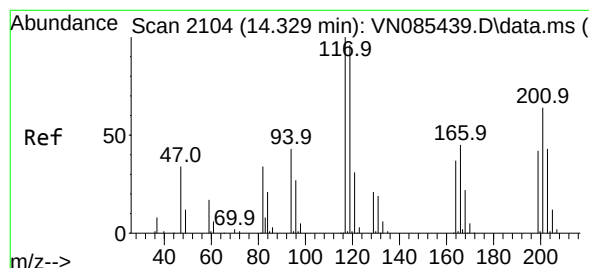
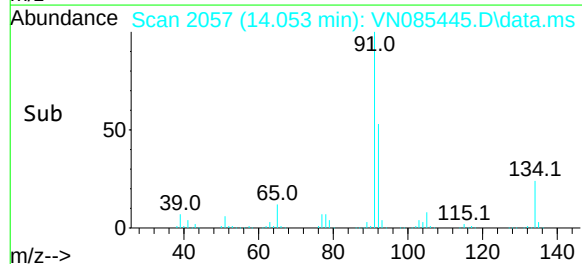
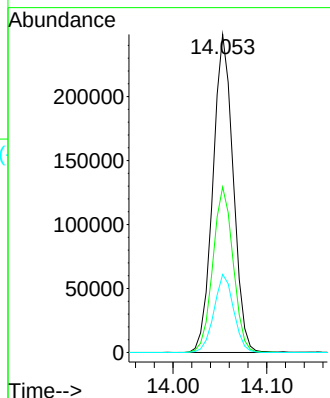
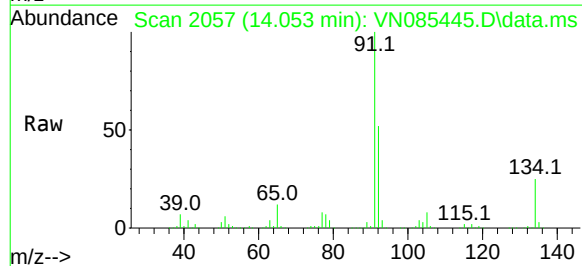
#89  
n-Butylbenzene  
Concen: 50.578 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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   |

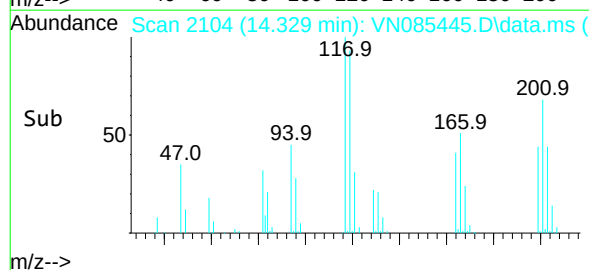
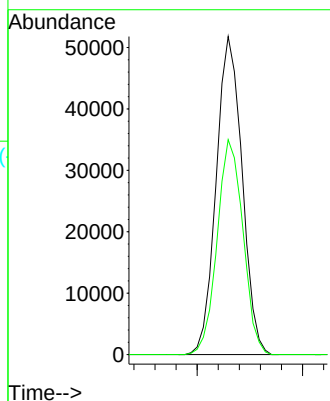
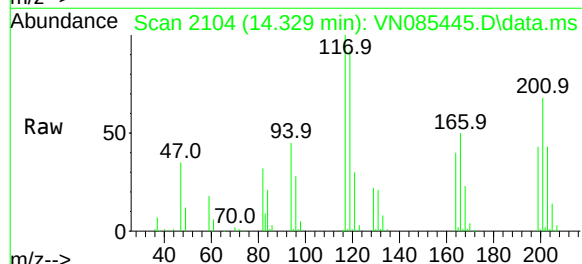
Manual Integrations  
APPROVED

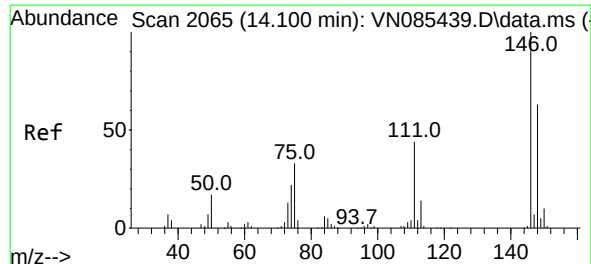
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

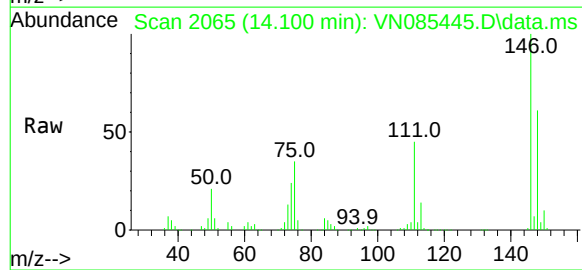
| Tgt Ion: | 117   | Resp: | 88538 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 67.2  | 33.7  | 101.0 |





#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

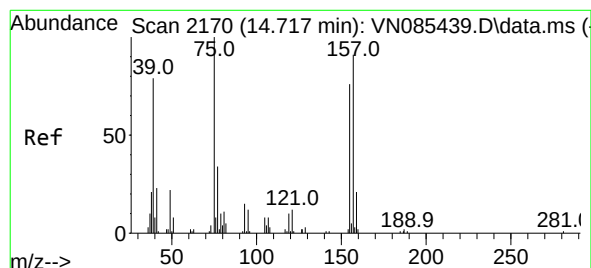
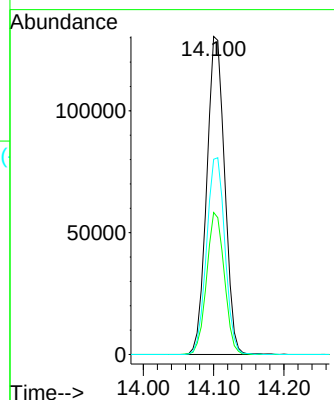
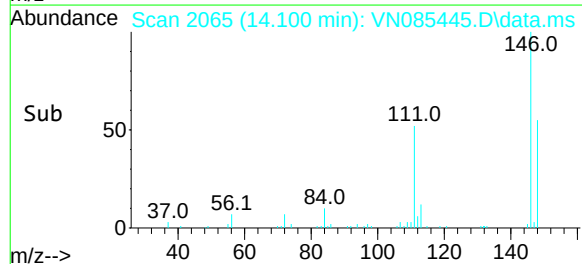
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



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

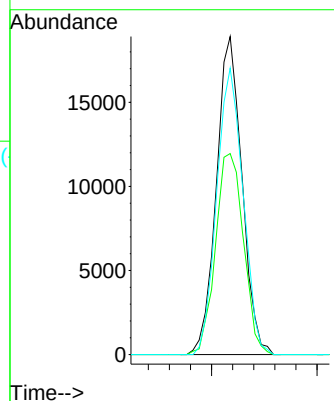
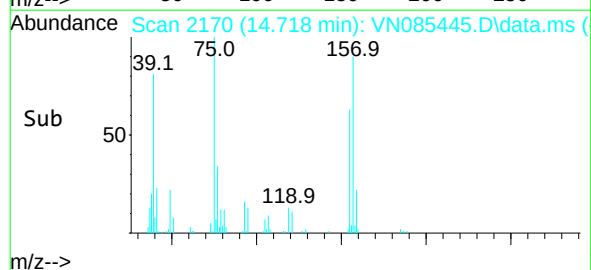
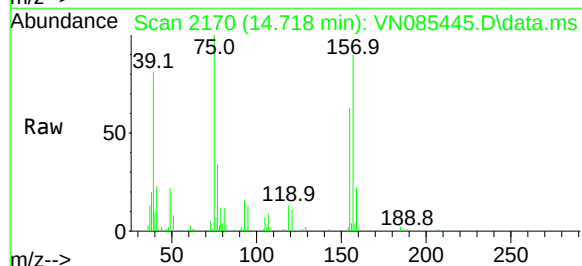
Manual Integrations  
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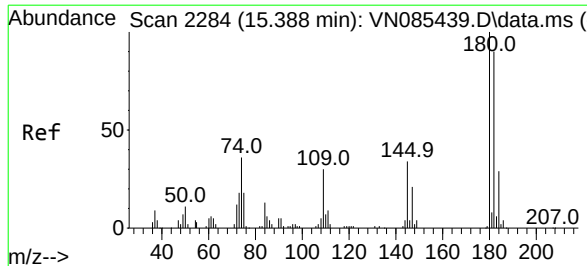
Reviewed By :John Carlone 01/15/2025  
Supervised By :Mahesh Dadoda 01/15/2025



#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

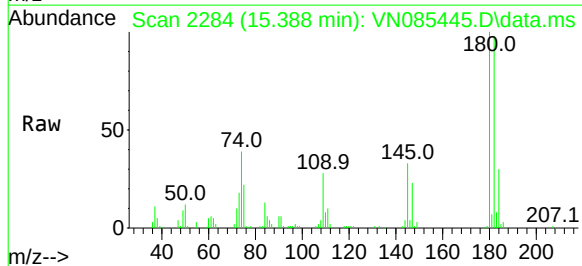
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA\_N

ClientSampleId :

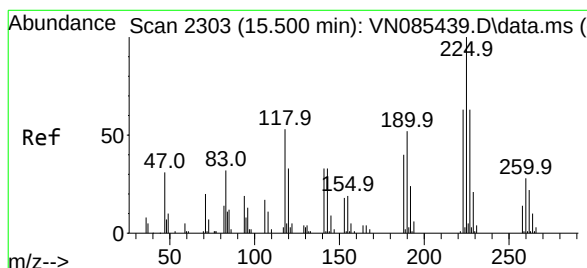
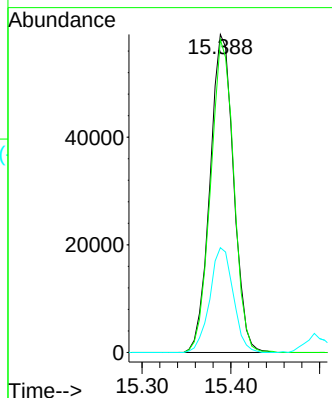
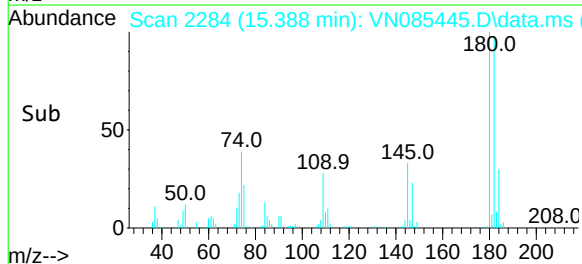
ICVVN011425



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



#94

Hexachlorobutadiene

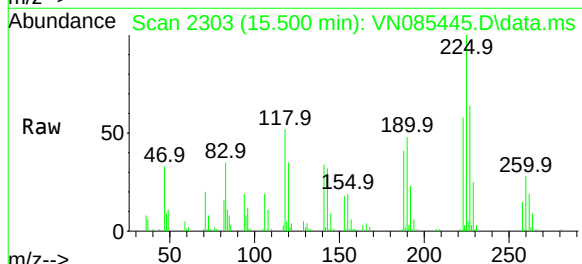
Concen: 42.112 ug/l

RT: 15.500 min Scan# 2303

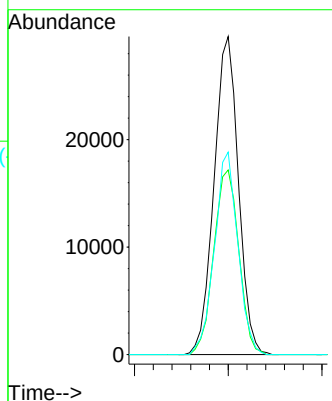
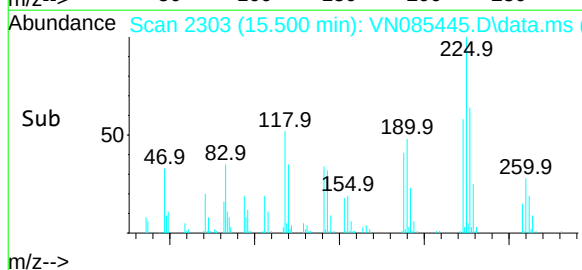
Delta R.T. 0.000 min

Lab File: VN085445.D

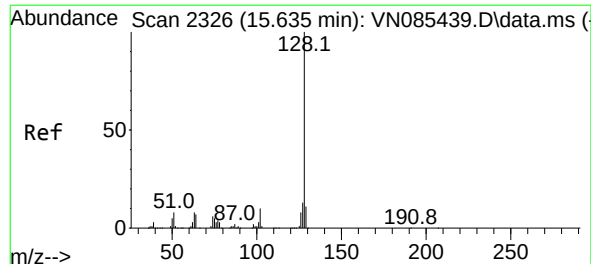
Acq: 14 Jan 2025 18:06



|          |       |       |       |
|----------|-------|-------|-------|
| 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 :

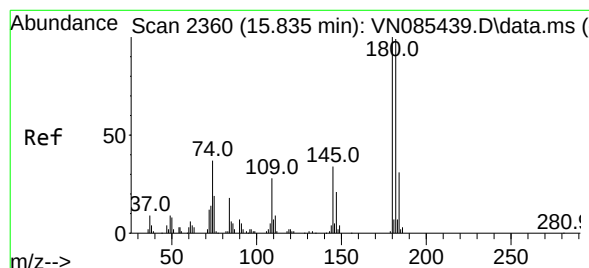
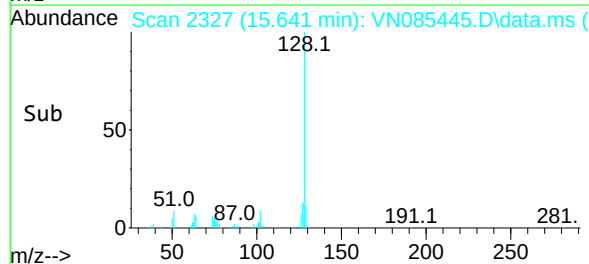
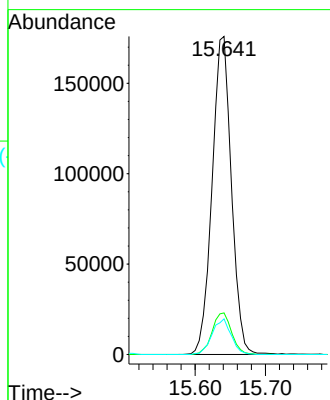
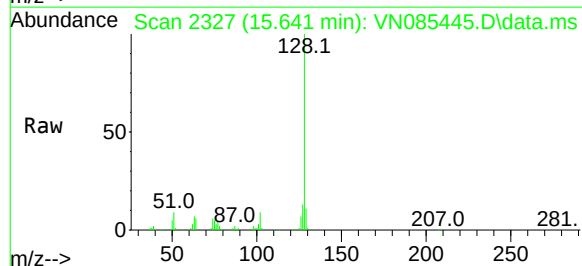
ICVVN011425

|           |       |       |        |
|-----------|-------|-------|--------|
| 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

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



#96

1,2,3-Trichlorobenzene

Concen: 44.551 ug/l

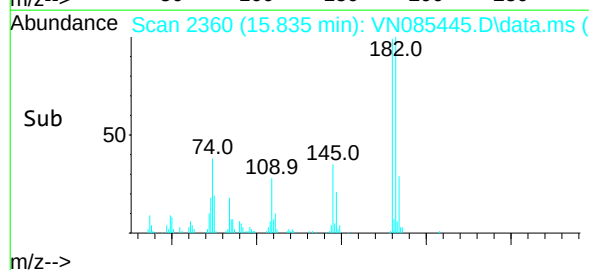
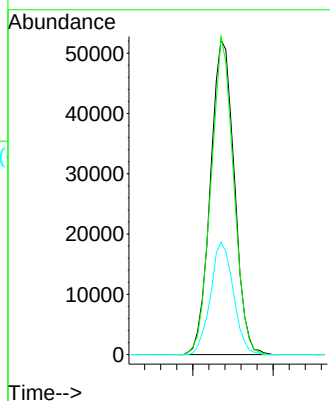
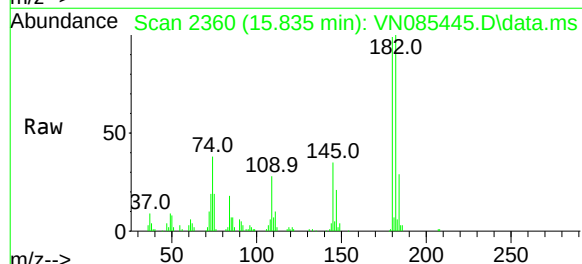
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 107583 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 95.6  | 47.4  | 142.2  |
| 145       | 34.3  | 16.9  | 50.7   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 110   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.677 | 0.593 | 12.4  | 104   | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.629 | 14.2  | 102   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.629 | 14.7# | 101   | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.364 | 18.2  | 96    | 0.00     |
| 6 T   | Chloroethane                | 0.467 | 0.395 | 15.4  | 103   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.069 | 0.940 | 12.1  | 104   | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.316 | 14.4  | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.538 | 10.6  | 109   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.638 | 7.5   | 98    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.076 | 17.4  | 90    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.486 | 9.5#  | 101   | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.124 | 1.6   | 97    | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.775 | 11.0  | 101   | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.268 | 8.8   | 99    | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.223 | 14.6  | 98    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.366 | 17.3  | 102   | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.714 | 10.0  | 100   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.665 | 4.4   | 98    | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.555 | 14.1  | 97    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.512 | 10.6  | 102   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 1.817 | 6.0   | 98    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.339 | 1.0   | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.040 | 11.7  | 98    | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.351 | 8.6   | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 0.907 | 4.8   | 107   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.614 | 9.0   | 99    | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.484 | 11.7  | 98    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.233 | 4.1   | 98    | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.074 | 11.8# | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.878 | 14.3  | 110   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 0.947 | 11.3  | 103   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.804 | 0.4   | 107   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 109   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.352 | -1.4  | 107   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.437 | 10.3  | 103   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.434 | 11.6  | 97    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.496 | 11.0  | 102   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.455 | 0.4   | 107   | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.336 | 8.7   | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.241 | 5.9   | 97    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.501 | 9.1   | 100   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 0.716 | 9.0   | 96    | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.297 | 12.9  | 100   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.334 | 10.7# | 98    | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.238 | 11.9  | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.502 | 8.6   | 98    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.354 | 0.0   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.005 | 16.7  | 81    | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.289 | -4.6  | 111   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.449 | 1.8   | 99    | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.815 | 3.9#  | 102   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.496 | 4.4   | 98    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.530 | 4.3   | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.310 | 7.5   | 99    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.492 | -4.9  | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.547 | 6.2   | 99    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.218 | -2.3  | 99    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.323 | -0.6  | 99    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.372 | 8.1   | 98    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.299 | 10.5  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.446 | -5.7  | 108   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.306 | 10.3  | 102   | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.006 | 8.1   | 101   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.359 | 10.7  | 99    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.798 | -0.8# | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.681 | -3.3  | 104   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.656 | -4.1  | 104   | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.108 | -6.2  | 102   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.283 | 1.7   | 98    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.371 | 0.1   | 106   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.478 | 2.6   | 99    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.040 | 12.8  | 98    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 0.851 | 16.2  | 103   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.814 | 7.7   | 103   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.075 | -2.0  | 106   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.475 | 4.3   | 104   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 2.877 | -3.2  | 106   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.370 | 1.6   | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.511 | 2.4   | 105   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.387 | -2.0  | 106   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 2.885 | -3.9  | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.360 | -3.6  | 106   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 2.777 | -5.5  | 105   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.491 | 8.2   | 103   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.484 | 11.8  | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.354 | -1.2  | 103   | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.559 | 9.5   | 105   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.461 | 9.8   | 102   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.201 | 7.8   | 98    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.689 | 8.5   | 95    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.337 | 15.8  | 99    | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.117 | 5.7   | 92    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085445.D  
Acq On : 14 Jan 2025 18:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Quant Time: Jan 15 02:20:47 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.762 | 0.679 | 10.9 | 93    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
 Data File : VN085445.D  
 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 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.: Q1062 SAS No.: Q1062 SDG No.: Q1062

Instrument ID: MSVOA\_N Calibration Date/Time: 01/15/2025 09:03

Lab File ID: VN085447.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 | 0.674  | 0.1        | -8.05  | 20    |
| Vinyl Chloride                 | 0.737 | 0.696  |            | -5.56  | 20    |
| Bromomethane                   | 0.445 | 0.401  |            | -9.89  | 20    |
| Chloroethane                   | 0.467 | 0.426  |            | -8.78  | 20    |
| Trichlorofluoromethane         | 1.069 | 1.042  |            | -2.53  | 20    |
| 1,1,2-Trichlorotrifluoroethane | 0.602 | 0.600  |            | -0.33  | 20    |
| 1,1-Dichloroethene             | 0.537 | 0.531  |            | -1.12  | 20    |
| Acetone                        | 0.261 | 0.230  |            | -11.88 | 20    |
| Carbon Disulfide               | 1.652 | 1.522  |            | -7.87  | 20    |
| Methyl tert-butyl Ether        | 1.742 | 1.757  |            | 0.86   | 20    |
| Methylene Chloride             | 0.646 | 0.605  |            | -6.35  | 20    |
| trans-1,2-Dichloroethene       | 0.573 | 0.562  |            | -1.92  | 20    |
| 1,1-Dichloroethane             | 1.178 | 1.146  | 0.1        | -2.72  | 20    |
| 2-Butanone                     | 0.384 | 0.337  |            | -12.24 | 20    |
| Carbon Tetrachloride           | 0.557 | 0.563  |            | 1.08   | 20    |
| cis-1,2-Dichloroethene         | 0.675 | 0.674  |            | -0.15  | 20    |
| Chloroform                     | 1.218 | 1.163  |            | -4.52  | 20    |
| 1,1,1-Trichloroethane          | 1.068 | 1.035  |            | -3.09  | 20    |
| Methylcyclohexane              | 0.457 | 0.528  |            | 15.54  | 20    |
| Benzene                        | 1.463 | 1.504  |            | 2.8    | 20    |
| 1,2-Dichloroethane             | 0.551 | 0.550  |            | -0.18  | 20    |
| Trichloroethene                | 0.341 | 0.345  |            | 1.17   | 20    |
| 1,2-Dichloropropane            | 0.374 | 0.377  |            | 0.8    | 20    |
| Bromodichloromethane           | 0.549 | 0.568  |            | 3.46   | 20    |
| 4-Methyl-2-Pentanone           | 0.457 | 0.440  |            | -3.72  | 20    |
| Toluene                        | 0.848 | 0.916  |            | 8.02   | 20    |
| t-1,3-Dichloropropene          | 0.519 | 0.555  |            | 6.94   | 20    |
| cis-1,3-Dichloropropene        | 0.554 | 0.594  |            | 7.22   | 20    |
| 1,1,2-Trichloroethane          | 0.335 | 0.337  |            | 0.6    | 20    |
| 2-Hexanone                     | 0.321 | 0.312  |            | -2.8   | 20    |
| Dibromochloromethane           | 0.405 | 0.408  |            | 0.74   | 20    |
| Tetrachloroethene              | 0.341 | 0.355  |            | 4.11   | 20    |
| Chlorobenzene                  | 1.095 | 1.101  | 0.3        | 0.55   | 20    |
| Ethyl Benzene                  | 1.784 | 1.967  |            | 10.26  | 20    |
| m/p-Xylenes                    | 0.659 | 0.755  |            | 14.57  | 20    |
| o-Xylene                       | 0.630 | 0.699  |            | 10.95  | 20    |
| Styrene                        | 1.043 | 1.208  |            | 15.82  | 20    |
| Bromoform                      | 0.288 | 0.302  | 0.1        | 4.86   | 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.: Q1062 SAS No.: Q1062 SDG No.: Q1062

Instrument ID: MSVOA\_N Calibration Date/Time: 01/15/2025 09:03

Lab File ID: VN085447.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 | 3.662  |            | 8.5    | 20    |
| 1,1,2,2-Tetrachloroethane | 1.192 | 1.047  | 0.3        | -12.16 | 20    |
| 1,3-Dichlorobenzene       | 1.624 | 1.628  |            | 0.25   | 20    |
| 1,4-Dichlorobenzene       | 1.683 | 1.618  |            | -3.86  | 20    |
| 1,2-Dichlorobenzene       | 1.620 | 1.533  |            | -5.37  | 20    |
| 1,2-Dichloroethane-d4     | 0.807 | 0.819  |            | 1.49   | 20    |
| Dibromofluoromethane      | 0.347 | 0.369  |            | 6.34   | 20    |
| Toluene-d8                | 1.232 | 1.356  |            | 10.06  | 20    |
| 4-Bromofluorobenzene      | 0.422 | 0.469  |            | 11.14  | 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\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:51:35 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  | 218273   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 358609   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.859 | 117  | 316952   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 158347   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.571  | 65    | 178793   | 50.745   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 101.480% |
| 35) Dibromofluoromethane  | 8.159  | 113   | 132381   | 53.211   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 106.420% |
| 50) Toluene-d8            | 10.559 | 98    | 486444   | 55.032   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 110.060% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 168340   | 55.673   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 111.340% |

## Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 143408  | 48.525  | ug/l | 99     |
| 3) Chloromethane             | 2.359 | 50  | 147166  | 45.992  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.518 | 62  | 151933  | 47.239  | ug/l | 99     |
| 5) Bromomethane              | 2.959 | 94  | 87556   | 45.067  | ug/l | 97     |
| 6) Chloroethane              | 3.124 | 64  | 93081   | 45.648  | ug/l | 95     |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 227366  | 48.720  | ug/l | 100    |
| 8) Diethyl Ether             | 3.959 | 74  | 73785   | 45.767  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 130921  | 49.808  | ug/l | 99     |
| 10) Methyl Iodide            | 4.589 | 142 | 149033  | 49.511  | ug/l | 98     |
| 11) Tert butyl alcohol       | 5.506 | 59  | 74825   | 185.463 | ug/l | 100    |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 115861  | 49.459  | ug/l | 99     |
| 13) Acrolein                 | 4.177 | 56  | 131470  | 238.713 | ug/l | 99     |
| 14) Allyl chloride           | 5.018 | 41  | 181372  | 47.714  | ug/l | 99     |
| 15) Acrylonitrile            | 5.712 | 53  | 284008  | 221.624 | ug/l | 99     |
| 16) Acetone                  | 4.418 | 43  | 250548  | 220.081 | ug/l | 100    |
| 17) Carbon Disulfide         | 4.712 | 76  | 332259  | 46.066  | ug/l | 99     |
| 18) Methyl Acetate           | 5.018 | 43  | 152823  | 44.146  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 383442  | 50.410  | ug/l | 98     |
| 20) Methylene Chloride       | 5.271 | 84  | 132073  | 46.863  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene | 5.789 | 96  | 122694  | 49.008  | ug/l | 99     |
| 22) Diisopropyl ether        | 6.665 | 45  | 429155  | 50.865  | ug/l | 99     |
| 23) Vinyl Acetate            | 6.594 | 43  | 1530873 | 259.270 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 250056  | 48.606  | ug/l | 99     |
| 25) 2-Butanone               | 7.477 | 43  | 367726  | 219.497 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 224423  | 53.956  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 147121  | 49.893  | ug/l | 100    |
| 28) Bromochloromethane       | 7.806 | 49  | 117821  | 49.226  | ug/l | 99     |
| 29) Tetrahydrofuran          | 7.830 | 42  | 245371  | 231.013 | ug/l | 99     |
| 30) Chloroform               | 7.959 | 83  | 253854  | 47.743  | ug/l | 99     |
| 31) Cyclohexane              | 8.253 | 56  | 205522  | 45.962  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 225987  | 48.453  | ug/l | 99     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 180278  | 51.631  | ug/l | 99     |
| 37) Ethyl Acetate            | 7.553 | 43  | 157899  | 44.802  | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 201730  | 50.466  | ug/l | 99     |
| 39) Methylcyclohexane        | 9.594 | 83  | 189425  | 57.732  | ug/l | 98     |
| 40) Benzene                  | 8.600 | 78  | 539436  | 51.417  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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 :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 90556    | 49.387  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 197097   | 49.881  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 266284   | 47.153  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 123817   | 50.700  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.612  | 63   | 135244   | 50.468  | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 94501    | 48.873  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 203552   | 51.671  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 129471   | 50.945  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 37393    | 873.742 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 789380   | 240.885 | ug/l   | 99       |
| 52) Toluene                   | 10.624 | 92   | 328434   | 54.029  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 198974   | 53.447  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 213072   | 53.582  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 120803   | 50.215  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 184561   | 45.714  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 211921   | 50.662  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 416723   | 272.966 | ug/l   | 100      |
| 59) 2-Hexanone                | 11.188 | 43   | 558711   | 242.307 | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.353 | 129  | 146358   | 50.392  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 117431   | 49.039  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 112592   | 52.107  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 348954   | 50.257  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.953 | 131  | 126127   | 49.494  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 623373   | 55.122  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.065 | 106  | 478857   | 114.570 | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 221609   | 55.481  | ug/l   | 98       |
| 70) Styrene                   | 12.406 | 104  | 382963   | 57.933  | ug/l   | 100      |
| 71) Bromoform                 | 12.570 | 173  | 95715    | 52.493  | ug/l # | 97       |
| 73) Isopropylbenzene          | 12.688 | 105  | 579887   | 54.261  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 229808   | 47.841  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 165720   | 43.898  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 150178m  | 46.662  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 137136   | 49.115  | ug/l   | 96       |
| 78) n-propylbenzene           | 13.029 | 91   | 703936   | 55.640  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 423036   | 51.665  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 492256   | 55.763  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 58114    | 48.853  | ug/l   | 92       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 425288   | 52.164  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 405351   | 54.680  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 498787   | 56.692  | ug/l   | 97       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 580478   | 56.497  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 492423   | 52.852  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 257806   | 50.137  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 256221   | 48.073  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 424966   | 57.654  | ug/l   | 98       |
| 90) Hexachloroethane          | 14.329 | 117  | 95205    | 48.675  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 242707   | 47.320  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 29578    | 42.906  | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 120596   | 50.589  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.494 | 225  | 60079    | 47.470  | ug/l   | 97       |
| 95) Naphthalene               | 15.635 | 128  | 327305   | 46.012  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 113937   | 47.236  | ug/l   | 99       |

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Data File : VN085447.D  
Acq On : 15 Jan 2025 09:03  
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 :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:51:35 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

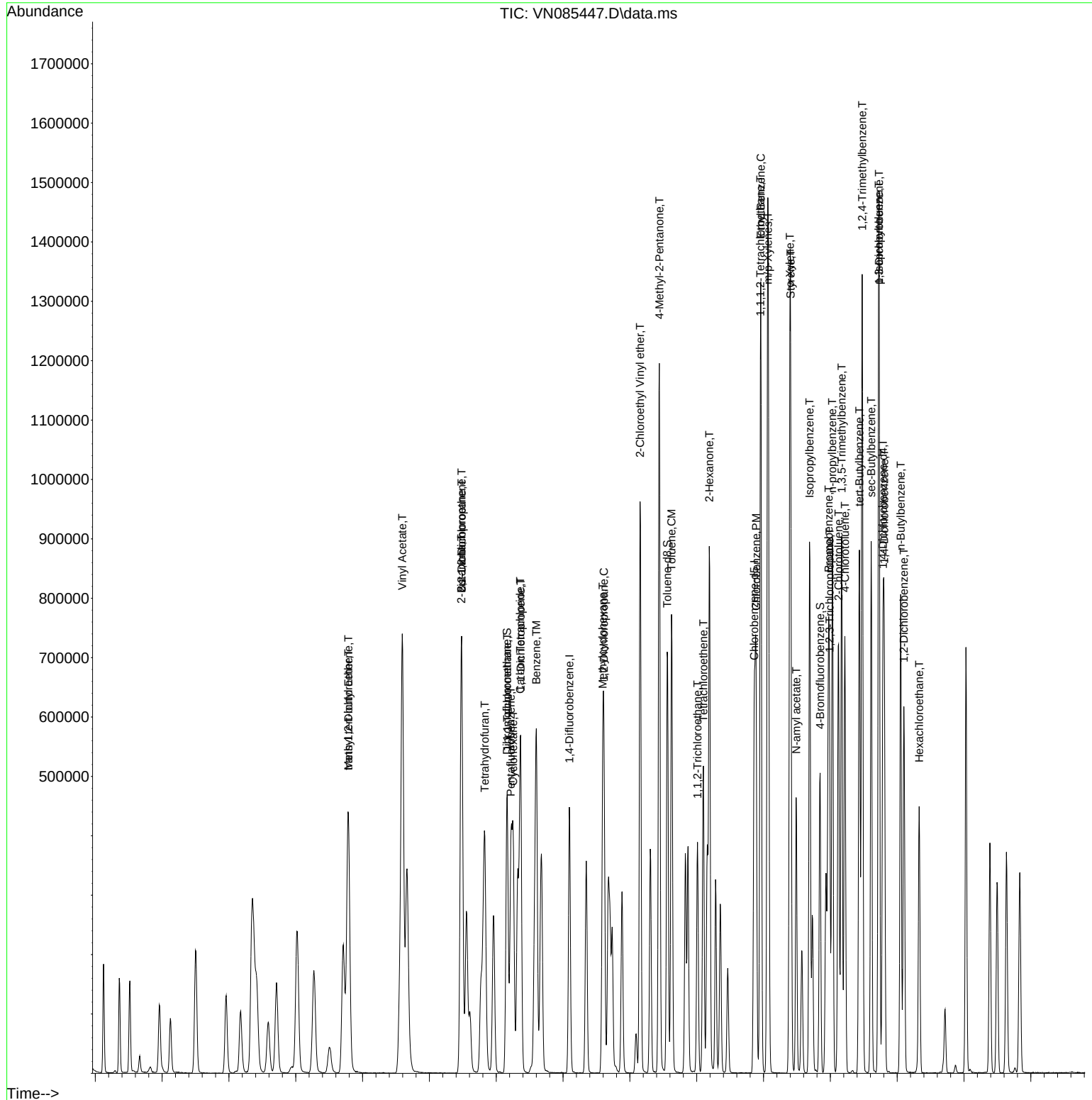
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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

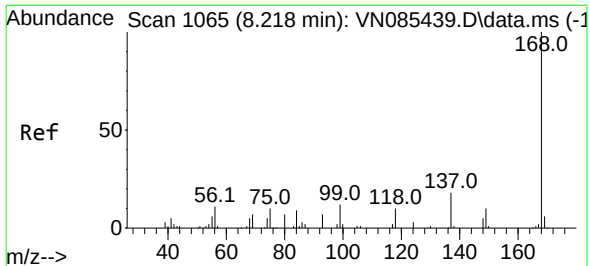
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By : Mahesh Dadoda 01/16/2025  
Supervised By : Semsettin Yesilyurt 01/16/2025

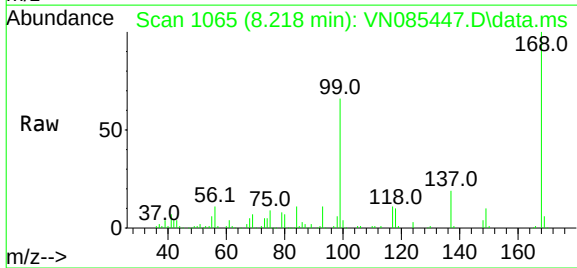
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

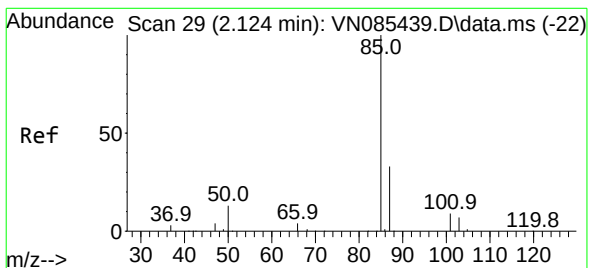
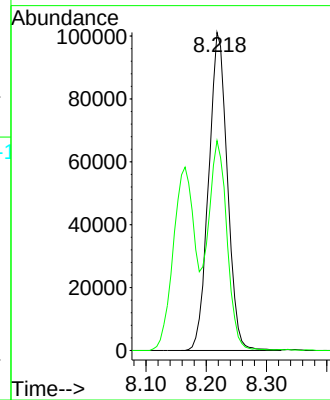
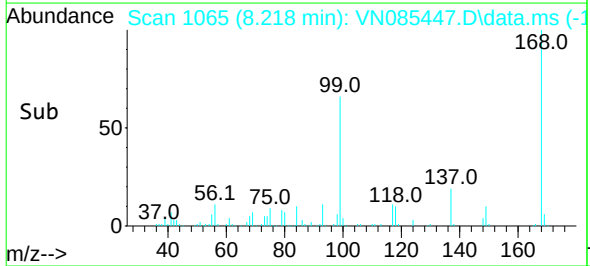
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 168 Resp: 218273  
Ion Ratio Lower Upper  
168 100  
99 65.7 53.6 80.4

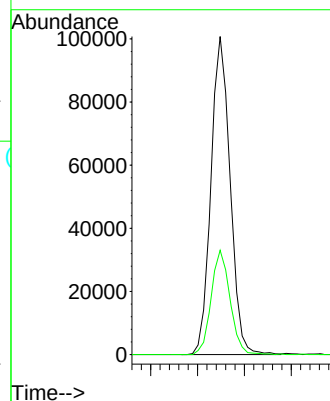
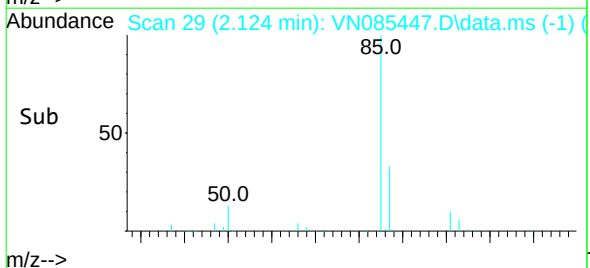
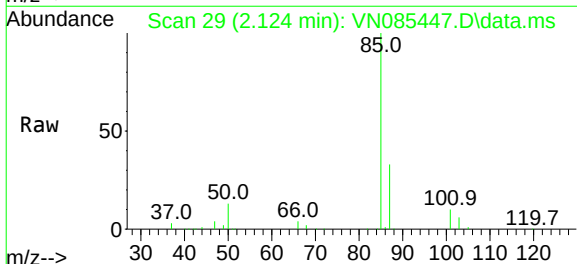
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

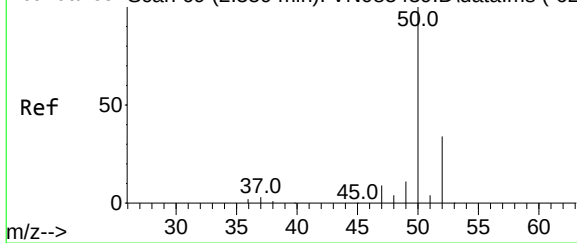


#2  
Dichlorodifluoromethane  
Concen: 48.525 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 85 Resp: 143408  
Ion Ratio Lower Upper  
85 100  
87 32.8 16.7 50.1



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



#3

Chloromethane

Concen: 45.992 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 50 Resp: 147166

Ion Ratio Lower Upper

50 100

52 32.9 27.0 40.6

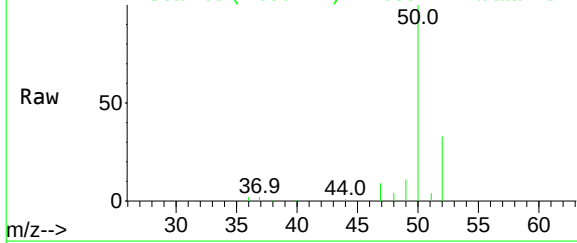
Manual Integrations

APPROVED

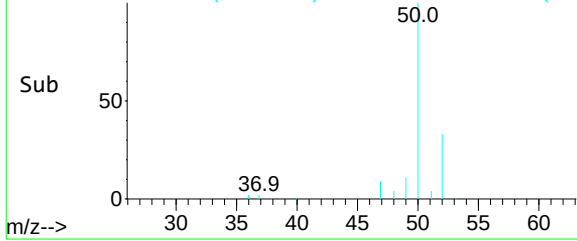
Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025

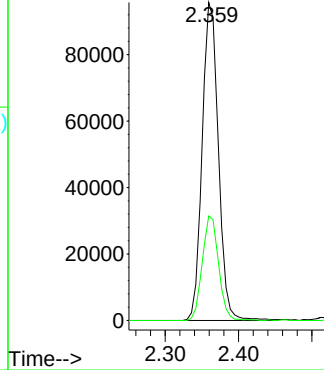
Abundance Scan 69 (2.359 min): VN085447.D\data.ms



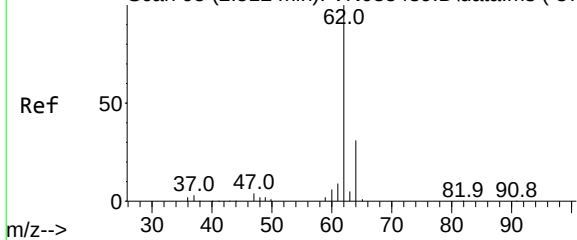
Abundance Scan 69 (2.359 min): VN085447.D\data.ms (-18)



Abundance



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



#4

Vinyl Chloride

Concen: 47.239 ug/l

RT: 2.518 min Scan# 96

Delta R.T. 0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

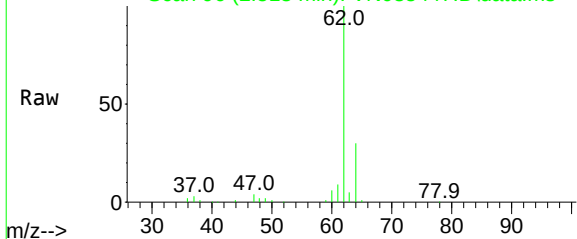
Tgt Ion: 62 Resp: 151933

Ion Ratio Lower Upper

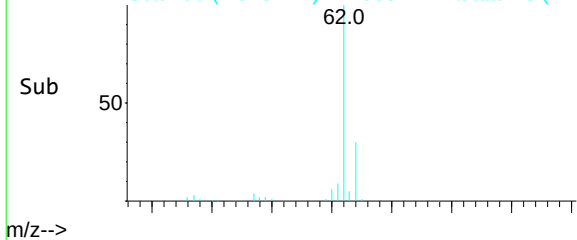
62 100

64 30.3 24.8 37.2

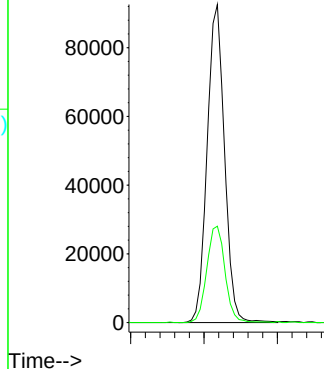
Abundance Scan 96 (2.518 min): VN085447.D\data.ms

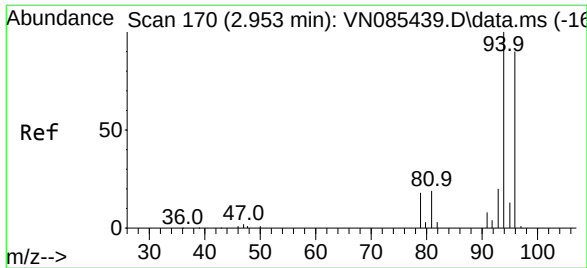


Abundance Scan 96 (2.518 min): VN085447.D\data.ms (-44)



Abundance





#5

Bromomethane

Concen: 45.067 ug/l

RT: 2.959 min Scan# 171

Delta R.T. 0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 94 Resp: 87556

Ion Ratio Lower Upper

94 100

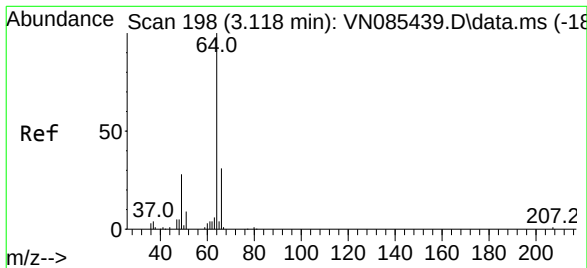
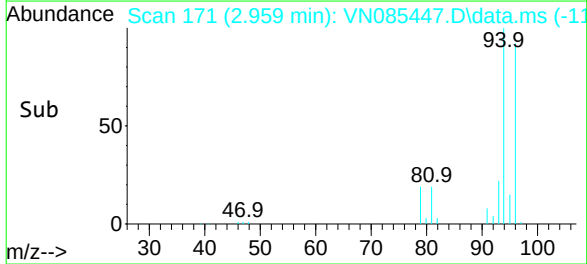
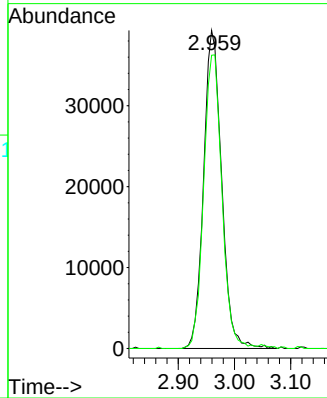
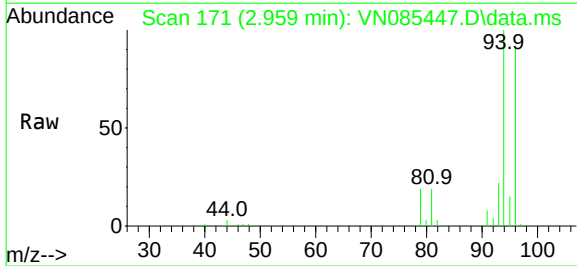
96 92.2 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#6

Chloroethane

Concen: 45.648 ug/l

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN085447.D

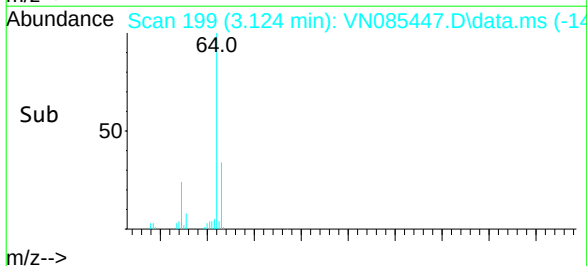
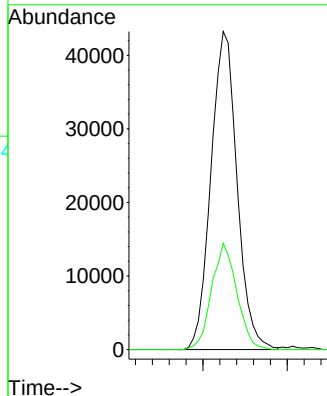
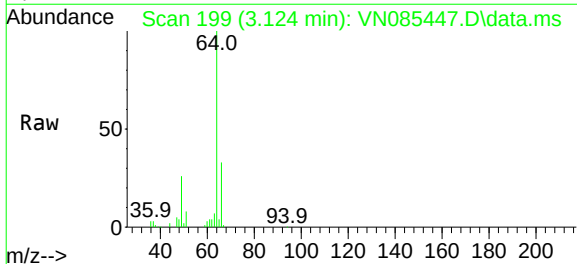
Acq: 15 Jan 2025 09:03

Tgt Ion: 64 Resp: 93081

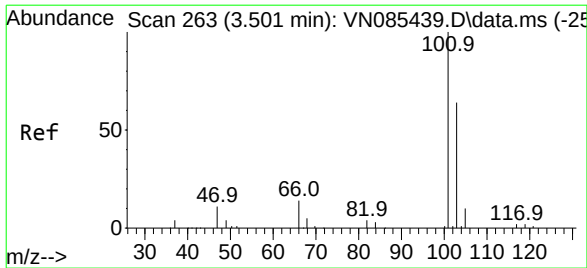
Ion Ratio Lower Upper

64 100

66 33.5 24.6 36.8

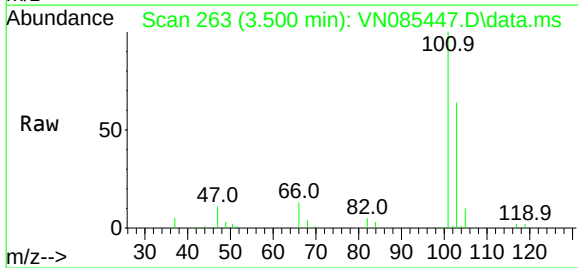






#7  
Trichlorofluoromethane  
Concen: 48.720 ug/l  
RT: 3.500 min Scan# 263  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

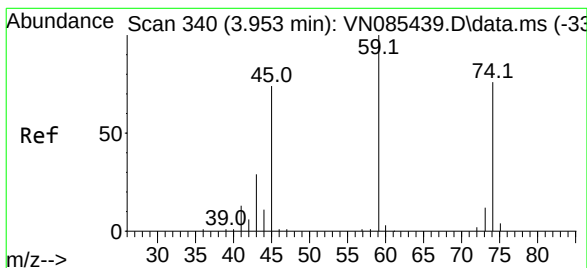
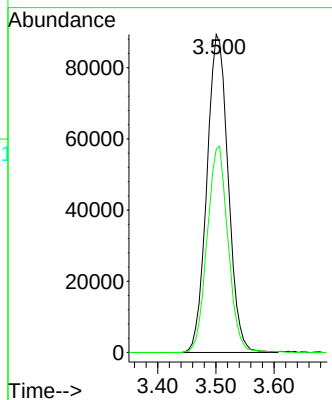
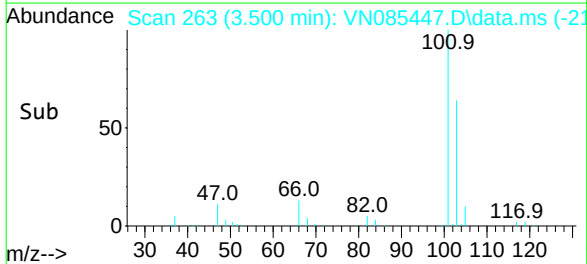
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 101 Resp: 227366  
Ion Ratio Lower Upper  
101 100  
103 63.9 51.4 77.2

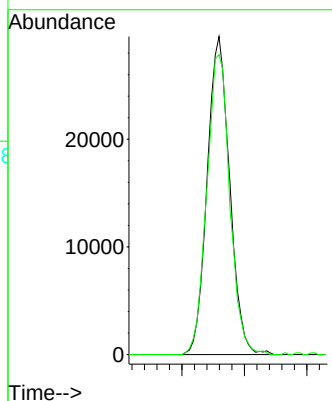
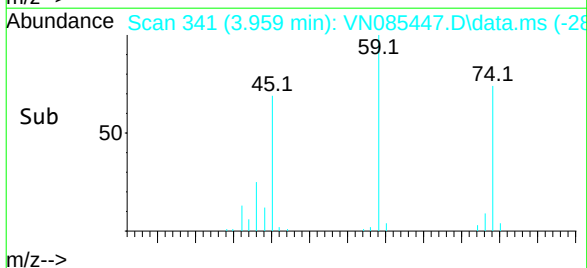
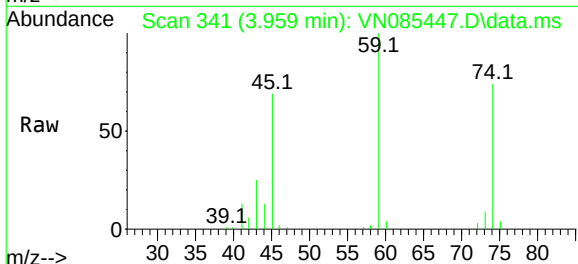
Manual Integrations  
APPROVED

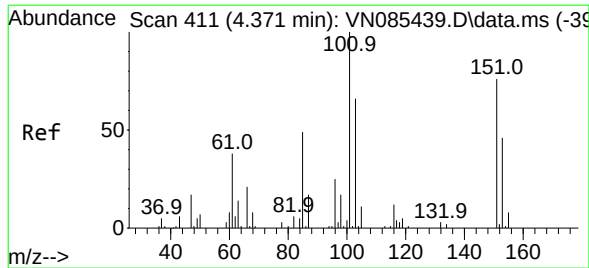
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#8  
Diethyl Ether  
Concen: 45.767 ug/l  
RT: 3.959 min Scan# 341  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 74 Resp: 73785  
Ion Ratio Lower Upper  
74 100  
45 96.7 49.7 149.1





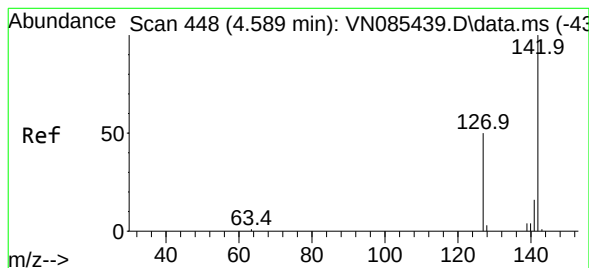
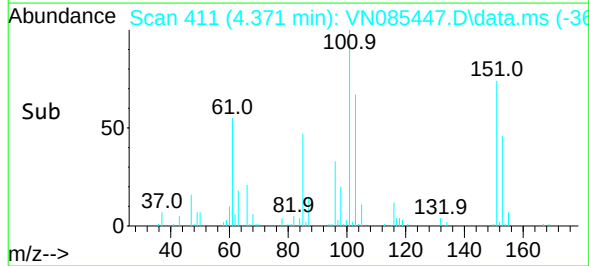
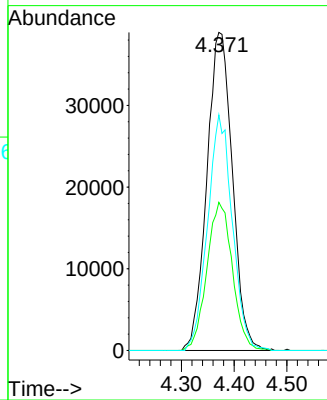
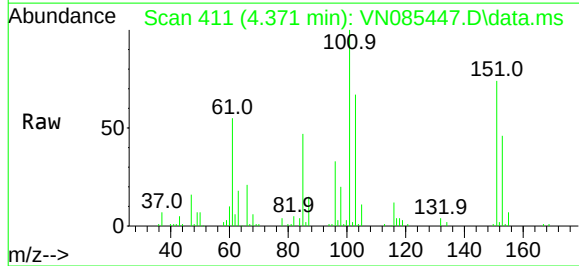
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 49.808 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:101 Resp: 130921  
Ion Ratio Lower Upper  
101 100  
85 46.6 37.8 56.8  
151 72.0 58.8 88.2

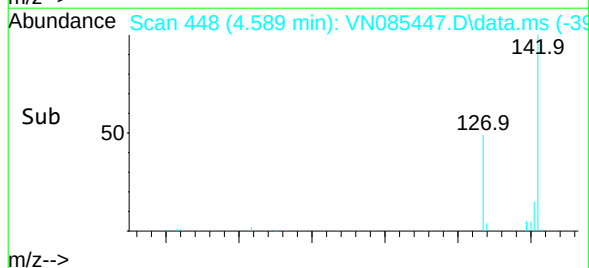
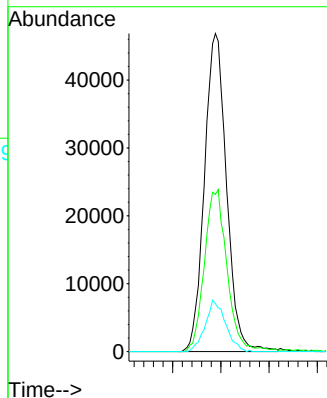
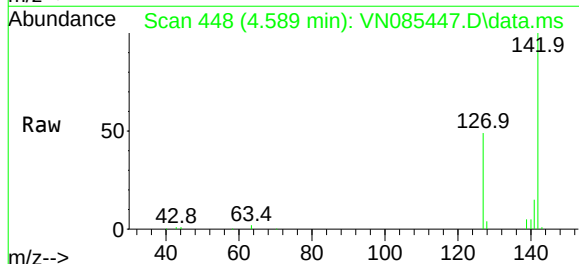
Manual Integrations  
APPROVED

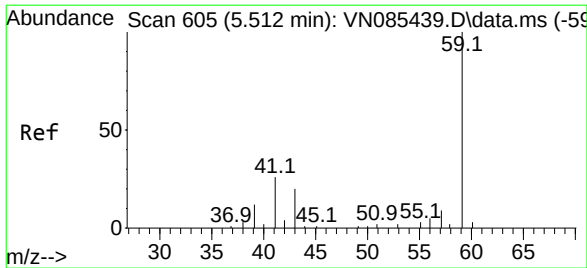
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#10  
Methyl Iodide  
Concen: 49.511 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:142 Resp: 149033  
Ion Ratio Lower Upper  
142 100  
127 49.4 40.3 60.5  
141 15.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 185.463 ug/l

RT: 5.506 min Scan# 605

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 59 Resp: 74825

Ion Ratio Lower Upper

59 100

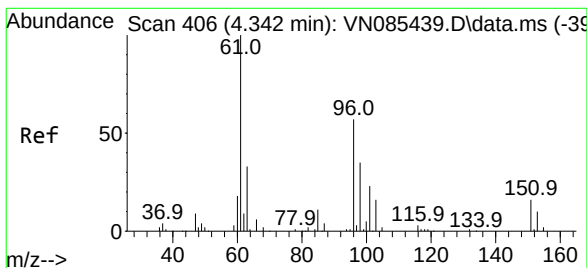
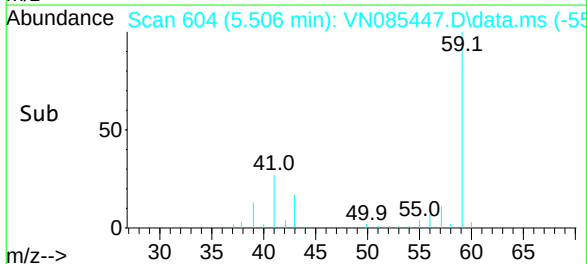
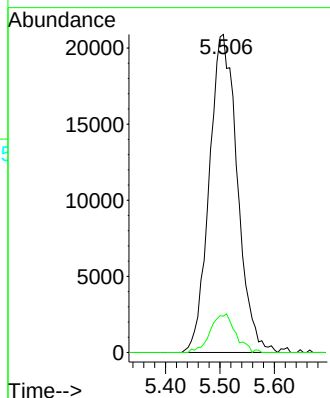
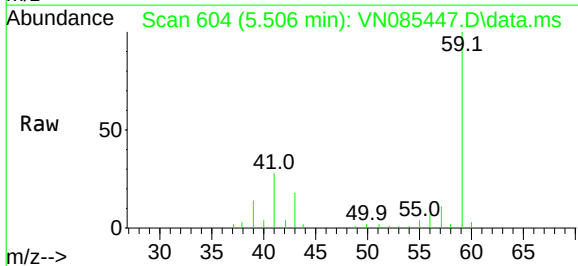
57 10.9 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#12

1,1-Dichloroethene

Concen: 49.459 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

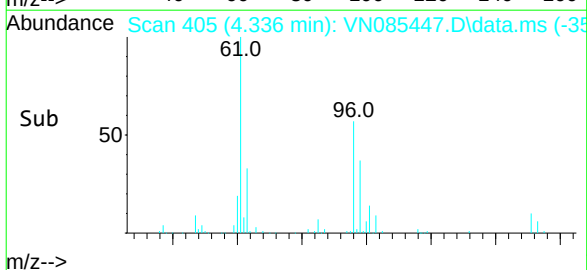
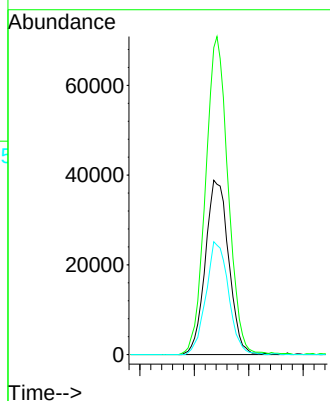
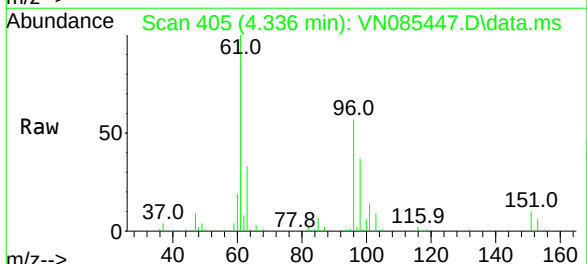
Tgt Ion: 96 Resp: 115861

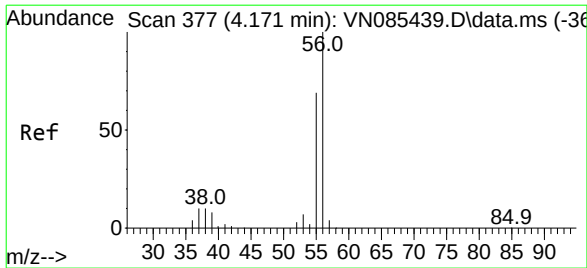
Ion Ratio Lower Upper

96 100

61 176.0 141.0 211.4

98 64.8 49.0 73.6





#13

Acrolein

Concen: 238.713 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 131476

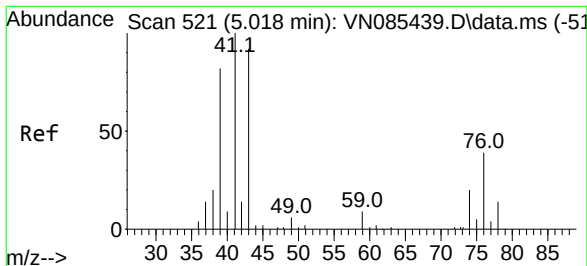
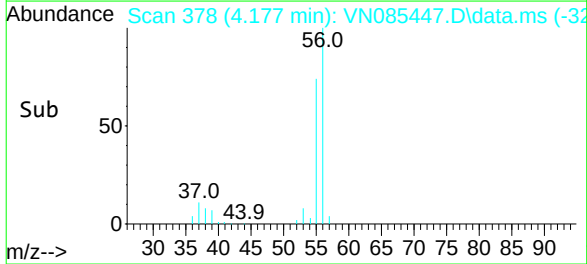
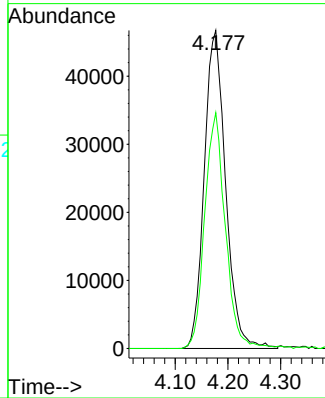
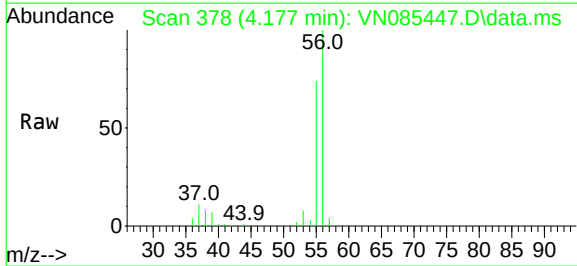
Ion Ratio Lower Upper

56 100

55 71.5 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#14

Allyl chloride

Concen: 47.714 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

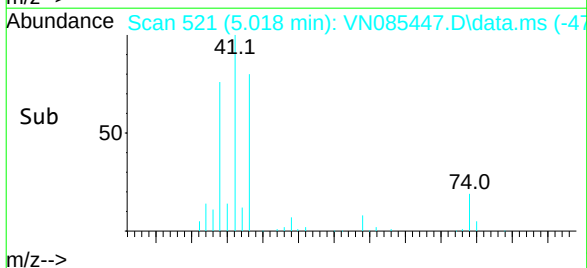
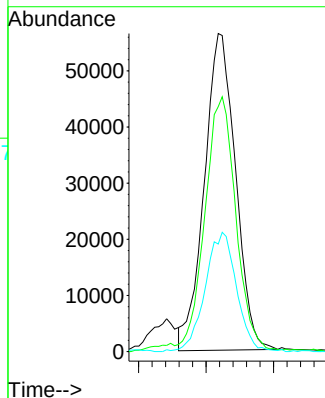
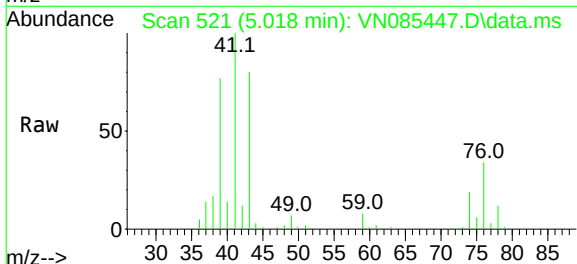
Tgt Ion: 41 Resp: 181372

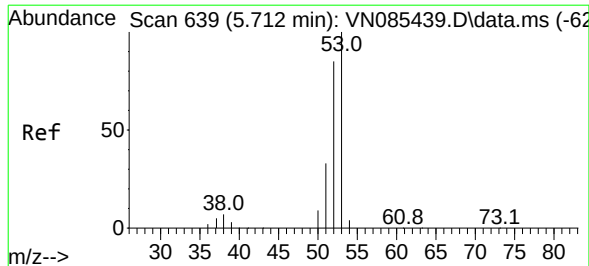
Ion Ratio Lower Upper

41 100

39 81.7 64.4 96.6

76 37.8 30.5 45.7





#15

Acrylonitrile

Concen: 221.624 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 53 Resp: 284008

Ion Ratio Lower Upper

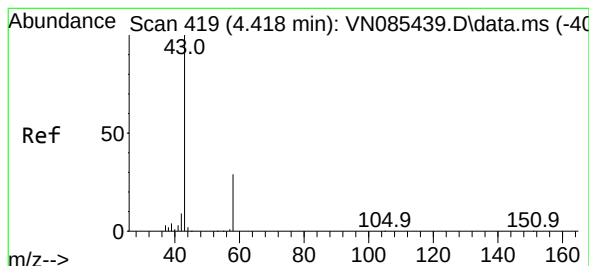
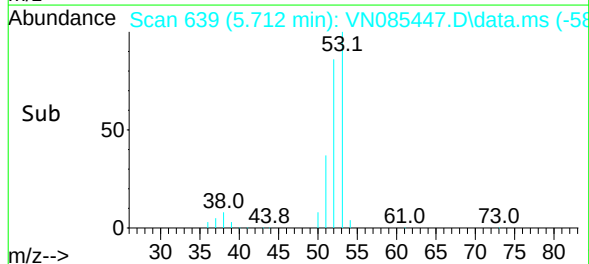
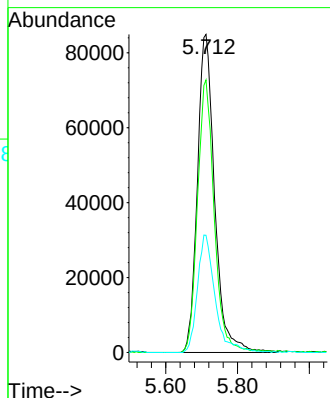
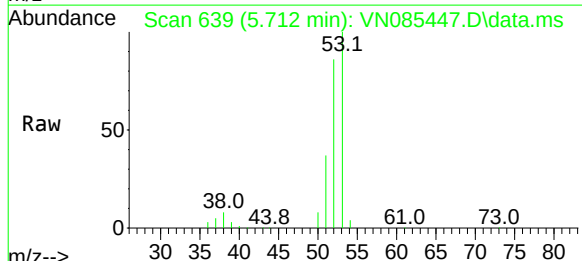
53 100

52 82.6 65.5 98.3

51 37.8 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#16

Acetone

Concen: 220.081 ug/l

RT: 4.418 min Scan# 419

Delta R.T. -0.000 min

Lab File: VN085447.D

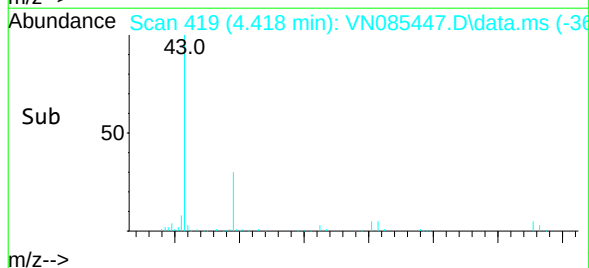
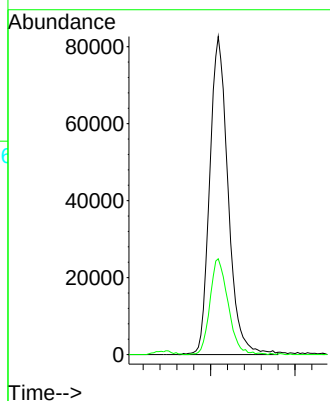
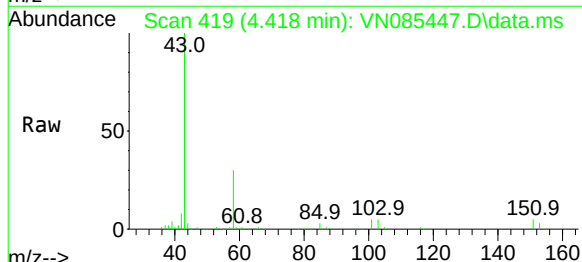
Acq: 15 Jan 2025 09:03

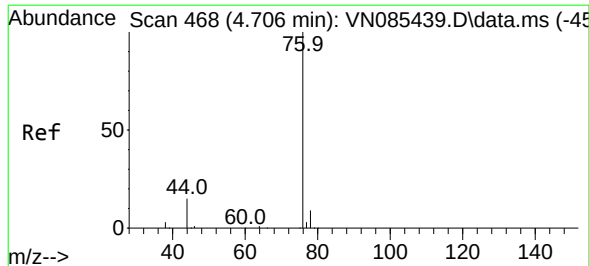
Tgt Ion: 43 Resp: 250548

Ion Ratio Lower Upper

43 100

58 29.9 23.8 35.6





#17

Carbon Disulfide

Concen: 46.066 ug/l

RT: 4.712 min Scan# 46

Delta R.T. 0.006 min

Lab File: VN085447.D

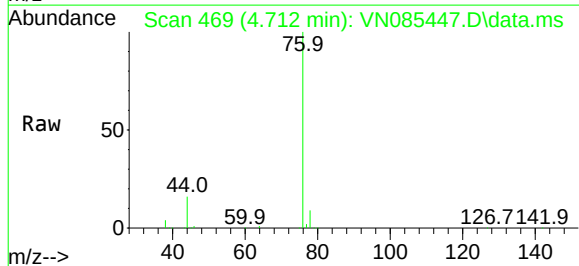
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 76 Resp: 332259

Ion Ratio Lower Upper

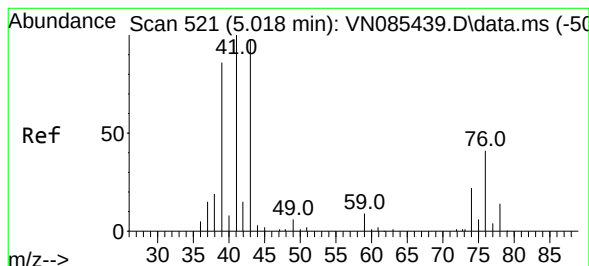
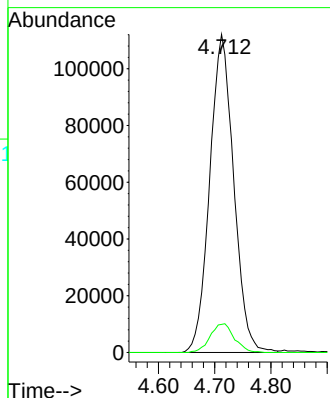
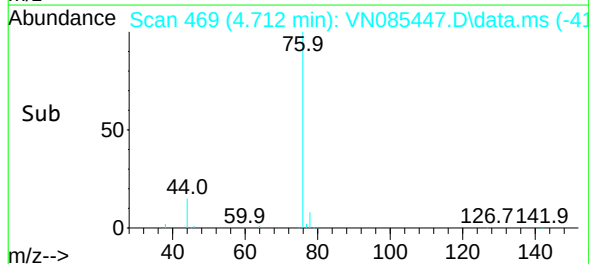
76 100

78 8.8 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#18

Methyl Acetate

Concen: 44.146 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085447.D

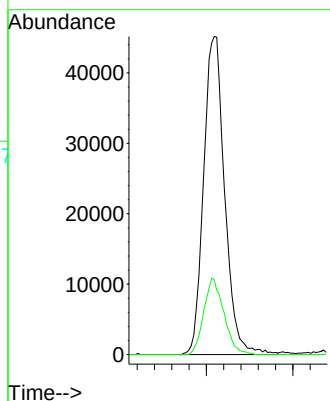
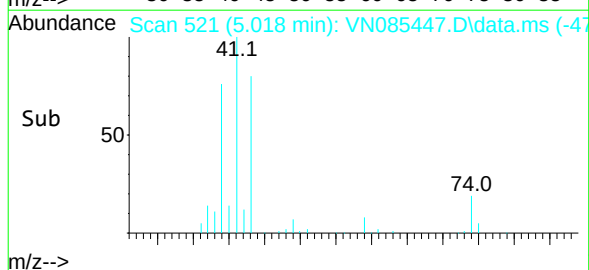
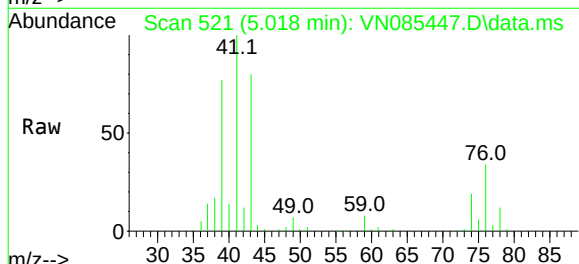
Acq: 15 Jan 2025 09:03

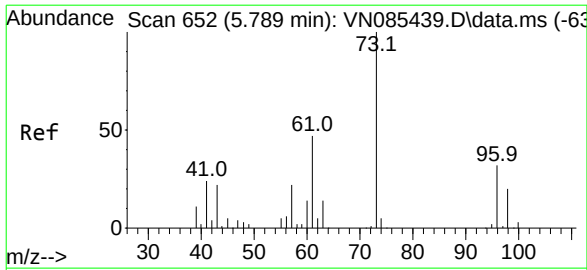
Tgt Ion: 43 Resp: 152823

Ion Ratio Lower Upper

43 100

74 22.9 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 50.410 ug/l

RT: 5.789 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 73 Resp: 383442

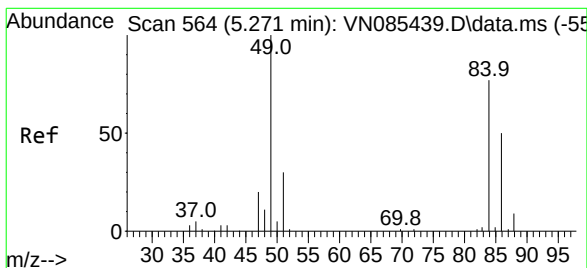
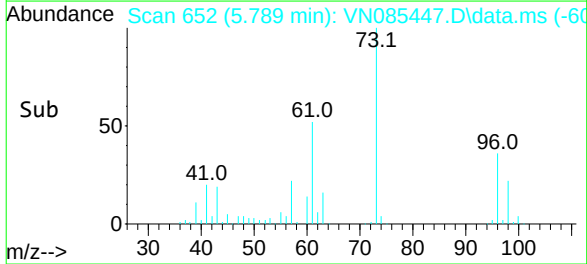
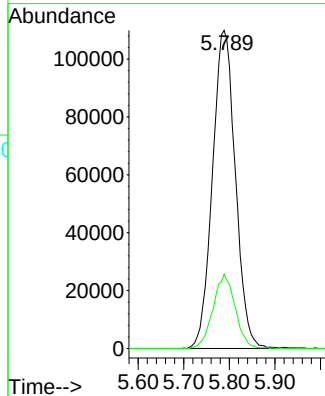
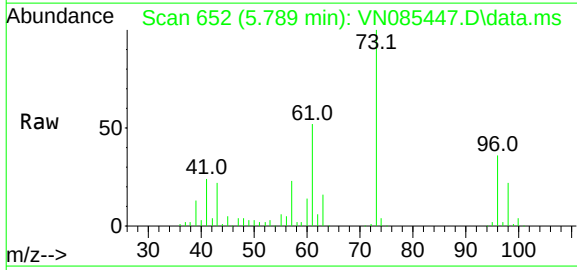
Ion Ratio Lower Upper

73 100

57 23.4 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#20

Methylene Chloride

Concen: 46.863 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Tgt Ion: 84 Resp: 132073

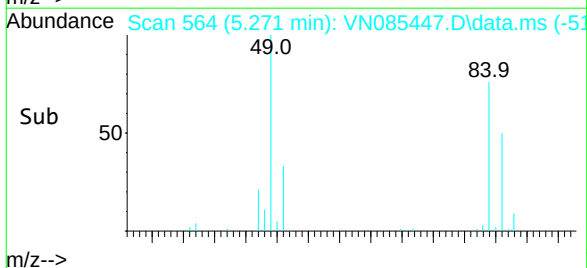
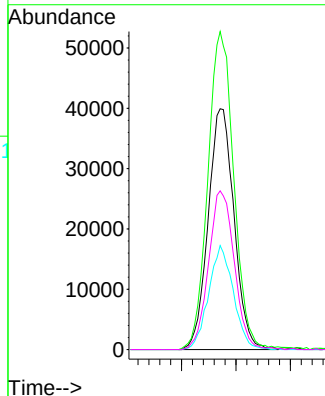
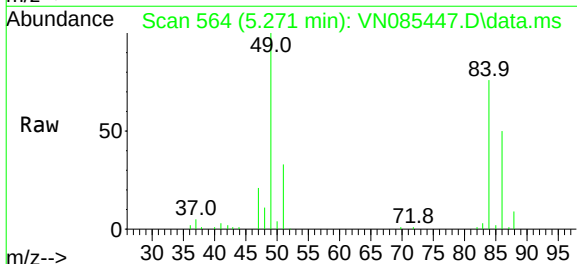
Ion Ratio Lower Upper

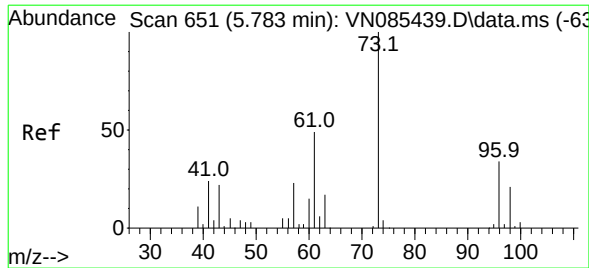
84 100

49 132.1 104.1 156.1

51 43.2 31.0 46.4

86 65.9 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 49.008 ug/l

RT: 5.789 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085447.D

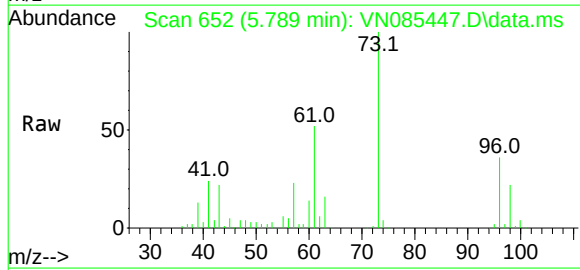
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 96 Resp: 122694

Ion Ratio Lower Upper

96 100

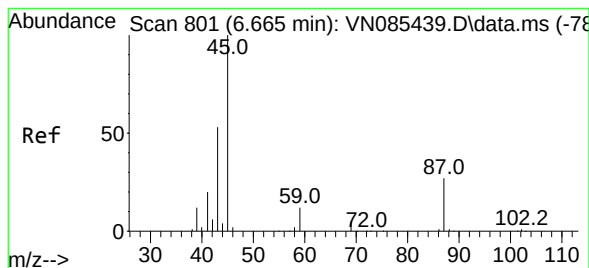
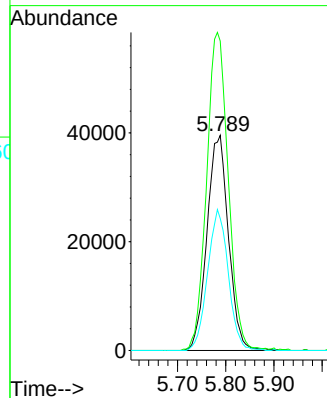
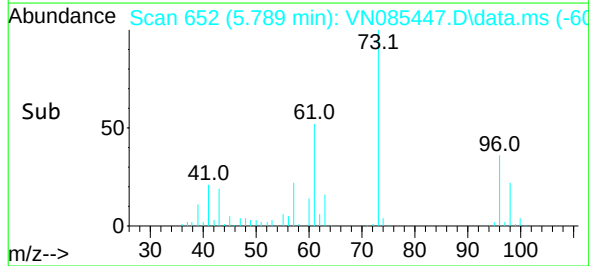
61 143.8 115.7 173.5

98 61.4 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#22

Diisopropyl ether

Concen: 50.865 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Tgt Ion: 45 Resp: 429155

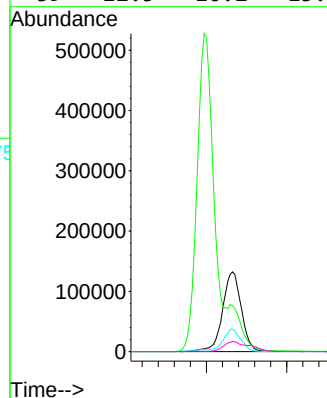
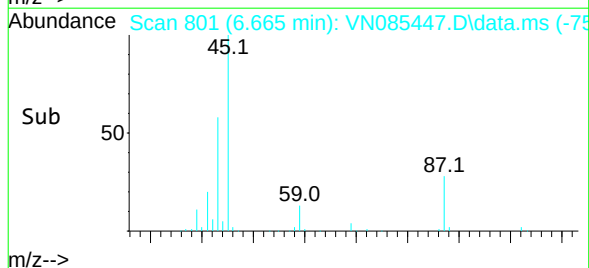
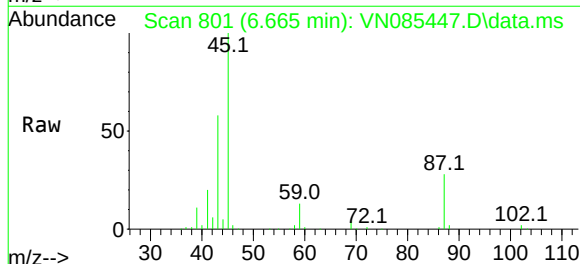
Ion Ratio Lower Upper

45 100

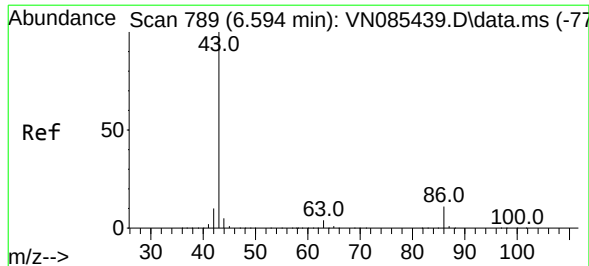
43 56.6 45.0 67.6

87 28.3 21.8 32.8

59 12.5 10.2 15.2







#23

Vinyl Acetate

Concen: 259.270 ug/l

RT: 6.594 min Scan# 789

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 1530873

Ion Ratio Lower Upper

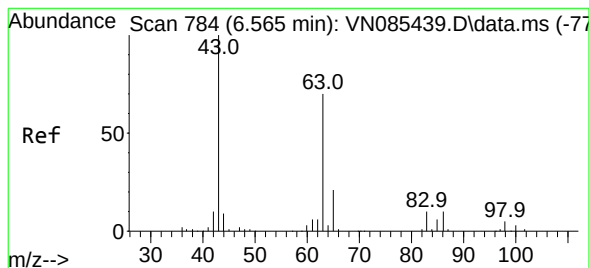
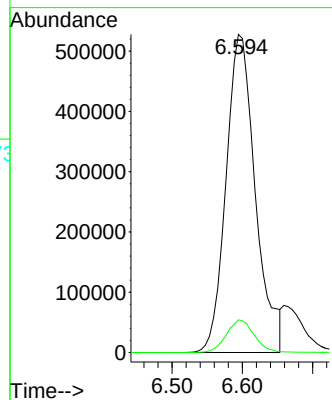
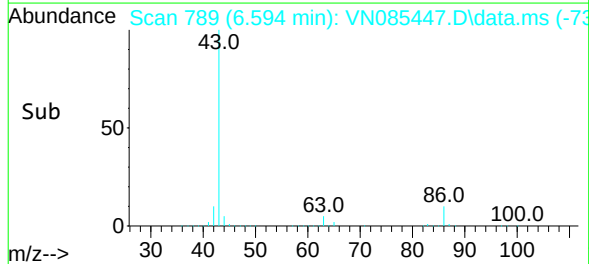
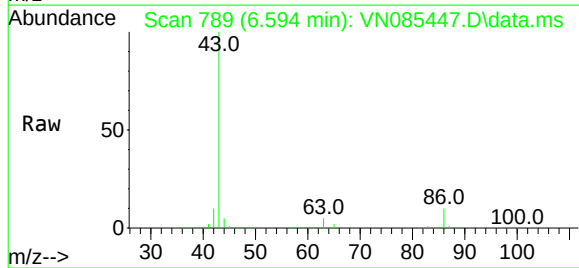
43 100

86 10.2 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#24

1,1-Dichloroethane

Concen: 48.606 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

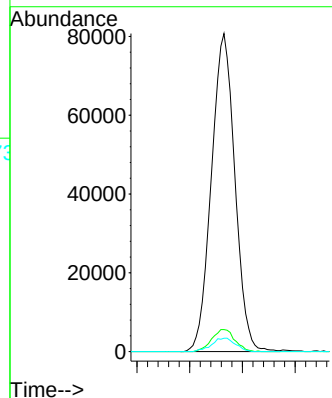
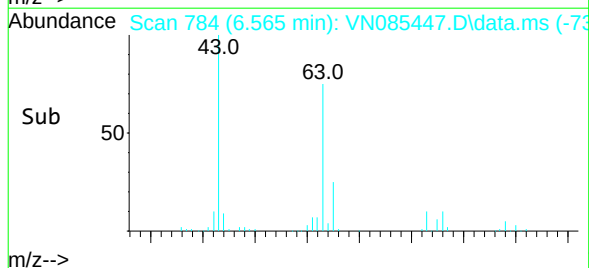
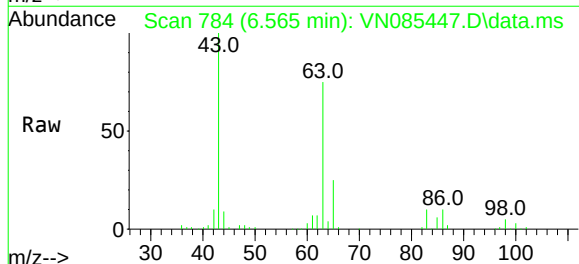
Tgt Ion: 63 Resp: 250056

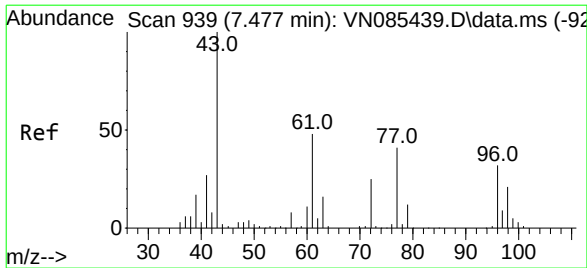
Ion Ratio Lower Upper

63 100

98 6.9 3.3 9.8

100 4.2 2.0 6.0





#25

2-Butanone

Concen: 219.497 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 367726

Ion Ratio Lower Upper

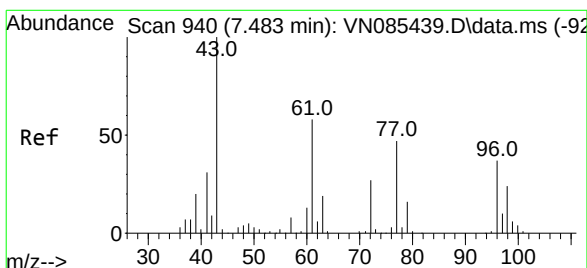
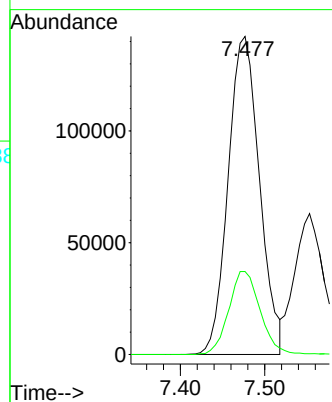
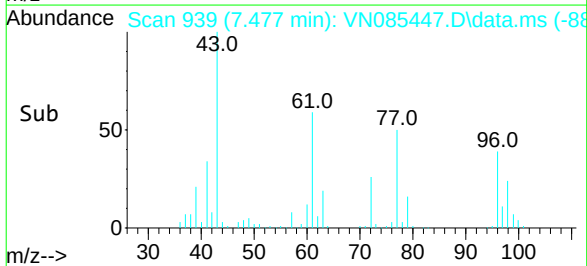
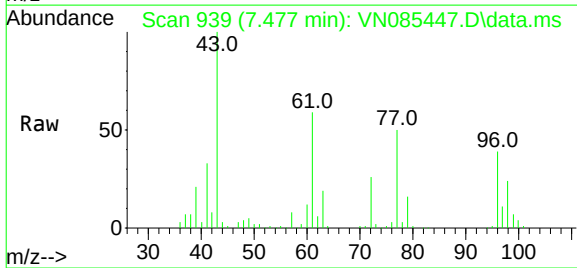
43 100

72 26.1 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#26

2,2-Dichloropropane

Concen: 53.956 ug/l

RT: 7.483 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085447.D

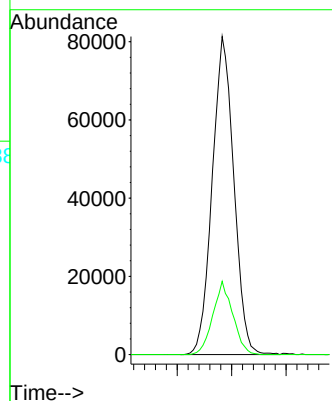
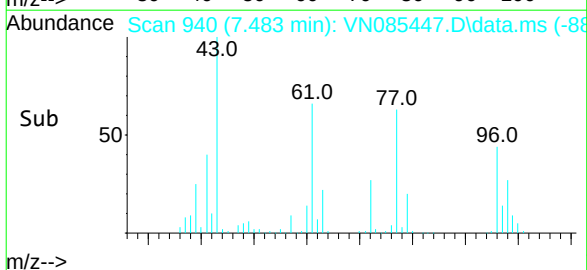
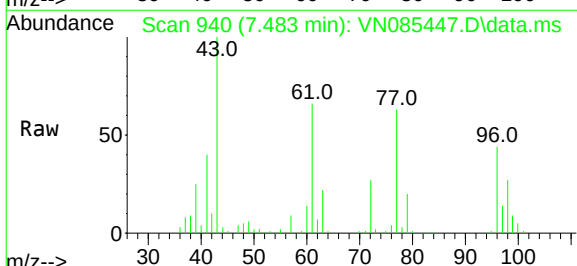
Acq: 15 Jan 2025 09:03

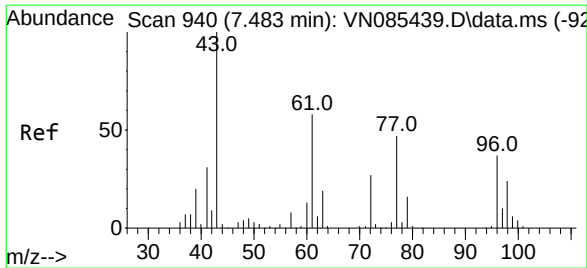
Tgt Ion: 77 Resp: 224423

Ion Ratio Lower Upper

77 100

97 21.2 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 49.893 ug/l

RT: 7.483 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 96 Resp: 147121

Ion Ratio Lower Upper

96 100

61 155.3 0.0 311.8

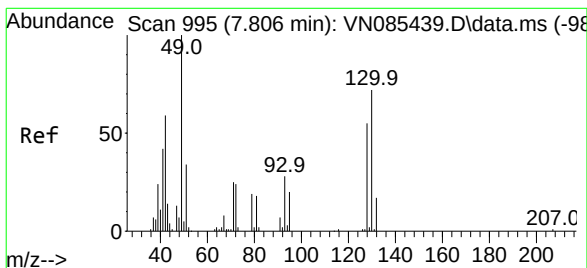
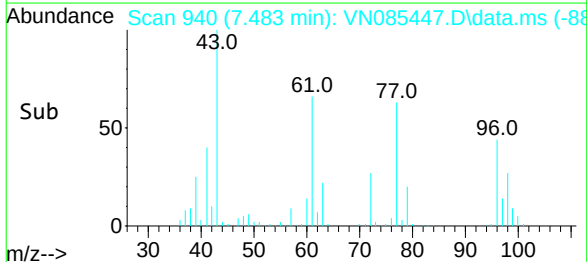
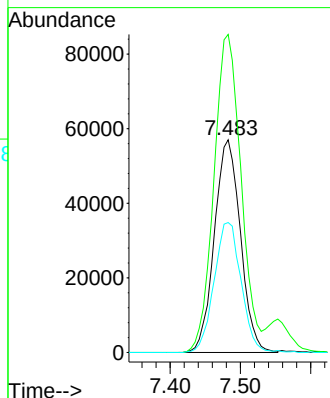
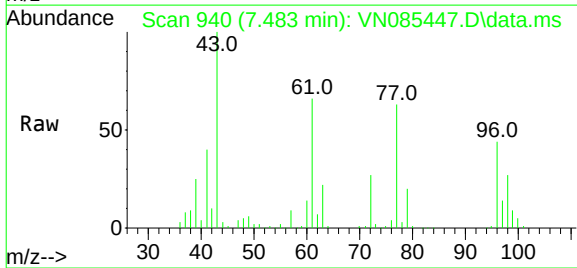
98 63.3 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#28

Bromochloromethane

Concen: 49.226 ug/l

RT: 7.806 min Scan# 995

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

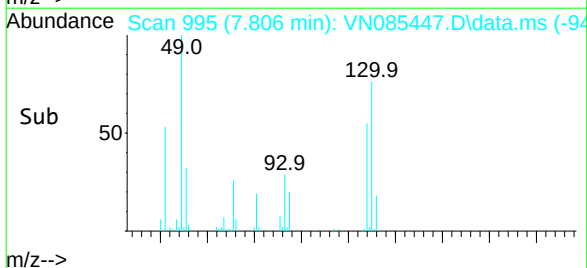
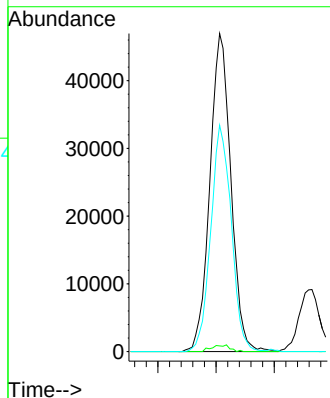
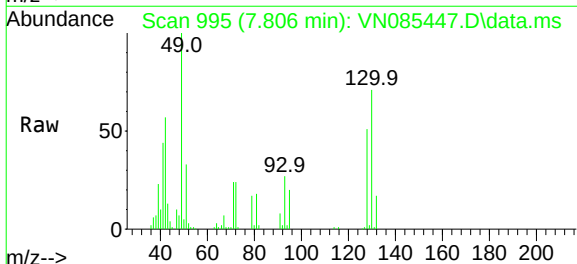
Tgt Ion: 49 Resp: 117821

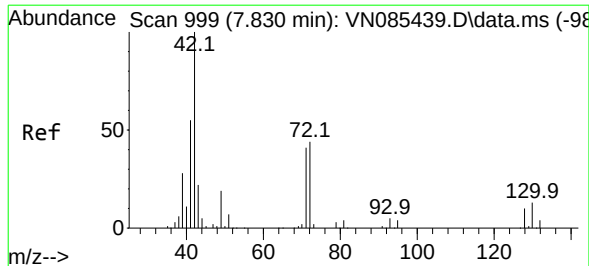
Ion Ratio Lower Upper

49 100

129 1.8 0.0 4.4

130 69.6 55.0 82.4





#29

Tetrahydrofuran

Concen: 231.013 ug/l

RT: 7.830 min Scan# 999

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 42 Resp: 245371

Ion Ratio Lower Upper

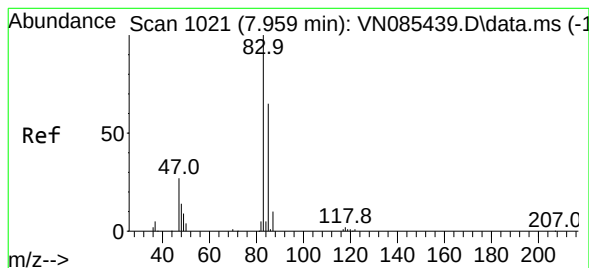
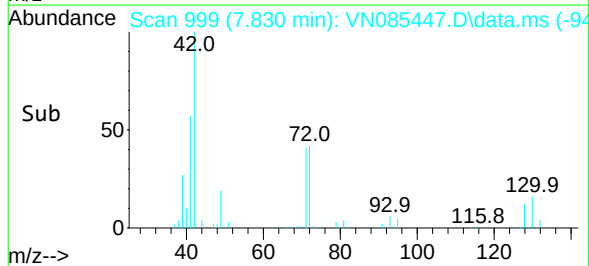
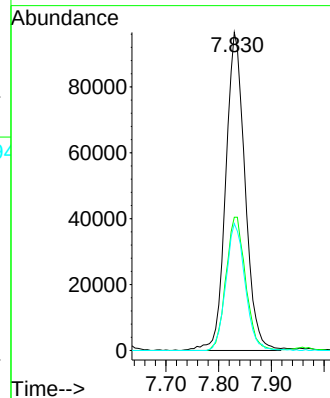
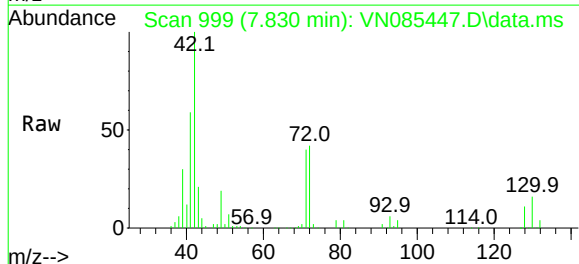
42 100

72 42.6 34.2 51.2

71 39.6 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#30

Chloroform

Concen: 47.743 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. -0.000 min

Lab File: VN085447.D

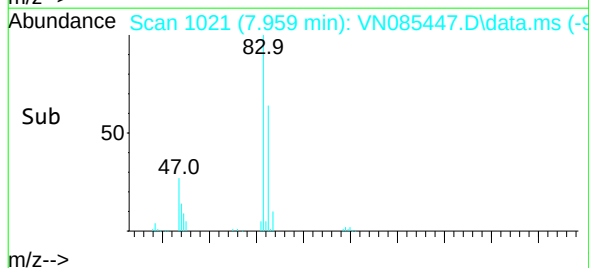
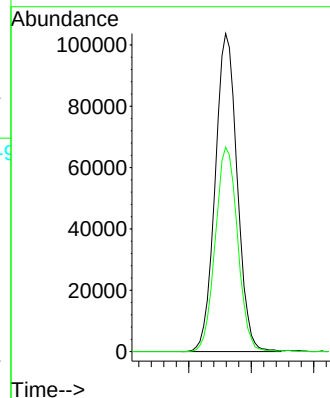
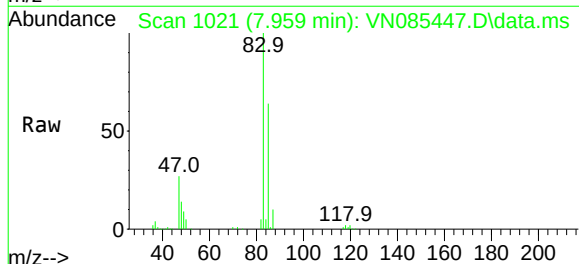
Acq: 15 Jan 2025 09:03

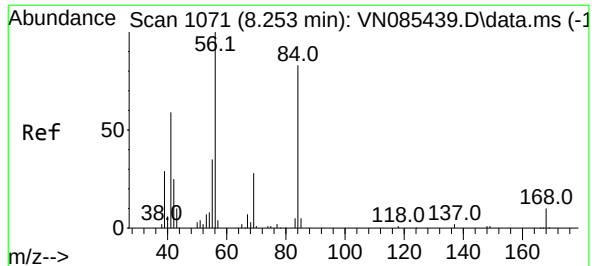
Tgt Ion: 83 Resp: 253854

Ion Ratio Lower Upper

83 100

85 64.3 51.8 77.6





#31

Cyclohexane

Concen: 45.962 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 205522

Ion Ratio Lower Upper

56 100

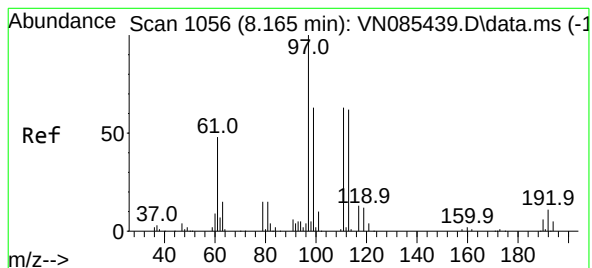
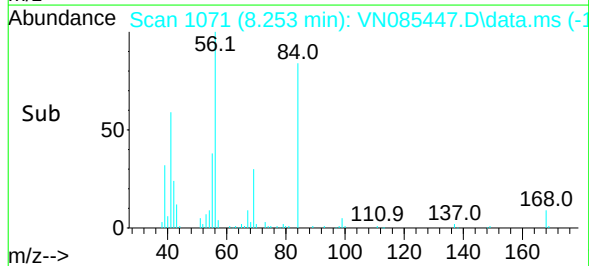
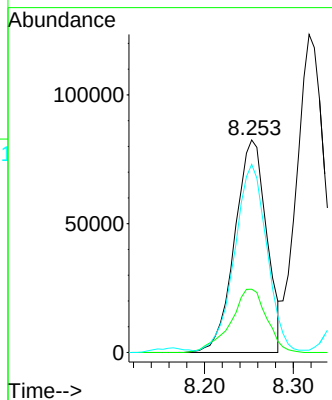
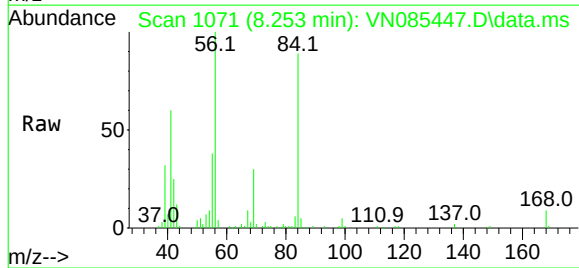
69 29.8 22.2 33.4

84 86.8 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#32

1,1,1-Trichloroethane

Concen: 48.453 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

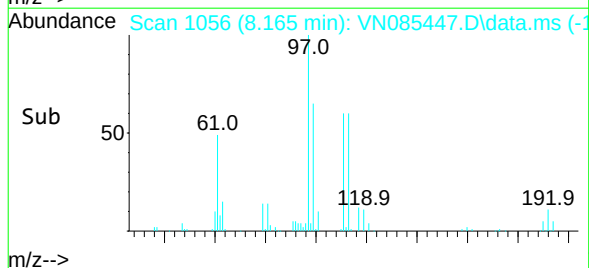
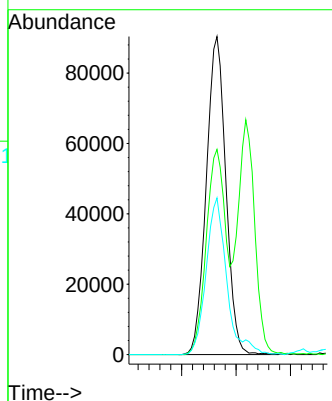
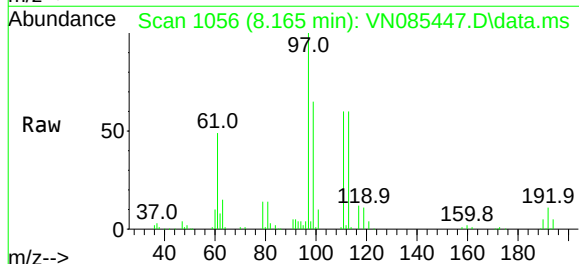
Tgt Ion: 97 Resp: 225987

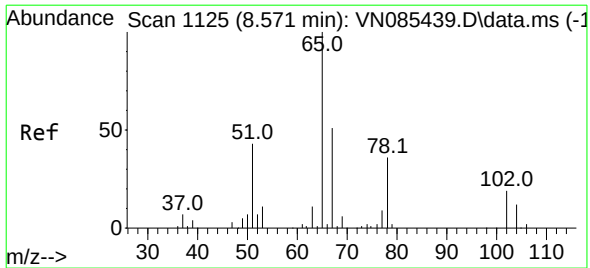
Ion Ratio Lower Upper

97 100

99 63.5 49.8 74.6

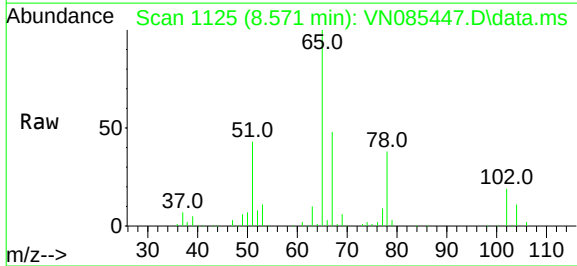
61 51.8 41.4 62.2





#33  
1,2-Dichloroethane-d4  
Concen: 50.745 ug/l  
RT: 8.571 min Scan# 1125  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

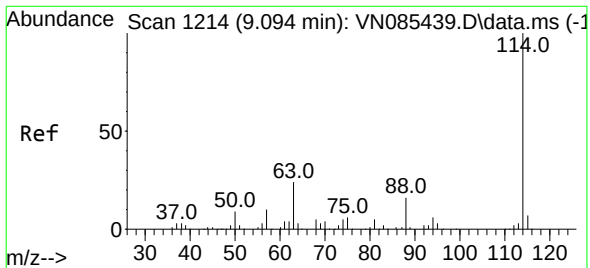
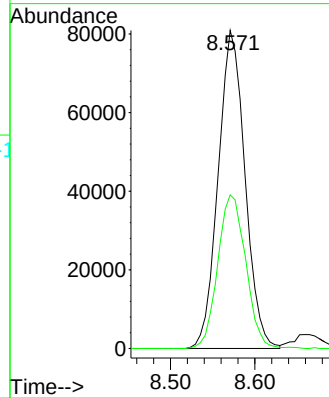
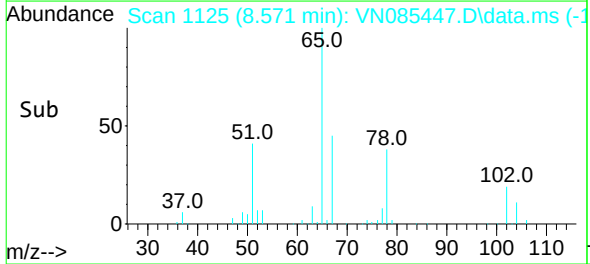
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



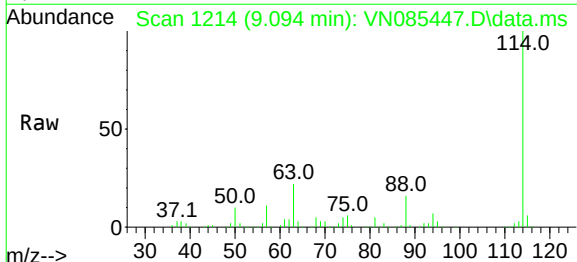
Tgt Ion: 65 Resp: 178793  
Ion Ratio Lower Upper  
65 100  
67 50.2 0.0 101.6

Manual Integrations  
APPROVED

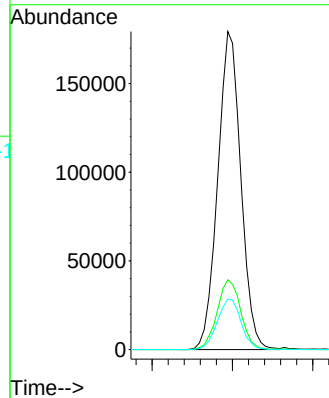
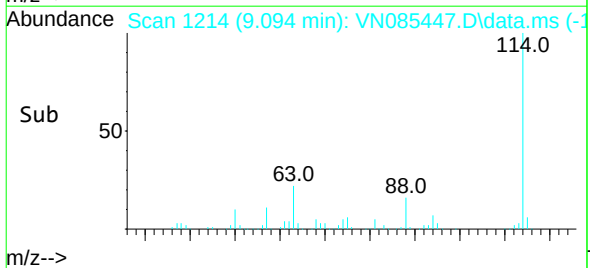
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

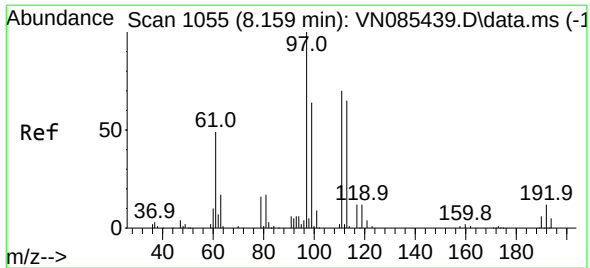


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.094 min Scan# 1214  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03



Tgt Ion:114 Resp: 358609  
Ion Ratio Lower Upper  
114 100  
63 22.0 0.0 47.6  
88 15.9 0.0 32.6





#35

Dibromofluoromethane

Concen: 53.211 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:113 Resp: 132381

Ion Ratio Lower Upper

113 100

111 101.2 82.7 124.1

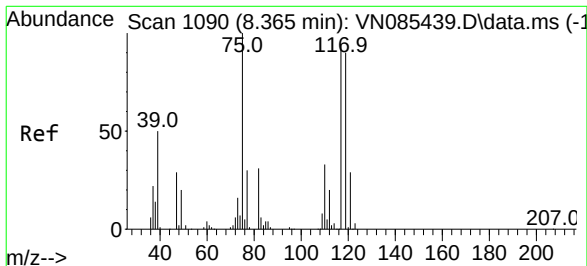
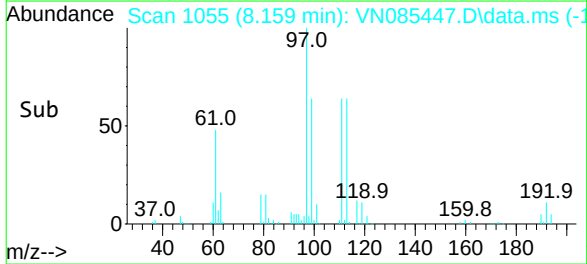
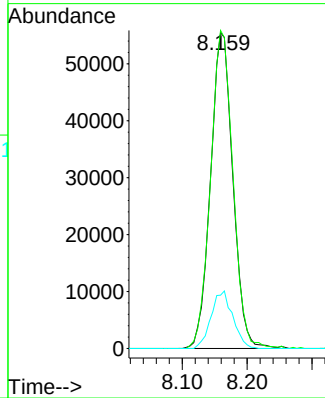
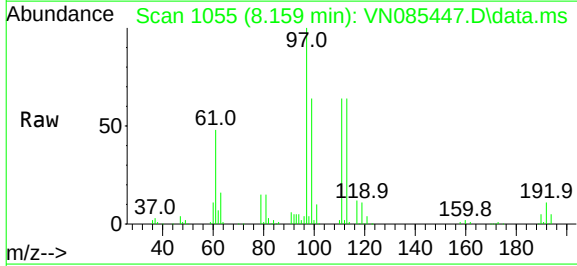
192 17.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#36

1,1-Dichloropropene

Concen: 51.631 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

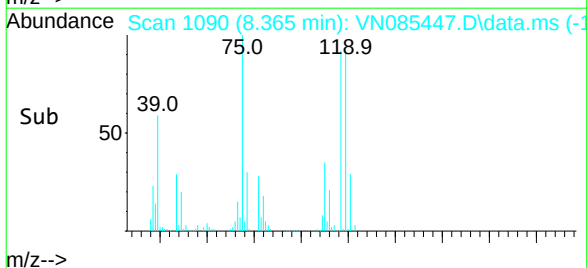
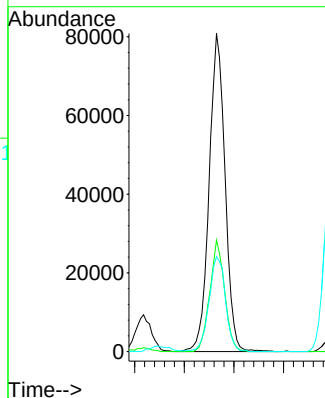
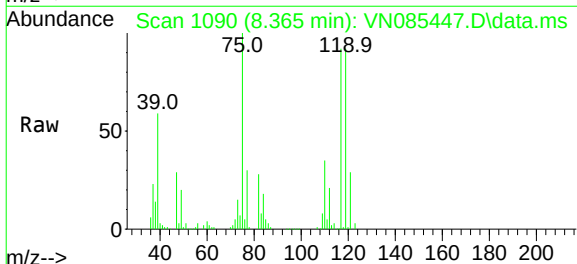
Tgt Ion: 75 Resp: 180278

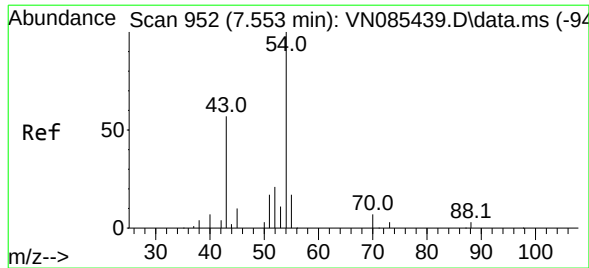
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 30.9 24.4 36.6





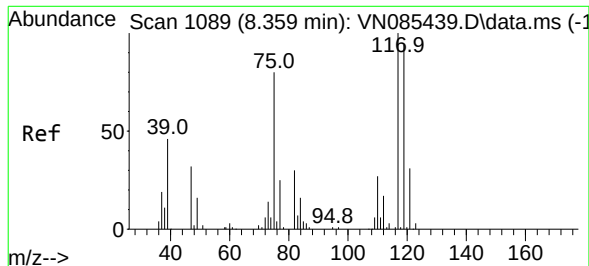
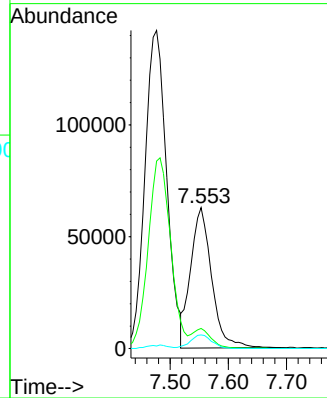
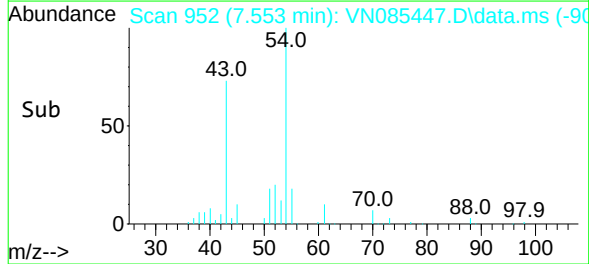
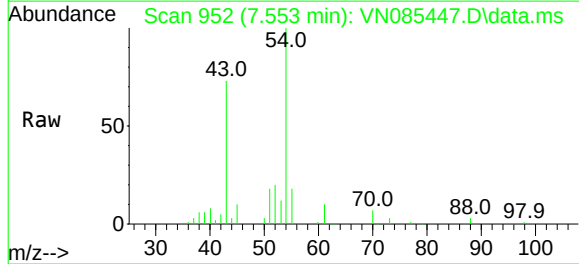
#37  
Ethyl Acetate  
Concen: 44.802 ug/l  
RT: 7.553 min Scan# 952  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 43 Resp: 157899  
Ion Ratio Lower Upper  
43 100  
61 11.7 10.9 16.3  
70 9.8 7.5 11.3

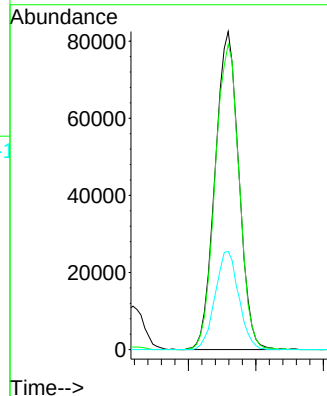
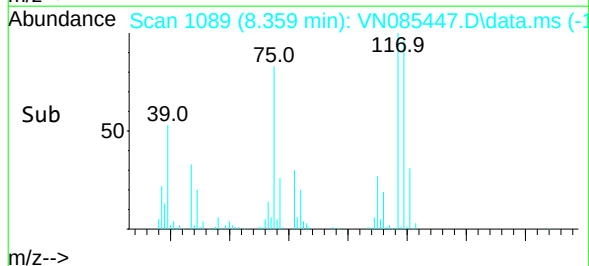
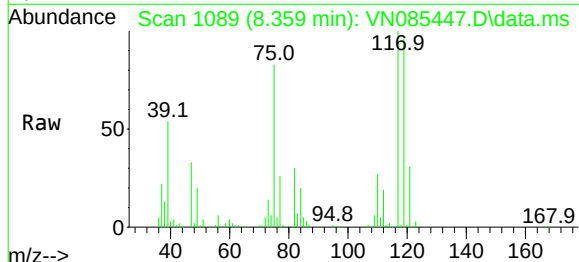
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

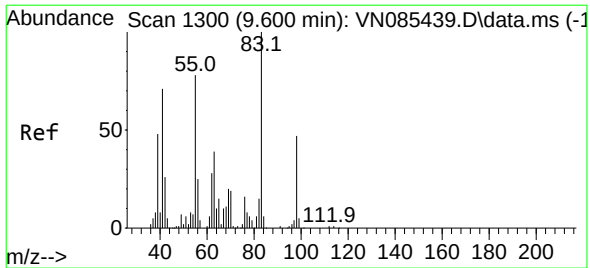


#38  
Carbon Tetrachloride  
Concen: 50.466 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:117 Resp: 201730  
Ion Ratio Lower Upper  
117 100  
119 96.0 75.4 113.2  
121 30.9 24.6 37.0







#39

Methylcyclohexane

Concen: 57.732 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 189425

Ion Ratio Lower Upper

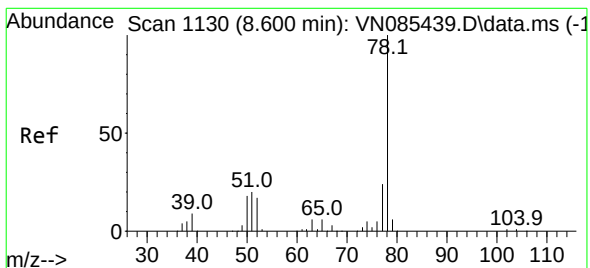
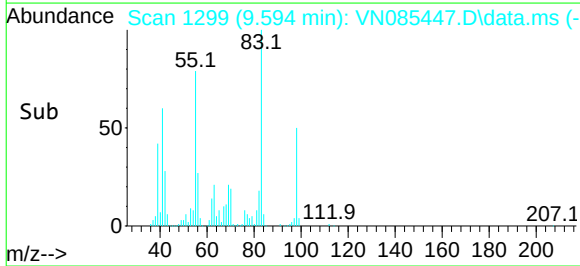
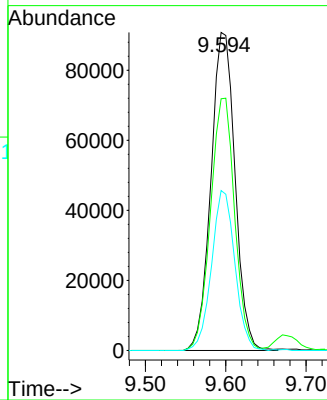
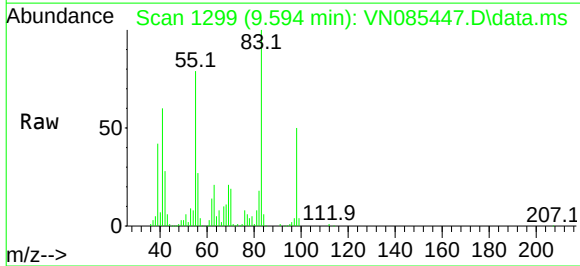
83 100

55 79.1 62.6 94.0

98 50.3 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#40

Benzene

Concen: 51.417 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085447.D

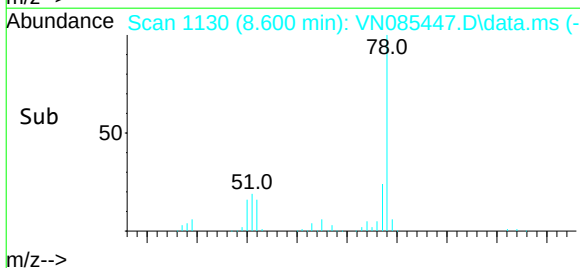
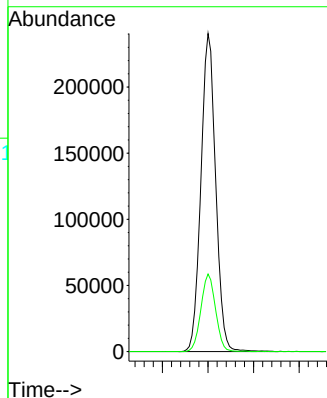
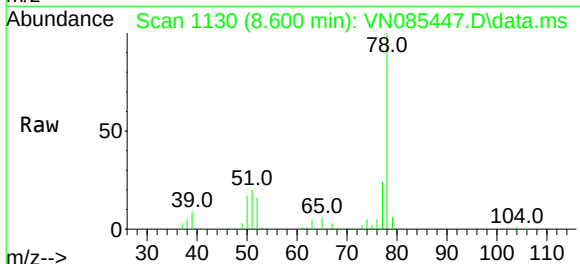
Acq: 15 Jan 2025 09:03

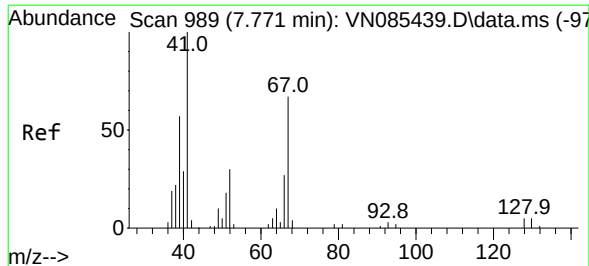
Tgt Ion: 78 Resp: 539436

Ion Ratio Lower Upper

78 100

77 24.4 19.0 28.6





#41

Methacrylonitrile

Concen: 49.387 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 41 Resp: 90556

Ion Ratio Lower Upper

41 100

39 57.8 46.0 69.0

67 69.2 57.4 86.2

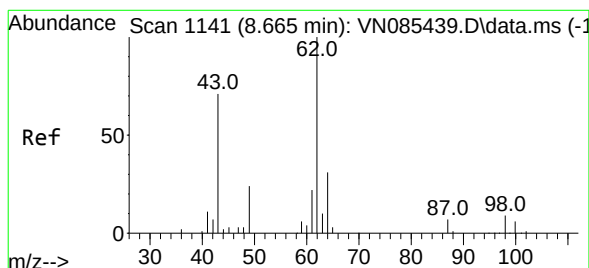
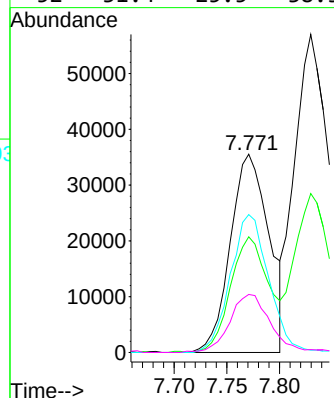
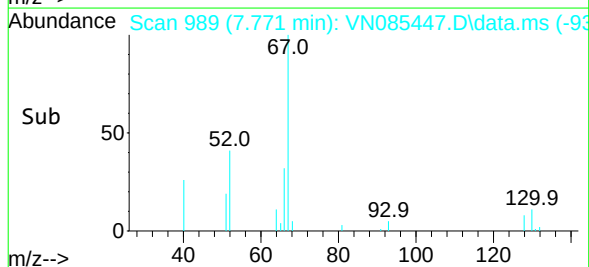
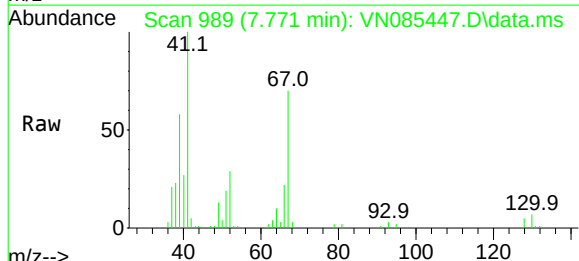
52 31.4 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#42

1,2-Dichloroethane

Concen: 49.881 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085447.D

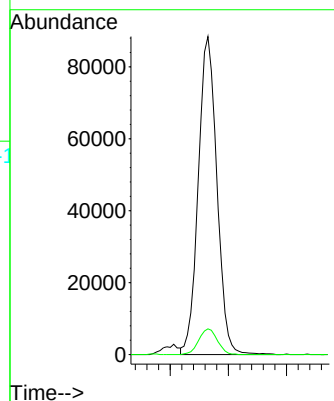
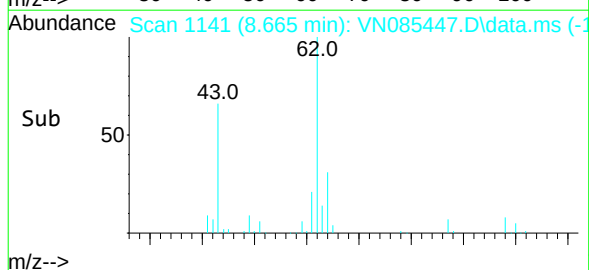
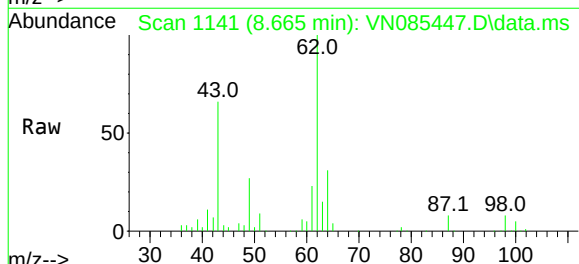
Acq: 15 Jan 2025 09:03

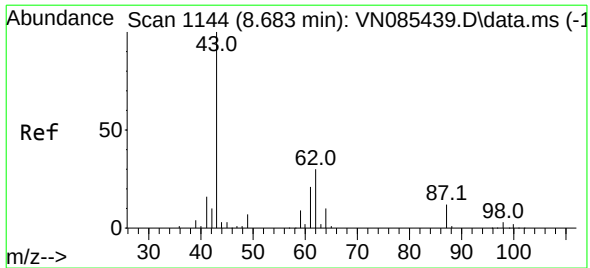
Tgt Ion: 62 Resp: 197097

Ion Ratio Lower Upper

62 100

98 8.1 0.0 17.0





#43

Isopropyl Acetate

Concen: 47.153 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 266284

Ion Ratio Lower Upper

43 100

61 26.6 20.7 31.1

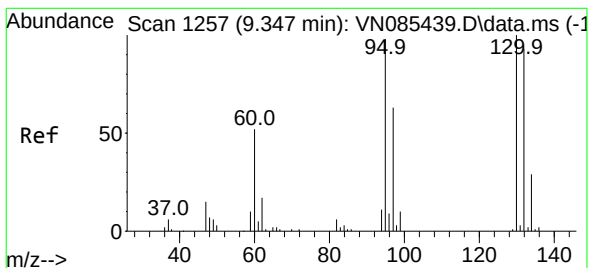
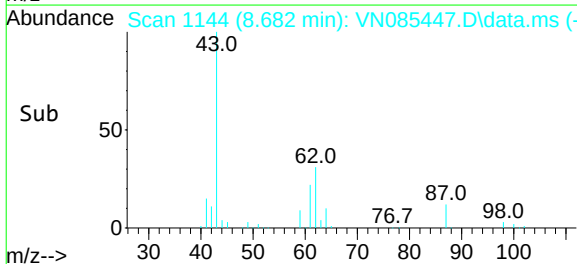
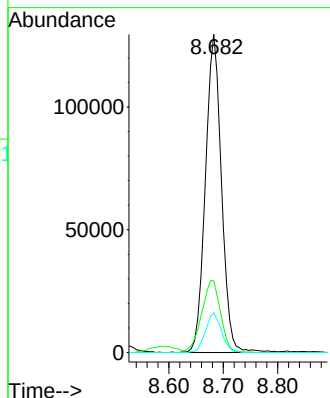
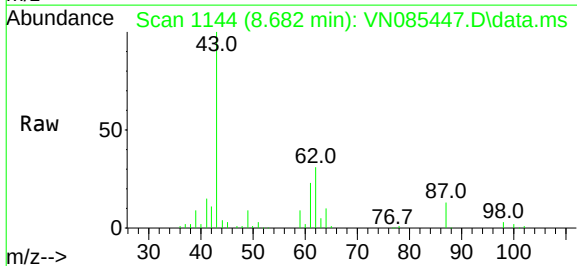
87 12.3 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#44

Trichloroethene

Concen: 50.700 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085447.D

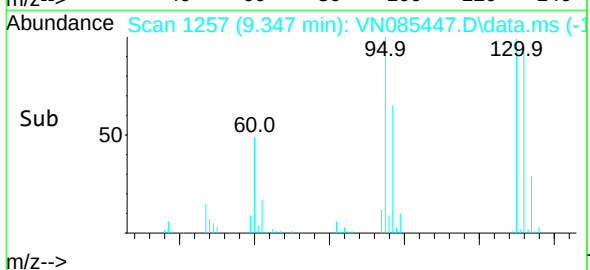
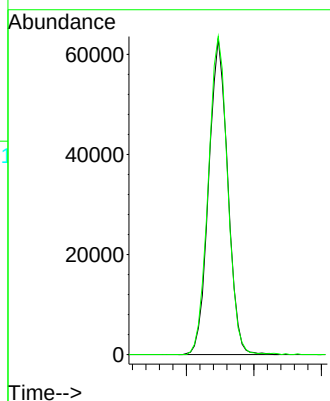
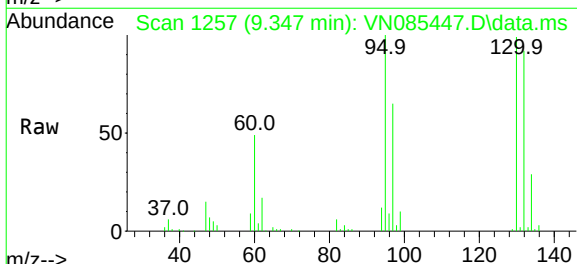
Acq: 15 Jan 2025 09:03

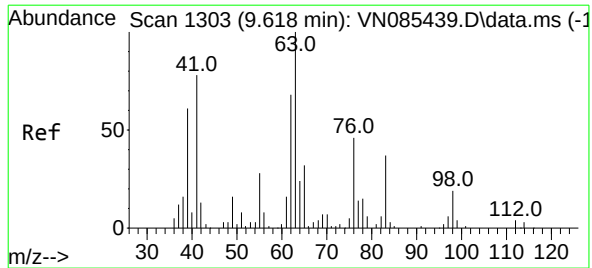
Tgt Ion:130 Resp: 123817

Ion Ratio Lower Upper

130 100

95 100.6 0.0 195.8





#45

1,2-Dichloropropane

Concen: 50.468 ug/l

RT: 9.612 min Scan# 13

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 63 Resp: 135244

Ion Ratio Lower Upper

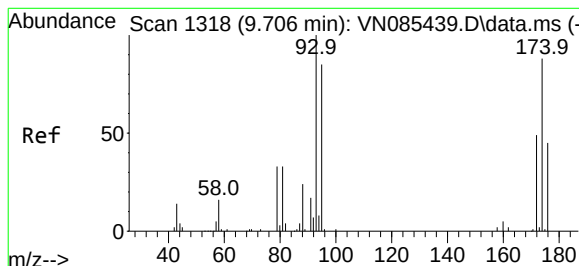
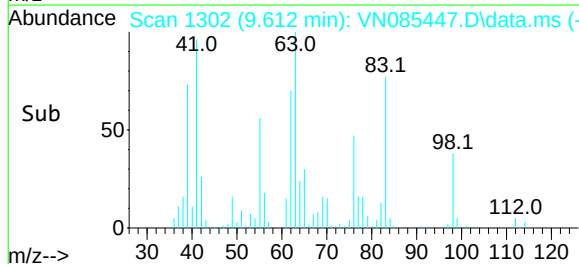
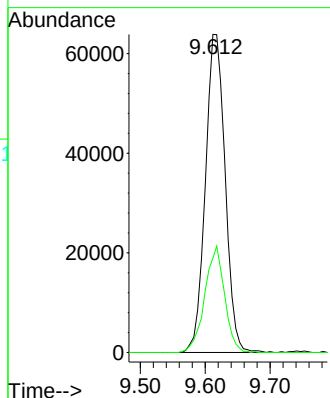
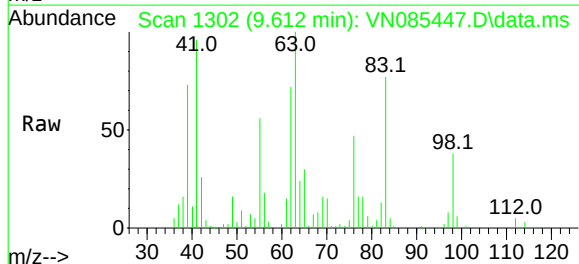
63 100

65 29.6 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#46

Dibromomethane

Concen: 48.873 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

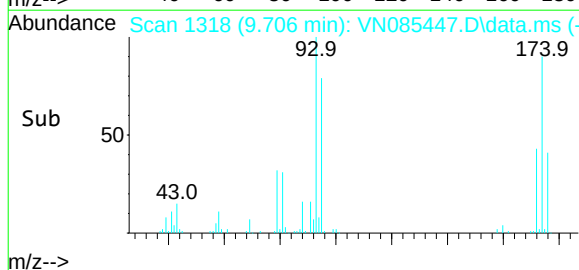
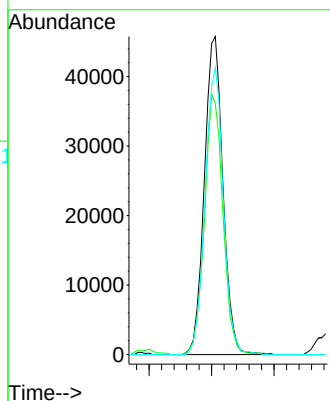
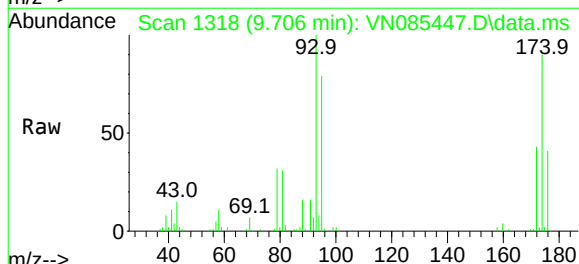
Tgt Ion: 93 Resp: 94501

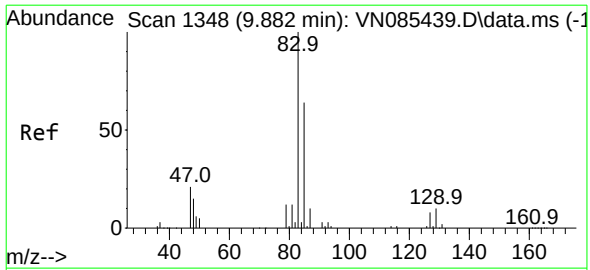
Ion Ratio Lower Upper

93 100

95 81.3 64.7 97.1

174 88.9 69.0 103.4





#47

Bromodichloromethane

Concen: 51.671 ug/l

RT: 9.882 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 203552

Ion Ratio Lower Upper

83 100

85 64.9 51.2 76.8

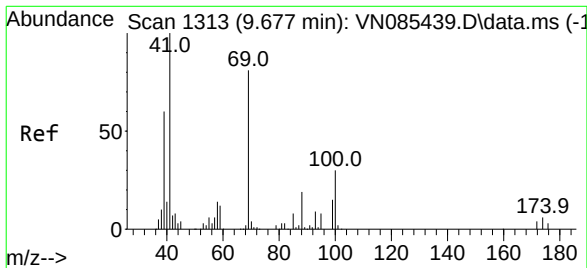
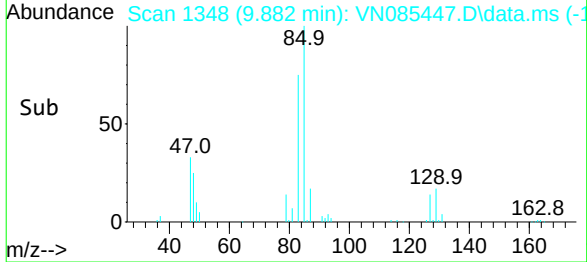
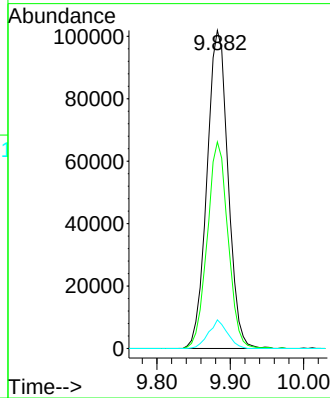
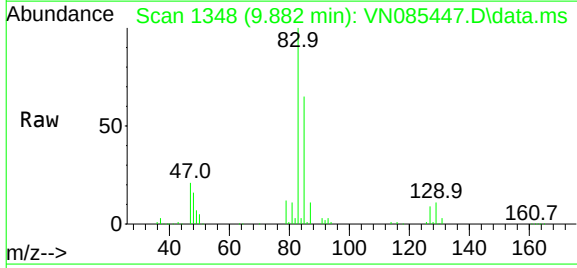
127 9.0 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#48

Methyl methacrylate

Concen: 50.945 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

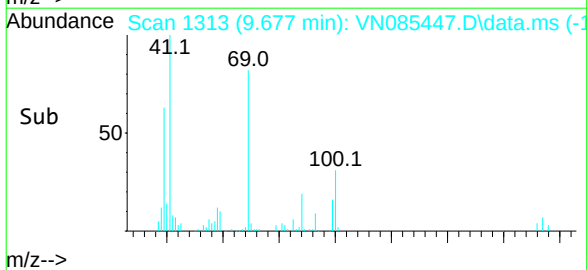
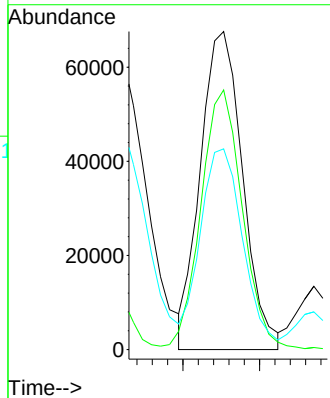
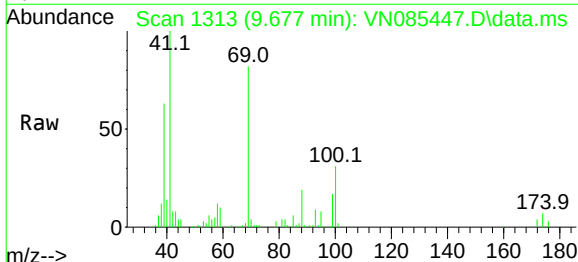
Tgt Ion: 41 Resp: 129471

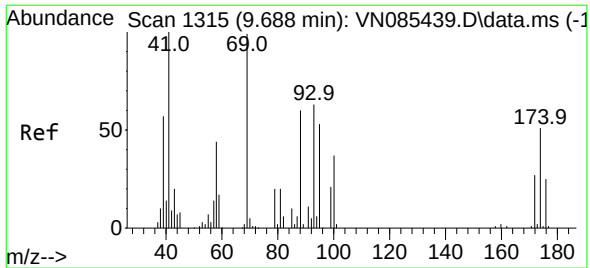
Ion Ratio Lower Upper

41 100

69 80.8 64.7 97.1

39 63.9 49.0 73.6





#49

1,4-Dioxane

Concen: 873.742 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. -0.000 min

Lab File: VN085447.D

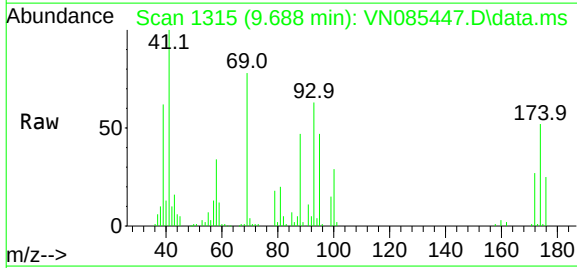
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 88 Resp: 37393

Ion Ratio Lower Upper

88 100

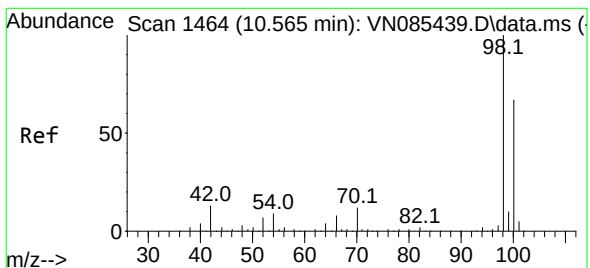
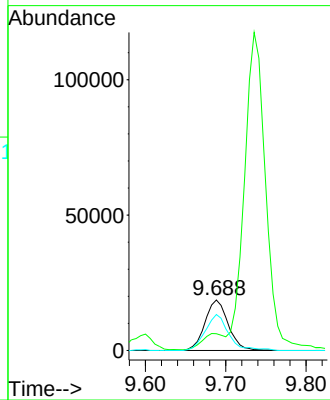
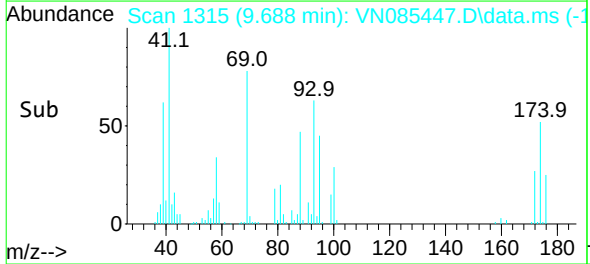
43 32.7 26.6 39.8

58 72.0 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#50

Toluene-d8

Concen: 55.032 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085447.D

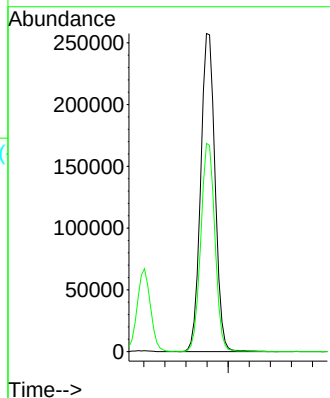
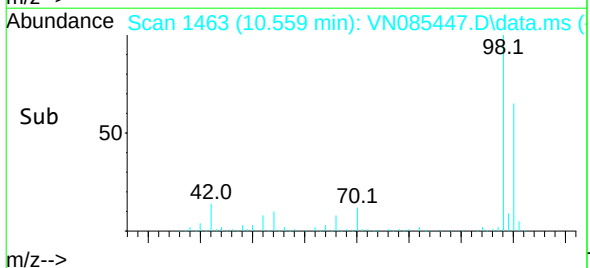
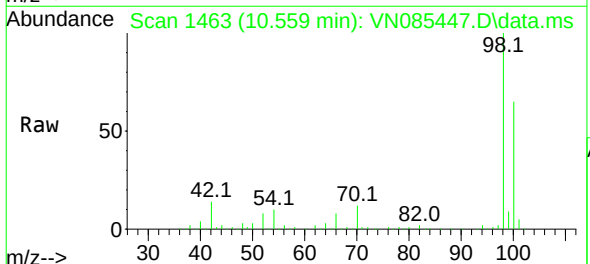
Acq: 15 Jan 2025 09:03

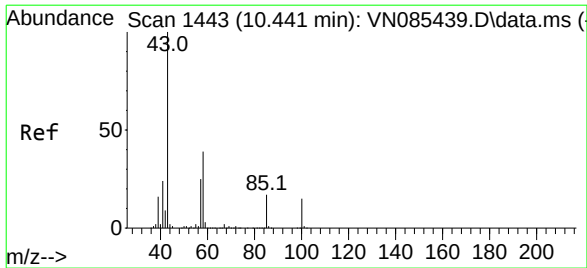
Tgt Ion: 98 Resp: 486444

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4





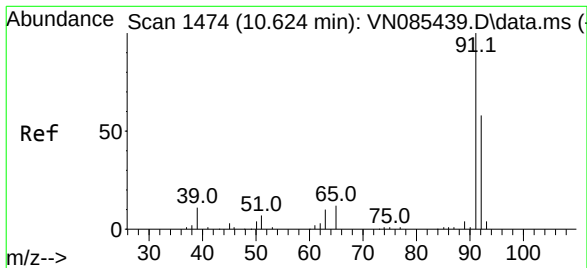
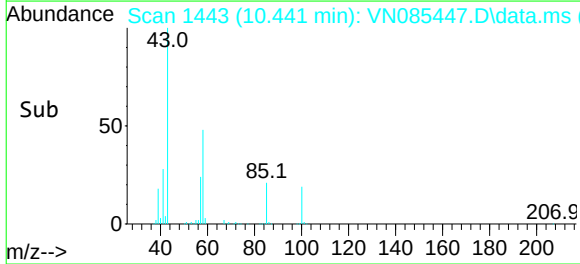
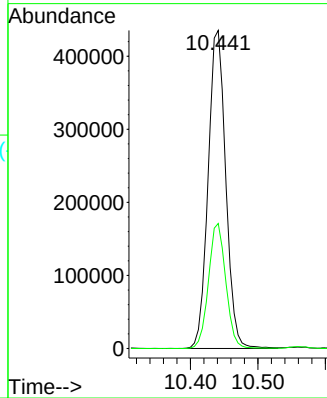
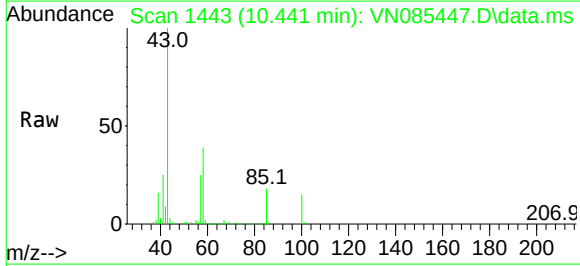
#51  
4-Methyl-2-Pentanone  
Concen: 240.885 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 43 Resp: 789380  
Ion Ratio Lower Upper  
43 100  
58 38.6 30.5 45.7

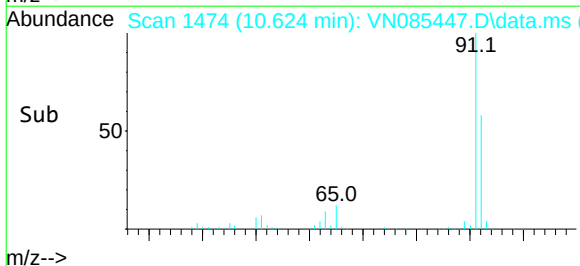
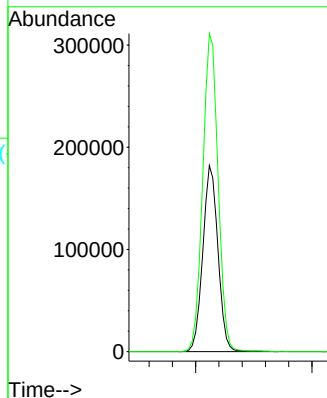
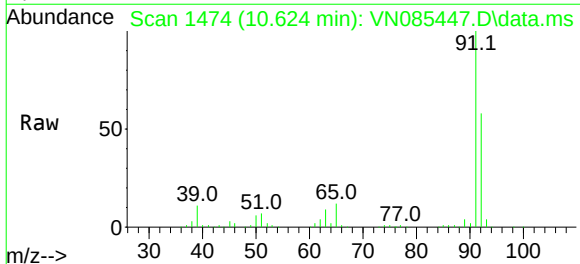
Manual Integrations  
APPROVED

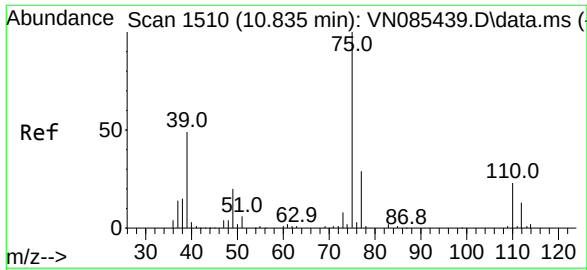
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#52  
Toluene  
Concen: 54.029 ug/l  
RT: 10.624 min Scan# 1474  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

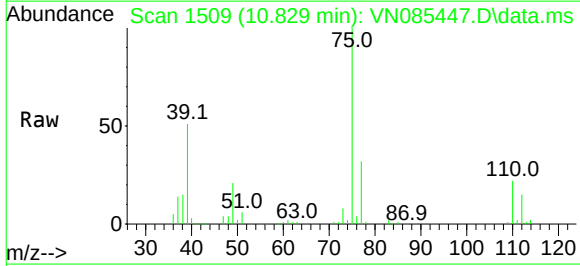
Tgt Ion: 92 Resp: 328434  
Ion Ratio Lower Upper  
92 100  
91 174.2 139.2 208.8





#53  
 t-1,3-Dichloropropene  
 Concen: 53.447 ug/l  
 RT: 10.829 min Scan# 1510  
 Delta R.T. -0.006 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

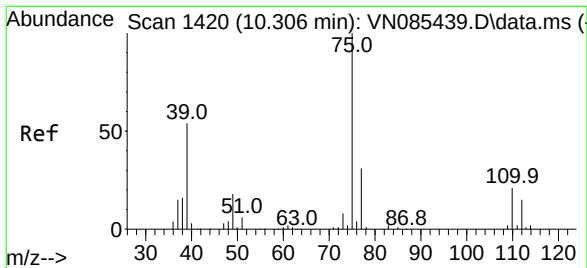
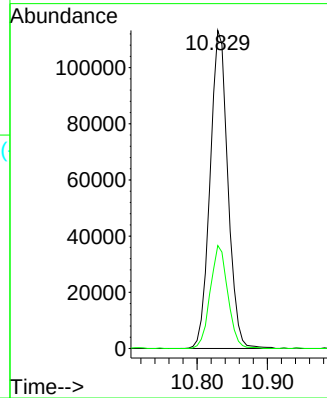
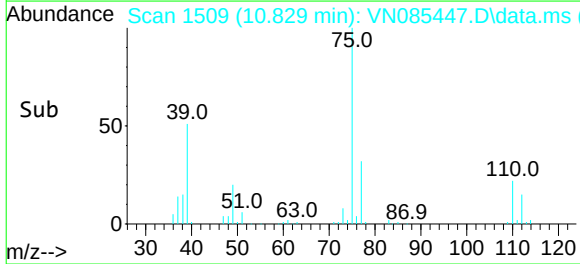
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050



Tgt Ion: 75 Resp: 198974  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 23.5 35.3

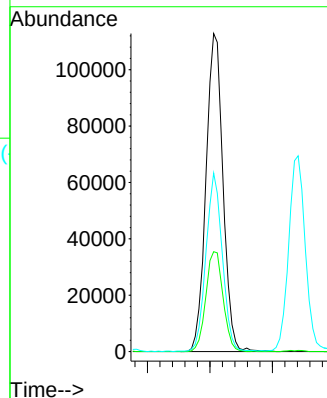
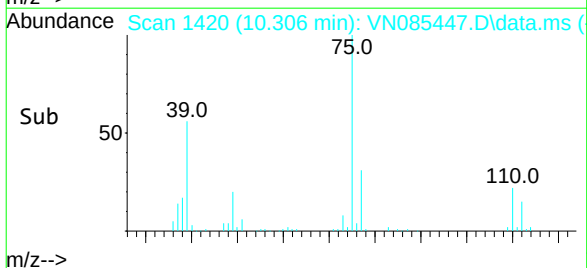
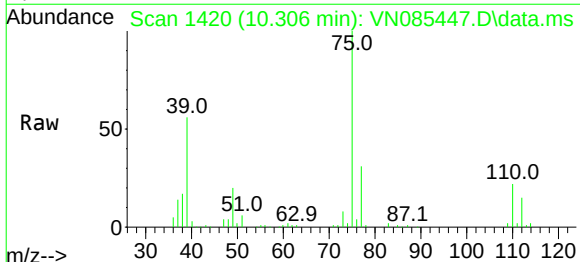
Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

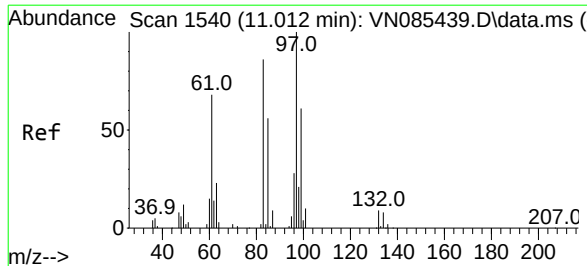


#54  
 cis-1,3-Dichloropropene  
 Concen: 53.582 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 75 Resp: 213072  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 25.0 37.4  
 39 56.0 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 50.215 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 97 Resp: 120803

Ion Ratio Lower Upper

97 100

83 88.0 69.0 103.6

85 55.1 44.6 66.8

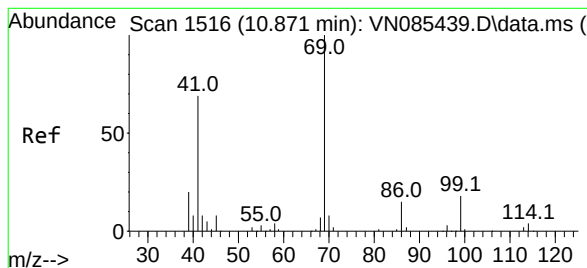
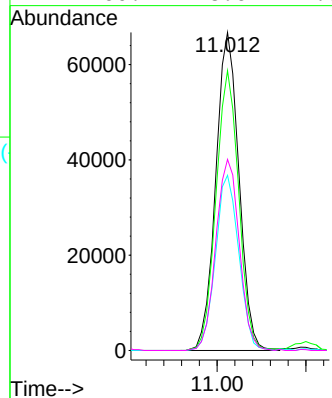
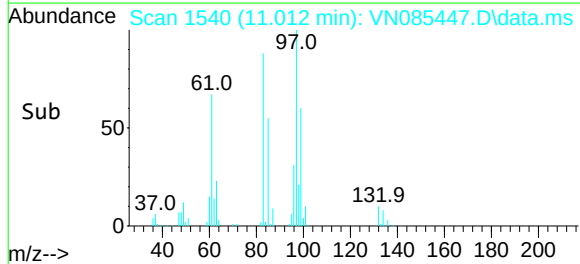
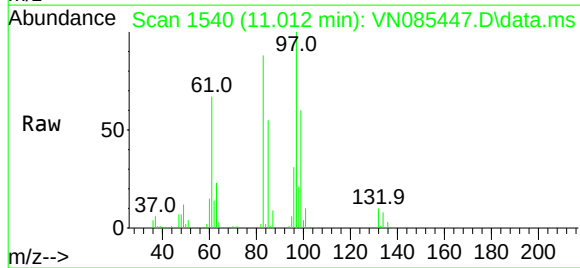
99 60.1 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#56

Ethyl methacrylate

Concen: 45.714 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

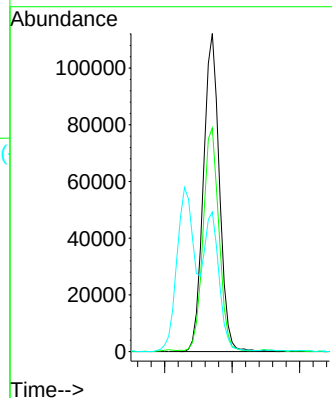
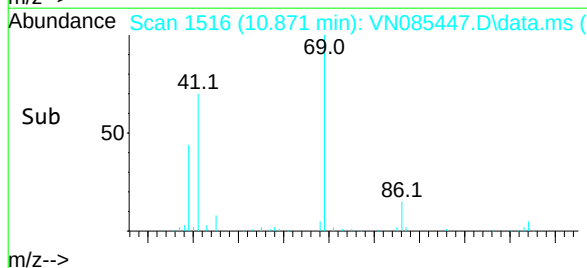
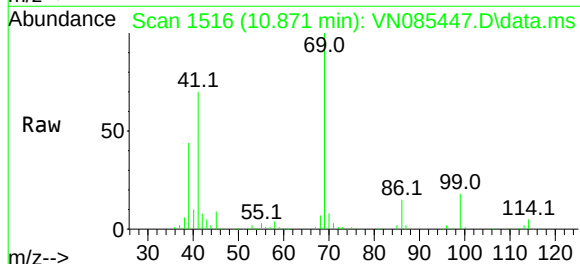
Tgt Ion: 69 Resp: 184561

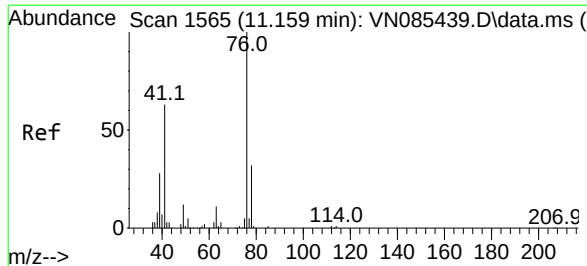
Ion Ratio Lower Upper

69 100

41 68.8 54.6 82.0

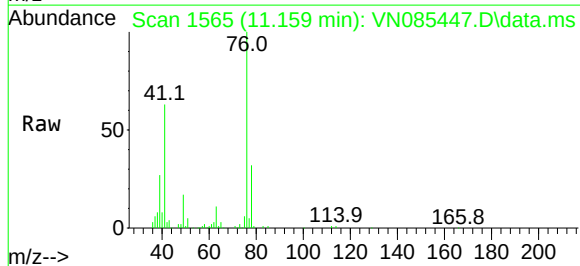
39 39.6 32.4 48.6





1,3-Dichloropropane  
Concen: 50.662 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

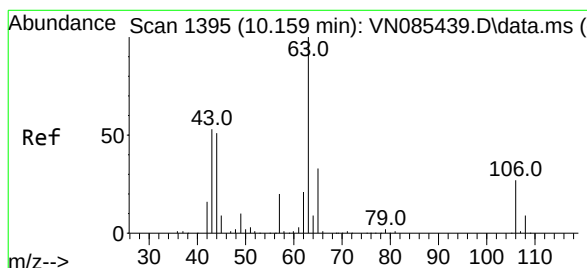
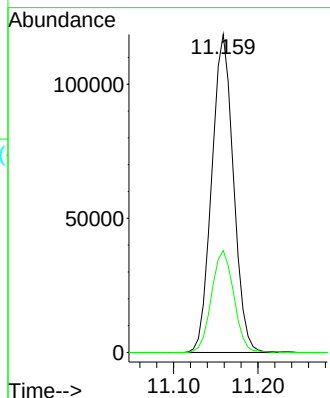
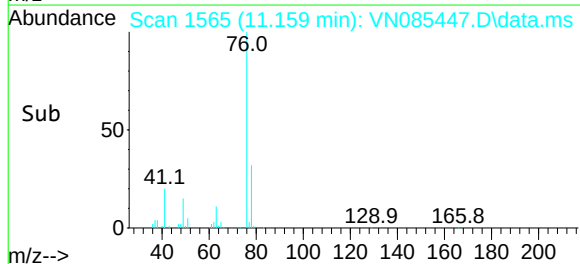
Instrument : MSVOA\_N  
ClientSampleId : VSTDCCC050



Tgt Ion: 76 Resp: 211921  
Ion Ratio Lower Upper  
76 100  
78 32.9 25.6 38.4

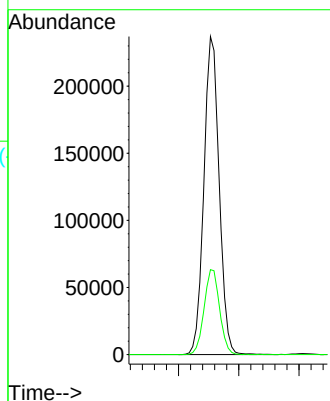
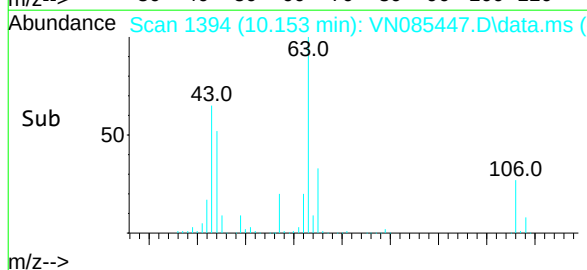
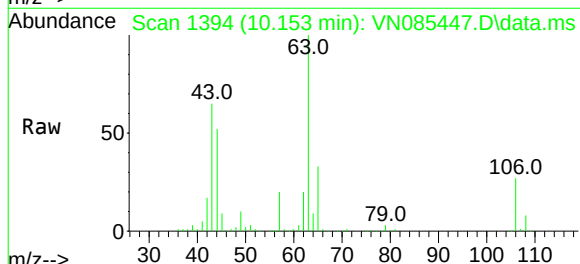
Manual Integrations  
APPROVED

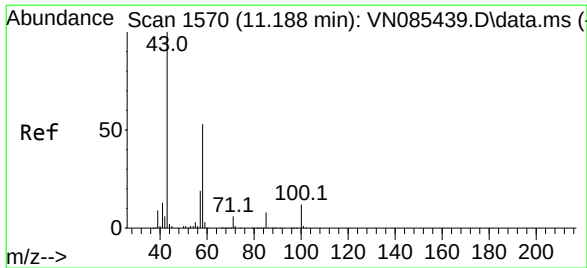
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



2-Chloroethyl Vinyl ether  
Concen: 272.966 ug/l  
RT: 10.153 min Scan# 1394  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

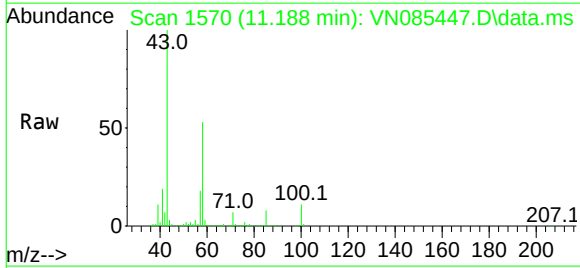
Tgt Ion: 63 Resp: 416723  
Ion Ratio Lower Upper  
63 100  
106 27.1 21.6 32.4





#59  
2-Hexanone  
Concen: 242.307 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

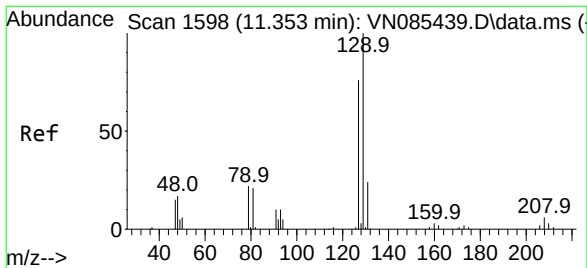
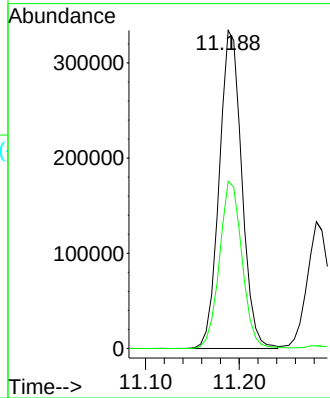
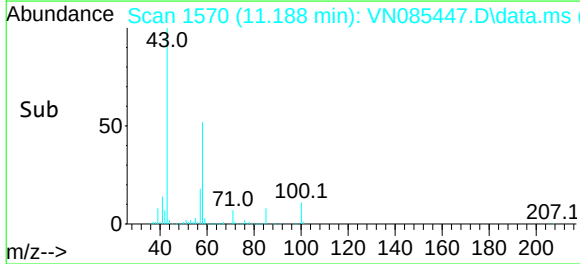
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 43 Resp: 558711  
Ion Ratio Lower Upper  
43 100  
58 52.6 26.2 78.6

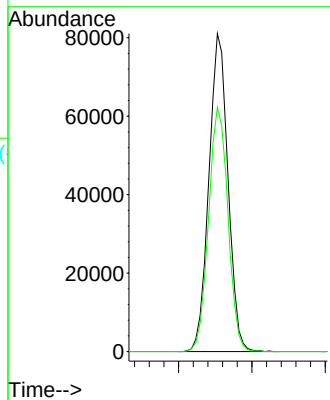
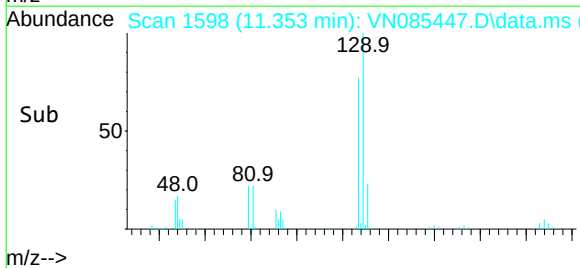
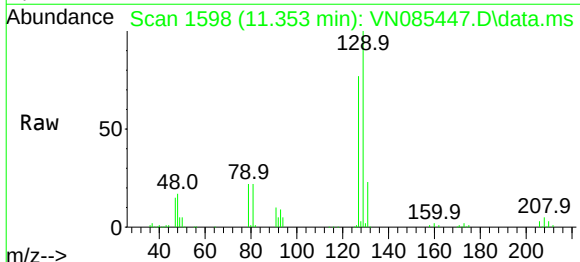
Manual Integrations  
APPROVED

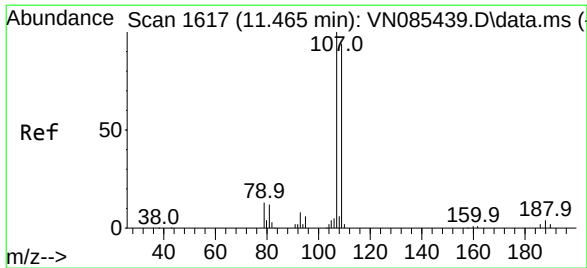
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#60  
Dibromochloromethane  
Concen: 50.392 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:129 Resp: 146358  
Ion Ratio Lower Upper  
129 100  
127 78.3 38.6 115.8





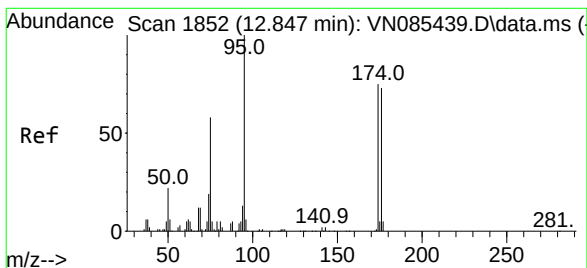
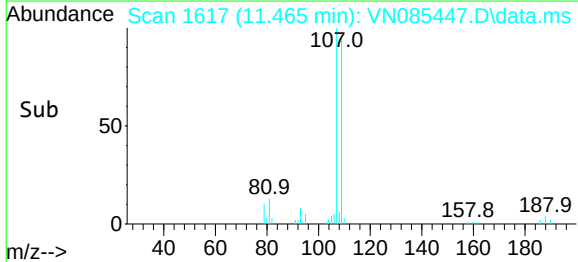
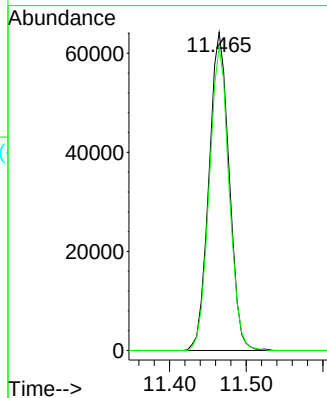
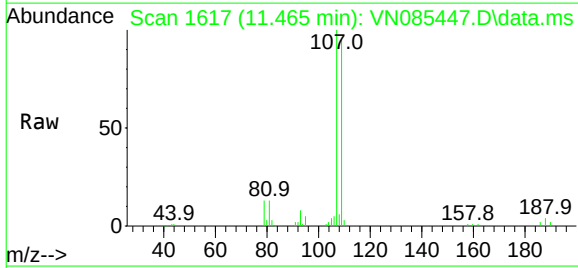
#61  
1,2-Dibromoethane  
Concen: 49.039 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 107 Resp: 117431  
Ion Ratio Lower Upper  
107 100  
109 93.8 75.9 113.9

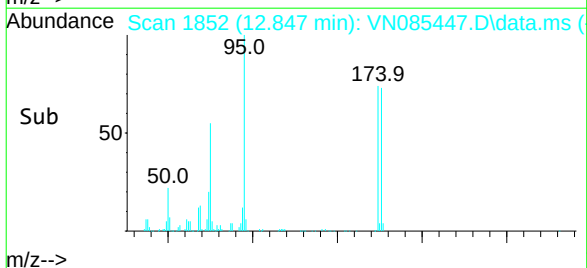
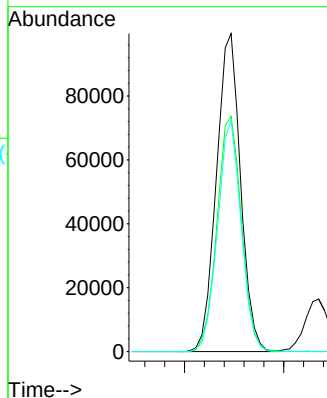
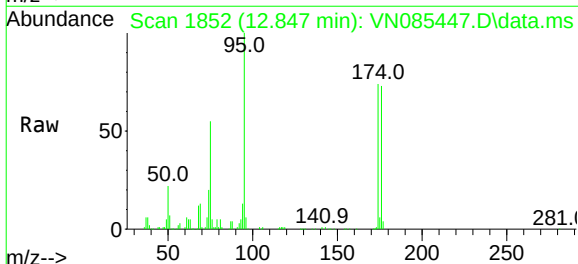
Manual Integrations  
APPROVED

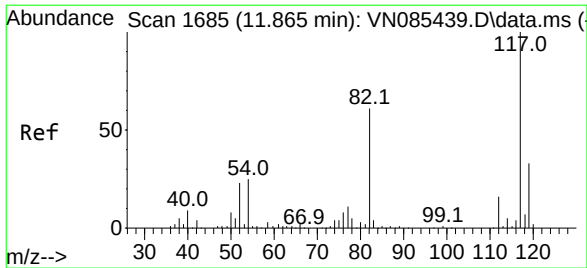
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#62  
4-Bromofluorobenzene  
Concen: 55.673 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

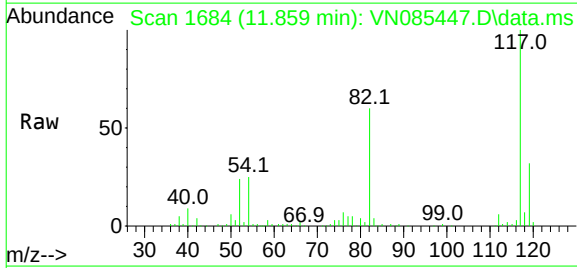
Tgt Ion: 95 Resp: 168340  
Ion Ratio Lower Upper  
95 100  
174 75.1 0.0 145.0  
176 70.8 0.0 142.4





#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.859 min Scan# 1685  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

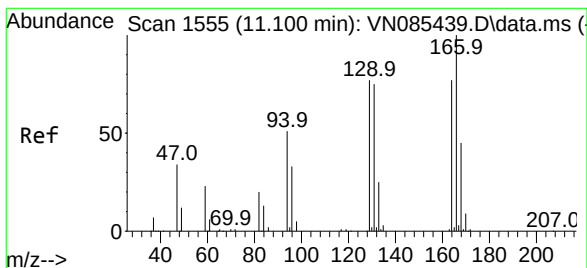
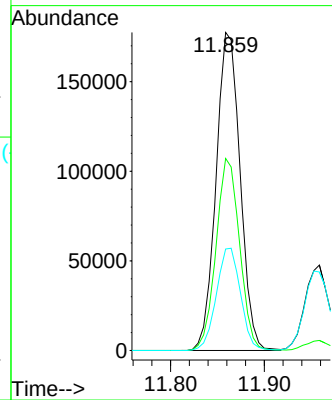
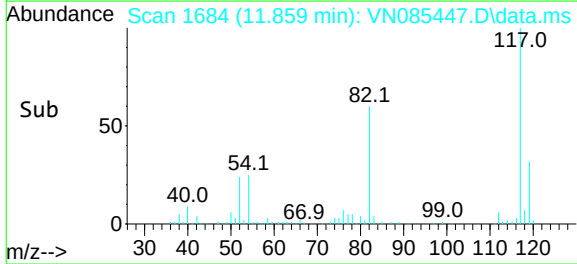
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion:117 Resp: 316952  
Ion Ratio Lower Upper  
117 100  
82 60.4 48.6 72.8  
119 31.9 26.6 39.8

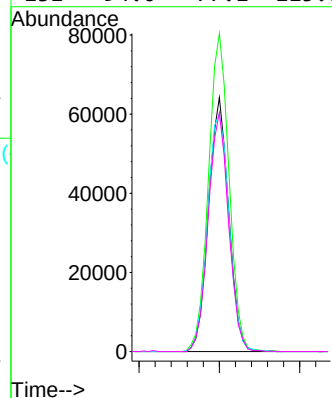
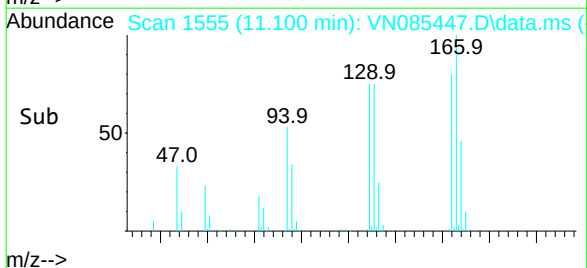
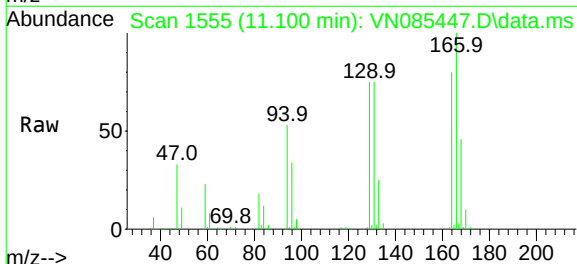
Manual Integrations  
APPROVED

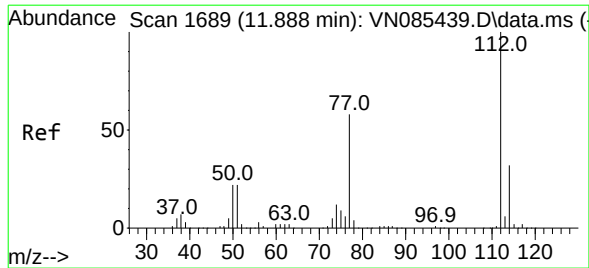
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#64  
Tetrachloroethene  
Concen: 52.107 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:164 Resp: 112592  
Ion Ratio Lower Upper  
164 100  
166 125.2 103.4 155.2  
129 93.6 79.2 118.8  
131 94.0 77.1 115.7





#65

Chlorobenzene

Concen: 50.257 ug/l

RT: 11.888 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:112 Resp: 348954

Ion Ratio Lower Upper

112 100

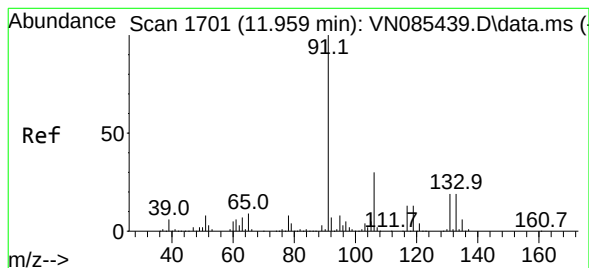
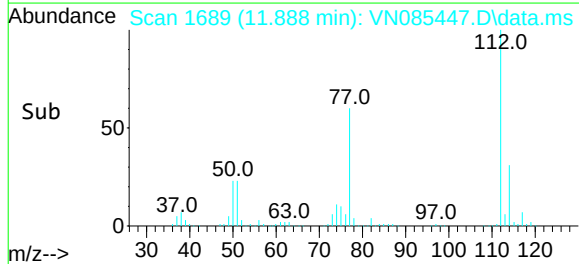
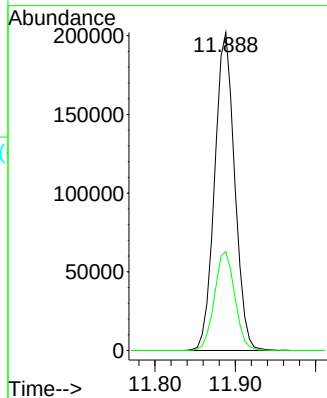
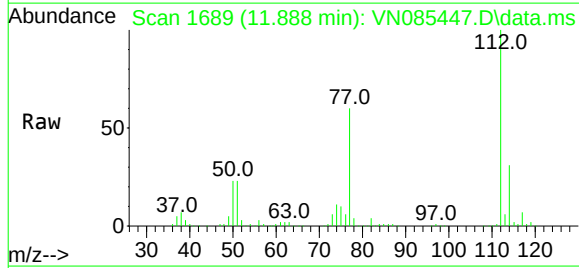
114 31.1 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 49.494 ug/l

RT: 11.953 min Scan# 1700

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

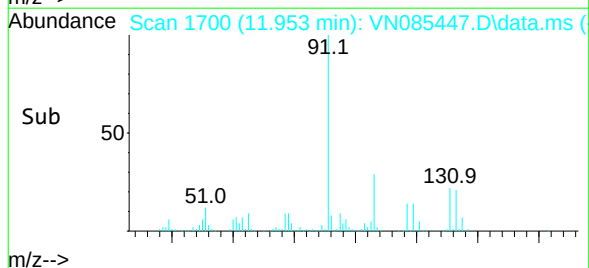
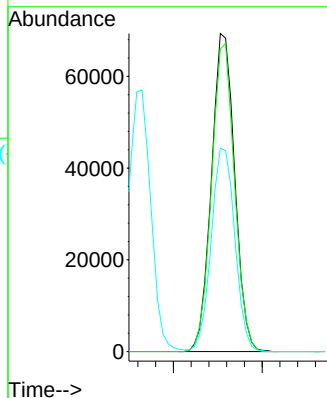
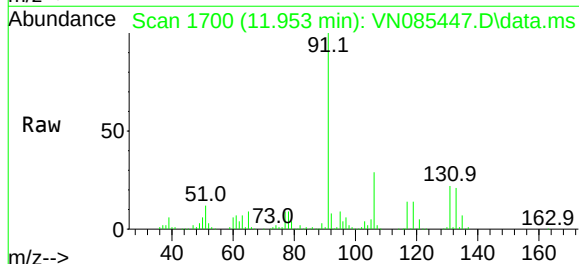
Tgt Ion:131 Resp: 126127

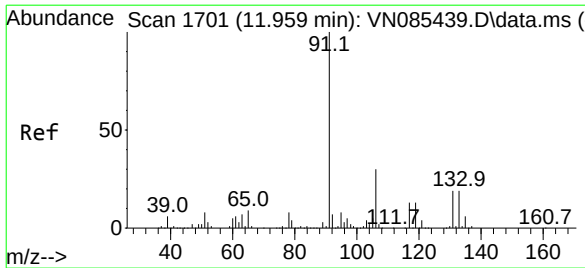
Ion Ratio Lower Upper

131 100

133 95.6 47.4 142.3

119 65.1 33.1 99.5





#67

Ethyl Benzene

Concen: 55.122 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 623373

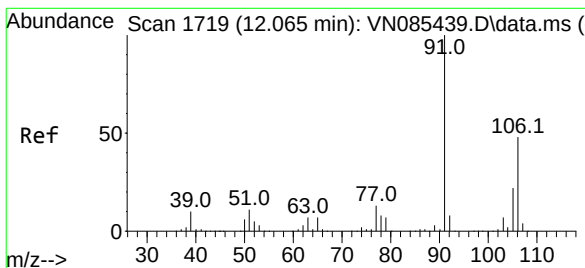
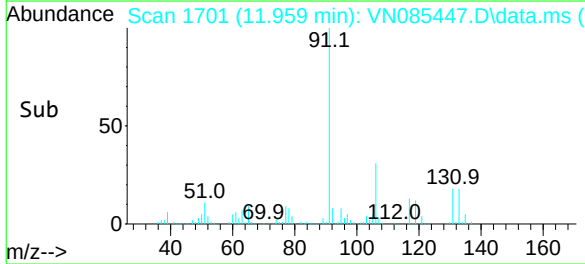
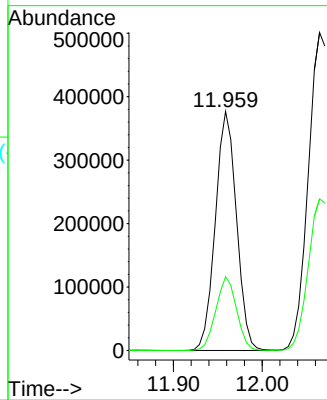
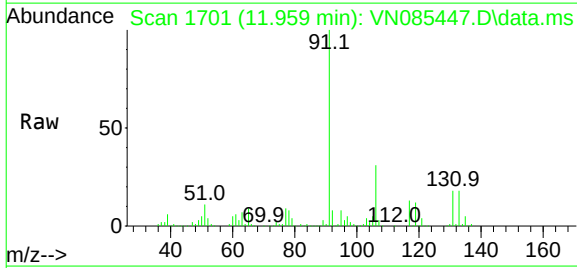
Ion Ratio Lower Upper

91 100

106 30.9 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#68

m/p-Xylenes

Concen: 114.570 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. -0.000 min

Lab File: VN085447.D

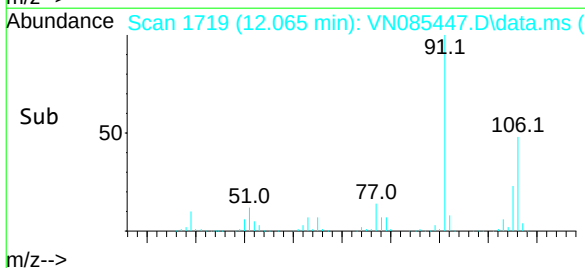
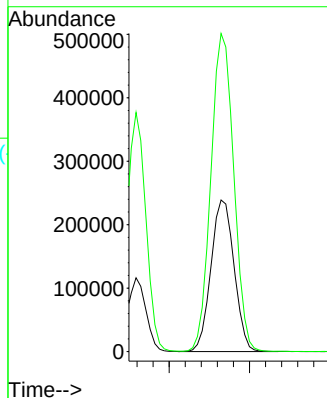
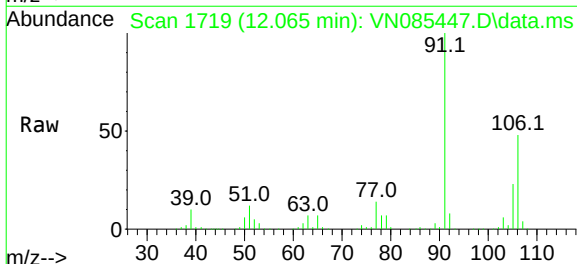
Acq: 15 Jan 2025 09:03

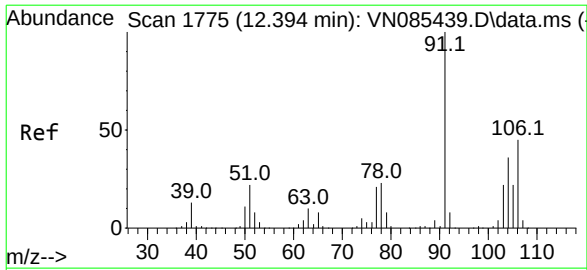
Tgt Ion:106 Resp: 478857

Ion Ratio Lower Upper

106 100

91 207.2 167.7 251.5





#69

o-Xylene

Concen: 55.481 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:106 Resp: 221609

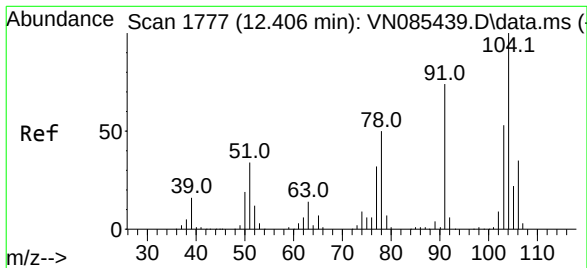
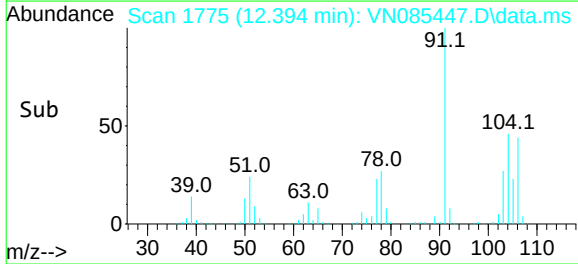
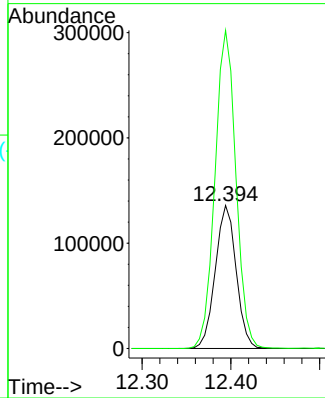
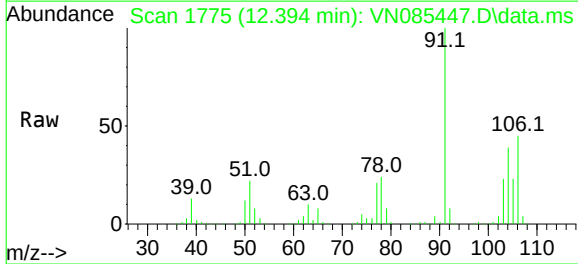
Ion Ratio Lower Upper

106 100

91 223.4 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#70

Styrene

Concen: 57.933 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

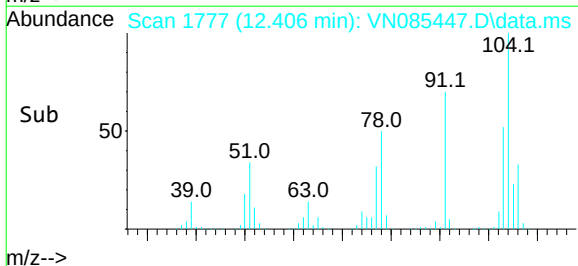
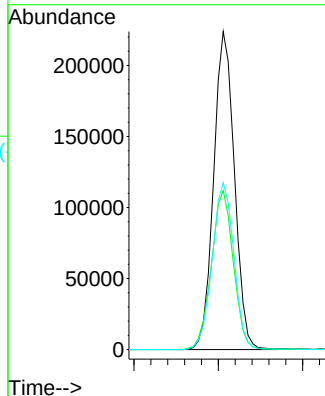
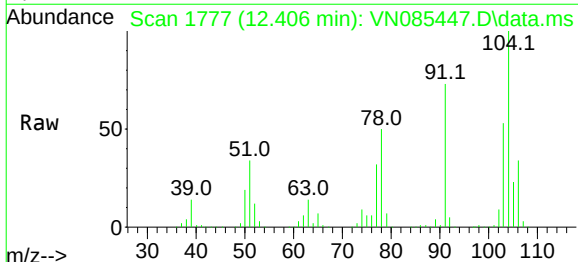
Tgt Ion:104 Resp: 382963

Ion Ratio Lower Upper

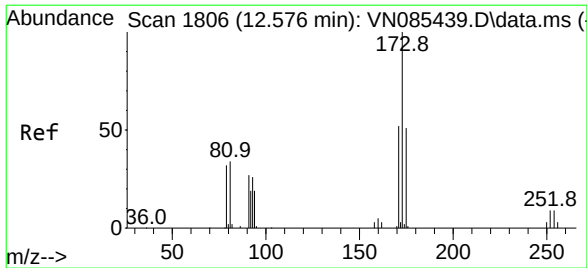
104 100

78 52.8 42.5 63.7

103 55.0 43.8 65.8







#71

Bromoform

Concen: 52.493 ug/l

RT: 12.570 min Scan# 1806

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:173 Resp: 95715

Ion Ratio Lower Upper

173 100

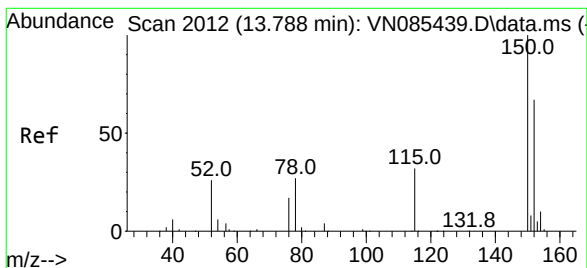
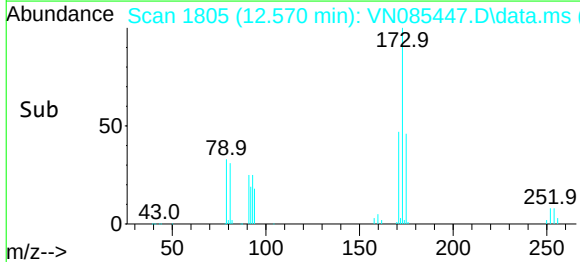
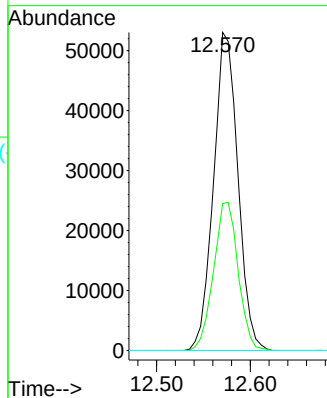
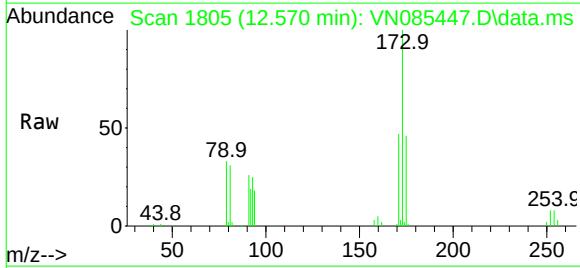
175 47.0 24.4 73.2

254 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

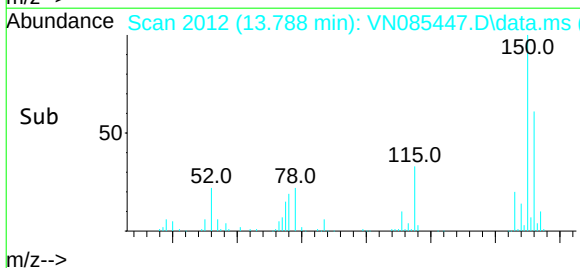
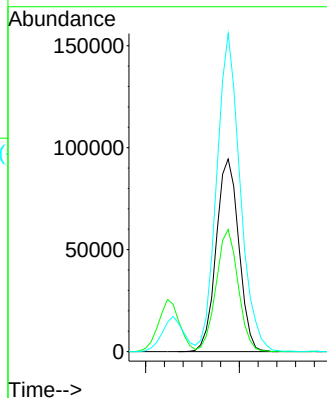
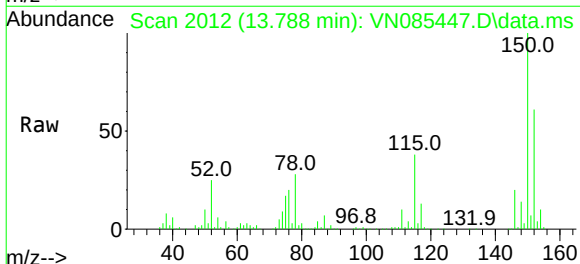
Tgt Ion:152 Resp: 158347

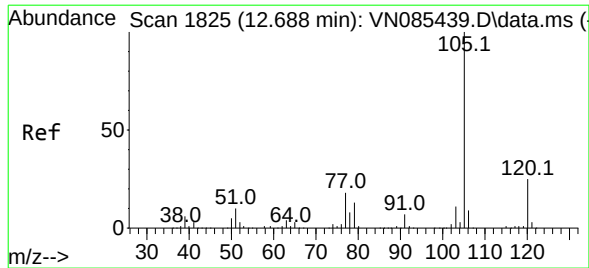
Ion Ratio Lower Upper

152 100

115 61.8 31.1 93.3

150 171.2 0.0 343.6





#73

Isopropylbenzene

Concen: 54.261 ug/l

RT: 12.688 min Scan# 1825

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 105 Resp: 579887

Ion Ratio Lower Upper

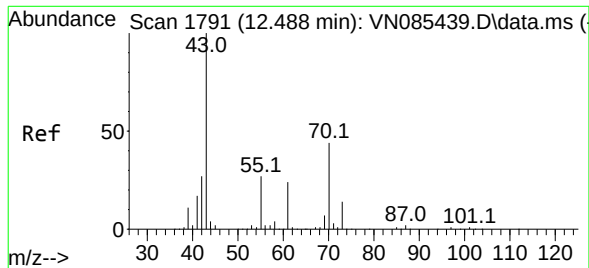
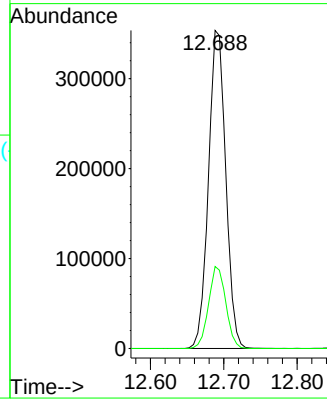
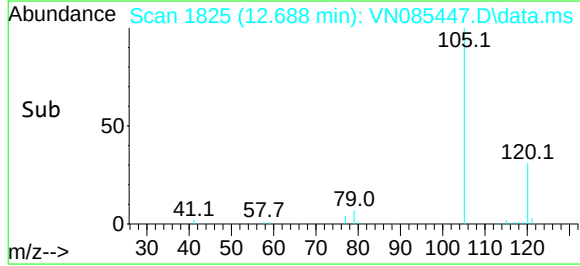
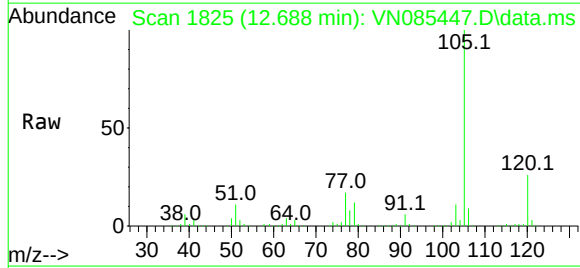
105 100

120 25.6 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#74

N-ethyl acetate

Concen: 47.841 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Tgt Ion: 43 Resp: 229808

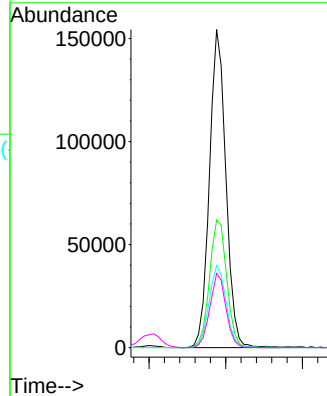
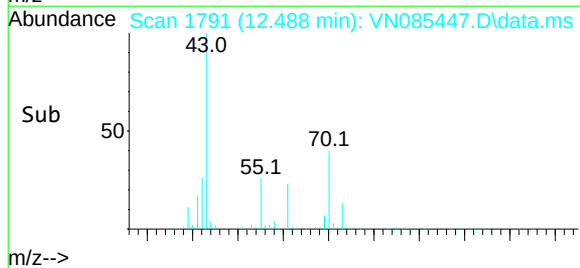
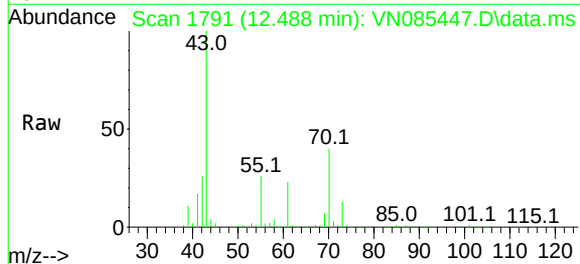
Ion Ratio Lower Upper

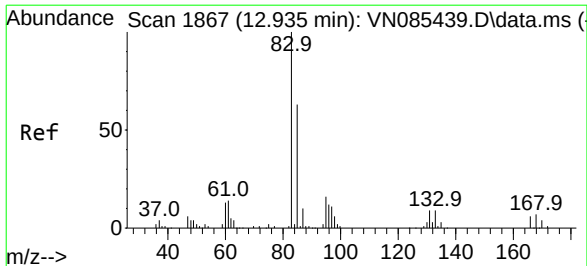
43 100

70 42.0 34.0 51.0

55 26.8 21.4 32.2

61 22.7 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 43.898 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 165720

Ion Ratio Lower Upper

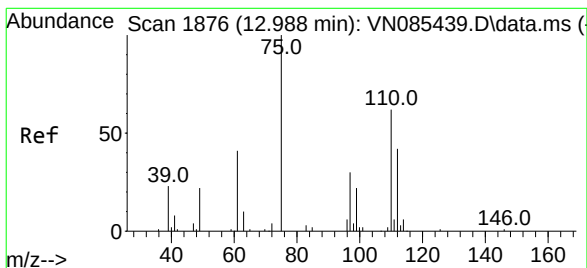
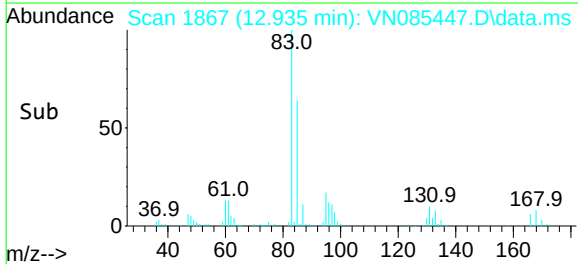
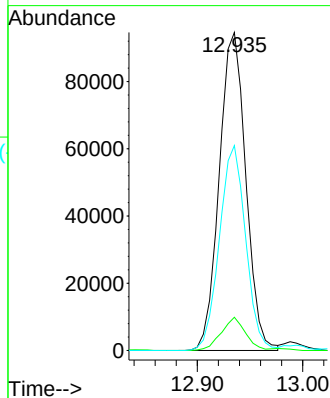
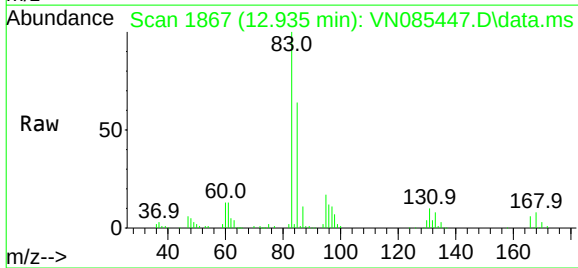
83 100

131 9.6 4.8 14.4

85 63.6 32.2 96.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#76

1,2,3-Trichloropropane

Concen: 46.662 ug/l m

RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

Lab File: VN085447.D

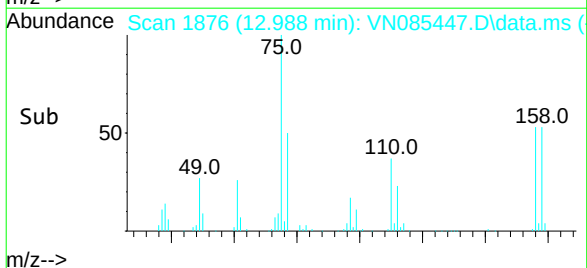
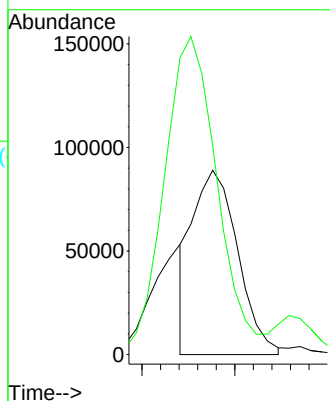
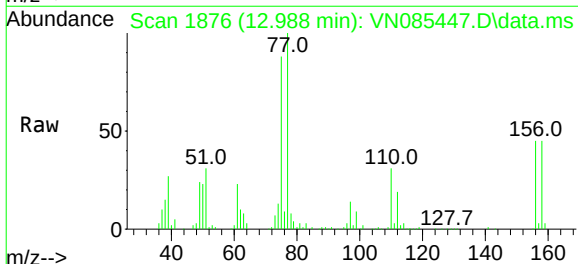
Acq: 15 Jan 2025 09:03

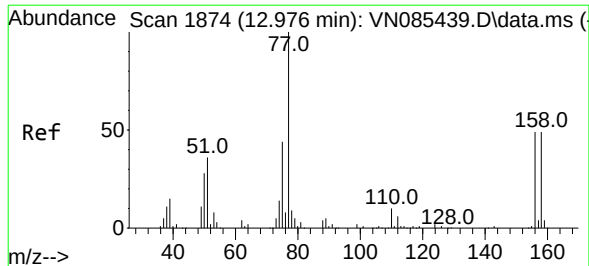
Tgt Ion: 75 Resp: 150178

Ion Ratio Lower Upper

75 100

77 201.4 109.7 329.2





#77

Bromobenzene

Concen: 49.115 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085447.D

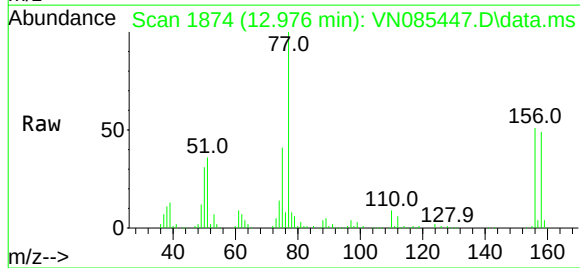
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion:156 Resp: 137136

Ion Ratio Lower Upper

156 100

77 220.6 114.1 342.4

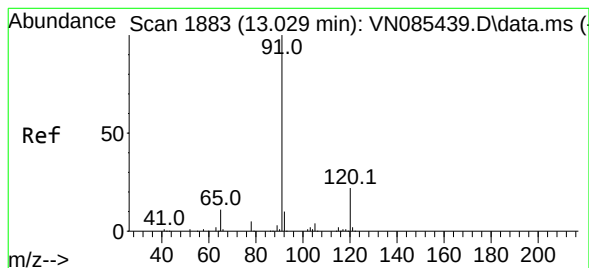
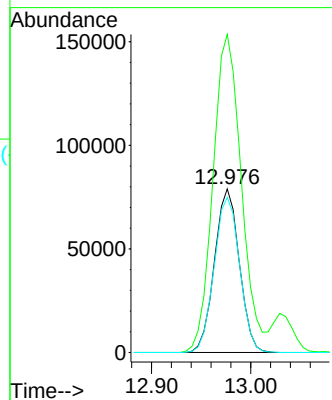
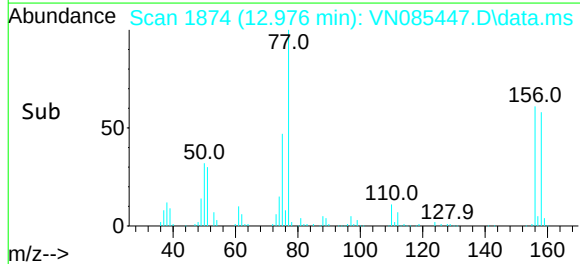
158 97.1 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#78

n-propylbenzene

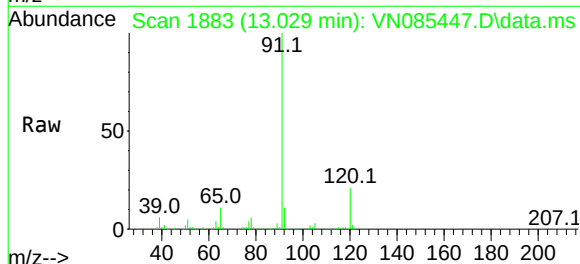
Concen: 55.640 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

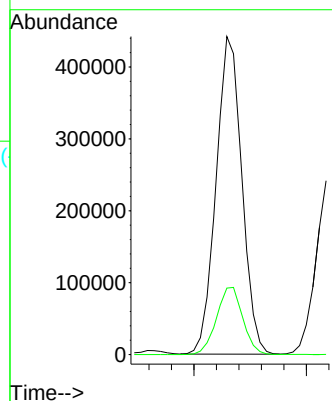
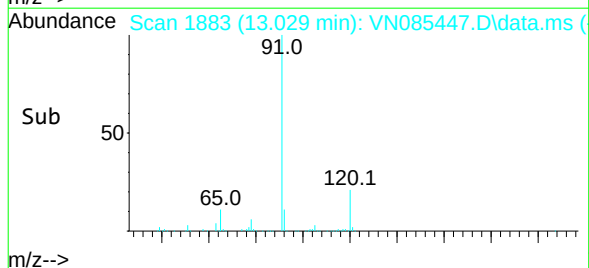


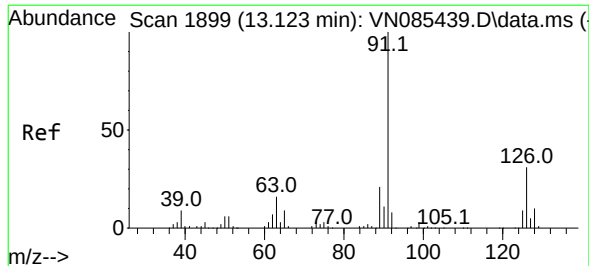
Tgt Ion: 91 Resp: 703936

Ion Ratio Lower Upper

91 100

120 21.5 10.9 32.6





#79

2-Chlorotoluene

Concen: 51.665 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 423036

Ion Ratio Lower Upper

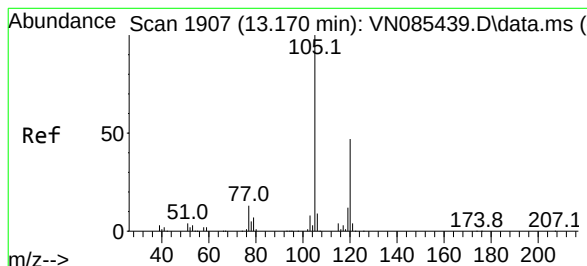
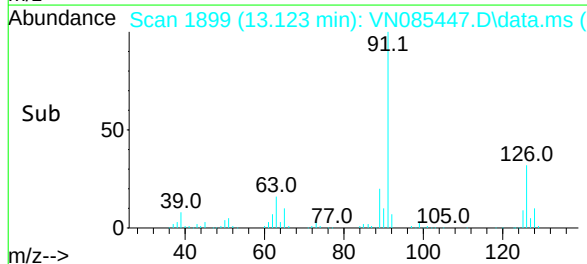
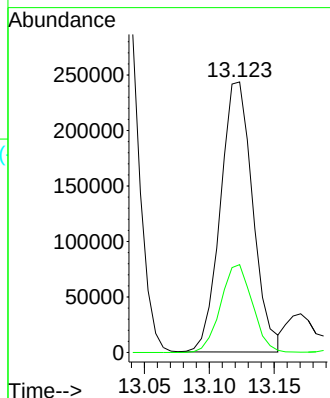
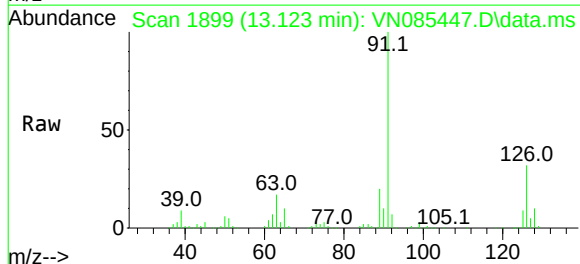
91 100

126 31.9 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#80

1,3,5-Trimethylbenzene

Concen: 55.763 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085447.D

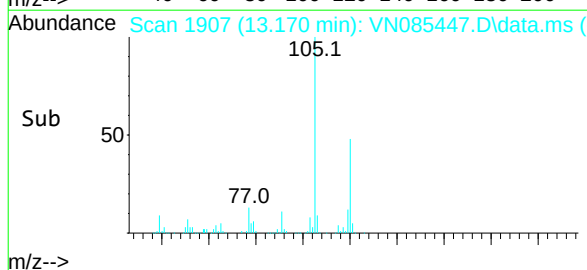
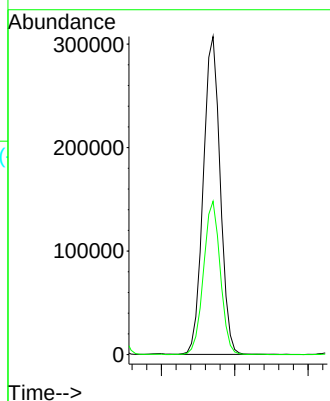
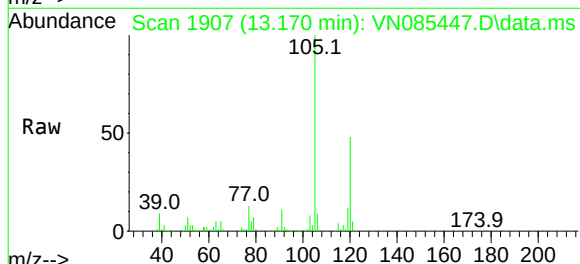
Acq: 15 Jan 2025 09:03

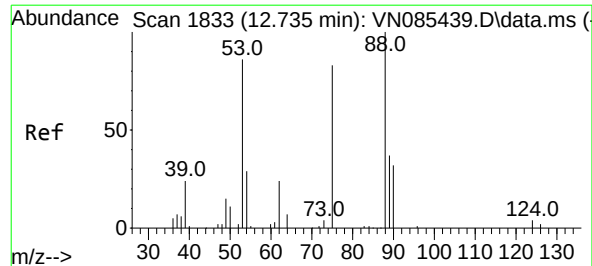
Tgt Ion:105 Resp: 492256

Ion Ratio Lower Upper

105 100

120 47.9 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 48.853 ug/l

RT: 12.729 min Scan# 1833

Delta R.T. -0.006 min

Lab File: VN085447.D

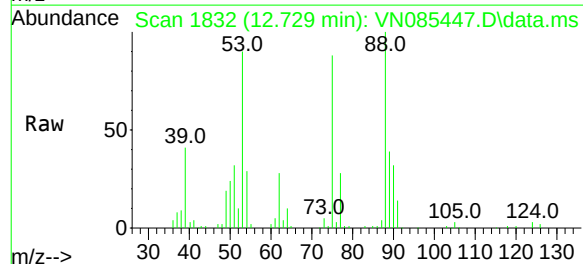
Acq: 15 Jan 2025 09:03

Instrument :

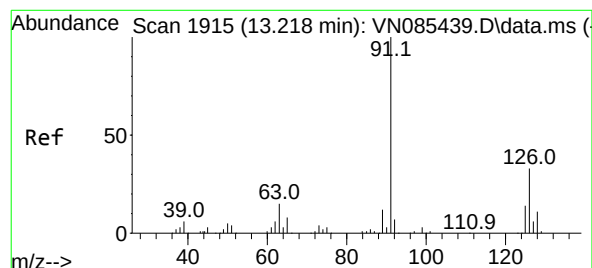
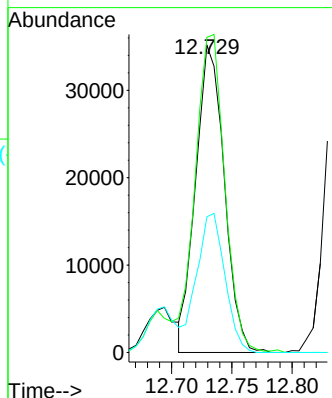
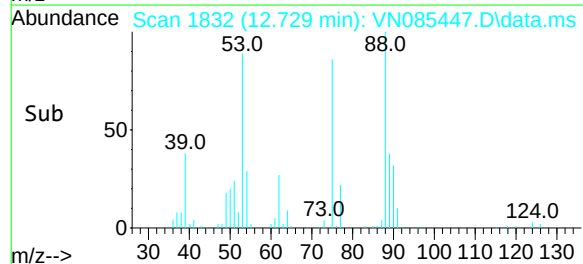
MSVOA\_N

ClientSampleId :

VSTDCCC050



| Tgt Ion: | 75    | Resp: | 58114 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 108.1 | 95.6  | 143.4 |
| 89       | 45.1  | 37.0  | 55.6  |

**Manual Integrations**  
**APPROVED**Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#82

4-Chlorotoluene

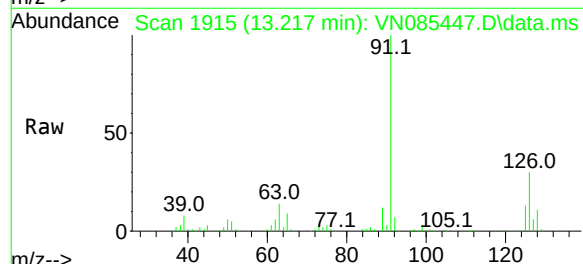
Concen: 52.164 ug/l

RT: 13.217 min Scan# 1915

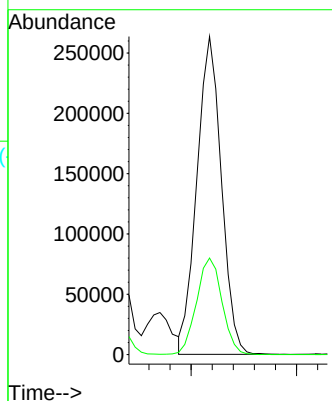
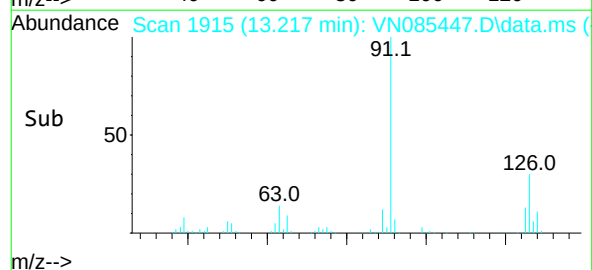
Delta R.T. -0.000 min

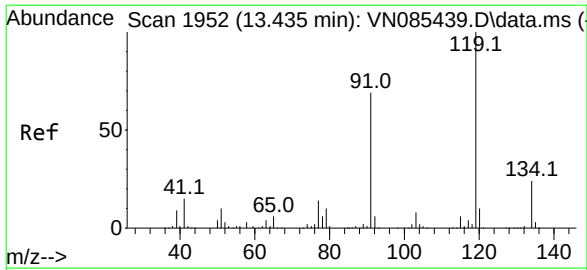
Lab File: VN085447.D

Acq: 15 Jan 2025 09:03



| Tgt Ion: | 91    | Resp: | 425288 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 126      | 31.6  | 15.9  | 47.7   |





#83

tert-Butylbenzene

Concen: 54.680 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085447.D

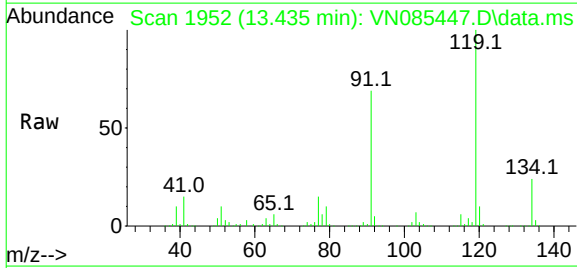
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion:119 Resp: 405351

Ion Ratio Lower Upper

119 100

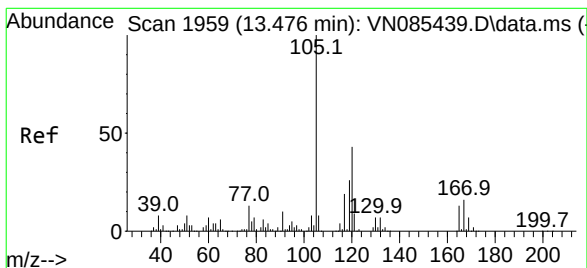
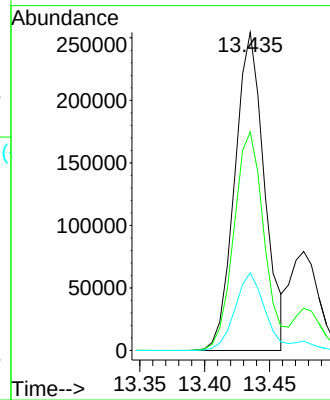
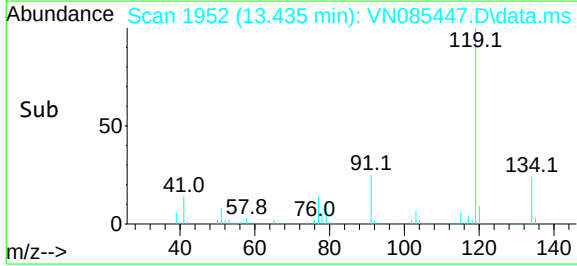
91 70.7 35.1 105.3

134 24.5 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#84

1,2,4-Trimethylbenzene

Concen: 56.692 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085447.D

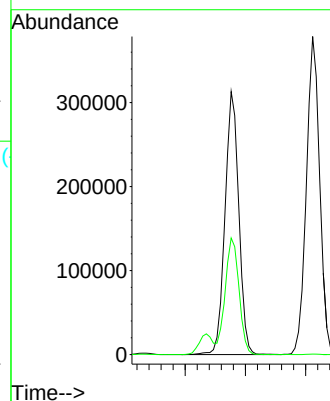
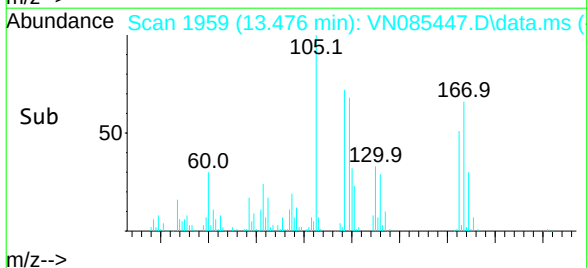
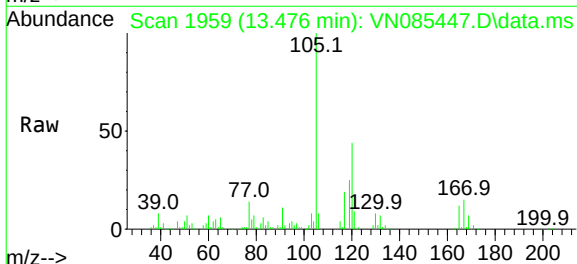
Acq: 15 Jan 2025 09:03

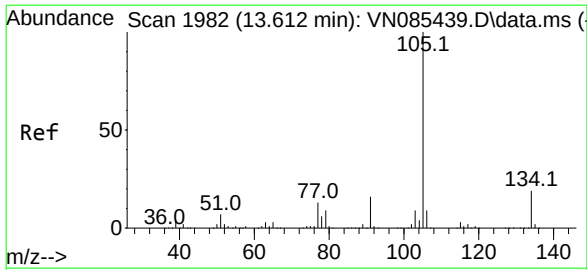
Tgt Ion:105 Resp: 498787

Ion Ratio Lower Upper

105 100

120 45.0 21.6 65.0





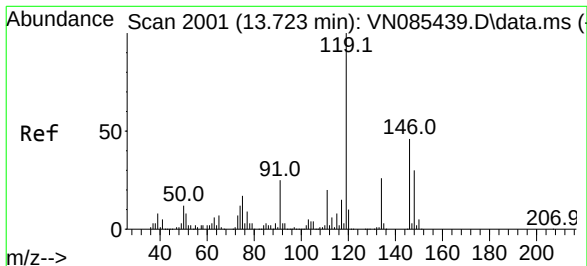
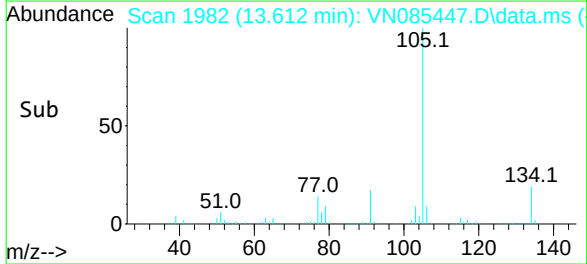
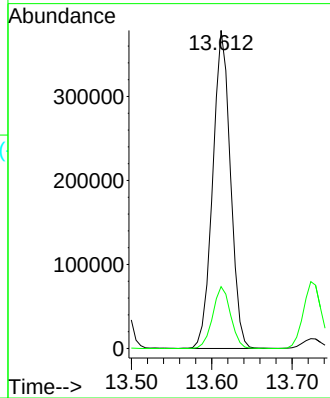
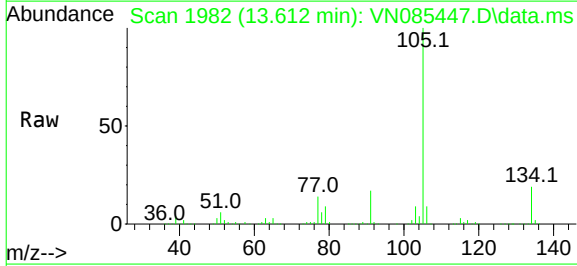
#85  
sec-Butylbenzene  
Concen: 56.497 ug/l  
RT: 13.612 min Scan# 1982  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:105 Resp: 580478  
Ion Ratio Lower Upper  
105 100  
134 19.6 9.7 28.9

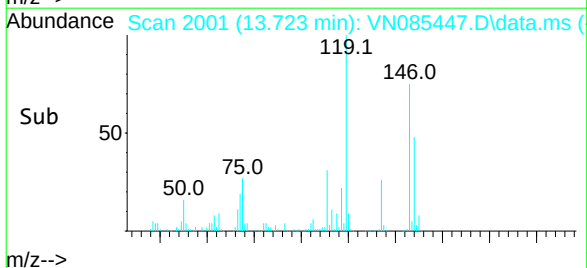
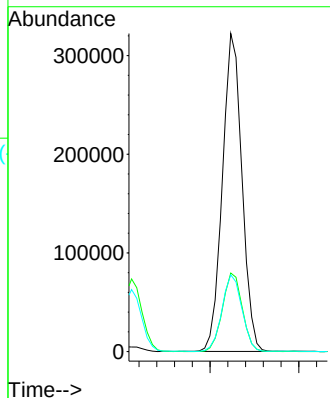
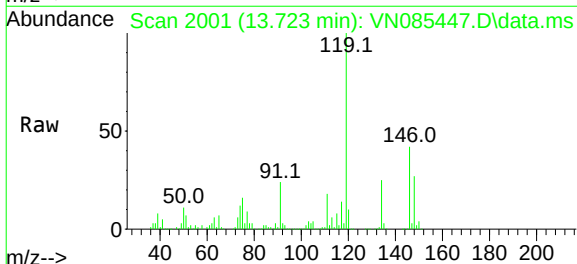
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

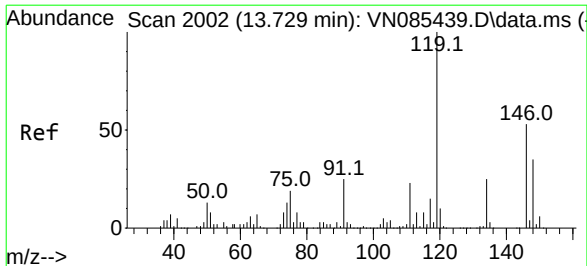


#86  
p-Isopropyltoluene  
Concen: 52.852 ug/l  
RT: 13.723 min Scan# 2001  
Delta R.T. 0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:119 Resp: 492423  
Ion Ratio Lower Upper  
119 100  
134 25.1 12.7 38.0  
91 24.5 12.7 38.1







#87

1,3-Dichlorobenzene

Concen: 50.137 ug/l

RT: 13.729 min Scan# 20

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:146 Resp: 257806

Ion Ratio Lower Upper

146 100

111 42.0 21.4 64.3

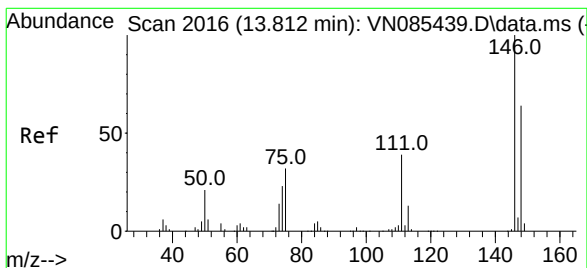
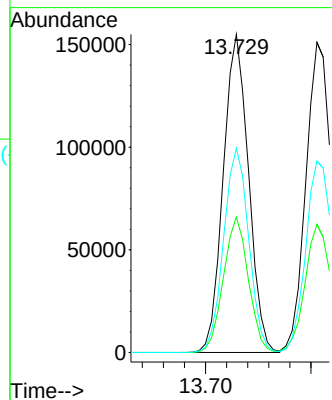
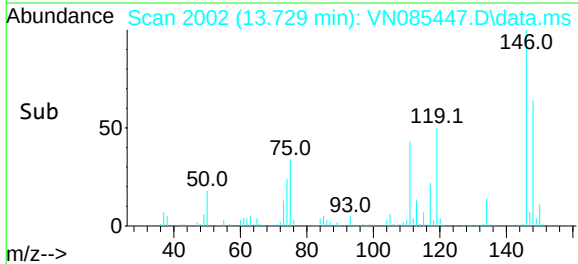
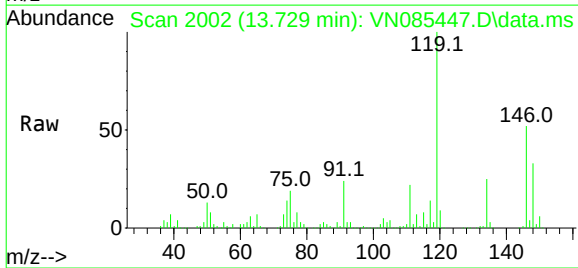
148 63.9 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#88

1,4-Dichlorobenzene

Concen: 48.073 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

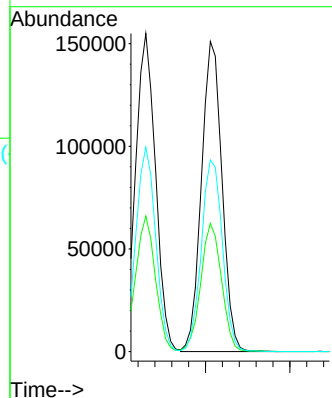
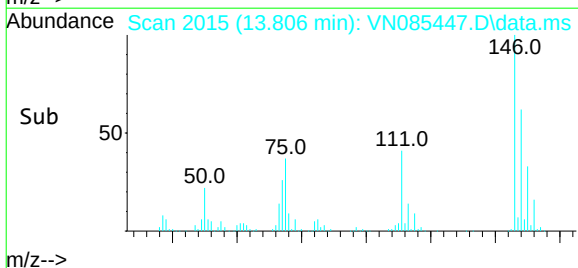
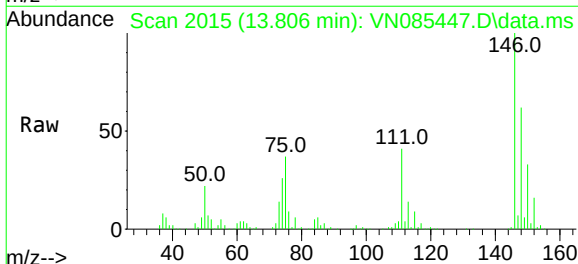
Tgt Ion:146 Resp: 256221

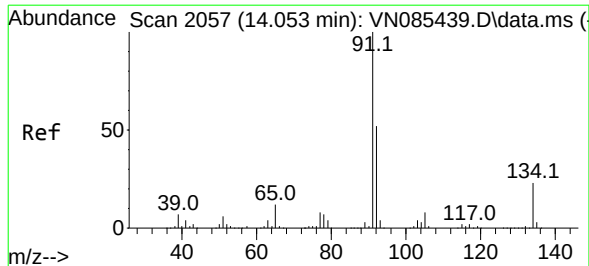
Ion Ratio Lower Upper

146 100

111 41.8 21.3 63.7

148 63.5 32.4 97.0





#89

n-Butylbenzene

Concen: 57.654 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 424966

Ion Ratio Lower Upper

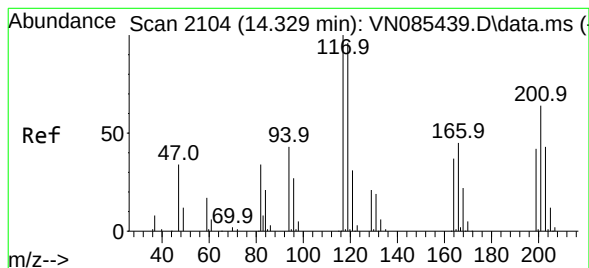
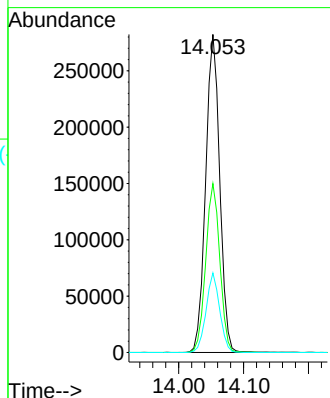
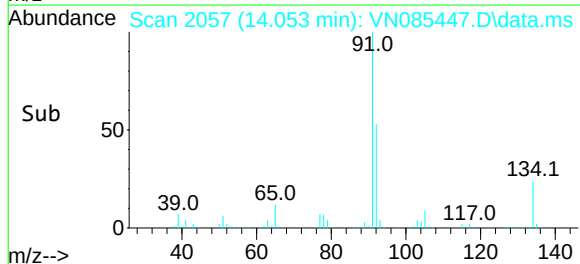
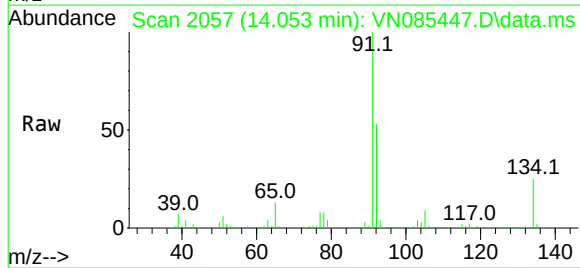
91 100

92 53.2 25.8 77.3

134 24.2 11.7 35.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#90

Hexachloroethane

Concen: 48.675 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. -0.000 min

Lab File: VN085447.D

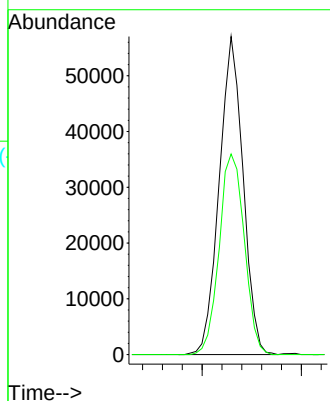
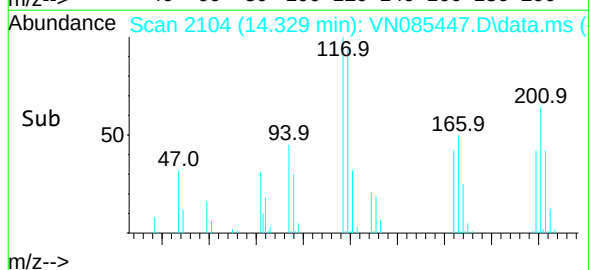
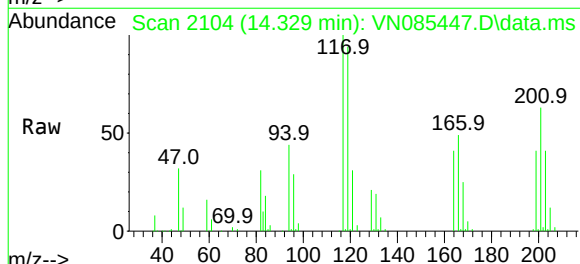
Acq: 15 Jan 2025 09:03

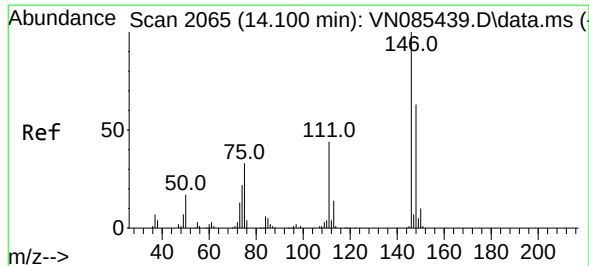
Tgt Ion:117 Resp: 95205

Ion Ratio Lower Upper

117 100

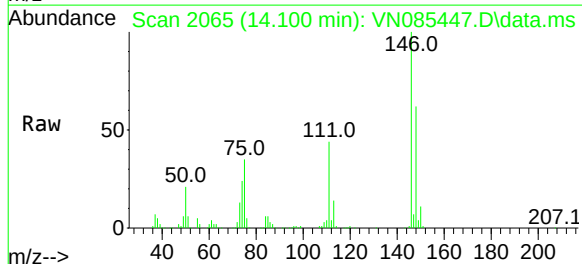
201 66.4 33.7 101.0





#91  
1,2-Dichlorobenzene  
Concen: 47.320 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

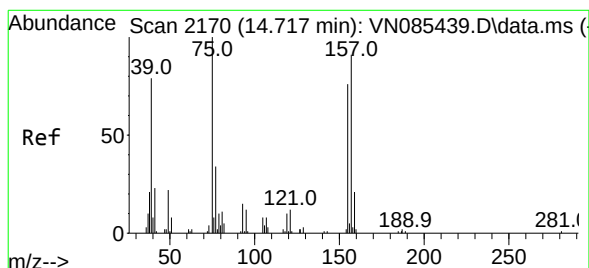
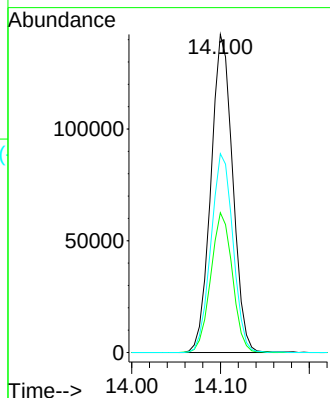
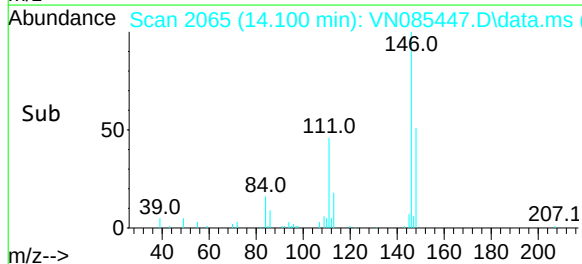
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050



Tgt Ion: 146 Resp: 242707  
Ion Ratio Lower Upper  
146 100  
111 43.6 21.7 65.1  
148 63.3 31.4 94.2

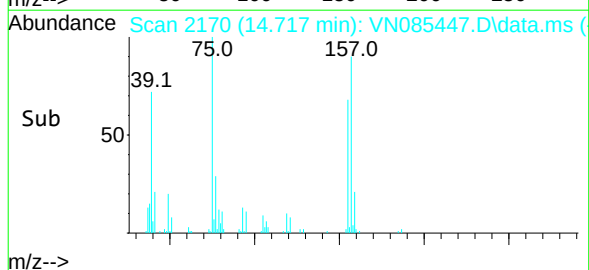
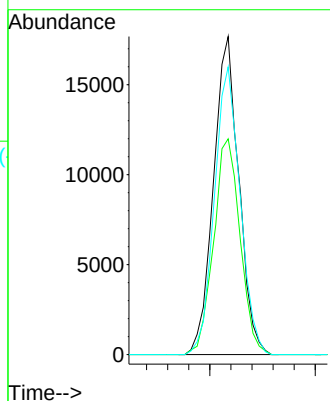
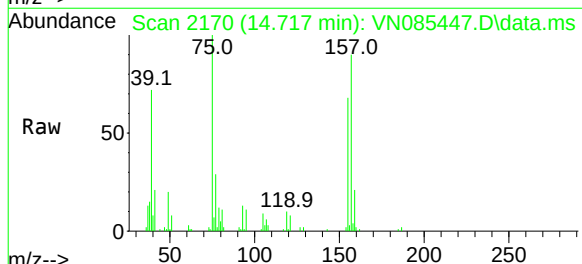
Manual Integrations  
APPROVED

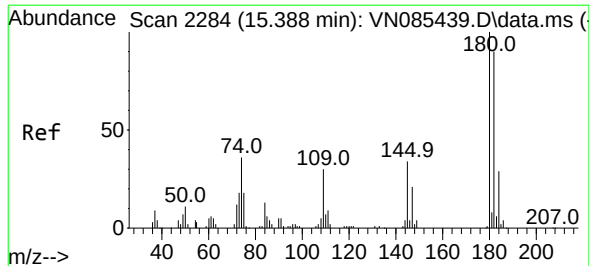
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 42.906 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 75 Resp: 29578  
Ion Ratio Lower Upper  
75 100  
155 70.6 36.4 109.2  
157 91.5 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 50.589 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085447.D

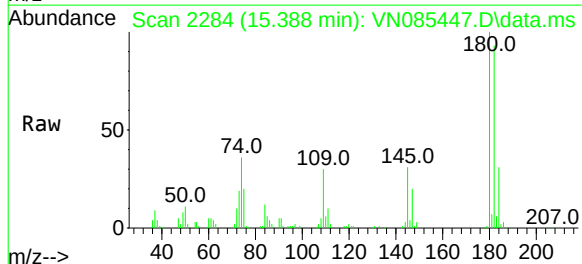
Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050



Tgt Ion:180 Resp: 120596

Ion Ratio Lower Upper

180 100

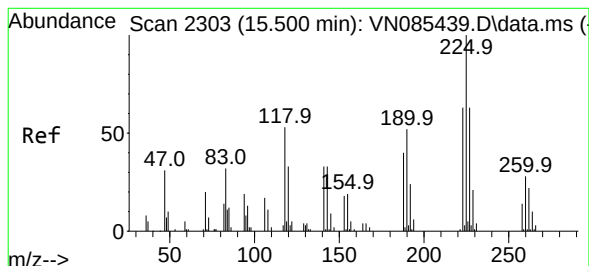
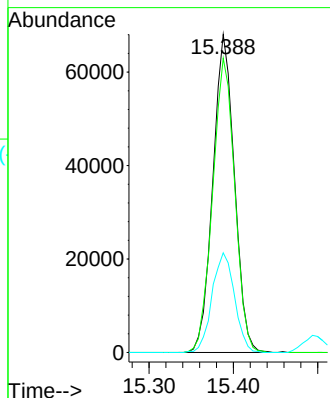
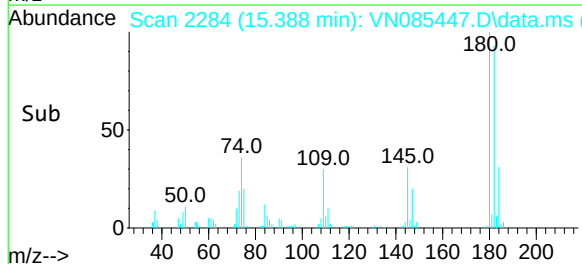
182 95.1 46.8 140.3

145 32.8 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#94

Hexachlorobutadiene

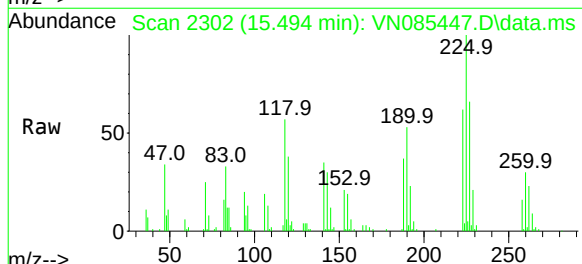
Concen: 47.470 ug/l

RT: 15.494 min Scan# 2302

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03



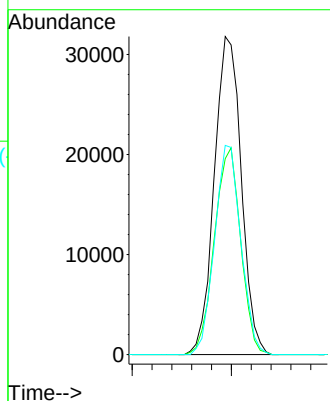
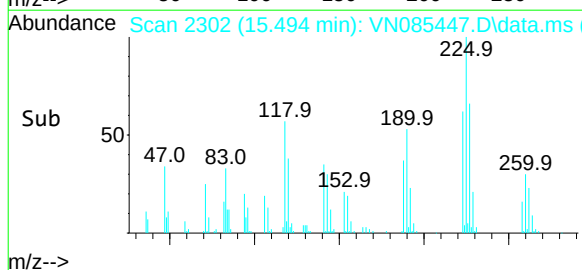
Tgt Ion:225 Resp: 60079

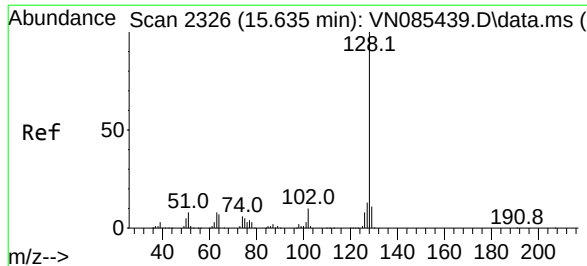
Ion Ratio Lower Upper

225 100

223 63.2 30.7 92.1

227 63.9 30.9 92.5





#95

Naphthalene

Concen: 46.012 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

Tgt Ion:128 Resp: 327305

Ion Ratio Lower Upper

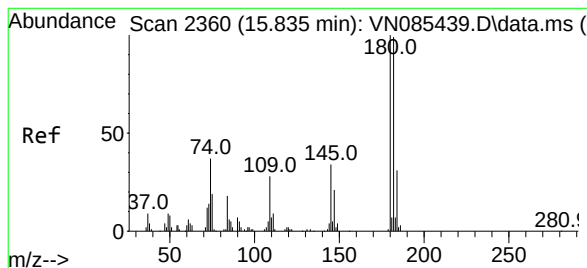
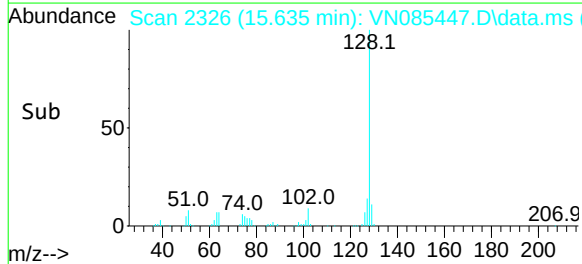
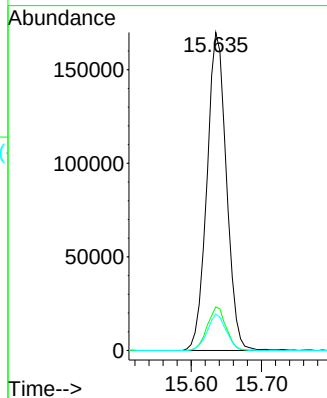
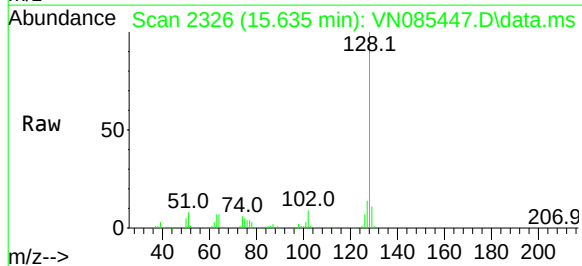
128 100

127 13.2 10.6 16.0

129 11.1 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#96

1,2,3-Trichlorobenzene

Concen: 47.236 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

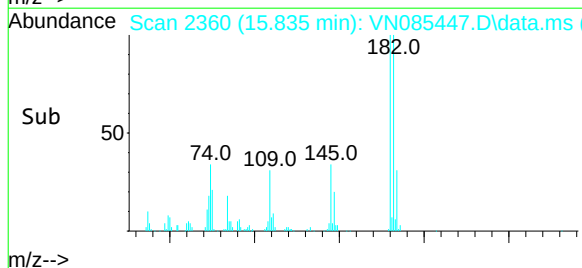
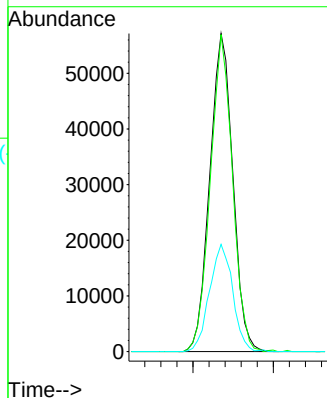
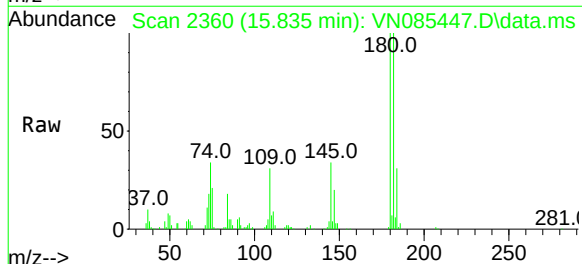
Tgt Ion:180 Resp: 113937

Ion Ratio Lower Upper

180 100

182 95.4 47.4 142.2

145 33.9 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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   | 109   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.677 | 0.657 | 3.0   | 114   | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.674 | 8.0   | 109   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.696 | 5.6#  | 111   | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.401 | 9.9   | 105   | 0.00     |
| 6 T   | Chloroethane                | 0.467 | 0.426 | 8.8   | 110   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.069 | 1.042 | 2.5   | 114   | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.338 | 8.4   | 103   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.600 | 0.3   | 121   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.683 | 1.0   | 104   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.069 | 25.0  | 81    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.531 | 1.1#  | 109   | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.120 | 4.8   | 94    | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.831 | 4.6   | 108   | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.260 | 11.6  | 96    | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.230 | 11.9  | 100   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.522 | 7.9   | 113   | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.700 | 11.7  | 97    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.757 | -0.9  | 103   | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.605 | 6.3   | 105   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.562 | 1.9   | 111   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 1.966 | -1.7  | 106   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.403 | -3.7  | 103   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.146 | 2.7   | 107   | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.337 | 12.2  | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 1.028 | -7.9  | 120   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.674 | 0.1   | 108   | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.540 | 1.5   | 109   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.225 | 7.4   | 94    | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.163 | 4.5#  | 108   | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.942 | 8.0   | 117   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 1.035 | 3.1   | 112   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.819 | -1.5  | 108   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 106   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.369 | -6.3  | 109   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.503 | -3.3  | 115   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.440 | 10.4  | 95    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.563 | -1.1  | 112   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.528 | -15.5 | 120   | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.504 | -2.8  | 110   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.253 | 1.2   | 99    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.550 | 0.2   | 106   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 0.743 | 5.6   | 96    | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.345 | -1.2  | 113   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.377 | -0.8# | 107   | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.264 | 2.2   | 104   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.568 | -3.5  | 107   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.361 | -2.0  | 97    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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   | 87    | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.356 | -10.1  | 113   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.440 | 3.7    | 94    | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.916 | -8.0#  | 111   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.555 | -6.9   | 106   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.594 | -7.2   | 107   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.337 | -0.6   | 105   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.515 | -9.8   | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.591 | -1.4   | 104   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.232 | -8.9   | 102   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.312 | 2.8    | 92    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.408 | -0.7   | 104   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.327 | 2.1    | 103   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.469 | -11.1  | 110   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 107   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.355 | -4.1   | 117   | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.101 | -0.5   | 109   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.398 | 1.0    | 108   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.967 | -10.3# | 112   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.755 | -14.6  | 114   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.699 | -11.0  | 109   | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.208 | -15.8  | 110   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.302 | -4.9   | 104   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.662 | -8.5   | 115   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.451 | 4.4    | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.047 | 12.2   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 0.948 | 6.7    | 115   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.866 | 1.8    | 109   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.446 | -11.3  | 116   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.672 | -3.3   | 112   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 3.109 | -11.6  | 114   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.367 | 2.4    | 102   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.686 | -4.4   | 112   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.560 | -9.4   | 113   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 3.150 | -13.4  | 113   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.666 | -13.0  | 116   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 3.110 | -18.2  | 117   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.628 | -0.2   | 112   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.618 | 3.9    | 112   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.684 | -15.3  | 117   | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.601 | 2.8    | 113   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.533 | 5.4    | 106   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.187 | 14.2   | 91    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.762 | -1.2   | 105   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.379 | 5.3    | 112   | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.067 | 8.0    | 90    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085447.D  
Acq On : 15 Jan 2025 09:03  
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 16 00:51:35 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 | 0.720 | 5.5  | 99    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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   | 109   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 48.525  | 3.0   | 114   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 45.992  | 8.0   | 109   | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 47.239  | 5.5#  | 111   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 45.067  | 9.9   | 105   | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 45.648  | 8.7   | 110   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 48.720  | 2.6   | 114   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 45.767  | 8.5   | 103   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 49.808  | 0.4   | 121   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 49.511  | 1.0   | 104   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 185.463 | 25.8# | 81    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 49.459  | 1.1#  | 109   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 238.713 | 4.5   | 94    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 47.714  | 4.6   | 108   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 221.624 | 11.4  | 96    | 0.00     |
| 16 T  | Acetone                     | 250.000 | 220.081 | 12.0  | 100   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 46.066  | 7.9   | 113   | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 44.146  | 11.7  | 97    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 50.410  | -0.8  | 103   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 46.863  | 6.3   | 105   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 49.008  | 2.0   | 111   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 50.865  | -1.7  | 106   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 259.270 | -3.7  | 103   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 48.606  | 2.8   | 107   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 219.497 | 12.2  | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 53.956  | -7.9  | 120   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 49.893  | 0.2   | 108   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 49.226  | 1.5   | 109   | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 231.013 | 7.6   | 94    | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 47.743  | 4.5#  | 108   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 45.962  | 8.1   | 117   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 48.453  | 3.1   | 112   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 50.745  | -1.5  | 108   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 106   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 53.211  | -6.4  | 109   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 51.631  | -3.3  | 115   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 44.802  | 10.4  | 95    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 50.466  | -0.9  | 112   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 57.732  | -15.5 | 120   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 51.417  | -2.8  | 110   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 49.387  | 1.2   | 99    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 49.881  | 0.2   | 106   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 47.153  | 5.7   | 96    | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 50.700  | -1.4  | 113   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.468  | -0.9# | 107   | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 48.873  | 2.3   | 104   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 51.671  | -3.3  | 107   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 50.945  | -1.9  | 97    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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 | 873.742 | 12.6   | 87    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 55.032  | -10.1  | 113   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 240.885 | 3.6    | 94    | 0.00     |
| 52 CM | Toluene                     | 50.000   | 54.029  | -8.1#  | 111   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 53.447  | -6.9   | 106   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 53.582  | -7.2   | 107   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 50.215  | -0.4   | 105   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 45.714  | 8.6    | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 50.662  | -1.3   | 104   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 272.966 | -9.2   | 102   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 242.307 | 3.1    | 92    | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 50.392  | -0.8   | 104   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 49.039  | 1.9    | 103   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 55.673  | -11.3  | 110   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000  | 0.0    | 107   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 52.107  | -4.2   | 117   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 50.257  | -0.5   | 109   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 49.494  | 1.0    | 108   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 55.122  | -10.2# | 112   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 114.570 | -14.6  | 114   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 55.481  | -11.0  | 109   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 57.933  | -15.9  | 110   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 52.493  | -5.0   | 104   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000  | 0.0    | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 54.261  | -8.5   | 115   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 47.841  | 4.3    | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 43.898  | 12.2   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 46.662  | 6.7    | 115   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 49.115  | 1.8    | 109   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 55.640  | -11.3  | 116   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 51.665  | -3.3   | 112   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 55.763  | -11.5  | 114   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 48.853  | 2.3    | 102   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 52.164  | -4.3   | 112   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 54.680  | -9.4   | 113   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 56.692  | -13.4  | 113   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 56.497  | -13.0  | 116   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 52.852  | -5.7   | 117   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 50.137  | -0.3   | 112   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 48.073  | 3.9    | 112   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 57.654  | -15.3  | 117   | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 48.675  | 2.7    | 113   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 47.320  | 5.4    | 106   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 42.906  | 14.2   | 91    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 50.589  | -1.2   | 105   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 47.470  | 5.1    | 112   | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 46.012  | 8.0    | 90    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085447.D  
Acq On : 15 Jan 2025 09:03  
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 16 00:51:35 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 | 47.236 | 5.5  | 99    | 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.: Q1062 SAS No.: Q1062 SDG No.: Q1062

Instrument ID: MSVOA\_N Calibration Date/Time: 01/15/2025 15:58

Lab File ID: VN085463.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 | 0.702  | 0.1        | -4.23 | 50    |
| Vinyl Chloride                 | 0.737 | 0.708  |            | -3.93 | 50    |
| Bromomethane                   | 0.445 | 0.408  |            | -8.31 | 50    |
| Chloroethane                   | 0.467 | 0.455  |            | -2.57 | 50    |
| Trichlorofluoromethane         | 1.069 | 1.073  |            | 0.37  | 50    |
| 1,1,2-Trichlorotrifluoroethane | 0.602 | 0.611  |            | 1.5   | 50    |
| 1,1-Dichloroethene             | 0.537 | 0.553  |            | 2.98  | 50    |
| Acetone                        | 0.261 | 0.262  |            | 0.38  | 50    |
| Carbon Disulfide               | 1.652 | 1.549  |            | -6.24 | 50    |
| Methyl tert-butyl Ether        | 1.742 | 1.940  |            | 11.37 | 50    |
| Methylene Chloride             | 0.646 | 0.639  |            | -1.08 | 50    |
| trans-1,2-Dichloroethene       | 0.573 | 0.583  |            | 1.75  | 50    |
| 1,1-Dichloroethane             | 1.178 | 1.209  | 0.1        | 2.63  | 50    |
| 2-Butanone                     | 0.384 | 0.414  |            | 7.81  | 50    |
| Carbon Tetrachloride           | 0.557 | 0.568  |            | 1.98  | 50    |
| cis-1,2-Dichloroethene         | 0.675 | 0.710  |            | 5.18  | 50    |
| Chloroform                     | 1.218 | 1.244  |            | 2.13  | 50    |
| 1,1,1-Trichloroethane          | 1.068 | 1.085  |            | 1.59  | 50    |
| Methylcyclohexane              | 0.457 | 0.526  |            | 15.1  | 50    |
| Benzene                        | 1.463 | 1.516  |            | 3.62  | 50    |
| 1,2-Dichloroethane             | 0.551 | 0.569  |            | 3.27  | 50    |
| Trichloroethene                | 0.341 | 0.335  |            | -1.76 | 50    |
| 1,2-Dichloropropane            | 0.374 | 0.381  |            | 1.87  | 50    |
| Bromodichloromethane           | 0.549 | 0.580  |            | 5.65  | 50    |
| 4-Methyl-2-Pentanone           | 0.457 | 0.517  |            | 13.13 | 50    |
| Toluene                        | 0.848 | 0.933  |            | 10.02 | 50    |
| t-1,3-Dichloropropene          | 0.519 | 0.581  |            | 11.95 | 50    |
| cis-1,3-Dichloropropene        | 0.554 | 0.617  |            | 11.37 | 50    |
| 1,1,2-Trichloroethane          | 0.335 | 0.347  |            | 3.58  | 50    |
| 2-Hexanone                     | 0.321 | 0.376  |            | 17.13 | 50    |
| Dibromochloromethane           | 0.405 | 0.424  |            | 4.69  | 50    |
| Tetrachloroethene              | 0.341 | 0.322  |            | -5.57 | 50    |
| Chlorobenzene                  | 1.095 | 1.124  | 0.3        | 2.65  | 50    |
| Ethyl Benzene                  | 1.784 | 2.015  |            | 12.95 | 50    |
| m/p-Xylenes                    | 0.659 | 0.755  |            | 14.57 | 50    |
| o-Xylene                       | 0.630 | 0.715  |            | 13.49 | 50    |
| Styrene                        | 1.043 | 1.237  |            | 18.6  | 50    |
| Bromoform                      | 0.288 | 0.318  | 0.1        | 10.42 | 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.: Q1062 SAS No.: Q1062 SDG No.: Q1062

Instrument ID: MSVOA\_N Calibration Date/Time: 01/15/2025 15:58

Lab File ID: VN085463.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 | 3.695  |            | 9.48  | 50    |
| 1,1,2,2-Tetrachloroethane | 1.192 | 1.175  | 0.3        | -1.43 | 50    |
| 1,3-Dichlorobenzene       | 1.624 | 1.668  |            | 2.71  | 50    |
| 1,4-Dichlorobenzene       | 1.683 | 1.639  |            | -2.61 | 50    |
| 1,2-Dichlorobenzene       | 1.620 | 1.603  |            | -1.05 | 50    |
| 1,2-Dichloroethane-d4     | 0.807 | 0.841  |            | 4.21  | 50    |
| Dibromofluoromethane      | 0.347 | 0.359  |            | 3.46  | 50    |
| Toluene-d8                | 1.232 | 1.331  |            | 8.04  | 50    |
| 4-Bromofluorobenzene      | 0.422 | 0.473  |            | 12.09 | 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\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 01:00:39 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  | 218558   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 374640   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 330319   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 166317   | 50.000 | ug/l  | 0.00     |

|                             |                |     |                     |        |      |      |
|-----------------------------|----------------|-----|---------------------|--------|------|------|
| System Monitoring Compounds |                |     |                     |        |      |      |
| 33) 1,2-Dichloroethane-d4   | 8.571          | 65  | 183857              | 52.114 | ug/l | 0.00 |
| Spiked Amount 50.000        | Range 74 - 125 |     | Recovery = 104.220% |        |      |      |
| 35) Dibromofluoromethane    | 8.165          | 113 | 134312              | 51.677 | ug/l | 0.00 |
| Spiked Amount 50.000        | Range 75 - 124 |     | Recovery = 103.360% |        |      |      |
| 50) Toluene-d8              | 10.565         | 98  | 498748              | 54.009 | ug/l | 0.00 |
| Spiked Amount 50.000        | Range 86 - 113 |     | Recovery = 108.020% |        |      |      |
| 62) 4-Bromofluorobenzene    | 12.847         | 95  | 177300              | 56.127 | ug/l | 0.00 |
| Spiked Amount 50.000        | Range 77 - 121 |     | Recovery = 112.260% |        |      |      |

|                              |       |     |         |         |          |
|------------------------------|-------|-----|---------|---------|----------|
| Target Compounds             |       |     |         |         | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 149573  | 50.545  | ug/l 99  |
| 3) Chloromethane             | 2.359 | 50  | 153360  | 47.865  | ug/l 97  |
| 4) Vinyl Chloride            | 2.512 | 62  | 154638  | 48.017  | ug/l 99  |
| 5) Bromomethane              | 2.948 | 94  | 89160   | 45.833  | ug/l 100 |
| 6) Chloroethane              | 3.118 | 64  | 99471   | 48.718  | ug/l 98  |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 234589  | 50.203  | ug/l 98  |
| 8) Diethyl Ether             | 3.959 | 74  | 78639   | 48.714  | ug/l 98  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 133519  | 50.730  | ug/l 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 158063  | 52.443  | ug/l 97  |
| 11) Tert butyl alcohol       | 5.506 | 59  | 107622  | 266.406 | ug/l 98  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 120856  | 51.524  | ug/l 97  |
| 13) Acrolein                 | 4.171 | 56  | 156827  | 284.383 | ug/l 98  |
| 14) Allyl chloride           | 5.018 | 41  | 195577  | 51.384  | ug/l 98  |
| 15) Acrylonitrile            | 5.718 | 53  | 337135  | 262.738 | ug/l 98  |
| 16) Acetone                  | 4.418 | 43  | 286337  | 251.190 | ug/l 97  |
| 17) Carbon Disulfide         | 4.712 | 76  | 338441  | 46.862  | ug/l 99  |
| 18) Methyl Acetate           | 5.018 | 43  | 179563  | 51.803  | ug/l 100 |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 424024  | 55.672  | ug/l 100 |
| 20) Methylene Chloride       | 5.277 | 84  | 139560  | 49.455  | ug/l 93  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 127358  | 50.805  | ug/l 96  |
| 22) Diisopropyl ether        | 6.665 | 45  | 467061  | 55.286  | ug/l 96  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1731604 | 292.883 | ug/l 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 264195  | 51.287  | ug/l 98  |
| 25) 2-Butanone               | 7.477 | 43  | 452029  | 269.467 | ug/l 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 236796  | 56.857  | ug/l 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 155179  | 52.557  | ug/l 99  |
| 28) Bromochloromethane       | 7.806 | 49  | 119440  | 49.837  | ug/l 99  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 302642  | 284.562 | ug/l 98  |
| 30) Chloroform               | 7.965 | 83  | 271813  | 51.054  | ug/l 99  |
| 31) Cyclohexane              | 8.253 | 56  | 218304  | 48.757  | ug/l 95  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 237039  | 50.757  | ug/l 97  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 184438  | 50.562  | ug/l 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 187078  | 50.810  | ug/l 98  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 212942  | 50.991  | ug/l 100 |
| 39) Methylcyclohexane        | 9.594 | 83  | 196879  | 57.436  | ug/l 97  |
| 40) Benzene                  | 8.600 | 78  | 567975  | 51.821  | ug/l 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 01:00:39 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   | 105319   | 54.981  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 213125   | 51.629  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 339818   | 57.599  | ug/l   | 96       |
| 44) Trichloroethene           | 9.347  | 130  | 125677   | 49.260  | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 142897   | 51.043  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 100497   | 49.750  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 217353   | 52.814  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 153447   | 57.796  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 43495    | 972.836 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 967748   | 282.679 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 349488   | 55.032  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 217586   | 55.946  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 231235   | 55.661  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 130083   | 51.759  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 211176   | 49.885  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 233088   | 53.338  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 462882   | 290.228 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 703719   | 292.136 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.353 | 129  | 158806   | 52.339  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 127688   | 51.040  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 106305   | 47.207  | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 371312   | 51.313  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 133724   | 50.351  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 665536   | 56.469  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.065 | 106  | 498925   | 114.541 | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 236130   | 56.724  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 408614   | 59.312  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 105169   | 55.344  | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 614595   | 54.752  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 283775   | 56.244  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 195465   | 49.296  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 154649m  | 45.748  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 146854   | 50.075  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 748465   | 56.324  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 450235   | 52.351  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 523728   | 56.485  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 70693m   | 56.580  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 459658   | 53.678  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 437674   | 56.211  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 531276   | 57.491  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 626587   | 58.063  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 525049   | 53.560  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 277409   | 51.364  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 272594   | 48.694  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 455243   | 58.802  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 103728   | 50.491  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 266635   | 49.494  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 36986    | 51.081  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 133515   | 53.324  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 64832    | 48.771  | ug/l   | 99       |
| 95) Naphthalene               | 15.635 | 128  | 399446   | 53.462  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 128843   | 50.856  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085463.D  
Acq On : 15 Jan 2025 15:58  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 01:00:39 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



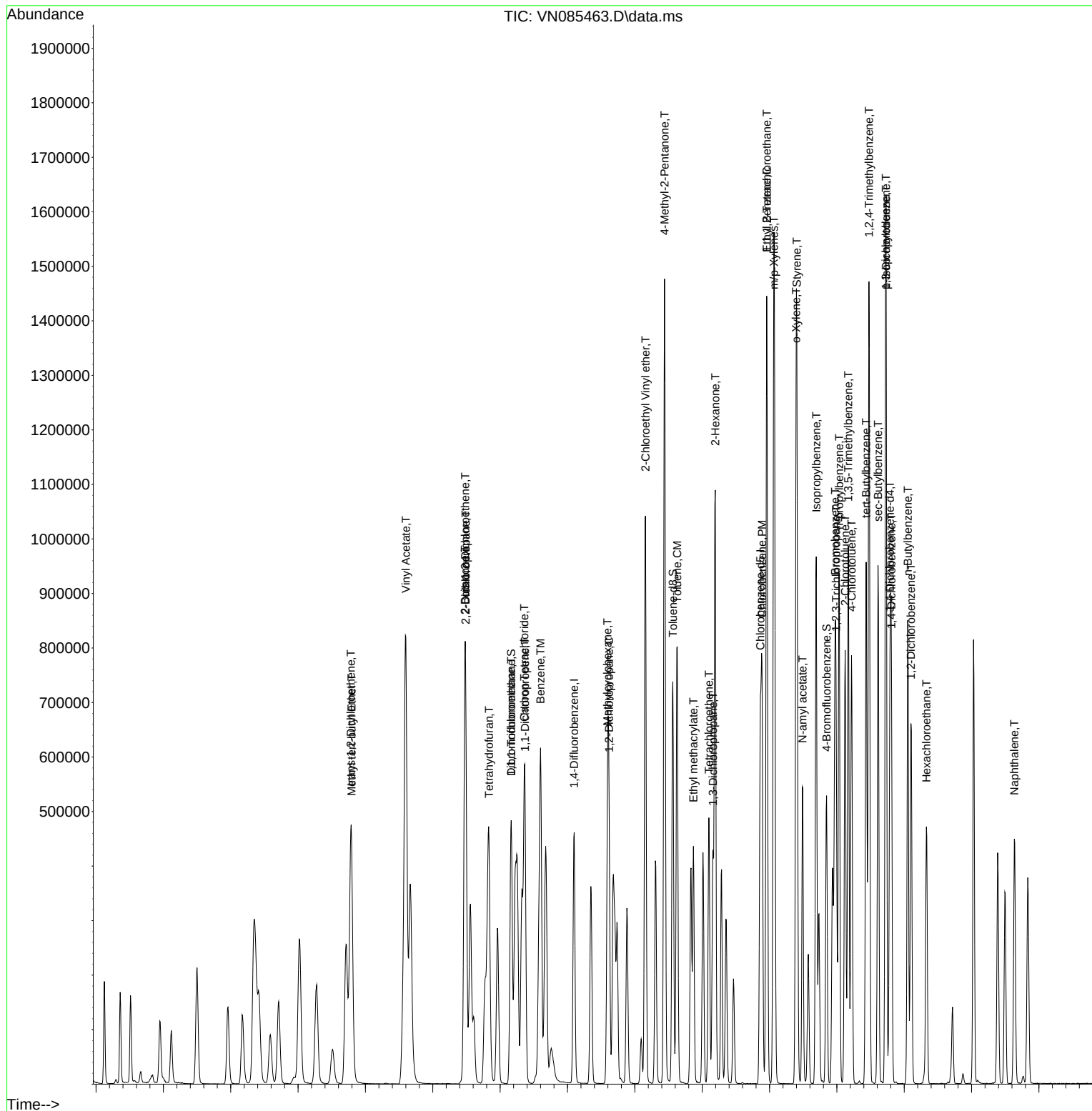
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Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 18 Sample Multiplier: 1

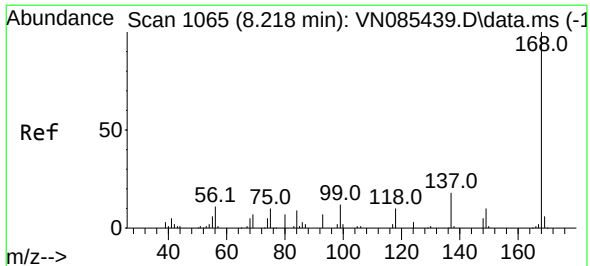
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QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

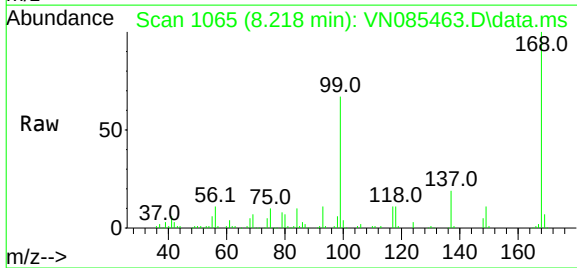
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

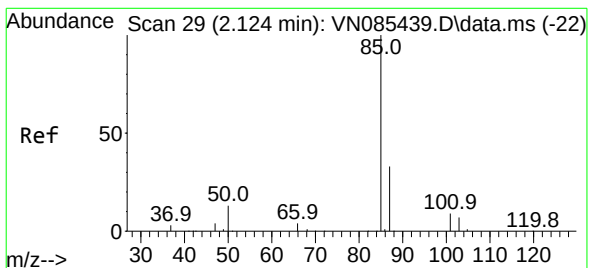
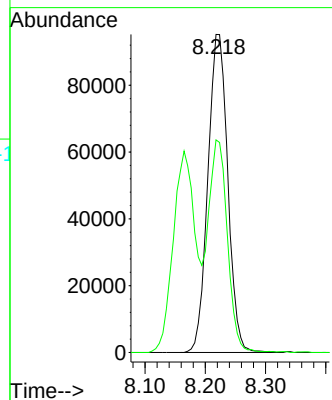
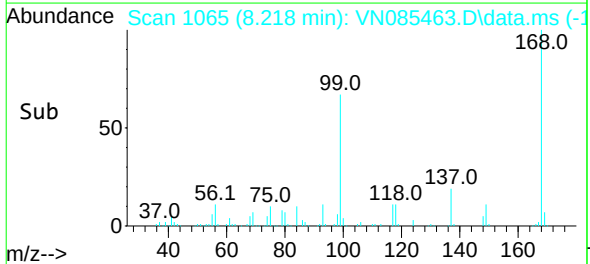
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 168 Resp: 218558  
Ion Ratio Lower Upper  
168 100  
99 66.6 53.6 80.4

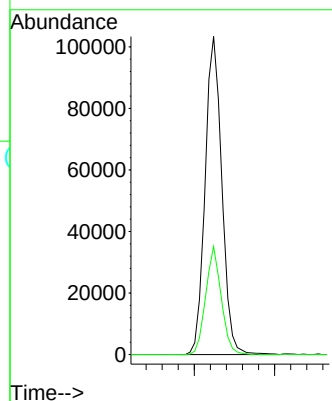
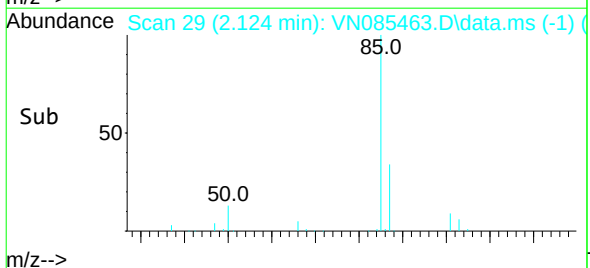
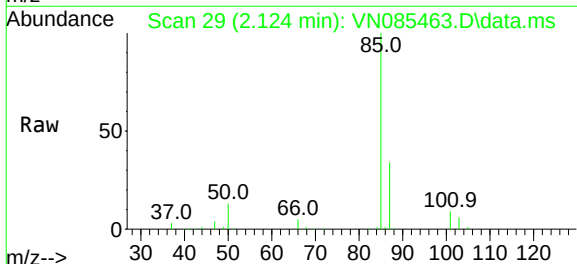
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

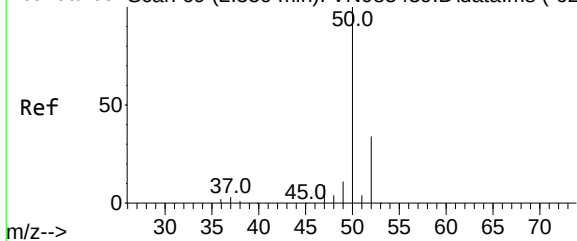


#2  
Dichlorodifluoromethane  
Concen: 50.545 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 85 Resp: 149573  
Ion Ratio Lower Upper  
85 100  
87 34.0 16.7 50.1



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



#3

Chloromethane

Concen: 47.865 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 50 Resp: 153360

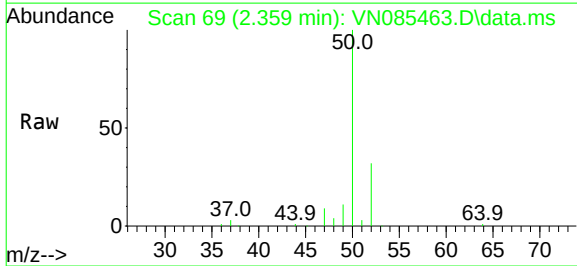
Ion Ratio Lower Upper

50 100

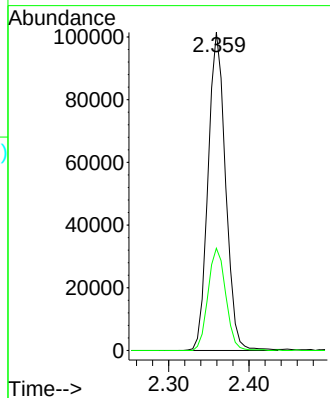
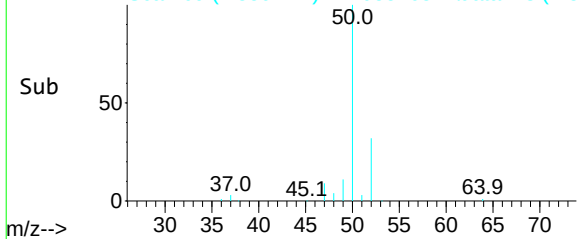
52 32.1 27.0 40.6

Manual Integrations

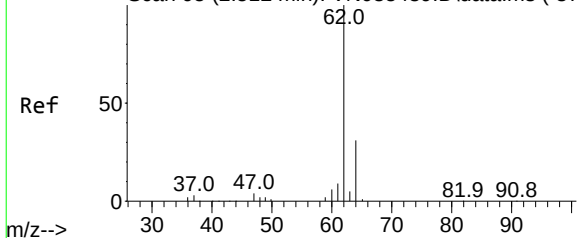
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Abundance Scan 69 (2.359 min): VN085463.D\data.ms (-18)



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



#4

Vinyl Chloride

Concen: 48.017 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085463.D

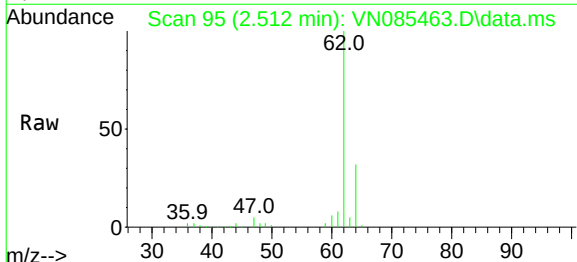
Acq: 15 Jan 2025 15:58

Tgt Ion: 62 Resp: 154638

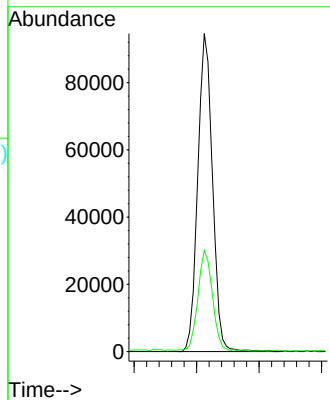
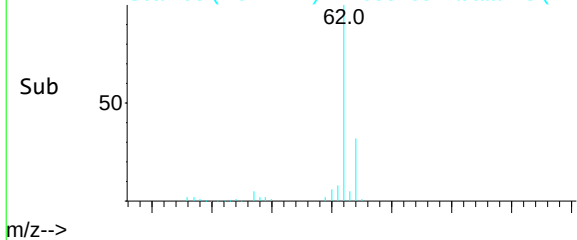
Ion Ratio Lower Upper

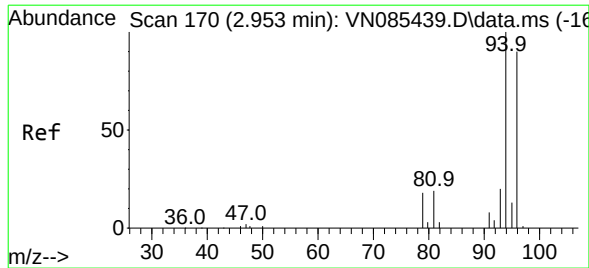
62 100

64 31.4 24.8 37.2



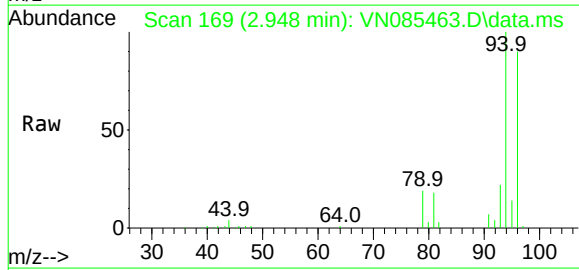
Abundance Scan 95 (2.512 min): VN085463.D\data.ms (-44)





#5  
Bromomethane  
Concen: 45.833 ug/l  
RT: 2.948 min Scan# 16  
Delta R.T. -0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

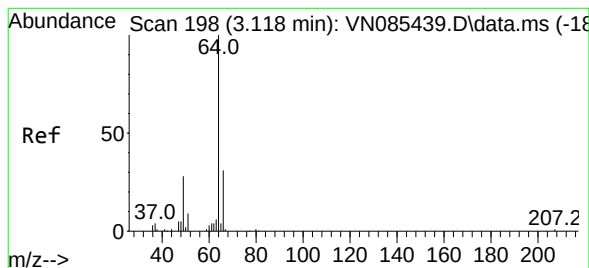
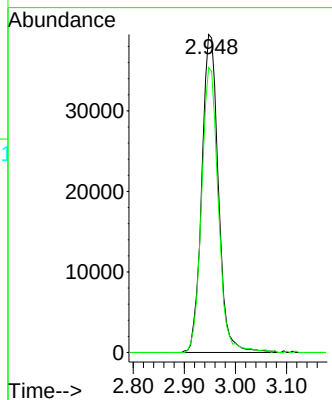
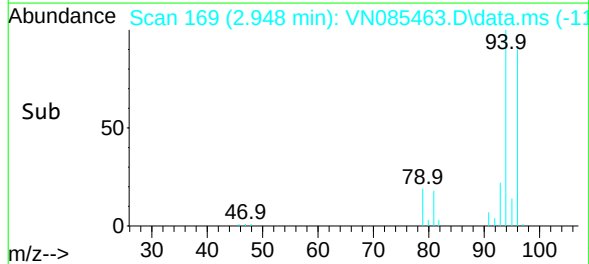
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 94 Resp: 89160  
Ion Ratio Lower Upper  
94 100  
96 89.6 71.8 107.6

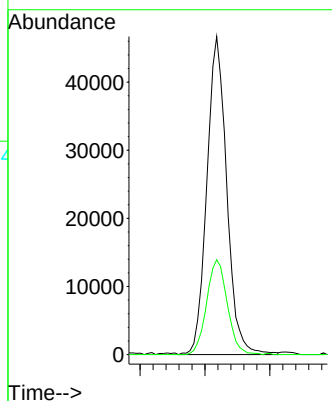
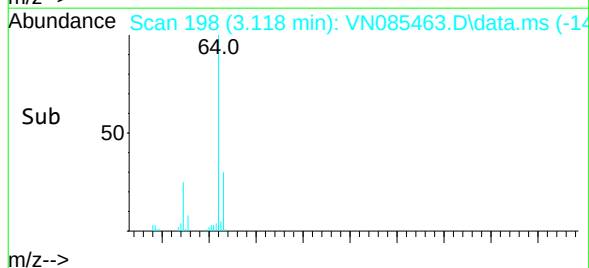
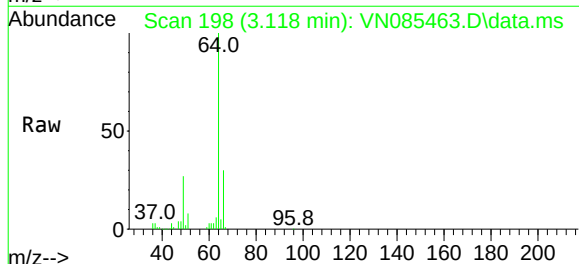
Manual Integrations  
APPROVED

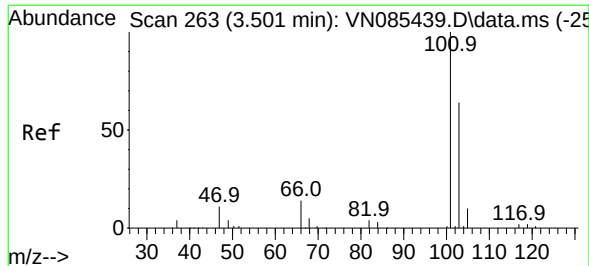
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#6  
Chloroethane  
Concen: 48.718 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

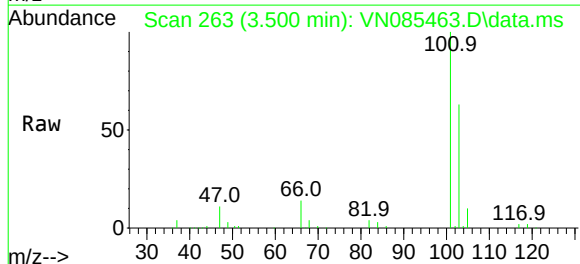
Tgt Ion: 64 Resp: 99471  
Ion Ratio Lower Upper  
64 100  
66 29.8 24.6 36.8





#7  
Trichlorofluoromethane  
Concen: 50.203 ug/l  
RT: 3.500 min Scan# 263  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

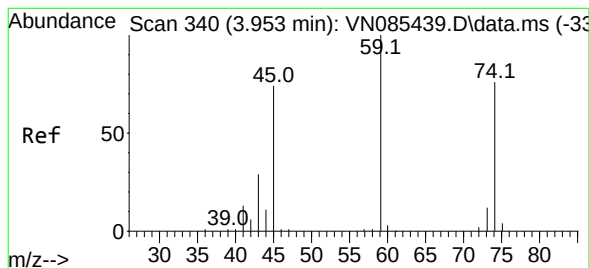
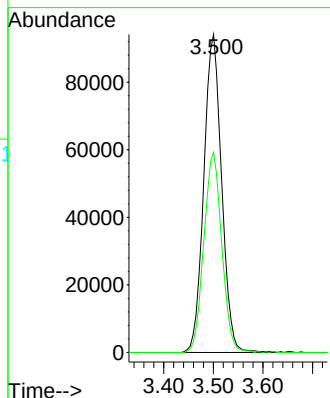
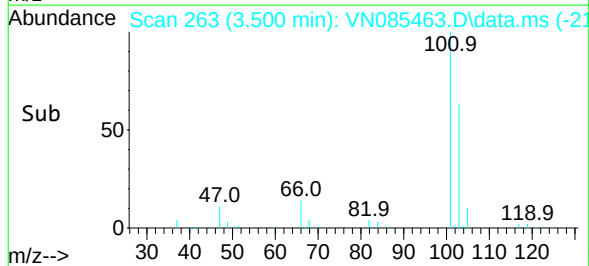
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



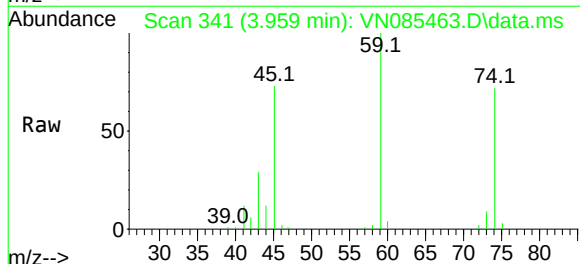
Tgt Ion: 101 Resp: 234589  
Ion Ratio Lower Upper  
101 100  
103 62.9 51.4 77.2

Manual Integrations  
APPROVED

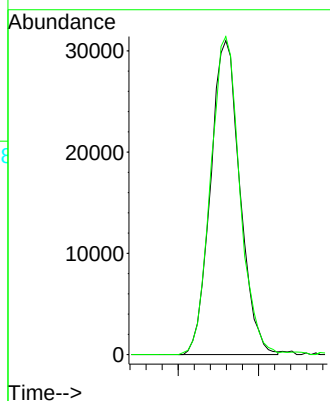
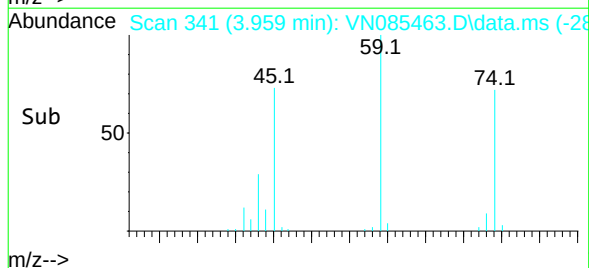
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

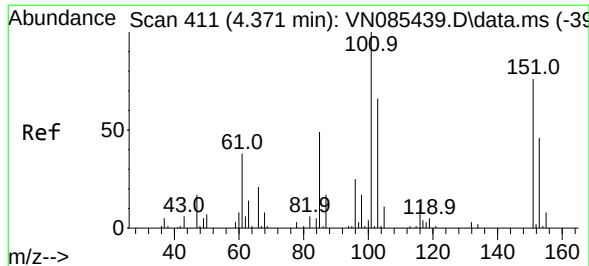


#8  
Diethyl Ether  
Concen: 48.714 ug/l  
RT: 3.959 min Scan# 341  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58



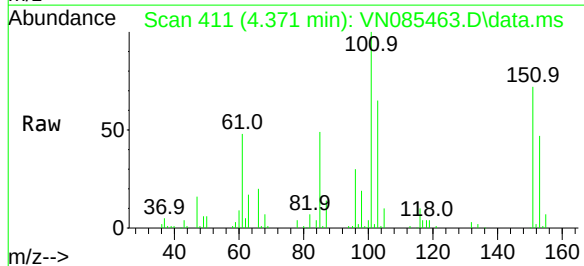
Tgt Ion: 74 Resp: 78639  
Ion Ratio Lower Upper  
74 100  
45 100.9 49.7 149.1





#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 50.730 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

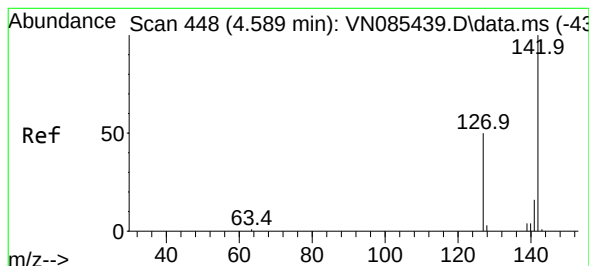
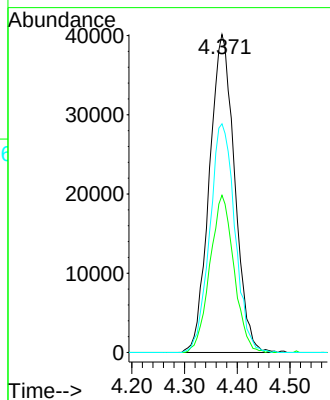
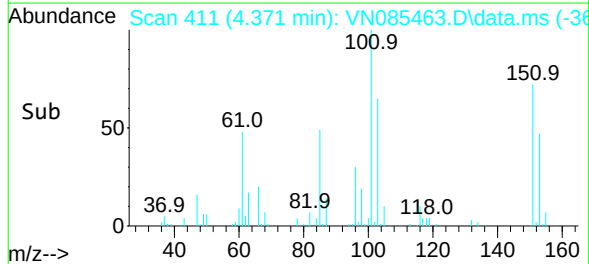
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



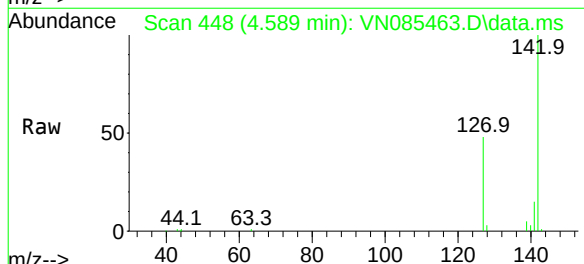
Tgt Ion:101 Resp: 133519  
Ion Ratio Lower Upper  
101 100  
85 47.1 37.8 56.8  
151 71.8 58.8 88.2

Manual Integrations  
APPROVED

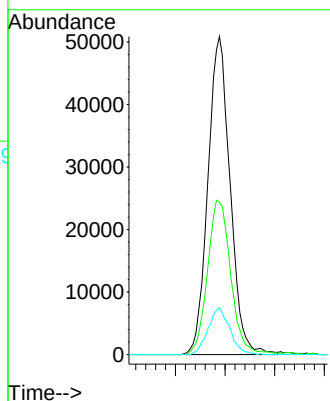
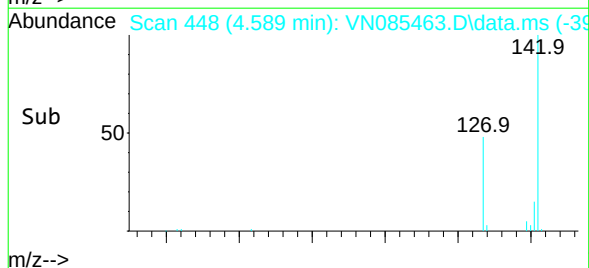
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

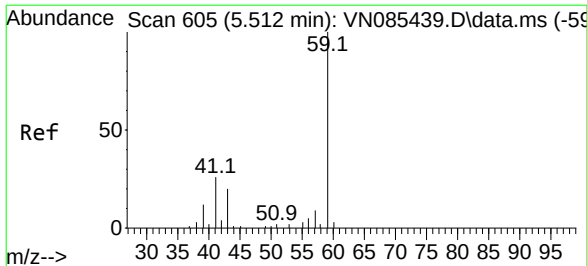


#10  
Methyl Iodide  
Concen: 52.443 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58



Tgt Ion:142 Resp: 158063  
Ion Ratio Lower Upper  
142 100  
127 47.9 40.3 60.5  
141 14.8 12.8 19.2





#11

Tert butyl alcohol

Concen: 266.406 ug/l

RT: 5.506 min Scan# 605

Delta R.T. -0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 59 Resp: 107622

Ion Ratio Lower Upper

59 100

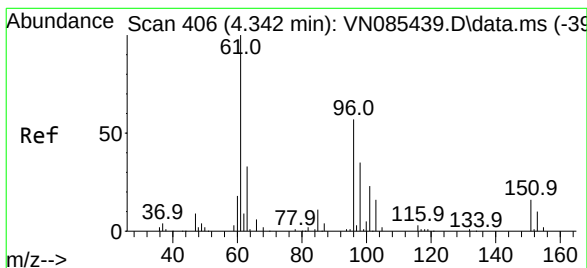
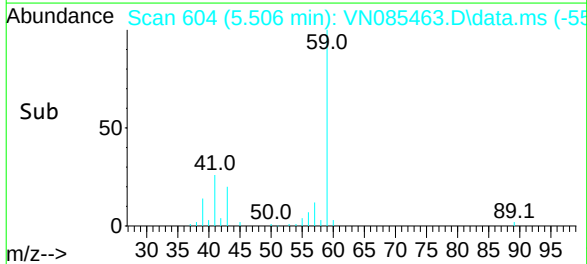
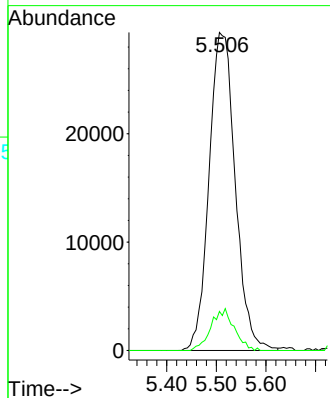
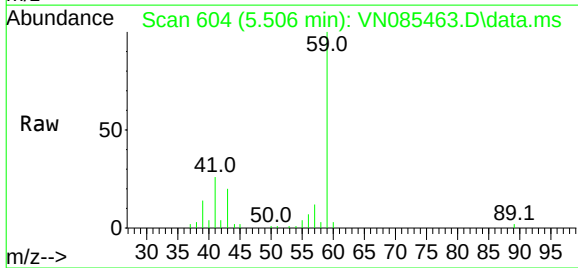
57 11.7 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#12

1,1-Dichloroethene

Concen: 51.524 ug/l

RT: 4.342 min Scan# 406

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

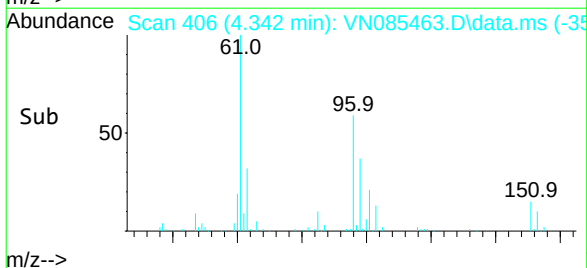
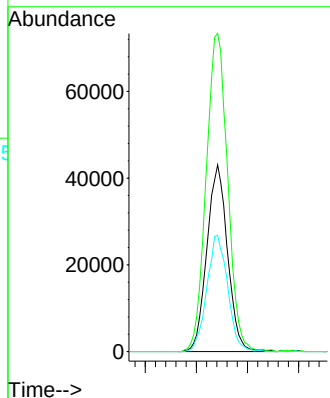
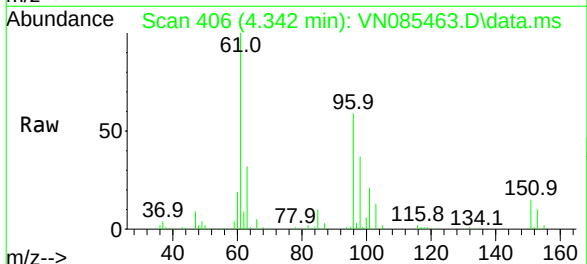
Tgt Ion: 96 Resp: 120856

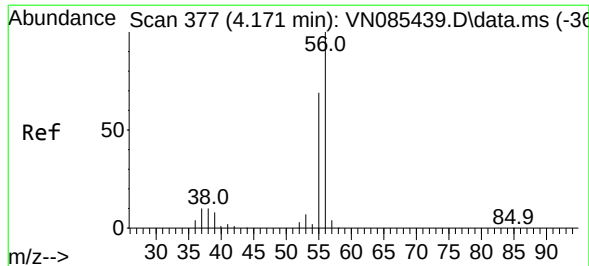
Ion Ratio Lower Upper

96 100

61 170.3 141.0 211.4

98 62.3 49.0 73.6





#13

Acrolein

Concen: 284.383 ug/l

RT: 4.171 min Scan# 377

Delta R.T. -0.000 min

Lab File: VN085463.D

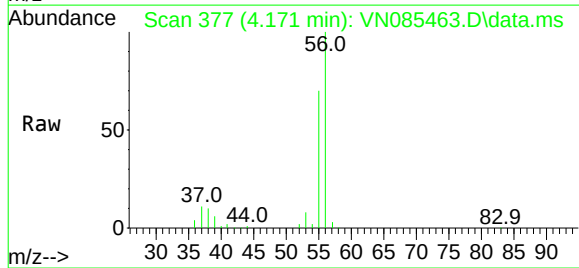
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 56 Resp: 156827

Ion Ratio Lower Upper

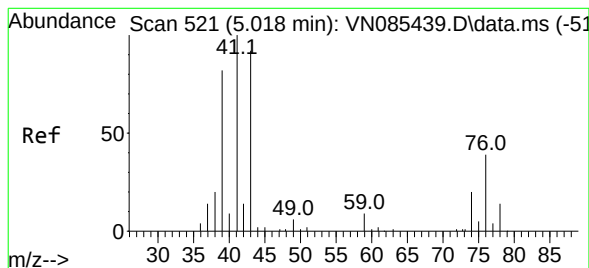
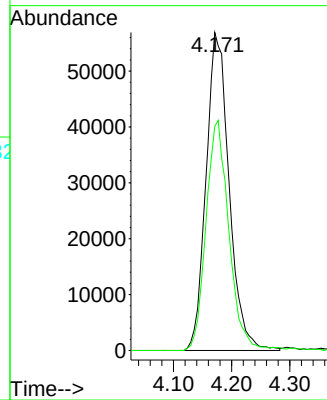
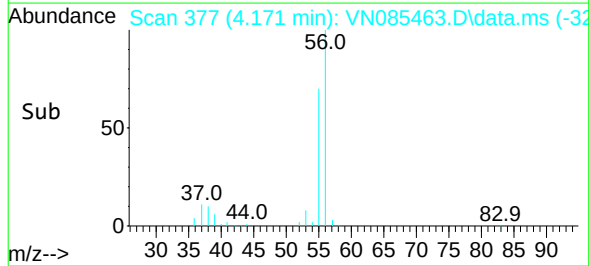
56 100

55 71.8 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#14

Allyl chloride

Concen: 51.384 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

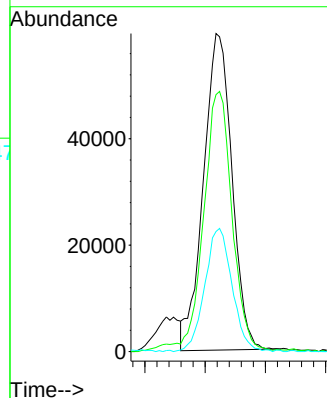
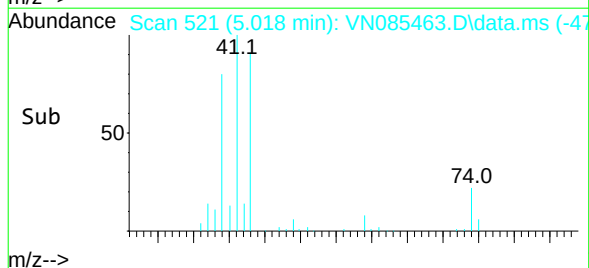
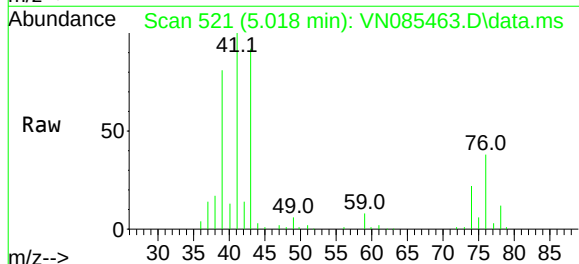
Tgt Ion: 41 Resp: 195577

Ion Ratio Lower Upper

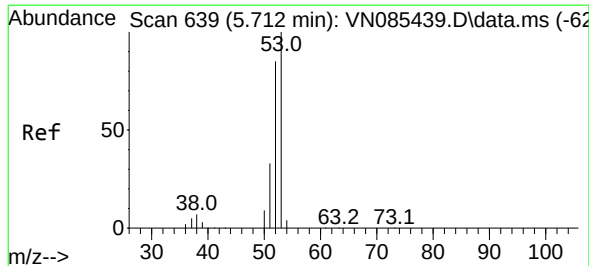
41 100

39 82.9 64.4 96.6

76 37.2 30.5 45.7







#15

Acrylonitrile

Concen: 262.738 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 53 Resp: 337135

Ion Ratio Lower Upper

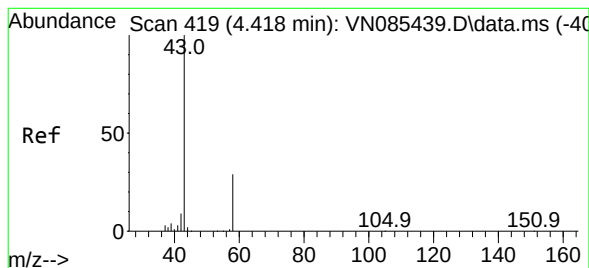
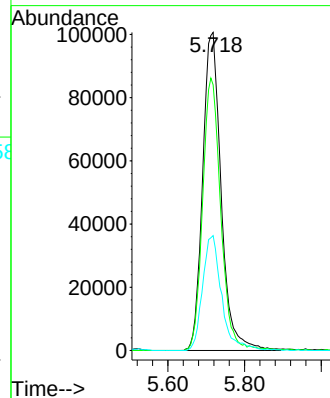
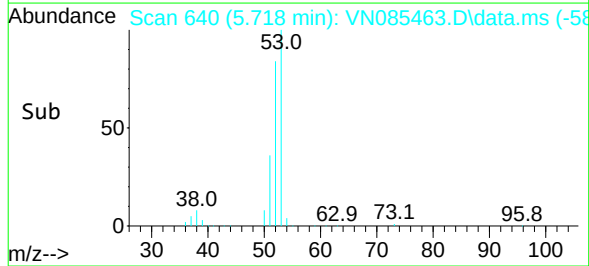
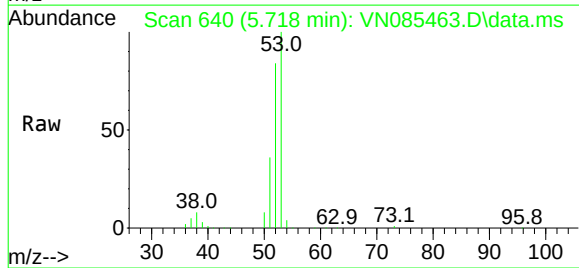
53 100

52 84.0 65.5 98.3

51 37.1 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#16

Acetone

Concen: 251.190 ug/l

RT: 4.418 min Scan# 419

Delta R.T. -0.000 min

Lab File: VN085463.D

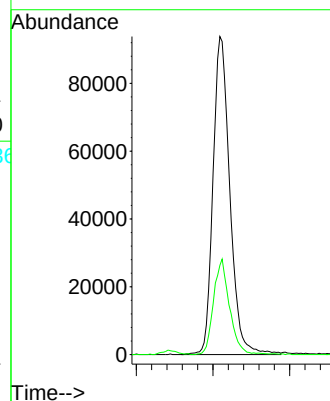
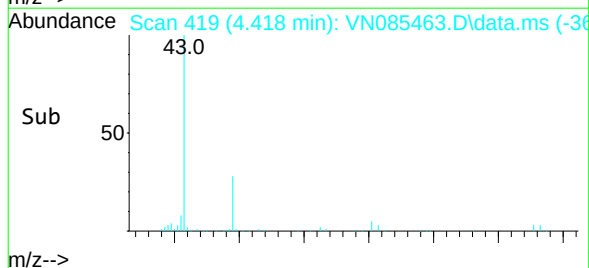
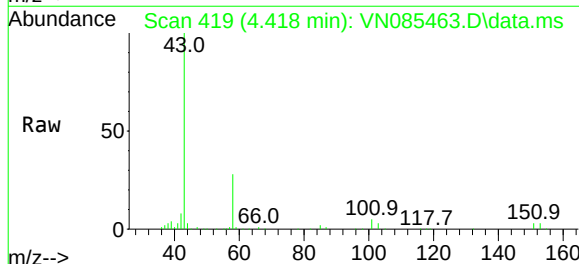
Acq: 15 Jan 2025 15:58

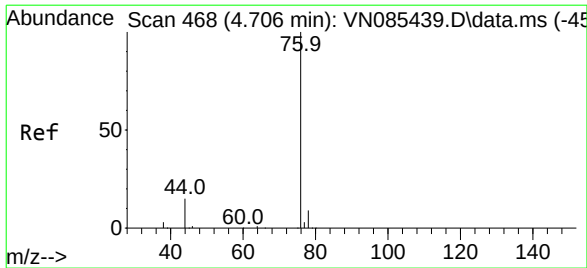
Tgt Ion: 43 Resp: 286337

Ion Ratio Lower Upper

43 100

58 27.9 23.8 35.6





#17

Carbon Disulfide

Concen: 46.862 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085463.D

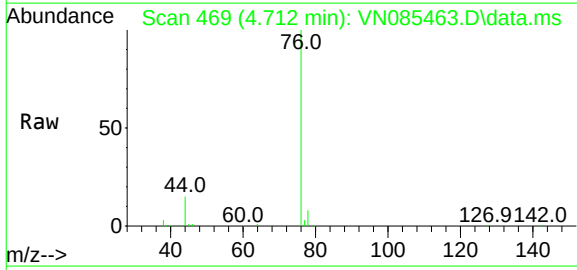
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 76 Resp: 338441

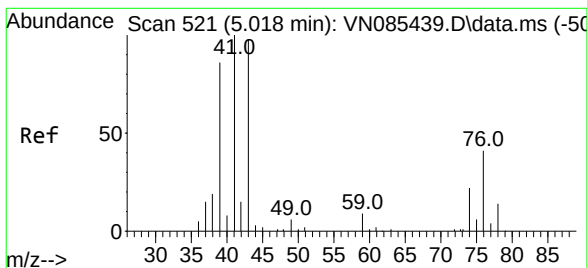
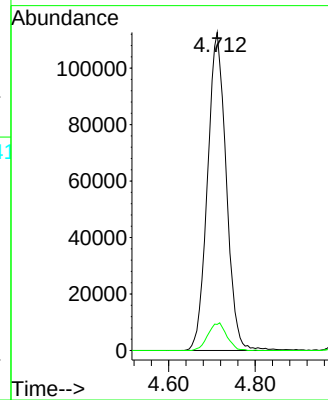
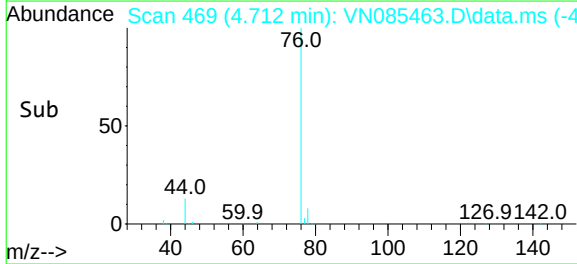
Ion Ratio Lower Upper

76 100

78 8.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#18

Methyl Acetate

Concen: 51.803 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085463.D

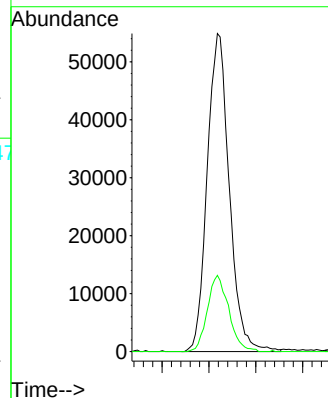
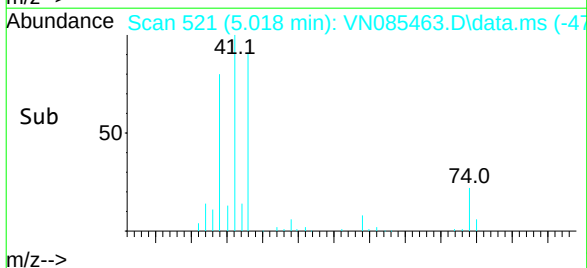
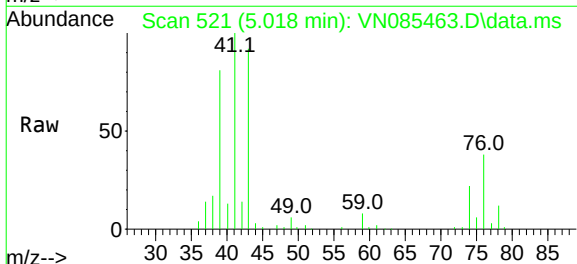
Acq: 15 Jan 2025 15:58

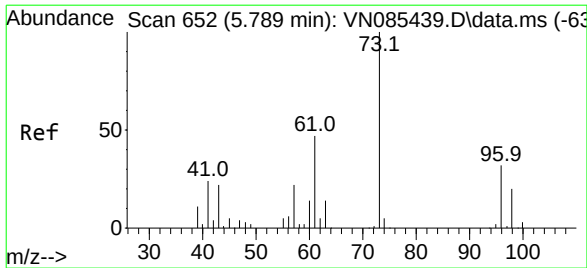
Tgt Ion: 43 Resp: 179563

Ion Ratio Lower Upper

43 100

74 23.2 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 55.672 ug/l

RT: 5.794 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 73 Resp: 424024

Ion Ratio Lower Upper

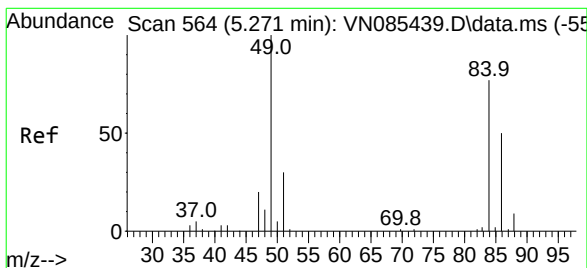
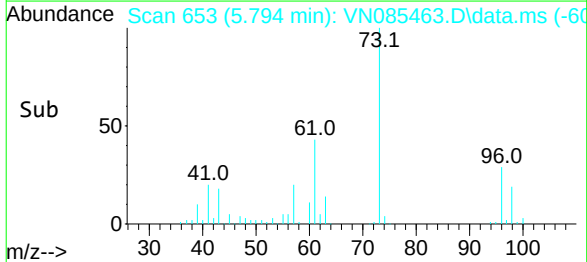
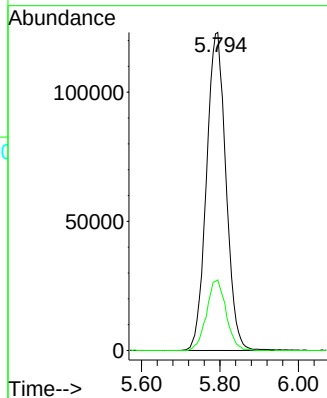
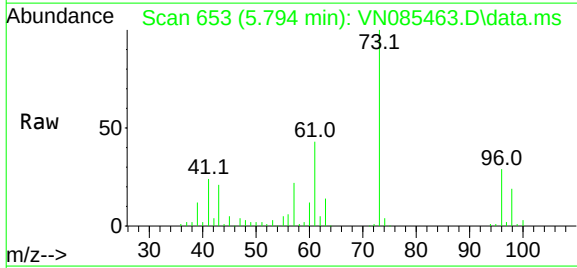
73 100

57 22.2 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#20

Methylene Chloride

Concen: 49.455 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Tgt Ion: 84 Resp: 139560

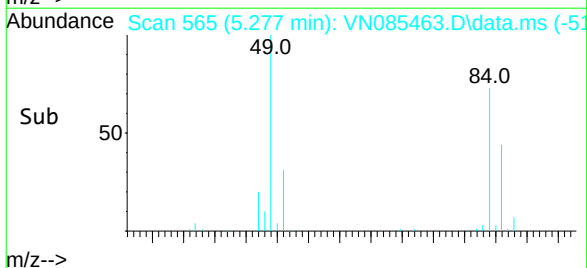
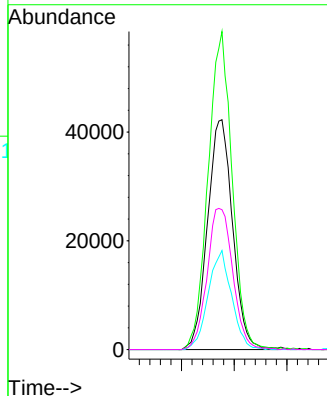
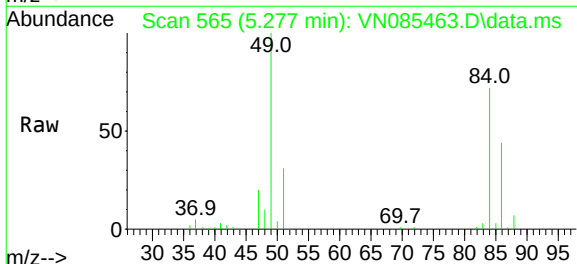
Ion Ratio Lower Upper

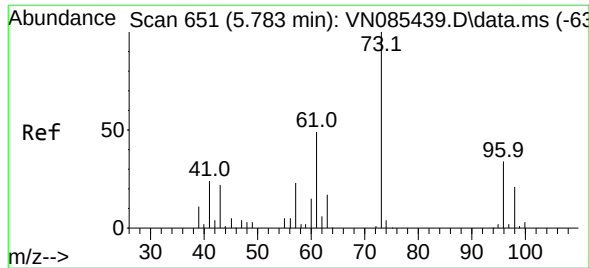
84 100

49 138.4 104.1 156.1

51 43.1 31.0 46.4

86 60.8 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 50.805 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085463.D

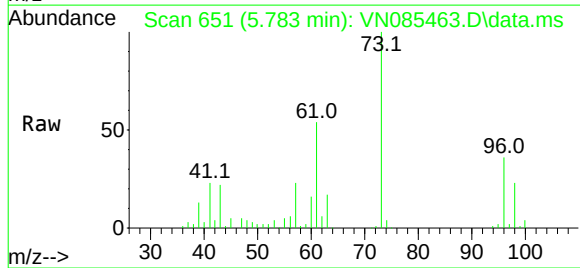
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion: 96 Resp: 127358

Ion Ratio Lower Upper

96 100

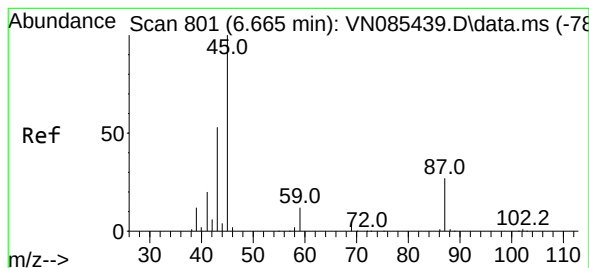
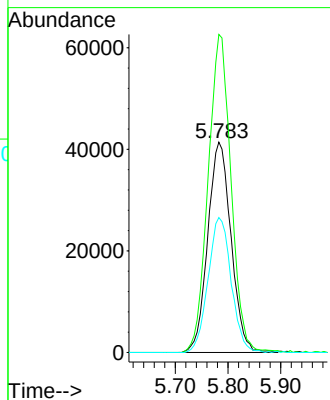
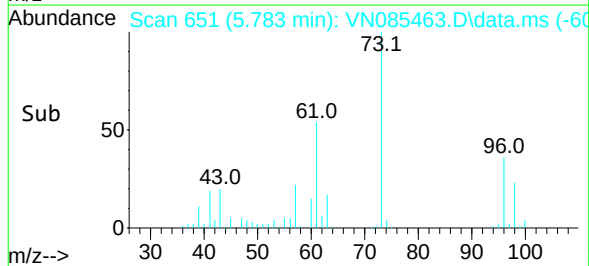
61 151.2 115.7 173.5

98 64.1 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#22

Diisopropyl ether

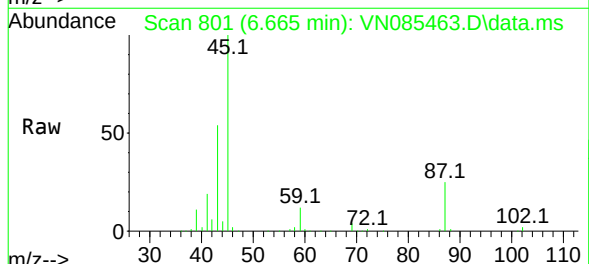
Concen: 55.286 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58



Tgt Ion: 45 Resp: 467061

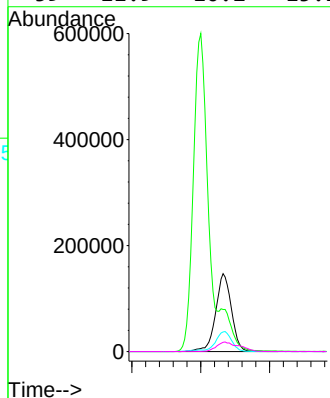
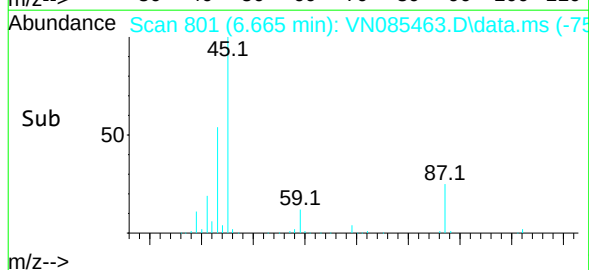
Ion Ratio Lower Upper

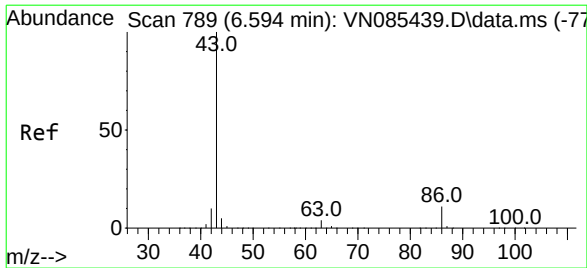
45 100

43 53.5 45.0 67.6

87 25.2 21.8 32.8

59 11.9 10.2 15.2





#23

Vinyl Acetate

Concen: 292.883 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 1731604

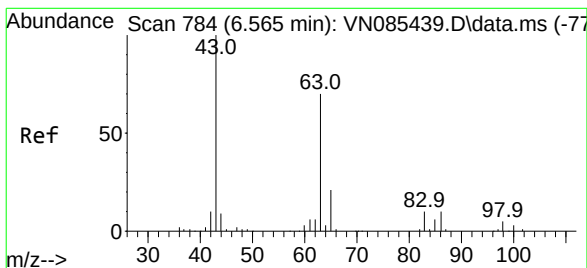
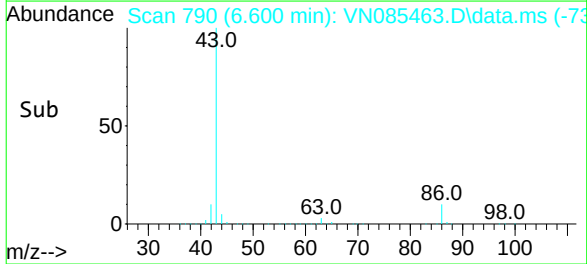
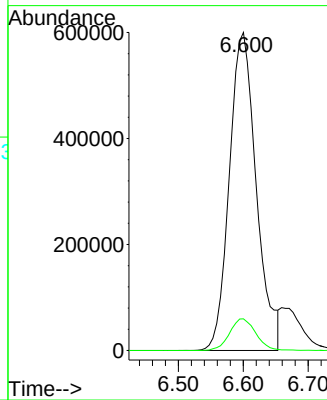
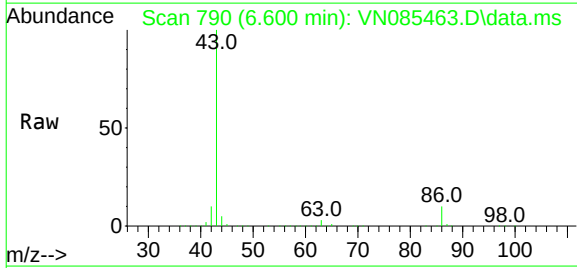
Ion Ratio Lower Upper

43 100

86 9.9 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#24

1,1-Dichloroethane

Concen: 51.287 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

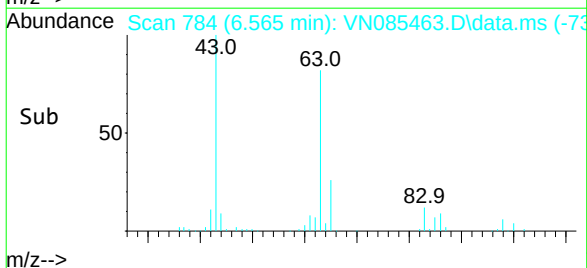
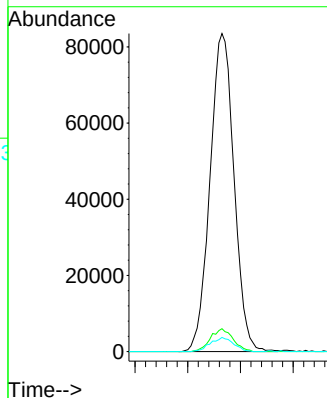
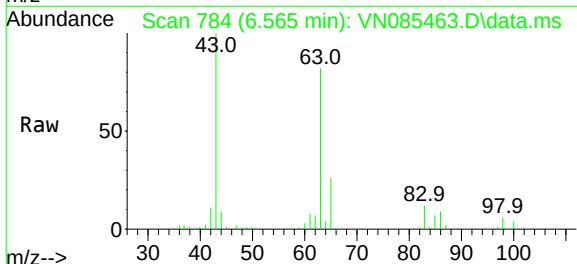
Tgt Ion: 63 Resp: 264195

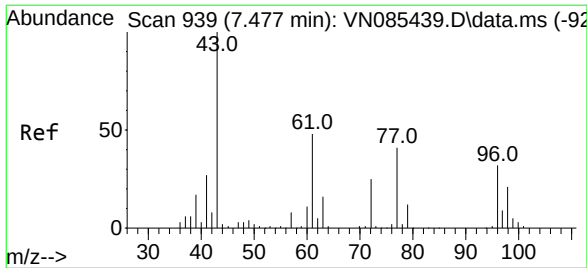
Ion Ratio Lower Upper

63 100

98 7.2 3.3 9.8

100 4.5 2.0 6.0





#25

2-Butanone

Concen: 269.467 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 452029

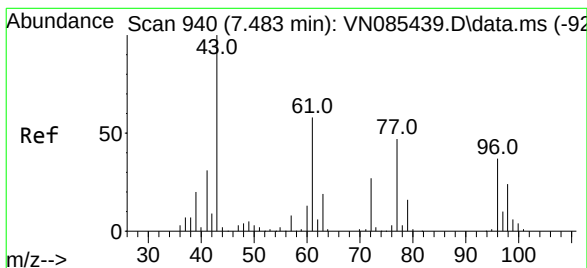
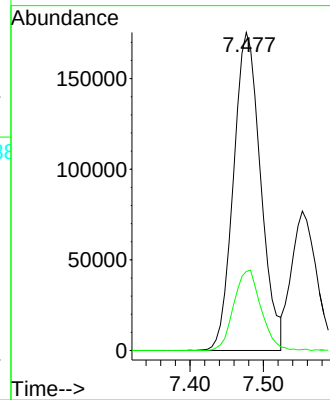
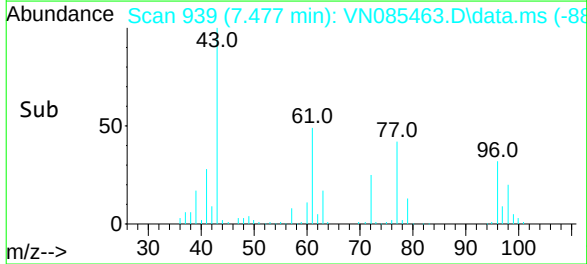
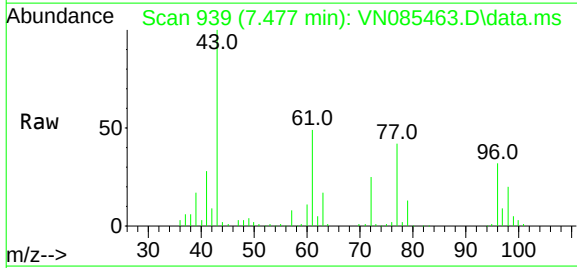
Ion Ratio Lower Upper

43 100

72 24.8 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#26

2,2-Dichloropropane

Concen: 56.857 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085463.D

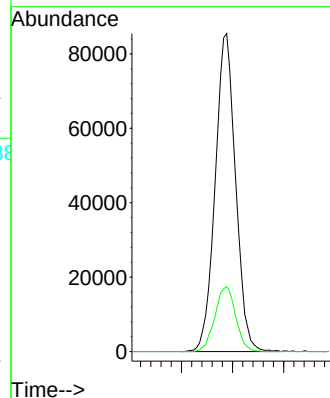
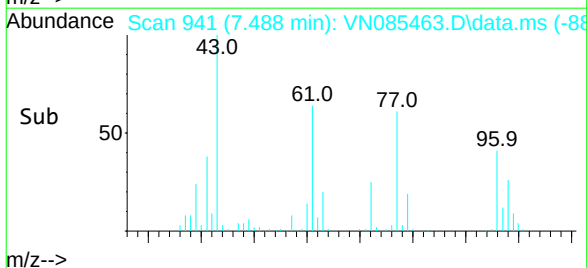
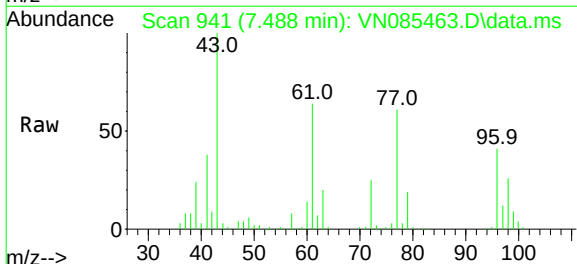
Acq: 15 Jan 2025 15:58

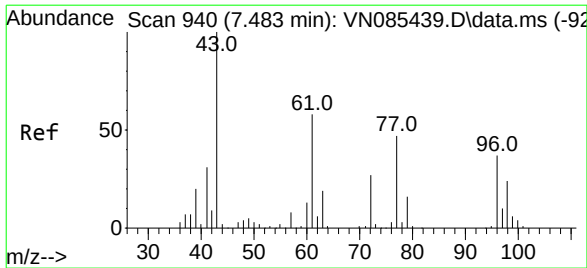
Tgt Ion: 77 Resp: 236796

Ion Ratio Lower Upper

77 100

97 20.8 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 52.557 ug/l

RT: 7.483 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 96 Resp: 155179

Ion Ratio Lower Upper

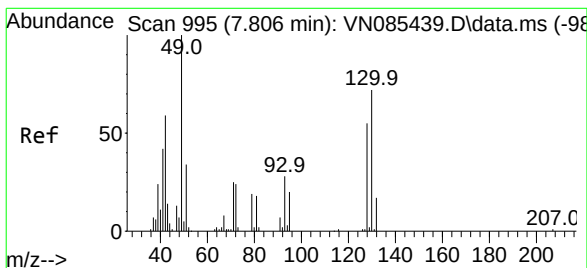
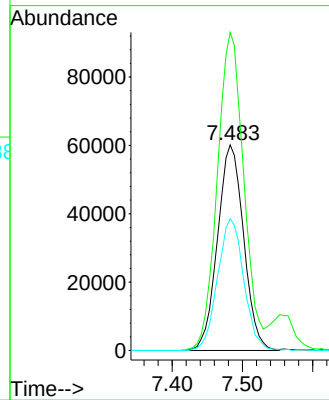
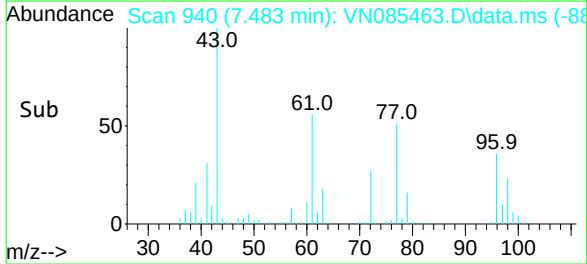
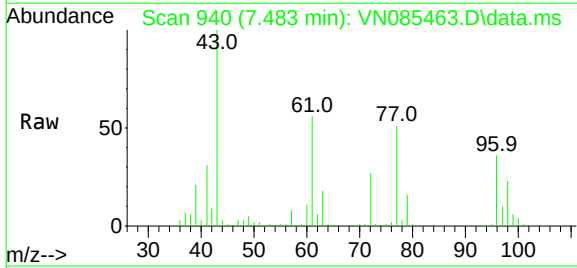
96 100

61 156.3 0.0 311.8

98 64.4 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#28

Bromochloromethane

Concen: 49.837 ug/l

RT: 7.806 min Scan# 995

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

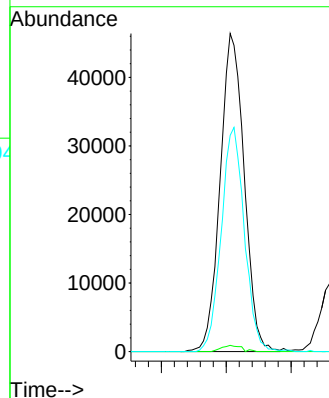
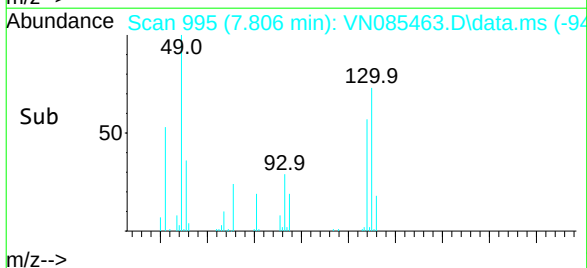
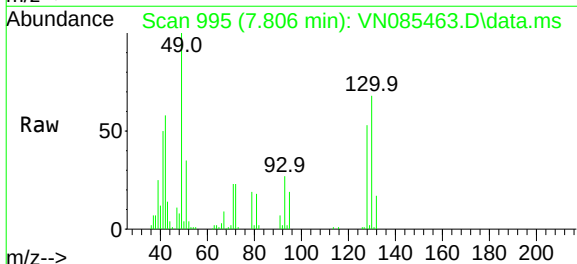
Tgt Ion: 49 Resp: 119440

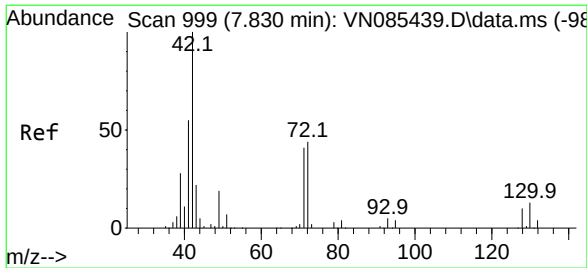
Ion Ratio Lower Upper

49 100

129 1.6 0.0 4.4

130 68.0 55.0 82.4





#29

Tetrahydrofuran

Concen: 284.562 ug/l

RT: 7.835 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 42 Resp: 302642

Ion Ratio Lower Upper

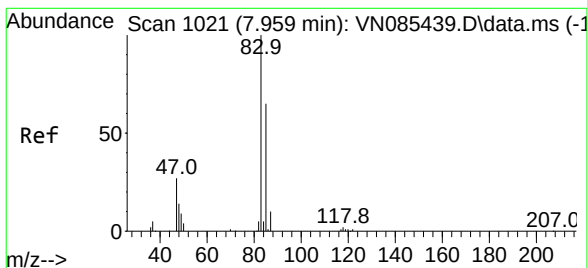
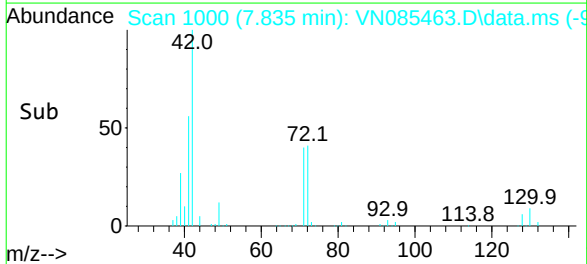
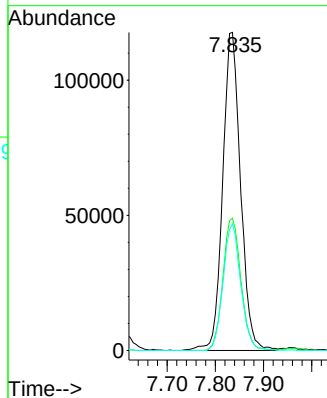
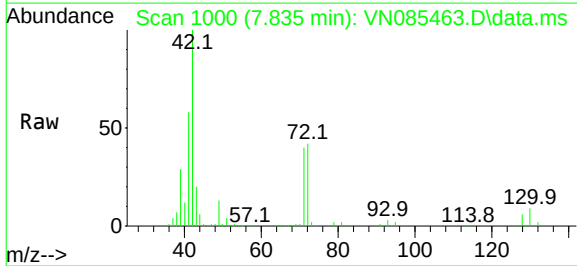
42 100

72 42.0 34.2 51.2

71 39.2 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#30

Chloroform

Concen: 51.054 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085463.D

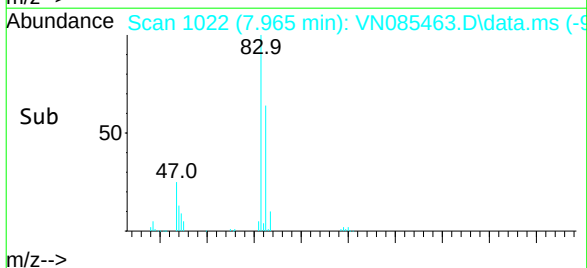
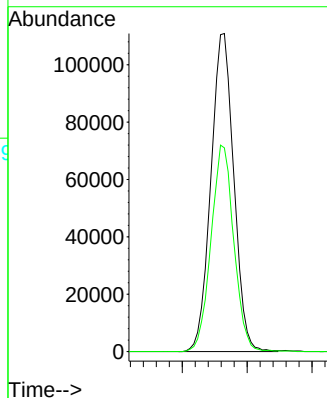
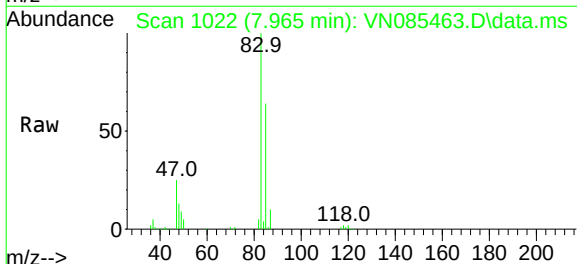
Acq: 15 Jan 2025 15:58

Tgt Ion: 83 Resp: 271813

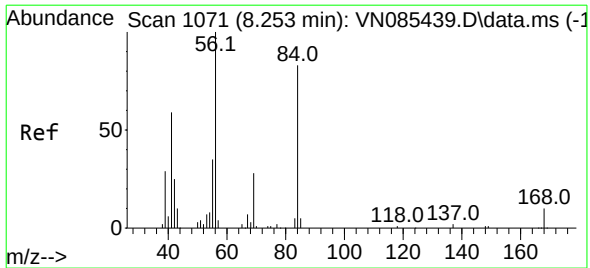
Ion Ratio Lower Upper

83 100

85 64.1 51.8 77.6







#31

Cyclohexane

Concen: 48.757 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 56 Resp: 218304

Ion Ratio Lower Upper

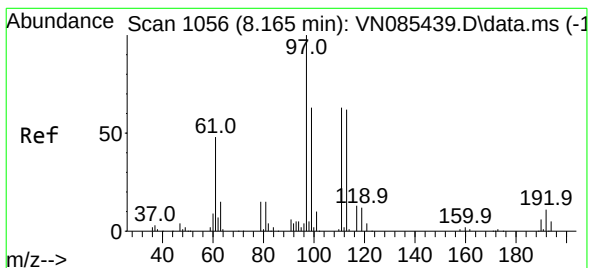
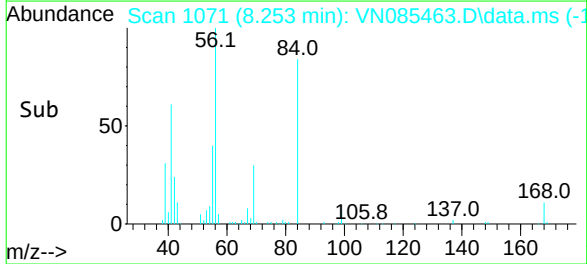
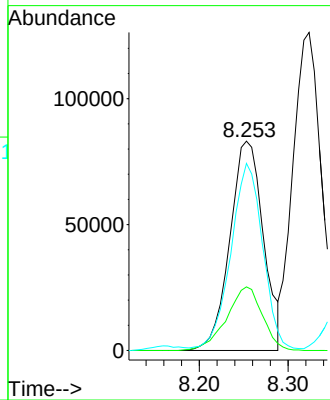
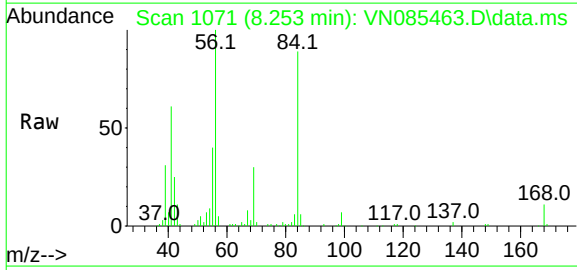
56 100

69 30.4 22.2 33.4

84 87.7 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#32

1,1,1-Trichloroethane

Concen: 50.757 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

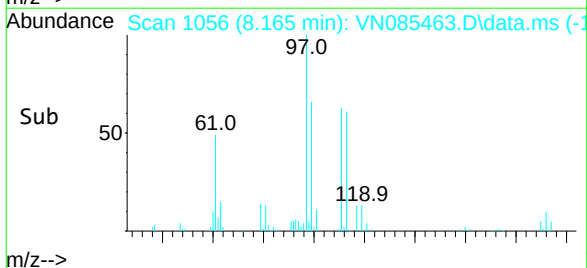
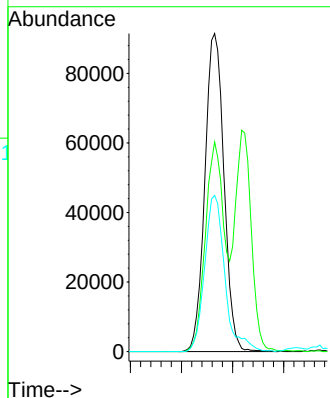
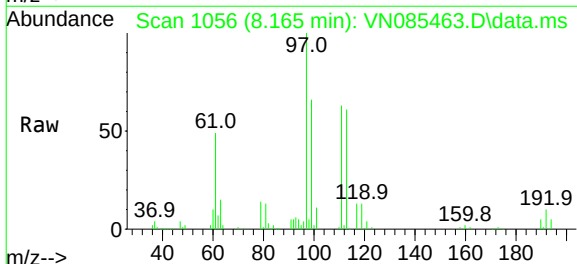
Tgt Ion: 97 Resp: 237039

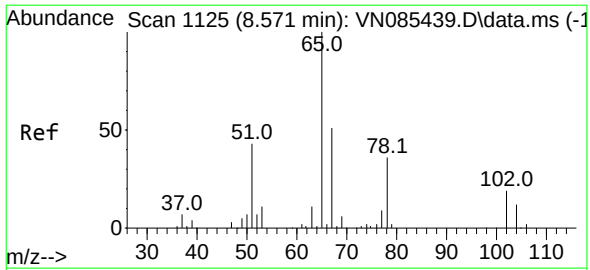
Ion Ratio Lower Upper

97 100

99 65.5 49.8 74.6

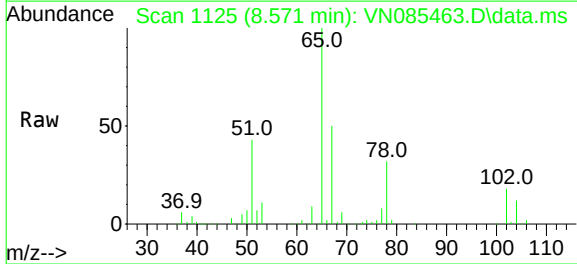
61 52.1 41.4 62.2





#33  
1,2-Dichloroethane-d4  
Concen: 52.114 ug/l  
RT: 8.571 min Scan# 1125  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

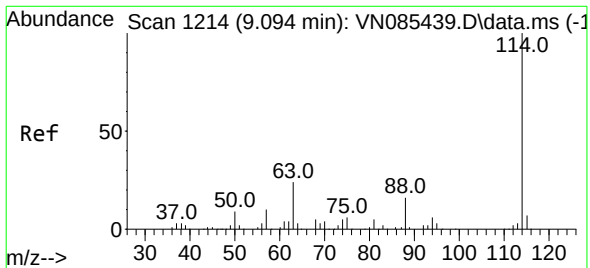
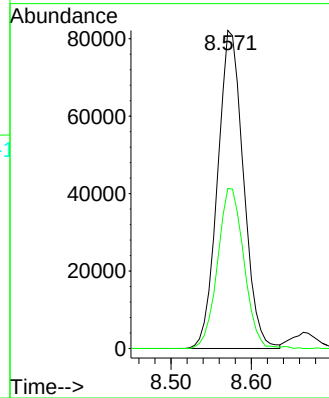
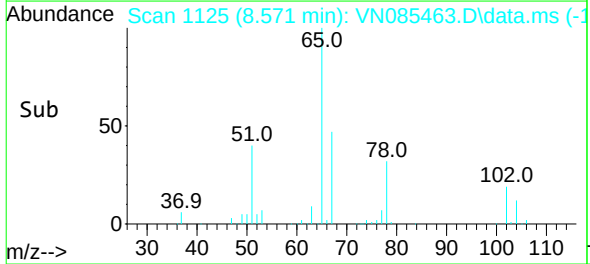
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



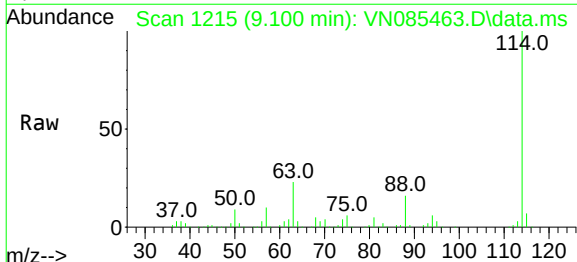
Tgt Ion: 65 Resp: 183857  
Ion Ratio Lower Upper  
65 100  
67 51.2 0.0 101.6

Manual Integrations  
APPROVED

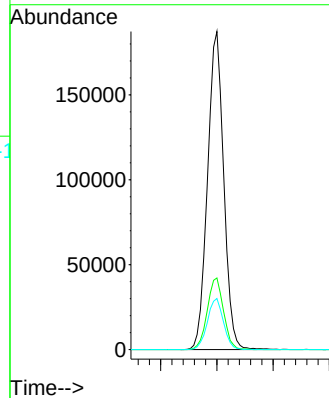
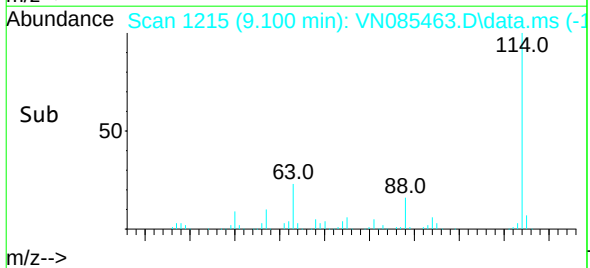
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

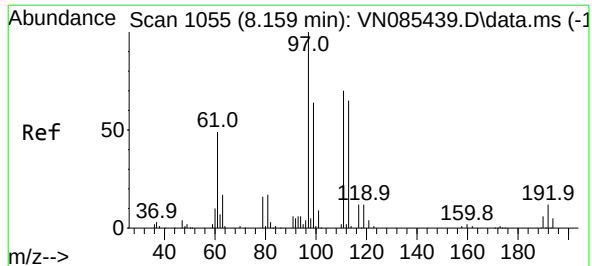


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58



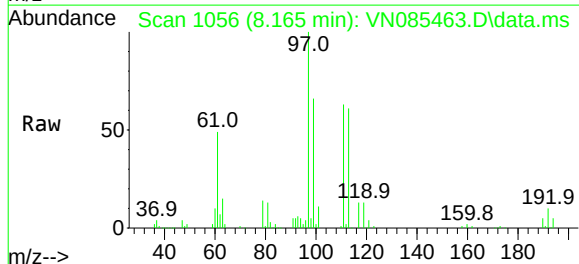
Tgt Ion:114 Resp: 374640  
Ion Ratio Lower Upper  
114 100  
63 22.5 0.0 47.6  
88 16.1 0.0 32.6





#35  
Dibromofluoromethane  
Concen: 51.677 ug/l  
RT: 8.165 min Scan# 1055  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

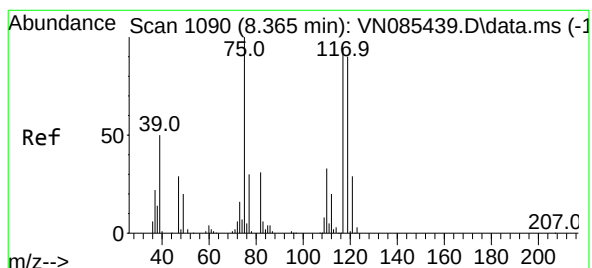
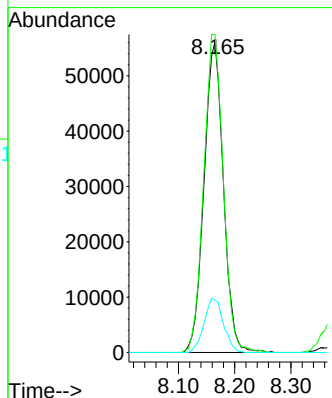
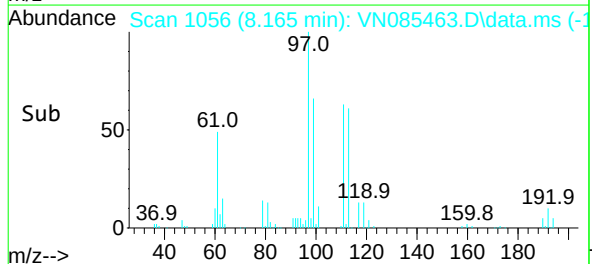
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 113 Resp: 134312  
Ion Ratio Lower Upper  
113 100  
111 103.3 82.7 124.1  
192 17.4 14.3 21.5

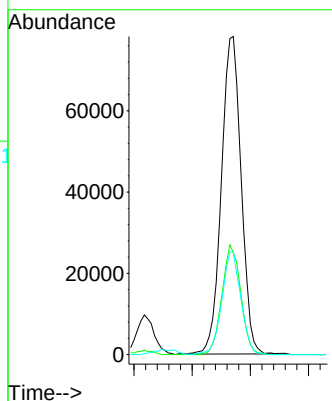
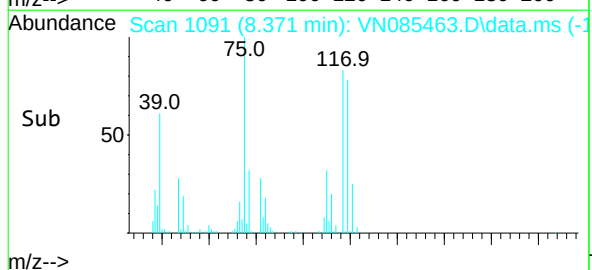
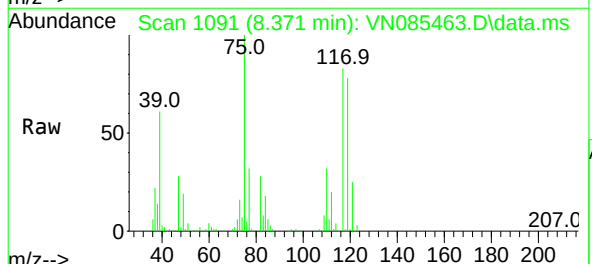
Manual Integrations  
APPROVED

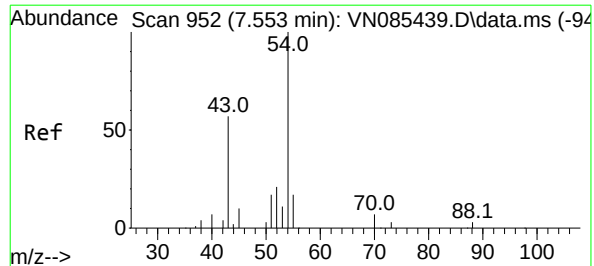
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#36  
1,1-Dichloropropene  
Concen: 50.562 ug/l  
RT: 8.371 min Scan# 1091  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 75 Resp: 184438  
Ion Ratio Lower Upper  
75 100  
110 32.8 16.5 49.5  
77 31.2 24.4 36.6





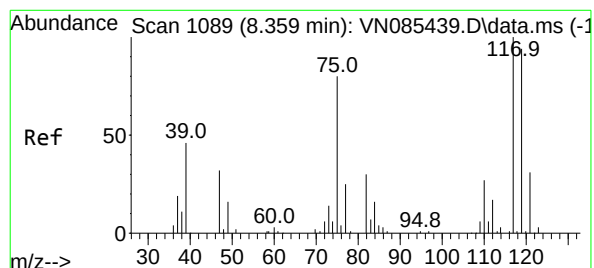
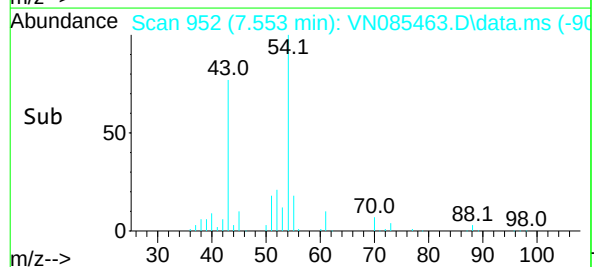
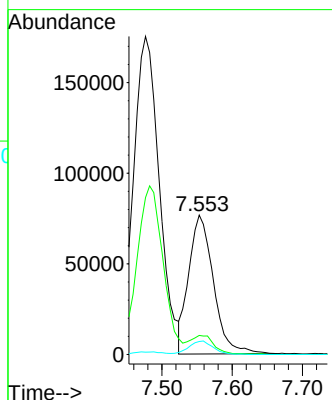
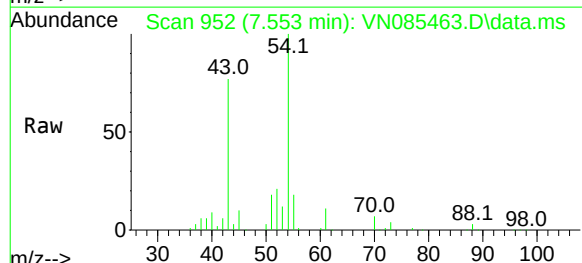
#37  
Ethyl Acetate  
Concen: 50.810 ug/l  
RT: 7.553 min Scan# 952  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 43 Resp: 187078  
Ion Ratio Lower Upper  
43 100  
61 12.1 10.9 16.3  
70 9.6 7.5 11.3

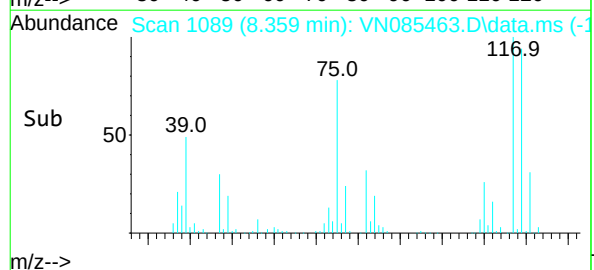
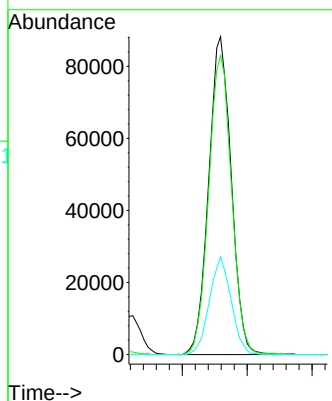
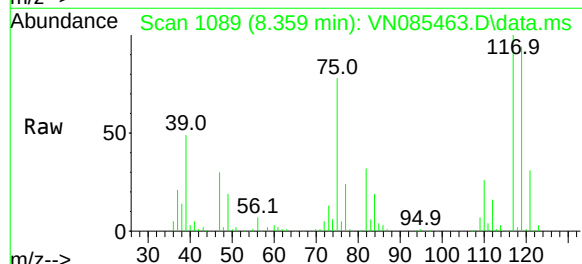
Manual Integrations  
APPROVED

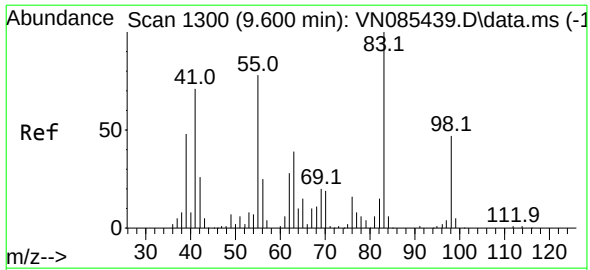
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#38  
Carbon Tetrachloride  
Concen: 50.991 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:117 Resp: 212942  
Ion Ratio Lower Upper  
117 100  
119 93.8 75.4 113.2  
121 30.8 24.6 37.0





#39

Methylcyclohexane

Concen: 57.436 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 83 Resp: 196879

Ion Ratio Lower Upper

83 100

55 80.1 62.6 94.0

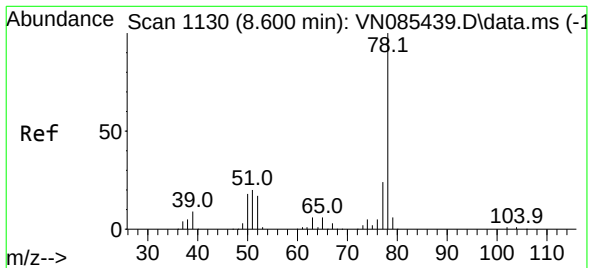
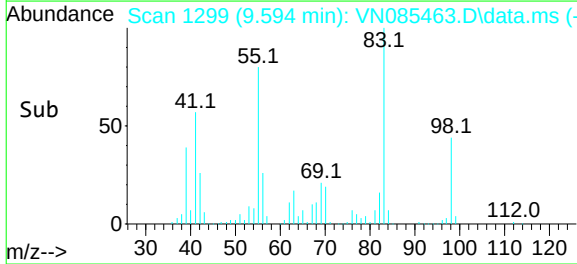
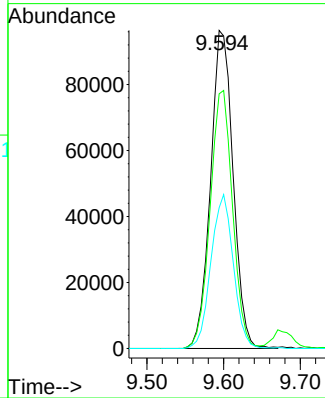
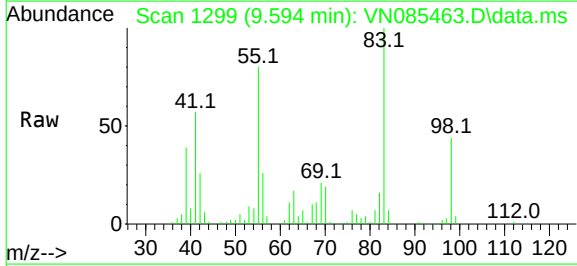
98 44.2 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#40

Benzene

Concen: 51.821 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085463.D

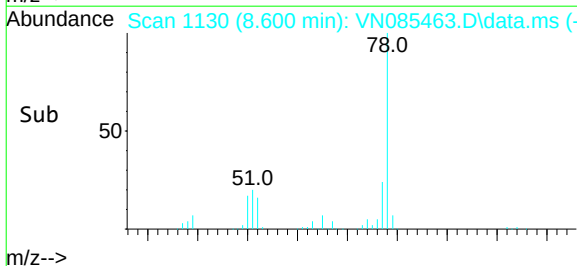
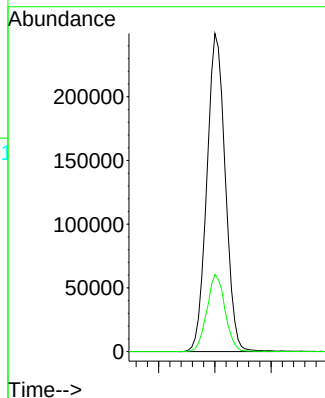
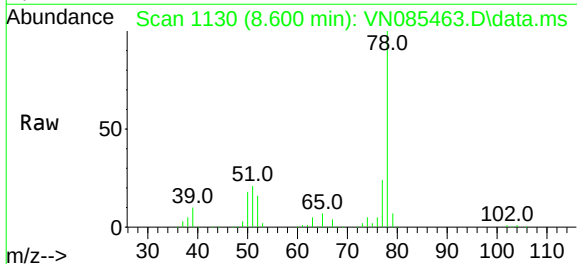
Acq: 15 Jan 2025 15:58

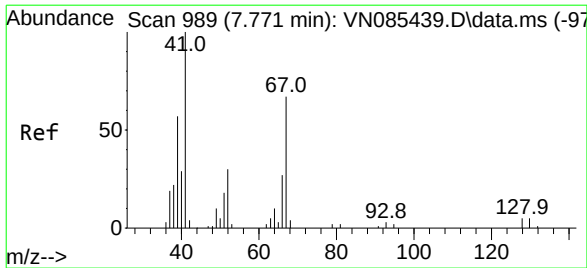
Tgt Ion: 78 Resp: 567975

Ion Ratio Lower Upper

78 100

77 24.3 19.0 28.6





#41

Methacrylonitrile

Concen: 54.981 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 41 Resp: 105319

Ion Ratio Lower Upper

41 100

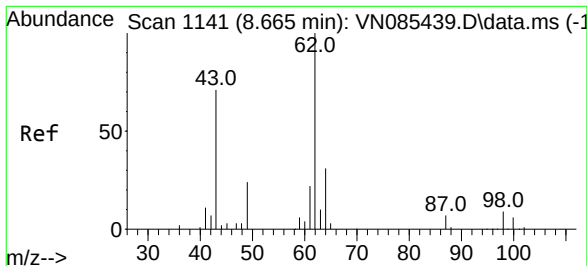
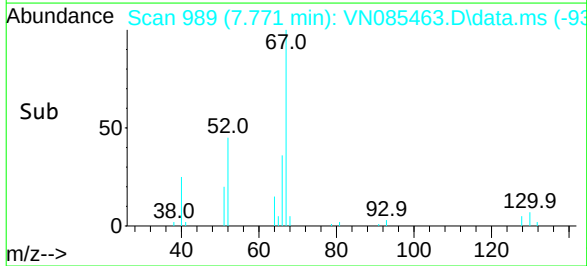
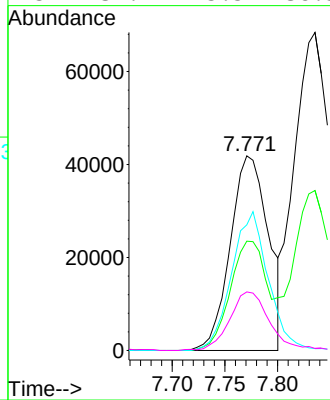
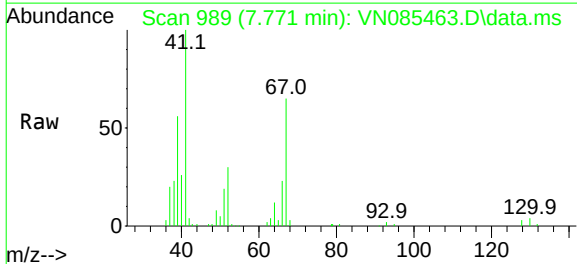
39 56.3 46.0 69.0

67 68.8 57.4 86.2

52 32.1 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#42

1,2-Dichloroethane

Concen: 51.629 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085463.D

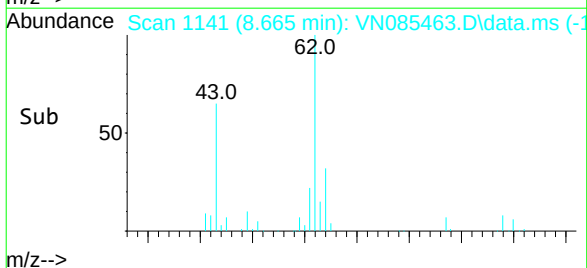
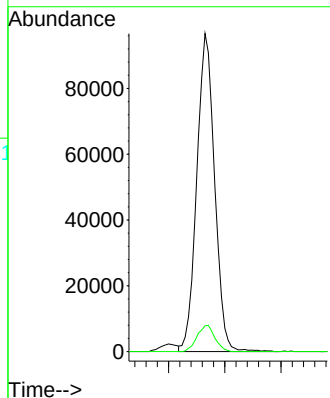
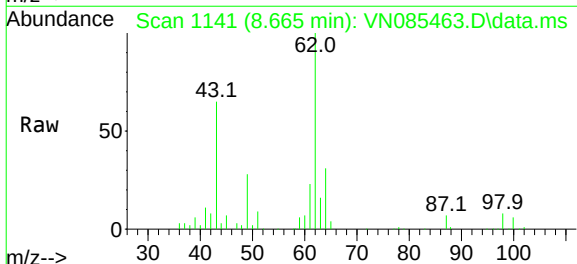
Acq: 15 Jan 2025 15:58

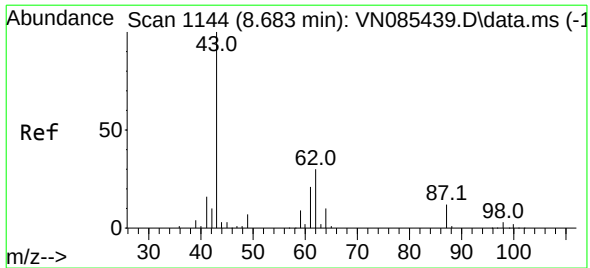
Tgt Ion: 62 Resp: 213125

Ion Ratio Lower Upper

62 100

98 8.2 0.0 17.0





#43

Isopropyl Acetate

Concen: 57.599 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 339818

Ion Ratio Lower Upper

43 100

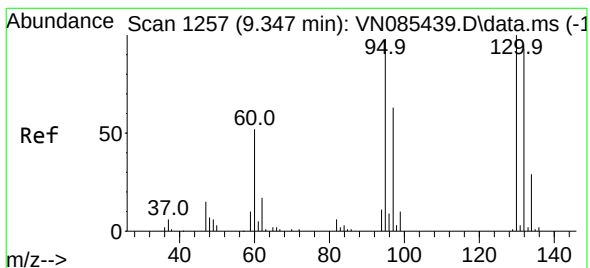
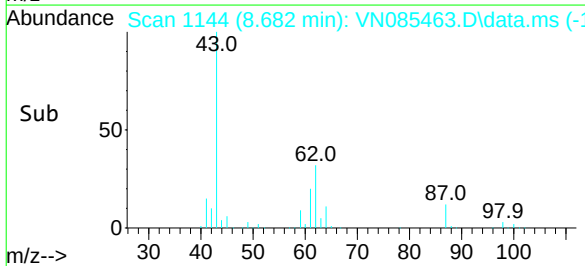
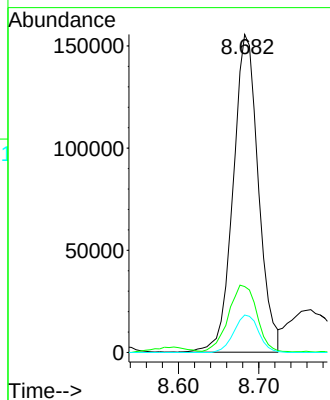
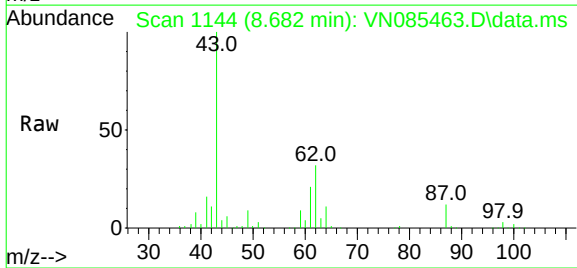
61 23.7 20.7 31.1

87 11.5 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#44

Trichloroethene

Concen: 49.260 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085463.D

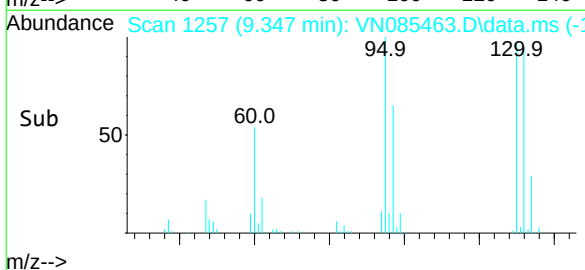
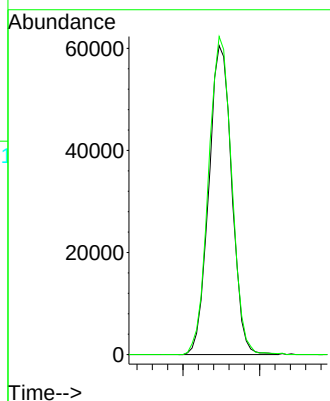
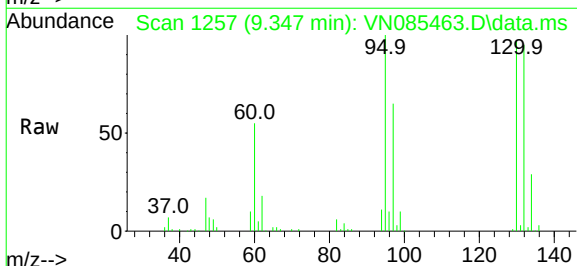
Acq: 15 Jan 2025 15:58

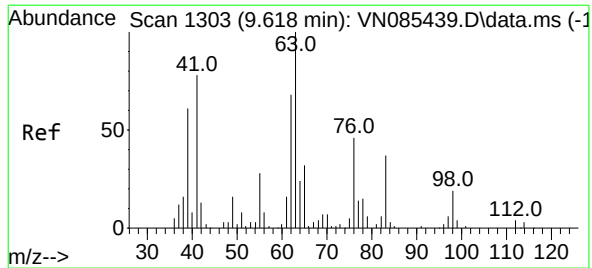
Tgt Ion:130 Resp: 125677

Ion Ratio Lower Upper

130 100

95 103.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 51.043 ug/l

RT: 9.618 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 63 Resp: 142897

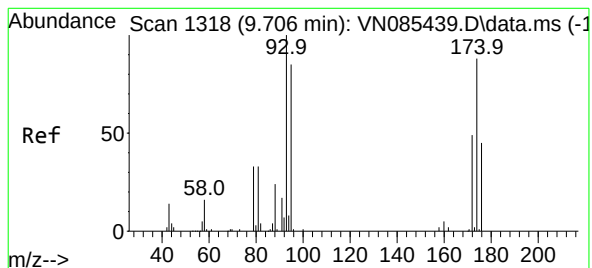
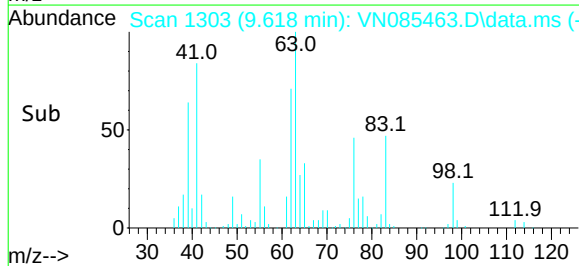
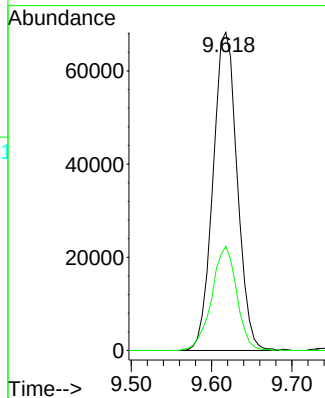
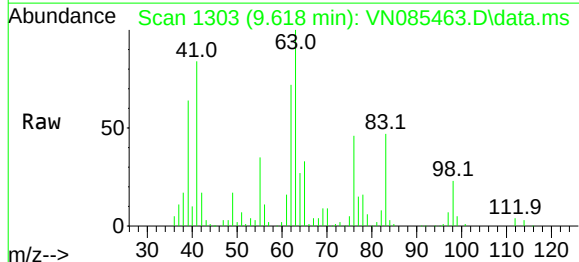
Ion Ratio Lower Upper

63 100

65 32.7 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#46

Dibromomethane

Concen: 49.750 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

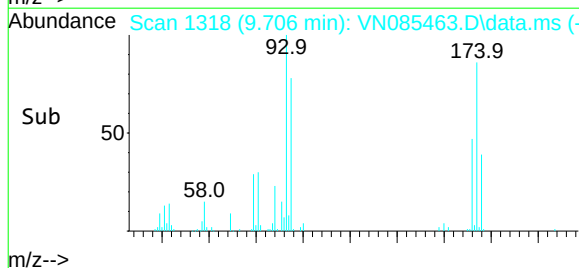
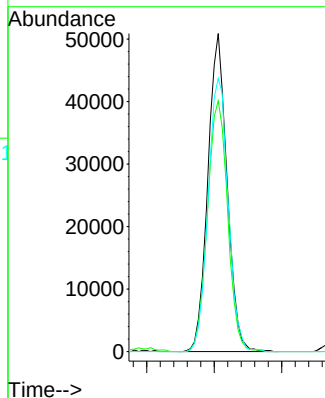
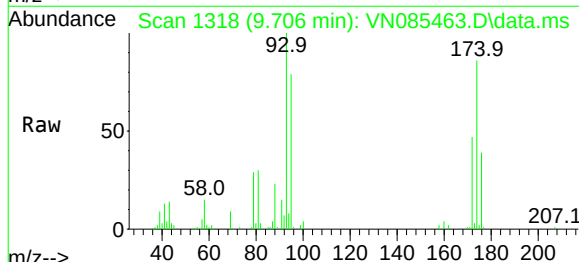
Tgt Ion: 93 Resp: 100497

Ion Ratio Lower Upper

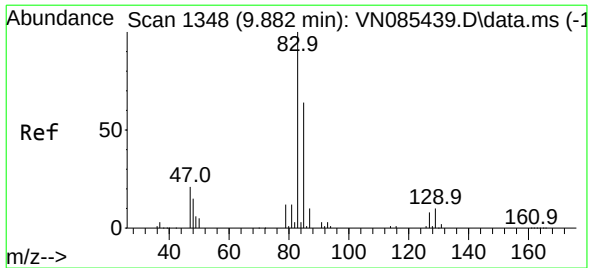
93 100

95 82.8 64.7 97.1

174 90.0 69.0 103.4







#47

Bromodichloromethane

Concen: 52.814 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 83 Resp: 217353

Ion Ratio Lower Upper

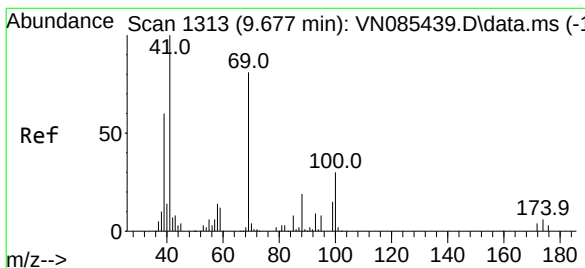
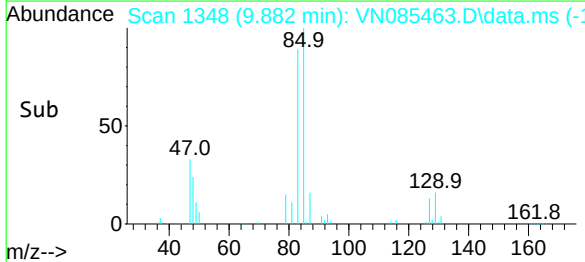
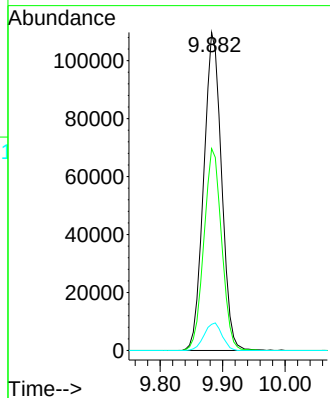
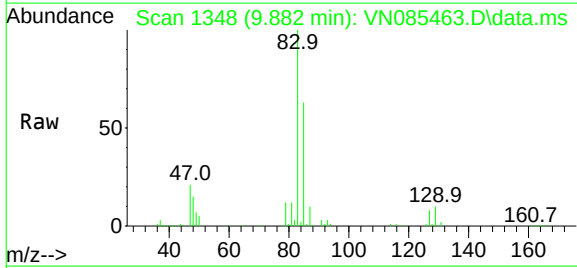
83 100

85 63.5 51.2 76.8

127 8.2 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#48

Methyl methacrylate

Concen: 57.796 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

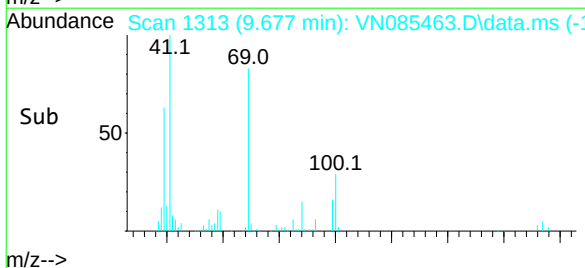
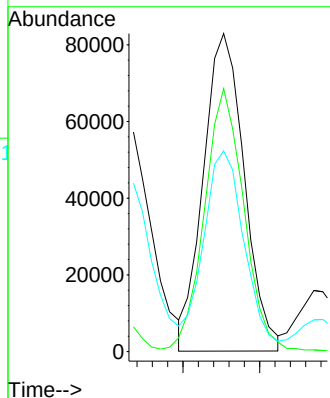
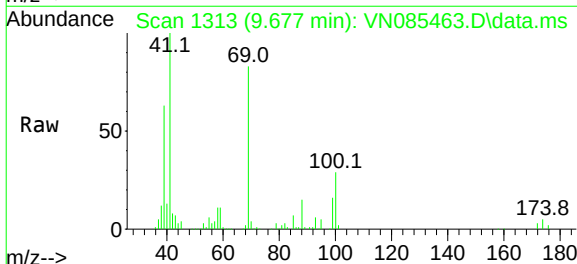
Tgt Ion: 41 Resp: 153447

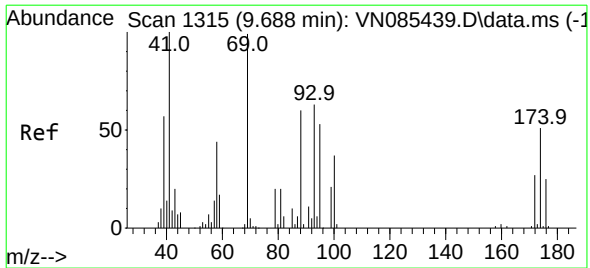
Ion Ratio Lower Upper

41 100

69 80.2 64.7 97.1

39 63.2 49.0 73.6





#49

1,4-Dioxane

Concen: 972.836 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 88 Resp: 43495

Ion Ratio Lower Upper

88 100

43 32.9 26.6 39.8

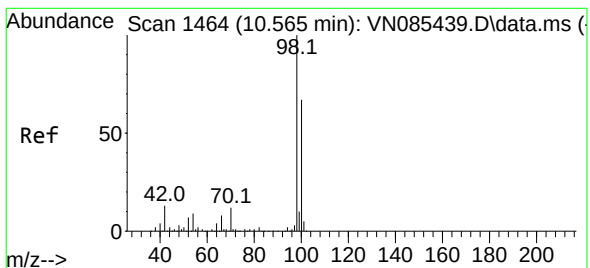
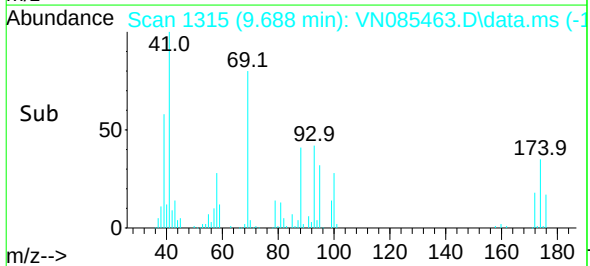
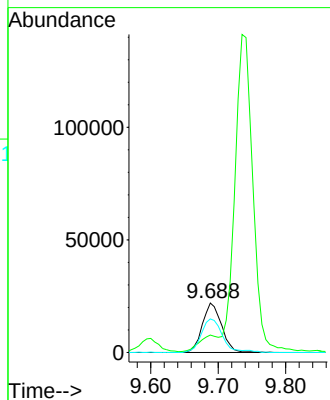
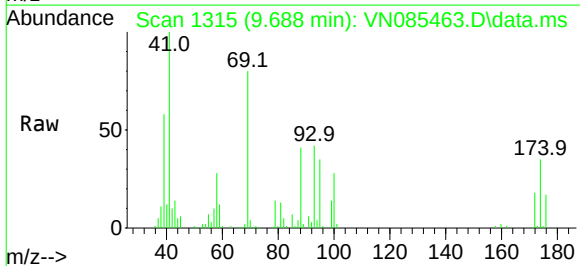
58 75.2 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#50

Toluene-d8

Concen: 54.009 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085463.D

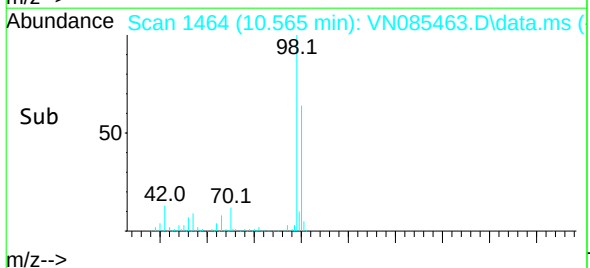
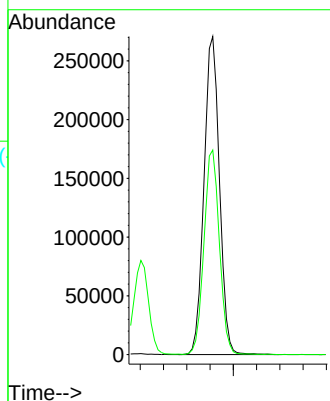
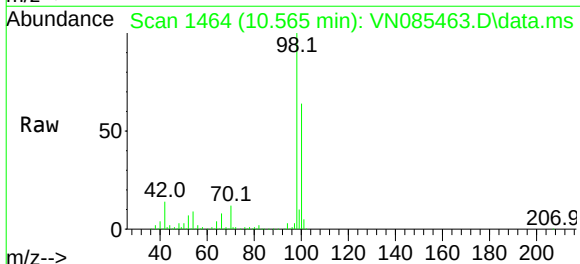
Acq: 15 Jan 2025 15:58

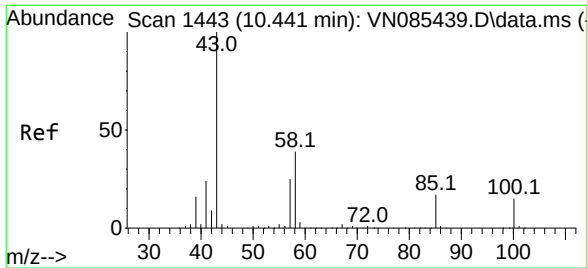
Tgt Ion: 98 Resp: 498748

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.4





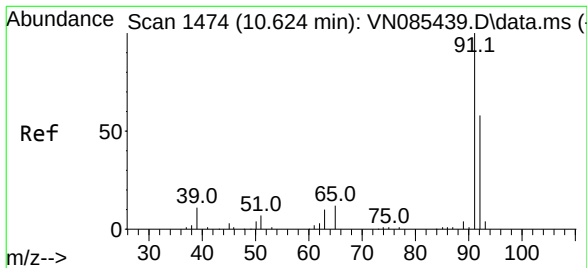
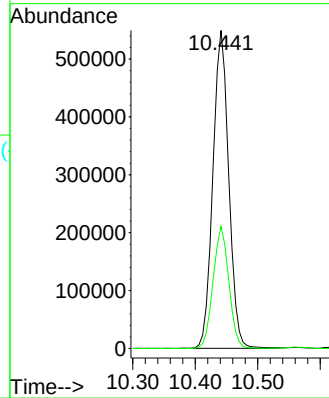
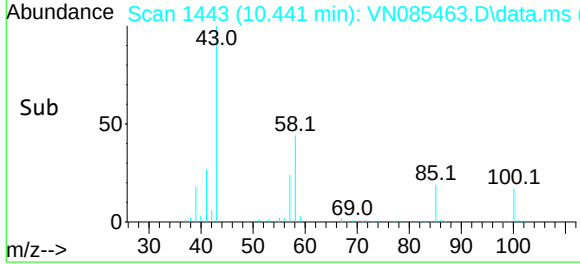
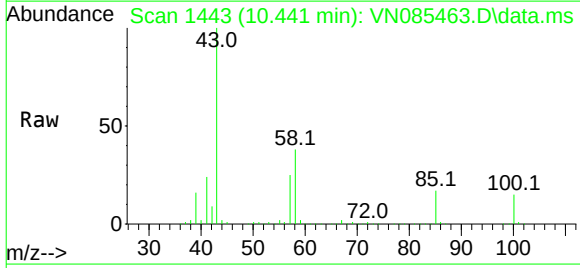
#51  
4-Methyl-2-Pentanone  
Concen: 282.679 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 43 Resp: 967748  
Ion Ratio Lower Upper  
43 100  
58 38.2 30.5 45.7

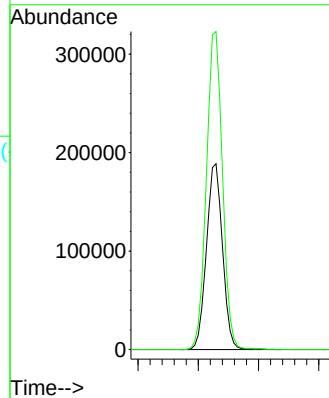
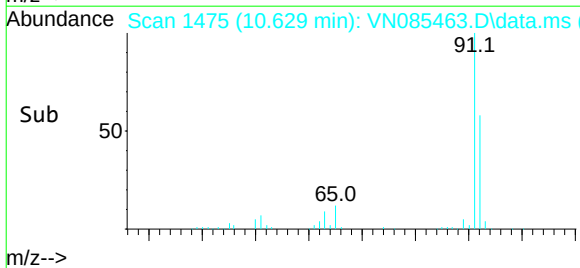
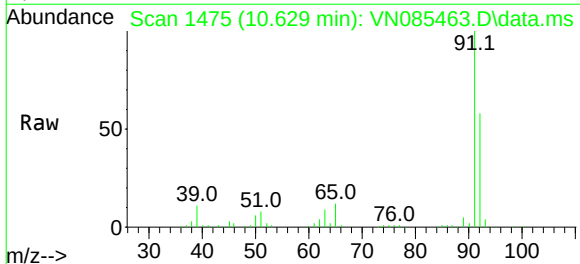
Manual Integrations  
APPROVED

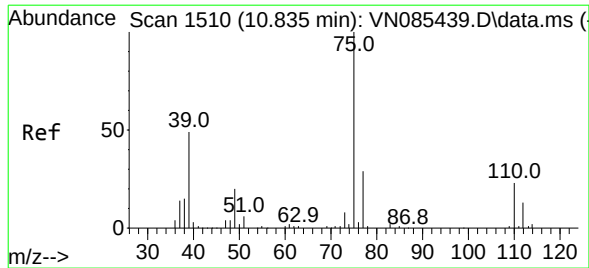
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#52  
Toluene  
Concen: 55.032 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 92 Resp: 349488  
Ion Ratio Lower Upper  
92 100  
91 171.6 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 55.946 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 75 Resp: 217586

Ion Ratio Lower Upper

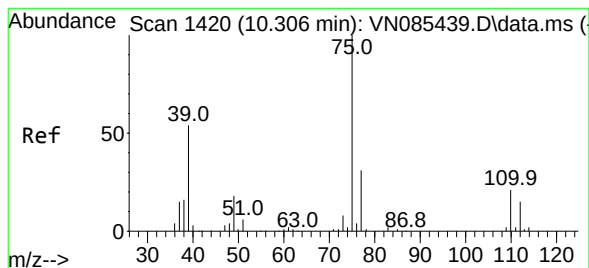
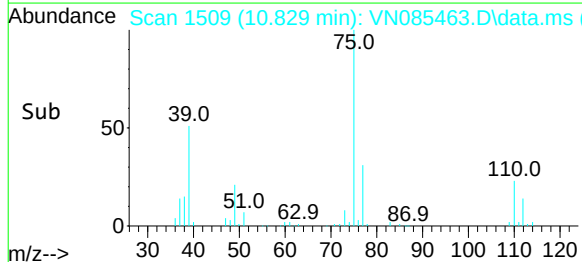
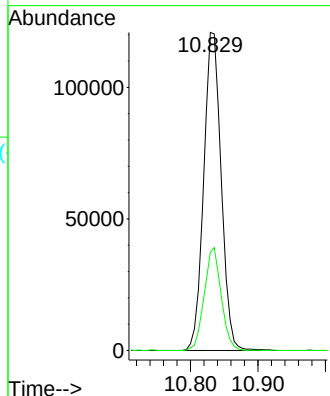
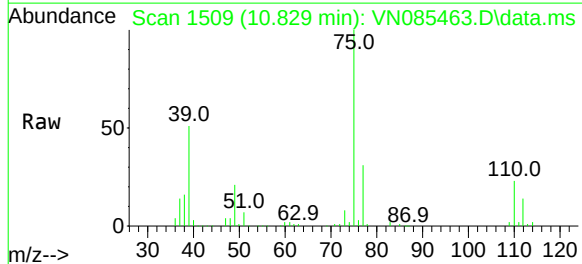
75 100

77 30.8 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#54

cis-1,3-Dichloropropene

Concen: 55.661 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

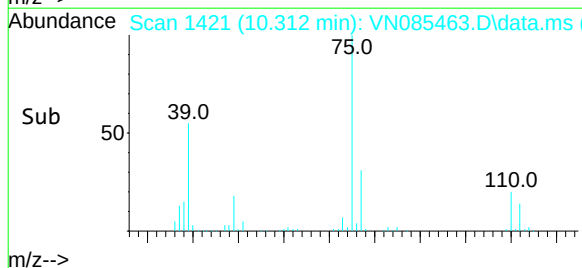
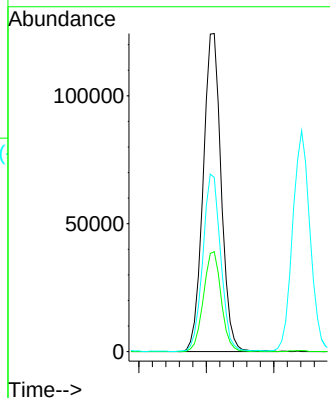
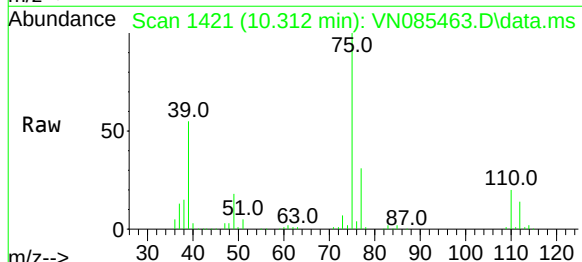
Tgt Ion: 75 Resp: 231235

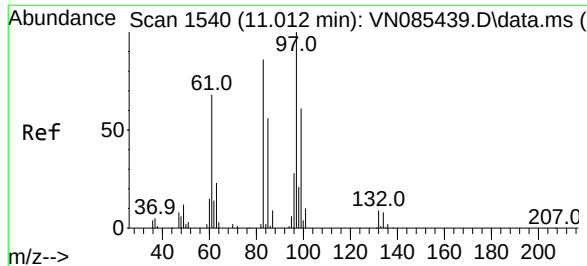
Ion Ratio Lower Upper

75 100

77 31.4 25.0 37.4

39 54.6 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 51.759 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 97 Resp: 130083

Ion Ratio Lower Upper

97 100

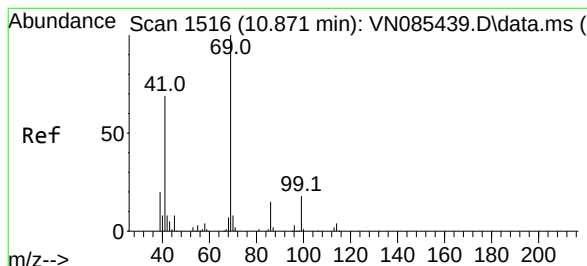
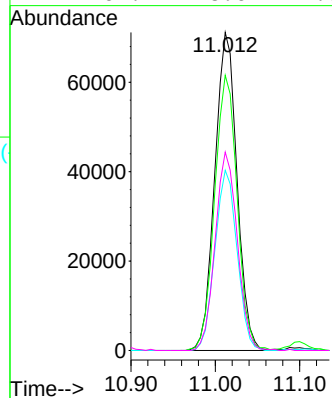
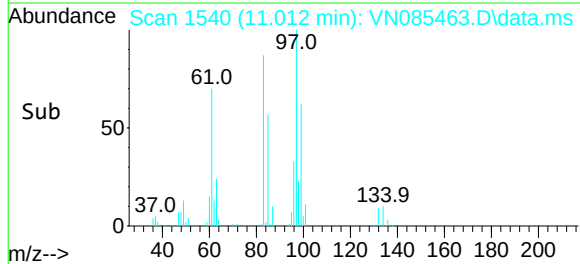
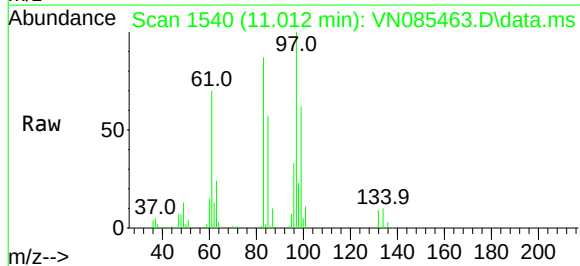
83 86.5 69.0 103.6

85 56.7 44.6 66.8

99 62.4 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#56

Ethyl methacrylate

Concen: 49.885 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

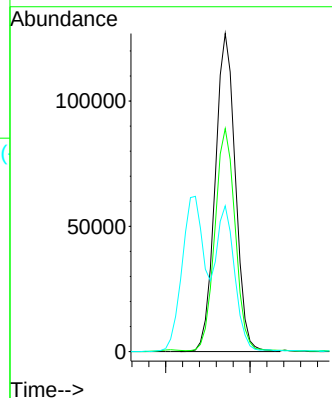
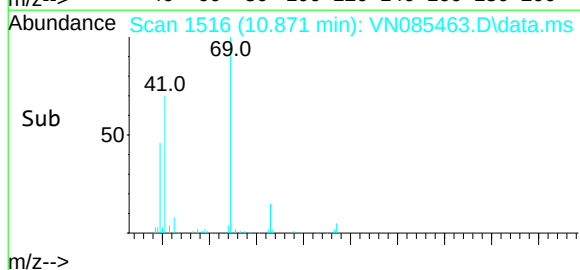
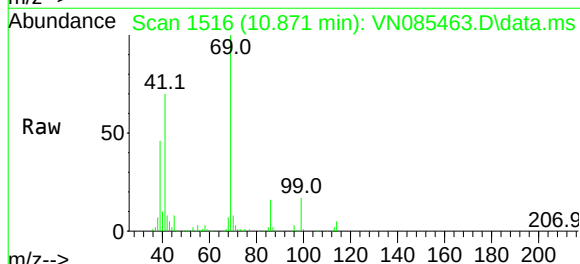
Tgt Ion: 69 Resp: 211176

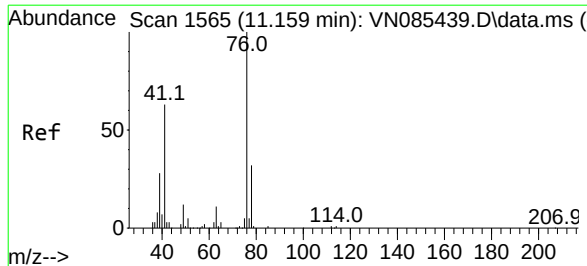
Ion Ratio Lower Upper

69 100

41 70.3 54.6 82.0

39 41.5 32.4 48.6





#57

1,3-Dichloropropane

Concen: 53.338 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 76 Resp: 233088

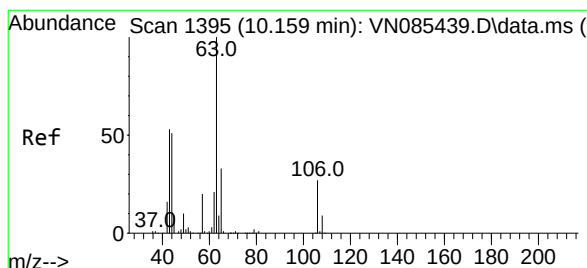
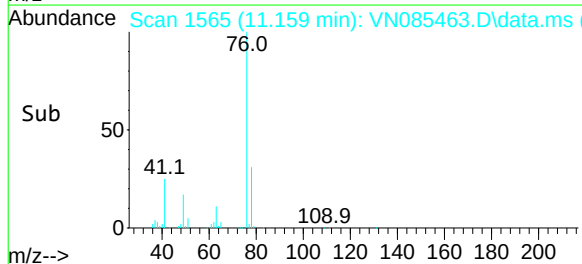
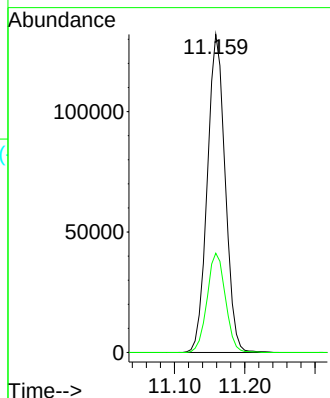
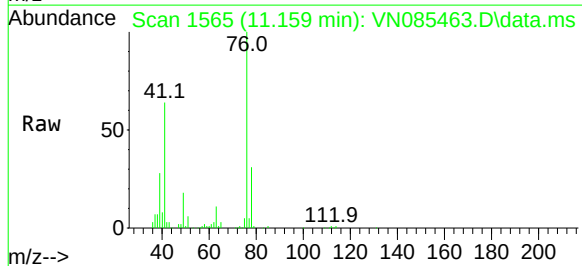
Ion Ratio Lower Upper

76 100

78 32.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#58

2-Chloroethyl Vinyl ether

Concen: 290.228 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085463.D

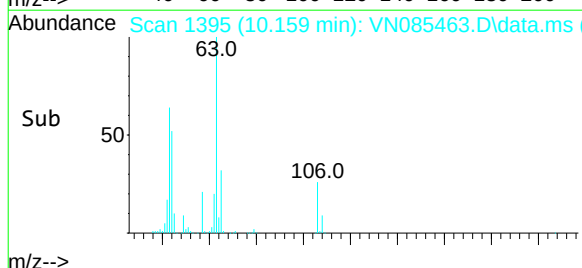
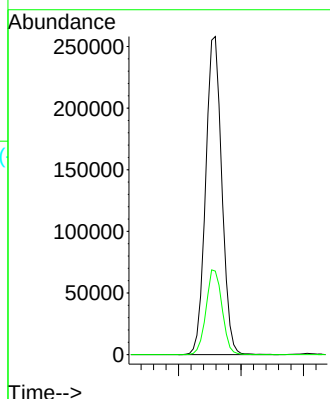
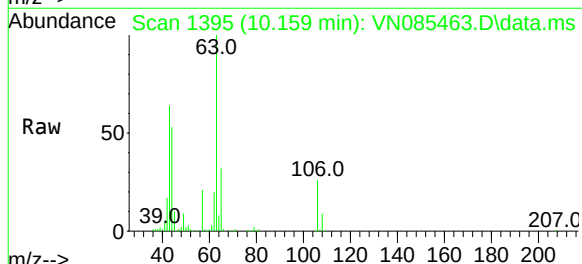
Acq: 15 Jan 2025 15:58

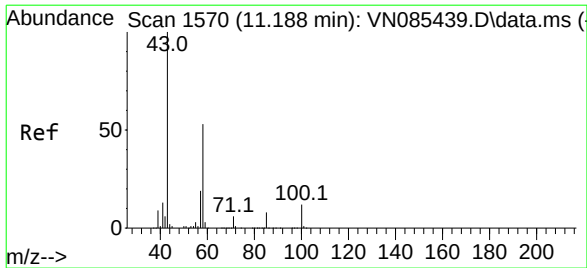
Tgt Ion: 63 Resp: 462882

Ion Ratio Lower Upper

63 100

106 26.4 21.6 32.4





#59

2-Hexanone

Concen: 292.136 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 43 Resp: 703719

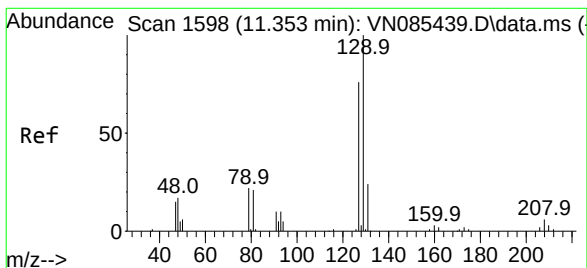
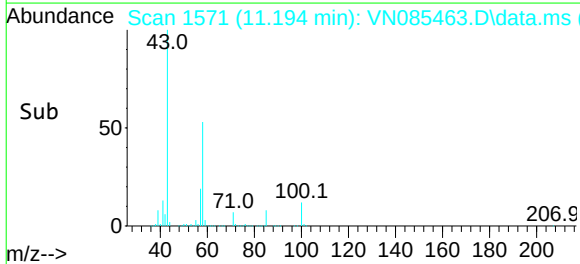
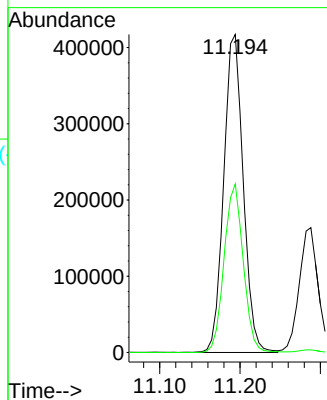
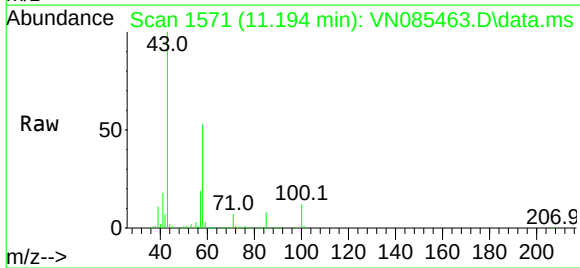
Ion Ratio Lower Upper

43 100

58 52.0 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#60

Dibromochloromethane

Concen: 52.339 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. -0.000 min

Lab File: VN085463.D

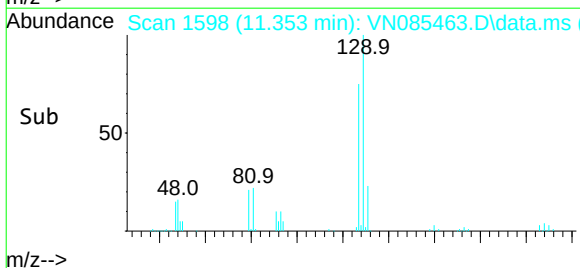
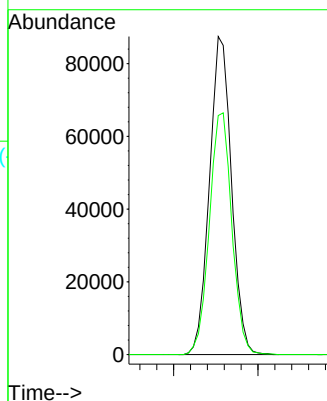
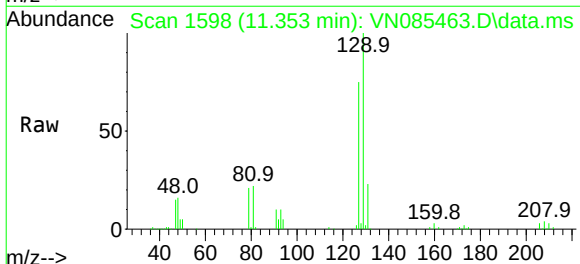
Acq: 15 Jan 2025 15:58

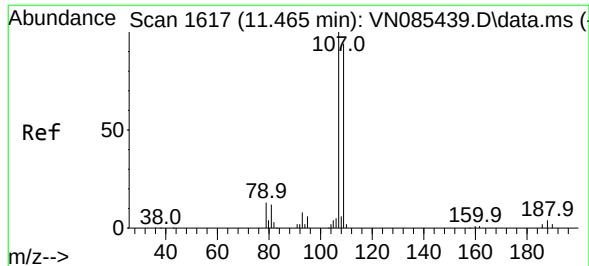
Tgt Ion:129 Resp: 158806

Ion Ratio Lower Upper

129 100

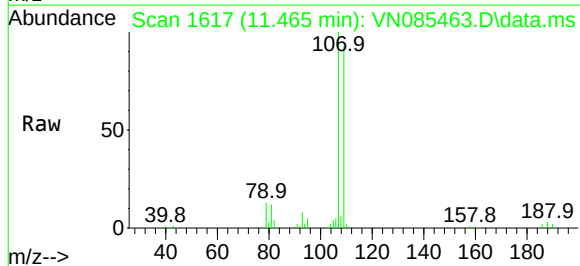
127 77.4 38.6 115.8





#61  
1,2-Dibromoethane  
Concen: 51.040 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

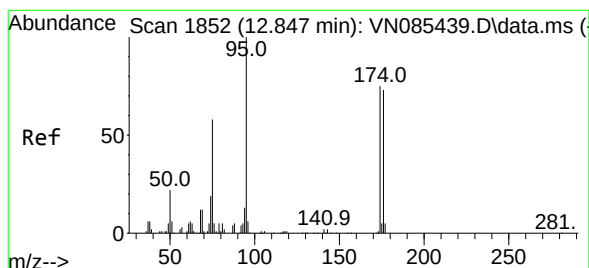
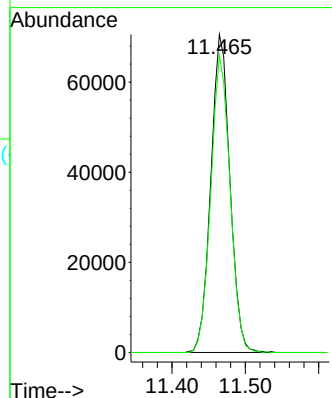
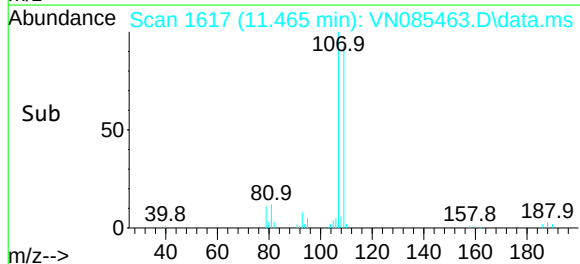
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 107 Resp: 127688  
Ion Ratio Lower Upper  
107 100  
109 94.2 75.9 113.9

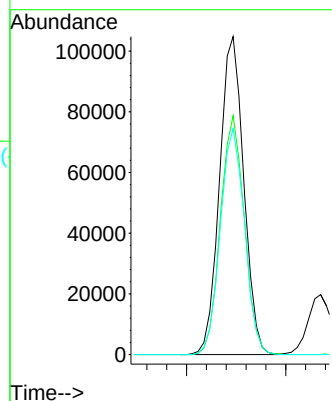
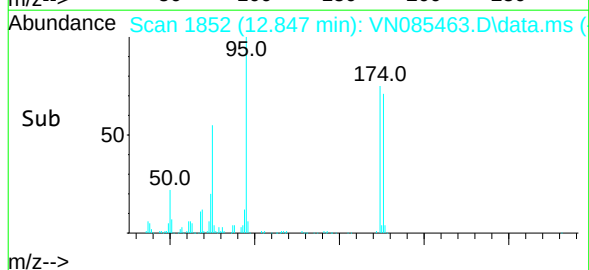
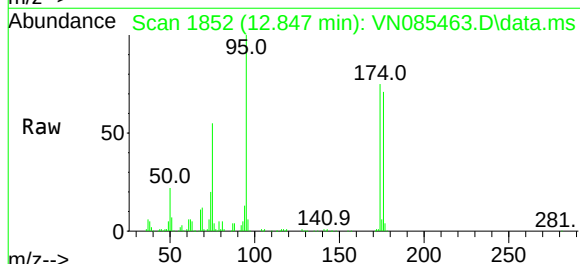
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

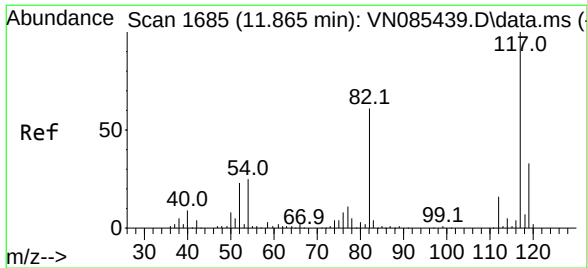


#62  
4-Bromofluorobenzene  
Concen: 56.127 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 95 Resp: 177300  
Ion Ratio Lower Upper  
95 100  
174 73.9 0.0 145.0  
176 71.4 0.0 142.4

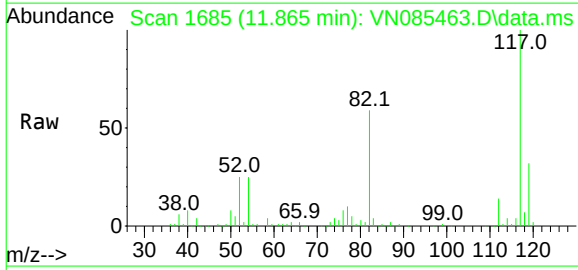






#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

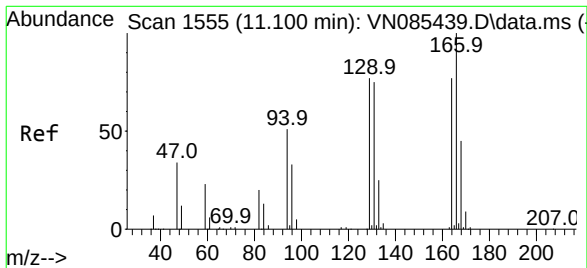
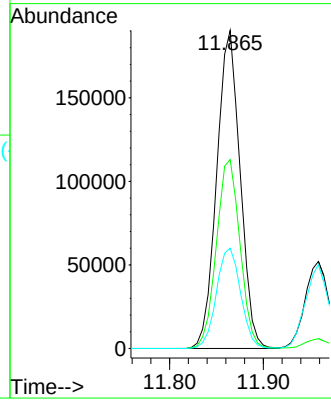
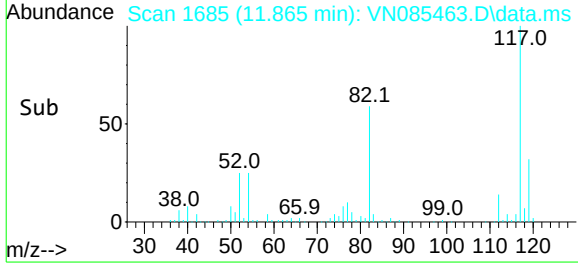
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:117 Resp: 330319  
Ion Ratio Lower Upper  
117 100  
82 59.4 48.6 72.8  
119 31.6 26.6 39.8

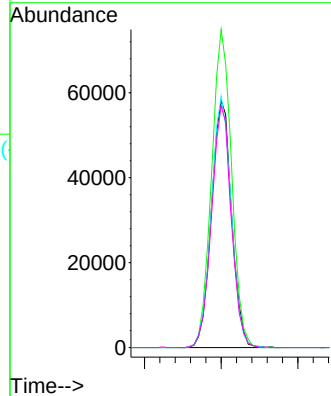
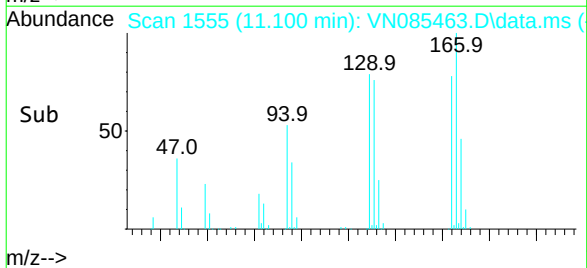
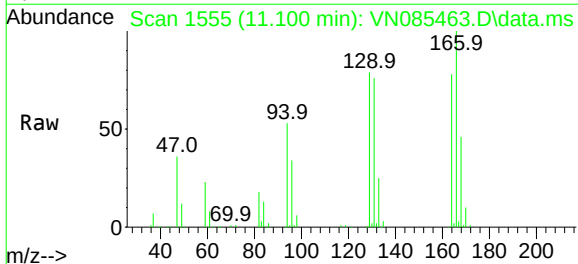
Manual Integrations  
APPROVED

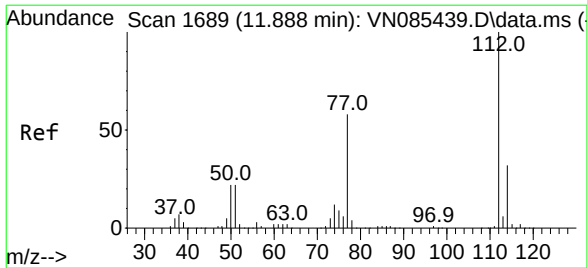
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#64  
Tetrachloroethene  
Concen: 47.207 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

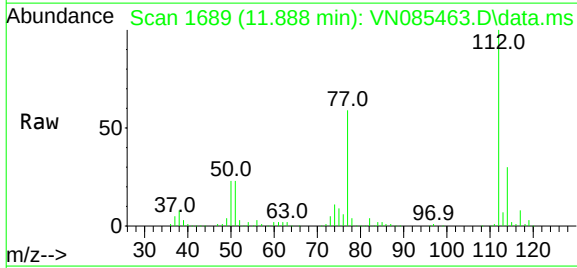
Tgt Ion:164 Resp: 106305  
Ion Ratio Lower Upper  
164 100  
166 128.8 103.4 155.2  
129 101.8 79.2 118.8  
131 97.9 77.1 115.7





#65  
Chlorobenzene  
Concen: 51.313 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

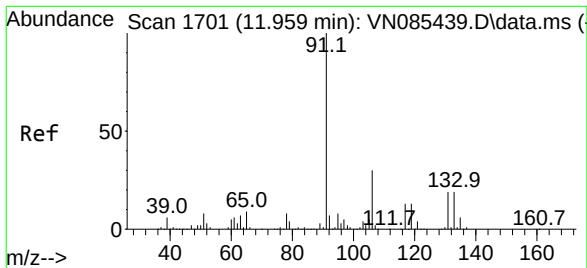
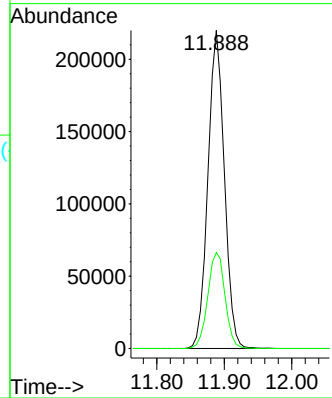
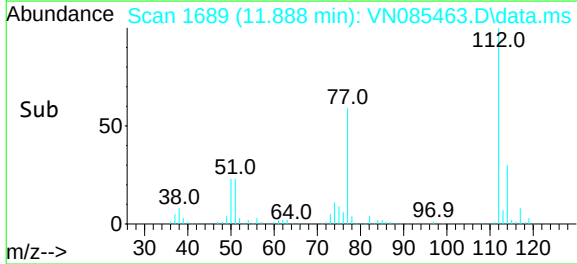
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion:112 Resp: 371312  
Ion Ratio Lower Upper  
112 100  
114 30.2 25.3 37.9

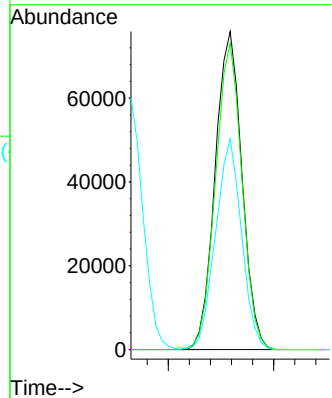
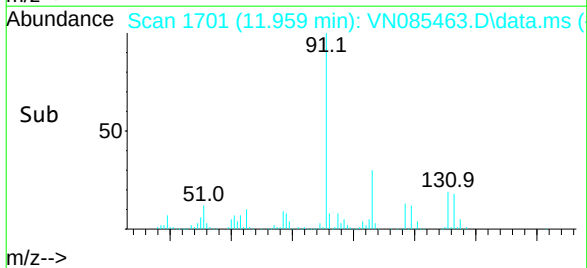
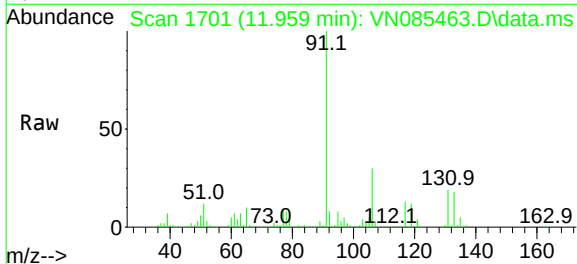
Manual Integrations  
APPROVED

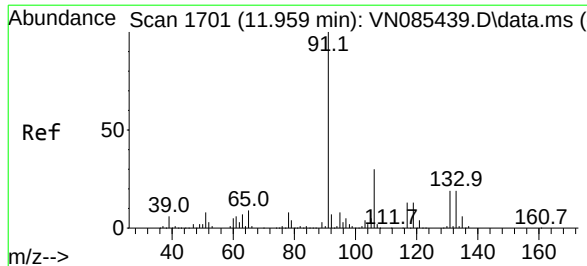
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#66  
1,1,1,2-Tetrachloroethane  
Concen: 50.351 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:131 Resp: 133724  
Ion Ratio Lower Upper  
131 100  
133 95.2 47.4 142.3  
119 64.4 33.1 99.5





#67

Ethyl Benzene

Concen: 56.469 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 91 Resp: 665536

Ion Ratio Lower Upper

91 100

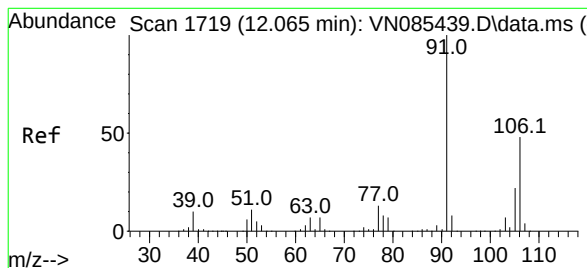
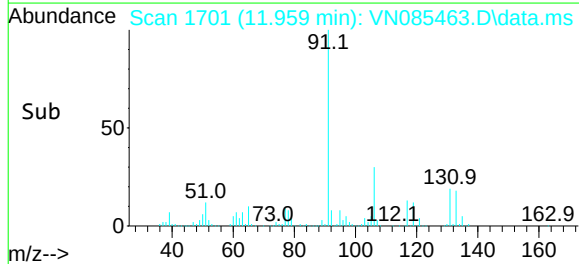
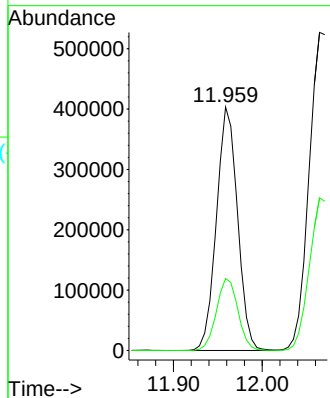
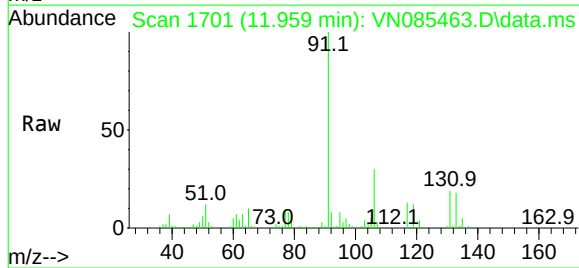
106 29.5 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#68

m/p-Xylenes

Concen: 114.541 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. -0.000 min

Lab File: VN085463.D

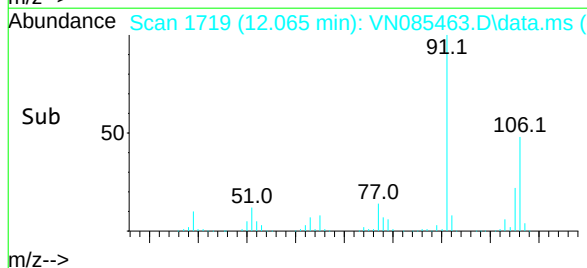
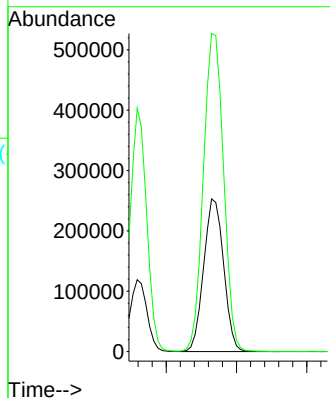
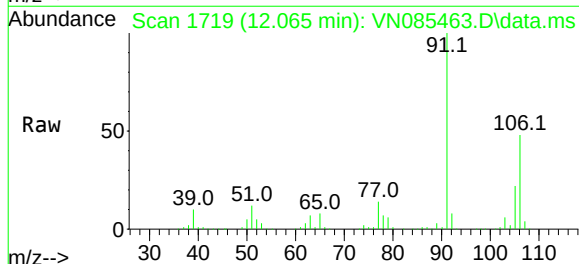
Acq: 15 Jan 2025 15:58

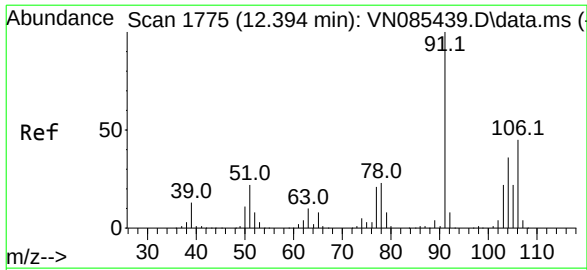
Tgt Ion:106 Resp: 498925

Ion Ratio Lower Upper

106 100

91 210.4 167.7 251.5





#69

o-Xylene

Concen: 56.724 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:106 Resp: 236130

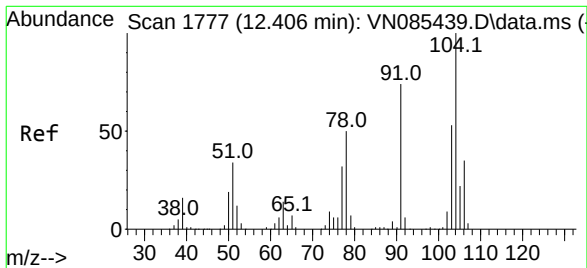
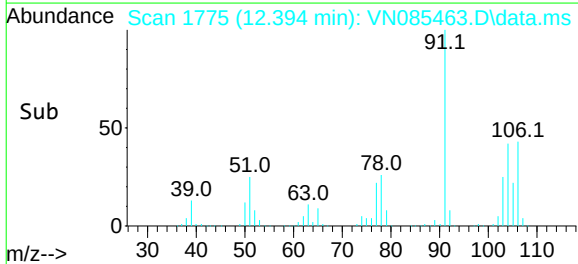
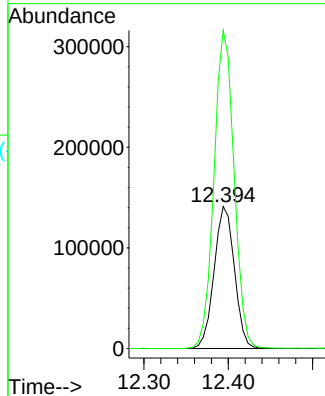
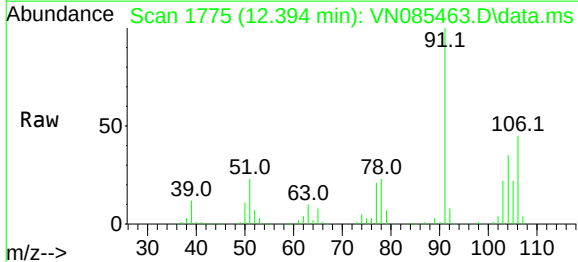
Ion Ratio Lower Upper

106 100

91 222.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#70

Styrene

Concen: 59.312 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

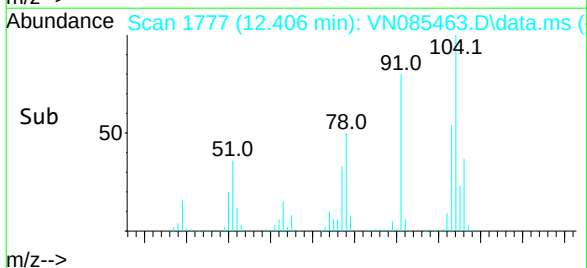
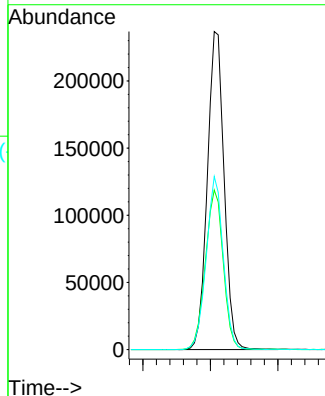
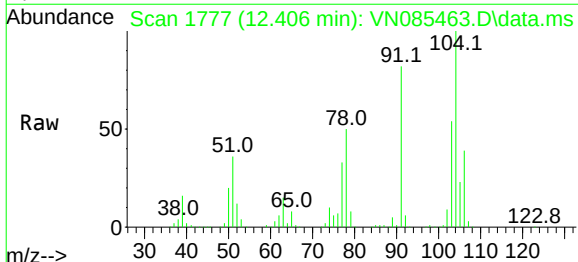
Tgt Ion:104 Resp: 408614

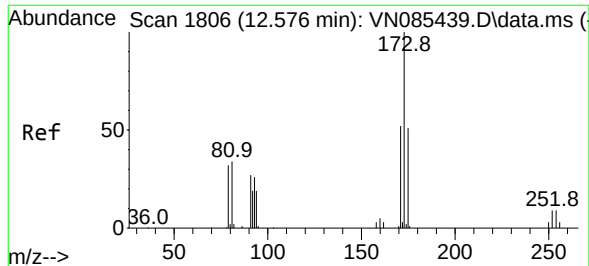
Ion Ratio Lower Upper

104 100

78 53.4 42.5 63.7

103 55.4 43.8 65.8





#71

Bromoform

Concen: 55.344 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:173 Resp: 105169

Ion Ratio Lower Upper

173 100

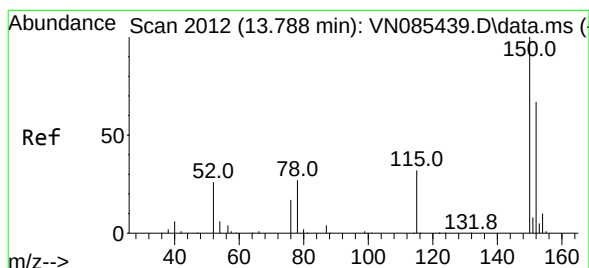
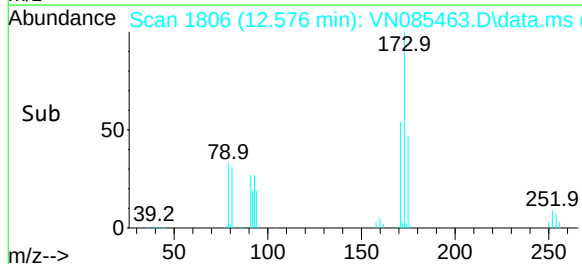
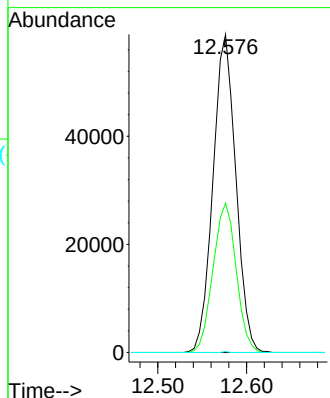
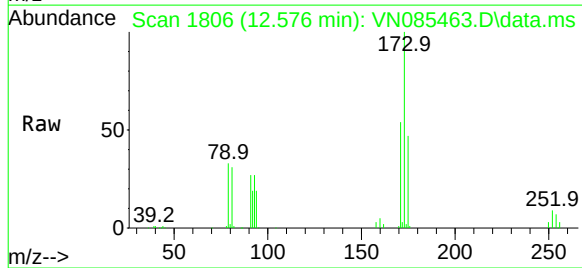
175 47.5 24.4 73.2

254 0.1 0.0 0.0#

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

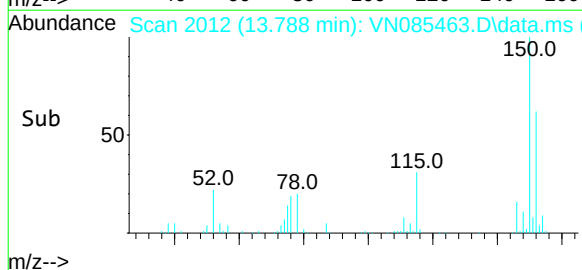
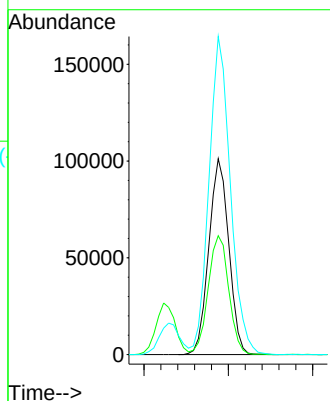
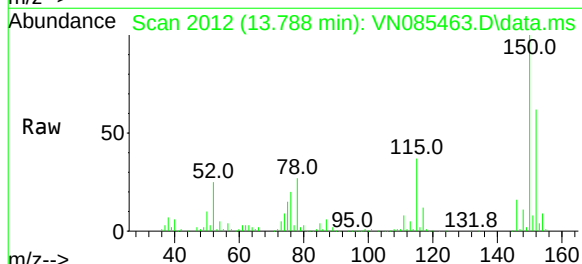
Tgt Ion:152 Resp: 166317

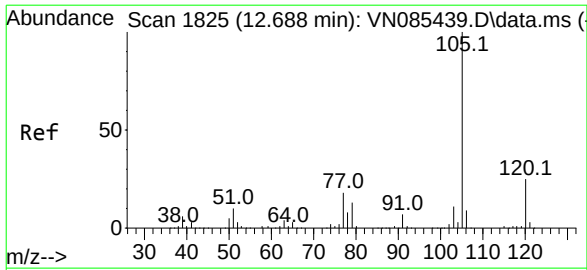
Ion Ratio Lower Upper

152 100

115 62.7 31.1 93.3

150 174.6 0.0 343.6





#73

Isopropylbenzene

Concen: 54.752 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 105 Resp: 614595

Ion Ratio Lower Upper

105 100

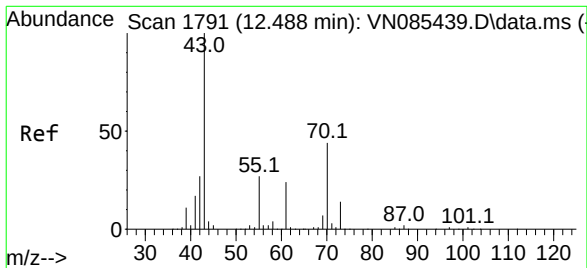
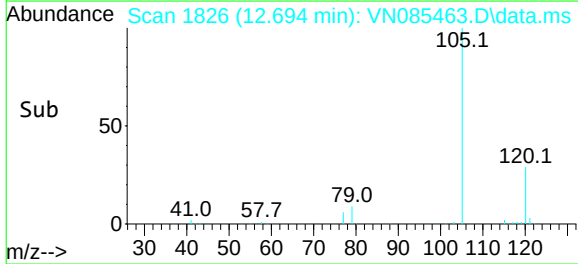
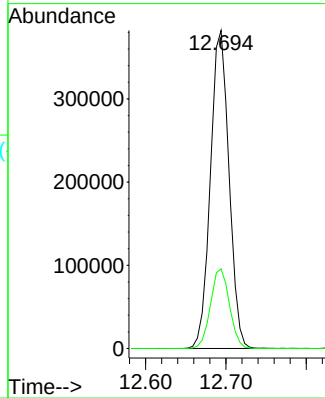
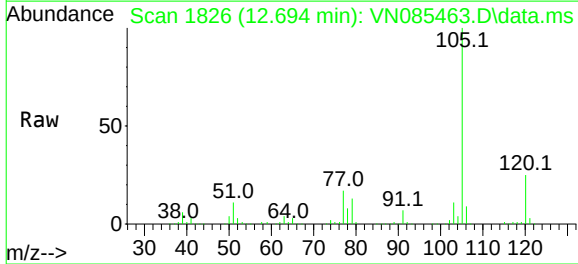
120 25.5 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#74

N-ethyl acetate

Concen: 56.244 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Tgt Ion: 43 Resp: 283775

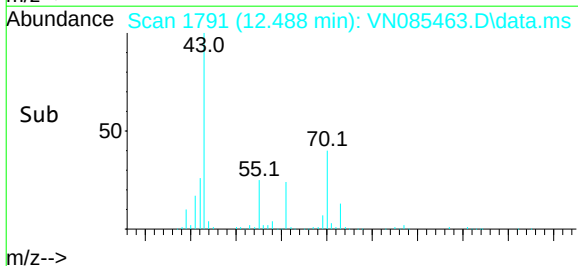
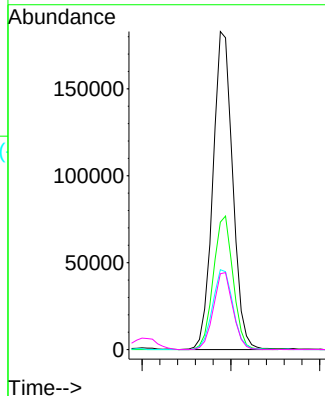
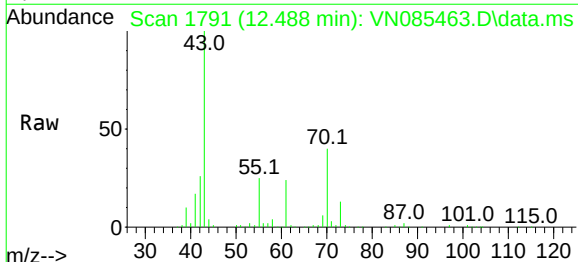
Ion Ratio Lower Upper

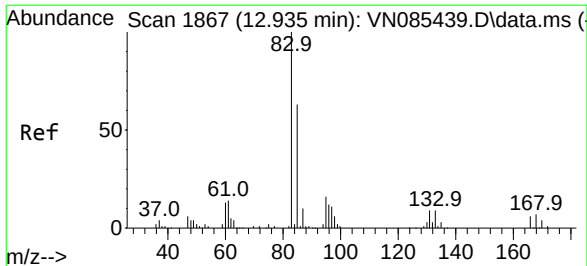
43 100

70 41.8 34.0 51.0

55 25.9 21.4 32.2

61 23.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 49.296 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

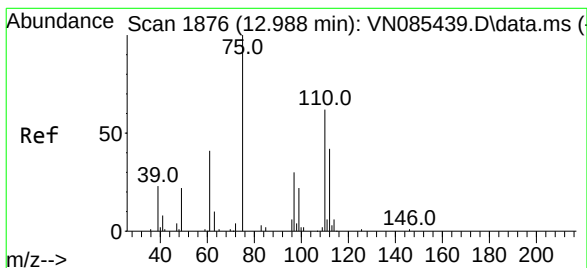
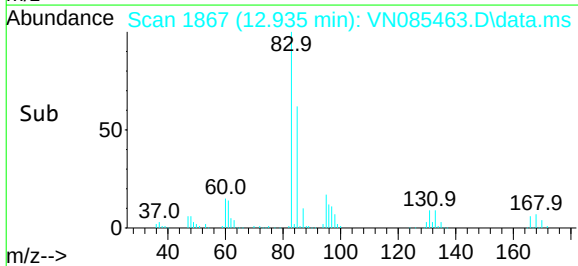
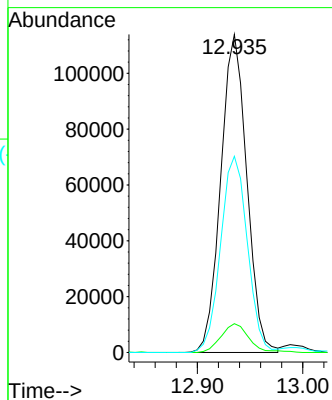
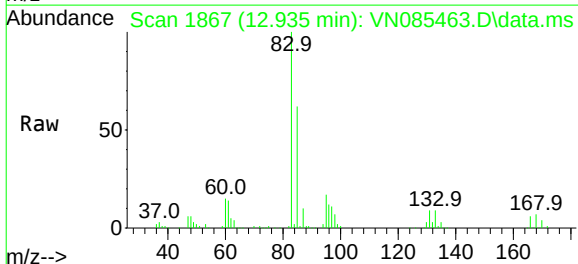
VSTDCCC050EC

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 83    | Resp: | 195465 |
| Ion Ratio | Lower | Upper |        |
| 83        | 100   |       |        |
| 131       | 9.7   | 4.8   | 14.4   |
| 85        | 63.5  | 32.2  | 96.6   |

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#76

1,2,3-Trichloropropane

Concen: 45.748 ug/l m

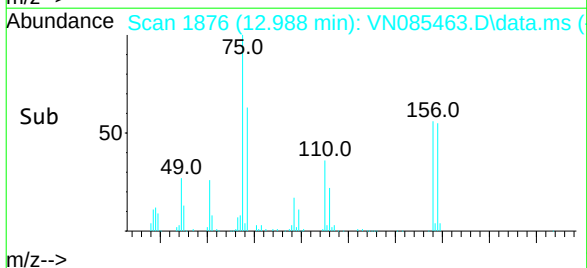
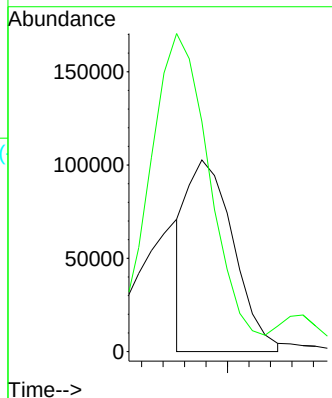
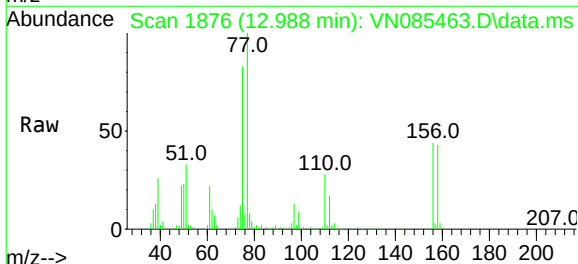
RT: 12.988 min Scan# 1876

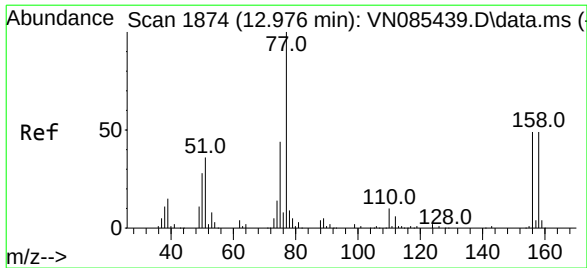
Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 75    | Resp: | 154649 |
| Ion Ratio | Lower | Upper |        |
| 75        | 100   |       |        |
| 77        | 218.6 | 109.7 | 329.2  |





#77

Bromobenzene

Concen: 50.075 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:156 Resp: 146854

Ion Ratio Lower Upper

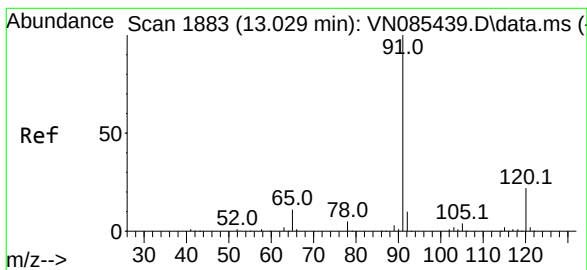
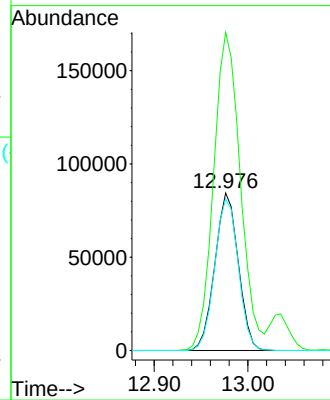
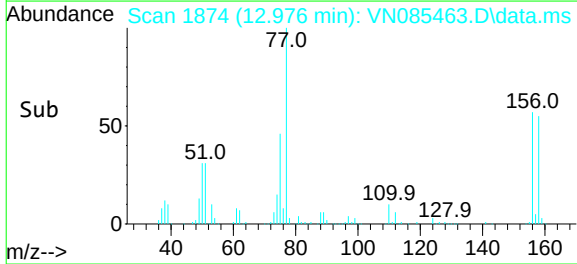
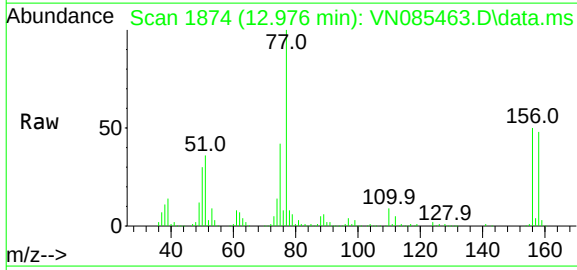
156 100

77 230.3 114.1 342.4

158 96.8 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#78

n-propylbenzene

Concen: 56.324 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085463.D

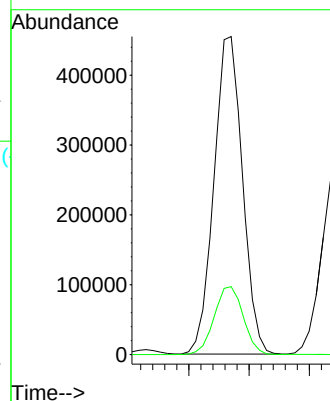
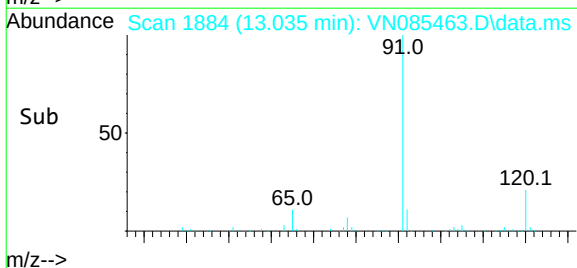
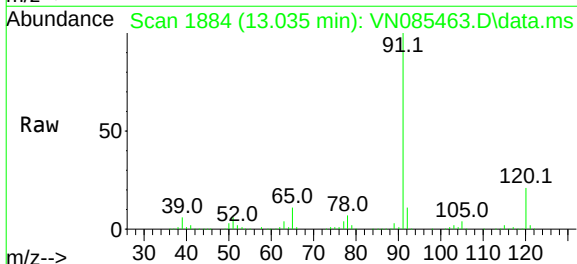
Acq: 15 Jan 2025 15:58

Tgt Ion: 91 Resp: 748465

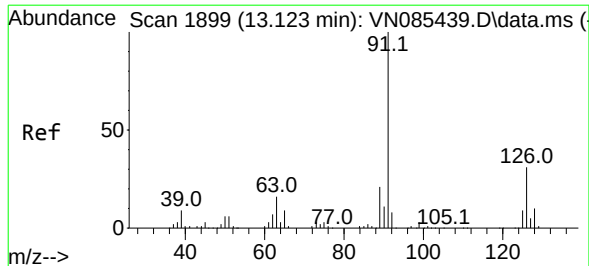
Ion Ratio Lower Upper

91 100

120 21.8 10.9 32.6







#79

2-Chlorotoluene

Concen: 52.351 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 91 Resp: 450235

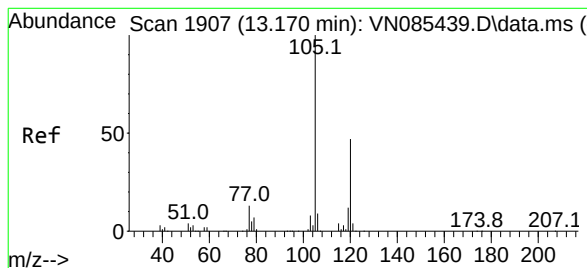
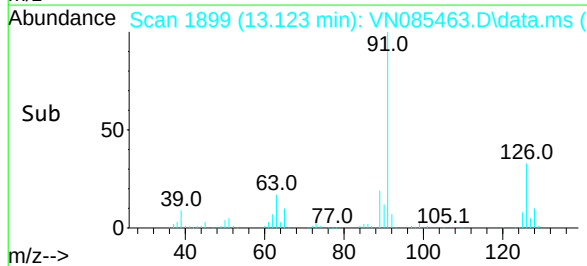
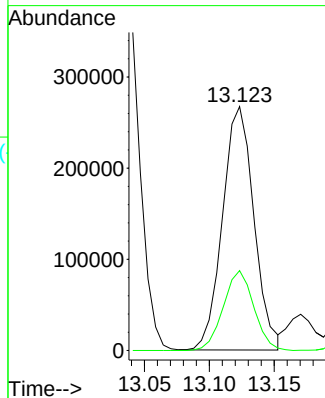
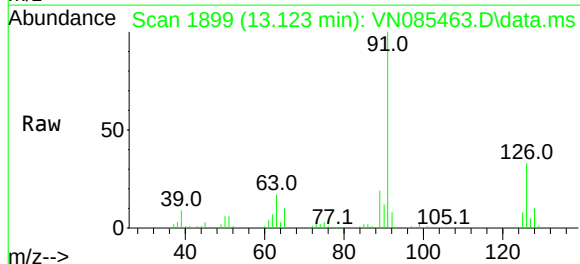
Ion Ratio Lower Upper

91 100

126 31.8 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#80

1,3,5-Trimethylbenzene

Concen: 56.485 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085463.D

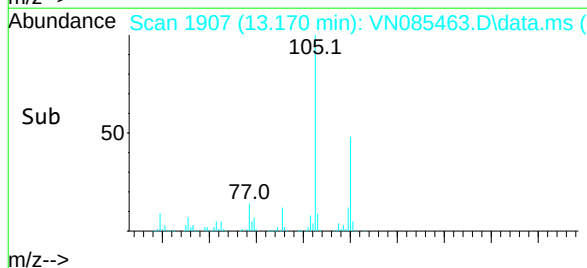
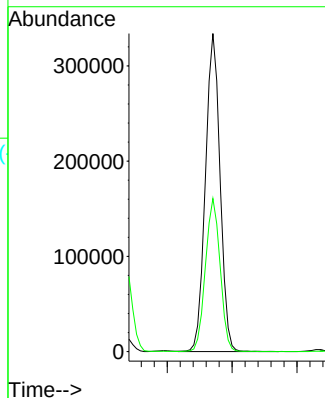
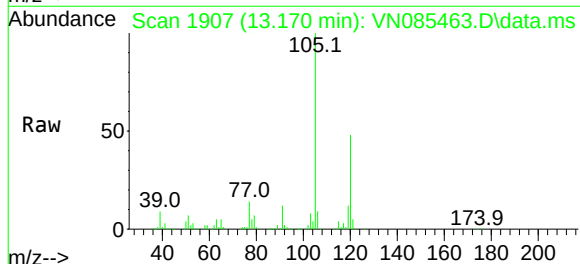
Acq: 15 Jan 2025 15:58

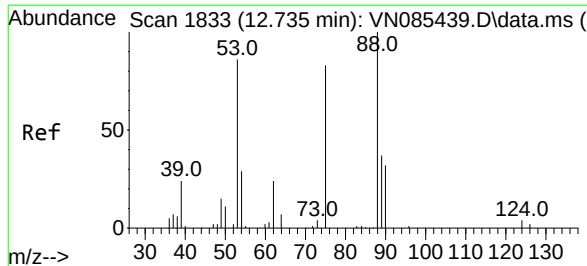
Tgt Ion:105 Resp: 523728

Ion Ratio Lower Upper

105 100

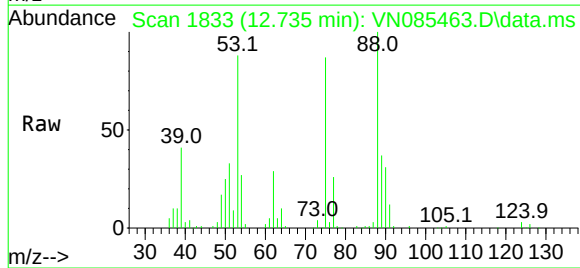
120 48.2 23.9 71.7





#81  
trans-1,4-Dichloro-2-butene  
Concen: 56.580 ug/l m  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

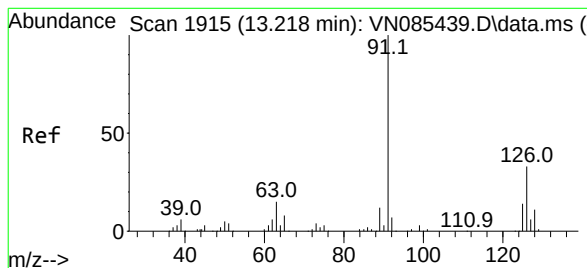
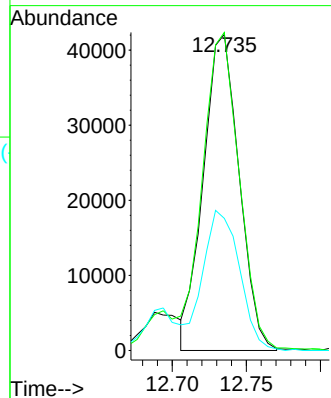
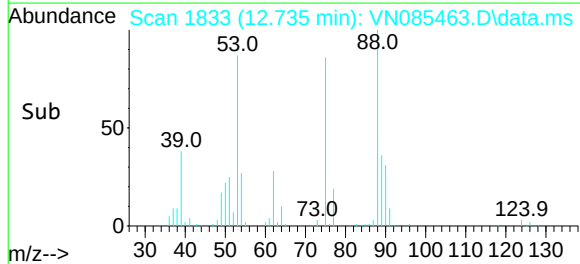
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 75 Resp: 70693  
Ion Ratio Lower Upper  
75 100  
53 114.6 95.6 143.4  
89 45.8 37.0 55.6

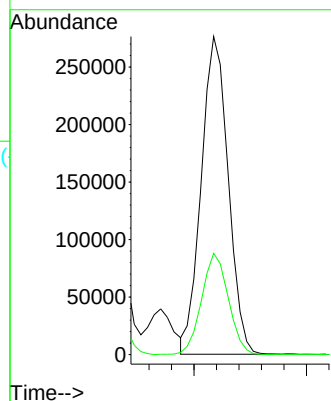
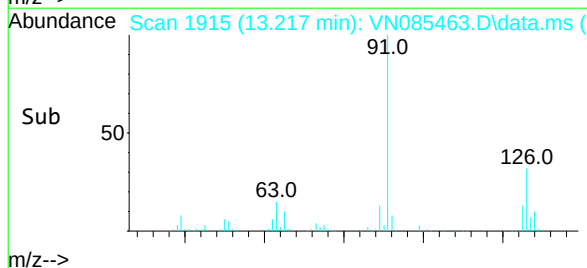
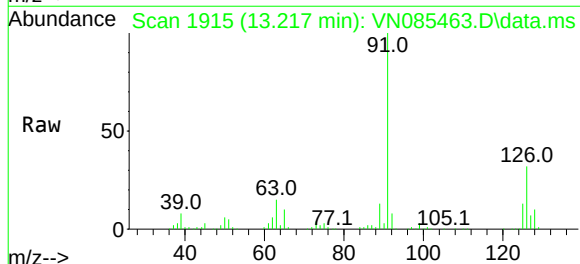
Manual Integrations  
APPROVED

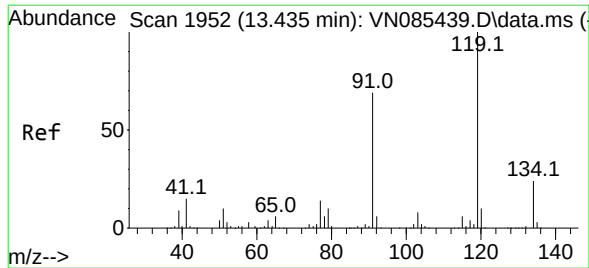
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#82  
4-Chlorotoluene  
Concen: 53.678 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 91 Resp: 459658  
Ion Ratio Lower Upper  
91 100  
126 31.6 15.9 47.7





#83

tert-Butylbenzene

Concen: 56.211 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085463.D

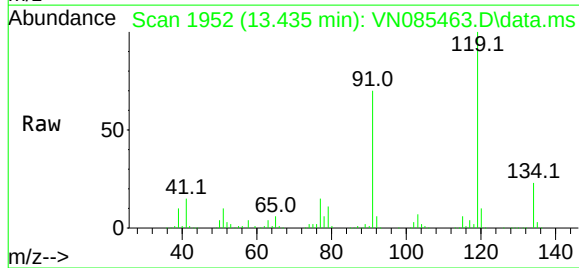
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion:119 Resp: 437674

Ion Ratio Lower Upper

119 100

91 69.9 35.1 105.3

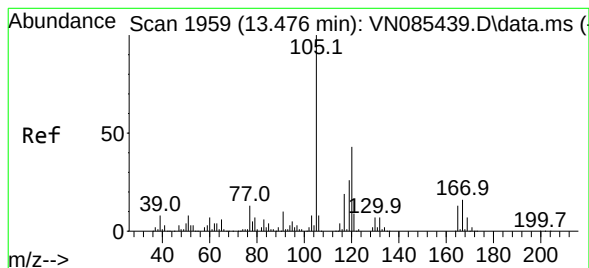
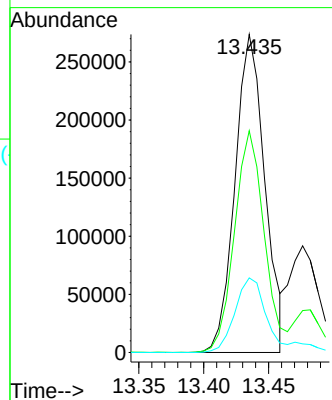
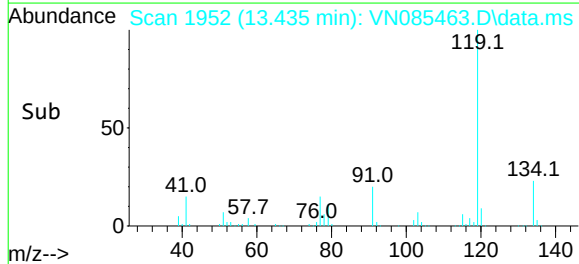
134 24.1 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#84

1,2,4-Trimethylbenzene

Concen: 57.491 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085463.D

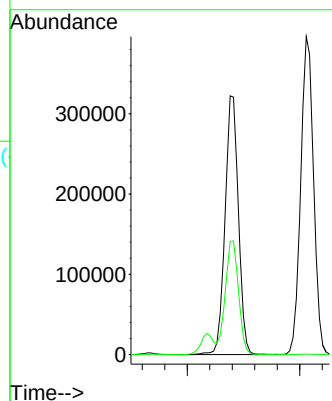
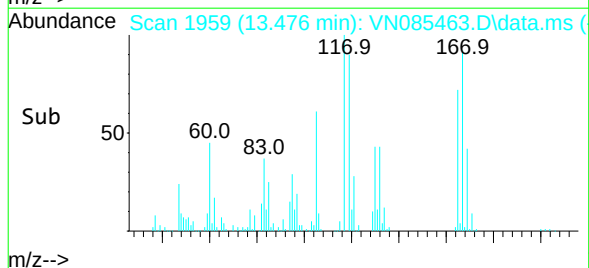
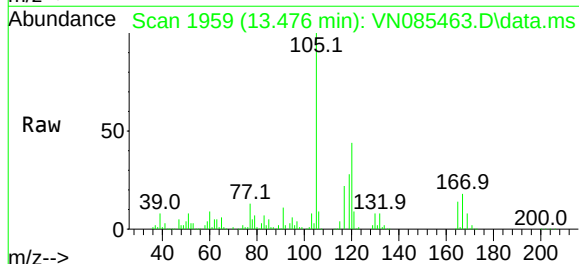
Acq: 15 Jan 2025 15:58

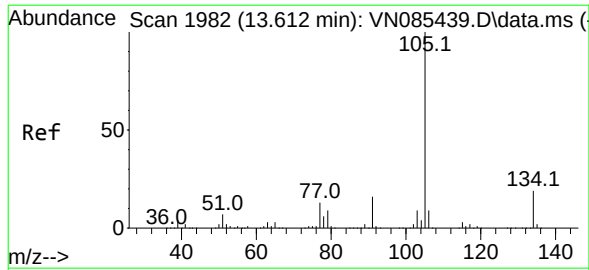
Tgt Ion:105 Resp: 531276

Ion Ratio Lower Upper

105 100

120 43.5 21.6 65.0





#85

sec-Butylbenzene

Concen: 58.063 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion:105 Resp: 626587

Ion Ratio Lower Upper

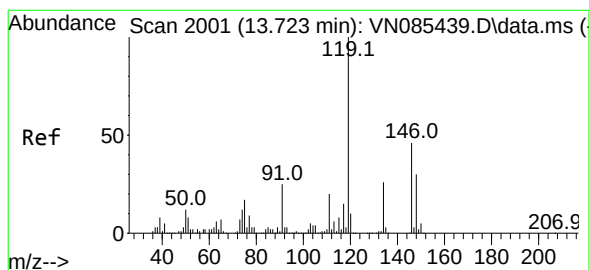
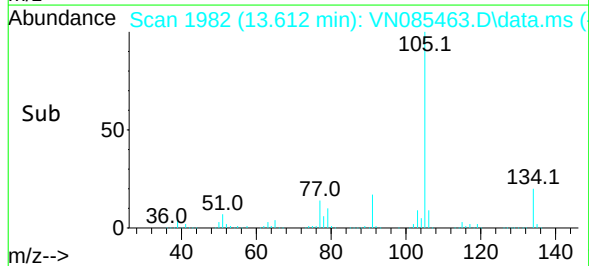
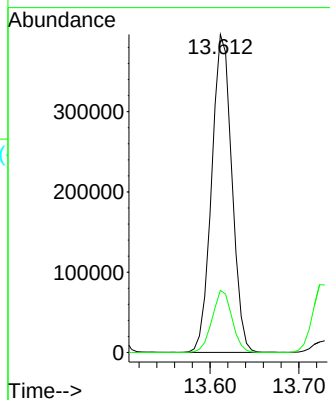
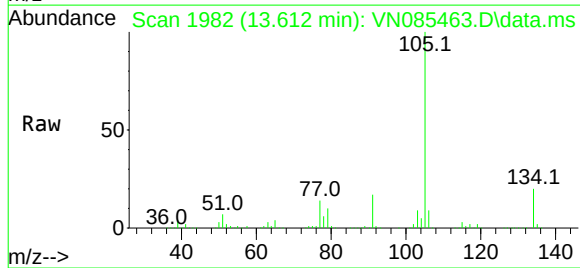
105 100

134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#86

p-Isopropyltoluene

Concen: 53.560 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

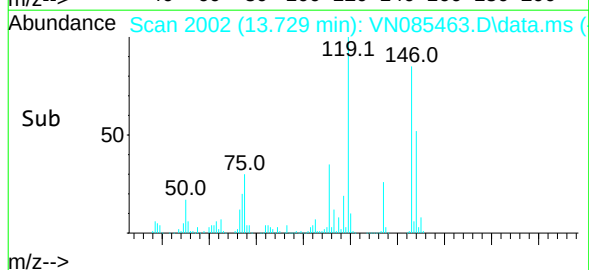
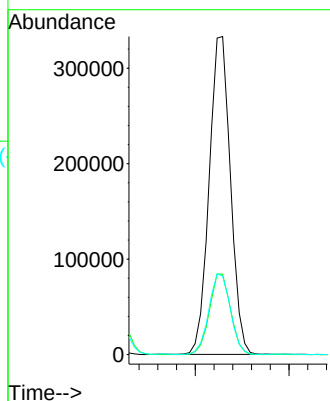
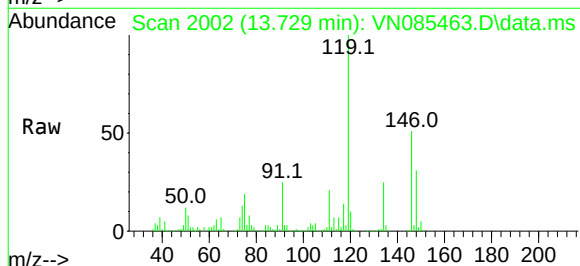
Tgt Ion:119 Resp: 525049

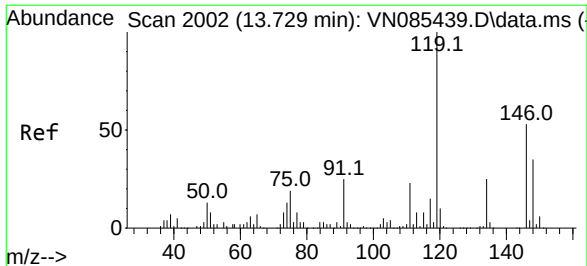
Ion Ratio Lower Upper

119 100

134 25.2 12.7 38.0

91 25.6 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 51.364 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085463.D

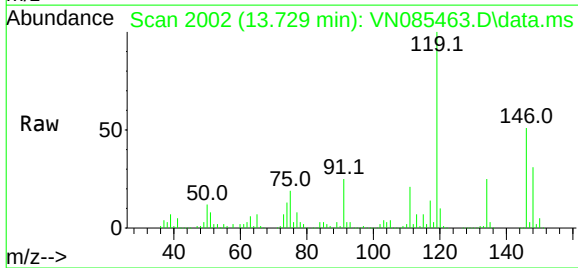
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC



Tgt Ion:146 Resp: 277409

Ion Ratio Lower Upper

146 100

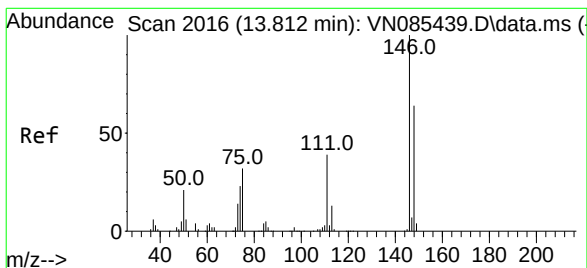
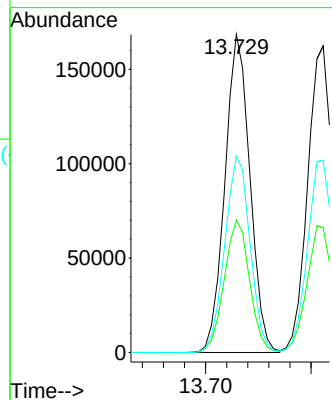
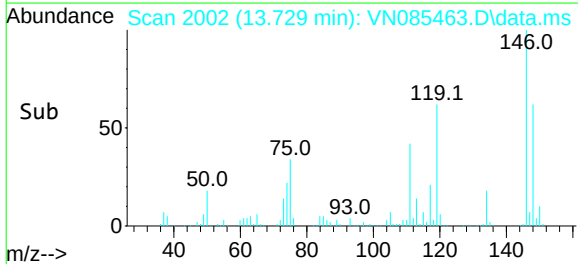
111 42.2 21.4 64.3

148 62.6 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#88

1,4-Dichlorobenzene

Concen: 48.694 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

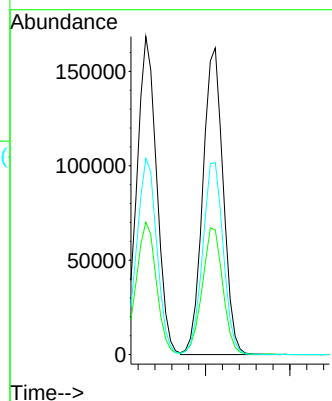
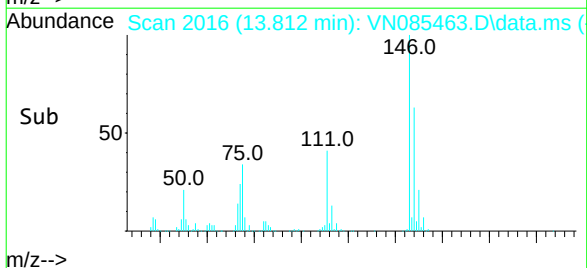
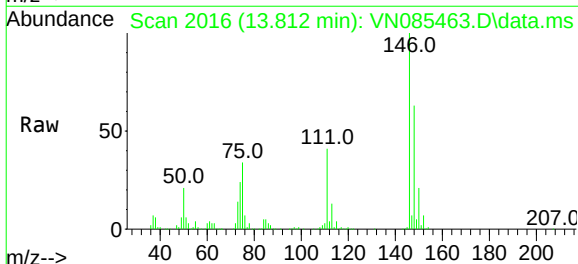
Tgt Ion:146 Resp: 272594

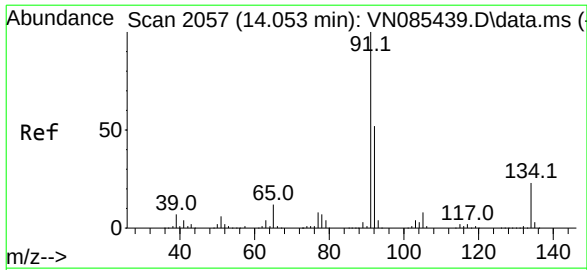
Ion Ratio Lower Upper

146 100

111 41.7 21.3 63.7

148 63.5 32.4 97.0





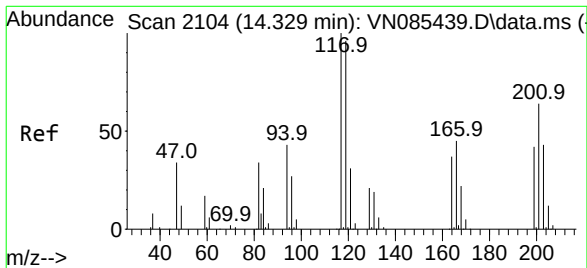
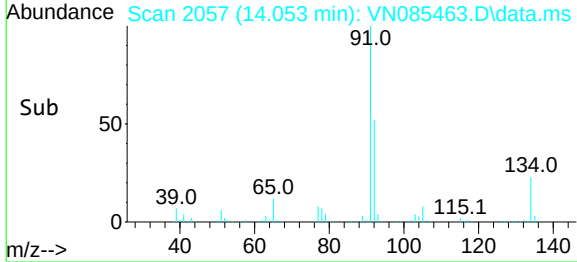
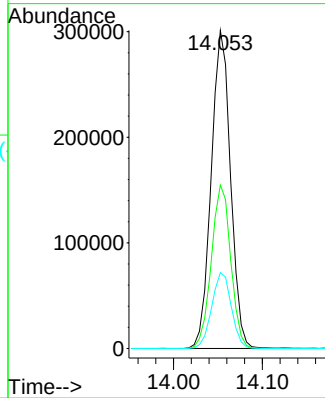
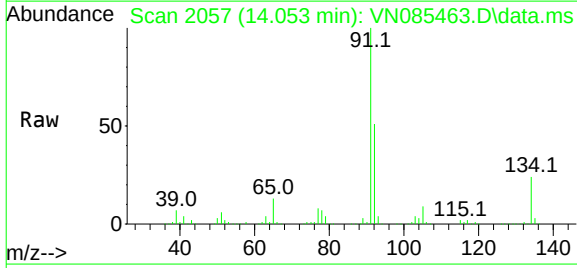
#89  
n-Butylbenzene  
Concen: 58.802 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 91 Resp: 455243  
Ion Ratio Lower Upper  
91 100  
92 51.7 25.8 77.3  
134 24.2 11.7 35.1

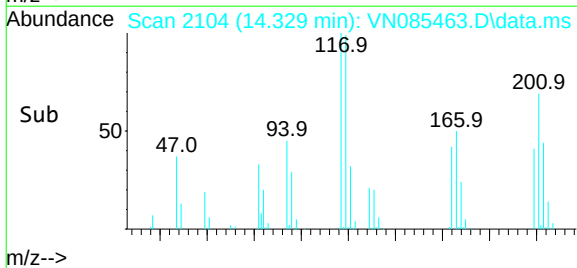
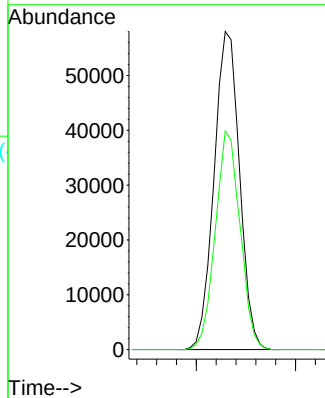
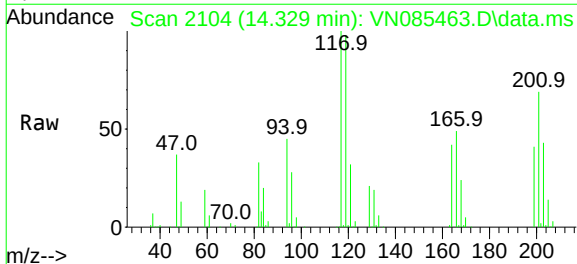
Manual Integrations  
APPROVED

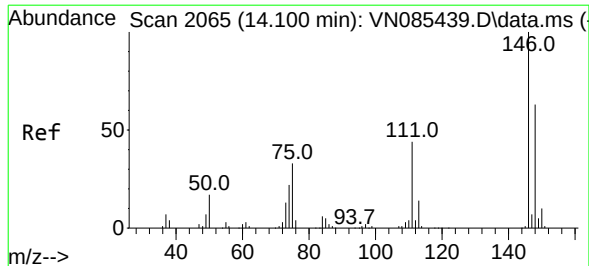
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#90  
Hexachloroethane  
Concen: 50.491 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

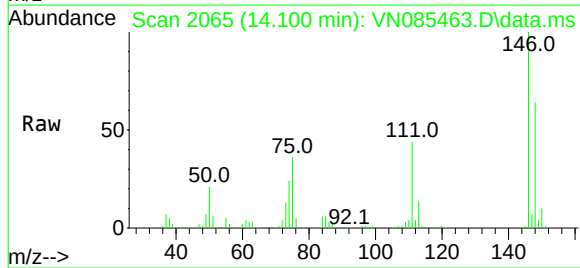
Tgt Ion:117 Resp: 103728  
Ion Ratio Lower Upper  
117 100  
201 66.7 33.7 101.0





#91  
1,2-Dichlorobenzene  
Concen: 49.494 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

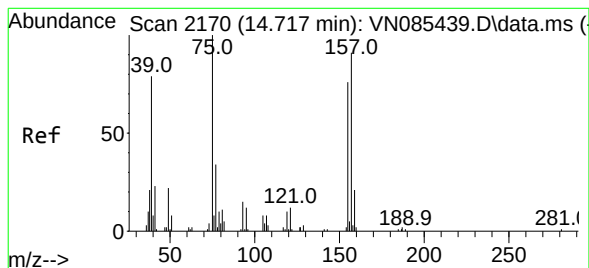
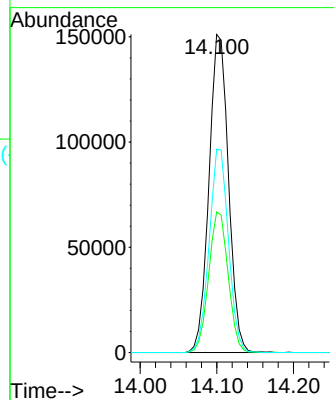
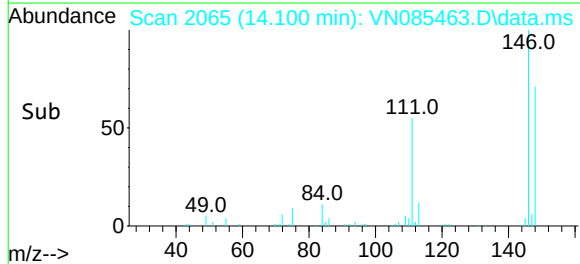
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC



Tgt Ion: 146 Resp: 266635  
Ion Ratio Lower Upper  
146 100  
111 44.1 21.7 65.1  
148 63.3 31.4 94.2

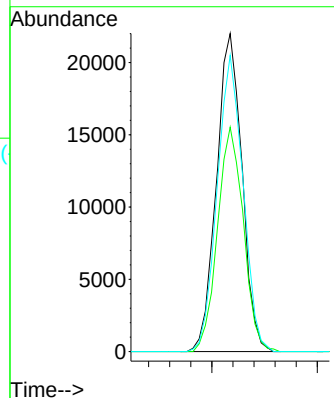
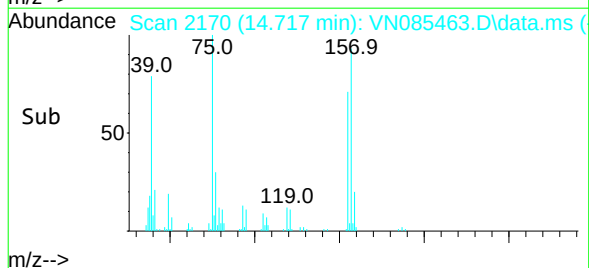
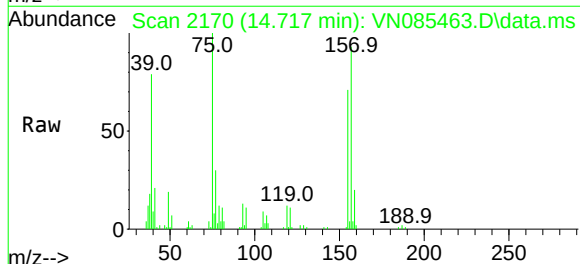
Manual Integrations  
APPROVED

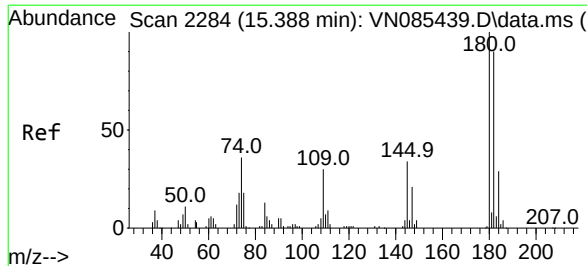
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 51.081 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 75 Resp: 36986  
Ion Ratio Lower Upper  
75 100  
155 71.4 36.4 109.2  
157 94.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 53.324 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085463.D

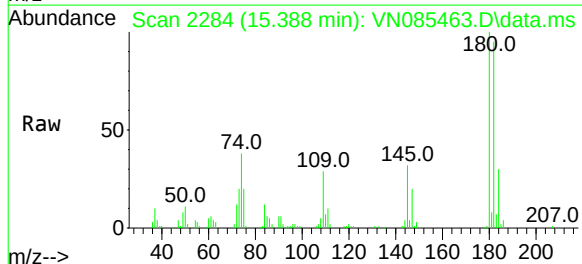
Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

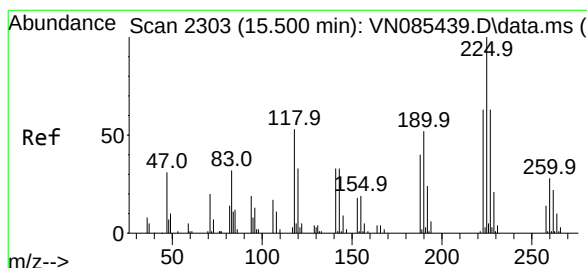
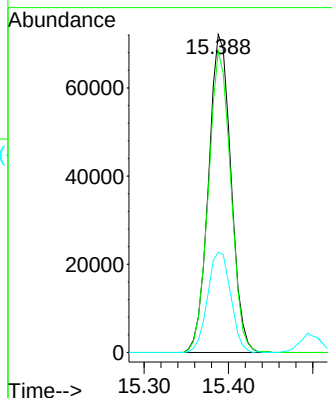
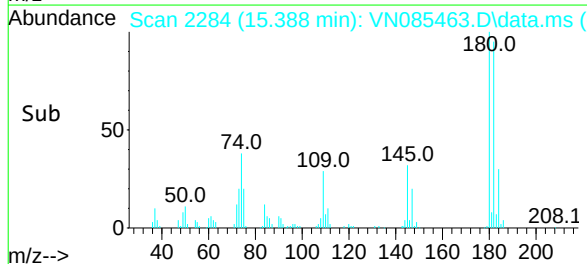
VSTDCCC050EC



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 180   | Resp: | 133515 |
| Ion Ratio | Lower | Upper |        |
| 180       | 100   |       |        |
| 182       | 94.2  | 46.8  | 140.3  |
| 145       | 32.5  | 16.0  | 48.0   |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#94

Hexachlorobutadiene

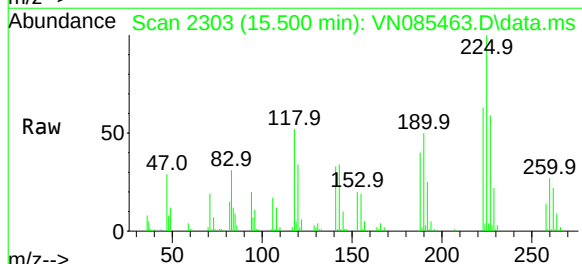
Concen: 48.771 ug/l

RT: 15.500 min Scan# 2303

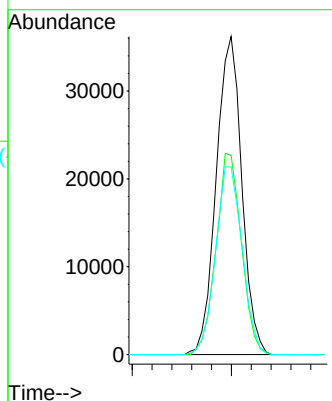
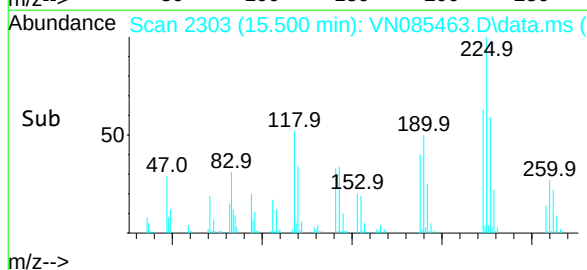
Delta R.T. -0.000 min

Lab File: VN085463.D

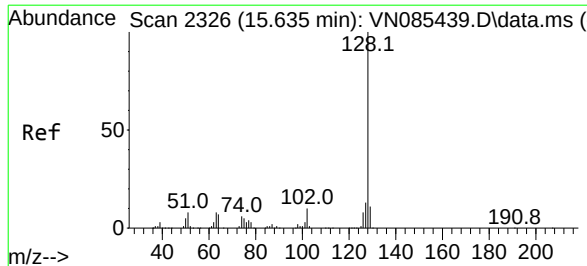
Acq: 15 Jan 2025 15:58



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 64832 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 62.7  | 30.7  | 92.1  |
| 227       | 61.7  | 30.9  | 92.5  |







#95

Naphthalene

Concen: 53.462 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085463.D

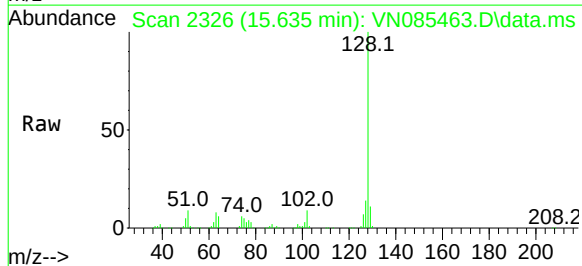
Acq: 15 Jan 2025 15:58

Instrument :

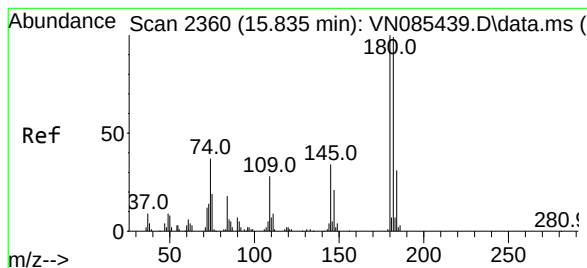
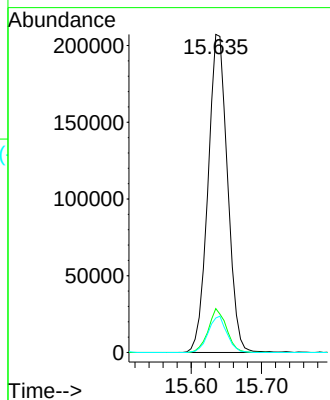
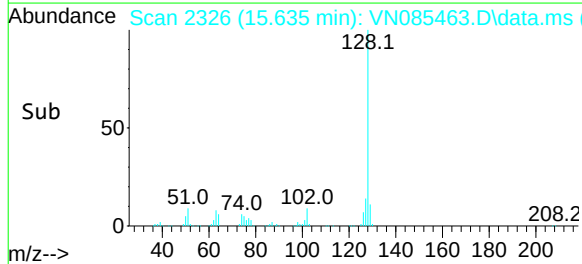
MSVOA\_N

ClientSampleId :

VSTDCCC050EC



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 128   | Resp: | 399446 |
| Ion      | Ratio | Lower | Upper  |
| 128      | 100   |       |        |
| 127      | 12.9  | 10.6  | 16.0   |
| 129      | 11.0  | 8.8   | 13.2   |

Manual Integrations  
APPROVEDReviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#96

1,2,3-Trichlorobenzene

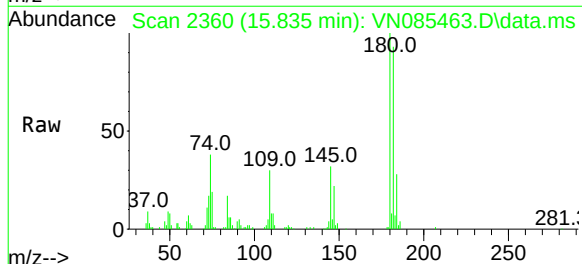
Concen: 50.856 ug/l

RT: 15.835 min Scan# 2360

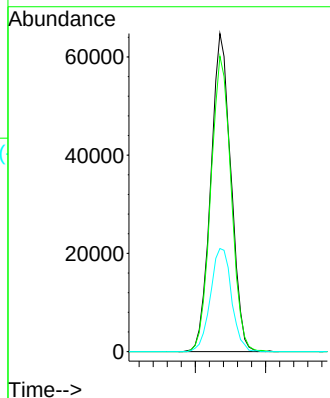
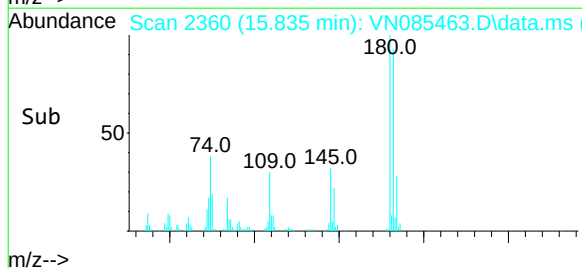
Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 128843 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 93.6  | 47.4  | 142.2  |
| 145      | 34.0  | 16.9  | 50.7   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 16 01:00:39 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 | 0.684 | -1.0  | 119   | 0.00     |
| 3 P   | Chloromethane               | 0.733 | 0.702 | 4.2   | 113   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.737 | 0.708 | 3.9#  | 113   | 0.00     |
| 5 T   | Bromomethane                | 0.445 | 0.408 | 8.3   | 107   | 0.00     |
| 6 T   | Chloroethane                | 0.467 | 0.455 | 2.6   | 118   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.069 | 1.073 | -0.4  | 118   | 0.00     |
| 8 T   | Diethyl Ether               | 0.369 | 0.360 | 2.4   | 110   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.611 | -1.5  | 124   | 0.00     |
| 10 T  | Methyl Iodide               | 0.690 | 0.723 | -4.8  | 110   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.092 | 0.098 | -6.5  | 116   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.553 | -3.0# | 114   | 0.00     |
| 13 T  | Acrolein                    | 0.126 | 0.144 | -14.3 | 113   | 0.00     |
| 14 T  | Allyl chloride              | 0.871 | 0.895 | -2.8  | 116   | 0.00     |
| 15 T  | Acrylonitrile               | 0.294 | 0.309 | -5.1  | 114   | 0.00     |
| 16 T  | Acetone                     | 0.261 | 0.262 | -0.4  | 114   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.652 | 1.549 | 6.2   | 115   | 0.00     |
| 18 T  | Methyl Acetate              | 0.793 | 0.822 | -3.7  | 114   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.742 | 1.940 | -11.4 | 114   | 0.00     |
| 20 T  | Methylene Chloride          | 0.646 | 0.639 | 1.1   | 111   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.583 | -1.7  | 115   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.933 | 2.137 | -10.6 | 115   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.353 | 1.585 | -17.1 | 116   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.178 | 1.209 | -2.6  | 113   | 0.00     |
| 25 T  | 2-Butanone                  | 0.384 | 0.414 | -7.8  | 116   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.953 | 1.083 | -13.6 | 127   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.710 | -5.2  | 114   | 0.00     |
| 28 T  | Bromochloromethane          | 0.548 | 0.546 | 0.4   | 110   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.243 | 0.277 | -14.0 | 117   | 0.00     |
| 30 C  | Chloroform                  | 1.218 | 1.244 | -2.1# | 116   | 0.00     |
| 31 T  | Cyclohexane                 | 1.024 | 0.999 | 2.4   | 124   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.068 | 1.085 | -1.6  | 117   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.807 | 0.841 | -4.2  | 111   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 110   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.347 | 0.359 | -3.5  | 110   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.487 | 0.492 | -1.0  | 117   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.491 | 0.499 | -1.6  | 113   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.557 | 0.568 | -2.0  | 118   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.457 | 0.526 | -15.1 | 125   | 0.00     |
| 40 TM | Benzene                     | 1.463 | 1.516 | -3.6  | 115   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.256 | 0.281 | -9.8  | 115   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.551 | 0.569 | -3.3  | 115   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.787 | 0.907 | -15.2 | 123   | 0.00     |
| 44 TM | Trichloroethene             | 0.341 | 0.335 | 1.8   | 114   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.374 | 0.381 | -1.9# | 113   | 0.00     |
| 46 T  | Dibromomethane              | 0.270 | 0.268 | 0.7   | 111   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.549 | 0.580 | -5.6  | 114   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.354 | 0.410 | -15.8 | 115   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 16 01:00:39 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    | 101   | 0.00     |
| 50 S  | Toluene-d8                  | 1.232 | 1.331 | -8.0   | 116   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.457 | 0.517 | -13.1  | 116   | 0.00     |
| 52 CM | Toluene                     | 0.848 | 0.933 | -10.0# | 118   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.519 | 0.581 | -11.9  | 116   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.554 | 0.617 | -11.4  | 116   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.335 | 0.347 | -3.6   | 113   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.469 | 0.564 | -20.3  | 114   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.583 | 0.622 | -6.7   | 114   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.213 | 0.247 | -16.0  | 113   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.321 | 0.376 | -17.1  | 116   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.405 | 0.424 | -4.7   | 113   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.334 | 0.341 | -2.1   | 112   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.422 | 0.473 | -12.1  | 116   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 111   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.341 | 0.322 | 5.6    | 111   | 0.00     |
| 65 PM | Chlorobenzene               | 1.095 | 1.124 | -2.6   | 116   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.402 | 0.405 | -0.7   | 115   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 2.015 | -12.9# | 120   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.659 | 0.755 | -14.6  | 119   | 0.00     |
| 69 T  | o-Xylene                    | 0.630 | 0.715 | -13.5  | 117   | 0.00     |
| 70 T  | Styrene                     | 1.043 | 1.237 | -18.6  | 117   | 0.00     |
| 71 P  | Bromoform                   | 0.288 | 0.318 | -10.4  | 114   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 113   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.375 | 3.695 | -9.5   | 122   | 0.00     |
| 74 T  | N-amyl acetate              | 1.517 | 1.706 | -12.5  | 119   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.192 | 1.175 | 1.4    | 116   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.016 | 0.930 | 8.5    | 118   | 0.00     |
| 77 T  | Bromobenzene                | 0.882 | 0.883 | -0.1   | 117   | 0.00     |
| 78 T  | n-propylbenzene             | 3.995 | 4.500 | -12.6  | 123   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.586 | 2.707 | -4.7   | 119   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.787 | 3.149 | -13.0  | 122   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.376 | 0.425 | -13.0  | 124   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.574 | 2.764 | -7.4   | 121   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.341 | 2.632 | -12.4  | 122   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.778 | 3.194 | -15.0  | 120   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.244 | 3.767 | -16.1  | 125   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.631 | 3.157 | -20.0  | 125   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.668 | -2.7   | 121   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.683 | 1.639 | 2.6    | 119   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.327 | 2.737 | -17.6  | 125   | 0.00     |
| 90 T  | Hexachloroethane            | 0.618 | 0.624 | -1.0   | 123   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.620 | 1.603 | 1.0    | 117   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.222 | -1.8   | 114   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.753 | 0.803 | -6.6   | 117   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.400 | 0.390 | 2.5    | 120   | 0.00     |
| 95 T  | Naphthalene                 | 2.246 | 2.402 | -6.9   | 110   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085463.D  
Acq On : 15 Jan 2025 15:58  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 16 01:00:39 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 | 0.775 | -1.7 | 112   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 16 01:00:39 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  | 50.545  | -1.1  | 119   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 47.865  | 4.3   | 113   | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 48.017  | 4.0#  | 113   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 45.833  | 8.3   | 107   | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 48.718  | 2.6   | 118   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 50.203  | -0.4  | 118   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 48.714  | 2.6   | 110   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 50.730  | -1.5  | 124   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 52.443  | -4.9  | 110   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 266.406 | -6.6  | 116   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 51.524  | -3.0# | 114   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 284.383 | -13.8 | 113   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 51.384  | -2.8  | 116   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 262.738 | -5.1  | 114   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 251.190 | -0.5  | 114   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 46.862  | 6.3   | 115   | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 51.803  | -3.6  | 114   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 55.672  | -11.3 | 114   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 49.455  | 1.1   | 111   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 50.805  | -1.6  | 115   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 55.286  | -10.6 | 115   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 292.883 | -17.2 | 116   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 51.287  | -2.6  | 113   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 269.467 | -7.8  | 116   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 56.857  | -13.7 | 127   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 52.557  | -5.1  | 114   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 49.837  | 0.3   | 110   | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 284.562 | -13.8 | 117   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 51.054  | -2.1# | 116   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 48.757  | 2.5   | 124   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 50.757  | -1.5  | 117   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 52.114  | -4.2  | 111   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 110   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 51.677  | -3.4  | 110   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 50.562  | -1.1  | 117   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 50.810  | -1.6  | 113   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 50.991  | -2.0  | 118   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 57.436  | -14.9 | 125   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 51.821  | -3.6  | 115   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 54.981  | -10.0 | 115   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 51.629  | -3.3  | 115   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 57.599  | -15.2 | 123   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 49.260  | 1.5   | 114   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 51.043  | -2.1# | 113   | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 49.750  | 0.5   | 111   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 52.814  | -5.6  | 114   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 57.796  | -15.6 | 115   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 16 01:00:39 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 | 972.836 | 2.7    | 101   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 54.009  | -8.0   | 116   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 282.679 | -13.1  | 116   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 55.032  | -10.1# | 118   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 55.946  | -11.9  | 116   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 55.661  | -11.3  | 116   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 51.759  | -3.5   | 113   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 49.885  | 0.2    | 114   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 53.338  | -6.7   | 114   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 290.228 | -16.1  | 113   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 292.136 | -16.9  | 116   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 52.339  | -4.7   | 113   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 51.040  | -2.1   | 112   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 56.127  | -12.3  | 116   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000  | 0.0    | 111   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 47.207  | 5.6    | 111   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 51.313  | -2.6   | 116   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 50.351  | -0.7   | 115   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 56.469  | -12.9# | 120   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 114.541 | -14.5  | 119   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 56.724  | -13.4  | 117   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 59.312  | -18.6  | 117   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 55.344  | -10.7  | 114   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000  | 0.0    | 113   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 54.752  | -9.5   | 122   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 56.244  | -12.5  | 119   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 49.296  | 1.4    | 116   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 45.748  | 8.5    | 118   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 50.075  | -0.2   | 117   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 56.324  | -12.6  | 123   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 52.351  | -4.7   | 119   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 56.485  | -13.0  | 122   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 56.580  | -13.2  | 124   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 53.678  | -7.4   | 121   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 56.211  | -12.4  | 122   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 57.491  | -15.0  | 120   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 58.063  | -16.1  | 125   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 53.560  | -7.1   | 125   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 51.364  | -2.7   | 121   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 48.694  | 2.6    | 119   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 58.802  | -17.6  | 125   | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 50.491  | -1.0   | 123   | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 49.494  | 1.0    | 117   | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 51.081  | -2.2   | 114   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 53.324  | -6.6   | 117   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 48.771  | 2.5    | 120   | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 53.462  | -6.9   | 110   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085463.D  
Acq On : 15 Jan 2025 15:58  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 16 01:00:39 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 | 50.856 | -1.7 | 112   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



# QC SAMPLE DATA

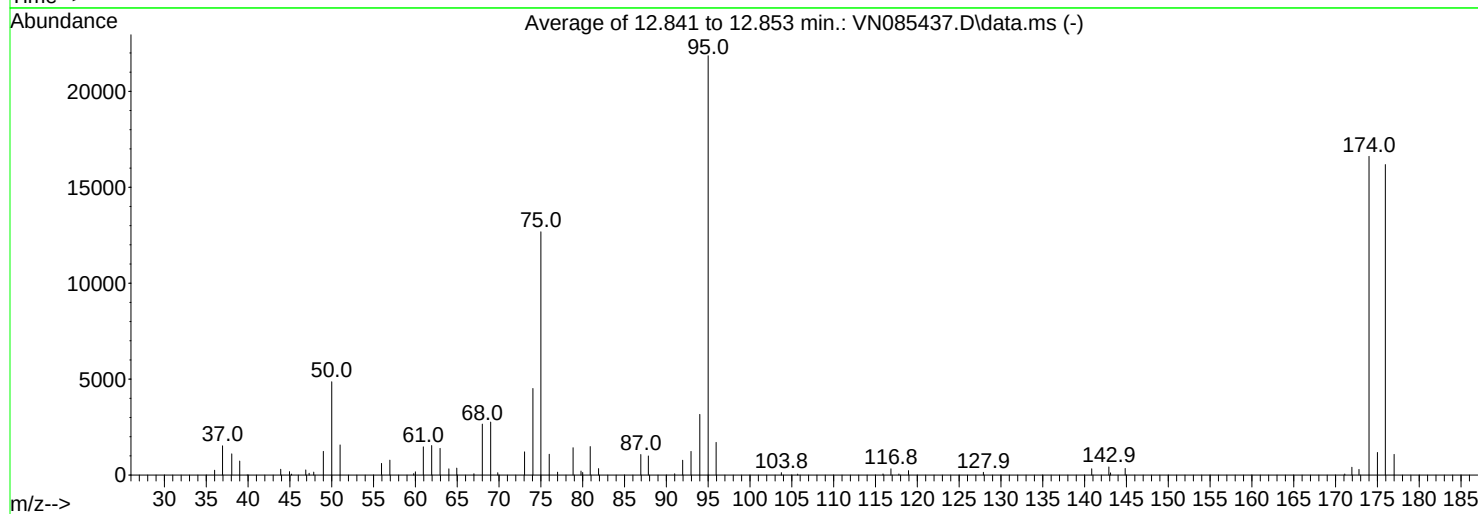
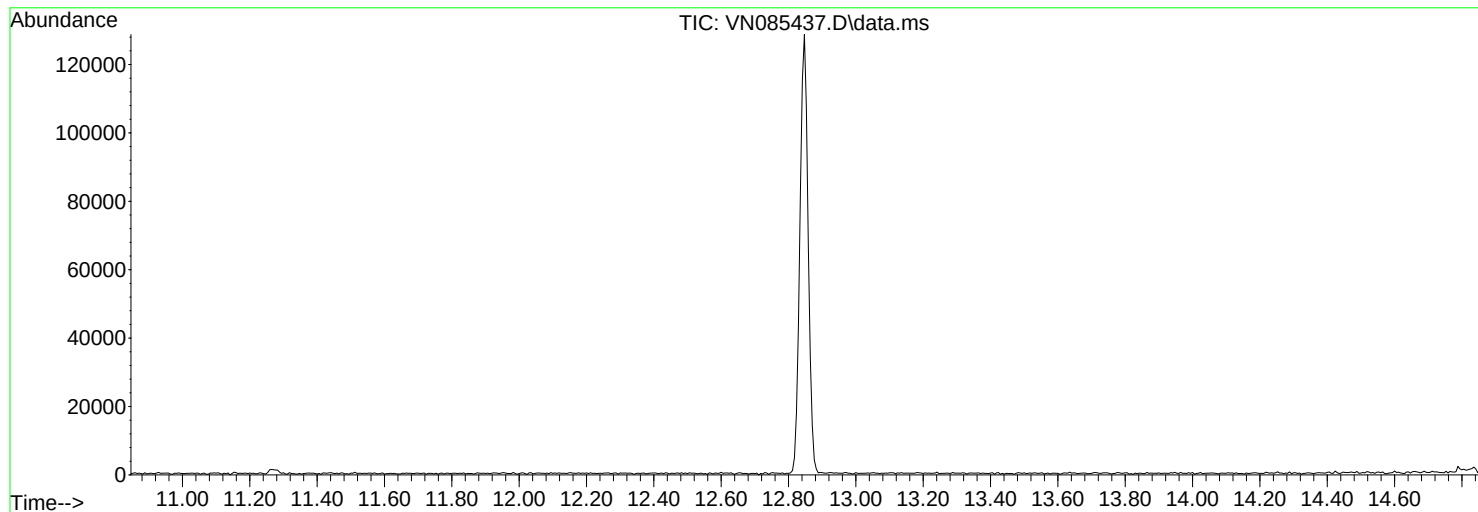


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011425\  
Data File : VN085437.D  
Acq On : 14 Jan 2025 14:22  
Operator : JC\MD  
Sample : BFB  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

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

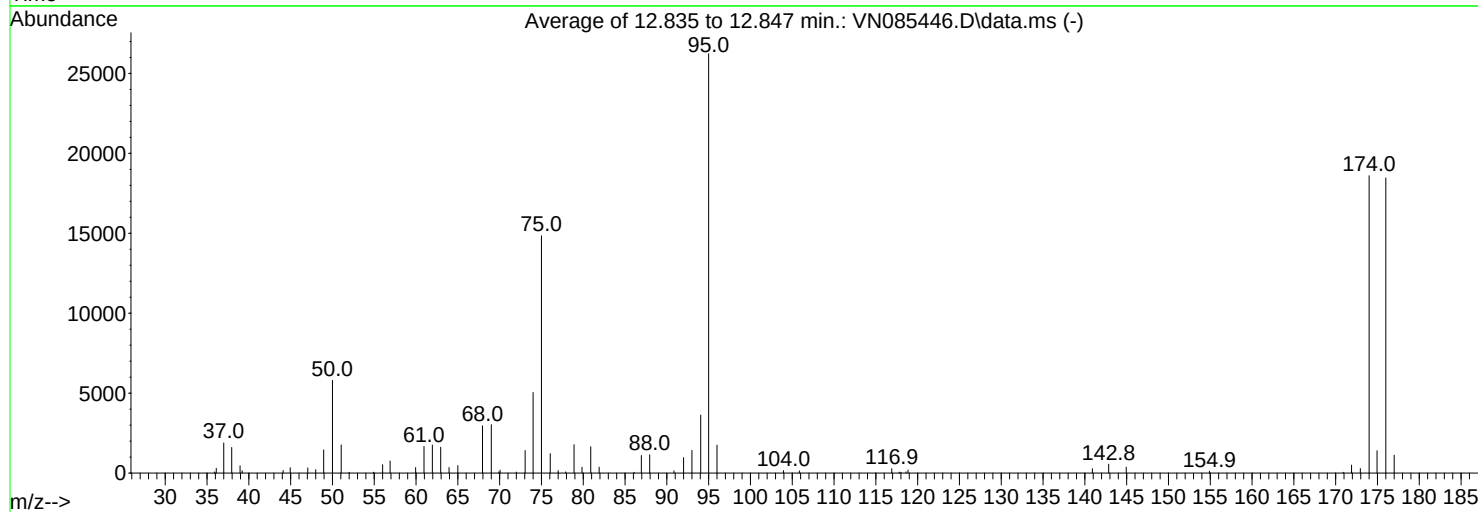
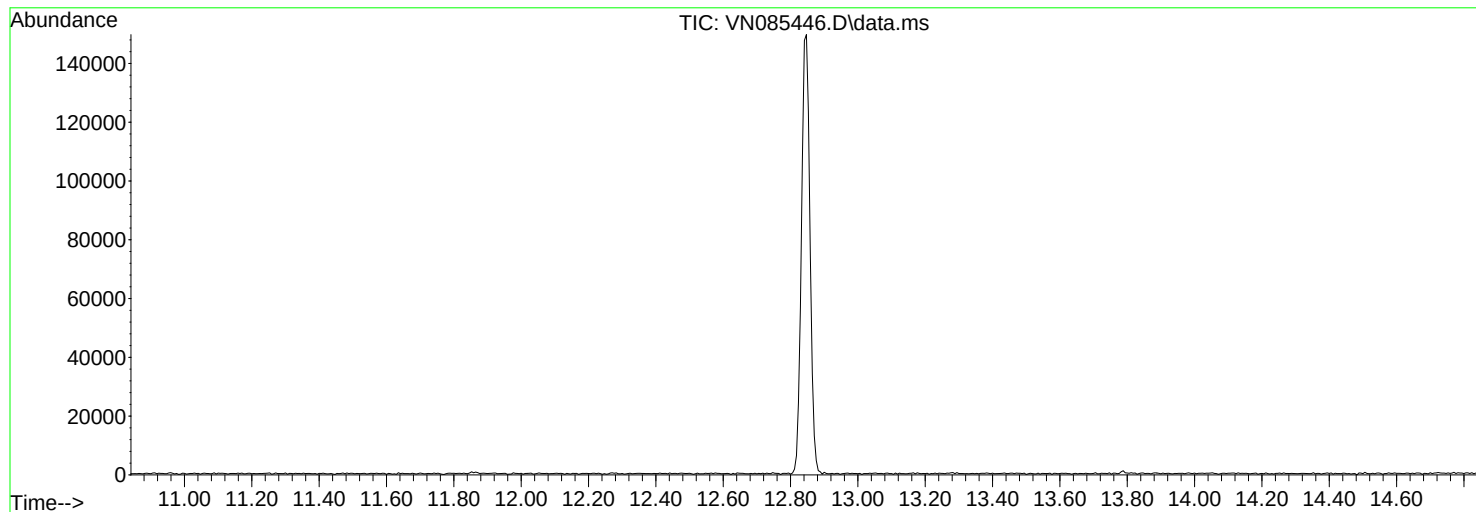
| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 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\VN011525\  
Data File : VN085446.D  
Acq On : 15 Jan 2025 08:25  
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 1850, 1851, 1852; 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              | 22.1         | 5803       | PASS                |
| 75             | 95              | 30              | 60              | 56.6         | 14841      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 26229      | PASS                |
| 96             | 95              | 5               | 9               | 6.7          | 1751       | PASS                |
| 173            | 174             | 0.00            | 2               | 1.5          | 282        | PASS                |
| 174            | 95              | 50              | 100             | 70.9         | 18601      | PASS                |
| 175            | 174             | 5               | 9               | 7.5          | 1400       | PASS                |
| 176            | 174             | 95              | 101             | 99.2         | 18460      | PASS                |
| 177            | 176             | 5               | 9               | 6.1          | 1123       | PASS                |

## Report of Analysis

|                    |                               |        |      |                 |              |
|--------------------|-------------------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc.          |        |      | Date Collected: |              |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  |              |
| Client Sample ID:  | VN0115WBL01                   |        |      | SDG No.:        | Q1062        |
| Lab Sample ID:     | VN0115WBL01                   |        |      | 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 |
| VN085449.D        | 1         |           | 01/15/25 10:05 | VN011525      |

| 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:           | NWIRP Bethpage 112G08005-WE13             | Date Received:  |                              |
| Client Sample ID:  | VN0115WBL01                               | SDG No.:        | Q1062                        |
| Lab Sample ID:     | VN0115WBL01                               | 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 |
| VN085449.D        | 1         |           | 01/15/25 10:05 | VN011525      |

| 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     | 55.1   |           | 81 - 118 |      | 110%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 51.9   |           | 80 - 119 |      | 104%       | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 50.1   |           | 89 - 112 |      | 100%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 49.1   |           | 85 - 114 |      | 98%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 195000 | 8.218     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 361000 | 9.1       |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 320000 | 11.859    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 131000 | 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\VN011525\  
 Data File : VN085449.D  
 Acq On : 15 Jan 2025 10:05  
 Operator : JC\MD  
 Sample : VN0115WBL01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBL01

Quant Time: Jan 16 00:53:04 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon           | Response | Conc       | Units | Dev(Min) |
|-----------------------------|--------|----------------|----------|------------|-------|----------|
| -----                       |        |                |          |            |       |          |
| Internal Standards          |        |                |          |            |       |          |
| 1) Pentafluorobenzene       | 8.218  | 168            | 195111   | 50.000     | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 360723   | 50.000     | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.859 | 117            | 319974   | 50.000     | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 130534   | 50.000     | ug/l  | 0.00     |
| System Monitoring Compounds |        |                |          |            |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65             | 173401   | 55.057     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | = 110.120% |       |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 129916   | 51.914     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | = 103.820% |       |          |
| 50) Toluene-d8              | 10.565 | 98             | 445519   | 50.107     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | = 100.220% |       |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 149204   | 49.055     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | = 98.120%  |       |          |

Target Compounds Qvalue

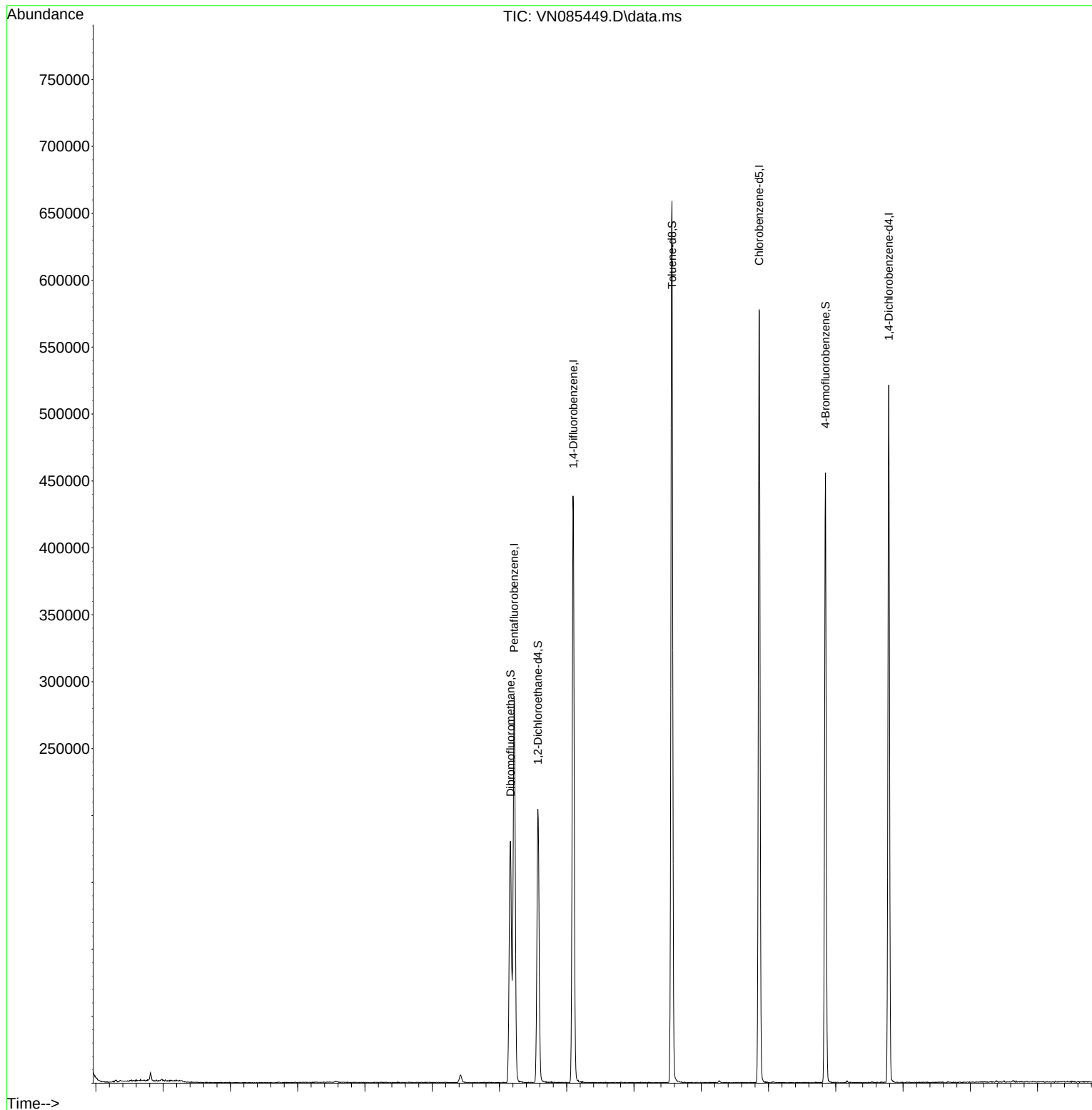
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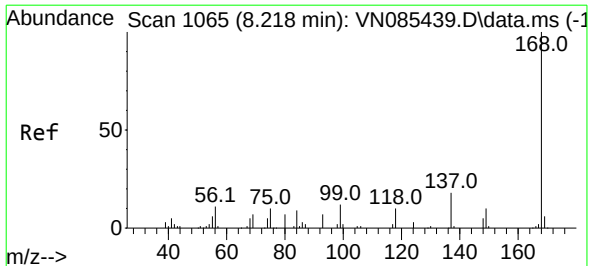
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085449.D  
Acq On : 15 Jan 2025 10:05  
Operator : JC\MD  
Sample : VN0115WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

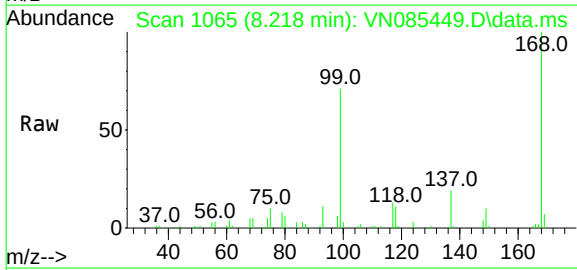
Quant Time: Jan 16 00:53:04 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration



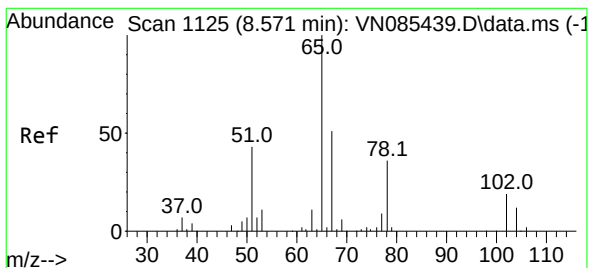
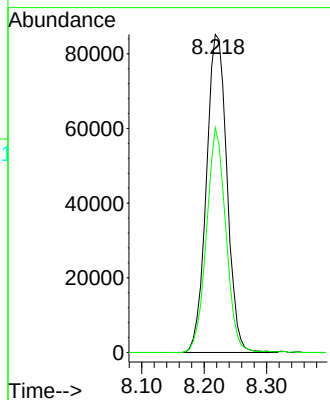
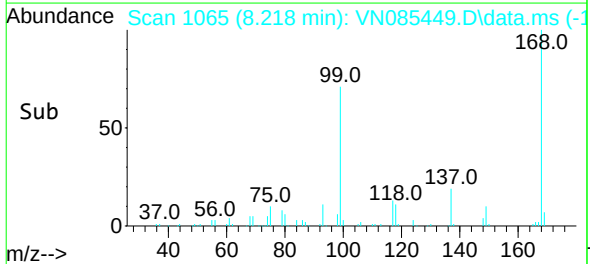


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085449.D  
Acq: 15 Jan 2025 10:05

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

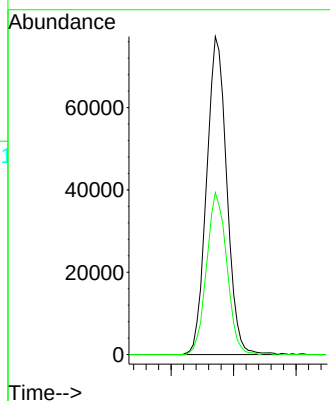
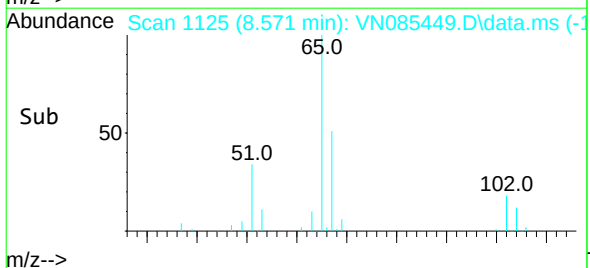
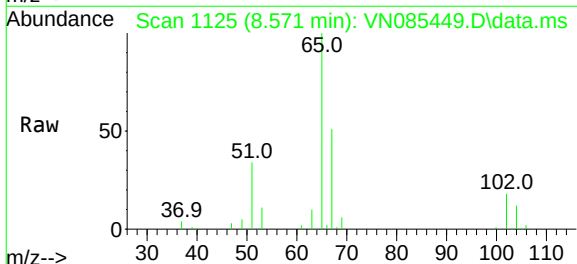


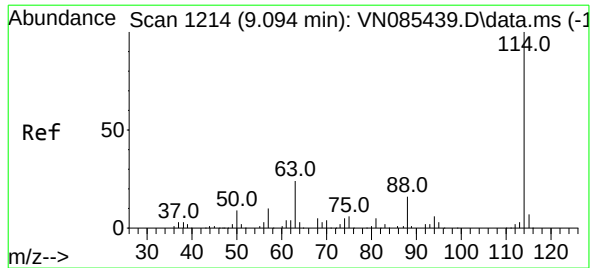
Tgt Ion:168 Resp: 195111  
Ion Ratio Lower Upper  
168 100  
99 70.6 53.6 80.4



#33  
1,2-Dichloroethane-d4  
Concen: 55.057 ug/l  
RT: 8.571 min Scan# 1125  
Delta R.T. -0.000 min  
Lab File: VN085449.D  
Acq: 15 Jan 2025 10:05

Tgt Ion: 65 Resp: 173401  
Ion Ratio Lower Upper  
65 100  
67 51.0 0.0 101.6

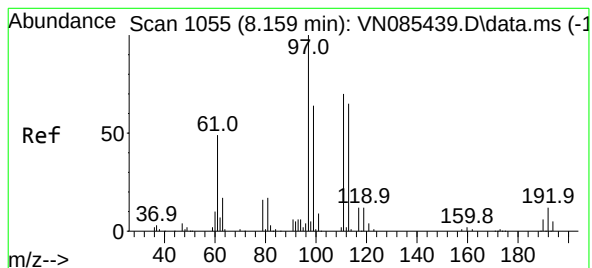
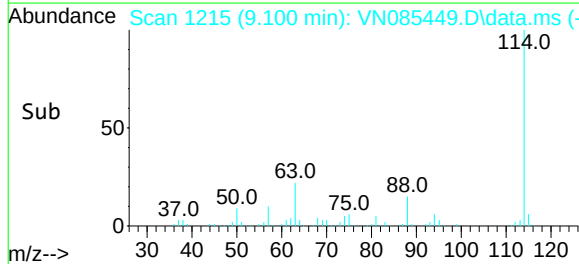
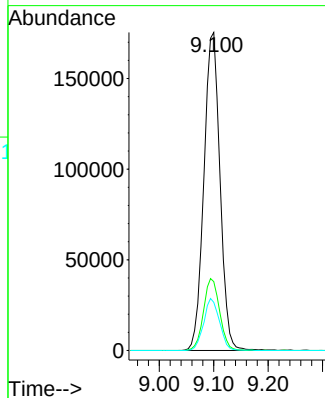
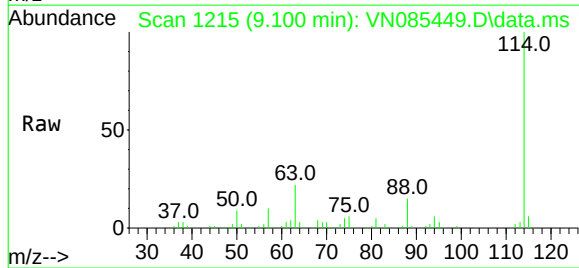




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1214  
Delta R.T. 0.006 min  
Lab File: VN085449.D  
Acq: 15 Jan 2025 10:05

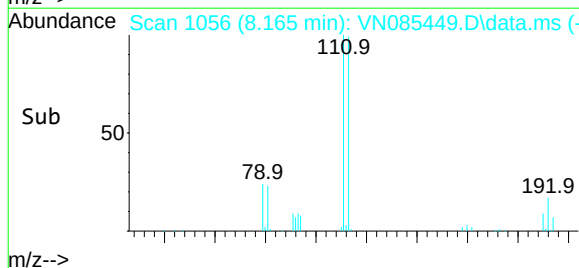
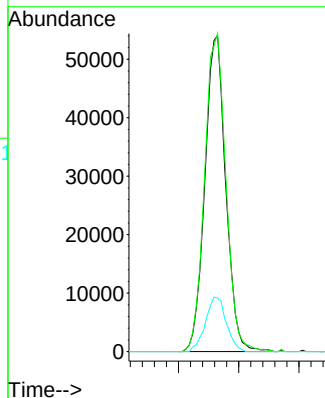
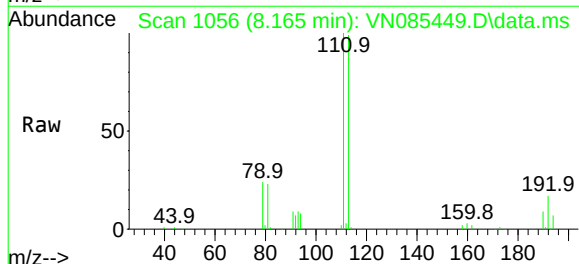
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.7  | 0.0   | 47.6  |
| 88      | 15.1  | 0.0   | 32.6  |

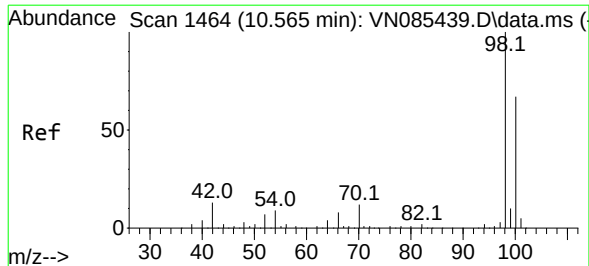


#35  
Dibromofluoromethane  
Concen: 51.914 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085449.D  
Acq: 15 Jan 2025 10:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.0 | 82.7  | 124.1 |
| 192     | 17.2  | 14.3  | 21.5  |







#50

Toluene-d8

Concen: 50.107 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085449.D

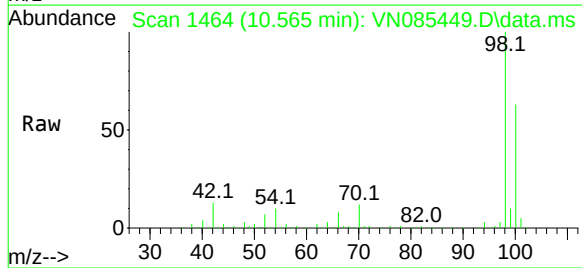
Acq: 15 Jan 2025 10:05

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBL01

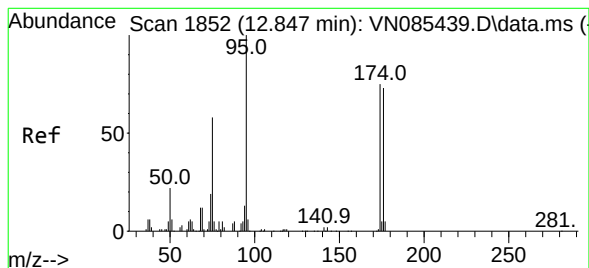
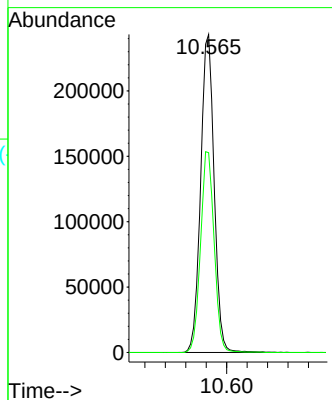
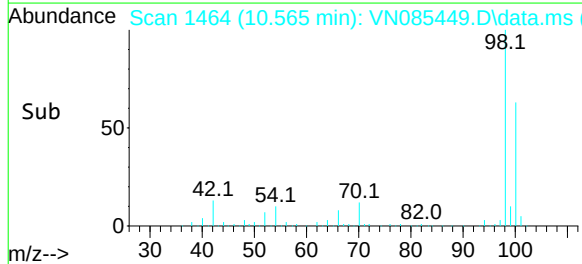


Tgt Ion: 98 Resp: 445519

Ion Ratio Lower Upper

98 100

100 63.5 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 49.055 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085449.D

Acq: 15 Jan 2025 10:05

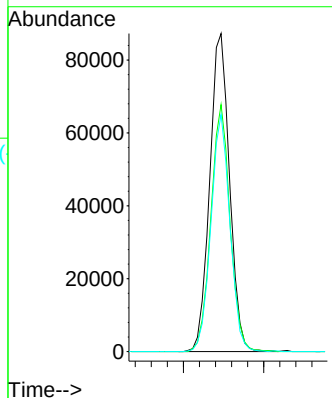
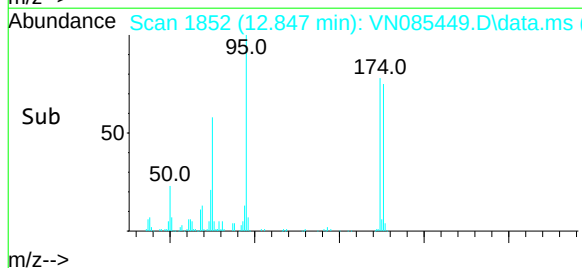
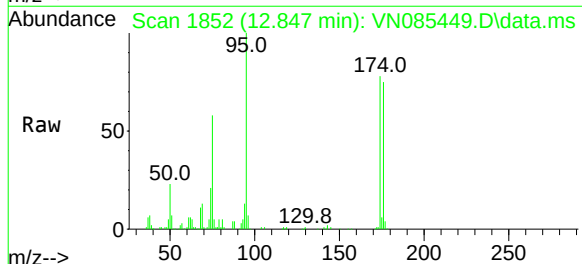
Tgt Ion: 95 Resp: 149204

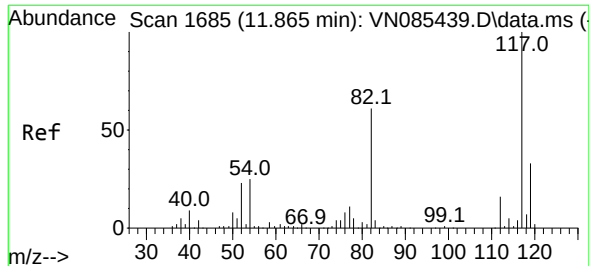
Ion Ratio Lower Upper

95 100

174 75.4 0.0 145.0

176 71.3 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.859 min Scan# 16

Delta R.T. -0.006 min

Lab File: VN085449.D

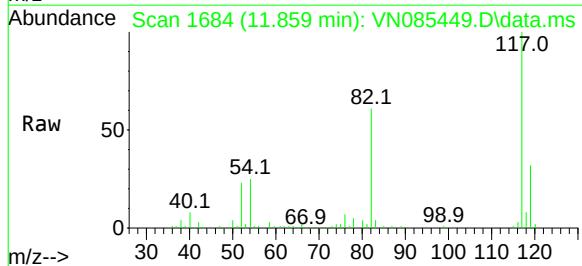
Acq: 15 Jan 2025 10:05

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBL01



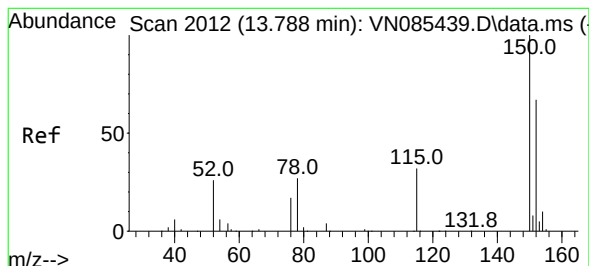
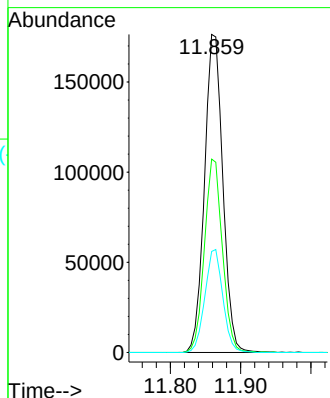
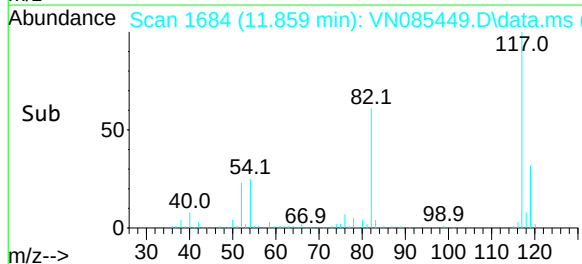
Tgt Ion:117 Resp: 319974

Ion Ratio Lower Upper

117 100

82 60.8 48.6 72.8

119 31.8 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: VN085449.D

Acq: 15 Jan 2025 10:05

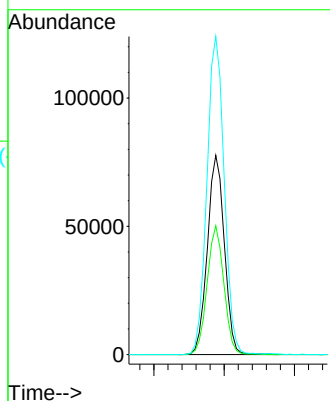
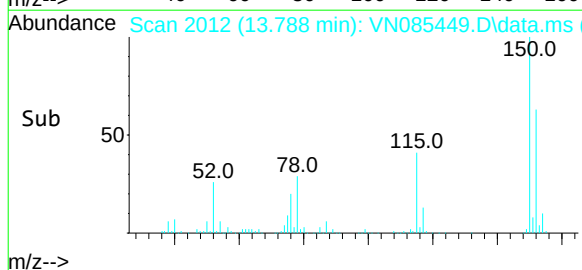
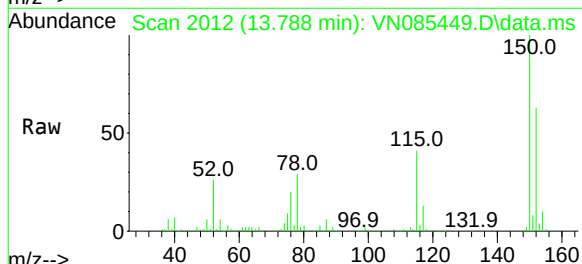
Tgt Ion:152 Resp: 130534

Ion Ratio Lower Upper

152 100

115 63.5 31.1 93.3

150 162.1 0.0 343.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085449.D  
Acq On : 15 Jan 2025 10:05  
Operator : JC\MD  
Sample : VN0115WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

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: VN085449.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         | 7.424       | 921           | 930         | 940          | rBV2     | 5847           | 15794         | 1.31%           | 0.249%        |
| 2         | 8.165       | 1046          | 1056        | 1060         | rBV      | 180742         | 440963        | 36.53%          | 6.945%        |
| 3         | 8.218       | 1060          | 1065        | 1078         | rVB      | 288383         | 641210        | 53.12%          | 10.099%       |
| 4         | 8.571       | 1115          | 1125        | 1138         | rBV      | 204455         | 463778        | 38.42%          | 7.305%        |
| 5         | 9.094       | 1205          | 1214        | 1225         | rBV      | 438702         | 900841        | 74.63%          | 14.188%       |
| 6         | 10.565      | 1456          | 1464        | 1478         | rBV      | 658553         | 1207121       | 100.00%         | 19.012%       |
| 7         | 11.859      | 1676          | 1684        | 1698         | rBV      | 577768         | 1045316       | 86.60%          | 16.464%       |
| 8         | 12.847      | 1843          | 1852        | 1862         | rBV      | 455849         | 765121        | 63.38%          | 12.051%       |
| 9         | 13.788      | 2004          | 2012        | 2023         | rBV      | 521223         | 868998        | 71.99%          | 13.687%       |

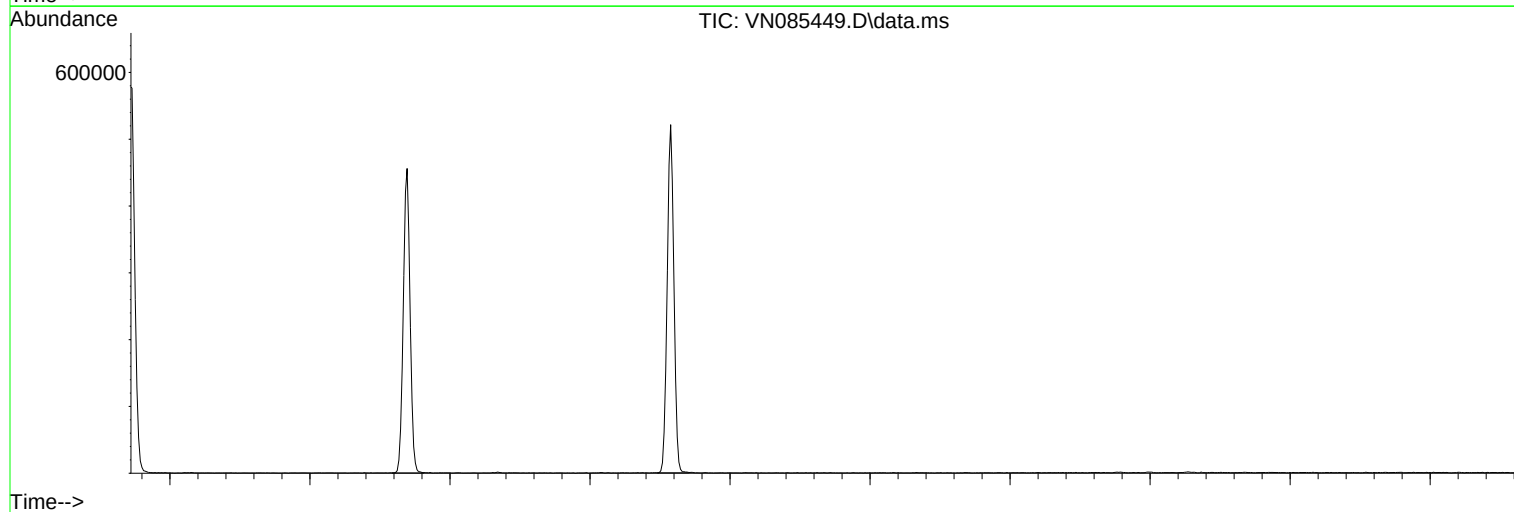
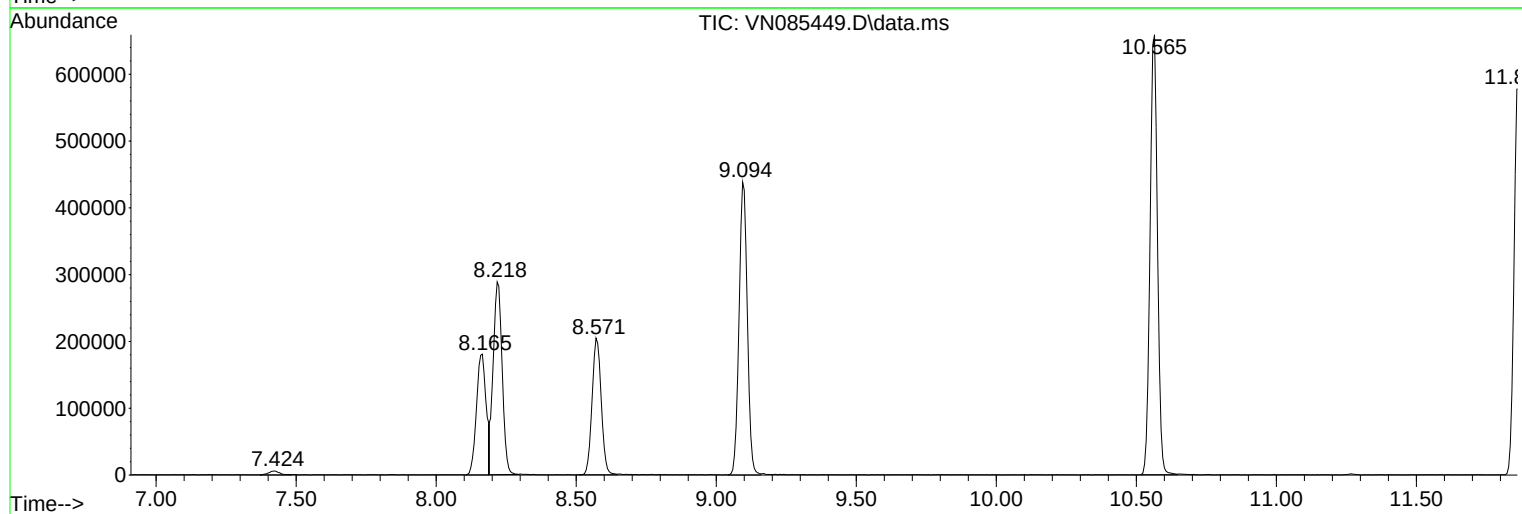
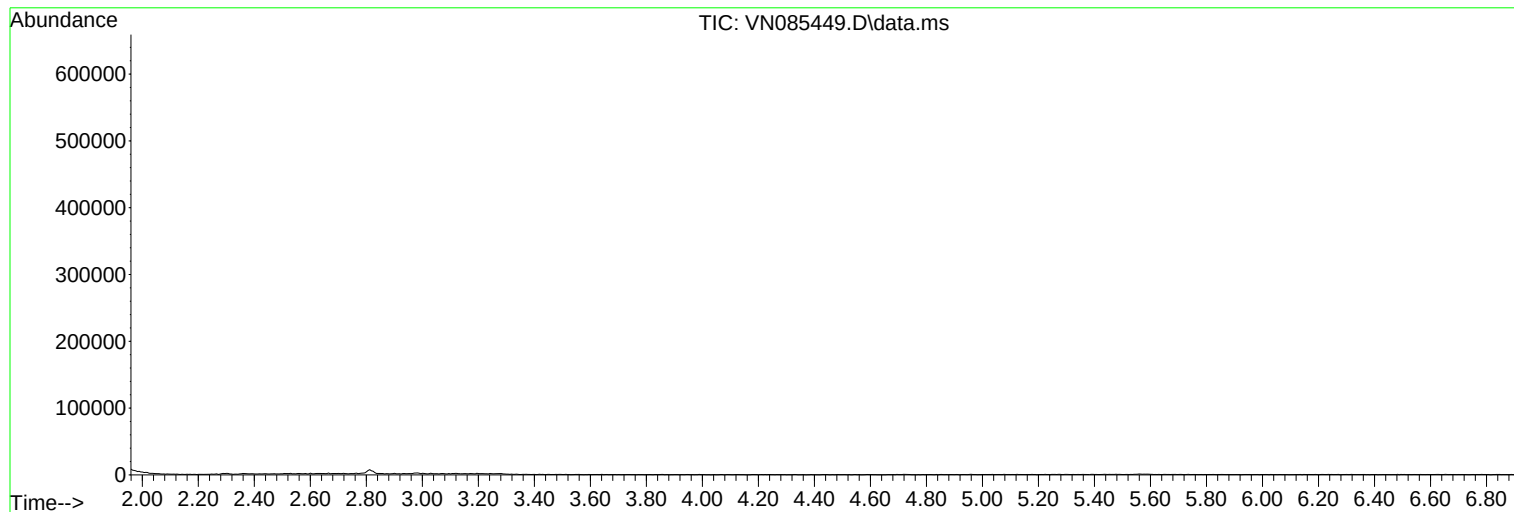
Sum of corrected areas: 6349142

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085449.D  
Acq On : 15 Jan 2025 10:05  
Operator : JC\MD  
Sample : VN0115WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

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\VN011525\  
Data File : VN085449.D  
Acq On : 15 Jan 2025 10:05  
Operator : JC\MD  
Sample : VN0115WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

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\VN011525\  
Data File : VN085449.D  
Acq On : 15 Jan 2025 10:05  
Operator : JC\MD  
Sample : VN0115WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBL01

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:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  |              |
| Client Sample ID:  | VN0115WBS01                   |        |      | SDG No.:        | Q1062        |
| Lab Sample ID:     | VN0115WBS01                   |        |      | 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 |
| VN085450.D        | 1         |           | 01/15/25 10:29 | VN011525      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 18.5  |           | 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                   | 18.5  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 17.8  |           | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 18.7  |           | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 19.0  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 18.6  |           | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 87.7  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 17.4  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 18.7  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 18.2  |           | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 18.6  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 18.6  |           | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 91.2  |           | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 19.0  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 18.7  |           | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 18.4  |           | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 18.6  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 19.8  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 19.2  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 18.8  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 19.2  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 18.9  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 19.8  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 95.3  |           | 0.75 | 2.50 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 20.1  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 10061-02-6     | t-1,3-Dichloropropene          | 19.0  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 20.0  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 18.9  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 96.5  |           | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                               |                 |              |
|--------------------|-------------------------------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc.          | Date Collected: |              |
| Project:           | NWIRP Bethpage 112G08005-WE13 | Date Received:  |              |
| Client Sample ID:  | VN0115WBS01                   | SDG No.:        | Q1062        |
| Lab Sample ID:     | VN0115WBS01                   | 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 |
| VN085450.D        | 1         |           | 01/15/25 10:29 | VN011525      |

| CAS Number                | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 19.1   |           | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene         | 20.1   |           | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene             | 19.3   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene             | 20.0   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes               | 41.3   |           | 0.31     | 1.00 | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                  | 20.2   |           | 0.14     | 0.50 | 1.00       | ug/L    |
| 100-42-5                  | Styrene                   | 20.4   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                 | 19.8   |           | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene          | 20.7   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 18.5   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene       | 19.6   |           | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene       | 18.7   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene       | 18.9   |           | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                           |        |           |          |      |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4     | 47.6   |           | 81 - 118 |      | 95%        | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 48.5   |           | 80 - 119 |      | 97%        | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 50.4   |           | 89 - 112 |      | 101%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 49.5   |           | 85 - 114 |      | 99%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 209000 | 8.224     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 350000 | 9.094     |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 302000 | 11.865    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 141000 | 13.788    |          |      |            |         |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085450.D  
 Acq On : 15 Jan 2025 10:29  
 Operator : JC\MD  
 Sample : VN0115WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:53:27 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  | 208834   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 350038   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 301633   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 141189   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.576  | 65    | 160496   | 47.611   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 95.220%  |
| 35) Dibromofluoromethane  | 8.165  | 113   | 117791   | 48.506   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 97.020%  |
| 50) Toluene-d8            | 10.559 | 98    | 434650   | 50.376   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 100.760% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 146069   | 49.491   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 98.980%  |

## Target Compounds

|                              |       |     |        |         |      | Qvalue |
|------------------------------|-------|-----|--------|---------|------|--------|
|                              |       |     |        |         |      |        |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 53406  | 18.888  | ug/l | 97     |
| 3) Chloromethane             | 2.359 | 50  | 56766  | 18.542  | ug/l | 100    |
| 4) Vinyl Chloride            | 2.518 | 62  | 55927  | 18.175  | ug/l | 98     |
| 5) Bromomethane              | 2.959 | 94  | 34404  | 18.509  | ug/l | 93     |
| 6) Chloroethane              | 3.130 | 64  | 34817  | 17.847  | ug/l | 99     |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 83471  | 18.695  | ug/l | 98     |
| 8) Diethyl Ether             | 3.959 | 74  | 26372  | 17.097  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 47665  | 18.954  | ug/l | 98     |
| 10) Methyl Iodide            | 4.589 | 142 | 52836  | 18.346  | ug/l | 94     |
| 11) Tert butyl alcohol       | 5.500 | 59  | 34842  | 90.264  | ug/l | 98     |
| 12) 1,1-Dichloroethene       | 4.347 | 96  | 41789  | 18.645  | ug/l | 97     |
| 13) Acrolein                 | 4.177 | 56  | 57066  | 108.299 | ug/l | 99     |
| 14) Allyl chloride           | 5.024 | 41  | 64682  | 17.785  | ug/l | 98     |
| 15) Acrylonitrile            | 5.718 | 53  | 111192 | 90.690  | ug/l | 98     |
| 16) Acetone                  | 4.424 | 43  | 95481  | 87.661  | ug/l | 97     |
| 17) Carbon Disulfide         | 4.712 | 76  | 120042 | 17.395  | ug/l | 99     |
| 18) Methyl Acetate           | 5.024 | 43  | 59306  | 17.906  | ug/l | 100    |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 136088 | 18.700  | ug/l | 100    |
| 20) Methylene Chloride       | 5.277 | 84  | 48956  | 18.156  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene | 5.788 | 96  | 44485  | 18.572  | ug/l | 95     |
| 22) Diisopropyl ether        | 6.665 | 45  | 156113 | 19.339  | ug/l | 99     |
| 23) Vinyl Acetate            | 6.600 | 43  | 540854 | 95.740  | ug/l | 100    |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 91537  | 18.597  | ug/l | 99     |
| 25) 2-Butanone               | 7.477 | 43  | 146109 | 91.155  | ug/l | 99     |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 81881  | 20.576  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 52626  | 18.654  | ug/l | 99     |
| 28) Bromochloromethane       | 7.806 | 49  | 39408  | 17.209  | ug/l | 99     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 97170  | 95.619  | ug/l | 98     |
| 30) Chloroform               | 7.959 | 83  | 93604  | 18.400  | ug/l | 100    |
| 31) Cyclohexane              | 8.259 | 56  | 79144  | 18.500  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane    | 8.159 | 97  | 83081  | 18.618  | ug/l | 97     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 63125  | 18.521  | ug/l | 99     |
| 37) Ethyl Acetate            | 7.553 | 43  | 62310  | 18.113  | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 74287  | 19.039  | ug/l | 97     |
| 39) Methylcyclohexane        | 9.594 | 83  | 63410  | 19.799  | ug/l | 99     |
| 40) Benzene                  | 8.600 | 78  | 196843 | 19.222  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085450.D  
 Acq On : 15 Jan 2025 10:29  
 Operator : JC\MD  
 Sample : VN0115WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:53:27 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   | 34152    | 19.082  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 72644    | 18.835  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.682  | 43   | 99545    | 18.059  | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 45825    | 19.224  | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 49517    | 18.931  | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 34976    | 18.531  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.882  | 83   | 75979    | 19.759  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.676  | 41   | 47488    | 19.143  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 14354    | 343.615 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 304924   | 95.328  | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 118985   | 20.053  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 69201    | 19.044  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 77467    | 19.958  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 44394    | 18.906  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 63560    | 17.379  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78133    | 19.136  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 148732   | 99.810  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 217128   | 96.472  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 54139    | 19.097  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 44253    | 18.932  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 41267    | 20.068  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 127557   | 19.304  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 45645    | 18.821  | ug/l   | 100      |
| 67) Ethyl Benzene             | 11.959 | 91   | 215448   | 20.019  | ug/l   | 95       |
| 68) m/p-Xylenes               | 12.065 | 106  | 164329   | 41.314  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 76723    | 20.184  | ug/l   | 98       |
| 70) Styrene                   | 12.406 | 104  | 128074   | 20.358  | ug/l   | 100      |
| 71) Bromoform                 | 12.570 | 173  | 34422    | 19.837  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 196948   | 20.668  | ug/l   | 100      |
| 74) N-ethyl acetate           | 12.488 | 43   | 80290    | 18.746  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 62306    | 18.510  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 57678m   | 20.099  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 48006    | 19.283  | ug/l   | 98       |
| 78) n-propylbenzene           | 13.029 | 91   | 234178   | 20.759  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 148584   | 20.351  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 167516   | 21.282  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 20052m   | 18.905  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 148888   | 20.481  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 137144   | 20.748  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 168611   | 21.493  | ug/l   | 97       |
| 85) sec-Butylbenzene          | 13.611 | 105  | 193667   | 21.140  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 158593   | 20.730  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 89998    | 19.629  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 88968    | 18.721  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 132410   | 20.147  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 32875    | 18.850  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 86586    | 18.933  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 10904    | 17.740  | ug/l   | 96       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 38461    | 18.095  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 21171    | 18.761  | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 104770   | 16.518  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 38077    | 17.704  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085450.D  
Acq On : 15 Jan 2025 10:29  
Operator : JC\MD  
Sample : VN0115WBS01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Manual Integrations  
APPROVED

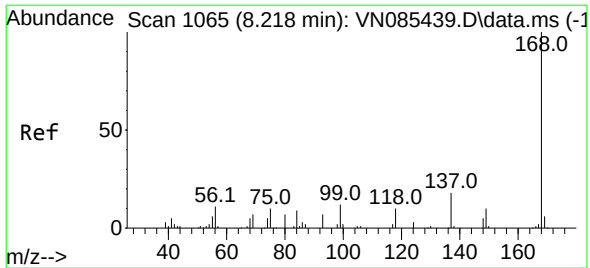
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:53:27 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) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

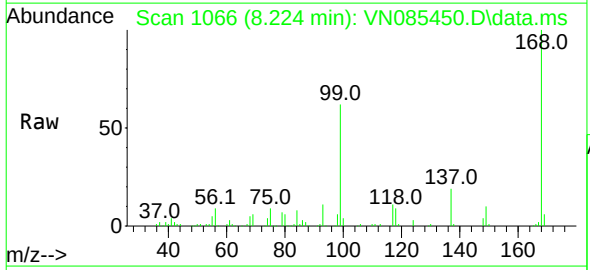
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(#) = qualifier out of range (m) = manual integration (+) = signals summed





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

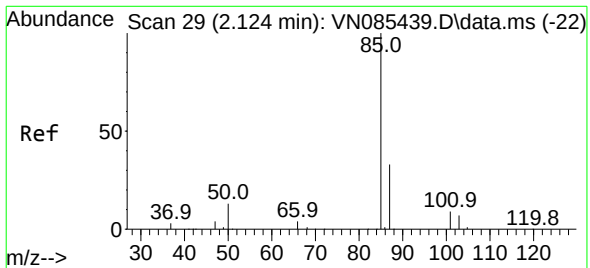
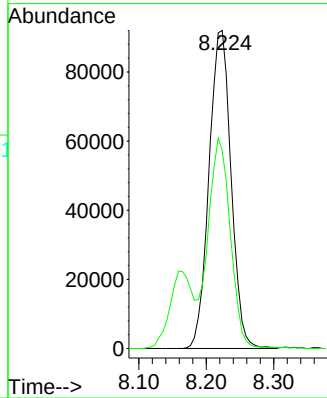
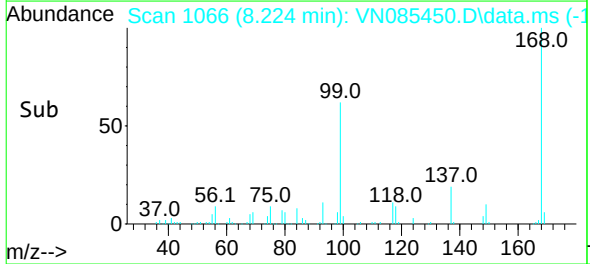
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion:168 Resp: 208834  
Ion Ratio Lower Upper  
168 100  
99 62.0 53.6 80.4

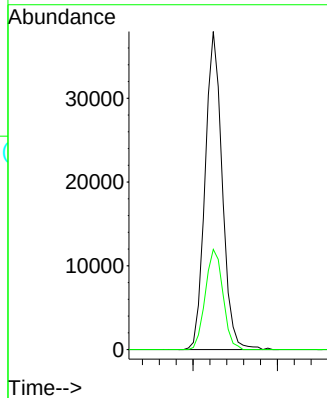
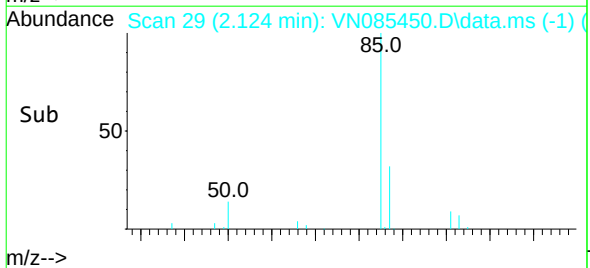
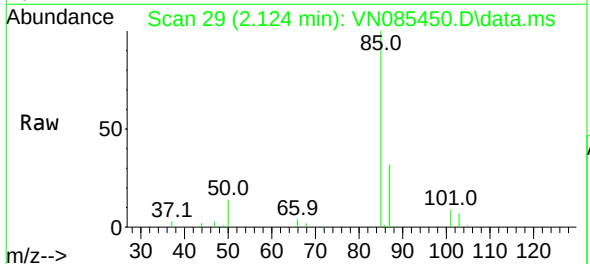
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

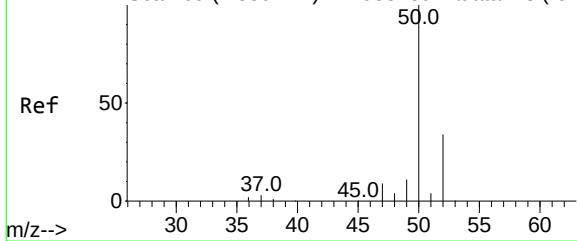


#2  
Dichlorodifluoromethane  
Concen: 18.888 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 85 Resp: 53406  
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: 18.542 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min MSVOA\_N

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 50 Resp: 56766

Ion Ratio Lower Upper

50 100

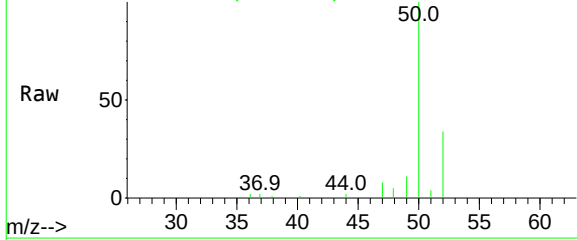
52 33.9 27.0 40.6

Manual Integrations

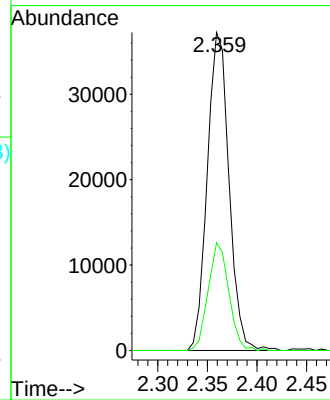
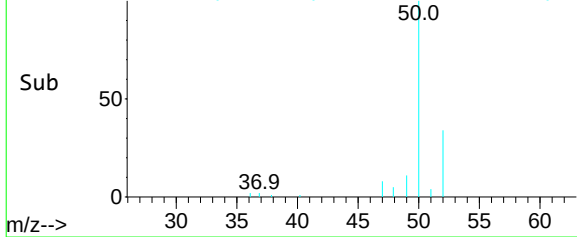
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

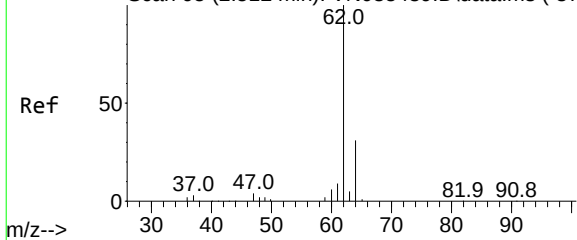
Abundance Scan 69 (2.359 min): VN085450.D\data.ms



Abundance Scan 69 (2.359 min): VN085450.D\data.ms (-18)



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



#4

Vinyl Chloride

Concen: 18.175 ug/l

RT: 2.518 min Scan# 96

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

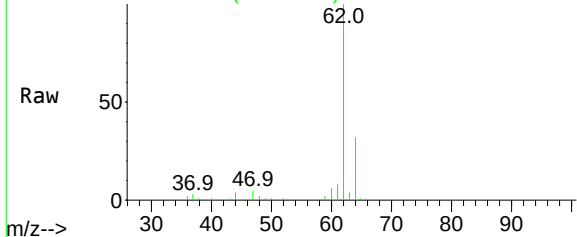
Tgt Ion: 62 Resp: 55927

Ion Ratio Lower Upper

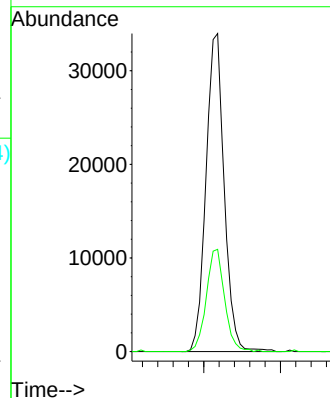
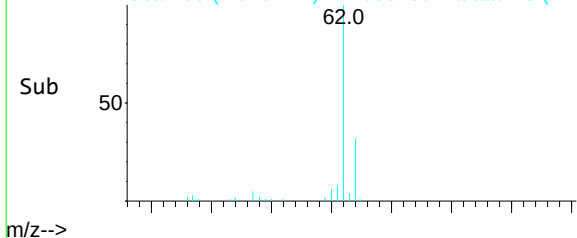
62 100

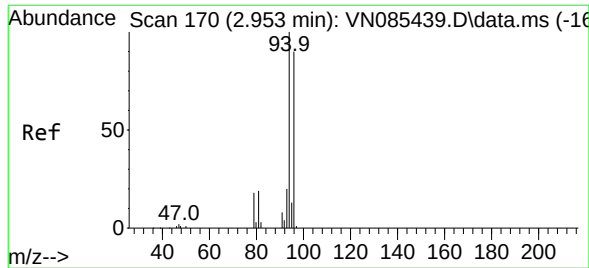
64 32.2 24.8 37.2

Abundance Scan 96 (2.518 min): VN085450.D\data.ms



Abundance Scan 96 (2.518 min): VN085450.D\data.ms (-44)





#5

Bromomethane

Concen: 18.509 ug/l

RT: 2.959 min Scan# 171

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 94 Resp: 34404

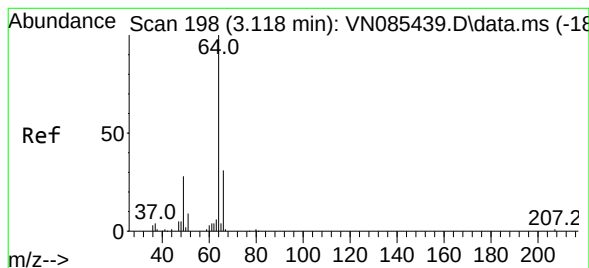
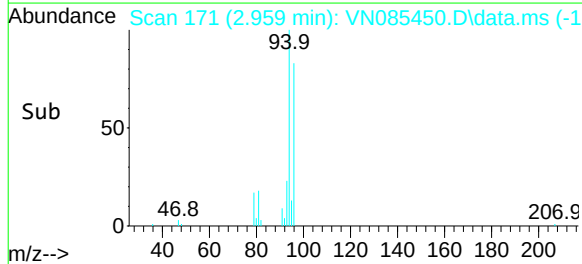
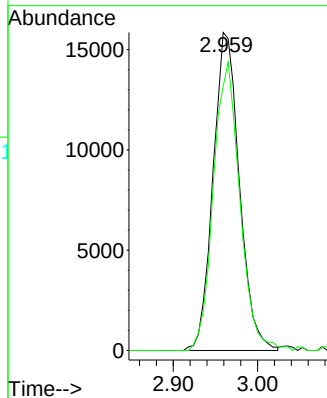
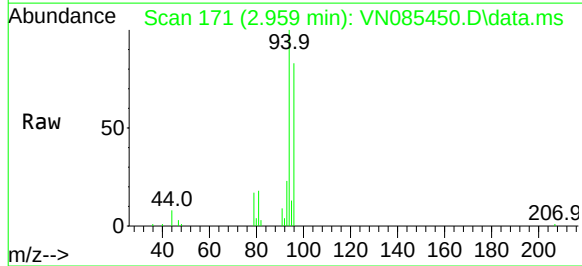
Ion Ratio Lower Upper

94 100

96 83.0 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#6

Chloroethane

Concen: 17.847 ug/l

RT: 3.130 min Scan# 200

Delta R.T. 0.012 min

Lab File: VN085450.D

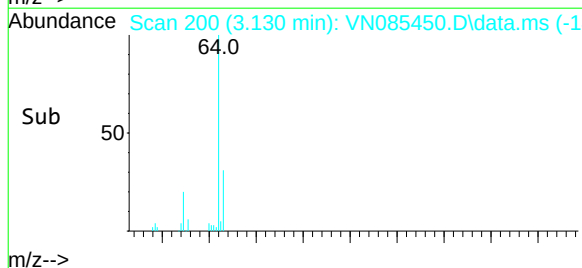
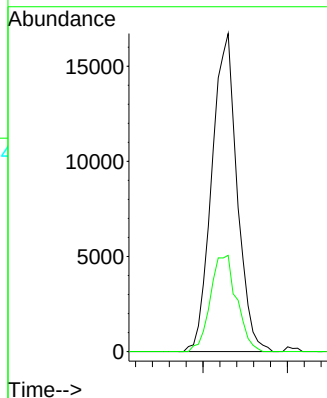
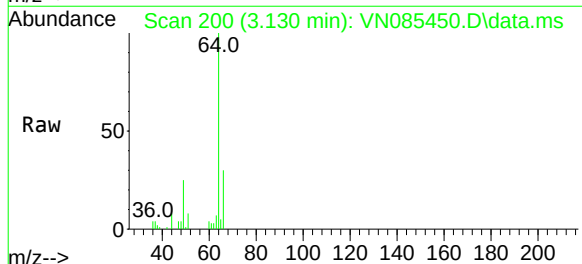
Acq: 15 Jan 2025 10:29

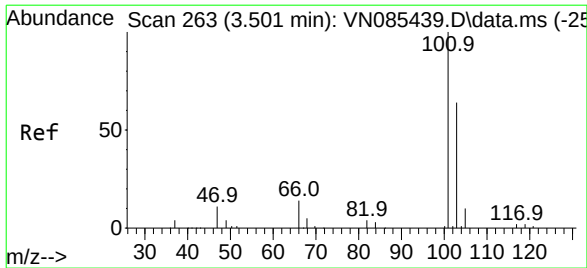
Tgt Ion: 64 Resp: 34817

Ion Ratio Lower Upper

64 100

66 30.2 24.6 36.8





#7

Trichlorofluoromethane

Concen: 18.695 ug/l

RT: 3.500 min Scan# 26

Delta R.T. -0.000 min

Lab File: VN085450.D

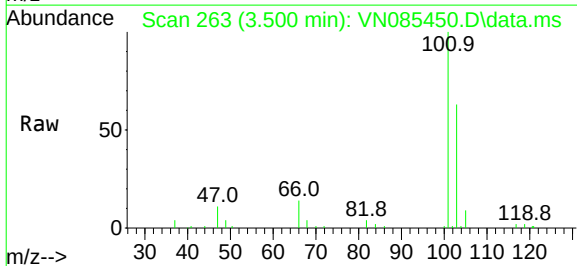
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion:101 Resp: 83471

Ion Ratio Lower Upper

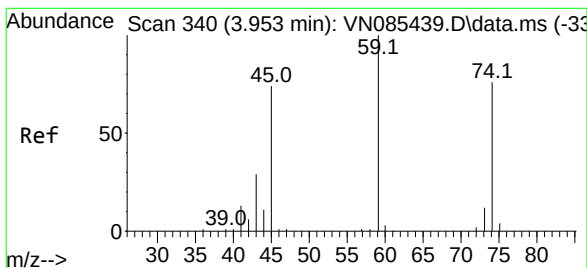
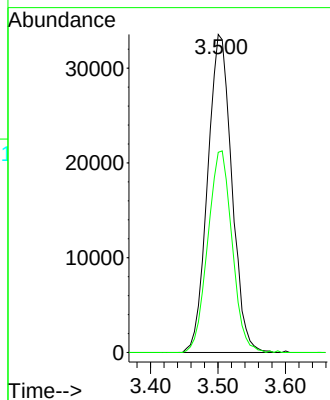
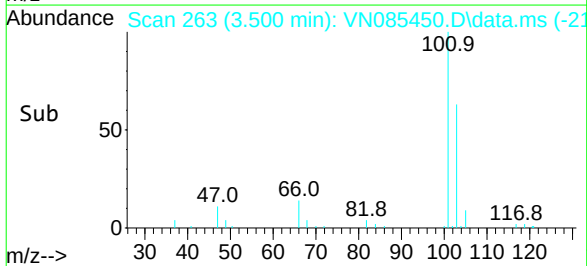
101 100

103 62.9 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#8

Diethyl Ether

Concen: 17.097 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085450.D

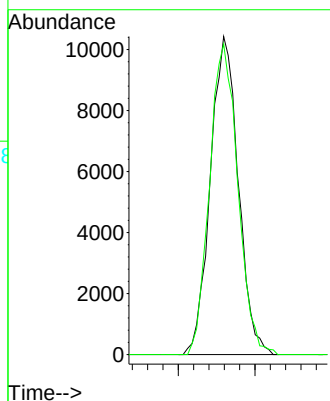
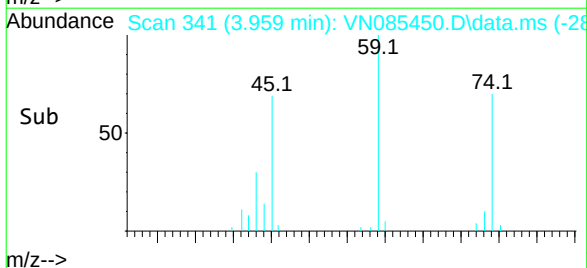
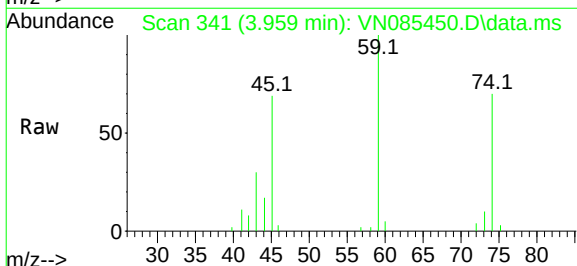
Acq: 15 Jan 2025 10:29

Tgt Ion: 74 Resp: 26372

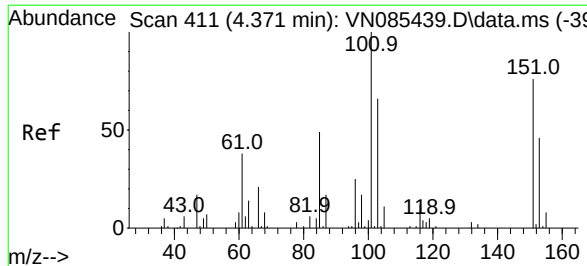
Ion Ratio Lower Upper

74 100

45 98.9 49.7 149.1







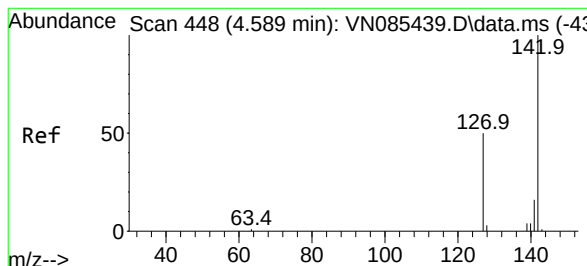
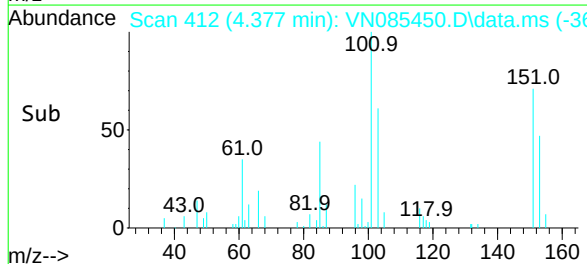
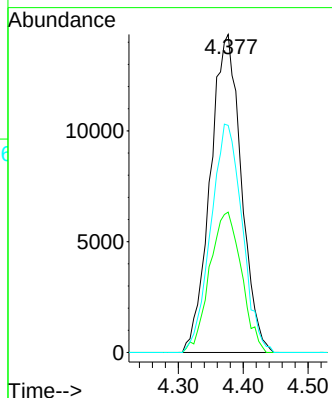
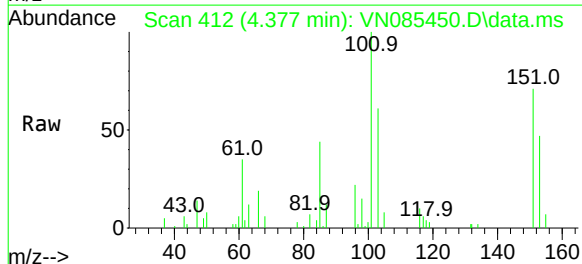
#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 18.954 ug/l  
RT: 4.377 min Scan# 411  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion:101 Resp: 47665  
Ion Ratio Lower Upper  
101 100  
85 45.2 37.8 56.8  
151 72.6 58.8 88.2

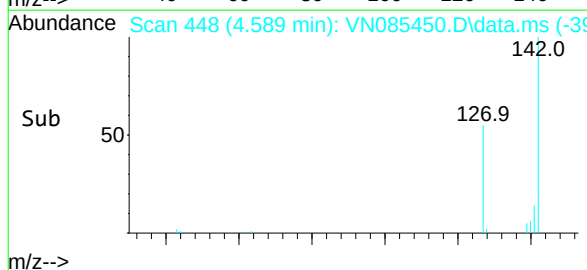
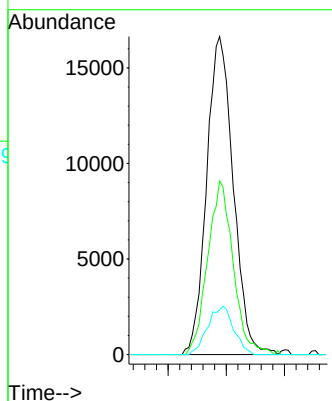
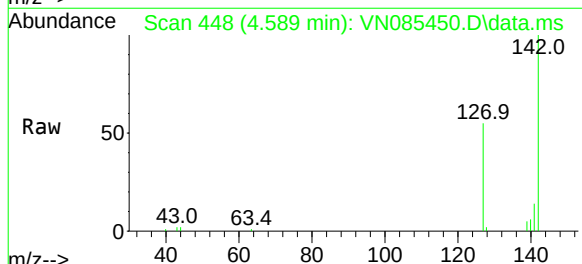
Manual Integrations  
APPROVED

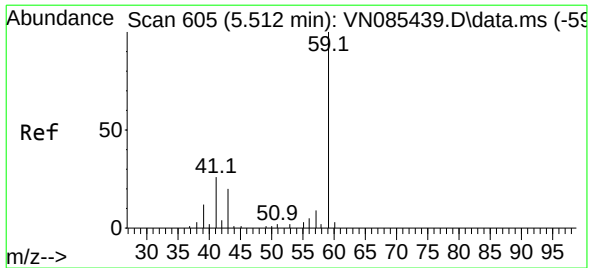
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#10  
Methyl Iodide  
Concen: 18.346 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:142 Resp: 52836  
Ion Ratio Lower Upper  
142 100  
127 54.6 40.3 60.5  
141 14.1 12.8 19.2





#11

Tert butyl alcohol

Concen: 90.264 ug/l

RT: 5.500 min Scan# 605

Delta R.T. -0.012 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 59 Resp: 34842

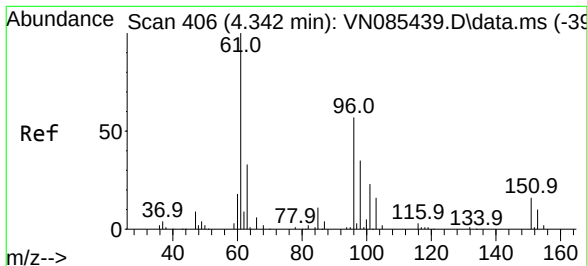
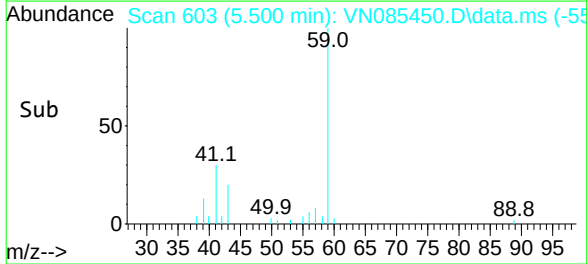
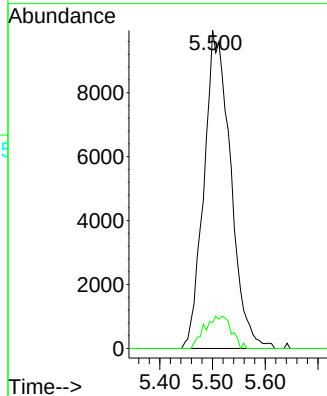
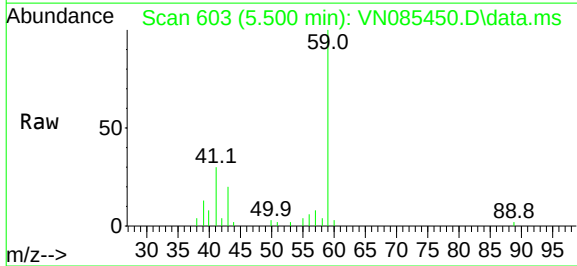
Ion Ratio Lower Upper

59 100

57 10.2 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#12

1,1-Dichloroethene

Concen: 18.645 ug/l

RT: 4.347 min Scan# 407

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

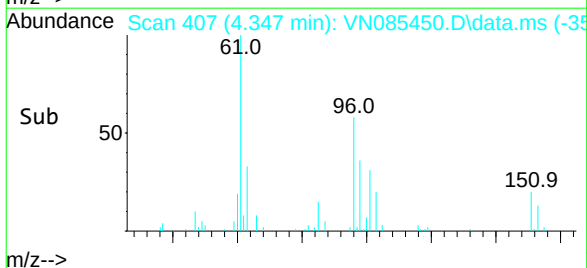
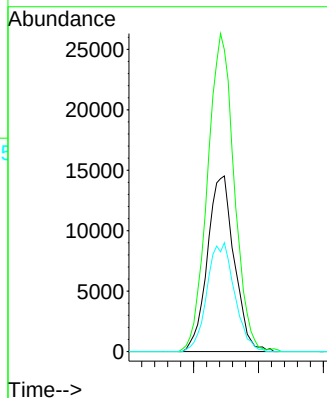
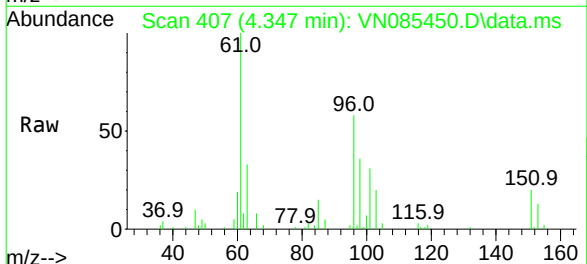
Tgt Ion: 96 Resp: 41789

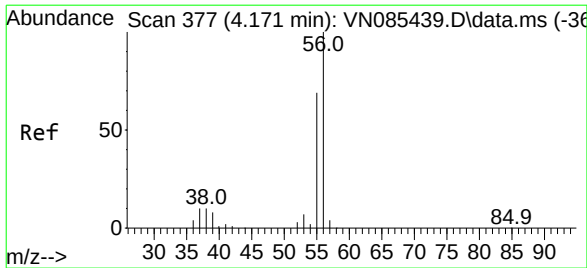
Ion Ratio Lower Upper

96 100

61 171.8 141.0 211.4

98 62.0 49.0 73.6





#13

Acrolein

Concen: 108.299 ug/l

RT: 4.177 min Scan# 37

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 56 Resp: 57066

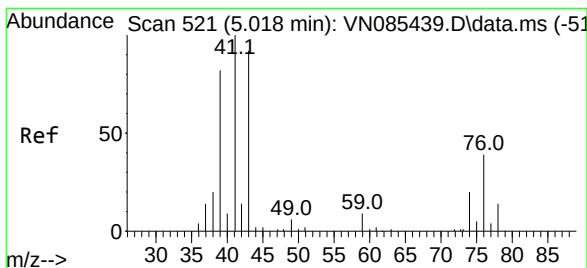
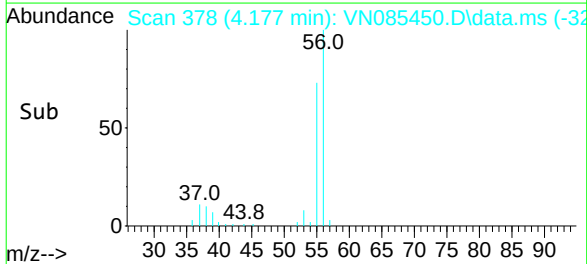
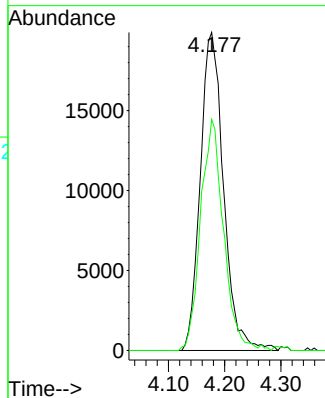
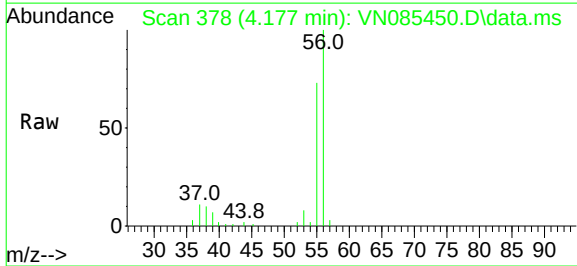
Ion Ratio Lower Upper

56 100

55 71.4 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#14

Allyl chloride

Concen: 17.785 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

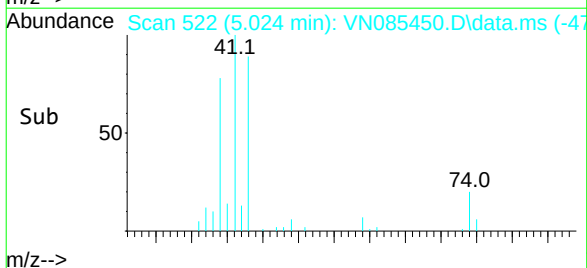
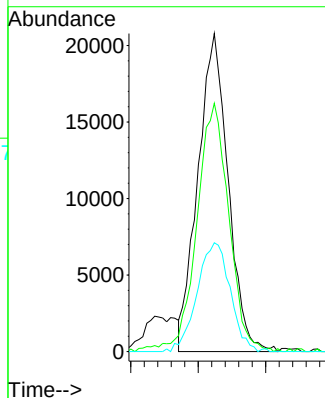
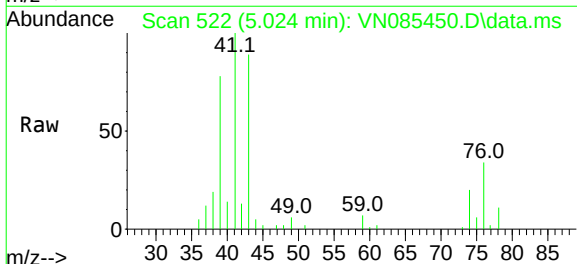
Tgt Ion: 41 Resp: 64682

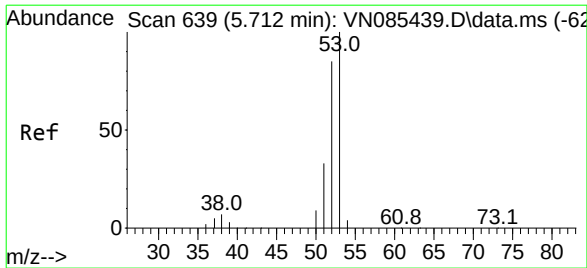
Ion Ratio Lower Upper

41 100

39 83.1 64.4 96.6

76 37.5 30.5 45.7





#15

Acrylonitrile

Concen: 90.690 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 53 Resp: 111192

Ion Ratio Lower Upper

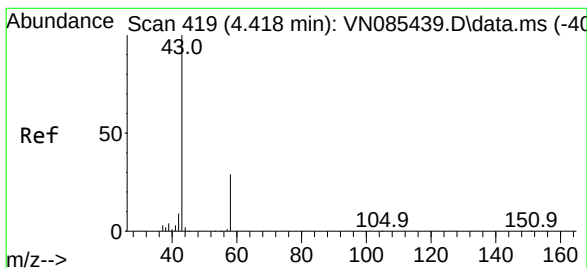
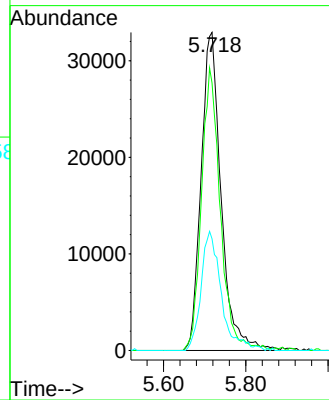
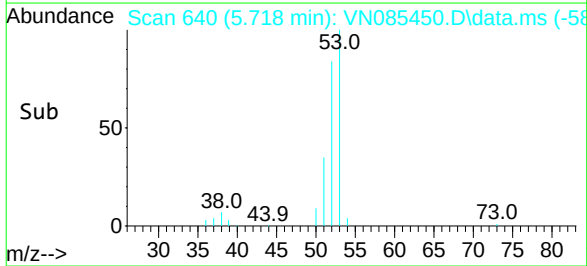
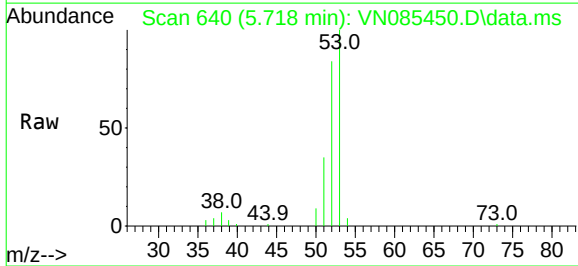
53 100

52 83.8 65.5 98.3

51 37.5 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#16

Acetone

Concen: 87.661 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085450.D

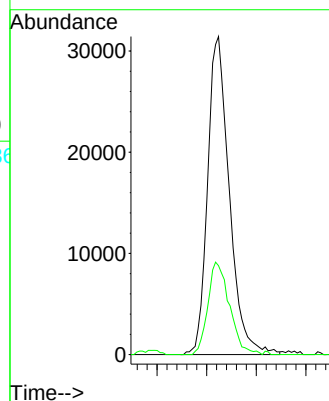
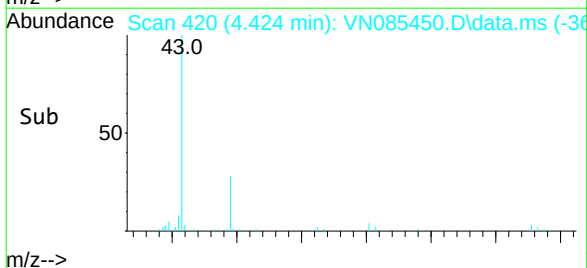
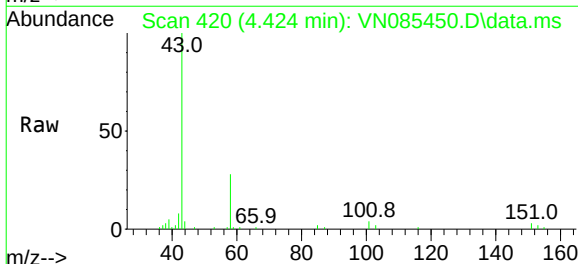
Acq: 15 Jan 2025 10:29

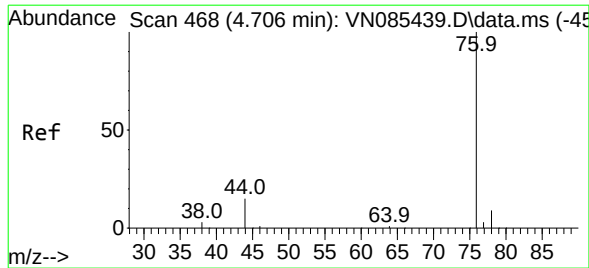
Tgt Ion: 43 Resp: 95481

Ion Ratio Lower Upper

43 100

58 28.0 23.8 35.6





#17

Carbon Disulfide

Concen: 17.395 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085450.D

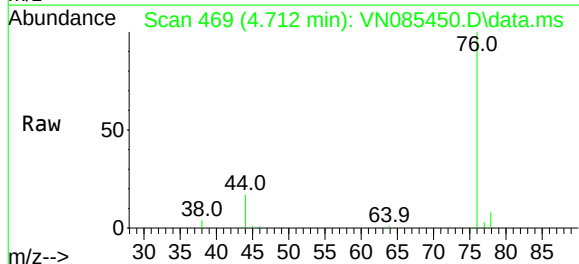
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion: 76 Resp: 120042

Ion Ratio Lower Upper

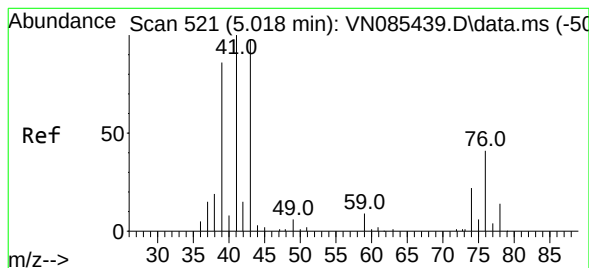
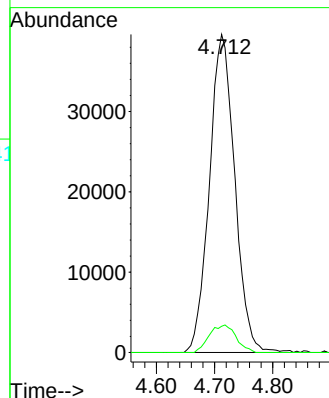
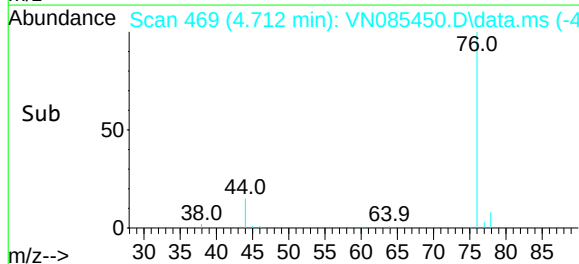
76 100

78 8.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#18

Methyl Acetate

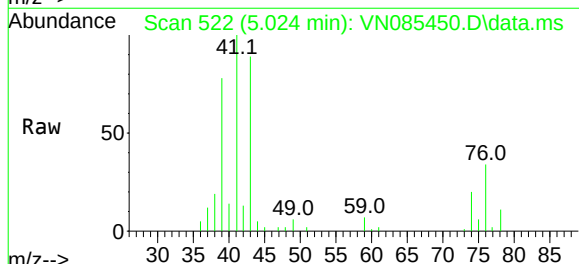
Concen: 17.906 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

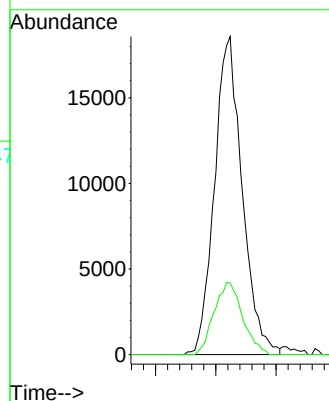
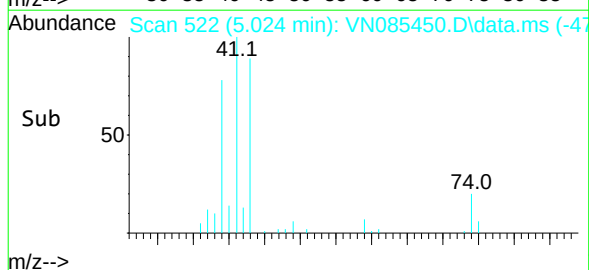


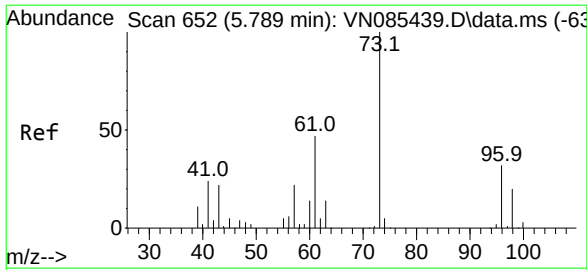
Tgt Ion: 43 Resp: 59306

Ion Ratio Lower Upper

43 100

74 23.4 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 18.700 ug/l

RT: 5.794 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 73 Resp: 136088

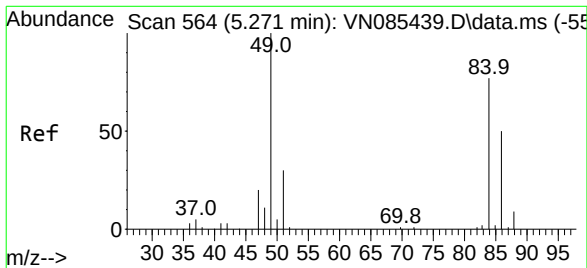
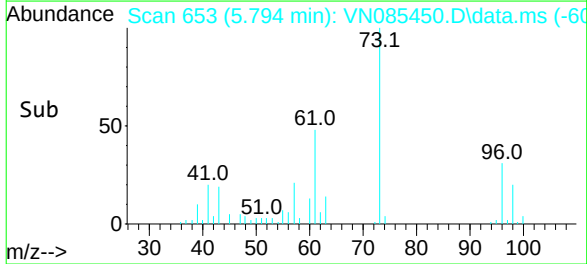
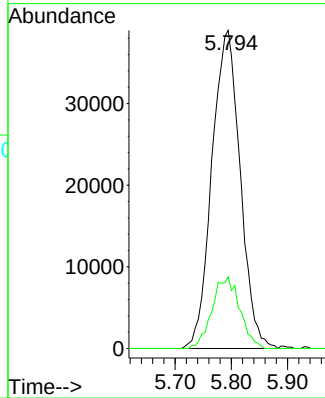
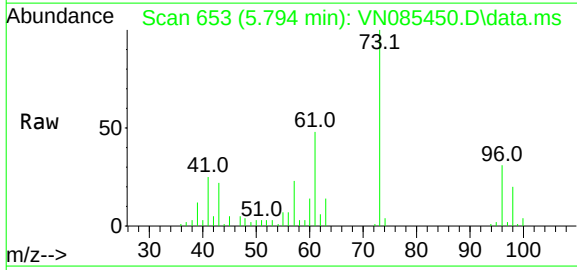
Ion Ratio Lower Upper

73 100

57 22.5 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#20

Methylene Chloride

Concen: 18.156 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Tgt Ion: 84 Resp: 48956

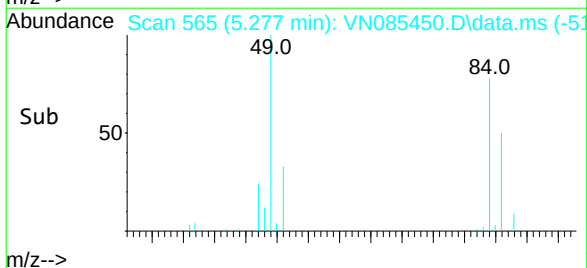
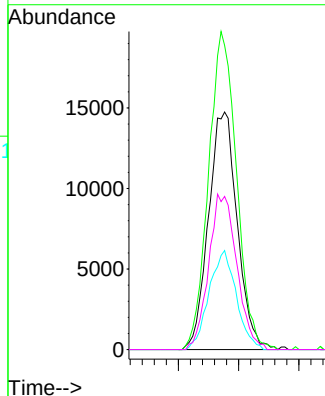
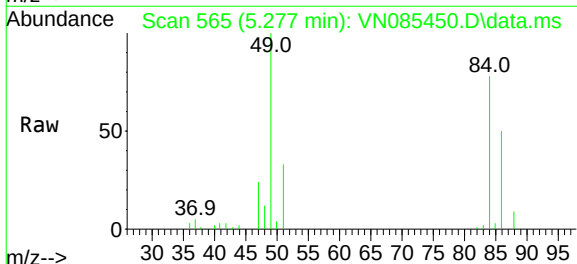
Ion Ratio Lower Upper

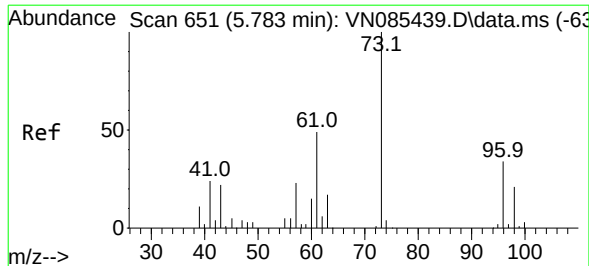
84 100

49 128.0 104.1 156.1

51 41.7 31.0 46.4

86 64.5 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 18.572 ug/l

RT: 5.788 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085450.D

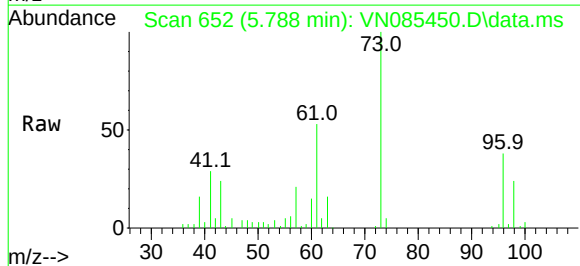
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion: 96 Resp: 44485

Ion Ratio Lower Upper

96 100

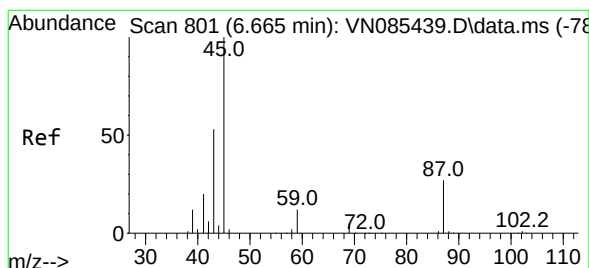
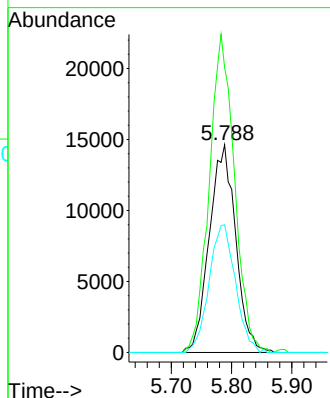
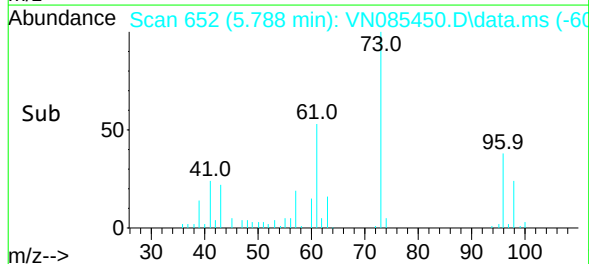
61 137.2 115.7 173.5

98 61.4 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#22

Diisopropyl ether

Concen: 19.339 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Tgt Ion: 45 Resp: 156113

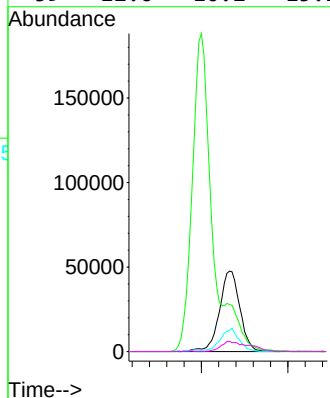
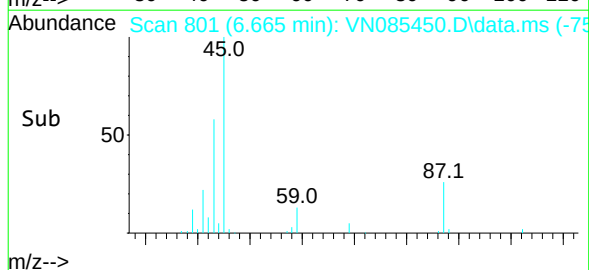
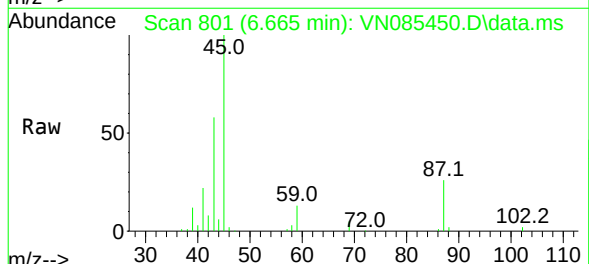
Ion Ratio Lower Upper

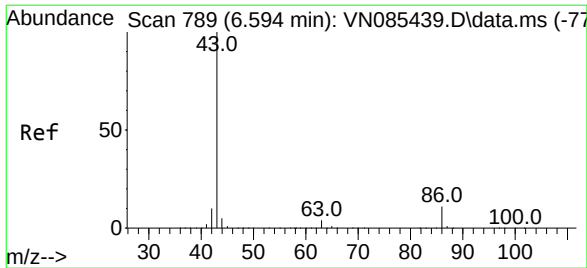
45 100

43 56.9 45.0 67.6

87 26.4 21.8 32.8

59 12.6 10.2 15.2





#23

Vinyl Acetate

Concen: 95.740 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 43 Resp: 540854

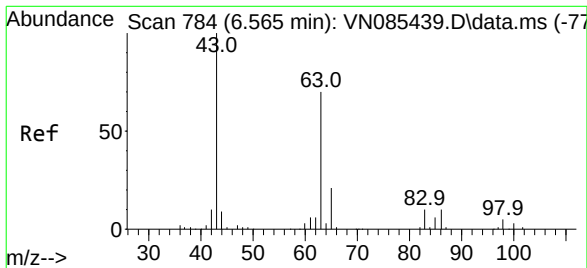
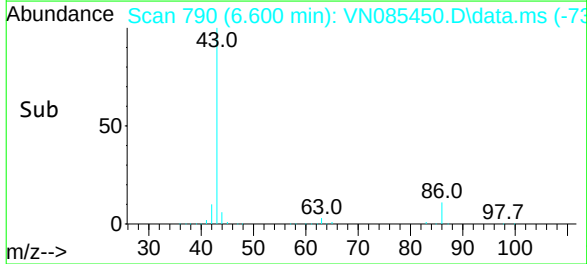
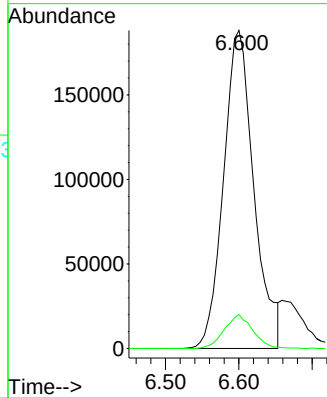
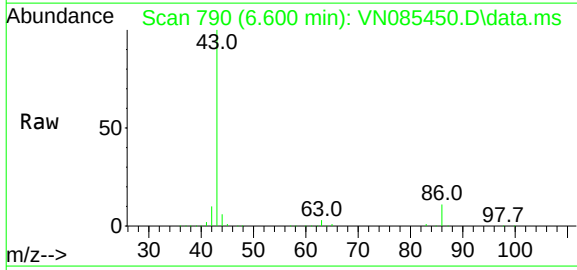
Ion Ratio Lower Upper

43 100

86 10.7 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#24

1,1-Dichloroethane

Concen: 18.597 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

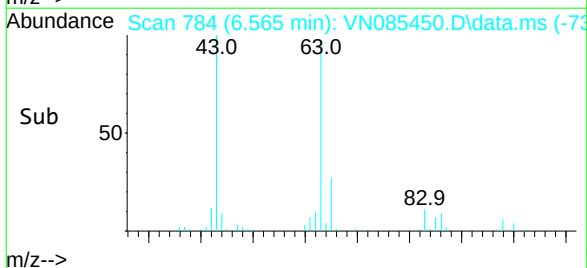
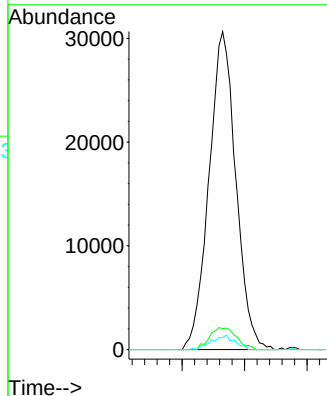
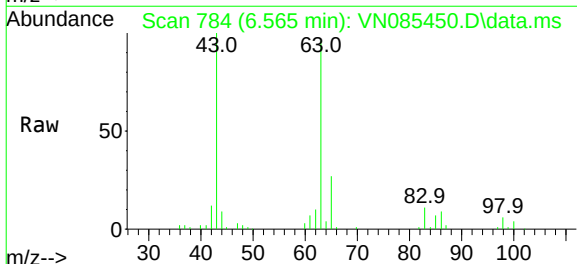
Tgt Ion: 63 Resp: 91537

Ion Ratio Lower Upper

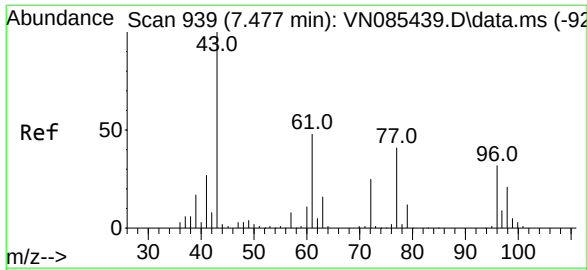
63 100

98 6.6 3.3 9.8

100 3.8 2.0 6.0







#25

2-Butanone

Concen: 91.155 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 43 Resp: 146109

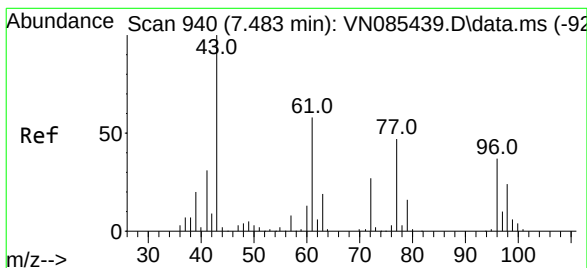
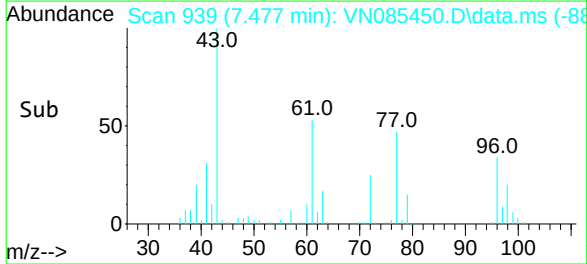
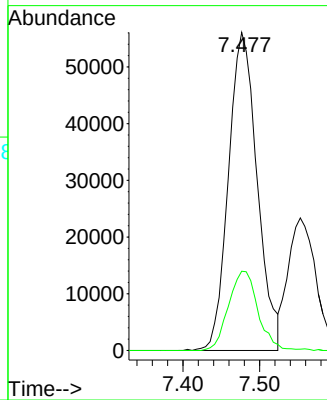
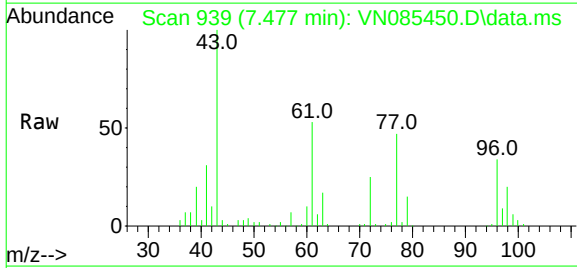
Ion Ratio Lower Upper

43 100

72 24.9 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#26

2,2-Dichloropropane

Concen: 20.576 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085450.D

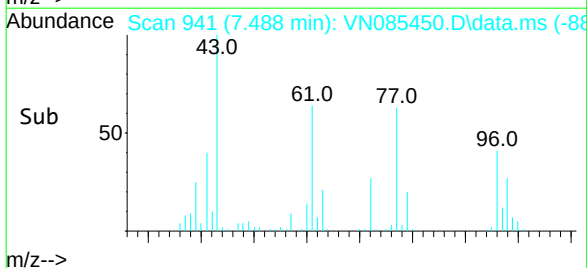
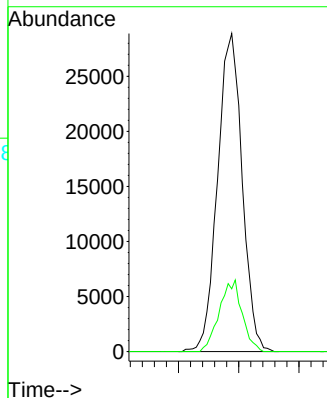
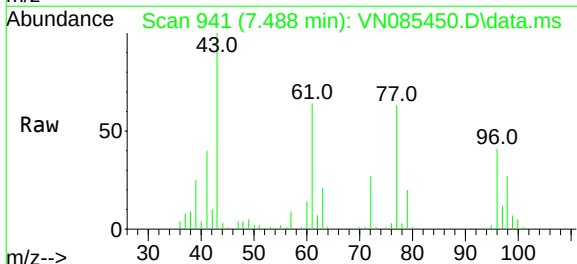
Acq: 15 Jan 2025 10:29

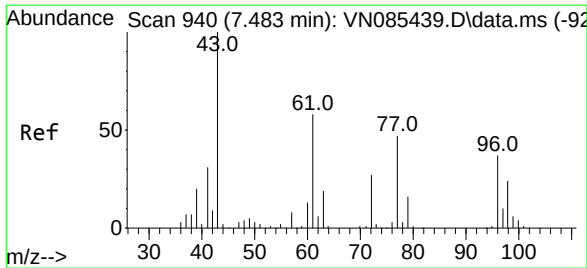
Tgt Ion: 77 Resp: 81881

Ion Ratio Lower Upper

77 100

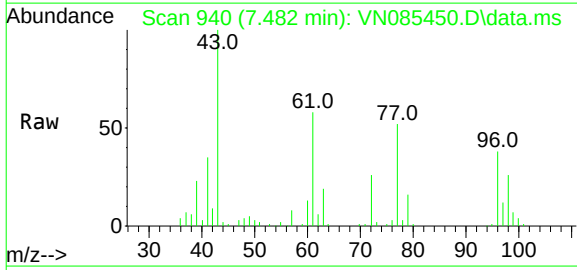
97 20.8 10.7 32.1





#27  
cis-1,2-Dichloroethene  
Concen: 18.654 ug/l  
RT: 7.482 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

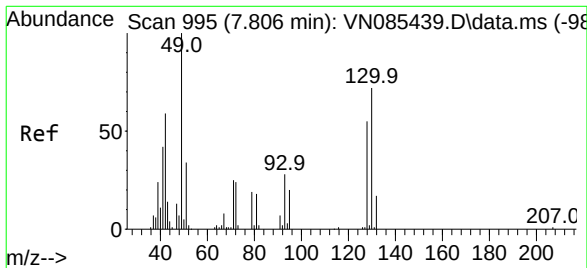
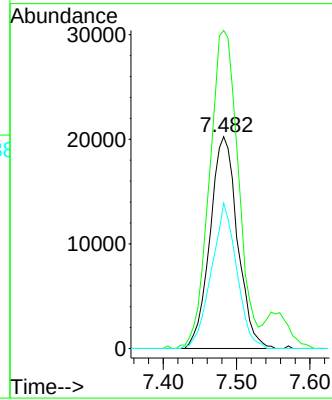
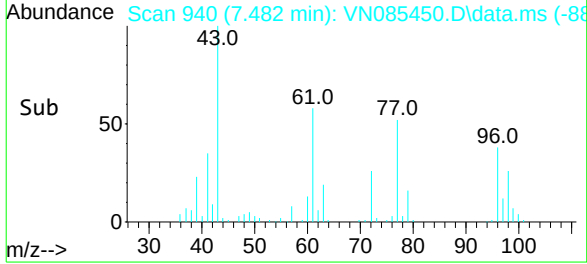
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion: 96 Resp: 52626  
Ion Ratio Lower Upper  
96 100  
61 157.4 0.0 311.8  
98 63.4 0.0 126.0

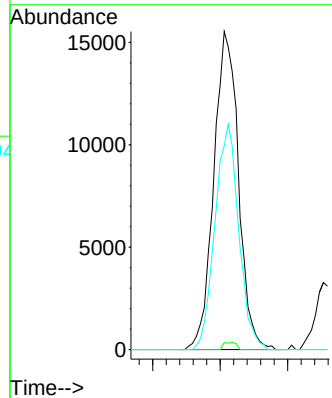
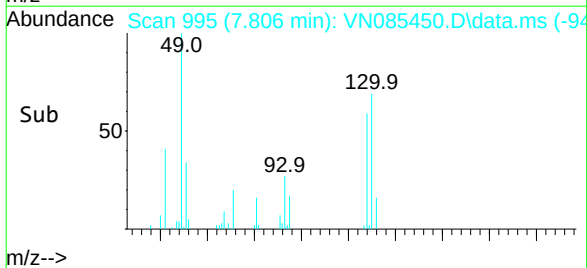
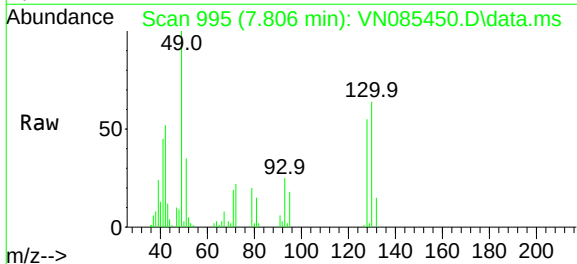
Manual Integrations  
APPROVED

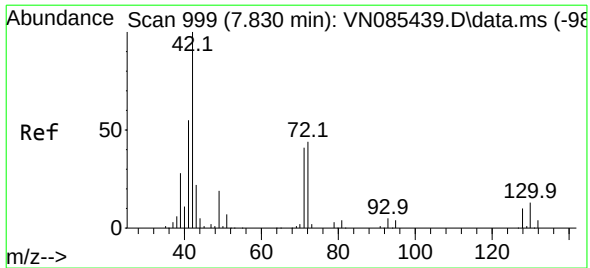
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#28  
Bromochloromethane  
Concen: 17.209 ug/l  
RT: 7.806 min Scan# 995  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 49 Resp: 39408  
Ion Ratio Lower Upper  
49 100  
129 1.2 0.0 4.4  
130 68.3 55.0 82.4





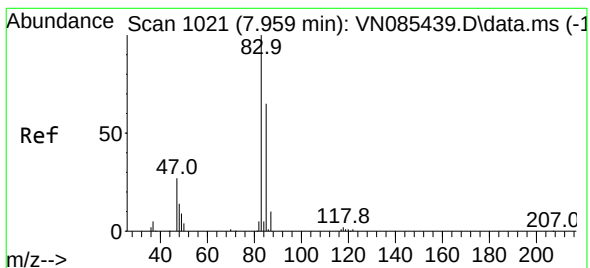
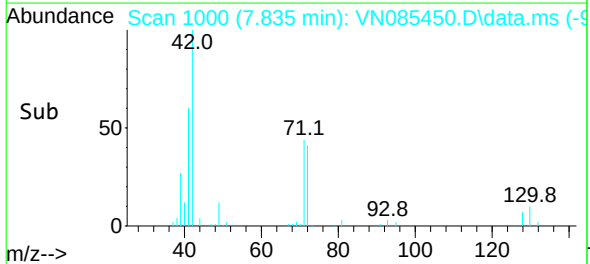
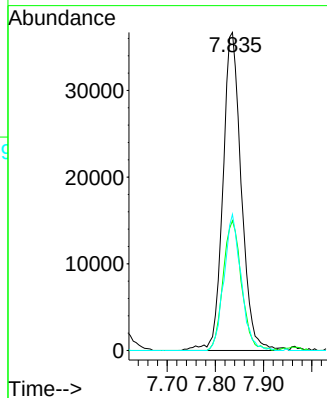
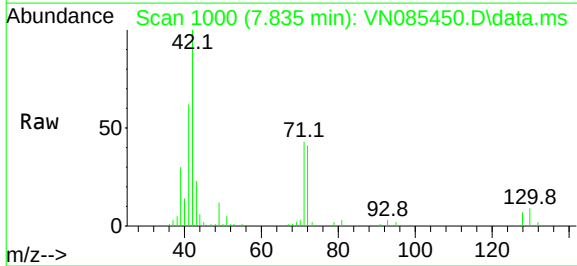
#29  
Tetrahydrofuran  
Concen: 95.619 ug/l  
RT: 7.835 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 42 Resp: 97170  
Ion Ratio Lower Upper  
42 100  
72 40.8 34.2 51.2  
71 39.9 32.5 48.7

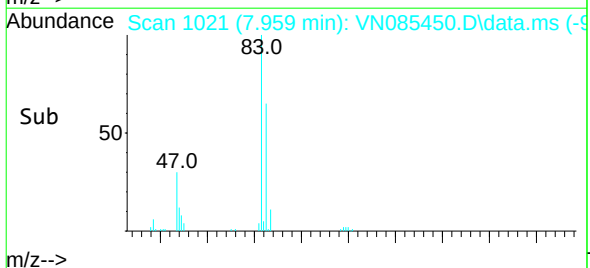
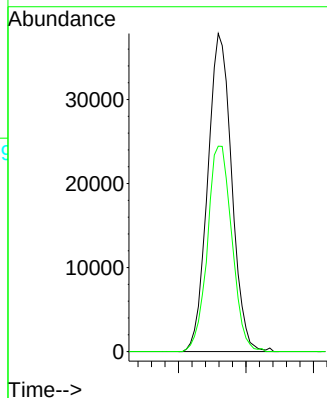
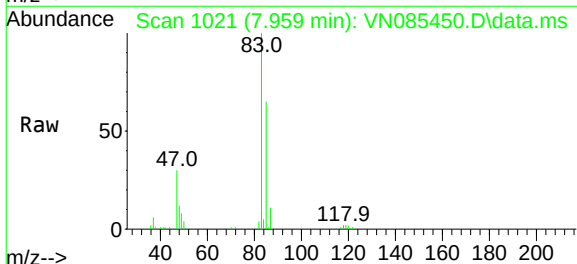
Manual Integrations  
APPROVED

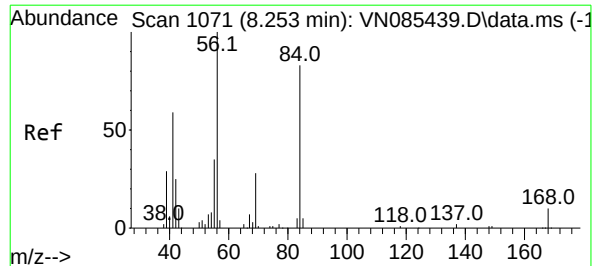
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#30  
Chloroform  
Concen: 18.400 ug/l  
RT: 7.959 min Scan# 1021  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 83 Resp: 93604  
Ion Ratio Lower Upper  
83 100  
85 64.6 51.8 77.6





#31

Cyclohexane

Concen: 18.500 ug/l

RT: 8.259 min Scan# 1071

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 56 Resp: 79144

Ion Ratio Lower Upper

56 100

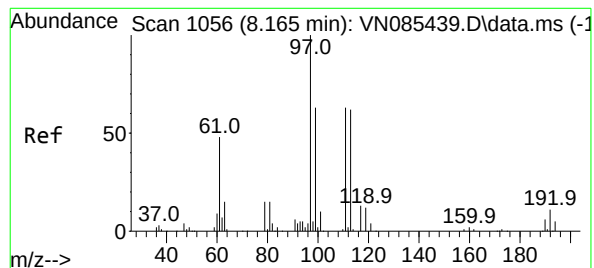
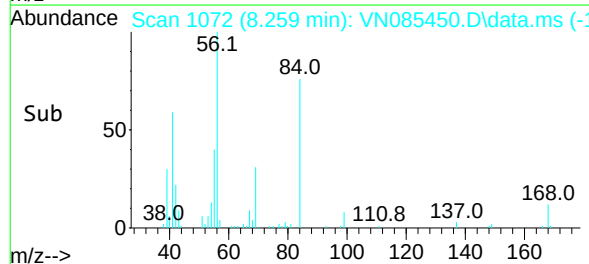
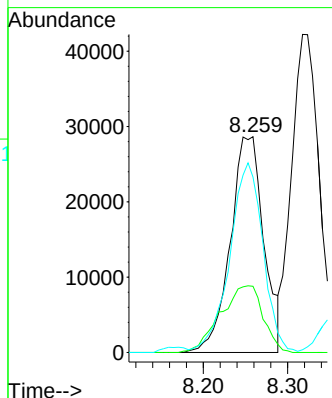
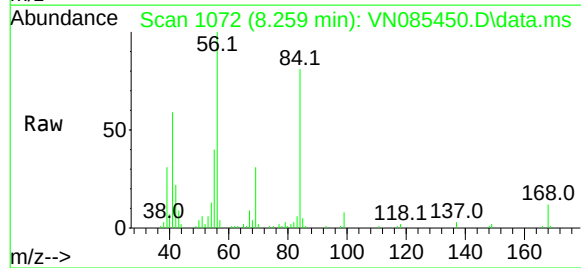
69 30.0 22.2 33.4

84 78.9 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#32

1,1,1-Trichloroethane

Concen: 18.618 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

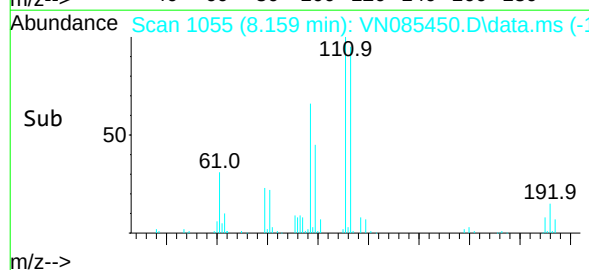
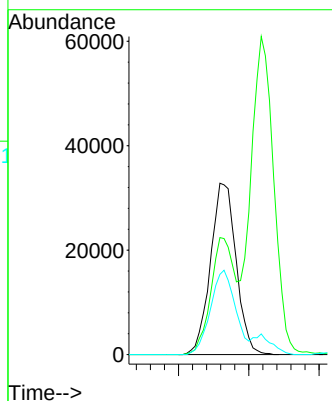
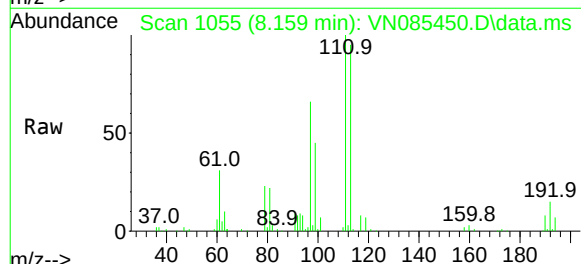
Tgt Ion: 97 Resp: 83081

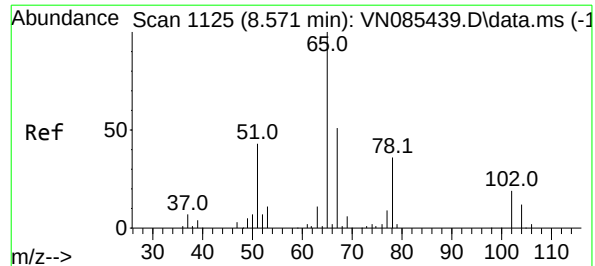
Ion Ratio Lower Upper

97 100

99 61.6 49.8 74.6

61 48.2 41.4 62.2





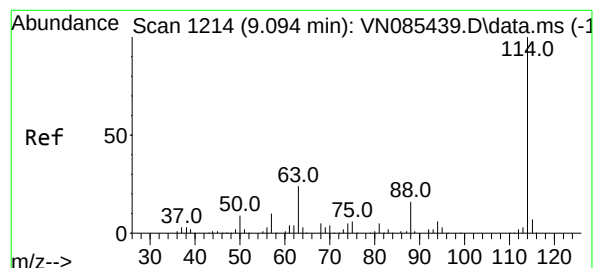
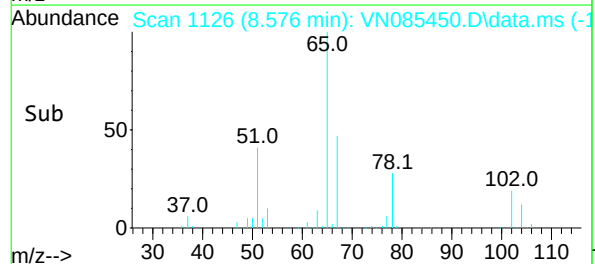
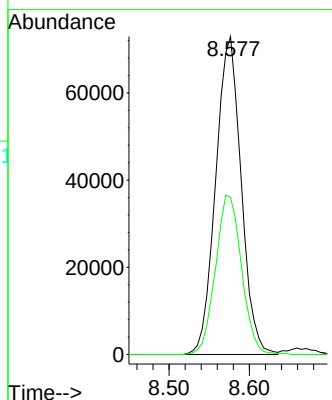
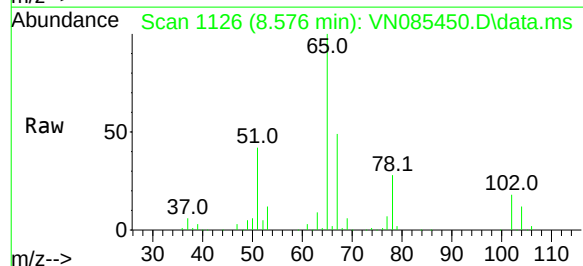
#33  
1,2-Dichloroethane-d4  
Concen: 47.611 ug/l  
RT: 8.576 min Scan# 1125  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 65 Resp: 160496  
Ion Ratio Lower Upper  
65 100  
67 51.3 0.0 101.6

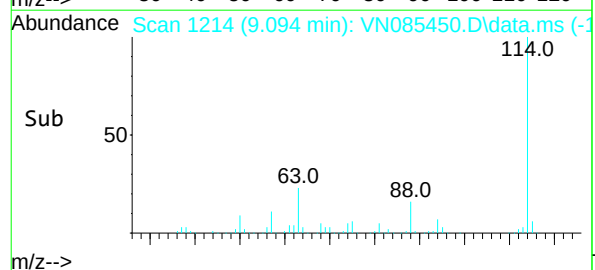
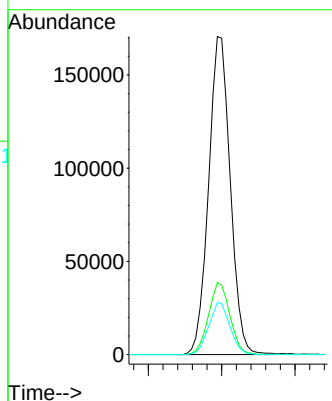
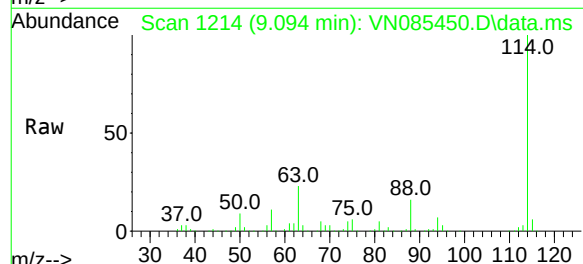
Manual Integrations  
APPROVED

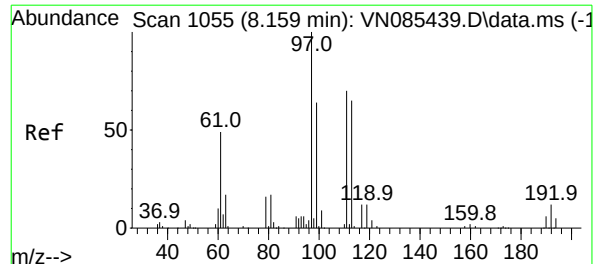
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.094 min Scan# 1214  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

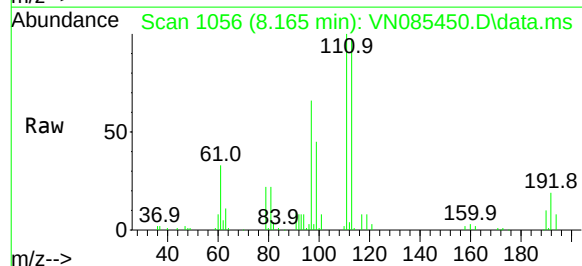
Tgt Ion:114 Resp: 350038  
Ion Ratio Lower Upper  
114 100  
63 22.7 0.0 47.6  
88 16.4 0.0 32.6





#35  
Dibromofluoromethane  
Concen: 48.506 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

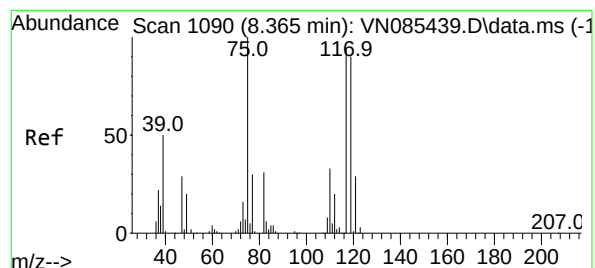
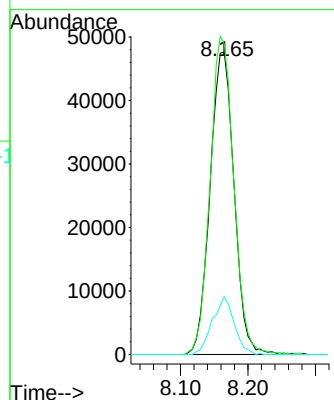
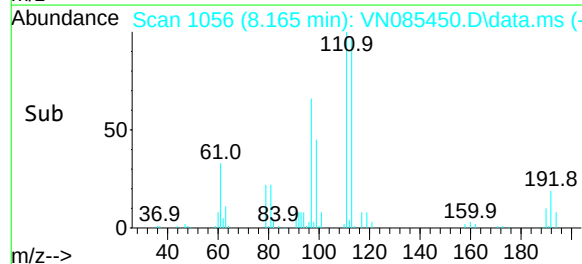
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion: 113 Resp: 117791  
Ion Ratio Lower Upper  
113 100  
111 103.8 82.7 124.1  
192 17.4 14.3 21.5

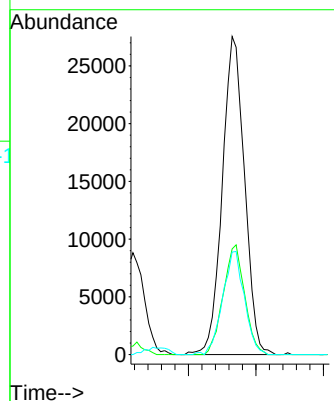
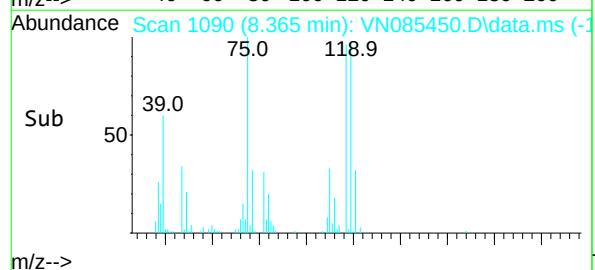
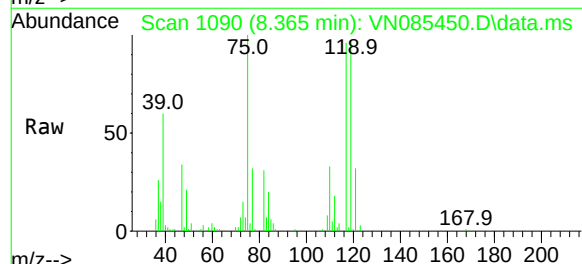
Manual Integrations  
APPROVED

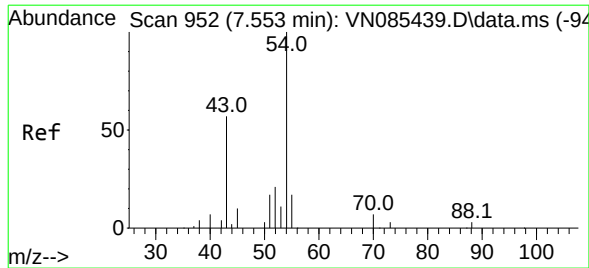
Reviewed By : Mahesh Dadoda 01/16/2025  
Supervised By : Semsettin Yesilyurt 01/16/2025



#36  
1,1-Dichloropropene  
Concen: 18.521 ug/l  
RT: 8.365 min Scan# 1090  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 75 Resp: 63125  
Ion Ratio Lower Upper  
75 100  
110 33.2 16.5 49.5  
77 31.7 24.4 36.6





#37

Ethyl Acetate

Concen: 18.113 ug/l

RT: 7.553 min Scan# 952

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 43 Resp: 62310

Ion Ratio Lower Upper

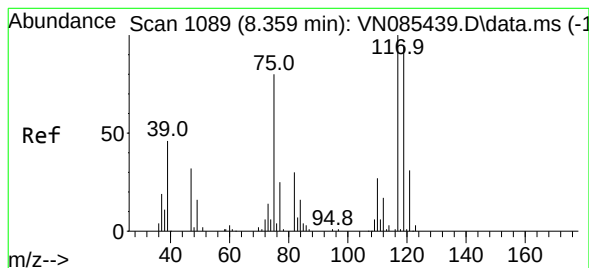
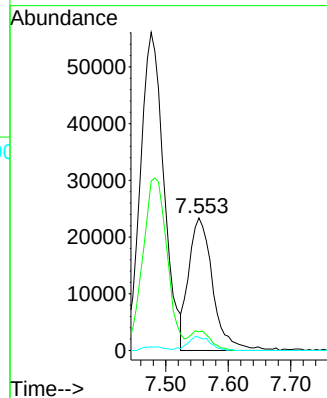
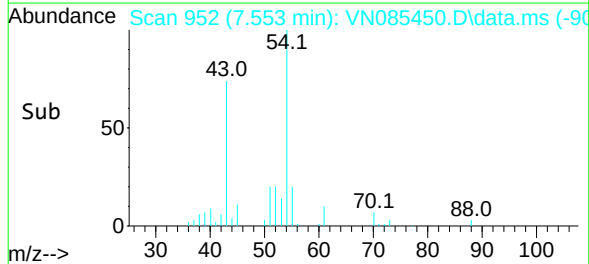
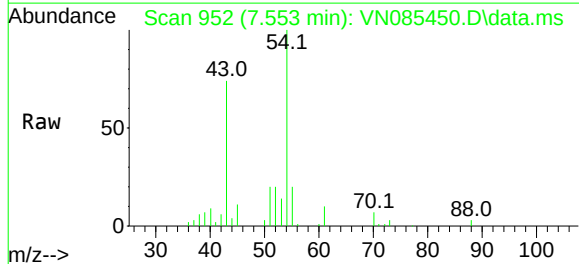
43 100

61 12.0 10.9 16.3

70 9.8 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#38

Carbon Tetrachloride

Concen: 19.039 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

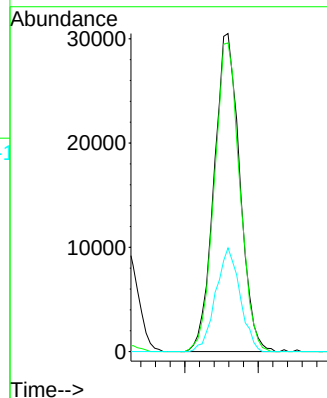
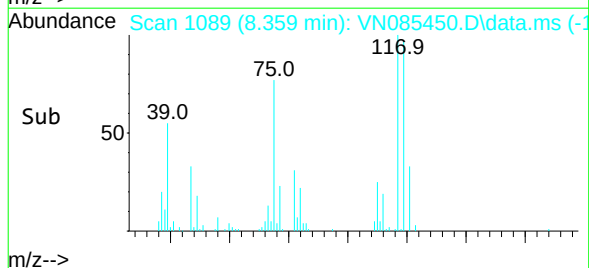
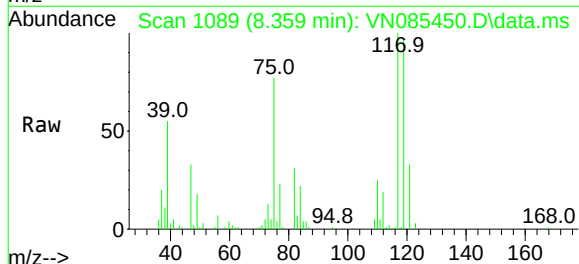
Tgt Ion:117 Resp: 74287

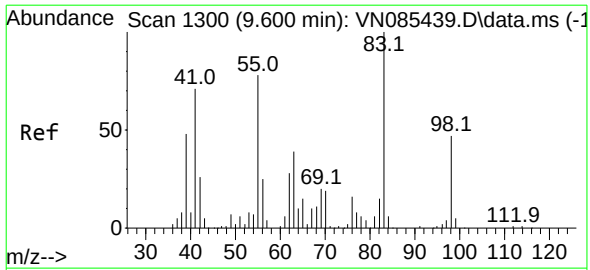
Ion Ratio Lower Upper

117 100

119 97.1 75.4 113.2

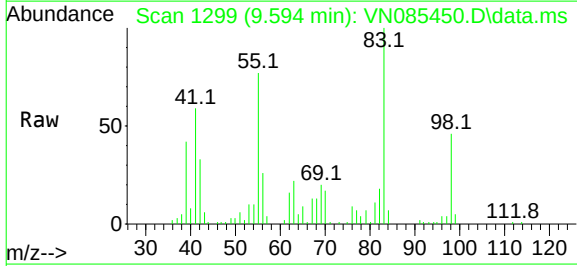
121 32.6 24.6 37.0





#39  
Methylcyclohexane  
Concen: 19.799 ug/l  
RT: 9.594 min Scan# 1299  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

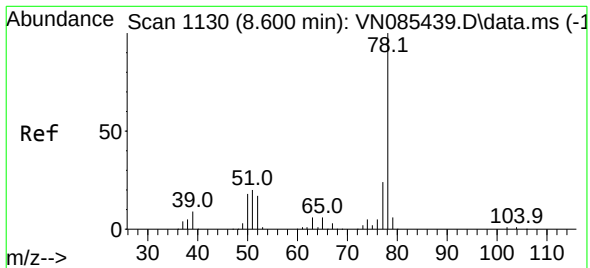
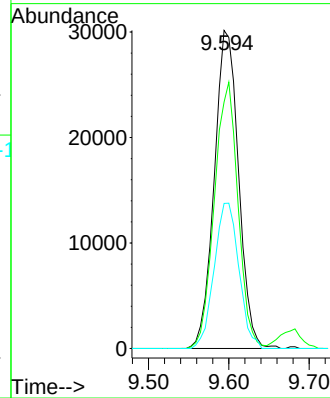
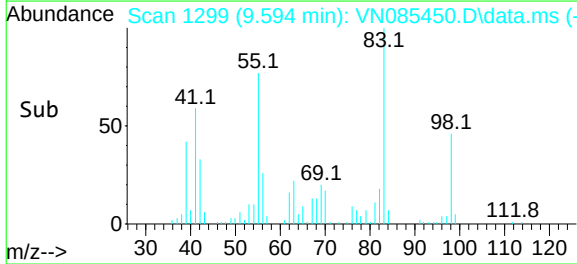
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion: 83 Resp: 63410  
Ion Ratio Lower Upper  
83 100  
55 77.5 62.6 94.0  
98 45.6 37.7 56.5

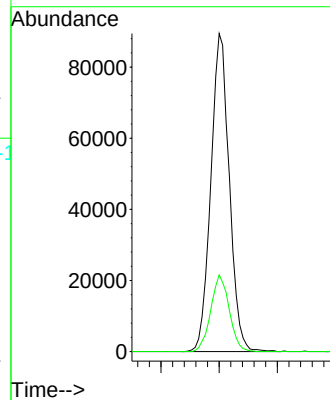
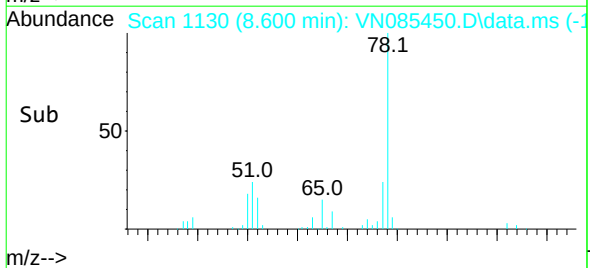
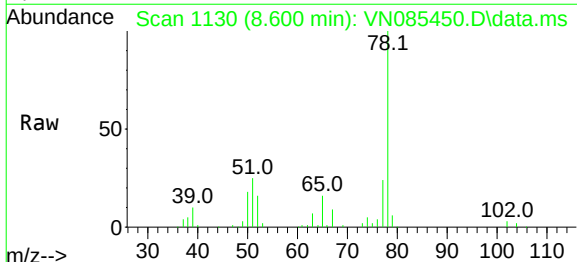
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

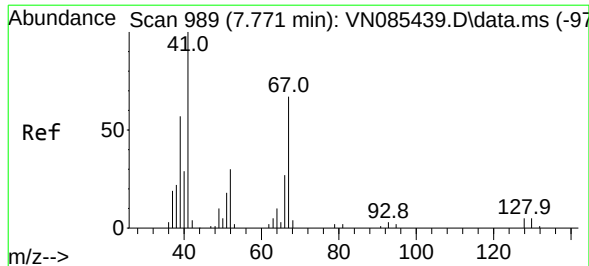


#40  
Benzene  
Concen: 19.222 ug/l  
RT: 8.600 min Scan# 1130  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 78 Resp: 196843  
Ion Ratio Lower Upper  
78 100  
77 24.1 19.0 28.6







#41

Methacrylonitrile

Concen: 19.082 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 41 Resp: 34152

Ion Ratio Lower Upper

41 100

39 55.0 46.0 69.0

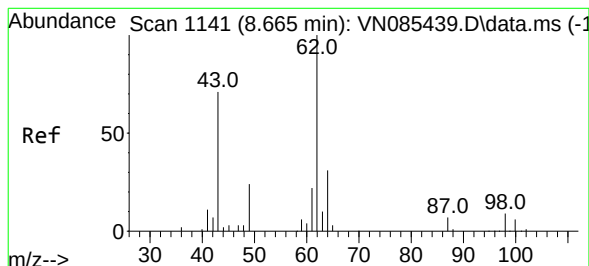
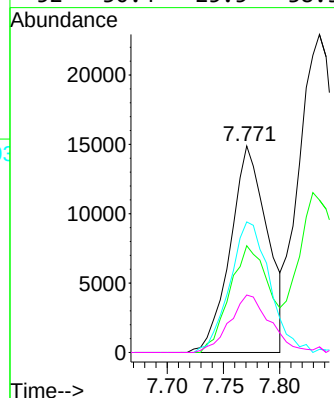
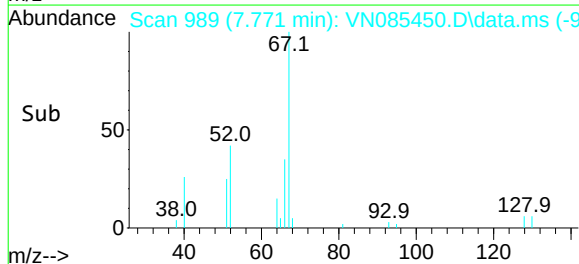
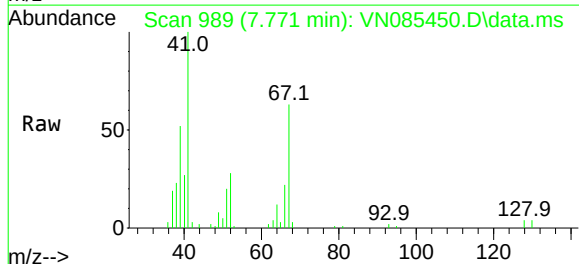
67 68.1 57.4 86.2

52 30.4 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#42

1,2-Dichloroethane

Concen: 18.835 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085450.D

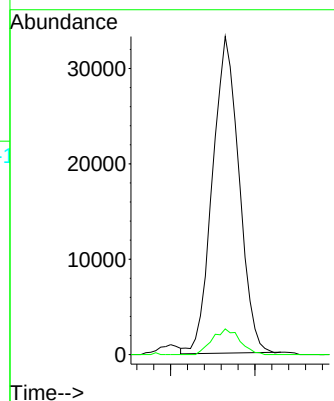
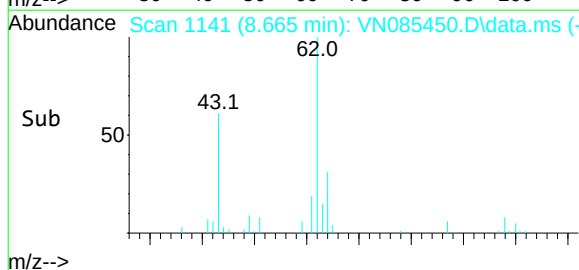
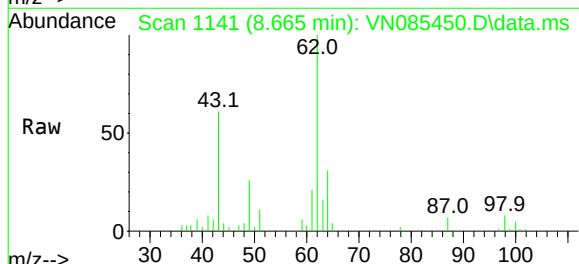
Acq: 15 Jan 2025 10:29

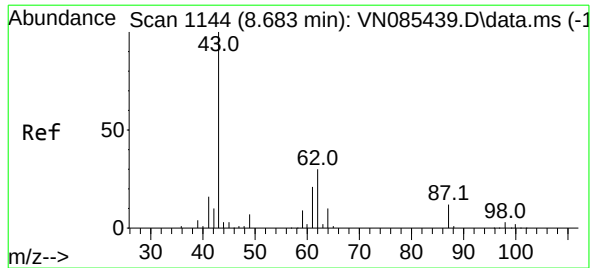
Tgt Ion: 62 Resp: 72644

Ion Ratio Lower Upper

62 100

98 8.4 0.0 17.0





#43

Isopropyl Acetate

Concen: 18.059 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 43 Resp: 99545

Ion Ratio Lower Upper

43 100

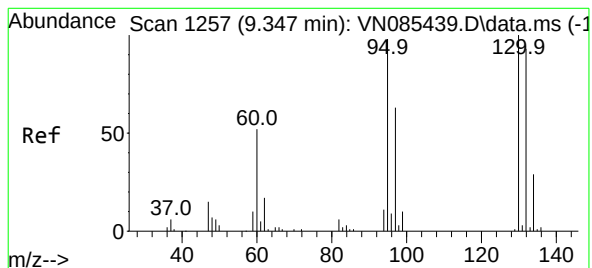
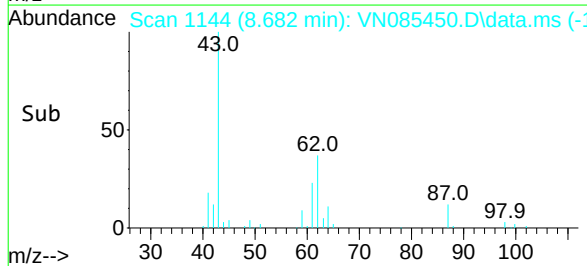
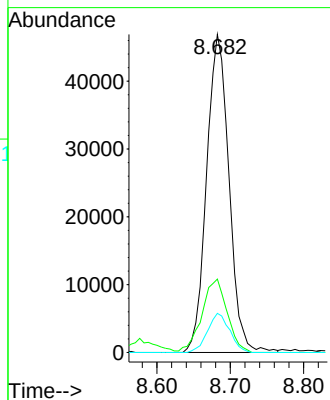
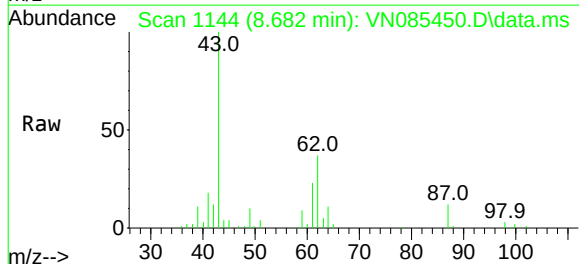
61 26.0 20.7 31.1

87 12.1 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#44

Trichloroethene

Concen: 19.224 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085450.D

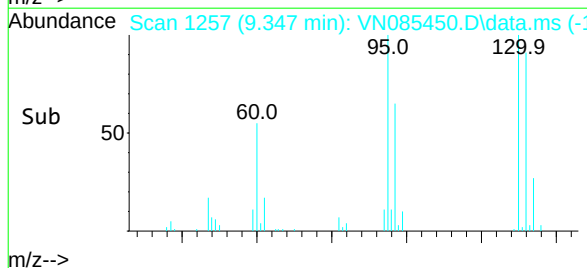
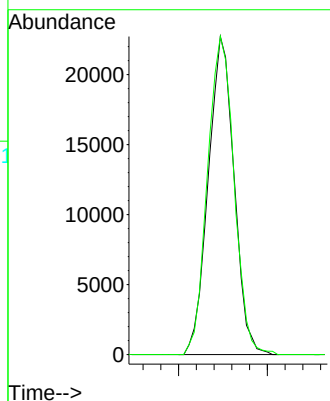
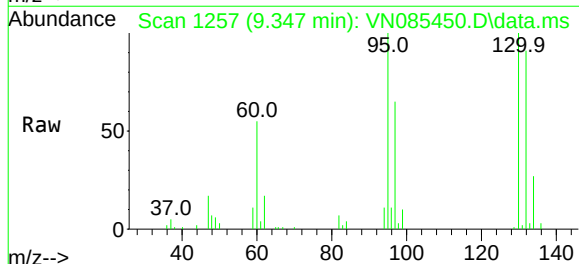
Acq: 15 Jan 2025 10:29

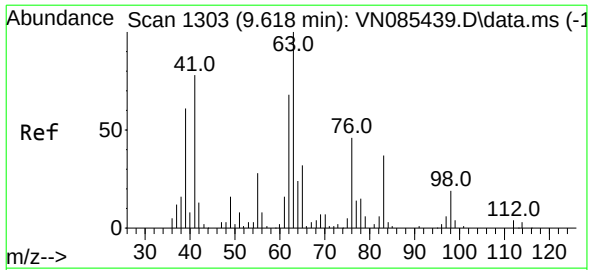
Tgt Ion:130 Resp: 45825

Ion Ratio Lower Upper

130 100

95 100.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 18.931 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 63 Resp: 49517

Ion Ratio Lower Upper

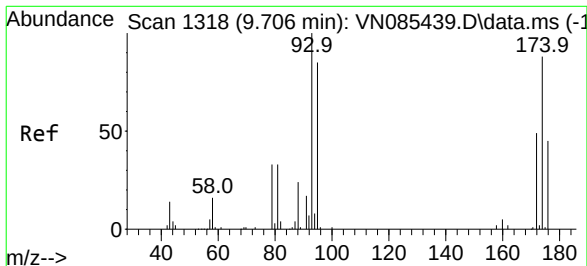
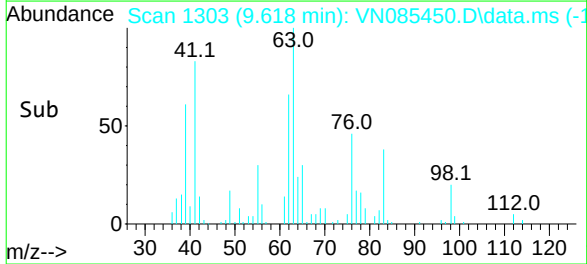
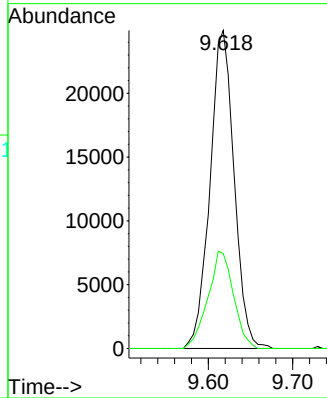
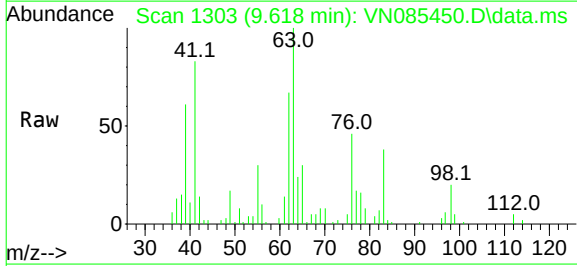
63 100

65 29.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#46

Dibromomethane

Concen: 18.531 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

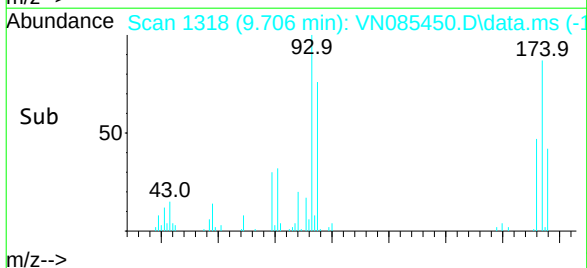
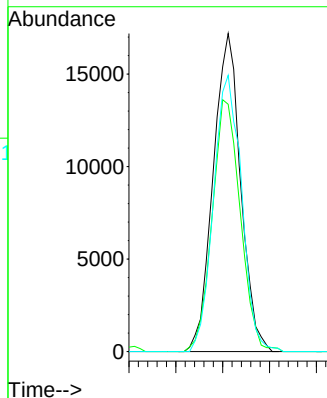
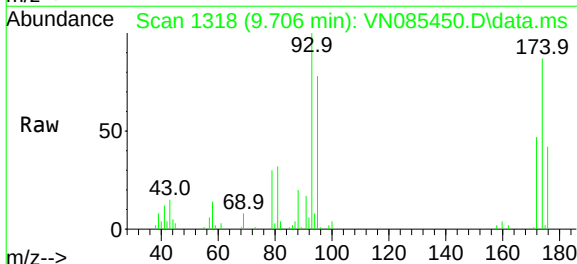
Tgt Ion: 93 Resp: 34976

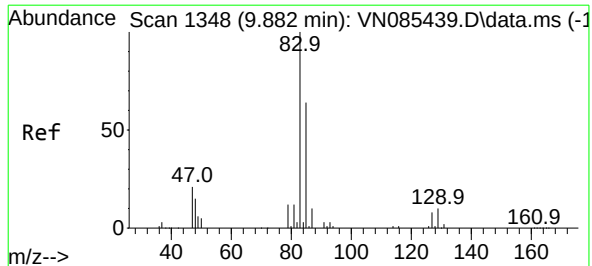
Ion Ratio Lower Upper

93 100

95 80.9 64.7 97.1

174 88.6 69.0 103.4





#47

Bromodichloromethane

Concen: 19.759 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085450.D

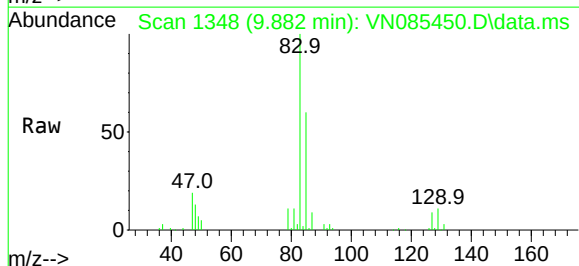
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

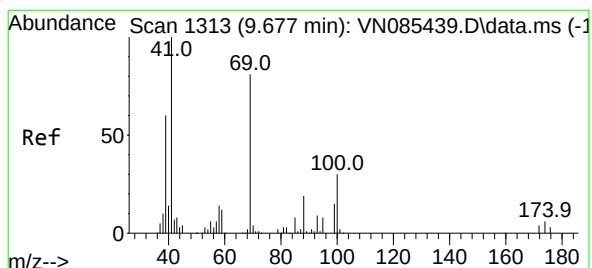
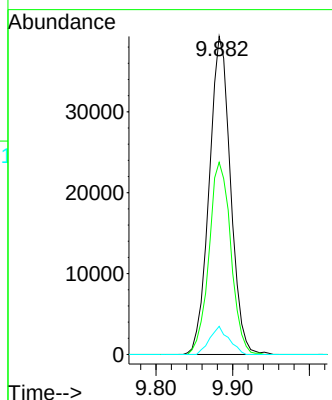
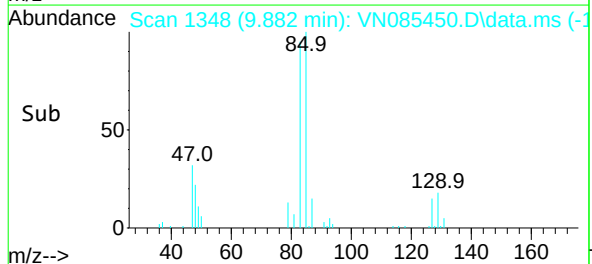
VN0115WBS01



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 75979 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 60.4  | 51.2  | 76.8  |
| 127      | 8.8   | 6.5   | 9.7   |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#48

Methyl methacrylate

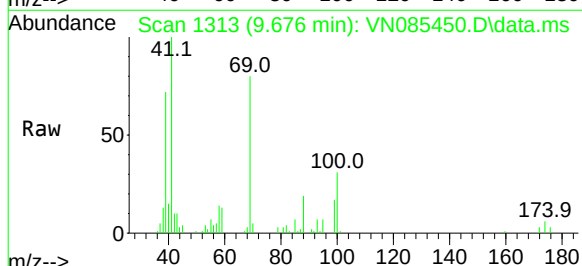
Concen: 19.143 ug/l

RT: 9.676 min Scan# 1313

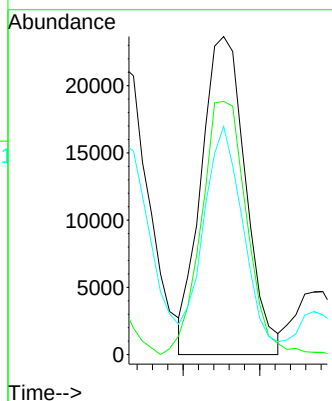
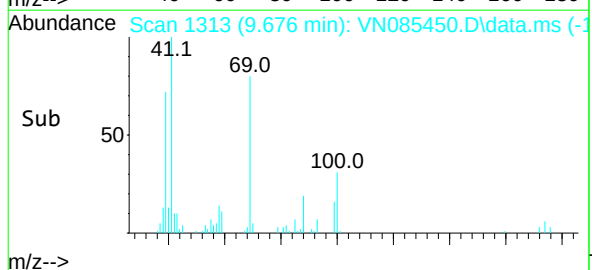
Delta R.T. -0.001 min

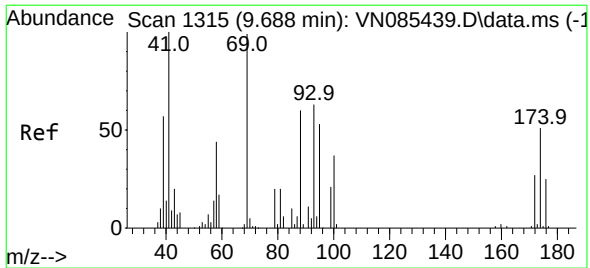
Lab File: VN085450.D

Acq: 15 Jan 2025 10:29



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 47488 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 81.2  | 64.7  | 97.1  |
| 39       | 65.3  | 49.0  | 73.6  |





#49

1,4-Dioxane

Concen: 343.615 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085450.D

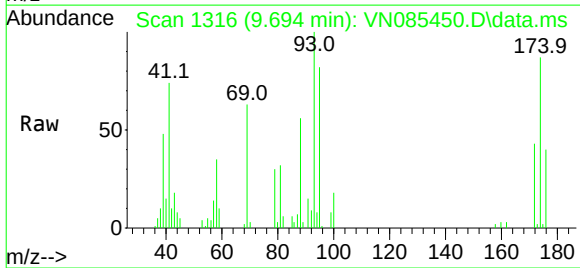
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion: 88 Resp: 14354

Ion Ratio Lower Upper

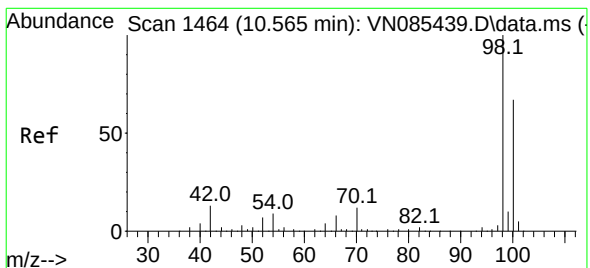
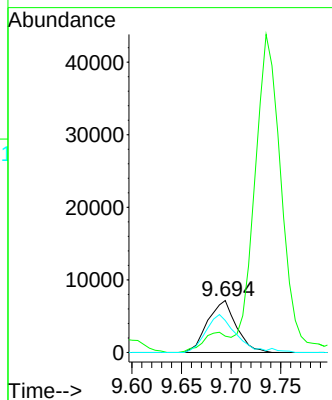
88 100

43 36.4 26.6 39.8

58 77.8 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#50

Toluene-d8

Concen: 50.376 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085450.D

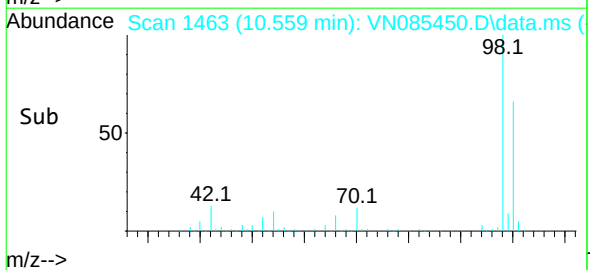
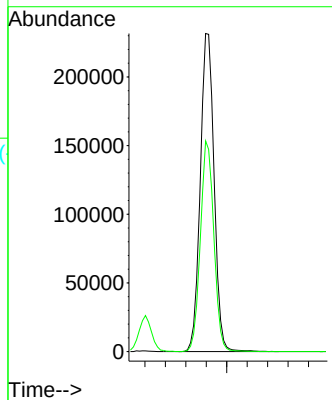
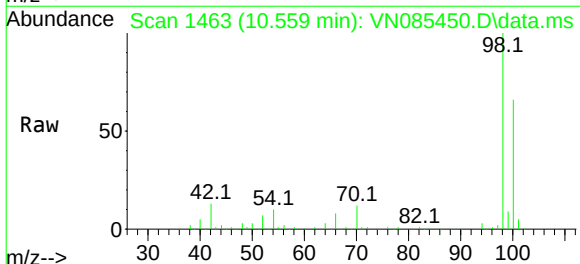
Acq: 15 Jan 2025 10:29

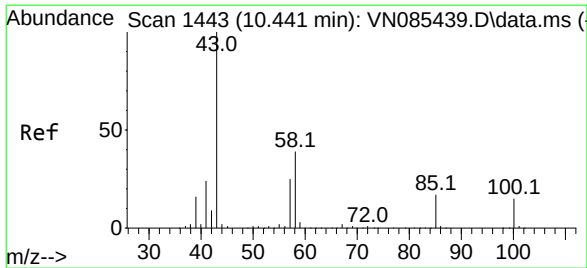
Tgt Ion: 98 Resp: 434650

Ion Ratio Lower Upper

98 100

100 64.6 52.2 78.4





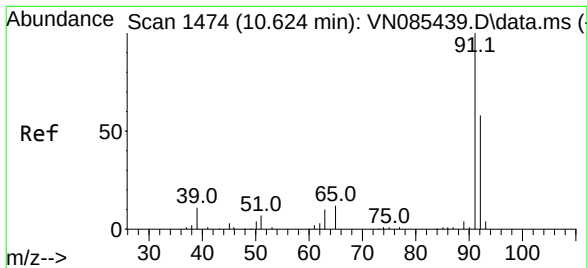
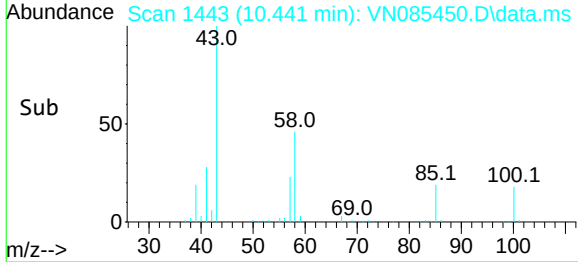
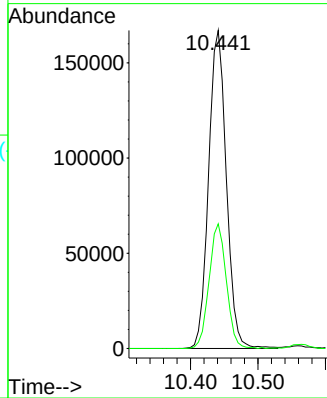
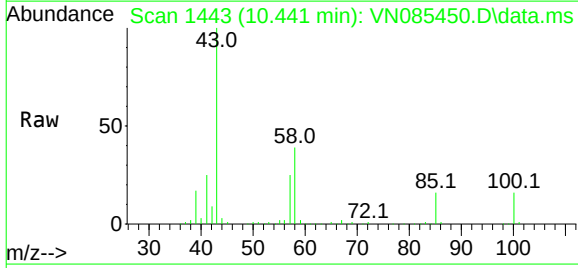
#51  
4-Methyl-2-Pentanone  
Concen: 95.328 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 43 Resp: 304924  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7

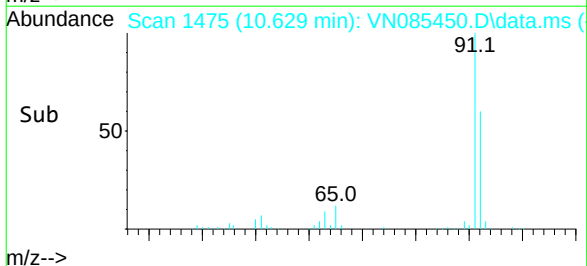
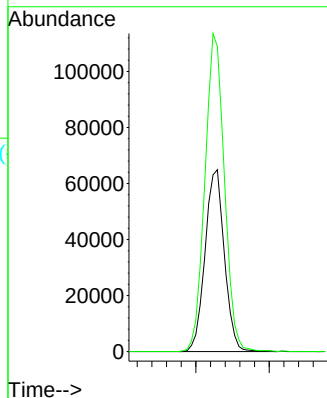
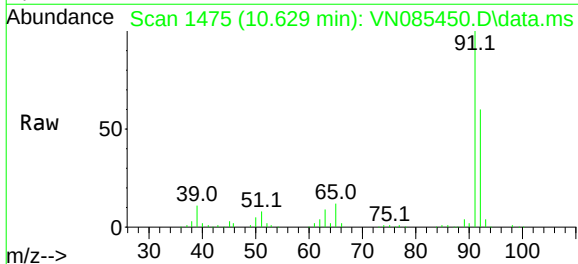
Manual Integrations  
APPROVED

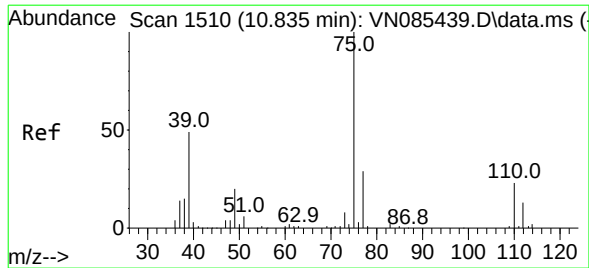
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#52  
Toluene  
Concen: 20.053 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 92 Resp: 118985  
Ion Ratio Lower Upper  
92 100  
91 176.2 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 19.044 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 75 Resp: 69201

Ion Ratio Lower Upper

75 100

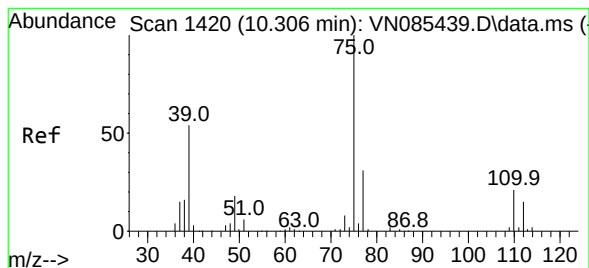
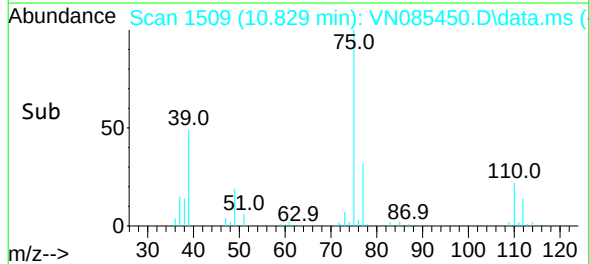
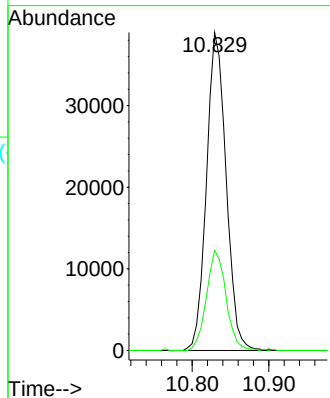
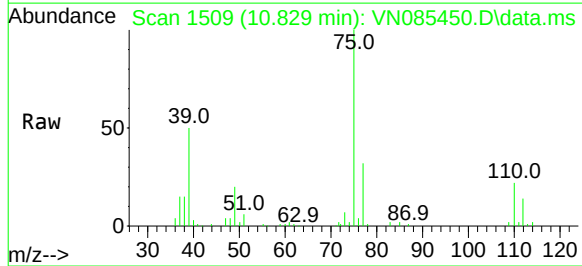
77 31.5 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#54

cis-1,3-Dichloropropene

Concen: 19.958 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

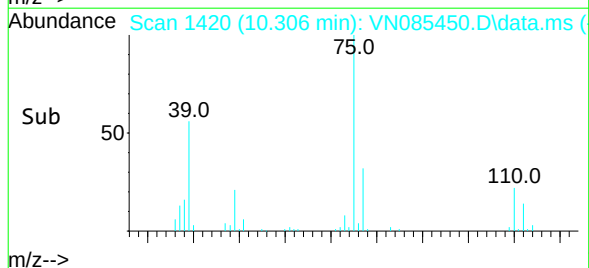
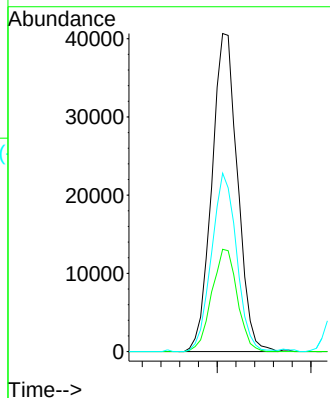
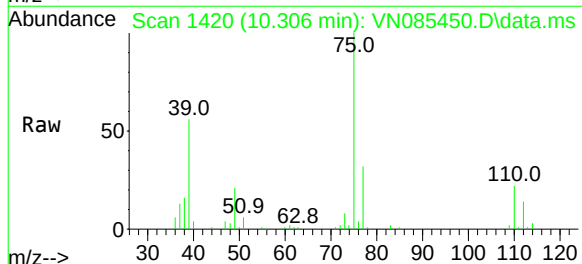
Tgt Ion: 75 Resp: 77467

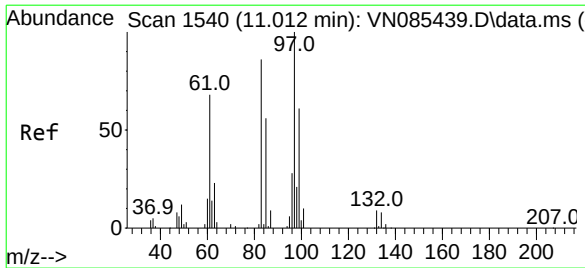
Ion Ratio Lower Upper

75 100

77 32.2 25.0 37.4

39 56.1 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 18.906 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 97 Resp: 44394

Ion Ratio Lower Upper

97 100

83 84.9 69.0 103.6

85 56.3 44.6 66.8

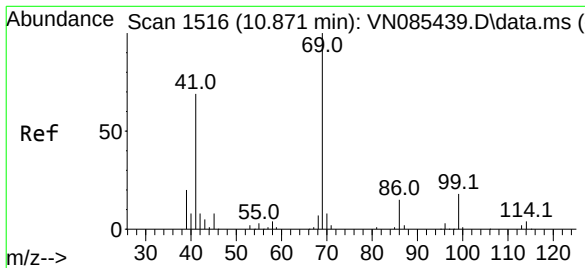
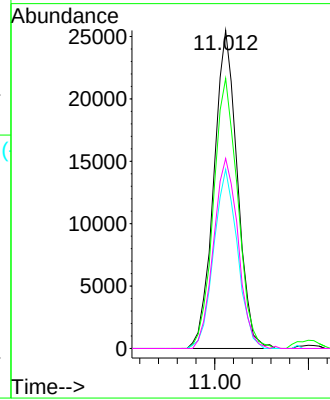
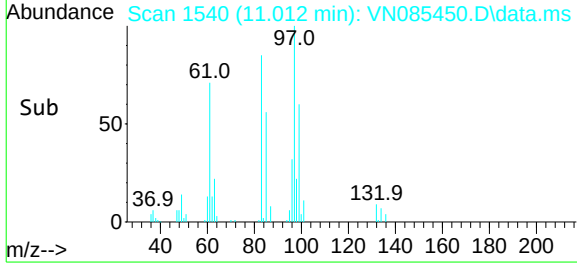
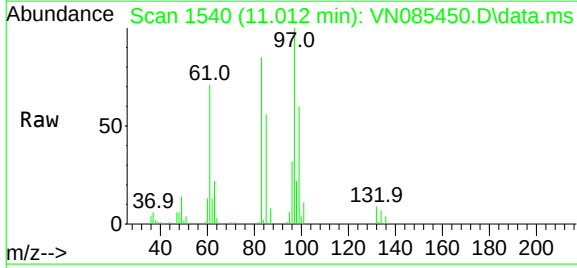
99 59.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#56

Ethyl methacrylate

Concen: 17.379 ug/l

RT: 10.870 min Scan# 1516

Delta R.T. -0.001 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

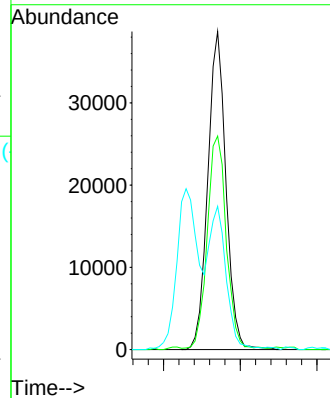
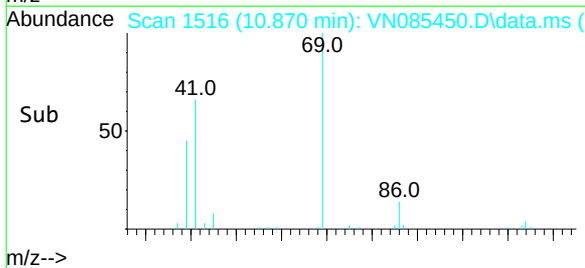
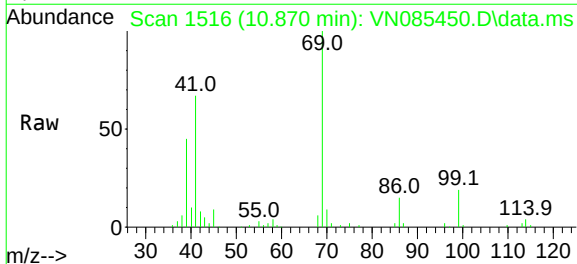
Tgt Ion: 69 Resp: 63560

Ion Ratio Lower Upper

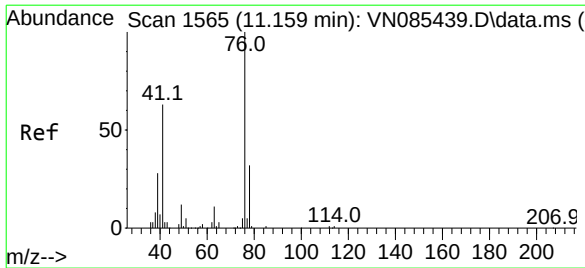
69 100

41 69.4 54.6 82.0

39 41.4 32.4 48.6







#57

1,3-Dichloropropane

Concen: 19.136 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 76 Resp: 78133

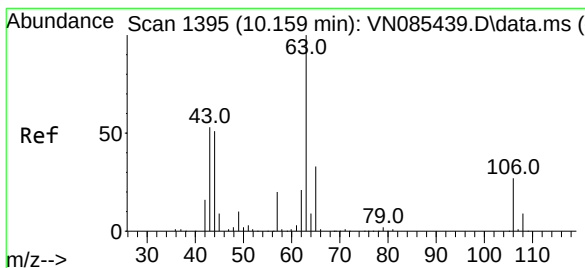
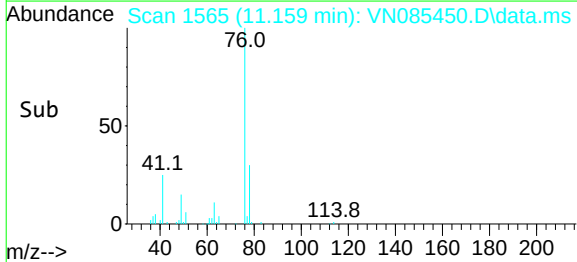
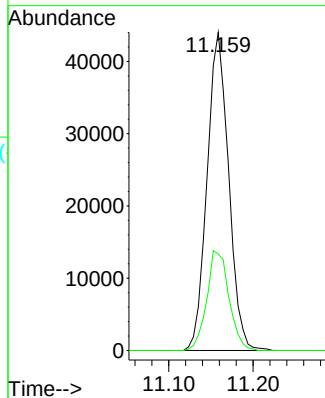
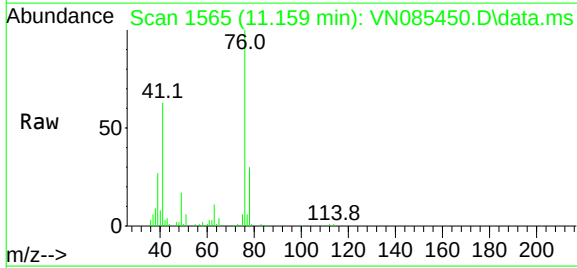
Ion Ratio Lower Upper

76 100

78 32.3 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#58

2-Chloroethyl Vinyl ether

Concen: 99.810 ug/l

RT: 10.153 min Scan# 1394

Delta R.T. -0.006 min

Lab File: VN085450.D

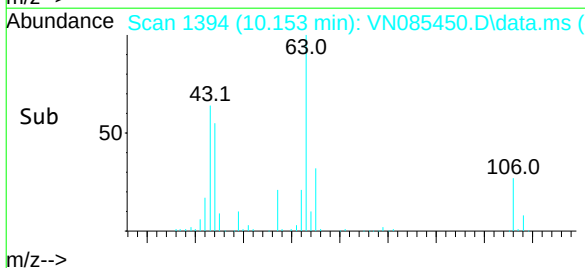
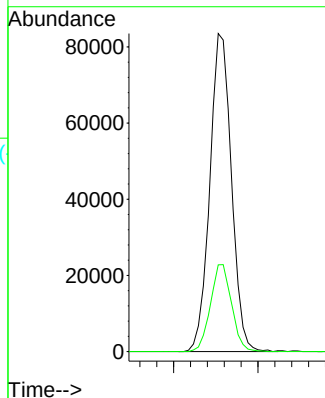
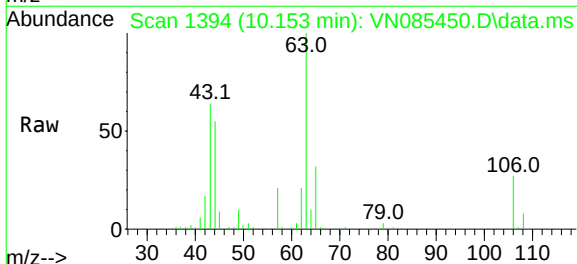
Acq: 15 Jan 2025 10:29

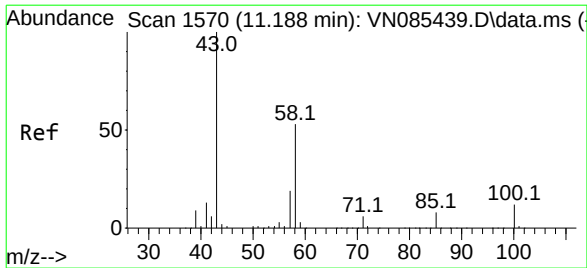
Tgt Ion: 63 Resp: 148732

Ion Ratio Lower Upper

63 100

106 26.7 21.6 32.4





#59

2-Hexanone

Concen: 96.472 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 43 Resp: 217128

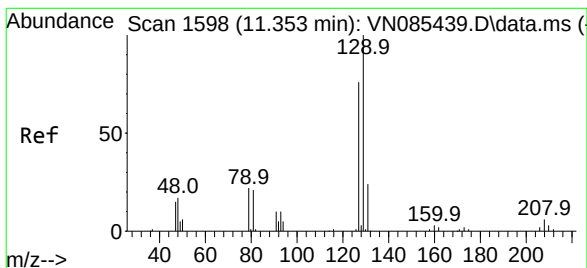
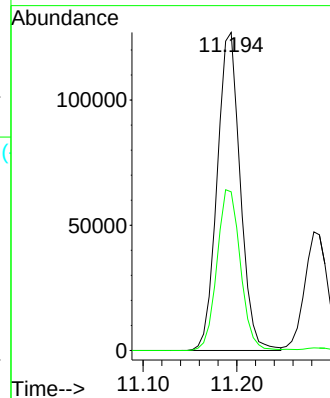
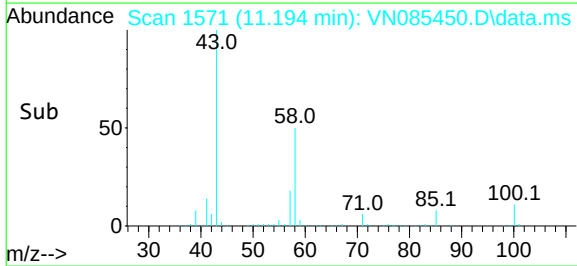
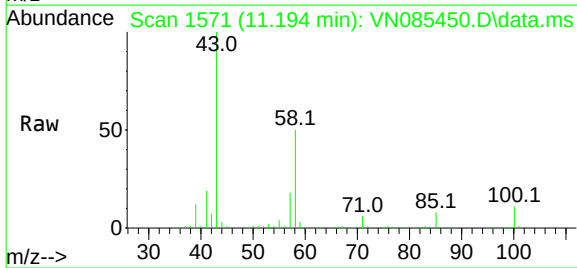
Ion Ratio Lower Upper

43 100

58 51.2 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#60

Dibromochloromethane

Concen: 19.097 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. -0.000 min

Lab File: VN085450.D

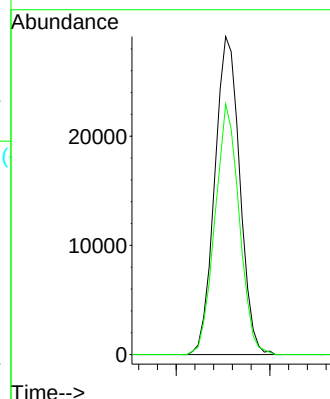
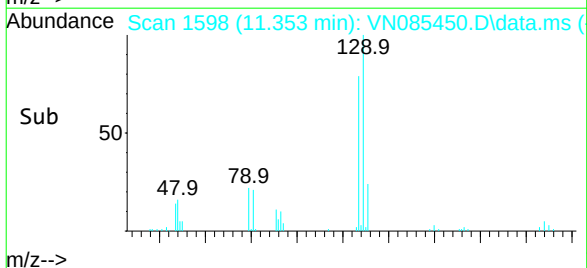
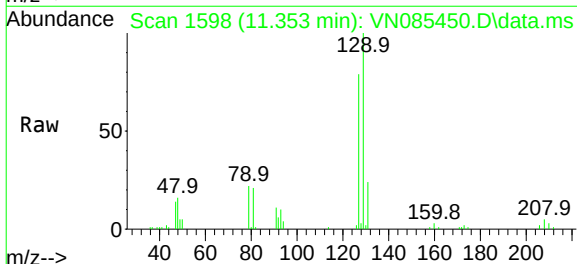
Acq: 15 Jan 2025 10:29

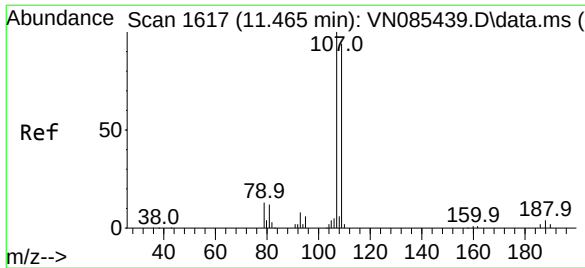
Tgt Ion:129 Resp: 54139

Ion Ratio Lower Upper

129 100

127 76.2 38.6 115.8





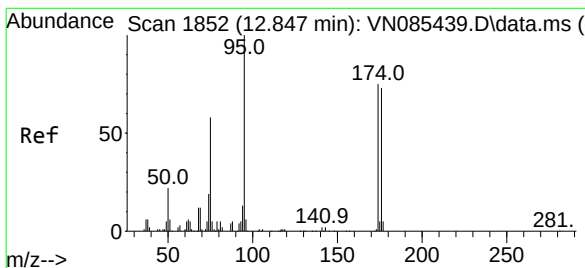
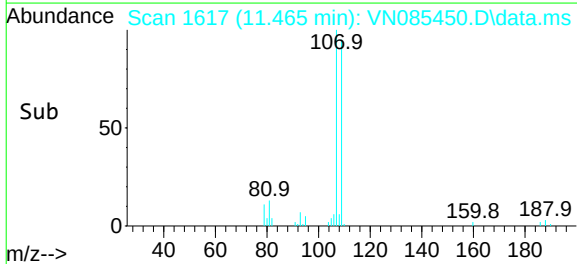
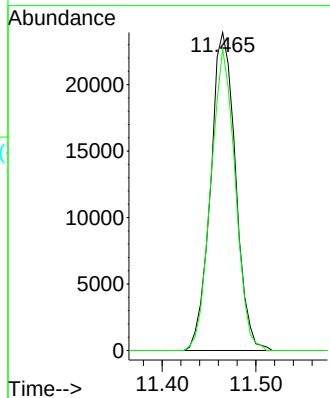
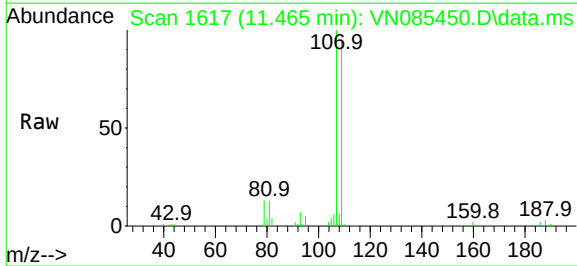
#61  
1,2-Dibromoethane  
Concen: 18.932 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 107 Resp: 44253  
Ion Ratio Lower Upper  
107 100  
109 92.6 75.9 113.9

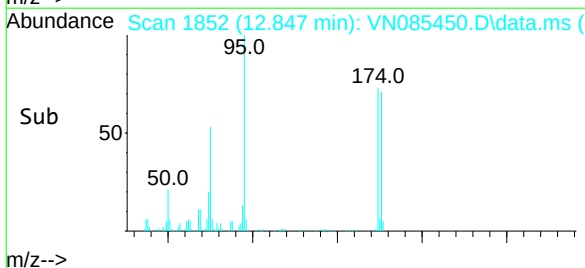
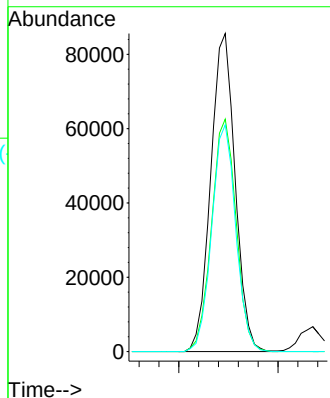
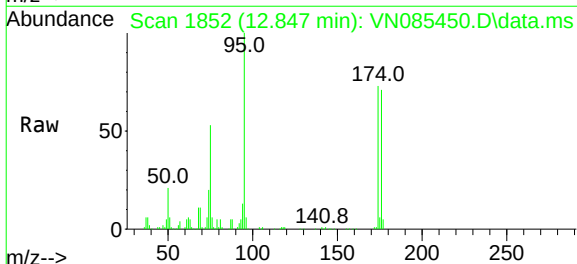
Manual Integrations  
APPROVED

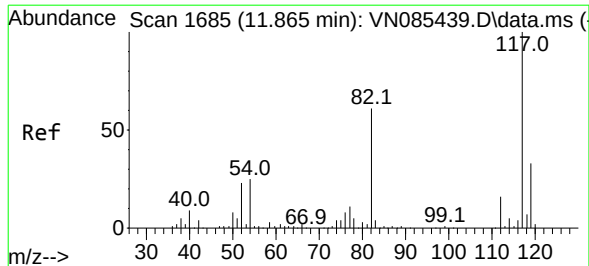
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#62  
4-Bromofluorobenzene  
Concen: 49.491 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 95 Resp: 146069  
Ion Ratio Lower Upper  
95 100  
174 73.5 0.0 145.0  
176 70.2 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: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:117 Resp: 301633

Ion Ratio Lower Upper

117 100

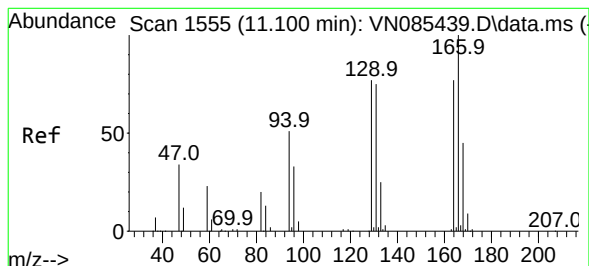
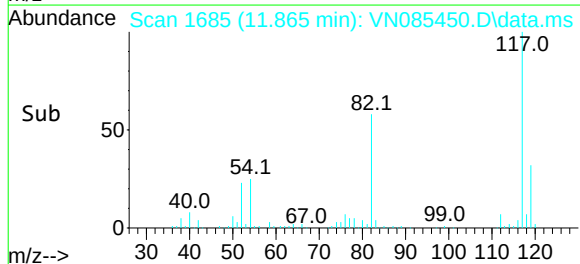
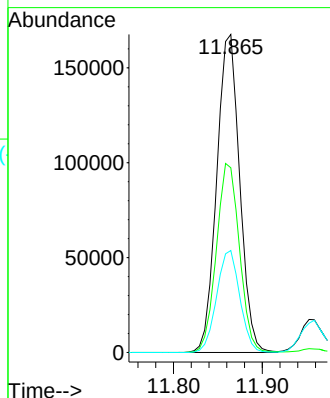
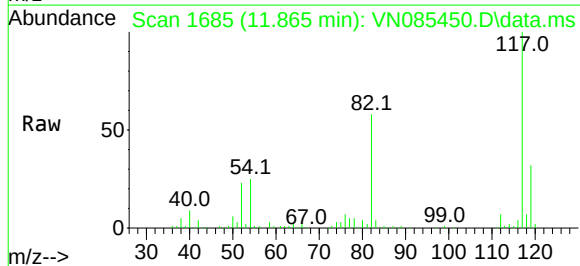
82 58.1 48.6 72.8

119 32.1 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#64

Tetrachloroethene

Concen: 20.068 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Tgt Ion:164 Resp: 41267

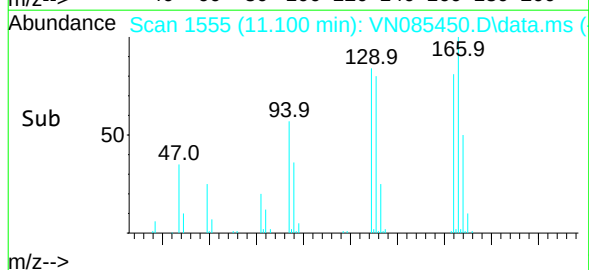
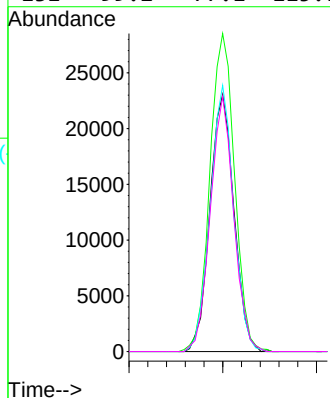
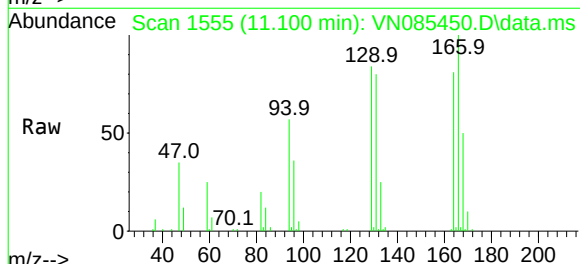
Ion Ratio Lower Upper

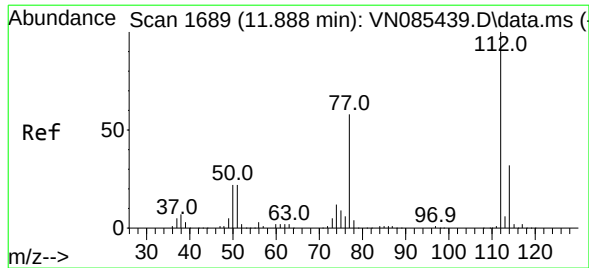
164 100

166 123.7 103.4 155.2

129 103.5 79.2 118.8

131 99.2 77.1 115.7





#65

Chlorobenzene

Concen: 19.304 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:112 Resp: 127557

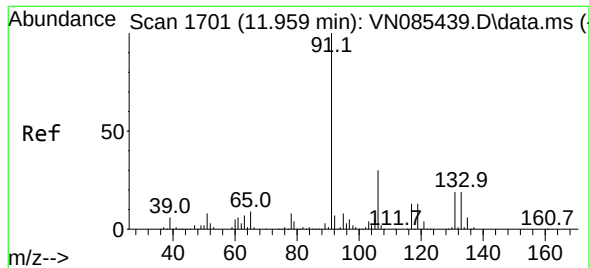
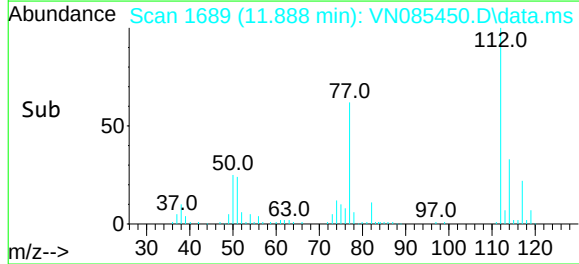
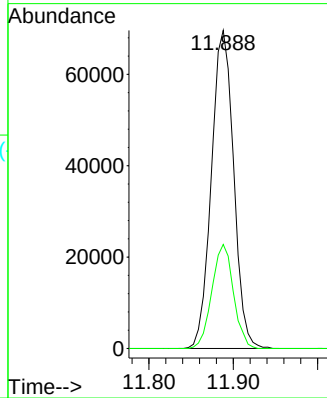
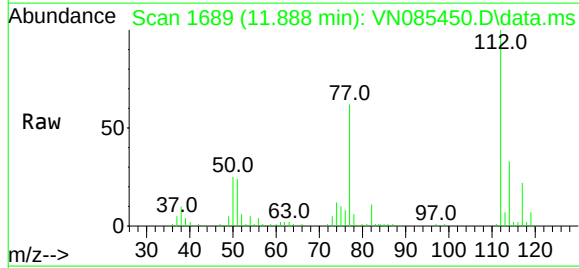
Ion Ratio Lower Upper

112 100

114 32.7 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#66

1,1,1,2-Tetrachloroethane

Concen: 18.821 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

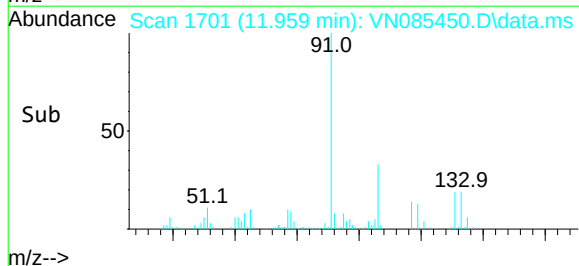
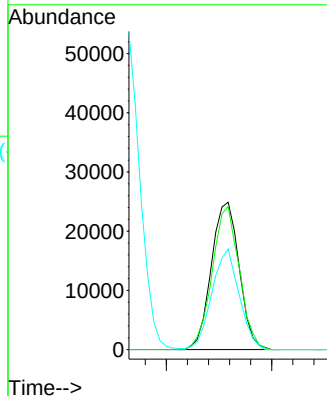
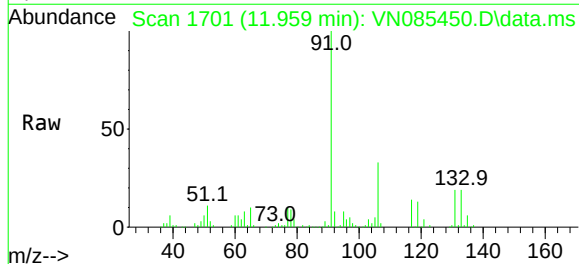
Tgt Ion:131 Resp: 45645

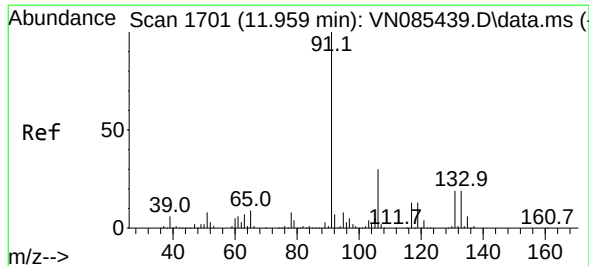
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.9 33.1 99.5





#67

Ethyl Benzene

Concen: 20.019 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085450.D

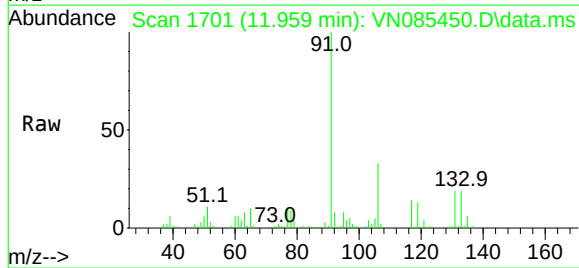
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion: 91 Resp: 215448

Ion Ratio Lower Upper

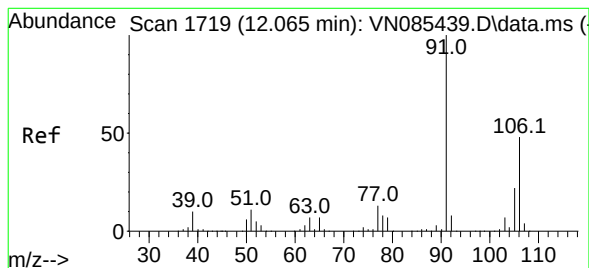
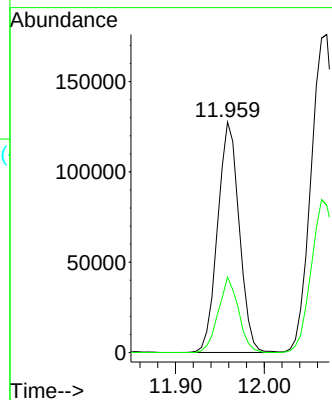
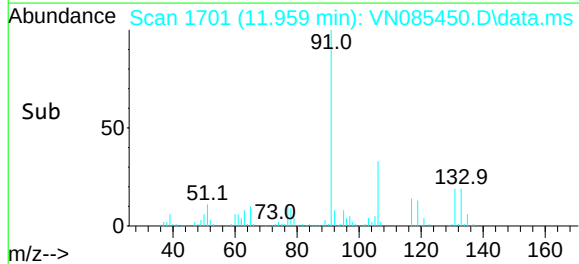
91 100

106 32.7 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#68

m/p-Xylenes

Concen: 41.314 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. -0.000 min

Lab File: VN085450.D

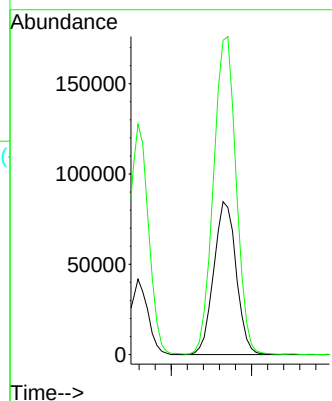
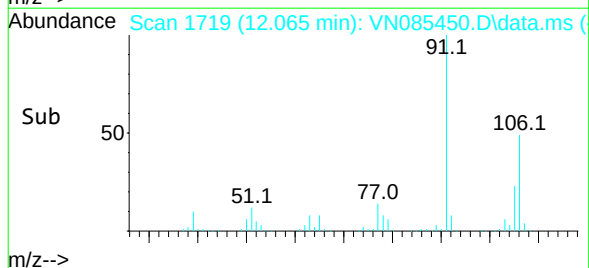
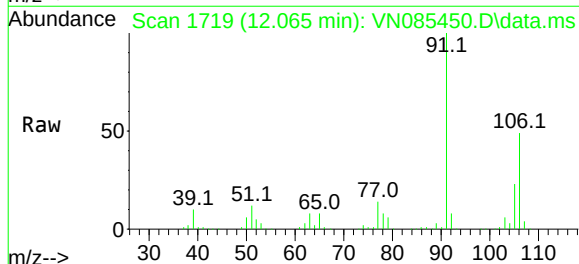
Acq: 15 Jan 2025 10:29

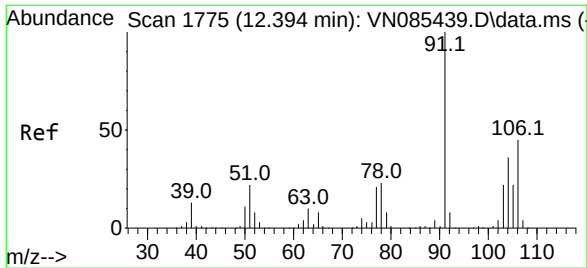
Tgt Ion:106 Resp: 164329

Ion Ratio Lower Upper

106 100

91 209.5 167.7 251.5





#69

o-Xylene

Concen: 20.184 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:106 Resp: 76723

Ion Ratio Lower Upper

106 100

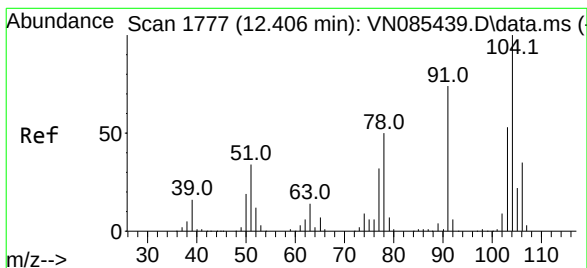
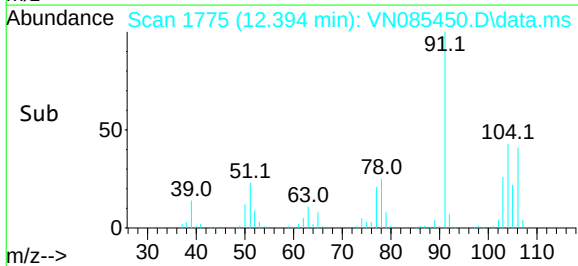
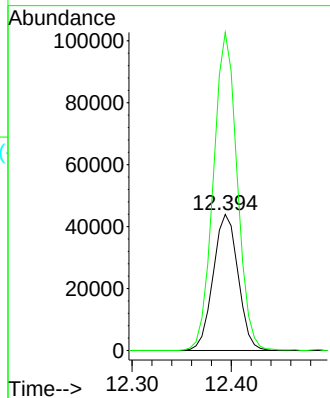
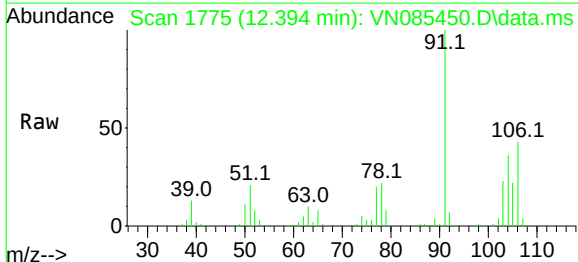
91 223.5 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#70

Styrene

Concen: 20.358 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

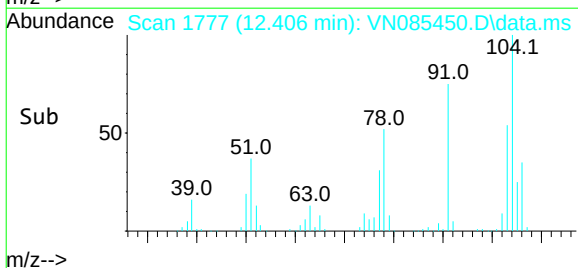
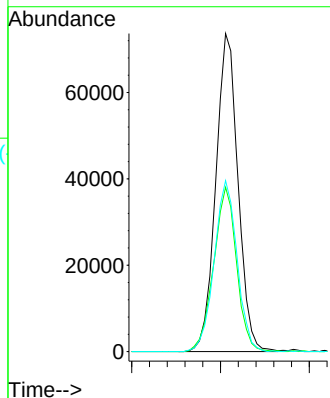
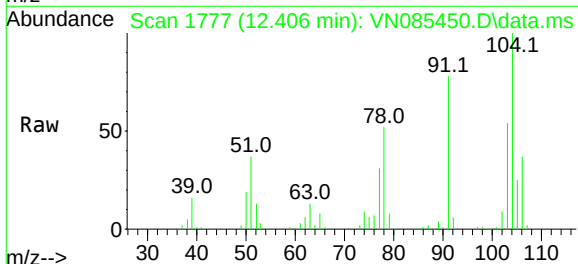
Tgt Ion:104 Resp: 128074

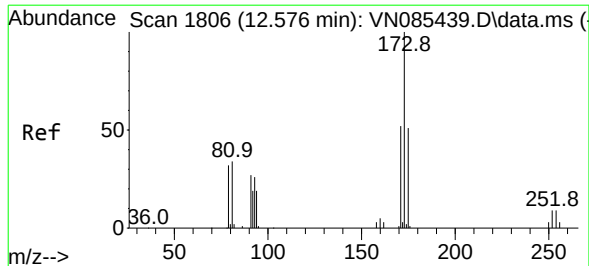
Ion Ratio Lower Upper

104 100

78 53.2 42.5 63.7

103 55.3 43.8 65.8





#71

Bromoform

Concen: 19.837 ug/l

RT: 12.570 min Scan# 1806

Delta R.T. -0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:173 Resp: 34422

Ion Ratio Lower Upper

173 100

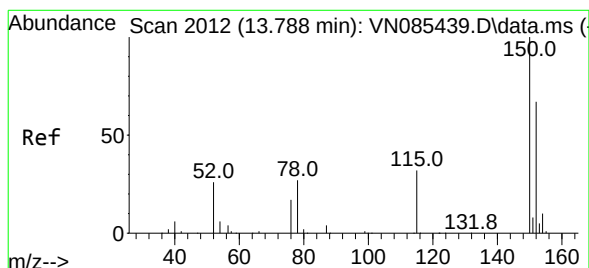
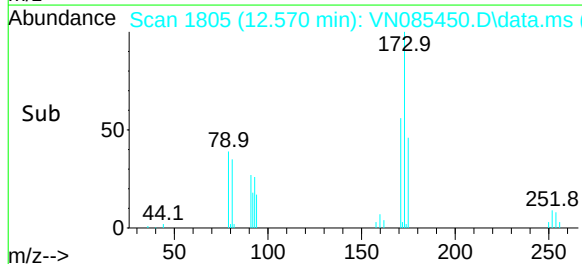
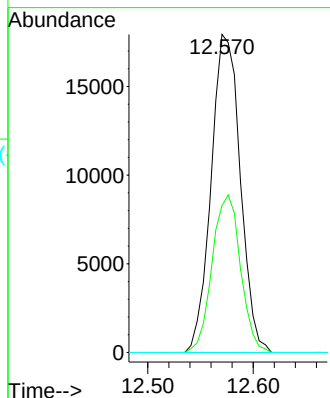
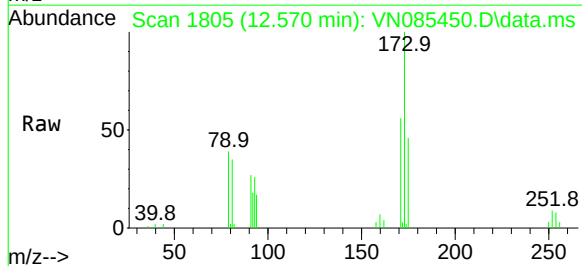
175 48.1 24.4 73.2

254 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

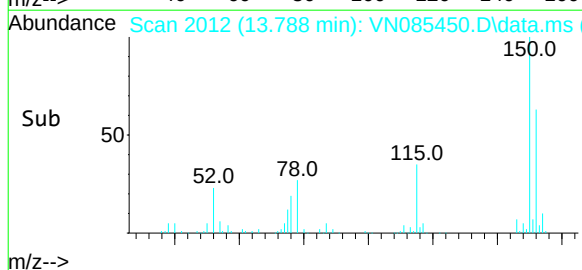
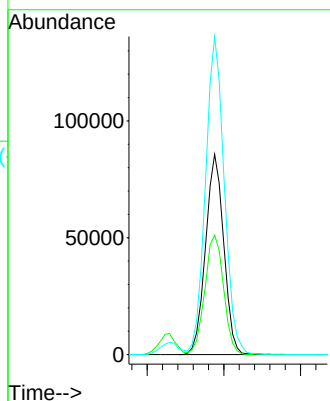
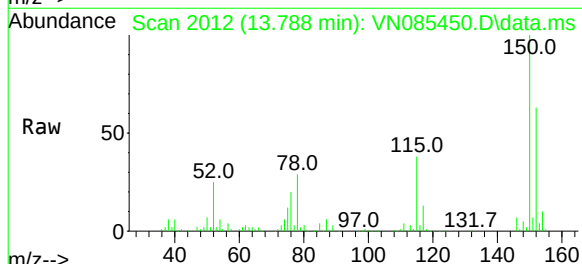
Tgt Ion:152 Resp: 141189

Ion Ratio Lower Upper

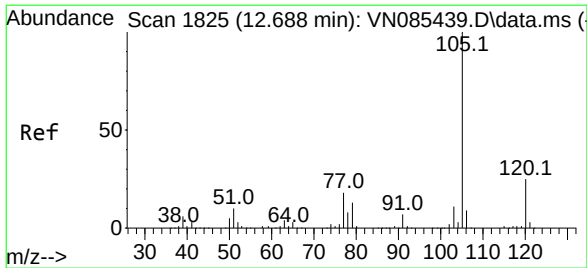
152 100

115 61.5 31.1 93.3

150 163.3 0.0 343.6







#73

Isopropylbenzene

Concen: 20.668 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 105 Resp: 196948

Ion Ratio Lower Upper

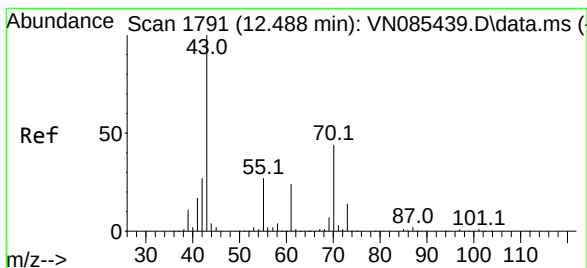
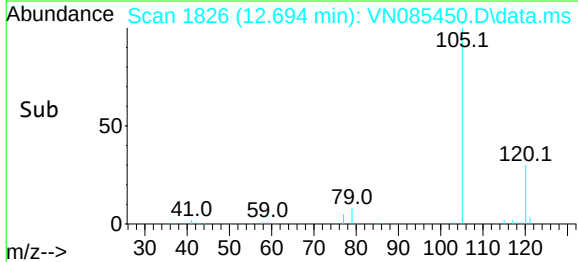
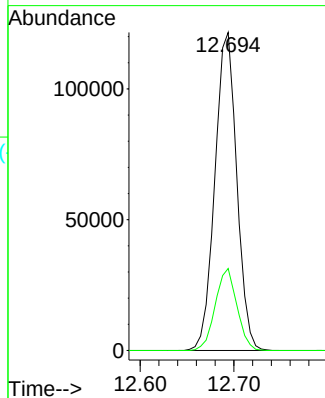
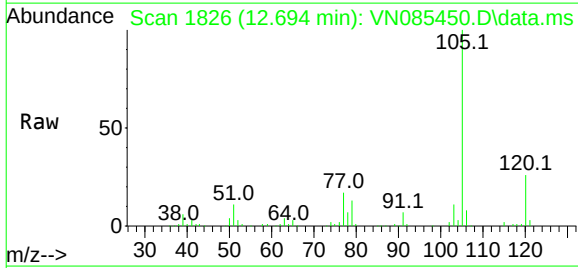
105 100

120 25.5 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#74

N-ethyl acetate

Concen: 18.746 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Tgt Ion: 43 Resp: 80290

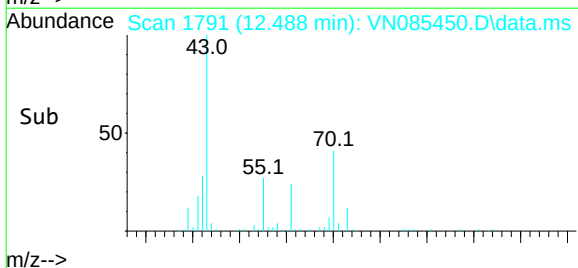
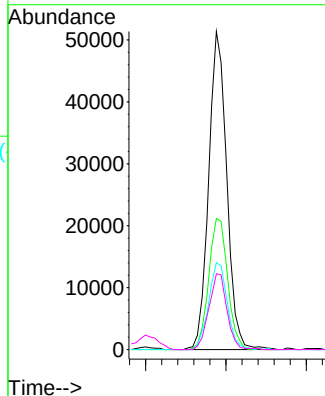
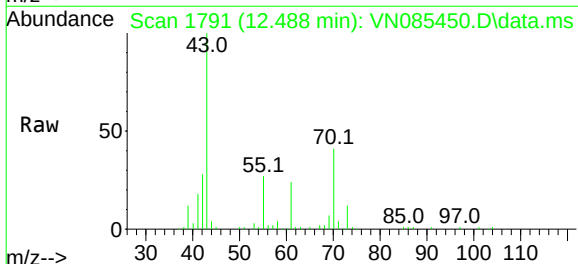
Ion Ratio Lower Upper

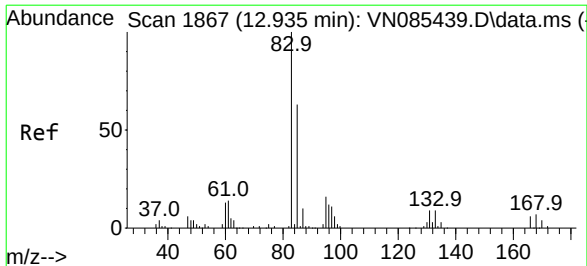
43 100

70 43.0 34.0 51.0

55 28.2 21.4 32.2

61 23.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 18.510 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

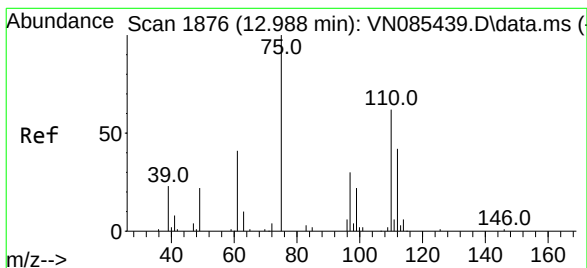
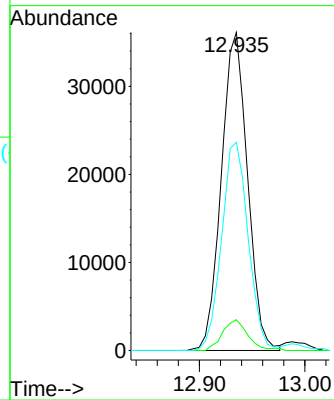
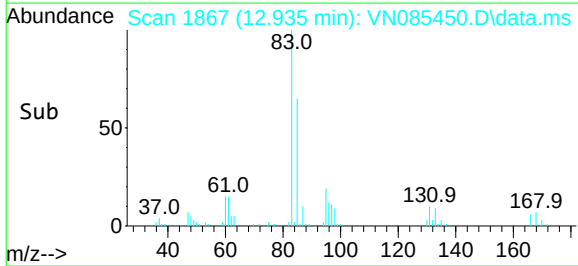
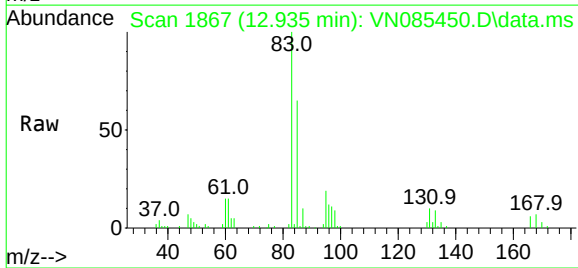
VN0115WBS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 62306 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 9.4   | 4.8   | 14.4  |
| 85       | 66.2  | 32.2  | 96.6  |

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#76

1,2,3-Trichloropropane

Concen: 20.099 ug/l m

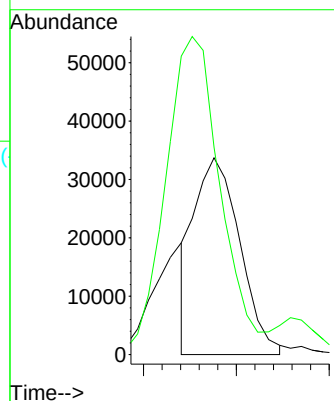
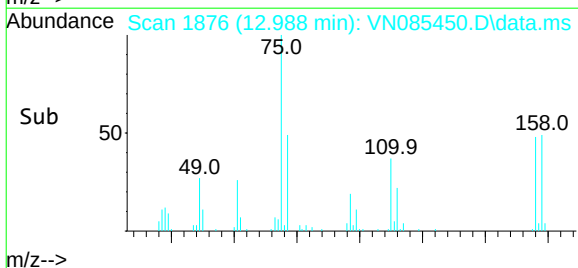
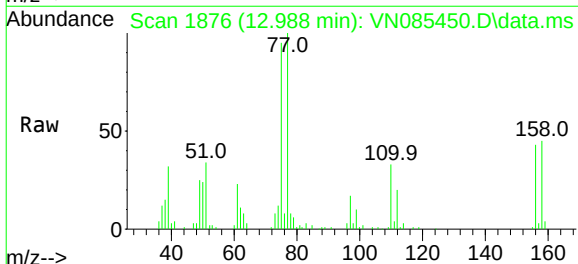
RT: 12.988 min Scan# 1876

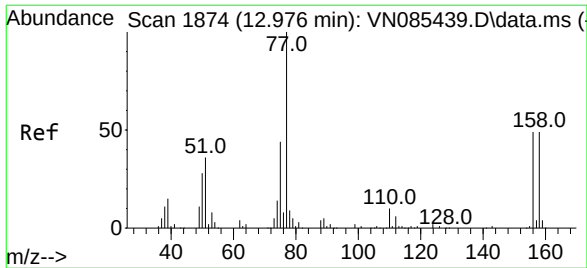
Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 57678 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 194.7 | 109.7 | 329.2 |





#77

Bromobenzene

Concen: 19.283 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:156 Resp: 48006

Ion Ratio Lower Upper

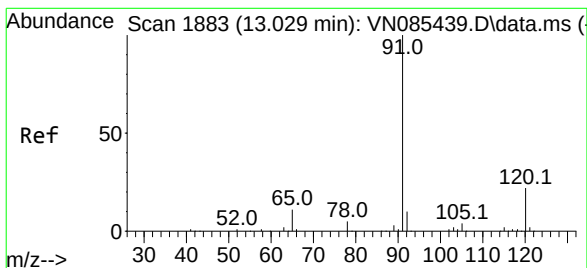
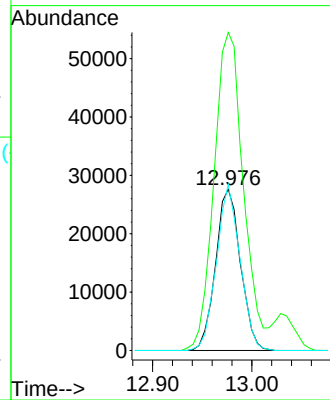
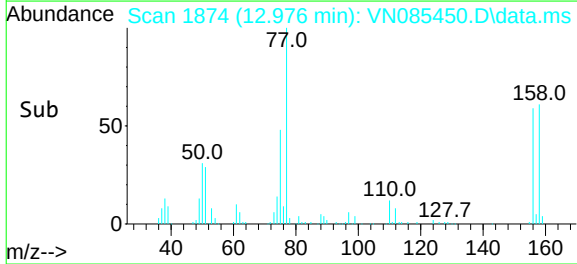
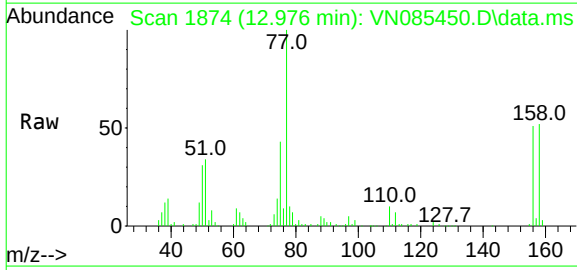
156 100

77 233.9 114.1 342.4

158 97.9 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#78

n-propylbenzene

Concen: 20.759 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. -0.000 min

Lab File: VN085450.D

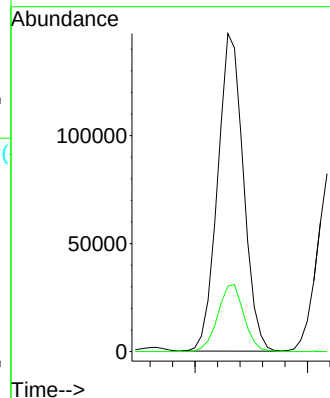
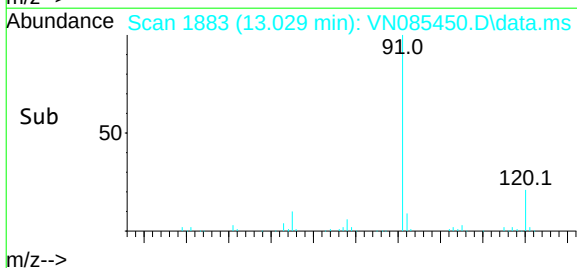
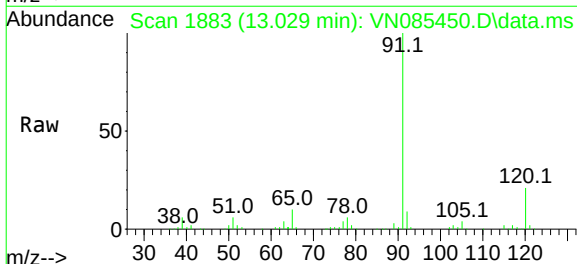
Acq: 15 Jan 2025 10:29

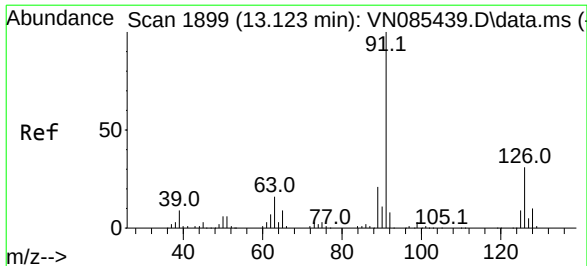
Tgt Ion: 91 Resp: 234178

Ion Ratio Lower Upper

91 100

120 21.4 10.9 32.6





#79

2-Chlorotoluene

Concen: 20.351 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion: 91 Resp: 148584

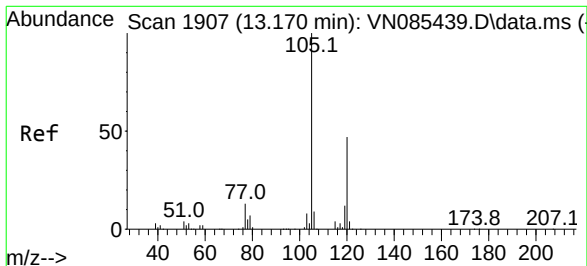
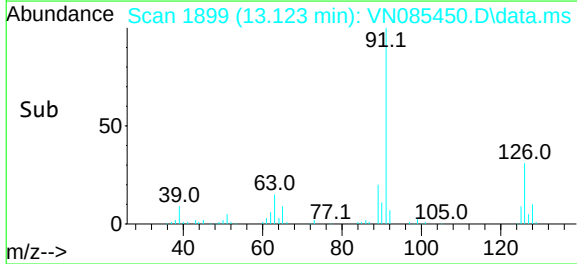
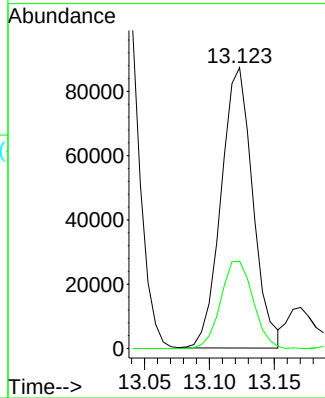
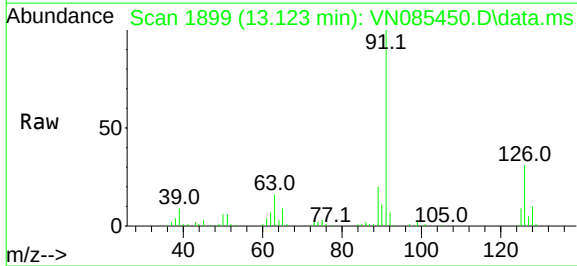
Ion Ratio Lower Upper

91 100

126 31.7 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#80

1,3,5-Trimethylbenzene

Concen: 21.282 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085450.D

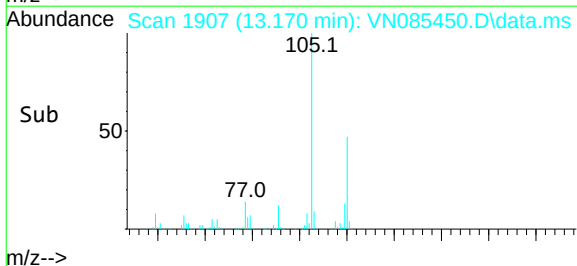
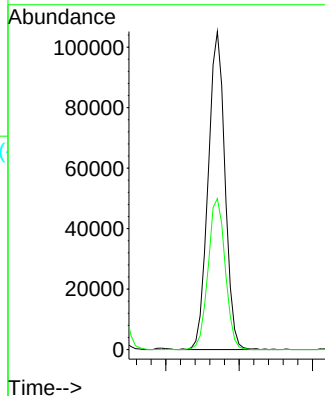
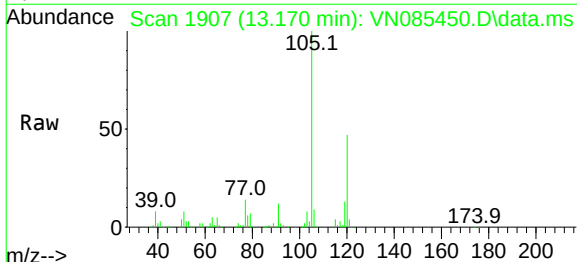
Acq: 15 Jan 2025 10:29

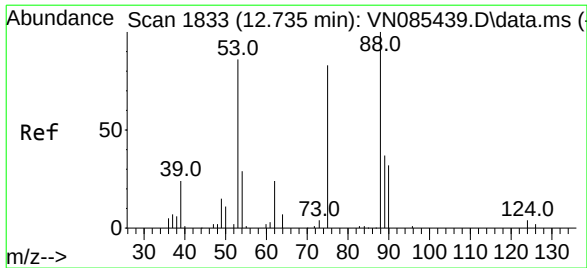
Tgt Ion:105 Resp: 167516

Ion Ratio Lower Upper

105 100

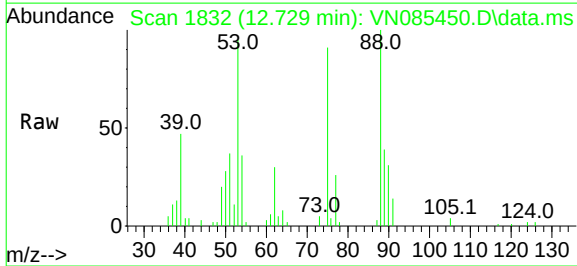
120 48.1 23.9 71.7





#81  
trans-1,4-Dichloro-2-butene  
Concen: 18.905 ug/l m  
RT: 12.729 min Scan# 1833  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

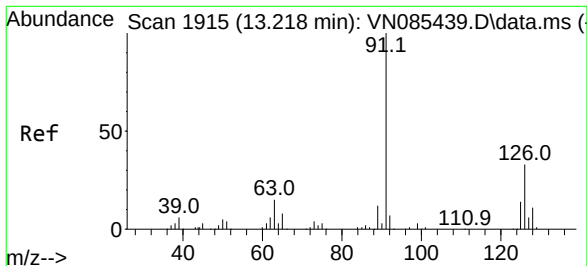
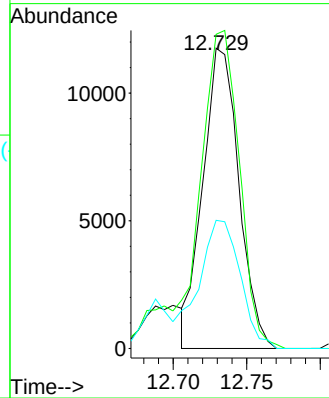
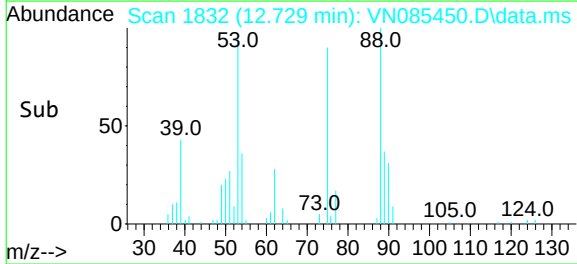
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion: 75 Resp: 20052  
Ion Ratio Lower Upper  
75 100  
53 125.4 95.6 143.4  
89 49.2 37.0 55.6

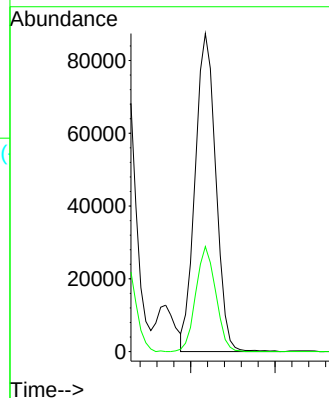
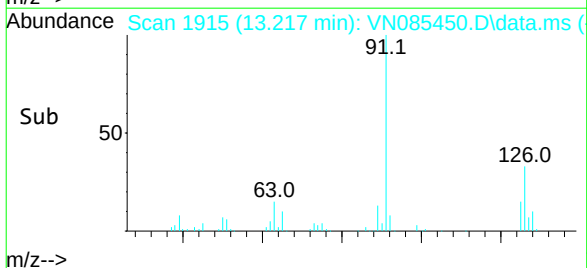
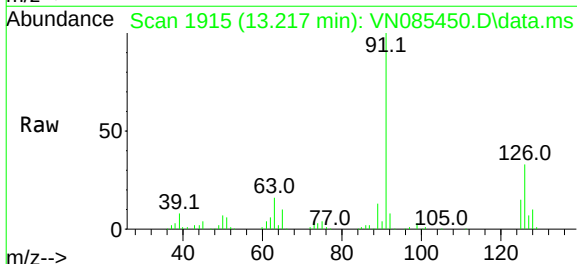
Manual Integrations  
APPROVED

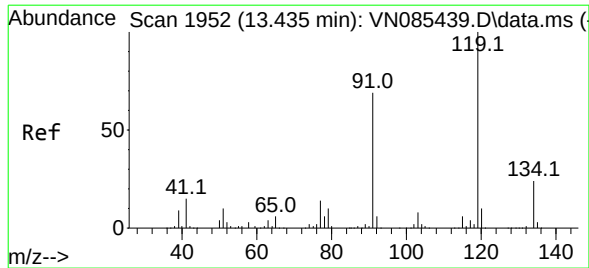
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#82  
4-Chlorotoluene  
Concen: 20.481 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 91 Resp: 148888  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.9 47.7





#83

tert-Butylbenzene

Concen: 20.748 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085450.D

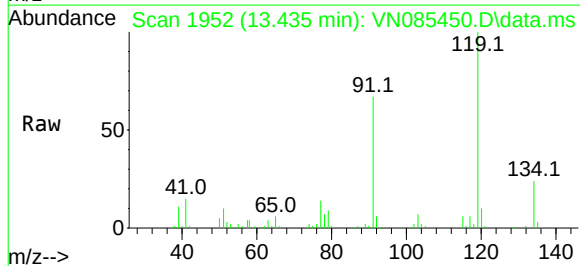
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion:119 Resp: 137144

Ion Ratio Lower Upper

119 100

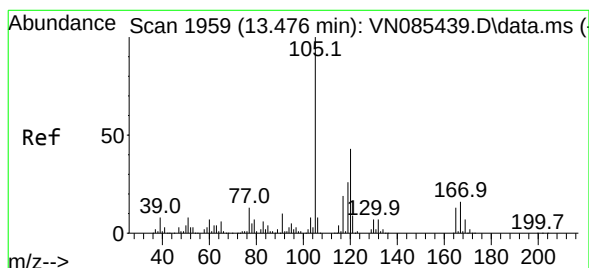
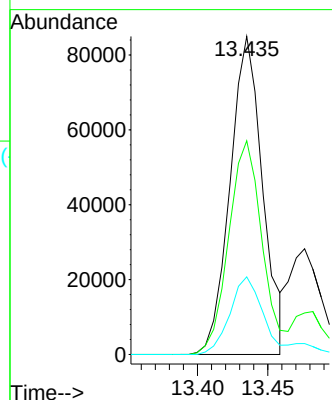
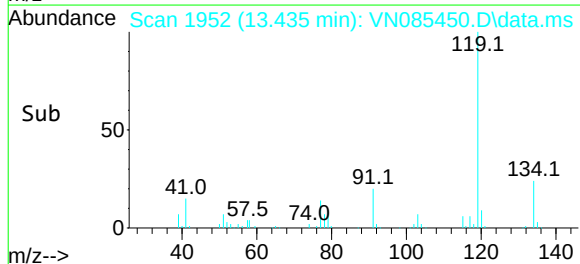
91 69.5 35.1 105.3

134 24.7 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#84

1,2,4-Trimethylbenzene

Concen: 21.493 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085450.D

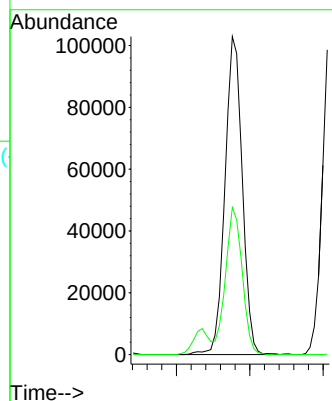
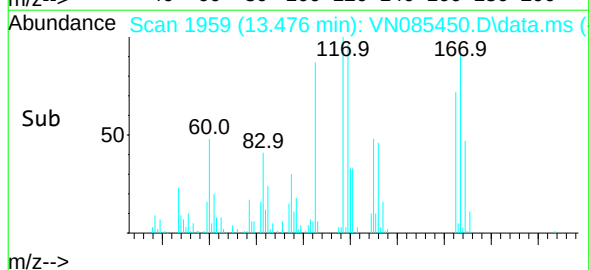
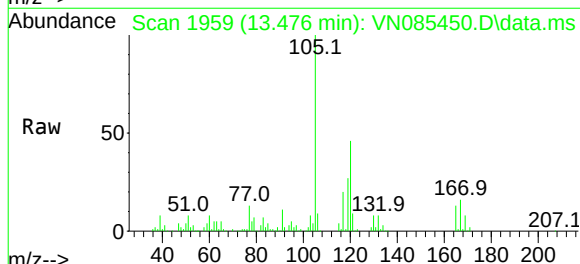
Acq: 15 Jan 2025 10:29

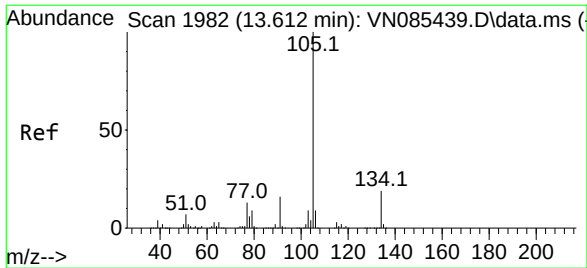
Tgt Ion:105 Resp: 168611

Ion Ratio Lower Upper

105 100

120 45.1 21.6 65.0





#85

sec-Butylbenzene

Concen: 21.140 ug/l

RT: 13.611 min Scan# 19

Delta R.T. -0.001 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:105 Resp: 193667

Ion Ratio Lower Upper

105 100

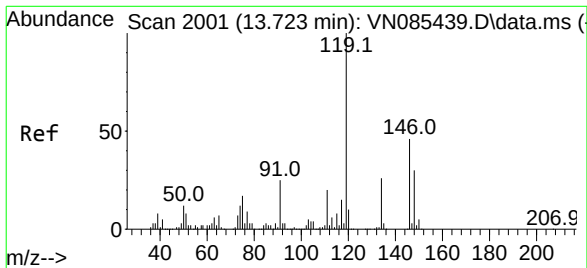
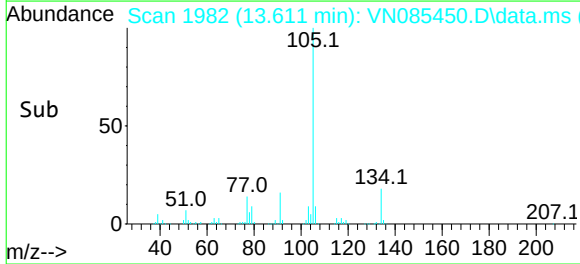
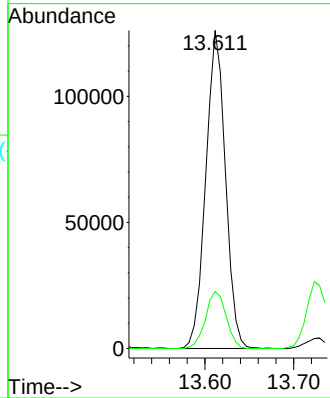
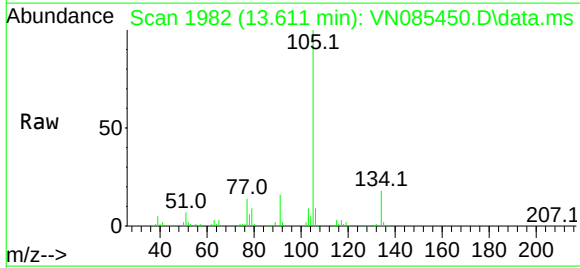
134 18.8 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#86

p-Isopropyltoluene

Concen: 20.730 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

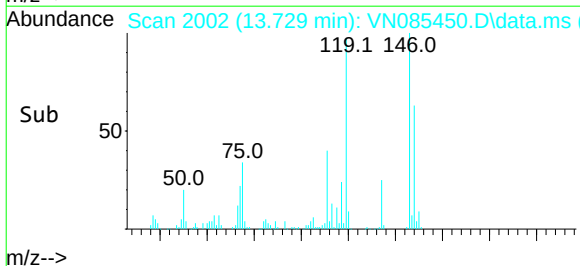
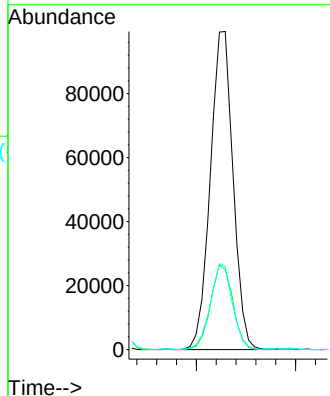
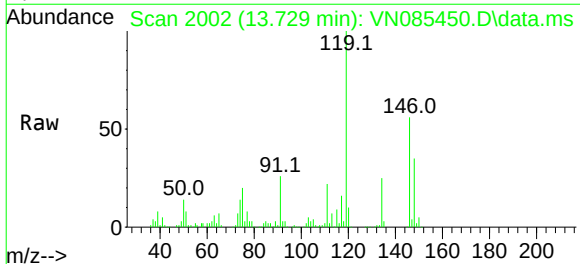
Tgt Ion:119 Resp: 158593

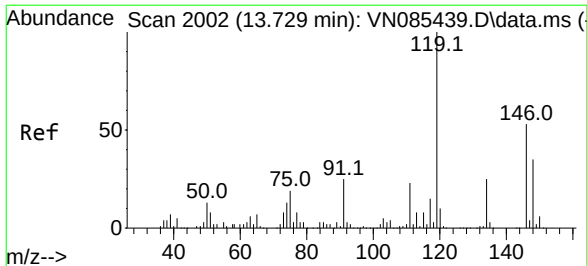
Ion Ratio Lower Upper

119 100

134 26.1 12.7 38.0

91 26.2 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 19.629 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:146 Resp: 89998

Ion Ratio Lower Upper

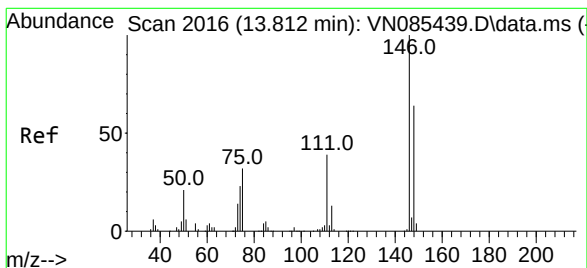
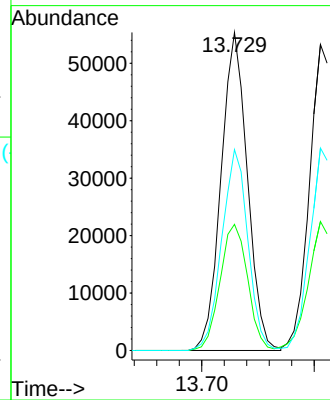
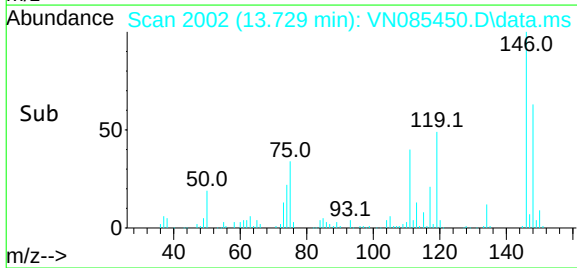
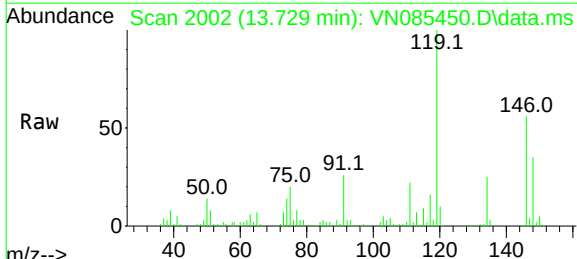
146 100

111 41.6 21.4 64.3

148 62.7 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#88

1,4-Dichlorobenzene

Concen: 18.721 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

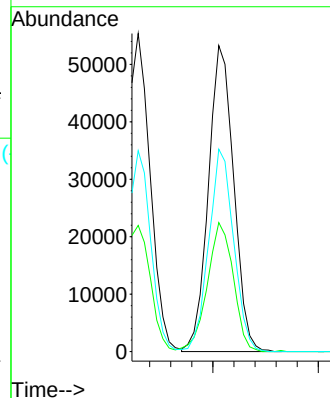
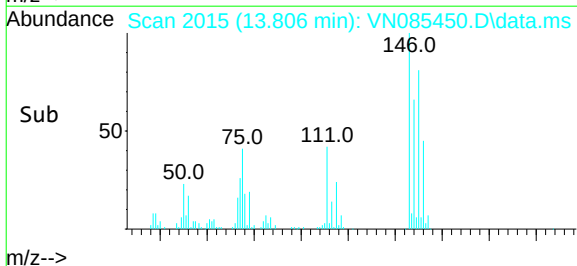
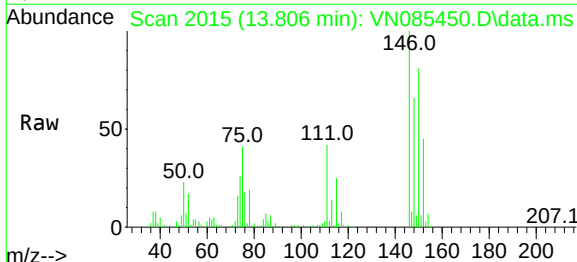
Tgt Ion:146 Resp: 88968

Ion Ratio Lower Upper

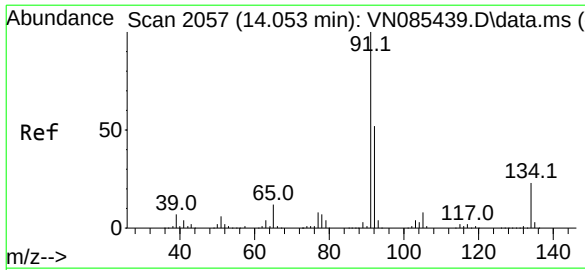
146 100

111 43.2 21.3 63.7

148 65.2 32.4 97.0







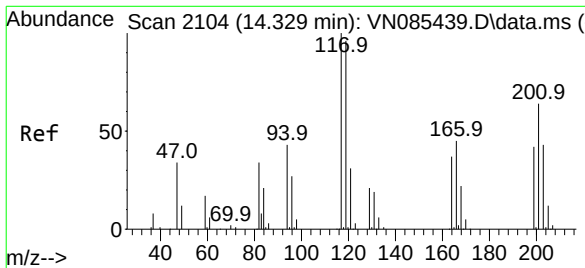
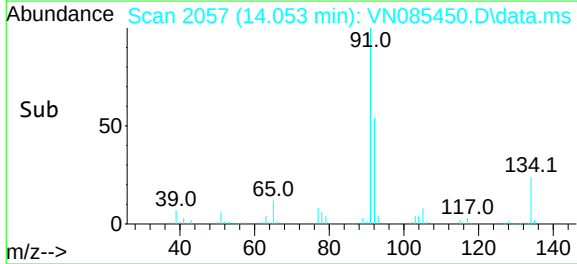
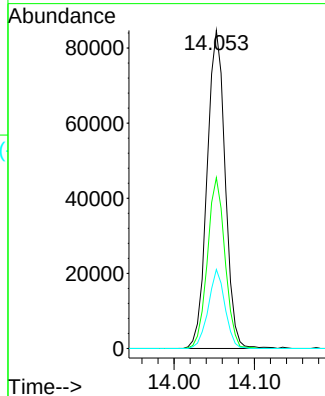
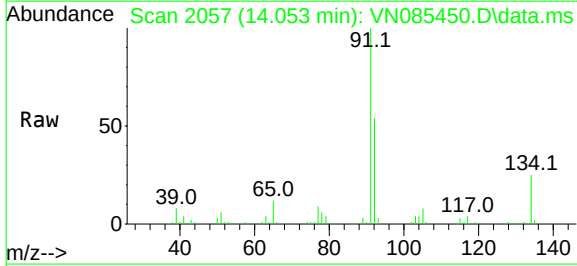
#89  
n-Butylbenzene  
Concen: 20.147 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

| Tgt Ion: | 91    | Resp: | 132410 |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 52.0  | 25.8  | 77.3   |
| 134      | 22.9  | 11.7  | 35.1   |

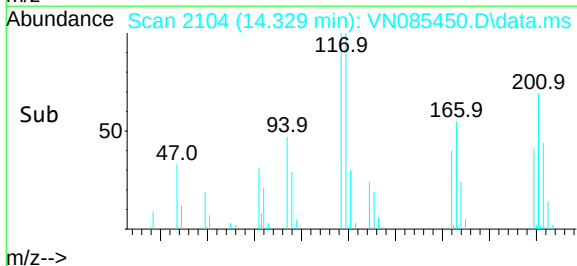
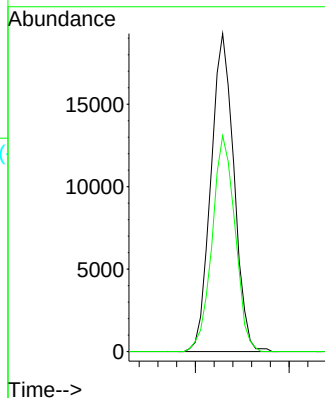
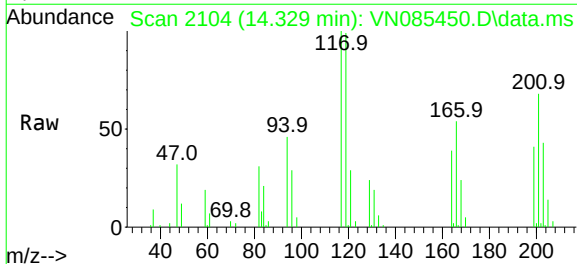
Manual Integrations  
APPROVED

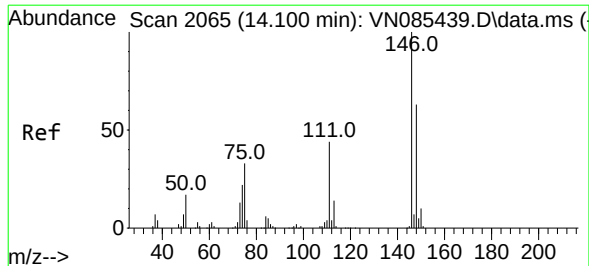
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#90  
Hexachloroethane  
Concen: 18.850 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

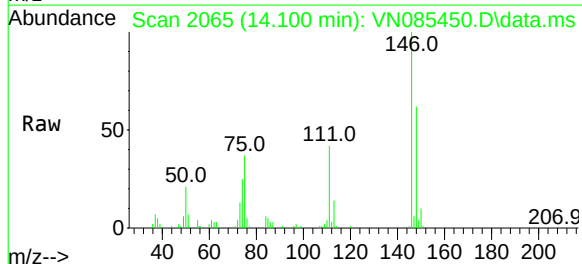
| Tgt Ion: | 117   | Resp: | 32875 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 67.6  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 18.933 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

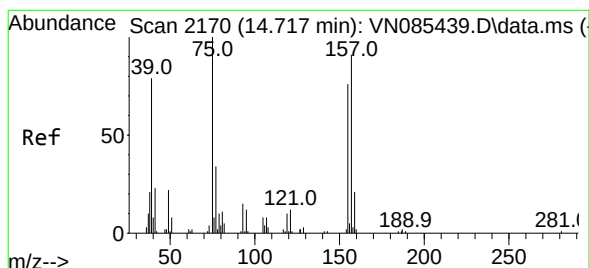
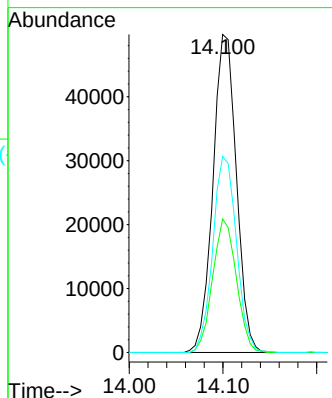
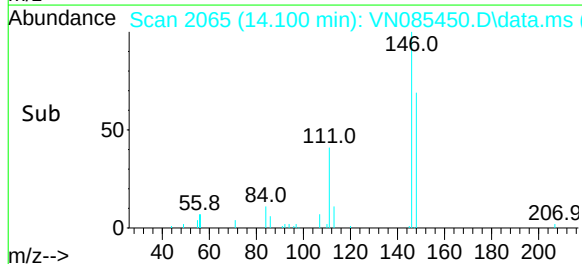
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01



Tgt Ion: 146 Resp: 86586  
Ion Ratio Lower Upper  
146 100  
111 42.4 21.7 65.1  
148 62.3 31.4 94.2

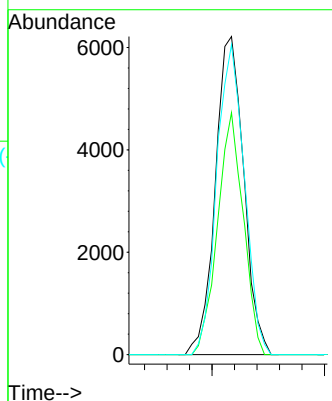
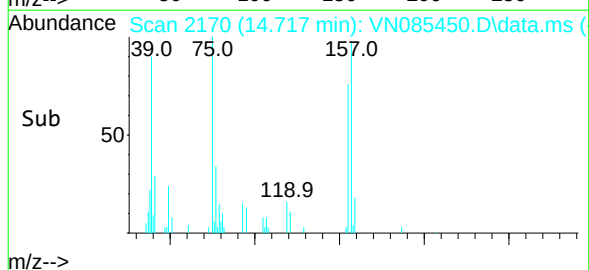
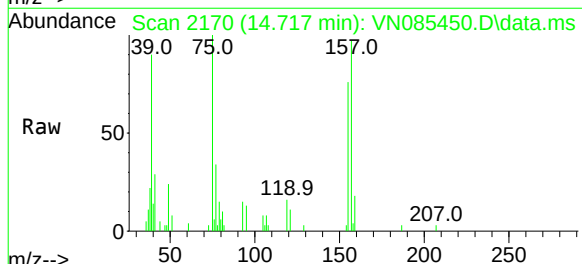
Manual Integrations  
APPROVED

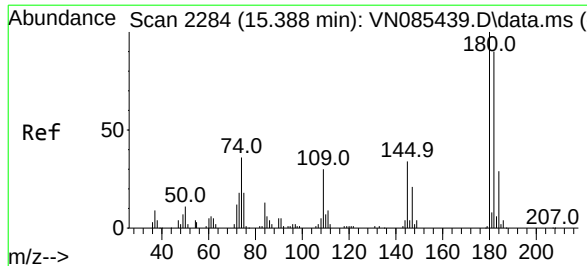
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 17.740 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 75 Resp: 10904  
Ion Ratio Lower Upper  
75 100  
155 69.0 36.4 109.2  
157 94.7 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 18.095 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

Tgt Ion:180 Resp: 38461

Ion Ratio Lower Upper

180 100

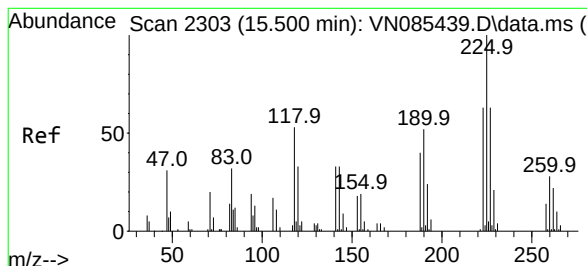
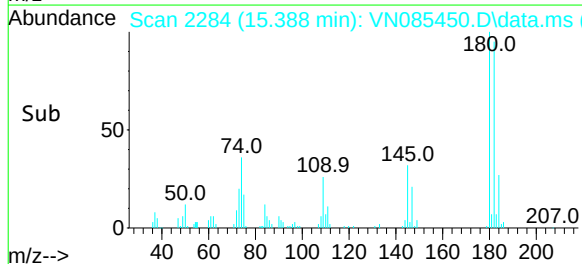
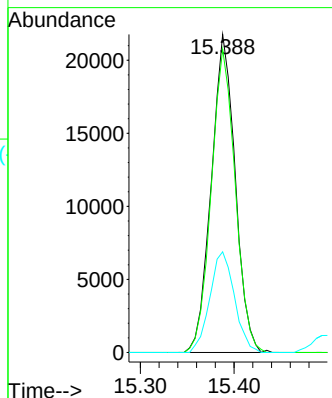
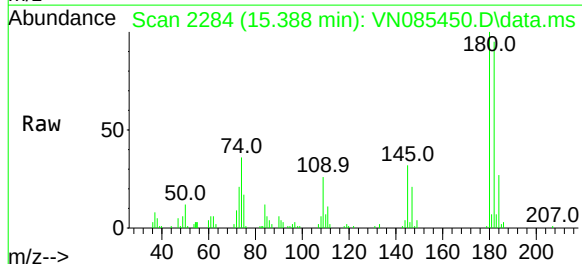
182 95.9 46.8 140.3

145 32.7 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#94

Hexachlorobutadiene

Concen: 18.761 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

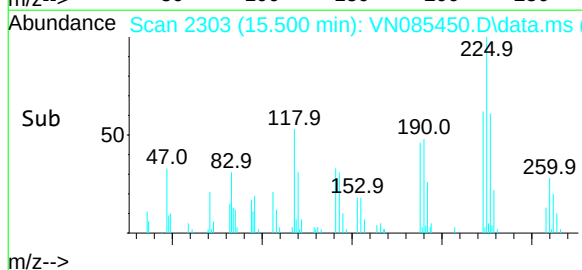
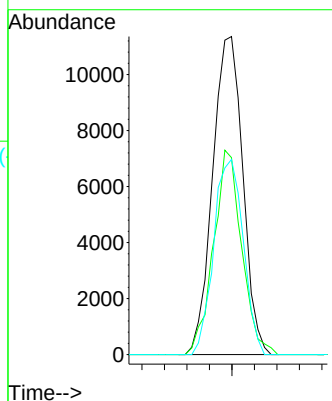
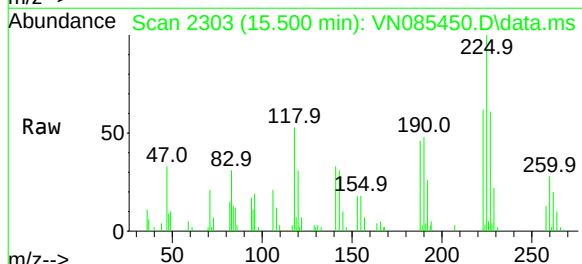
Tgt Ion:225 Resp: 21171

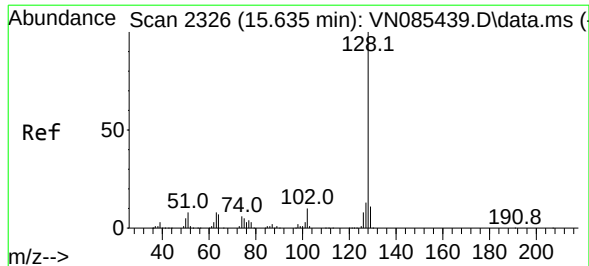
Ion Ratio Lower Upper

225 100

223 60.1 30.7 92.1

227 60.0 30.9 92.5





#95

Naphthalene

Concen: 16.518 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085450.D

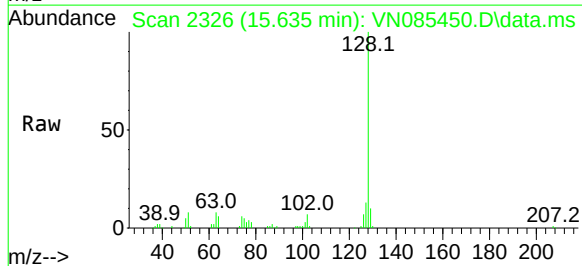
Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01



Tgt Ion:128 Resp: 104770

Ion Ratio Lower Upper

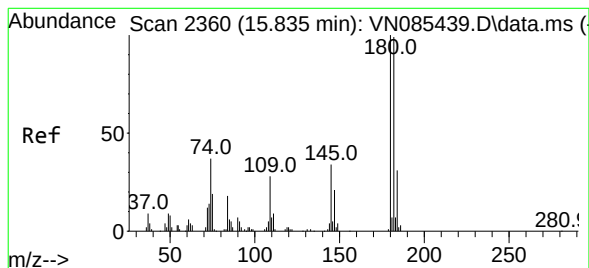
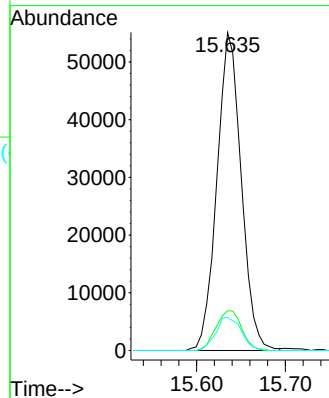
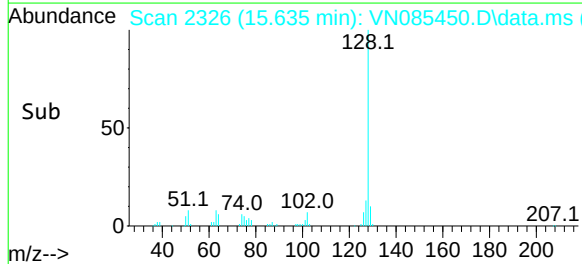
128 100

127 13.2 10.6 16.0

129 11.0 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#96

1,2,3-Trichlorobenzene

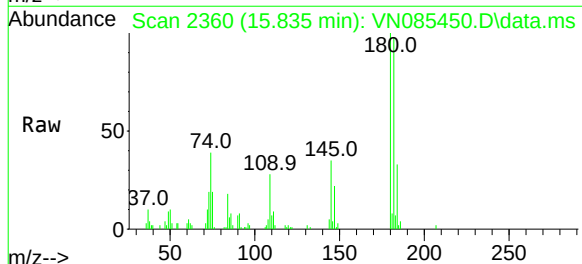
Concen: 17.704 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29



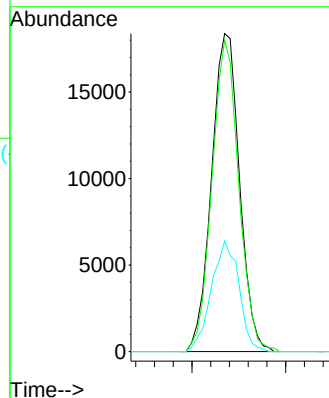
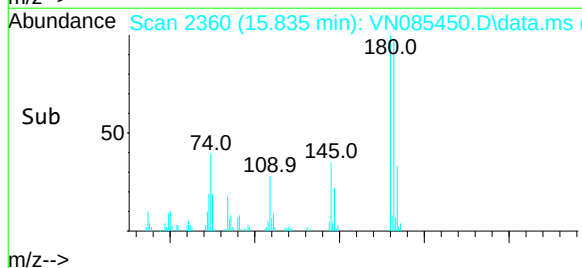
Tgt Ion:180 Resp: 38077

Ion Ratio Lower Upper

180 100

182 93.7 47.4 142.2

145 34.4 16.9 50.7



### Report of Analysis

|                    |                               |        |      |                 |              |
|--------------------|-------------------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc.          |        |      | Date Collected: |              |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  |              |
| Client Sample ID:  | VN0115WBSD01                  |        |      | SDG No.:        | Q1062        |
| Lab Sample ID:     | VN0115WBSD01                  |        |      | 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 |
| VN085451.D        | 1         |           | 01/15/25 11:02 | VN011525      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOD  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |      |            |       |
| 74-87-3        | Chloromethane                  | 19.5  |           | 0.35 | 0.50 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 19.1  |           | 0.34 | 0.75 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 19.3  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 18.5  |           | 0.56 | 0.75 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 19.7  |           | 0.34 | 0.50 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 19.6  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 19.3  |           | 0.26 | 0.75 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 94.9  |           | 1.40 | 3.80 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 18.1  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 21.1  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 20.1  |           | 0.32 | 0.50 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 19.9  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 20.0  |           | 0.23 | 0.50 | 1.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 97.6  |           | 1.30 | 2.50 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 19.9  |           | 0.25 | 0.50 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 19.7  |           | 0.25 | 0.75 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 20.1  |           | 0.26 | 0.50 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 19.9  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 20.0  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 20.1  |           | 0.16 | 0.50 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 20.7  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 20.1  |           | 0.32 | 0.75 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 20.2  |           | 0.19 | 0.50 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 20.9  |           | 0.24 | 0.50 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 100   |           | 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          | 20.3  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 10061-01-5     | cis-1,3-Dichloropropene        | 21.0  |           | 0.18 | 0.50 | 1.00       | ug/L  |
| 79-00-5        | 1,1,2-Trichloroethane          | 20.9  |           | 0.21 | 0.50 | 1.00       | ug/L  |
| 591-78-6       | 2-Hexanone                     | 100   |           | 1.10 | 2.50 | 5.00       | ug/L  |

## Report of Analysis

|                    |                               |        |      |                 |              |
|--------------------|-------------------------------|--------|------|-----------------|--------------|
| Client:            | Tetra Tech NUS, Inc.          |        |      | Date Collected: |              |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |      | Date Received:  |              |
| Client Sample ID:  | VN0115WBSD01                  |        |      | SDG No.:        | Q1062        |
| Lab Sample ID:     | VN0115WBSD01                  |        |      | 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 |
|-------------------|-----------|-----------|----------------|---------------|
| VN085451.D        | 1         |           | 01/15/25 11:02 | VN011525      |

| CAS Number                | Parameter                 | Conc.  | Qualifier | MDL      | LOD  | LOQ / CRQL | Units   |
|---------------------------|---------------------------|--------|-----------|----------|------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 20.2   |           | 0.18     | 0.50 | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene         | 20.7   |           | 0.25     | 0.50 | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene             | 19.5   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene             | 20.4   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes               | 42.5   |           | 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                   | 20.8   |           | 0.16     | 0.50 | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                 | 20.6   |           | 0.21     | 0.50 | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene          | 20.6   |           | 0.13     | 0.50 | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 19.0   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene       | 20.1   |           | 0.24     | 0.50 | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene       | 19.1   |           | 0.27     | 0.50 | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene       | 19.0   |           | 0.19     | 0.50 | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                           |        |           |          |      |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4     | 48.9   |           | 81 - 118 |      | 98%        | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane      | 49.3   |           | 80 - 119 |      | 99%        | SPK: 50 |
| 2037-26-5                 | Toluene-d8                | 50.1   |           | 89 - 112 |      | 100%       | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene      | 50.4   |           | 85 - 114 |      | 101%       | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                           |        |           |          |      |            |         |
| 363-72-4                  | Pentafluorobenzene        | 189000 | 8.218     |          |      |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 323000 | 9.1       |          |      |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 286000 | 11.865    |          |      |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4    | 137000 | 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\VN011525\  
 Data File : VN085451.D  
 Acq On : 15 Jan 2025 11:02  
 Operator : JC\MD  
 Sample : VN0115WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:54:27 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  | 188898   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 323122   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 286298   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 136502   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.576  | 65    | 149231   | 48.941   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 97.880%  |
| 35) Dibromofluoromethane  | 8.159  | 113   | 110423   | 49.259   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 98.520%  |
| 50) Toluene-d8            | 10.565 | 98    | 399040   | 50.102   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 100.200% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 137216   | 50.364   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 100.720% |

## Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 50526   | 19.755  | ug/l | 95     |
| 3) Chloromethane             | 2.359 | 50  | 53907   | 19.467  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.512 | 62  | 53251   | 19.131  | ug/l | 98     |
| 5) Bromomethane              | 2.965 | 94  | 32421   | 19.283  | ug/l | 95     |
| 6) Chloroethane              | 3.124 | 64  | 32723   | 18.543  | ug/l | 98     |
| 7) Trichlorofluoromethane    | 3.506 | 101 | 79391   | 19.658  | ug/l | 98     |
| 8) Diethyl Ether             | 3.965 | 74  | 26011   | 18.643  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 44531   | 19.576  | ug/l | 99     |
| 10) Methyl Iodide            | 4.594 | 142 | 52886   | 20.302  | ug/l | 95     |
| 11) Tert butyl alcohol       | 5.500 | 59  | 33491   | 95.920  | ug/l | 100    |
| 12) 1,1-Dichloroethene       | 4.341 | 96  | 39080   | 19.277  | ug/l | 98     |
| 13) Acrolein                 | 4.171 | 56  | 55291   | 116.005 | ug/l | 99     |
| 14) Allyl chloride           | 5.030 | 41  | 63692   | 19.361  | ug/l | 99     |
| 15) Acrylonitrile            | 5.712 | 53  | 108425  | 97.766  | ug/l | 99     |
| 16) Acetone                  | 4.418 | 43  | 93485   | 94.887  | ug/l | 98     |
| 17) Carbon Disulfide         | 4.718 | 76  | 112944  | 18.094  | ug/l | 99     |
| 18) Methyl Acetate           | 5.012 | 43  | 58686   | 19.589  | ug/l | 100    |
| 19) Methyl tert-butyl Ether  | 5.788 | 73  | 138775  | 21.081  | ug/l | 98     |
| 20) Methylene Chloride       | 5.271 | 84  | 49058   | 20.114  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 43073   | 19.880  | ug/l | 93     |
| 22) Diisopropyl ether        | 6.665 | 45  | 156331  | 21.410  | ug/l | 97     |
| 23) Vinyl Acetate            | 6.600 | 43  | 528099m | 103.348 | ug/l |        |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 88831   | 19.952  | ug/l | 99     |
| 25) 2-Butanone               | 7.477 | 43  | 141498  | 97.595  | ug/l | 93     |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 78212   | 21.728  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 50200   | 19.672  | ug/l | 95     |
| 28) Bromochloromethane       | 7.806 | 49  | 38238   | 18.460  | ug/l | 100    |
| 29) Tetrahydrofuran          | 7.835 | 42  | 93959   | 102.217 | ug/l | 99     |
| 30) Chloroform               | 7.965 | 83  | 92715   | 20.149  | ug/l | 98     |
| 31) Cyclohexane              | 8.247 | 56  | 72255   | 18.672  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 80190   | 19.867  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 61822   | 19.650  | ug/l | 98     |
| 37) Ethyl Acetate            | 7.553 | 43  | 59684   | 18.795  | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 71714   | 19.911  | ug/l | 97     |
| 39) Methylcyclohexane        | 9.600 | 83  | 59161   | 20.011  | ug/l | 93     |
| 40) Benzene                  | 8.600 | 78  | 189640  | 20.061  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085451.D  
 Acq On : 15 Jan 2025 11:02  
 Operator : JC\MD  
 Sample : VN0115WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:54:27 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   | 31866    | 19.288  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 73669    | 20.692  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 100283   | 19.708  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 44329    | 20.145  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 48696    | 20.167  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 34080    | 19.561  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 74218    | 20.909  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.676  | 41   | 46655    | 20.374  | ug/l   | 99       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 14983    | 388.550 | ug/l # | 76       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 300611   | 101.808 | ug/l   | 100      |
| 52) Toluene                   | 10.623 | 92   | 117631   | 21.476  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 68014    | 20.276  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 75146    | 20.973  | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 45220    | 20.861  | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 63954    | 18.769  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 76979    | 20.424  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 148262   | 107.782 | ug/l   | 97       |
| 59) 2-Hexanone                | 11.188 | 43   | 211689   | 101.890 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.353 | 129  | 52957    | 20.236  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 42146    | 19.533  | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 40480    | 20.740  | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 122590   | 19.546  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 44850    | 19.484  | ug/l   | 100      |
| 67) Ethyl Benzene             | 11.959 | 91   | 208196   | 20.381  | ug/l   | 100      |
| 68) m/p-Xylenes               | 12.070 | 106  | 160511   | 42.515  | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 75509    | 20.928  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 124126   | 20.788  | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 34000    | 20.643  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 189617   | 20.582  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 81241    | 19.619  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 61871    | 19.012  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 56609m   | 20.404  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 48489    | 20.145  | ug/l   | 98       |
| 78) n-propylbenzene           | 13.035 | 91   | 228827   | 20.981  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 143092   | 20.272  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 163195   | 21.445  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 20113m   | 19.614  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 144513   | 20.562  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 131013   | 20.501  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 164079   | 21.634  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.611 | 105  | 189519   | 21.398  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 153867   | 20.798  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 89126    | 20.107  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 87559    | 19.057  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 128246   | 20.183  | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 31733    | 18.820  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 83864    | 18.967  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 10944    | 18.416  | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 39555    | 19.248  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 20590    | 18.872  | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 106293   | 17.334  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 39966    | 19.221  | ug/l   | 99       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085451.D  
Acq On : 15 Jan 2025 11:02  
Operator : JC\MD  
Sample : VN0115WBSD01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VN0115WBSD01

**Manual Integrations**  
**APPROVED**

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Quant Time: Jan 16 00:54:27 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

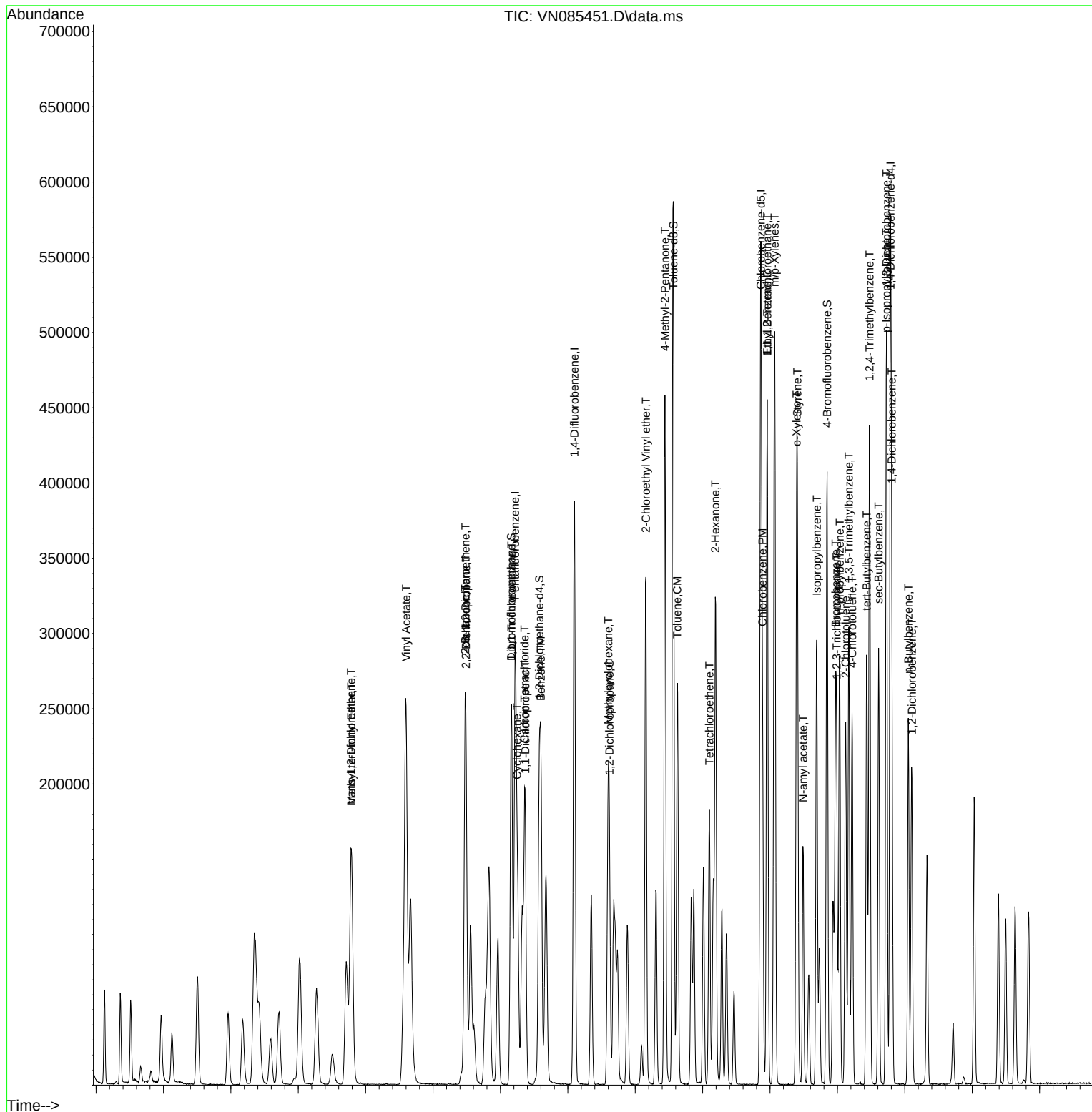
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011525\  
Data File : VN085451.D  
Acq On    : 15 Jan 2025  11:02  
Operator  : JC\MD  
Sample    : VN0115WBSD01  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6    Sample Multiplier: 1
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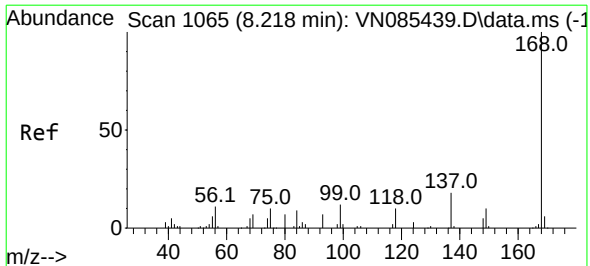
**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VN0115WBSD01

## Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

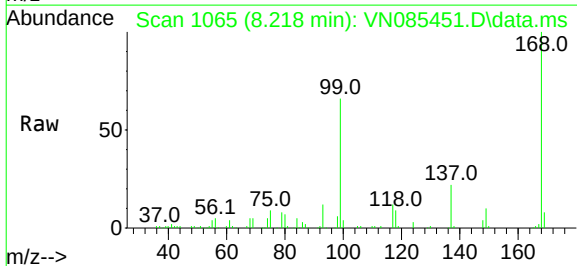
Quant Time: Jan 16 00:54:27 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration





#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

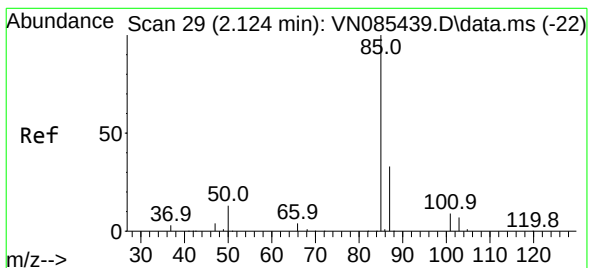
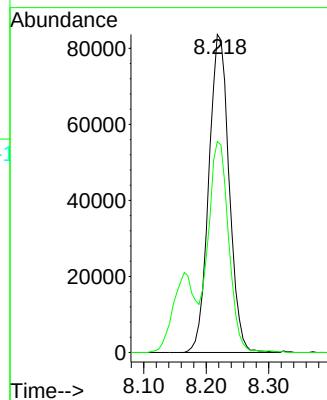
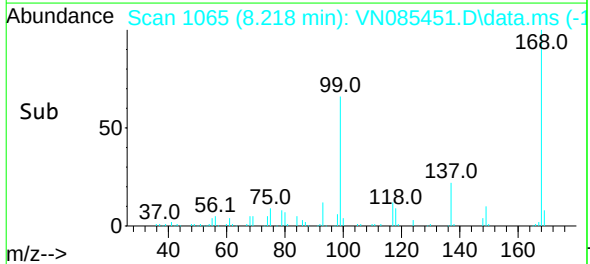
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion: 168 Resp: 188898  
Ion Ratio Lower Upper  
168 100  
99 66.1 53.6 80.4

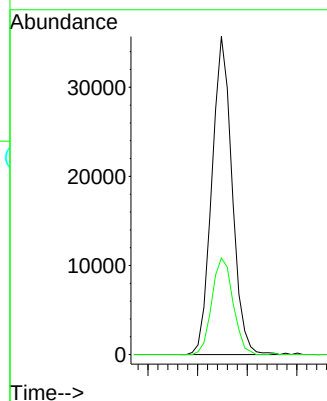
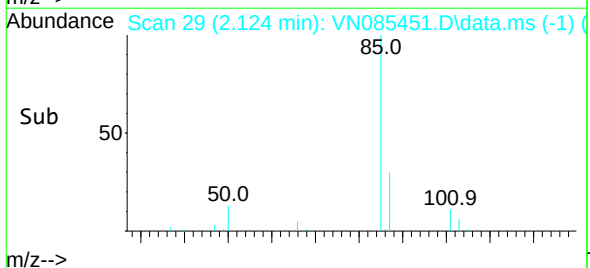
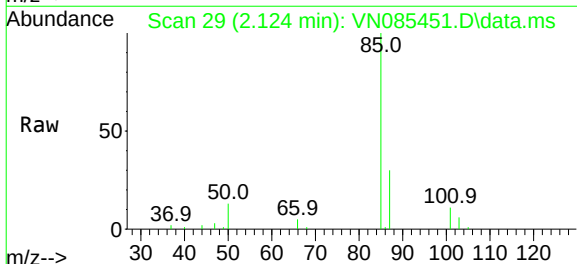
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

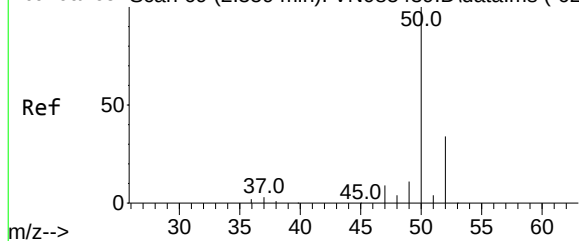


#2  
Dichlorodifluoromethane  
Concen: 19.755 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 85 Resp: 50526  
Ion Ratio Lower Upper  
85 100  
87 30.4 16.7 50.1



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



#3

Chloromethane

Concen: 19.467 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

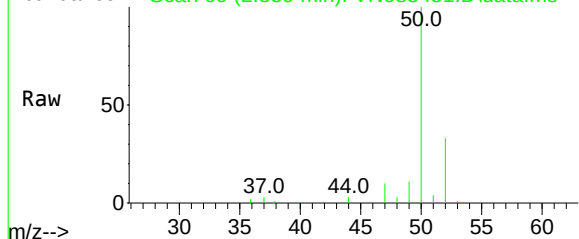
Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Abundance Scan 69 (2.359 min): VN085451.D\data.ms



Tgt Ion: 50 Resp: 53907

Ion Ratio Lower Upper

50 100

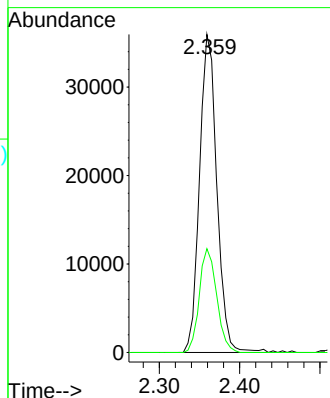
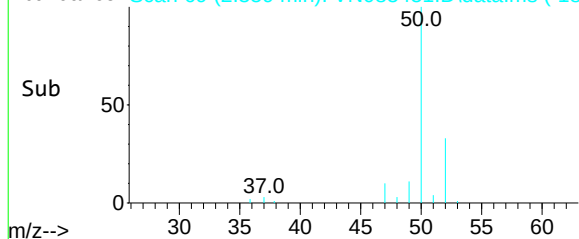
52 32.6 27.0 40.6

Manual Integrations

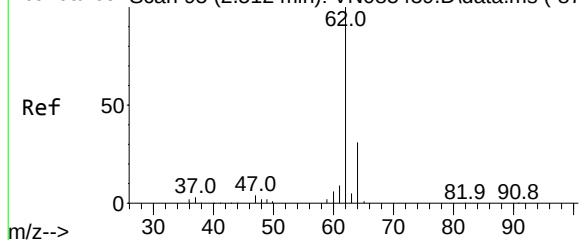
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

Abundance Scan 69 (2.359 min): VN085451.D\data.ms (-18)



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



#4

Vinyl Chloride

Concen: 19.131 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

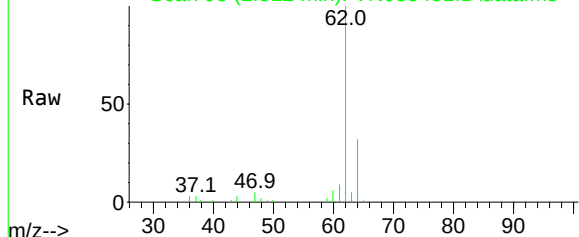
Tgt Ion: 62 Resp: 53251

Ion Ratio Lower Upper

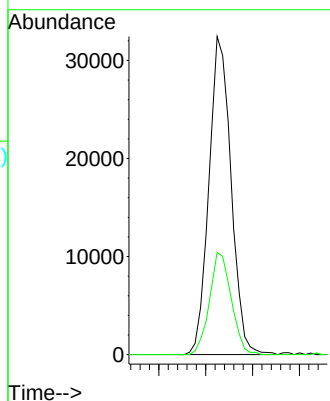
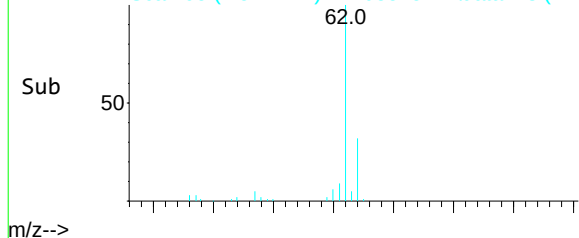
62 100

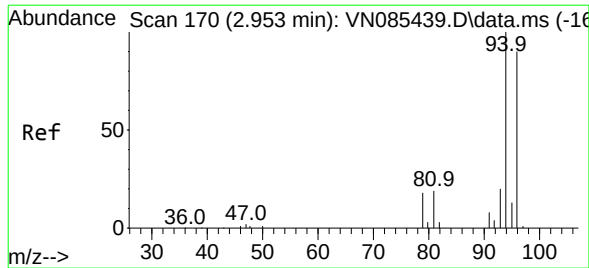
64 32.1 24.8 37.2

Abundance Scan 95 (2.512 min): VN085451.D\data.ms



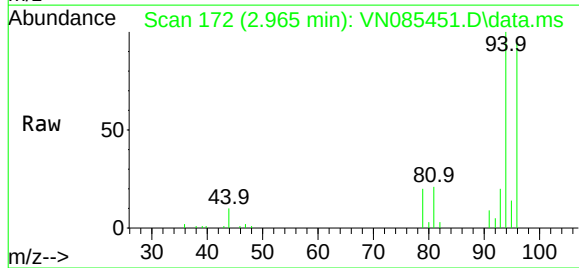
Abundance Scan 95 (2.512 min): VN085451.D\data.ms (-44)





#5  
Bromomethane  
Concen: 19.283 ug/l  
RT: 2.965 min Scan# 170  
Delta R.T. 0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

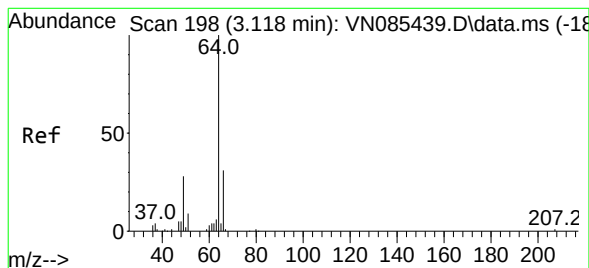
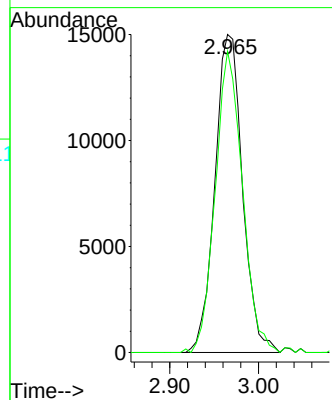
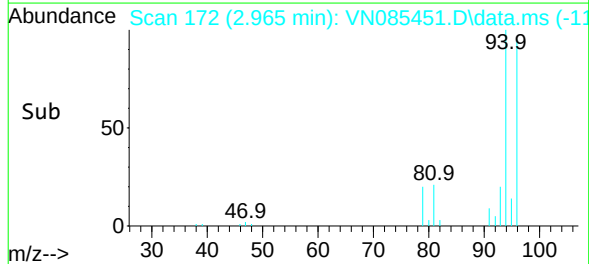
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion: 94 Resp: 32421  
Ion Ratio Lower Upper  
94 100  
96 94.7 71.8 107.6

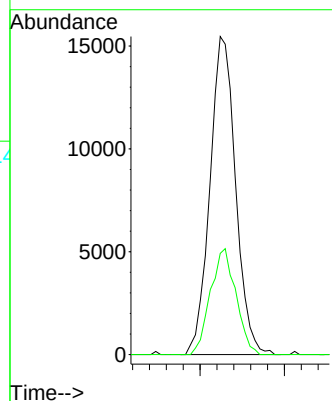
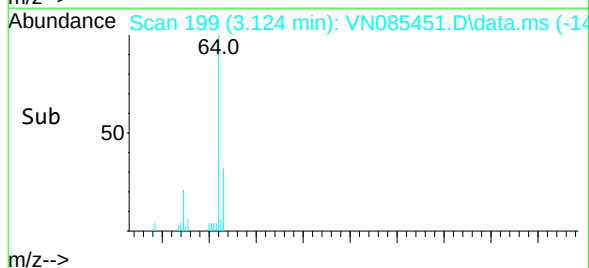
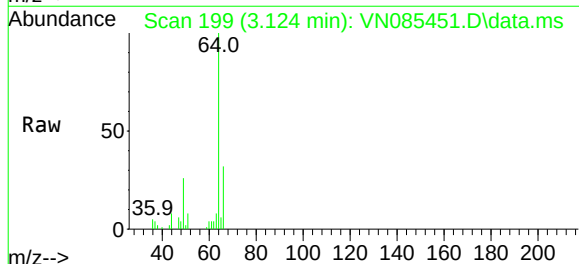
Manual Integrations  
APPROVED

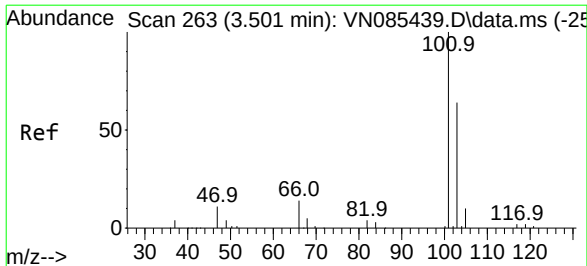
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#6  
Chloroethane  
Concen: 18.543 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

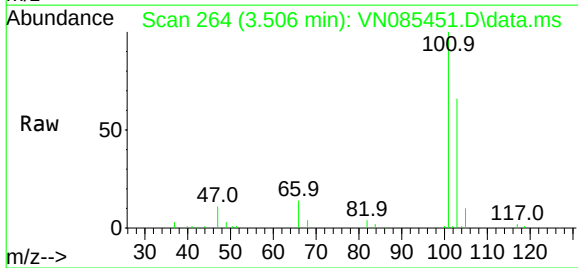
Tgt Ion: 64 Resp: 32723  
Ion Ratio Lower Upper  
64 100  
66 31.8 24.6 36.8





#7  
Trichlorofluoromethane  
Concen: 19.658 ug/l  
RT: 3.506 min Scan# 263  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

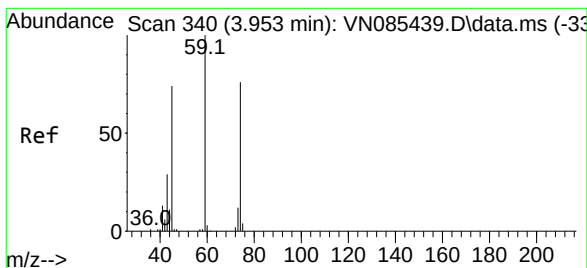
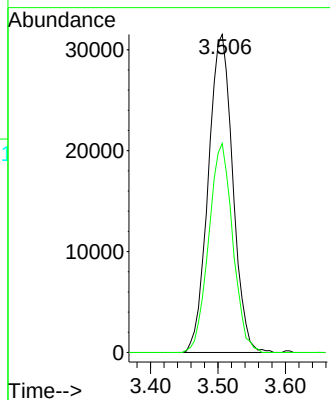
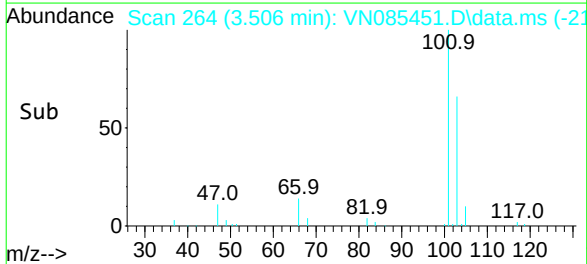
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion: 101 Resp: 79391  
Ion Ratio Lower Upper  
101 100  
103 65.7 51.4 77.2

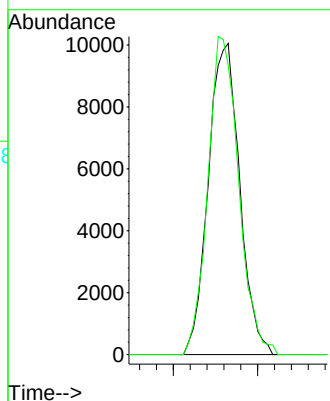
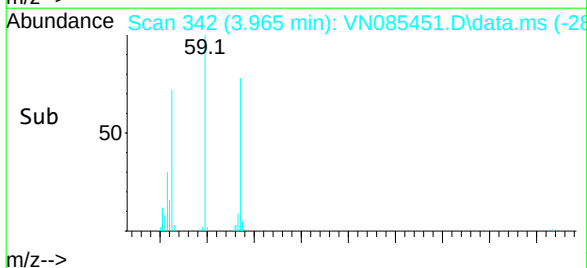
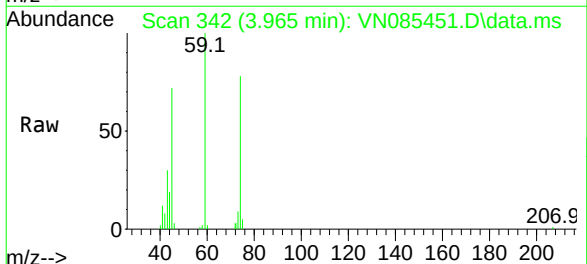
Manual Integrations  
APPROVED

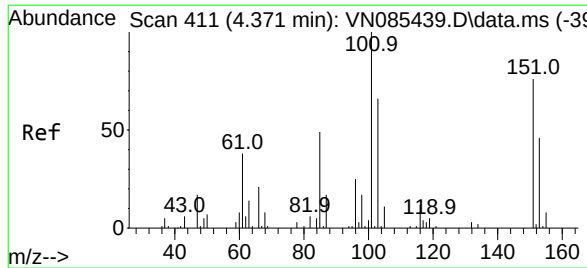
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#8  
Diethyl Ether  
Concen: 18.643 ug/l  
RT: 3.965 min Scan# 342  
Delta R.T. 0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

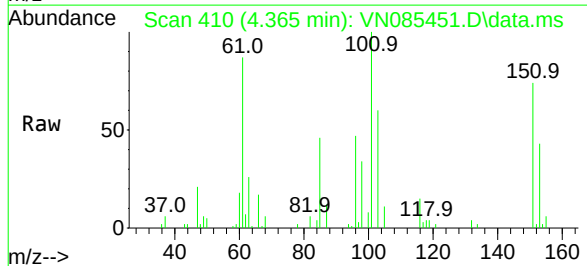
Tgt Ion: 74 Resp: 26011  
Ion Ratio Lower Upper  
74 100  
45 100.1 49.7 149.1





#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 19.576 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

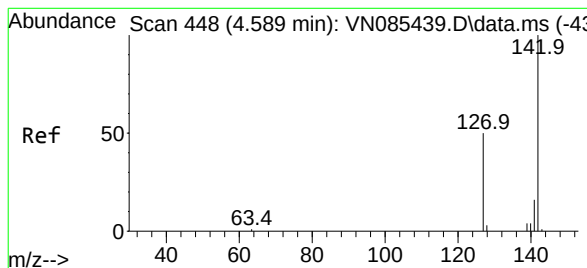
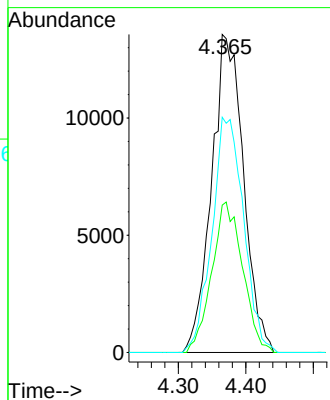
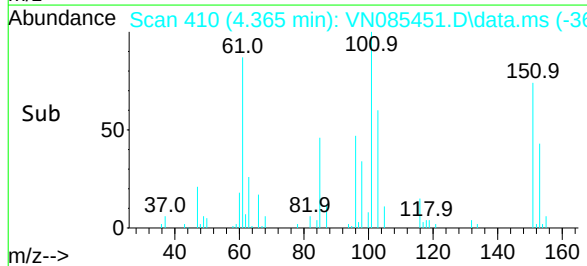
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



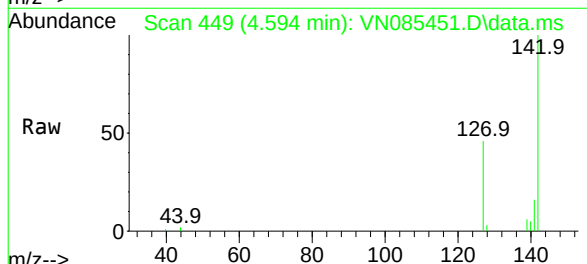
Tgt Ion:101 Resp: 44531  
Ion Ratio Lower Upper  
101 100  
85 45.8 37.8 56.8  
151 73.3 58.8 88.2

Manual Integrations  
APPROVED

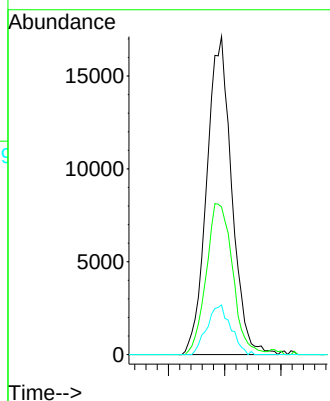
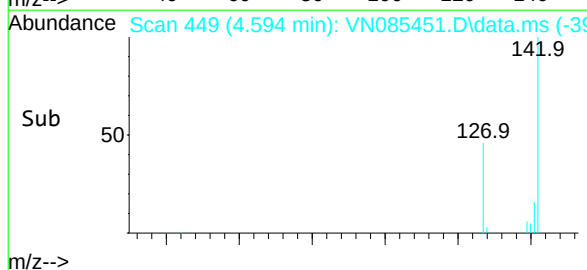
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

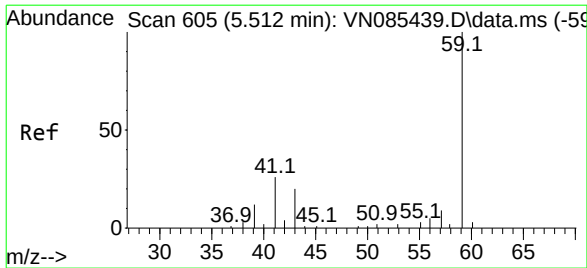


#10  
Methyl Iodide  
Concen: 20.302 ug/l  
RT: 4.594 min Scan# 449  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02



Tgt Ion:142 Resp: 52886  
Ion Ratio Lower Upper  
142 100  
127 46.4 40.3 60.5  
141 15.6 12.8 19.2





#11

Tert butyl alcohol

Concen: 95.920 ug/l

RT: 5.500 min Scan# 605

Delta R.T. -0.012 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 59 Resp: 33491

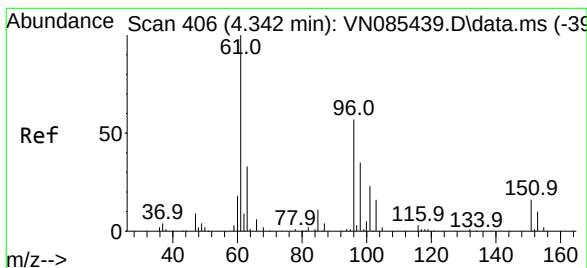
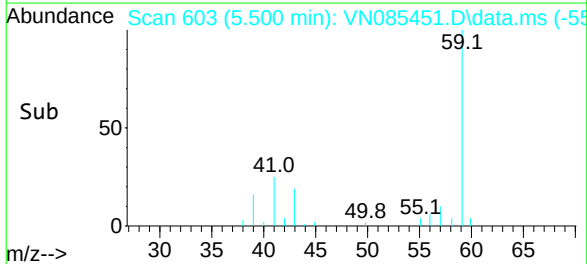
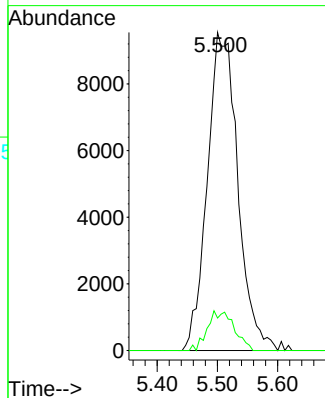
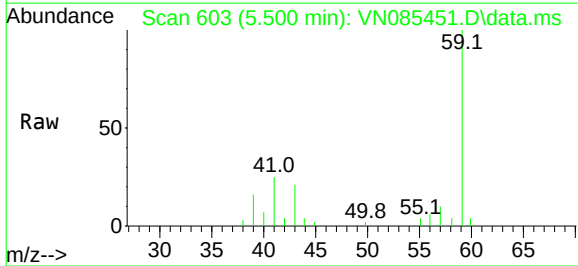
Ion Ratio Lower Upper

59 100

57 10.9 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#12

1,1-Dichloroethene

Concen: 19.277 ug/l

RT: 4.341 min Scan# 406

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

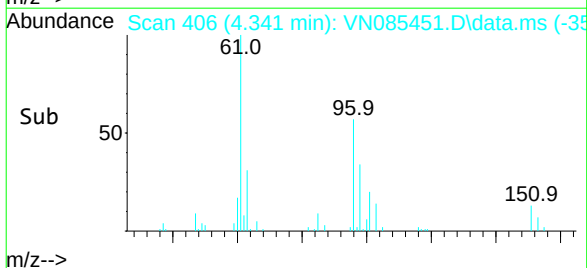
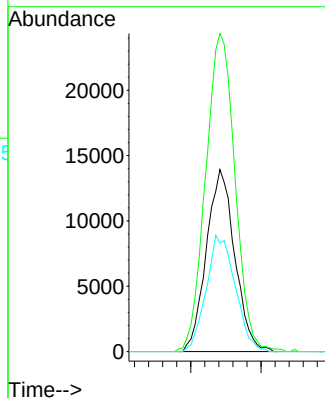
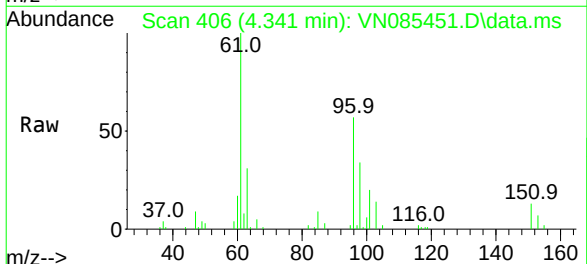
Tgt Ion: 96 Resp: 39080

Ion Ratio Lower Upper

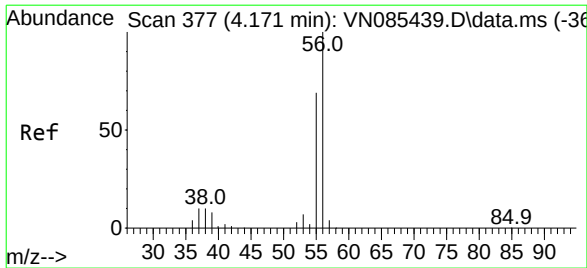
96 100

61 173.3 141.0 211.4

98 59.5 49.0 73.6







#13

Acrolein

Concen: 116.005 ug/l

RT: 4.171 min Scan# 377

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 56 Resp: 55291

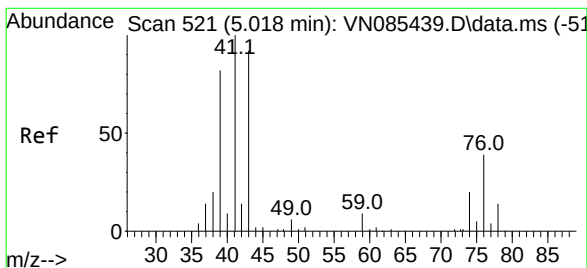
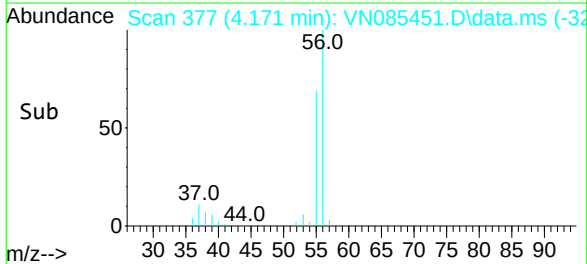
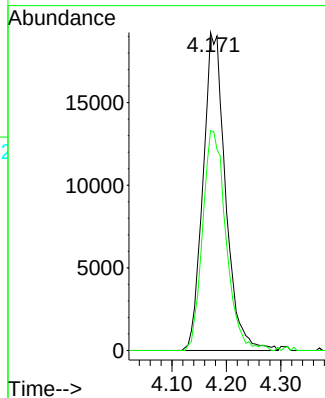
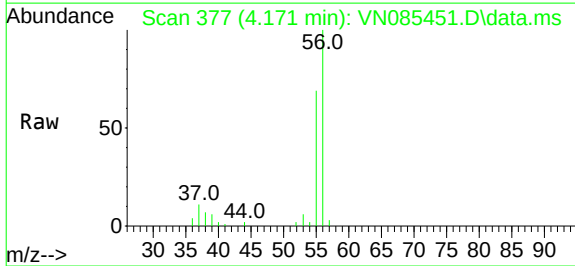
Ion Ratio Lower Upper

56 100

55 71.3 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#14

Allyl chloride

Concen: 19.361 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

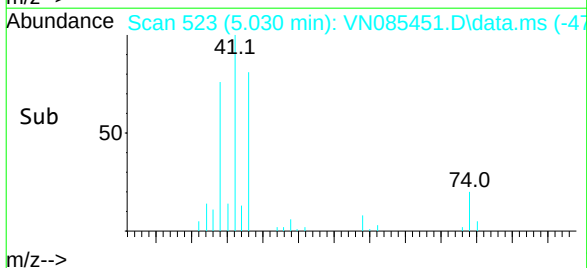
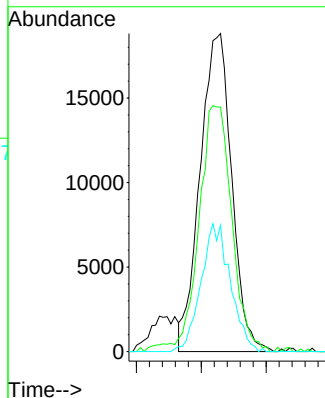
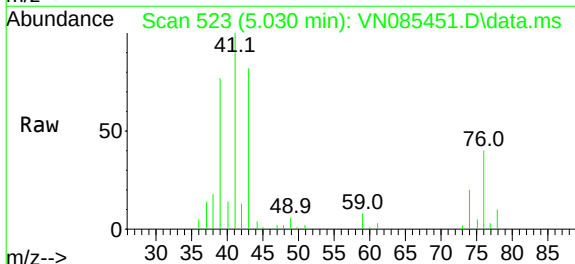
Tgt Ion: 41 Resp: 63692

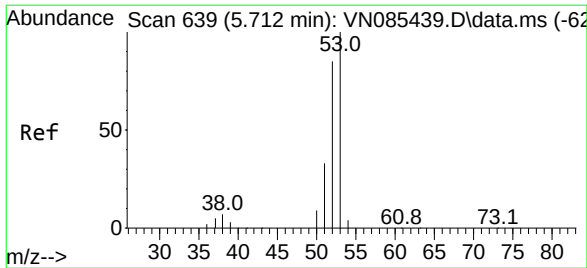
Ion Ratio Lower Upper

41 100

39 80.8 64.4 96.6

76 37.4 30.5 45.7





#15

Acrylonitrile

Concen: 97.766 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 53 Resp: 108425

Ion Ratio Lower Upper

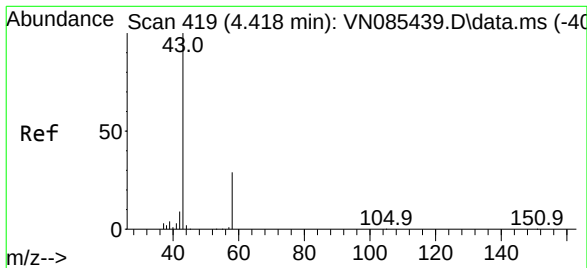
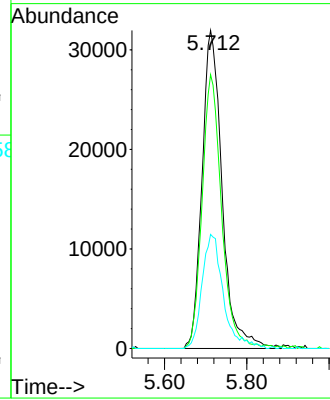
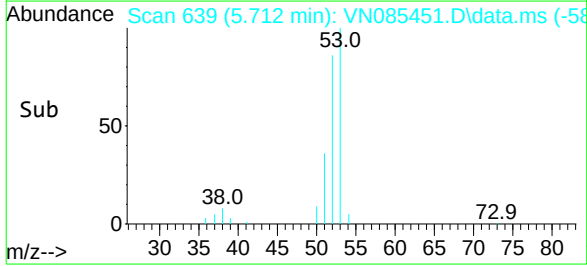
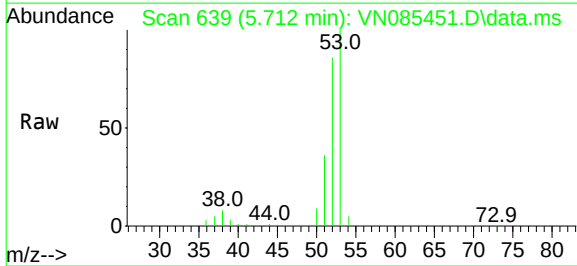
53 100

52 83.1 65.5 98.3

51 37.9 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#16

Acetone

Concen: 94.887 ug/l

RT: 4.418 min Scan# 419

Delta R.T. -0.000 min

Lab File: VN085451.D

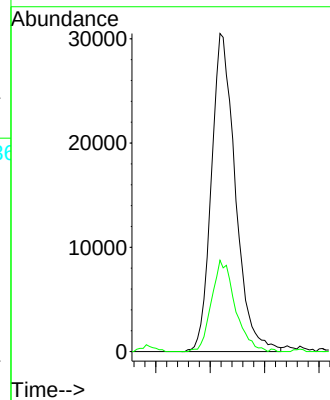
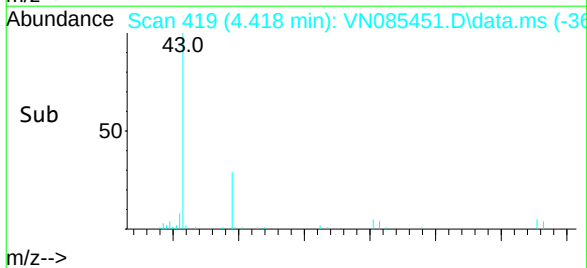
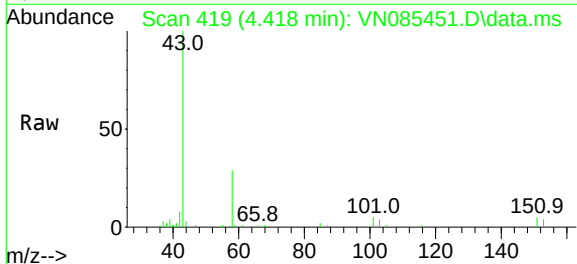
Acq: 15 Jan 2025 11:02

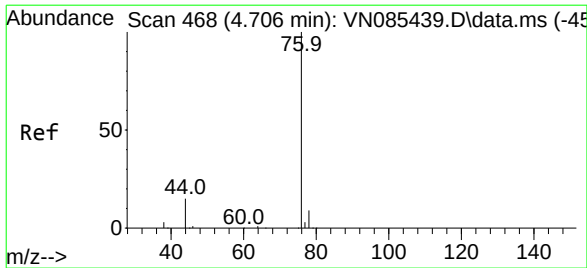
Tgt Ion: 43 Resp: 93485

Ion Ratio Lower Upper

43 100

58 28.7 23.8 35.6





#17

Carbon Disulfide

Concen: 18.094 ug/l

RT: 4.718 min Scan# 47

Delta R.T. 0.012 min

Lab File: VN085451.D

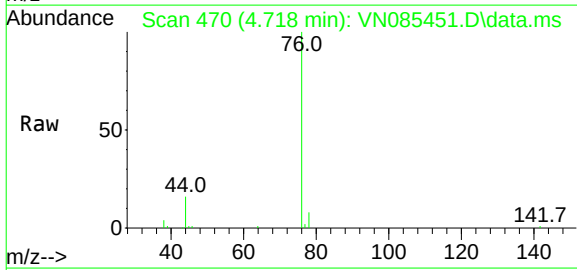
Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01



Tgt Ion: 76 Resp: 112944

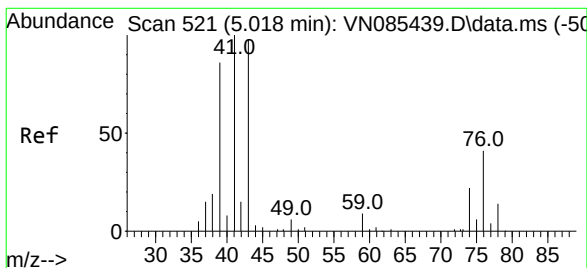
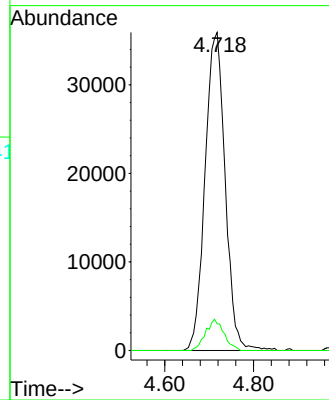
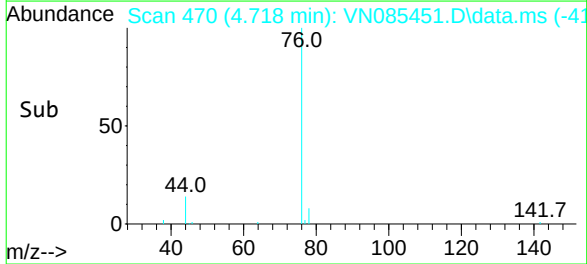
Ion Ratio Lower Upper

76 100

78 8.4 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#18

Methyl Acetate

Concen: 19.589 ug/l

RT: 5.012 min Scan# 520

Delta R.T. -0.006 min

Lab File: VN085451.D

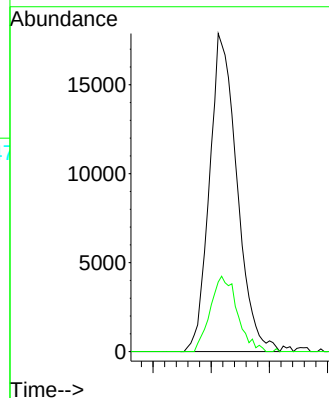
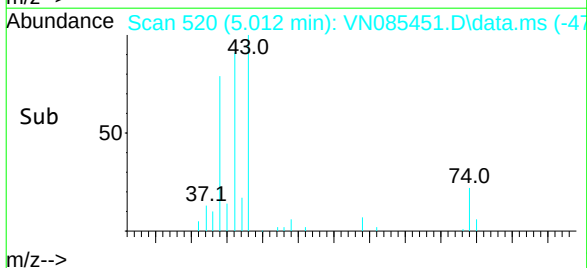
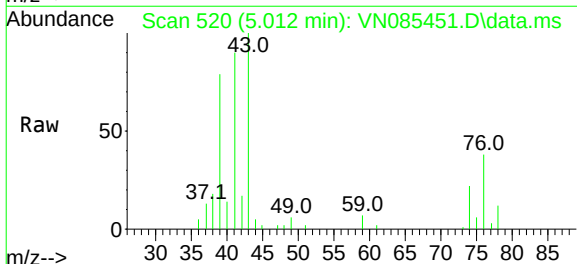
Acq: 15 Jan 2025 11:02

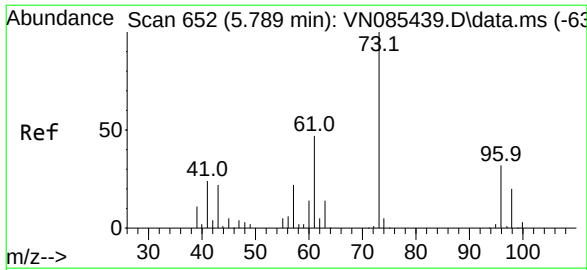
Tgt Ion: 43 Resp: 58686

Ion Ratio Lower Upper

43 100

74 23.2 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 21.081 ug/l

RT: 5.788 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 73 Resp: 138775

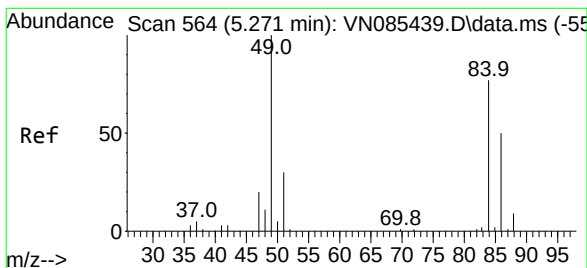
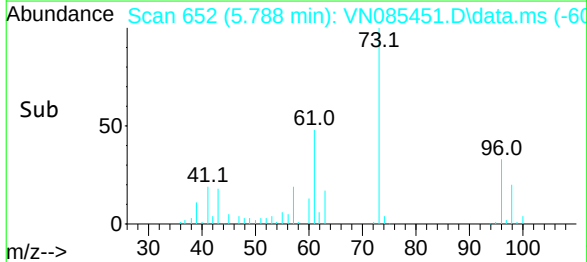
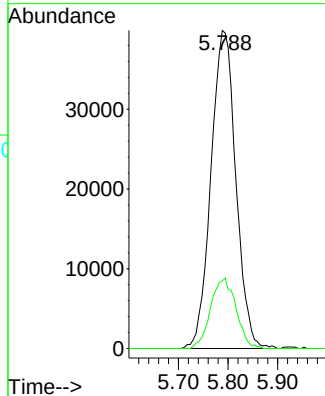
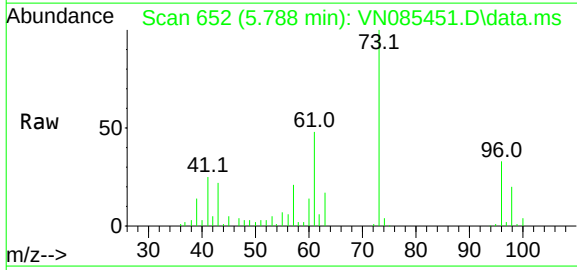
Ion Ratio Lower Upper

73 100

57 21.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#20

Methylene Chloride

Concen: 20.114 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Tgt Ion: 84 Resp: 49058

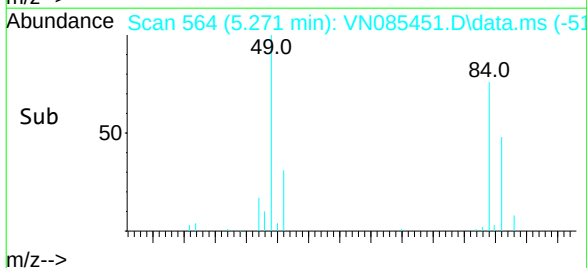
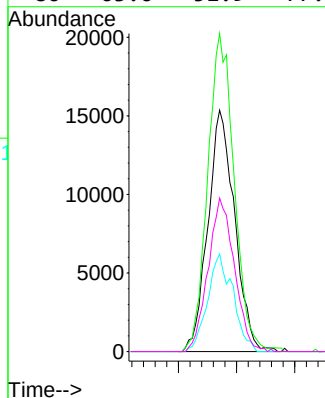
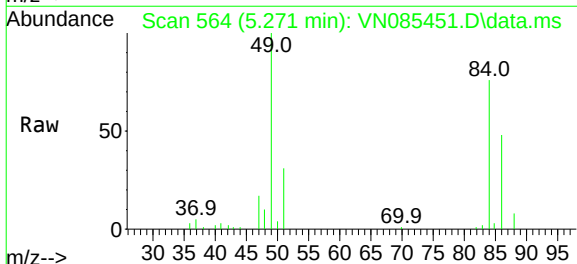
Ion Ratio Lower Upper

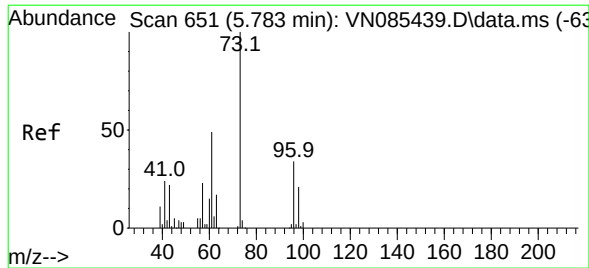
84 100

49 131.8 104.1 156.1

51 40.5 31.0 46.4

86 63.6 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 19.880 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085451.D

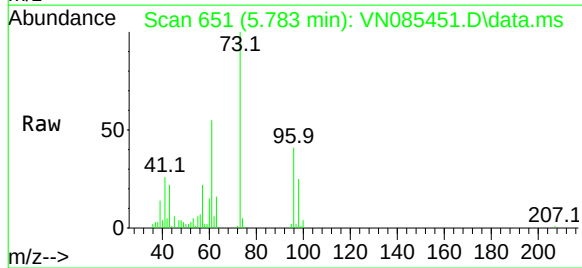
Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01



Tgt Ion: 96 Resp: 43073

Ion Ratio Lower Upper

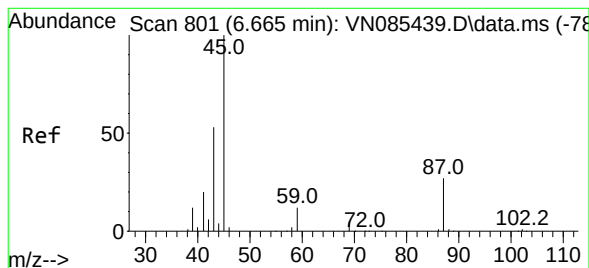
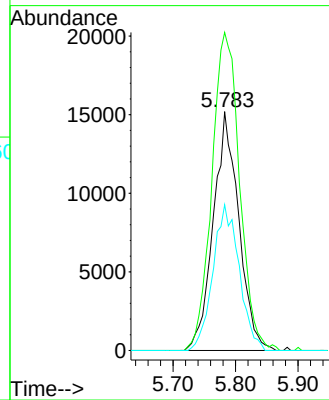
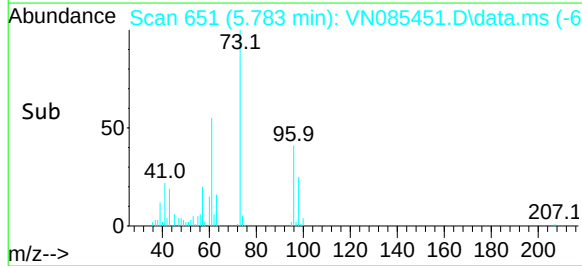
96 100

61 133.1 115.7 173.5

98 61.0 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#22

Diisopropyl ether

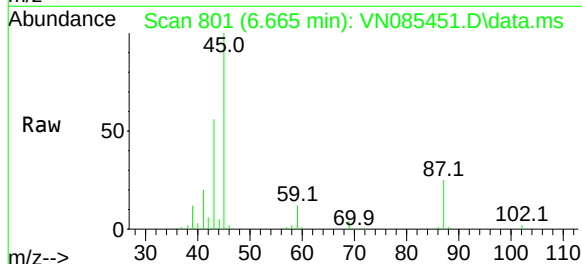
Concen: 21.410 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02



Tgt Ion: 45 Resp: 156331

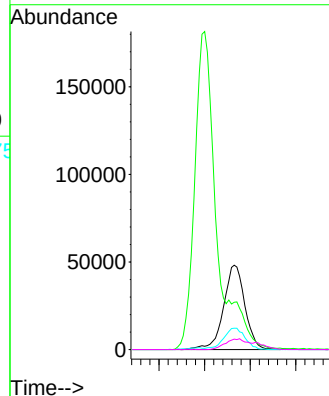
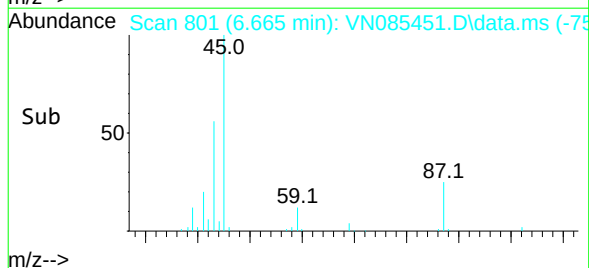
Ion Ratio Lower Upper

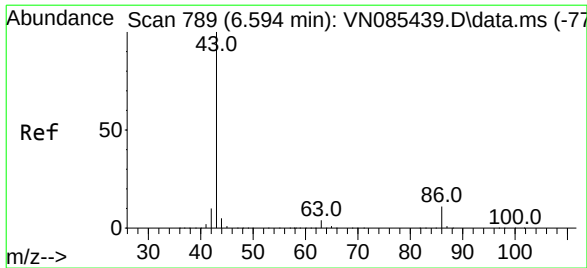
45 100

43 54.3 45.0 67.6

87 25.3 21.8 32.8

59 12.4 10.2 15.2





#23

Vinyl Acetate

Concen: 103.348 ug/l

RT: 6.600 min Scan# 79

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 43 Resp: 528099

Ion Ratio Lower Upper

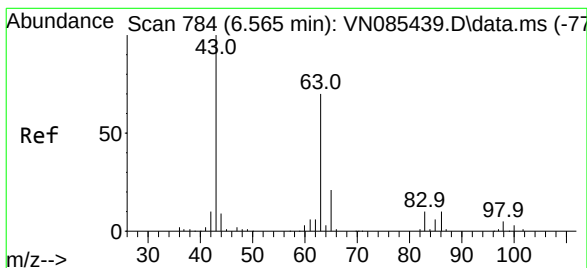
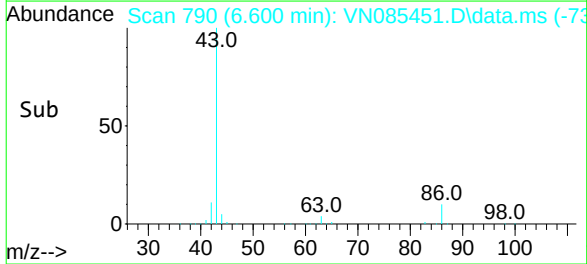
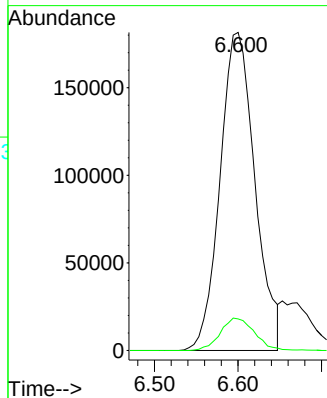
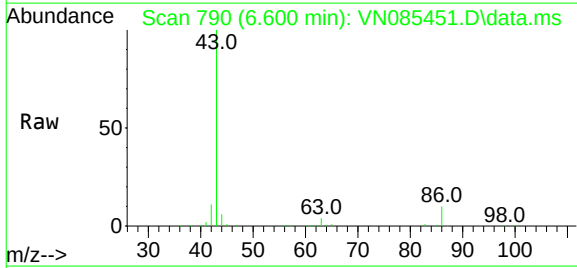
43 100

86 9.9 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#24

1,1-Dichloroethane

Concen: 19.952 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

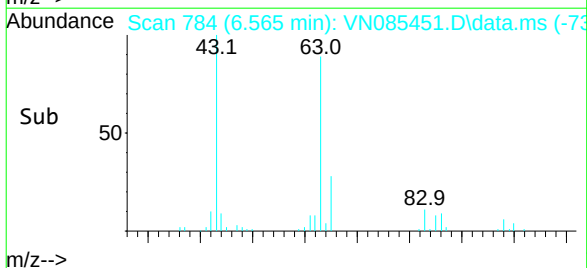
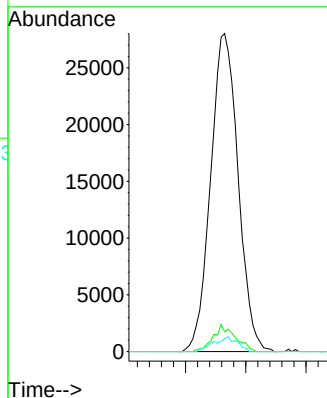
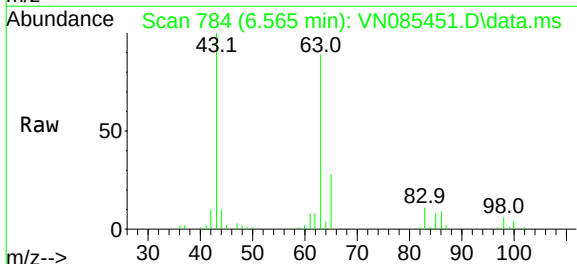
Tgt Ion: 63 Resp: 88831

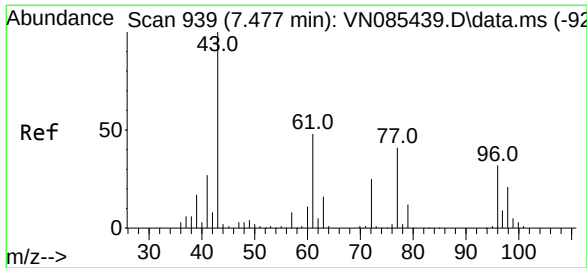
Ion Ratio Lower Upper

63 100

98 6.3 3.3 9.8

100 4.1 2.0 6.0





#25

2-Butanone

Concen: 97.595 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 43 Resp: 141498

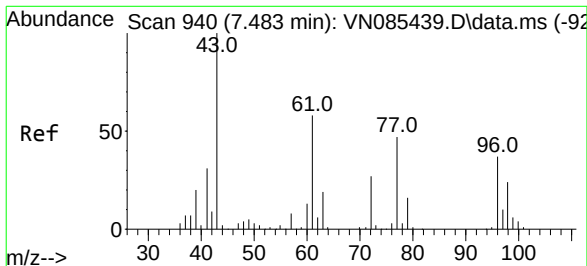
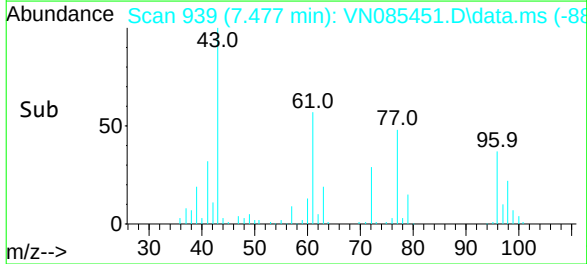
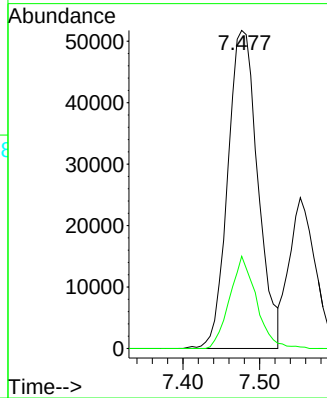
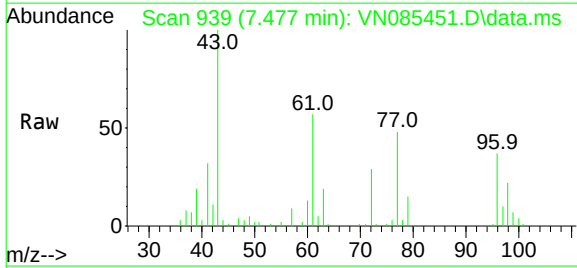
Ion Ratio Lower Upper

43 100

72 29.0 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#26

2,2-Dichloropropane

Concen: 21.728 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085451.D

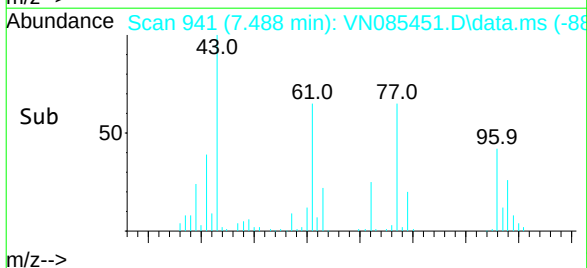
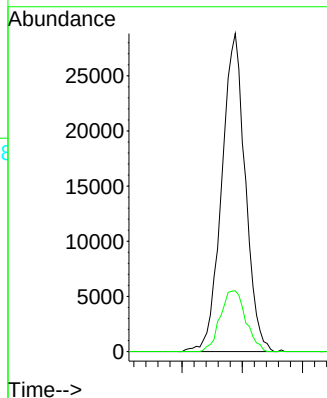
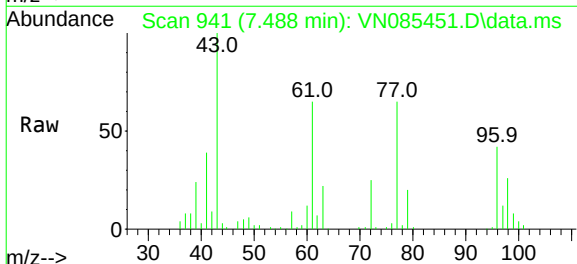
Acq: 15 Jan 2025 11:02

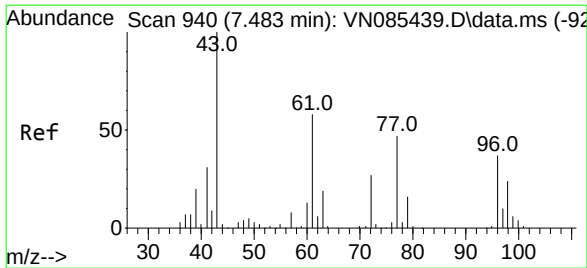
Tgt Ion: 77 Resp: 78212

Ion Ratio Lower Upper

77 100

97 20.7 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 19.672 ug/l

RT: 7.482 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085451.D

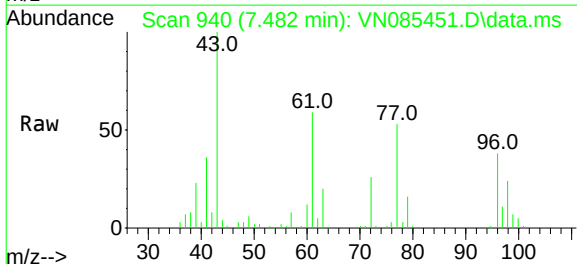
Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01



Tgt Ion: 96 Resp: 50200

Ion Ratio Lower Upper

96 100

61 165.3 0.0 311.8

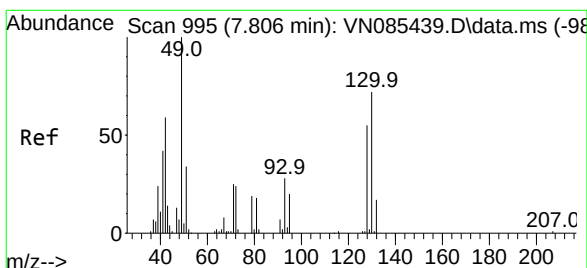
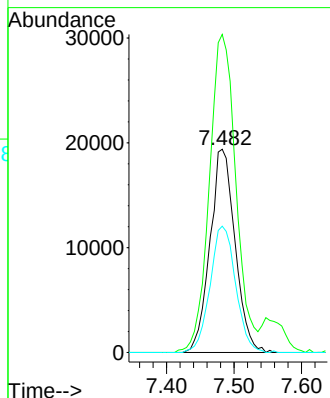
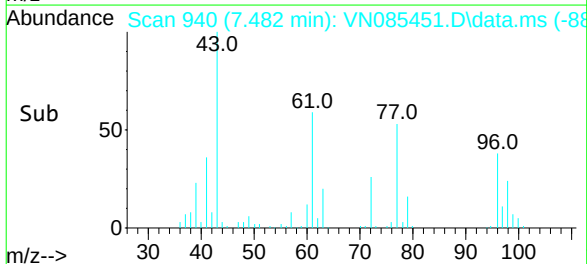
98 63.3 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#28

Bromochloromethane

Concen: 18.460 ug/l

RT: 7.806 min Scan# 995

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

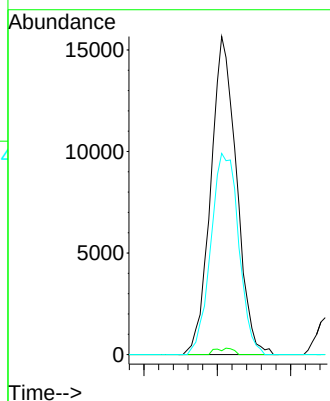
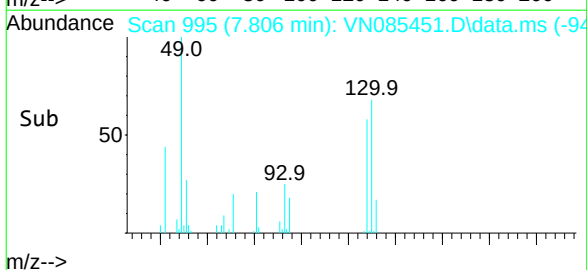
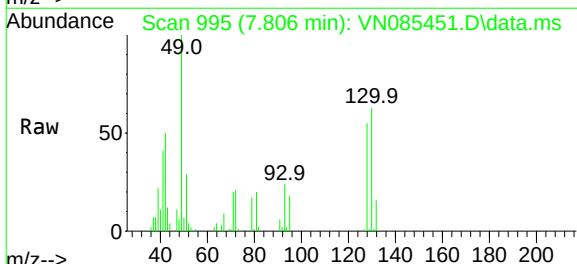
Tgt Ion: 49 Resp: 38238

Ion Ratio Lower Upper

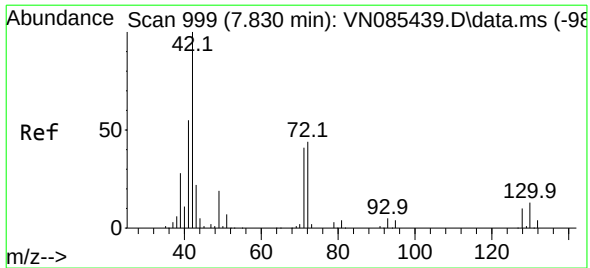
49 100

129 0.7 0.0 4.4

130 68.4 55.0 82.4







#29

Tetrahydrofuran

Concen: 102.217 ug/l

RT: 7.835 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 42 Resp: 93959

Ion Ratio Lower Upper

42 100

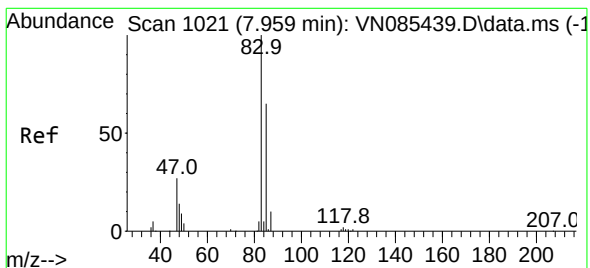
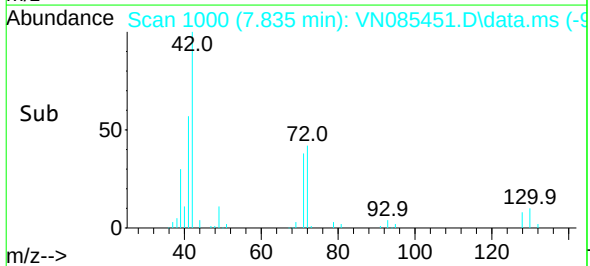
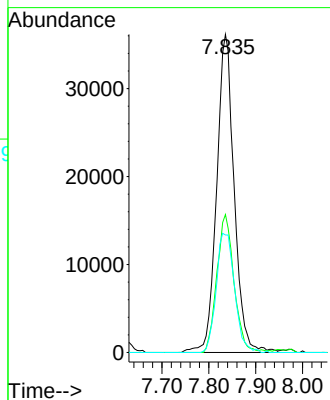
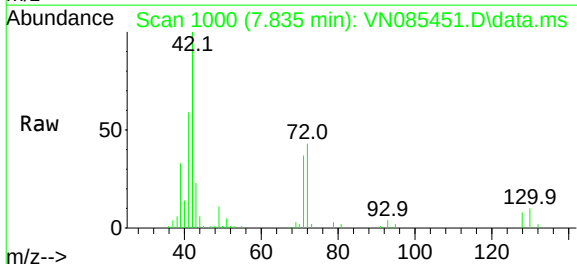
72 42.2 34.2 51.2

71 39.3 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#30

Chloroform

Concen: 20.149 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085451.D

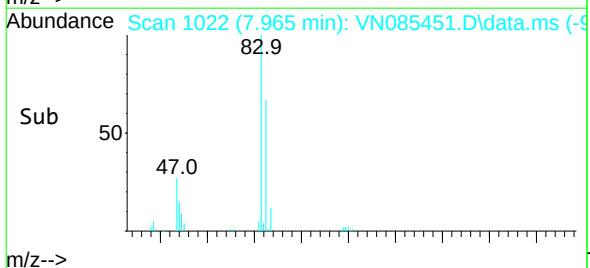
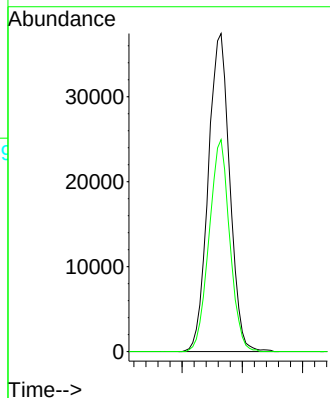
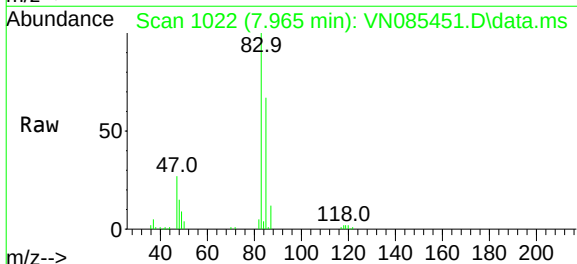
Acq: 15 Jan 2025 11:02

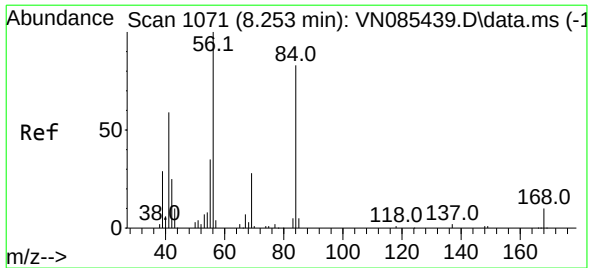
Tgt Ion: 83 Resp: 92715

Ion Ratio Lower Upper

83 100

85 66.6 51.8 77.6





#31

Cyclohexane

Concen: 18.672 ug/l

RT: 8.247 min Scan# 1071

Delta R.T. -0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 56 Resp: 72255

Ion Ratio Lower Upper

56 100

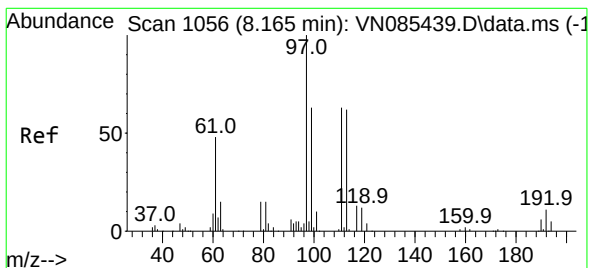
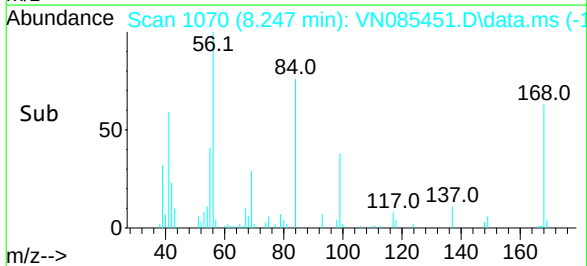
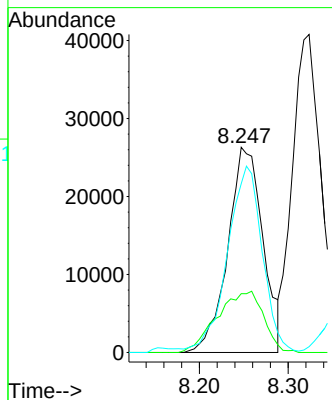
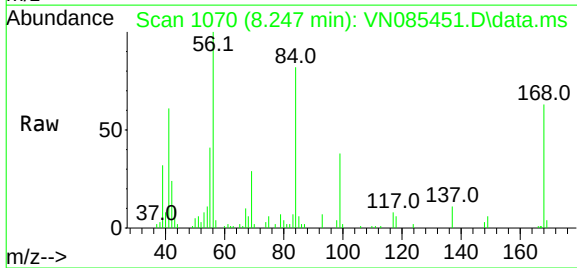
69 28.7 22.2 33.4

84 80.4 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#32

1,1,1-Trichloroethane

Concen: 19.867 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

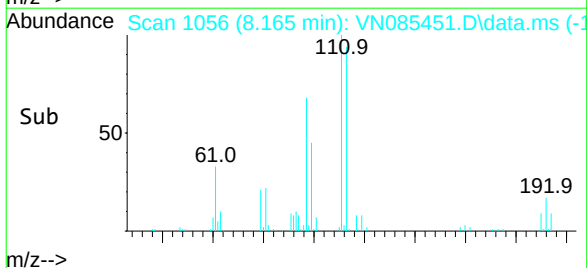
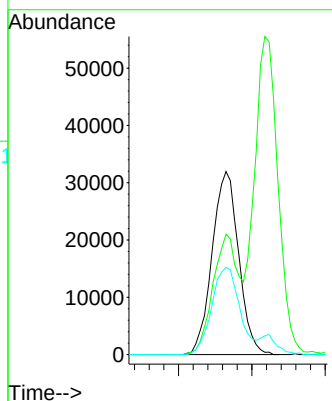
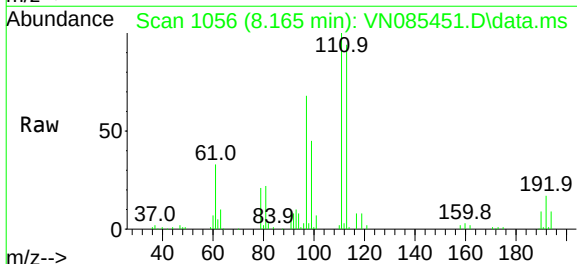
Tgt Ion: 97 Resp: 80190

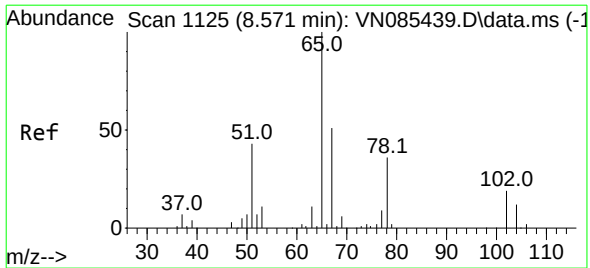
Ion Ratio Lower Upper

97 100

99 64.5 49.8 74.6

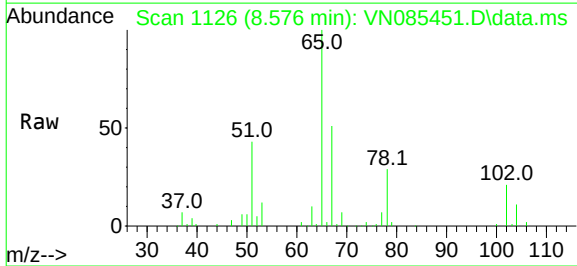
61 50.6 41.4 62.2





#33  
1,2-Dichloroethane-d4  
Concen: 48.941 ug/l  
RT: 8.576 min Scan# 111  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

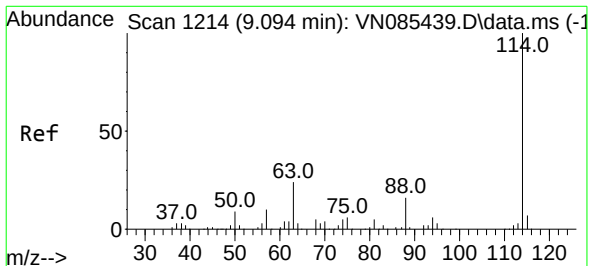
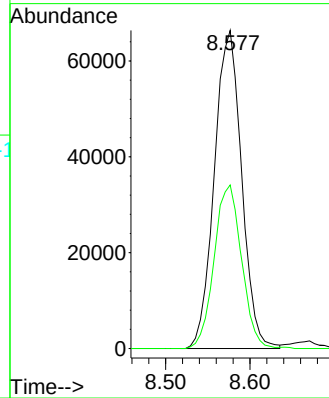
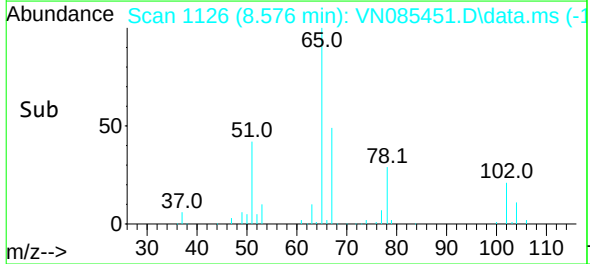
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



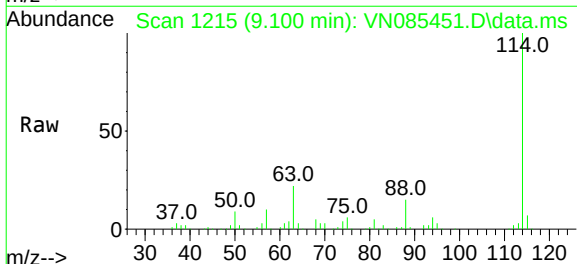
Tgt Ion: 65 Resp: 149231  
Ion Ratio Lower Upper  
65 100  
67 51.7 0.0 101.6

Manual Integrations  
APPROVED

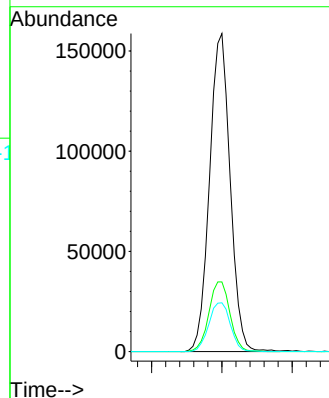
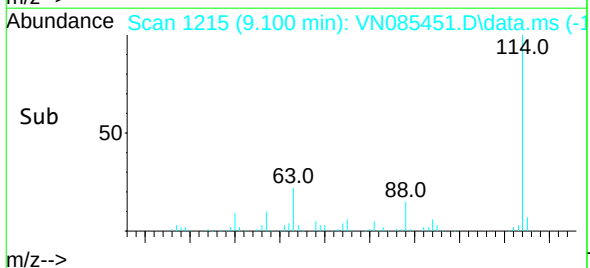
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

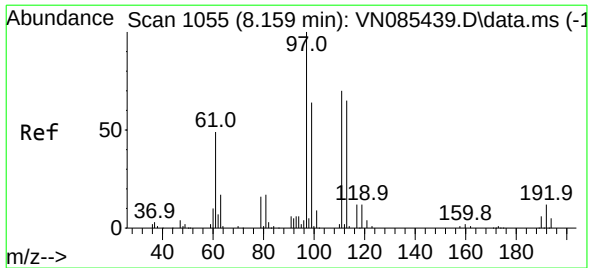


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02



Tgt Ion:114 Resp: 323122  
Ion Ratio Lower Upper  
114 100  
63 21.9 0.0 47.6  
88 15.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 49.259 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:113 Resp: 110423

Ion Ratio Lower Upper

113 100

111 103.1 82.7 124.1

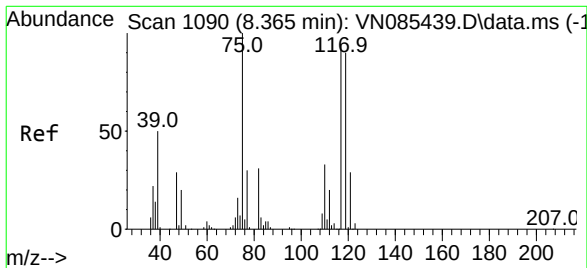
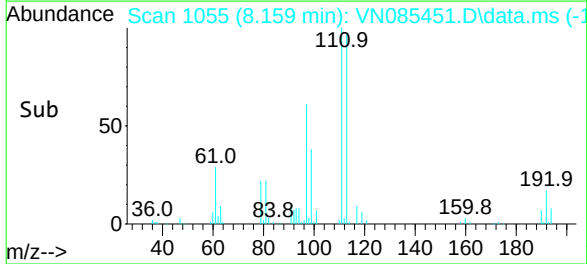
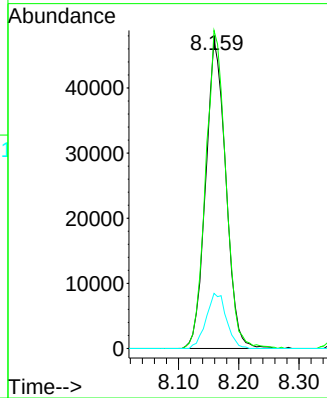
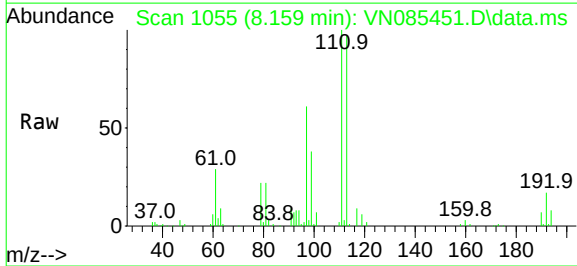
192 17.9 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#36

1,1-Dichloropropene

Concen: 19.650 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

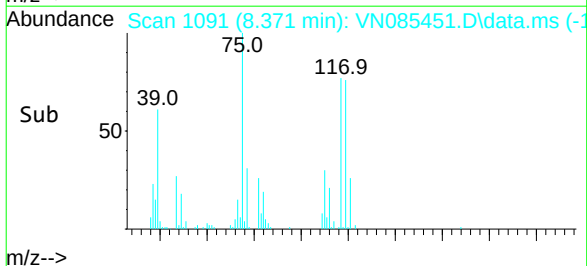
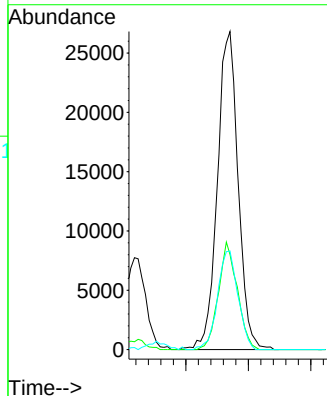
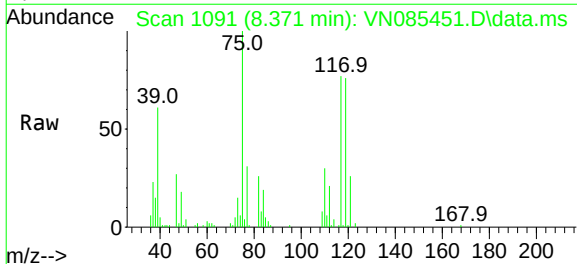
Tgt Ion: 75 Resp: 61822

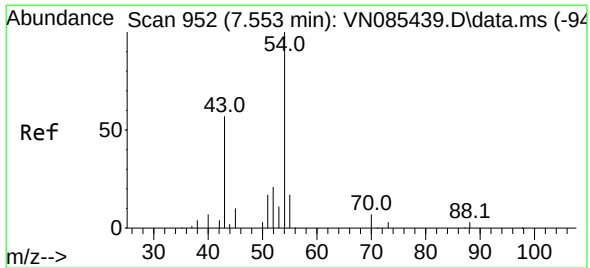
Ion Ratio Lower Upper

75 100

110 30.8 16.5 49.5

77 30.6 24.4 36.6





#37

Ethyl Acetate

Concen: 18.795 ug/l

RT: 7.553 min Scan# 952

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

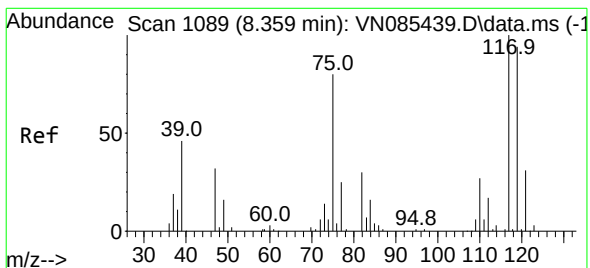
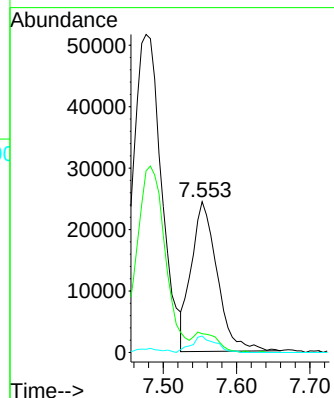
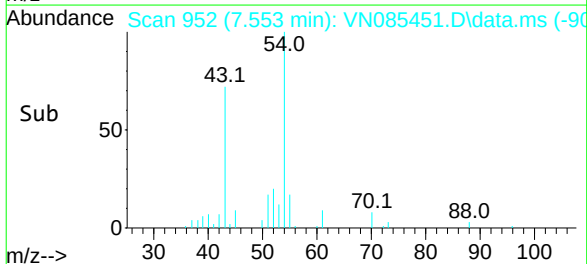
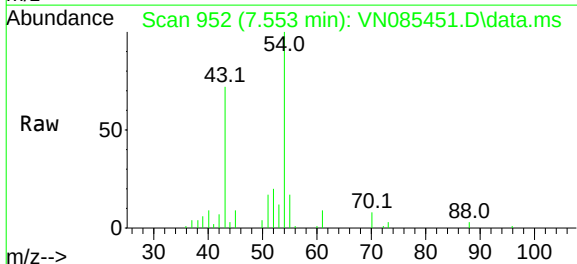
ClientSampleId :

VN0115WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 59684 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 12.3  | 10.9  | 16.3  |
| 70       | 10.1  | 7.5   | 11.3  |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#38

Carbon Tetrachloride

Concen: 19.911 ug/l

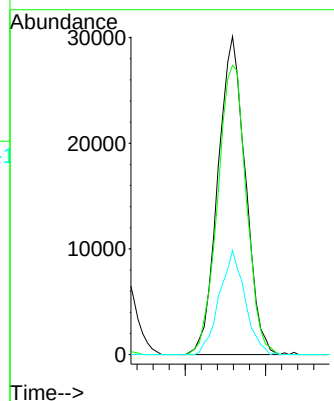
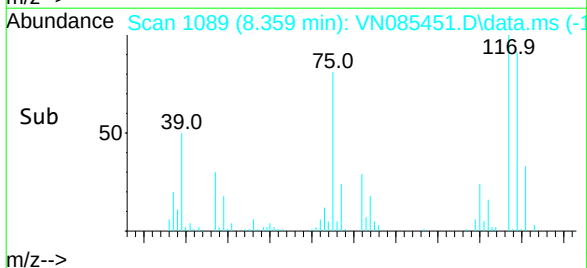
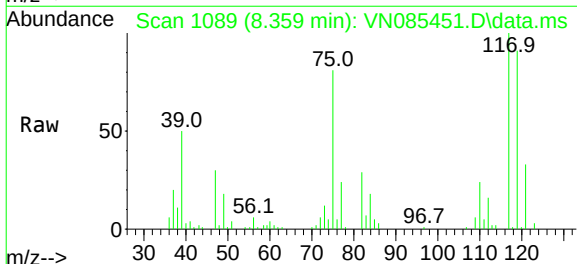
RT: 8.359 min Scan# 1089

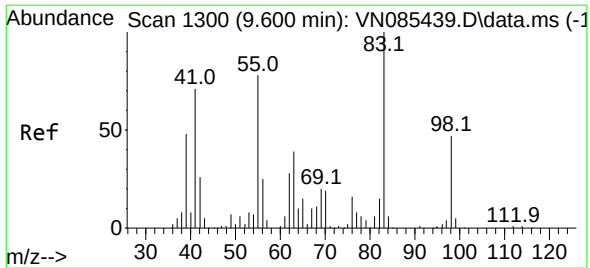
Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 71714 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 91.0  | 75.4  | 113.2 |
| 121      | 32.7  | 24.6  | 37.0  |





#39

Methylcyclohexane

Concen: 20.011 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

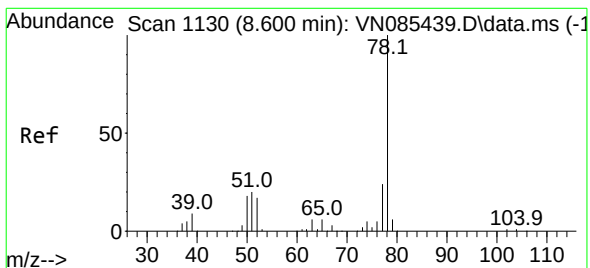
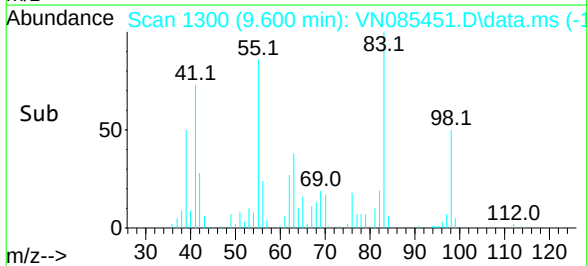
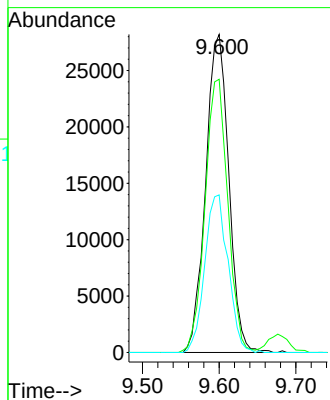
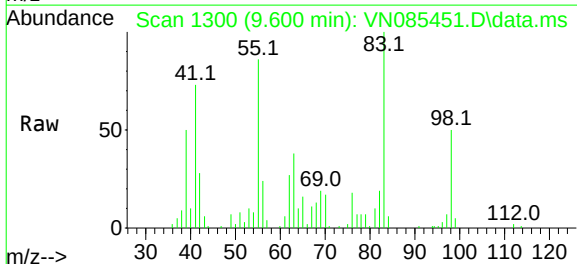
ClientSampleId :

VN0115WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 59161 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 85.9  | 62.6  | 94.0  |
| 98       | 49.6  | 37.7  | 56.5  |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#40

Benzene

Concen: 20.061 ug/l

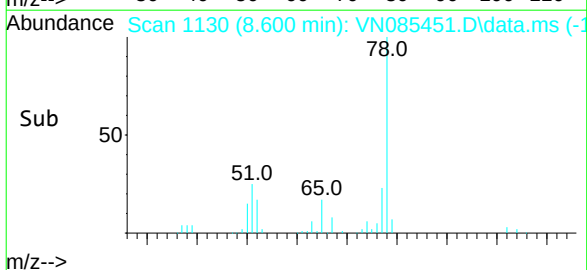
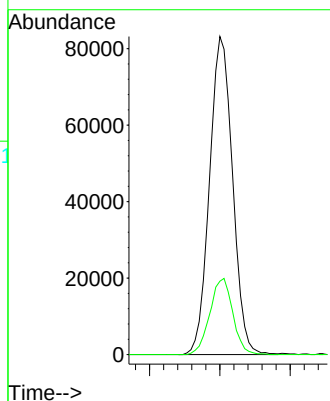
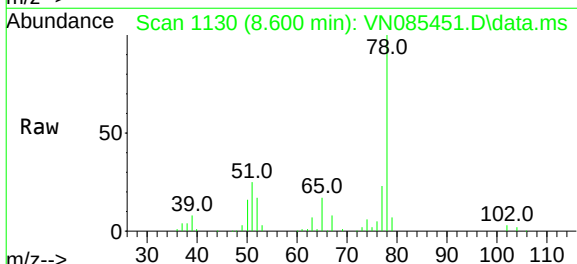
RT: 8.600 min Scan# 1130

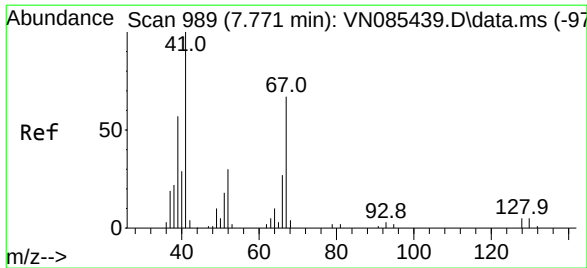
Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 78    | Resp: | 189640 |
| Ion      | Ratio | Lower | Upper  |
| 78       | 100   |       |        |
| 77       | 23.1  | 19.0  | 28.6   |





#41

Methacrylonitrile

Concen: 19.288 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 41 Resp: 31866

Ion Ratio Lower Upper

41 100

39 58.3 46.0 69.0

67 71.3 57.4 86.2

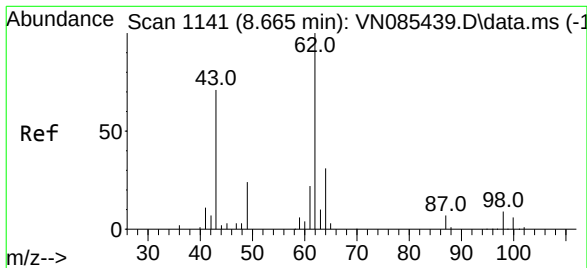
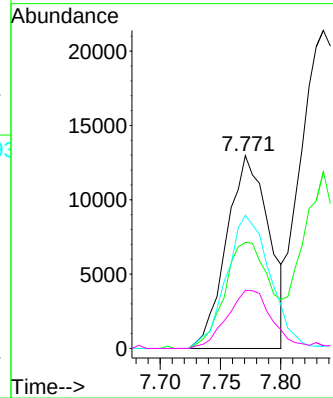
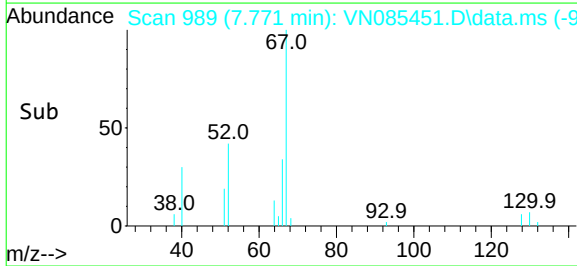
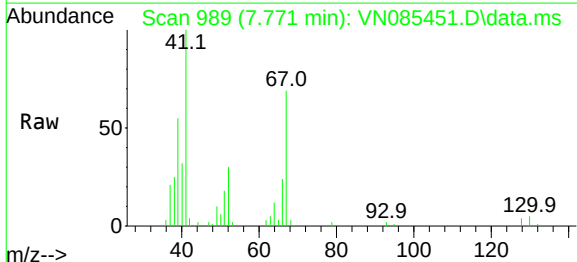
52 31.7 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#42

1,2-Dichloroethane

Concen: 20.692 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085451.D

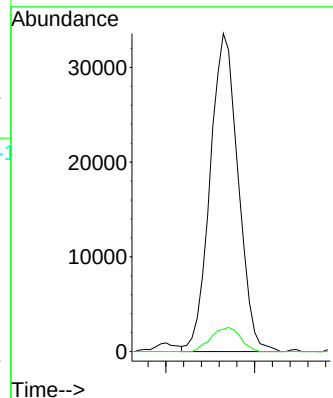
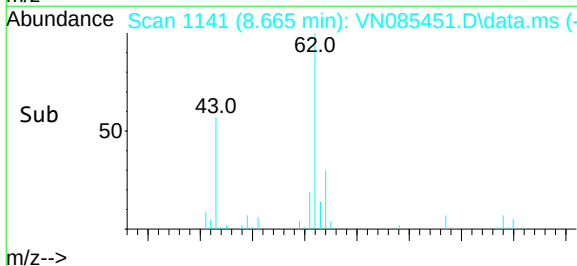
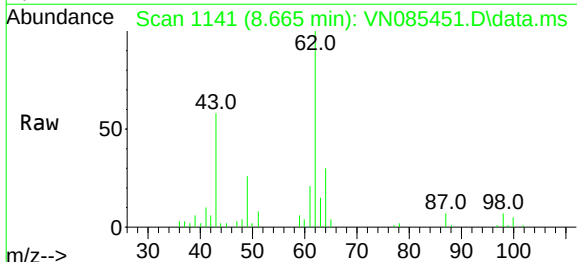
Acq: 15 Jan 2025 11:02

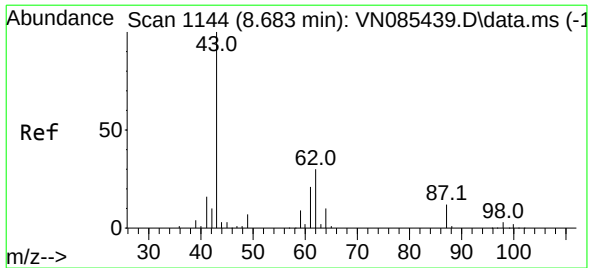
Tgt Ion: 62 Resp: 73669

Ion Ratio Lower Upper

62 100

98 7.9 0.0 17.0





#43

Isopropyl Acetate

Concen: 19.708 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 43 Resp: 100283

Ion Ratio Lower Upper

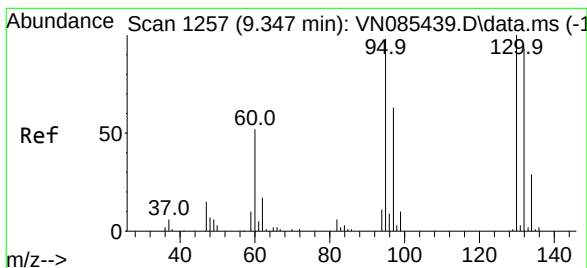
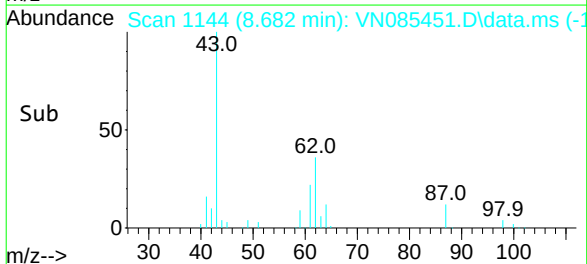
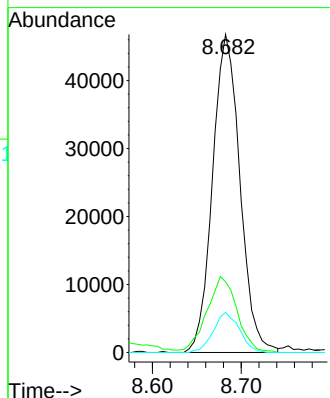
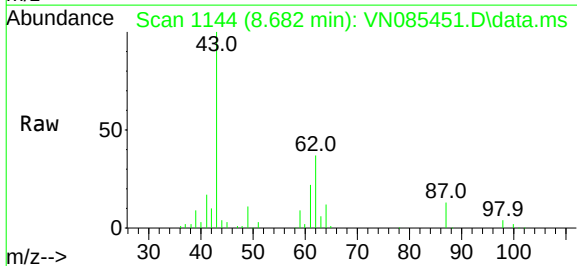
43 100

61 26.5 20.7 31.1

87 12.0 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#44

Trichloroethene

Concen: 20.145 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085451.D

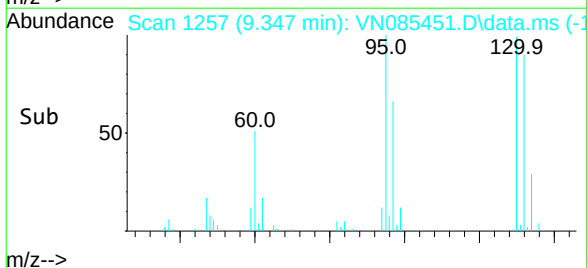
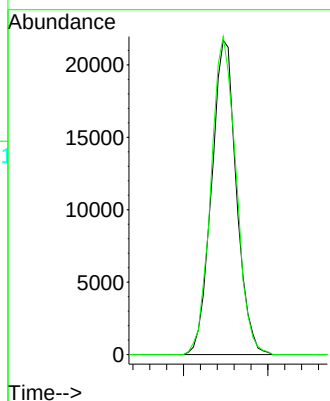
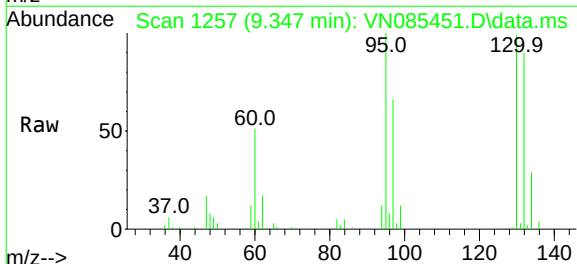
Acq: 15 Jan 2025 11:02

Tgt Ion:130 Resp: 44329

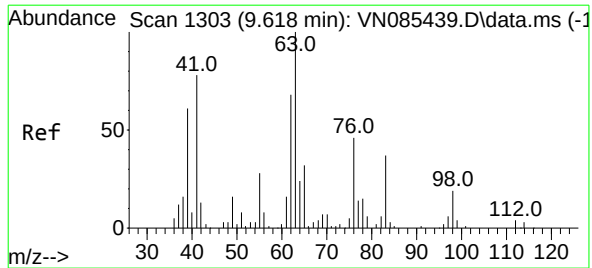
Ion Ratio Lower Upper

130 100

95 101.2 0.0 195.8







#45

1,2-Dichloropropane

Concen: 20.167 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 63 Resp: 48696

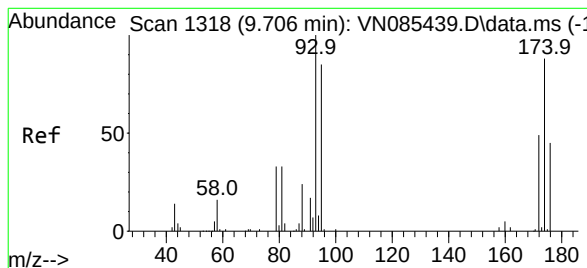
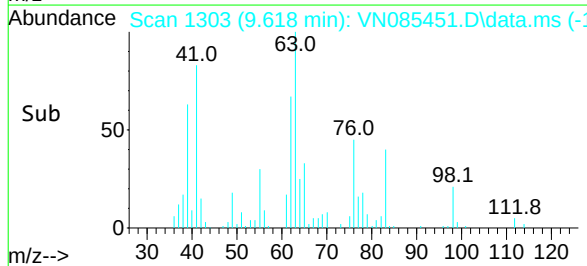
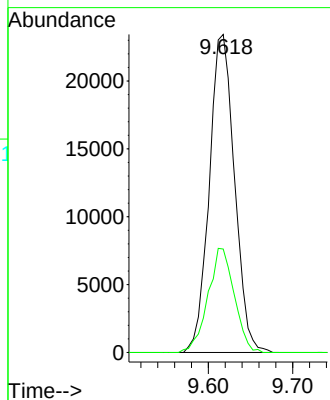
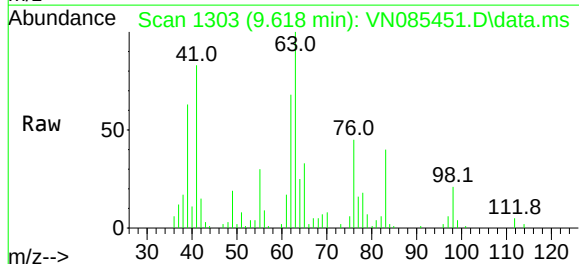
Ion Ratio Lower Upper

63 100

65 32.5 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#46

Dibromomethane

Concen: 19.561 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

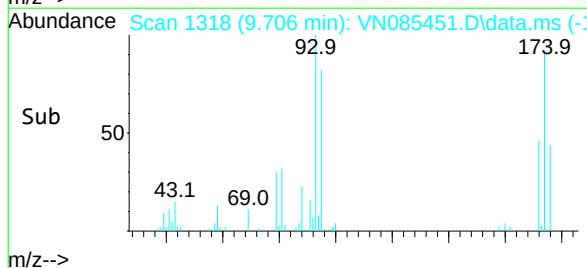
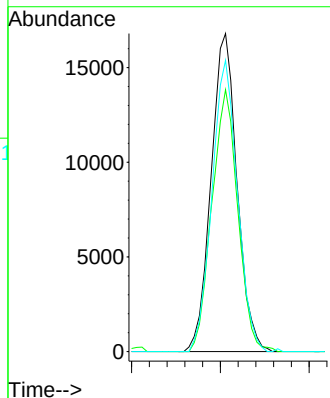
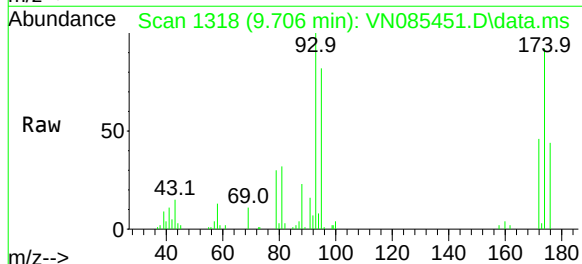
Tgt Ion: 93 Resp: 34080

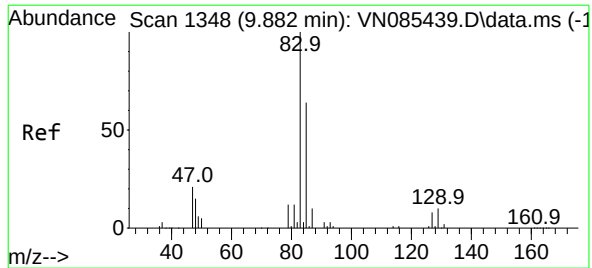
Ion Ratio Lower Upper

93 100

95 82.2 64.7 97.1

174 90.2 69.0 103.4





#47

Bromodichloromethane

Concen: 20.909 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085451.D

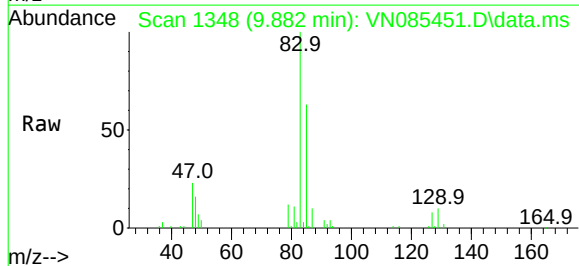
Acq: 15 Jan 2025 11:02

Instrument :

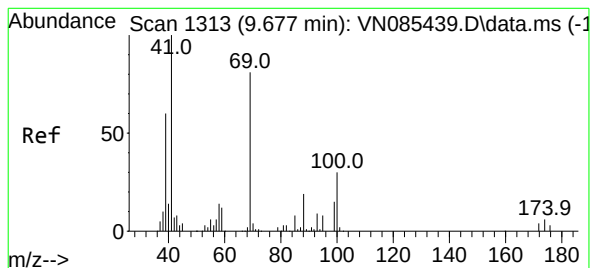
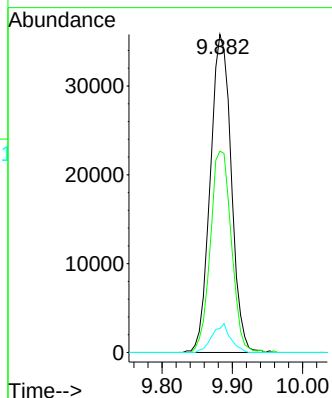
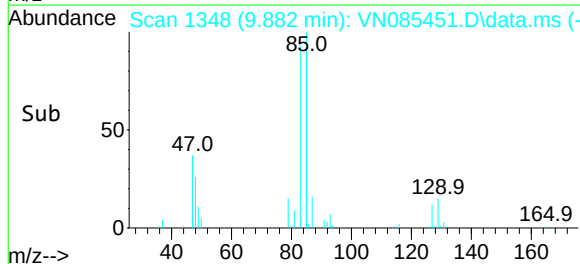
MSVOA\_N

ClientSampleId :

VN0115WBSD01



| Tgt Ion:  | 83    | Resp: | 74218 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 63.3  | 51.2  | 76.8  |
| 127       | 7.5   | 6.5   | 9.7   |

Manual Integrations  
APPROVEDReviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#48

Methyl methacrylate

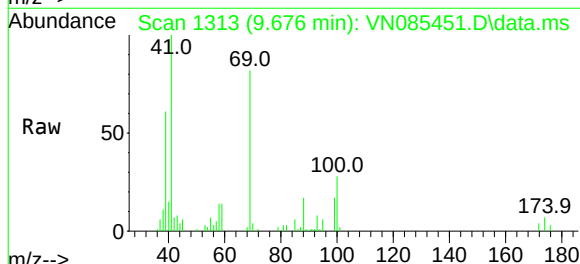
Concen: 20.374 ug/l

RT: 9.676 min Scan# 1313

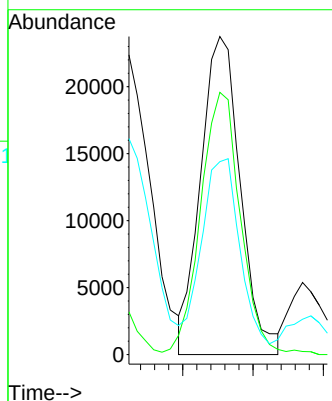
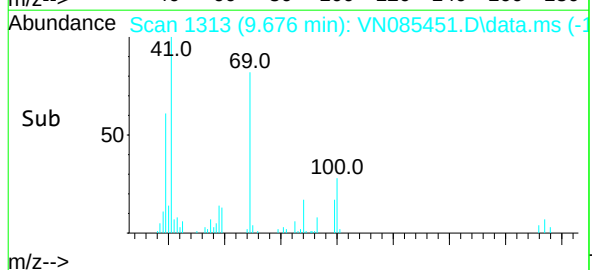
Delta R.T. -0.001 min

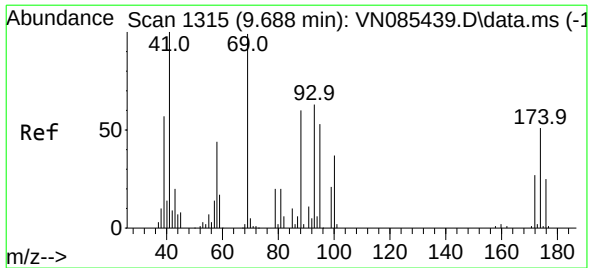
Lab File: VN085451.D

Acq: 15 Jan 2025 11:02



| Tgt Ion:  | 41    | Resp: | 46655 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 41        | 100   |       |       |
| 69        | 82.9  | 64.7  | 97.1  |
| 39        | 61.1  | 49.0  | 73.6  |





#49

1,4-Dioxane

Concen: 388.550 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 88 Resp: 14983

Ion Ratio Lower Upper

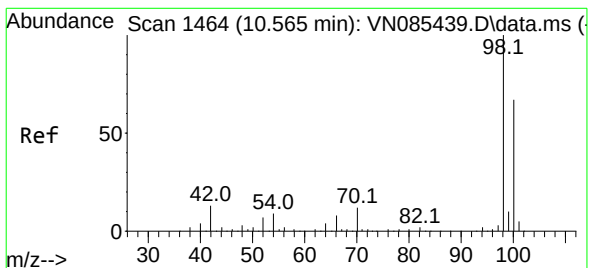
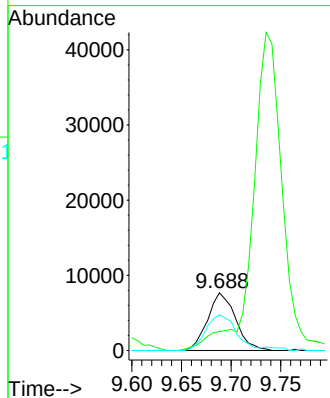
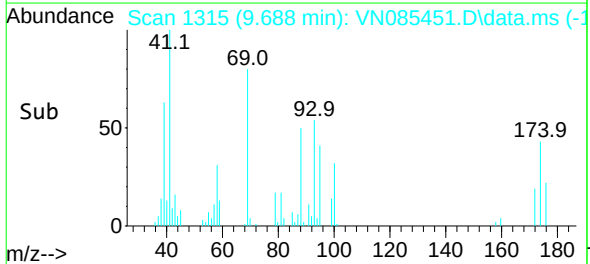
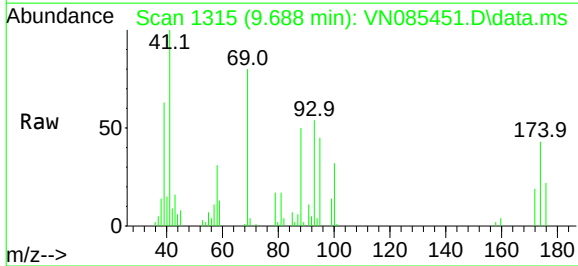
88 100

43 0.0 26.6 39.8

58 66.8 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#50

Toluene-d8

Concen: 50.102 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085451.D

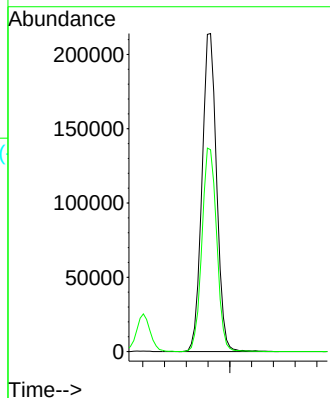
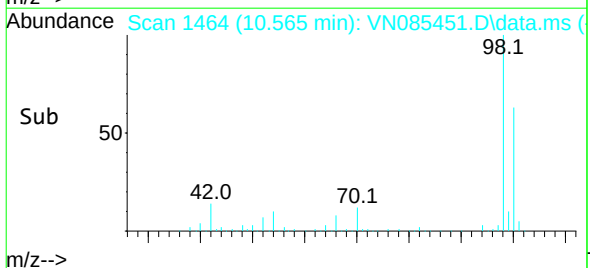
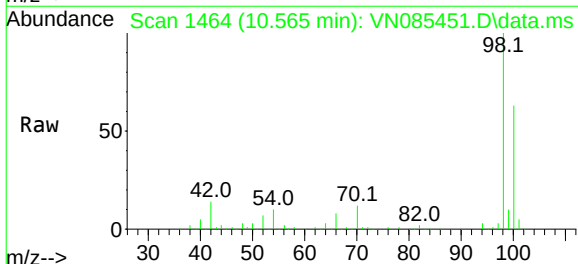
Acq: 15 Jan 2025 11:02

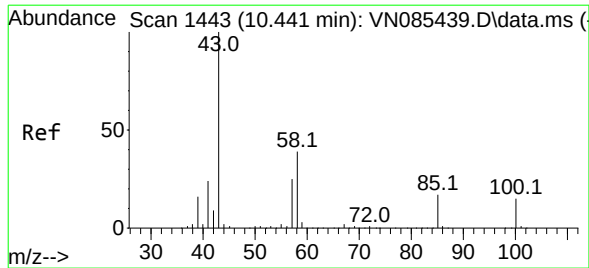
Tgt Ion: 98 Resp: 399040

Ion Ratio Lower Upper

98 100

100 64.8 52.2 78.4





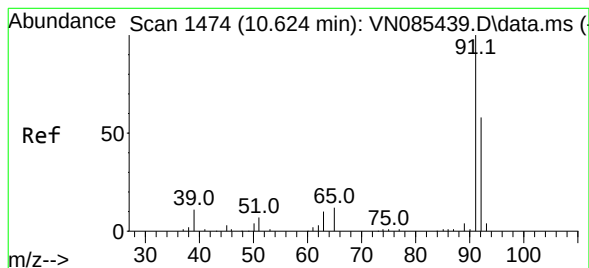
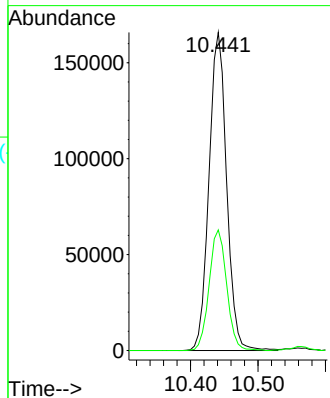
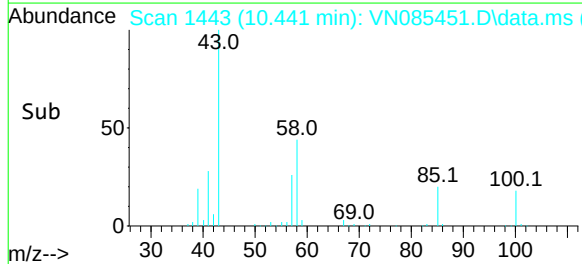
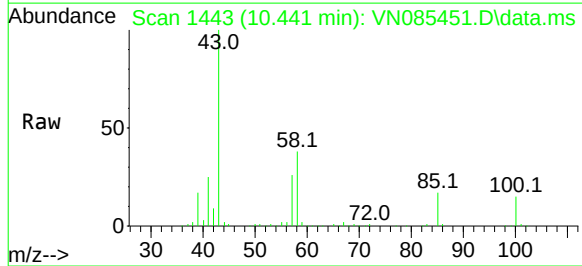
#51  
4-Methyl-2-Pentanone  
Concen: 101.808 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

Tgt Ion: 43 Resp: 300611  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7

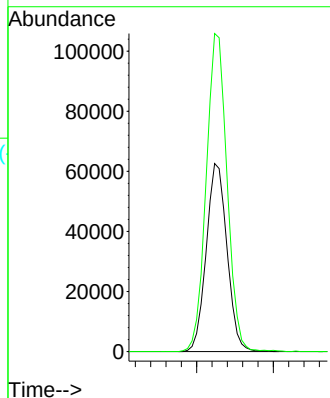
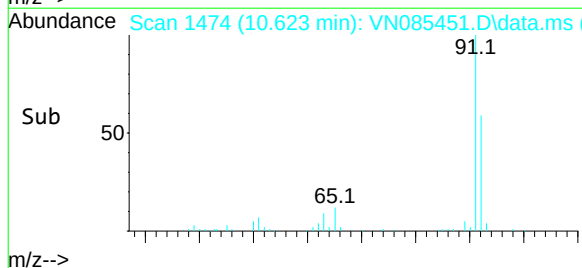
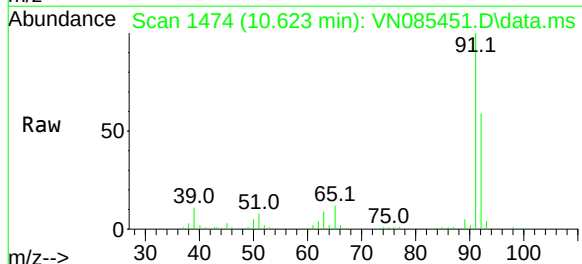
Manual Integrations  
APPROVED

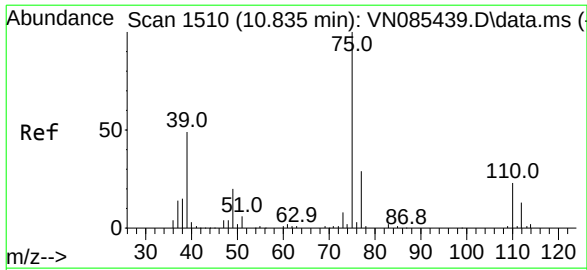
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#52  
Toluene  
Concen: 21.476 ug/l  
RT: 10.623 min Scan# 1474  
Delta R.T. -0.001 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

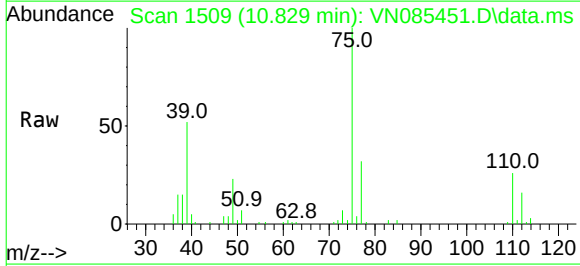
Tgt Ion: 92 Resp: 117631  
Ion Ratio Lower Upper  
92 100  
91 169.9 139.2 208.8





#53  
t-1,3-Dichloropropene  
Concen: 20.276 ug/l  
RT: 10.829 min Scan# 1510  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

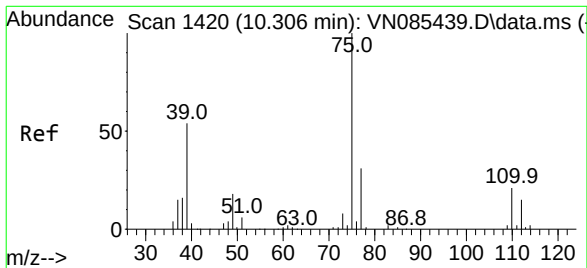
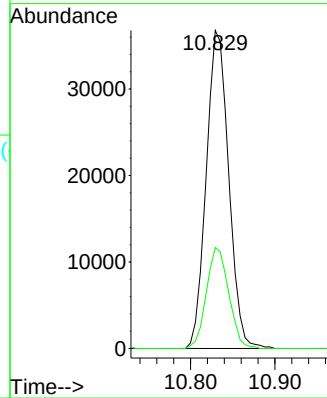
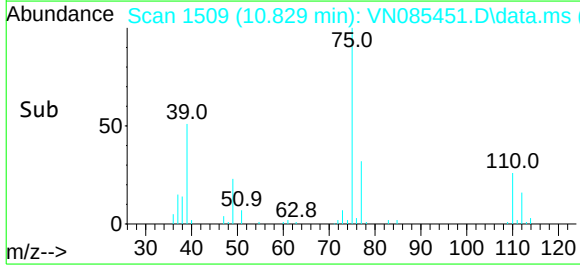
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



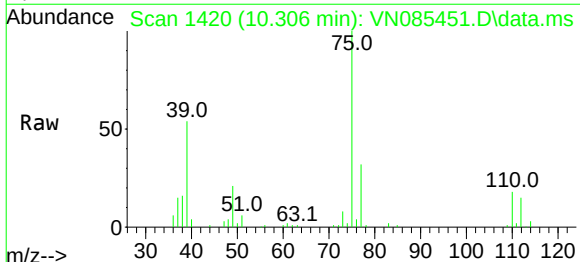
Tgt Ion: 75 Resp: 68014  
Ion Ratio Lower Upper  
75 100  
77 31.7 23.5 35.3

Manual Integrations  
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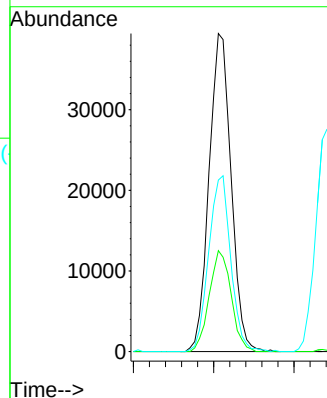
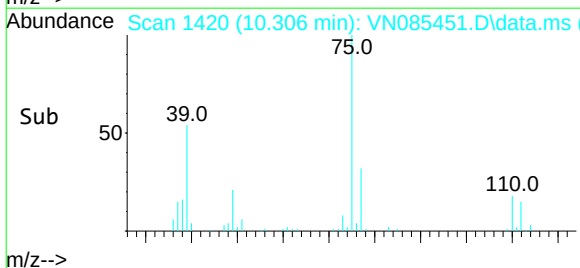
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

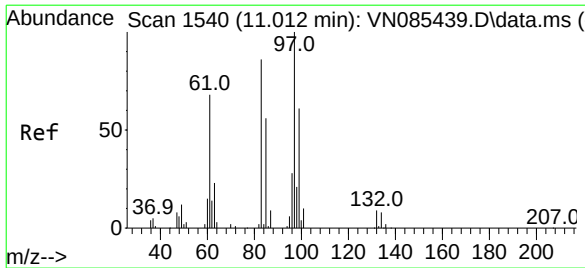


#54  
cis-1,3-Dichloropropene  
Concen: 20.973 ug/l  
RT: 10.306 min Scan# 1420  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02



Tgt Ion: 75 Resp: 75146  
Ion Ratio Lower Upper  
75 100  
77 31.7 25.0 37.4  
39 53.9 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 20.861 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 97 Resp: 45220

Ion Ratio Lower Upper

97 100

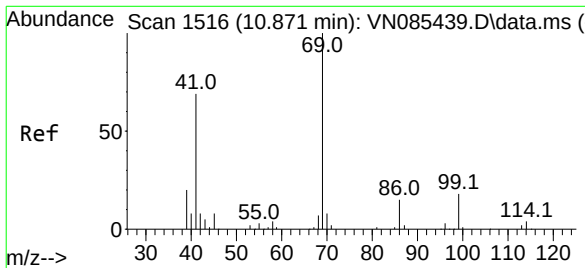
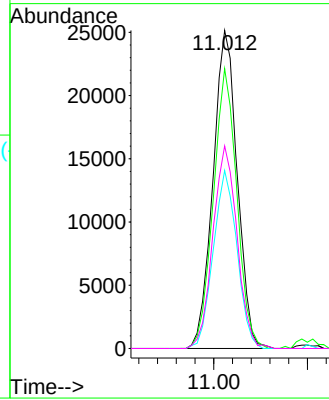
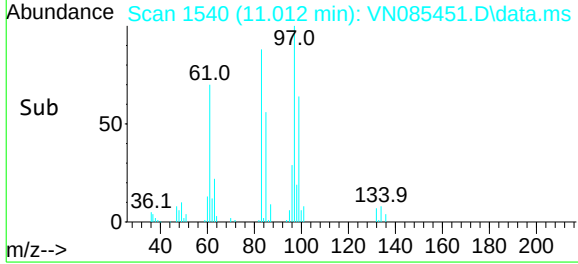
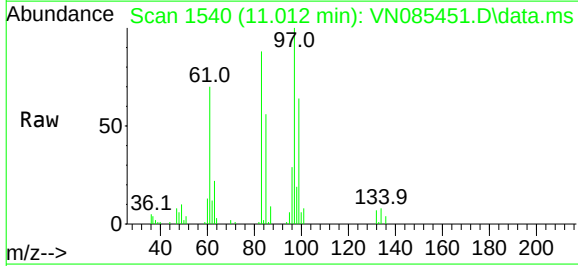
83 88.0 69.0 103.6

85 55.9 44.6 66.8

99 63.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#56

Ethyl methacrylate

Concen: 18.769 ug/l

RT: 10.870 min Scan# 1516

Delta R.T. -0.001 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

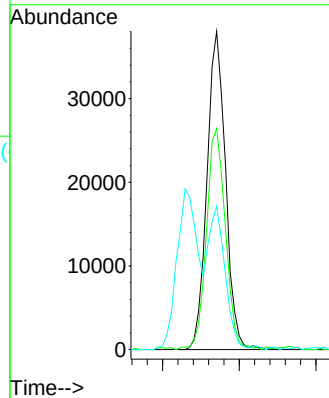
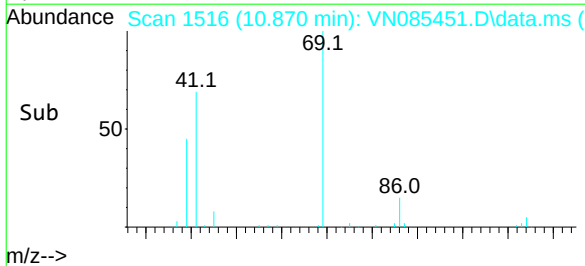
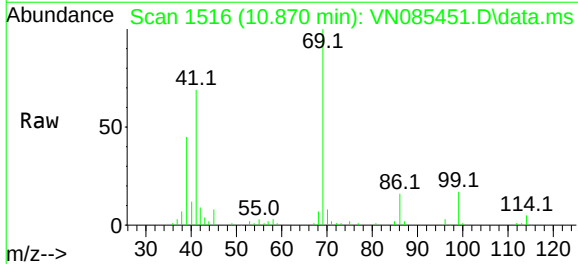
Tgt Ion: 69 Resp: 63954

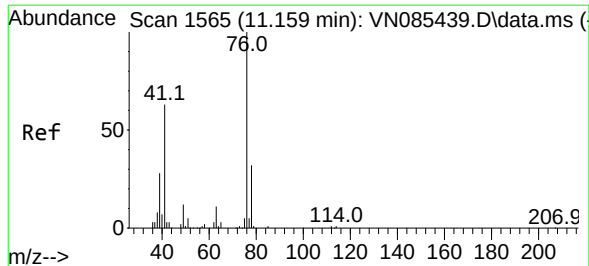
Ion Ratio Lower Upper

69 100

41 71.0 54.6 82.0

39 40.3 32.4 48.6





#57

1,3-Dichloropropane

Concen: 20.424 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085451.D

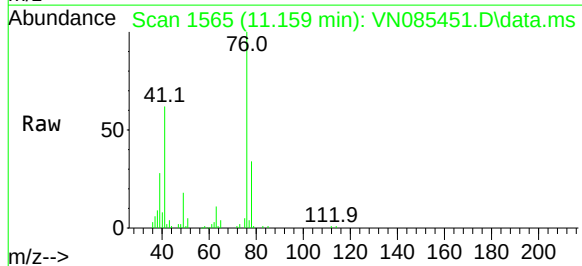
Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01



Tgt Ion: 76 Resp: 76979

Ion Ratio Lower Upper

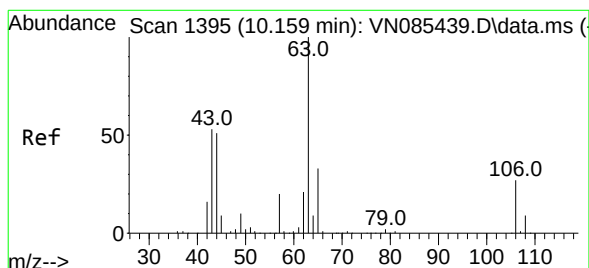
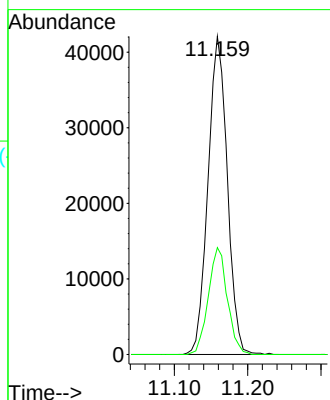
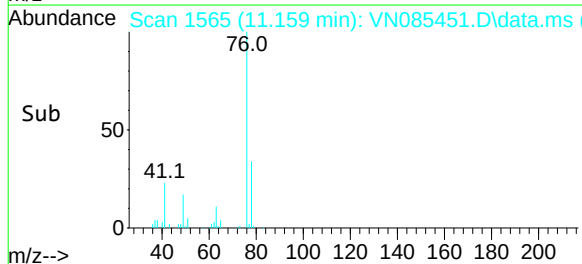
76 100

78 33.2 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#58

2-Chloroethyl Vinyl ether

Concen: 107.782 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085451.D

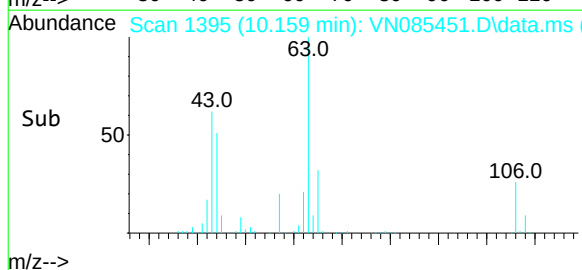
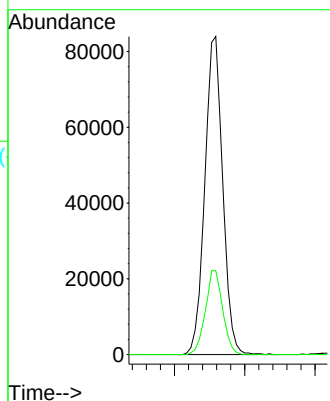
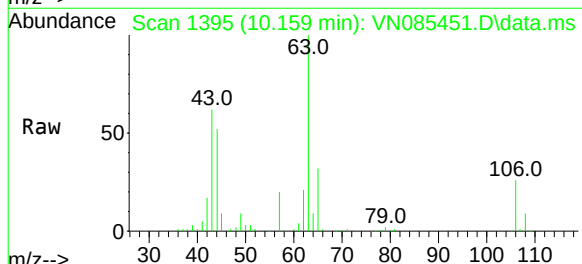
Acq: 15 Jan 2025 11:02

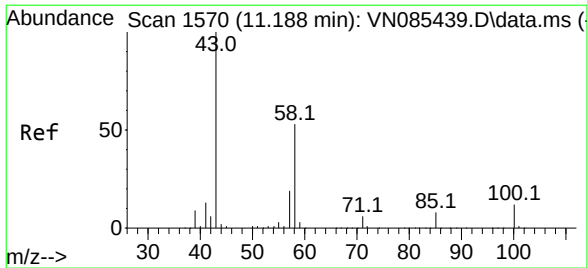
Tgt Ion: 63 Resp: 148262

Ion Ratio Lower Upper

63 100

106 25.5 21.6 32.4





#59

2-Hexanone

Concen: 101.890 ug/l

RT: 11.188 min Scan# 1570

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 43 Resp: 211689

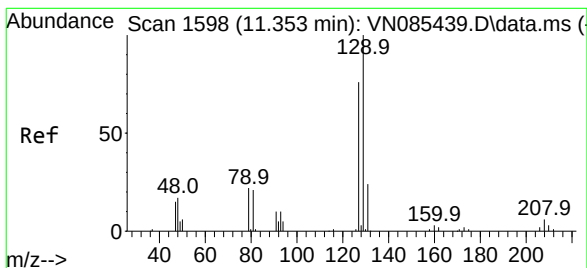
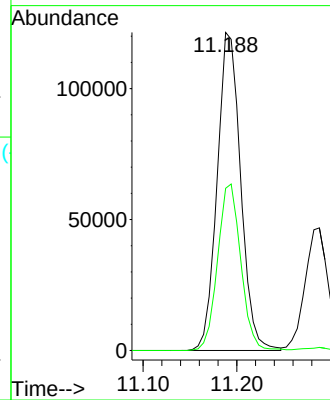
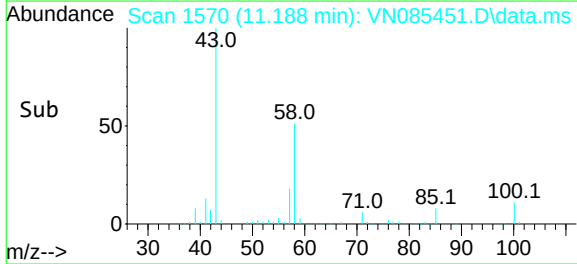
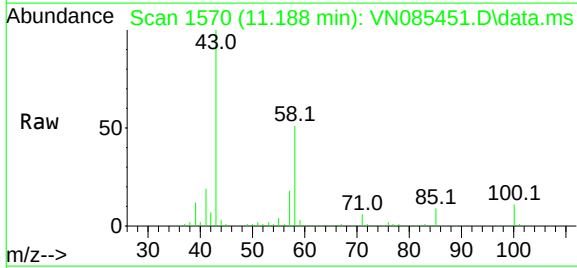
Ion Ratio Lower Upper

43 100

58 51.5 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#60

Dibromochloromethane

Concen: 20.236 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. -0.000 min

Lab File: VN085451.D

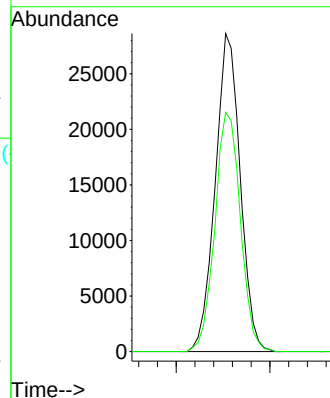
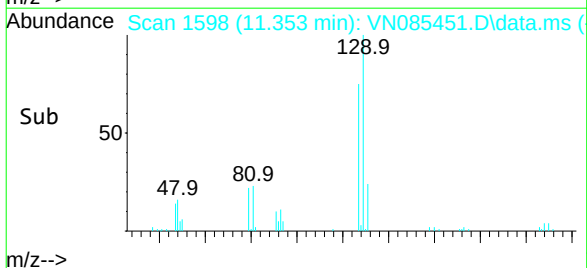
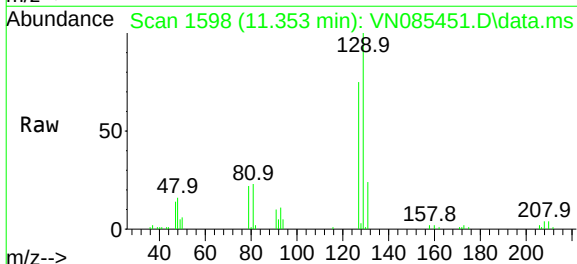
Acq: 15 Jan 2025 11:02

Tgt Ion:129 Resp: 52957

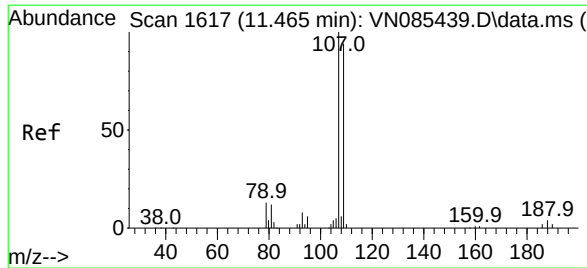
Ion Ratio Lower Upper

129 100

127 76.8 38.6 115.8







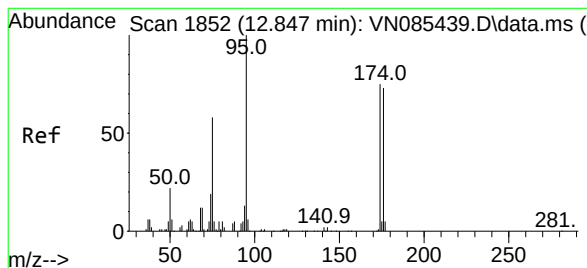
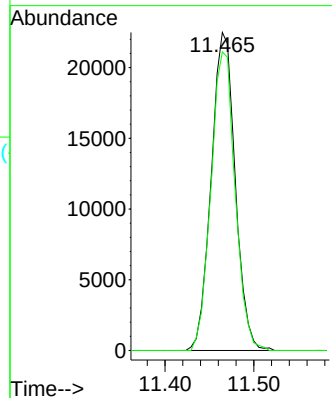
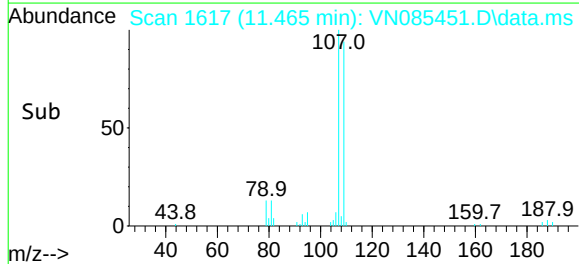
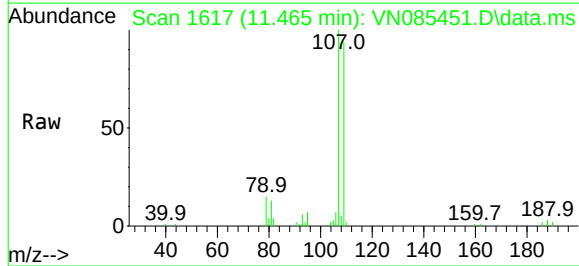
#61  
1,2-Dibromoethane  
Concen: 19.533 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

Tgt Ion: 107 Resp: 42146  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9

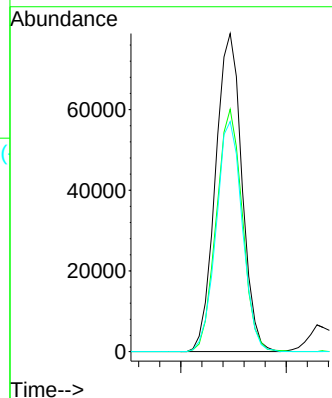
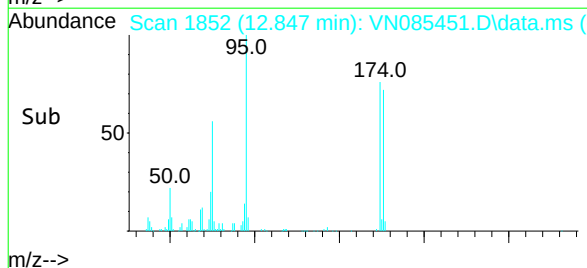
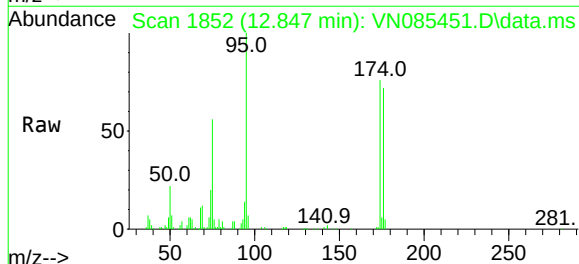
Manual Integrations  
APPROVED

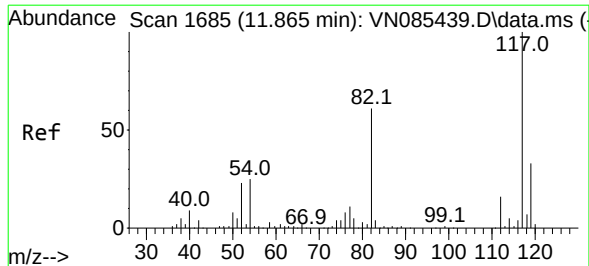
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#62  
4-Bromofluorobenzene  
Concen: 50.364 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

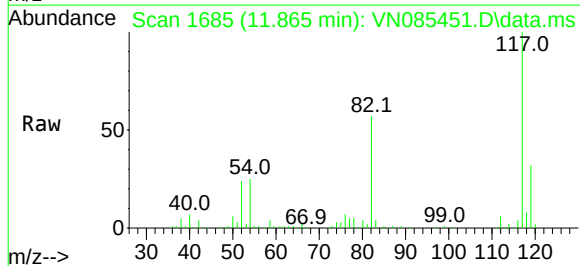
Tgt Ion: 95 Resp: 137216  
Ion Ratio Lower Upper  
95 100  
174 74.8 0.0 145.0  
176 71.6 0.0 142.4





#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

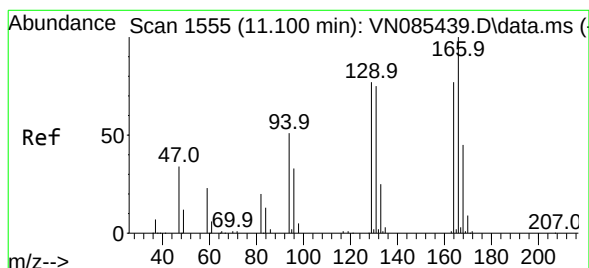
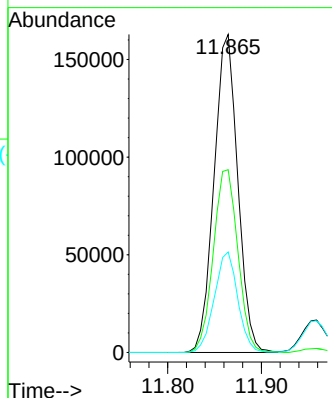
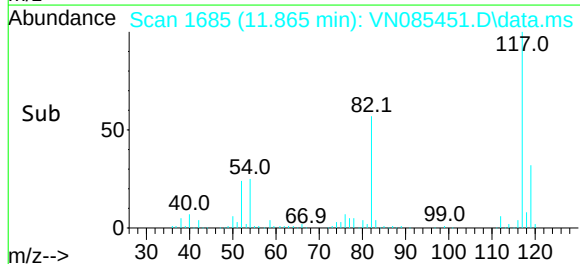
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion:117 Resp: 286298  
Ion Ratio Lower Upper  
117 100  
82 57.5 48.6 72.8  
119 31.6 26.6 39.8

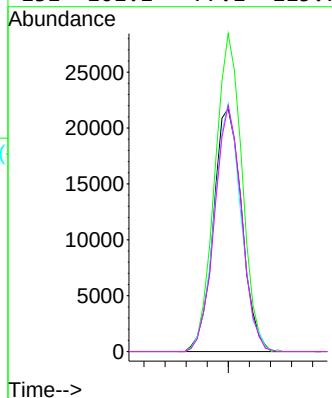
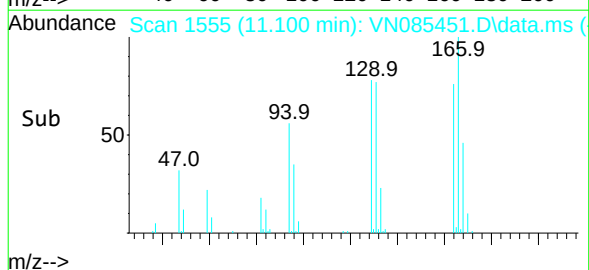
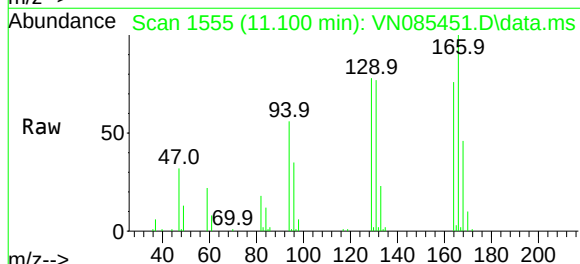
Manual Integrations  
APPROVED

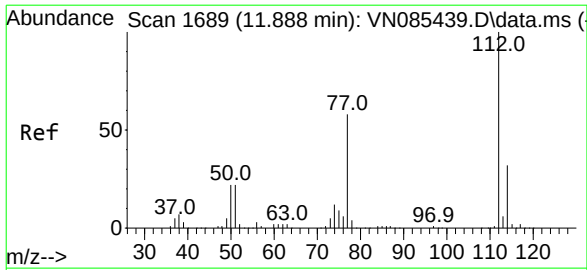
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#64  
Tetrachloroethene  
Concen: 20.740 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion:164 Resp: 40480  
Ion Ratio Lower Upper  
164 100  
166 130.9 103.4 155.2  
129 101.9 79.2 118.8  
131 101.1 77.1 115.7





#65

Chlorobenzene

Concen: 19.546 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:112 Resp: 122590

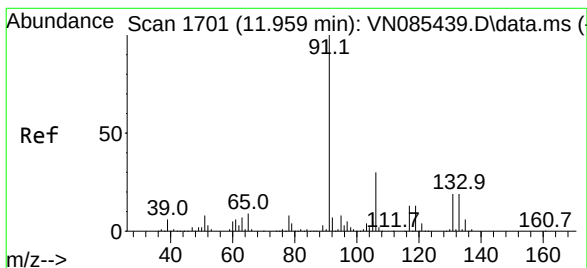
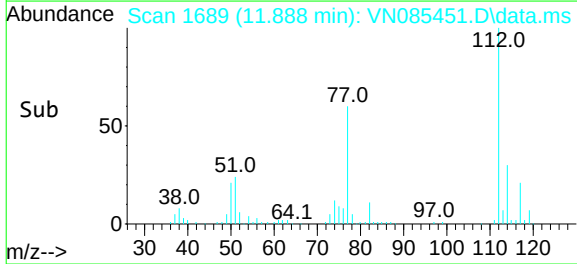
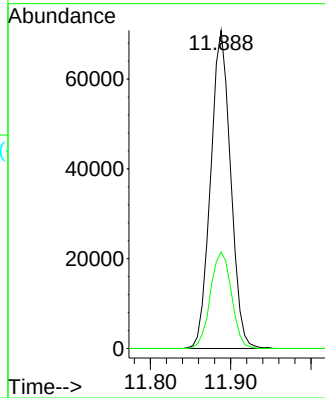
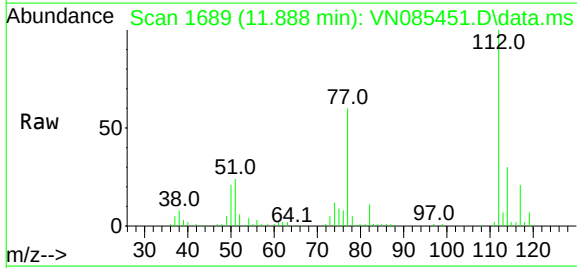
Ion Ratio Lower Upper

112 100

114 30.3 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#66

1,1,1,2-Tetrachloroethane

Concen: 19.484 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

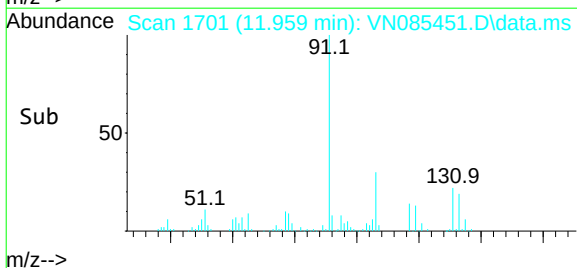
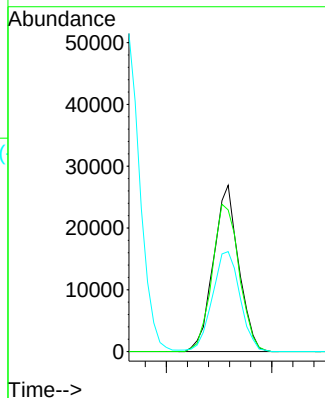
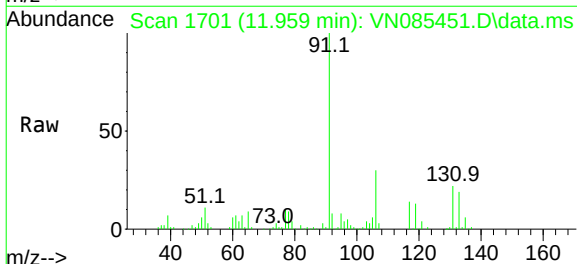
Tgt Ion:131 Resp: 44850

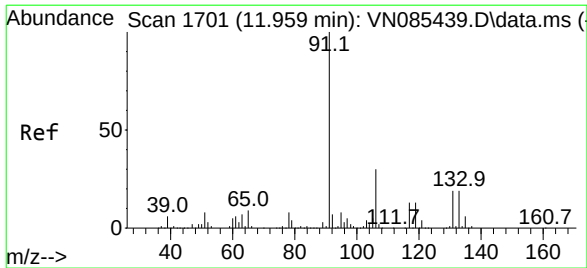
Ion Ratio Lower Upper

131 100

133 94.6 47.4 142.3

119 65.9 33.1 99.5





#67

Ethyl Benzene

Concen: 20.381 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 91 Resp: 208196

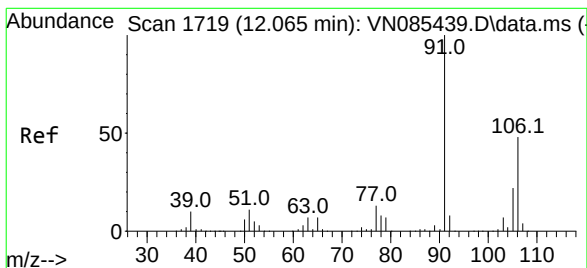
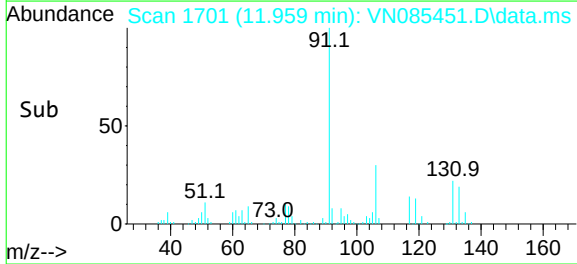
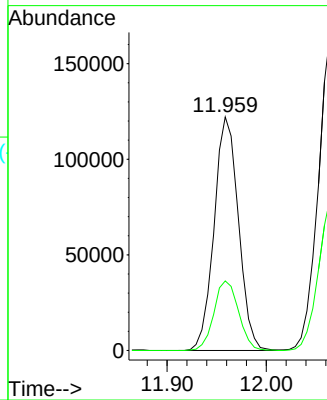
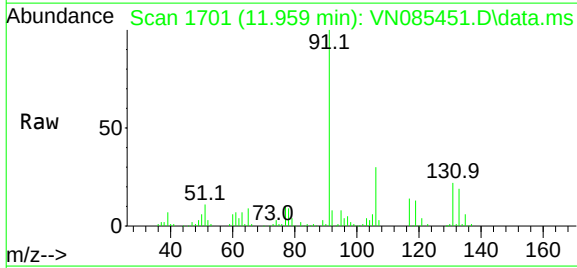
Ion Ratio Lower Upper

91 100

106 29.8 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#68

m/p-Xylenes

Concen: 42.515 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085451.D

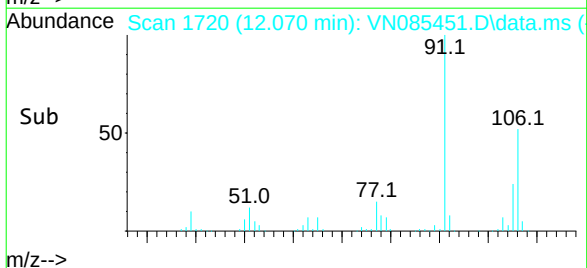
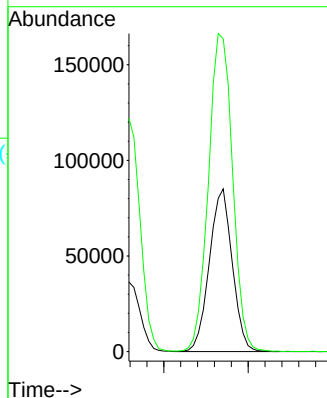
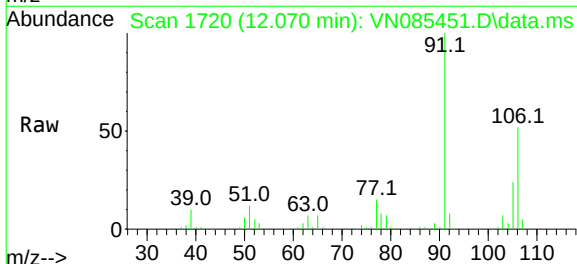
Acq: 15 Jan 2025 11:02

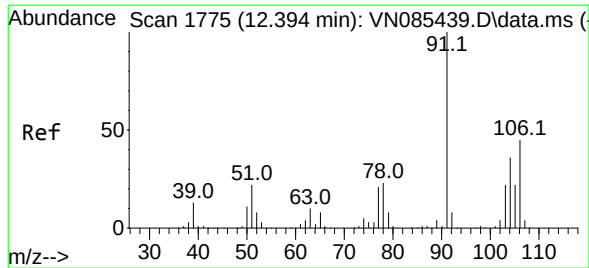
Tgt Ion:106 Resp: 160511

Ion Ratio Lower Upper

106 100

91 206.6 167.7 251.5





#69

o-Xylene

Concen: 20.928 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:106 Resp: 75509

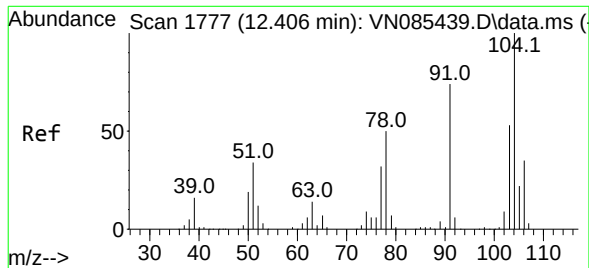
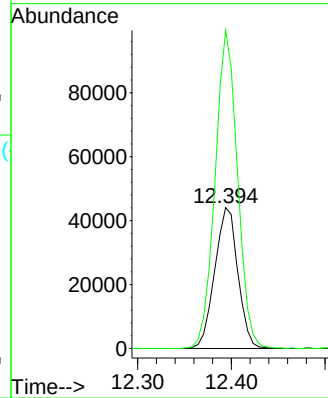
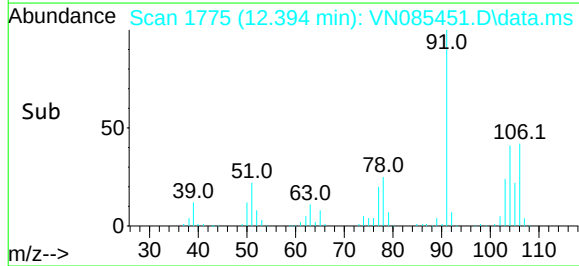
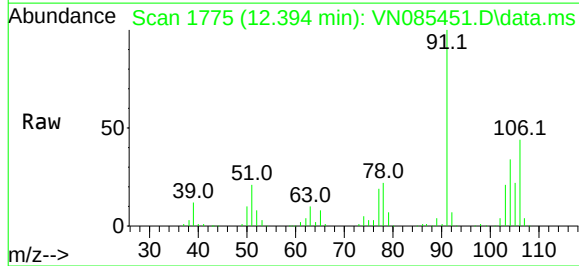
Ion Ratio Lower Upper

106 100

91 219.1 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#70

Styrene

Concen: 20.788 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

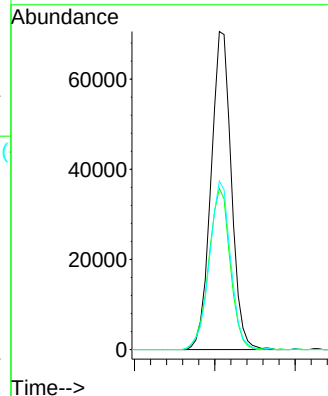
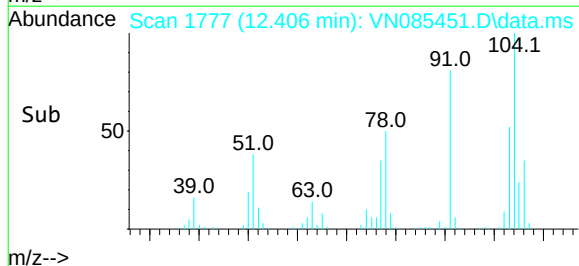
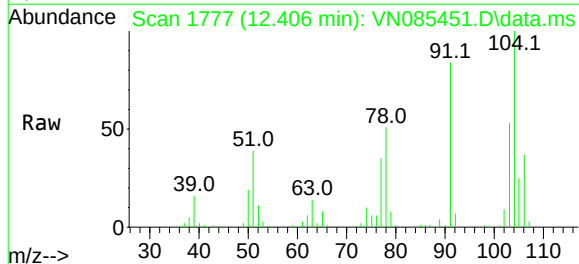
Tgt Ion:104 Resp: 124126

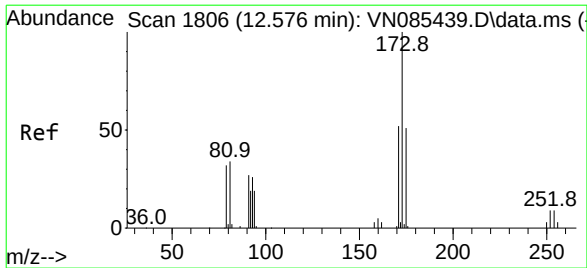
Ion Ratio Lower Upper

104 100

78 53.5 42.5 63.7

103 54.9 43.8 65.8





#71

Bromoform

Concen: 20.643 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:173 Resp: 34000

Ion Ratio Lower Upper

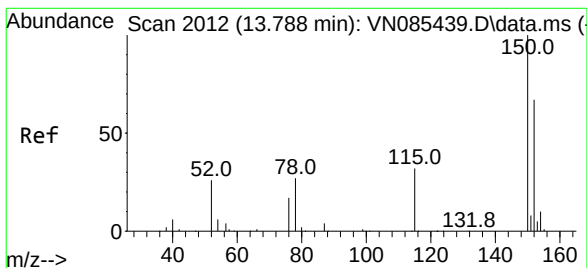
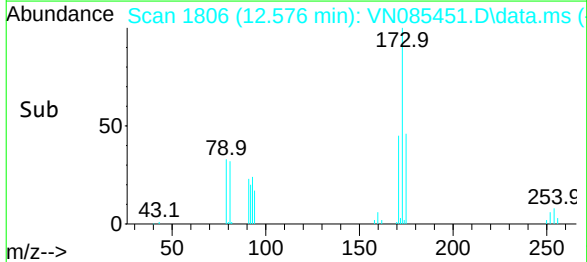
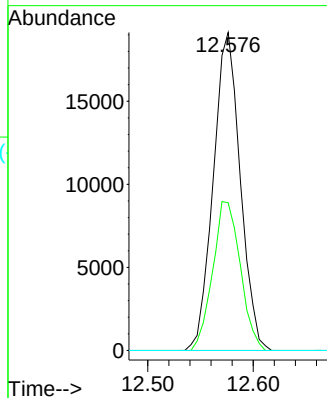
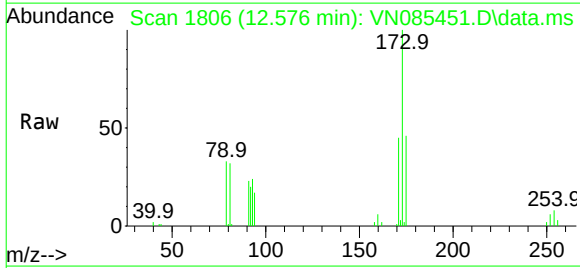
173 100

175 48.0 24.4 73.2

254 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

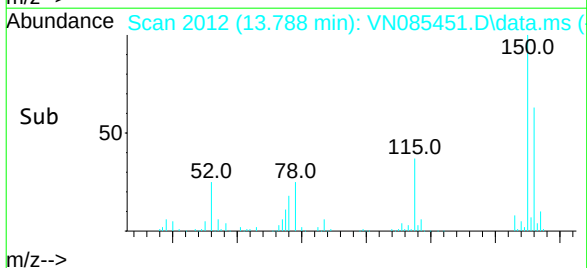
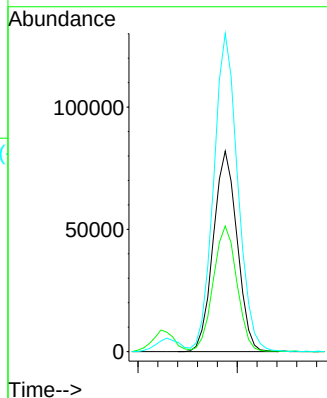
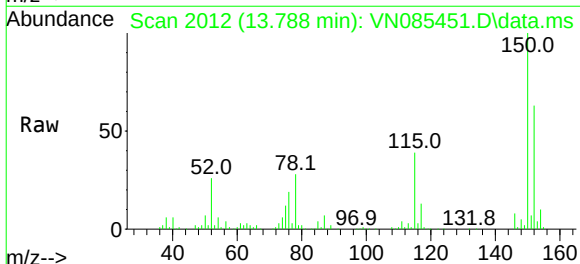
Tgt Ion:152 Resp: 136502

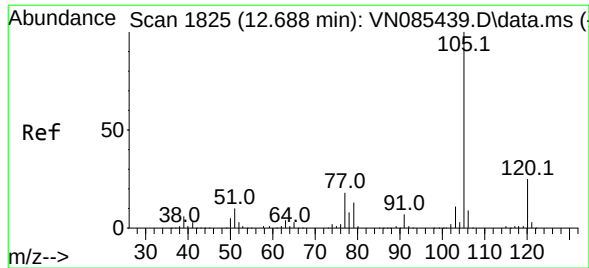
Ion Ratio Lower Upper

152 100

115 62.5 31.1 93.3

150 160.9 0.0 343.6





#73

Isopropylbenzene

Concen: 20.582 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:105 Resp: 189617

Ion Ratio Lower Upper

105 100

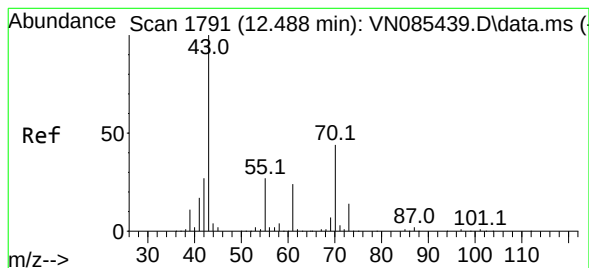
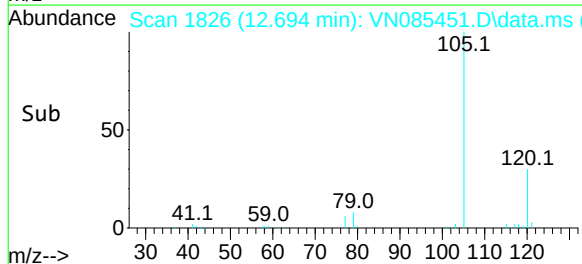
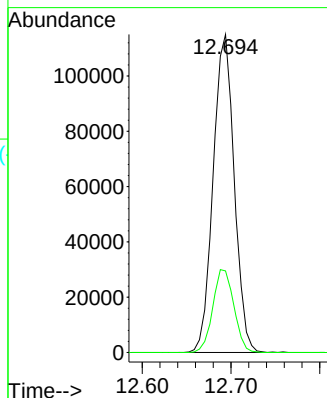
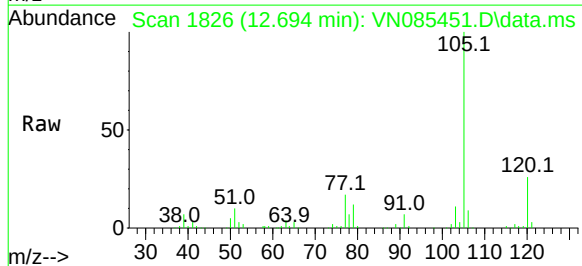
120 26.1 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#74

N-ethyl acetate

Concen: 19.619 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Tgt Ion: 43 Resp: 81241

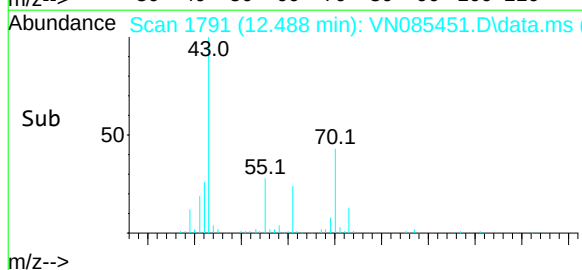
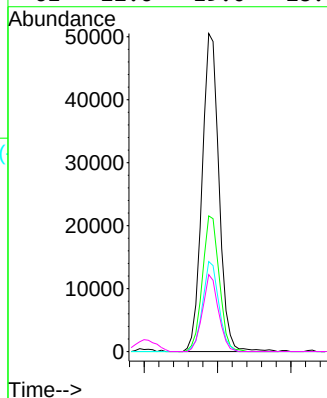
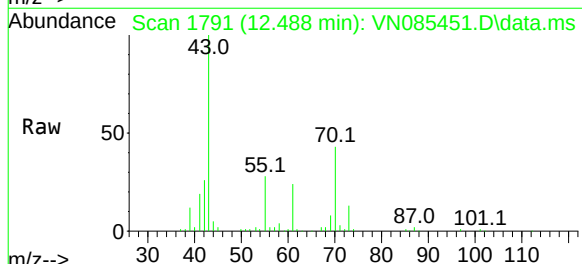
Ion Ratio Lower Upper

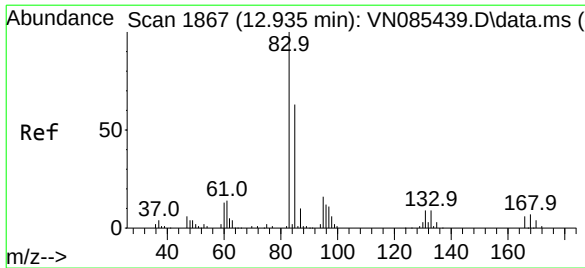
43 100

70 42.3 34.0 51.0

55 26.9 21.4 32.2

61 22.6 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 19.012 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

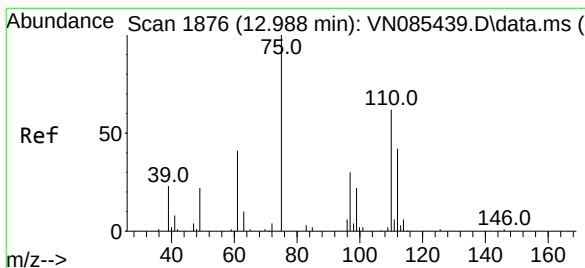
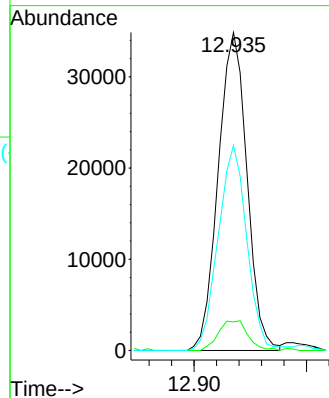
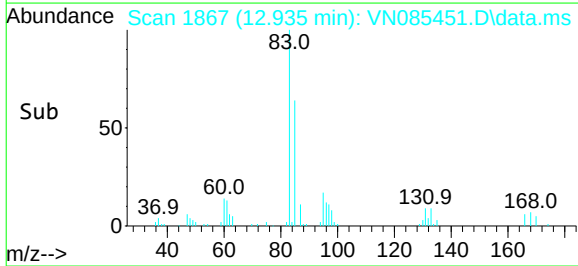
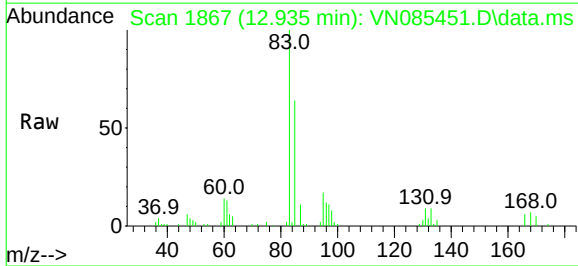
VN0115WBSD01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 61871 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 9.6   | 4.8   | 14.4  |
| 85       | 63.9  | 32.2  | 96.6  |

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#76

1,2,3-Trichloropropane

Concen: 20.404 ug/l m

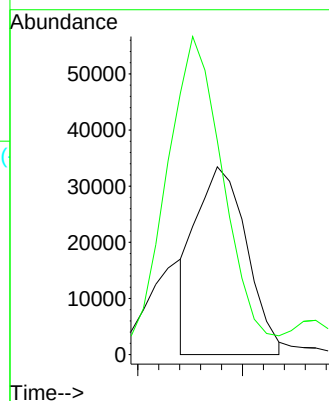
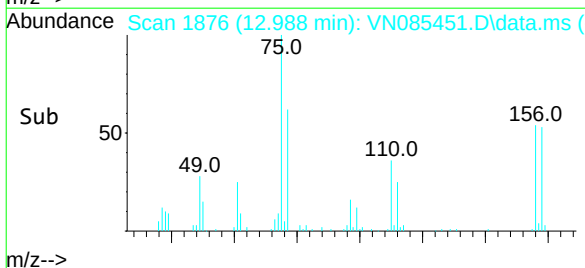
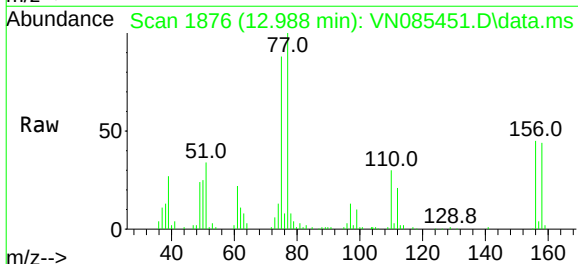
RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

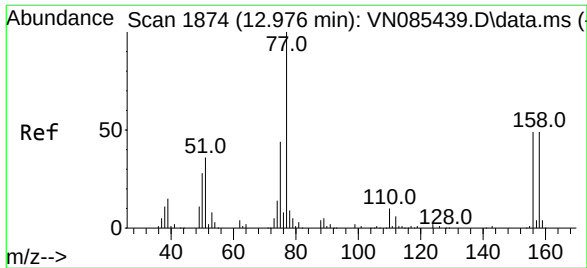
Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 56609 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 193.4 | 109.7 | 329.2 |







#77

Bromobenzene

Concen: 20.145 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 156 Resp: 48489

Ion Ratio Lower Upper

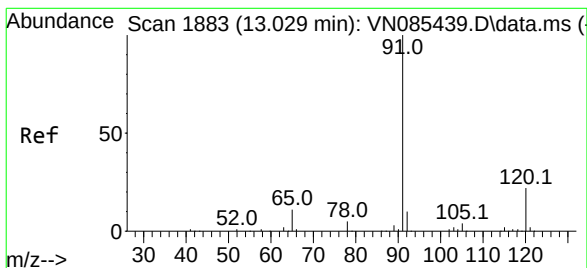
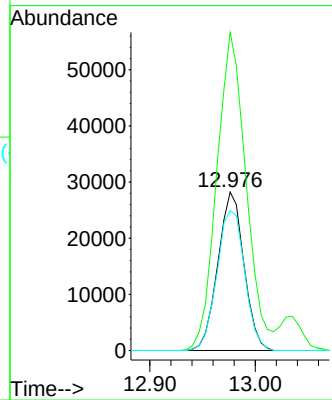
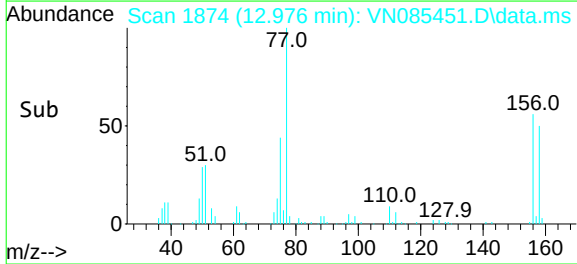
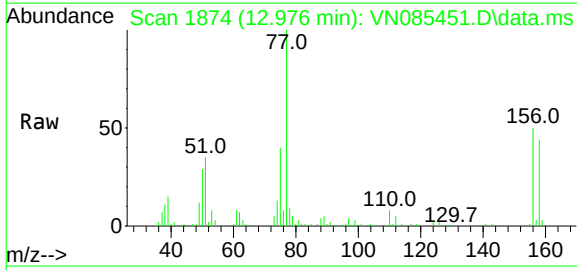
156 100

77 225.8 114.1 342.4

158 94.1 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#78

n-propylbenzene

Concen: 20.981 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085451.D

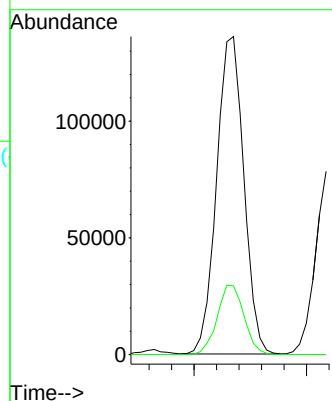
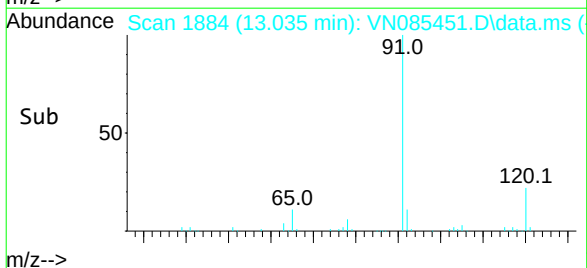
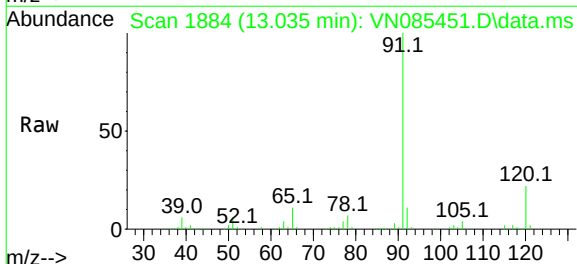
Acq: 15 Jan 2025 11:02

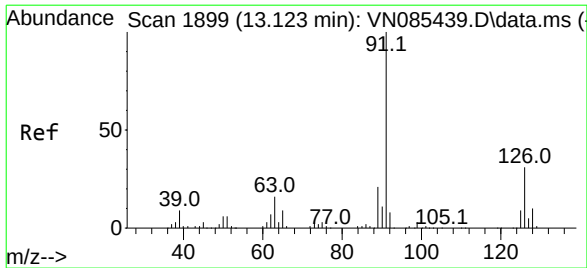
Tgt Ion: 91 Resp: 228827

Ion Ratio Lower Upper

91 100

120 21.5 10.9 32.6





#79

2-Chlorotoluene

Concen: 20.272 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion: 91 Resp: 143092

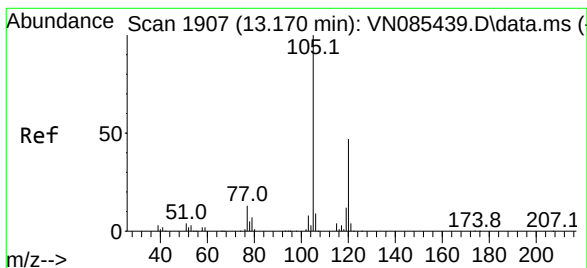
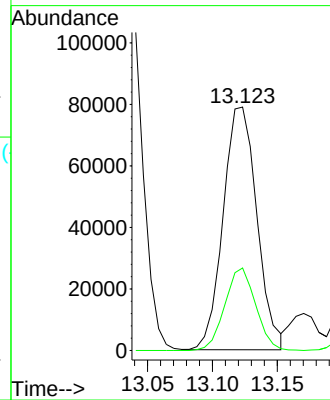
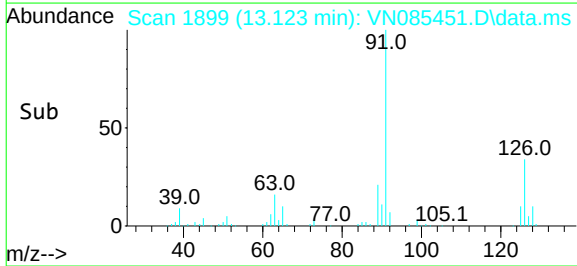
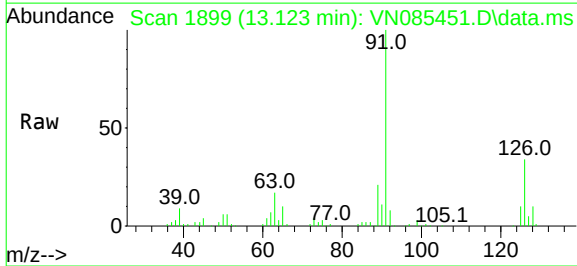
Ion Ratio Lower Upper

91 100

126 31.0 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#80

1,3,5-Trimethylbenzene

Concen: 21.445 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085451.D

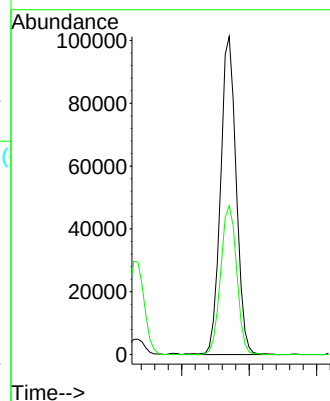
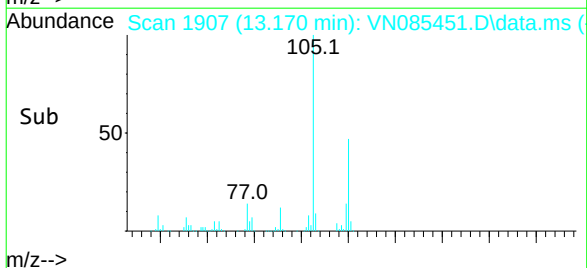
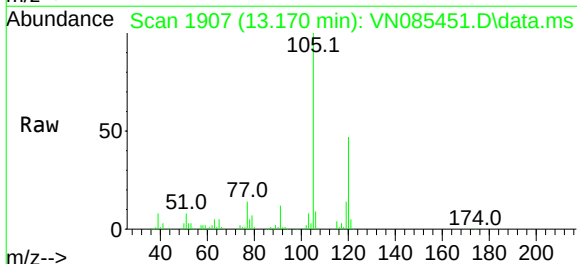
Acq: 15 Jan 2025 11:02

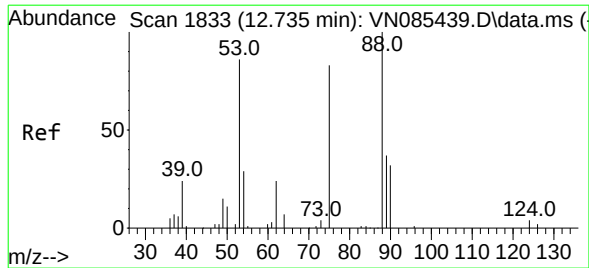
Tgt Ion:105 Resp: 163195

Ion Ratio Lower Upper

105 100

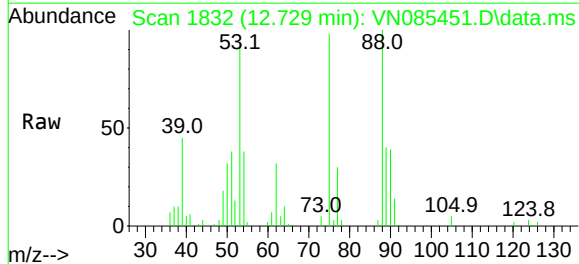
120 47.8 23.9 71.7





#81  
trans-1,4-Dichloro-2-butene  
Concen: 19.614 ug/l m  
RT: 12.729 min Scan# 18  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

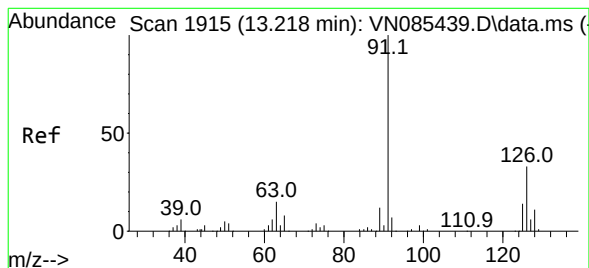
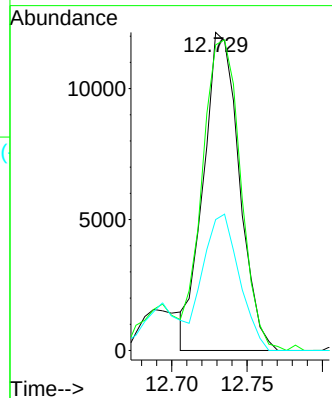
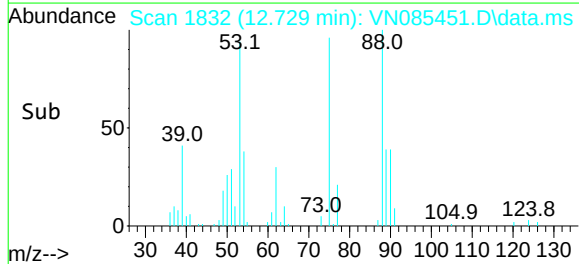
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion: 75 Resp: 20113  
Ion Ratio Lower Upper  
75 100  
53 104.2 95.6 143.4  
89 42.6 37.0 55.6

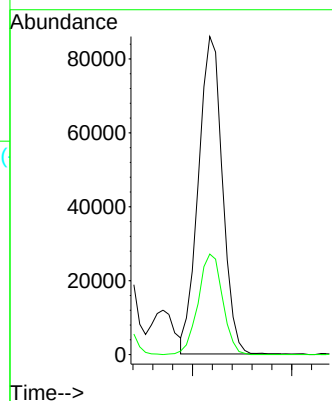
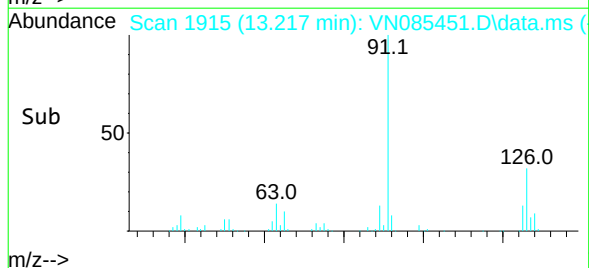
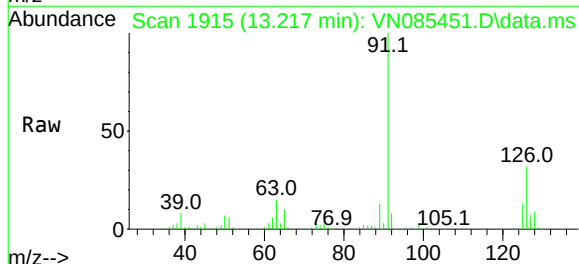
Manual Integrations  
APPROVED

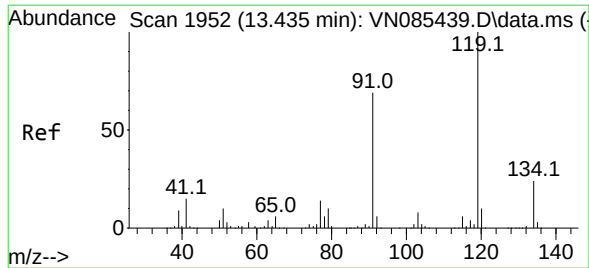
Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#82  
4-Chlorotoluene  
Concen: 20.562 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 91 Resp: 144513  
Ion Ratio Lower Upper  
91 100  
126 32.2 15.9 47.7





#83

tert-Butylbenzene

Concen: 20.501 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085451.D

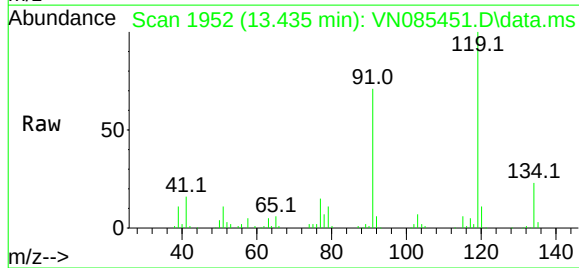
Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01



Tgt Ion:119 Resp: 131013

Ion Ratio Lower Upper

119 100

91 71.6 35.1 105.3

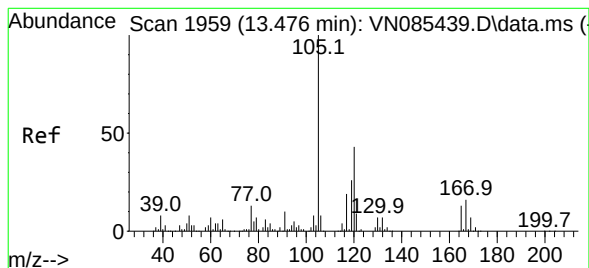
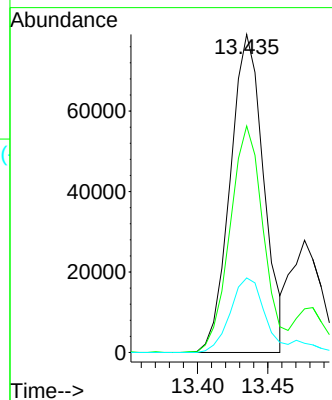
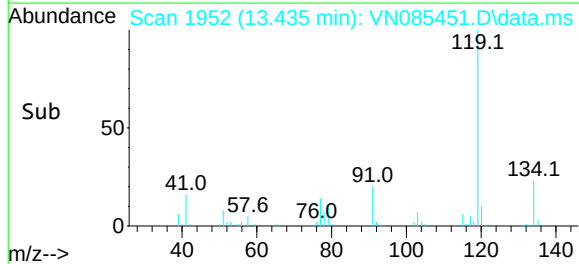
134 24.0 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#84

1,2,4-Trimethylbenzene

Concen: 21.634 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085451.D

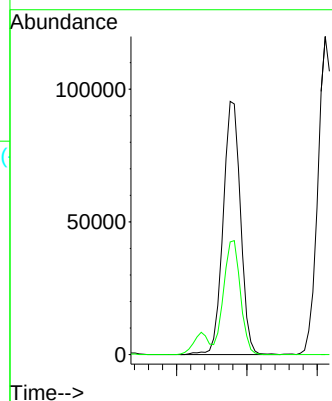
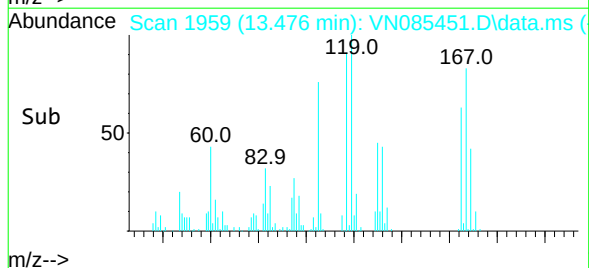
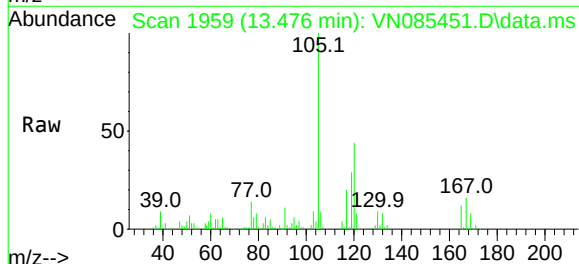
Acq: 15 Jan 2025 11:02

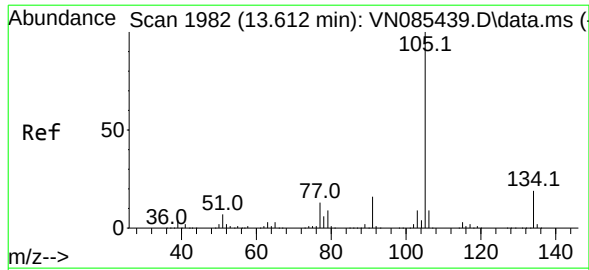
Tgt Ion:105 Resp: 164079

Ion Ratio Lower Upper

105 100

120 43.3 21.6 65.0





#85

sec-Butylbenzene

Concen: 21.398 ug/l

RT: 13.611 min Scan# 19

Delta R.T. -0.001 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:105 Resp: 189519

Ion Ratio Lower Upper

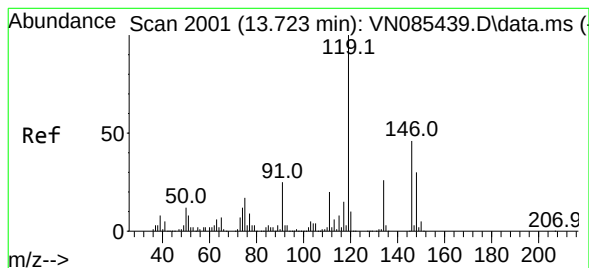
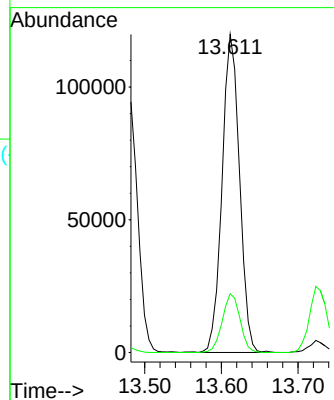
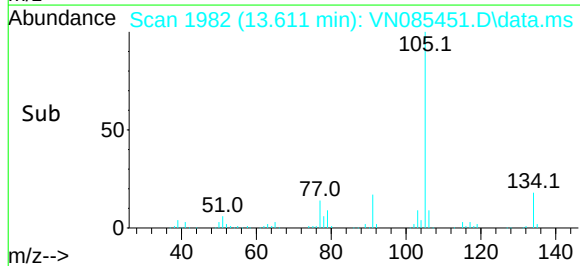
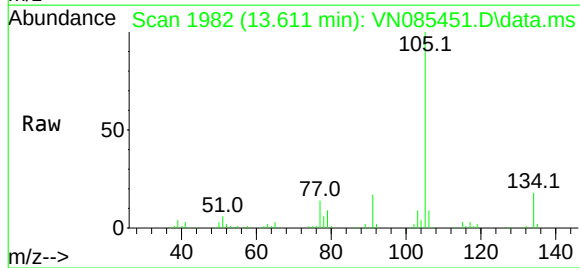
105 100

134 18.7 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
 Supervised By :Semsettin Yesilyurt 01/16/2025



#86

p-Isopropyltoluene

Concen: 20.798 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

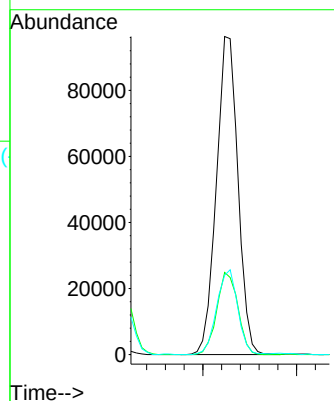
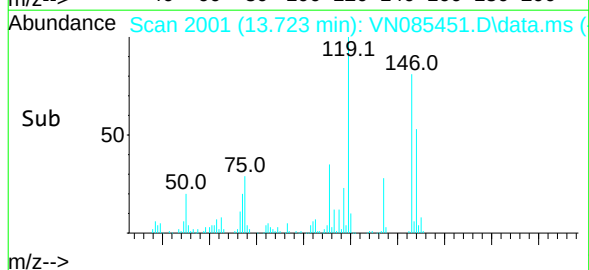
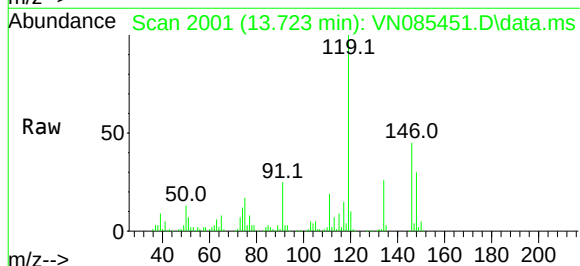
Tgt Ion:119 Resp: 153867

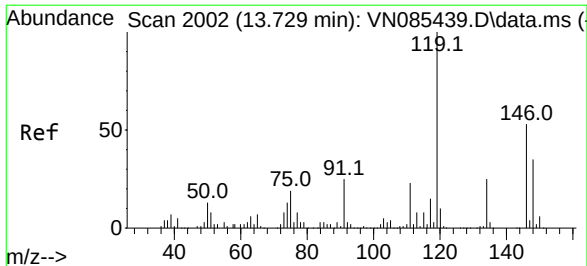
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 26.0 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 20.107 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:146 Resp: 89126

Ion Ratio Lower Upper

146 100

111 42.0 21.4 64.3

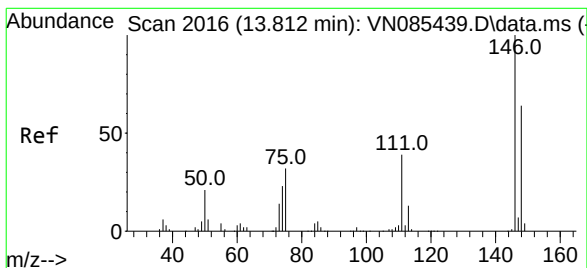
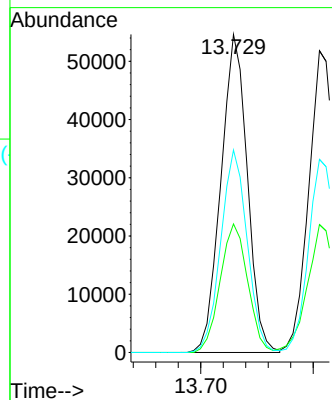
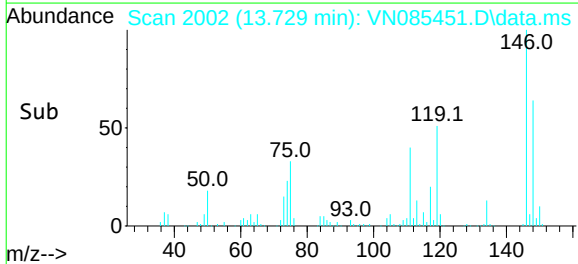
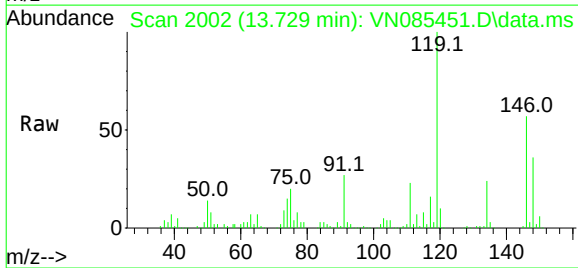
148 63.8 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025

Supervised By :Semsettin Yesilyurt 01/16/2025



#88

1,4-Dichlorobenzene

Concen: 19.057 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

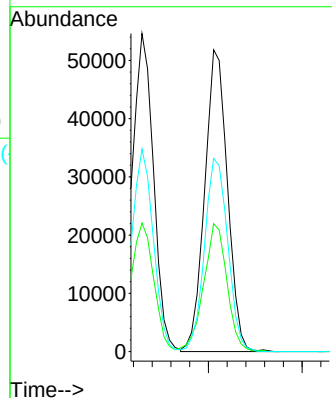
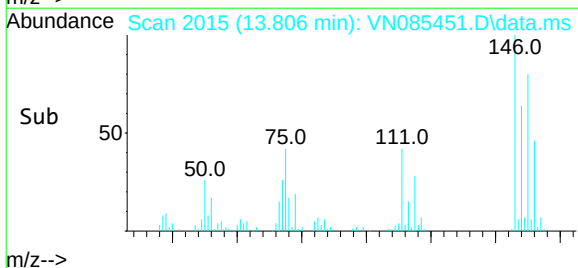
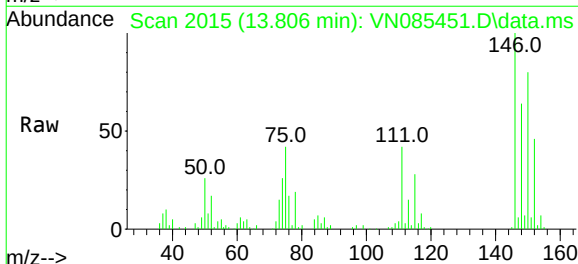
Tgt Ion:146 Resp: 87559

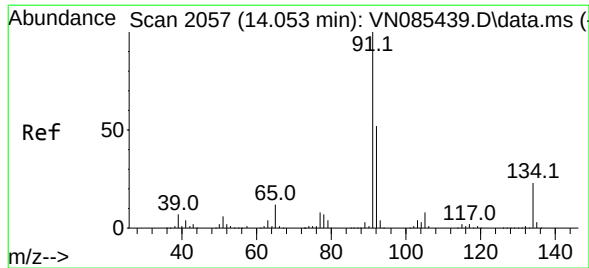
Ion Ratio Lower Upper

146 100

111 43.5 21.3 63.7

148 65.5 32.4 97.0





#89

n-Butylbenzene

Concen: 20.183 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

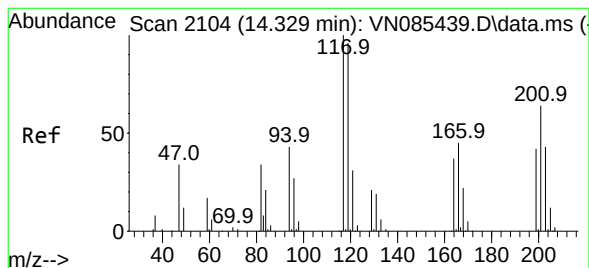
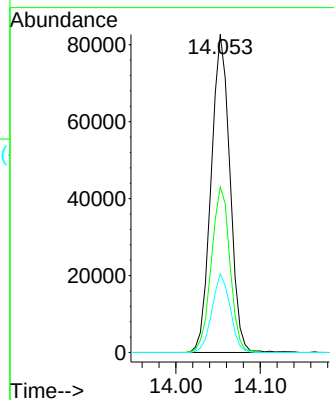
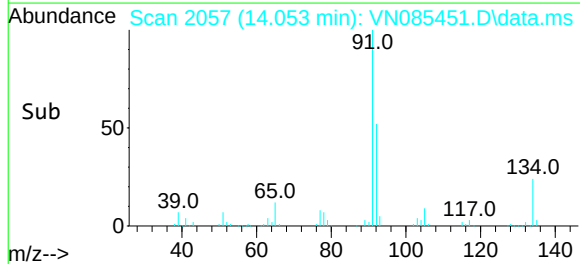
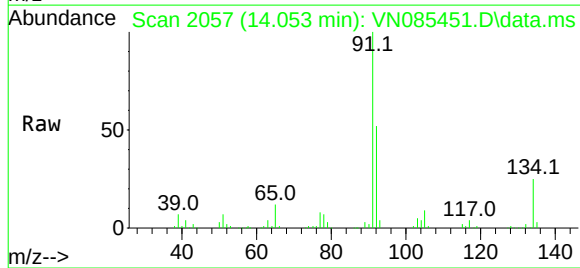
ClientSampleId :

VN0115WBSD01

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 128246 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 51.4  | 25.8  | 77.3   |
| 134      | 23.8  | 11.7  | 35.1   |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#90

Hexachloroethane

Concen: 18.820 ug/l

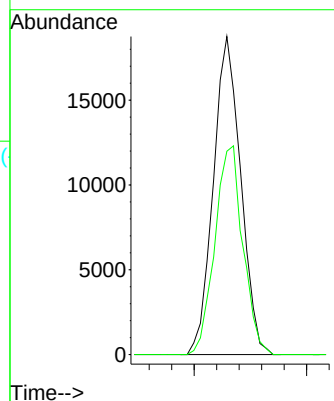
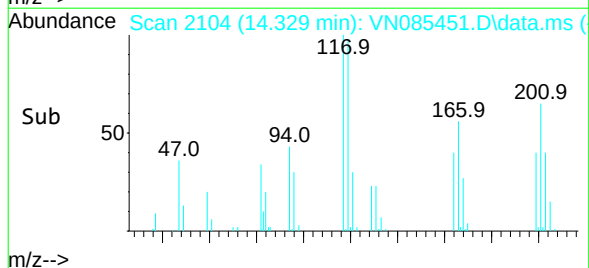
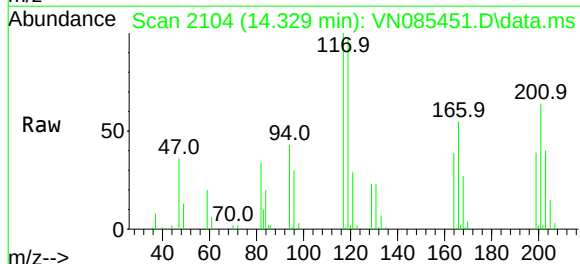
RT: 14.329 min Scan# 2104

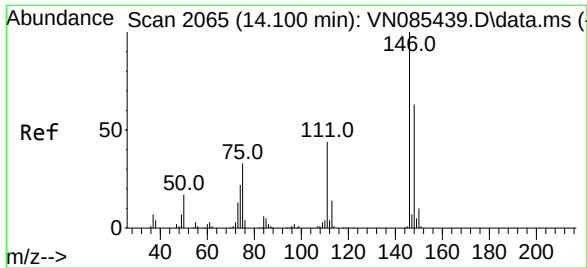
Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

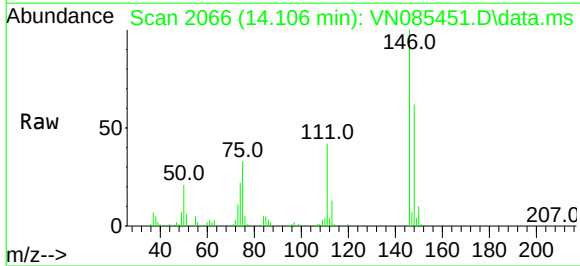
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 31733 |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 201      | 67.1  | 33.7  | 101.0 |





#91  
1,2-Dichlorobenzene  
Concen: 18.967 ug/l  
RT: 14.106 min Scan# 2065  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

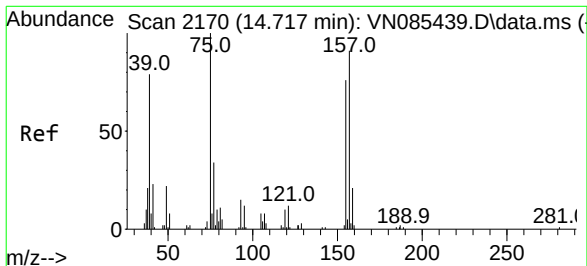
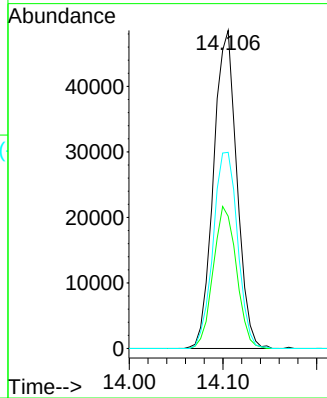
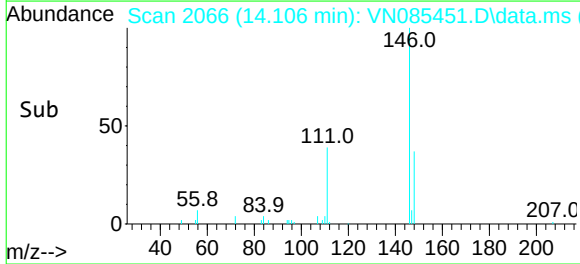
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01



Tgt Ion: 146 Resp: 83864  
Ion Ratio Lower Upper  
146 100  
111 44.6 21.7 65.1  
148 64.9 31.4 94.2

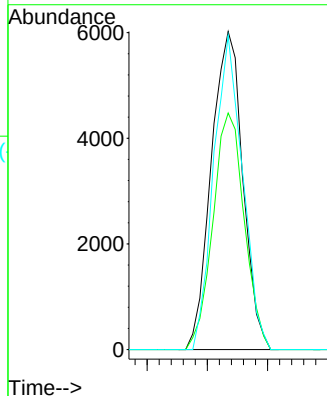
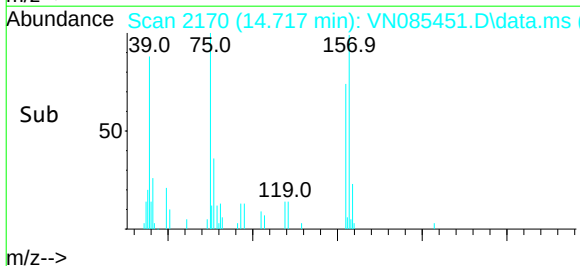
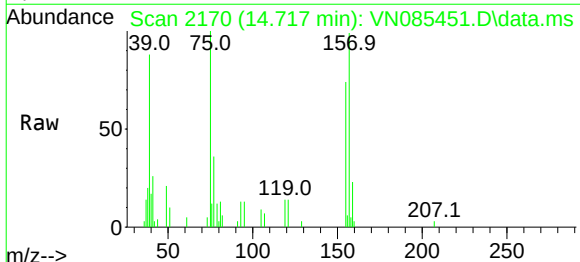
Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

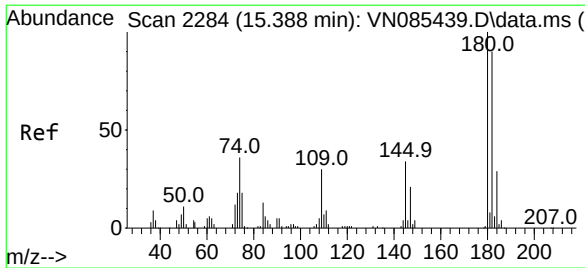


#92  
1,2-Dibromo-3-Chloropropane  
Concen: 18.416 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 75 Resp: 10944  
Ion Ratio Lower Upper  
75 100  
155 74.0 36.4 109.2  
157 90.2 45.4 136.1







#93

1,2,4-Trichlorobenzene

Concen: 19.248 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

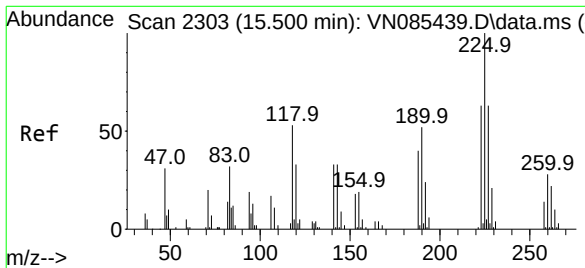
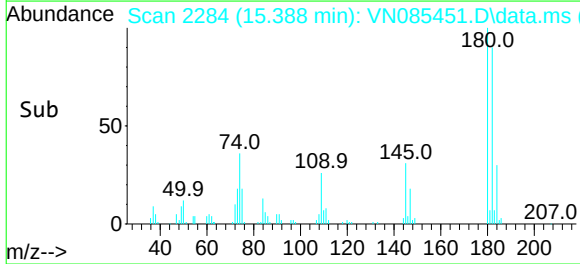
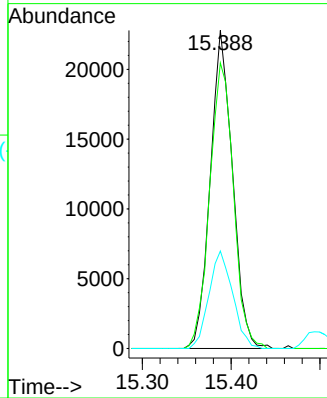
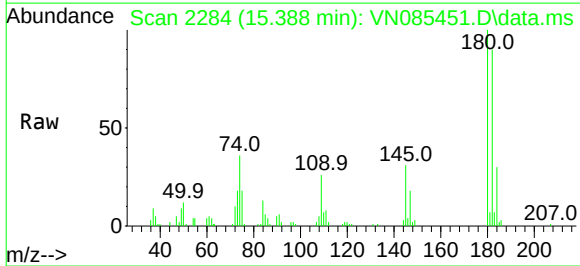
ClientSampleId :

VN0115WBSD01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 39555 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 96.1  | 46.8  | 140.3 |
| 145       | 32.8  | 16.0  | 48.0  |

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025



#94

Hexachlorobutadiene

Concen: 18.872 ug/l

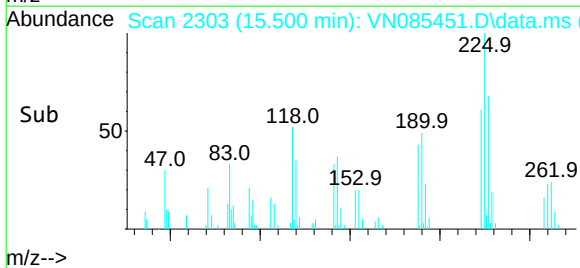
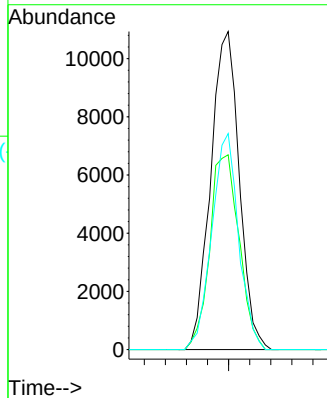
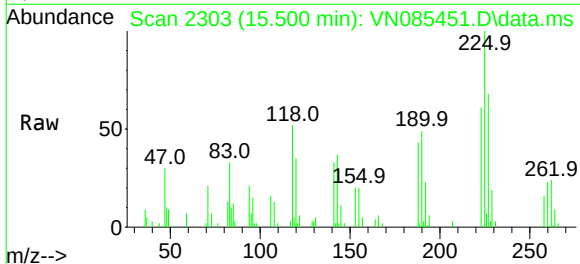
RT: 15.500 min Scan# 2303

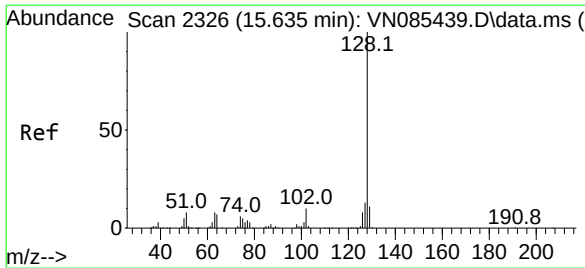
Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 20590 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 62.9  | 30.7  | 92.1  |
| 227       | 63.8  | 30.9  | 92.5  |





#95

Naphthalene

Concen: 17.334 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

Tgt Ion:128 Resp: 106293

Ion Ratio Lower Upper

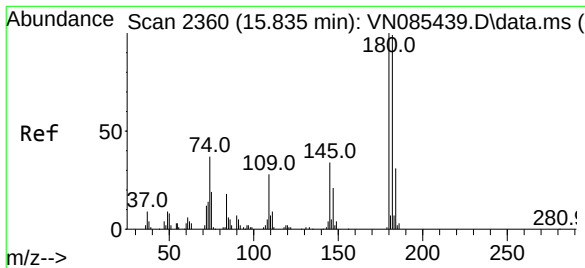
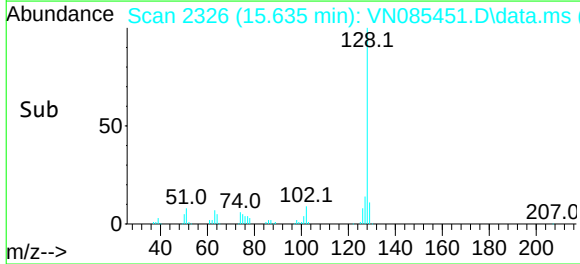
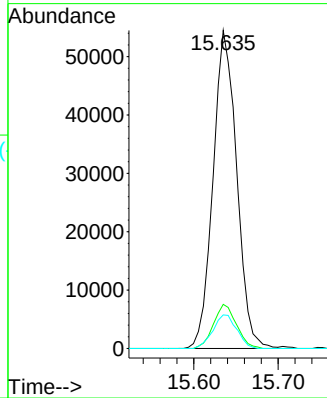
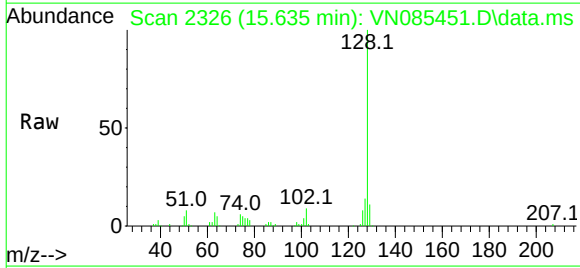
128 100

127 13.4 10.6 16.0

129 10.7 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/16/2025  
Supervised By :Semsettin Yesilyurt 01/16/2025

#96

1,2,3-Trichlorobenzene

Concen: 19.221 ug/l

RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

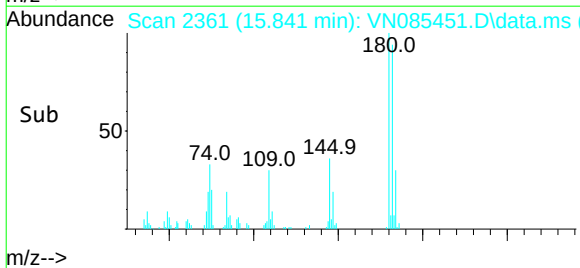
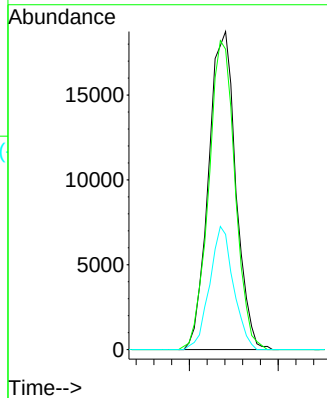
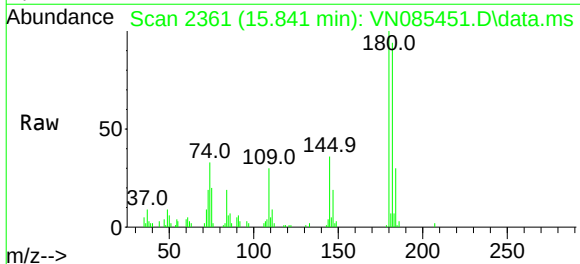
Tgt Ion:180 Resp: 39966

Ion Ratio Lower Upper

180 100

182 94.0 47.4 142.2

145 33.9 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: | VN011525 | Instrument | MSVOA_n |
|-----------|----------|------------|---------|

| Sample ID        | File ID    | Parameter                       | Review By    | Review On               | Supervised By | Supervised On           | Reason                      |
|------------------|------------|---------------------------------|--------------|-------------------------|---------------|-------------------------|-----------------------------|
| VSTDCCC050       | VN085447.D | 1,2,3-Trichloropropane          | MMDADO<br>DA | 1/16/2025 7:34:24<br>AM | SAM           | 1/16/2025 7:37:05<br>AM | Peak Integrated by Software |
| VN0115WBS01      | VN085450.D | 1,2,3-Trichloropropane          | MMDADO<br>DA | 1/16/2025 7:34:27<br>AM | SAM           | 1/16/2025 7:37:06<br>AM | Peak Integrated by Software |
| VN0115WBS01      | VN085450.D | trans-1,4-Dichloro-2-but<br>ene | MMDADO<br>DA | 1/16/2025 7:34:27<br>AM | SAM           | 1/16/2025 7:37:06<br>AM | Peak Integrated by Software |
| VN0115WBSD0<br>1 | VN085451.D | 1,2,3-Trichloropropane          | MMDADO<br>DA | 1/16/2025 7:34:29<br>AM | SAM           | 1/16/2025 7:37:08<br>AM | Peak Integrated by Software |
| VN0115WBSD0<br>1 | VN085451.D | trans-1,4-Dichloro-2-but<br>ene | MMDADO<br>DA | 1/16/2025 7:34:29<br>AM | SAM           | 1/16/2025 7:37:08<br>AM | Peak Integrated by Software |
| VN0115WBSD0<br>1 | VN085451.D | Vinyl Acetate                   | MMDADO<br>DA | 1/16/2025 7:34:29<br>AM | SAM           | 1/16/2025 7:37:08<br>AM | Peak Integrated by Software |
| VSTDCCC050       | VN085463.D | 1,2,3-Trichloropropane          | MMDADO<br>DA | 1/16/2025 7:34:34<br>AM | SAM           | 1/16/2025 7:37:13<br>AM | Peak Integrated by Software |
| VSTDCCC050       | VN085463.D | trans-1,4-Dichloro-2-but<br>ene | MMDADO<br>DA | 1/16/2025 7:34:34<br>AM | SAM           | 1/16/2025 7:37:13<br>AM | 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 | HP Processing Method 82N011425W.M |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                      |                   |                                   |
| 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 # VN011525**

|                                                                                                    |                     |                   |                                   |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Review By                                                                                          | Mahesh Dadoda       | Review On         | 1/16/2025 7:34:37 AM              |
| Supervise By                                                                                       | Semsettin Yesilyurt | Supervise On      | 1/16/2025 7:37:16 AM              |
| SubDirectory                                                                                       | VN011525            | HP Acquire Method | HP Processing Method 82N011425W.M |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>    |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132547            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132548,VP132549   |                   |                                   |

| Sr# | SampleId       | Data File Name | Date-Time         | Operator | Status |
|-----|----------------|----------------|-------------------|----------|--------|
| 1   | BFB            | VN085446.D     | 15 Jan 2025 08:25 | JC\MD    | Ok     |
| 2   | VSTDCCC050     | VN085447.D     | 15 Jan 2025 09:03 | JC\MD    | Ok,M   |
| 3   | VN0115MBL01    | VN085448.D     | 15 Jan 2025 09:41 | JC\MD    | Ok     |
| 4   | VN0115WBL01    | VN085449.D     | 15 Jan 2025 10:05 | JC\MD    | Ok     |
| 5   | VN0115WBS01    | VN085450.D     | 15 Jan 2025 10:29 | JC\MD    | Ok,M   |
| 6   | VN0115WBSD01   | VN085451.D     | 15 Jan 2025 11:02 | JC\MD    | Ok,M   |
| 7   | Q1062-04       | VN085452.D     | 15 Jan 2025 11:26 | JC\MD    | Ok     |
| 8   | Q1062-01       | VN085453.D     | 15 Jan 2025 11:50 | JC\MD    | Ok     |
| 9   | Q1062-03       | VN085454.D     | 15 Jan 2025 12:14 | JC\MD    | Ok     |
| 10  | Q1062-02       | VN085455.D     | 15 Jan 2025 12:37 | JC\MD    | Ok     |
| 11  | PB166029TB     | VN085456.D     | 15 Jan 2025 13:01 | JC\MD    | Ok     |
| 12  | PB166029ZHE#01 | VN085457.D     | 15 Jan 2025 13:25 | JC\MD    | Ok     |
| 13  | PB166029ZHE#02 | VN085458.D     | 15 Jan 2025 13:49 | JC\MD    | Ok     |
| 14  | PB166029ZHE#03 | VN085459.D     | 15 Jan 2025 14:13 | JC\MD    | Ok     |
| 15  | Q1069-02       | VN085460.D     | 15 Jan 2025 14:37 | JC\MD    | ReRun  |
| 16  | Q1074-02       | VN085461.D     | 15 Jan 2025 15:00 | JC\MD    | Ok     |
| 17  | Q1076-02       | VN085462.D     | 15 Jan 2025 15:24 | JC\MD    | Ok,M   |
| 18  | VSTDCCC050     | VN085463.D     | 15 Jan 2025 15:58 | 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 | HP Processing Method 82N011425W.M |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                      |                   |                                   |
| Tune/Reschk              | VP132529                                              |                   |                                   |
| Initial Calibration Stds | VP132530,VP132531,VP132532,VP132533,VP132534,VP132535 |                   |                                   |
| CCC                      |                                                       |                   |                                   |
| Internal Standard/PEM    |                                                       |                   |                                   |
| ICV/I.BLK                | VP132544                                              |                   |                                   |
| Surrogate Standard       |                                                       |                   |                                   |
| MS/MSD Standard          |                                                       |                   |                                   |
| LCS Standard             |                                                       |                   |                                   |

| Sr# | SampleID    | ClientID    | Data File Name | Date-Time         | Comment                             | Operator | Status |
|-----|-------------|-------------|----------------|-------------------|-------------------------------------|----------|--------|
| 1   | BFB         | BFB         | VN085437.D     | 14 Jan 2025 14:22 |                                     | JC\MD    | Ok     |
| 2   | VSTDICC100  | VSTDICC100  | VN085438.D     | 14 Jan 2025 14:56 |                                     | JC\MD    | Ok,M   |
| 3   | VSTDICCC050 | VSTDICCC050 | VN085439.D     | 14 Jan 2025 15:19 | Comp.#56 is on Linear Regression    | JC\MD    | Ok,M   |
| 4   | VSTDICC020  | VSTDICC020  | VN085440.D     | 14 Jan 2025 15:43 | Comp.#86 is on Quadratic Regression | JC\MD    | Ok,M   |
| 5   | VSTDICC010  | VSTDICC010  | VN085441.D     | 14 Jan 2025 16:07 |                                     | JC\MD    | Ok,M   |
| 6   | VSTDICC005  | VSTDICC005  | VN085442.D     | 14 Jan 2025 16:31 |                                     | JC\MD    | Ok,M   |
| 7   | VSTDICC001  | VSTDICC001  | VN085443.D     | 14 Jan 2025 17:19 |                                     | JC\MD    | Ok,M   |
| 8   | IBLK        | IBLK        | VN085444.D     | 14 Jan 2025 17:42 |                                     | JC\MD    | Ok     |
| 9   | VSTDICV050  | ICVVN011425 | VN085445.D     | 14 Jan 2025 18:06 |                                     | JC\MD    | Ok,M   |

M : Manual Integration



Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN011525**

|              |                     |                   |                                   |
|--------------|---------------------|-------------------|-----------------------------------|
| Review By    | Maresh Dadoda       | Review On         | 1/16/2025 7:34:37 AM              |
| Supervise By | Semsettin Yesilyurt | Supervise On      | 1/16/2025 7:37:16 AM              |
| SubDirectory | VN011525            | HP Acquire Method | HP Processing Method 82N011425W.M |

| STD. NAME                                                                                          | STD REF.#         |
|----------------------------------------------------------------------------------------------------|-------------------|
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132547          |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132548,VP132549 |

| Sr# | SampleID       | ClientID            | Data File Name | Date-Time         | Comment                      | Operator | Status |
|-----|----------------|---------------------|----------------|-------------------|------------------------------|----------|--------|
| 1   | BFB            | BFB                 | VN085446.D     | 15 Jan 2025 08:25 |                              | JC\MD    | Ok     |
| 2   | VSTDCCC050     | VSTDCCC050          | VN085447.D     | 15 Jan 2025 09:03 | V13516                       | JC\MD    | Ok,M   |
| 3   | VN0115MBL01    | VN0115MBL01         | VN085448.D     | 15 Jan 2025 09:41 |                              | JC\MD    | Ok     |
| 4   | VN0115WBL01    | VN0115WBL01         | VN085449.D     | 15 Jan 2025 10:05 |                              | JC\MD    | Ok     |
| 5   | VN0115WBS01    | VN0115WBS01         | VN085450.D     | 15 Jan 2025 10:29 |                              | JC\MD    | Ok,M   |
| 6   | VN0115WBSD01   | VN0115WBSD01        | VN085451.D     | 15 Jan 2025 11:02 |                              | JC\MD    | Ok,M   |
| 7   | Q1062-04       | BP-VPB-190A-GW-898  | VN085452.D     | 15 Jan 2025 11:26 | vial B pH<2                  | JC\MD    | Ok     |
| 8   | Q1062-01       | BP-VPB-190A-TB-2025 | VN085453.D     | 15 Jan 2025 11:50 | vial B pH<2 TB               | JC\MD    | Ok     |
| 9   | Q1062-03       | BP-VPB-190A-EB-2025 | VN085454.D     | 15 Jan 2025 12:14 | vial B pH<2 EB               | JC\MD    | Ok     |
| 10  | Q1062-02       | VPB190A-HYD-202501  | VN085455.D     | 15 Jan 2025 12:37 | vial B pH<2                  | JC\MD    | Ok     |
| 11  | PB166029TB     | PB166029TB          | VN085456.D     | 15 Jan 2025 13:01 |                              | JC\MD    | Ok     |
| 12  | PB166029ZHE#01 | PB166029ZHE#01      | VN085457.D     | 15 Jan 2025 13:25 |                              | JC\MD    | Ok     |
| 13  | PB166029ZHE#02 | PB166029ZHE#02      | VN085458.D     | 15 Jan 2025 13:49 |                              | JC\MD    | Ok     |
| 14  | PB166029ZHE#03 | PB166029ZHE#03      | VN085459.D     | 15 Jan 2025 14:13 |                              | JC\MD    | Ok     |
| 15  | Q1069-02       | RW7B-CARBON-20250   | VN085460.D     | 15 Jan 2025 14:37 | vial A pH#6.0 Surrogate Fail | JC\MD    | ReRun  |
| 16  | Q1074-02       | HACKENSACK-DGA      | VN085461.D     | 15 Jan 2025 15:00 | vial A pH#5.0                | JC\MD    | Ok     |
| 17  | Q1076-02       | ARS20-0006          | VN085462.D     | 15 Jan 2025 15:24 | vial A pH#5.0                | JC\MD    | Ok,M   |
| 18  | VSTDCCC050     | VSTDCCC050EC        | VN085463.D     | 15 Jan 2025 15:58 |                              | JC\MD    | Ok,M   |

**Instrument ID:** MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN011525**

| Review By                                                                                          | Mahesh Dadoda       | Review On         | 1/16/2025 7:34:37 AM              |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                                                                                       | Semsettin Yesilyurt | Supervise On      | 1/16/2025 7:37:16 AM              |
| SubDirectory                                                                                       | VN011525            | HP Acquire Method | HP Processing Method 82N011425W.M |
| STD. NAME                                                                                          | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP132547            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP132548,VP132549   |                   |                                   |

M : Manual Integration

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1062

**Test :** VOCMS Group1

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VN011525,

**Standard ID :**

VP130430,VP131746,VP131767,VP132005,VP132035,VP132096,VP132468,VP132547,VP132548,VP132549,

**Chemical ID :**

V13391,V13445,V13457,V13460,V13465,V13466,V13707,V13806,V14020,V14021,V14105,V14106,V14145,V14152,V14154,V14173,V14174,V14192,V14194,V14201,V14289,V14434,V14437,V14614,V14627,V14630,V14631,V14632,V14633,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> |
|------------------|-------------------------------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 257              | 8260 Calibration Working STD Mix-First source, 160PPM | <a href="#">VP132005</a> | 12/09/2024       | 01/18/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
|                  |                                                       |                          |                  |                        |                     |                |                  | 12/12/2024           |

**FROM** 0.40000ml of V13445 + 1.00000ml of V13806 + 1.00000ml of V14020 + 1.00000ml of V14021 + 1.00000ml of V14105 + 1.00000ml of V14106 + 1.00000ml of V14173 + 1.00000ml of V14174 + 1.00000ml of V14194 + 1.00000ml of V14434 + 1.00000ml of V14437 + 1.50000ml of V14192 + 1.50000ml of V14201 + 10.60000ml of V14152 = 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> |
|------------------|--------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 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

| <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           |

**FROM** 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final  
Quantity: 25.000 ml

## 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> |
|------------------|---------------------------------------------------|--------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 51               | 8260 Working STD (Acrolein) -first source, 800PPM | <a href="#">VP132468</a> | 01/08/2025       | 02/07/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
|                  |                                                   |                          |                  |                        |                     |                |                  | 01/17/2025           |

**FROM** 1.00000ml of V14832 + 1.50000ml of V14830 + 1.50000ml of V14831 + 21.00000ml of V14627 = Final Quantity: 25.000 ml

| <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="#">VP132547</a> | 01/15/2025       | 01/16/2025             | John Carlone       | None           | None             | Maresh Dadoda        |
|                  |                |                          |                  |                        |                    |                |                  | 01/17/2025           |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

[illegible]

| <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="#">VP132549</a> | 01/15/2025       | 01/16/2025             | John Carlone       | None           | None             | Mahesh Dadoda<br><br>01/17/2025 |
| <b><u>FROM</u></b> 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132005 + 0.01250ml of VP132035 + 0.01250ml of VP132468 = 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      | 11/26/2024 / SAM        | 01/23/2023 / SAM            | V13445         |

| 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 # |
|----------|----------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0194279 | 03/16/2025      | 09/16/2024 / SAM        | 05/31/2023 / SAM            | V13806         |

| 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) | 032922 | 03/29/2025      | 11/26/2024 / SAM        | 11/22/2023 / SAM            | V14020         |

| 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) | 032922 | 03/29/2025      | 11/26/2024 / SAM        | 11/22/2023 / SAM            | V14021         |

| 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 | A0205179 | 05/26/2025      | 11/26/2024 / SAM        | 12/22/2023 / SAM            | V14105         |

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 | A0205179 | 05/26/2025      | 11/26/2024 / SAM        | 12/22/2023 / SAM            | V14106         |

LOTS

## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 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 | 04/14/2025      | 10/14/2024 / SAM        | 02/06/2024 / SAM            | V14152         |

| 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 | 05/26/2025      | 11/26/2024 / SAM        | 02/20/2024 / SAM            | V14173         |

| 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 | 05/26/2025      | 11/26/2024 / SAM        | 02/20/2024 / SAM            | V14174         |

| 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 | A0200785 | 05/26/2025      | 11/26/2024 / SAM        | 02/28/2024 / SAM            | V14192         |

## 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 | A0200785 | 05/26/2025      | 11/26/2024 / SAM        | 02/28/2024 / SAM            | V14194         |

| 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 | A0200785 | 05/26/2025      | 11/26/2024 / SAM        | 02/28/2024 / SAM            | V14201         |

| Supplier | ItemCode / ItemName                                     | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555581 / Custom Standard, 8260 Internal Std [CS 5179-1] | A0210184 | 11/22/2025      | 11/22/2024 / SAM        | 04/15/2024 / SAM            | V14289         |

| Supplier | ItemCode / ItemName                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0209618 | 05/26/2025      | 11/26/2024 / SAM        | 08/15/2024 / SAM            | V14434         |

| 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 | 05/26/2025      | 11/26/2024 / SAM        | 08/15/2024 / SAM            | V14437         |

| 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         |

## 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) | 2310762004 | 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 # |
|--------------------------|-------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025      | 01/08/2025 / SAM        | 01/08/2025 / SAM            | V14830         |

## 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            | 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

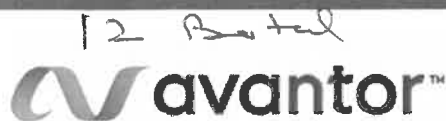
| Test                                                    | Specification | Result   |
|---------------------------------------------------------|---------------|----------|
| Assay (CH <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 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



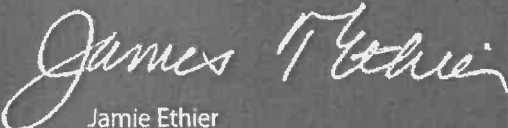
Material No.: 9077-02  
Batch No.: 22L0562016  
Manufactured Date: 2022-10-26  
Expiration Date: 2025-10-25  
Revision No.: 0

## 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

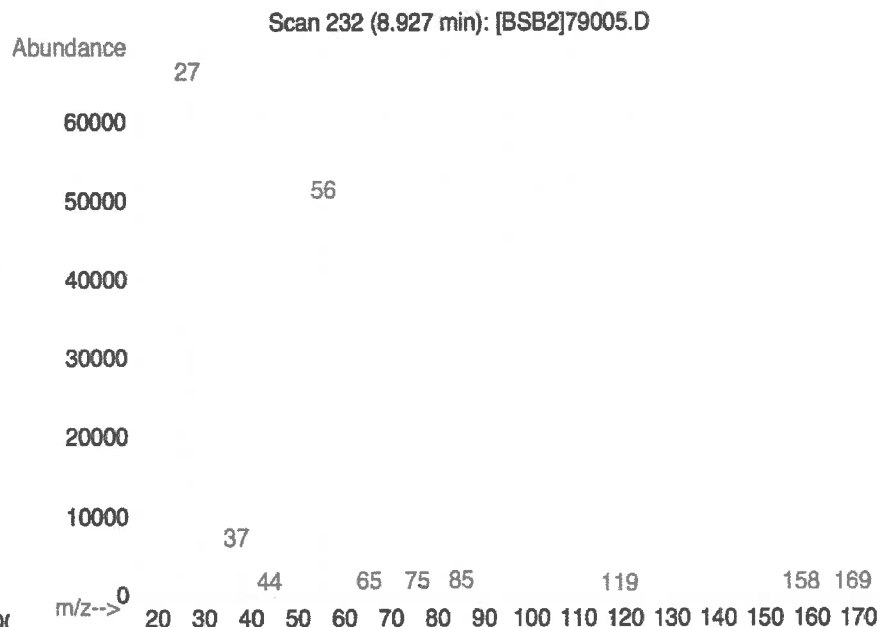
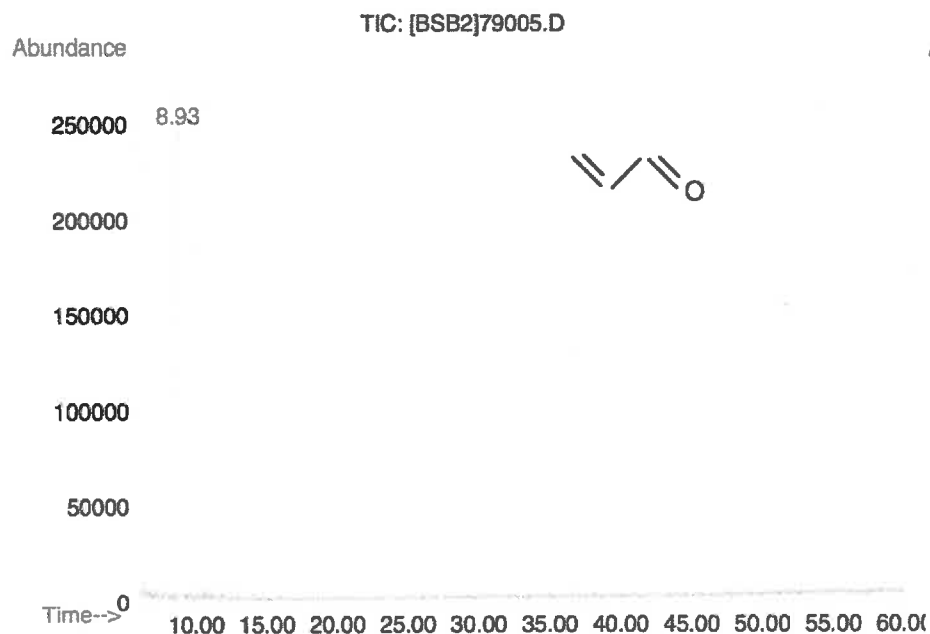
Weight(s) shown below were combined and diluted to (mL): **10.0**

|                        |                 |        |
|------------------------|-----------------|--------|
| <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* *V 14827*

| 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     | NA                                                                        |                                         | NA  |
| Appearance and Odor     | Completely miscible<br>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



## 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

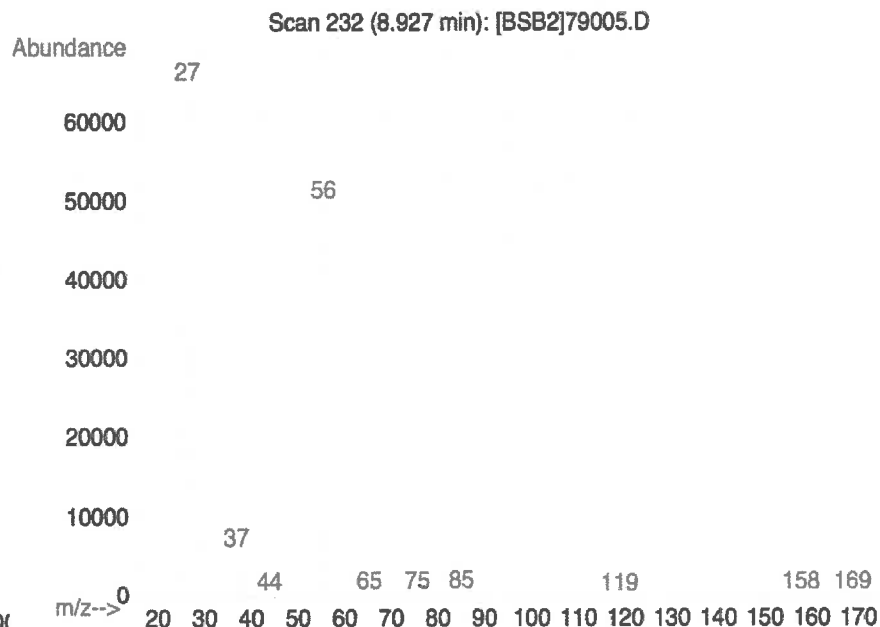
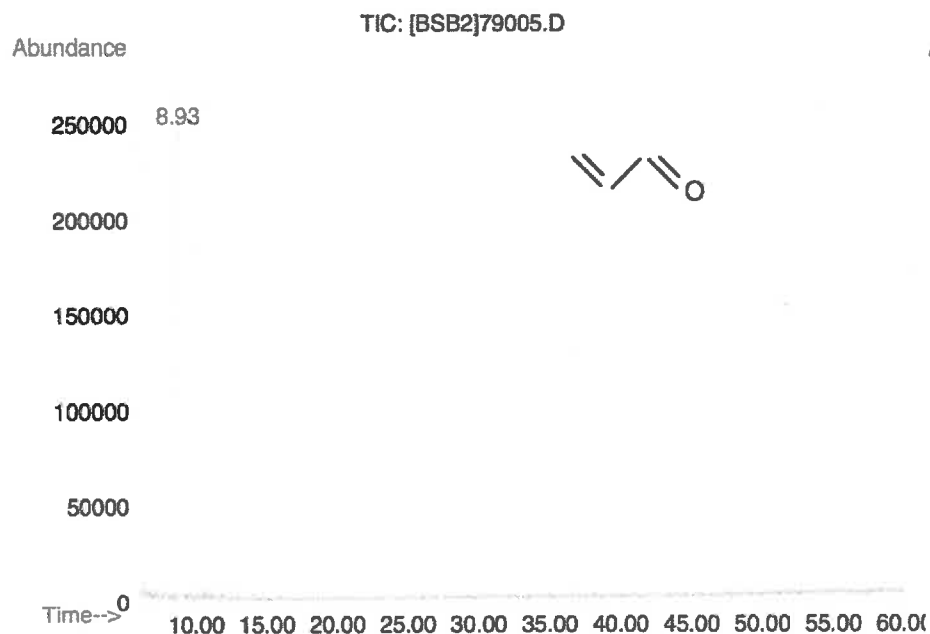
0.001 Flask Uncertainty

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 (H <sub>2</sub> O = 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



## 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

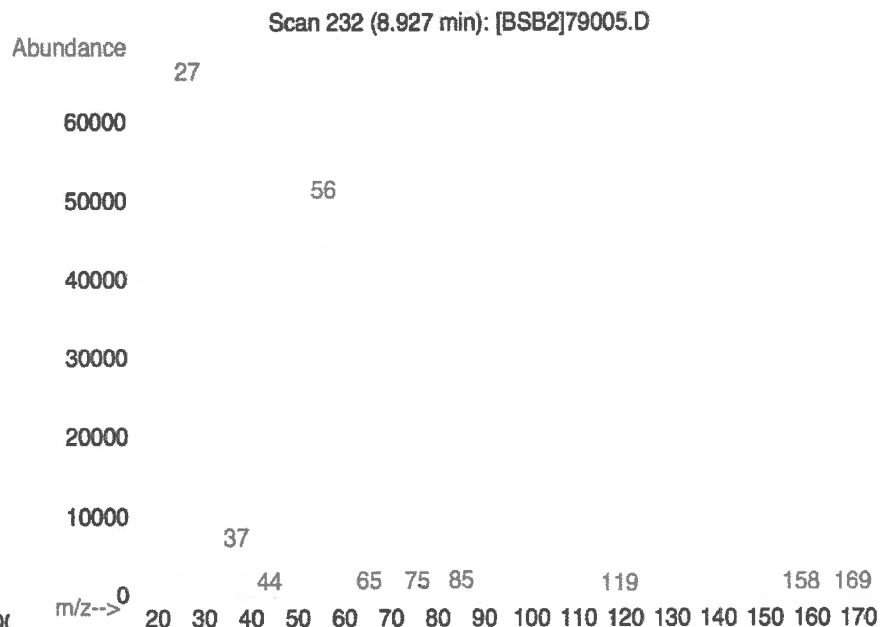
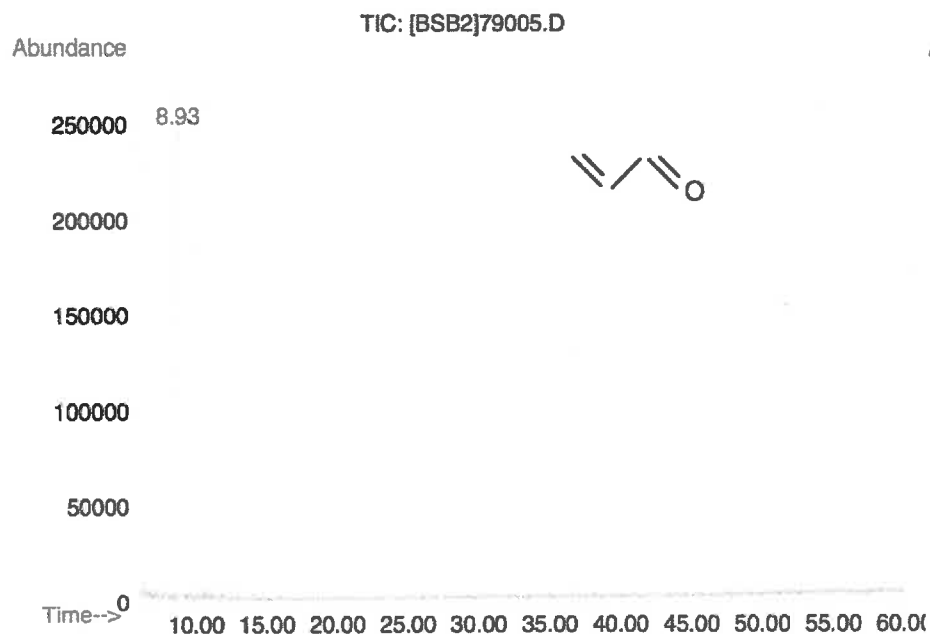
Weight(s) shown below were combined and diluted to (mL): **10.0**

|                        |                 |        |
|------------------------|-----------------|--------|
| <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* *V 14827*

| 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 |
|                         | NA                                                 |                                         | NA  |
| Solubility in Water     | Completely miscible                                |                                         |     |
| Appearance and Odor     | CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR. |                                         |     |

**Section X. STABILITY AND REACTIVITY**

|                                                      |                                              |
|------------------------------------------------------|----------------------------------------------|
| Chemical stability                                   | Stable under recommended storage conditions. |
| Possibility of hazardous reactions                   | NA                                           |
| Conditions to avoid                                  | NA                                           |
| Materials to avoid                                   | NA                                           |
| Hazardous decomposition products - No data available |                                              |

**Section XI. TOXICOLOGICAL INFORMATION**

|                          |    |
|--------------------------|----|
| LD50 Oral - Rat          | NA |
| LC50 Inhalation - Rat    | NA |
| LD50 Dermal - Guinea pig | NA |
| Causes skin irritation.  |    |
| Eye irritation           |    |

**Section XII. ECOLOGICAL INFORMATION**

|      |    |
|------|----|
| LC50 | NA |
| EC50 | NA |

**Section XIII. DISPOSAL CONSIDERATIONS**

Dispose with normal Laboratory Solvent Waste.

**Section XIV. TRANSPORT INFORMATION**

|                             |                             |
|-----------------------------|-----------------------------|
| DOT (US)                    | 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**

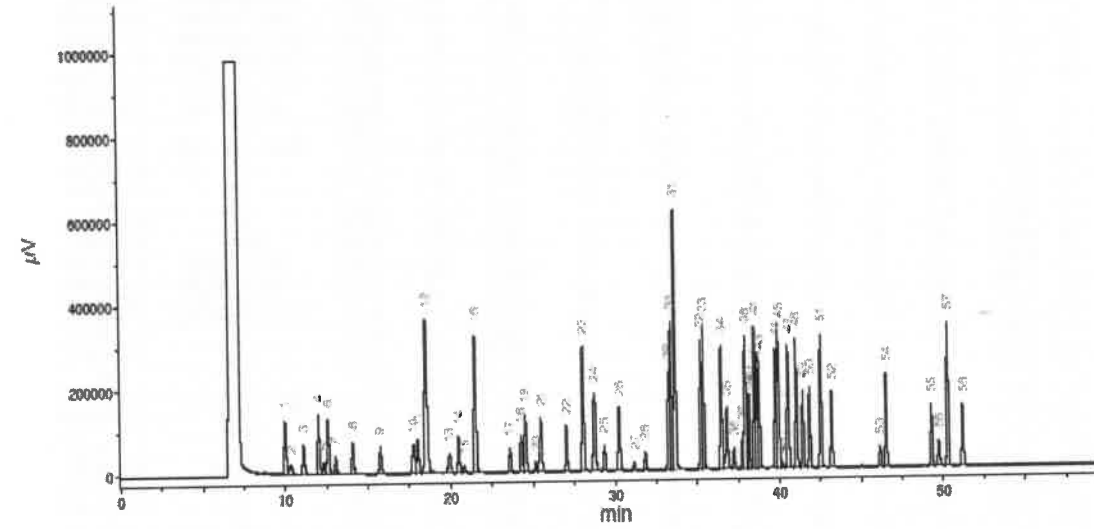
|                                        |  |        |
|----------------------------------------|--|--------|
| Formulated By: <i>Prashant Chauhan</i> |  | 021624 |
| Reviewed By: <i>Pedro L. Rentes</i>    |  | 021624 |
|                                        |  | DATE   |

| 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) | Conc. (µg/mL) | Conc. (µg/mL) | (%)    | Uncertainty | Pipette (mL) | Weight(g) | Weight(g) | Conc (µg/mL) | (+/-) (µg/mL) | CAS#                                   | OSHA PEL (TWA)               | LD50              |
| 1. Acetonitrile                     | (0324)      | 021644      | NA     | NA        | NA            | 2000          | 99.99  | 0.2         | NA           | 0.20007   | 0.20020   | 2001.3       | 8.1           | 75-05-8                                | 40 ppm (70mg/m3/8H)          | or-rat 2400mg/kg  |
| 2. Allyl chloride (3-Chloropropene) | (0325)      | 102395      | 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   |
| 3. 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  |
| 4. cis-1,4-Dichloro-2-butene        | (1196)      | 14718EF     | NA     | NA        | NA            | 2000          | 95     | 0.2         | NA           | 0.21058   | 0.21069   | 2001.1       | 8.5           | 1476-11-5                              | N/A                          | N/A               |
| 5. trans-1,4-Dichloro-2-butene      | (0486)      | MKBP6041F   | NA     | NA        | NA            | 2000          | 96.5   | 0.2         | NA           | 0.20731   | 0.20748   | 2001.7       | 8.4           | 110-57-6                               | N/A                          | N/A               |
| 6. Diethyl ether                    | (0153)      | 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               |
| 7. 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 |
| 8. 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    |
| 9. 2-Methyl-1-propanol              | (0445)      | 15241EB     | NA     | NA        | NA            | 2000          | 99.5   | 0.2         | NA           | 0.20106   | 0.20120   | 2001.4       | 8.1           | 78-83-1                                | 50 ppm (150mg/m3/8H)         | or-rat 3480mg/kg  |
| 10. Methacrylonitrile               | (0442)      | 03427ET     | 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  |
| 11. Methyl acrylate                 | (1075)      | SHBK0679    | NA     | NA        | NA            | 2000          | 99.9   | 0.2         | NA           | 0.20025   | 0.20040   | 2001.5       | 8.1           | 96-33-3                                | 10 ppm (35mg/m3/8H) (skin)   | or-rat 277mg/kg   |
| 12. Methyl methacrylate             | (0404)      | MKBW5137V   | NA     | NA        | NA            | 2000          | 99.9   | 0.2         | NA           | 0.20025   | 0.20041   | 2001.6       | 8.1           | 80-62-6                                | 100 ppm (410mg/m3/8H)        | or-rat 7872mg/kg  |
| 13. Nitrobenzene                    | (0228)      | 01213TV     | NA     | NA        | NA            | 2000          | 99     | 0.2         | NA           | 0.20207   | 0.20220   | 2001.3       | 8.2           | 98-95-3                                | 1 ppm (5mg/m3/8H) (skin)     | or-rat 700mg/kg   |
| 14. 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 7200mg/kg  |
| 15. Perfluorooctane                 | (0450)      | HGA01       | NA     | NA        | NA            | 2000          | 98     | 0.2         | NA           | 0.20413   | 0.20430   | 2001.6       | 8.3           | 76-01-7                                | N/A                          | N/A               |
| 16. 1,1,2-Trichlorotrifluoroethane  | (0474)      | 18930       | NA     | NA        | NA            | 2000          | 99     | 0.2         | NA           | 0.20207   | 0.20225   | 2001.8       | 8.2           | 76-13-1                                | 1000 ppm (7800mg/m3/8H)      | or-rat 43mg/kg    |
| 17. Bromodichloromethane            | 35171       | 101623      | 0.05   | 5.00      | 40001.7       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 22.9          | 75-27-4                                | N/A                          | or-rat 910mg/kg   |
| 18. Dibromochloromethane            | 35171       | 101623      | 0.05   | 5.00      | 40002.1       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 23.0          | 124-48-1                               | N/A                          | or-rat 840mg/kg   |
| 19. 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               |
| 20. trans-1,2-Dichloroethane        | 35171       | 101623      | 0.05   | 5.00      | 40002.4       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 22.9          | 156-60-5                               | N/A                          | or-rat 1235mg/kg  |
| 21. Methylene chloride              | 35171       | 101623      | 0.05   | 5.00      | 40002.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 22.9          | 75-09-2                                | 500 ppm                      | or-rat 820mg/kg   |
| 22. 1,1-Dichloroethene              | 32251       | 102023      | 0.10   | 10.00     | 20001.6       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.7       | 20.4          | 75-35-4                                | 1 ppm (4mg/m3/8H)            | or-rat 200mg/kg   |
| 23. Bromoform                       | 95321       | 020724      | 0.10   | 10.00     | 20003.2       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.5          | 75-25-2                                | 0.5 ppm (5mg/m3) (skin)      | or-rat 930mg/kg   |
| 24. Carbon tetrachloride            | 95321       | 020724      | 0.10   | 10.00     | 20003.4       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.4          | 56-23-5                                | 2 ppm (12.6mg/m3/8H)         | or-rat 2350mg/kg  |
| 25. Chloroform                      | 95321       | 020724      | 0.10   | 10.00     | 20002.0       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.5          | 67-66-3                                | 50 ppm (240mg/m3) (CL)       | or-rat 900mg/kg   |
| 26. 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   |
| 27. 1,1-Dichloroethane              | 95321       | 020724      | 0.10   | 10.00     | 20003.4       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.5          | 75-34-3                                | 100 ppm                      | or-rat 725mg/kg   |
| 28. 2,2-Dichloropropane             | 95321       | 020724      | 0.10   | 10.00     | 20003.4       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.4          | 594-20-7                               | N/A                          | N/A               |
| 29. 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) (flnal) | or-rat 2629mg/kg  |
| 30. 1,1,1-Trichloroethane           | 95321       | 020724      | 0.10   | 10.00     | 20003.0       | 2000          | NA     | NA          | 0.042        | NA        | NA        | 1999.8       | 20.5          | 71-55-6                                | 350 ppm (1900mg/m3/8H)       | or-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane     | 35161       | 112322      | 0.05   | 5.00      | 40016.5       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.3       | 22.9          | 96-12-6                                | 0.001 ppm                    | or-rat 170mg/kg   |
| 32. 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   |
| 33. 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   |
| 34. 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  |
| 35. 1,3-Dichloropropane             | 35161       | 112322      | 0.05   | 5.00      | 40005.9       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 142-28-9                               | N/A                          | un-rat 3600mg/kg  |
| 36. 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               |
| 37. cis-1,3-Dichloropropene         | 35161       | 112322      | 0.05   | 5.00      | 40010.0       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.0       | 23.0          | 10061-01-5                             | N/A                          | N/A               |
| 38. trans-1,3-Dichloropropene       | 35161       | 112322      | 0.05   | 5.00      | 40017.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.4       | 23.0          | 10061-02-6                             | N/A                          | N/A               |
| 39. Hexachloro-1,3-butadiene        | 35161       | 112322      | 0.05   | 5.00      | 40021.9       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.6       | 22.9          | 87-68-3                                | 0.02 ppm (0.24mg/m3/8H)      | or-rat 82mg/kg    |
| 40. 1,1,1,2-Tetrachloroethane       | 35161       | 112322      | 0.05   | 5.00      | 40011.9       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.1       | 22.9          | 630-20-6                               | N/A                          | or-rat 670mg/kg   |
| 41. 1,1,2,2-Tetrachloroethane       | 35161       | 112322      | 0.05   | 5.00      | 40007.5       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.9       | 22.9          | 79-34-5                                | 5 ppm (35mg/m3/8H) (skin)    | or-rat 800mg/kg   |
| 42. 1,1,2-Trichloroethane           | 35161       | 112322      | 0.05   | 5.00      | 40006.6       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 23.0          | 79-00-5                                | 10 ppm (46mg/m3/8H) (skin)   | or-rat 830mg/kg   |
| 43. Trichloroethene                 | 35161       | 112322      | 0.05   | 5.00      | 40029.0       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 2000.9       | 22.9          | 79-01-6                                | 50 ppm (270mg/m3/8H)         | or-rat 2400mg/kg  |
| 44. 1,2,3-Trichloropropane          | 35161       | 112322      | 0.05   | 5.00      | 40007.5       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.9       | 22.9          | 96-18-4                                | 10 ppm (50mg/m3/8H)          | or-rat 149.6mg/kg |
| 45. Benzene                         | 35162       | 050823      | 0.05   | 5.00      | 40005.0       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 71-43-2                                | 1 ppm                        | or-rat 4694mg/kg  |
| 46. Bromobenzene                    | 35162       | 050823      | 0.05   | 5.00      | 40006.9       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 104-51-8                               | N/A                          | N/A               |
| 47. n-Butyl benzene                 | 35162       | 050823      | 0.05   | 5.00      | 40003.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 100-41-4                               | 100 ppm (435mg/m3/8H)        | or-rat >2000mg/kg |
| 48. Ethyl benzene                   | 35162       | 050823      | 0.05   | 5.00      | 40004.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 99-87-6                                | N/A                          | or-rat 4750mg/kg  |
| 49. p-Isopropyl toluene             | 35162       | 050823      | 0.05   | 5.00      | 40005.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 91-20-3                                | 10 ppm (50mg/m3/8H)          | or-rat 490mg/kg   |
| 50. Naphthalene                     | 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  |
| 51. Styrene                         | 35162       | 050823      | 0.05   | 5.00      | 40006.2       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 108-98-3                               | 200 ppm                      | or-rat 5000mg/kg  |
| 52. Toluene                         | 35162       | 050823      | 0.05   | 5.00      | 40003.1       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 87-61-6                                | N/A                          | or-rat 1390mg/kg  |
| 53. 1,2,3-Trichlorobenzene          | 35162       | 050823      | 0.05   | 5.00      | 40003.1       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 120-82-1                               | 5 ppm (CL) (40mg/m3)         | or-rat 750mg/kg   |
| 54. 1,2,4-Trichlorobenzene          | 35162       | 050823      | 0.05   | 5.00      | 40006.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 23.0          | 95-63-6                                | N/A                          | or-rat 5g/kg      |
| 55. 1,2,4-Trimethylbenzene          | 35162       | 050823      | 0.05   | 5.00      | 40001.6       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 106-67-8                               | N/A                          | or-rat 5000mg/kg  |
| 56. 1,3,5-Trimethylbenzene          | 35162       | 050823      | 0.05   | 5.00      | 40006.7       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 108-38-3                               | 100 ppm (435mg/m3/8H)        | or-rat 5g/kg      |
| 57. m-Xylene                        | 35162       | 050823      | 0.05   | 5.00      | 40005.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.8       | 22.9          | 98-06-6                                | N/A                          | N/A               |
| 58. tert-Butyl benzene              | 35163       | 101923      | 0.05   | 5.00      | 40001.2       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 22.9          | 135-98-8                               | N/A                          | or-rat 2240mg/kg  |
| 59. sec-Butyl benzene               | 35163       | 101923      | 0.05   | 5.00      | 40002.4       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 108-90-7                               | 75 ppm (350mg/m3/8H)         | or-rat 2290mg/kg  |
| 60. Chlorobenzene                   | 35163       | 101923      | 0.05   | 5.00      | 40003.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.5       | 22.9          | 95-49-8                                | 50 ppm (250mg/m3/8H)         | or-rat 3900mg/kg  |
| 61. 2-Chlorotoluene                 | 35163       | 101923      | 0.05   | 5.00      | 40003.3       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 106-43-4                               | N/A                          | or-rat 2100mg/kg  |
| 62. 4-Chlorotoluene                 | 35163       | 101923      | 0.05   | 5.00      | 40003.3       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.7       | 22.9          | 541-73-1                               | 50 ppm (300mg/m3) (CL)       | or-rat 500mg/kg   |
| 63. 1,2-Dichlorobenzene             | 35163       | 101923      | 0.05   | 5.00      | 40003.8       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 23.0          | 95-50-1                                | 75 ppm (450mg/m3/8H)         | or-rat 900mg/kg   |
| 64. 1,3-Dichlorobenzene             | 35163       | 101923      | 0.05   | 5.00      | 40001.7       | 2000          | NA     | NA          | 0.017        | NA        | NA        | 1999.6       | 22.9          | 96-52-6                                | 50 ppm (245mg/m3/8H)         | or-rat 14         |

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-Hitroprene                  | 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                    | 36.48         |
| 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**

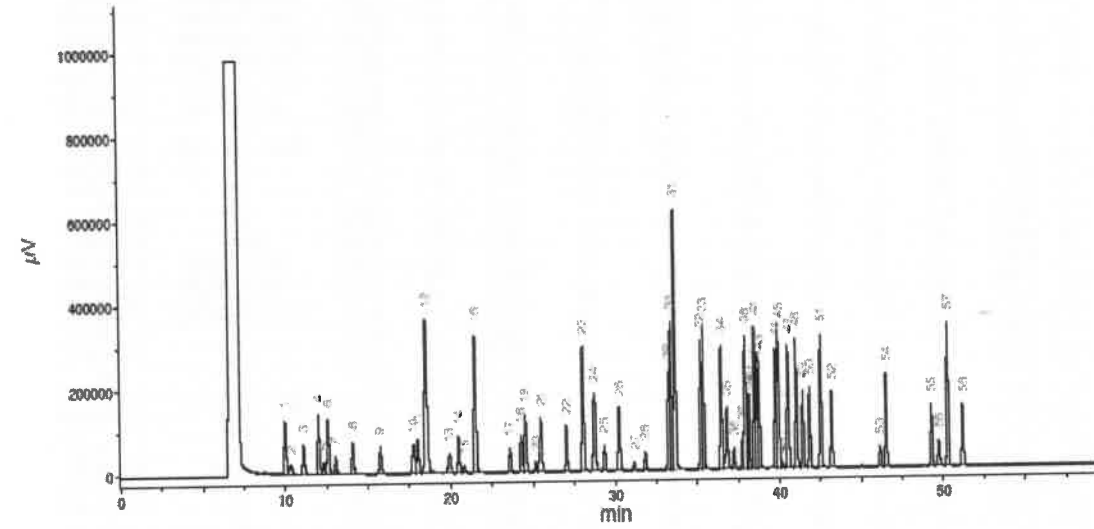
|                |                  |        |
|----------------|------------------|--------|
|                |                  | 021624 |
| Formulated By: | Prashant Chauhan | DATE   |
|                |                  | 021624 |
| Reviewed By:   | Pedro L. Rentes  | DATE   |

| 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     | 67-66-3                                | 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 | 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                                | 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     | 108-88-1                               | 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     | 99-87-6                                | 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  |           |
| 2,3-Trichlorobenzene             | 35162  | 050823      | 0.05 | 5.00    | 40003.1 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.8 | 22.9     | 106-88-3                               | 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    | 40003.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.5 | 22.9     | 108-90-7                               | 50 ppm (250mg/m3/8H)         | or-rat 3900mg/kg  |           |
| Chlorotoluene                    | 35163  | 101923      | 0.05 | 5.00    | 40003.3 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 106-43-4                               | N/A                          | or-rat 2100mg/kg  |           |
| 2-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40003.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.7 | 22.9     | 95-50-1                                | 50 ppm (300mg/m3) (CL)       | or-rat 500mg/kg   |           |
| 3-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.7 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.6 | 23.0     | 541-73-1                               | N/A                          | or-rat 500mg/kg   |           |
| 4-Dichlorobenzene                | 35163  | 101923      | 0.05 | 5.00    | 40001.8 | 2000    | NA     | NA     | 0.017       | NA      | NA      | 1999.1 |          |                                        |                              |                   |           |

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-Hitroprene                  | 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/Bromofonn                   | 36.18         |
| 35     | cis-1,4-Dichloro-3-butene                    | 36.48         |
| 36     | 1,1,2,2-Tetrachloroethane                    | 37.23         |
| 37     | 1,2,3-Trichloropropane                       | 37.77         |
| 38     | n-Propylbenzene                              | 37.99         |
| 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: **95319**  
Lot Number: **032922**  
Description: **Revised Additions Mix**  
**11 components**

Solvent(s): **Lot#**  
**Methanol EC592-US**

Expiration Date: **032925**

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

Varied

NIST Test ID#:

6UTB

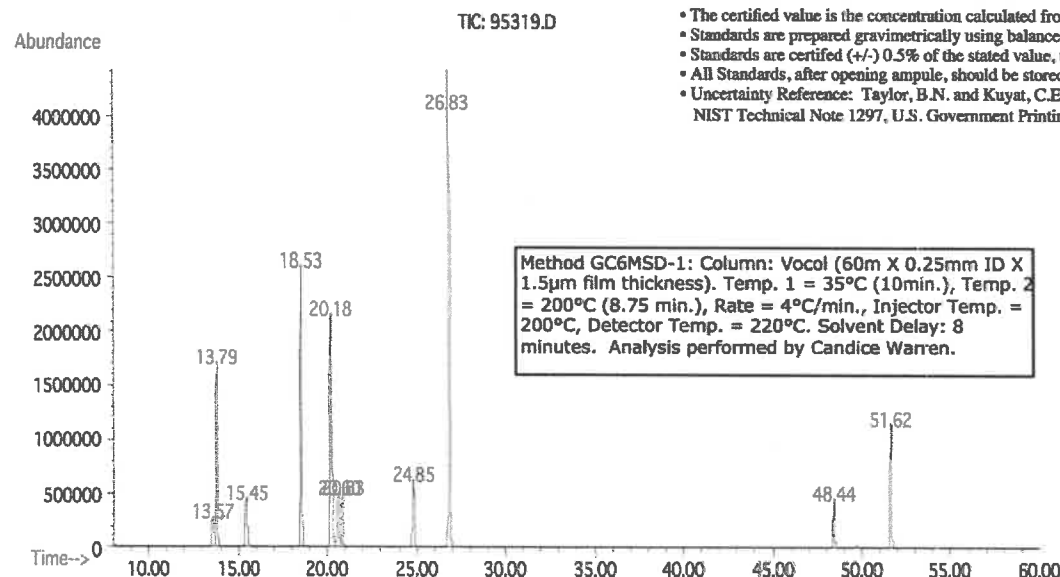
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): **100.0**

0.012 Flask Uncertainty

|                |                  |        |
|----------------|------------------|--------|
|                |                  | 032922 |
| Formulated By: | Prashant Chauhan | DATE   |
|                |                  | 032922 |
| 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<br>(Solvent Safety Info. On Attached pg.) |                           |                    |
|-----------------------------------|------|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|-----------------------------------------------------------|---------------------------|--------------------|
|                                   |      |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                      | OSHA PEL (TWA)            | LD50               |
| 1. Acrylonitrile                  | 7    | 4718CK     | 10000                | 99         | 0.2                | 1.01015          | 1.01030          | 10001.5             | 40.5                               | 107-13-1                                                  | N/A                       | ori-rat 78 mg/kg   |
| 2. 1-Chlorobutane                 | 1072 | MKCM5711   | 2000                 | 99.99      | 0.2                | 0.20003          | 0.20020          | 2001.7              | 8.1                                | 109-69-3                                                  | N/A                       | ori-rat 2670mg/kg  |
| 3. Cyclohexane                    | 1023 | 28930      | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 110-82-7                                                  | 300 ppm (1050mg/m3/8H)    | ori-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE)      | 987  | 00412MX    | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 108-20-3                                                  | 500 ppm (2100mg/m3/8H)    | ori-rat 8470mg/kg  |
| 5. 1,4-Dioxane                    | 373  | 03853KE    | 40000                | 99         | 0.2                | 4.04060          | 4.04100          | 40004.0             | 161.9                              | 123-91-1                                                  | 25 ppm (90mg/m3/8H)(skin) | ori-mus 5700mg/kg  |
| 6. Hexachloroethane               | 199  | 12604HBV   | 2000                 | 99         | 0.2                | 0.20203          | 0.20213          | 2001.0              | 8.2                                | 67-72-1                                                   | 1 ppm (10mg/m3/8H)(skin)  | ori-gpg 4970mg/kg  |
| 7. Methylcyclohexane              | 1627 | 08046KN    | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 108-87-2                                                  | N/A                       | N/A                |
| 8. Methyl tert-butyl ether (MTBE) | 209  | 02197JJ    | 2000                 | 99.8       | 0.2                | 0.20041          | 0.20055          | 2001.4              | 8.1                                | 1634-04-4                                                 | N/A                       | ori-rat 4g/kg      |
| 9. Propionitrile                  | 349  | 1395468    | 20000                | 99         | 0.2                | 2.02030          | 2.02045          | 20001.5             | 81.0                               | 107-12-0                                                  | N/A                       | ori-rat 39mg/kg    |
| 10. Tetrahydrofuran               | 380  | SHBH8330   | 10000                | 99.9       | 0.2                | 1.00105          | 1.00120          | 10001.5             | 40.1                               | 109-99-9                                                  | 20 ppm (590mg/m3/8H)      | ori-rat 1650mg/kg  |
| 11. 1,2,3,4-Tetramethylbenzene    | 491  | AP01       | 2000                 | 93         | 0.2                | 0.21506          | 0.21520          | 2001.3              | 8.7                                | 488-23-3                                                  | N/A                       | ori-rat 6408mg/kg  |



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

| Name                           | MSD RT (min.) |
|--------------------------------|---------------|
| Methyl tert-butyl ether (MTBE) | 13.56         |
| Acrylonitrile                  | 13.79         |
| Di-isopropyl ether             | 15.44         |
| Propionitrile                  | 18.53         |
| Tetrahydrofuran                | 20.17         |
| Cyclohexane                    | 20.58         |
| 1-Chlorobutane                 | 20.83         |
| Methylcyclohexane              | 24.84         |
| 1,4-Dioxane                    | 26.84         |
| Hexachloroethane               | 48.44         |
| 1,2,3,4-Tetramethylbenzene     | 51.62         |

## 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 Rosotto 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: | CAS#:   | LD50 Oral - Rat | OSHA PEL | % (optional) |
|-------------|---------|-----------------|----------|--------------|
| Methanol    | 67-56-1 | 2,769 mg/kg     | 200 ppm  | > 99         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                               |                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability                  | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| Suitable extinguishing media  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                        |
| Protective equipment for fire | Wear self contained breathing apparatus for fire fighting if necessary.                                                                                         |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.                                                                                         |
|                               | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.                                                |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                                                                                                    |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Methanol                                                                                      | 67-56-1 TWA 200 ppm                                                                                |
| Skin notation                                                                                 | TWA 200 ppm                                                                                        |
| Potential for skin absorption, ingestion and inhalation.                                      |                                                                                                    |
| Personal protective equipment                                                                 | Respiratory protection. Handle with gloves. Gloves must be inspected prior to use. Eye protection. |
| Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product. |                                                                                                    |

## Section IX - Physical/Chemical Characteristics

|                         |                                                           |                                         |       |
|-------------------------|-----------------------------------------------------------|-----------------------------------------|-------|
| Boiling Point           | 65°C                                                      | Specific Gravity (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: **95319**  
Lot Number: **032922**  
Description: **Revised Additions Mix**  
**11 components**

Solvent(s): **Lot#**  
**Methanol EC592-US**

Expiration Date: **032925**

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

Varied

NIST Test ID#:

6UTB

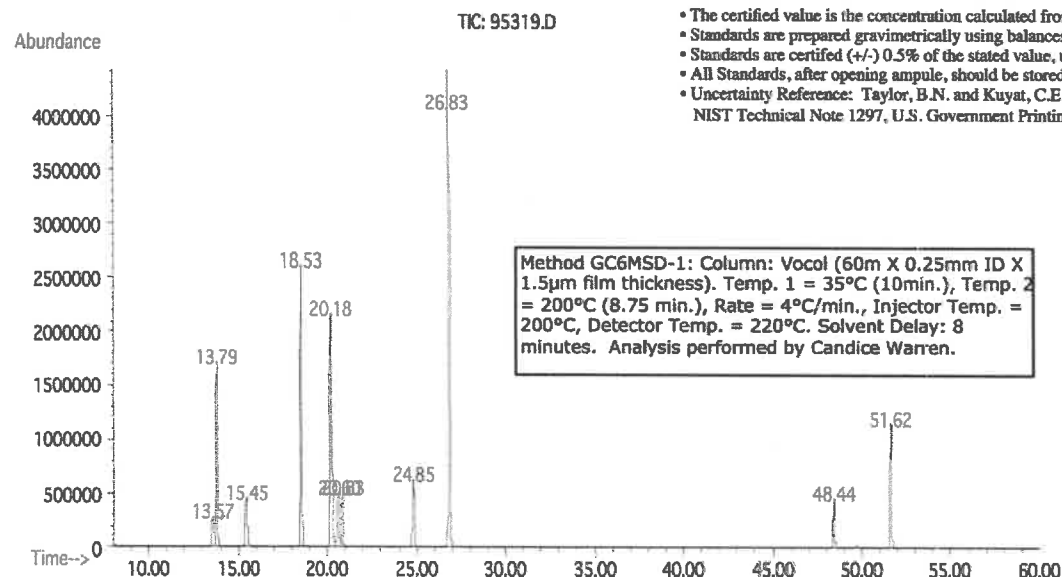
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): **100.0**

0.012 Flask Uncertainty

|                |                  |        |
|----------------|------------------|--------|
|                |                  | 032922 |
| Formulated By: | Prashant Chauhan | DATE   |
|                |                  | 032922 |
| 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<br>(Solvent Safety Info. On Attached pg.) |                           |                    |
|-----------------------------------|------|------------|----------------------|------------|--------------------|------------------|------------------|---------------------|------------------------------------|-----------------------------------------------------------|---------------------------|--------------------|
|                                   |      |            |                      |            |                    |                  |                  |                     |                                    | CAS#                                                      | OSHA PEL (TWA)            | LD50               |
| 1. Acrylonitrile                  | 7    | 4718CK     | 10000                | 99         | 0.2                | 1.01015          | 1.01030          | 10001.5             | 40.5                               | 107-13-1                                                  | N/A                       | ori-rat 78 mg/kg   |
| 2. 1-Chlorobutane                 | 1072 | MKCM5711   | 2000                 | 99.99      | 0.2                | 0.20003          | 0.20020          | 2001.7              | 8.1                                | 109-69-3                                                  | N/A                       | ori-rat 2670mg/kg  |
| 3. Cyclohexane                    | 1023 | 28930      | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 110-82-7                                                  | 300 ppm (1050mg/m3/8H)    | ori-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE)      | 987  | 00412MX    | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 108-20-3                                                  | 500 ppm (2100mg/m3/8H)    | ori-rat 8470mg/kg  |
| 5. 1,4-Dioxane                    | 373  | 03853KE    | 40000                | 99         | 0.2                | 4.04060          | 4.04100          | 40004.0             | 161.9                              | 123-91-1                                                  | 25 ppm (90mg/m3/8H)(skin) | ori-mus 5700mg/kg  |
| 6. Hexachloroethane               | 199  | 12604HBV   | 2000                 | 99         | 0.2                | 0.20203          | 0.20213          | 2001.0              | 8.2                                | 67-72-1                                                   | 1 ppm (10mg/m3/8H)(skin)  | ori-gpg 4970mg/kg  |
| 7. Methylcyclohexane              | 1627 | 08046KN    | 2000                 | 99         | 0.2                | 0.20203          | 0.20215          | 2001.2              | 8.2                                | 108-87-2                                                  | N/A                       | N/A                |
| 8. Methyl tert-butyl ether (MTBE) | 209  | 02197JJ    | 2000                 | 99.8       | 0.2                | 0.20041          | 0.20055          | 2001.4              | 8.1                                | 1634-04-4                                                 | N/A                       | ori-rat 4g/kg      |
| 9. Propionitrile                  | 349  | 1395468    | 20000                | 99         | 0.2                | 2.02030          | 2.02045          | 20001.5             | 81.0                               | 107-12-0                                                  | N/A                       | ori-rat 39mg/kg    |
| 10. Tetrahydrofuran               | 380  | SHBH8330   | 10000                | 99.9       | 0.2                | 1.00105          | 1.00120          | 10001.5             | 40.1                               | 109-99-9                                                  | 20 ppm (590mg/m3/8H)      | ori-rat 1650mg/kg  |
| 11. 1,2,3,4-Tetramethylbenzene    | 491  | AP01       | 2000                 | 93         | 0.2                | 0.21506          | 0.21520          | 2001.3              | 8.7                                | 488-23-3                                                  | N/A                       | ori-rat 6408mg/kg  |



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

| Name                           | MSD RT (min.) |
|--------------------------------|---------------|
| Methyl tert-butyl ether (MTBE) | 13.56         |
| Acrylonitrile                  | 13.79         |
| Di-isopropyl ether             | 15.44         |
| Propionitrile                  | 18.53         |
| Tetrahydrofuran                | 20.17         |
| Cyclohexane                    | 20.58         |
| 1-Chlorobutane                 | 20.83         |
| Methylcyclohexane              | 24.84         |
| 1,4-Dioxane                    | 26.84         |
| Hexachloroethane               | 48.44         |
| 1,2,3,4-Tetramethylbenzene     | 51.62         |

## 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 Rosotto 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: | CAS#:   | LD50 Oral - Rat | OSHA PEL | % (optional) |
|-------------|---------|-----------------|----------|--------------|
| Methanol    | 67-56-1 | 2,769 mg/kg     | 200 ppm  | > 99         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                               |                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability                  | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| Suitable extinguishing media  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                        |
| Protective equipment for fire | Wear self contained breathing apparatus for fire fighting if necessary.                                                                                         |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.                                                                                         |
|                               | Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.                                                |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                                                                                                    |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Methanol                                                                                      | 67-56-1 TWA 200 ppm                                                                                |
| Skin notation                                                                                 | TWA 200 ppm                                                                                        |
| Potential for skin absorption, ingestion and inhalation.                                      |                                                                                                    |
| Personal protective equipment                                                                 | Respiratory protection. Handle with gloves. Gloves must be inspected prior to use. Eye protection. |
| Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product. |                                                                                                    |

## Section IX - Physical/Chemical Characteristics

|                         |                                                           |                                         |       |
|-------------------------|-----------------------------------------------------------|-----------------------------------------|-------|
| Boiling Point           | 65°C                                                      | Specific Gravity (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  
V14630 to  
V14649

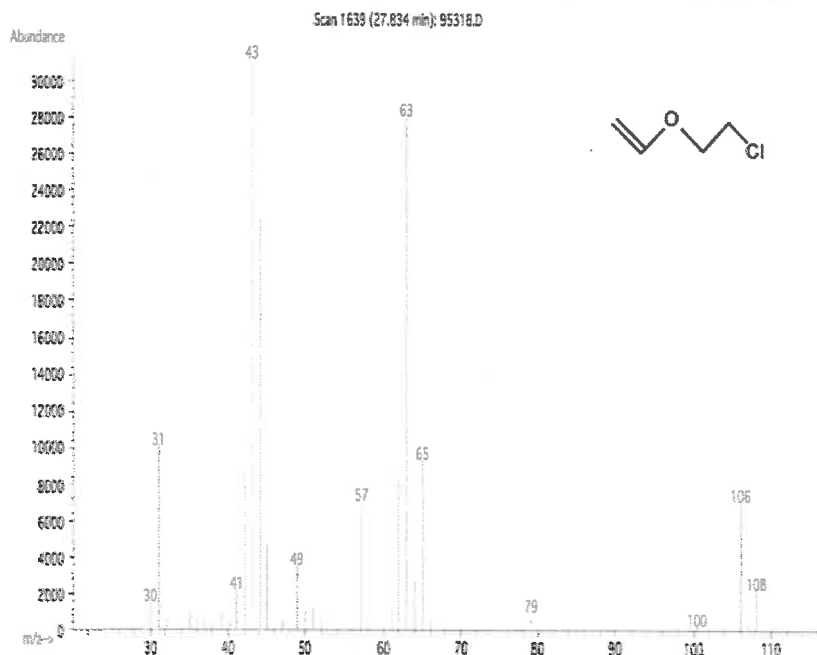
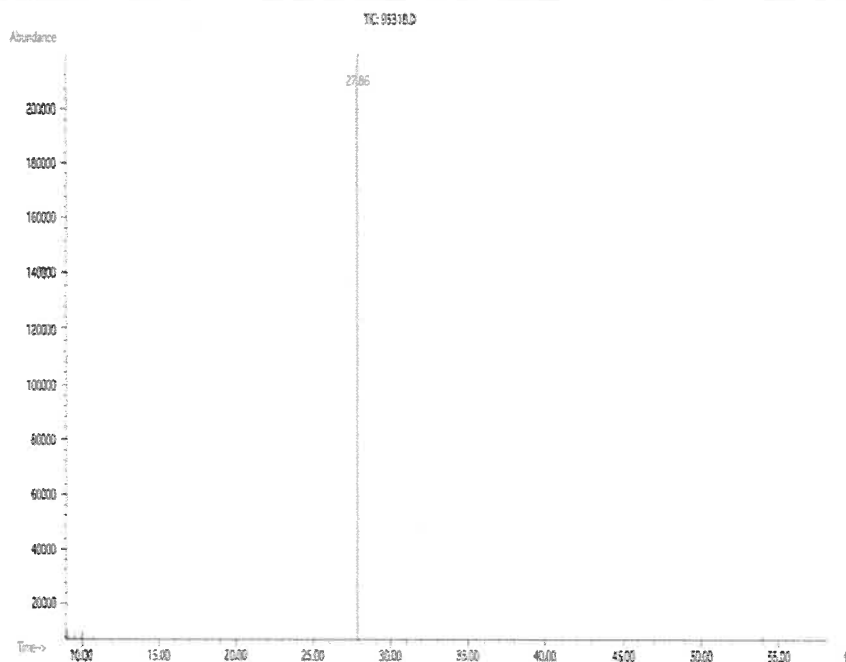
Weight(s) shown below were combined and diluted to (mL): **50.0**

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                | 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*

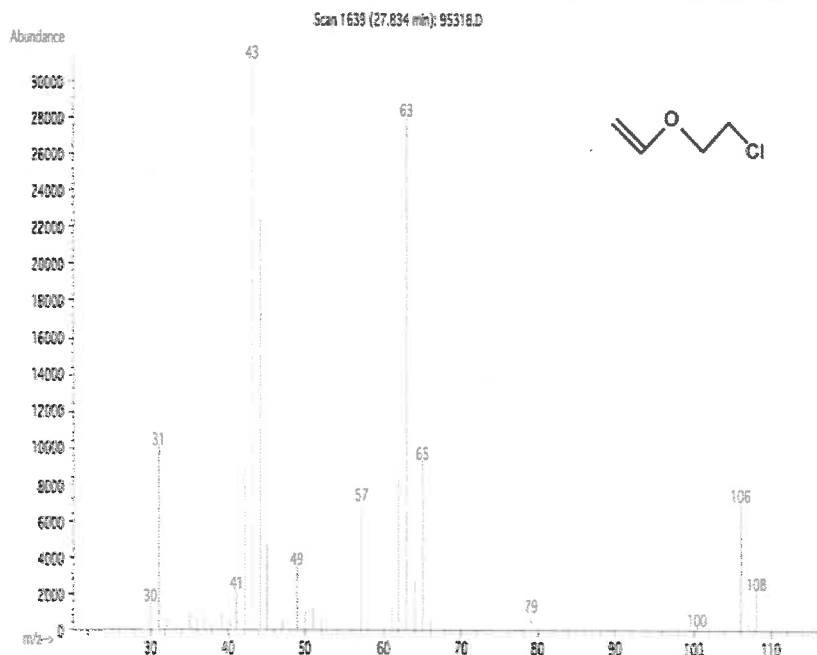
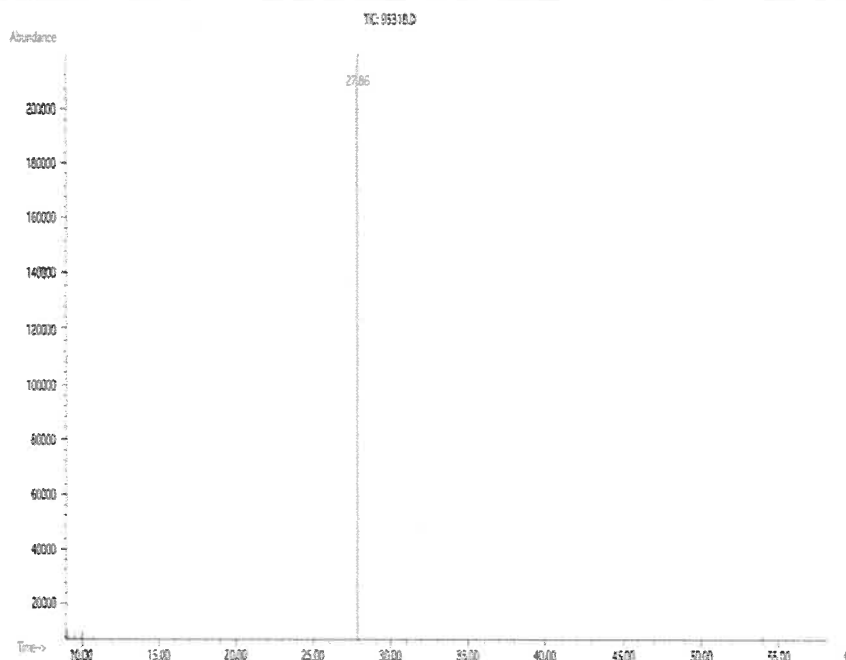
Weight(s) shown below were combined and diluted to (mL): **50.0**

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)) | CAS#                   | % (optional) |
| Methanol                                                | METHYL ALCOHOL 67-56-1 | > 97         |

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

## Section IV. FIRST AID MEASURES

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| General advice          | Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.            |
| If inhaled              | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash with soap and water. Consult a physician.                                                              |
| In case of eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                      |
| If swallowed            | Do NOT induce vomiting. Rinse mouth with water. Consult a physician.                                        |

## Section V. FIREFIGHTING MEASURES

|                               |                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability                  | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| Suitable extinguishing media  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                        |
| Protective equipment for fire | Wear self contained breathing apparatus for fire fighting if necessary.                                                                                         |

## Section VI. ACCIDENTAL RELEASE MEASURES

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions      | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                              |
| Clean up                  | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).                                                             |

## Section VII. HANDLING AND STORAGE

|                               |                                                                                                                                                                                         |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions            | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.                           |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                               |                        |                                                            |                 |
|-----------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------|-----------------|
| Methanol                                                                                      | 67-56-1                | 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*

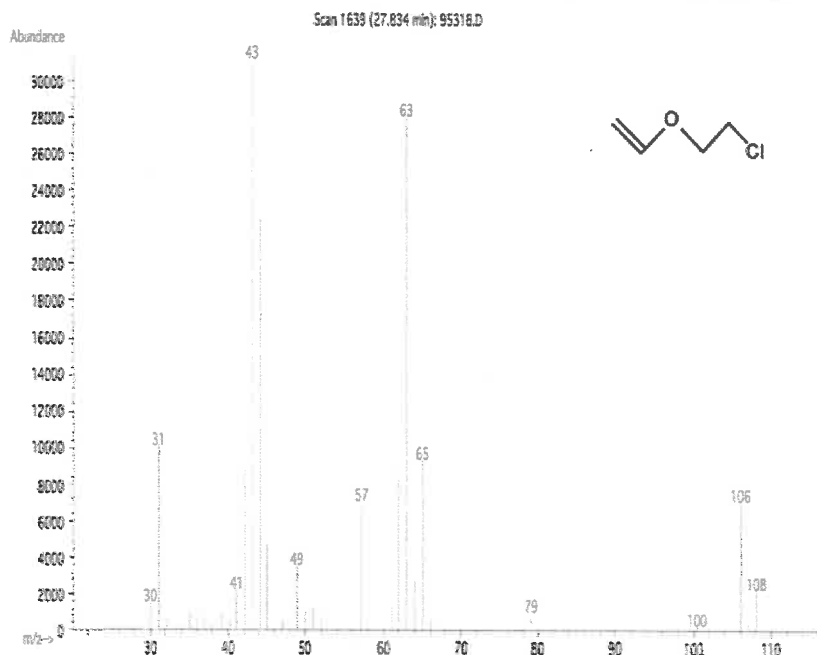
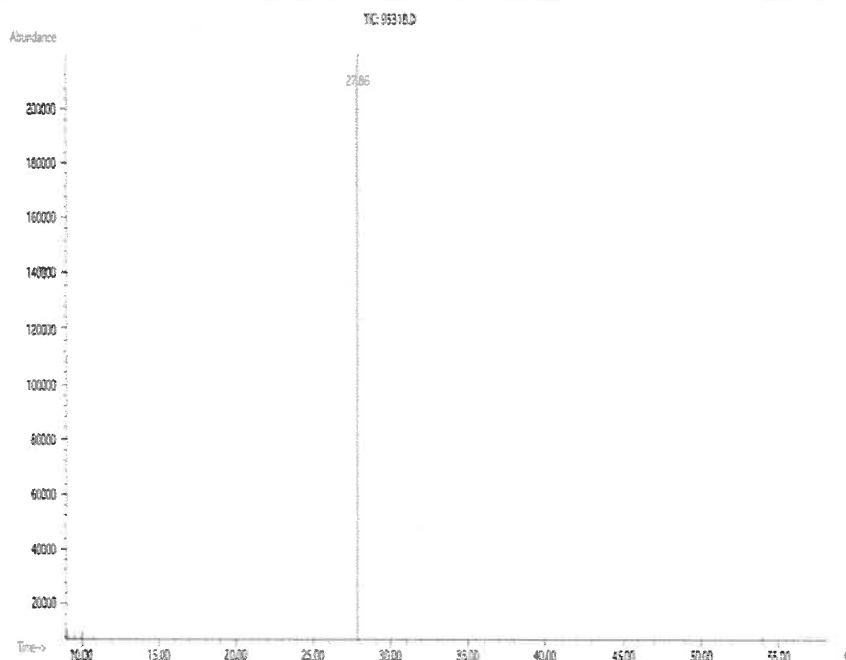
Weight(s) shown below were combined and diluted to (mL): **50.0**

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 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*

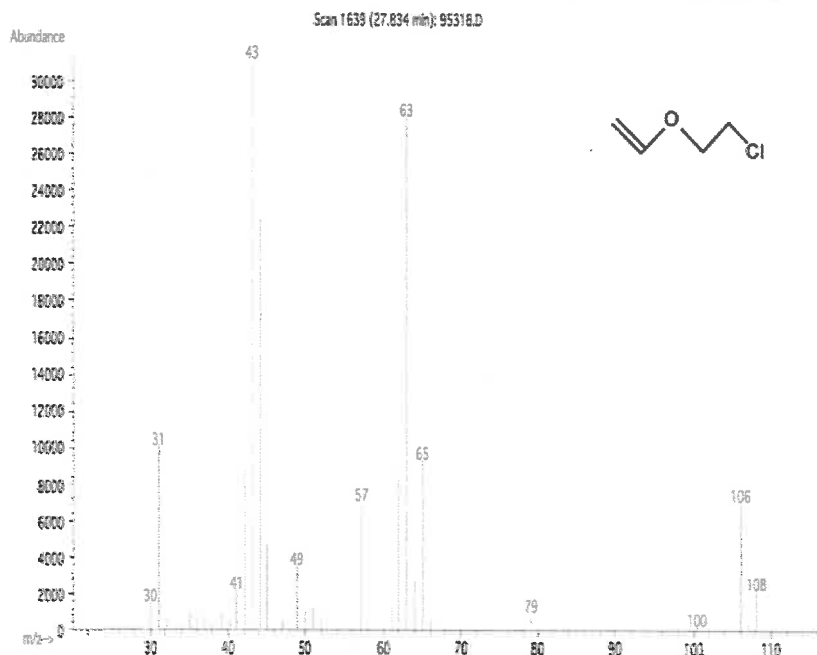
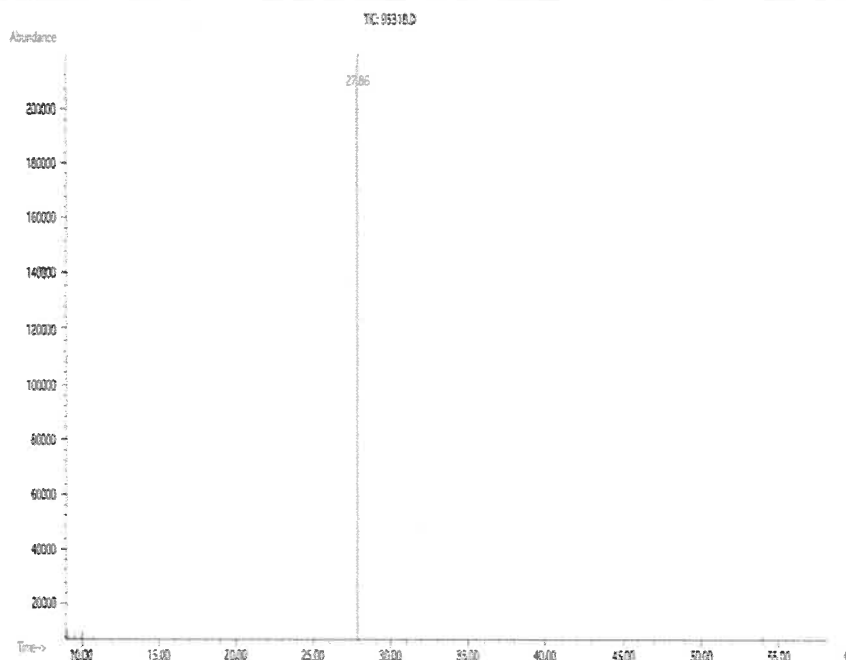
Weight(s) shown below were combined and diluted to (mL): **50.0**

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.



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)<br>CAS # 75-65-0<br>Purity 99%<br>(Lot SHBM7694) | 50,126.0 µg/mL                 | <table><tr><td>+/-</td><td>293.4988</td><td>µg/mL</td><td>Gravimetric</td></tr><tr><td>+/-</td><td>1,073.7654</td><td>µg/mL</td><td>Unstressed</td></tr><tr><td>+/-</td><td>1,104.9494</td><td>µg/mL</td><td>Stressed</td></tr></table> | +/- | 293.4988 | µg/mL | Gravimetric | +/- | 1,073.7654 | µg/mL | Unstressed | +/- | 1,104.9494 | µg/mL | Stressed |
| +/-           | 293.4988                                                            | µg/mL                          | Gravimetric                                                                                                                                                                                                                             |     |          |       |             |     |            |       |            |     |            |       |          |
| +/-           | 1,073.7654                                                          | µg/mL                          | Unstressed                                                                                                                                                                                                                              |     |          |       |             |     |            |       |            |     |            |       |          |
| +/-           | 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:**

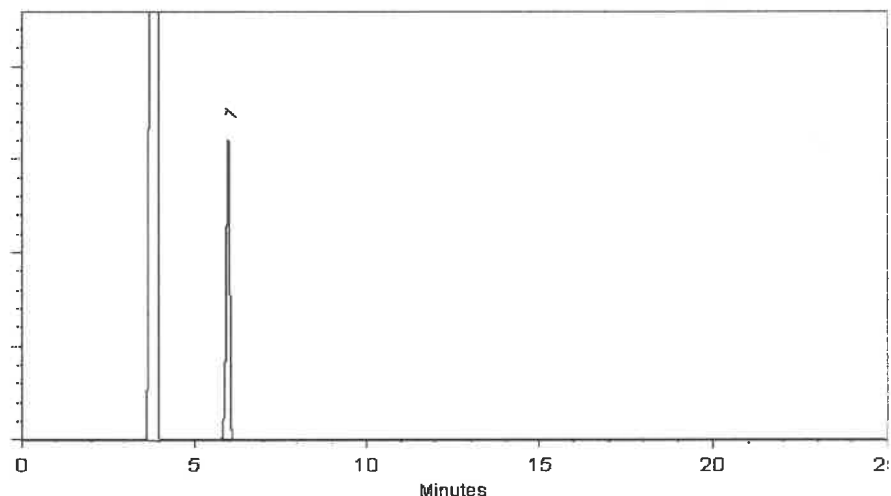
200°C

**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.



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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:**

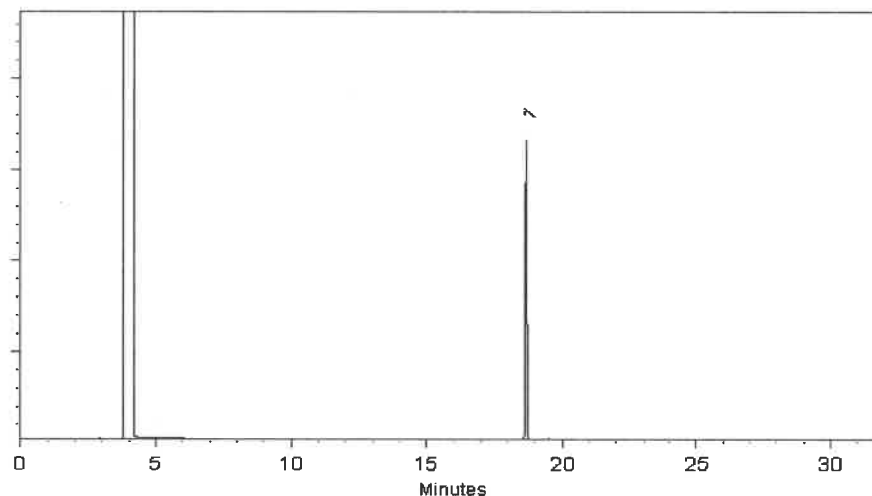
FID

**Split Vent:**

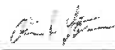
40 ml/min

**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/ $\mu$ 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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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:**

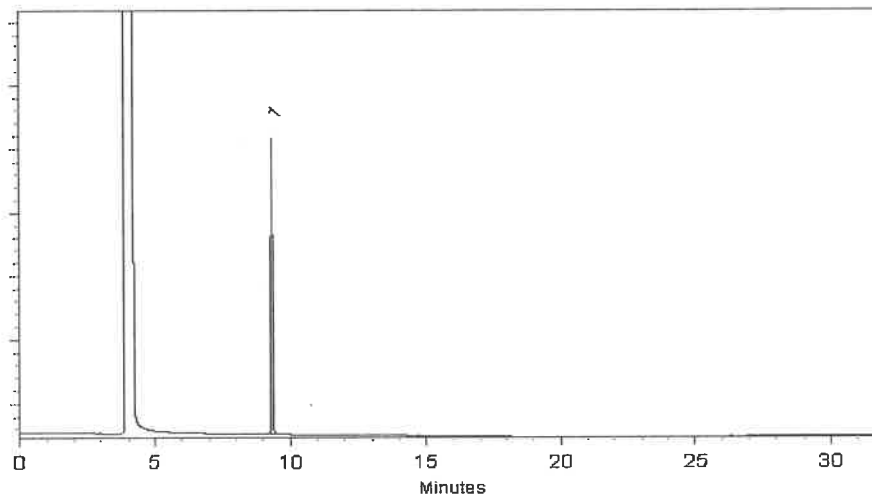
FID

**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:**

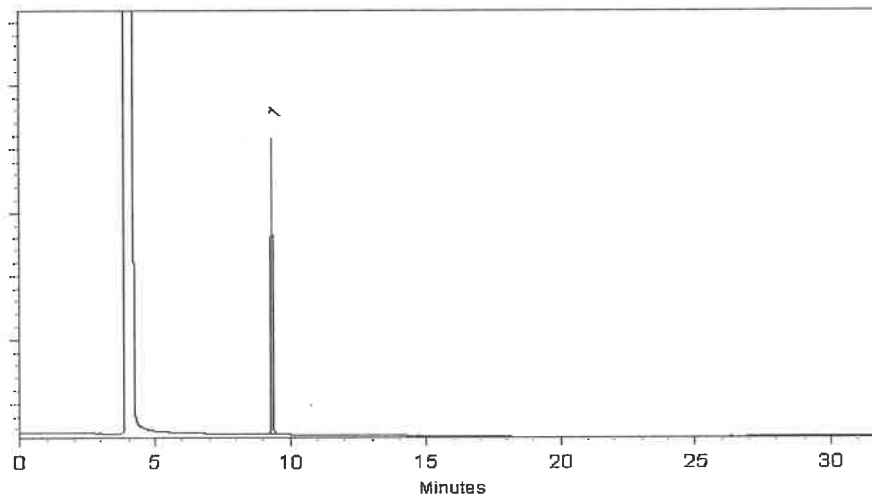
FID

**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:

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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:

- 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:**

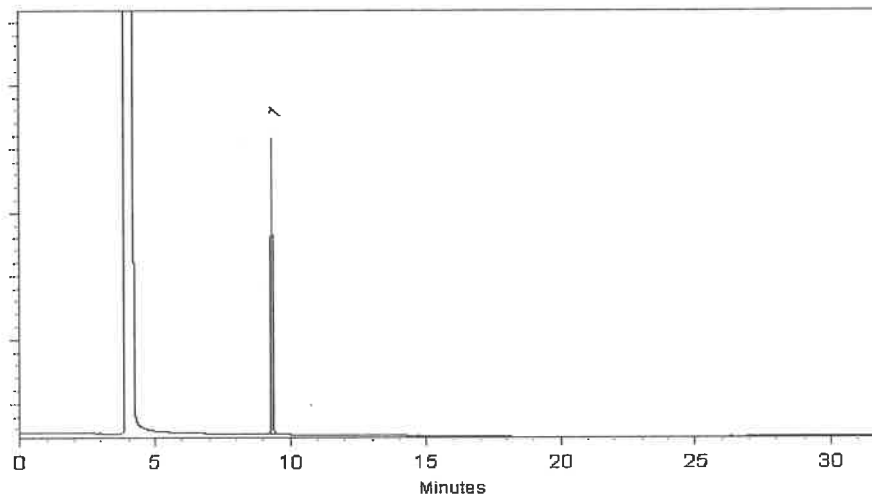
FID

**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:**

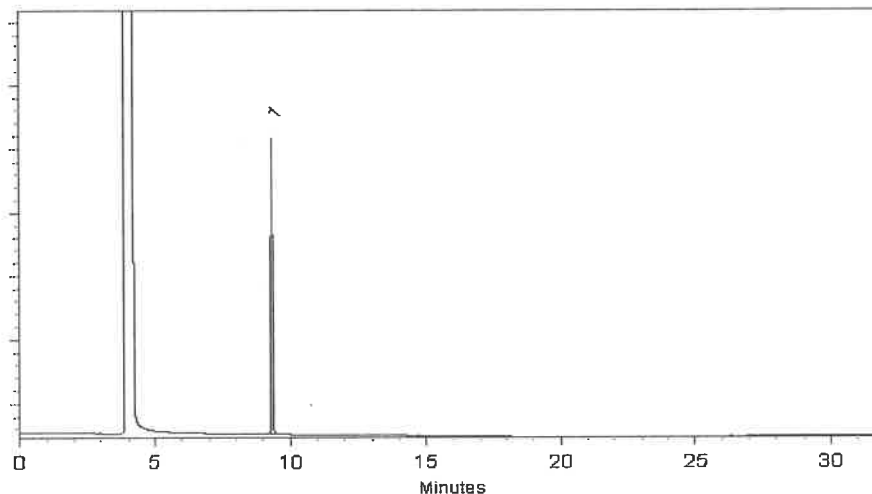
FID

**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.
- 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. :** 30042 **Lot No.:** A0194279

**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 :** October 31, 2029 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound                         | CAS #   | Lot #           | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|----------------------------------|---------|-----------------|--------|-----------------------------|----------------------------------------|
| 1             | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00012554        | 99%    | 2,001.5 µg/mL               | +/- 112.7231                           |
| 2             | Chloromethane (methyl chloride)  | 74-87-3 | SHBK6571        | 99%    | 2,001.2 µg/mL               | +/- 112.5863                           |
| 3             | Vinyl chloride                   | 75-01-4 | 00015559        | 99%    | 2,001.4 µg/mL               | +/- 112.6561                           |
| 4             | Bromomethane (methyl bromide)    | 74-83-9 | 101604          | 99%    | 2,006.4 µg/mL               | +/- 112.8262                           |
| 5             | Chloroethane (ethyl chloride)    | 75-00-3 | 107-401039114-1 | 99%    | 2,001.9 µg/mL               | +/- 112.5897                           |
| 6             | Trichlorofluoromethane (CFC-11)  | 75-69-4 | MKCL8411        | 99%    | 2,000.8 µg/mL               | +/- 112.6473                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

## Quality Confirmation Test

**Column:**

60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

**Carrier Gas:**

helium-constant flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**

200°C

**Det. Temp:**

250°C

**Det. Type:**

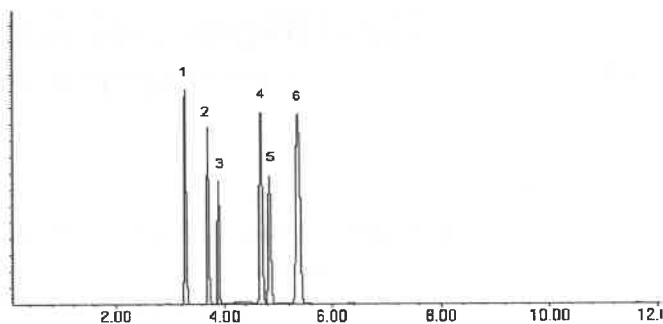
MSD

**Split Vent:**

Split ratio 10:1

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckar - Mix Technician

Date Mixed: 03-Feb-2023

Balance Serial # B707717271

  
Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Feb-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

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:

- 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:

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# 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. :** 30006 **Lot No.:** A0200785

**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 :** November 30, 2026 **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  | SHBP8774 | 99%    | 5,018.5 µg/mL               | +/- 173.4162                           |
| 2             | 2-Butanone (MEK)            | 78-93-3  | SHBL5543 | 99%    | 5,016.0 µg/mL               | +/- 173.3298                           |
| 3             | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99%    | 5,010.7 µg/mL               | +/- 173.1455                           |
| 4             | 2-Hexanone                  | 591-78-6 | MKCQ6663 | 99%    | 5,015.0 µg/mL               | +/- 173.2952                           |

\* 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:**

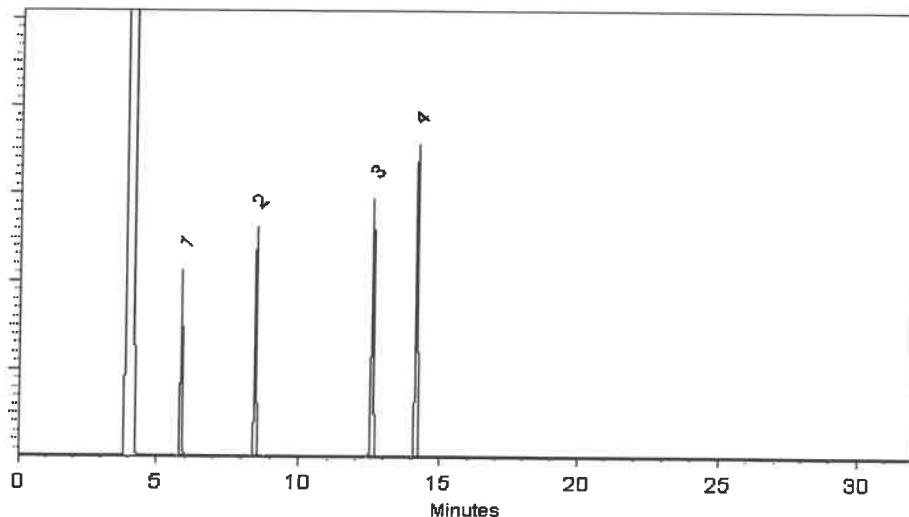
FID

**Split Vent:**

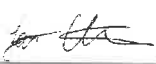
40 ml/min

**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.

  
Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271

  
Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-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:

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## Certificate of Analysis

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### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0200785

**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 :** November 30, 2026 **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  | SHBP8774 | 99%    | 5,018.5 µg/mL               | +/- 173.4162                           |
| 2             | 2-Butanone (MEK)            | 78-93-3  | SHBL5543 | 99%    | 5,016.0 µg/mL               | +/- 173.3298                           |
| 3             | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99%    | 5,010.7 µg/mL               | +/- 173.1455                           |
| 4             | 2-Hexanone                  | 591-78-6 | MKCQ6663 | 99%    | 5,015.0 µg/mL               | +/- 173.2952                           |

\* 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:**

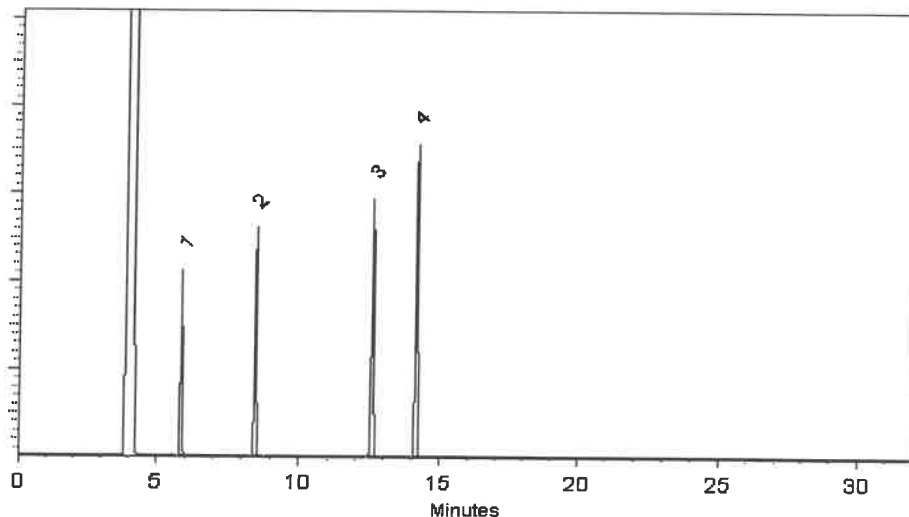
FID

**Split Vent:**

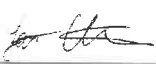
40 ml/min

**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.

  
Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271

  
Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-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. :** 30006 **Lot No.:** A0200785

**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 :** November 30, 2026 **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  | SHBP8774 | 99%    | 5,018.5 µg/mL               | +/- 173.4162                           |
| 2             | 2-Butanone (MEK)            | 78-93-3  | SHBL5543 | 99%    | 5,016.0 µg/mL               | +/- 173.3298                           |
| 3             | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99%    | 5,010.7 µg/mL               | +/- 173.1455                           |
| 4             | 2-Hexanone                  | 591-78-6 | MKCQ6663 | 99%    | 5,015.0 µg/mL               | +/- 173.2952                           |

\* 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:**

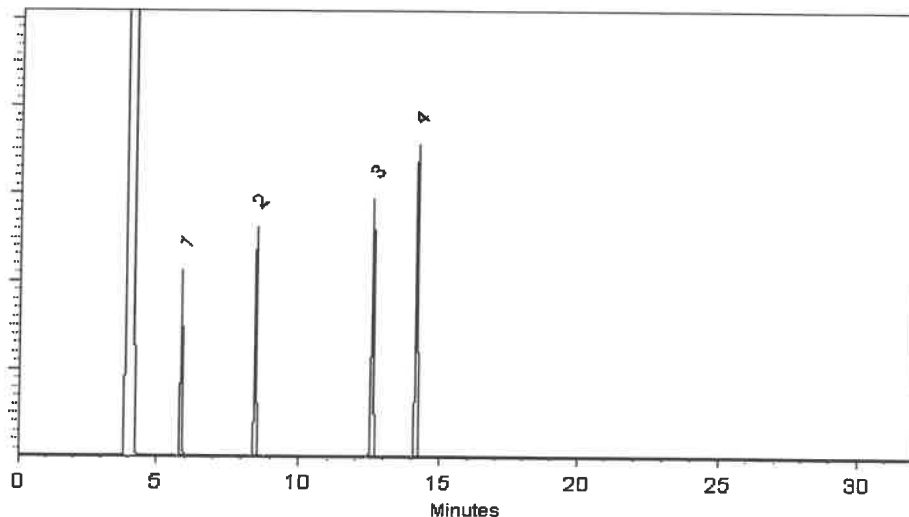
FID

**Split Vent:**

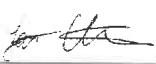
40 ml/min

**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.

  
Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271

  
Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-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

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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. :** 555408-SL **Lot No.:** A0205179  
**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, 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             | Vinyl acetate | 108-05-4 | RP231030CTH | 98%    | 8,075.2 µg/mL               | +/- 279.1159                           |

\* 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:**

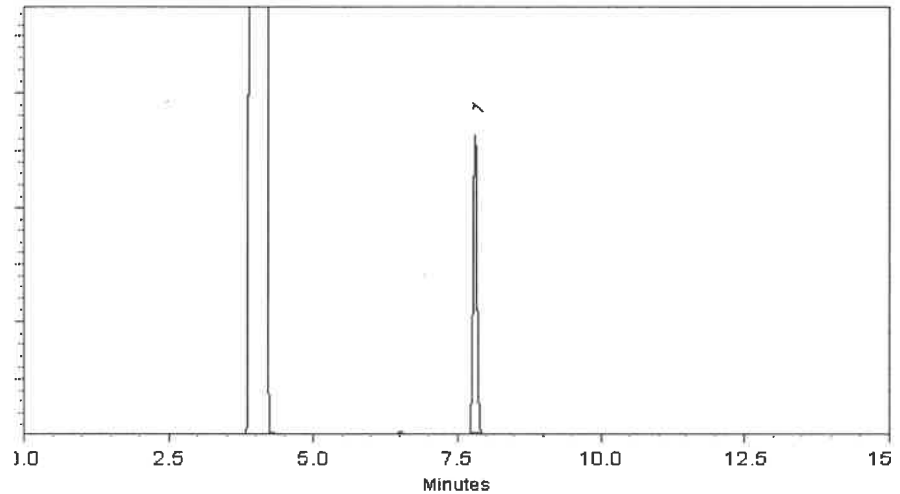
FID

**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.

  
Daniel Wasson - Operations Tech I

Date Mixed: 06-Dec-2023

Balance Serial # 1127510105

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Dec-2023

APPROVED  
By: Jennifer Pollino (Date: 11-Dec-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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## Certificate of Analysis

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### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0205179  
**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, 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             | Vinyl acetate | 108-05-4 | RP231030CTH | 98%    | 8,075.2 µg/mL               | +/- 279.1159                           |

\* 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:**

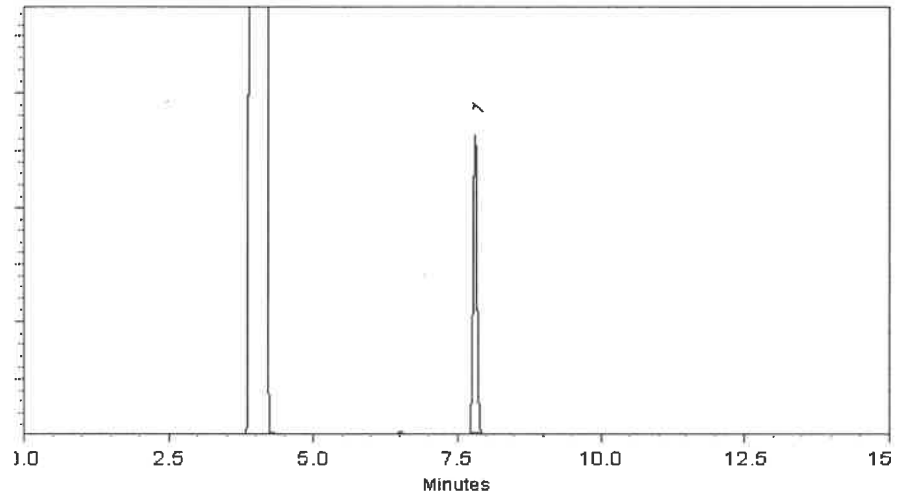
FID

**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.

  
Daniel Wasson - Operations Tech I

Date Mixed: 06-Dec-2023

Balance Serial # 1127510105

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Dec-2023

APPROVED  
By: Jennifer Pollino (Date: 11-Dec-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/ $\mu$ 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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# 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:**

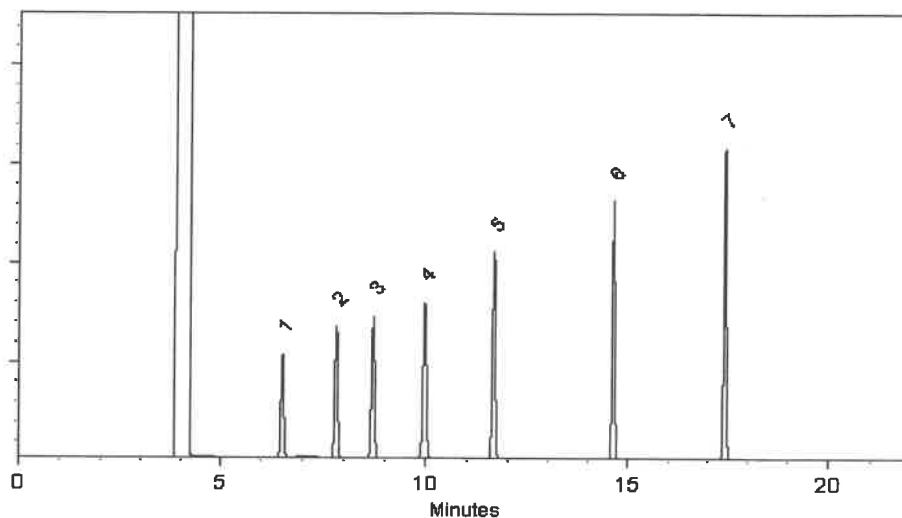
FID

**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

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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. :** 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:**

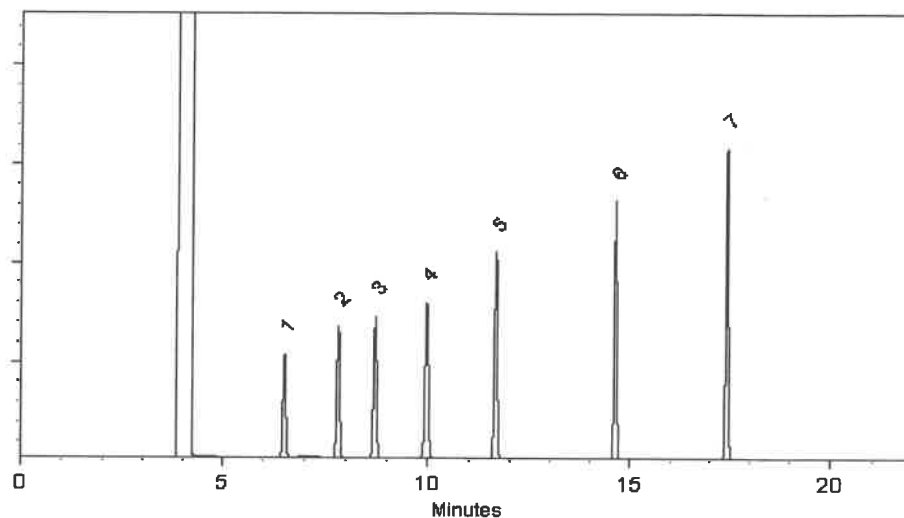
FID

**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

*Dylan Murphy*  
Dylan 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.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



### 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

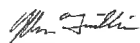
**Expiration Date :** April 30, 2027 **Storage:** 10°C or colder

**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 L&P, Apr 16, 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.

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   |
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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   |
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| 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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
 Data File : VN085432.D  
 Acq On : 13 Jan 2025 17:30  
 Operator : JC\MD  
 Sample : Q1062-01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-TB-20250107

Quant Time: Jan 13 17:46:46 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Dec 28 01:36:16 2024  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|-------|----------|
| -----                       |        |       |          |          |       |          |
| Internal Standards          |        |       |          |          |       |          |
| 1) Pentafluorobenzene       | 8.224  | 168   | 174662   | 50.000   | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114   | 325733   | 50.000   | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117   | 274916   | 50.000   | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152   | 102139   | 50.000   | ug/l  | 0.00     |
| System Monitoring Compounds |        |       |          |          |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.576  | 65    | 144408   | 57.968   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =     | 115.940% |
| 35) Dibromofluoromethane    | 8.165  | 113   | 107333   | 52.819   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =     | 105.640% |
| 50) Toluene-d8              | 10.565 | 98    | 359238   | 48.175   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =     | 96.360%  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 104988   | 42.394   | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =     | 84.780%  |

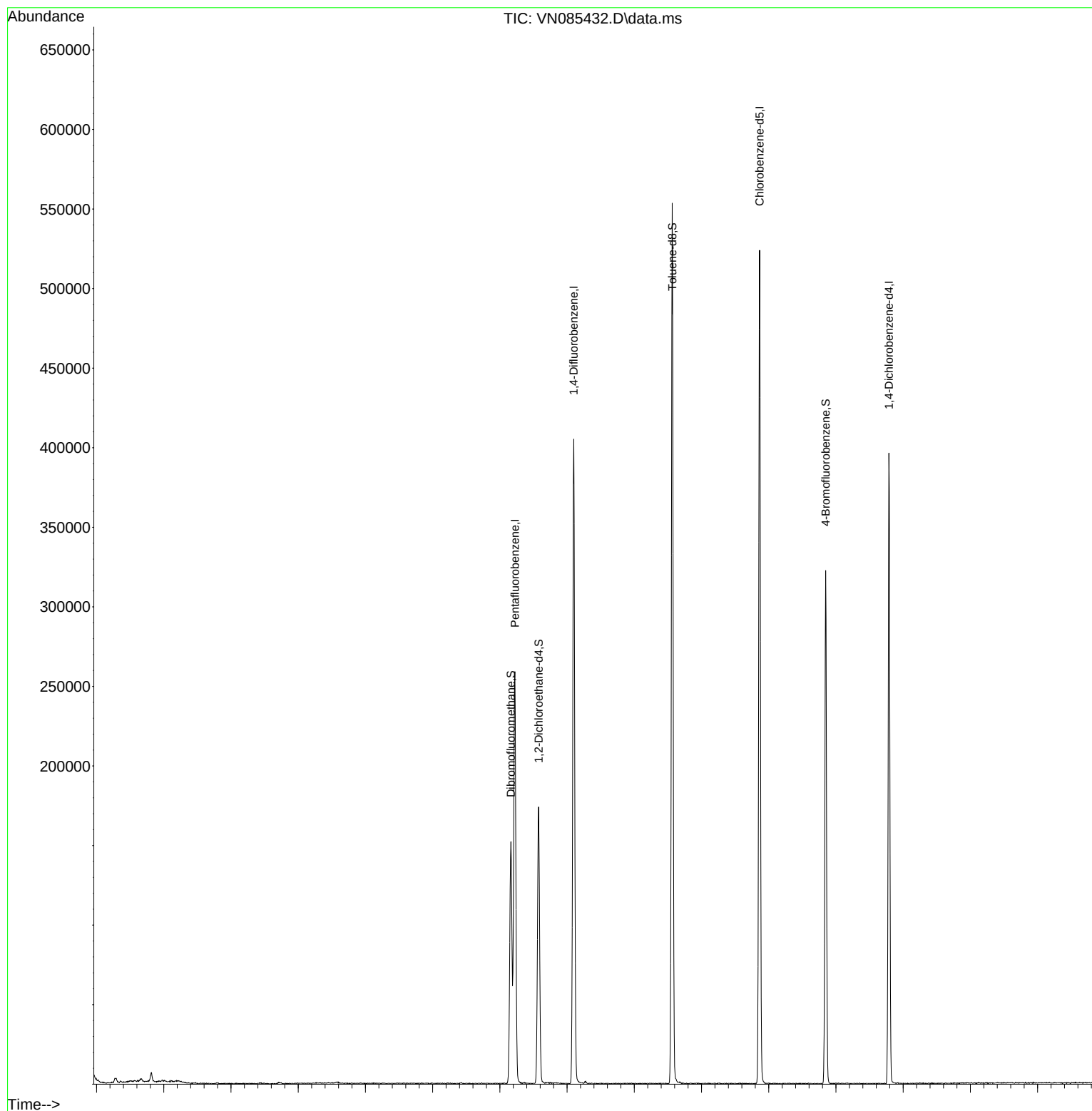
Target Compounds Qvalue

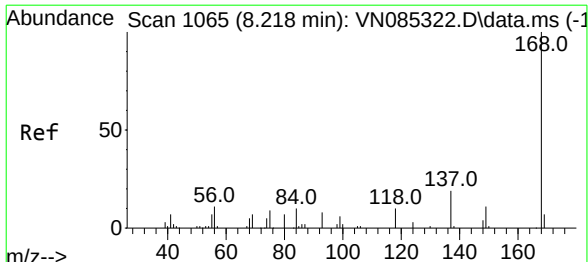
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 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
Data File : VN085432.D  
Acq On : 13 Jan 2025 17:30  
Operator : JC\MD  
Sample : Q1062-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

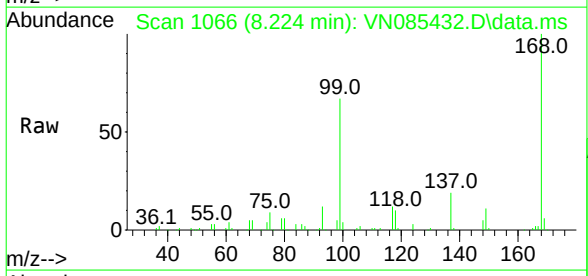
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
Quant Title : SW846 8260  
QLast Update : Sat Dec 28 01:36:16 2024  
Response via : Initial Calibration



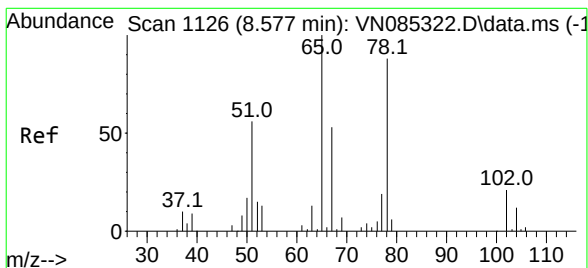
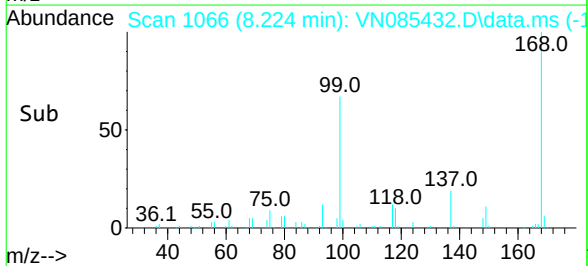
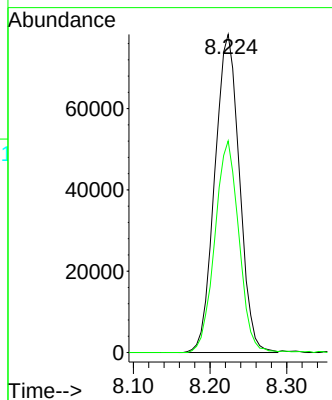


#1  
 Pentafluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.224 min Scan# 1066  
 Delta R.T. 0.006 min  
 Lab File: VN085432.D  
 Acq: 13 Jan 2025 17:30

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-TB-20250107

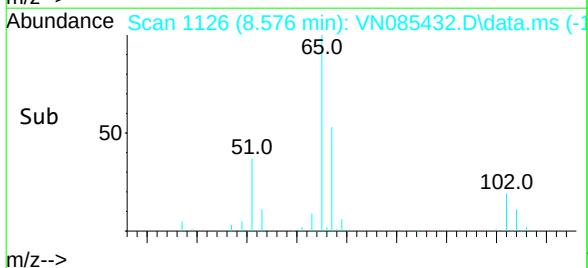
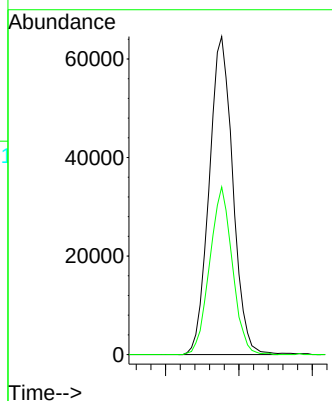
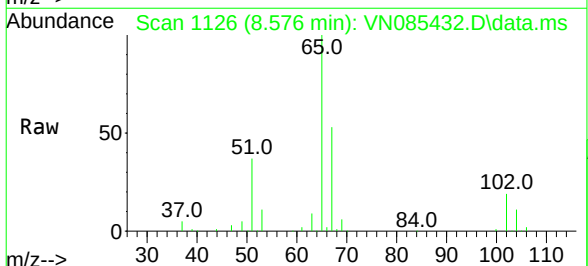


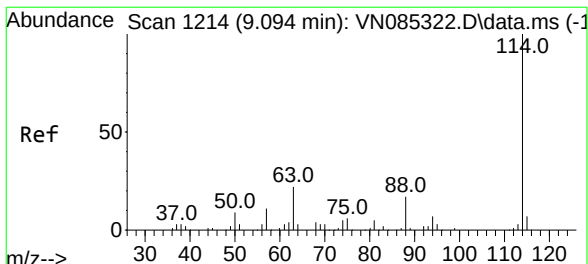
Tgt Ion: 168 Resp: 174662  
 Ion Ratio Lower Upper  
 168 100  
 99 66.5 51.0 76.4



#33  
 1,2-Dichloroethane-d4  
 Concen: 57.968 ug/l  
 RT: 8.576 min Scan# 1126  
 Delta R.T. -0.000 min  
 Lab File: VN085432.D  
 Acq: 13 Jan 2025 17:30

Tgt Ion: 65 Resp: 144408  
 Ion Ratio Lower Upper  
 65 100  
 67 50.5 0.0 104.0

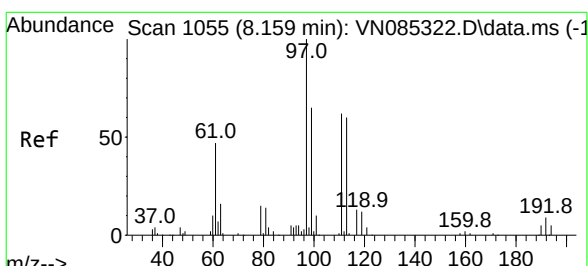
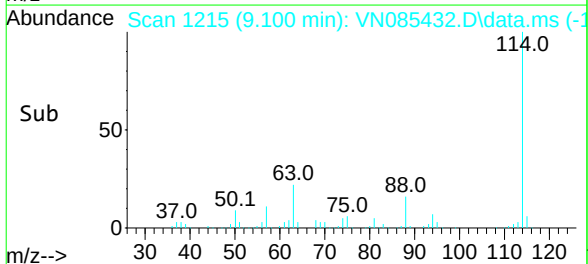
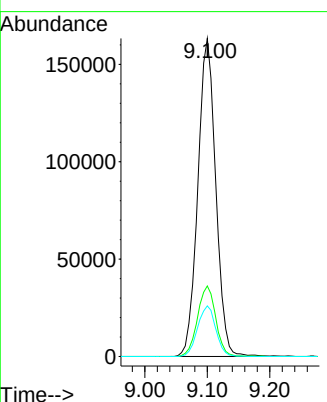
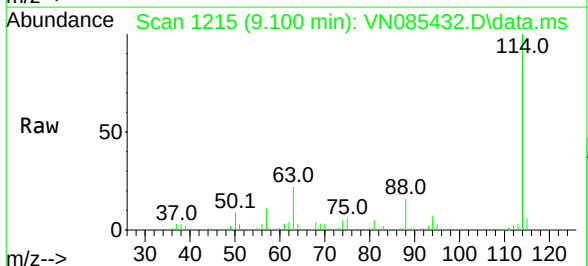




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1214  
 Delta R.T. 0.006 min  
 Lab File: VN085432.D  
 Acq: 13 Jan 2025 17:30

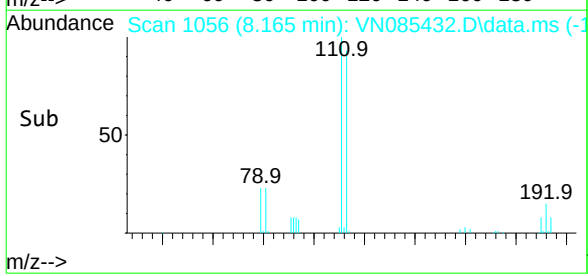
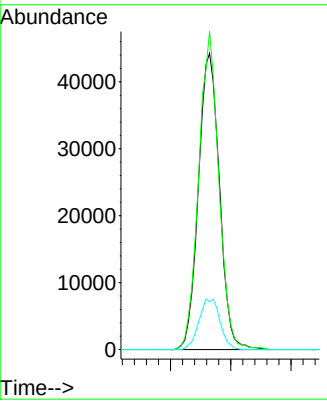
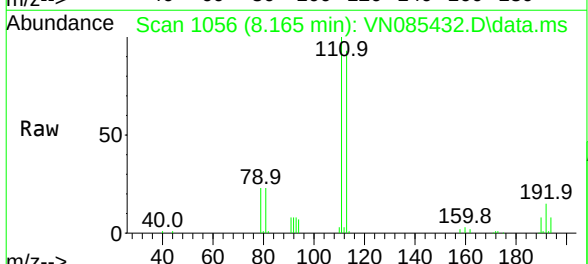
Instrument : MSVOA\_N  
 ClientSampleId : BP-VPB-190A-TB-20250107

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 114   | Resp: | 325733 |
| Ion Ratio | Lower | Upper |        |
| 114       | 100   |       |        |
| 63        | 22.2  | 0.0   | 43.4   |
| 88        | 15.9  | 0.0   | 33.6   |

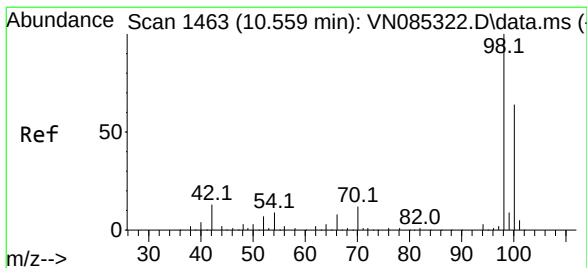


#35  
 Dibromofluoromethane  
 Concen: 52.819 ug/l  
 RT: 8.165 min Scan# 1056  
 Delta R.T. 0.006 min  
 Lab File: VN085432.D  
 Acq: 13 Jan 2025 17:30

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 113   | Resp: | 107333 |
| Ion Ratio | Lower | Upper |        |
| 113       | 100   |       |        |
| 111       | 102.8 | 80.5  | 120.7  |
| 192       | 17.1  | 12.9  | 19.3   |







#50

Toluene-d8

Concen: 48.175 ug/l

RT: 10.565 min Scan# 14

Delta R.T. 0.006 min

Lab File: VN085432.D

Acq: 13 Jan 2025 17:30

Instrument :

MSVOA\_N

ClientSampleId :

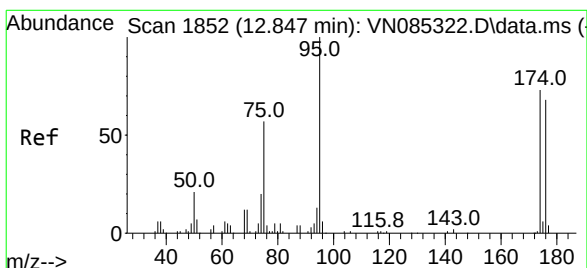
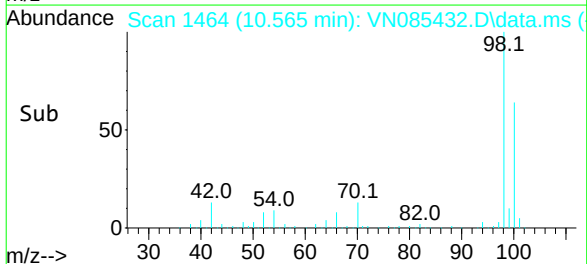
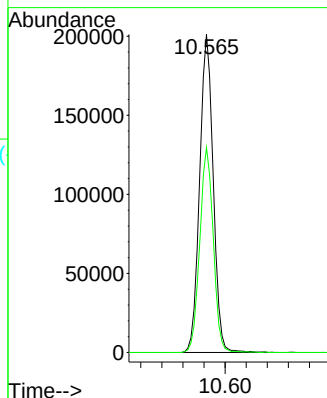
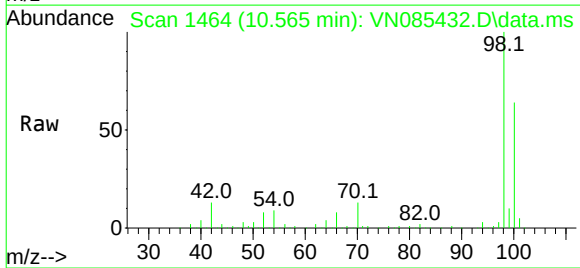
BP-VPB-190A-TB-20250107

Tgt Ion: 98 Resp: 359238

Ion Ratio Lower Upper

98 100

100 64.2 51.5 77.3



#62

4-Bromofluorobenzene

Concen: 42.394 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085432.D

Acq: 13 Jan 2025 17:30

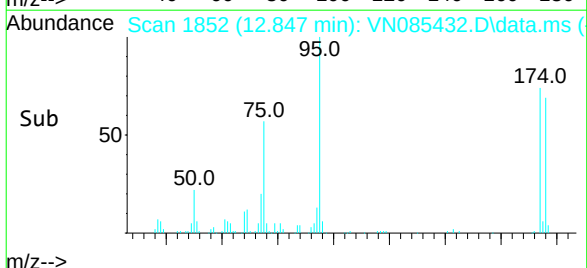
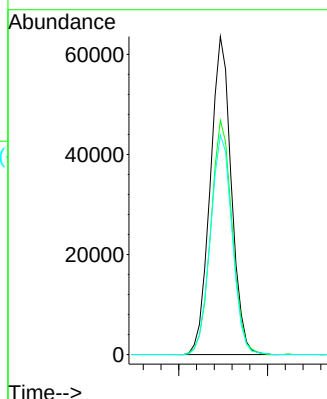
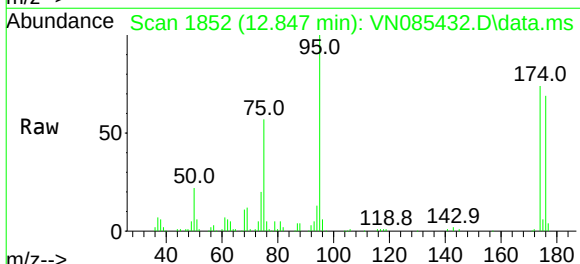
Tgt Ion: 95 Resp: 104988

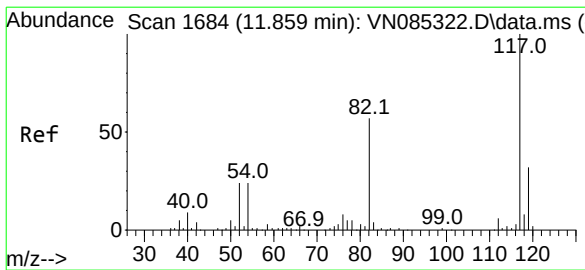
Ion Ratio Lower Upper

95 100

174 74.6 0.0 143.2

176 71.1 0.0 135.8

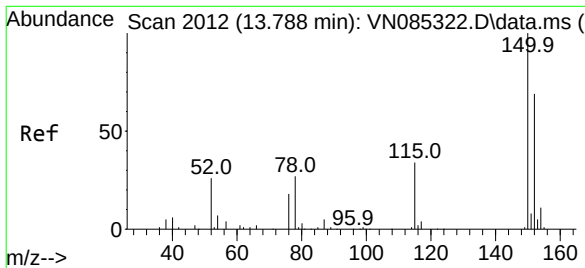
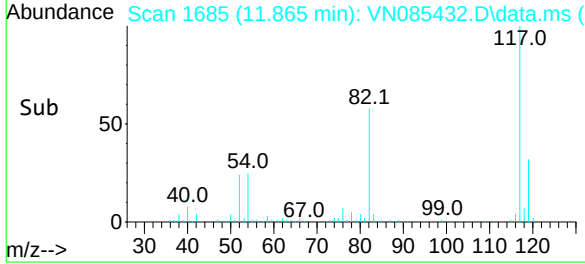
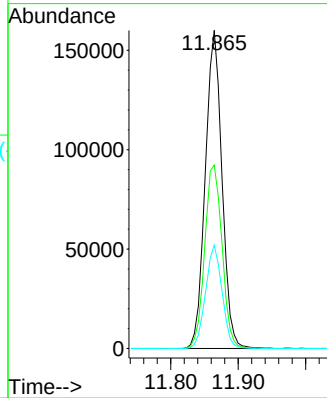
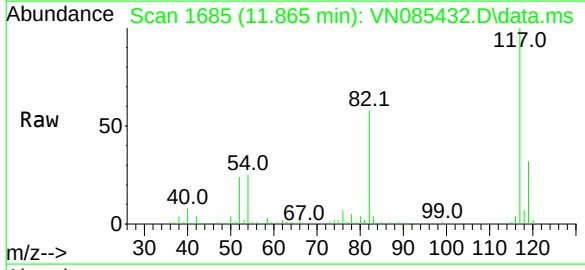




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1684  
Delta R.T. 0.006 min  
Lab File: VN085432.D  
Acq: 13 Jan 2025 17:30

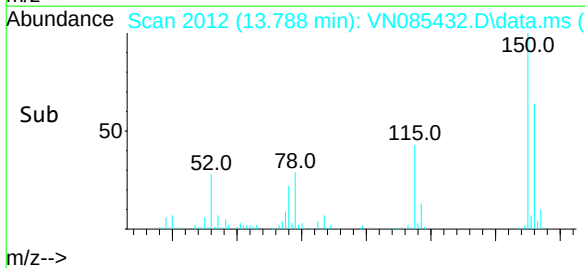
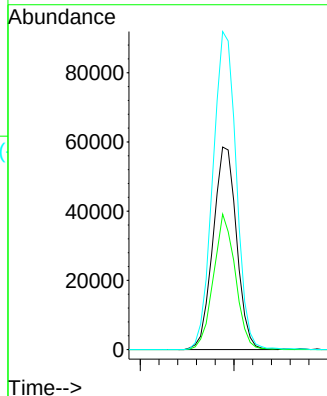
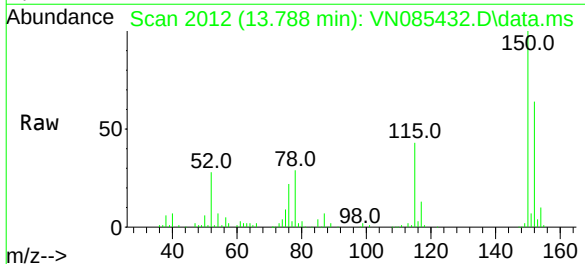
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-TB-20250107

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 274916 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 57.7  | 45.7  | 68.5   |
| 119      | 32.5  | 25.8  | 38.8   |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN085432.D  
Acq: 13 Jan 2025 17:30

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 152   | Resp: | 102139 |
| Ion      | Ratio | Lower | Upper  |
| 152      | 100   |       |        |
| 115      | 62.2  | 30.4  | 91.3   |
| 150      | 156.9 | 0.0   | 345.0  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
 Data File : VN085431.D  
 Acq On : 13 Jan 2025 17:06  
 Operator : JC\MD  
 Sample : Q1062-02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VPB190A-HYD-20250107

Quant Time: Jan 13 17:22:36 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Dec 28 01:36:16 2024  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min) |
|-----------------------------|--------|----------------|----------|--------|----------|----------|
| -----                       |        |                |          |        |          |          |
| Internal Standards          |        |                |          |        |          |          |
| 1) Pentafluorobenzene       | 8.224  | 168            | 171762   | 50.000 | ug/l     | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 321172   | 50.000 | ug/l     | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 285304   | 50.000 | ug/l     | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 114295   | 50.000 | ug/l     | 0.00     |
| System Monitoring Compounds |        |                |          |        |          |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 144844   | 59.124 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 118.240% |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 109949   | 54.874 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 109.740% |          |
| 50) Toluene-d8              | 10.565 | 98             | 353662   | 48.101 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 96.200%  |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 117799   | 48.242 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 96.480%  |          |

Target Compounds Qvalue

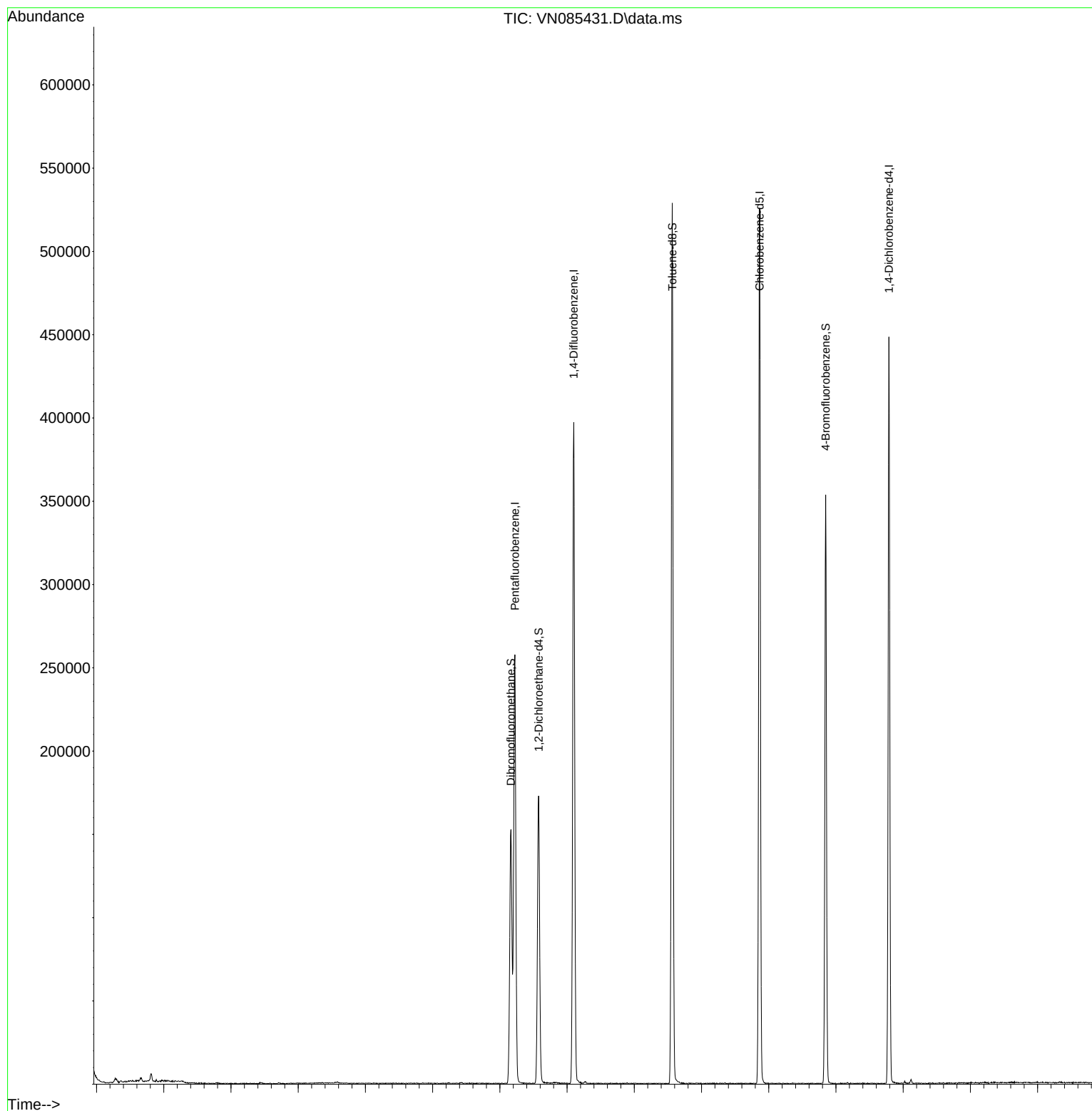
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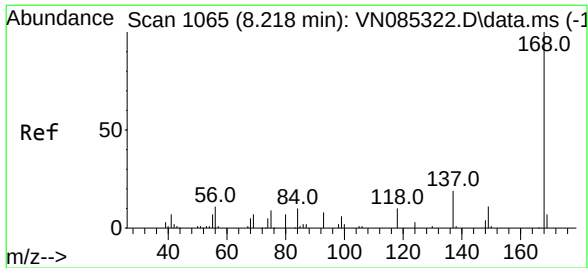
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
Data File : VN085431.D  
Acq On : 13 Jan 2025 17:06  
Operator : JC\MD  
Sample : Q1062-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

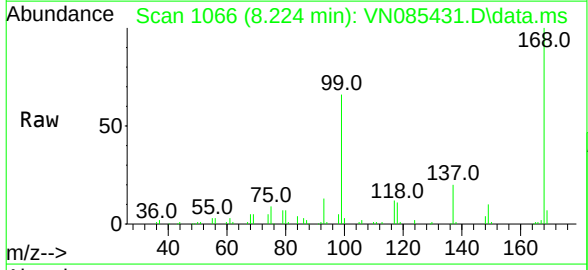
Quant Time: Jan 13 17:22:36 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
Quant Title : SW846 8260  
QLast Update : Sat Dec 28 01:36:16 2024  
Response via : Initial Calibration



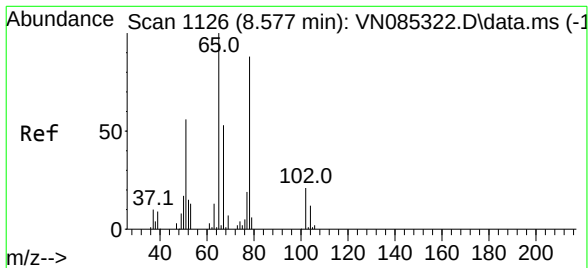
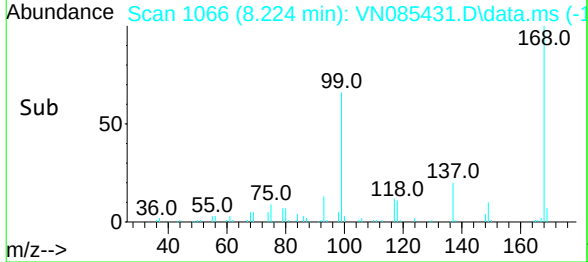
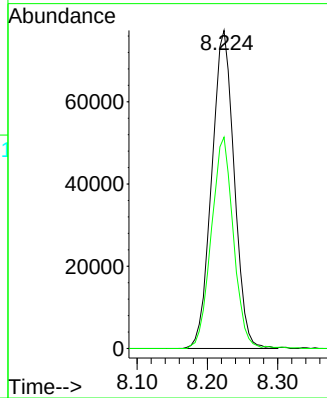


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085431.D  
Acq: 13 Jan 2025 17:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
VPB190A-HYD-20250107

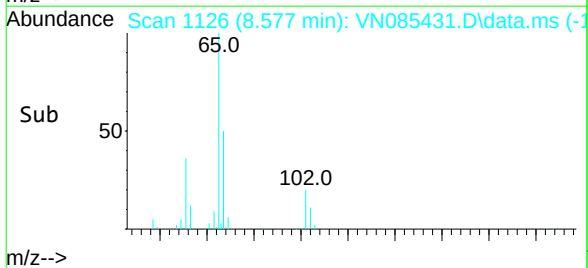
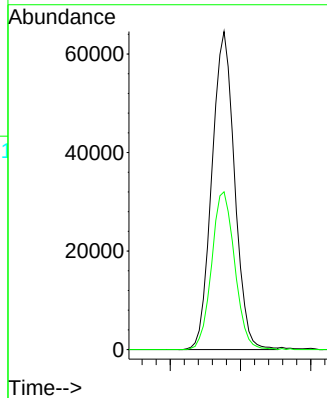
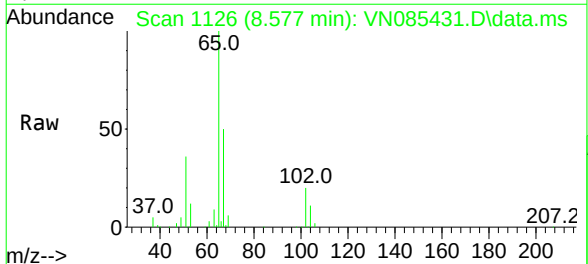


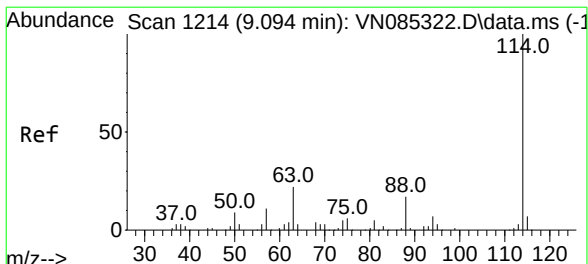
Tgt Ion:168 Resp: 171762  
Ion Ratio Lower Upper  
168 100  
99 66.4 51.0 76.4



#33  
1,2-Dichloroethane-d4  
Concen: 59.124 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.000 min  
Lab File: VN085431.D  
Acq: 13 Jan 2025 17:06

Tgt Ion: 65 Resp: 144844  
Ion Ratio Lower Upper  
65 100  
67 50.4 0.0 104.0

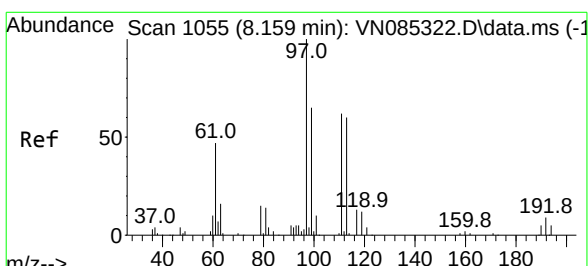
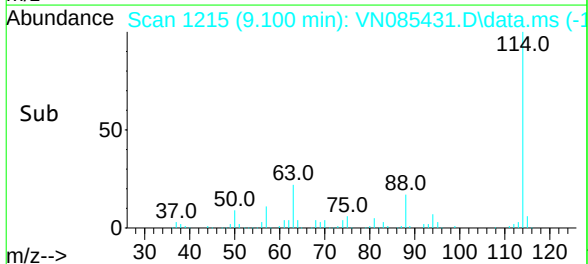
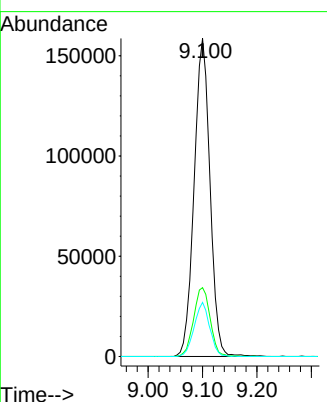
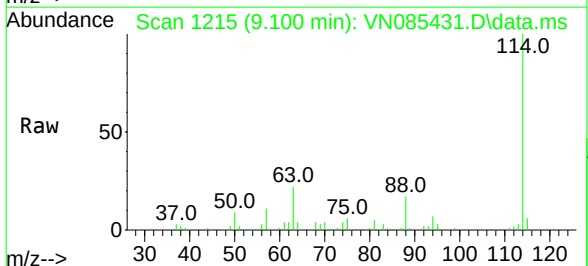




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.006 min  
 Lab File: VN085431.D  
 Acq: 13 Jan 2025 17:06

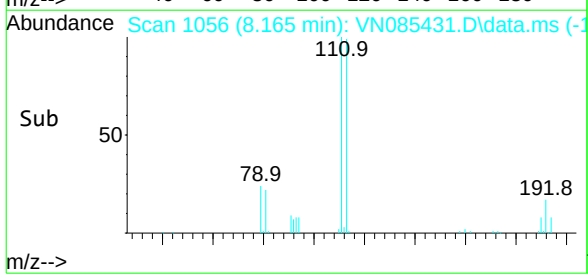
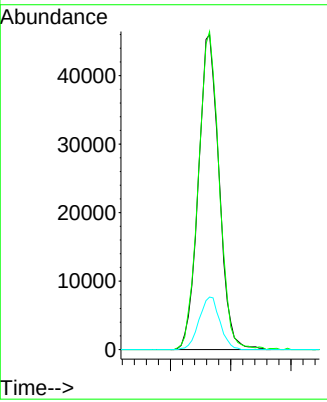
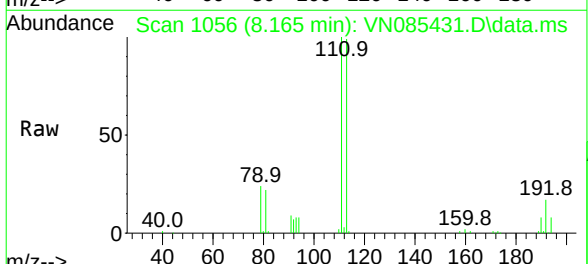
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VPB190A-HYD-20250107

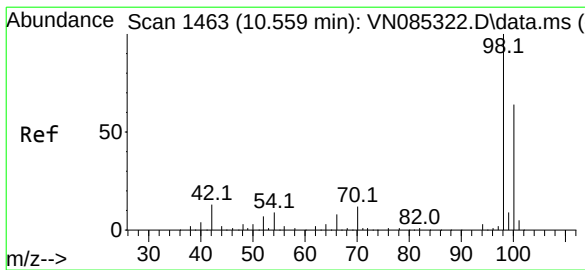
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 321172 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 21.6  | 0.0   | 43.4   |
| 88       | 17.0  | 0.0   | 33.6   |



#35  
 Dibromofluoromethane  
 Concen: 54.874 ug/l  
 RT: 8.165 min Scan# 1056  
 Delta R.T. 0.006 min  
 Lab File: VN085431.D  
 Acq: 13 Jan 2025 17:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 109949 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 101.1 | 80.5  | 120.7  |
| 192      | 16.7  | 12.9  | 19.3   |





#50

Toluene-d8

Concen: 48.101 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VN085431.D

Acq: 13 Jan 2025 17:06

Instrument :

MSVOA\_N

ClientSampleId :

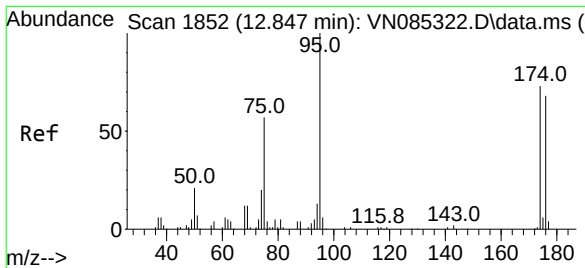
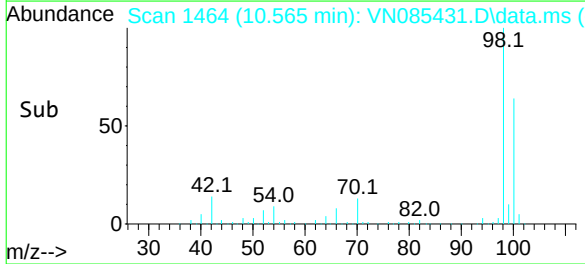
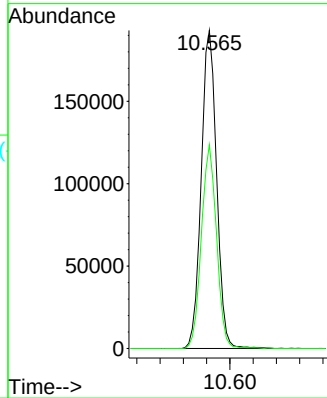
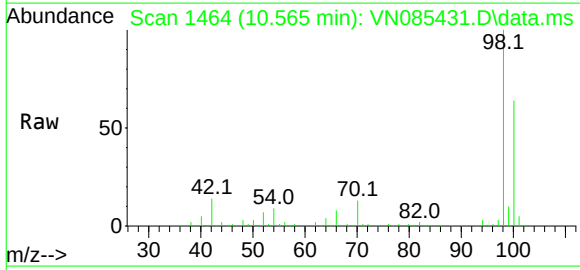
VPB190A-HYD-20250107

Tgt Ion: 98 Resp: 353662

Ion Ratio Lower Upper

98 100

100 63.1 51.5 77.3



#62

4-Bromofluorobenzene

Concen: 48.242 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085431.D

Acq: 13 Jan 2025 17:06

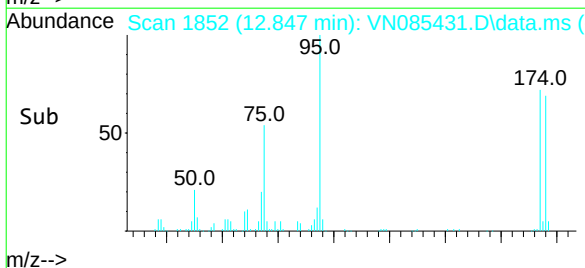
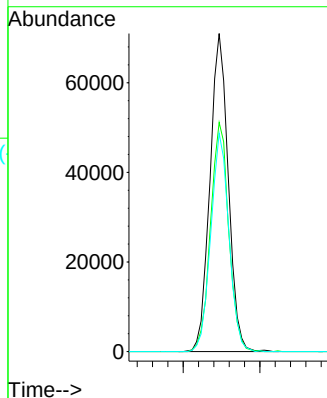
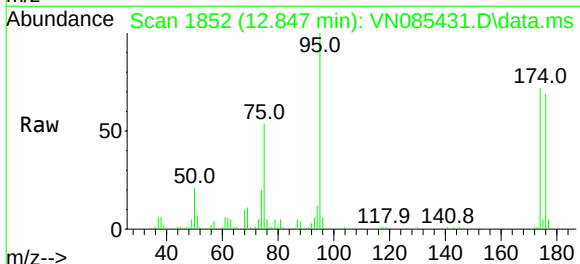
Tgt Ion: 95 Resp: 117799

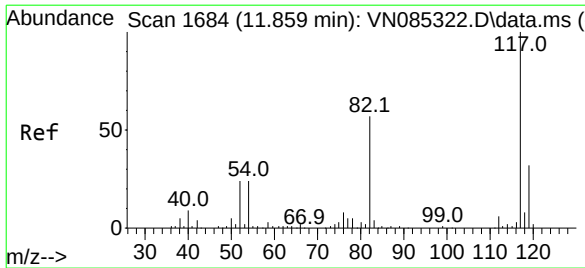
Ion Ratio Lower Upper

95 100

174 71.8 0.0 143.2

176 67.7 0.0 135.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. 0.006 min

Lab File: VN085431.D

Acq: 13 Jan 2025 17:06

Instrument :

MSVOA\_N

ClientSampleId :

VPB190A-HYD-20250107

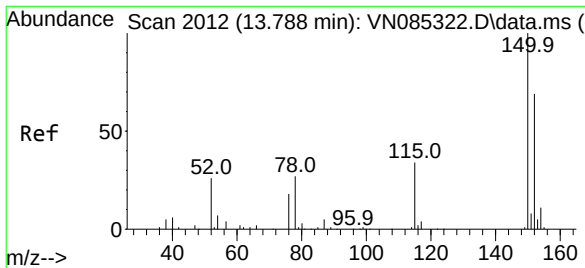
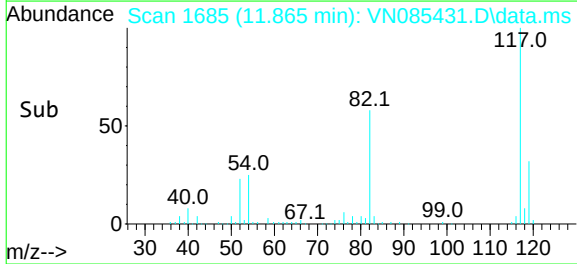
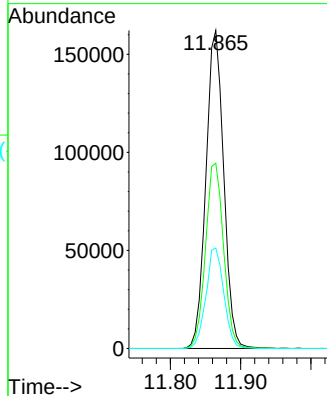
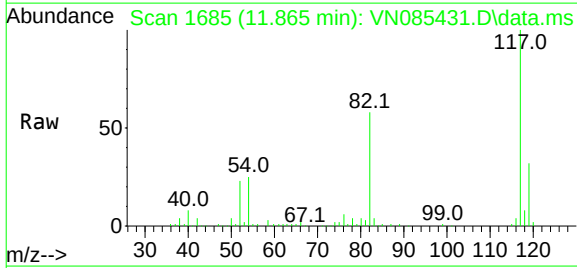
Tgt Ion:117 Resp: 285304

Ion Ratio Lower Upper

117 100

82 58.3 45.7 68.5

119 31.6 25.8 38.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085431.D

Acq: 13 Jan 2025 17:06

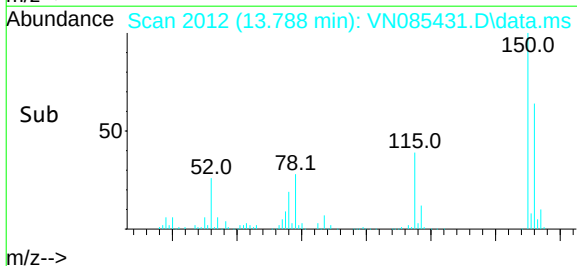
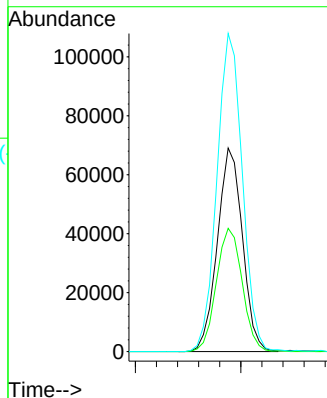
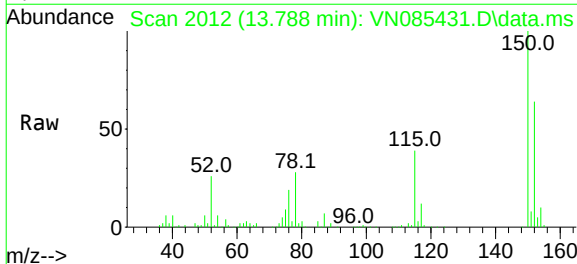
Tgt Ion:152 Resp: 114295

Ion Ratio Lower Upper

152 100

115 62.3 30.4 91.3

150 158.4 0.0 345.0





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
 Data File : VN085433.D  
 Acq On : 13 Jan 2025 17:54  
 Operator : JC\MD  
 Sample : Q1062-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-EB-20250107

Quant Time: Jan 13 18:11:56 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Dec 28 01:36:16 2024  
 Response via : Initial Calibration

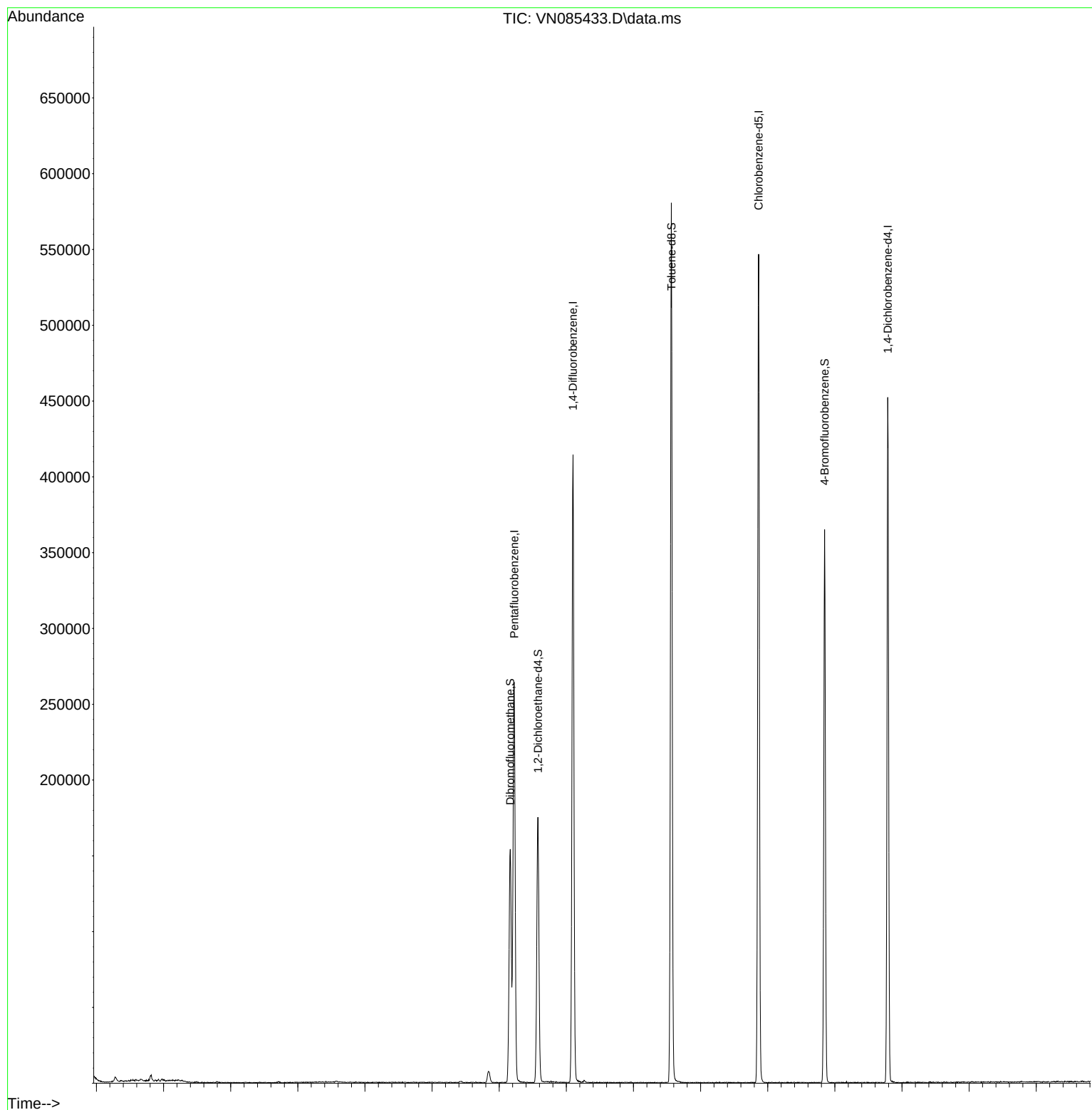
| Compound                    | R.T.           | QIon | Response            | Conc   | Units | Dev(Min)  |
|-----------------------------|----------------|------|---------------------|--------|-------|-----------|
| -----                       |                |      |                     |        |       |           |
| Internal Standards          |                |      |                     |        |       |           |
| 1) Pentafluorobenzene       | 8.224          | 168  | 177659              | 50.000 | ug/l  | 0.00      |
| 34) 1,4-Difluorobenzene     | 9.100          | 114  | 334626              | 50.000 | ug/l  | 0.00      |
| 63) Chlorobenzene-d5        | 11.865         | 117  | 294528              | 50.000 | ug/l  | 0.00      |
| 72) 1,4-Dichlorobenzene-d4  | 13.788         | 152  | 115338              | 50.000 | ug/l  | 0.00      |
|                             |                |      |                     |        |       |           |
| System Monitoring Compounds |                |      |                     |        |       |           |
| 33) 1,2-Dichloroethane-d4   | 8.577          | 65   | 146550              | 57.835 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 74 - 125 |      | Recovery = 115.680% |        |       |           |
| 35) Dibromofluoromethane    | 8.165          | 113  | 108928              | 52.179 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 75 - 124 |      | Recovery = 104.360% |        |       |           |
| 50) Toluene-d8              | 10.565         | 98   | 372474              | 48.623 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 86 - 113 |      | Recovery = 97.240%  |        |       |           |
| 62) 4-Bromofluorobenzene    | 12.847         | 95   | 121568              | 47.784 | ug/l  | 0.00      |
| Spiked Amount 50.000        | Range 77 - 121 |      | Recovery = 95.560%  |        |       |           |
|                             |                |      |                     |        |       |           |
| Target Compounds            |                |      |                     |        |       |           |
| 29) Tetrahydrofuran         | 7.841          | 42   | 5374                | 6.454  | ug/l  | Qvalue 96 |
| -----                       |                |      |                     |        |       |           |

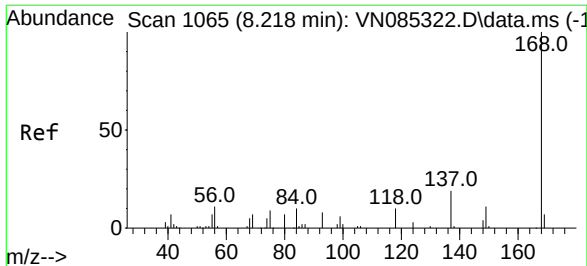
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
Data File : VN085433.D  
Acq On : 13 Jan 2025 17:54  
Operator : JC\MD  
Sample : Q1062-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

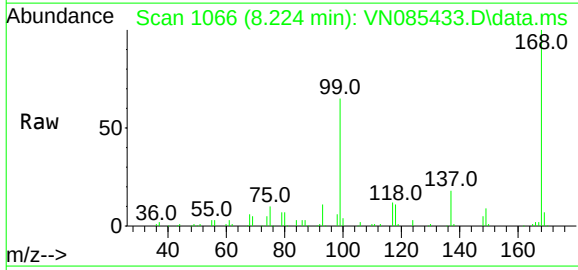
Quant Time: Jan 13 18:11:56 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
Quant Title : SW846 8260  
QLast Update : Sat Dec 28 01:36:16 2024  
Response via : Initial Calibration



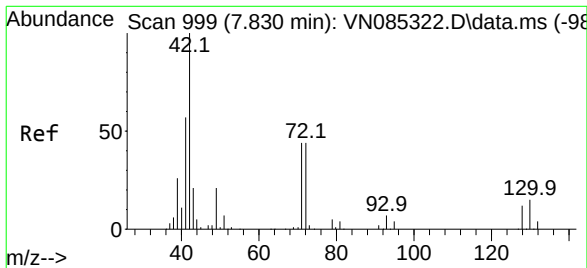
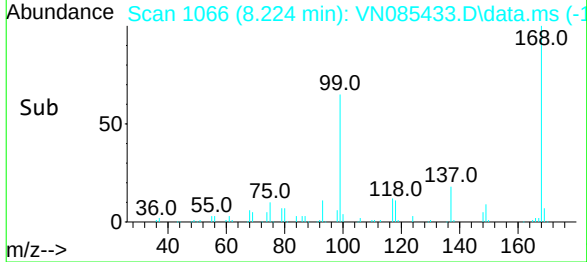
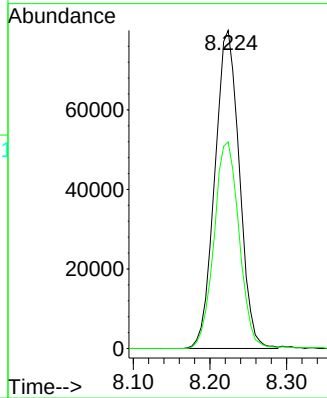


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

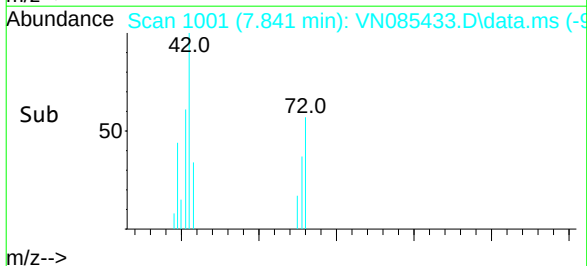
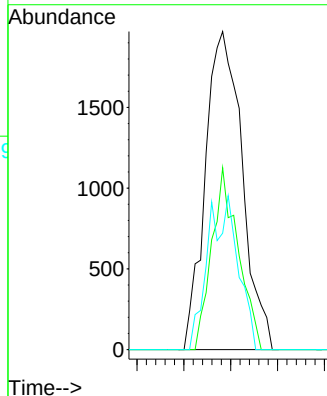
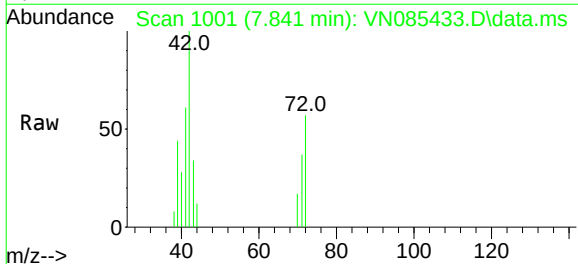


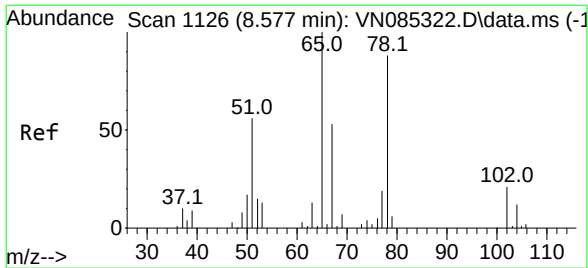
Tgt Ion:168 Resp: 177659  
Ion Ratio Lower Upper  
168 100  
99 64.9 51.0 76.4



#29  
Tetrahydrofuran  
Concen: 6.454 ug/l  
RT: 7.841 min Scan# 1001  
Delta R.T. 0.012 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54

Tgt Ion: 42 Resp: 5374  
Ion Ratio Lower Upper  
42 100  
72 41.1 35.1 52.7  
71 39.5 33.4 50.0

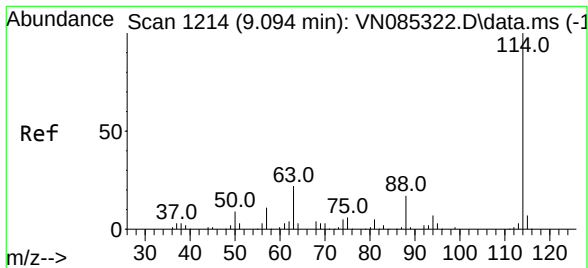
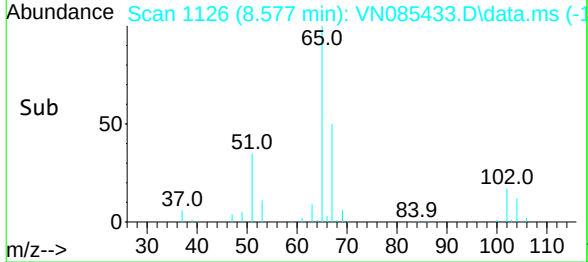
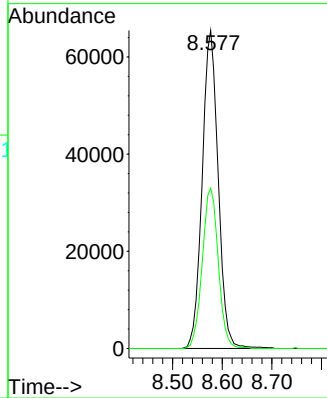
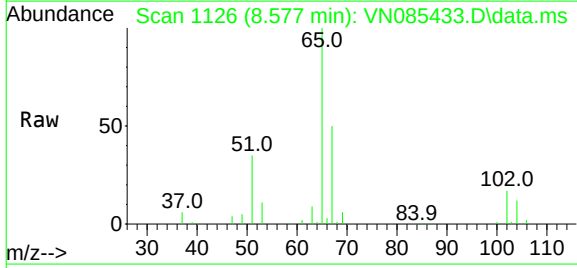




#33  
1,2-Dichloroethane-d4  
Concen: 57.835 ug/l  
RT: 8.577 min Scan# 111  
Delta R.T. 0.000 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54

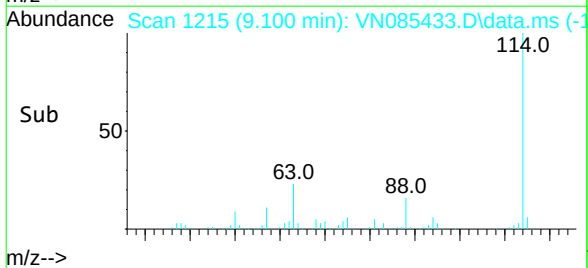
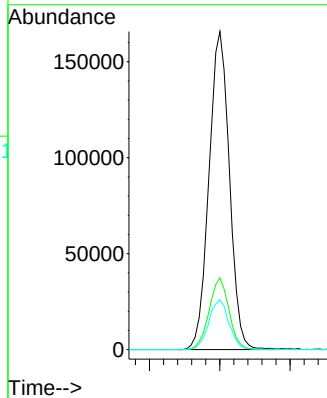
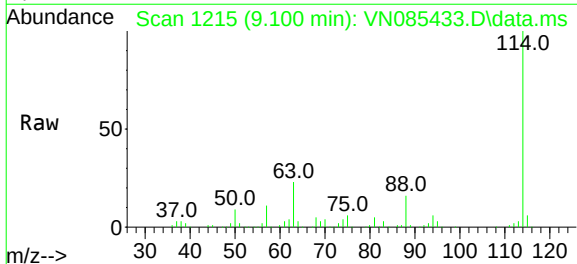
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107

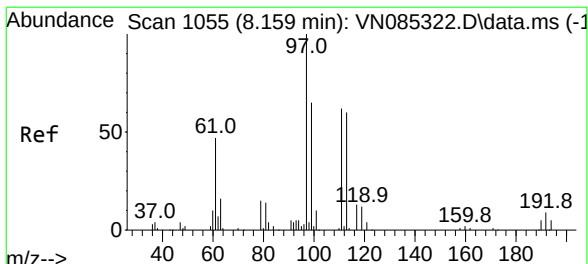
Tgt Ion: 65 Resp: 146550  
Ion Ratio Lower Upper  
65 100  
67 50.5 0.0 104.0



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.006 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54

Tgt Ion: 114 Resp: 334626  
Ion Ratio Lower Upper  
114 100  
63 22.6 0.0 43.4  
88 15.7 0.0 33.6

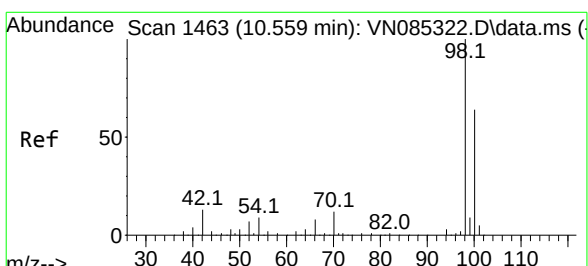
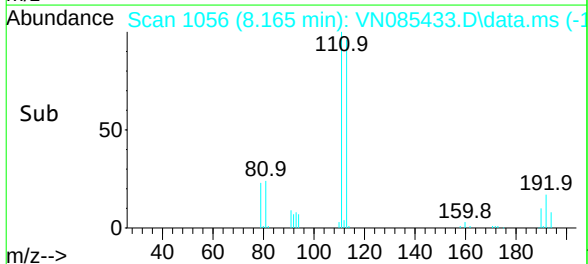
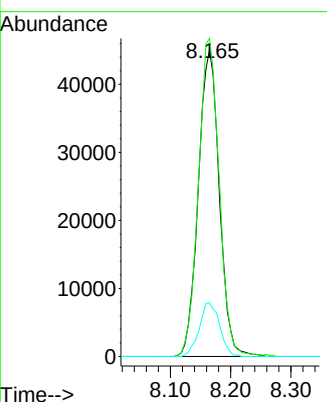
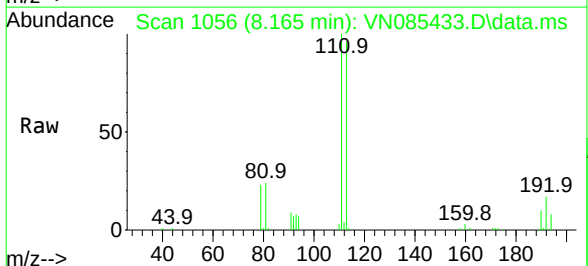




#35  
 Dibromofluoromethane  
 Concen: 52.179 ug/l  
 RT: 8.165 min Scan# 1056  
 Delta R.T. 0.006 min  
 Lab File: VN085433.D  
 Acq: 13 Jan 2025 17:54

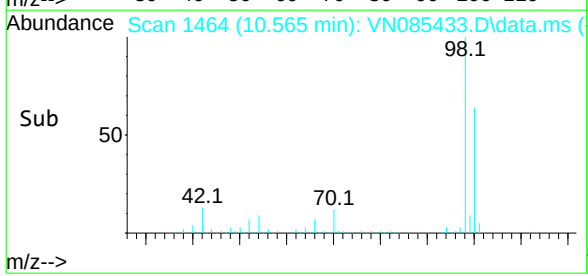
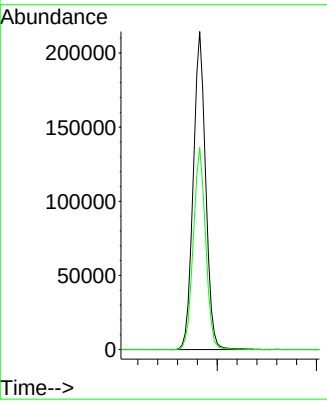
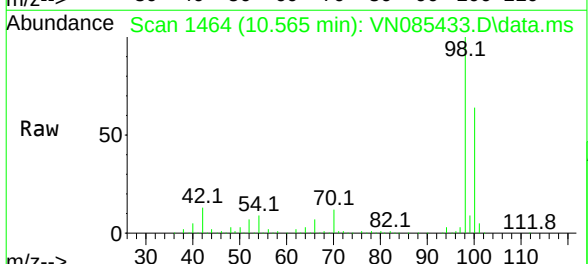
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-EB-20250107

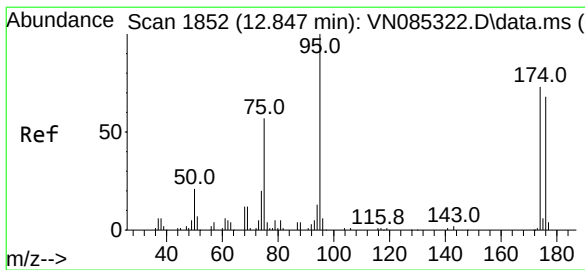
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 108928 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 102.6 | 80.5  | 120.7  |
| 192      | 17.0  | 12.9  | 19.3   |



#50  
 Toluene-d8  
 Concen: 48.623 ug/l  
 RT: 10.565 min Scan# 1464  
 Delta R.T. 0.006 min  
 Lab File: VN085433.D  
 Acq: 13 Jan 2025 17:54

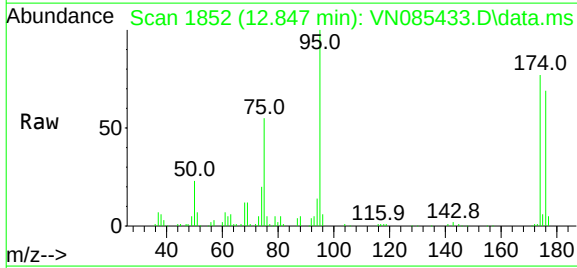
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 98    | Resp: | 372474 |
| Ion      | Ratio | Lower | Upper  |
| 98       | 100   |       |        |
| 100      | 63.3  | 51.5  | 77.3   |



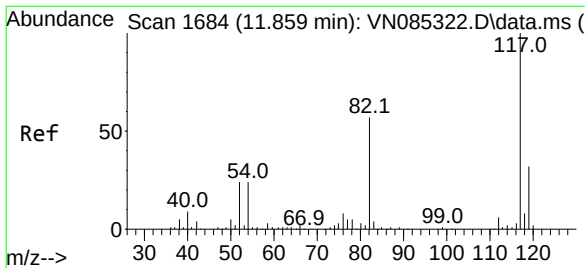
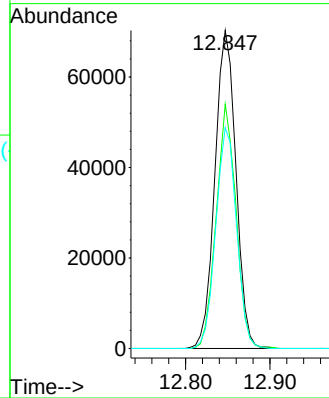
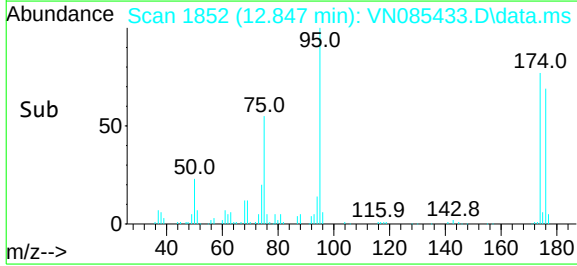


#62  
4-Bromofluorobenzene  
Concen: 47.784 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54

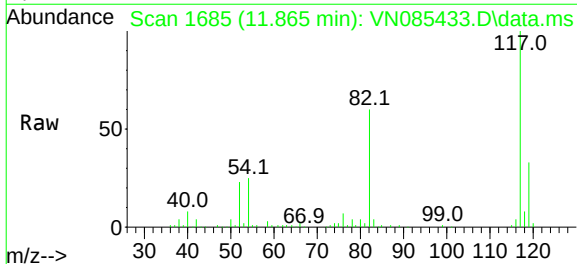
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-EB-20250107



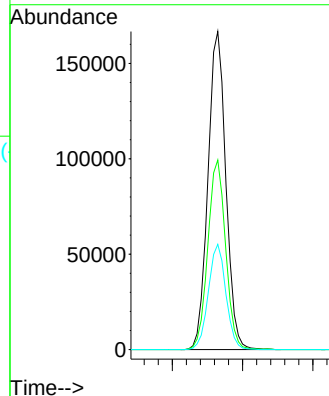
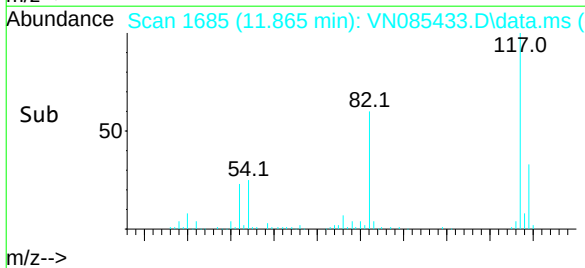
Tgt Ion: 95 Resp: 121568  
Ion Ratio Lower Upper  
95 100  
174 72.6 0.0 143.2  
176 68.6 0.0 135.8

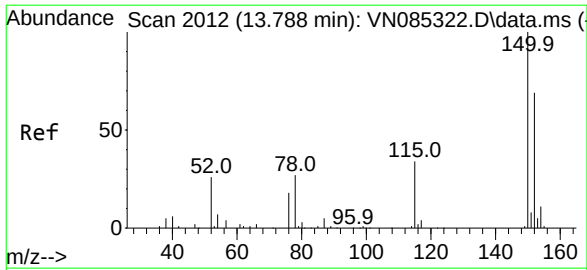


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.006 min  
Lab File: VN085433.D  
Acq: 13 Jan 2025 17:54



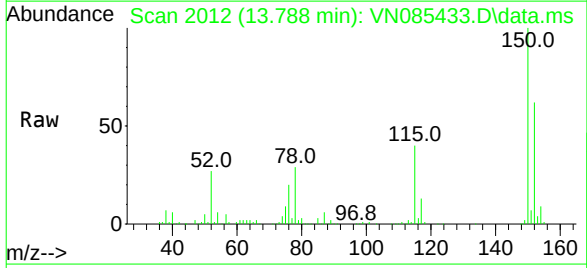
Tgt Ion: 117 Resp: 294528  
Ion Ratio Lower Upper  
117 100  
82 59.6 45.7 68.5  
119 33.1 25.8 38.8



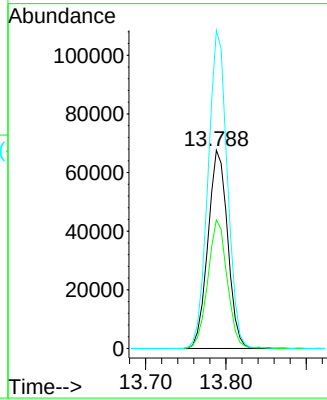
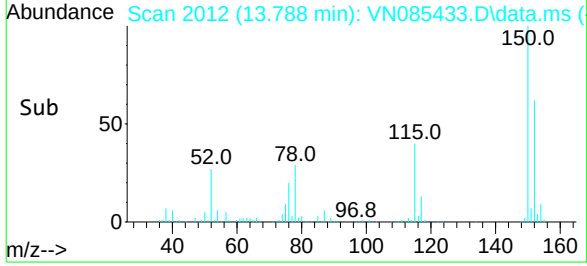


#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.788 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085433.D  
 Acq: 13 Jan 2025 17:54

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-EB-20250107



Tgt Ion:152 Resp: 115338  
 Ion Ratio Lower Upper  
 152 100  
 115 63.7 30.4 91.3  
 150 157.0 0.0 345.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
 Data File : VN085430.D  
 Acq On : 13 Jan 2025 16:42  
 Operator : JC\MD  
 Sample : Q1062-04 10X  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-GW-898-900

Quant Time: Jan 13 17:22:21 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Dec 28 01:36:16 2024  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min) |
|-----------------------------|--------|----------------|----------|--------|----------|----------|
| -----                       |        |                |          |        |          |          |
| Internal Standards          |        |                |          |        |          |          |
| 1) Pentafluorobenzene       | 8.224  | 168            | 188453   | 50.000 | ug/l     | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 351449   | 50.000 | ug/l     | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 313757   | 50.000 | ug/l     | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 124648   | 50.000 | ug/l     | 0.00     |
| System Monitoring Compounds |        |                |          |        |          |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 144609   | 53.800 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 107.600% |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 109324   | 49.862 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 99.720%  |          |
| 50) Toluene-d8              | 10.565 | 98             | 369034   | 45.868 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 91.740%  |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 121616   | 45.515 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 91.020%  |          |

Target Compounds Qvalue

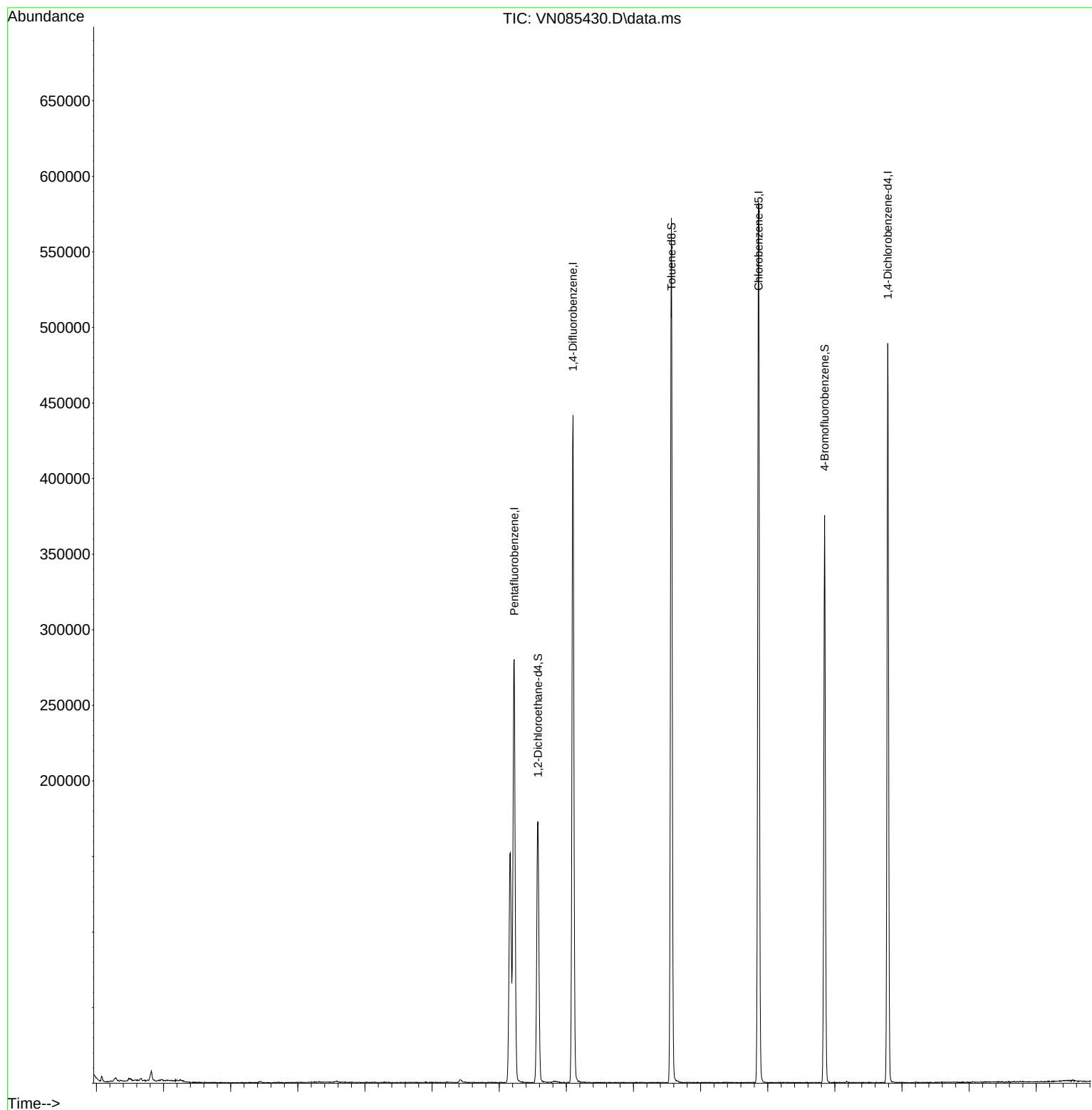
(#) = qualifier out of range (m) = manual integration (+) = signals summed

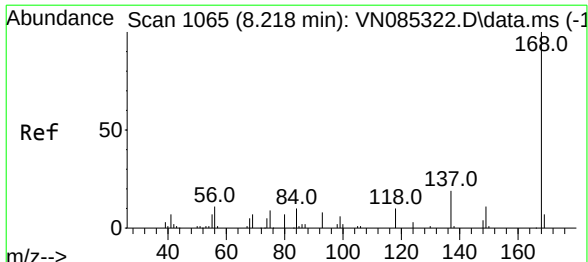


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011325\  
Data File : VN085430.D  
Acq On : 13 Jan 2025 16:42  
Operator : JC\MD  
Sample : Q1062-04 10X  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

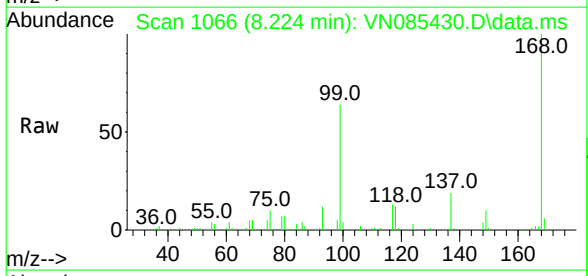
Quant Time: Jan 13 17:22:21 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N122724W.M  
Quant Title : SW846 8260  
QLast Update : Sat Dec 28 01:36:16 2024  
Response via : Initial Calibration



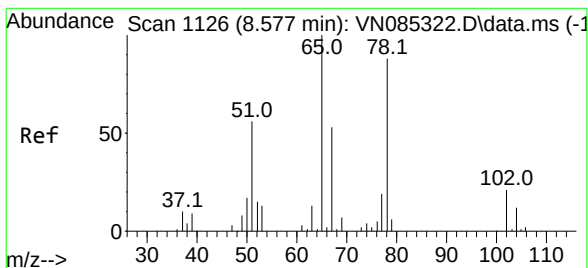
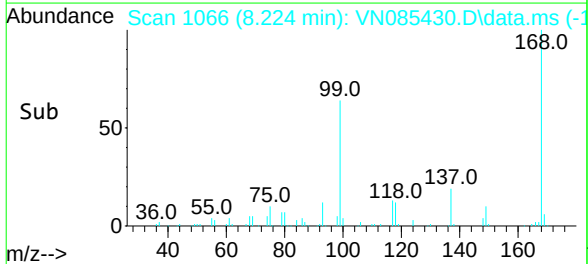
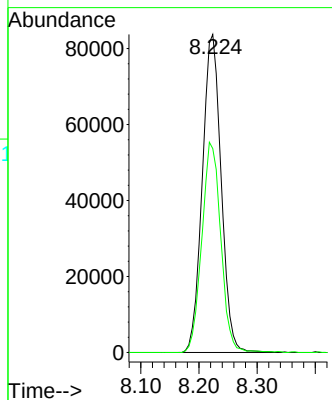


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085430.D  
Acq: 13 Jan 2025 16:42

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-VPB-190A-GW-898-900

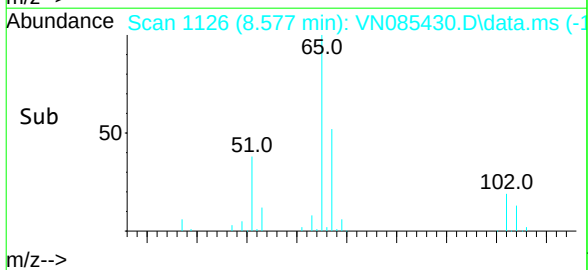
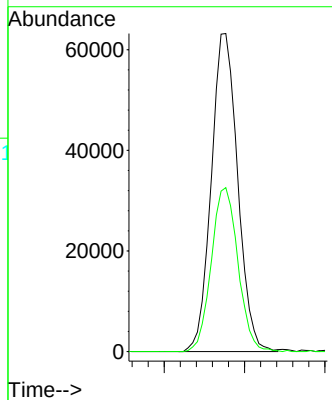
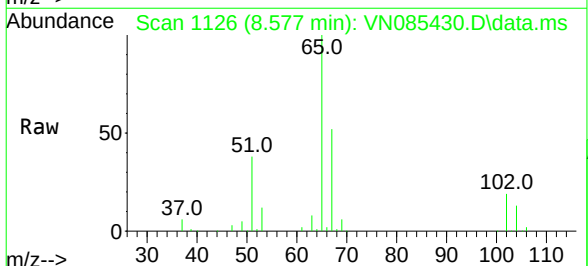


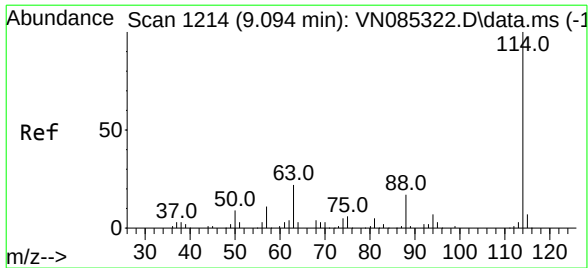
Tgt Ion:168 Resp: 188453  
Ion Ratio Lower Upper  
168 100  
99 64.1 51.0 76.4



#33  
1,2-Dichloroethane-d4  
Concen: 53.800 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.000 min  
Lab File: VN085430.D  
Acq: 13 Jan 2025 16:42

Tgt Ion: 65 Resp: 144609  
Ion Ratio Lower Upper  
65 100  
67 51.9 0.0 104.0

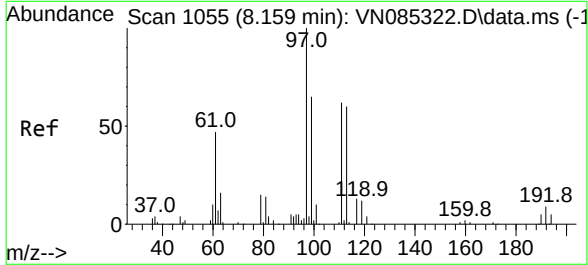
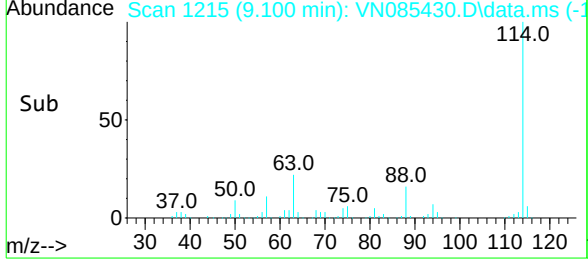
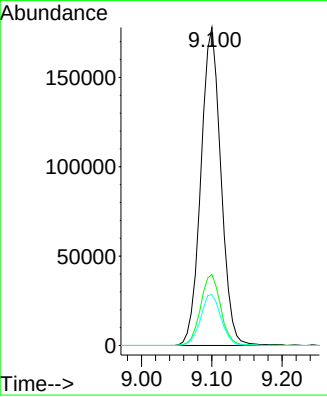
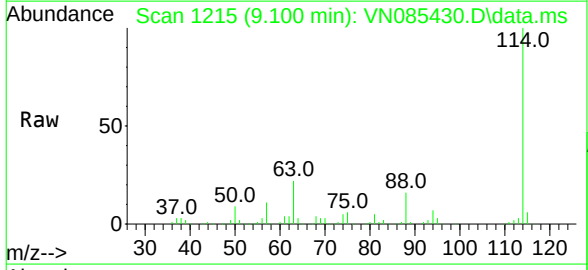




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1214  
 Delta R.T. 0.006 min  
 Lab File: VN085430.D  
 Acq: 13 Jan 2025 16:42

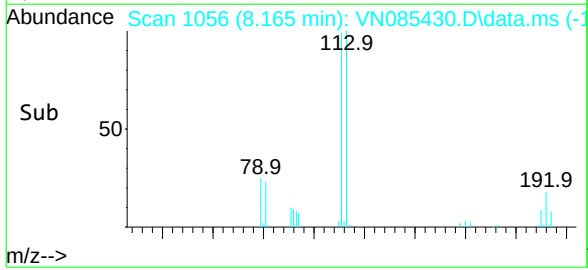
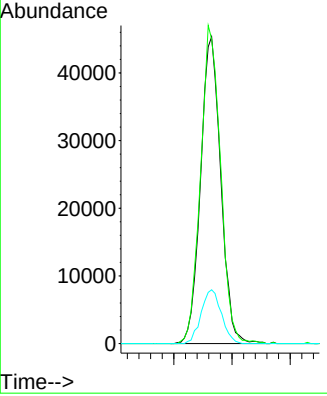
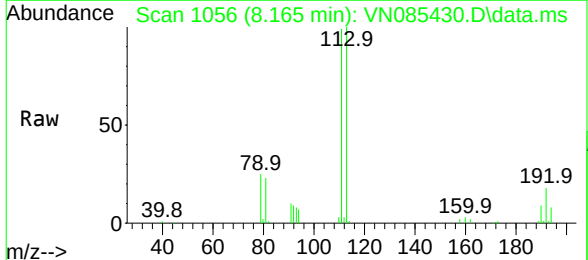
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-VPB-190A-GW-898-900

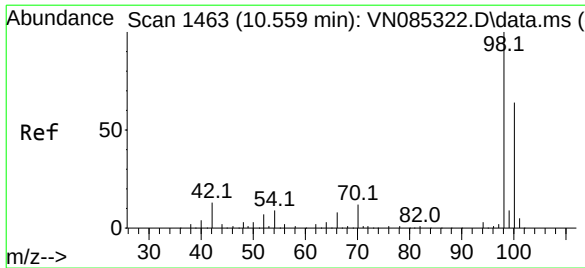
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 351449 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 22.3  | 0.0   | 43.4   |
| 88       | 16.0  | 0.0   | 33.6   |



#35  
 Dibromofluoromethane  
 Concen: 49.862 ug/l  
 RT: 8.165 min Scan# 1056  
 Delta R.T. 0.006 min  
 Lab File: VN085430.D  
 Acq: 13 Jan 2025 16:42

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 109324 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 102.6 | 80.5  | 120.7  |
| 192      | 17.6  | 12.9  | 19.3   |





#50

Toluene-d8

Concen: 45.868 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VN085430.D

Acq: 13 Jan 2025 16:42

Instrument :

MSVOA\_N

ClientSampleId :

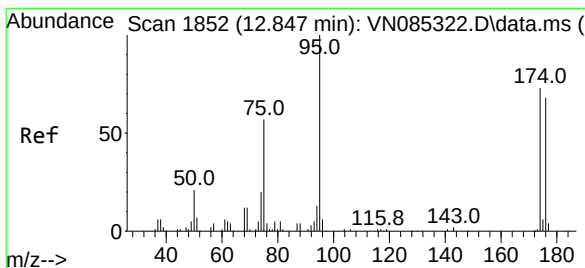
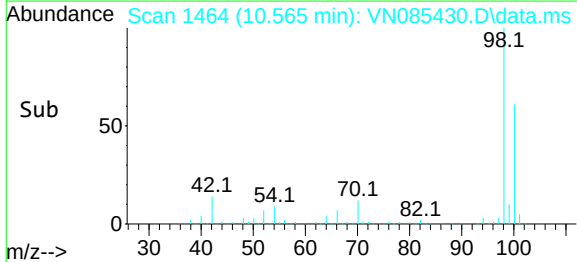
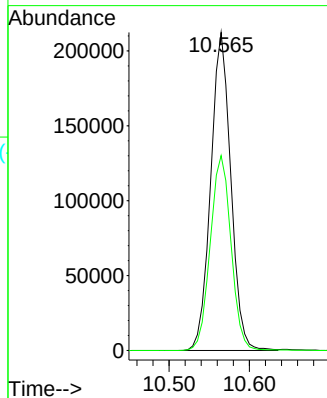
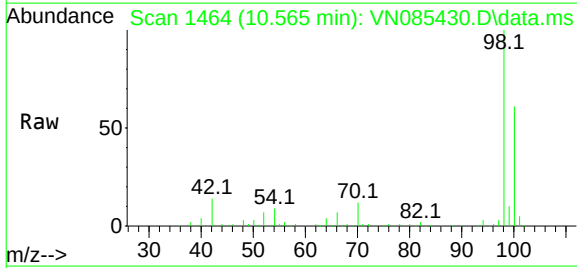
BP-VPB-190A-GW-898-900

Tgt Ion: 98 Resp: 369034

Ion Ratio Lower Upper

98 100

100 63.5 51.5 77.3



#62

4-Bromofluorobenzene

Concen: 45.515 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085430.D

Acq: 13 Jan 2025 16:42

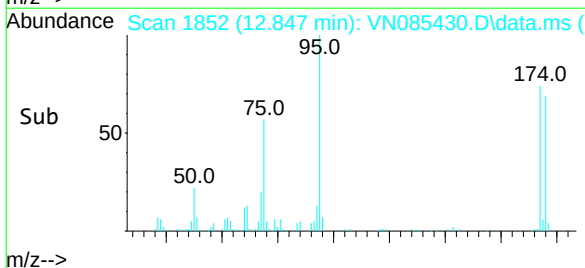
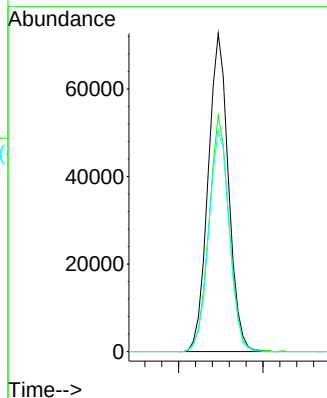
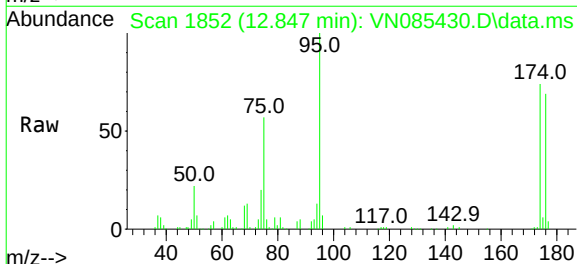
Tgt Ion: 95 Resp: 121616

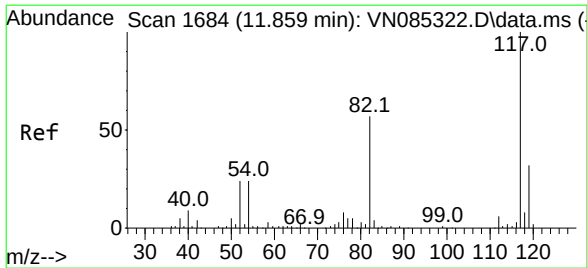
Ion Ratio Lower Upper

95 100

174 73.8 0.0 143.2

176 70.7 0.0 135.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. 0.006 min

Lab File: VN085430.D

Acq: 13 Jan 2025 16:42

Instrument :

MSVOA\_N

ClientSampleId :

BP-VPB-190A-GW-898-900

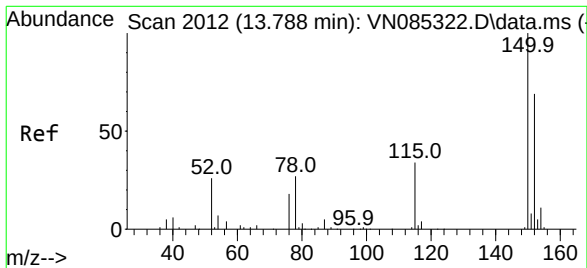
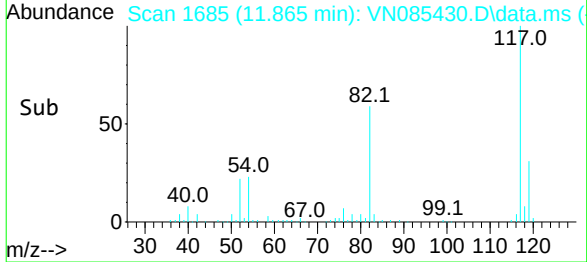
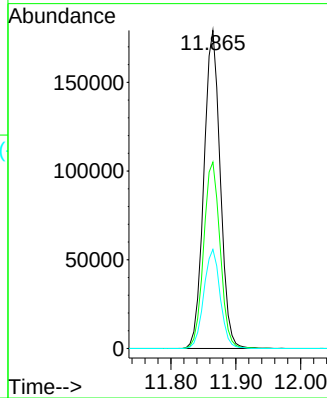
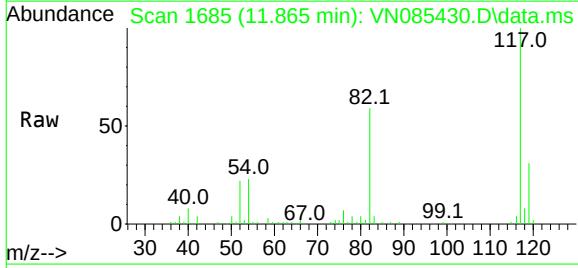
Tgt Ion:117 Resp: 313757

Ion Ratio Lower Upper

117 100

82 58.6 45.7 68.5

119 31.2 25.8 38.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085430.D

Acq: 13 Jan 2025 16:42

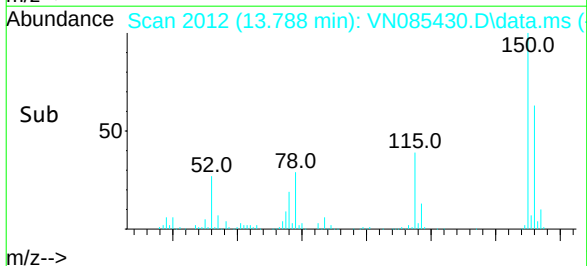
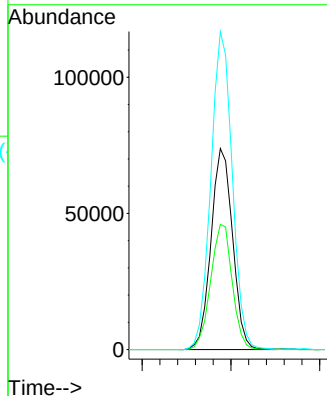
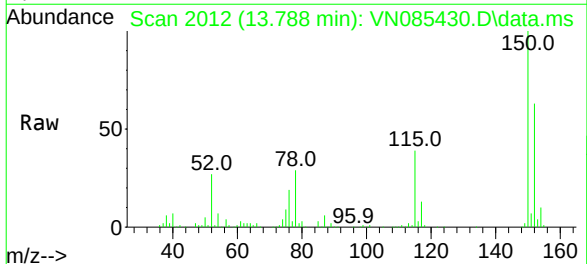
Tgt Ion:152 Resp: 124648

Ion Ratio Lower Upper

152 100

115 62.3 30.4 91.3

150 157.0 0.0 345.0





# SHIPPING DOCUMENTS



## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

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www.chemtech.net

Chemtech Project Number:

Q1062/Q1063

COC Number:

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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-190

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrattech.com

PHONE: 757-466-4901

FAX: 757-461-4148

## DATA TURNAROUND INFORMATION

FAX: 2 &amp; 10 DAYS\*

HARD COPY: 2 &amp; 10 DAYS\*

EDD 2 &amp; 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 \_\_\_\_\_

## BILLING INFORMATION

BILL TO: SEE CONTRACT

PO#

ADDRESS:

CITY:

STATE: ZIP:

ATTENTION:

PHONE:

## ANALYSIS

| VOC(SW846-8260B) | 1,4 Dioxane (8270 SIM) | 1,4 Dioxane (522 PREC) |   |   |   |   |   |   |  |
|------------------|------------------------|------------------------|---|---|---|---|---|---|--|
| 1                | 2                      | 3                      | 4 | 5 | 6 | 7 | 8 | 9 |  |

## PRESERVATIVES

## COMMENTS

| CHEMTECH<br>SAMPLE<br>ID | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX | SAMPLE<br>TYPE |      | SAMPLE<br>COLLECTION |       | # of Bottles |   |   |   |  |  |  |  |  |  | <-- Specify Preservatives<br>A-HCl B-HNO3<br>C-H2SO4 D-NaOH<br>E-ICE F-Other |
|--------------------------|----------------------------------|------------------|----------------|------|----------------------|-------|--------------|---|---|---|--|--|--|--|--|--|------------------------------------------------------------------------------|
|                          |                                  |                  | COMP           | GRAB | DATE                 | TIME  |              | A |   | F |  |  |  |  |  |  |                                                                              |
| 1.                       | BP-VPB-190A-TB-20250107          | QA               |                | X    | 1/7/25               | 8:00  | 2            | 2 |   |   |  |  |  |  |  |  | Trip Blank                                                                   |
| 2.                       | VPB190A-HYD-20250107             | QA               |                | X    | 1/7/25               | 9:30  | 5            | 2 | 1 | 2 |  |  |  |  |  |  | Hydrant sample                                                               |
| 3.                       | BP-VPB-190A-EB-20250107          | QA               |                | X    | 1/7/25               | 10:30 | 2            | 2 |   |   |  |  |  |  |  |  | Equipment Blank                                                              |
| 4.                       | BP-VPB-190A-GW-898-900           | AQ               |                | X    | 1/7/25               | 14:50 | 2            | 2 |   |   |  |  |  |  |  |  |                                                                              |
| 5.                       |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |
| 6.                       |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |
| 7.                       |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |
| 8.                       |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |
| 9.                       |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |
| 10.                      |                                  |                  |                |      |                      |       |              |   |   |   |  |  |  |  |  |  |                                                                              |

## SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

|                         |                              |                                              |                                                                                                                                                                                                                                                                                 |
|-------------------------|------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RELINQUISHED BY SAMPLER | DATE/TIME<br>1/9/25<br>15:20 | RECEIVED BY<br>1. [Signature] 1530<br>1-9-25 | Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp 2.5°C<br>MeOH extraction requires an additional 4oz. Jar for percent solid <input type="checkbox"/> Ice in Cooler?: |
| RELINQUISHED BY         | DATE/TIME                    | RECEIVED BY                                  | Comments: 48hr TAT - For VOC's see worksheet #15 of SAP 2018 for VPB program VOC list<br>10-DAY TAT - For 1,4 Dioxane (8270 SIM)                                                                                                                                                |
| RELINQUISHED BY         | DATE/TIME<br>1-9-25          | RECEIVED FOR LAB BY<br>2. [Signature]<br>3.  | SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight<br>CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight                                                                                              |

Page 1 of 1

Shipment Complete  
☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

### Laboratory Certification

| Certified By         | License No.      |
|----------------------|------------------|
|                      |                  |
| CAS EPA CLP Contract | 68HERH20D0011    |
|                      |                  |
| Connecticut          | PH-0830          |
|                      |                  |
| DOD ELAP (ANAB)      | L2219            |
|                      |                  |
| Maine                | 2024021          |
|                      |                  |
| Maryland             | 296              |
|                      |                  |
| New Hampshire        | 255424 Rev 1     |
|                      |                  |
| New Jersey           | 20012            |
|                      |                  |
| New York             | 11376            |
|                      |                  |
| Pennsylvania         | 68-00548         |
|                      |                  |
| Soil Permit          | 525-24-234-08441 |
|                      |                  |
| Texas                | T104704488       |



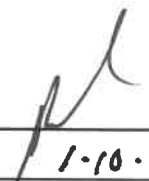
## LOGIN REPORT/SAMPLE TRANSFER

|                                            |        |                                                |                                             |
|--------------------------------------------|--------|------------------------------------------------|---------------------------------------------|
| <b>Order ID :</b> Q1062                    | TETR06 | <b>Order Date :</b> 1/10/2025 11:26:00 AM      | <b>Project Mgr :</b> Kiran                  |
| <b>Client Name :</b> Tetra Tech NUS, Inc.  |        | <b>Project Name :</b> NWIRP Bethpage 112G080   | <b>Report Type :</b> Level 4                |
| <b>Client Contact :</b> Ernie Wu           |        | <b>Receive Date/Time :</b> 1/9/2025 4:15:00 PM | <b>EDD Type :</b> ADAPT                     |
| <b>Invoice Name :</b> Tetra Tech NUS, Inc. |        | <b>Purchase Order :</b>                        | <b>Hard Copy Date :</b>                     |
| <b>Invoice Contact :</b> Ernie Wu          |        |                                                | <b>Date Signoff :</b> 1/10/2025 12:45:41 PM |

| LAB ID   | CLIENT ID               | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD   | FAX DATE    | DUE DATES |
|----------|-------------------------|--------|-------------|-------------|--------------|------------|----------|-------------|-----------|
| Q1062-01 | BP-VPB-190A-TB-20250107 | Water  | 01/07/2025  | 08:00       |              |            |          |             |           |
|          |                         |        |             |             | VOCMS Group1 |            | 8260-Low | 2 Bus. Days |           |
| Q1062-02 | VPB190A-HYD-20250107    | Water  | 01/07/2025  | 09:30       |              |            |          |             |           |
|          |                         |        |             |             | VOCMS Group1 |            | 8260-Low | 2 Bus. Days |           |
| Q1062-03 | BP-VPB-190A-EB-20250107 | Water  | 01/07/2025  | 10:30       |              |            |          |             |           |
|          |                         |        |             |             | VOCMS Group1 |            | 8260-Low | 2 Bus. Days |           |
| Q1062-04 | BP-VPB-190A-GW-898-900  | Water  | 01/07/2025  | 14:50       |              |            |          |             |           |
|          |                         |        |             |             | VOCMS Group1 |            | 8260-Low | 2 Bus. Days |           |

Relinquished By : 

Date / Time : 1-10-25 1305

Received By : 

Date / Time : 1-10-25 13:05

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

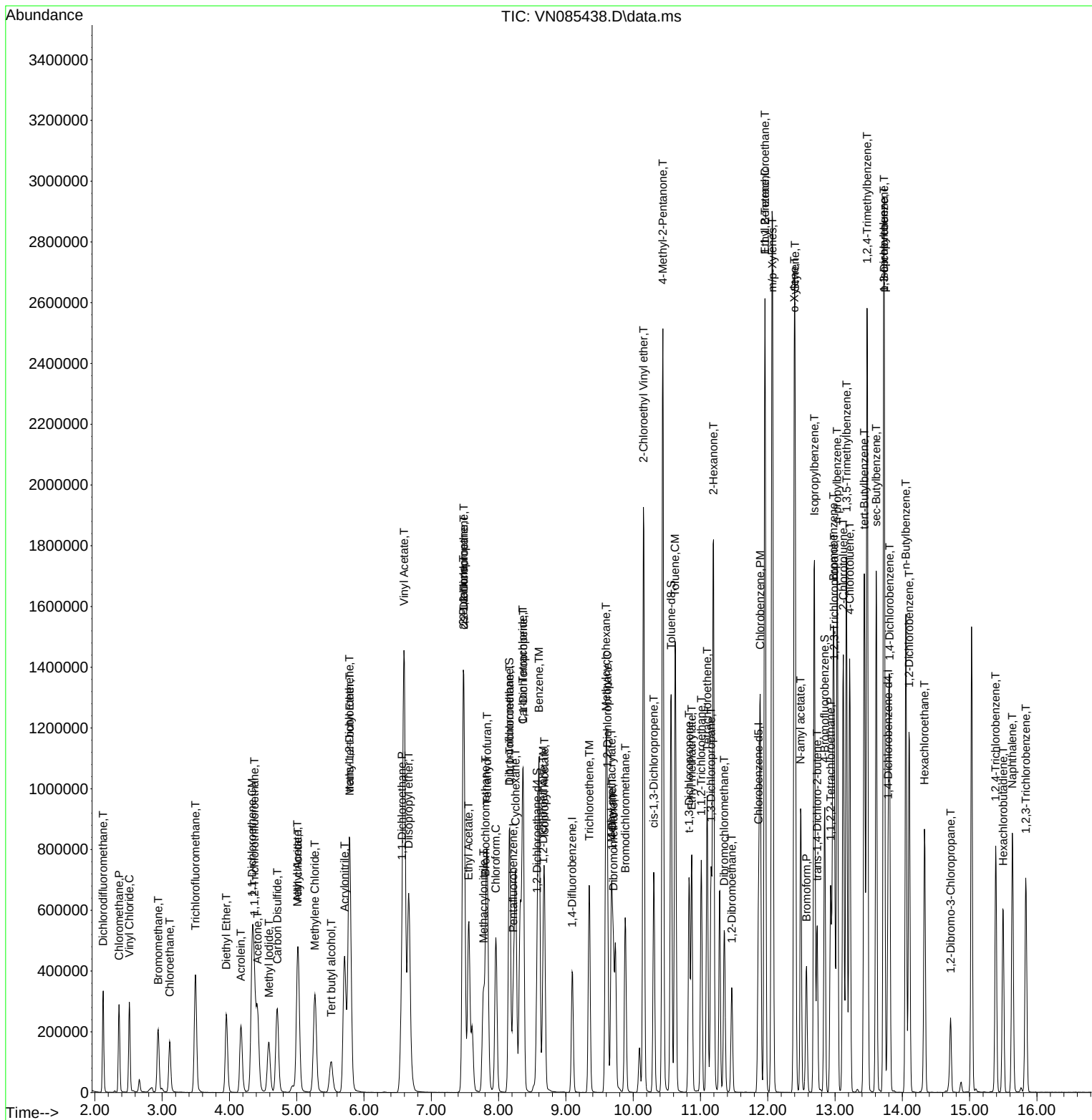
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

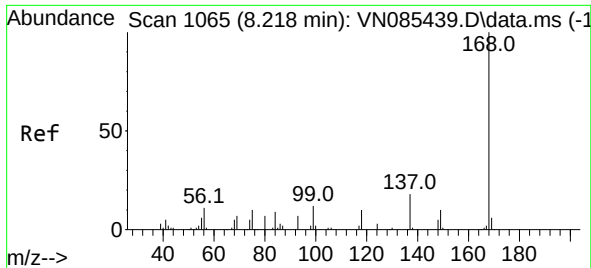
Quant Time: Jan 15 01:41:17 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

| 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  
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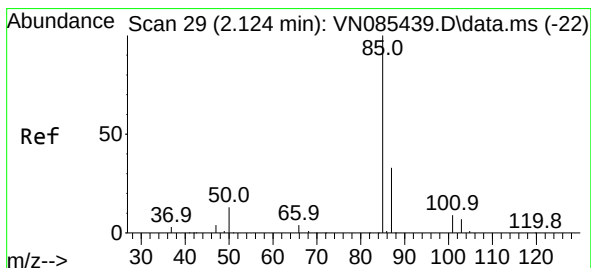
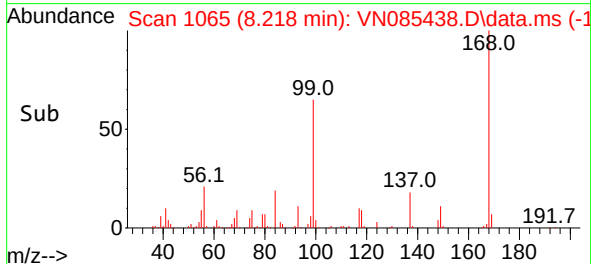
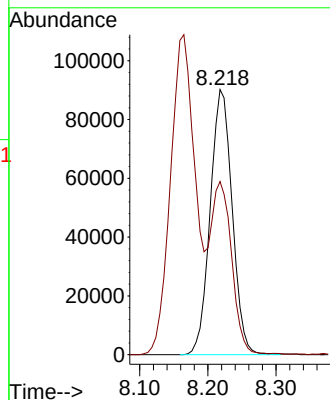
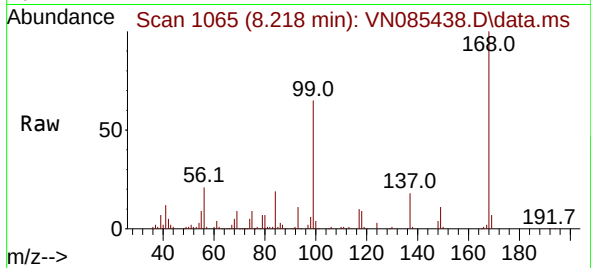




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

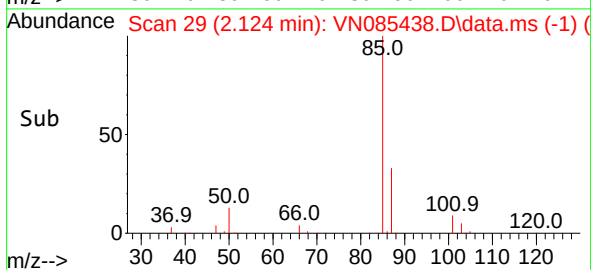
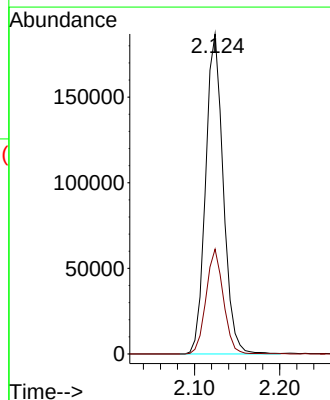
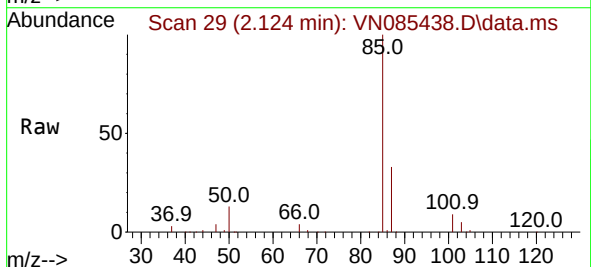
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

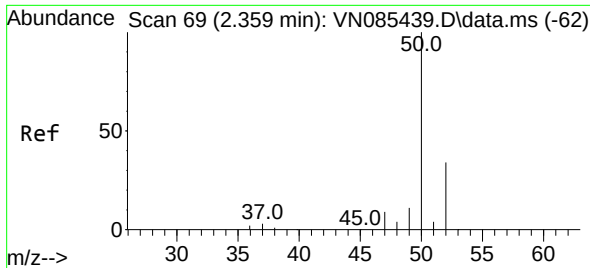
Tgt Ion:168 Resp: 202613  
Ion Ratio Lower Upper  
168 100  
99 64.9 53.6 80.4



#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

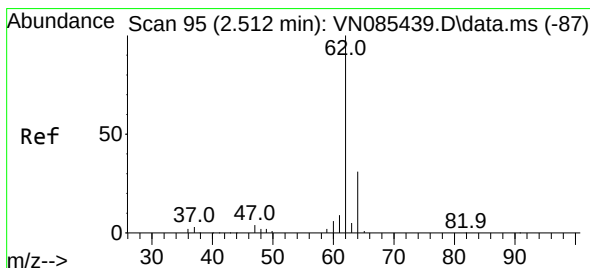
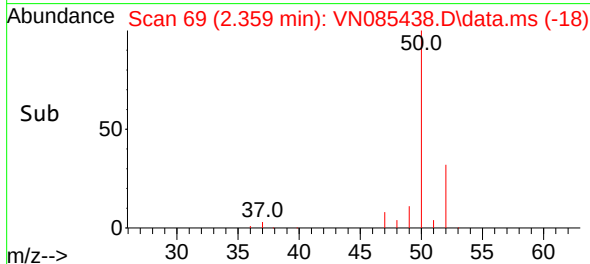
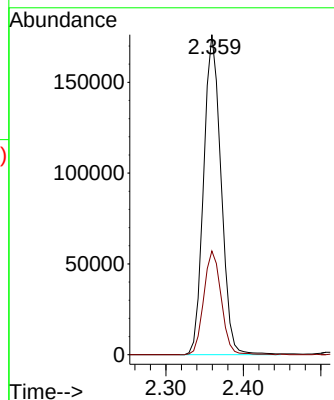
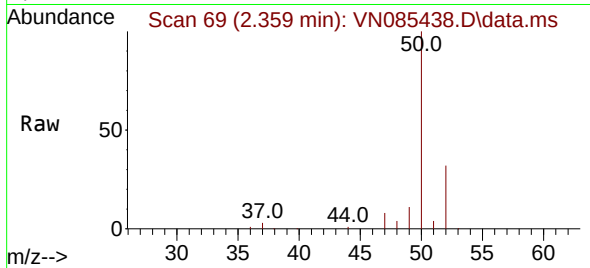




#3  
Chloromethane  
Concen: 92.724 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

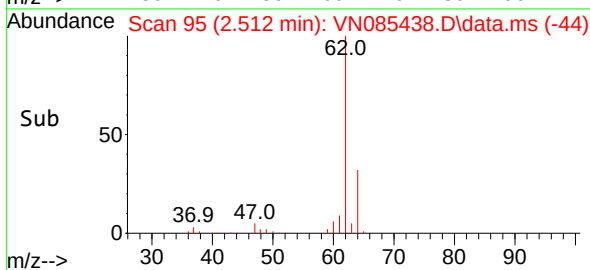
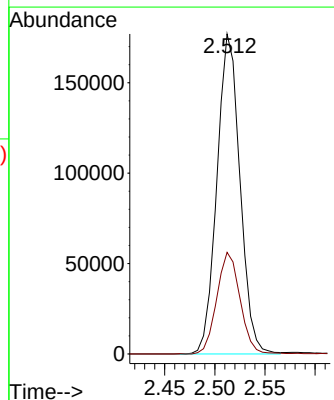
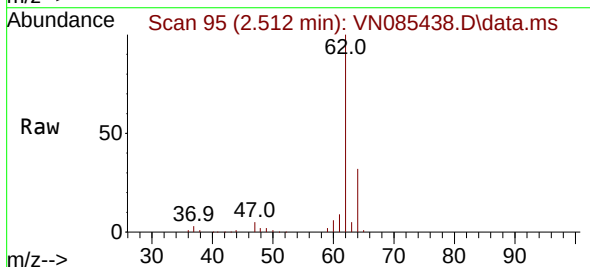
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

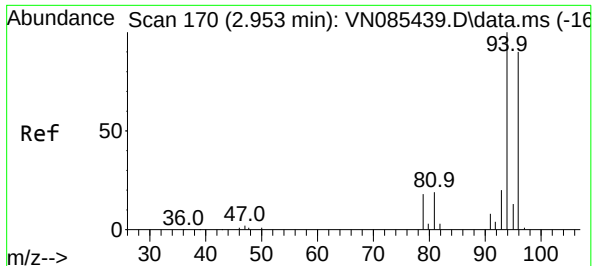
Tgt Ion: 50 Resp: 275415  
Ion Ratio Lower Upper  
50 100  
52 32.4 27.0 40.6



#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

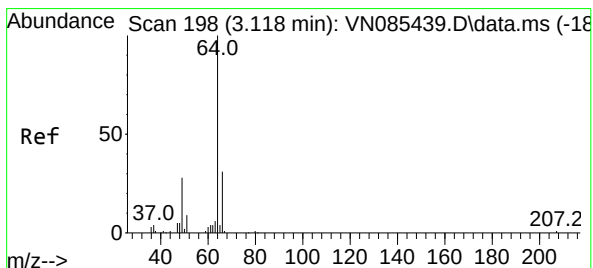
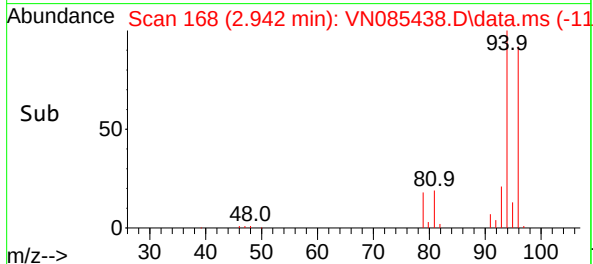
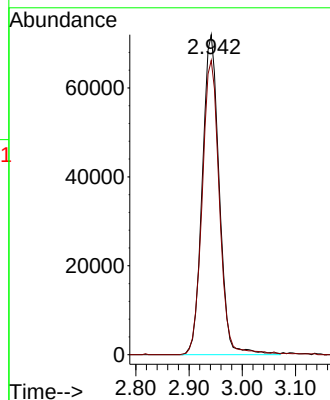
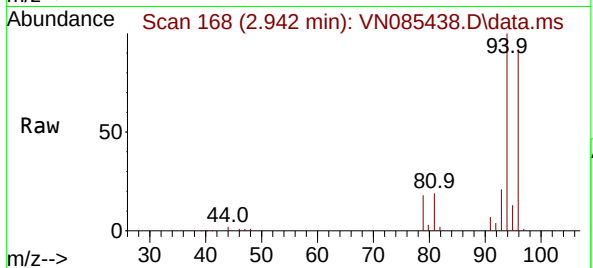




#5  
Bromomethane  
Concen: 88.105 ug/l  
RT: 2.942 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

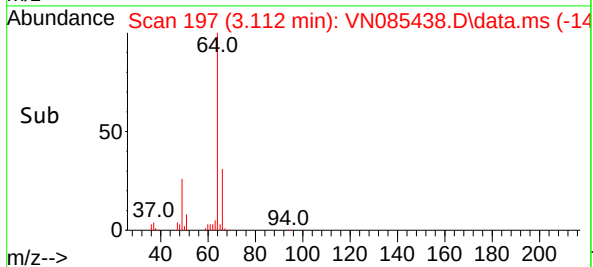
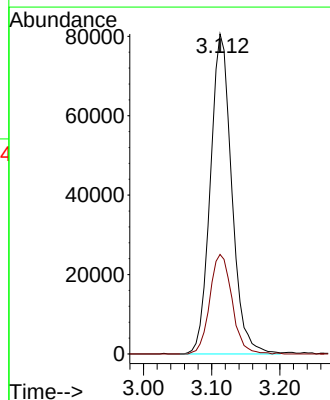
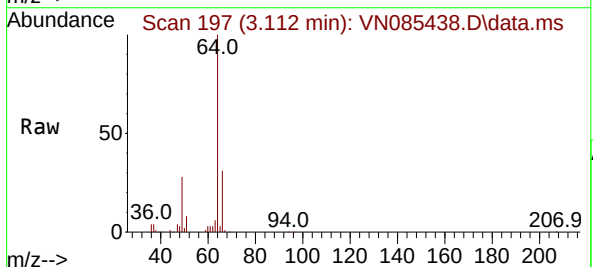
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 94 Resp: 158888  
Ion Ratio Lower Upper  
94 100  
96 91.9 71.8 107.6

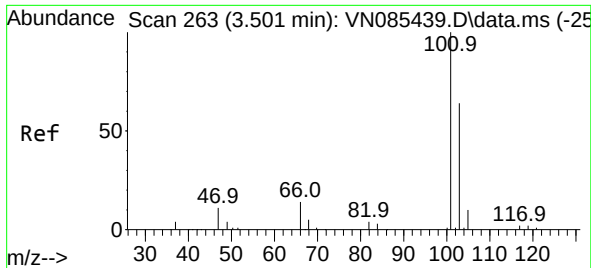


#6  
Chloroethane  
Concen: 93.043 ug/l  
RT: 3.112 min Scan# 197  
Delta R.T. -0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 64 Resp: 176111  
Ion Ratio Lower Upper  
64 100  
66 31.1 24.6 36.8



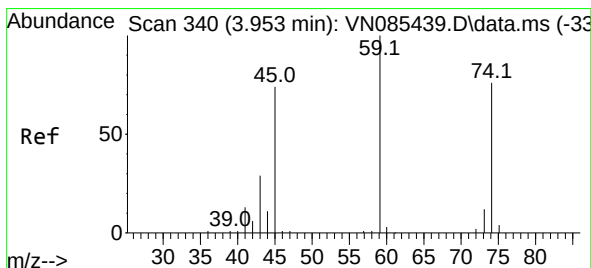
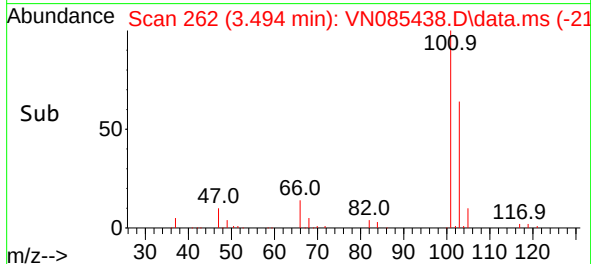
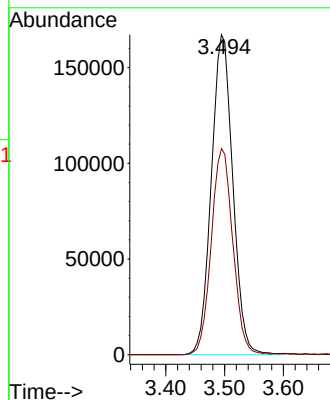
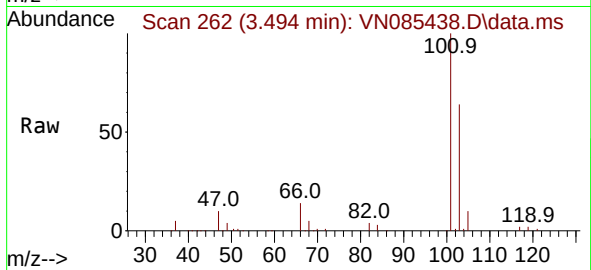




#7  
 Trichlorofluoromethane  
 Concen: 97.870 ug/l  
 RT: 3.494 min Scan# 210  
 Delta R.T. -0.006 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

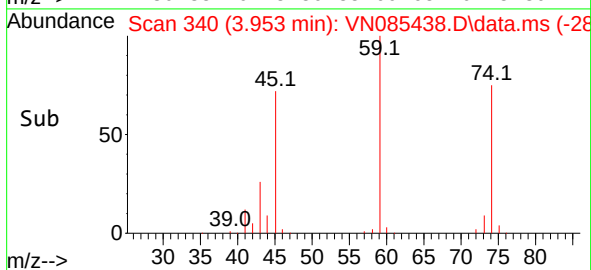
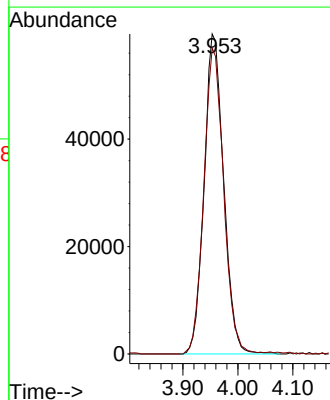
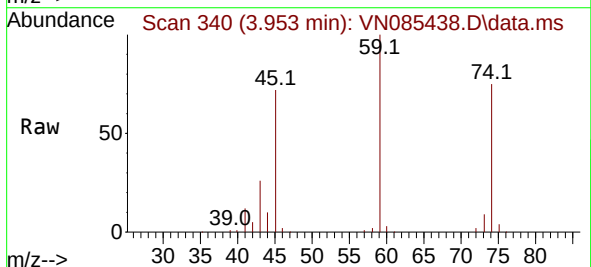
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

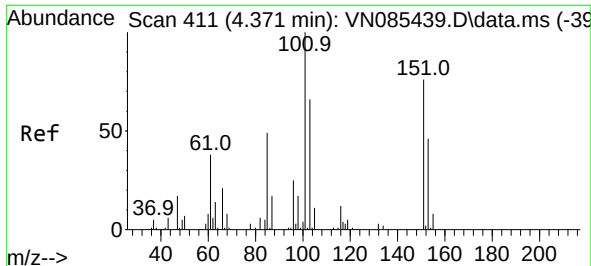
Tgt Ion:101 Resp: 423967  
 Ion Ratio Lower Upper  
 101 100  
 103 64.4 51.4 77.2



#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

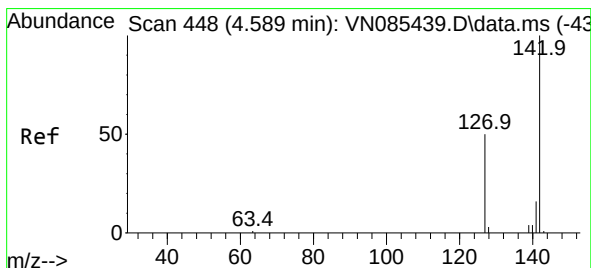
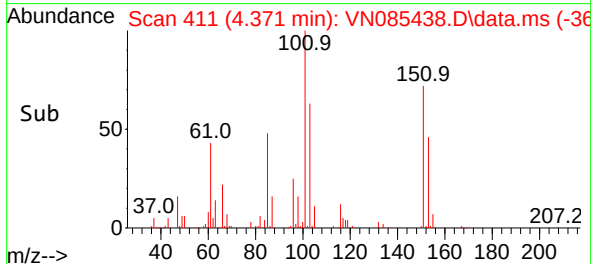
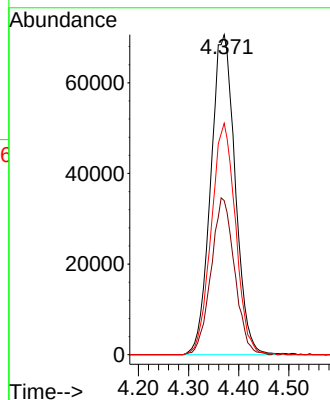
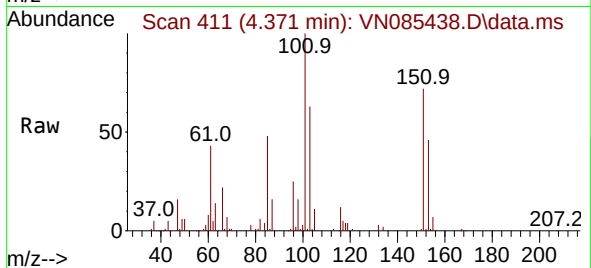




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 97.997 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

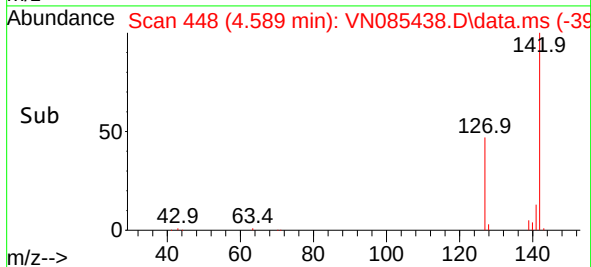
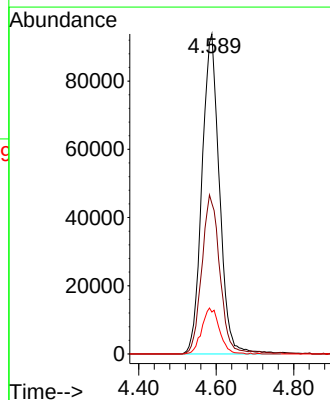
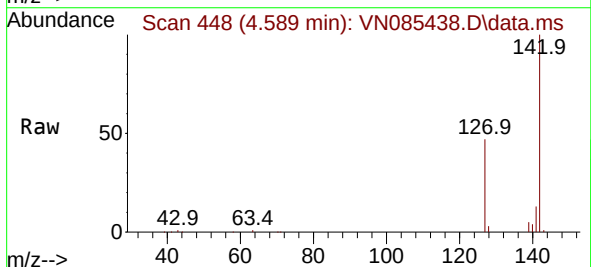
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

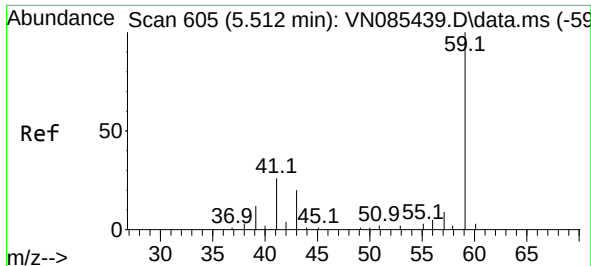
Tgt Ion:101 Resp: 239104  
Ion Ratio Lower Upper  
101 100  
85 47.1 37.8 56.8  
151 71.8 58.8 88.2



#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

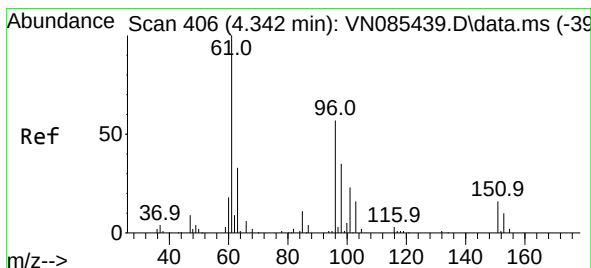
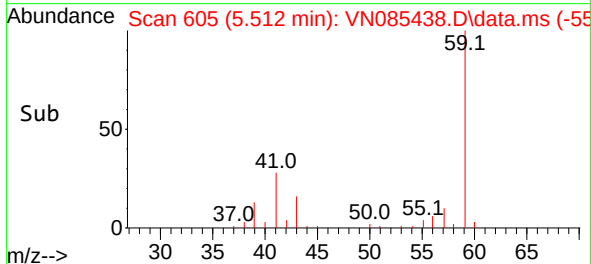
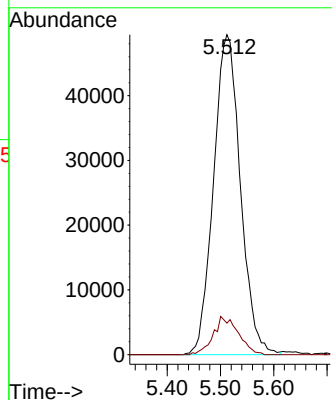
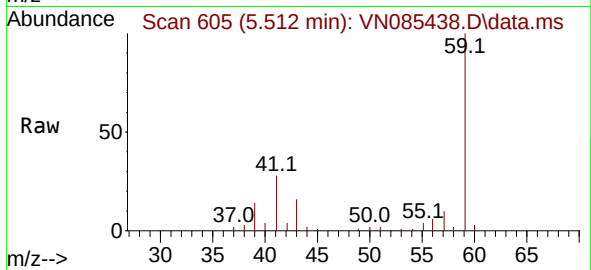




#11  
Tert butyl alcohol  
Concen: 462.061 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

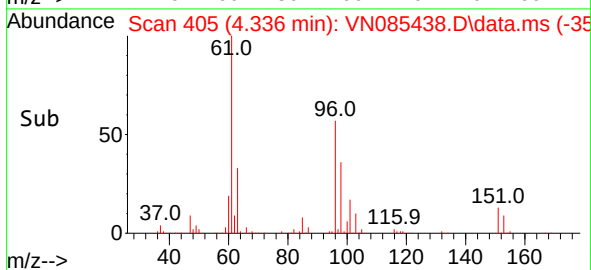
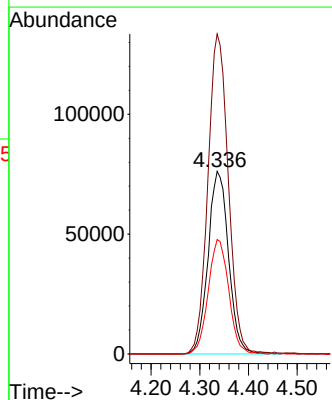
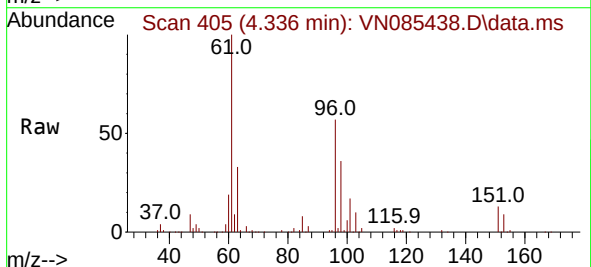
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

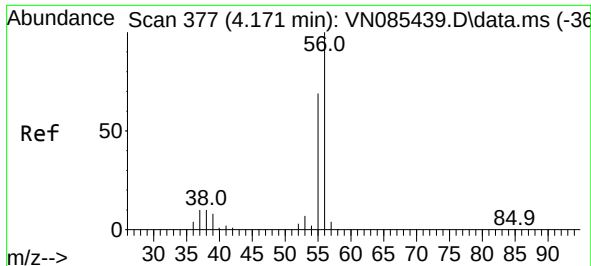
Tgt Ion: 59 Resp: 173044  
Ion Ratio Lower Upper  
59 100  
57 11.1 8.6 13.0



#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 :

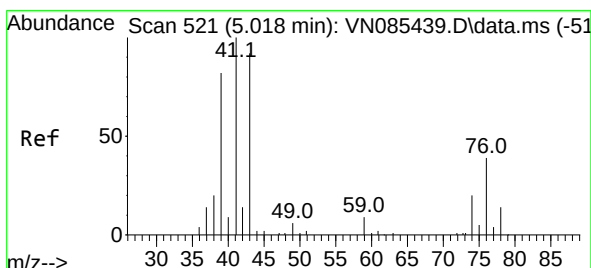
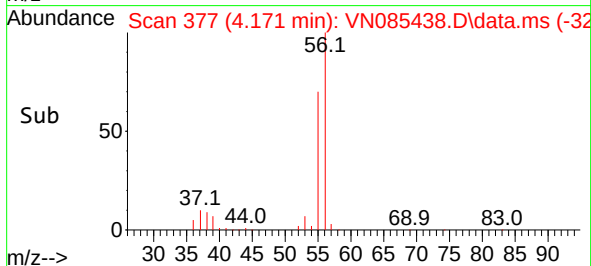
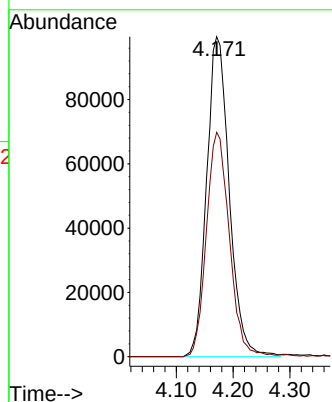
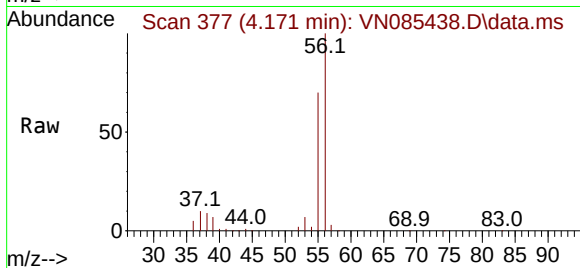
VSTDICC100

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

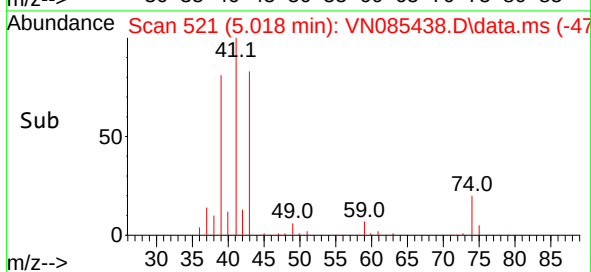
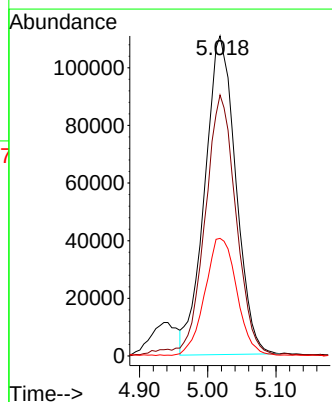
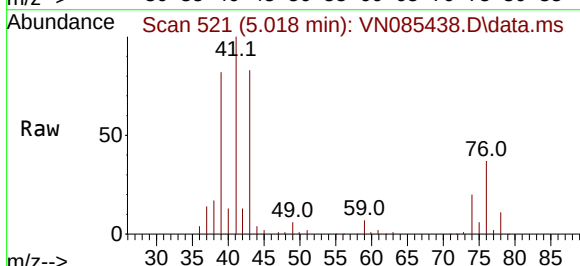
Tgt Ion: 41 Resp: 349717

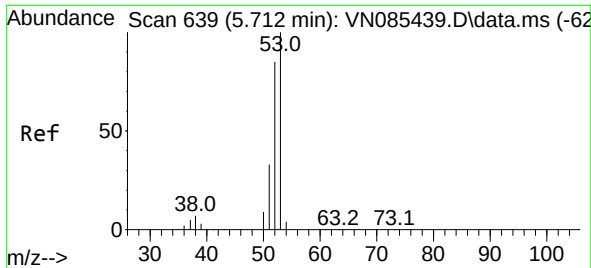
Ion Ratio Lower Upper

41 100

39 83.3 64.4 96.6

76 37.9 30.5 45.7

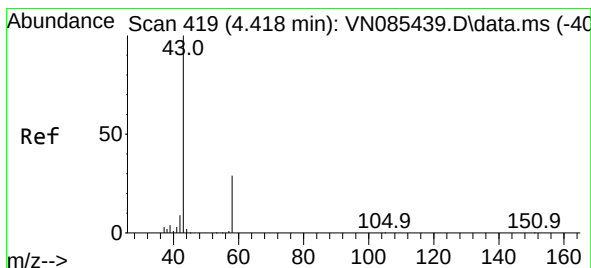
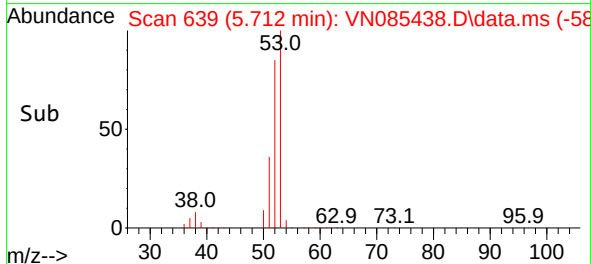
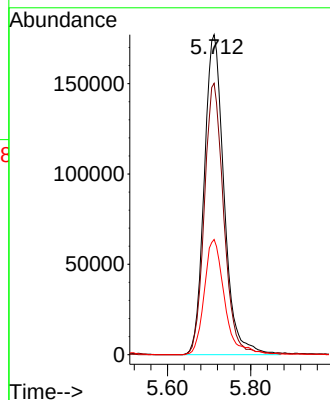
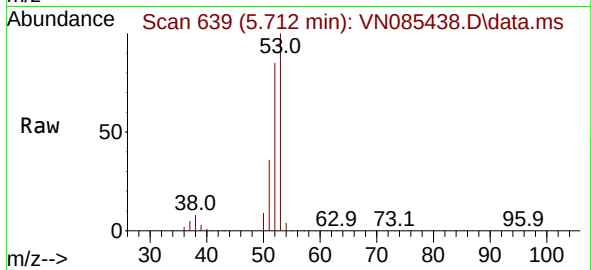




#15  
Acrylonitrile  
Concen: 492.095 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

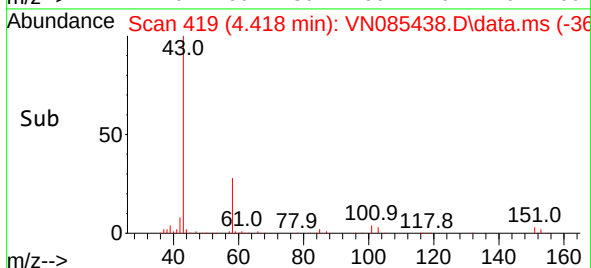
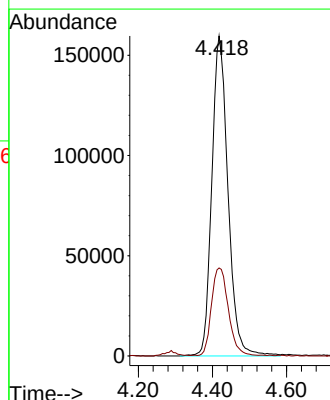
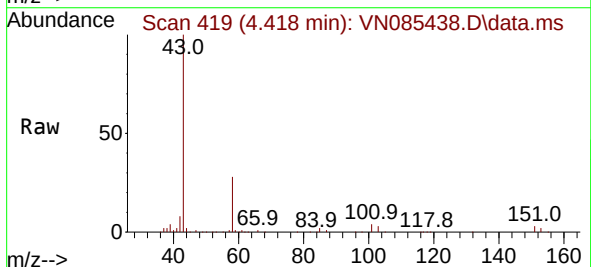
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

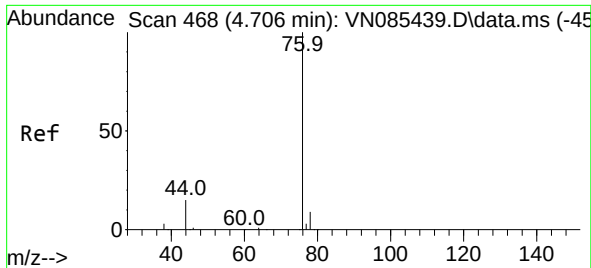
Tgt Ion: 53 Resp: 585370  
Ion Ratio Lower Upper  
53 100  
52 83.0 65.5 98.3  
51 37.1 29.8 44.8



#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

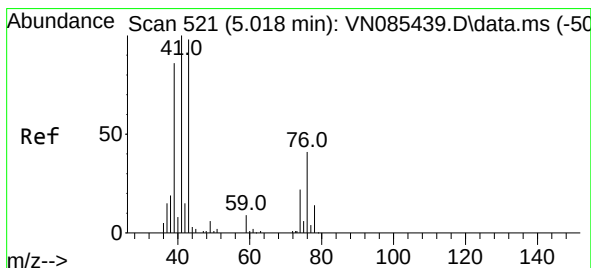
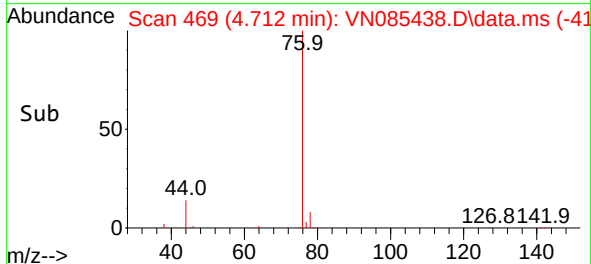
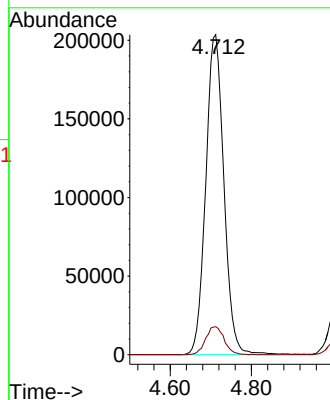
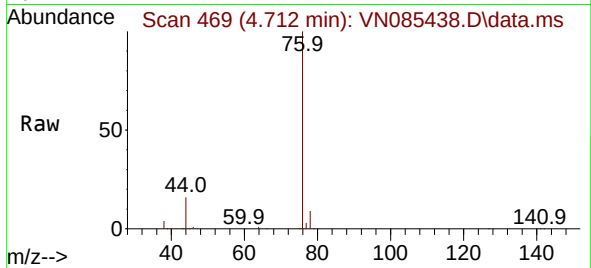




#17  
Carbon Disulfide  
Concen: 94.140 ug/l  
RT: 4.712 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

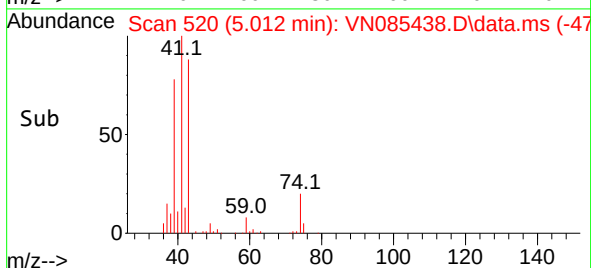
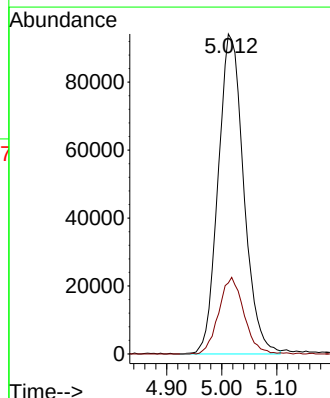
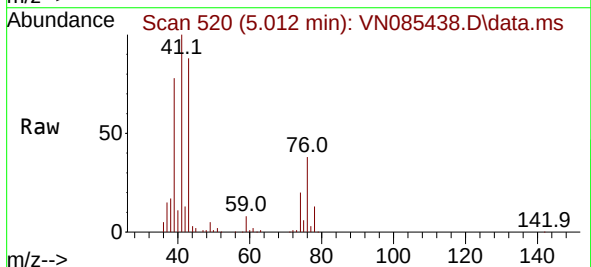
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

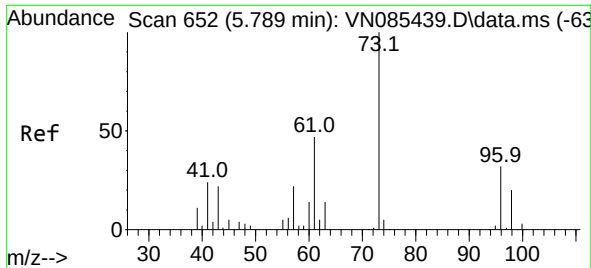
Tgt Ion: 76 Resp: 630294  
Ion Ratio Lower Upper  
76 100  
78 8.7 6.9 10.3



#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

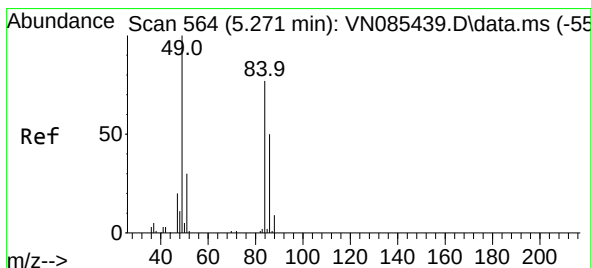
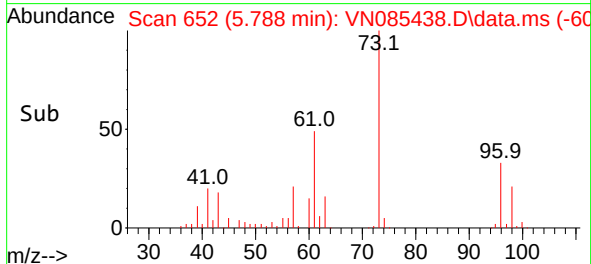
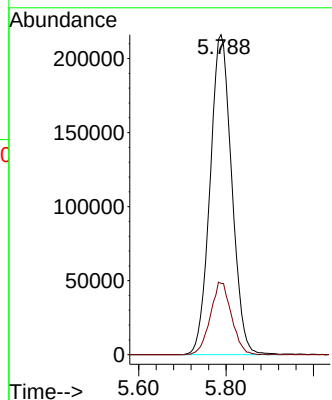
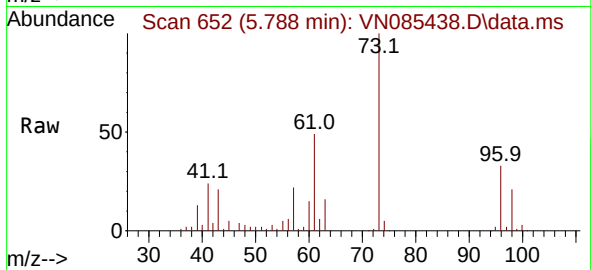




#19  
Methyl tert-butyl Ether  
Concen: 105.230 ug/l  
RT: 5.788 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

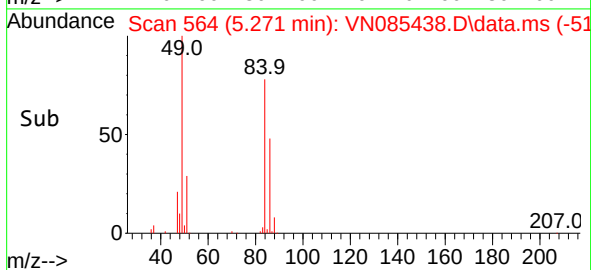
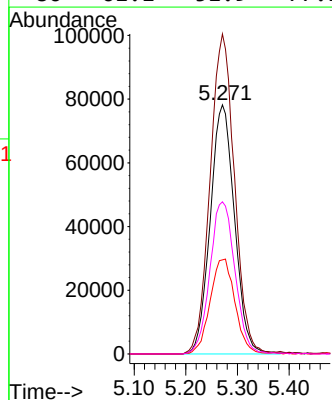
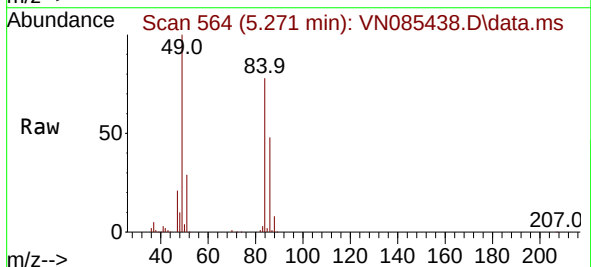
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

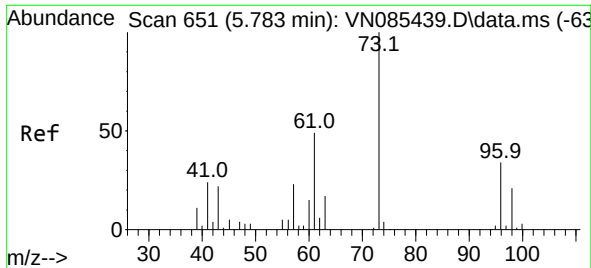
Tgt Ion: 73 Resp: 743008  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



#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

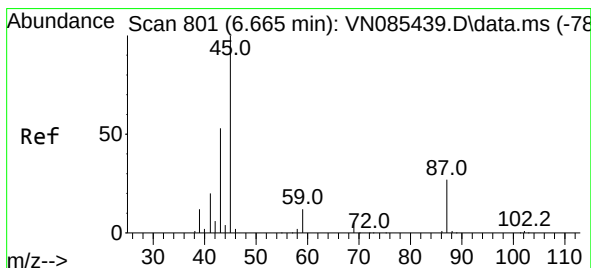
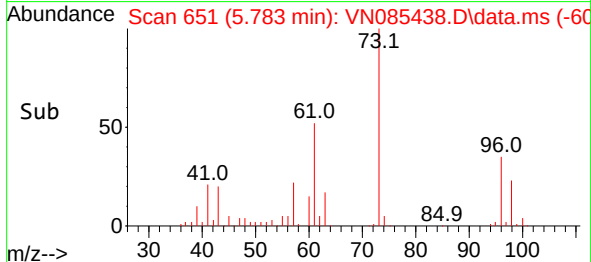
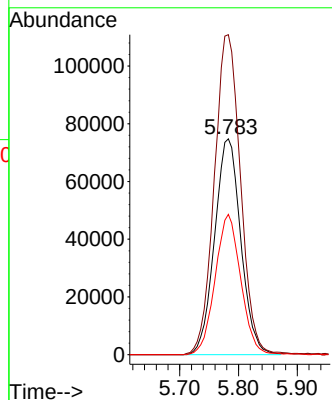
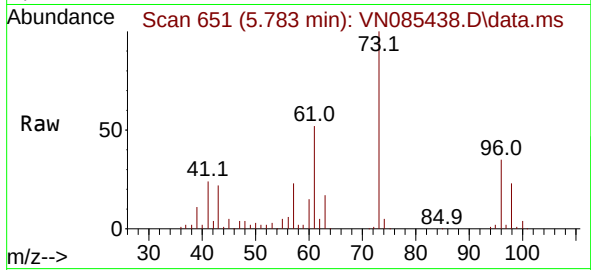




#21  
trans-1,2-Dichloroethene  
Concen: 99.618 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

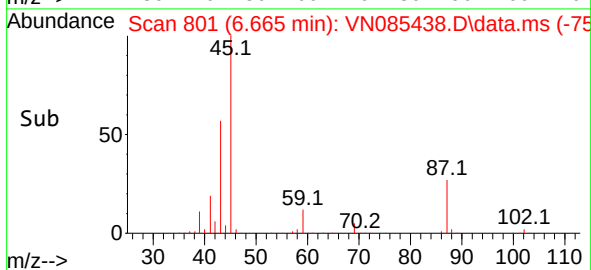
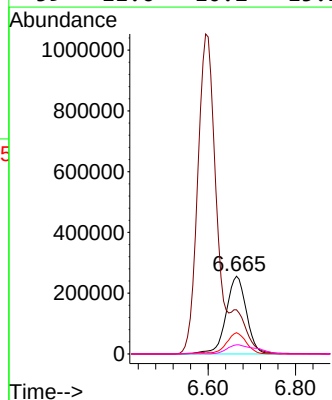
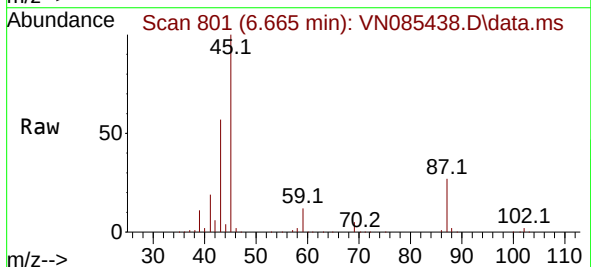
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

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

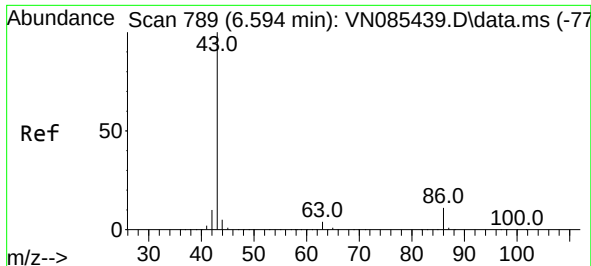


#22  
Diisopropyl ether  
Concen: 104.812 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

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



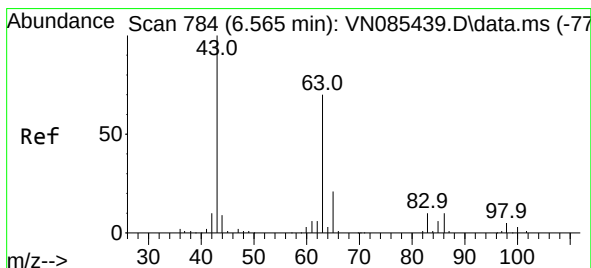
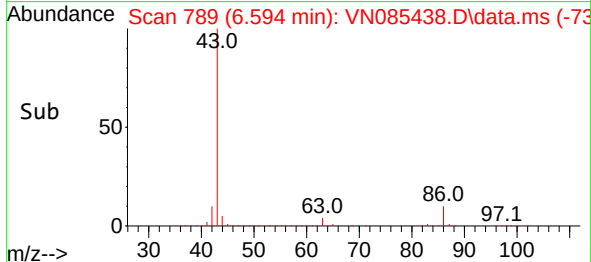
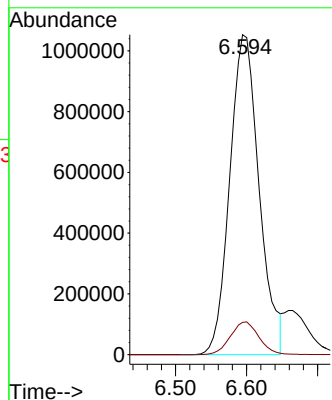
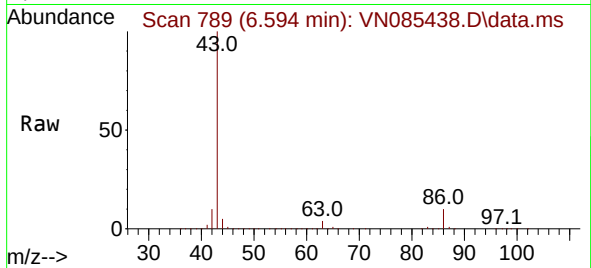




#23  
 Vinyl Acetate  
 Concen: 550.850 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

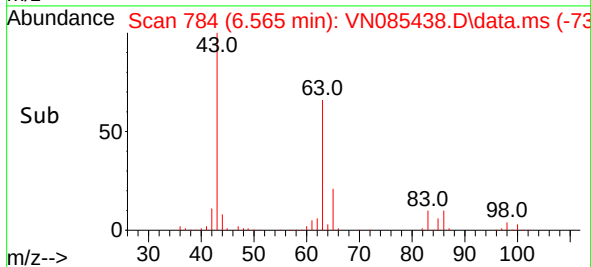
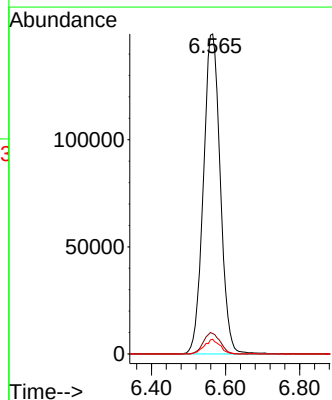
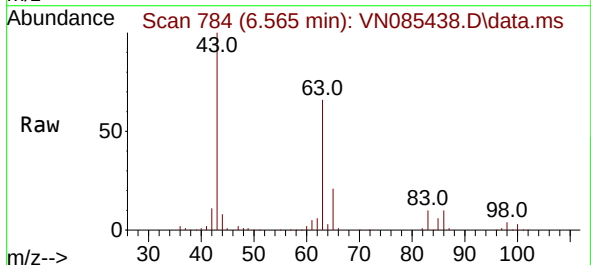
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

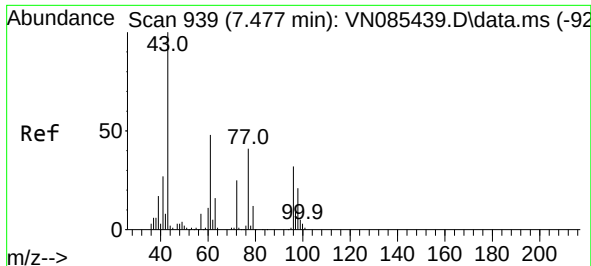
Tgt Ion: 43 Resp: 3029568  
 Ion Ratio Lower Upper  
 43 100  
 86 10.1 8.4 12.6



#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

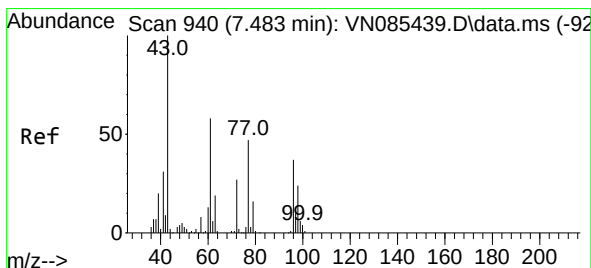
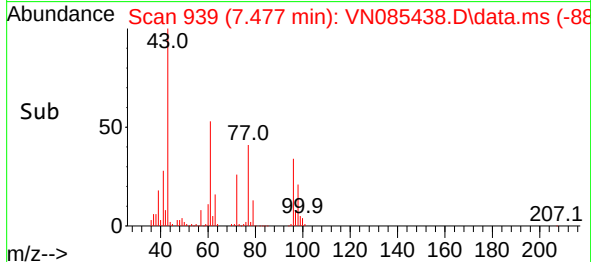
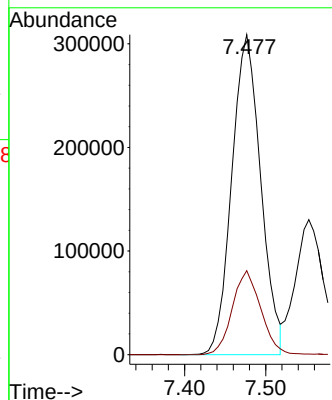
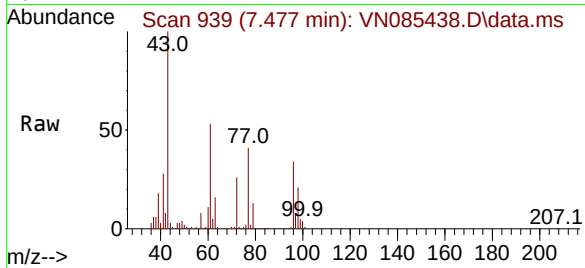




#25  
2-Butanone  
Concen: 491.912 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

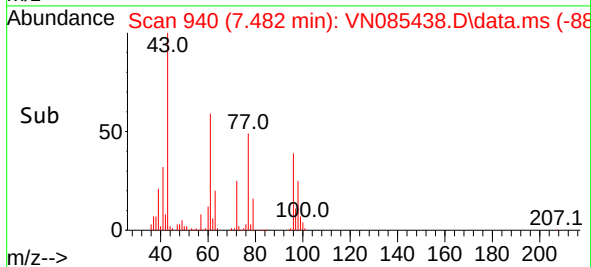
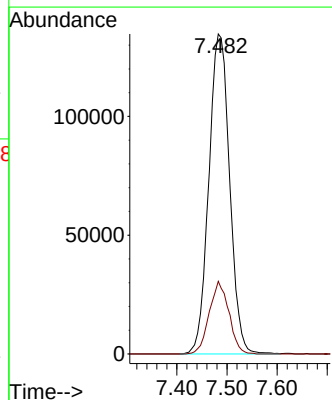
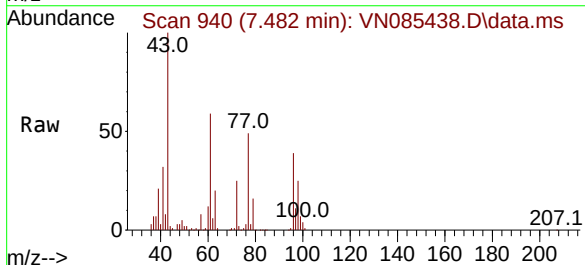
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

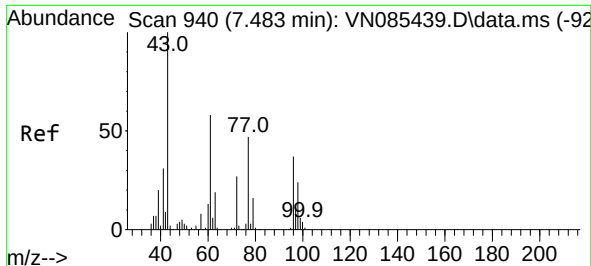
Tgt Ion: 43 Resp: 764979  
Ion Ratio Lower Upper  
43 100  
72 26.3 20.2 30.4



#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

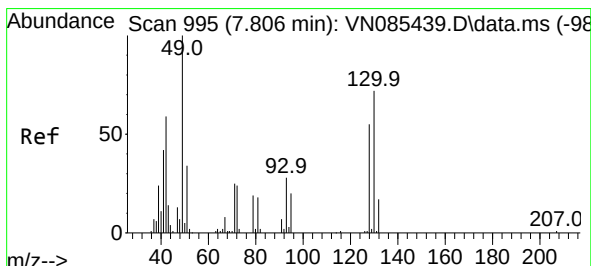
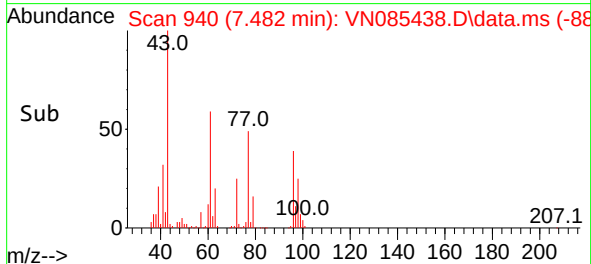
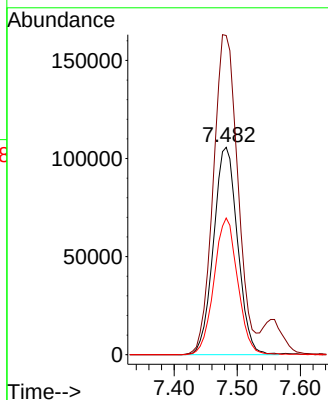
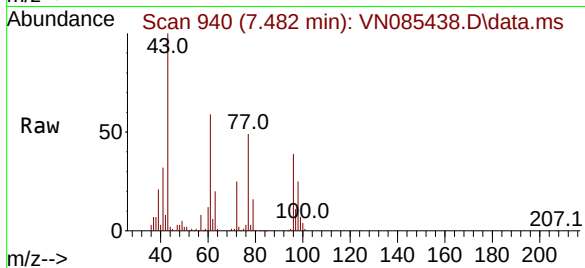




#27  
 cis-1,2-Dichloroethene  
 Concen: 102.367 ug/l  
 RT: 7.482 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

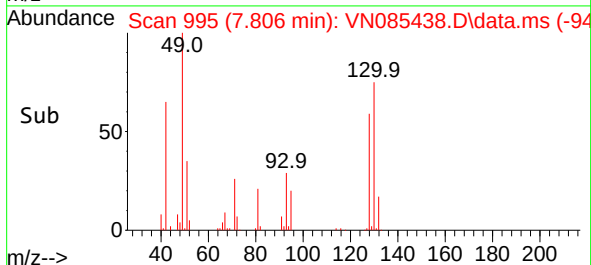
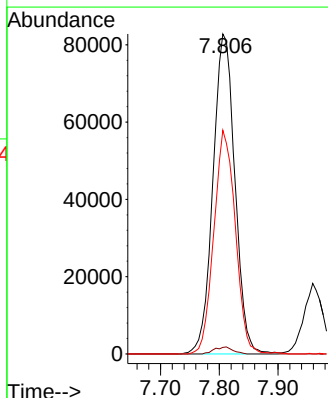
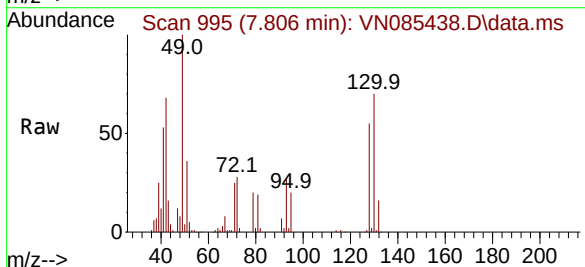
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

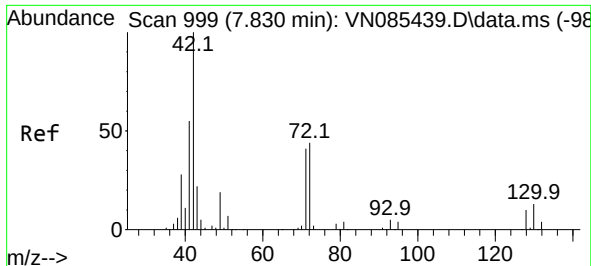
Tgt Ion: 96 Resp: 280197  
 Ion Ratio Lower Upper  
 96 100  
 61 156.8 0.0 311.8  
 98 65.0 0.0 126.0



#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

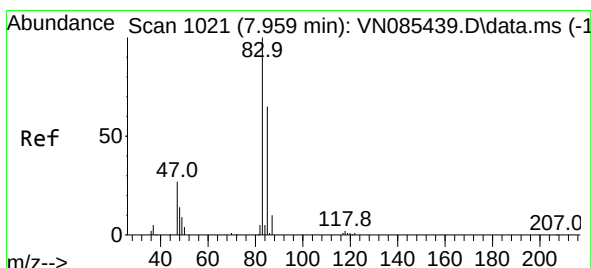
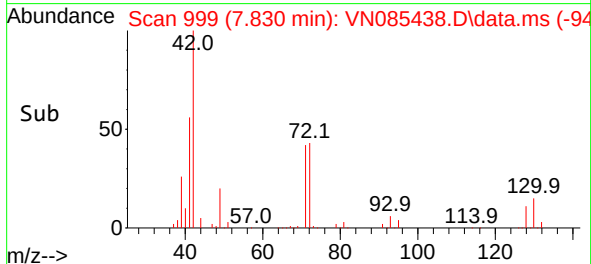
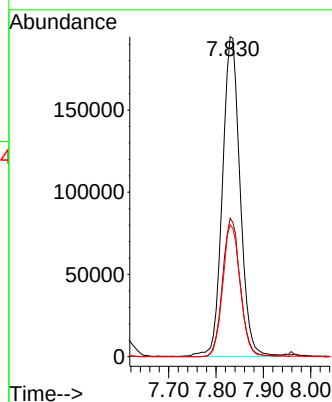
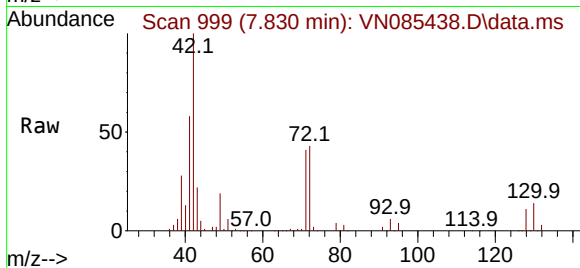
Tgt Ion: 42 Resp: 503459

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

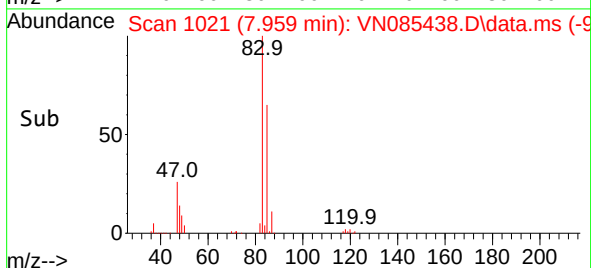
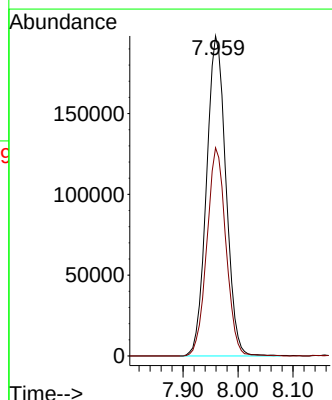
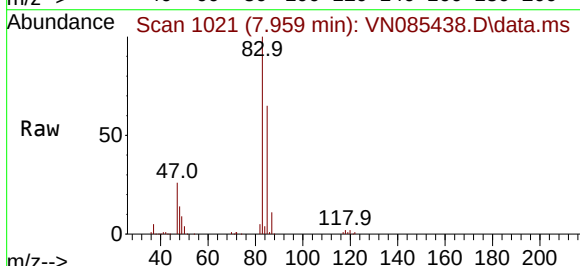
Acq: 14 Jan 2025 14:56

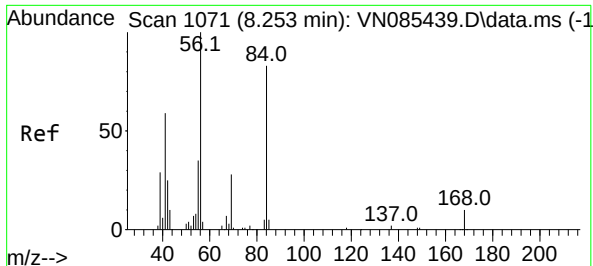
Tgt Ion: 83 Resp: 484941

Ion Ratio Lower Upper

83 100

85 65.0 51.8 77.6

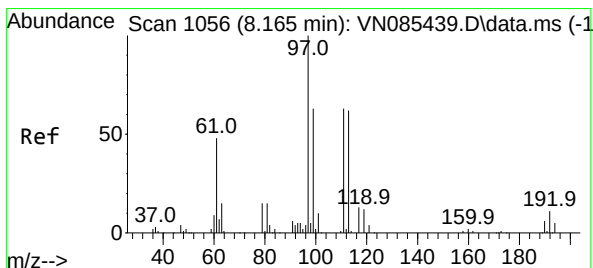
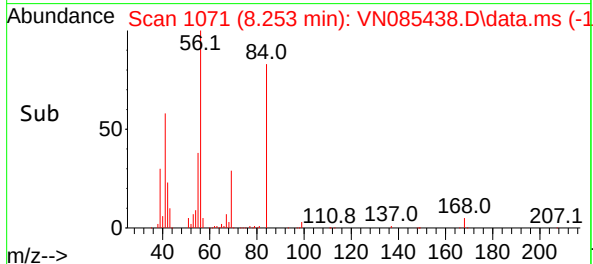
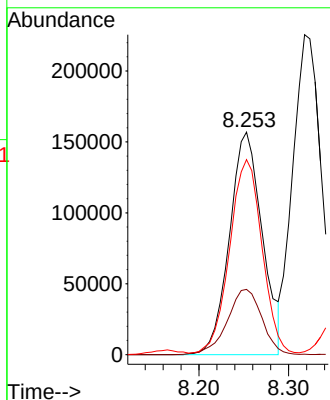
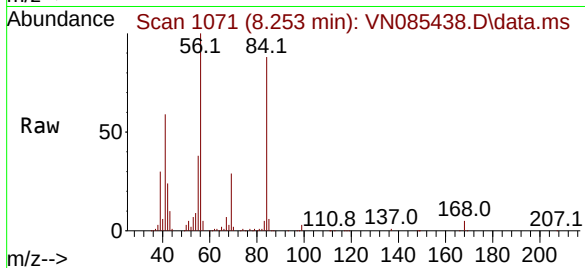




#31  
Cyclohexane  
Concen: 96.041 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

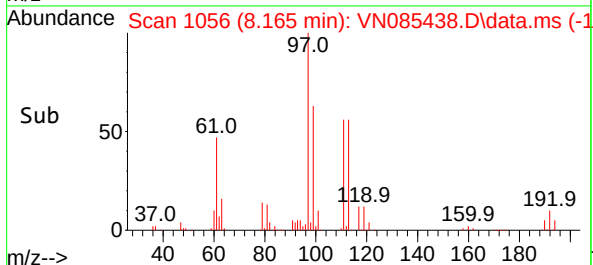
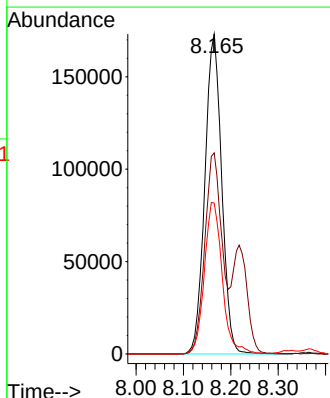
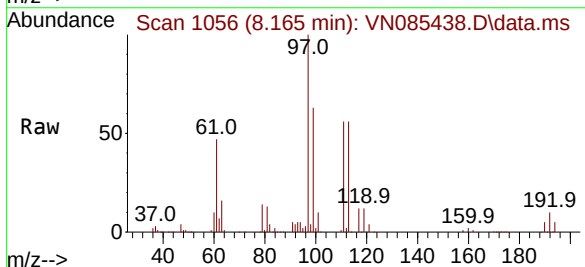
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

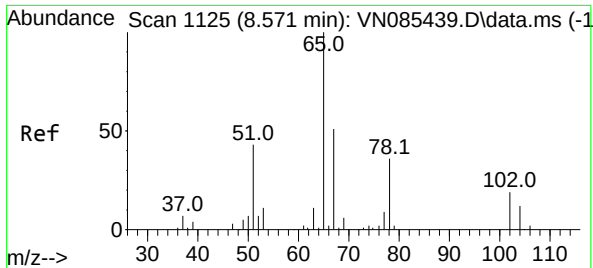
Tgt Ion: 56 Resp: 398641  
Ion Ratio Lower Upper  
56 100  
69 29.2 22.2 33.4  
84 86.4 66.4 99.6



#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

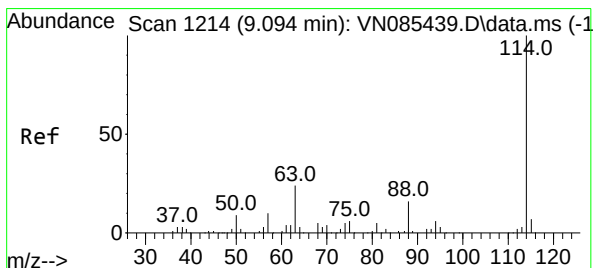
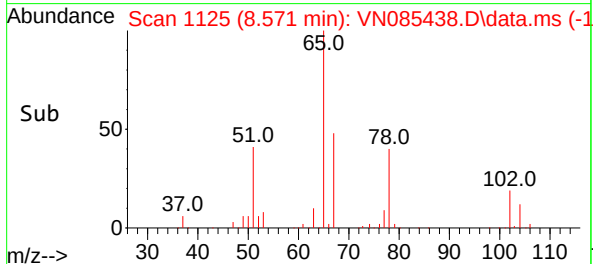
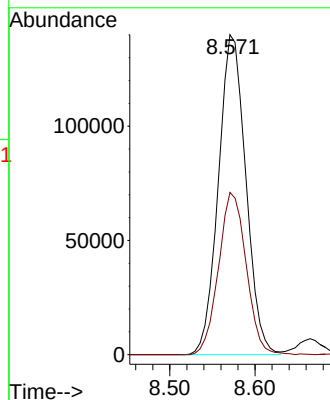
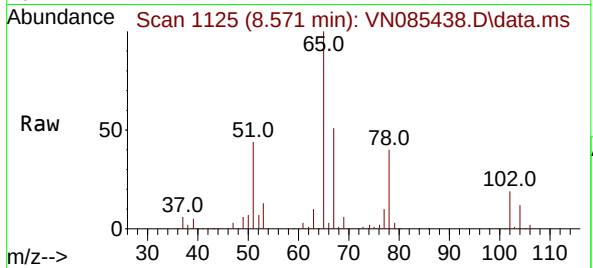




#33  
 1,2-Dichloroethane-d4  
 Concen: 95.899 ug/l  
 RT: 8.571 min Scan# 1125  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

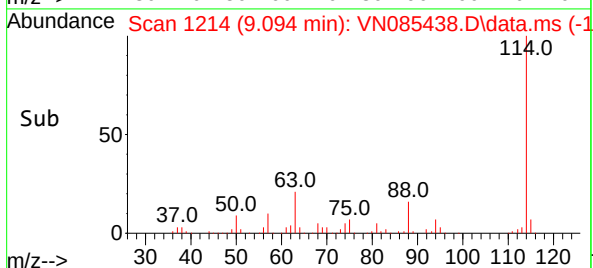
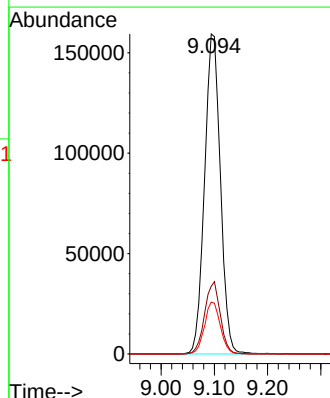
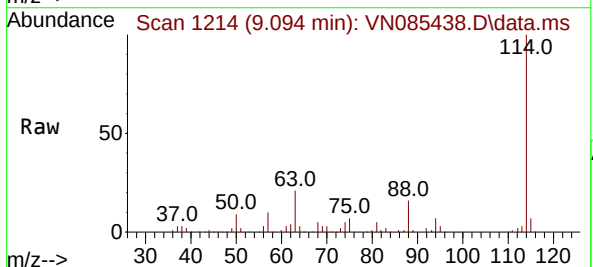
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

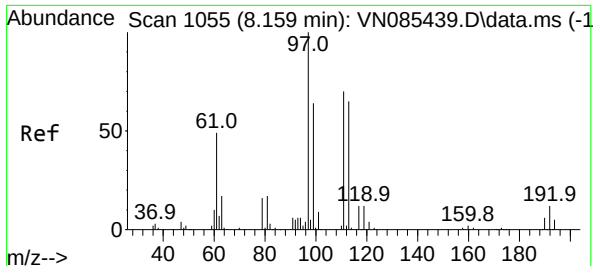
Tgt Ion: 65 Resp: 313645  
 Ion Ratio Lower Upper  
 65 100  
 67 51.1 0.0 101.6



#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

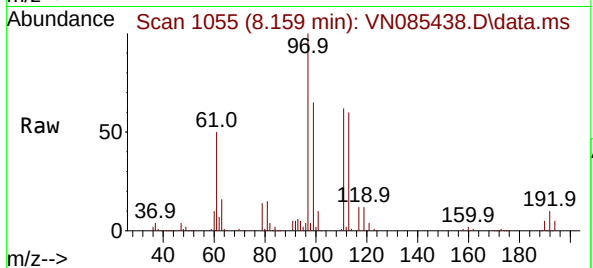
Tgt Ion: 114 Resp: 329363  
 Ion Ratio Lower Upper  
 114 100  
 63 21.2 0.0 47.6  
 88 16.2 0.0 32.6



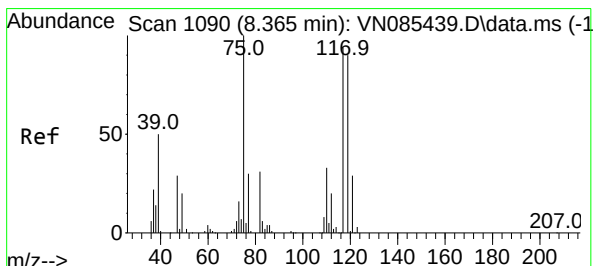
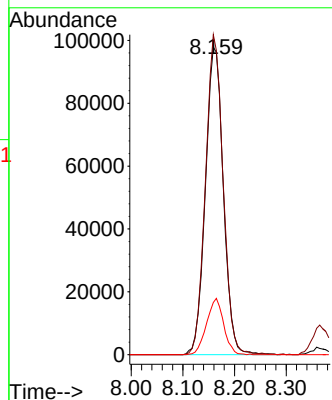
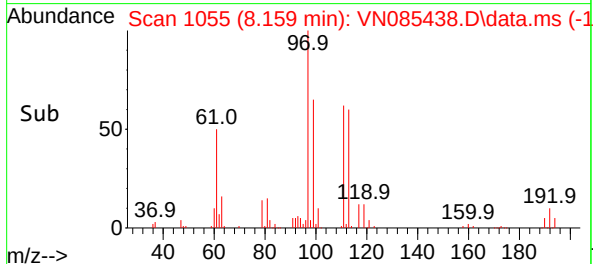


#35  
Dibromofluoromethane  
Concen: 103.353 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

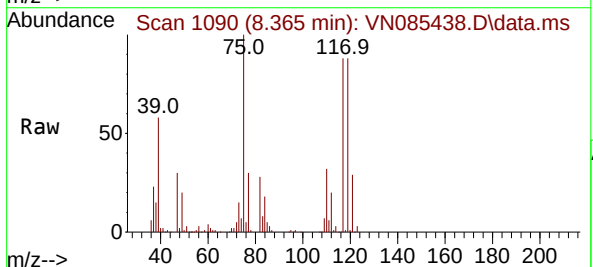
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100



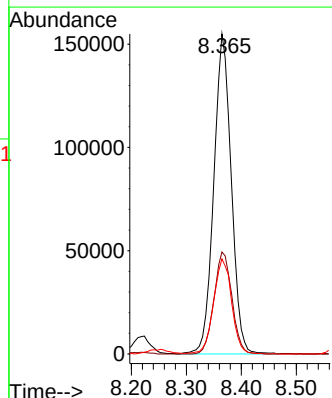
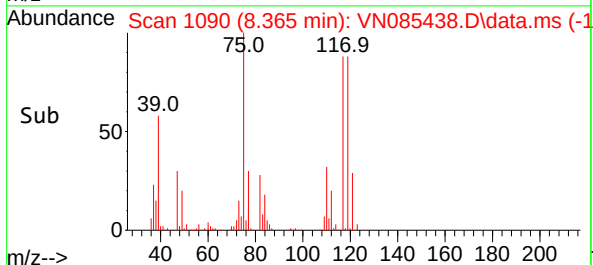
Tgt Ion:113 Resp: 236159  
Ion Ratio Lower Upper  
113 100  
111 102.3 82.7 124.1  
192 17.4 14.3 21.5

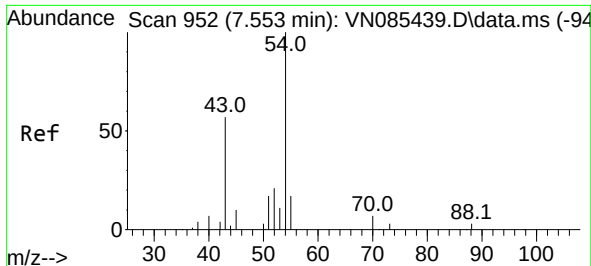


#36  
1,1-Dichloropropene  
Concen: 106.945 ug/l  
RT: 8.365 min Scan# 1090  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56



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

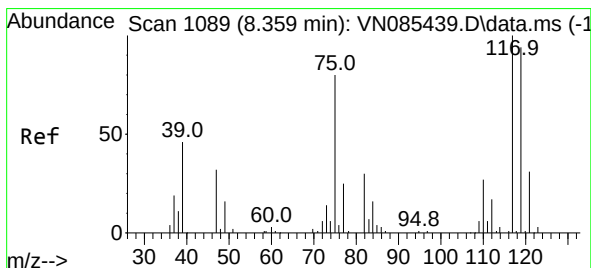
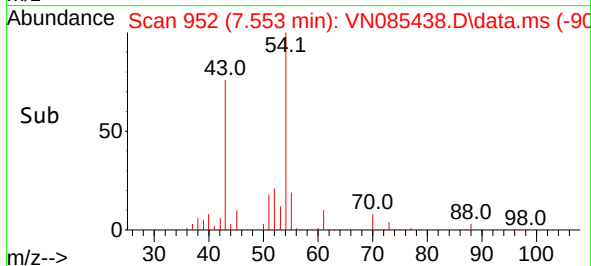
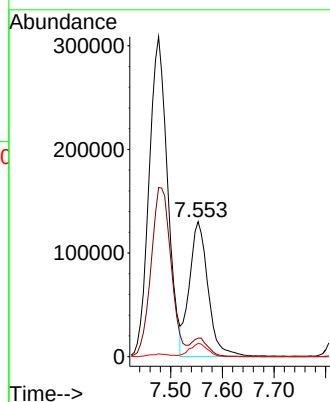
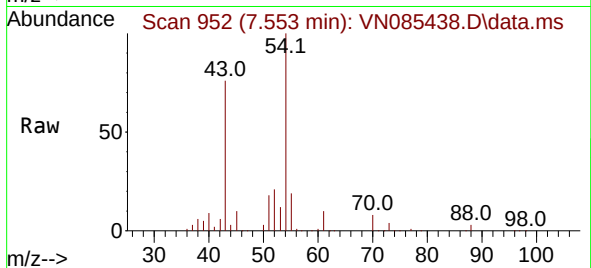
Tgt Ion: 43 Resp: 326802

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

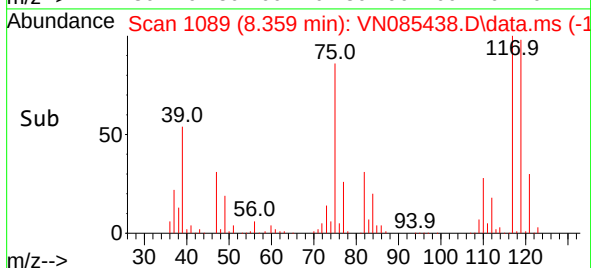
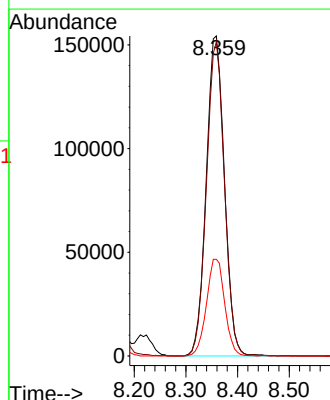
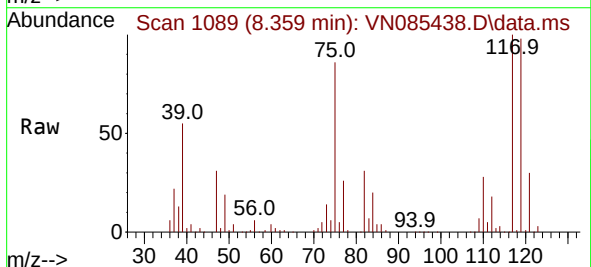
Tgt Ion: 117 Resp: 378390

Ion Ratio Lower Upper

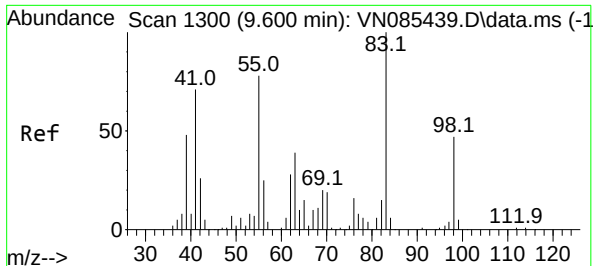
117 100

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# 1129

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC100

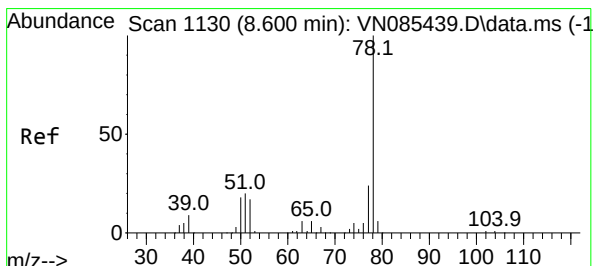
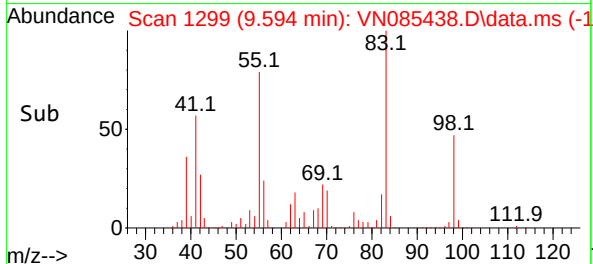
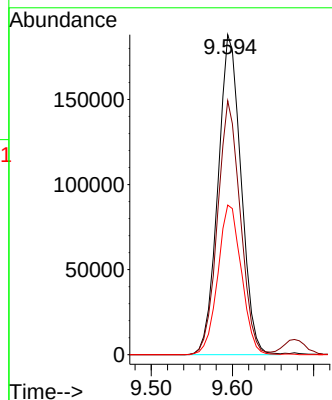
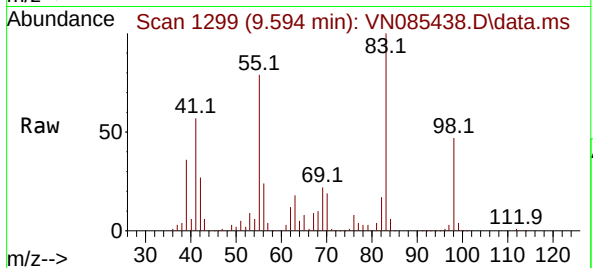
Tgt Ion: 83 Resp: 371734

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

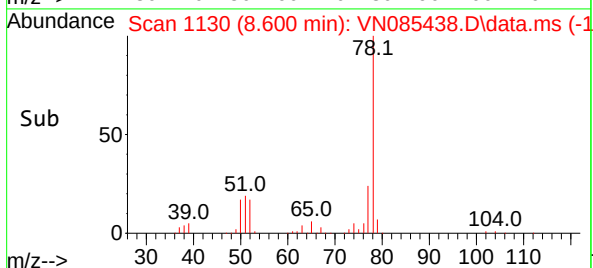
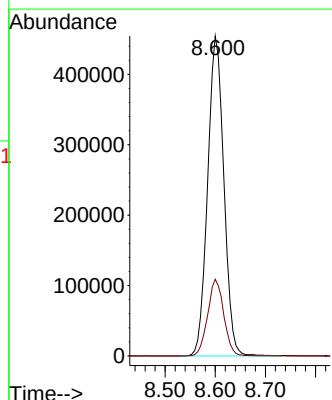
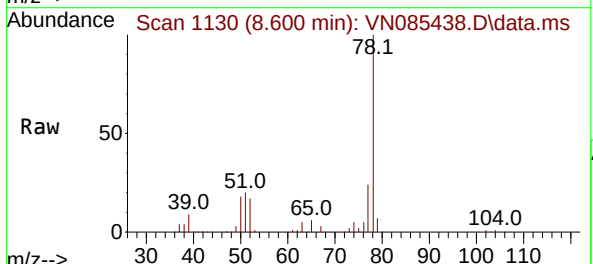
Acq: 14 Jan 2025 14:56

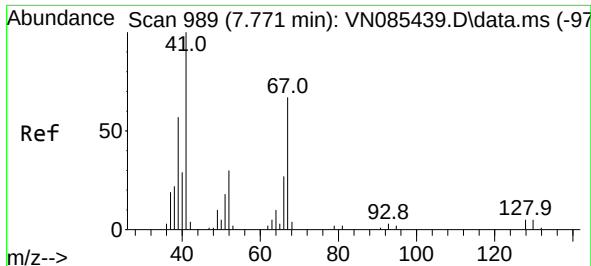
Tgt Ion: 78 Resp: 1021393

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6



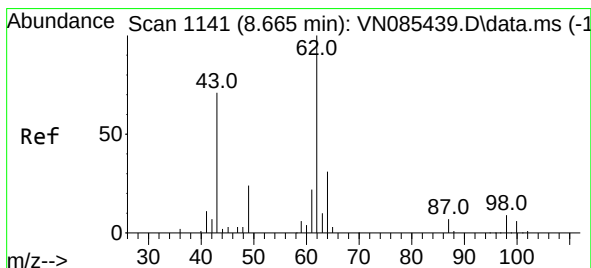
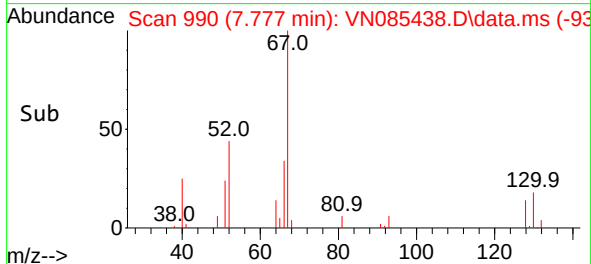
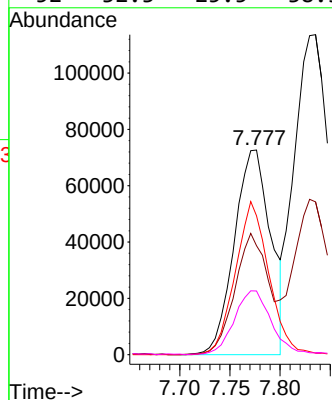
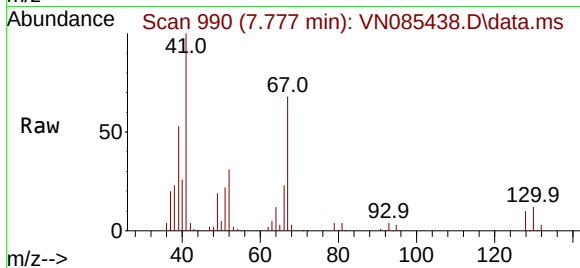


#41  
Methacrylonitrile  
Concen: 109.454 ug/l  
RT: 7.777 min Scan# 911  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 41 Resp: 184326

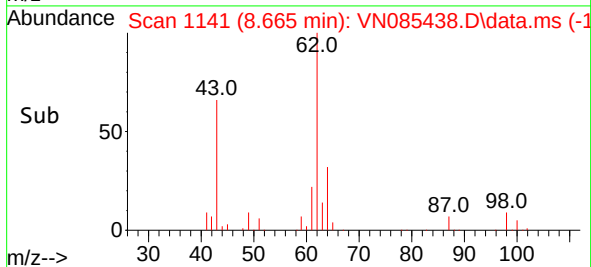
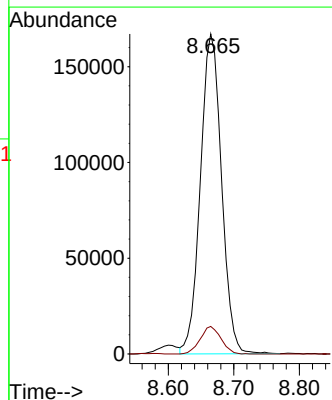
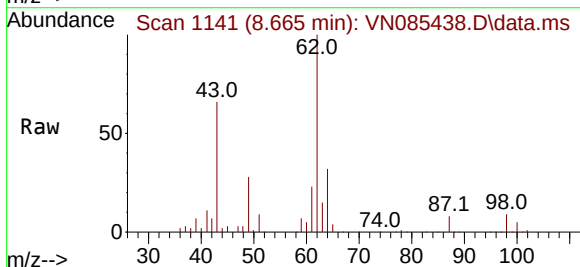
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 39  | 52.8  | 46.0  | 69.0  |
| 67  | 68.8  | 57.4  | 86.2  |
| 52  | 32.3  | 25.5  | 38.3  |

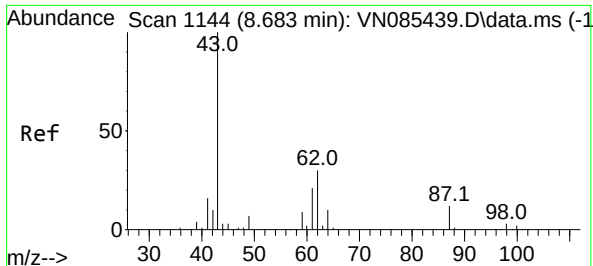


#42  
1,2-Dichloroethane  
Concen: 103.314 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 374938

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

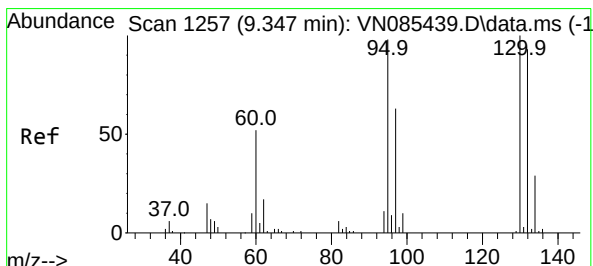
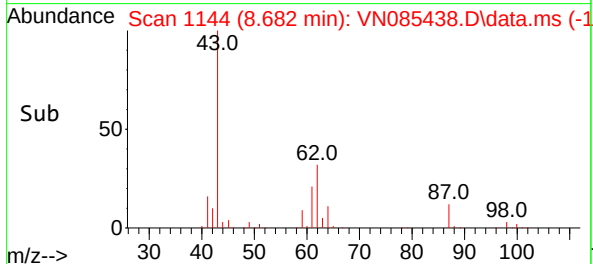
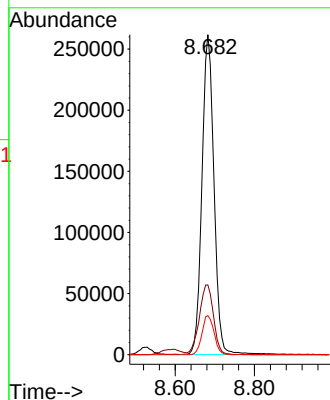
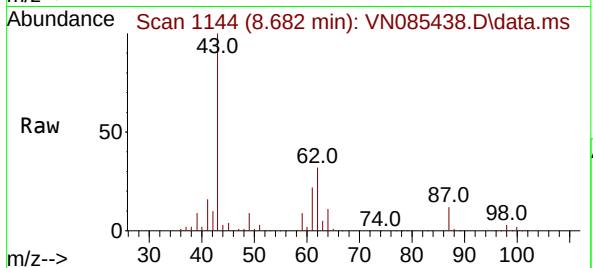




#43  
Isopropyl Acetate  
Concen: 106.035 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

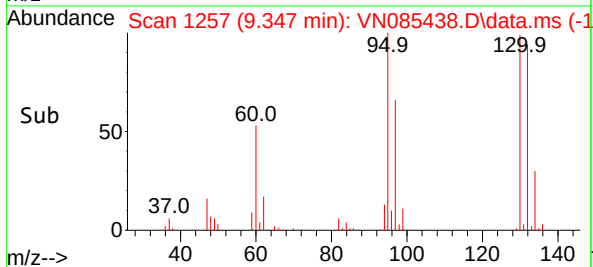
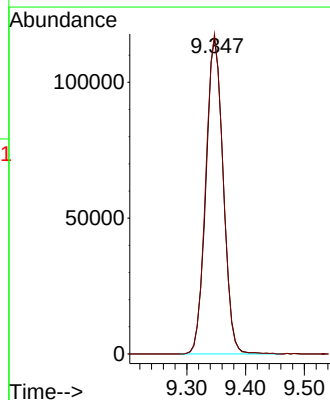
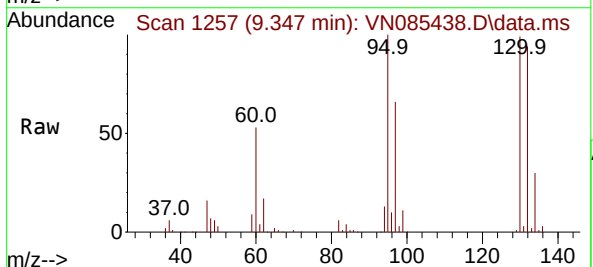
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

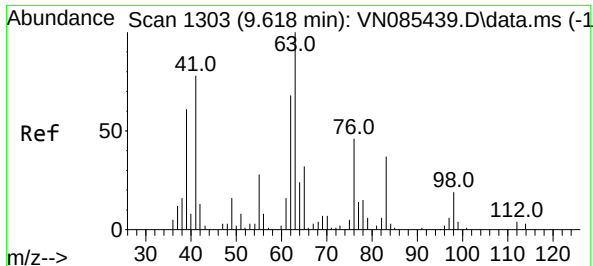
Tgt Ion: 43 Resp: 549969  
Ion Ratio Lower Upper  
43 100  
61 25.7 20.7 31.1  
87 12.2 9.8 14.8



#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

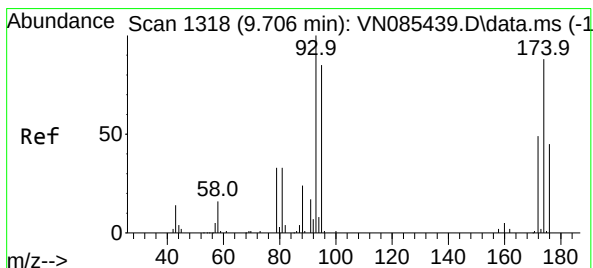
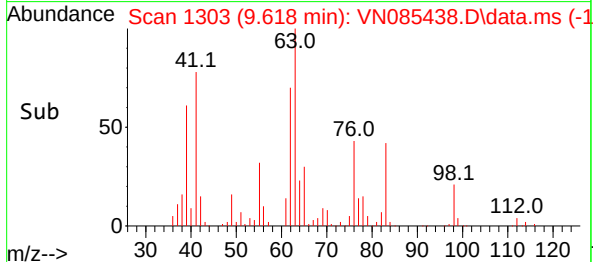
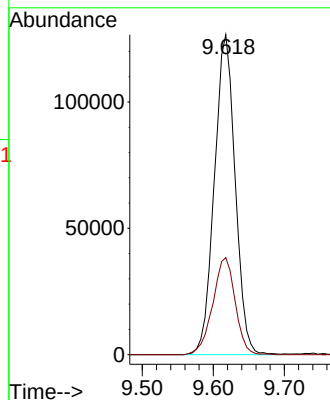
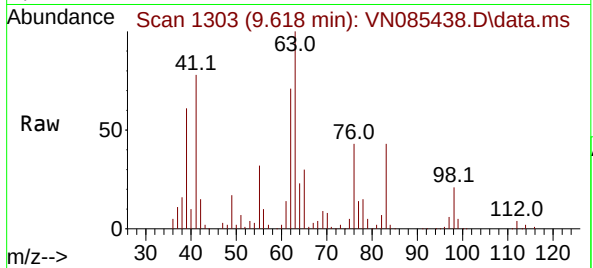




#45  
1,2-Dichloropropane  
Concen: 104.405 ug/l  
RT: 9.618 min Scan# 1303  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

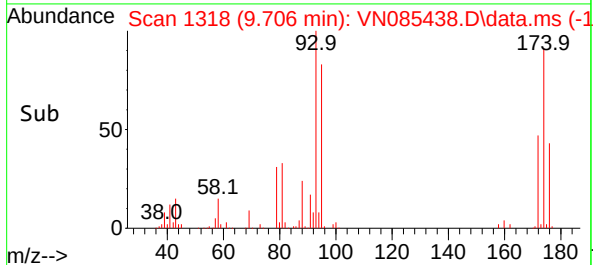
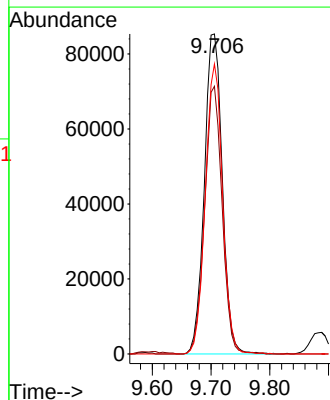
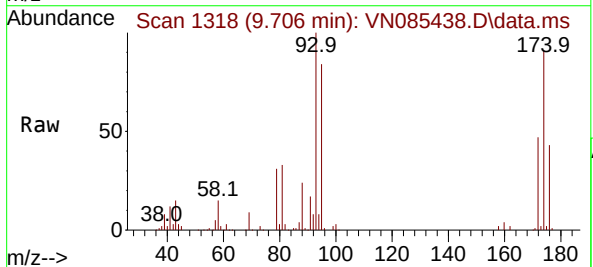
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

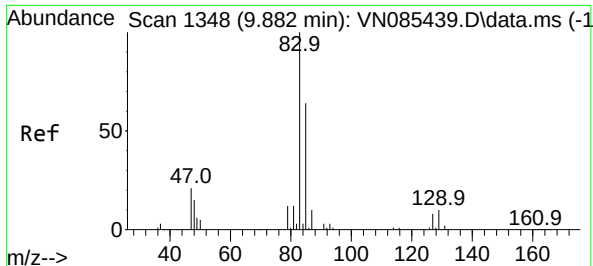
Tgt Ion: 63 Resp: 256964  
Ion Ratio Lower Upper  
63 100  
65 30.3 25.6 38.4



#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

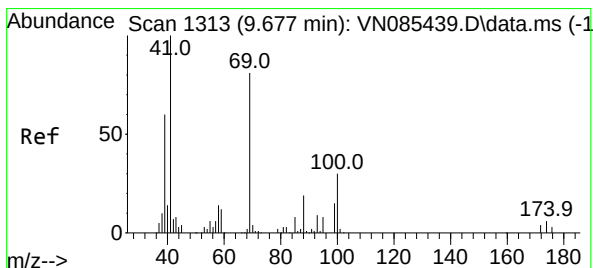
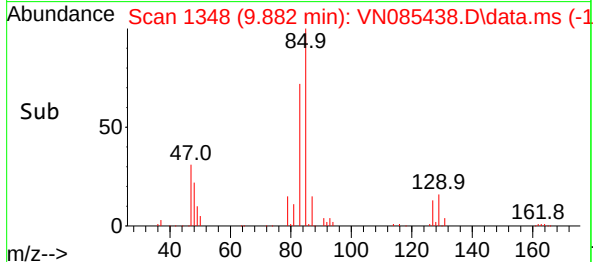
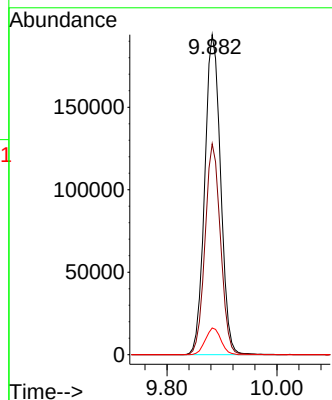
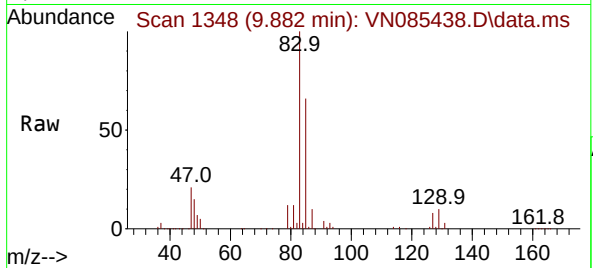




#47  
Bromodichloromethane  
Concen: 107.377 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

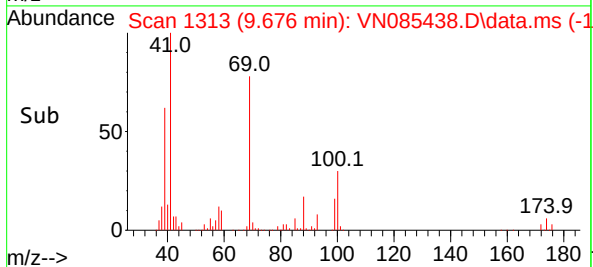
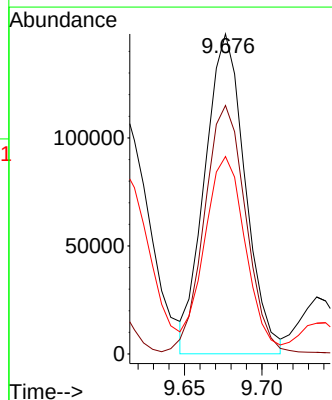
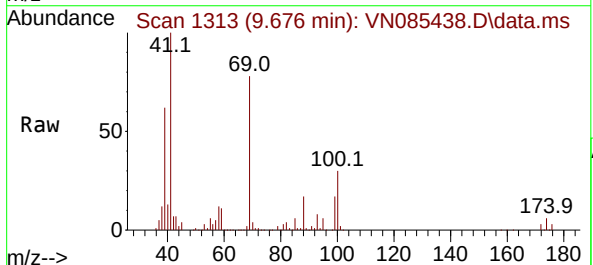
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

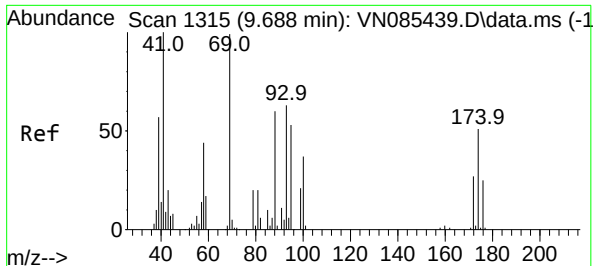
Tgt Ion: 83 Resp: 388499  
Ion Ratio Lower Upper  
83 100  
85 65.9 51.2 76.8  
127 8.4 6.5 9.7



#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

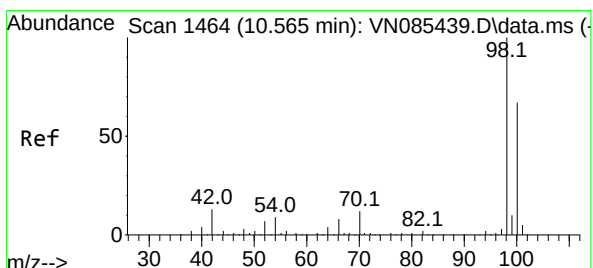
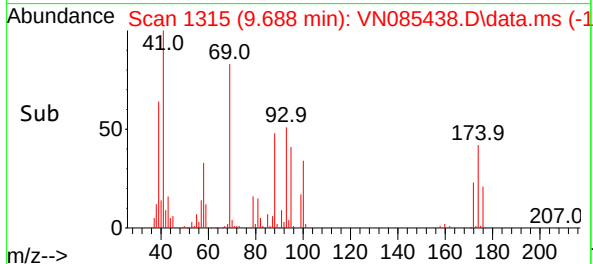
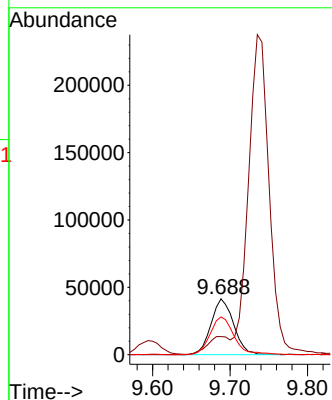
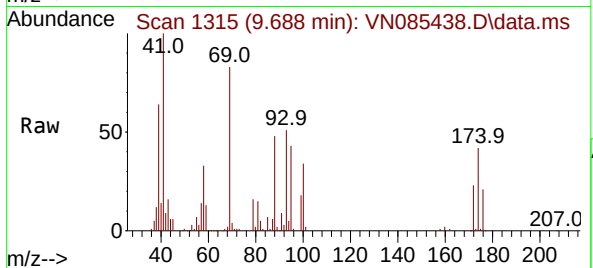




#49  
1,4-Dioxane  
Concen: 2133.992 ug/l  
RT: 9.688 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

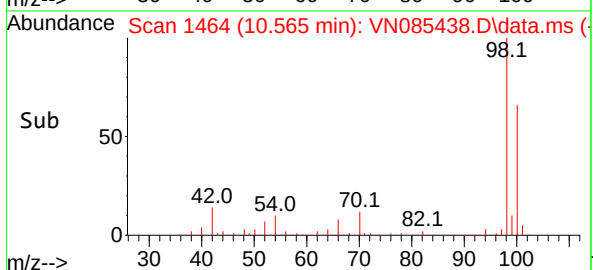
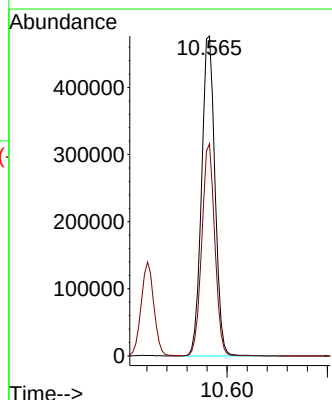
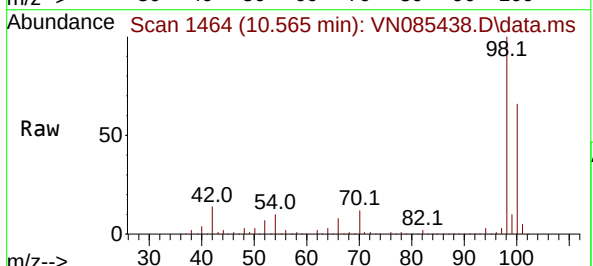
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

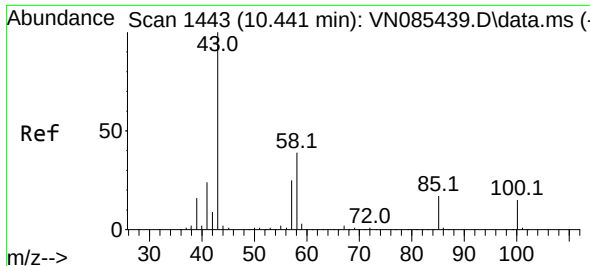
Tgt Ion: 88 Resp: 83879  
Ion Ratio Lower Upper  
88 100  
43 31.3 26.6 39.8  
58 72.1 59.5 89.3



#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 :

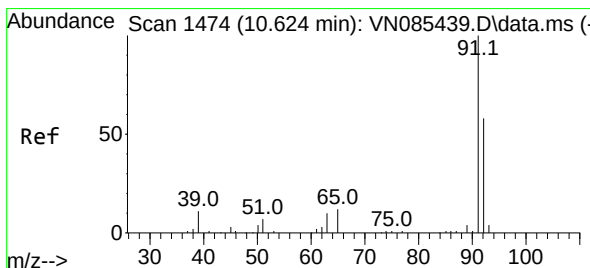
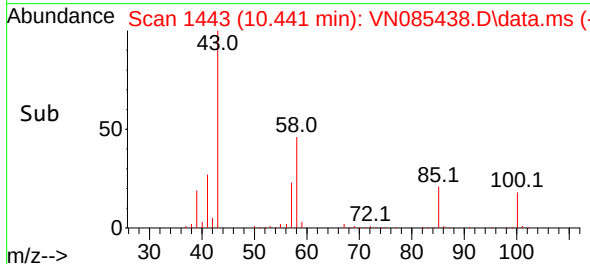
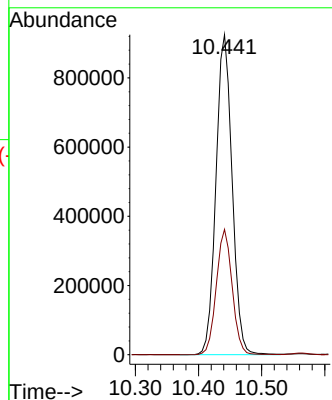
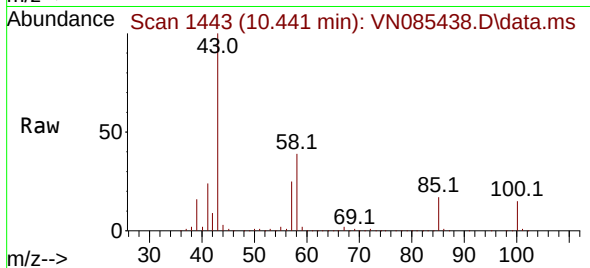
VSTDIC100

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

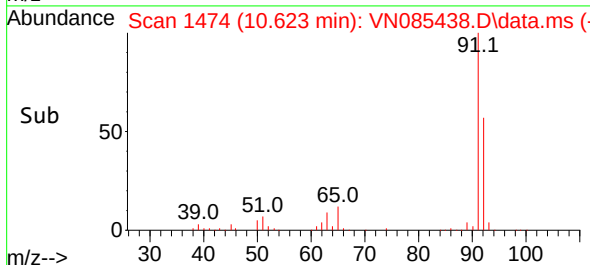
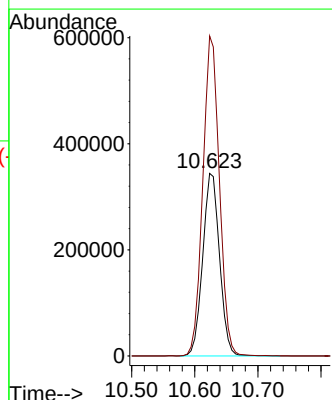
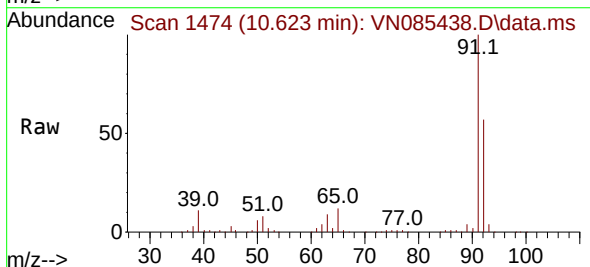
Acq: 14 Jan 2025 14:56

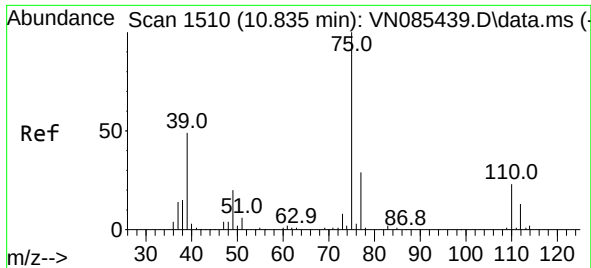
Tgt Ion: 92 Resp: 634743

Ion Ratio Lower Upper

92 100

91 173.1 139.2 208.8

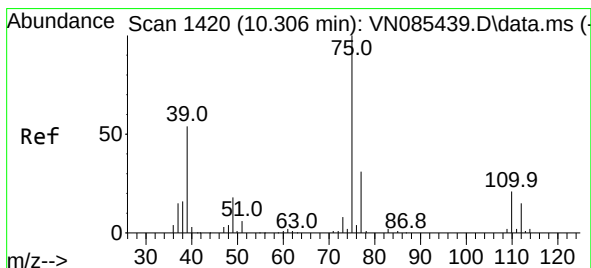
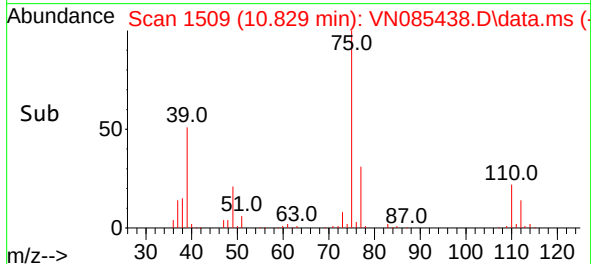
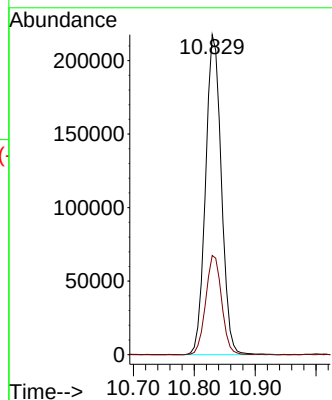
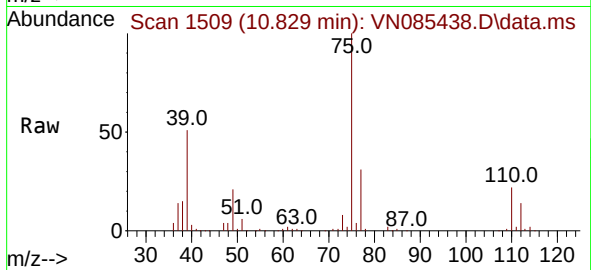




#53  
 t-1,3-Dichloropropene  
 Concen: 114.424 ug/l  
 RT: 10.829 min Scan# 1509  
 Delta R.T. -0.006 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

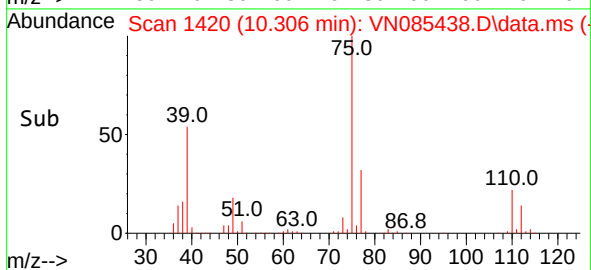
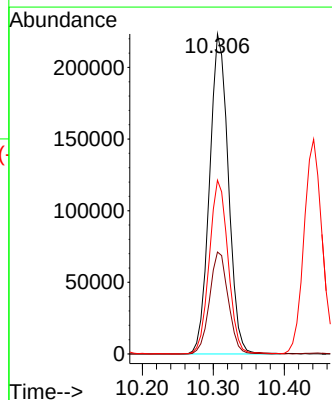
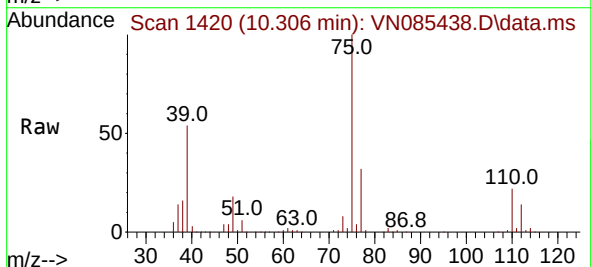
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Tgt Ion: 75 Resp: 391238  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 23.5 35.3

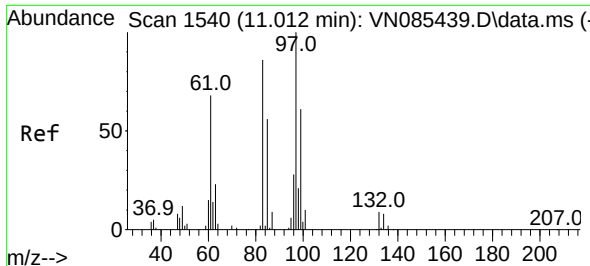


#54  
 cis-1,3-Dichloropropene  
 Concen: 112.369 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

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





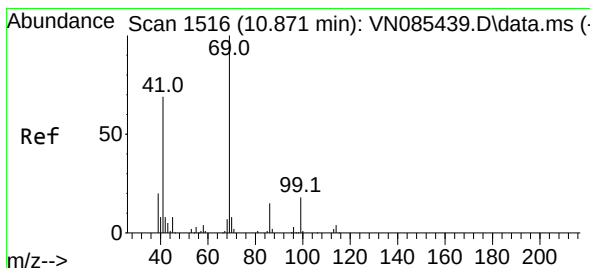
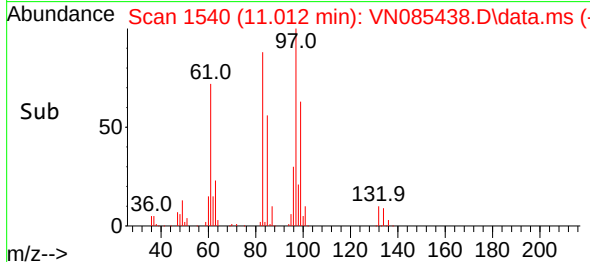
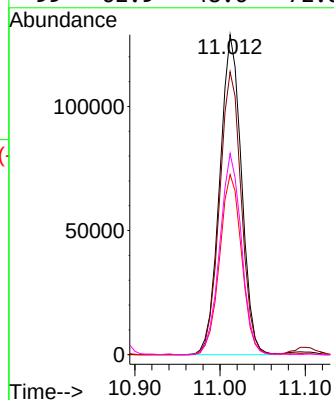
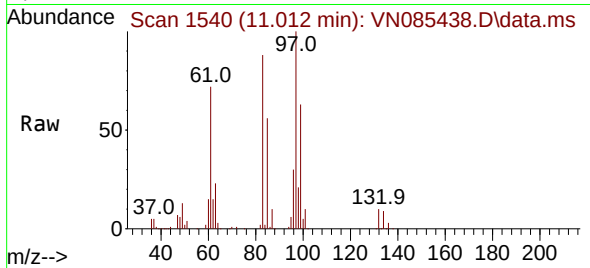


#55  
1,1,2-Trichloroethane  
Concen: 103.879 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

Tgt Ion: 97 Resp: 229522

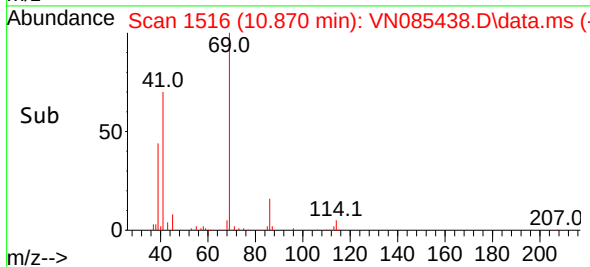
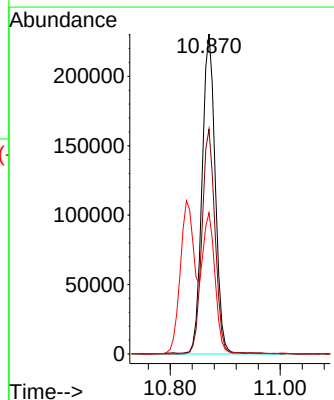
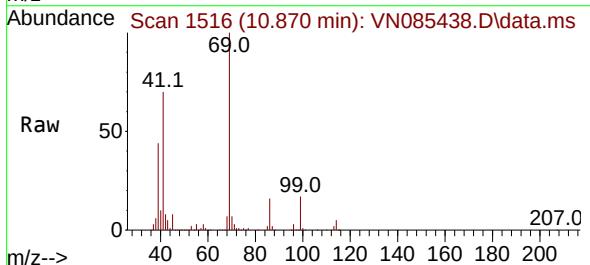
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 88.4  | 69.0  | 103.6 |
| 85  | 56.3  | 44.6  | 66.8  |
| 99  | 62.9  | 48.6  | 72.8  |

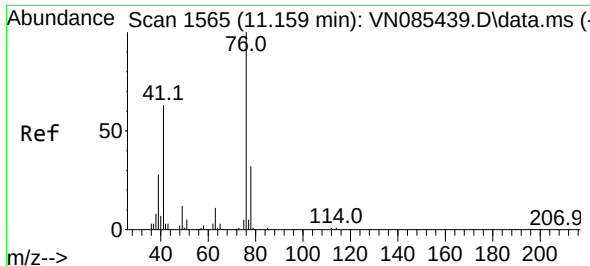


#56  
Ethyl methacrylate  
Concen: 101.029 ug/l  
RT: 10.870 min Scan# 1516  
Delta R.T. -0.001 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

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# 11

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA\_N

ClientSampleId :

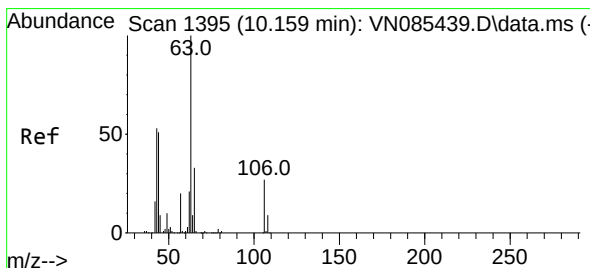
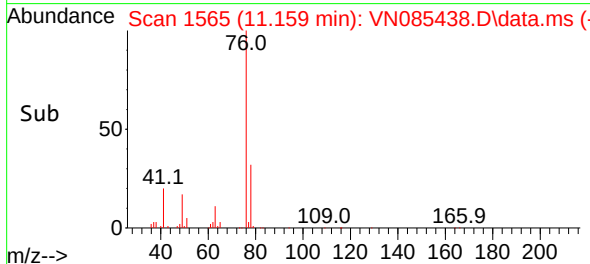
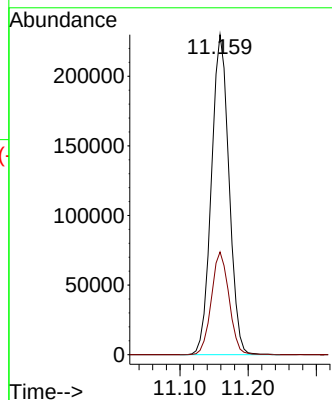
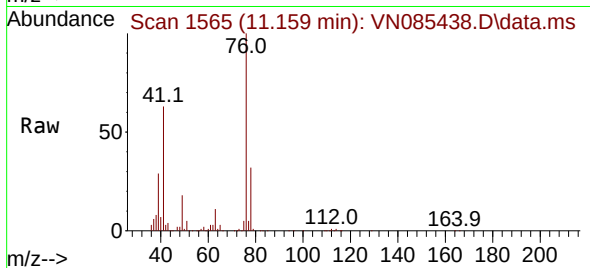
VSTDIC100

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

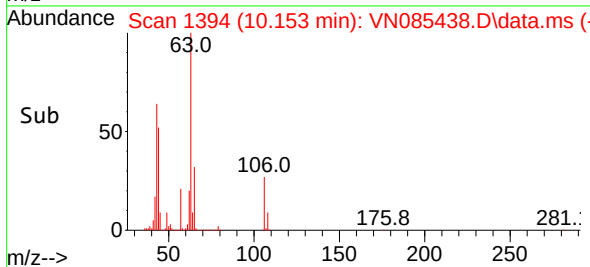
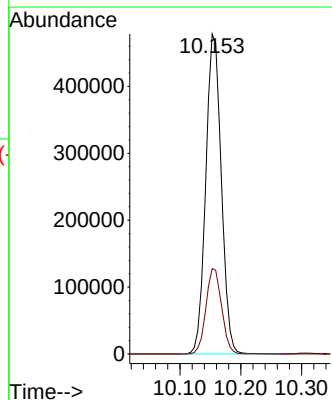
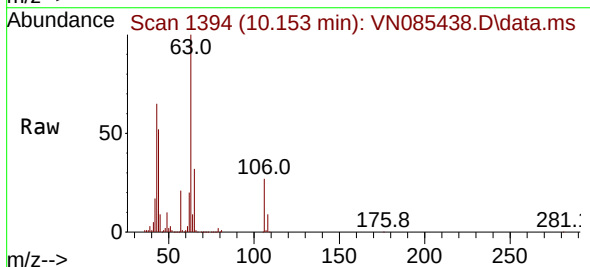
Acq: 14 Jan 2025 14:56

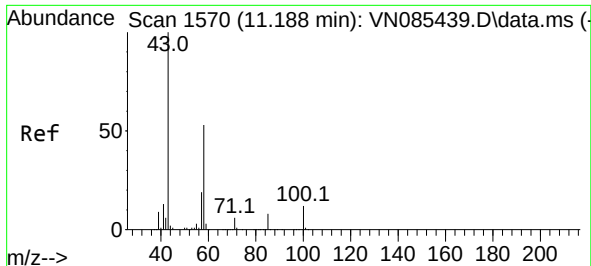
Tgt Ion: 63 Resp: 848636

Ion Ratio Lower Upper

63 100

106 26.8 21.6 32.4

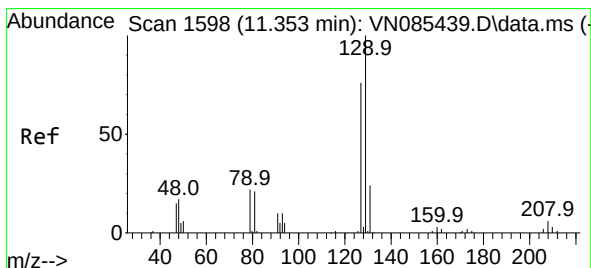
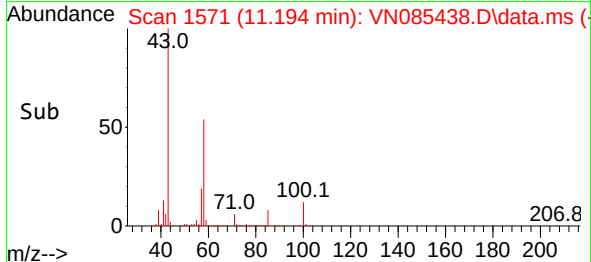
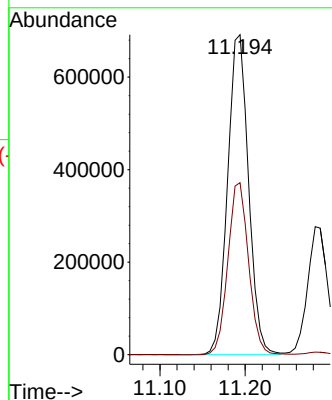
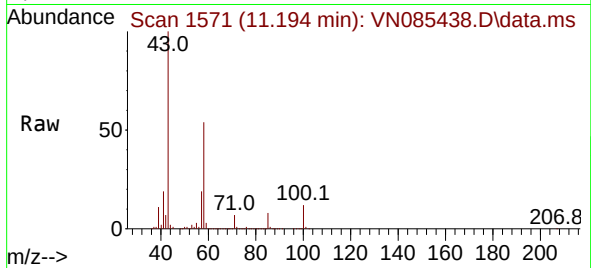




#59  
2-Hexanone  
Concen: 556.643 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

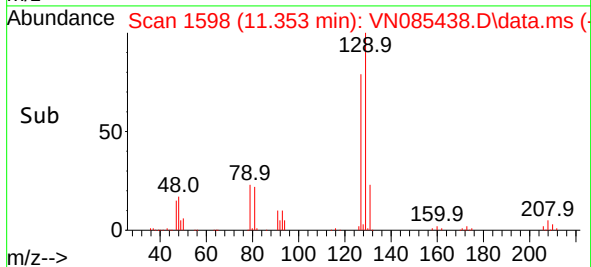
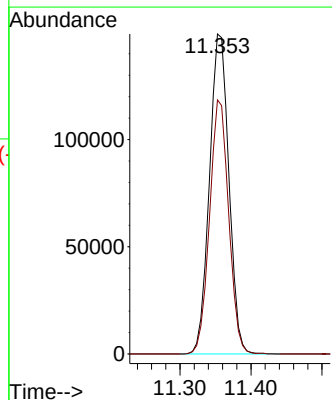
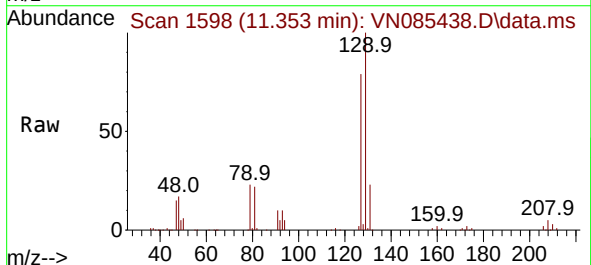
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

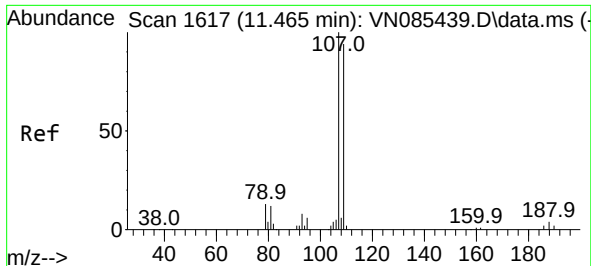
Tgt Ion: 43 Resp: 1178831  
Ion Ratio Lower Upper  
43 100  
58 53.2 26.2 78.6



#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

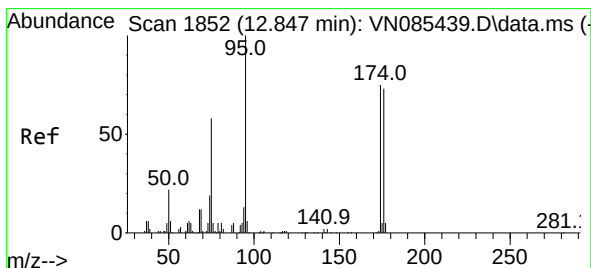
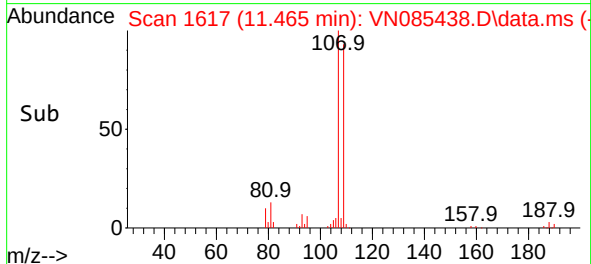
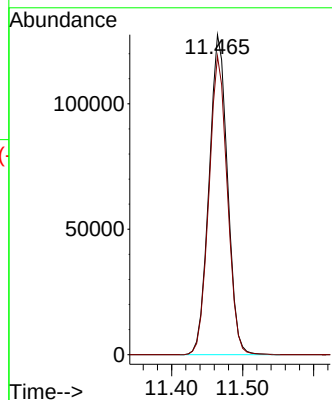
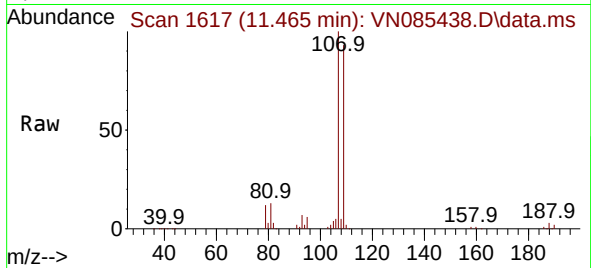




#61  
1,2-Dibromoethane  
Concen: 104.623 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

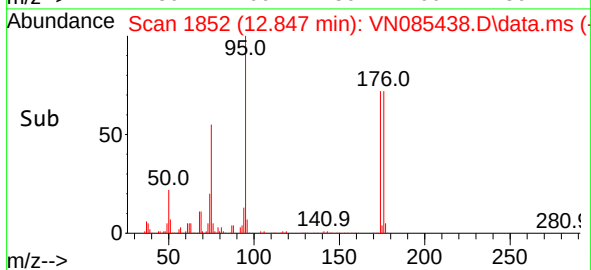
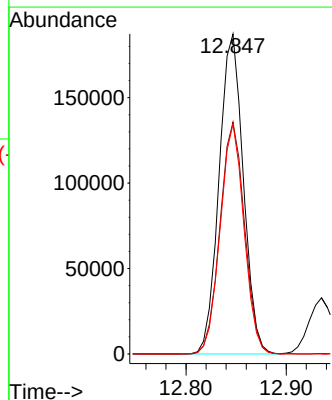
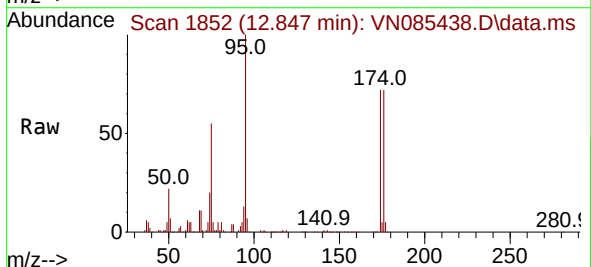
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

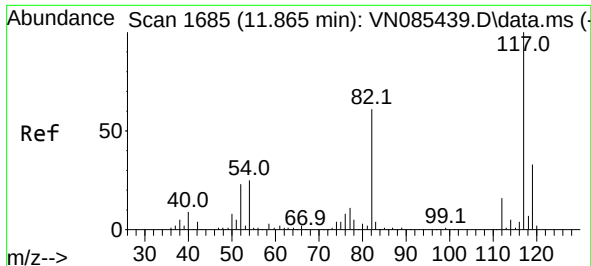
Tgt Ion:107 Resp: 230104  
Ion Ratio Lower Upper  
107 100  
109 93.1 75.9 113.9



#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

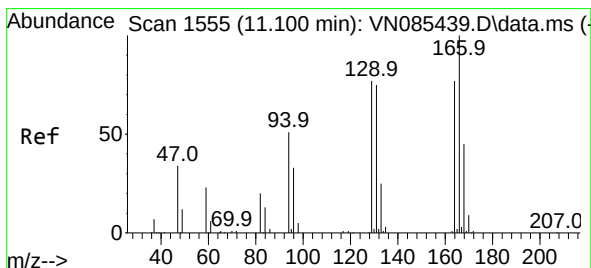
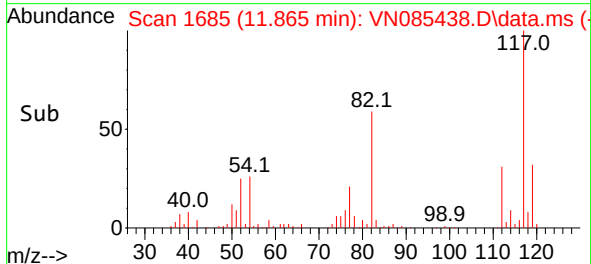
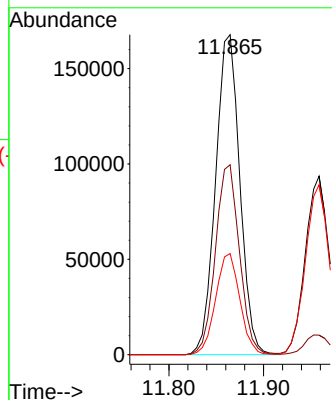
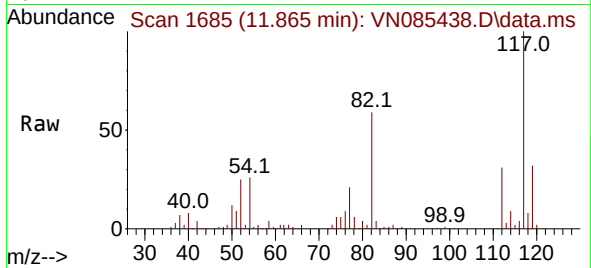




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

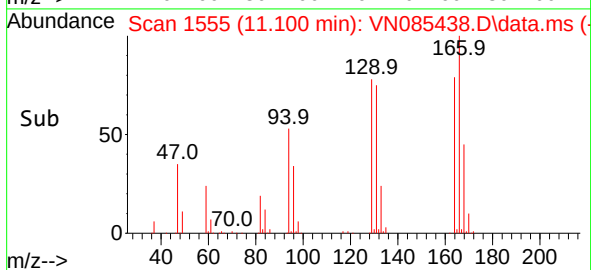
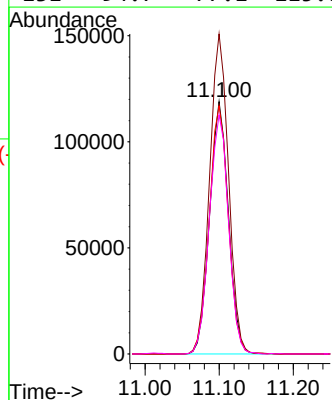
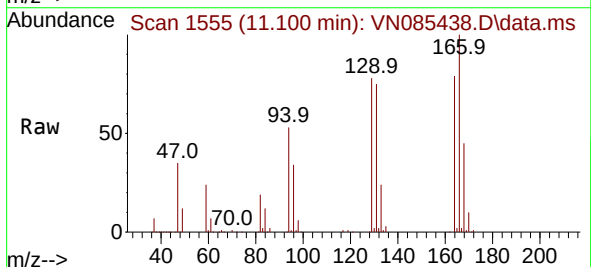
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

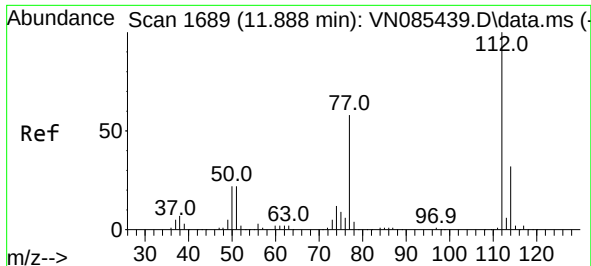
Tgt Ion:117 Resp: 298938  
Ion Ratio Lower Upper  
117 100  
82 59.3 48.6 72.8  
119 31.6 26.6 39.8



#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

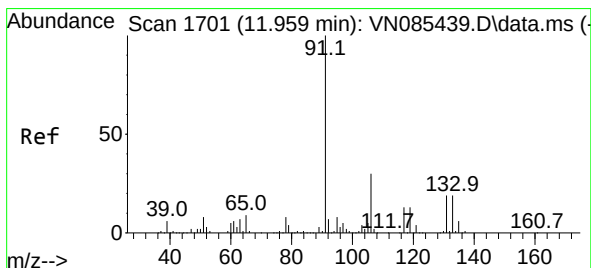
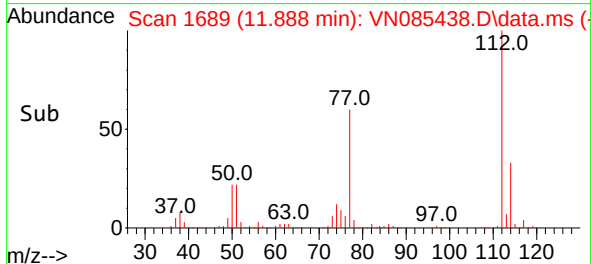
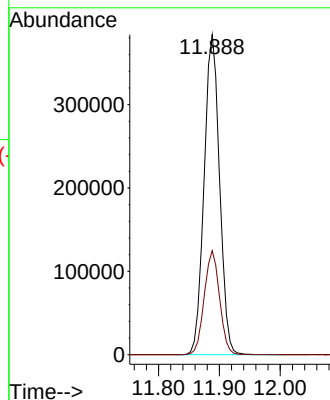
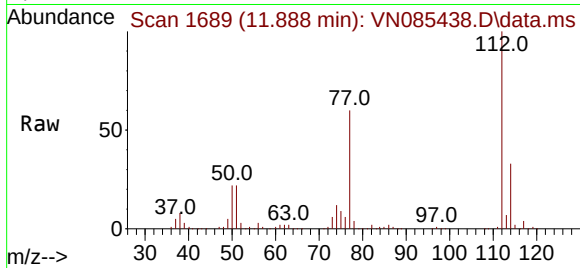




#65  
Chlorobenzene  
Concen: 103.482 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

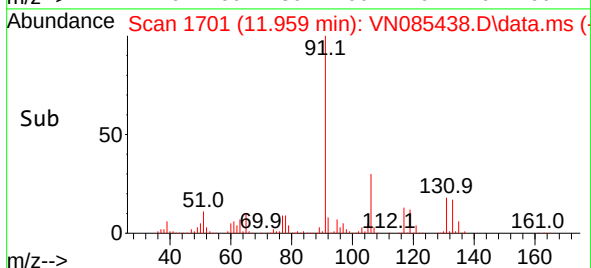
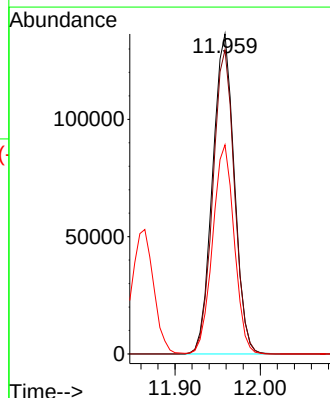
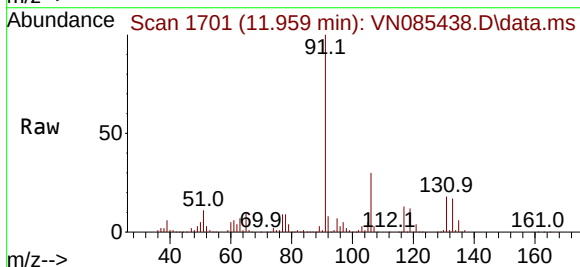
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

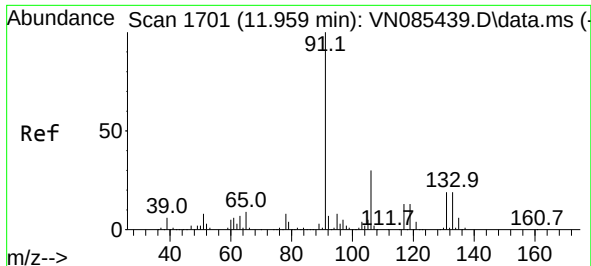
Tgt Ion:112 Resp: 677679  
Ion Ratio Lower Upper  
112 100  
114 32.5 25.3 37.9



#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

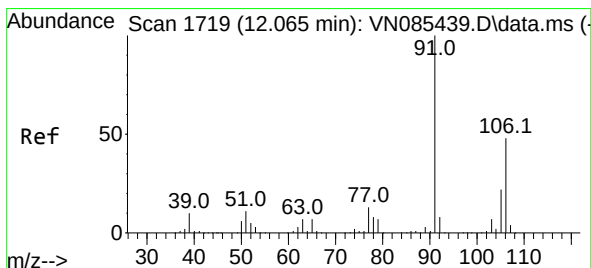
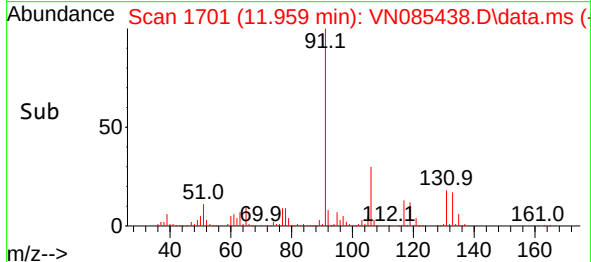
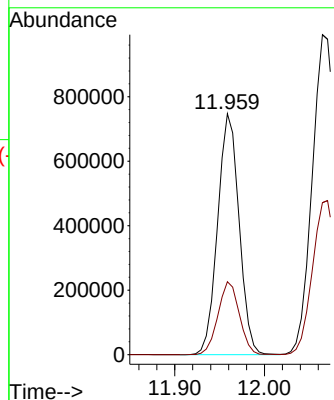
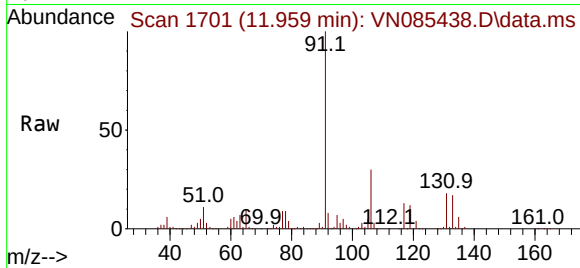




#67  
Ethyl Benzene  
Concen: 116.169 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

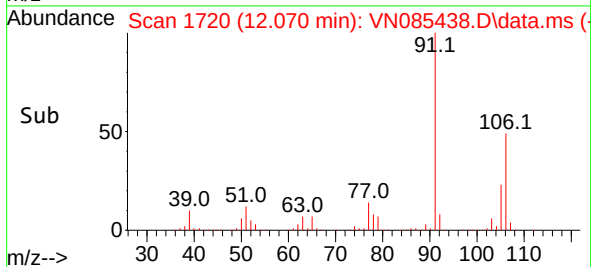
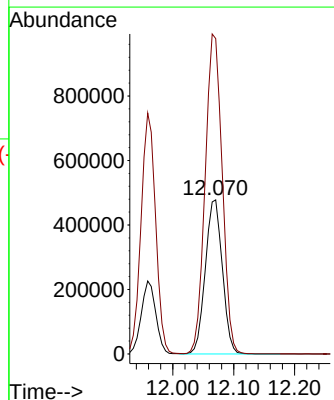
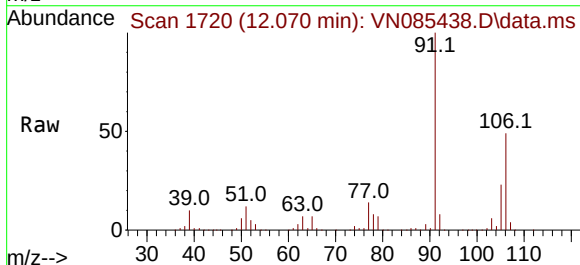
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

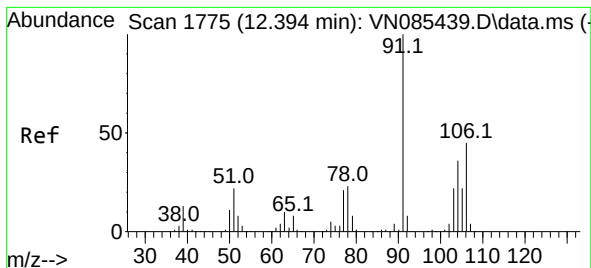
Tgt Ion: 91 Resp: 1239080  
Ion Ratio Lower Upper  
91 100  
106 30.3 23.8 35.8



#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 :

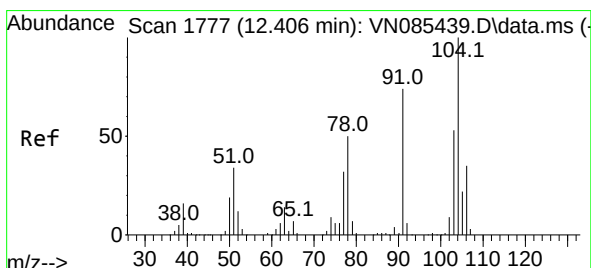
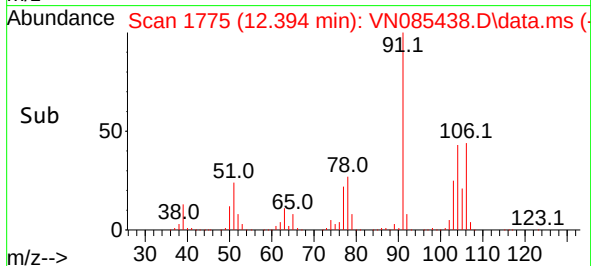
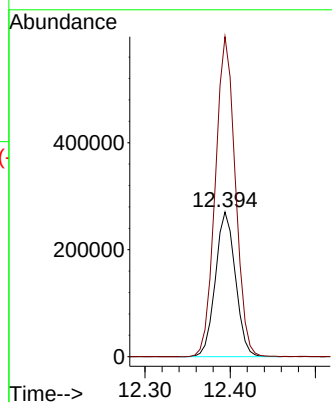
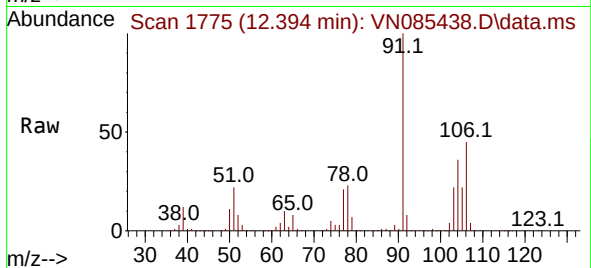
VSTDIC100

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

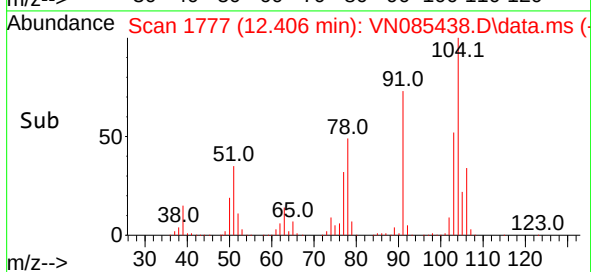
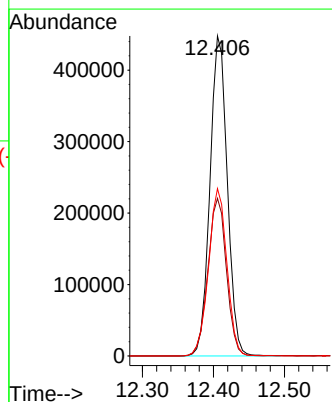
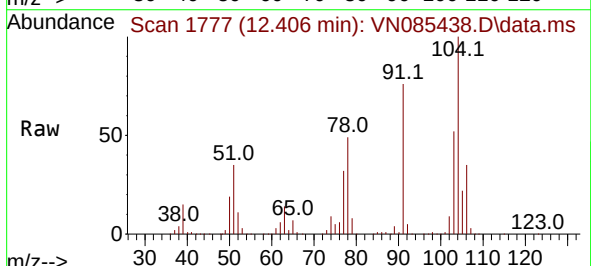
Tgt Ion:104 Resp: 760136

Ion Ratio Lower Upper

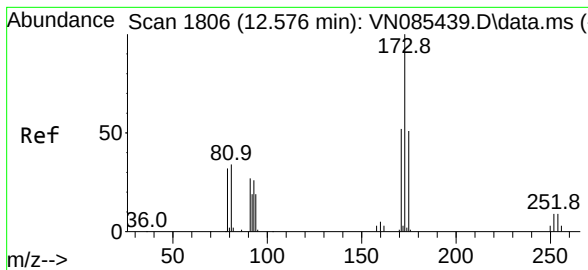
104 100

78 52.8 42.5 63.7

103 55.3 43.8 65.8



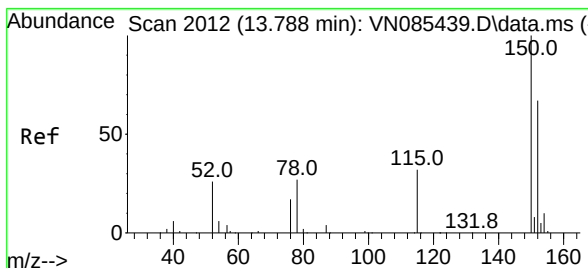
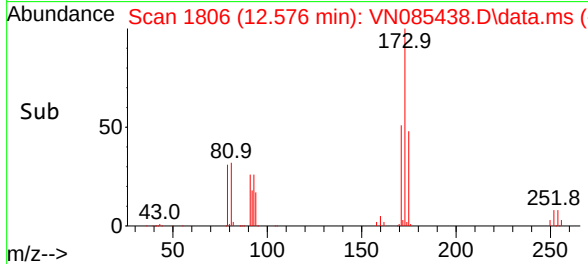
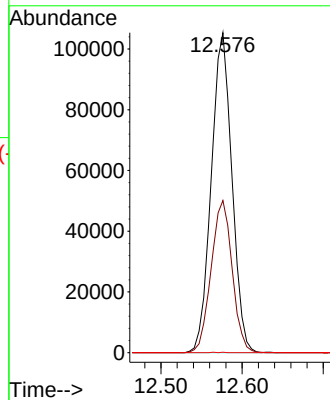
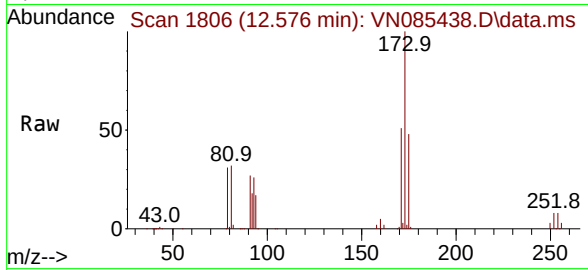




#71  
Bromoform  
Concen: 108.227 ug/l  
RT: 12.576 min Scan# 1806  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

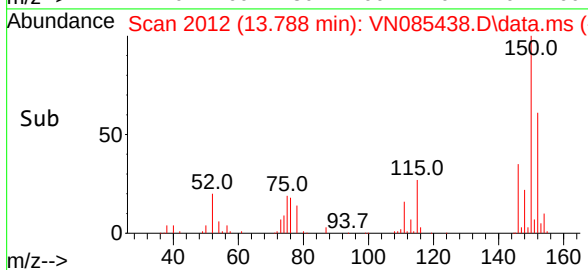
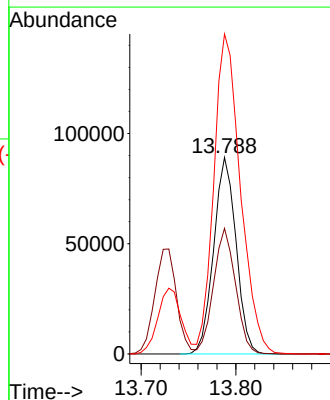
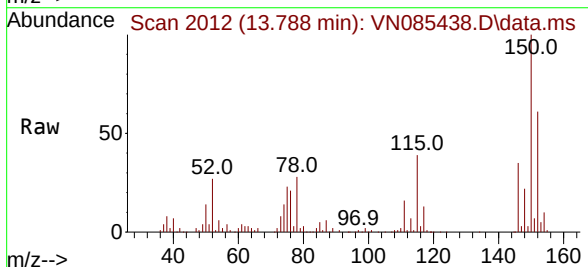
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

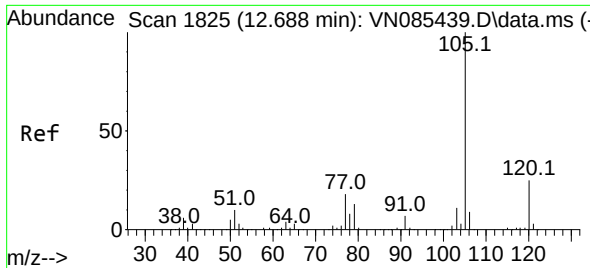
Tgt Ion:173 Resp: 186124  
Ion Ratio Lower Upper  
173 100  
175 48.4 24.4 73.2  
254 0.1 0.0 0.0#



#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

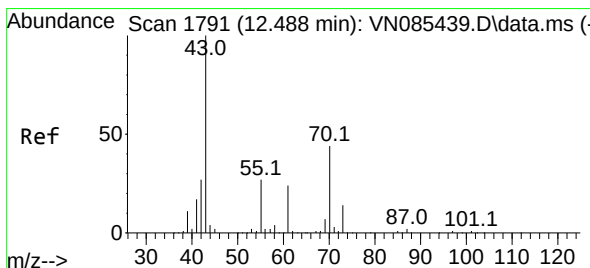
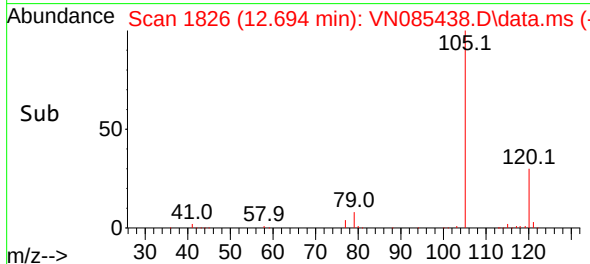
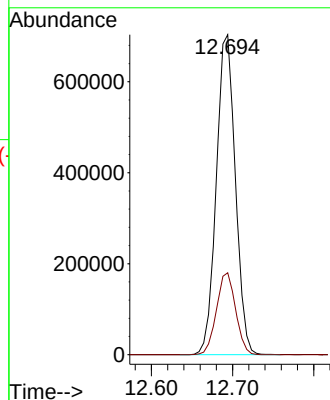
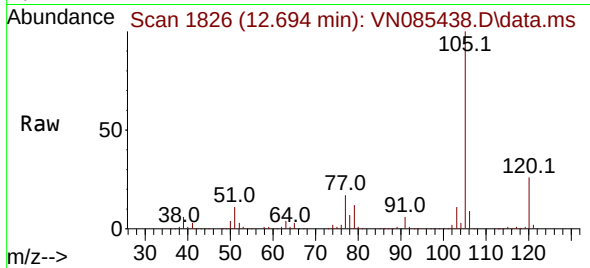




#73  
Isopropylbenzene  
Concen: 116.221 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

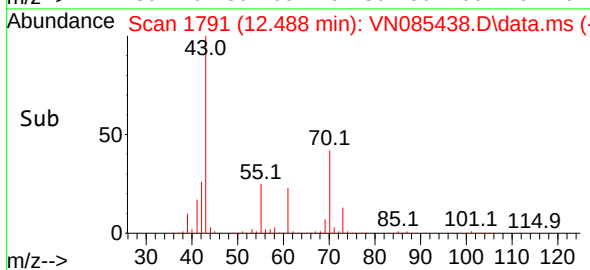
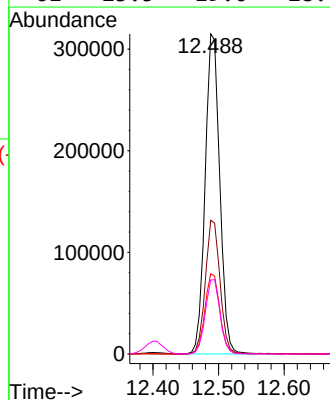
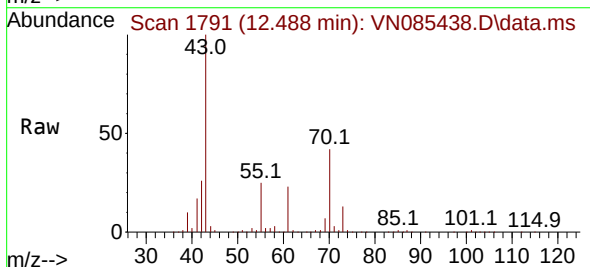
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

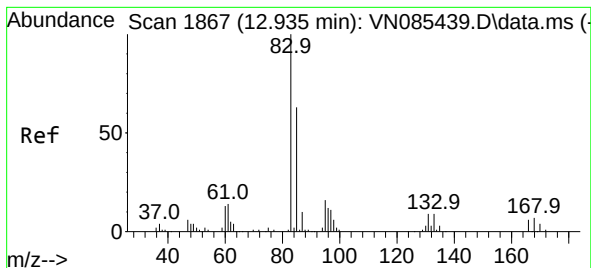
Tgt Ion:105 Resp: 1146752  
Ion Ratio Lower Upper  
105 100  
120 25.7 12.8 38.3



#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

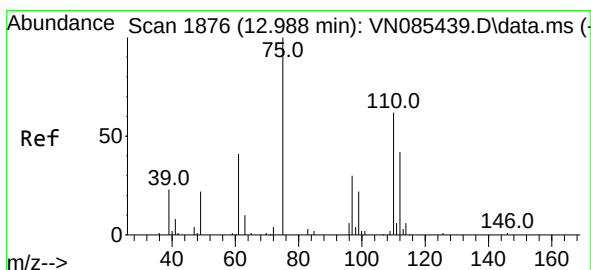
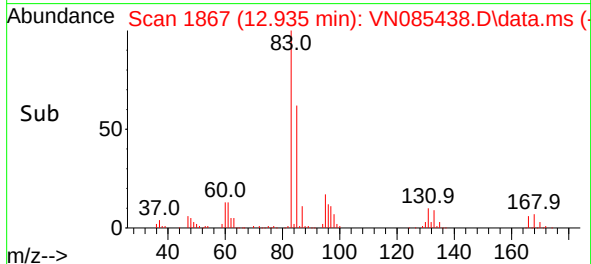
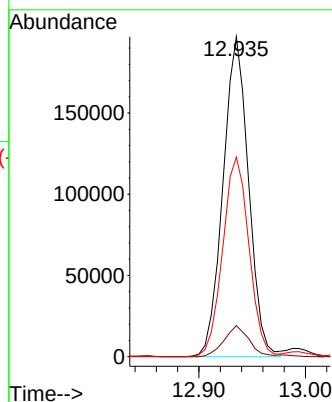
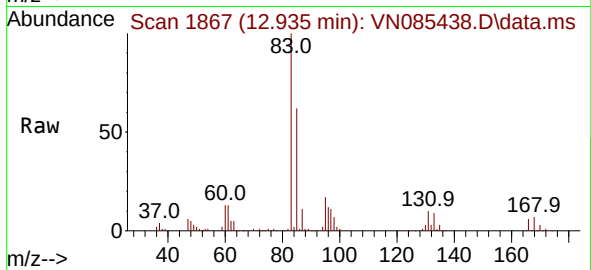
Tgt Ion: 83 Resp: 327767

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

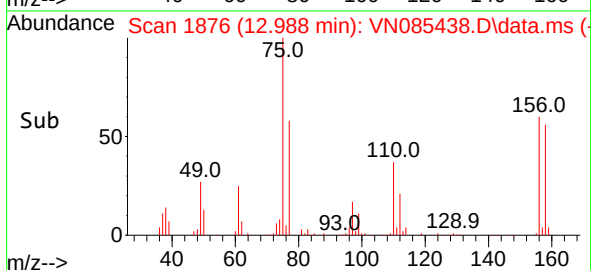
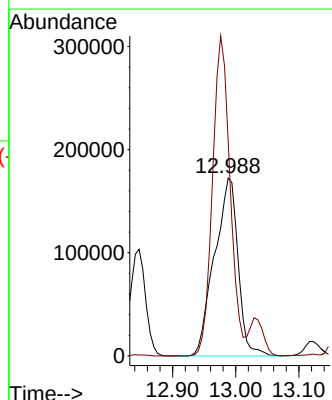
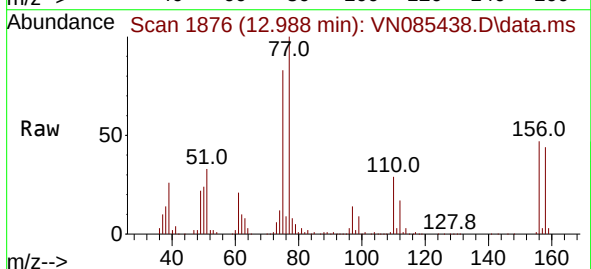
Acq: 14 Jan 2025 14:56

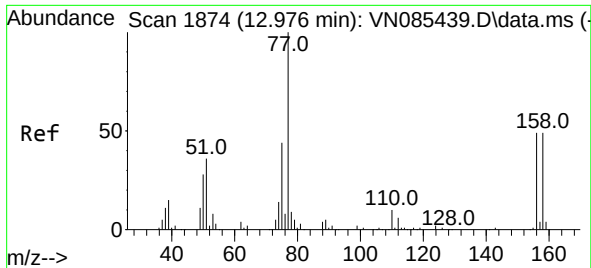
Tgt Ion: 75 Resp: 446237

Ion Ratio Lower Upper

75 100

77 133.9 109.7 329.2

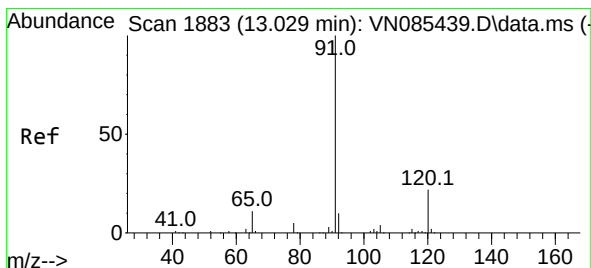
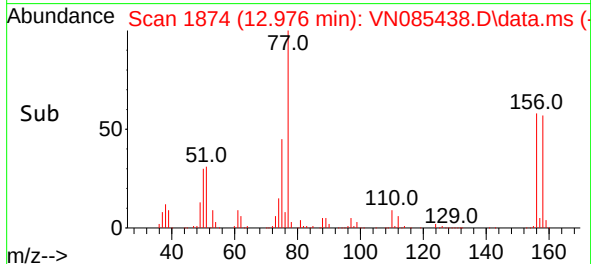
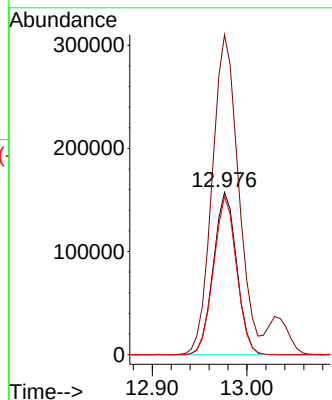
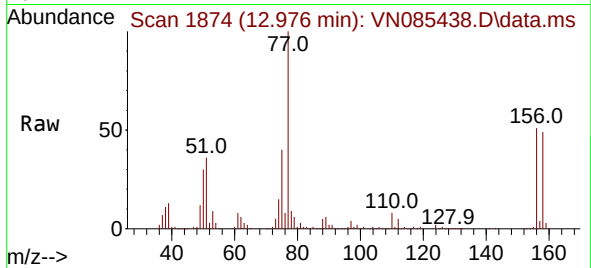




#77  
Bromobenzene  
Concen: 104.200 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

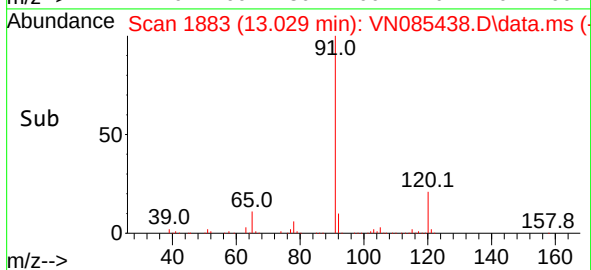
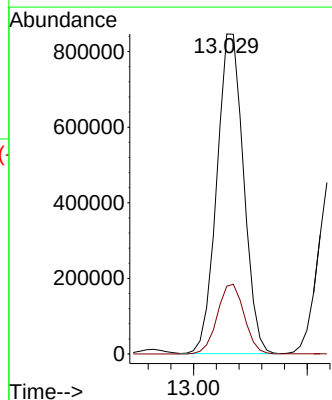
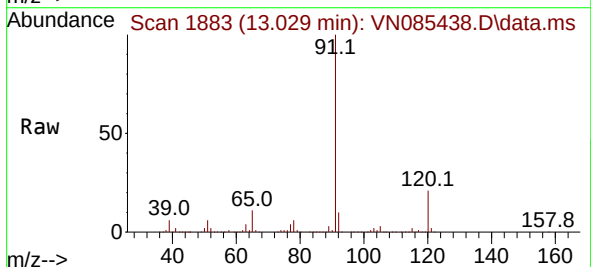
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

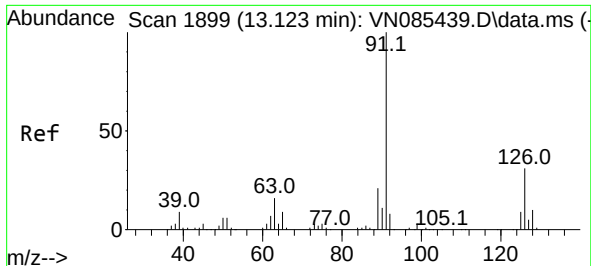
Tgt Ion:156 Resp: 268616  
Ion Ratio Lower Upper  
156 100  
77 222.4 114.1 342.4  
158 96.3 48.9 146.8



#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

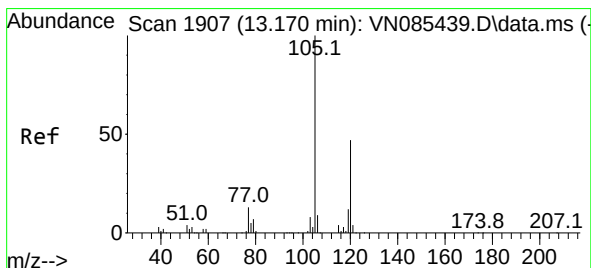
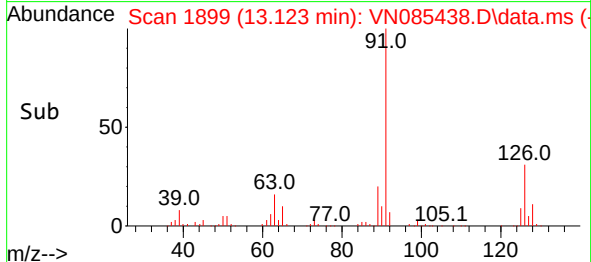
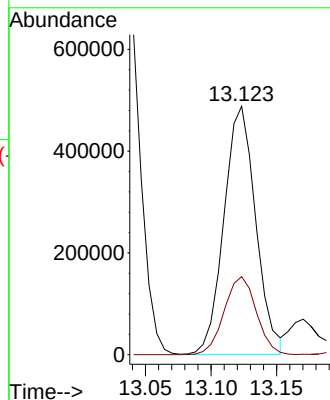
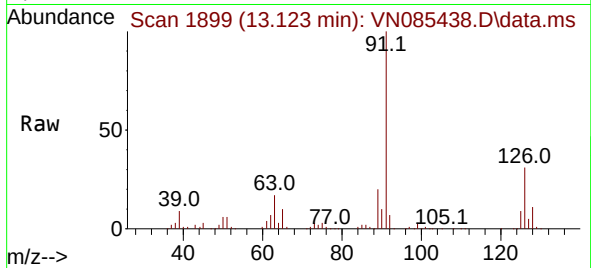




#79  
2-Chlorotoluene  
Concen: 108.767 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

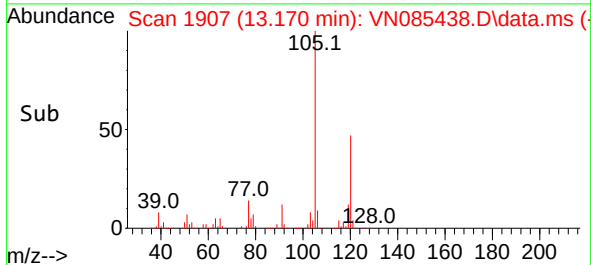
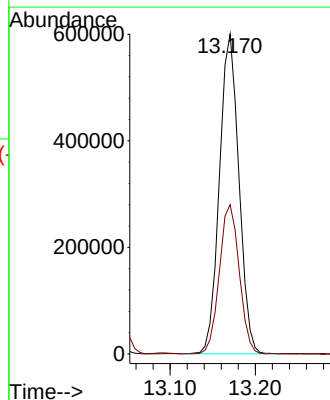
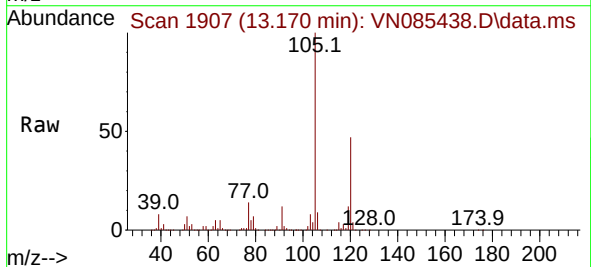
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

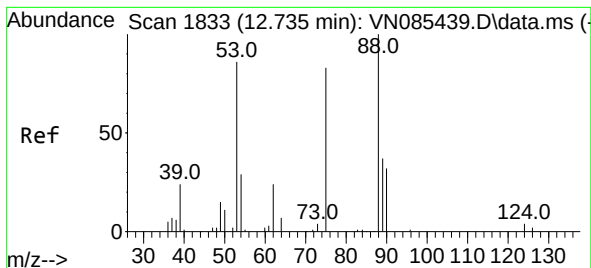
Tgt Ion: 91 Resp: 822258  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.7 47.1



#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

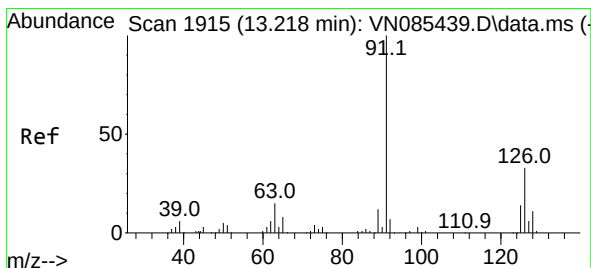
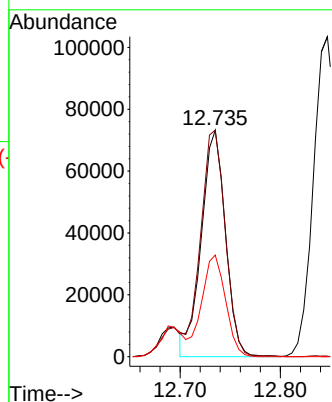
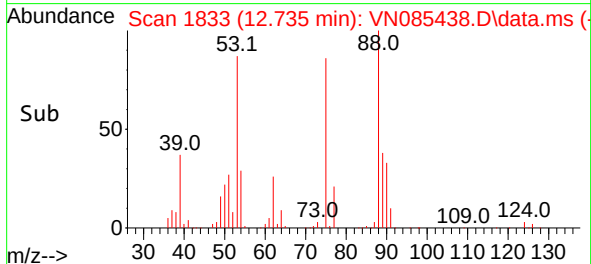
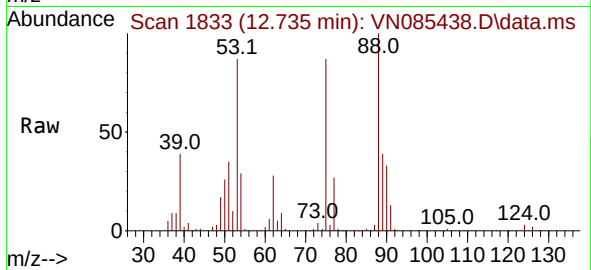




#81  
trans-1,4-Dichloro-2-butene  
Concen: 111.544 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

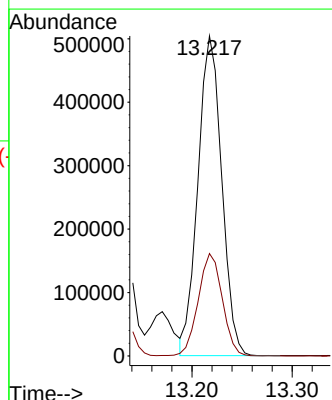
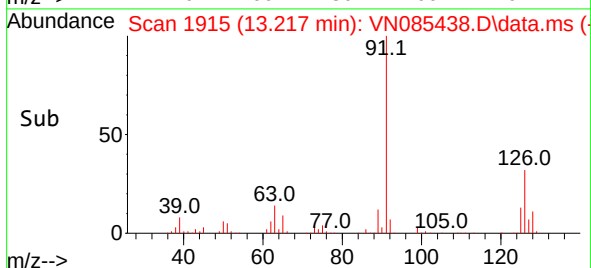
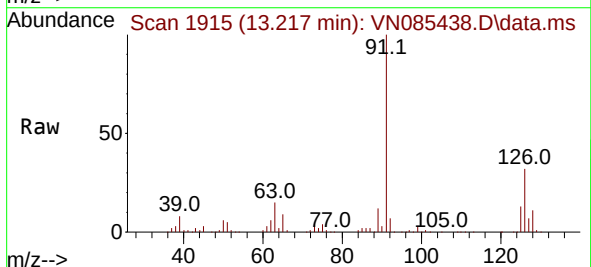
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

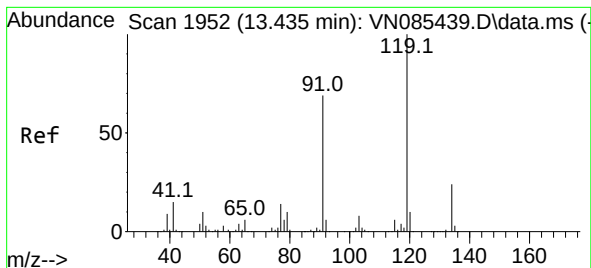
Tgt Ion: 75 Resp: 122508  
Ion Ratio Lower Upper  
75 100  
53 100.9 95.6 143.4  
89 44.4 37.0 55.6



#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

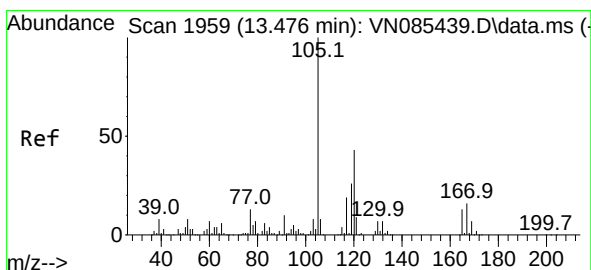
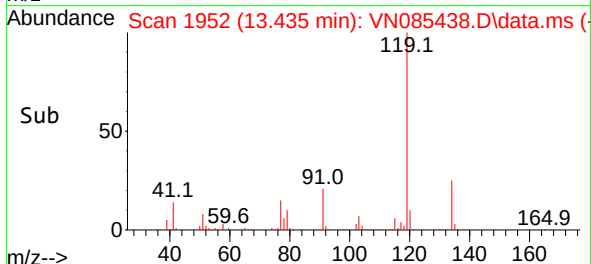
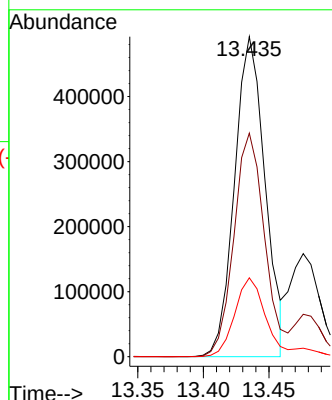
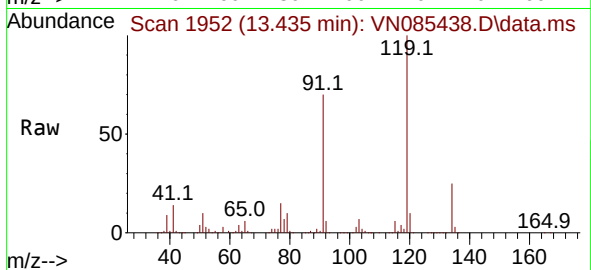
Tgt Ion:119 Resp: 797069

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

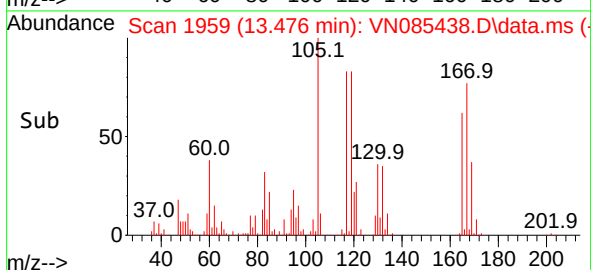
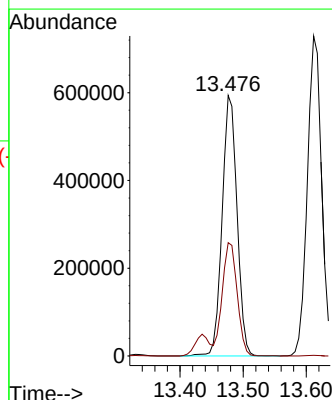
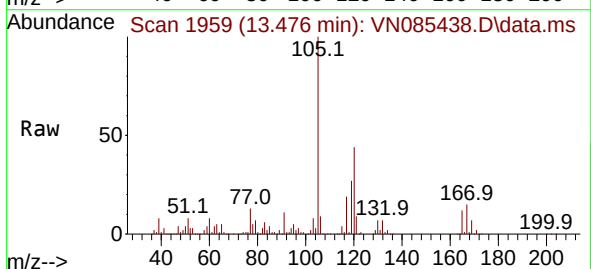
Acq: 14 Jan 2025 14:56

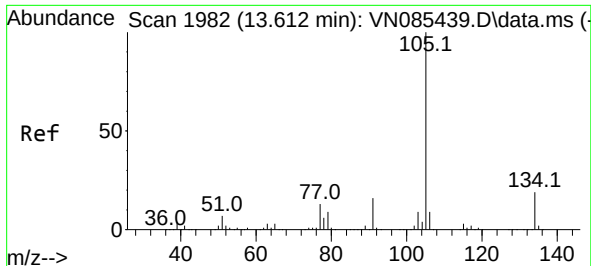
Tgt Ion:105 Resp: 971729

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0

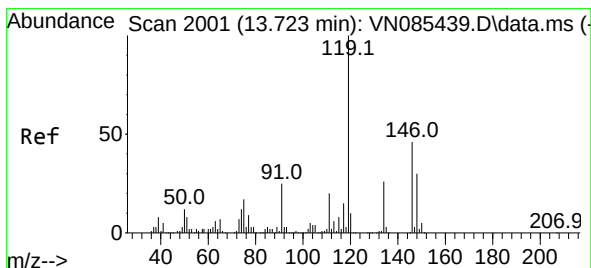
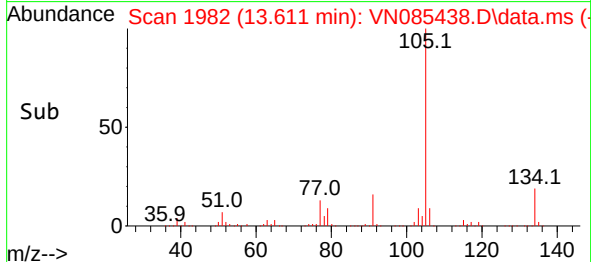
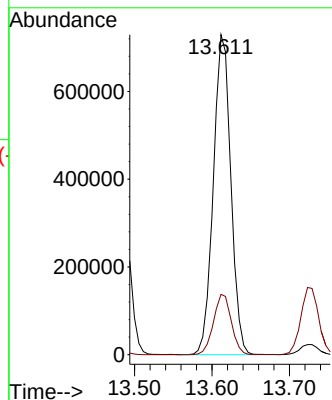
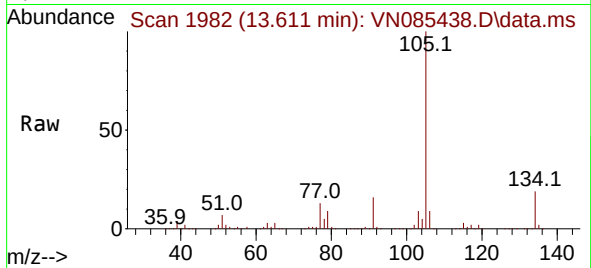




#85  
 sec-Butylbenzene  
 Concen: 120.587 ug/l  
 RT: 13.611 min Scan# 1982  
 Delta R.T. -0.001 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

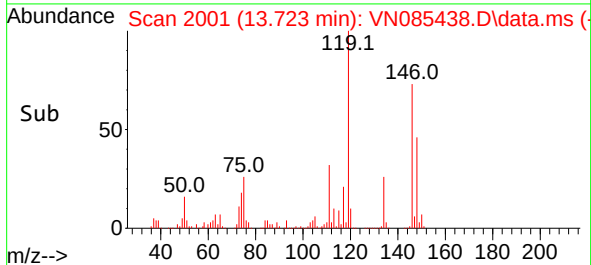
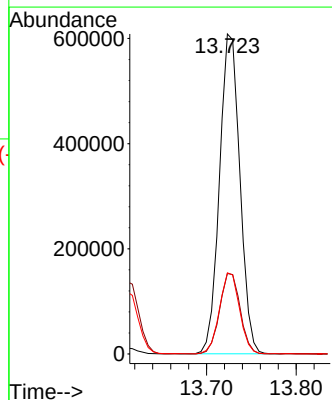
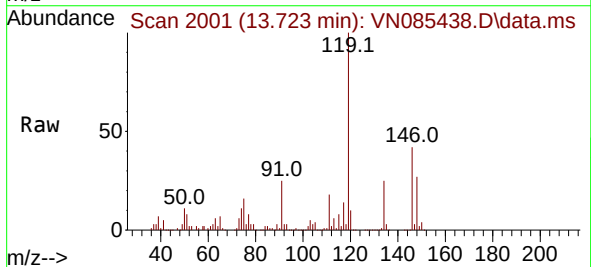
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

Tgt Ion:105 Resp: 1143885  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9

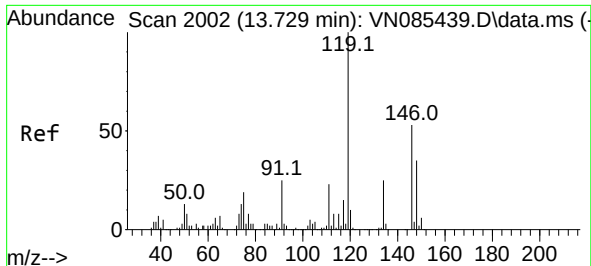


#86  
 p-Isopropyltoluene  
 Concen: 100.111 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

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



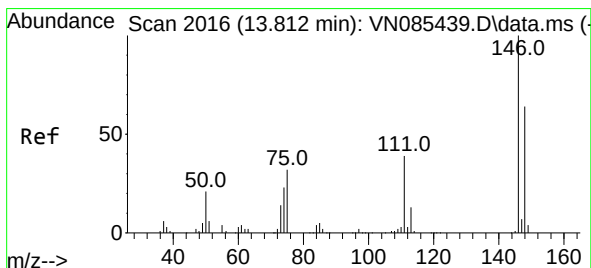
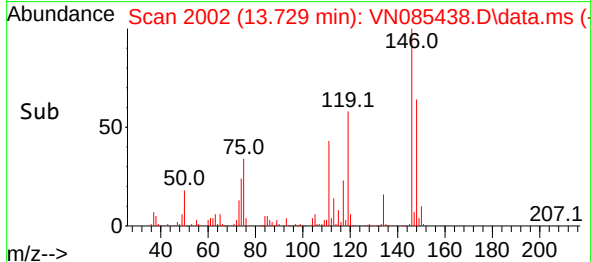
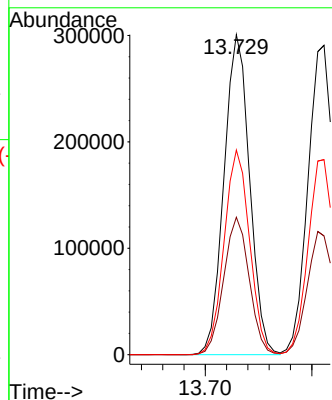
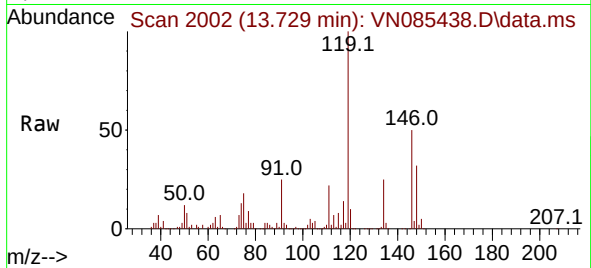




#87  
 1,3-Dichlorobenzene  
 Concen: 105.943 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. -0.000 min  
 Lab File: VN085438.D  
 Acq: 14 Jan 2025 14:56

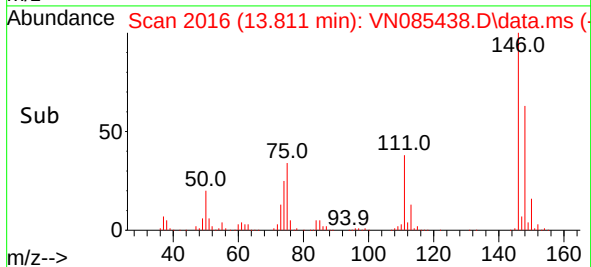
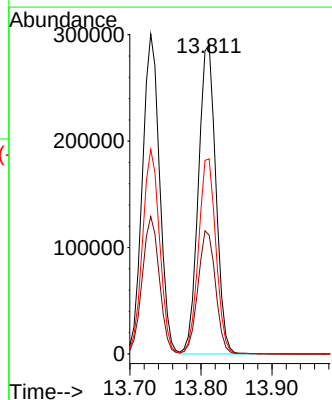
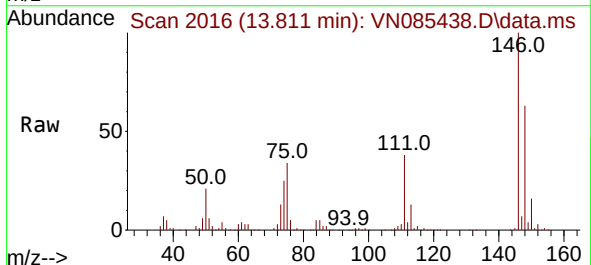
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC100

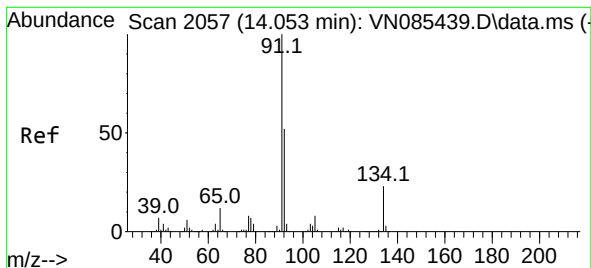
Tgt Ion:146 Resp: 502960  
 Ion Ratio Lower Upper  
 146 100  
 111 42.8 21.4 64.3  
 148 63.6 32.3 96.9



#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

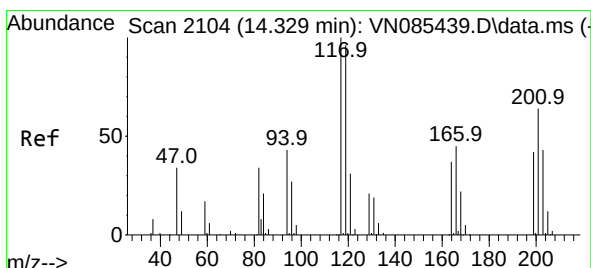
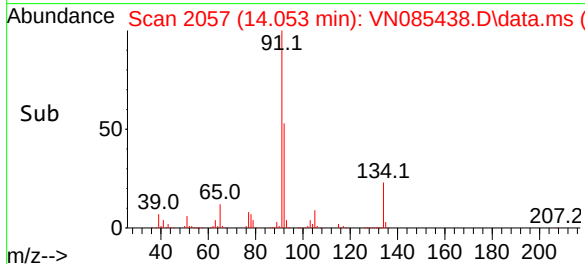
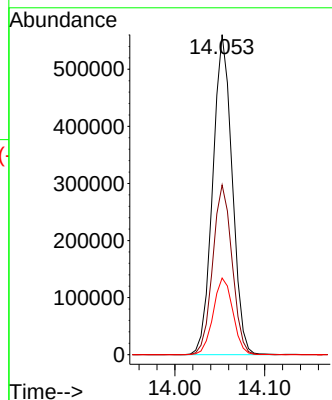
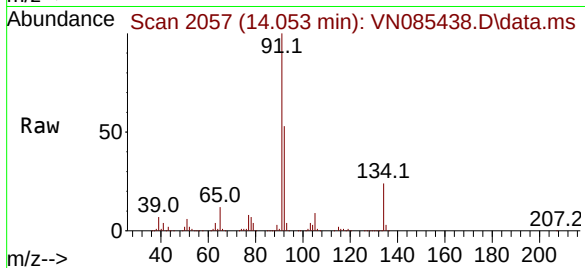
Tgt Ion: 91 Resp: 842368

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

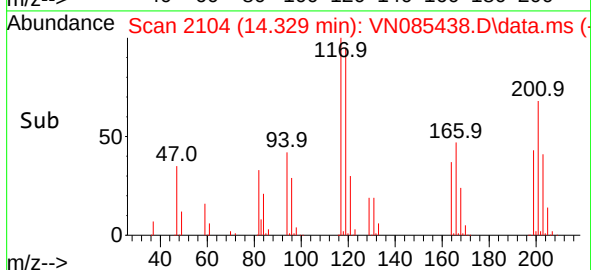
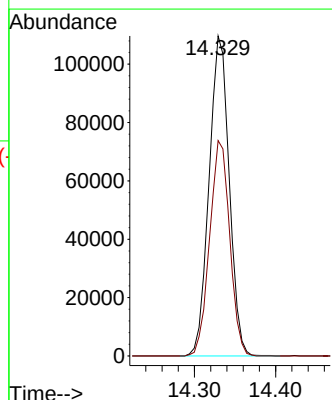
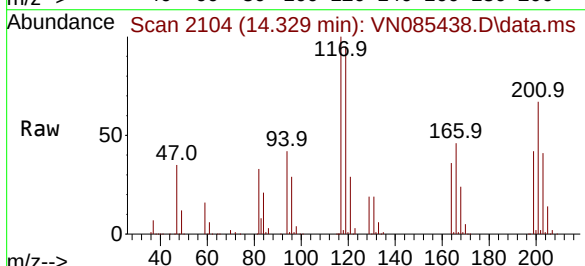
Acq: 14 Jan 2025 14:56

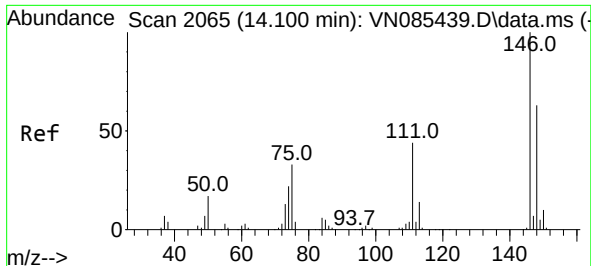
Tgt Ion: 117 Resp: 188541

Ion Ratio Lower Upper

117 100

201 67.2 33.7 101.0

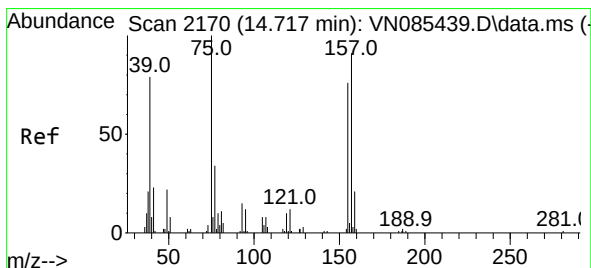
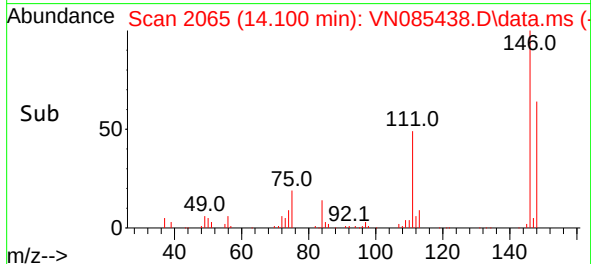
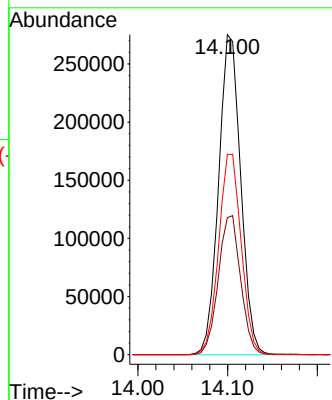
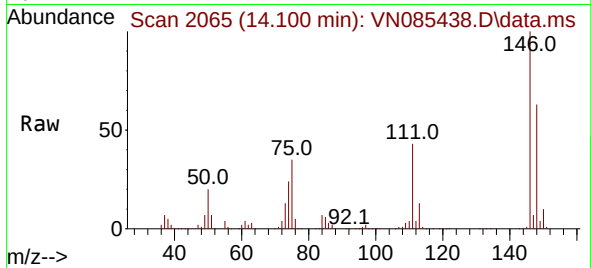




#91  
1,2-Dichlorobenzene  
Concen: 99.445 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085438.D  
Acq: 14 Jan 2025 14:56

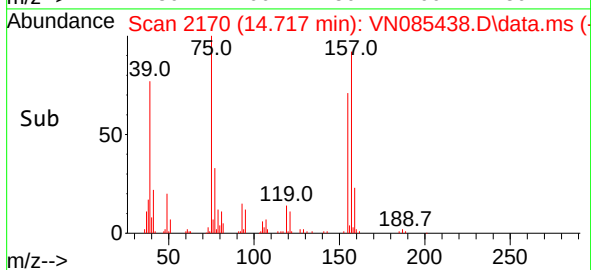
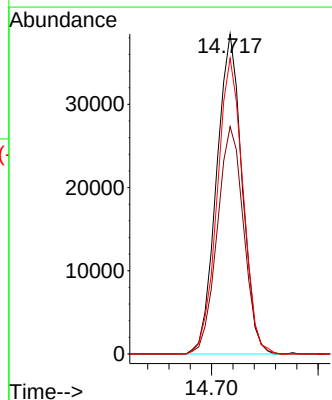
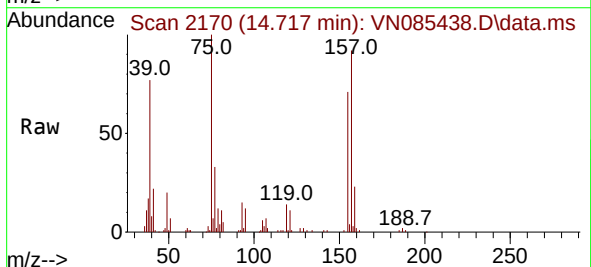
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC100

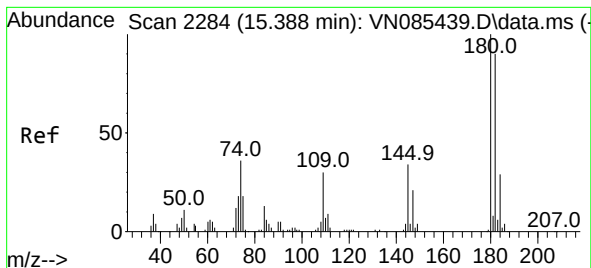
Tgt Ion:146 Resp: 470919  
Ion Ratio Lower Upper  
146 100  
111 43.9 21.7 65.1  
148 64.0 31.4 94.2



#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

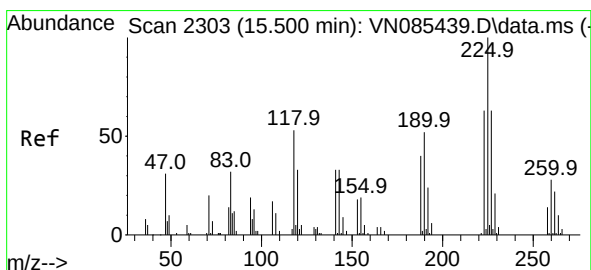
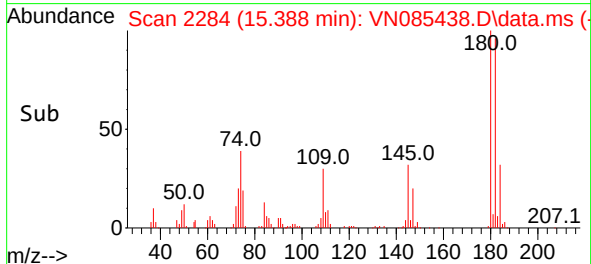
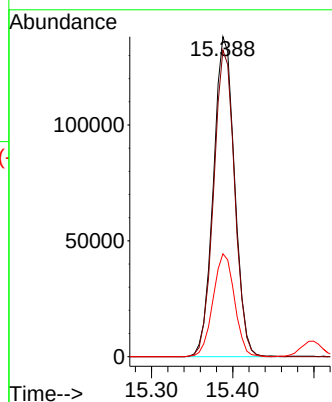
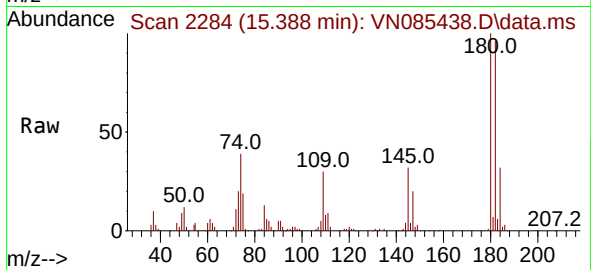
Tgt Ion:180 Resp: 250787

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

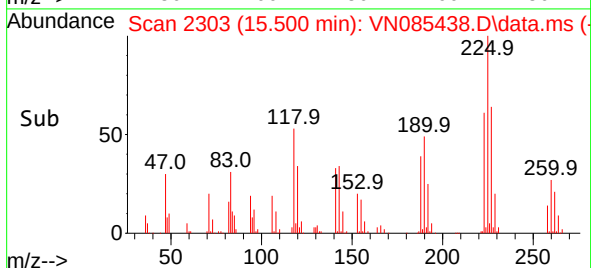
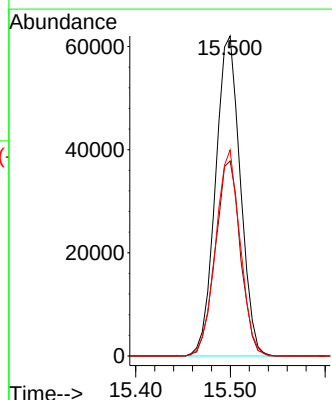
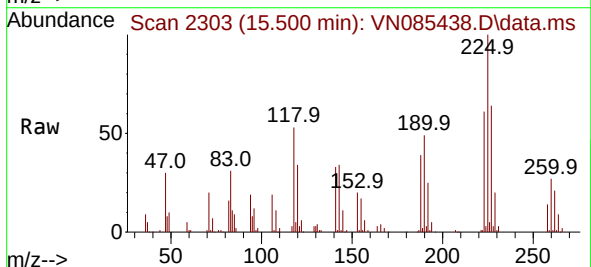
Tgt Ion:225 Resp: 112899

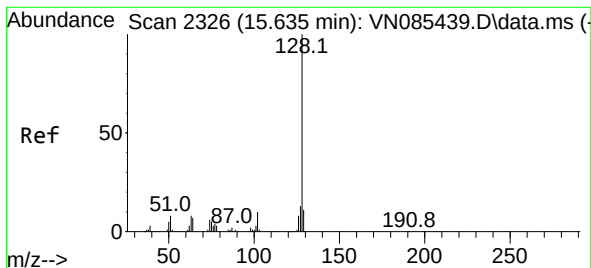
Ion Ratio Lower Upper

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

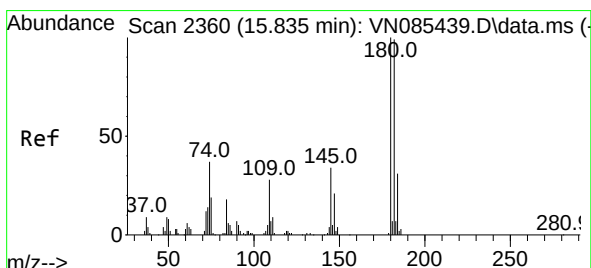
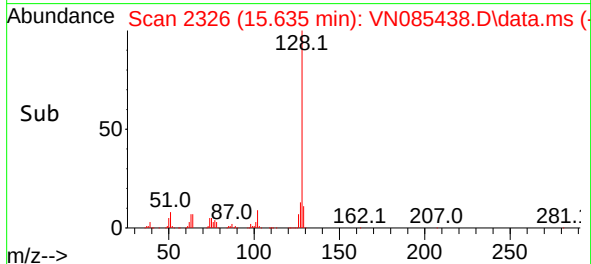
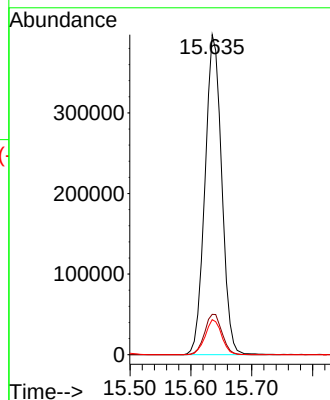
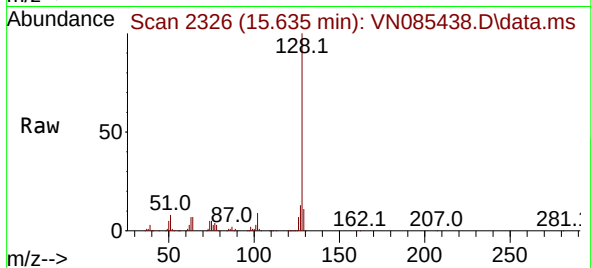
Tgt Ion:128 Resp: 756816

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

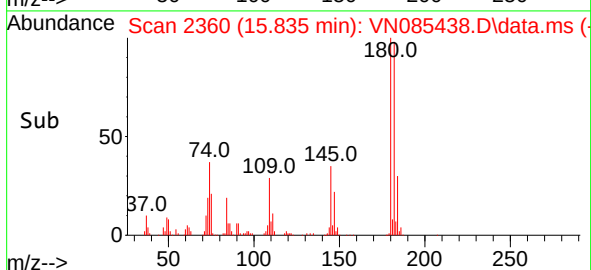
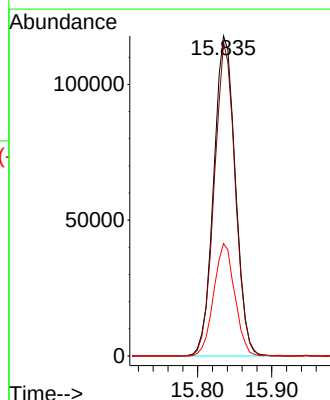
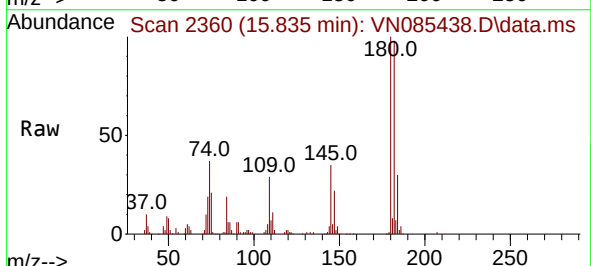
Tgt Ion:180 Resp: 238860

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

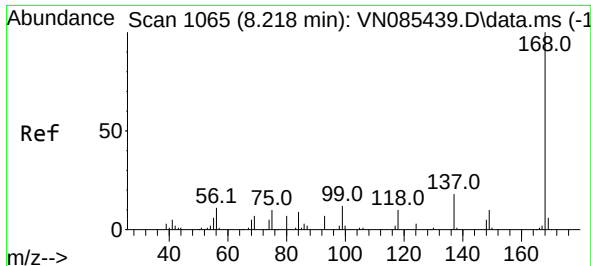
Quant Time: Jan 15 01:42:13 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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



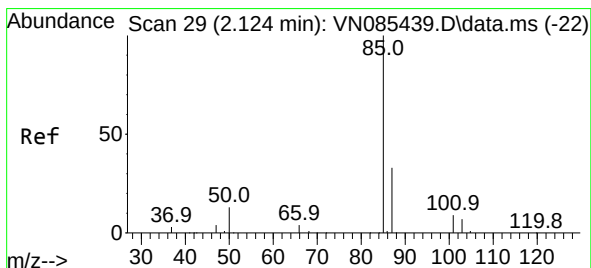
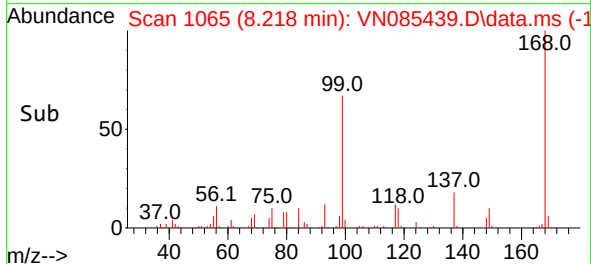
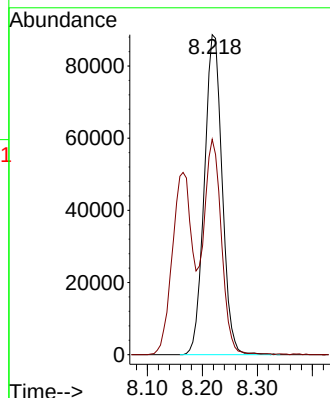
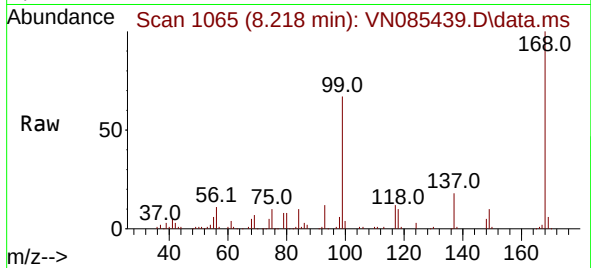




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

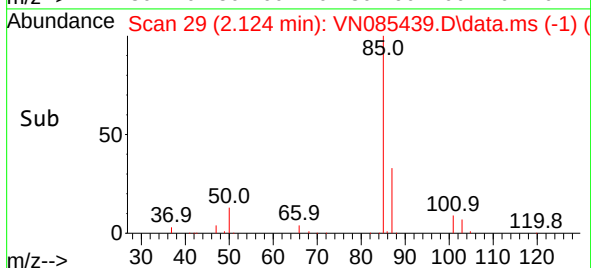
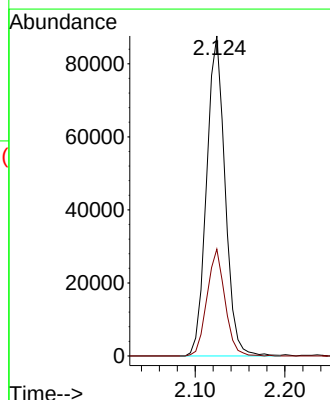
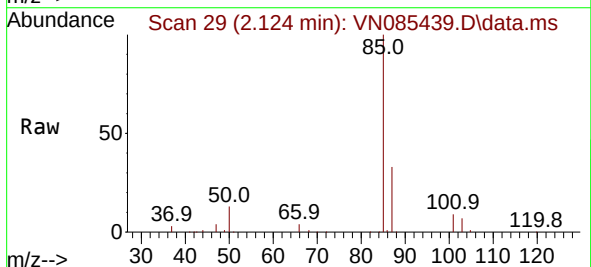
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

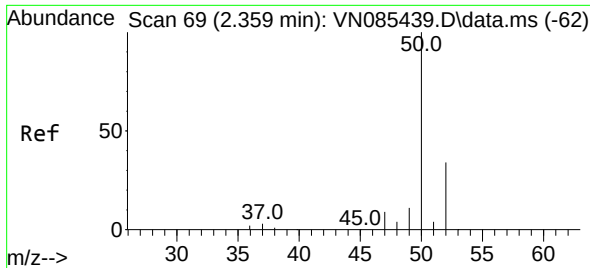
Tgt Ion:168 Resp: 199403  
Ion Ratio Lower Upper  
168 100  
99 67.0 53.6 80.4



#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

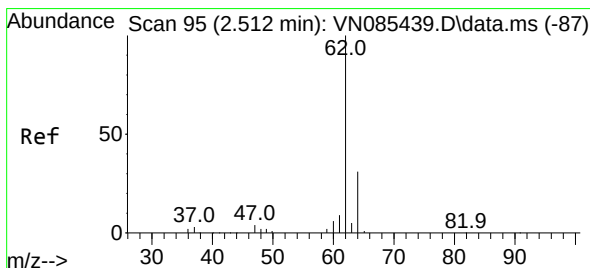
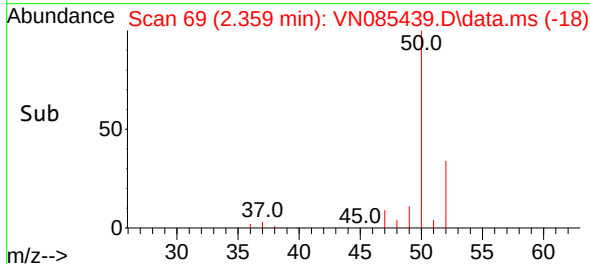
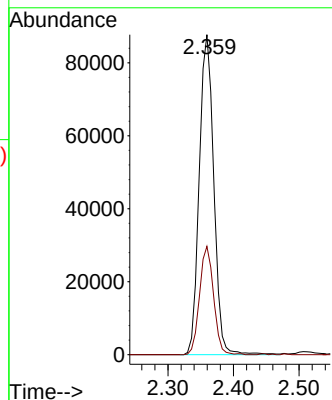
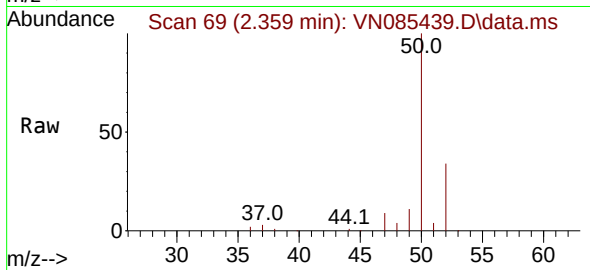




#3  
Chloromethane  
Concen: 46.398 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

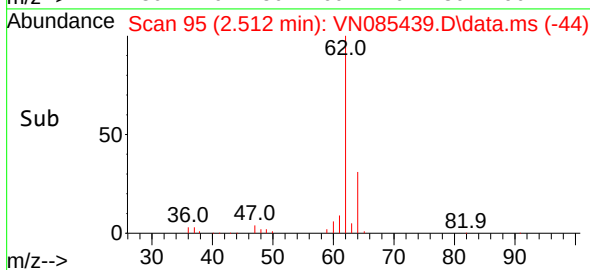
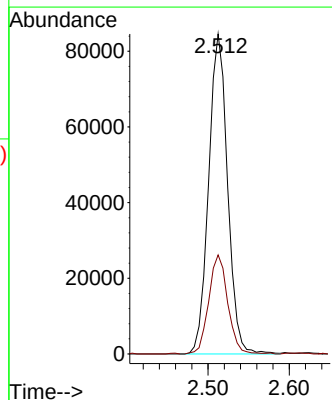
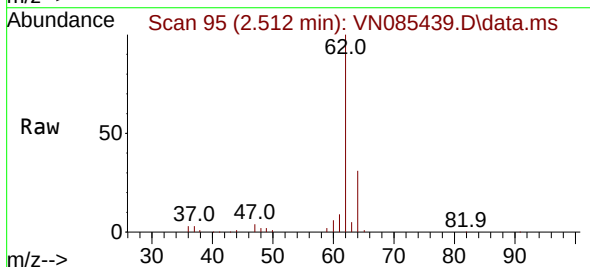
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

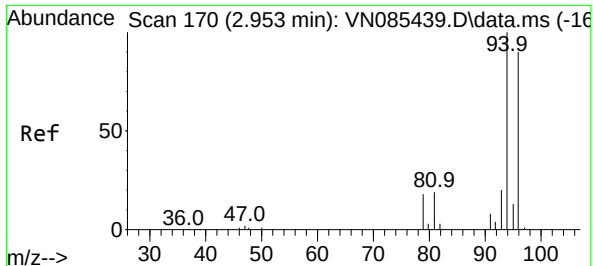
Tgt Ion: 50 Resp: 135631  
Ion Ratio Lower Upper  
50 100  
52 33.8 27.0 40.6



#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

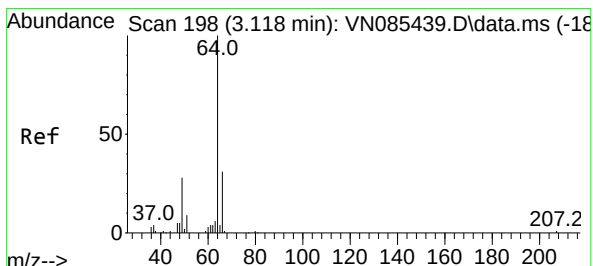
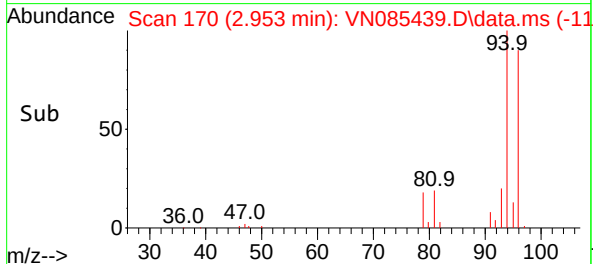
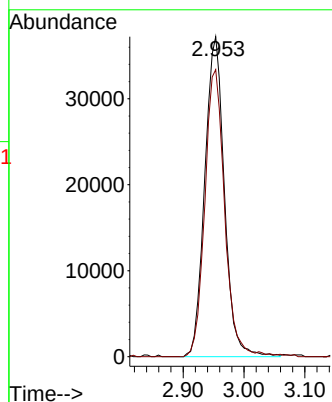
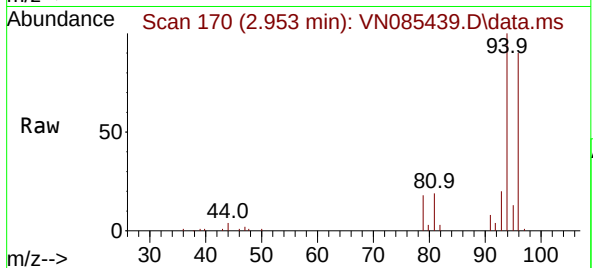




#5  
Bromomethane  
Concen: 46.877 ug/l  
RT: 2.953 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

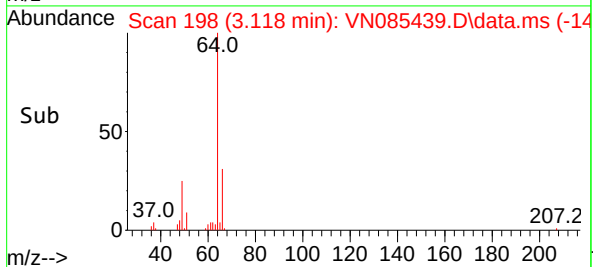
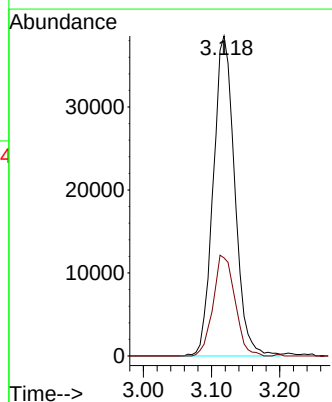
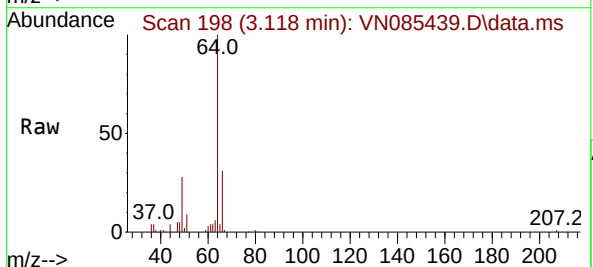
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

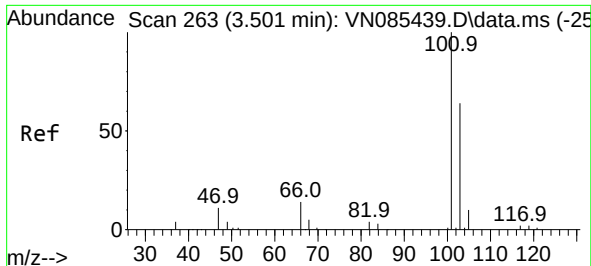
Tgt Ion: 94 Resp: 83199  
Ion Ratio Lower Upper  
94 100  
96 89.7 71.8 107.6



#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

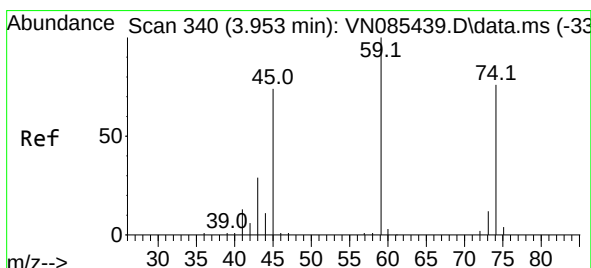
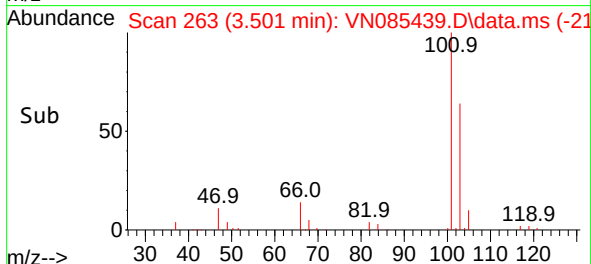
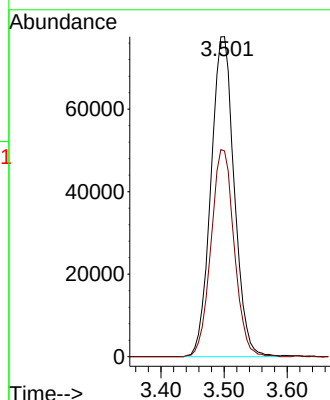
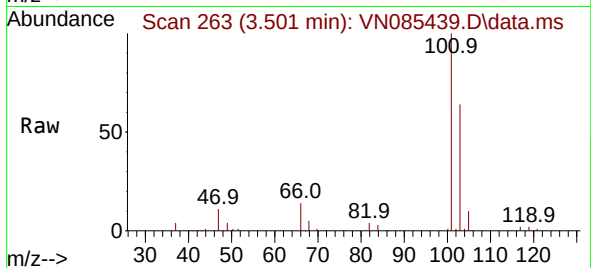




#7  
 Trichlorofluoromethane  
 Concen: 46.613 ug/l  
 RT: 3.501 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

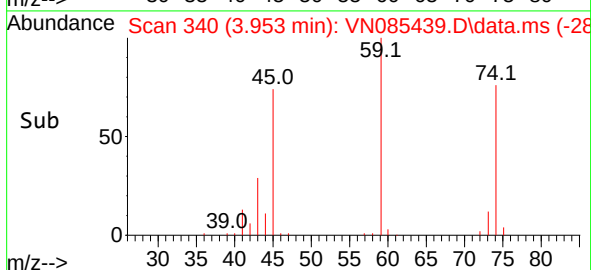
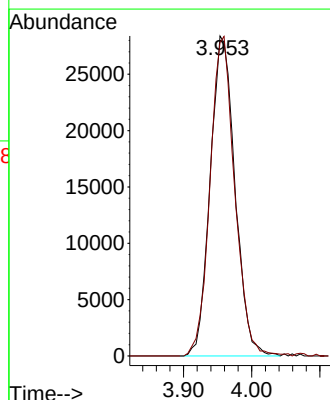
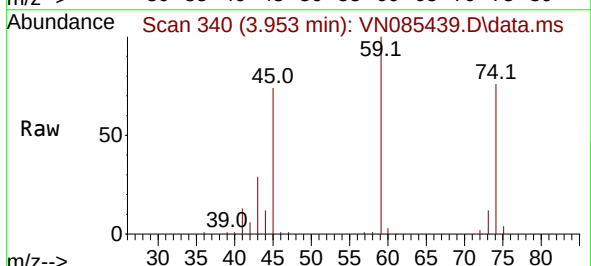
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

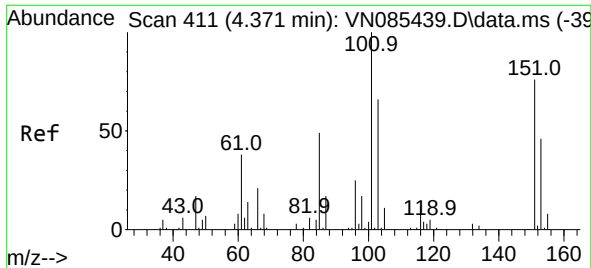
Tgt Ion:101 Resp: 198726  
 Ion Ratio Lower Upper  
 101 100  
 103 64.3 51.4 77.2



#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

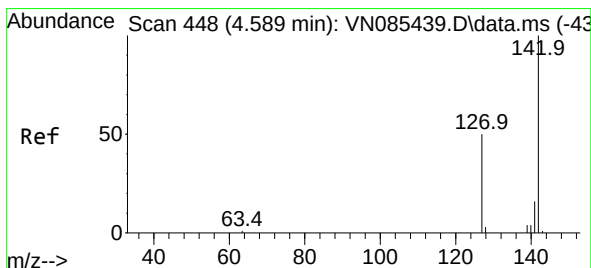
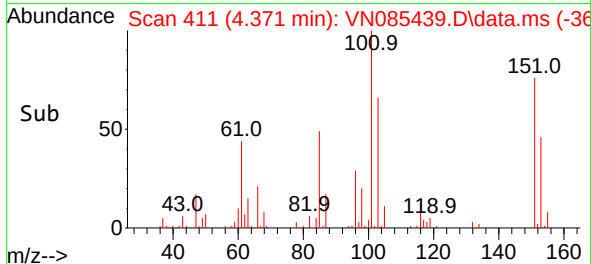
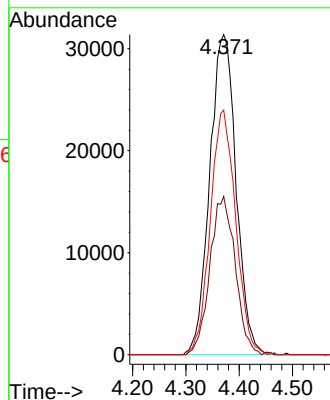
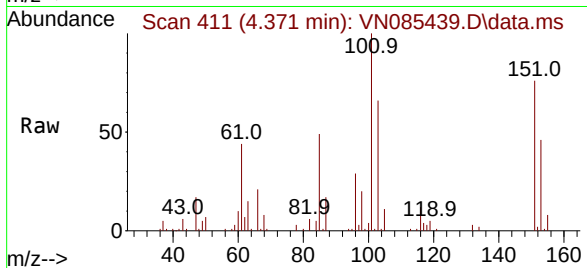




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 45.010 ug/l  
 RT: 4.371 min Scan# 411  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

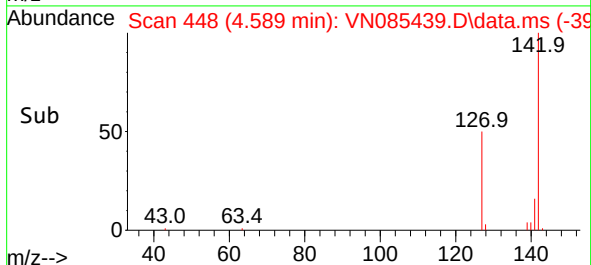
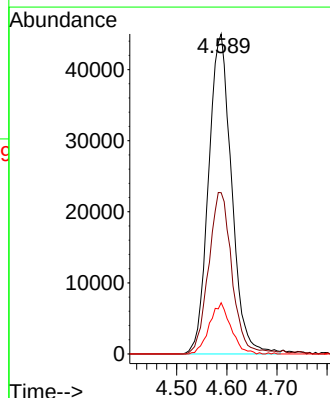
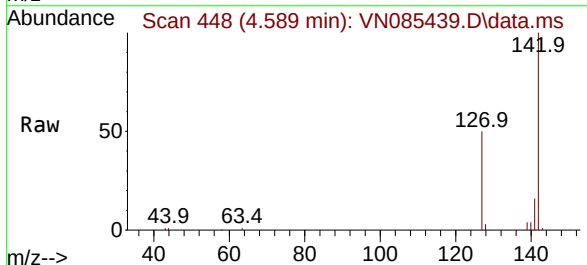
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

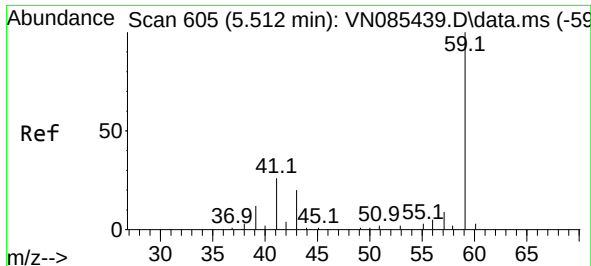
Tgt Ion:101 Resp: 108081  
 Ion Ratio Lower Upper  
 101 100  
 85 47.3 37.8 56.8  
 151 73.5 58.8 88.2



#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

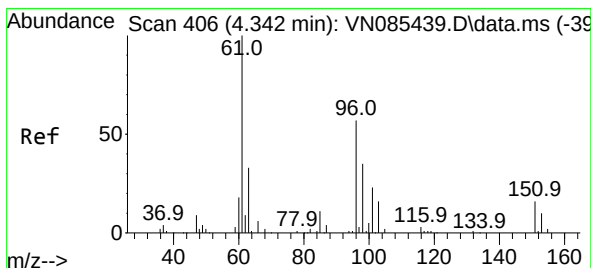
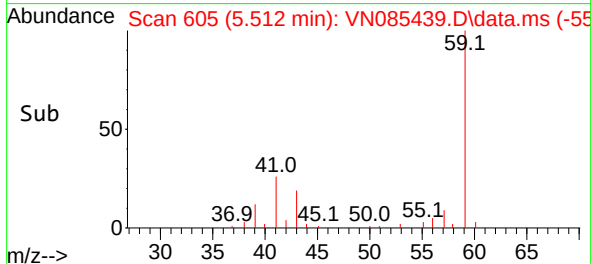
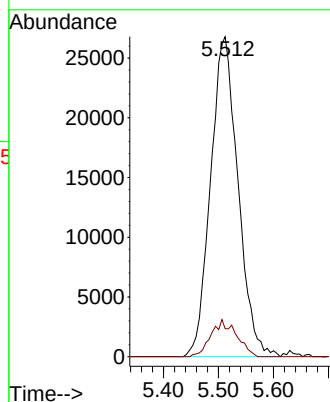
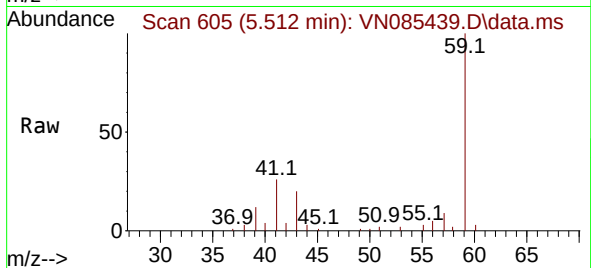




#11  
Tert butyl alcohol  
Concen: 251.894 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

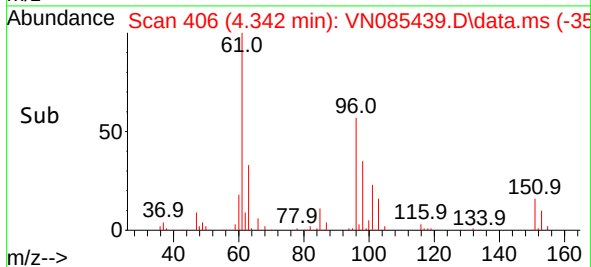
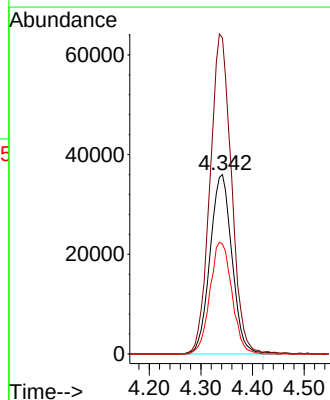
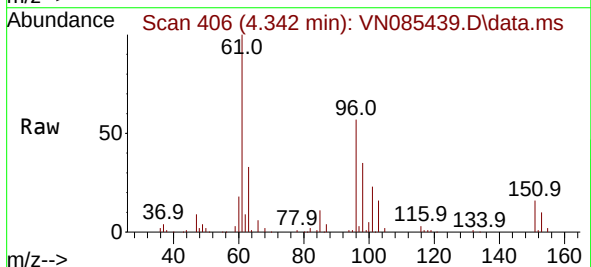
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

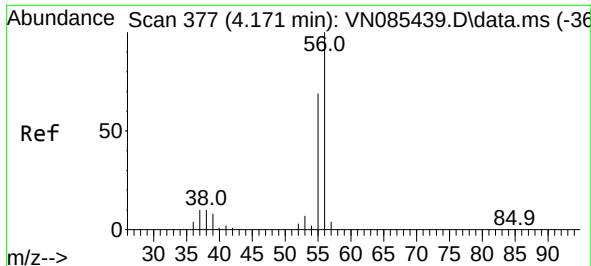
Tgt Ion: 59 Resp: 92841  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 13.0



#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

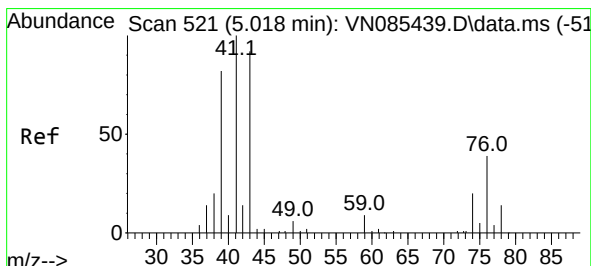
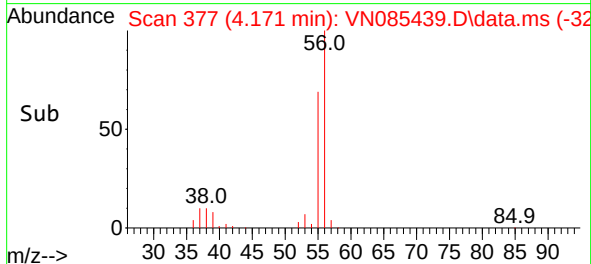
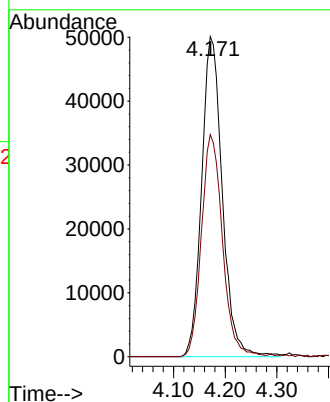
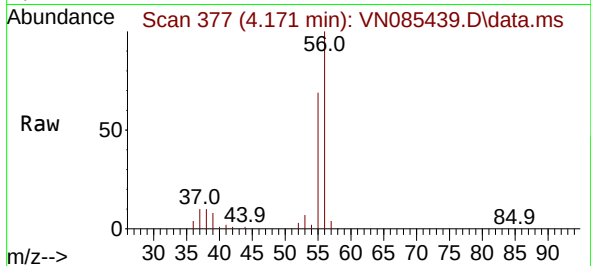




#13  
Acrolein  
Concen: 276.734 ug/l  
RT: 4.171 min Scan# 31  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

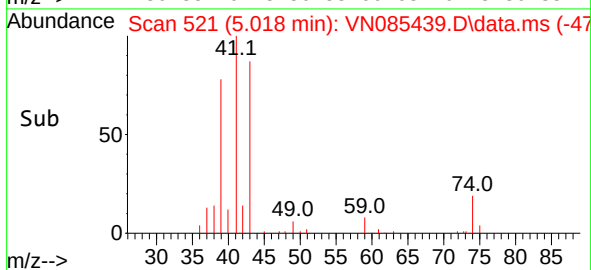
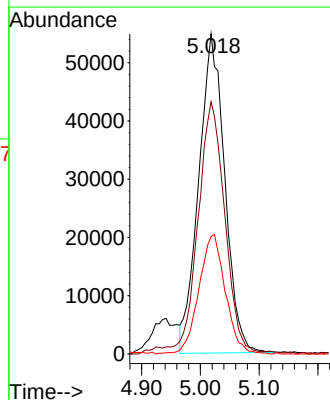
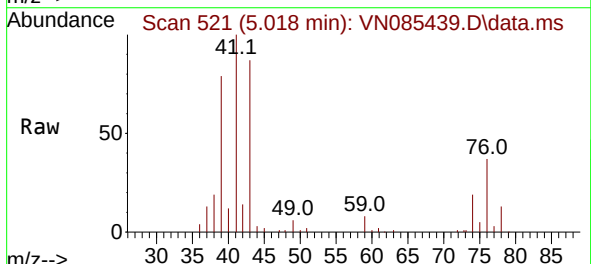
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Tgt Ion: 56 Resp: 139234  
Ion Ratio Lower Upper  
56 100  
55 70.4 56.3 84.5

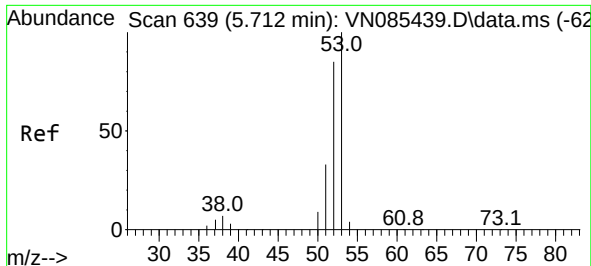


#14  
Allyl chloride  
Concen: 48.567 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

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



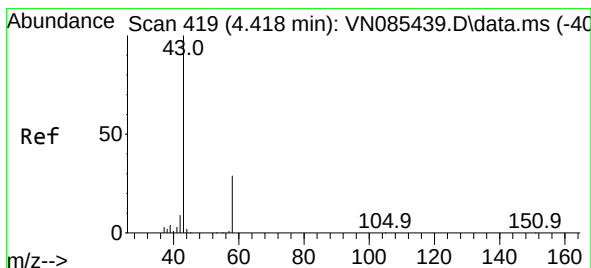
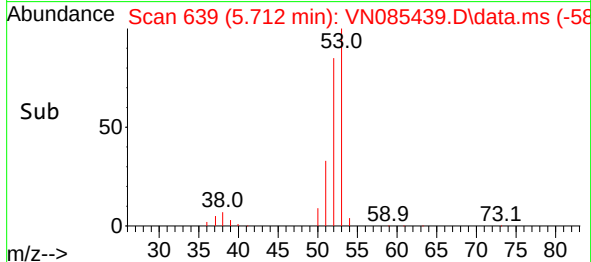
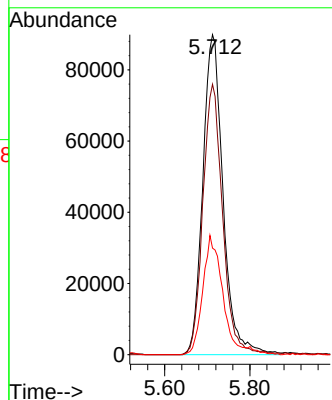
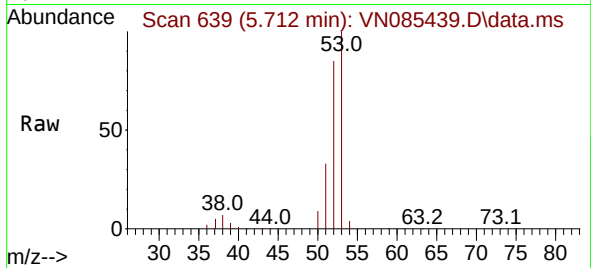




#15  
Acrylonitrile  
Concen: 253.507 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

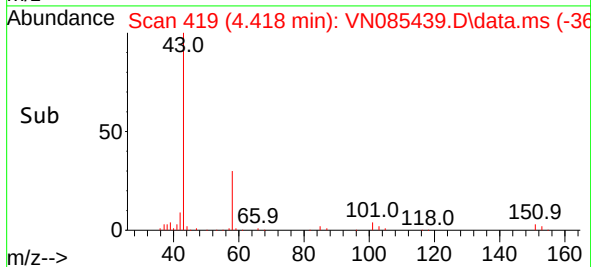
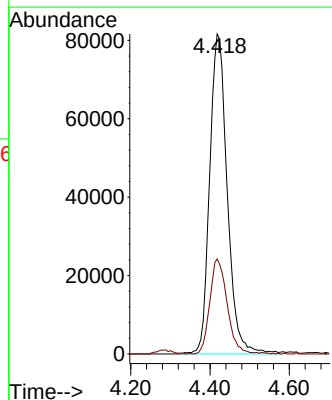
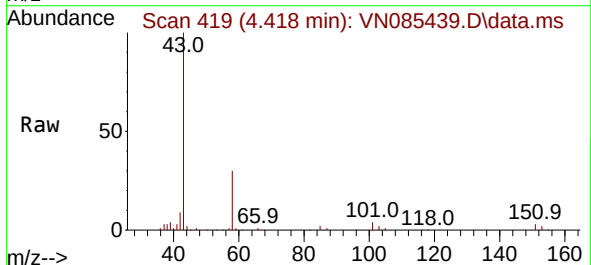
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

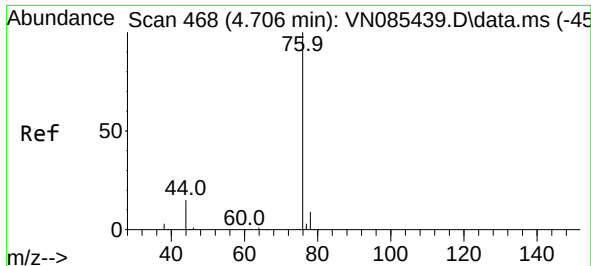
Tgt Ion: 53 Resp: 296781  
Ion Ratio Lower Upper  
53 100  
52 81.9 65.5 98.3  
51 37.3 29.8 44.8



#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

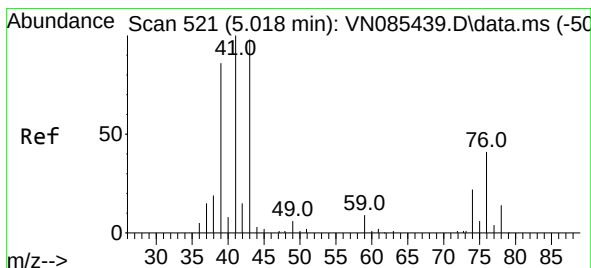
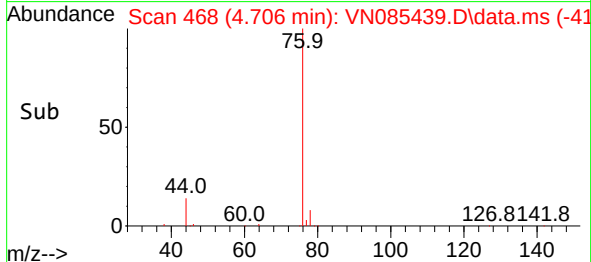
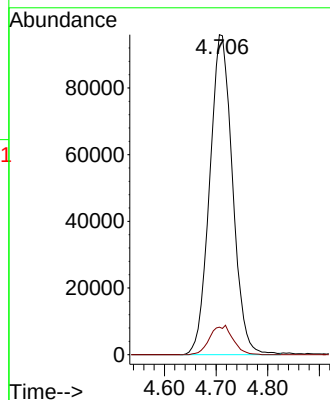
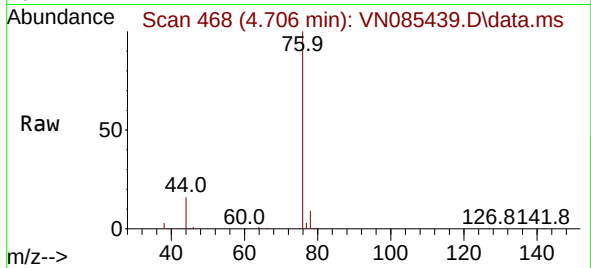




#17  
Carbon Disulfide  
Concen: 44.710 ug/l  
RT: 4.706 min Scan# 468  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

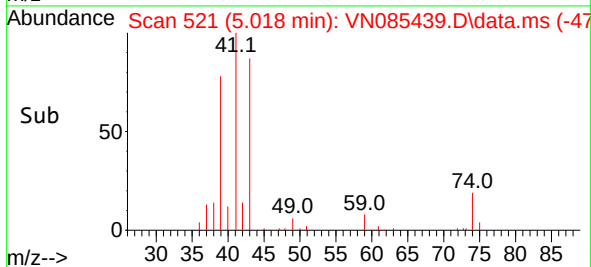
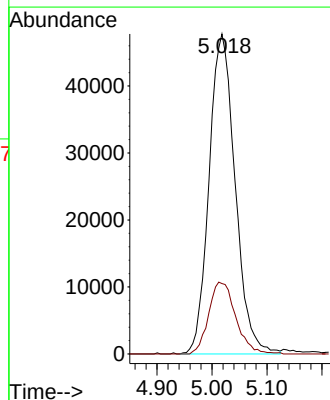
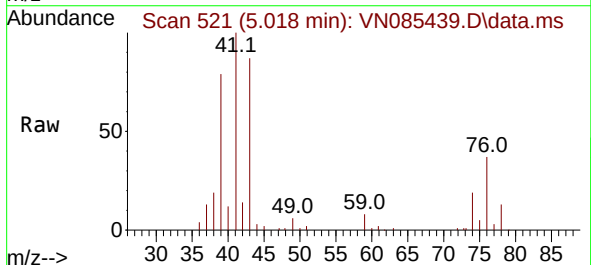
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

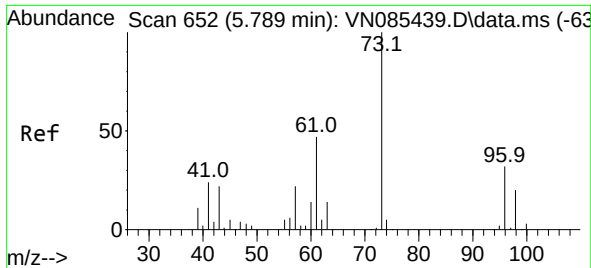
Tgt Ion: 76 Resp: 294604  
Ion Ratio Lower Upper  
76 100  
78 8.6 6.9 10.3



#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

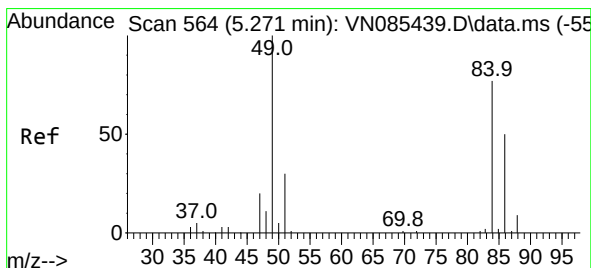
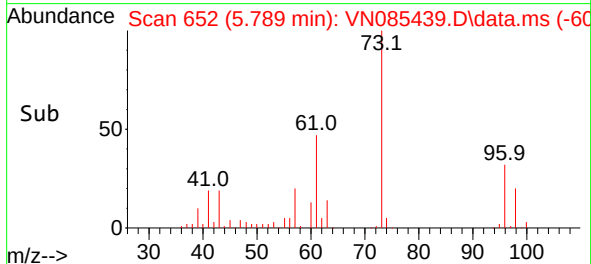
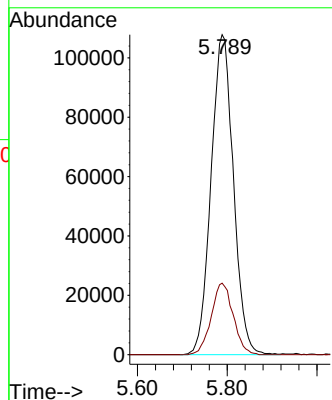
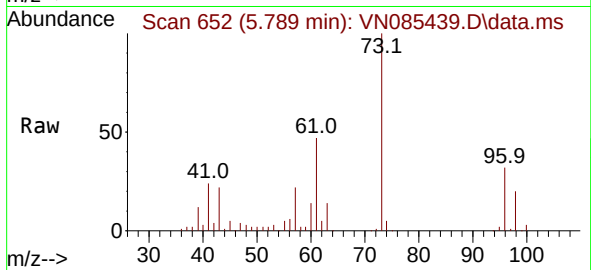




#19  
Methyl tert-butyl Ether  
Concen: 53.758 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

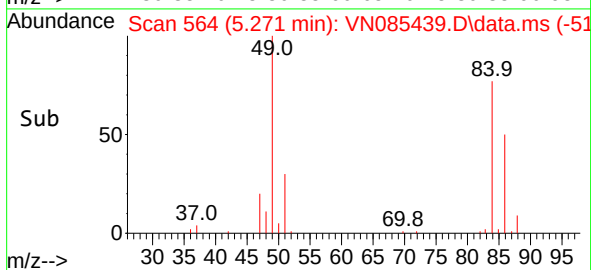
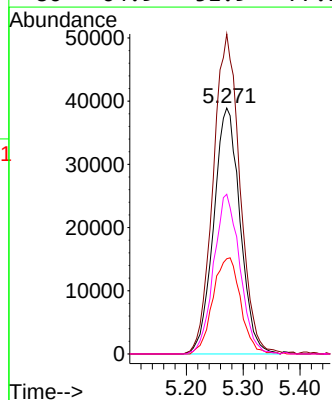
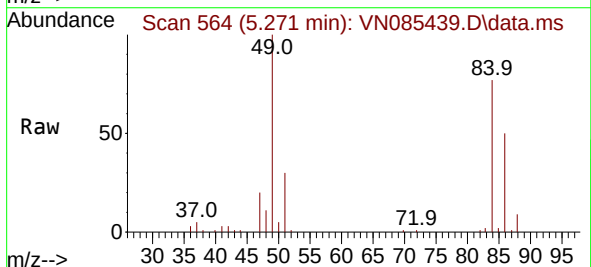
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

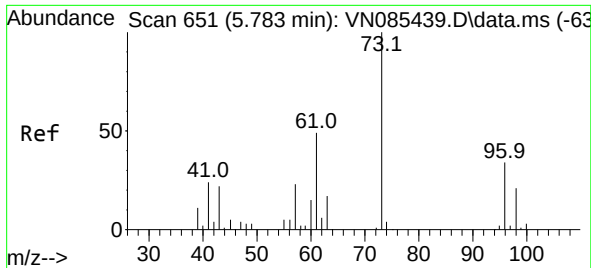
Tgt Ion: 73 Resp: 373561  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



#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

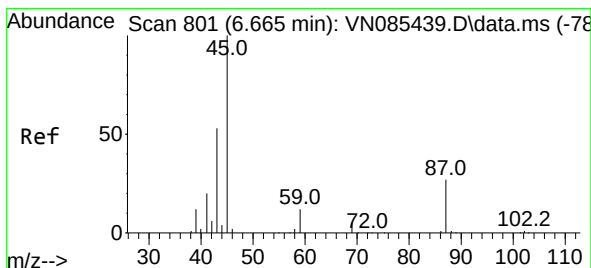
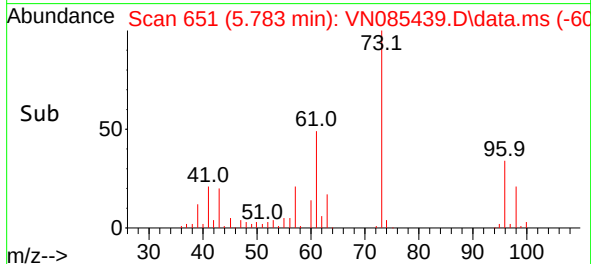
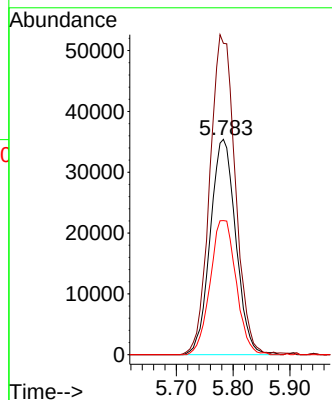
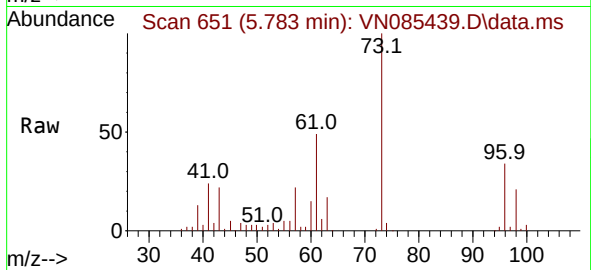




#21  
trans-1,2-Dichloroethene  
Concen: 48.395 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

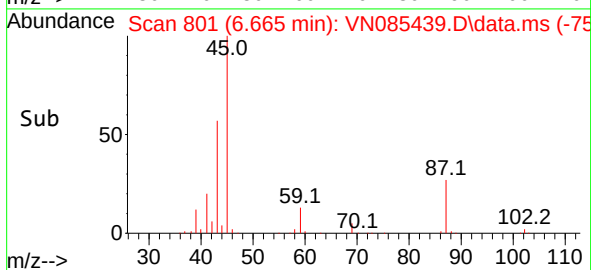
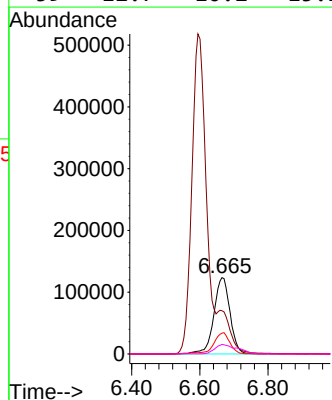
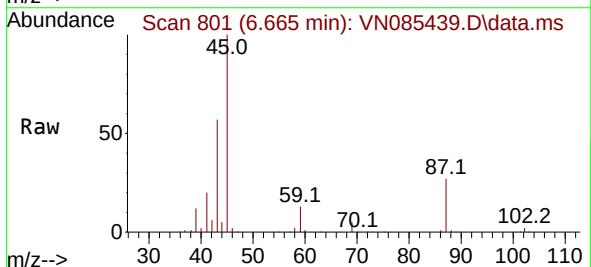
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

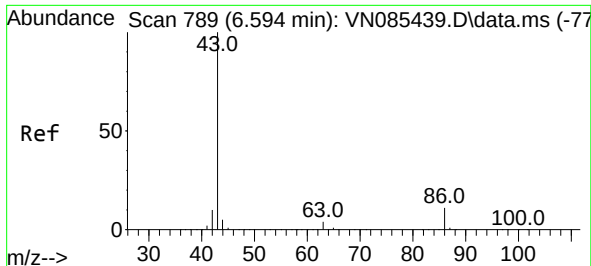
Tgt Ion: 96 Resp: 110684  
Ion Ratio Lower Upper  
96 100  
61 144.6 115.7 173.5  
98 62.3 49.8 74.8



#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

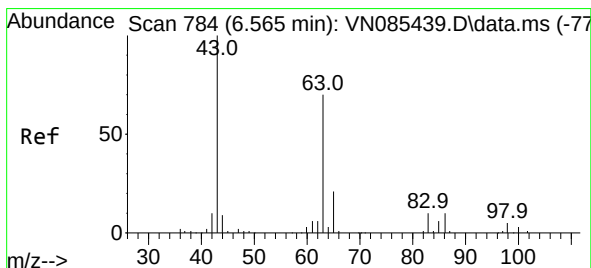
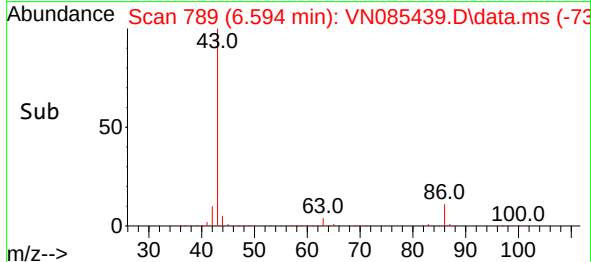
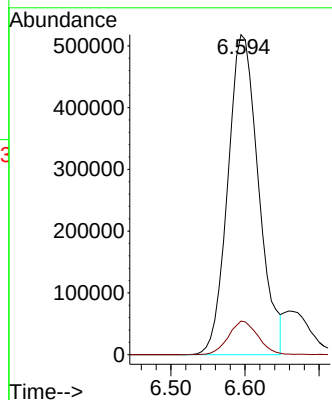
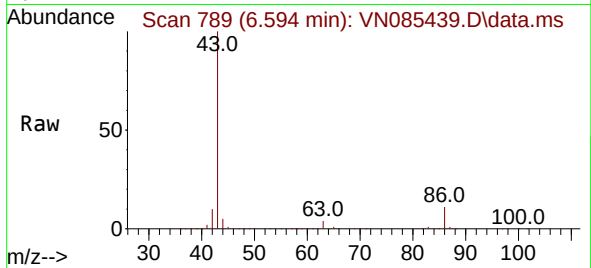




#23  
 Vinyl Acetate  
 Concen: 275.471 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

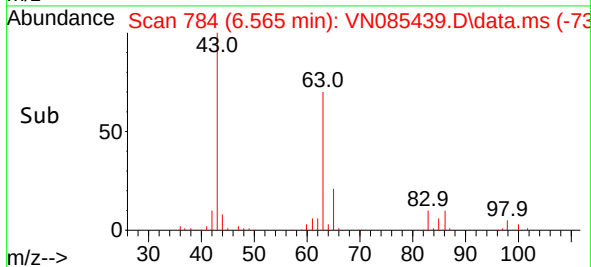
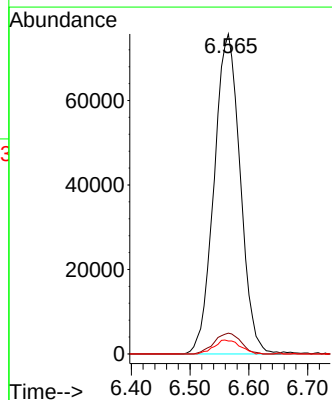
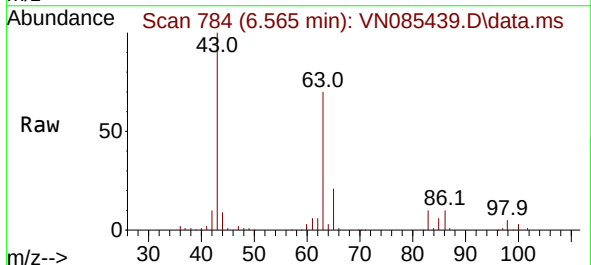
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

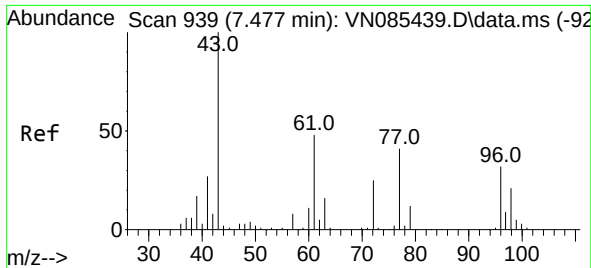
Tgt Ion: 43 Resp: 1491031  
 Ion Ratio Lower Upper  
 43 100  
 86 10.5 8.4 12.6



#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

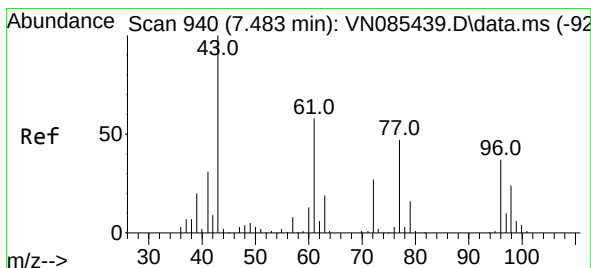
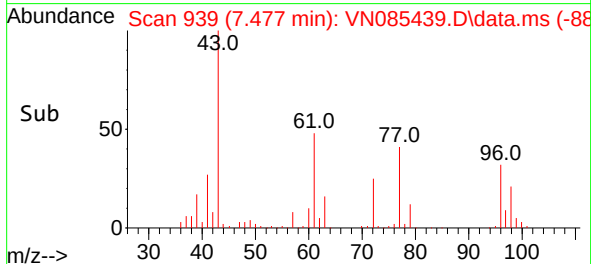
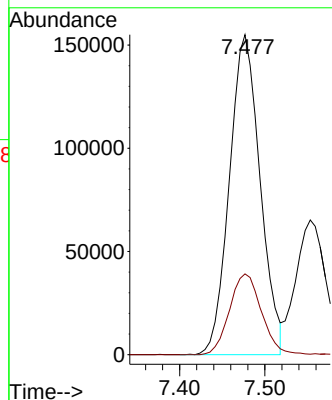
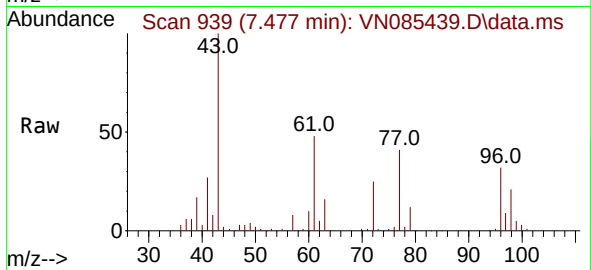




#25  
2-Butanone  
Concen: 253.815 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

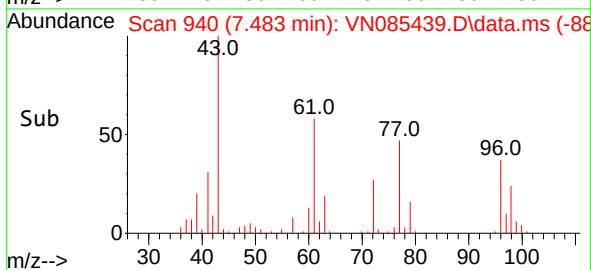
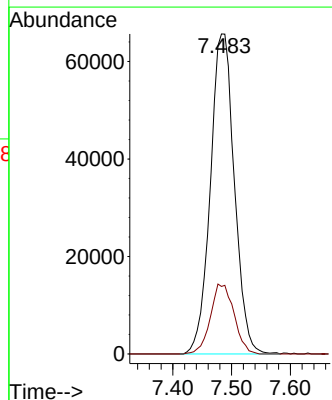
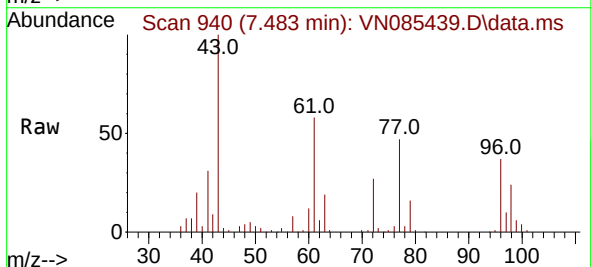
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

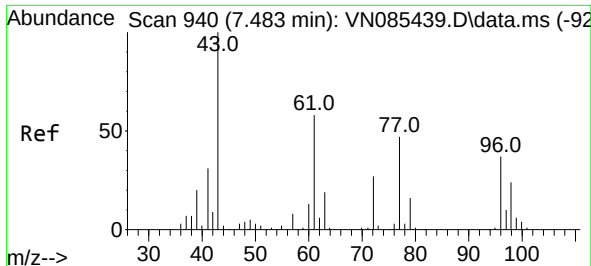
Tgt Ion: 43 Resp: 388457  
Ion Ratio Lower Upper  
43 100  
72 25.3 20.2 30.4



#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



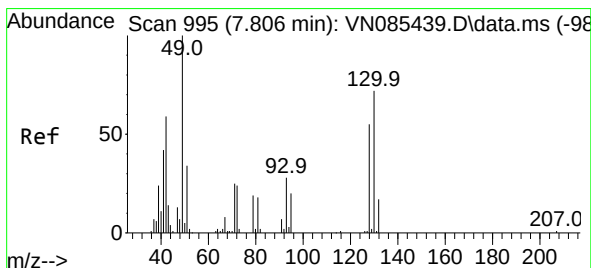
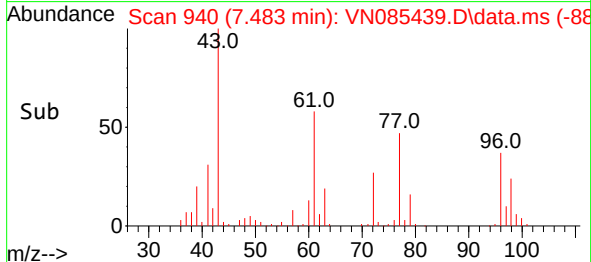
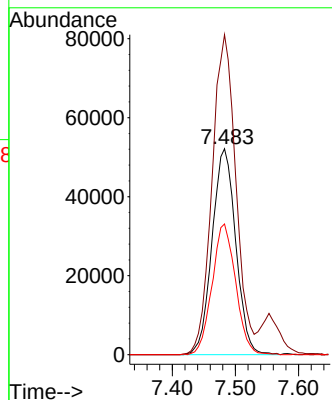
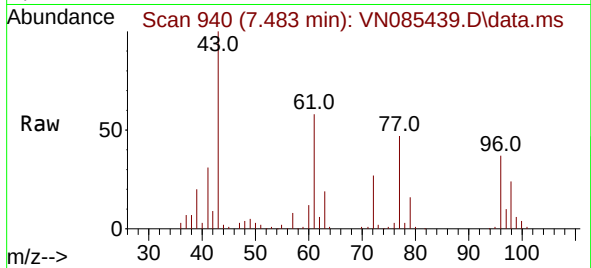


#27  
 cis-1,2-Dichloroethene  
 Concen: 50.571 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Tgt Ion: 96 Resp: 136229  

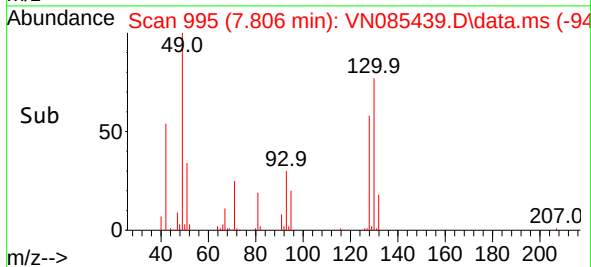
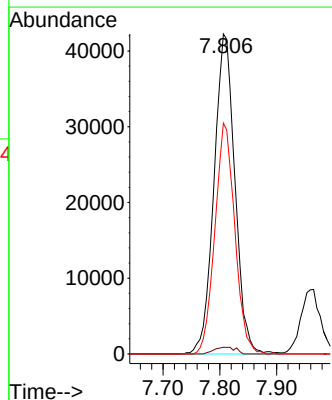
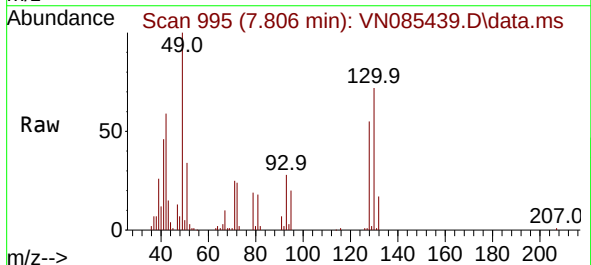
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 155.9 | 0.0   | 311.8 |
| 98  | 63.0  | 0.0   | 126.0 |

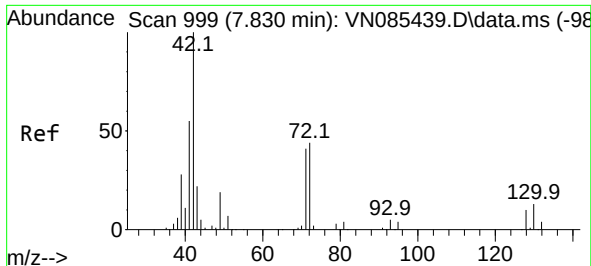


#28  
 Bromochloromethane  
 Concen: 49.461 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

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

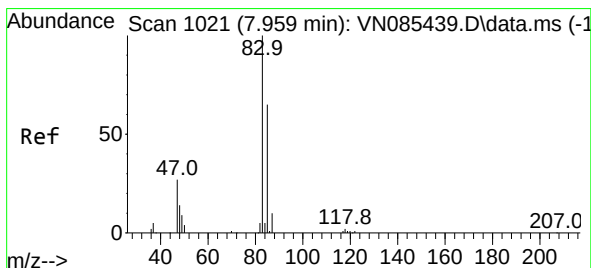
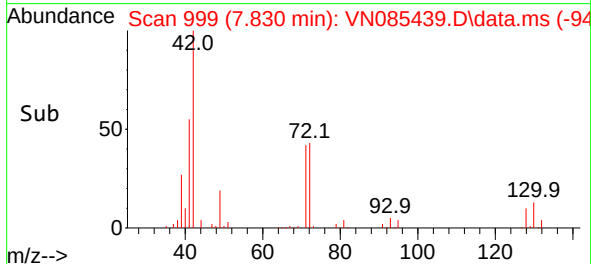
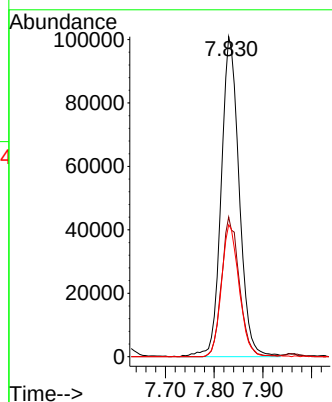
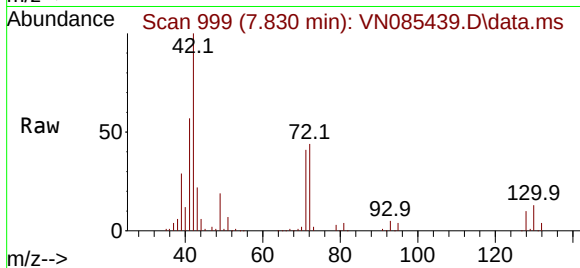
Tgt Ion: 42 Resp: 259683

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

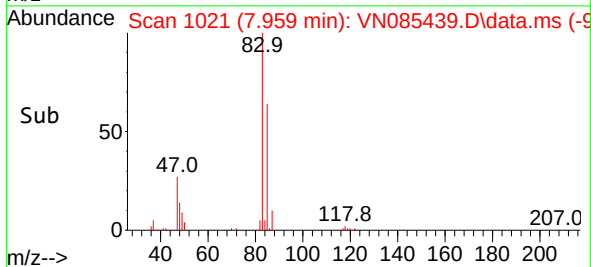
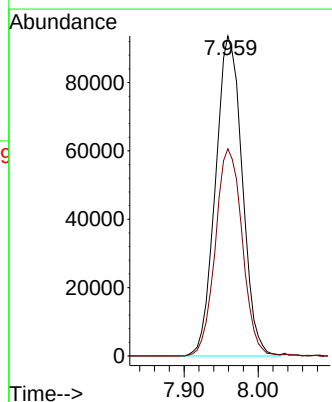
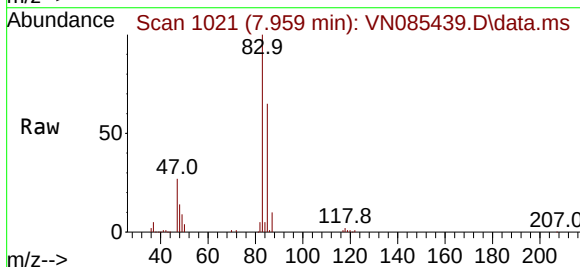
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 234271

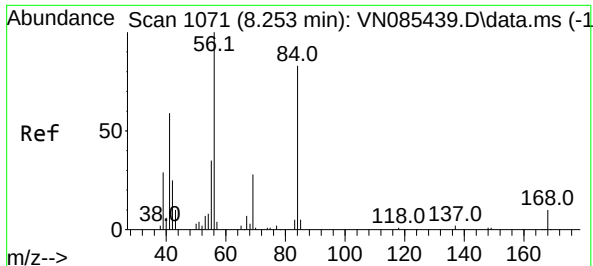
Ion Ratio Lower Upper

83 100

85 64.7 51.8 77.6



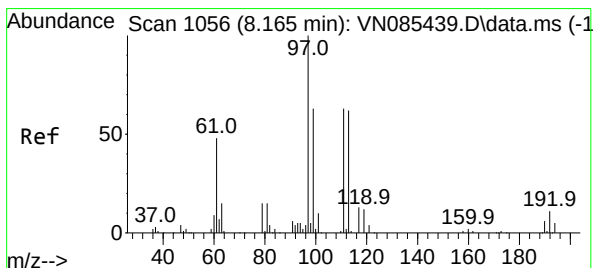
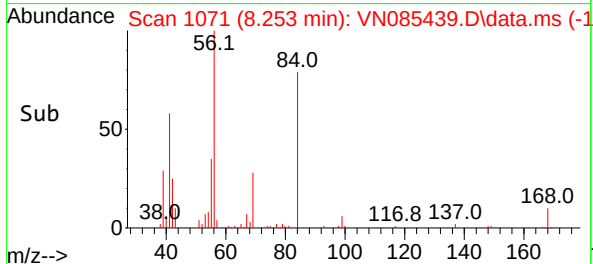
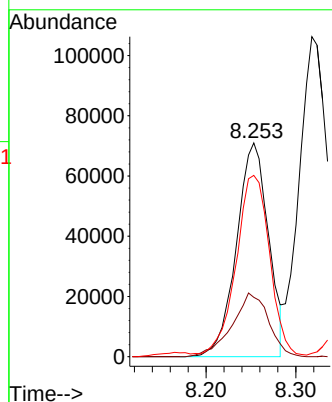
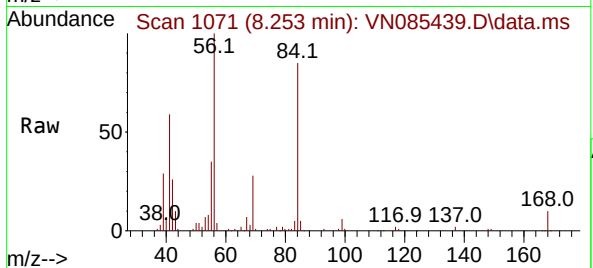




#31  
Cyclohexane  
Concen: 42.984 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

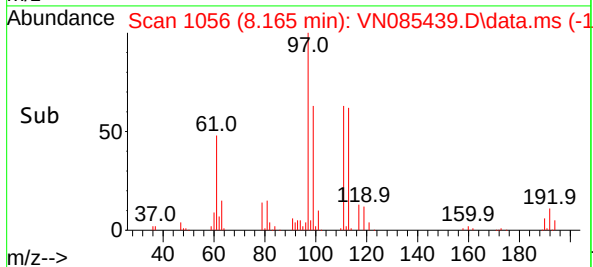
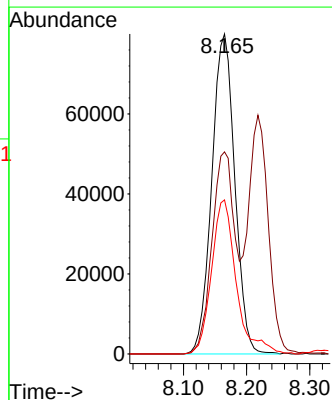
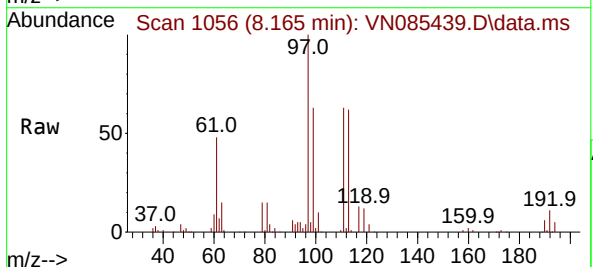
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

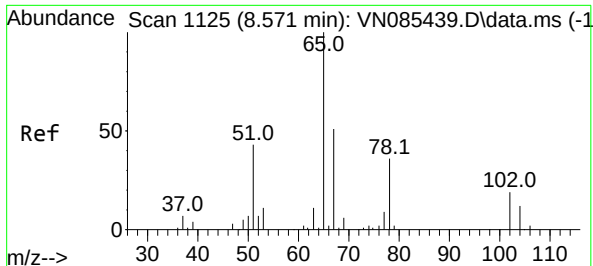
Tgt Ion: 56 Resp: 175588  
Ion Ratio Lower Upper  
56 100  
69 27.8 22.2 33.4  
84 83.0 66.4 99.6



#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 :

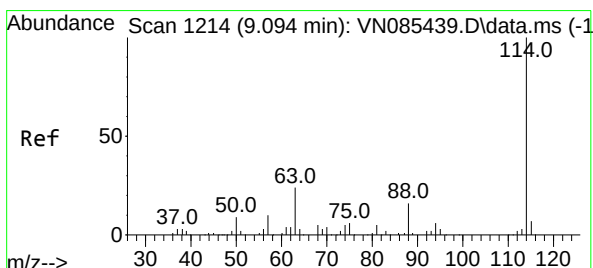
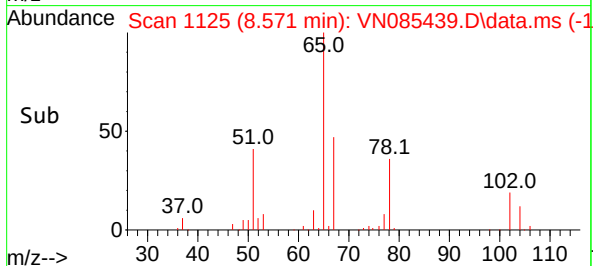
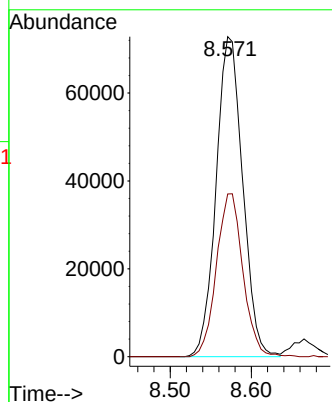
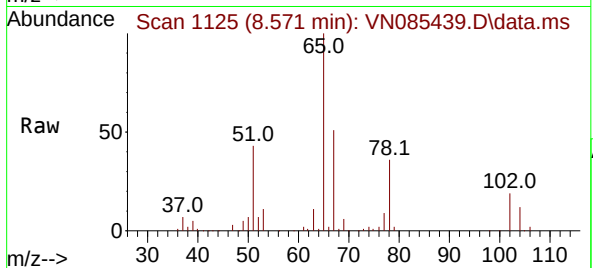
VSTDICCC050

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

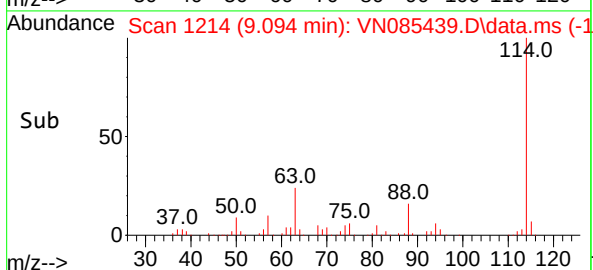
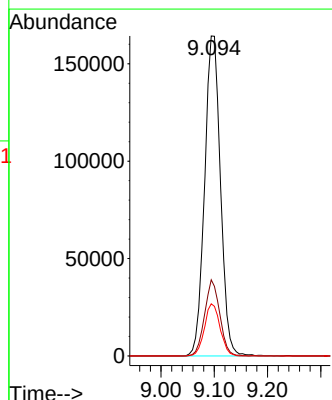
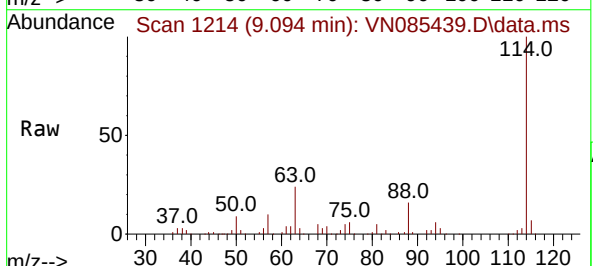
Tgt Ion: 114 Resp: 339872

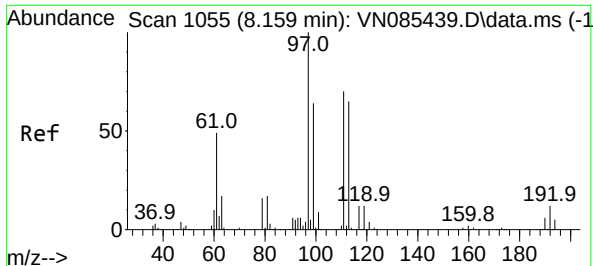
Ion Ratio Lower Upper

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

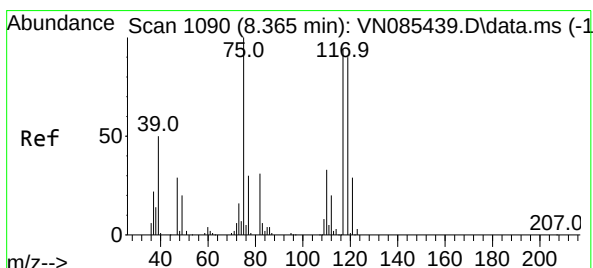
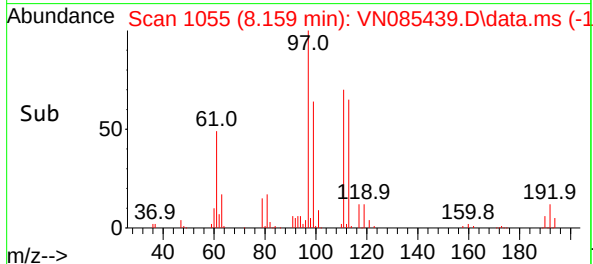
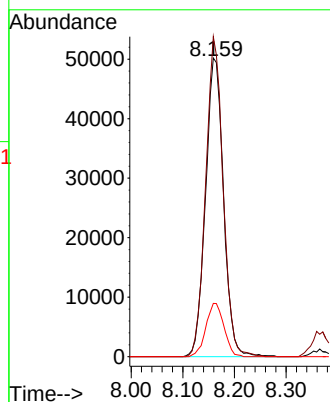
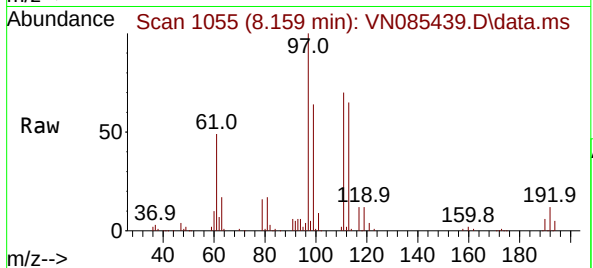
Tgt Ion:113 Resp: 121554

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

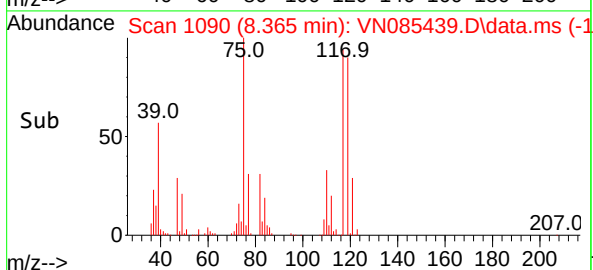
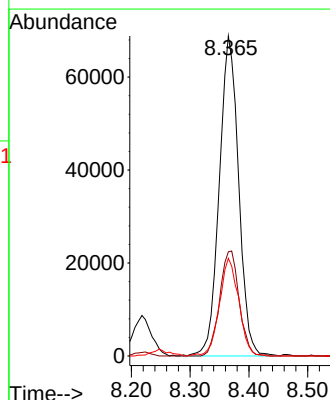
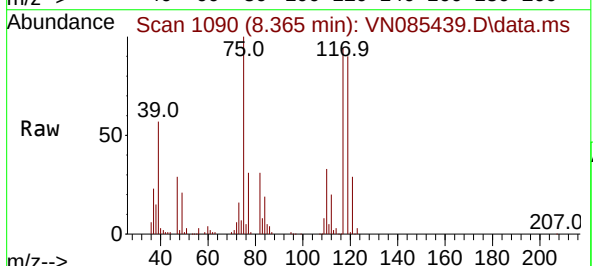
Tgt Ion: 75 Resp: 157031

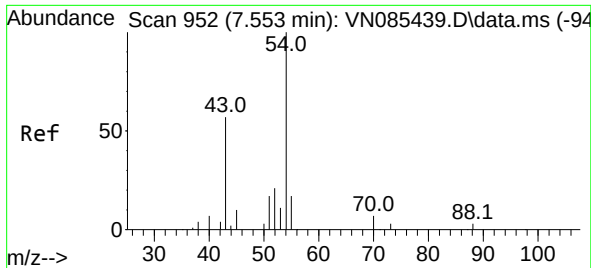
Ion Ratio Lower Upper

75 100

110 33.0 16.5 49.5

77 30.5 24.4 36.6

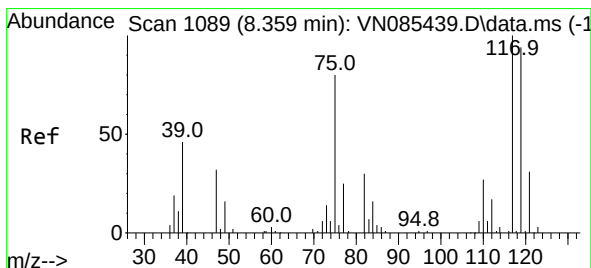
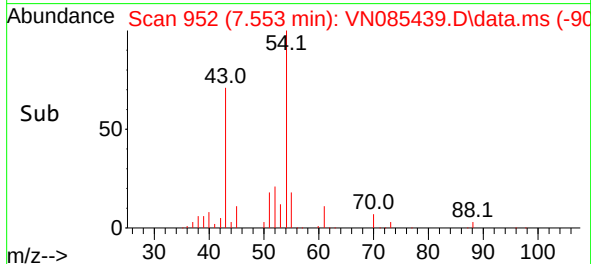
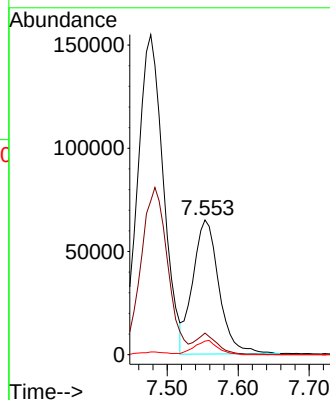
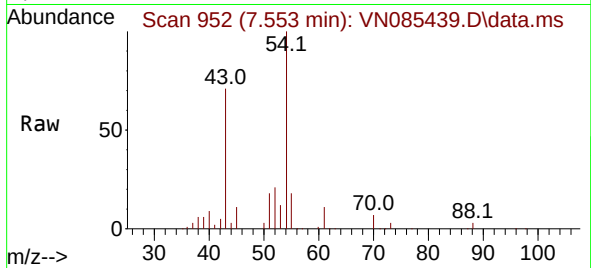




#37  
Ethyl Acetate  
Concen: 49.658 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

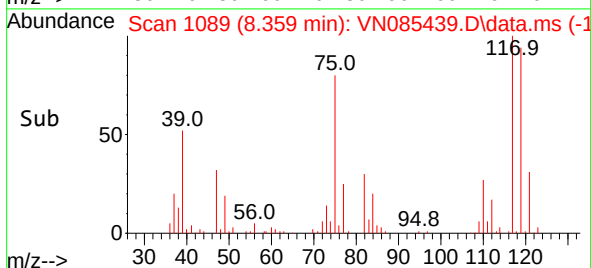
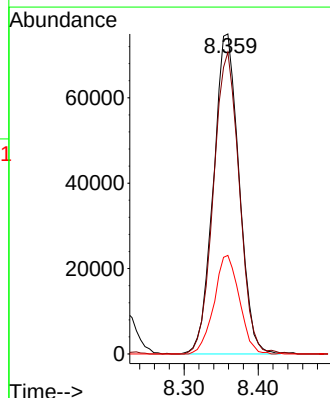
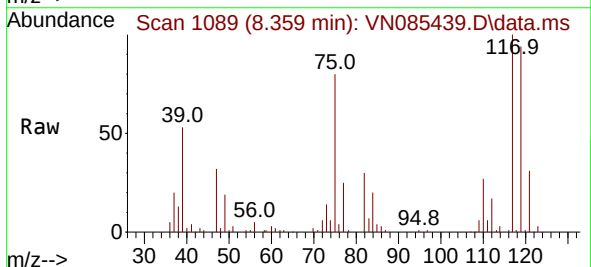
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

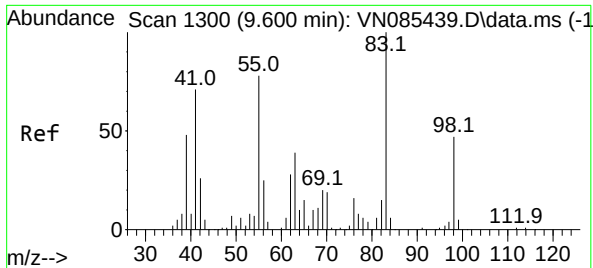
Tgt Ion: 43 Resp: 165866  
Ion Ratio Lower Upper  
43 100  
61 13.6 10.9 16.3  
70 9.4 7.5 11.3



#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

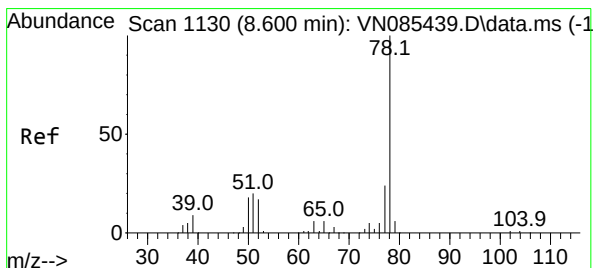
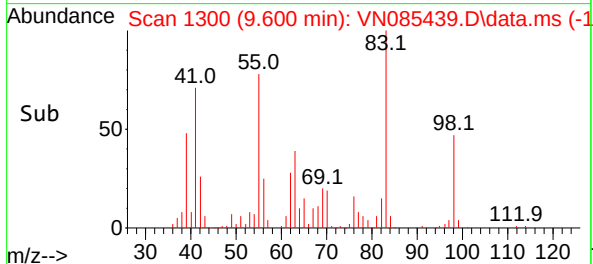
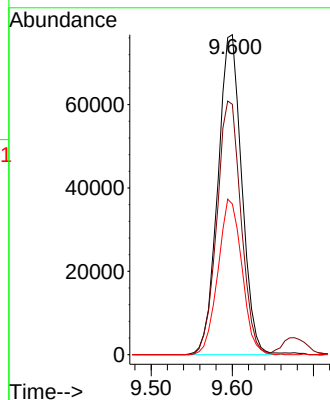
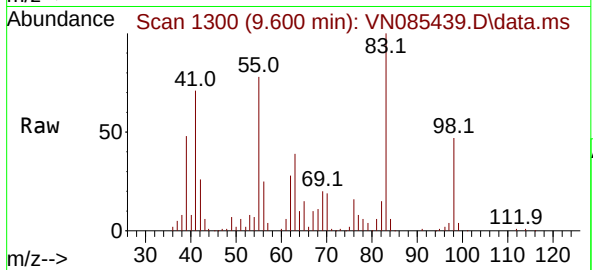
Tgt Ion: 83 Resp: 157234

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

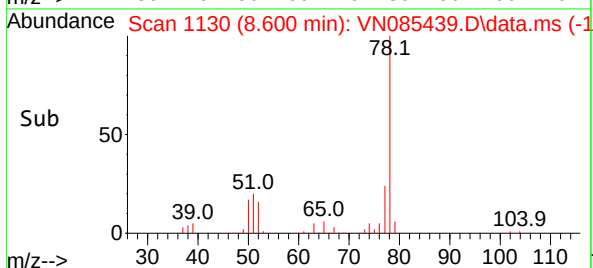
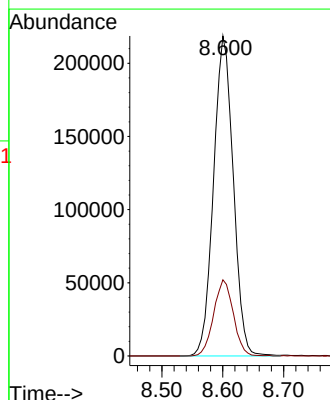
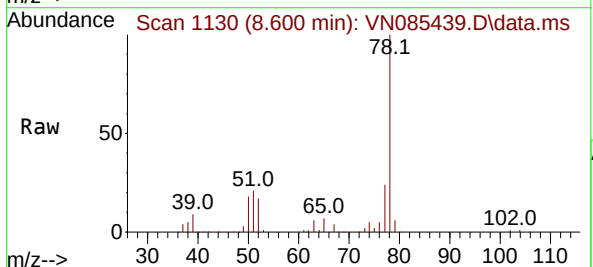
Acq: 14 Jan 2025 15:19

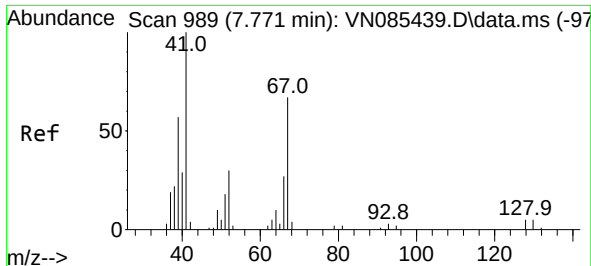
Tgt Ion: 78 Resp: 492606

Ion Ratio Lower Upper

78 100

77 23.8 19.0 28.6

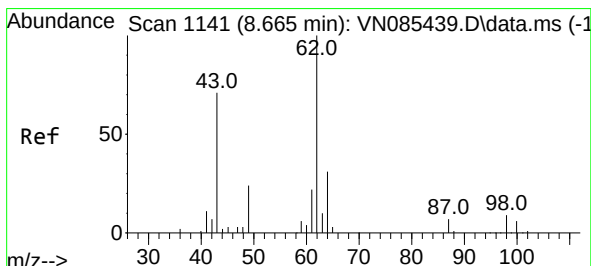
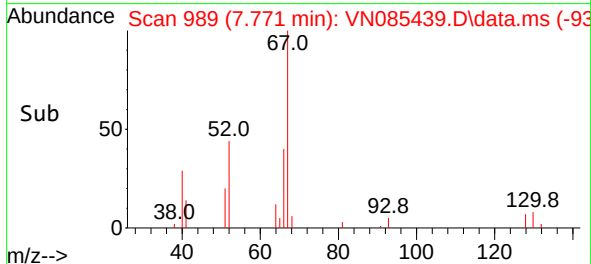
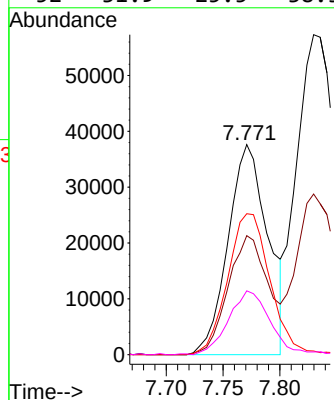
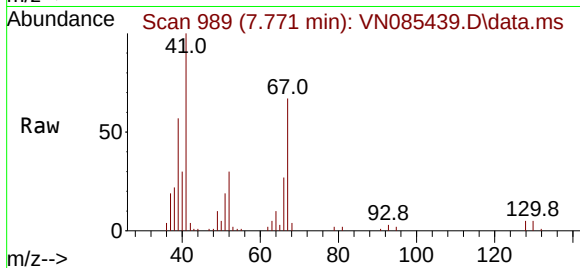




#41  
Methacrylonitrile  
Concen: 52.775 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

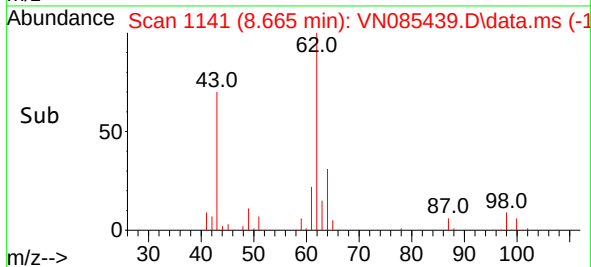
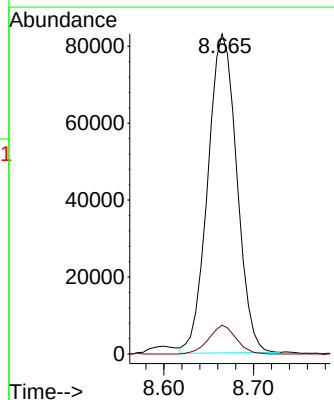
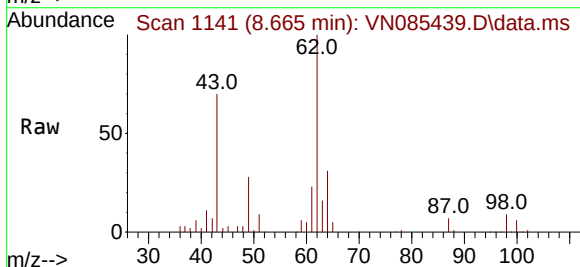
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

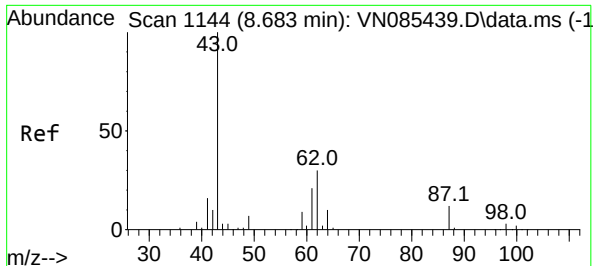
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 91711 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.5  | 46.0  | 69.0  |
| 67       | 71.8  | 57.4  | 86.2  |
| 52       | 31.9  | 25.5  | 38.3  |



#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   |

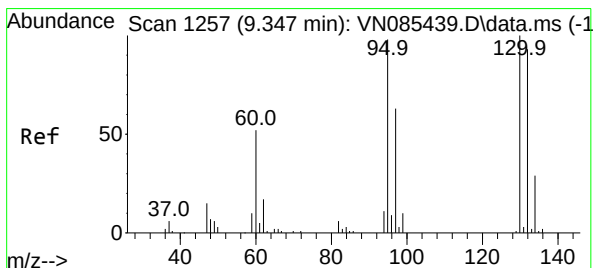
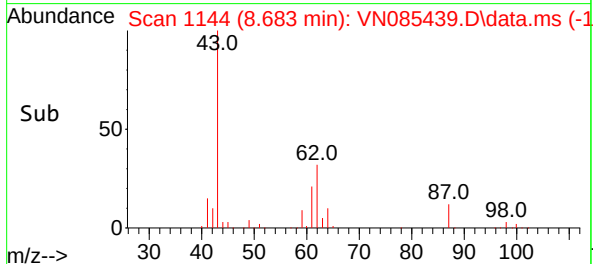
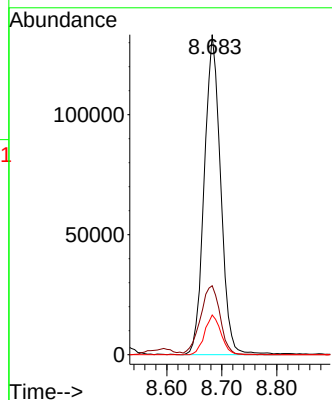
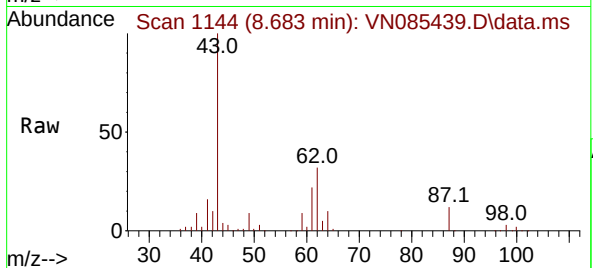




#43  
Isopropyl Acetate  
Concen: 51.611 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

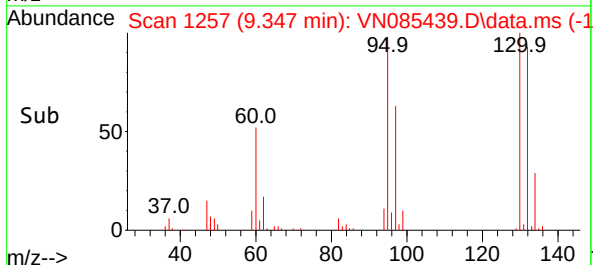
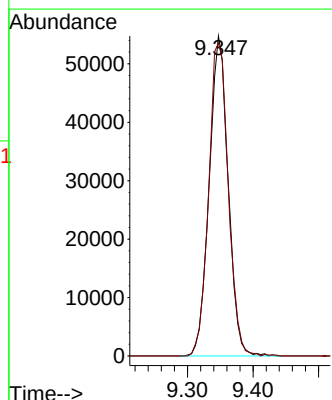
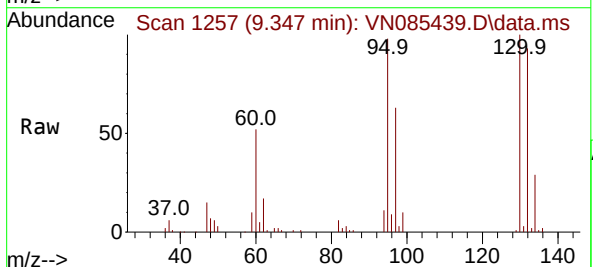
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

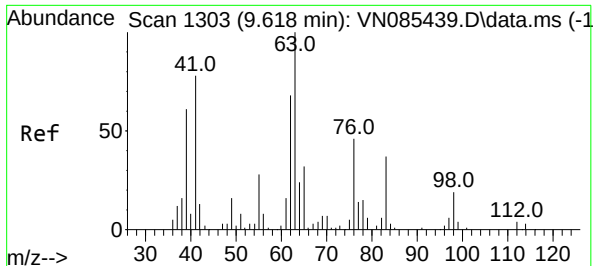
Tgt Ion: 43 Resp: 276228  
Ion Ratio Lower Upper  
43 100  
61 25.9 20.7 31.1  
87 12.3 9.8 14.8



#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 :

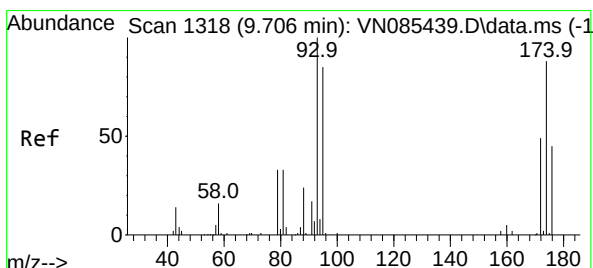
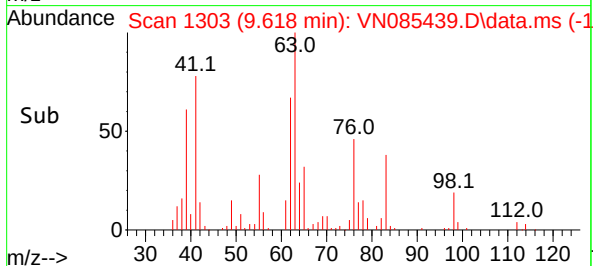
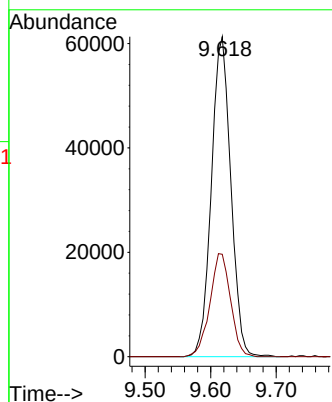
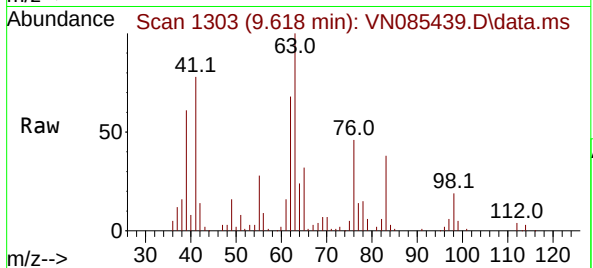
VSTDICCC050

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

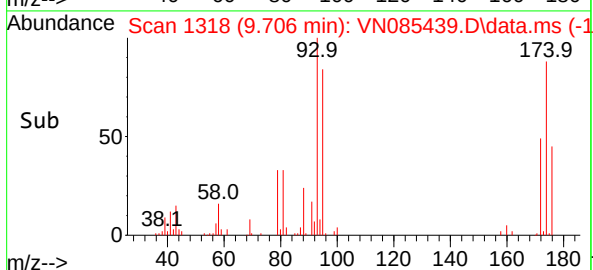
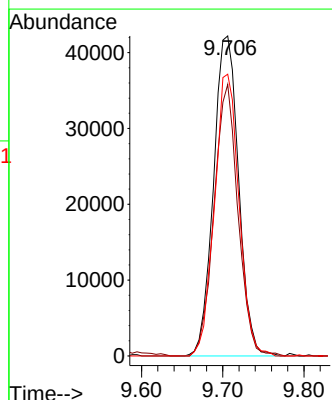
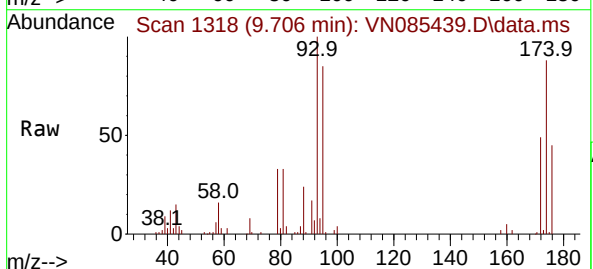
Tgt Ion: 93 Resp: 90670

Ion Ratio Lower Upper

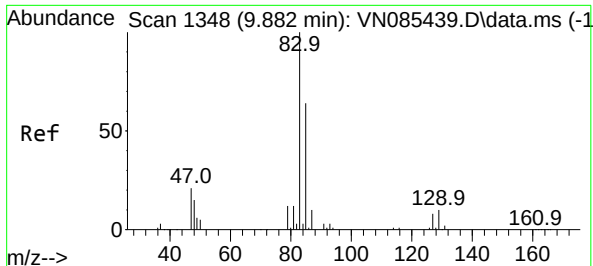
93 100

95 80.9 64.7 97.1

174 86.2 69.0 103.4



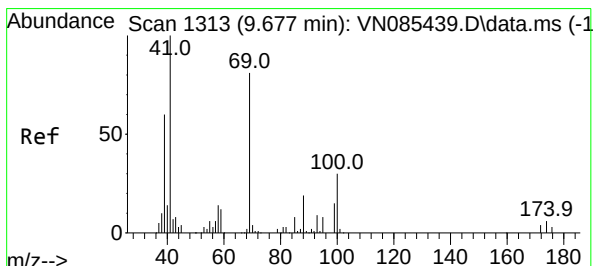
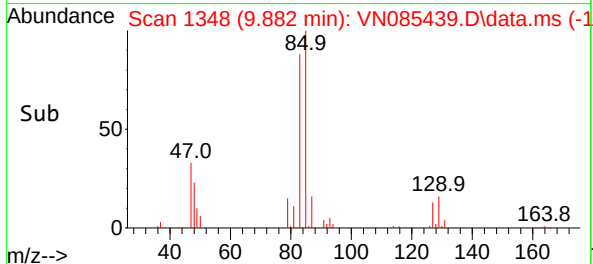
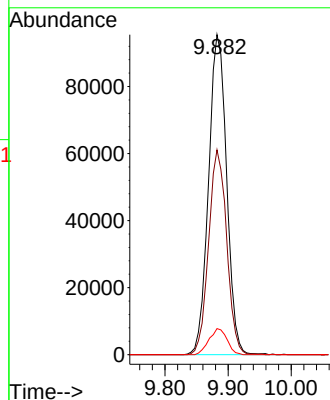
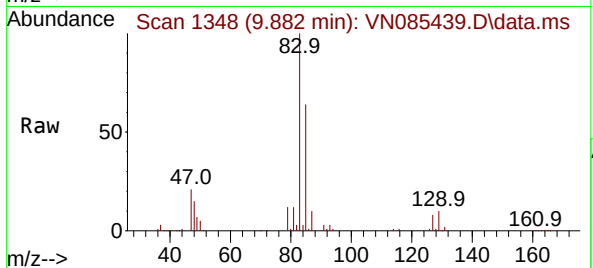




#47  
Bromodichloromethane  
Concen: 50.867 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

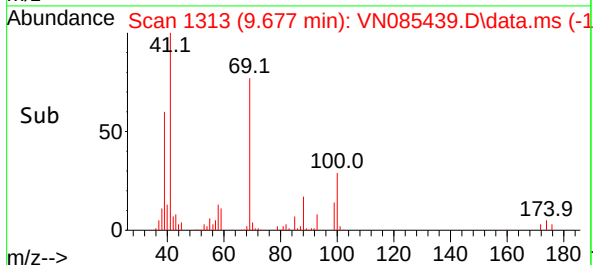
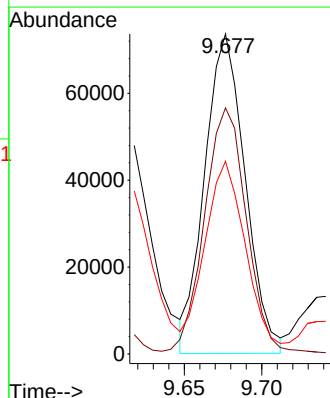
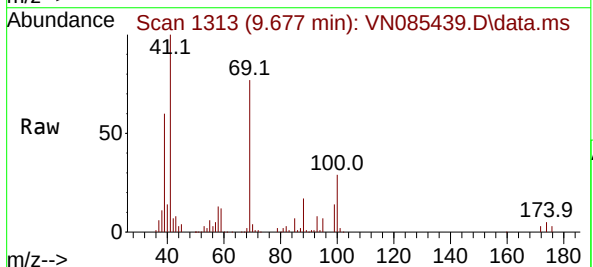
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

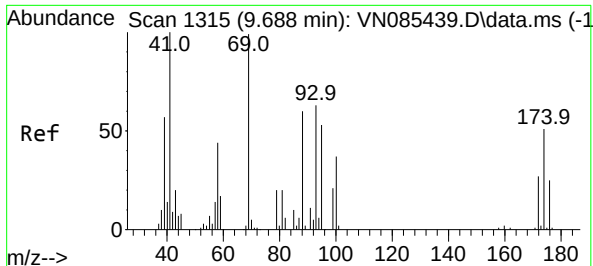
Tgt Ion: 83 Resp: 189915  
Ion Ratio Lower Upper  
83 100  
85 64.0 51.2 76.8  
127 8.1 6.5 9.7



#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

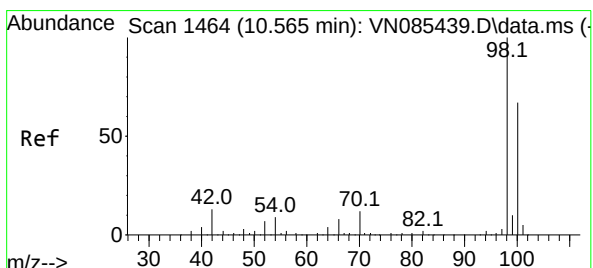
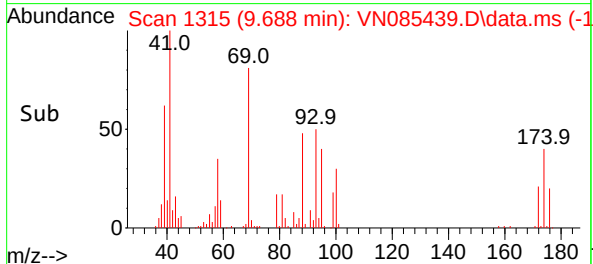
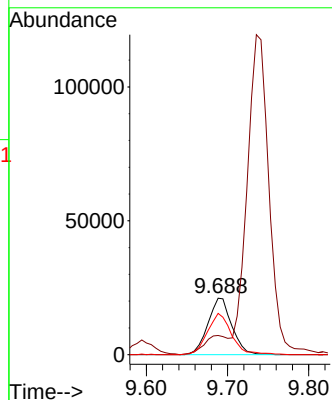
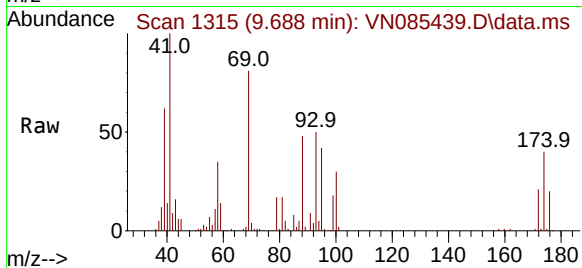
Tgt Ion: 88 Resp: 43048

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

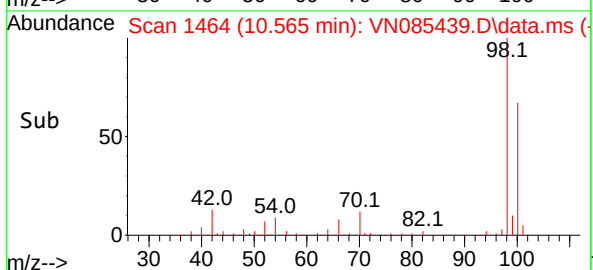
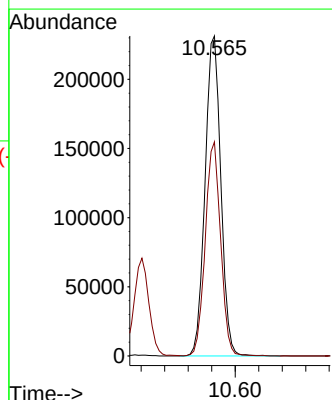
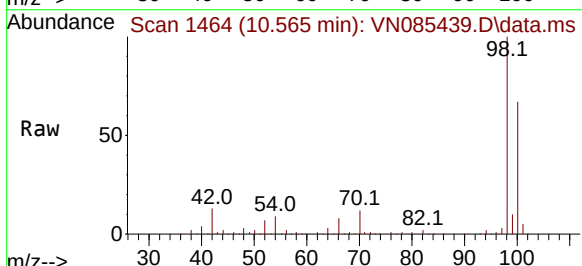
Acq: 14 Jan 2025 15:19

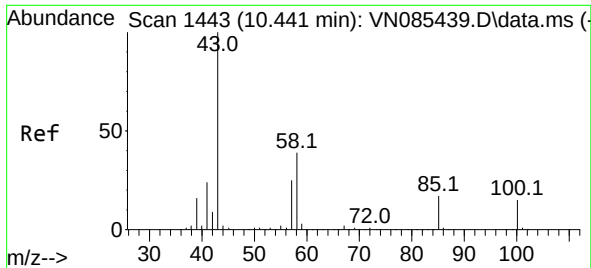
Tgt Ion: 98 Resp: 430698

Ion Ratio Lower Upper

98 100

100 65.3 52.2 78.4

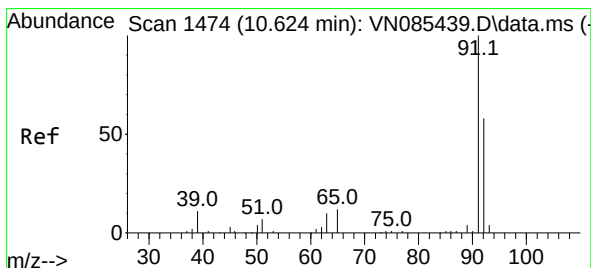
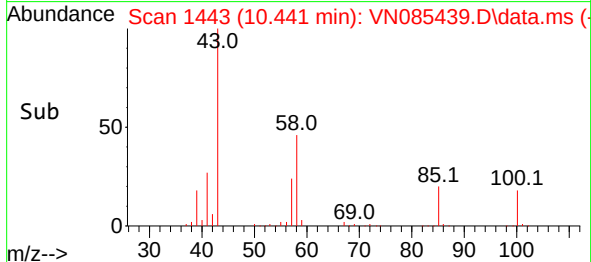
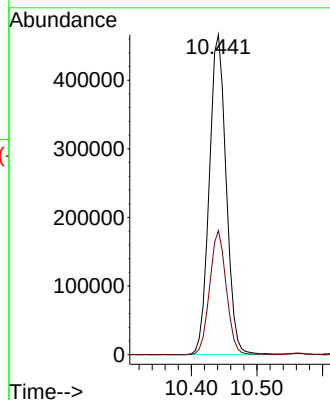
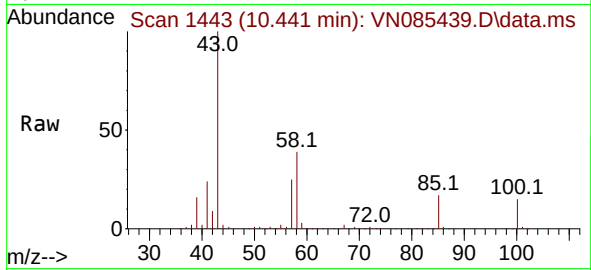




#51  
4-Methyl-2-Pentanone  
Concen: 269.403 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

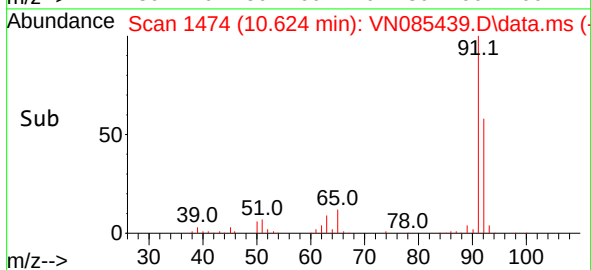
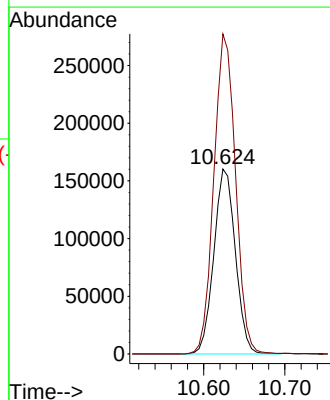
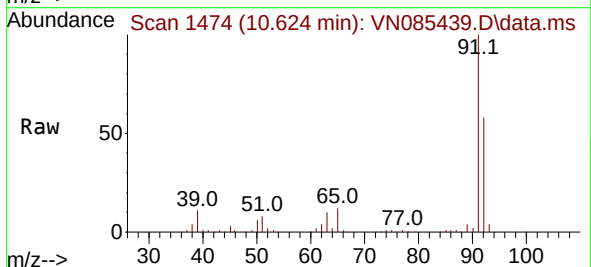
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

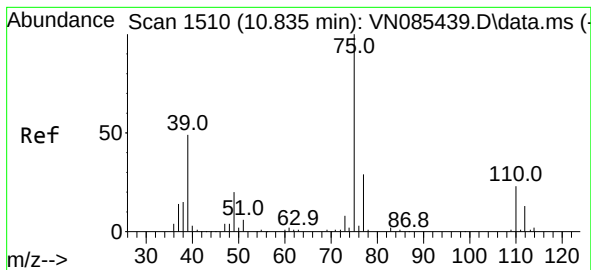
Tgt Ion: 43 Resp: 836707  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#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

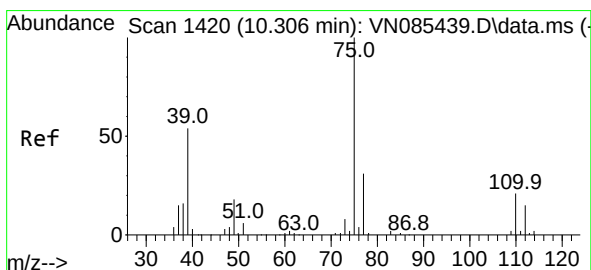
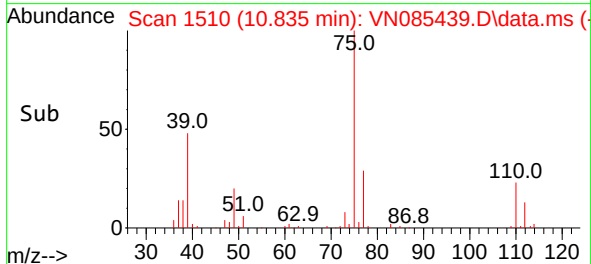
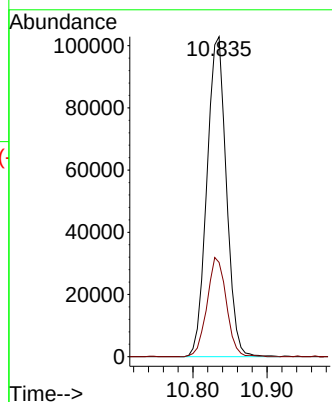
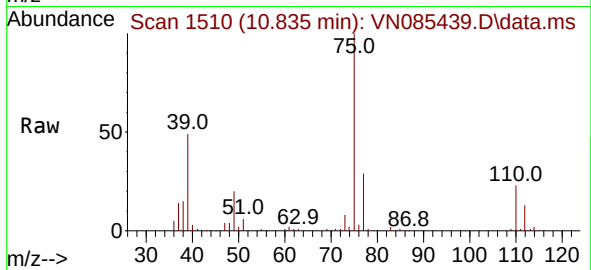




#53  
 t-1,3-Dichloropropene  
 Concen: 53.125 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

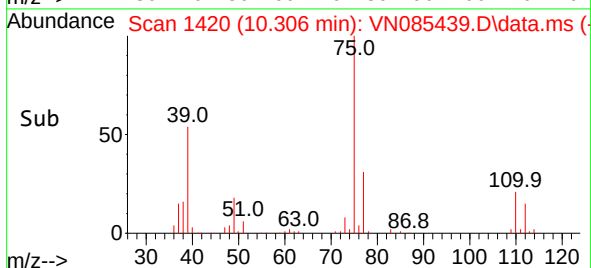
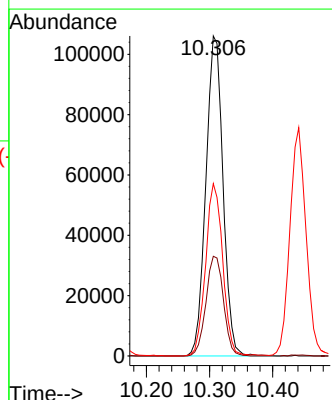
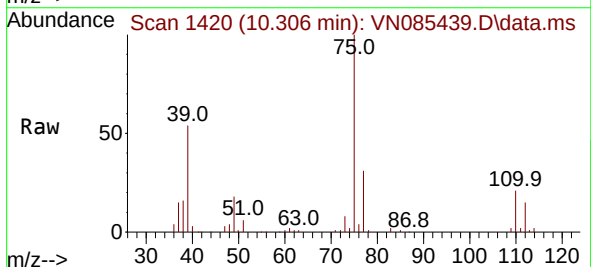
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

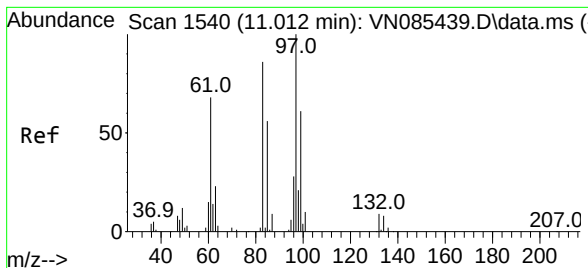
Tgt Ion: 75 Resp: 187439  
 Ion Ratio Lower Upper  
 75 100  
 77 29.4 23.5 35.3



#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

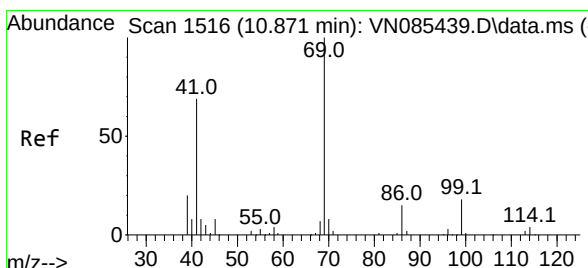
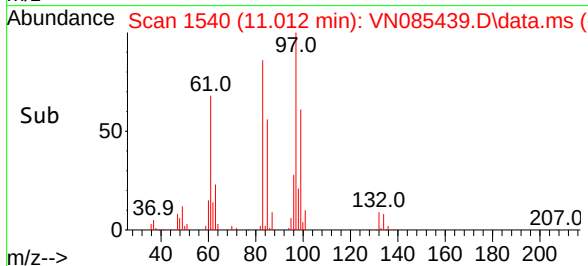
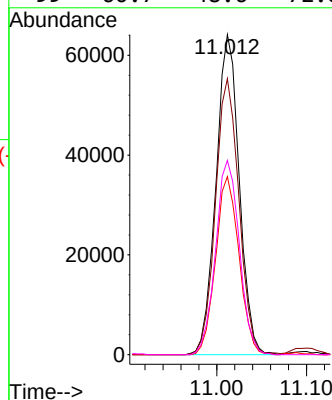
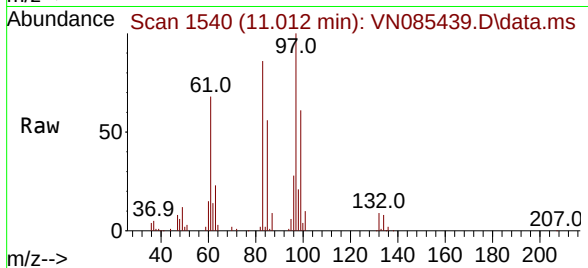
Ion Ratio Lower Upper

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

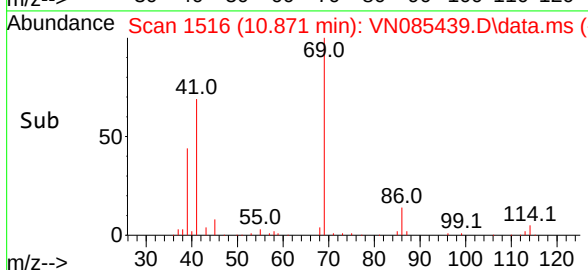
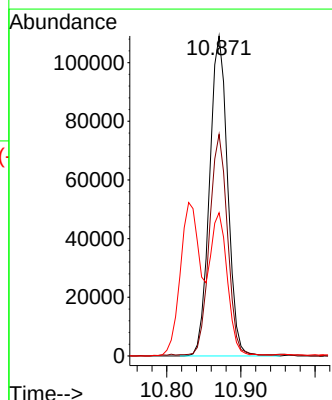
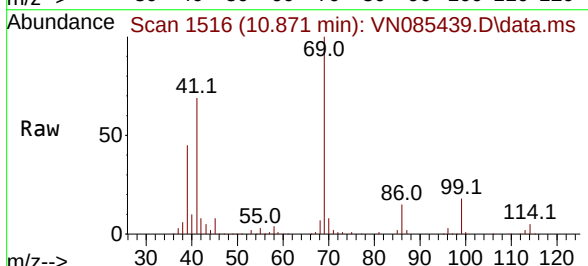
Tgt Ion: 69 Resp: 184775

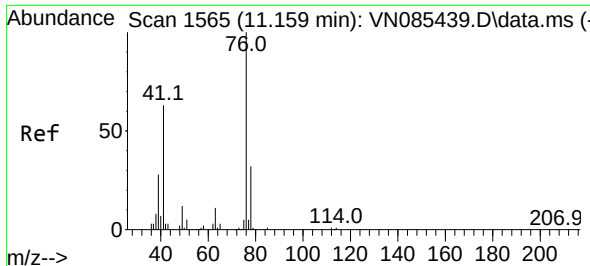
Ion Ratio Lower Upper

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 :

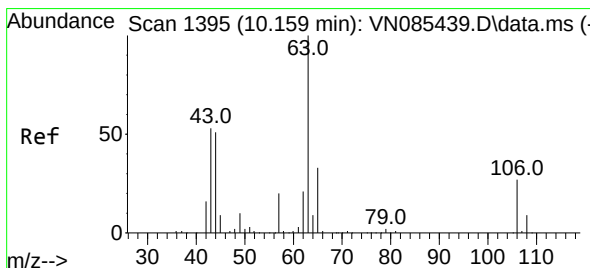
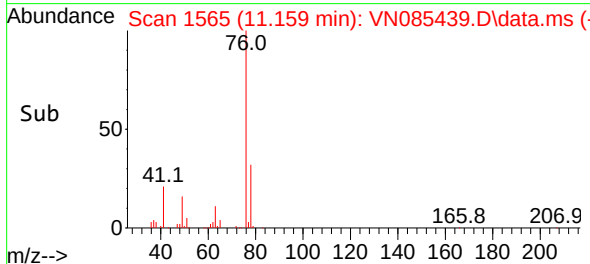
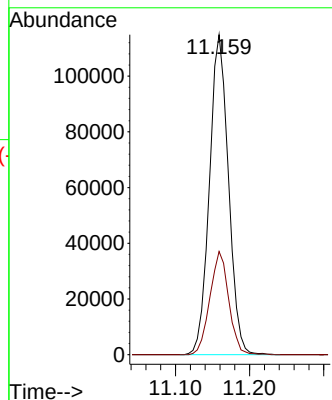
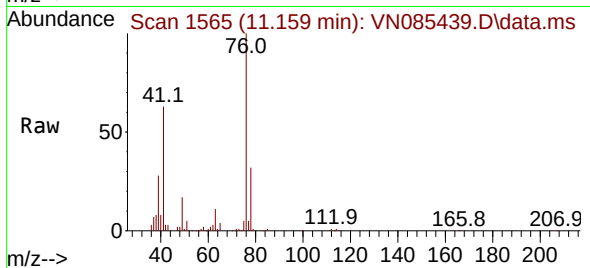
VSTDICCC050

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

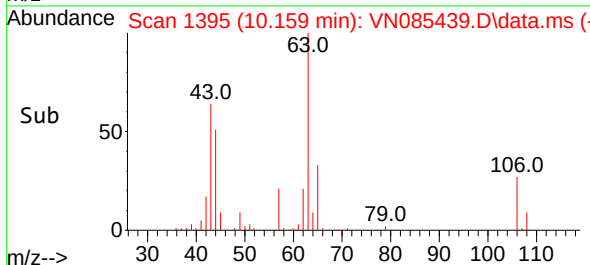
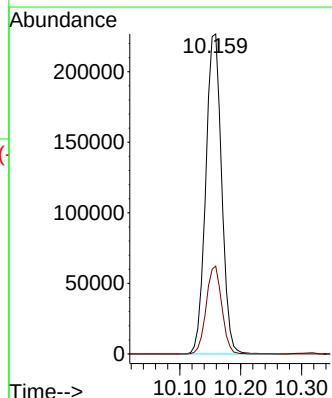
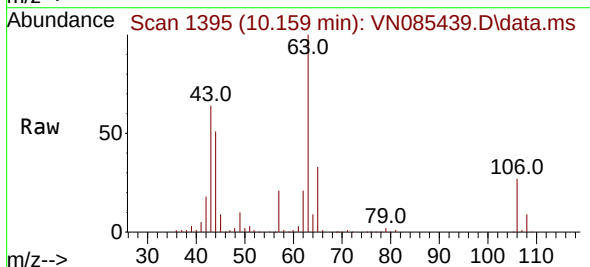
Acq: 14 Jan 2025 15:19

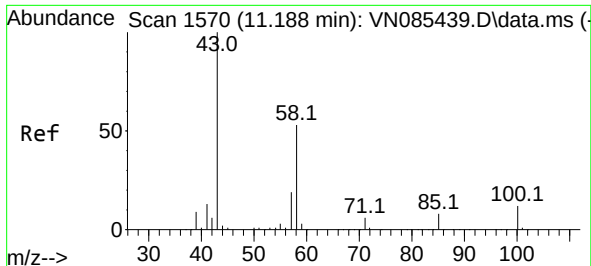
Tgt Ion: 63 Resp: 409594

Ion Ratio Lower Upper

63 100

106 27.0 21.6 32.4

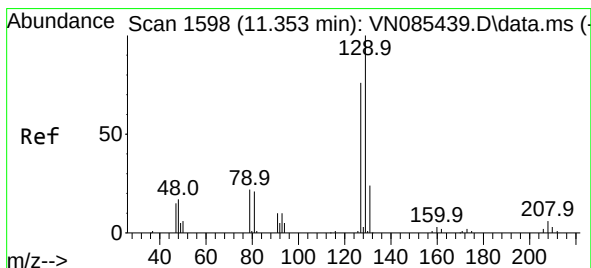
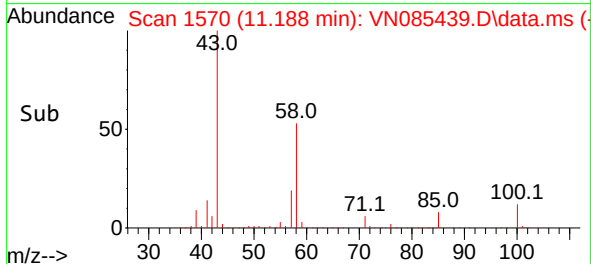
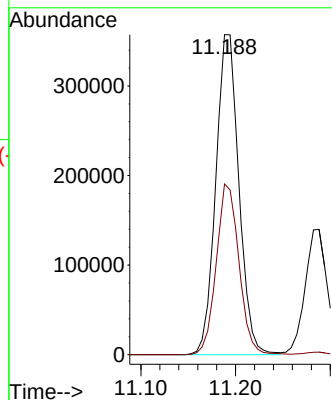
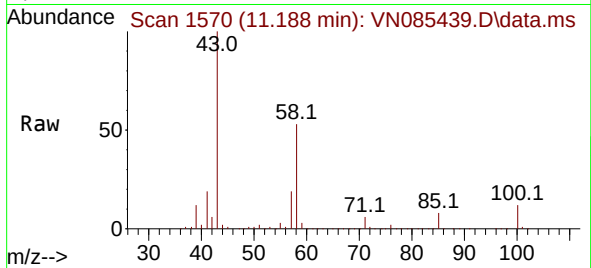




#59  
2-Hexanone  
Concen: 277.643 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

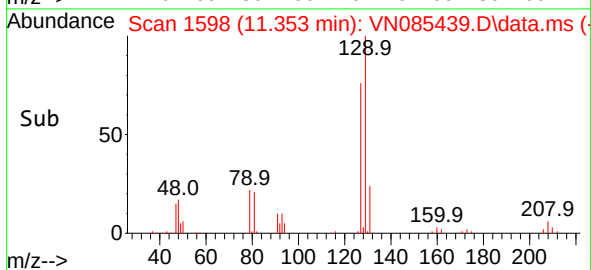
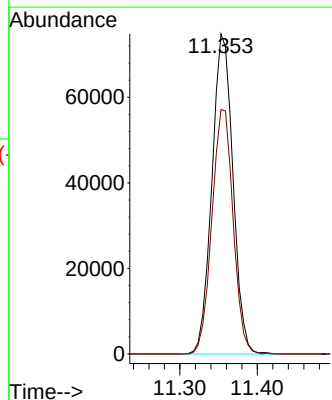
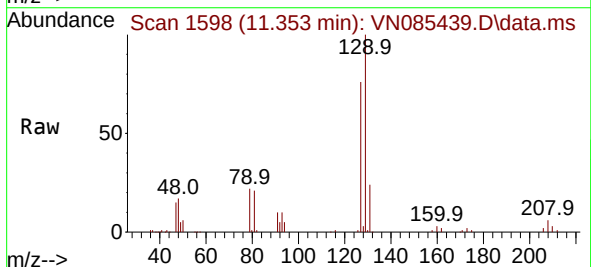
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MSVOA\_N  
ClientSampleId :  
VSTDICCC050

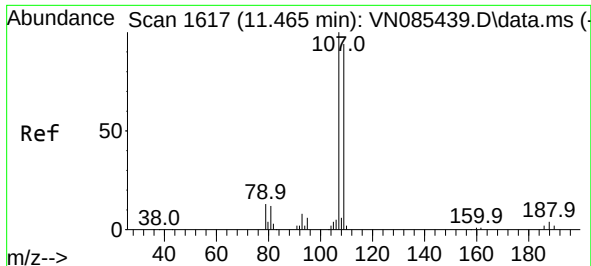
Tgt Ion: 43 Resp: 606740  
Ion Ratio Lower Upper  
43 100  
58 52.4 26.2 78.6



#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

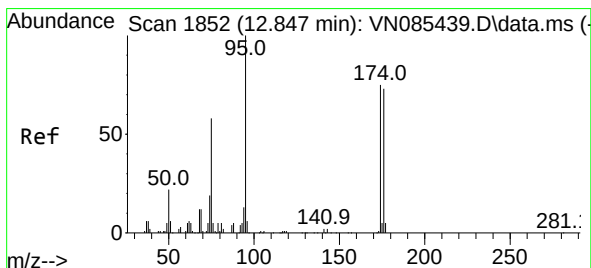
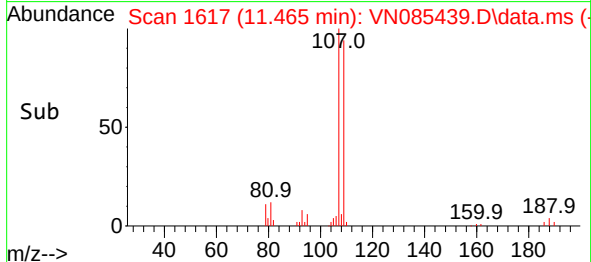
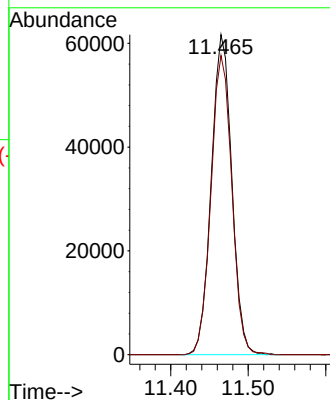
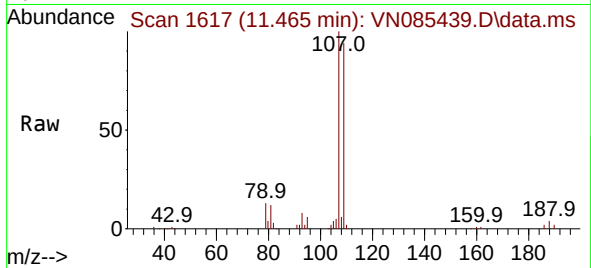




#61  
1,2-Dibromoethane  
Concen: 50.028 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

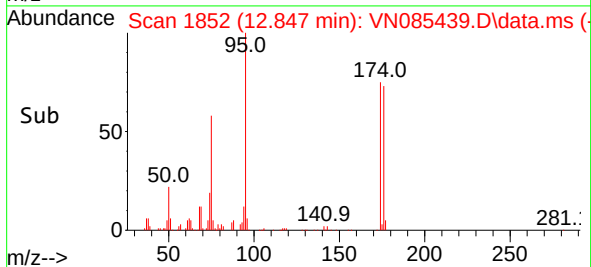
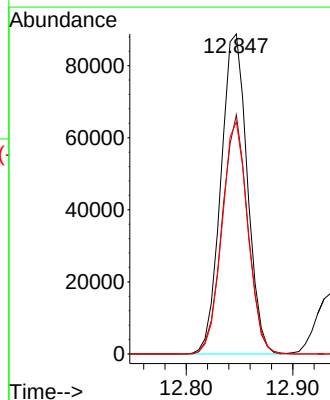
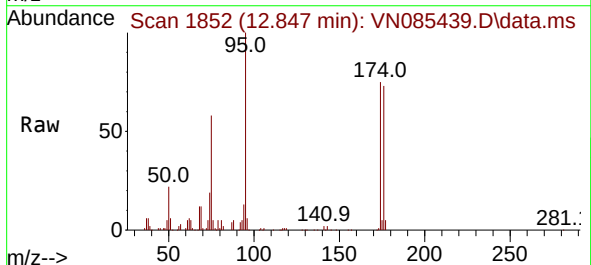
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

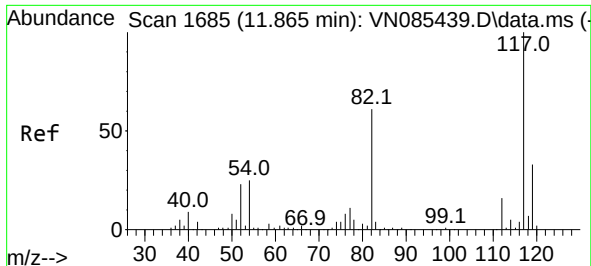


#62  
4-Bromofluorobenzene  
Concen: 53.239 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

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



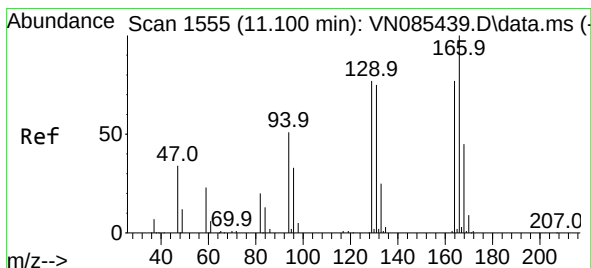
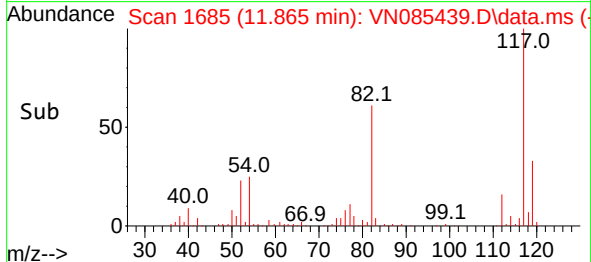
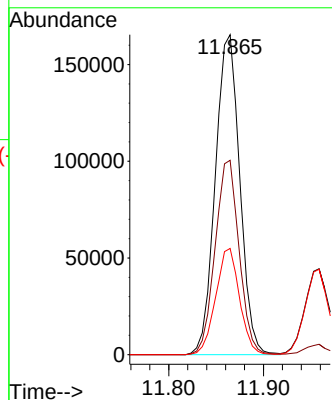
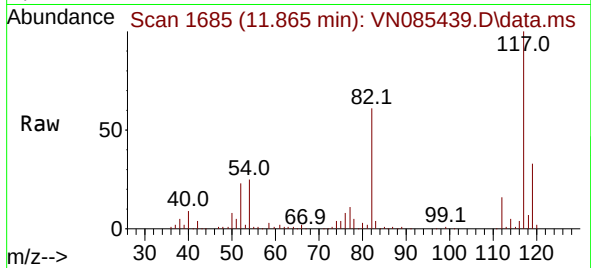




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1170  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

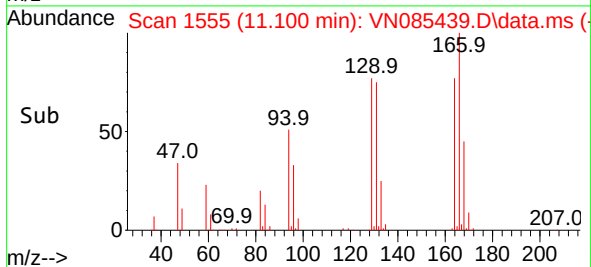
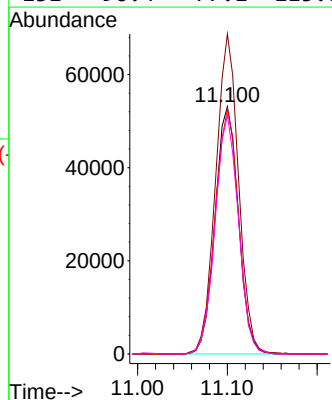
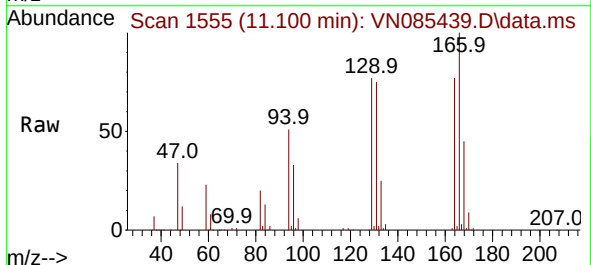
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VSTDICCC050

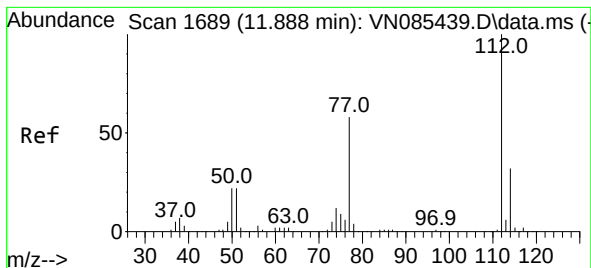
Tgt Ion:117 Resp: 297366  
Ion Ratio Lower Upper  
117 100  
82 60.7 48.6 72.8  
119 33.2 26.6 39.8



#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 :

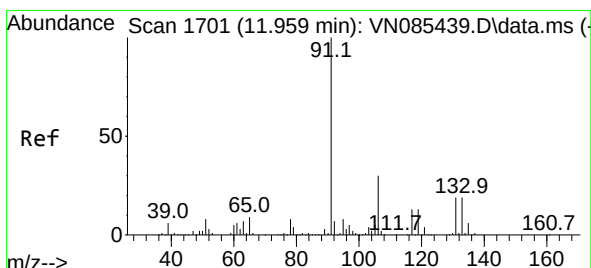
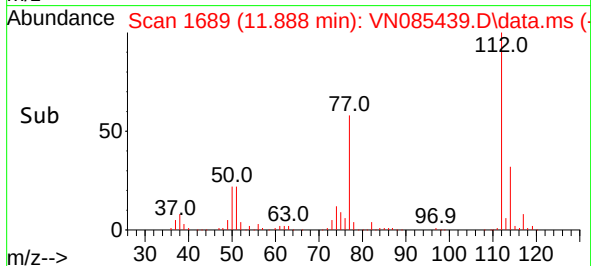
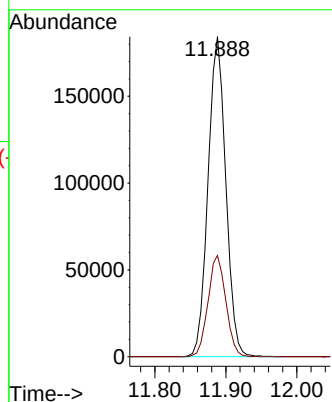
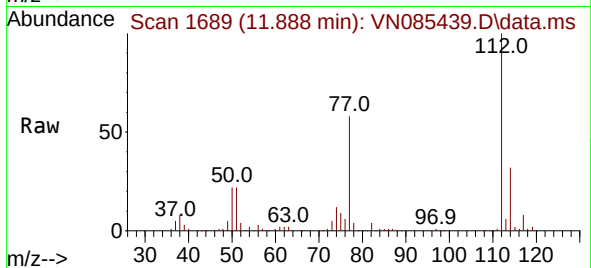
VSTDICCC050

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

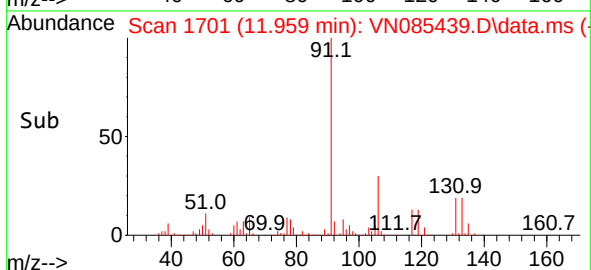
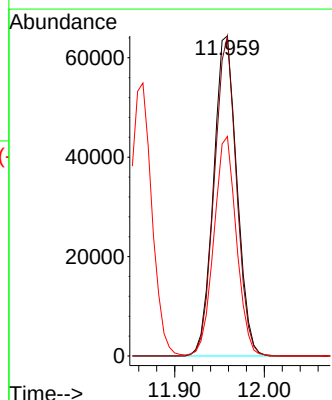
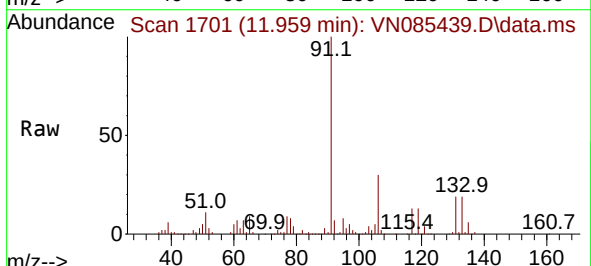
Tgt Ion:131 Resp: 116488

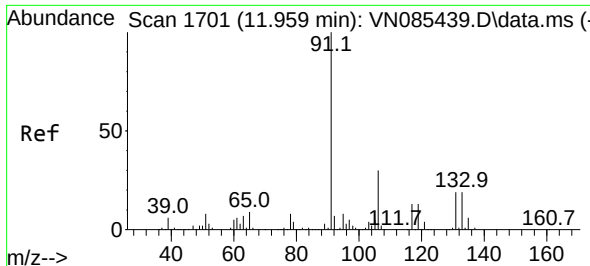
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.3 33.1 99.5

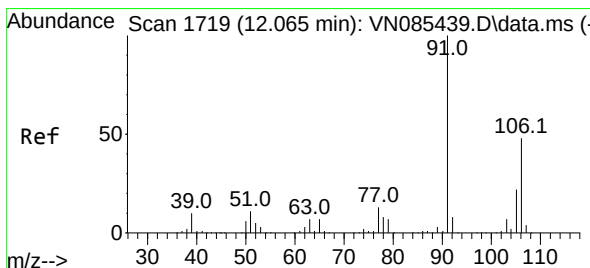
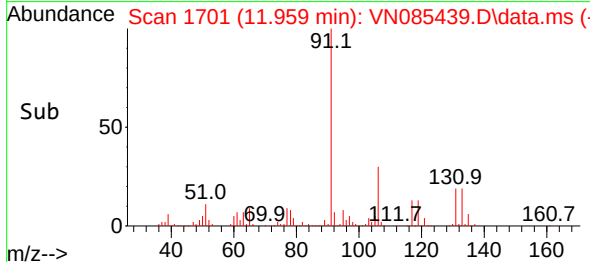
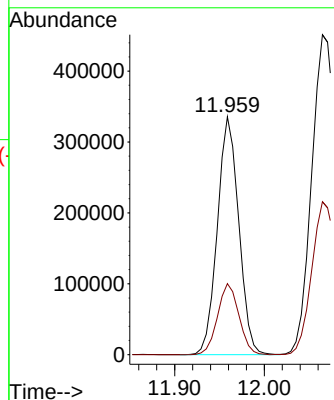
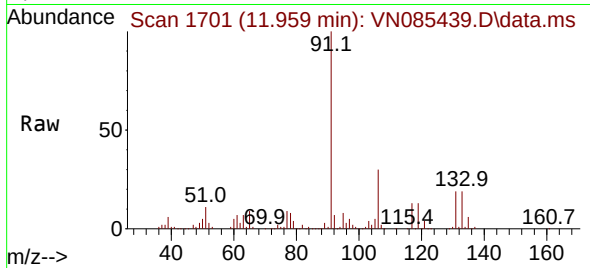




#67  
Ethyl Benzene  
Concen: 52.339 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

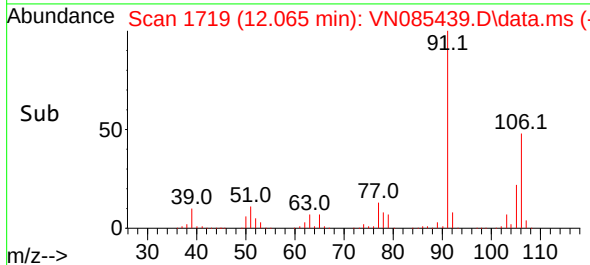
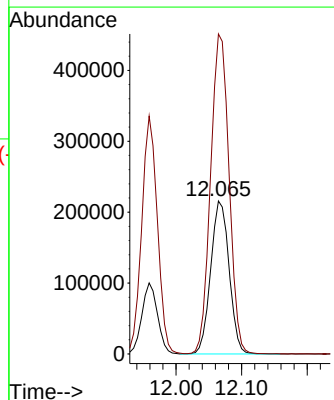
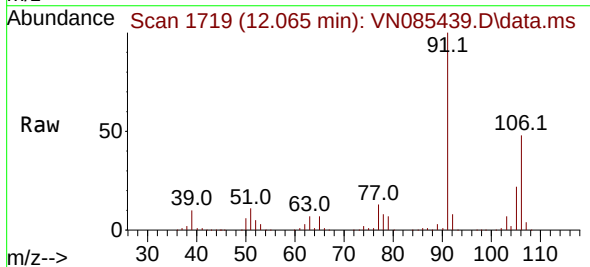
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MSVOA\_N  
ClientSampleId :  
VSTDICCC050

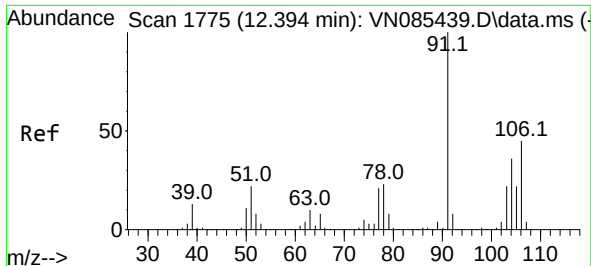
Tgt Ion: 91 Resp: 555322  
Ion Ratio Lower Upper  
91 100  
106 29.8 23.8 35.8



#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

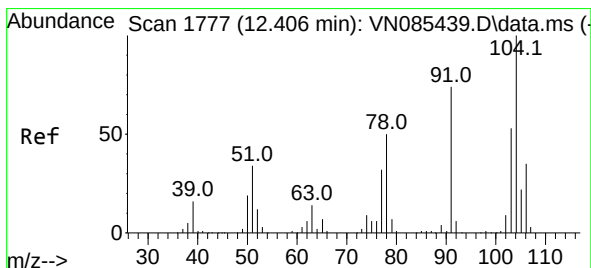
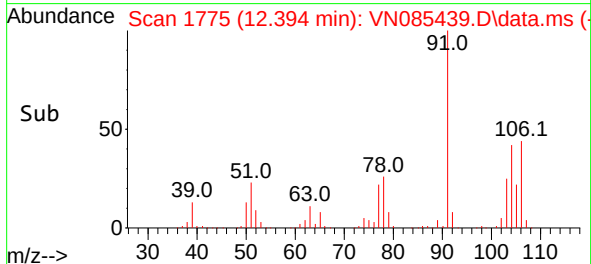
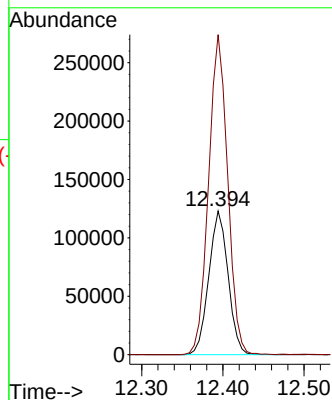
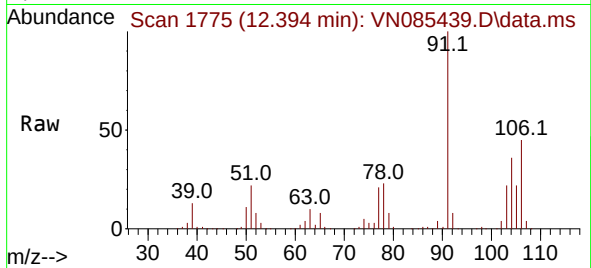




#69  
o-Xylene  
Concen: 54.062 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

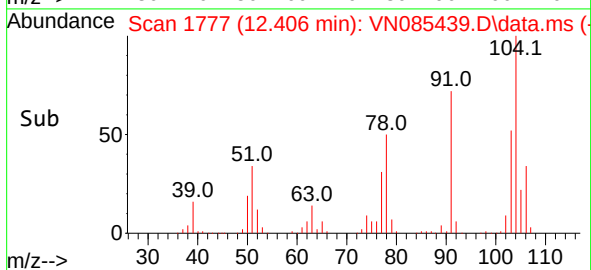
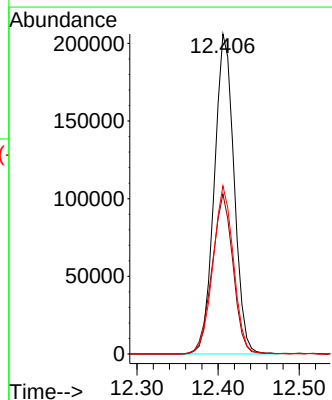
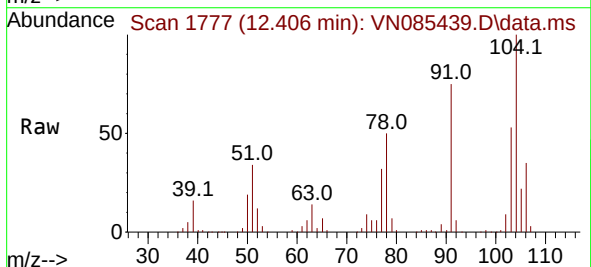
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MSVOA\_N  
ClientSampleId :  
VSTDICCC050

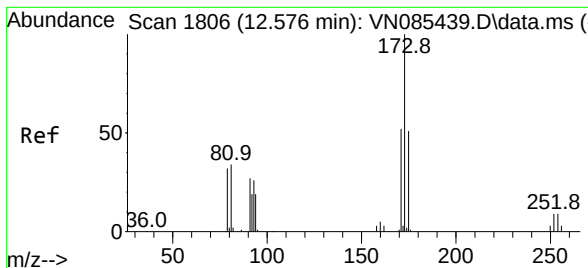
Tgt Ion:106 Resp: 202597  
Ion Ratio Lower Upper  
106 100  
91 220.8 110.4 331.2



#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# 1806

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICCC050

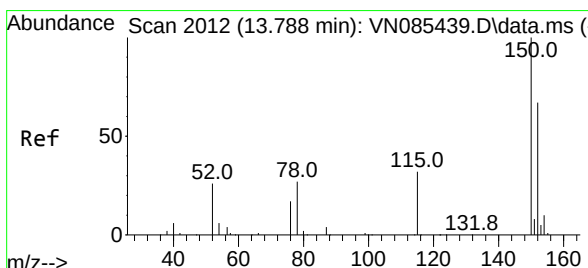
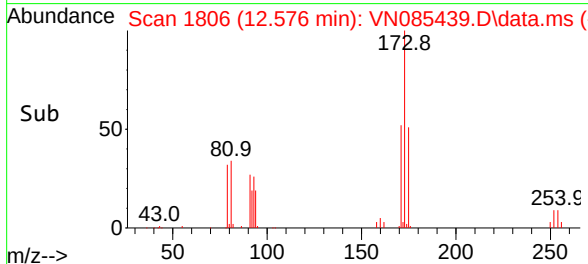
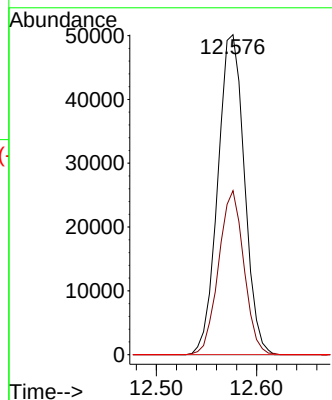
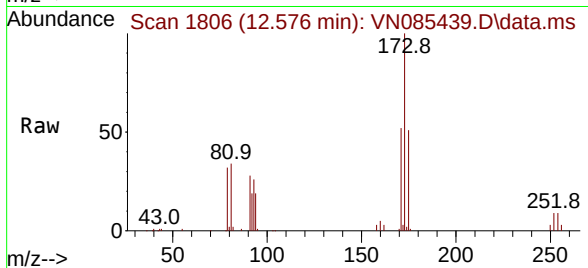
Tgt Ion:173 Resp: 92366

Ion Ratio Lower Upper

173 100

175 48.8 24.4 73.2

254 0.0 0.0 0.0



#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

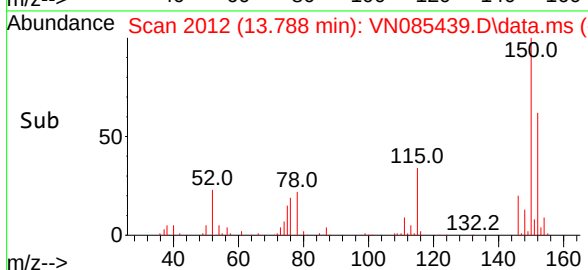
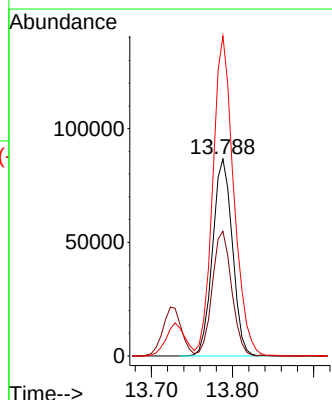
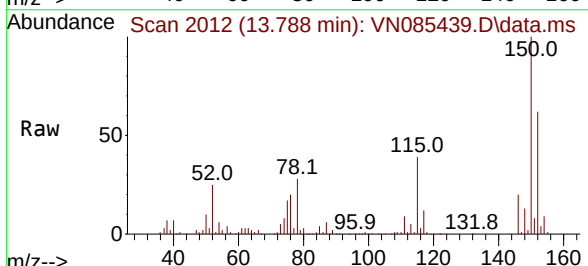
Tgt Ion:152 Resp: 146624

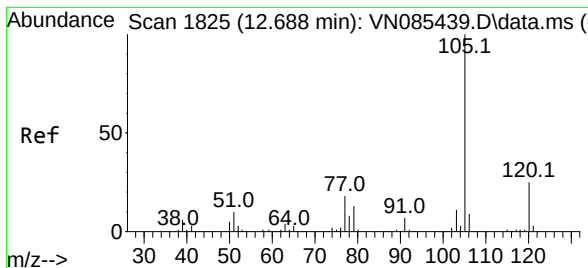
Ion Ratio Lower Upper

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 :

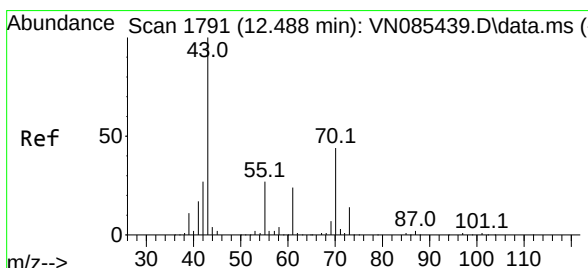
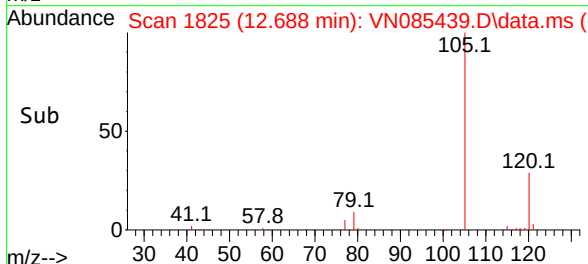
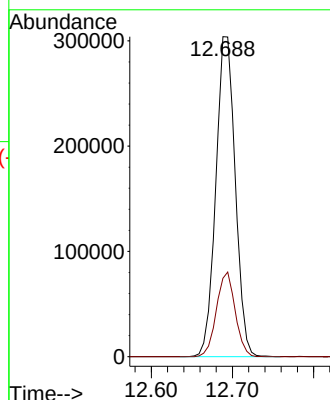
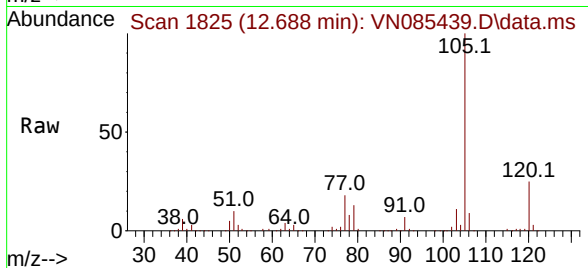
VSTDICCC050

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

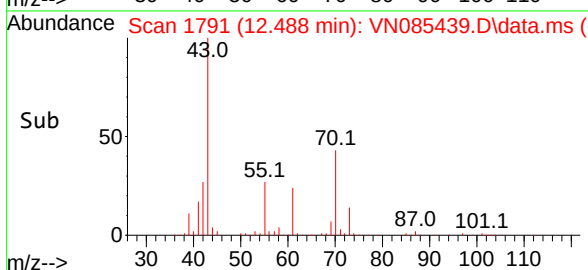
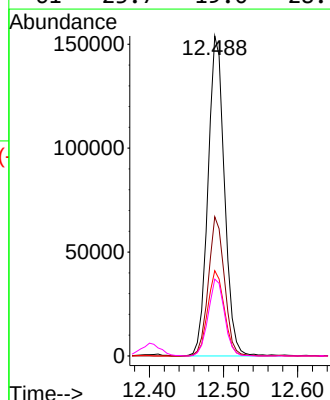
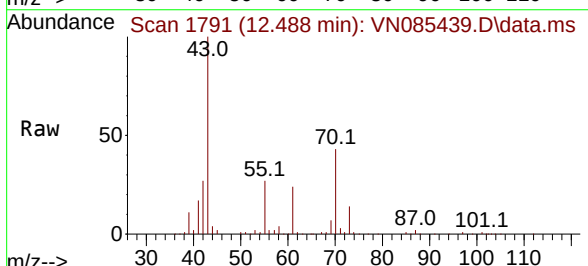
Ion Ratio Lower Upper

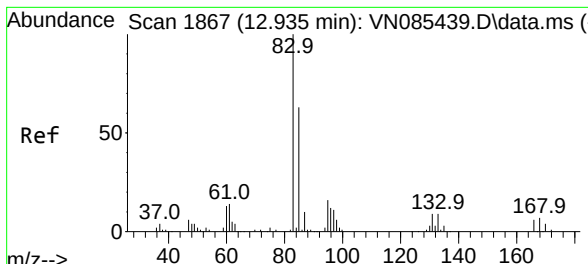
43 100

70 42.5 34.0 51.0

55 26.8 21.4 32.2

61 23.7 19.0 28.4

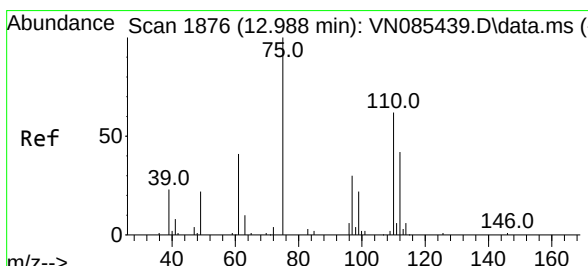
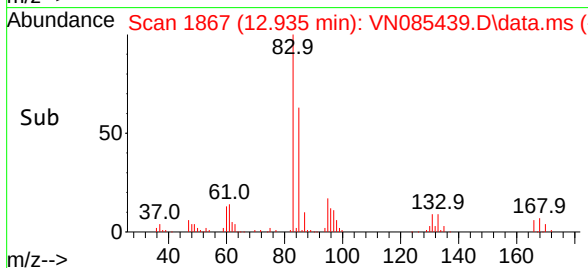
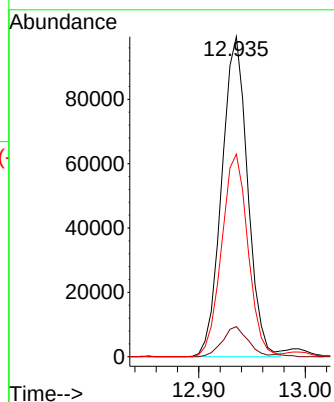
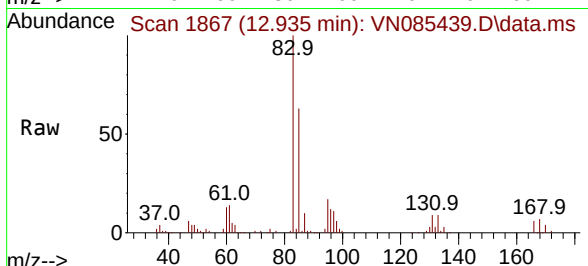




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 48.019 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

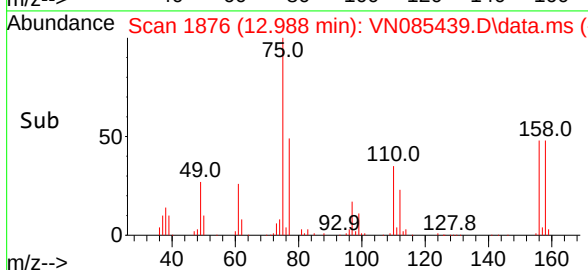
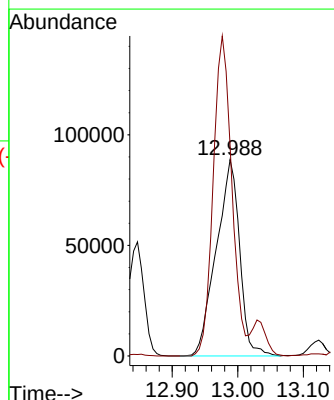
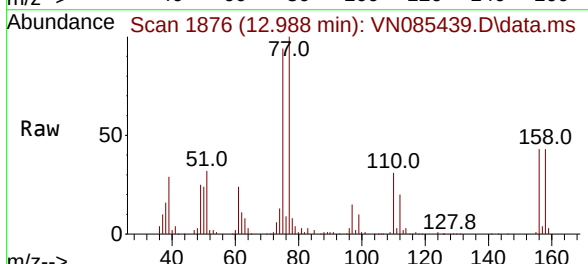
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

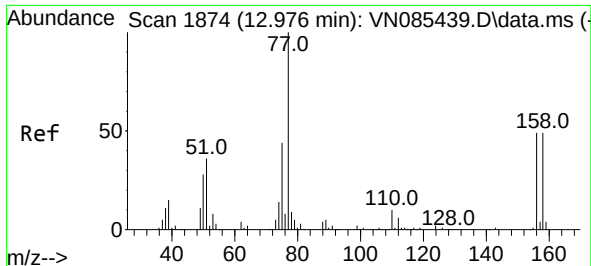
Tgt Ion: 83 Resp: 167856  
 Ion Ratio Lower Upper  
 83 100  
 131 9.6 4.8 14.4  
 85 64.4 32.2 96.6



#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

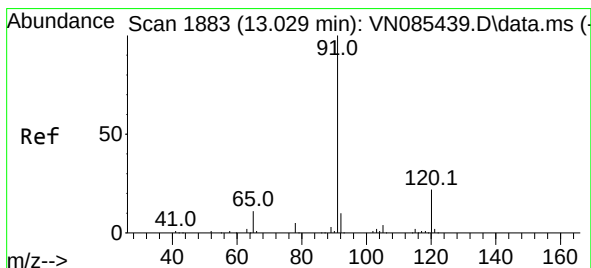
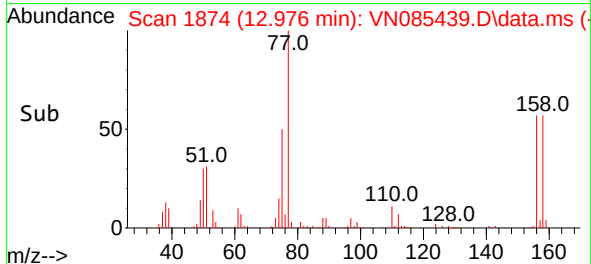
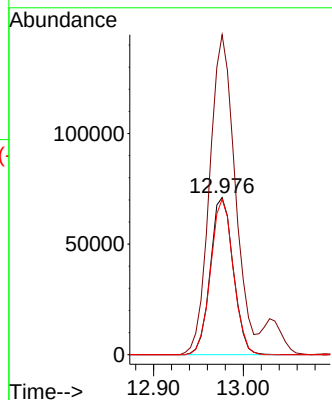
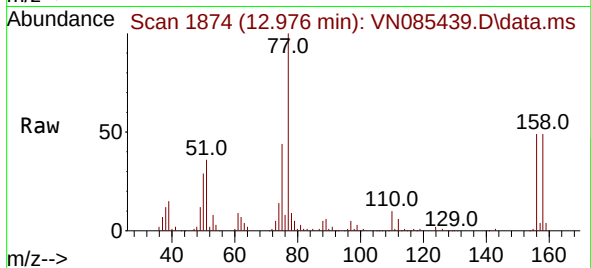




#77  
Bromobenzene  
Concen: 48.657 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

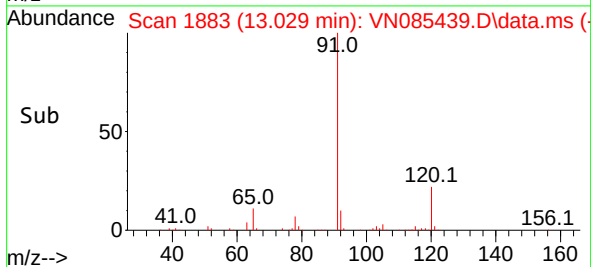
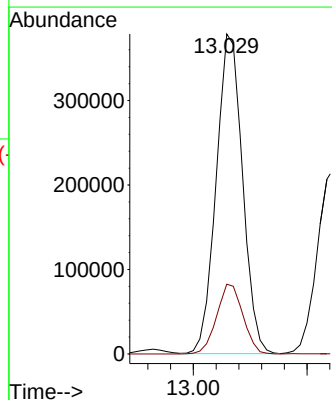
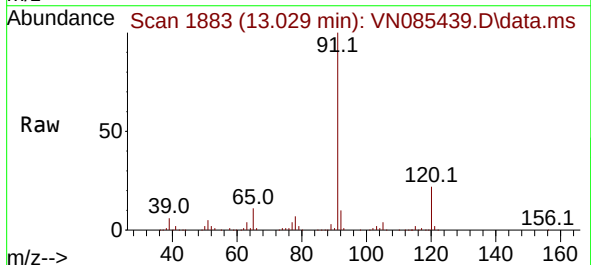
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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

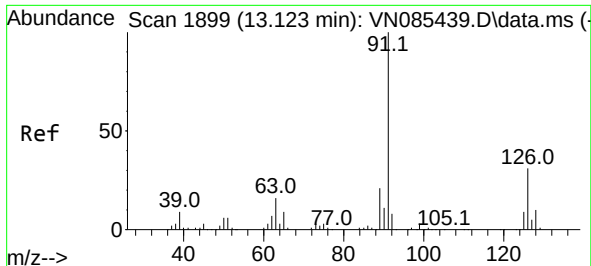


#78  
n-propylbenzene  
Concen: 51.986 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 609022  
Ion Ratio Lower Upper  
91 100  
120 21.7 10.9 32.6



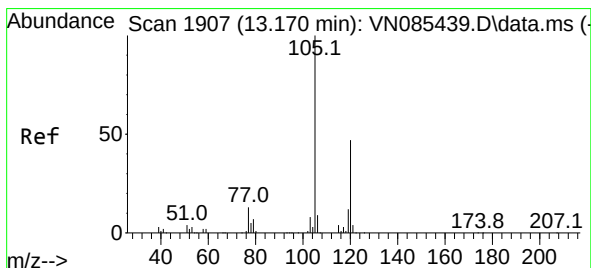
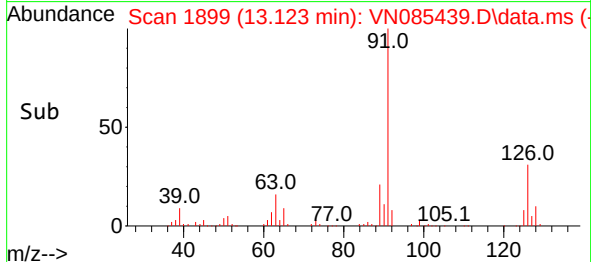
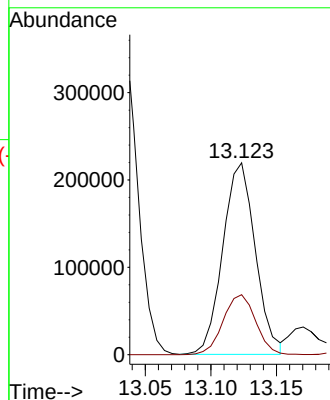
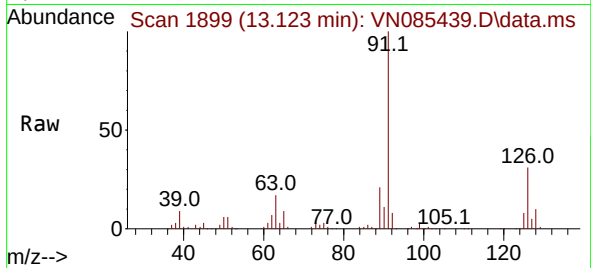




#79  
2-Chlorotoluene  
Concen: 49.985 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

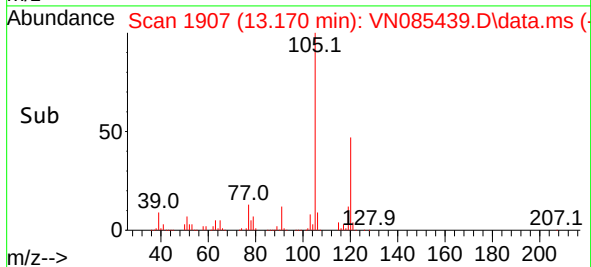
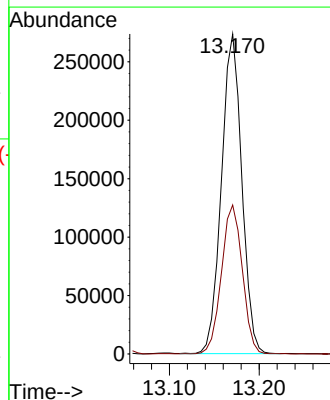
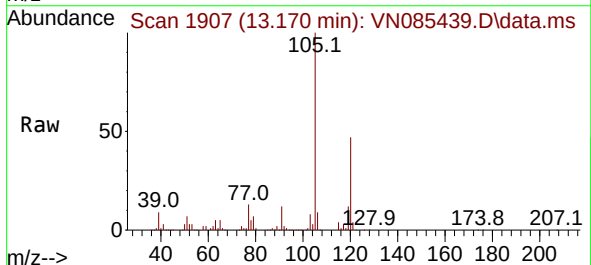
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

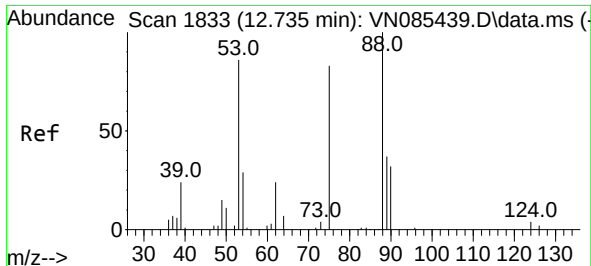
Tgt Ion: 91 Resp: 378981  
Ion Ratio Lower Upper  
91 100  
126 31.4 15.7 47.1



#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

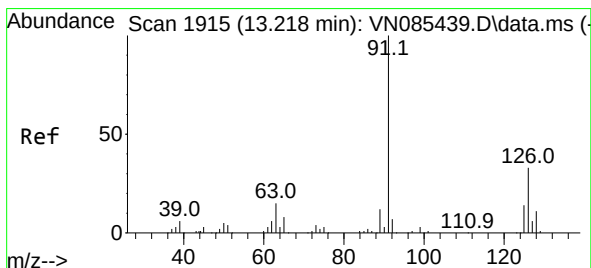
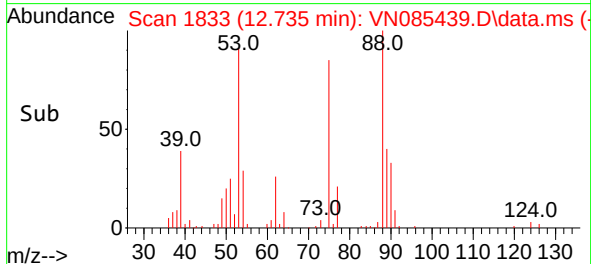
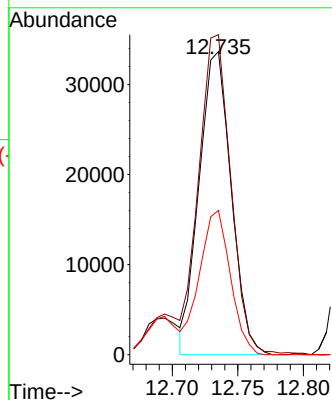
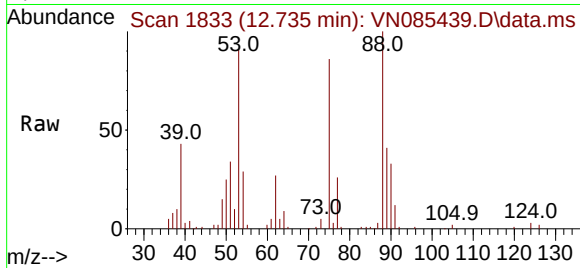




#81  
trans-1,4-Dichloro-2-butene  
Concen: 51.914 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

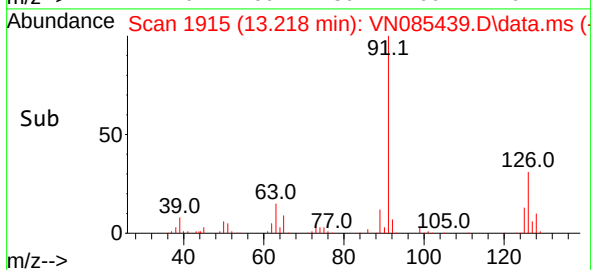
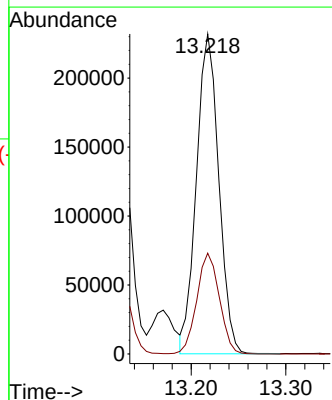
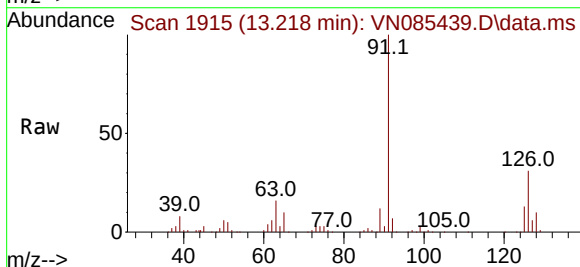
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

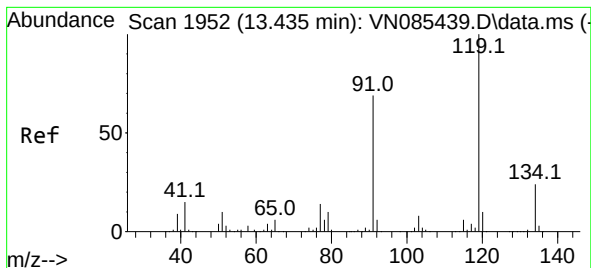
Tgt Ion: 75 Resp: 57184  
Ion Ratio Lower Upper  
75 100  
53 119.5 95.6 143.4  
89 46.3 37.0 55.6



#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

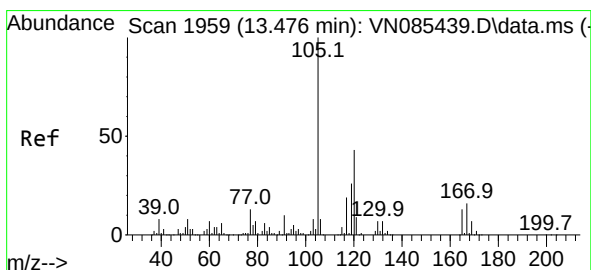
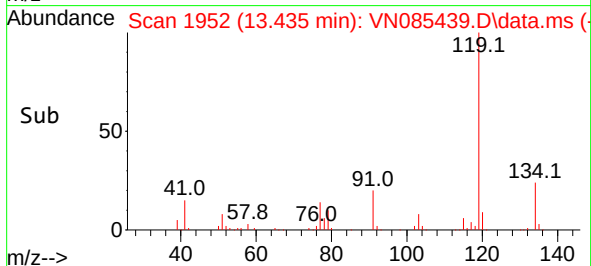
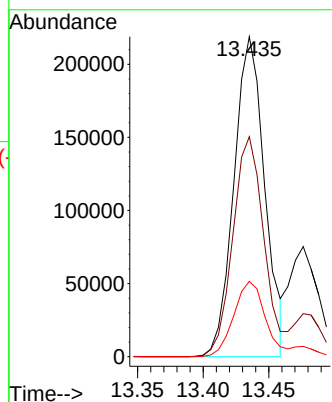
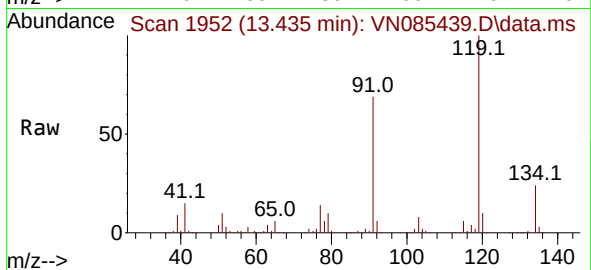
Tgt Ion:119 Resp: 357563

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

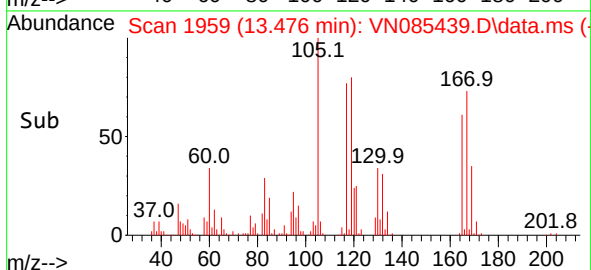
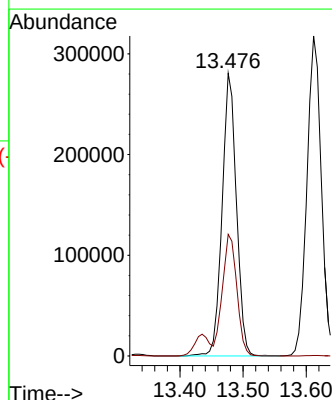
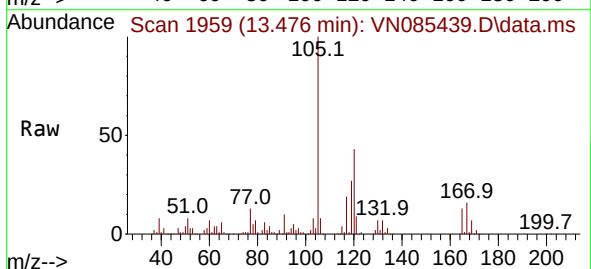
Acq: 14 Jan 2025 15:19

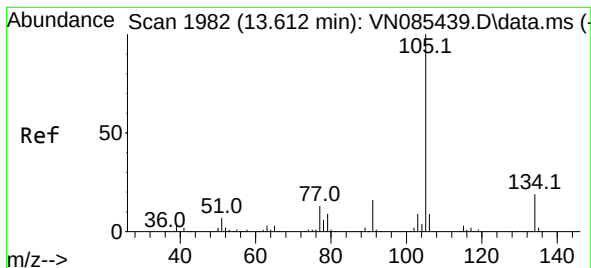
Tgt Ion:105 Resp: 442175

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 :

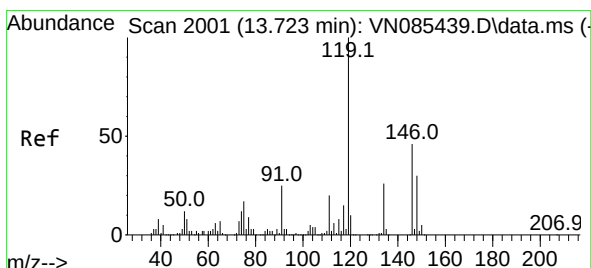
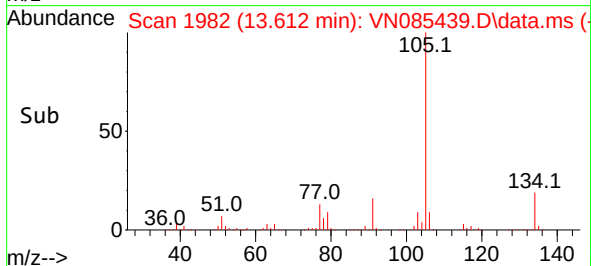
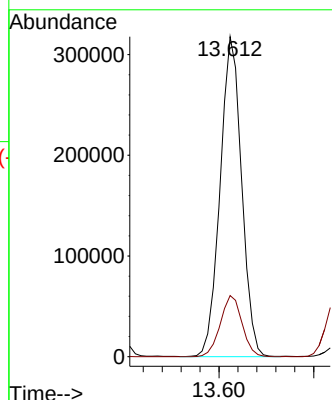
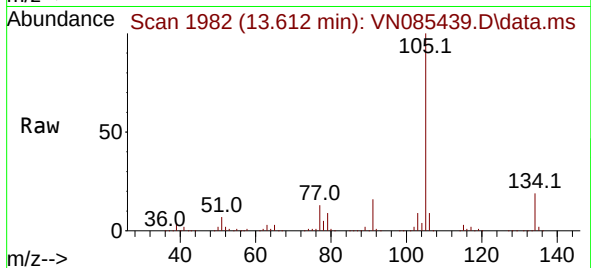
VSTDICCC050

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

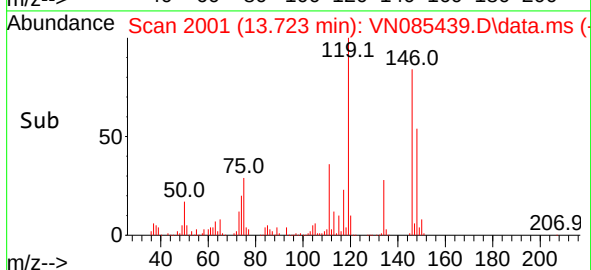
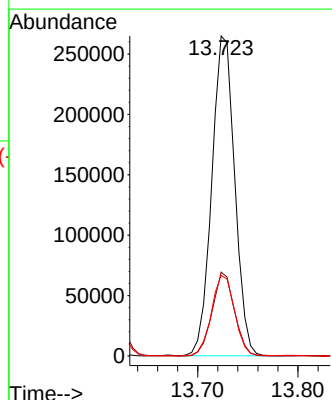
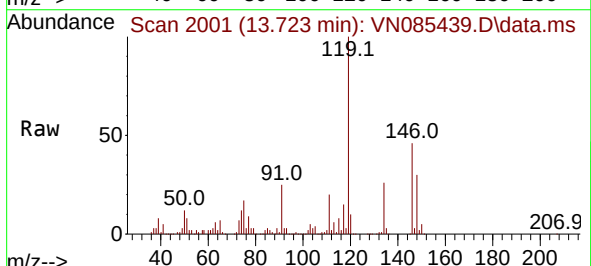
Tgt Ion:119 Resp: 421052

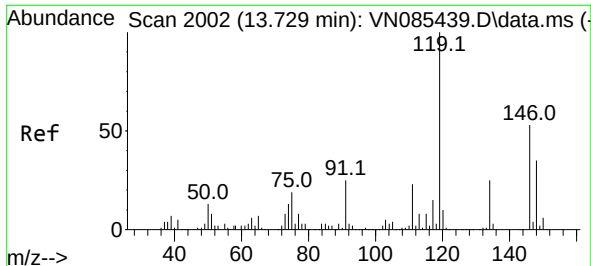
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 25.4 12.7 38.1

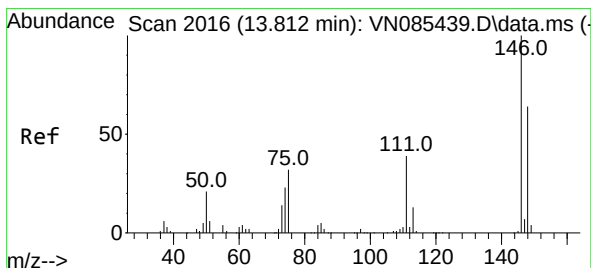
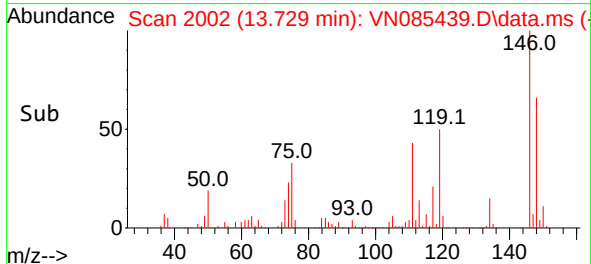
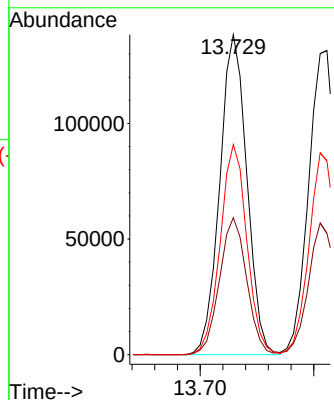
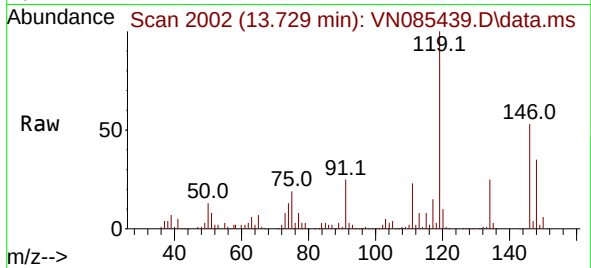




#87  
 1,3-Dichlorobenzene  
 Concen: 48.204 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

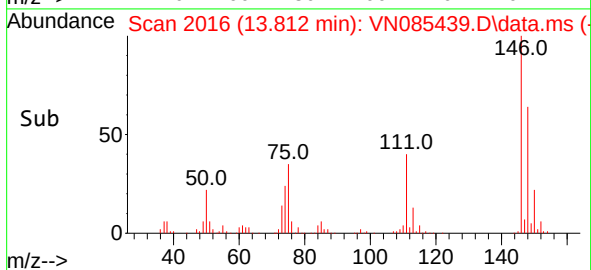
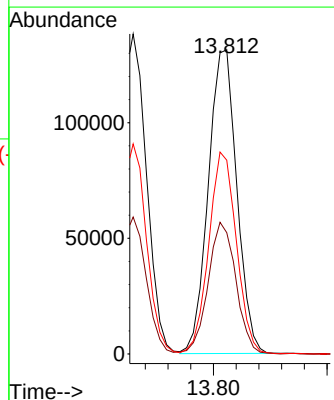
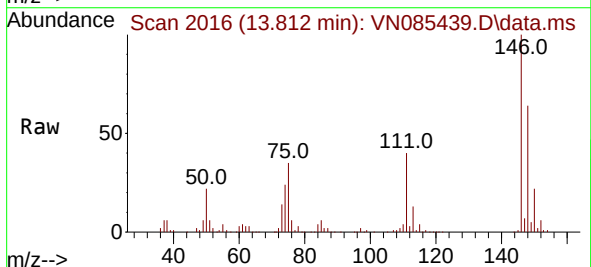
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

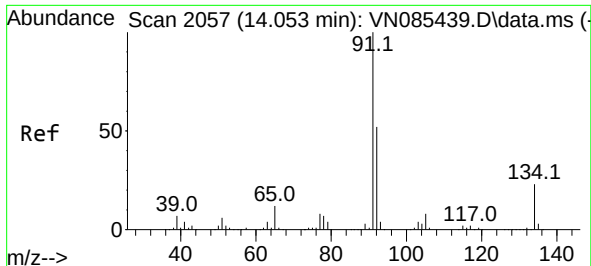
Tgt Ion:146 Resp: 229518  
 Ion Ratio Lower Upper  
 146 100  
 111 42.9 21.4 64.3  
 148 64.6 32.3 96.9



#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

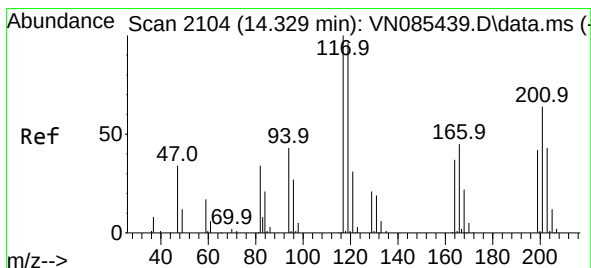
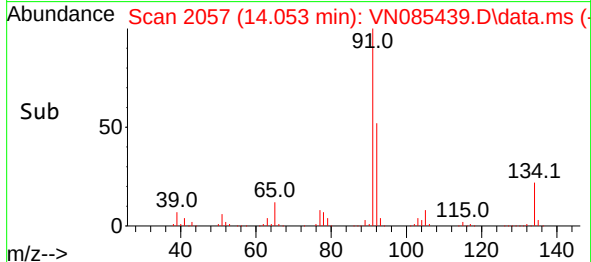
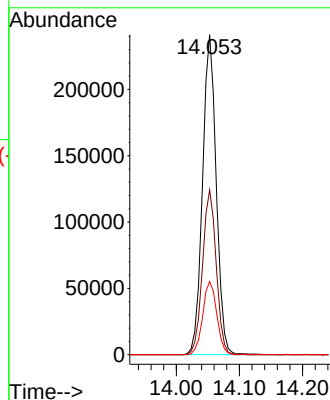
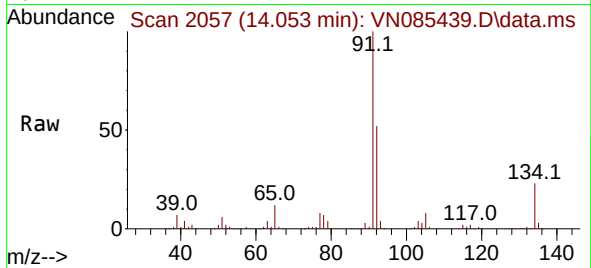




#89  
n-Butylbenzene  
Concen: 53.348 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

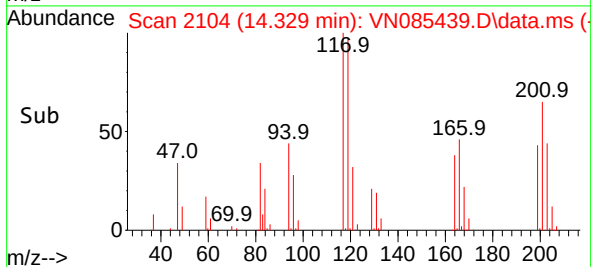
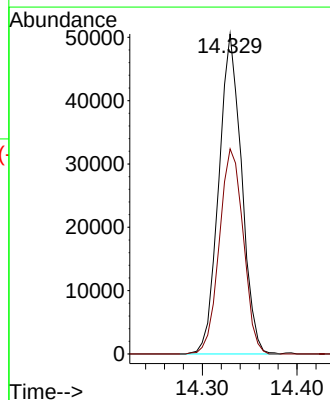
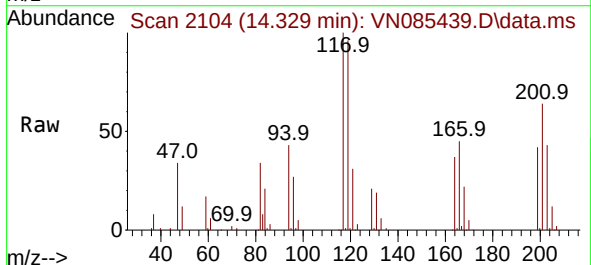
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

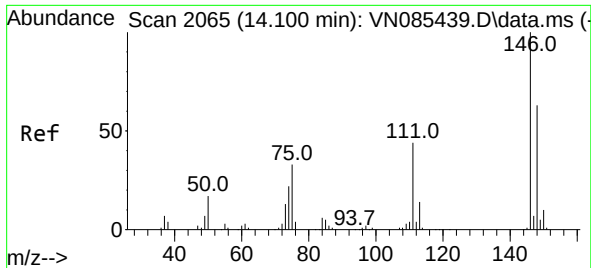
Tgt Ion: 91 Resp: 364111  
Ion Ratio Lower Upper  
91 100  
92 51.5 25.8 77.3  
134 23.4 11.7 35.1



#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

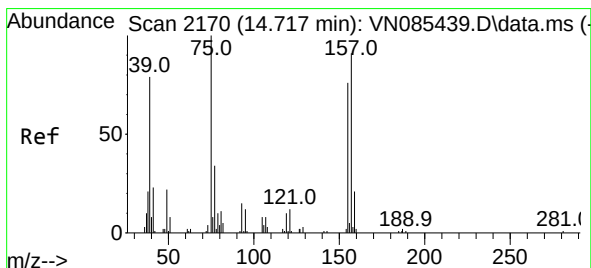
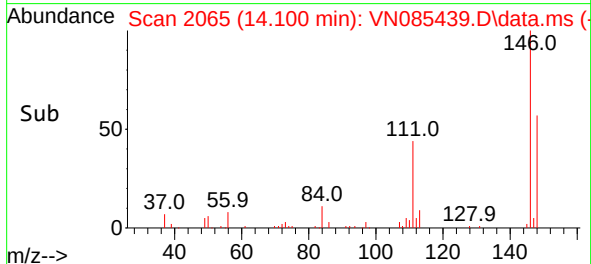
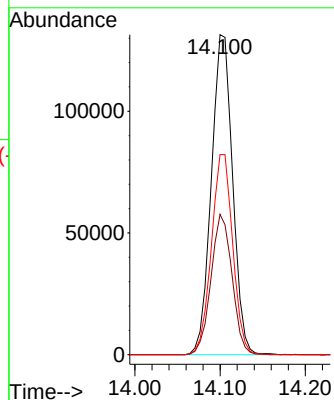
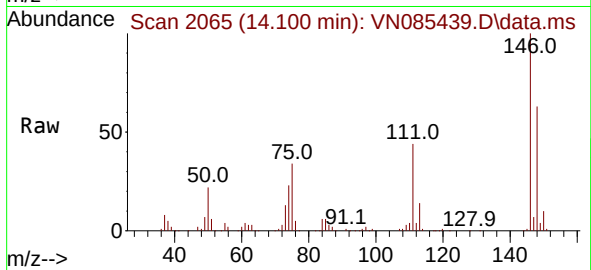




#91  
1,2-Dichlorobenzene  
Concen: 48.012 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

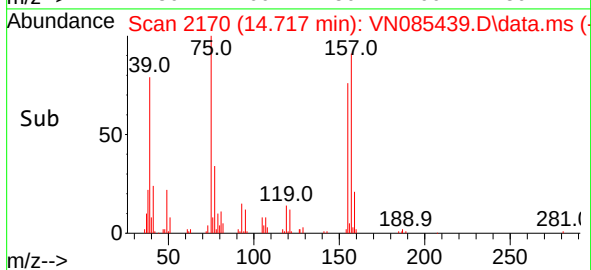
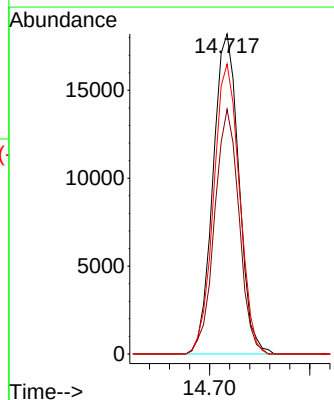
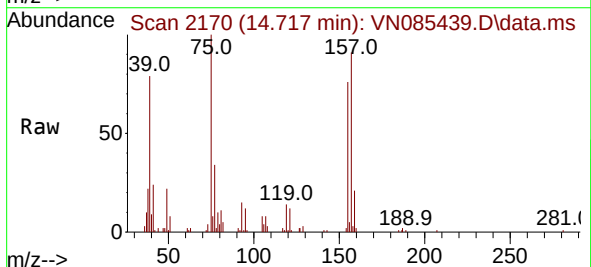
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

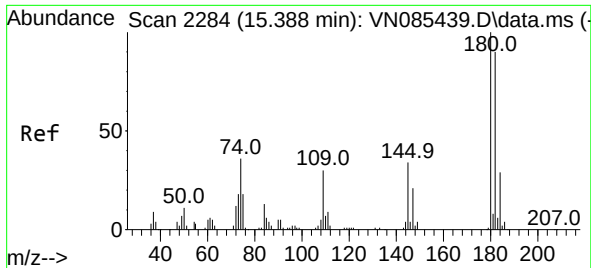
Tgt Ion:146 Resp: 228024  
Ion Ratio Lower Upper  
146 100  
111 43.4 21.7 65.1  
148 62.8 31.4 94.2



#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

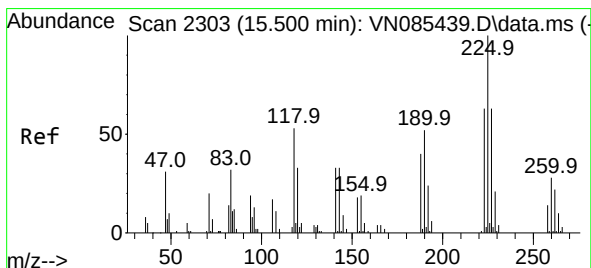
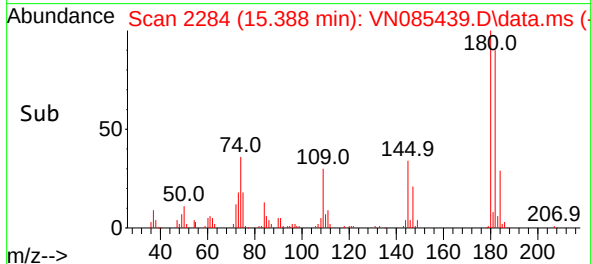
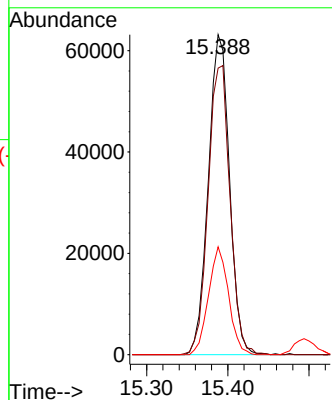
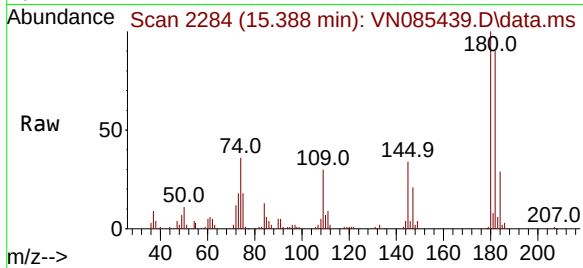




#93  
 1,2,4-Trichlorobenzene  
 Concen: 51.857 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

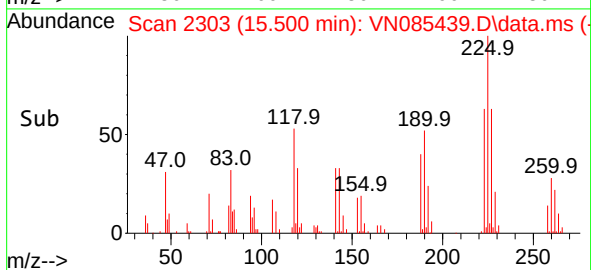
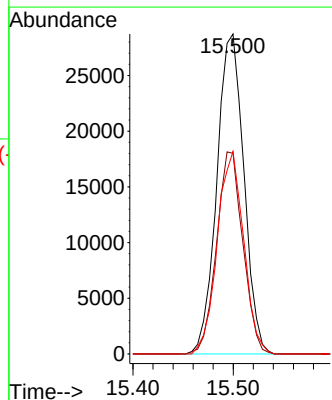
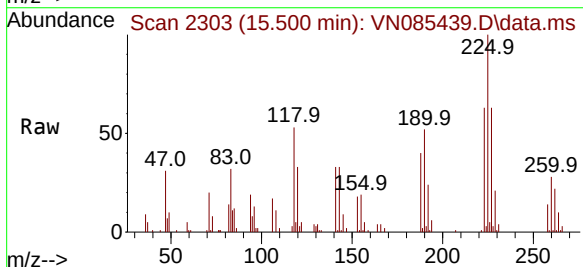
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

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

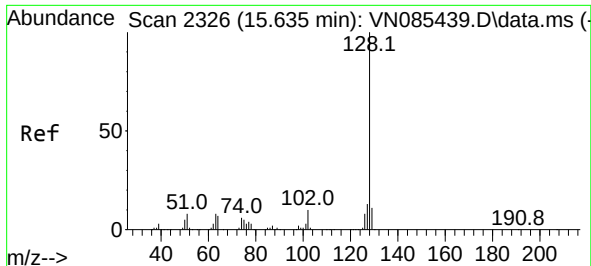


#94  
 Hexachlorobutadiene  
 Concen: 45.947 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.000 min  
 Lab File: VN085439.D  
 Acq: 14 Jan 2025 15:19

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



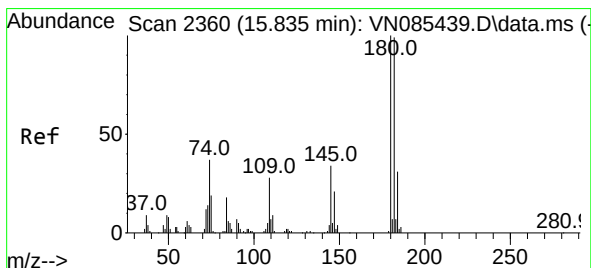
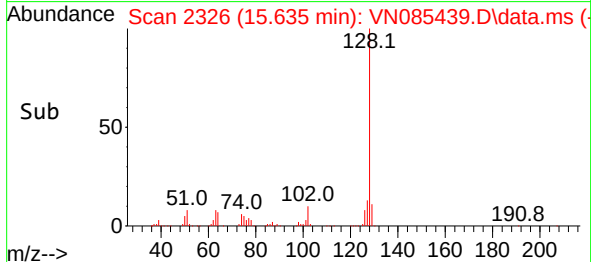
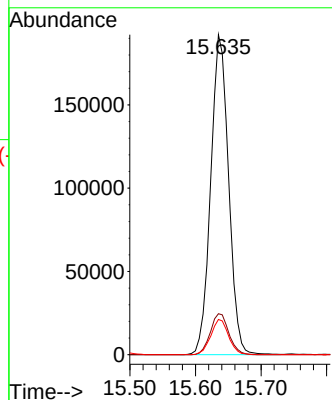
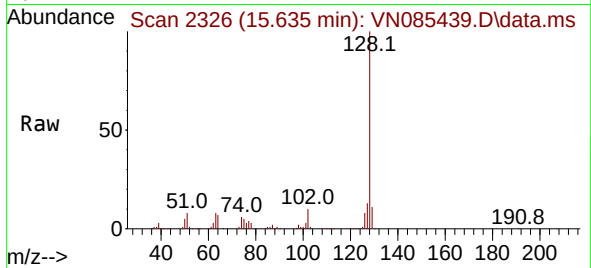




#95  
Naphthalene  
Concen: 55.243 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. 0.000 min  
Lab File: VN085439.D  
Acq: 14 Jan 2025 15:19

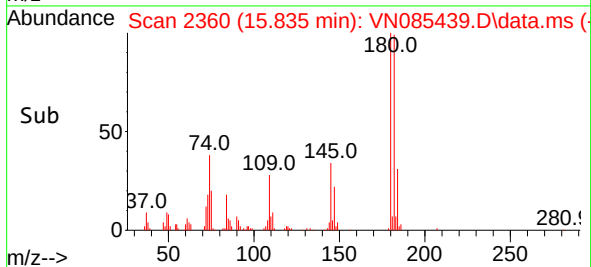
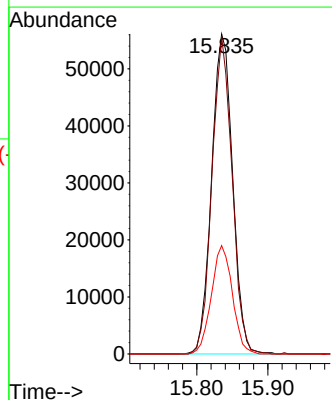
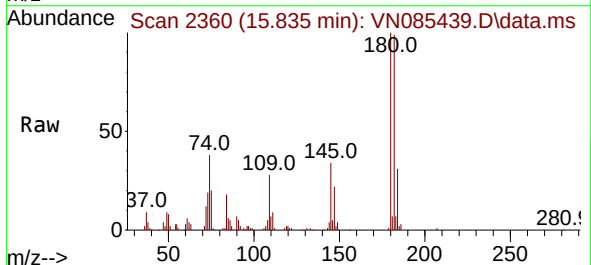
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

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\  
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

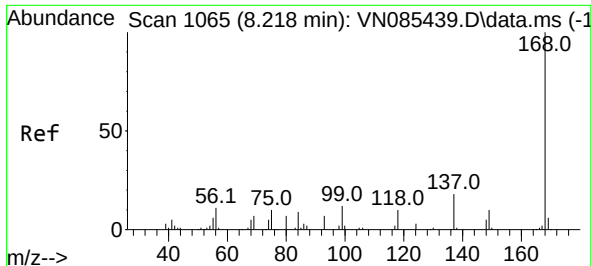
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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

Quant Time: Jan 15 01:43:07 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

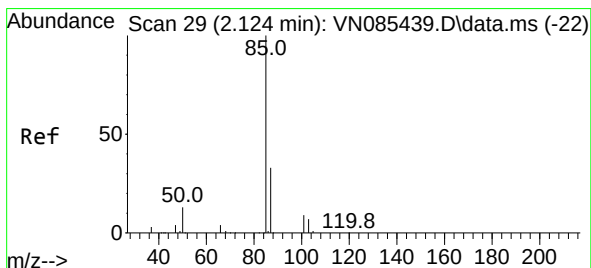
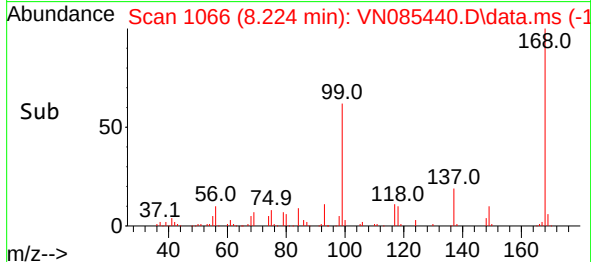
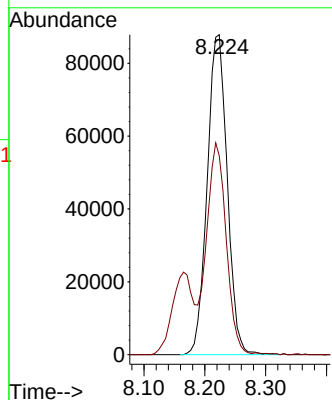
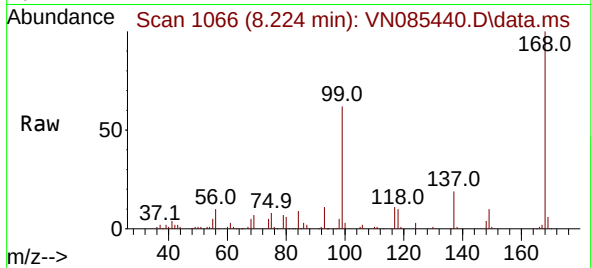




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

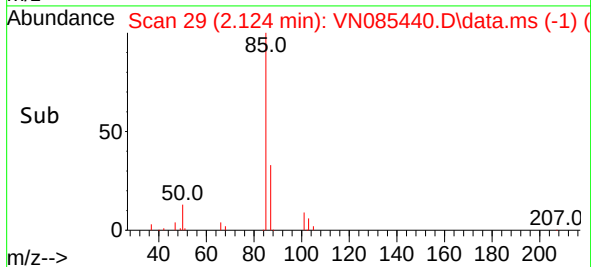
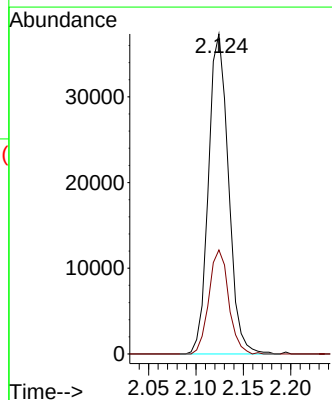
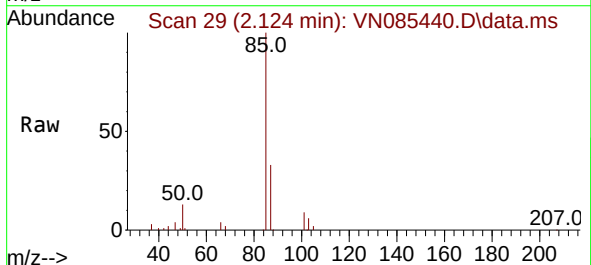
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

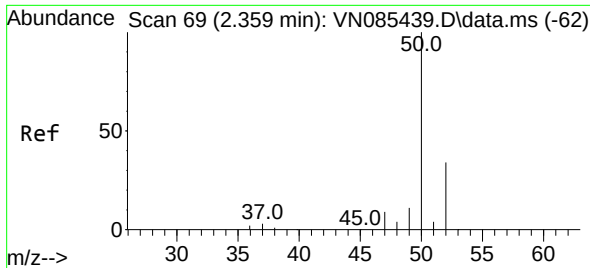
Tgt Ion:168 Resp: 200796  
Ion Ratio Lower Upper  
168 100  
99 62.2 53.6 80.4



#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

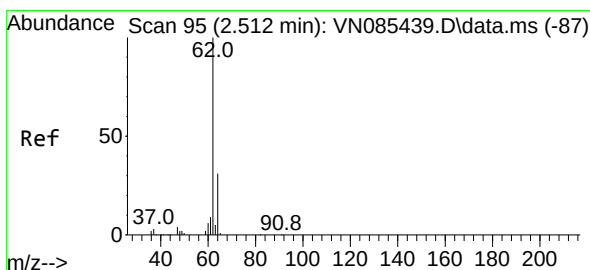
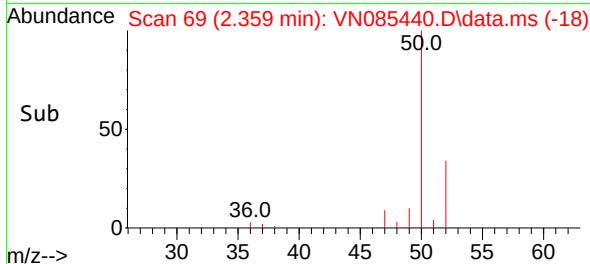
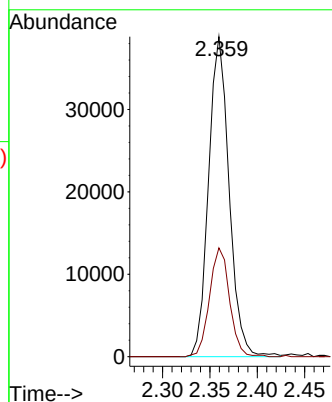
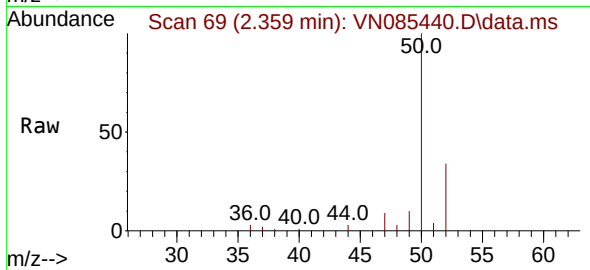




#3  
Chloromethane  
Concen: 19.848 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

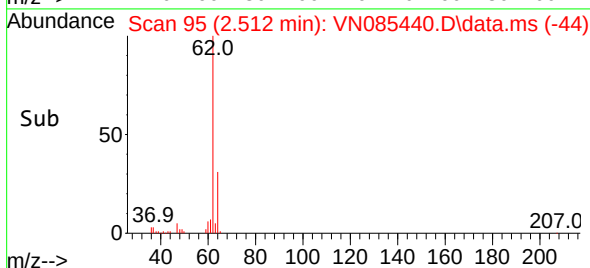
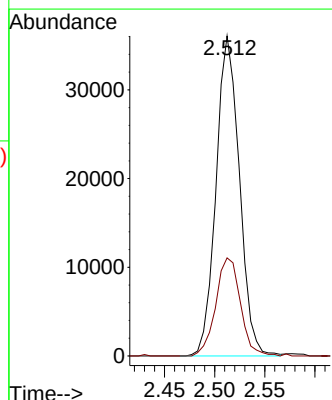
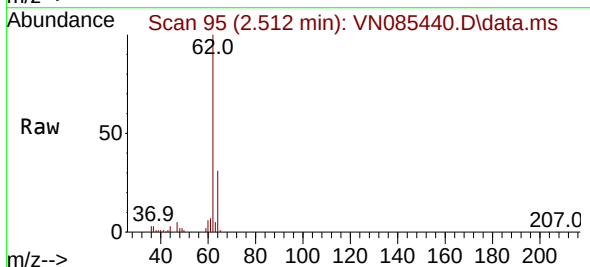
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ClientSampleId :  
VSTDICC020

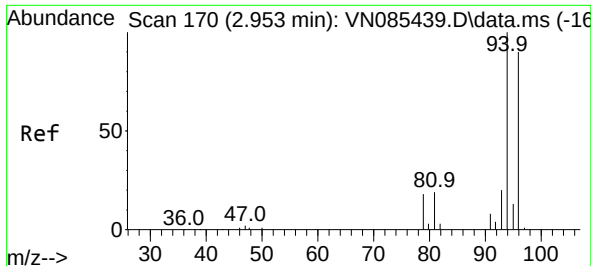
Tgt Ion: 50 Resp: 58426  
Ion Ratio Lower Upper  
50 100  
52 34.0 27.0 40.6



#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

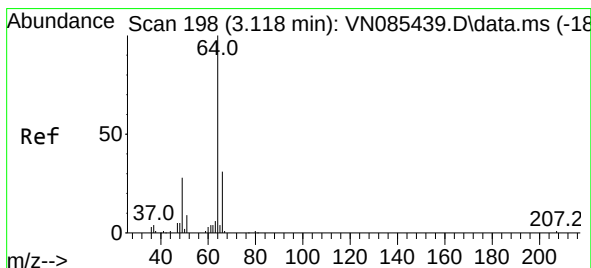
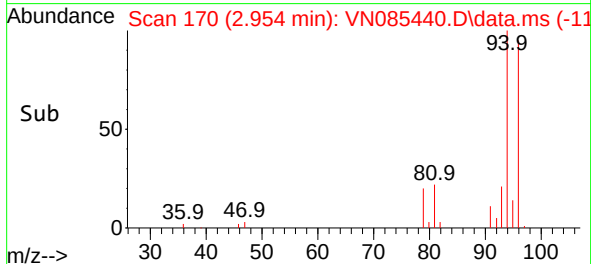
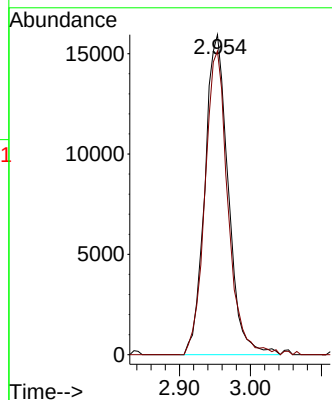
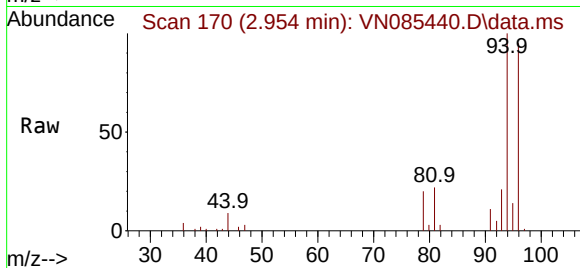




#5  
Bromomethane  
Concen: 20.389 ug/l  
RT: 2.954 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

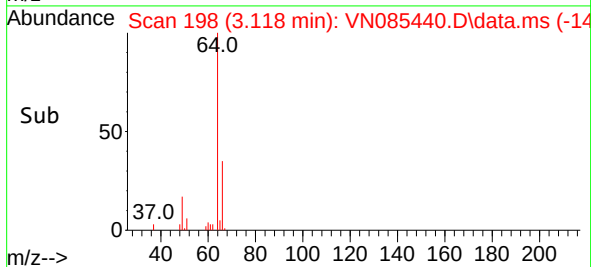
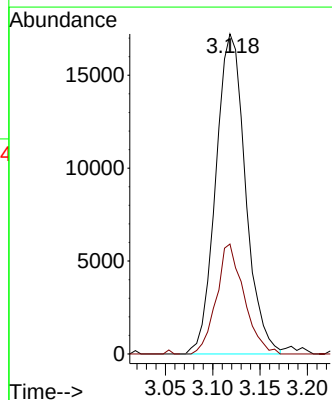
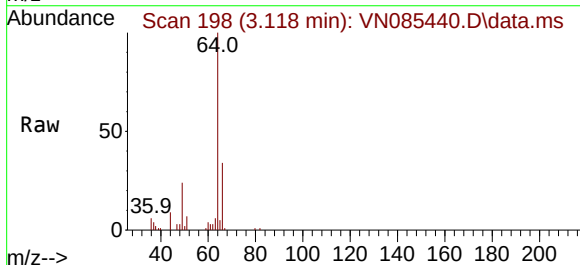
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion: 94 Resp: 36440  
Ion Ratio Lower Upper  
94 100  
96 94.9 71.8 107.6

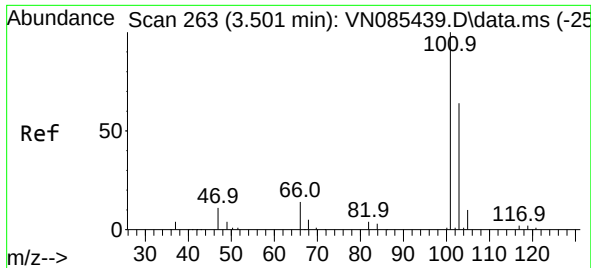


#6  
Chloroethane  
Concen: 20.041 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

Tgt Ion: 64 Resp: 37594  
Ion Ratio Lower Upper  
64 100  
66 34.3 24.6 36.8



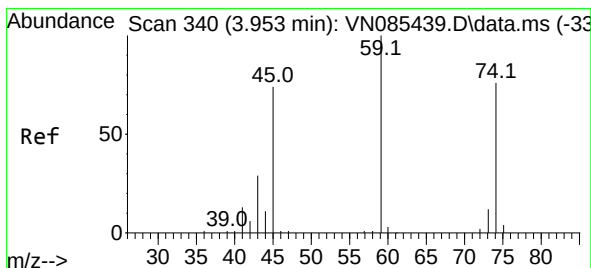
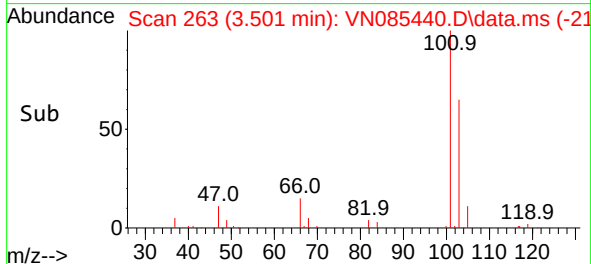
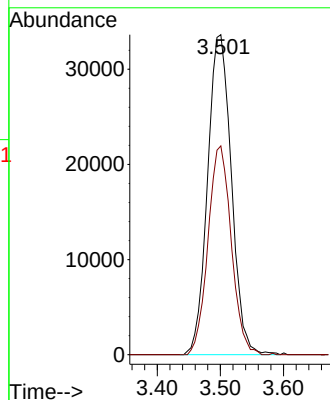
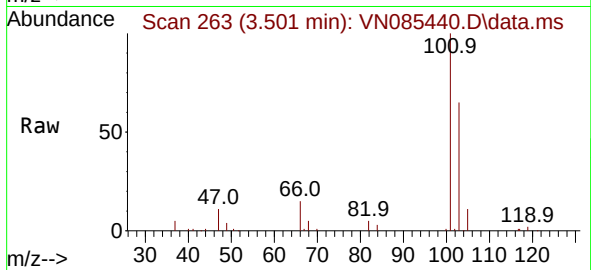




#7  
 Trichlorofluoromethane  
 Concen: 20.526 ug/l  
 RT: 3.501 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

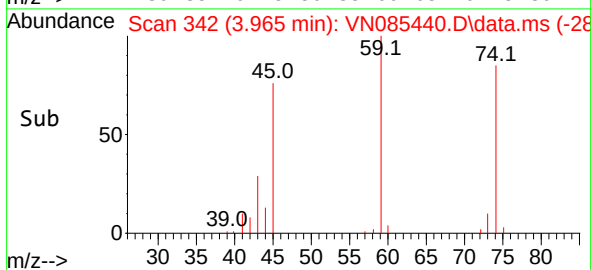
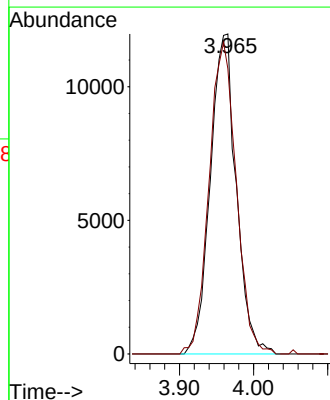
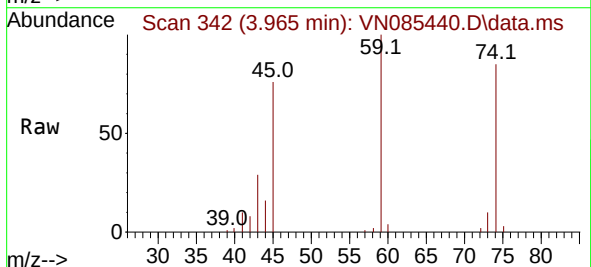
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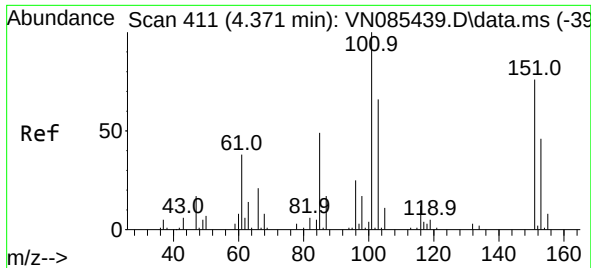
Tgt Ion:101 Resp: 88121  
 Ion Ratio Lower Upper  
 101 100  
 103 65.3 51.4 77.2



#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

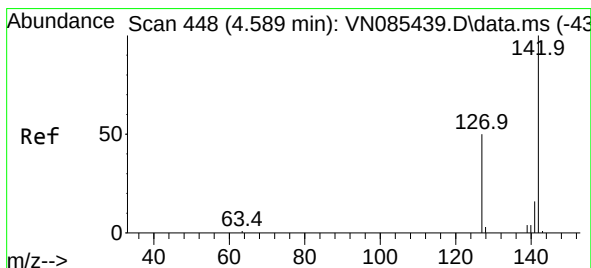
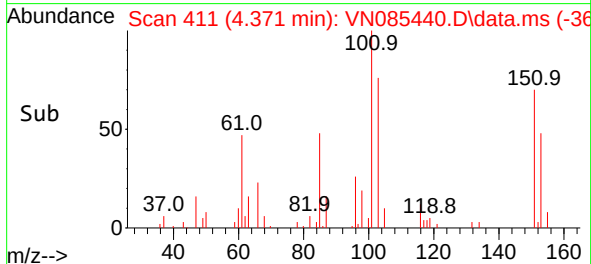
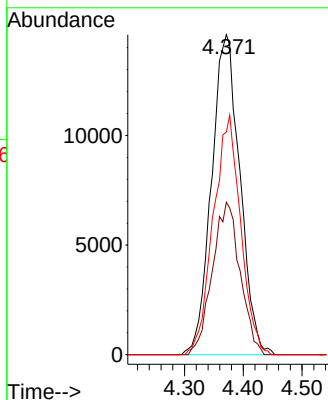
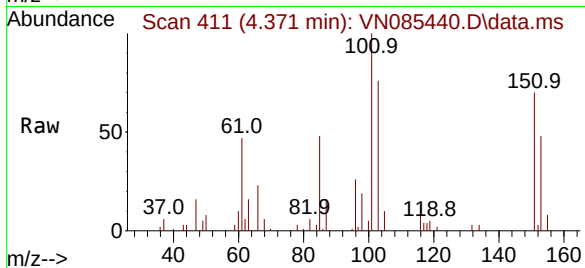




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 20.237 ug/l  
 RT: 4.371 min Scan# 411  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

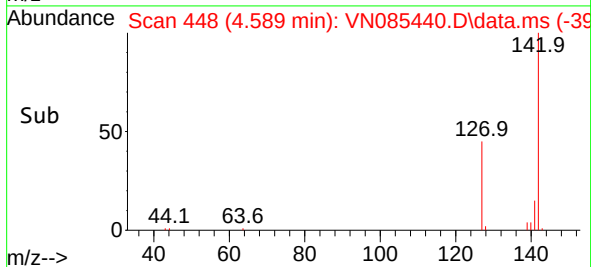
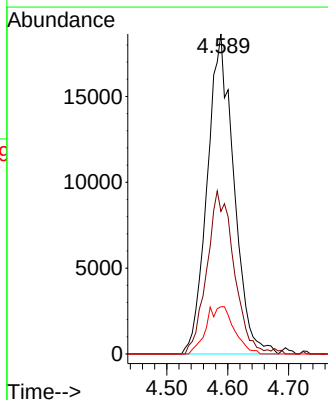
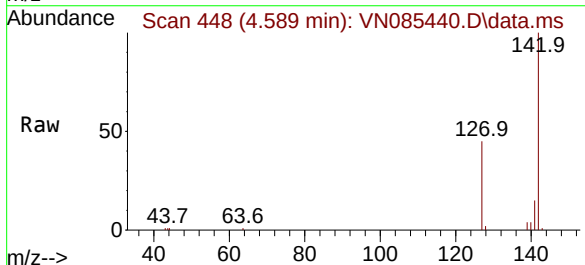
Instrument :  
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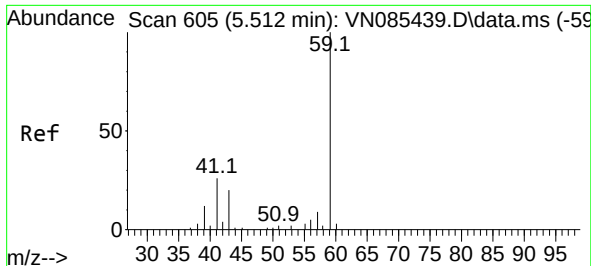
Tgt Ion:101 Resp: 48933  
 Ion Ratio Lower Upper  
 101 100  
 85 46.6 37.8 56.8  
 151 72.1 58.8 88.2



#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

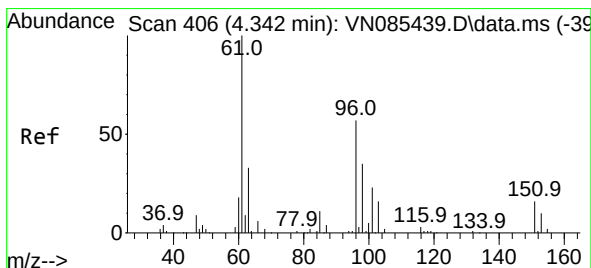
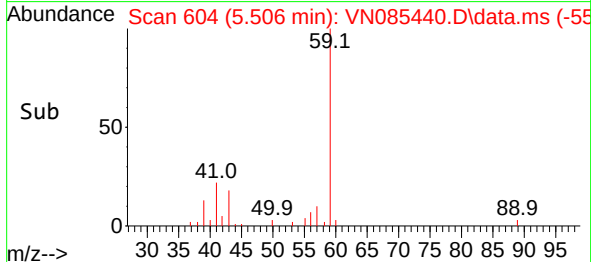
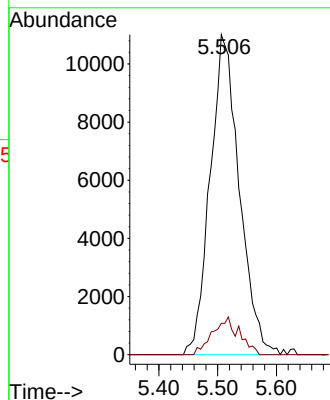
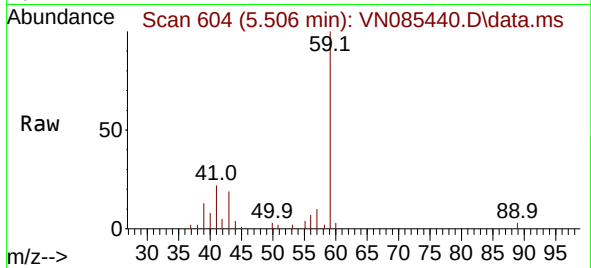




#11  
Tert butyl alcohol  
Concen: 102.342 ug/l  
RT: 5.506 min Scan# 605  
Delta R.T. -0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

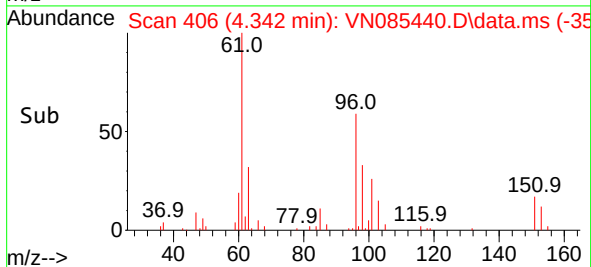
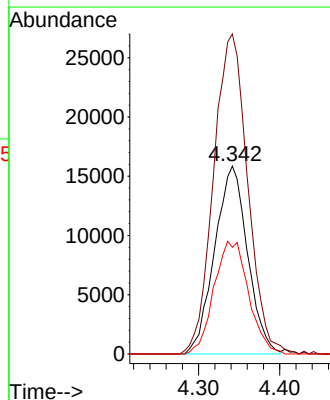
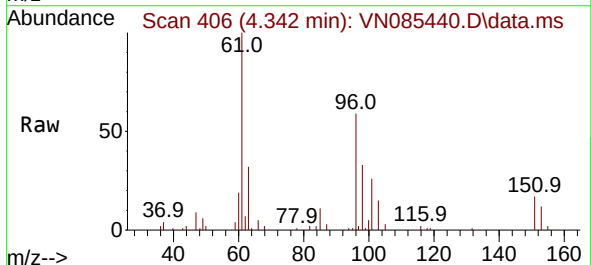
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ClientSampleId :  
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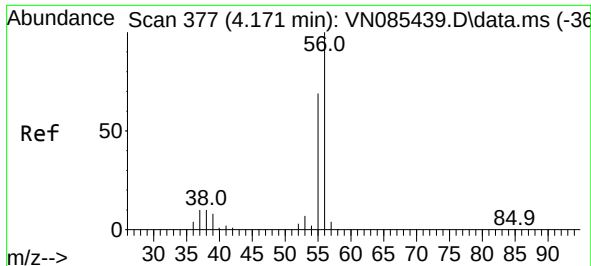
Tgt Ion: 59 Resp: 37984  
Ion Ratio Lower Upper  
59 100  
57 10.7 8.6 13.0



#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

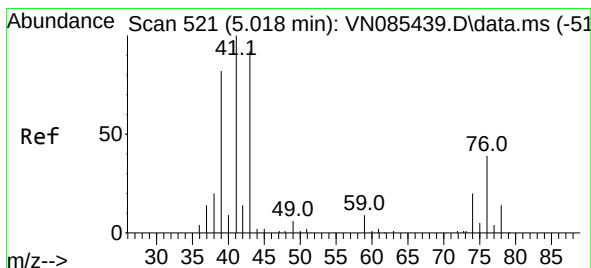
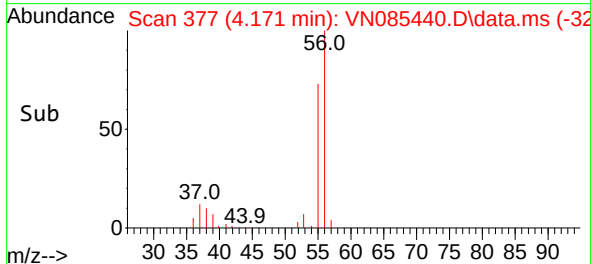
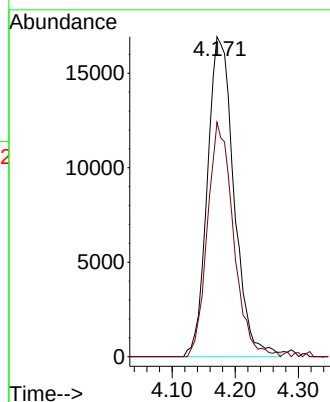
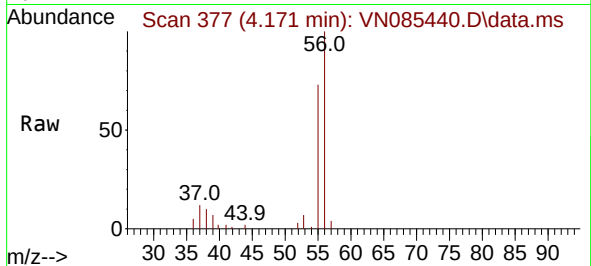




#13  
Acrolein  
Concen: 97.995 ug/l  
RT: 4.171 min Scan# 31  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

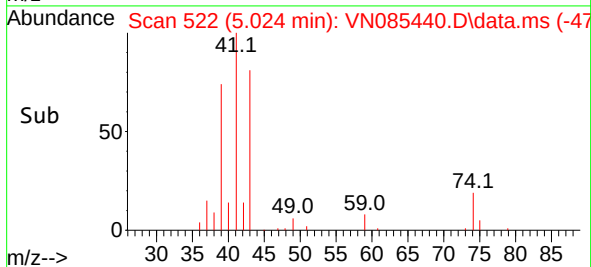
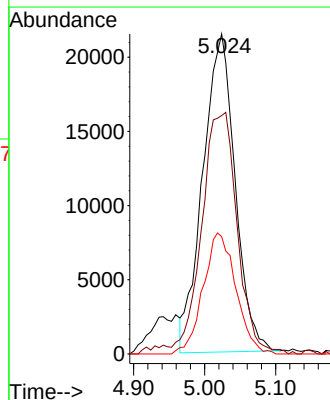
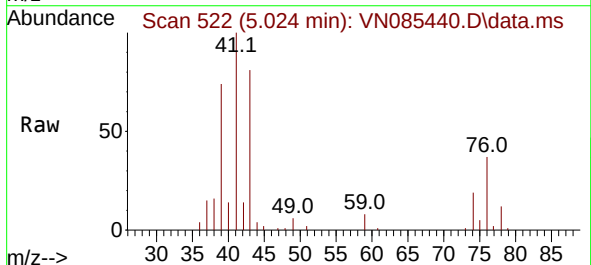
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ClientSampleId :  
VSTDICC020

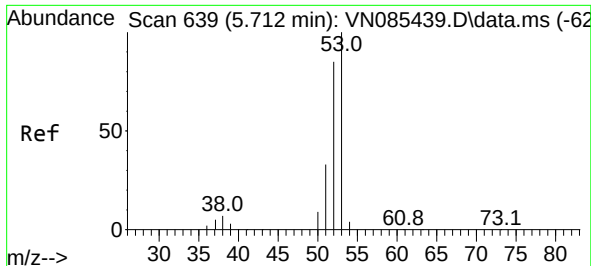
Tgt Ion: 56 Resp: 49649  
Ion Ratio Lower Upper  
56 100  
55 71.4 56.3 84.5



#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

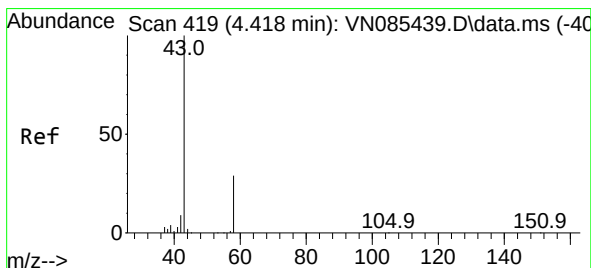
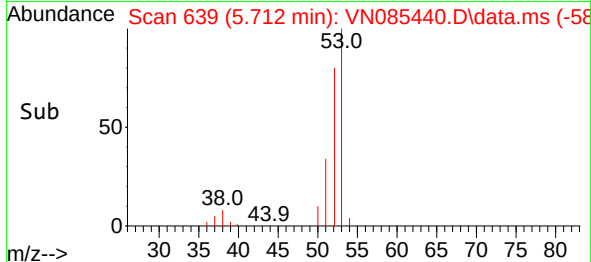
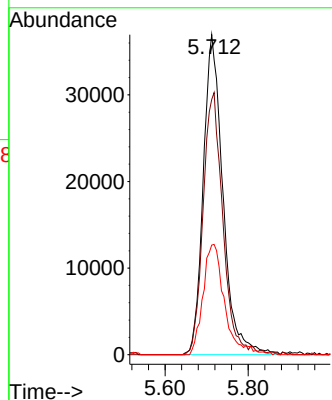
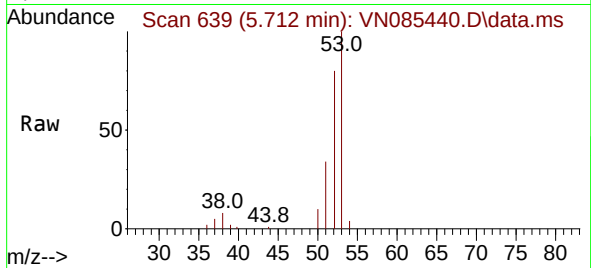




#15  
Acrylonitrile  
Concen: 103.171 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

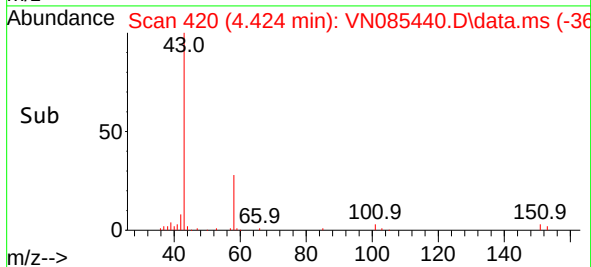
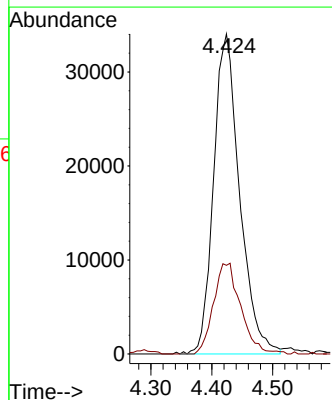
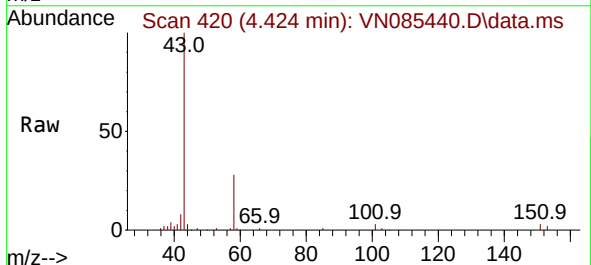
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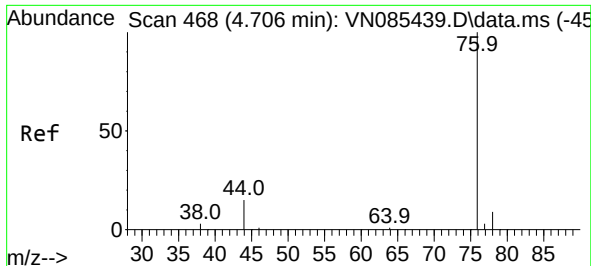
Tgt Ion: 53 Resp: 121626  
Ion Ratio Lower Upper  
53 100  
52 81.1 65.5 98.3  
51 36.1 29.8 44.8



#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

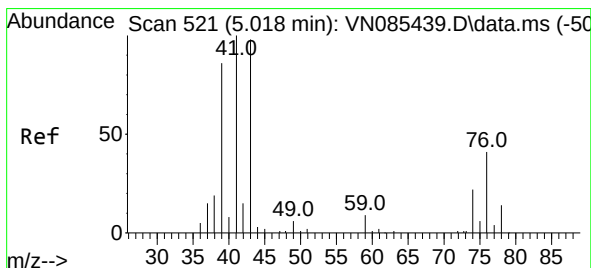
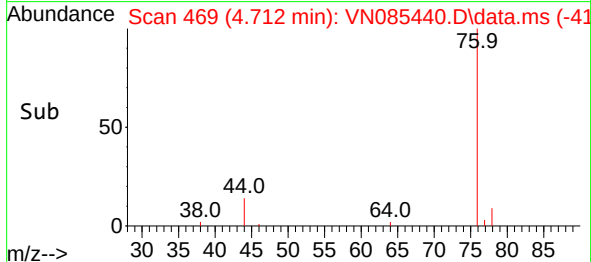
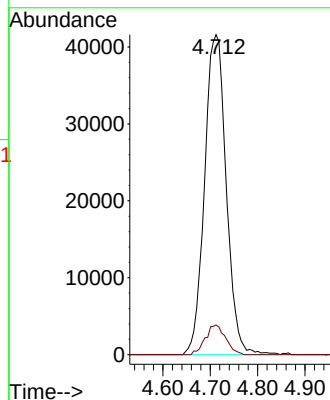
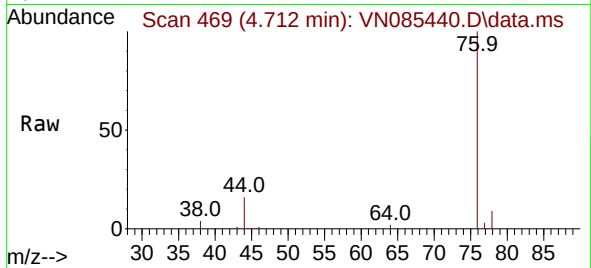




#17  
Carbon Disulfide  
Concen: 19.939 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

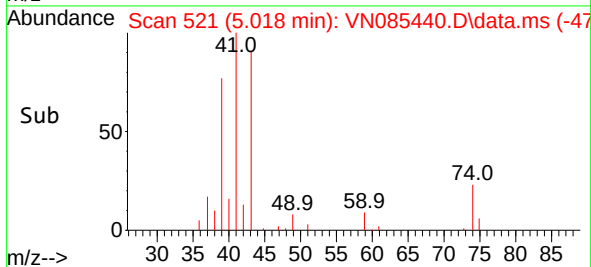
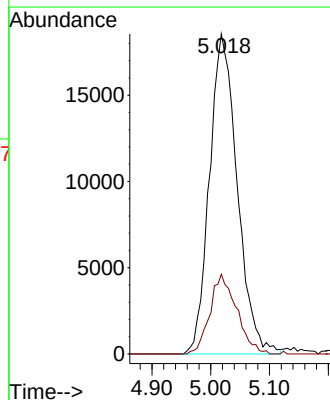
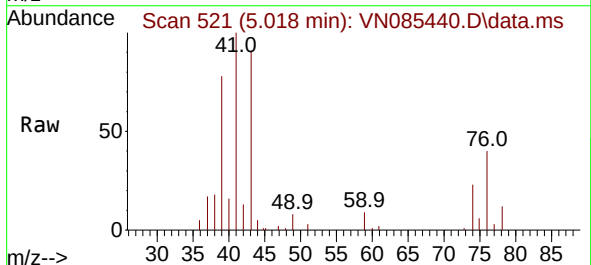
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

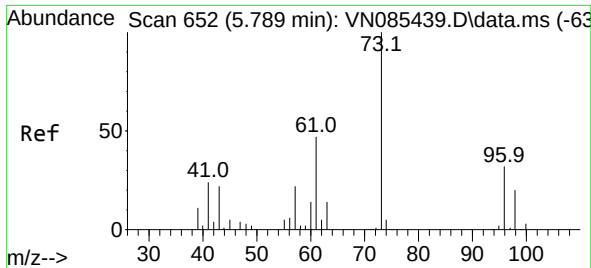
Tgt Ion: 76 Resp: 132300  
Ion Ratio Lower Upper  
76 100  
78 9.3 6.9 10.3



#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

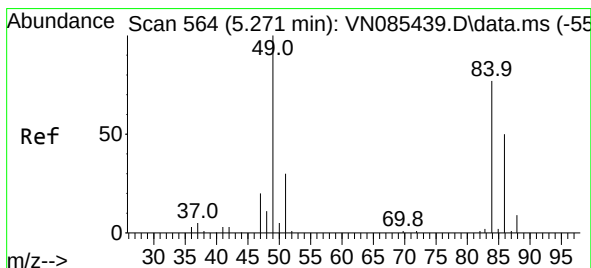
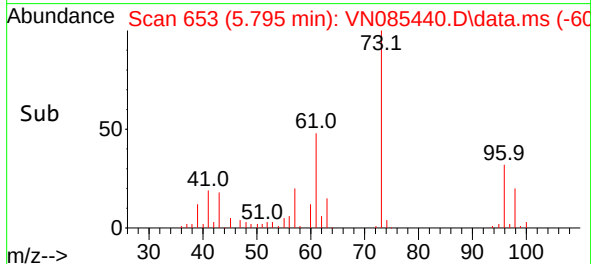
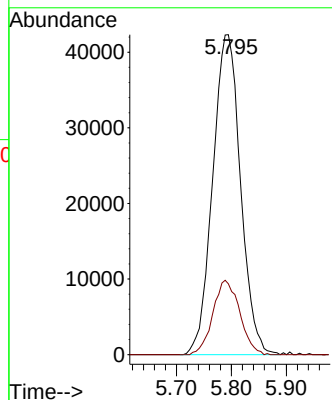
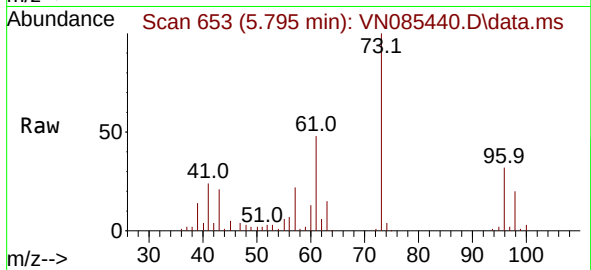




#19  
Methyl tert-butyl Ether  
Concen: 21.272 ug/l  
RT: 5.795 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

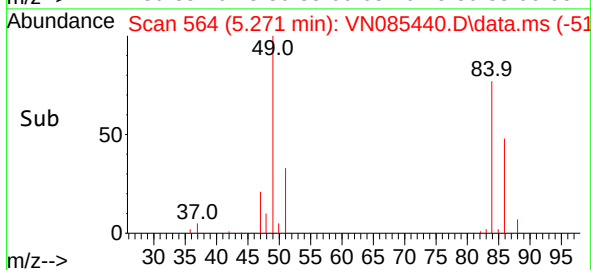
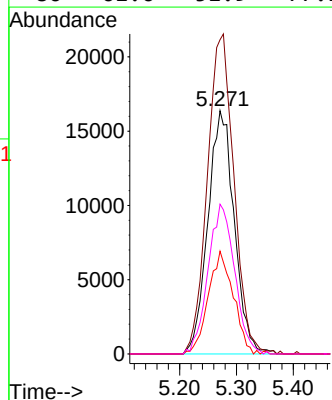
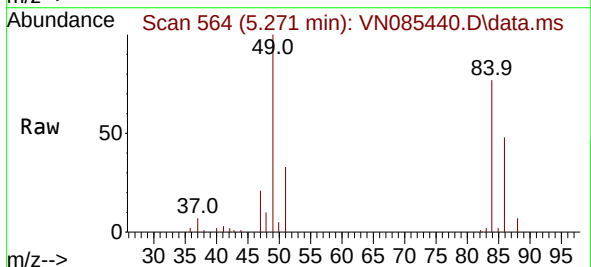
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

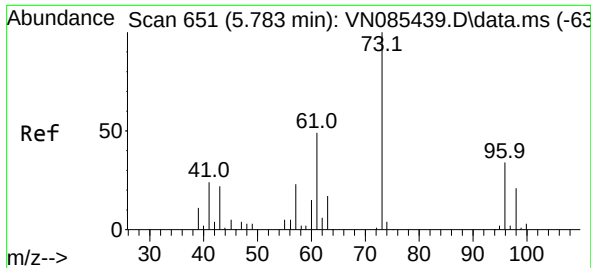
Tgt Ion: 73 Resp: 148847  
Ion Ratio Lower Upper  
73 100  
57 22.1 17.8 26.8



#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

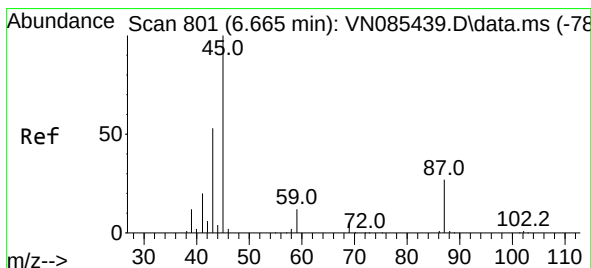
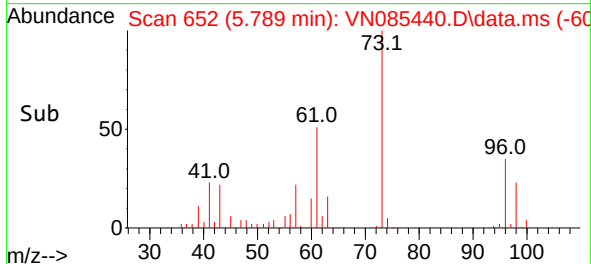
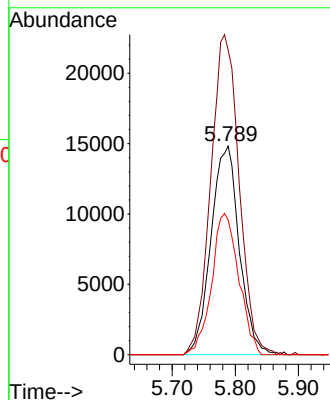
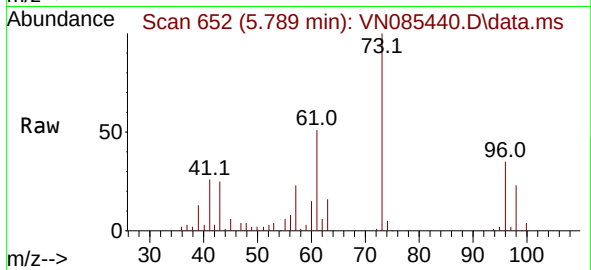




#21  
trans-1,2-Dichloroethene  
Concen: 20.023 ug/l  
RT: 5.789 min Scan# 651  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

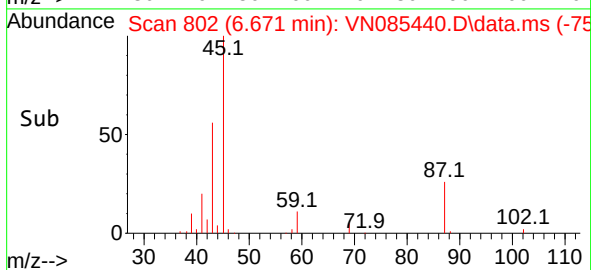
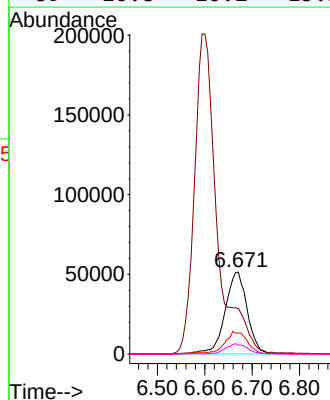
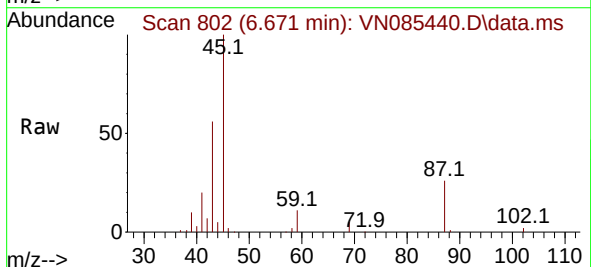
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

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

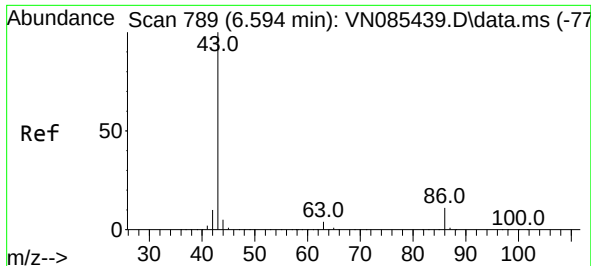


#22  
Diisopropyl ether  
Concen: 21.480 ug/l  
RT: 6.671 min Scan# 802  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

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



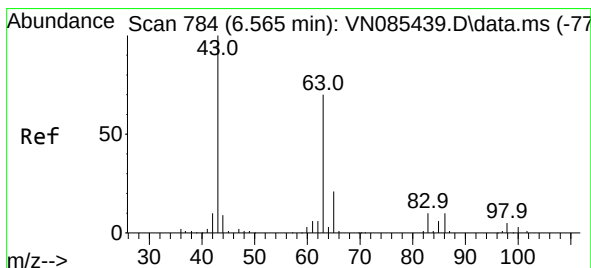
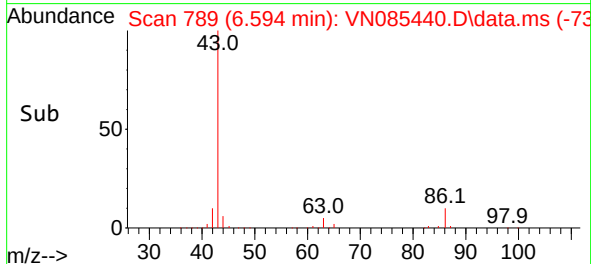
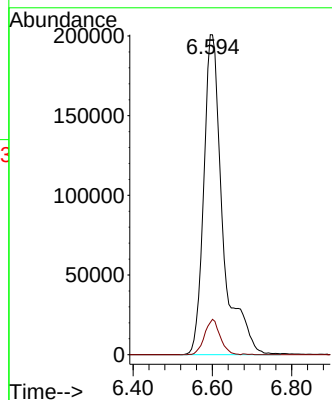
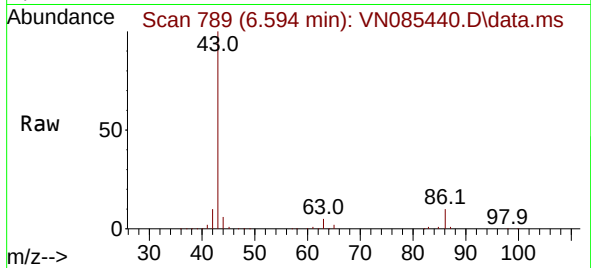




#23  
 Vinyl Acetate  
 Concen: 122.364 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

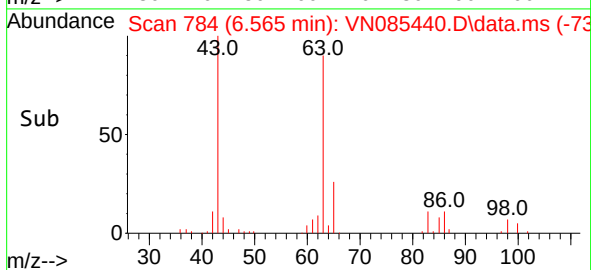
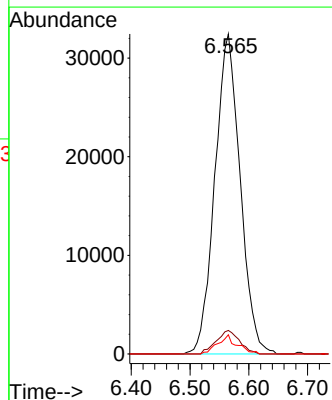
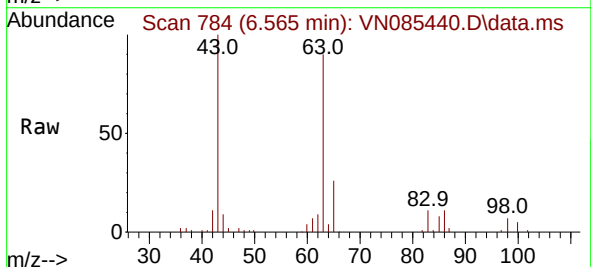
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

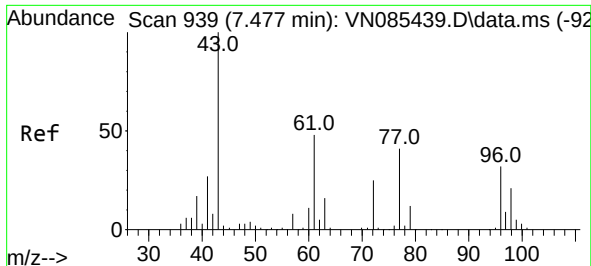
Tgt Ion: 43 Resp: 666942  
 Ion Ratio Lower Upper  
 43 100  
 86 10.1 8.4 12.6



#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#

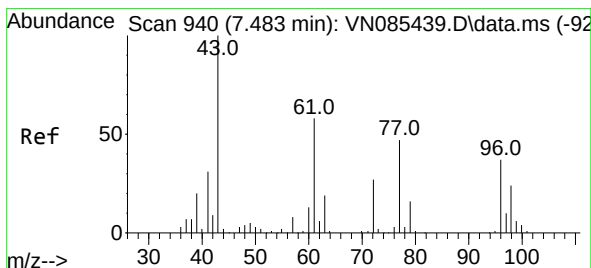
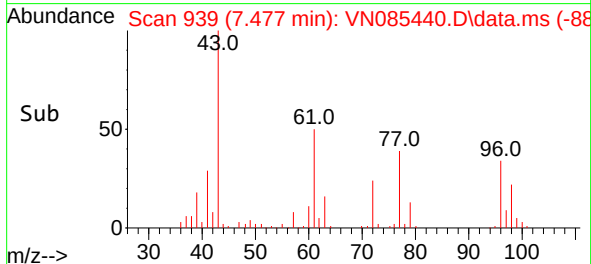
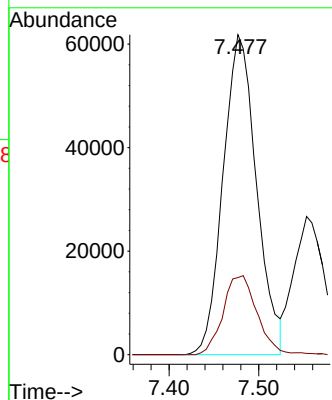
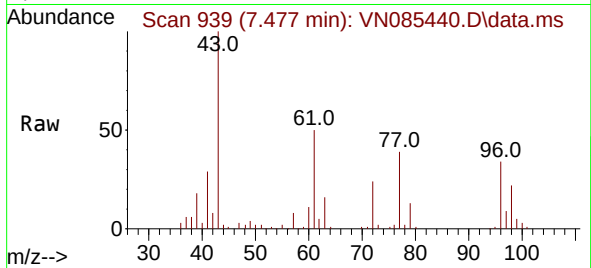




#25  
2-Butanone  
Concen: 103.786 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

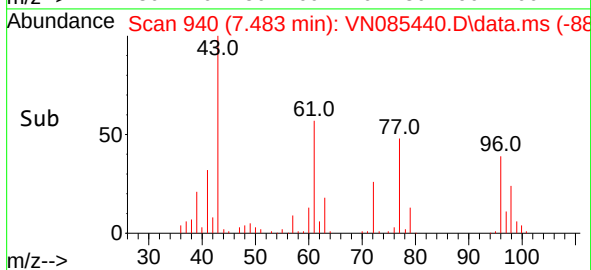
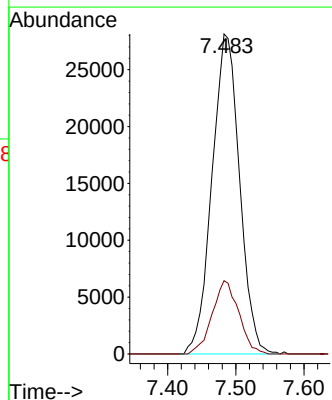
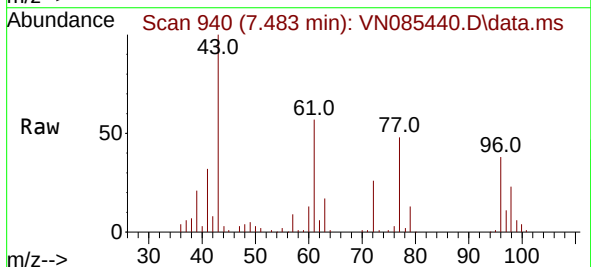
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

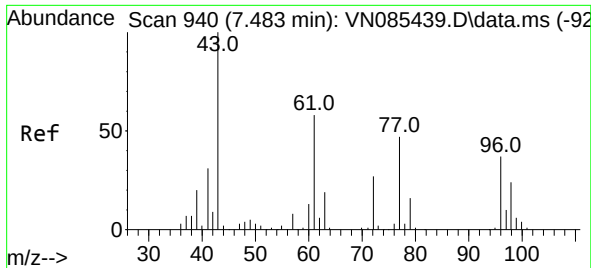
Tgt Ion: 43 Resp: 159952  
Ion Ratio Lower Upper  
43 100  
72 24.1 20.2 30.4



#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

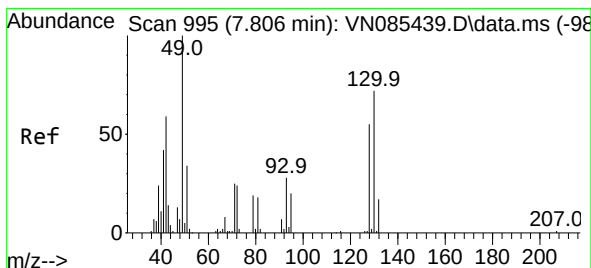
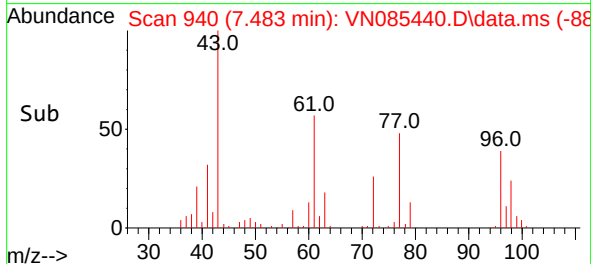
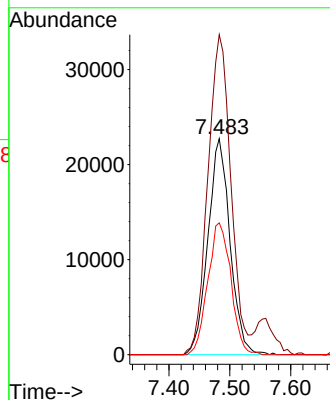
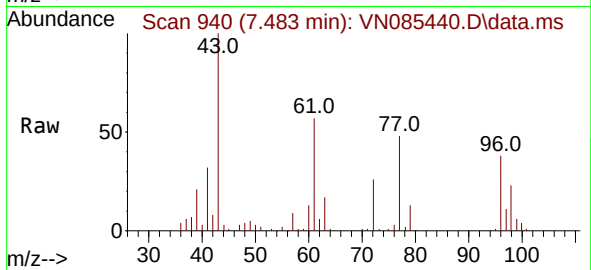




#27  
 cis-1,2-Dichloroethene  
 Concen: 21.180 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

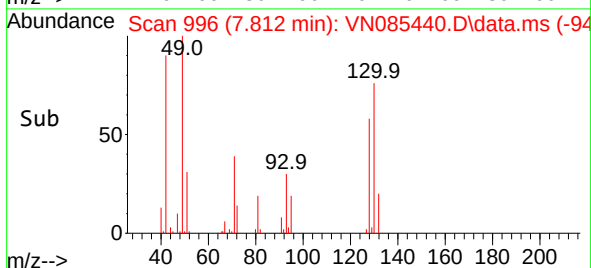
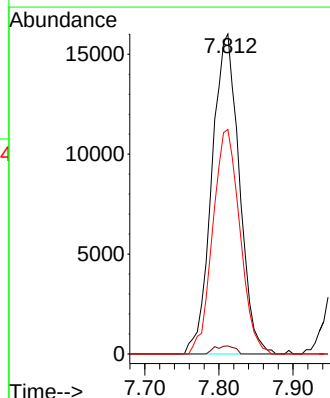
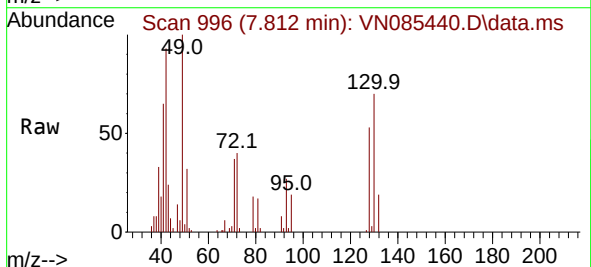
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

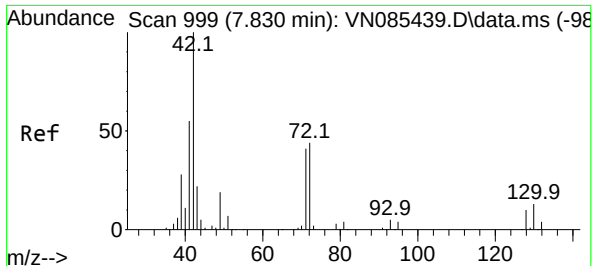
Tgt Ion: 96 Resp: 57454  
 Ion Ratio Lower Upper  
 96 100  
 61 153.0 0.0 311.8  
 98 63.7 0.0 126.0



#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

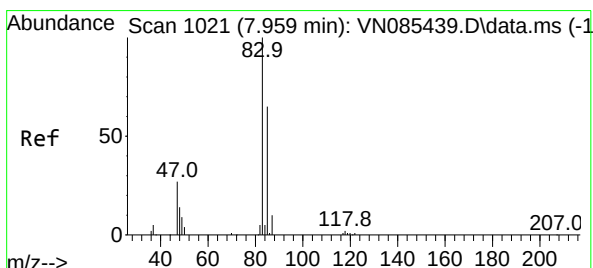
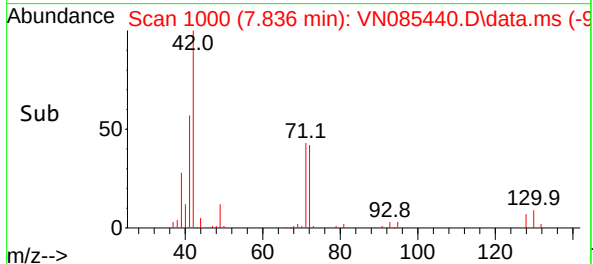
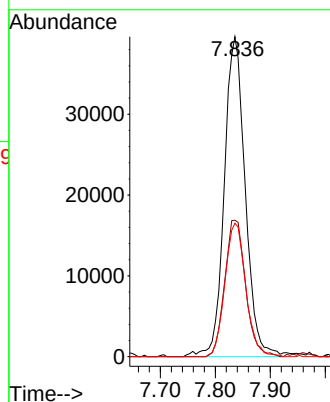
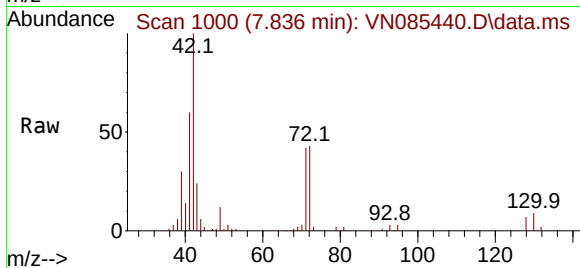
Tgt Ion: 42 Resp: 104792

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

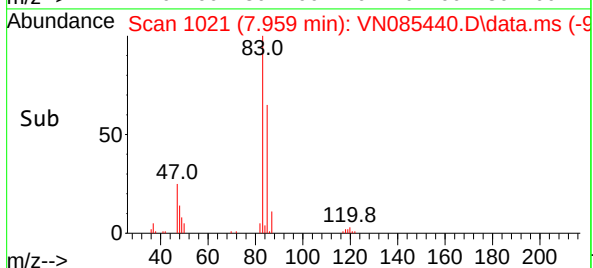
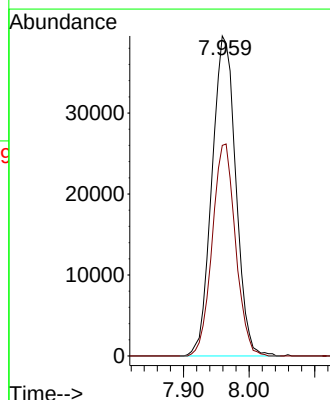
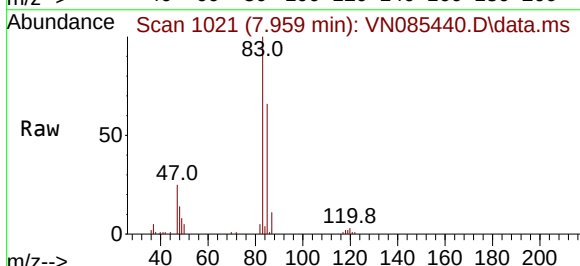
Acq: 14 Jan 2025 15:43

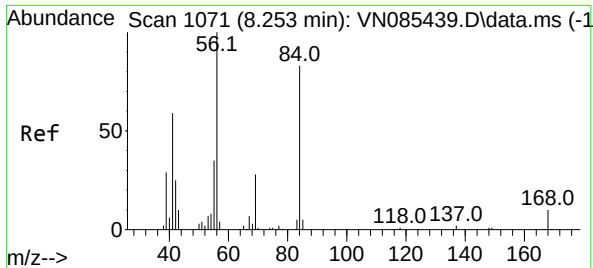
Tgt Ion: 83 Resp: 99655

Ion Ratio Lower Upper

83 100

85 65.8 51.8 77.6

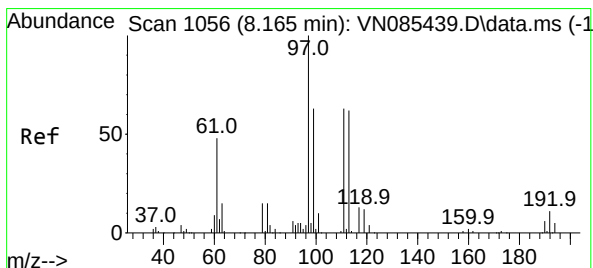
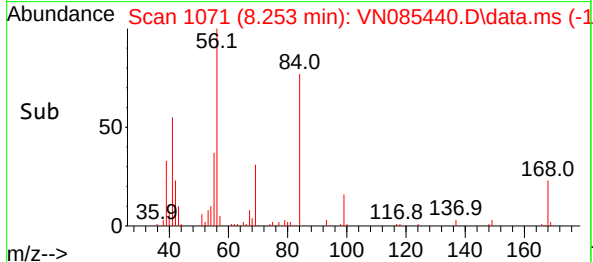
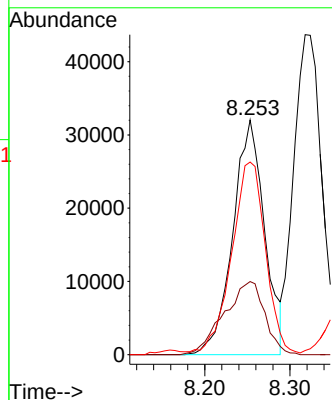
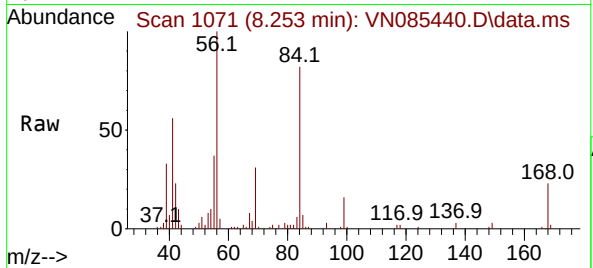




#31  
Cyclohexane  
Concen: 20.173 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

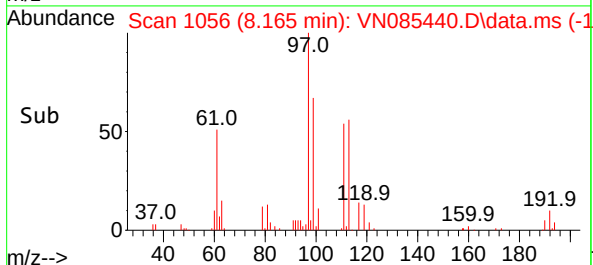
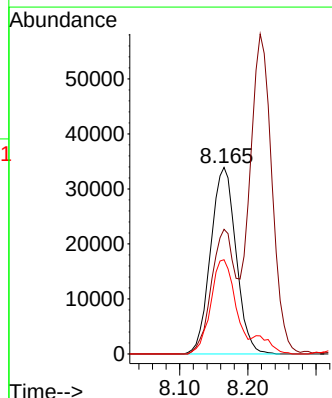
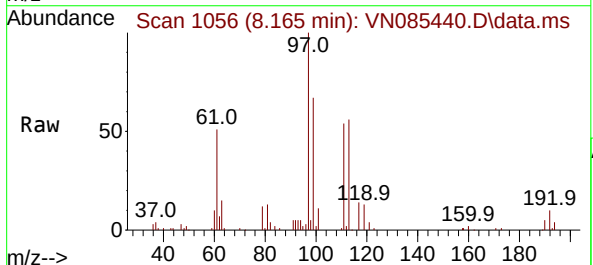
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

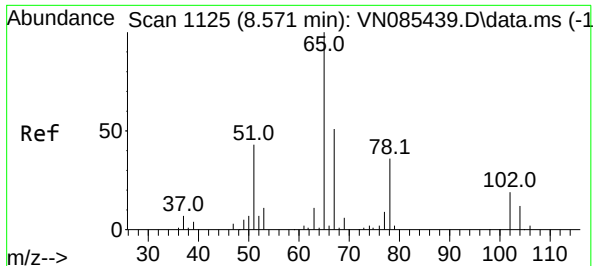
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 56    | Resp: | 82980 |
| Ion Ratio | Lower | Upper |       |
| 56        | 100   |       |       |
| 69        | 31.2  | 22.2  | 33.4  |
| 84        | 80.8  | 66.4  | 99.6  |



#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 :

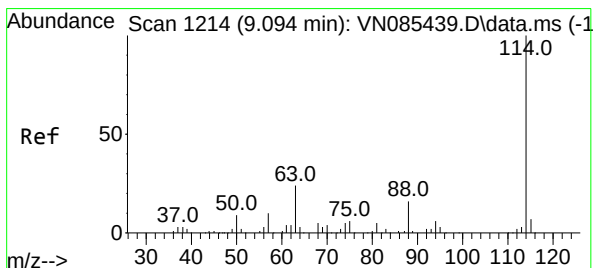
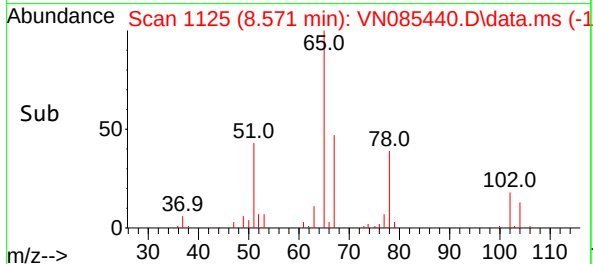
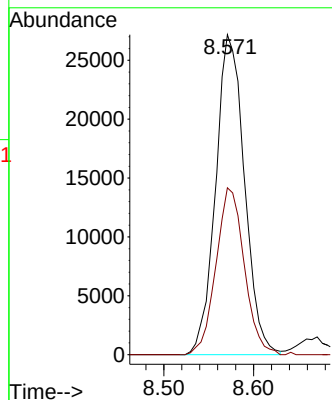
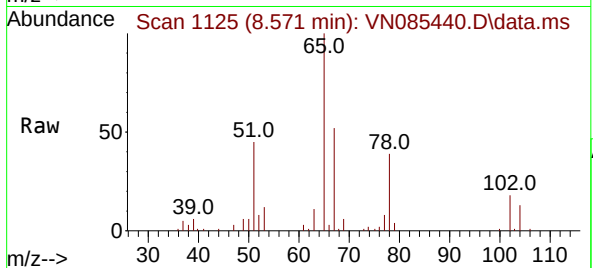
VSTDICC020

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

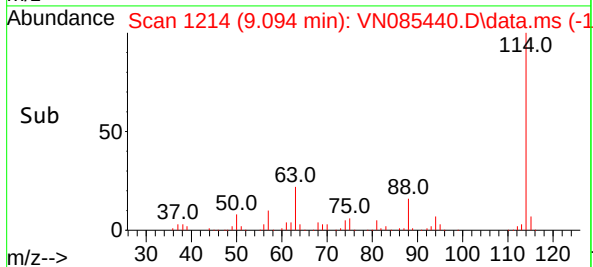
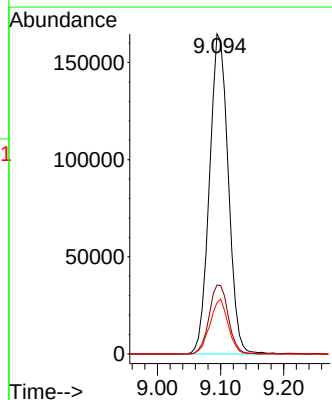
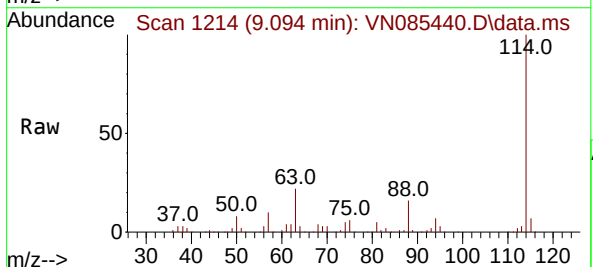
Tgt Ion: 114 Resp: 340593

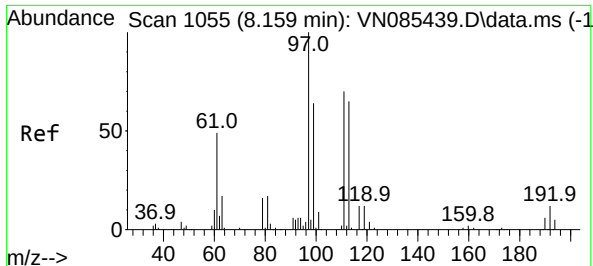
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 16.0 0.0 32.6

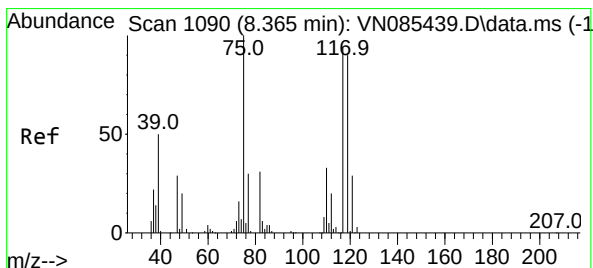
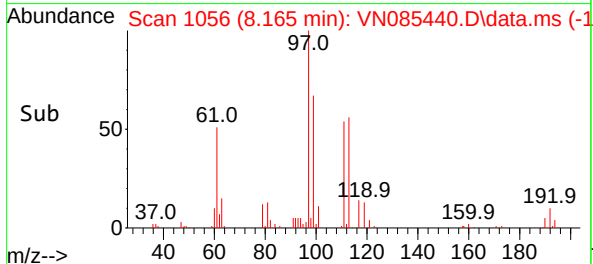
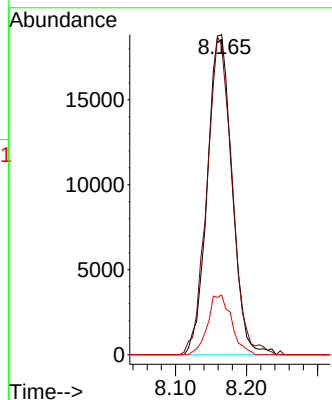
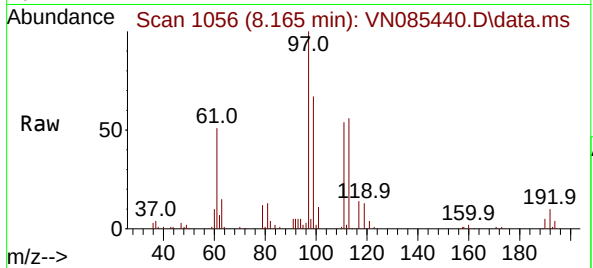




#35  
Dibromofluoromethane  
Concen: 19.322 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

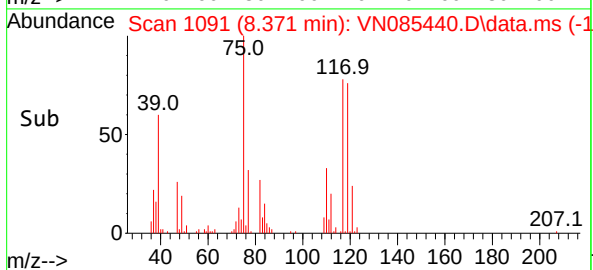
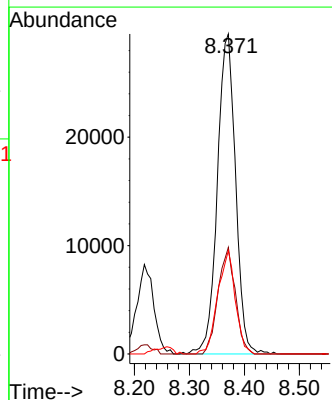
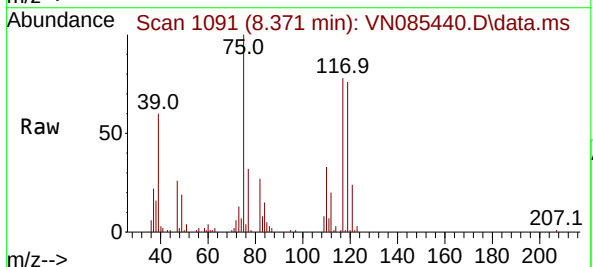
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

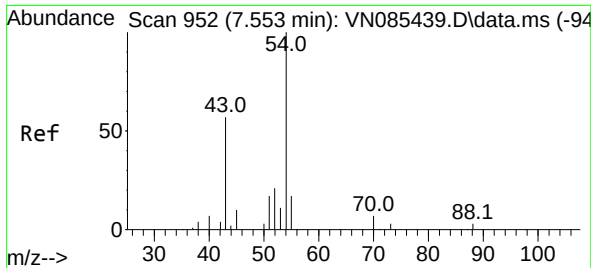
Tgt Ion:113 Resp: 45655  
Ion Ratio Lower Upper  
113 100  
111 100.6 82.7 124.1  
192 17.9 14.3 21.5



#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

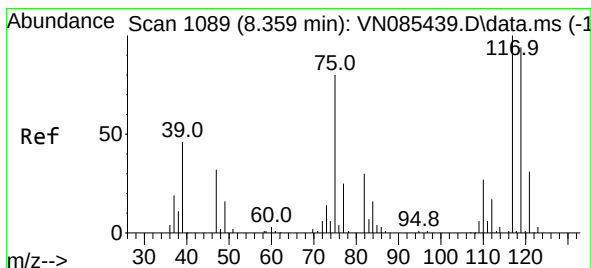
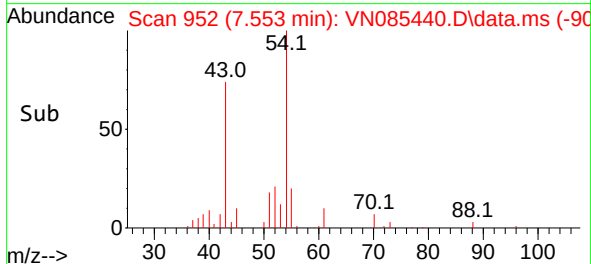
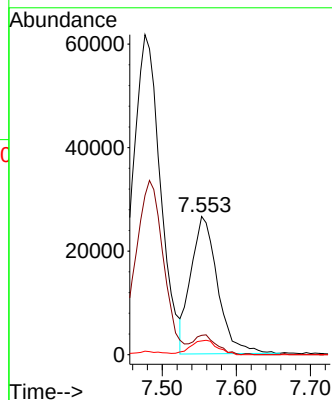
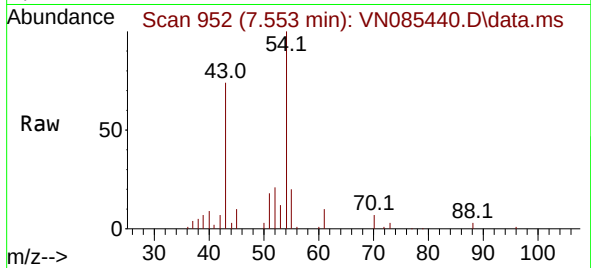




#37  
Ethyl Acetate  
Concen: 19.850 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

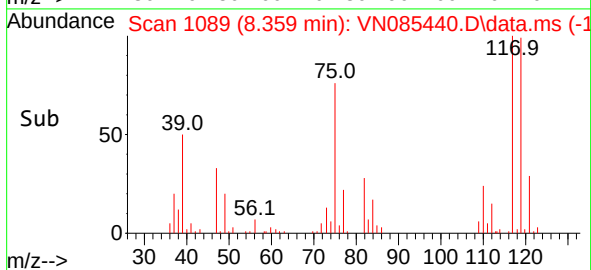
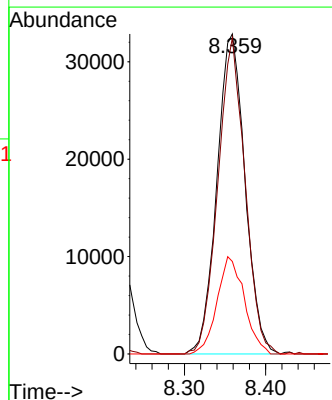
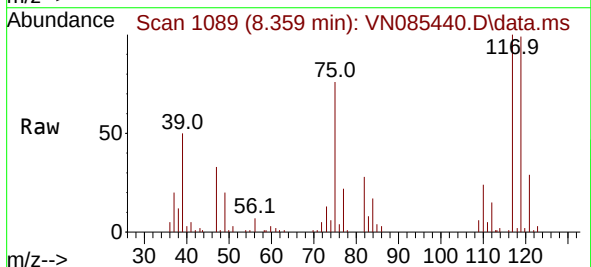
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

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

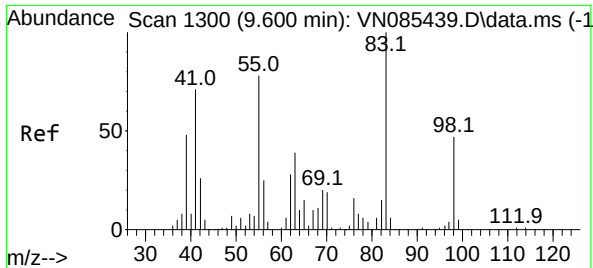


#38  
Carbon Tetrachloride  
Concen: 20.767 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

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

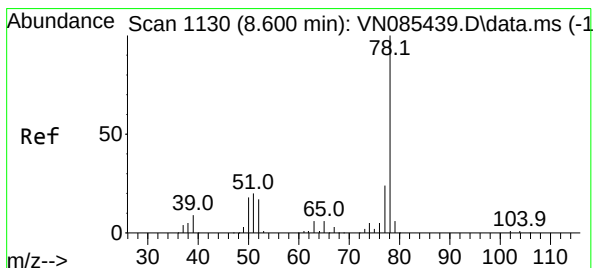
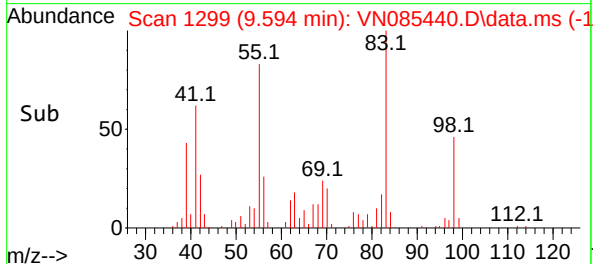
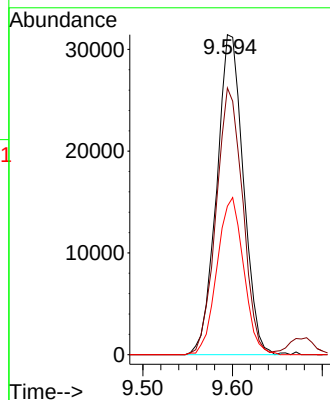
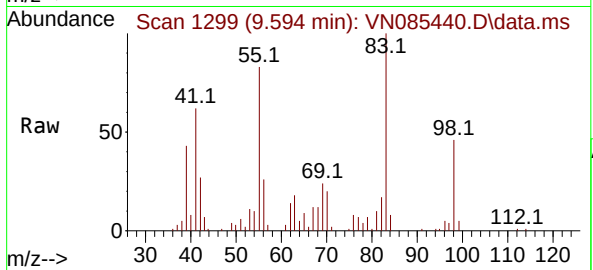
Tgt Ion: 83 Resp: 65012

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

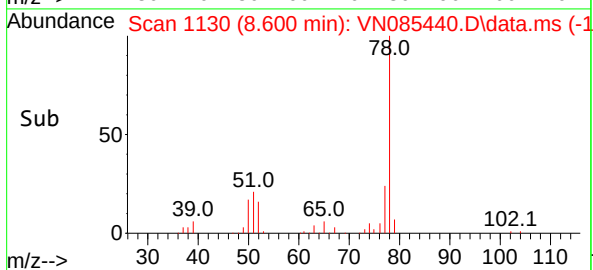
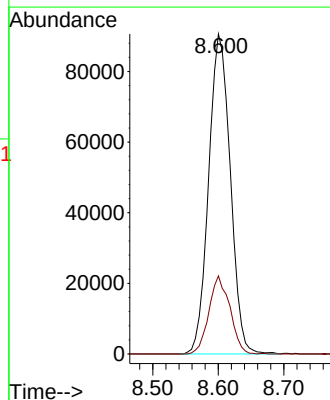
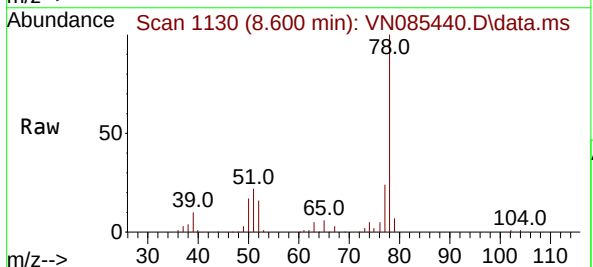
Acq: 14 Jan 2025 15:43

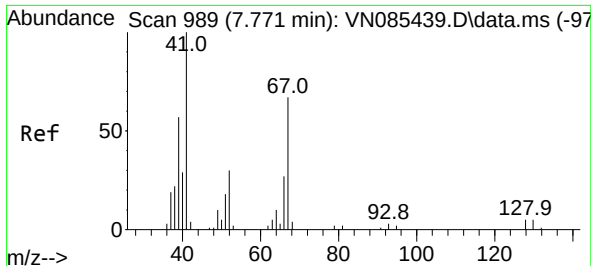
Tgt Ion: 78 Resp: 207985

Ion Ratio Lower Upper

78 100

77 24.4 19.0 28.6

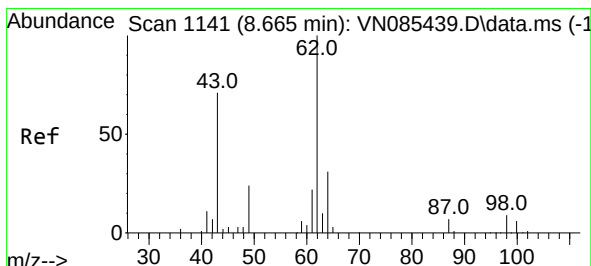
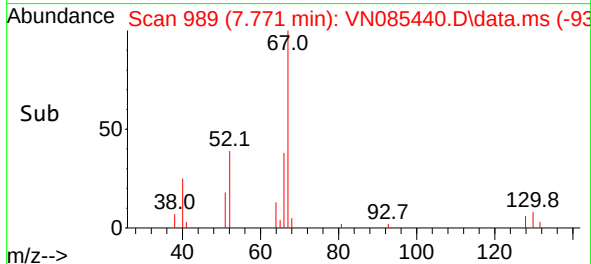
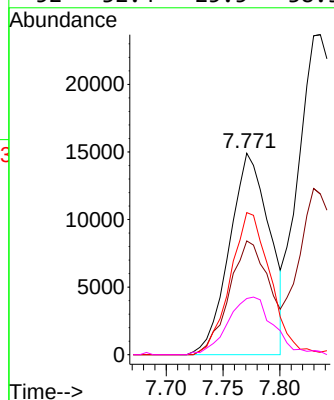
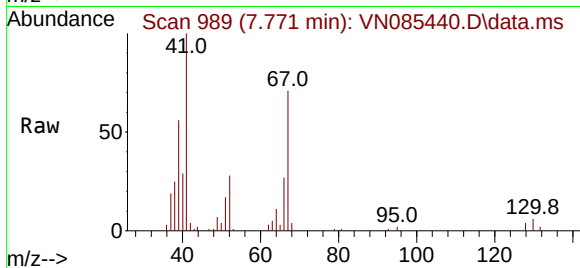




#41  
Methacrylonitrile  
Concen: 21.004 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

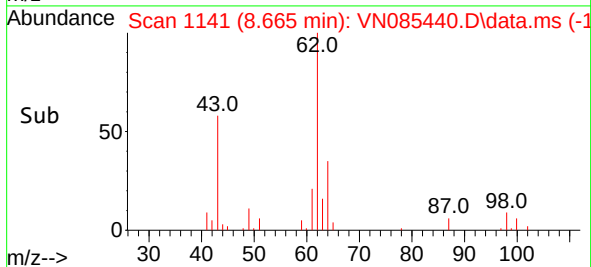
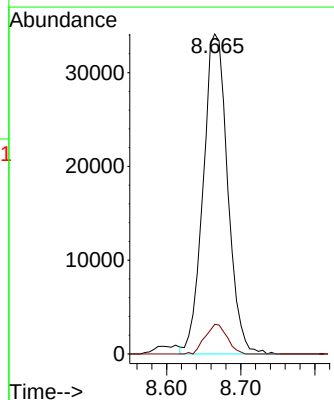
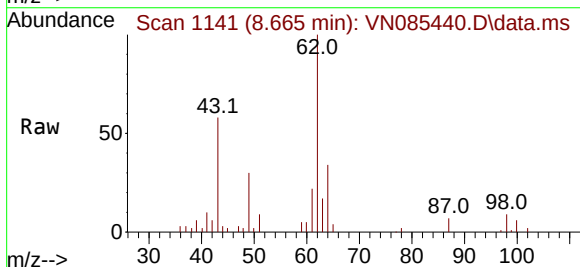
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

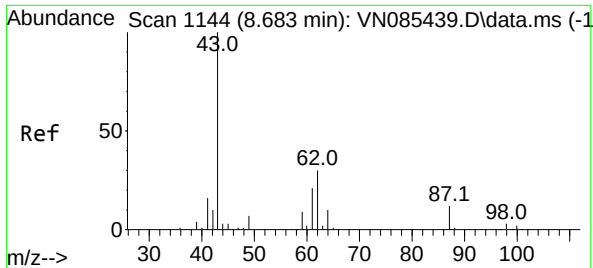
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 36578 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.6  | 46.0  | 69.0  |
| 67       | 70.3  | 57.4  | 86.2  |
| 52       | 32.4  | 25.5  | 38.3  |



#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  |

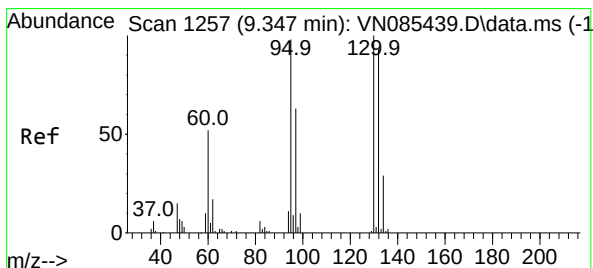
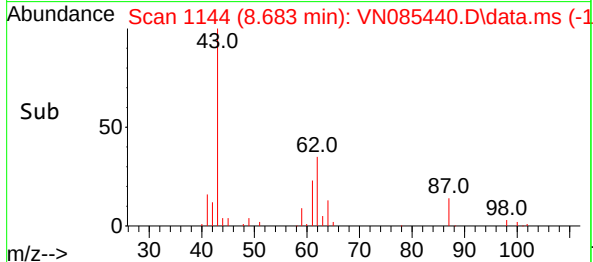
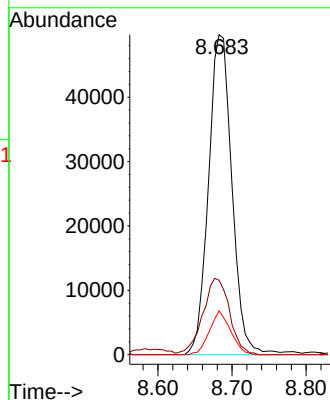
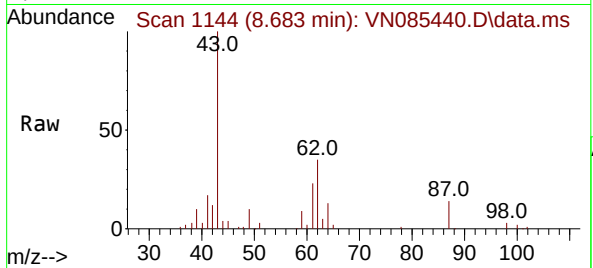




#43  
Isopropyl Acetate  
Concen: 20.347 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

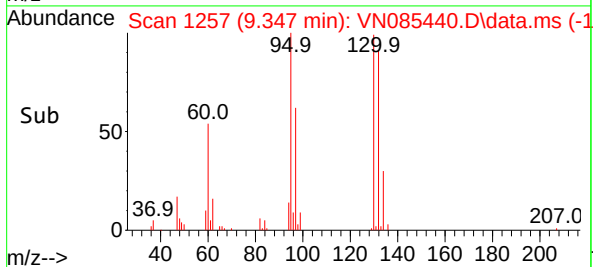
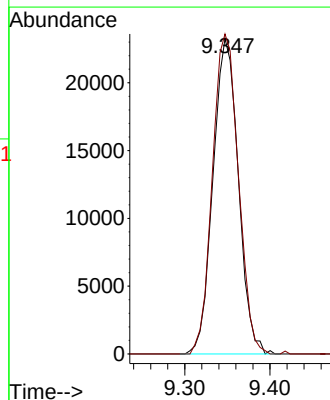
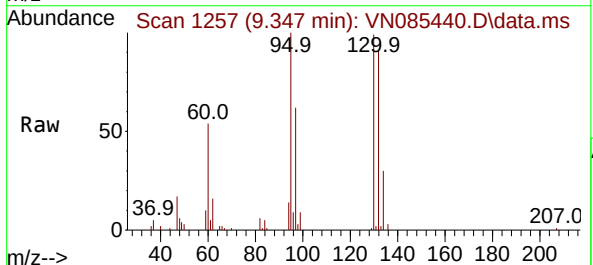
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

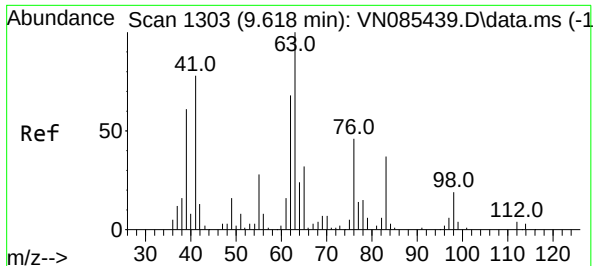
Tgt Ion: 43 Resp: 109131  
Ion Ratio Lower Upper  
43 100  
61 27.2 20.7 31.1  
87 12.3 9.8 14.8



#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 :

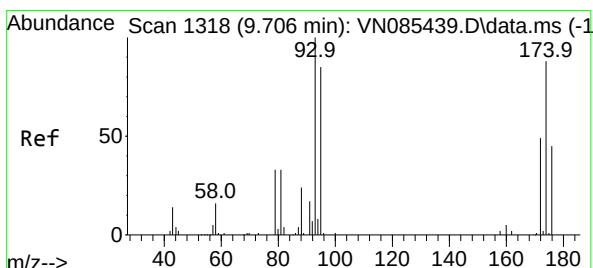
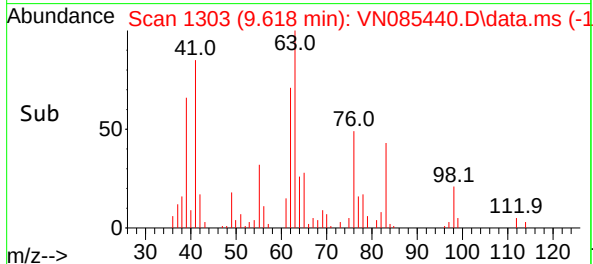
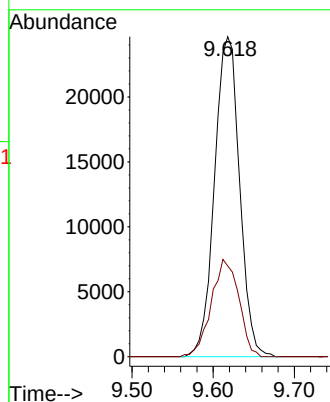
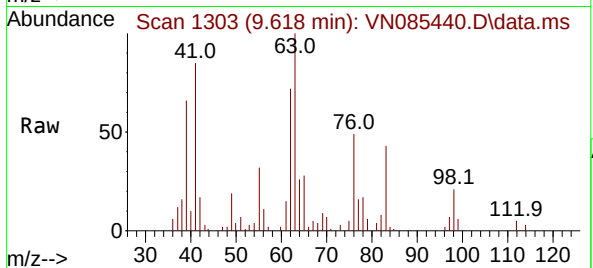
VSTDIC020

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

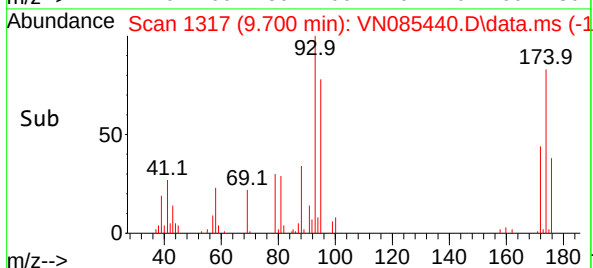
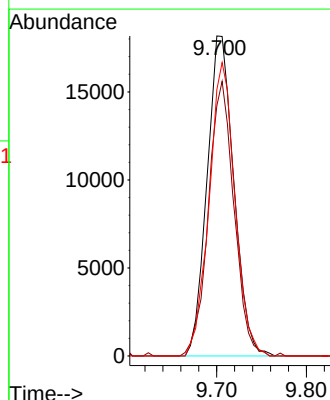
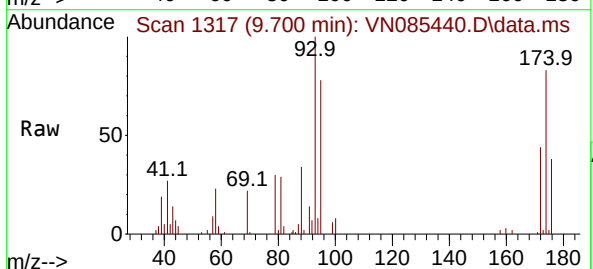
Tgt Ion: 93 Resp: 37721

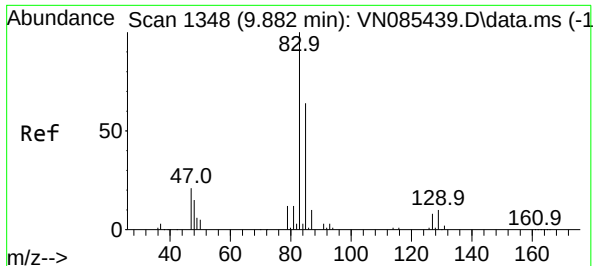
Ion Ratio Lower Upper

93 100

95 82.0 64.7 97.1

174 88.4 69.0 103.4

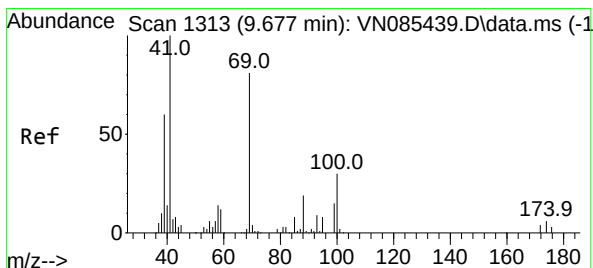
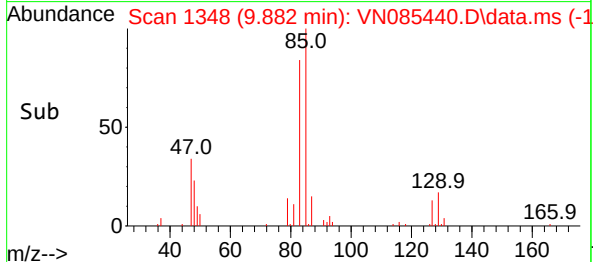
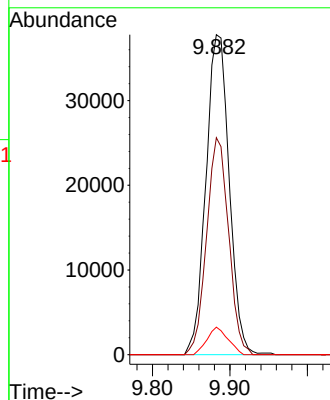
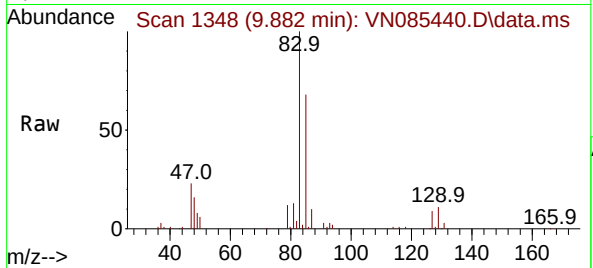




#47  
Bromodichloromethane  
Concen: 21.093 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

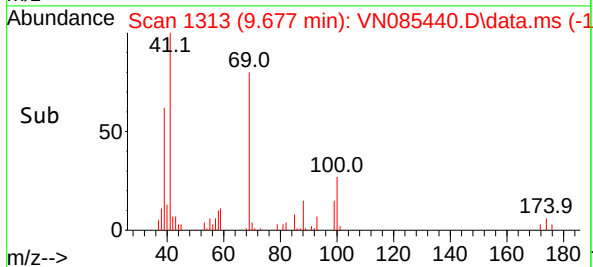
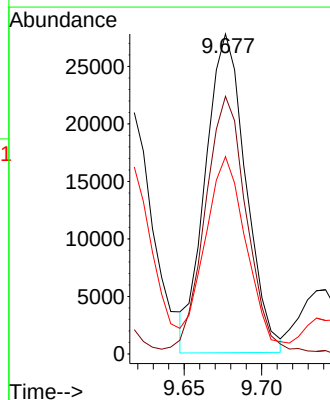
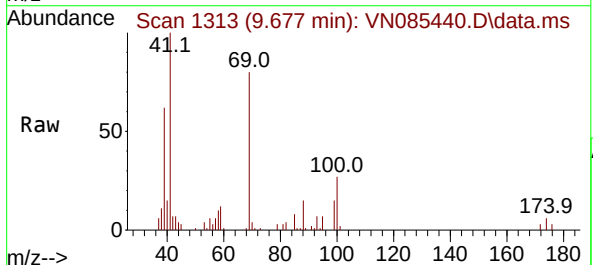
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

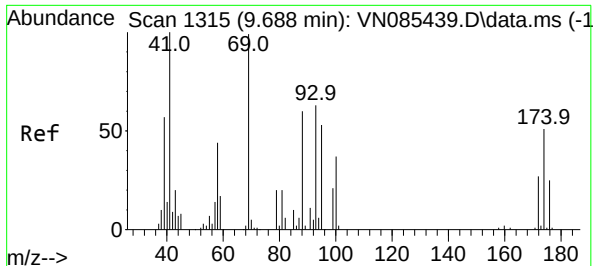
Tgt Ion: 83 Resp: 78918  
Ion Ratio Lower Upper  
83 100  
85 67.8 51.2 76.8  
127 8.6 6.5 9.7



#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

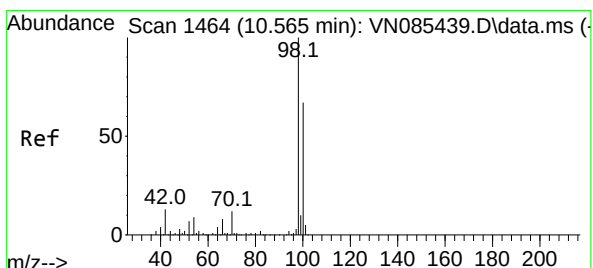
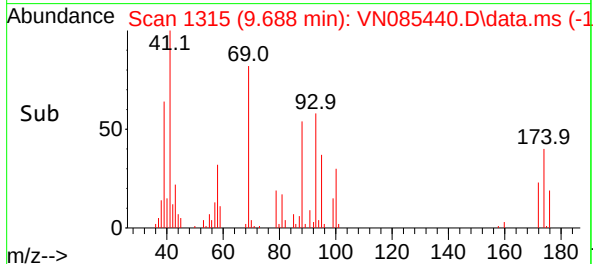
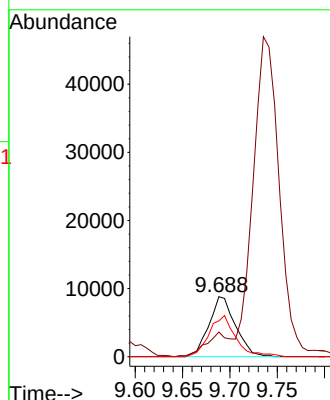
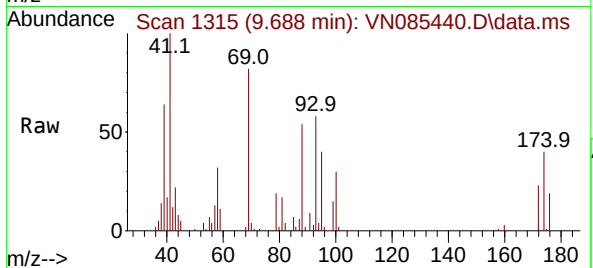
Tgt Ion: 88 Resp: 17140

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

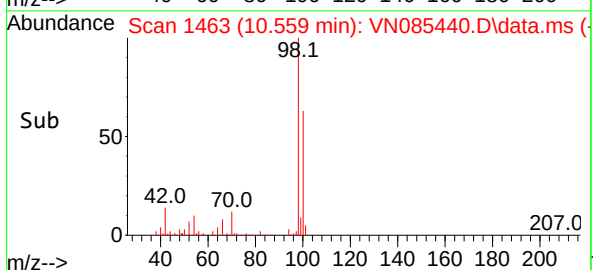
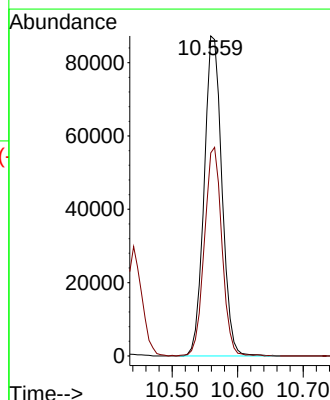
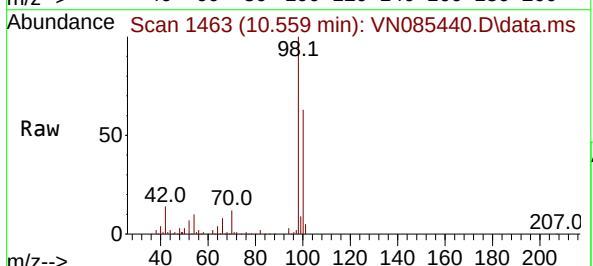
Acq: 14 Jan 2025 15:43

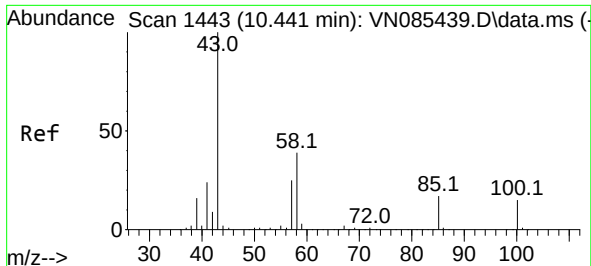
Tgt Ion: 98 Resp: 164391

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4

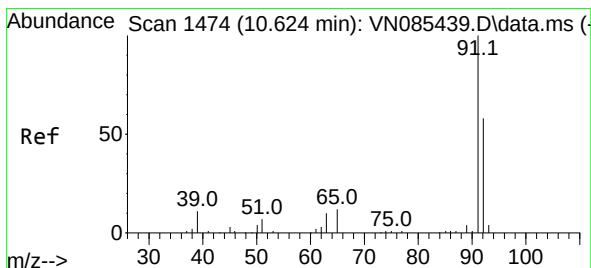
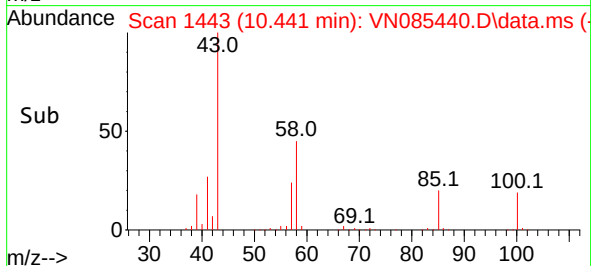
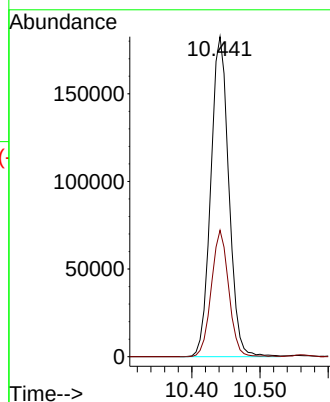
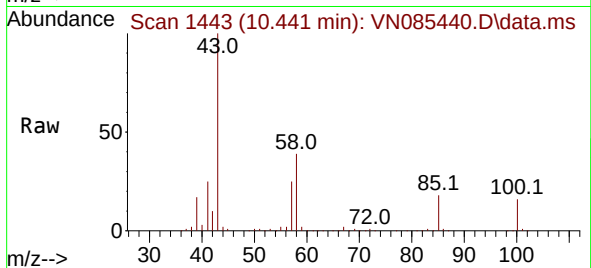




#51  
4-Methyl-2-Pentanone  
Concen: 108.249 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

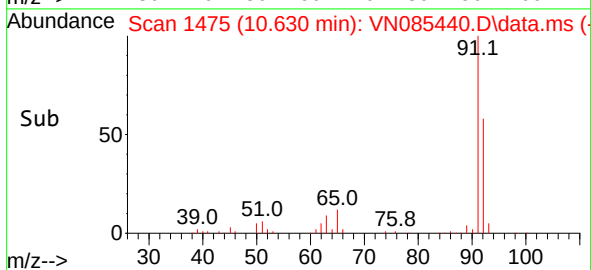
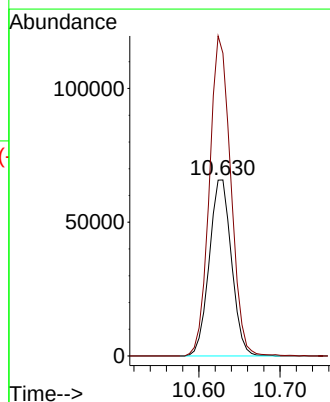
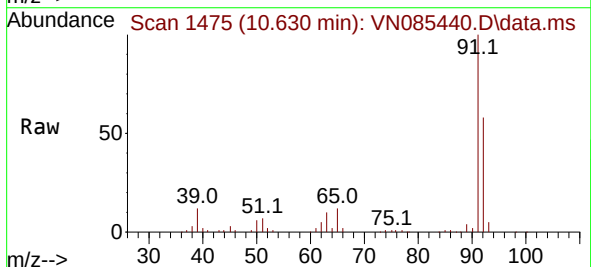
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

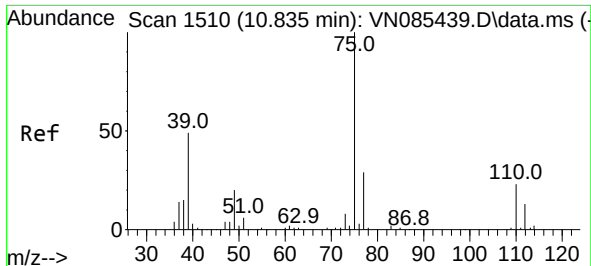
Tgt Ion: 43 Resp: 336911  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#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

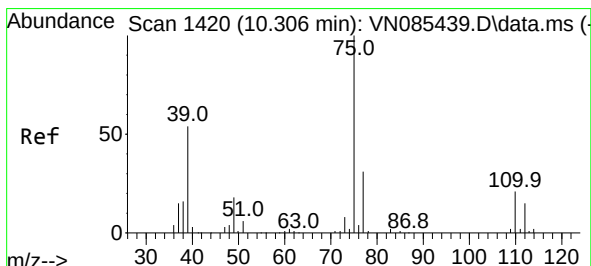
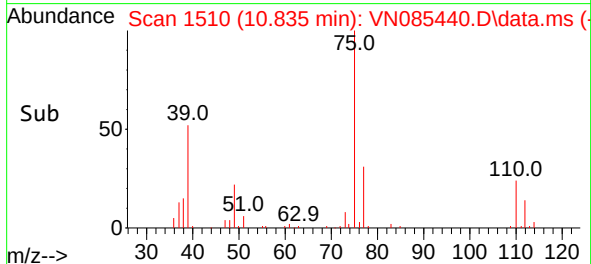
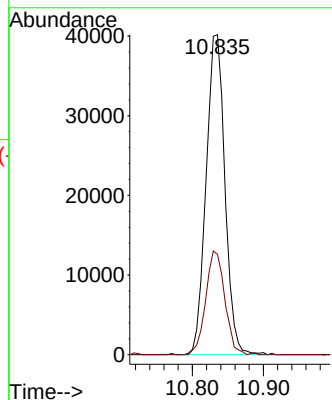
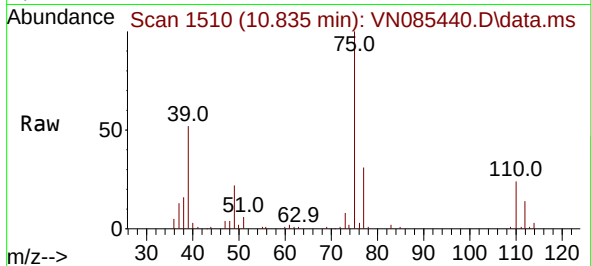




#53  
 t-1,3-Dichloropropene  
 Concen: 20.965 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

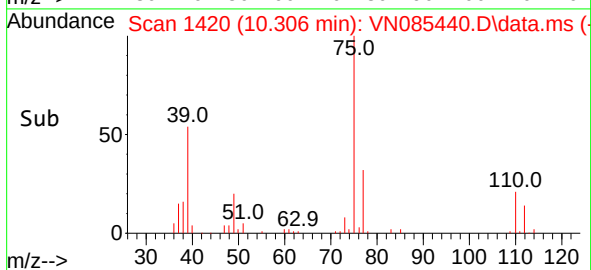
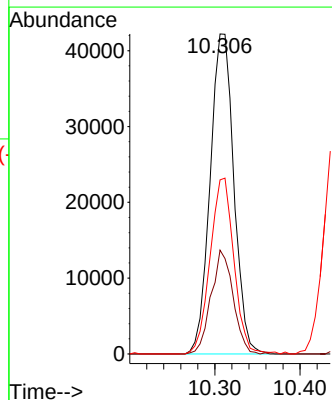
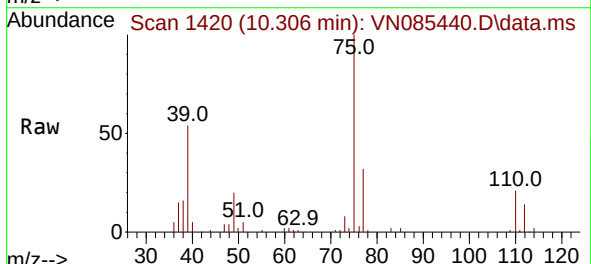
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

Tgt Ion: 75 Resp: 74129  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 23.5 35.3

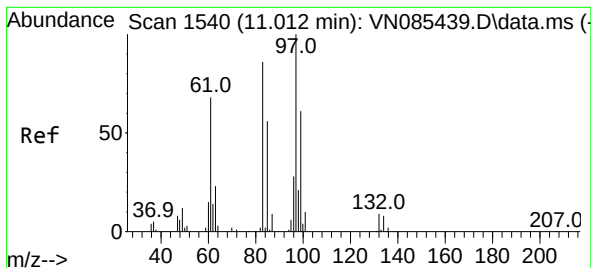


#54  
 cis-1,3-Dichloropropene  
 Concen: 21.684 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

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



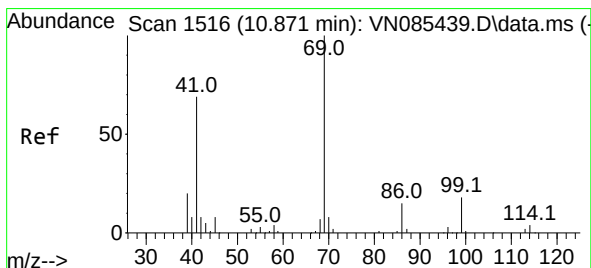
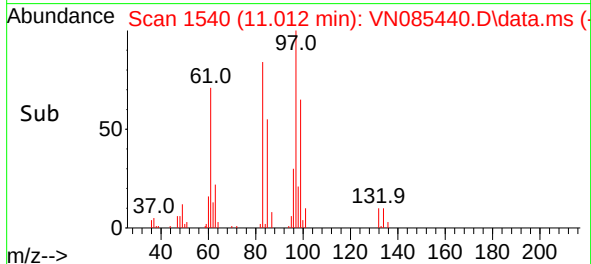
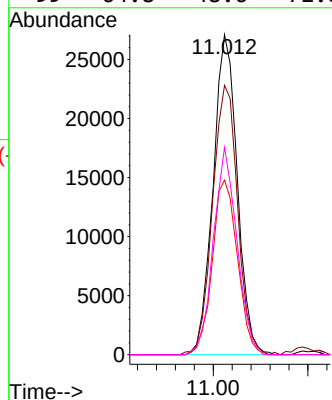
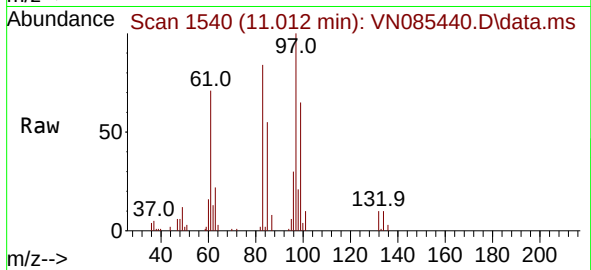




#55  
1,1,2-Trichloroethane  
Concen: 21.025 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

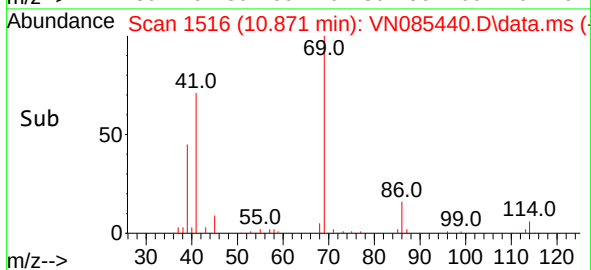
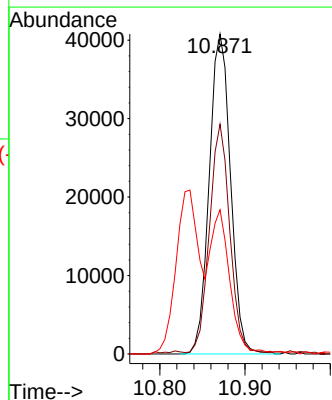
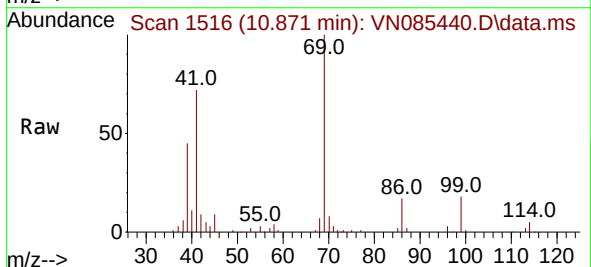
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

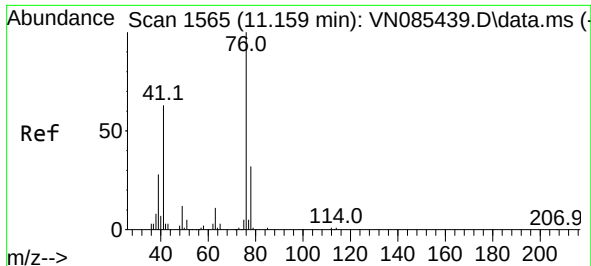
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 48039 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 84.1     | 69.0 103.6  |
| 85 54.6     | 44.6 66.8   |
| 99 64.8     | 48.6 72.8   |



#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 :

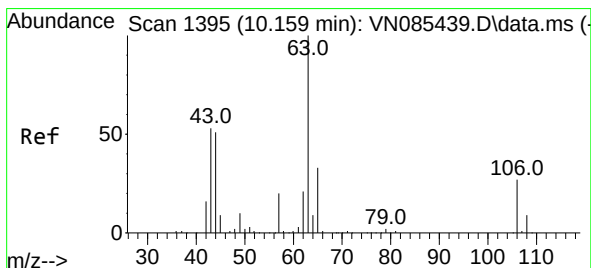
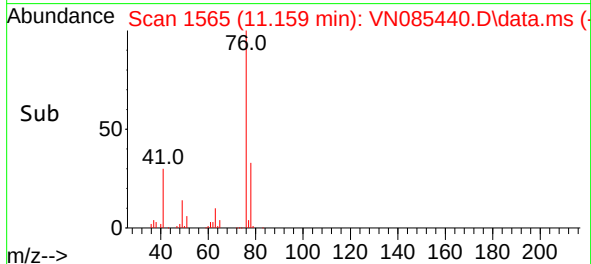
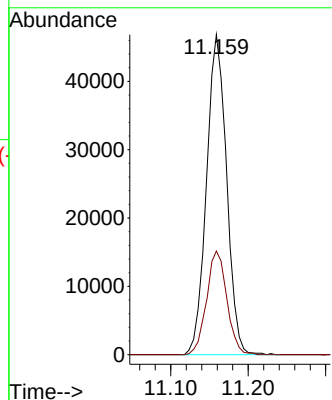
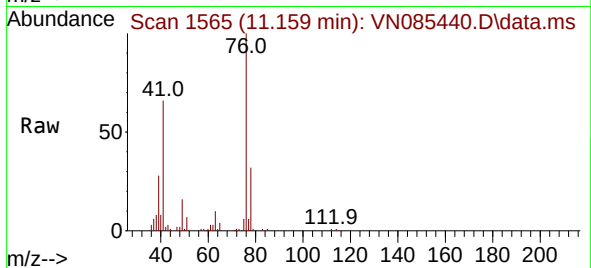
VSTDIC020

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

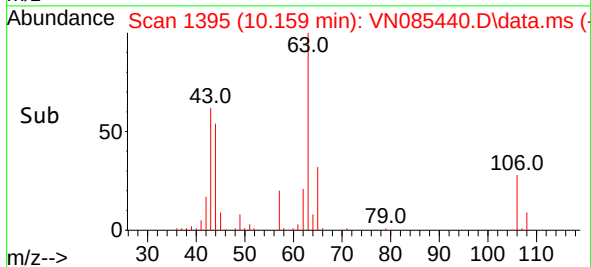
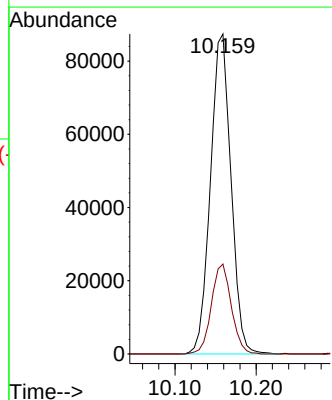
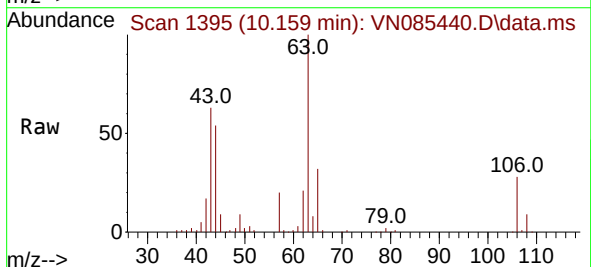
Acq: 14 Jan 2025 15:43

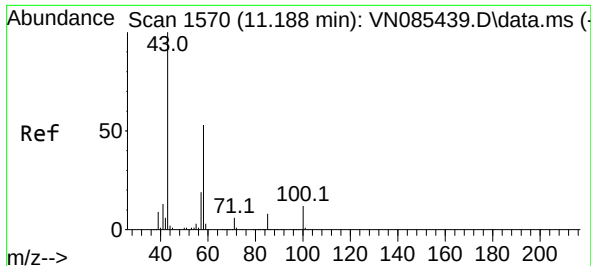
Tgt Ion: 63 Resp: 153681

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4

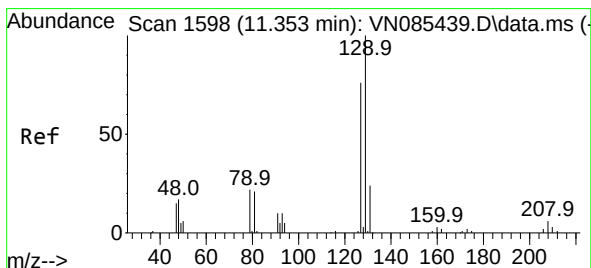
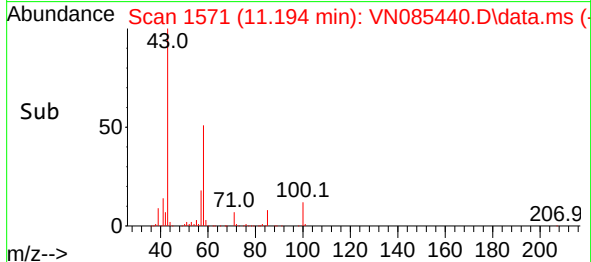
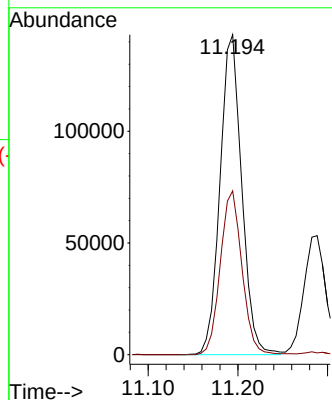
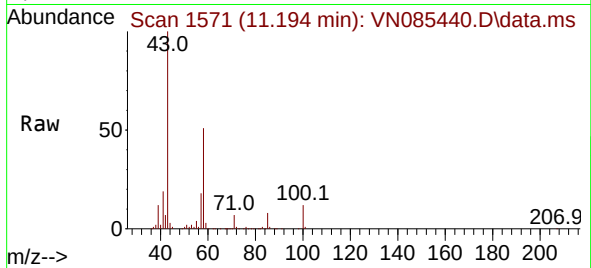




#59  
2-Hexanone  
Concen: 109.863 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

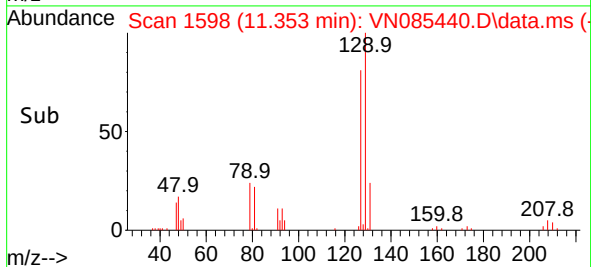
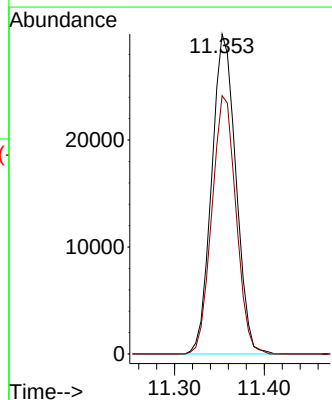
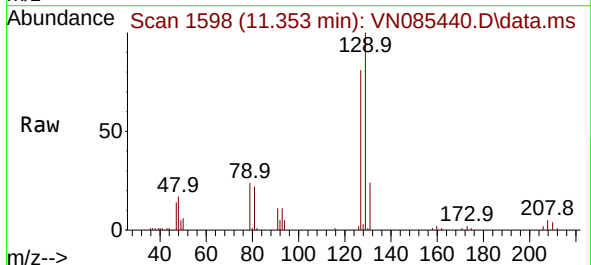
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

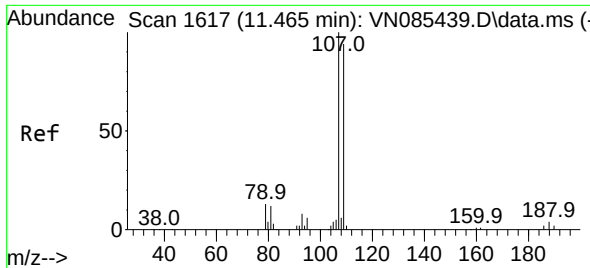
Tgt Ion: 43 Resp: 240595  
Ion Ratio Lower Upper  
43 100  
58 51.1 26.2 78.6



#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

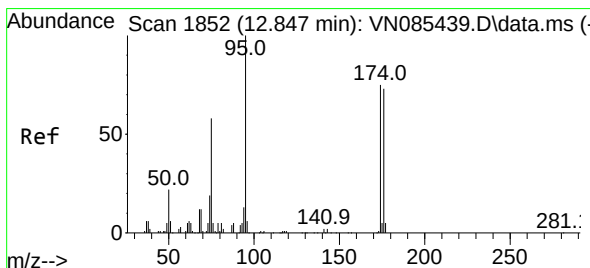
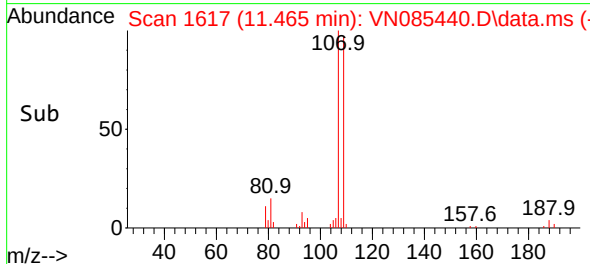
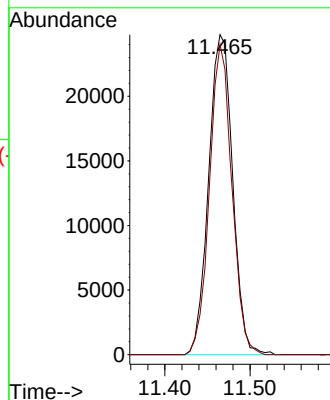
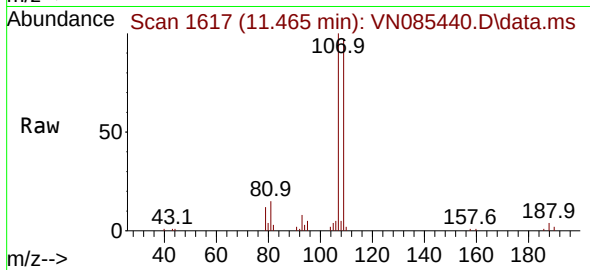




#61  
1,2-Dibromoethane  
Concen: 21.309 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

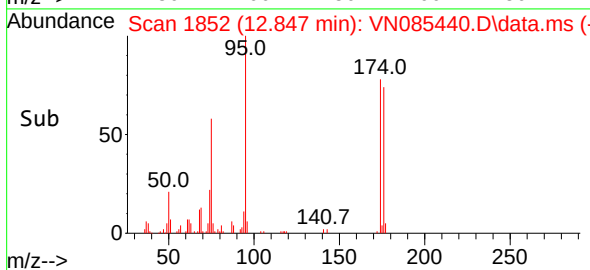
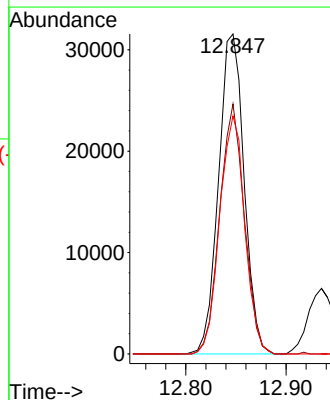
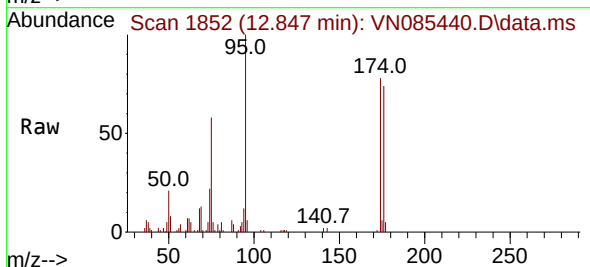
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

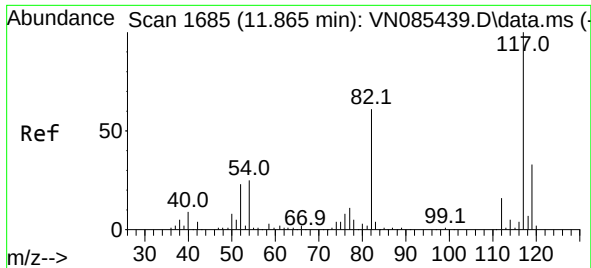
Tgt Ion:107 Resp: 48465  
Ion Ratio Lower Upper  
107 100  
109 90.6 75.9 113.9



#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

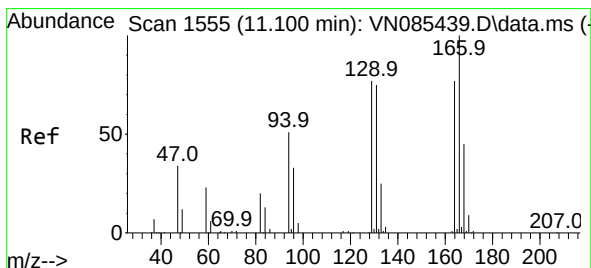
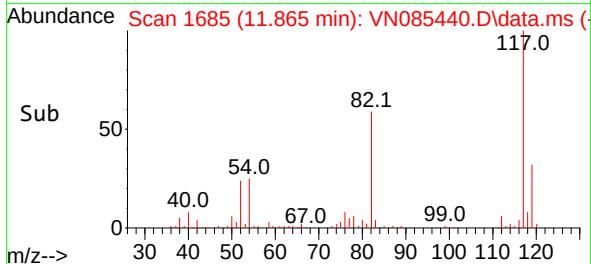
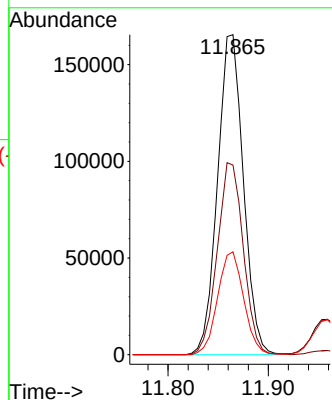
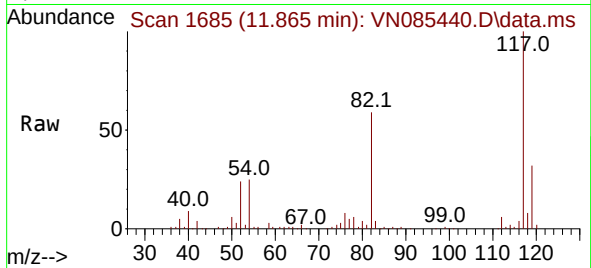




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

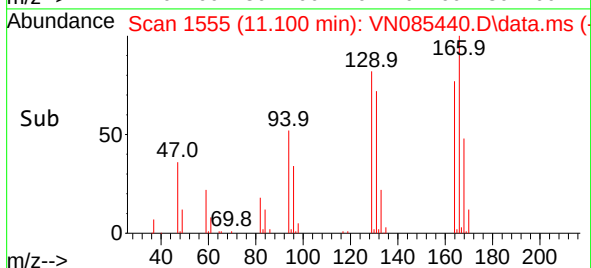
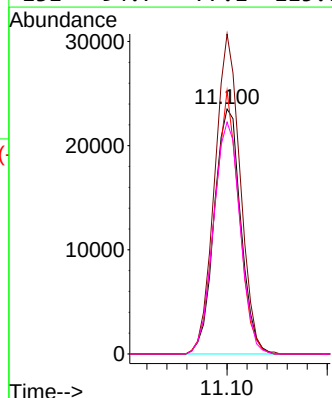
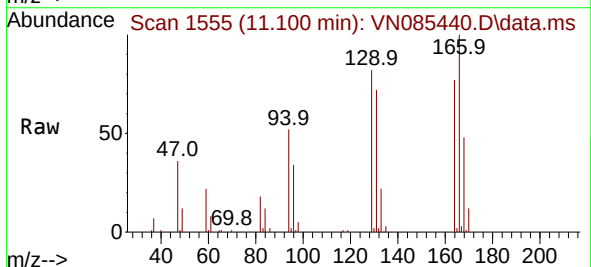
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

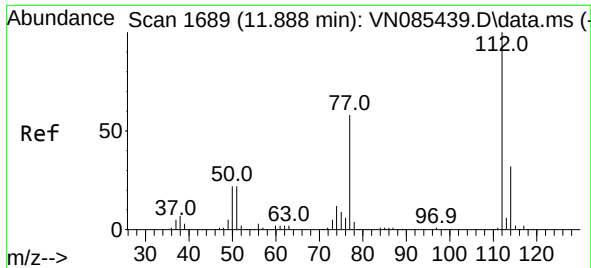
Tgt Ion:117 Resp: 296298  
Ion Ratio Lower Upper  
117 100  
82 59.3 48.6 72.8  
119 32.2 26.6 39.8



#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

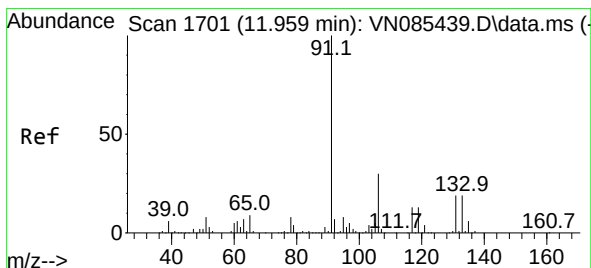
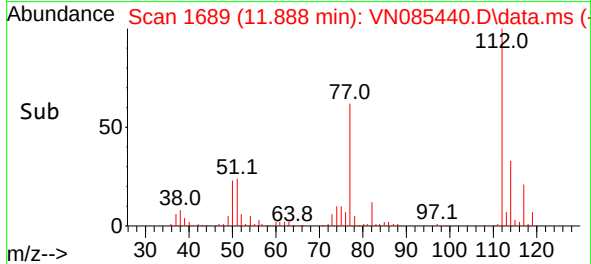
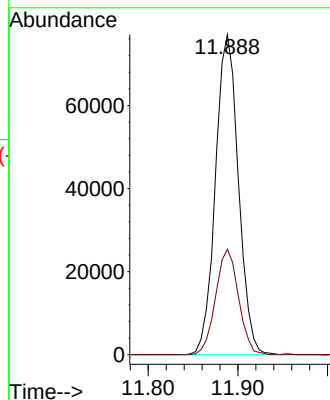
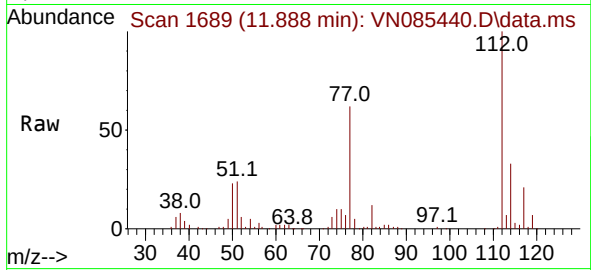




#65  
Chlorobenzene  
Concen: 21.077 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

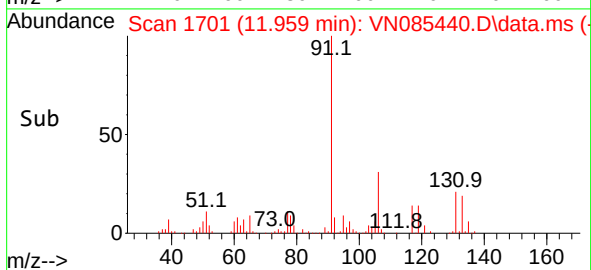
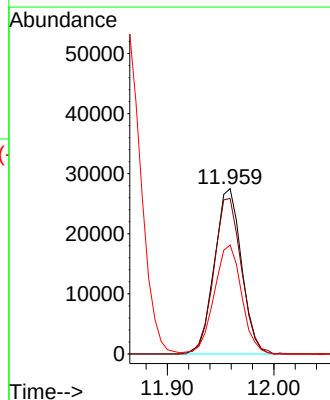
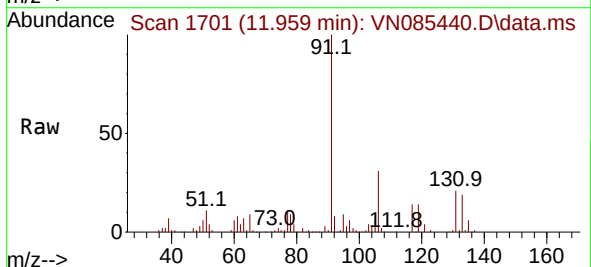
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

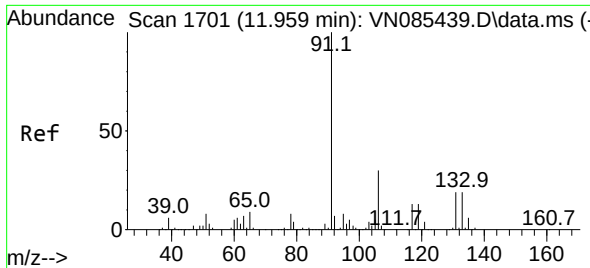
Tgt Ion:112 Resp: 136809  
Ion Ratio Lower Upper  
112 100  
114 32.9 25.3 37.9



#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

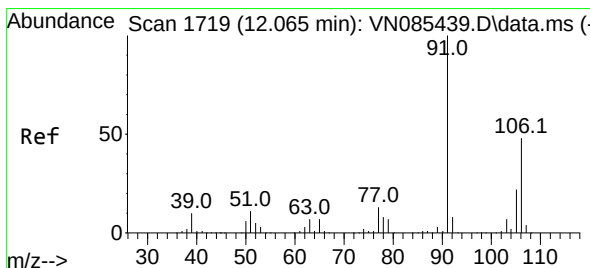
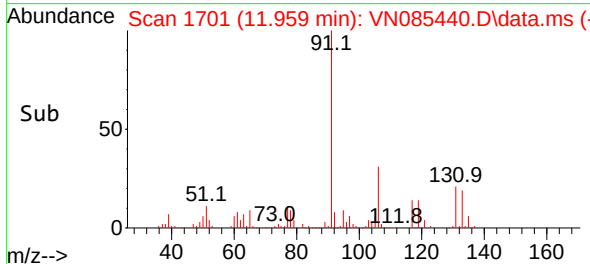
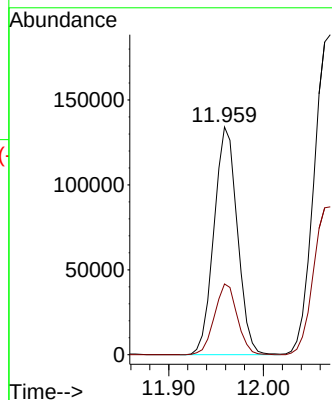
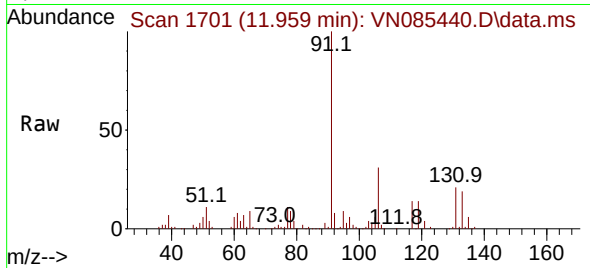




#67  
Ethyl Benzene  
Concen: 21.753 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

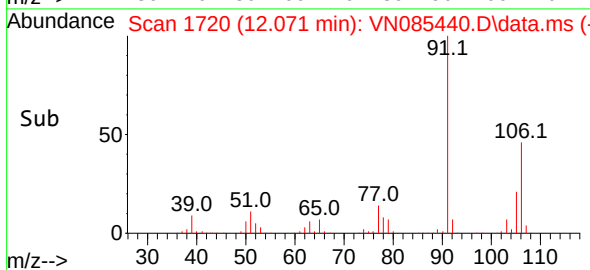
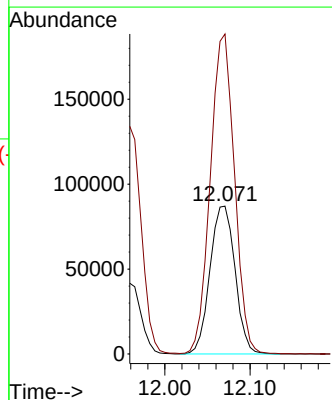
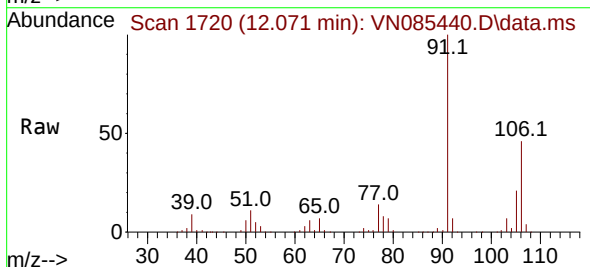
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

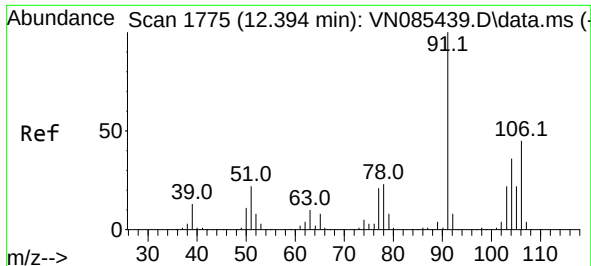
Tgt Ion: 91 Resp: 229978  
Ion Ratio Lower Upper  
91 100  
106 31.1 23.8 35.8



#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

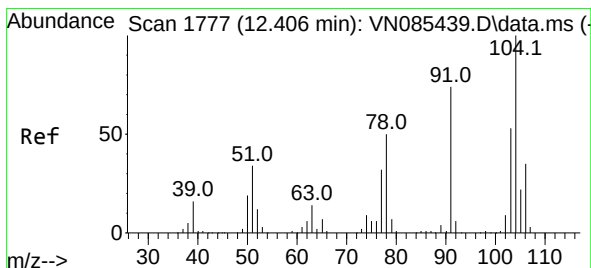
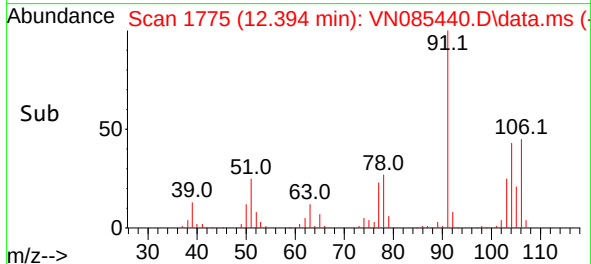
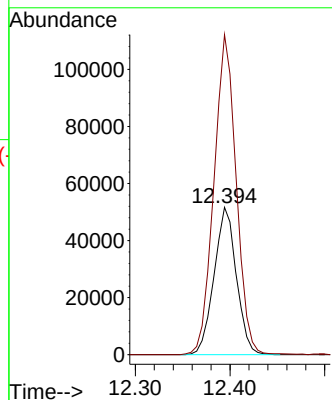
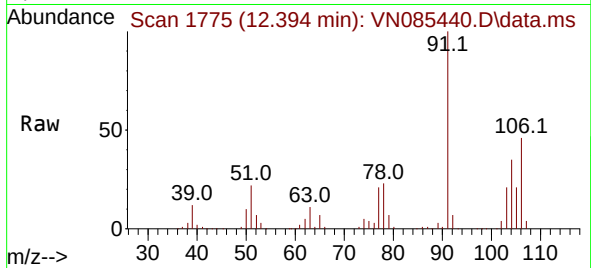




#69  
o-Xylene  
Concen: 22.643 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

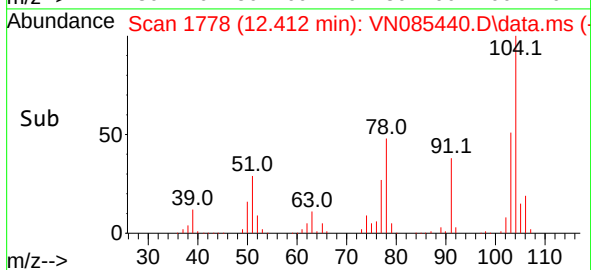
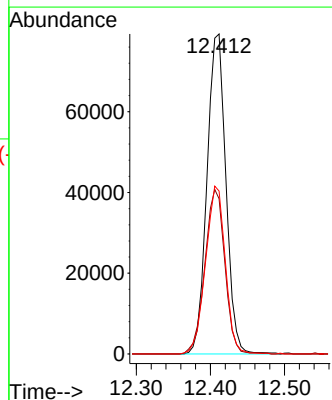
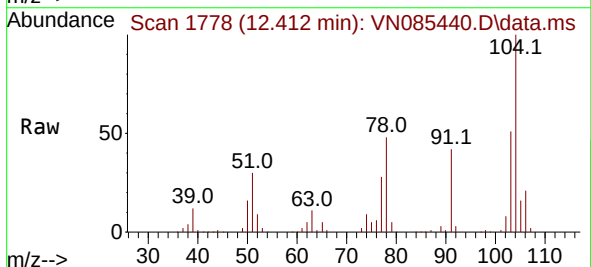
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion:106 Resp: 84548  
Ion Ratio Lower Upper  
106 100  
91 217.0 110.4 331.2

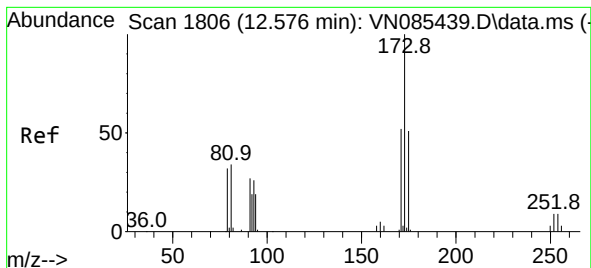


#70  
Styrene  
Concen: 22.749 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

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 :

VSTDICC020

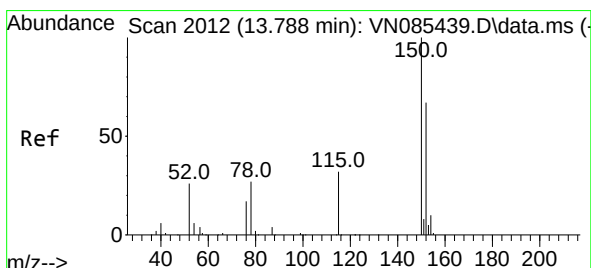
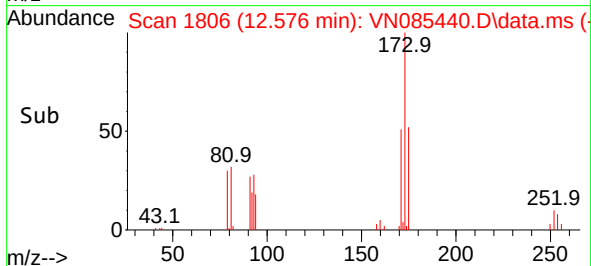
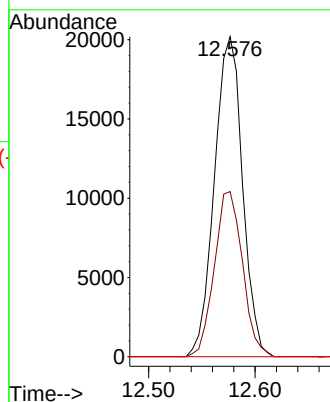
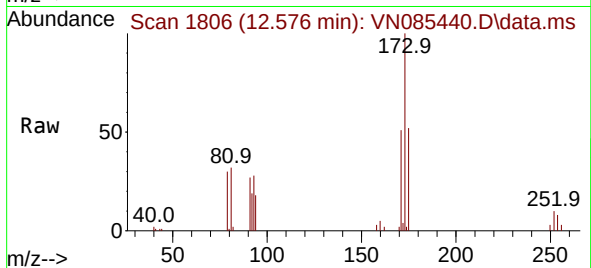
Tgt Ion:173 Resp: 36961

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

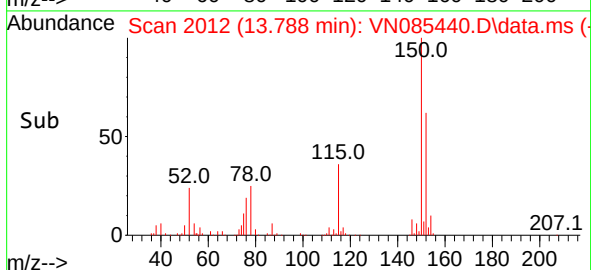
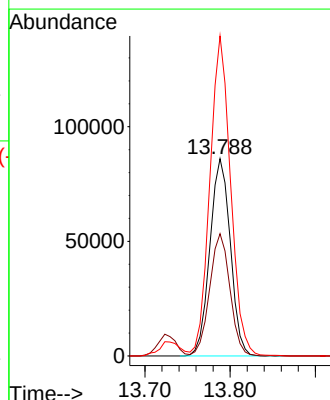
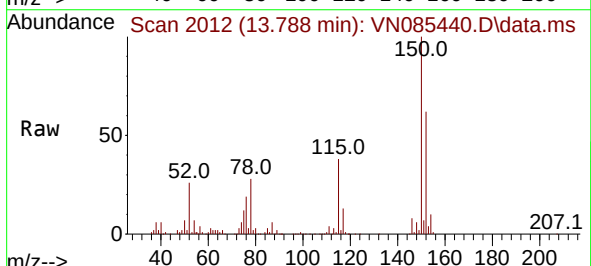
Tgt Ion:152 Resp: 143526

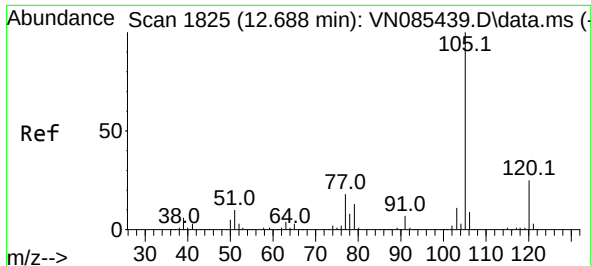
Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 163.9 0.0 343.6

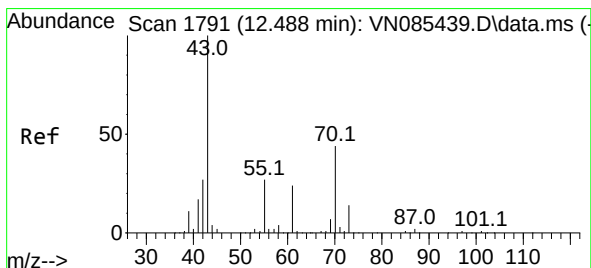
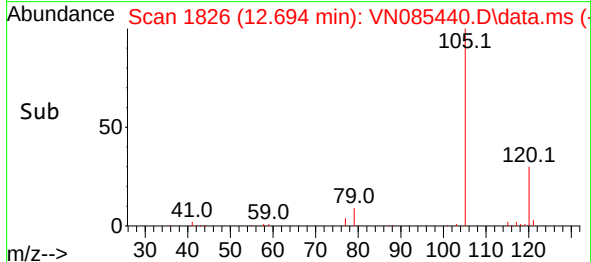
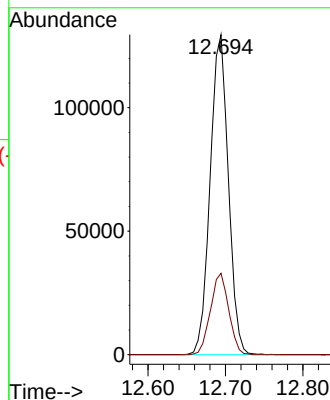
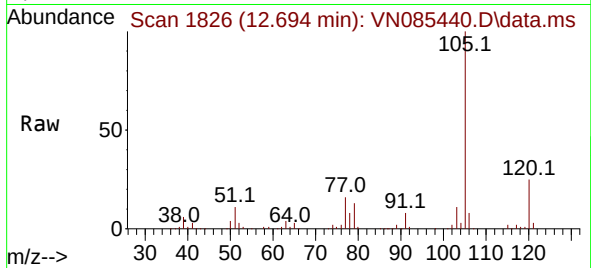




#73  
Isopropylbenzene  
Concen: 21.819 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

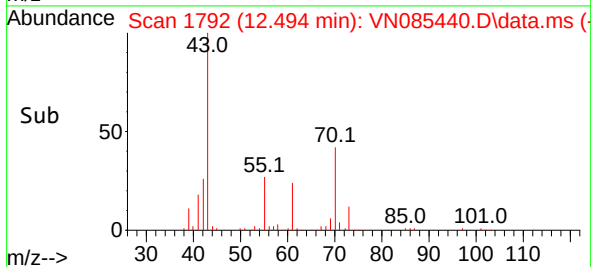
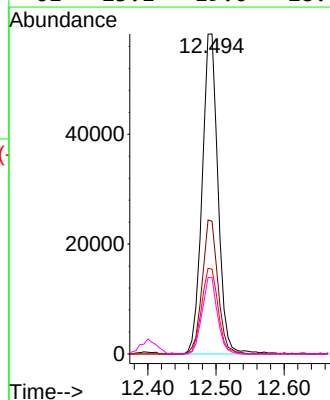
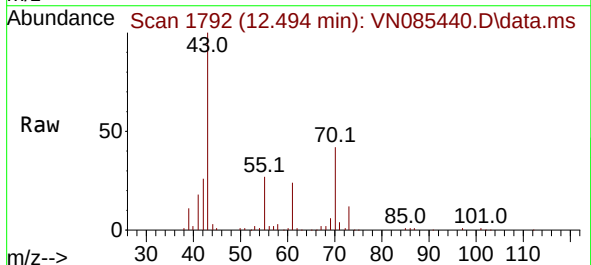
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

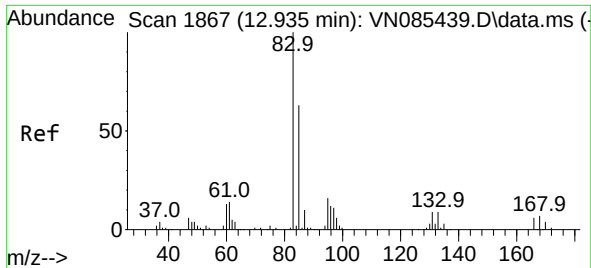
Tgt Ion:105 Resp: 211354  
Ion Ratio Lower Upper  
105 100  
120 25.5 12.8 38.3



#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

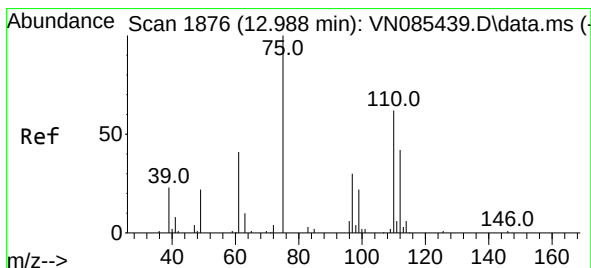
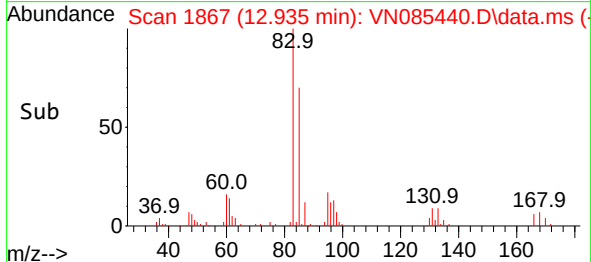
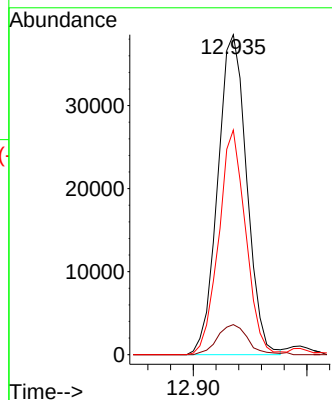
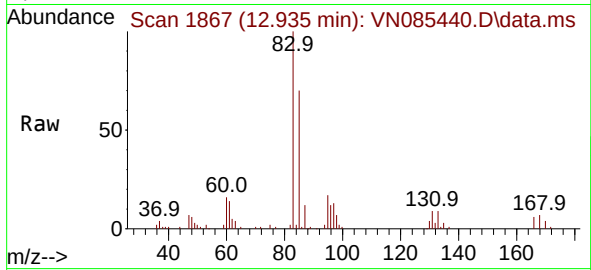




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 19.917 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

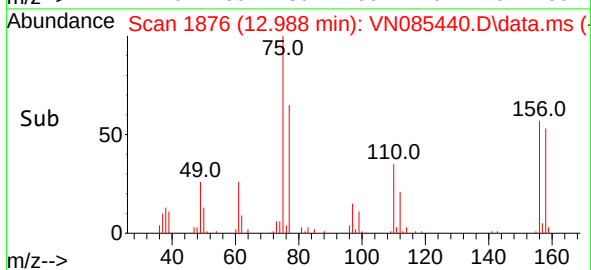
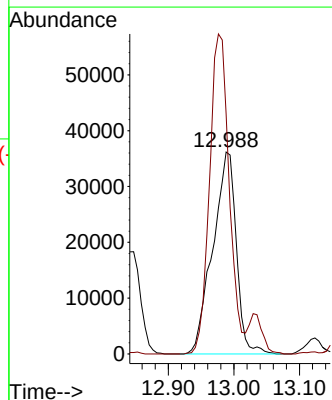
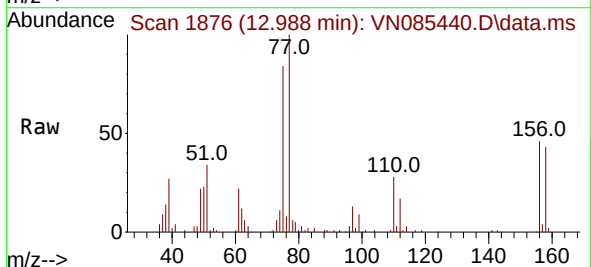
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

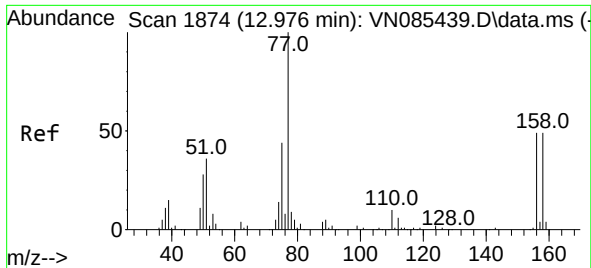
Tgt Ion: 83 Resp: 68151  
 Ion Ratio Lower Upper  
 83 100  
 131 9.9 4.8 14.4  
 85 65.5 32.2 96.6



#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

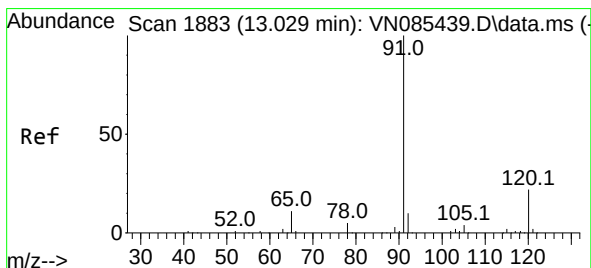
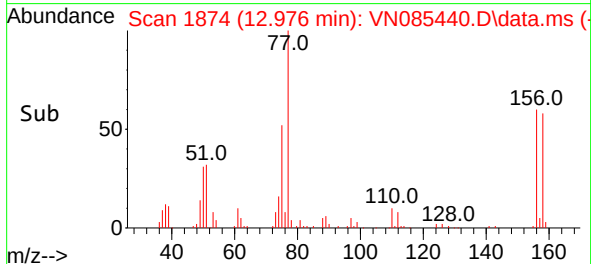
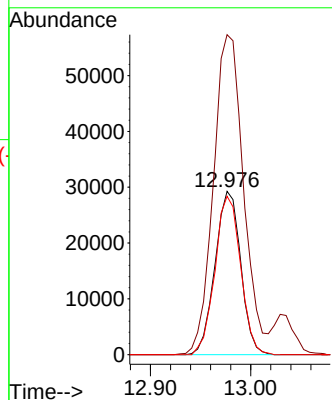
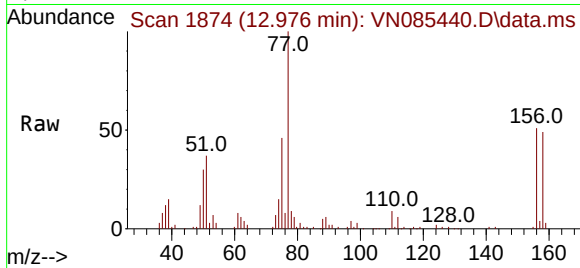




#77  
Bromobenzene  
Concen: 20.556 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

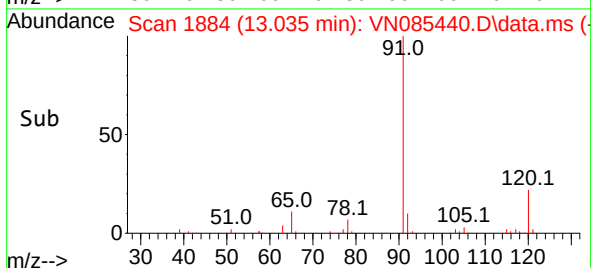
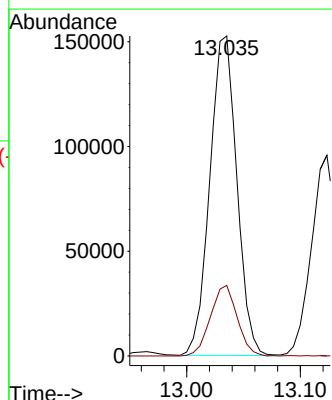
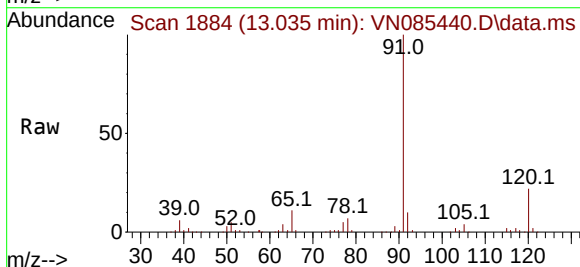
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

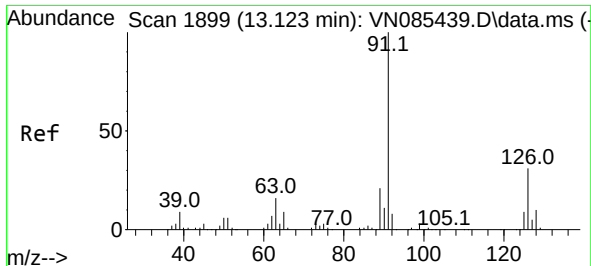
Tgt Ion:156 Resp: 52022  
Ion Ratio Lower Upper  
156 100  
77 230.4 114.1 342.4  
158 97.0 48.9 146.8



#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

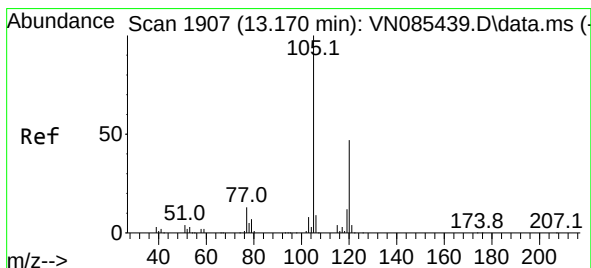
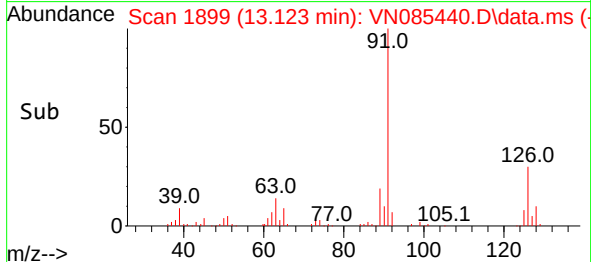
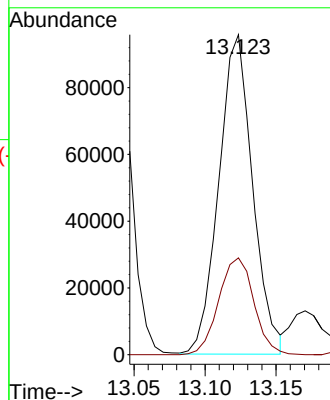
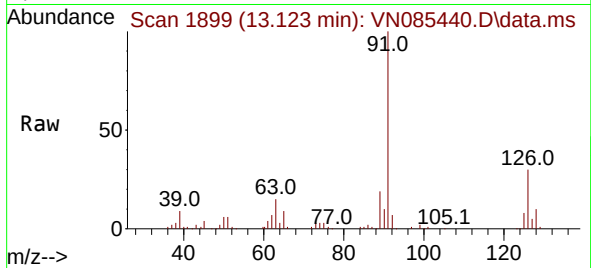




#79  
2-Chlorotoluene  
Concen: 21.358 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

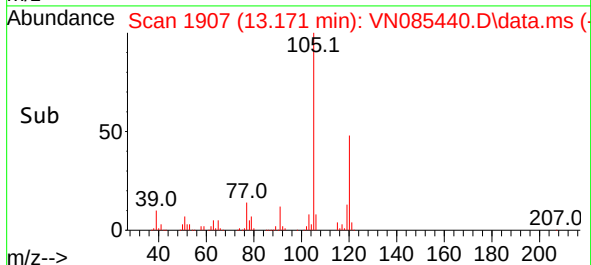
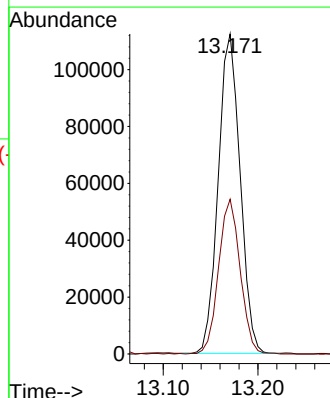
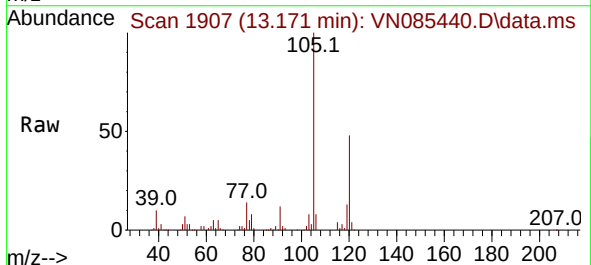
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

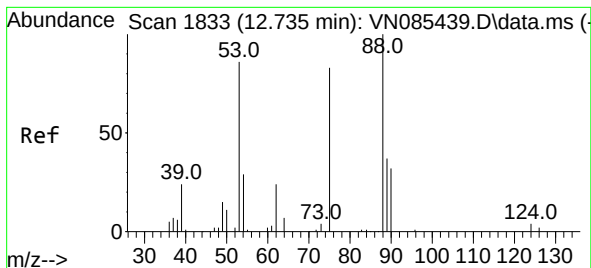
Tgt Ion: 91 Resp: 158511  
Ion Ratio Lower Upper  
91 100  
126 31.5 15.7 47.1



#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

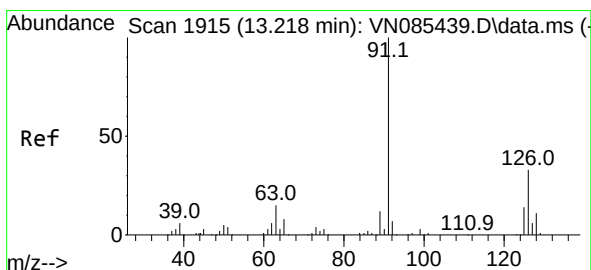
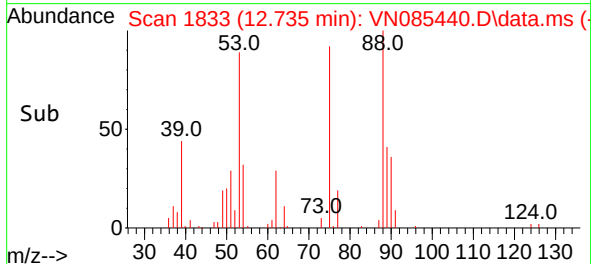
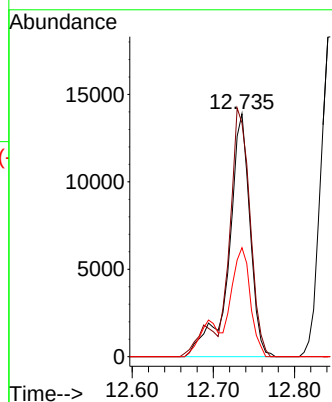
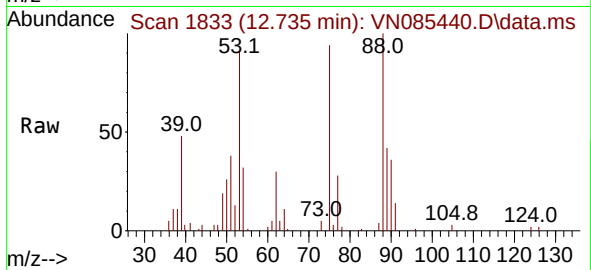




#81  
trans-1,4-Dichloro-2-butene  
Concen: 23.322 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

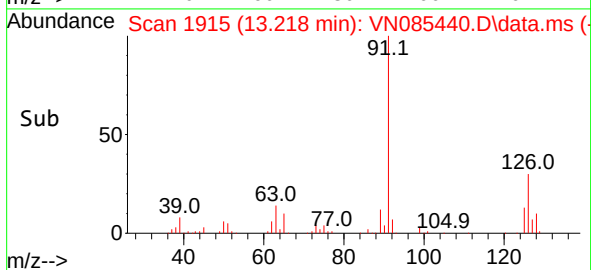
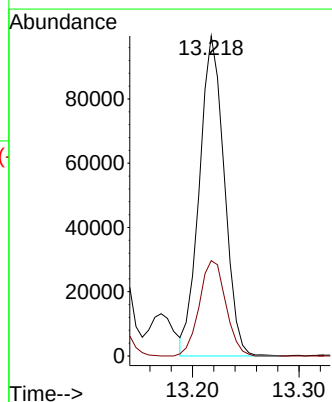
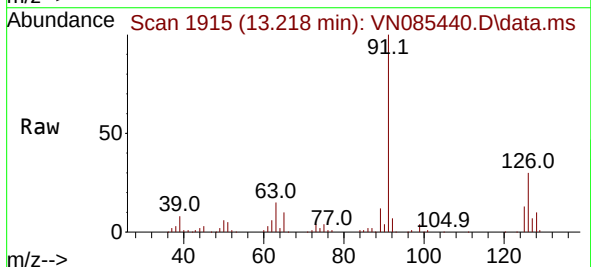
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

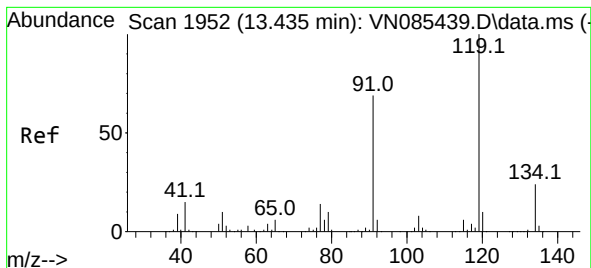
Tgt Ion: 75 Resp: 25146  
Ion Ratio Lower Upper  
75 100  
53 94.6 95.6 143.4#  
89 41.3 37.0 55.6



#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

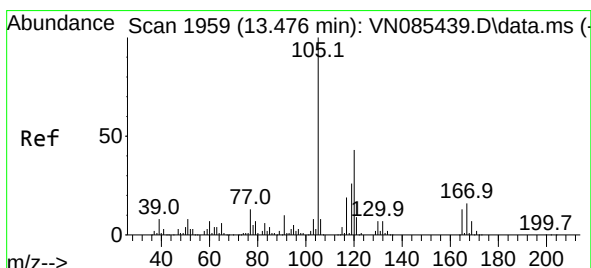
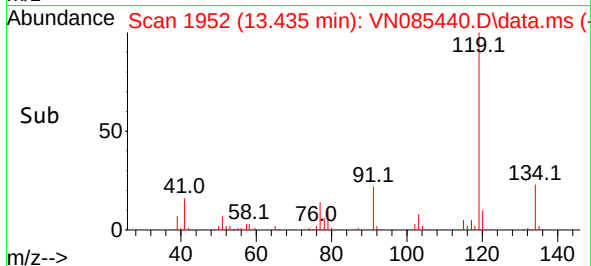
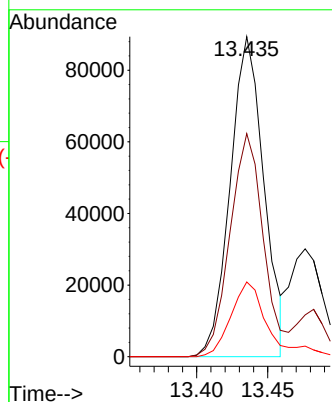
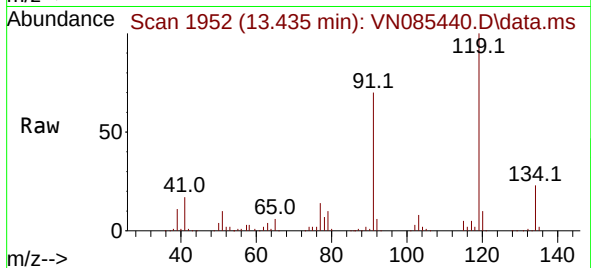
Tgt Ion:119 Resp: 147541

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

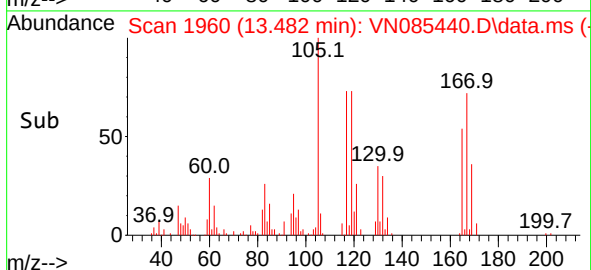
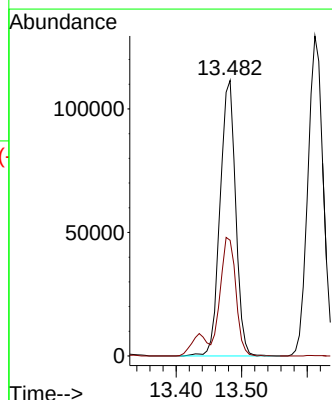
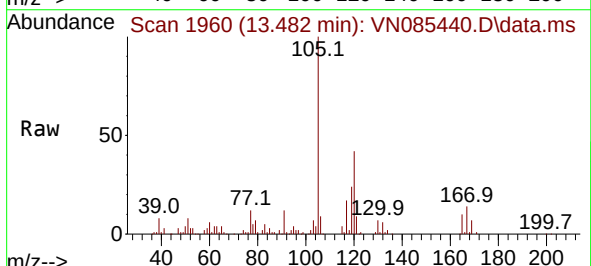
Acq: 14 Jan 2025 15:43

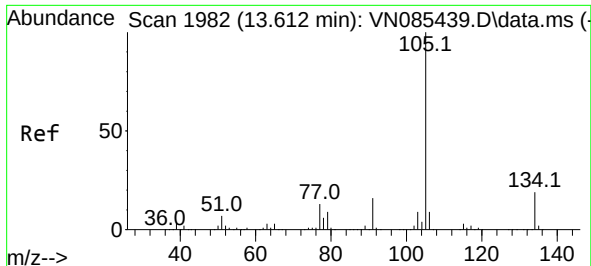
Tgt Ion:105 Resp: 183144

Ion Ratio Lower Upper

105 100

120 42.8 21.6 65.0

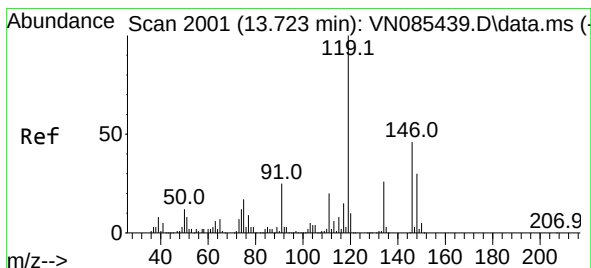
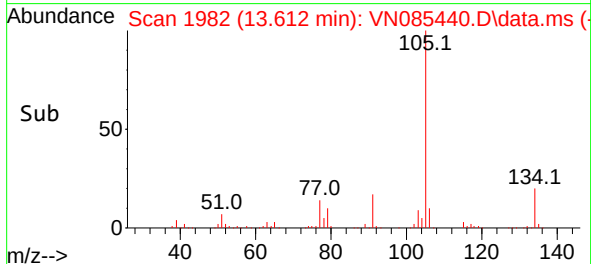
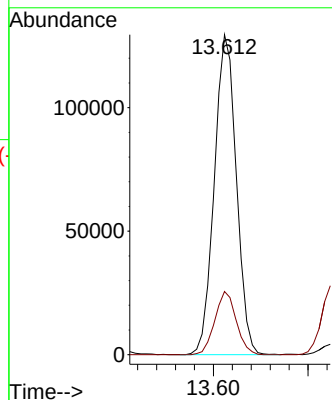
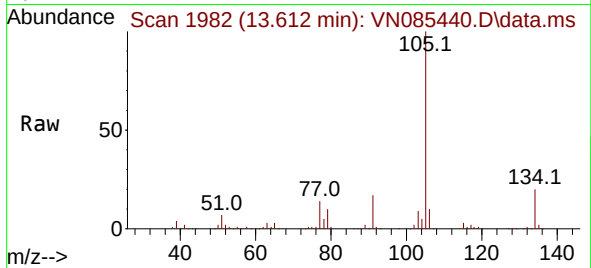




#85  
sec-Butylbenzene  
Concen: 22.457 ug/l  
RT: 13.612 min Scan# 1982  
Delta R.T. -0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

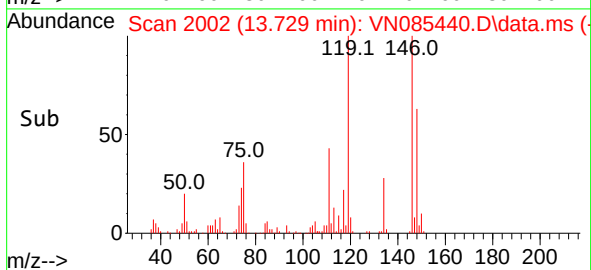
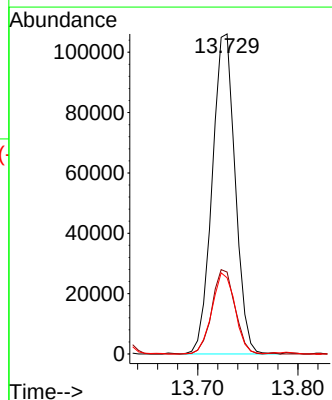
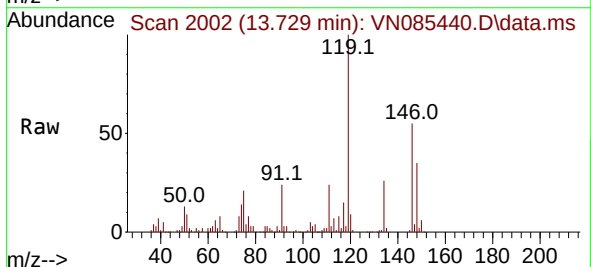
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

Tgt Ion:105 Resp: 209133  
Ion Ratio Lower Upper  
105 100  
134 19.2 9.7 28.9

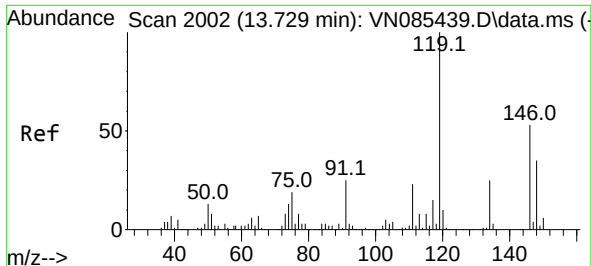


#86  
p-Isopropyltoluene  
Concen: 21.661 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. 0.006 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

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



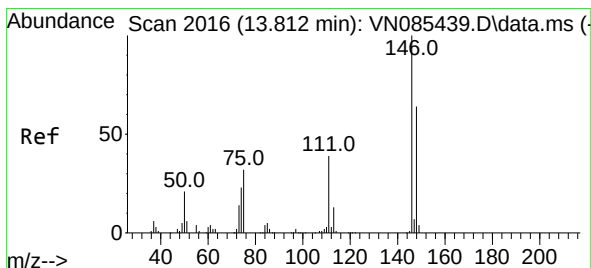
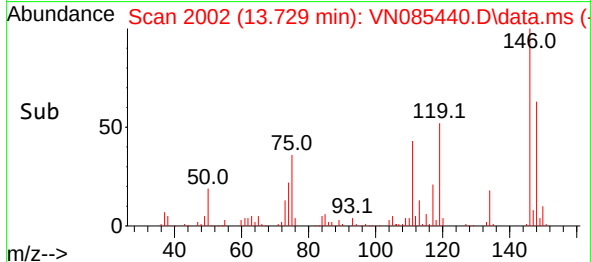
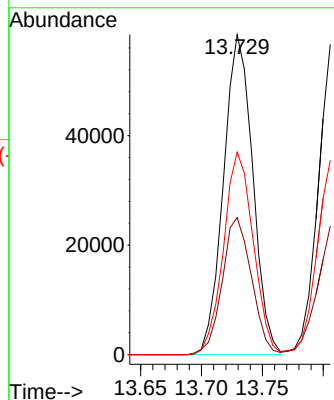
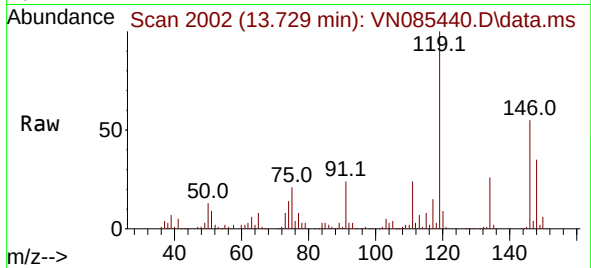




#87  
 1,3-Dichlorobenzene  
 Concen: 20.952 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

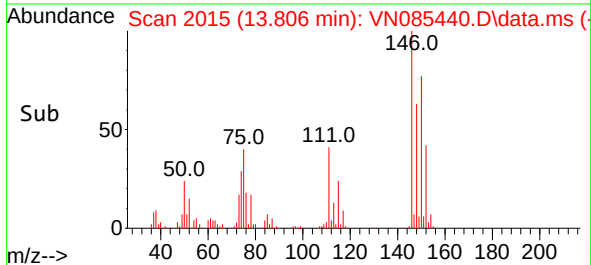
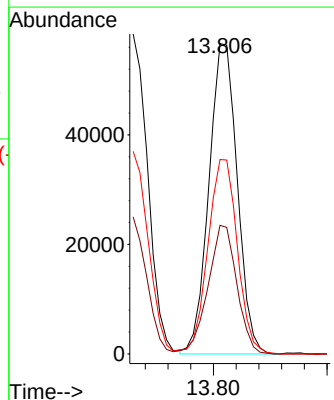
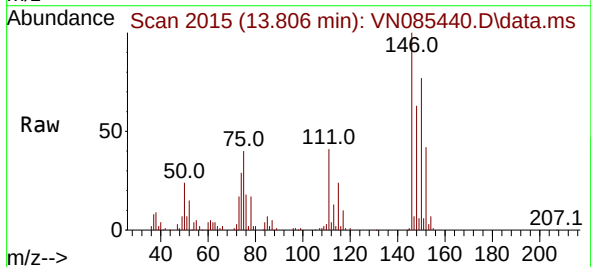
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

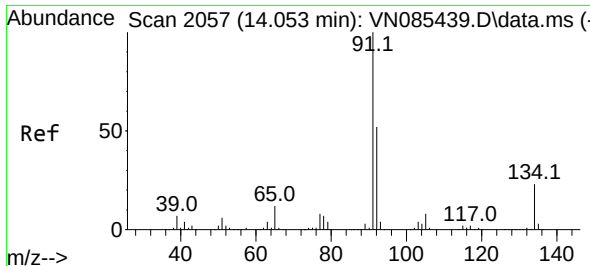
Tgt Ion:146 Resp: 97652  
 Ion Ratio Lower Upper  
 146 100  
 111 42.9 21.4 64.3  
 148 64.3 32.3 96.9



#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

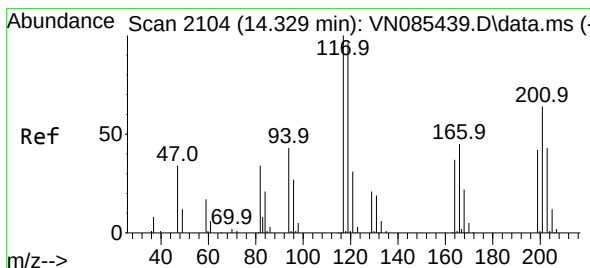
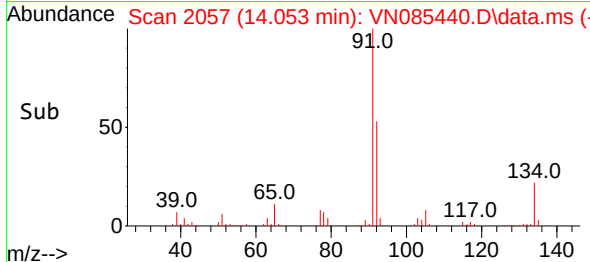
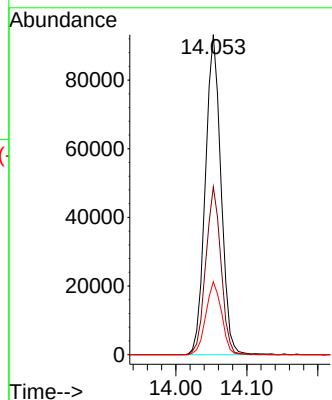
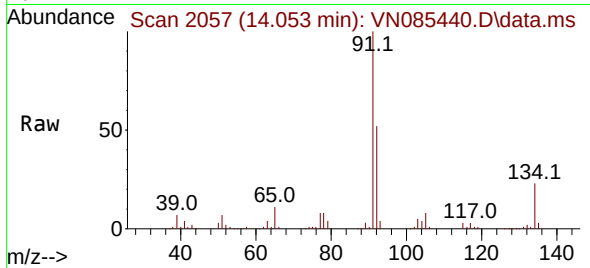




#89  
n-Butylbenzene  
Concen: 21.355 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

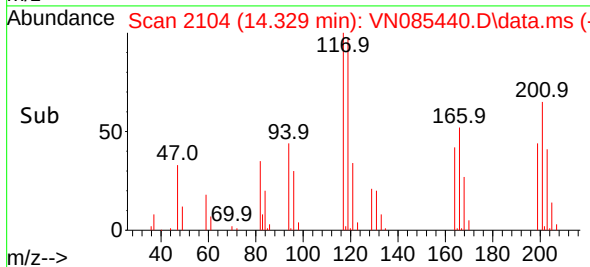
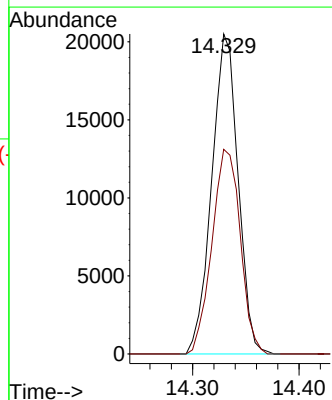
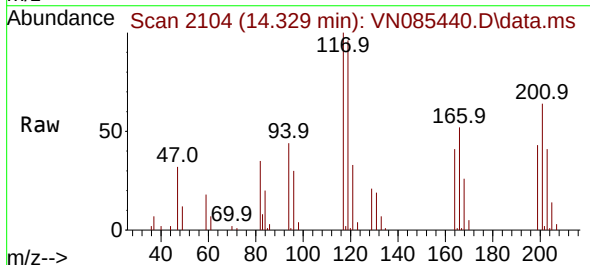
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

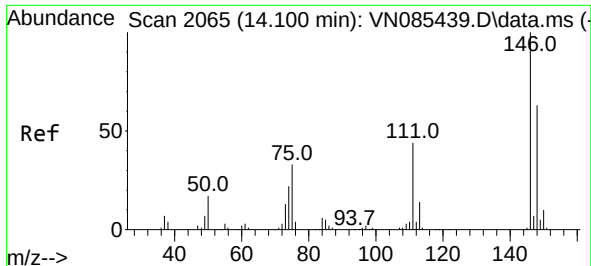
Tgt Ion: 91 Resp: 142673  
Ion Ratio Lower Upper  
91 100  
92 51.0 25.8 77.3  
134 23.0 11.7 35.1



#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

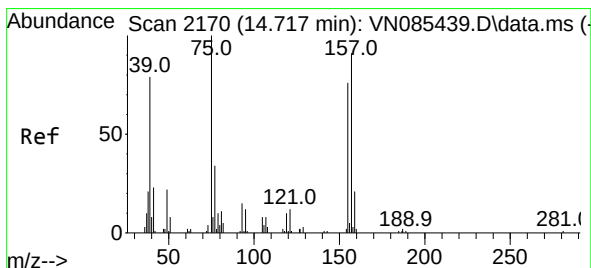
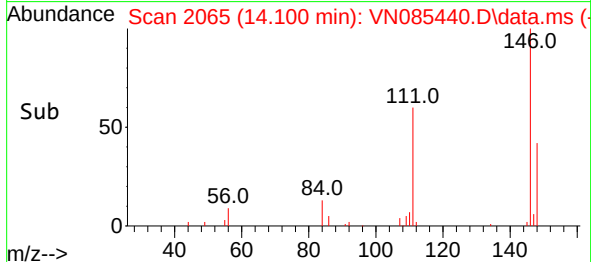
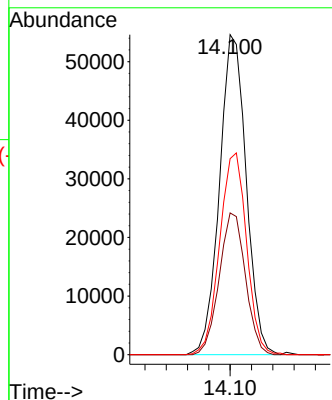
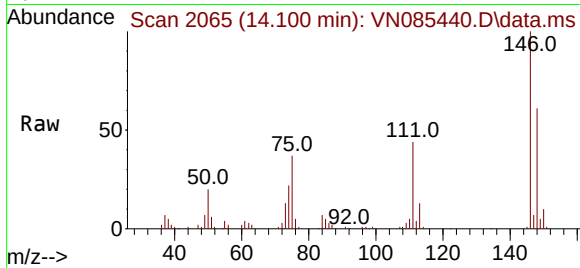




#91  
1,2-Dichlorobenzene  
Concen: 20.425 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. 0.000 min  
Lab File: VN085440.D  
Acq: 14 Jan 2025 15:43

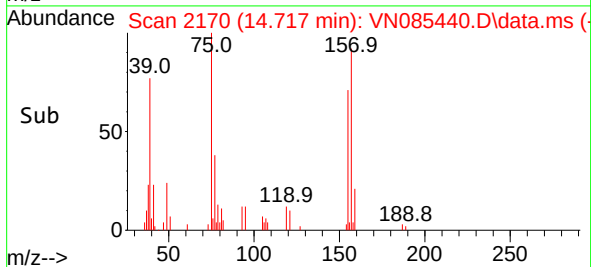
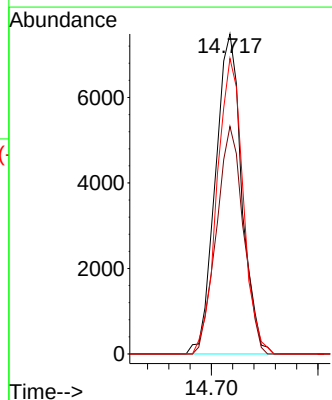
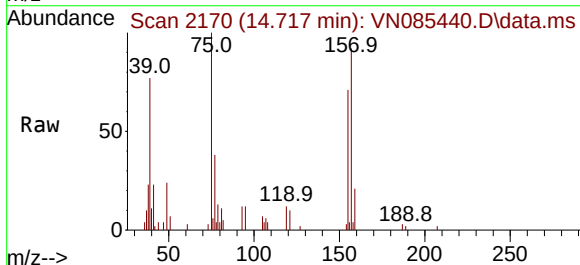
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC020

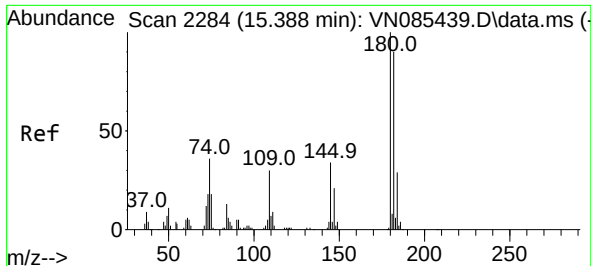
Tgt Ion:146 Resp: 94954  
Ion Ratio Lower Upper  
146 100  
111 43.5 21.7 65.1  
148 63.5 31.4 94.2



#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

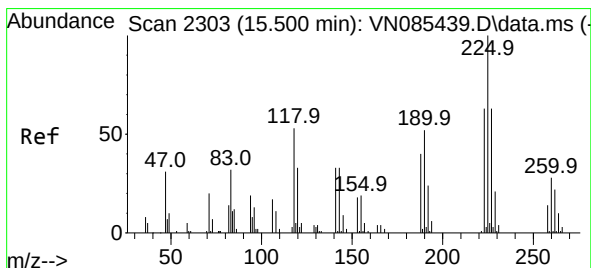
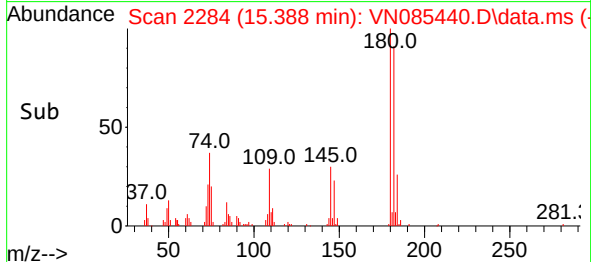
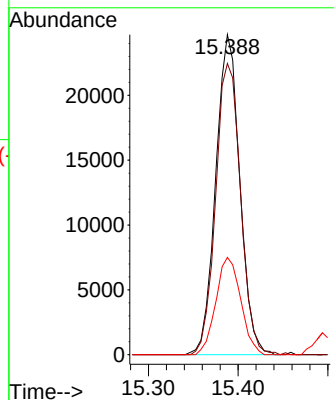
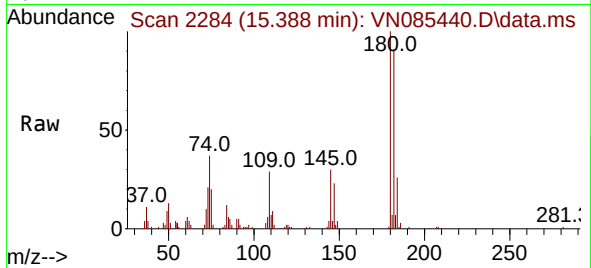




#93  
 1,2,4-Trichlorobenzene  
 Concen: 21.233 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN085440.D  
 Acq: 14 Jan 2025 15:43

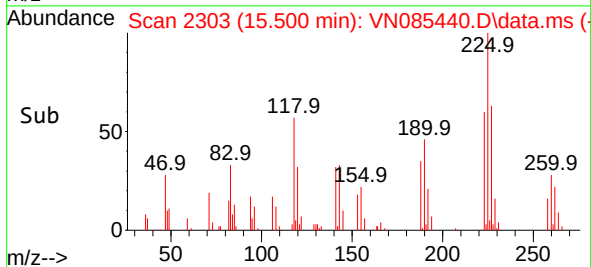
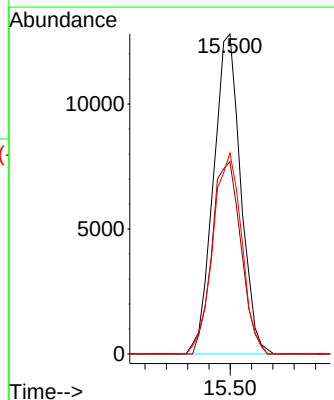
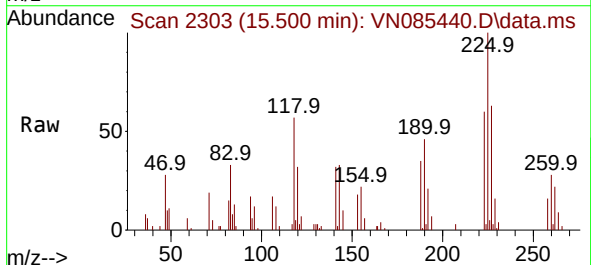
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC020

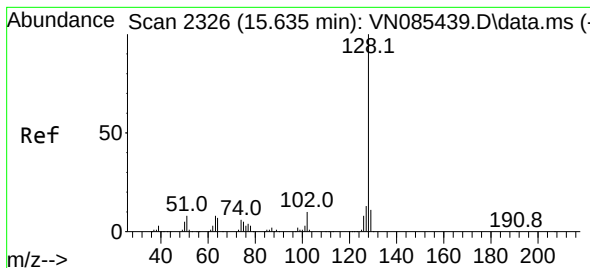
Tgt Ion:180 Resp: 45878  
 Ion Ratio Lower Upper  
 180 100  
 182 94.2 46.8 140.3  
 145 31.4 16.0 48.0



#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

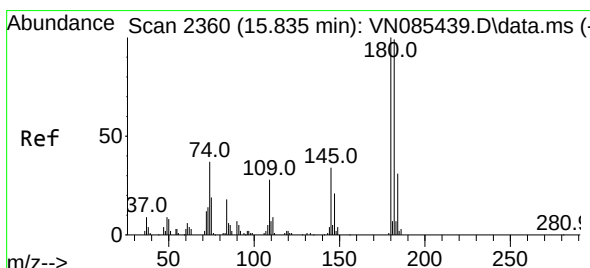
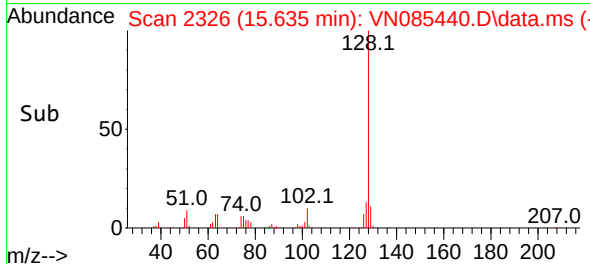
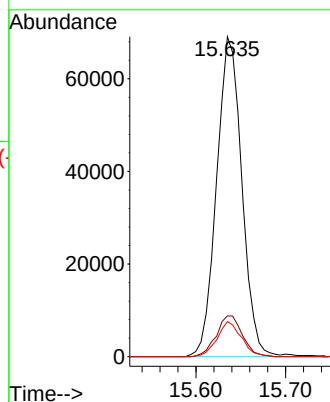
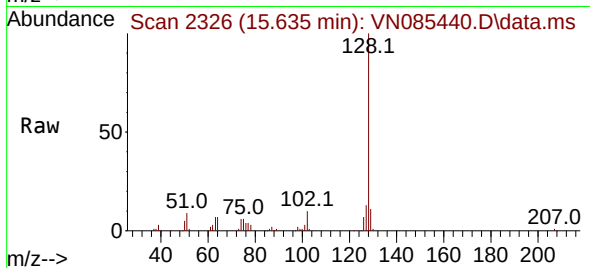
Tgt Ion:128 Resp: 134793

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

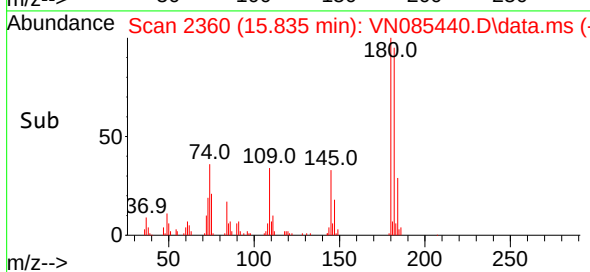
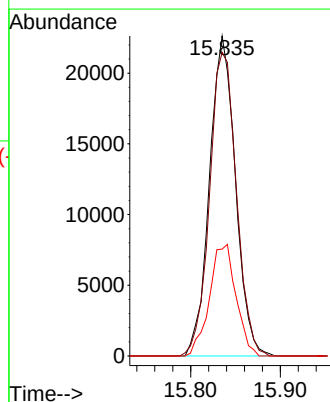
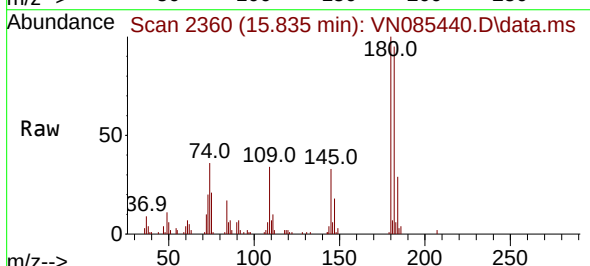
Tgt Ion:180 Resp: 45468

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 : 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) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| 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

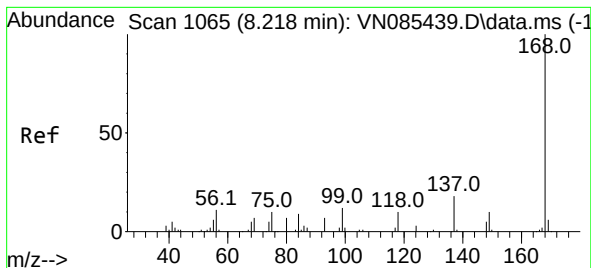
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC010

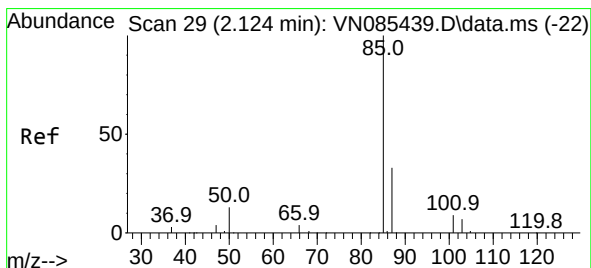
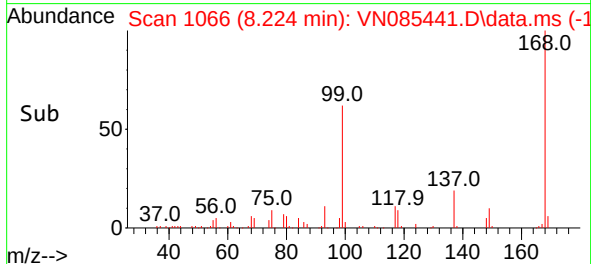
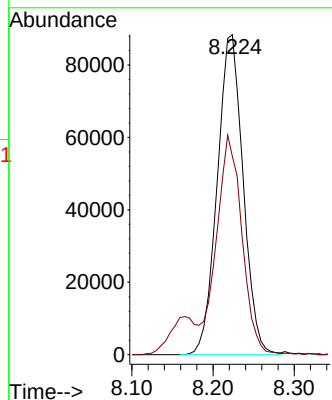
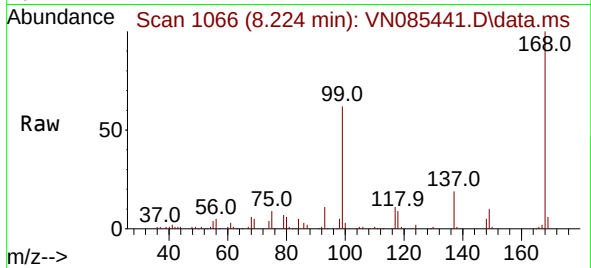
[illegible]



#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

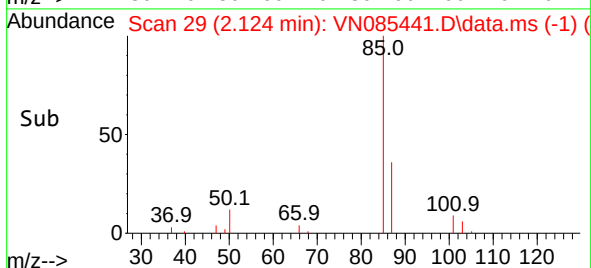
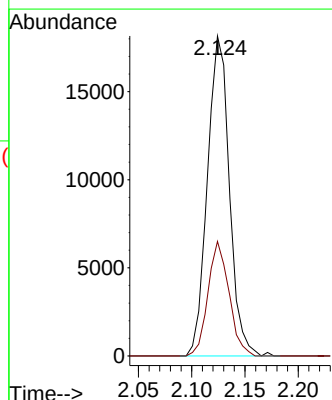
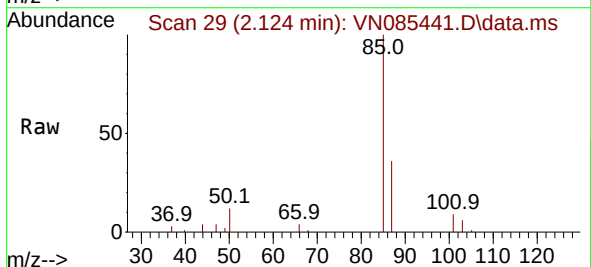
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

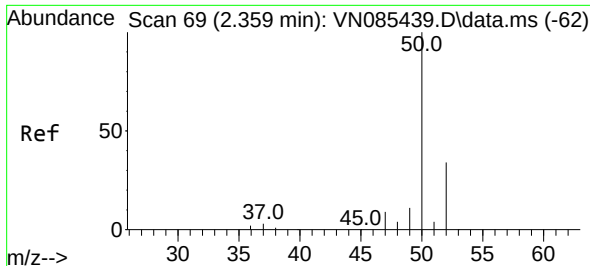
Tgt Ion:168 Resp: 195889  
Ion Ratio Lower Upper  
168 100  
99 61.7 53.6 80.4



#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

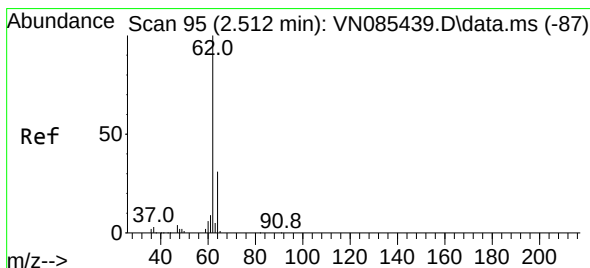
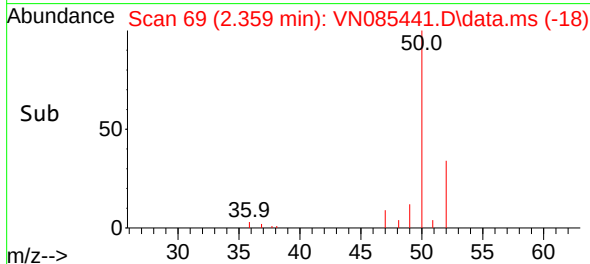
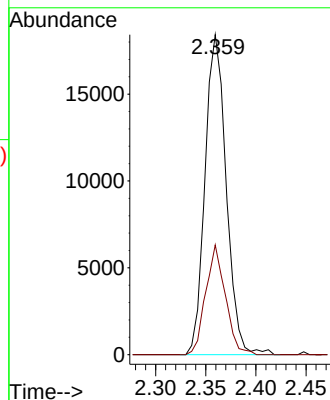
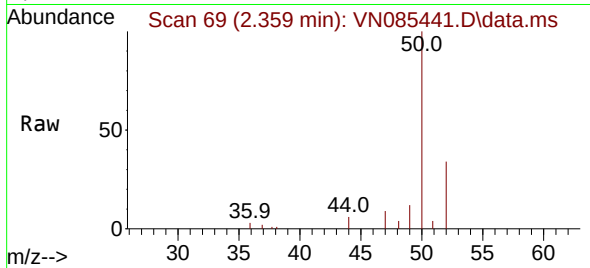




#3  
Chloromethane  
Concen: 9.452 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

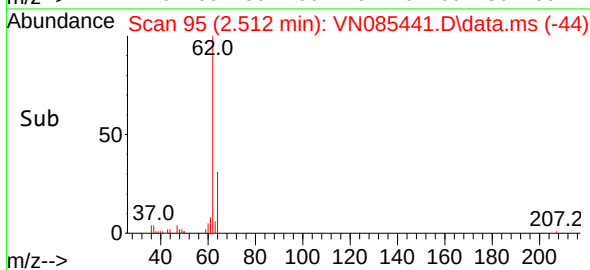
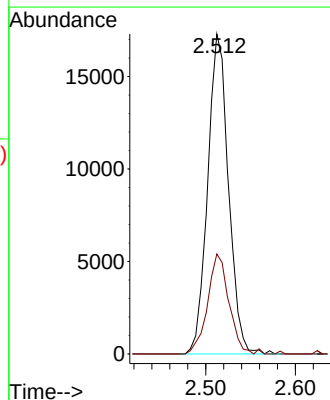
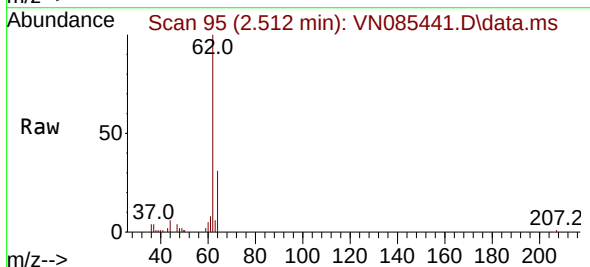
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

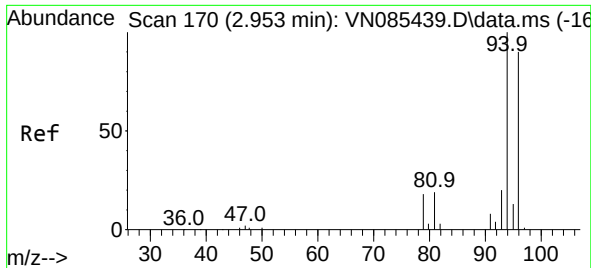
Tgt Ion: 50 Resp: 27143  
Ion Ratio Lower Upper  
50 100  
52 34.3 27.0 40.6



#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

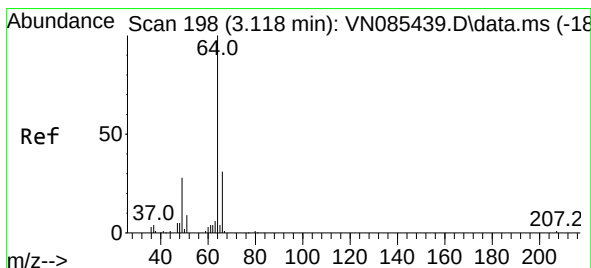
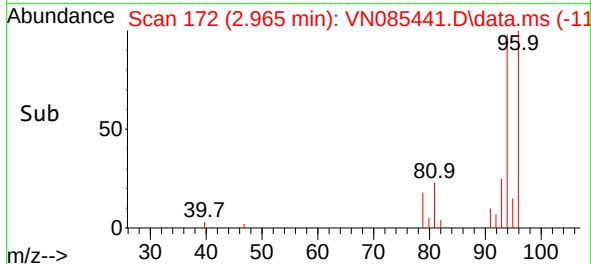
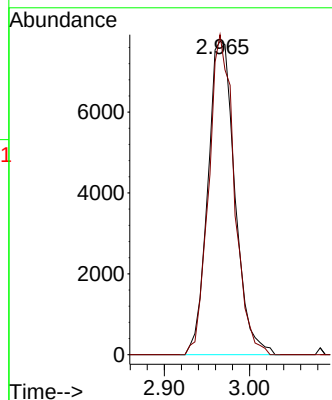
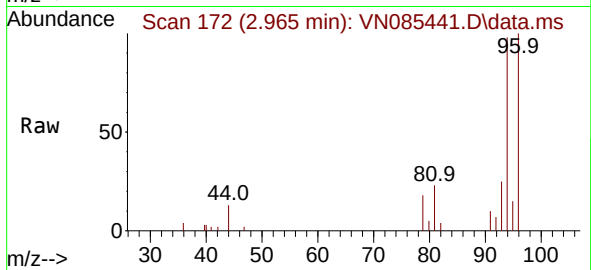




#5  
Bromomethane  
Concen: 9.830 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

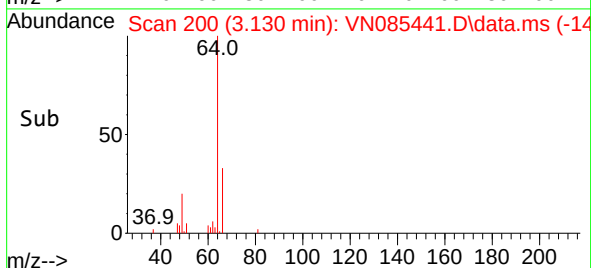
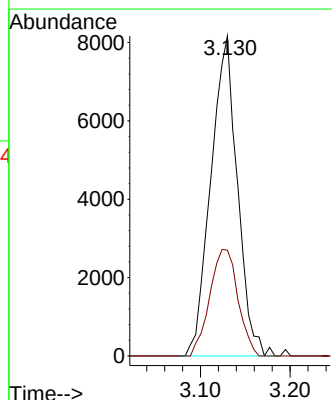
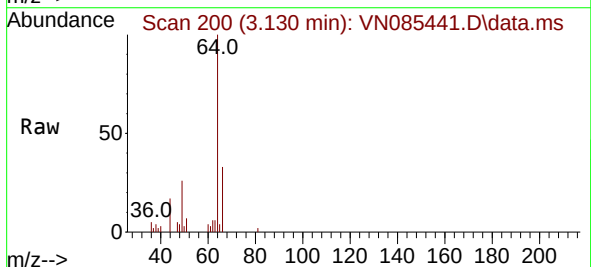
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MSVOA\_N  
ClientSampleId :  
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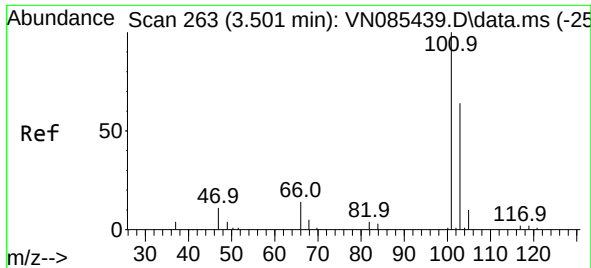
Tgt Ion: 94 Resp: 17139  
Ion Ratio Lower Upper  
94 100  
96 102.1 71.8 107.6



#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

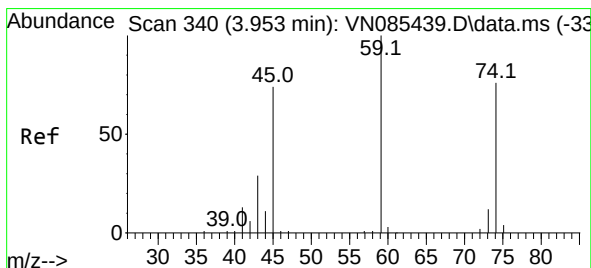
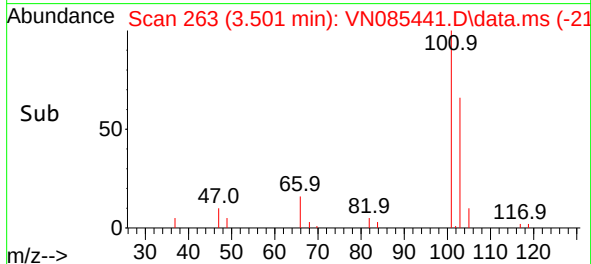
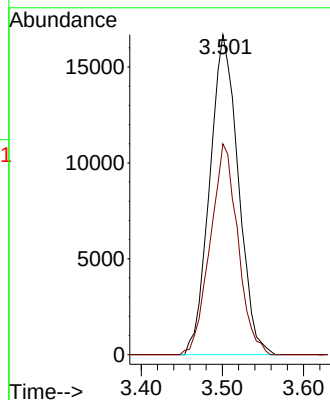
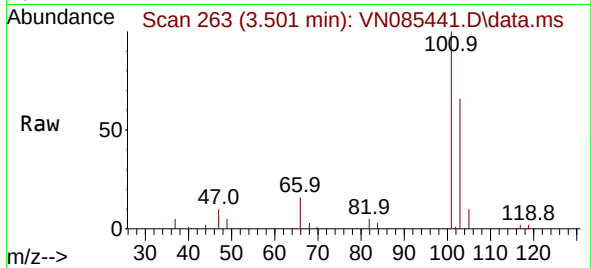




#7  
 Trichlorofluoromethane  
 Concen: 9.731 ug/l  
 RT: 3.501 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

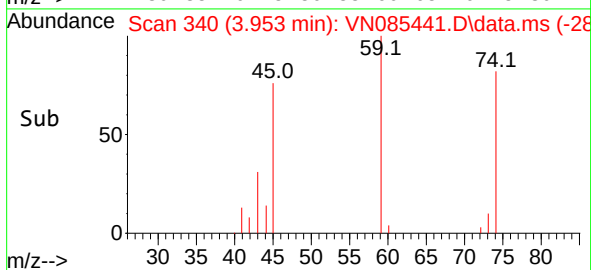
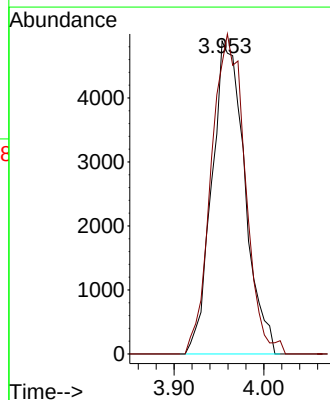
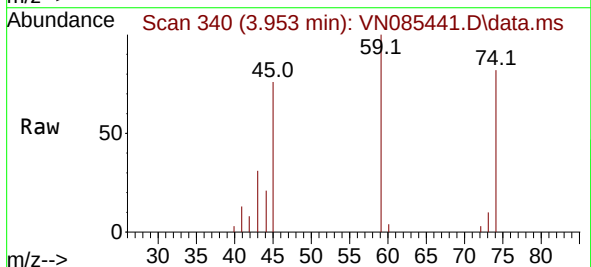
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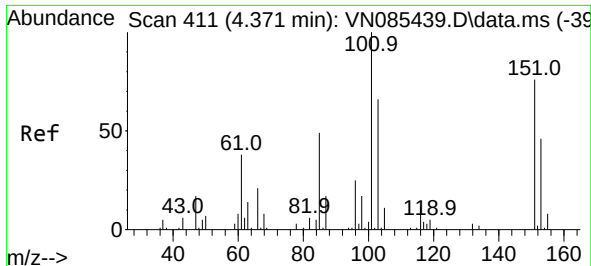
Tgt Ion:101 Resp: 40755  
 Ion Ratio Lower Upper  
 101 100  
 103 65.9 51.4 77.2



#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

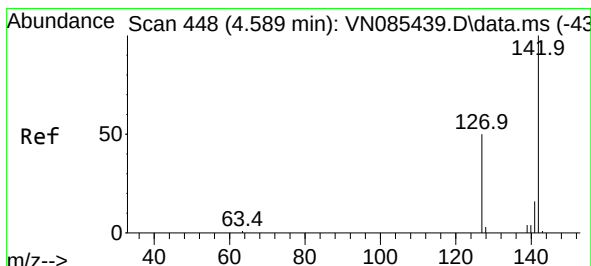
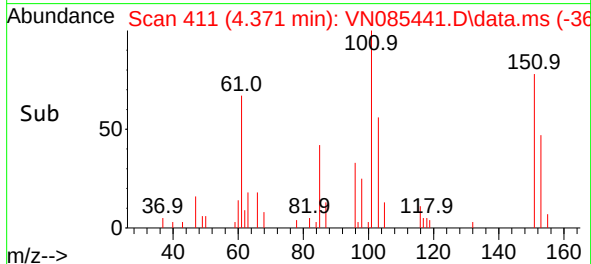
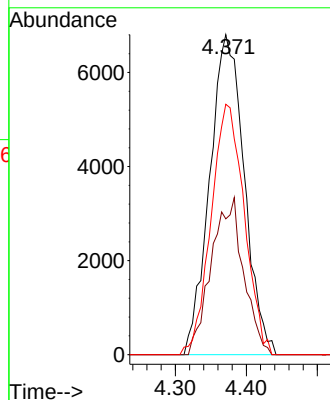
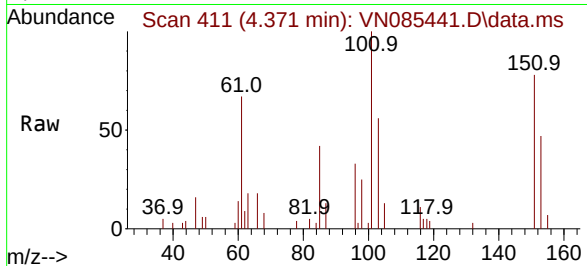




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.742 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

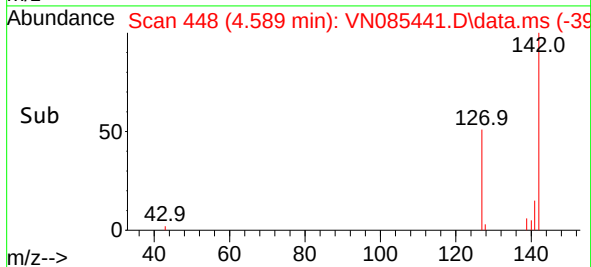
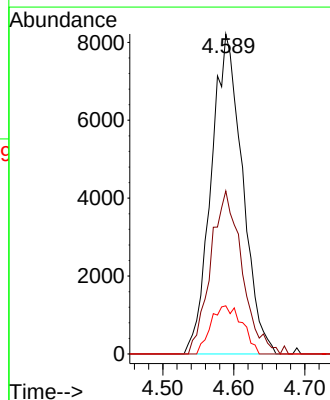
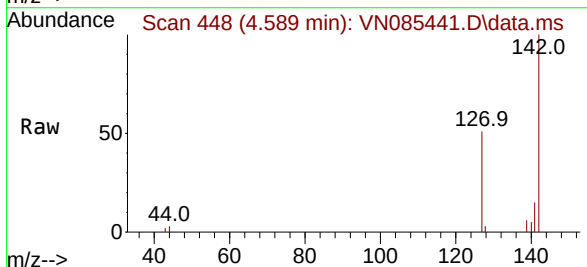
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ClientSampleId :  
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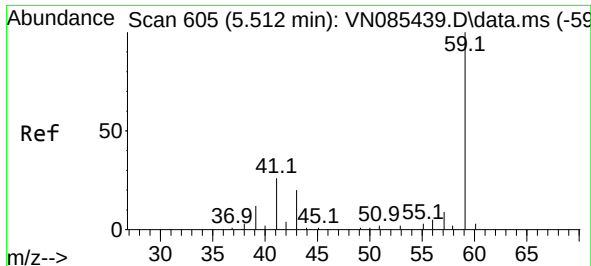
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 101   | Resp: | 22982 |
| Ion      | Ratio | Lower | Upper |
| 101      | 100   |       |       |
| 85       | 45.8  | 37.8  | 56.8  |
| 151      | 75.2  | 58.8  | 88.2  |



#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  |

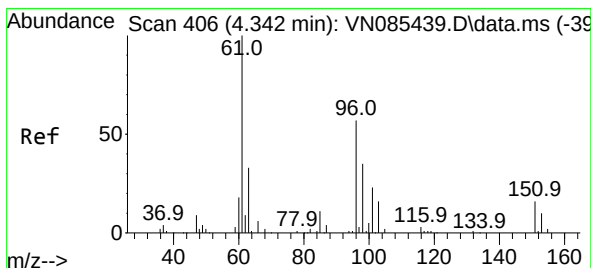
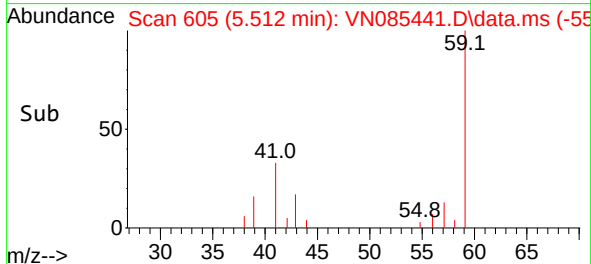
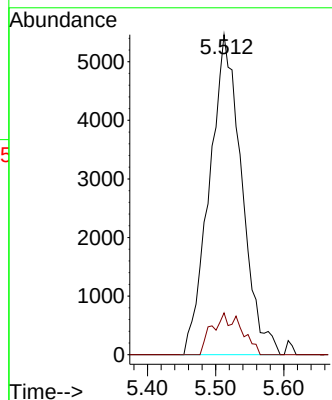
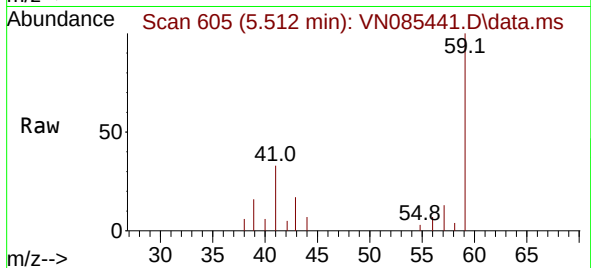




#11  
Tert butyl alcohol  
Concen: 49.608 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

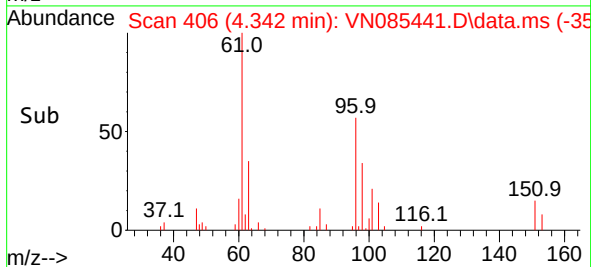
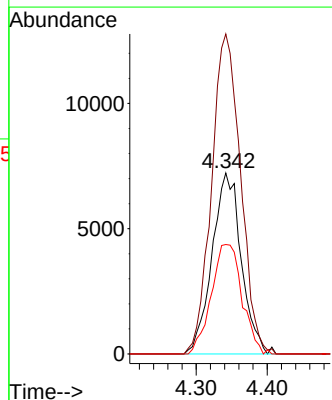
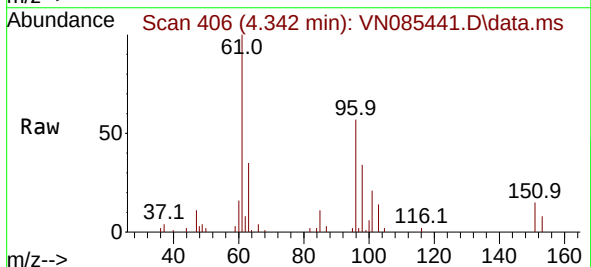
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ClientSampleId :  
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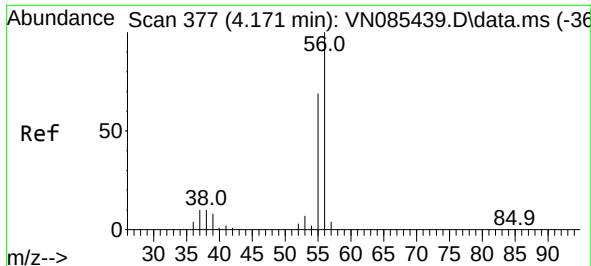
Tgt Ion: 59 Resp: 17962  
Ion Ratio Lower Upper  
59 100  
57 11.9 8.6 13.0



#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 :

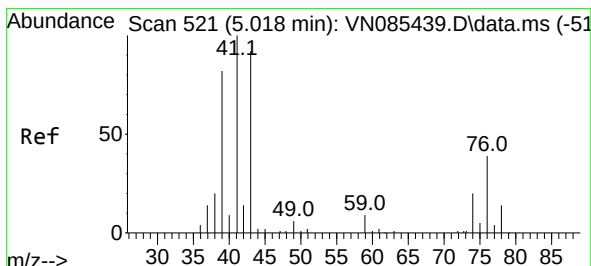
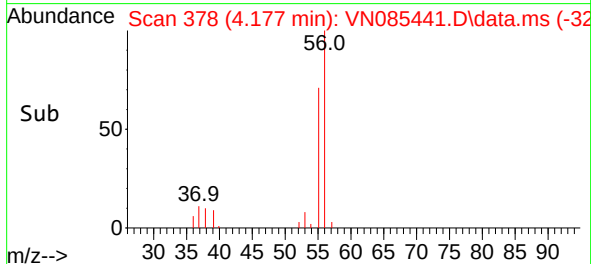
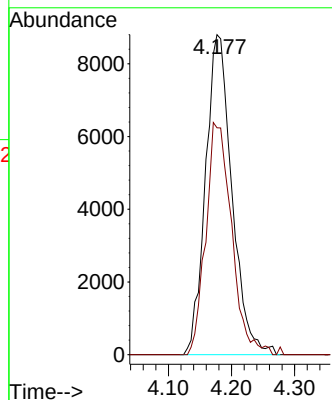
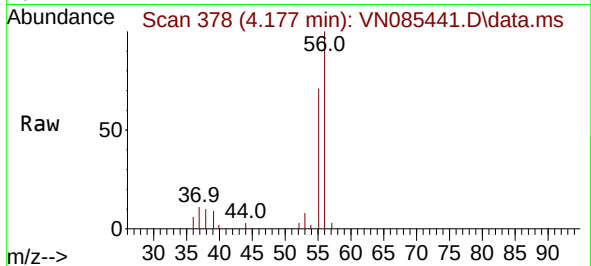
VSTDIC010

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

Acq: 14 Jan 2025 16:07

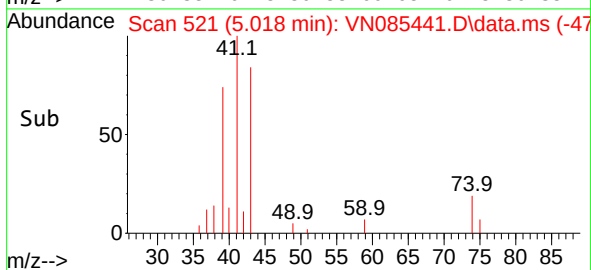
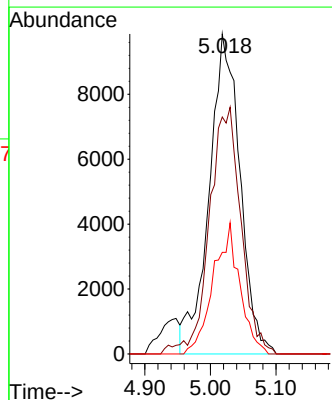
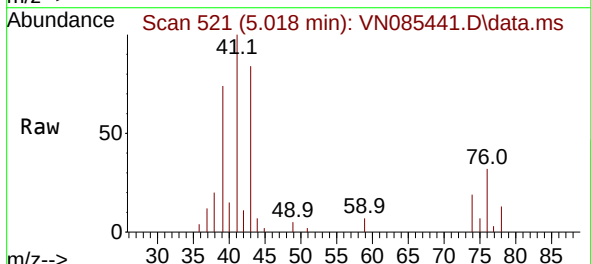
Tgt Ion: 41 Resp: 32240

Ion Ratio Lower Upper

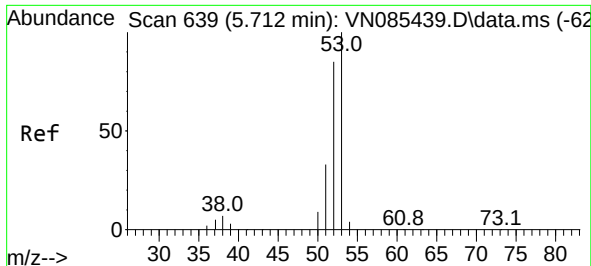
41 100

39 78.3 64.4 96.6

76 35.1 30.5 45.7



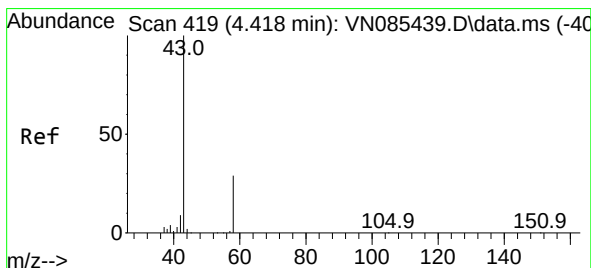
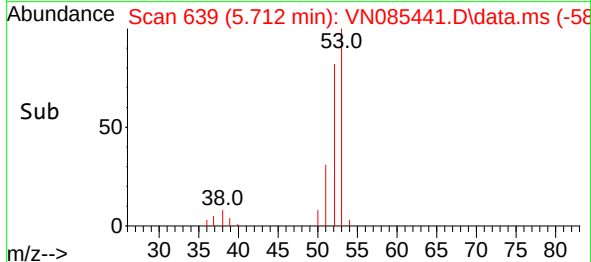
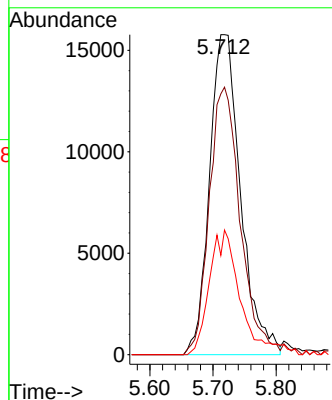
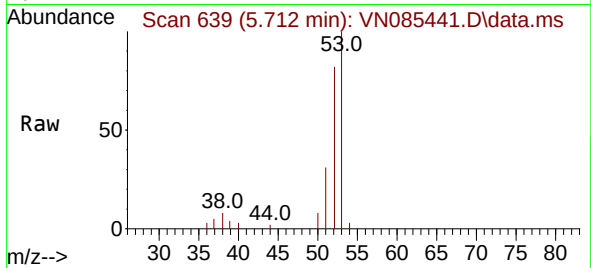




#15  
Acrylonitrile  
Concen: 46.918 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

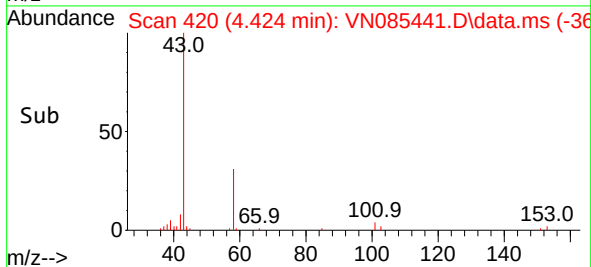
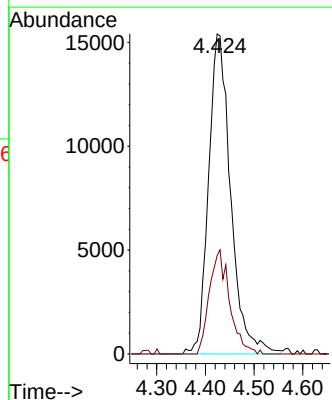
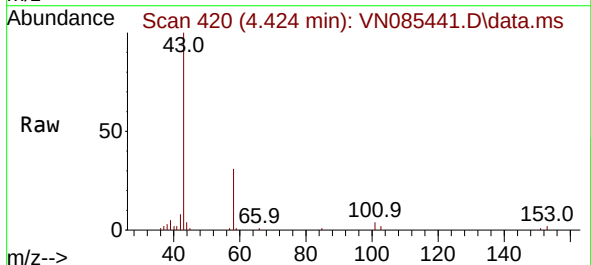
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

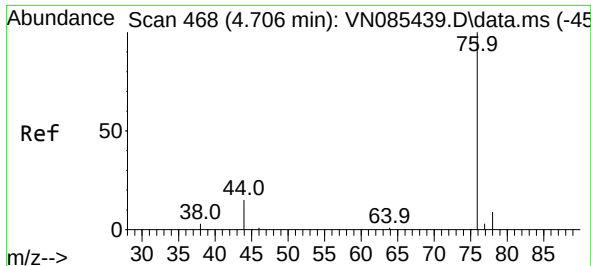
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 53959 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 83.3  | 65.5  | 98.3  |
| 51       | 38.8  | 29.8  | 44.8  |



#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  |

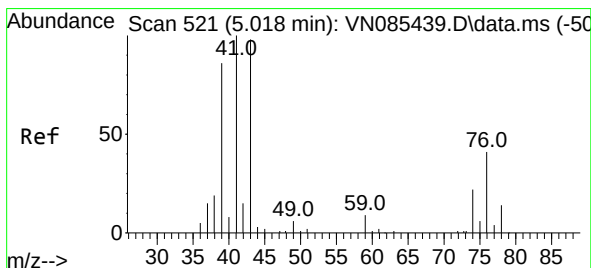
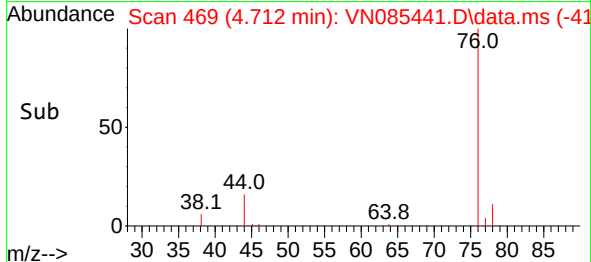
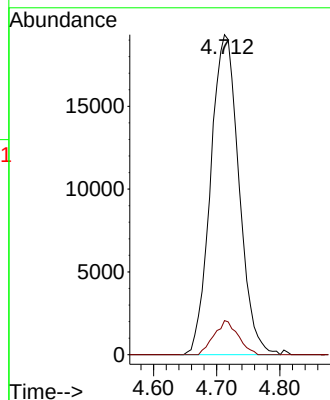
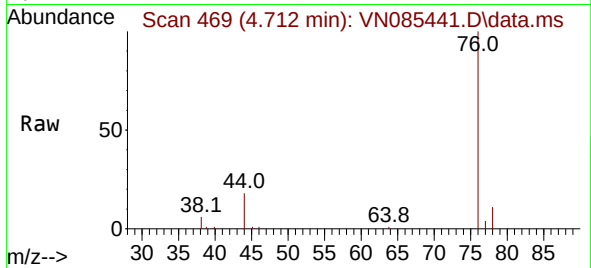




#17  
Carbon Disulfide  
Concen: 9.300 ug/l  
RT: 4.712 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

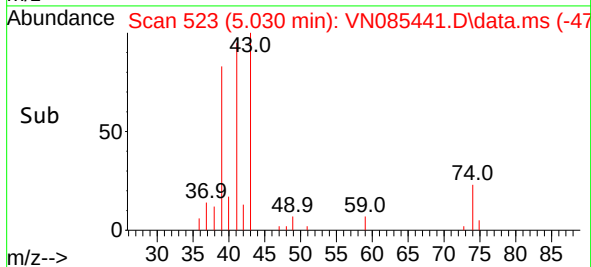
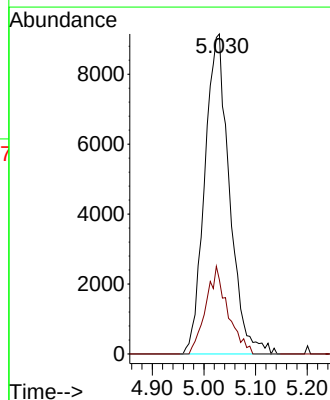
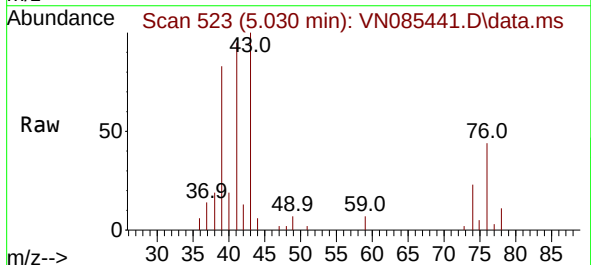
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

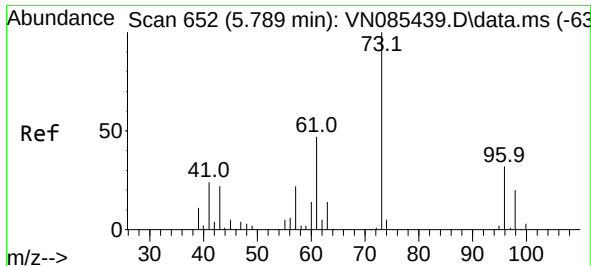
Tgt Ion: 76 Resp: 60201  
Ion Ratio Lower Upper  
76 100  
78 10.7 6.9 10.3#



#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

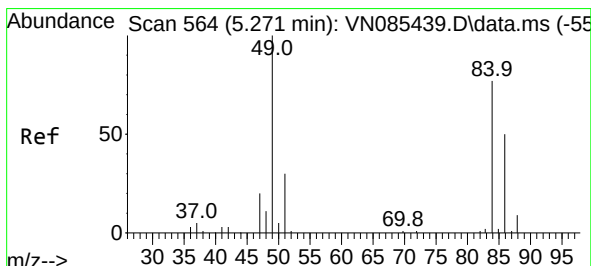
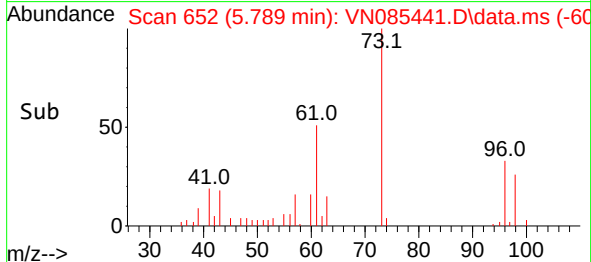
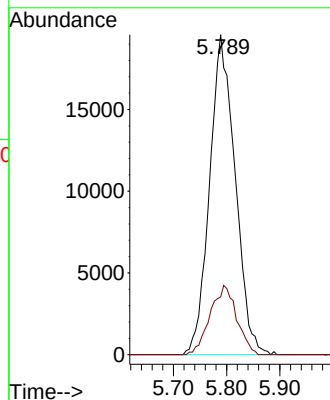
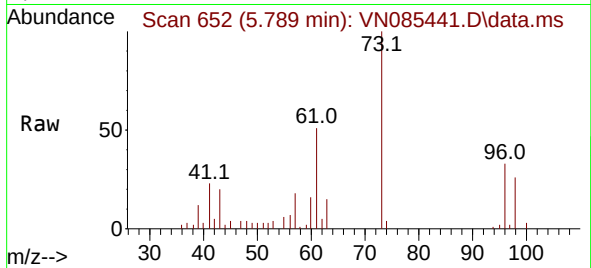




#19  
Methyl tert-butyl Ether  
Concen: 9.552 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

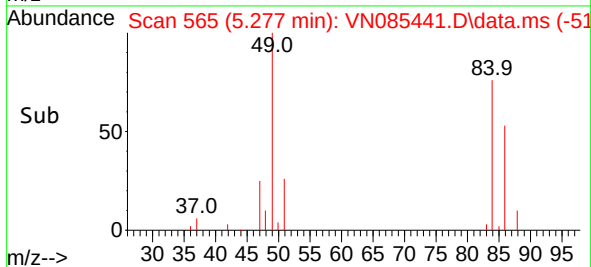
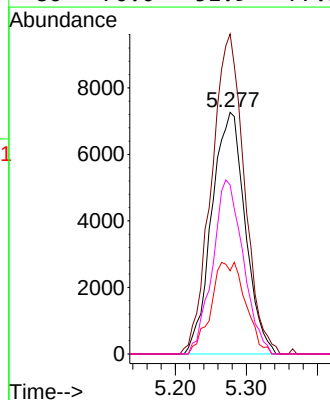
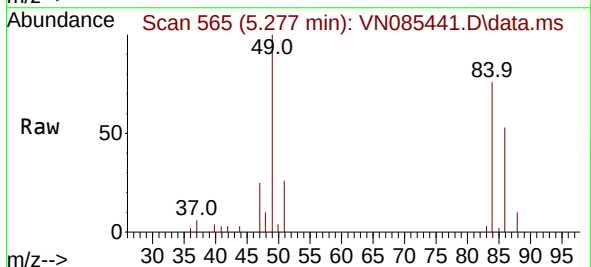
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

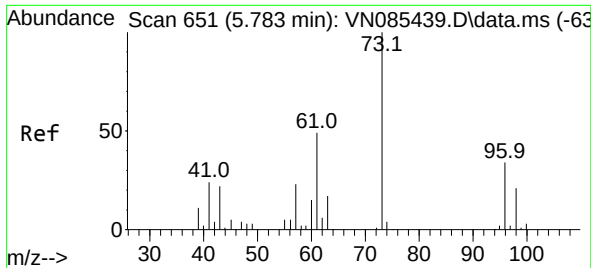
Tgt Ion: 73 Resp: 65207  
Ion Ratio Lower Upper  
73 100  
57 18.1 17.8 26.8



#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

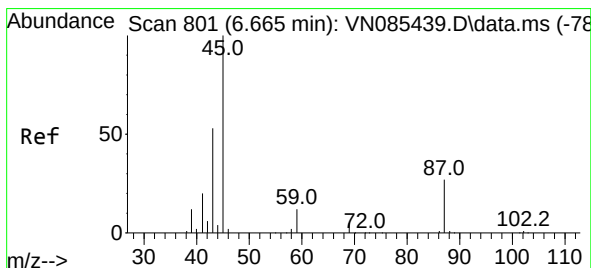
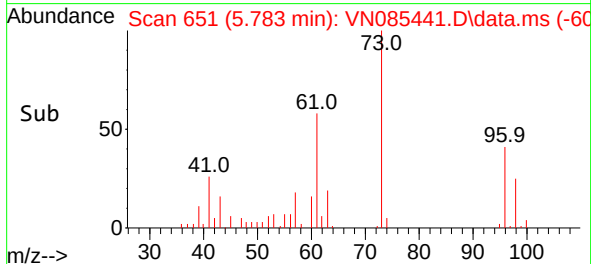
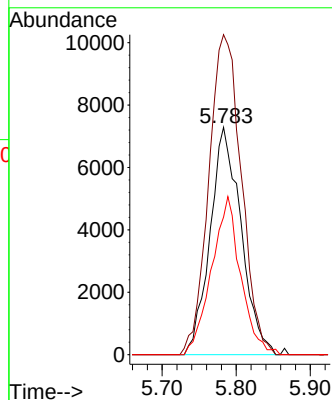
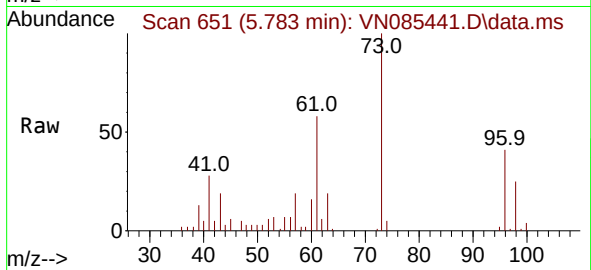




#21  
trans-1,2-Dichloroethene  
Concen: 9.403 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

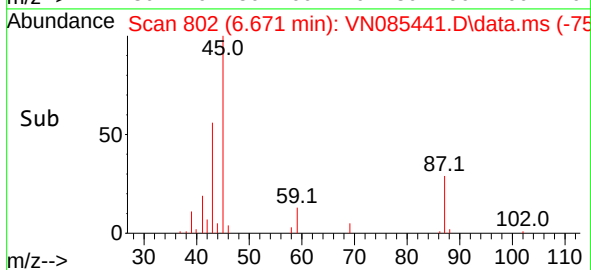
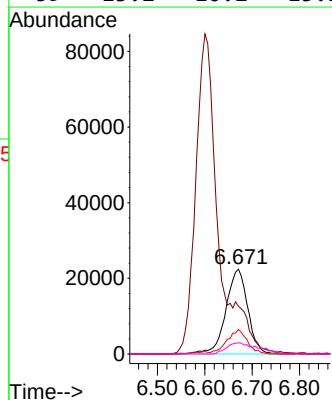
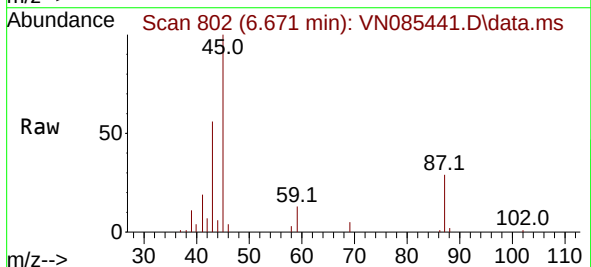
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

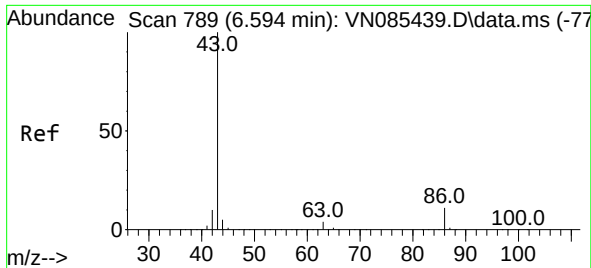
Tgt Ion: 96 Resp: 21127  
Ion Ratio Lower Upper  
96 100  
61 140.8 115.7 173.5  
98 60.5 49.8 74.8



#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

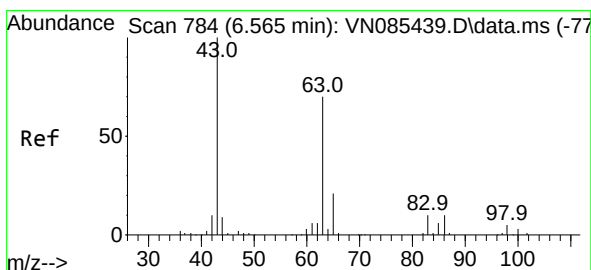
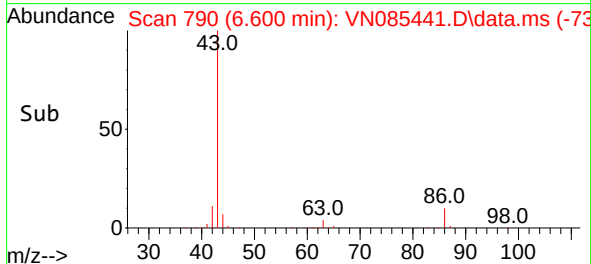
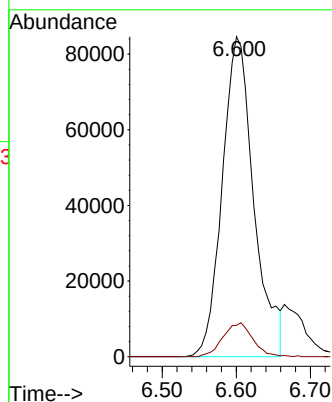
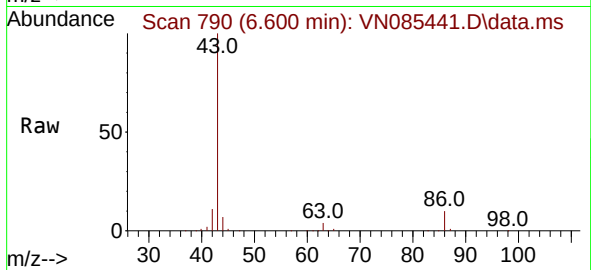




#23  
 Vinyl Acetate  
 Concen: 47.125 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

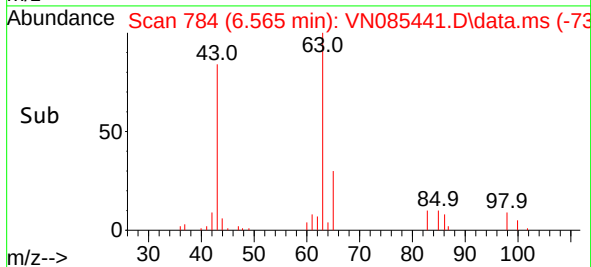
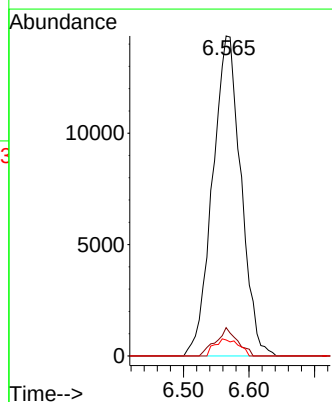
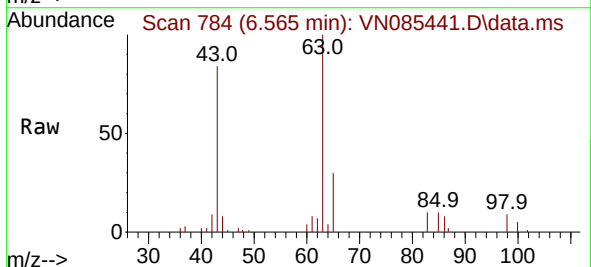
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

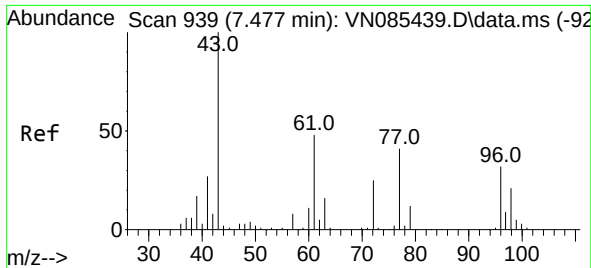
Tgt Ion: 43 Resp: 250575  
 Ion Ratio Lower Upper  
 43 100  
 86 9.8 8.4 12.6



#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

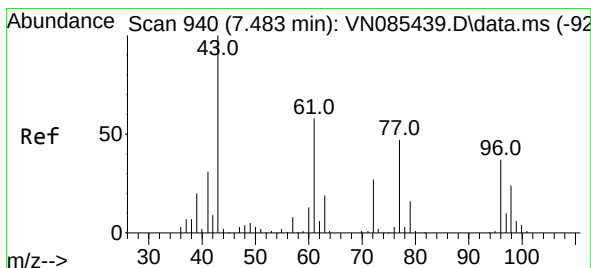
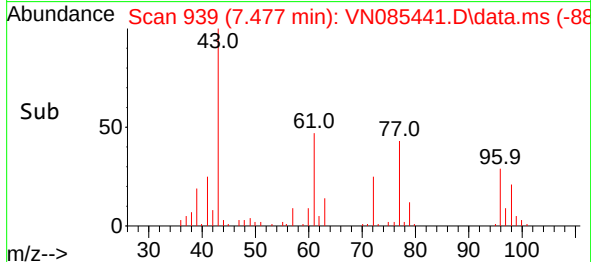
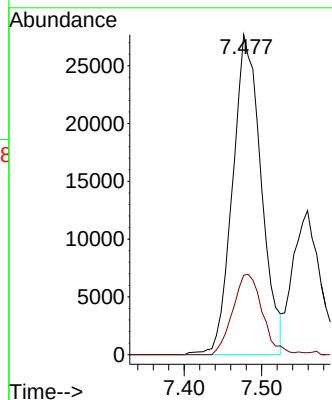
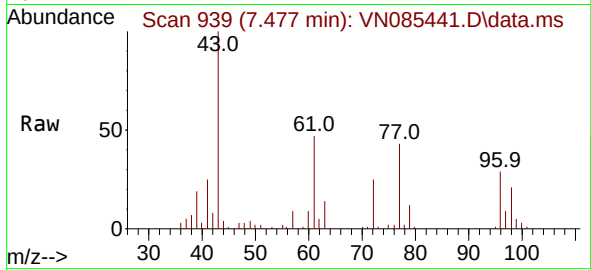




#25  
2-Butanone  
Concen: 47.350 ug/l  
RT: 7.477 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

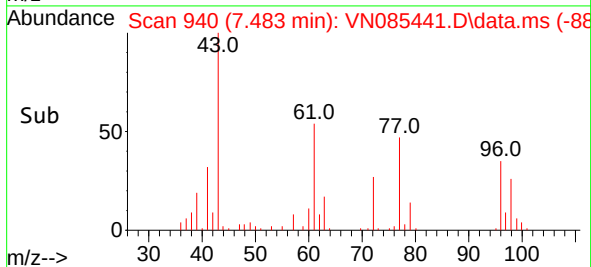
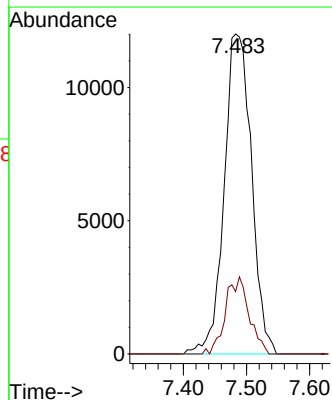
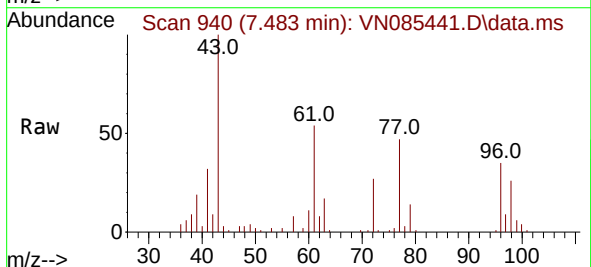
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

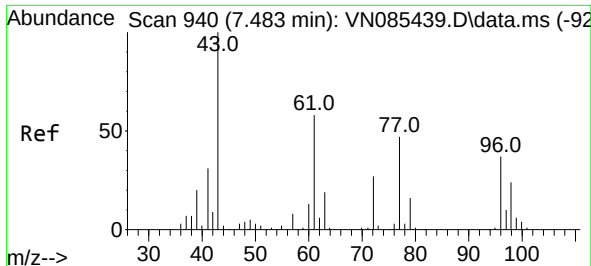
Tgt Ion: 43 Resp: 71191  
Ion Ratio Lower Upper  
43 100  
72 24.8 20.2 30.4



#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

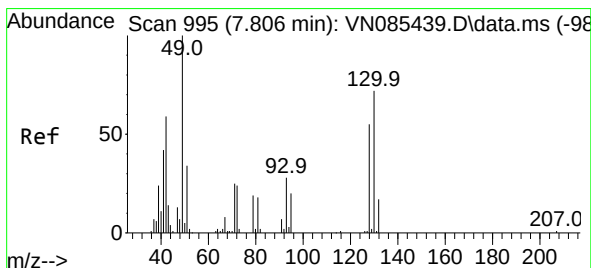
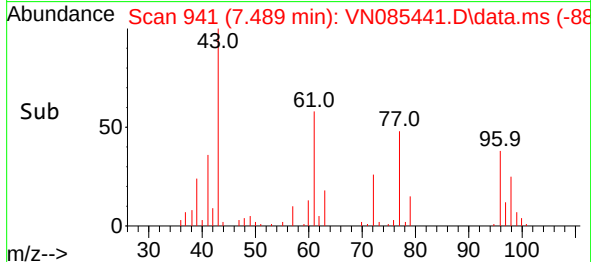
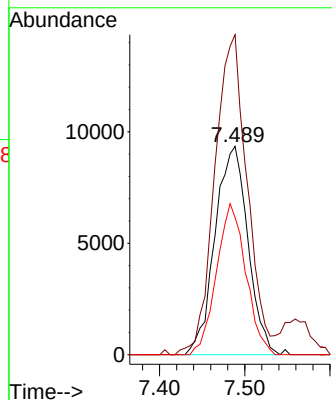
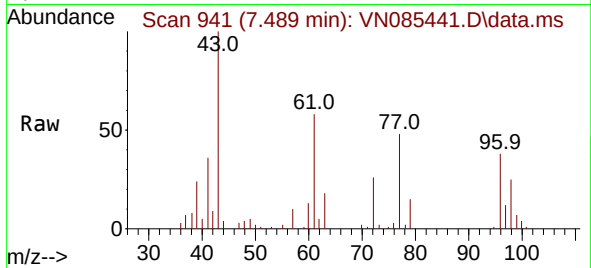




#27  
 cis-1,2-Dichloroethene  
 Concen: 9.466 ug/l  
 RT: 7.489 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

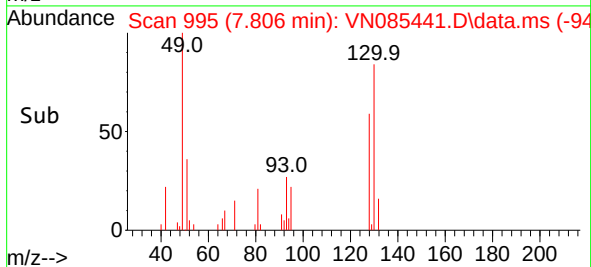
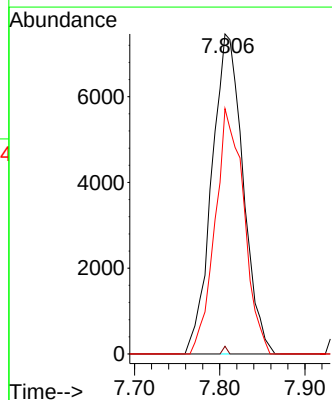
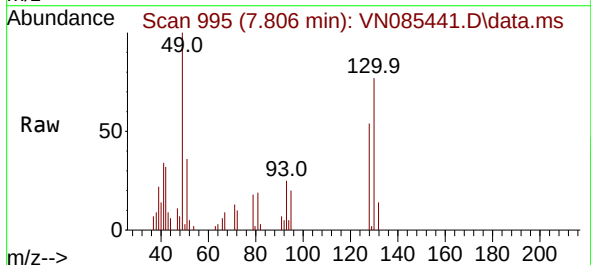
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

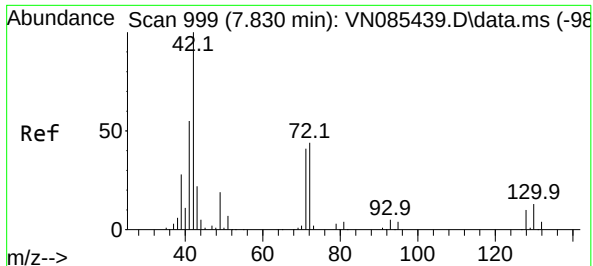
Tgt Ion: 96 Resp: 25049  
 Ion Ratio Lower Upper  
 96 100  
 61 151.8 0.0 311.8  
 98 64.7 0.0 126.0



#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

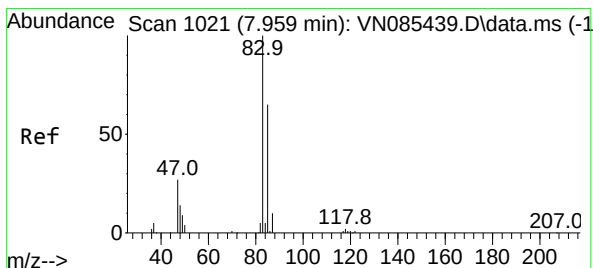
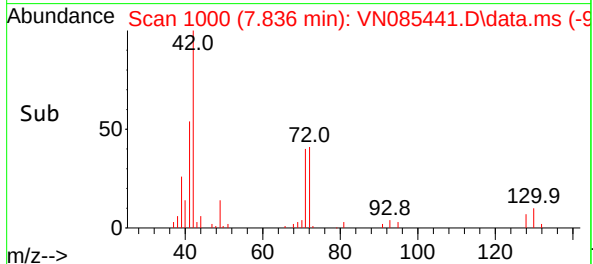
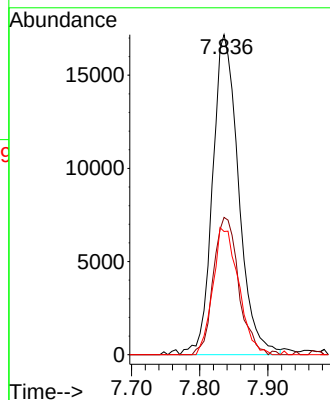
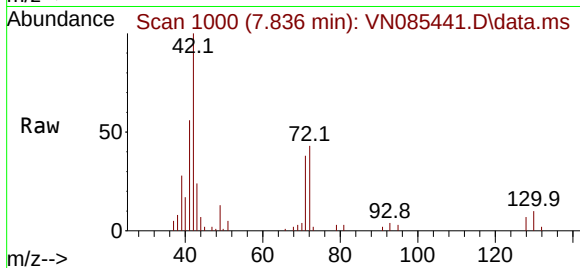
Tgt Ion: 42 Resp: 45641

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

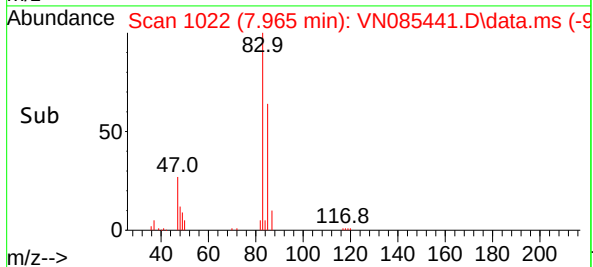
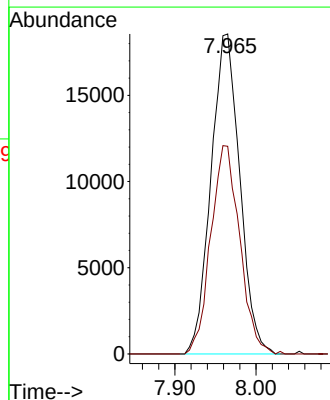
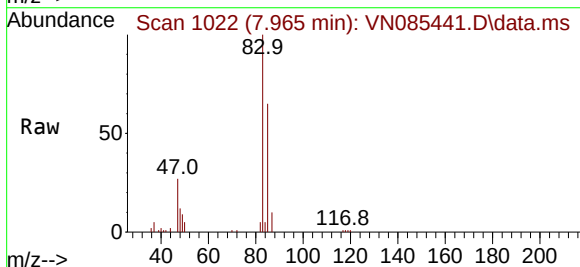
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 45792

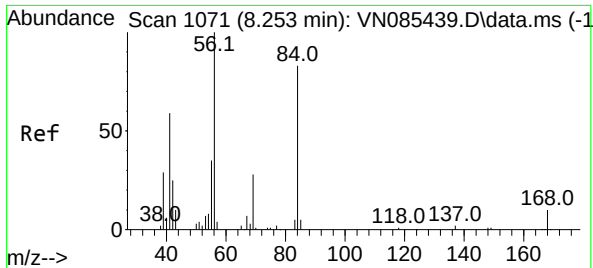
Ion Ratio Lower Upper

83 100

85 64.9 51.8 77.6



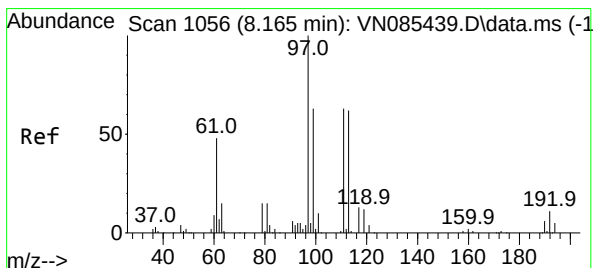
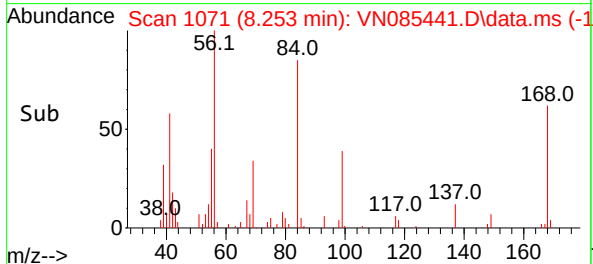
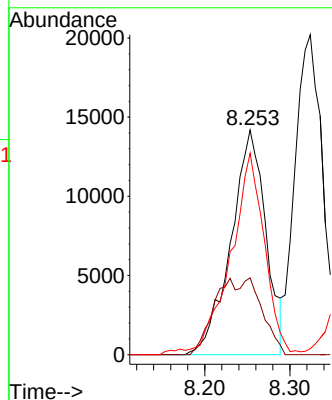
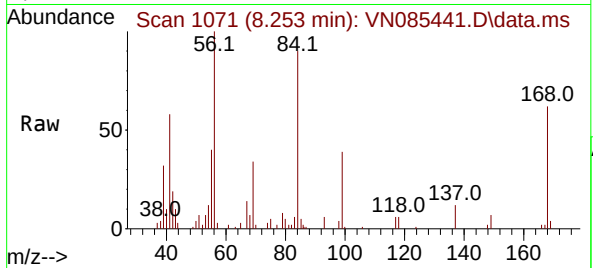




#31  
Cyclohexane  
Concen: 10.020 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

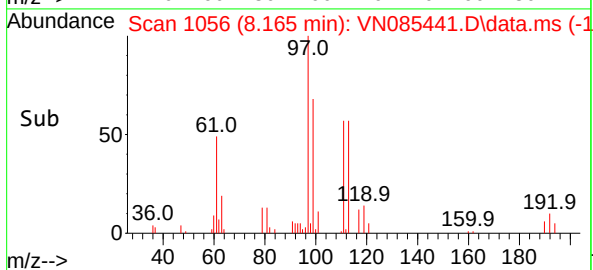
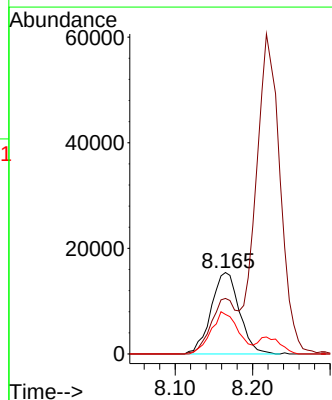
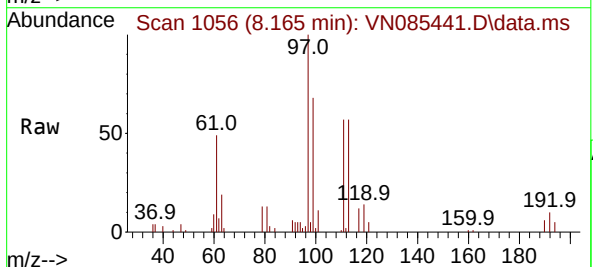
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

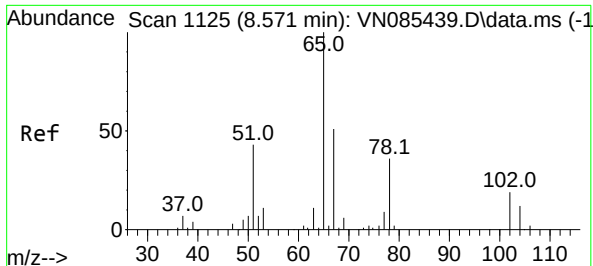
Tgt Ion: 56 Resp: 40211  
Ion Ratio Lower Upper  
56 100  
69 34.2 22.2 33.4#  
84 87.2 66.4 99.6



#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 :

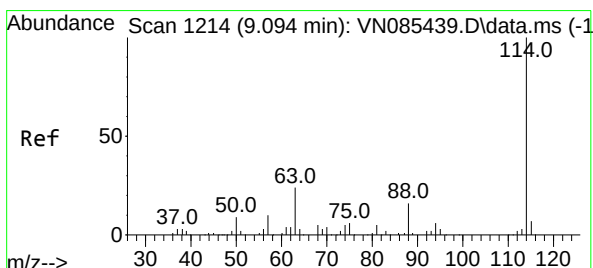
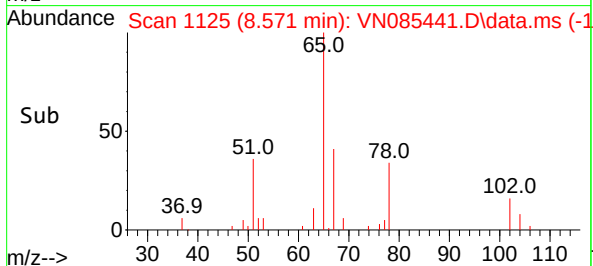
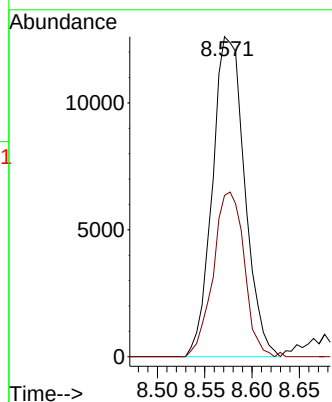
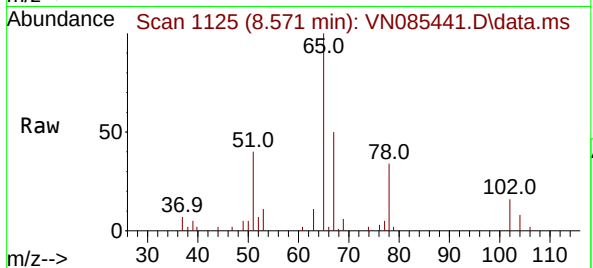
VSTDIC010

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

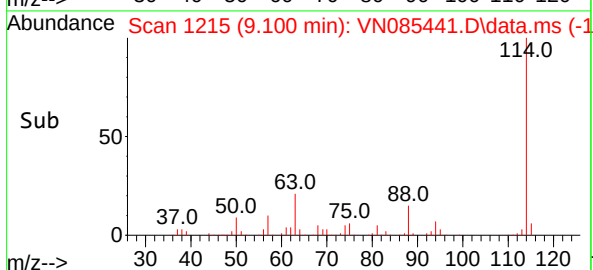
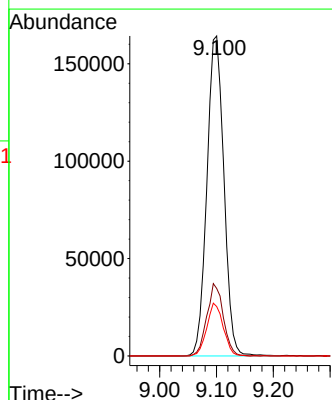
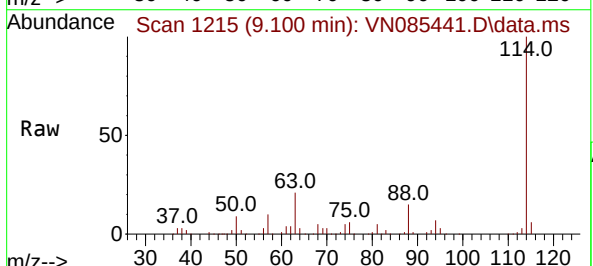
Tgt Ion: 114 Resp: 340403

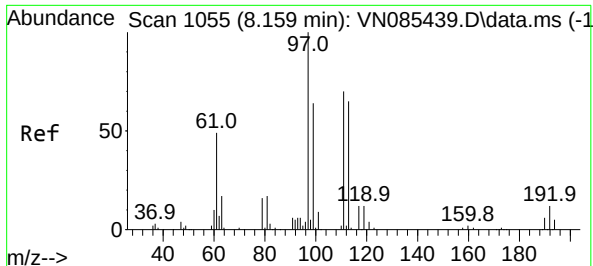
Ion Ratio Lower Upper

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

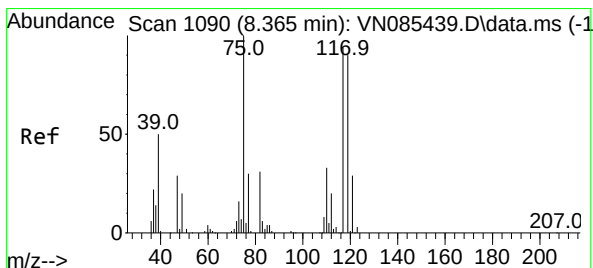
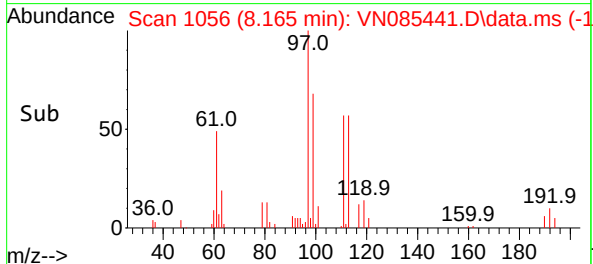
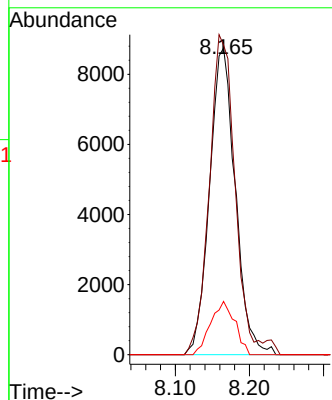
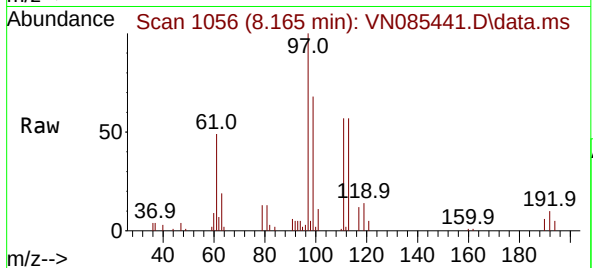
Tgt Ion:113 Resp: 21110

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

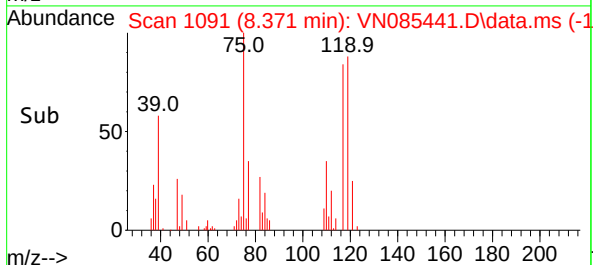
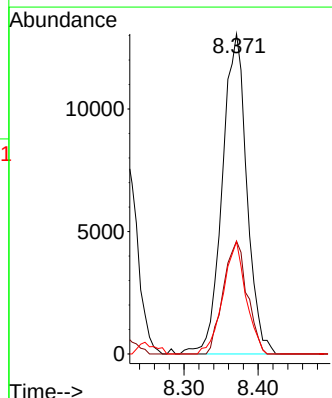
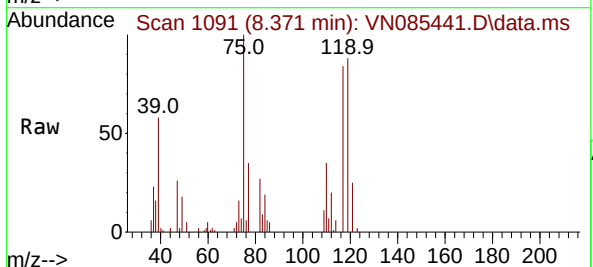
Tgt Ion: 75 Resp: 30015

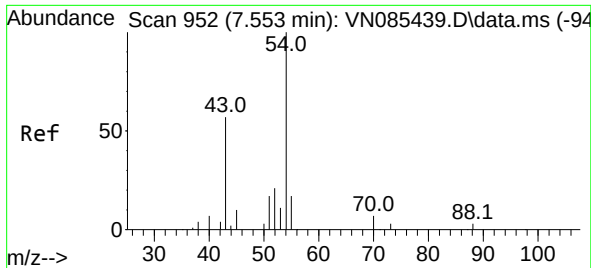
Ion Ratio Lower Upper

75 100

110 34.3 16.5 49.5

77 32.9 24.4 36.6

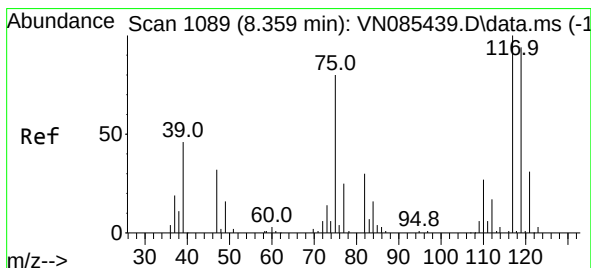
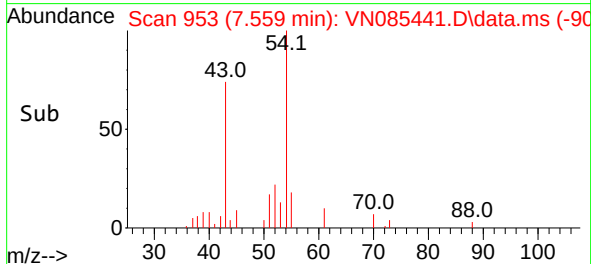
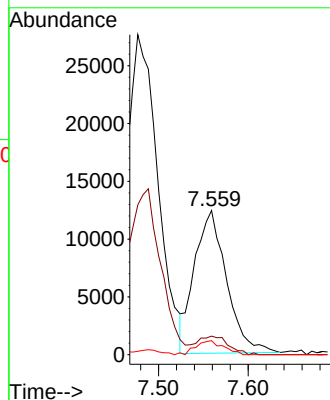
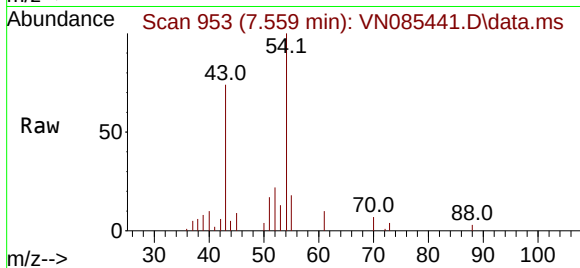




#37  
Ethyl Acetate  
Concen: 9.195 ug/l  
RT: 7.559 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

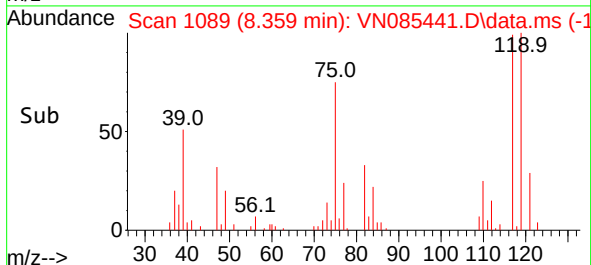
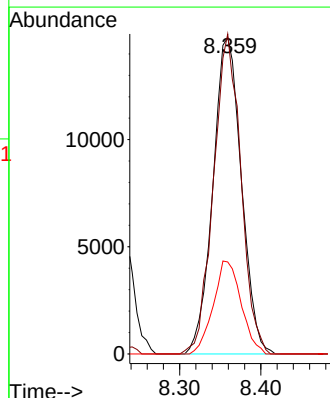
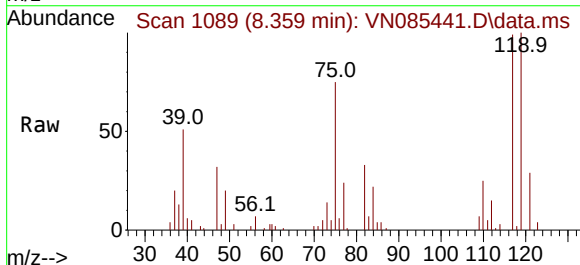
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

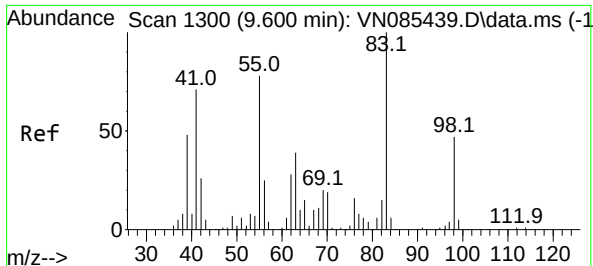
Tgt Ion: 43 Resp: 30760  
Ion Ratio Lower Upper  
43 100  
61 12.2 10.9 16.3  
70 8.4 7.5 11.3



#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

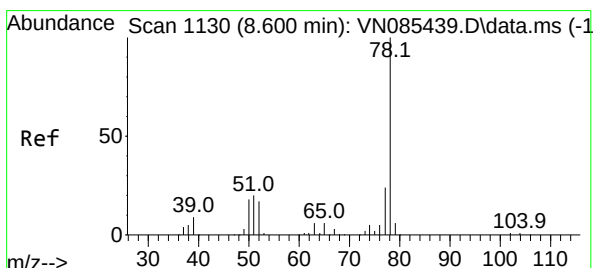
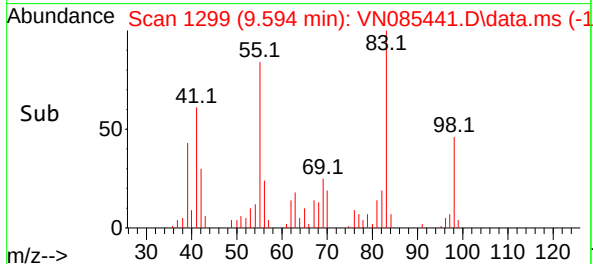
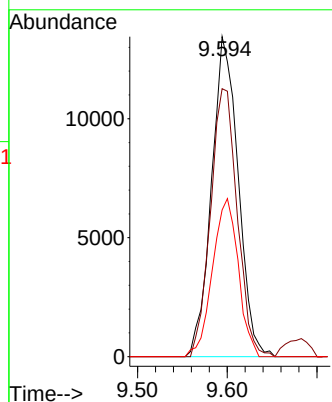
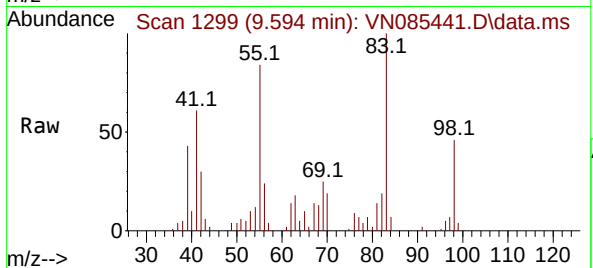
Tgt Ion: 83 Resp: 27721

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

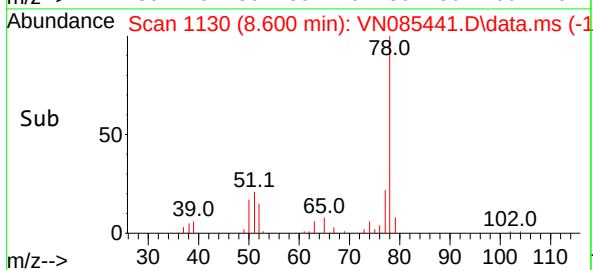
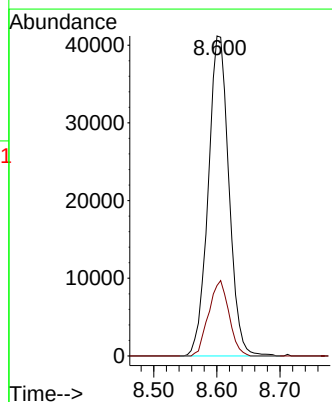
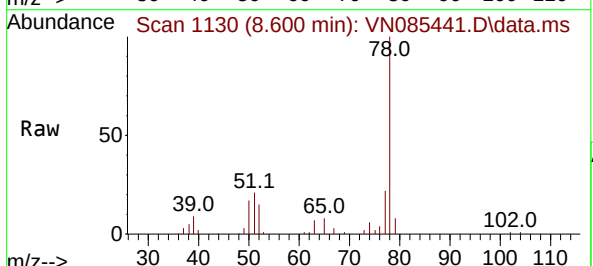
Acq: 14 Jan 2025 16:07

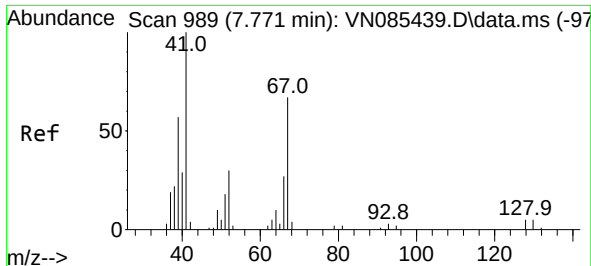
Tgt Ion: 78 Resp: 93680

Ion Ratio Lower Upper

78 100

77 22.0 19.0 28.6

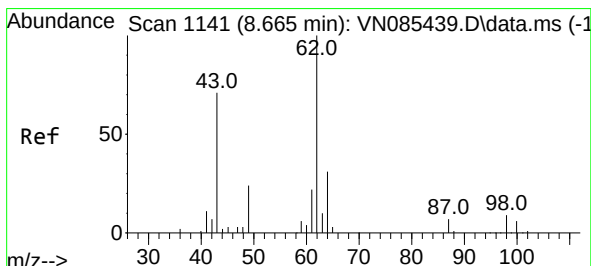
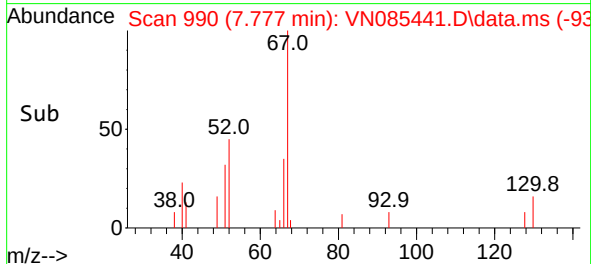
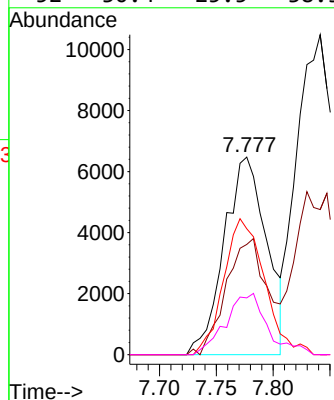
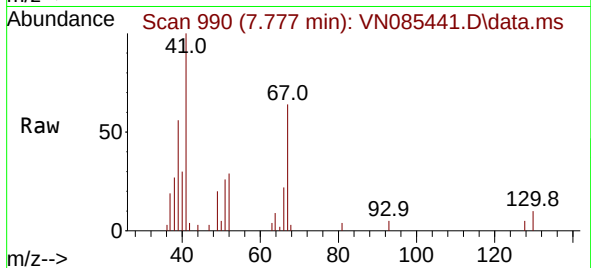




#41  
Methacrylonitrile  
Concen: 9.686 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

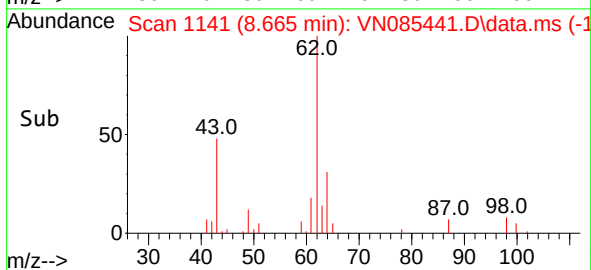
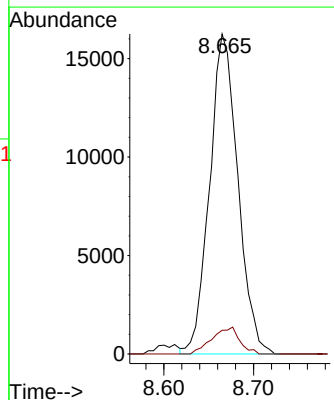
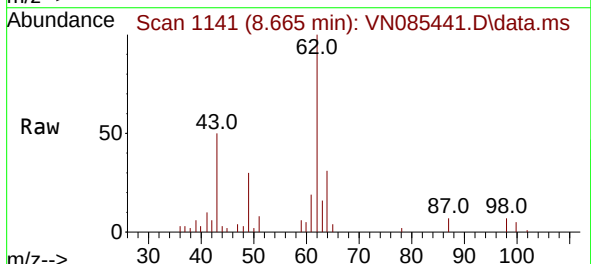
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

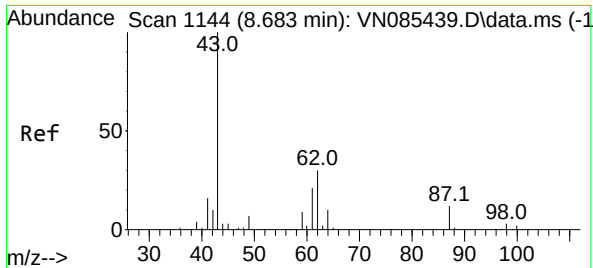
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 16859 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.3  | 46.0  | 69.0  |
| 67       | 66.2  | 57.4  | 86.2  |
| 52       | 30.4  | 25.5  | 38.3  |



#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

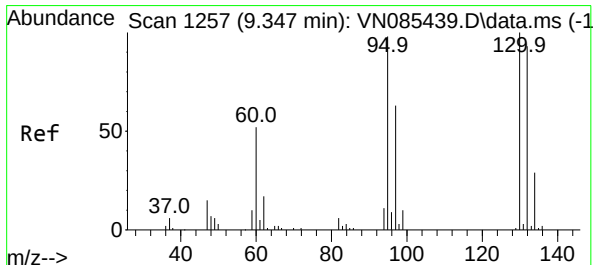
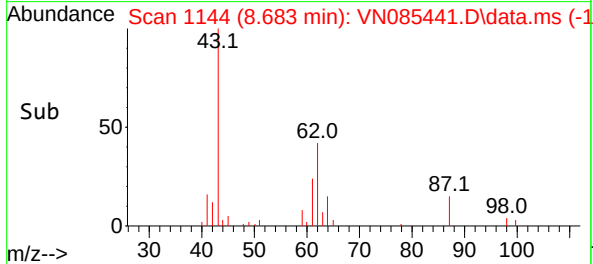
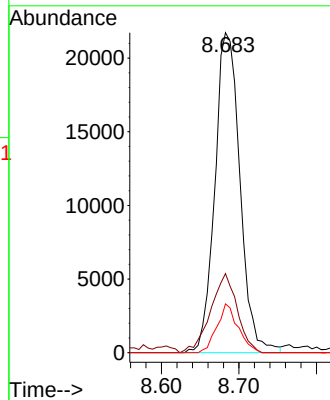
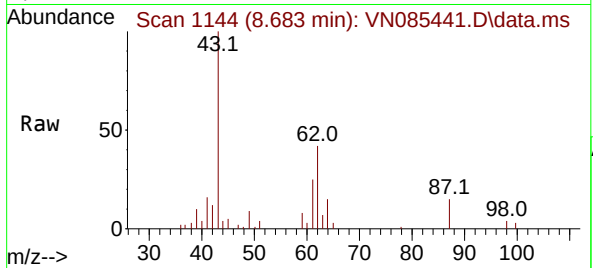
Tgt Ion: 43 Resp: 48926

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

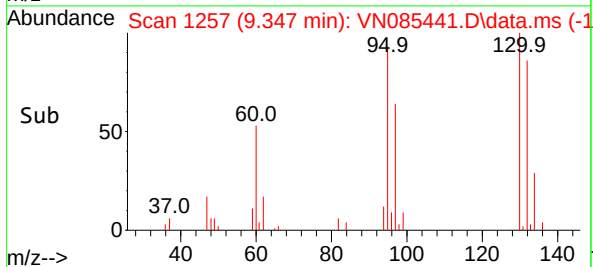
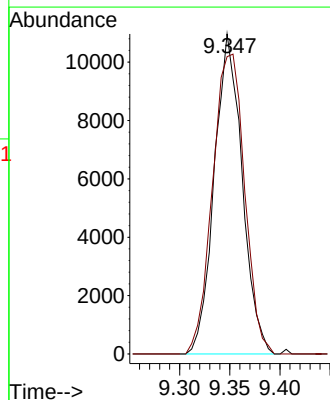
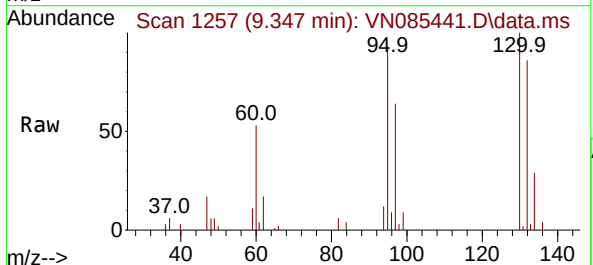
Acq: 14 Jan 2025 16:07

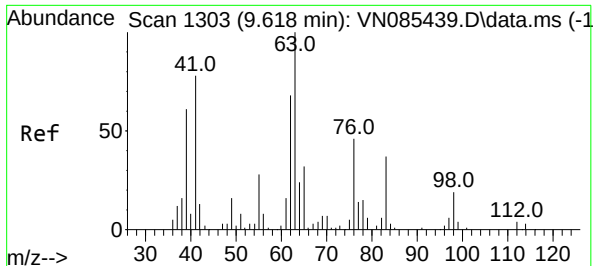
Tgt Ion:130 Resp: 21113

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 :

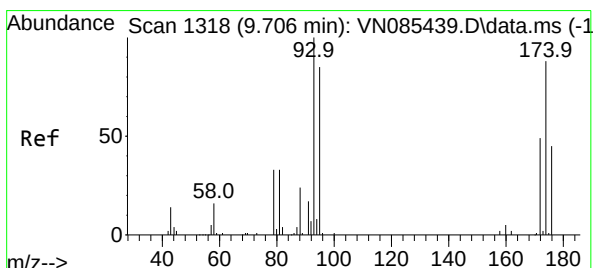
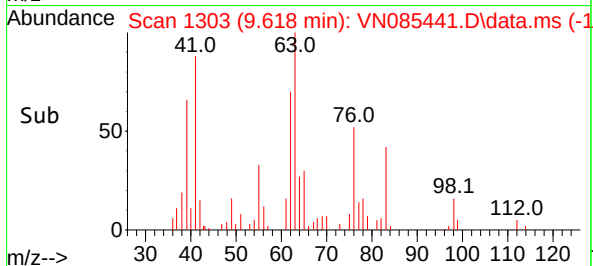
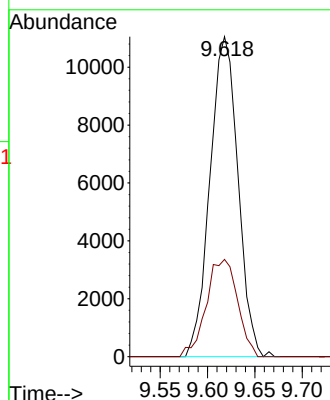
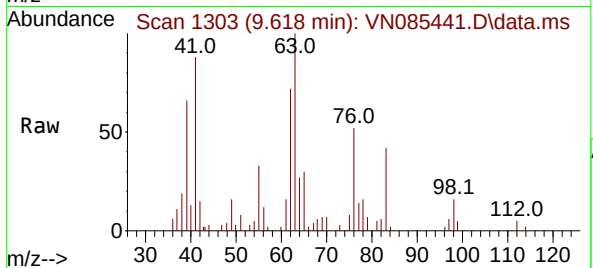
VSTDIC010

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

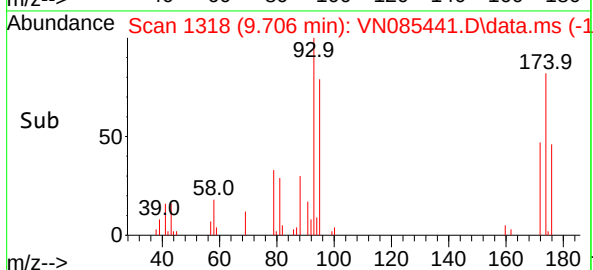
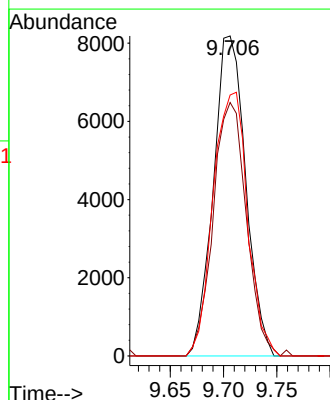
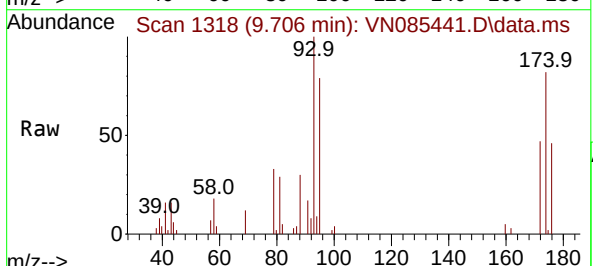
Tgt Ion: 93 Resp: 17260

Ion Ratio Lower Upper

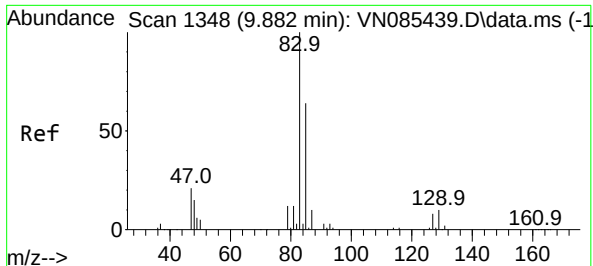
93 100

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

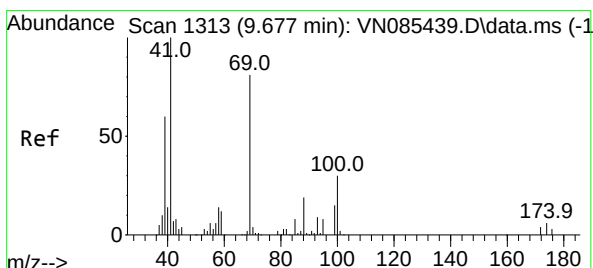
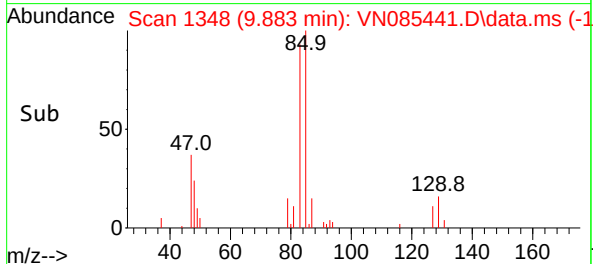
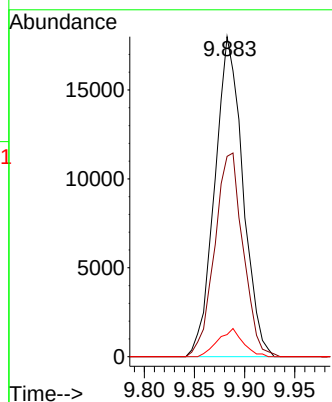
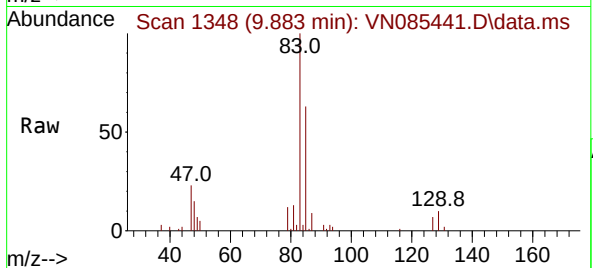
Tgt Ion: 83 Resp: 35020

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

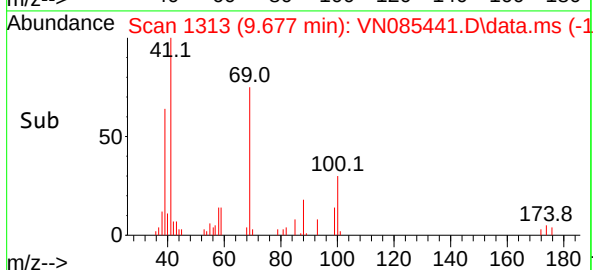
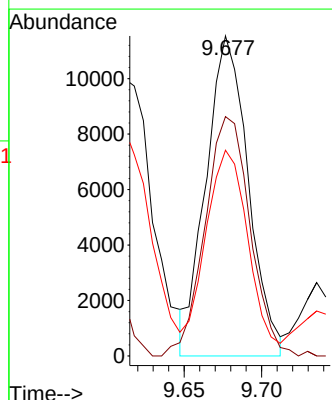
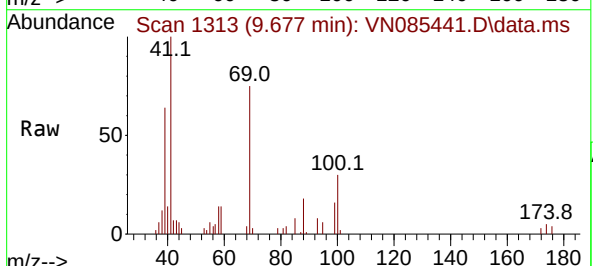
Tgt Ion: 41 Resp: 21873

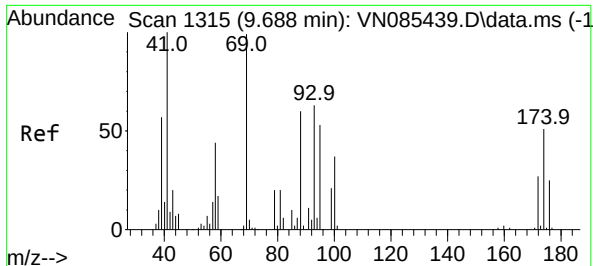
Ion Ratio Lower Upper

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

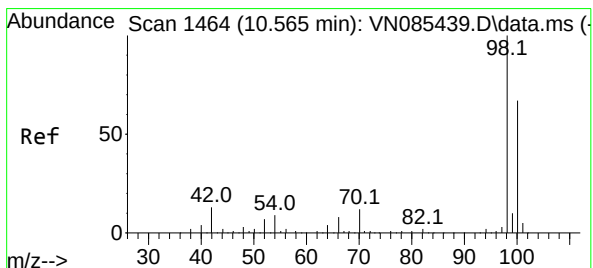
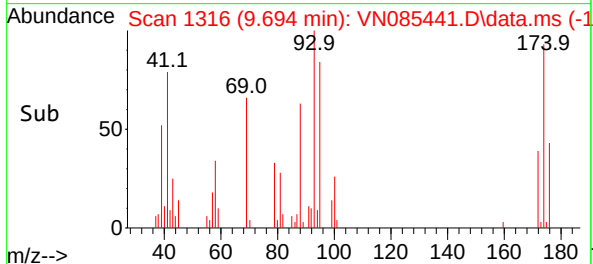
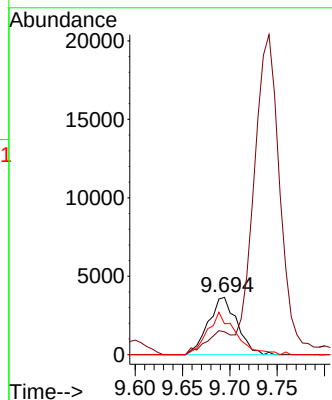
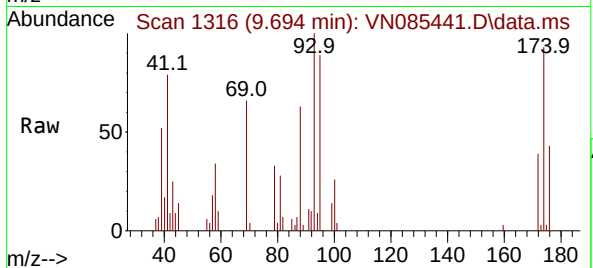
Tgt Ion: 88 Resp: 7734

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

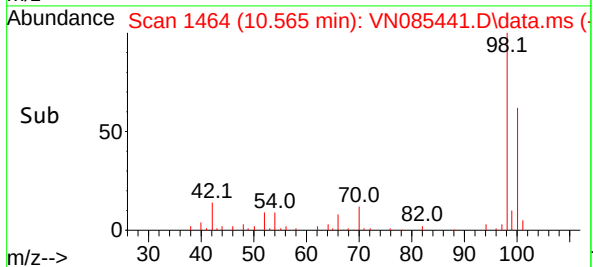
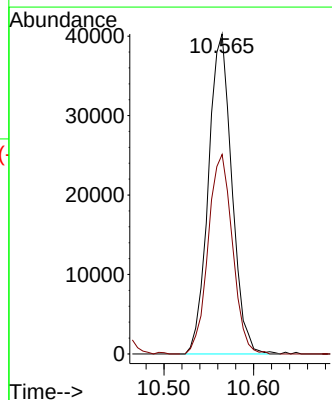
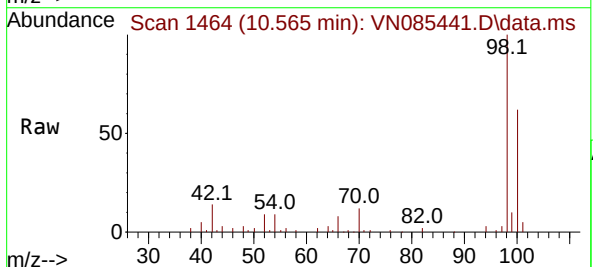
Acq: 14 Jan 2025 16:07

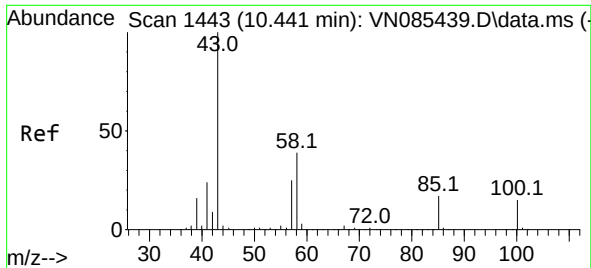
Tgt Ion: 98 Resp: 73223

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4

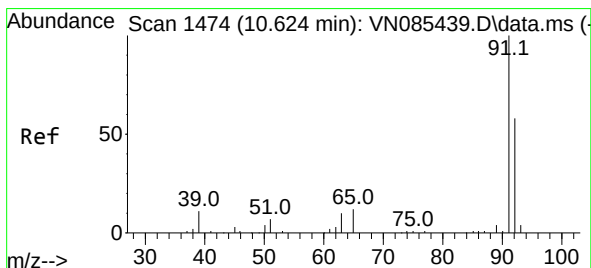
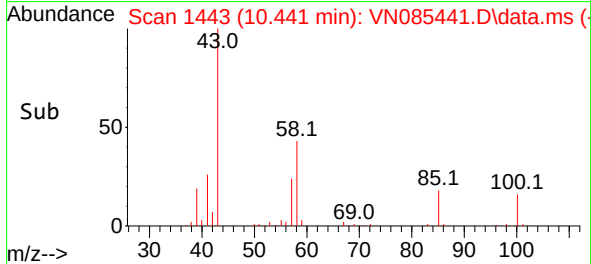
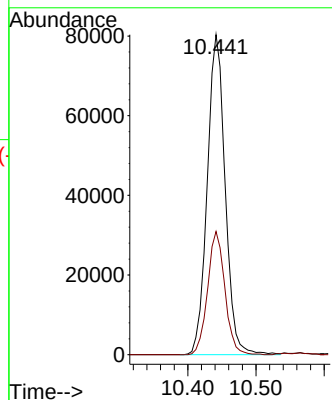
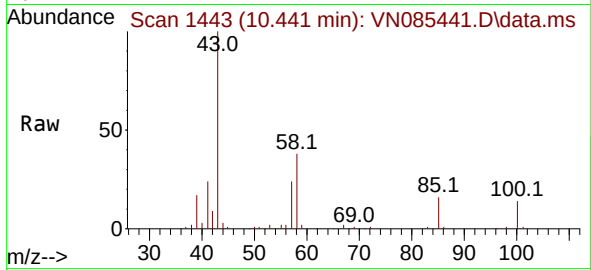




#51  
4-Methyl-2-Pentanone  
Concen: 47.254 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

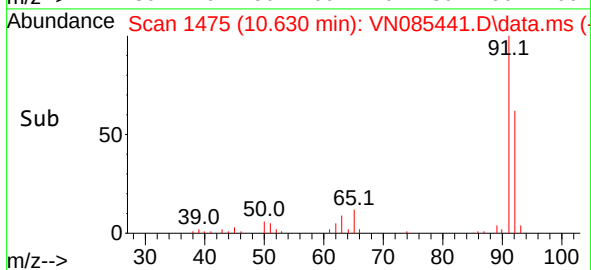
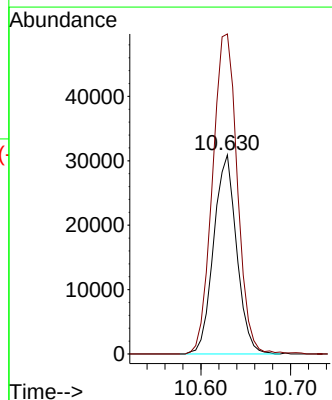
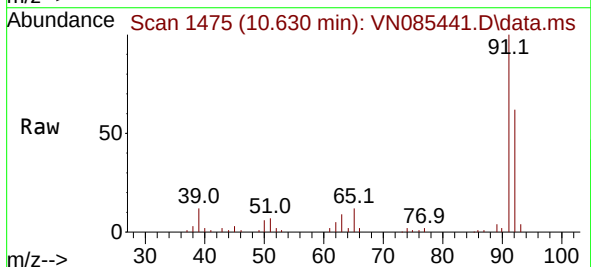
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

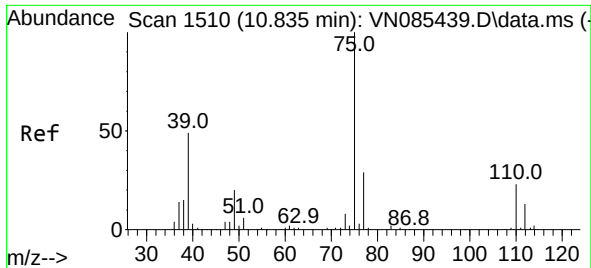
Tgt Ion: 43 Resp: 146990  
Ion Ratio Lower Upper  
43 100  
58 37.1 30.5 45.7



#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

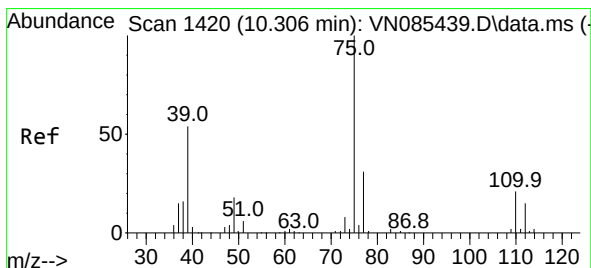
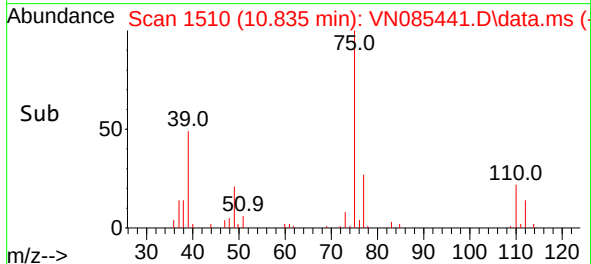
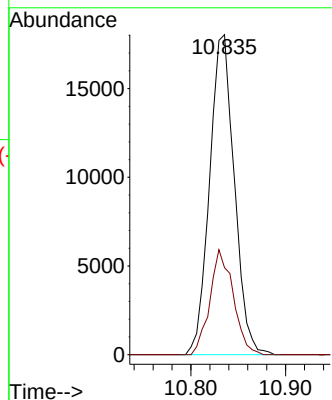
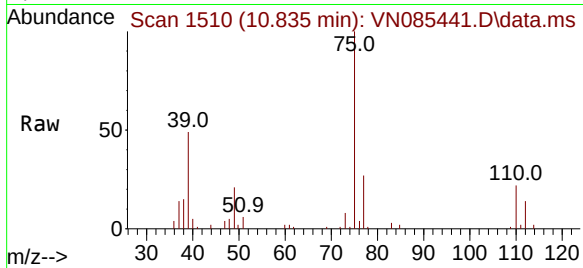




#53  
 t-1,3-Dichloropropene  
 Concen: 9.276 ug/l  
 RT: 10.835 min Scan# 1510  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

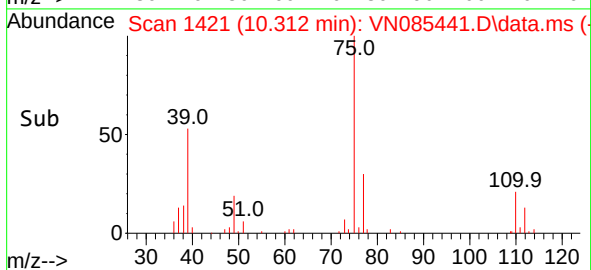
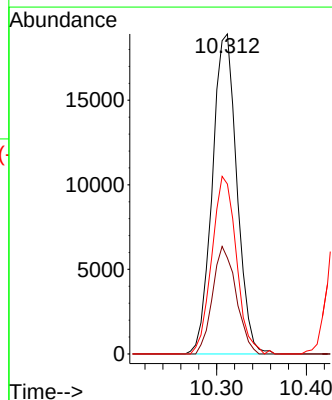
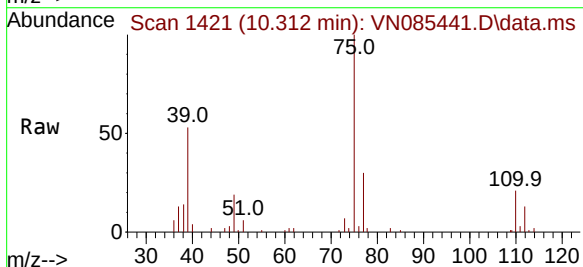
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

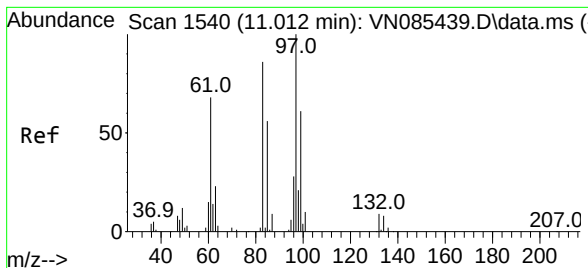
Tgt Ion: 75 Resp: 32780  
 Ion Ratio Lower Upper  
 75 100  
 77 27.2 23.5 35.3



#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

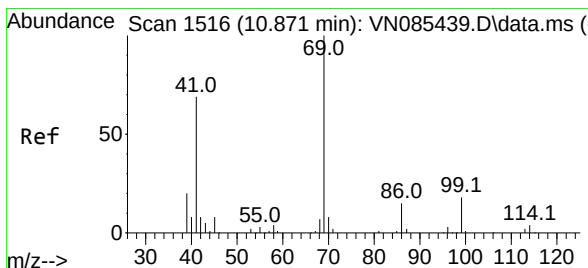
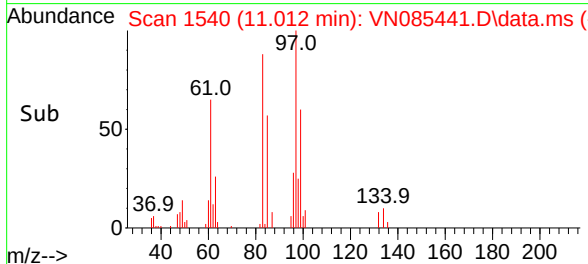
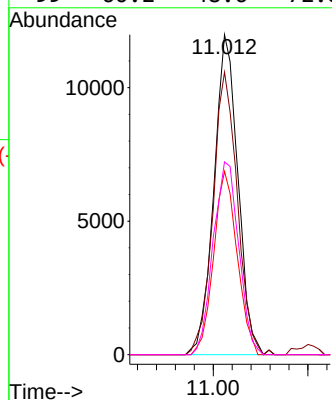
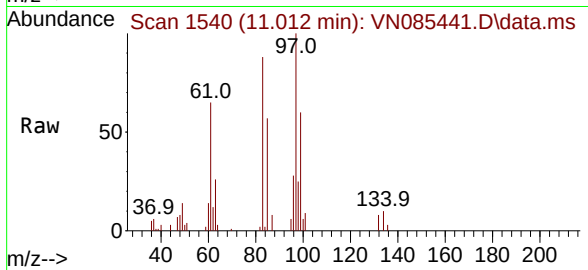




#55  
1,1,2-Trichloroethane  
Concen: 9.222 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

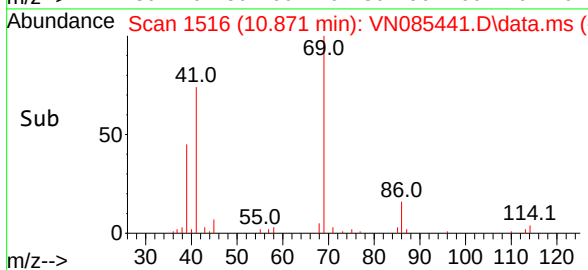
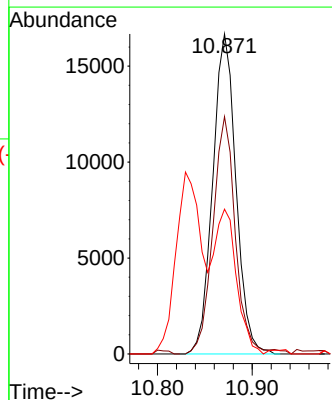
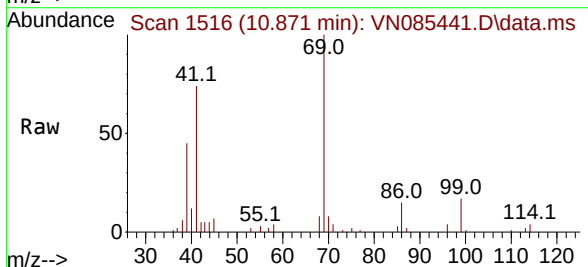
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

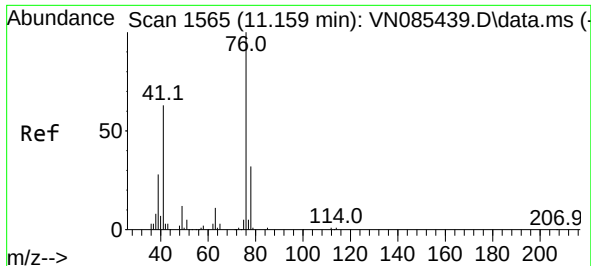
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 21060 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 88.3     | 69.0 103.6  |
| 85 57.3     | 44.6 66.8   |
| 99 60.2     | 48.6 72.8   |



#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   |

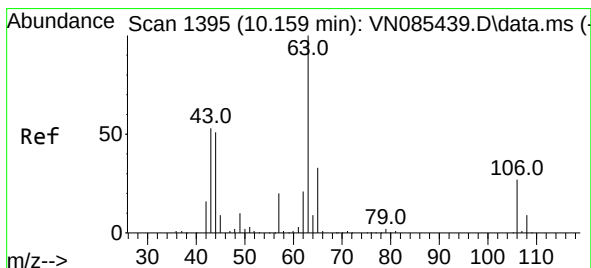
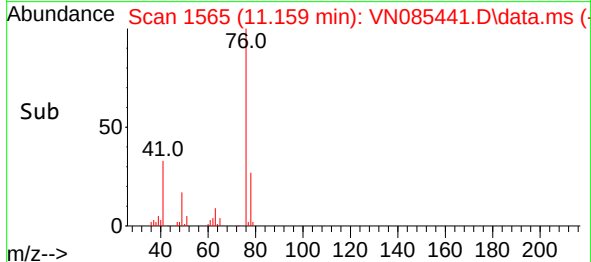
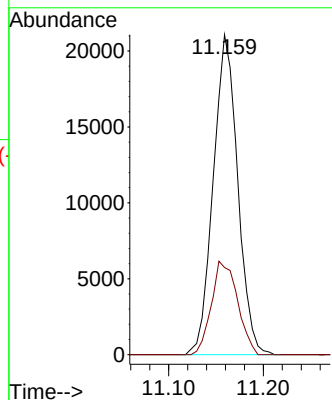
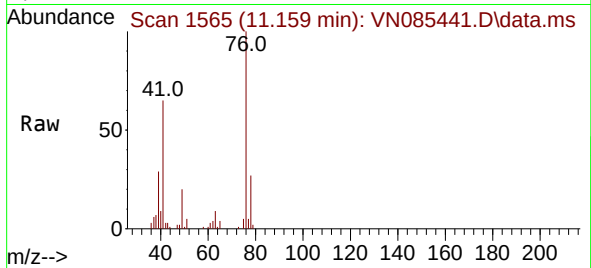




#57  
1,3-Dichloropropane  
Concen: 9.512 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

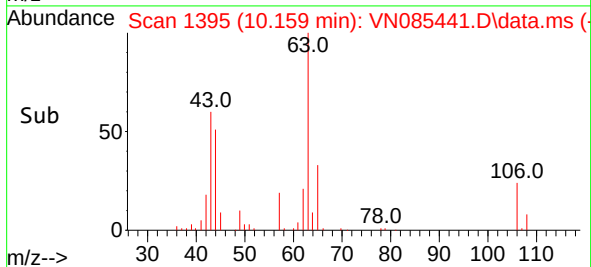
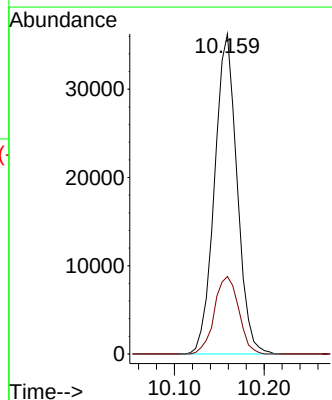
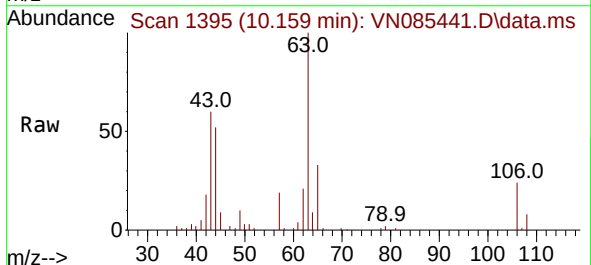
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

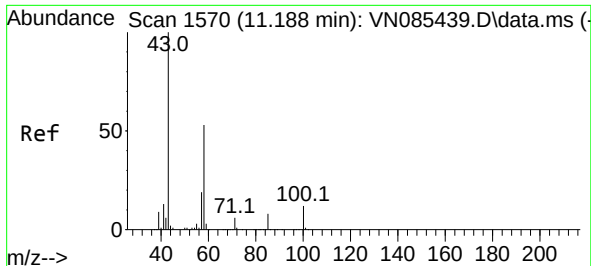
Tgt Ion: 76 Resp: 37768  
Ion Ratio Lower Upper  
76 100  
78 31.1 25.6 38.4



#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 :

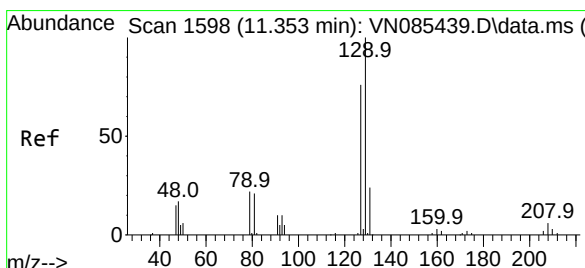
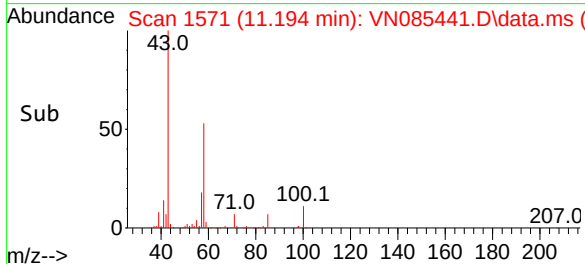
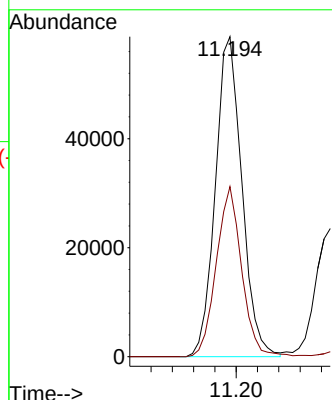
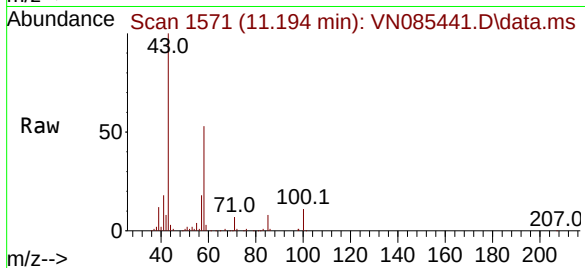
VSTDIC010

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

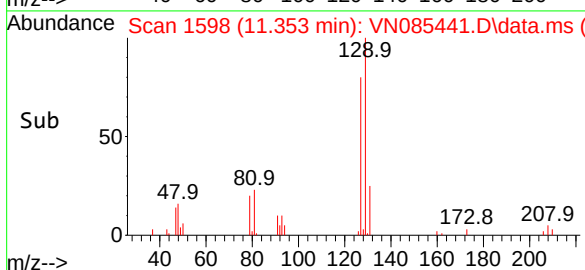
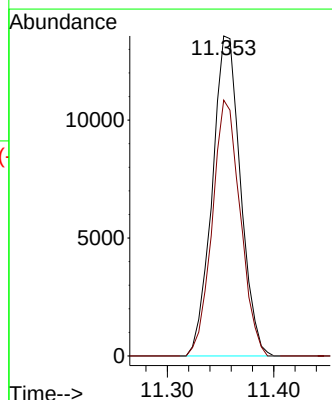
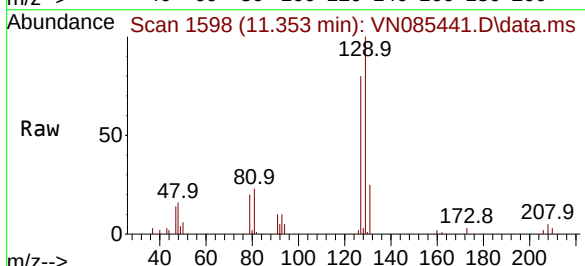
Acq: 14 Jan 2025 16:07

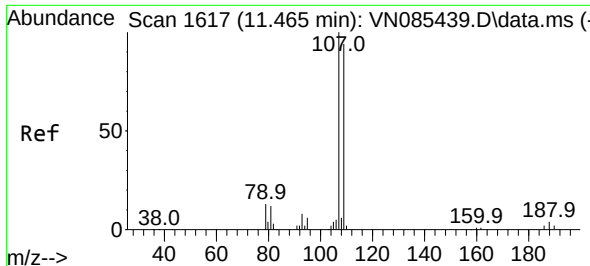
Tgt Ion:129 Resp: 25029

Ion Ratio Lower Upper

129 100

127 79.1 38.6 115.8

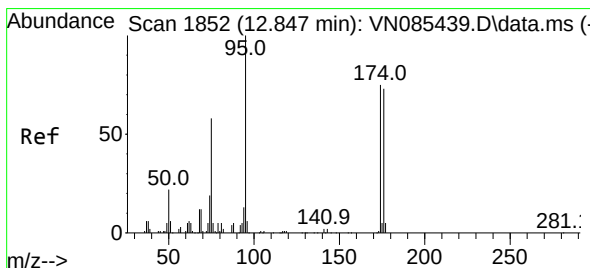
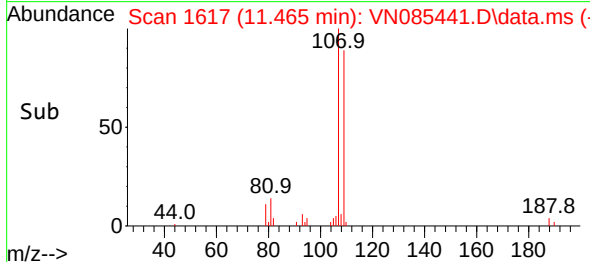
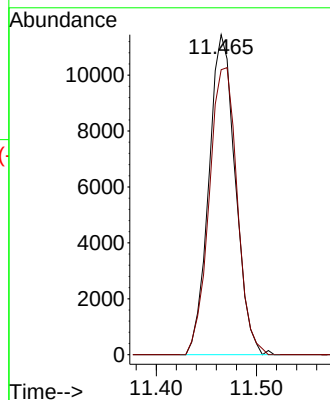
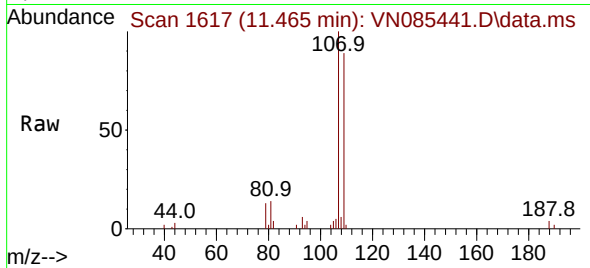




#61  
1,2-Dibromoethane  
Concen: 9.263 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

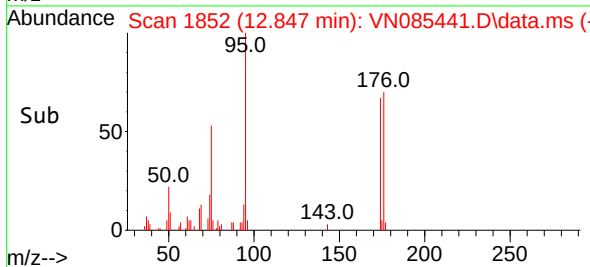
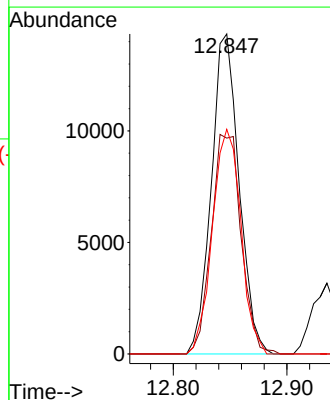
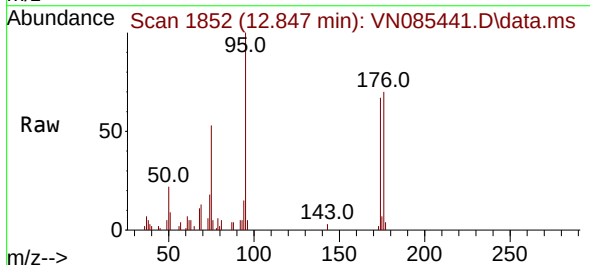
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

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

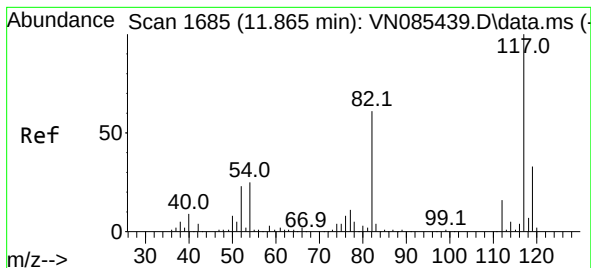


#62  
4-Bromofluorobenzene  
Concen: 8.476 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

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# 1

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDICC010

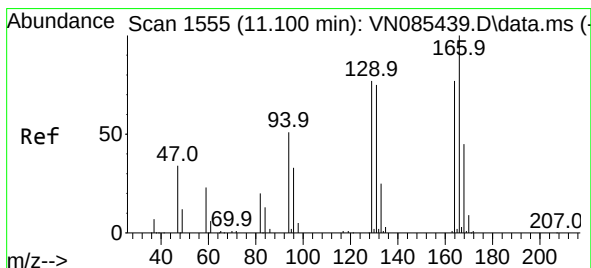
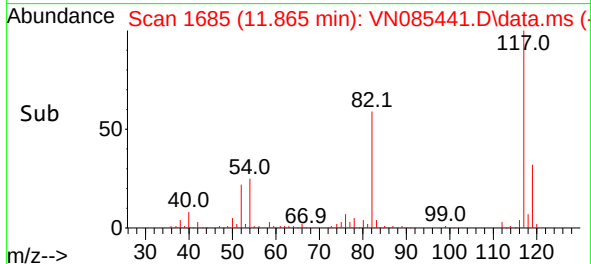
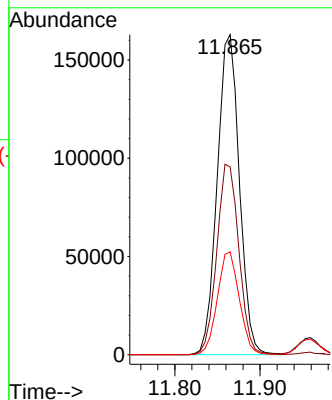
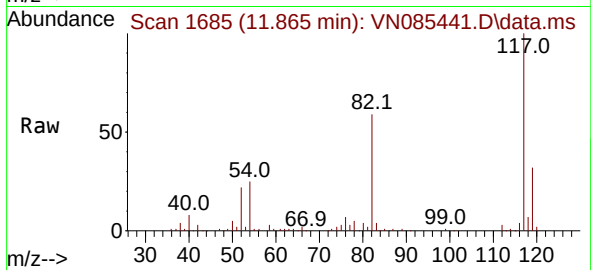
Tgt Ion:117 Resp: 294508

Ion Ratio Lower Upper

117 100

82 58.7 48.6 72.8

119 32.2 26.6 39.8



#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

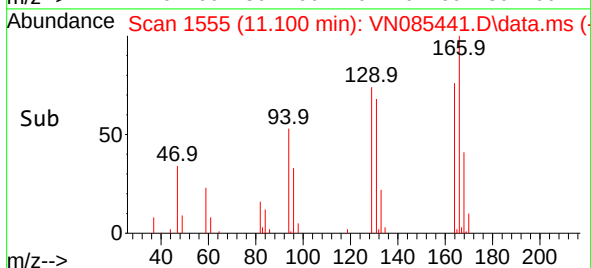
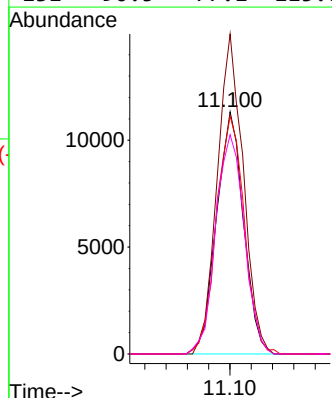
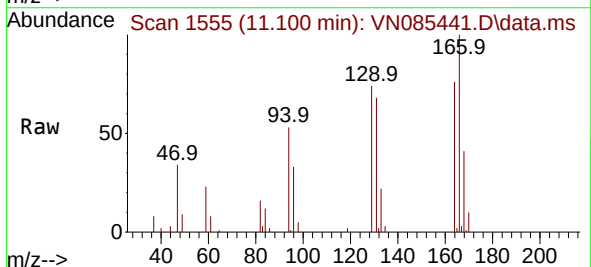
Ion Ratio Lower Upper

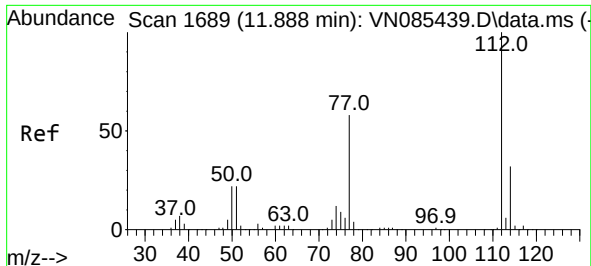
164 100

166 132.2 103.4 155.2

129 98.3 79.2 118.8

131 90.5 77.1 115.7

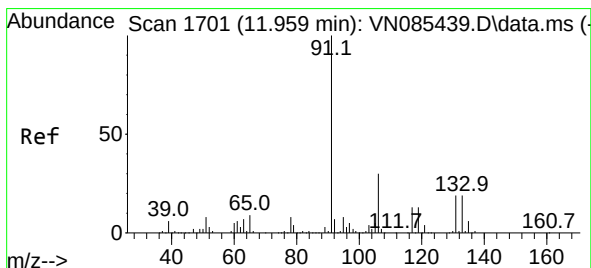
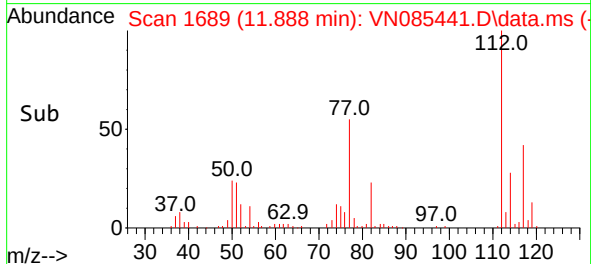
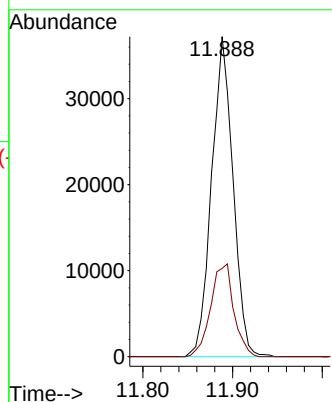
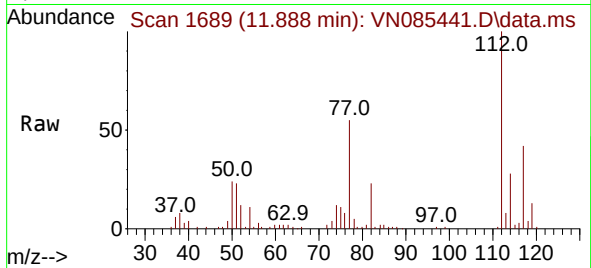




#65  
Chlorobenzene  
Concen: 9.560 ug/l  
RT: 11.888 min Scan# 111  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

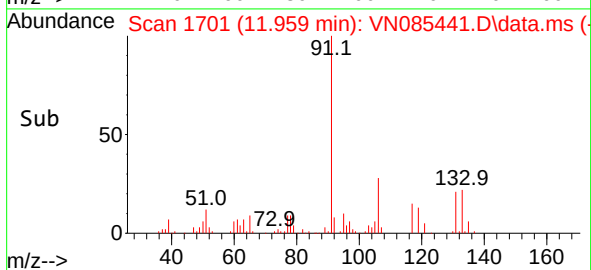
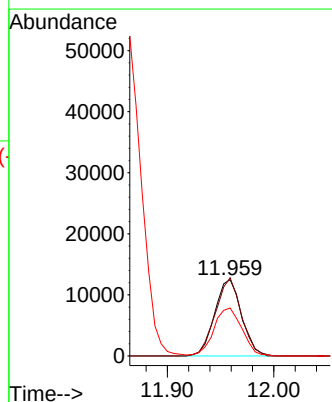
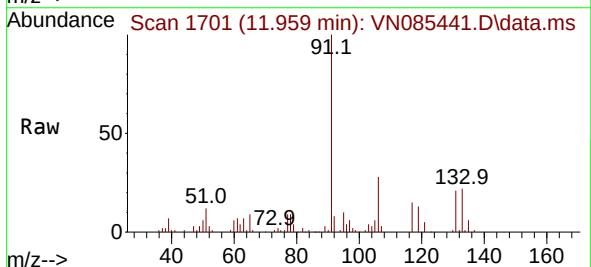
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

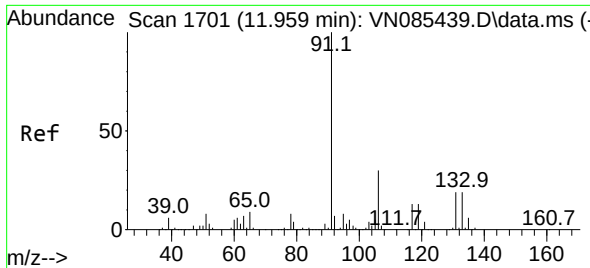
Tgt Ion:112 Resp: 61680  
Ion Ratio Lower Upper  
112 100  
114 27.6 25.3 37.9



#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

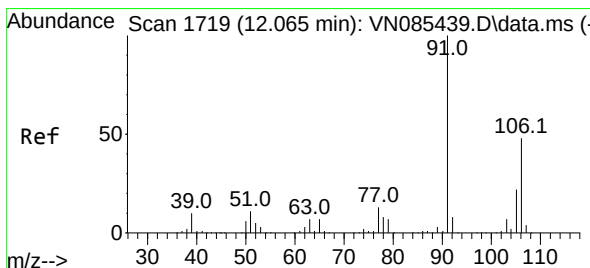
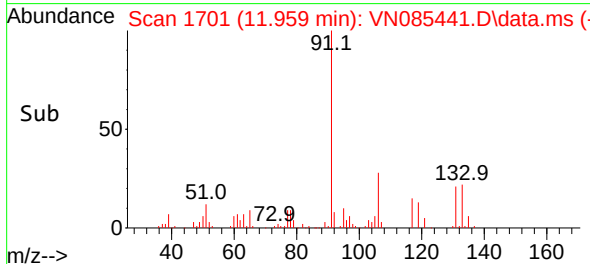
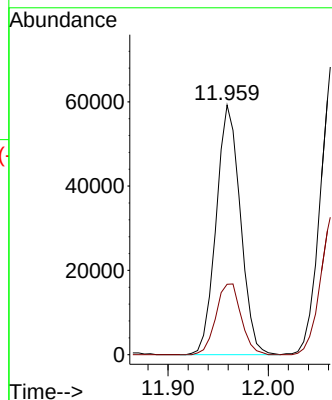
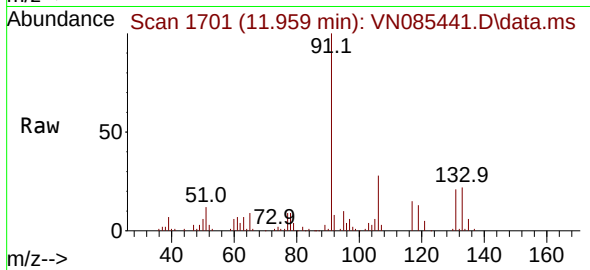




#67  
Ethyl Benzene  
Concen: 9.445 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

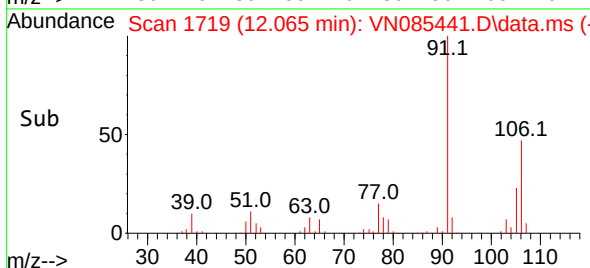
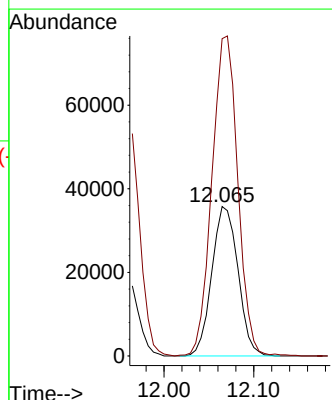
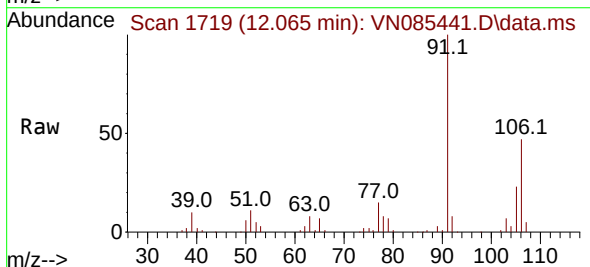
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

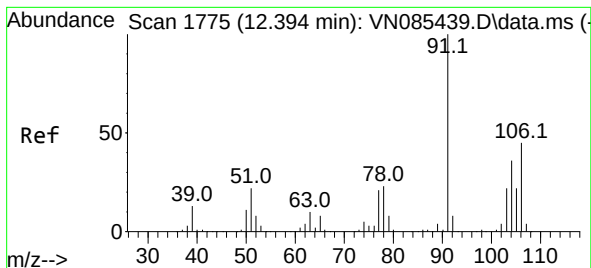
Tgt Ion: 91 Resp: 99248  
Ion Ratio Lower Upper  
91 100  
106 28.2 23.8 35.8



#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 :

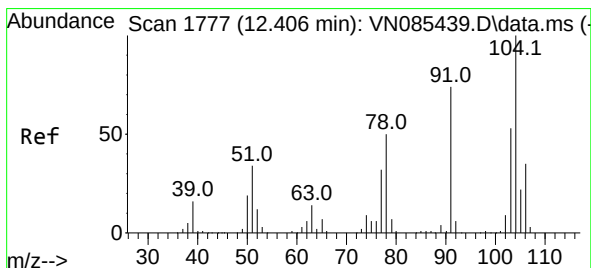
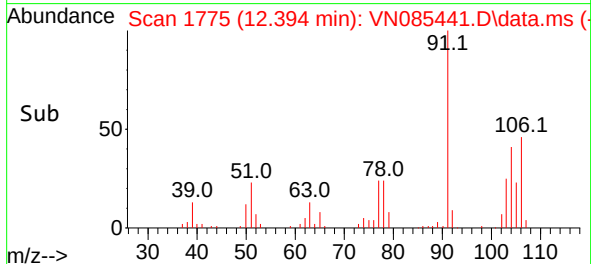
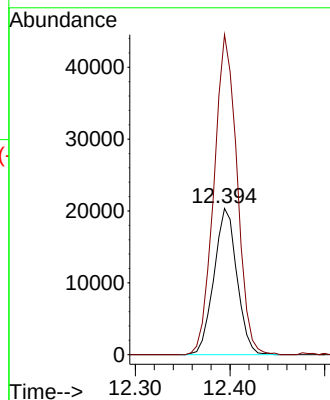
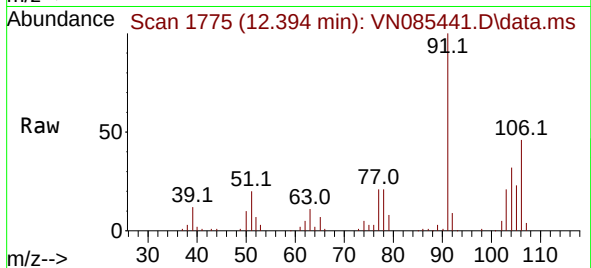
VSTDICC010

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

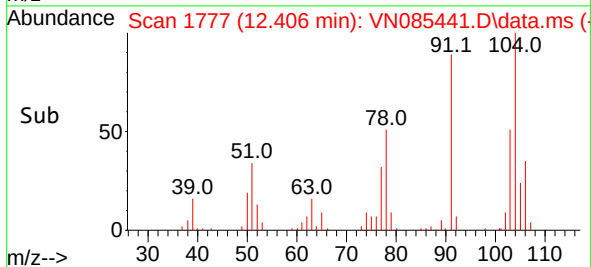
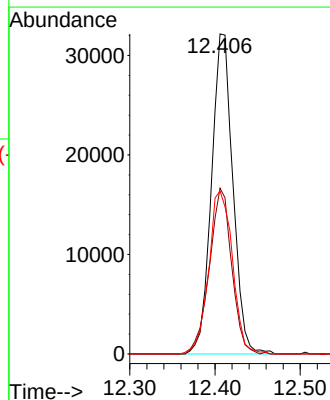
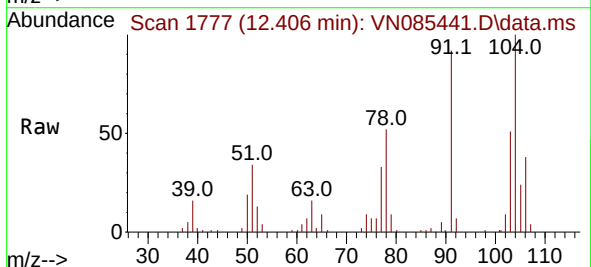
Tgt Ion:104 Resp: 56285

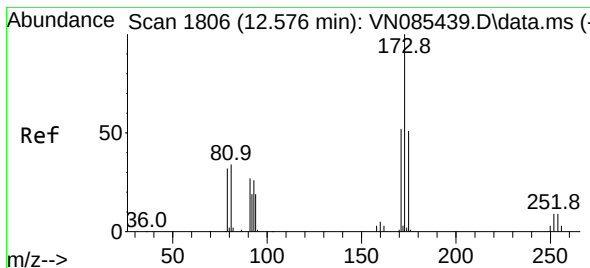
Ion Ratio Lower Upper

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

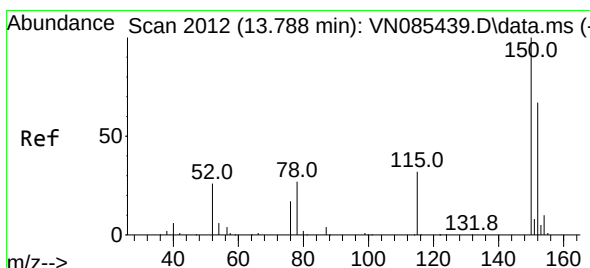
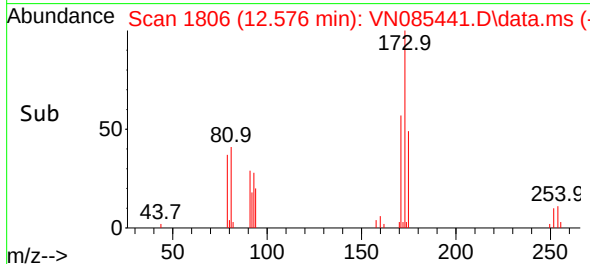
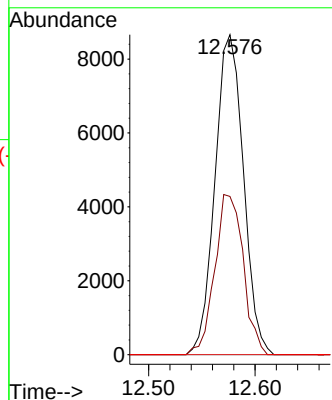
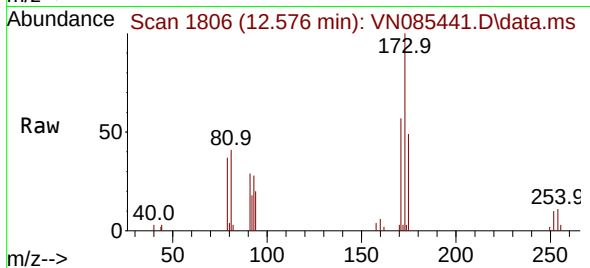
Tgt Ion:173 Resp: 16071

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# 2012

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

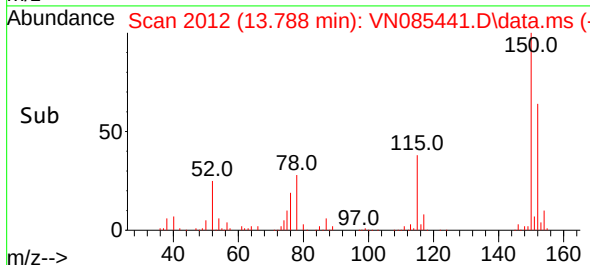
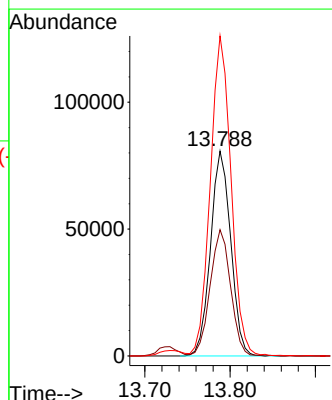
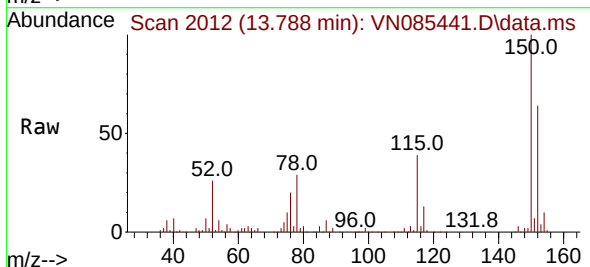
Tgt Ion:152 Resp: 132934

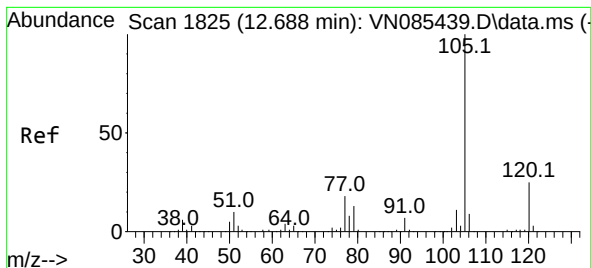
Ion Ratio Lower Upper

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# 1826

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

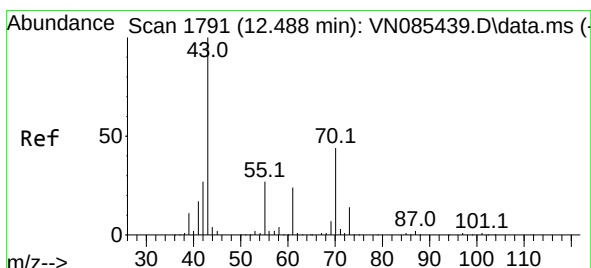
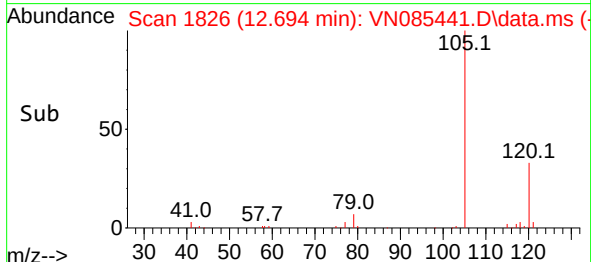
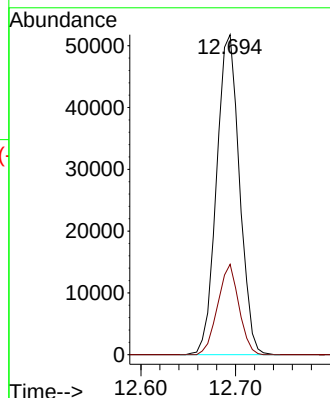
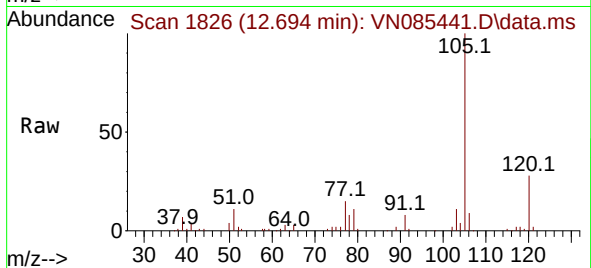
VSTDIC010

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

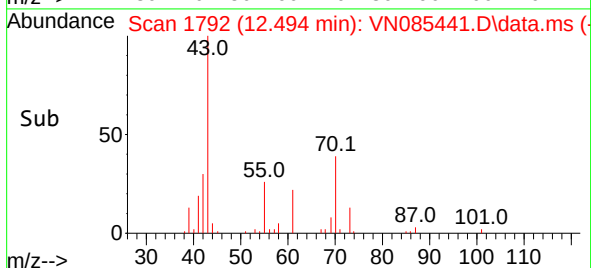
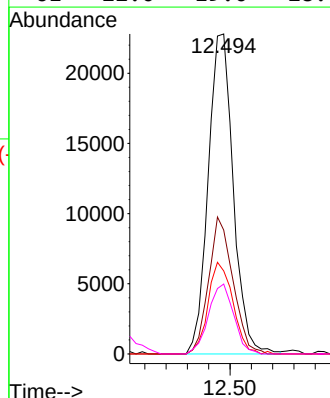
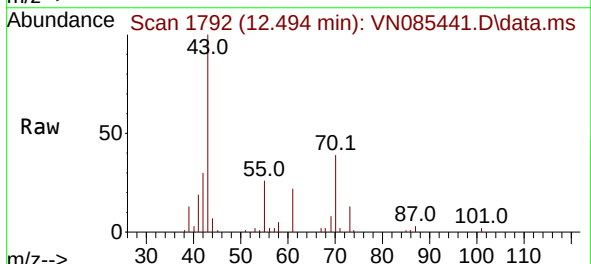
Ion Ratio Lower Upper

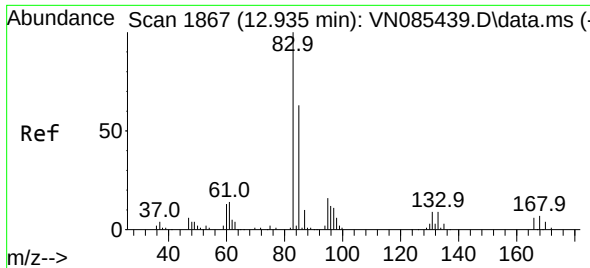
43 100

70 41.4 34.0 51.0

55 28.5 21.4 32.2

61 22.0 19.0 28.4

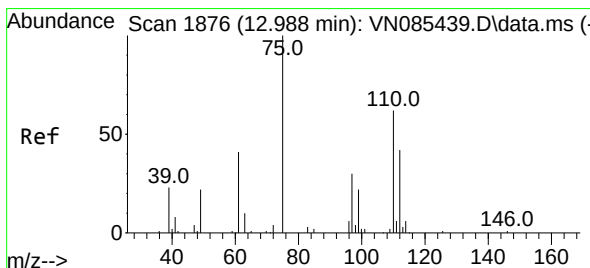
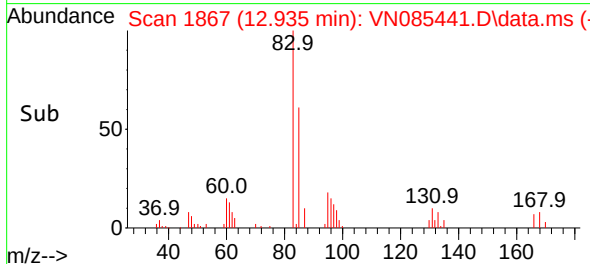
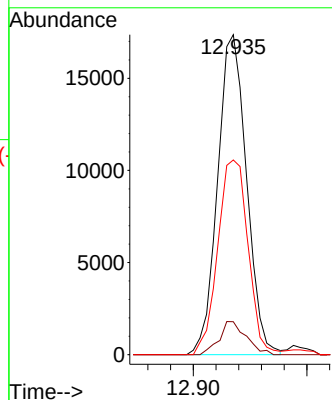
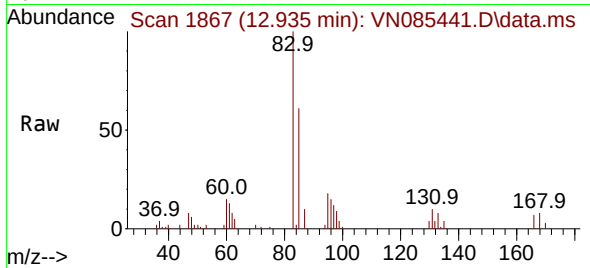




#75  
1,1,2,2-Tetrachloroethane  
Concen: 9.709 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

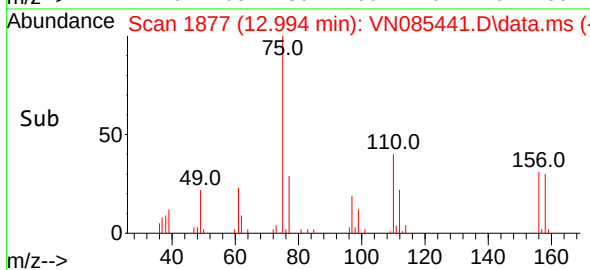
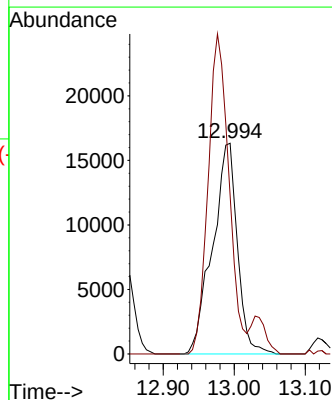
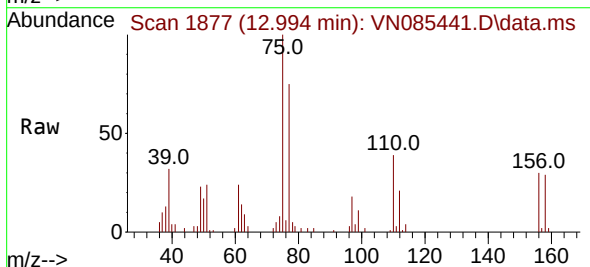
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

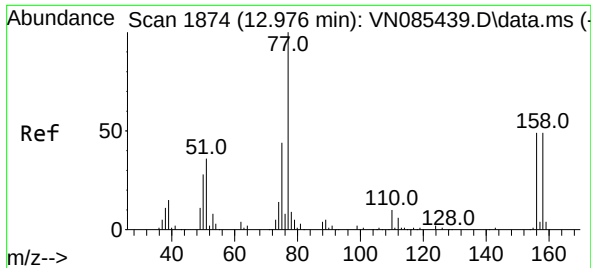
Tgt Ion: 83 Resp: 30770  
Ion Ratio Lower Upper  
83 100  
131 9.6 4.8 14.4  
85 63.6 32.2 96.6



#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

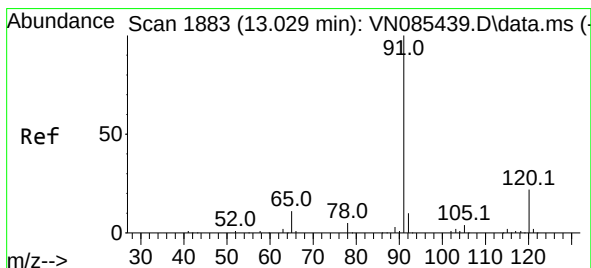
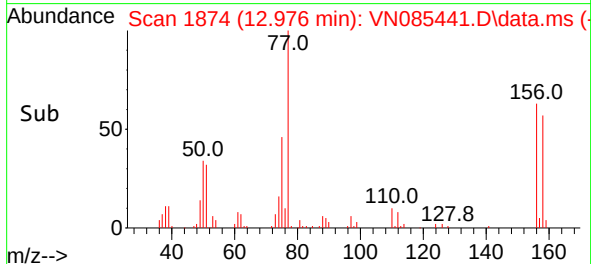
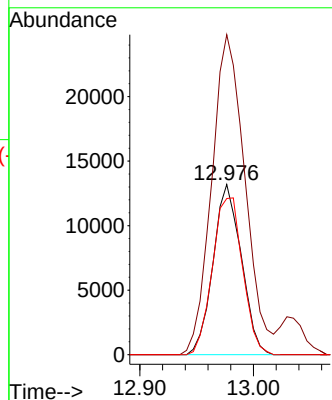
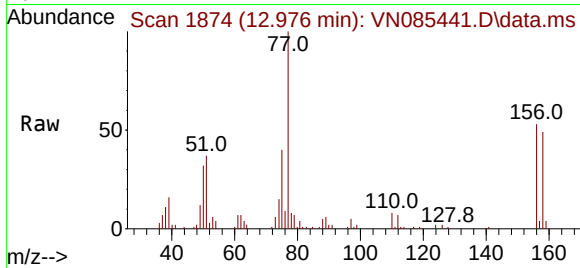




#77  
Bromobenzene  
Concen: 9.720 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

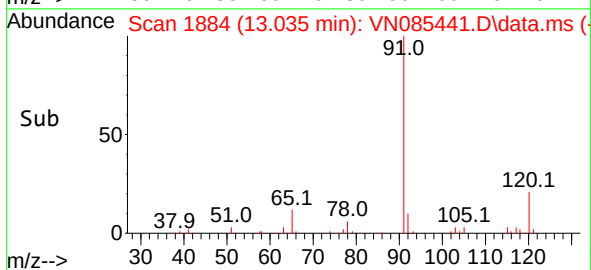
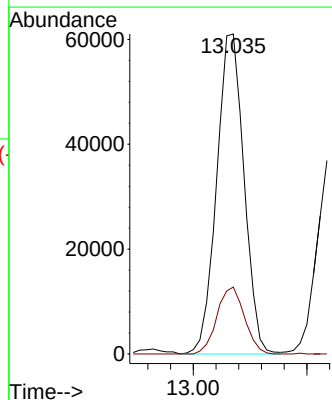
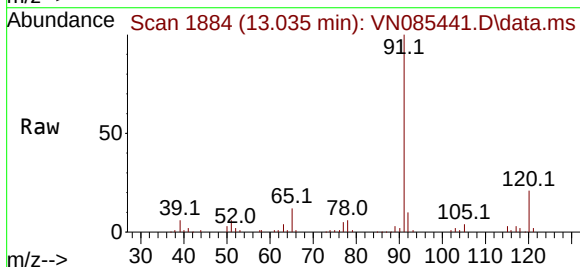
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

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

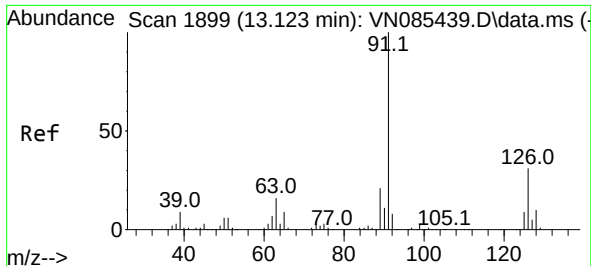


#78  
n-propylbenzene  
Concen: 9.628 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

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 :

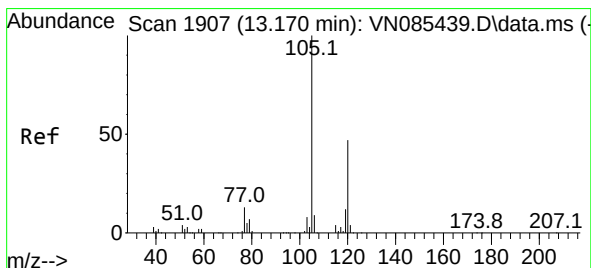
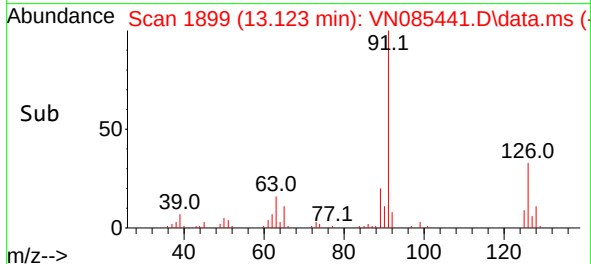
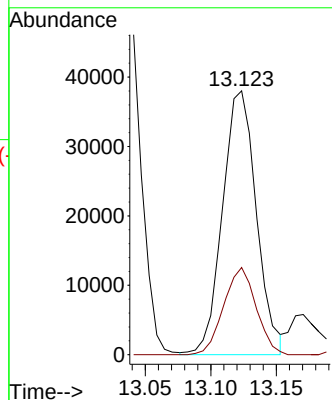
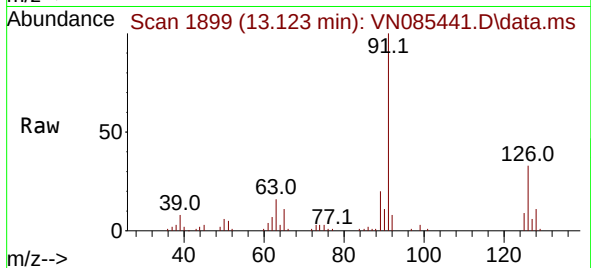
VSTDIC010

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

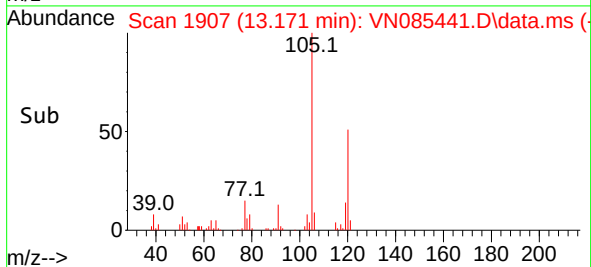
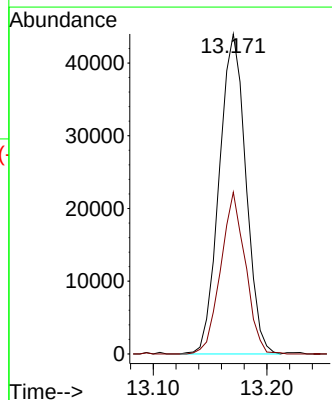
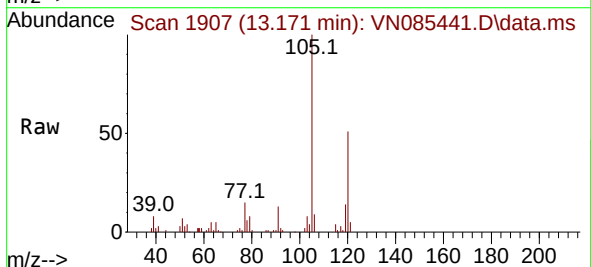
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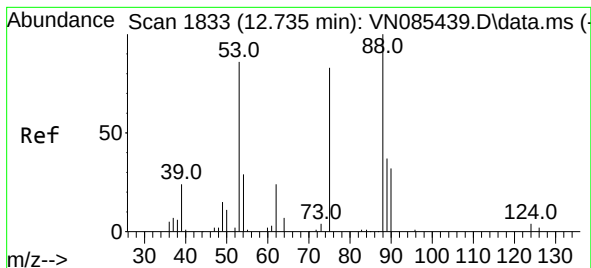
Tgt Ion:105 Resp: 71656

Ion Ratio Lower Upper

105 100

120 46.8 23.9 71.7

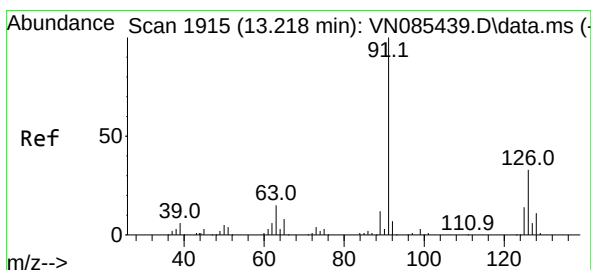
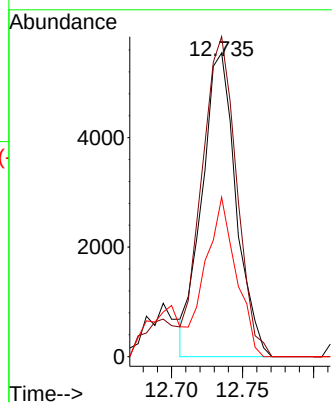
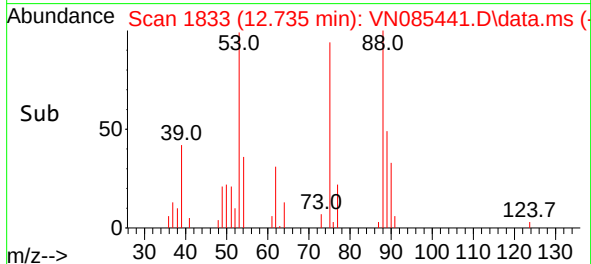
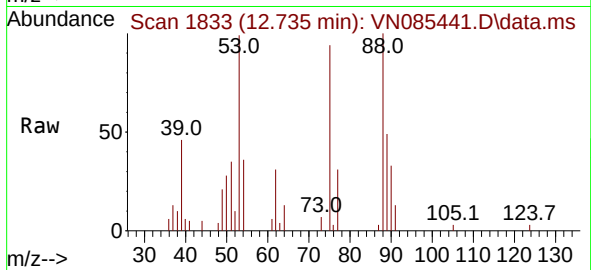




#81  
trans-1,4-Dichloro-2-butene  
Concen: 9.248 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

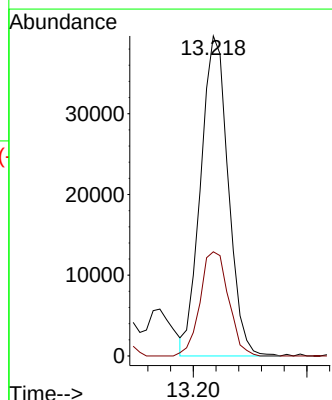
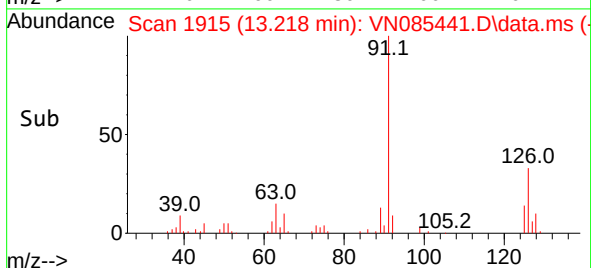
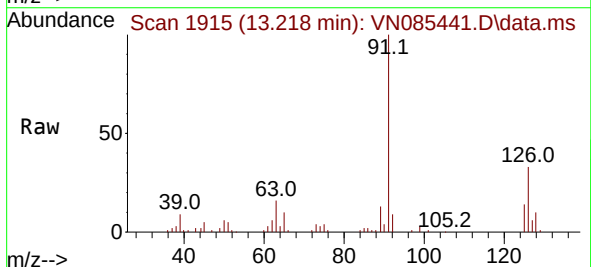
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MSVOA\_N  
ClientSampleId :  
VSTDIC010

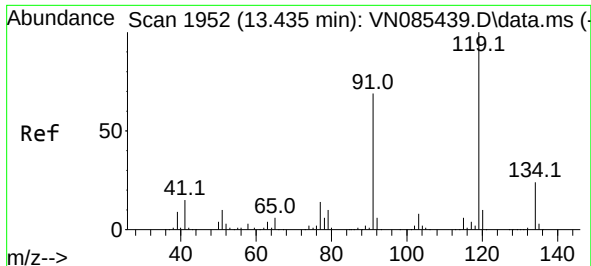
Tgt Ion: 75 Resp: 9236  
Ion Ratio Lower Upper  
75 100  
53 119.6 95.6 143.4  
89 46.6 37.0 55.6



#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

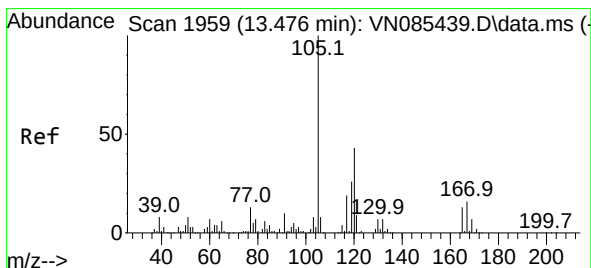
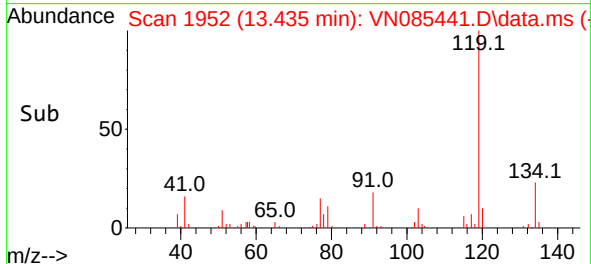
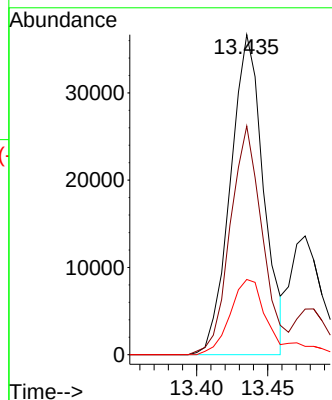
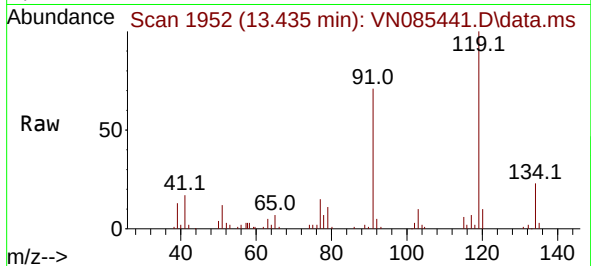




#83  
tert-Butylbenzene  
Concen: 9.553 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

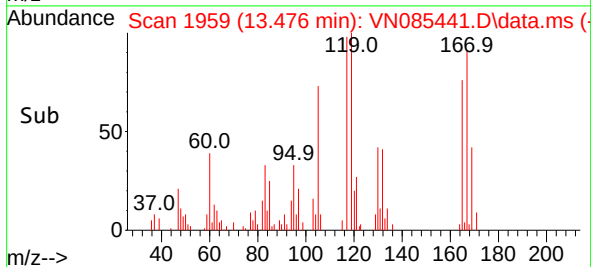
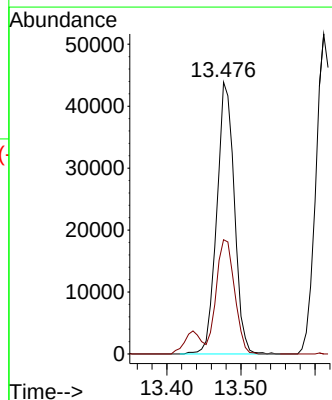
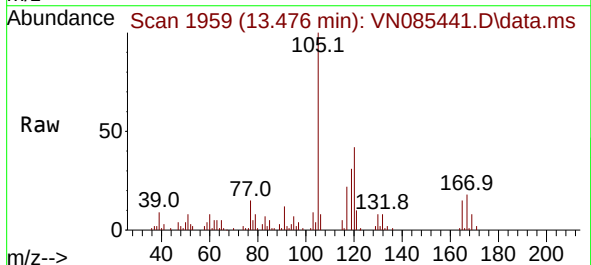
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MSVOA\_N  
ClientSampleId :  
VSTDICC010

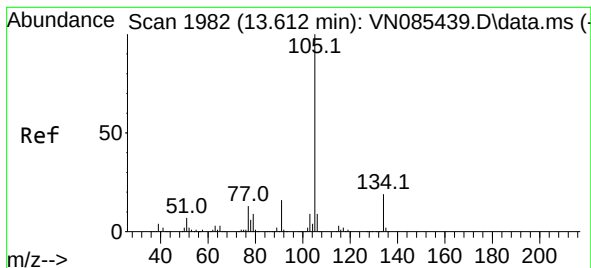
Tgt Ion:119 Resp: 59455  
Ion Ratio Lower Upper  
119 100  
91 70.0 35.1 105.3  
134 27.8 12.0 36.1



#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 :

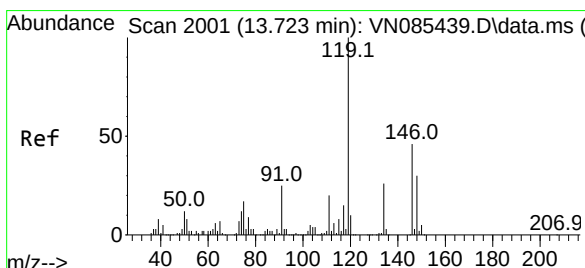
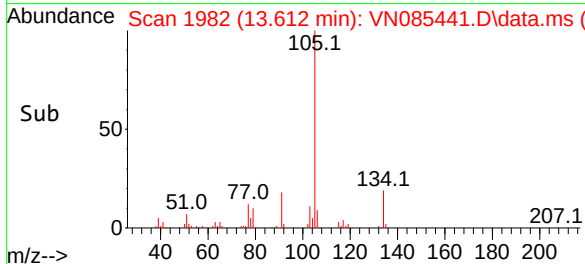
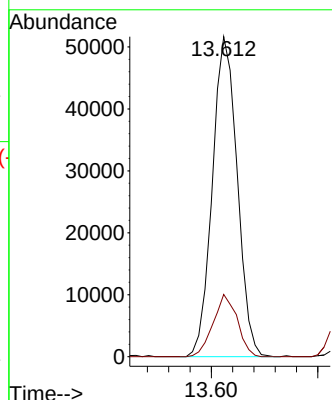
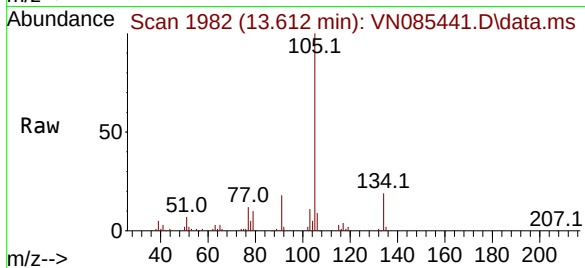
VSTDIC010

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

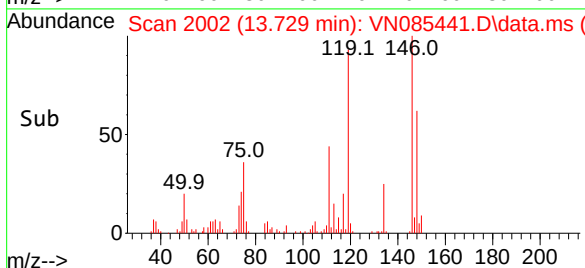
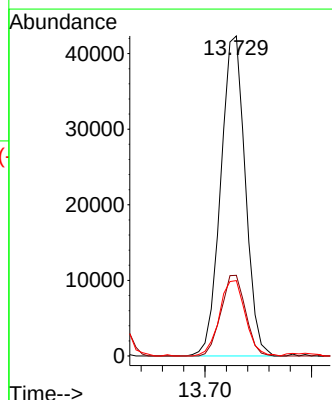
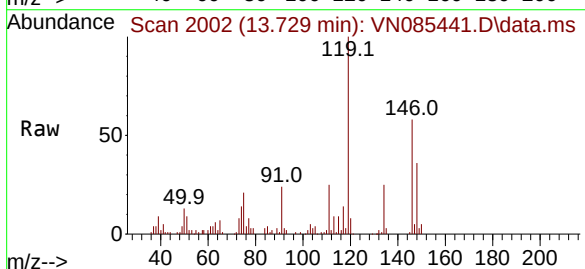
Tgt Ion:119 Resp: 67556

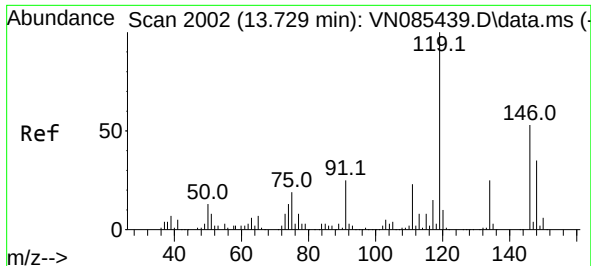
Ion Ratio Lower Upper

119 100

134 25.2 12.7 38.0

91 25.0 12.7 38.1

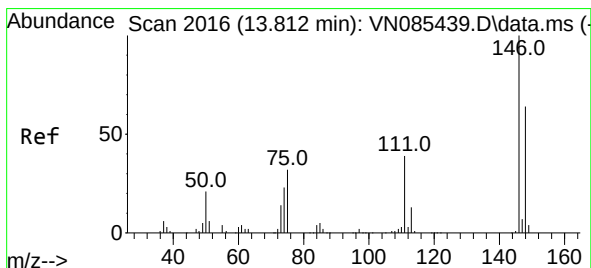
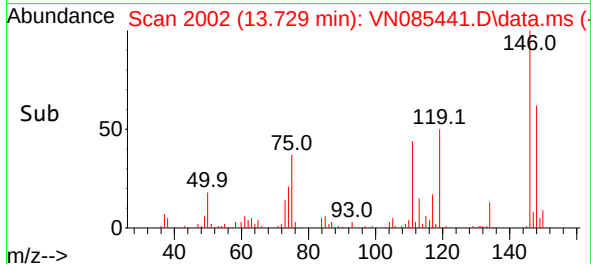
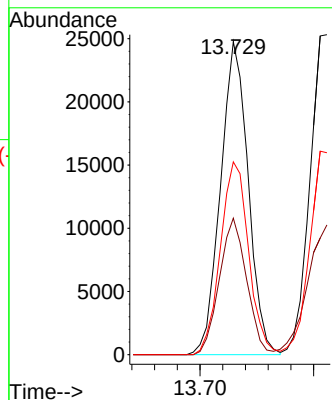
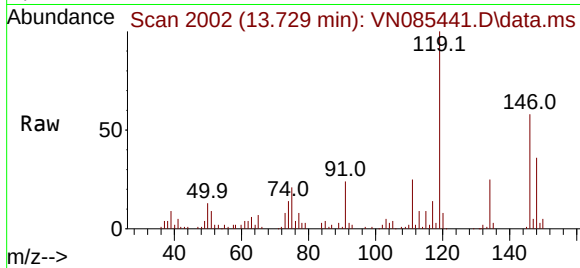




#87  
 1,3-Dichlorobenzene  
 Concen: 9.693 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085441.D  
 Acq: 14 Jan 2025 16:07

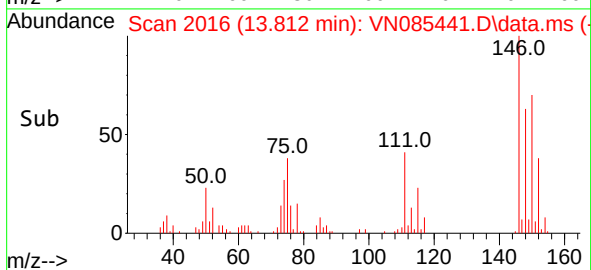
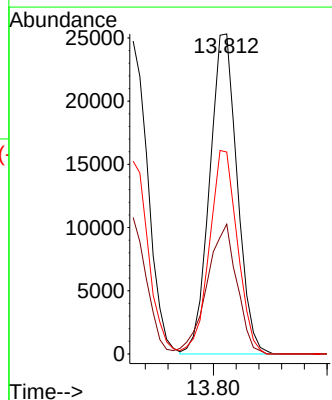
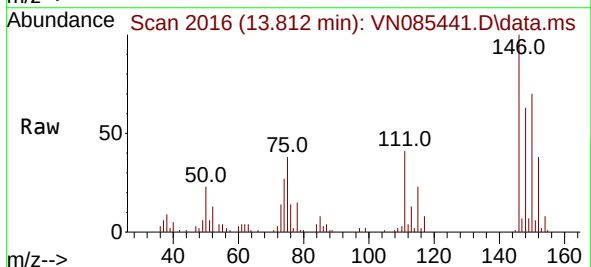
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

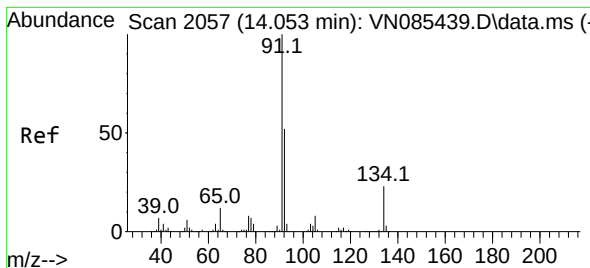
Tgt Ion:146 Resp: 41843  
 Ion Ratio Lower Upper  
 146 100  
 111 43.1 21.4 64.3  
 148 63.0 32.3 96.9



#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

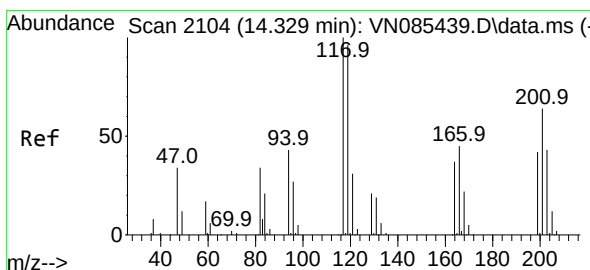
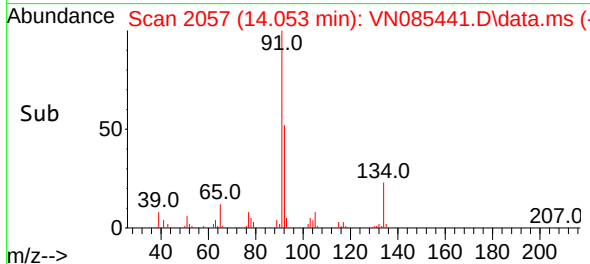
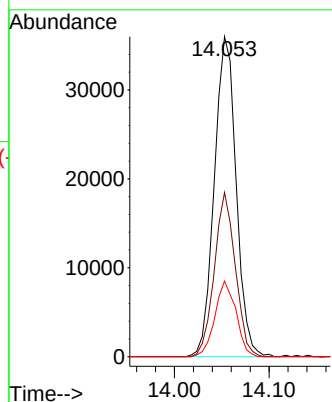
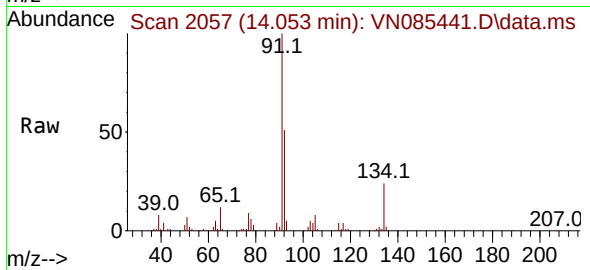
Tgt Ion: 91 Resp: 57632

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

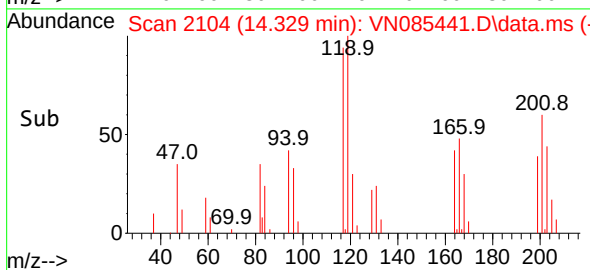
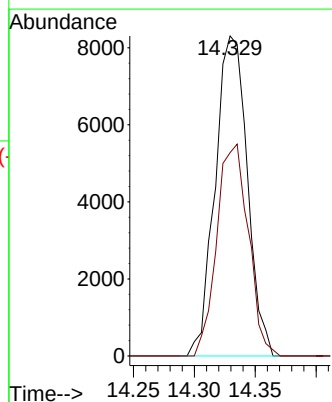
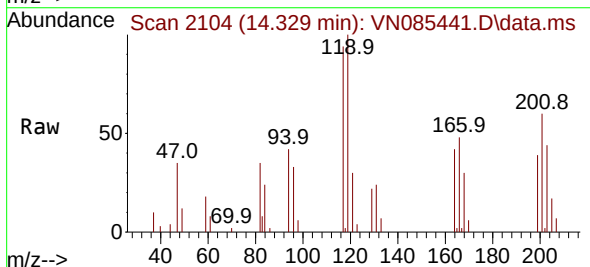
Acq: 14 Jan 2025 16:07

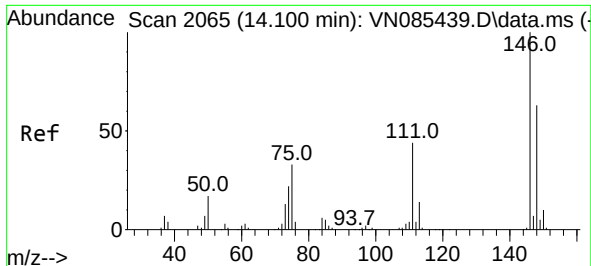
Tgt Ion: 117 Resp: 15261

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# 2065

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC010

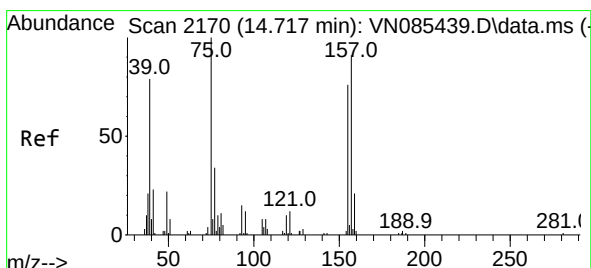
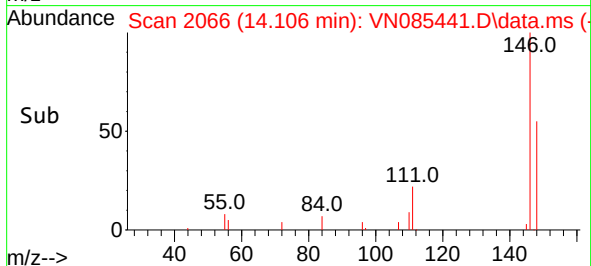
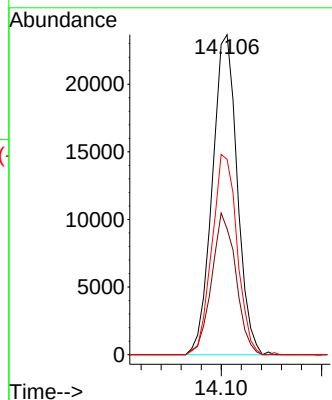
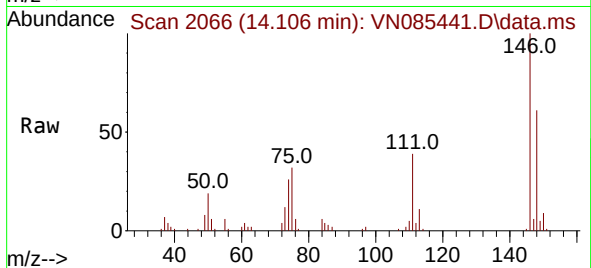
Tgt Ion:146 Resp: 40726

Ion Ratio Lower Upper

146 100

111 42.9 21.7 65.1

148 62.9 31.4 94.2



#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

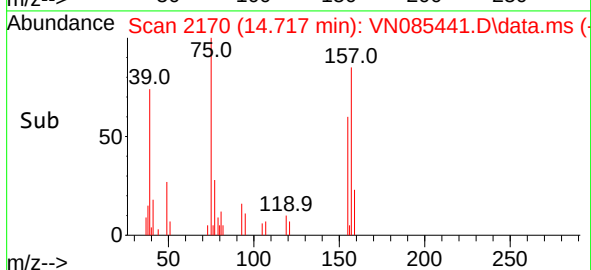
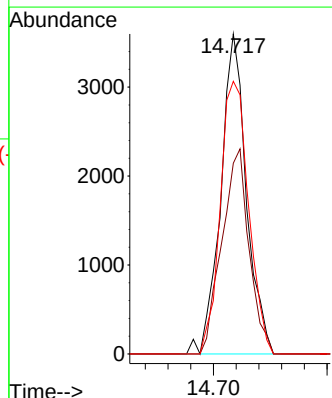
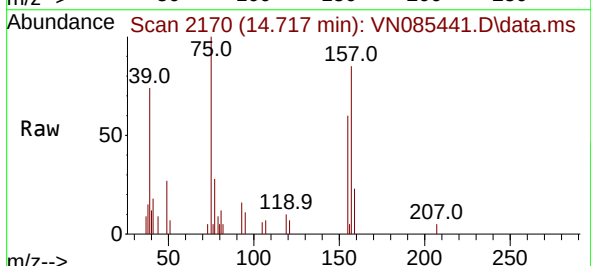
Tgt Ion: 75 Resp: 5639

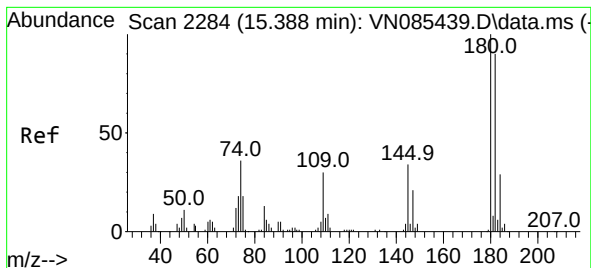
Ion Ratio Lower Upper

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

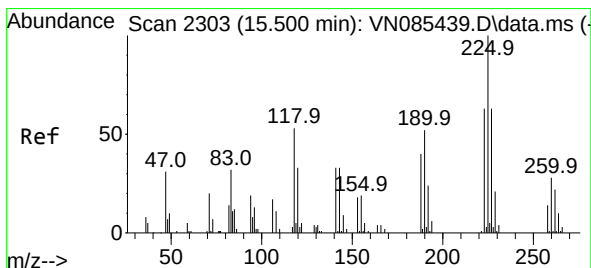
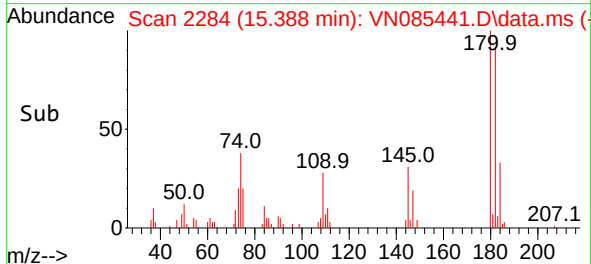
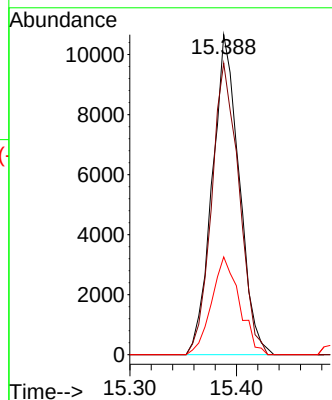
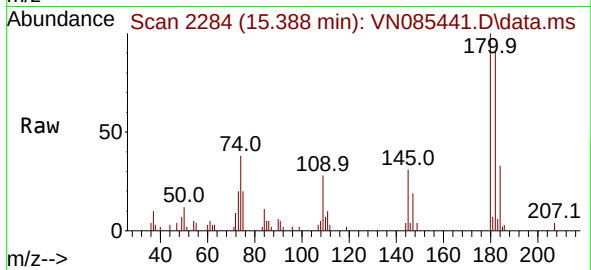
Tgt Ion:180 Resp: 18720

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

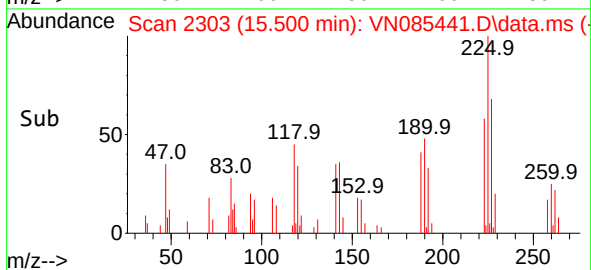
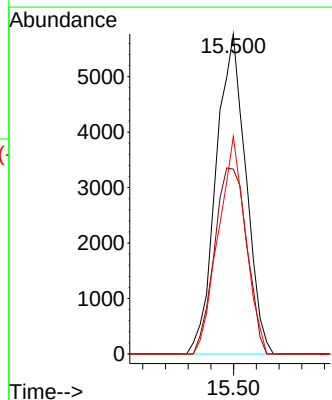
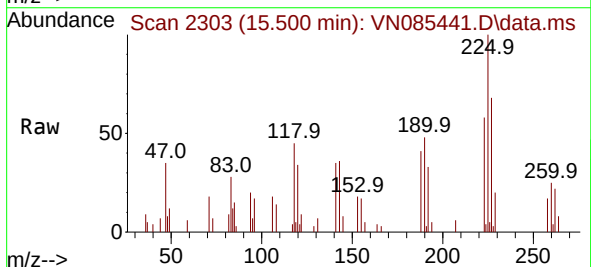
Tgt Ion:225 Resp: 10491

Ion Ratio Lower Upper

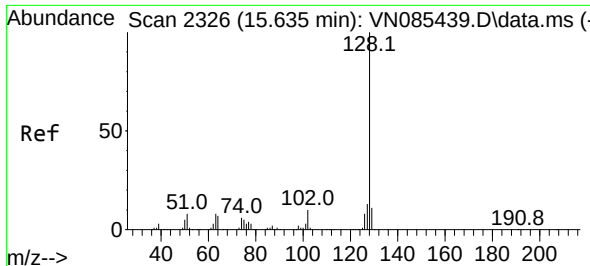
225 100

223 63.3 30.7 92.1

227 62.1 30.9 92.5



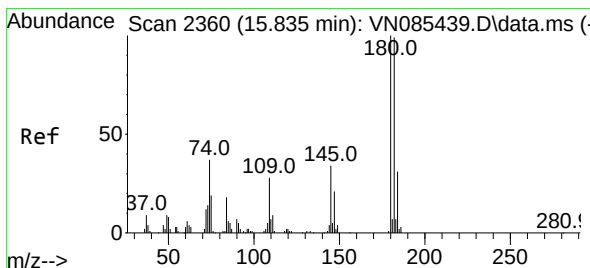
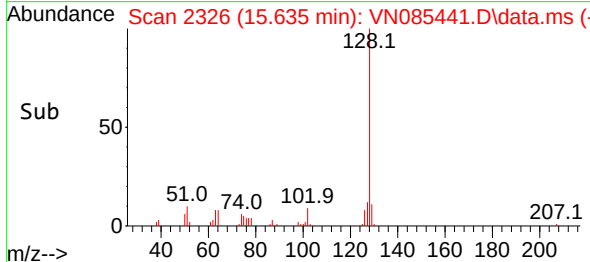
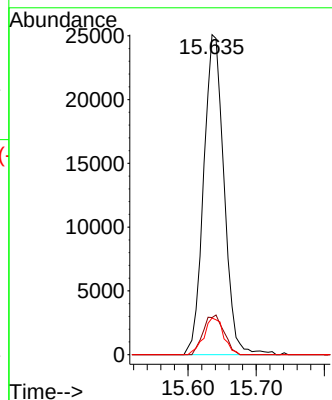
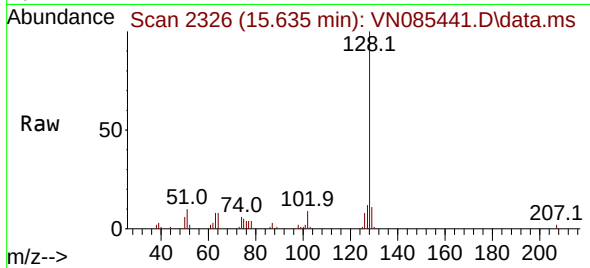




#95  
Naphthalene  
Concen: 8.717 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. 0.000 min  
Lab File: VN085441.D  
Acq: 14 Jan 2025 16:07

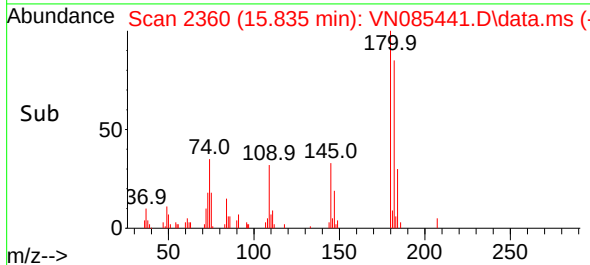
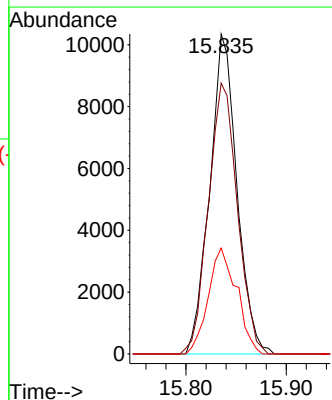
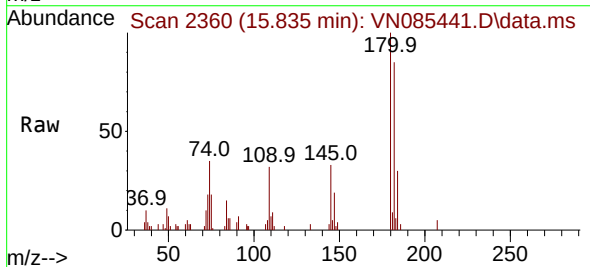
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

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 : 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) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| 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       |

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Acq On : 14 Jan 2025 16:31  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 8 Sample Multiplier: 1

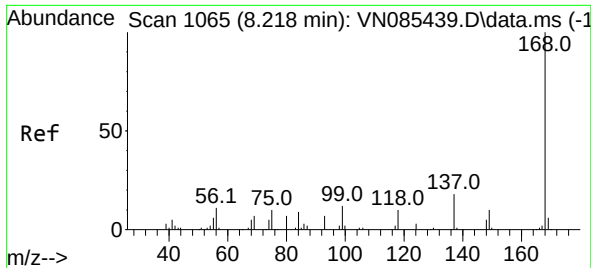
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MSVOA\_N  
ClientSampleId :  
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 01:28:51 2025  
Response via : Initial Calibration

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

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

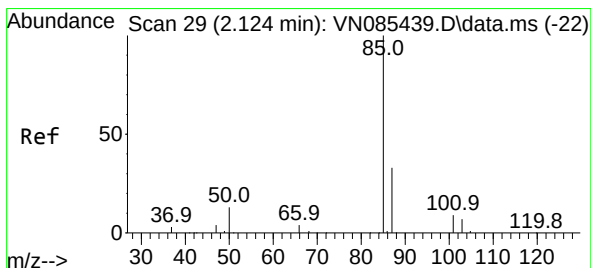
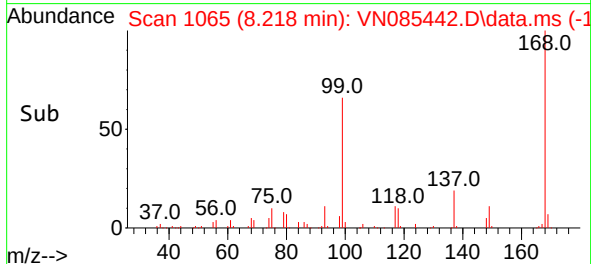
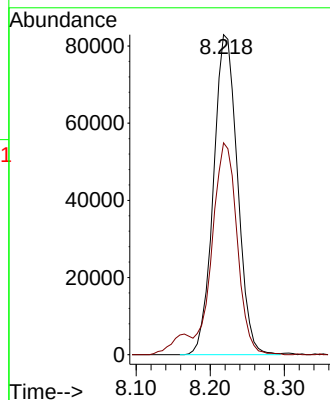
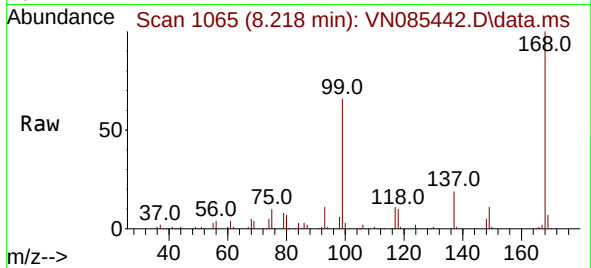




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

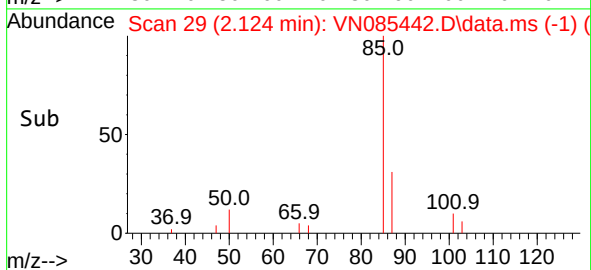
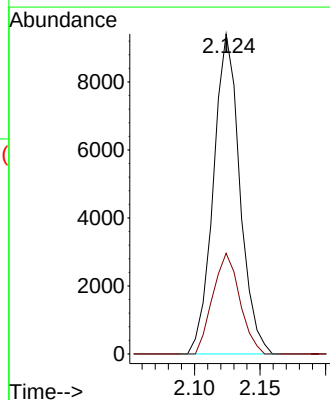
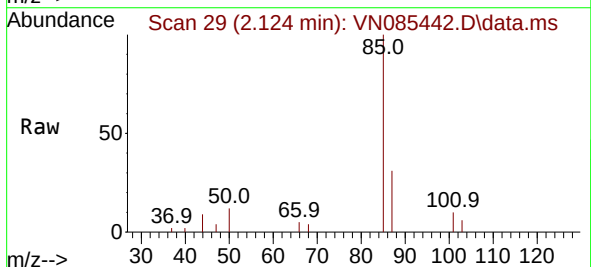
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ClientSampleId :  
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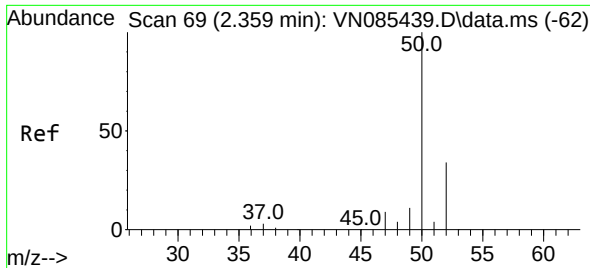
Tgt Ion:168 Resp: 186556  
Ion Ratio Lower Upper  
168 100  
99 65.9 53.6 80.4



#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

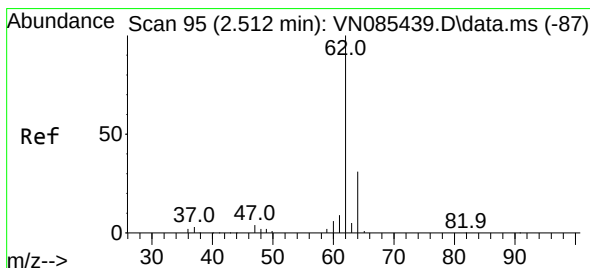
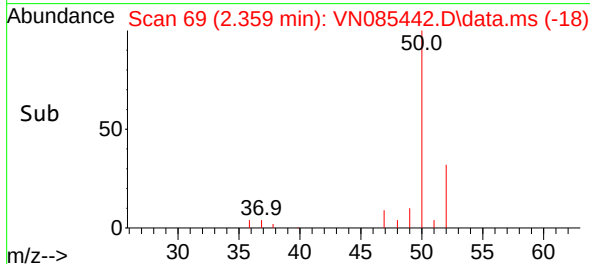
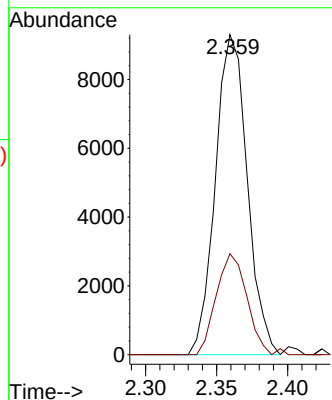
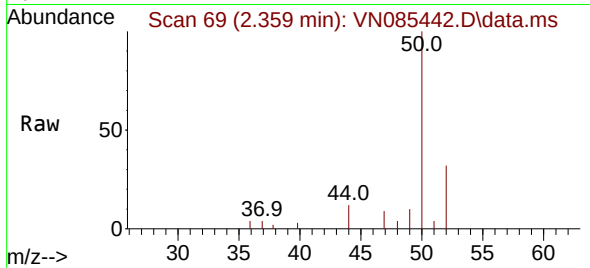




#3  
Chloromethane  
Concen: 5.311 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

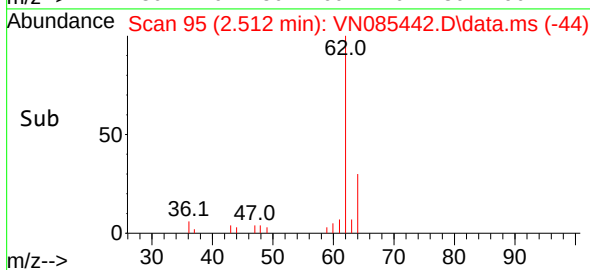
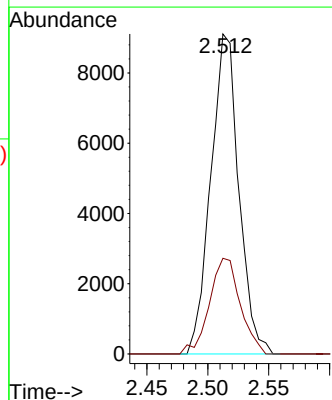
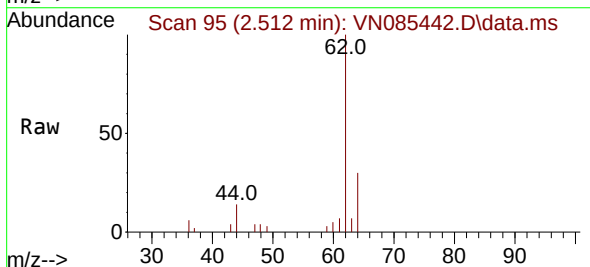
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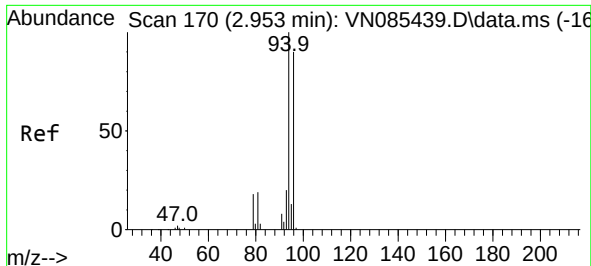
Tgt Ion: 50 Resp: 14526  
Ion Ratio Lower Upper  
50 100  
52 31.6 27.0 40.6



#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

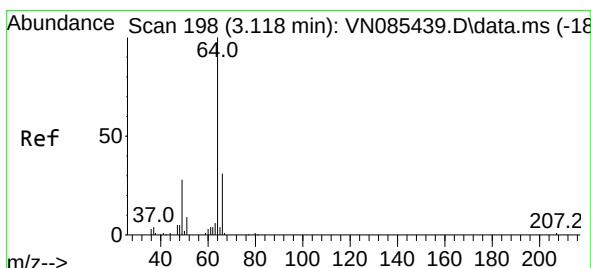
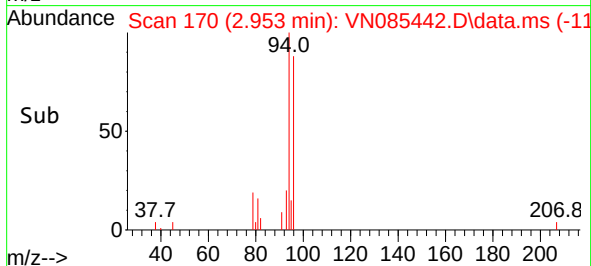
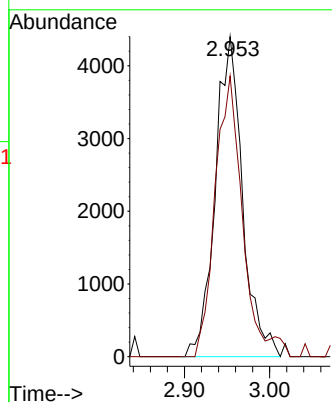
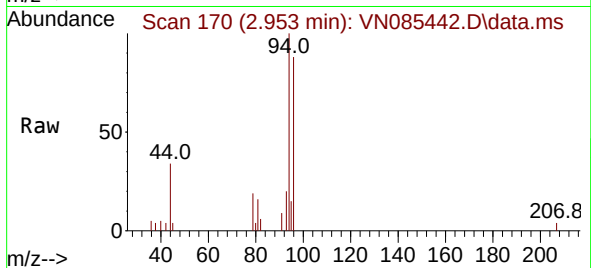




#5  
Bromomethane  
Concen: 5.895 ug/l  
RT: 2.953 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

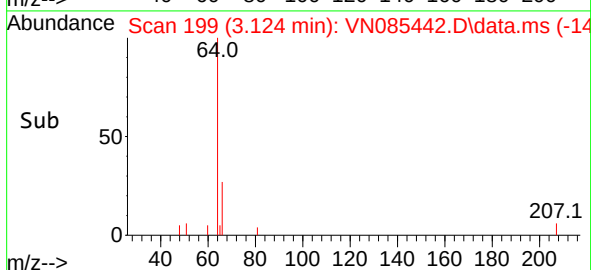
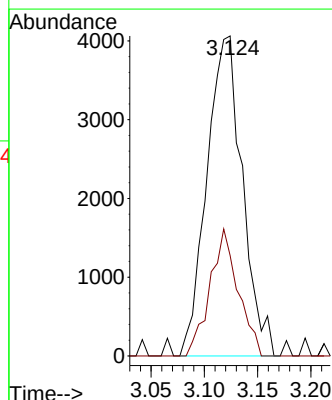
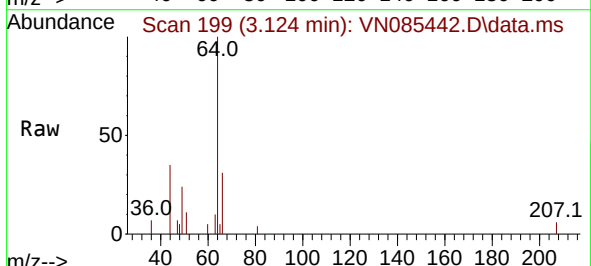
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion: 94 Resp: 9788  
Ion Ratio Lower Upper  
94 100  
96 87.7 71.8 107.6

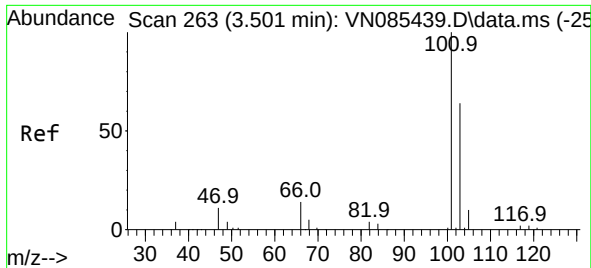


#6  
Chloroethane  
Concen: 5.411 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

Tgt Ion: 64 Resp: 9430  
Ion Ratio Lower Upper  
64 100  
66 31.4 24.6 36.8



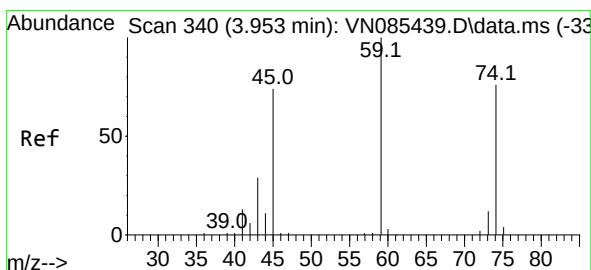
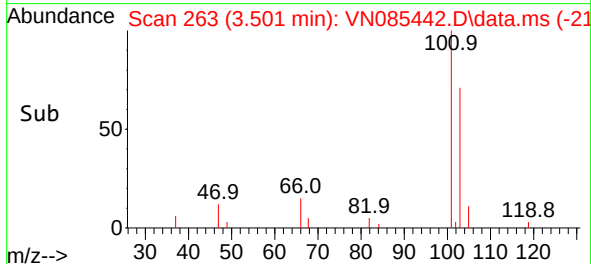
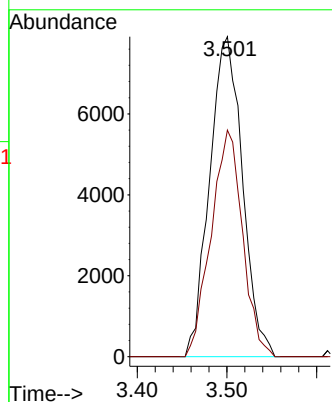
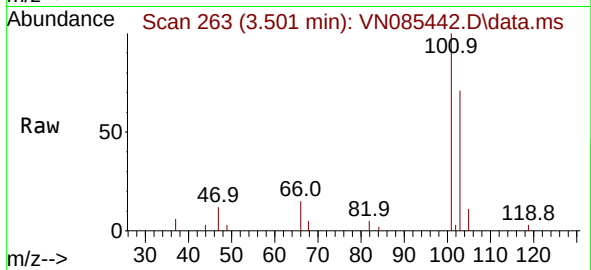




#7  
 Trichlorofluoromethane  
 Concen: 5.039 ug/l  
 RT: 3.501 min Scan# 209  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

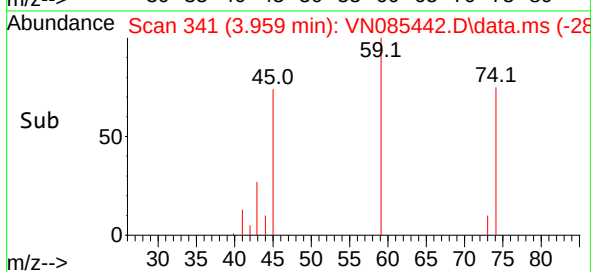
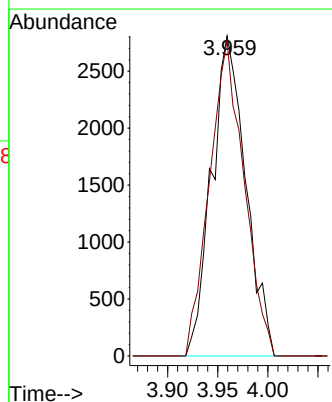
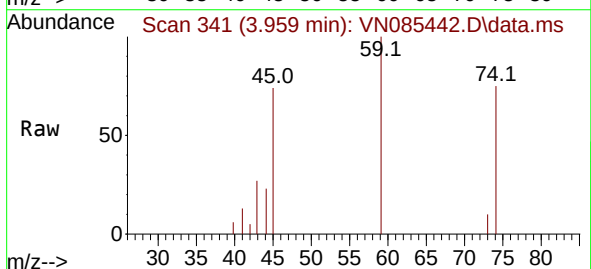
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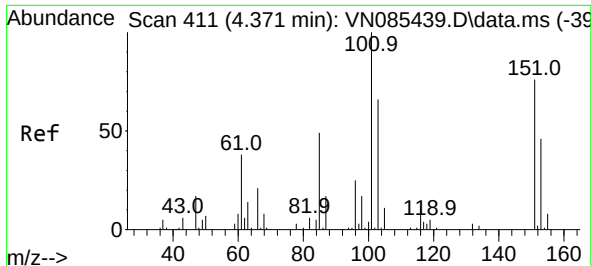
Tgt Ion:101 Resp: 20098  
 Ion Ratio Lower Upper  
 101 100  
 103 70.8 51.4 77.2



#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

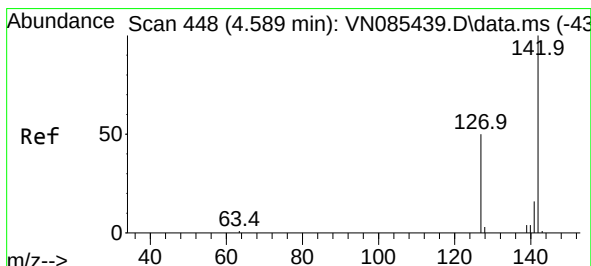
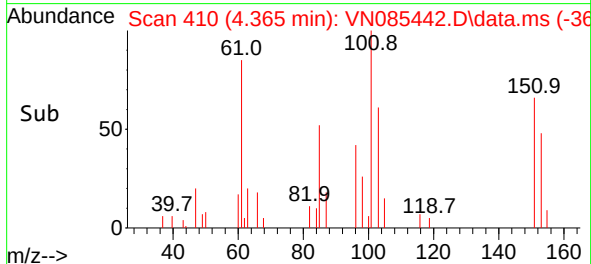
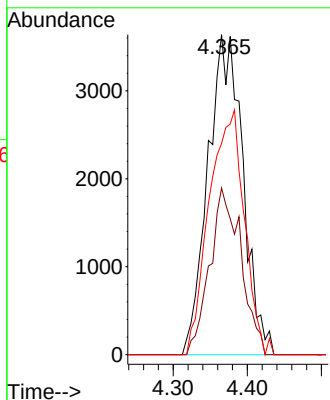
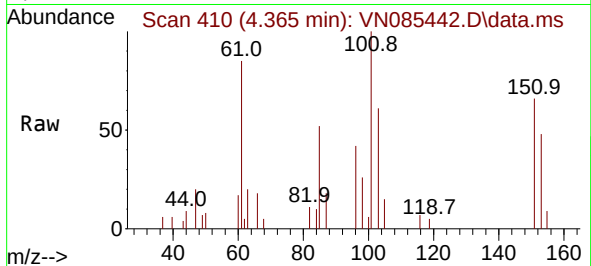




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 5.305 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

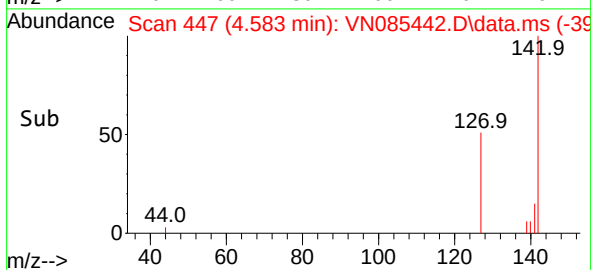
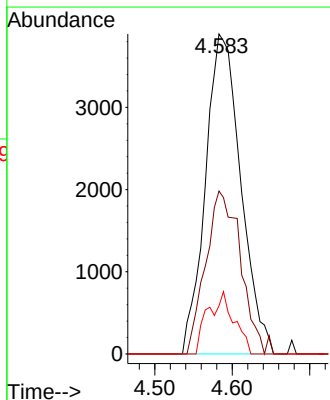
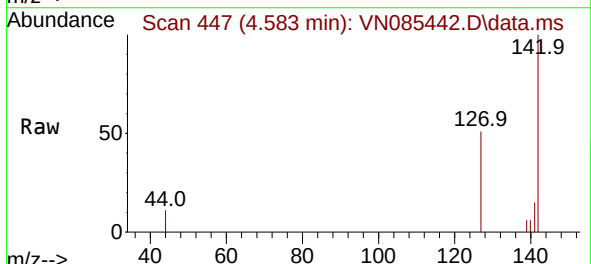
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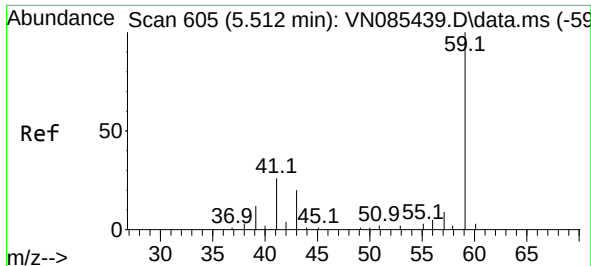
Tgt Ion:101 Resp: 11917  
Ion Ratio Lower Upper  
101 100  
85 46.5 37.8 56.8  
151 76.7 58.8 88.2



#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

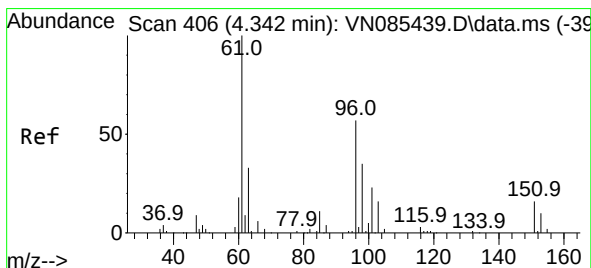
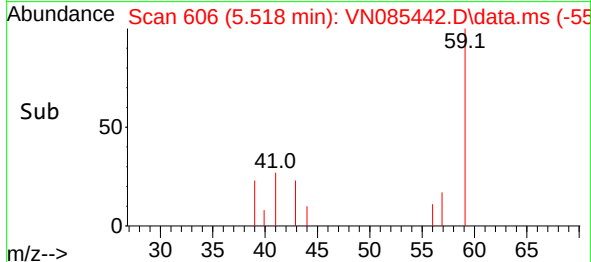
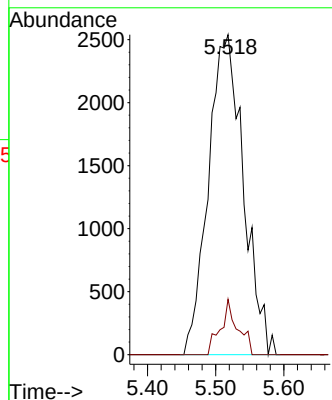
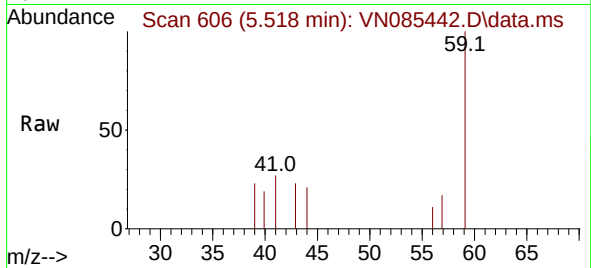




#11  
Tert butyl alcohol  
Concen: 26.318 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

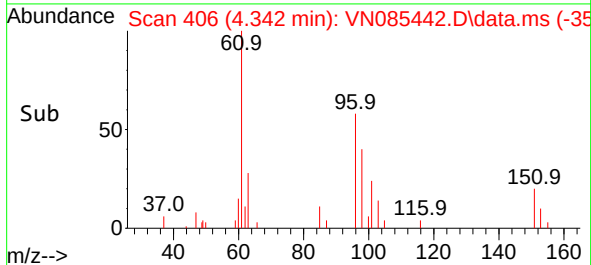
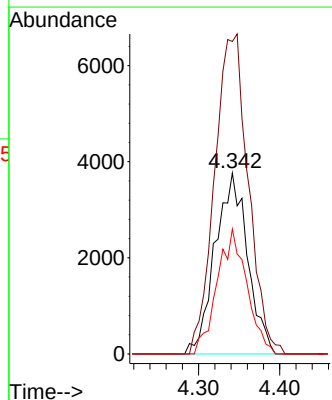
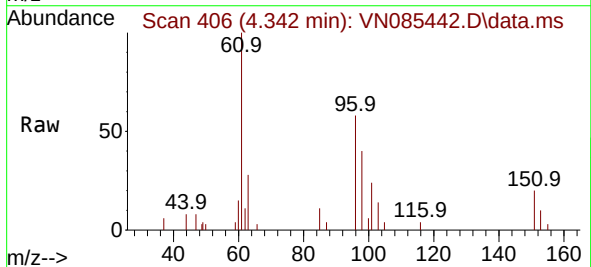
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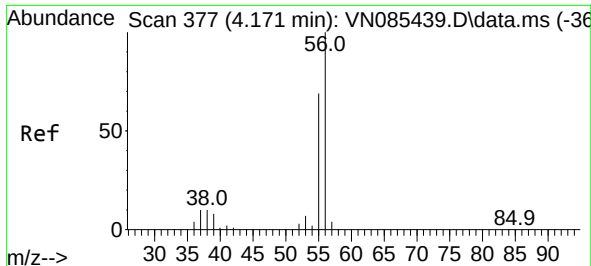
Tgt Ion: 59 Resp: 9075  
Ion Ratio Lower Upper  
59 100  
57 8.5 8.6 13.0#



#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 :

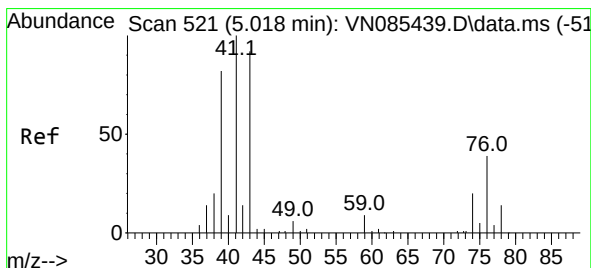
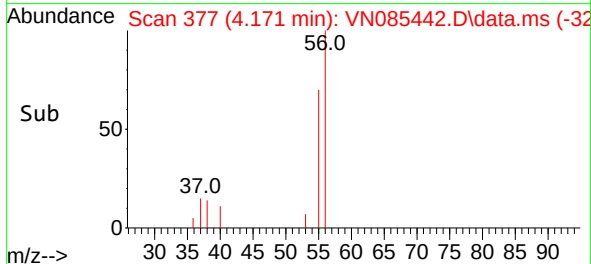
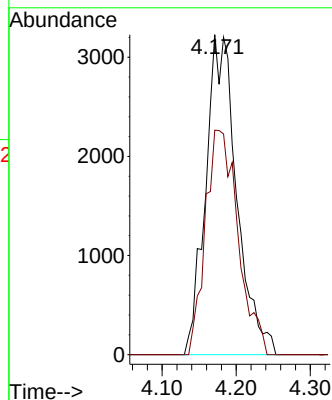
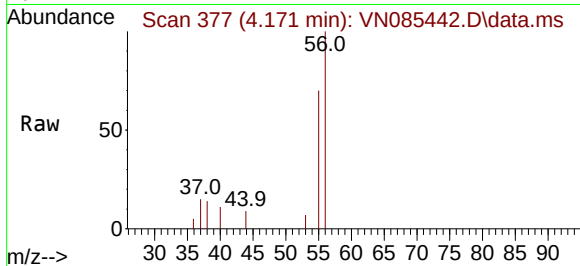
VSTDICC005

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

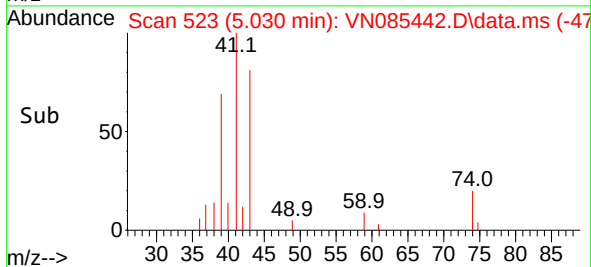
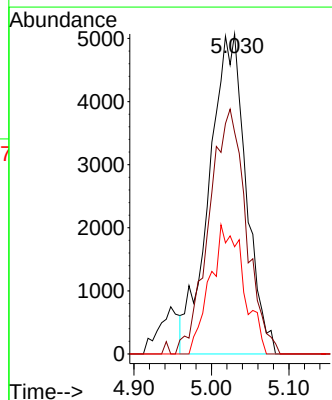
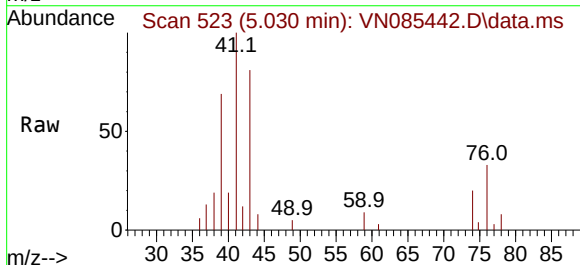
Tgt Ion: 41 Resp: 16741

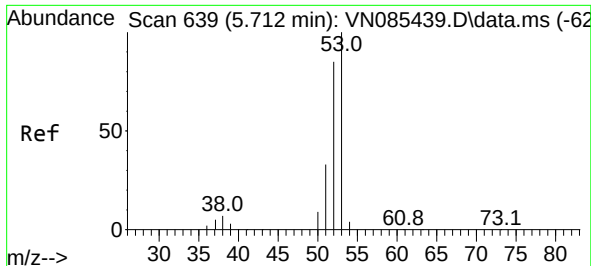
Ion Ratio Lower Upper

41 100

39 77.4 64.4 96.6

76 36.6 30.5 45.7

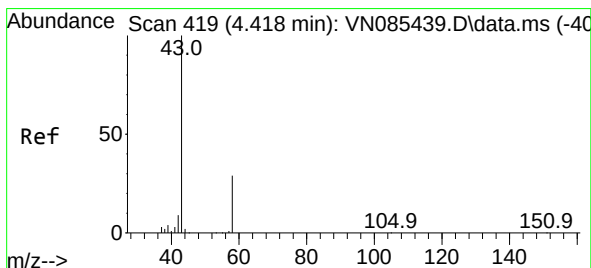
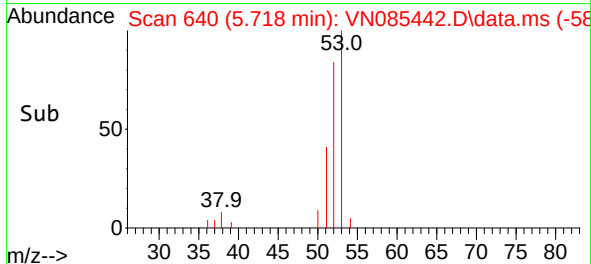
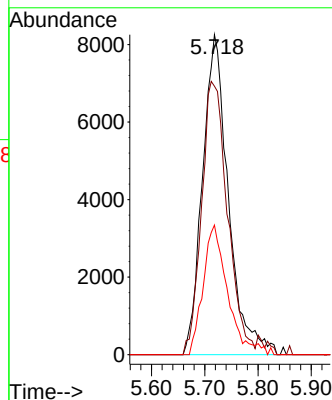
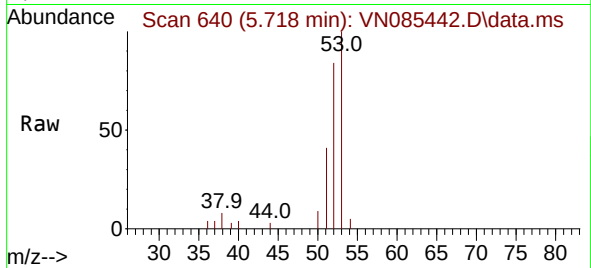




#15  
Acrylonitrile  
Concen: 25.445 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

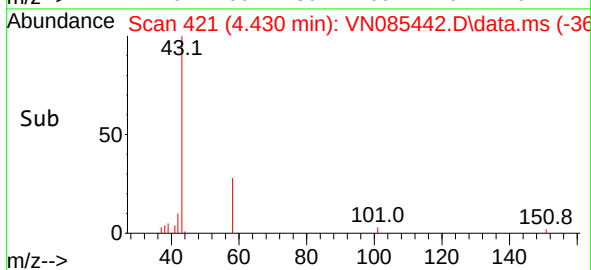
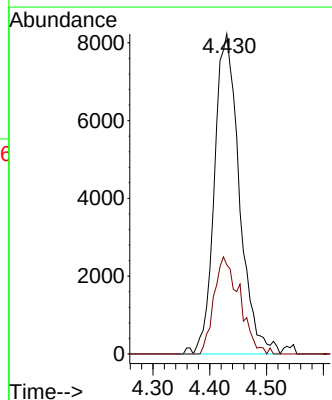
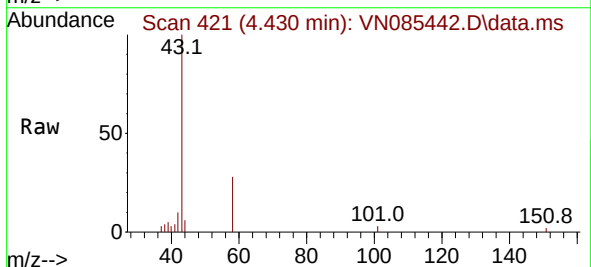
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

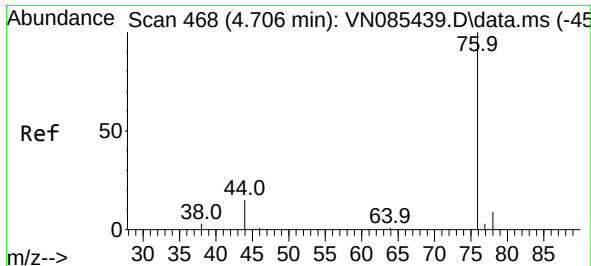
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 53    | Resp: | 27869 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 85.5  | 65.5  | 98.3  |
| 51       | 38.5  | 29.8  | 44.8  |



#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  |

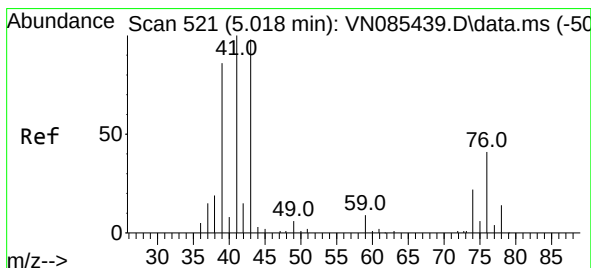
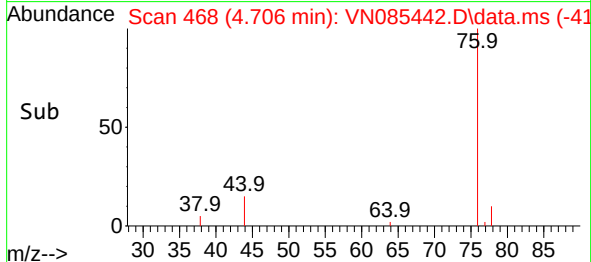
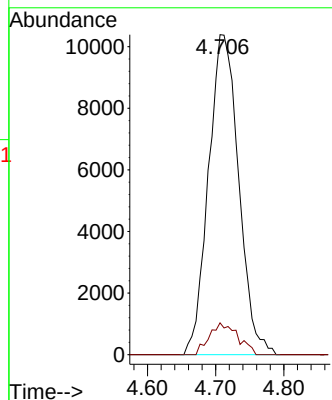
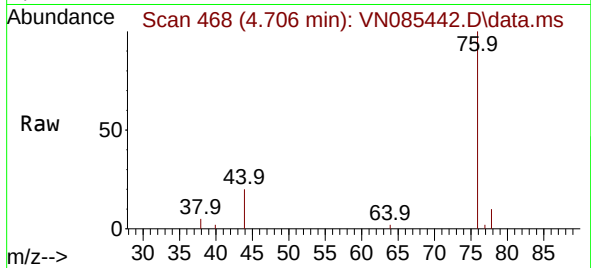




#17  
Carbon Disulfide  
Concen: 5.202 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

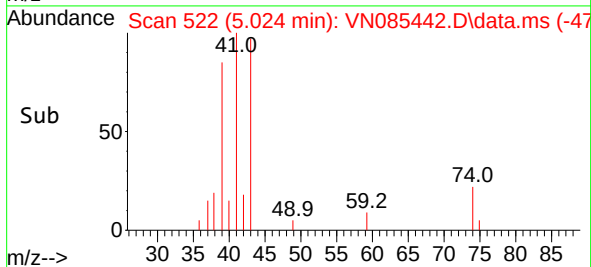
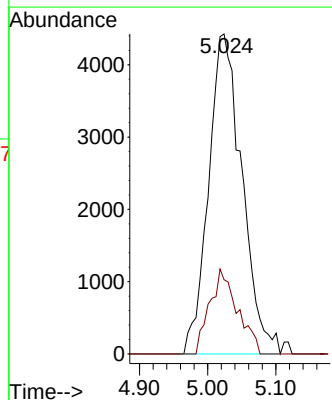
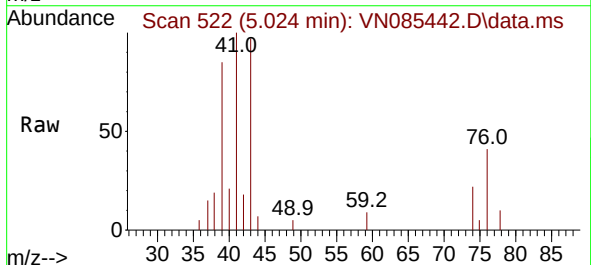
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

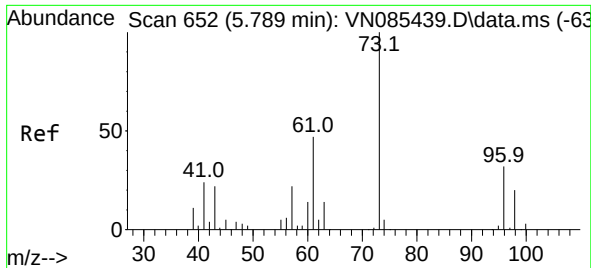
Tgt Ion: 76 Resp: 32068  
Ion Ratio Lower Upper  
76 100  
78 9.9 6.9 10.3



#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

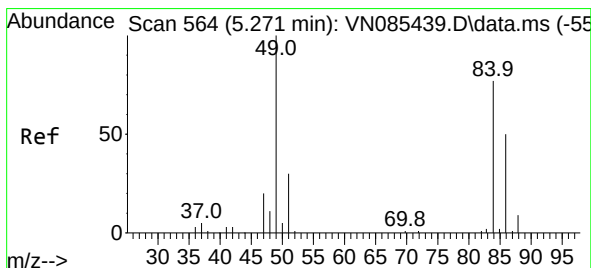
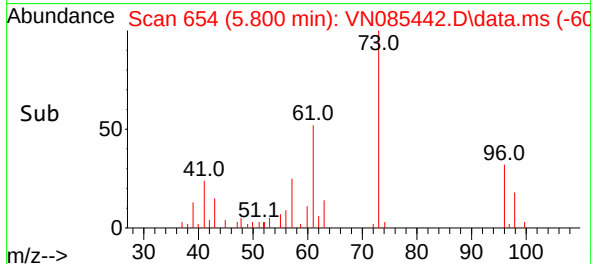
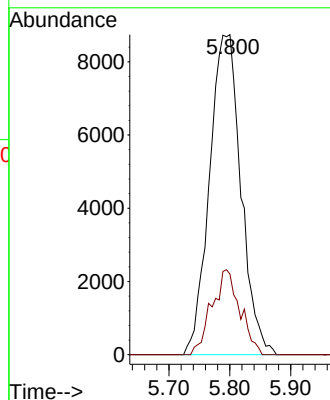
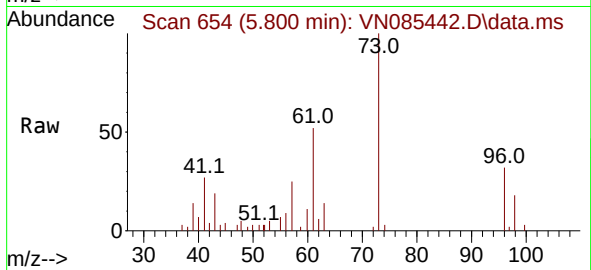




#19  
Methyl tert-butyl Ether  
Concen: 4.836 ug/l  
RT: 5.800 min Scan# 61  
Delta R.T. 0.012 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

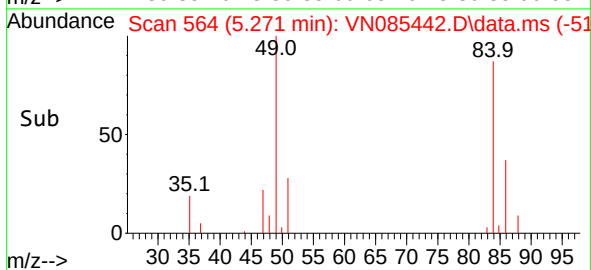
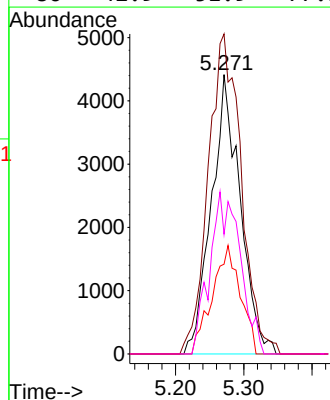
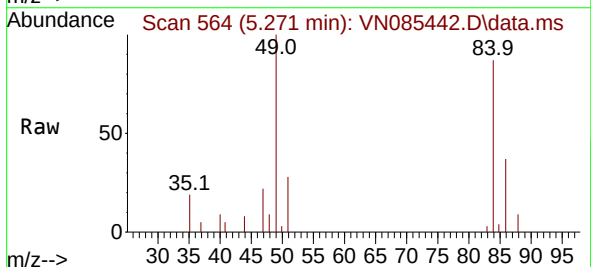
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

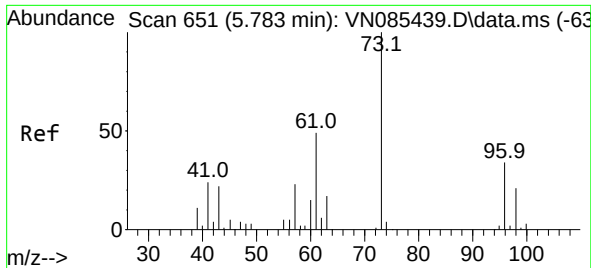
Tgt Ion: 73 Resp: 31439  
Ion Ratio Lower Upper  
73 100  
57 25.2 17.8 26.8



#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#

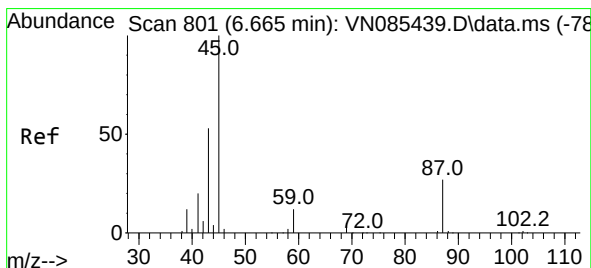
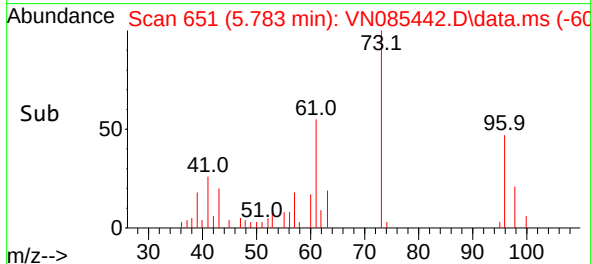
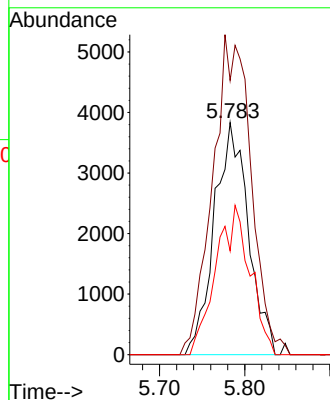
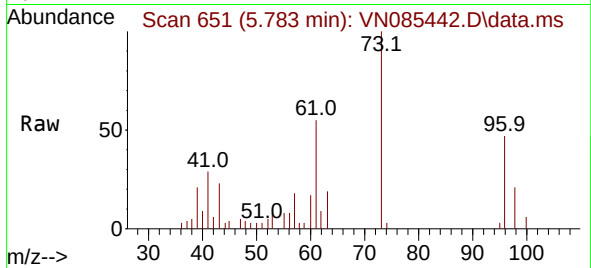




#21  
trans-1,2-Dichloroethene  
Concen: 4.960 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

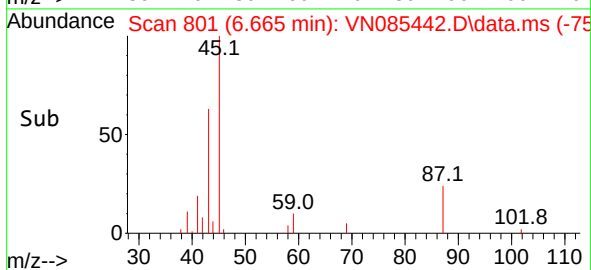
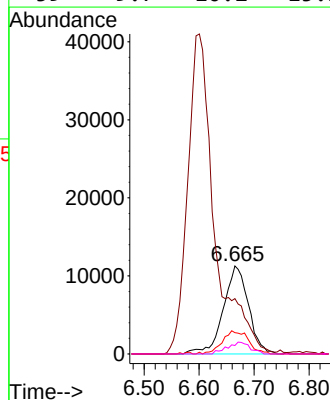
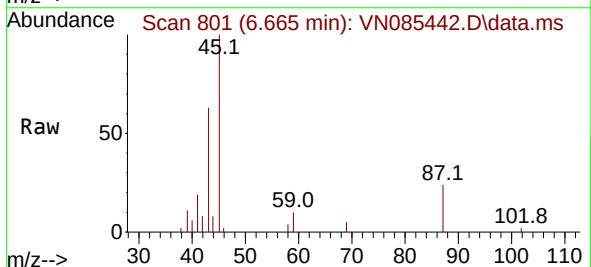
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

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#

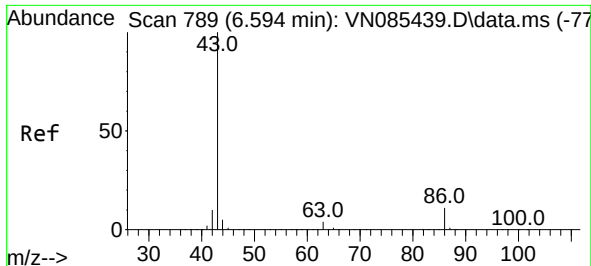


#22  
Diisopropyl ether  
Concen: 4.962 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

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#



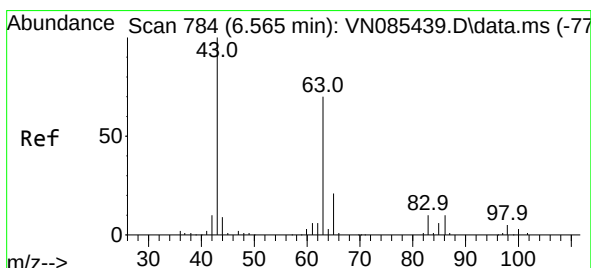
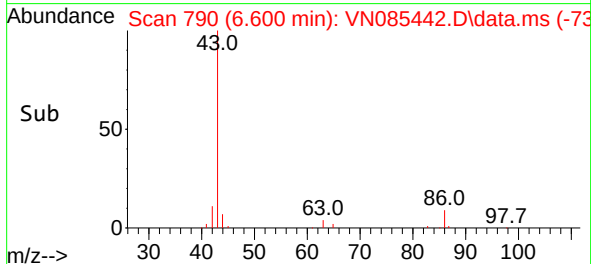
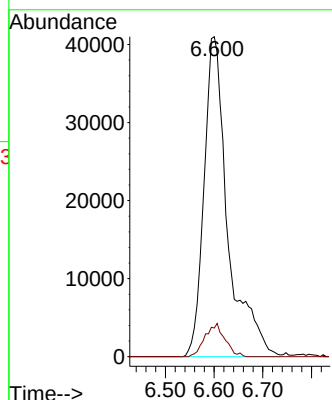
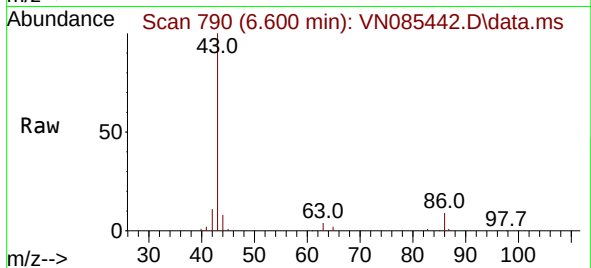




#23  
 Vinyl Acetate  
 Concen: 27.533 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

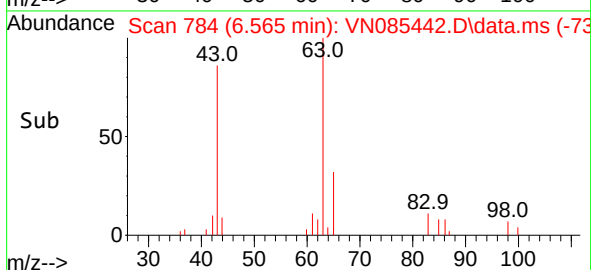
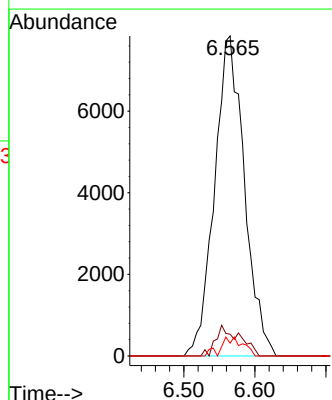
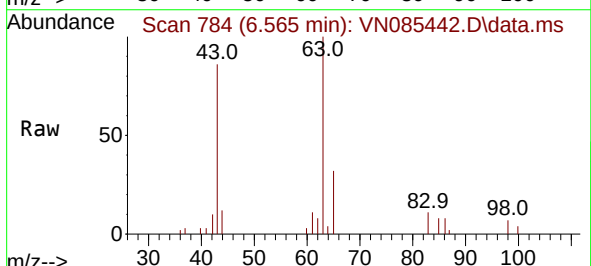
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

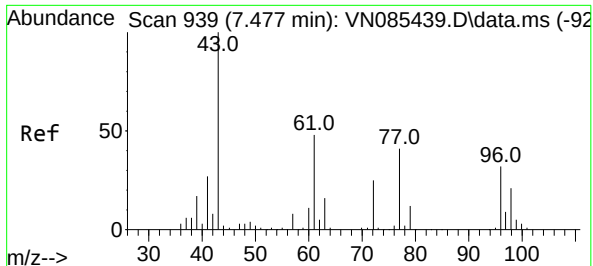
Tgt Ion: 43 Resp: 139425  
 Ion Ratio Lower Upper  
 43 100  
 86 9.0 8.4 12.6



#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

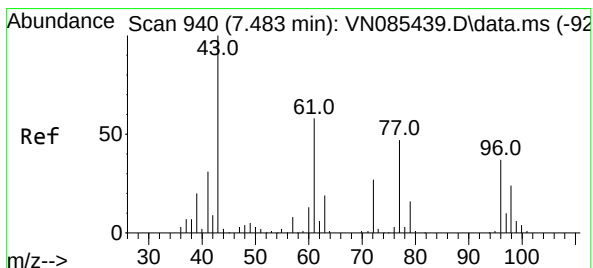
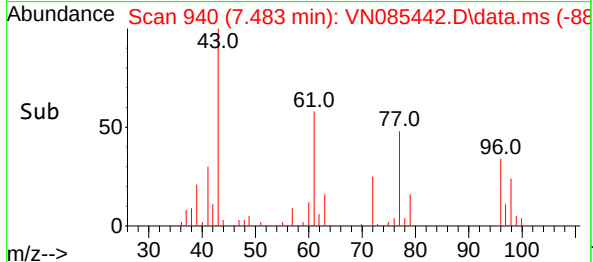
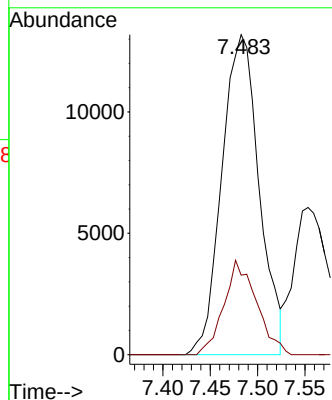
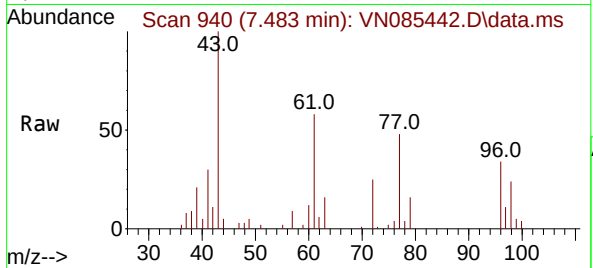




#25  
2-Butanone  
Concen: 25.231 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

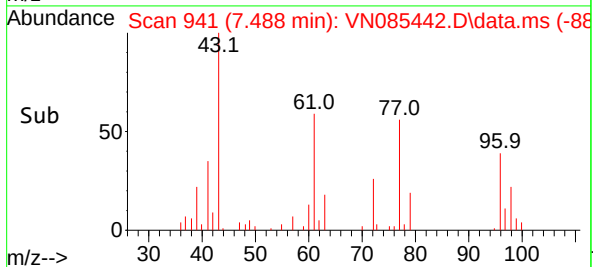
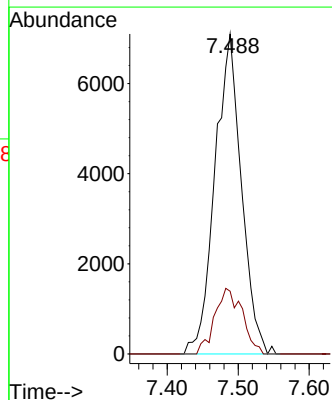
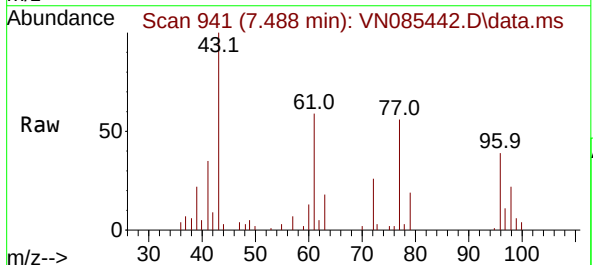
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

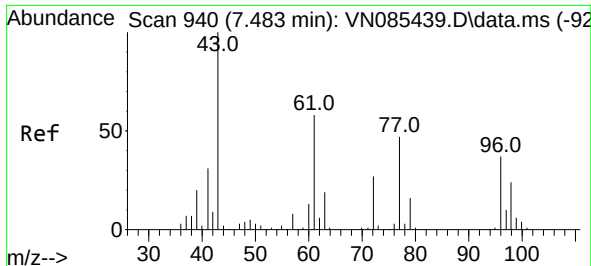
Tgt Ion: 43 Resp: 36127  
Ion Ratio Lower Upper  
43 100  
72 24.9 20.2 30.4



#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



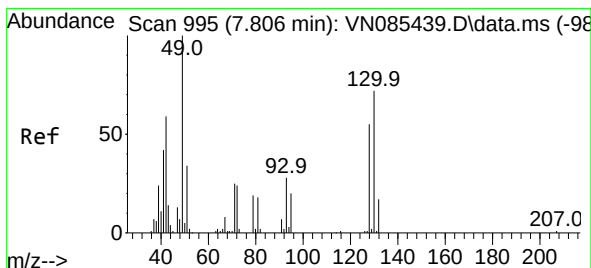
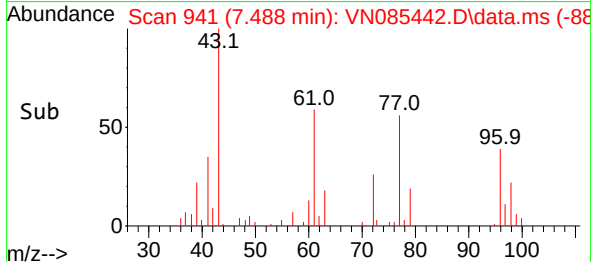
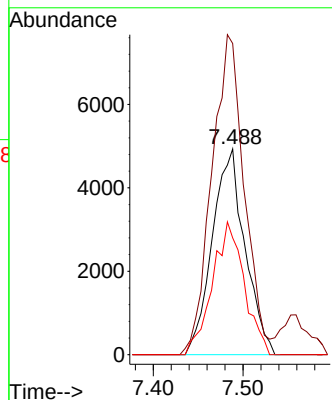
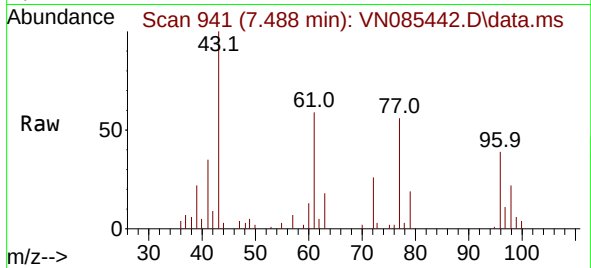


#27  
 cis-1,2-Dichloroethene  
 Concen: 4.951 ug/l  
 RT: 7.488 min Scan# 941  
 Delta R.T. 0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Tgt Ion: 96 Resp: 12477  

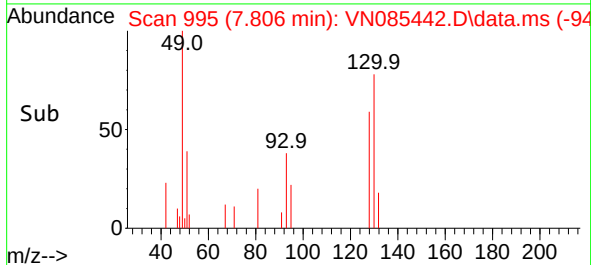
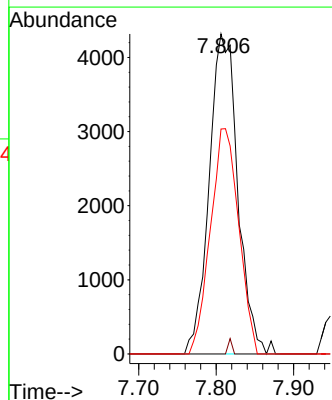
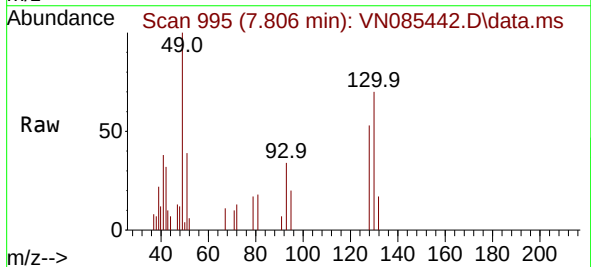
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 154.5 | 0.0   | 311.8 |
| 98  | 62.8  | 0.0   | 126.0 |

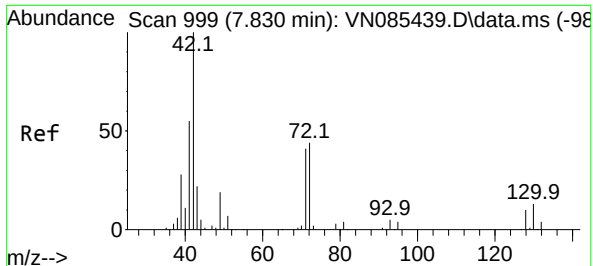


#28  
 Bromochloromethane  
 Concen: 5.424 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

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  |

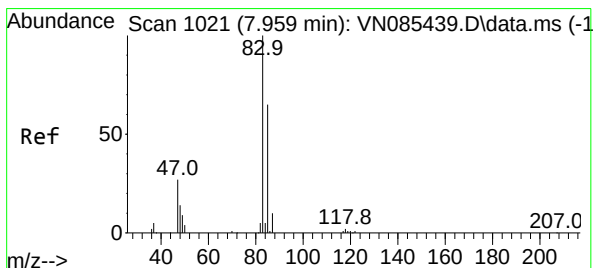
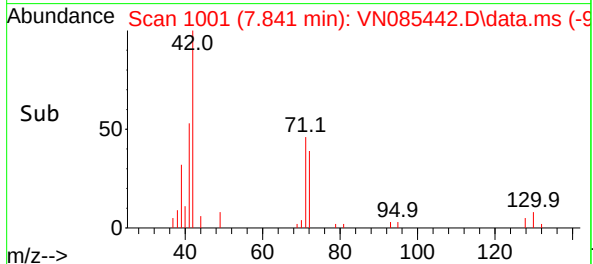
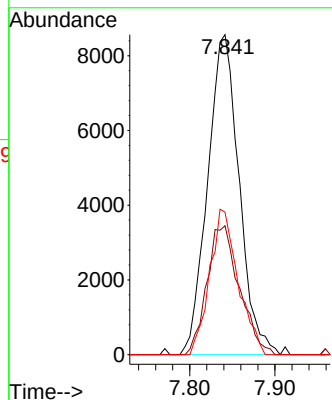
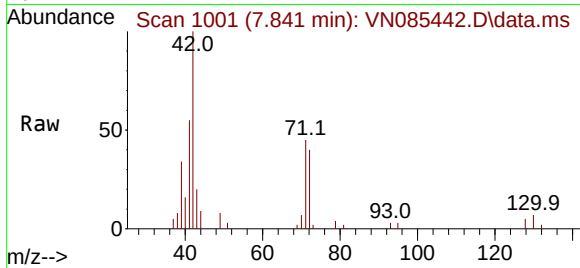




#29  
Tetrahydrofuran  
Concen: 24.215 ug/l  
RT: 7.841 min Scan# 1001  
Delta R.T. 0.012 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

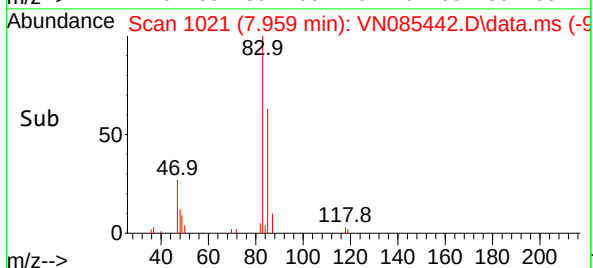
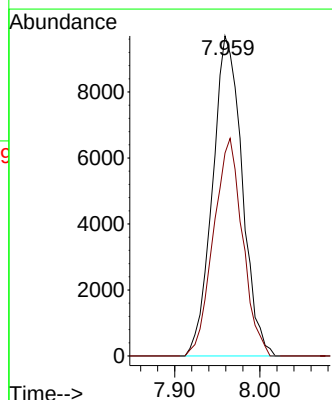
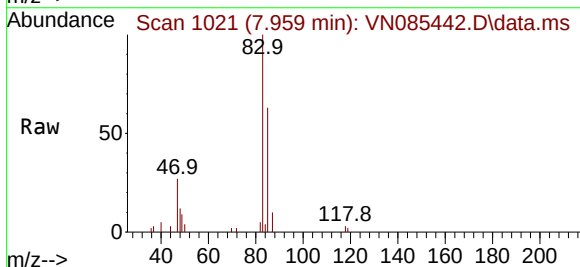
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

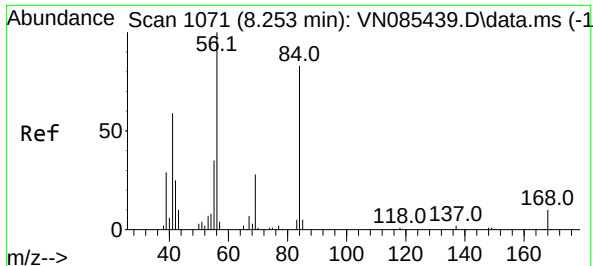
Tgt Ion: 42 Resp: 21983  
Ion Ratio Lower Upper  
42 100  
72 41.5 34.2 51.2  
71 41.0 32.5 48.7



#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

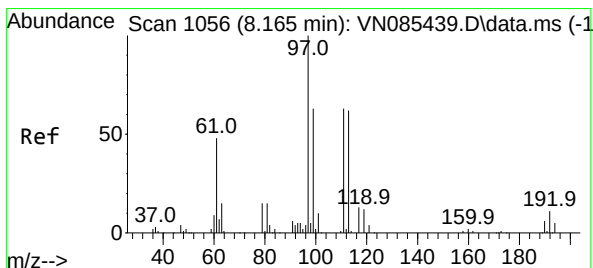
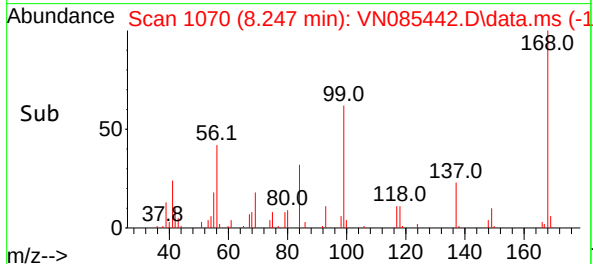
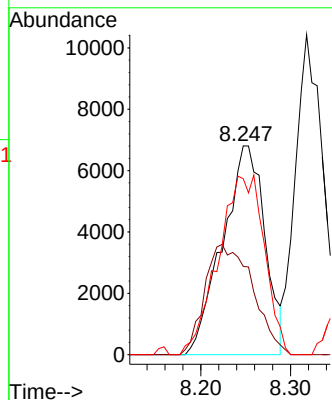
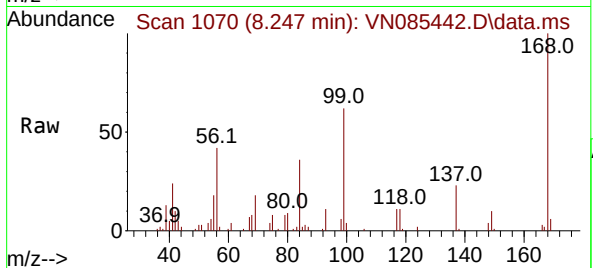




#31  
Cyclohexane  
Concen: 5.846 ug/l  
RT: 8.247 min Scan# 1070  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

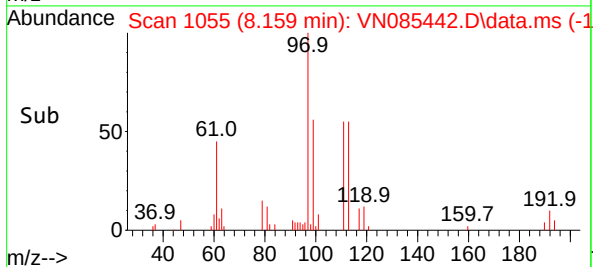
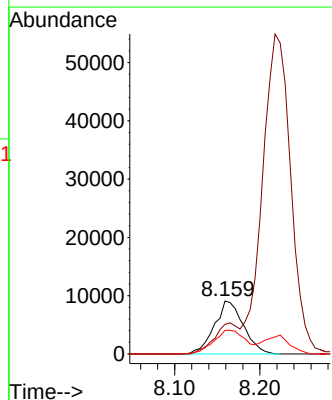
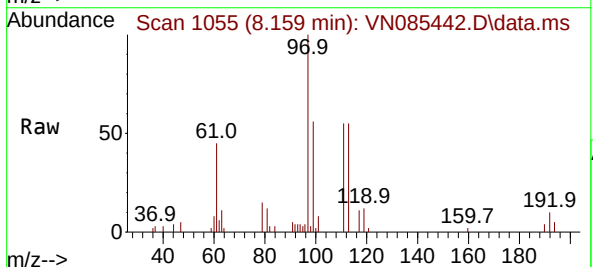
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

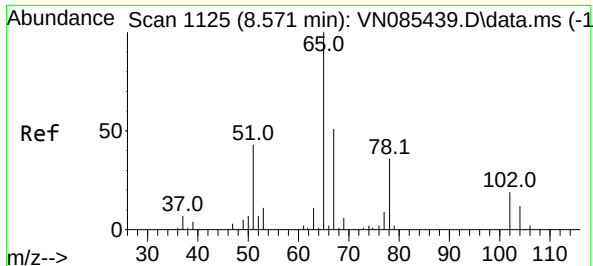
Tgt Ion: 56 Resp: 22343  
Ion Ratio Lower Upper  
56 100  
69 42.3 22.2 33.4#  
84 84.3 66.4 99.6



#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 :

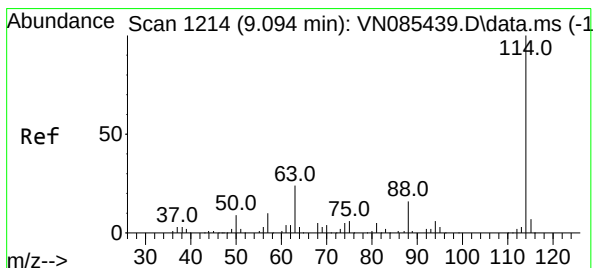
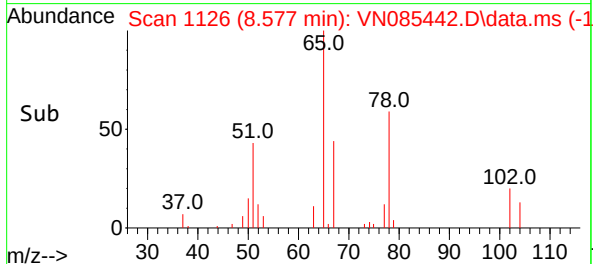
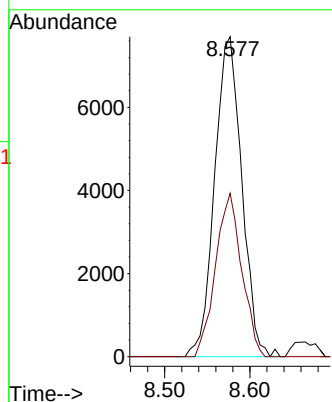
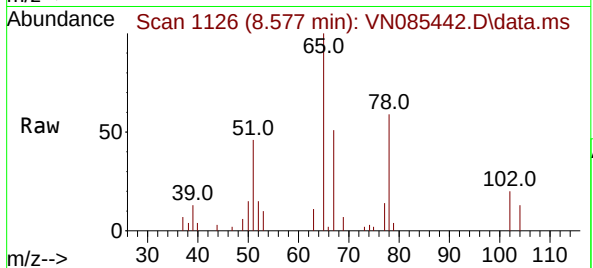
VSTDIC005

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

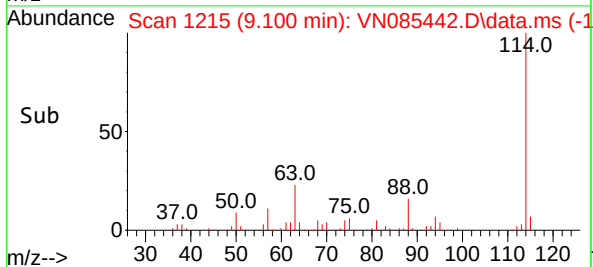
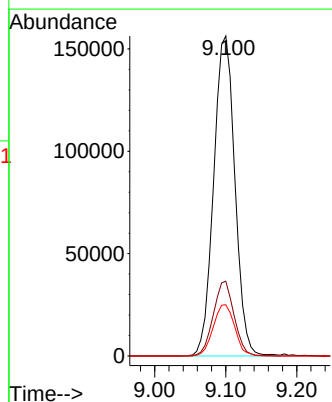
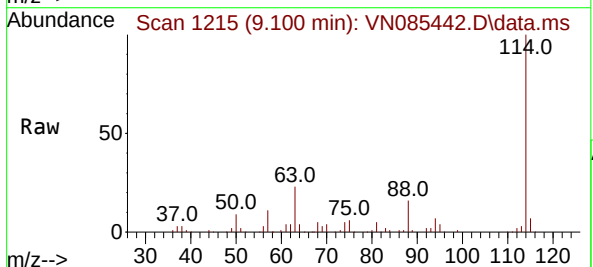
Tgt Ion: 114 Resp: 324413

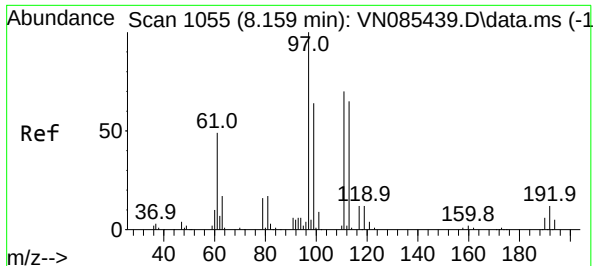
Ion Ratio Lower Upper

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

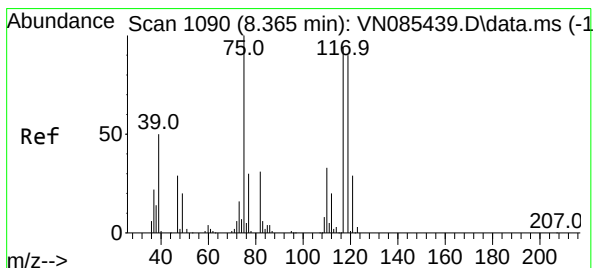
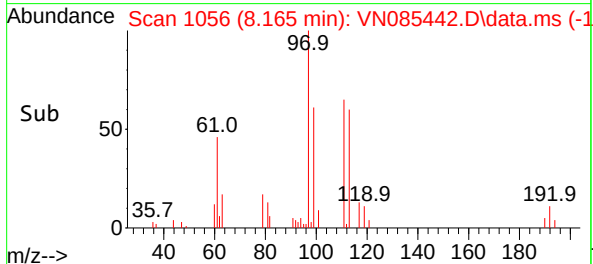
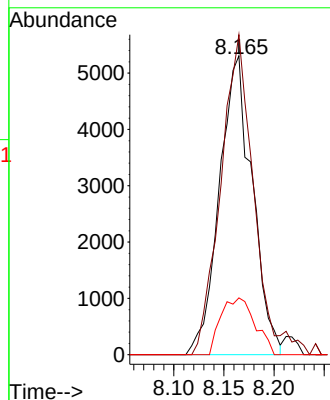
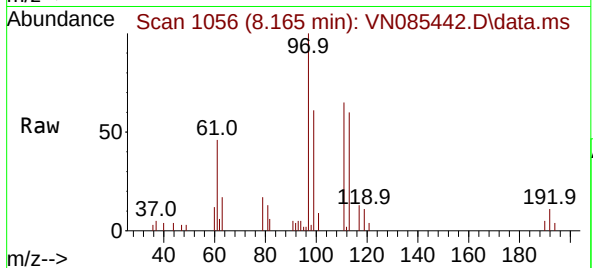
Tgt Ion:113 Resp: 12102

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

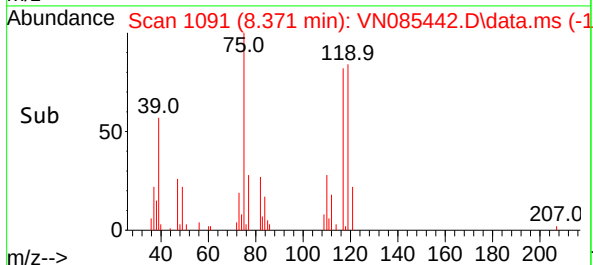
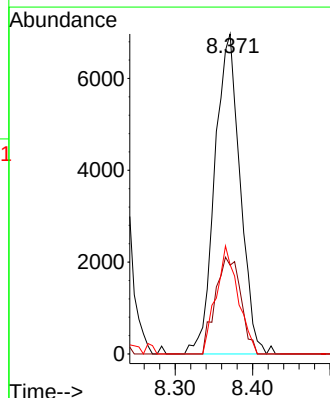
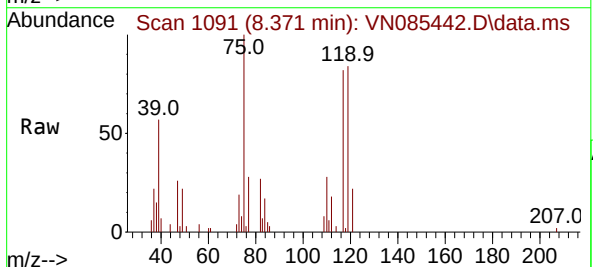
Tgt Ion: 75 Resp: 15886

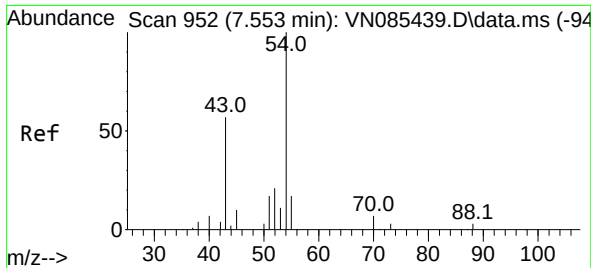
Ion Ratio Lower Upper

75 100

110 30.3 16.5 49.5

77 29.2 24.4 36.6

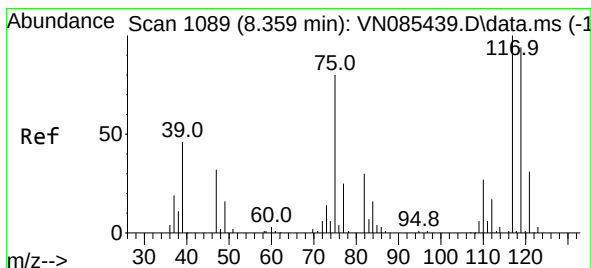
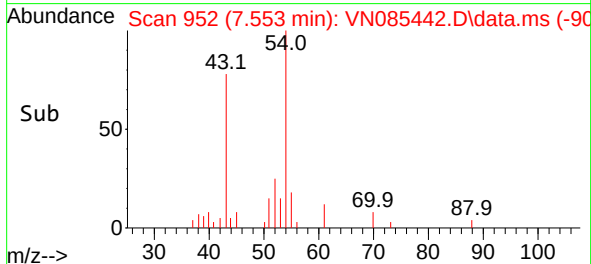
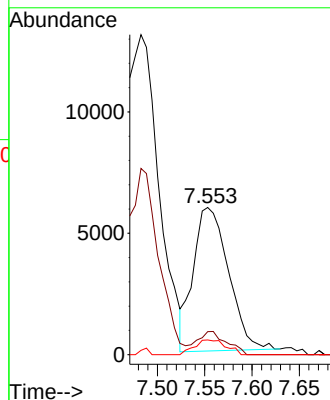
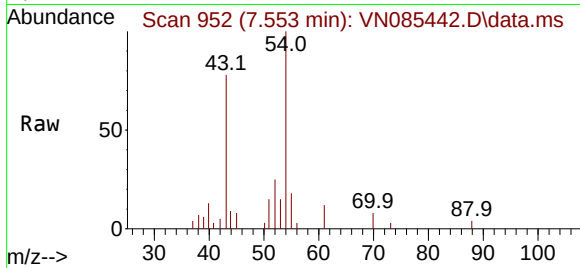




#37  
Ethyl Acetate  
Concen: 4.810 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

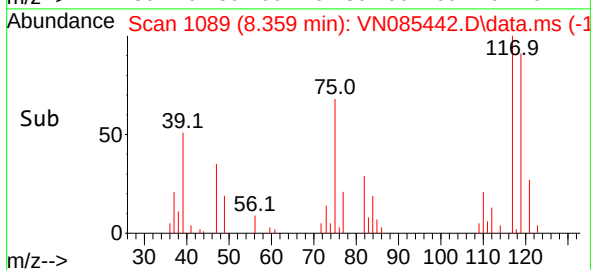
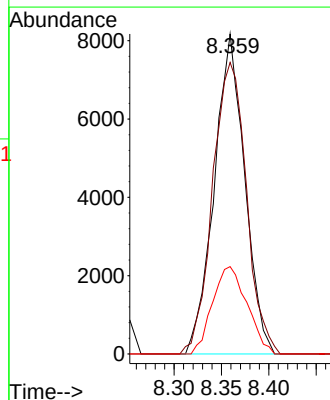
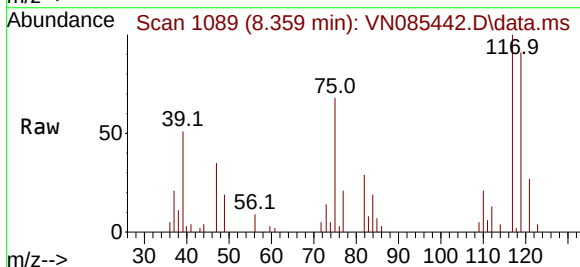
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

|             |                |
|-------------|----------------|
| 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   |

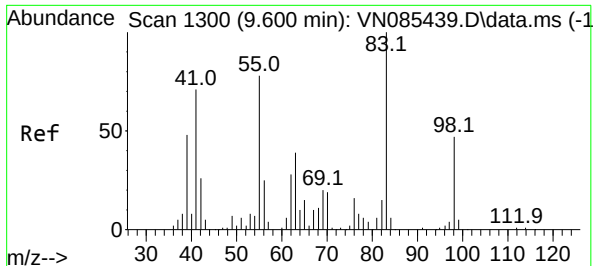


#38  
Carbon Tetrachloride  
Concen: 5.065 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

|              |                 |
|--------------|-----------------|
| 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  |



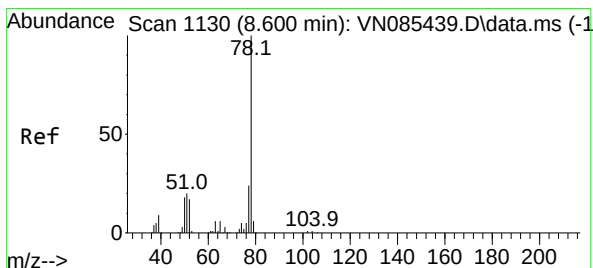
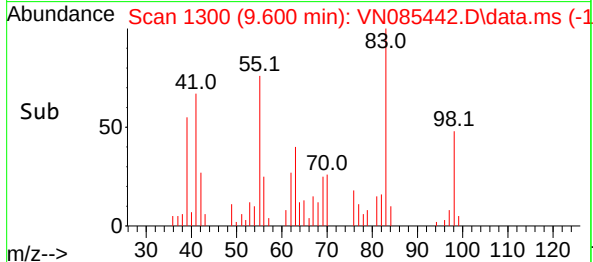
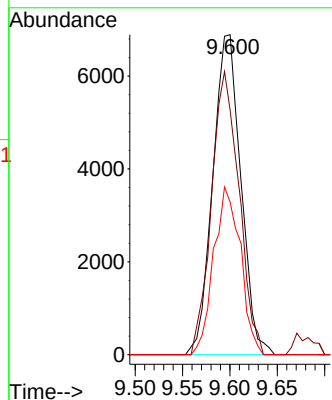
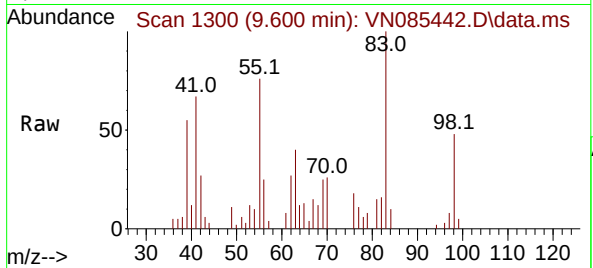




#39  
Methylcyclohexane  
Concen: 4.776 ug/l  
RT: 9.600 min Scan# 1130  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

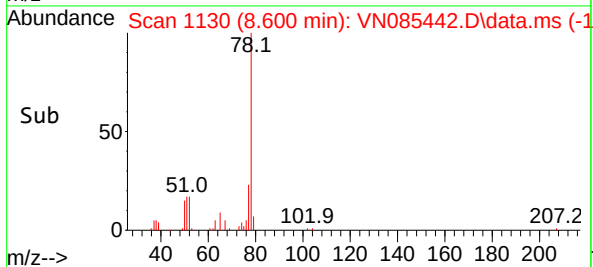
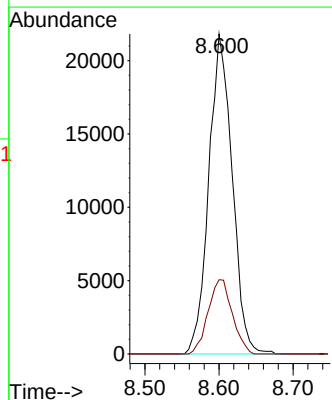
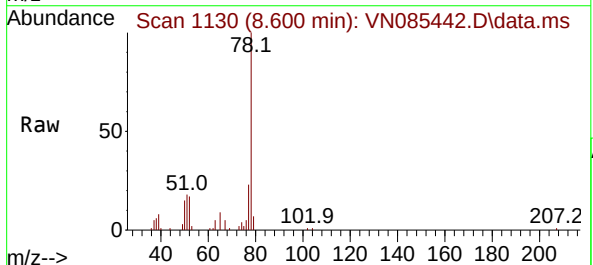
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

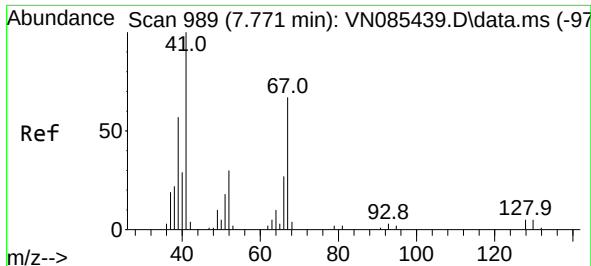
Tgt Ion: 83 Resp: 14175  
Ion Ratio Lower Upper  
83 100  
55 76.5 62.6 94.0  
98 47.7 37.7 56.5



#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

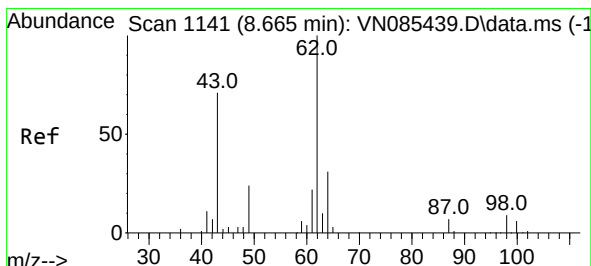
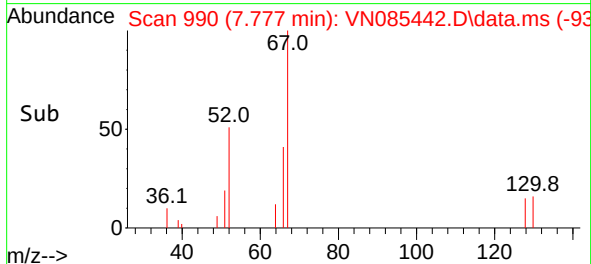
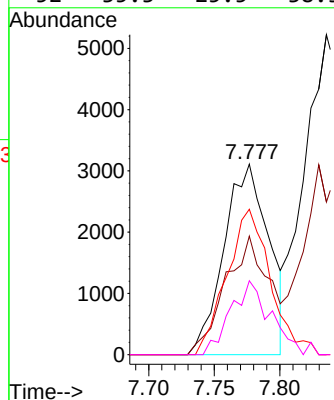
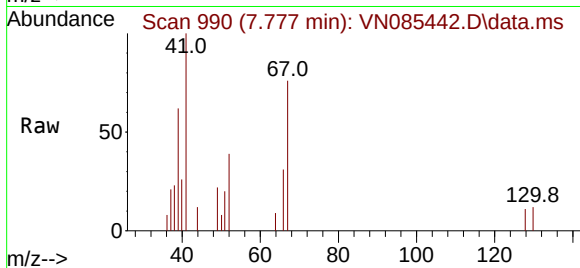




#41  
Methacrylonitrile  
Concen: 4.449 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

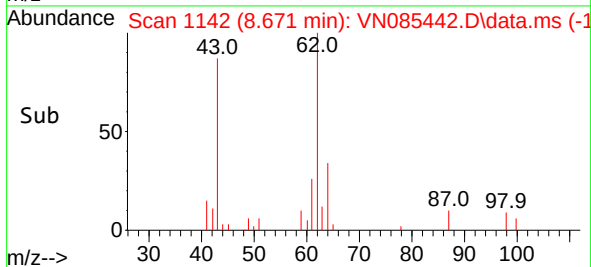
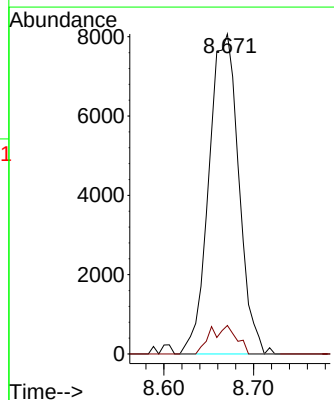
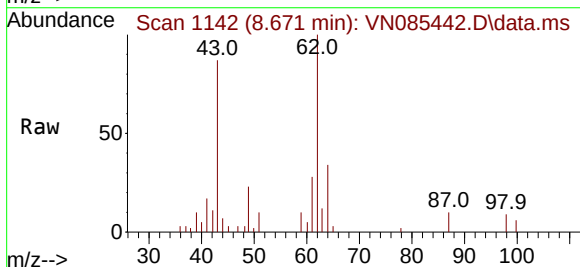
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

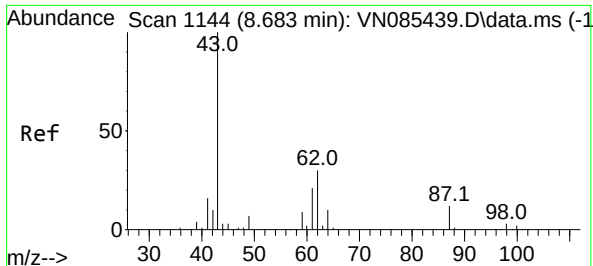
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 7380  |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 60.5     | 46.0 69.0   |
| 67 74.6     | 57.4 86.2   |
| 52 35.3     | 25.5 38.3   |



#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    |

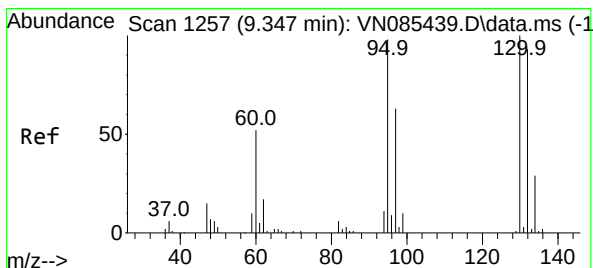
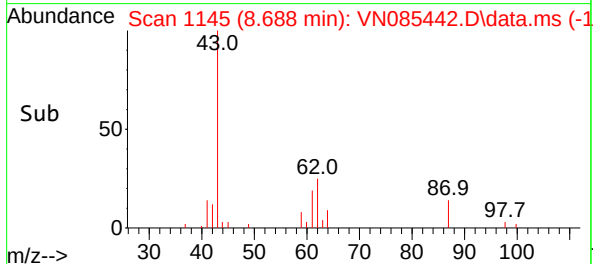
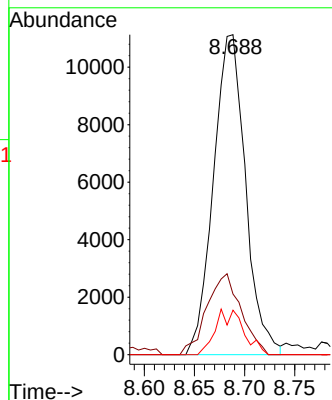
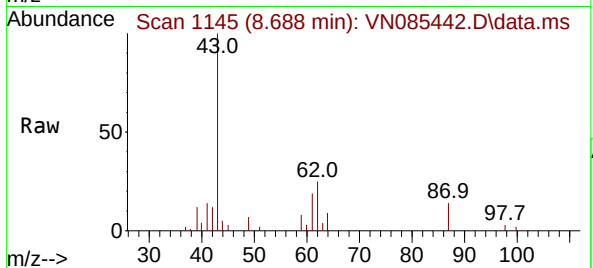




#43  
Isopropyl Acetate  
Concen: 4.853 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

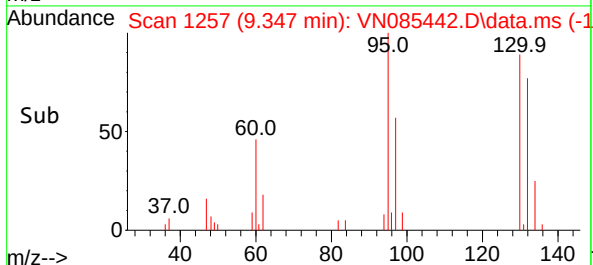
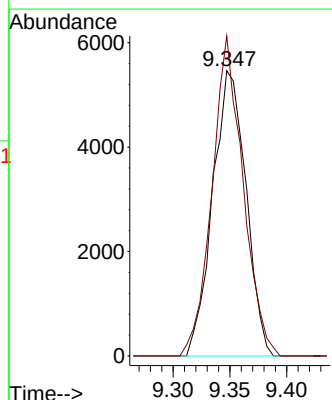
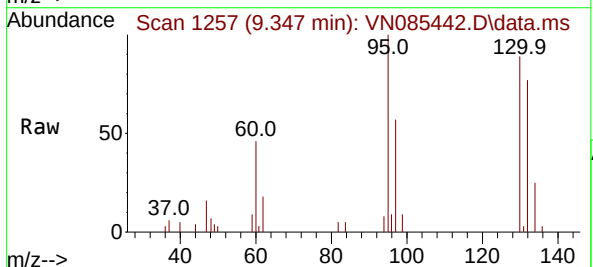
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

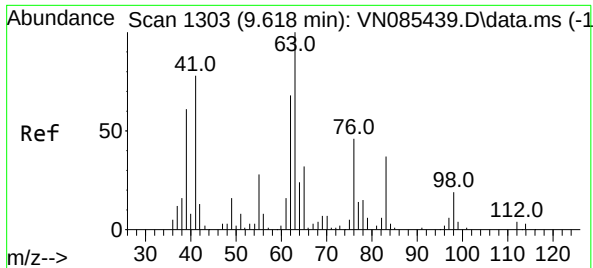
Tgt Ion: 43 Resp: 24792  
Ion Ratio Lower Upper  
43 100  
61 27.0 20.7 31.1  
87 12.3 9.8 14.8



#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

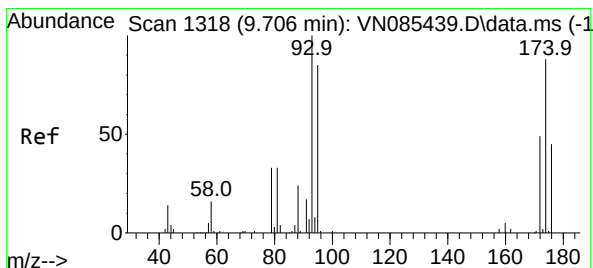
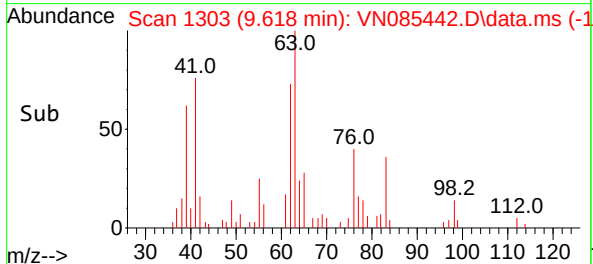
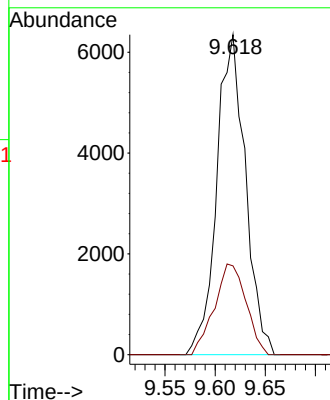
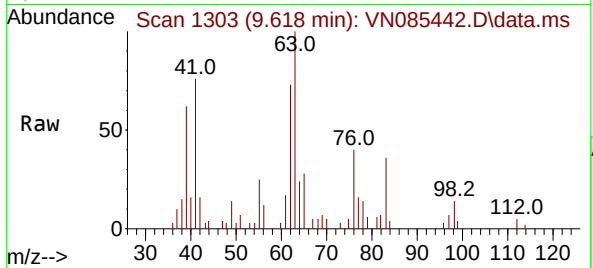




#45  
1,2-Dichloropropane  
Concen: 5.194 ug/l  
RT: 9.618 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

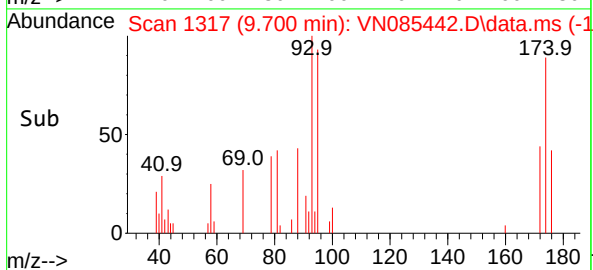
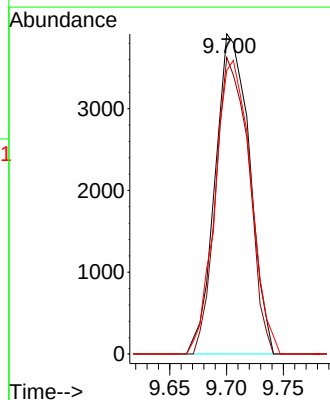
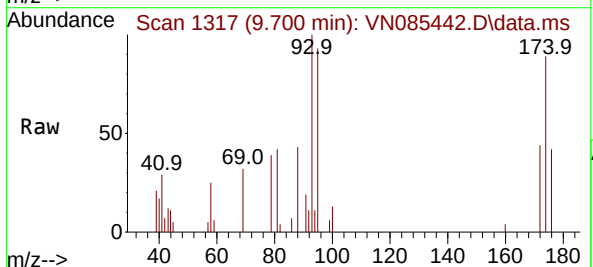
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

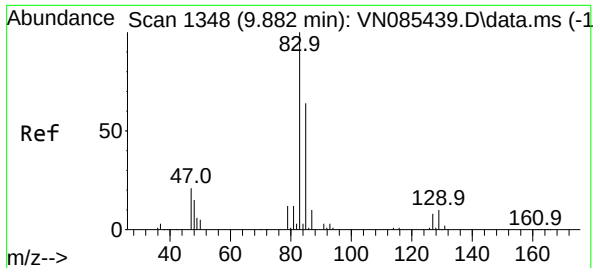
Tgt Ion: 63 Resp: 12591  
Ion Ratio Lower Upper  
63 100  
65 27.8 25.6 38.4



#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

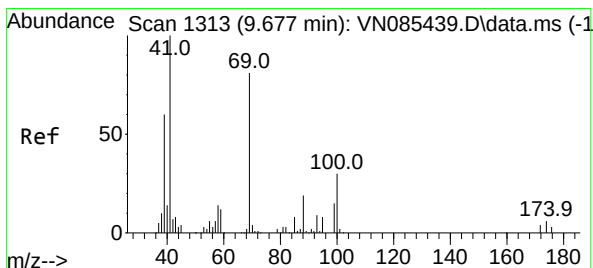
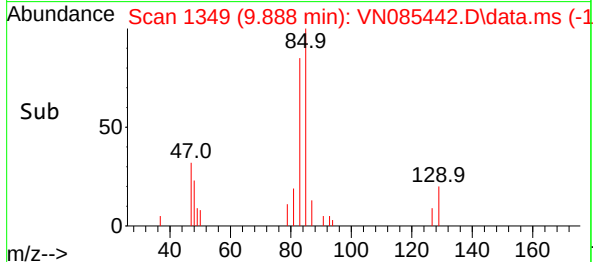
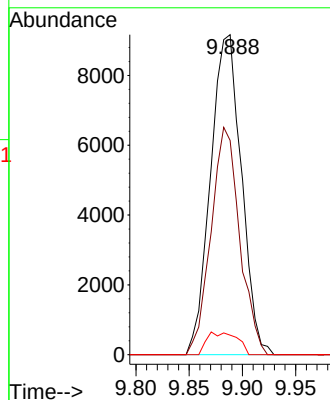
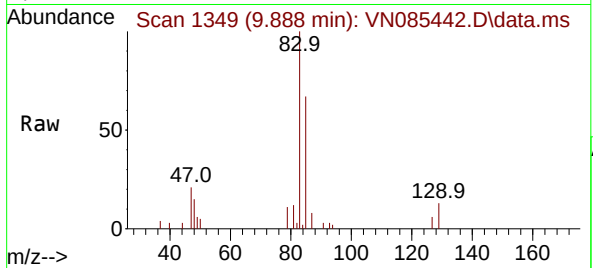




#47  
Bromodichloromethane  
Concen: 5.179 ug/l  
RT: 9.888 min Scan# 1348  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

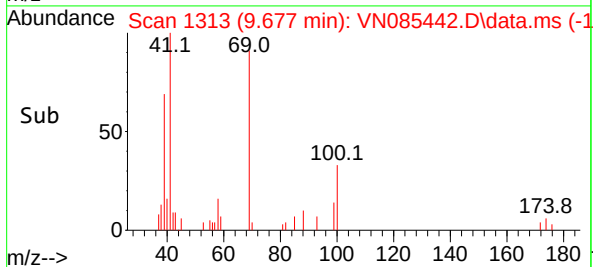
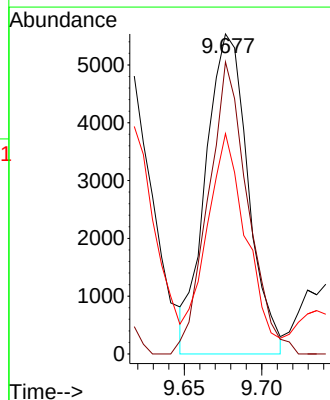
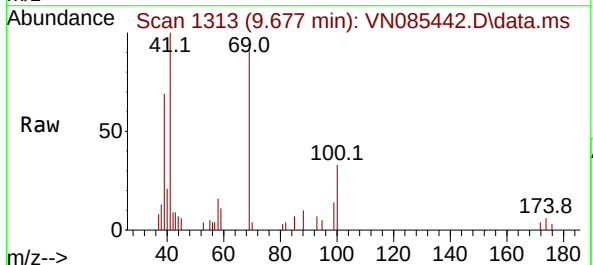
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

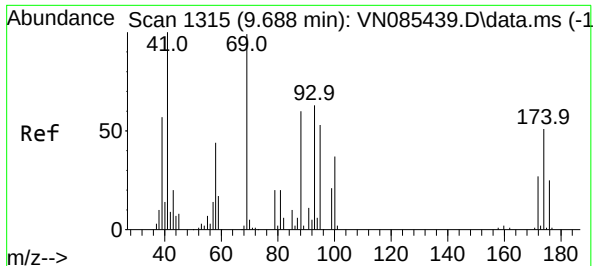
Tgt Ion: 83 Resp: 18456  
Ion Ratio Lower Upper  
83 100  
85 67.0 51.2 76.8  
127 6.1 6.5 9.7#



#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

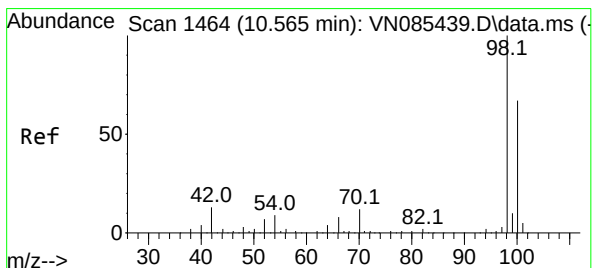
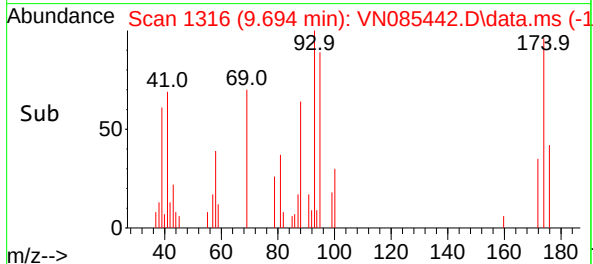
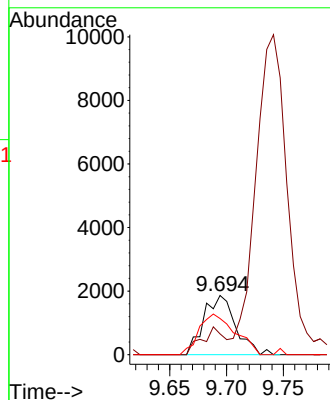
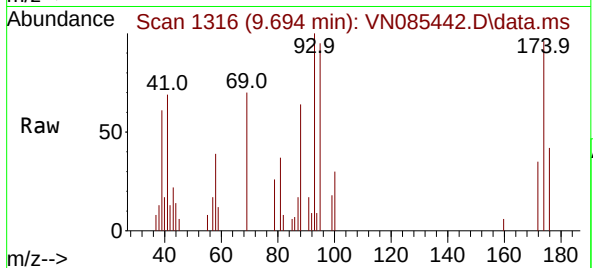
Tgt Ion: 88 Resp: 3619

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

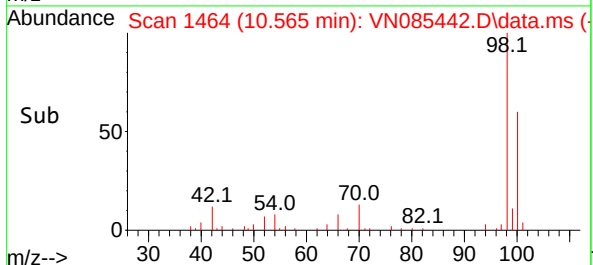
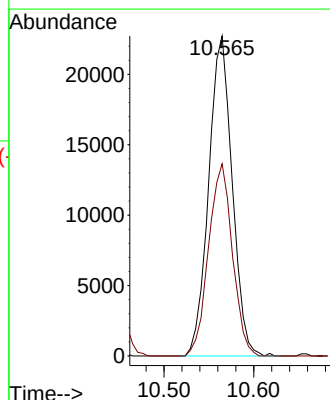
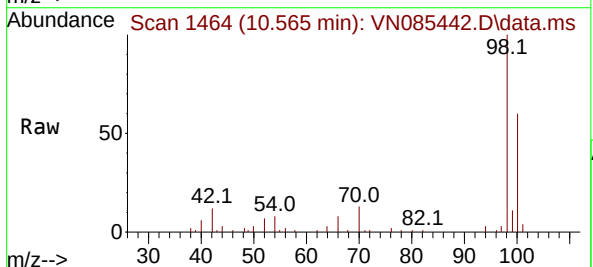
Acq: 14 Jan 2025 16:31

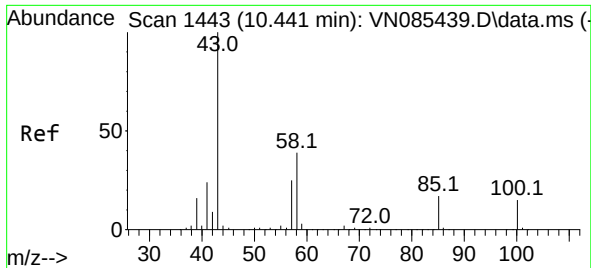
Tgt Ion: 98 Resp: 41328

Ion Ratio Lower Upper

98 100

100 60.9 52.2 78.4

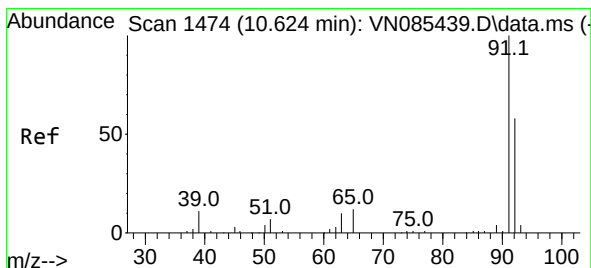
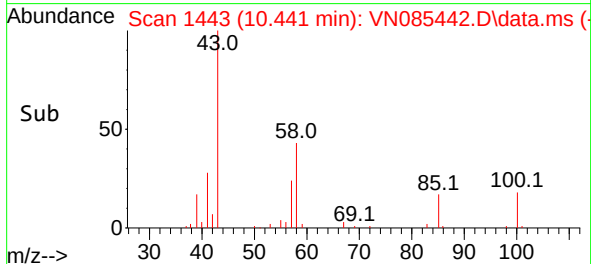
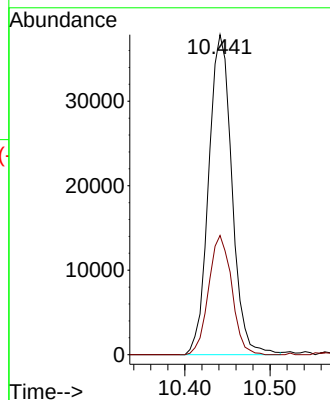
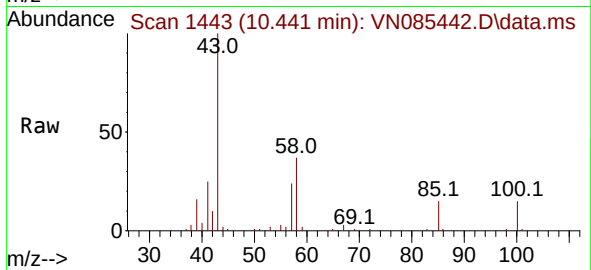




#51  
4-Methyl-2-Pentanone  
Concen: 24.250 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

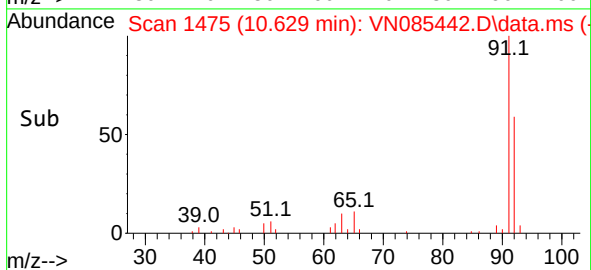
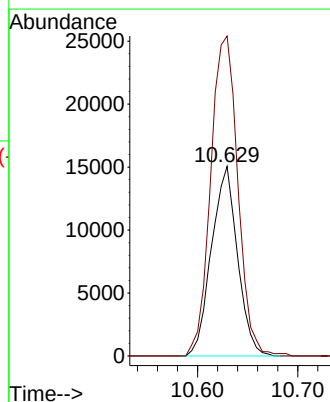
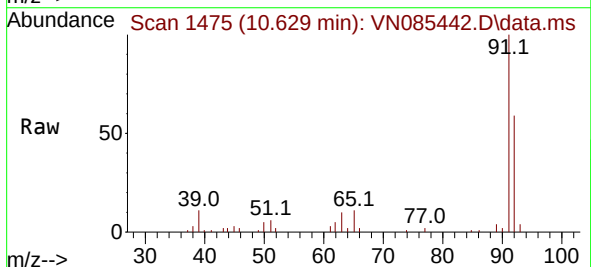
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

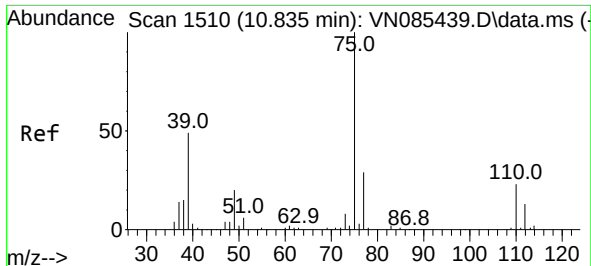
Tgt Ion: 43 Resp: 71889  
Ion Ratio Lower Upper  
43 100  
58 36.9 30.5 45.7



#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

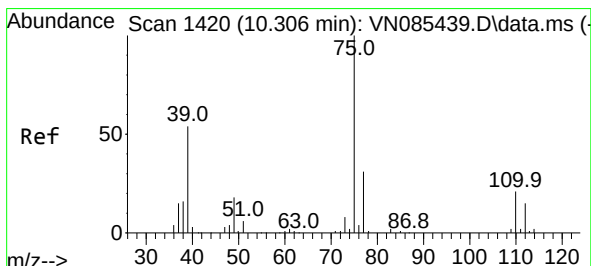
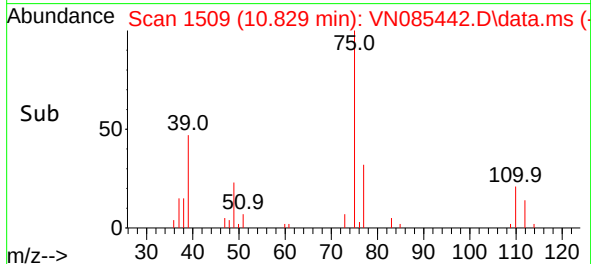
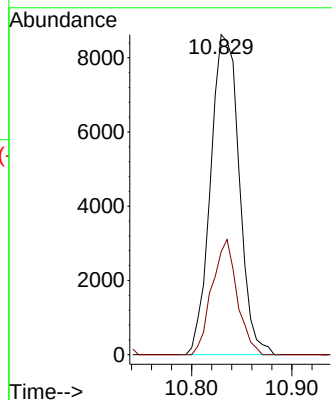
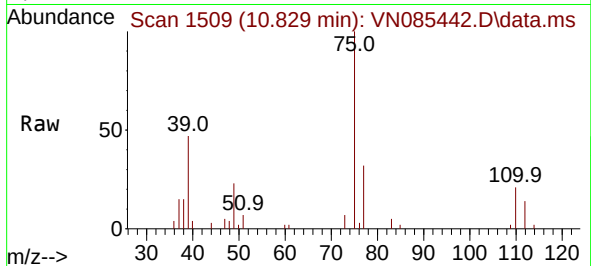




#53  
 t-1,3-Dichloropropene  
 Concen: 5.077 ug/l  
 RT: 10.829 min Scan# 1510  
 Delta R.T. -0.006 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

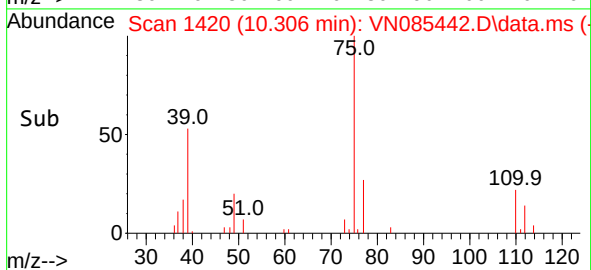
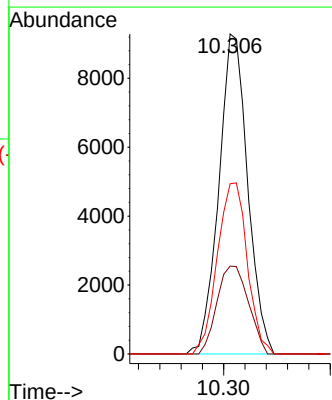
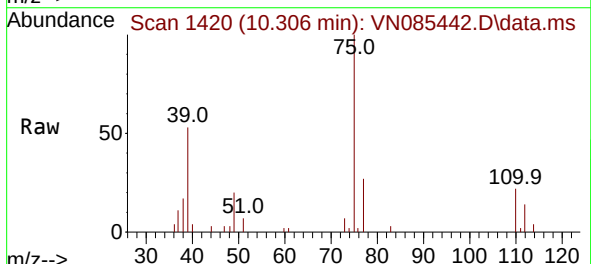
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Tgt Ion: 75 Resp: 17099  
 Ion Ratio Lower Upper  
 75 100  
 77 32.2 23.5 35.3

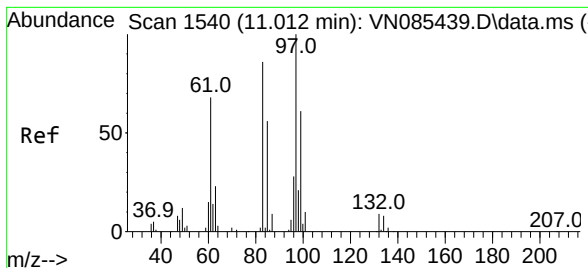


#54  
 cis-1,3-Dichloropropene  
 Concen: 4.848 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

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# 11

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

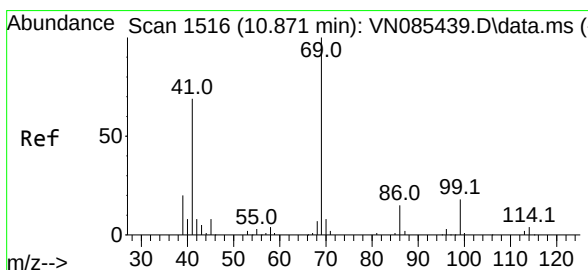
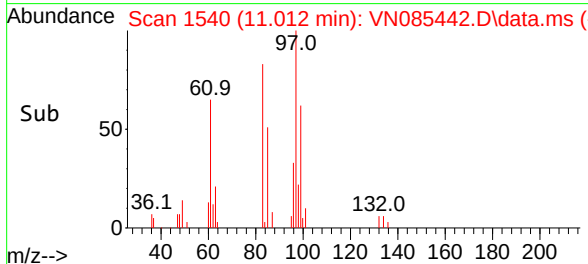
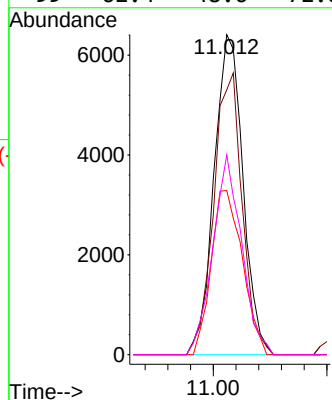
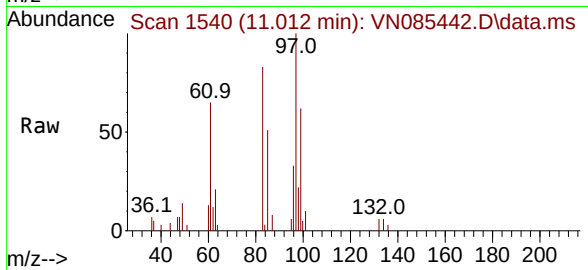
Ion Ratio Lower Upper

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

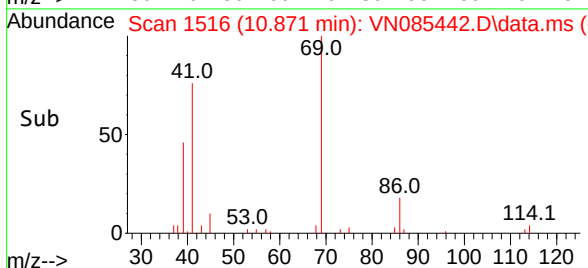
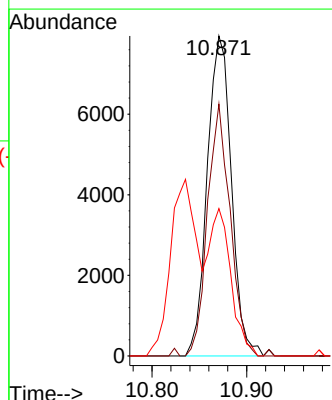
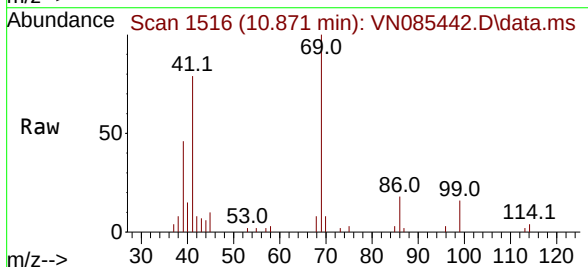
Tgt Ion: 69 Resp: 14094

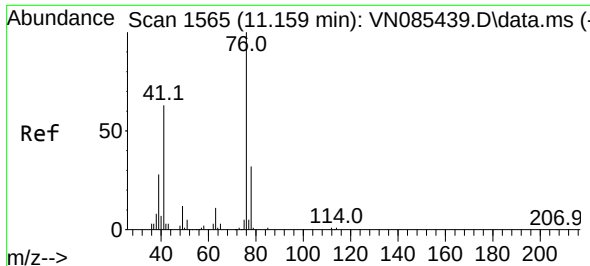
Ion Ratio Lower Upper

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 :

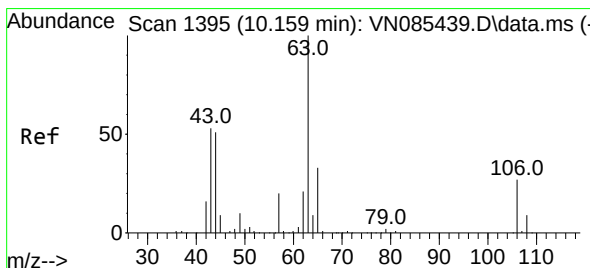
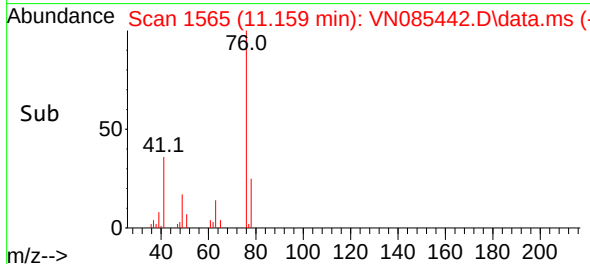
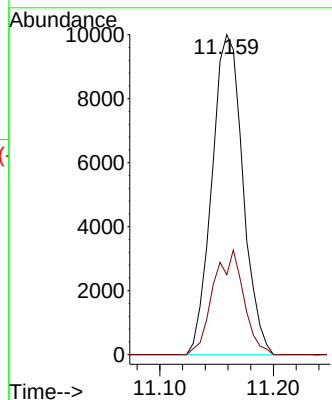
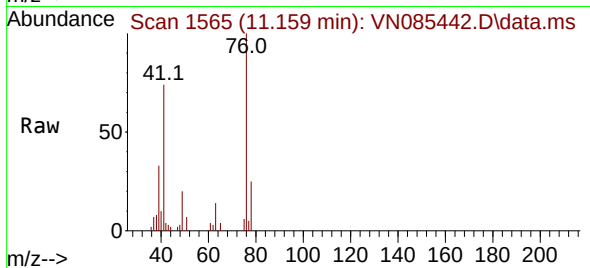
VSTDIC005

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

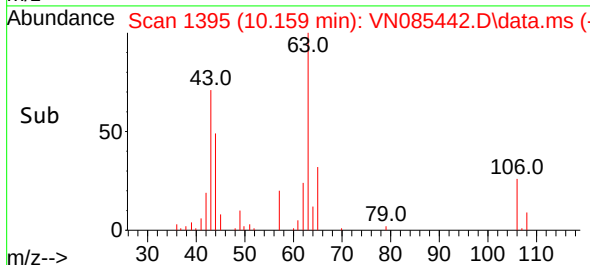
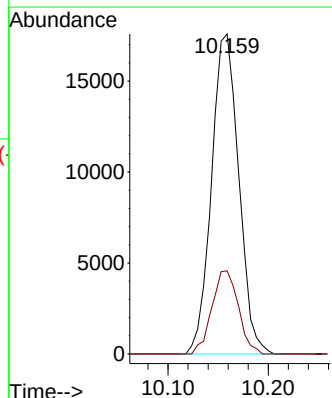
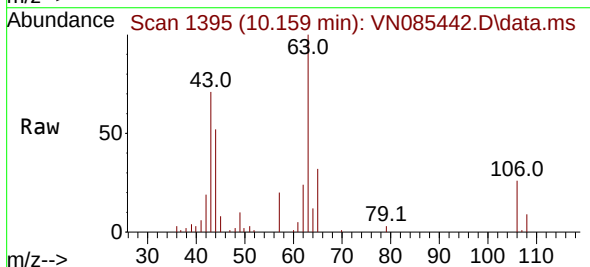
Acq: 14 Jan 2025 16:31

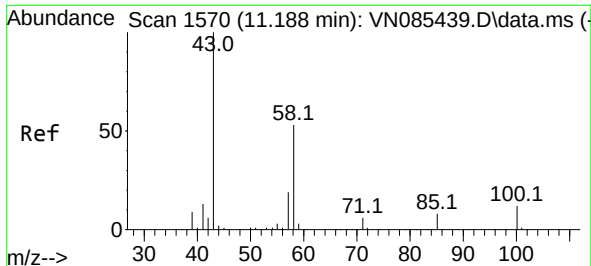
Tgt Ion: 63 Resp: 33210

Ion Ratio Lower Upper

63 100

106 25.2 21.6 32.4

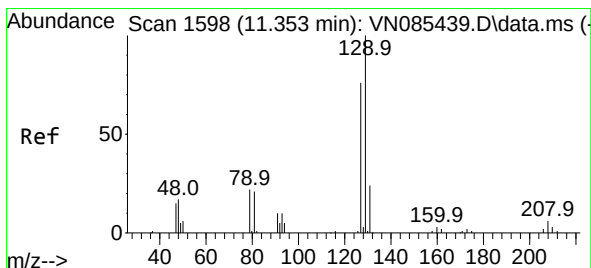
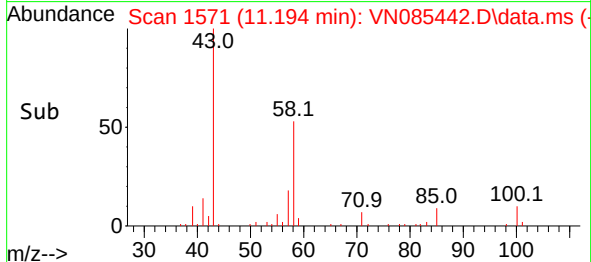
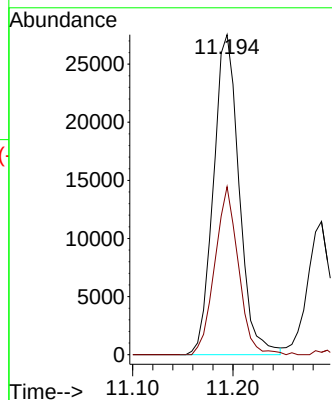
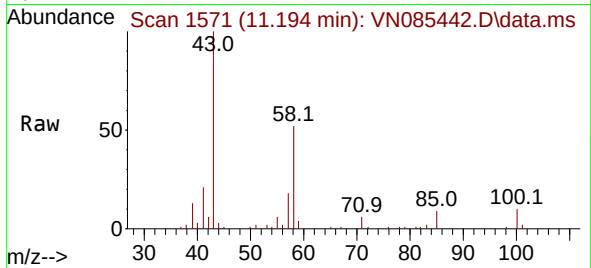




#59  
2-Hexanone  
Concen: 23.501 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

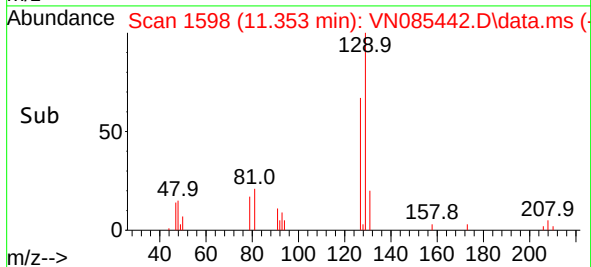
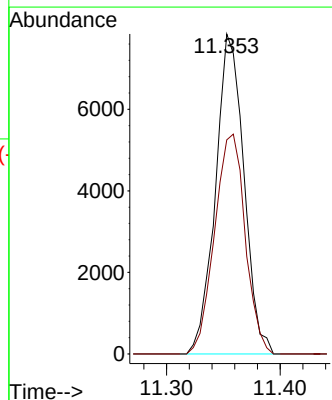
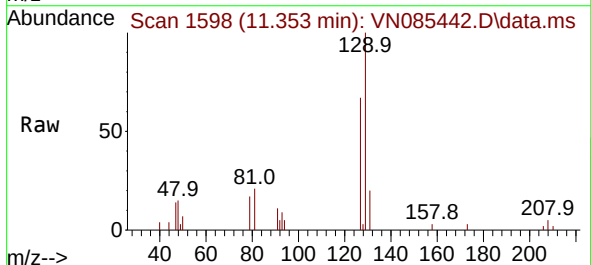
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

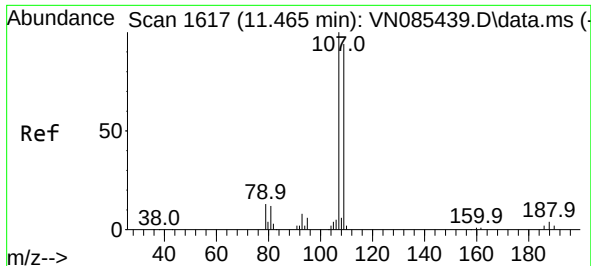
Tgt Ion: 43 Resp: 49021  
Ion Ratio Lower Upper  
43 100  
58 48.3 26.2 78.6



#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

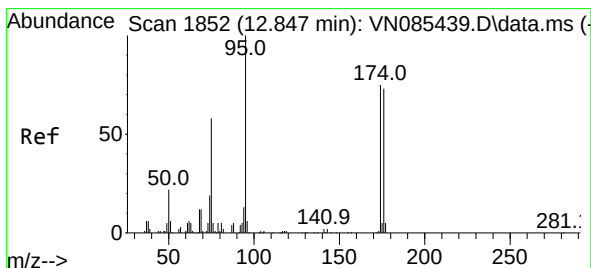
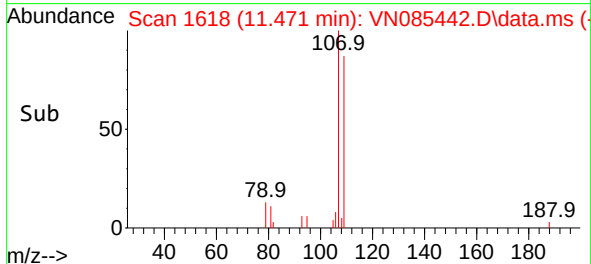
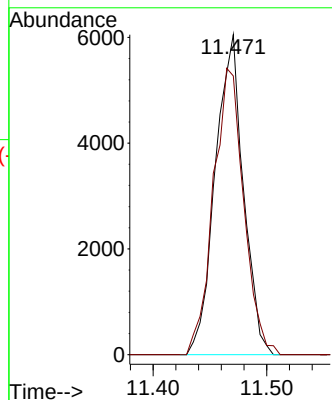
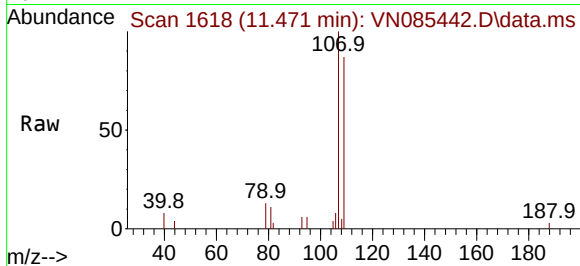




#61  
1,2-Dibromoethane  
Concen: 4.810 ug/l  
RT: 11.471 min Scan# 1617  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

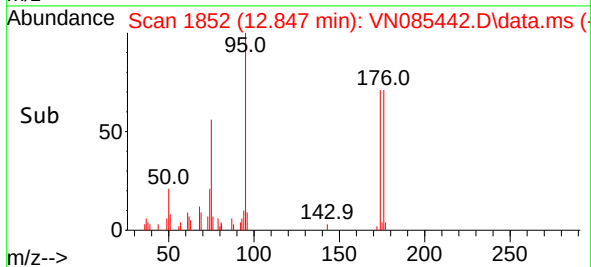
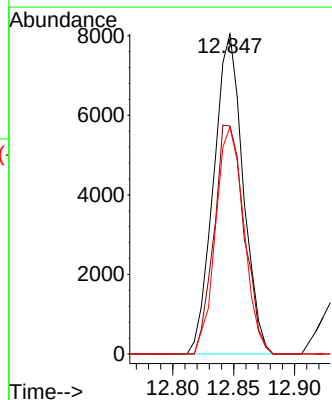
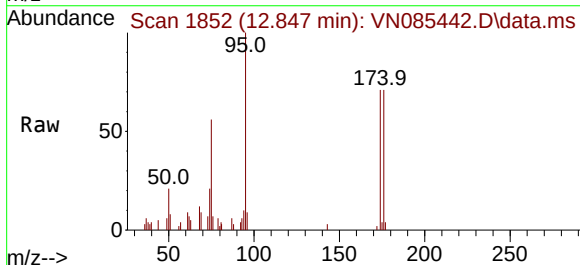
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

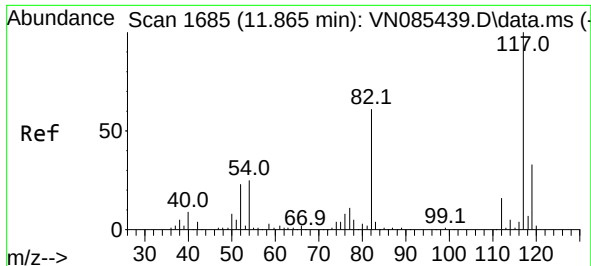
Tgt Ion:107 Resp: 10419  
Ion Ratio Lower Upper  
107 100  
109 96.8 75.9 113.9



#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

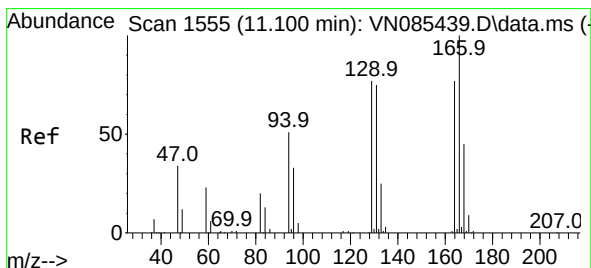
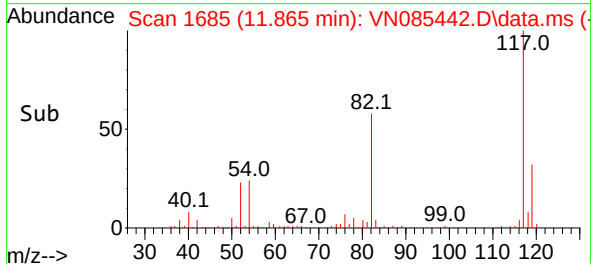
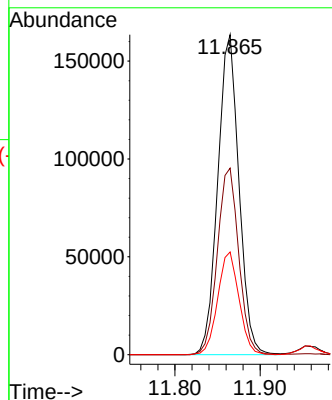
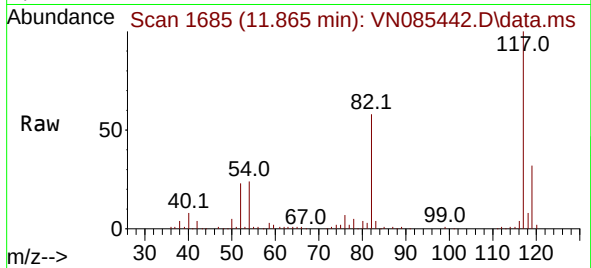




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

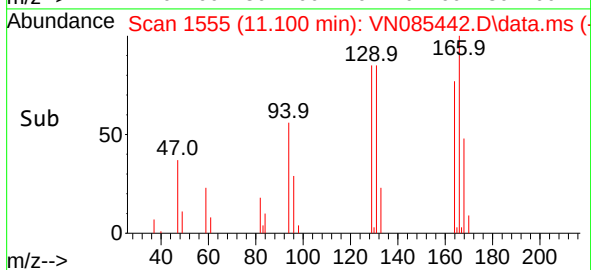
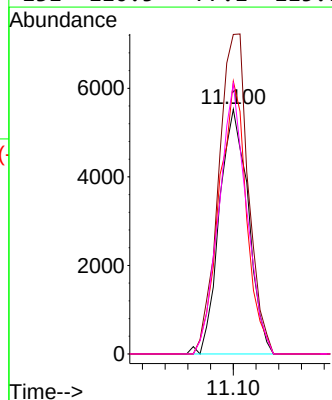
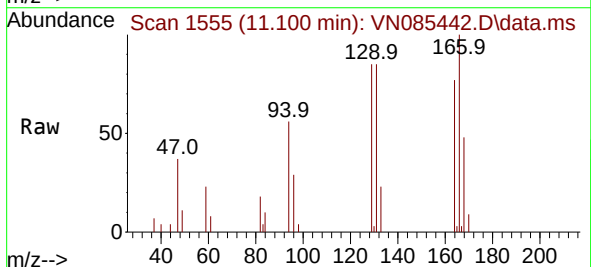
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

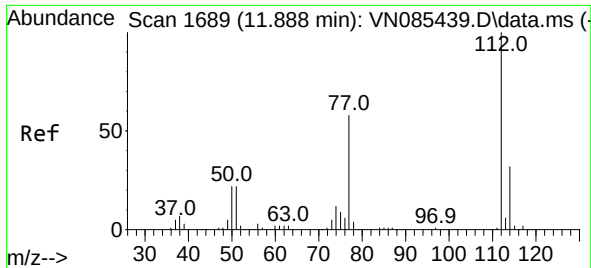
Tgt Ion:117 Resp: 282203  
Ion Ratio Lower Upper  
117 100  
82 58.3 48.6 72.8  
119 32.1 26.6 39.8



#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

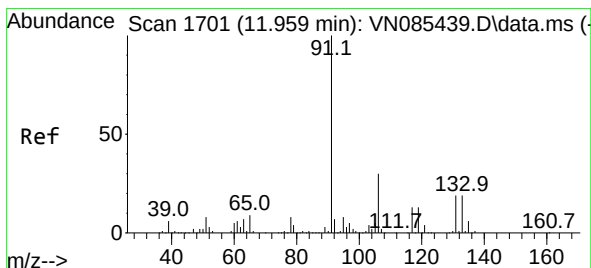
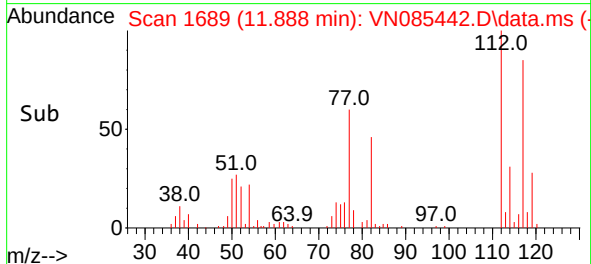
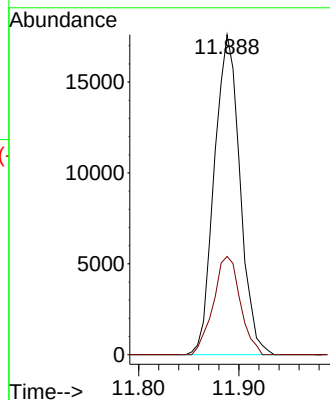
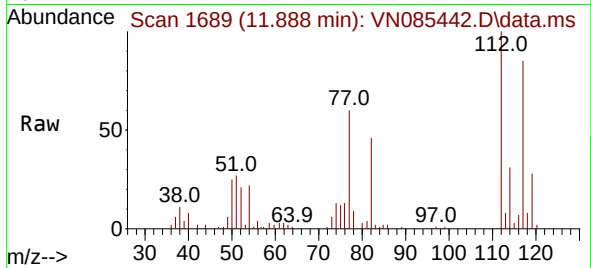




#65  
Chlorobenzene  
Concen: 5.065 ug/l  
RT: 11.888 min Scan# 1112  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

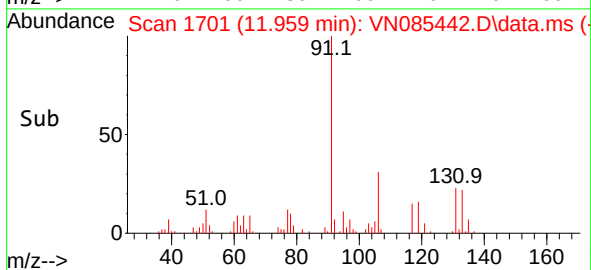
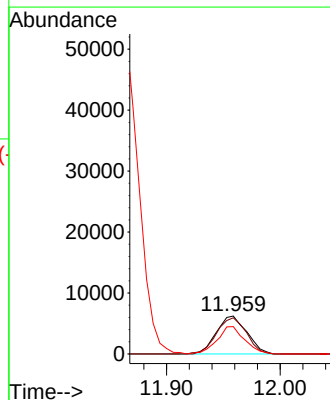
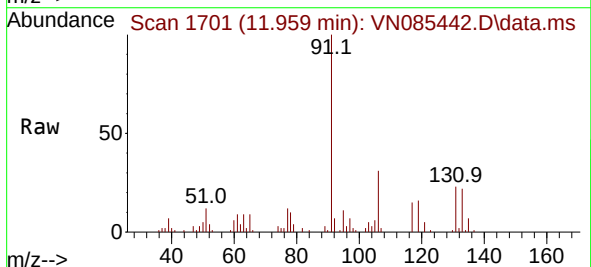
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

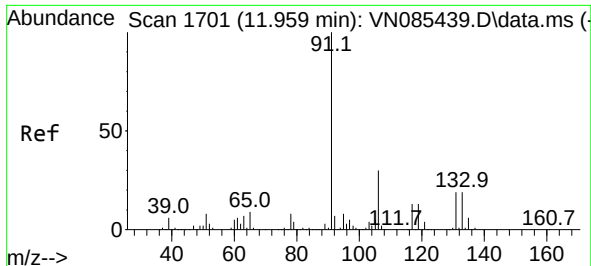
Tgt Ion:112 Resp: 31312  
Ion Ratio Lower Upper  
112 100  
114 30.7 25.3 37.9



#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 :

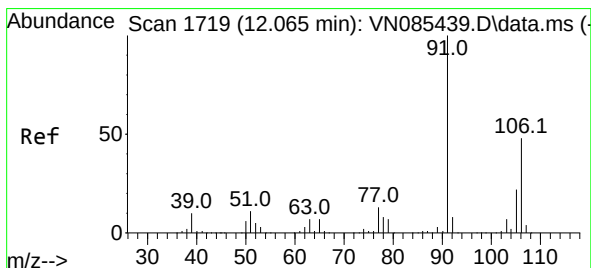
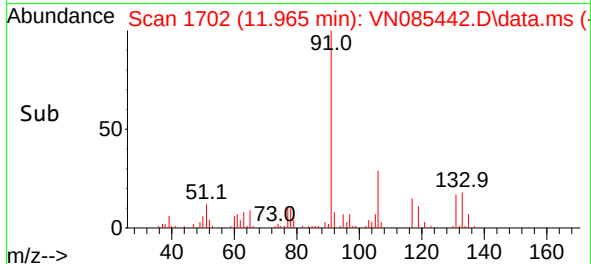
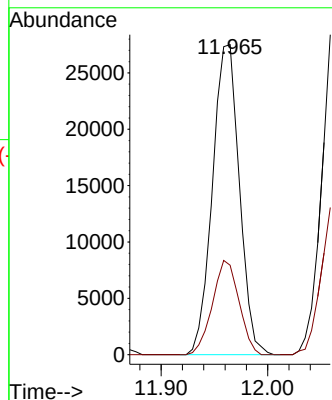
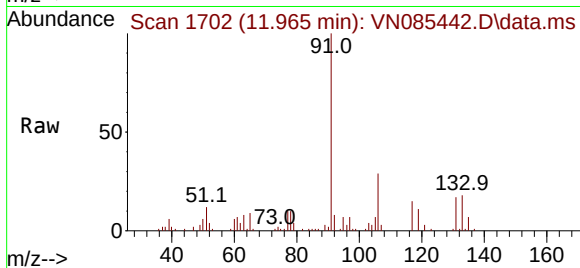
VSTDIC005

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

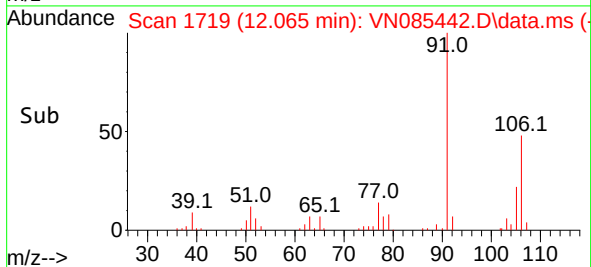
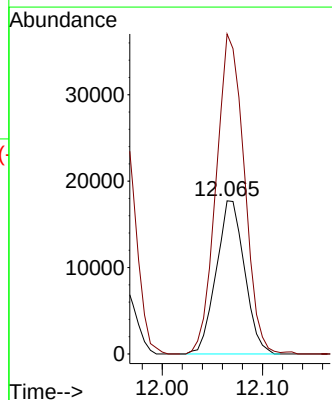
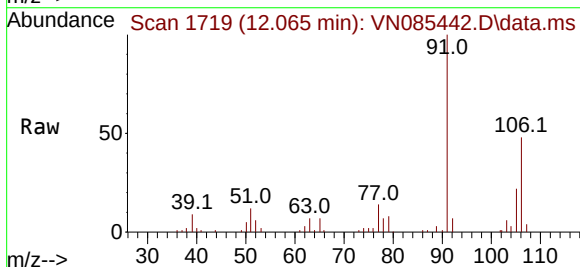
Acq: 14 Jan 2025 16:31

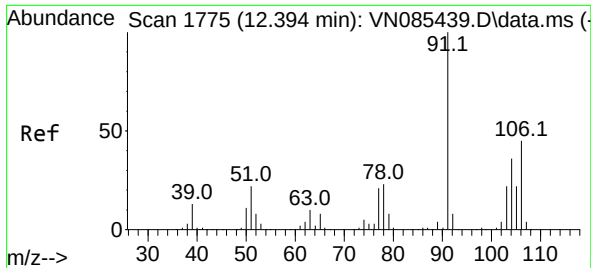
Tgt Ion: 106 Resp: 34771

Ion Ratio Lower Upper

106 100

91 207.9 167.7 251.5

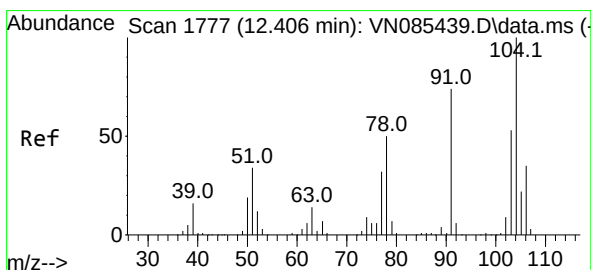
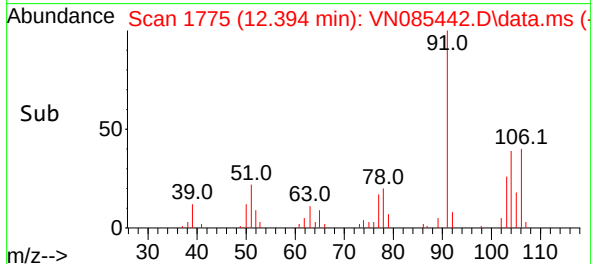
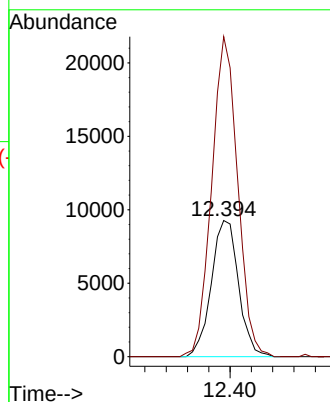
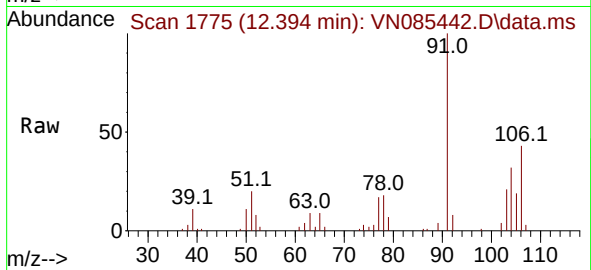




#69  
o-Xylene  
Concen: 4.617 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

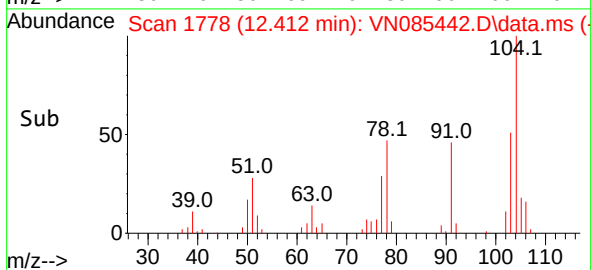
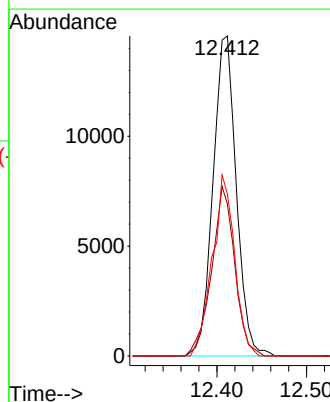
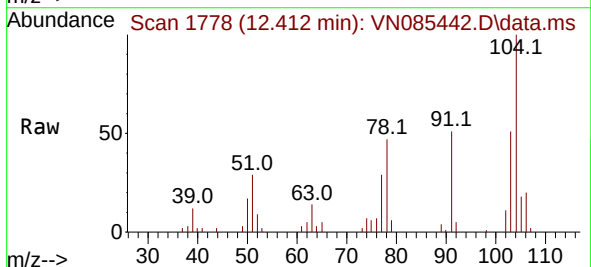
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Tgt Ion:106 Resp: 16419  
Ion Ratio Lower Upper  
106 100  
91 224.0 110.4 331.2

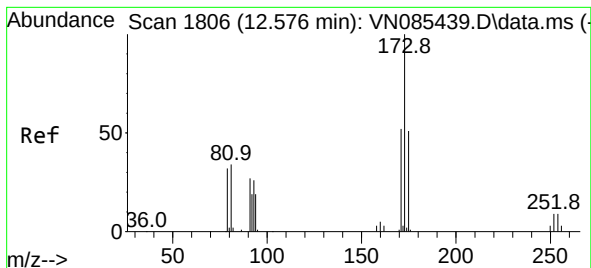


#70  
Styrene  
Concen: 4.454 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

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# 1806

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

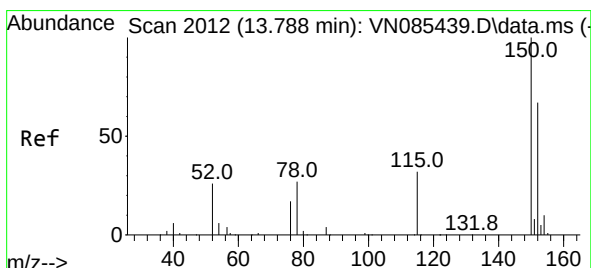
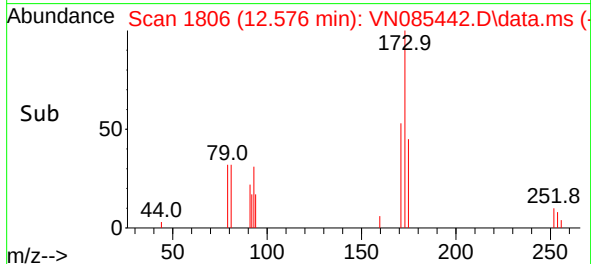
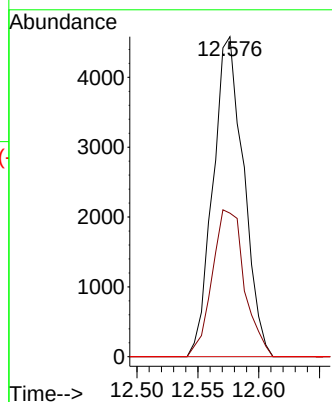
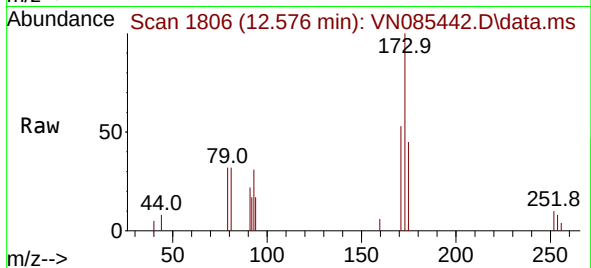
Tgt Ion:173 Resp: 8017

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

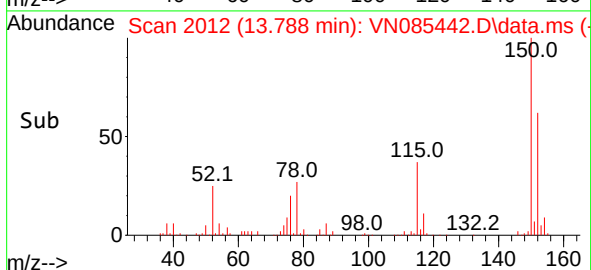
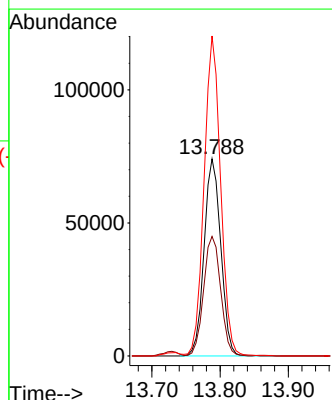
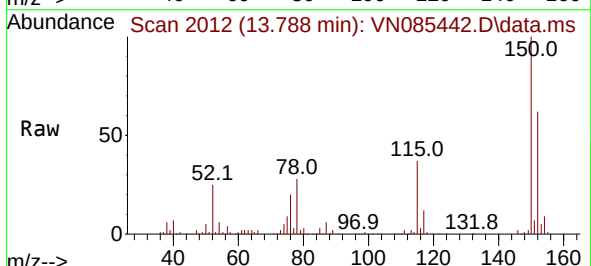
Tgt Ion:152 Resp: 126086

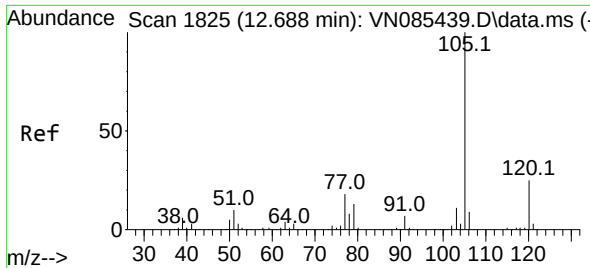
Ion Ratio Lower Upper

152 100

115 62.0 31.1 93.3

150 160.7 0.0 343.6

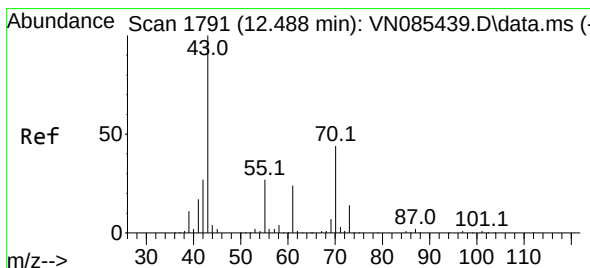
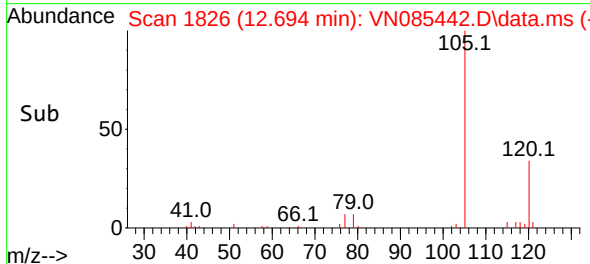
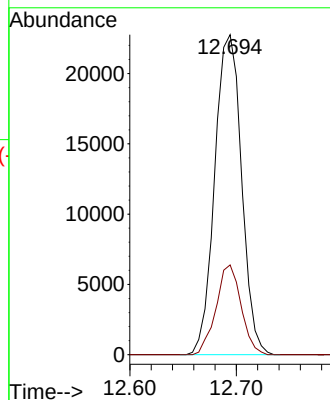
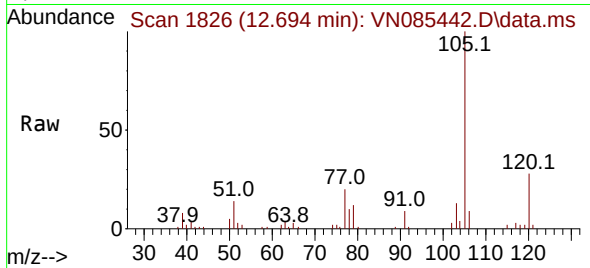




#73  
Isopropylbenzene  
Concen: 4.678 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

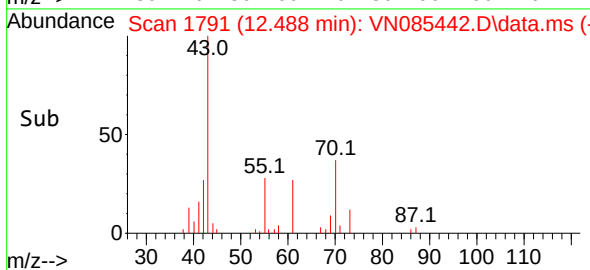
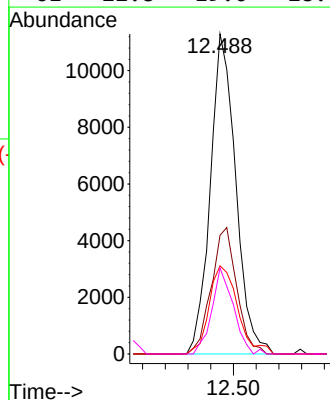
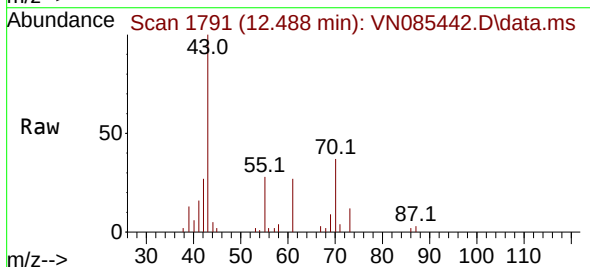
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

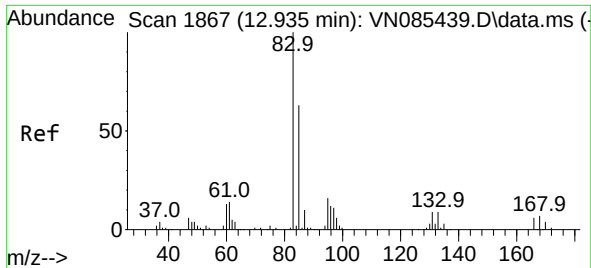
Tgt Ion:105 Resp: 39811  
Ion Ratio Lower Upper  
105 100  
120 26.1 12.8 38.3



#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

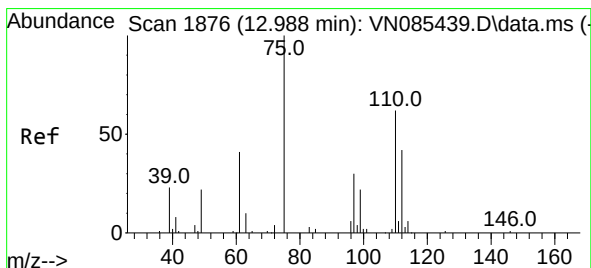
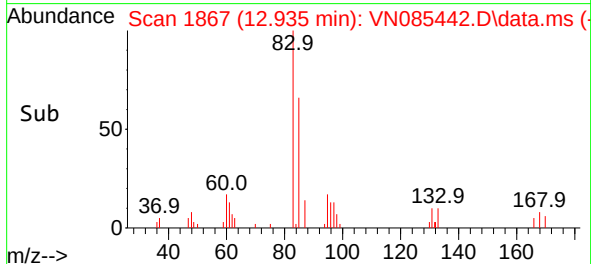
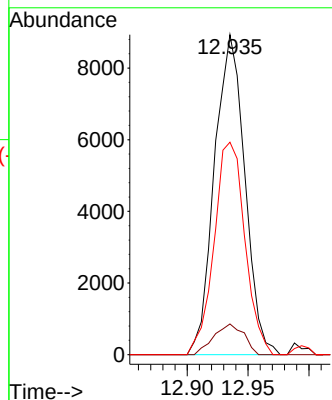
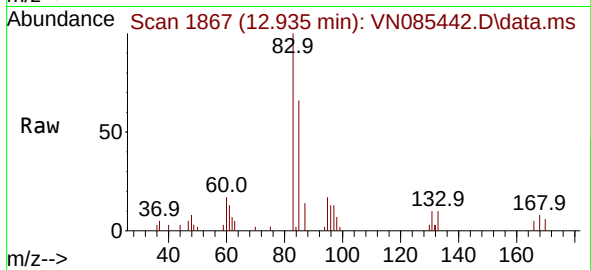




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 5.151 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

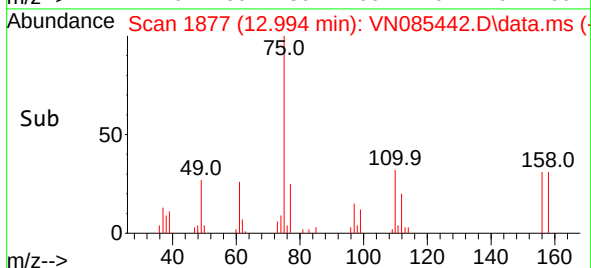
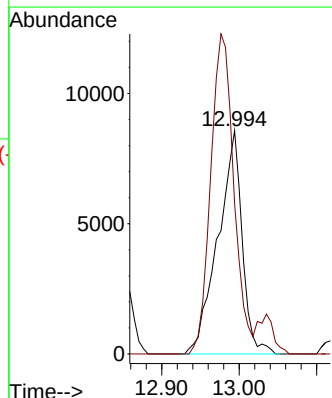
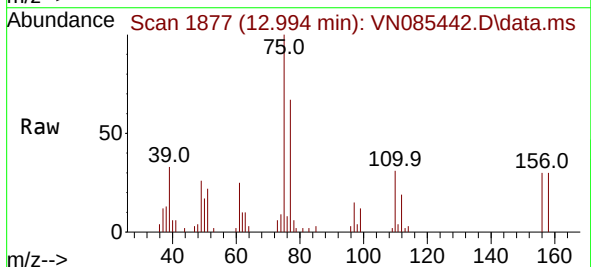
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

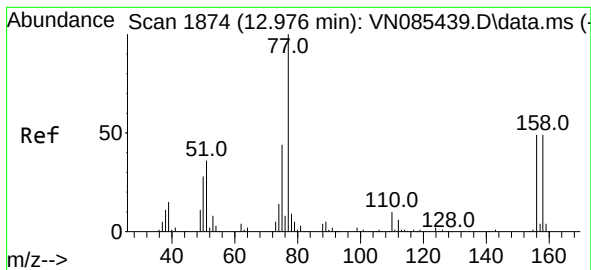
Tgt Ion: 83 Resp: 15483  
 Ion Ratio Lower Upper  
 83 100  
 131 9.5 4.8 14.4  
 85 67.5 32.2 96.6



#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# 11

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC005

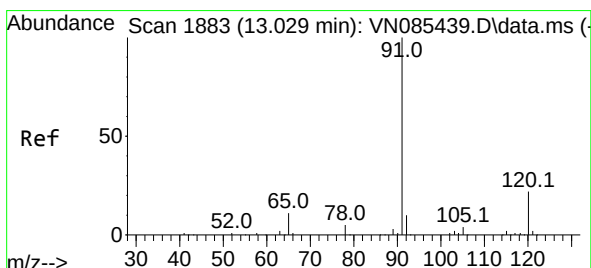
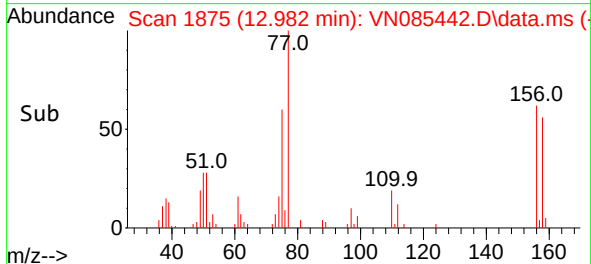
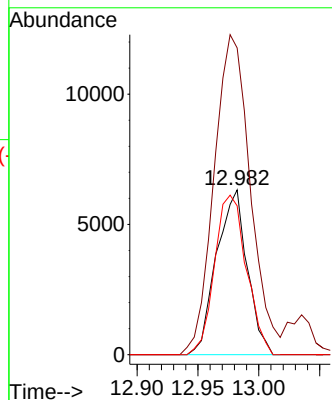
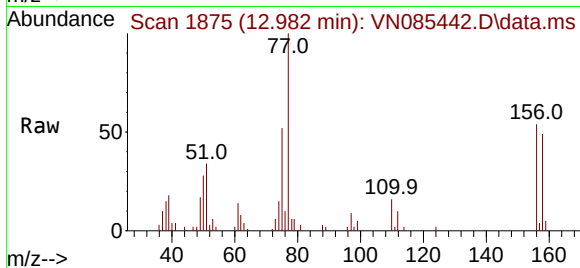
Tgt Ion:156 Resp: 11091

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

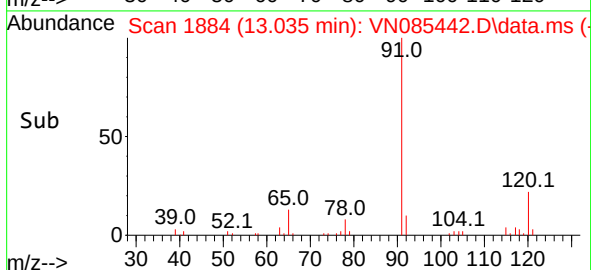
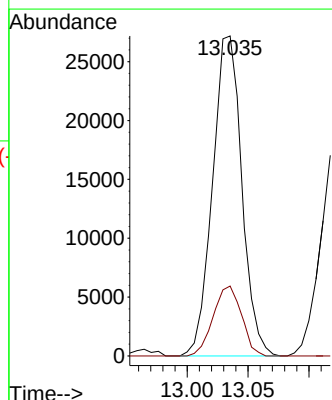
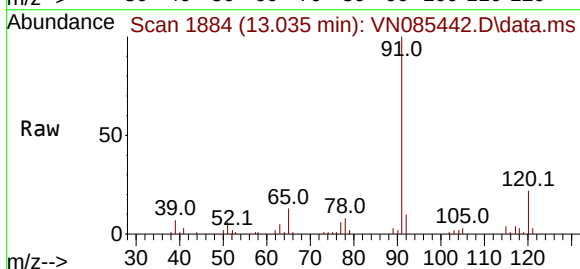
Acq: 14 Jan 2025 16:31

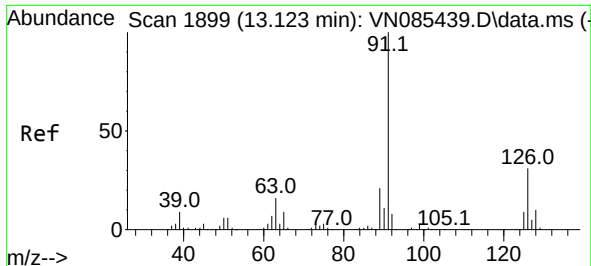
Tgt Ion: 91 Resp: 45450

Ion Ratio Lower Upper

91 100

120 21.1 10.9 32.6

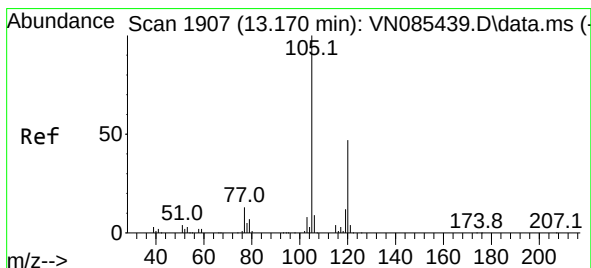
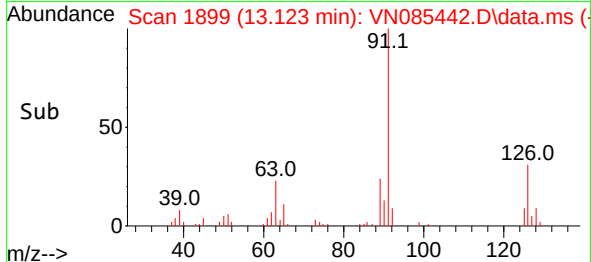
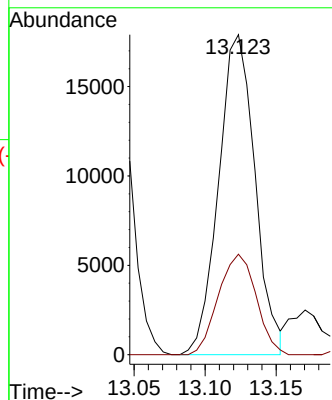
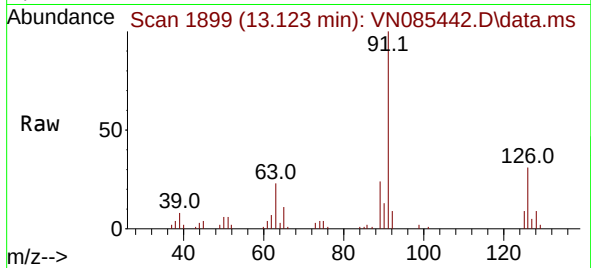




#79  
2-Chlorotoluene  
Concen: 4.898 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

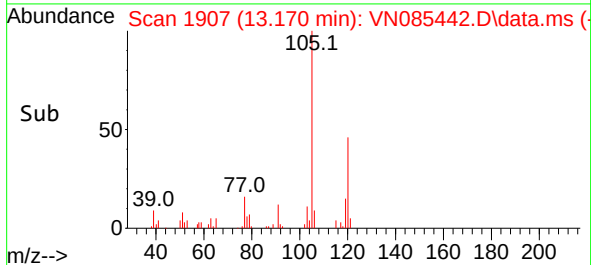
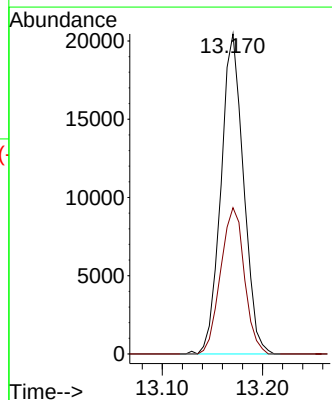
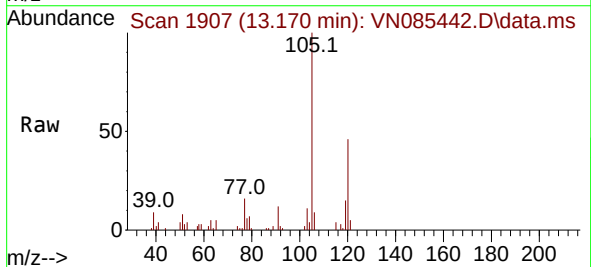
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

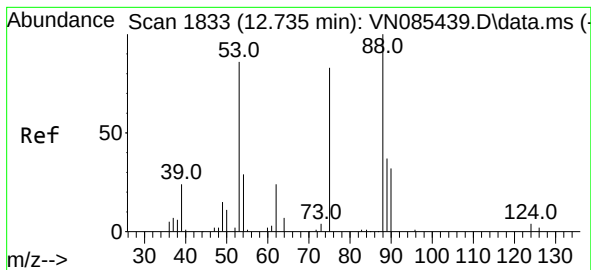
Tgt Ion: 91 Resp: 31932  
Ion Ratio Lower Upper  
91 100  
126 32.6 15.7 47.1



#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

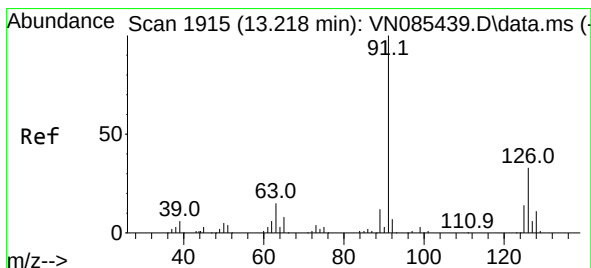
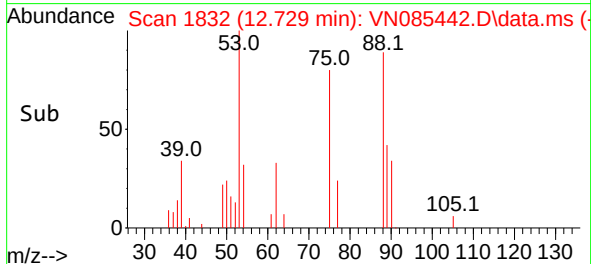
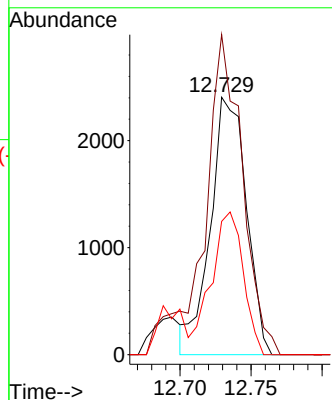
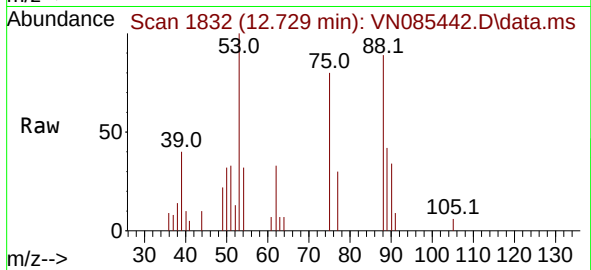




#81  
trans-1,4-Dichloro-2-butene  
Concen: 4.465 ug/l  
RT: 12.729 min Scan# 1832  
Delta R.T. -0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

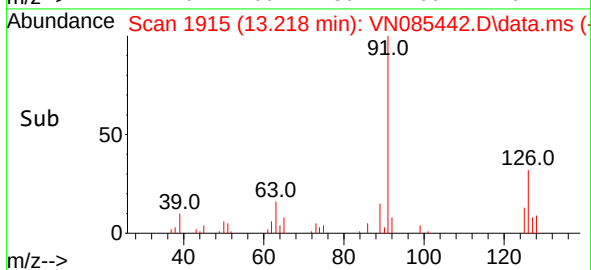
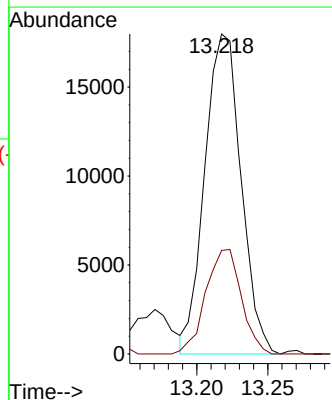
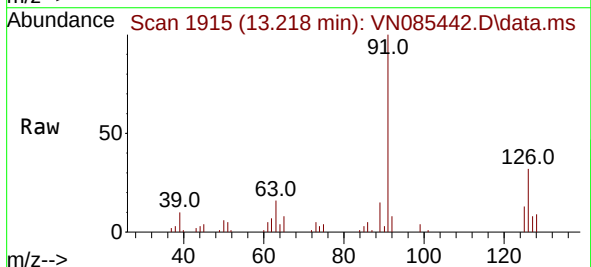
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

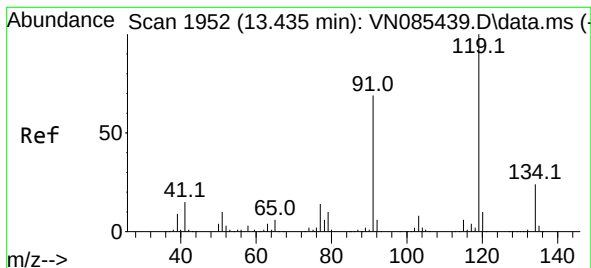
Tgt Ion: 75 Resp: 4229  
Ion Ratio Lower Upper  
75 100  
53 132.6 95.6 143.4  
89 49.7 37.0 55.6



#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

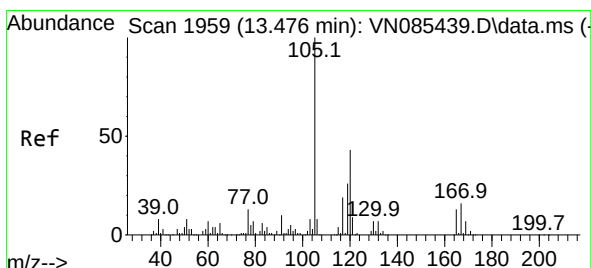
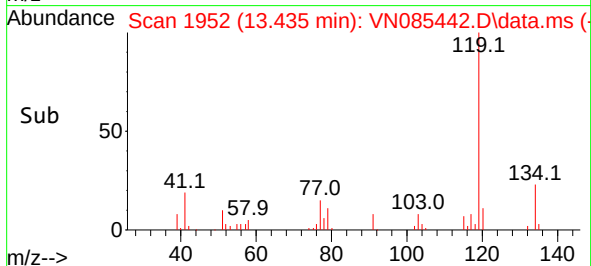
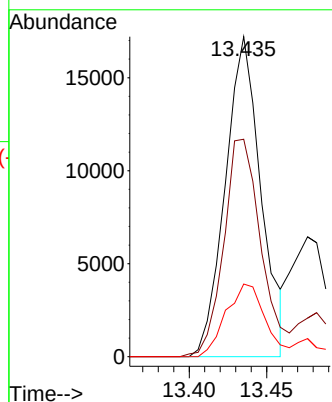
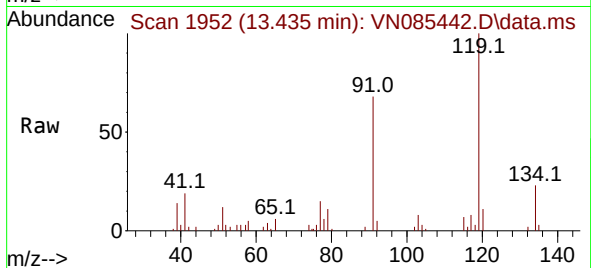
Tgt Ion:119 Resp: 27597

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

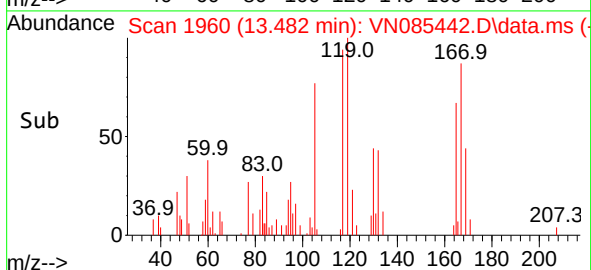
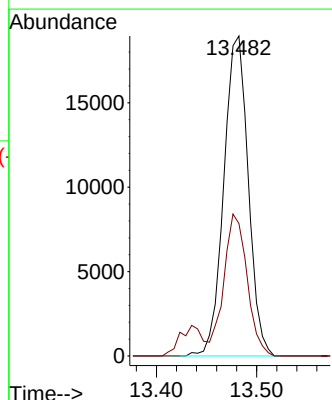
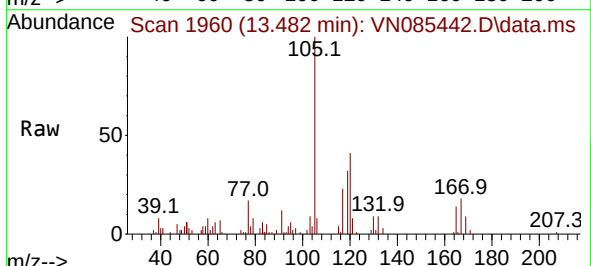
Acq: 14 Jan 2025 16:31

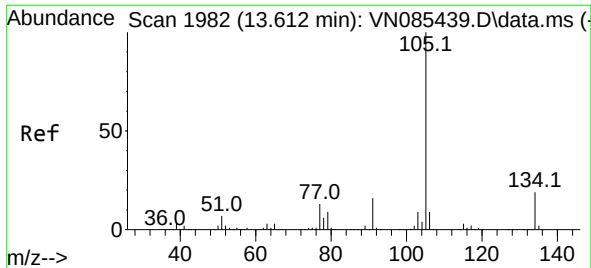
Tgt Ion:105 Resp: 32054

Ion Ratio Lower Upper

105 100

120 42.0 21.6 65.0

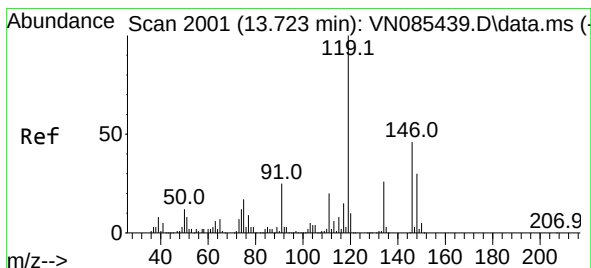
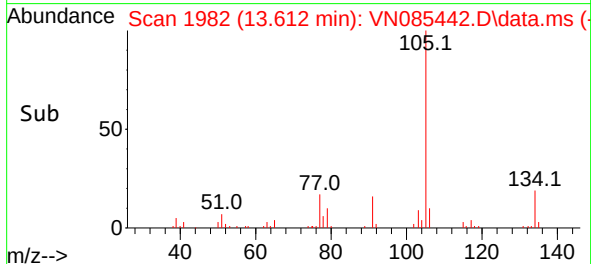
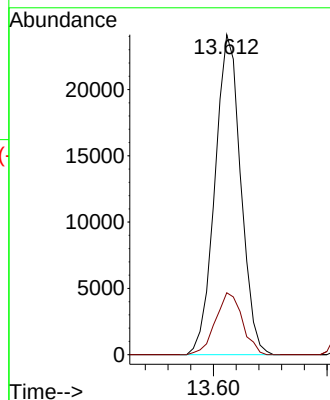
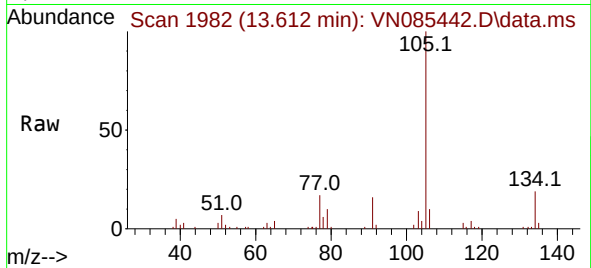




#85  
 sec-Butylbenzene  
 Concen: 4.663 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

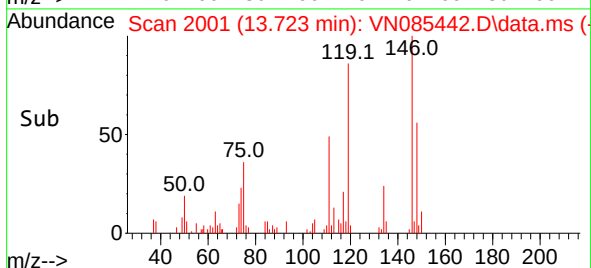
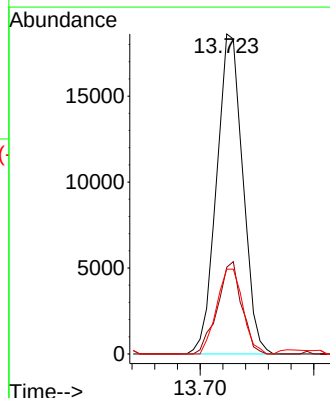
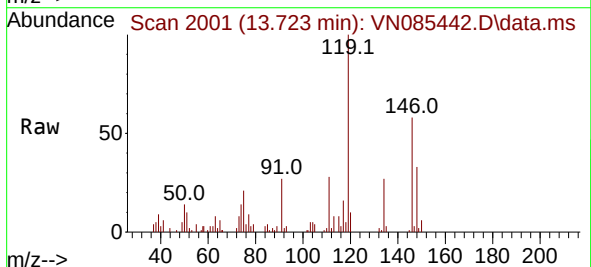
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Tgt Ion:105 Resp: 38148  
 Ion Ratio Lower Upper  
 105 100  
 134 20.1 9.7 28.9

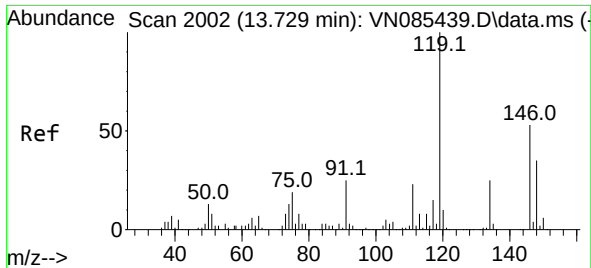


#86  
 p-Isopropyltoluene  
 Concen: 4.584 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

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



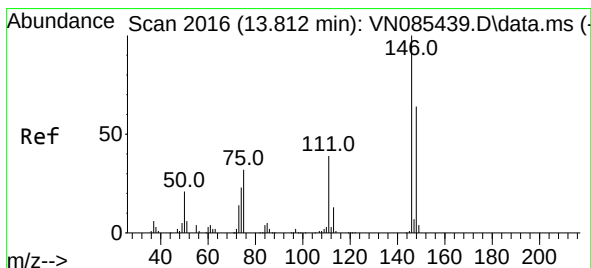
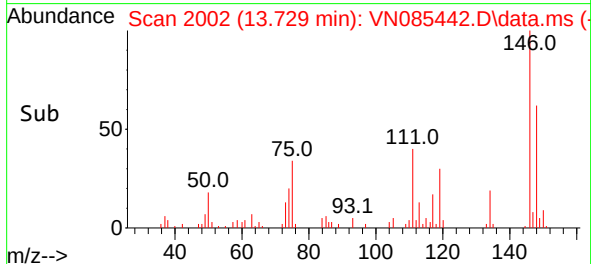
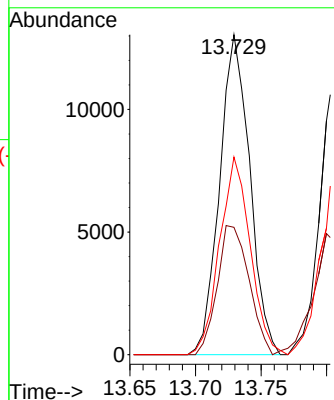
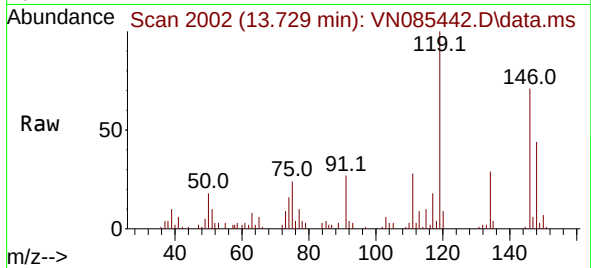




#87  
 1,3-Dichlorobenzene  
 Concen: 5.099 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085442.D  
 Acq: 14 Jan 2025 16:31

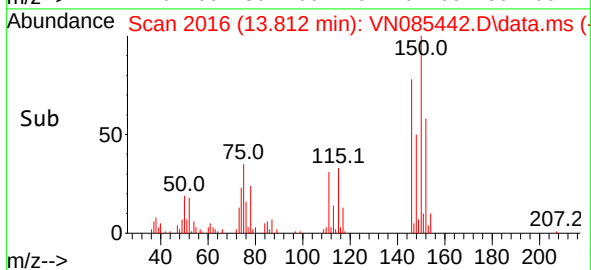
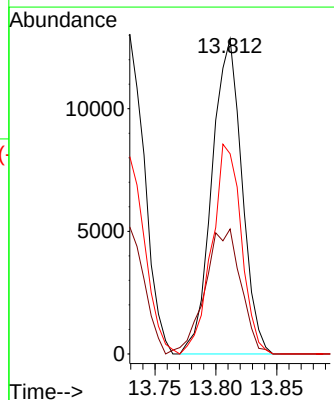
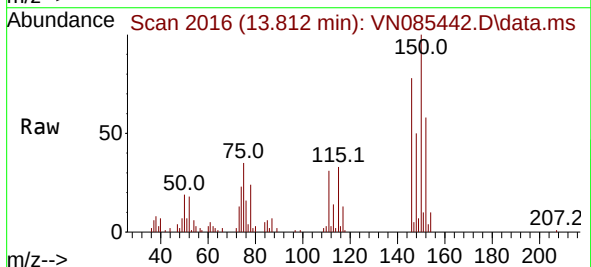
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

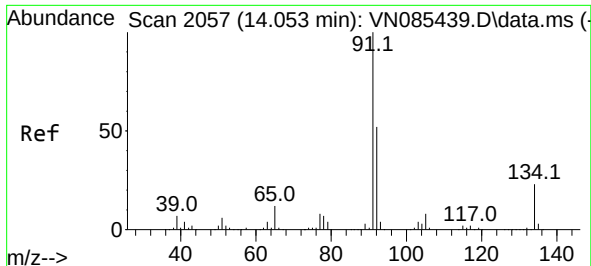
Tgt Ion:146 Resp: 20876  
 Ion Ratio Lower Upper  
 146 100  
 111 42.3 21.4 64.3  
 148 62.7 32.3 96.9



#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

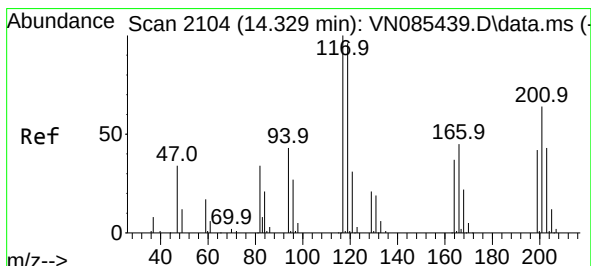
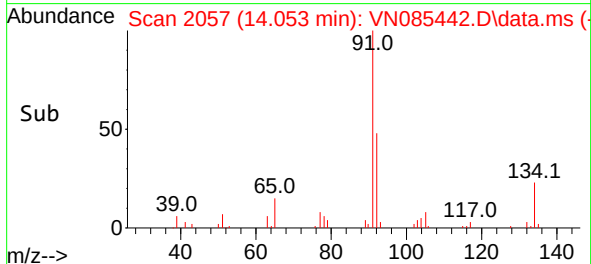
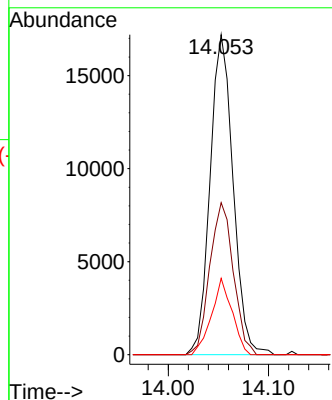
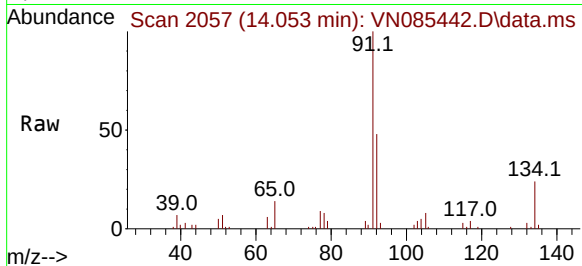




#89  
n-Butylbenzene  
Concen: 4.675 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

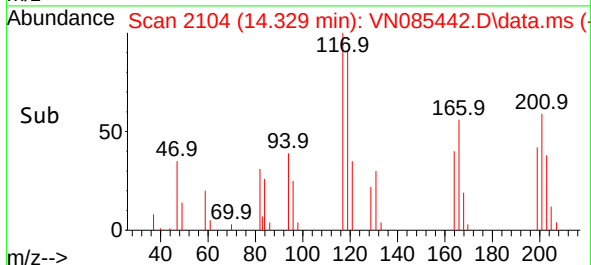
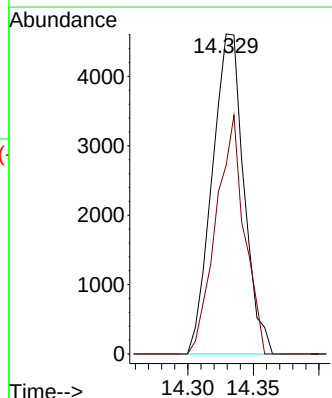
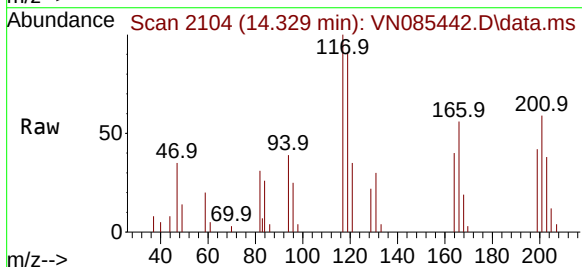
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

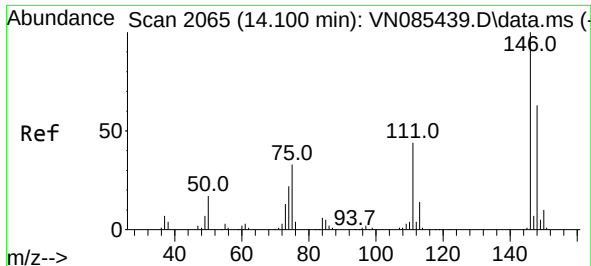
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 27437 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 48.7  | 25.8  | 77.3  |
| 134      | 21.4  | 11.7  | 35.1  |



#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 |

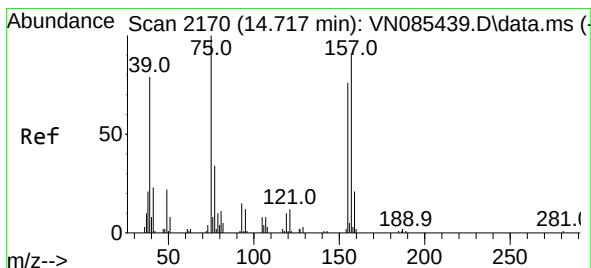
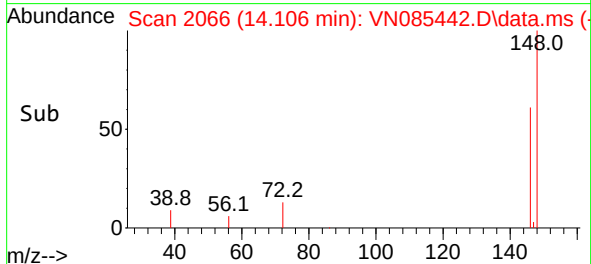
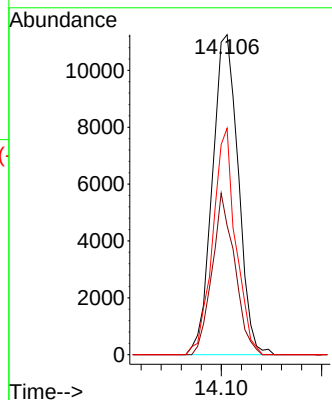
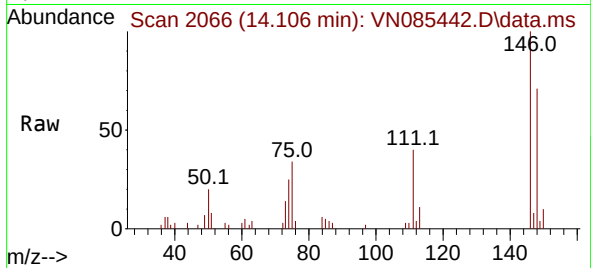




#91  
1,2-Dichlorobenzene  
Concen: 4.940 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085442.D  
Acq: 14 Jan 2025 16:31

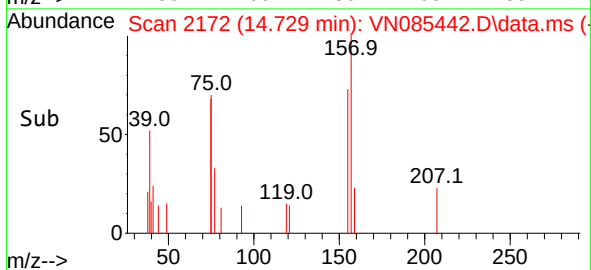
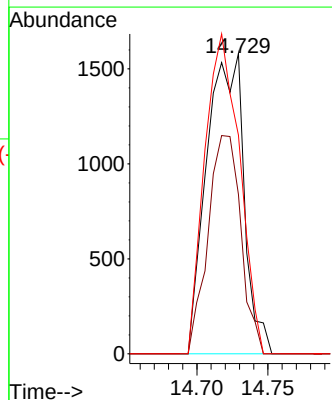
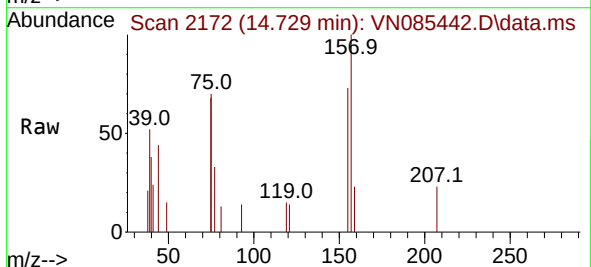
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

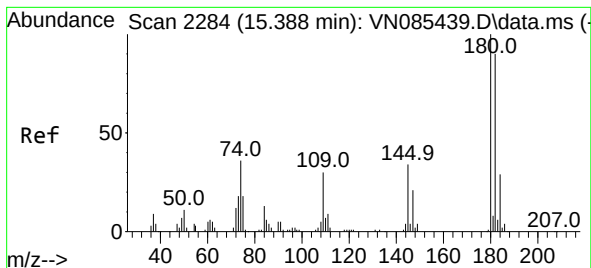
Tgt Ion:146 Resp: 20177  
Ion Ratio Lower Upper  
146 100  
111 44.0 21.7 65.1  
148 62.8 31.4 94.2



#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

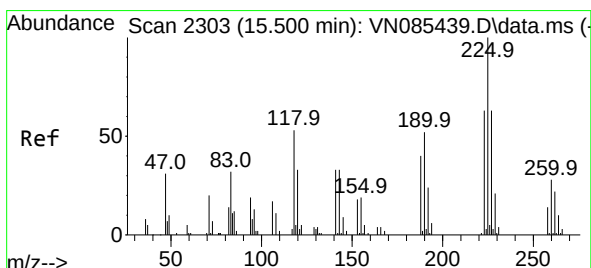
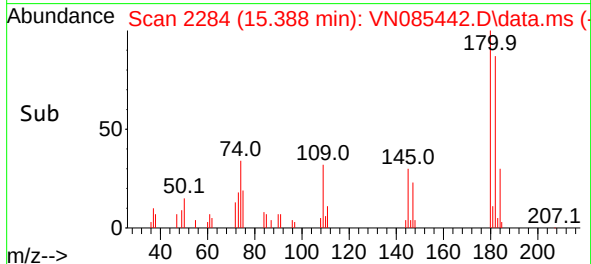
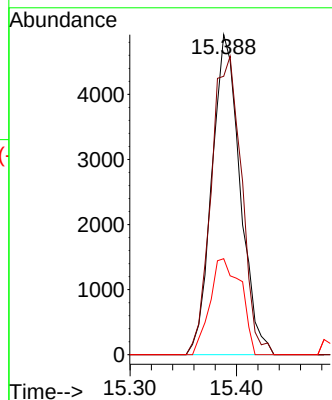
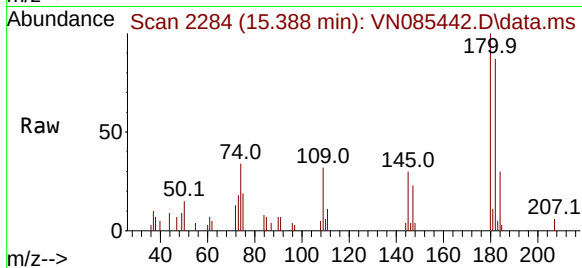
Tgt Ion:180 Resp: 9037

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

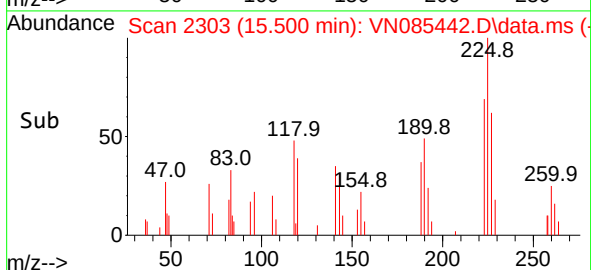
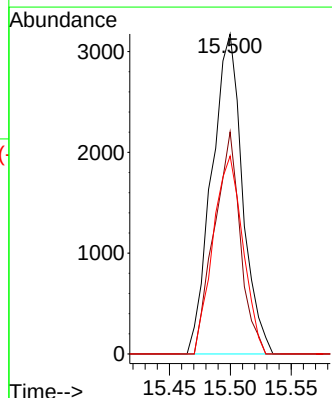
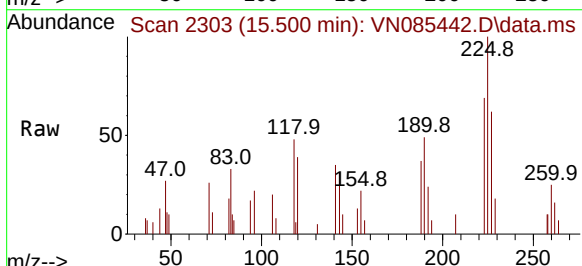
Tgt Ion:225 Resp: 5563

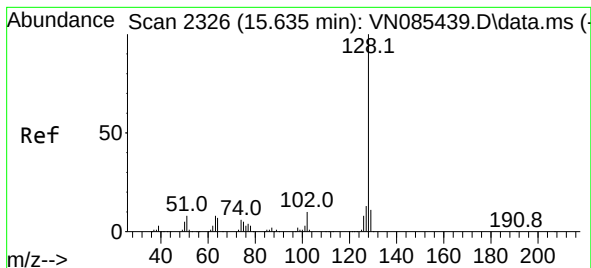
Ion Ratio Lower Upper

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

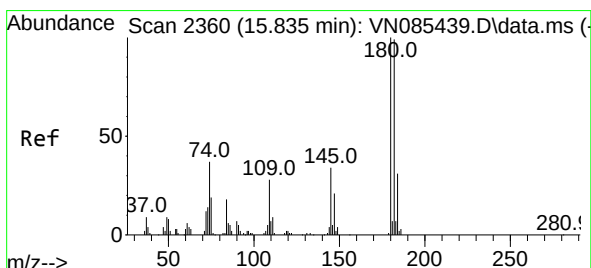
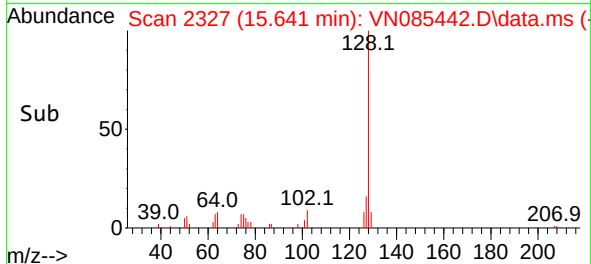
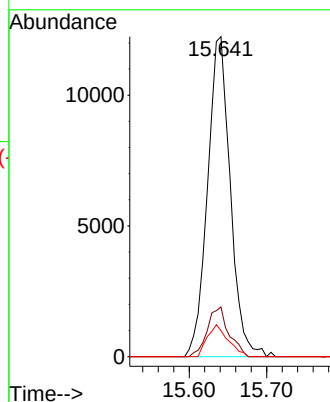
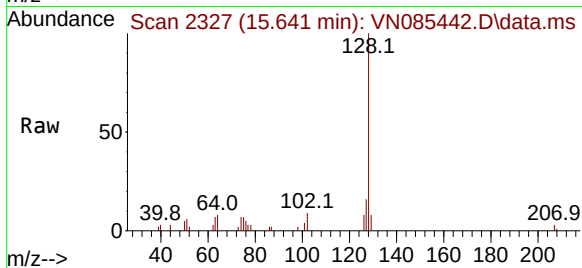
Tgt Ion:128 Resp: 25047

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

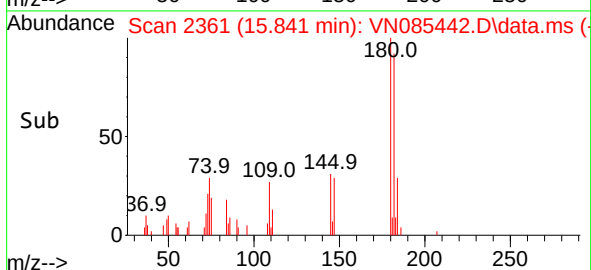
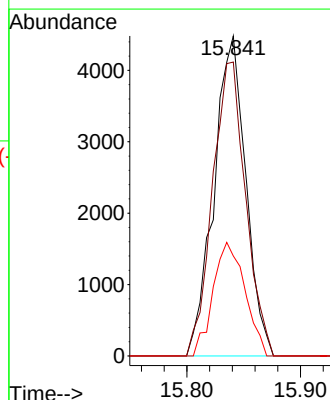
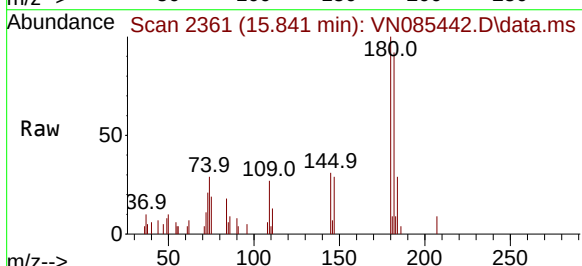
Tgt Ion:180 Resp: 8737

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       |

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

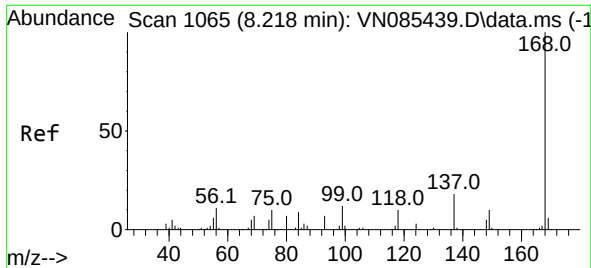
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

(#) = 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

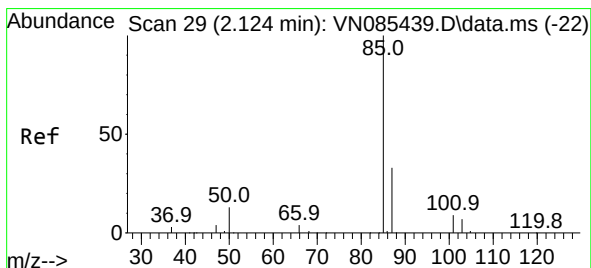
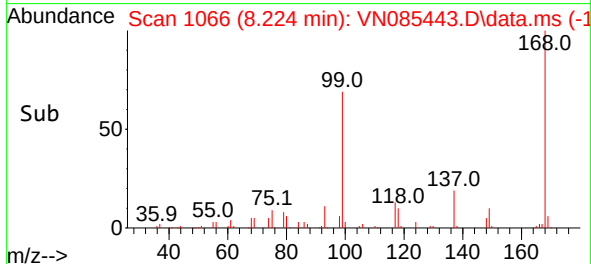
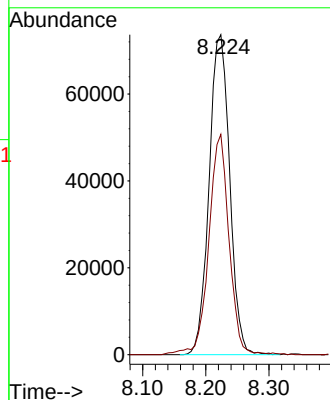
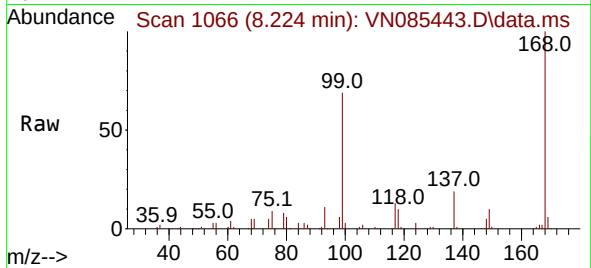




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

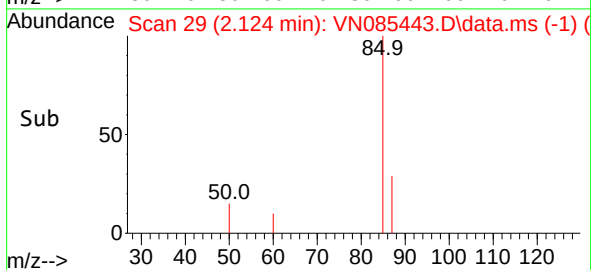
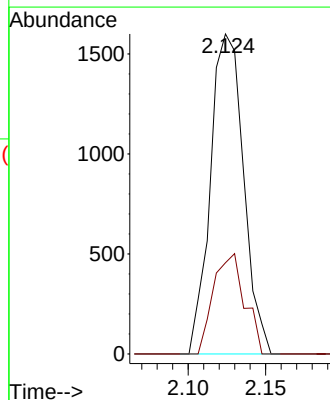
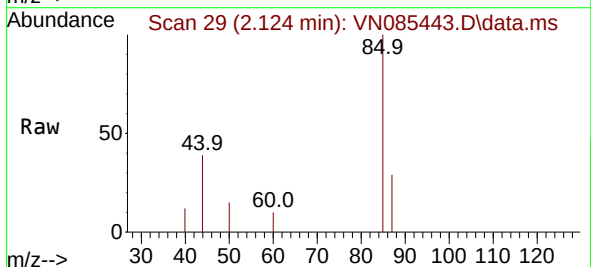
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

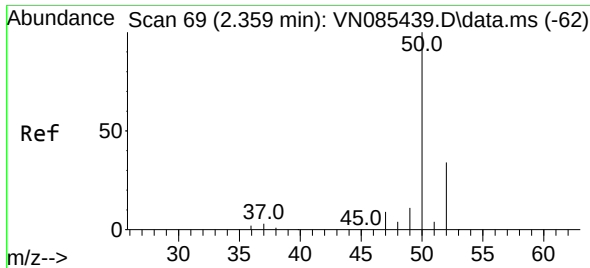
Tgt Ion:168 Resp: 166880  
Ion Ratio Lower Upper  
168 100  
99 68.6 53.6 80.4



#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

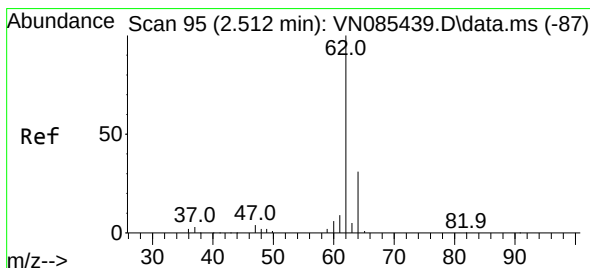
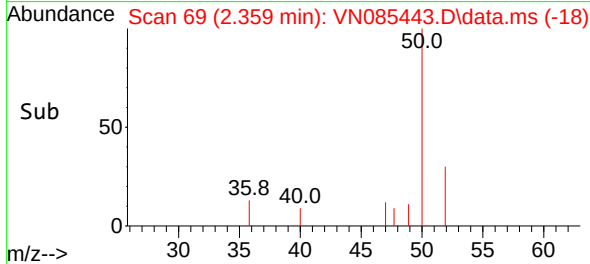
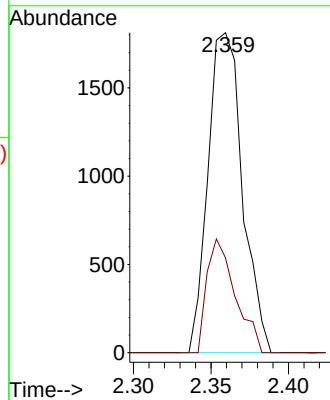
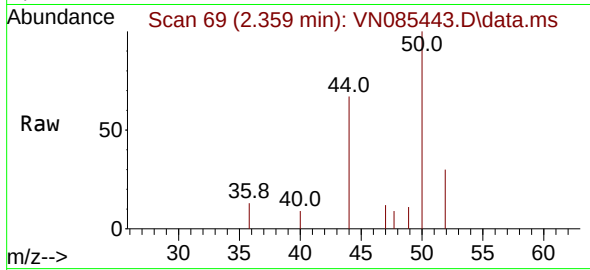




#3  
Chloromethane  
Concen: 1.145 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

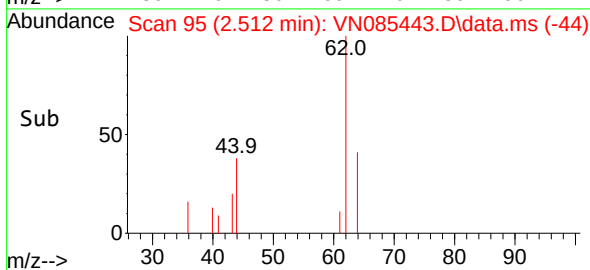
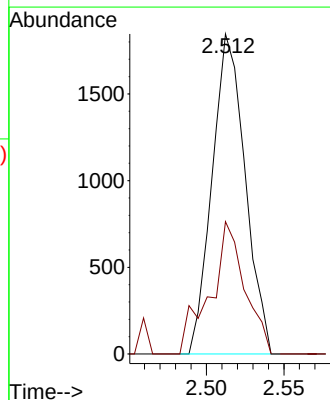
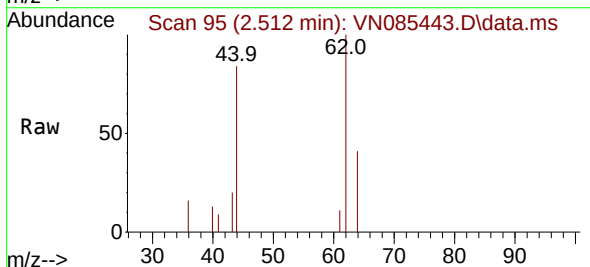
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

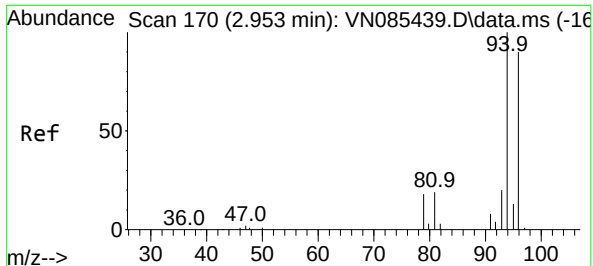
Tgt Ion: 50 Resp: 2801  
Ion Ratio Lower Upper  
50 100  
52 29.7 27.0 40.6



#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#

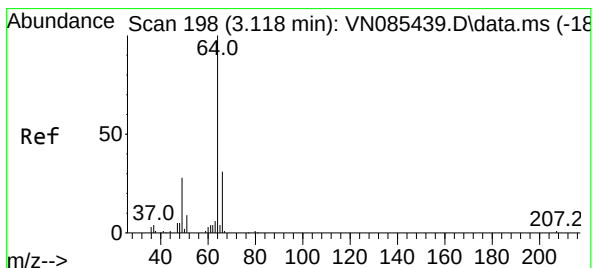
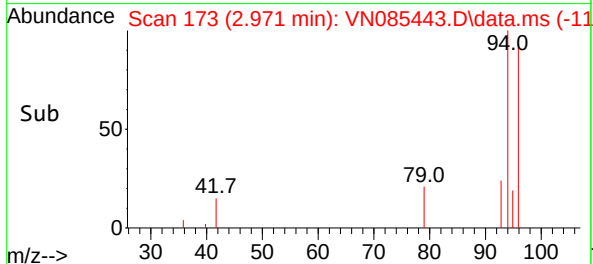
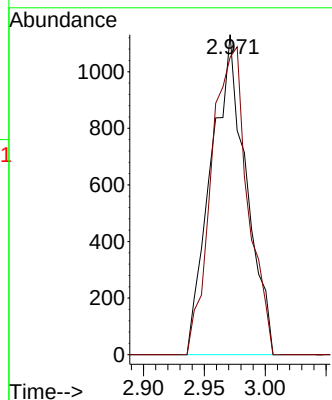
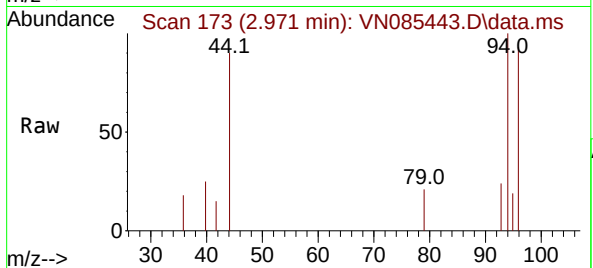




#5  
Bromomethane  
Concen: 1.534 ug/l  
RT: 2.971 min Scan# 11  
Delta R.T. 0.018 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

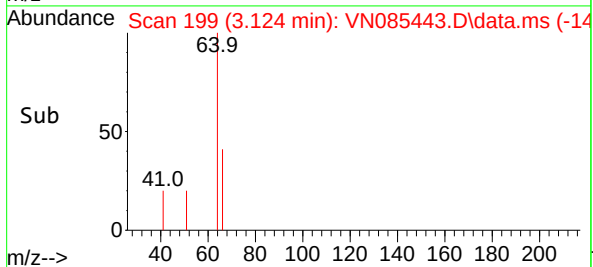
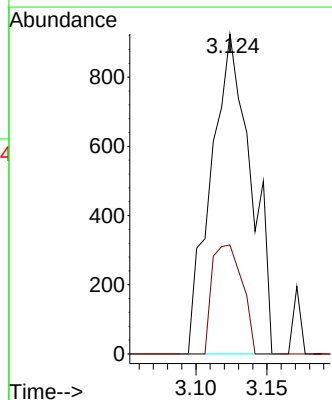
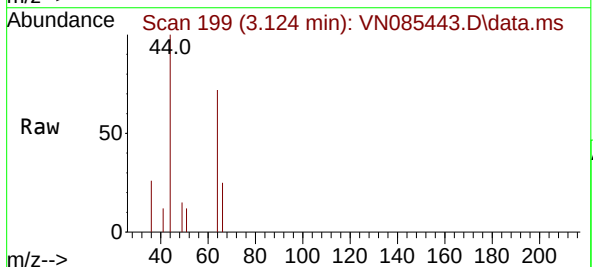
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001

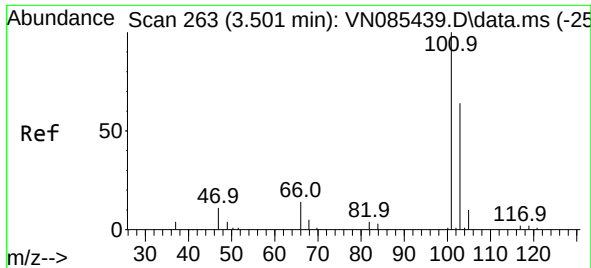
Tgt Ion: 94 Resp: 2279  
Ion Ratio Lower Upper  
94 100  
96 92.9 71.8 107.6



#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

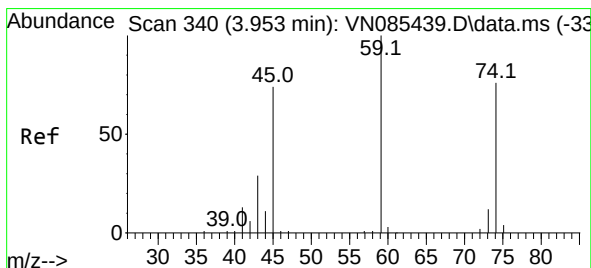
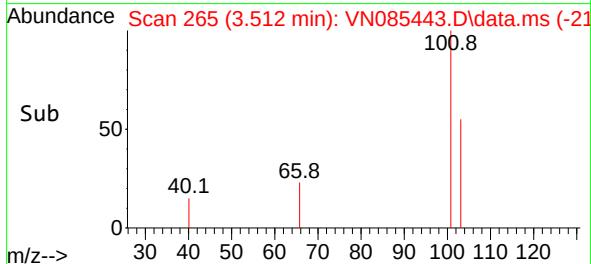
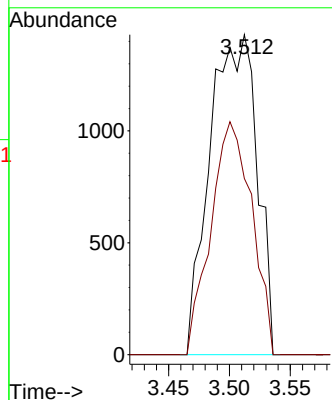
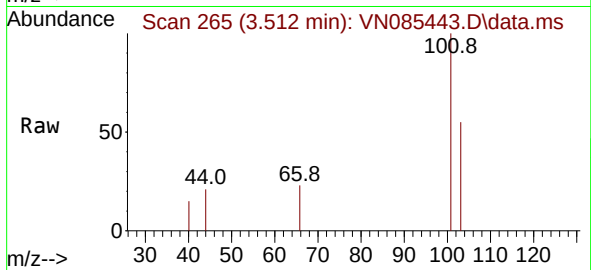




#7  
Trichlorofluoromethane  
Concen: 1.082 ug/l  
RT: 3.512 min Scan# 21  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

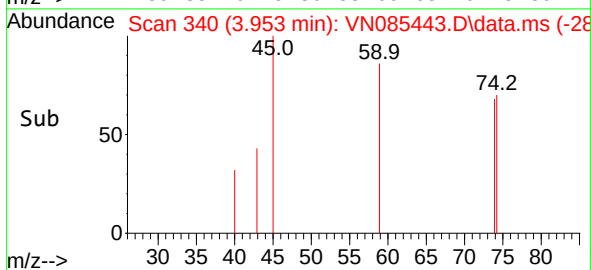
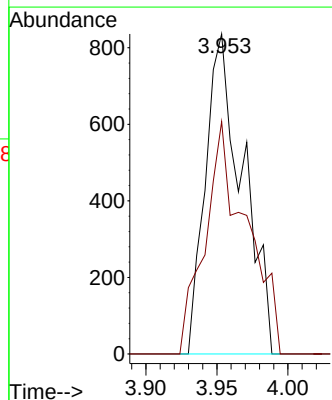
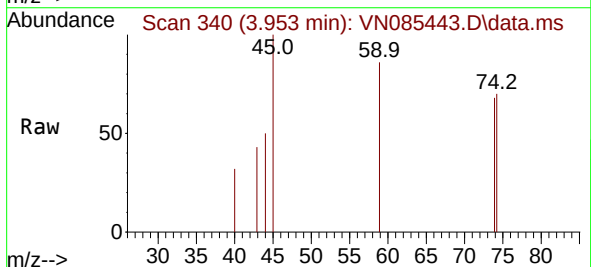
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

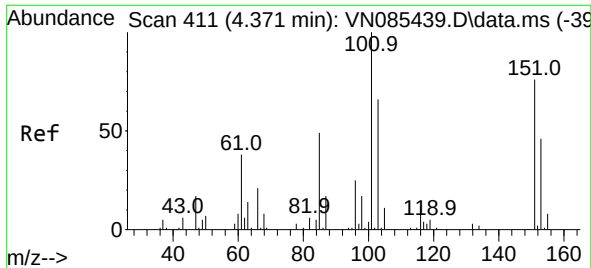
Tgt Ion:101 Resp: 3860  
Ion Ratio Lower Upper  
101 100  
103 55.0 51.4 77.2



#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

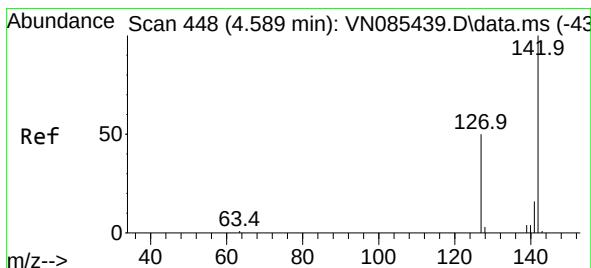
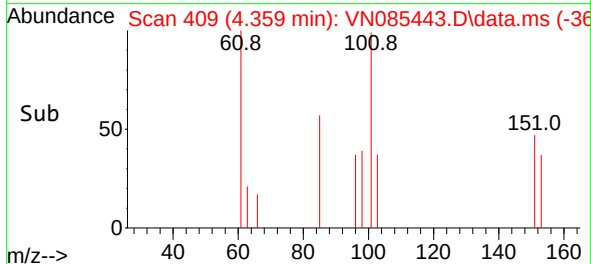
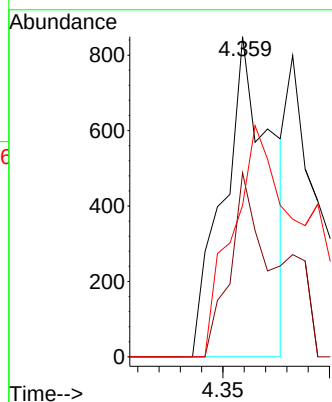
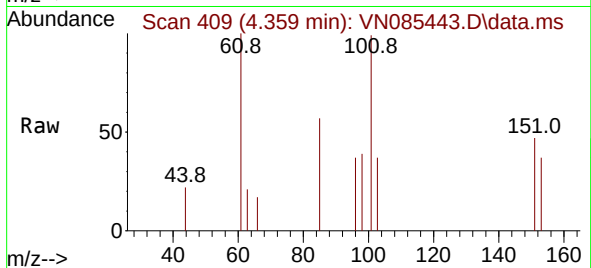




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.651 ug/l  
RT: 4.359 min Scan# 409  
Delta R.T. -0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

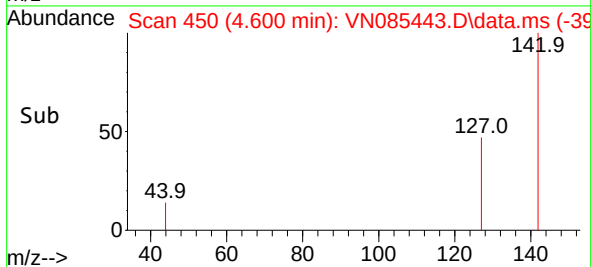
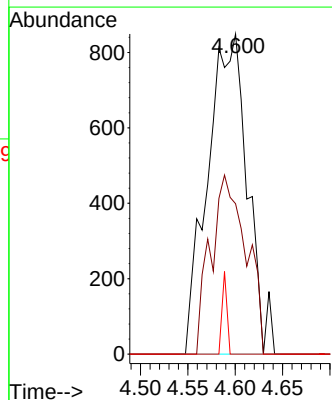
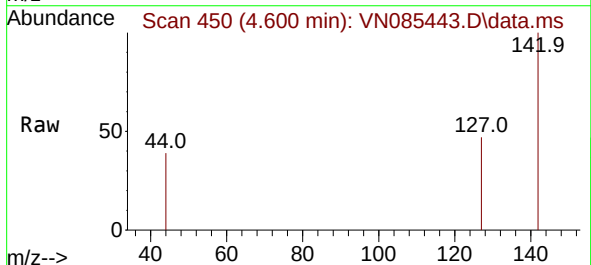
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

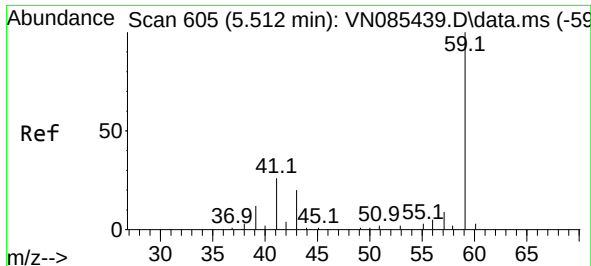
Tgt Ion:101 Resp: 1308  
Ion Ratio Lower Upper  
101 100  
85 58.3 37.8 56.8#  
151 109.4 58.8 88.2#



#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#

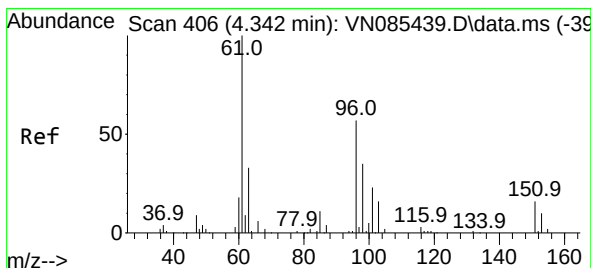
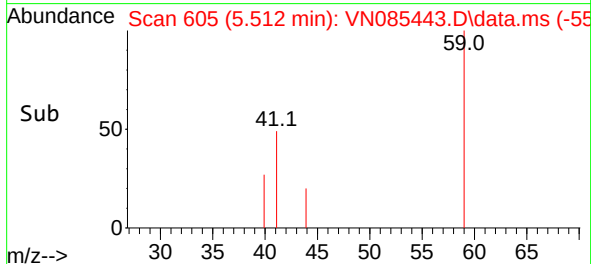
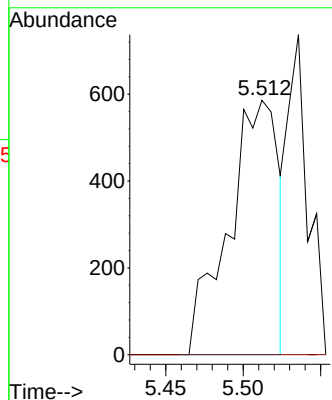
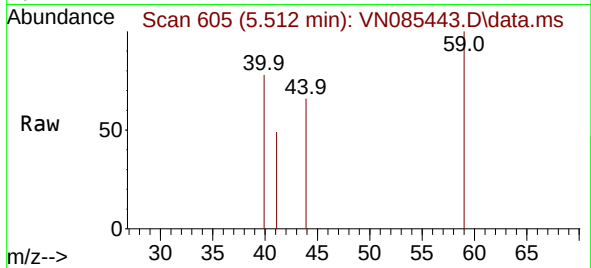




#11  
Tert butyl alcohol  
Concen: 4.260 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

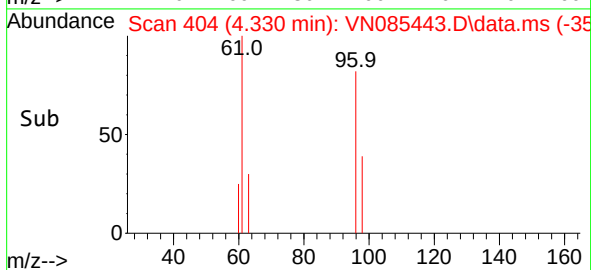
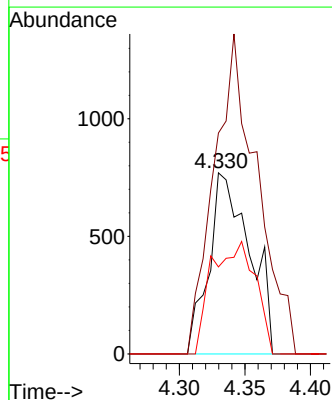
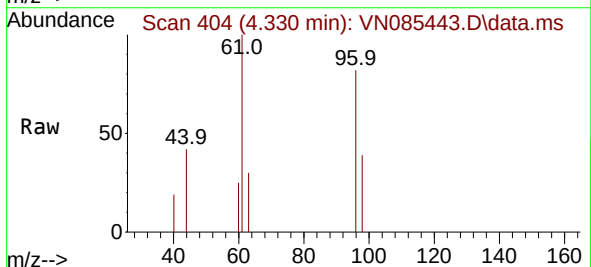
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ClientSampleId :  
VSTDIC001

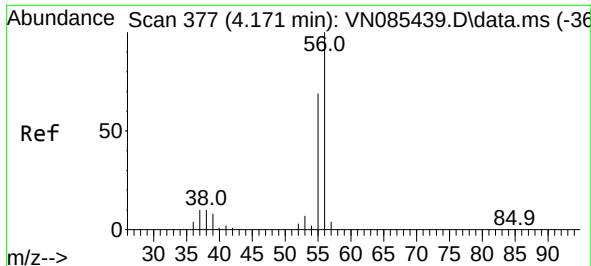
Tgt Ion: 59 Resp: 1314  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.6 13.0#



#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 :

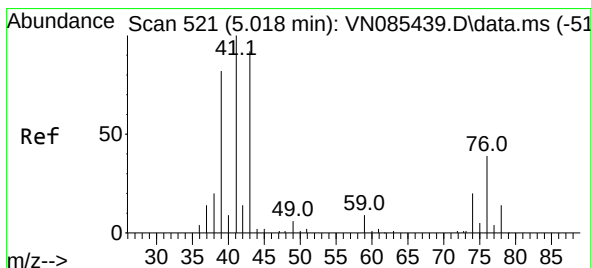
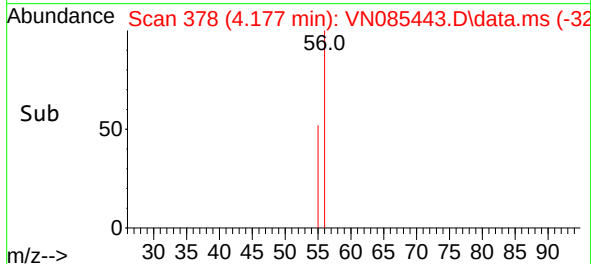
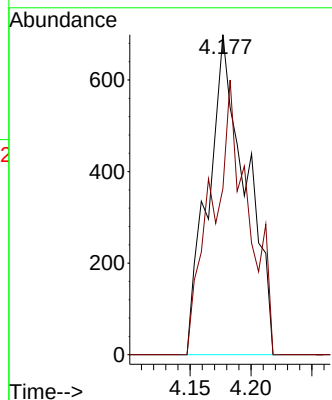
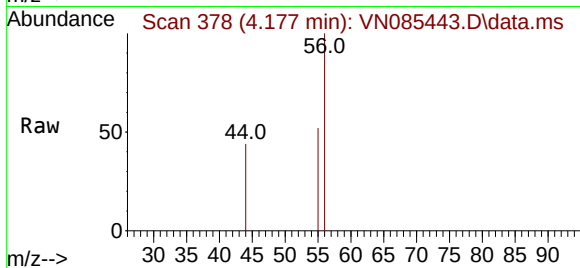
VSTDIC001

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

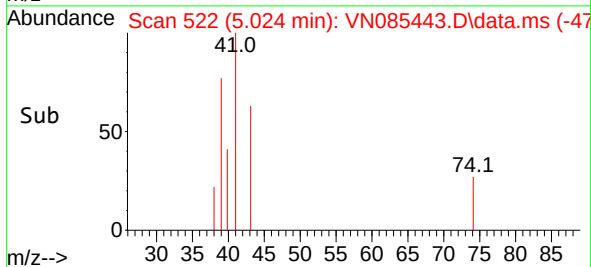
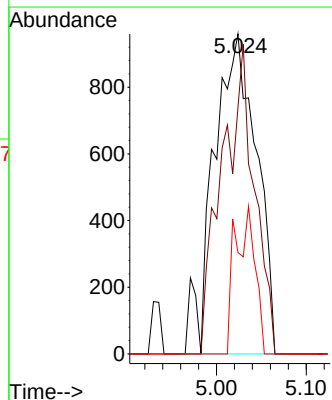
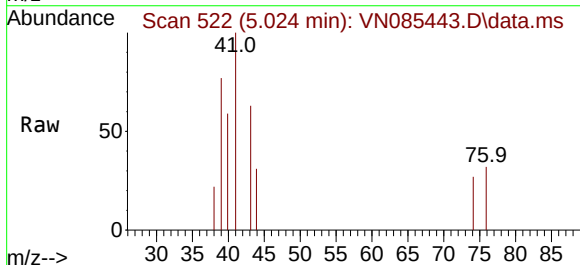
Tgt Ion: 41 Resp: 3179

Ion Ratio Lower Upper

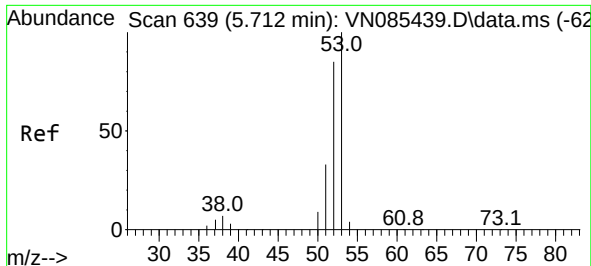
41 100

39 73.1 64.4 96.6

76 21.4 30.5 45.7#



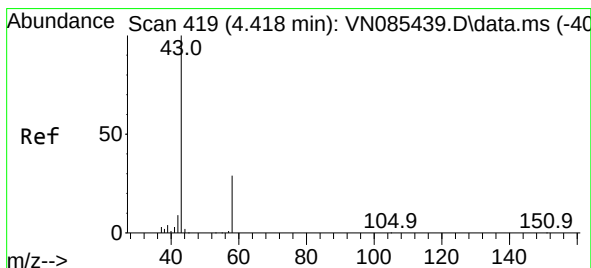
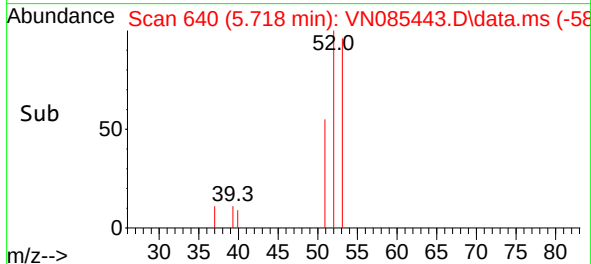
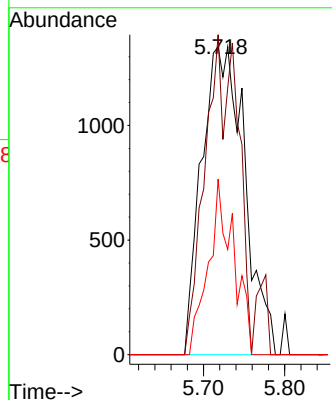
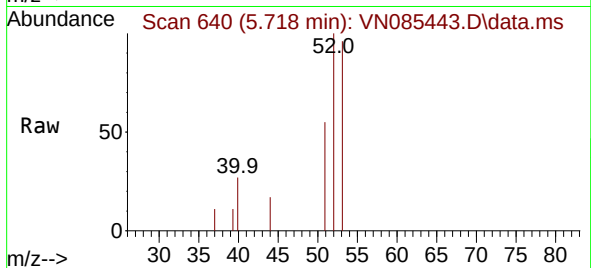




#15  
Acrylonitrile  
Concen: 5.070 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

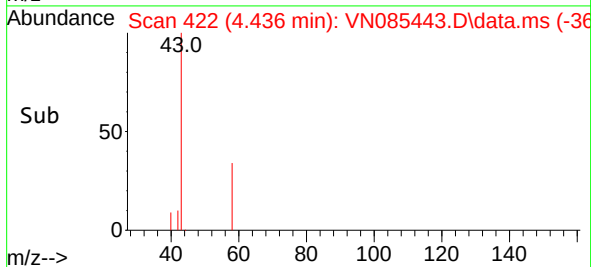
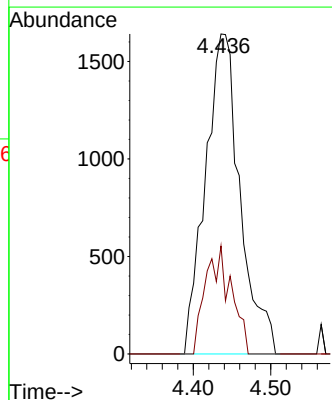
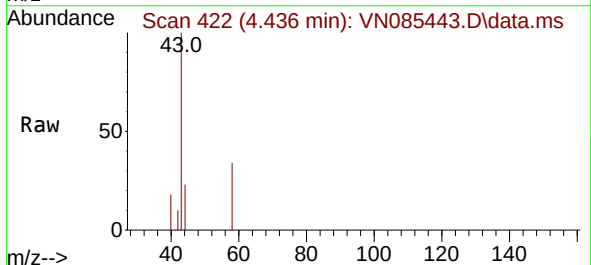
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ClientSampleId :  
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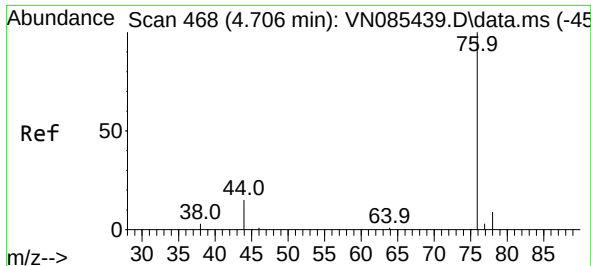
Tgt Ion: 53 Resp: 4967  
Ion Ratio Lower Upper  
53 100  
52 45.1 65.5 98.3#  
51 33.3 29.8 44.8



#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

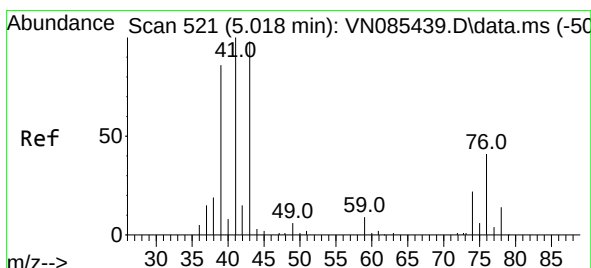
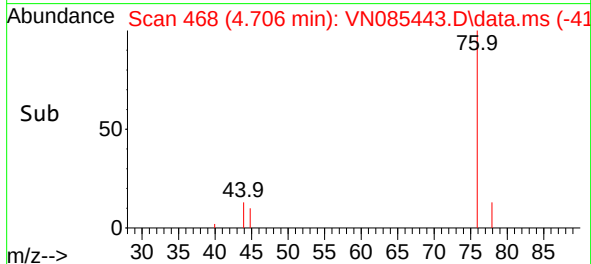
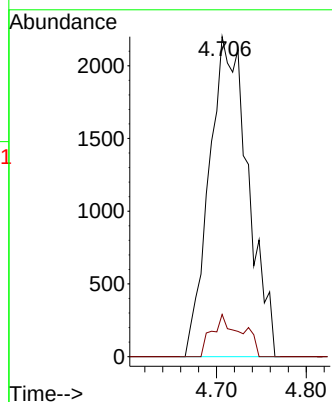
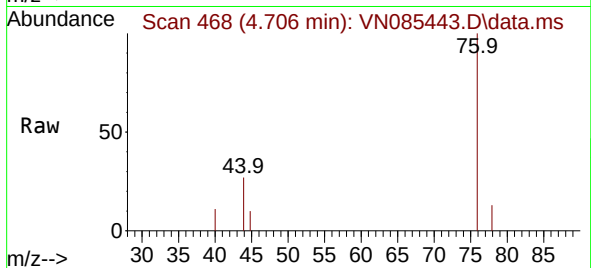




#17  
Carbon Disulfide  
Concen: 1.197 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

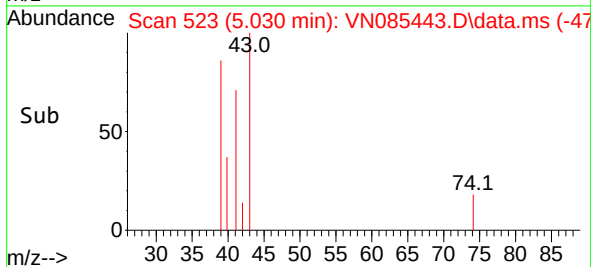
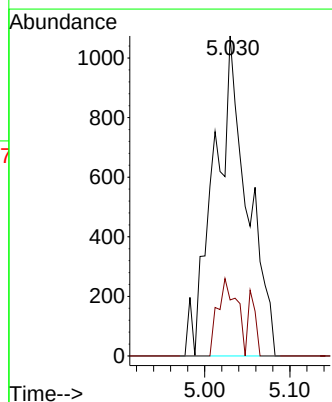
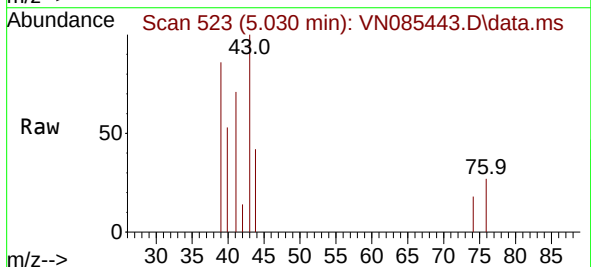
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC001

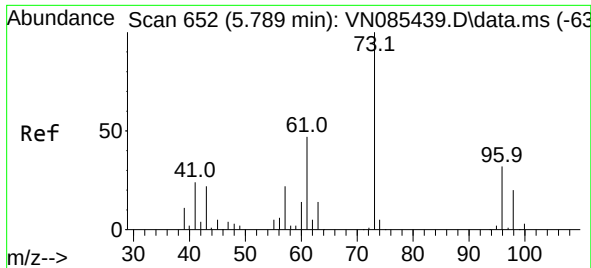
Tgt Ion: 76 Resp: 6601  
Ion Ratio Lower Upper  
76 100  
78 13.2 6.9 10.3#



#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#

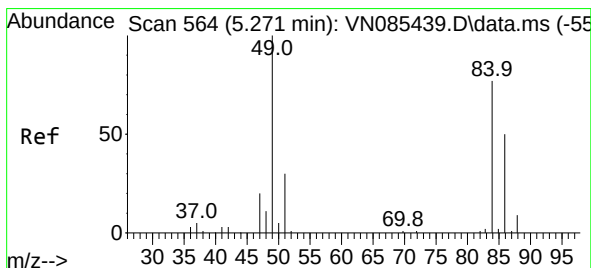
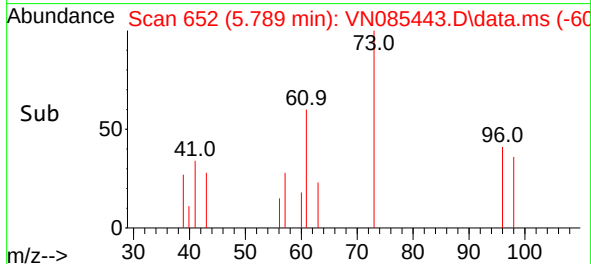
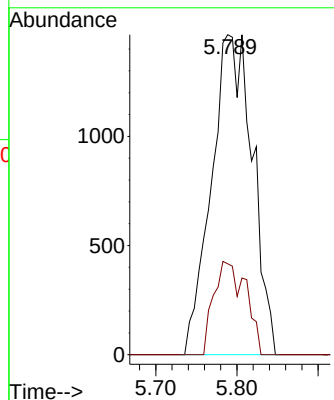
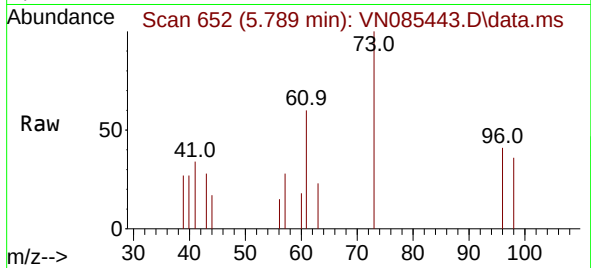




#19  
Methyl tert-butyl Ether  
Concen: 0.887 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

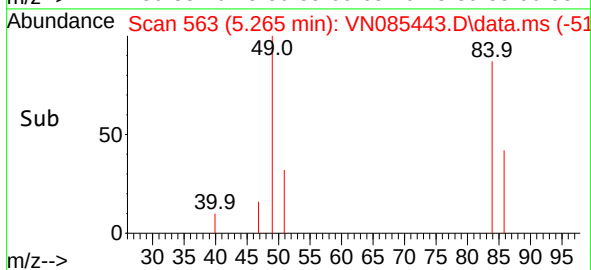
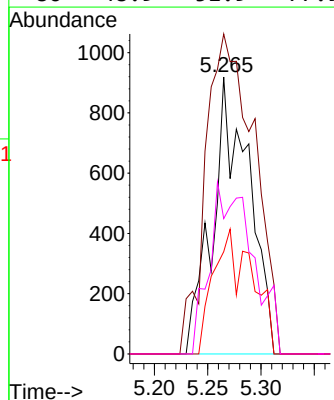
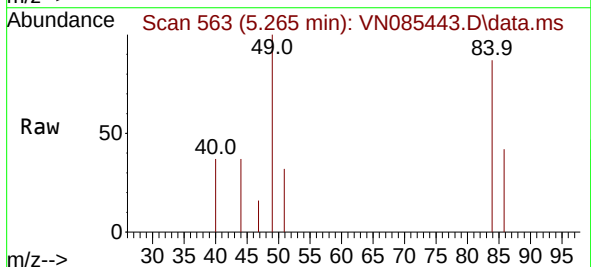
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

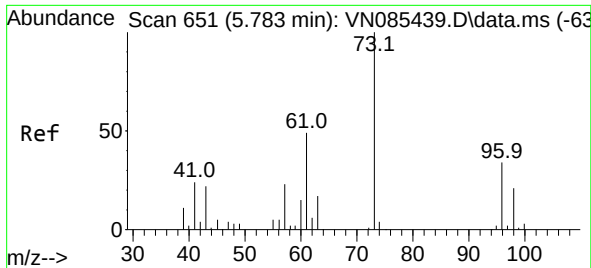
Tgt Ion: 73 Resp: 5156  
Ion Ratio Lower Upper  
73 100  
57 28.4 17.8 26.8#



#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#

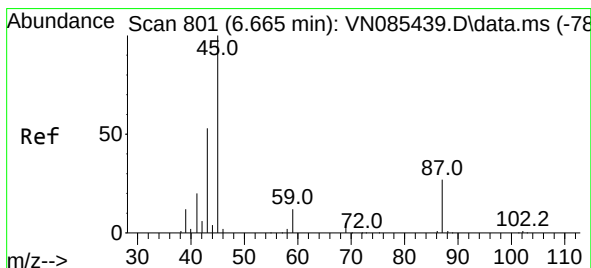
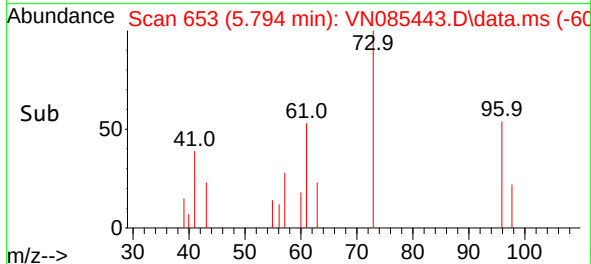
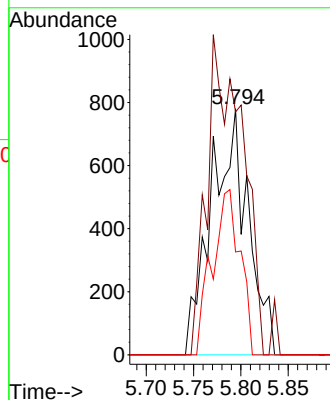
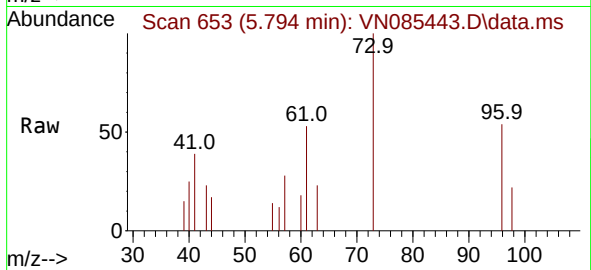




#21  
trans-1,2-Dichloroethene  
Concen: 1.102 ug/l  
RT: 5.794 min Scan# 610  
Delta R.T. 0.012 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

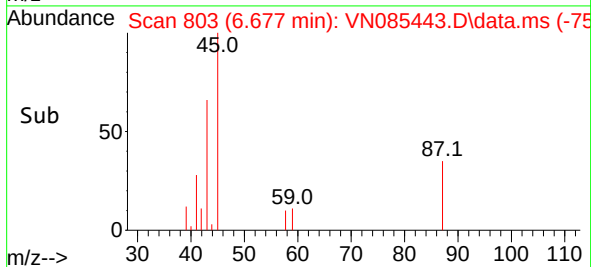
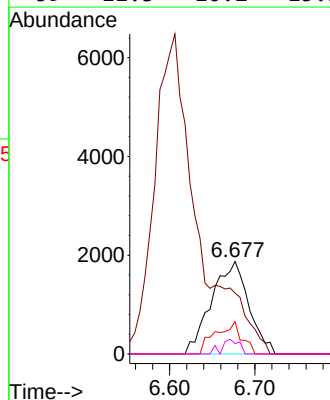
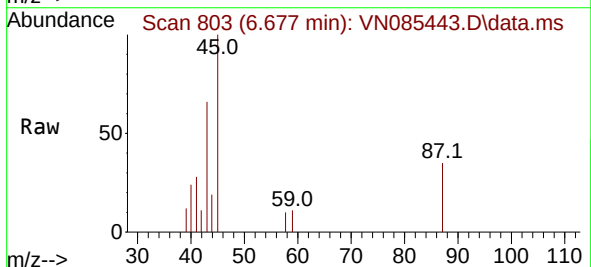
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MSVOA\_N  
ClientSampleId :  
VSTDIC001

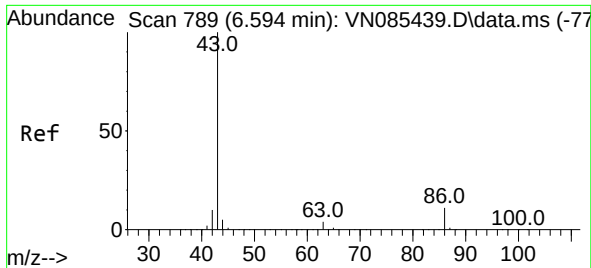
Tgt Ion: 96 Resp: 2110  
Ion Ratio Lower Upper  
96 100  
61 98.7 115.7 173.5#  
98 41.8 49.8 74.8#



#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

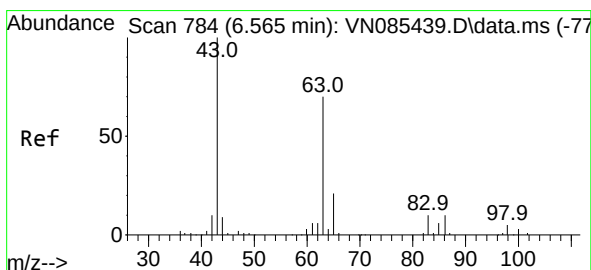
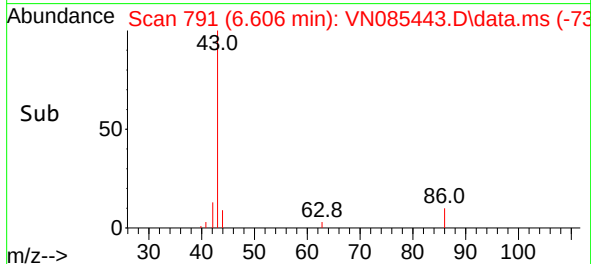
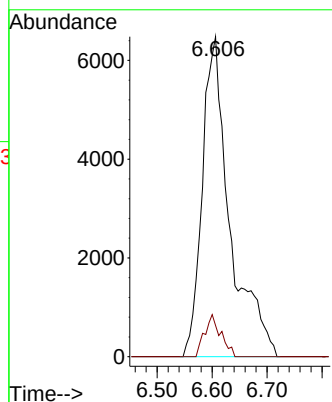
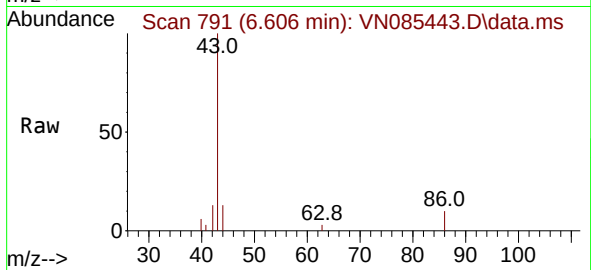




#23  
 Vinyl Acetate  
 Concen: 4.988 ug/l  
 RT: 6.606 min Scan# 791  
 Delta R.T. 0.012 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

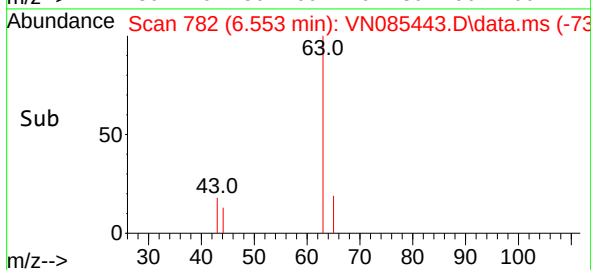
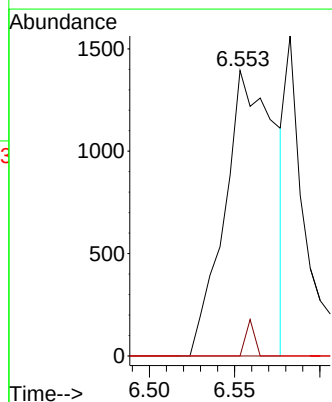
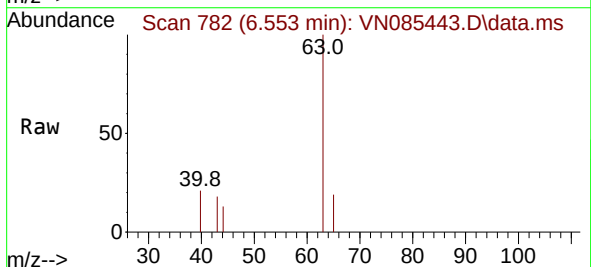
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 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

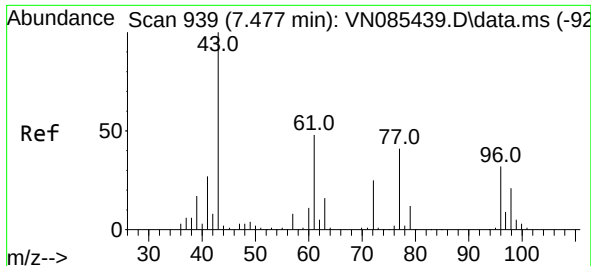
Tgt Ion: 43 Resp: 22593  
 Ion Ratio Lower Upper  
 43 100  
 86 9.8 8.4 12.6



#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#

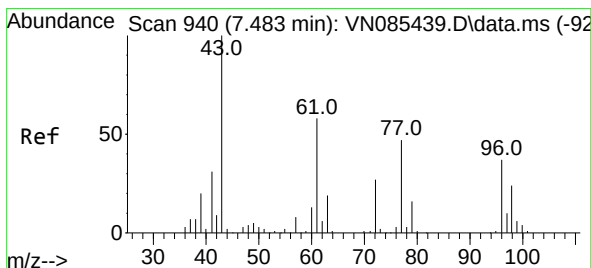
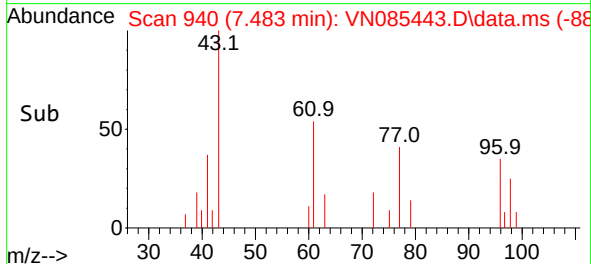
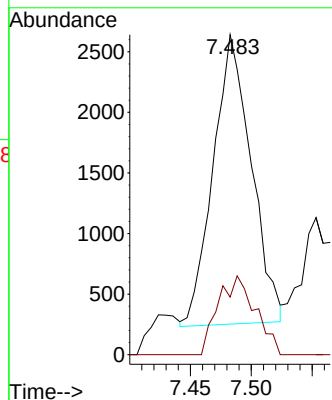
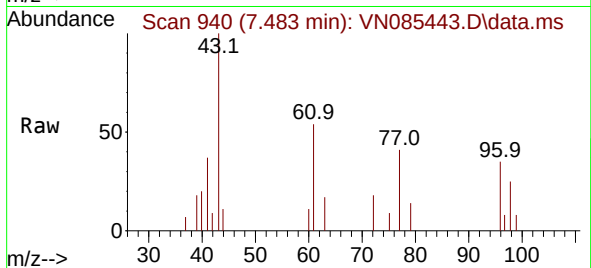




#25  
2-Butanone  
Concen: 4.062 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

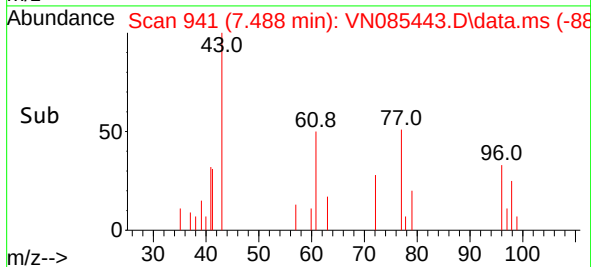
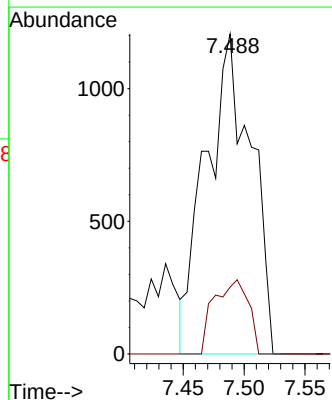
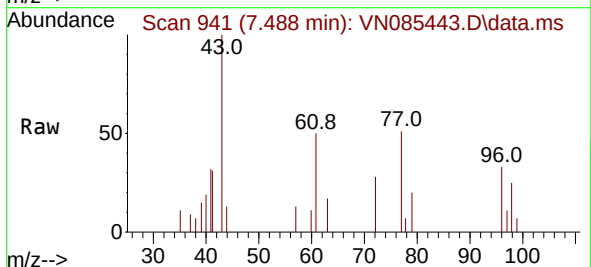
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MSVOA\_N  
ClientSampleId :  
VSTDIC001

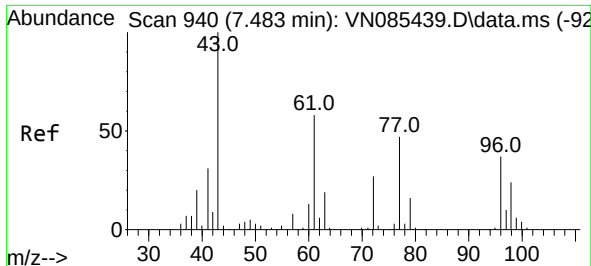
Tgt Ion: 43 Resp: 5203  
Ion Ratio Lower Upper  
43 100  
72 20.1 20.2 30.4#



#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

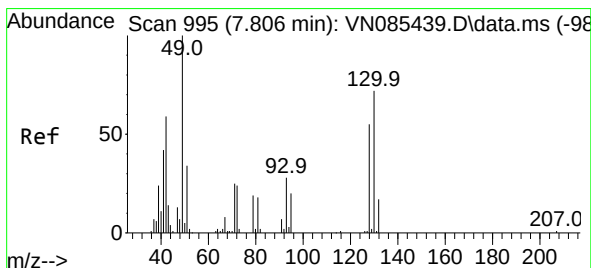
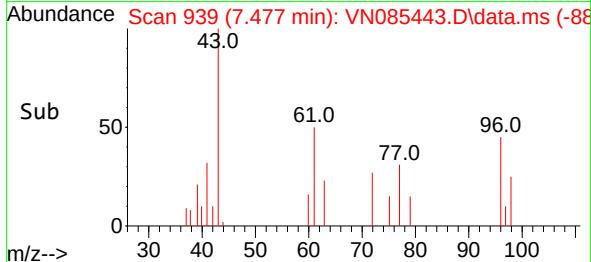
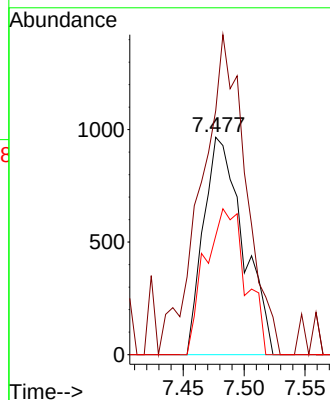
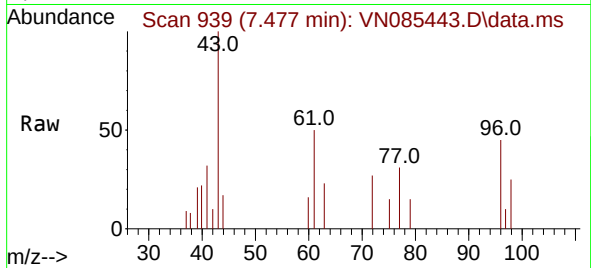




#27  
 cis-1,2-Dichloroethene  
 Concen: 0.969 ug/l  
 RT: 7.477 min Scan# 91  
 Delta R.T. -0.006 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

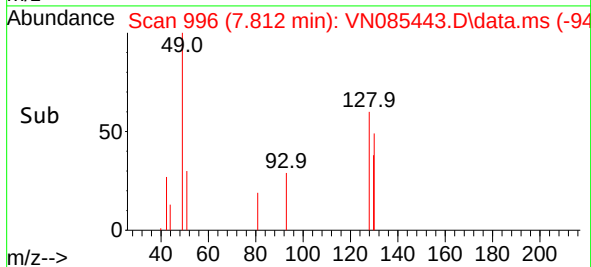
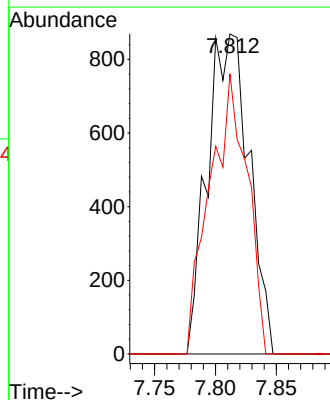
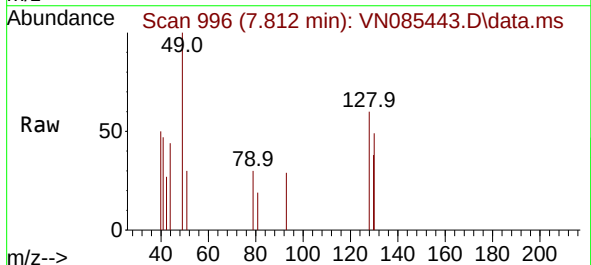
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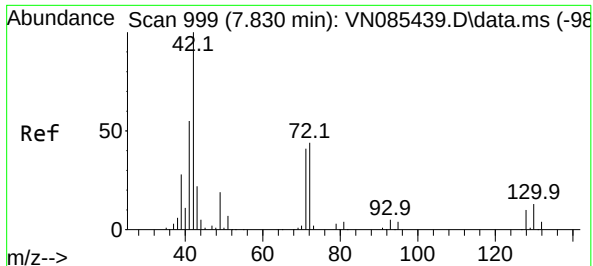
Tgt Ion: 96 Resp: 2185  
 Ion Ratio Lower Upper  
 96 100  
 61 166.1 0.0 311.8  
 98 68.7 0.0 126.0



#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

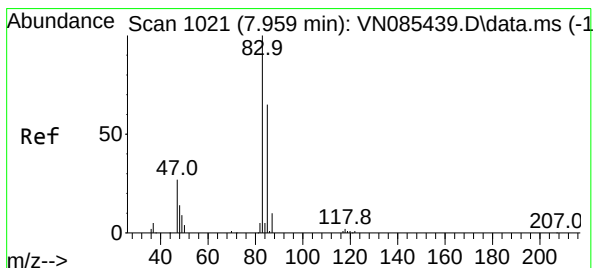
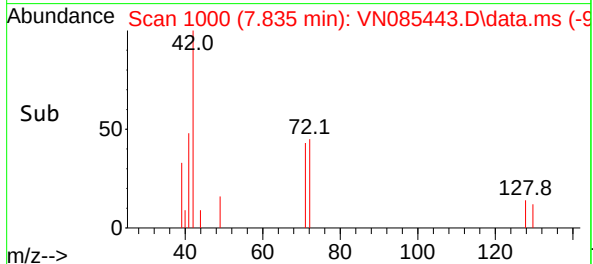
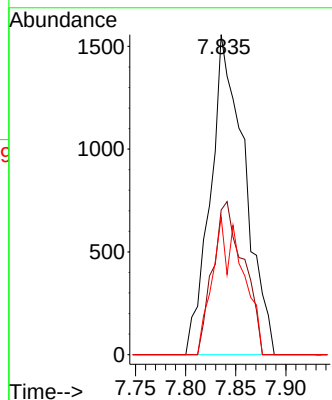
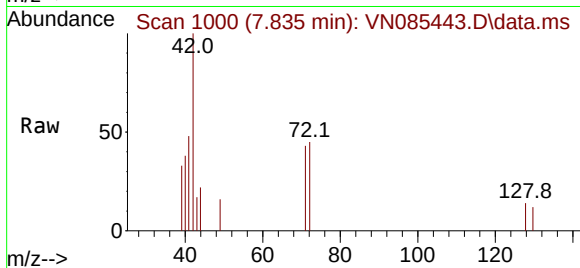
Tgt Ion: 42 Resp: 3693

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

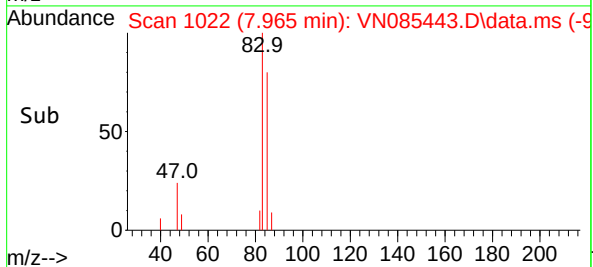
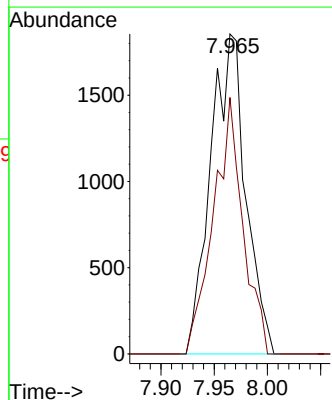
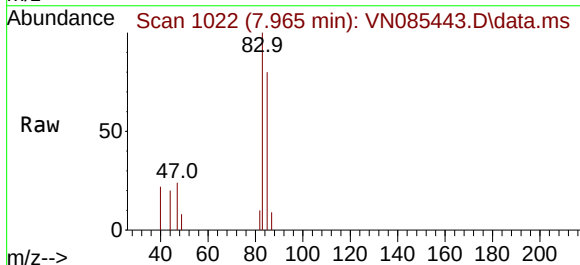
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 4250

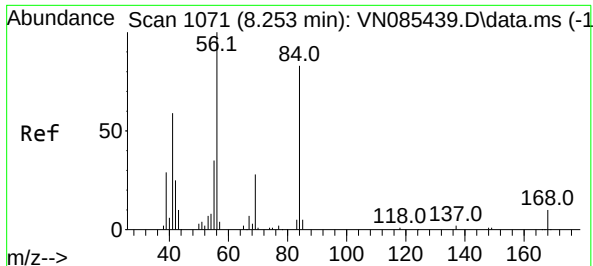
Ion Ratio Lower Upper

83 100

85 80.2 51.8 77.6#



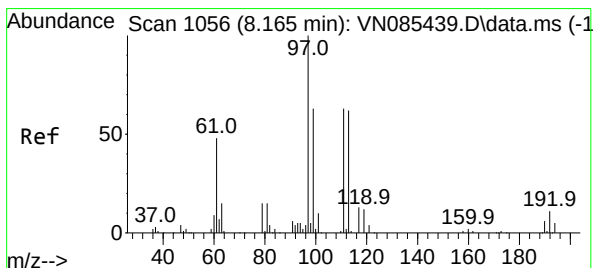
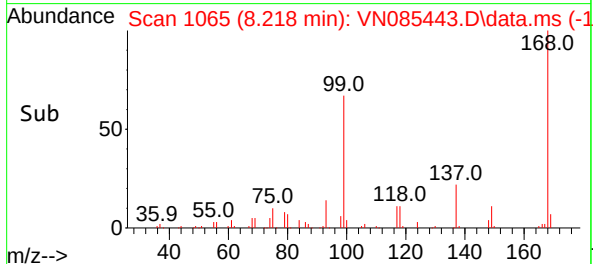
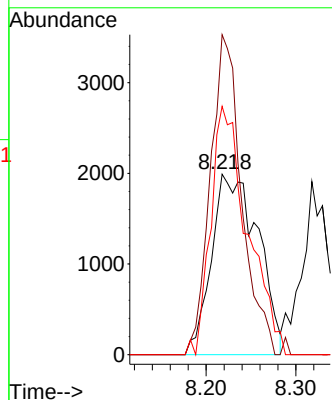
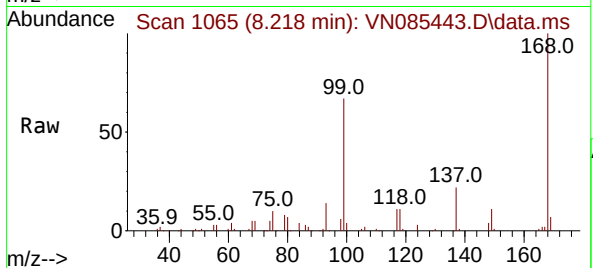




#31  
Cyclohexane  
Concen: 2.092 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.035 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

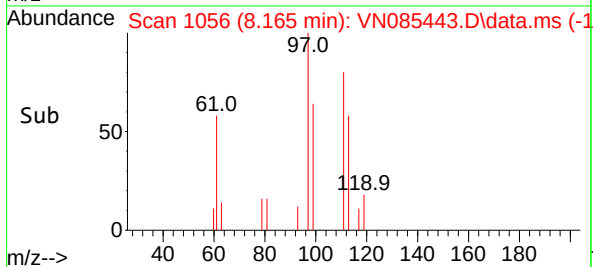
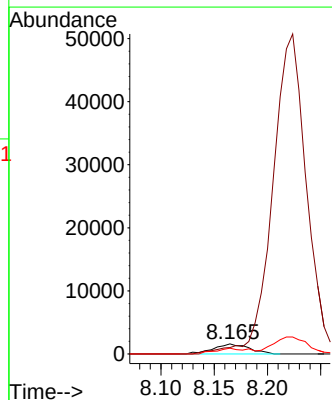
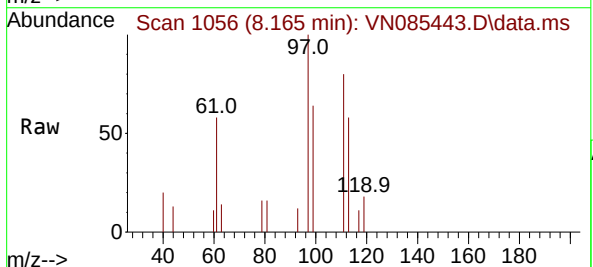
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

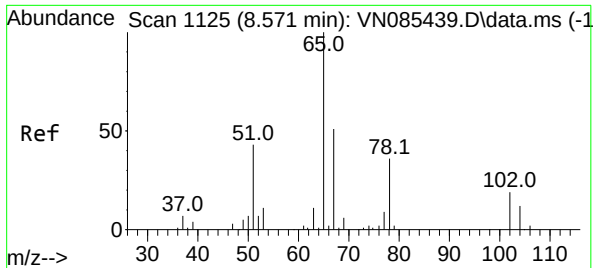
Tgt Ion: 56 Resp: 7152  
Ion Ratio Lower Upper  
56 100  
69 177.3 22.2 33.4#  
84 137.6 66.4 99.6#



#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 :

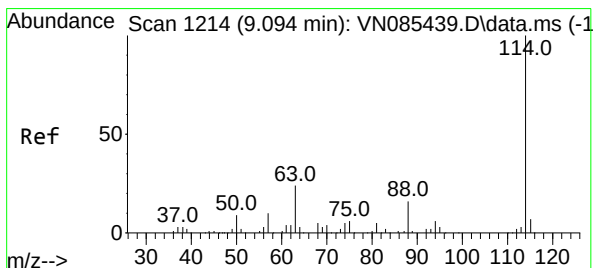
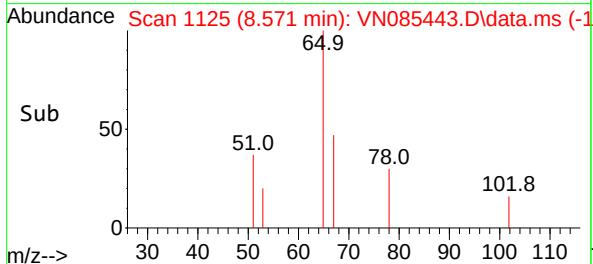
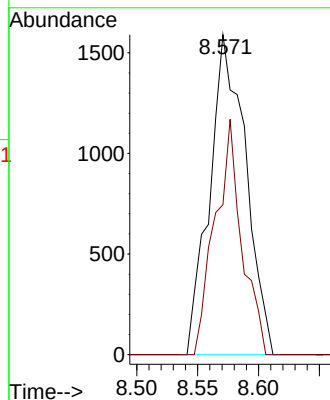
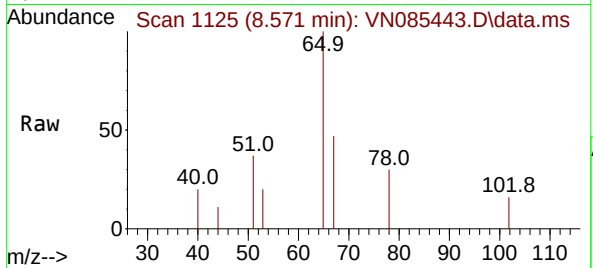
VSTDIC001

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

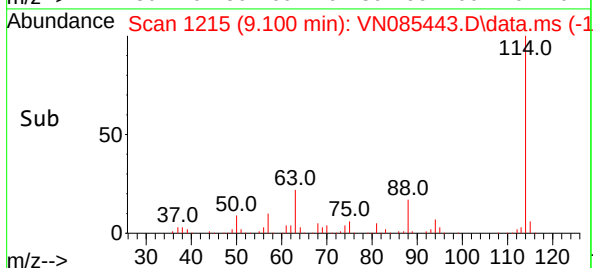
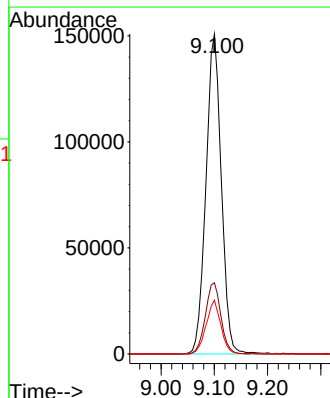
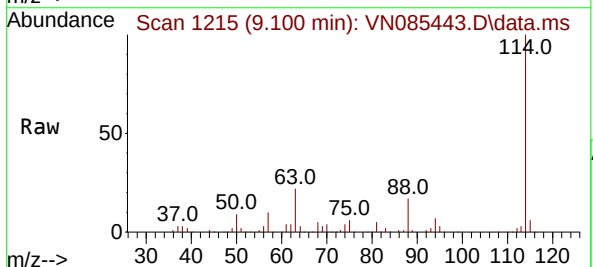
Tgt Ion: 114 Resp: 302938

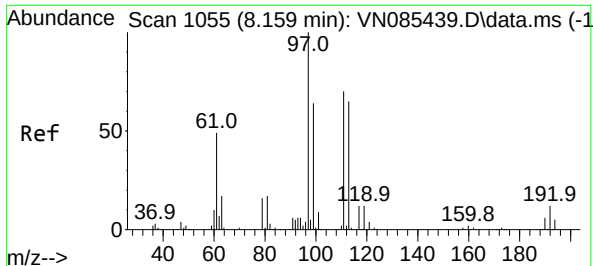
Ion Ratio Lower Upper

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

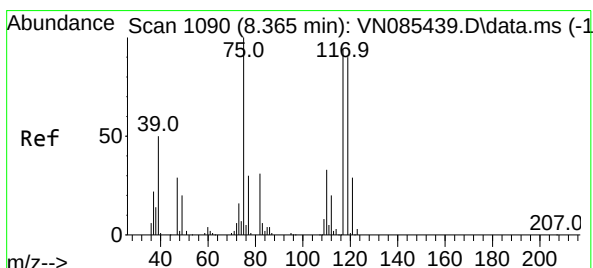
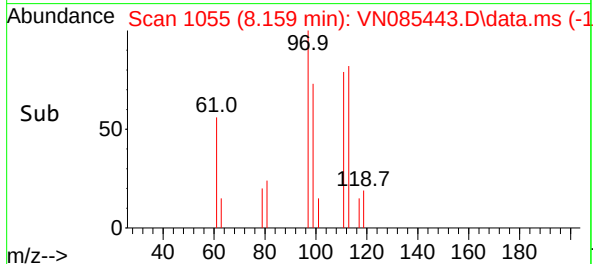
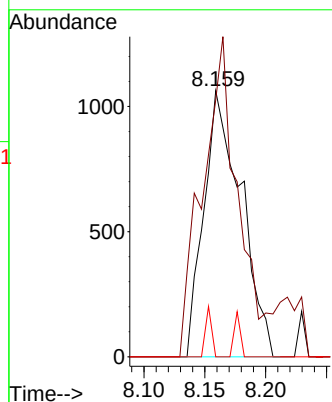
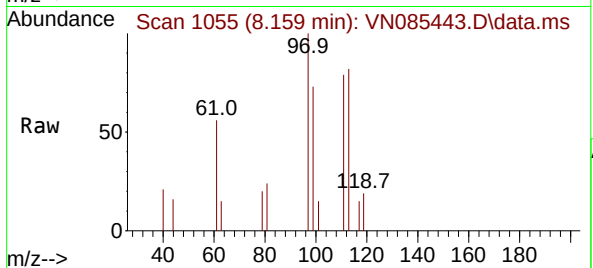
Tgt Ion:113 Resp: 2258

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

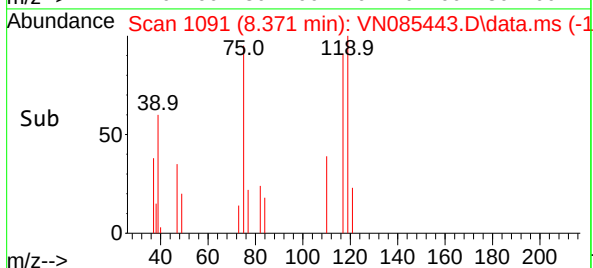
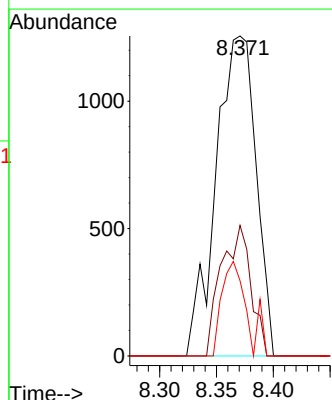
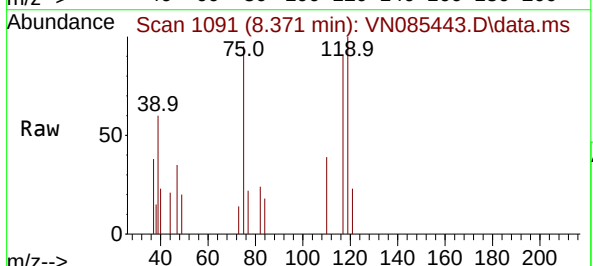
Tgt Ion: 75 Resp: 3084

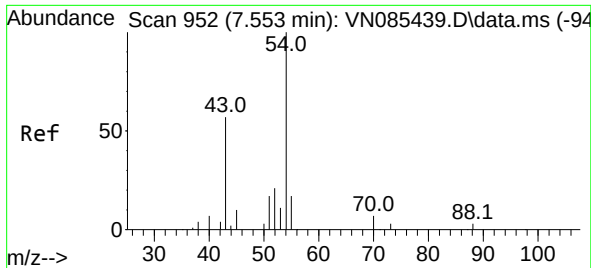
Ion Ratio Lower Upper

75 100

110 30.1 16.5 49.5

77 15.9 24.4 36.6#

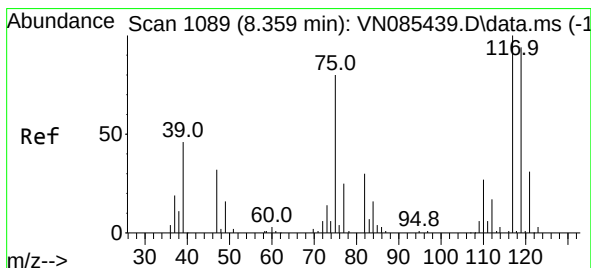
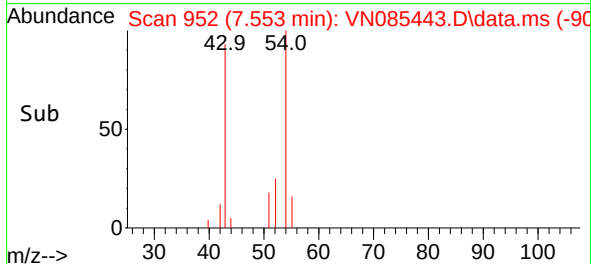
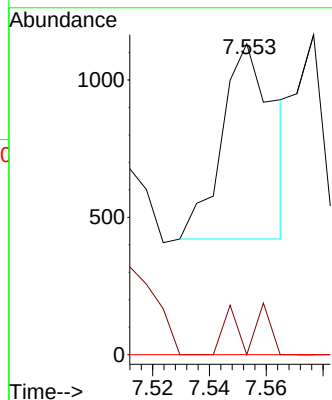
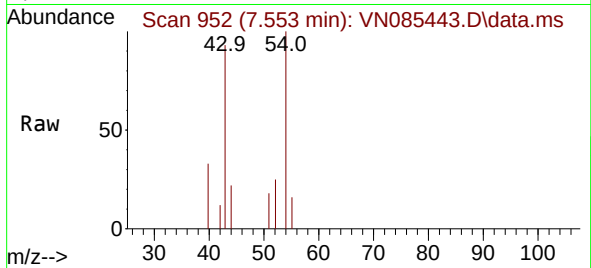




#37  
Ethyl Acetate  
Concen: 0.306 ug/l  
RT: 7.553 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

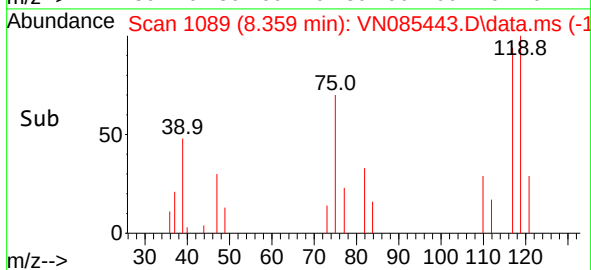
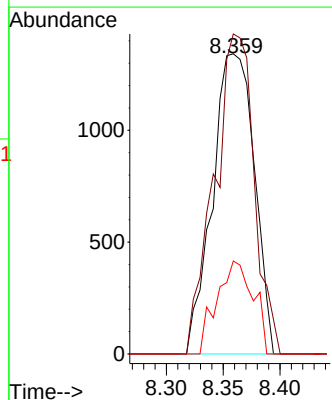
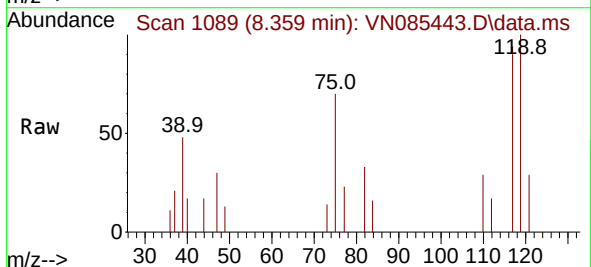
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

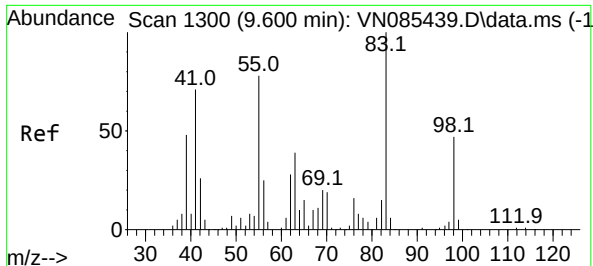
Tgt Ion: 43 Resp: 911  
Ion Ratio Lower Upper  
43 100  
61 14.3 10.9 16.3  
70 0.0 7.5 11.3#



#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

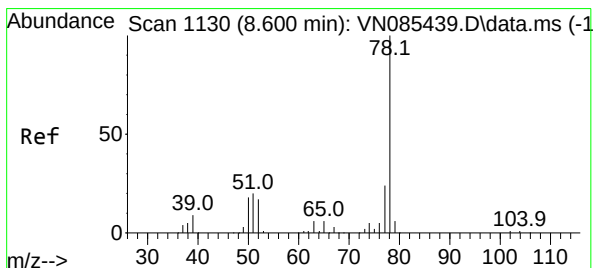
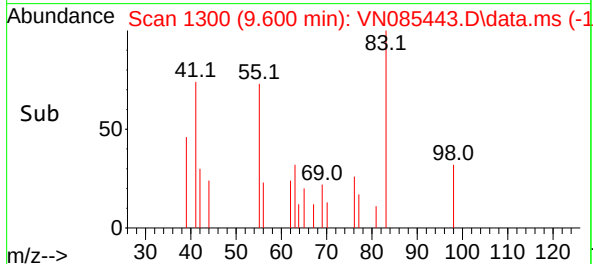
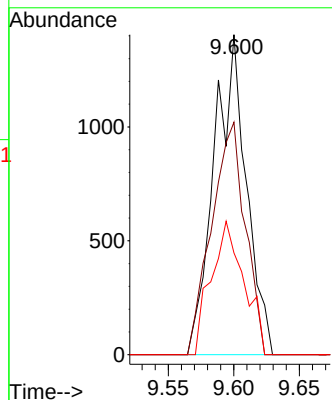
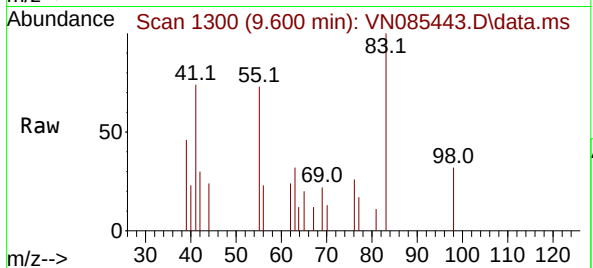
Tgt Ion: 83 Resp: 2403

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

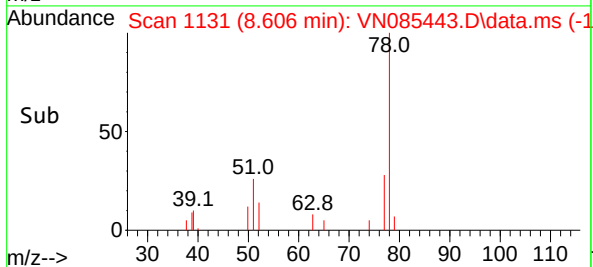
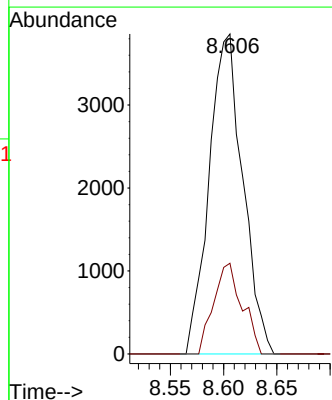
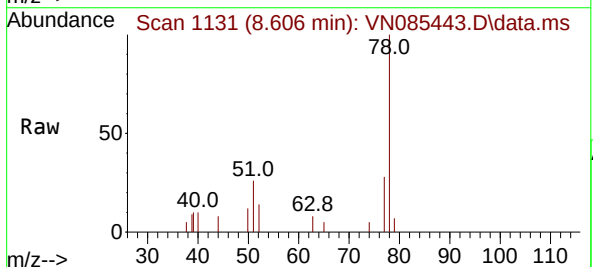
Acq: 14 Jan 2025 17:19

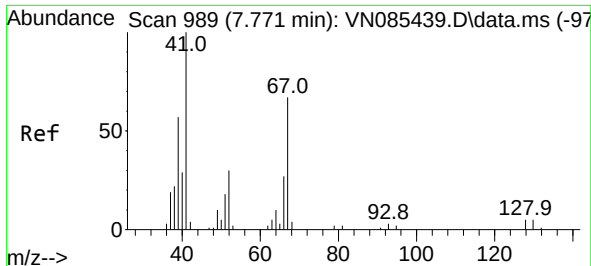
Tgt Ion: 78 Resp: 8480

Ion Ratio Lower Upper

78 100

77 28.3 19.0 28.6

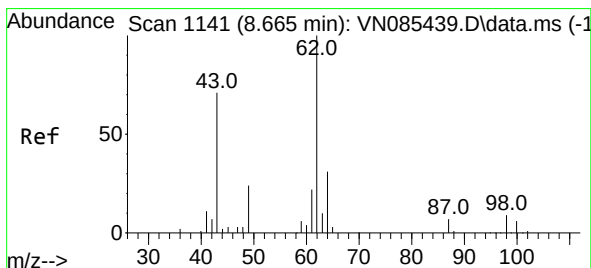
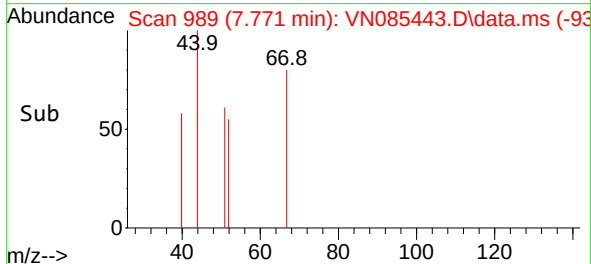
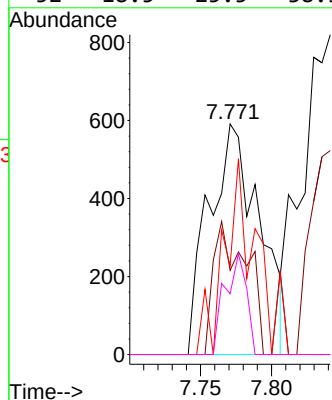
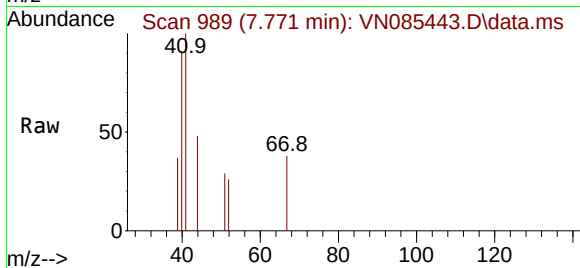




#41  
Methacrylonitrile  
Concen: 0.941 ug/l  
RT: 7.771 min Scan# 989  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

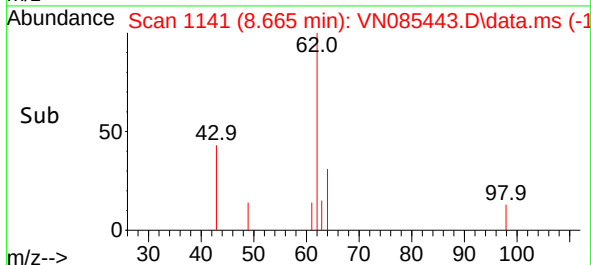
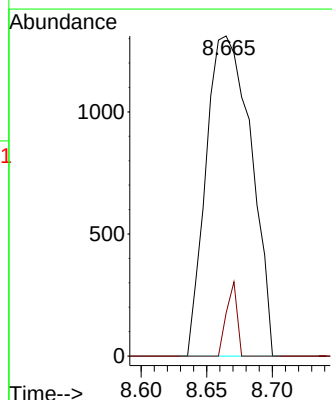
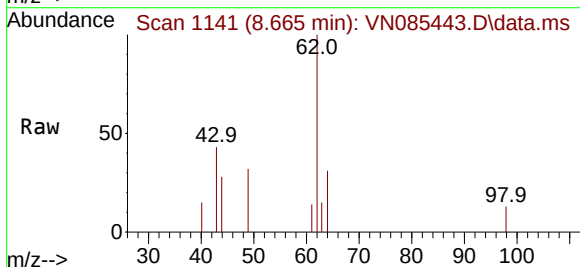
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

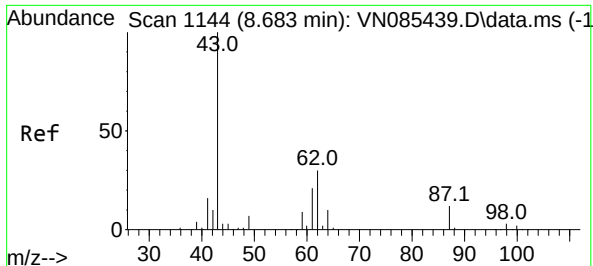
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 1458  |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 37.6     | 46.0 69.0#  |
| 67 53.8     | 57.4 86.2#  |
| 52 18.5     | 25.5 38.3#  |



#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

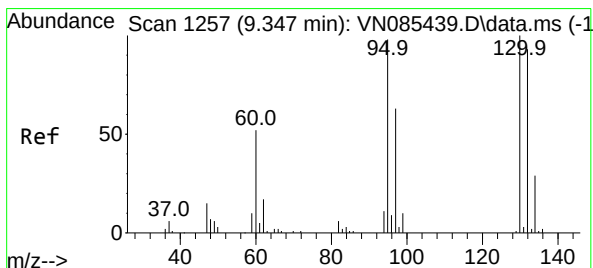
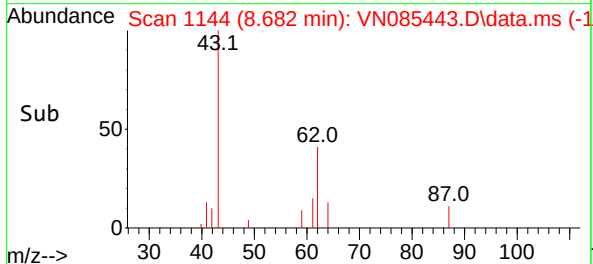
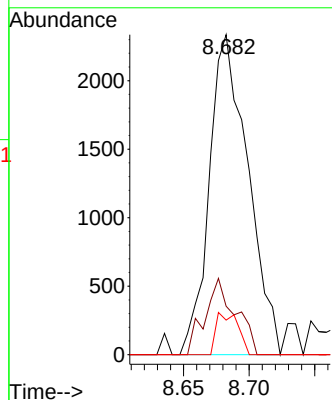
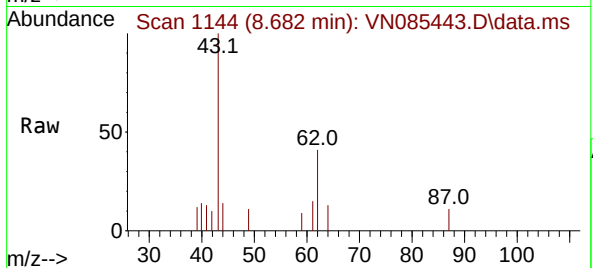
Tgt Ion: 43 Resp: 4803

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

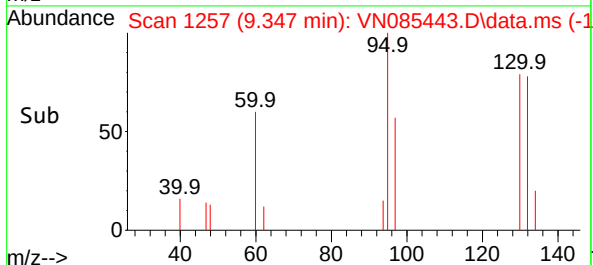
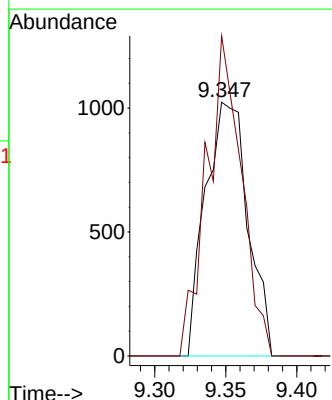
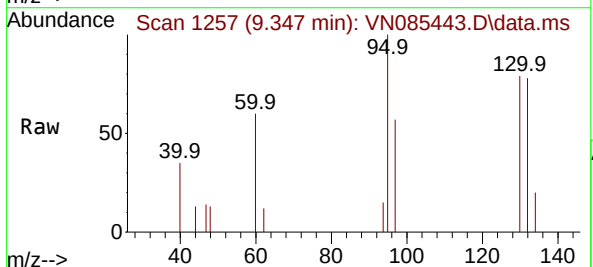
Acq: 14 Jan 2025 17:19

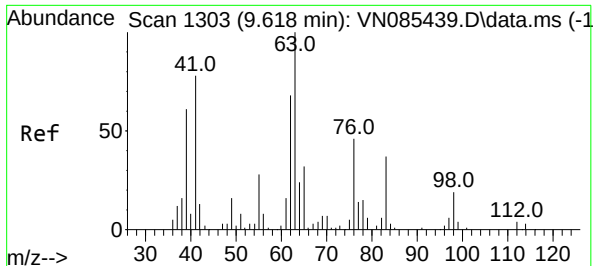
Tgt Ion:130 Resp: 2133

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 :

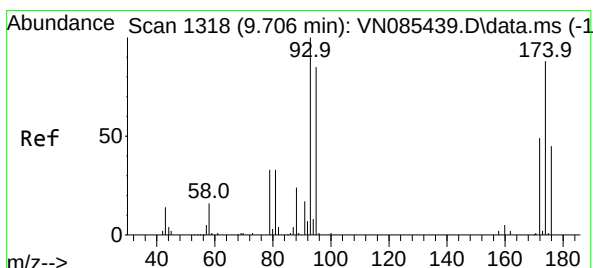
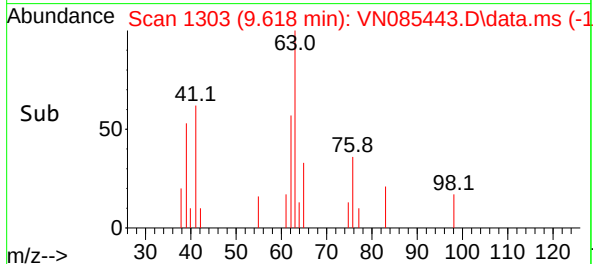
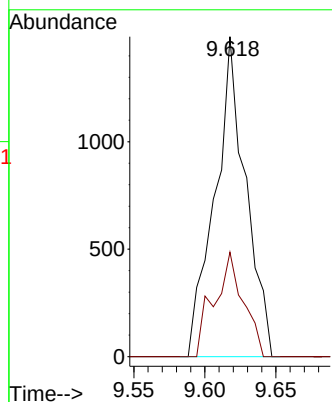
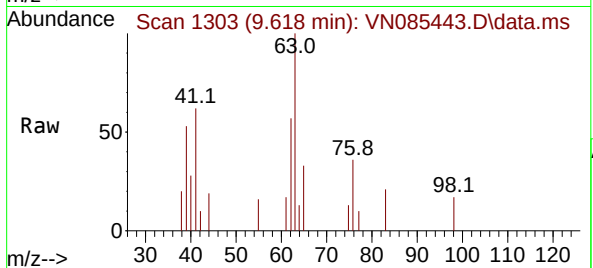
VSTDIC001

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

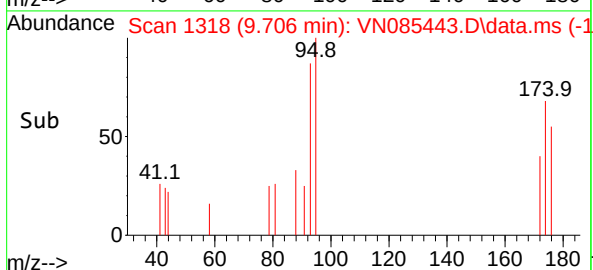
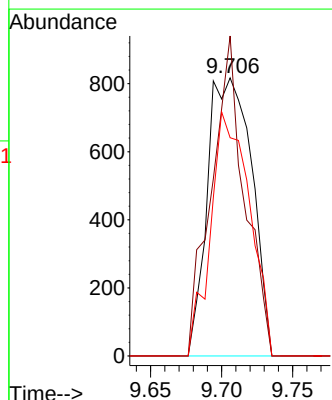
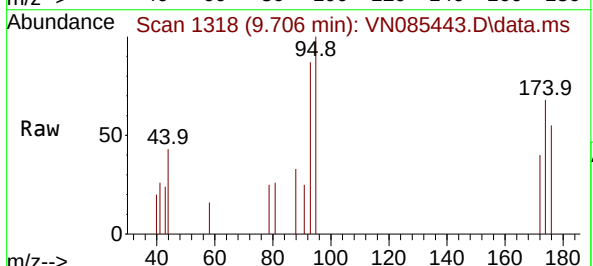
Tgt Ion: 93 Resp: 1769

Ion Ratio Lower Upper

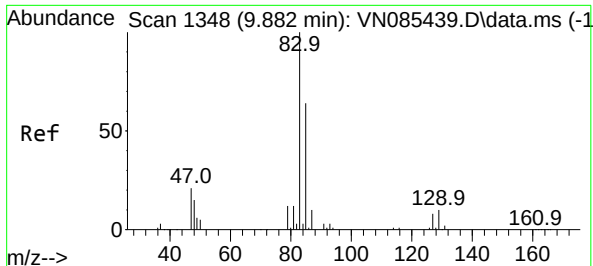
93 100

95 86.5 64.7 97.1

174 77.4 69.0 103.4



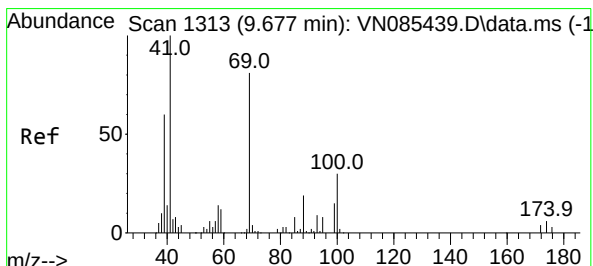
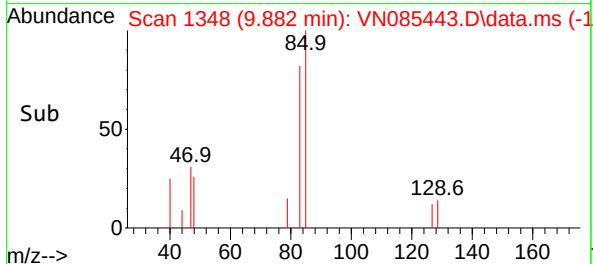
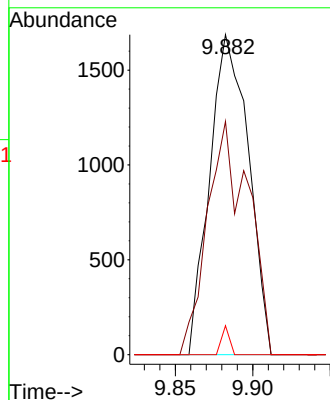
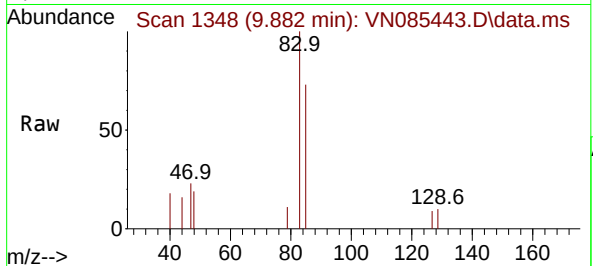




#47  
Bromodichloromethane  
Concen: 0.882 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

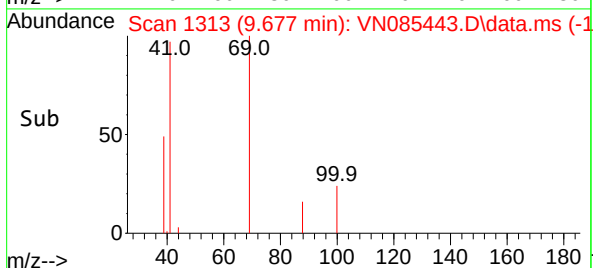
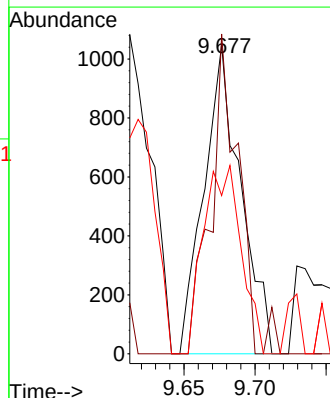
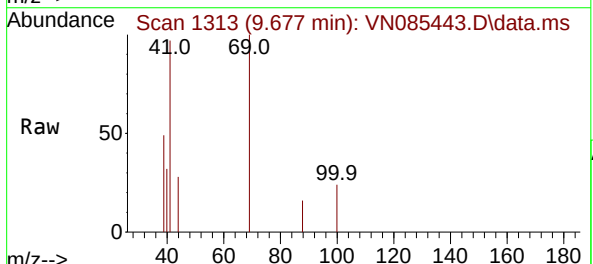
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

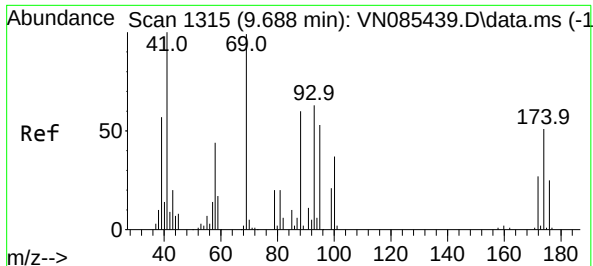
Tgt Ion: 83 Resp: 2935  
Ion Ratio Lower Upper  
83 100  
85 72.9 51.2 76.8  
127 9.0 6.5 9.7



#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# 1315

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

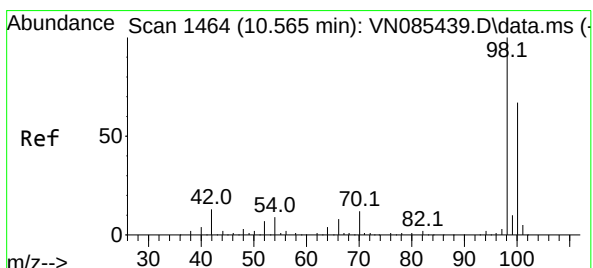
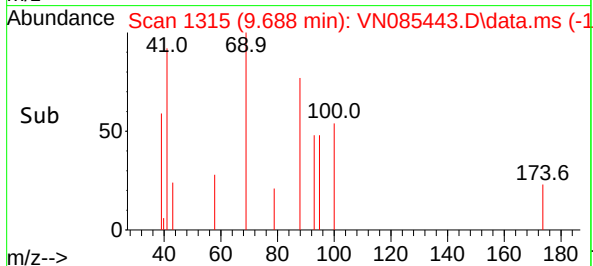
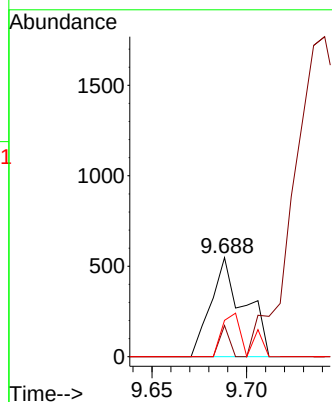
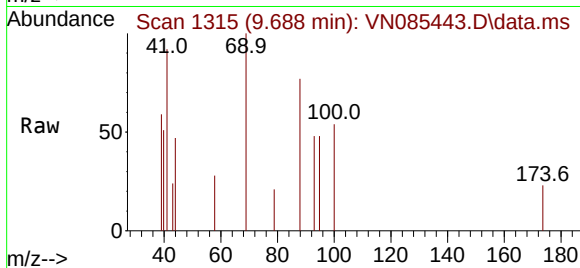
Tgt Ion: 88 Resp: 673

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

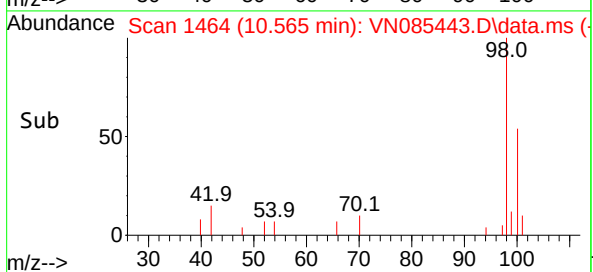
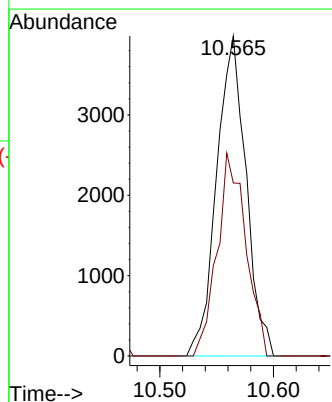
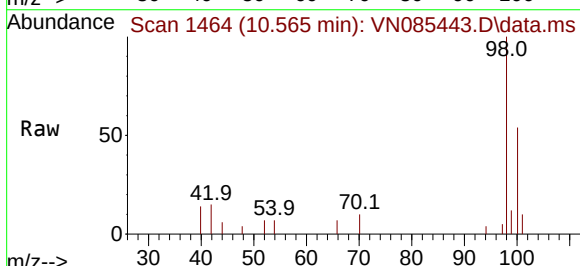
Acq: 14 Jan 2025 17:19

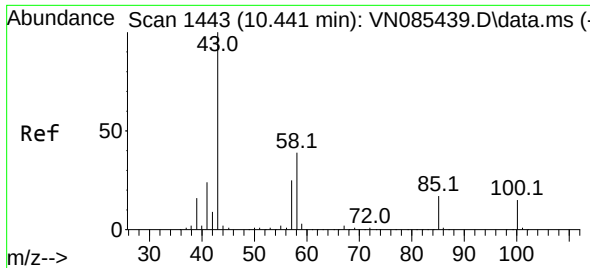
Tgt Ion: 98 Resp: 7164

Ion Ratio Lower Upper

98 100

100 61.9 52.2 78.4

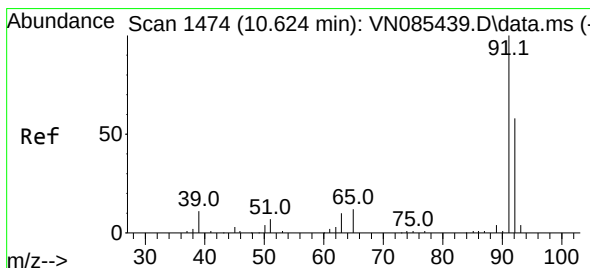
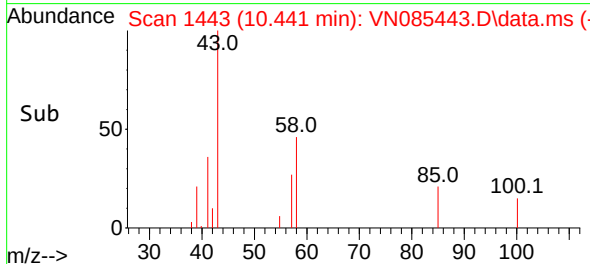
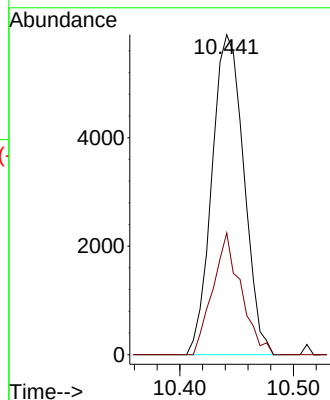
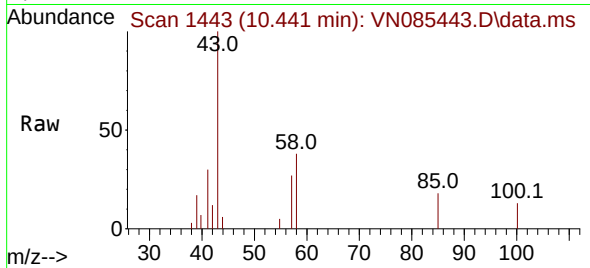




#51  
4-Methyl-2-Pentanone  
Concen: 4.163 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

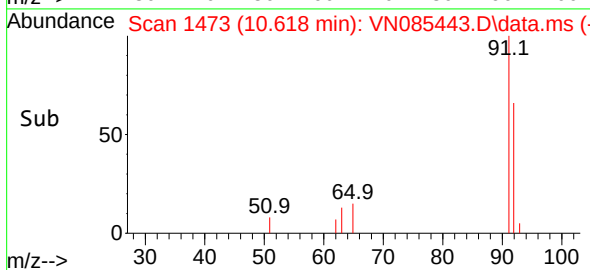
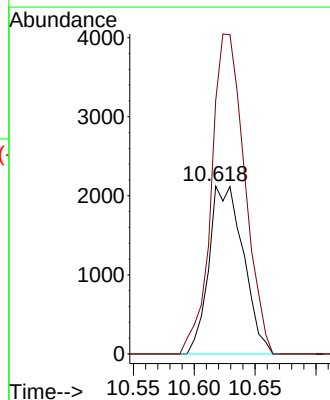
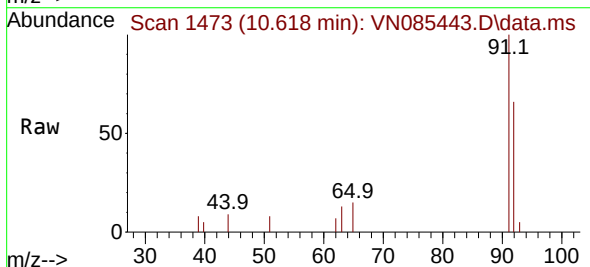
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

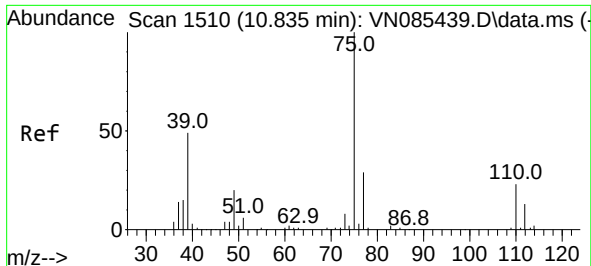
Tgt Ion: 43 Resp: 11523  
Ion Ratio Lower Upper  
43 100  
58 33.6 30.5 45.7



#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

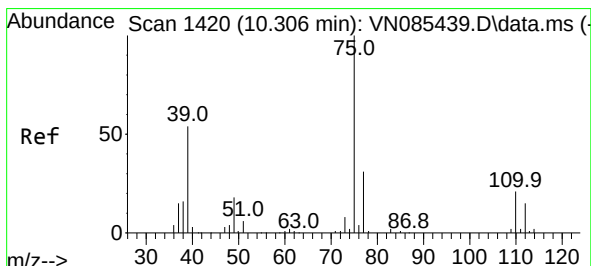
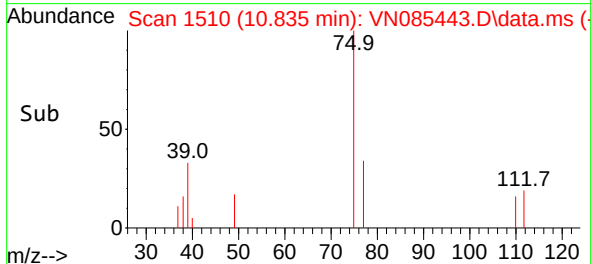
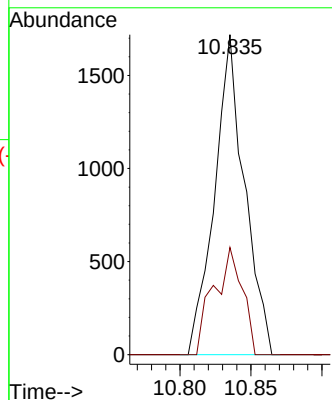
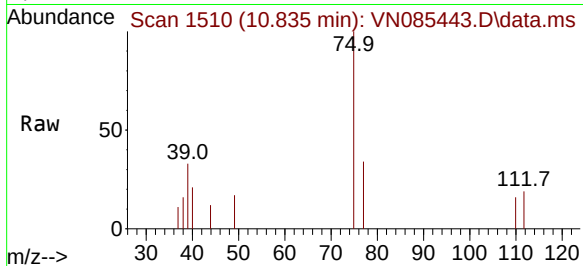




#53  
 t-1,3-Dichloropropene  
 Concen: 0.802 ug/l  
 RT: 10.835 min Scan# 11  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

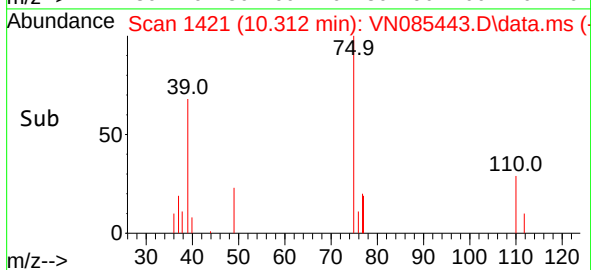
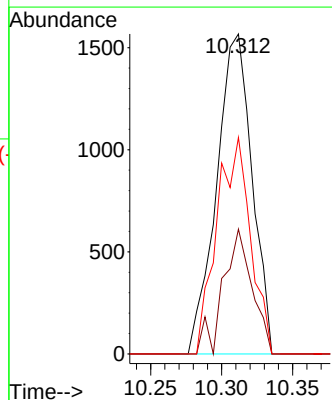
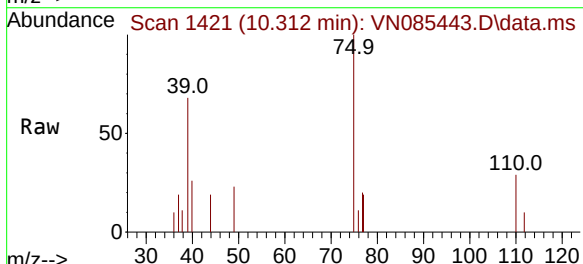
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

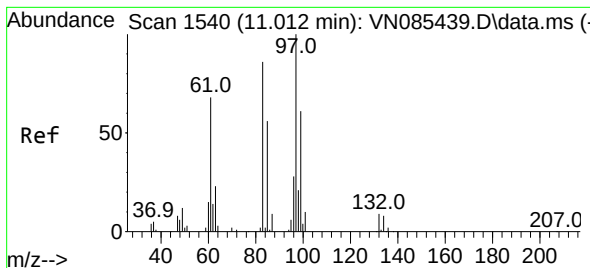
Tgt Ion: 75 Resp: 2522  
 Ion Ratio Lower Upper  
 75 100  
 77 33.5 23.5 35.3



#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

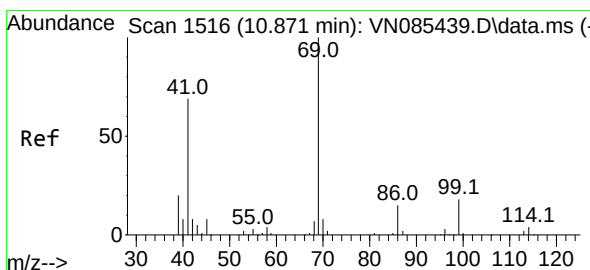
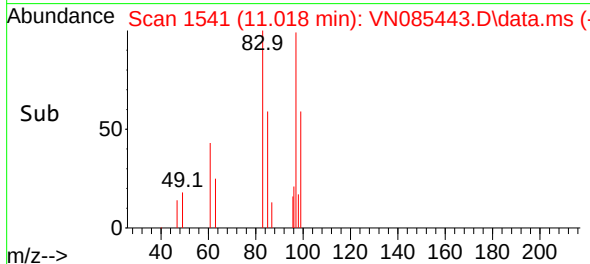
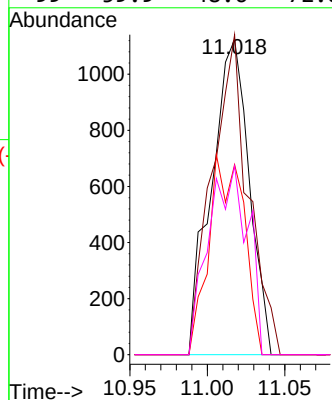
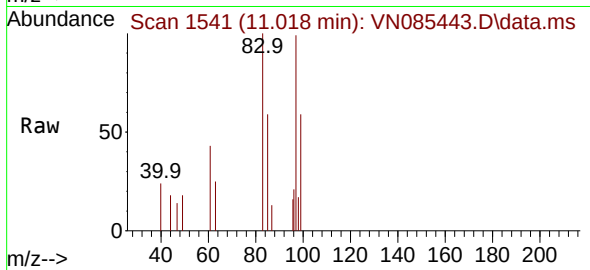
Ion Ratio Lower Upper

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

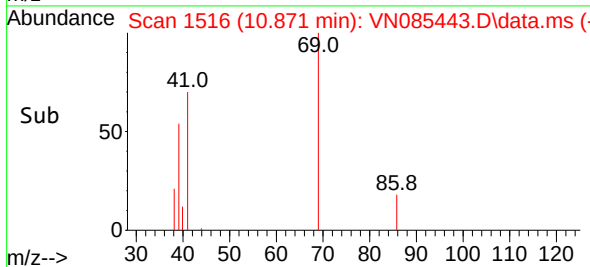
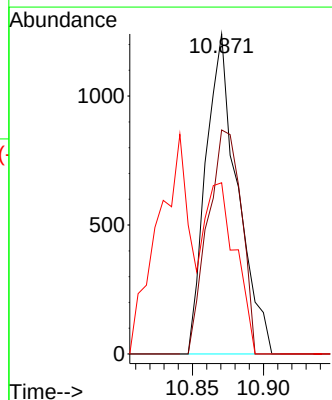
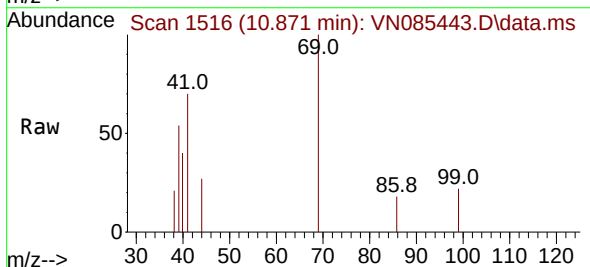
Tgt Ion: 69 Resp: 1923

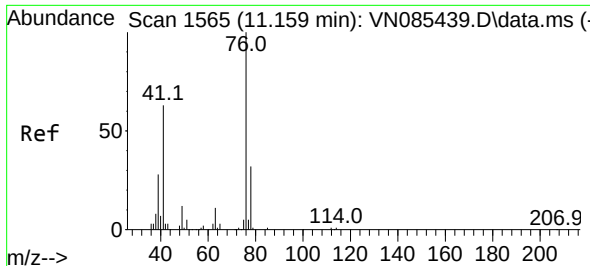
Ion Ratio Lower Upper

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 :

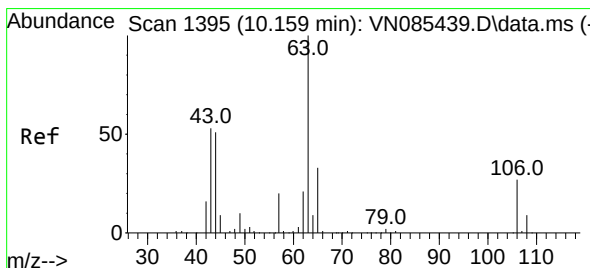
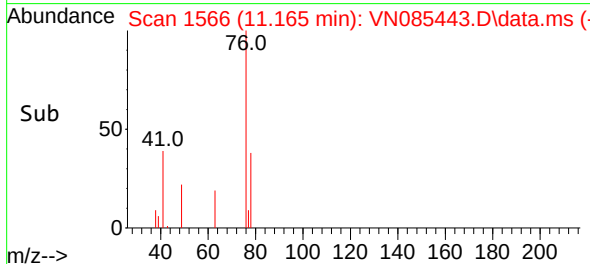
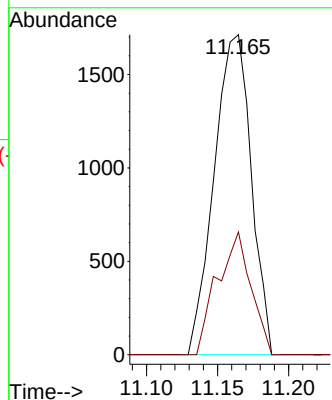
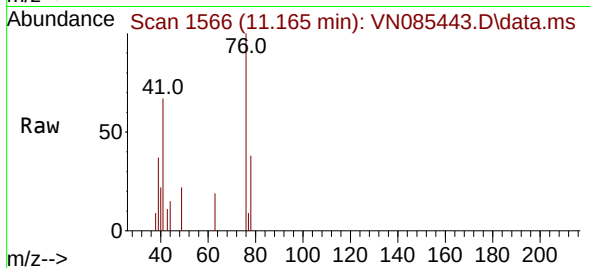
VSTDIC001

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

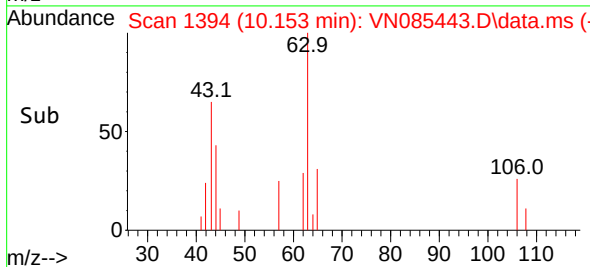
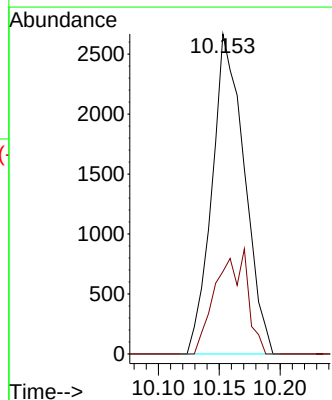
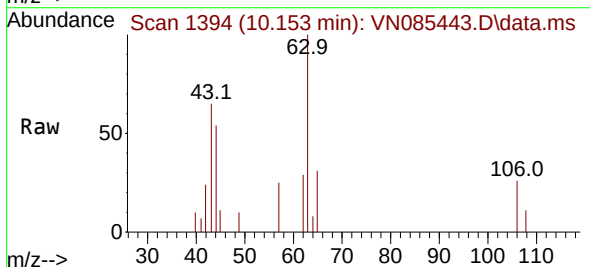
Acq: 14 Jan 2025 17:19

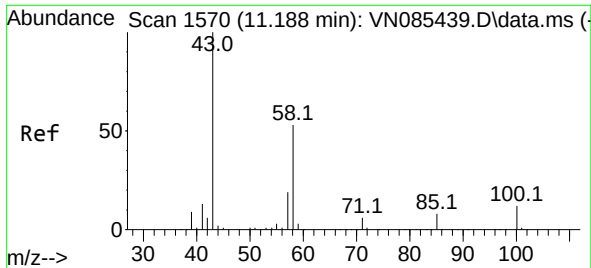
Tgt Ion: 63 Resp: 4929

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# 1571

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA\_N

ClientSampleId :

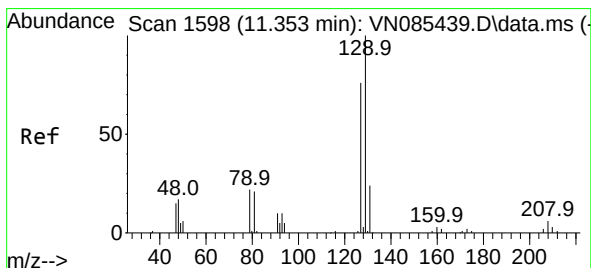
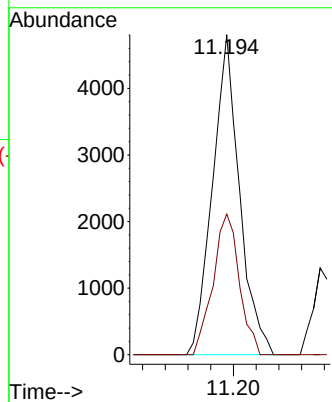
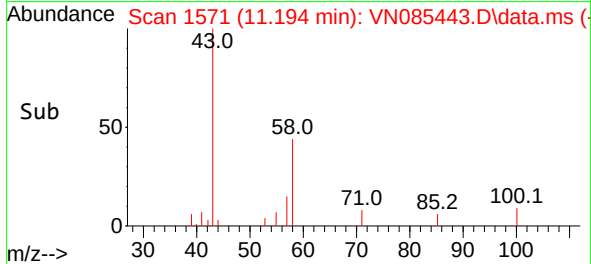
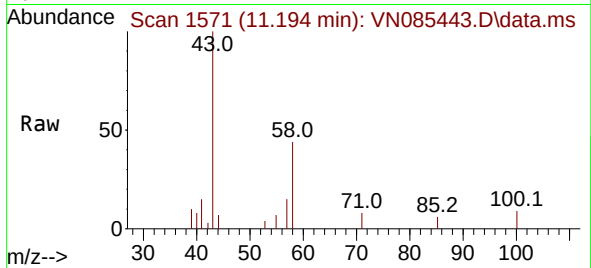
VSTDIC001

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

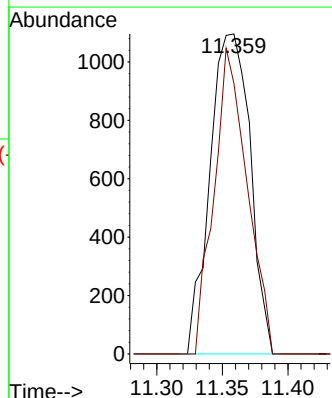
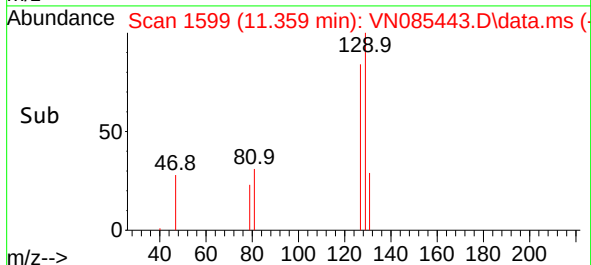
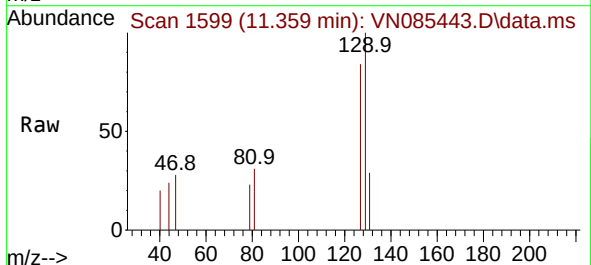
Acq: 14 Jan 2025 17:19

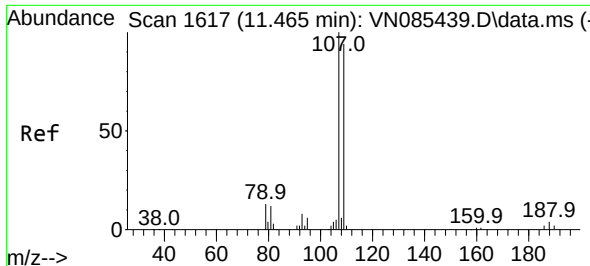
Tgt Ion: 129 Resp: 2339

Ion Ratio Lower Upper

129 100

127 78.9 38.6 115.8

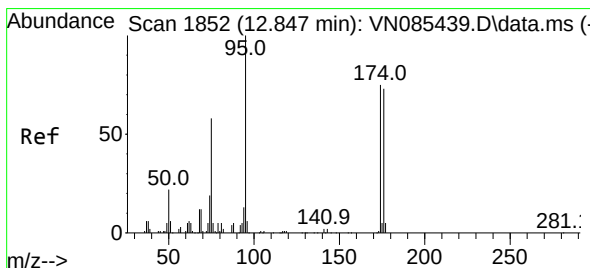
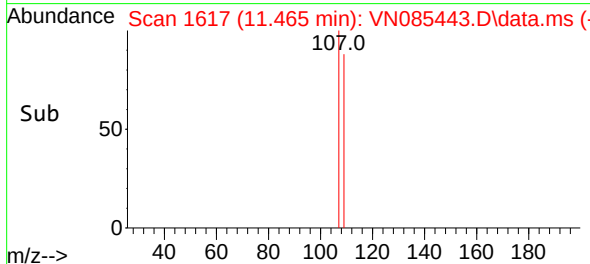
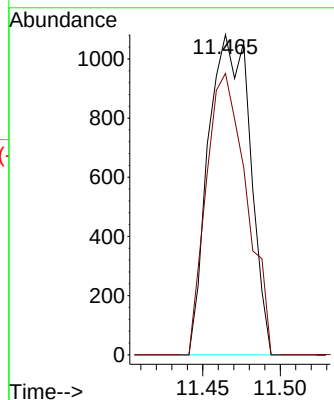
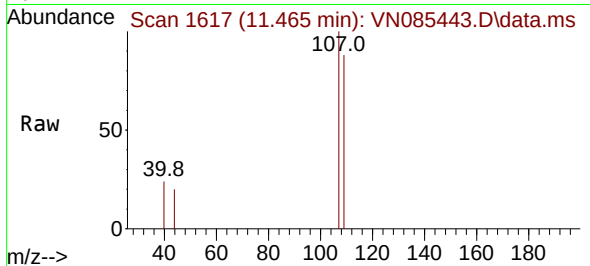




#61  
1,2-Dibromoethane  
Concen: 1.000 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

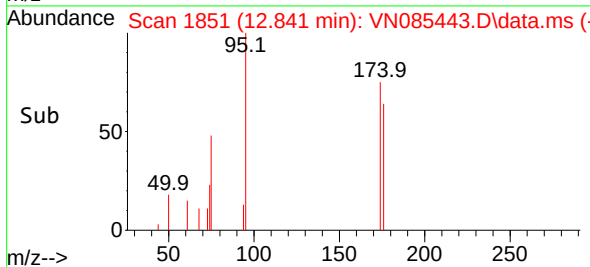
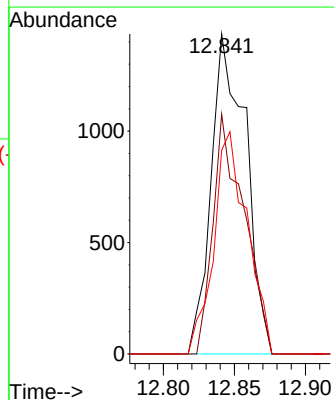
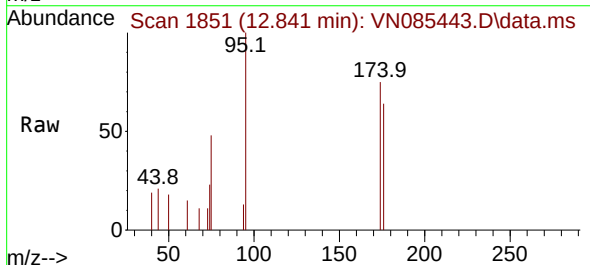
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Tgt Ion:107 Resp: 2022  
Ion Ratio Lower Upper  
107 100  
109 84.8 75.9 113.9

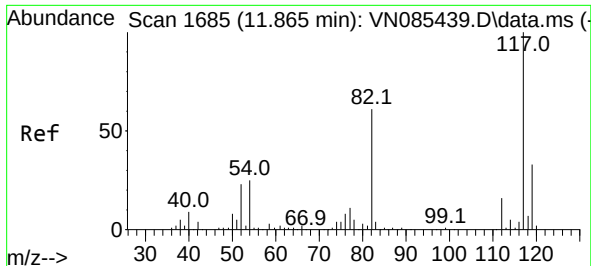


#62  
4-Bromofluorobenzene  
Concen: 0.951 ug/l  
RT: 12.841 min Scan# 1851  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

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



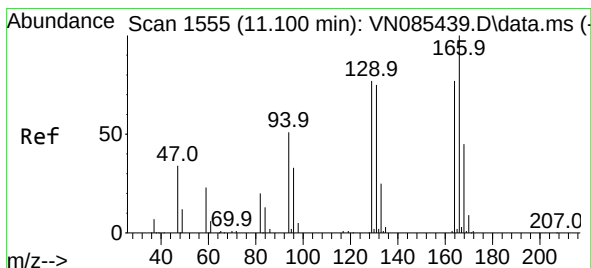
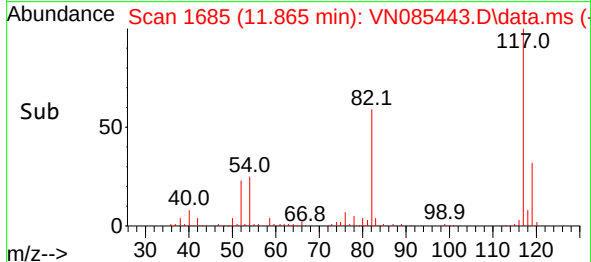
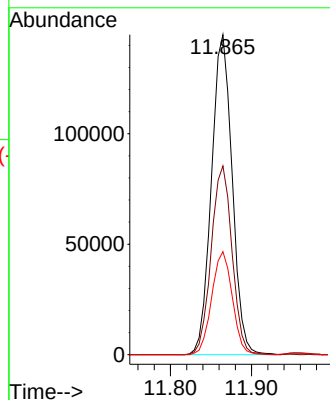
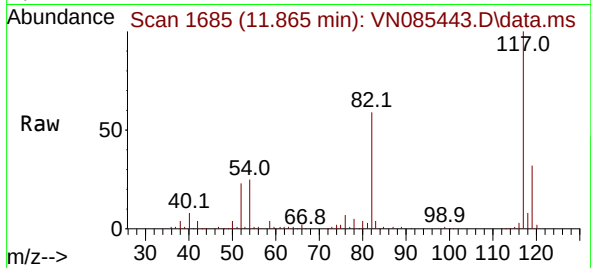




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

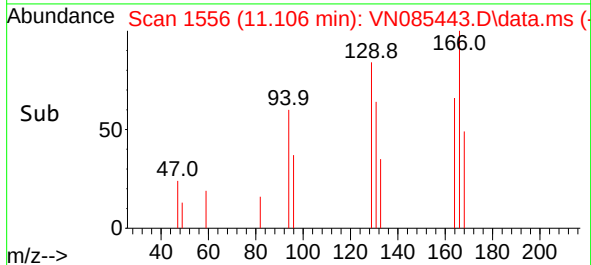
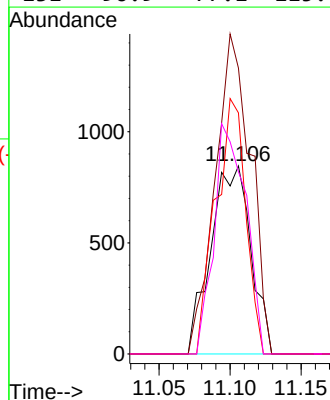
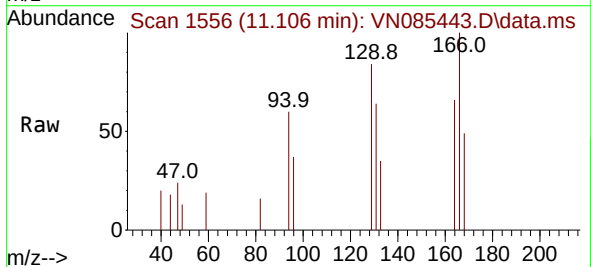
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

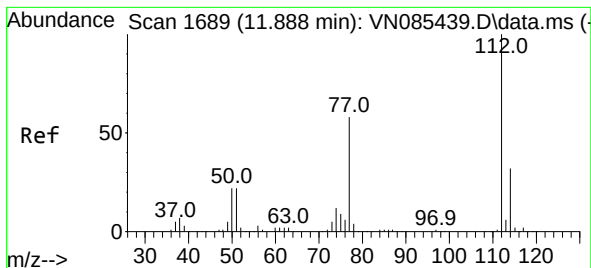
Tgt Ion:117 Resp: 256851  
Ion Ratio Lower Upper  
117 100  
82 59.0 48.6 72.8  
119 32.2 26.6 39.8



#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

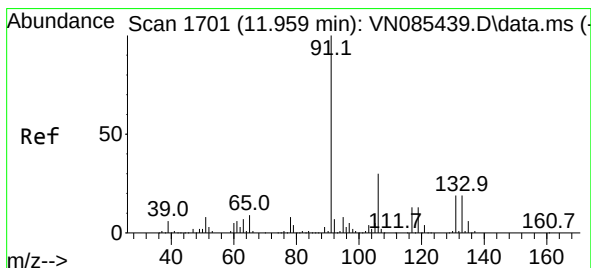
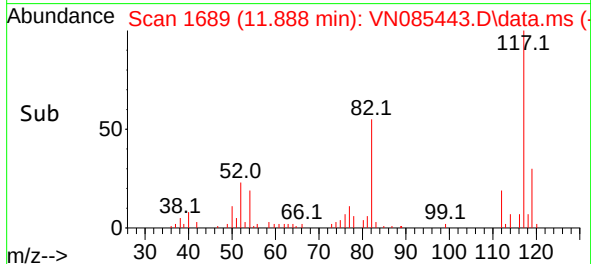
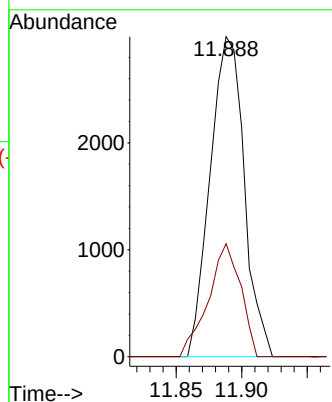
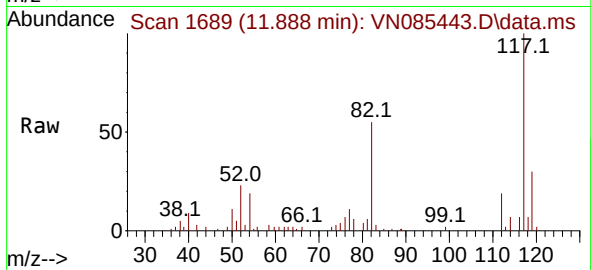




#65  
Chlorobenzene  
Concen: 0.960 ug/l  
RT: 11.888 min Scan# 111  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

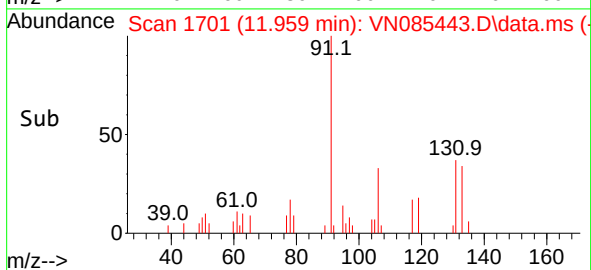
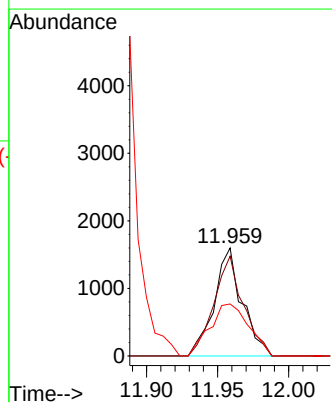
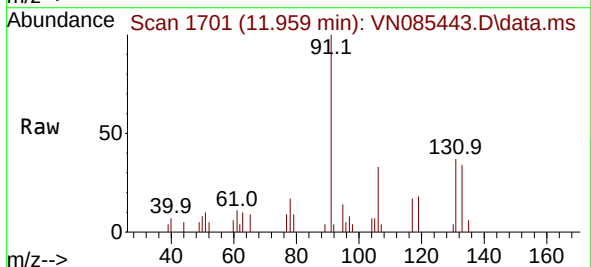
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

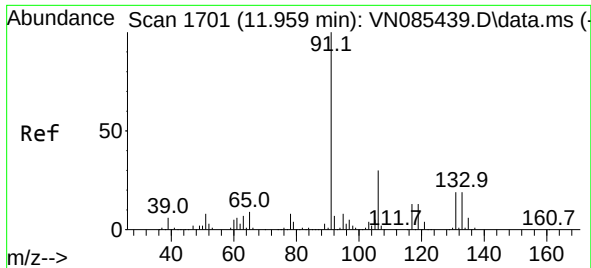
Tgt Ion:112 Resp: 5401  
Ion Ratio Lower Upper  
112 100  
114 35.3 25.3 37.9



#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#

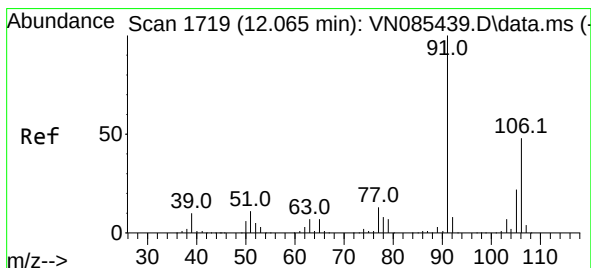
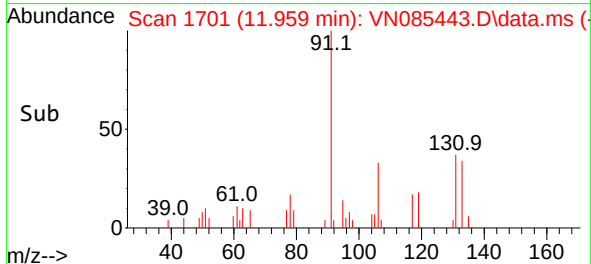
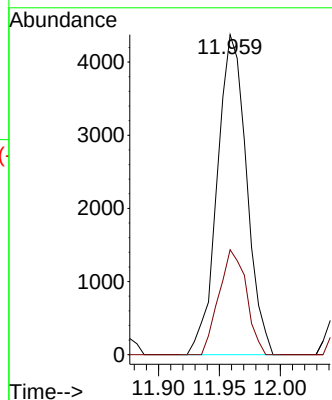
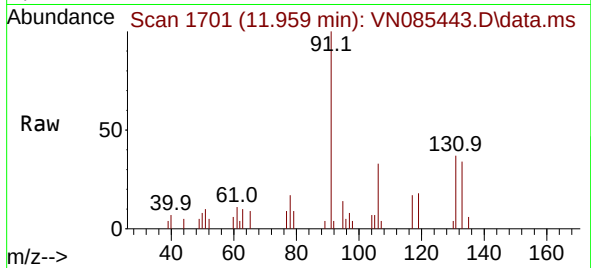




#67  
Ethyl Benzene  
Concen: 0.802 ug/l  
RT: 11.959 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

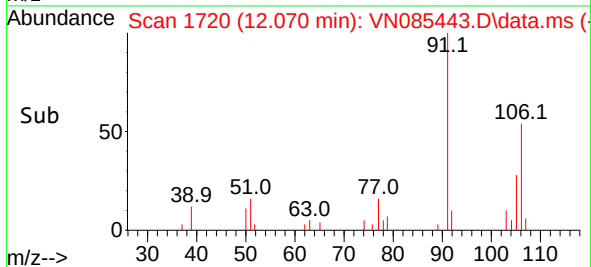
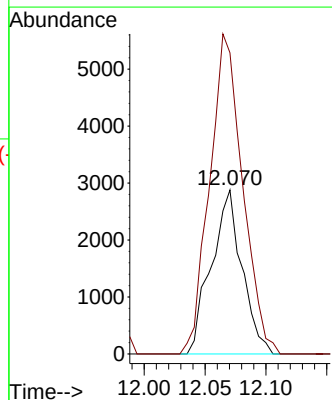
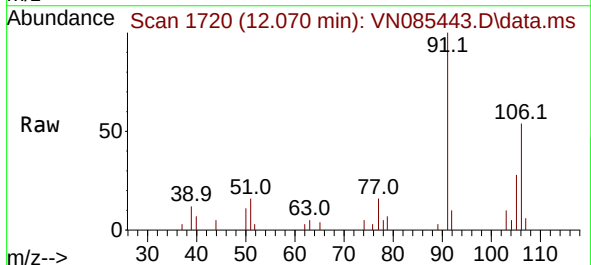
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

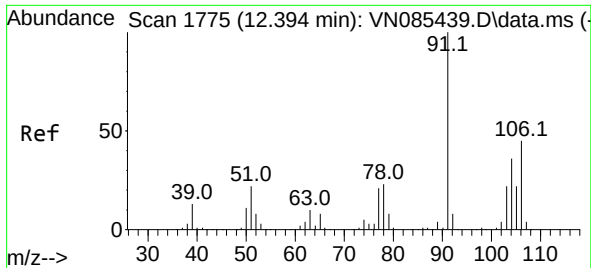
Tgt Ion: 91 Resp: 7347  
Ion Ratio Lower Upper  
91 100  
106 32.8 23.8 35.8



#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

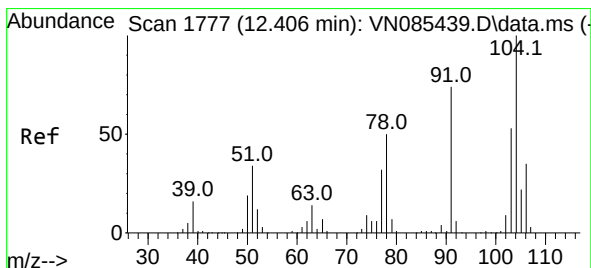
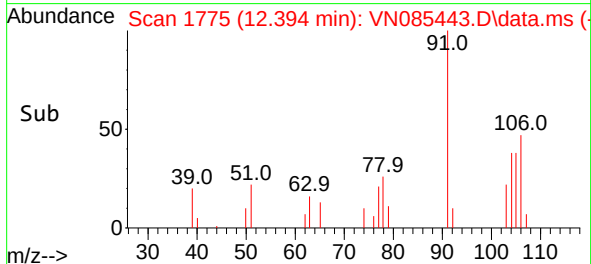
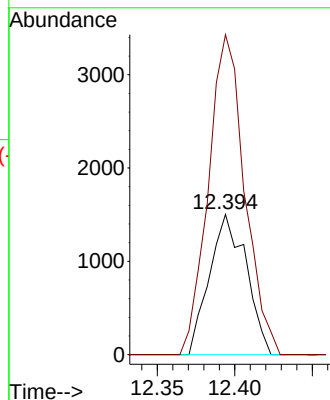
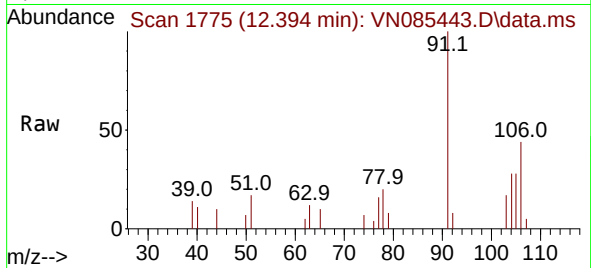




#69  
o-Xylene  
Concen: 0.766 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

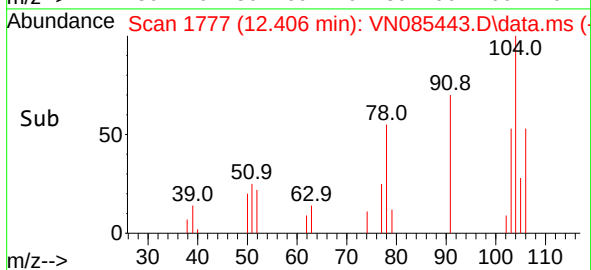
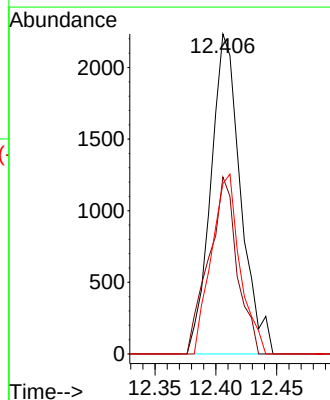
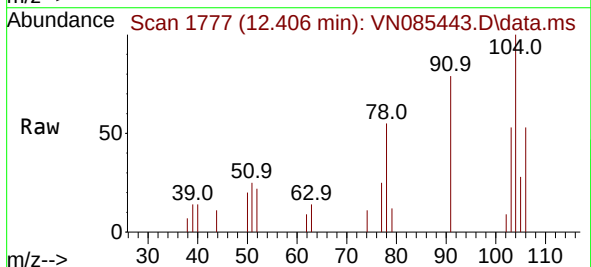
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MSVOA\_N  
ClientSampleId :  
VSTDIC001

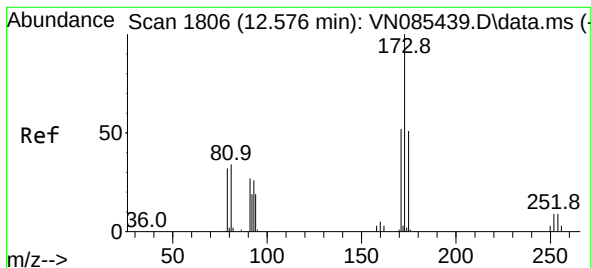
Tgt Ion:106 Resp: 2478  
Ion Ratio Lower Upper  
106 100  
91 225.4 110.4 331.2



#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

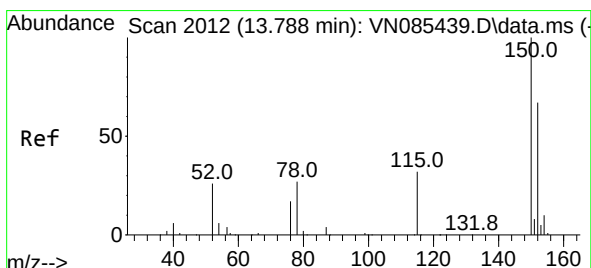
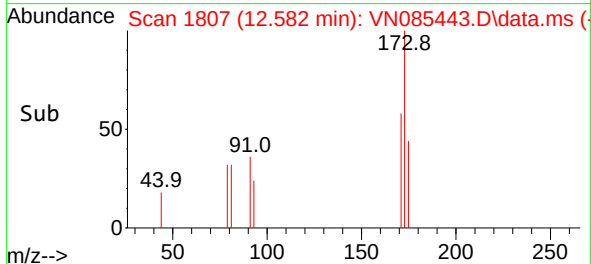
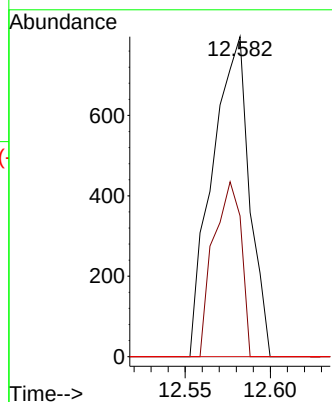
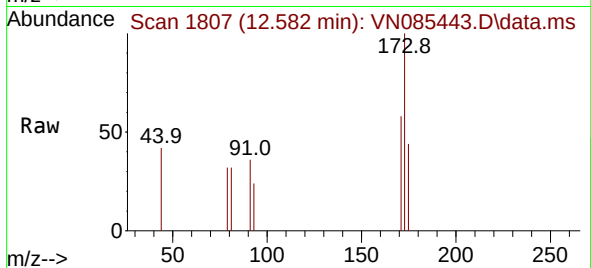
Tgt Ion:173 Resp: 1208

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

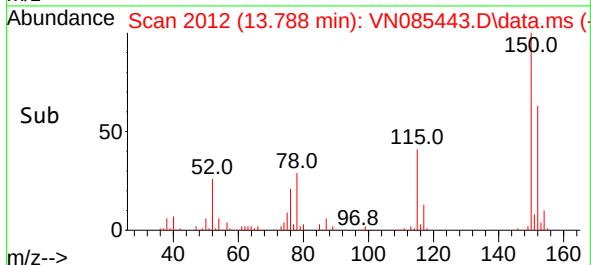
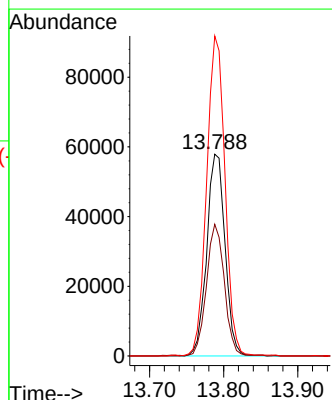
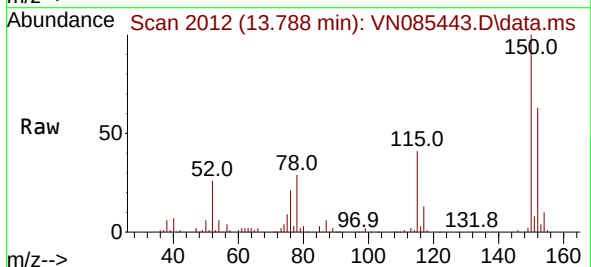
Tgt Ion:152 Resp: 99539

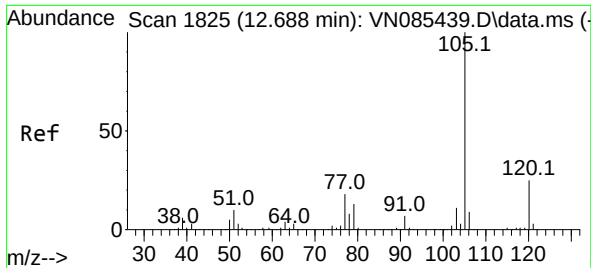
Ion Ratio Lower Upper

152 100

115 63.8 31.1 93.3

150 158.5 0.0 343.6

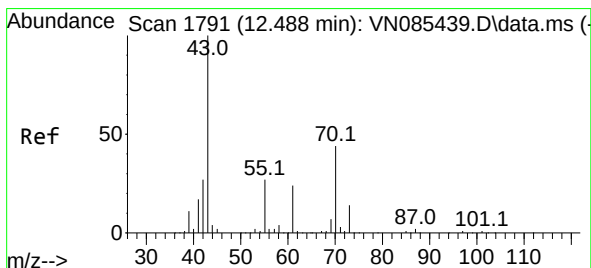
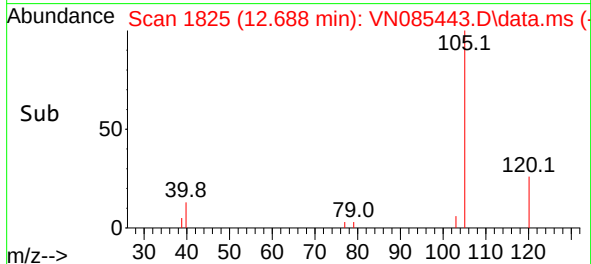
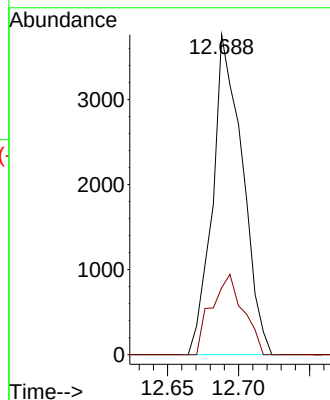
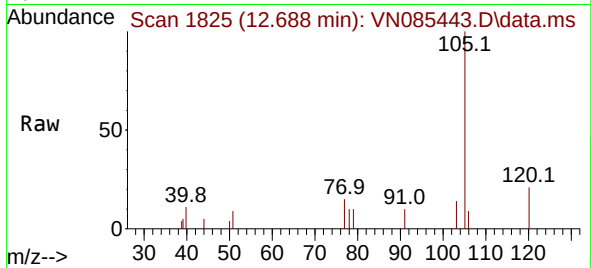




#73  
Isopropylbenzene  
Concen: 0.820 ug/l  
RT: 12.688 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

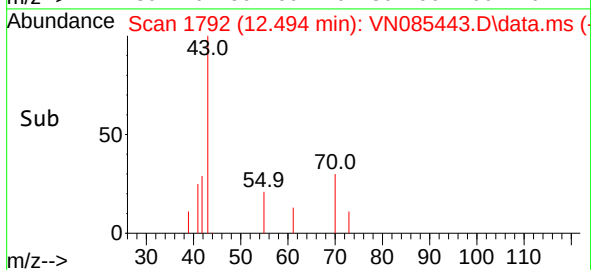
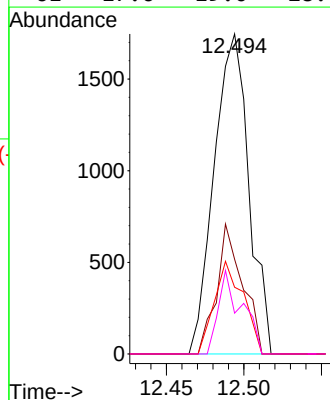
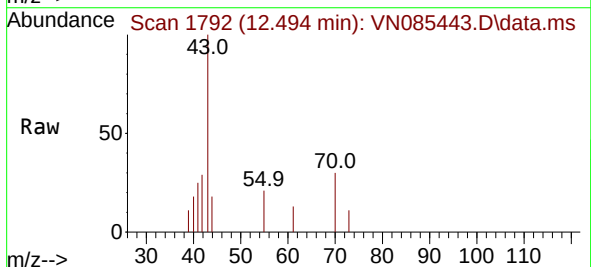
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

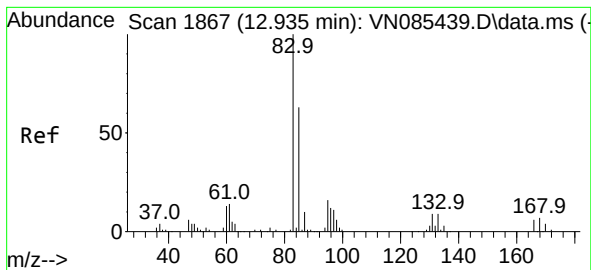
Tgt Ion:105 Resp: 5506  
Ion Ratio Lower Upper  
105 100  
120 26.7 12.8 38.3



#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

Instrument :

MSVOA\_N

ClientSampleId :

VSTDIC001

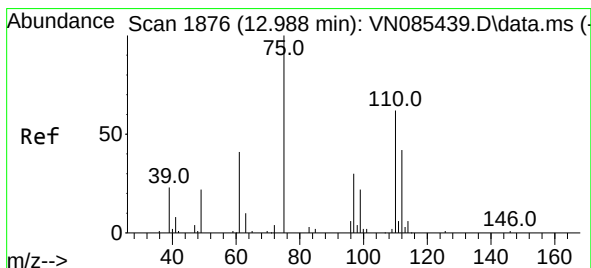
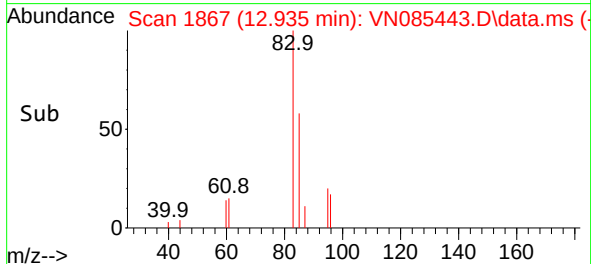
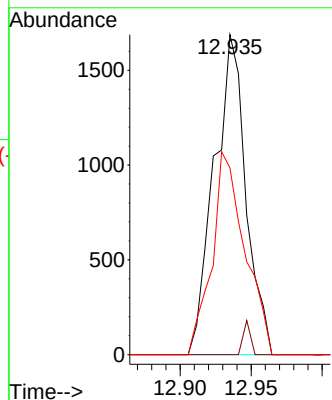
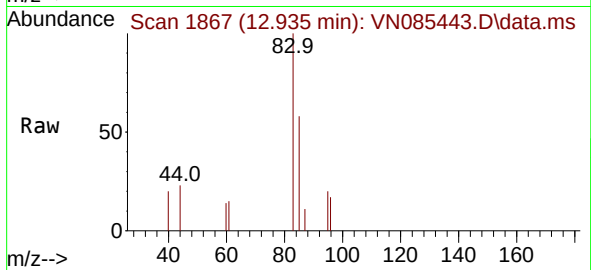
Tgt Ion: 83 Resp: 2616

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

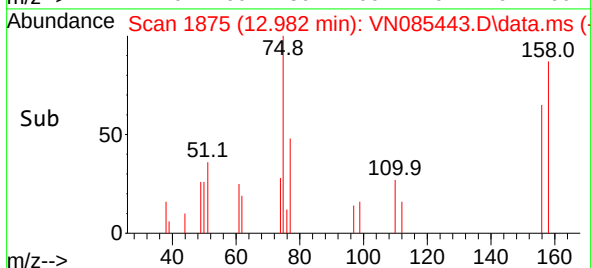
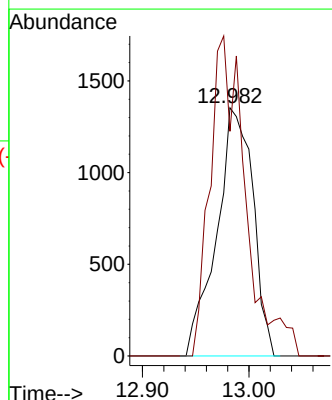
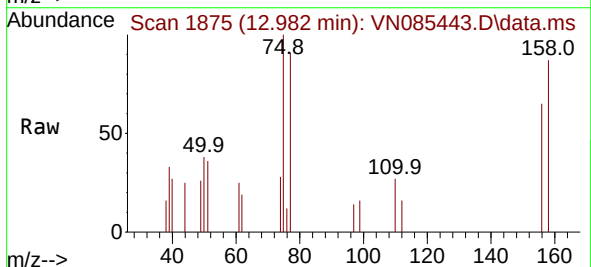
Acq: 14 Jan 2025 17:19

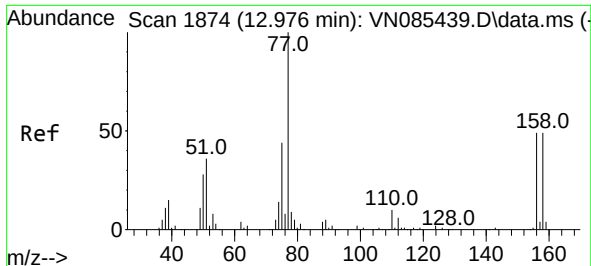
Tgt Ion: 75 Resp: 3212

Ion Ratio Lower Upper

75 100

77 126.0 109.7 329.2

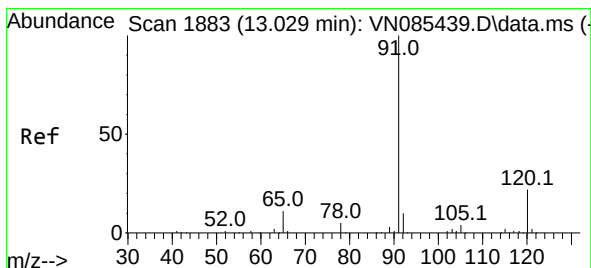
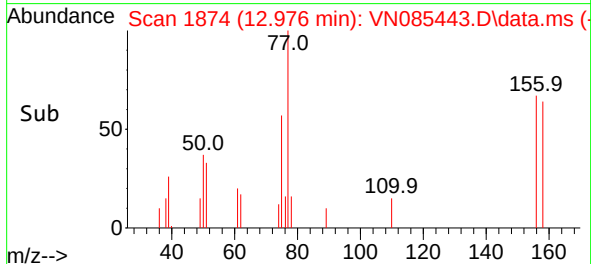
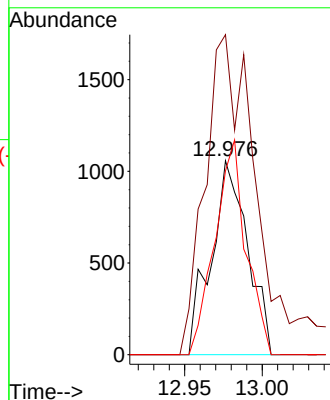
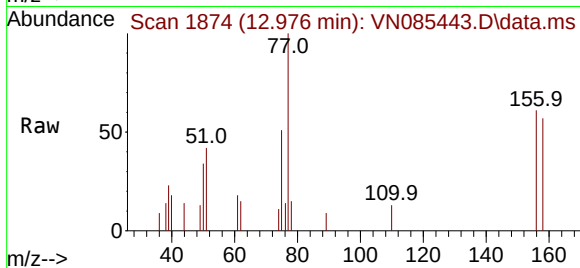




#77  
Bromobenzene  
Concen: 0.987 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

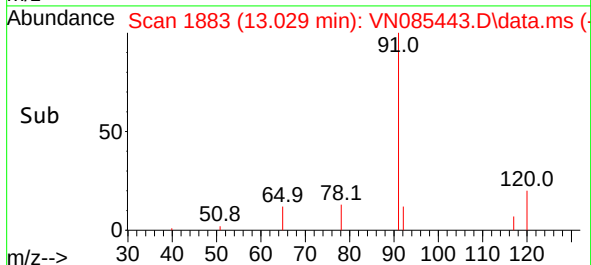
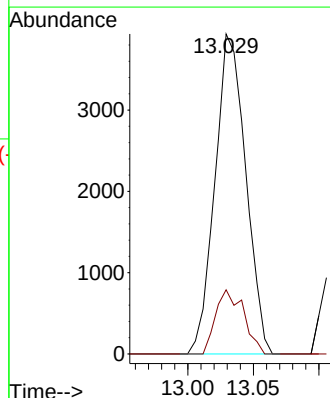
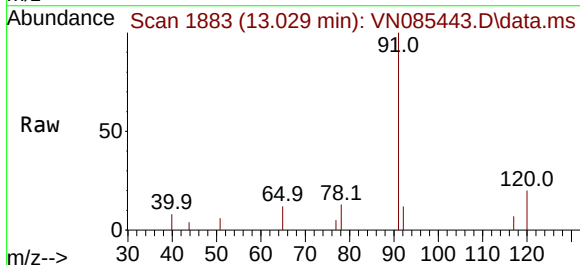
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

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

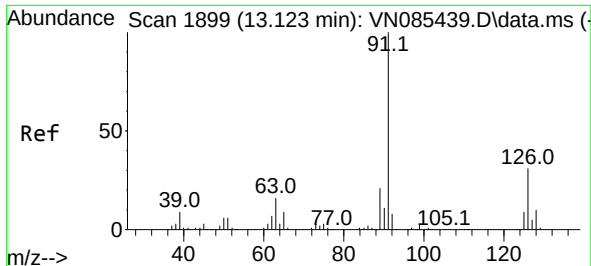


#78  
n-propylbenzene  
Concen: 0.808 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 6424  
Ion Ratio Lower Upper  
91 100  
120 18.2 10.9 32.6



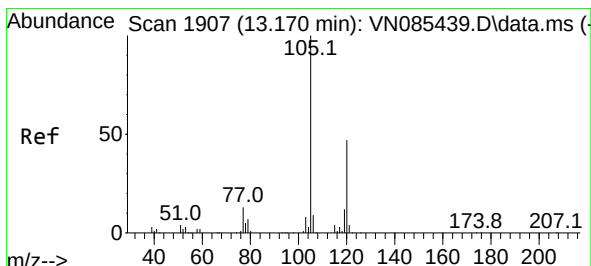
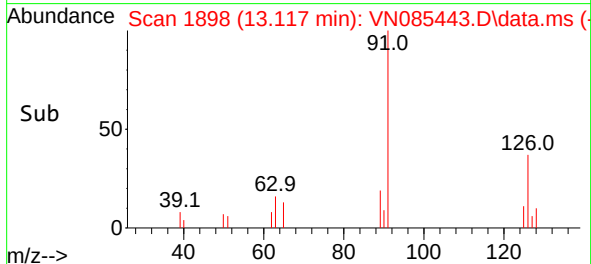
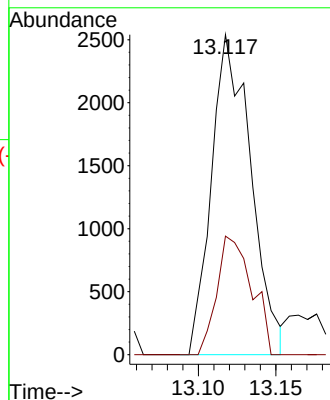
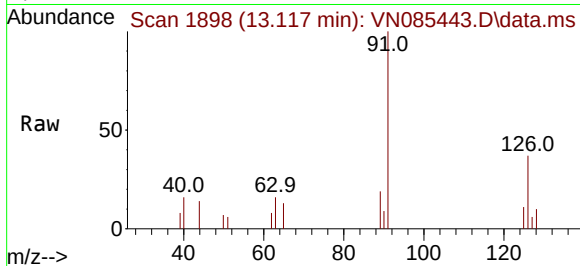




#79  
2-Chlorotoluene  
Concen: 0.871 ug/l  
RT: 13.117 min Scan# 1898  
Delta R.T. -0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

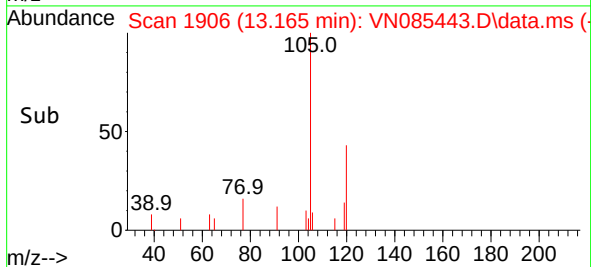
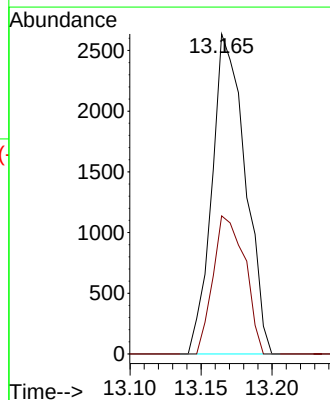
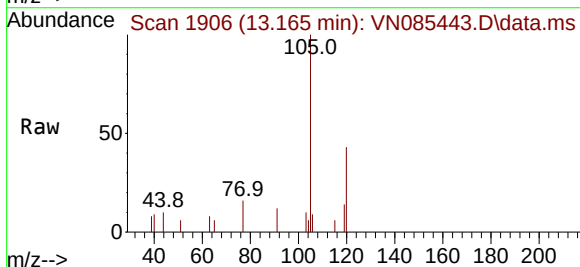
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

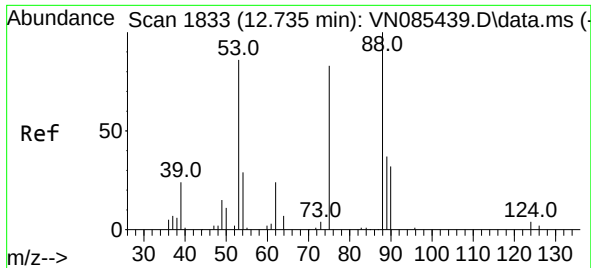
Tgt Ion: 91 Resp: 4483  
Ion Ratio Lower Upper  
91 100  
126 32.9 15.7 47.1



#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

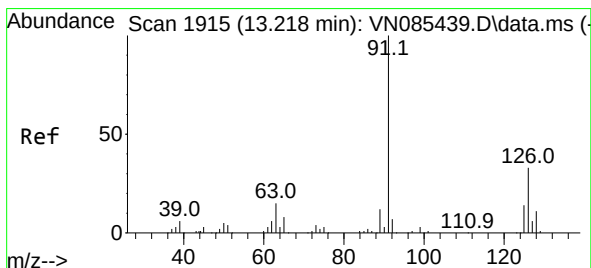
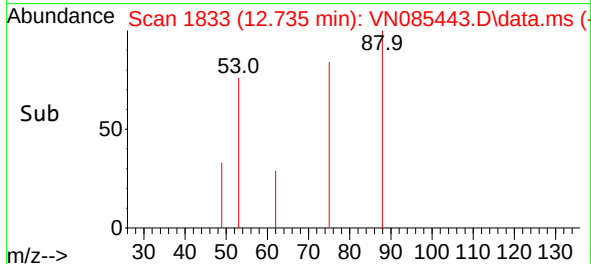
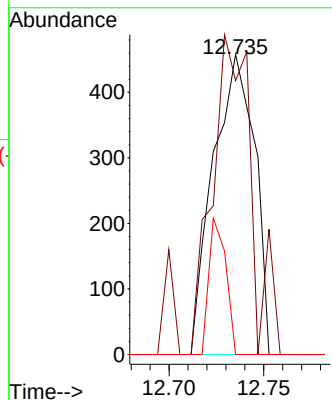
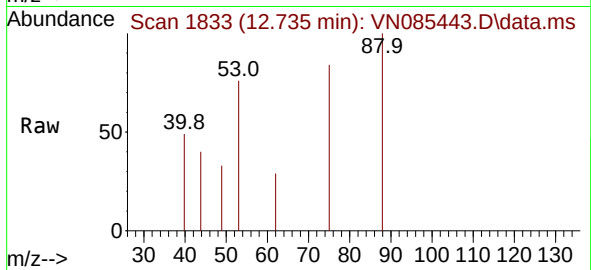




#81  
trans-1,4-Dichloro-2-butene  
Concen: 0.929 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

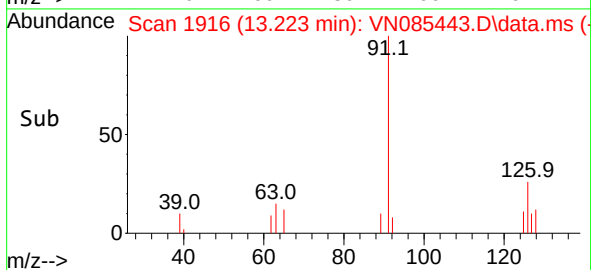
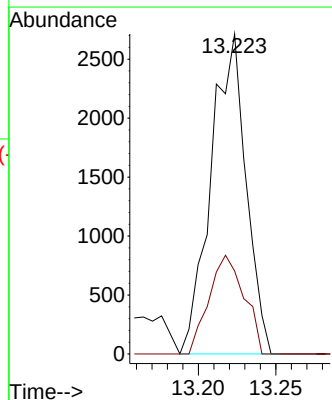
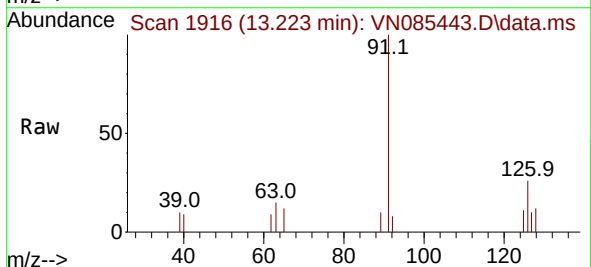
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

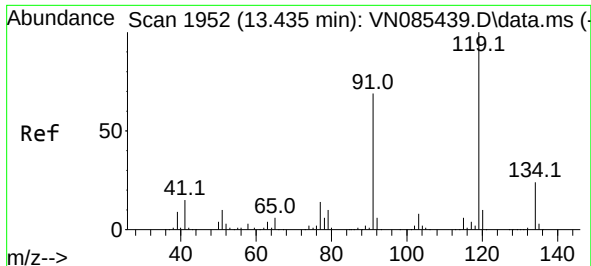
Tgt Ion: 75 Resp: 695  
Ion Ratio Lower Upper  
75 100  
53 101.2 95.6 143.4  
89 18.6 37.0 55.6#



#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

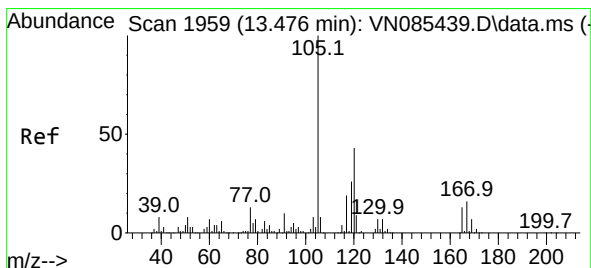
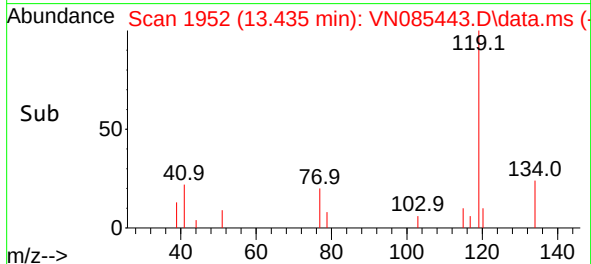
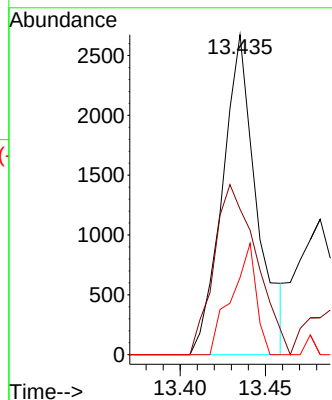
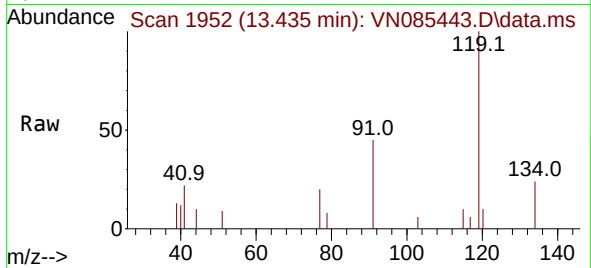




#83  
tert-Butylbenzene  
Concen: 0.805 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

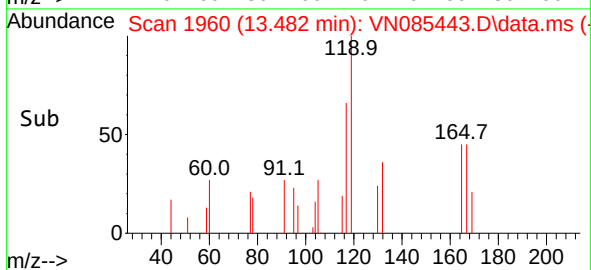
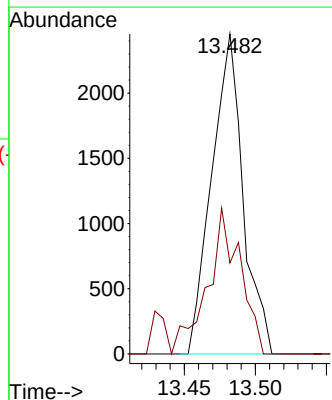
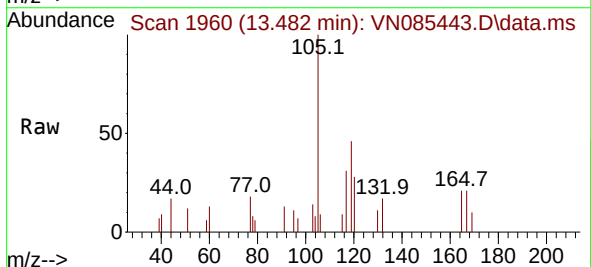
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

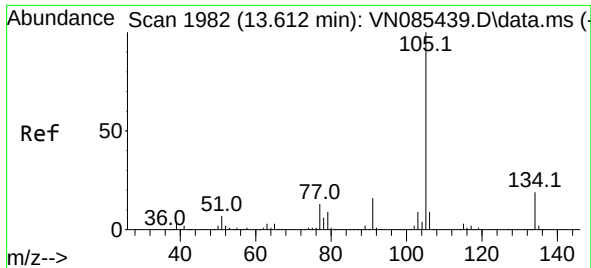
Tgt Ion:119 Resp: 3753  
Ion Ratio Lower Upper  
119 100  
91 65.9 35.1 105.3  
134 24.9 12.0 36.1



#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

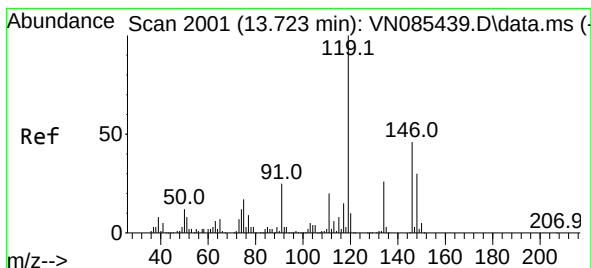
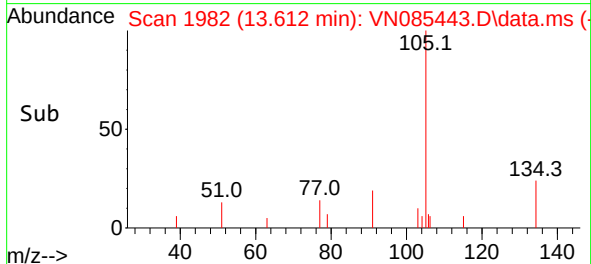
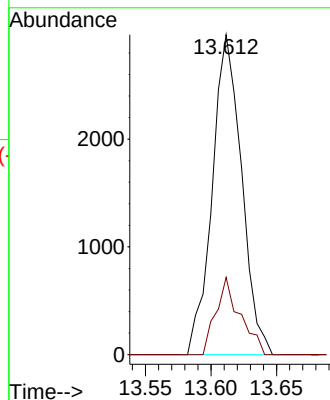
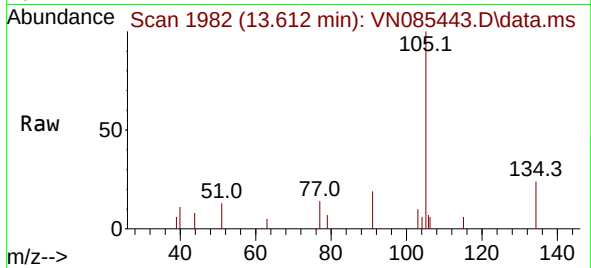




#85  
 sec-Butylbenzene  
 Concen: 0.714 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085443.D  
 Acq: 14 Jan 2025 17:19

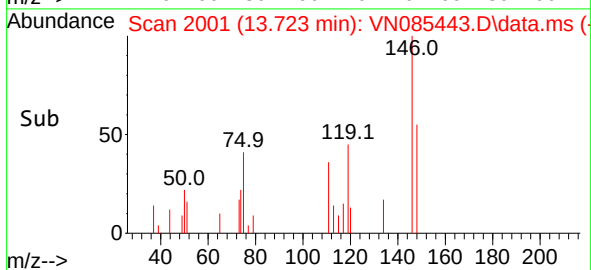
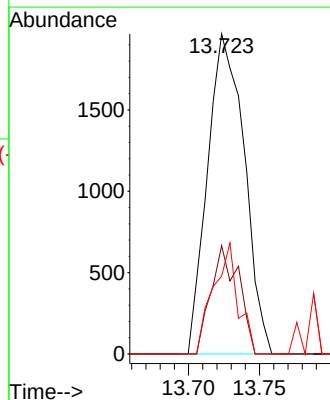
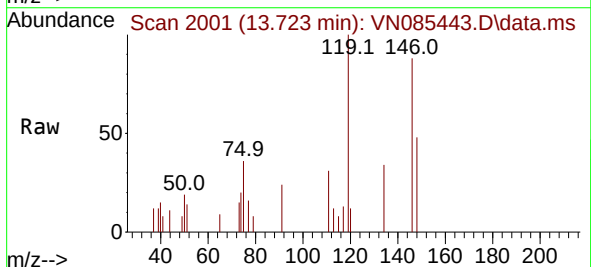
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

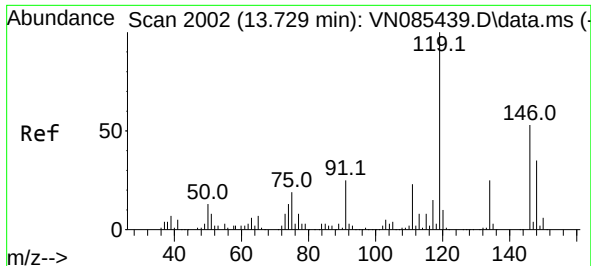
Tgt Ion:105 Resp: 4614  
 Ion Ratio Lower Upper  
 105 100  
 134 19.9 9.7 28.9



#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

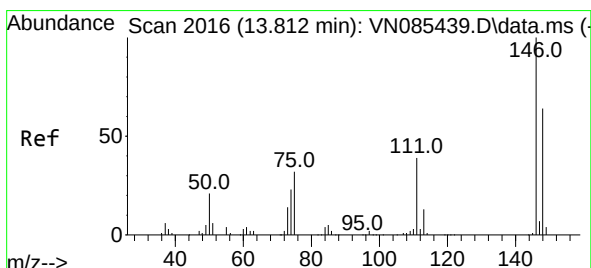
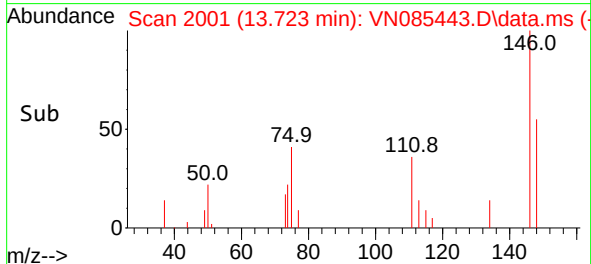
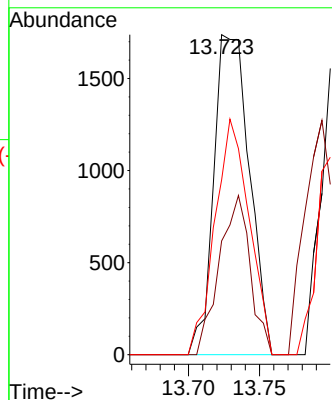
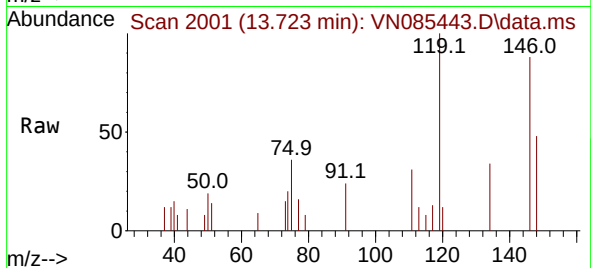
Tgt Ion:146 Resp: 3038

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

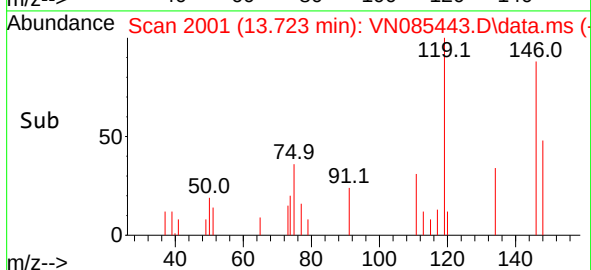
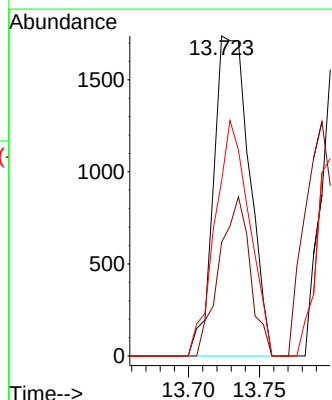
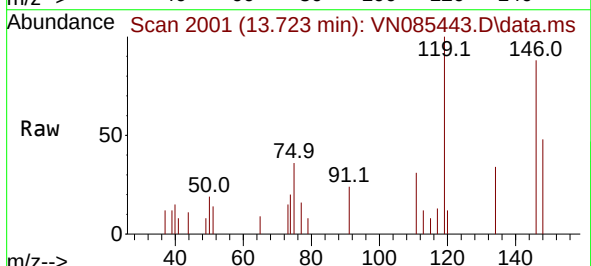
Tgt Ion:146 Resp: 3038

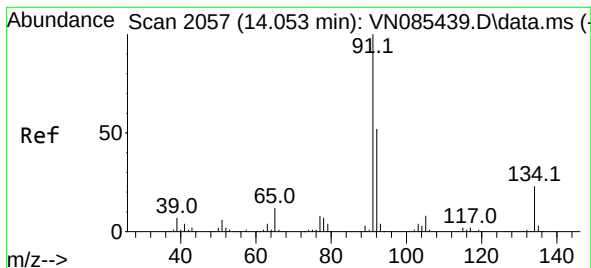
Ion Ratio Lower Upper

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

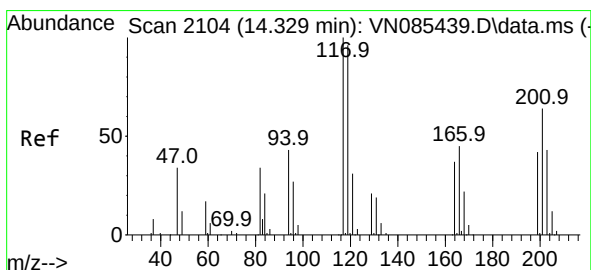
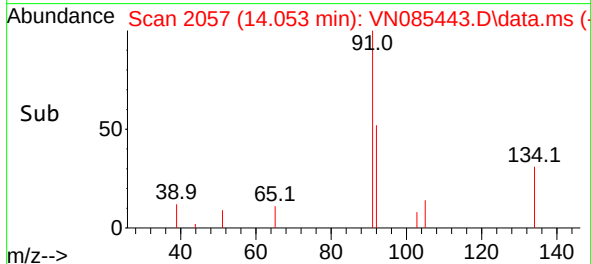
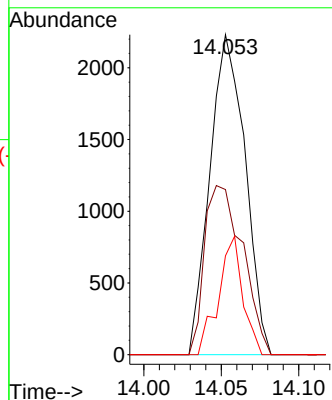
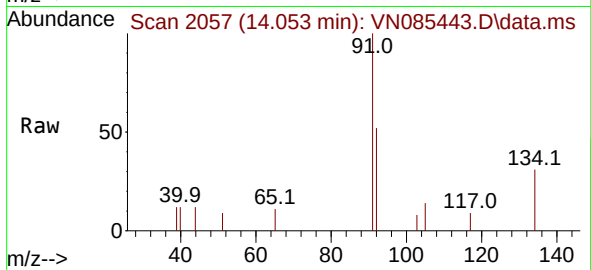
Tgt Ion: 91 Resp: 3527

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

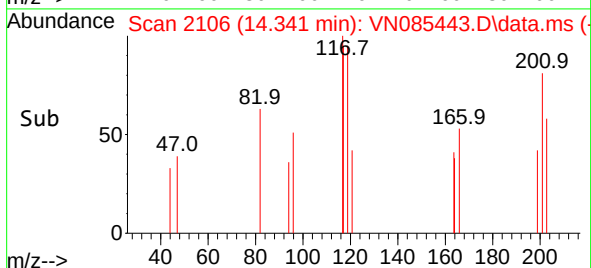
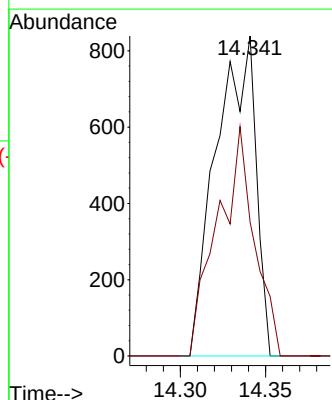
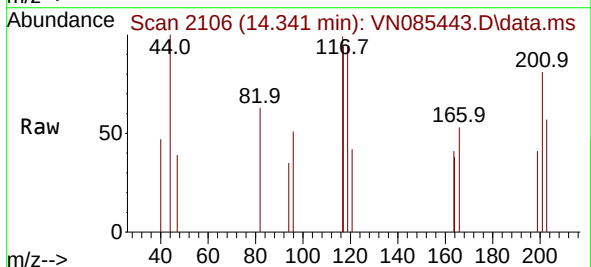
Acq: 14 Jan 2025 17:19

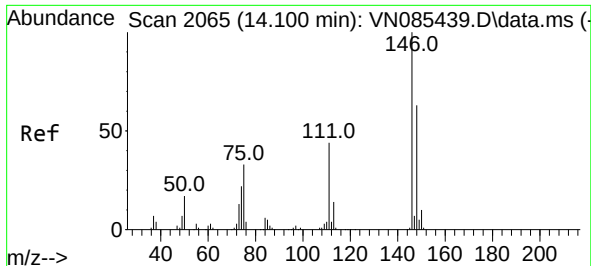
Tgt Ion: 117 Resp: 1355

Ion Ratio Lower Upper

117 100

201 66.5 33.7 101.0

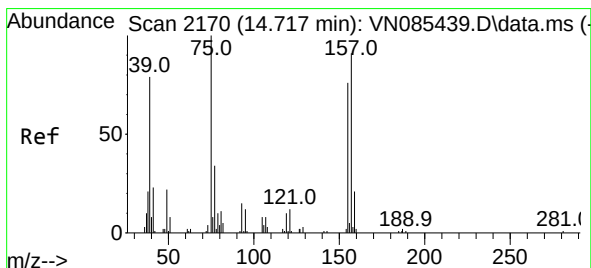
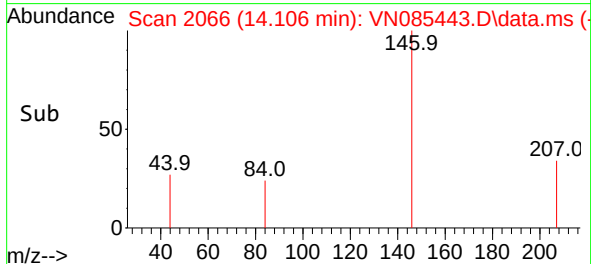
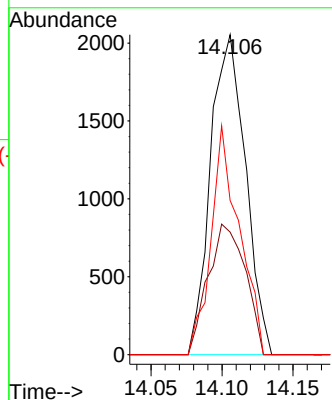
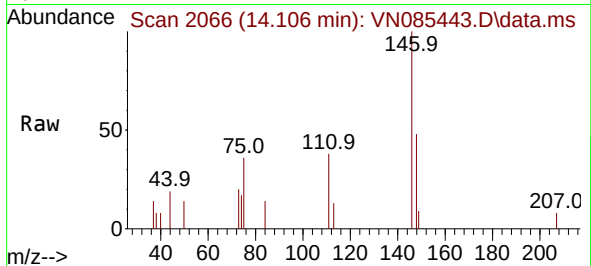




#91  
1,2-Dichlorobenzene  
Concen: 1.090 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

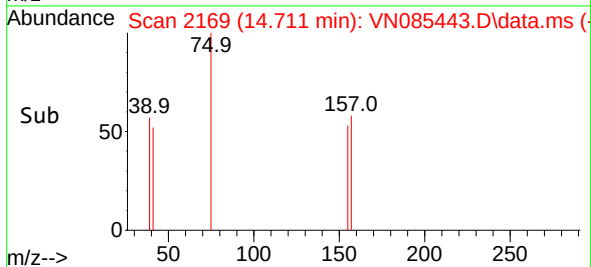
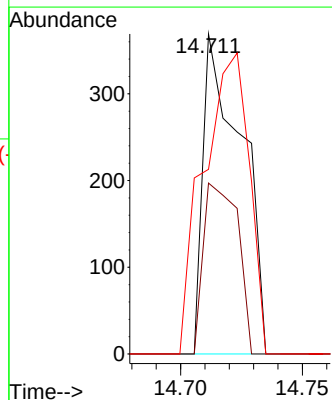
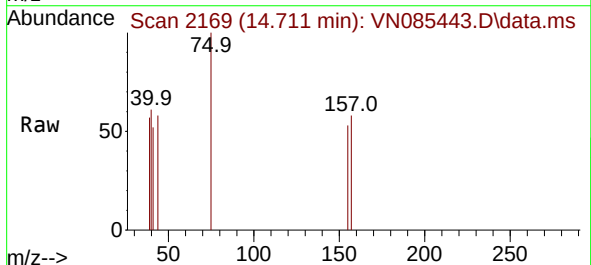
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

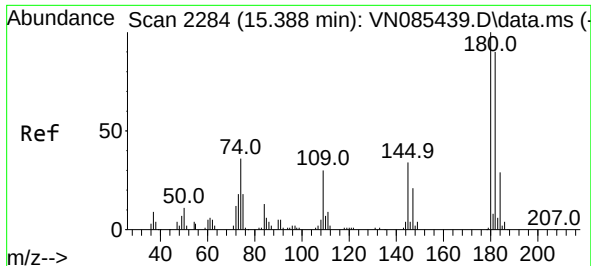
Tgt Ion:146 Resp: 3515  
Ion Ratio Lower Upper  
146 100  
111 43.4 21.7 65.1  
148 57.8 31.4 94.2



#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

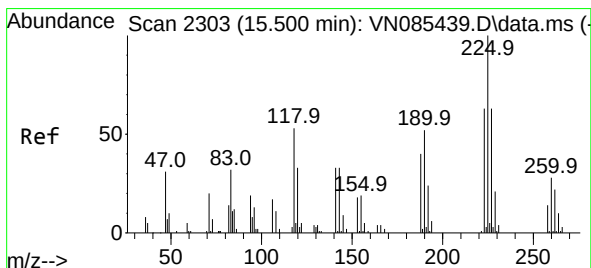
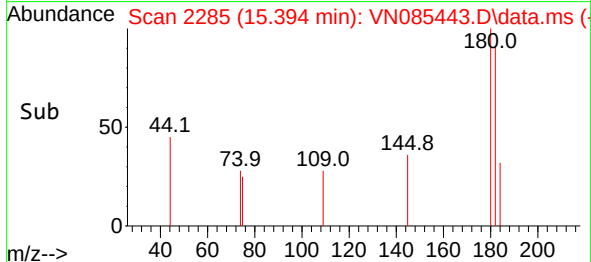
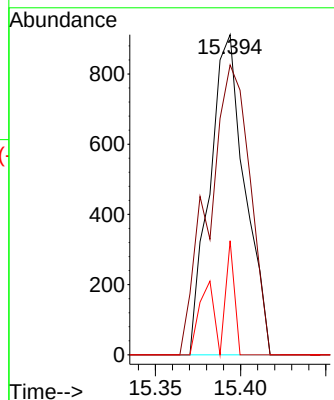
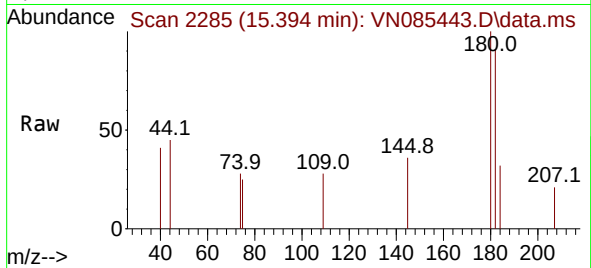




#93  
1,2,4-Trichlorobenzene  
Concen: 0.874 ug/l  
RT: 15.394 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

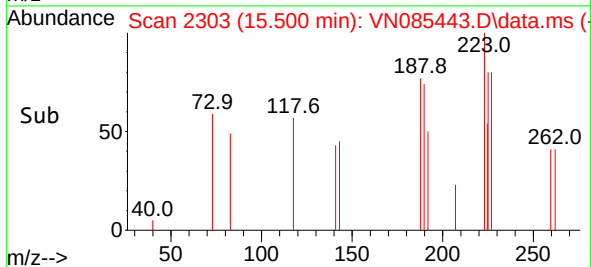
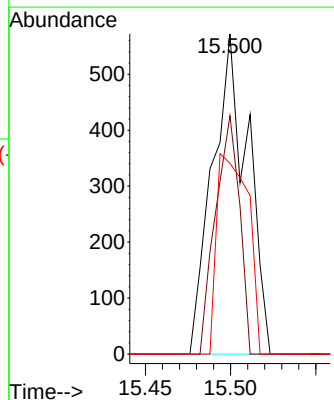
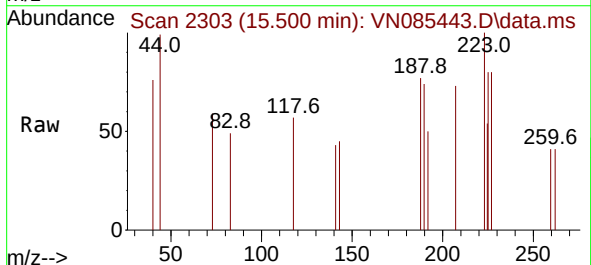
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

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#

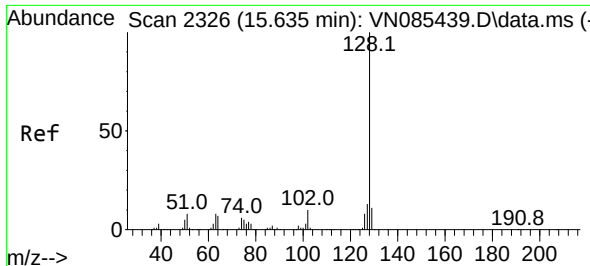


#94  
Hexachlorobutadiene  
Concen: 1.033 ug/l  
RT: 15.500 min Scan# 2303  
Delta R.T. -0.000 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

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



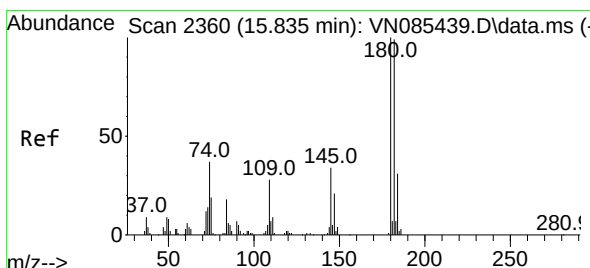
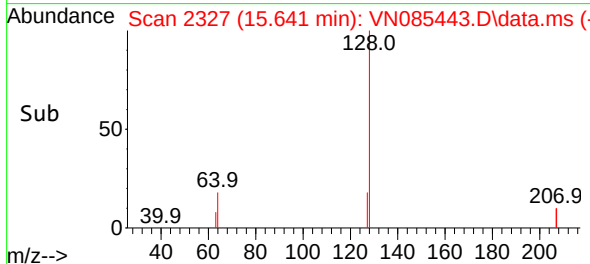
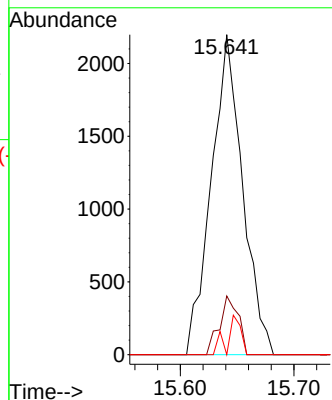
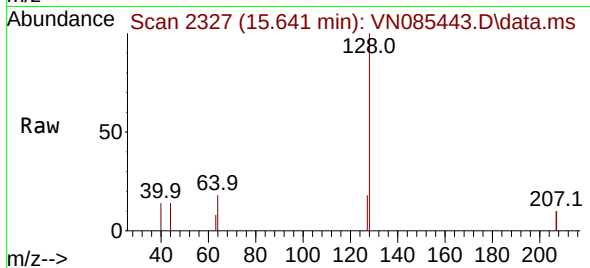




#95  
Naphthalene  
Concen: 0.941 ug/l  
RT: 15.641 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VN085443.D  
Acq: 14 Jan 2025 17:19

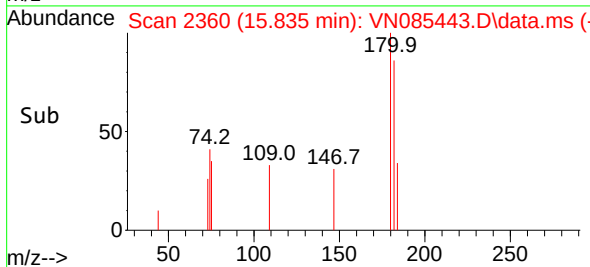
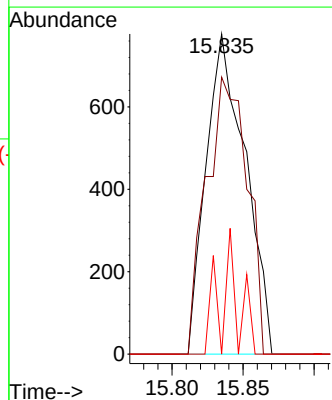
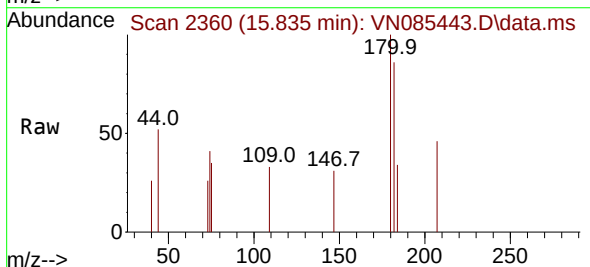
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

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       |

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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

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

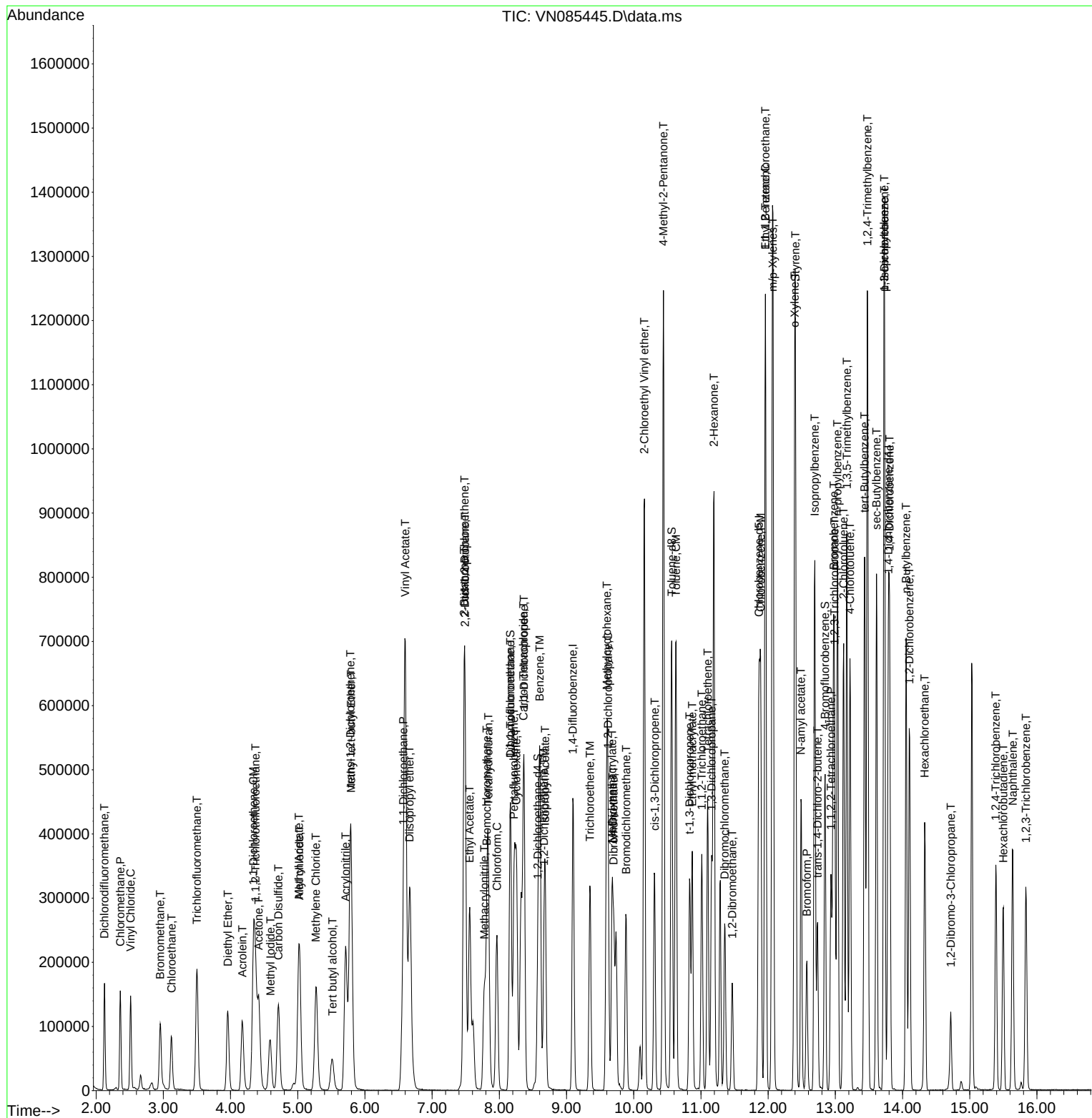
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|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

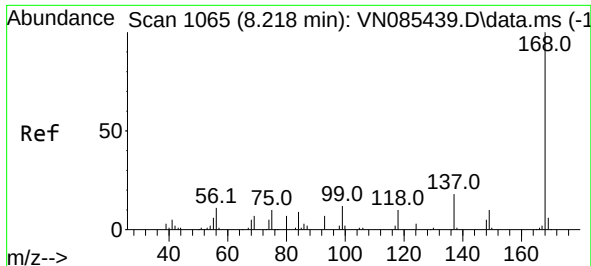
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 Acq On : 14 Jan 2025 18:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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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

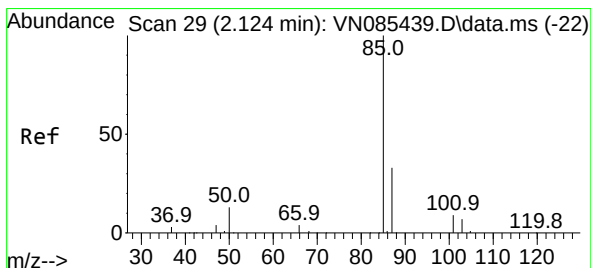
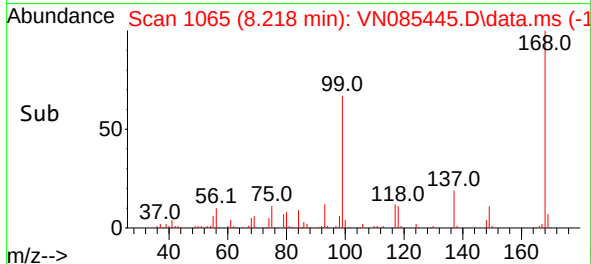
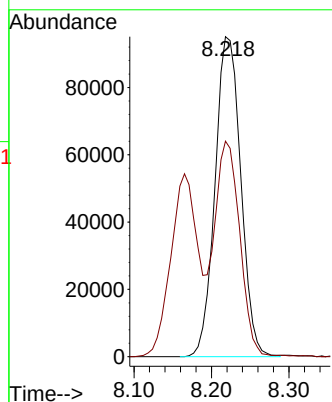
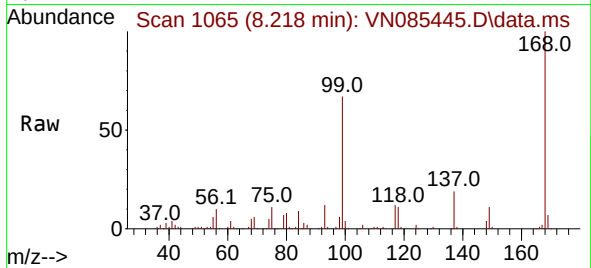




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

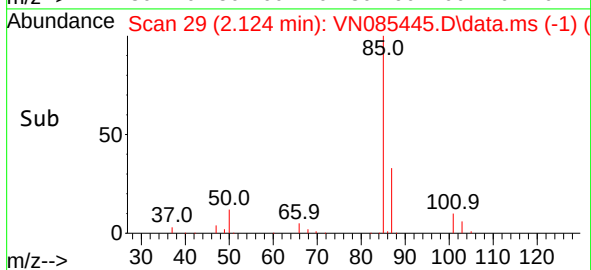
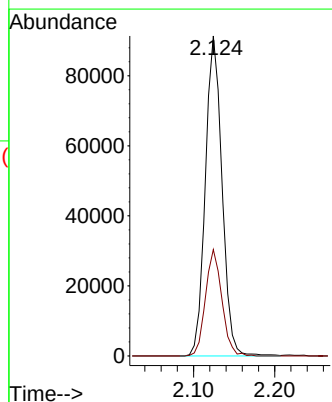
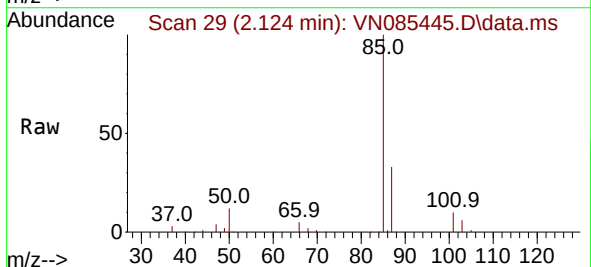
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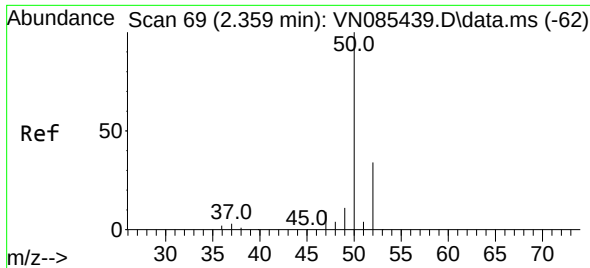
Tgt Ion:168 Resp: 219757  
Ion Ratio Lower Upper  
168 100  
99 66.9 53.6 80.4



#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

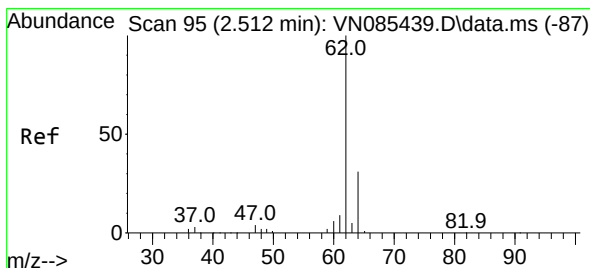
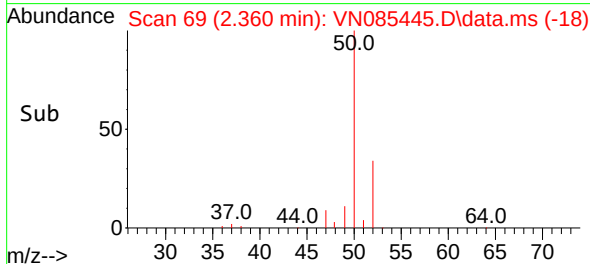
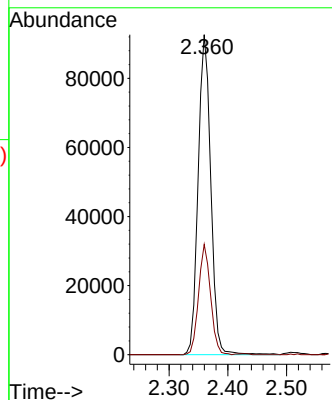
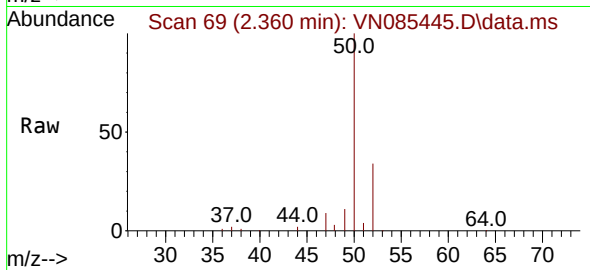




#3  
Chloromethane  
Concen: 42.883 ug/l  
RT: 2.360 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

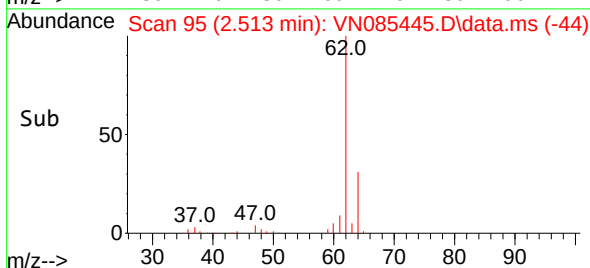
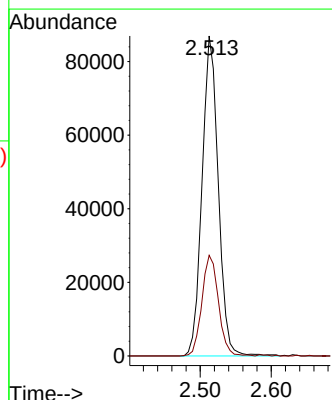
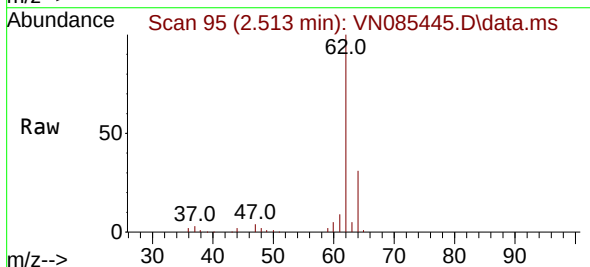
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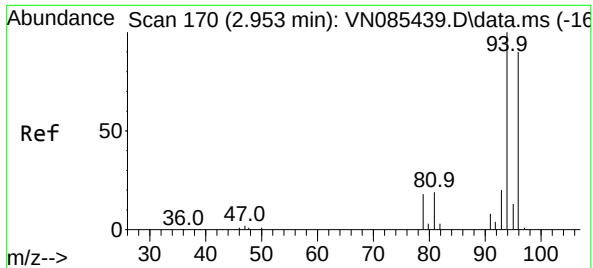
Tgt Ion: 50 Resp: 138152  
Ion Ratio Lower Upper  
50 100  
52 34.4 27.0 40.6



#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

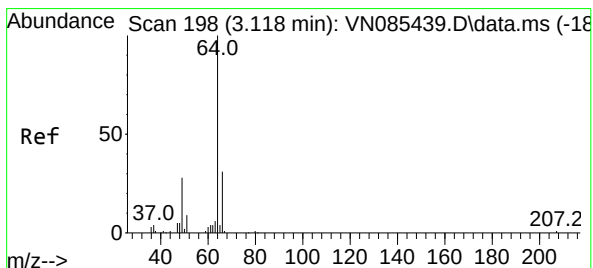
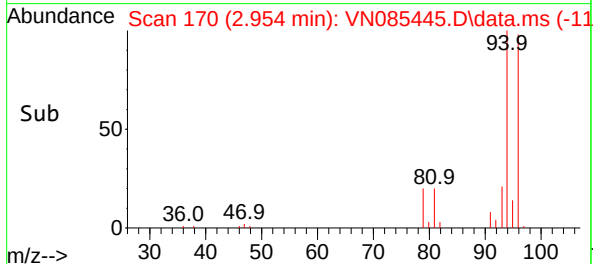
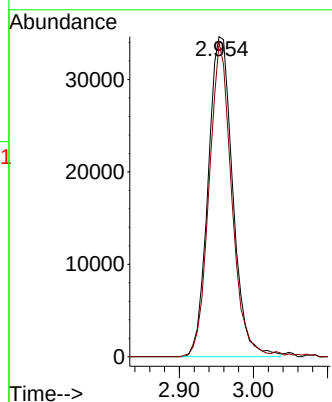
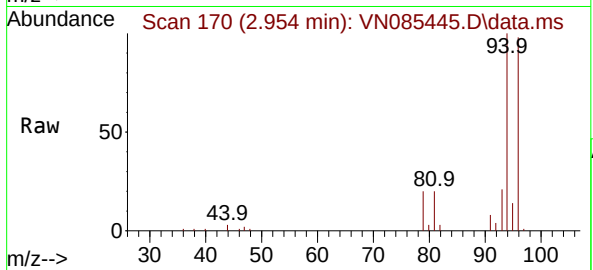




#5  
Bromomethane  
Concen: 40.910 ug/l  
RT: 2.954 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

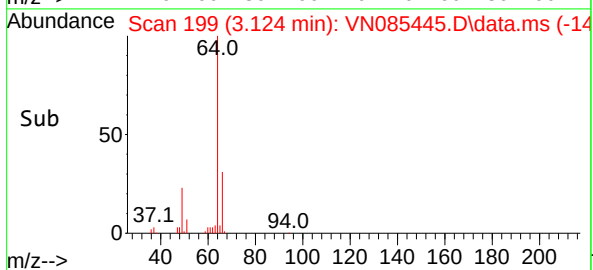
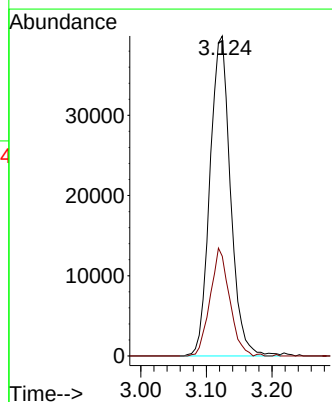
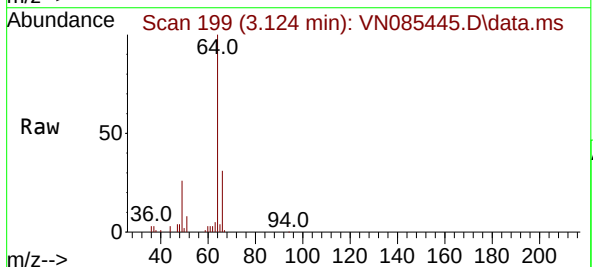
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

Tgt Ion: 94 Resp: 80019  
Ion Ratio Lower Upper  
94 100  
96 98.2 71.8 107.6

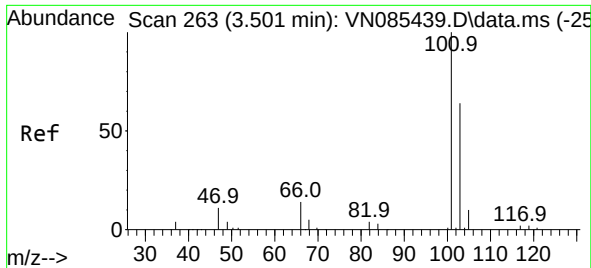


#6  
Chloroethane  
Concen: 42.299 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Tgt Ion: 64 Resp: 86837  
Ion Ratio Lower Upper  
64 100  
66 31.1 24.6 36.8



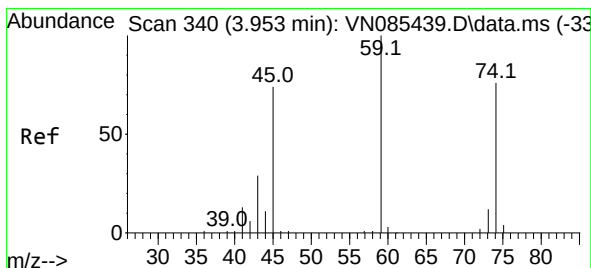
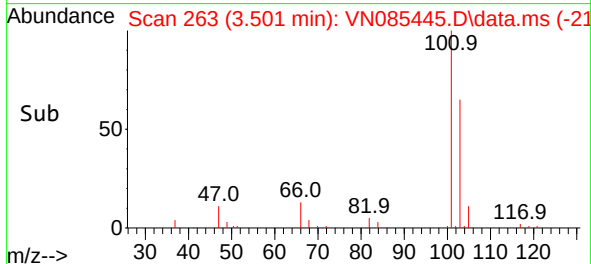
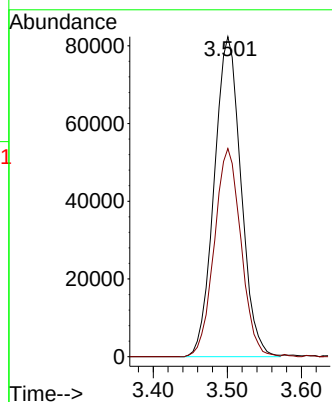
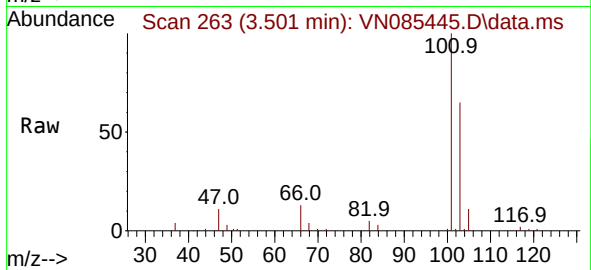




#7  
 Trichlorofluoromethane  
 Concen: 43.956 ug/l  
 RT: 3.501 min Scan# 206  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

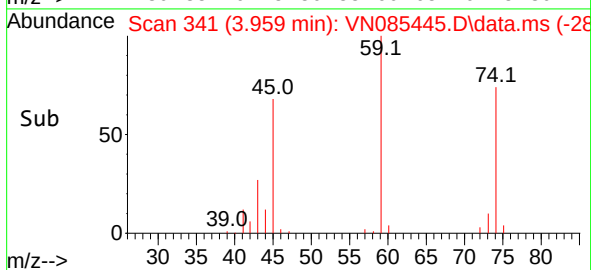
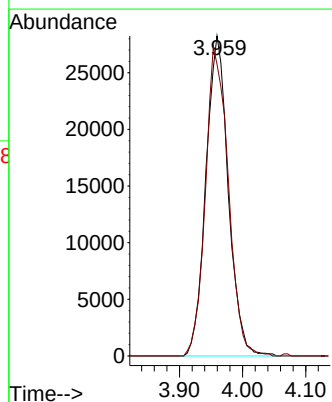
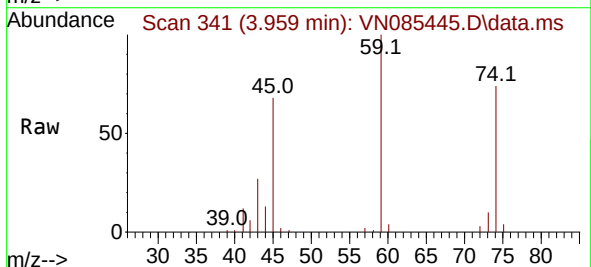
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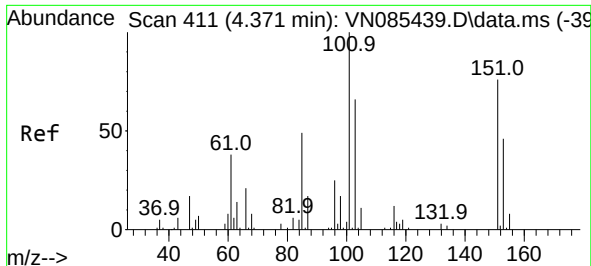
Tgt Ion:101 Resp: 206526  
 Ion Ratio Lower Upper  
 101 100  
 103 65.1 51.4 77.2



#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

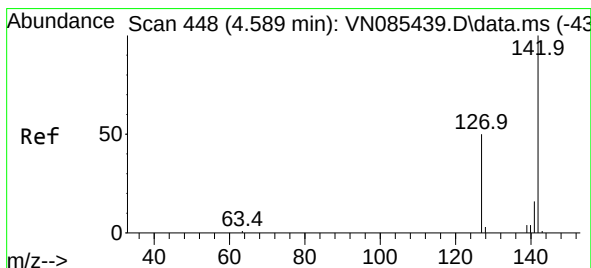
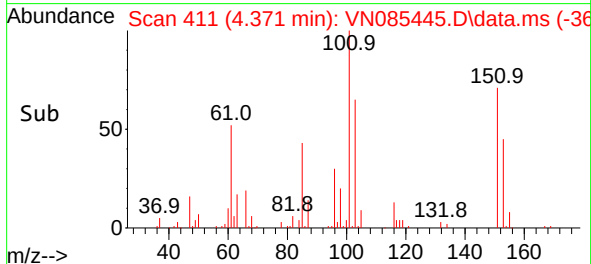
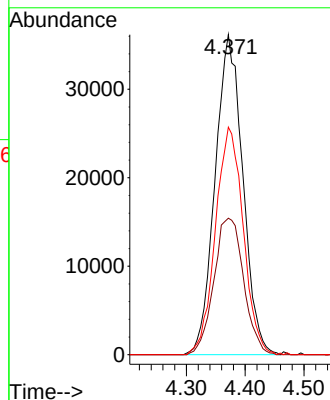
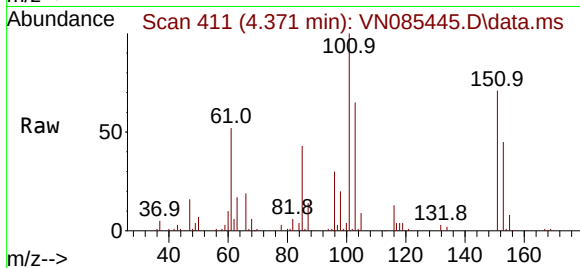




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 44.706 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

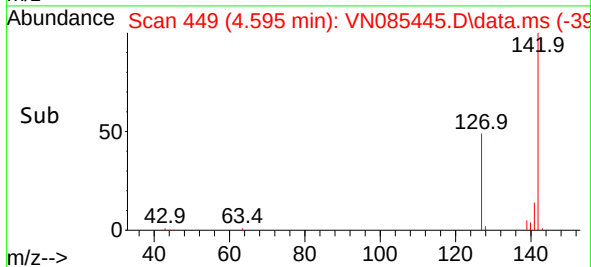
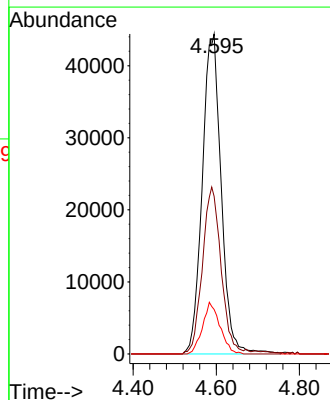
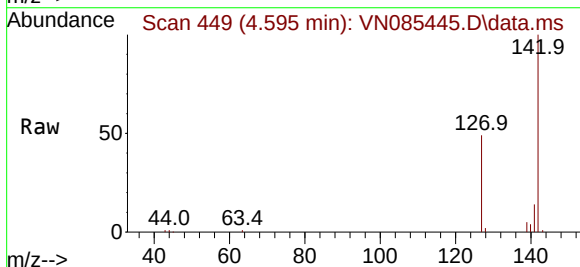
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

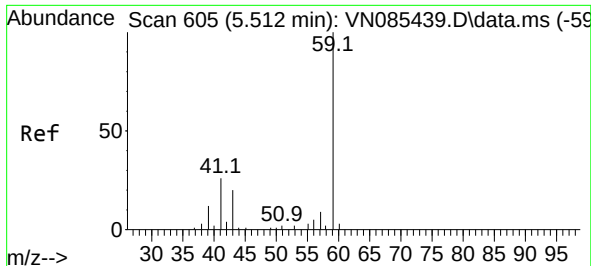
Tgt Ion:101 Resp: 118310  
Ion Ratio Lower Upper  
101 100  
85 45.9 37.8 56.8  
151 71.5 58.8 88.2



#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

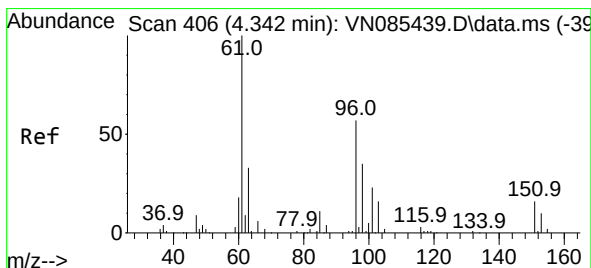
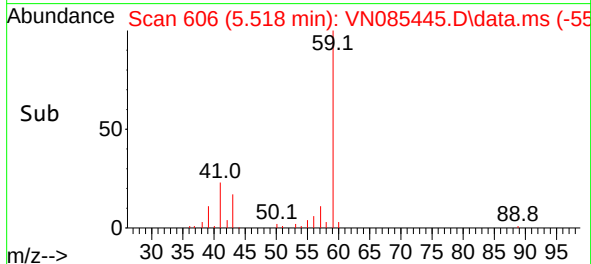
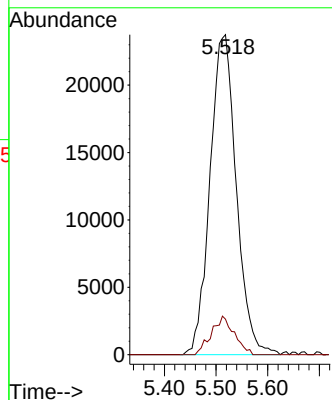
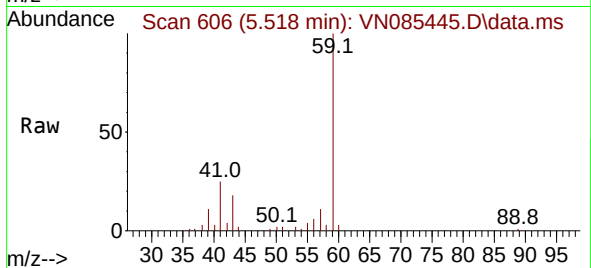




#11  
Tert butyl alcohol  
Concen: 206.633 ug/l  
RT: 5.518 min Scan# 605  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

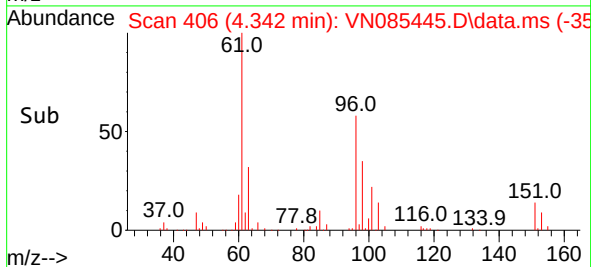
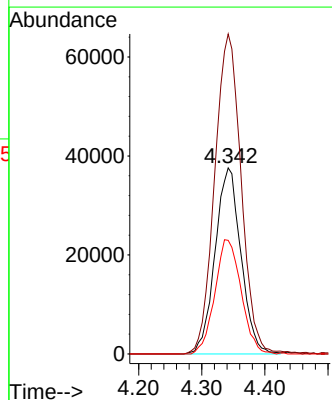
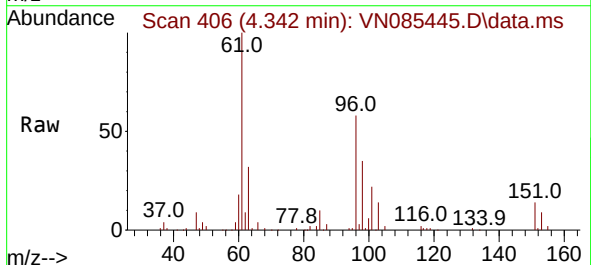
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICV\_VN011425

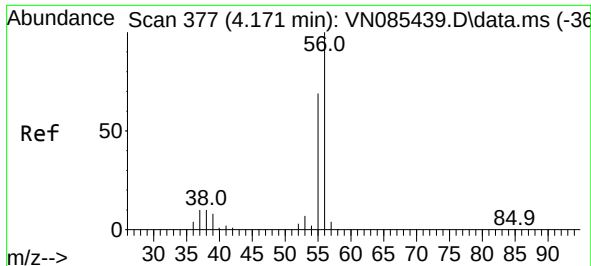
Tgt Ion: 59 Resp: 83933  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0



#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

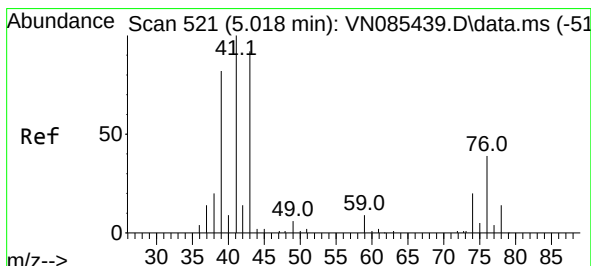
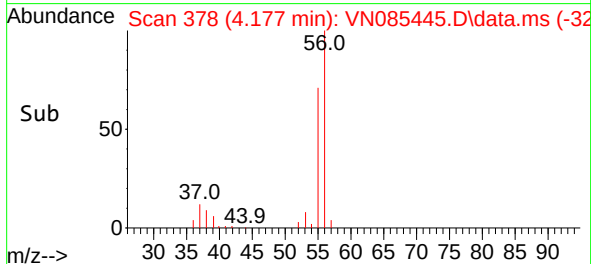
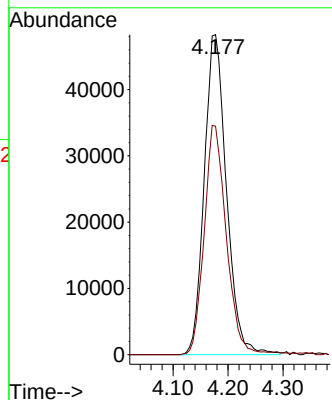
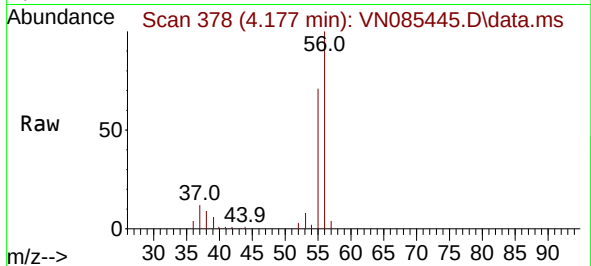




#13  
Acrolein  
Concen: 244.765 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

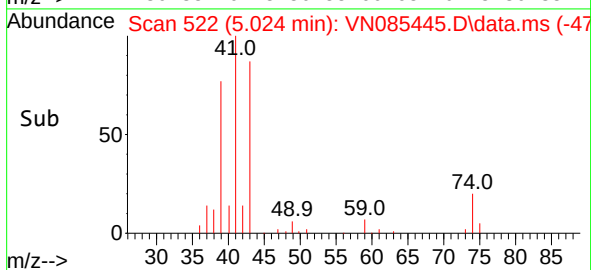
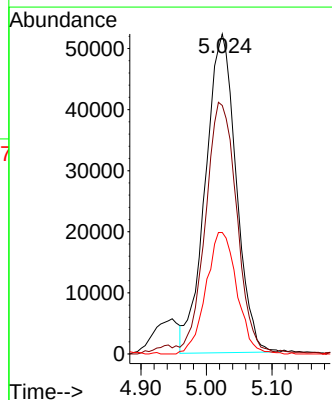
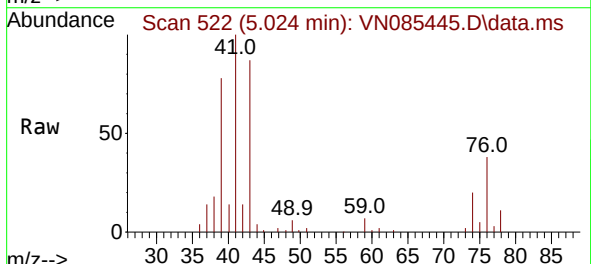
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

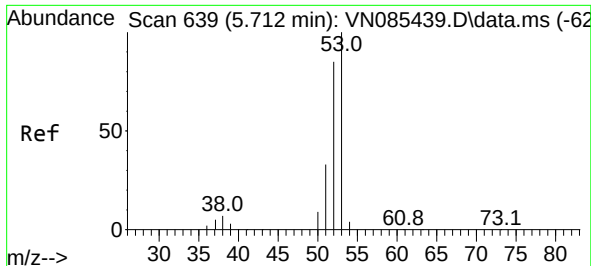
Tgt Ion: 56 Resp: 135720  
Ion Ratio Lower Upper  
56 100  
55 70.9 56.3 84.5



#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

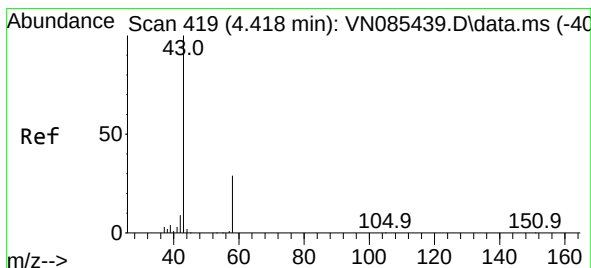
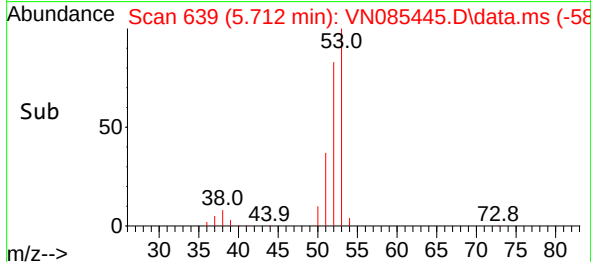
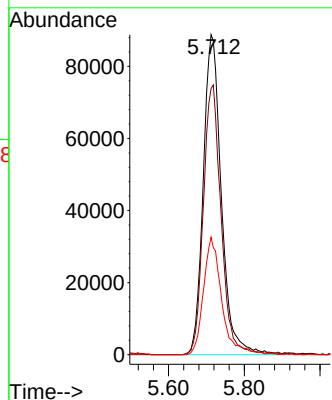
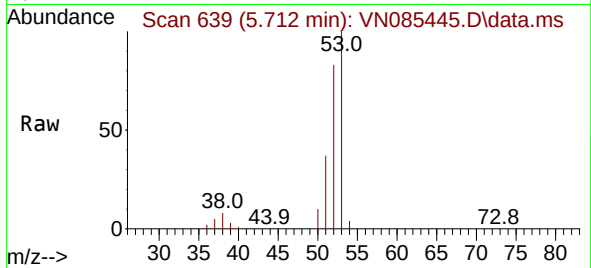




#15  
Acrylonitrile  
Concen: 227.920 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

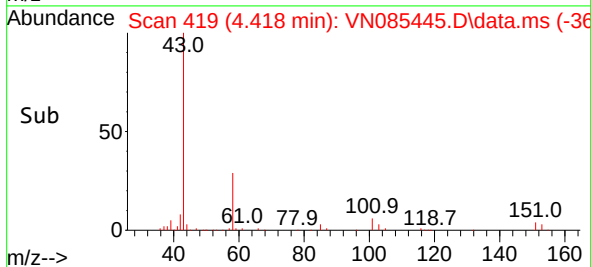
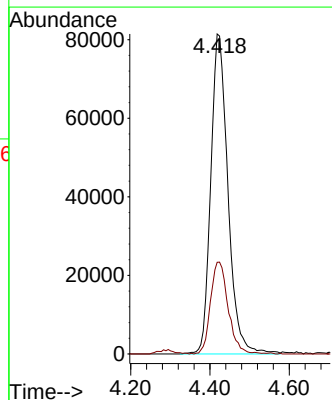
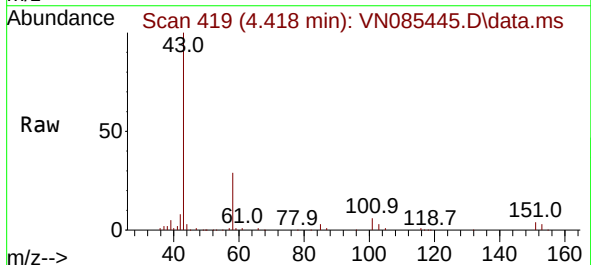
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

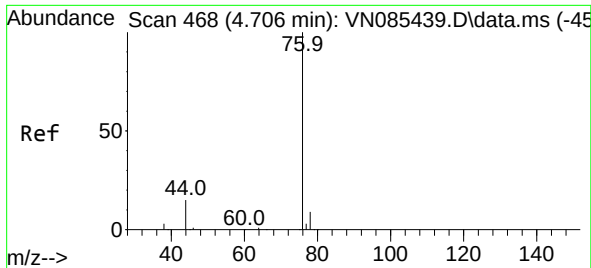
Tgt Ion: 53 Resp: 294062  
Ion Ratio Lower Upper  
53 100  
52 82.7 65.5 98.3  
51 36.8 29.8 44.8



#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

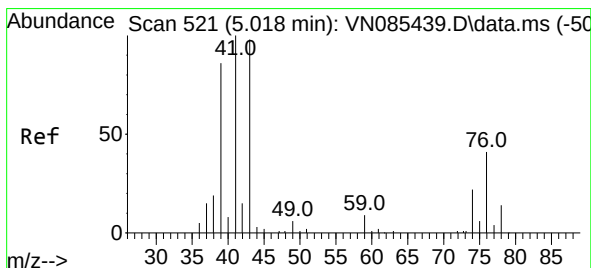
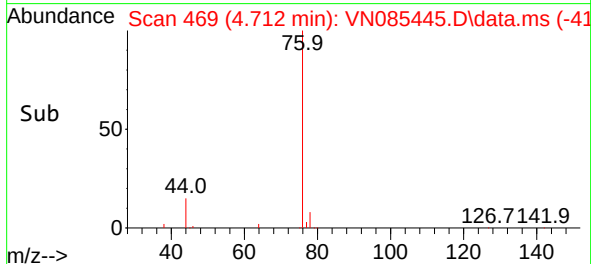
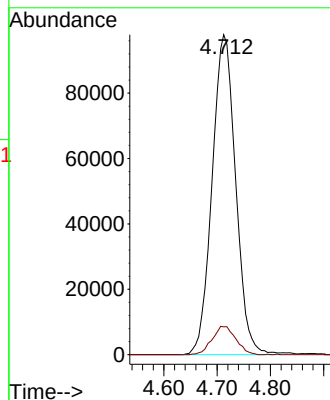
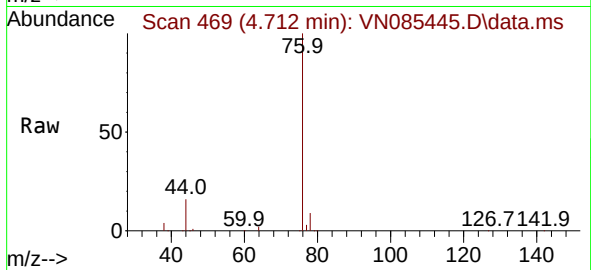




#17  
Carbon Disulfide  
Concen: 41.342 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

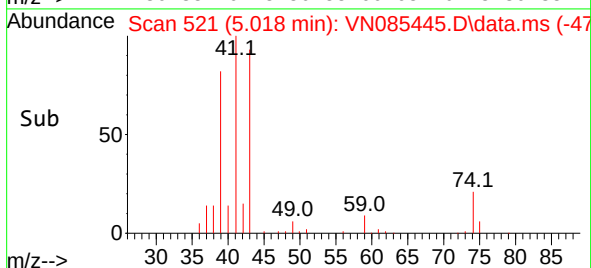
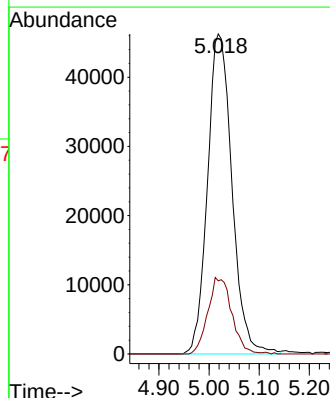
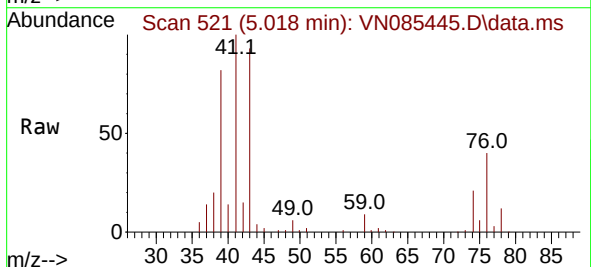
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

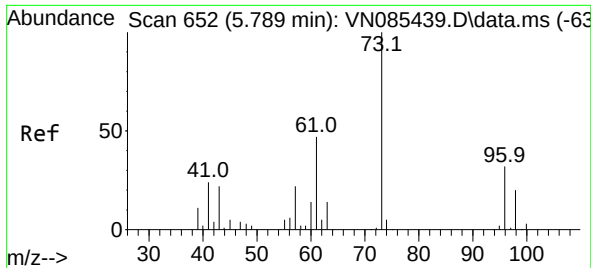
Tgt Ion: 76 Resp: 300215  
Ion Ratio Lower Upper  
76 100  
78 8.7 6.9 10.3



#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

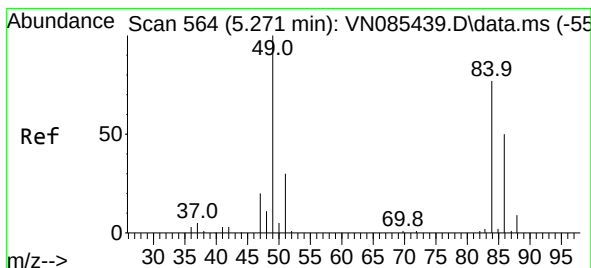
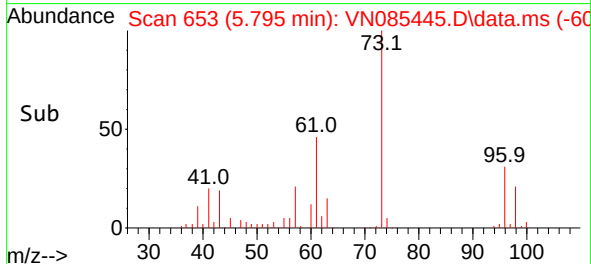
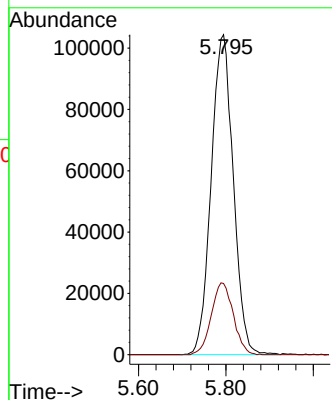
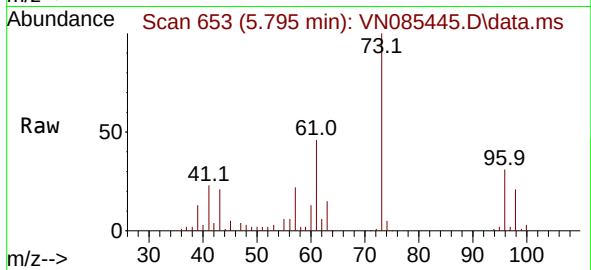




#19  
Methyl tert-butyl Ether  
Concen: 47.768 ug/l  
RT: 5.795 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

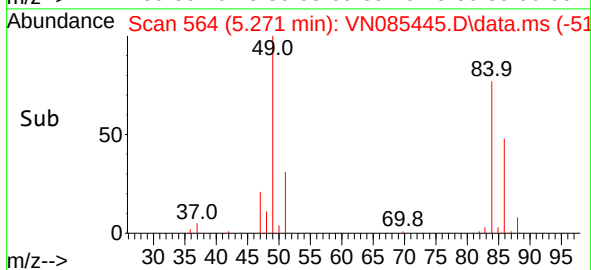
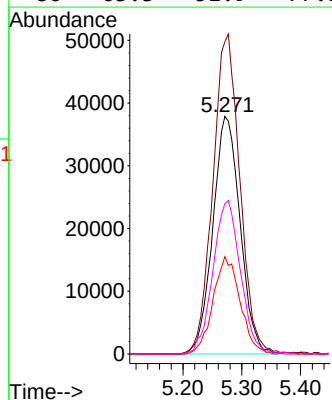
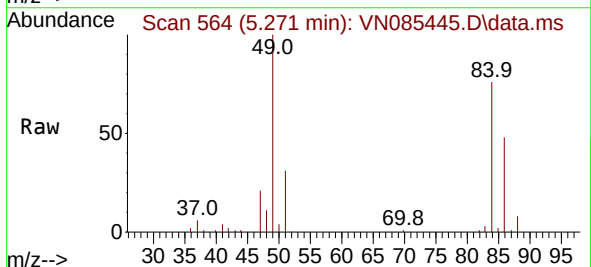
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVNVN011425

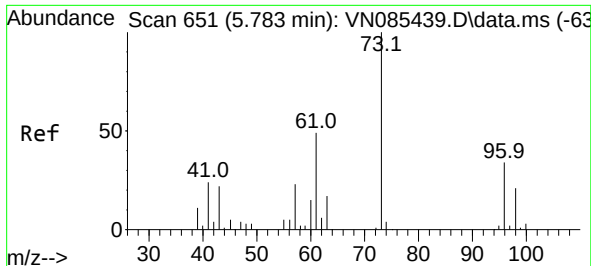
Tgt Ion: 73 Resp: 365819  
Ion Ratio Lower Upper  
73 100  
57 22.3 17.8 26.8



#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

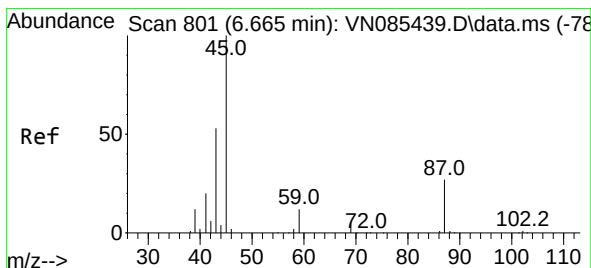
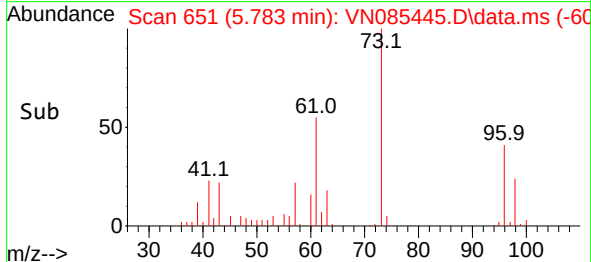
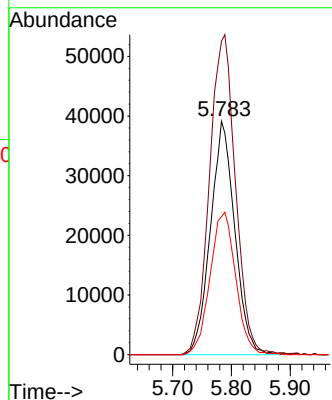
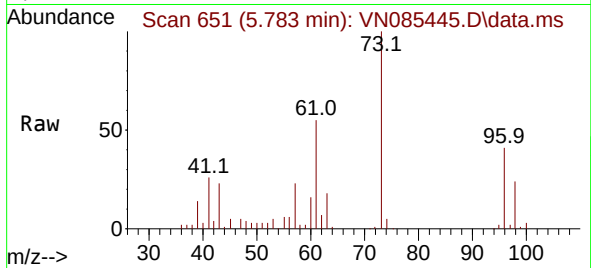




#21  
trans-1,2-Dichloroethene  
Concen: 44.672 ug/l  
RT: 5.783 min Scan# 651  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

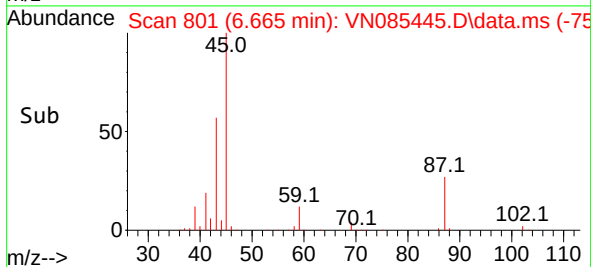
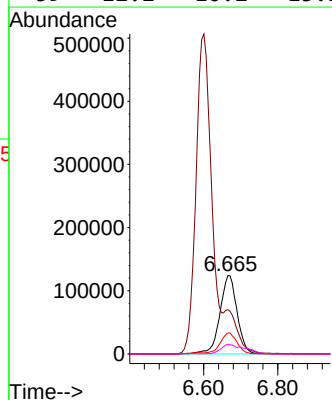
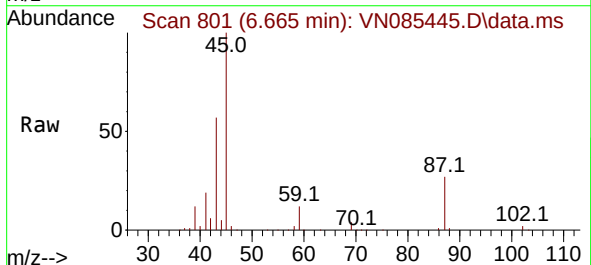
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVNV011425

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

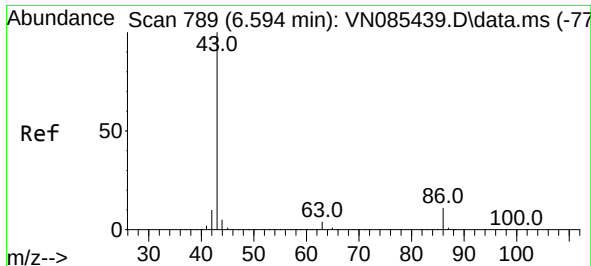


#22  
Diisopropyl ether  
Concen: 46.996 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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



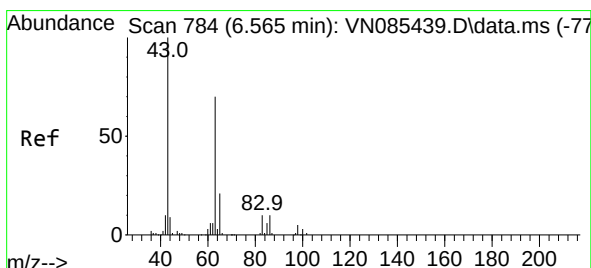
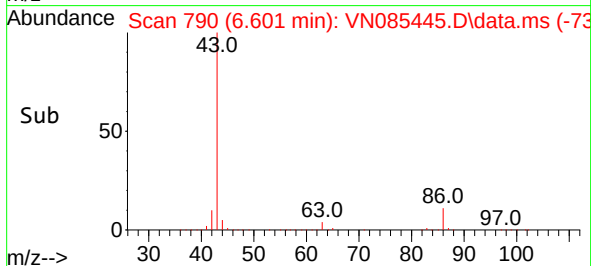
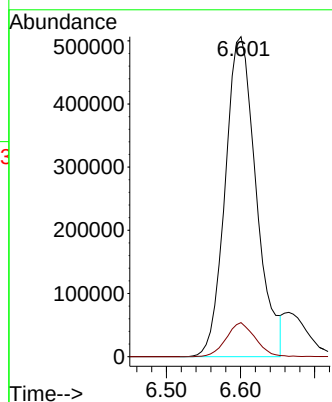
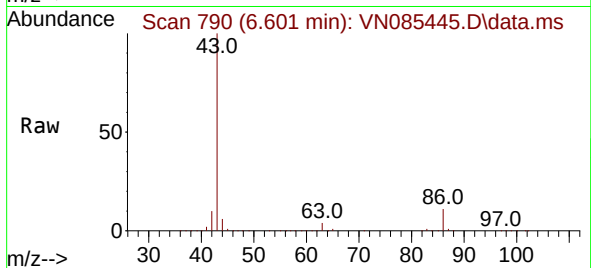




#23  
 Vinyl Acetate  
 Concen: 247.459 ug/l  
 RT: 6.601 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

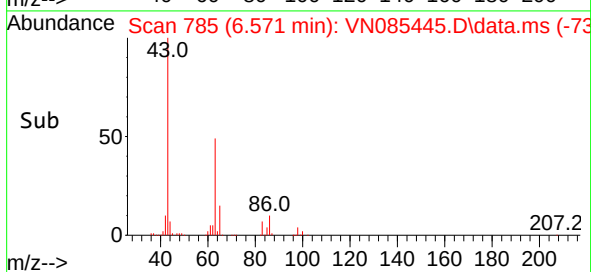
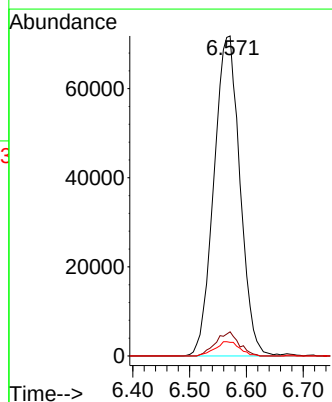
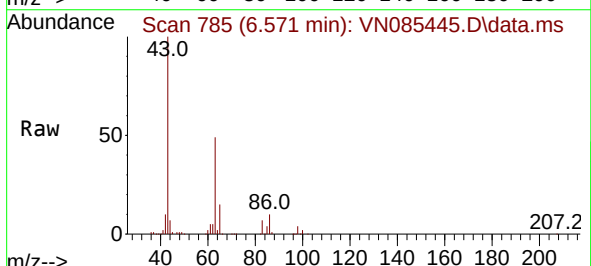
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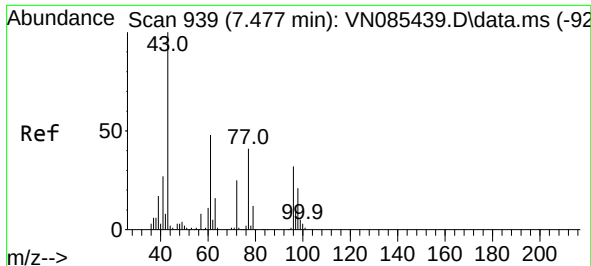
Tgt Ion: 43 Resp: 1471068  
 Ion Ratio Lower Upper  
 43 100  
 86 10.7 8.4 12.6



#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

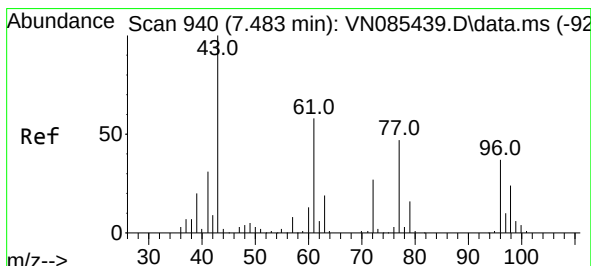
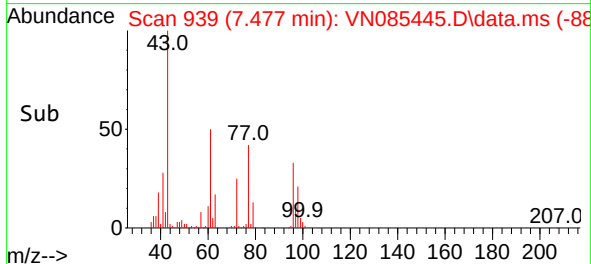
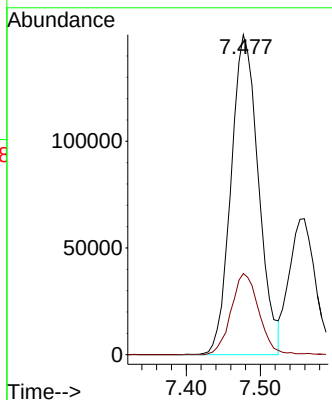
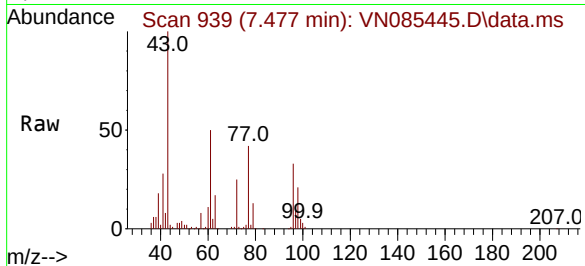




#25  
2-Butanone  
Concen: 228.924 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

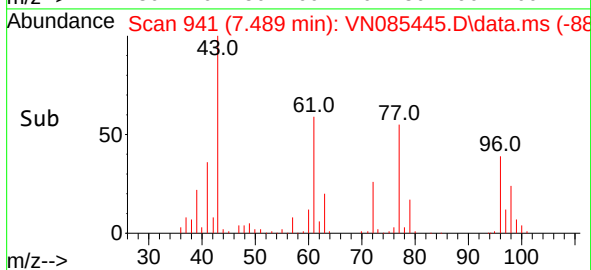
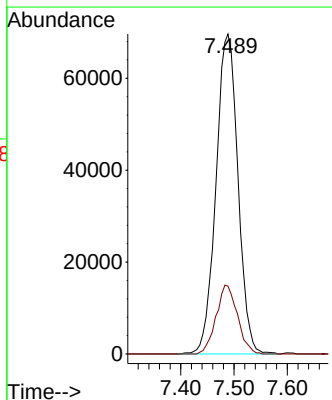
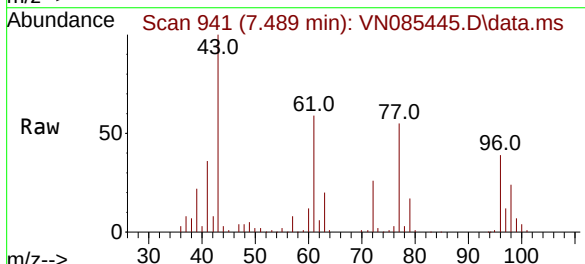
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

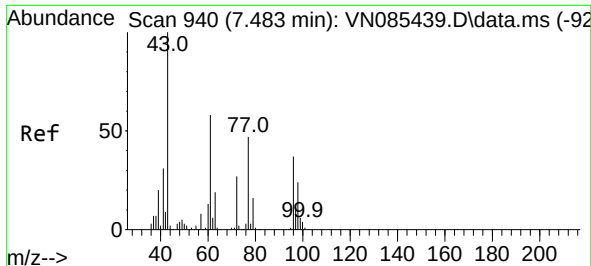
Tgt Ion: 43 Resp: 386125  
Ion Ratio Lower Upper  
43 100  
72 25.4 20.2 30.4



#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

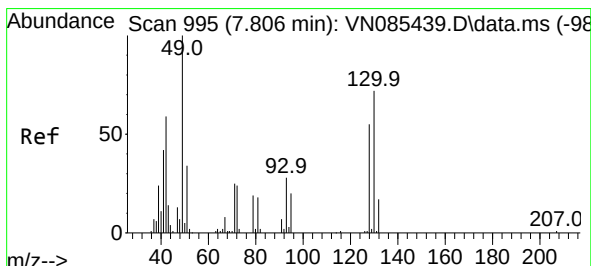
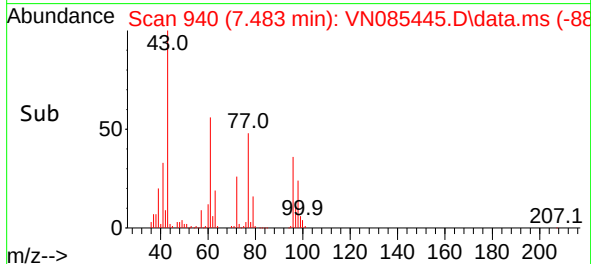
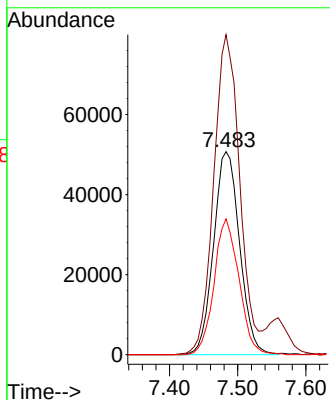
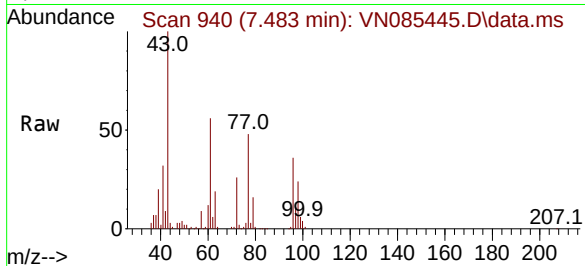




#27  
 cis-1,2-Dichloroethene  
 Concen: 45.446 ug/l  
 RT: 7.483 min Scan# 941  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

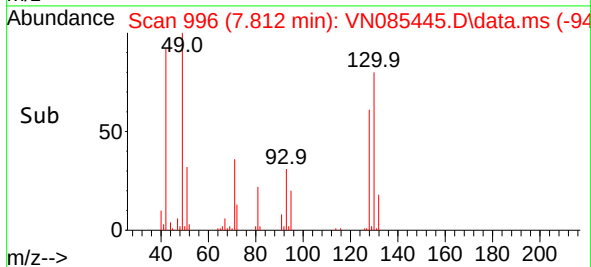
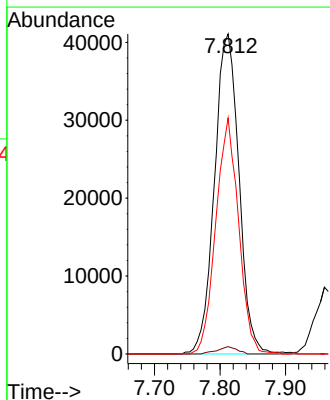
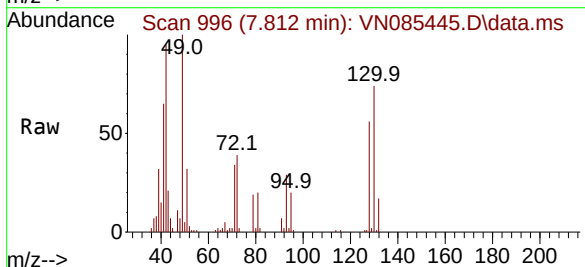
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

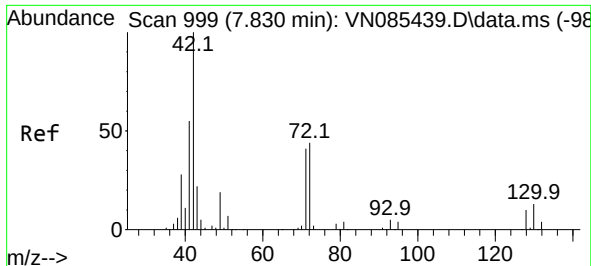
Tgt Ion: 96 Resp: 134920  
 Ion Ratio Lower Upper  
 96 100  
 61 158.0 0.0 311.8  
 98 64.1 0.0 126.0



#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

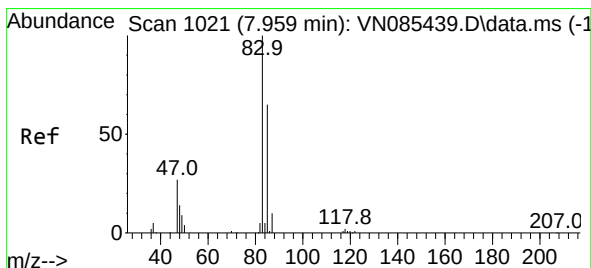
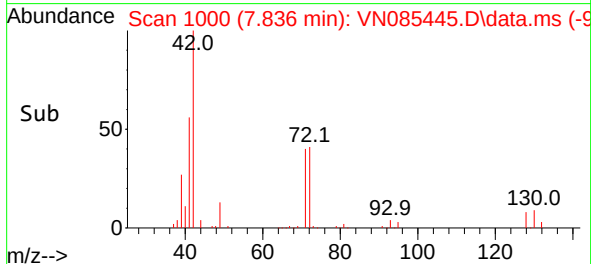
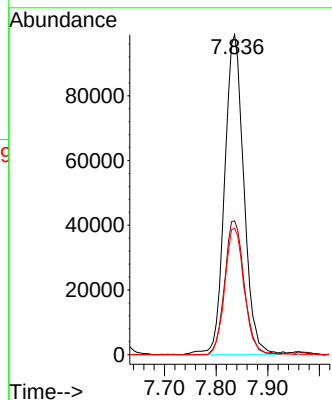
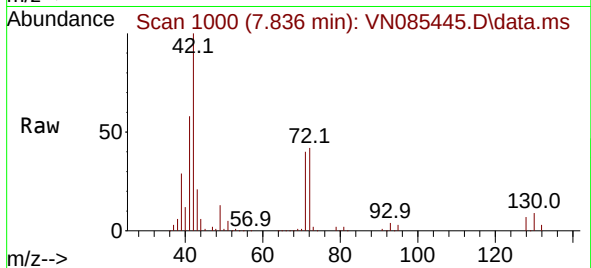




#29  
Tetrahydrofuran  
Concen: 239.065 ug/l  
RT: 7.836 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

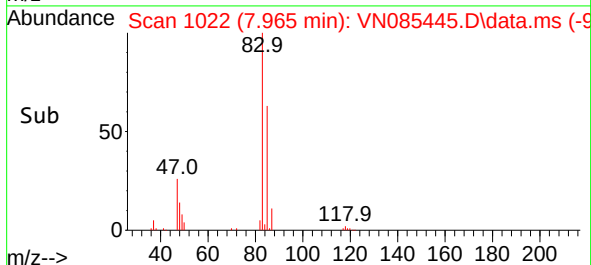
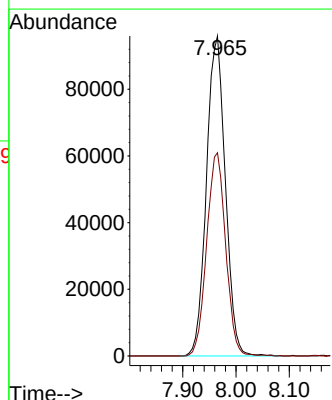
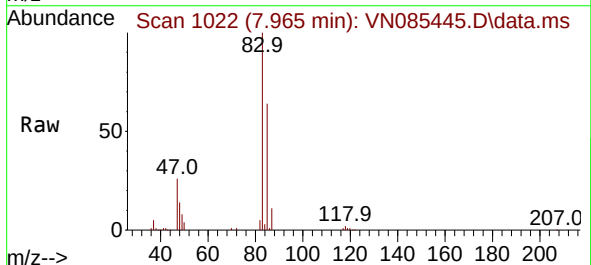
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

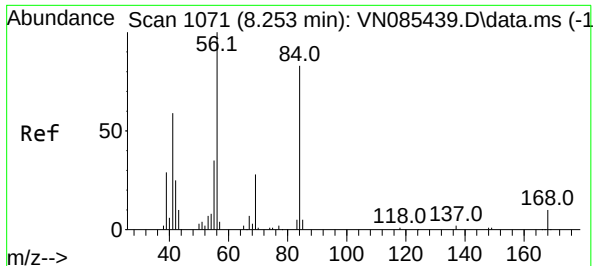
Tgt Ion: 42 Resp: 255650  
Ion Ratio Lower Upper  
42 100  
72 42.5 34.2 51.2  
71 39.9 32.5 48.7



#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

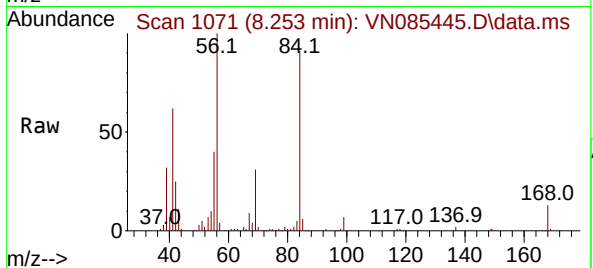
Tgt Ion: 83 Resp: 235923  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.8 77.6



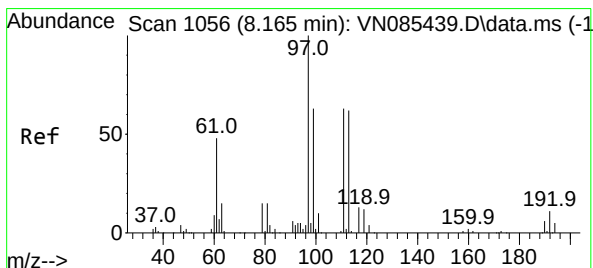
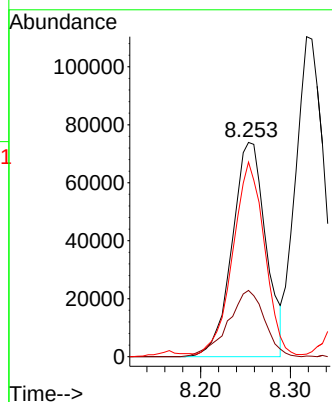
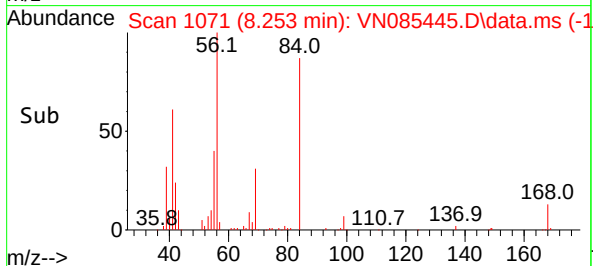


#31  
Cyclohexane  
Concen: 42.878 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

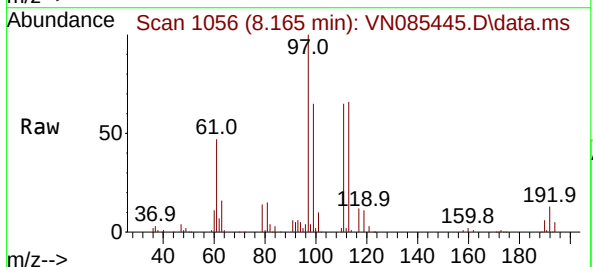
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425



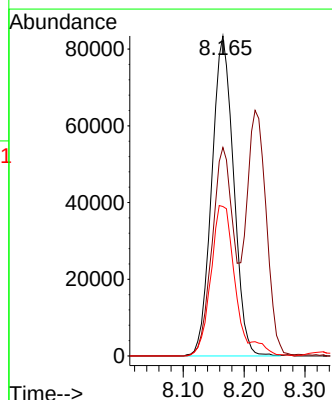
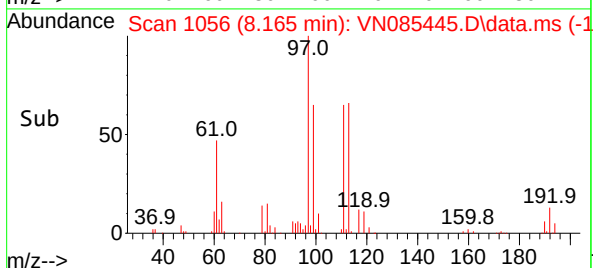
Tgt Ion: 56 Resp: 193034  
Ion Ratio Lower Upper  
56 100  
69 30.5 22.2 33.4  
84 89.4 66.4 99.6

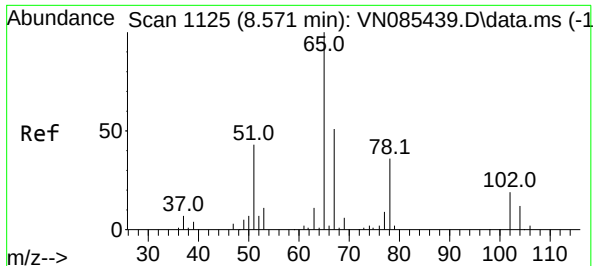


#32  
1,1,1-Trichloroethane  
Concen: 44.332 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06



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 :

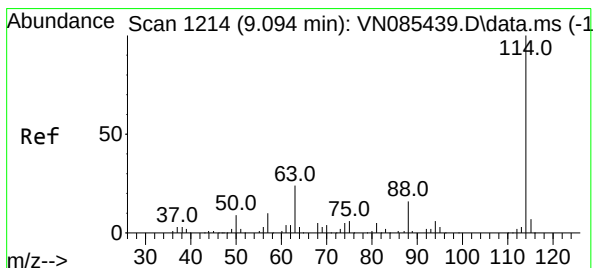
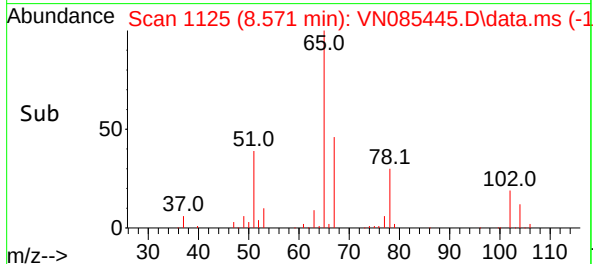
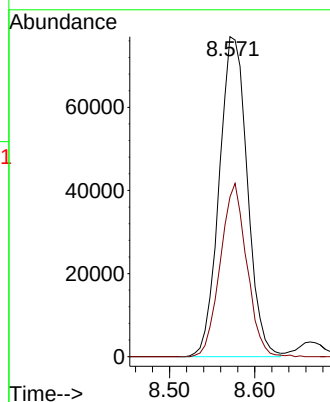
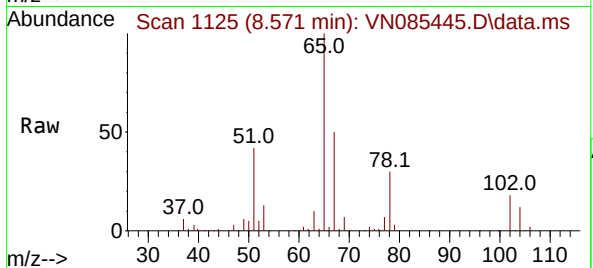
ICVVN011425

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

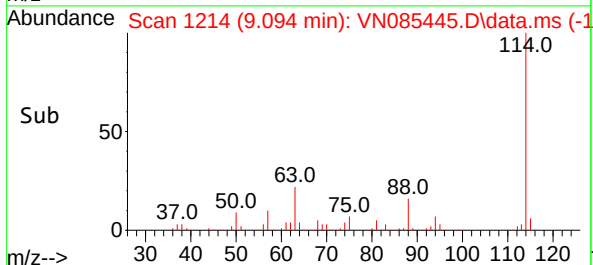
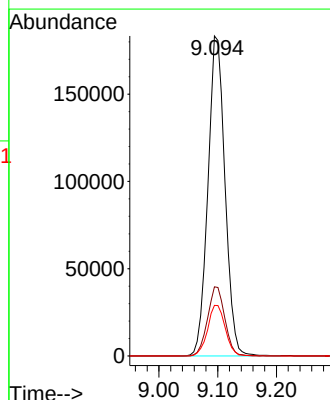
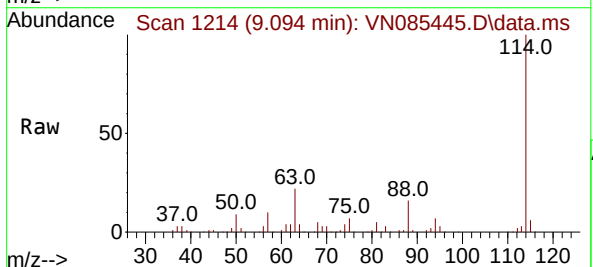
Tgt Ion: 114 Resp: 370487

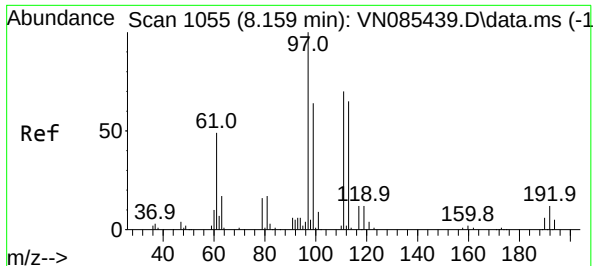
Ion Ratio Lower Upper

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

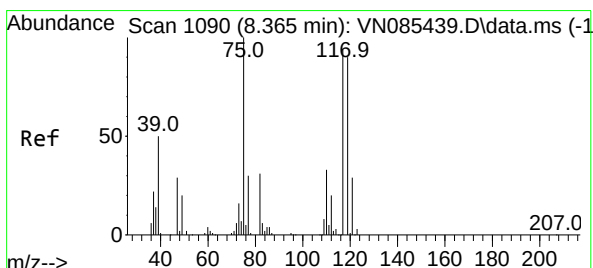
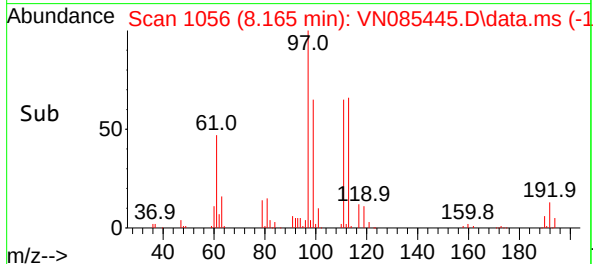
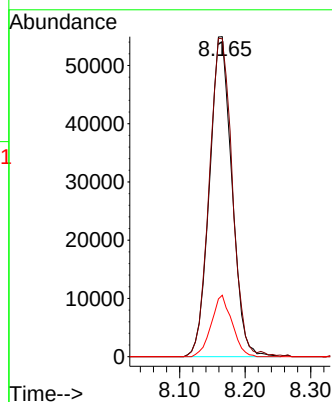
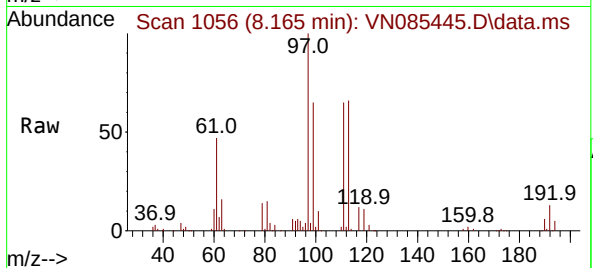
Tgt Ion:113 Resp: 130487

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

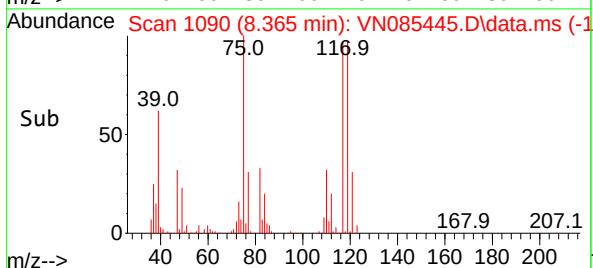
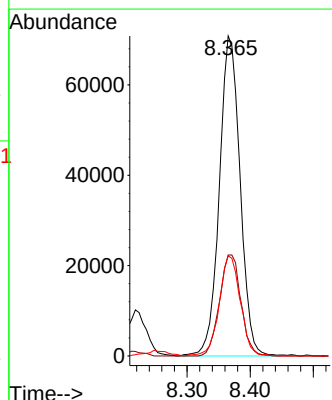
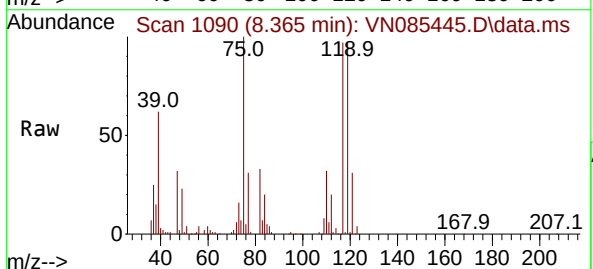
Tgt Ion: 75 Resp: 161834

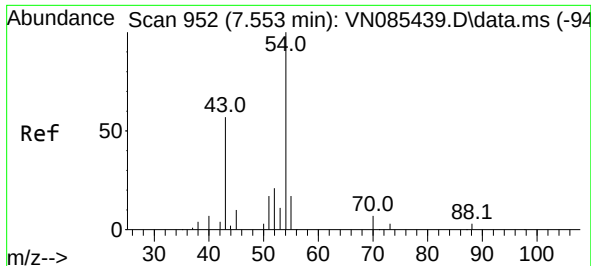
Ion Ratio Lower Upper

75 100

110 32.4 16.5 49.5

77 31.8 24.4 36.6

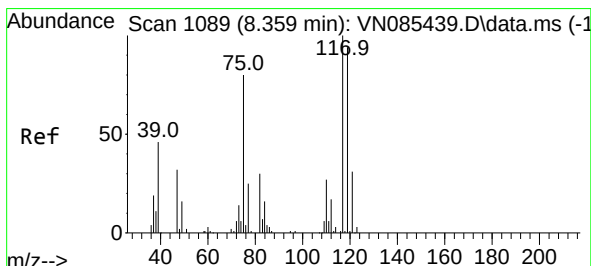
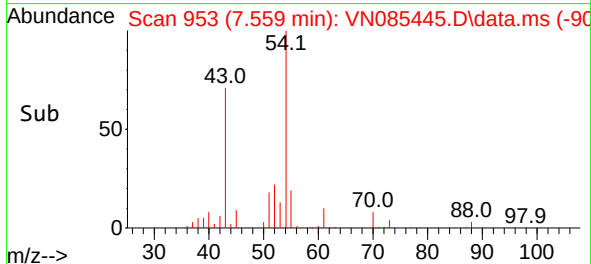
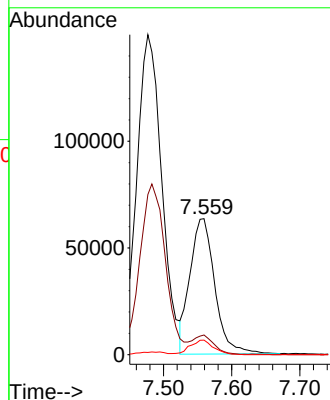
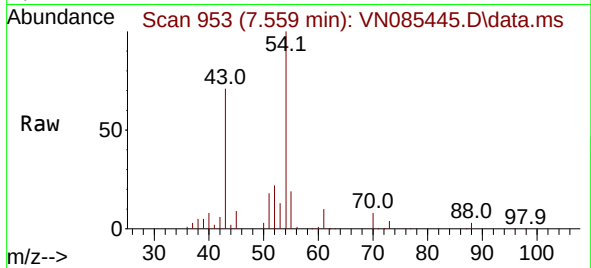




#37  
Ethyl Acetate  
Concen: 44.123 ug/l  
RT: 7.559 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

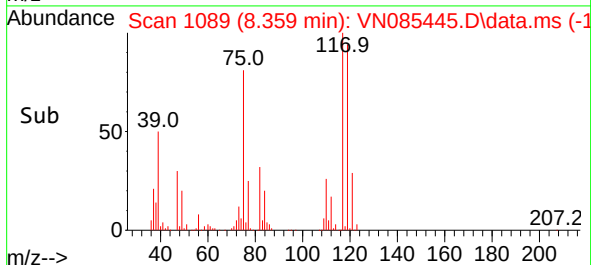
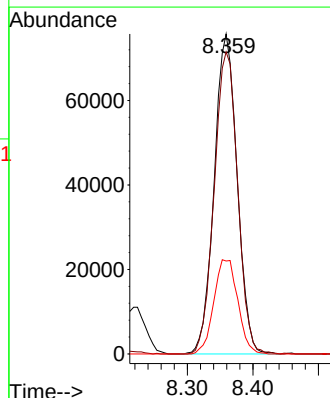
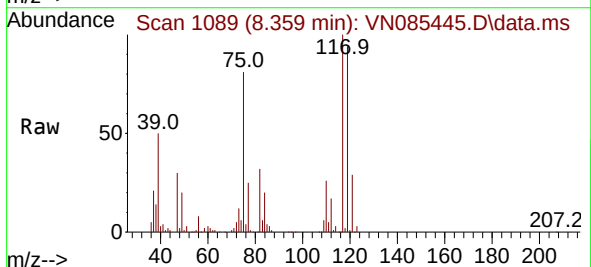
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

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

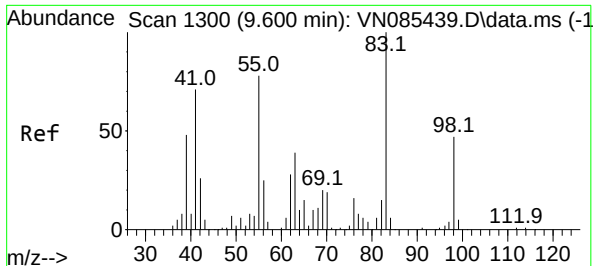


#38  
Carbon Tetrachloride  
Concen: 44.456 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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

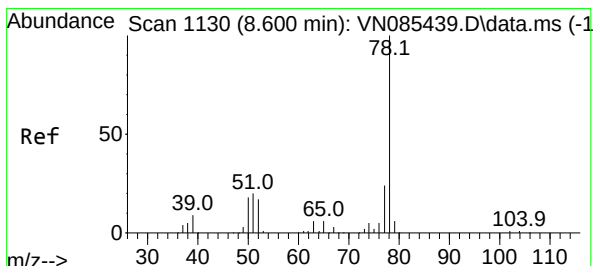
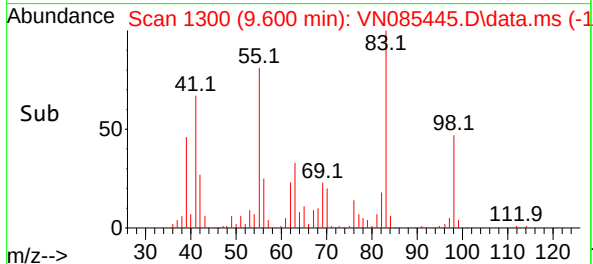
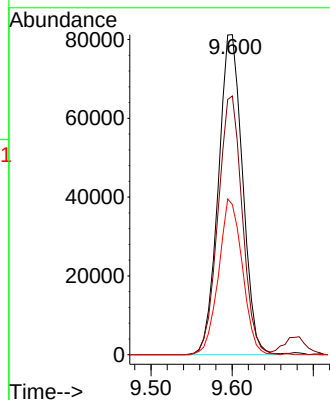
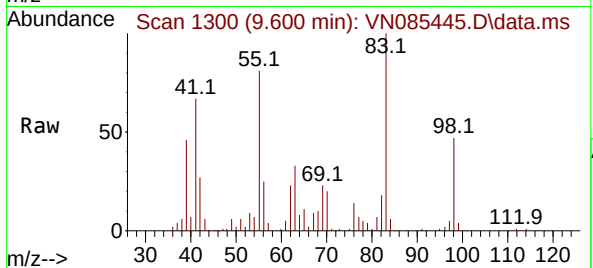
Tgt Ion: 83 Resp: 168431

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

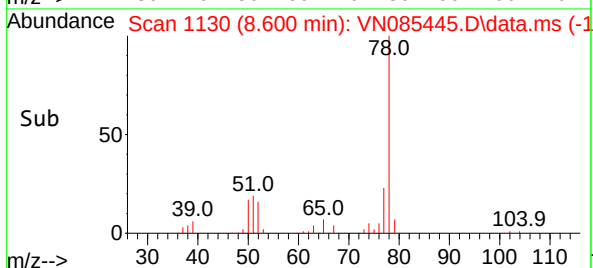
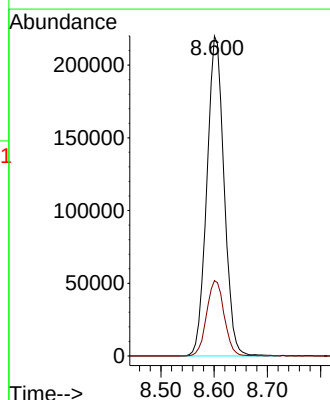
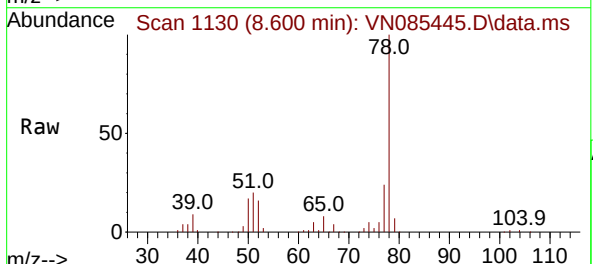
Acq: 14 Jan 2025 18:06

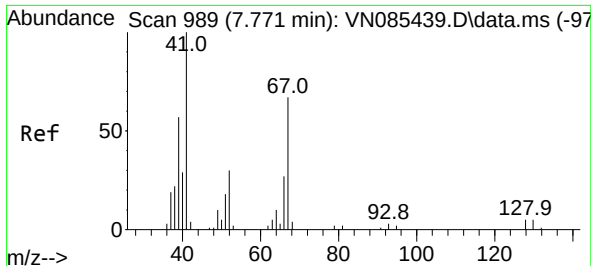
Tgt Ion: 78 Resp: 494871

Ion Ratio Lower Upper

78 100

77 23.5 19.0 28.6

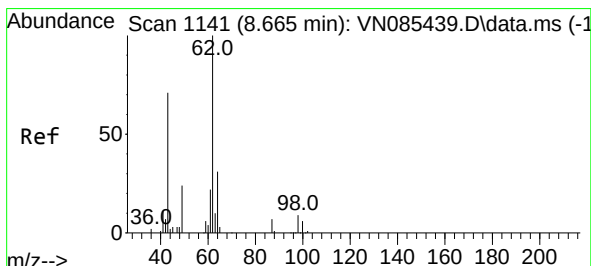
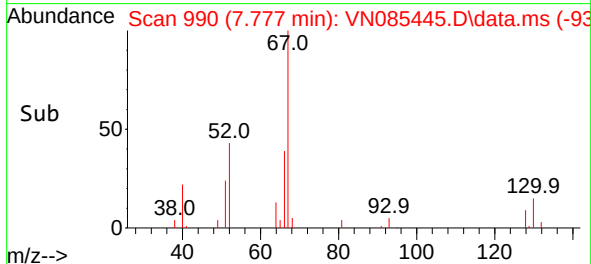
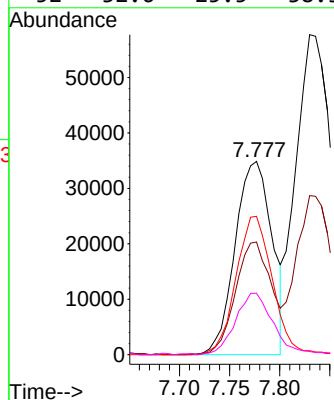
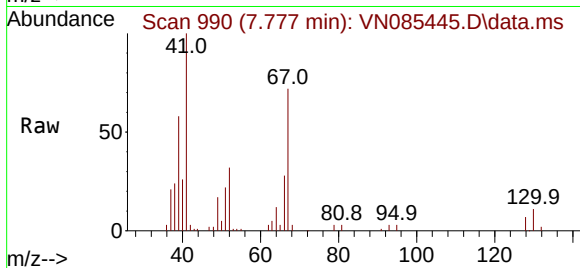




#41  
Methacrylonitrile  
Concen: 47.155 ug/l  
RT: 7.777 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

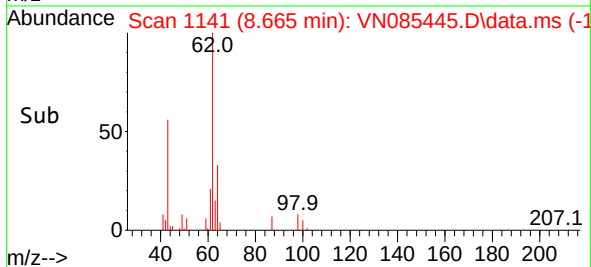
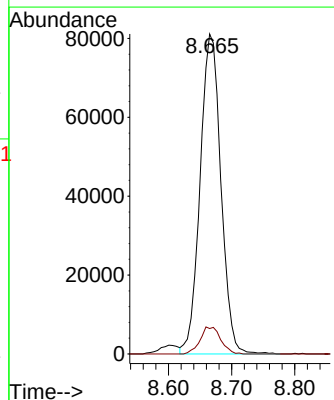
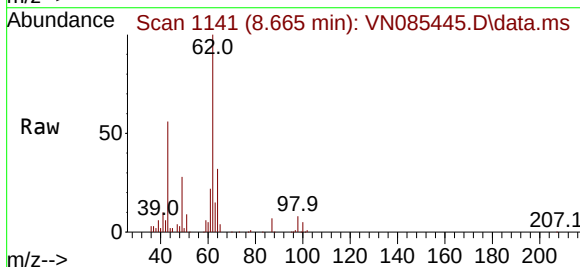
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

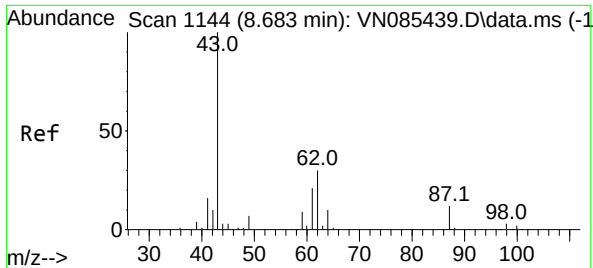
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 89326 |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 56.6     | 46.0 69.0   |
| 67 70.9     | 57.4 86.2   |
| 52 32.6     | 25.5 38.3   |



#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     |

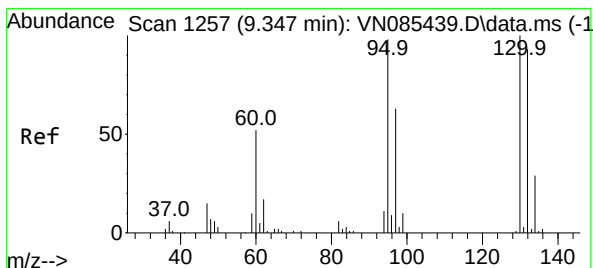
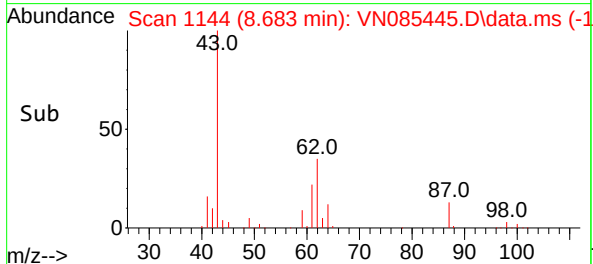
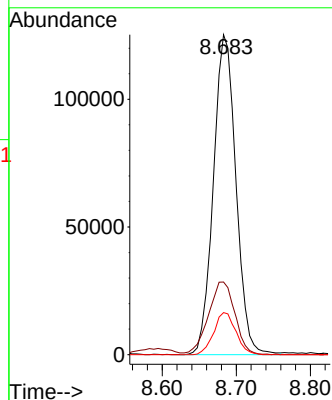
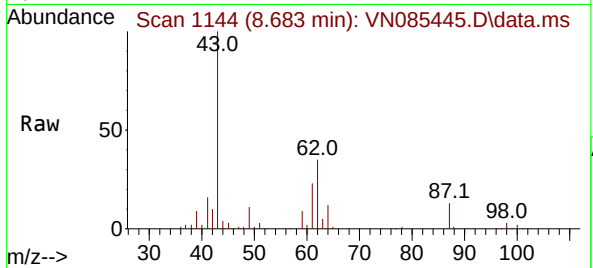




#43  
Isopropyl Acetate  
Concen: 45.440 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

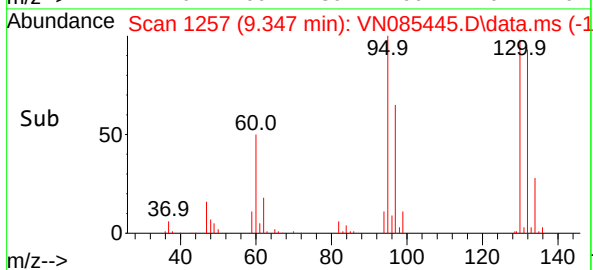
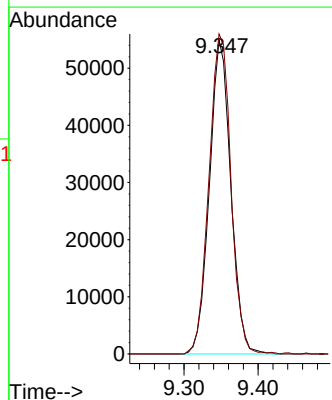
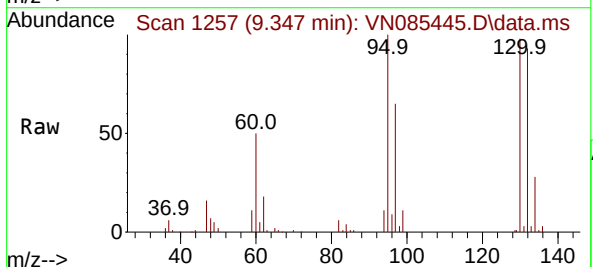
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

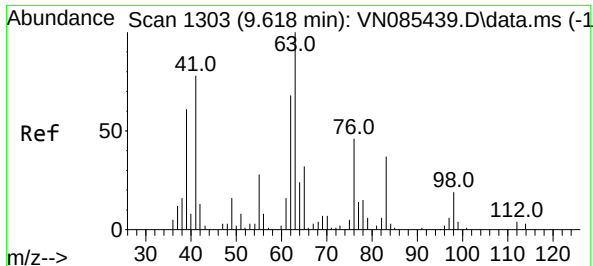
Tgt Ion: 43 Resp: 265107  
Ion Ratio Lower Upper  
43 100  
61 26.7 20.7 31.1  
87 12.9 9.8 14.8



#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 :

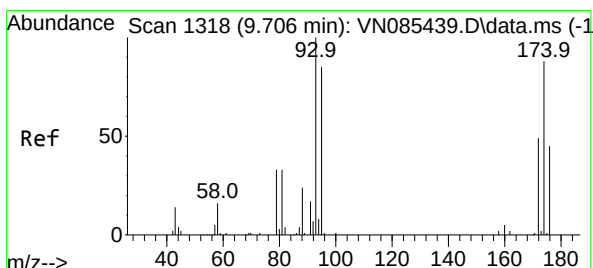
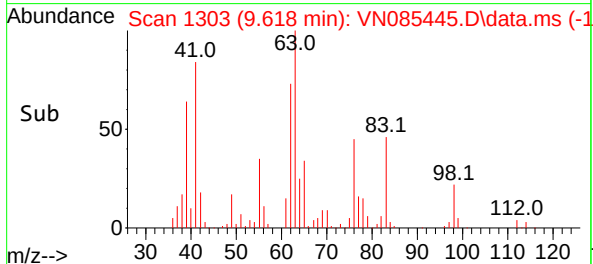
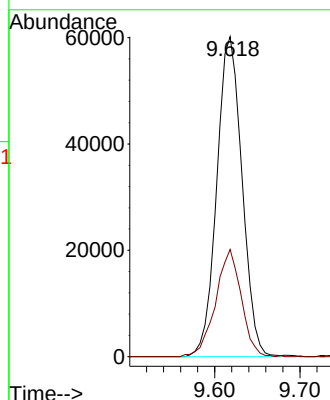
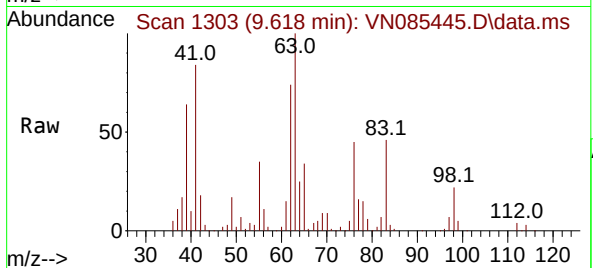
ICVVN011425

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

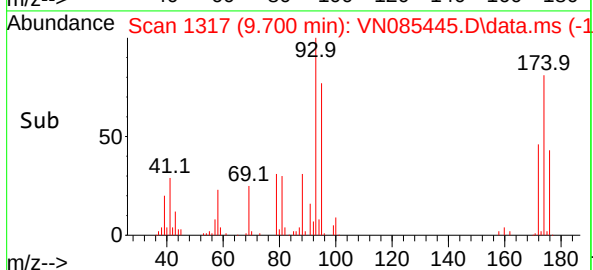
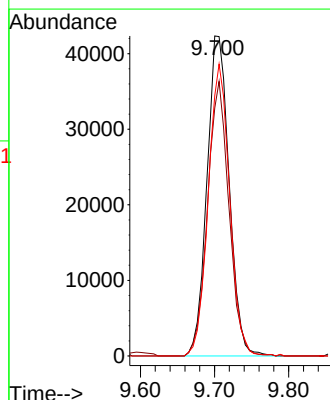
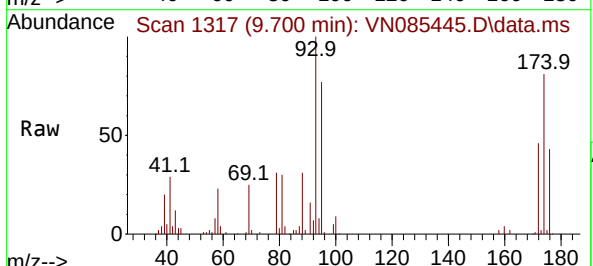
Tgt Ion: 93 Resp: 88325

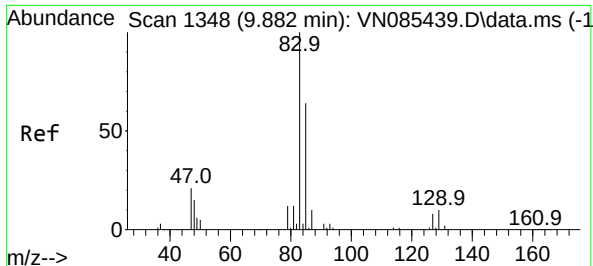
Ion Ratio Lower Upper

93 100

95 82.9 64.7 97.1

174 88.0 69.0 103.4

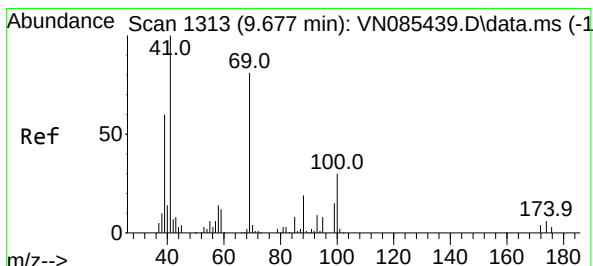
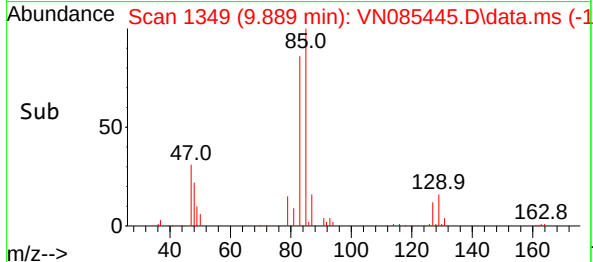
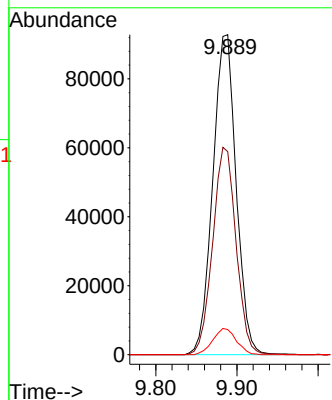
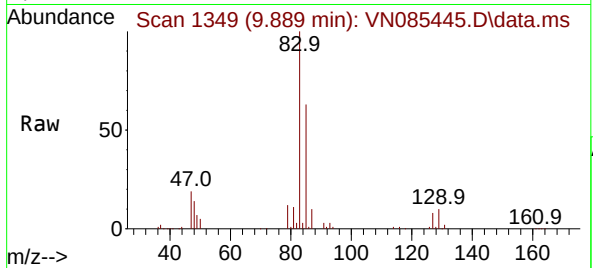




#47  
Bromodichloromethane  
Concen: 45.655 ug/l  
RT: 9.889 min Scan# 1349  
Delta R.T. 0.007 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

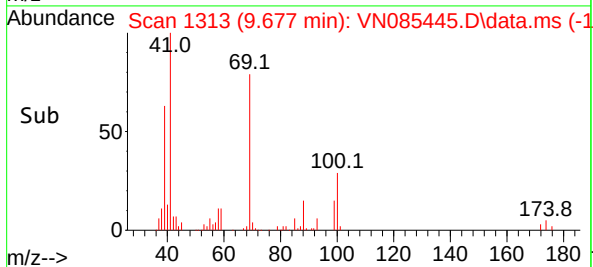
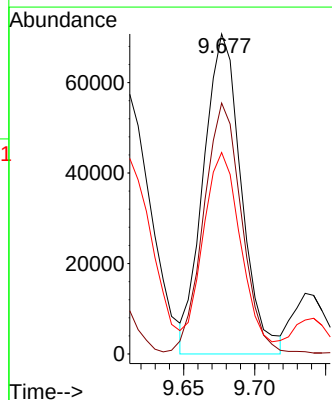
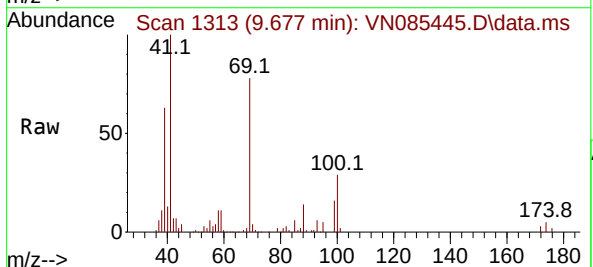
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

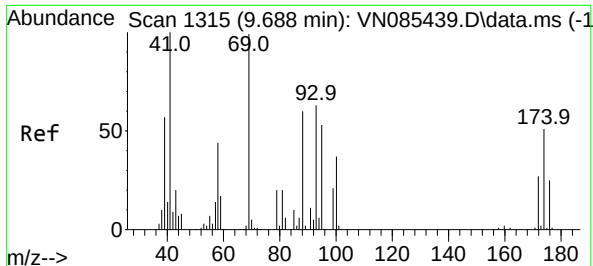
Tgt Ion: 83 Resp: 185808  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.2 76.8  
127 7.8 6.5 9.7



#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

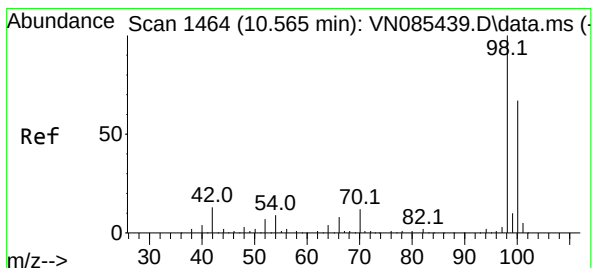
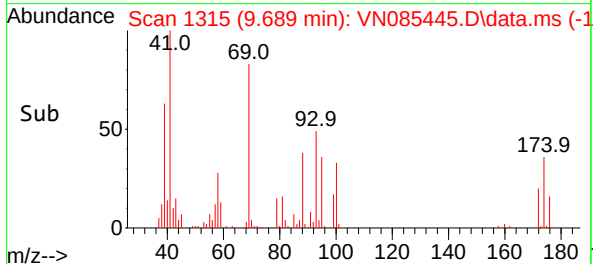
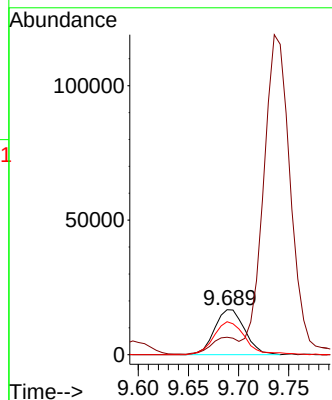
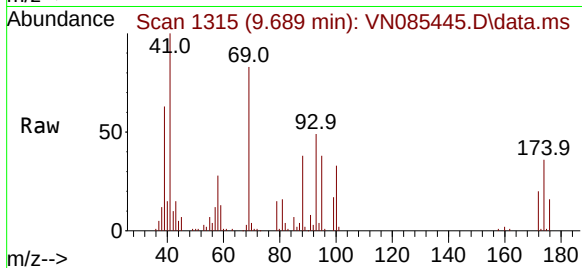
Tgt Ion: 88 Resp: 35051

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

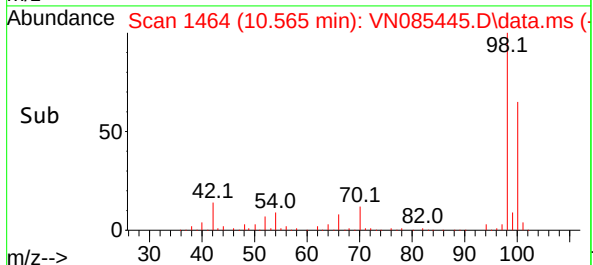
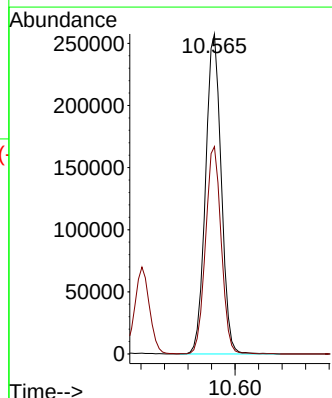
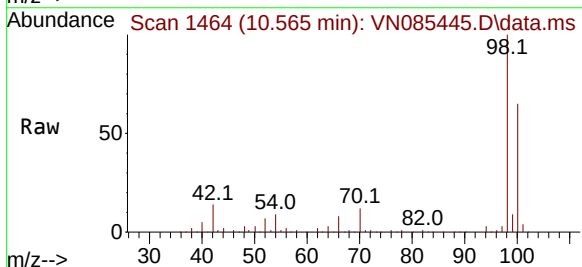
Acq: 14 Jan 2025 18:06

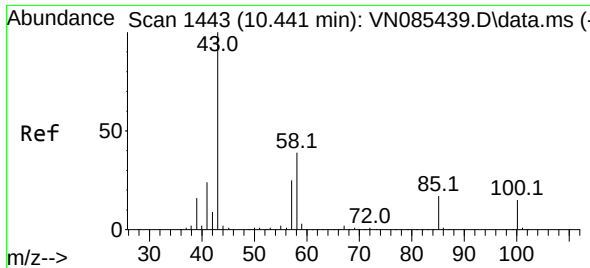
Tgt Ion: 98 Resp: 477630

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4

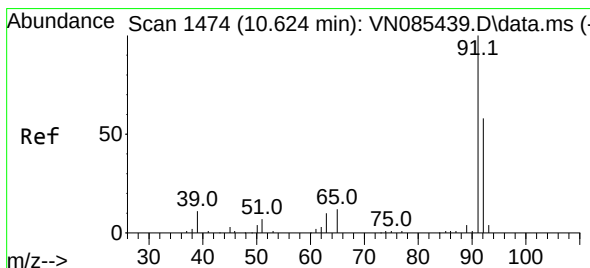
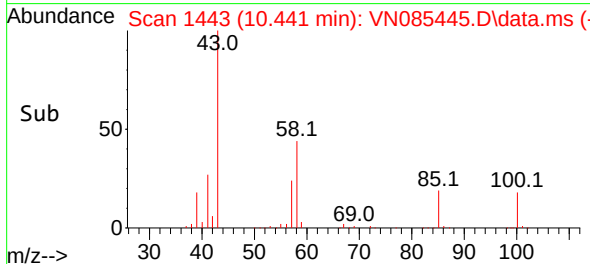
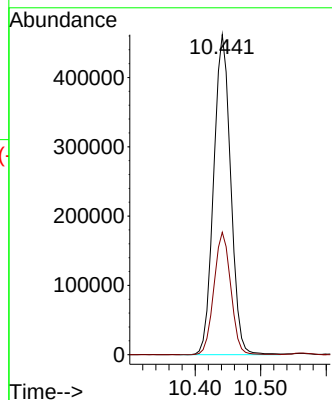
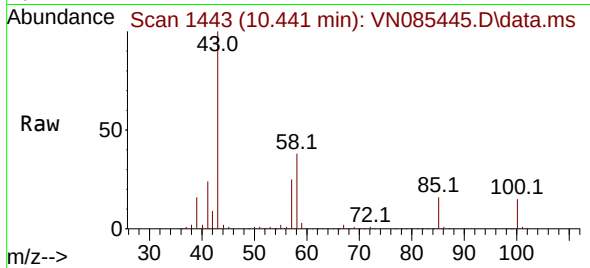




#51  
4-Methyl-2-Pentanone  
Concen: 245.877 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

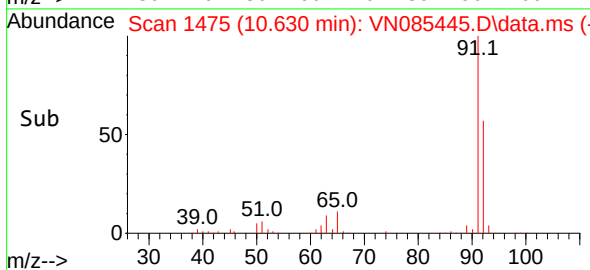
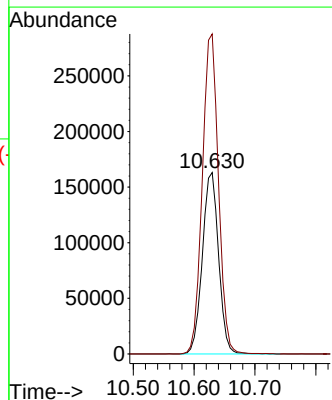
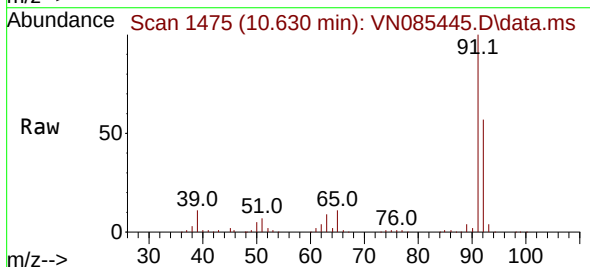
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

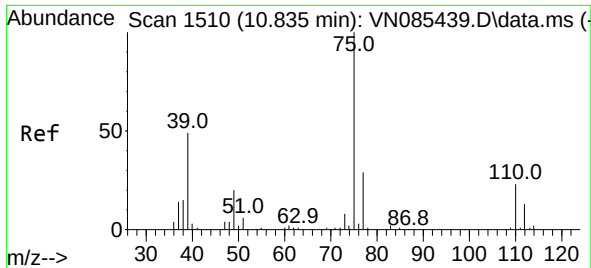
Tgt Ion: 43 Resp: 832426  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7



#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

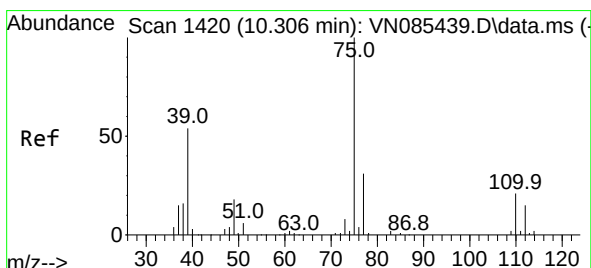
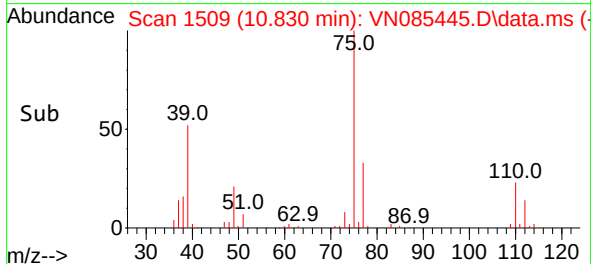
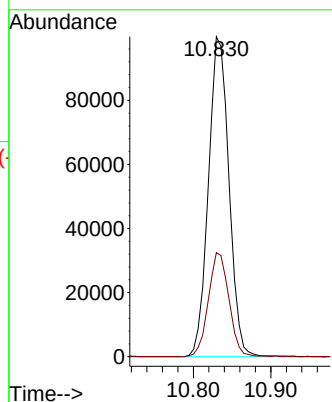
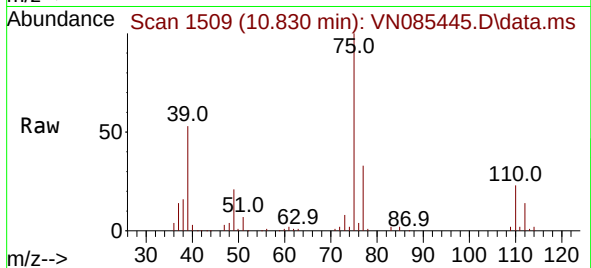




#53  
 t-1,3-Dichloropropene  
 Concen: 47.757 ug/l  
 RT: 10.830 min Scan# 11  
 Delta R.T. -0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

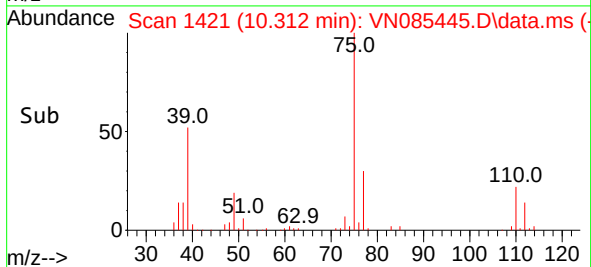
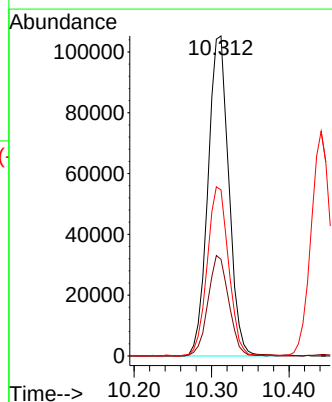
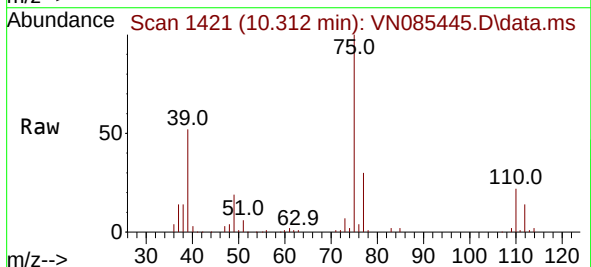
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN011425

Tgt Ion: 75 Resp: 183680  
 Ion Ratio Lower Upper  
 75 100  
 77 32.6 23.5 35.3

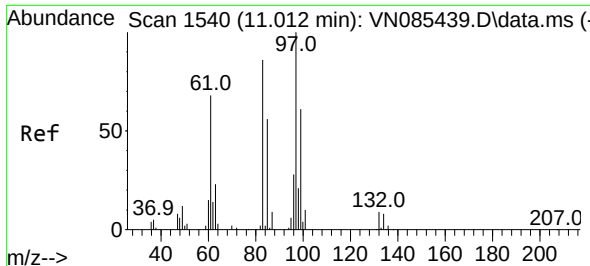


#54  
 cis-1,3-Dichloropropene  
 Concen: 47.783 ug/l  
 RT: 10.312 min Scan# 1421  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

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





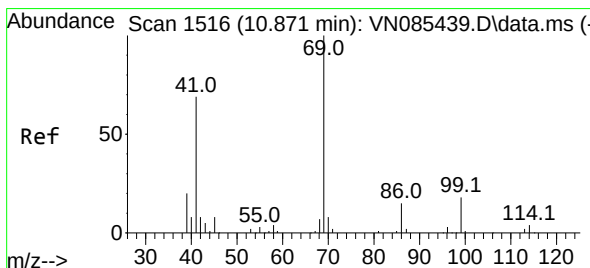
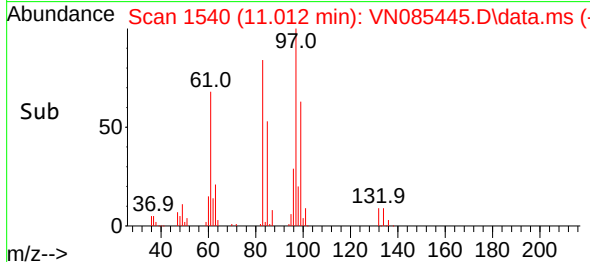
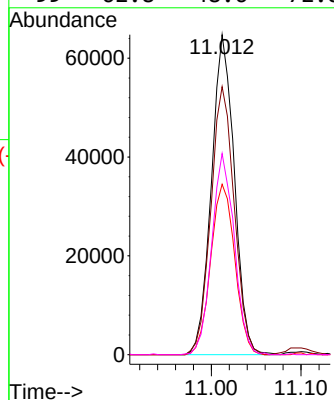
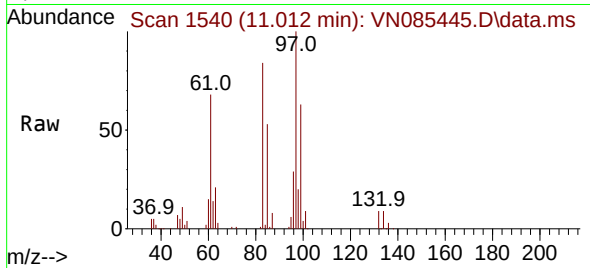


#55  
1,1,2-Trichloroethane  
Concen: 46.173 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

Instrument : MSVOA\_N  
ClientSampleId : ICVVN011425

Tgt Ion: 97 Resp: 114757

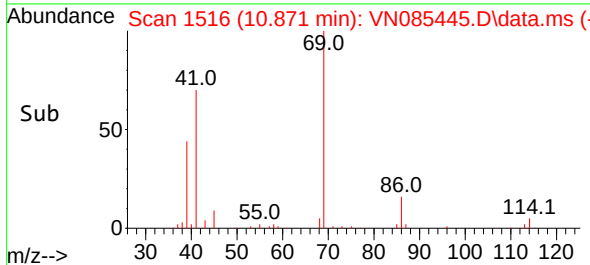
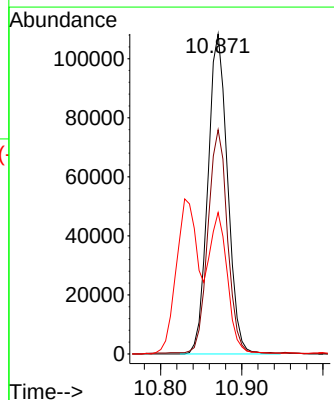
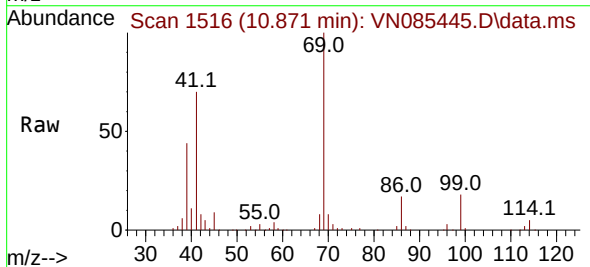
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 83.7  | 69.0  | 103.6 |
| 85  | 53.2  | 44.6  | 66.8  |
| 99  | 62.8  | 48.6  | 72.8  |

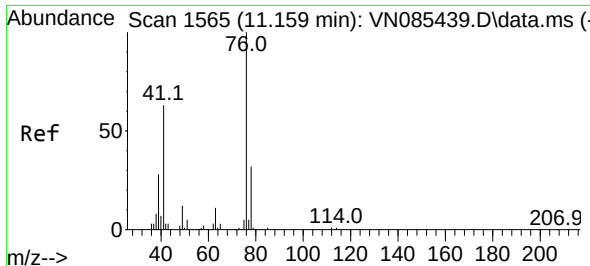


#56  
Ethyl methacrylate  
Concen: 43.762 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

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  |

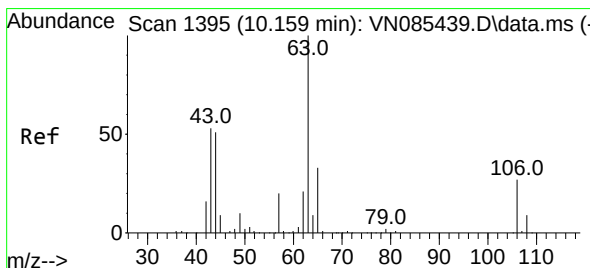
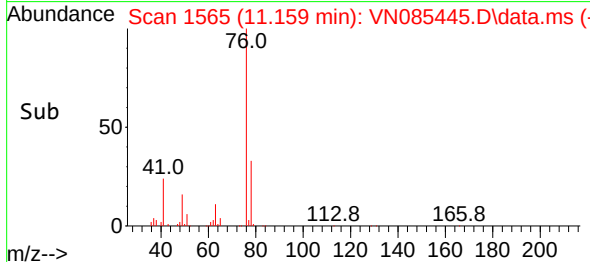
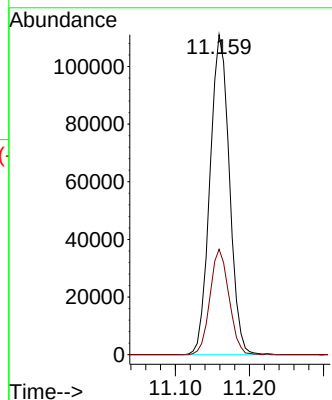
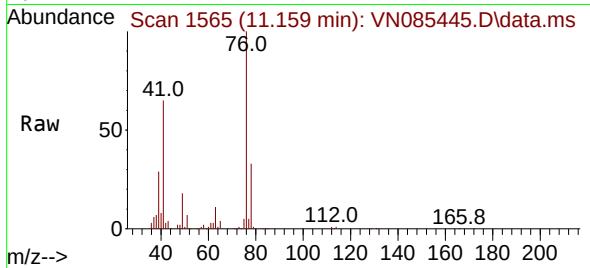




#57  
1,3-Dichloropropane  
Concen: 46.877 ug/l  
RT: 11.159 min Scan# 1565  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

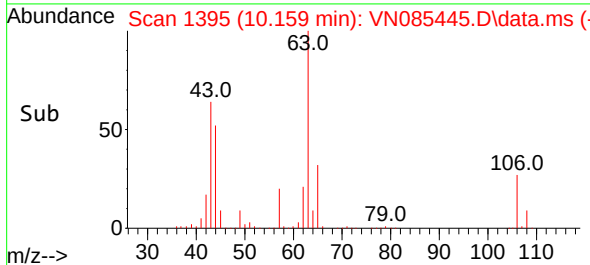
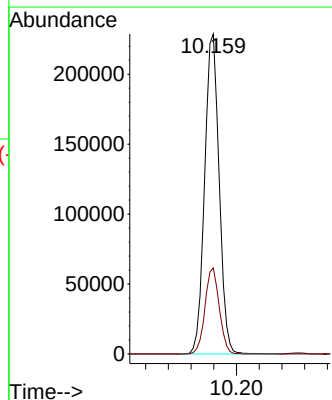
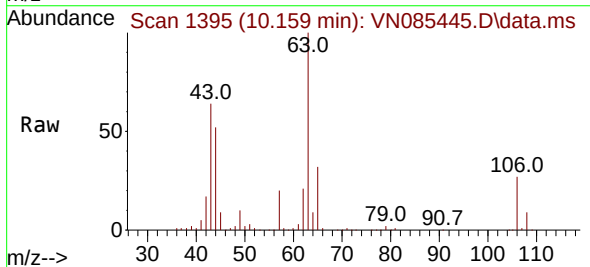
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

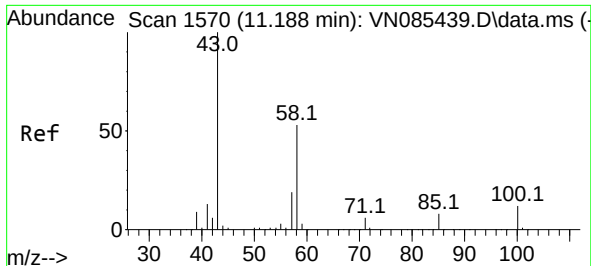
Tgt Ion: 76 Resp: 202583  
Ion Ratio Lower Upper  
76 100  
78 32.1 25.6 38.4



#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

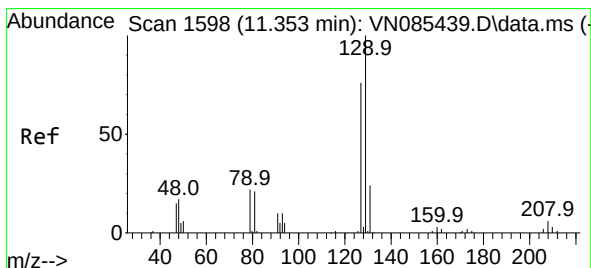
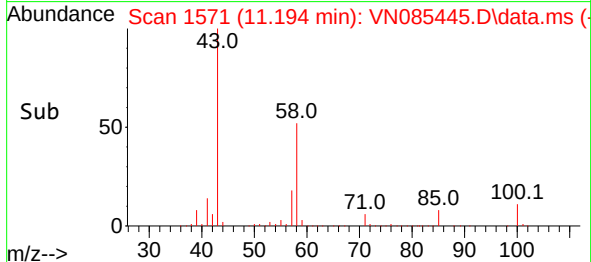
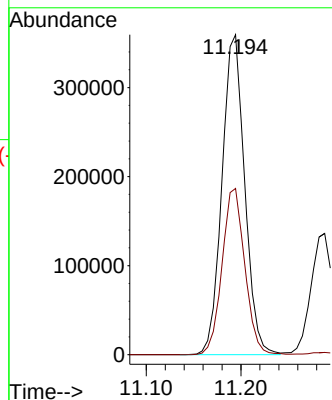
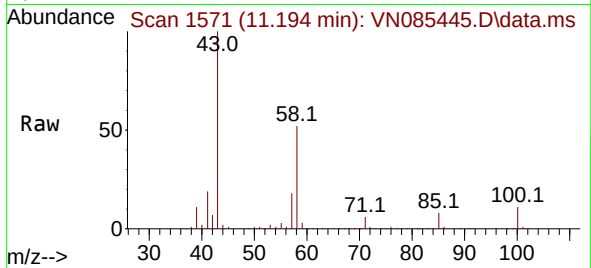




#59  
2-Hexanone  
Concen: 251.213 ug/l  
RT: 11.194 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

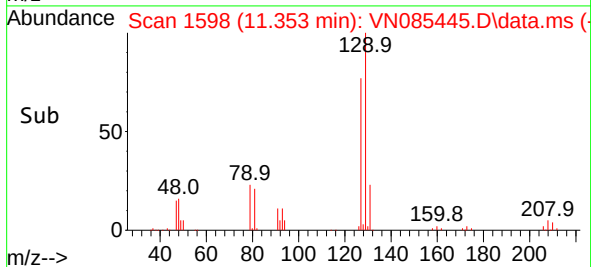
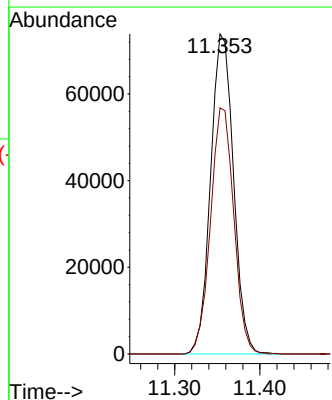
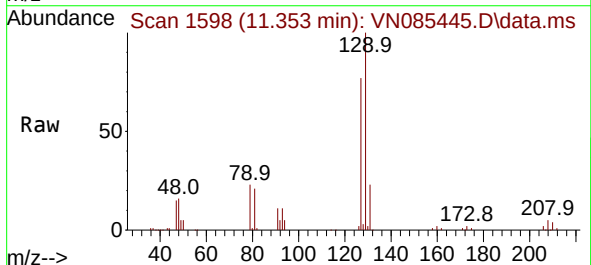
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

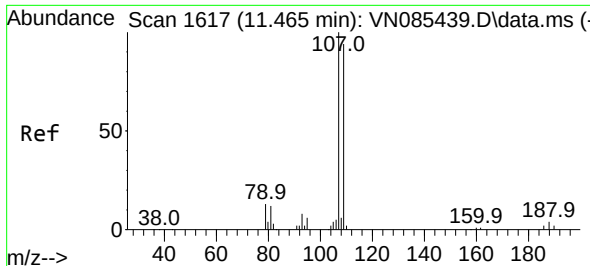
Tgt Ion: 43 Resp: 598433  
Ion Ratio Lower Upper  
43 100  
58 52.1 26.2 78.6



#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

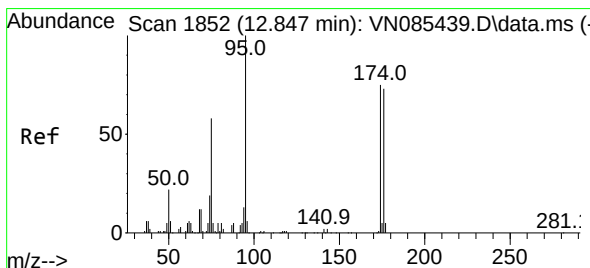
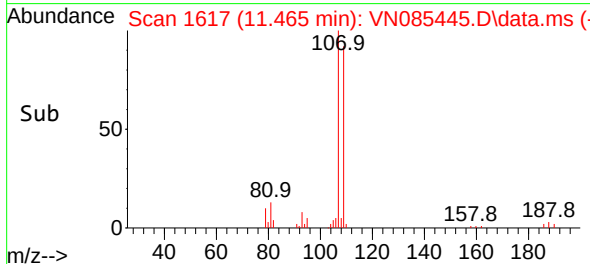
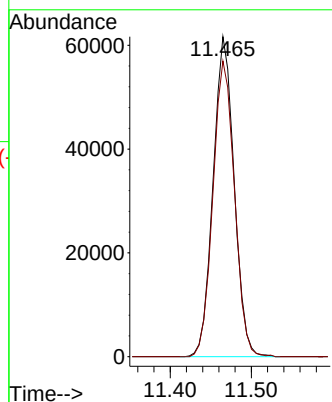
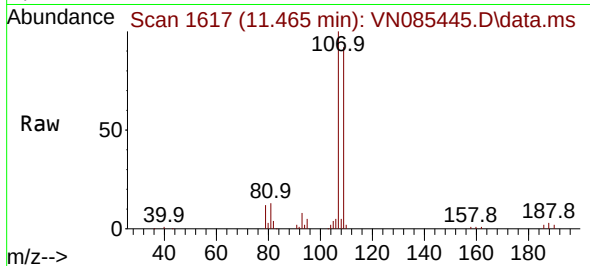




#61  
1,2-Dibromoethane  
Concen: 44.837 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

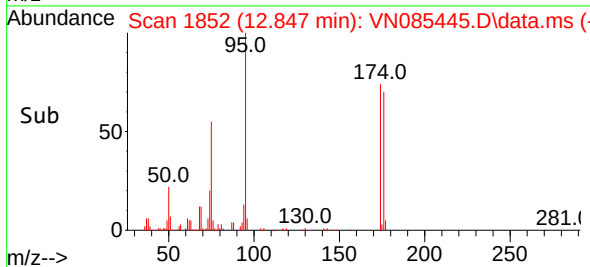
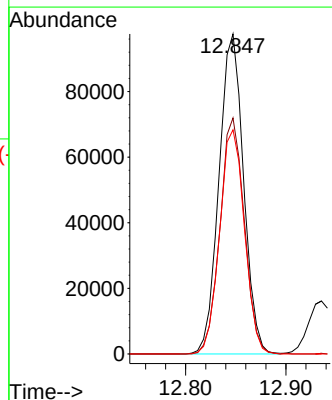
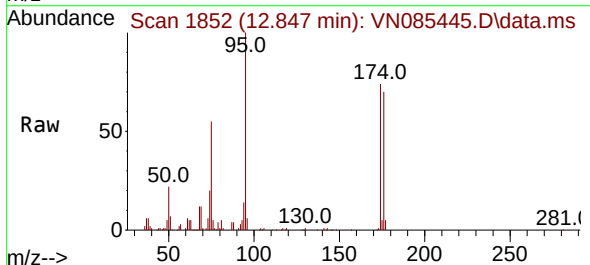
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

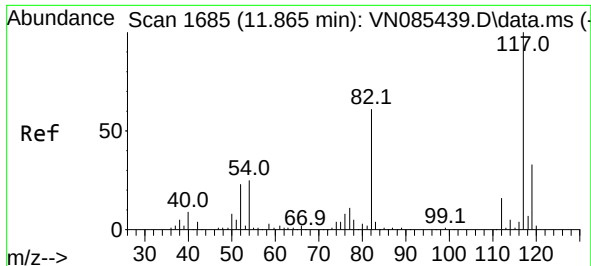
Tgt Ion:107 Resp: 110926  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9



#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

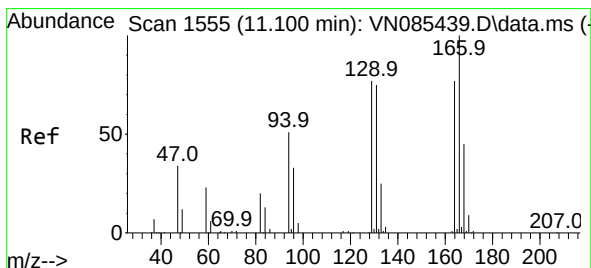
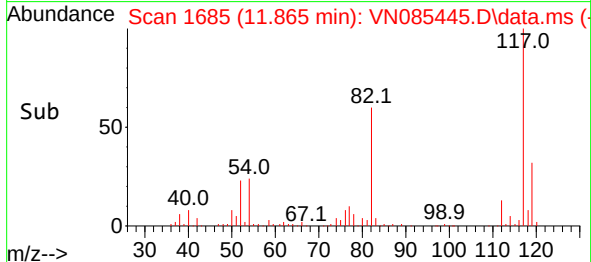
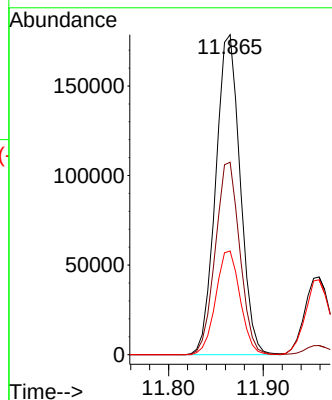
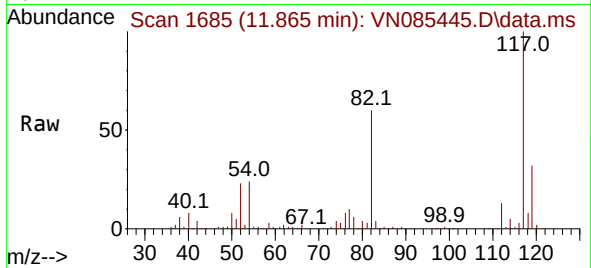




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

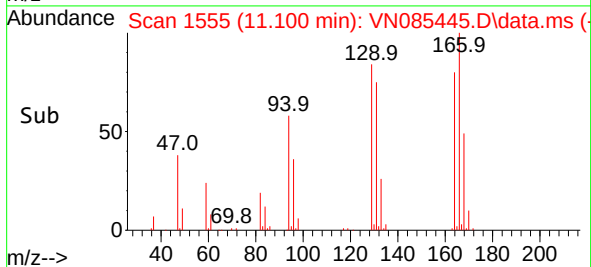
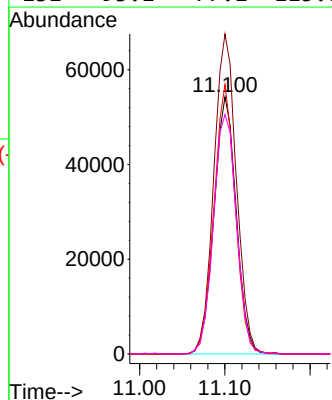
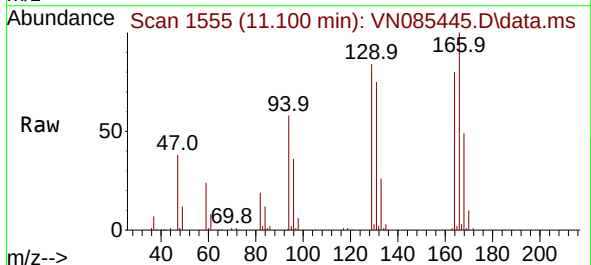
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

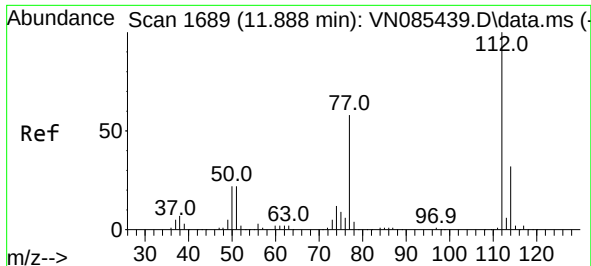
Tgt Ion:117 Resp: 320948  
Ion Ratio Lower Upper  
117 100  
82 60.1 48.6 72.8  
119 32.4 26.6 39.8



#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

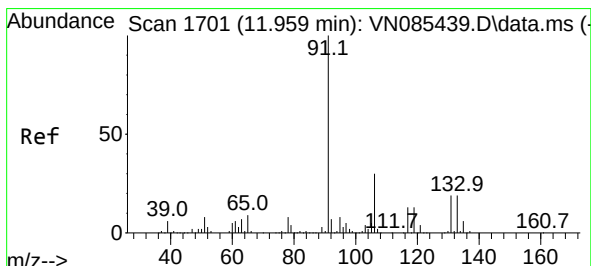
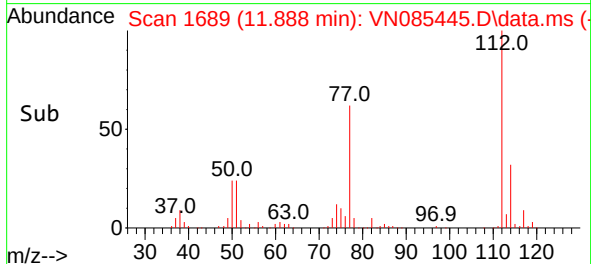
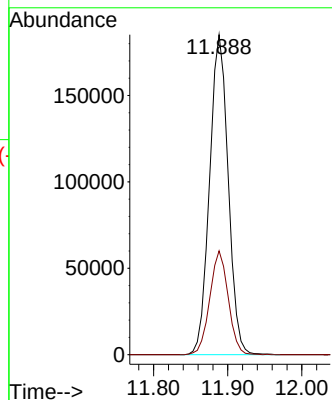
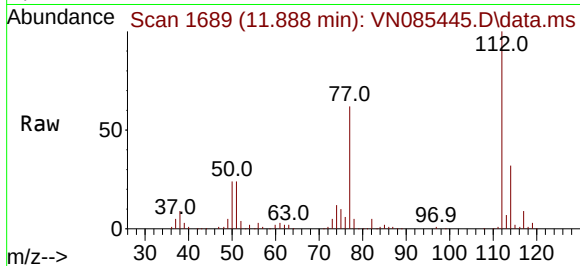




#65  
Chlorobenzene  
Concen: 45.901 ug/l  
RT: 11.888 min Scan# 1689  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

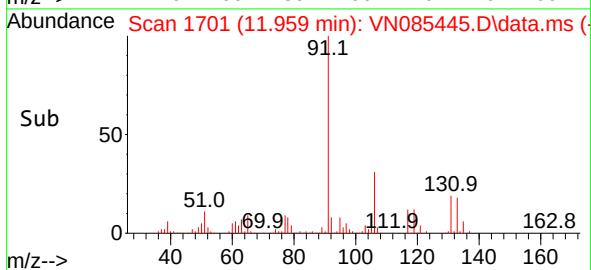
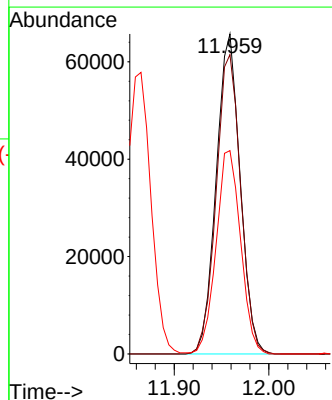
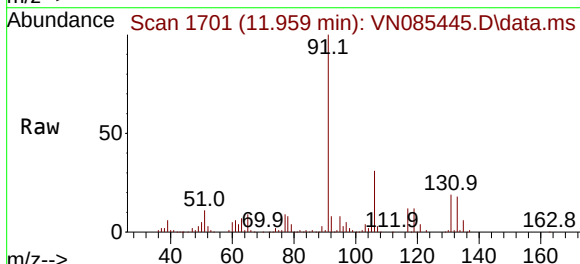
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

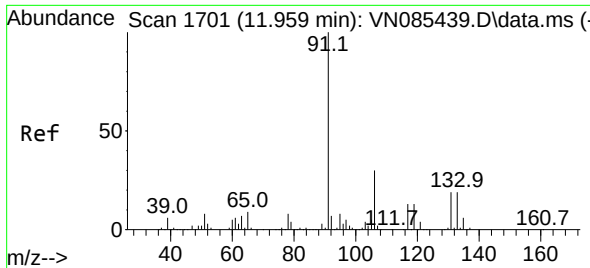
Tgt Ion:112 Resp: 322723  
Ion Ratio Lower Upper  
112 100  
114 32.4 25.3 37.9



#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

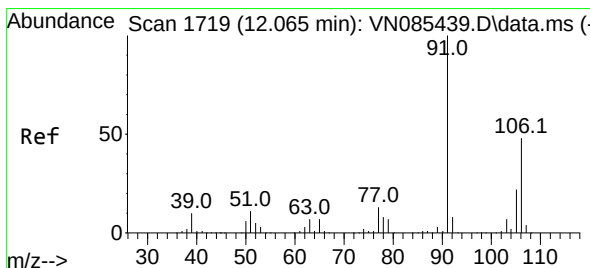
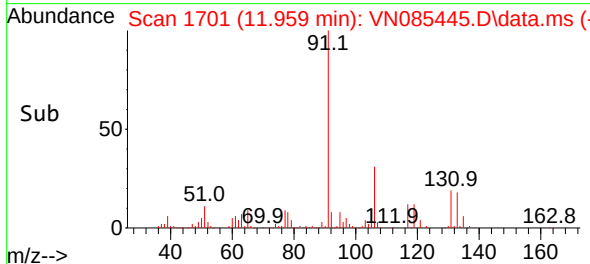
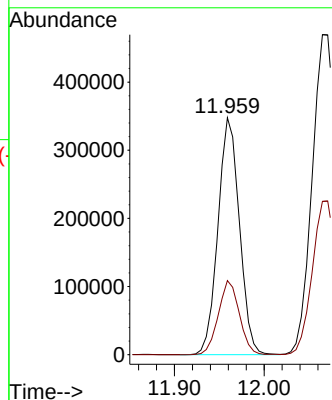
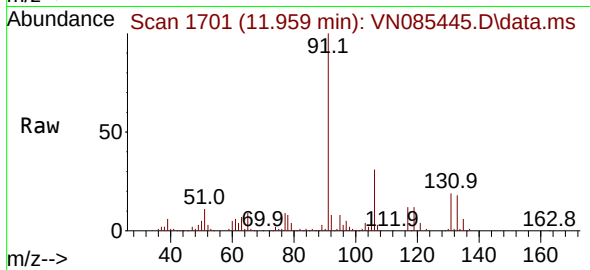




#67  
Ethyl Benzene  
Concen: 50.391 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

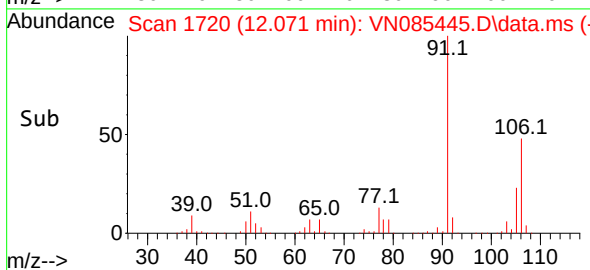
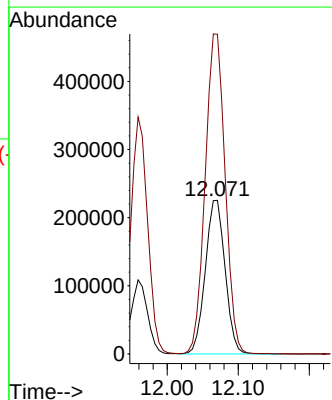
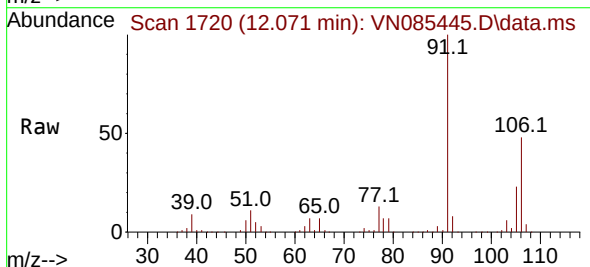
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

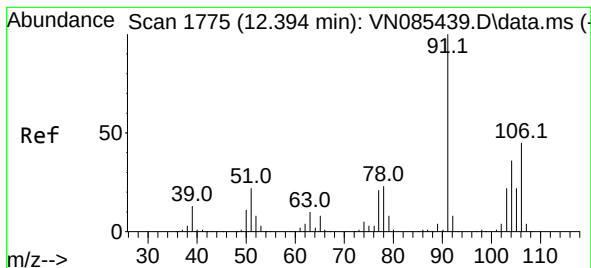
Tgt Ion: 91 Resp: 577059  
Ion Ratio Lower Upper  
91 100  
106 31.2 23.8 35.8



#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 :

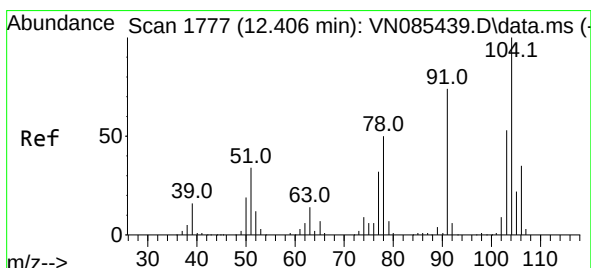
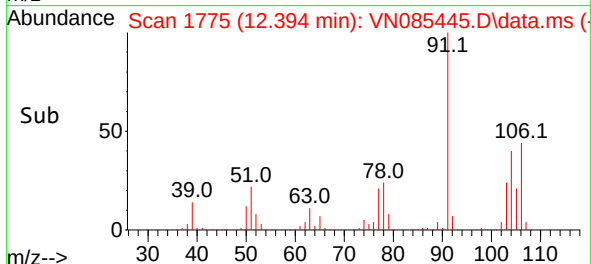
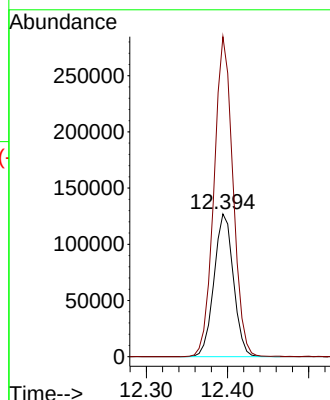
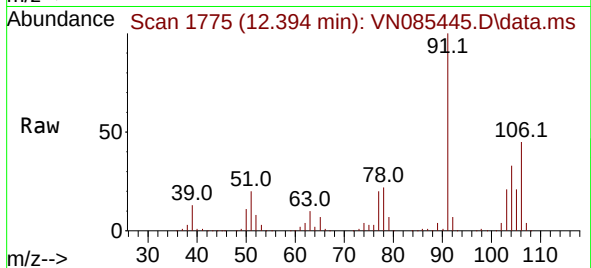
ICVVN011425

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

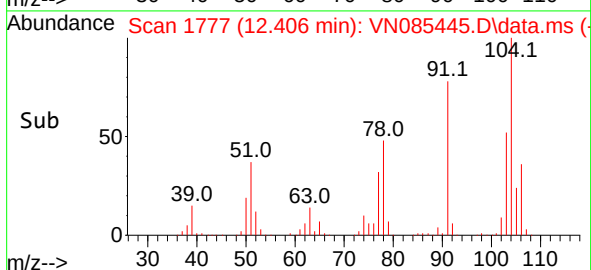
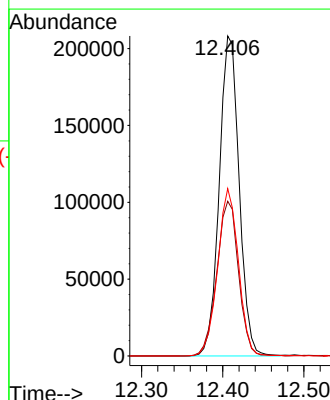
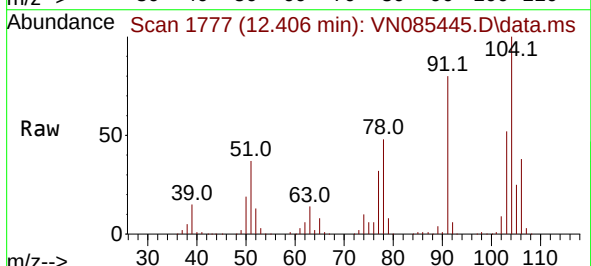
Tgt Ion:104 Resp: 355459

Ion Ratio Lower Upper

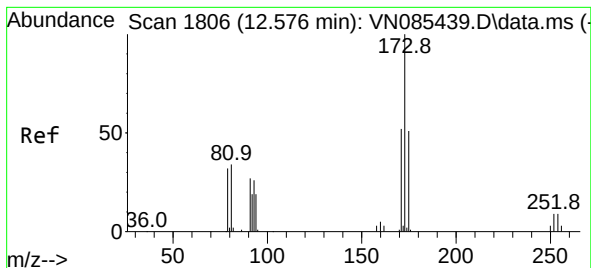
104 100

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

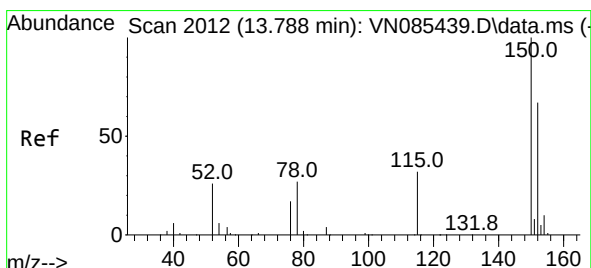
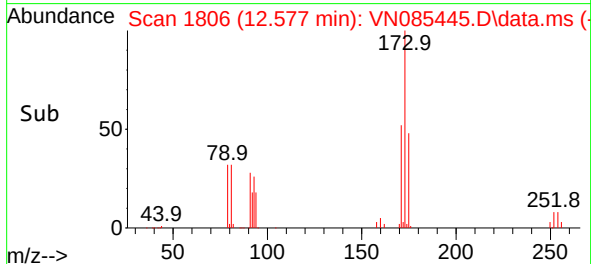
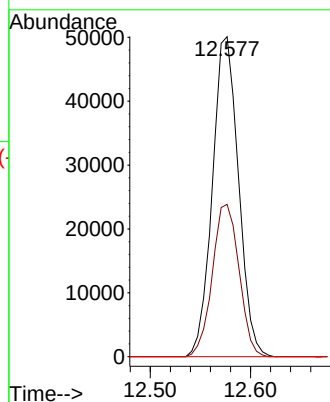
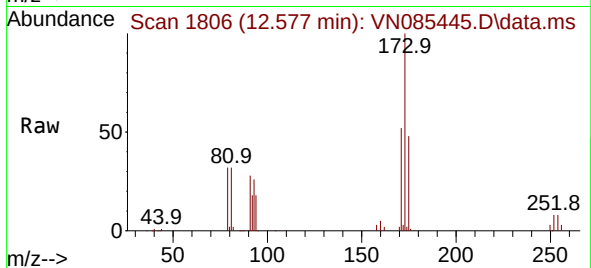
Tgt Ion:173 Resp: 90693

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

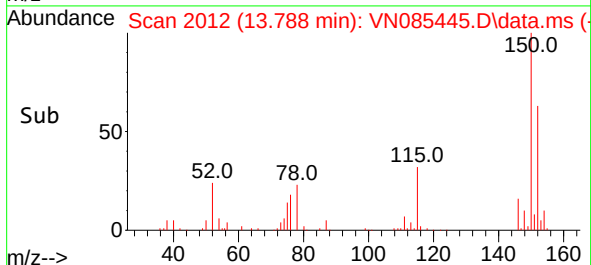
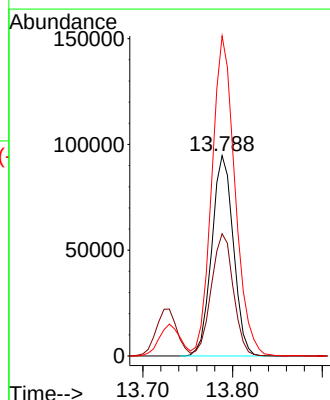
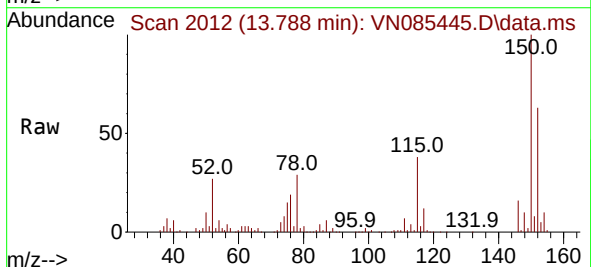
Tgt Ion:152 Resp: 158525

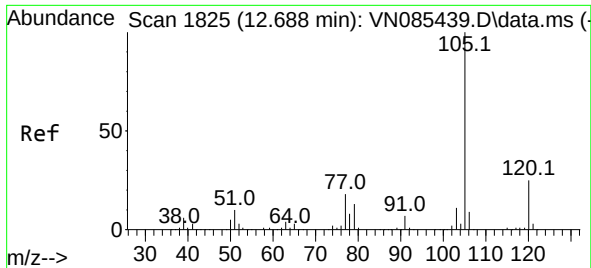
Ion Ratio Lower Upper

152 100

115 62.2 31.1 93.3

150 171.0 0.0 343.6

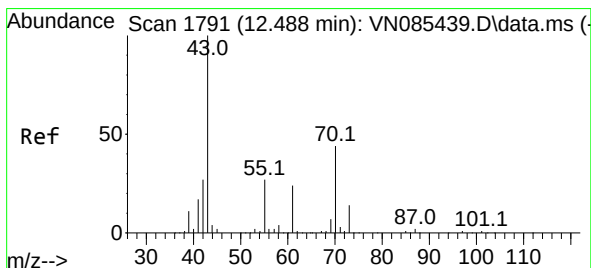
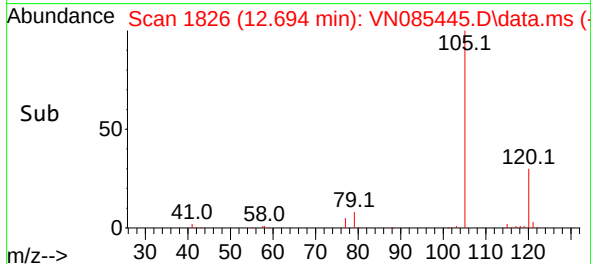
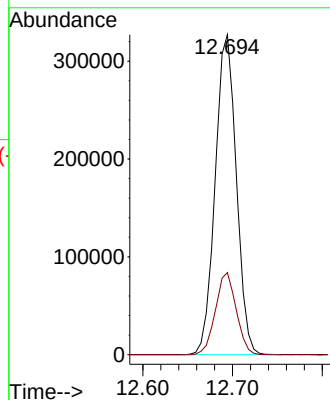
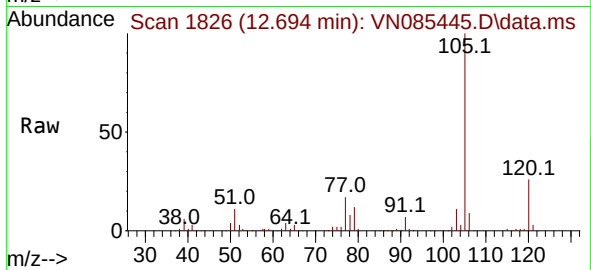




#73  
Isopropylbenzene  
Concen: 49.951 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

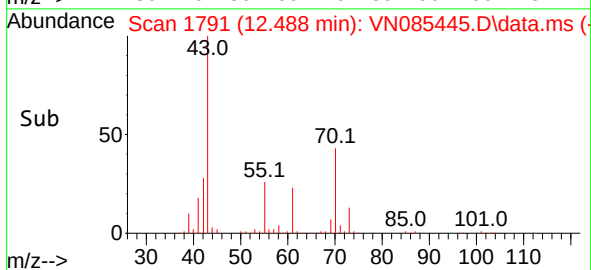
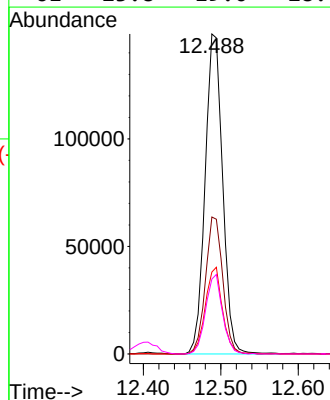
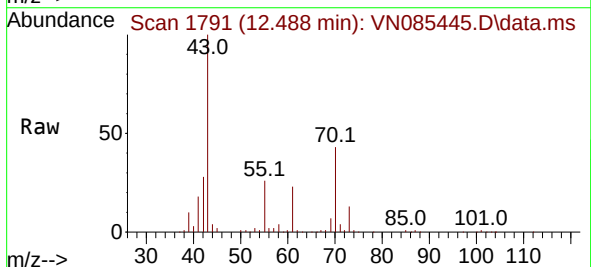
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

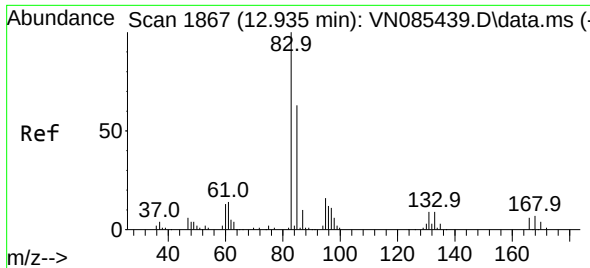
Tgt Ion:105 Resp: 534428  
Ion Ratio Lower Upper  
105 100  
120 25.2 12.8 38.3



#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

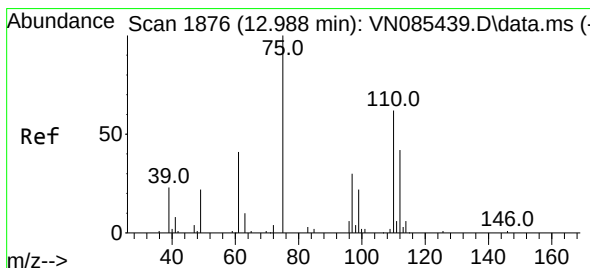
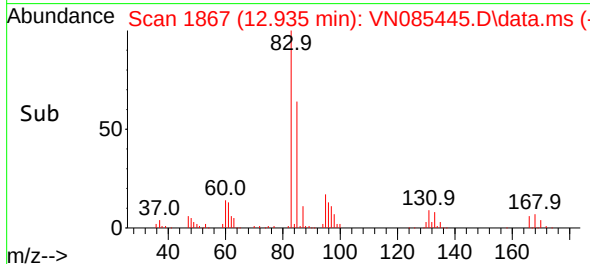
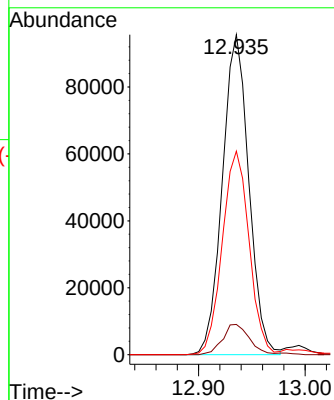
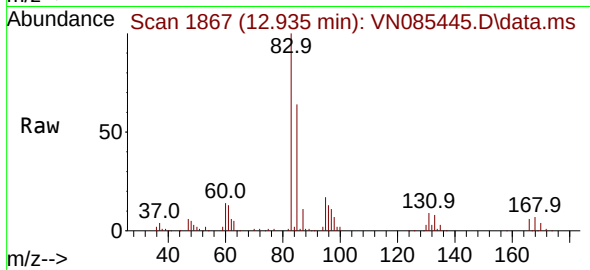




#75  
1,1,2,2-Tetrachloroethane  
Concen: 43.627 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

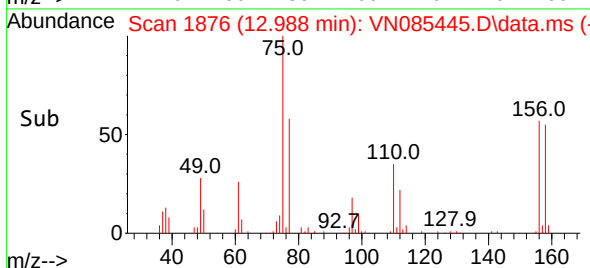
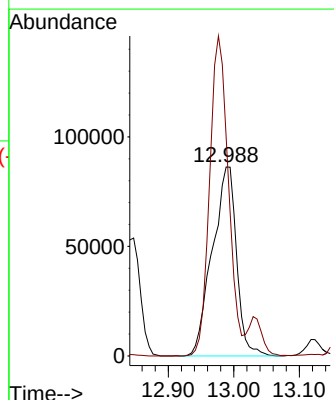
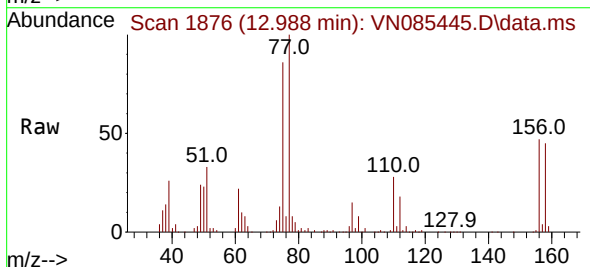
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

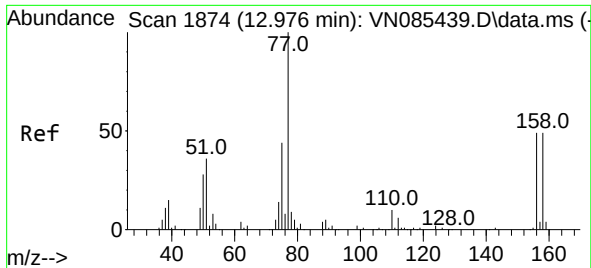
Tgt Ion: 83 Resp: 164882  
Ion Ratio Lower Upper  
83 100  
131 9.9 4.8 14.4  
85 64.6 32.2 96.6



#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

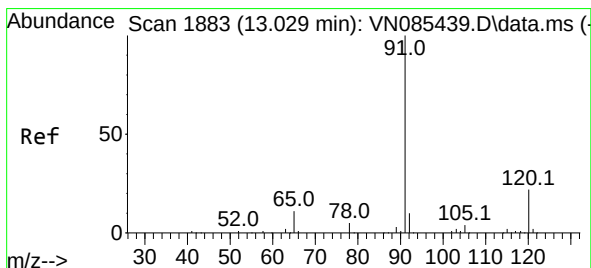
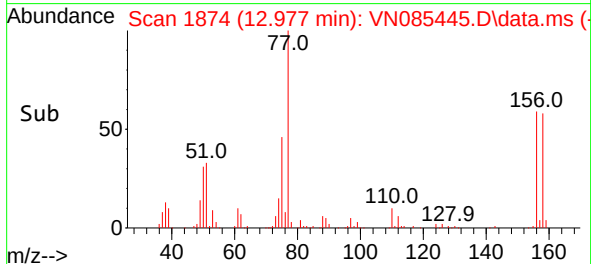
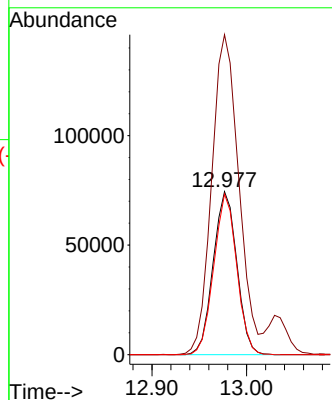
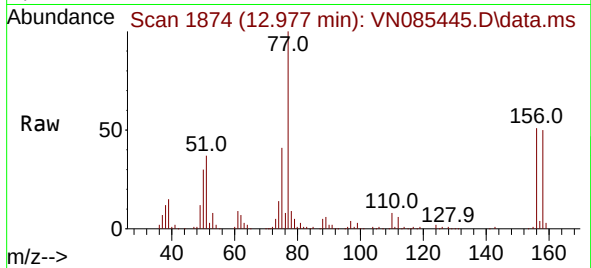




#77  
Bromobenzene  
Concen: 46.138 ug/l  
RT: 12.977 min Scan# 1874  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

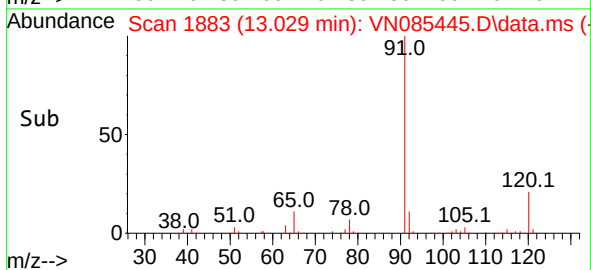
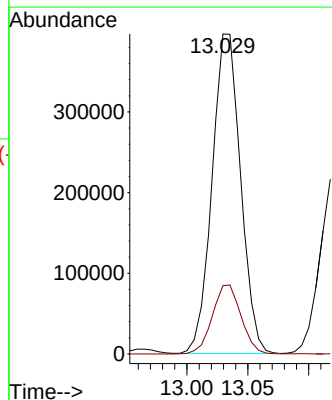
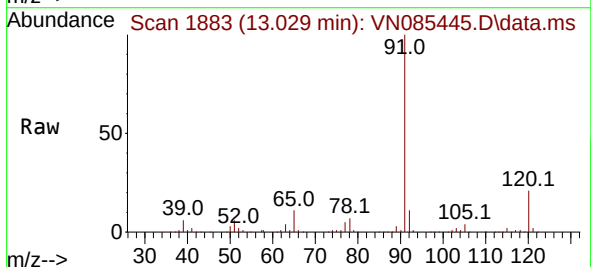
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

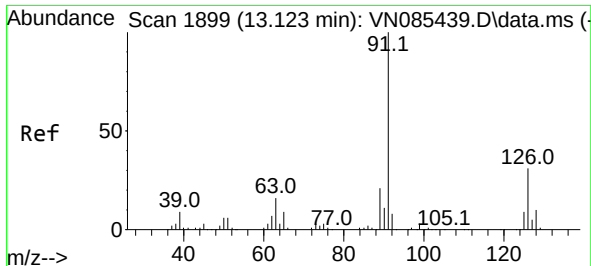
Tgt Ion:156 Resp: 128968  
Ion Ratio Lower Upper  
156 100  
77 223.8 114.1 342.4  
158 95.7 48.9 146.8



#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

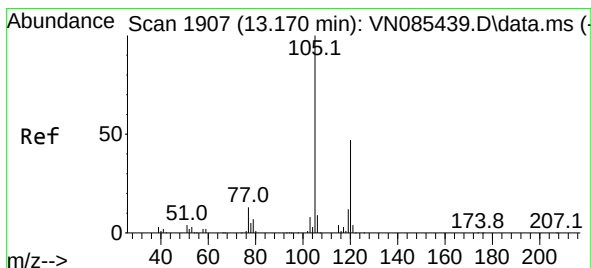
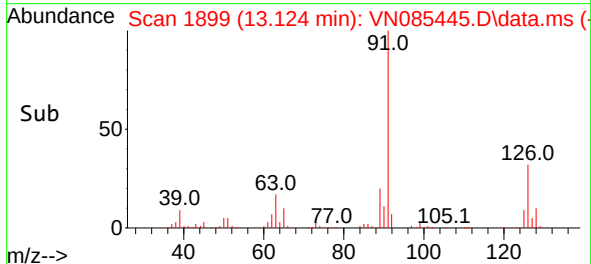
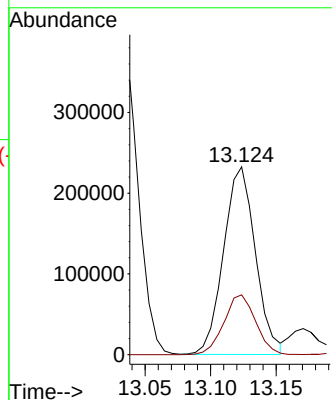
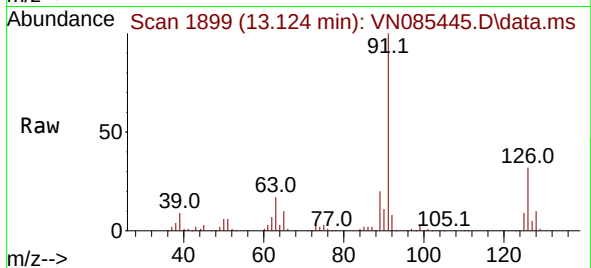




#79  
2-Chlorotoluene  
Concen: 47.870 ug/l  
RT: 13.124 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

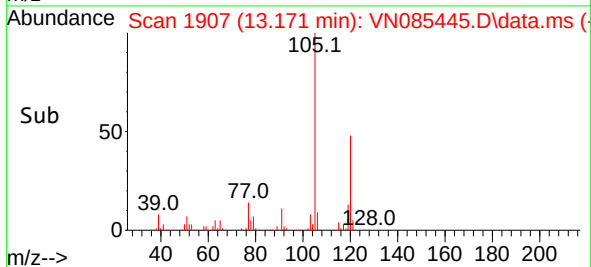
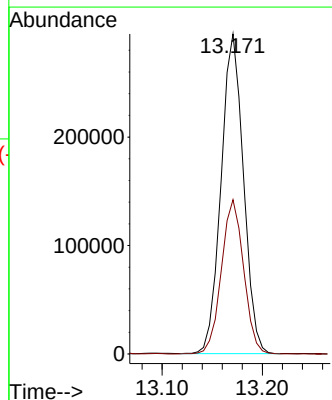
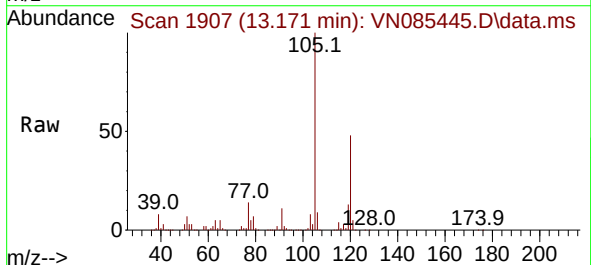
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

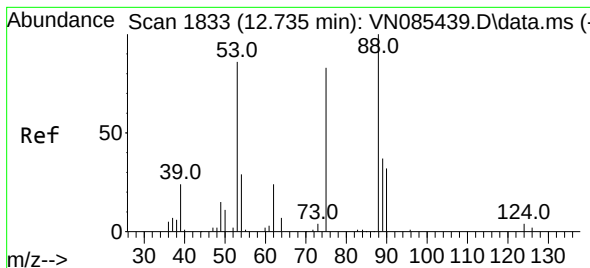
Tgt Ion: 91 Resp: 392404  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.7 47.1



#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

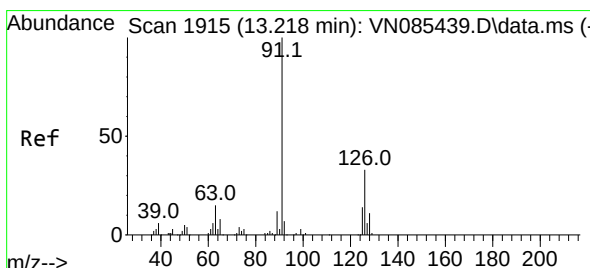
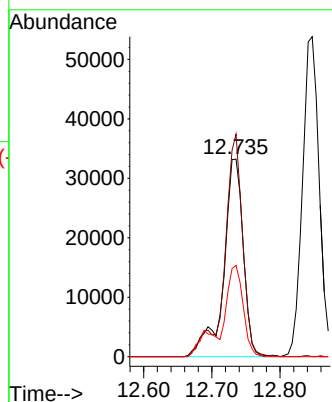
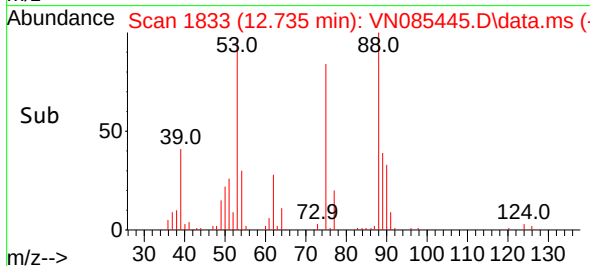
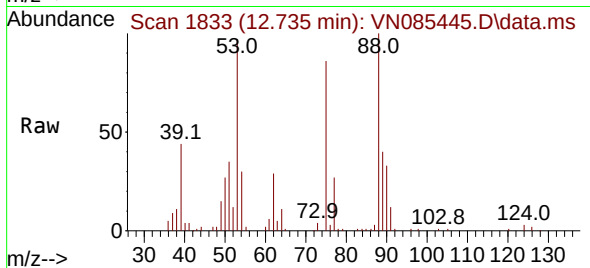




#81  
trans-1,4-Dichloro-2-butene  
Concen: 56.127 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

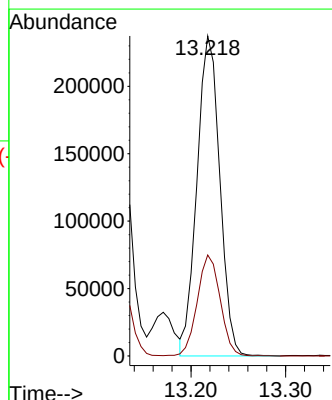
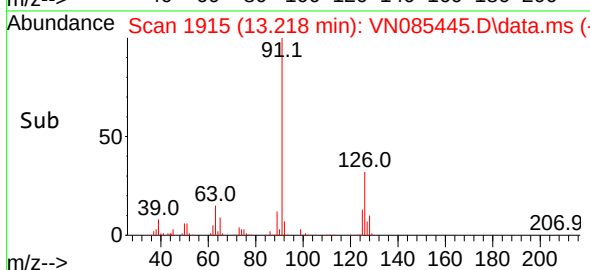
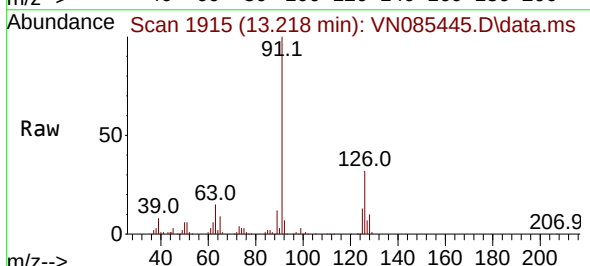
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

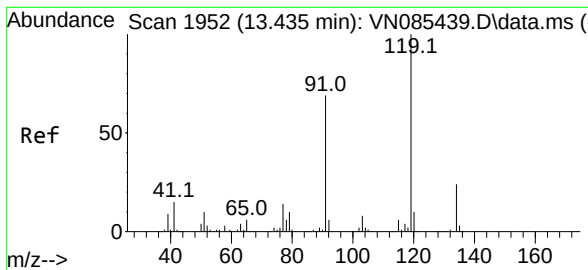
Tgt Ion: 75 Resp: 66842  
Ion Ratio Lower Upper  
75 100  
53 103.5 95.6 143.4  
89 38.0 37.0 55.6



#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

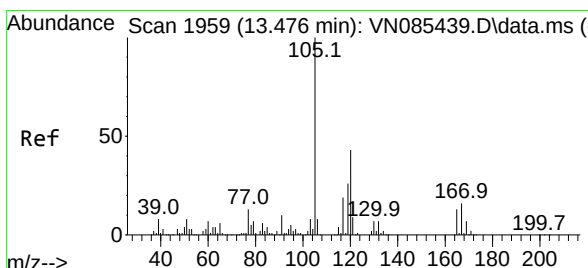
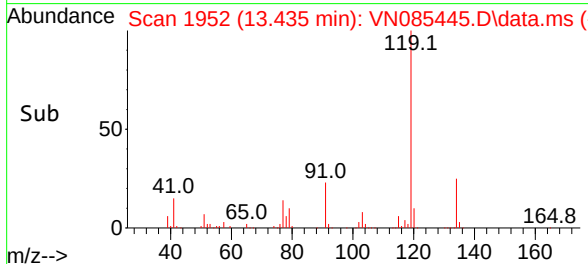
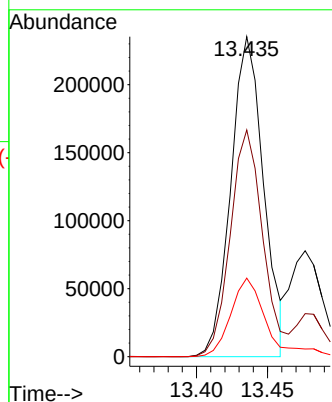
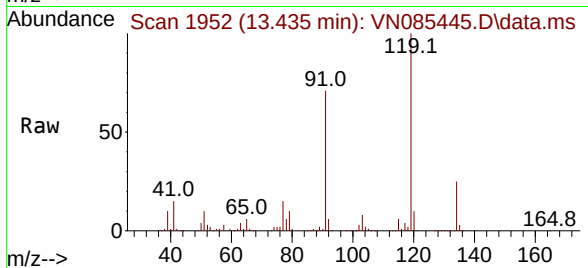




#83  
 tert-Butylbenzene  
 Concen: 50.997 ug/l  
 RT: 13.435 min Scan# 1952  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

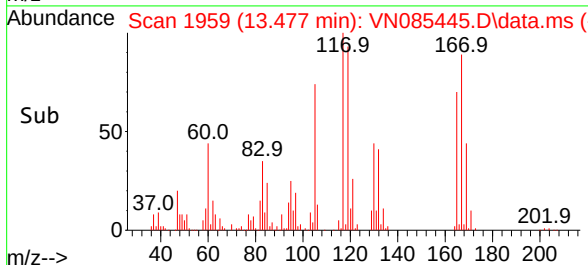
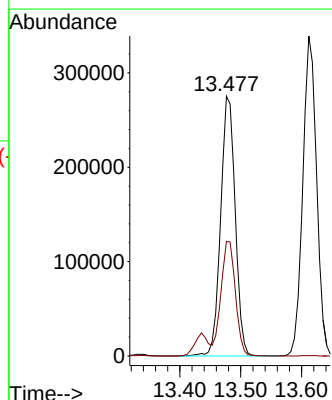
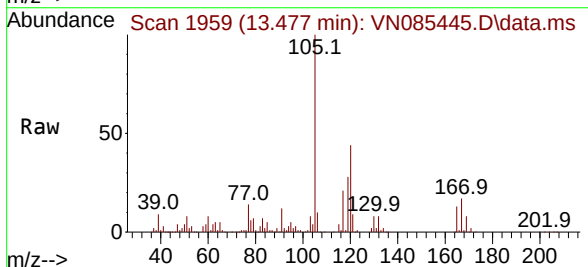
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

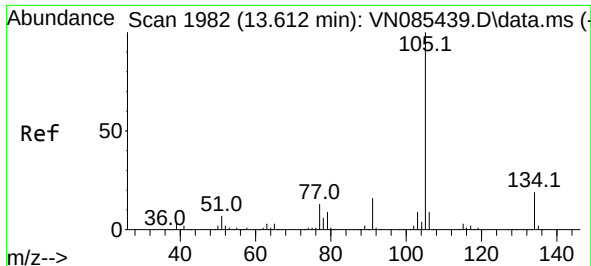
Tgt Ion:119 Resp: 378478  
 Ion Ratio Lower Upper  
 119 100  
 91 70.6 35.1 105.3  
 134 26.7 12.0 36.1



#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

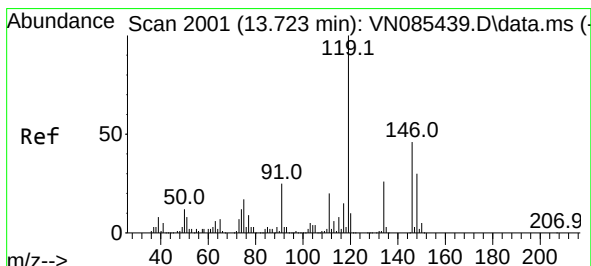
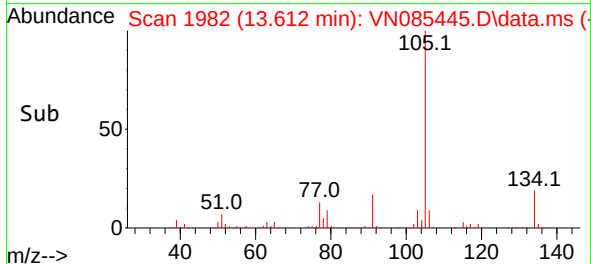
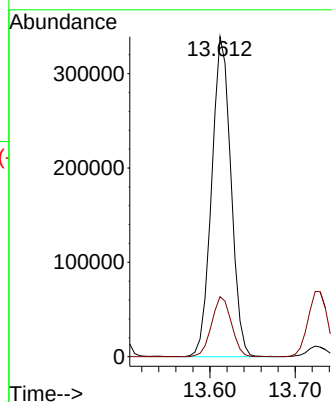
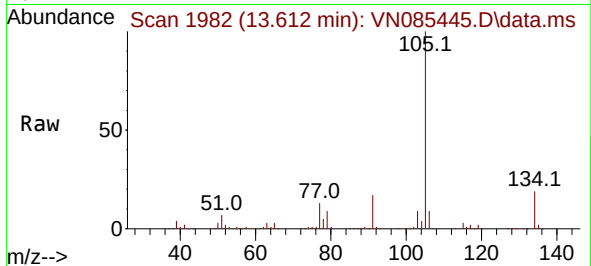




#85  
 sec-Butylbenzene  
 Concen: 51.777 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

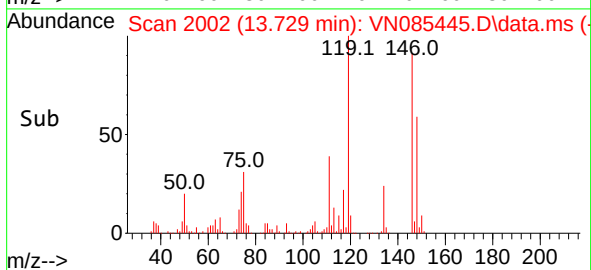
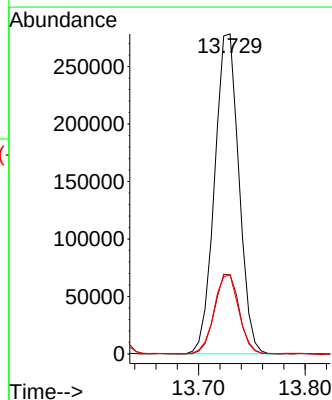
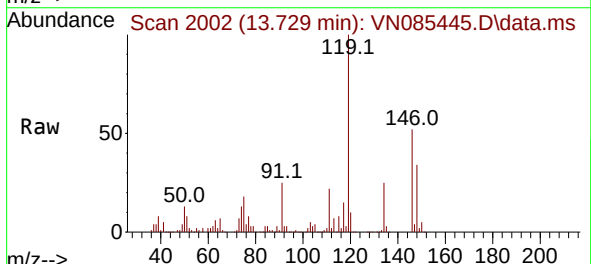
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

Tgt Ion:105 Resp: 532578  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9

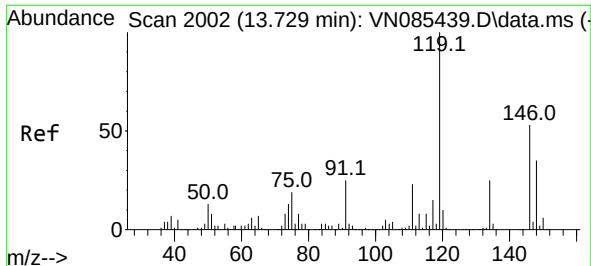


#86  
 p-Isopropyltoluene  
 Concen: 47.795 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

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



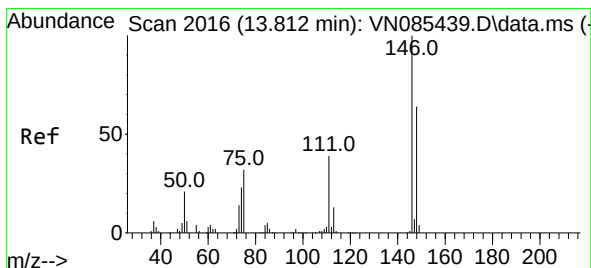
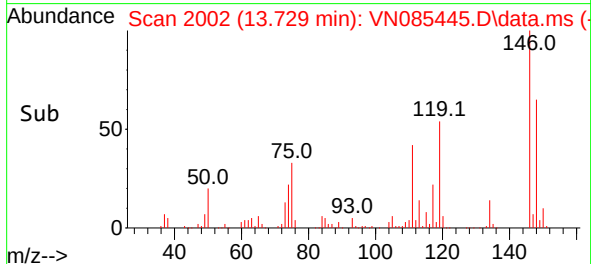
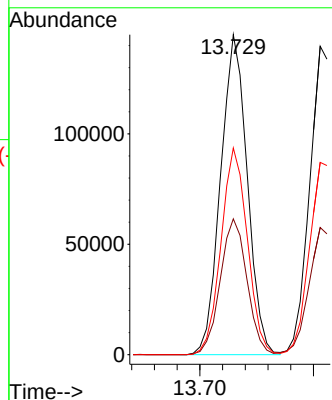
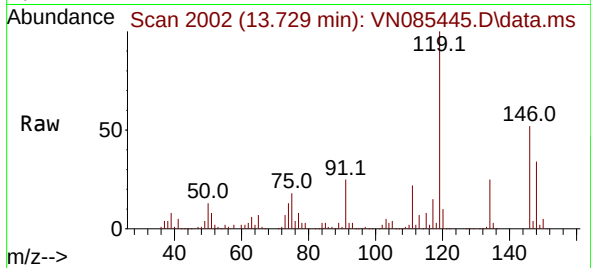




#87  
1,3-Dichlorobenzene  
Concen: 45.920 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. 0.000 min  
Lab File: VN085445.D  
Acq: 14 Jan 2025 18:06

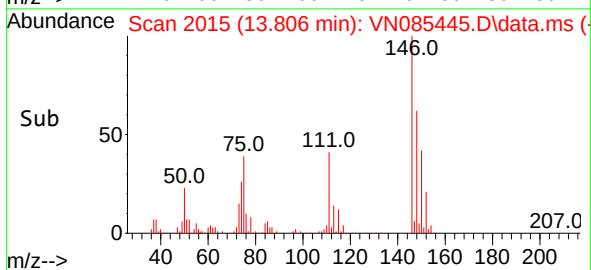
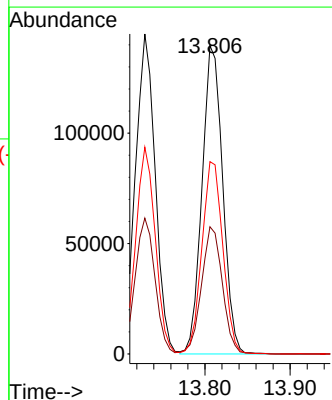
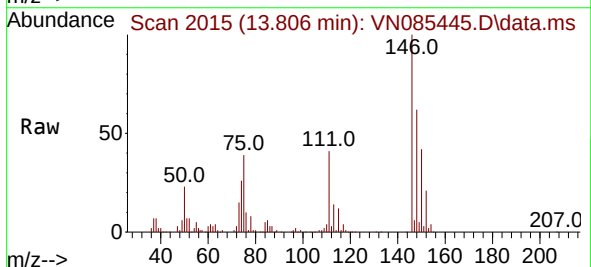
Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN011425

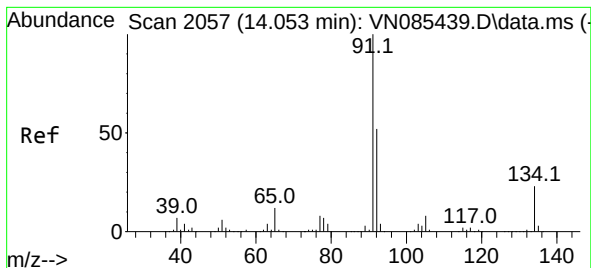
Tgt Ion:146 Resp: 236387  
Ion Ratio Lower Upper  
146 100  
111 42.6 21.4 64.3  
148 63.8 32.3 96.9



#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

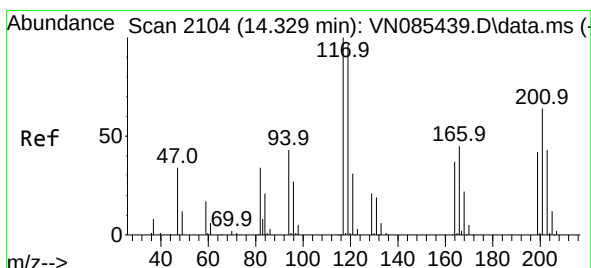
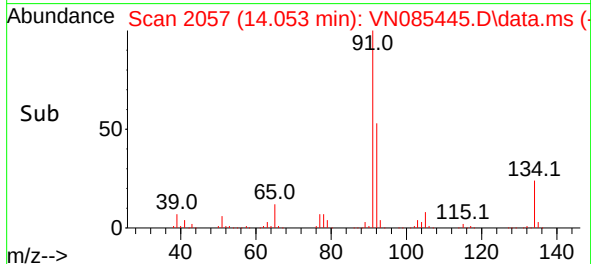
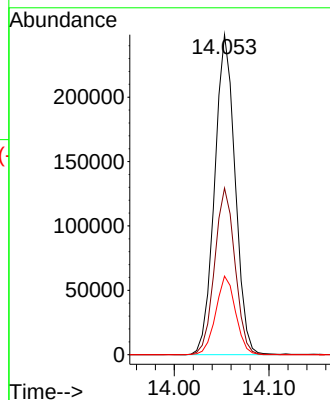
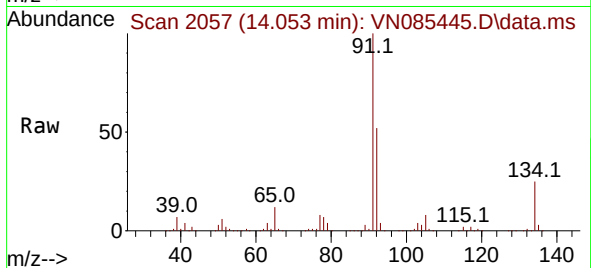
Tgt Ion: 91 Resp: 373227

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

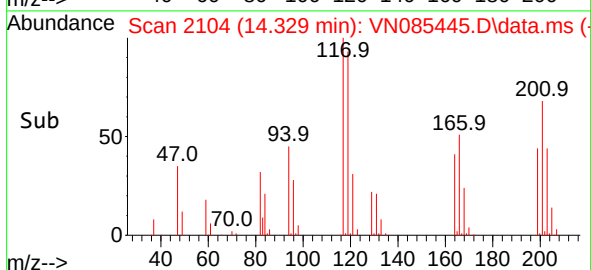
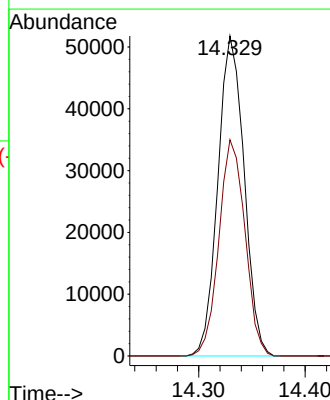
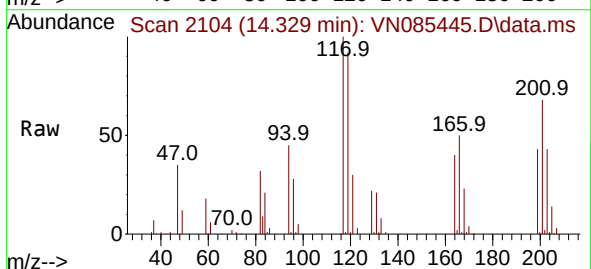
Acq: 14 Jan 2025 18:06

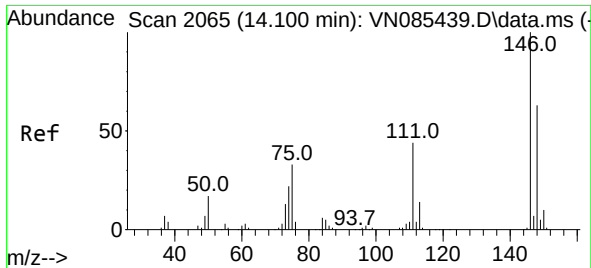
Tgt Ion: 117 Resp: 88538

Ion Ratio Lower Upper

117 100

201 67.2 33.7 101.0

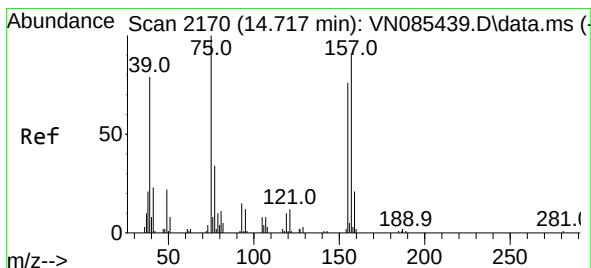
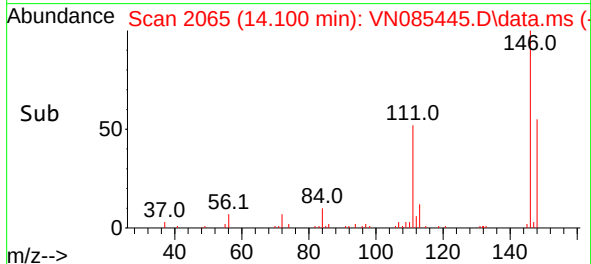
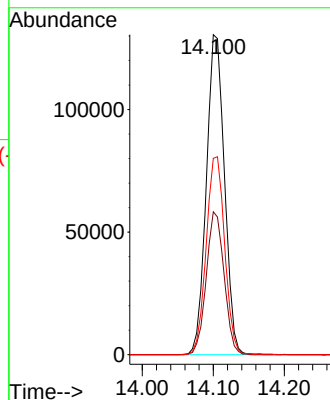
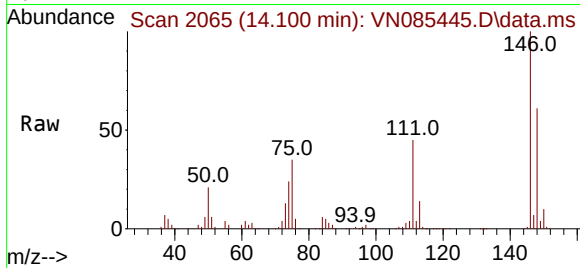




#91  
 1,2-Dichlorobenzene  
 Concen: 45.113 ug/l  
 RT: 14.100 min Scan# 2065  
 Delta R.T. 0.000 min  
 Lab File: VN085445.D  
 Acq: 14 Jan 2025 18:06

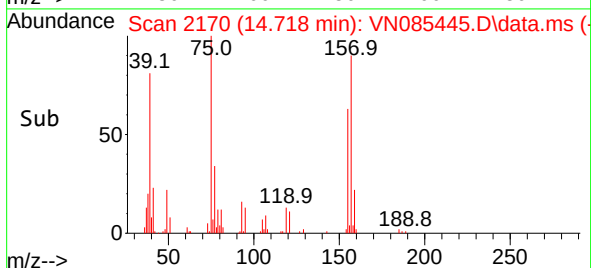
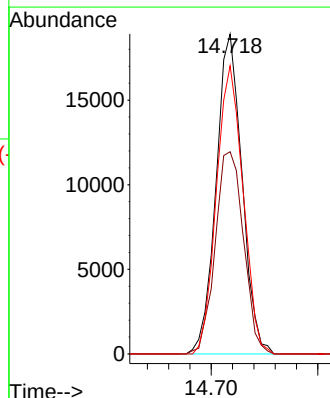
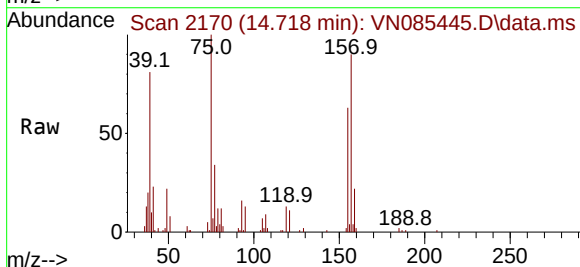
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN011425

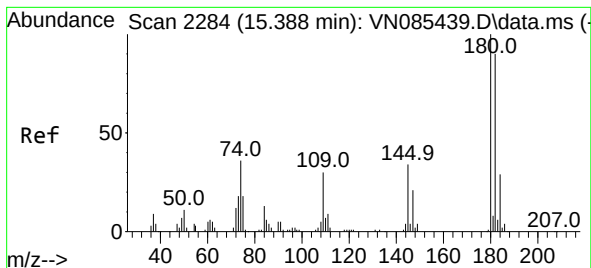
Tgt Ion:146 Resp: 231646  
 Ion Ratio Lower Upper  
 146 100  
 111 43.9 21.7 65.1  
 148 63.1 31.4 94.2



#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

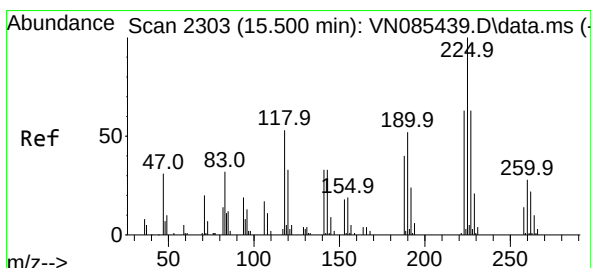
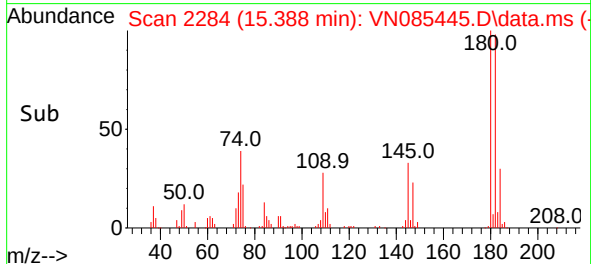
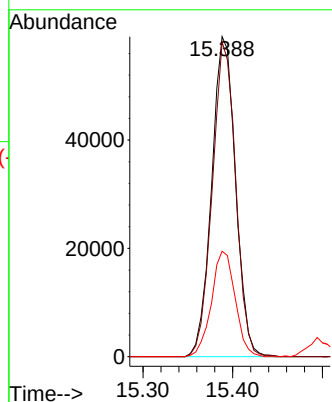
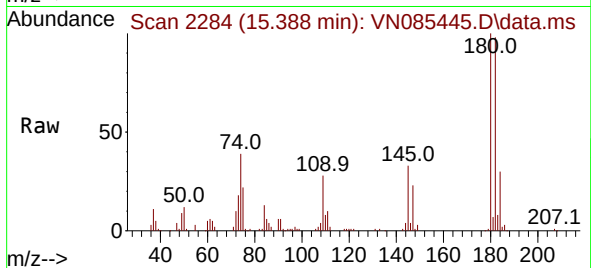
Tgt Ion:180 Resp: 109157

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

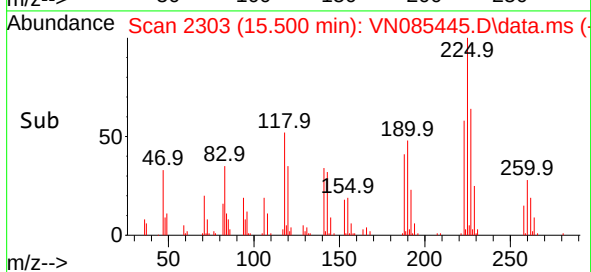
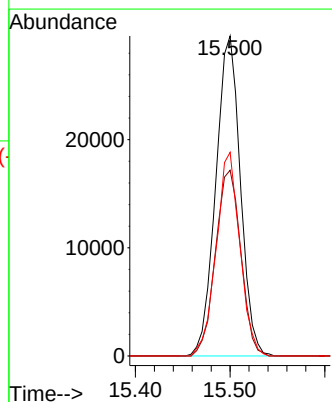
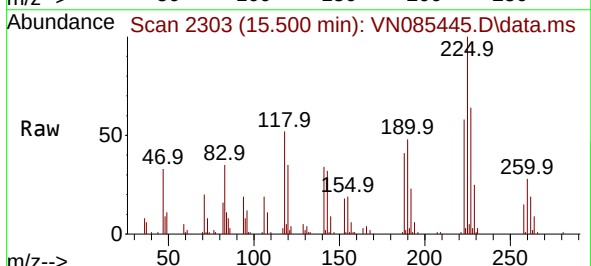
Tgt Ion:225 Resp: 53358

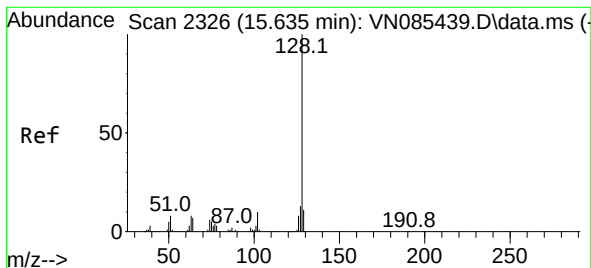
Ion Ratio Lower Upper

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

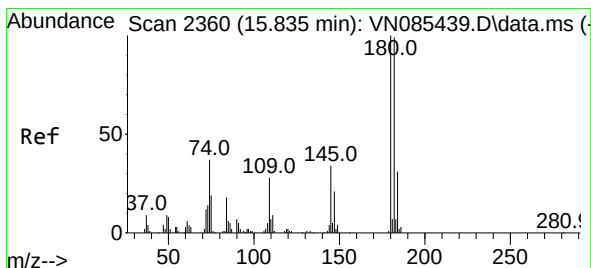
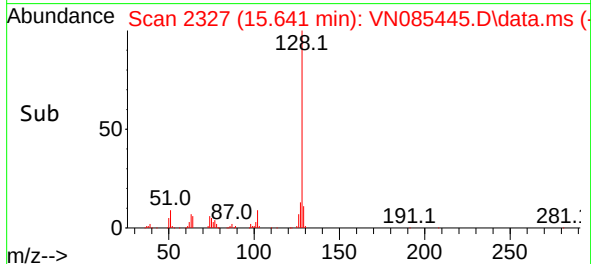
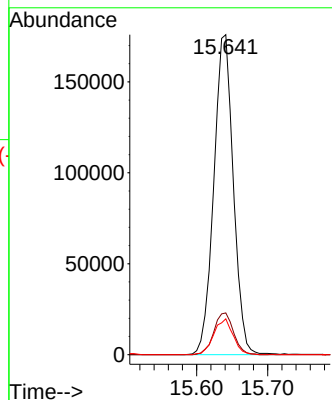
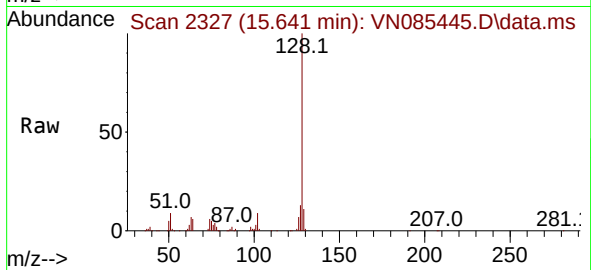
Tgt Ion:128 Resp: 335535

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

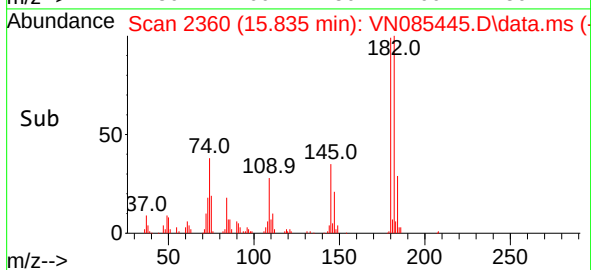
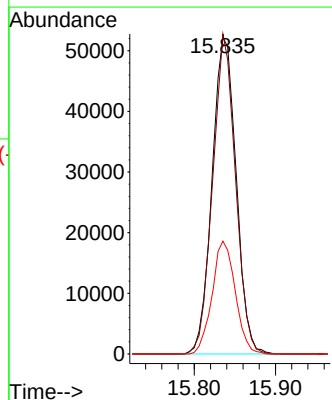
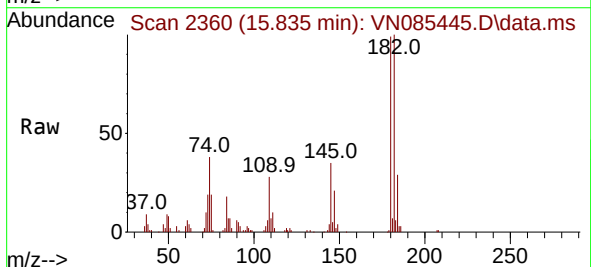
Tgt Ion:180 Resp: 107583

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\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 Operator : JC\MD  
 Sample : VSTDC0050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDC0050

Quant Time: Jan 16 00:51:35 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  | 218273   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 358609   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.859 | 117  | 316952   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 158347   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| System Monitoring Compounds |        |       |          |          |            |      |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 178793   | 50.745   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 101.480% |      |
| 35) Dibromofluoromethane    | 8.159  | 113   | 132381   | 53.211   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 106.420% |      |
| 50) Toluene-d8              | 10.559 | 98    | 486444   | 55.032   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 110.060% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 168340   | 55.673   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 111.340% |      |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 143408  | 48.525  | ug/l   | 99  |
| 3) Chloromethane             | 2.359 | 50  | 147166  | 45.992  | ug/l   | 98  |
| 4) Vinyl Chloride            | 2.518 | 62  | 151933  | 47.239  | ug/l   | 99  |
| 5) Bromomethane              | 2.959 | 94  | 87556   | 45.067  | ug/l   | 97  |
| 6) Chloroethane              | 3.124 | 64  | 93081   | 45.648  | ug/l   | 95  |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 227366  | 48.720  | ug/l   | 100 |
| 8) Diethyl Ether             | 3.959 | 74  | 73785   | 45.767  | ug/l   | 97  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 130921  | 49.808  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 149033  | 49.511  | ug/l   | 98  |
| 11) Tert butyl alcohol       | 5.506 | 59  | 74825   | 185.463 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.336 | 96  | 115861  | 49.459  | ug/l   | 99  |
| 13) Acrolein                 | 4.177 | 56  | 131470  | 238.713 | ug/l   | 99  |
| 14) Allyl chloride           | 5.018 | 41  | 181372  | 47.714  | ug/l   | 99  |
| 15) Acrylonitrile            | 5.712 | 53  | 284008  | 221.624 | ug/l   | 99  |
| 16) Acetone                  | 4.418 | 43  | 250548  | 220.081 | ug/l   | 100 |
| 17) Carbon Disulfide         | 4.712 | 76  | 332259  | 46.066  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.018 | 43  | 152823  | 44.146  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 383442  | 50.410  | ug/l   | 98  |
| 20) Methylene Chloride       | 5.271 | 84  | 132073  | 46.863  | ug/l   | 97  |
| 21) trans-1,2-Dichloroethene | 5.789 | 96  | 122694  | 49.008  | ug/l   | 99  |
| 22) Diisopropyl ether        | 6.665 | 45  | 429155  | 50.865  | ug/l   | 99  |
| 23) Vinyl Acetate            | 6.594 | 43  | 1530873 | 259.270 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 250056  | 48.606  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 367726  | 219.497 | ug/l   | 98  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 224423  | 53.956  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 147121  | 49.893  | ug/l   | 100 |
| 28) Bromochloromethane       | 7.806 | 49  | 117821  | 49.226  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.830 | 42  | 245371  | 231.013 | ug/l   | 99  |
| 30) Chloroform               | 7.959 | 83  | 253854  | 47.743  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 205522  | 45.962  | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 225987  | 48.453  | ug/l   | 99  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 180278  | 51.631  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 157899  | 44.802  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 201730  | 50.466  | ug/l   | 99  |
| 39) Methylcyclohexane        | 9.594 | 83  | 189425  | 57.732  | ug/l   | 98  |
| 40) Benzene                  | 8.600 | 78  | 539436  | 51.417  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085447.D  
 Acq On : 15 Jan 2025 09:03  
 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 16 00:51:35 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   | 90556    | 49.387  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 197097   | 49.881  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 266284   | 47.153  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 123817   | 50.700  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.612  | 63   | 135244   | 50.468  | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 94501    | 48.873  | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.882  | 83   | 203552   | 51.671  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 129471   | 50.945  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 37393    | 873.742 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 789380   | 240.885 | ug/l   | 99       |
| 52) Toluene                   | 10.624 | 92   | 328434   | 54.029  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 198974   | 53.447  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 213072   | 53.582  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 120803   | 50.215  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 184561   | 45.714  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 211921   | 50.662  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 416723   | 272.966 | ug/l   | 100      |
| 59) 2-Hexanone                | 11.188 | 43   | 558711   | 242.307 | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.353 | 129  | 146358   | 50.392  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 117431   | 49.039  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 112592   | 52.107  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 348954   | 50.257  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.953 | 131  | 126127   | 49.494  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 623373   | 55.122  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.065 | 106  | 478857   | 114.570 | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 221609   | 55.481  | ug/l   | 98       |
| 70) Styrene                   | 12.406 | 104  | 382963   | 57.933  | ug/l   | 100      |
| 71) Bromoform                 | 12.570 | 173  | 95715    | 52.493  | ug/l # | 97       |
| 73) Isopropylbenzene          | 12.688 | 105  | 579887   | 54.261  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 229808   | 47.841  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 165720   | 43.898  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 218540   | 67.902  | ug/l   | 50       |
| 77) Bromobenzene              | 12.976 | 156  | 137136   | 49.115  | ug/l   | 96       |
| 78) n-propylbenzene           | 13.029 | 91   | 703936   | 55.640  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 423036   | 51.665  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 492256   | 55.763  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 58114    | 48.853  | ug/l   | 92       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 425288   | 52.164  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 405351   | 54.680  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 498787   | 56.692  | ug/l   | 97       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 580478   | 56.497  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 492423   | 52.852  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 257806   | 50.137  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 256221   | 48.073  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 424966   | 57.654  | ug/l   | 98       |
| 90) Hexachloroethane          | 14.329 | 117  | 95205    | 48.675  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 242707   | 47.320  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 29578    | 42.906  | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 120596   | 50.589  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.494 | 225  | 60079    | 47.470  | ug/l   | 97       |
| 95) Naphthalene               | 15.635 | 128  | 327305   | 46.012  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 113937   | 47.236  | ug/l   | 99       |

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Data File : VN085447.D  
Acq On : 15 Jan 2025 09:03  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

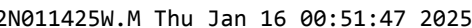
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Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

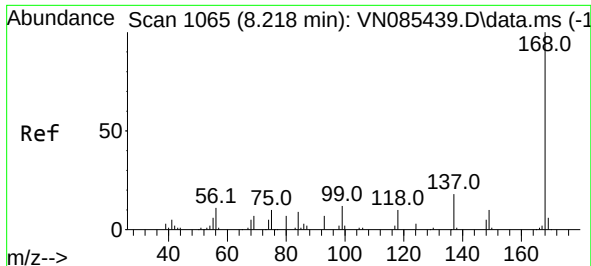
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 16 00:51:35 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

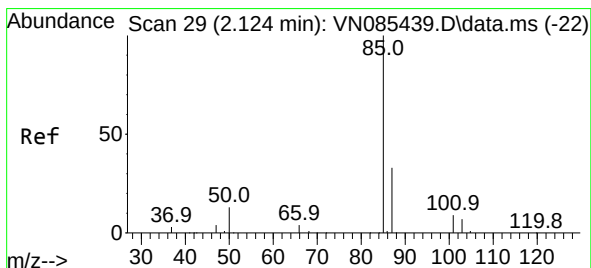
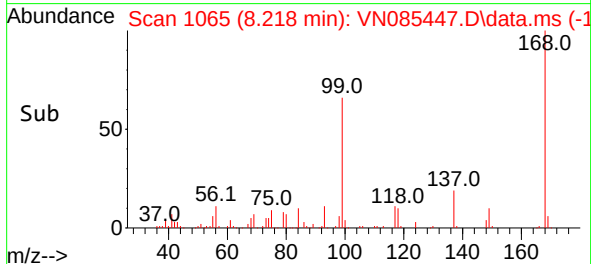
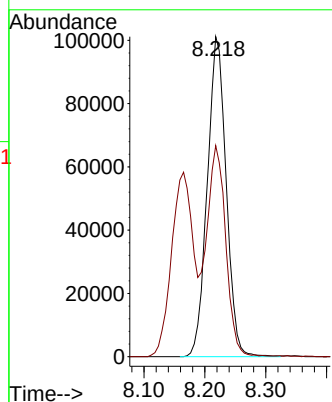
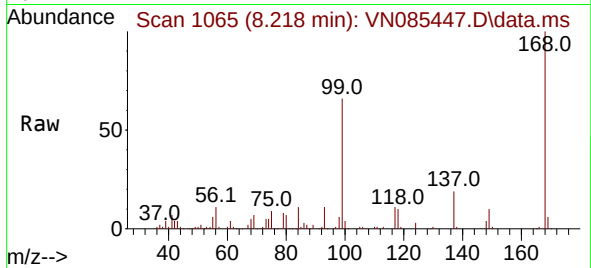




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

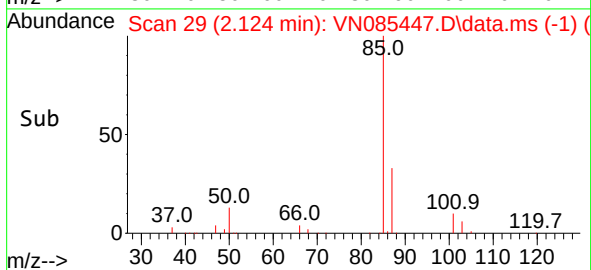
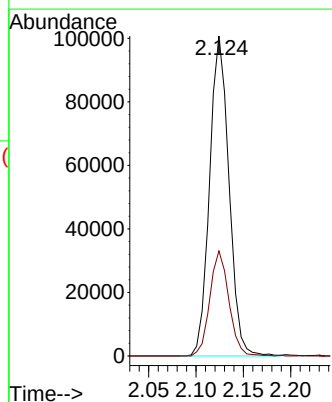
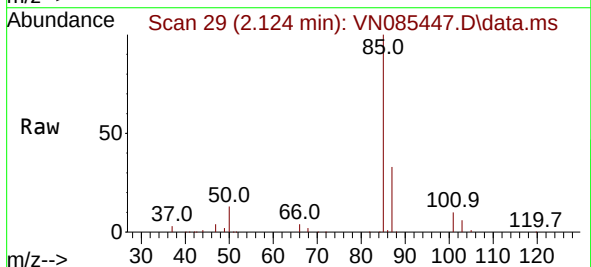
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

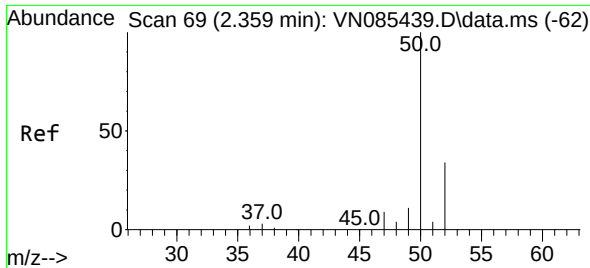
Tgt Ion:168 Resp: 218273  
Ion Ratio Lower Upper  
168 100  
99 65.7 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 48.525 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 85 Resp: 143408  
Ion Ratio Lower Upper  
85 100  
87 32.8 16.7 50.1

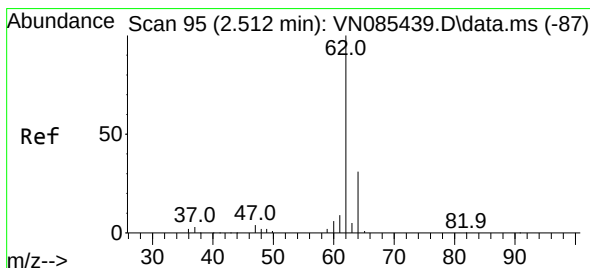
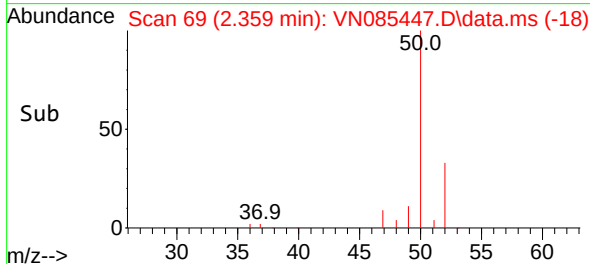
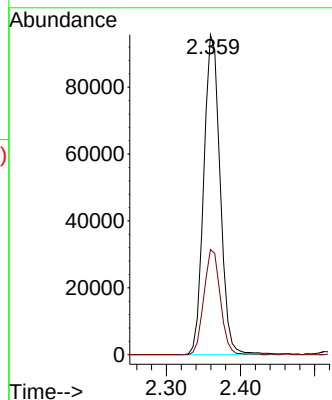
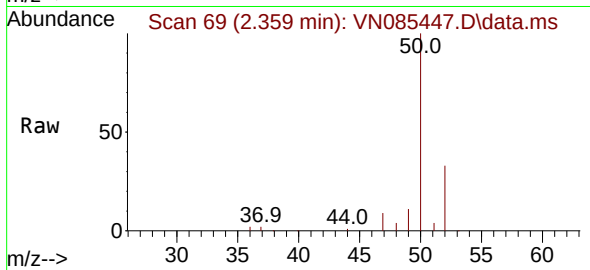




#3  
Chloromethane  
Concen: 45.992 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

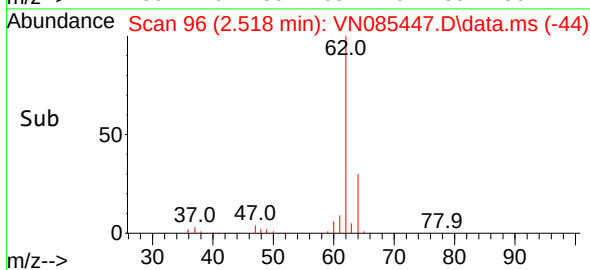
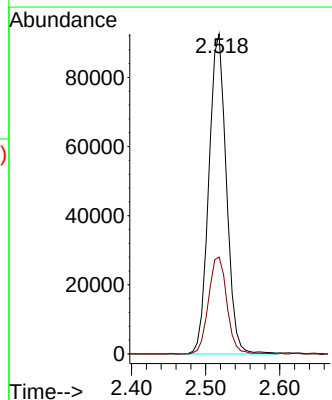
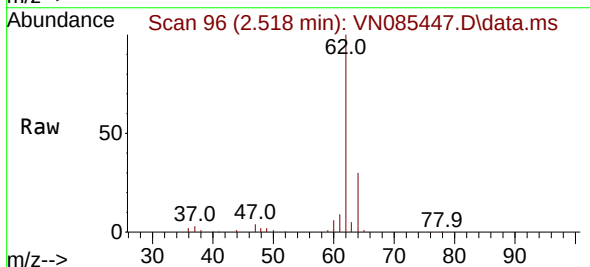
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

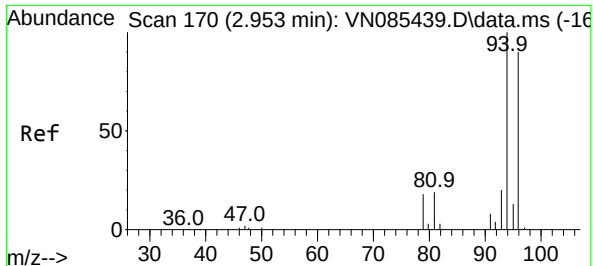
Tgt Ion: 50 Resp: 147166  
Ion Ratio Lower Upper  
50 100  
52 32.9 27.0 40.6



#4  
Vinyl Chloride  
Concen: 47.239 ug/l  
RT: 2.518 min Scan# 96  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 62 Resp: 151933  
Ion Ratio Lower Upper  
62 100  
64 30.3 24.8 37.2

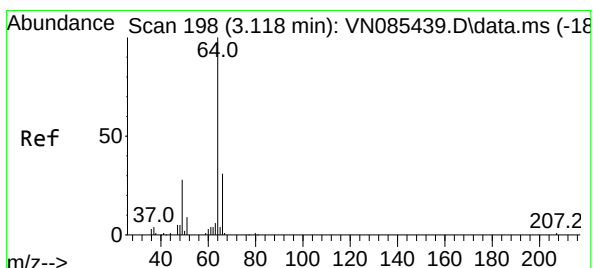
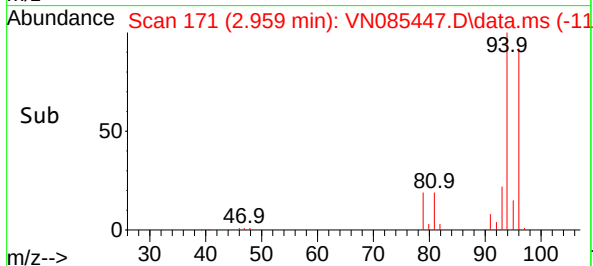
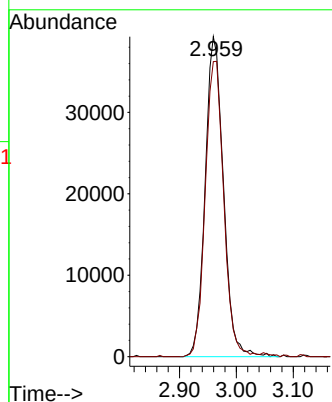
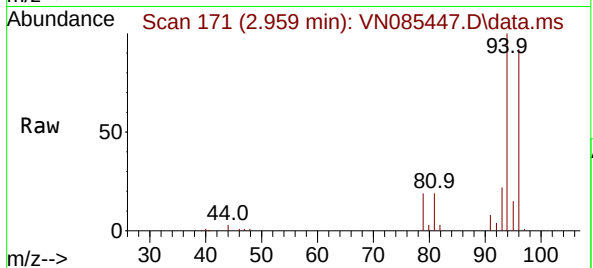




#5  
Bromomethane  
Concen: 45.067 ug/l  
RT: 2.959 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

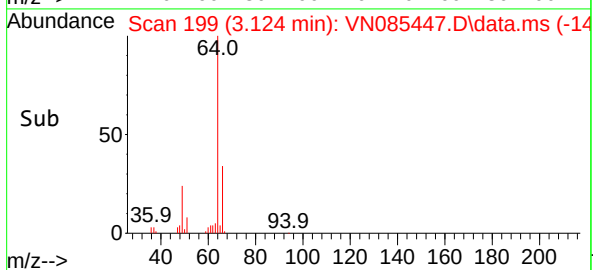
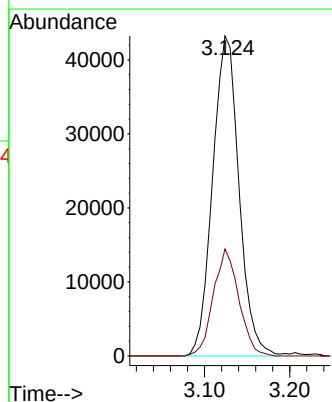
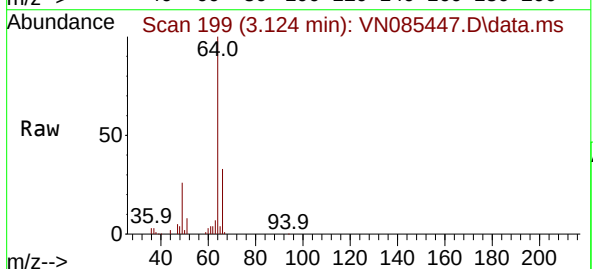
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ClientSampleId :  
VSTDCCC050

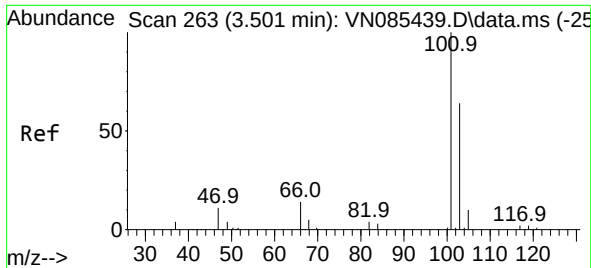
Tgt Ion: 94 Resp: 87556  
Ion Ratio Lower Upper  
94 100  
96 92.2 71.8 107.6



#6  
Chloroethane  
Concen: 45.648 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 64 Resp: 93081  
Ion Ratio Lower Upper  
64 100  
66 33.5 24.6 36.8

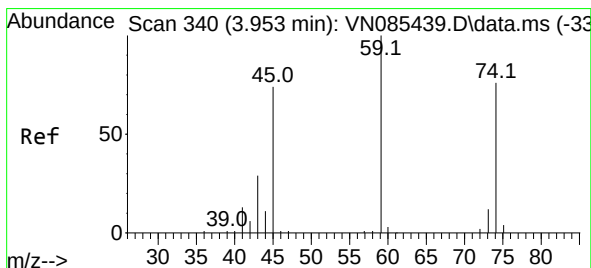
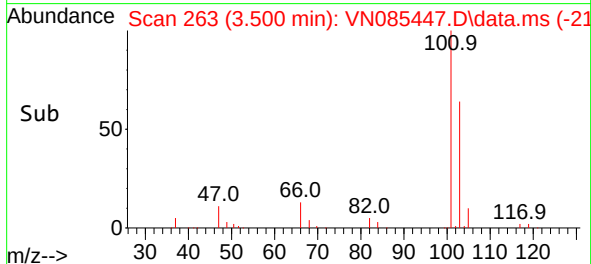
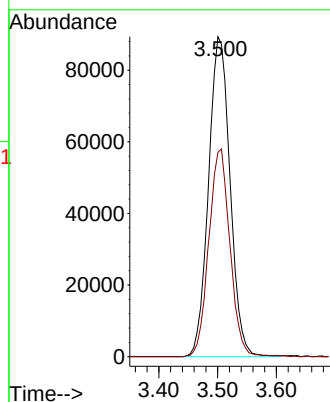
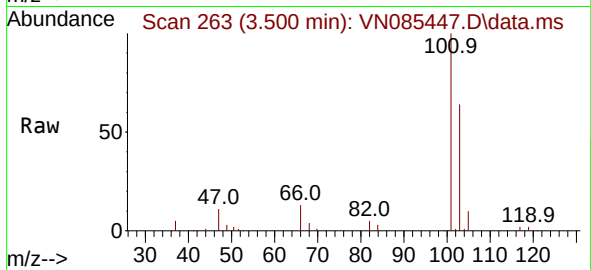




#7  
 Trichlorofluoromethane  
 Concen: 48.720 ug/l  
 RT: 3.500 min Scan# 210  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

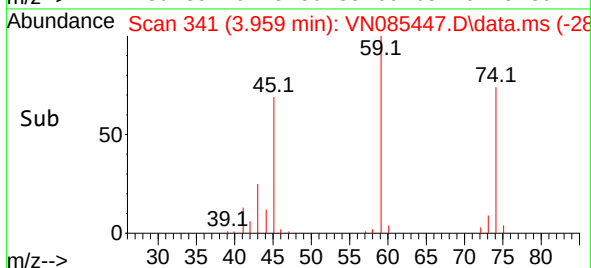
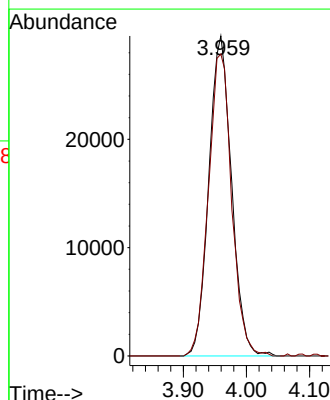
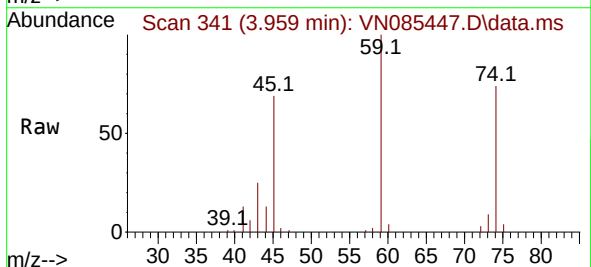
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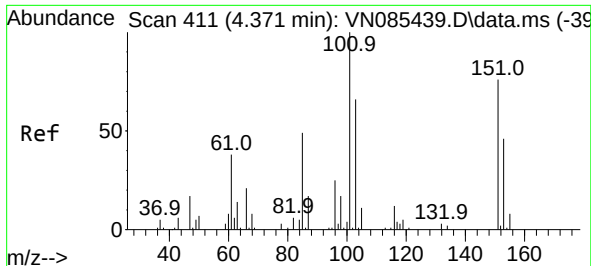
Tgt Ion:101 Resp: 227366  
 Ion Ratio Lower Upper  
 101 100  
 103 63.9 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 45.767 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 74 Resp: 73785  
 Ion Ratio Lower Upper  
 74 100  
 45 96.7 49.7 149.1

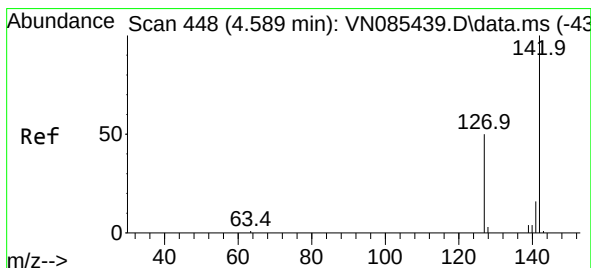
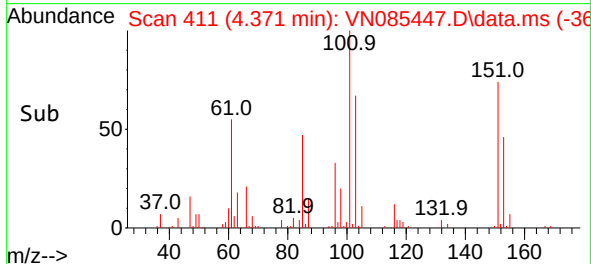
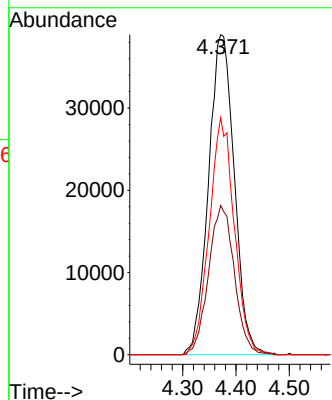
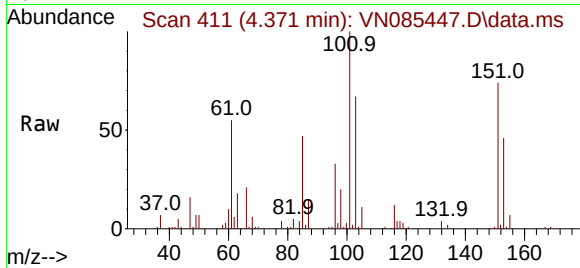




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 49.808 ug/l  
RT: 4.371 min Scan# 411  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

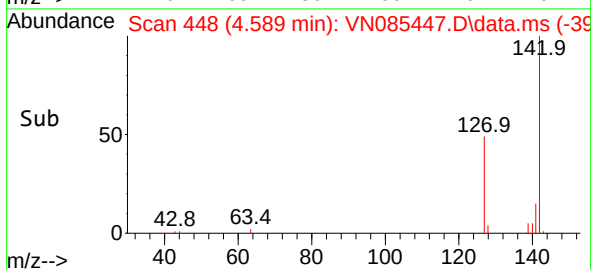
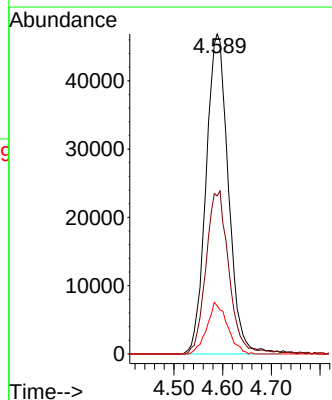
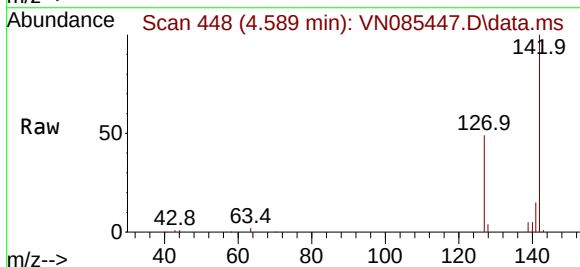
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ClientSampleId :  
VSTDCCC050

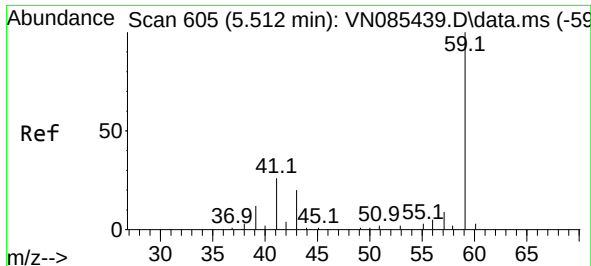
Tgt Ion:101 Resp: 130921  
Ion Ratio Lower Upper  
101 100  
85 46.6 37.8 56.8  
151 72.0 58.8 88.2



#10  
Methyl Iodide  
Concen: 49.511 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:142 Resp: 149033  
Ion Ratio Lower Upper  
142 100  
127 49.4 40.3 60.5  
141 15.0 12.8 19.2

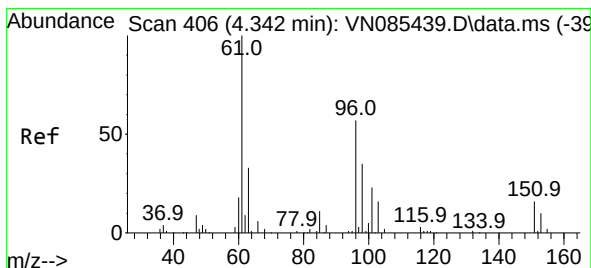
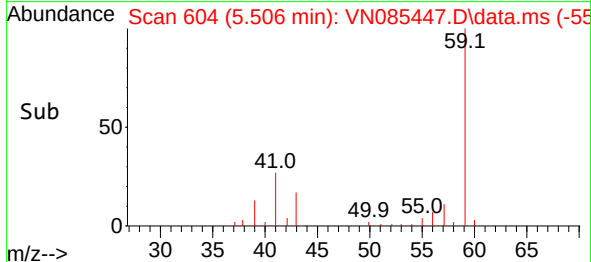
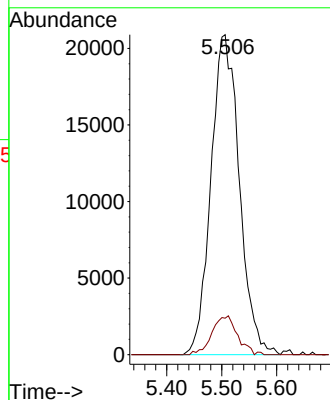
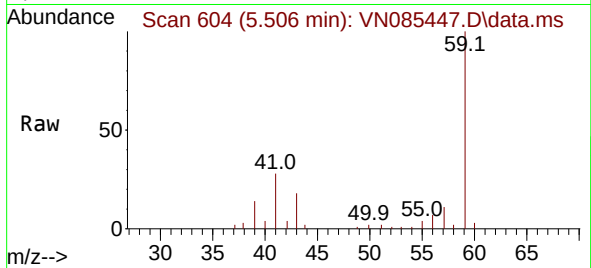




#11  
Tert butyl alcohol  
Concen: 185.463 ug/l  
RT: 5.506 min Scan# 605  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

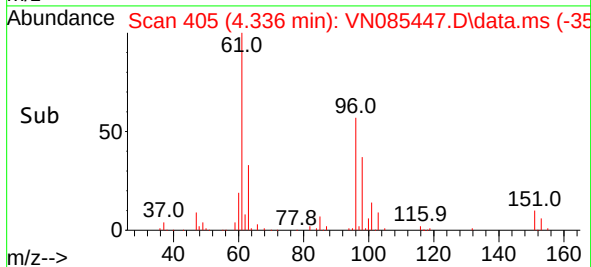
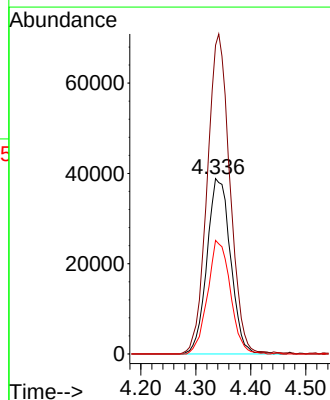
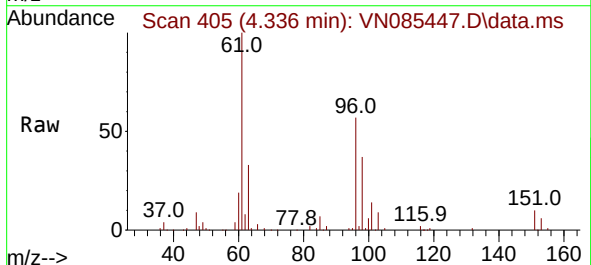
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050

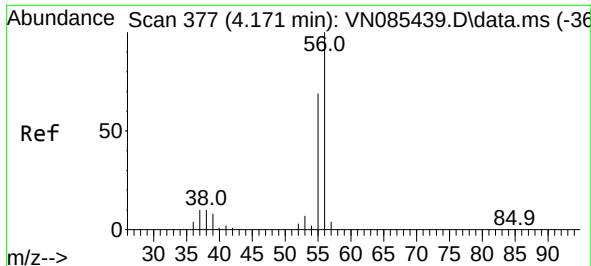
Tgt Ion: 59 Resp: 74825  
Ion Ratio Lower Upper  
59 100  
57 10.9 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 49.459 ug/l  
RT: 4.336 min Scan# 405  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 96 Resp: 115861  
Ion Ratio Lower Upper  
96 100  
61 176.0 141.0 211.4  
98 64.8 49.0 73.6

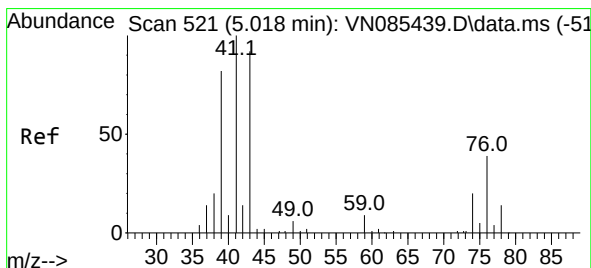
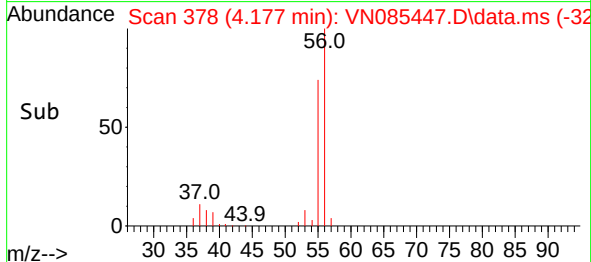
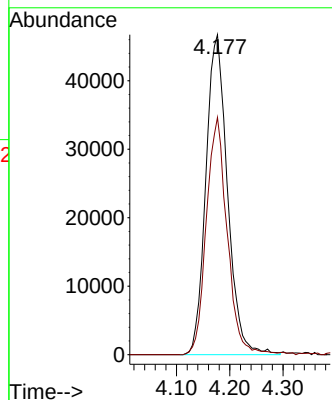
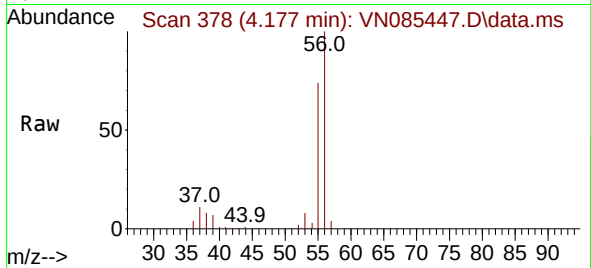




#13  
Acrolein  
Concen: 238.713 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

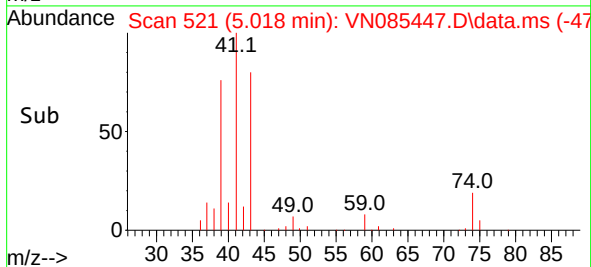
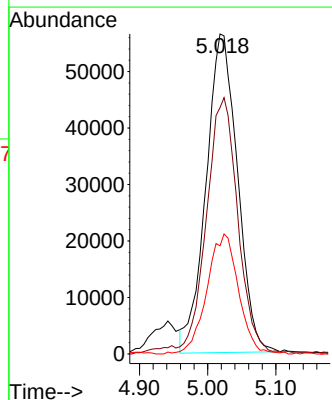
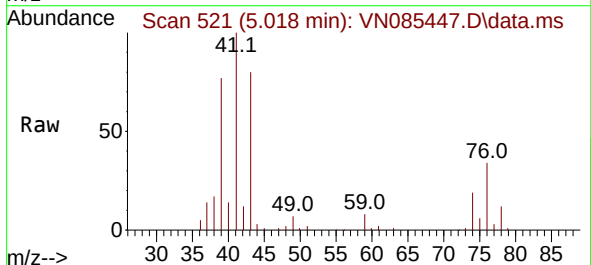
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 56 Resp: 131470  
Ion Ratio Lower Upper  
56 100  
55 71.5 56.3 84.5

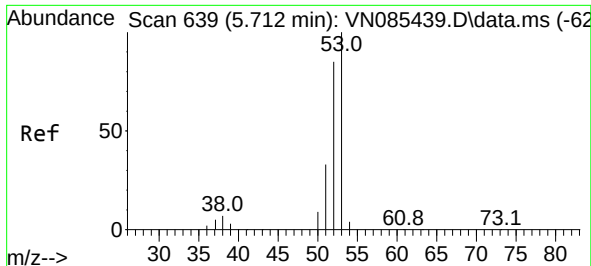


#14  
Allyl chloride  
Concen: 47.714 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 41 Resp: 181372  
Ion Ratio Lower Upper  
41 100  
39 81.7 64.4 96.6  
76 37.8 30.5 45.7



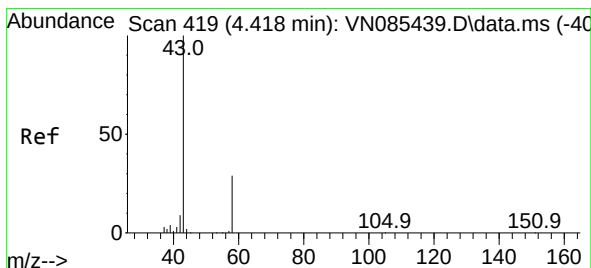
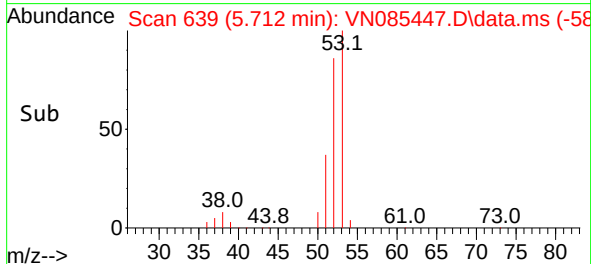
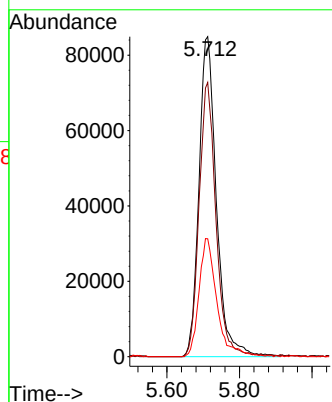
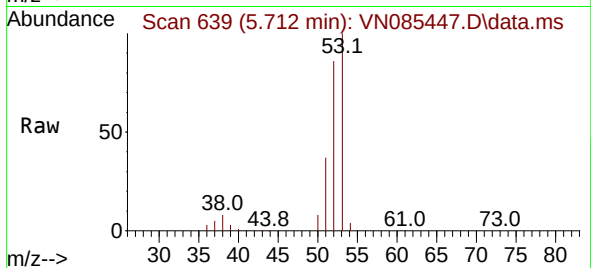




#15  
Acrylonitrile  
Concen: 221.624 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

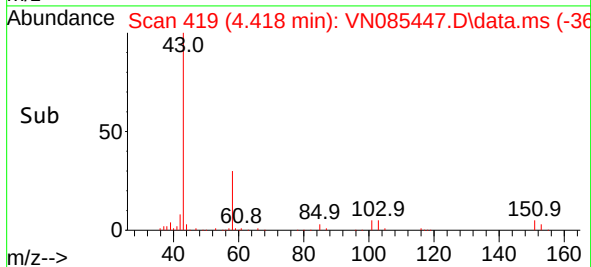
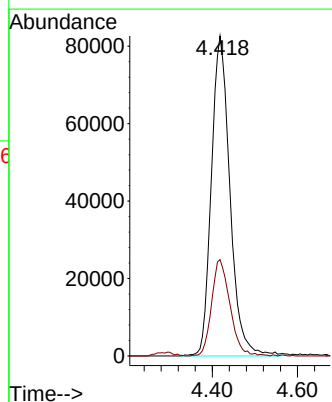
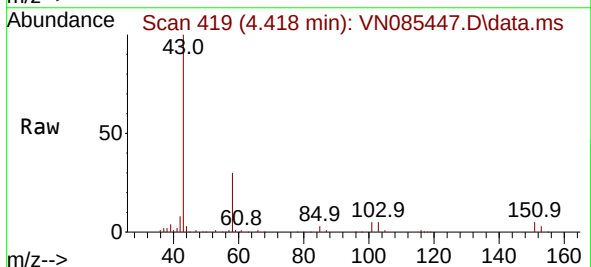
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050

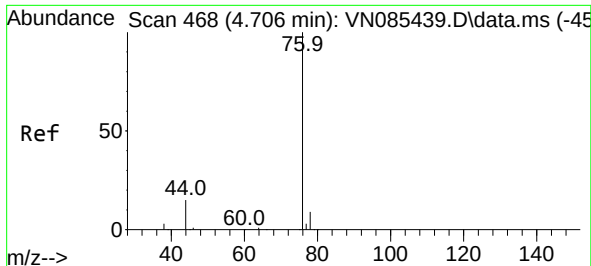
Tgt Ion: 53 Resp: 284008  
Ion Ratio Lower Upper  
53 100  
52 82.6 65.5 98.3  
51 37.8 29.8 44.8



#16  
Acetone  
Concen: 220.081 ug/l  
RT: 4.418 min Scan# 419  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 43 Resp: 250548  
Ion Ratio Lower Upper  
43 100  
58 29.9 23.8 35.6

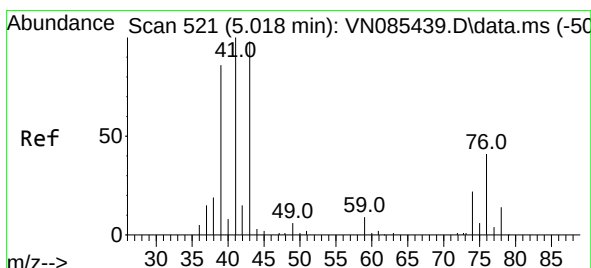
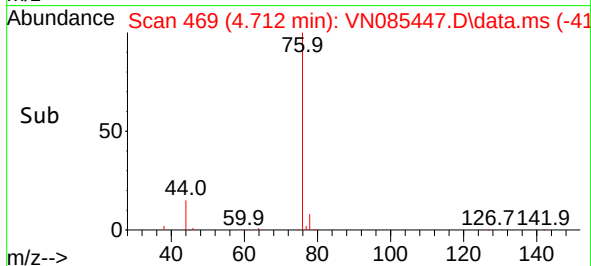
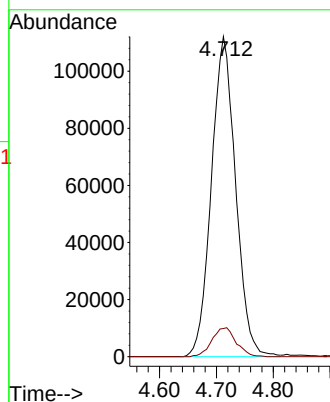
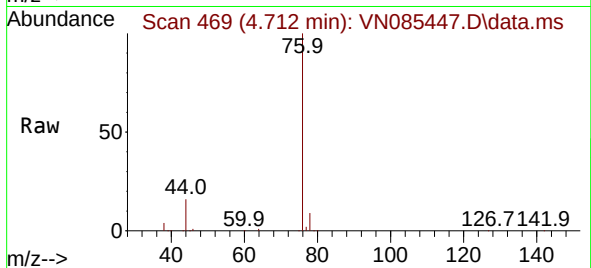




#17  
Carbon Disulfide  
Concen: 46.066 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

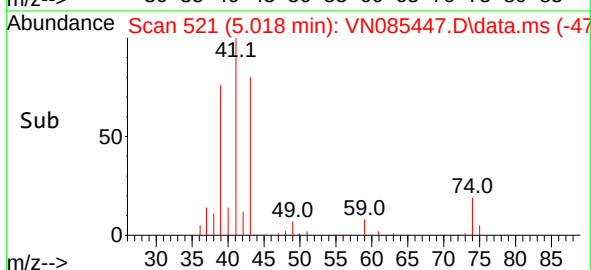
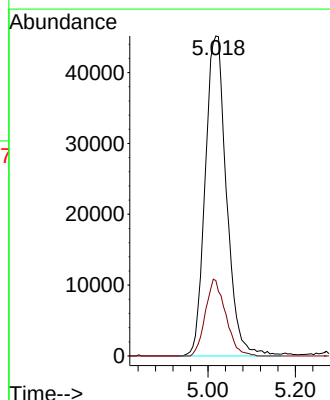
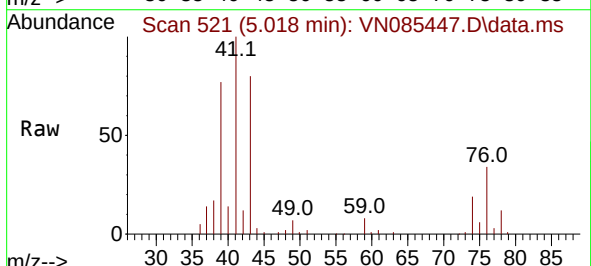
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

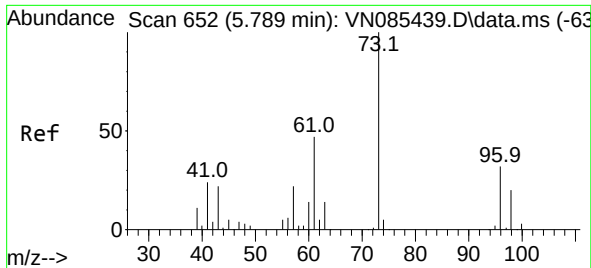
Tgt Ion: 76 Resp: 332259  
Ion Ratio Lower Upper  
76 100  
78 8.8 6.9 10.3



#18  
Methyl Acetate  
Concen: 44.146 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 43 Resp: 152823  
Ion Ratio Lower Upper  
43 100  
74 22.9 18.6 28.0

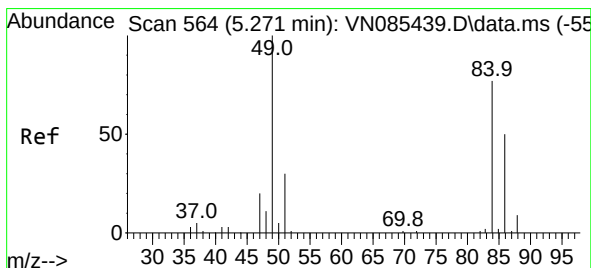
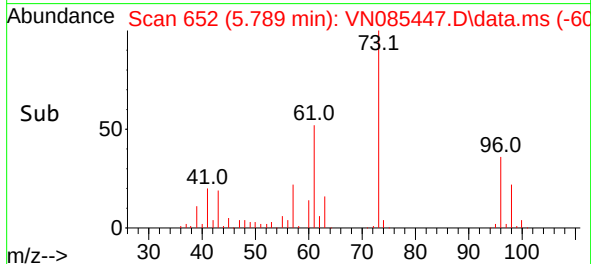
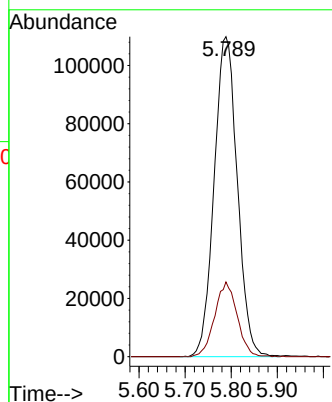
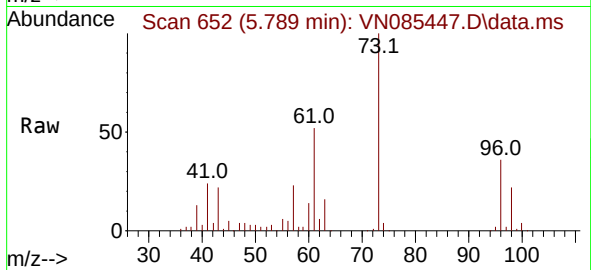




#19  
Methyl tert-butyl Ether  
Concen: 50.410 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

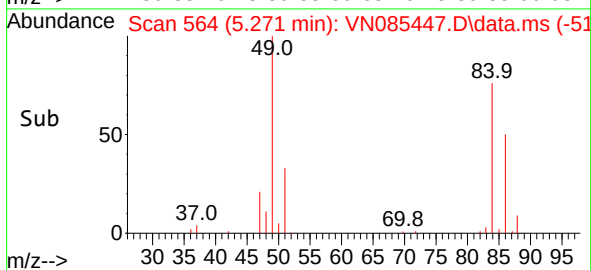
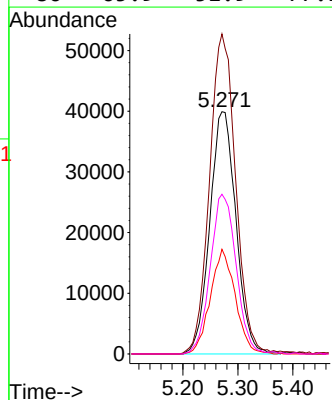
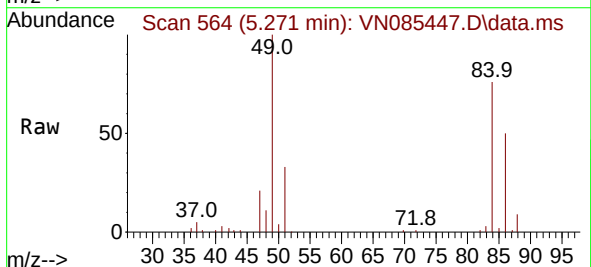
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

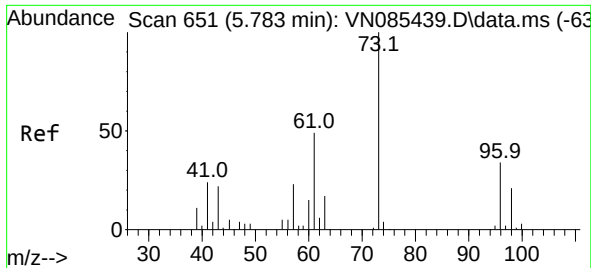
Tgt Ion: 73 Resp: 383442  
Ion Ratio Lower Upper  
73 100  
57 23.4 17.8 26.8



#20  
Methylene Chloride  
Concen: 46.863 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 84 Resp: 132073  
Ion Ratio Lower Upper  
84 100  
49 132.1 104.1 156.1  
51 43.2 31.0 46.4  
86 65.9 51.9 77.9

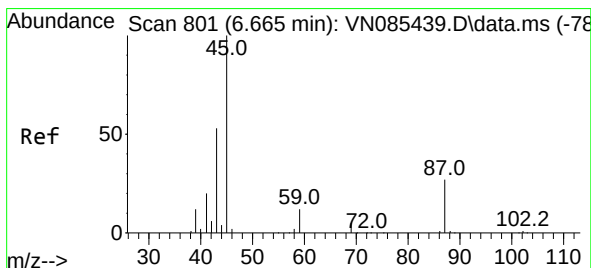
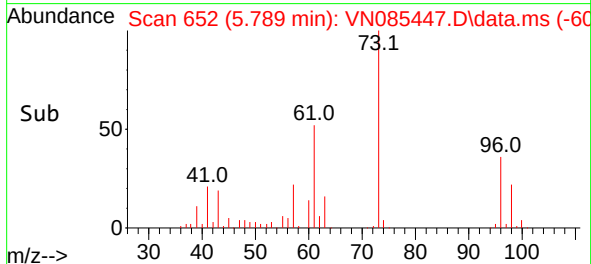
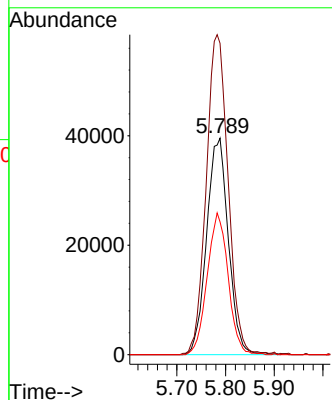
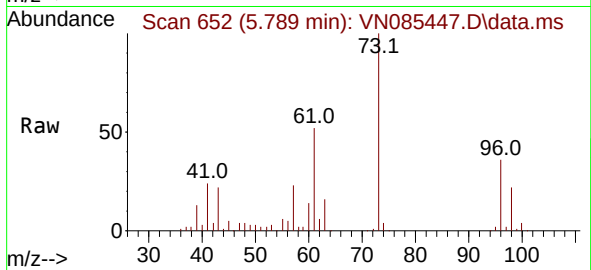




#21  
trans-1,2-Dichloroethene  
Concen: 49.008 ug/l  
RT: 5.789 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

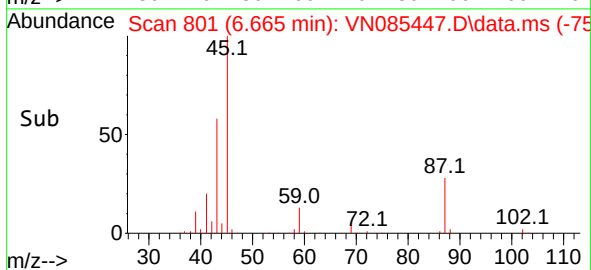
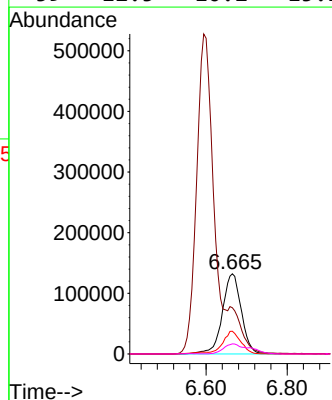
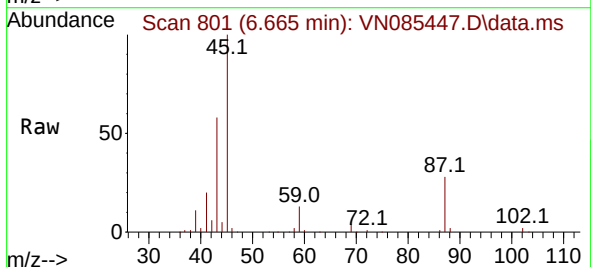
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MSVOA\_N  
ClientSampleId :  
VSTDCCC050

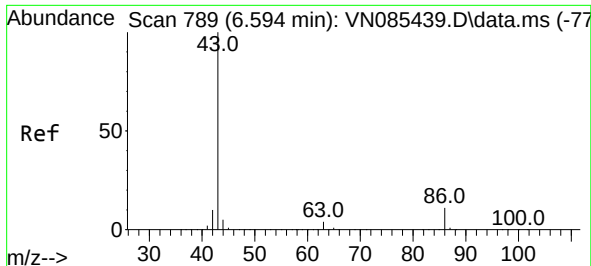
Tgt Ion: 96 Resp: 122694  
Ion Ratio Lower Upper  
96 100  
61 143.8 115.7 173.5  
98 61.4 49.8 74.8



#22  
Diisopropyl ether  
Concen: 50.865 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 45 Resp: 429155  
Ion Ratio Lower Upper  
45 100  
43 56.6 45.0 67.6  
87 28.3 21.8 32.8  
59 12.5 10.2 15.2

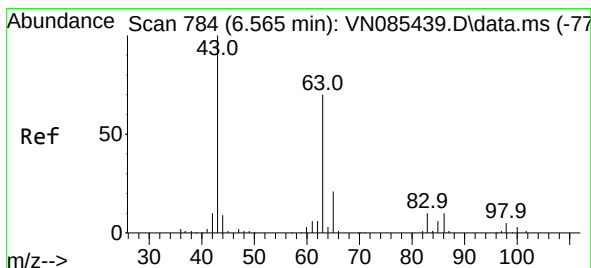
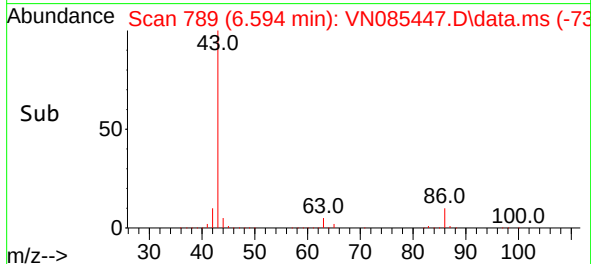
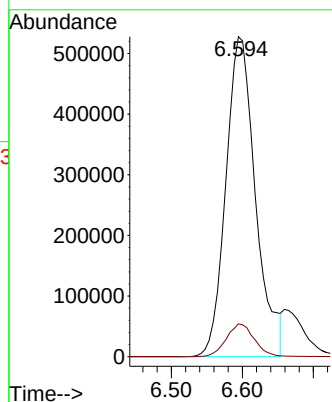
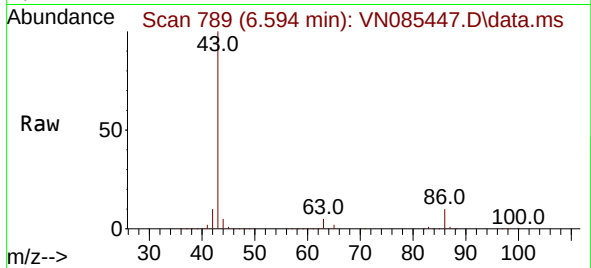




#23  
 Vinyl Acetate  
 Concen: 259.270 ug/l  
 RT: 6.594 min Scan# 789  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

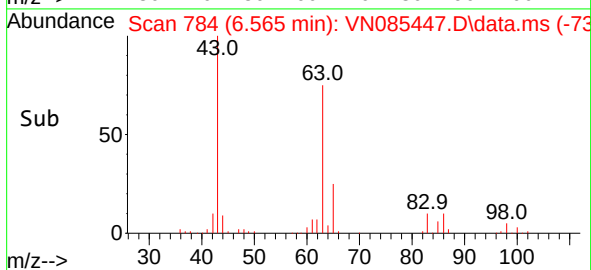
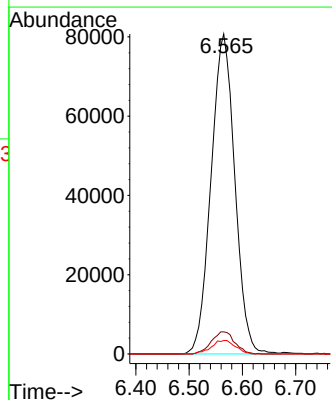
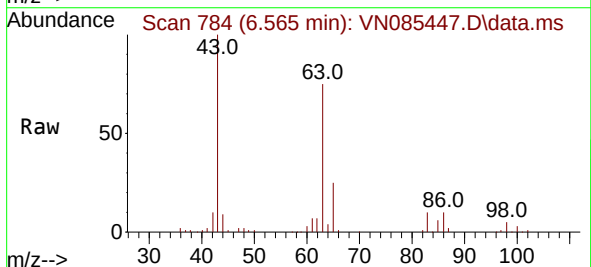
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

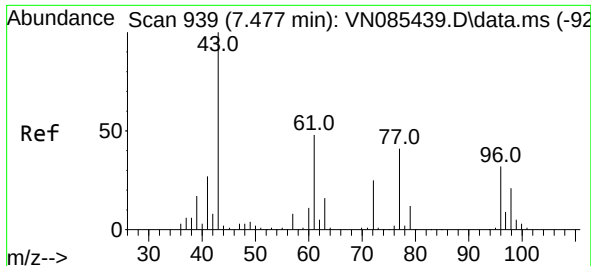
Tgt Ion: 43 Resp: 1530873  
 Ion Ratio Lower Upper  
 43 100  
 86 10.2 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 48.606 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 63 Resp: 250056  
 Ion Ratio Lower Upper  
 63 100  
 98 6.9 3.3 9.8  
 100 4.2 2.0 6.0

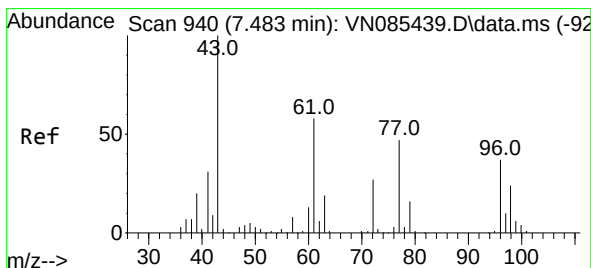
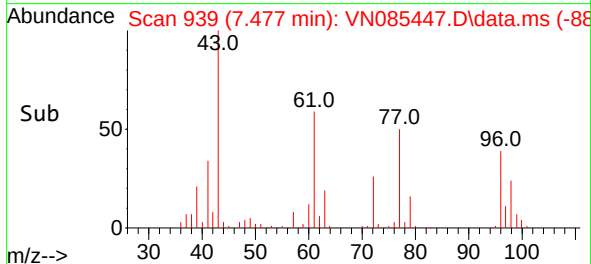
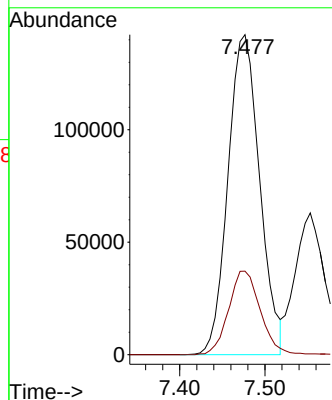
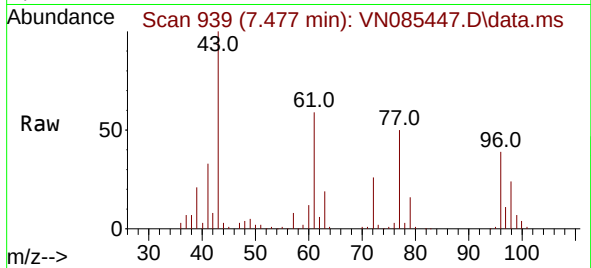




#25  
2-Butanone  
Concen: 219.497 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

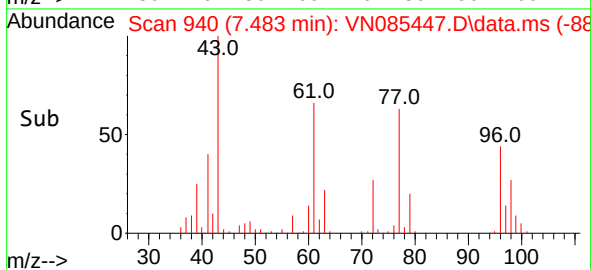
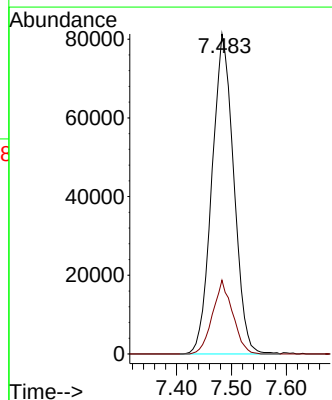
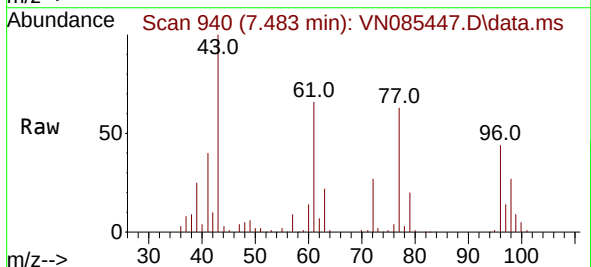
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

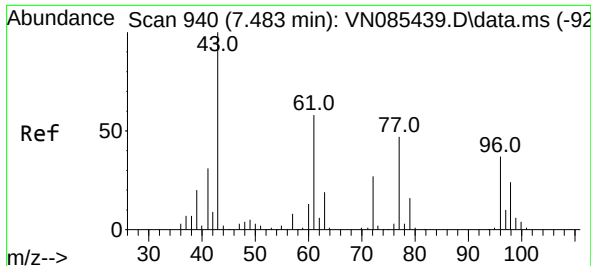
Tgt Ion: 43 Resp: 367726  
Ion Ratio Lower Upper  
43 100  
72 26.1 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 53.956 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 77 Resp: 224423  
Ion Ratio Lower Upper  
77 100  
97 21.2 10.7 32.1



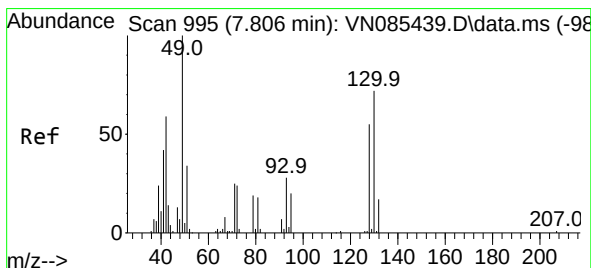
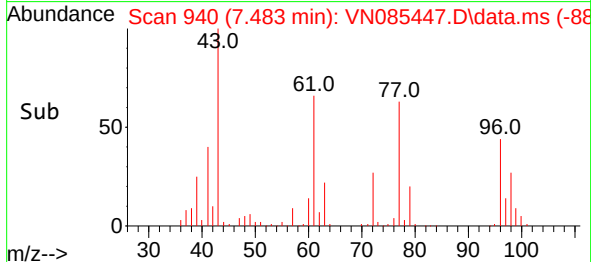
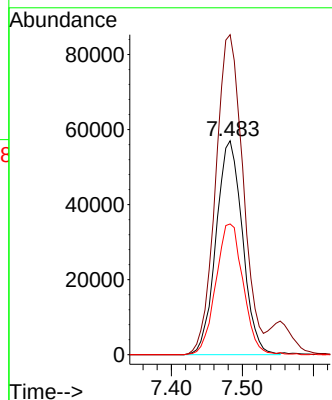
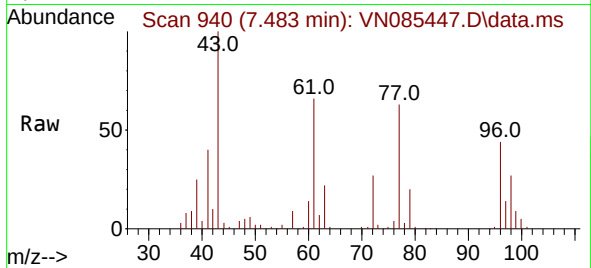


#27  
 cis-1,2-Dichloroethene  
 Concen: 49.893 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Tgt Ion: 96 Resp: 147121  

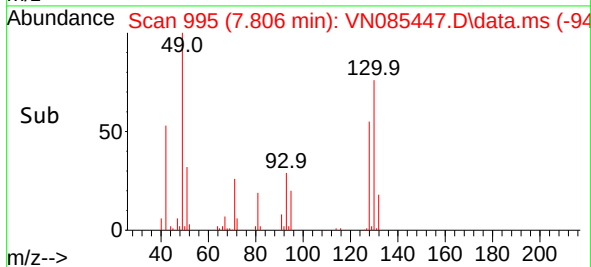
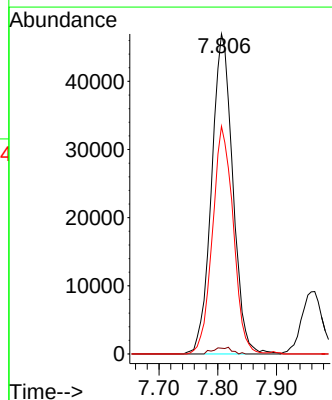
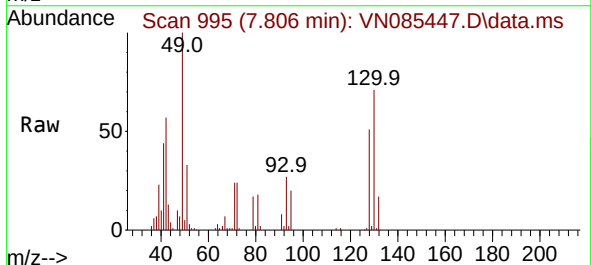
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 155.3 | 0.0   | 311.8 |
| 98  | 63.3  | 0.0   | 126.0 |

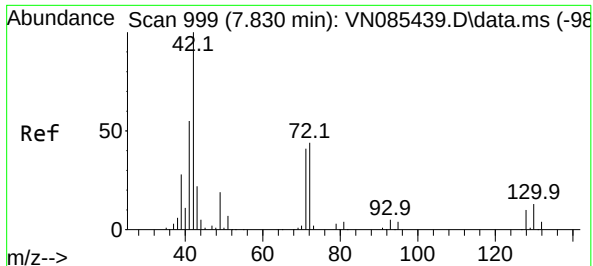


#28  
 Bromochloromethane  
 Concen: 49.226 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 49 Resp: 117821  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 129 | 1.8   | 0.0   | 4.4   |
| 130 | 69.6  | 55.0  | 82.4  |





#29

Tetrahydrofuran

Concen: 231.013 ug/l

RT: 7.830 min Scan# 999

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

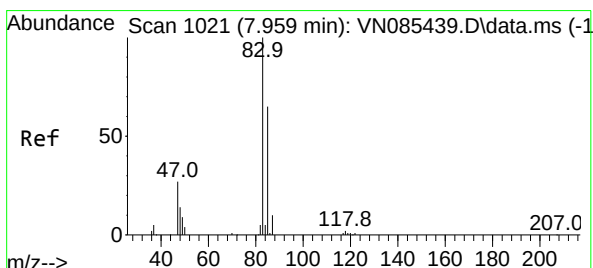
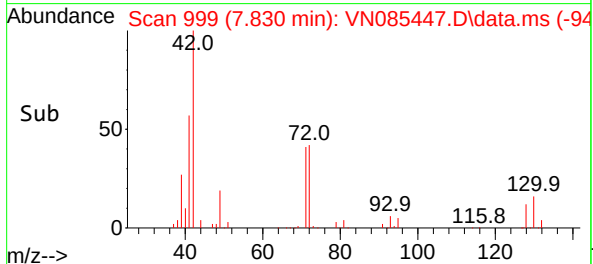
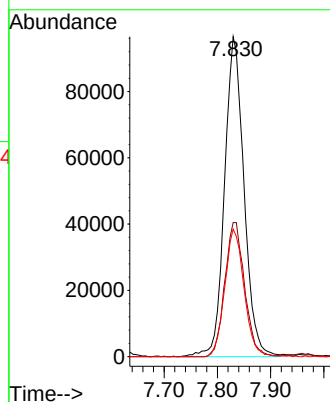
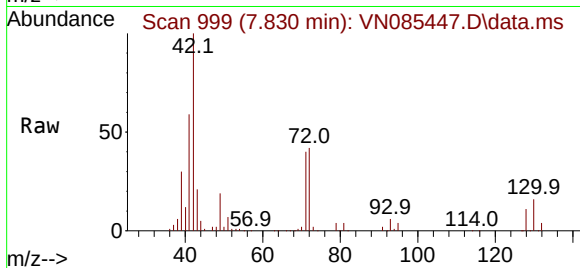
Tgt Ion: 42 Resp: 245371

Ion Ratio Lower Upper

42 100

72 42.6 34.2 51.2

71 39.6 32.5 48.7



#30

Chloroform

Concen: 47.743 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. -0.000 min

Lab File: VN085447.D

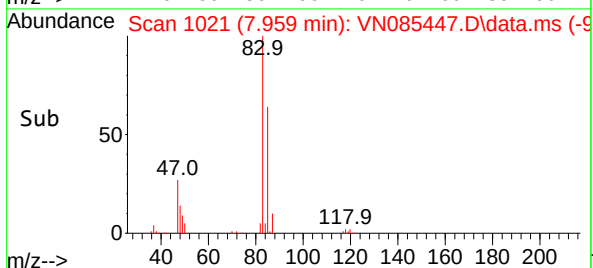
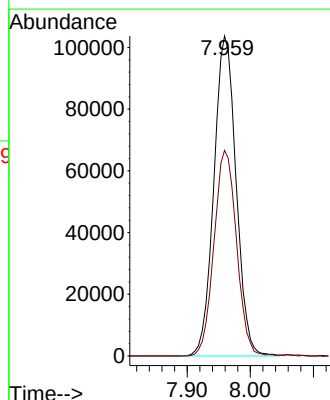
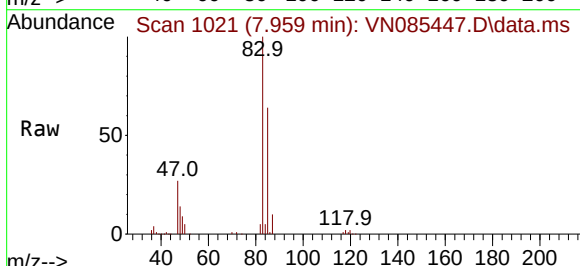
Acq: 15 Jan 2025 09:03

Tgt Ion: 83 Resp: 253854

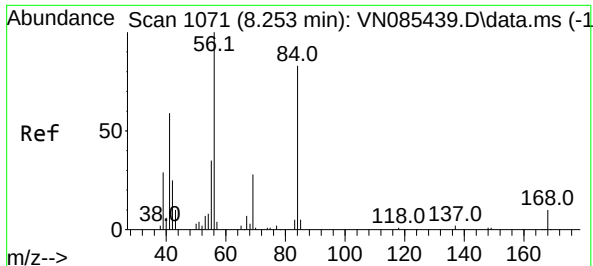
Ion Ratio Lower Upper

83 100

85 64.3 51.8 77.6



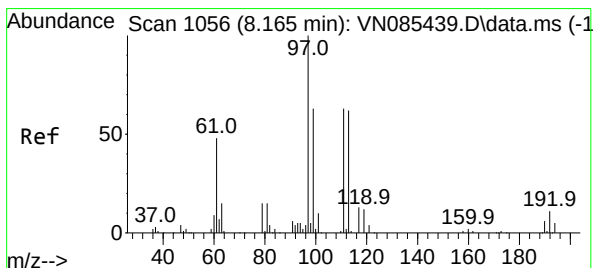
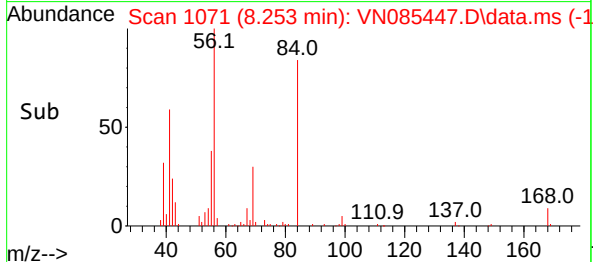
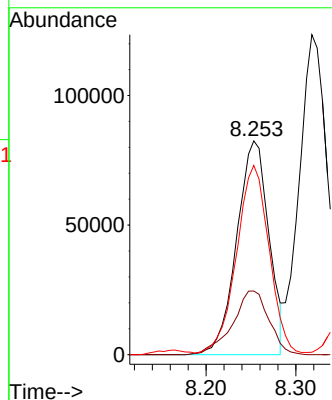
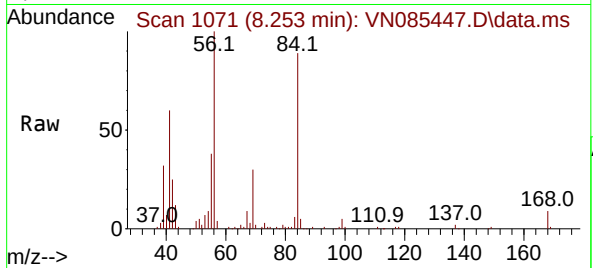




#31  
Cyclohexane  
Concen: 45.962 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

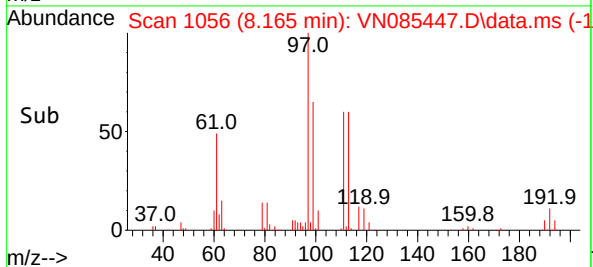
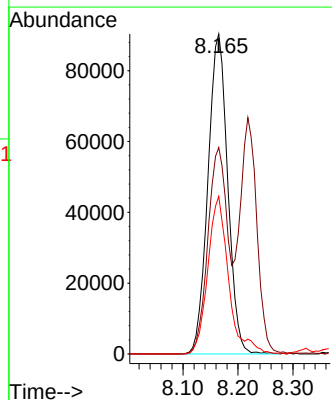
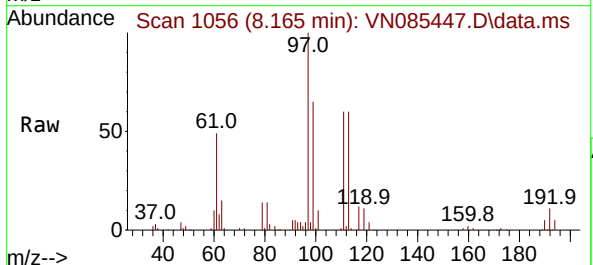
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

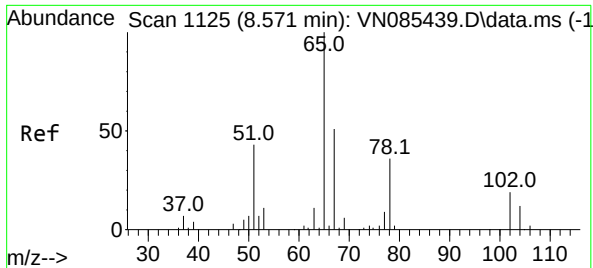
Tgt Ion: 56 Resp: 205522  
Ion Ratio Lower Upper  
56 100  
69 29.8 22.2 33.4  
84 86.8 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 48.453 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 97 Resp: 225987  
Ion Ratio Lower Upper  
97 100  
99 63.5 49.8 74.6  
61 51.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 50.745 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

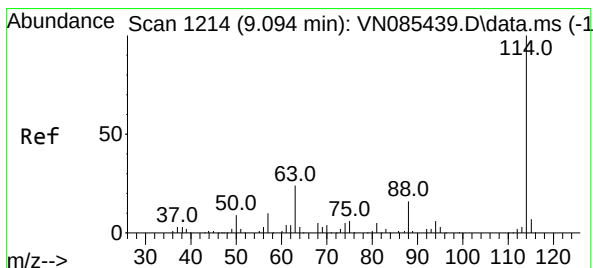
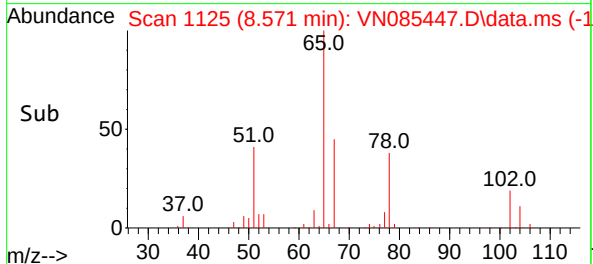
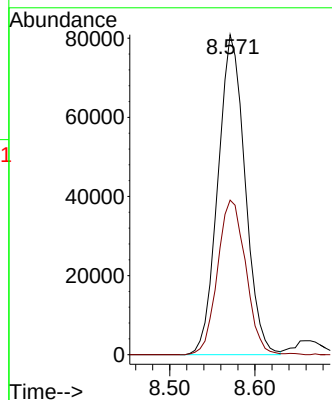
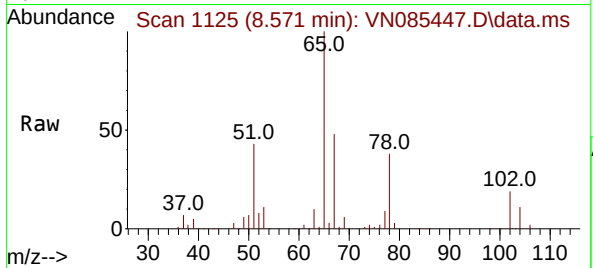
VSTDCCC050

Tgt Ion: 65 Resp: 178793

Ion Ratio Lower Upper

65 100

67 50.2 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: VN085447.D

Acq: 15 Jan 2025 09:03

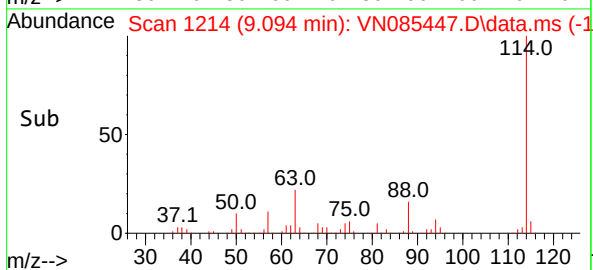
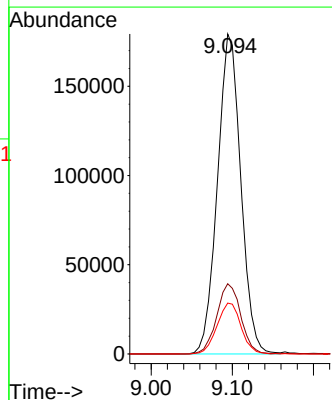
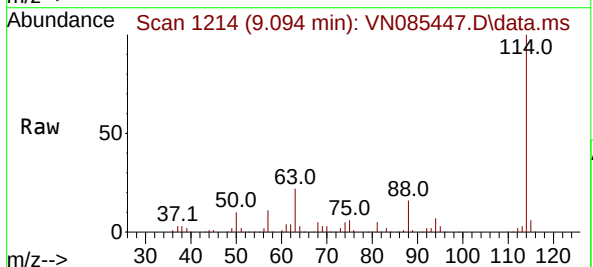
Tgt Ion: 114 Resp: 358609

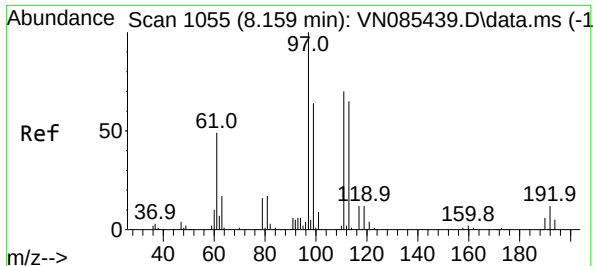
Ion Ratio Lower Upper

114 100

63 22.0 0.0 47.6

88 15.9 0.0 32.6





#35

Dibromofluoromethane

Concen: 53.211 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

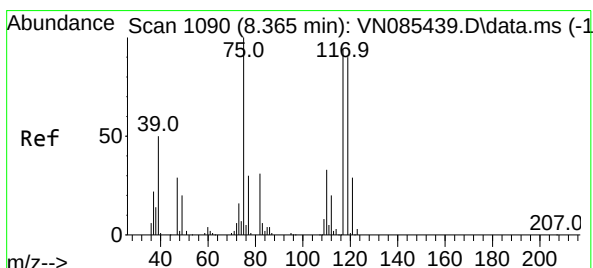
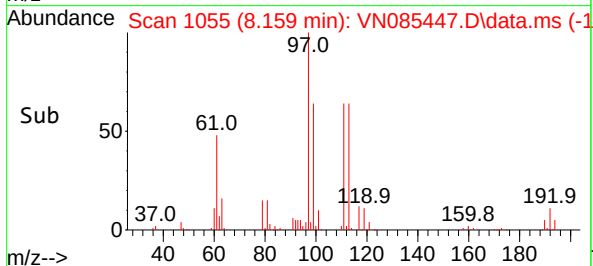
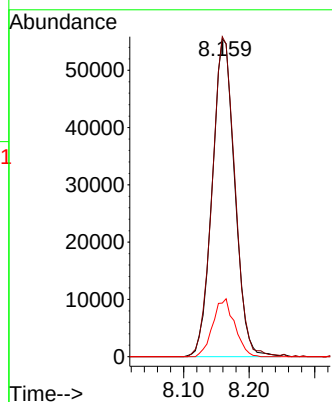
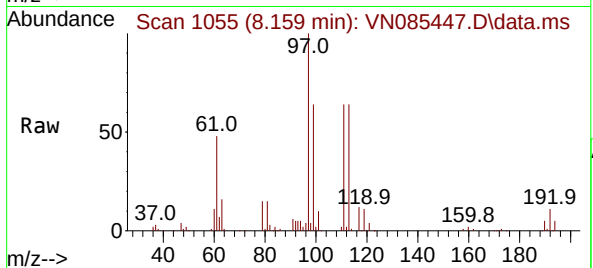
Tgt Ion:113 Resp: 132381

Ion Ratio Lower Upper

113 100

111 101.2 82.7 124.1

192 17.7 14.3 21.5



#36

1,1-Dichloropropene

Concen: 51.631 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

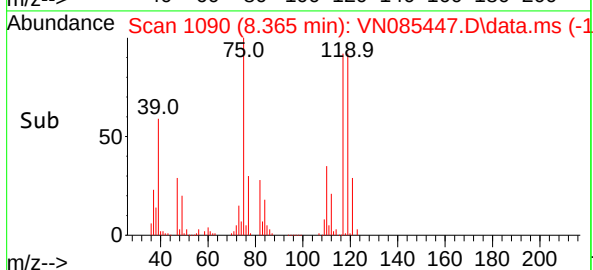
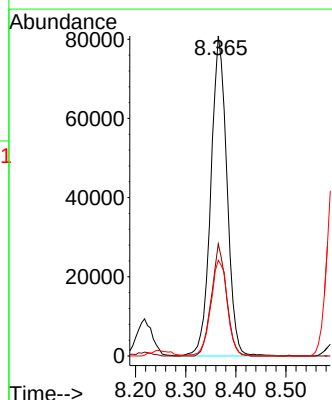
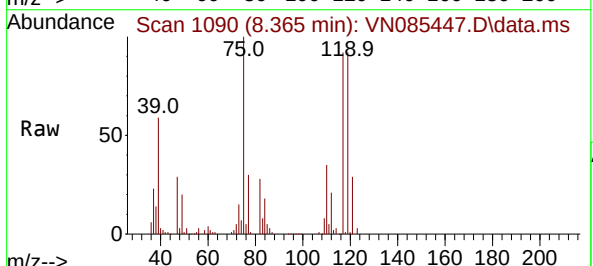
Tgt Ion: 75 Resp: 180278

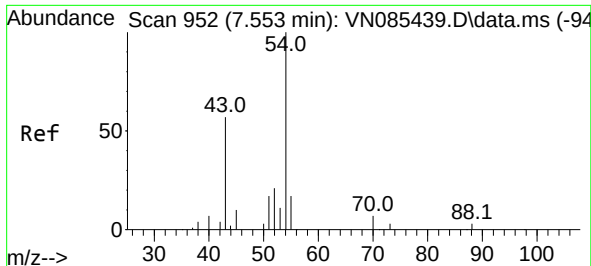
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 30.9 24.4 36.6

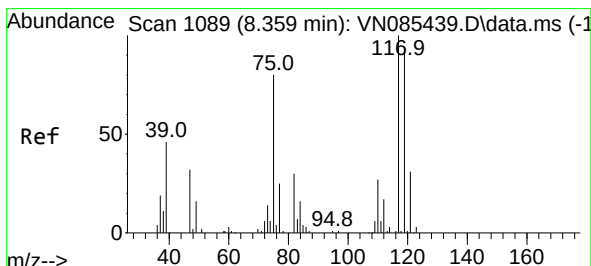
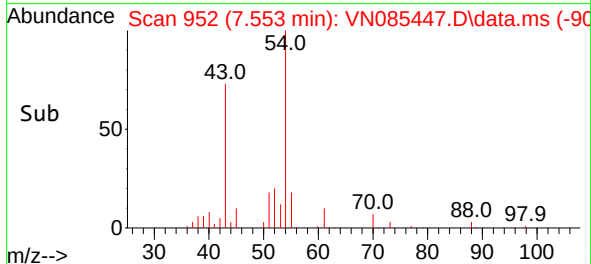
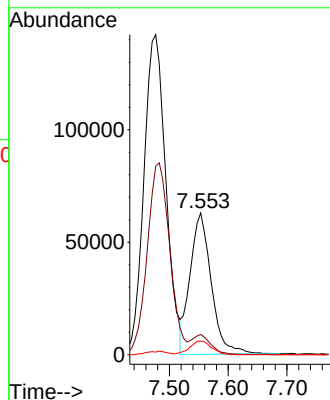
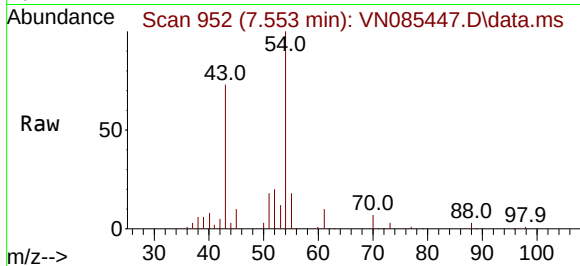




#37  
Ethyl Acetate  
Concen: 44.802 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

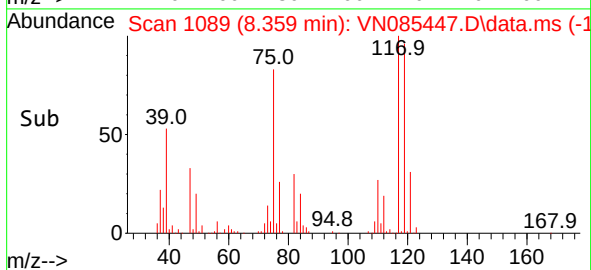
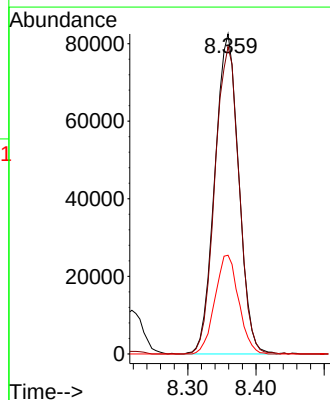
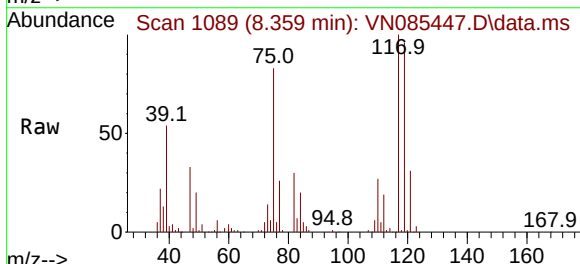
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

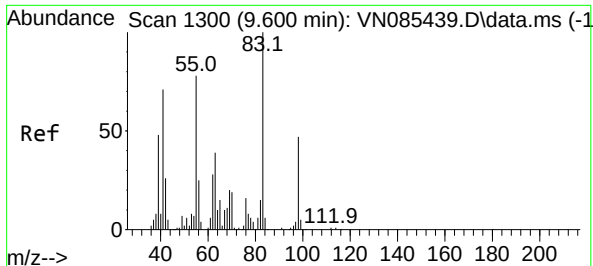
Tgt Ion: 43 Resp: 157899  
Ion Ratio Lower Upper  
43 100  
61 11.7 10.9 16.3  
70 9.8 7.5 11.3



#38  
Carbon Tetrachloride  
Concen: 50.466 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 117 Resp: 201730  
Ion Ratio Lower Upper  
117 100  
119 96.0 75.4 113.2  
121 30.9 24.6 37.0

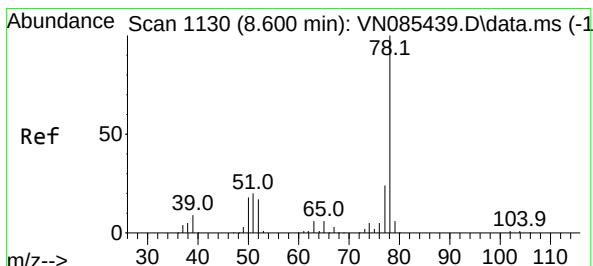
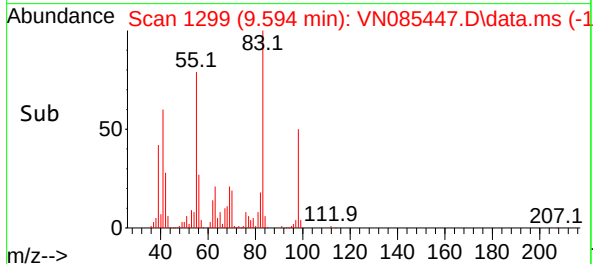
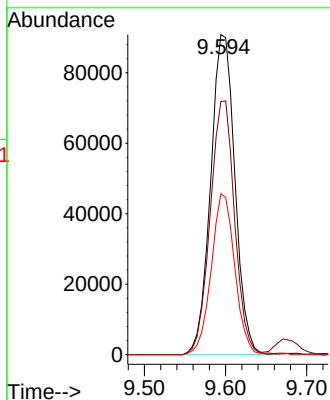
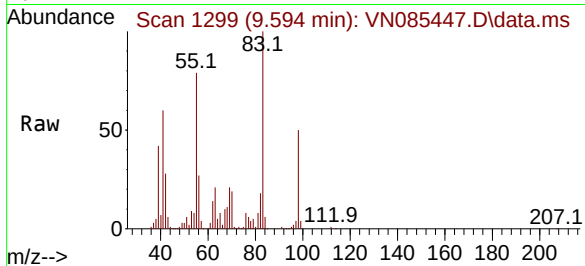




#39  
Methylcyclohexane  
Concen: 57.732 ug/l  
RT: 9.594 min Scan# 1129  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

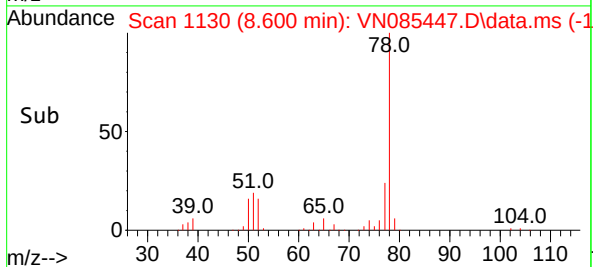
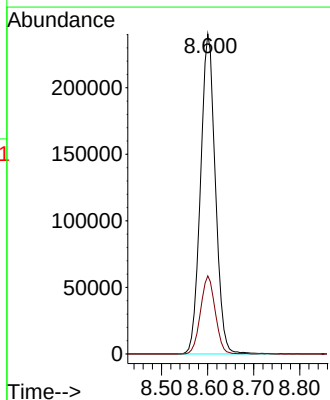
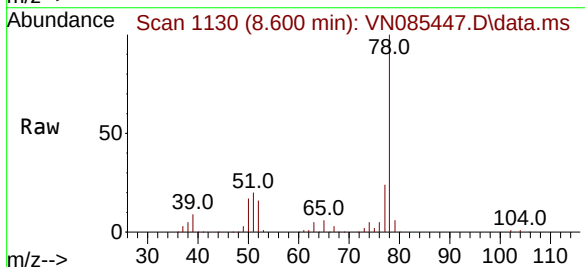
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

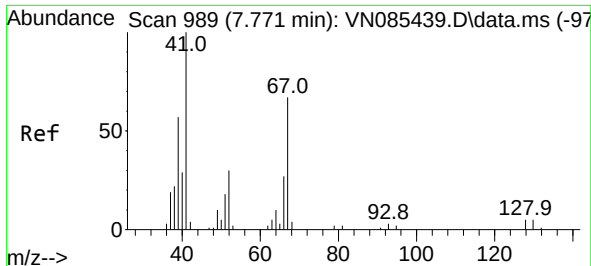
Tgt Ion: 83 Resp: 189425  
Ion Ratio Lower Upper  
83 100  
55 79.1 62.6 94.0  
98 50.3 37.7 56.5



#40  
Benzene  
Concen: 51.417 ug/l  
RT: 8.600 min Scan# 1130  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 78 Resp: 539436  
Ion Ratio Lower Upper  
78 100  
77 24.4 19.0 28.6

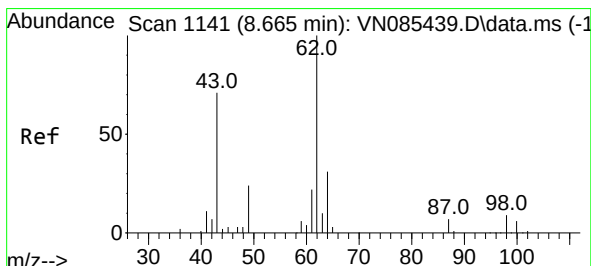
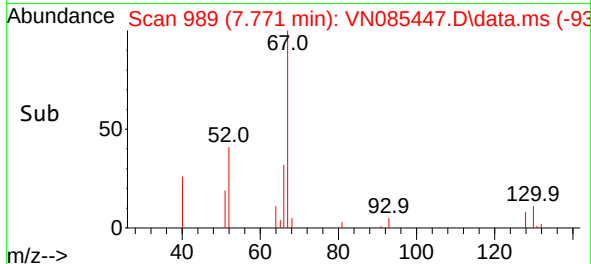
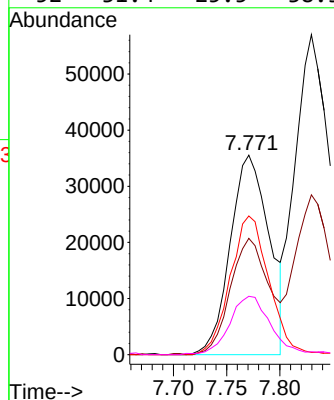
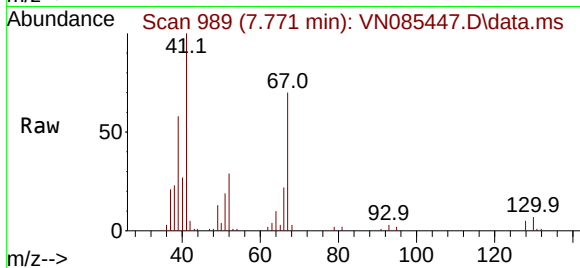




#41  
Methacrylonitrile  
Concen: 49.387 ug/l  
RT: 7.771 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

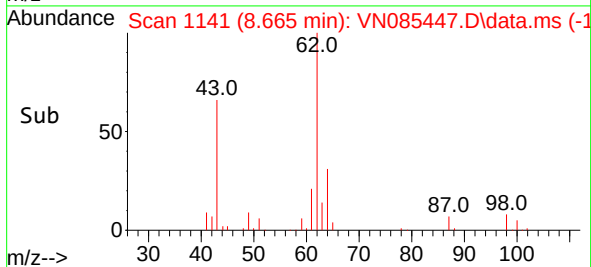
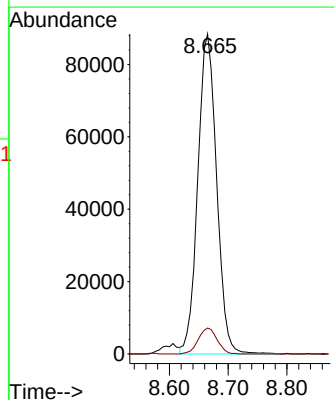
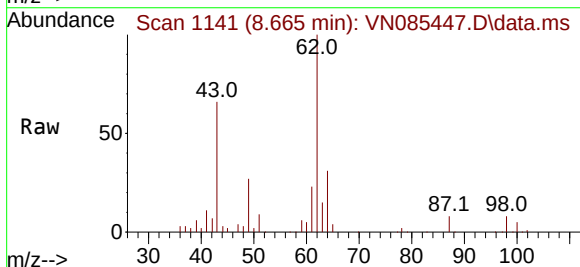
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

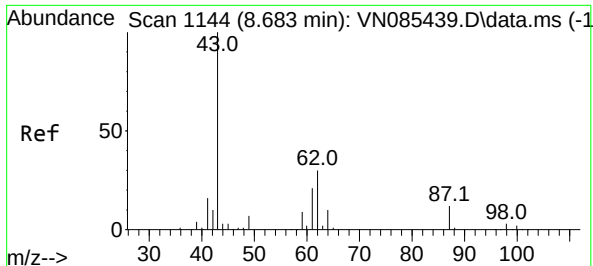
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 90556 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 57.8  | 46.0  | 69.0  |
| 67       | 69.2  | 57.4  | 86.2  |
| 52       | 31.4  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 49.881 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 62    | Resp: | 197097 |
| Ion      | Ratio | Lower | Upper  |
| 62       | 100   |       |        |
| 98       | 8.1   | 0.0   | 17.0   |

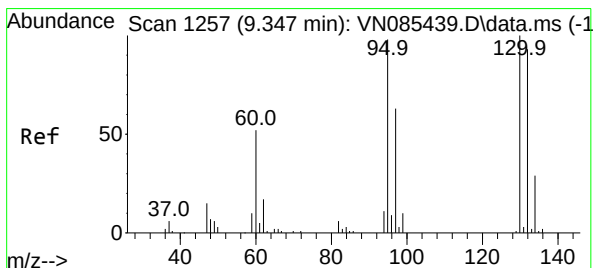
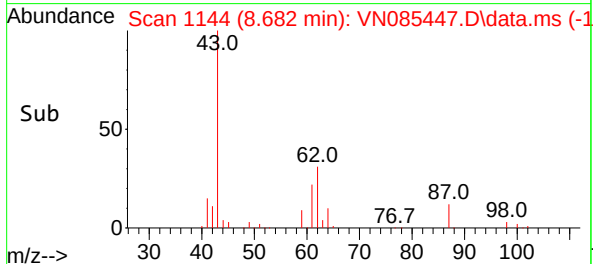
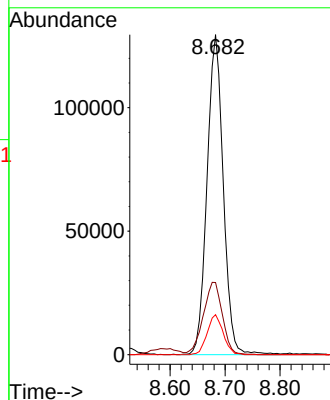
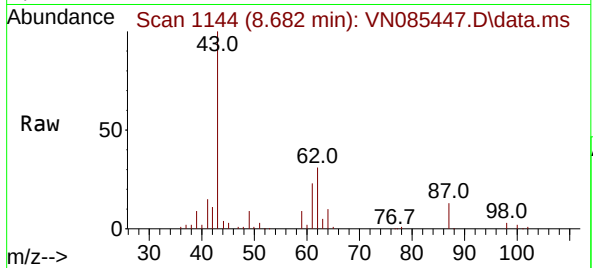




#43  
Isopropyl Acetate  
Concen: 47.153 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

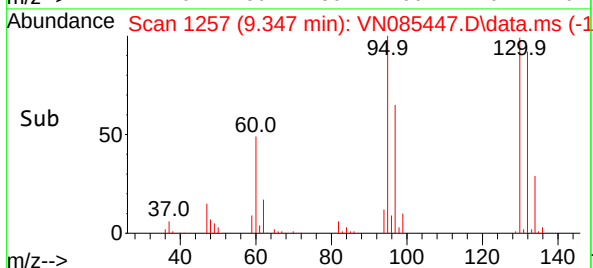
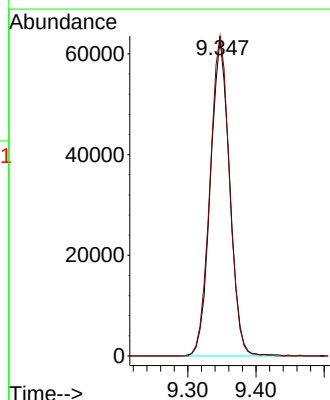
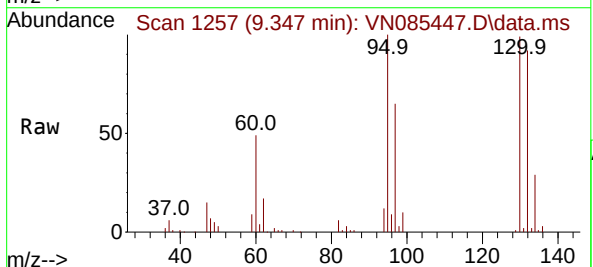
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

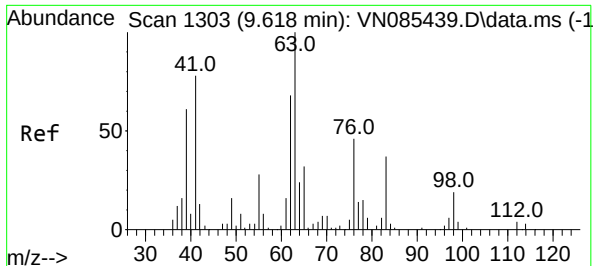
Tgt Ion: 43 Resp: 266284  
Ion Ratio Lower Upper  
43 100  
61 26.6 20.7 31.1  
87 12.3 9.8 14.8



#44  
Trichloroethene  
Concen: 50.700 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:130 Resp: 123817  
Ion Ratio Lower Upper  
130 100  
95 100.6 0.0 195.8

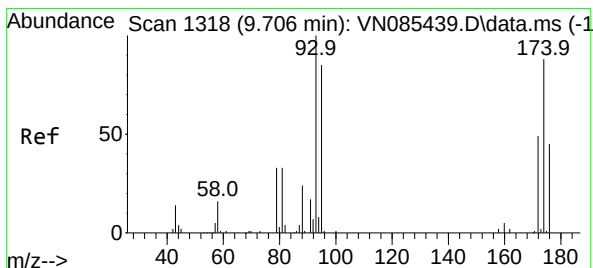
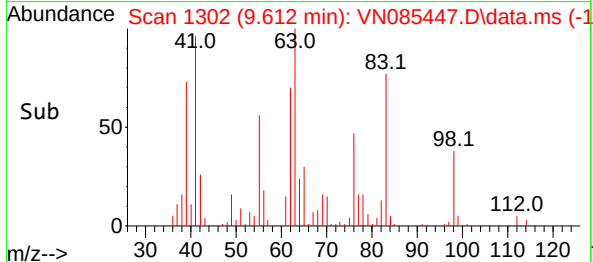
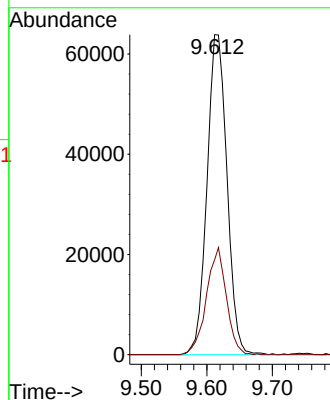
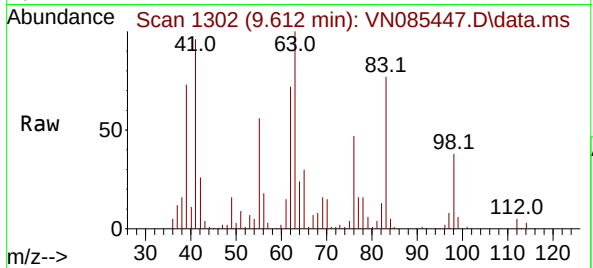




#45  
1,2-Dichloropropane  
Concen: 50.468 ug/l  
RT: 9.612 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

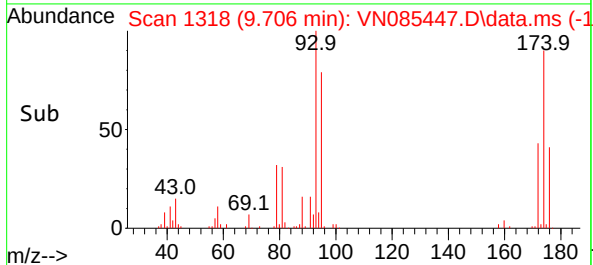
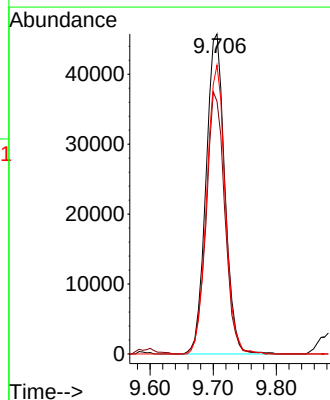
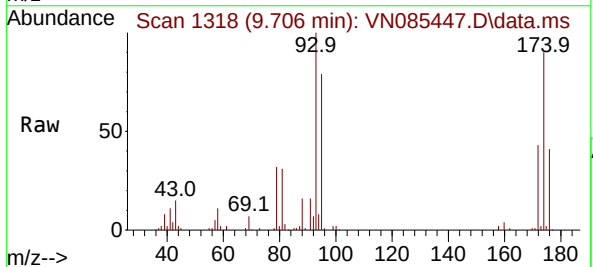
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 63 Resp: 135244  
Ion Ratio Lower Upper  
63 100  
65 29.6 25.6 38.4

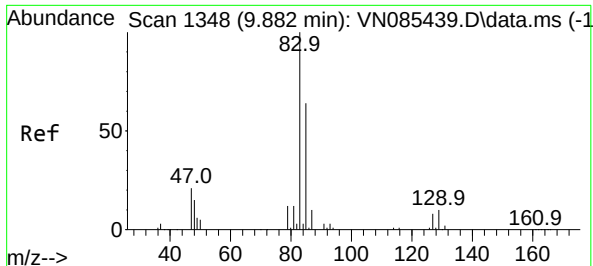


#46  
Dibromomethane  
Concen: 48.873 ug/l  
RT: 9.706 min Scan# 1318  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 93 Resp: 94501  
Ion Ratio Lower Upper  
93 100  
95 81.3 64.7 97.1  
174 88.9 69.0 103.4



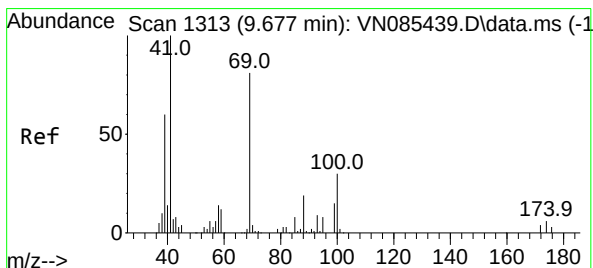
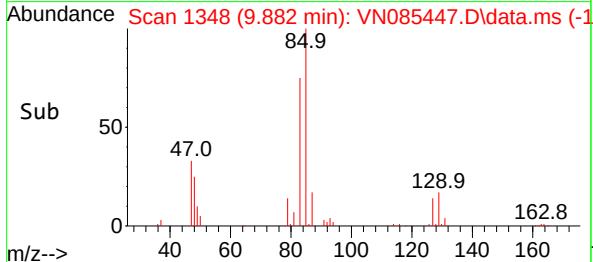
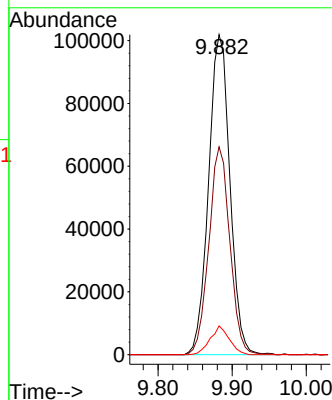
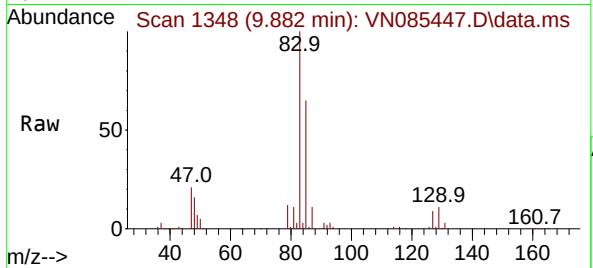




#47  
Bromodichloromethane  
Concen: 51.671 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

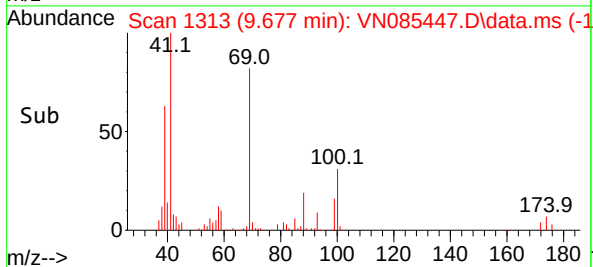
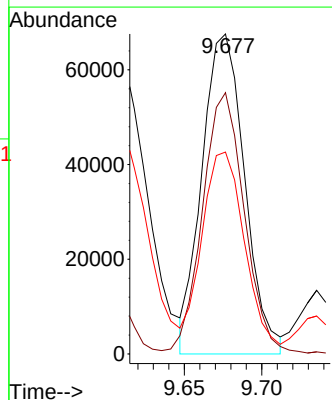
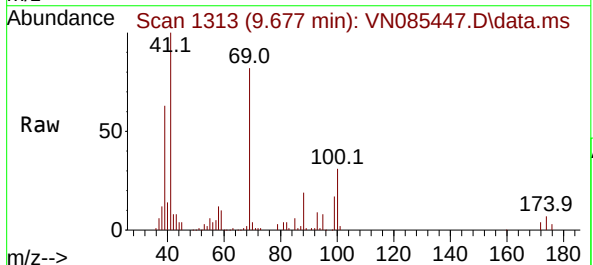
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

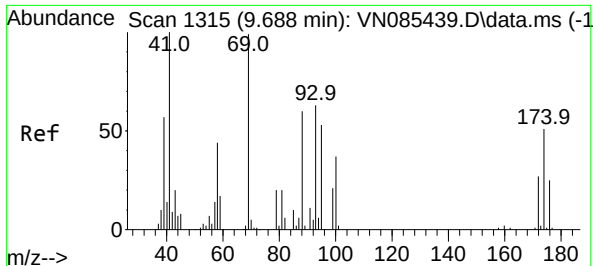
Tgt Ion: 83 Resp: 203552  
Ion Ratio Lower Upper  
83 100  
85 64.9 51.2 76.8  
127 9.0 6.5 9.7



#48  
Methyl methacrylate  
Concen: 50.945 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 41 Resp: 129471  
Ion Ratio Lower Upper  
41 100  
69 80.8 64.7 97.1  
39 63.9 49.0 73.6





#49

1,4-Dioxane

Concen: 873.742 ug/l

RT: 9.688 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

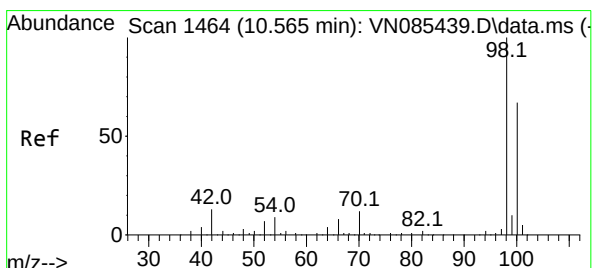
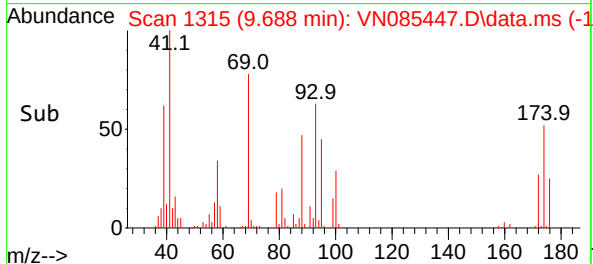
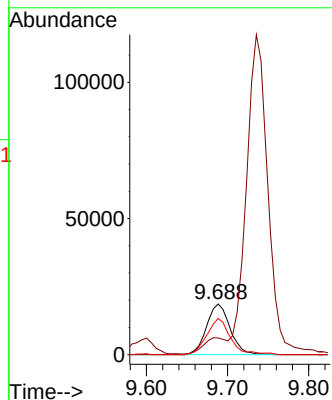
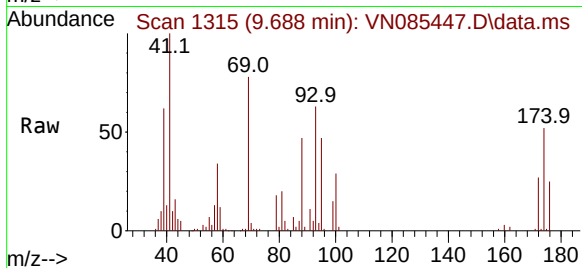
Tgt Ion: 88 Resp: 37393

Ion Ratio Lower Upper

88 100

43 32.7 26.6 39.8

58 72.0 59.5 89.3



#50

Toluene-d8

Concen: 55.032 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085447.D

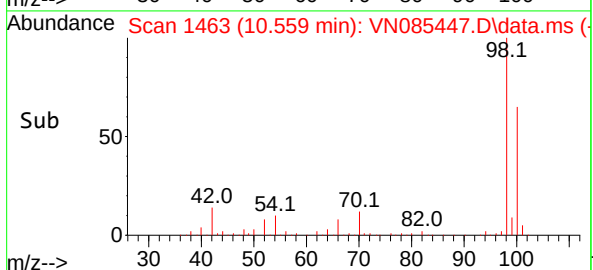
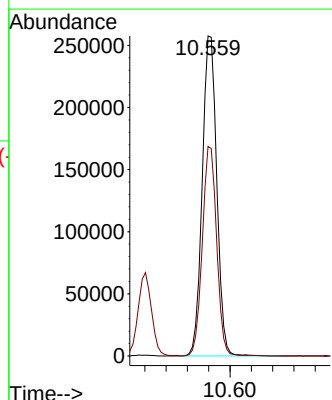
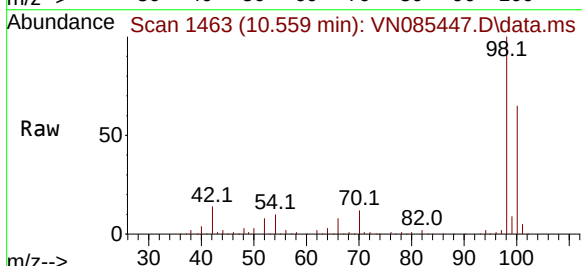
Acq: 15 Jan 2025 09:03

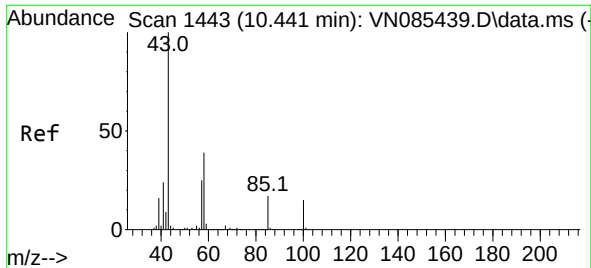
Tgt Ion: 98 Resp: 486444

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4

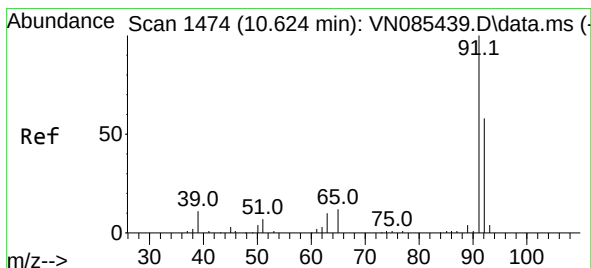
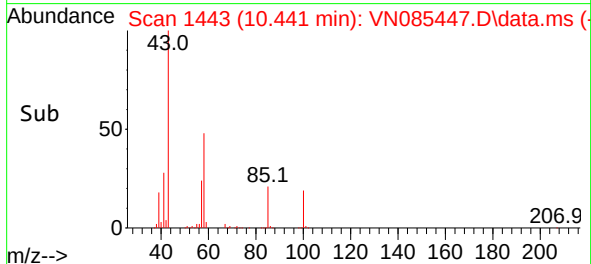
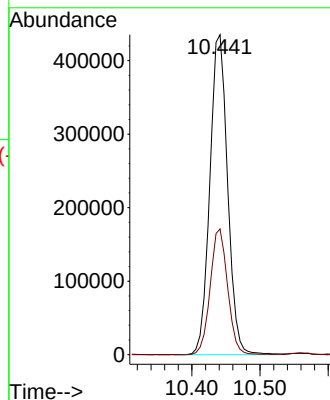
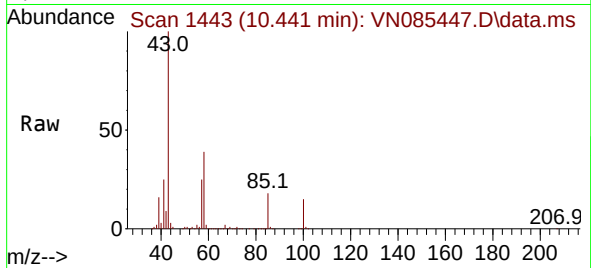




#51  
4-Methyl-2-Pentanone  
Concen: 240.885 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

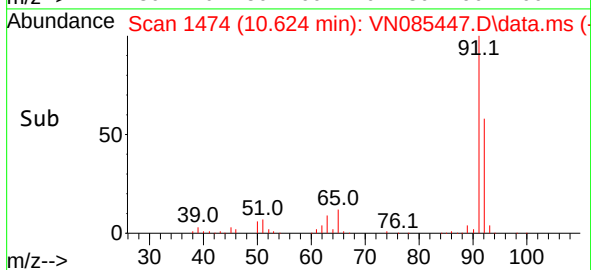
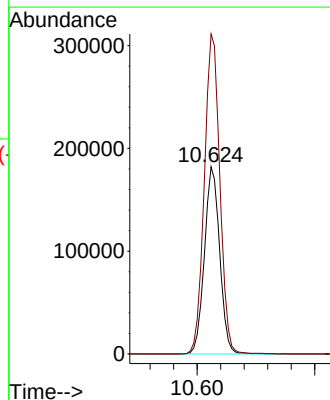
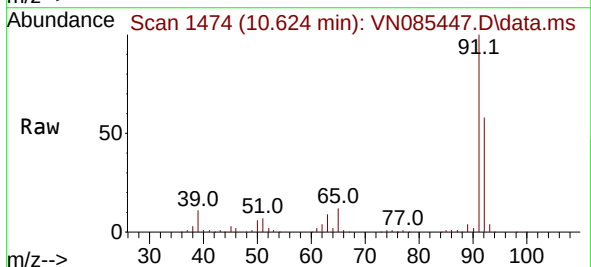
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

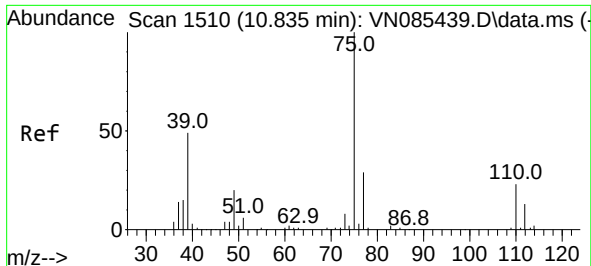
Tgt Ion: 43 Resp: 789380  
Ion Ratio Lower Upper  
43 100  
58 38.6 30.5 45.7



#52  
Toluene  
Concen: 54.029 ug/l  
RT: 10.624 min Scan# 1474  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 92 Resp: 328434  
Ion Ratio Lower Upper  
92 100  
91 174.2 139.2 208.8

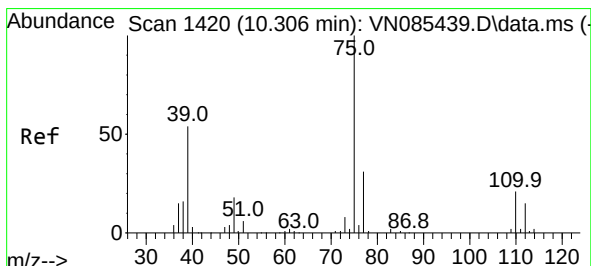
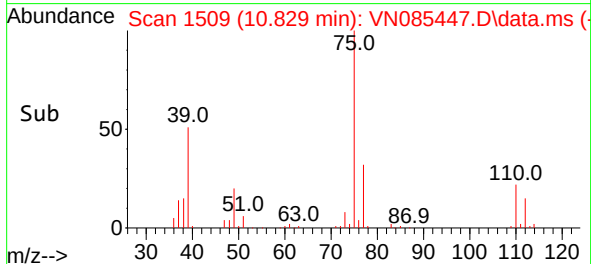
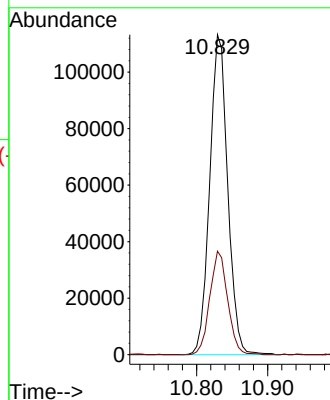
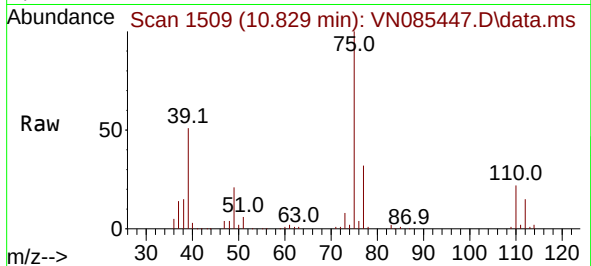




#53  
 t-1,3-Dichloropropene  
 Concen: 53.447 ug/l  
 RT: 10.829 min Scan# 11  
 Delta R.T. -0.006 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

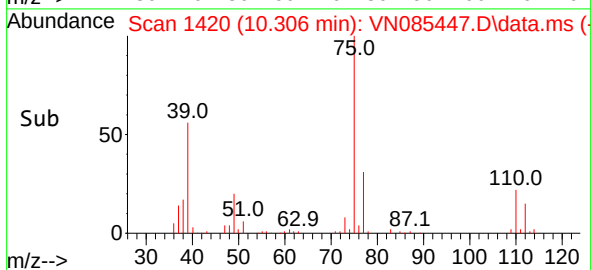
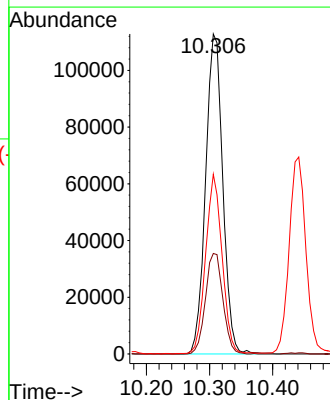
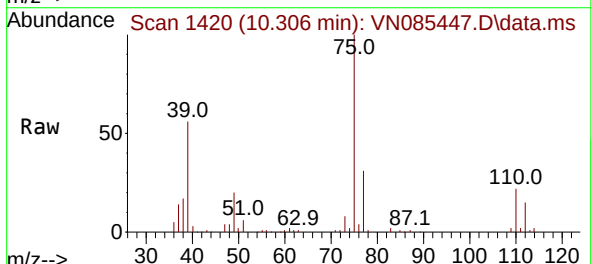
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

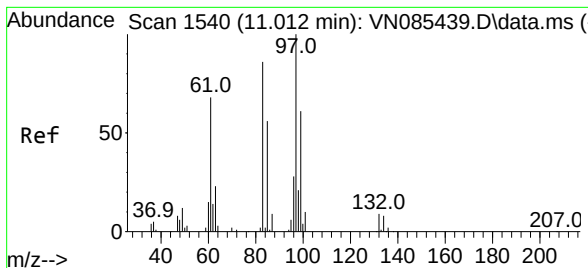
Tgt Ion: 75 Resp: 198974  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 53.582 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 75 Resp: 213072  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 25.0 37.4  
 39 56.0 43.1 64.7



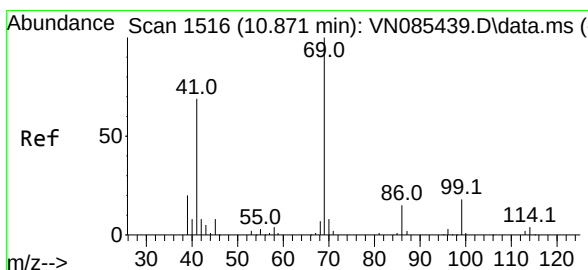
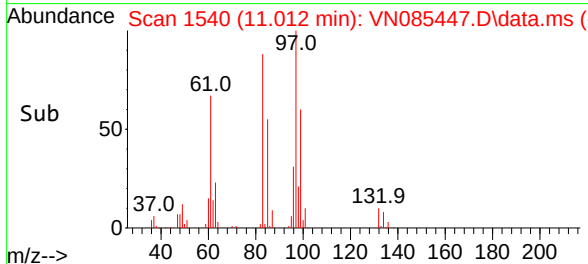
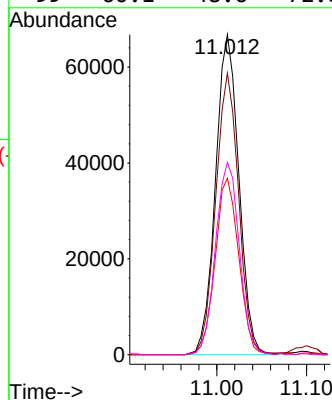
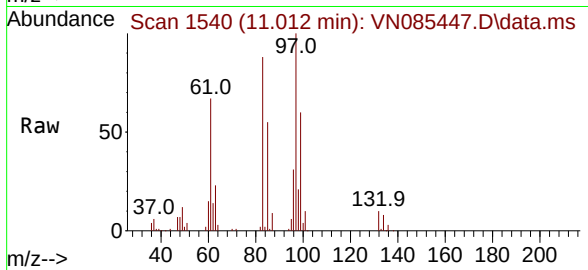


#55  
1,1,2-Trichloroethane  
Concen: 50.215 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion: 97 Resp: 120803

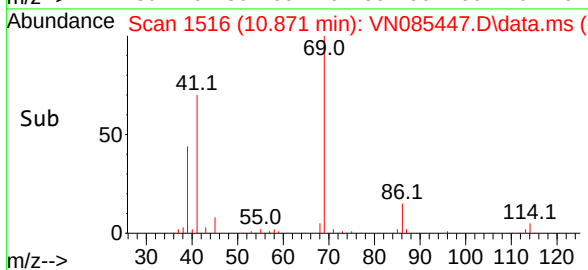
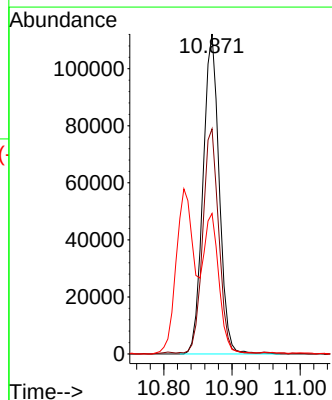
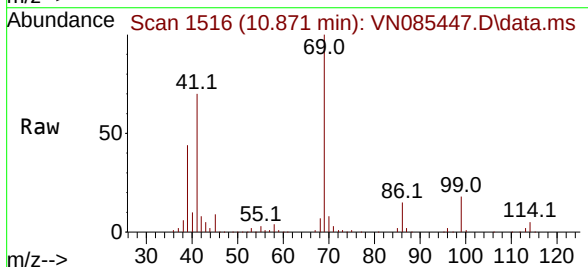
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 88.0  | 69.0  | 103.6 |
| 85  | 55.1  | 44.6  | 66.8  |
| 99  | 60.1  | 48.6  | 72.8  |

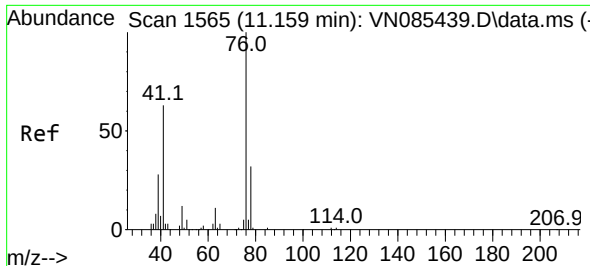


#56  
Ethyl methacrylate  
Concen: 45.714 ug/l  
RT: 10.871 min Scan# 1516  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 69 Resp: 184561

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 68.8  | 54.6  | 82.0  |
| 39  | 39.6  | 32.4  | 48.6  |

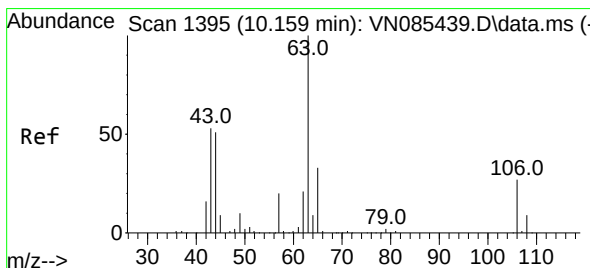
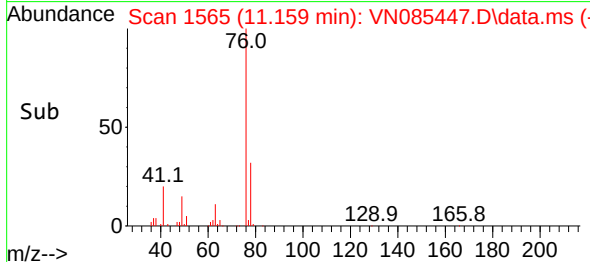
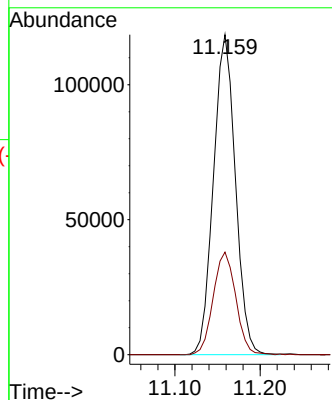
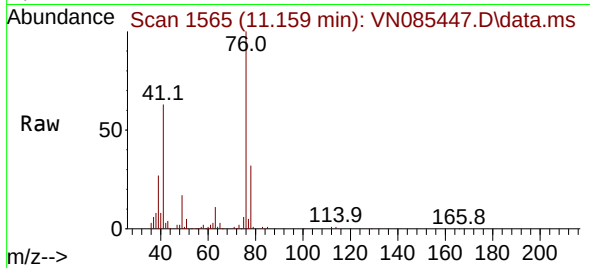




#57  
1,3-Dichloropropane  
Concen: 50.662 ug/l  
RT: 11.159 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

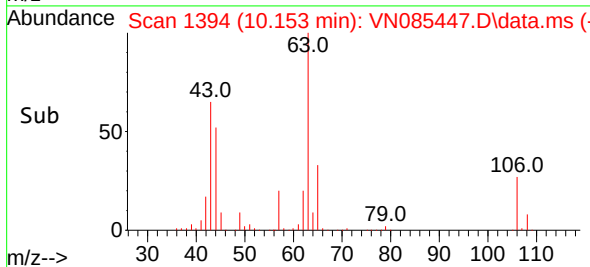
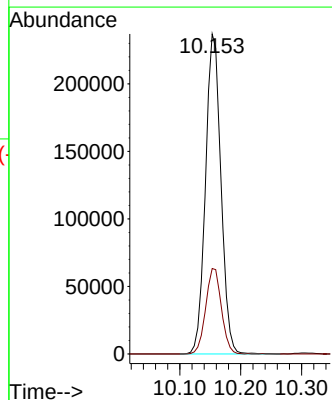
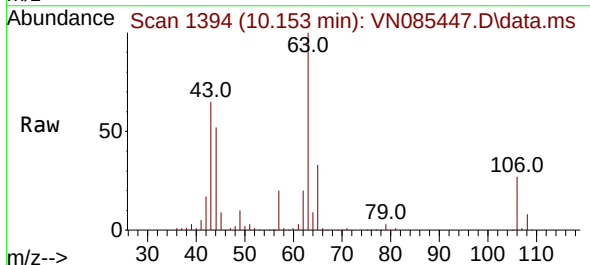
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

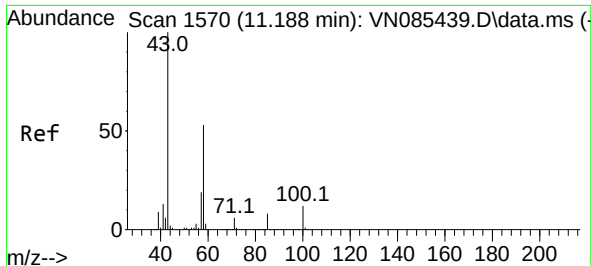
Tgt Ion: 76 Resp: 211921  
Ion Ratio Lower Upper  
76 100  
78 32.9 25.6 38.4



#58  
2-Chloroethyl Vinyl ether  
Concen: 272.966 ug/l  
RT: 10.153 min Scan# 1394  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 63 Resp: 416723  
Ion Ratio Lower Upper  
63 100  
106 27.1 21.6 32.4

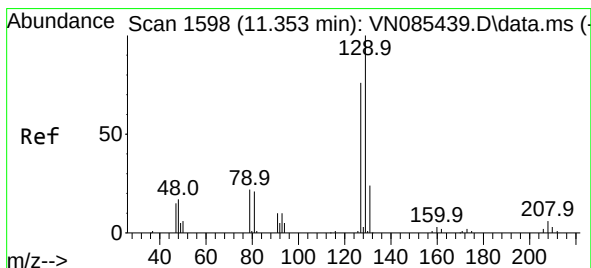
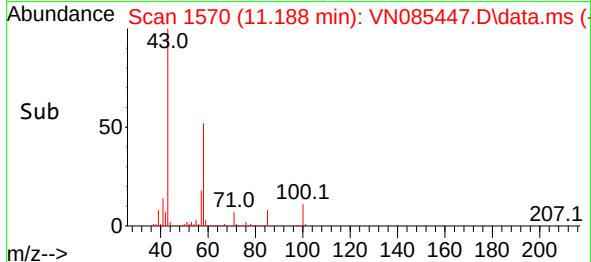
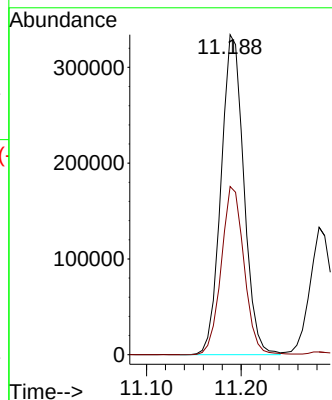
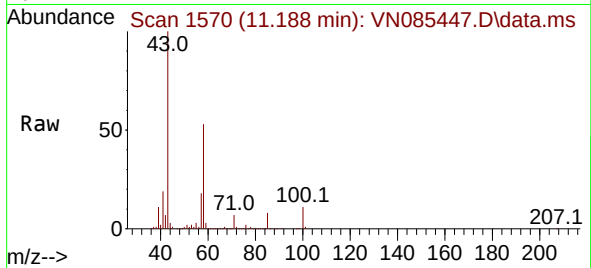




#59  
2-Hexanone  
Concen: 242.307 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

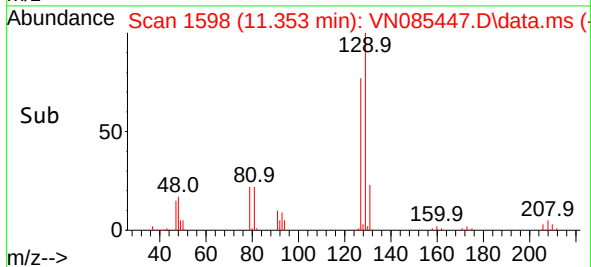
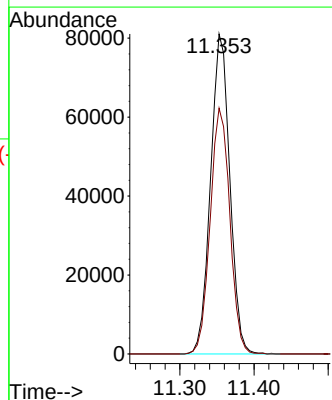
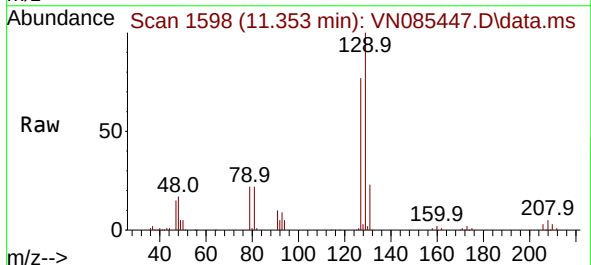
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

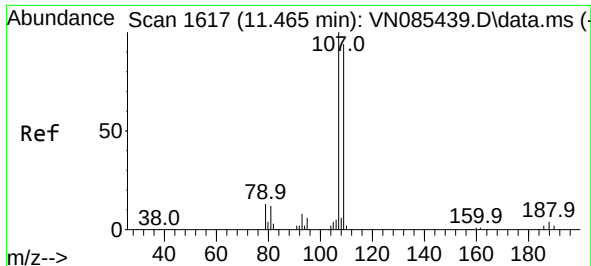
Tgt Ion: 43 Resp: 558711  
Ion Ratio Lower Upper  
43 100  
58 52.6 26.2 78.6



#60  
Dibromochloromethane  
Concen: 50.392 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 129 Resp: 146358  
Ion Ratio Lower Upper  
129 100  
127 78.3 38.6 115.8

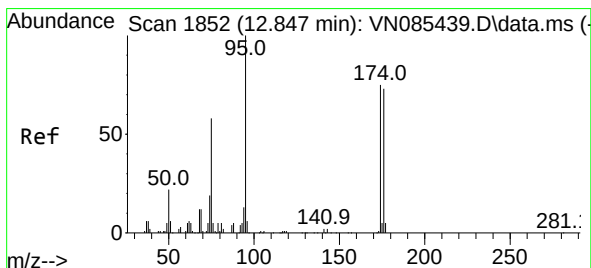
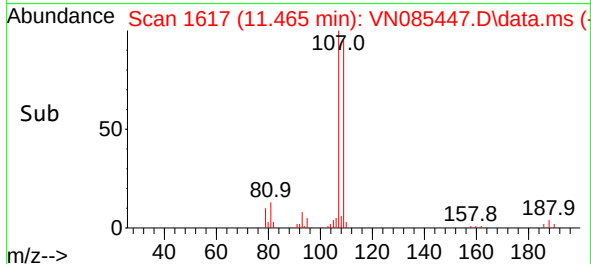
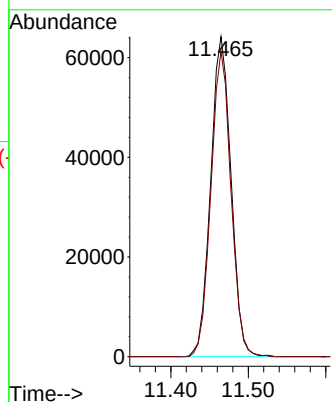
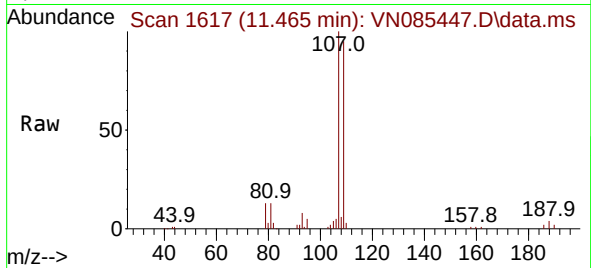




#61  
1,2-Dibromoethane  
Concen: 49.039 ug/l  
RT: 11.465 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

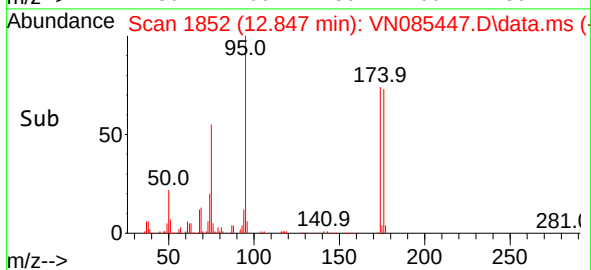
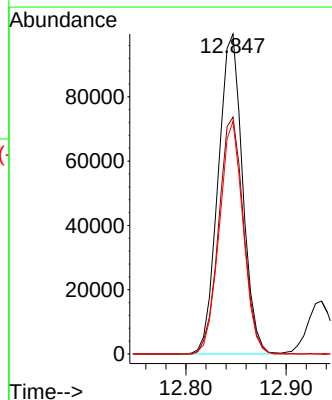
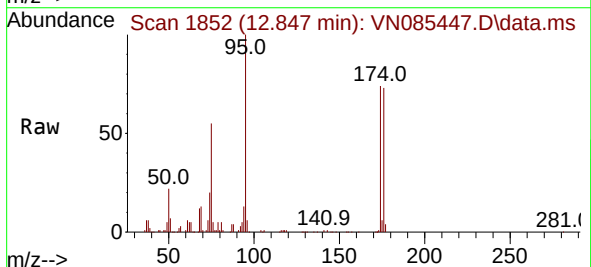
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:107 Resp: 117431  
Ion Ratio Lower Upper  
107 100  
109 93.8 75.9 113.9

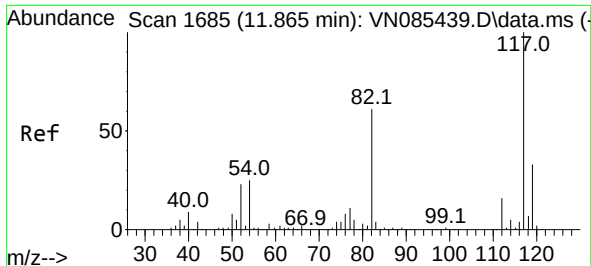


#62  
4-Bromofluorobenzene  
Concen: 55.673 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 95 Resp: 168340  
Ion Ratio Lower Upper  
95 100  
174 75.1 0.0 145.0  
176 70.8 0.0 142.4



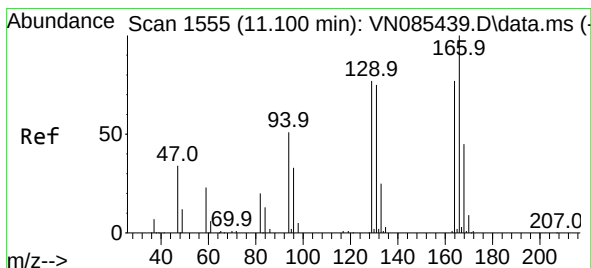
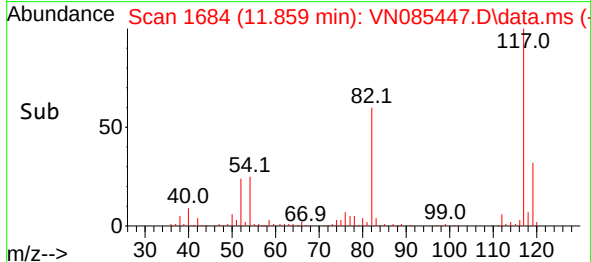
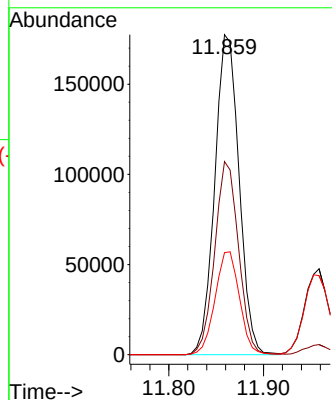
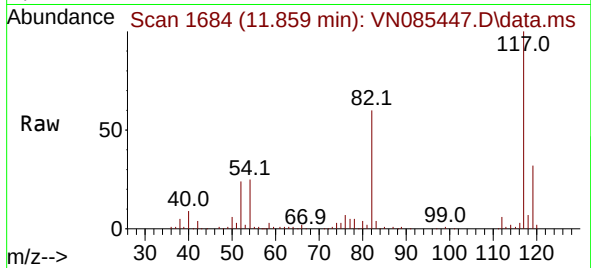




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.859 min Scan# 117  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

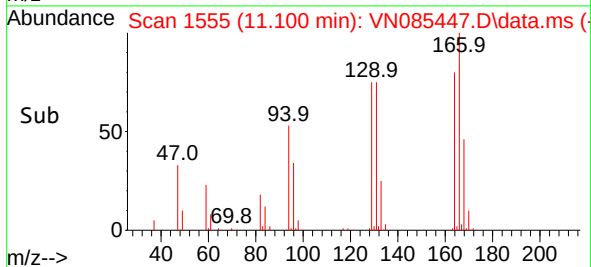
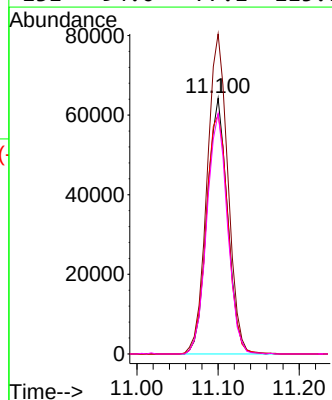
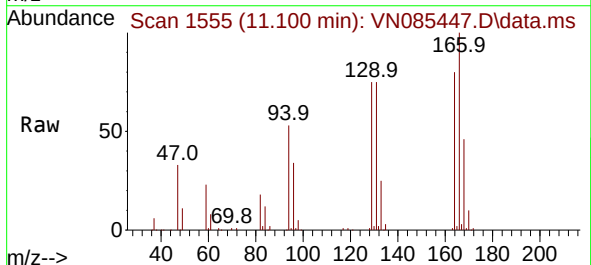
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

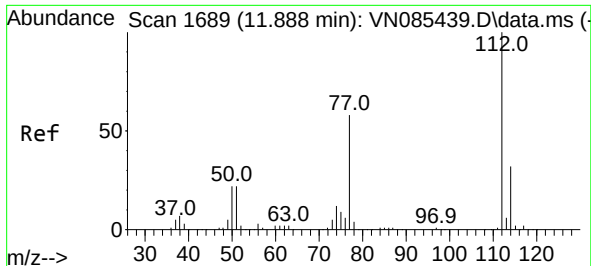
Tgt Ion:117 Resp: 316952  
Ion Ratio Lower Upper  
117 100  
82 60.4 48.6 72.8  
119 31.9 26.6 39.8



#64  
Tetrachloroethene  
Concen: 52.107 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:164 Resp: 112592  
Ion Ratio Lower Upper  
164 100  
166 125.2 103.4 155.2  
129 93.6 79.2 118.8  
131 94.0 77.1 115.7

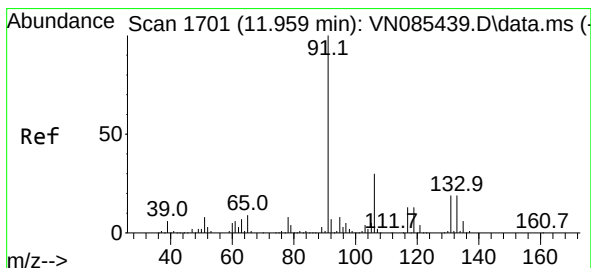
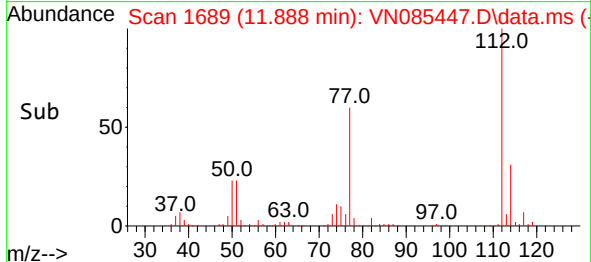
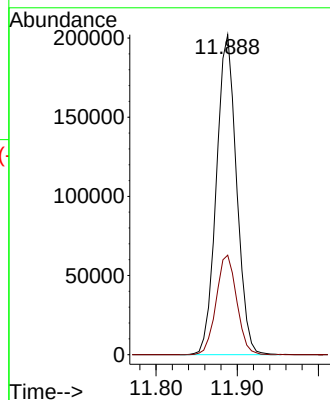
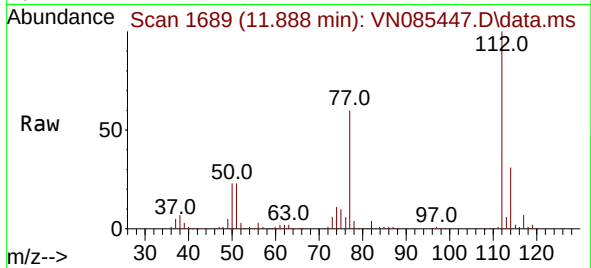




#65  
Chlorobenzene  
Concen: 50.257 ug/l  
RT: 11.888 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

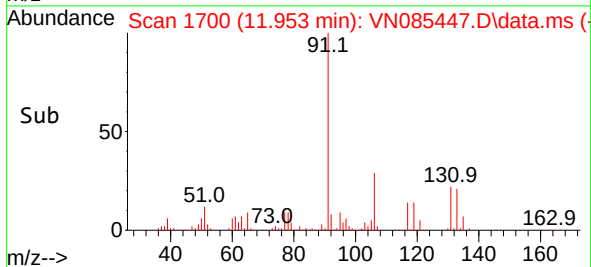
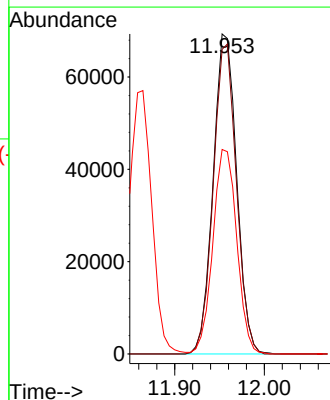
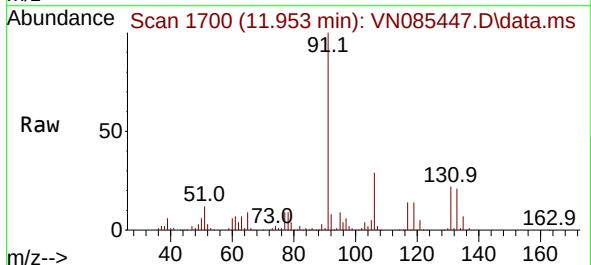
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

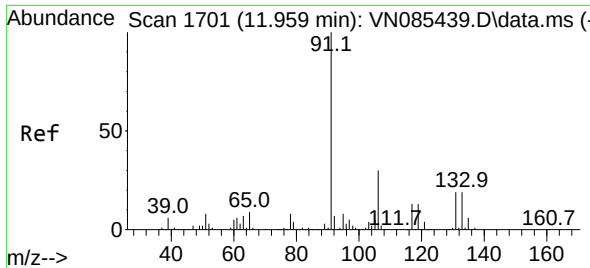
Tgt Ion:112 Resp: 348954  
Ion Ratio Lower Upper  
112 100  
114 31.1 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 49.494 ug/l  
RT: 11.953 min Scan# 1700  
Delta R.T. -0.006 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:131 Resp: 126127  
Ion Ratio Lower Upper  
131 100  
133 95.6 47.4 142.3  
119 65.1 33.1 99.5

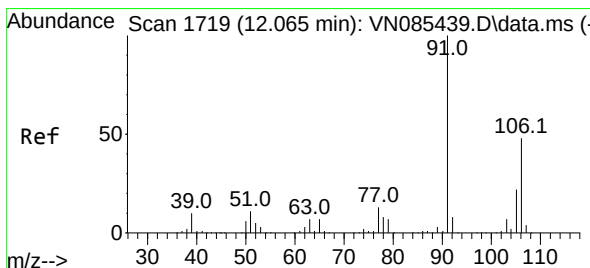
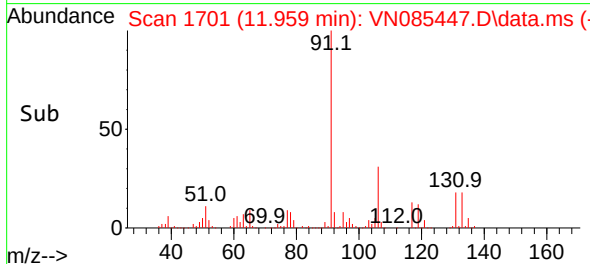
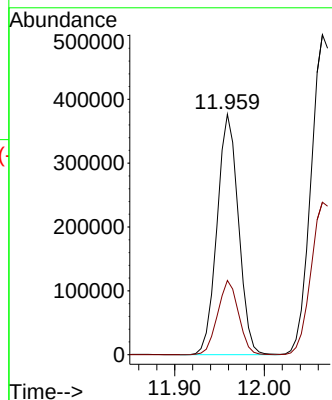
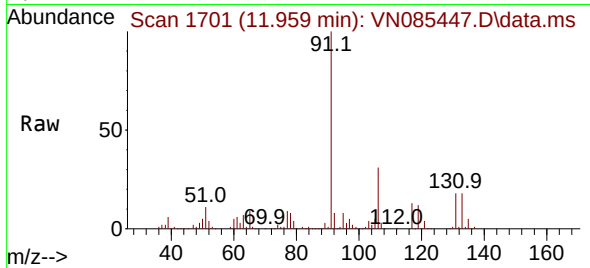




#67  
Ethyl Benzene  
Concen: 55.122 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

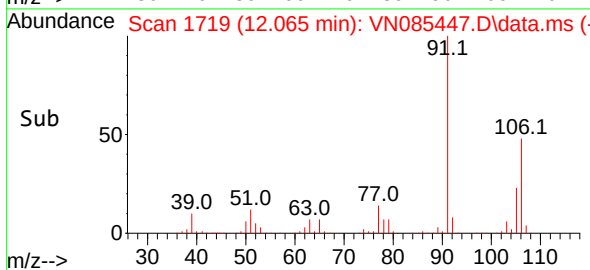
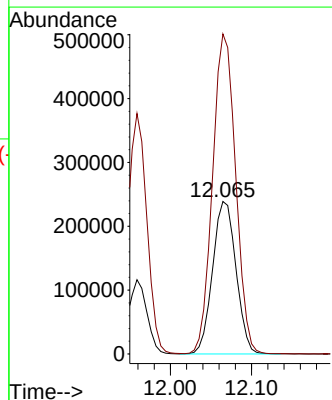
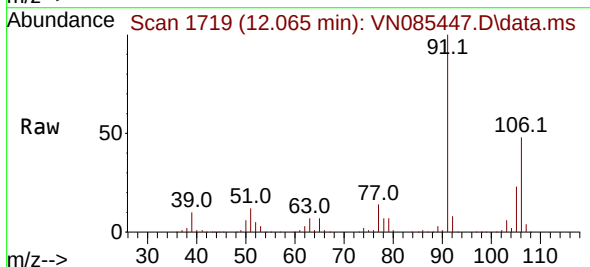
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

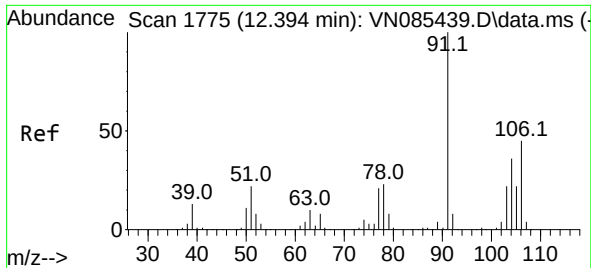
Tgt Ion: 91 Resp: 623373  
Ion Ratio Lower Upper  
91 100  
106 30.9 23.8 35.8



#68  
m/p-Xylenes  
Concen: 114.570 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:106 Resp: 478857  
Ion Ratio Lower Upper  
106 100  
91 207.2 167.7 251.5

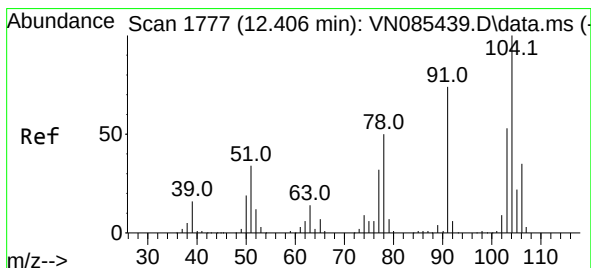
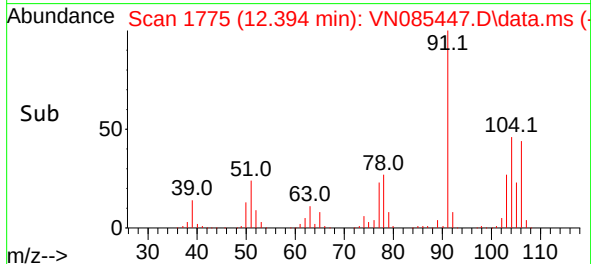
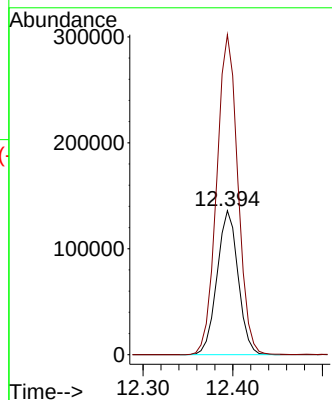
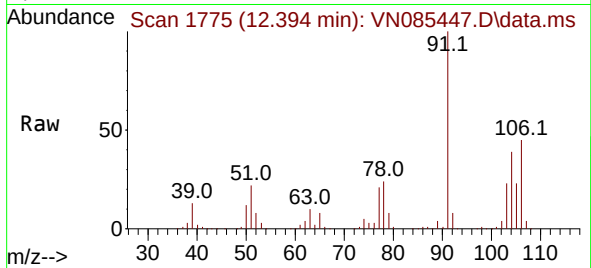




#69  
o-Xylene  
Concen: 55.481 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

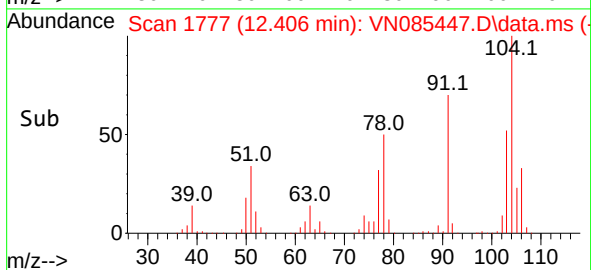
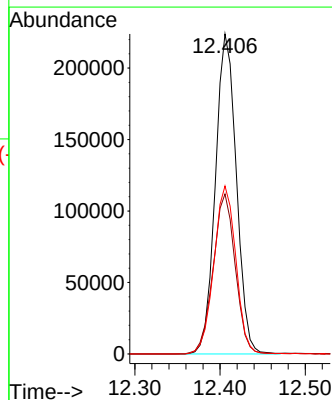
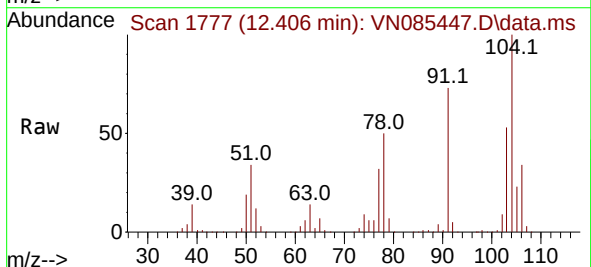
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

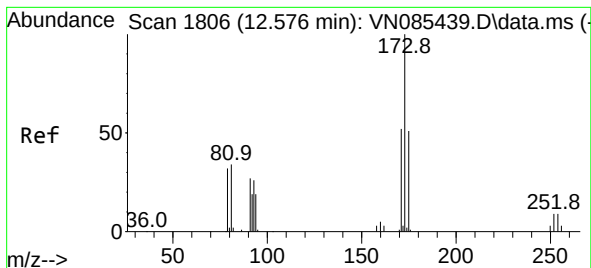
Tgt Ion:106 Resp: 221609  
Ion Ratio Lower Upper  
106 100  
91 223.4 110.4 331.2



#70  
Styrene  
Concen: 57.933 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:104 Resp: 382963  
Ion Ratio Lower Upper  
104 100  
78 52.8 42.5 63.7  
103 55.0 43.8 65.8





#71

Bromoform

Concen: 52.493 ug/l

RT: 12.570 min Scan# 1805

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

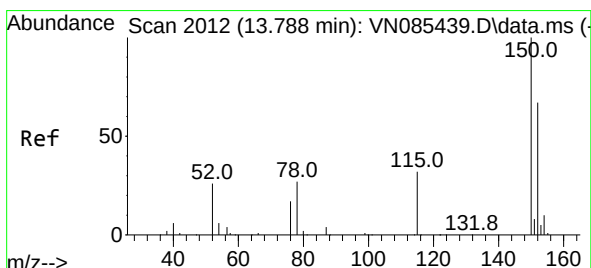
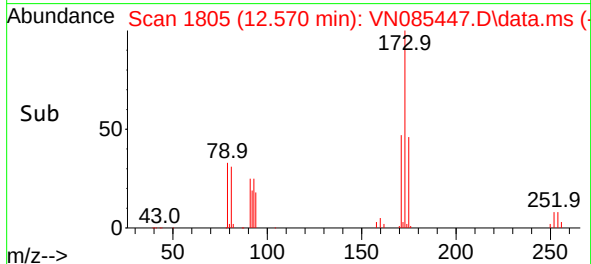
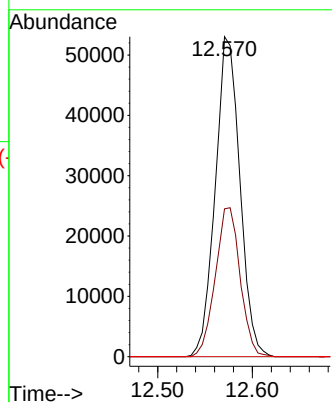
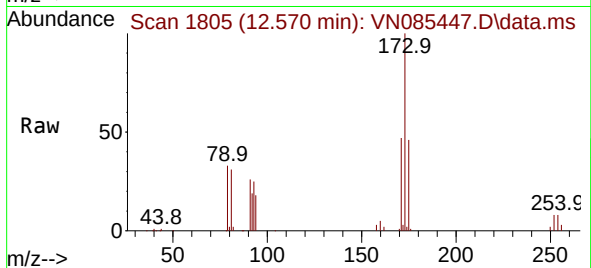
Tgt Ion:173 Resp: 95715

Ion Ratio Lower Upper

173 100

175 47.0 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: VN085447.D

Acq: 15 Jan 2025 09:03

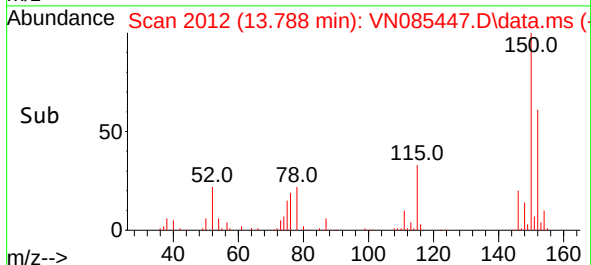
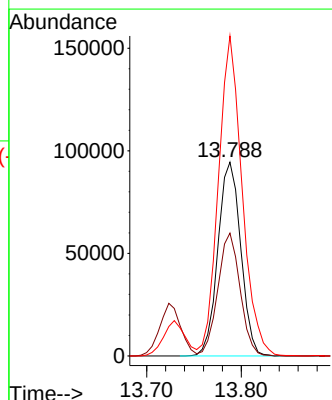
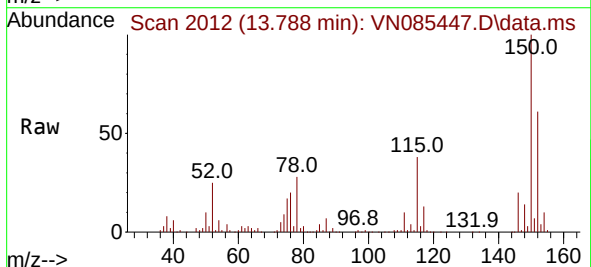
Tgt Ion:152 Resp: 158347

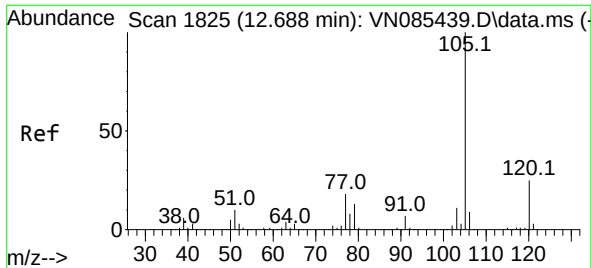
Ion Ratio Lower Upper

152 100

115 61.8 31.1 93.3

150 171.2 0.0 343.6

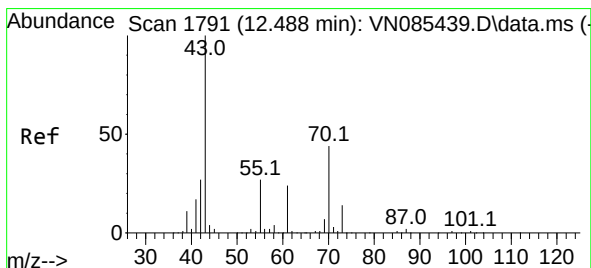
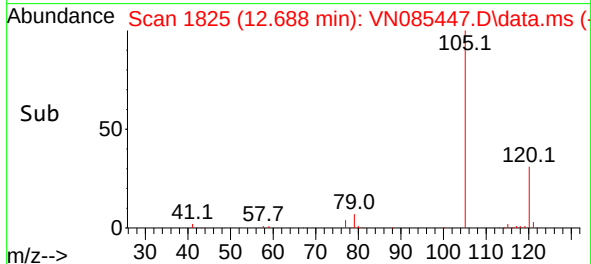
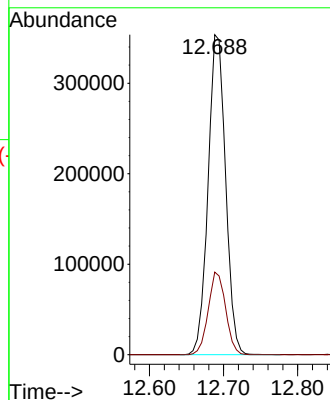
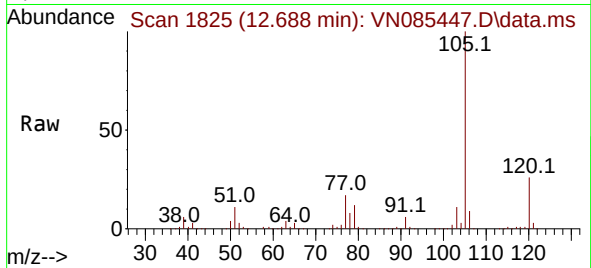




#73  
Isopropylbenzene  
Concen: 54.261 ug/l  
RT: 12.688 min Scan# 1825  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

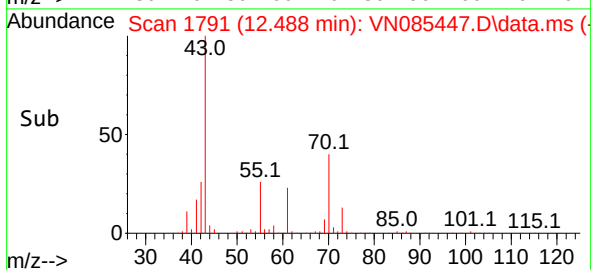
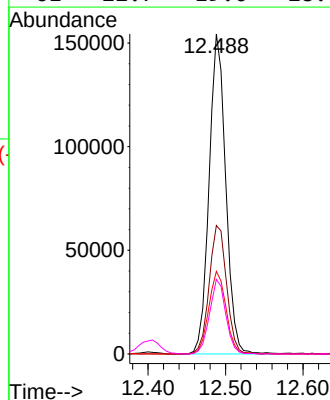
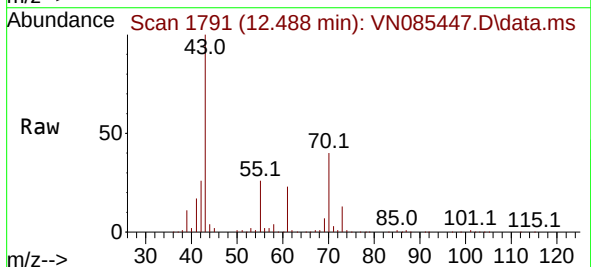
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

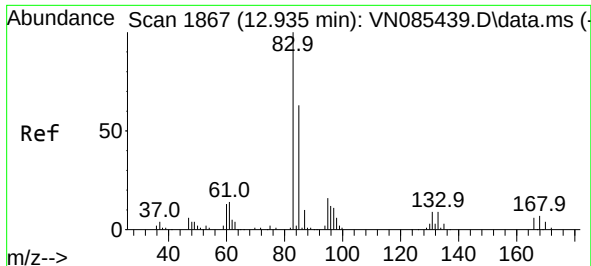
Tgt Ion:105 Resp: 579887  
Ion Ratio Lower Upper  
105 100  
120 25.6 12.8 38.3



#74  
N-ethyl acetate  
Concen: 47.841 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 43 Resp: 229808  
Ion Ratio Lower Upper  
43 100  
70 42.0 34.0 51.0  
55 26.8 21.4 32.2  
61 22.7 19.0 28.4

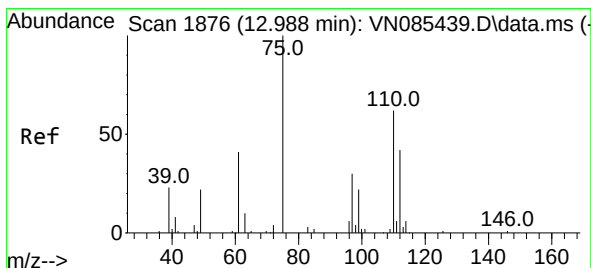
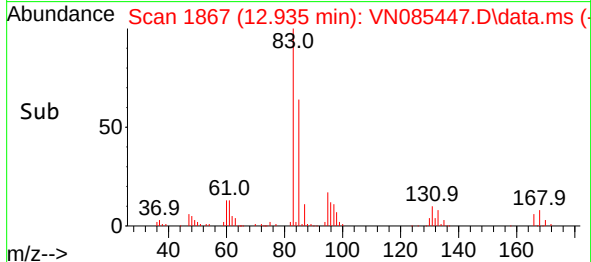
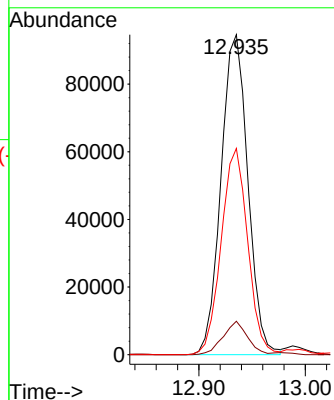
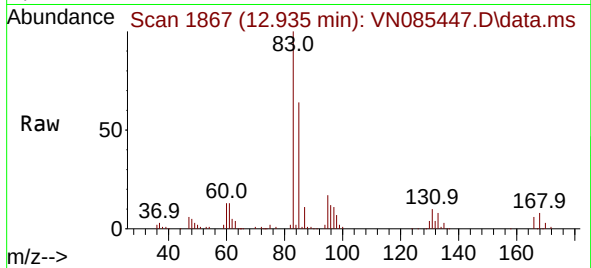




#75  
1,1,2-Tetrachloroethane  
Concen: 43.898 ug/l  
RT: 12.935 min Scan# 1867  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

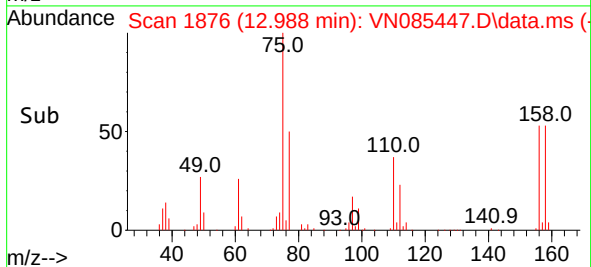
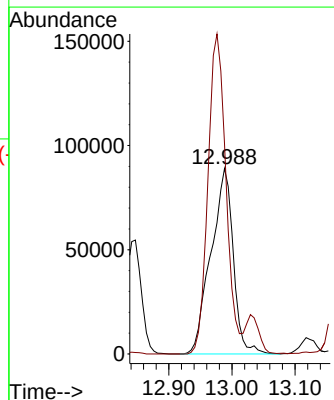
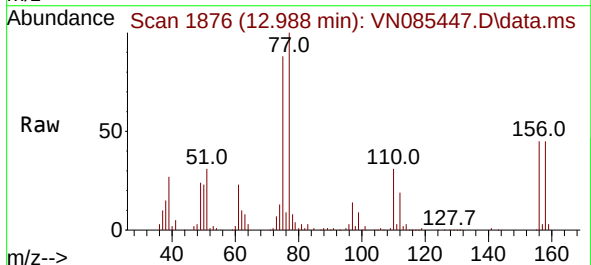
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

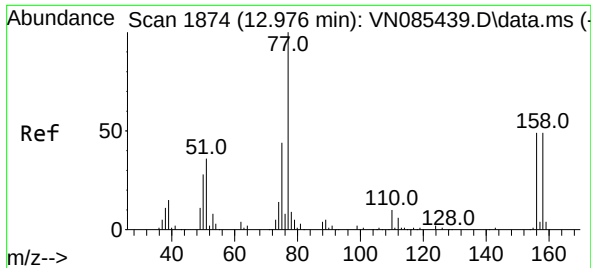
Tgt Ion: 83 Resp: 165720  
Ion Ratio Lower Upper  
83 100  
131 9.6 4.8 14.4  
85 63.6 32.2 96.6



#76  
1,2,3-Trichloropropane  
Concen: 67.902 ug/l  
RT: 12.988 min Scan# 1876  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 75 Resp: 218540  
Ion Ratio Lower Upper  
75 100  
77 138.4 109.7 329.2

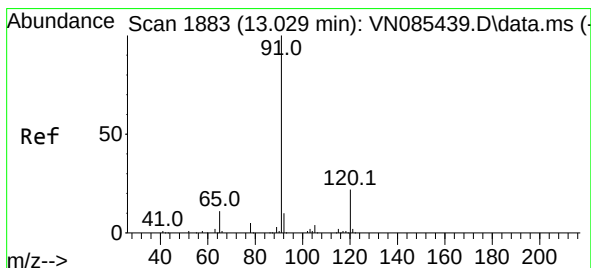
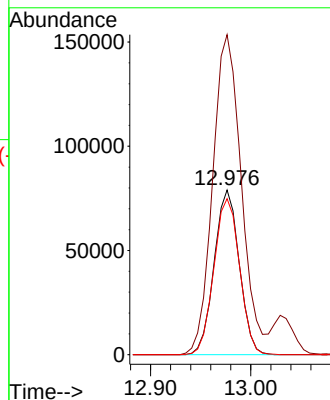
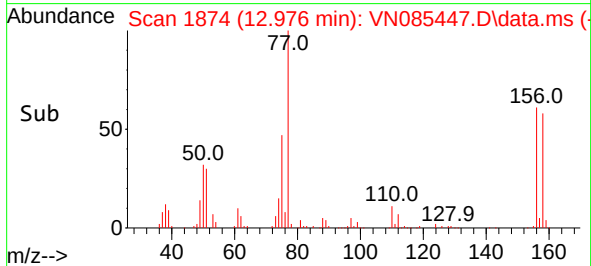
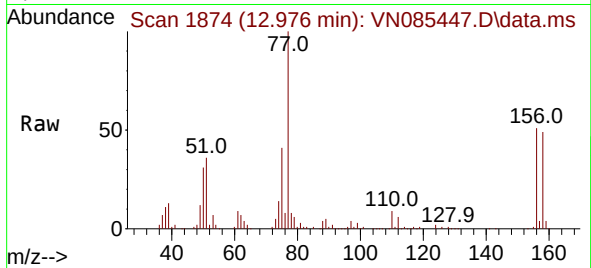




#77  
Bromobenzene  
Concen: 49.115 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

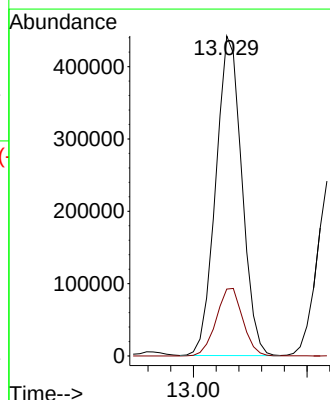
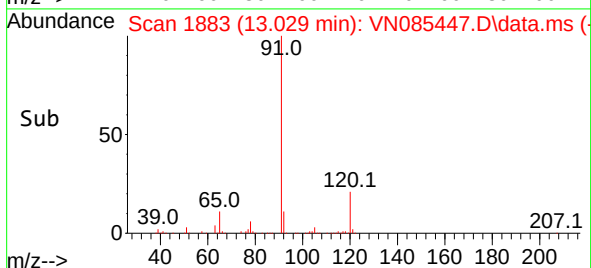
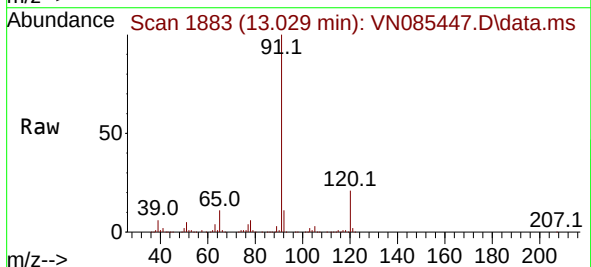
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Tgt Ion:156 Resp: 137136  
Ion Ratio Lower Upper  
156 100  
77 220.6 114.1 342.4  
158 97.1 48.9 146.8

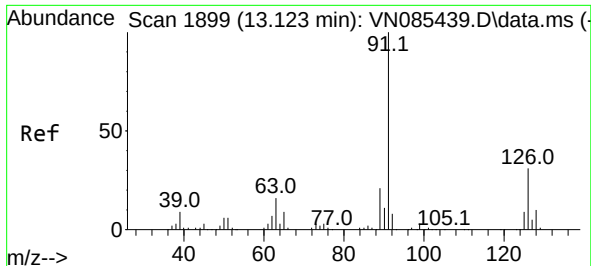


#78  
n-propylbenzene  
Concen: 55.640 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion: 91 Resp: 703936  
Ion Ratio Lower Upper  
91 100  
120 21.5 10.9 32.6



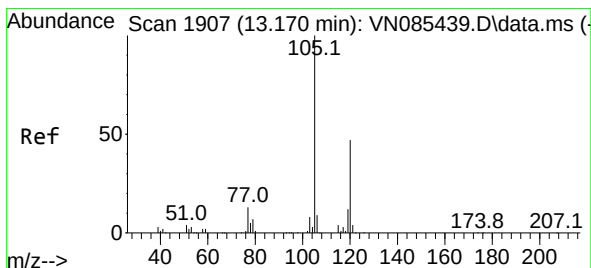
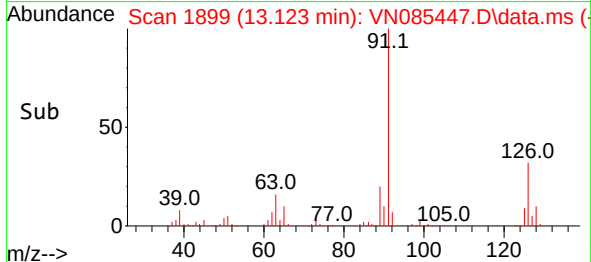
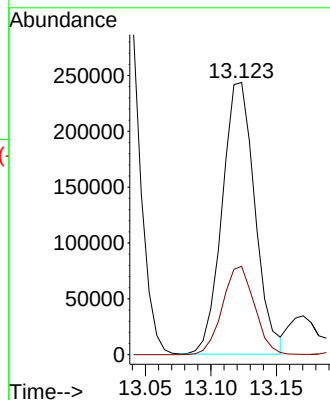
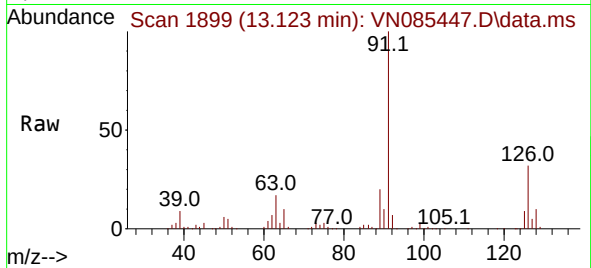




#79  
2-Chlorotoluene  
Concen: 51.665 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

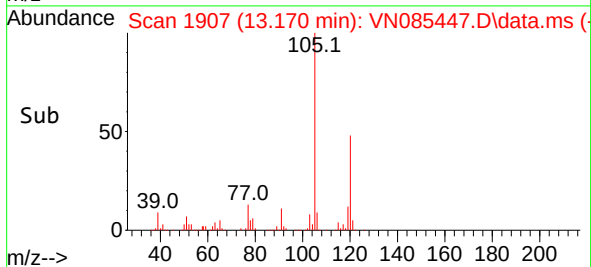
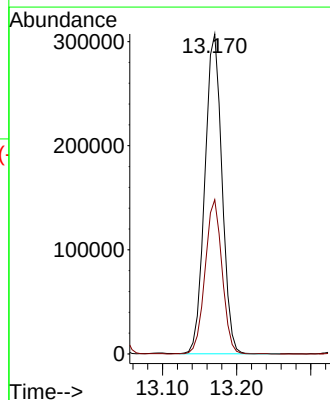
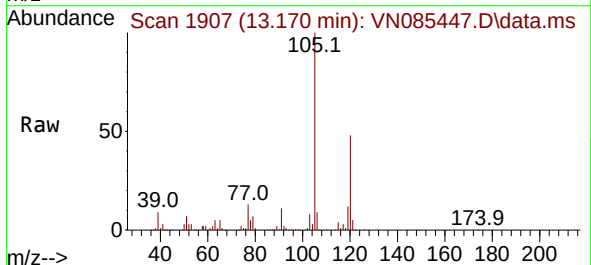
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

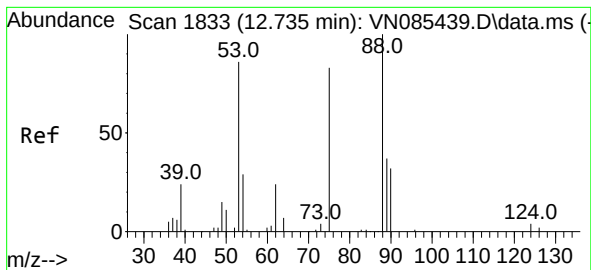
Tgt Ion: 91 Resp: 423036  
Ion Ratio Lower Upper  
91 100  
126 31.9 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 55.763 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:105 Resp: 492256  
Ion Ratio Lower Upper  
105 100  
120 47.9 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 48.853 ug/l

RT: 12.729 min Scan# 1832

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

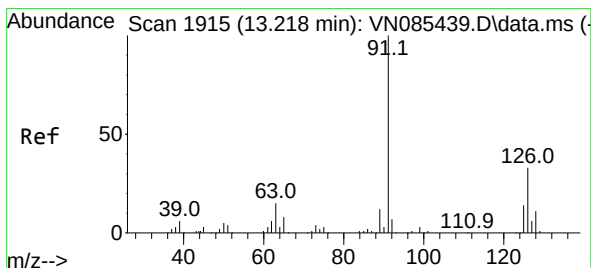
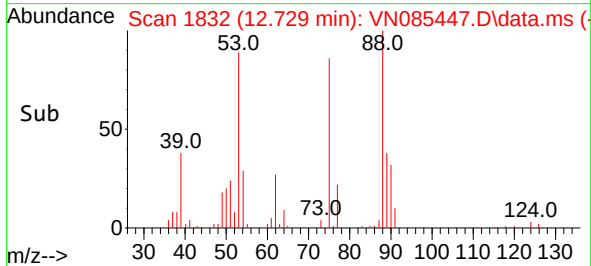
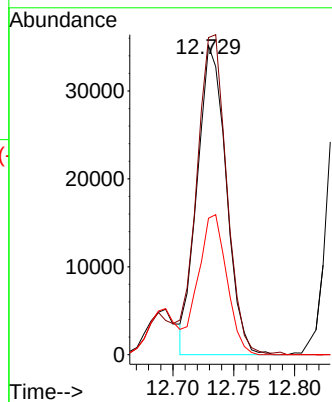
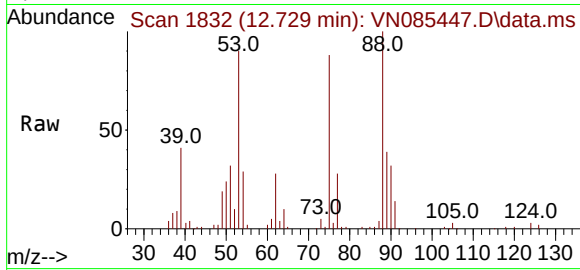
Tgt Ion: 75 Resp: 58114

Ion Ratio Lower Upper

75 100

53 108.1 95.6 143.4

89 45.1 37.0 55.6



#82

4-Chlorotoluene

Concen: 52.164 ug/l

RT: 13.217 min Scan# 1915

Delta R.T. -0.000 min

Lab File: VN085447.D

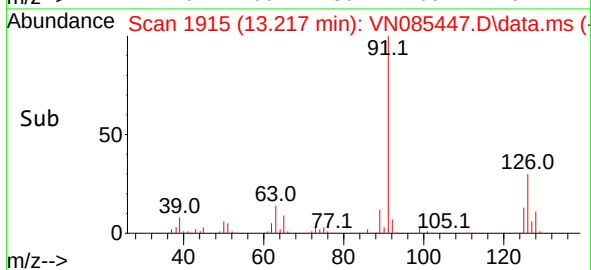
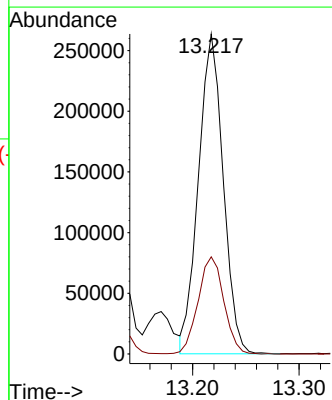
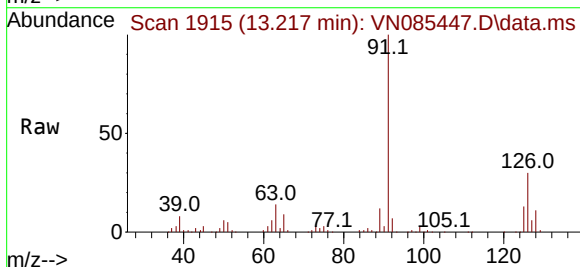
Acq: 15 Jan 2025 09:03

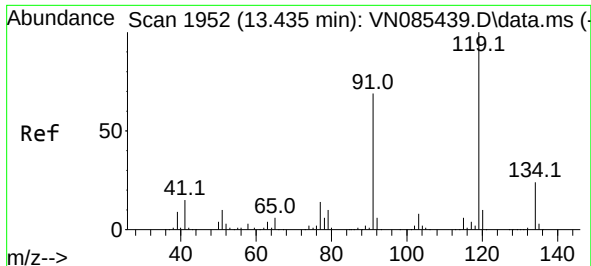
Tgt Ion: 91 Resp: 425288

Ion Ratio Lower Upper

91 100

126 31.6 15.9 47.7

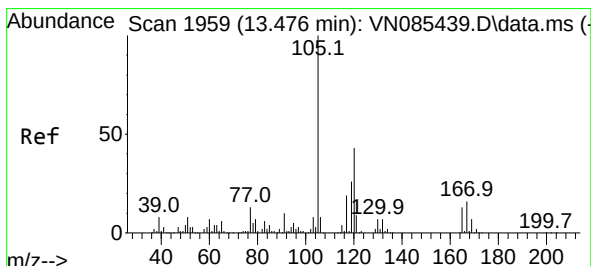
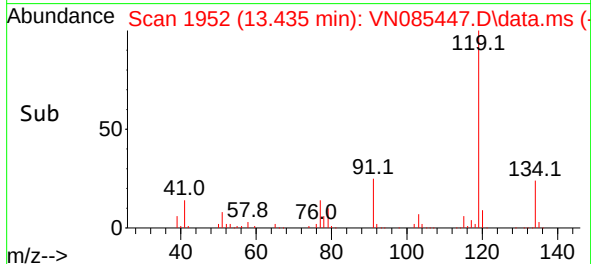
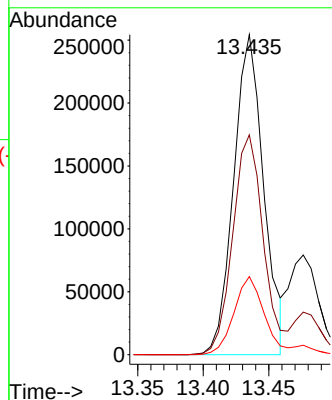
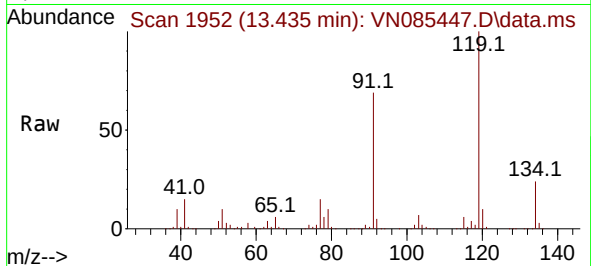




#83  
tert-Butylbenzene  
Concen: 54.680 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

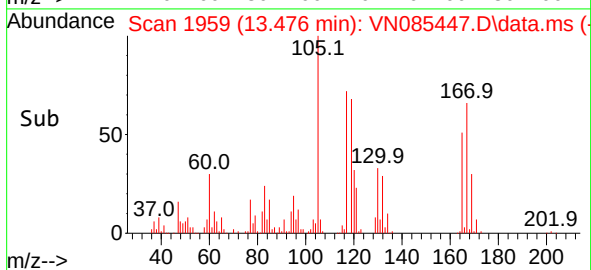
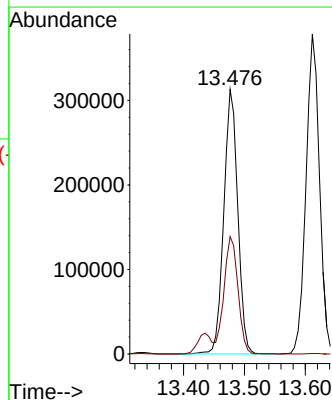
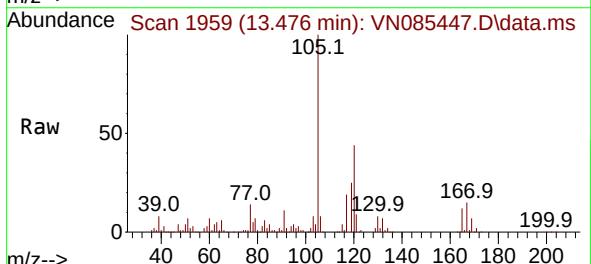
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

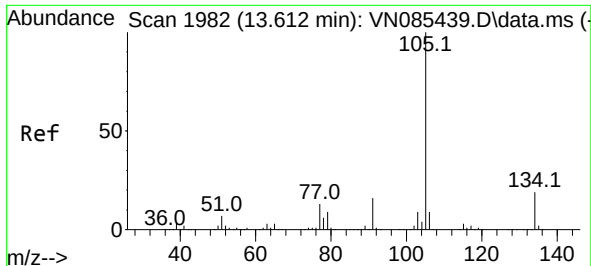
Tgt Ion:119 Resp: 405351  
Ion Ratio Lower Upper  
119 100  
91 70.7 35.1 105.3  
134 24.5 12.0 36.1



#84  
1,2,4-Trimethylbenzene  
Concen: 56.692 ug/l  
RT: 13.476 min Scan# 1959  
Delta R.T. -0.000 min  
Lab File: VN085447.D  
Acq: 15 Jan 2025 09:03

Tgt Ion:105 Resp: 498787  
Ion Ratio Lower Upper  
105 100  
120 45.0 21.6 65.0

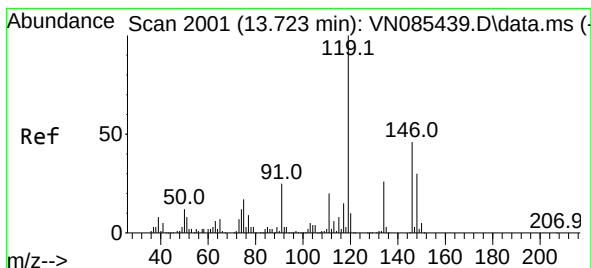
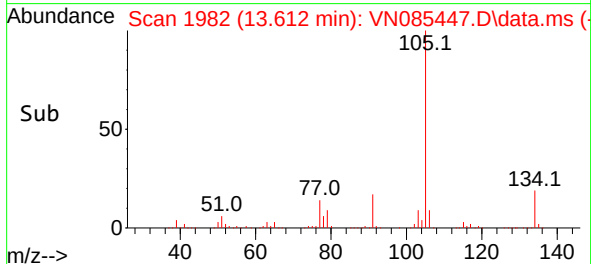
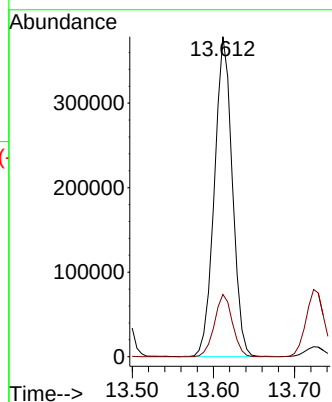
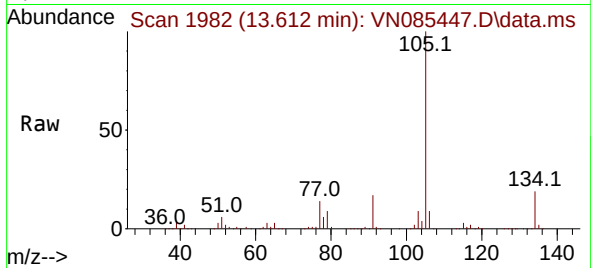




#85  
 sec-Butylbenzene  
 Concen: 56.497 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

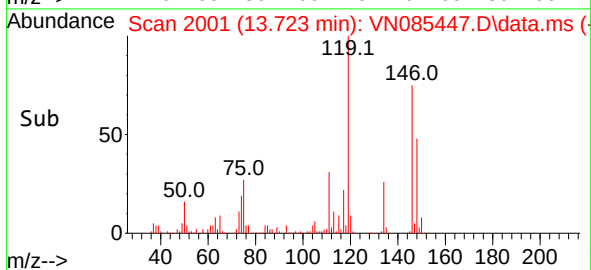
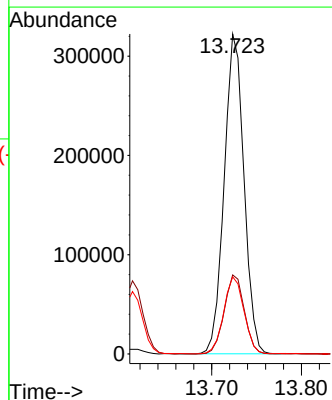
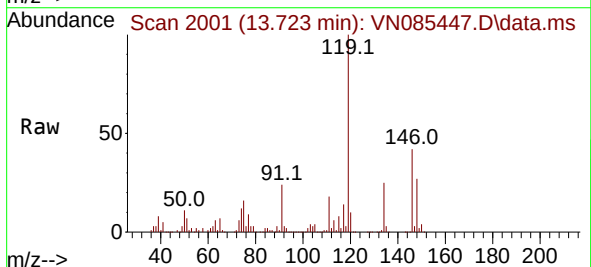
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

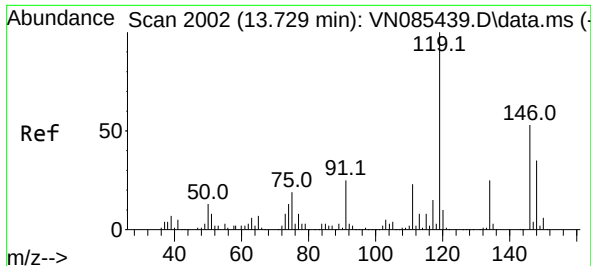
Tgt Ion:105 Resp: 580478  
 Ion Ratio Lower Upper  
 105 100  
 134 19.6 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 52.852 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion:119 Resp: 492423  
 Ion Ratio Lower Upper  
 119 100  
 134 25.1 12.7 38.0  
 91 24.5 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 50.137 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

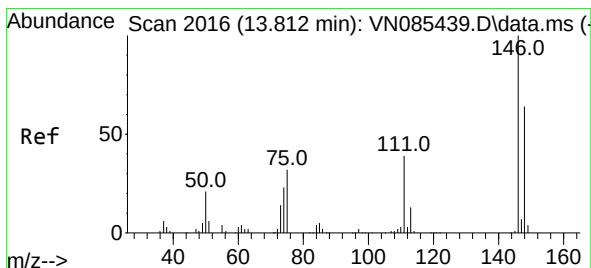
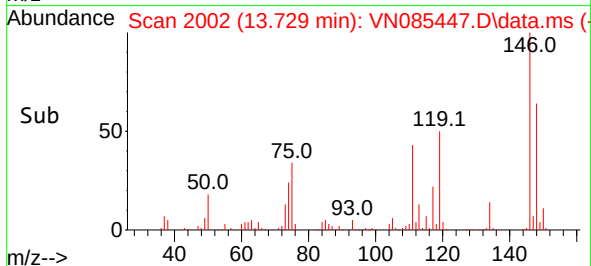
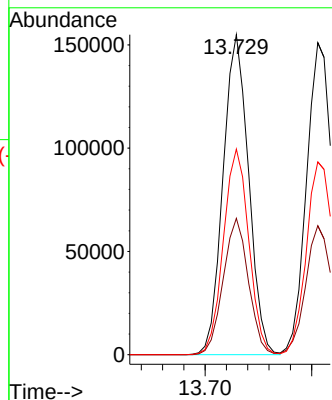
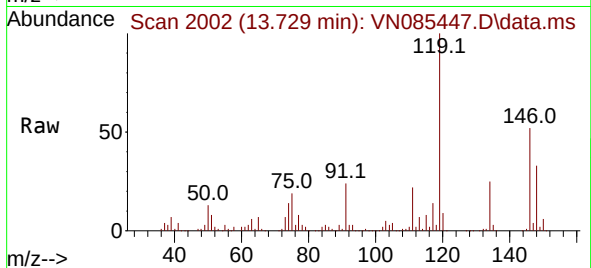
Tgt Ion:146 Resp: 257806

Ion Ratio Lower Upper

146 100

111 42.0 21.4 64.3

148 63.9 32.3 96.9



#88

1,4-Dichlorobenzene

Concen: 48.073 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. -0.006 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

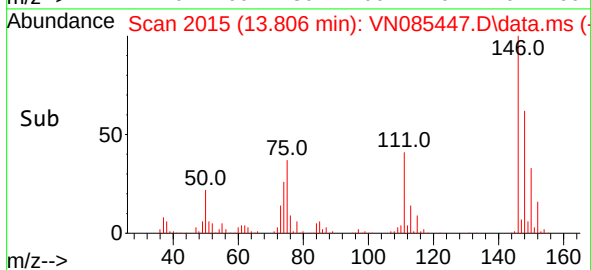
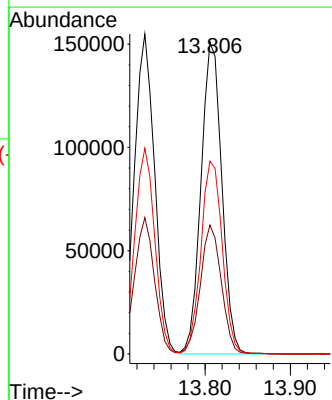
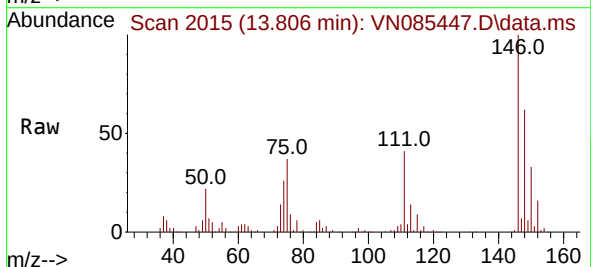
Tgt Ion:146 Resp: 256221

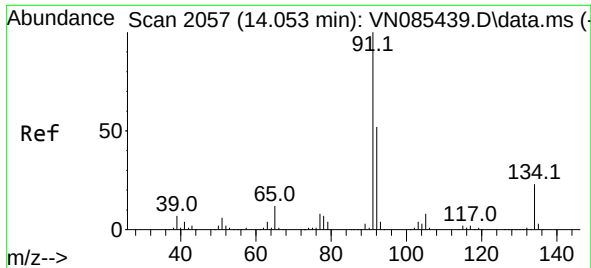
Ion Ratio Lower Upper

146 100

111 41.8 21.3 63.7

148 63.5 32.4 97.0





#89

n-Butylbenzene

Concen: 57.654 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

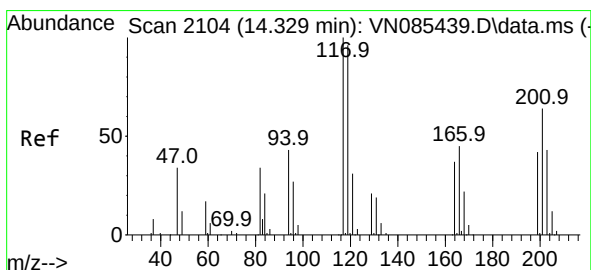
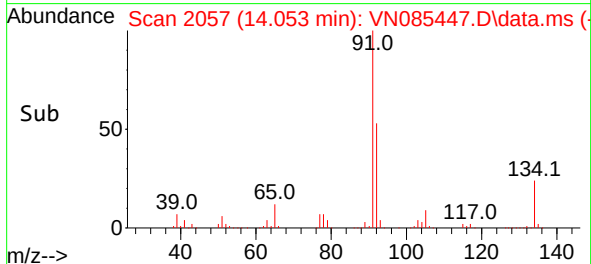
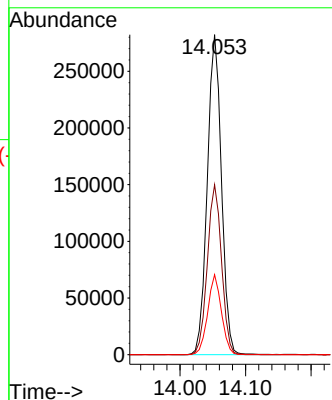
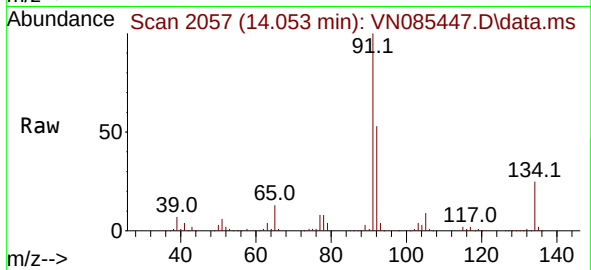
Tgt Ion: 91 Resp: 424966

Ion Ratio Lower Upper

91 100

92 53.2 25.8 77.3

134 24.2 11.7 35.1



#90

Hexachloroethane

Concen: 48.675 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. -0.000 min

Lab File: VN085447.D

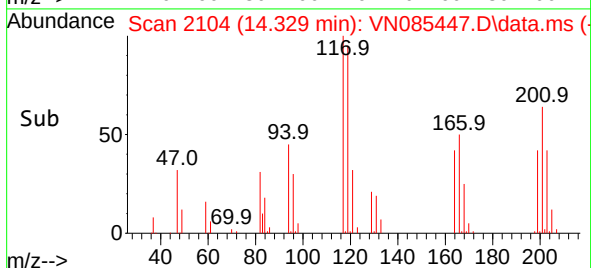
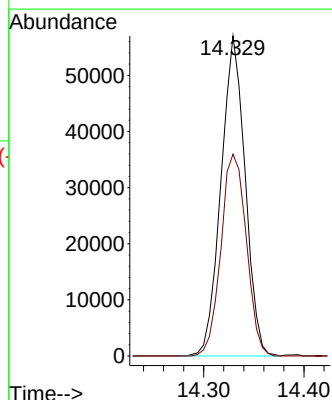
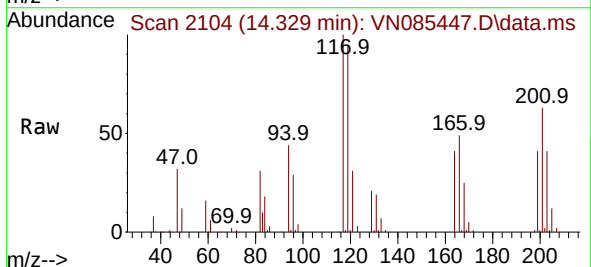
Acq: 15 Jan 2025 09:03

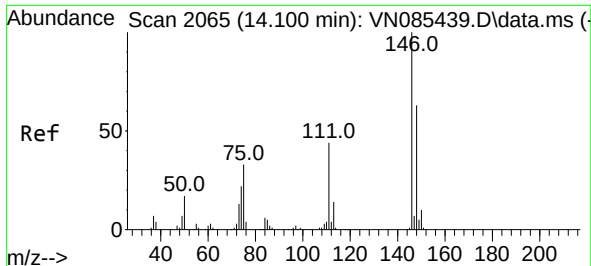
Tgt Ion: 117 Resp: 95205

Ion Ratio Lower Upper

117 100

201 66.4 33.7 101.0

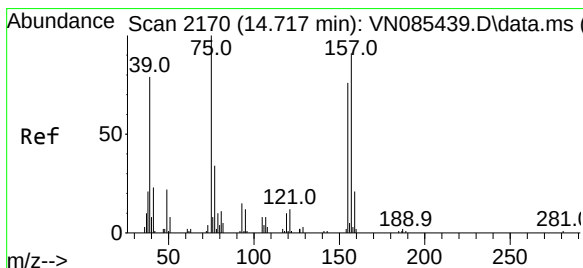
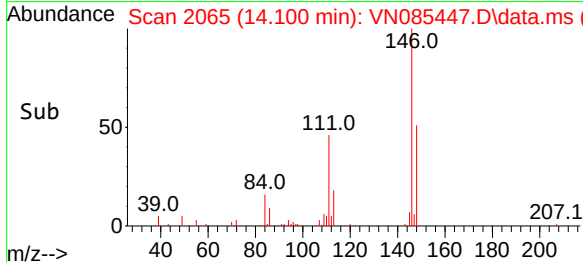
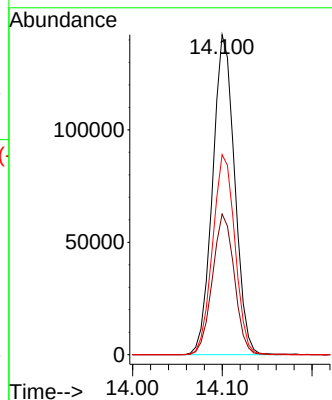
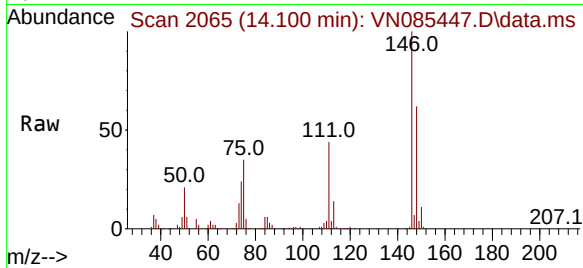




#91  
 1,2-Dichlorobenzene  
 Concen: 47.320 ug/l  
 RT: 14.100 min Scan# 2065  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

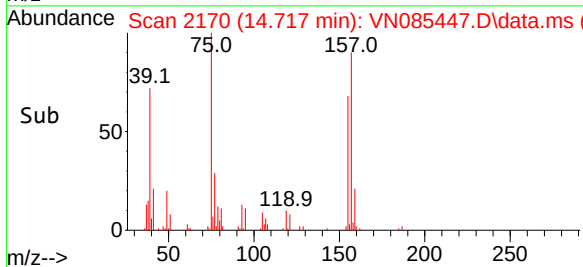
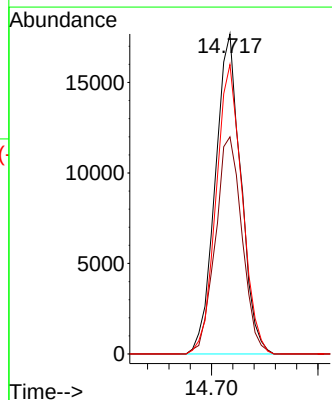
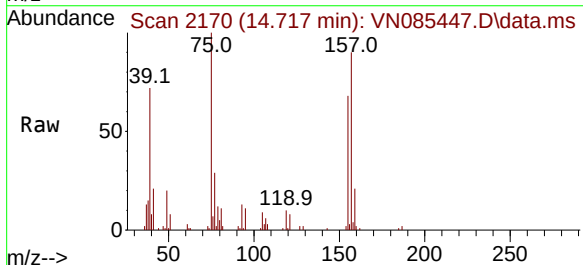
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

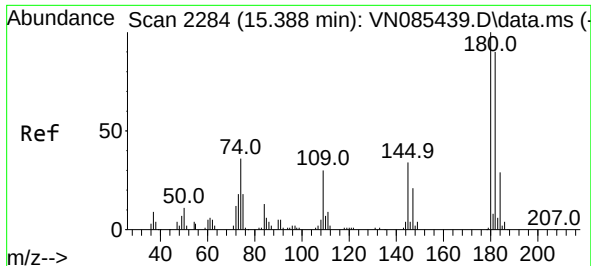
Tgt Ion:146 Resp: 242707  
 Ion Ratio Lower Upper  
 146 100  
 111 43.6 21.7 65.1  
 148 63.3 31.4 94.2



#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 42.906 ug/l  
 RT: 14.717 min Scan# 2170  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion: 75 Resp: 29578  
 Ion Ratio Lower Upper  
 75 100  
 155 70.6 36.4 109.2  
 157 91.5 45.4 136.1

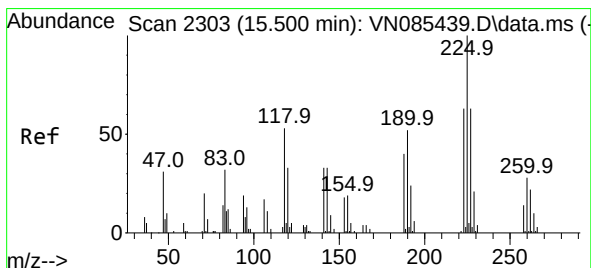
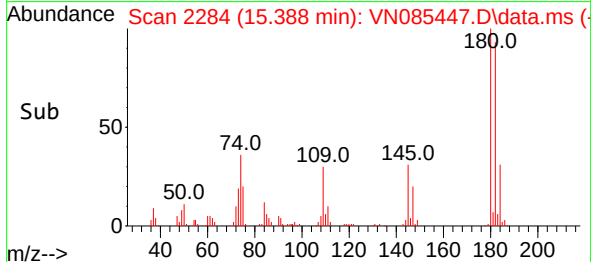
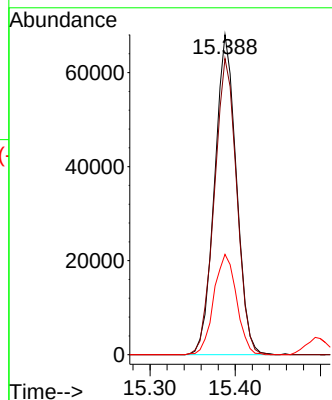
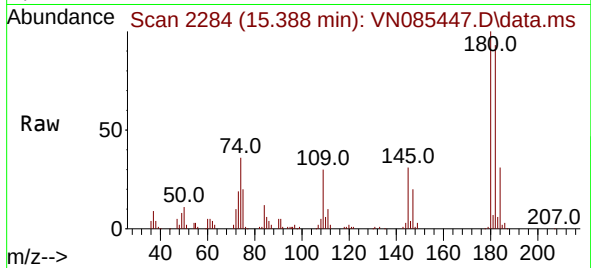




#93  
 1,2,4-Trichlorobenzene  
 Concen: 50.589 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

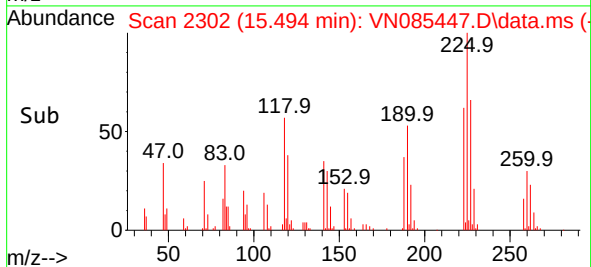
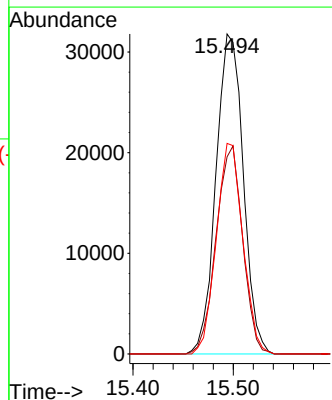
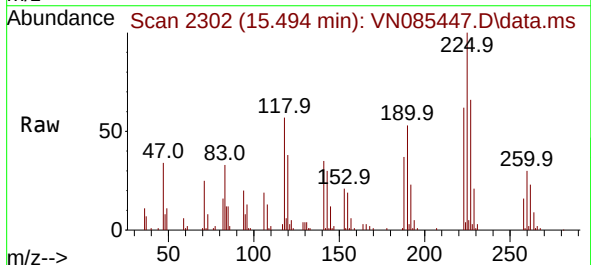
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Tgt Ion:180 Resp: 120596  
 Ion Ratio Lower Upper  
 180 100  
 182 95.1 46.8 140.3  
 145 32.8 16.0 48.0

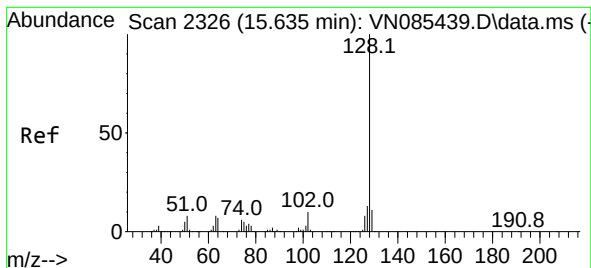


#94  
 Hexachlorobutadiene  
 Concen: 47.470 ug/l  
 RT: 15.494 min Scan# 2302  
 Delta R.T. -0.006 min  
 Lab File: VN085447.D  
 Acq: 15 Jan 2025 09:03

Tgt Ion:225 Resp: 60079  
 Ion Ratio Lower Upper  
 225 100  
 223 63.2 30.7 92.1  
 227 63.9 30.9 92.5







#95

Naphthalene

Concen: 46.012 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050

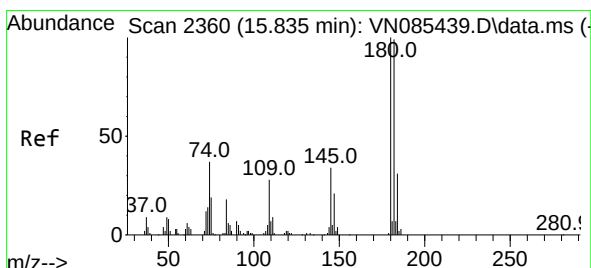
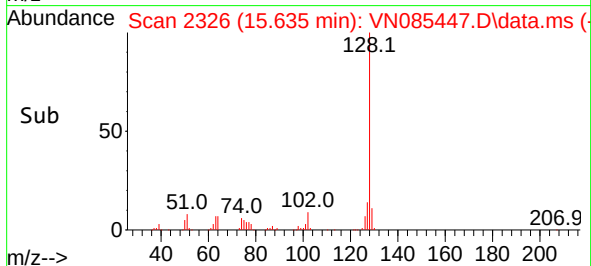
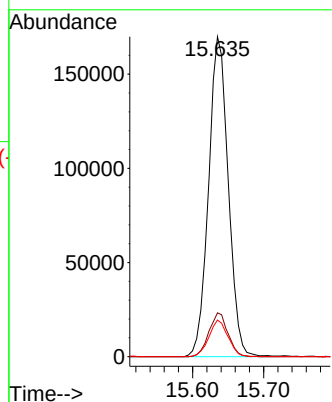
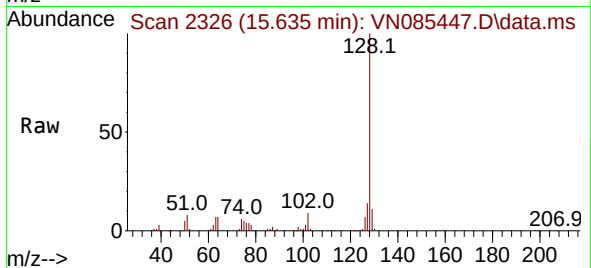
Tgt Ion:128 Resp: 327305

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: 47.236 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085447.D

Acq: 15 Jan 2025 09:03

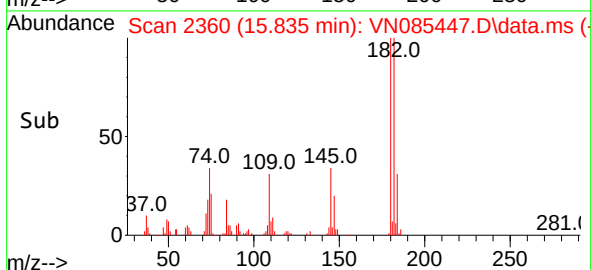
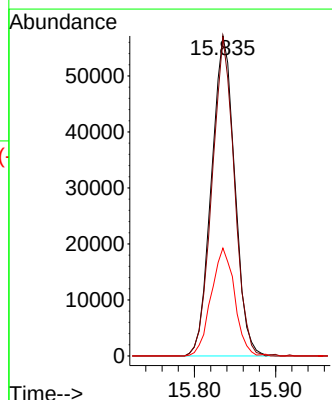
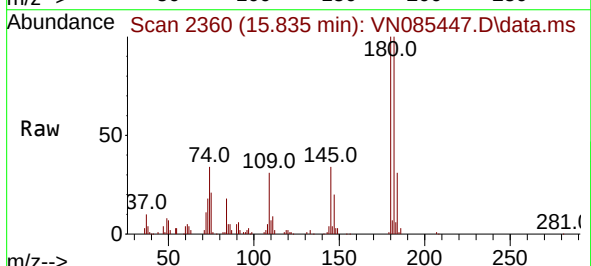
Tgt Ion:180 Resp: 113937

Ion Ratio Lower Upper

180 100

182 95.4 47.4 142.2

145 33.9 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085450.D  
 Acq On : 15 Jan 2025 10:29  
 Operator : JC\MD  
 Sample : VN0115WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

Quant Time: Jan 16 00:53:27 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  | 208834   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.094  | 114  | 350038   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 301633   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 141189   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.576  | 65    | 160496   | 47.611   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 95.220%  |
| 35) Dibromofluoromethane    | 8.165  | 113   | 117791   | 48.506   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 97.020%  |
| 50) Toluene-d8              | 10.559 | 98    | 434650   | 50.376   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 100.760% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 146069   | 49.491   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 98.980%  |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 53406  | 18.888  | ug/l   | 97  |
| 3) Chloromethane             | 2.359 | 50  | 56766  | 18.542  | ug/l   | 100 |
| 4) Vinyl Chloride            | 2.518 | 62  | 55927  | 18.175  | ug/l   | 98  |
| 5) Bromomethane              | 2.959 | 94  | 34404  | 18.509  | ug/l   | 93  |
| 6) Chloroethane              | 3.130 | 64  | 34817  | 17.847  | ug/l   | 99  |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 83471  | 18.695  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.959 | 74  | 26372  | 17.097  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 47665  | 18.954  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.589 | 142 | 52836  | 18.346  | ug/l   | 94  |
| 11) Tert butyl alcohol       | 5.500 | 59  | 34842  | 90.264  | ug/l   | 98  |
| 12) 1,1-Dichloroethene       | 4.347 | 96  | 41789  | 18.645  | ug/l   | 97  |
| 13) Acrolein                 | 4.177 | 56  | 57066  | 108.299 | ug/l   | 99  |
| 14) Allyl chloride           | 5.024 | 41  | 64682  | 17.785  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.718 | 53  | 111192 | 90.690  | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 95481  | 87.661  | ug/l   | 97  |
| 17) Carbon Disulfide         | 4.712 | 76  | 120042 | 17.395  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.024 | 43  | 59306  | 17.906  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 136088 | 18.700  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.277 | 84  | 48956  | 18.156  | ug/l   | 98  |
| 21) trans-1,2-Dichloroethene | 5.788 | 96  | 44485  | 18.572  | ug/l   | 95  |
| 22) Diisopropyl ether        | 6.665 | 45  | 156113 | 19.339  | ug/l   | 99  |
| 23) Vinyl Acetate            | 6.600 | 43  | 540854 | 95.740  | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 91537  | 18.597  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 146109 | 91.155  | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 81881  | 20.576  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 52626  | 18.654  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.806 | 49  | 39408  | 17.209  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 97170  | 95.619  | ug/l   | 98  |
| 30) Chloroform               | 7.959 | 83  | 93604  | 18.400  | ug/l   | 100 |
| 31) Cyclohexane              | 8.259 | 56  | 79144  | 18.500  | ug/l   | 95  |
| 32) 1,1,1-Trichloroethane    | 8.159 | 97  | 83081  | 18.618  | ug/l   | 97  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 63125  | 18.521  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 62310  | 18.113  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 74287  | 19.039  | ug/l   | 97  |
| 39) Methylcyclohexane        | 9.594 | 83  | 63410  | 19.799  | ug/l   | 99  |
| 40) Benzene                  | 8.600 | 78  | 196843 | 19.222  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085450.D  
 Acq On : 15 Jan 2025 10:29  
 Operator : JC\MD  
 Sample : VN0115WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

Quant Time: Jan 16 00:53:27 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   | 34152    | 19.082  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 72644    | 18.835  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.682  | 43   | 99545    | 18.059  | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 45825    | 19.224  | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 49517    | 18.931  | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 34976    | 18.531  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.882  | 83   | 75979    | 19.759  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.676  | 41   | 47488    | 19.143  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 14354    | 343.615 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 304924   | 95.328  | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 118985   | 20.053  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 69201    | 19.044  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 77467    | 19.958  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 44394    | 18.906  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 63560    | 17.379  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 78133    | 19.136  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63   | 148732   | 99.810  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 217128   | 96.472  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.353 | 129  | 54139    | 19.097  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 44253    | 18.932  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 41267    | 20.068  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 127557   | 19.304  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 45645    | 18.821  | ug/l   | 100      |
| 67) Ethyl Benzene             | 11.959 | 91   | 215448   | 20.019  | ug/l   | 95       |
| 68) m/p-Xylenes               | 12.065 | 106  | 164329   | 41.314  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 76723    | 20.184  | ug/l   | 98       |
| 70) Styrene                   | 12.406 | 104  | 128074   | 20.358  | ug/l   | 100      |
| 71) Bromoform                 | 12.570 | 173  | 34422    | 19.837  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 196948   | 20.668  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 80290    | 18.746  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 62306    | 18.510  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 82085    | 28.604  | ug/l   | 48       |
| 77) Bromobenzene              | 12.976 | 156  | 48006    | 19.283  | ug/l   | 98       |
| 78) n-propylbenzene           | 13.029 | 91   | 234178   | 20.759  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 148584   | 20.351  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 167516   | 21.282  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 23140    | 21.817  | ug/l   | 91       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 148888   | 20.481  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 137144   | 20.748  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 168611   | 21.493  | ug/l   | 97       |
| 85) sec-Butylbenzene          | 13.611 | 105  | 193667   | 21.140  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 158593   | 20.730  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 89998    | 19.629  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 88968    | 18.721  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 132410   | 20.147  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 32875    | 18.850  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 86586    | 18.933  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 10904    | 17.740  | ug/l   | 96       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 38461    | 18.095  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 21171    | 18.761  | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 104770   | 16.518  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 38077    | 17.704  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085450.D  
Acq On : 15 Jan 2025 10:29  
Operator : JC\MD  
Sample : VN0115WBS01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

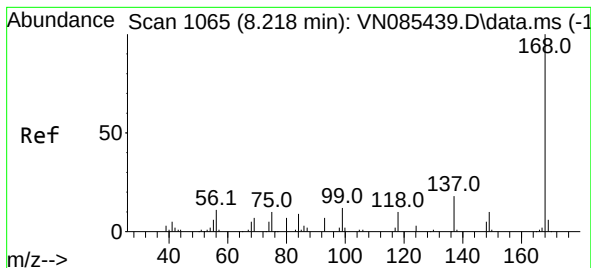
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Quant Time: Jan 16 00:53:27 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

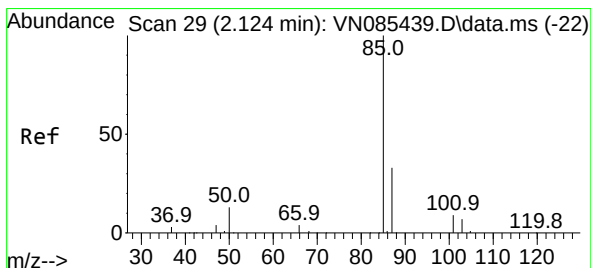
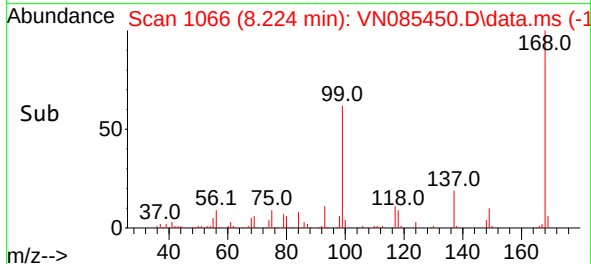
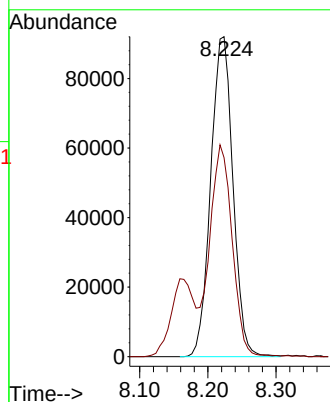
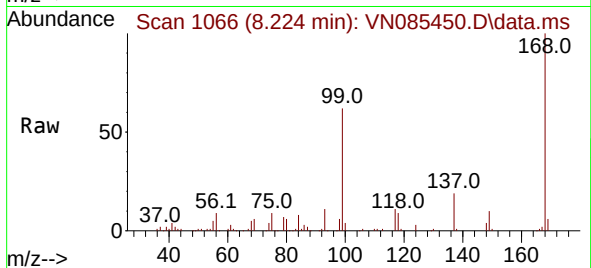




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

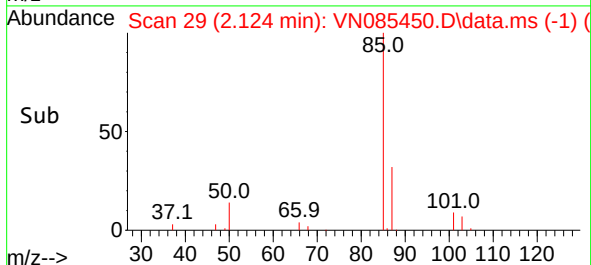
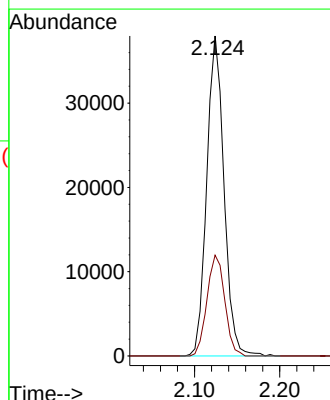
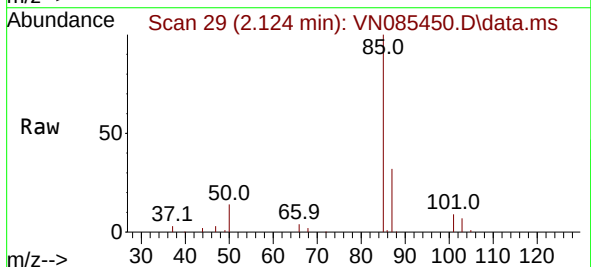
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

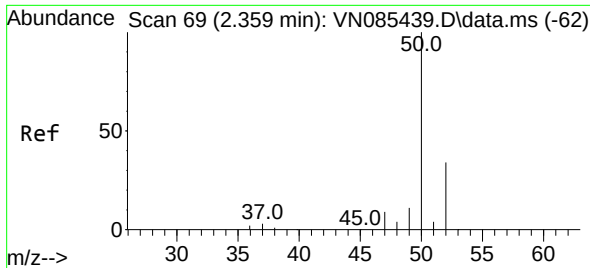
Tgt Ion:168 Resp: 208834  
Ion Ratio Lower Upper  
168 100  
99 62.0 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 18.888 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 85 Resp: 53406  
Ion Ratio Lower Upper  
85 100  
87 31.5 16.7 50.1

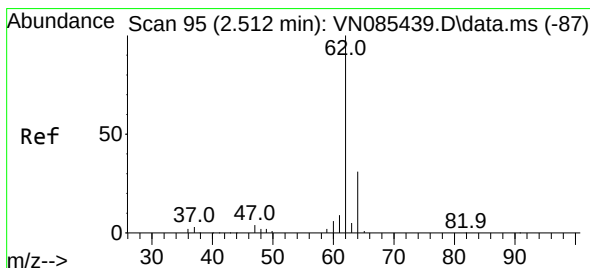
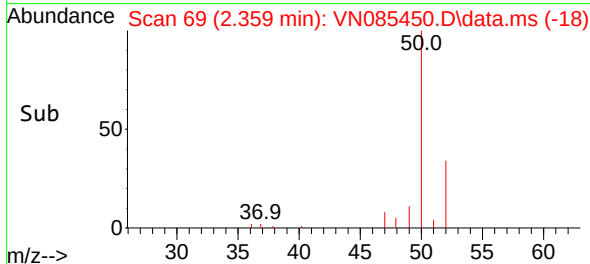
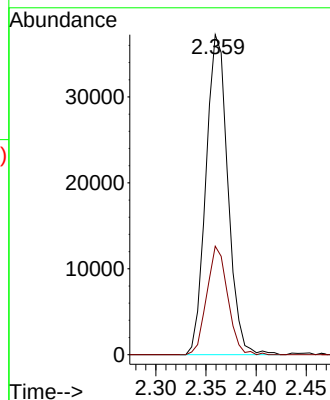
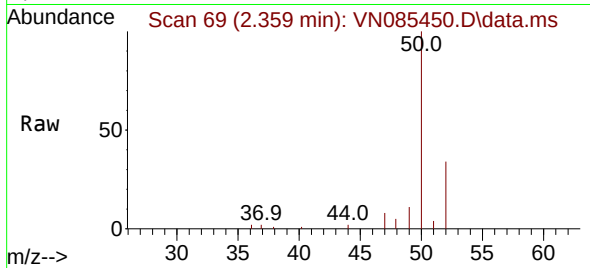




#3  
Chloromethane  
Concen: 18.542 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

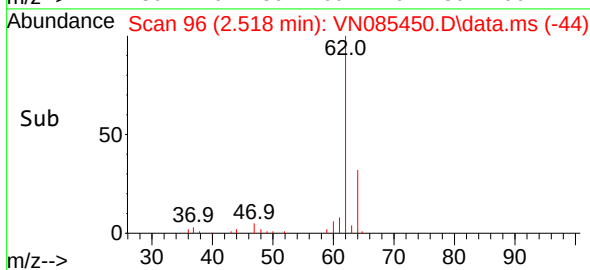
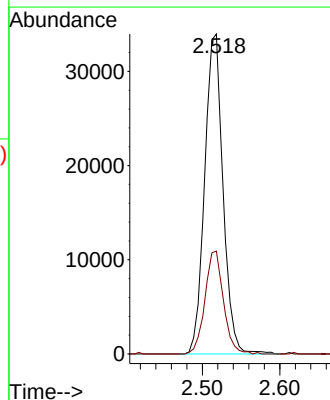
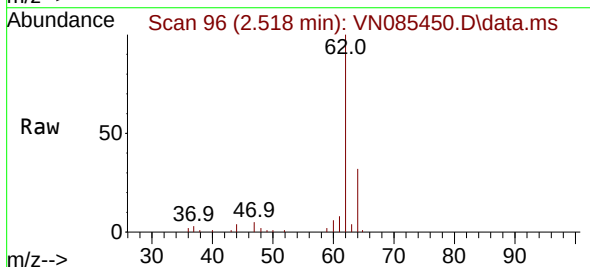
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

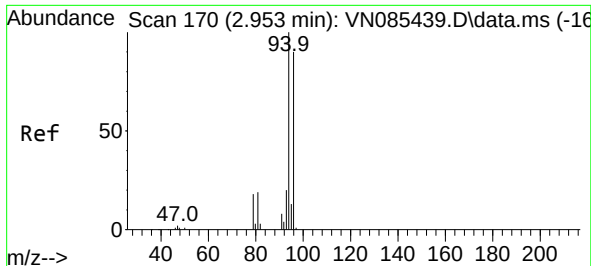
Tgt Ion: 50 Resp: 56766  
Ion Ratio Lower Upper  
50 100  
52 33.9 27.0 40.6



#4  
Vinyl Chloride  
Concen: 18.175 ug/l  
RT: 2.518 min Scan# 96  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 62 Resp: 55927  
Ion Ratio Lower Upper  
62 100  
64 32.2 24.8 37.2

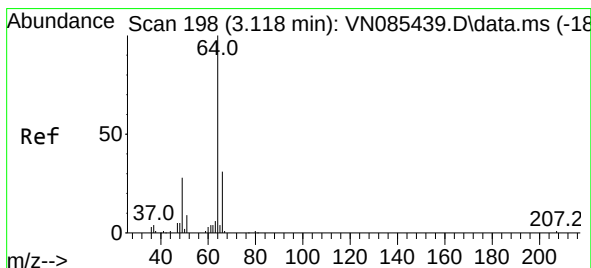
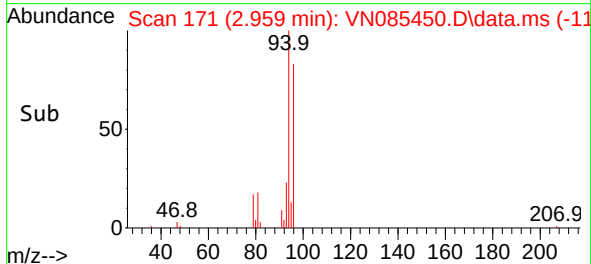
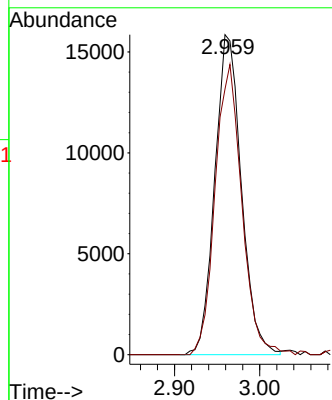
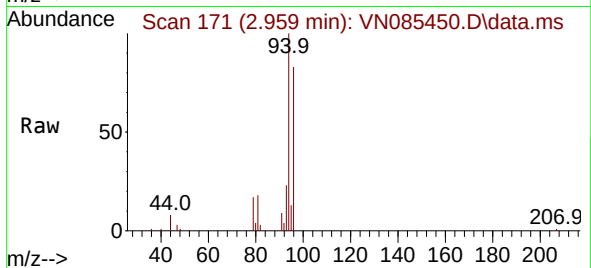




#5  
Bromomethane  
Concen: 18.509 ug/l  
RT: 2.959 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

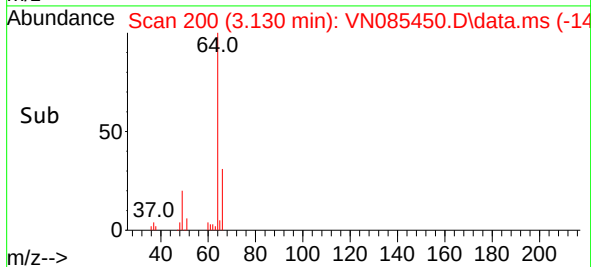
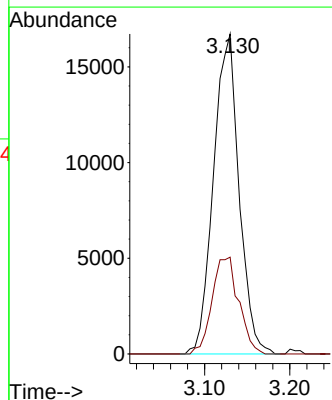
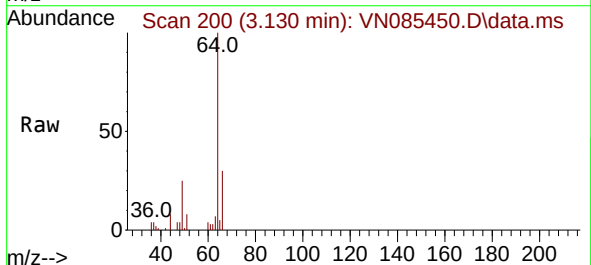
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 94 Resp: 34404  
Ion Ratio Lower Upper  
94 100  
96 83.0 71.8 107.6

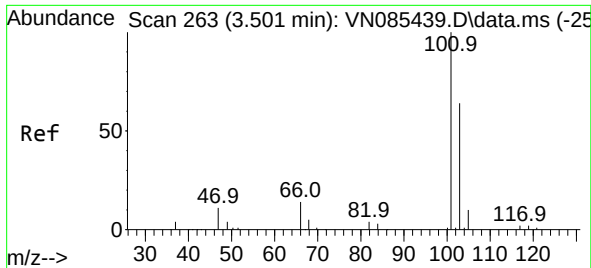


#6  
Chloroethane  
Concen: 17.847 ug/l  
RT: 3.130 min Scan# 200  
Delta R.T. 0.012 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 64 Resp: 34817  
Ion Ratio Lower Upper  
64 100  
66 30.2 24.6 36.8



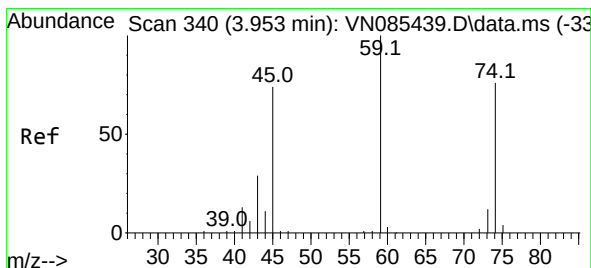
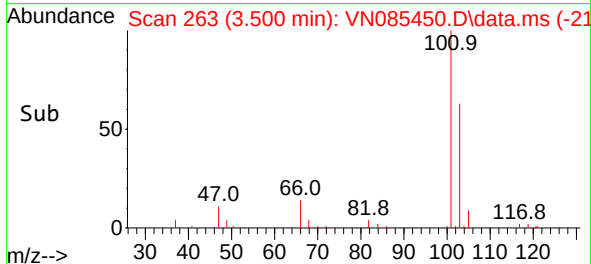
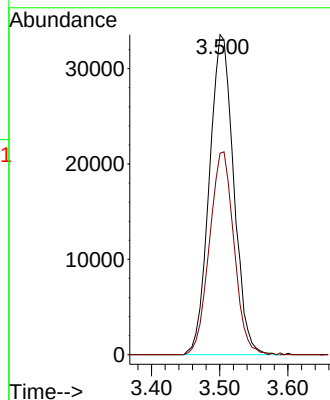
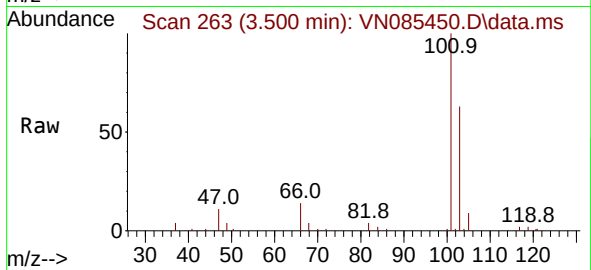




#7  
 Trichlorofluoromethane  
 Concen: 18.695 ug/l  
 RT: 3.500 min Scan# 210  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

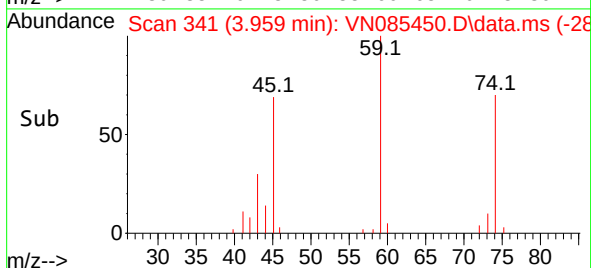
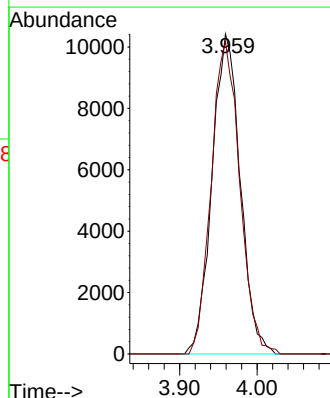
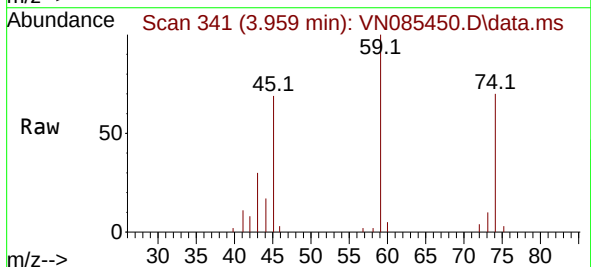
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

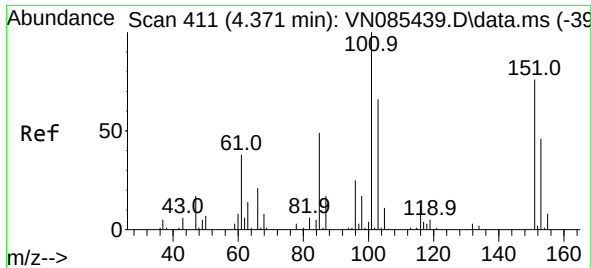
Tgt Ion:101 Resp: 83471  
 Ion Ratio Lower Upper  
 101 100  
 103 62.9 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 17.097 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

Tgt Ion: 74 Resp: 26372  
 Ion Ratio Lower Upper  
 74 100  
 45 98.9 49.7 149.1

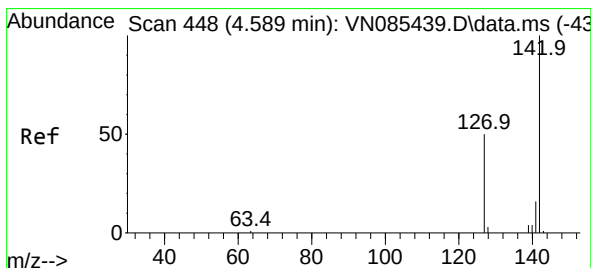
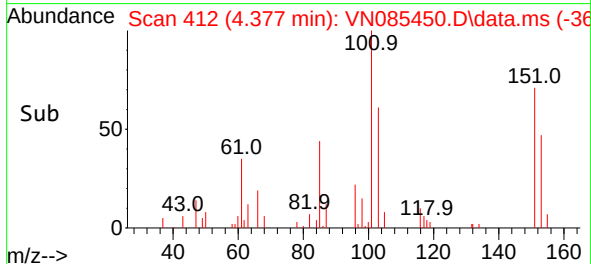
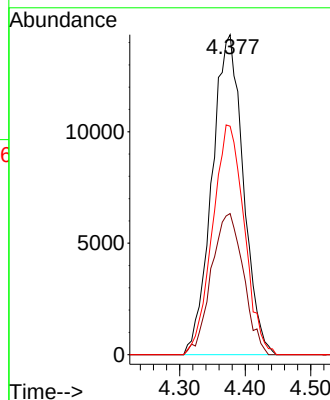
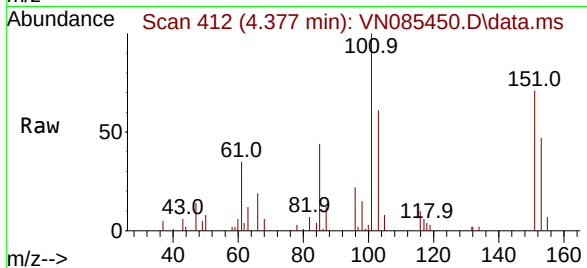




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 18.954 ug/l  
RT: 4.377 min Scan# 411  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

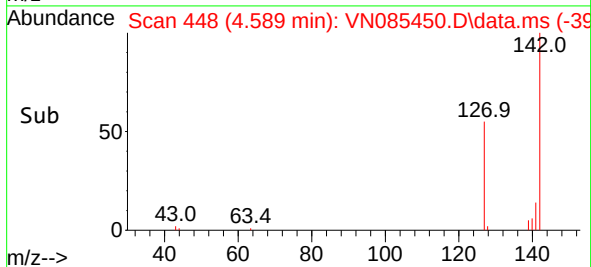
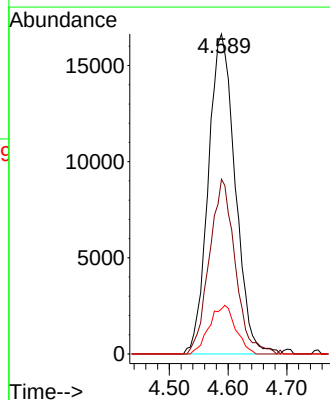
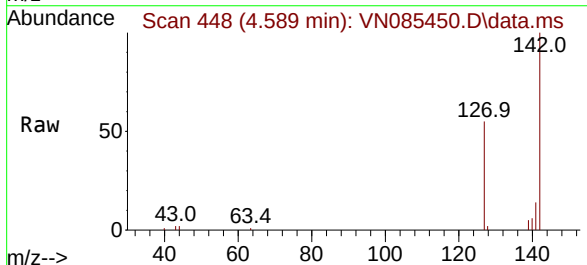
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

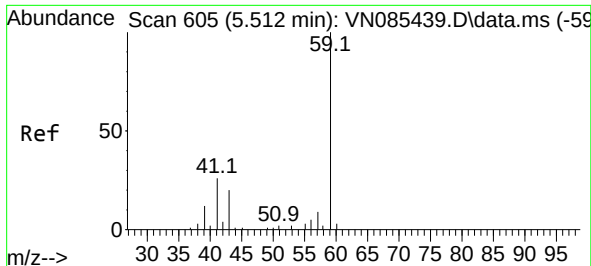
Tgt Ion:101 Resp: 47665  
Ion Ratio Lower Upper  
101 100  
85 45.2 37.8 56.8  
151 72.6 58.8 88.2



#10  
Methyl Iodide  
Concen: 18.346 ug/l  
RT: 4.589 min Scan# 448  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:142 Resp: 52836  
Ion Ratio Lower Upper  
142 100  
127 54.6 40.3 60.5  
141 14.1 12.8 19.2

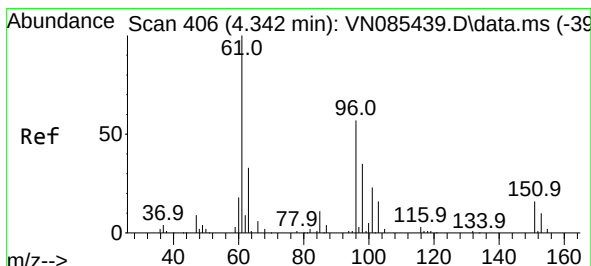
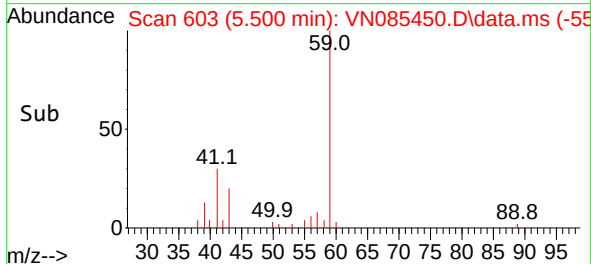
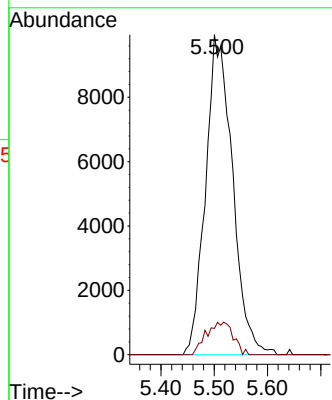
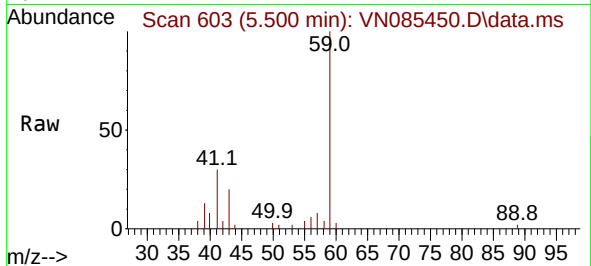




#11  
Tert butyl alcohol  
Concen: 90.264 ug/l  
RT: 5.500 min Scan# 605  
Delta R.T. -0.012 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

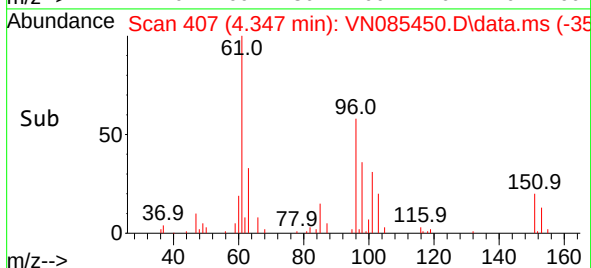
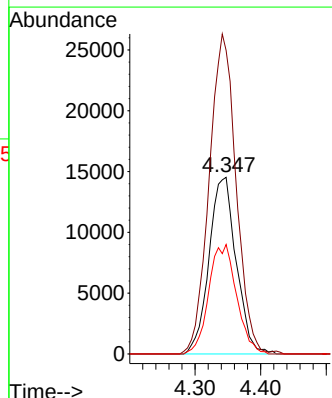
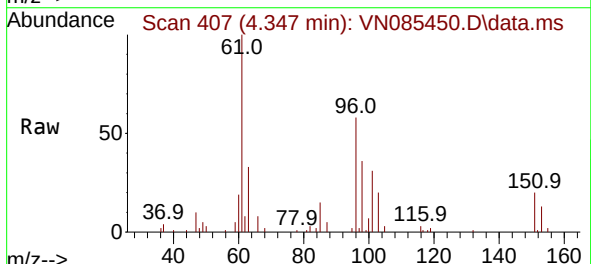
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

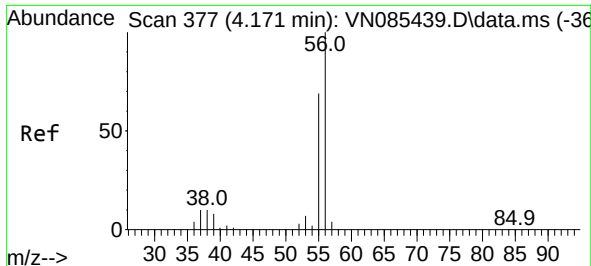
Tgt Ion: 59 Resp: 34842  
Ion Ratio Lower Upper  
59 100  
57 10.2 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 18.645 ug/l  
RT: 4.347 min Scan# 407  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 96 Resp: 41789  
Ion Ratio Lower Upper  
96 100  
61 171.8 141.0 211.4  
98 62.0 49.0 73.6

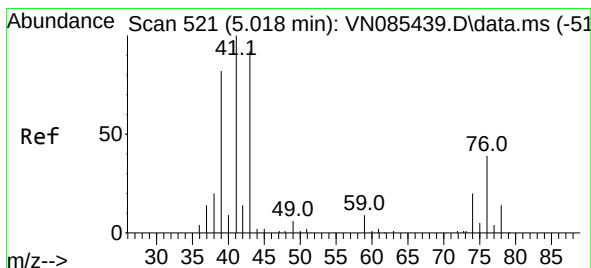
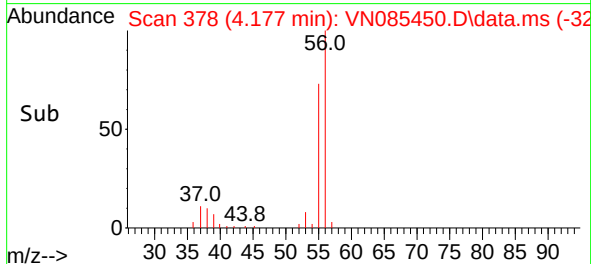
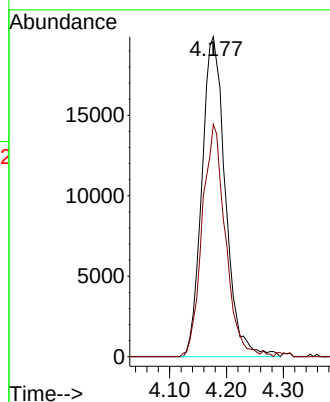
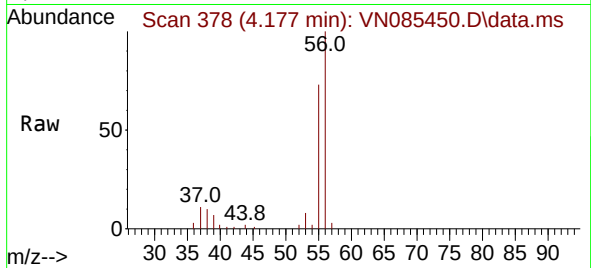




#13  
Acrolein  
Concen: 108.299 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

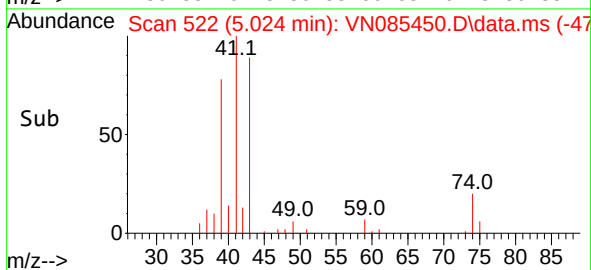
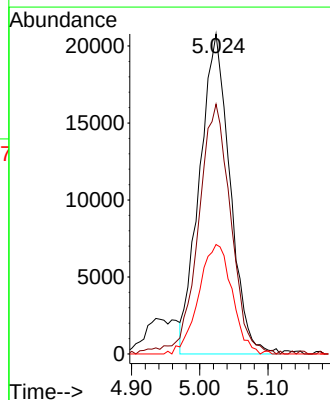
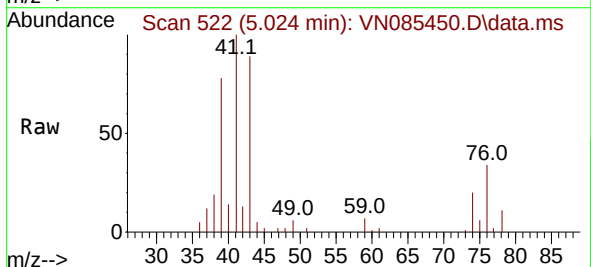
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

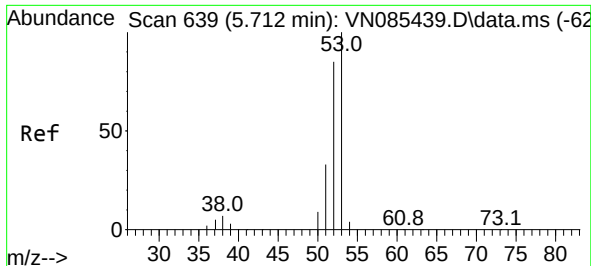
Tgt Ion: 56 Resp: 57066  
Ion Ratio Lower Upper  
56 100  
55 71.4 56.3 84.5



#14  
Allyl chloride  
Concen: 17.785 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 41 Resp: 64682  
Ion Ratio Lower Upper  
41 100  
39 83.1 64.4 96.6  
76 37.5 30.5 45.7

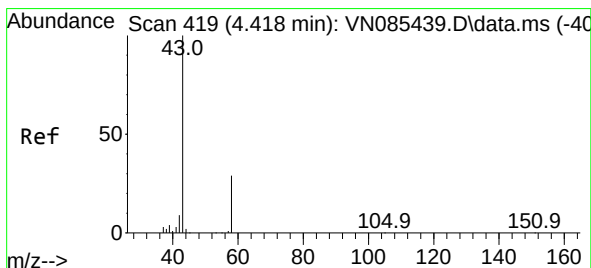
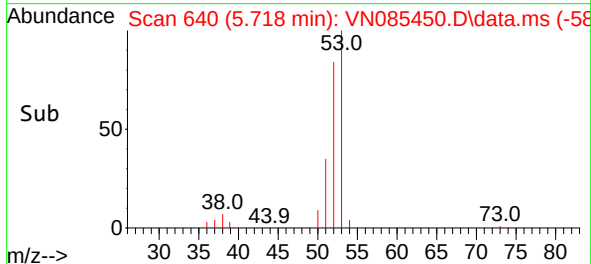
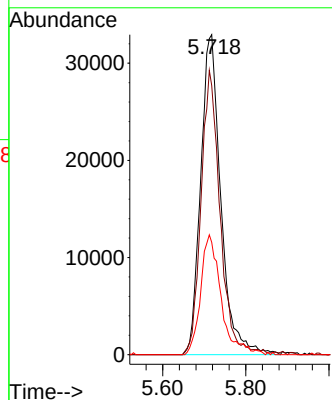
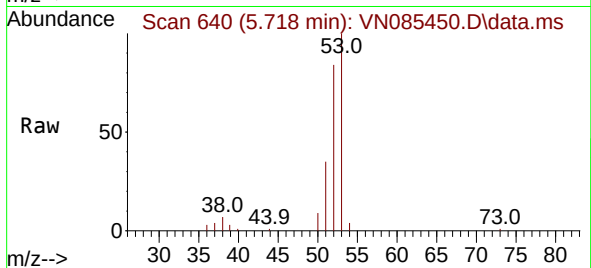




#15  
Acrylonitrile  
Concen: 90.690 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

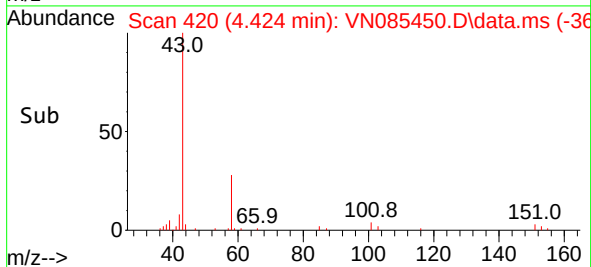
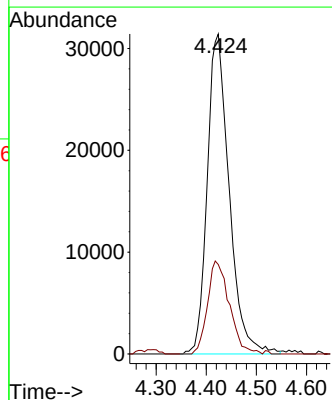
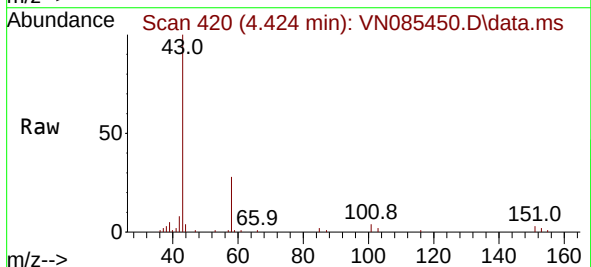
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

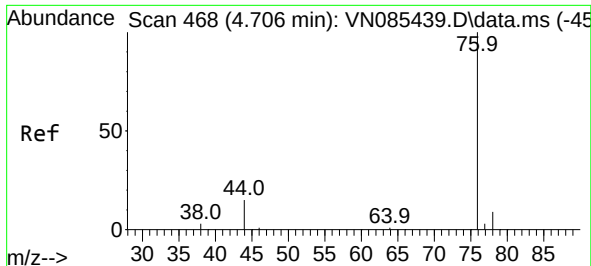
Tgt Ion: 53 Resp: 111192  
Ion Ratio Lower Upper  
53 100  
52 83.8 65.5 98.3  
51 37.5 29.8 44.8



#16  
Acetone  
Concen: 87.661 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 43 Resp: 95481  
Ion Ratio Lower Upper  
43 100  
58 28.0 23.8 35.6

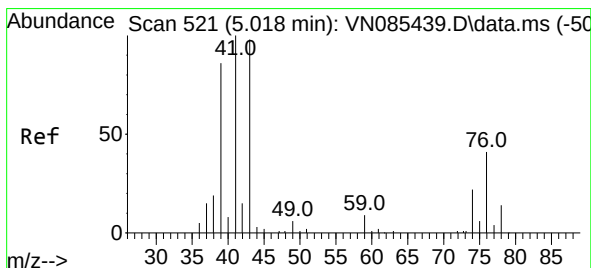
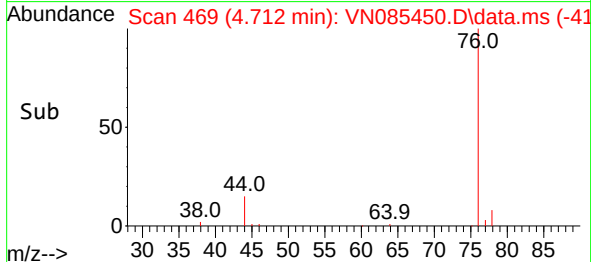
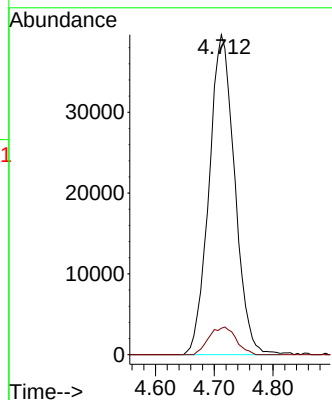
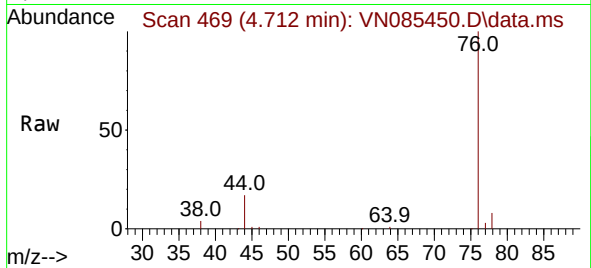




#17  
Carbon Disulfide  
Concen: 17.395 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

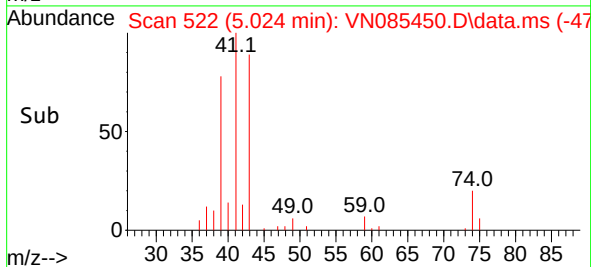
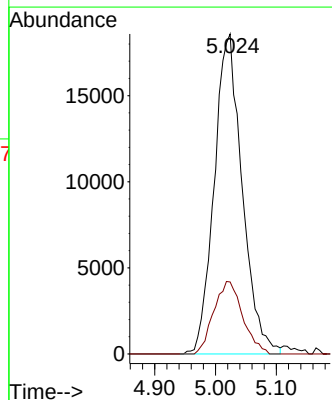
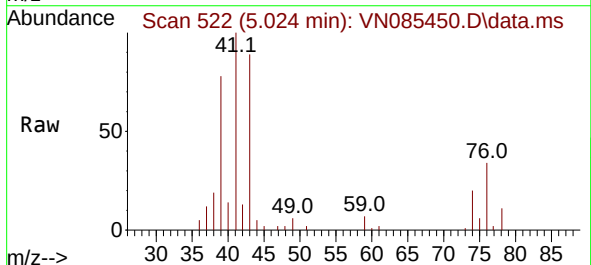
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

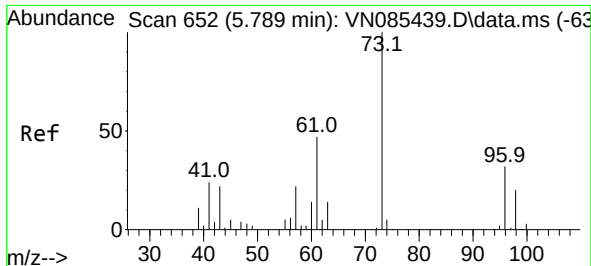
Tgt Ion: 76 Resp: 120042  
Ion Ratio Lower Upper  
76 100  
78 8.2 6.9 10.3



#18  
Methyl Acetate  
Concen: 17.906 ug/l  
RT: 5.024 min Scan# 522  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 43 Resp: 59306  
Ion Ratio Lower Upper  
43 100  
74 23.4 18.6 28.0

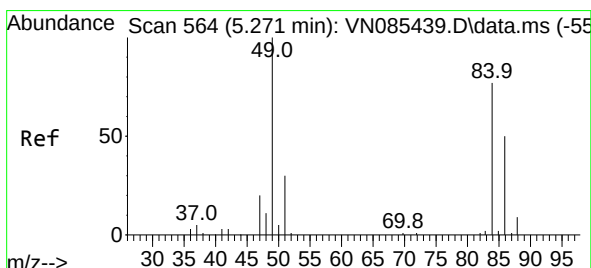
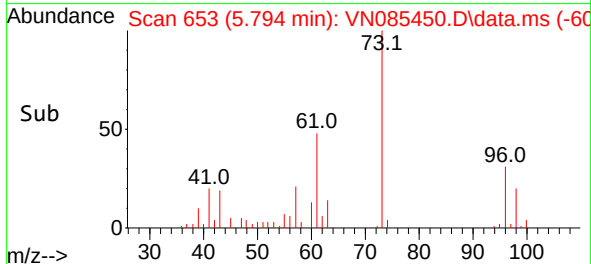
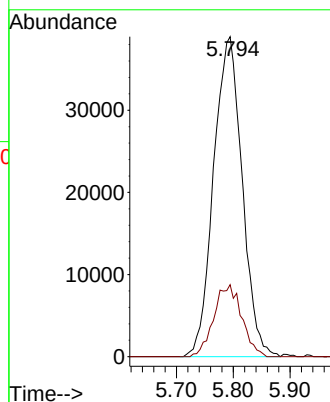
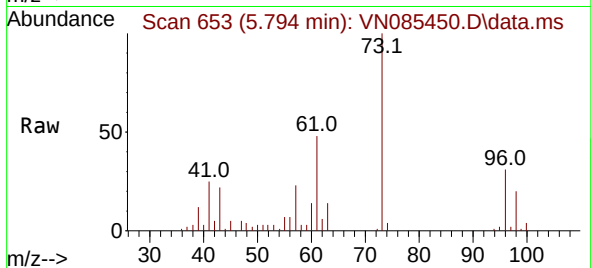




#19  
Methyl tert-butyl Ether  
Concen: 18.700 ug/l  
RT: 5.794 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

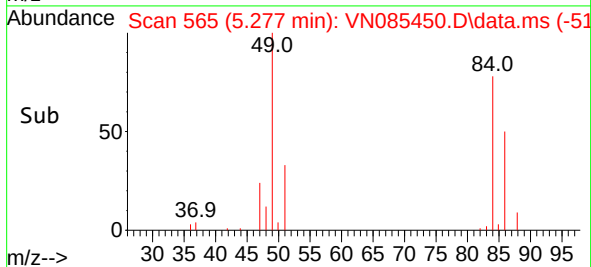
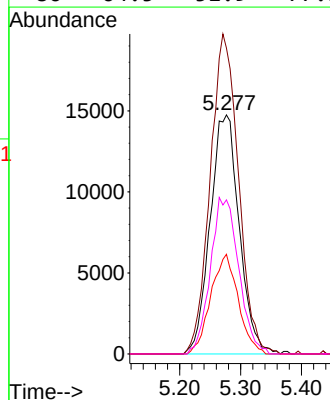
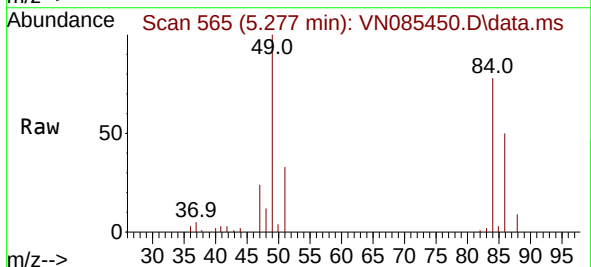
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

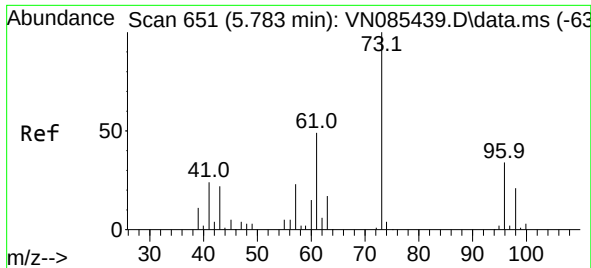
Tgt Ion: 73 Resp: 136088  
Ion Ratio Lower Upper  
73 100  
57 22.5 17.8 26.8



#20  
Methylene Chloride  
Concen: 18.156 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 84 Resp: 48956  
Ion Ratio Lower Upper  
84 100  
49 128.0 104.1 156.1  
51 41.7 31.0 46.4  
86 64.5 51.9 77.9

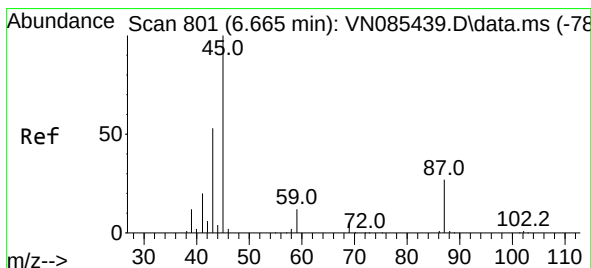
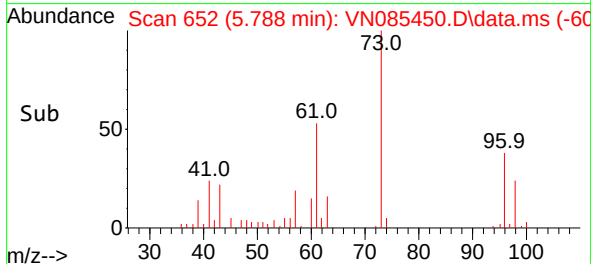
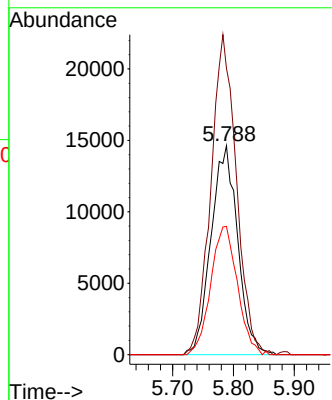
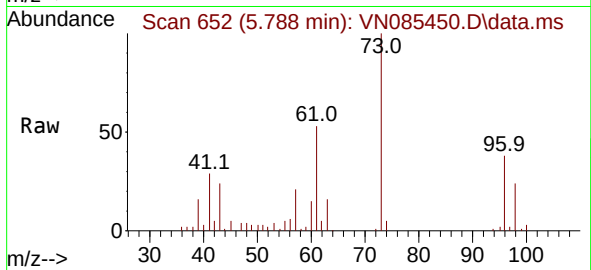




#21  
trans-1,2-Dichloroethene  
Concen: 18.572 ug/l  
RT: 5.788 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

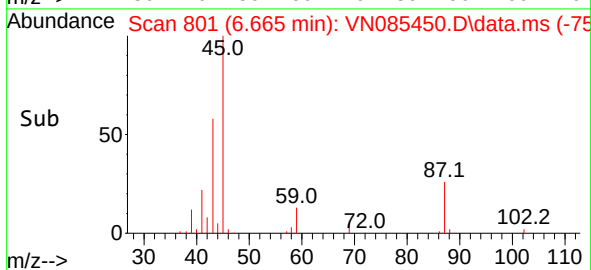
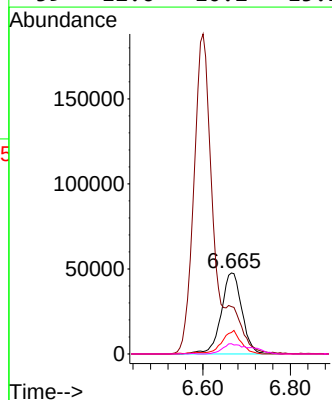
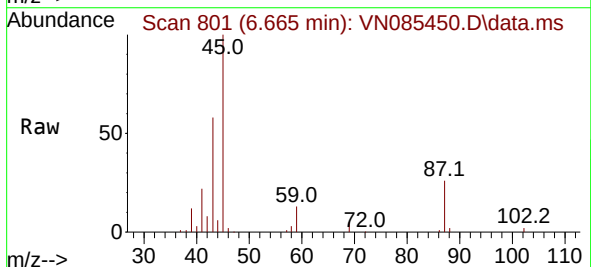
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion: 96 Resp: 44485  
Ion Ratio Lower Upper  
96 100  
61 137.2 115.7 173.5  
98 61.4 49.8 74.8

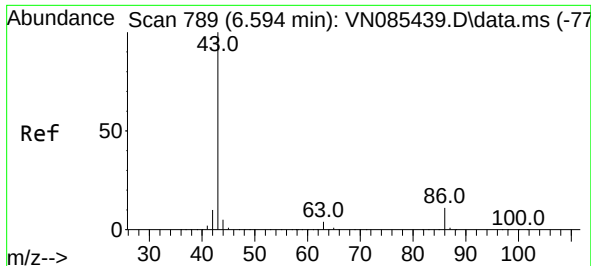


#22  
Diisopropyl ether  
Concen: 19.339 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 45 Resp: 156113  
Ion Ratio Lower Upper  
45 100  
43 56.9 45.0 67.6  
87 26.4 21.8 32.8  
59 12.6 10.2 15.2



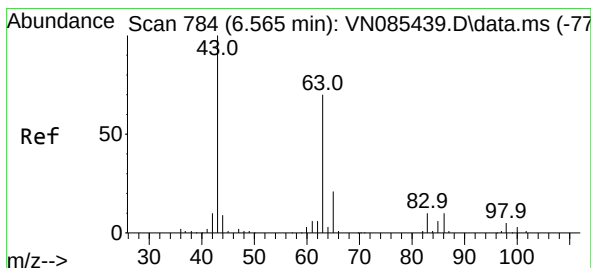
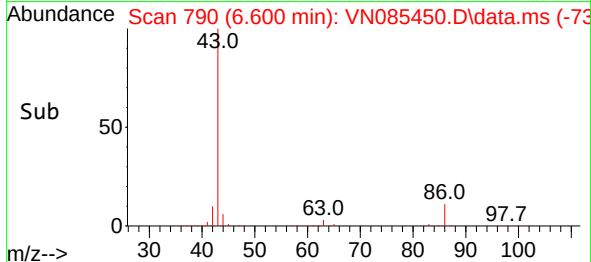
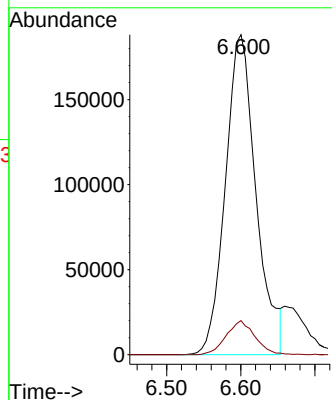
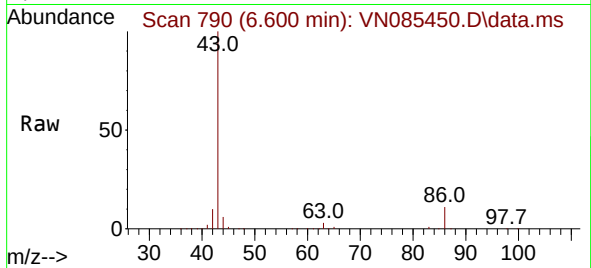




#23  
 Vinyl Acetate  
 Concen: 95.740 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

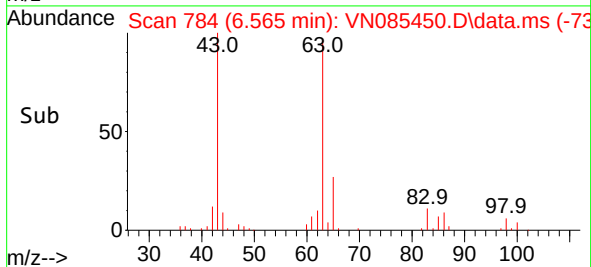
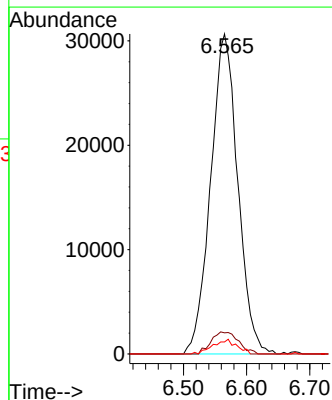
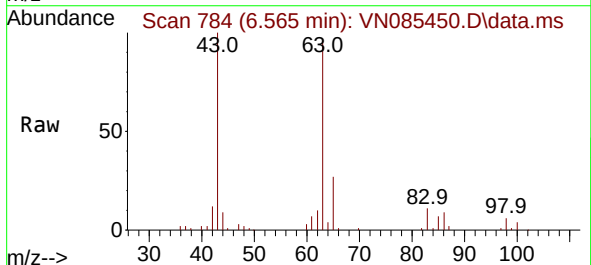
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

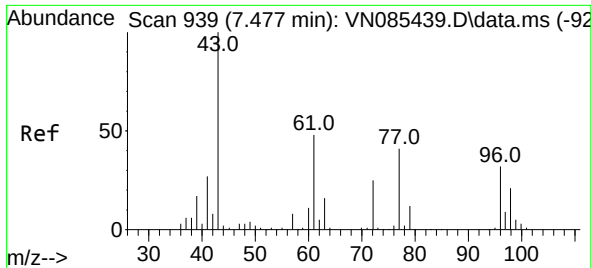
Tgt Ion: 43 Resp: 540854  
 Ion Ratio Lower Upper  
 43 100  
 86 10.7 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 18.597 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

Tgt Ion: 63 Resp: 91537  
 Ion Ratio Lower Upper  
 63 100  
 98 6.6 3.3 9.8  
 100 3.8 2.0 6.0

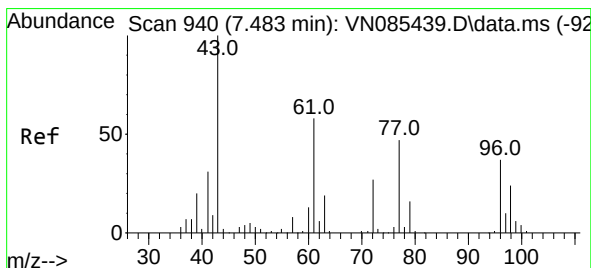
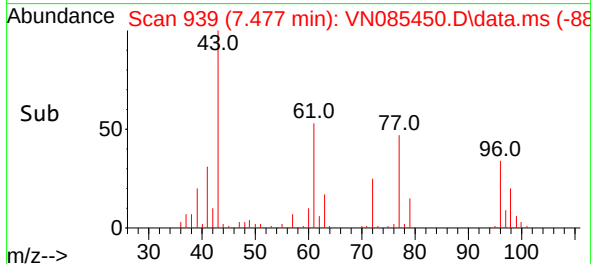
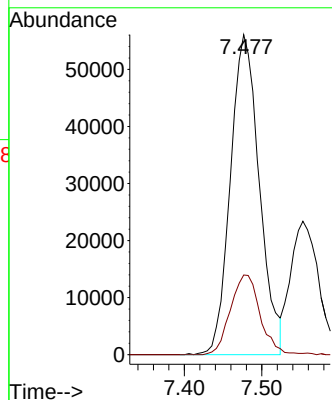
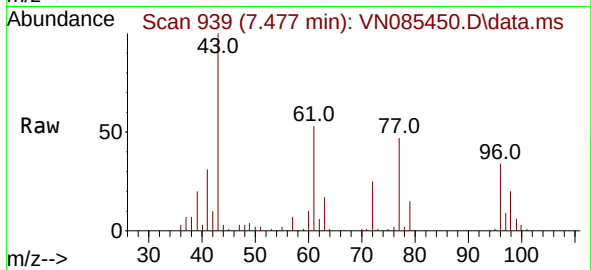




#25  
2-Butanone  
Concen: 91.155 ug/l  
RT: 7.477 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

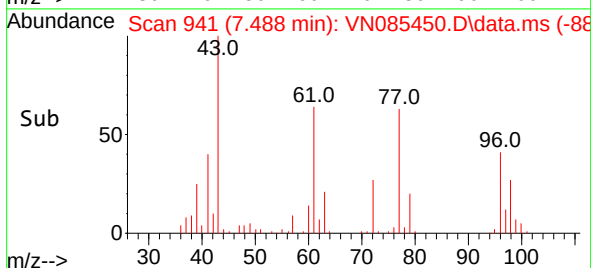
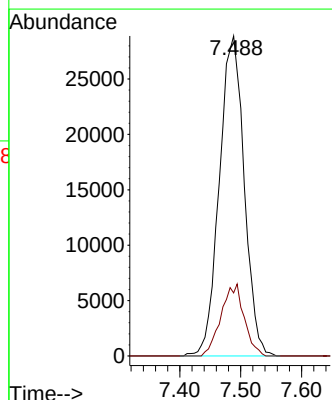
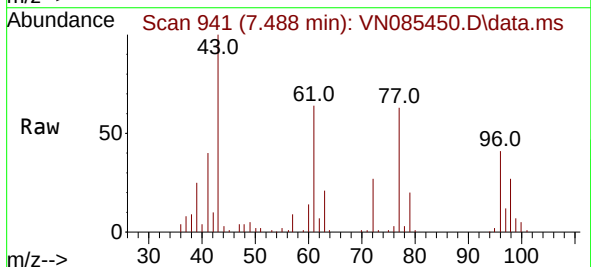
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

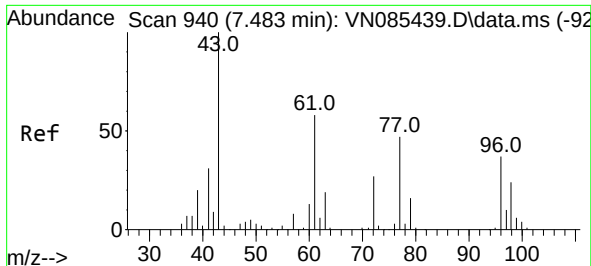
Tgt Ion: 43 Resp: 146109  
Ion Ratio Lower Upper  
43 100  
72 24.9 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 20.576 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 77 Resp: 81881  
Ion Ratio Lower Upper  
77 100  
97 20.8 10.7 32.1

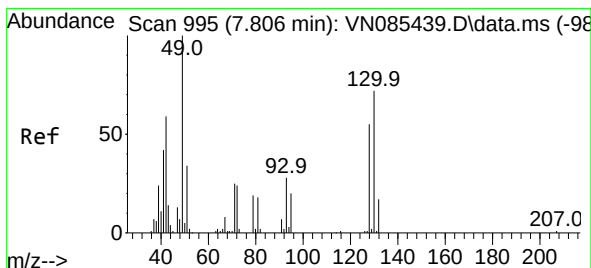
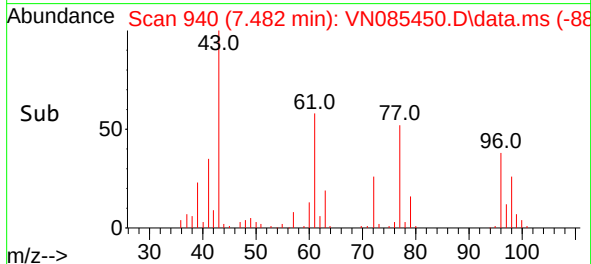
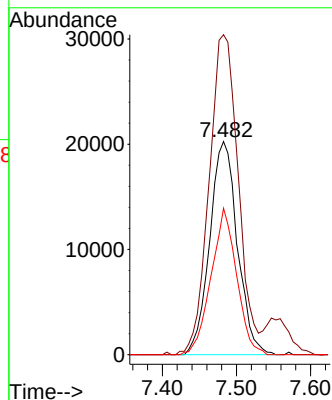
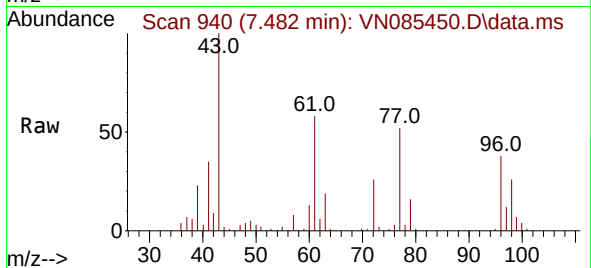




#27  
 cis-1,2-Dichloroethene  
 Concen: 18.654 ug/l  
 RT: 7.482 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

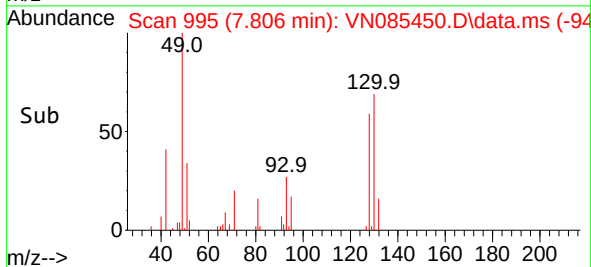
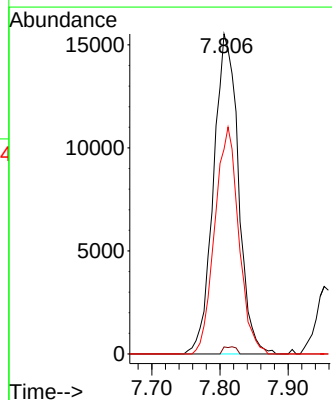
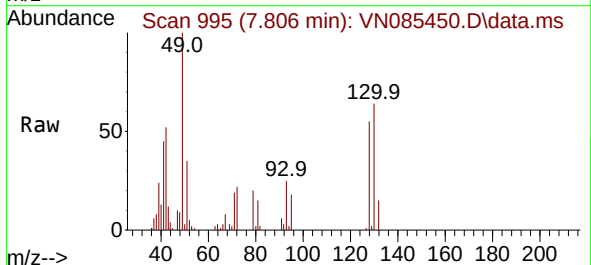
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

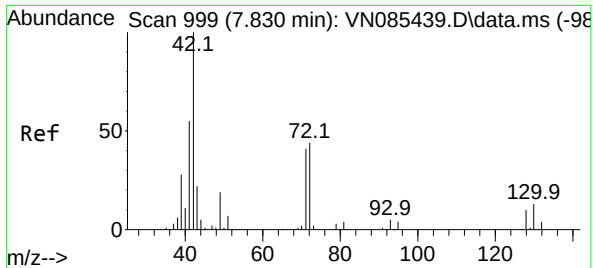
Tgt Ion: 96 Resp: 52626  
 Ion Ratio Lower Upper  
 96 100  
 61 157.4 0.0 311.8  
 98 63.4 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 17.209 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

Tgt Ion: 49 Resp: 39408  
 Ion Ratio Lower Upper  
 49 100  
 129 1.2 0.0 4.4  
 130 68.3 55.0 82.4

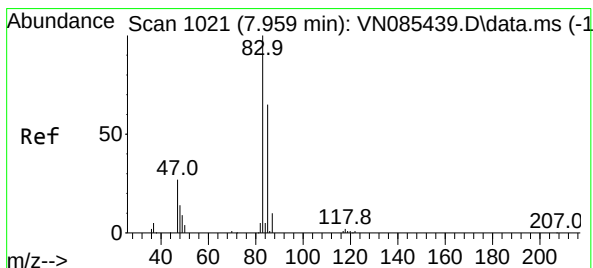
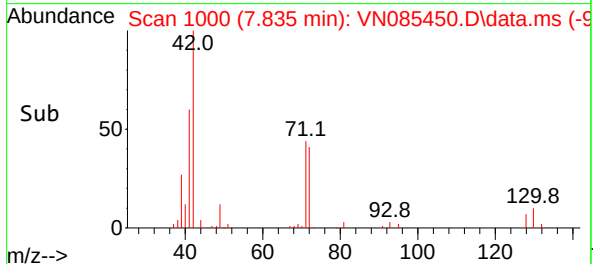
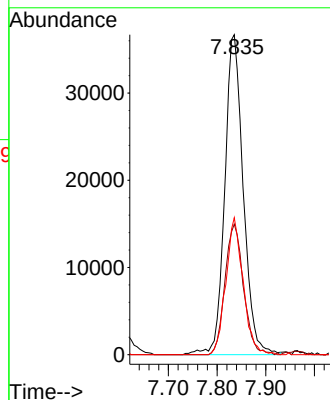
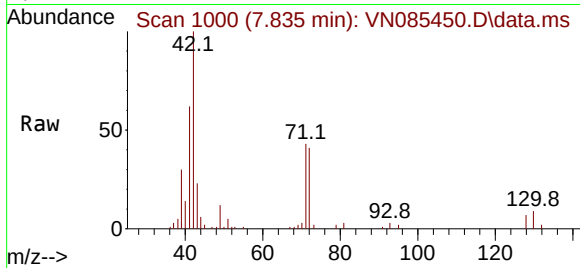




#29  
Tetrahydrofuran  
Concen: 95.619 ug/l  
RT: 7.835 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

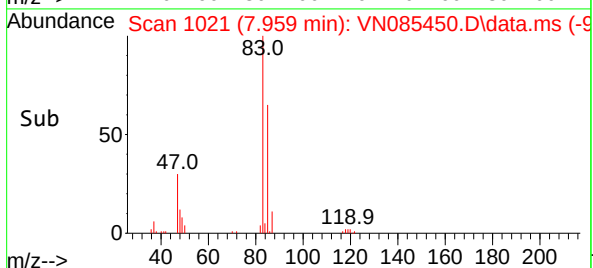
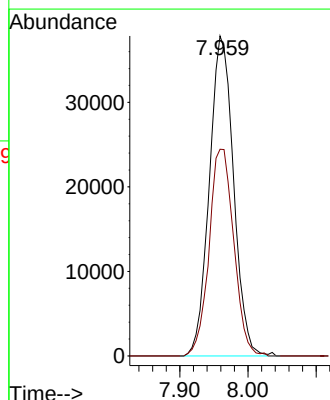
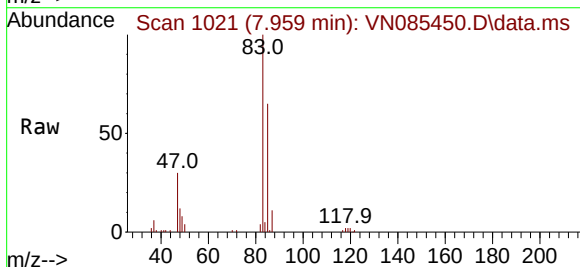
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

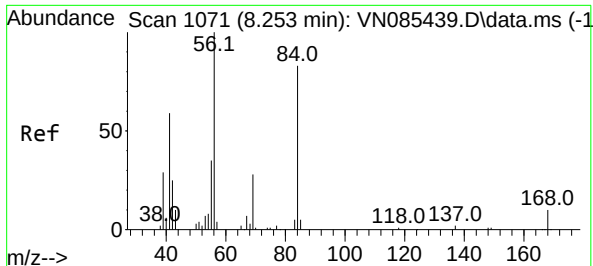
Tgt Ion: 42 Resp: 97170  
Ion Ratio Lower Upper  
42 100  
72 40.8 34.2 51.2  
71 39.9 32.5 48.7



#30  
Chloroform  
Concen: 18.400 ug/l  
RT: 7.959 min Scan# 1021  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 83 Resp: 93604  
Ion Ratio Lower Upper  
83 100  
85 64.6 51.8 77.6

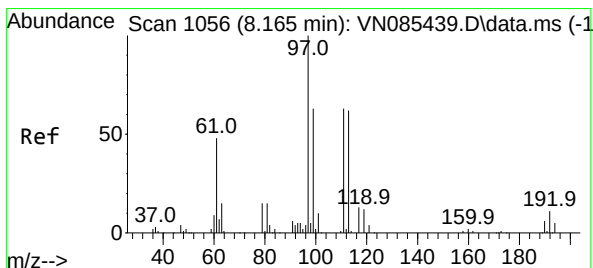
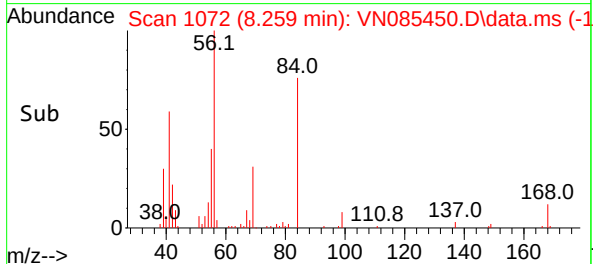
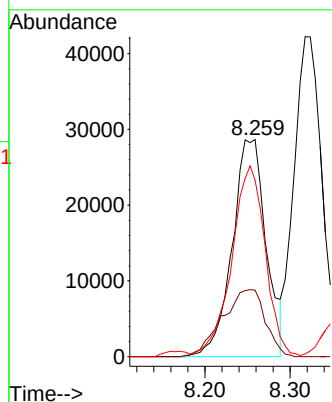
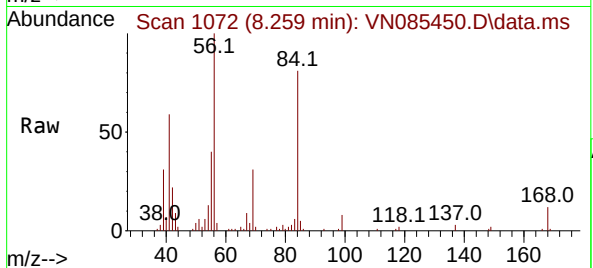




#31  
Cyclohexane  
Concen: 18.500 ug/l  
RT: 8.259 min Scan# 1072  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

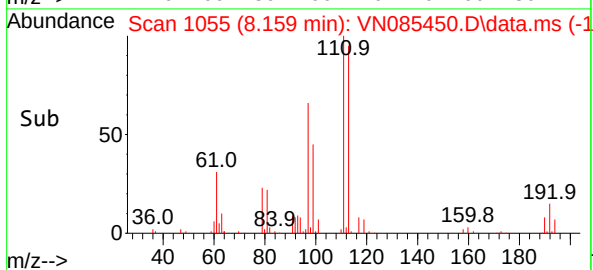
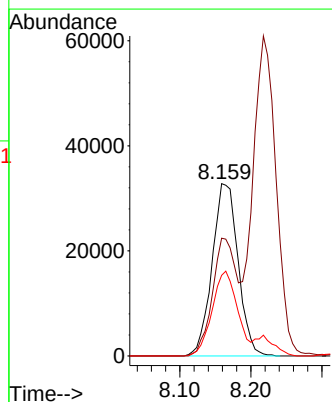
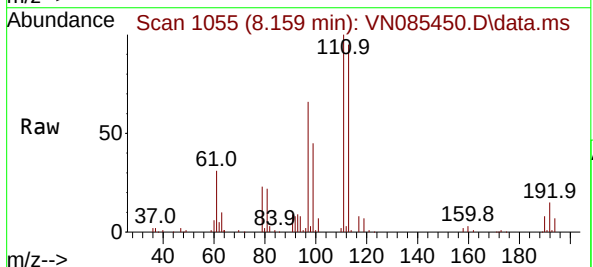
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

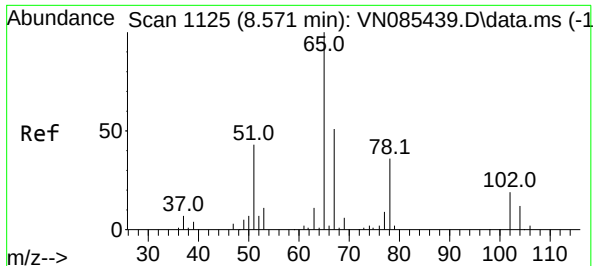
Tgt Ion: 56 Resp: 79144  
Ion Ratio Lower Upper  
56 100  
69 30.0 22.2 33.4  
84 78.9 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 18.618 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 97 Resp: 83081  
Ion Ratio Lower Upper  
97 100  
99 61.6 49.8 74.6  
61 48.2 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 47.611 ug/l

RT: 8.576 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

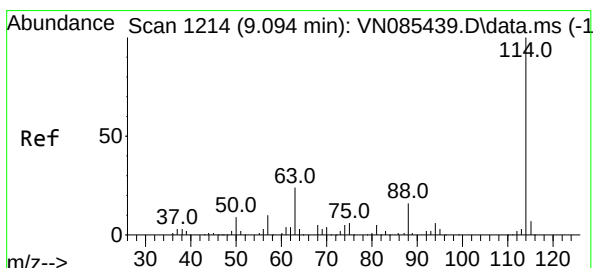
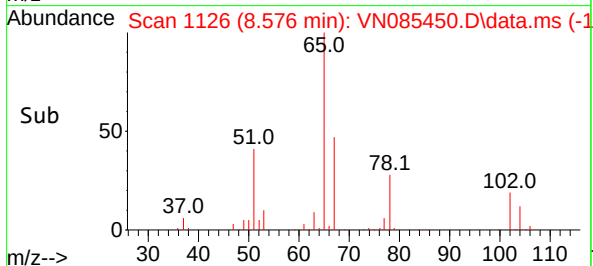
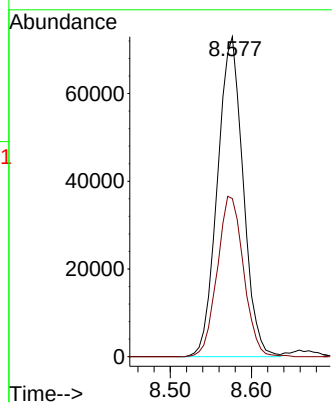
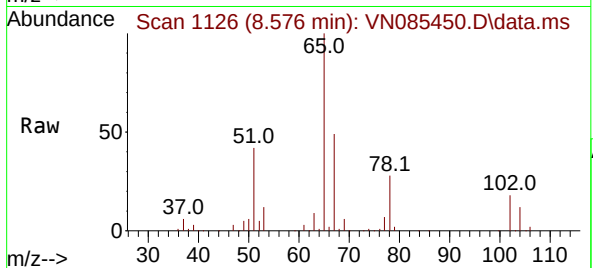
VN0115WBS01

Tgt Ion: 65 Resp: 160496

Ion Ratio Lower Upper

65 100

67 51.3 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: VN085450.D

Acq: 15 Jan 2025 10:29

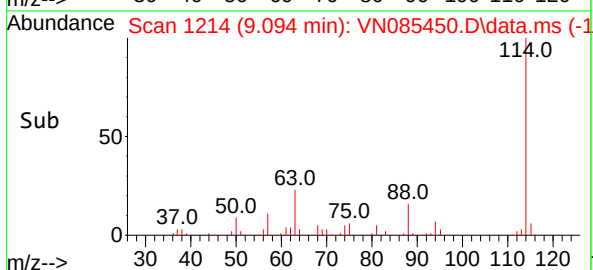
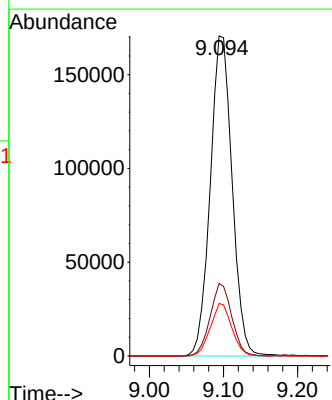
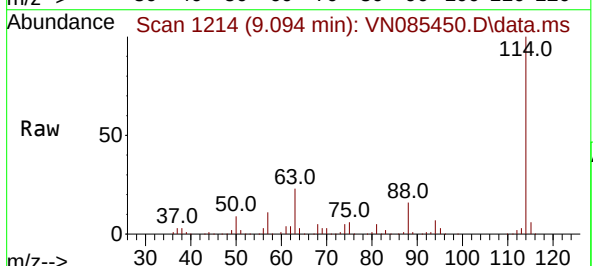
Tgt Ion: 114 Resp: 350038

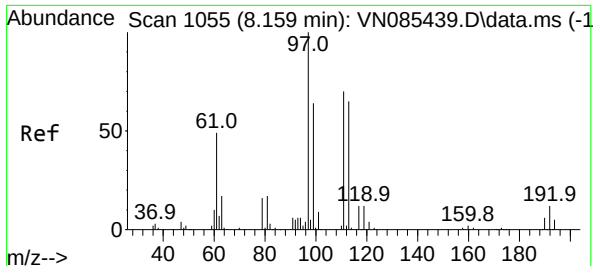
Ion Ratio Lower Upper

114 100

63 22.7 0.0 47.6

88 16.4 0.0 32.6





#35

Dibromofluoromethane

Concen: 48.506 ug/l

RT: 8.165 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

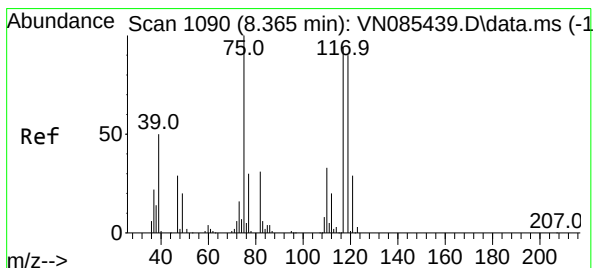
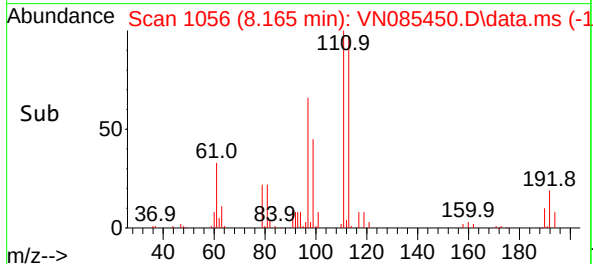
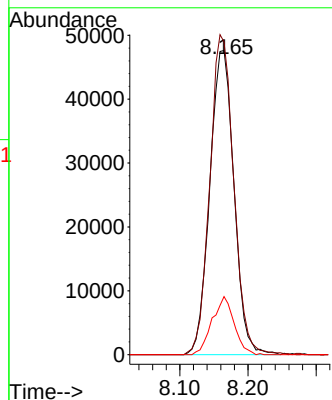
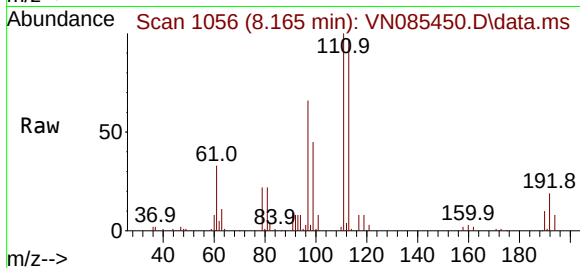
Tgt Ion:113 Resp: 117791

Ion Ratio Lower Upper

113 100

111 103.8 82.7 124.1

192 17.4 14.3 21.5



#36

1,1-Dichloropropene

Concen: 18.521 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

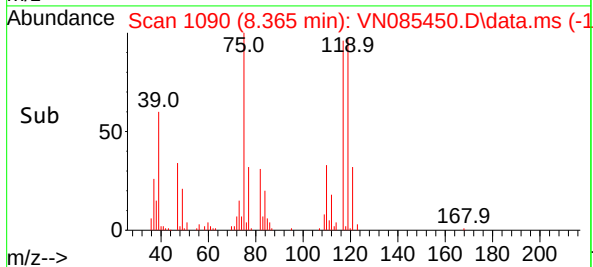
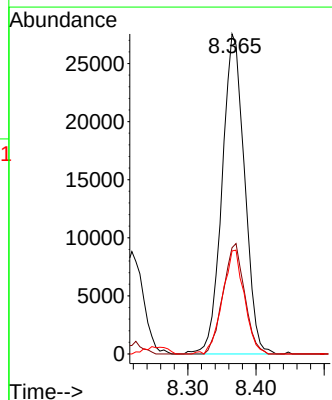
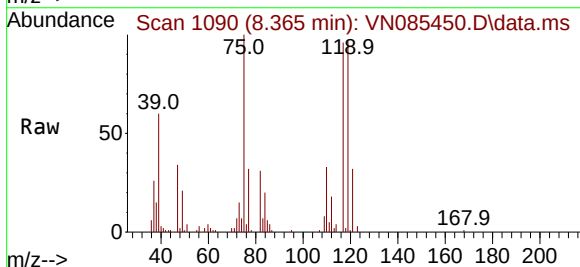
Tgt Ion: 75 Resp: 63125

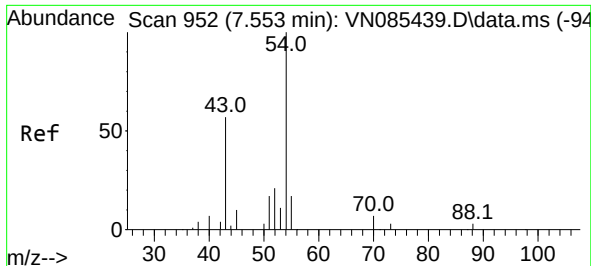
Ion Ratio Lower Upper

75 100

110 33.2 16.5 49.5

77 31.7 24.4 36.6





#37

Ethyl Acetate

Concen: 18.113 ug/l

RT: 7.553 min Scan# 91

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

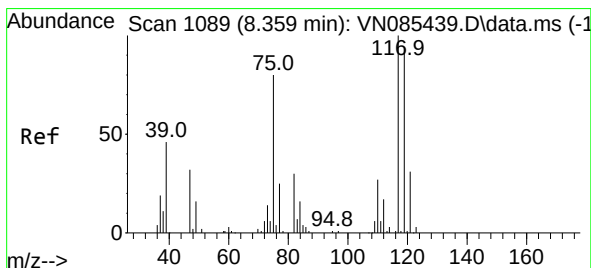
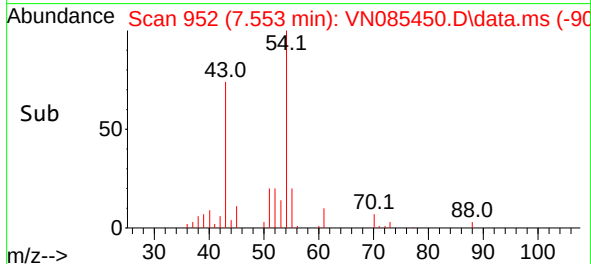
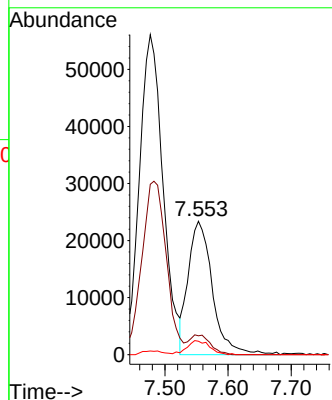
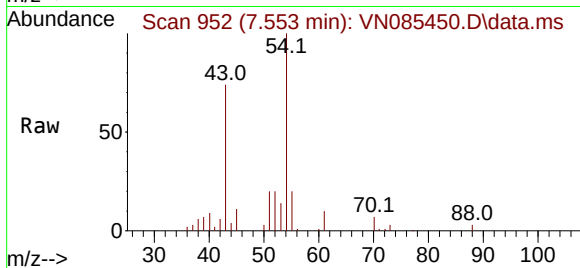
Tgt Ion: 43 Resp: 62310

Ion Ratio Lower Upper

43 100

61 12.0 10.9 16.3

70 9.8 7.5 11.3



#38

Carbon Tetrachloride

Concen: 19.039 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

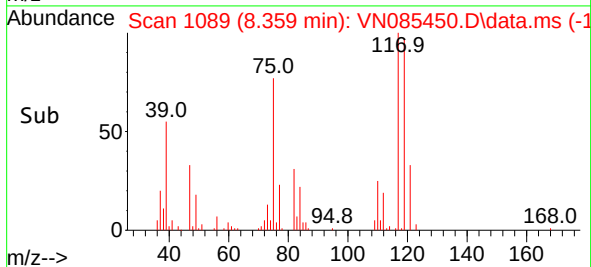
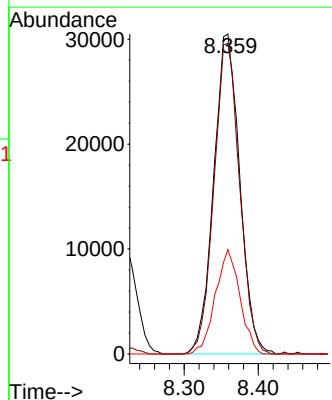
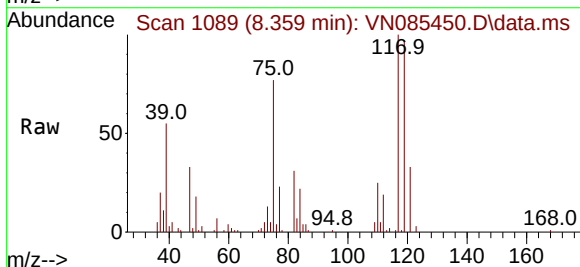
Tgt Ion: 117 Resp: 74287

Ion Ratio Lower Upper

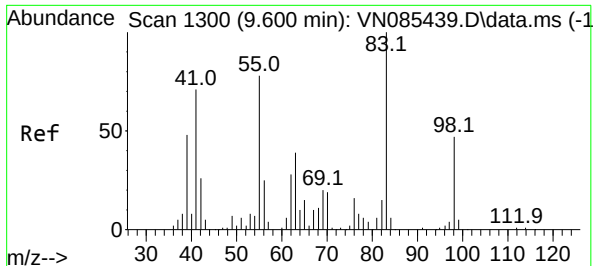
117 100

119 97.1 75.4 113.2

121 32.6 24.6 37.0







#39

Methylcyclohexane

Concen: 19.799 ug/l

RT: 9.594 min Scan# 1129

Delta R.T. -0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

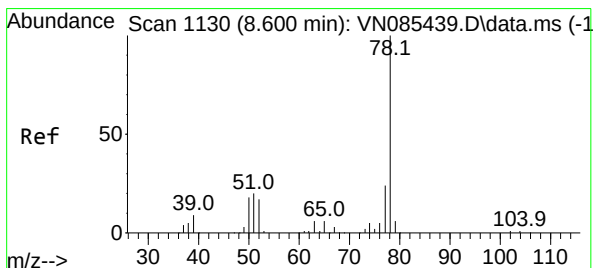
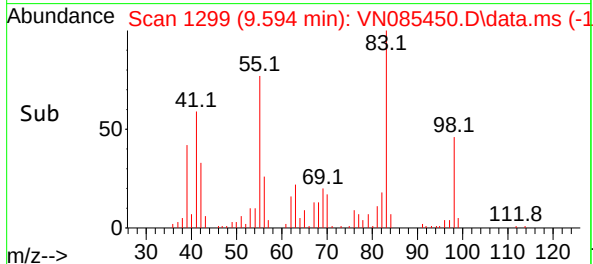
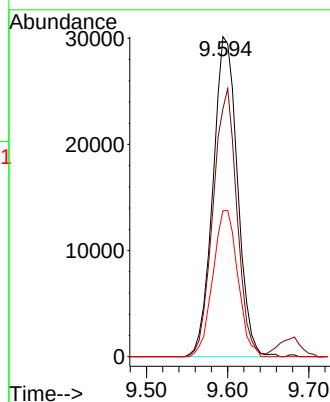
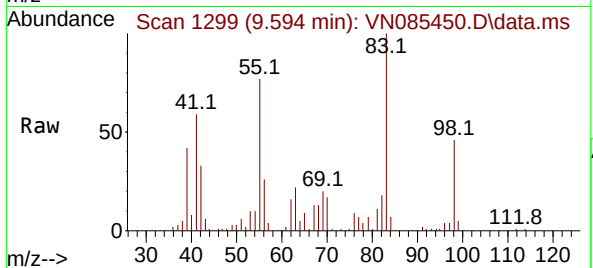
Tgt Ion: 83 Resp: 63410

Ion Ratio Lower Upper

83 100

55 77.5 62.6 94.0

98 45.6 37.7 56.5



#40

Benzene

Concen: 19.222 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085450.D

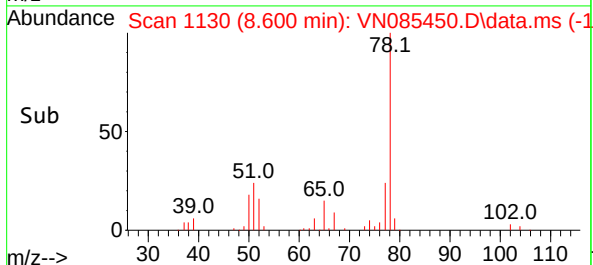
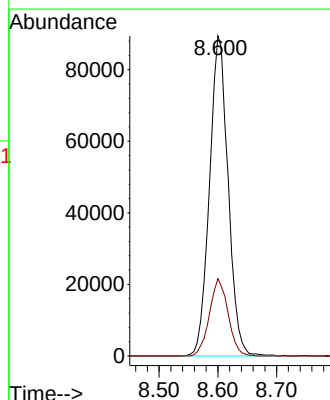
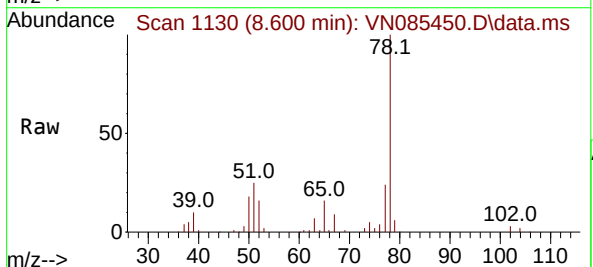
Acq: 15 Jan 2025 10:29

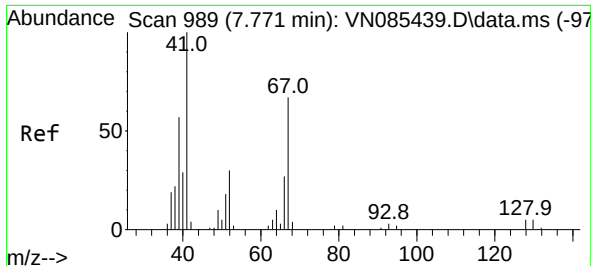
Tgt Ion: 78 Resp: 196843

Ion Ratio Lower Upper

78 100

77 24.1 19.0 28.6

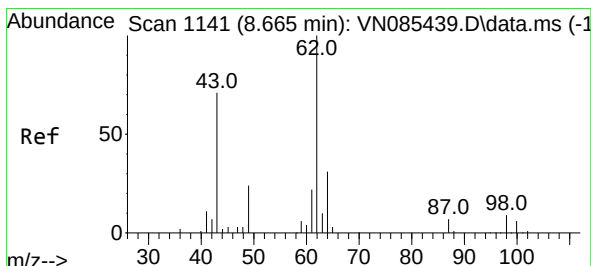
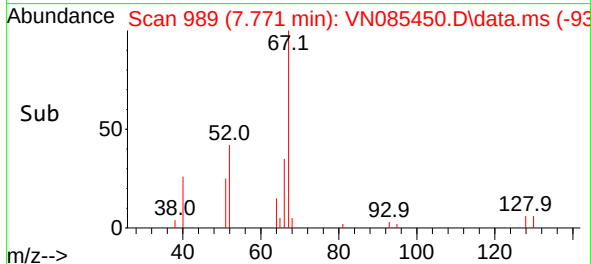
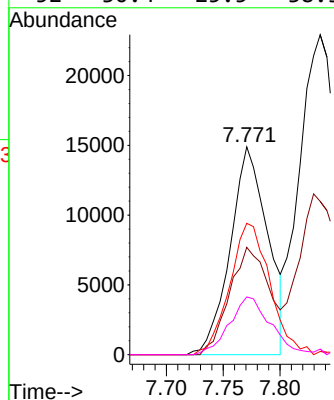
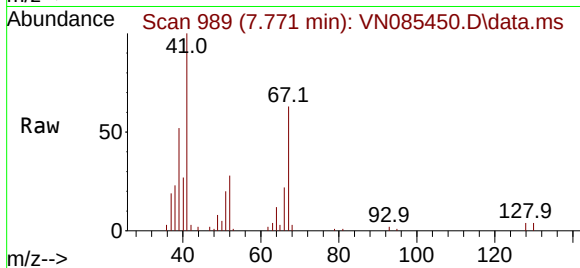




#41  
Methacrylonitrile  
Concen: 19.082 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

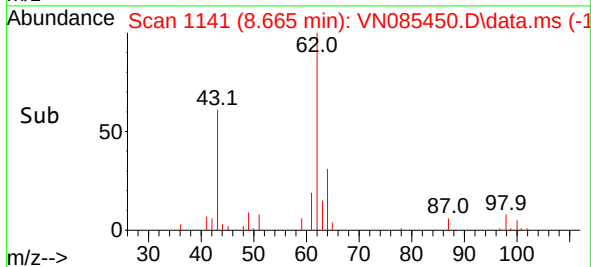
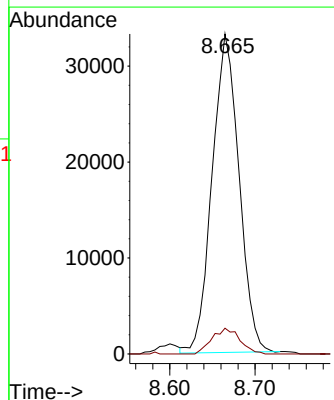
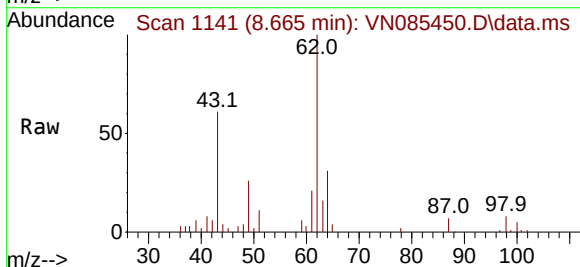
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

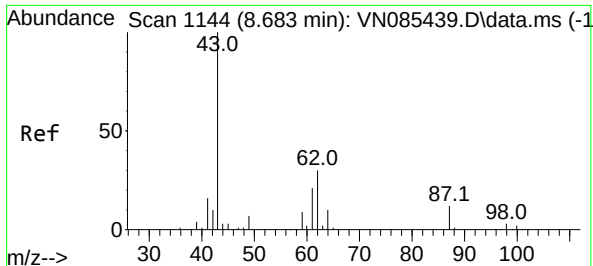
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 34152 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 55.0  | 46.0  | 69.0  |
| 67       | 68.1  | 57.4  | 86.2  |
| 52       | 30.4  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 18.835 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 72644 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 8.4   | 0.0   | 17.0  |

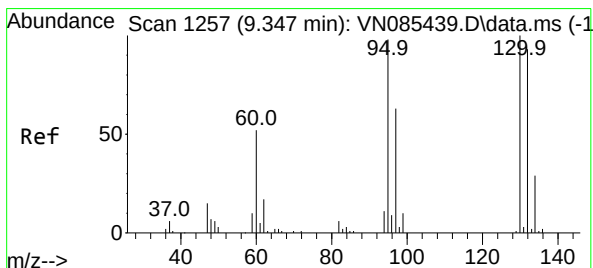
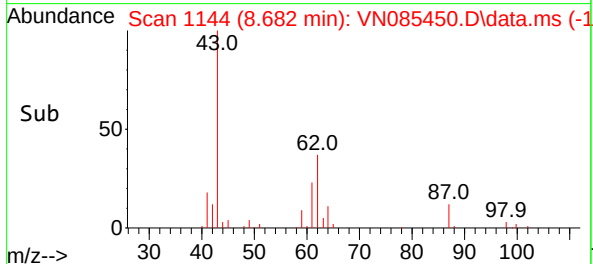
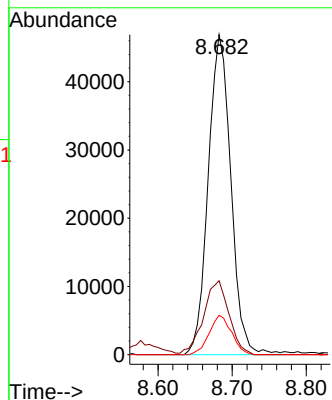
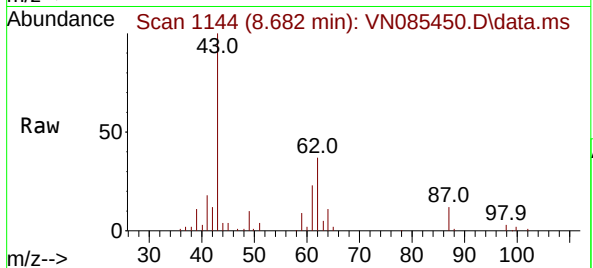




#43  
Isopropyl Acetate  
Concen: 18.059 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

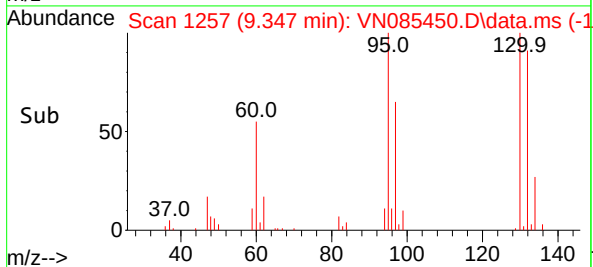
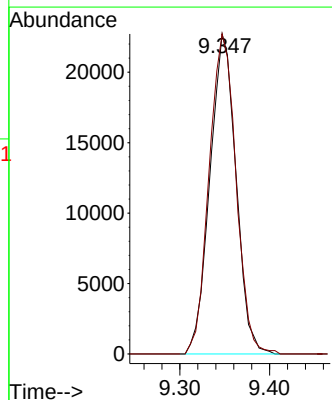
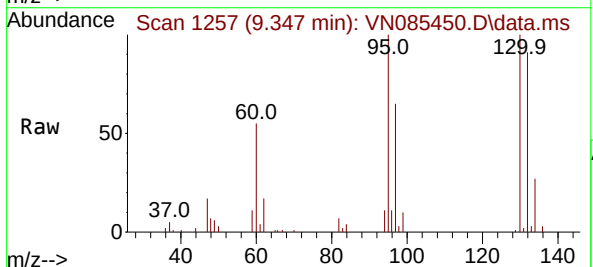
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

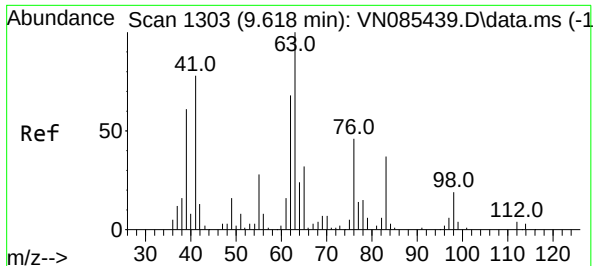
Tgt Ion: 43 Resp: 99545  
Ion Ratio Lower Upper  
43 100  
61 26.0 20.7 31.1  
87 12.1 9.8 14.8



#44  
Trichloroethene  
Concen: 19.224 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:130 Resp: 45825  
Ion Ratio Lower Upper  
130 100  
95 100.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 18.931 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

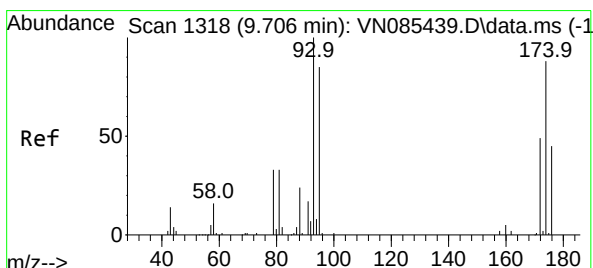
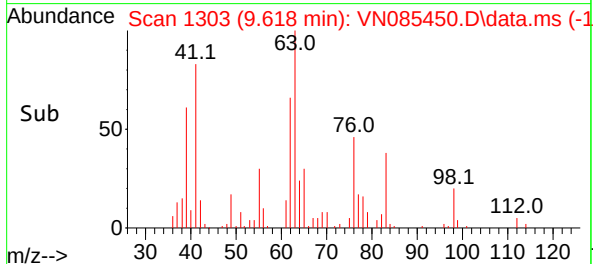
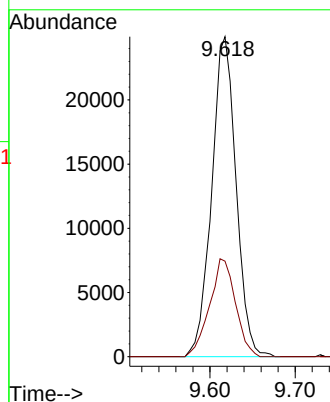
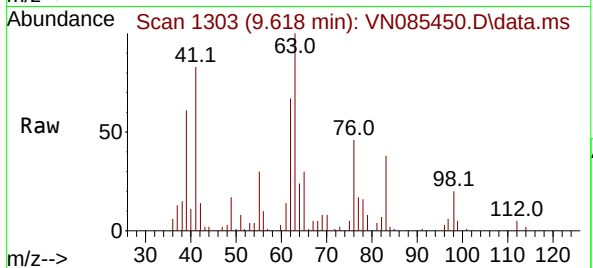
VN0115WBS01

Tgt Ion: 63 Resp: 49517

Ion Ratio Lower Upper

63 100

65 29.8 25.6 38.4



#46

Dibromomethane

Concen: 18.531 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

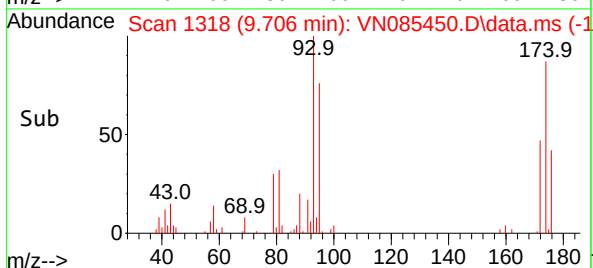
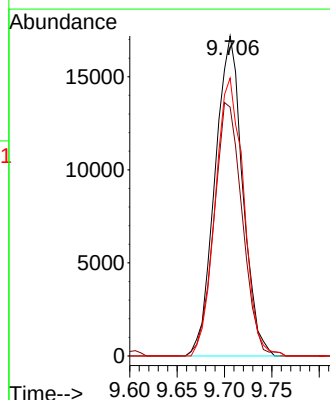
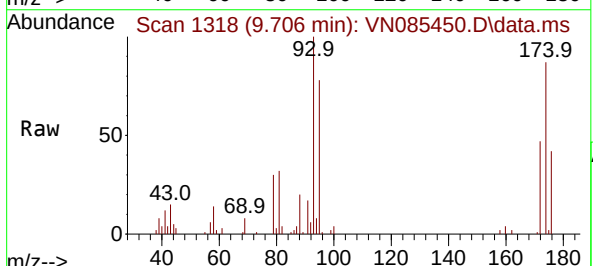
Tgt Ion: 93 Resp: 34976

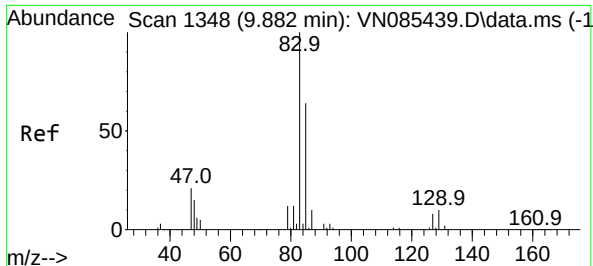
Ion Ratio Lower Upper

93 100

95 80.9 64.7 97.1

174 88.6 69.0 103.4

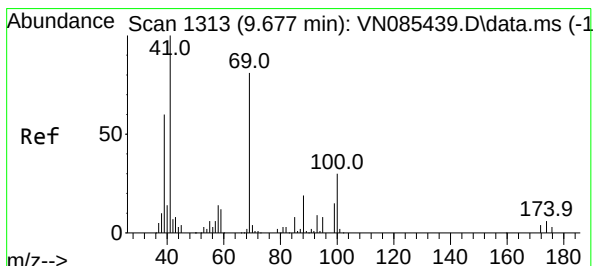
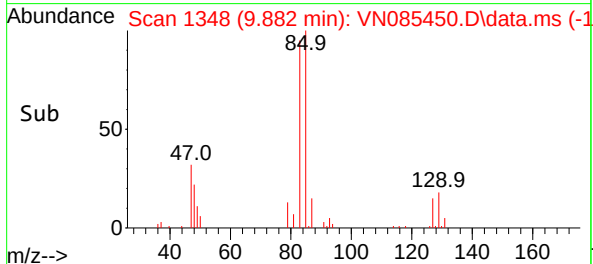
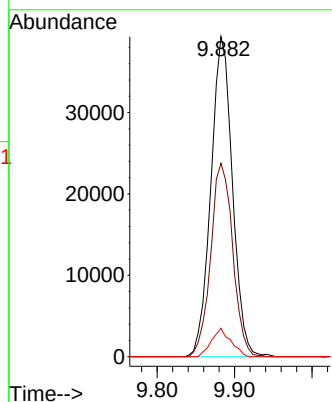
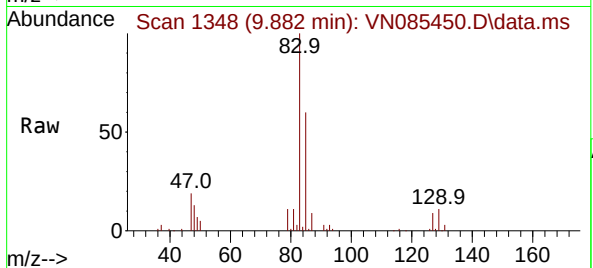




#47  
Bromodichloromethane  
Concen: 19.759 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

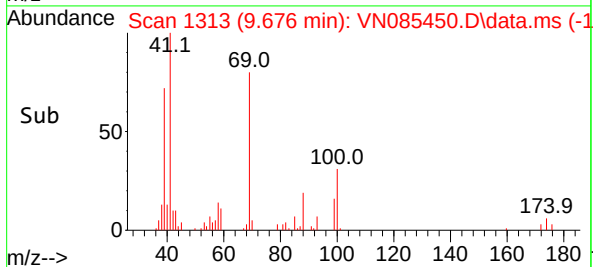
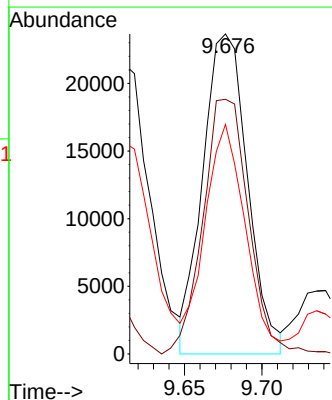
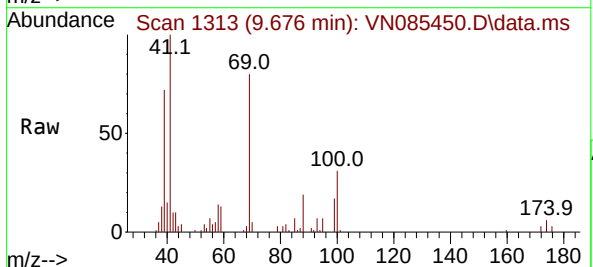
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

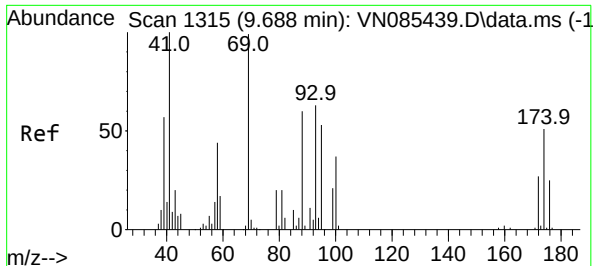
Tgt Ion: 83 Resp: 75979  
Ion Ratio Lower Upper  
83 100  
85 60.4 51.2 76.8  
127 8.8 6.5 9.7



#48  
Methyl methacrylate  
Concen: 19.143 ug/l  
RT: 9.676 min Scan# 1313  
Delta R.T. -0.001 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 41 Resp: 47488  
Ion Ratio Lower Upper  
41 100  
69 81.2 64.7 97.1  
39 65.3 49.0 73.6

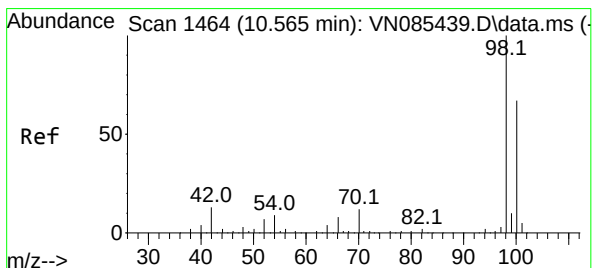
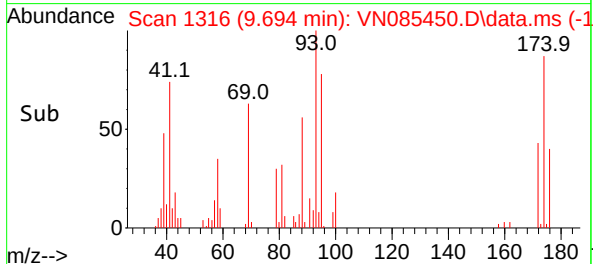
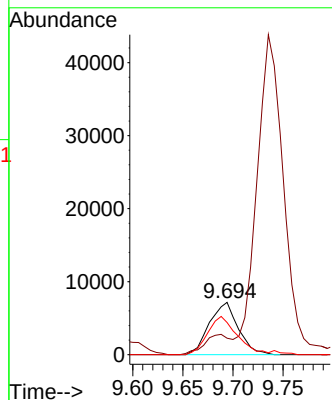
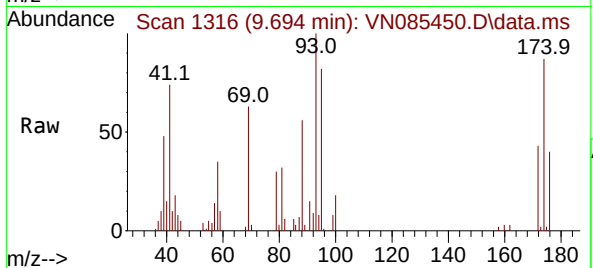




#49  
1,4-Dioxane  
Concen: 343.615 ug/l  
RT: 9.694 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

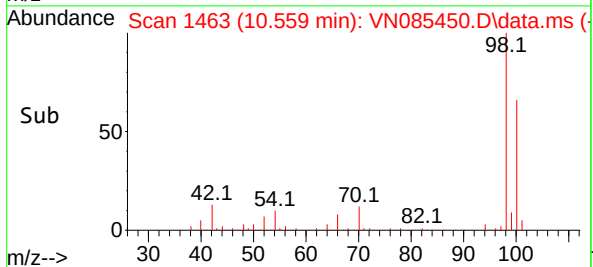
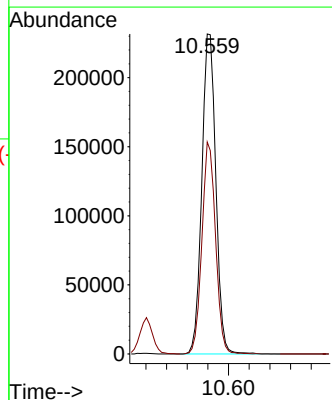
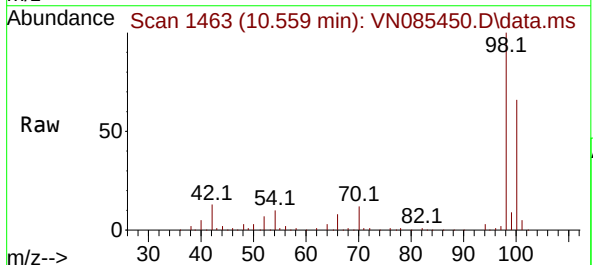
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

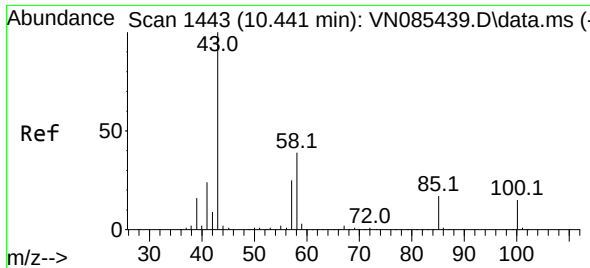
Tgt Ion: 88 Resp: 14354  
Ion Ratio Lower Upper  
88 100  
43 36.4 26.6 39.8  
58 77.8 59.5 89.3



#50  
Toluene-d8  
Concen: 50.376 ug/l  
RT: 10.559 min Scan# 1463  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 98 Resp: 434650  
Ion Ratio Lower Upper  
98 100  
100 64.6 52.2 78.4

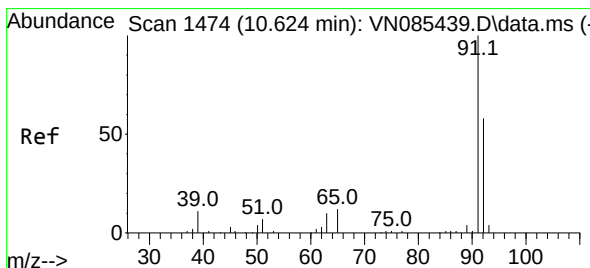
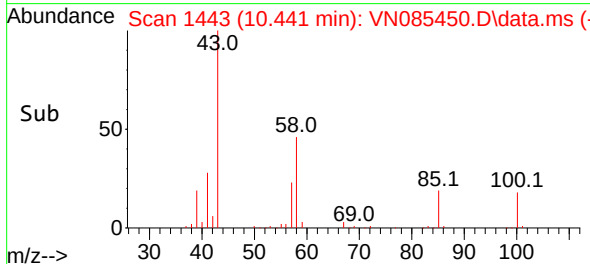
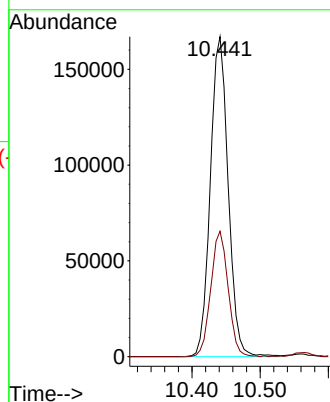
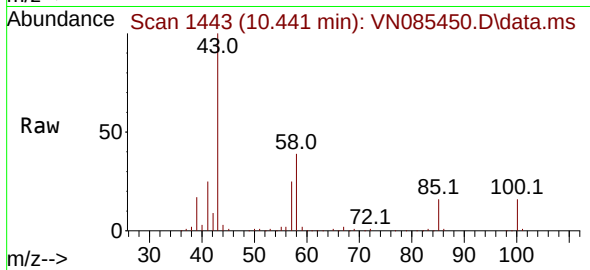




#51  
4-Methyl-2-Pentanone  
Concen: 95.328 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

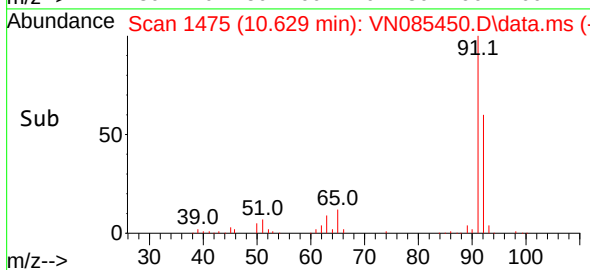
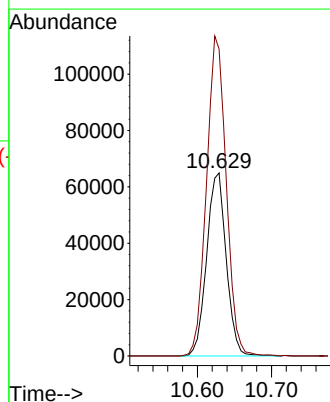
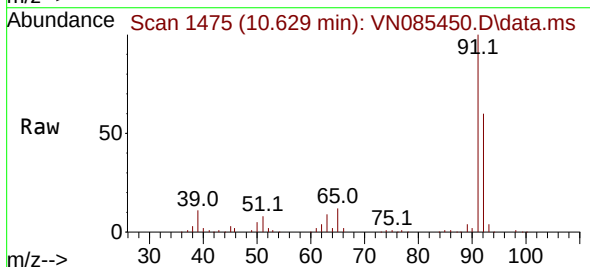
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

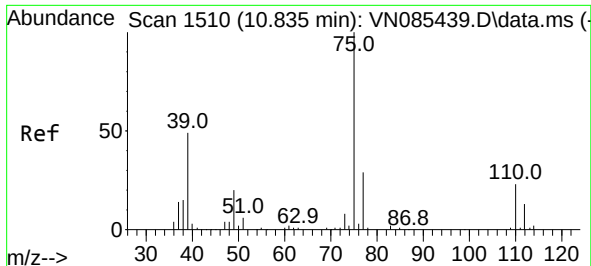
Tgt Ion: 43 Resp: 304924  
Ion Ratio Lower Upper  
43 100  
58 38.1 30.5 45.7



#52  
Toluene  
Concen: 20.053 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 92 Resp: 118985  
Ion Ratio Lower Upper  
92 100  
91 176.2 139.2 208.8

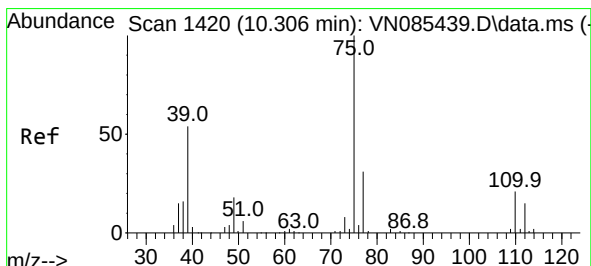
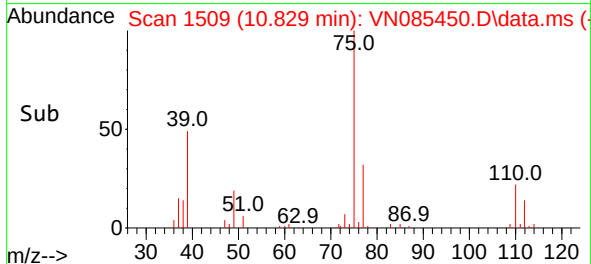
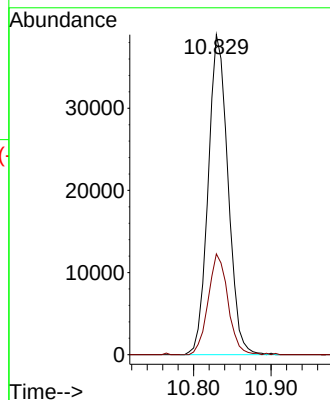
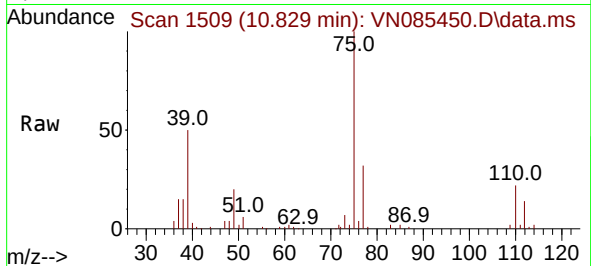




#53  
 t-1,3-Dichloropropene  
 Concen: 19.044 ug/l  
 RT: 10.829 min Scan# 1510  
 Delta R.T. -0.006 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

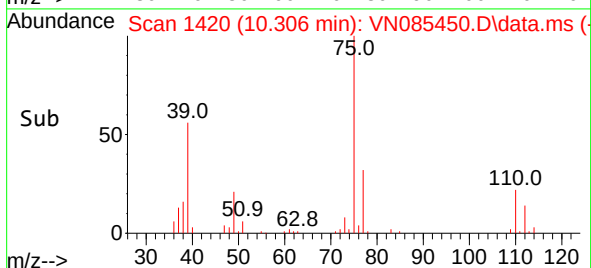
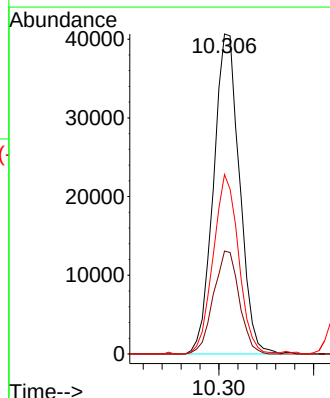
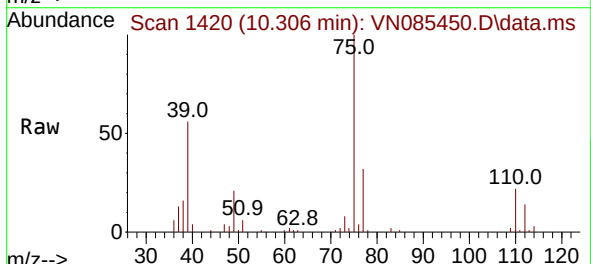
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

Tgt Ion: 75 Resp: 69201  
 Ion Ratio Lower Upper  
 75 100  
 77 31.5 23.5 35.3

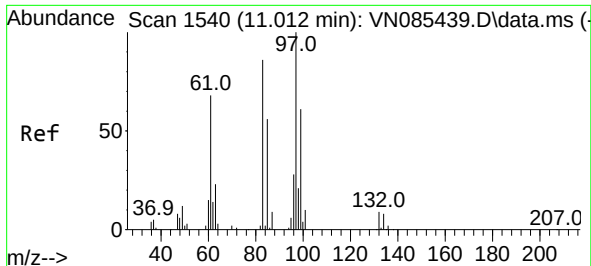


#54  
 cis-1,3-Dichloropropene  
 Concen: 19.958 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

Tgt Ion: 75 Resp: 77467  
 Ion Ratio Lower Upper  
 75 100  
 77 32.2 25.0 37.4  
 39 56.1 43.1 64.7



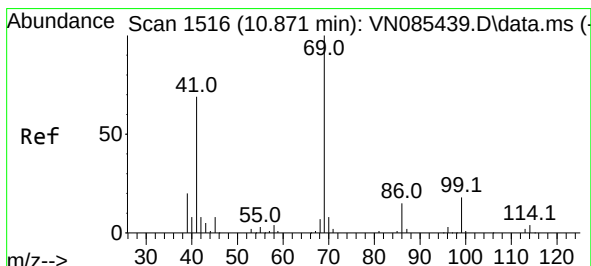
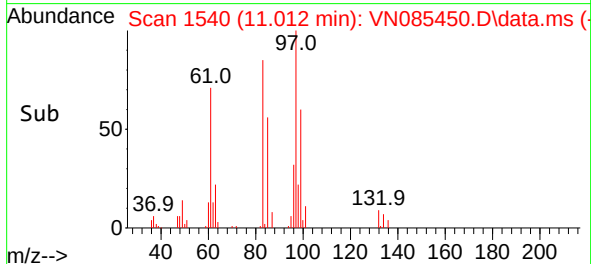
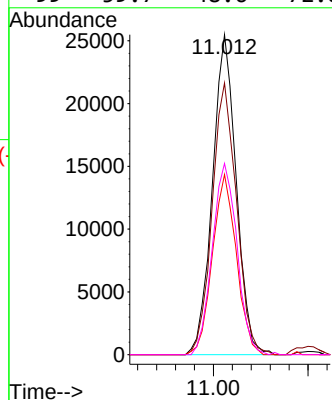
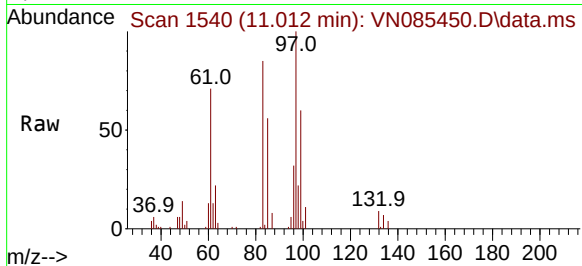




#55  
1,1,2-Trichloroethane  
Concen: 18.906 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

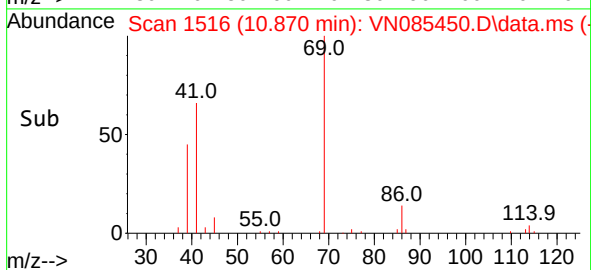
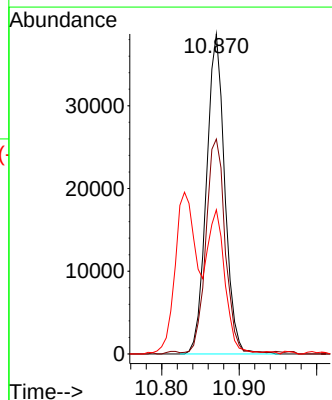
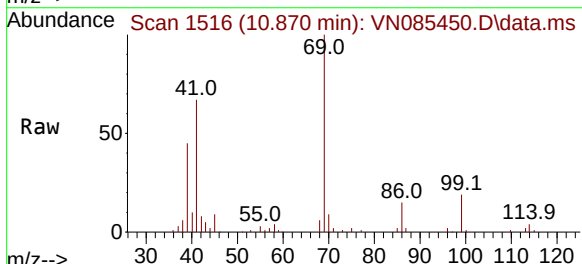
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

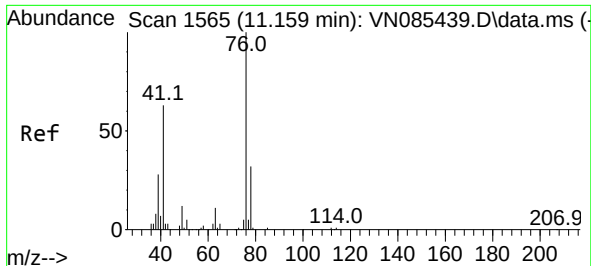
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 44394 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 84.9     | 69.0 103.6  |
| 85 56.3     | 44.6 66.8   |
| 99 59.7     | 48.6 72.8   |



#56  
Ethyl methacrylate  
Concen: 17.379 ug/l  
RT: 10.870 min Scan# 1516  
Delta R.T. -0.001 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

|             |             |       |  |
|-------------|-------------|-------|--|
| Tgt Ion: 69 | Resp: 63560 |       |  |
| Ion Ratio   | Lower       | Upper |  |
| 69 100      |             |       |  |
| 41 69.4     | 54.6        | 82.0  |  |
| 39 41.4     | 32.4        | 48.6  |  |

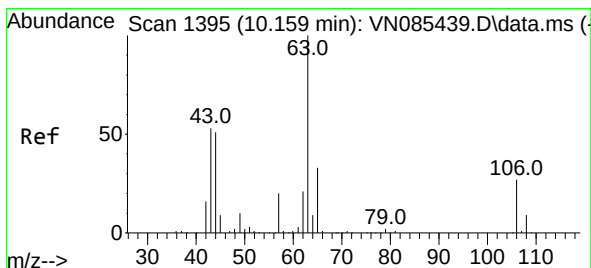
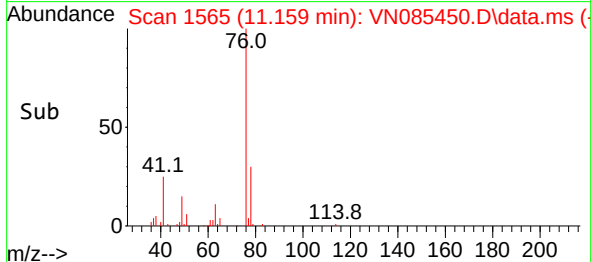
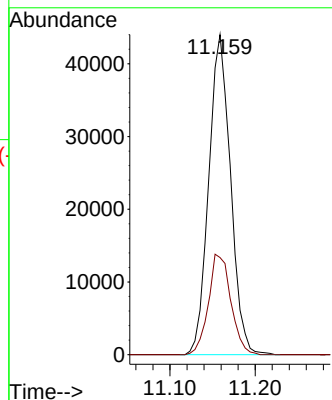
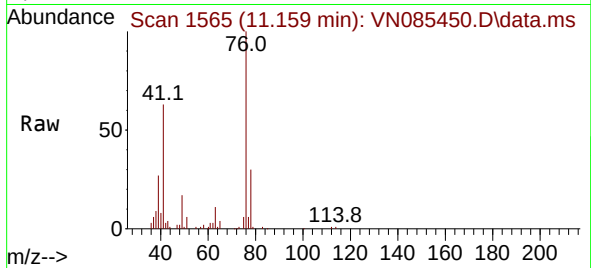




#57  
1,3-Dichloropropane  
Concen: 19.136 ug/l  
RT: 11.159 min Scan# 111  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

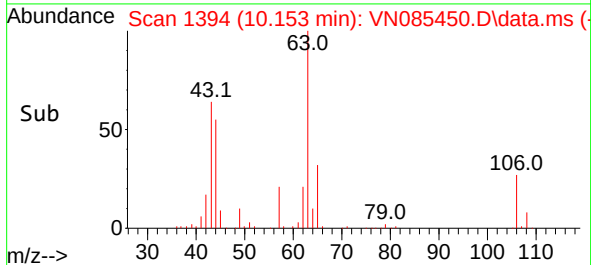
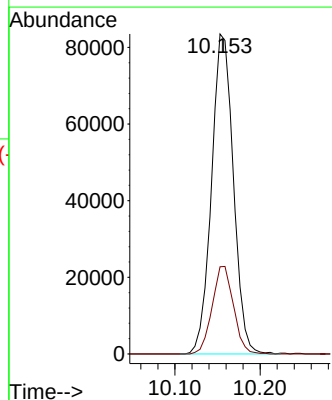
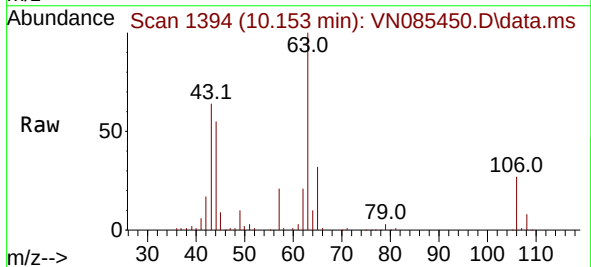
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

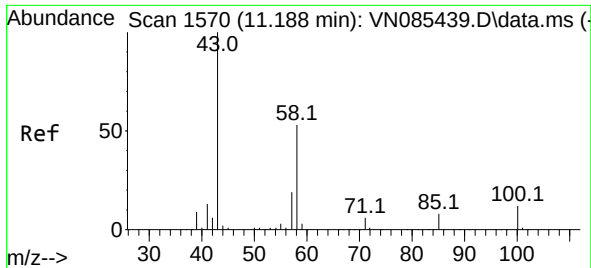
Tgt Ion: 76 Resp: 78133  
Ion Ratio Lower Upper  
76 100  
78 32.3 25.6 38.4



#58  
2-Chloroethyl Vinyl ether  
Concen: 99.810 ug/l  
RT: 10.153 min Scan# 1394  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 63 Resp: 148732  
Ion Ratio Lower Upper  
63 100  
106 26.7 21.6 32.4

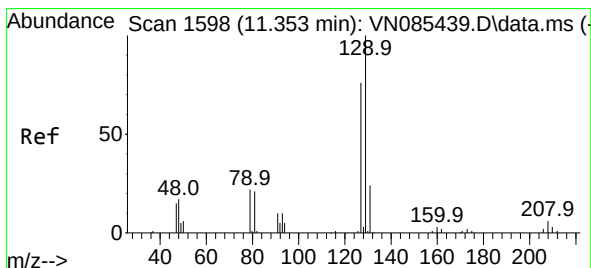
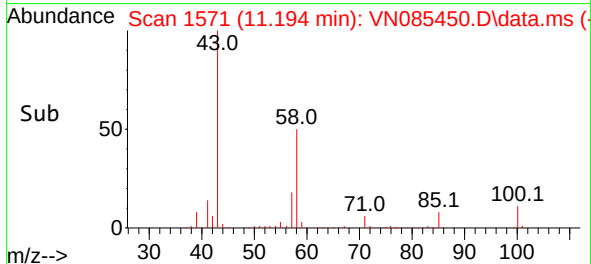
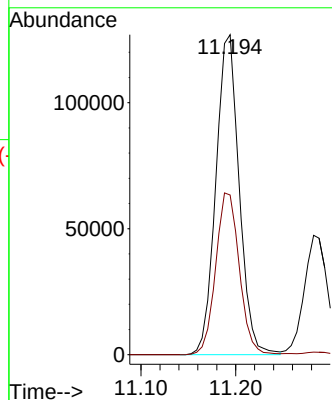
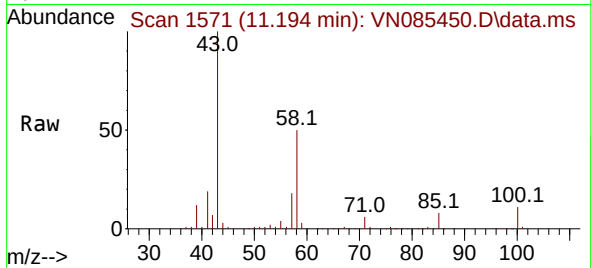




#59  
2-Hexanone  
Concen: 96.472 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

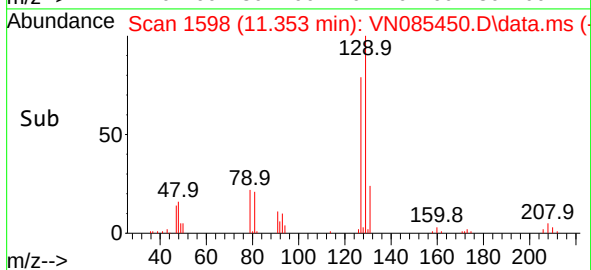
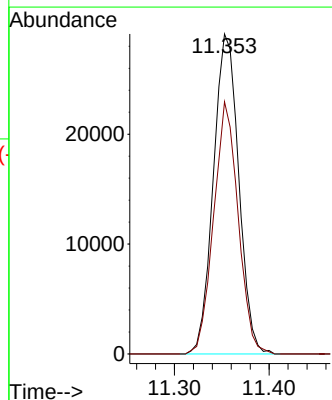
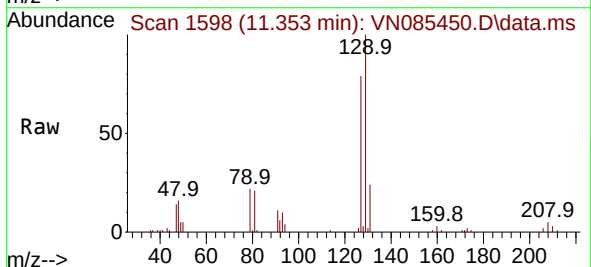
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

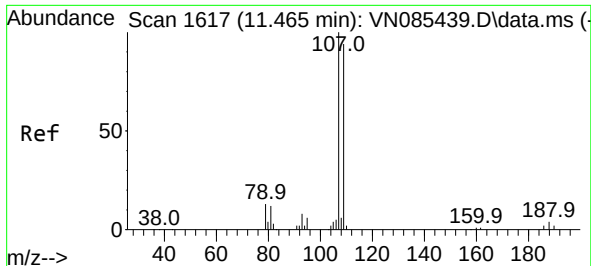
Tgt Ion: 43 Resp: 217128  
Ion Ratio Lower Upper  
43 100  
58 51.2 26.2 78.6



#60  
Dibromochloromethane  
Concen: 19.097 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 129 Resp: 54139  
Ion Ratio Lower Upper  
129 100  
127 76.2 38.6 115.8

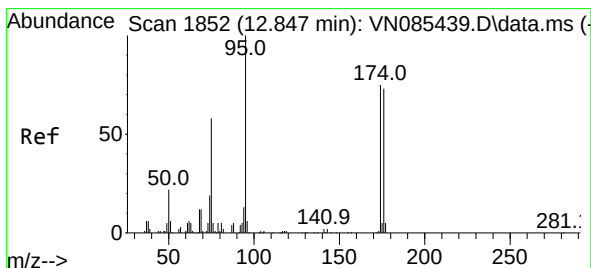
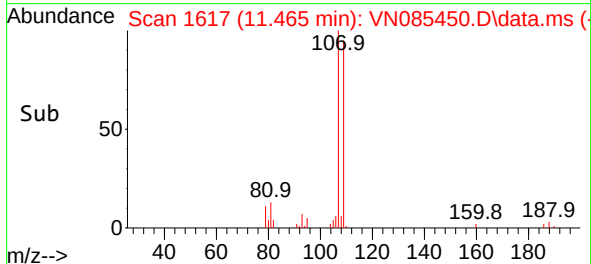
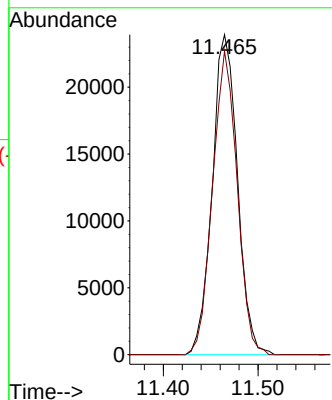
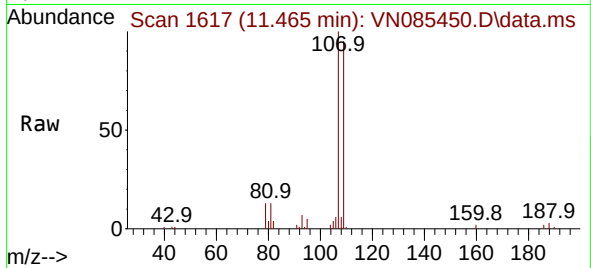




#61  
1,2-Dibromoethane  
Concen: 18.932 ug/l  
RT: 11.465 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

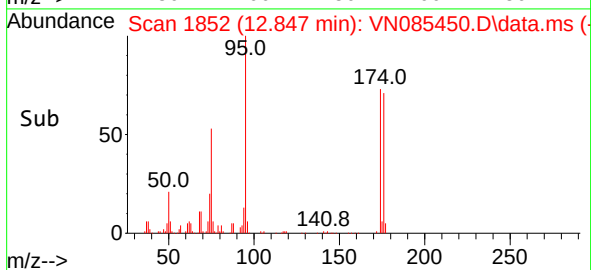
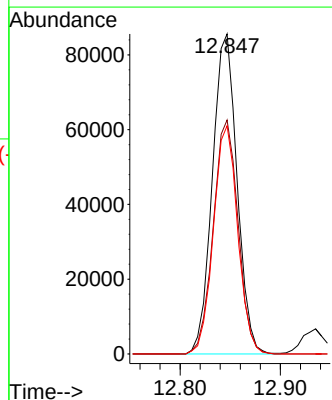
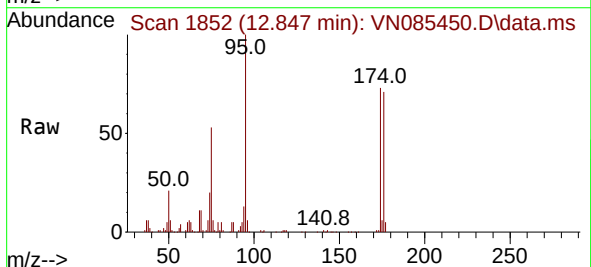
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

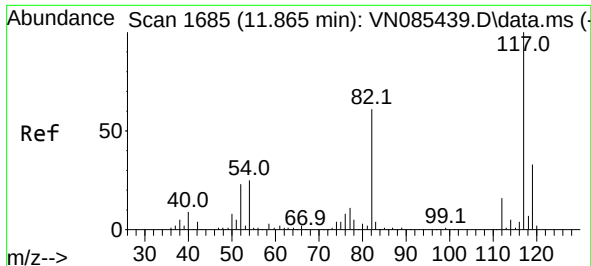
Tgt Ion:107 Resp: 44253  
Ion Ratio Lower Upper  
107 100  
109 92.6 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 49.491 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 95 Resp: 146069  
Ion Ratio Lower Upper  
95 100  
174 73.5 0.0 145.0  
176 70.2 0.0 142.4

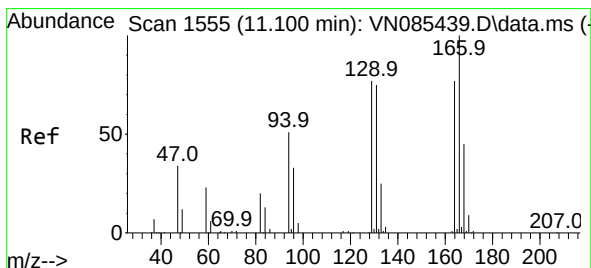
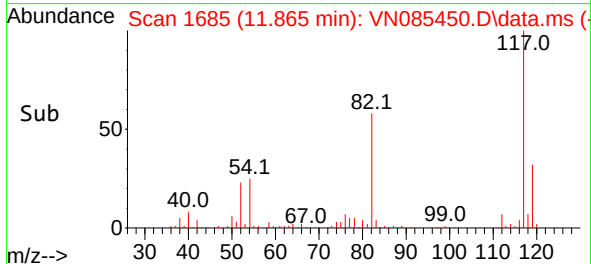
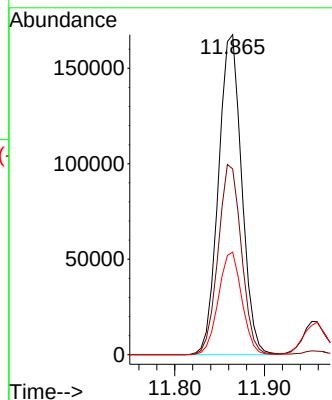
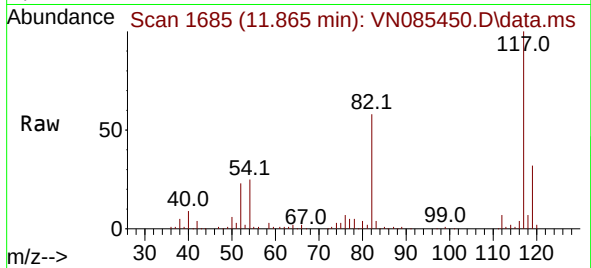




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

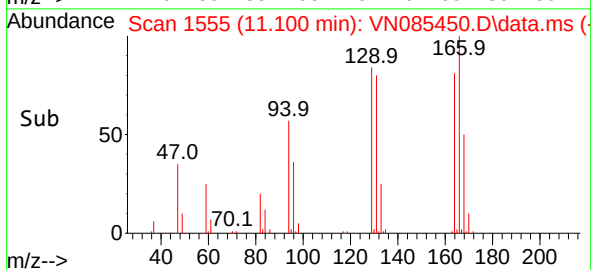
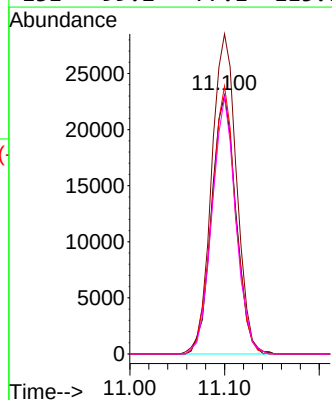
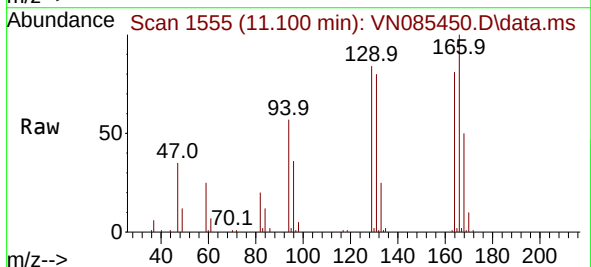
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

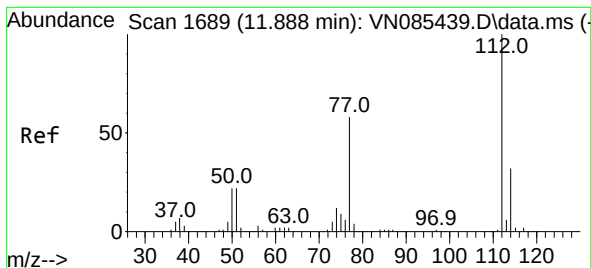
Tgt Ion:117 Resp: 301633  
Ion Ratio Lower Upper  
117 100  
82 58.1 48.6 72.8  
119 32.1 26.6 39.8



#64  
Tetrachloroethene  
Concen: 20.068 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:164 Resp: 41267  
Ion Ratio Lower Upper  
164 100  
166 123.7 103.4 155.2  
129 103.5 79.2 118.8  
131 99.2 77.1 115.7





#65

Chlorobenzene

Concen: 19.304 ug/l

RT: 11.888 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

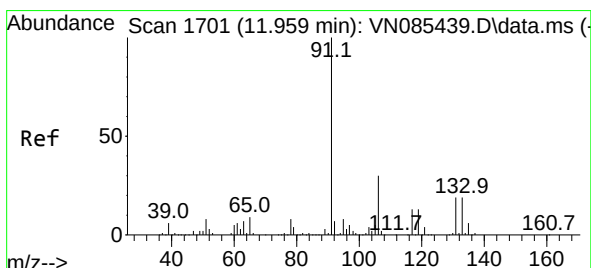
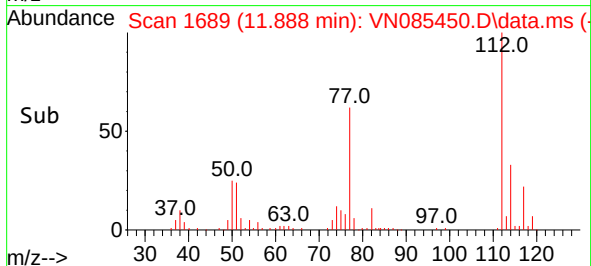
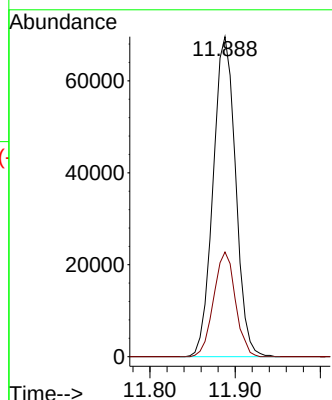
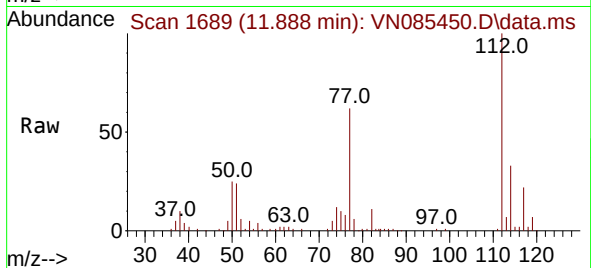
VN0115WBS01

Tgt Ion:112 Resp: 127557

Ion Ratio Lower Upper

112 100

114 32.7 25.3 37.9



#66

1,1,1,2-Tetrachloroethane

Concen: 18.821 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

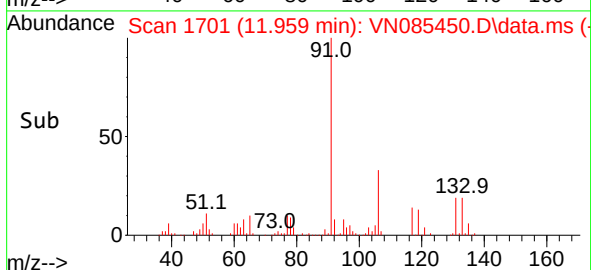
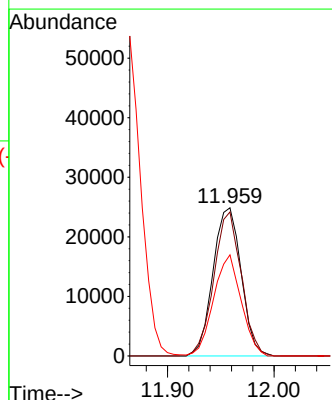
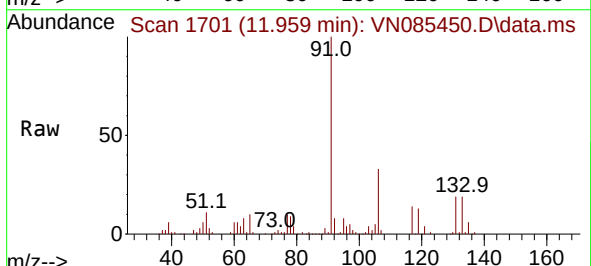
Tgt Ion:131 Resp: 45645

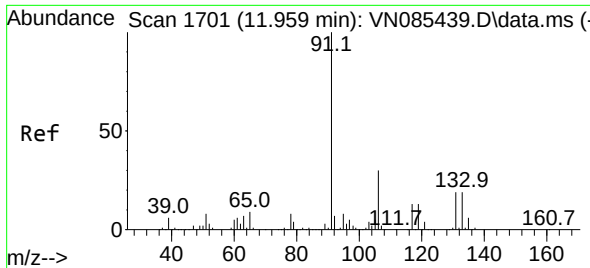
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.9 33.1 99.5

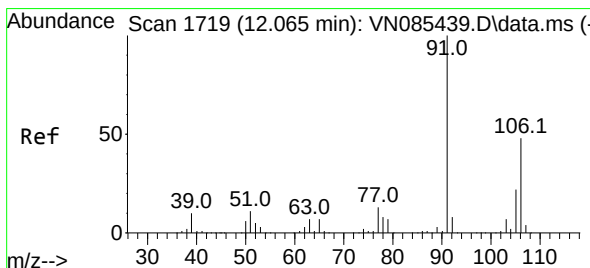
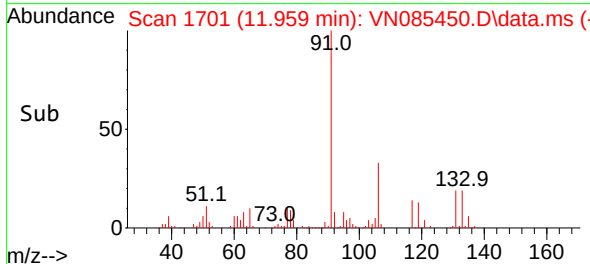
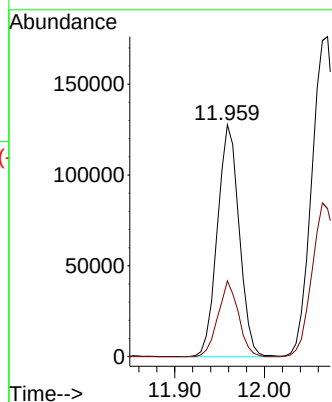
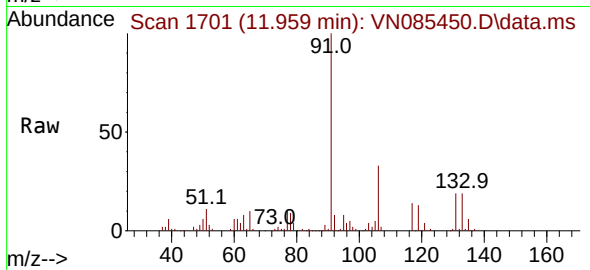




#67  
Ethyl Benzene  
Concen: 20.019 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

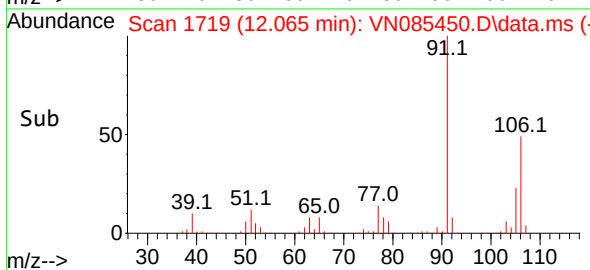
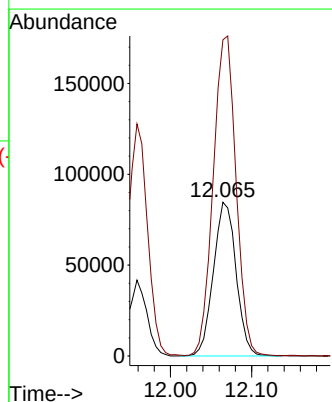
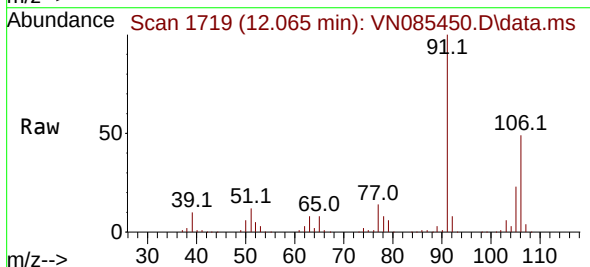
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

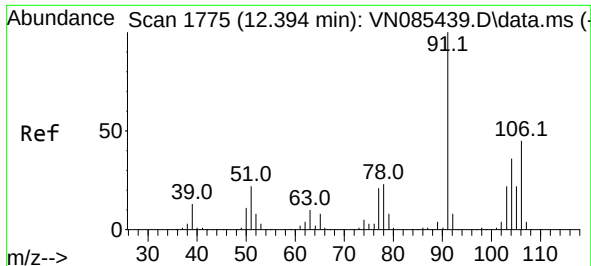
Tgt Ion: 91 Resp: 215448  
Ion Ratio Lower Upper  
91 100  
106 32.7 23.8 35.8



#68  
m/p-Xylenes  
Concen: 41.314 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:106 Resp: 164329  
Ion Ratio Lower Upper  
106 100  
91 209.5 167.7 251.5

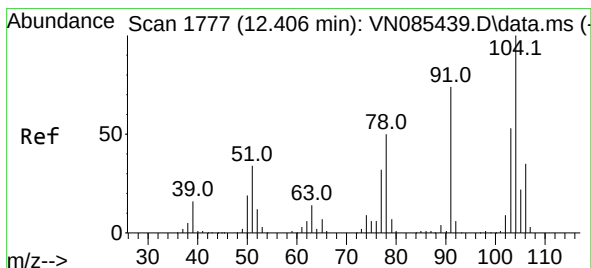
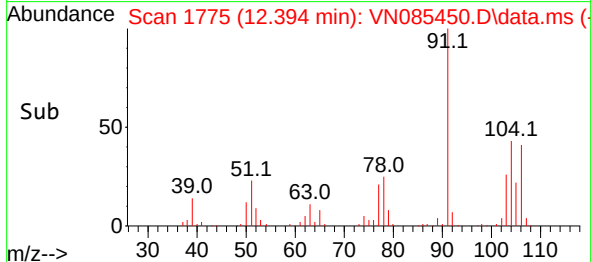
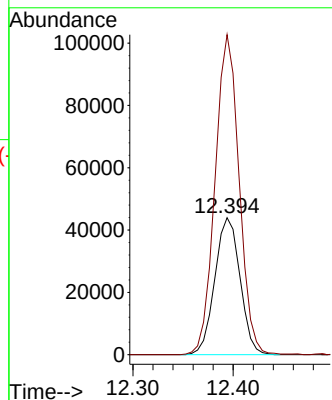
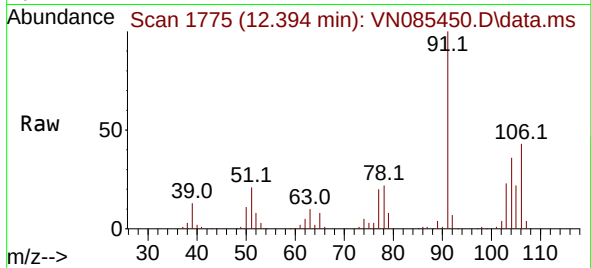




#69  
o-Xylene  
Concen: 20.184 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

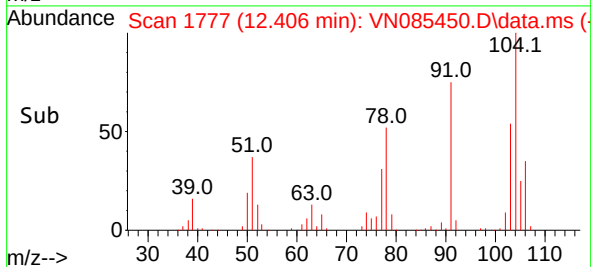
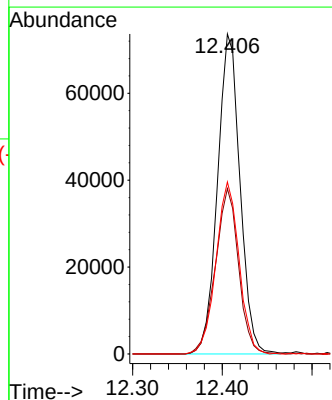
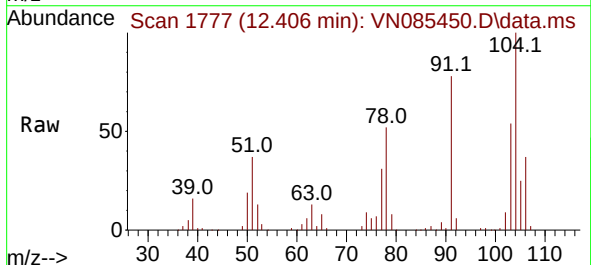
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion:106 Resp: 76723  
Ion Ratio Lower Upper  
106 100  
91 223.5 110.4 331.2

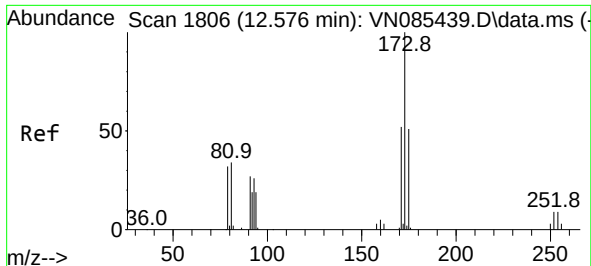


#70  
Styrene  
Concen: 20.358 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:104 Resp: 128074  
Ion Ratio Lower Upper  
104 100  
78 53.2 42.5 63.7  
103 55.3 43.8 65.8



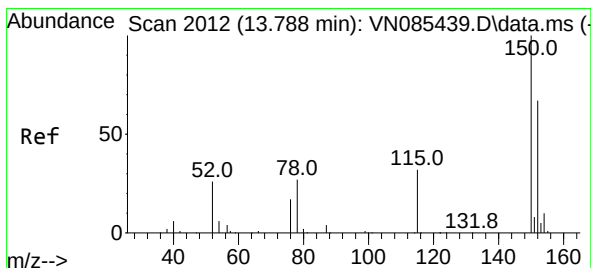
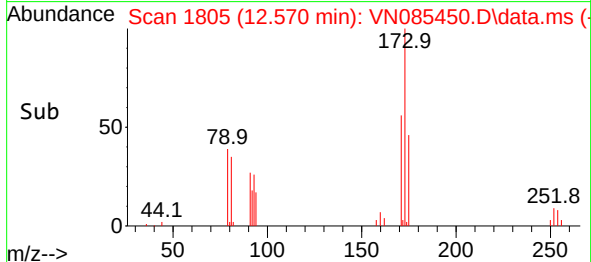
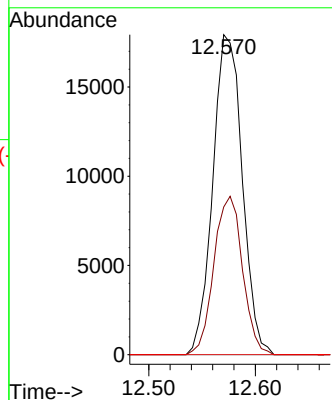
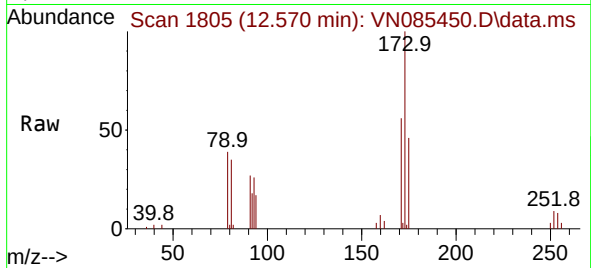




#71  
Bromoform  
Concen: 19.837 ug/l  
RT: 12.570 min Scan# 1805  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

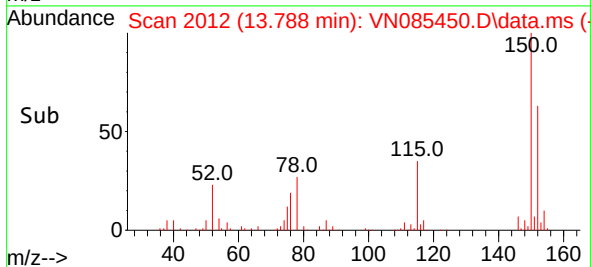
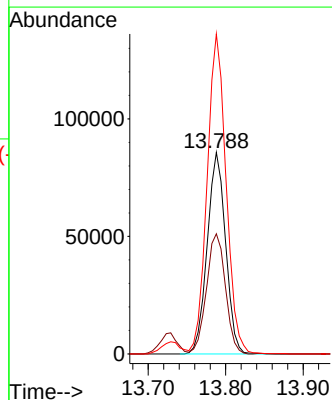
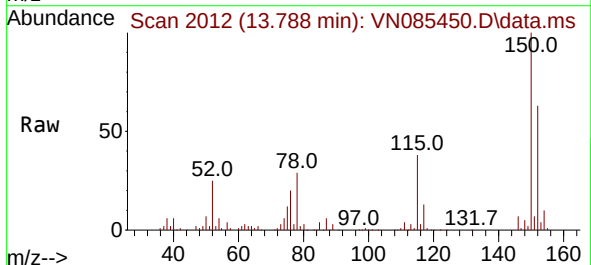
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

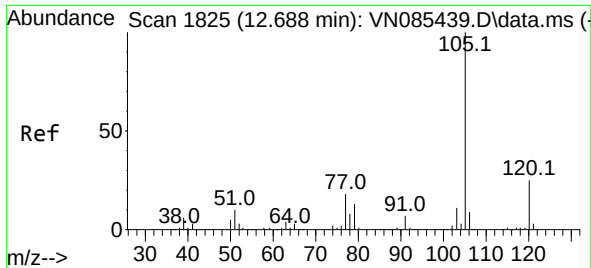
Tgt Ion:173 Resp: 34422  
Ion Ratio Lower Upper  
173 100  
175 48.1 24.4 73.2  
254 0.0 0.0 0.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:152 Resp: 141189  
Ion Ratio Lower Upper  
152 100  
115 61.5 31.1 93.3  
150 163.3 0.0 343.6

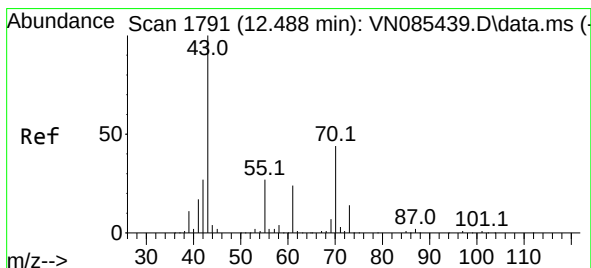
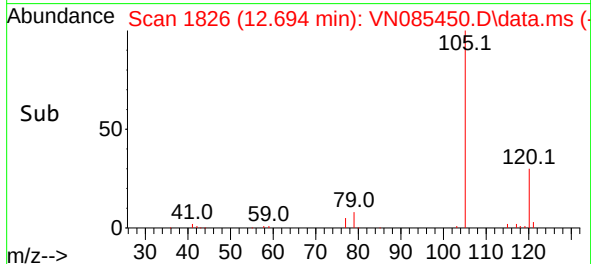
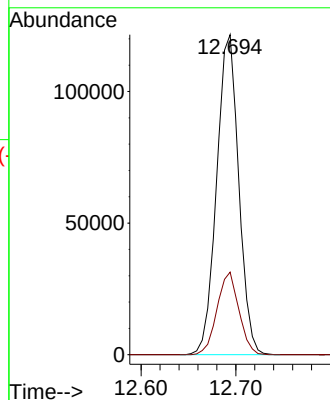
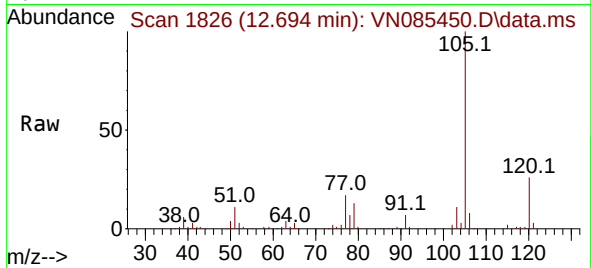




#73  
Isopropylbenzene  
Concen: 20.668 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

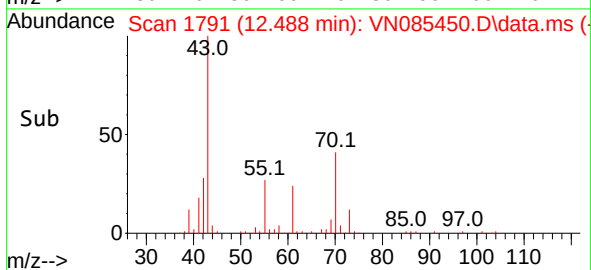
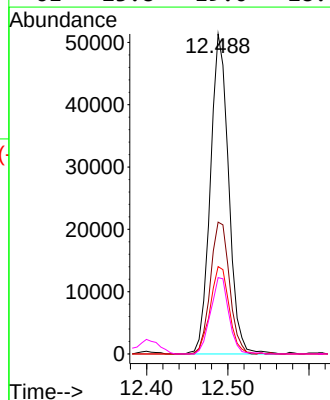
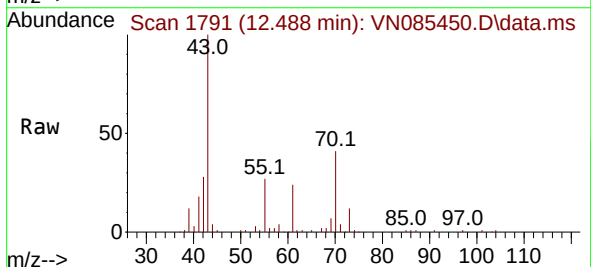
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

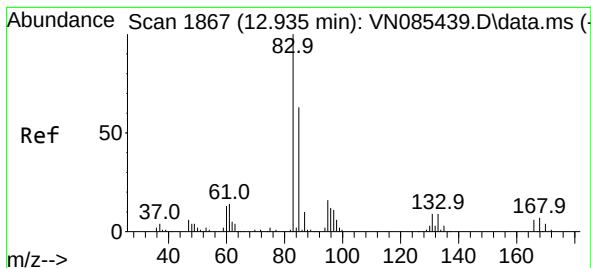
Tgt Ion:105 Resp: 196948  
Ion Ratio Lower Upper  
105 100  
120 25.5 12.8 38.3



#74  
N-ethyl acetate  
Concen: 18.746 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 43 Resp: 80290  
Ion Ratio Lower Upper  
43 100  
70 43.0 34.0 51.0  
55 28.2 21.4 32.2  
61 23.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 18.510 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

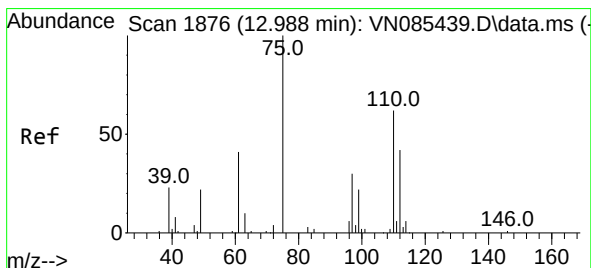
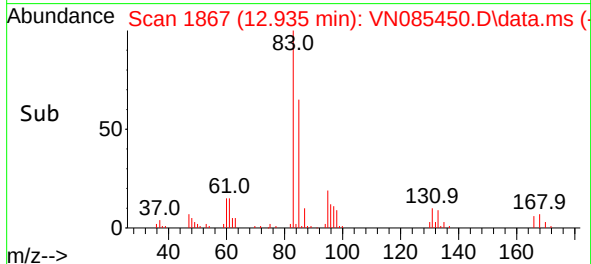
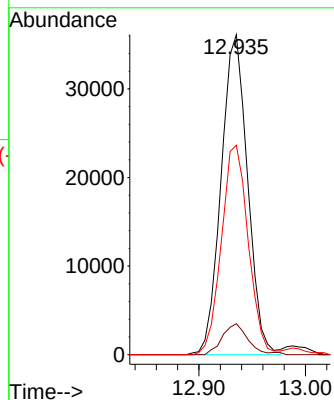
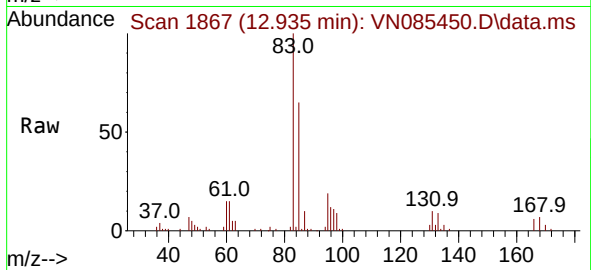
Tgt Ion: 83 Resp: 62306

Ion Ratio Lower Upper

83 100

131 9.4 4.8 14.4

85 66.2 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 28.604 ug/l

RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

Lab File: VN085450.D

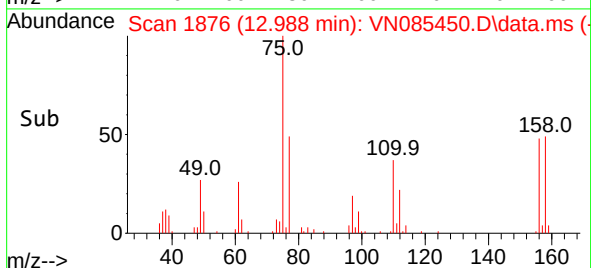
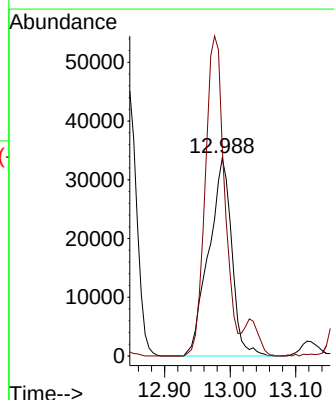
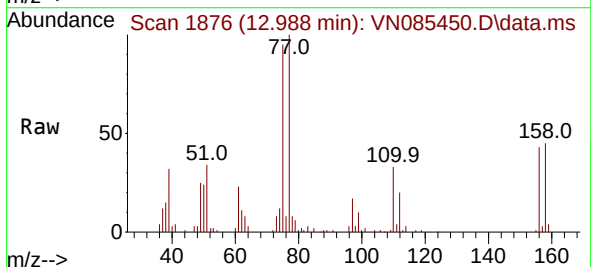
Acq: 15 Jan 2025 10:29

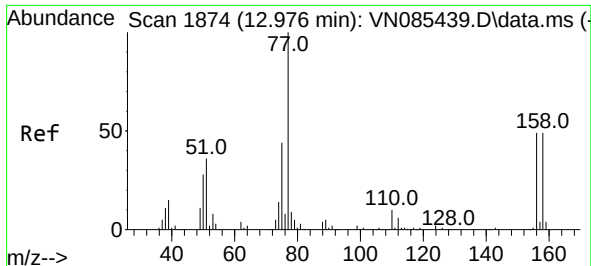
Tgt Ion: 75 Resp: 82085

Ion Ratio Lower Upper

75 100

77 136.8 109.7 329.2

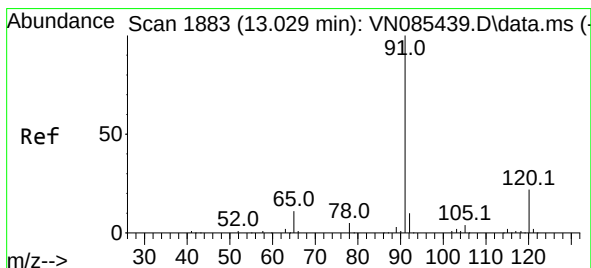
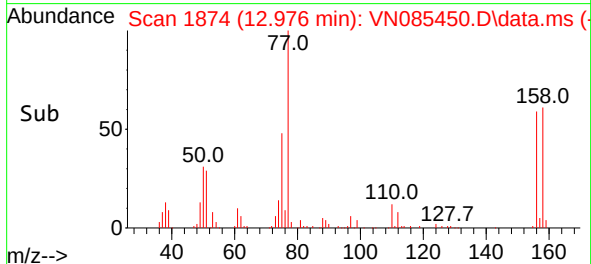
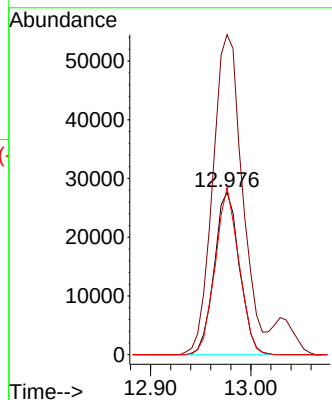
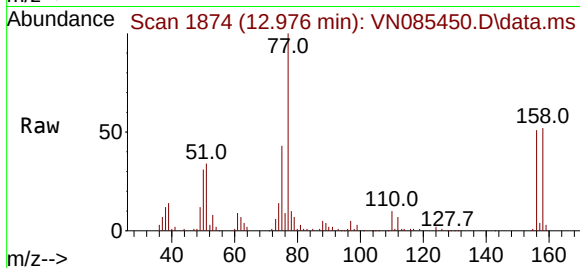




#77  
Bromobenzene  
Concen: 19.283 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

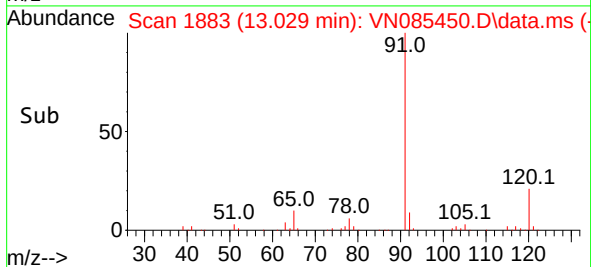
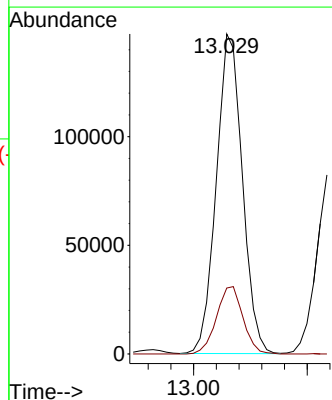
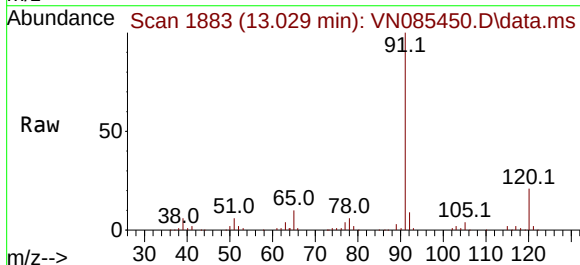
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

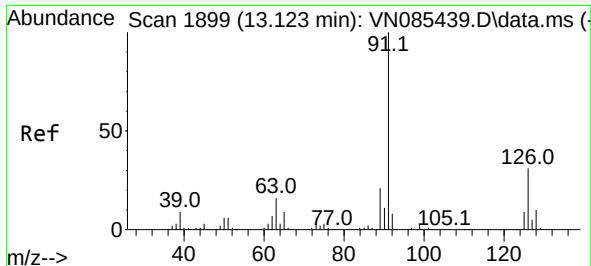
Tgt Ion:156 Resp: 48006  
Ion Ratio Lower Upper  
156 100  
77 233.9 114.1 342.4  
158 97.9 48.9 146.8



#78  
n-propylbenzene  
Concen: 20.759 ug/l  
RT: 13.029 min Scan# 1883  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 91 Resp: 234178  
Ion Ratio Lower Upper  
91 100  
120 21.4 10.9 32.6

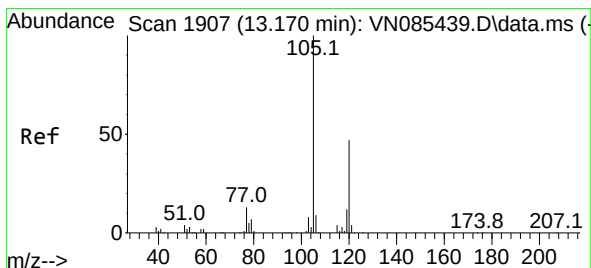
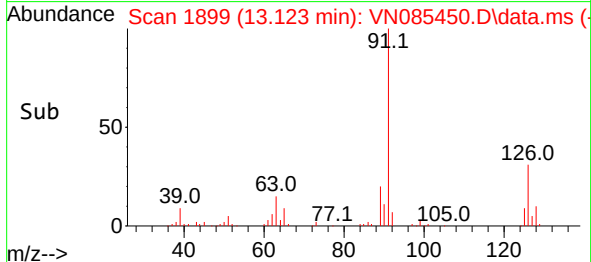
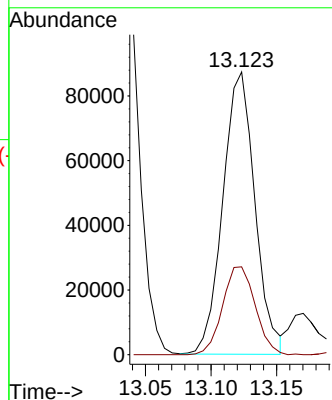
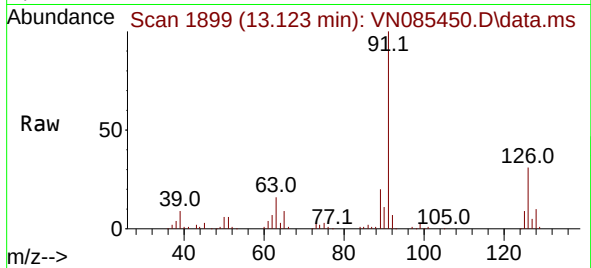




#79  
2-Chlorotoluene  
Concen: 20.351 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

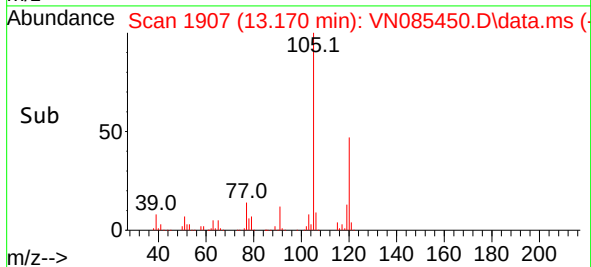
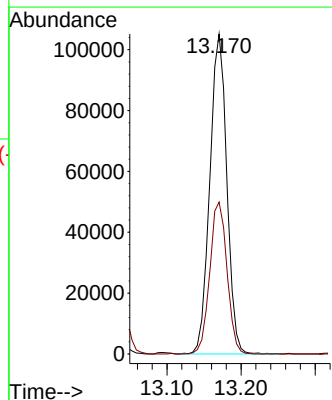
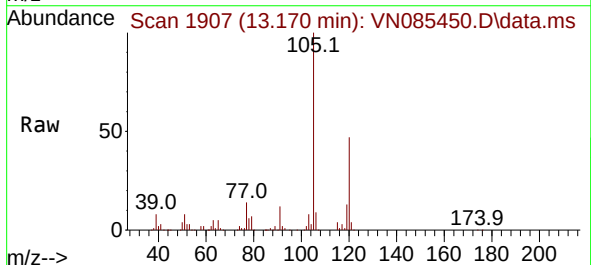
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

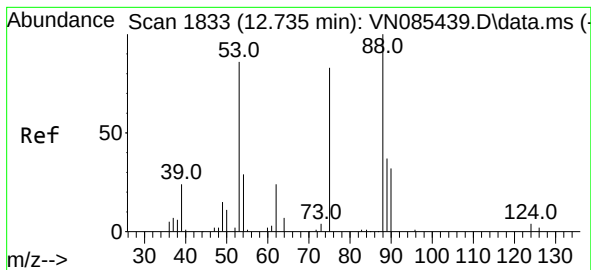
Tgt Ion: 91 Resp: 148584  
Ion Ratio Lower Upper  
91 100  
126 31.7 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 21.282 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 105 Resp: 167516  
Ion Ratio Lower Upper  
105 100  
120 48.1 23.9 71.7

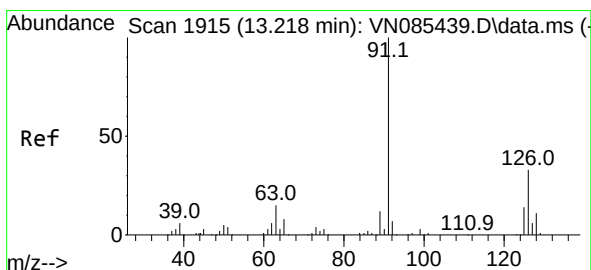
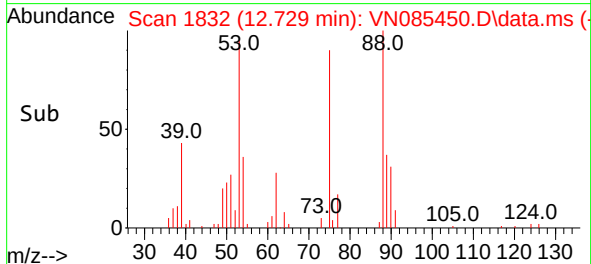
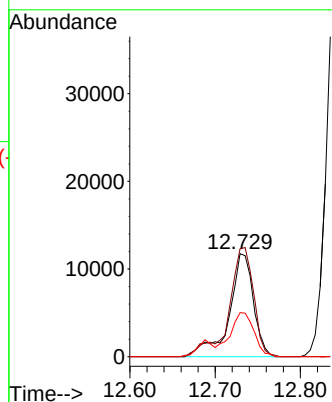
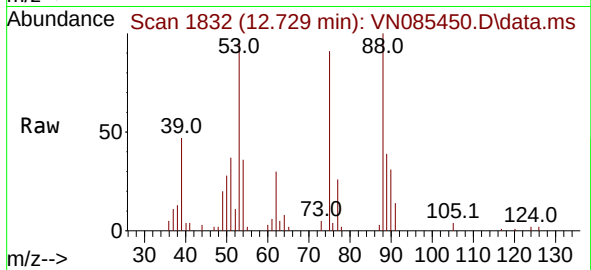




#81  
trans-1,4-Dichloro-2-butene  
Concen: 21.817 ug/l  
RT: 12.729 min Scan# 1832  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

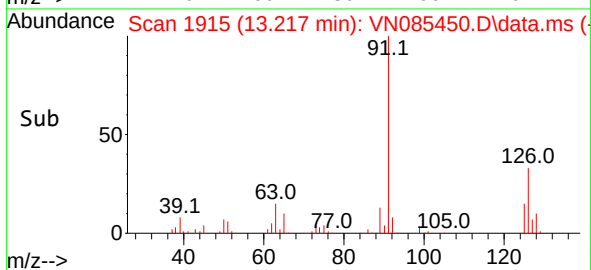
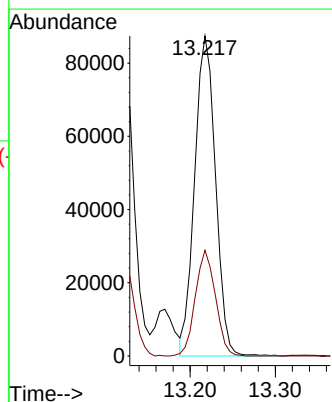
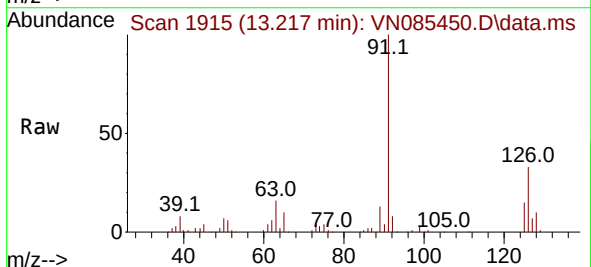
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

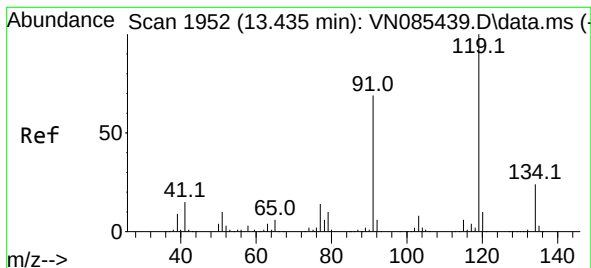
Tgt Ion: 75 Resp: 23140  
Ion Ratio Lower Upper  
75 100  
53 108.7 95.6 143.4  
89 42.6 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 20.481 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 91 Resp: 148888  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.9 47.7





#83

tert-Butylbenzene

Concen: 20.748 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

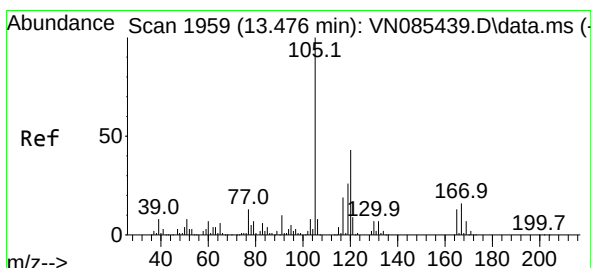
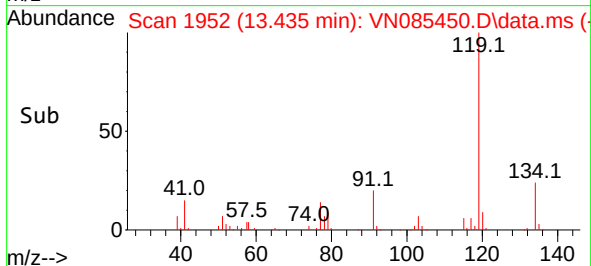
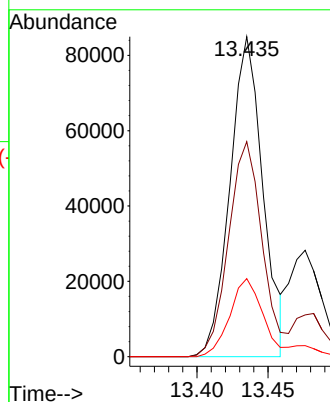
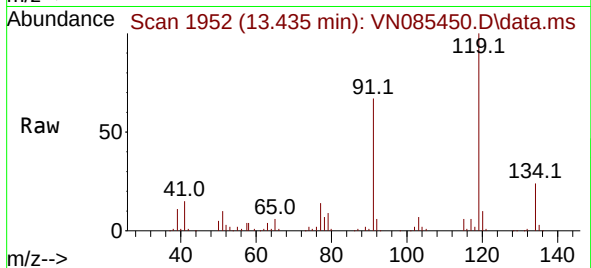
Tgt Ion:119 Resp: 137144

Ion Ratio Lower Upper

119 100

91 69.5 35.1 105.3

134 24.7 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 21.493 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085450.D

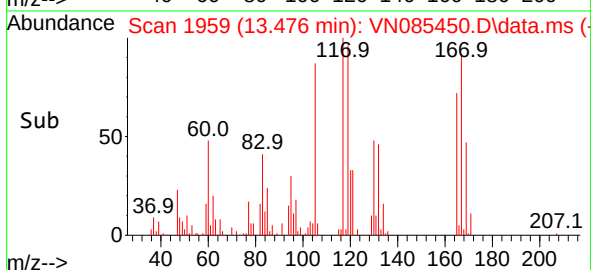
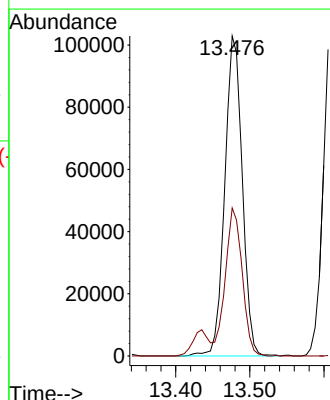
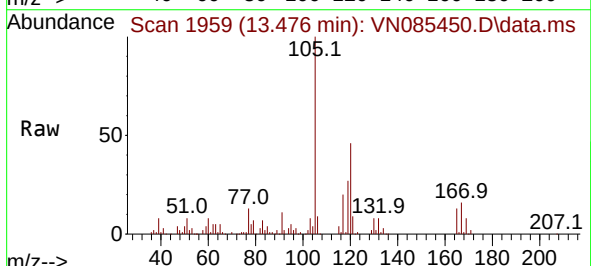
Acq: 15 Jan 2025 10:29

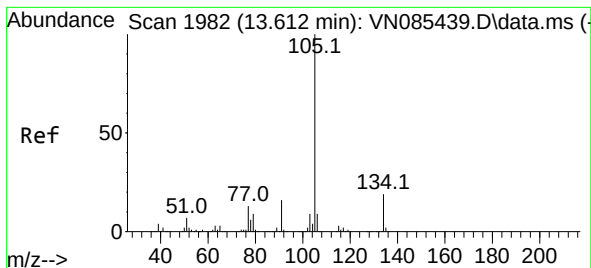
Tgt Ion:105 Resp: 168611

Ion Ratio Lower Upper

105 100

120 45.1 21.6 65.0





#85

sec-Butylbenzene

Concen: 21.140 ug/l

RT: 13.611 min Scan# 1982

Delta R.T. -0.001 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

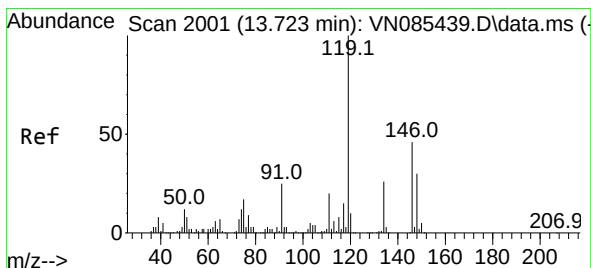
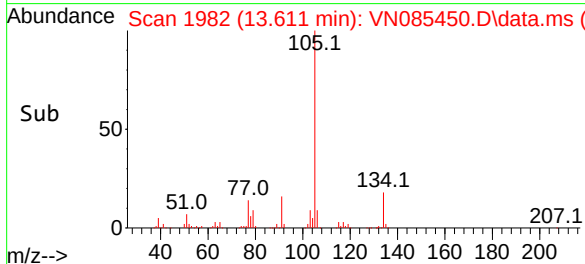
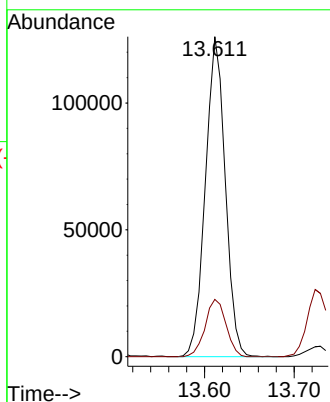
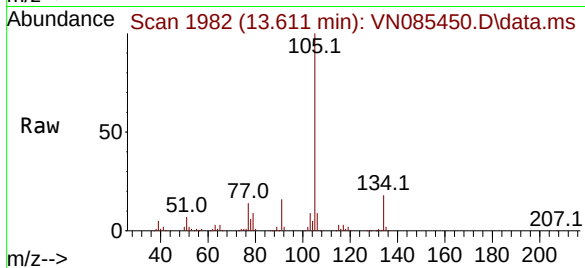
VN0115WBS01

Tgt Ion:105 Resp: 193667

Ion Ratio Lower Upper

105 100

134 18.8 9.7 28.9



#86

p-Isopropyltoluene

Concen: 20.730 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

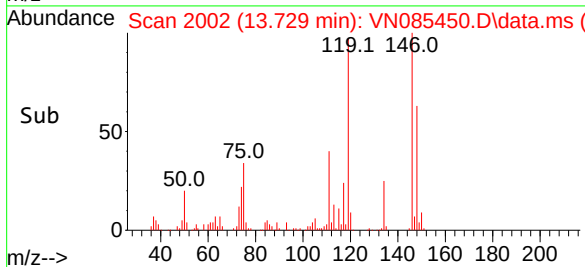
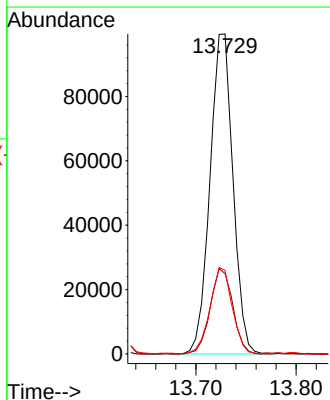
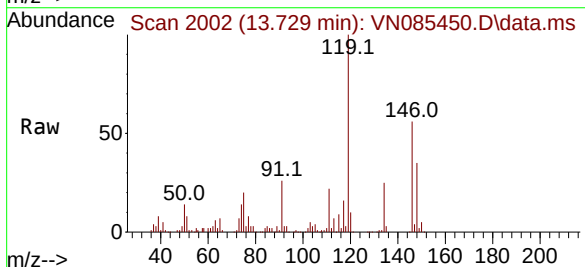
Tgt Ion:119 Resp: 158593

Ion Ratio Lower Upper

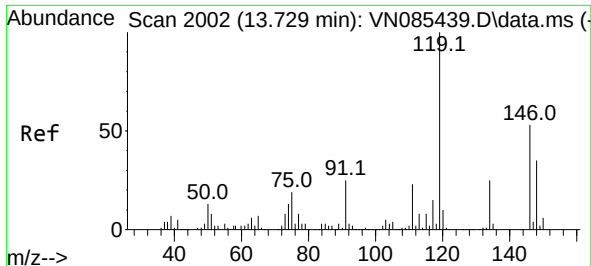
119 100

134 26.1 12.7 38.0

91 26.2 12.7 38.1



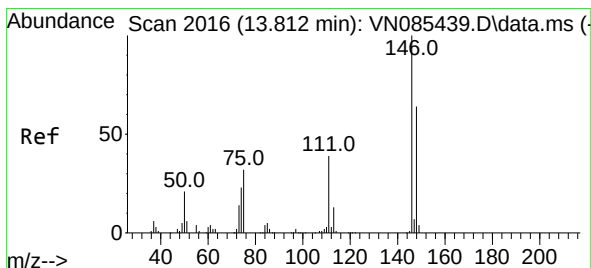
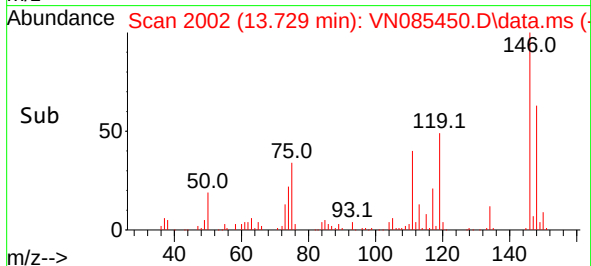
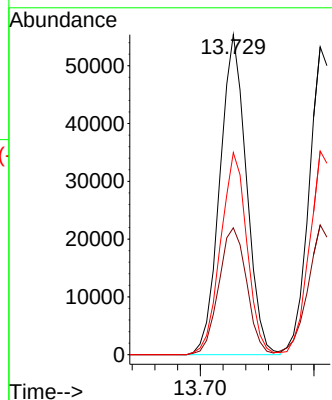
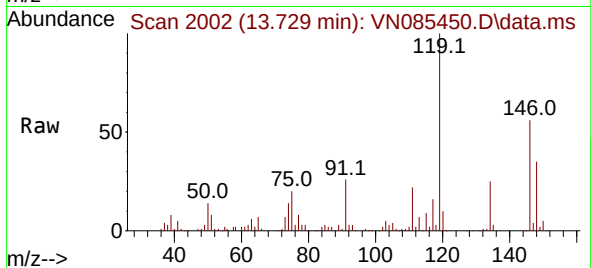




#87  
1,3-Dichlorobenzene  
Concen: 19.629 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

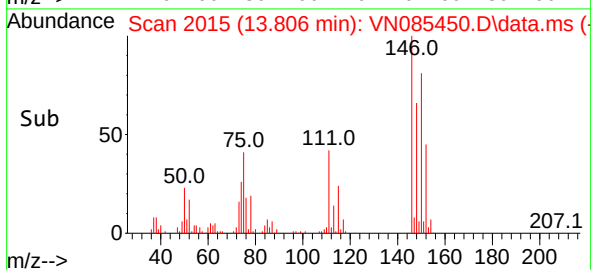
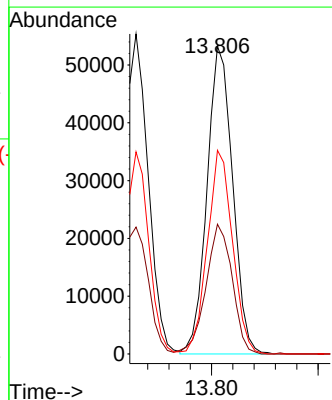
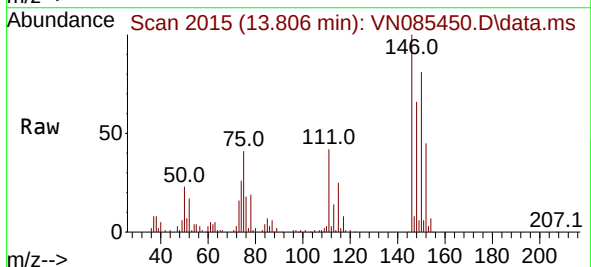
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

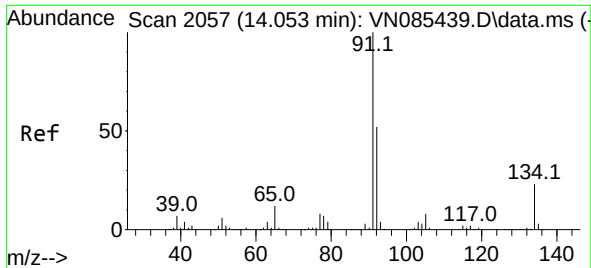
Tgt Ion:146 Resp: 89998  
Ion Ratio Lower Upper  
146 100  
111 41.6 21.4 64.3  
148 62.7 32.3 96.9



#88  
1,4-Dichlorobenzene  
Concen: 18.721 ug/l  
RT: 13.806 min Scan# 2015  
Delta R.T. -0.006 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:146 Resp: 88968  
Ion Ratio Lower Upper  
146 100  
111 43.2 21.3 63.7  
148 65.2 32.4 97.0

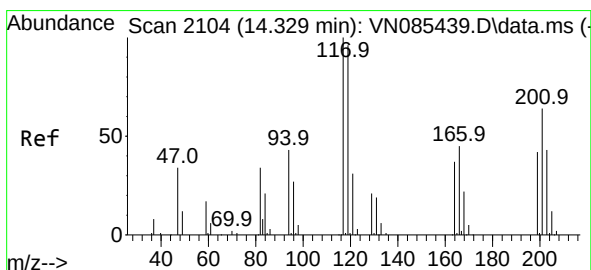
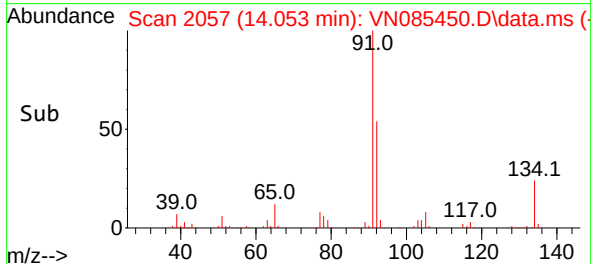
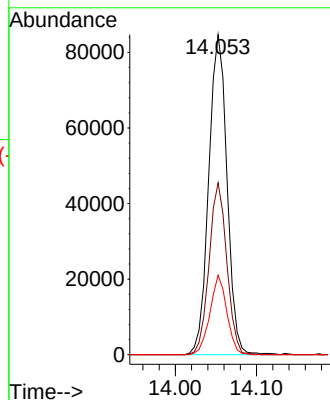
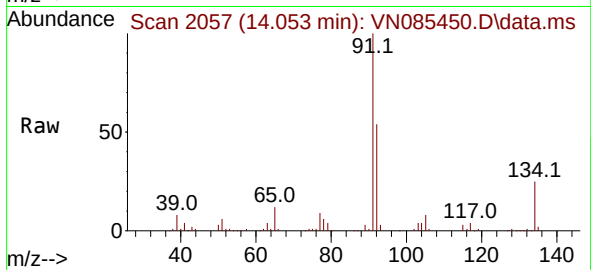




#89  
n-Butylbenzene  
Concen: 20.147 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

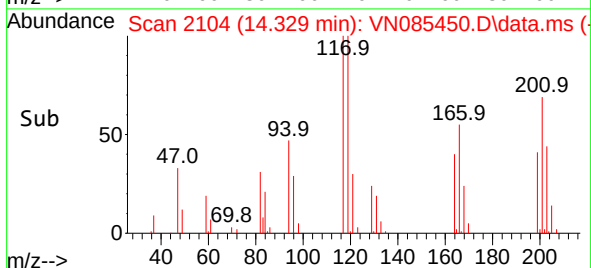
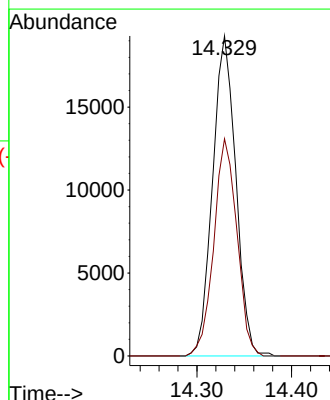
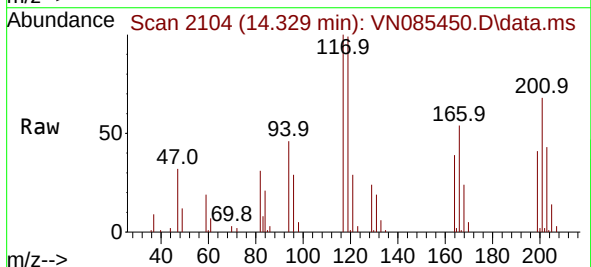
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

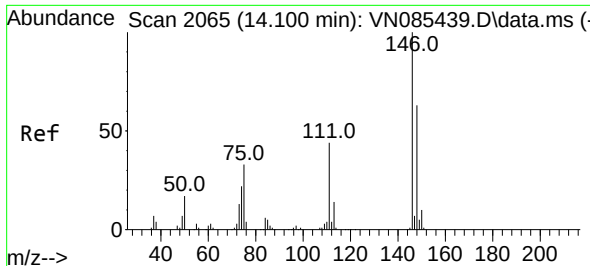
Tgt Ion: 91 Resp: 132410  
Ion Ratio Lower Upper  
91 100  
92 52.0 25.8 77.3  
134 22.9 11.7 35.1



#90  
Hexachloroethane  
Concen: 18.850 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion: 117 Resp: 32875  
Ion Ratio Lower Upper  
117 100  
201 67.6 33.7 101.0

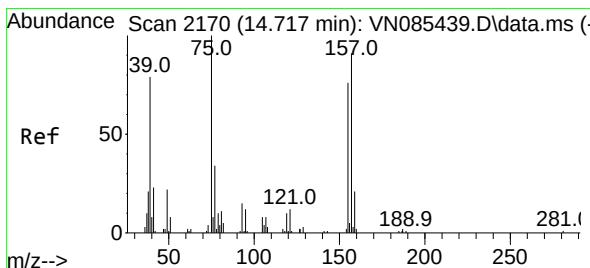
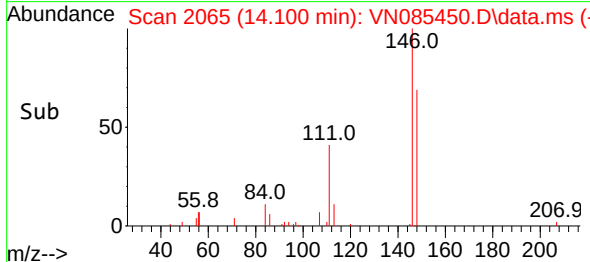
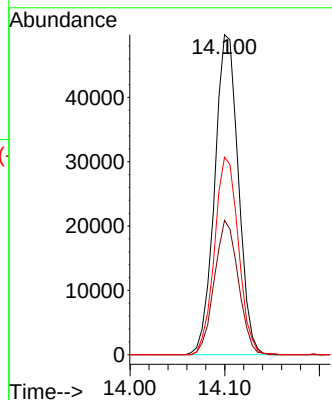
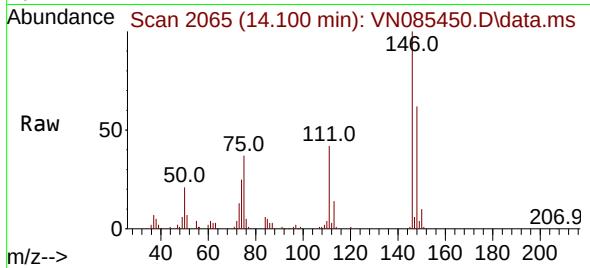




#91  
 1,2-Dichlorobenzene  
 Concen: 18.933 ug/l  
 RT: 14.100 min Scan# 2065  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

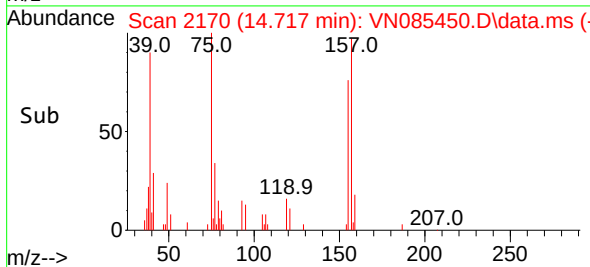
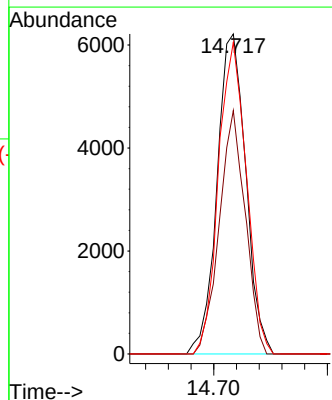
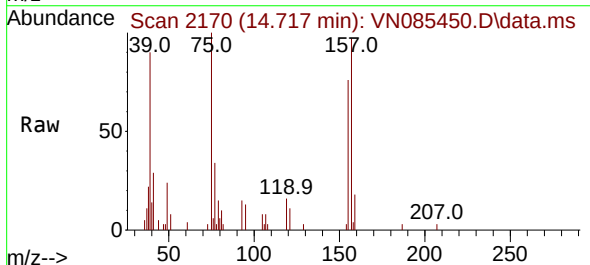
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBS01

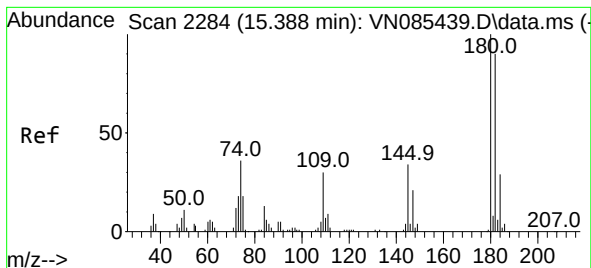
Tgt Ion:146 Resp: 86586  
 Ion Ratio Lower Upper  
 146 100  
 111 42.4 21.7 65.1  
 148 62.3 31.4 94.2



#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 17.740 ug/l  
 RT: 14.717 min Scan# 2170  
 Delta R.T. -0.000 min  
 Lab File: VN085450.D  
 Acq: 15 Jan 2025 10:29

Tgt Ion: 75 Resp: 10904  
 Ion Ratio Lower Upper  
 75 100  
 155 69.0 36.4 109.2  
 157 94.7 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 18.095 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBS01

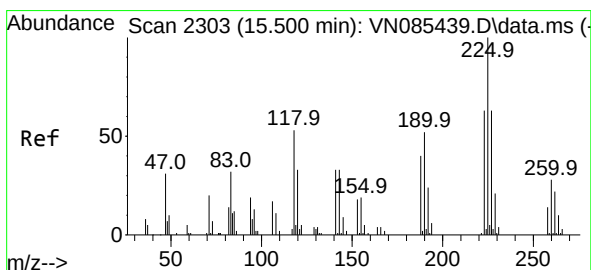
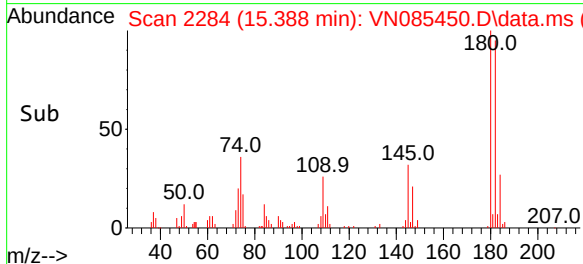
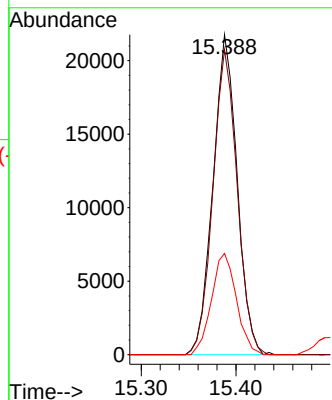
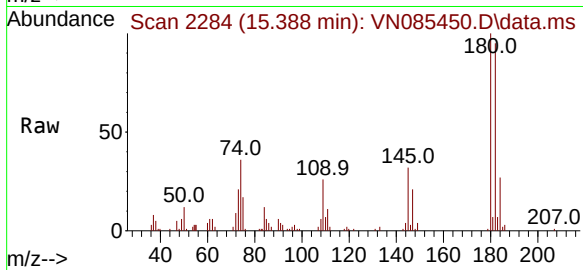
Tgt Ion:180 Resp: 38461

Ion Ratio Lower Upper

180 100

182 95.9 46.8 140.3

145 32.7 16.0 48.0



#94

Hexachlorobutadiene

Concen: 18.761 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085450.D

Acq: 15 Jan 2025 10:29

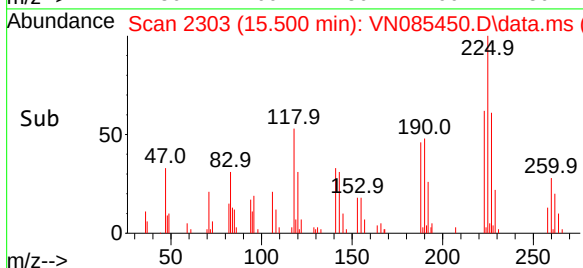
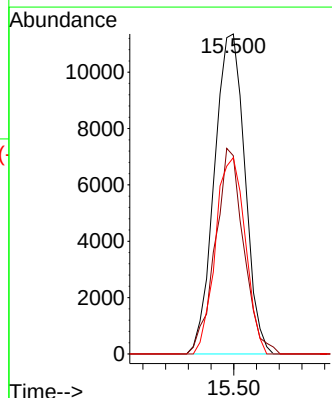
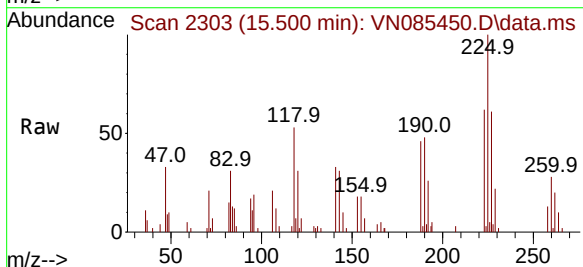
Tgt Ion:225 Resp: 21171

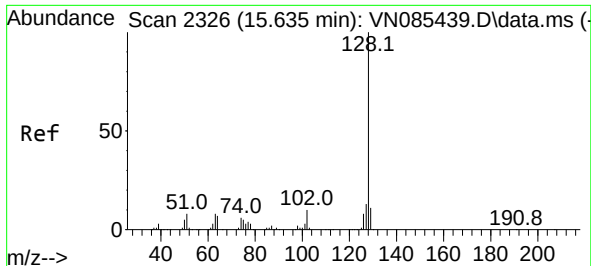
Ion Ratio Lower Upper

225 100

223 60.1 30.7 92.1

227 60.0 30.9 92.5

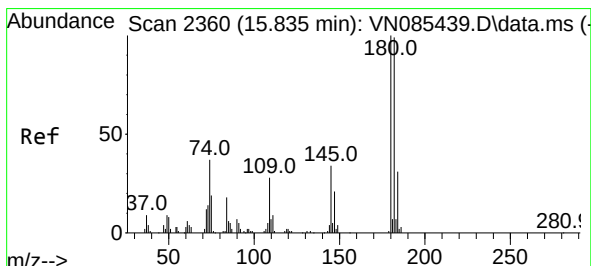
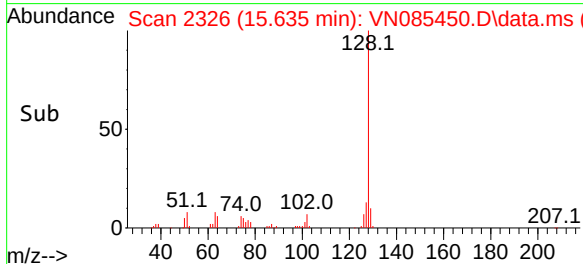
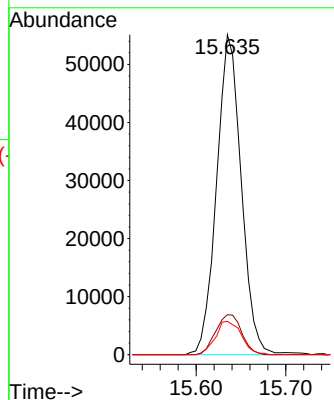
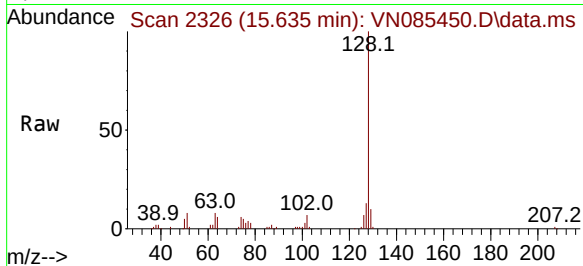




#95  
Naphthalene  
Concen: 16.518 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

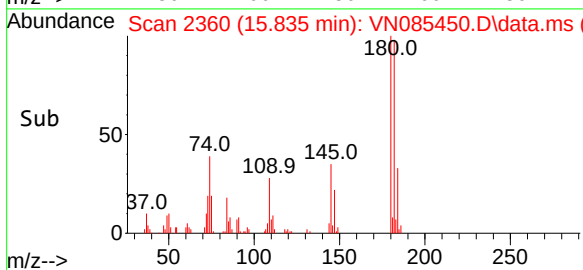
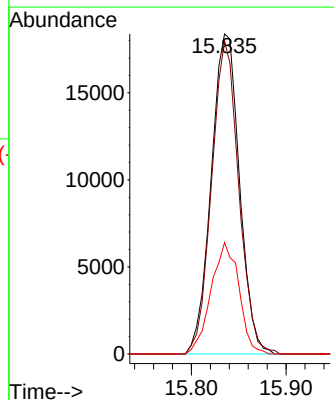
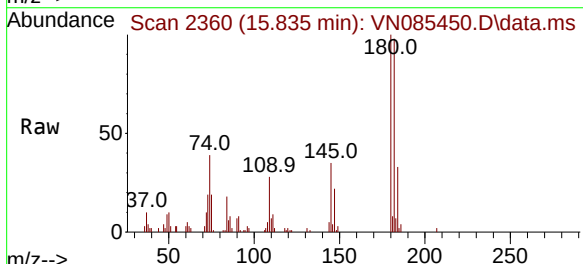
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBS01

Tgt Ion:128 Resp: 104770  
Ion Ratio Lower Upper  
128 100  
127 13.2 10.6 16.0  
129 11.0 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 17.704 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. -0.000 min  
Lab File: VN085450.D  
Acq: 15 Jan 2025 10:29

Tgt Ion:180 Resp: 38077  
Ion Ratio Lower Upper  
180 100  
182 93.7 47.4 142.2  
145 34.4 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085451.D  
 Acq On : 15 Jan 2025 11:02  
 Operator : JC\MD  
 Sample : VN0115WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

Quant Time: Jan 16 00:54:27 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  | 188898   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 323122   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 286298   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 136502   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.576  | 65    | 149231   | 48.941   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 97.880%  |
| 35) Dibromofluoromethane    | 8.159  | 113   | 110423   | 49.259   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 98.520%  |
| 50) Toluene-d8              | 10.565 | 98    | 399040   | 50.102   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 100.200% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 137216   | 50.364   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 100.720% |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 50526  | 19.755  | ug/l   | 95  |
| 3) Chloromethane             | 2.359 | 50  | 53907  | 19.467  | ug/l   | 98  |
| 4) Vinyl Chloride            | 2.512 | 62  | 53251  | 19.131  | ug/l   | 98  |
| 5) Bromomethane              | 2.965 | 94  | 32421  | 19.283  | ug/l   | 95  |
| 6) Chloroethane              | 3.124 | 64  | 32723  | 18.543  | ug/l   | 98  |
| 7) Trichlorofluoromethane    | 3.506 | 101 | 79391  | 19.658  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.965 | 74  | 26011  | 18.643  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 44531  | 19.576  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.594 | 142 | 52886  | 20.302  | ug/l   | 95  |
| 11) Tert butyl alcohol       | 5.500 | 59  | 33491  | 95.920  | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.341 | 96  | 39080  | 19.277  | ug/l   | 98  |
| 13) Acrolein                 | 4.171 | 56  | 55291  | 116.005 | ug/l   | 99  |
| 14) Allyl chloride           | 5.030 | 41  | 63692  | 19.361  | ug/l   | 99  |
| 15) Acrylonitrile            | 5.712 | 53  | 108425 | 97.766  | ug/l   | 99  |
| 16) Acetone                  | 4.418 | 43  | 93485  | 94.887  | ug/l   | 98  |
| 17) Carbon Disulfide         | 4.718 | 76  | 112944 | 18.094  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.012 | 43  | 58686  | 19.589  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.788 | 73  | 138775 | 21.081  | ug/l   | 98  |
| 20) Methylene Chloride       | 5.271 | 84  | 49058  | 20.114  | ug/l   | 98  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 43073  | 19.880  | ug/l   | 93  |
| 22) Diisopropyl ether        | 6.665 | 45  | 156331 | 21.410  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.600 | 43  | 604101 | 118.221 | ug/l   | 98  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 88831  | 19.952  | ug/l   | 99  |
| 25) 2-Butanone               | 7.477 | 43  | 141498 | 97.595  | ug/l   | 93  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 78212  | 21.728  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 50200  | 19.672  | ug/l   | 95  |
| 28) Bromochloromethane       | 7.806 | 49  | 38238  | 18.460  | ug/l   | 100 |
| 29) Tetrahydrofuran          | 7.835 | 42  | 93959  | 102.217 | ug/l   | 99  |
| 30) Chloroform               | 7.965 | 83  | 92715  | 20.149  | ug/l   | 98  |
| 31) Cyclohexane              | 8.247 | 56  | 72255  | 18.672  | ug/l   | 97  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 80190  | 19.867  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 61822  | 19.650  | ug/l   | 98  |
| 37) Ethyl Acetate            | 7.553 | 43  | 59684  | 18.795  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 71714  | 19.911  | ug/l   | 97  |
| 39) Methylcyclohexane        | 9.600 | 83  | 59161  | 20.011  | ug/l   | 93  |
| 40) Benzene                  | 8.600 | 78  | 189640 | 20.061  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085451.D  
 Acq On : 15 Jan 2025 11:02  
 Operator : JC\MD  
 Sample : VN0115WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

Quant Time: Jan 16 00:54:27 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   | 31866    | 19.288  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 73669    | 20.692  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 100283   | 19.708  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 44329    | 20.145  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 48696    | 20.167  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 34080    | 19.561  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 74218    | 20.909  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.676  | 41   | 46655    | 20.374  | ug/l   | 99       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 14983    | 388.550 | ug/l # | 76       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 300611   | 101.808 | ug/l   | 100      |
| 52) Toluene                   | 10.623 | 92   | 117631   | 21.476  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 68014    | 20.276  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene   | 10.306 | 75   | 75146    | 20.973  | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 45220    | 20.861  | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 63954    | 18.769  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 76979    | 20.424  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 148262   | 107.782 | ug/l   | 97       |
| 59) 2-Hexanone                | 11.188 | 43   | 211689   | 101.890 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.353 | 129  | 52957    | 20.236  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 42146    | 19.533  | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 40480    | 20.740  | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 122590   | 19.546  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 44850    | 19.484  | ug/l   | 100      |
| 67) Ethyl Benzene             | 11.959 | 91   | 208196   | 20.381  | ug/l   | 100      |
| 68) m/p-Xylenes               | 12.070 | 106  | 160511   | 42.515  | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 75509    | 20.928  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 124126   | 20.788  | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 34000    | 20.643  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 189617   | 20.582  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 81241    | 19.619  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 61871    | 19.012  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 79469    | 28.643  | ug/l   | 49       |
| 77) Bromobenzene              | 12.976 | 156  | 48489    | 20.145  | ug/l   | 98       |
| 78) n-propylbenzene           | 13.035 | 91   | 228827   | 20.981  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 143092   | 20.272  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 163195   | 21.445  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75   | 22916    | 22.347  | ug/l # | 78       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 144513   | 20.562  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 131013   | 20.501  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 164079   | 21.634  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.611 | 105  | 189519   | 21.398  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.723 | 119  | 153867   | 20.798  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 89126    | 20.107  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.806 | 146  | 87559    | 19.057  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 128246   | 20.183  | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 31733    | 18.820  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 83864    | 18.967  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 10944    | 18.416  | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 39555    | 19.248  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 20590    | 18.872  | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 106293   | 17.334  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 39966    | 19.221  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085451.D  
Acq On : 15 Jan 2025 11:02  
Operator : JC\MD  
Sample : VN0115WBSD01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

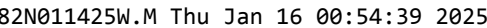
Quant Time: Jan 16 00:54:27 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

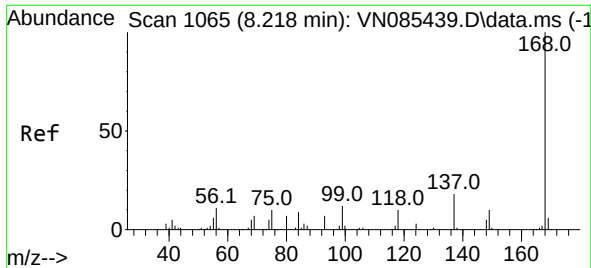
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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



Quant Time: Jan 16 00:54:27 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

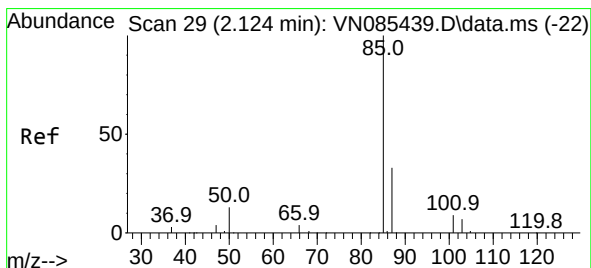
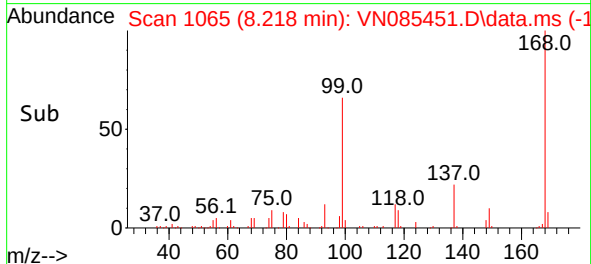
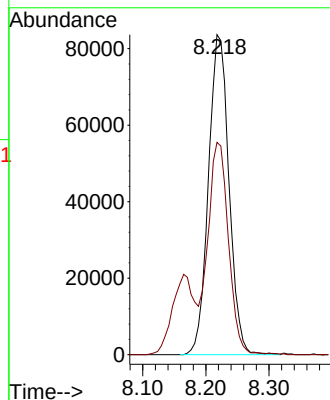
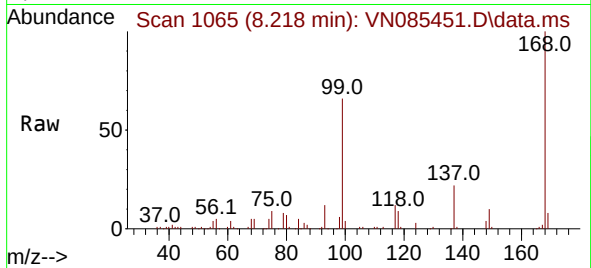




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

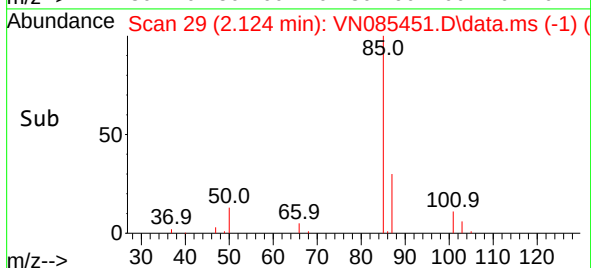
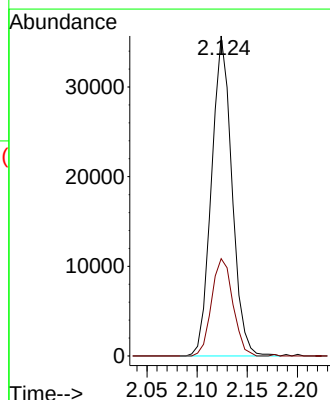
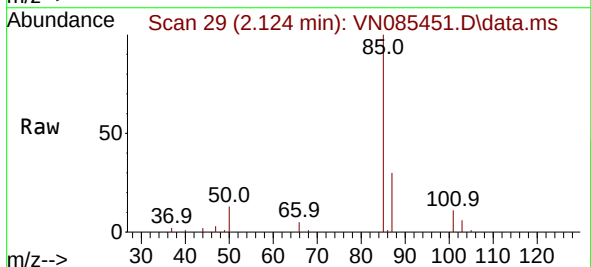
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

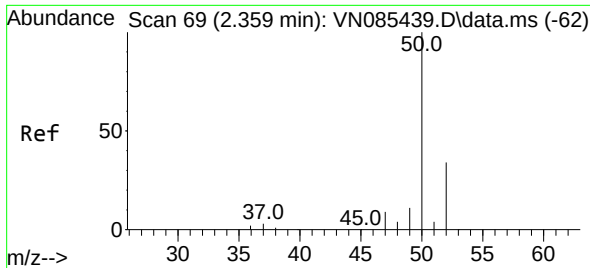
Tgt Ion:168 Resp: 188898  
Ion Ratio Lower Upper  
168 100  
99 66.1 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 19.755 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 85 Resp: 50526  
Ion Ratio Lower Upper  
85 100  
87 30.4 16.7 50.1

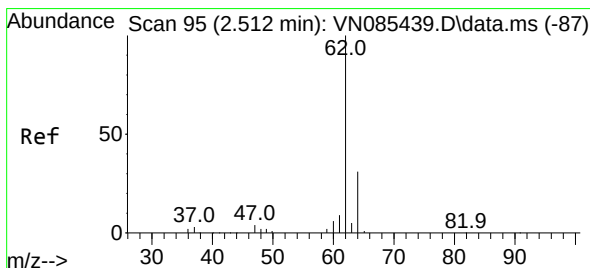
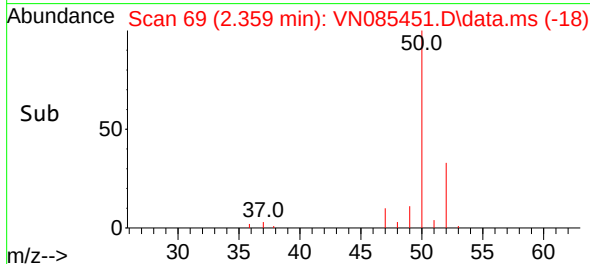
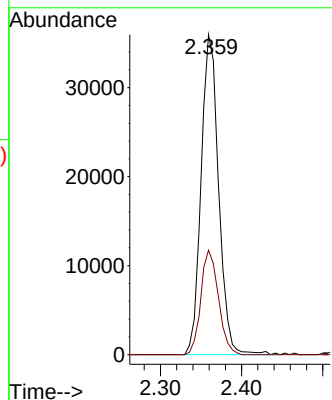
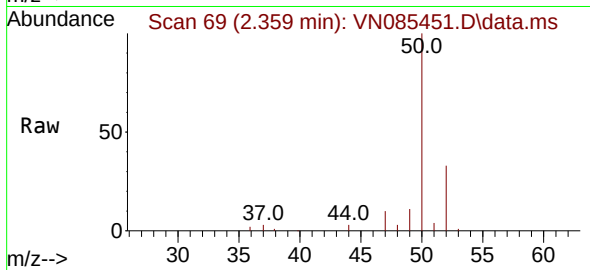




#3  
Chloromethane  
Concen: 19.467 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

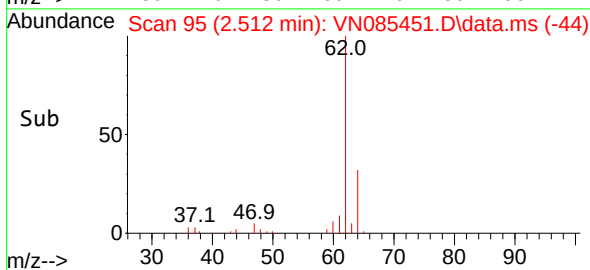
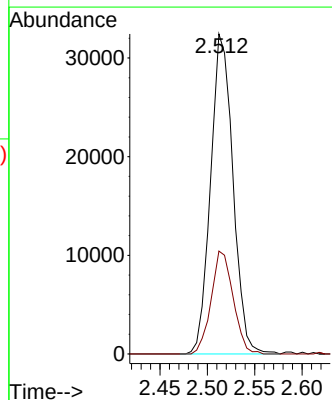
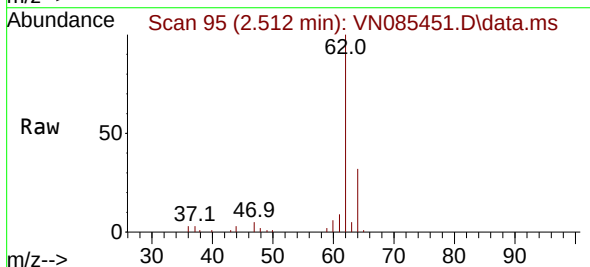
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

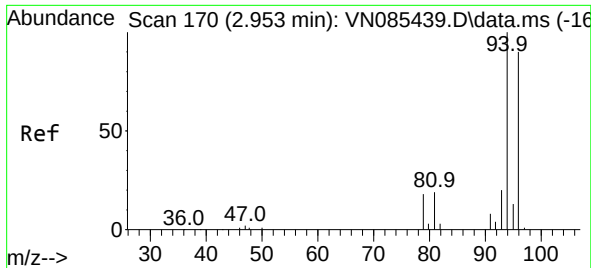
Tgt Ion: 50 Resp: 53907  
Ion Ratio Lower Upper  
50 100  
52 32.6 27.0 40.6



#4  
Vinyl Chloride  
Concen: 19.131 ug/l  
RT: 2.512 min Scan# 95  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 62 Resp: 53251  
Ion Ratio Lower Upper  
62 100  
64 32.1 24.8 37.2

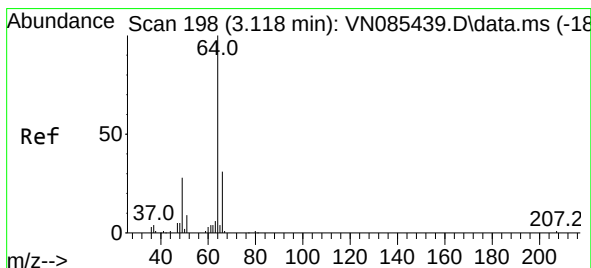
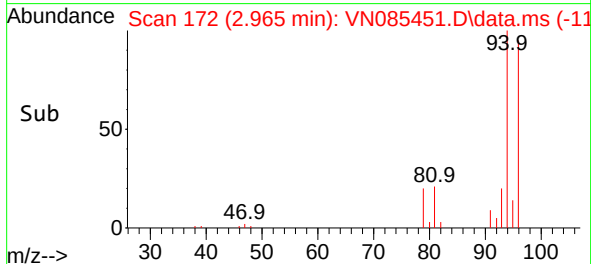
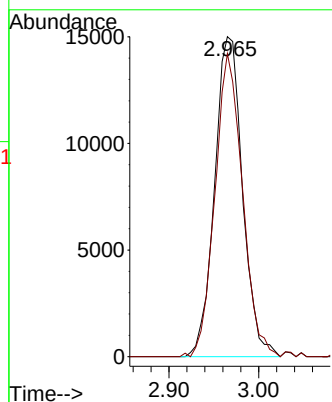
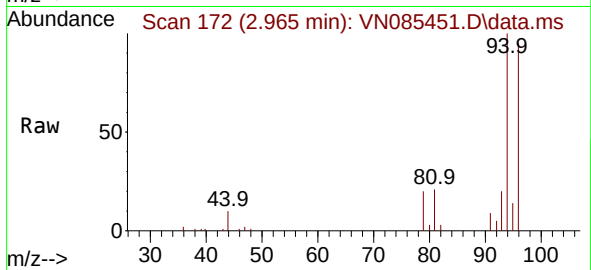




#5  
Bromomethane  
Concen: 19.283 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

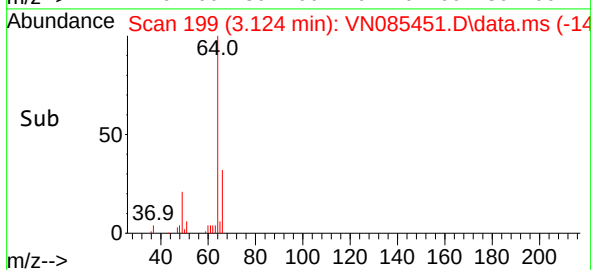
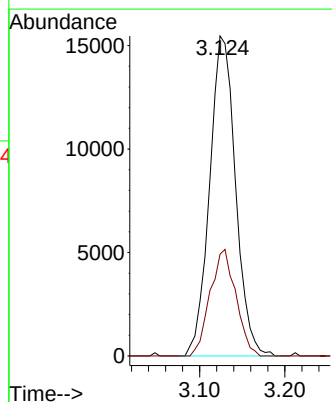
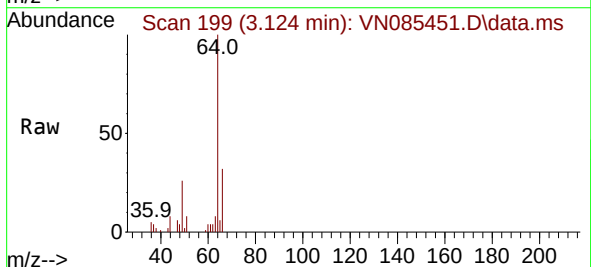
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

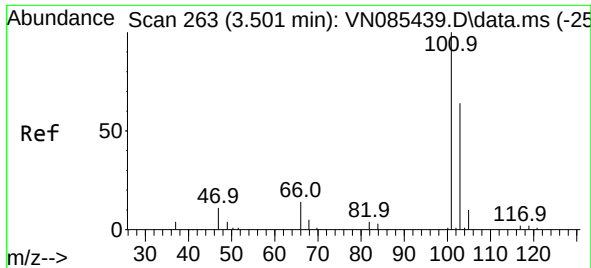
Tgt Ion: 94 Resp: 32421  
Ion Ratio Lower Upper  
94 100  
96 94.7 71.8 107.6



#6  
Chloroethane  
Concen: 18.543 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 64 Resp: 32723  
Ion Ratio Lower Upper  
64 100  
66 31.8 24.6 36.8

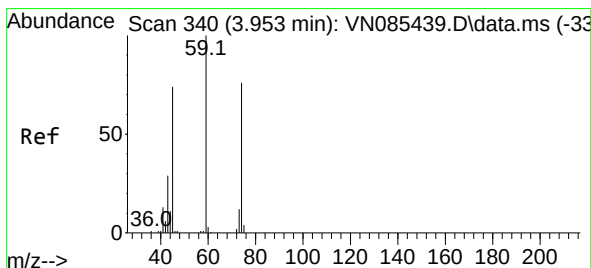
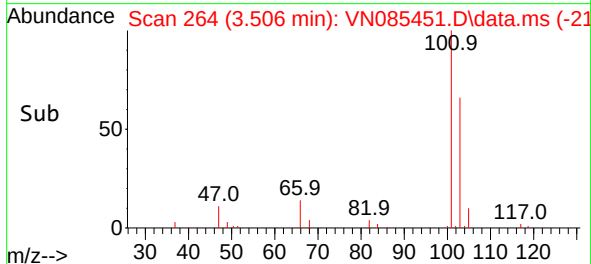
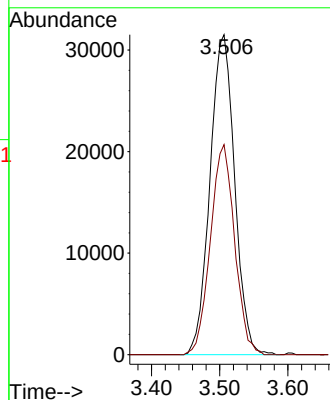
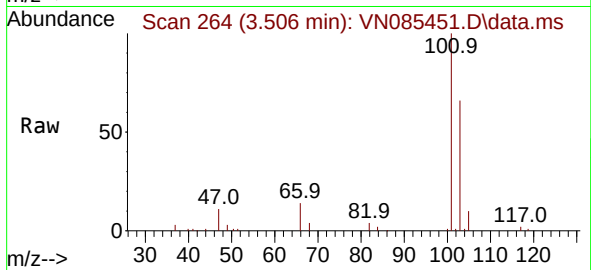




#7  
Trichlorofluoromethane  
Concen: 19.658 ug/l  
RT: 3.506 min Scan# 20  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

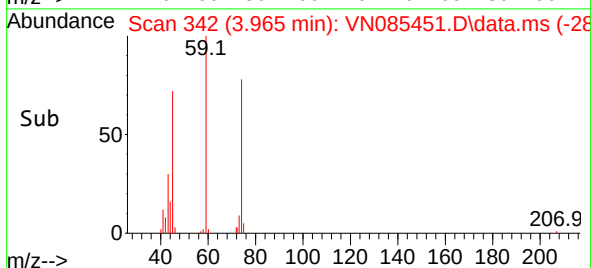
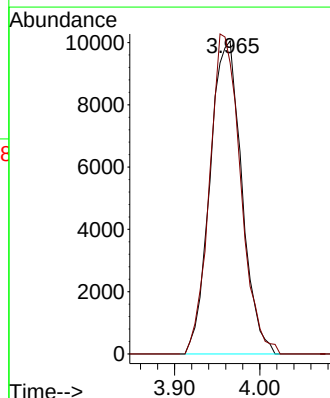
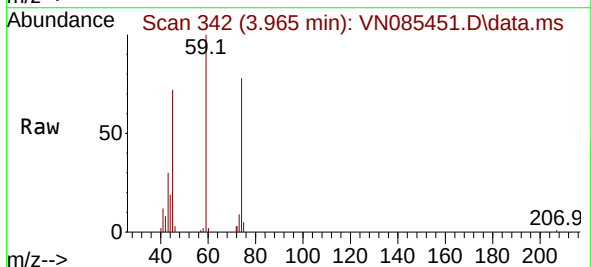
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

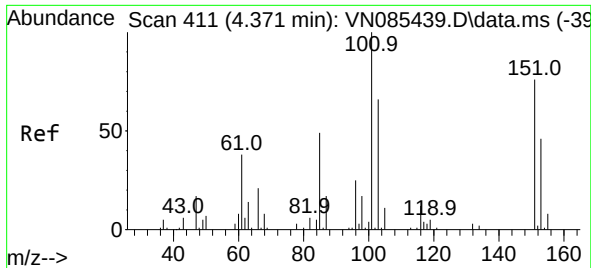
Tgt Ion:101 Resp: 79391  
Ion Ratio Lower Upper  
101 100  
103 65.7 51.4 77.2



#8  
Diethyl Ether  
Concen: 18.643 ug/l  
RT: 3.965 min Scan# 342  
Delta R.T. 0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 74 Resp: 26011  
Ion Ratio Lower Upper  
74 100  
45 100.1 49.7 149.1

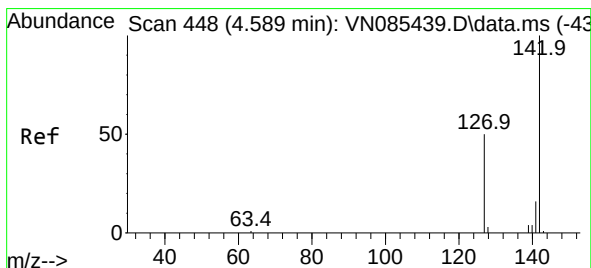
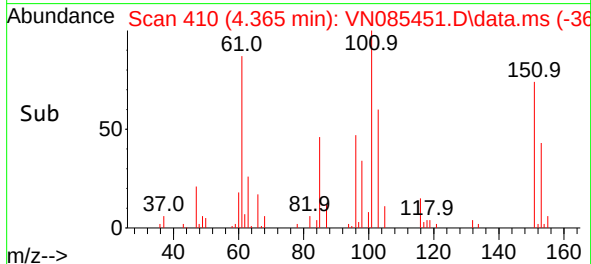
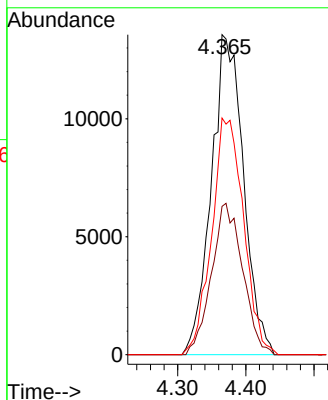
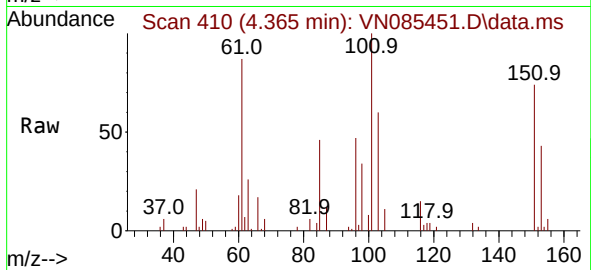




#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 19.576 ug/l  
RT: 4.365 min Scan# 411  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

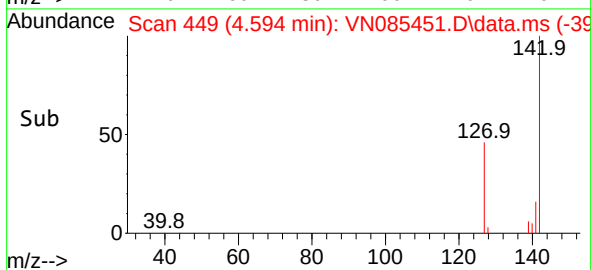
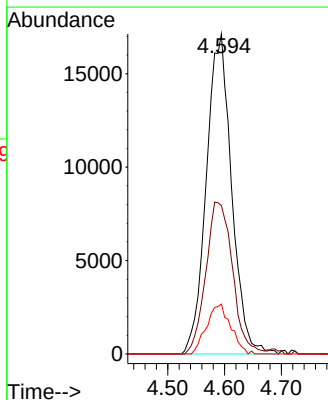
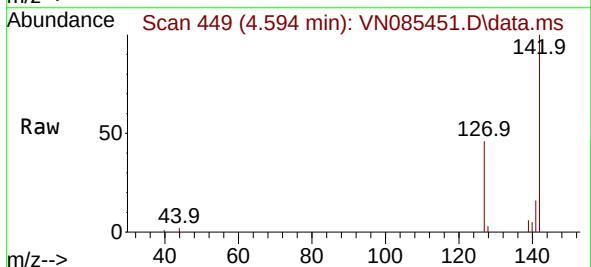
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

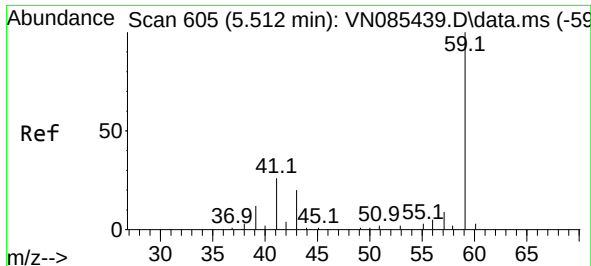
Tgt Ion:101 Resp: 44531  
Ion Ratio Lower Upper  
101 100  
85 45.8 37.8 56.8  
151 73.3 58.8 88.2



#10  
Methyl Iodide  
Concen: 20.302 ug/l  
RT: 4.594 min Scan# 449  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion:142 Resp: 52886  
Ion Ratio Lower Upper  
142 100  
127 46.4 40.3 60.5  
141 15.6 12.8 19.2

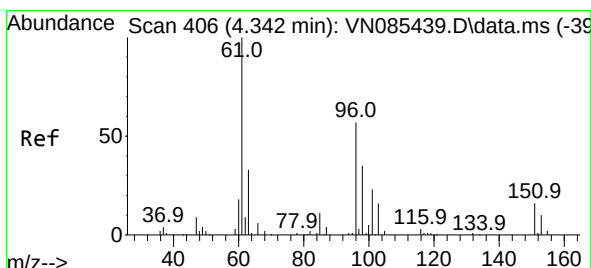
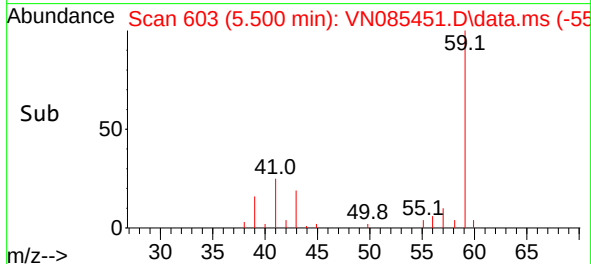
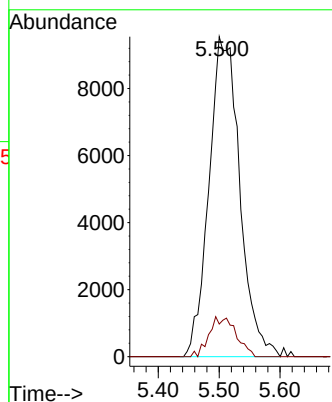
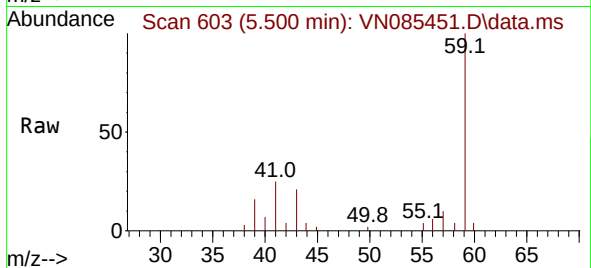




#11  
Tert butyl alcohol  
Concen: 95.920 ug/l  
RT: 5.500 min Scan# 605  
Delta R.T. -0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

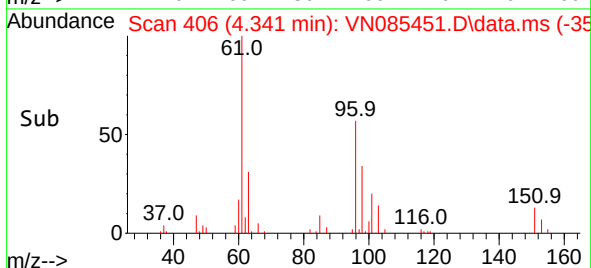
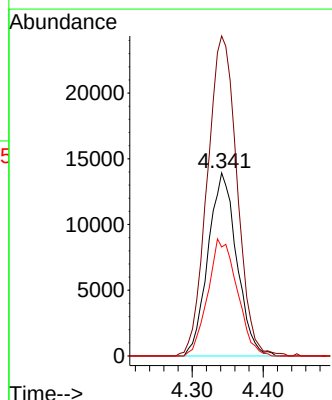
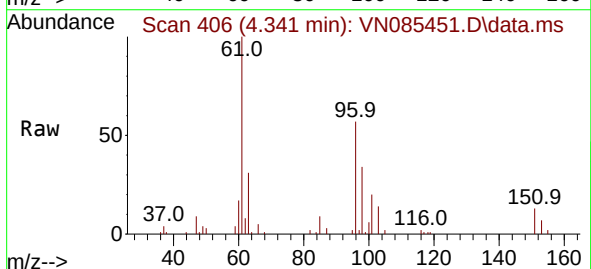
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

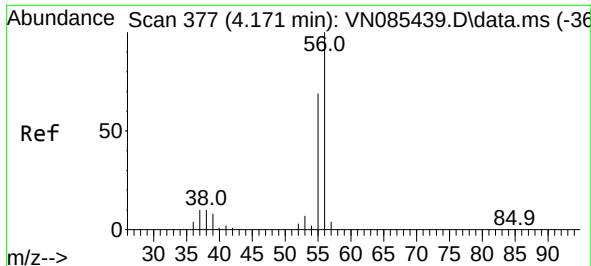
Tgt Ion: 59 Resp: 33491  
Ion Ratio Lower Upper  
59 100  
57 10.9 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 19.277 ug/l  
RT: 4.341 min Scan# 406  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 96 Resp: 39080  
Ion Ratio Lower Upper  
96 100  
61 173.3 141.0 211.4  
98 59.5 49.0 73.6





#13

Acrolein

Concen: 116.005 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

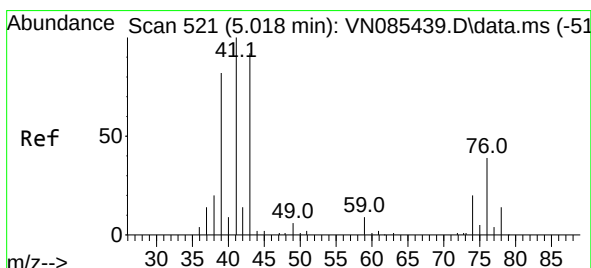
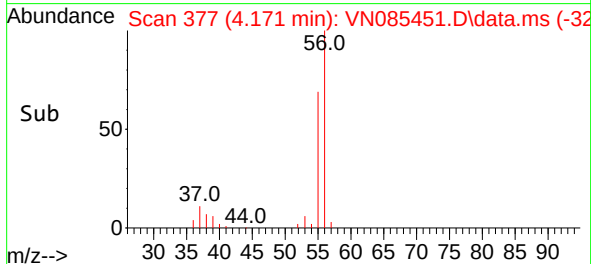
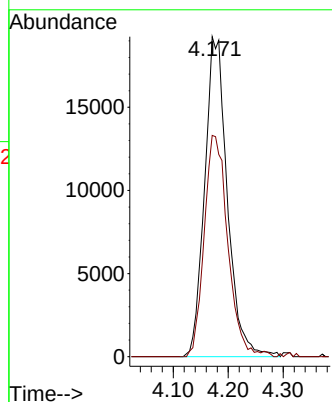
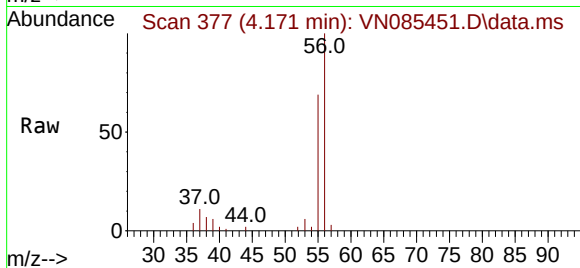
VN0115WBSD01

Tgt Ion: 56 Resp: 55291

Ion Ratio Lower Upper

56 100

55 71.3 56.3 84.5



#14

Allyl chloride

Concen: 19.361 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

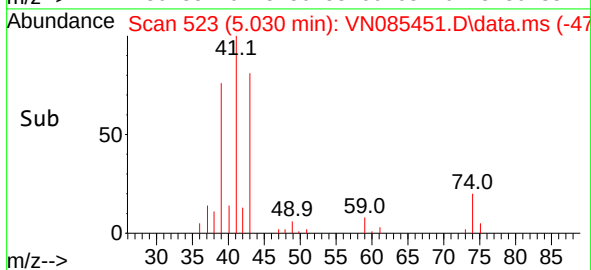
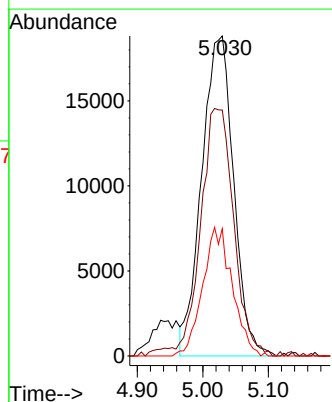
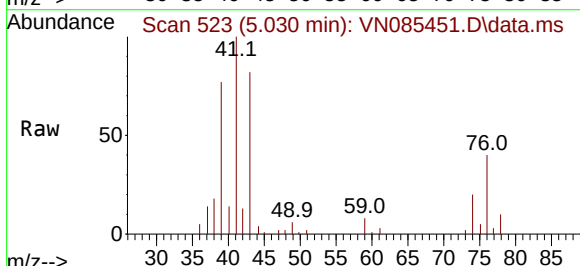
Tgt Ion: 41 Resp: 63692

Ion Ratio Lower Upper

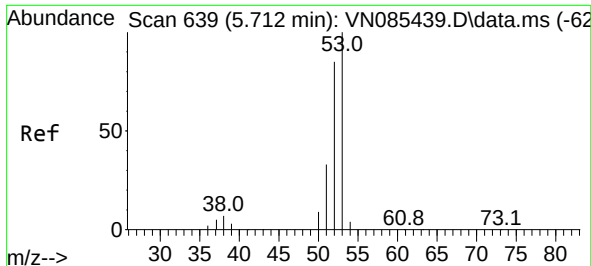
41 100

39 80.8 64.4 96.6

76 37.4 30.5 45.7



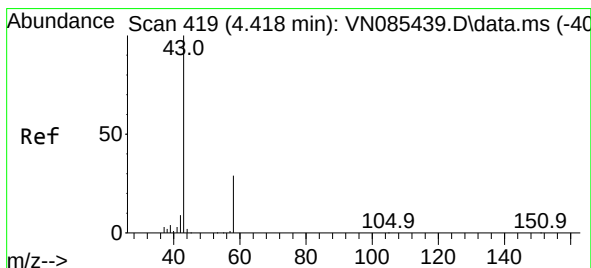
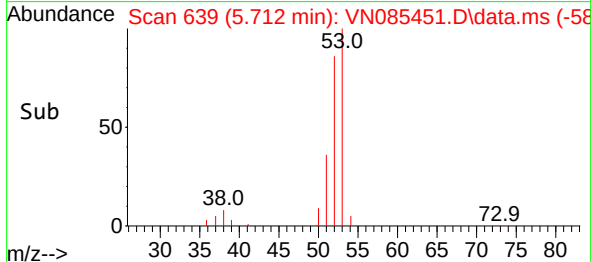
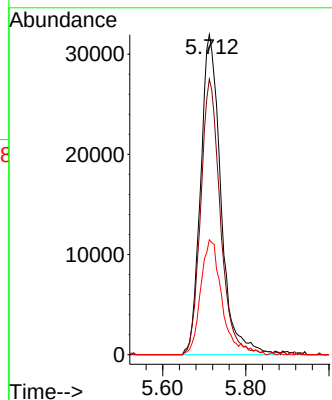
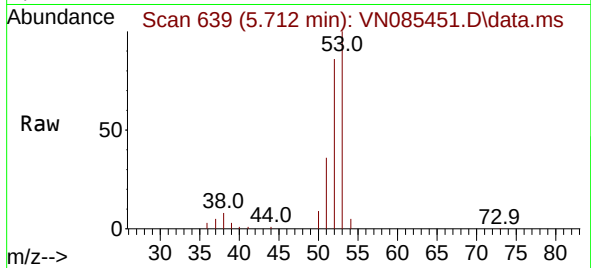




#15  
Acrylonitrile  
Concen: 97.766 ug/l  
RT: 5.712 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

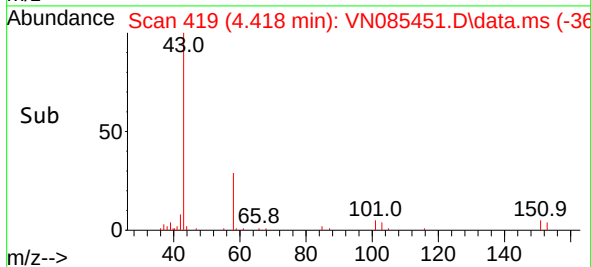
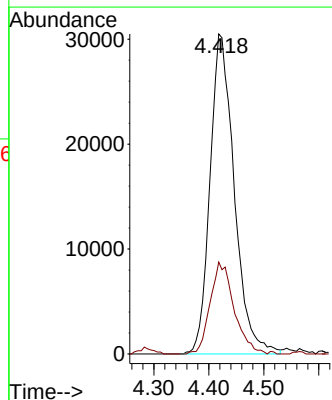
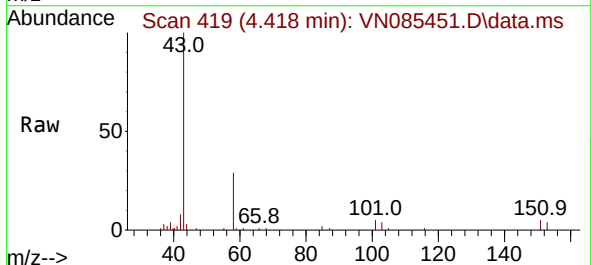
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

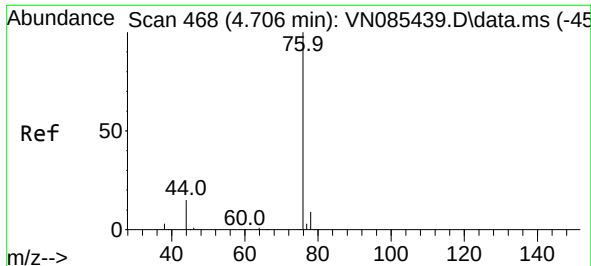
Tgt Ion: 53 Resp: 108425  
Ion Ratio Lower Upper  
53 100  
52 83.1 65.5 98.3  
51 37.9 29.8 44.8



#16  
Acetone  
Concen: 94.887 ug/l  
RT: 4.418 min Scan# 419  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 43 Resp: 93485  
Ion Ratio Lower Upper  
43 100  
58 28.7 23.8 35.6

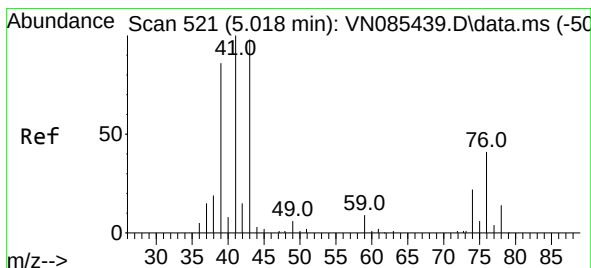
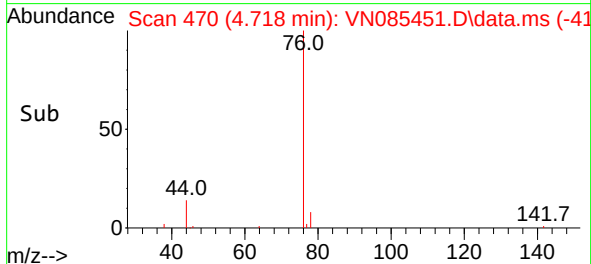
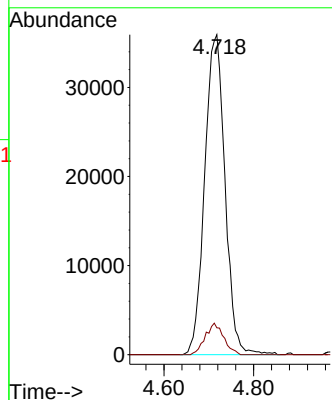
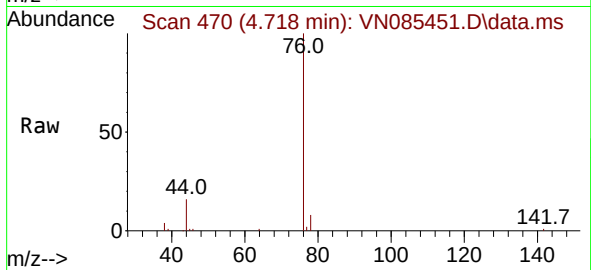




#17  
Carbon Disulfide  
Concen: 18.094 ug/l  
RT: 4.718 min Scan# 41  
Delta R.T. 0.012 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

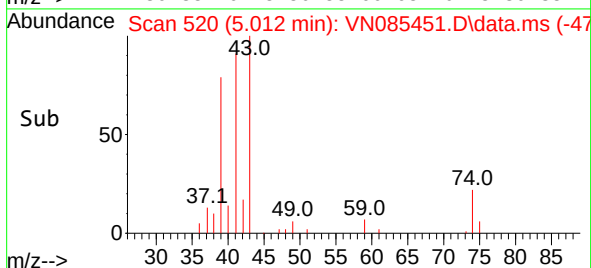
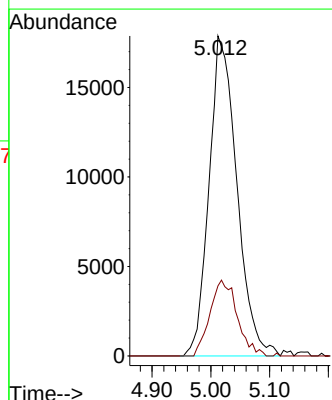
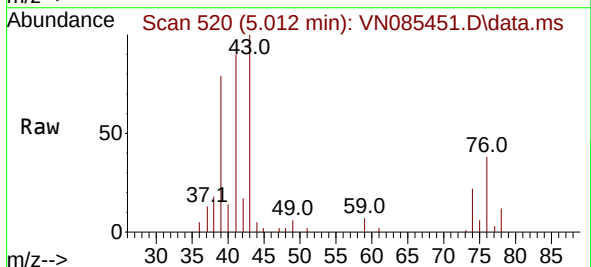
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

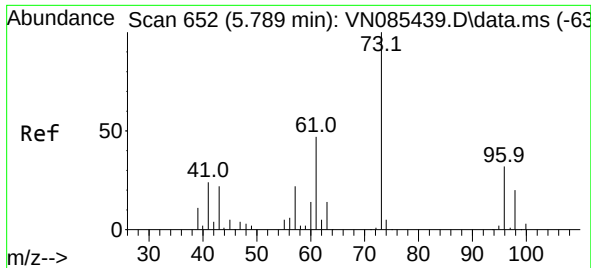
Tgt Ion: 76 Resp: 112944  
Ion Ratio Lower Upper  
76 100  
78 8.4 6.9 10.3



#18  
Methyl Acetate  
Concen: 19.589 ug/l  
RT: 5.012 min Scan# 520  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 43 Resp: 58686  
Ion Ratio Lower Upper  
43 100  
74 23.2 18.6 28.0

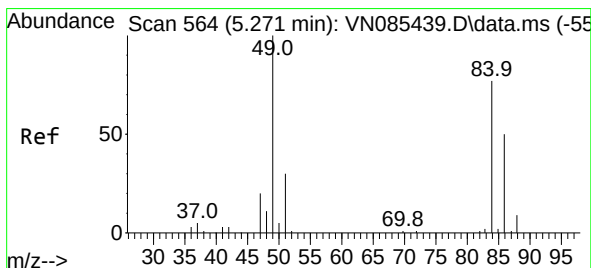
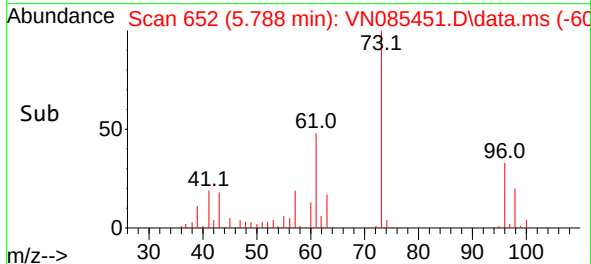
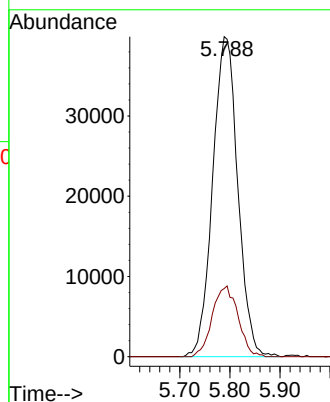
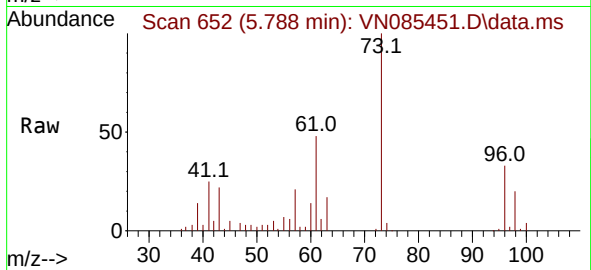




#19  
Methyl tert-butyl Ether  
Concen: 21.081 ug/l  
RT: 5.788 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

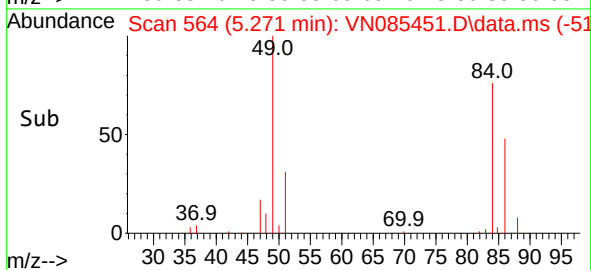
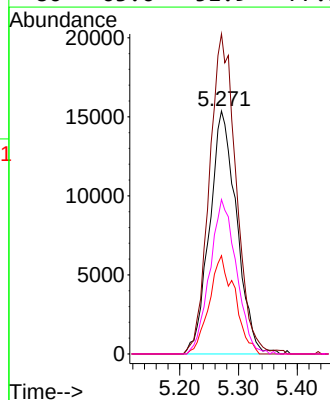
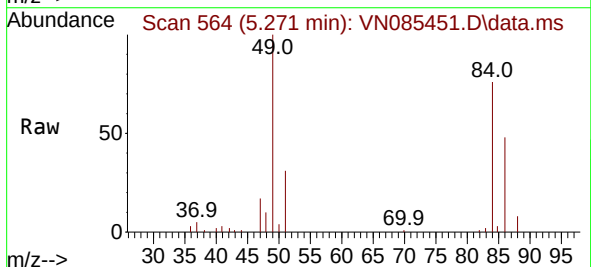
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

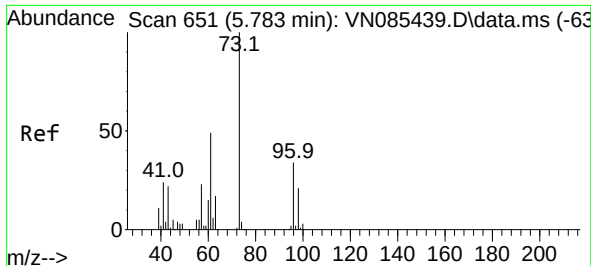
Tgt Ion: 73 Resp: 138775  
Ion Ratio Lower Upper  
73 100  
57 21.3 17.8 26.8



#20  
Methylene Chloride  
Concen: 20.114 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 84 Resp: 49058  
Ion Ratio Lower Upper  
84 100  
49 131.8 104.1 156.1  
51 40.5 31.0 46.4  
86 63.6 51.9 77.9

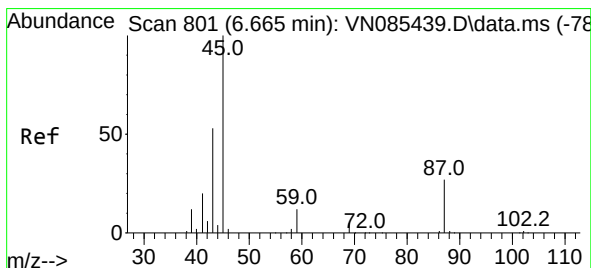
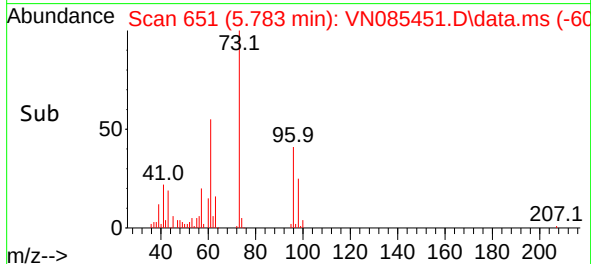
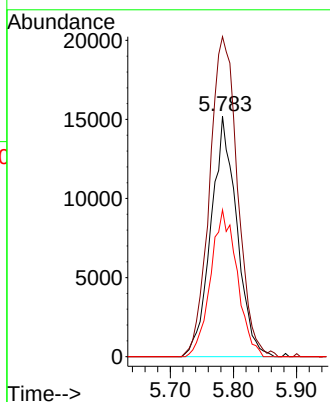
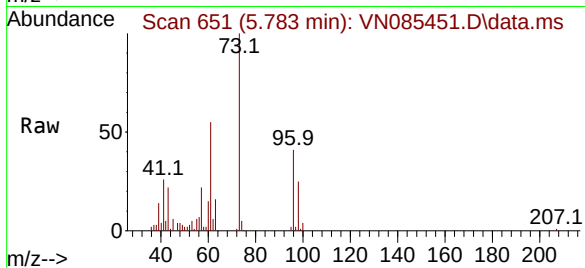




#21  
trans-1,2-Dichloroethene  
Concen: 19.880 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

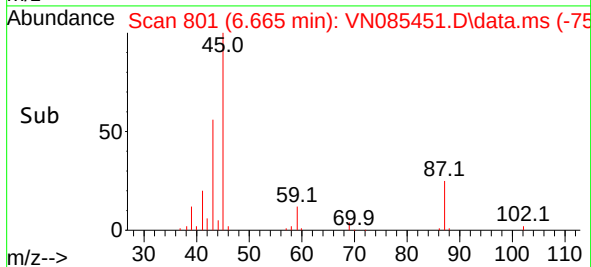
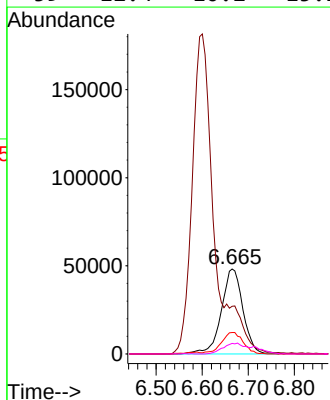
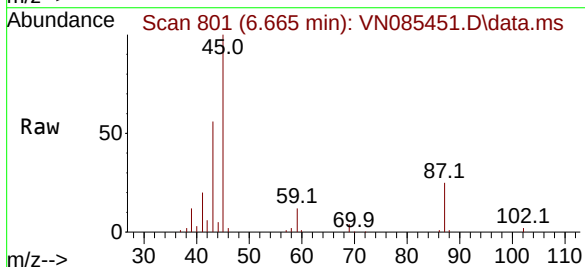
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

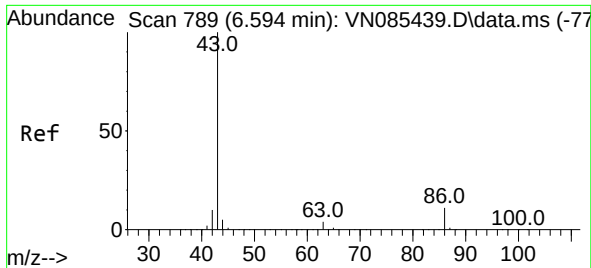
Tgt Ion: 96 Resp: 43073  
Ion Ratio Lower Upper  
96 100  
61 133.1 115.7 173.5  
98 61.0 49.8 74.8



#22  
Diisopropyl ether  
Concen: 21.410 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 45 Resp: 156331  
Ion Ratio Lower Upper  
45 100  
43 54.3 45.0 67.6  
87 25.3 21.8 32.8  
59 12.4 10.2 15.2

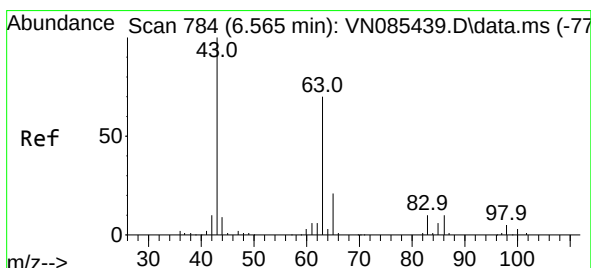
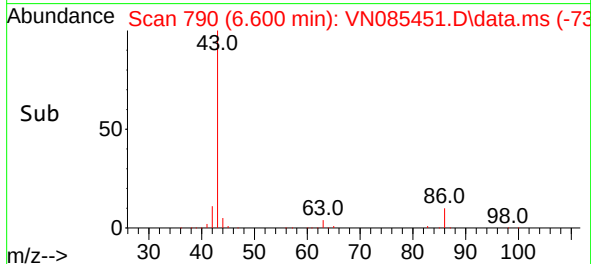
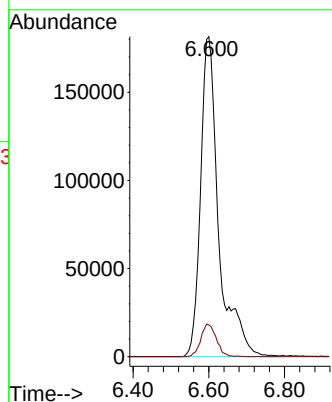
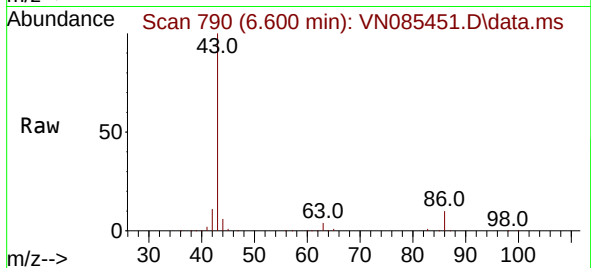




#23  
 Vinyl Acetate  
 Concen: 118.221 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

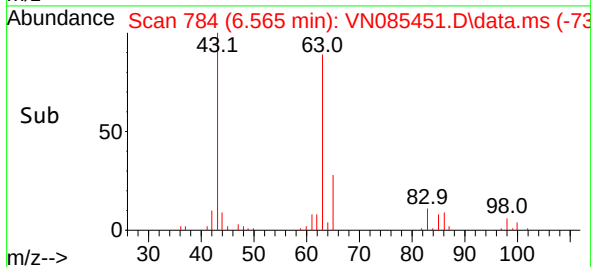
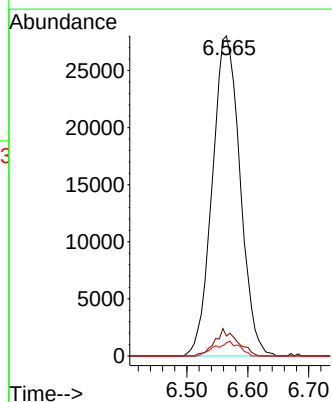
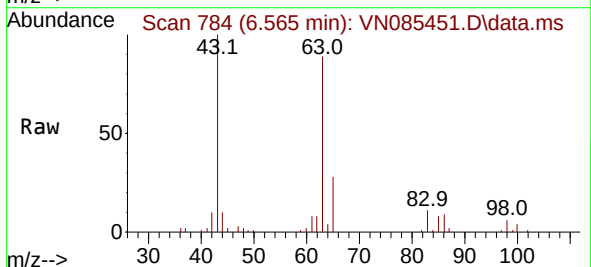
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

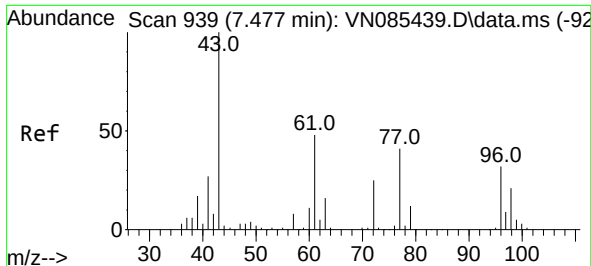
Tgt Ion: 43 Resp: 604101  
 Ion Ratio Lower Upper  
 43 100  
 86 9.9 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 19.952 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion: 63 Resp: 88831  
 Ion Ratio Lower Upper  
 63 100  
 98 6.3 3.3 9.8  
 100 4.1 2.0 6.0

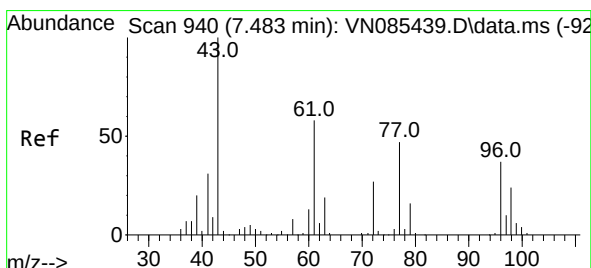
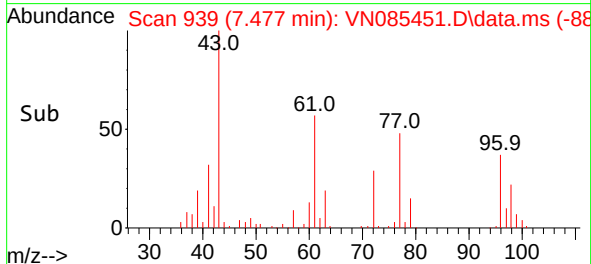
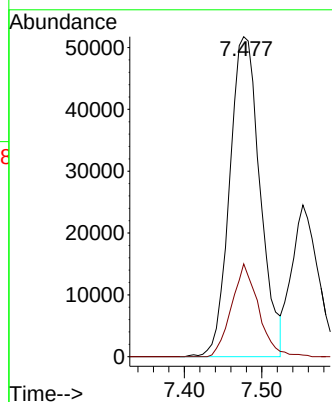
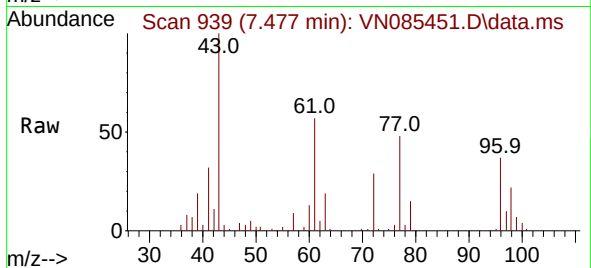




#25  
2-Butanone  
Concen: 97.595 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

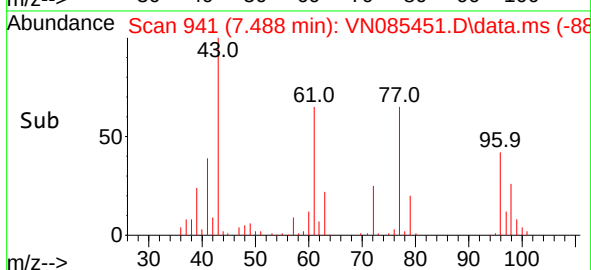
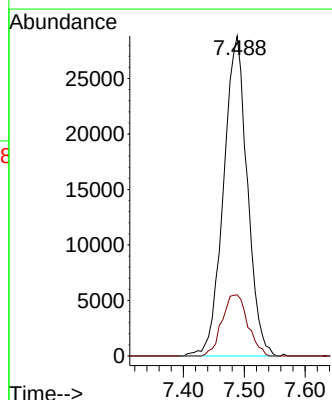
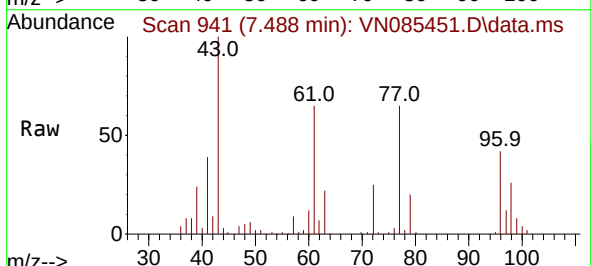
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

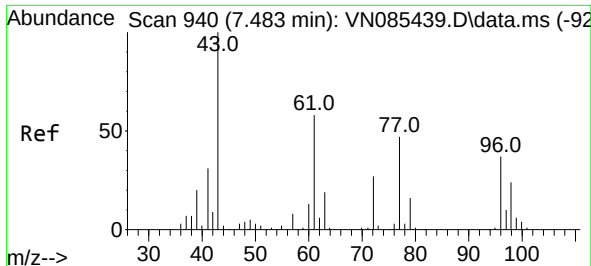
Tgt Ion: 43 Resp: 141498  
Ion Ratio Lower Upper  
43 100  
72 29.0 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 21.728 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 77 Resp: 78212  
Ion Ratio Lower Upper  
77 100  
97 20.7 10.7 32.1

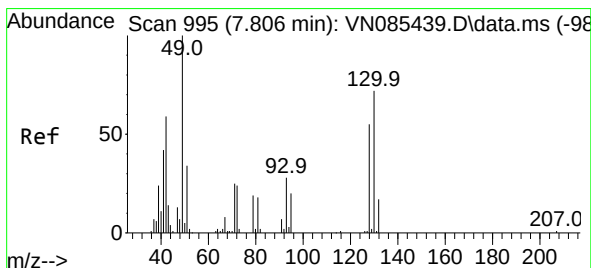
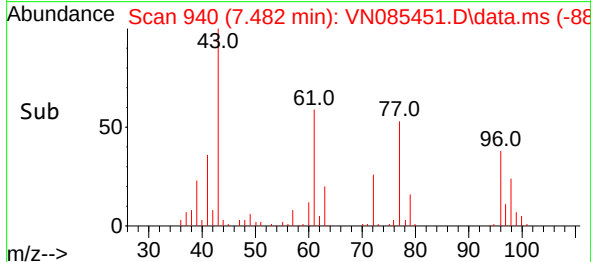
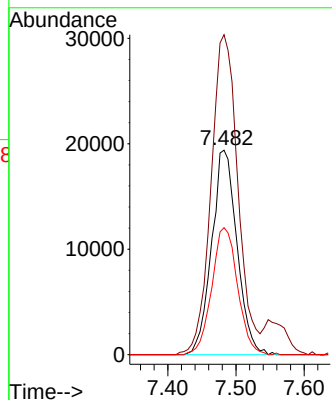
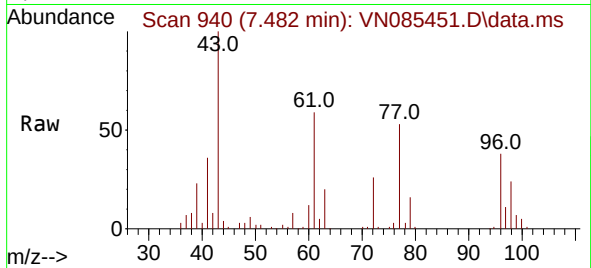




#27  
 cis-1,2-Dichloroethene  
 Concen: 19.672 ug/l  
 RT: 7.482 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

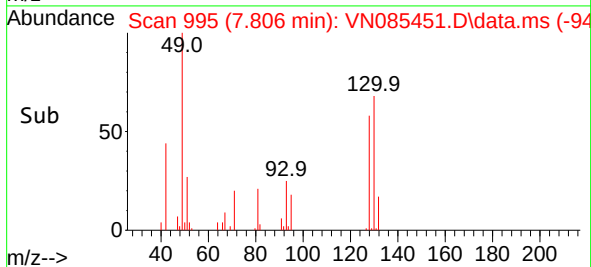
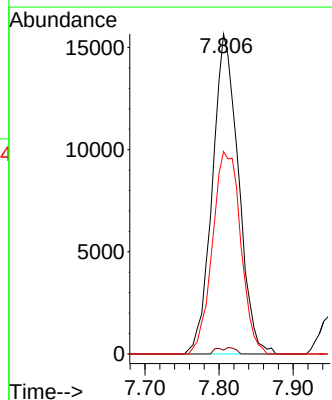
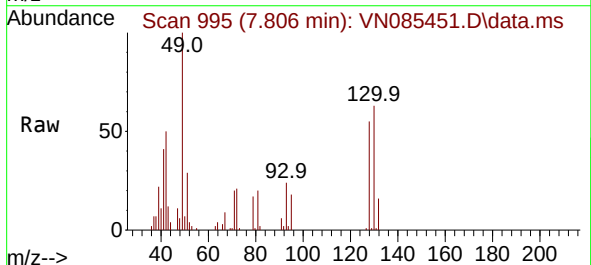
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

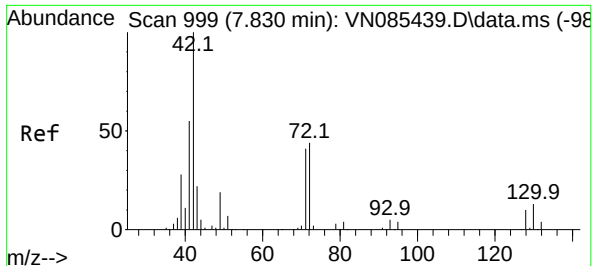
Tgt Ion: 96 Resp: 50200  
 Ion Ratio Lower Upper  
 96 100  
 61 165.3 0.0 311.8  
 98 63.3 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 18.460 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion: 49 Resp: 38238  
 Ion Ratio Lower Upper  
 49 100  
 129 0.7 0.0 4.4  
 130 68.4 55.0 82.4

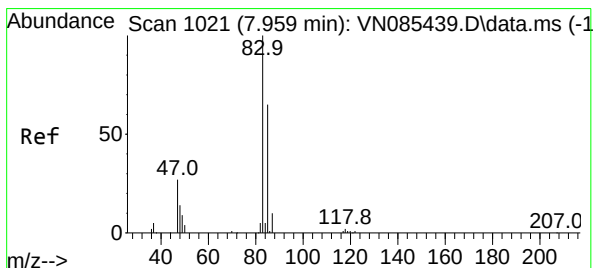
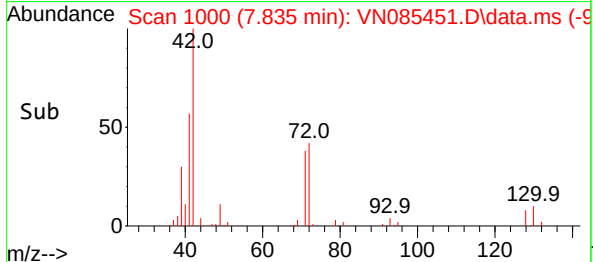
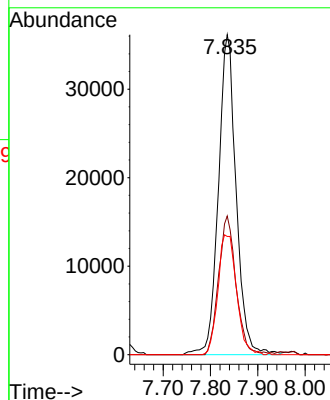
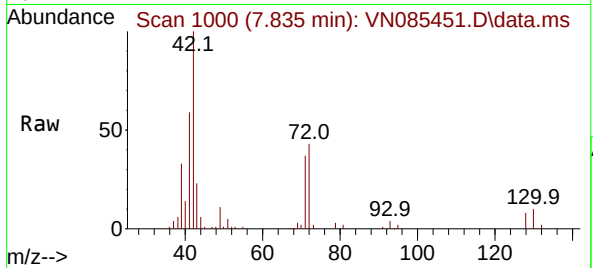




#29  
Tetrahydrofuran  
Concen: 102.217 ug/l  
RT: 7.835 min Scan# 1000  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

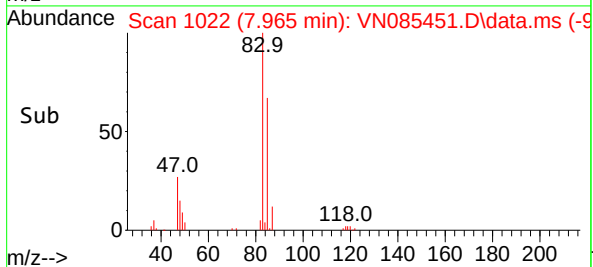
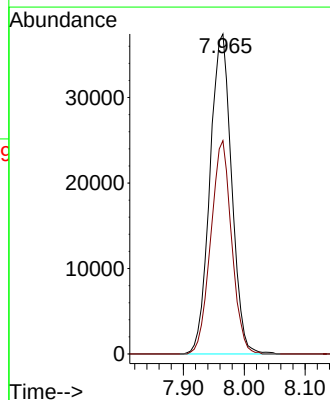
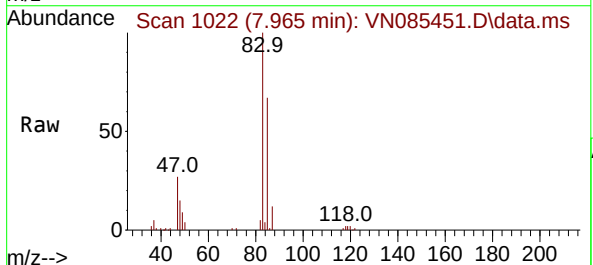
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

Tgt Ion: 42 Resp: 93959  
Ion Ratio Lower Upper  
42 100  
72 42.2 34.2 51.2  
71 39.3 32.5 48.7

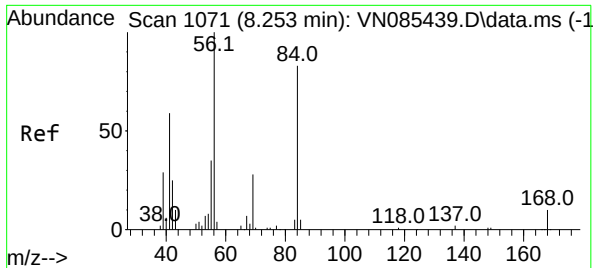


#30  
Chloroform  
Concen: 20.149 ug/l  
RT: 7.965 min Scan# 1022  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 83 Resp: 92715  
Ion Ratio Lower Upper  
83 100  
85 66.6 51.8 77.6



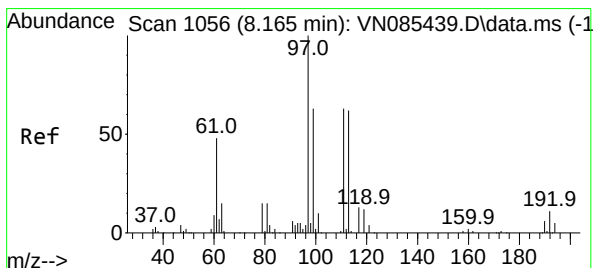
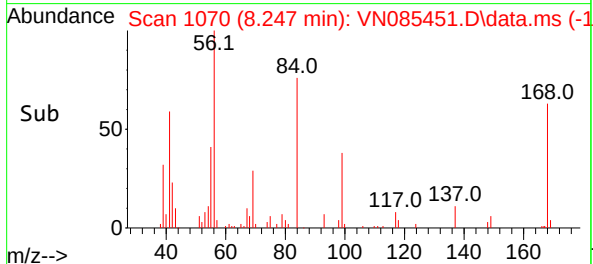
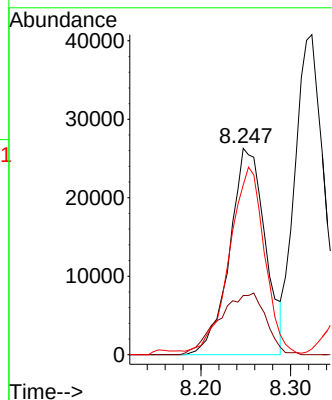
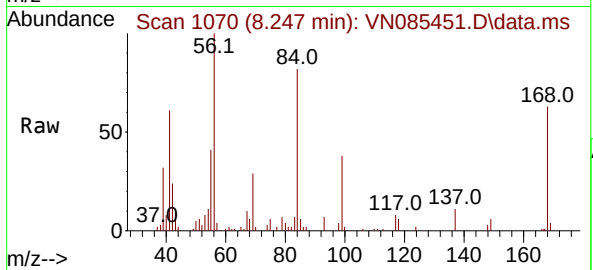




#31  
Cyclohexane  
Concen: 18.672 ug/l  
RT: 8.247 min Scan# 1070  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

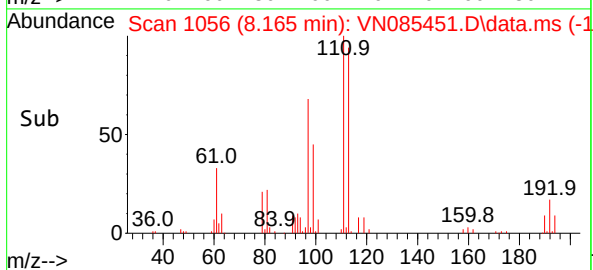
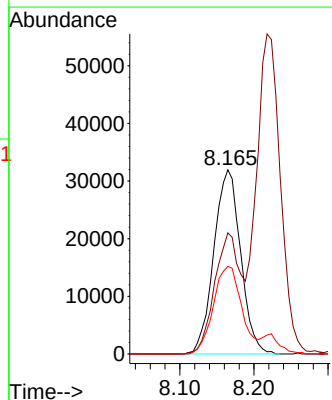
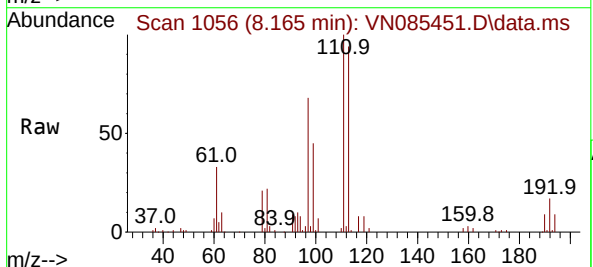
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

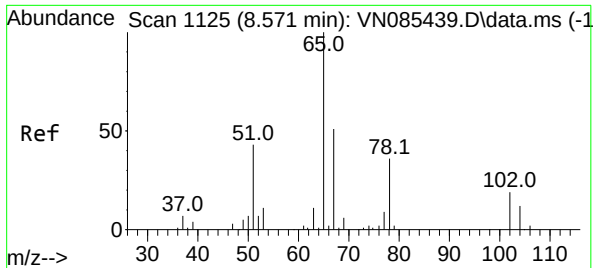
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 56    | Resp: | 72255 |
| Ion Ratio | Lower | Upper |       |
| 56        | 100   |       |       |
| 69        | 28.7  | 22.2  | 33.4  |
| 84        | 80.4  | 66.4  | 99.6  |



#32  
1,1,1-Trichloroethane  
Concen: 19.867 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 97    | Resp: | 80190 |
| Ion Ratio | Lower | Upper |       |
| 97        | 100   |       |       |
| 99        | 64.5  | 49.8  | 74.6  |
| 61        | 50.6  | 41.4  | 62.2  |

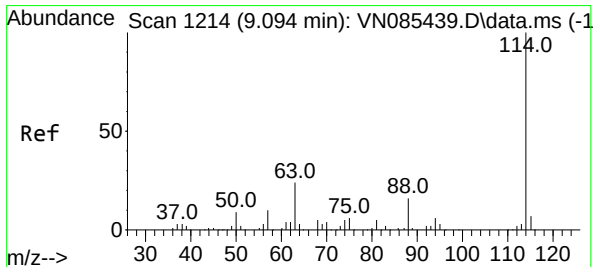
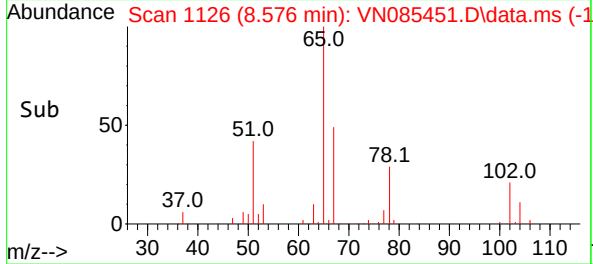
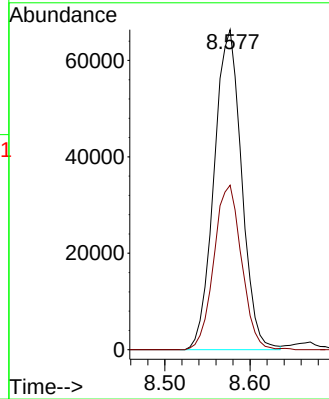
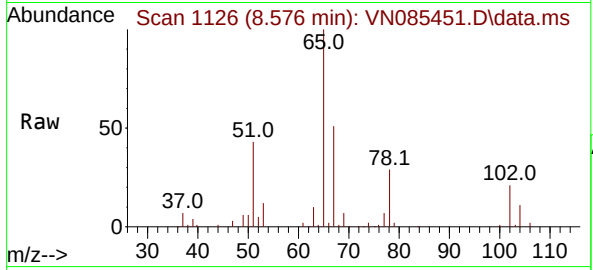




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.941 ug/l  
 RT: 8.576 min Scan# 1125  
 Delta R.T. 0.006 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

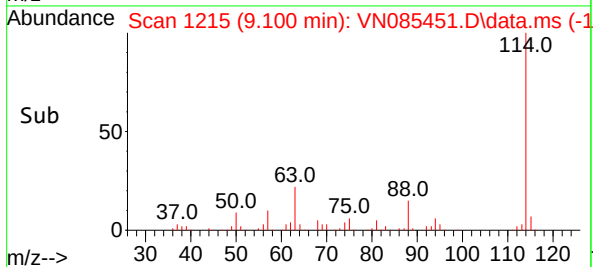
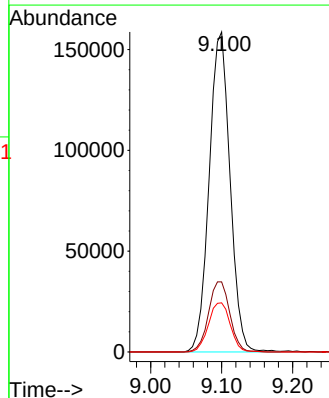
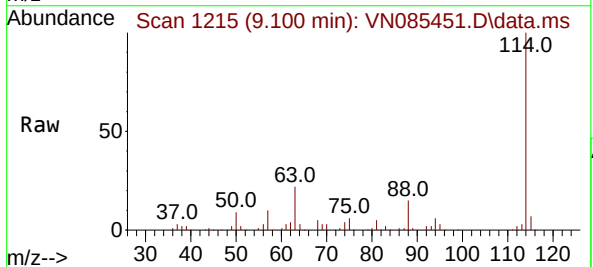
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

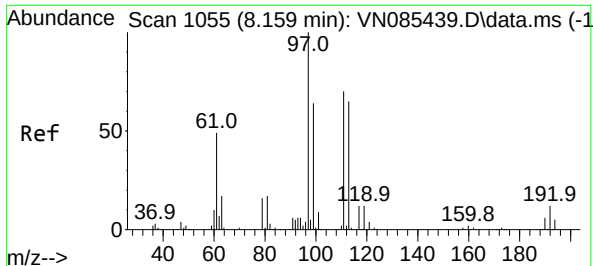
Tgt Ion: 65 Resp: 149231  
 Ion Ratio Lower Upper  
 65 100  
 67 51.7 0.0 101.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.006 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion: 114 Resp: 323122  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 47.6  
 88 15.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 49.259 ug/l

RT: 8.159 min Scan# 110423

Delta R.T. -0.000 min

Lab File: VN085451.D

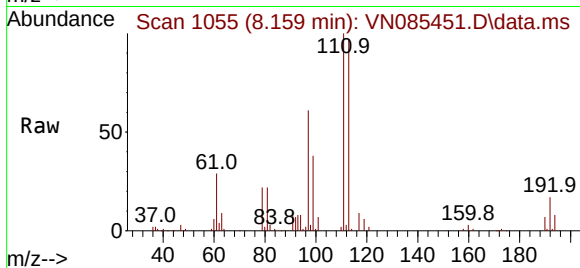
Acq: 15 Jan 2025 11:02

Instrument :

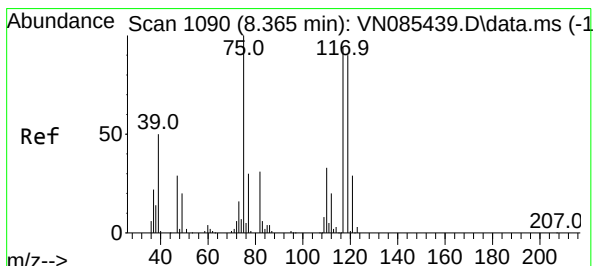
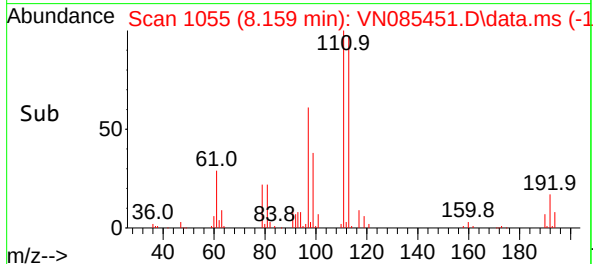
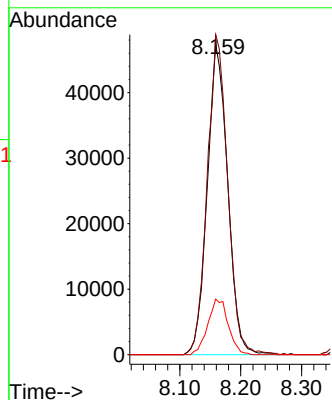
MSVOA\_N

ClientSampleId :

VN0115WBSD01



| Tgt Ion:  | 113   | Resp: | 110423 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 113       | 100   |       |        |
| 111       | 103.1 | 82.7  | 124.1  |
| 192       | 17.9  | 14.3  | 21.5   |



#36

1,1-Dichloropropene

Concen: 19.650 ug/l

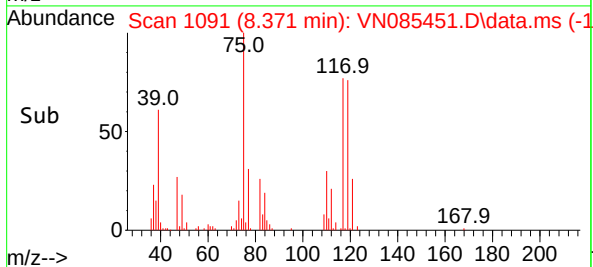
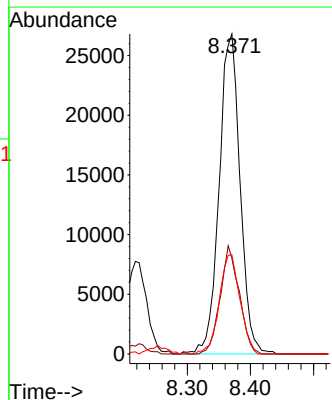
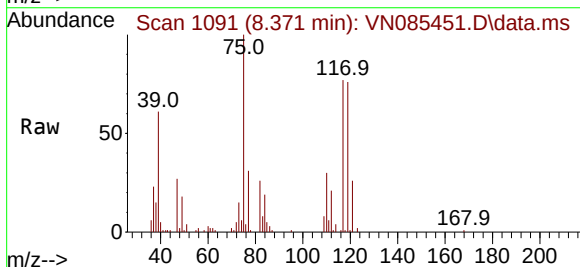
RT: 8.371 min Scan# 1091

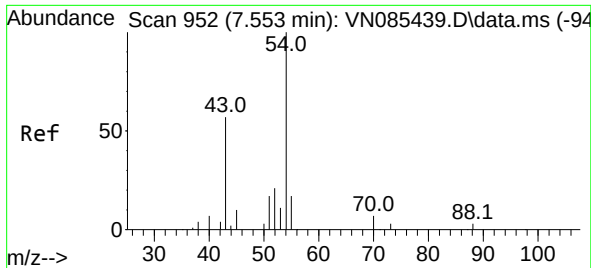
Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

| Tgt Ion:  | 75   | Resp: | 61822 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 75        | 100  |       |       |
| 110       | 30.8 | 16.5  | 49.5  |
| 77        | 30.6 | 24.4  | 36.6  |

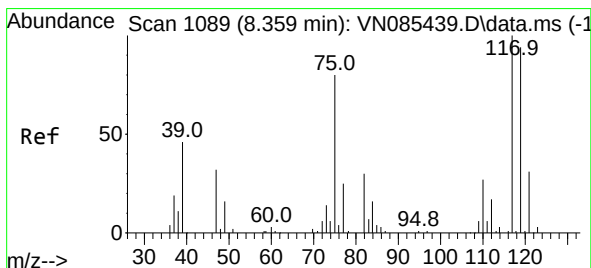
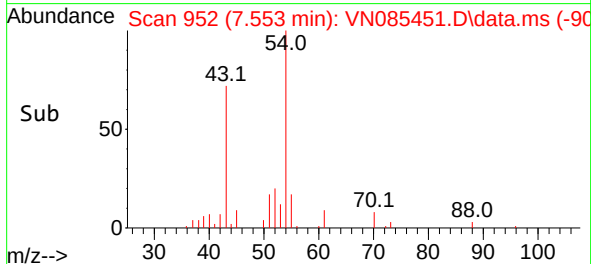
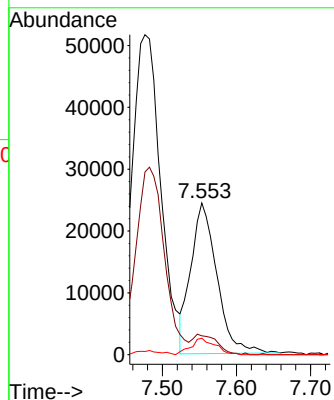
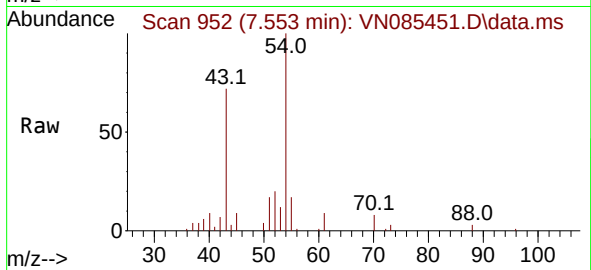




#37  
Ethyl Acetate  
Concen: 18.795 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

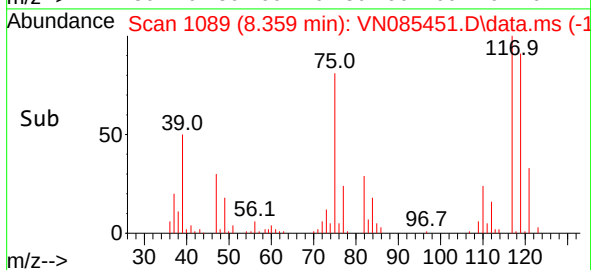
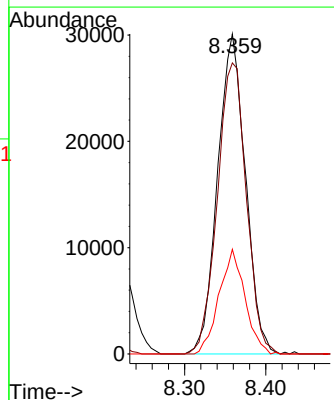
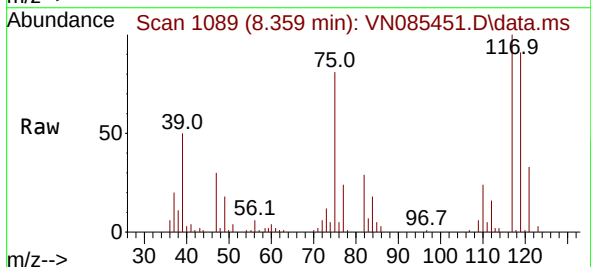
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

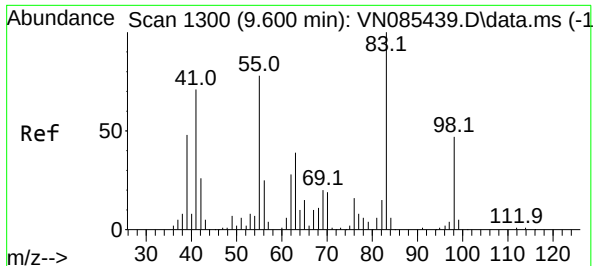
Tgt Ion: 43 Resp: 59684  
Ion Ratio Lower Upper  
43 100  
61 12.3 10.9 16.3  
70 10.1 7.5 11.3



#38  
Carbon Tetrachloride  
Concen: 19.911 ug/l  
RT: 8.359 min Scan# 1089  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 117 Resp: 71714  
Ion Ratio Lower Upper  
117 100  
119 91.0 75.4 113.2  
121 32.7 24.6 37.0





#39

Methylcyclohexane

Concen: 20.011 ug/l

RT: 9.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

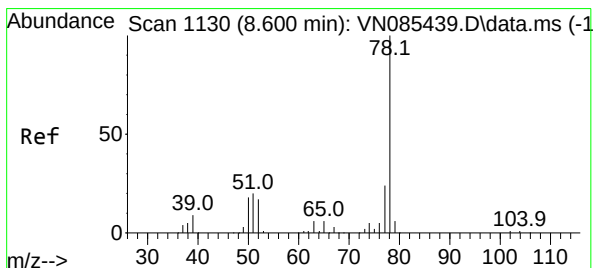
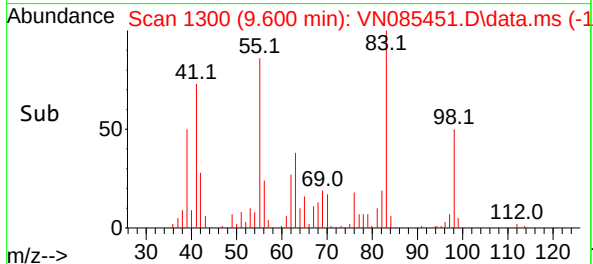
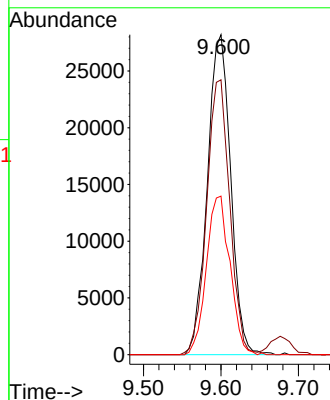
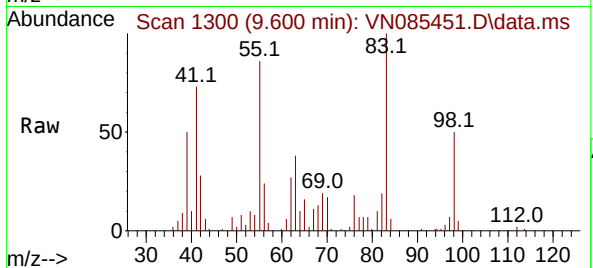
Tgt Ion: 83 Resp: 59161

Ion Ratio Lower Upper

83 100

55 85.9 62.6 94.0

98 49.6 37.7 56.5



#40

Benzene

Concen: 20.061 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085451.D

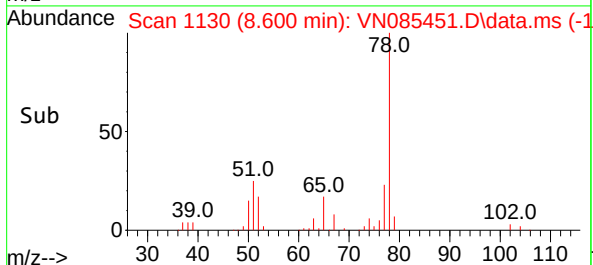
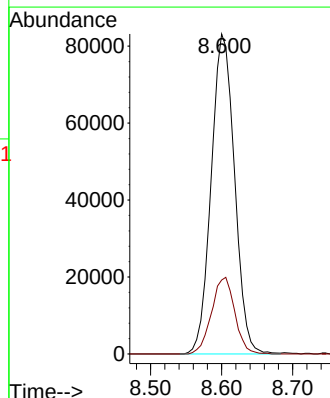
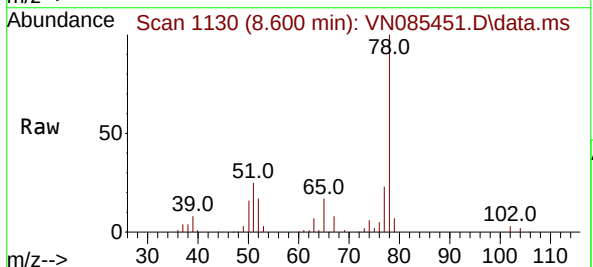
Acq: 15 Jan 2025 11:02

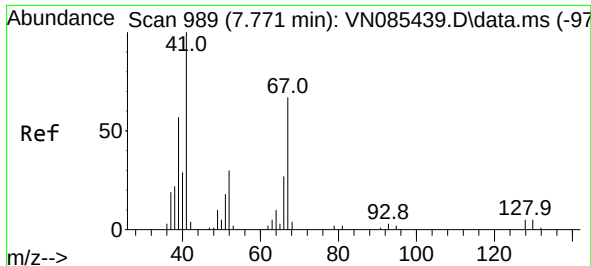
Tgt Ion: 78 Resp: 189640

Ion Ratio Lower Upper

78 100

77 23.1 19.0 28.6

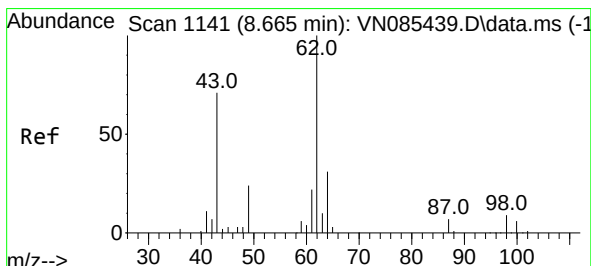
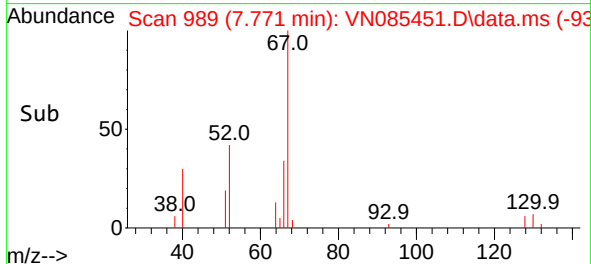
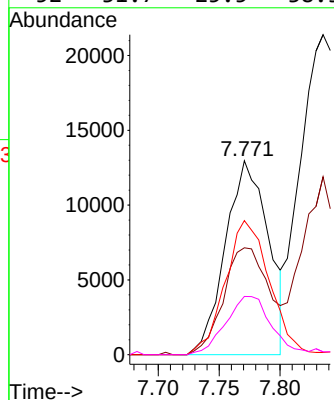
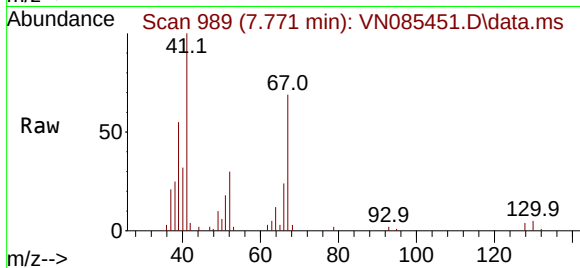




#41  
Methacrylonitrile  
Concen: 19.288 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

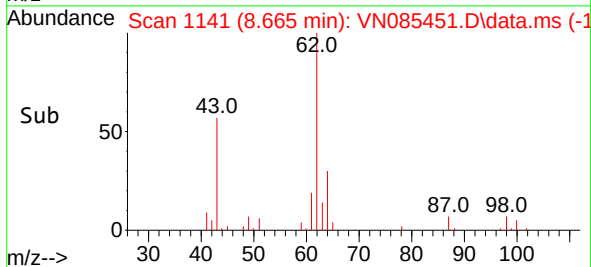
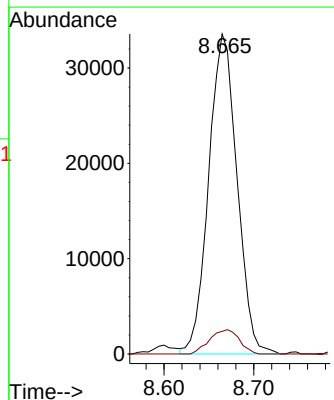
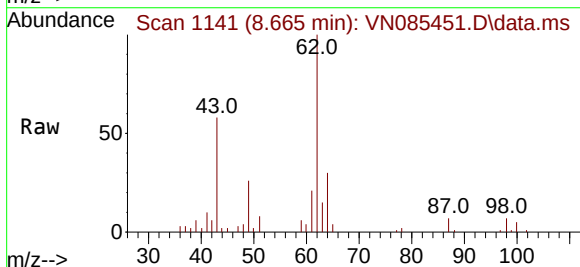
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

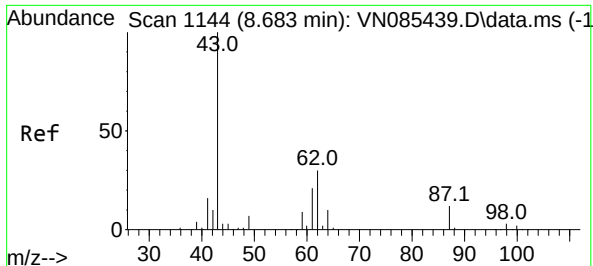
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 31866 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 58.3  | 46.0  | 69.0  |
| 67       | 71.3  | 57.4  | 86.2  |
| 52       | 31.7  | 25.5  | 38.3  |



#42  
1,2-Dichloroethane  
Concen: 20.692 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 62    | Resp: | 73669 |
| Ion      | Ratio | Lower | Upper |
| 62       | 100   |       |       |
| 98       | 7.9   | 0.0   | 17.0  |





#43

Isopropyl Acetate

Concen: 19.708 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

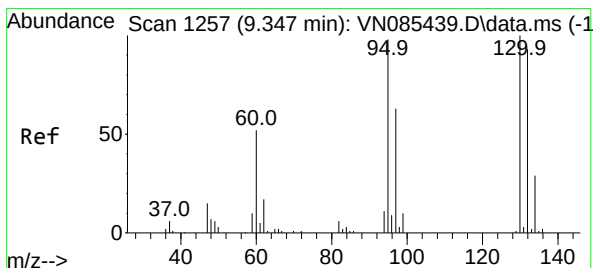
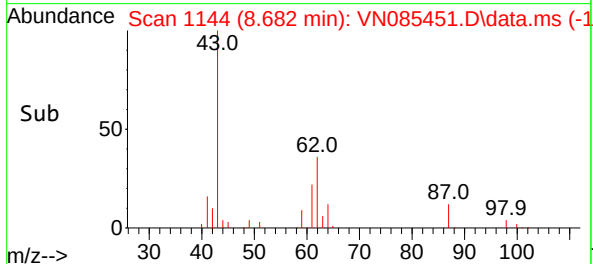
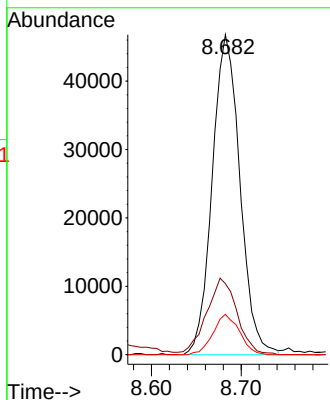
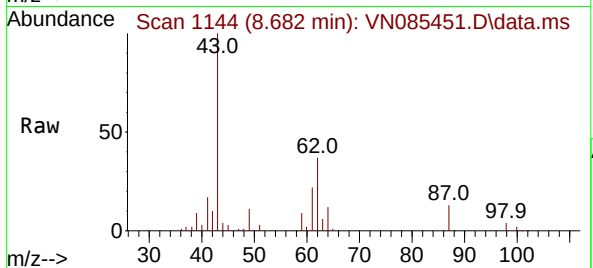
Tgt Ion: 43 Resp: 100283

Ion Ratio Lower Upper

43 100

61 26.5 20.7 31.1

87 12.0 9.8 14.8



#44

Trichloroethene

Concen: 20.145 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085451.D

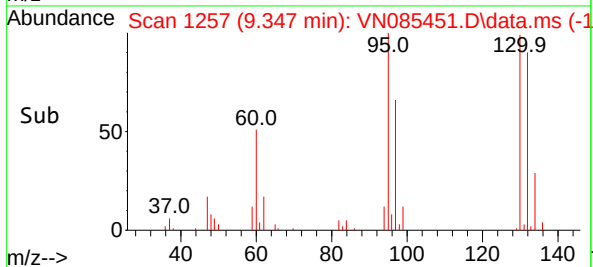
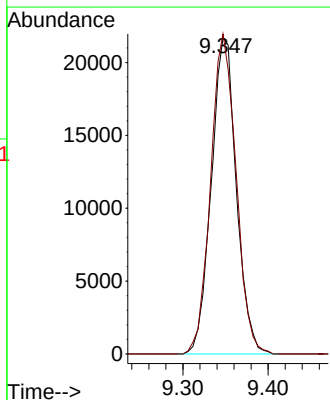
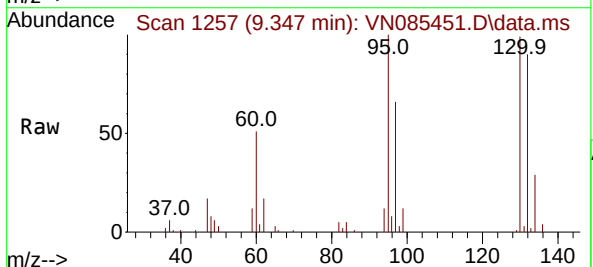
Acq: 15 Jan 2025 11:02

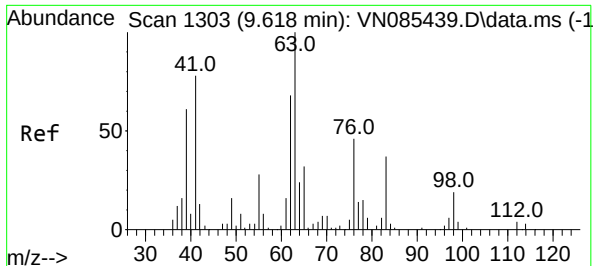
Tgt Ion:130 Resp: 44329

Ion Ratio Lower Upper

130 100

95 101.2 0.0 195.8





#45

1,2-Dichloropropane

Concen: 20.167 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

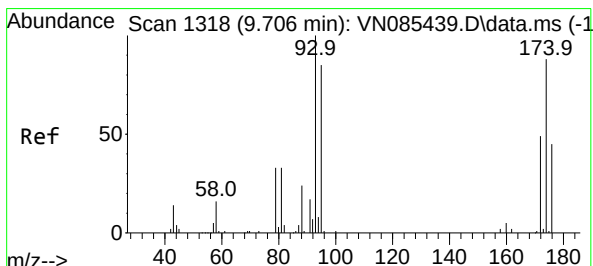
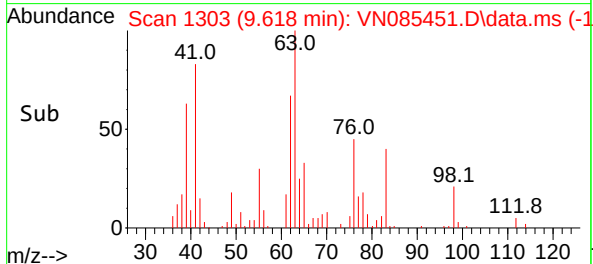
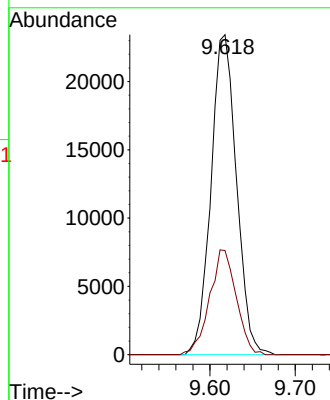
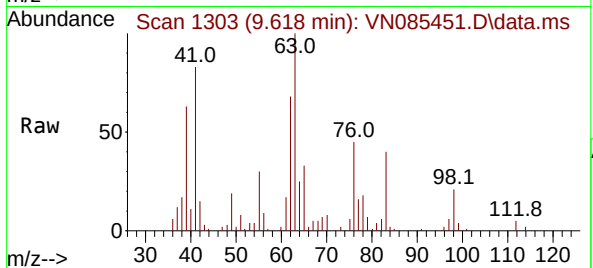
VN0115WBSD01

Tgt Ion: 63 Resp: 48696

Ion Ratio Lower Upper

63 100

65 32.5 25.6 38.4



#46

Dibromomethane

Concen: 19.561 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

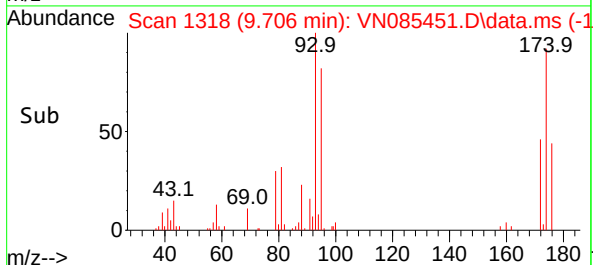
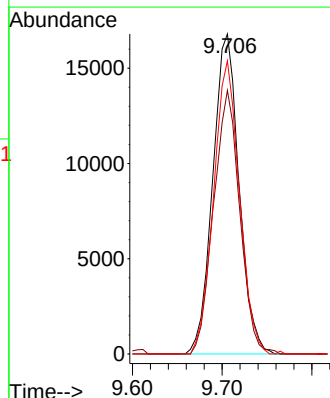
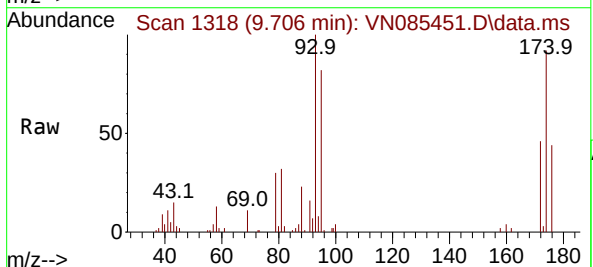
Tgt Ion: 93 Resp: 34080

Ion Ratio Lower Upper

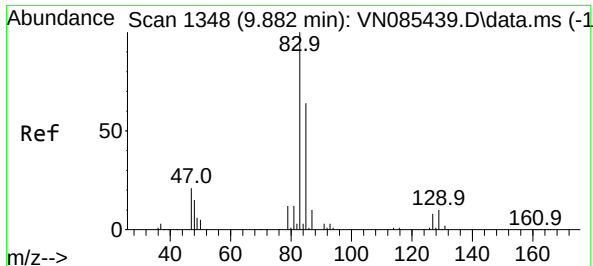
93 100

95 82.2 64.7 97.1

174 90.2 69.0 103.4



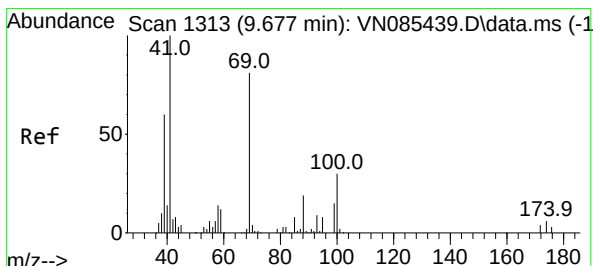
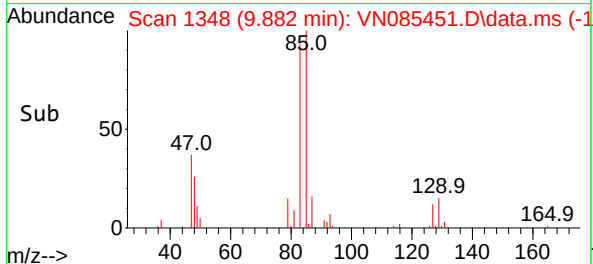
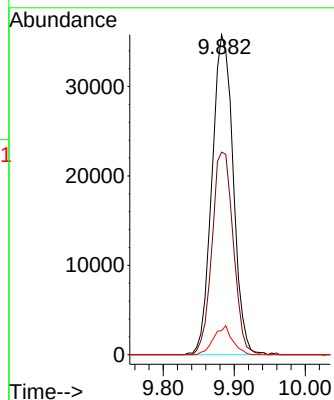
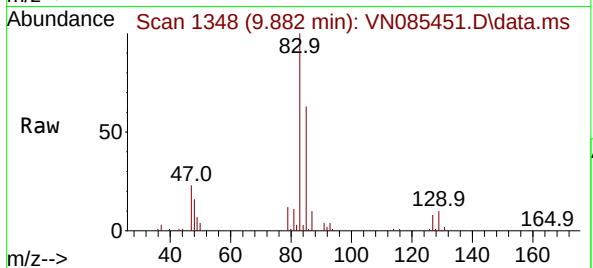




#47  
Bromodichloromethane  
Concen: 20.909 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

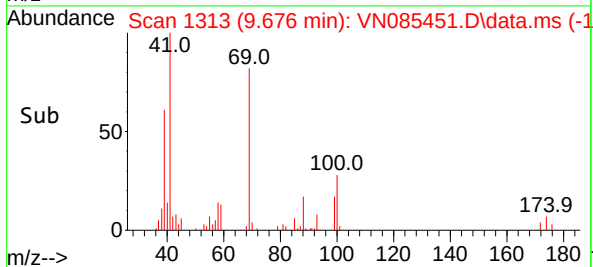
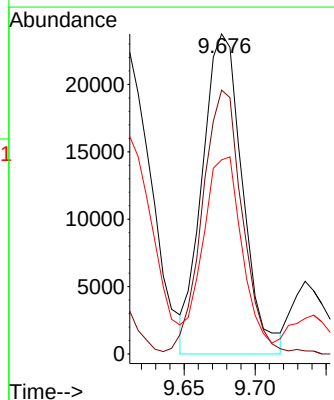
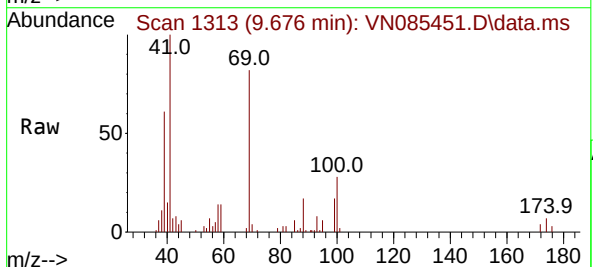
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

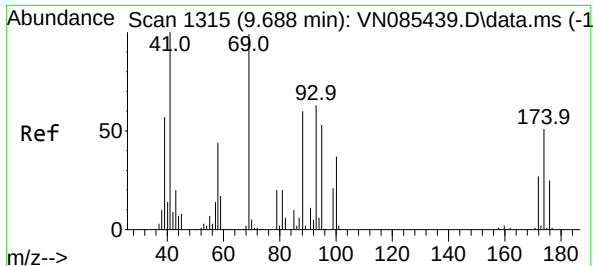
Tgt Ion: 83 Resp: 74218  
Ion Ratio Lower Upper  
83 100  
85 63.3 51.2 76.8  
127 7.5 6.5 9.7



#48  
Methyl methacrylate  
Concen: 20.374 ug/l  
RT: 9.676 min Scan# 1313  
Delta R.T. -0.001 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 41 Resp: 46655  
Ion Ratio Lower Upper  
41 100  
69 82.9 64.7 97.1  
39 61.1 49.0 73.6





#49

1,4-Dioxane

Concen: 388.550 ug/l

RT: 9.688 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

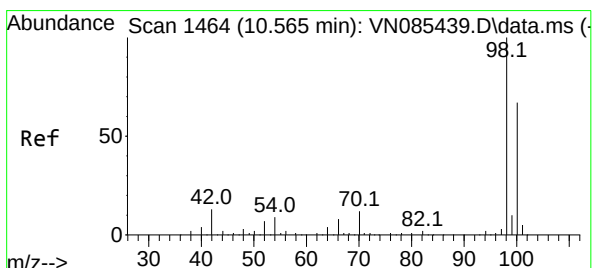
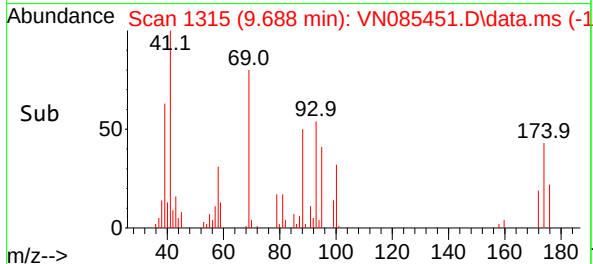
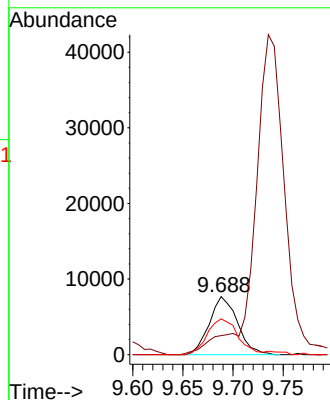
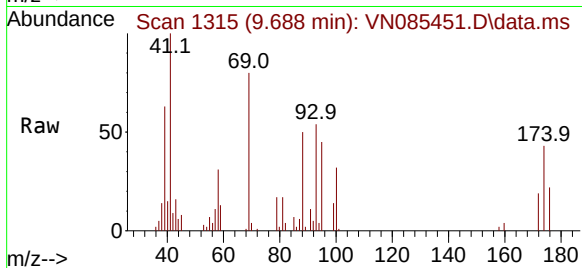
Tgt Ion: 88 Resp: 14983

Ion Ratio Lower Upper

88 100

43 0.0 26.6 39.8#

58 66.8 59.5 89.3



#50

Toluene-d8

Concen: 50.102 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085451.D

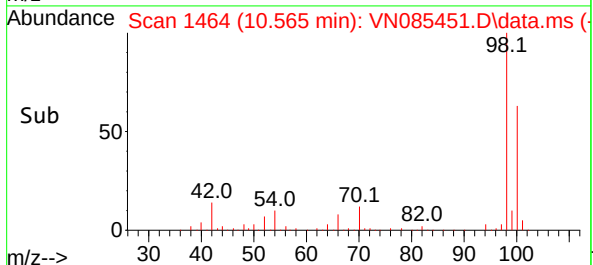
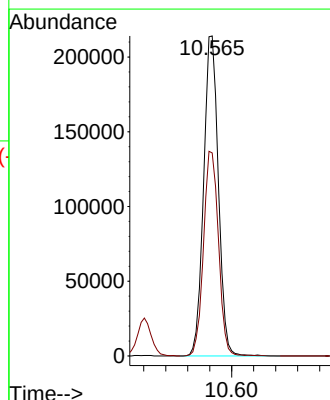
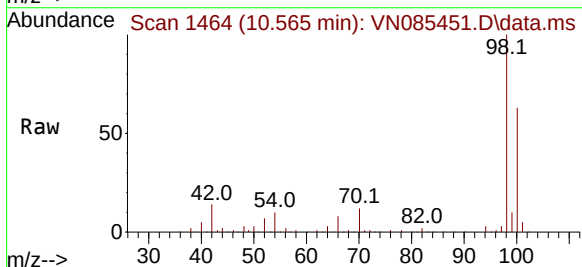
Acq: 15 Jan 2025 11:02

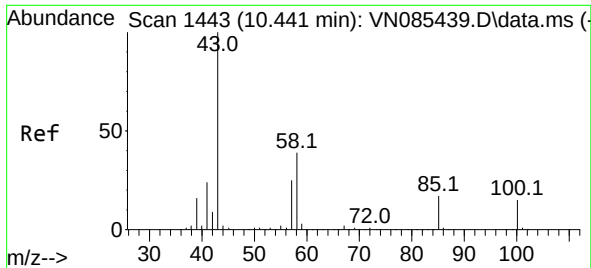
Tgt Ion: 98 Resp: 399040

Ion Ratio Lower Upper

98 100

100 64.8 52.2 78.4

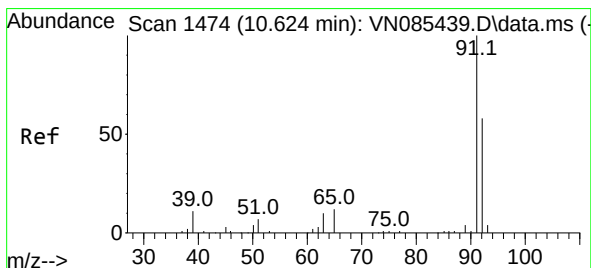
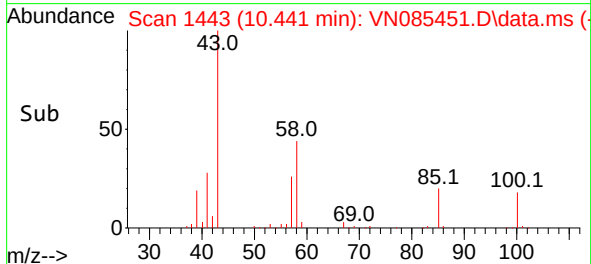
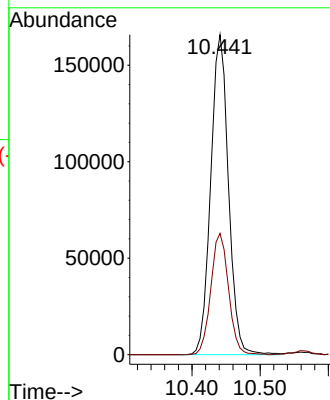
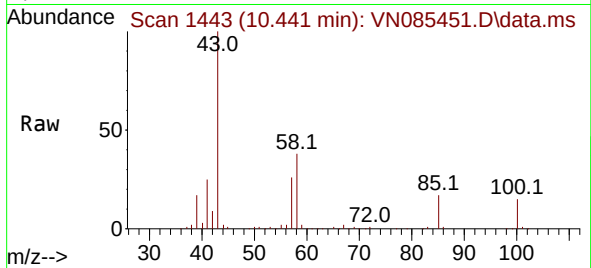




#51  
4-Methyl-2-Pentanone  
Concen: 101.808 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

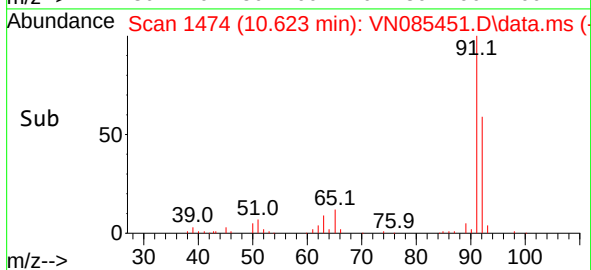
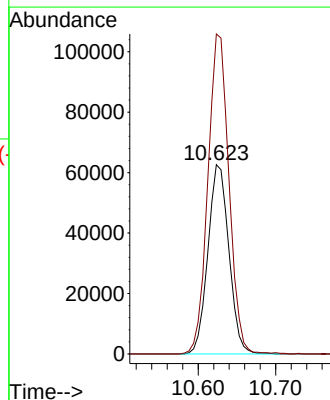
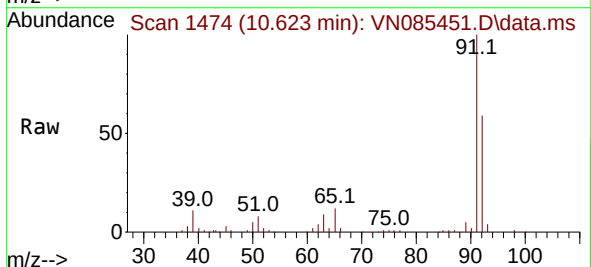
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MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

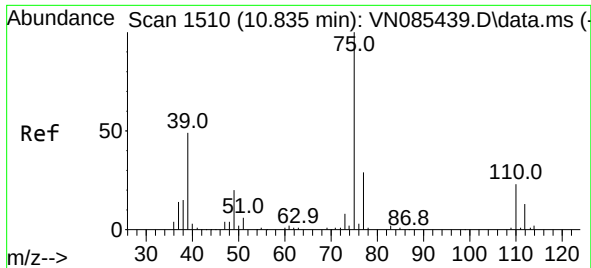
Tgt Ion: 43 Resp: 300611  
Ion Ratio Lower Upper  
43 100  
58 37.8 30.5 45.7



#52  
Toluene  
Concen: 21.476 ug/l  
RT: 10.623 min Scan# 1474  
Delta R.T. -0.001 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 92 Resp: 117631  
Ion Ratio Lower Upper  
92 100  
91 169.9 139.2 208.8

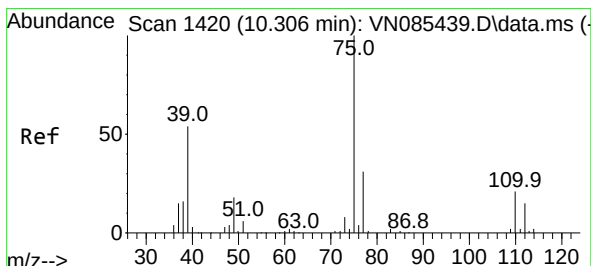
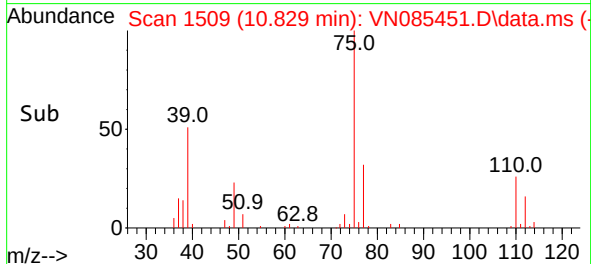
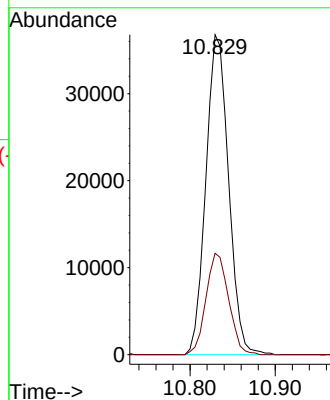
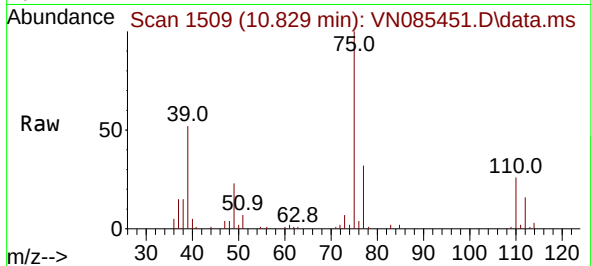




#53  
 t-1,3-Dichloropropene  
 Concen: 20.276 ug/l  
 RT: 10.829 min Scan# 1509  
 Delta R.T. -0.006 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

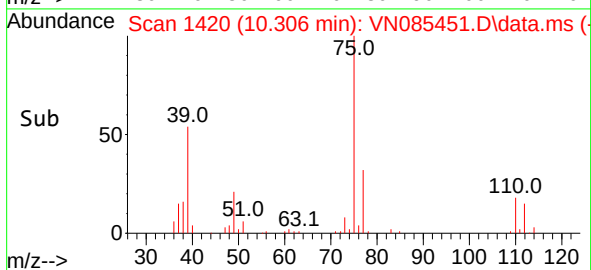
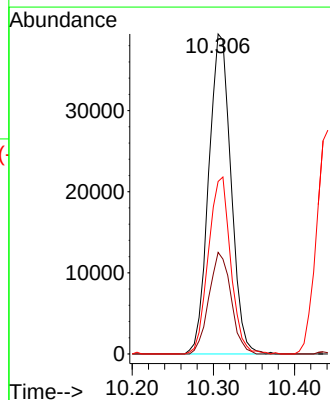
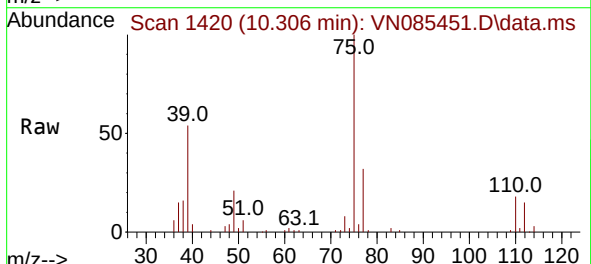
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

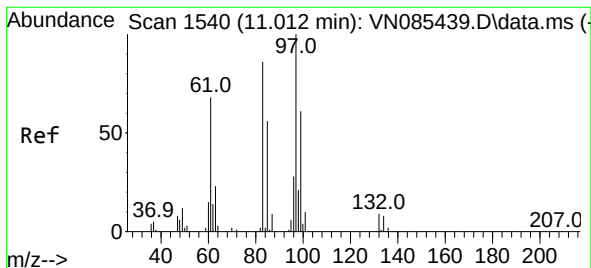
Tgt Ion: 75 Resp: 68014  
 Ion Ratio Lower Upper  
 75 100  
 77 31.7 23.5 35.3



#54  
 cis-1,3-Dichloropropene  
 Concen: 20.973 ug/l  
 RT: 10.306 min Scan# 1420  
 Delta R.T. -0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion: 75 Resp: 75146  
 Ion Ratio Lower Upper  
 75 100  
 77 31.7 25.0 37.4  
 39 53.9 43.1 64.7

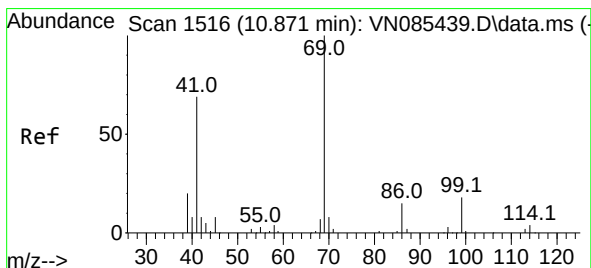
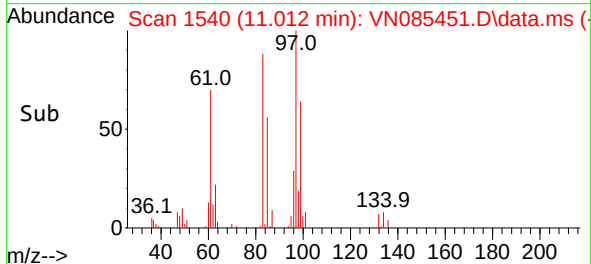
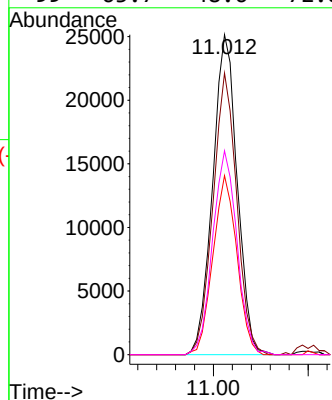
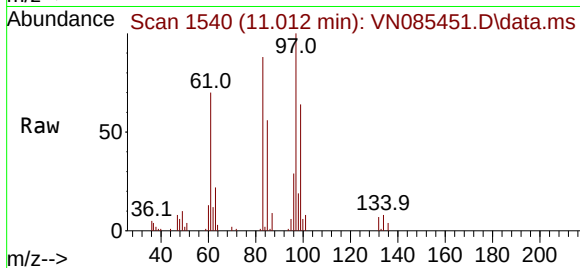




#55  
1,1,2-Trichloroethane  
Concen: 20.861 ug/l  
RT: 11.012 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

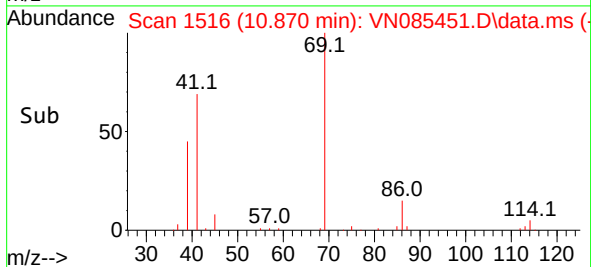
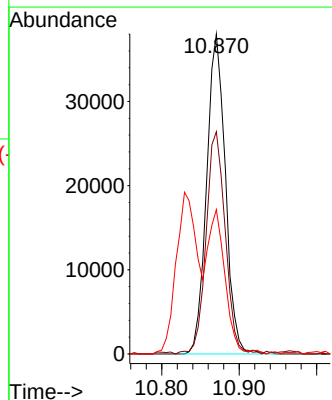
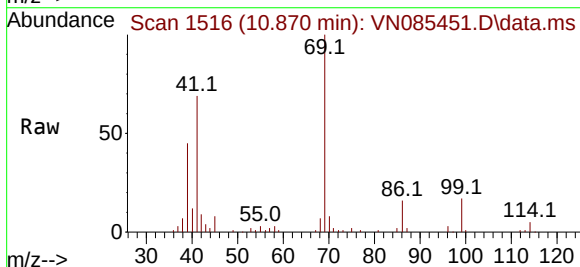
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

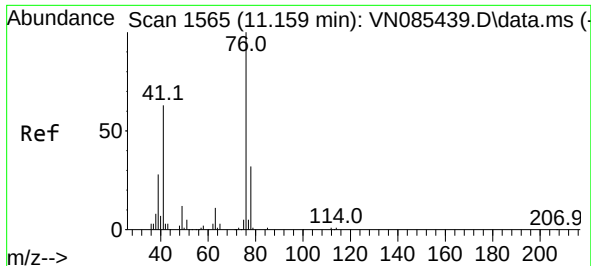
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 45220 |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 88.0     | 69.0 103.6  |
| 85 55.9     | 44.6 66.8   |
| 99 63.7     | 48.6 72.8   |



#56  
Ethyl methacrylate  
Concen: 18.769 ug/l  
RT: 10.870 min Scan# 1516  
Delta R.T. -0.001 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

|             |             |
|-------------|-------------|
| Tgt Ion: 69 | Resp: 63954 |
| Ion Ratio   | Lower Upper |
| 69 100      |             |
| 41 71.0     | 54.6 82.0   |
| 39 40.3     | 32.4 48.6   |





#57

1,3-Dichloropropane

Concen: 20.424 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

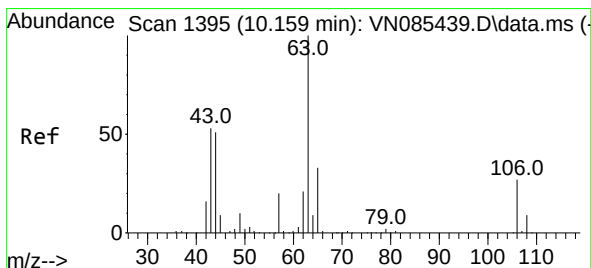
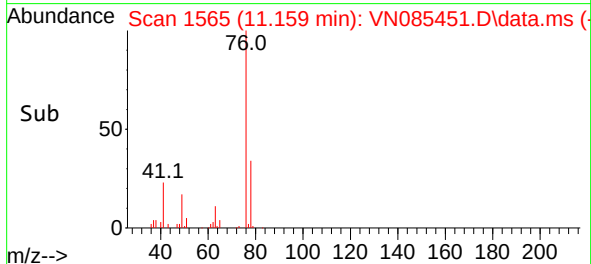
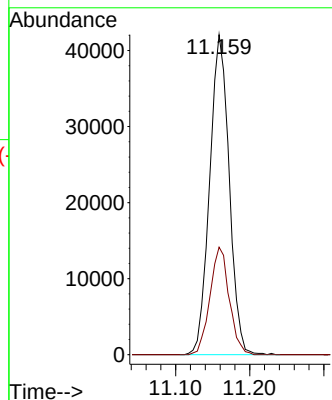
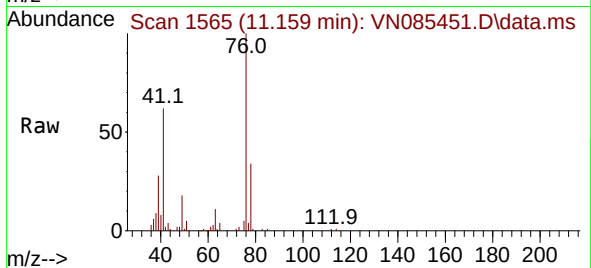
VN0115WBSD01

Tgt Ion: 76 Resp: 76979

Ion Ratio Lower Upper

76 100

78 33.2 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 107.782 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085451.D

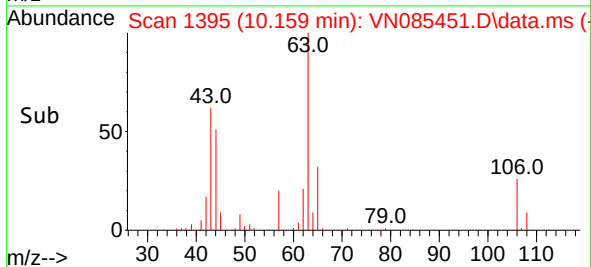
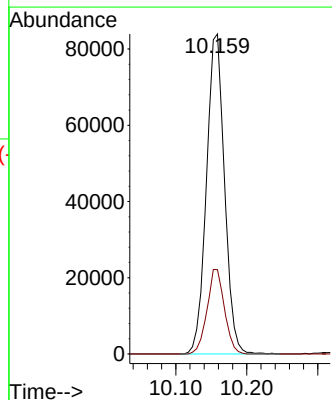
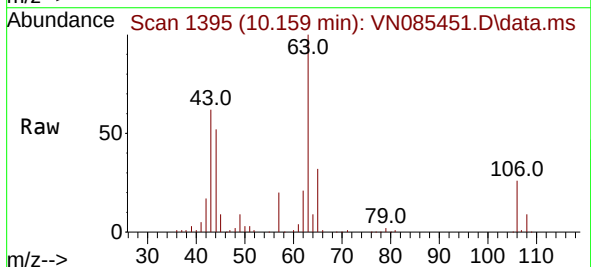
Acq: 15 Jan 2025 11:02

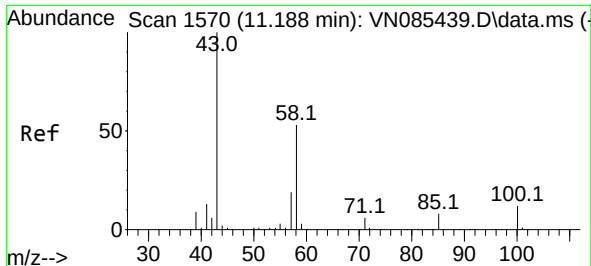
Tgt Ion: 63 Resp: 148262

Ion Ratio Lower Upper

63 100

106 25.5 21.6 32.4

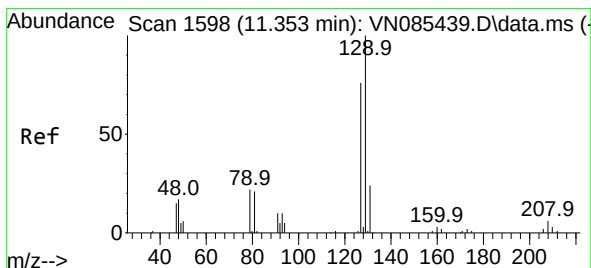
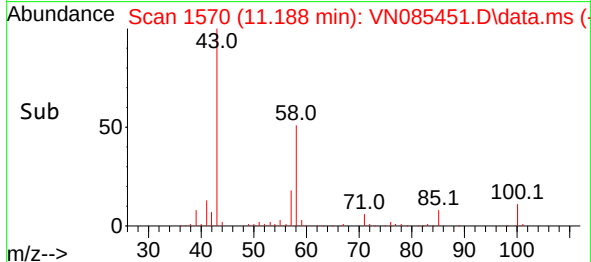
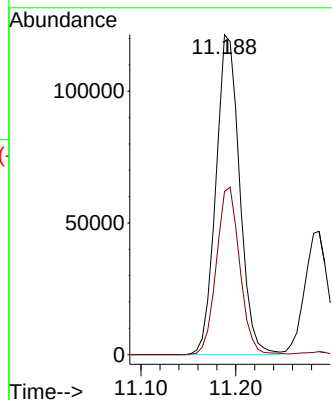
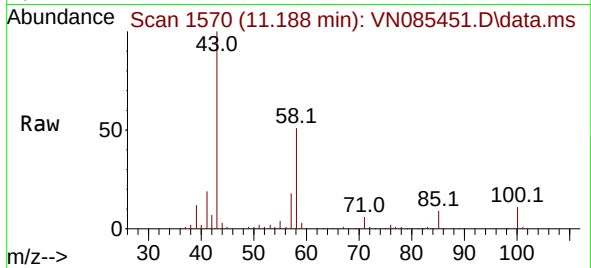




#59  
2-Hexanone  
Concen: 101.890 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

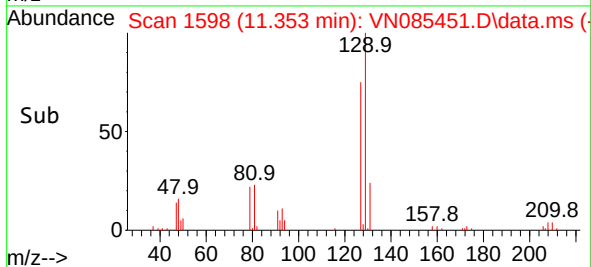
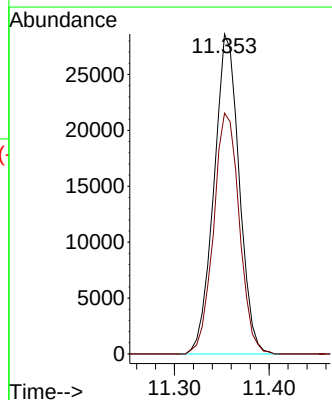
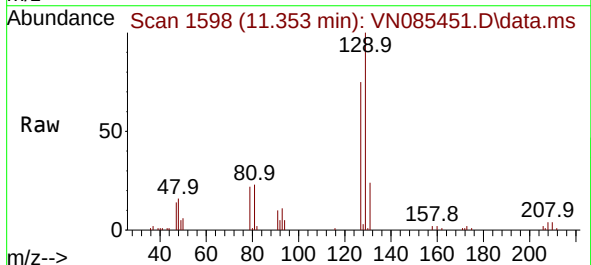
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

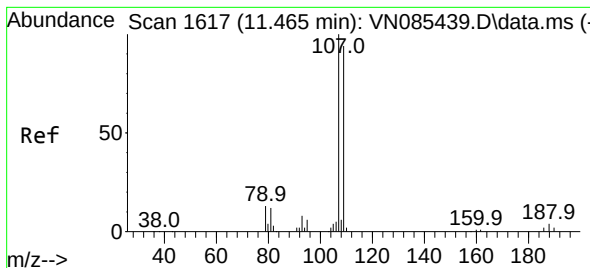
Tgt Ion: 43 Resp: 211689  
Ion Ratio Lower Upper  
43 100  
58 51.5 26.2 78.6



#60  
Dibromochloromethane  
Concen: 20.236 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 129 Resp: 52957  
Ion Ratio Lower Upper  
129 100  
127 76.8 38.6 115.8

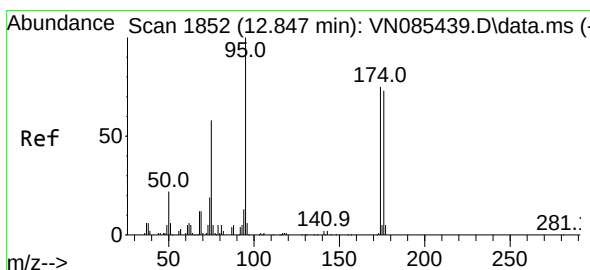
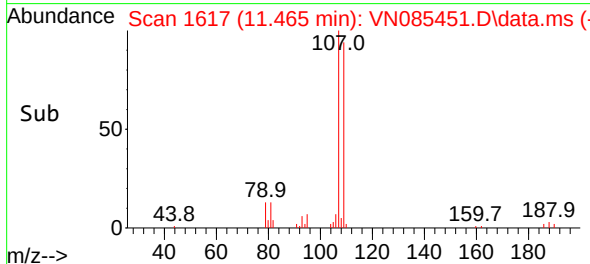
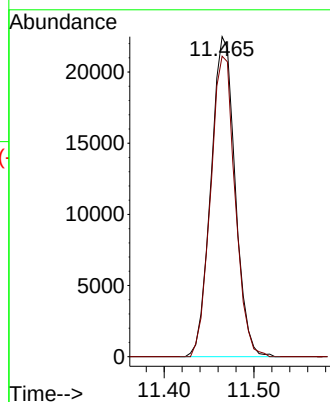
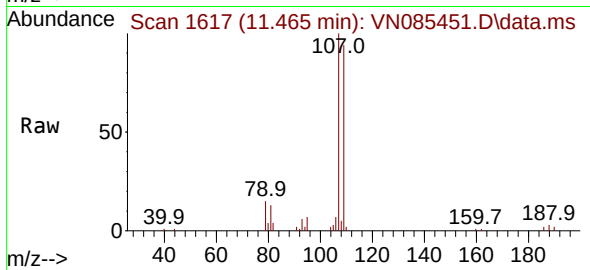




#61  
1,2-Dibromoethane  
Concen: 19.533 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

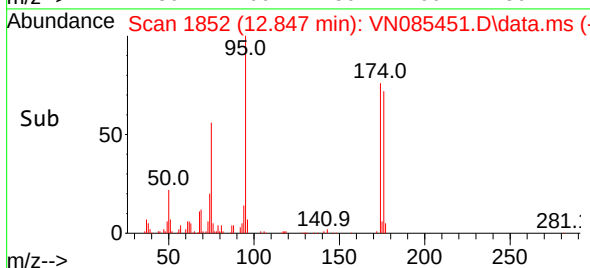
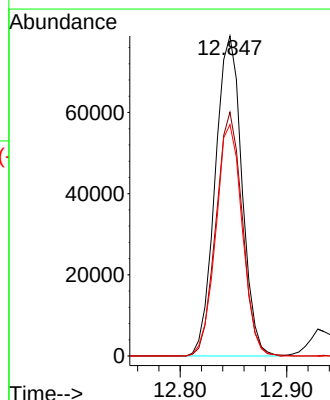
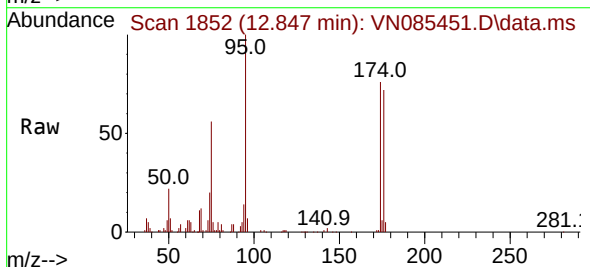
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

Tgt Ion:107 Resp: 42146  
Ion Ratio Lower Upper  
107 100  
109 94.7 75.9 113.9

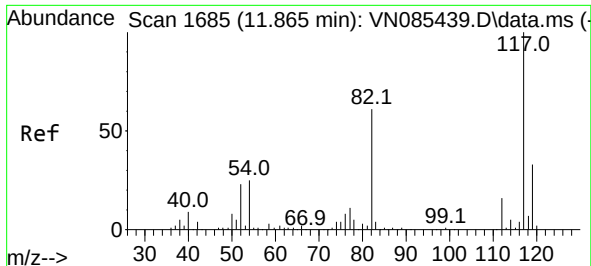


#62  
4-Bromofluorobenzene  
Concen: 50.364 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 95 Resp: 137216  
Ion Ratio Lower Upper  
95 100  
174 74.8 0.0 145.0  
176 71.6 0.0 142.4



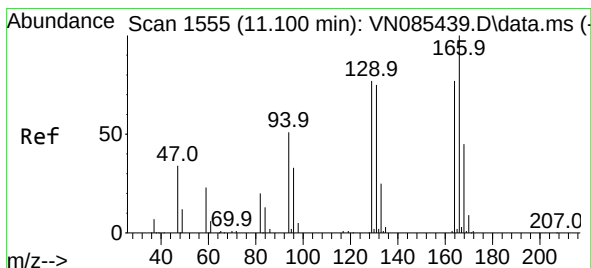
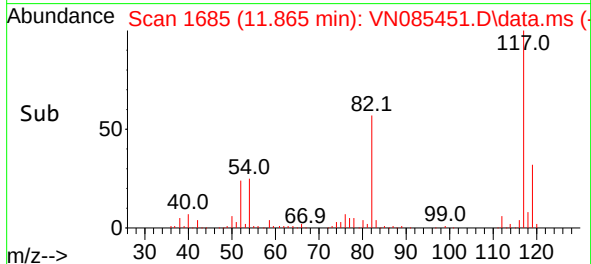
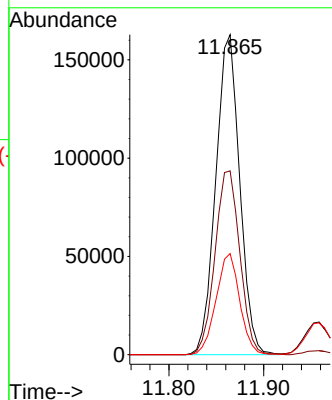
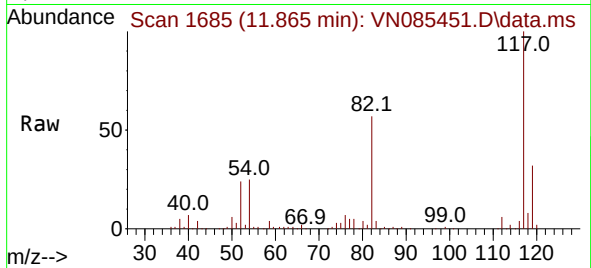




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

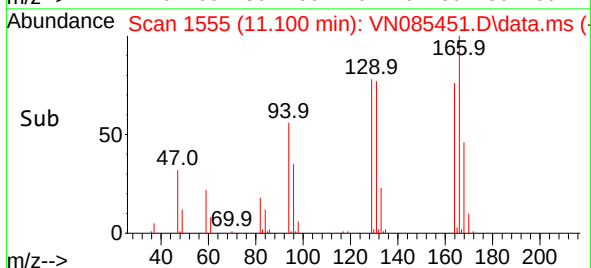
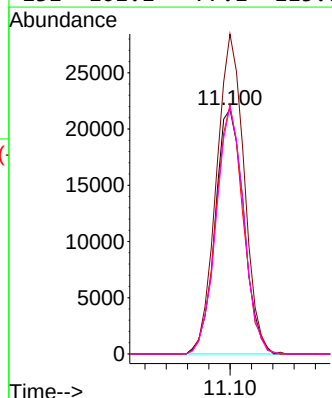
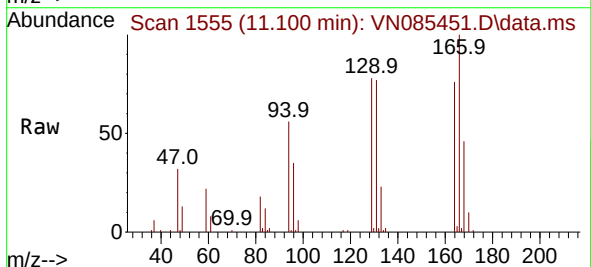
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

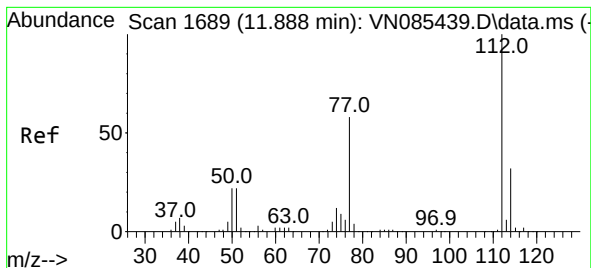
Tgt Ion:117 Resp: 286298  
Ion Ratio Lower Upper  
117 100  
82 57.5 48.6 72.8  
119 31.6 26.6 39.8



#64  
Tetrachloroethene  
Concen: 20.740 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion:164 Resp: 40480  
Ion Ratio Lower Upper  
164 100  
166 130.9 103.4 155.2  
129 101.9 79.2 118.8  
131 101.1 77.1 115.7





#65

Chlorobenzene

Concen: 19.546 ug/l

RT: 11.888 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

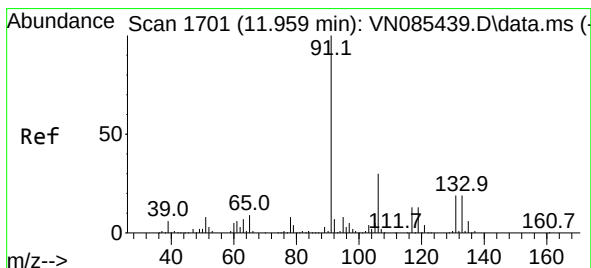
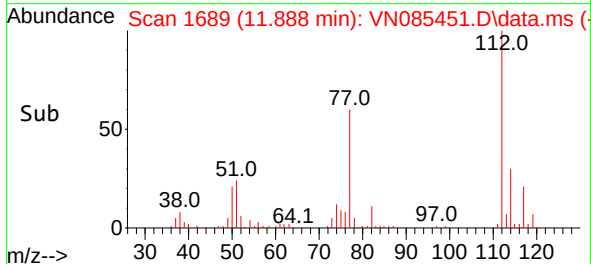
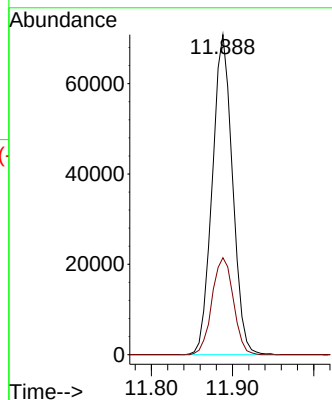
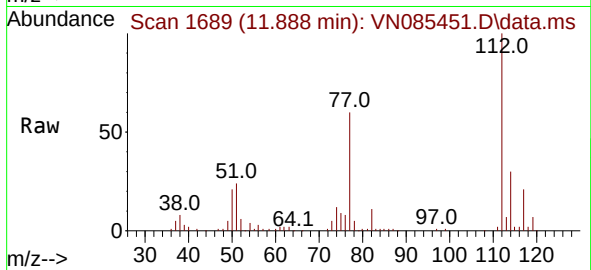
VN0115WBSD01

Tgt Ion:112 Resp: 122590

Ion Ratio Lower Upper

112 100

114 30.3 25.3 37.9



#66

1,1,1,2-Tetrachloroethane

Concen: 19.484 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

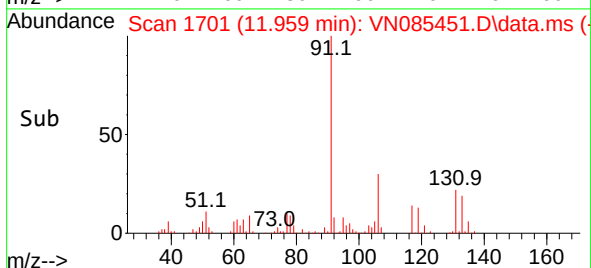
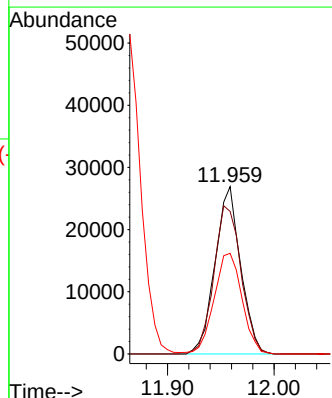
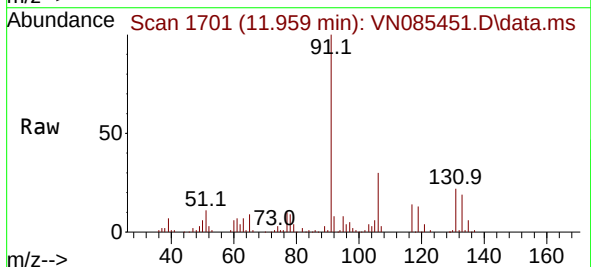
Tgt Ion:131 Resp: 44850

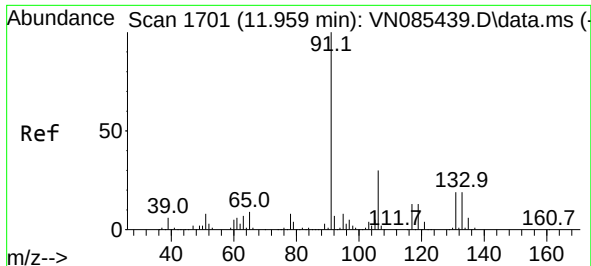
Ion Ratio Lower Upper

131 100

133 94.6 47.4 142.3

119 65.9 33.1 99.5

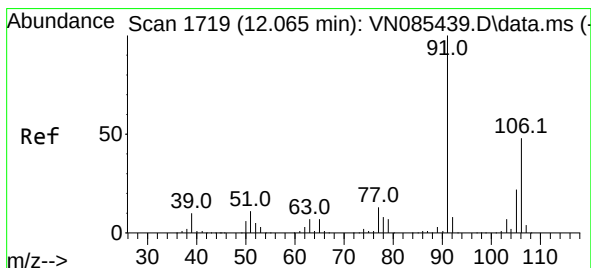
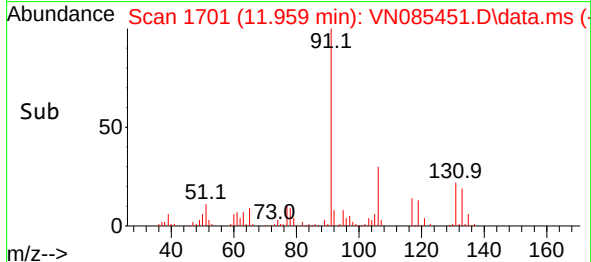
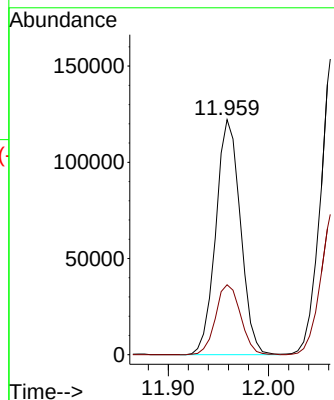
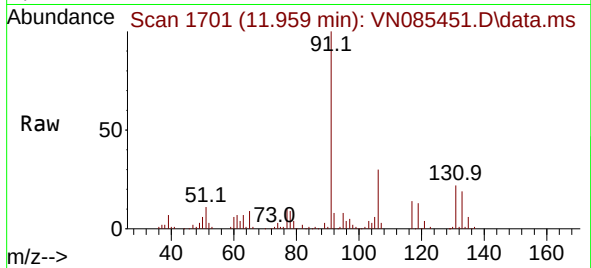




#67  
Ethyl Benzene  
Concen: 20.381 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

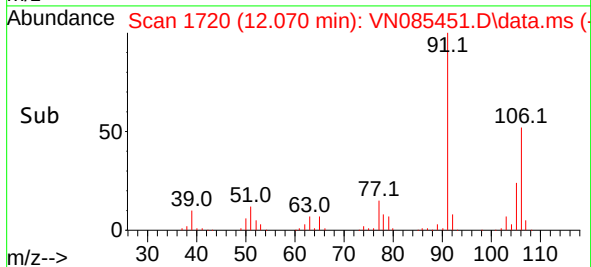
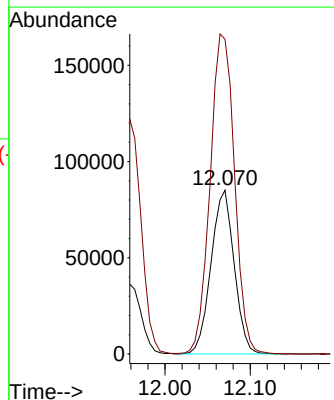
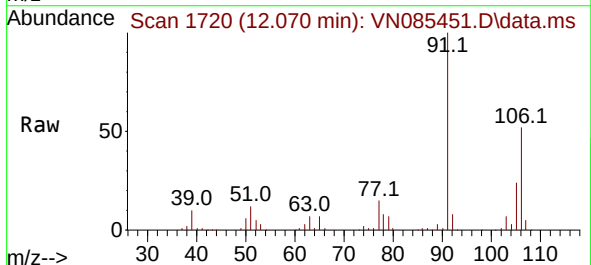
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

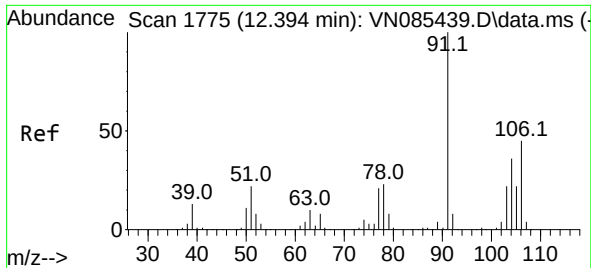
Tgt Ion: 91 Resp: 208196  
Ion Ratio Lower Upper  
91 100  
106 29.8 23.8 35.8



#68  
m/p-Xylenes  
Concen: 42.515 ug/l  
RT: 12.070 min Scan# 1720  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion:106 Resp: 160511  
Ion Ratio Lower Upper  
106 100  
91 206.6 167.7 251.5

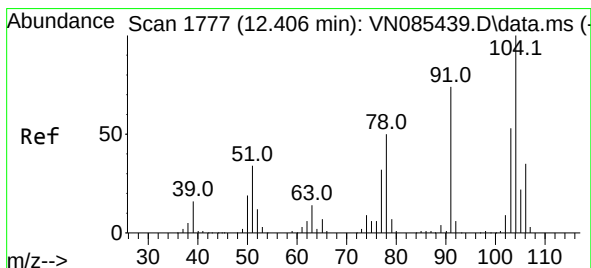
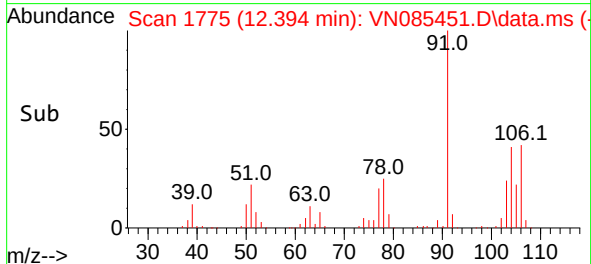
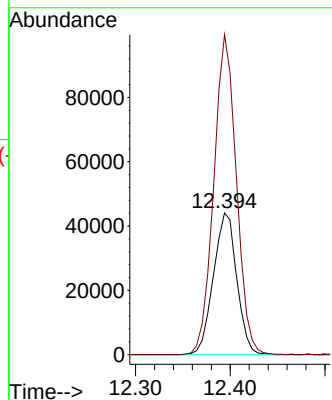
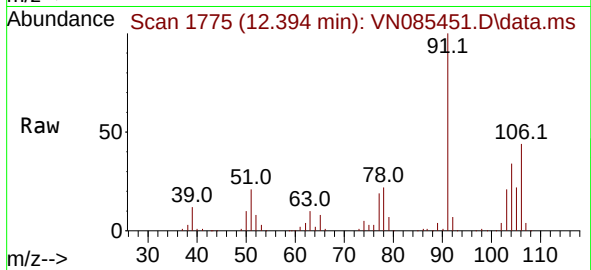




#69  
o-Xylene  
Concen: 20.928 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

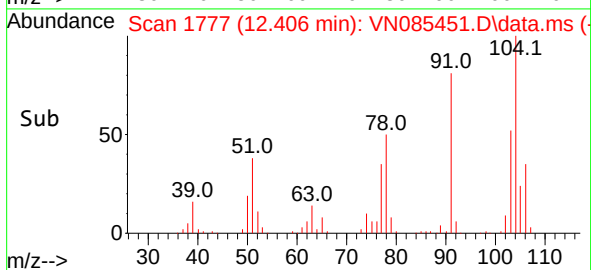
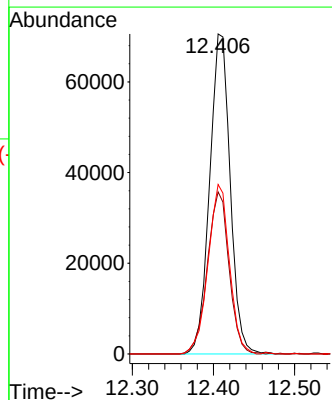
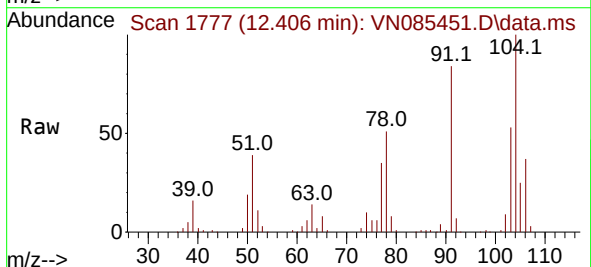
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

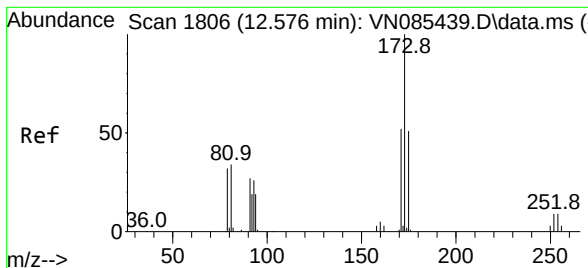
Tgt Ion:106 Resp: 75509  
Ion Ratio Lower Upper  
106 100  
91 219.1 110.4 331.2



#70  
Styrene  
Concen: 20.788 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion:104 Resp: 124126  
Ion Ratio Lower Upper  
104 100  
78 53.5 42.5 63.7  
103 54.9 43.8 65.8





#71

Bromoform

Concen: 20.643 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

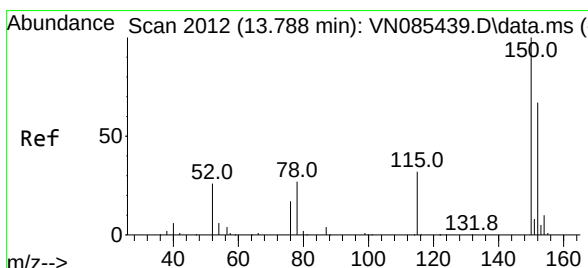
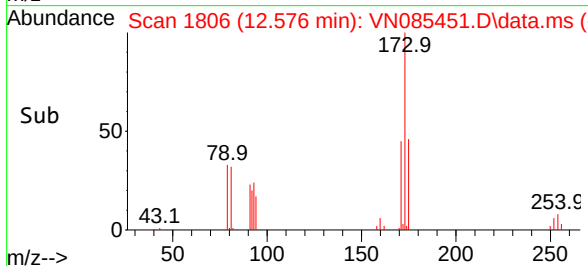
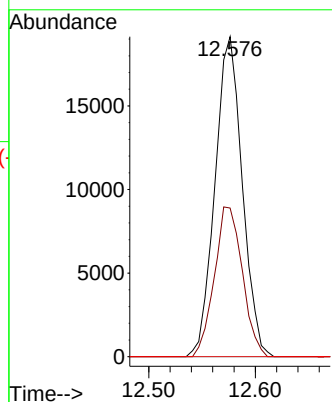
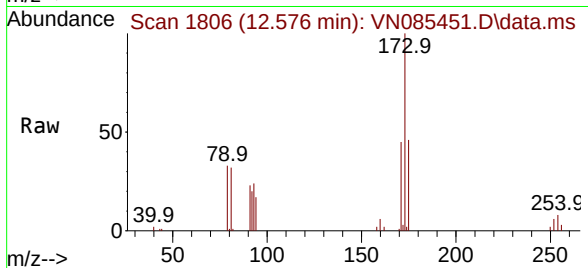
Tgt Ion:173 Resp: 34000

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: VN085451.D

Acq: 15 Jan 2025 11:02

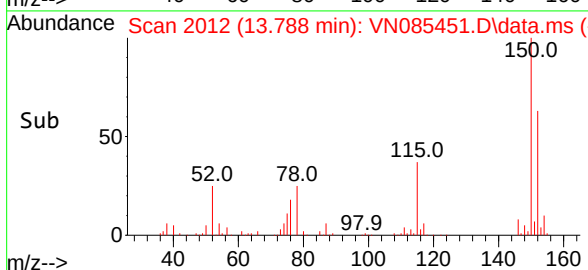
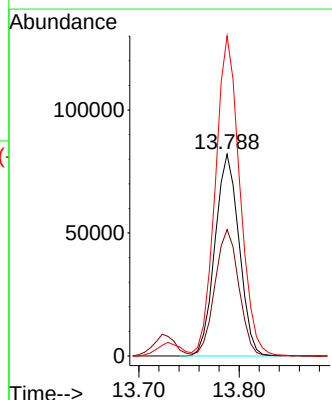
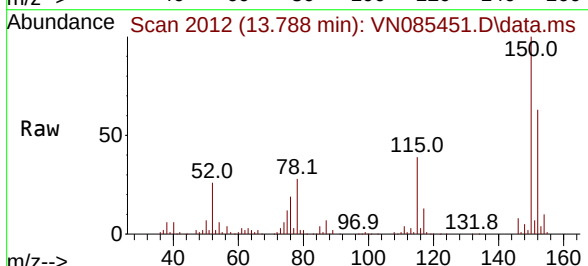
Tgt Ion:152 Resp: 136502

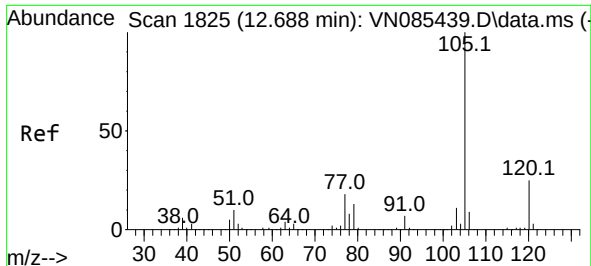
Ion Ratio Lower Upper

152 100

115 62.5 31.1 93.3

150 160.9 0.0 343.6

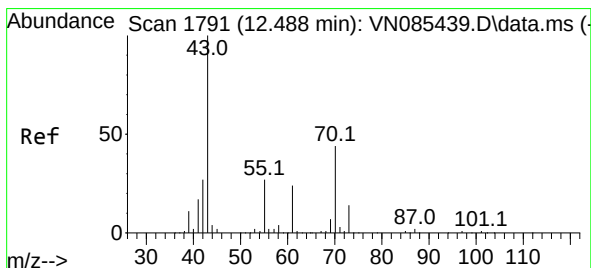
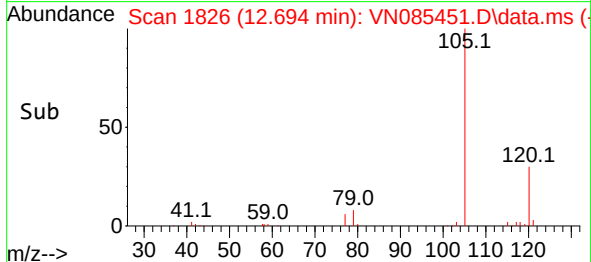
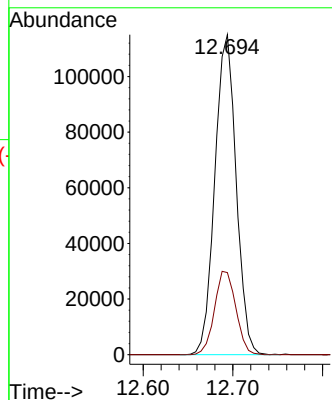
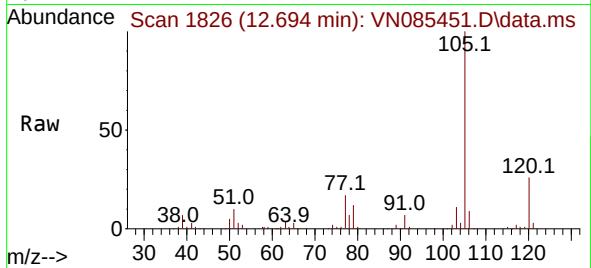




#73  
Isopropylbenzene  
Concen: 20.582 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

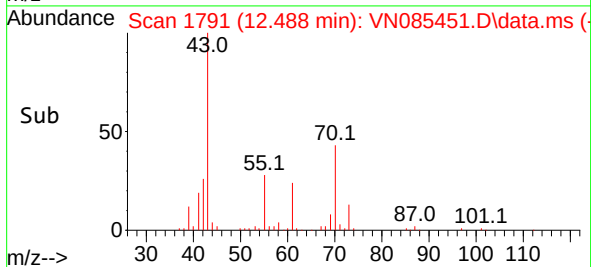
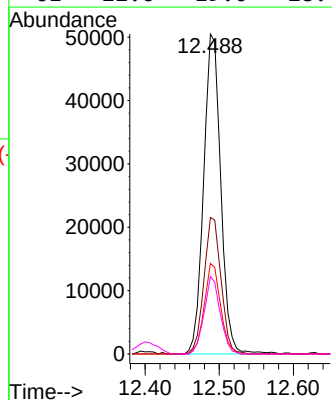
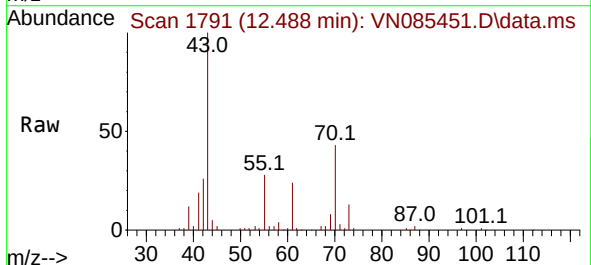
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

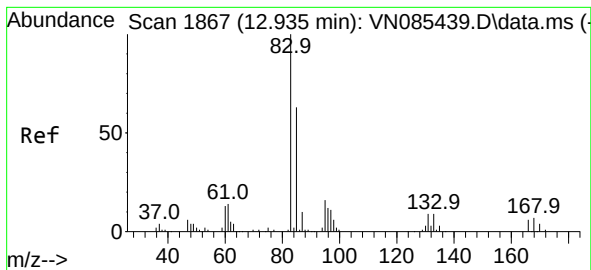
Tgt Ion:105 Resp: 189617  
Ion Ratio Lower Upper  
105 100  
120 26.1 12.8 38.3



#74  
N-ethyl acetate  
Concen: 19.619 ug/l  
RT: 12.488 min Scan# 1791  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 43 Resp: 81241  
Ion Ratio Lower Upper  
43 100  
70 42.3 34.0 51.0  
55 26.9 21.4 32.2  
61 22.6 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 19.012 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

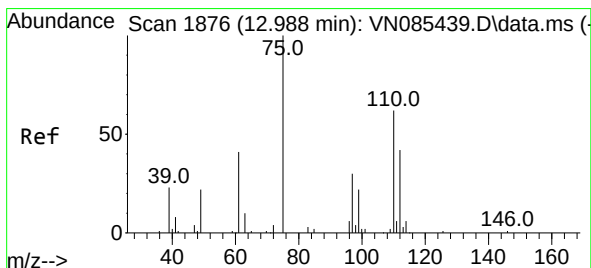
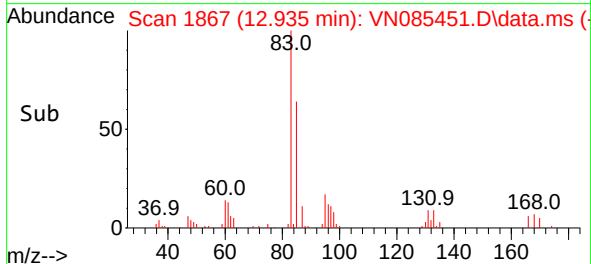
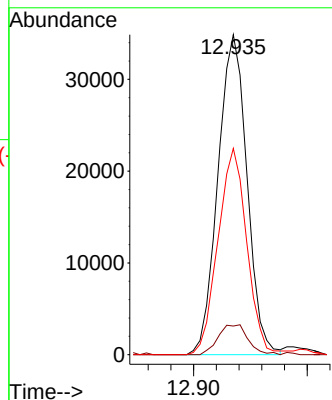
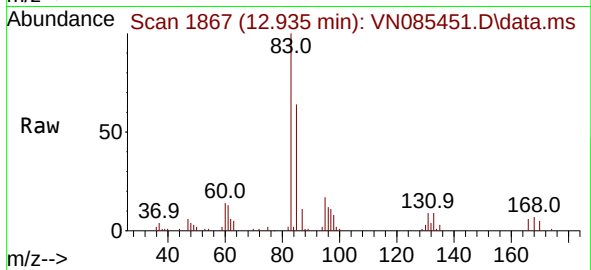
Tgt Ion: 83 Resp: 61871

Ion Ratio Lower Upper

83 100

131 9.6 4.8 14.4

85 63.9 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 28.643 ug/l

RT: 12.988 min Scan# 1876

Delta R.T. -0.000 min

Lab File: VN085451.D

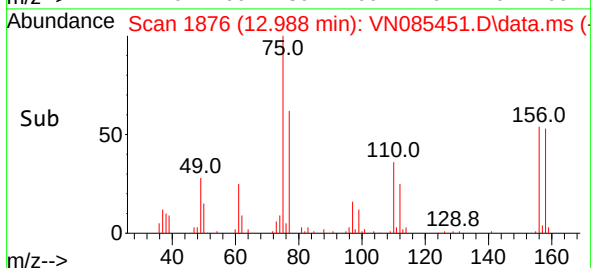
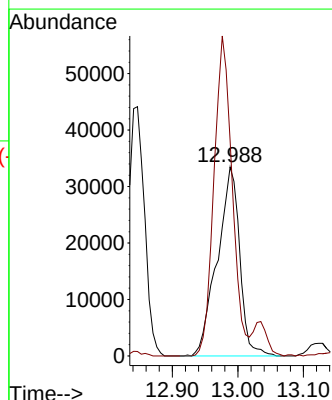
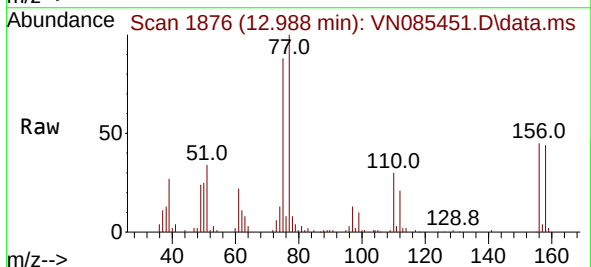
Acq: 15 Jan 2025 11:02

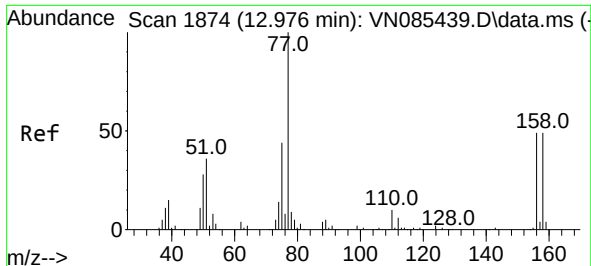
Tgt Ion: 75 Resp: 79469

Ion Ratio Lower Upper

75 100

77 137.8 109.7 329.2

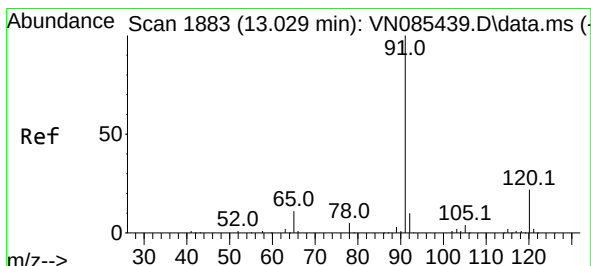
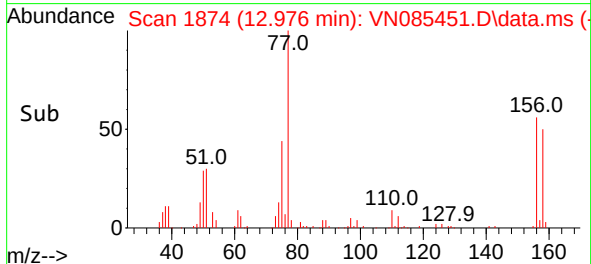
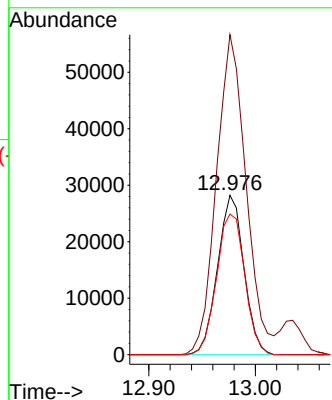
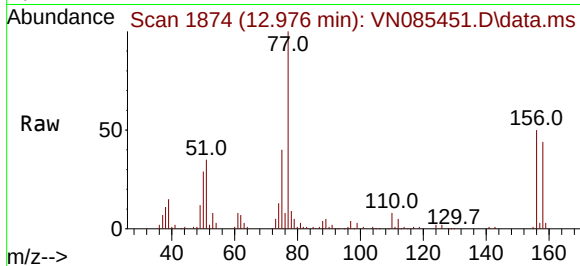




#77  
Bromobenzene  
Concen: 20.145 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

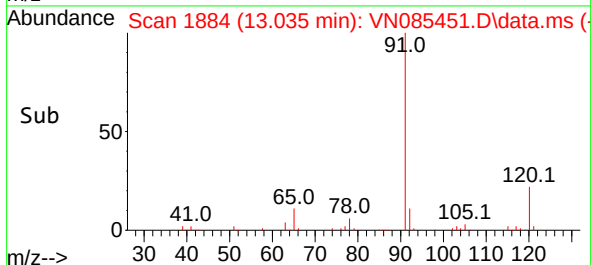
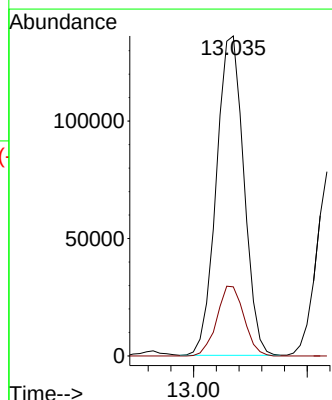
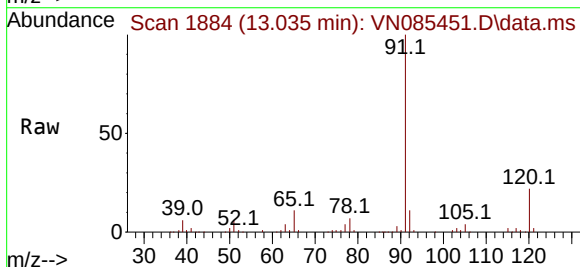
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

Tgt Ion:156 Resp: 48489  
Ion Ratio Lower Upper  
156 100  
77 225.8 114.1 342.4  
158 94.1 48.9 146.8

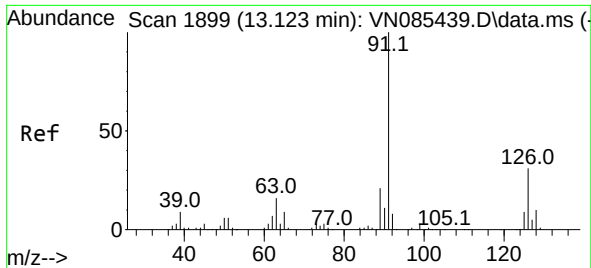


#78  
n-propylbenzene  
Concen: 20.981 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 91 Resp: 228827  
Ion Ratio Lower Upper  
91 100  
120 21.5 10.9 32.6



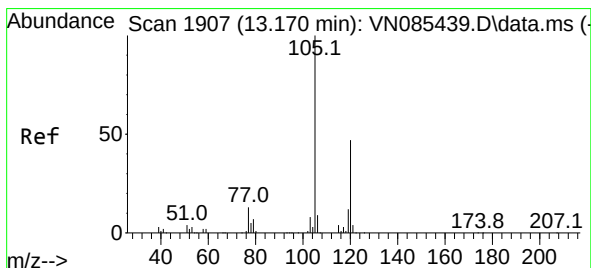
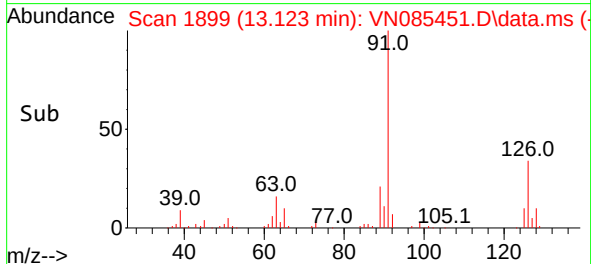
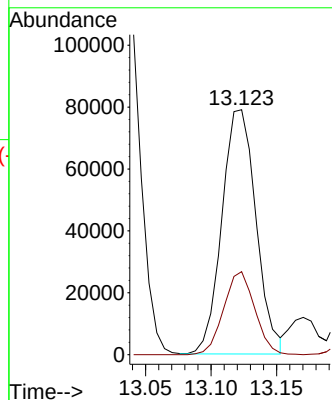
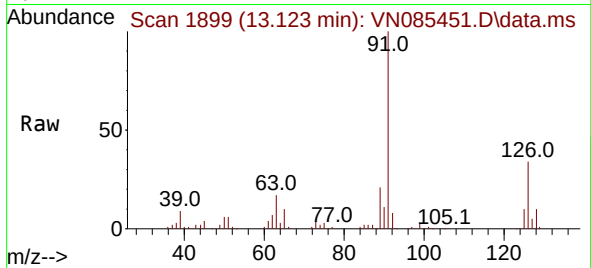




#79  
2-Chlorotoluene  
Concen: 20.272 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

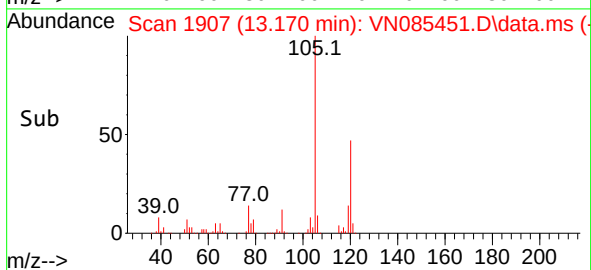
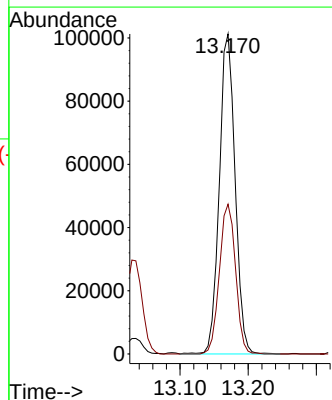
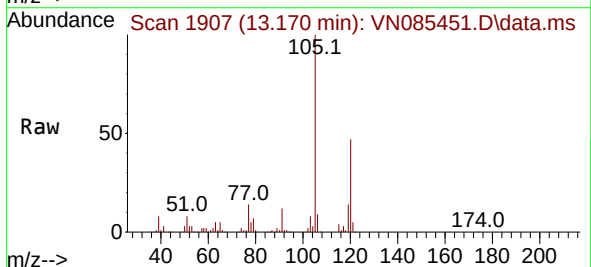
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

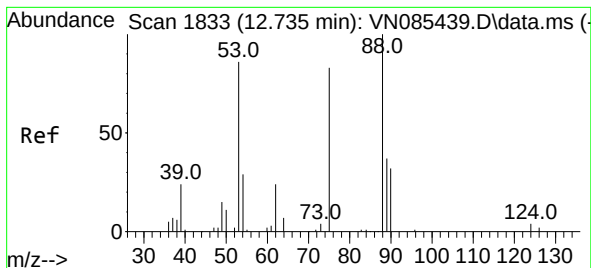
Tgt Ion: 91 Resp: 143092  
Ion Ratio Lower Upper  
91 100  
126 31.0 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 21.445 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 105 Resp: 163195  
Ion Ratio Lower Upper  
105 100  
120 47.8 23.9 71.7

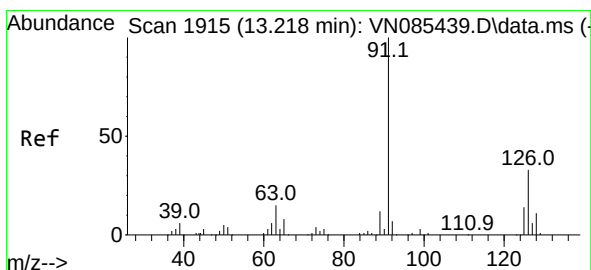
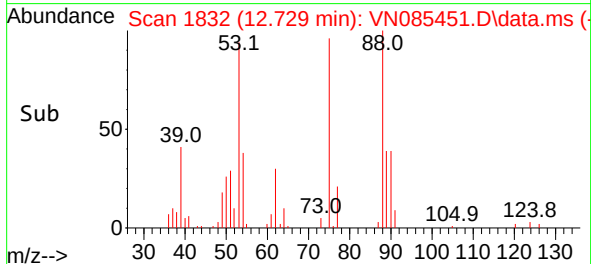
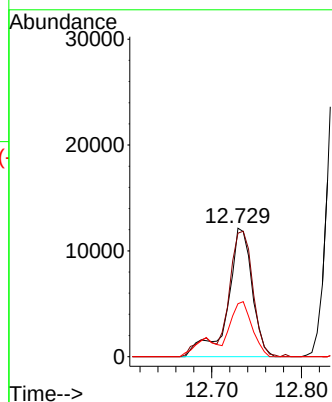
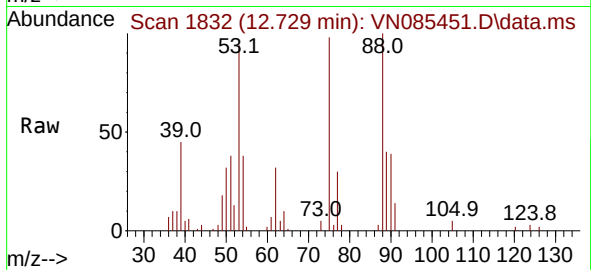




#81  
trans-1,4-Dichloro-2-butene  
Concen: 22.347 ug/l  
RT: 12.729 min Scan# 1832  
Delta R.T. -0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

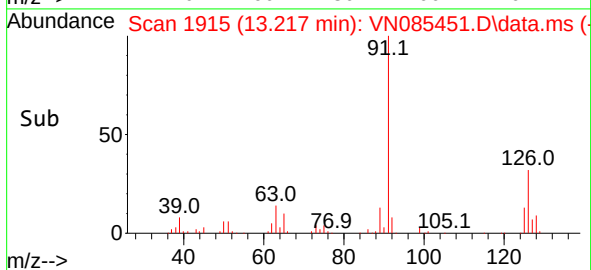
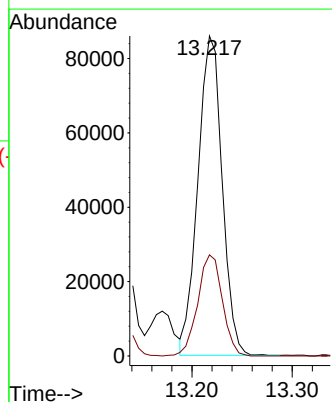
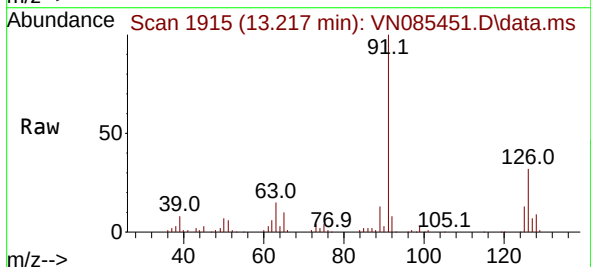
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

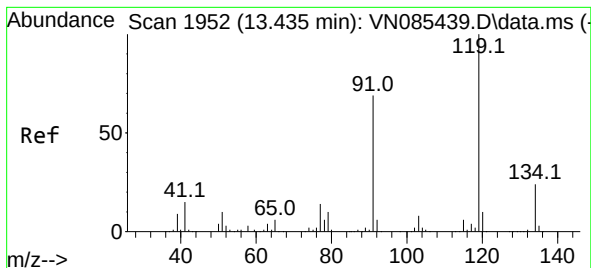
Tgt Ion: 75 Resp: 22916  
Ion Ratio Lower Upper  
75 100  
53 91.5 95.6 143.4#  
89 37.4 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 20.562 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 91 Resp: 144513  
Ion Ratio Lower Upper  
91 100  
126 32.2 15.9 47.7





#83

tert-Butylbenzene

Concen: 20.501 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

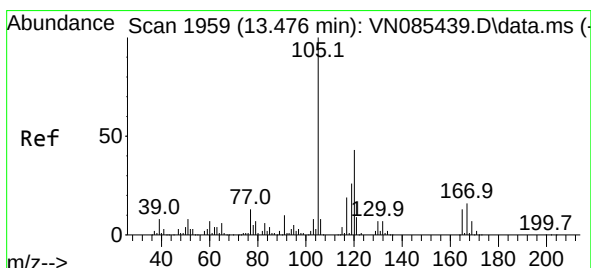
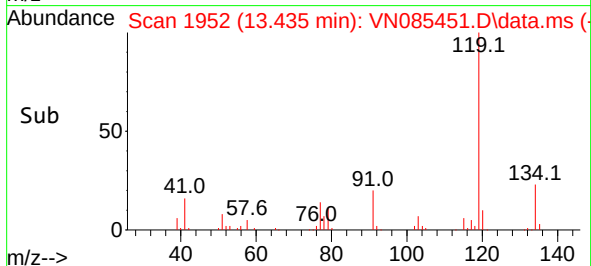
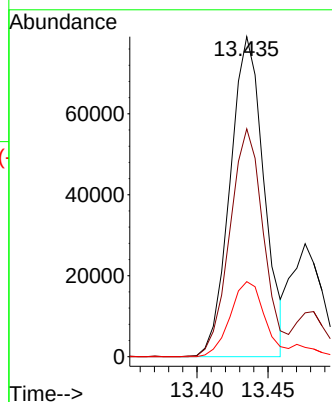
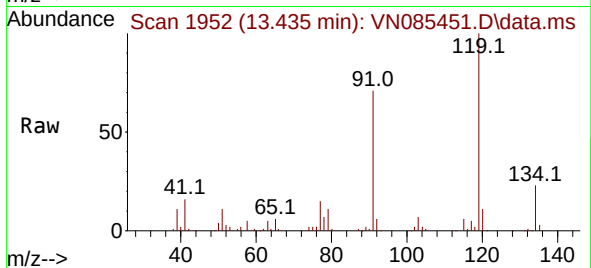
Tgt Ion:119 Resp: 131013

Ion Ratio Lower Upper

119 100

91 71.6 35.1 105.3

134 24.0 12.0 36.1



#84

1,2,4-Trimethylbenzene

Concen: 21.634 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085451.D

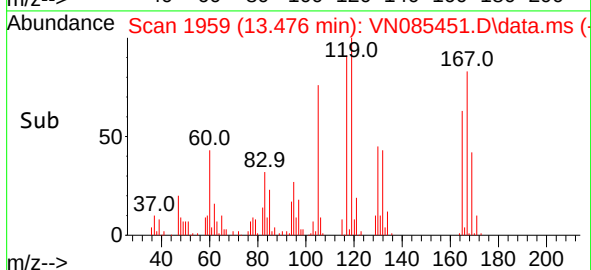
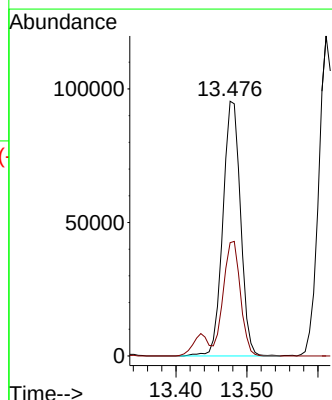
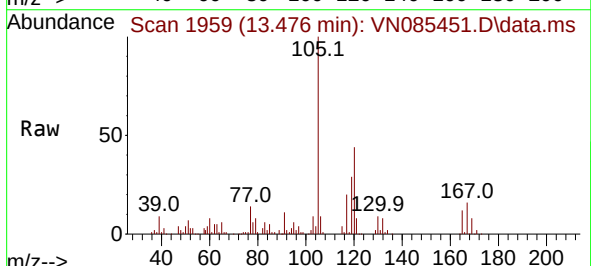
Acq: 15 Jan 2025 11:02

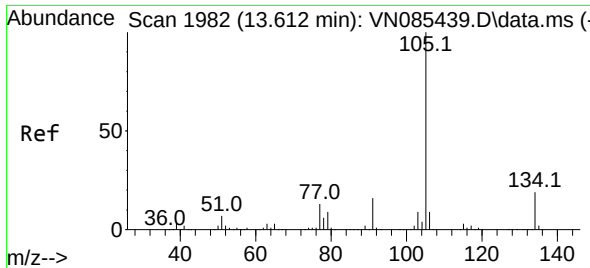
Tgt Ion:105 Resp: 164079

Ion Ratio Lower Upper

105 100

120 43.3 21.6 65.0

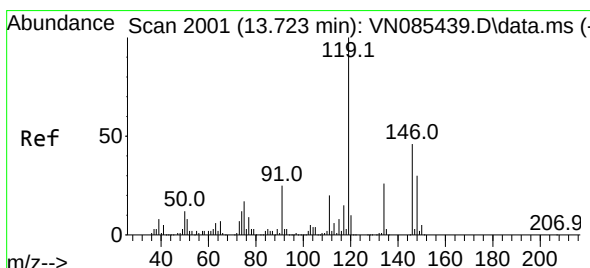
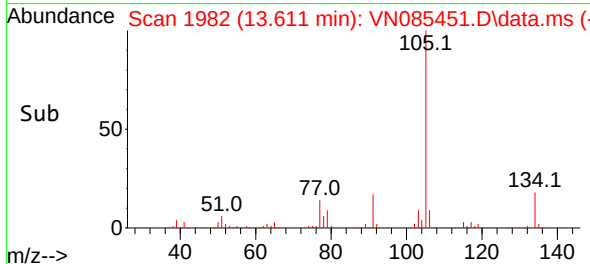
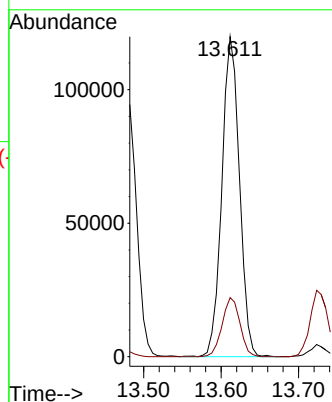
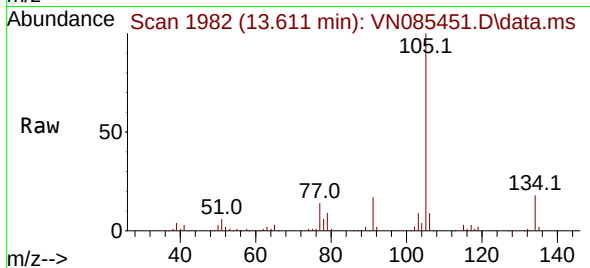




#85  
 sec-Butylbenzene  
 Concen: 21.398 ug/l  
 RT: 13.611 min Scan# 1982  
 Delta R.T. -0.001 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

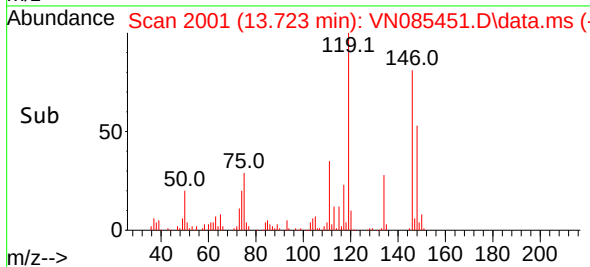
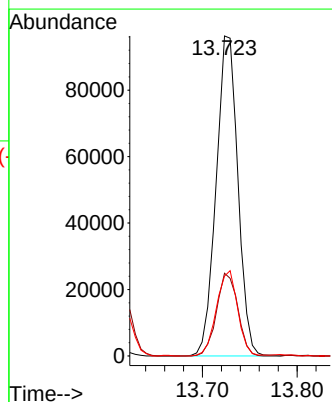
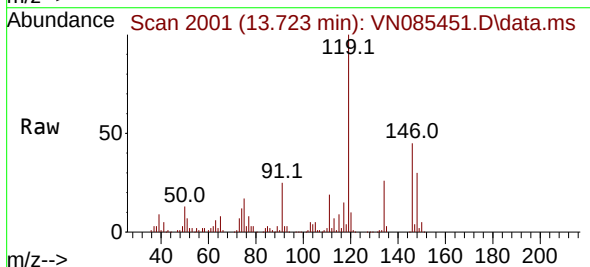
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 ClientSampleId :  
 VN0115WBSD01

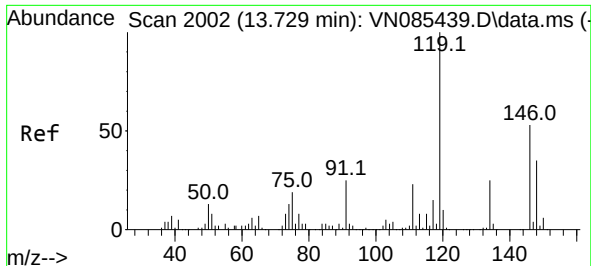
Tgt Ion:105 Resp: 189519  
 Ion Ratio Lower Upper  
 105 100  
 134 18.7 9.7 28.9



#86  
 p-Isopropyltoluene  
 Concen: 20.798 ug/l  
 RT: 13.723 min Scan# 2001  
 Delta R.T. 0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion:119 Resp: 153867  
 Ion Ratio Lower Upper  
 119 100  
 134 25.3 12.7 38.0  
 91 26.0 12.7 38.1

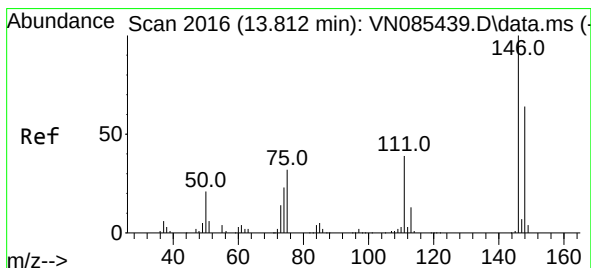
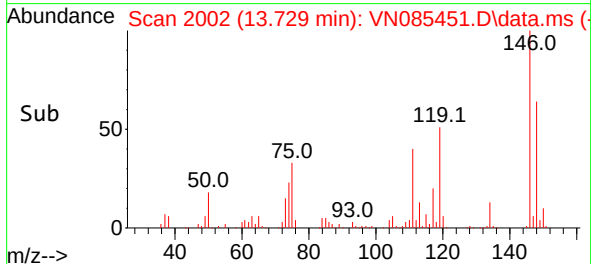
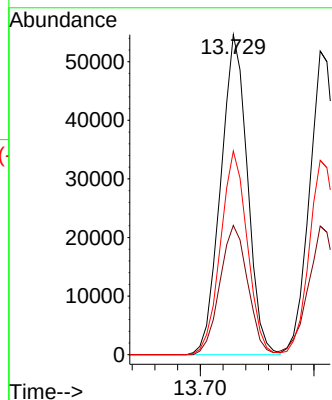
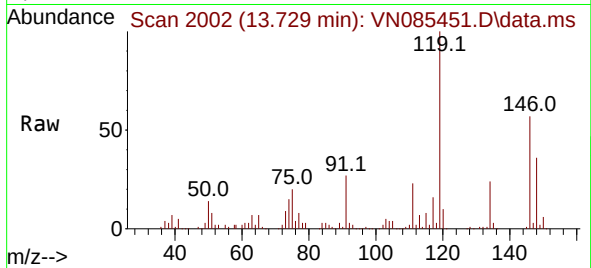




#87  
 1,3-Dichlorobenzene  
 Concen: 20.107 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. -0.000 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

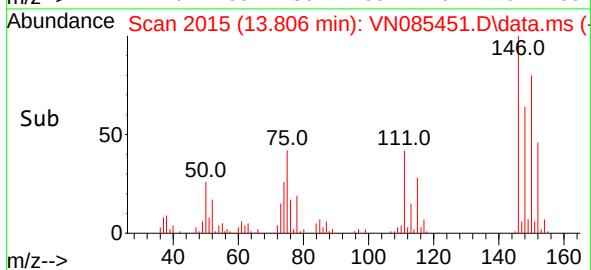
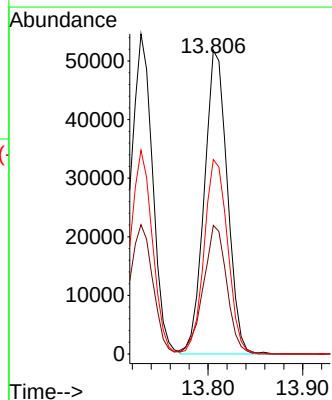
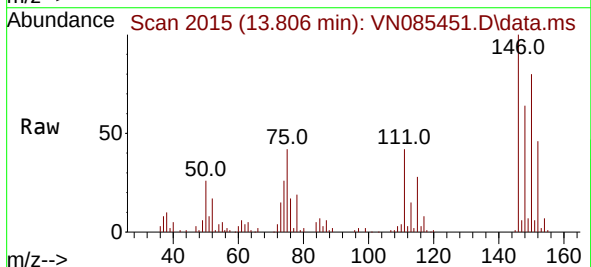
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0115WBSD01

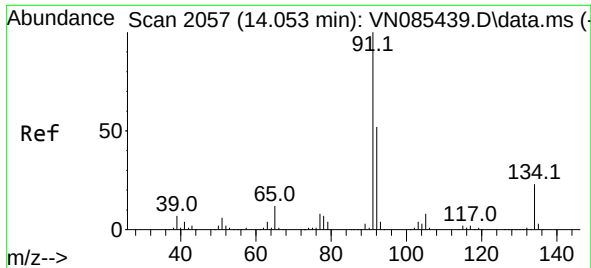
Tgt Ion:146 Resp: 89126  
 Ion Ratio Lower Upper  
 146 100  
 111 42.0 21.4 64.3  
 148 63.8 32.3 96.9



#88  
 1,4-Dichlorobenzene  
 Concen: 19.057 ug/l  
 RT: 13.806 min Scan# 2015  
 Delta R.T. -0.006 min  
 Lab File: VN085451.D  
 Acq: 15 Jan 2025 11:02

Tgt Ion:146 Resp: 87559  
 Ion Ratio Lower Upper  
 146 100  
 111 43.5 21.3 63.7  
 148 65.5 32.4 97.0

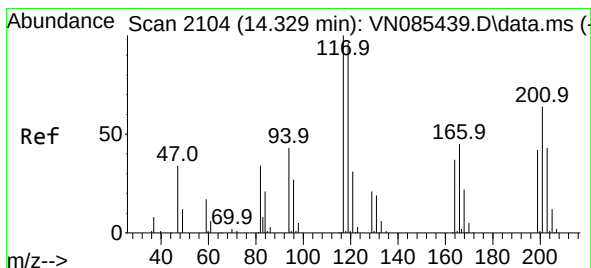
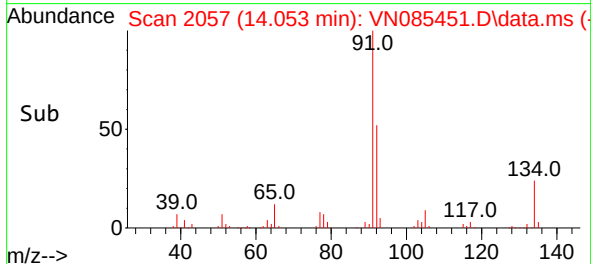
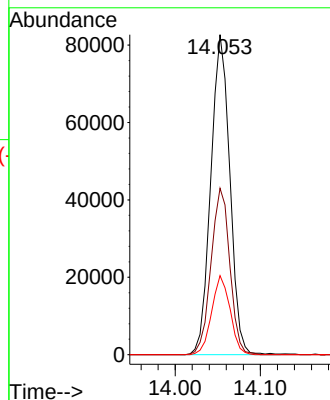
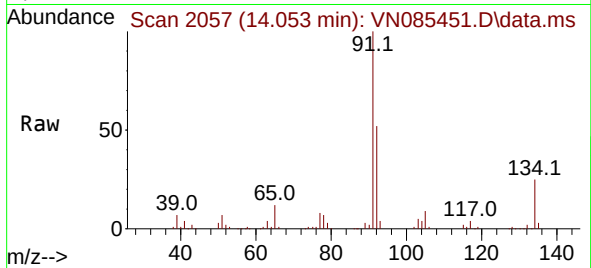




#89  
n-Butylbenzene  
Concen: 20.183 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

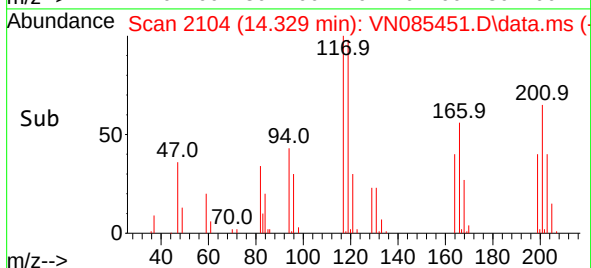
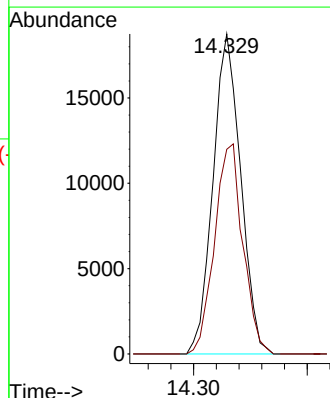
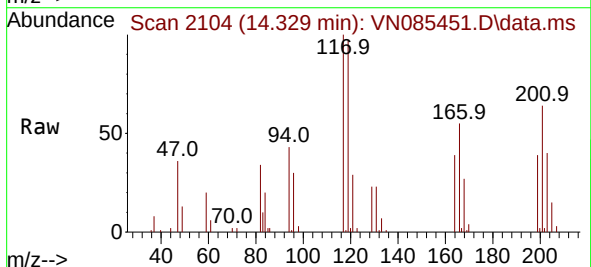
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

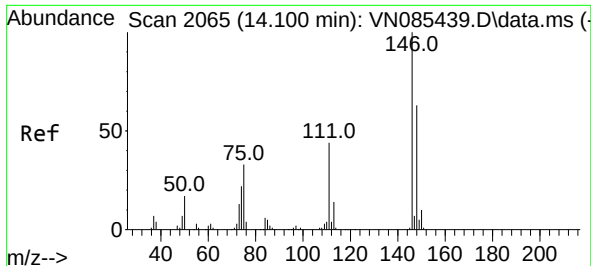
Tgt Ion: 91 Resp: 128246  
Ion Ratio Lower Upper  
91 100  
92 51.4 25.8 77.3  
134 23.8 11.7 35.1



#90  
Hexachloroethane  
Concen: 18.820 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 117 Resp: 31733  
Ion Ratio Lower Upper  
117 100  
201 67.1 33.7 101.0

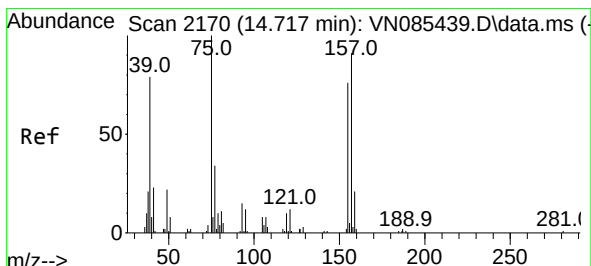
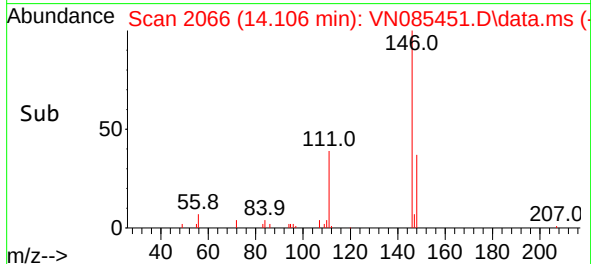
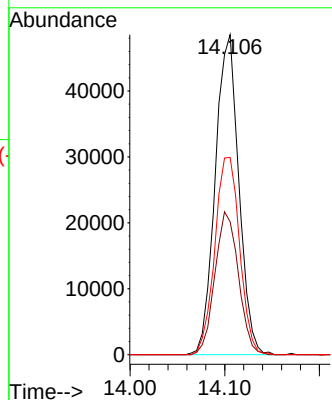
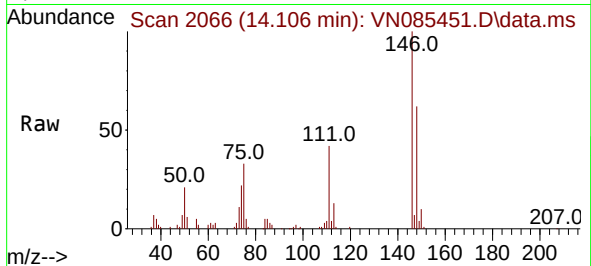




#91  
1,2-Dichlorobenzene  
Concen: 18.967 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

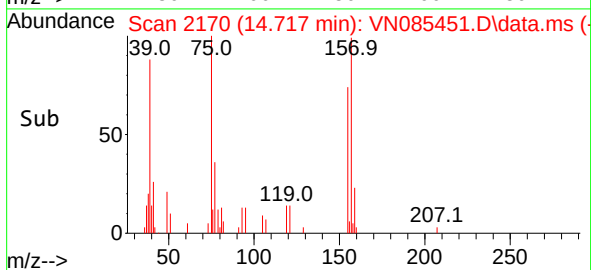
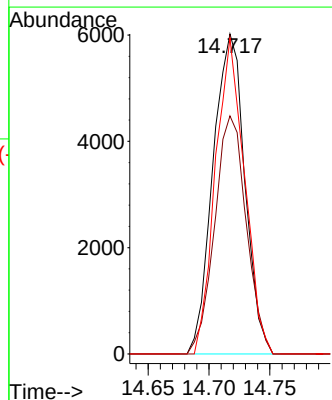
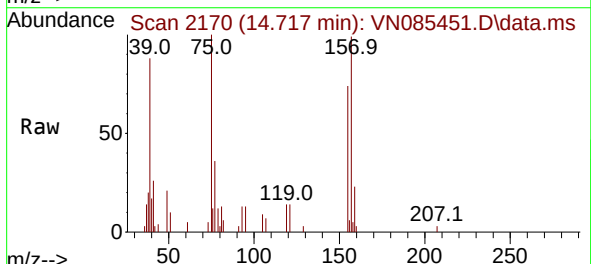
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0115WBSD01

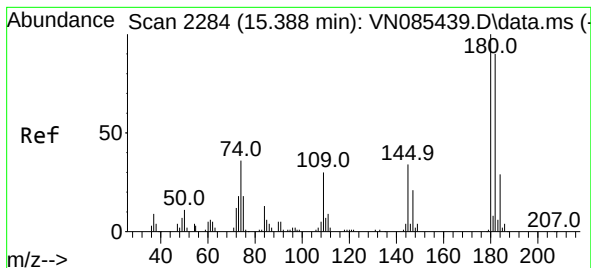
Tgt Ion:146 Resp: 83864  
Ion Ratio Lower Upper  
146 100  
111 44.6 21.7 65.1  
148 64.9 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 18.416 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085451.D  
Acq: 15 Jan 2025 11:02

Tgt Ion: 75 Resp: 10944  
Ion Ratio Lower Upper  
75 100  
155 74.0 36.4 109.2  
157 90.2 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 19.248 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

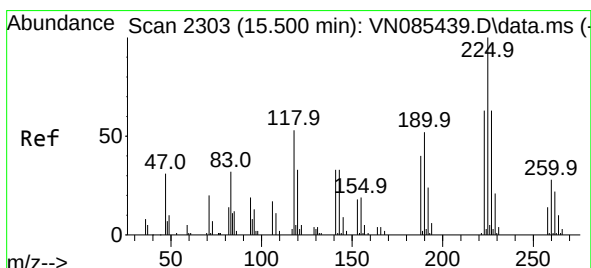
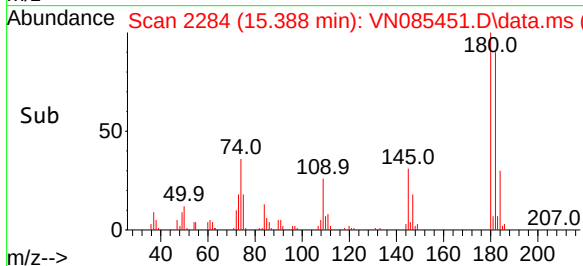
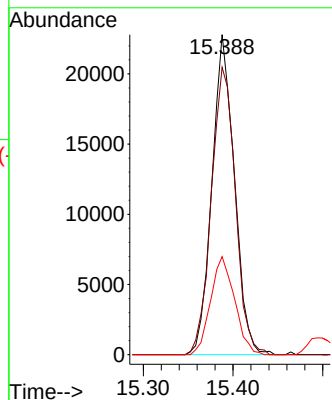
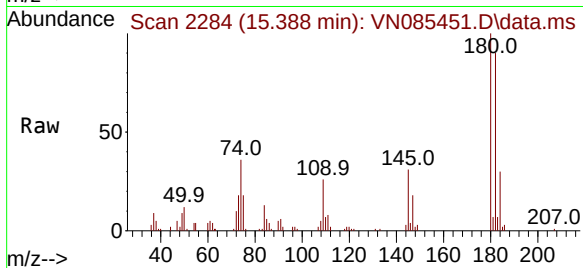
Tgt Ion:180 Resp: 39555

Ion Ratio Lower Upper

180 100

182 96.1 46.8 140.3

145 32.8 16.0 48.0



#94

Hexachlorobutadiene

Concen: 18.872 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

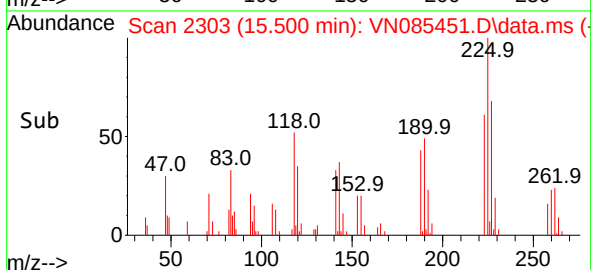
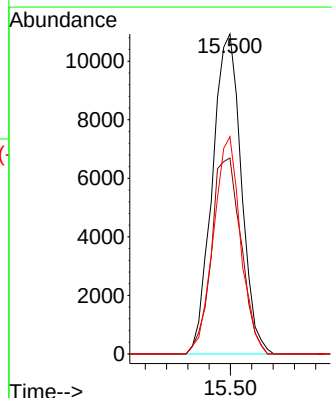
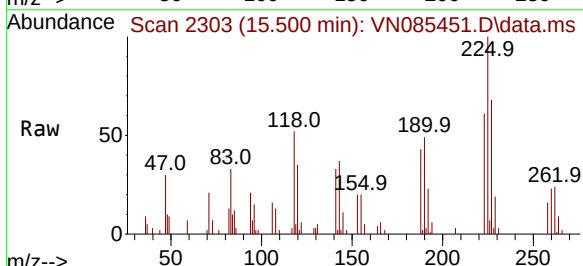
Tgt Ion:225 Resp: 20590

Ion Ratio Lower Upper

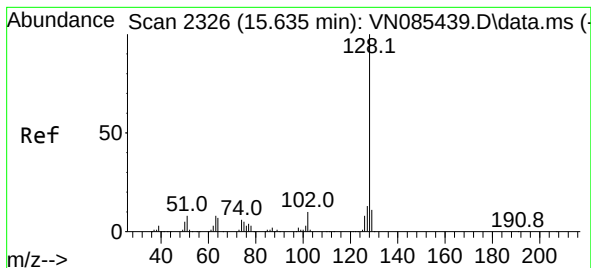
225 100

223 62.9 30.7 92.1

227 63.8 30.9 92.5







#95

Naphthalene

Concen: 17.334 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

Instrument :

MSVOA\_N

ClientSampleId :

VN0115WBSD01

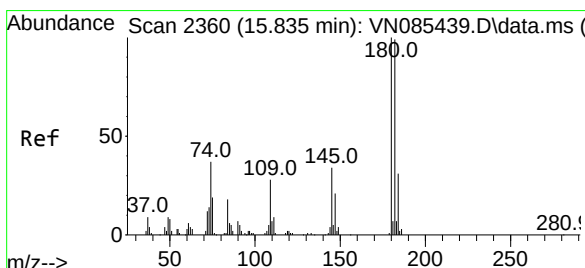
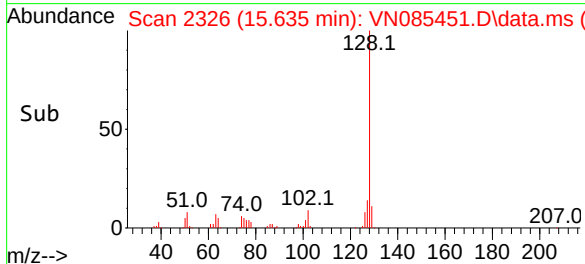
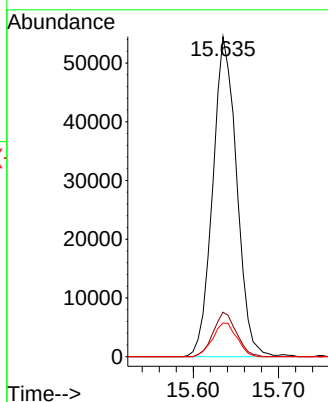
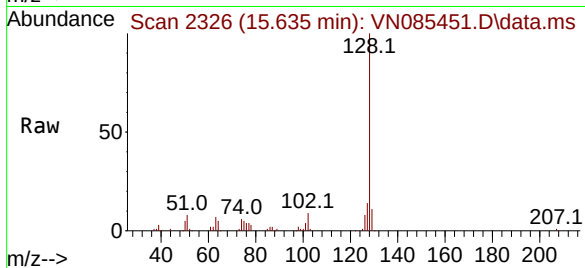
Tgt Ion:128 Resp: 106293

Ion Ratio Lower Upper

128 100

127 13.4 10.6 16.0

129 10.7 8.8 13.2



#96

1,2,3-Trichlorobenzene

Concen: 19.221 ug/l

RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN085451.D

Acq: 15 Jan 2025 11:02

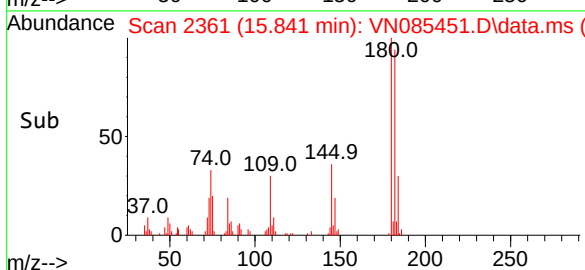
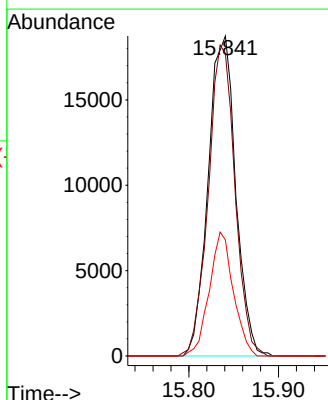
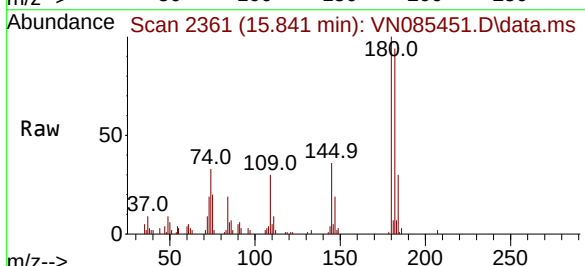
Tgt Ion:180 Resp: 39966

Ion Ratio Lower Upper

180 100

182 94.0 47.4 142.2

145 33.9 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Quant Time: Jan 16 01:00:39 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  | 218558   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 374640   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 330319   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 166317   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| System Monitoring Compounds |        |       |          |          |            |      |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 183857   | 52.114   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | = 104.220% |      |
| 35) Dibromofluoromethane    | 8.165  | 113   | 134312   | 51.677   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | = 103.360% |      |
| 50) Toluene-d8              | 10.565 | 98    | 498748   | 54.009   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | = 108.020% |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 177300   | 56.127   | ug/l       | 0.00 |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | = 112.260% |      |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 149573  | 50.545  | ug/l   | 99  |
| 3) Chloromethane             | 2.359 | 50  | 153360  | 47.865  | ug/l   | 97  |
| 4) Vinyl Chloride            | 2.512 | 62  | 154638  | 48.017  | ug/l   | 99  |
| 5) Bromomethane              | 2.948 | 94  | 89160   | 45.833  | ug/l   | 100 |
| 6) Chloroethane              | 3.118 | 64  | 99471   | 48.718  | ug/l   | 98  |
| 7) Trichlorofluoromethane    | 3.500 | 101 | 234589  | 50.203  | ug/l   | 98  |
| 8) Diethyl Ether             | 3.959 | 74  | 78639   | 48.714  | ug/l   | 98  |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 133519  | 50.730  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.589 | 142 | 158063  | 52.443  | ug/l   | 97  |
| 11) Tert butyl alcohol       | 5.506 | 59  | 107622  | 266.406 | ug/l   | 98  |
| 12) 1,1-Dichloroethene       | 4.342 | 96  | 120856  | 51.524  | ug/l   | 97  |
| 13) Acrolein                 | 4.171 | 56  | 156827  | 284.383 | ug/l   | 98  |
| 14) Allyl chloride           | 5.018 | 41  | 195577  | 51.384  | ug/l   | 98  |
| 15) Acrylonitrile            | 5.718 | 53  | 337135  | 262.738 | ug/l   | 98  |
| 16) Acetone                  | 4.418 | 43  | 286337  | 251.190 | ug/l   | 97  |
| 17) Carbon Disulfide         | 4.712 | 76  | 338441  | 46.862  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.018 | 43  | 179563  | 51.803  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 424024  | 55.672  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.277 | 84  | 139560  | 49.455  | ug/l   | 93  |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 127358  | 50.805  | ug/l   | 96  |
| 22) Diisopropyl ether        | 6.665 | 45  | 467061  | 55.286  | ug/l   | 96  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1731604 | 292.883 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 264195  | 51.287  | ug/l   | 98  |
| 25) 2-Butanone               | 7.477 | 43  | 452029  | 269.467 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 236796  | 56.857  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 155179  | 52.557  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.806 | 49  | 119440  | 49.837  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 302642  | 284.562 | ug/l   | 98  |
| 30) Chloroform               | 7.965 | 83  | 271813  | 51.054  | ug/l   | 99  |
| 31) Cyclohexane              | 8.253 | 56  | 218304  | 48.757  | ug/l   | 95  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 237039  | 50.757  | ug/l   | 97  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 184438  | 50.562  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 187078  | 50.810  | ug/l   | 98  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 212942  | 50.991  | ug/l   | 100 |
| 39) Methylcyclohexane        | 9.594 | 83  | 196879  | 57.436  | ug/l   | 97  |
| 40) Benzene                  | 8.600 | 78  | 567975  | 51.821  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
 Data File : VN085463.D  
 Acq On : 15 Jan 2025 15:58  
 Operator : JC\MD  
 Sample : VSTDC0050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDC0050EC

Quant Time: Jan 16 01:00:39 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   | 105319   | 54.981  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 213125   | 51.629  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.682  | 43   | 339818   | 57.599  | ug/l   | 96       |
| 44) Trichloroethene           | 9.347  | 130  | 125677   | 49.260  | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 142897   | 51.043  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 100497   | 49.750  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.882  | 83   | 217353   | 52.814  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.677  | 41   | 153447   | 57.796  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.688  | 88   | 43495    | 972.836 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 967748   | 282.679 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 349488   | 55.032  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.829 | 75   | 217586   | 55.946  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 231235   | 55.661  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 130083   | 51.759  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 211176   | 49.885  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 233088   | 53.338  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 462882   | 290.228 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 703719   | 292.136 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.353 | 129  | 158806   | 52.339  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 127688   | 51.040  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 106305   | 47.207  | ug/l   | 99       |
| 65) Chlorobenzene             | 11.888 | 112  | 371312   | 51.313  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 133724   | 50.351  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.959 | 91   | 665536   | 56.469  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.065 | 106  | 498925   | 114.541 | ug/l   | 99       |
| 69) o-Xylene                  | 12.394 | 106  | 236130   | 56.724  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 408614   | 59.312  | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 105169   | 55.344  | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 614595   | 54.752  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.488 | 43   | 283775   | 56.244  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 195465   | 49.296  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.988 | 75   | 257490   | 76.171  | ug/l   | 45       |
| 77) Bromobenzene              | 12.976 | 156  | 146854   | 50.075  | ug/l   | 99       |
| 78) n-propylbenzene           | 13.035 | 91   | 748465   | 56.324  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 450235   | 52.351  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 523728   | 56.485  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 79734    | 63.816  | ug/l   | 86       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 459658   | 53.678  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 437674   | 56.211  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene    | 13.476 | 105  | 531276   | 57.491  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 626587   | 58.063  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 525049   | 53.560  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 277409   | 51.364  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 272594   | 48.694  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 455243   | 58.802  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 103728   | 50.491  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.100 | 146  | 266635   | 49.494  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 36986    | 51.081  | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 133515   | 53.324  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 64832    | 48.771  | ug/l   | 99       |
| 95) Naphthalene               | 15.635 | 128  | 399446   | 53.462  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 128843   | 50.856  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011525\  
Data File : VN085463.D  
Acq On : 15 Jan 2025 15:58  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 18 Sample Multiplier: 1

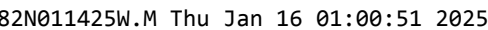
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

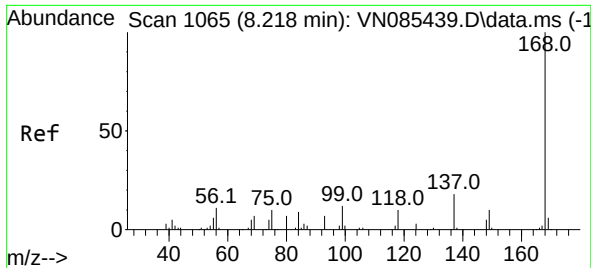
Quant Time: Jan 16 01:00:39 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 15 02:16:08 2025  
Response via : Initial Calibration

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

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

Quant Time: Jan 16 01:00:39 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

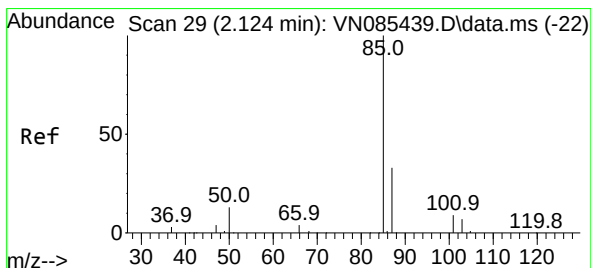
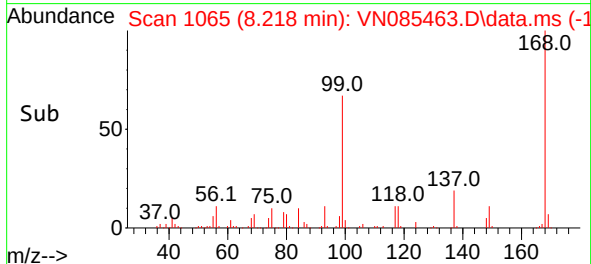
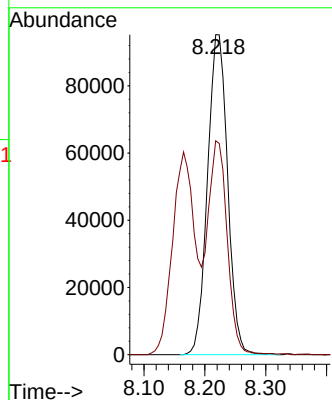
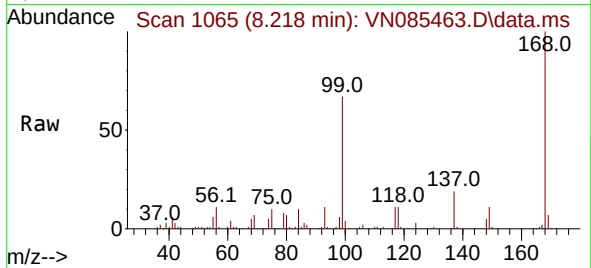




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

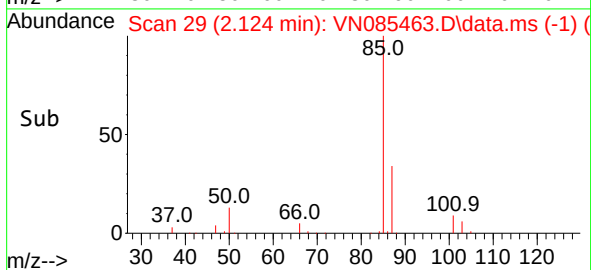
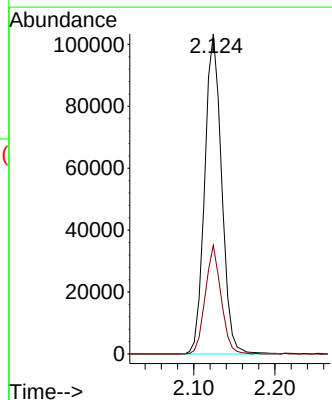
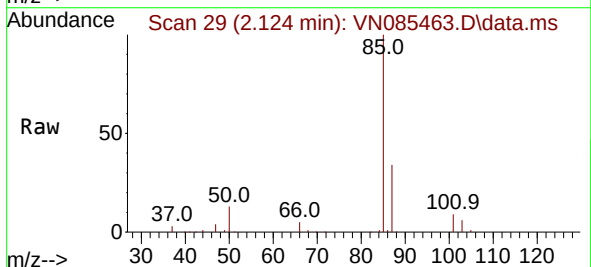
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

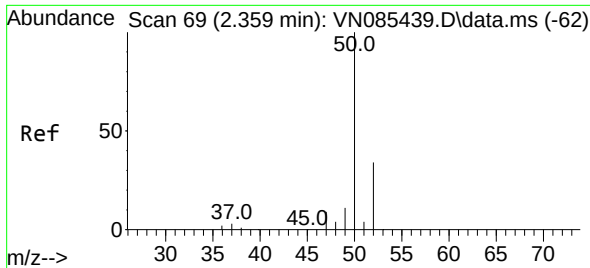
Tgt Ion:168 Resp: 218558  
Ion Ratio Lower Upper  
168 100  
99 66.6 53.6 80.4



#2  
Dichlorodifluoromethane  
Concen: 50.545 ug/l  
RT: 2.124 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 85 Resp: 149573  
Ion Ratio Lower Upper  
85 100  
87 34.0 16.7 50.1

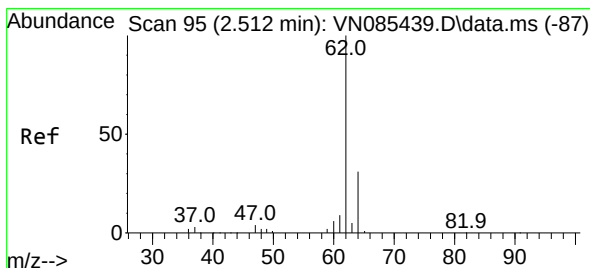
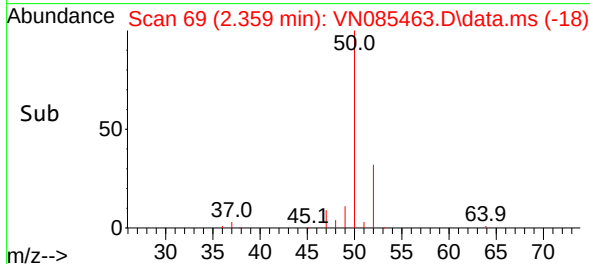
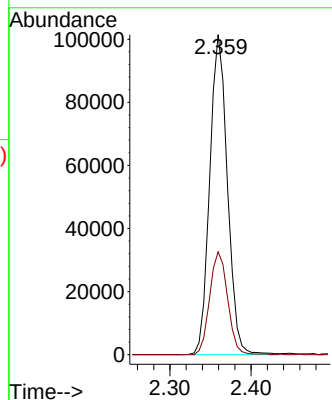
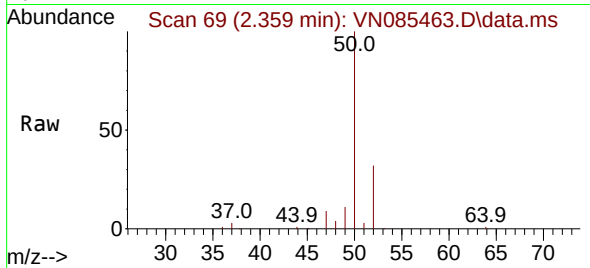




#3  
 Chloromethane  
 Concen: 47.865 ug/l  
 RT: 2.359 min Scan# 69  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

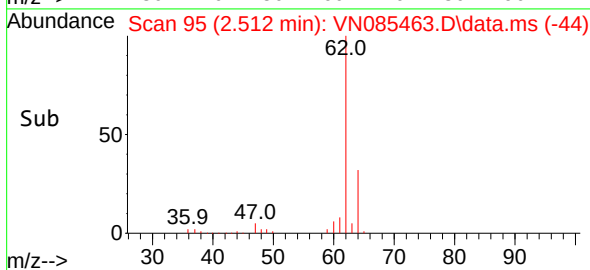
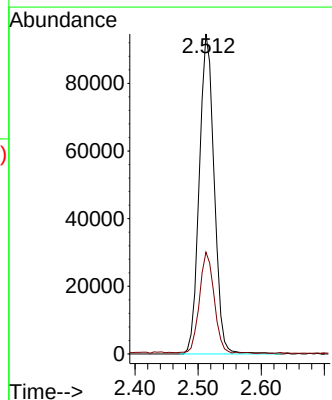
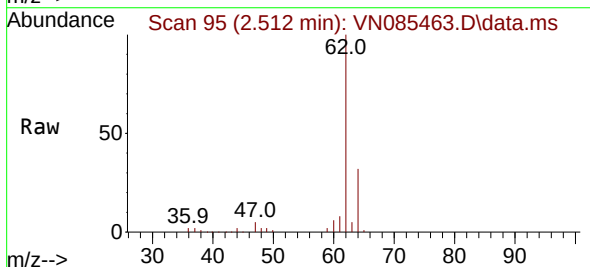
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 ClientSampleId :  
 VSTDCCC050EC

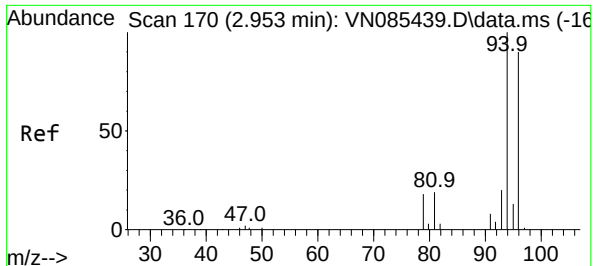
Tgt Ion: 50 Resp: 153360  
 Ion Ratio Lower Upper  
 50 100  
 52 32.1 27.0 40.6



#4  
 Vinyl Chloride  
 Concen: 48.017 ug/l  
 RT: 2.512 min Scan# 95  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion: 62 Resp: 154638  
 Ion Ratio Lower Upper  
 62 100  
 64 31.4 24.8 37.2

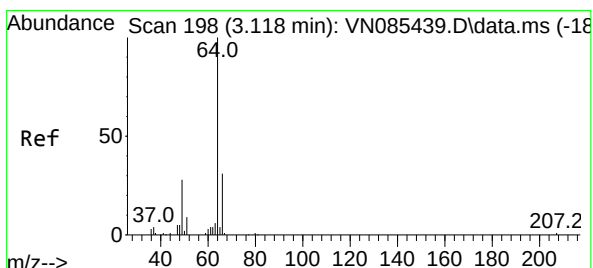
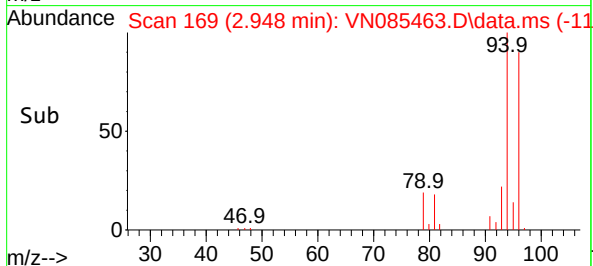
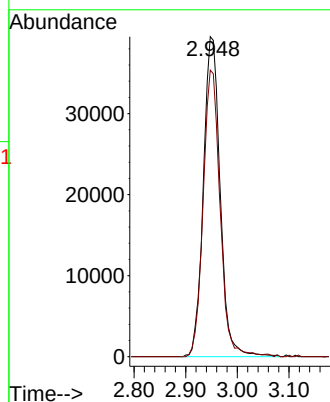
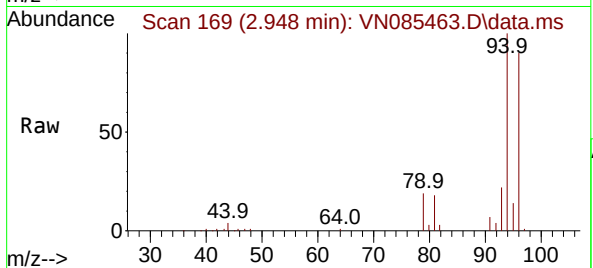




#5  
Bromomethane  
Concen: 45.833 ug/l  
RT: 2.948 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

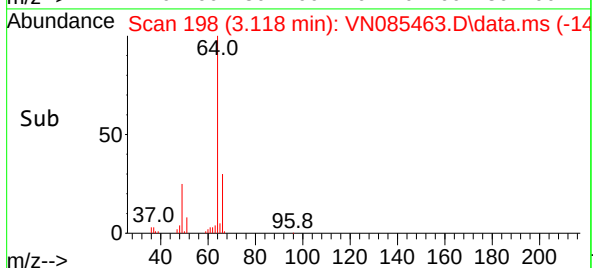
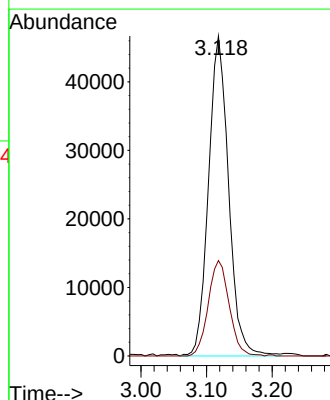
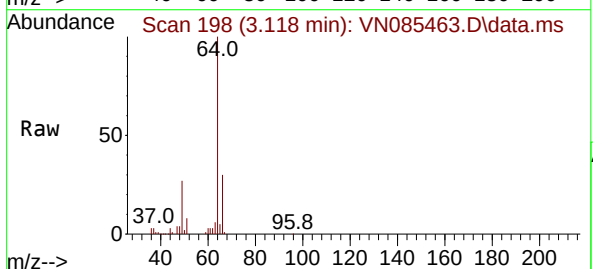
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 94 Resp: 89160  
Ion Ratio Lower Upper  
94 100  
96 89.6 71.8 107.6

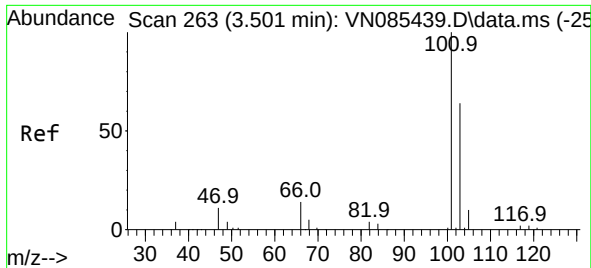


#6  
Chloroethane  
Concen: 48.718 ug/l  
RT: 3.118 min Scan# 198  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 64 Resp: 99471  
Ion Ratio Lower Upper  
64 100  
66 29.8 24.6 36.8



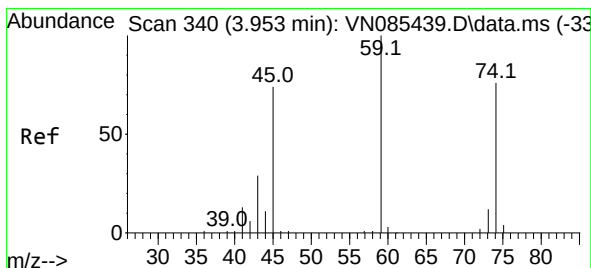
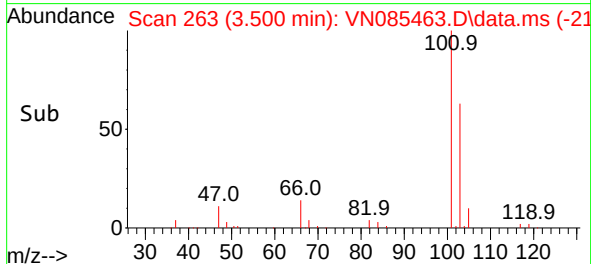
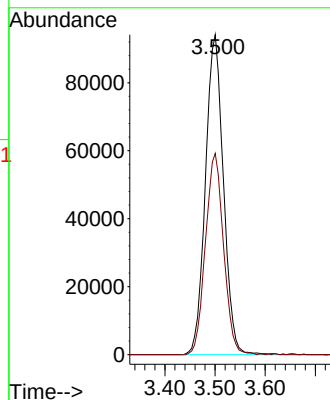
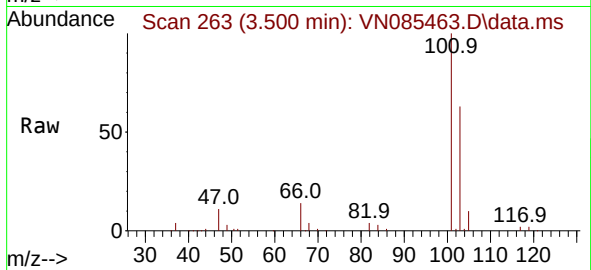




#7  
 Trichlorofluoromethane  
 Concen: 50.203 ug/l  
 RT: 3.500 min Scan# 210  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

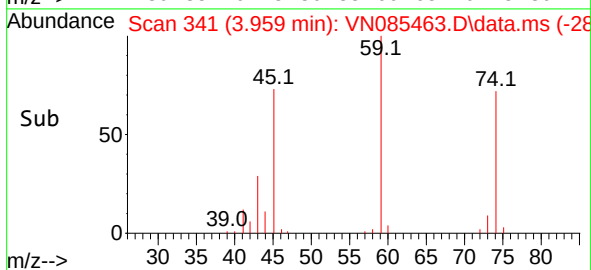
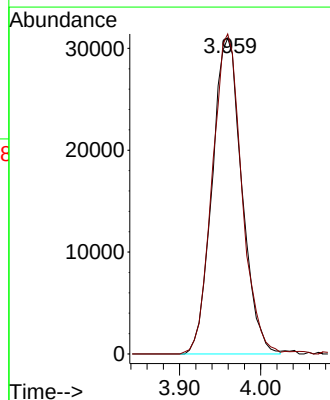
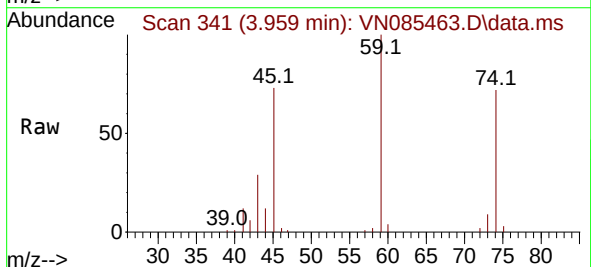
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

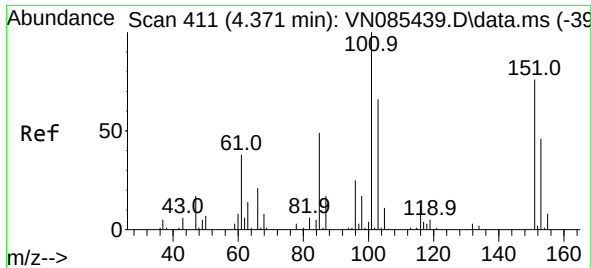
Tgt Ion:101 Resp: 234589  
 Ion Ratio Lower Upper  
 101 100  
 103 62.9 51.4 77.2



#8  
 Diethyl Ether  
 Concen: 48.714 ug/l  
 RT: 3.959 min Scan# 341  
 Delta R.T. 0.006 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion: 74 Resp: 78639  
 Ion Ratio Lower Upper  
 74 100  
 45 100.9 49.7 149.1

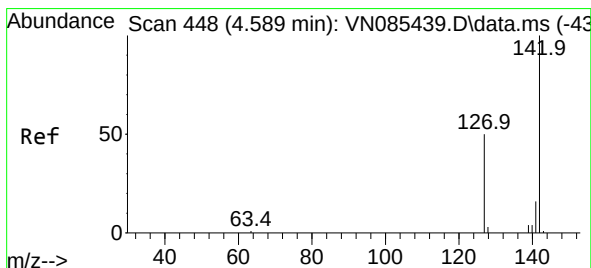
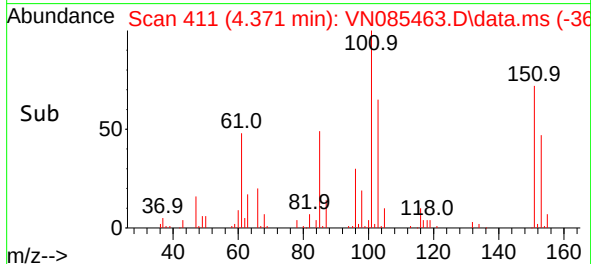
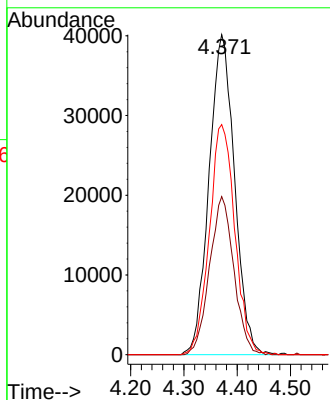
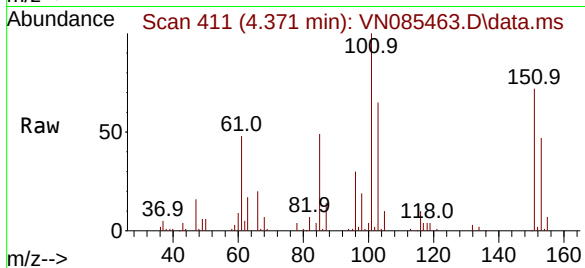




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 50.730 ug/l  
 RT: 4.371 min Scan# 411  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

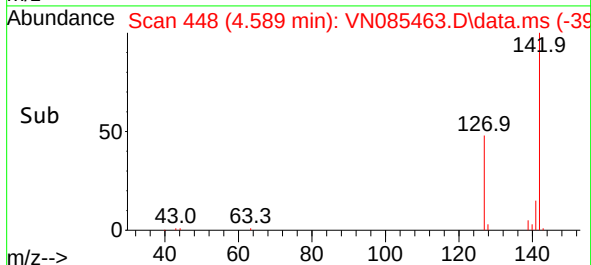
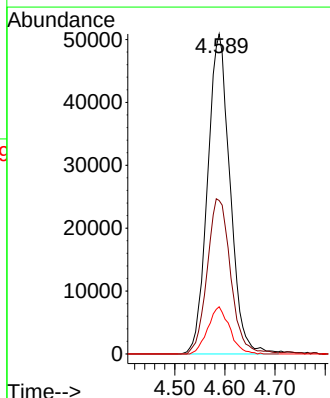
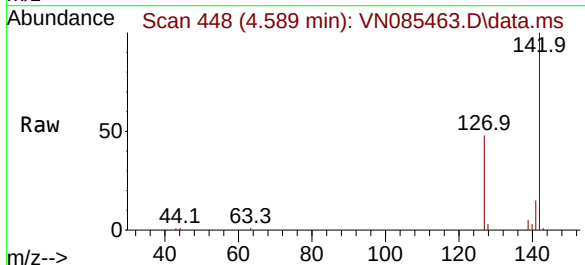
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

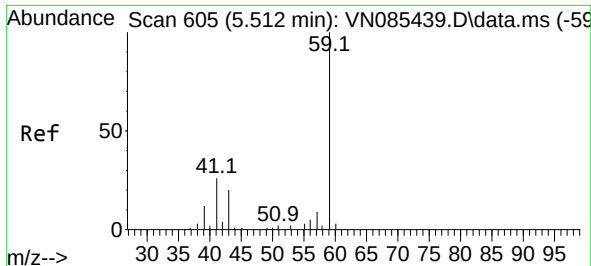
Tgt Ion:101 Resp: 133519  
 Ion Ratio Lower Upper  
 101 100  
 85 47.1 37.8 56.8  
 151 71.8 58.8 88.2



#10  
 Methyl Iodide  
 Concen: 52.443 ug/l  
 RT: 4.589 min Scan# 448  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion:142 Resp: 158063  
 Ion Ratio Lower Upper  
 142 100  
 127 47.9 40.3 60.5  
 141 14.8 12.8 19.2

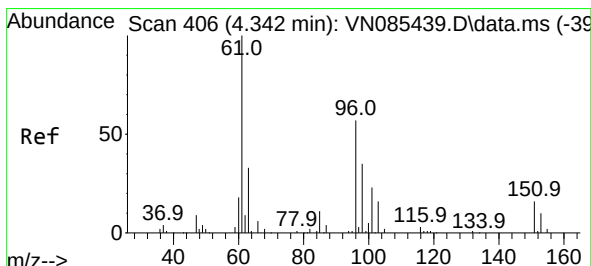
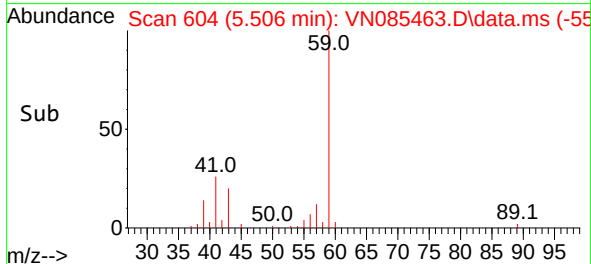
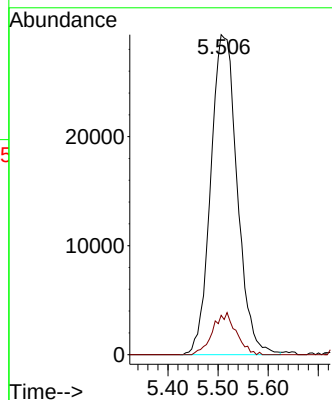
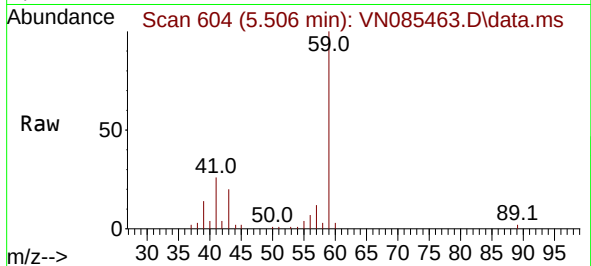




#11  
Tert butyl alcohol  
Concen: 266.406 ug/l  
RT: 5.506 min Scan# 605  
Delta R.T. -0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

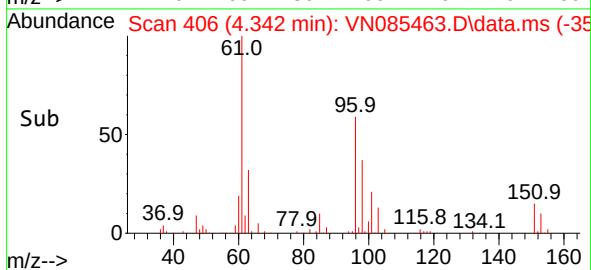
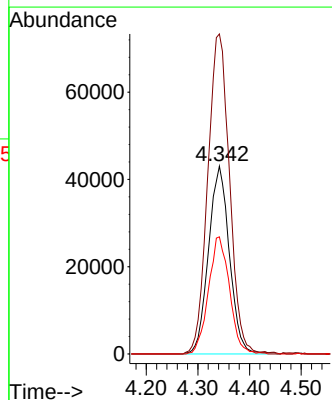
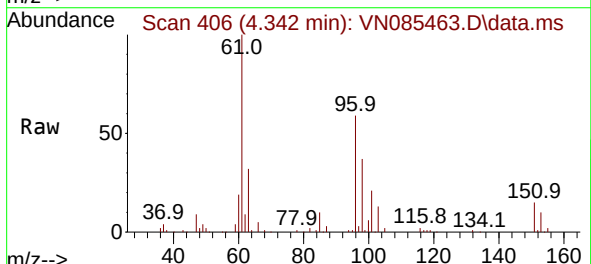
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

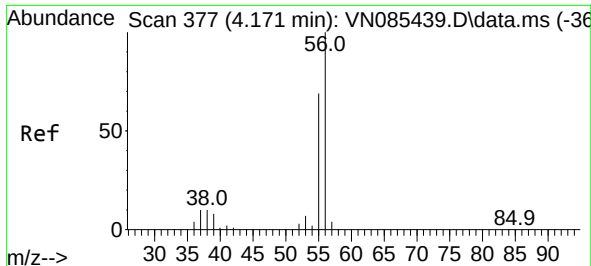
Tgt Ion: 59 Resp: 107622  
Ion Ratio Lower Upper  
59 100  
57 11.7 8.6 13.0



#12  
1,1-Dichloroethene  
Concen: 51.524 ug/l  
RT: 4.342 min Scan# 406  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 96 Resp: 120856  
Ion Ratio Lower Upper  
96 100  
61 170.3 141.0 211.4  
98 62.3 49.0 73.6





#13

Acrolein

Concen: 284.383 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

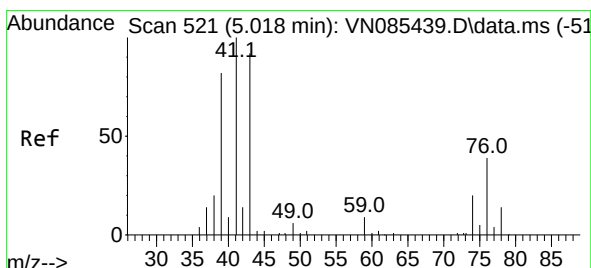
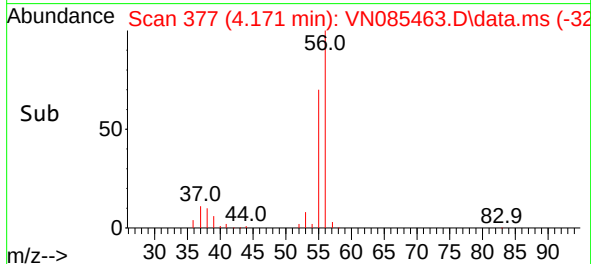
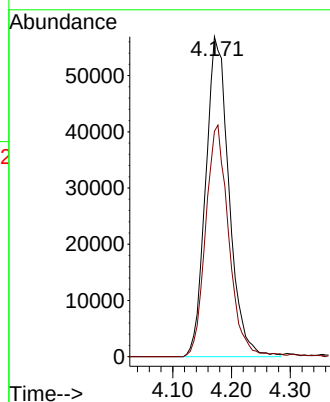
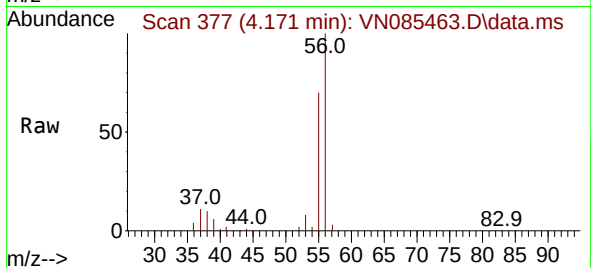
VSTDCCC050EC

Tgt Ion: 56 Resp: 156827

Ion Ratio Lower Upper

56 100

55 71.8 56.3 84.5



#14

Allyl chloride

Concen: 51.384 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

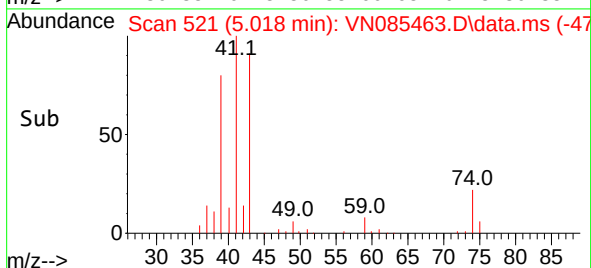
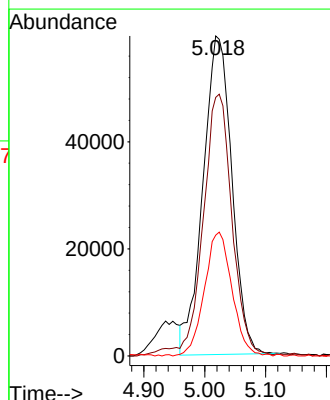
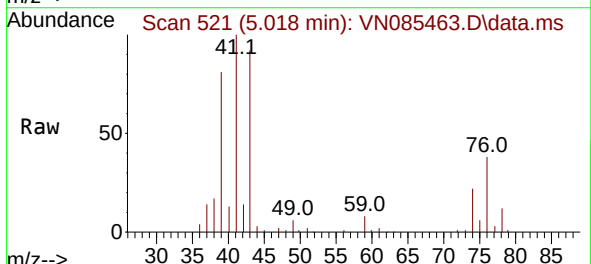
Tgt Ion: 41 Resp: 195577

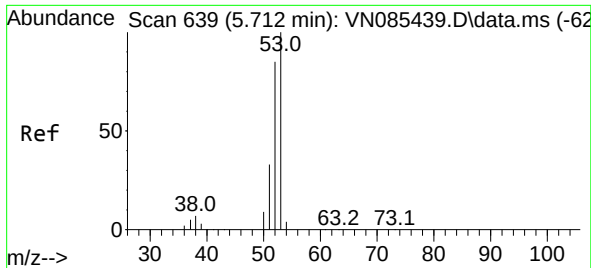
Ion Ratio Lower Upper

41 100

39 82.9 64.4 96.6

76 37.2 30.5 45.7

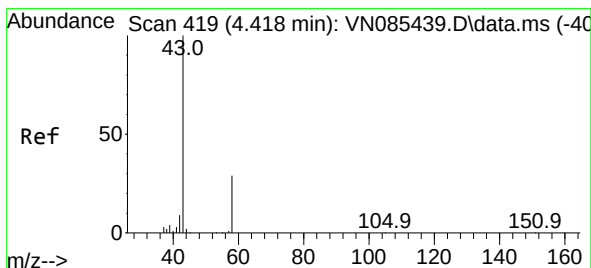
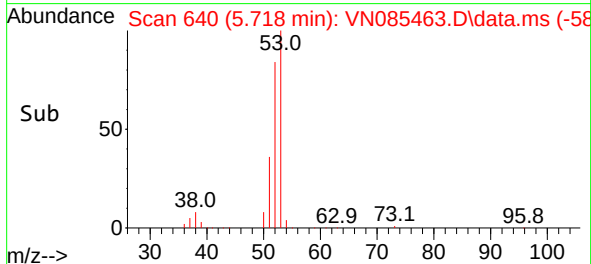
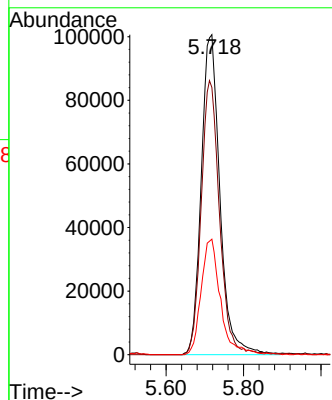
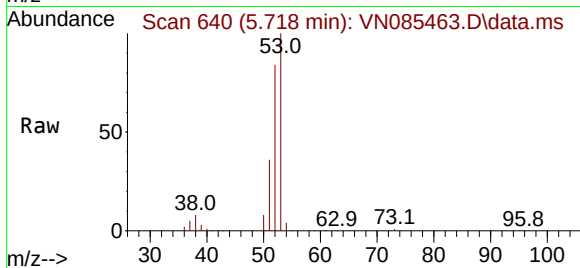




#15  
Acrylonitrile  
Concen: 262.738 ug/l  
RT: 5.718 min Scan# 640  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

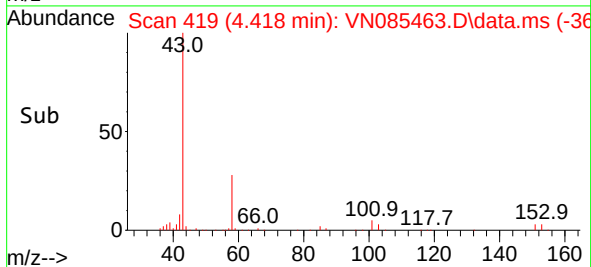
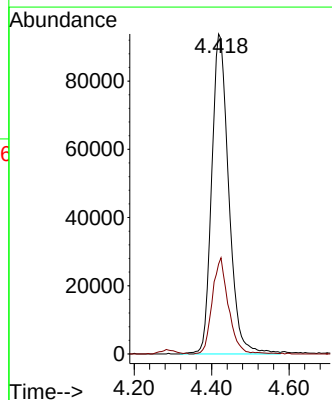
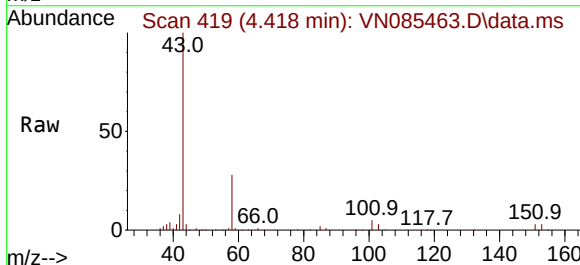
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

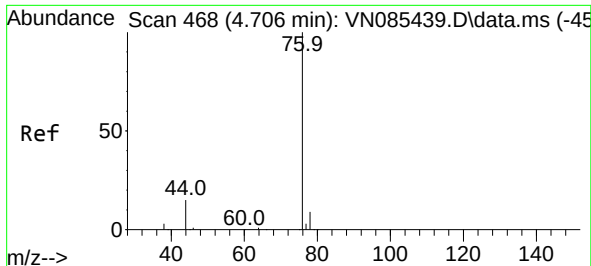
Tgt Ion: 53 Resp: 337135  
Ion Ratio Lower Upper  
53 100  
52 84.0 65.5 98.3  
51 37.1 29.8 44.8



#16  
Acetone  
Concen: 251.190 ug/l  
RT: 4.418 min Scan# 419  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 43 Resp: 286337  
Ion Ratio Lower Upper  
43 100  
58 27.9 23.8 35.6

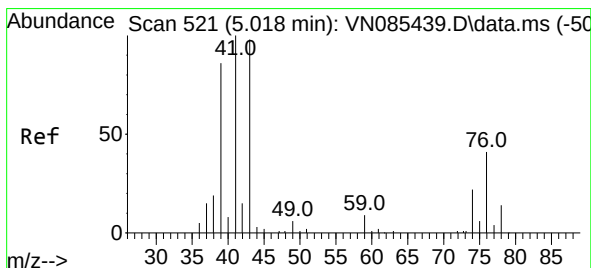
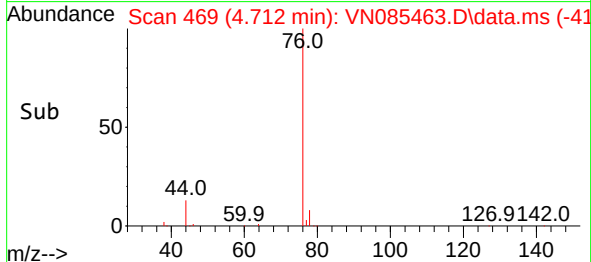
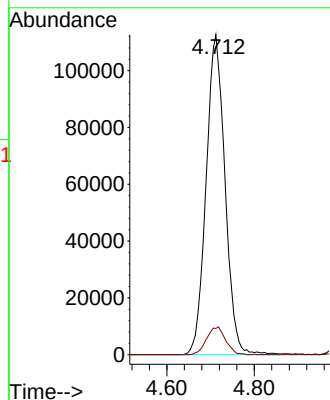
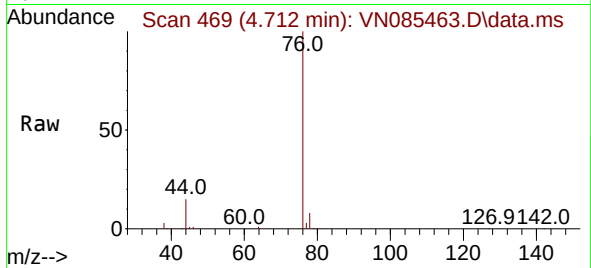




#17  
Carbon Disulfide  
Concen: 46.862 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

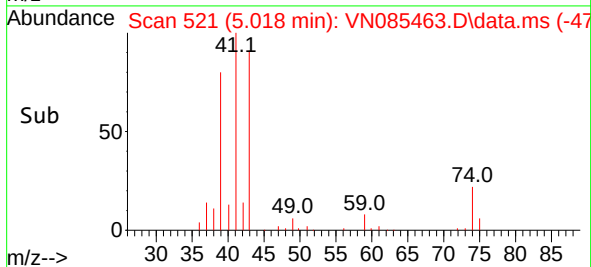
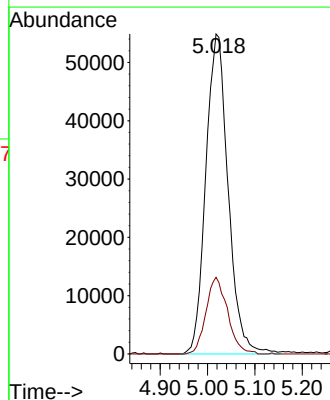
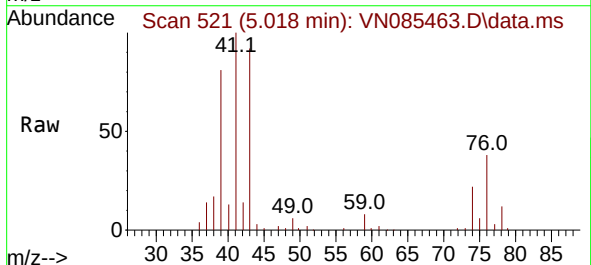
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

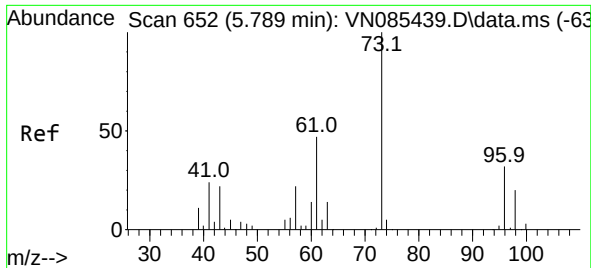
Tgt Ion: 76 Resp: 338441  
Ion Ratio Lower Upper  
76 100  
78 8.2 6.9 10.3



#18  
Methyl Acetate  
Concen: 51.803 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 43 Resp: 179563  
Ion Ratio Lower Upper  
43 100  
74 23.2 18.6 28.0

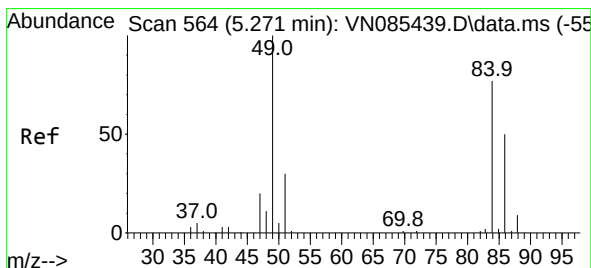
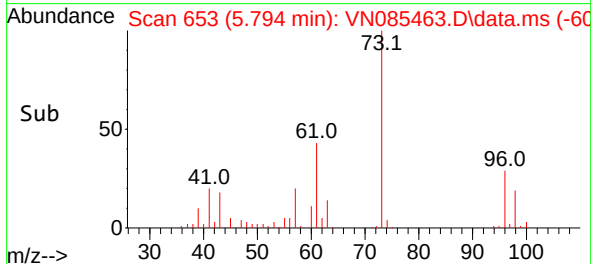
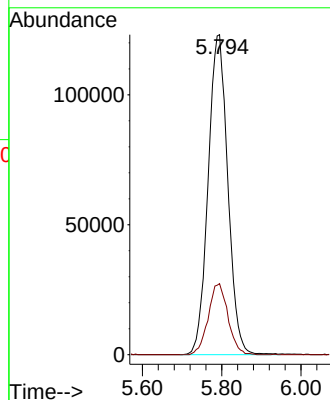
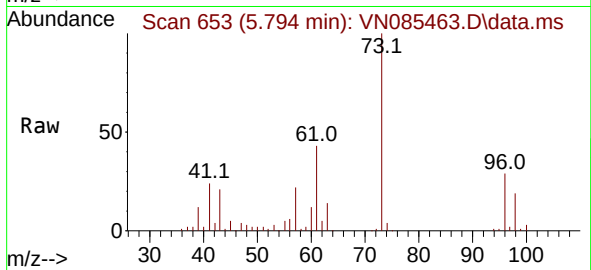




#19  
Methyl tert-butyl Ether  
Concen: 55.672 ug/l  
RT: 5.794 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

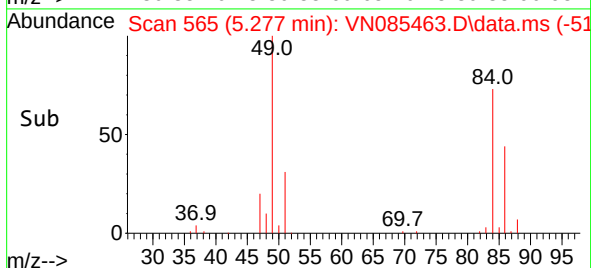
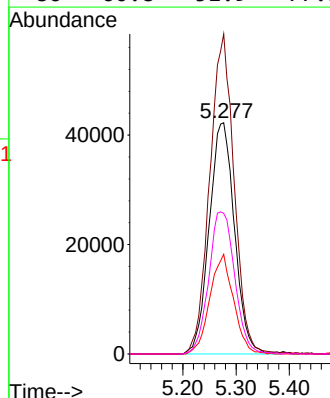
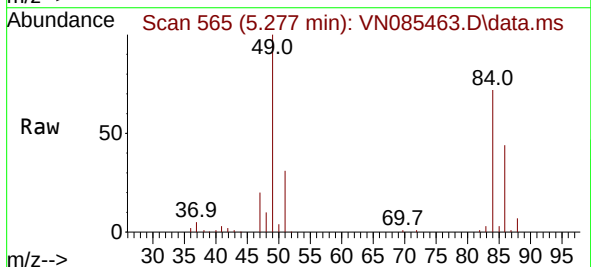
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

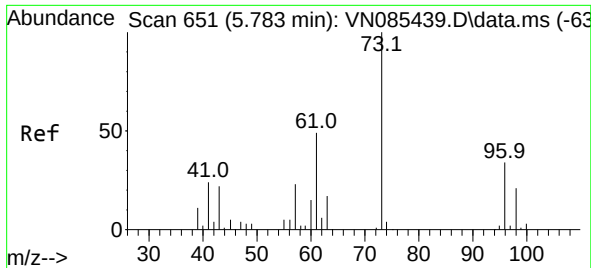
Tgt Ion: 73 Resp: 424024  
Ion Ratio Lower Upper  
73 100  
57 22.2 17.8 26.8



#20  
Methylene Chloride  
Concen: 49.455 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 84 Resp: 139560  
Ion Ratio Lower Upper  
84 100  
49 138.4 104.1 156.1  
51 43.1 31.0 46.4  
86 60.8 51.9 77.9

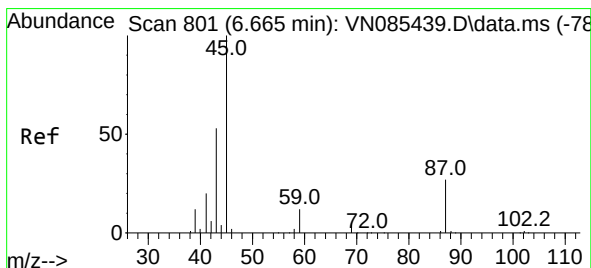
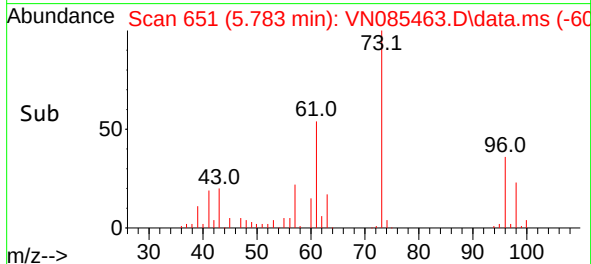
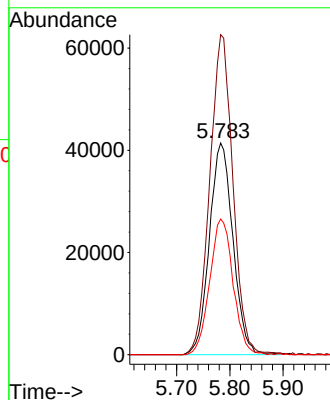
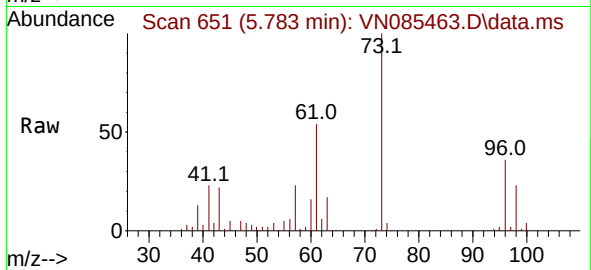




#21  
trans-1,2-Dichloroethene  
Concen: 50.805 ug/l  
RT: 5.783 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

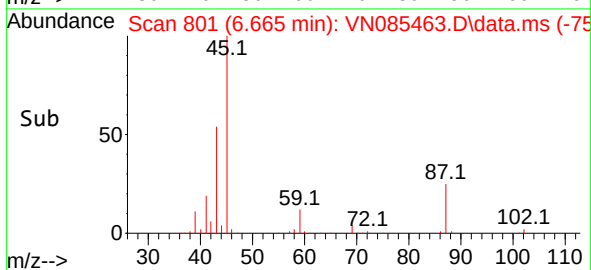
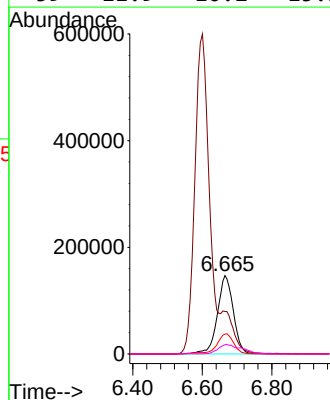
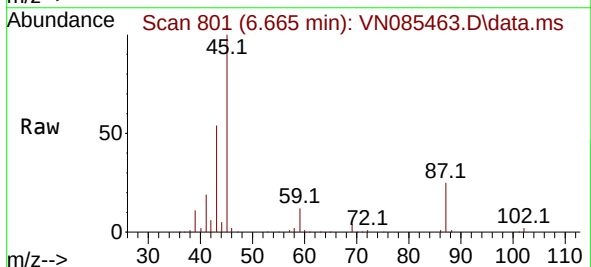
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 96 Resp: 127358  
Ion Ratio Lower Upper  
96 100  
61 151.2 115.7 173.5  
98 64.1 49.8 74.8

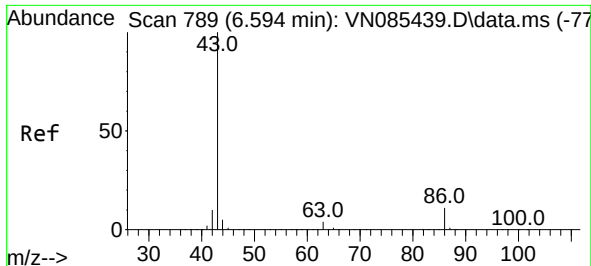


#22  
Diisopropyl ether  
Concen: 55.286 ug/l  
RT: 6.665 min Scan# 801  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 45 Resp: 467061  
Ion Ratio Lower Upper  
45 100  
43 53.5 45.0 67.6  
87 25.2 21.8 32.8  
59 11.9 10.2 15.2



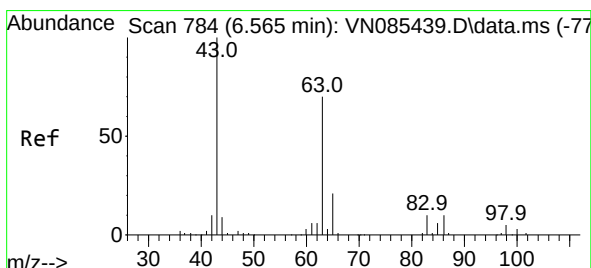
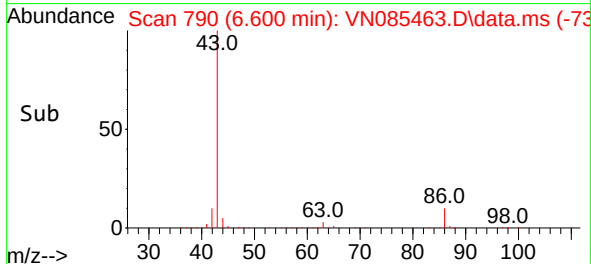
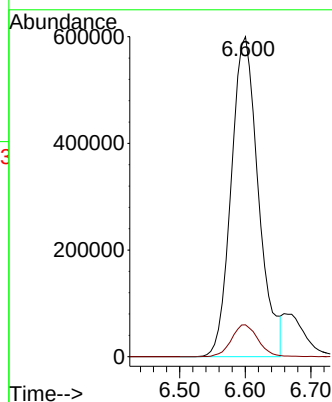
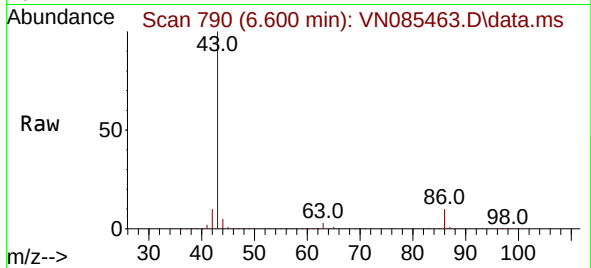




#23  
 Vinyl Acetate  
 Concen: 292.883 ug/l  
 RT: 6.600 min Scan# 790  
 Delta R.T. 0.006 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

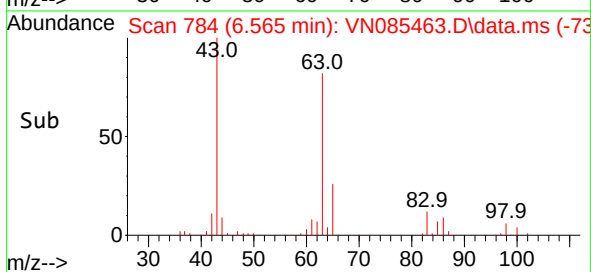
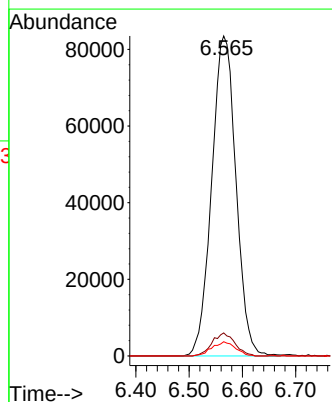
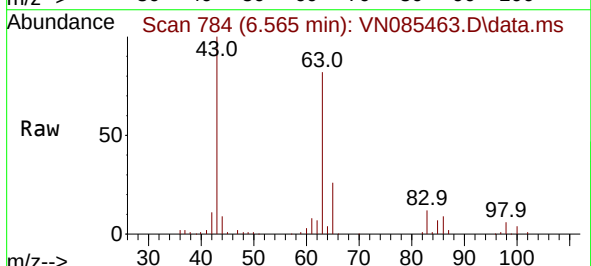
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

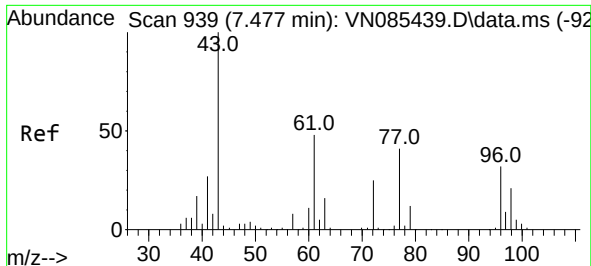
Tgt Ion: 43 Resp: 1731604  
 Ion Ratio Lower Upper  
 43 100  
 86 9.9 8.4 12.6



#24  
 1,1-Dichloroethane  
 Concen: 51.287 ug/l  
 RT: 6.565 min Scan# 784  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion: 63 Resp: 264195  
 Ion Ratio Lower Upper  
 63 100  
 98 7.2 3.3 9.8  
 100 4.5 2.0 6.0

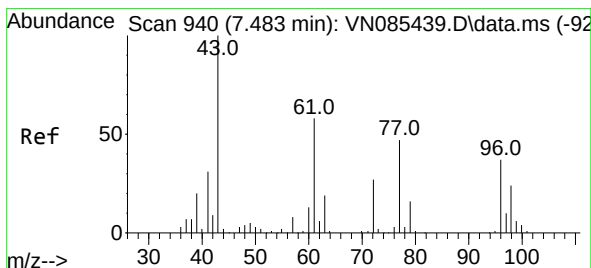
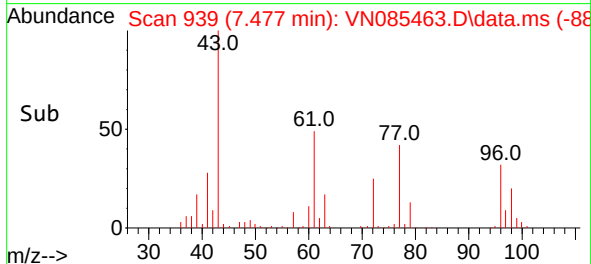
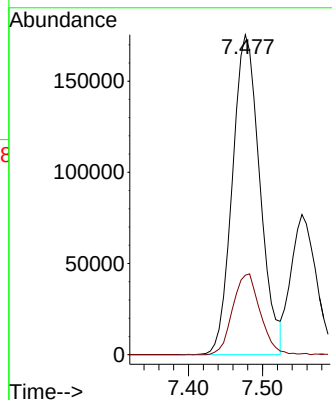
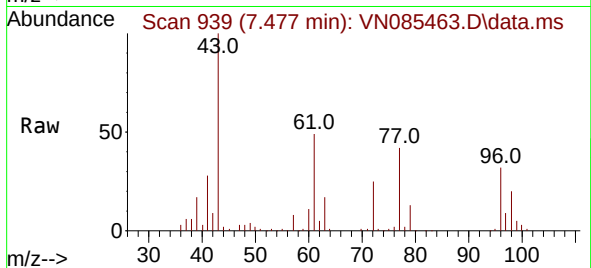




#25  
2-Butanone  
Concen: 269.467 ug/l  
RT: 7.477 min Scan# 910  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

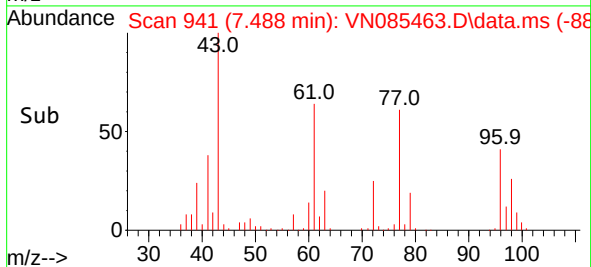
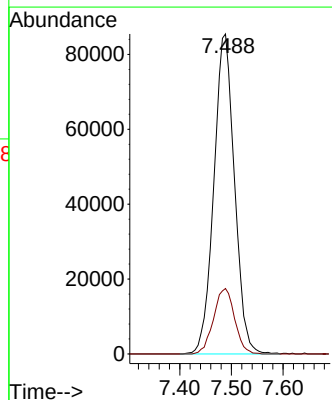
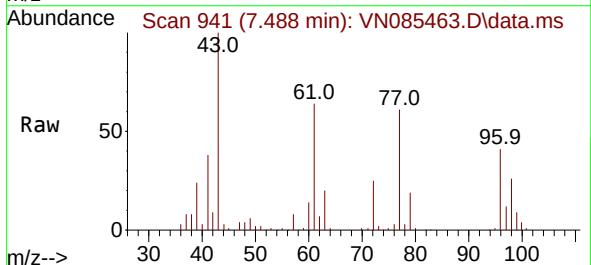
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

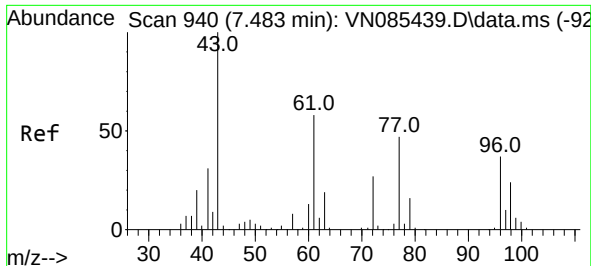
Tgt Ion: 43 Resp: 452029  
Ion Ratio Lower Upper  
43 100  
72 24.8 20.2 30.4



#26  
2,2-Dichloropropane  
Concen: 56.857 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 77 Resp: 236796  
Ion Ratio Lower Upper  
77 100  
97 20.8 10.7 32.1

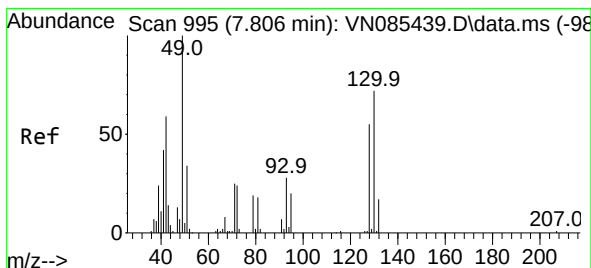
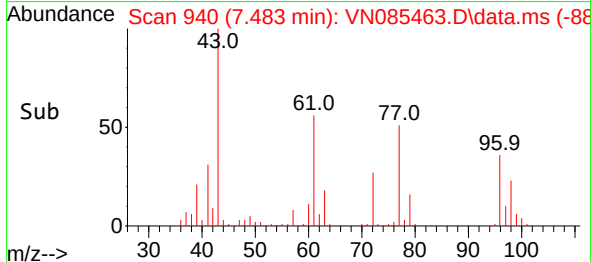
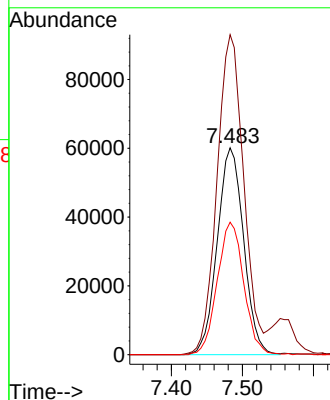
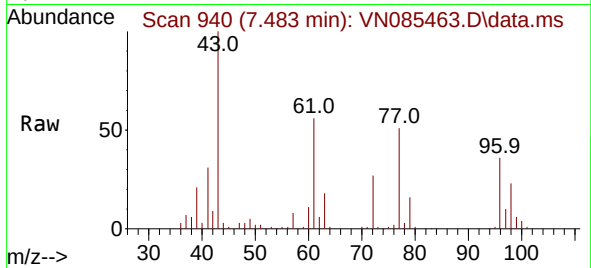




#27  
 cis-1,2-Dichloroethene  
 Concen: 52.557 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

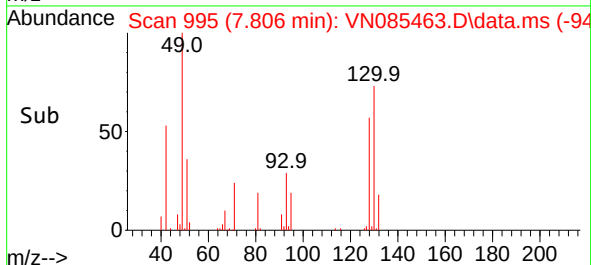
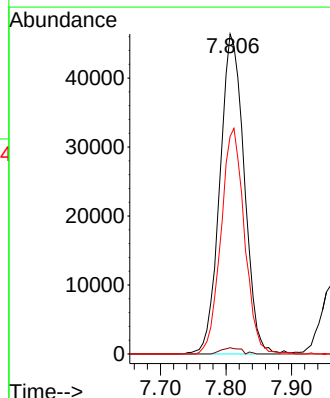
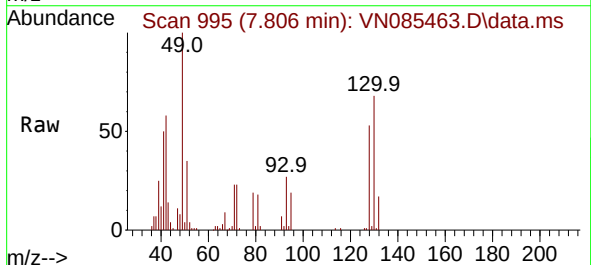
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

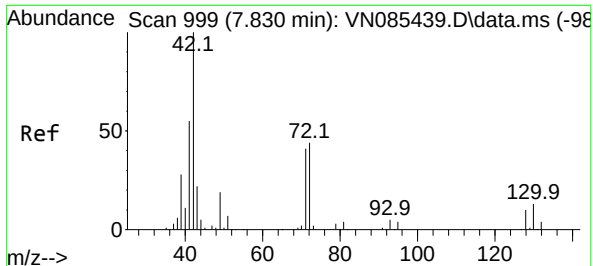
Tgt Ion: 96 Resp: 155179  
 Ion Ratio Lower Upper  
 96 100  
 61 156.3 0.0 311.8  
 98 64.4 0.0 126.0



#28  
 Bromochloromethane  
 Concen: 49.837 ug/l  
 RT: 7.806 min Scan# 995  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion: 49 Resp: 119440  
 Ion Ratio Lower Upper  
 49 100  
 129 1.6 0.0 4.4  
 130 68.0 55.0 82.4





#29

Tetrahydrofuran

Concen: 284.562 ug/l

RT: 7.835 min Scan# 1000

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

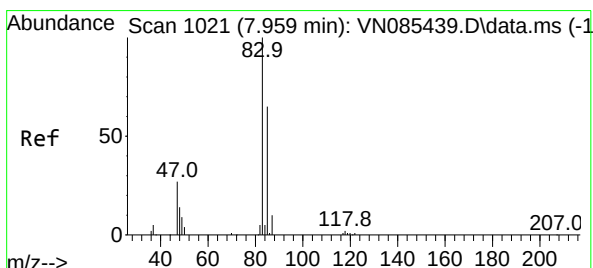
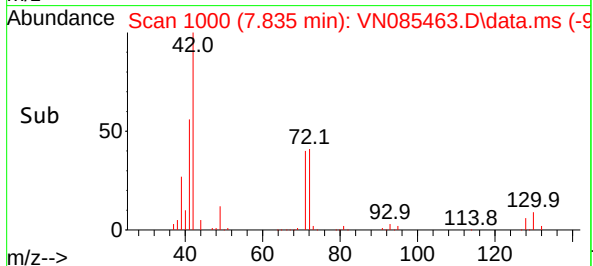
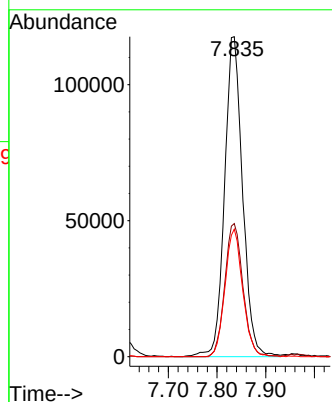
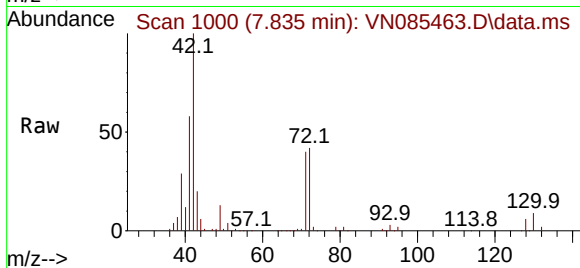
Tgt Ion: 42 Resp: 302642

Ion Ratio Lower Upper

42 100

72 42.0 34.2 51.2

71 39.2 32.5 48.7



#30

Chloroform

Concen: 51.054 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085463.D

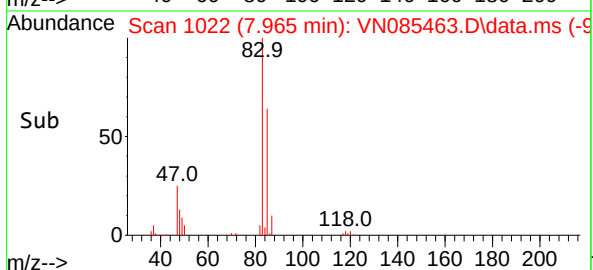
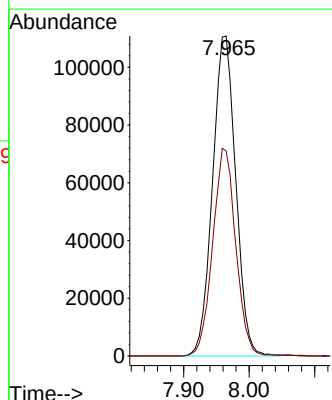
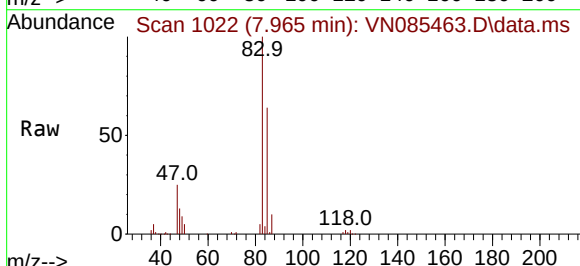
Acq: 15 Jan 2025 15:58

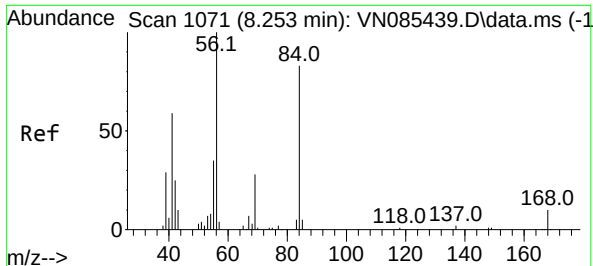
Tgt Ion: 83 Resp: 271813

Ion Ratio Lower Upper

83 100

85 64.1 51.8 77.6

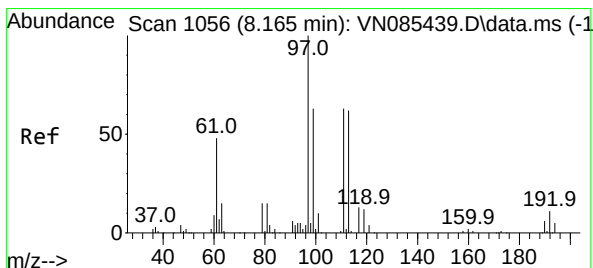
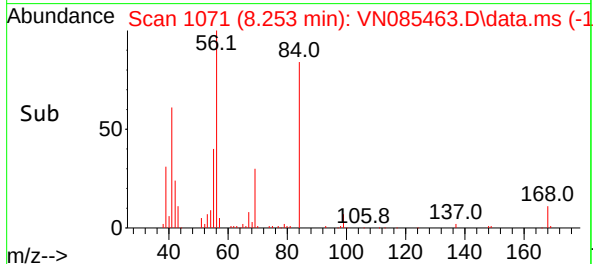
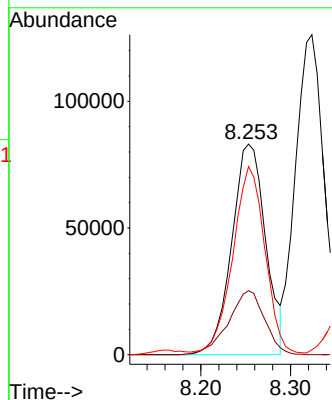
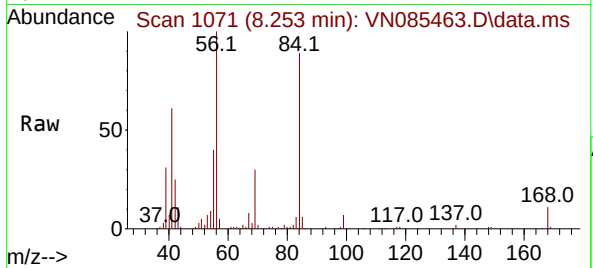




#31  
Cyclohexane  
Concen: 48.757 ug/l  
RT: 8.253 min Scan# 1071  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

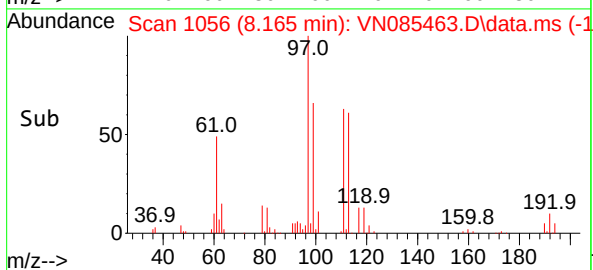
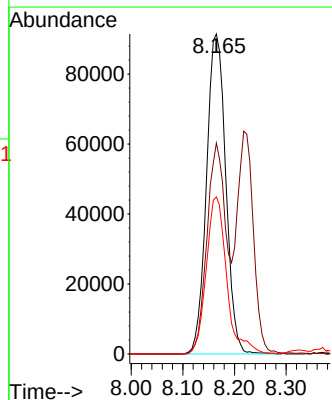
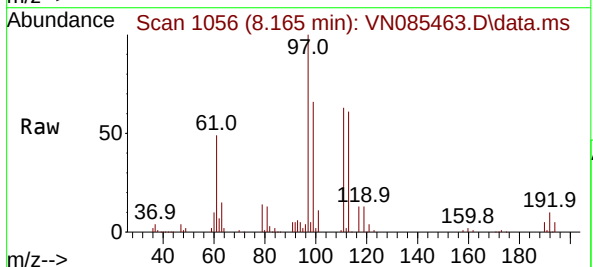
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

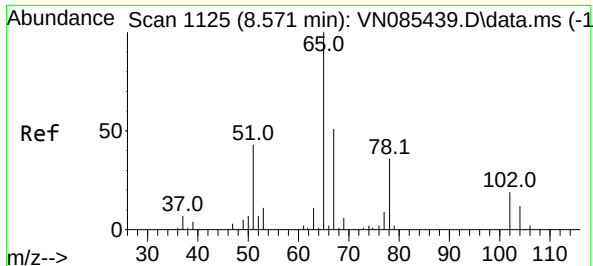
Tgt Ion: 56 Resp: 218304  
Ion Ratio Lower Upper  
56 100  
69 30.4 22.2 33.4  
84 87.7 66.4 99.6



#32  
1,1,1-Trichloroethane  
Concen: 50.757 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 97 Resp: 237039  
Ion Ratio Lower Upper  
97 100  
99 65.5 49.8 74.6  
61 52.1 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 52.114 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

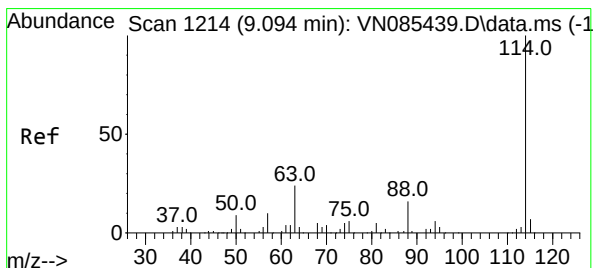
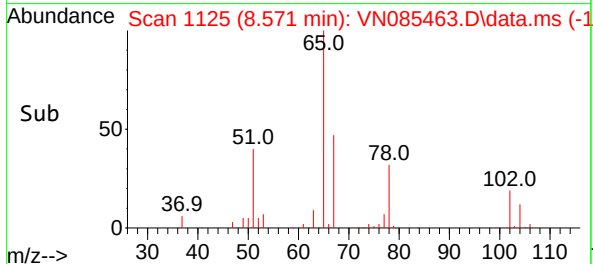
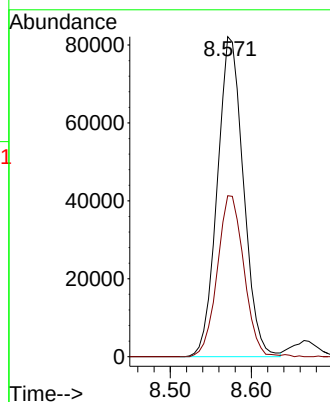
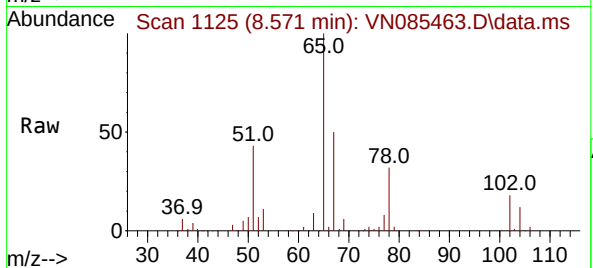
VSTDCCC050EC

Tgt Ion: 65 Resp: 183857

Ion Ratio Lower Upper

65 100

67 51.2 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: VN085463.D

Acq: 15 Jan 2025 15:58

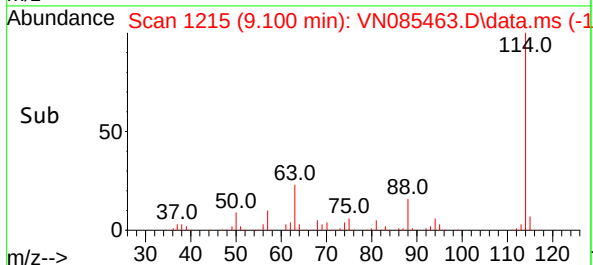
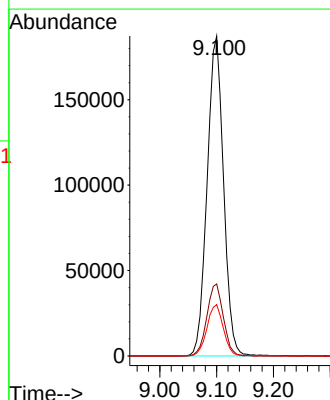
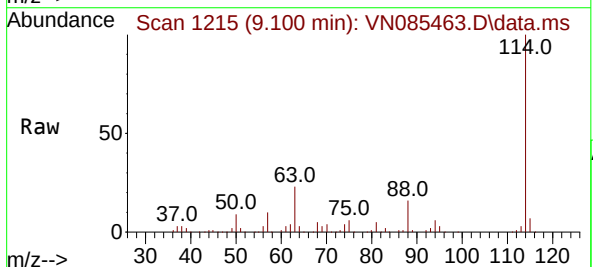
Tgt Ion: 114 Resp: 374640

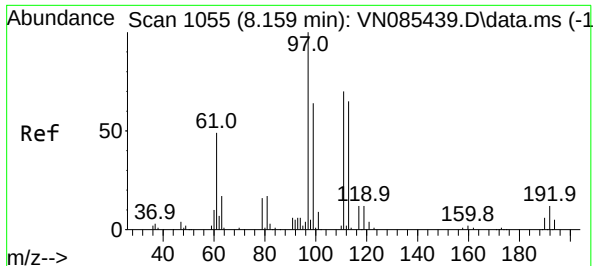
Ion Ratio Lower Upper

114 100

63 22.5 0.0 47.6

88 16.1 0.0 32.6





#35

Dibromofluoromethane

Concen: 51.677 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

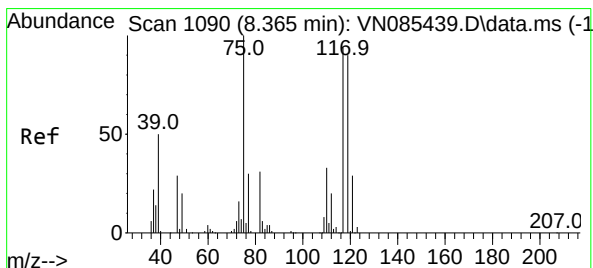
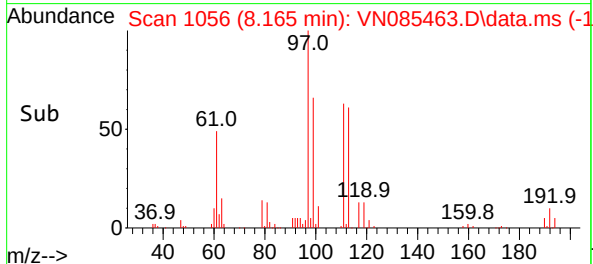
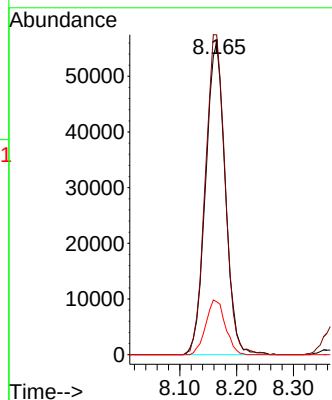
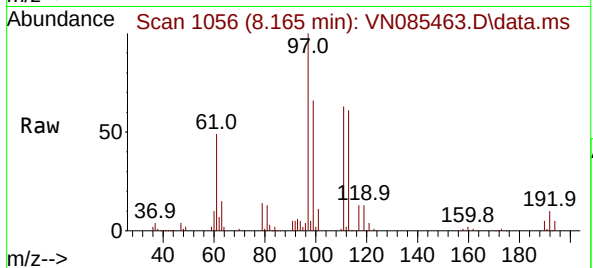
Tgt Ion:113 Resp: 134312

Ion Ratio Lower Upper

113 100

111 103.3 82.7 124.1

192 17.4 14.3 21.5



#36

1,1-Dichloropropene

Concen: 50.562 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

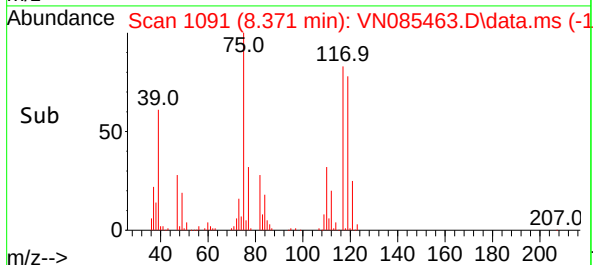
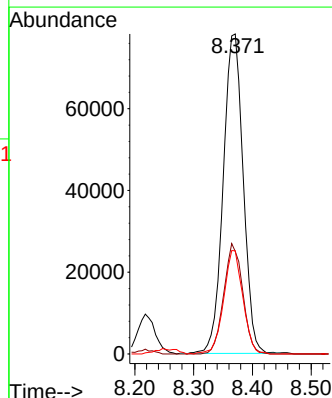
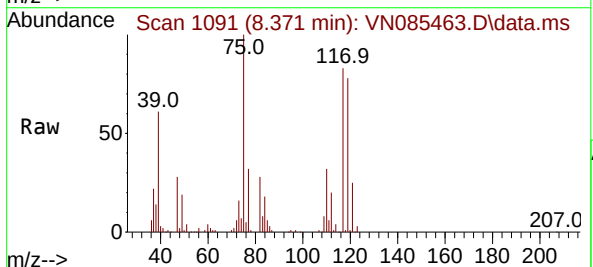
Tgt Ion: 75 Resp: 184438

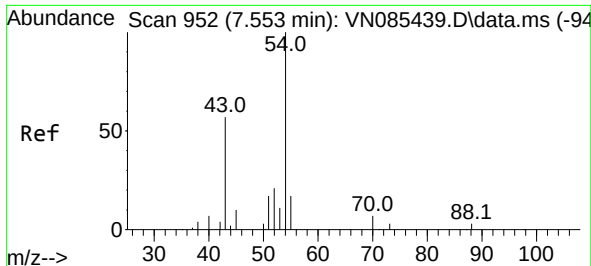
Ion Ratio Lower Upper

75 100

110 32.8 16.5 49.5

77 31.2 24.4 36.6





#37

Ethyl Acetate

Concen: 50.810 ug/l

RT: 7.553 min Scan# 91

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

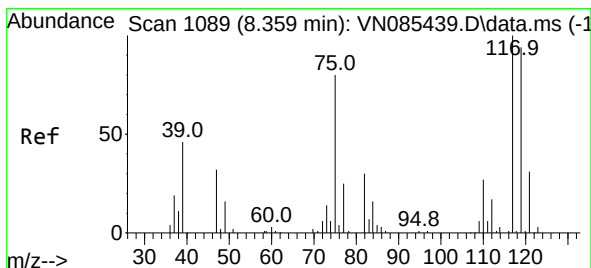
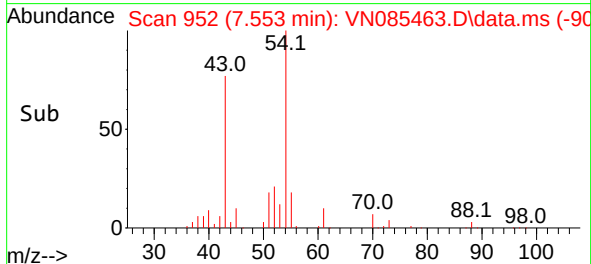
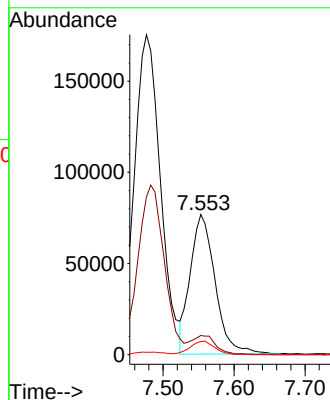
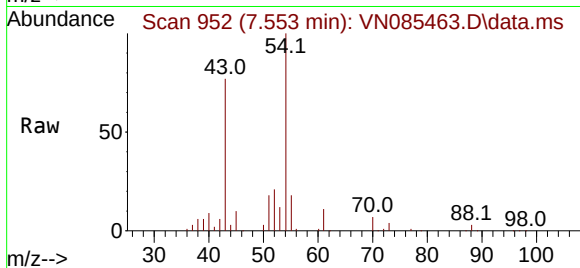
Tgt Ion: 43 Resp: 187078

Ion Ratio Lower Upper

43 100

61 12.1 10.9 16.3

70 9.6 7.5 11.3



#38

Carbon Tetrachloride

Concen: 50.991 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

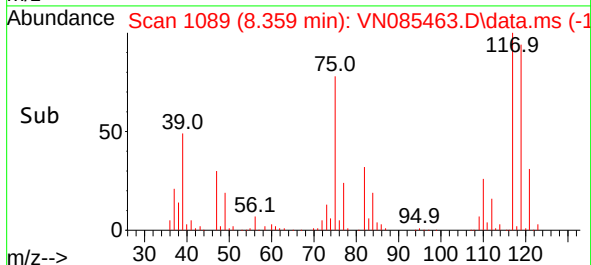
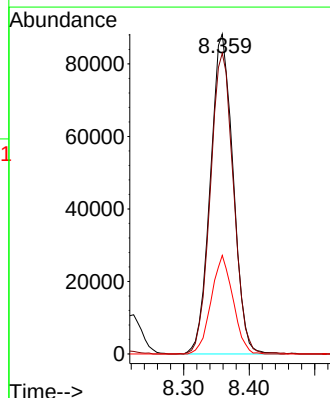
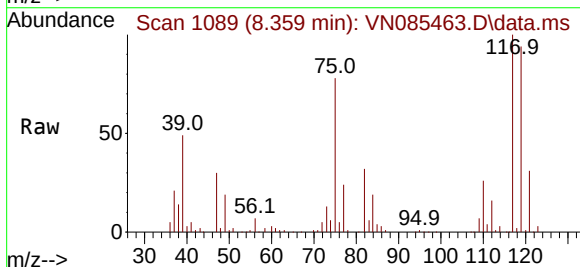
Tgt Ion: 117 Resp: 212942

Ion Ratio Lower Upper

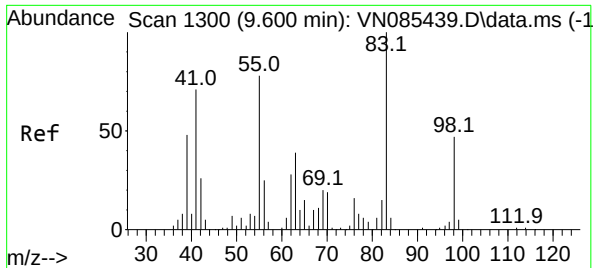
117 100

119 93.8 75.4 113.2

121 30.8 24.6 37.0



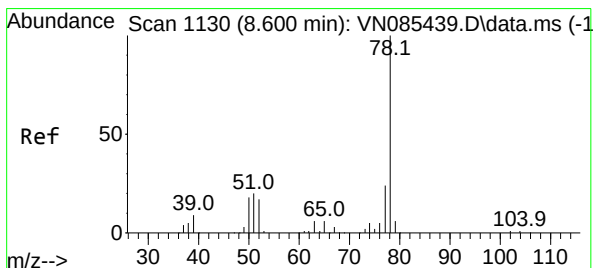
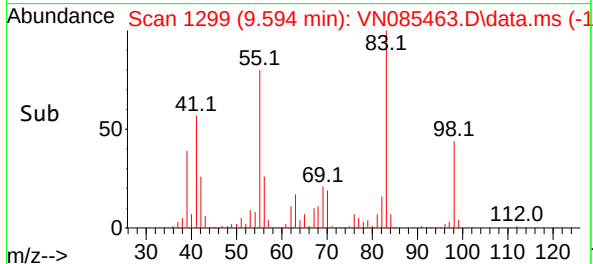
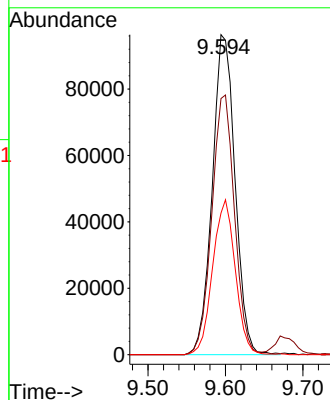
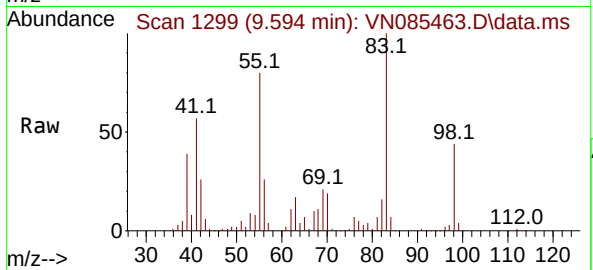




#39  
Methylcyclohexane  
Concen: 57.436 ug/l  
RT: 9.594 min Scan# 1129  
Delta R.T. -0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

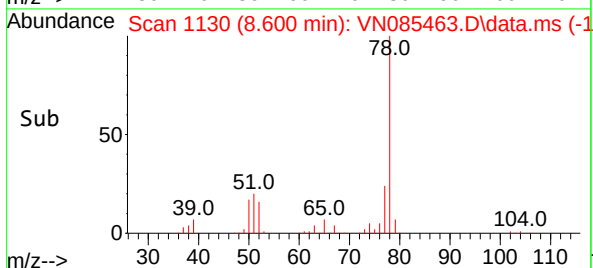
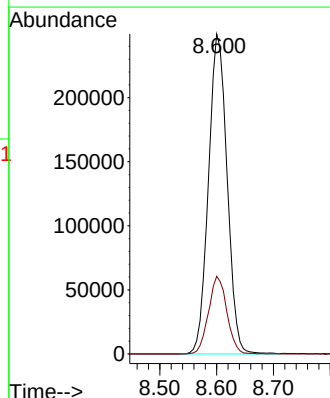
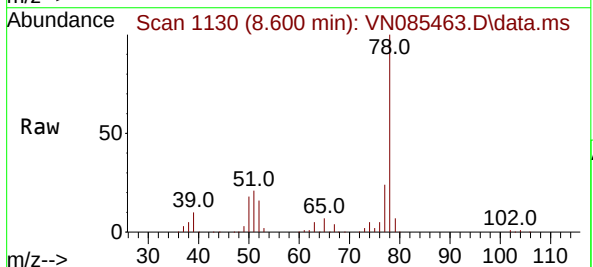
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

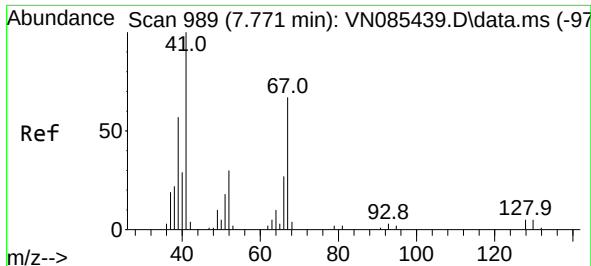
Tgt Ion: 83 Resp: 196879  
Ion Ratio Lower Upper  
83 100  
55 80.1 62.6 94.0  
98 44.2 37.7 56.5



#40  
Benzene  
Concen: 51.821 ug/l  
RT: 8.600 min Scan# 1130  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 78 Resp: 567975  
Ion Ratio Lower Upper  
78 100  
77 24.3 19.0 28.6



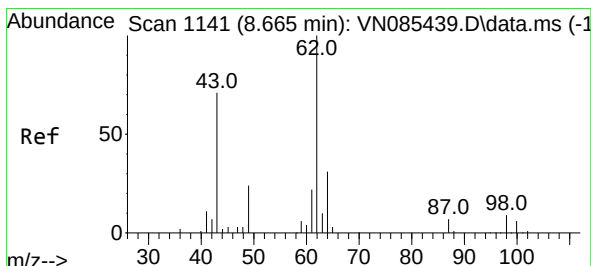
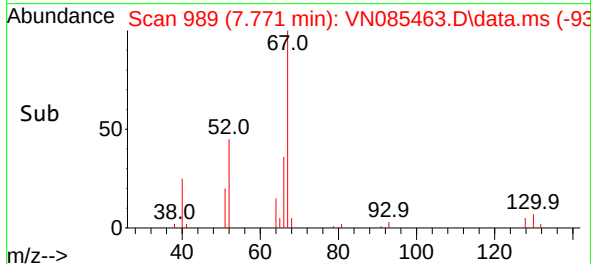
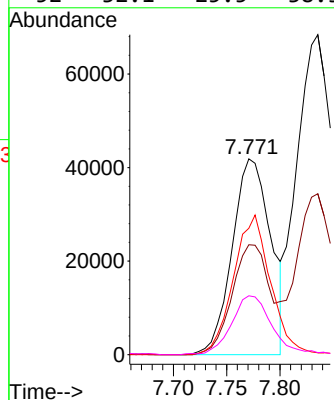
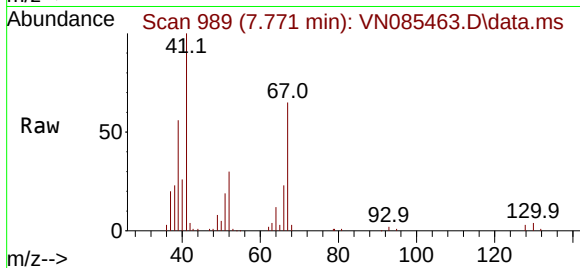


#41  
Methacrylonitrile  
Concen: 54.981 ug/l  
RT: 7.771 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 41 Resp: 105319

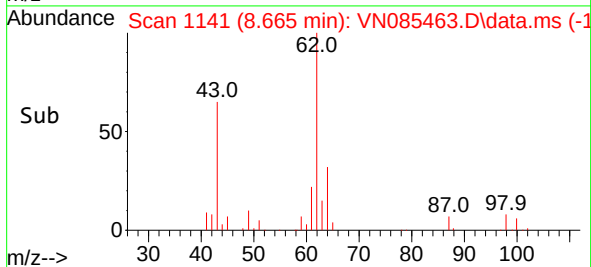
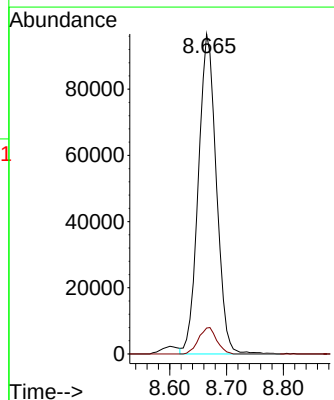
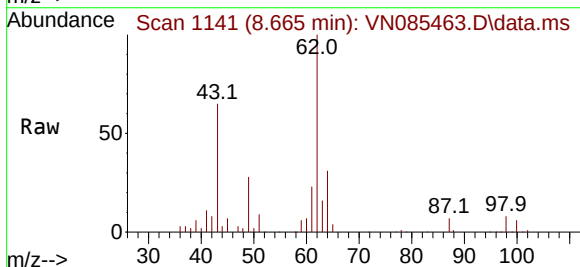
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 39  | 56.3  | 46.0  | 69.0  |
| 67  | 68.8  | 57.4  | 86.2  |
| 52  | 32.1  | 25.5  | 38.3  |

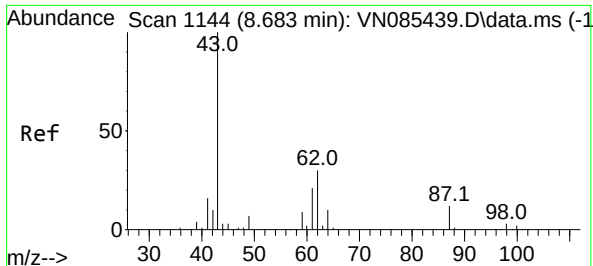


#42  
1,2-Dichloroethane  
Concen: 51.629 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 62 Resp: 213125

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 62  | 100   |       |       |
| 98  | 8.2   | 0.0   | 17.0  |

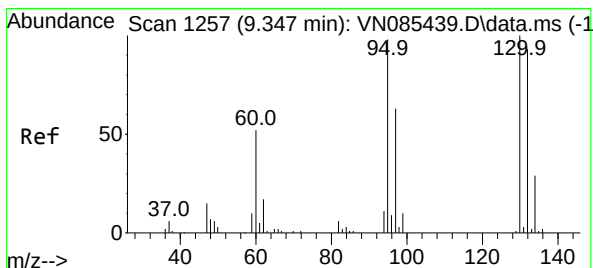
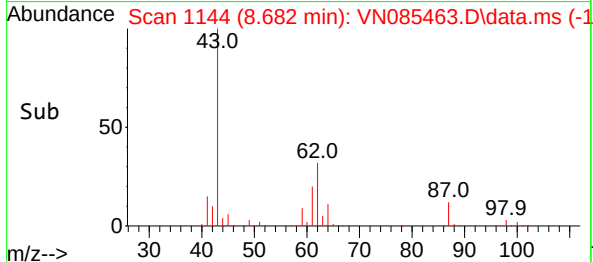
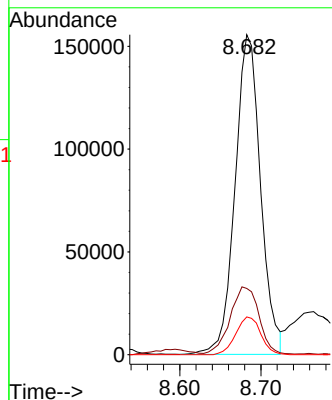
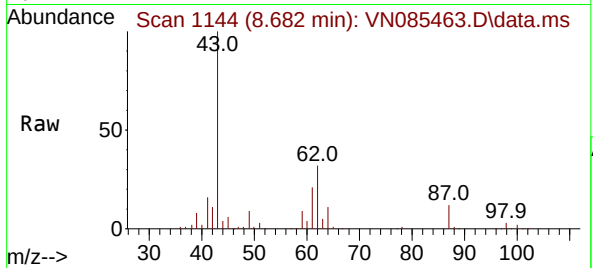




#43  
Isopropyl Acetate  
Concen: 57.599 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

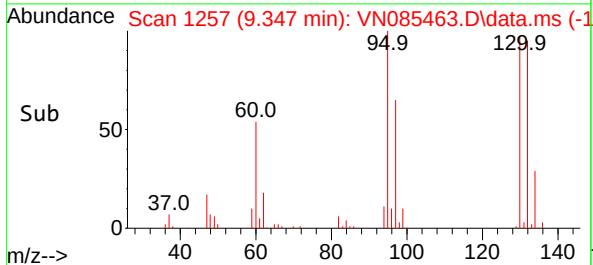
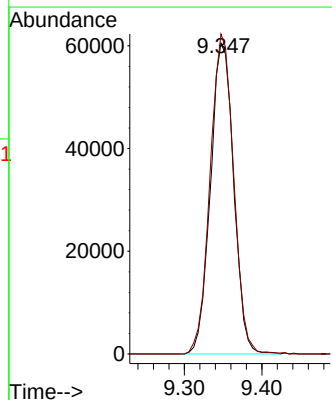
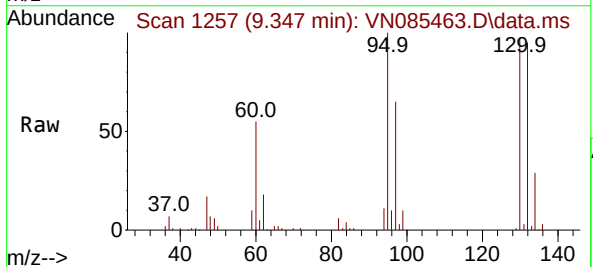
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

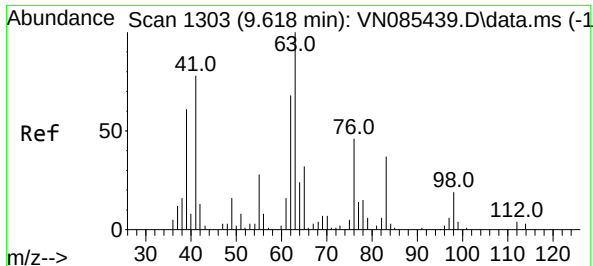
Tgt Ion: 43 Resp: 339818  
Ion Ratio Lower Upper  
43 100  
61 23.7 20.7 31.1  
87 11.5 9.8 14.8



#44  
Trichloroethene  
Concen: 49.260 ug/l  
RT: 9.347 min Scan# 1257  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:130 Resp: 125677  
Ion Ratio Lower Upper  
130 100  
95 103.0 0.0 195.8





#45

1,2-Dichloropropane

Concen: 51.043 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

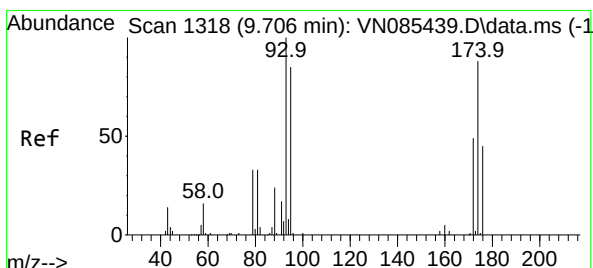
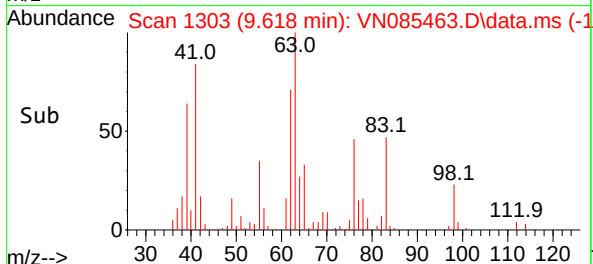
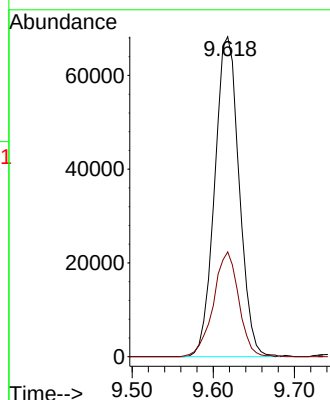
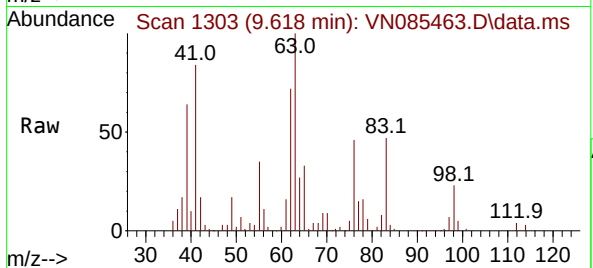
VSTDCCC050EC

Tgt Ion: 63 Resp: 142897

Ion Ratio Lower Upper

63 100

65 32.7 25.6 38.4



#46

Dibromomethane

Concen: 49.750 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

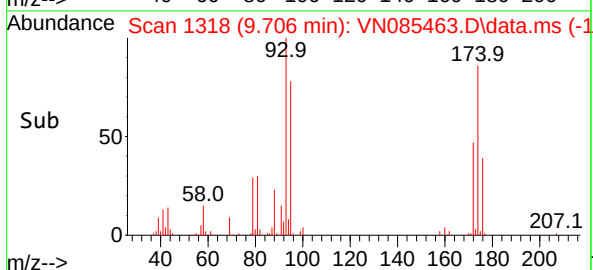
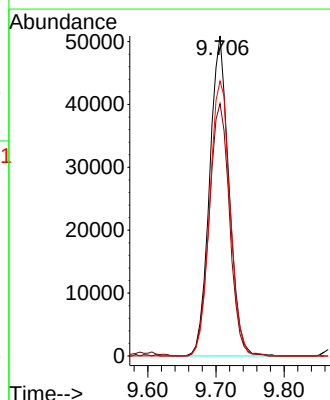
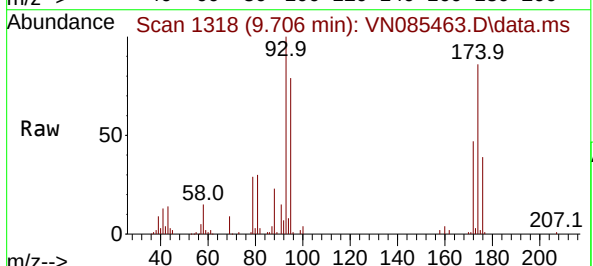
Tgt Ion: 93 Resp: 100497

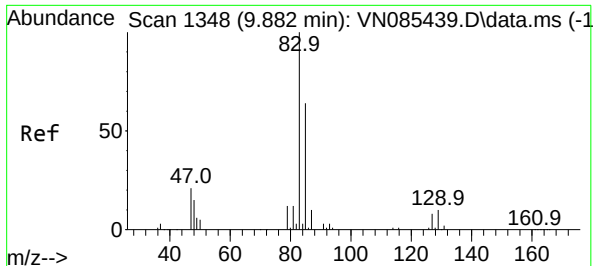
Ion Ratio Lower Upper

93 100

95 82.8 64.7 97.1

174 90.0 69.0 103.4

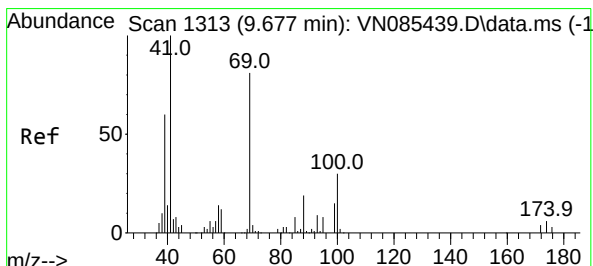
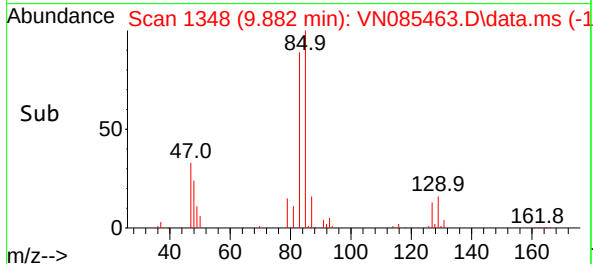
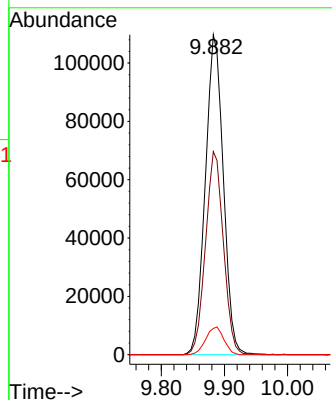
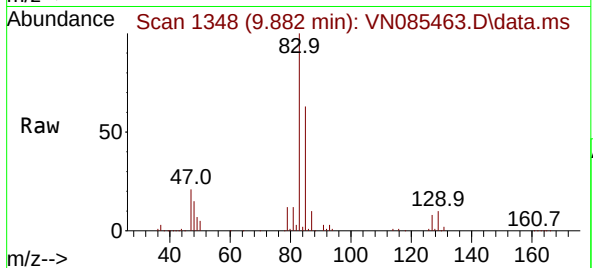




#47  
Bromodichloromethane  
Concen: 52.814 ug/l  
RT: 9.882 min Scan# 1348  
Delta R.T. 0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

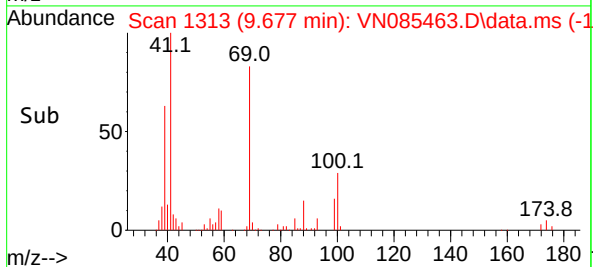
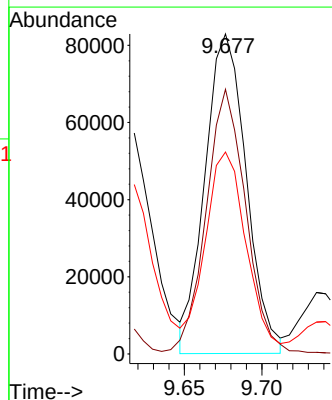
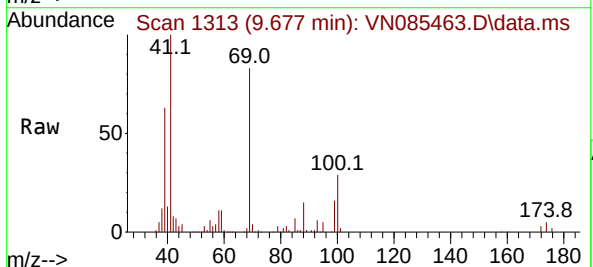
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

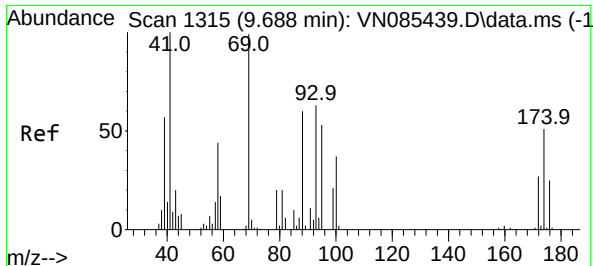
Tgt Ion: 83 Resp: 217353  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.2 76.8  
127 8.2 6.5 9.7



#48  
Methyl methacrylate  
Concen: 57.796 ug/l  
RT: 9.677 min Scan# 1313  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 41 Resp: 153447  
Ion Ratio Lower Upper  
41 100  
69 80.2 64.7 97.1  
39 63.2 49.0 73.6





#49

1,4-Dioxane

Concen: 972.836 ug/l

RT: 9.688 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

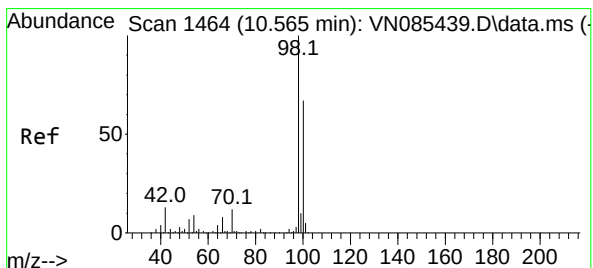
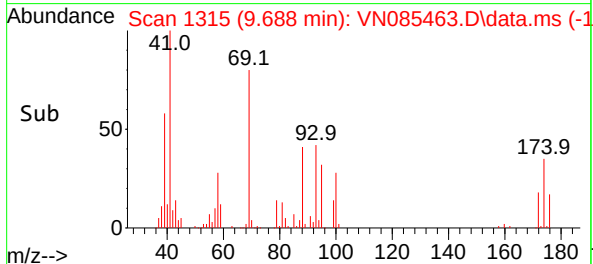
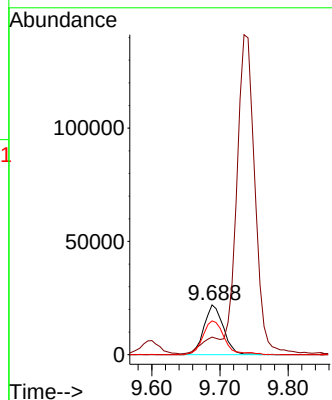
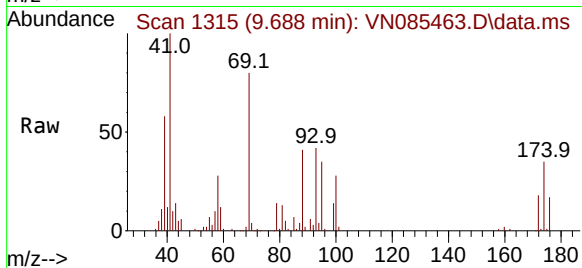
Tgt Ion: 88 Resp: 43495

Ion Ratio Lower Upper

88 100

43 32.9 26.6 39.8

58 75.2 59.5 89.3



#50

Toluene-d8

Concen: 54.009 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085463.D

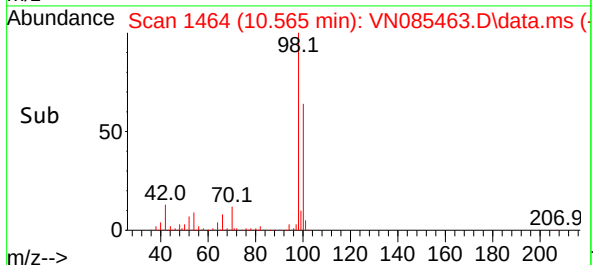
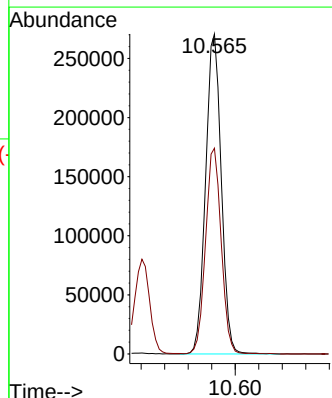
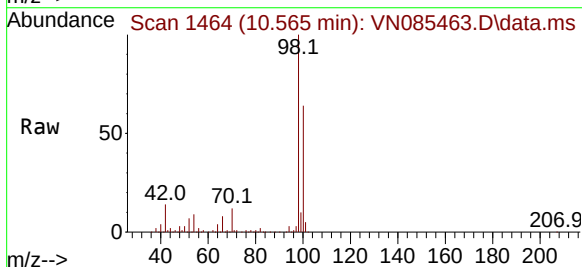
Acq: 15 Jan 2025 15:58

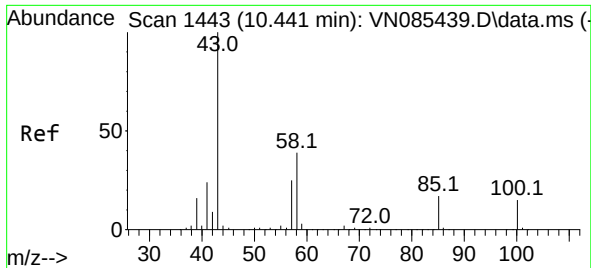
Tgt Ion: 98 Resp: 498748

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.4

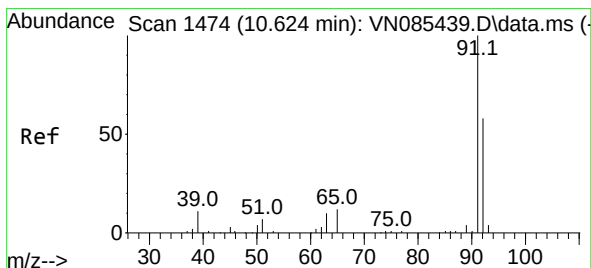
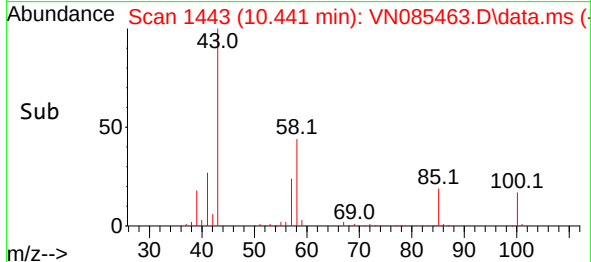
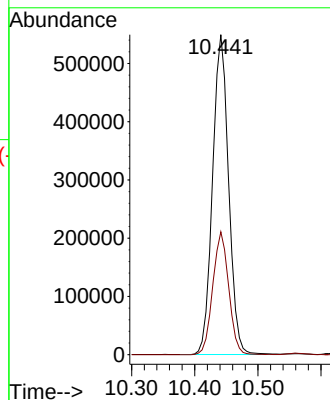
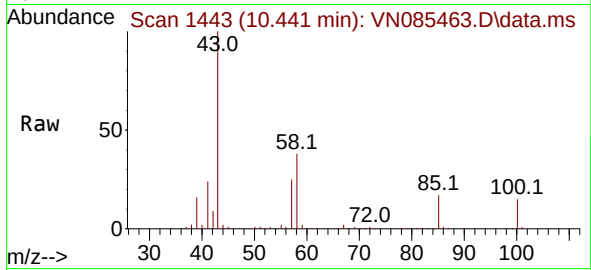




#51  
4-Methyl-2-Pentanone  
Concen: 282.679 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

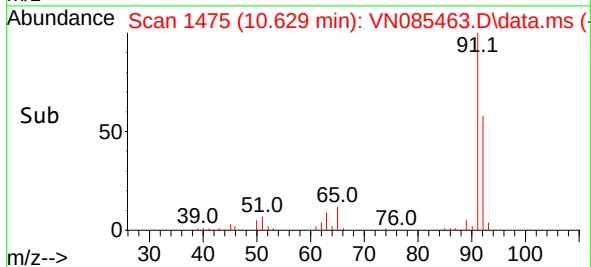
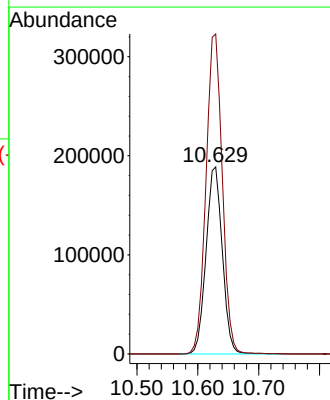
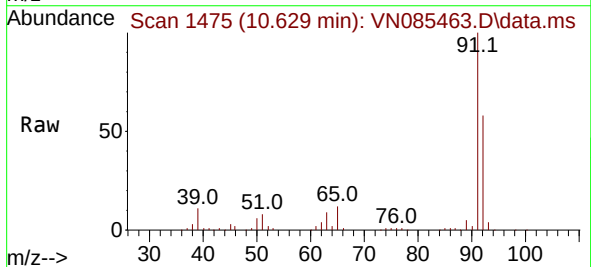
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

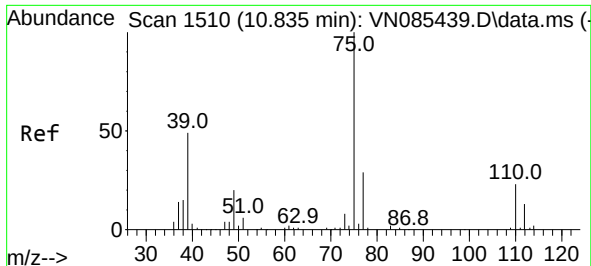
Tgt Ion: 43 Resp: 967748  
Ion Ratio Lower Upper  
43 100  
58 38.2 30.5 45.7



#52  
Toluene  
Concen: 55.032 ug/l  
RT: 10.629 min Scan# 1475  
Delta R.T. 0.005 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 92 Resp: 349488  
Ion Ratio Lower Upper  
92 100  
91 171.6 139.2 208.8

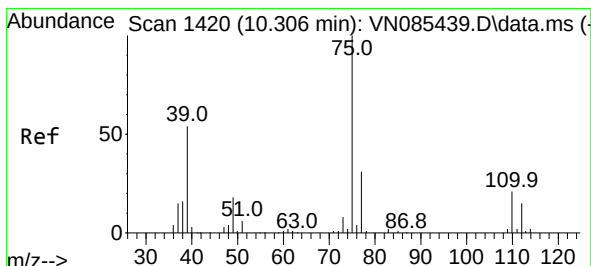
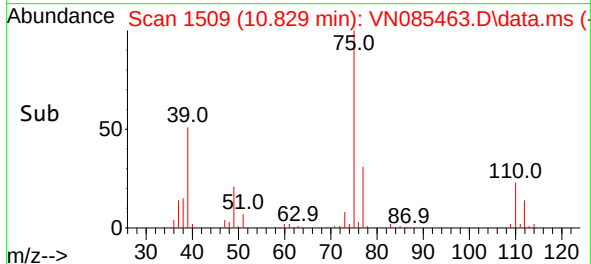
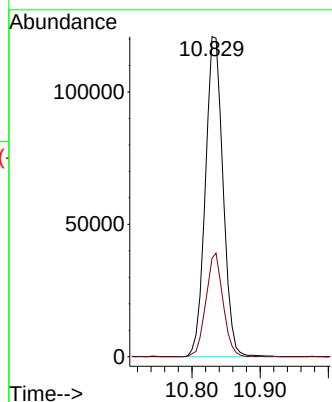
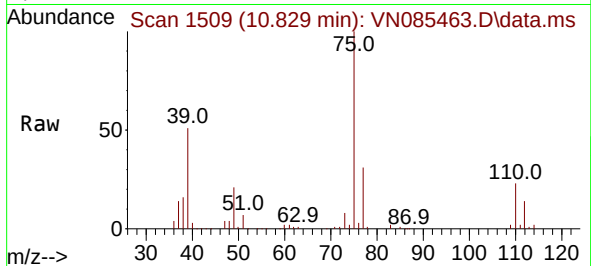




#53  
t-1,3-Dichloropropene  
Concen: 55.946 ug/l  
RT: 10.829 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

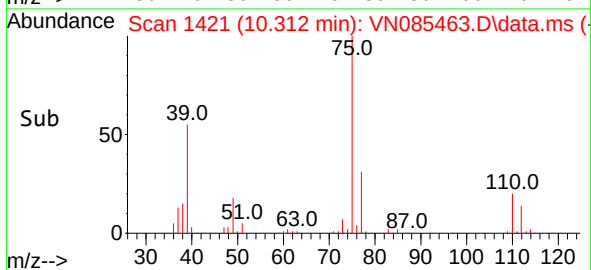
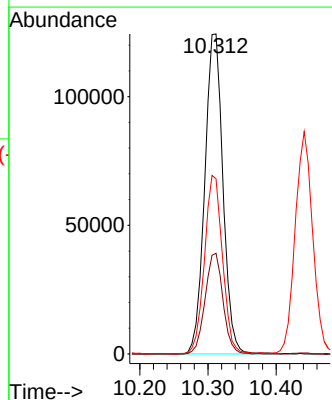
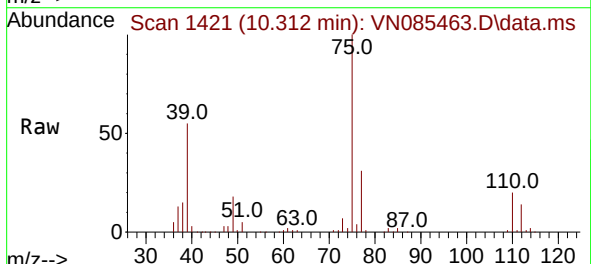
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion: 75 Resp: 217586  
Ion Ratio Lower Upper  
75 100  
77 30.8 23.5 35.3

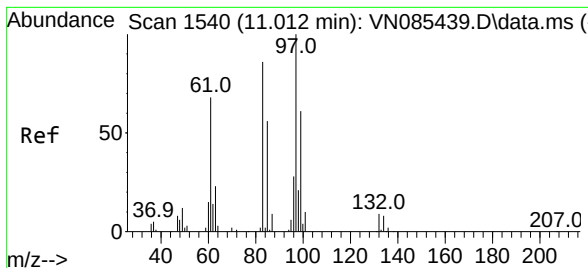


#54  
cis-1,3-Dichloropropene  
Concen: 55.661 ug/l  
RT: 10.312 min Scan# 1421  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 75 Resp: 231235  
Ion Ratio Lower Upper  
75 100  
77 31.4 25.0 37.4  
39 54.6 43.1 64.7







#55

1,1,2-Trichloroethane

Concen: 51.759 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

Tgt Ion: 97 Resp: 130083

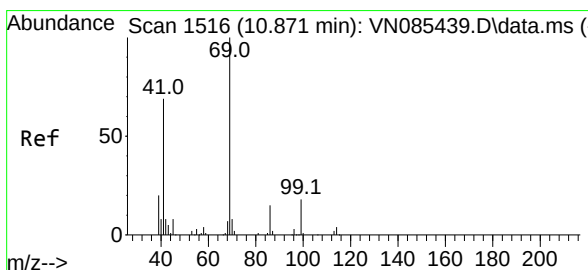
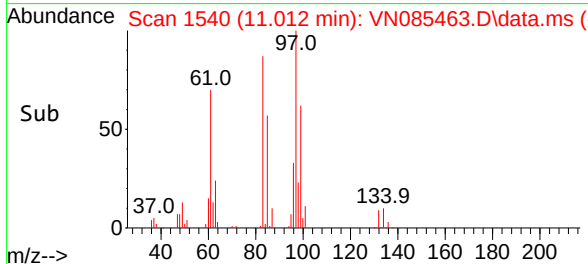
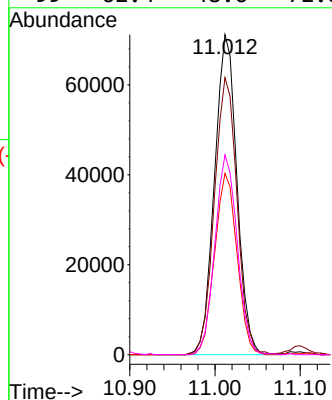
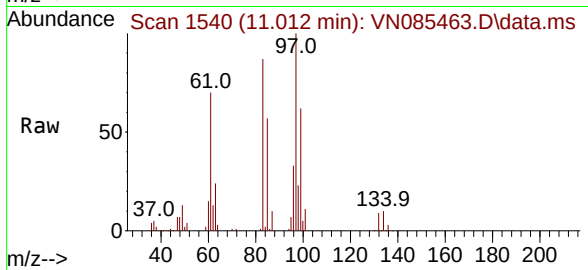
Ion Ratio Lower Upper

97 100

83 86.5 69.0 103.6

85 56.7 44.6 66.8

99 62.4 48.6 72.8



#56

Ethyl methacrylate

Concen: 49.885 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

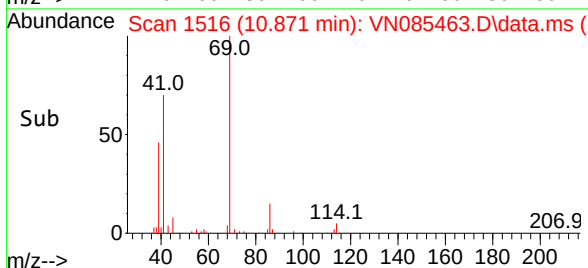
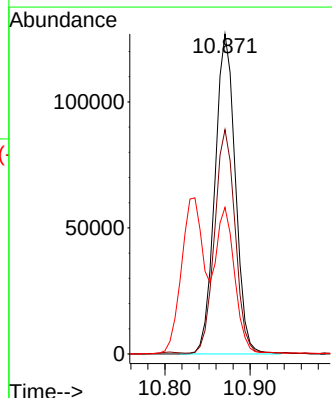
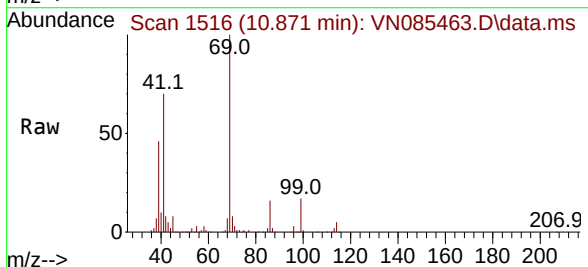
Tgt Ion: 69 Resp: 211176

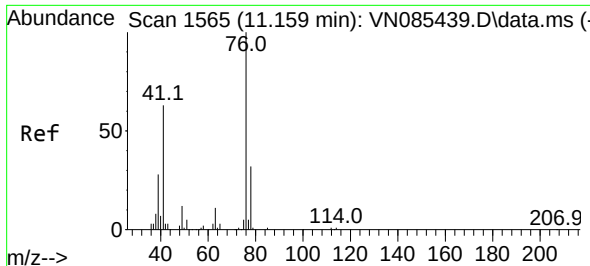
Ion Ratio Lower Upper

69 100

41 70.3 54.6 82.0

39 41.5 32.4 48.6





#57

1,3-Dichloropropane

Concen: 53.338 ug/l

RT: 11.159 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

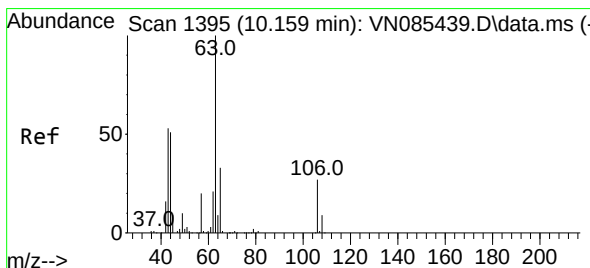
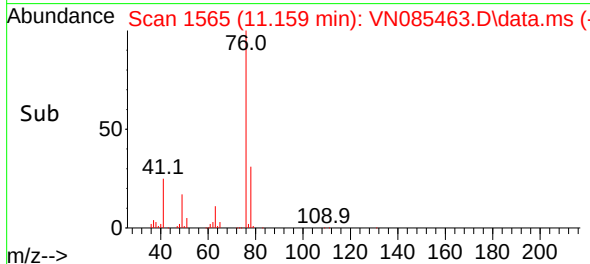
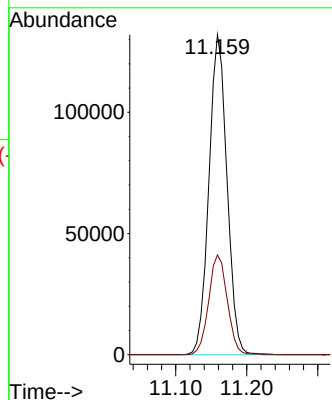
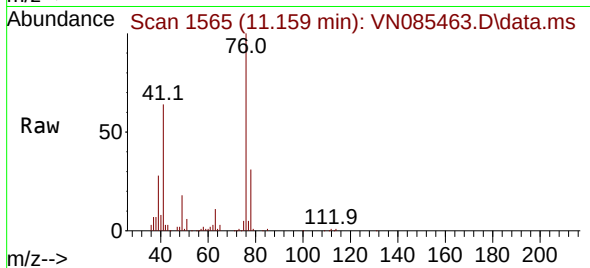
VSTDCCC050EC

Tgt Ion: 76 Resp: 233088

Ion Ratio Lower Upper

76 100

78 32.0 25.6 38.4



#58

2-Chloroethyl Vinyl ether

Concen: 290.228 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085463.D

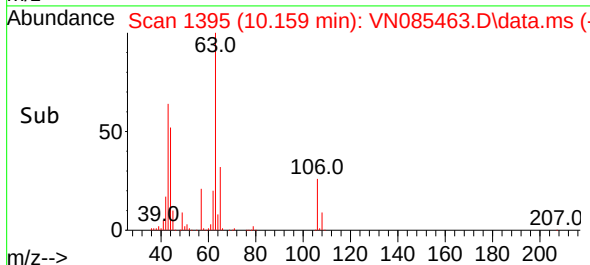
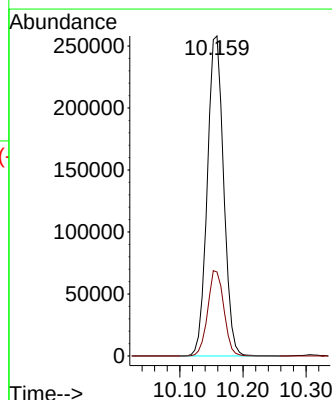
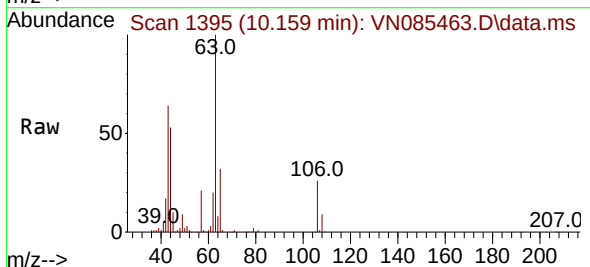
Acq: 15 Jan 2025 15:58

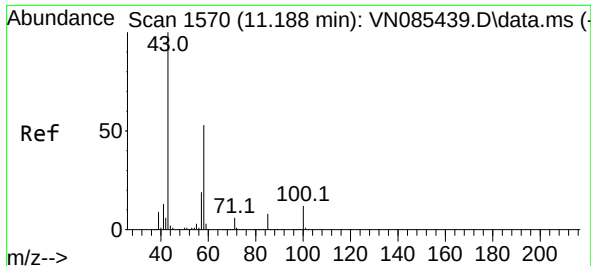
Tgt Ion: 63 Resp: 462882

Ion Ratio Lower Upper

63 100

106 26.4 21.6 32.4

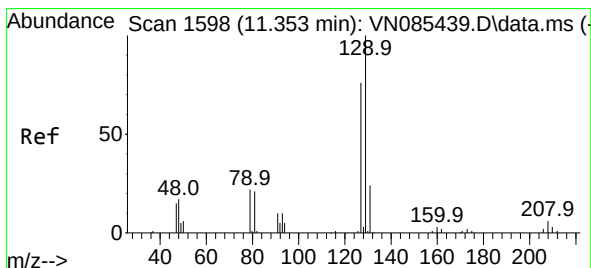
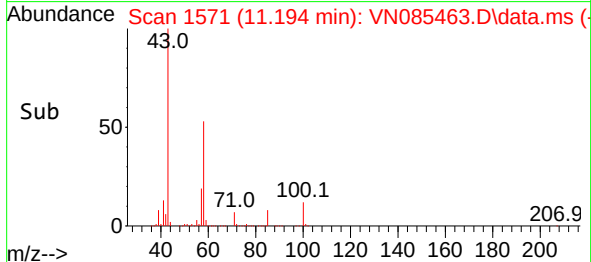
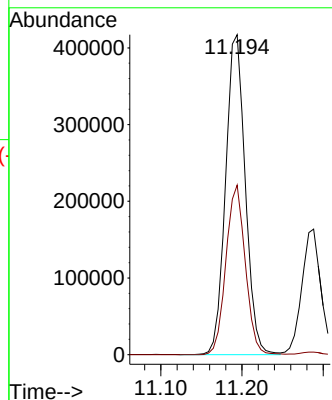
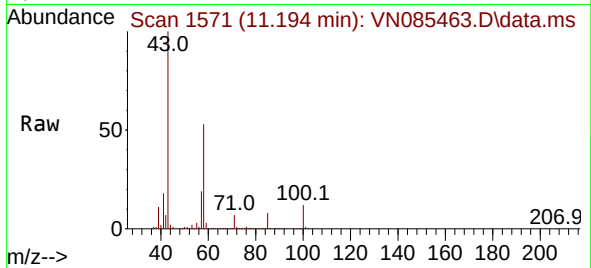




#59  
2-Hexanone  
Concen: 292.136 ug/l  
RT: 11.194 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

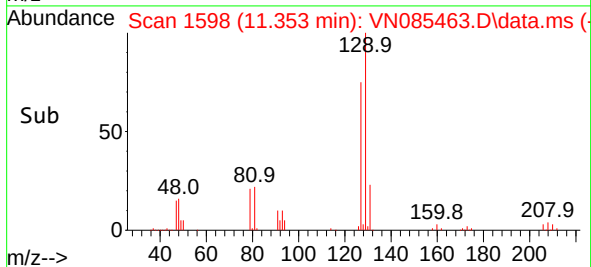
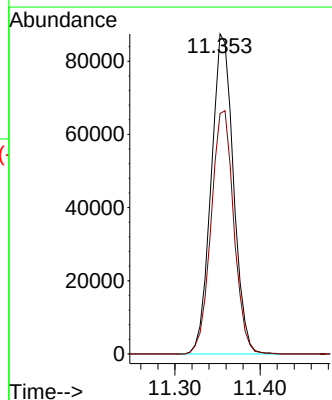
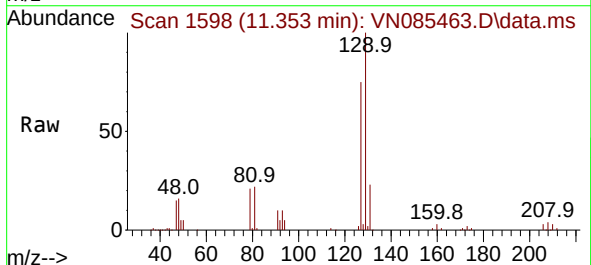
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

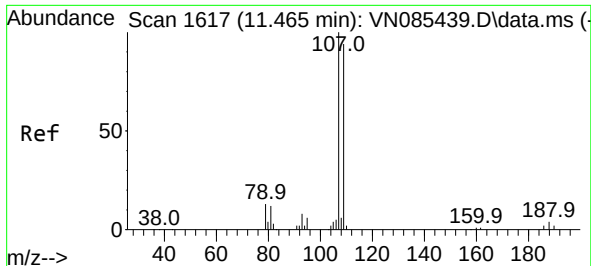
Tgt Ion: 43 Resp: 703719  
Ion Ratio Lower Upper  
43 100  
58 52.0 26.2 78.6



#60  
Dibromochloromethane  
Concen: 52.339 ug/l  
RT: 11.353 min Scan# 1598  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:129 Resp: 158806  
Ion Ratio Lower Upper  
129 100  
127 77.4 38.6 115.8

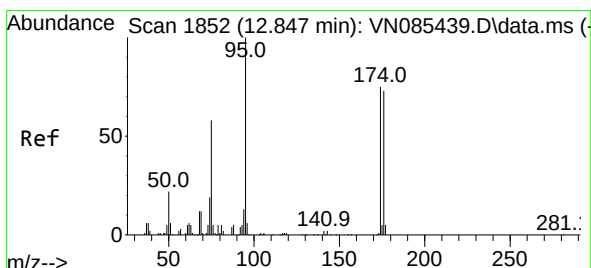
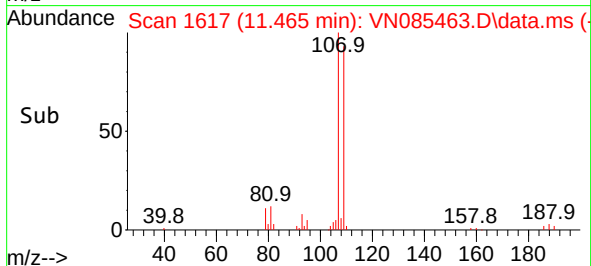
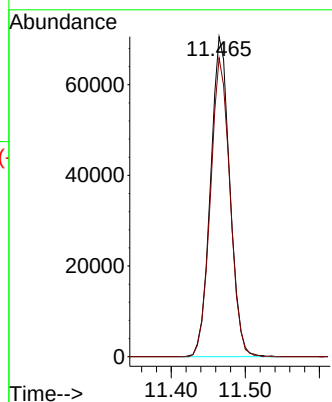
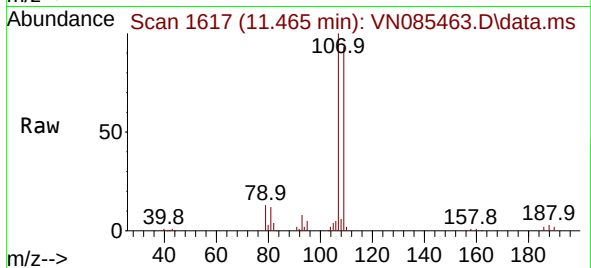




#61  
1,2-Dibromoethane  
Concen: 51.040 ug/l  
RT: 11.465 min Scan# 1617  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

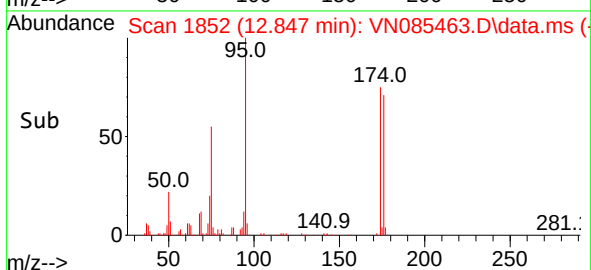
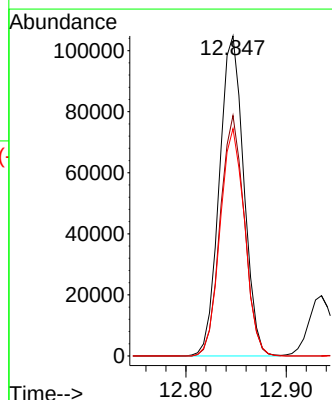
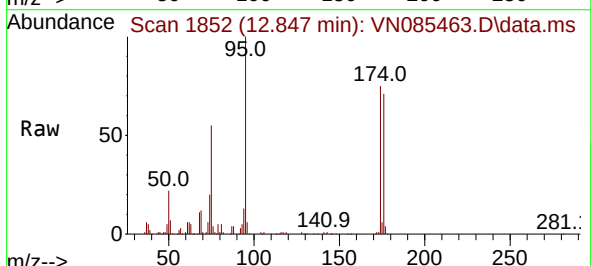
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

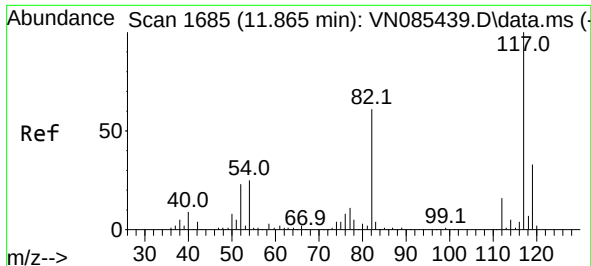
Tgt Ion:107 Resp: 127688  
Ion Ratio Lower Upper  
107 100  
109 94.2 75.9 113.9



#62  
4-Bromofluorobenzene  
Concen: 56.127 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 95 Resp: 177300  
Ion Ratio Lower Upper  
95 100  
174 73.9 0.0 145.0  
176 71.4 0.0 142.4

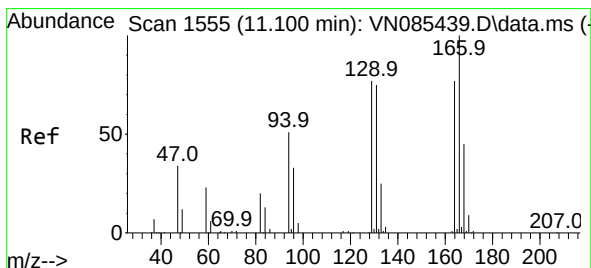
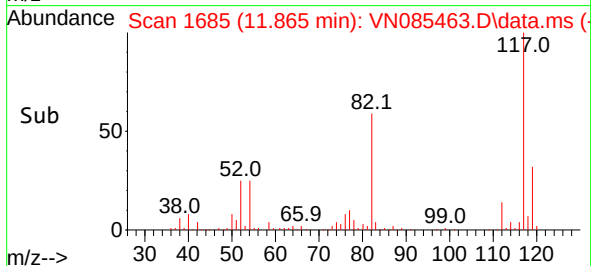
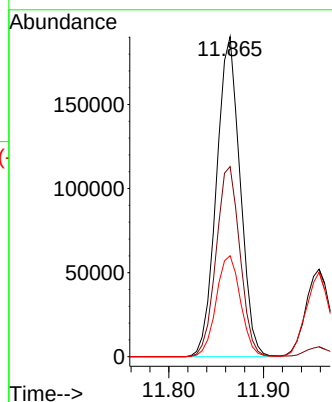
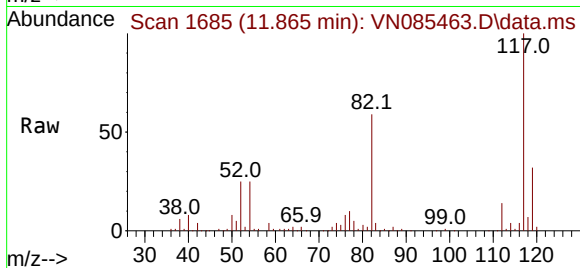




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1170  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

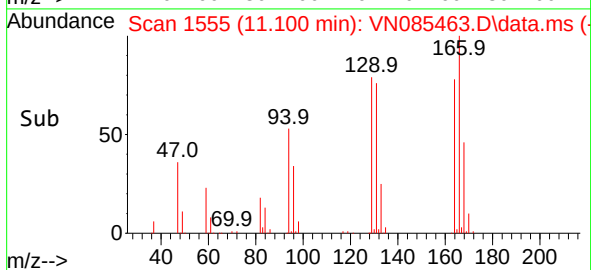
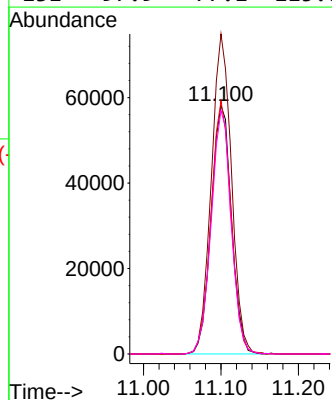
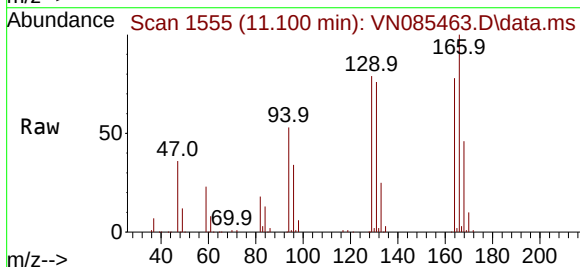
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

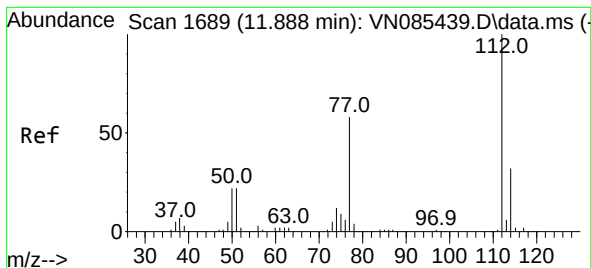
Tgt Ion:117 Resp: 330319  
Ion Ratio Lower Upper  
117 100  
82 59.4 48.6 72.8  
119 31.6 26.6 39.8



#64  
Tetrachloroethene  
Concen: 47.207 ug/l  
RT: 11.100 min Scan# 1555  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:164 Resp: 106305  
Ion Ratio Lower Upper  
164 100  
166 128.8 103.4 155.2  
129 101.8 79.2 118.8  
131 97.9 77.1 115.7

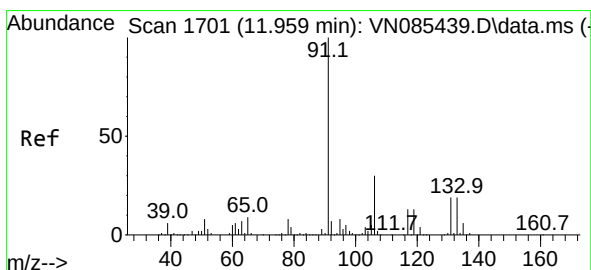
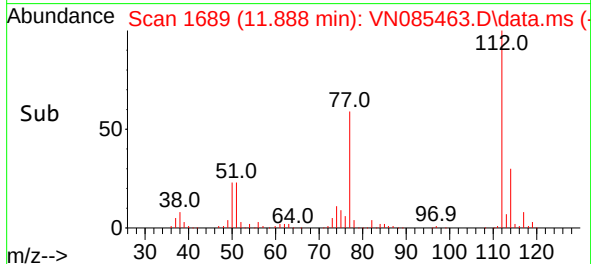
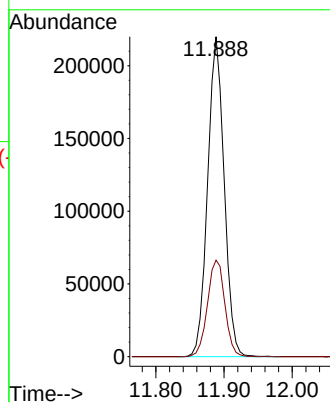
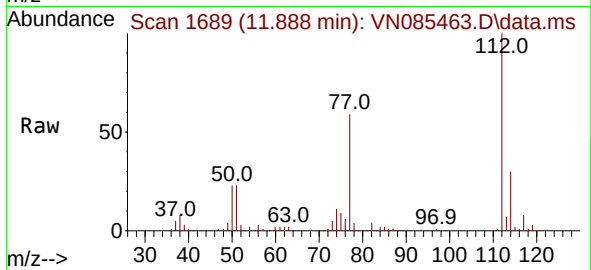




#65  
Chlorobenzene  
Concen: 51.313 ug/l  
RT: 11.888 min Scan# 1112  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

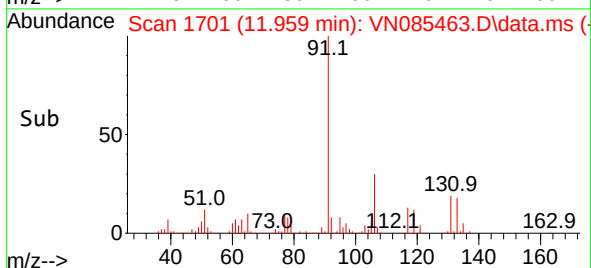
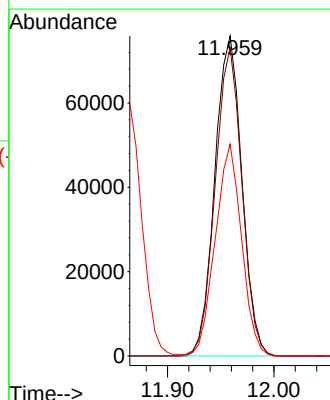
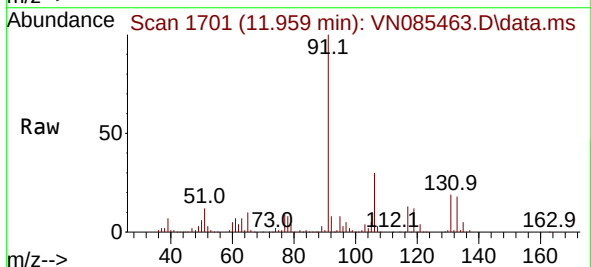
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

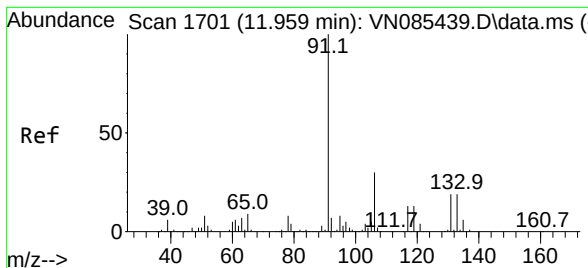
Tgt Ion:112 Resp: 371312  
Ion Ratio Lower Upper  
112 100  
114 30.2 25.3 37.9



#66  
1,1,1,2-Tetrachloroethane  
Concen: 50.351 ug/l  
RT: 11.959 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:131 Resp: 133724  
Ion Ratio Lower Upper  
131 100  
133 95.2 47.4 142.3  
119 64.4 33.1 99.5





#67

Ethyl Benzene

Concen: 56.469 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

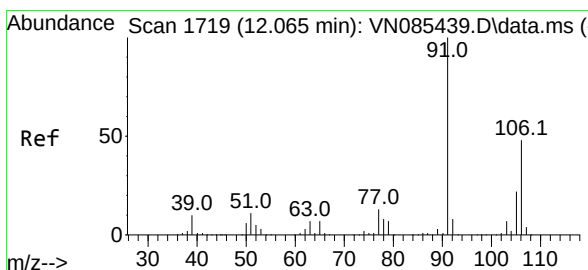
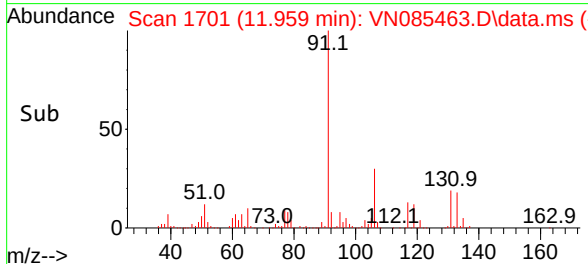
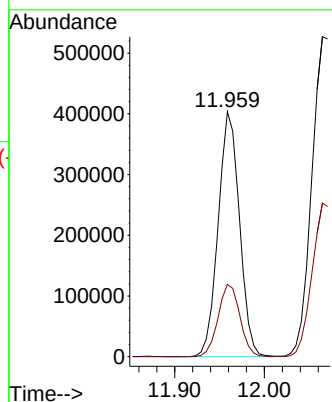
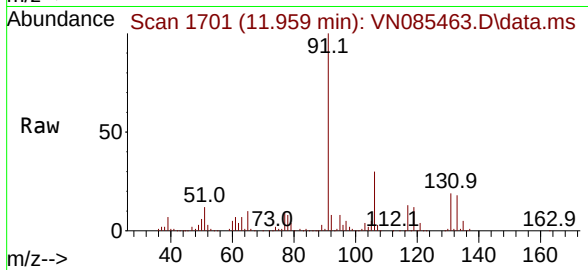
VSTDCCC050EC

Tgt Ion: 91 Resp: 665536

Ion Ratio Lower Upper

91 100

106 29.5 23.8 35.8



#68

m/p-Xylenes

Concen: 114.541 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. -0.000 min

Lab File: VN085463.D

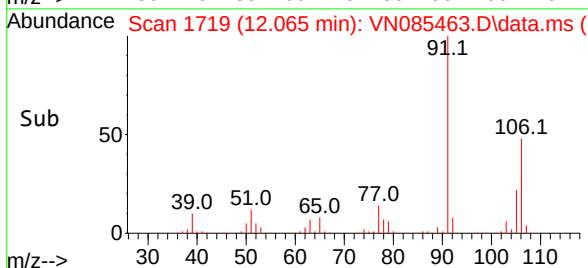
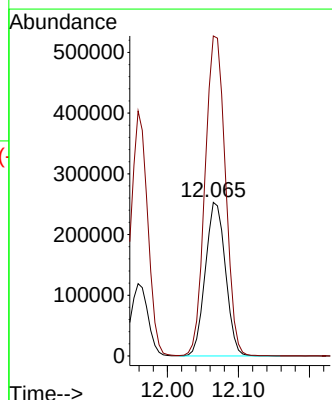
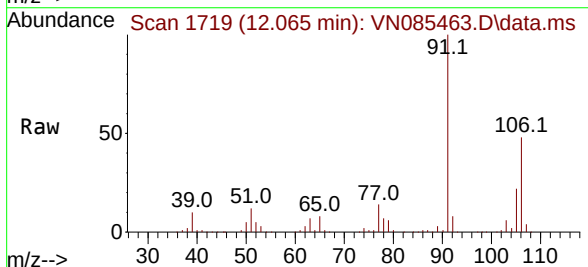
Acq: 15 Jan 2025 15:58

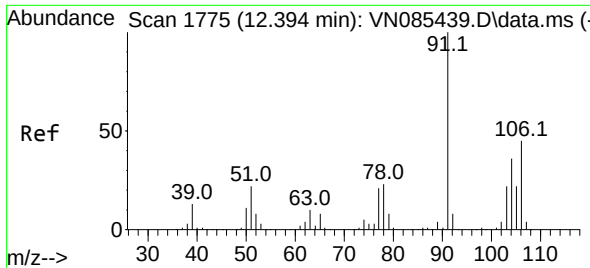
Tgt Ion:106 Resp: 498925

Ion Ratio Lower Upper

106 100

91 210.4 167.7 251.5

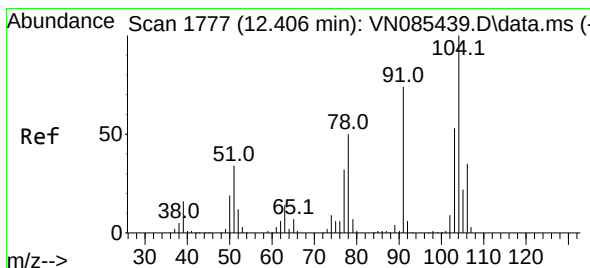
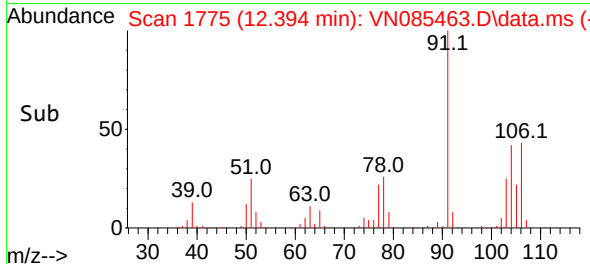
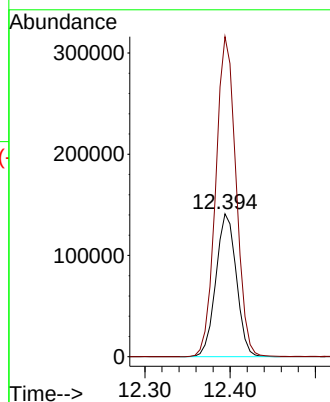
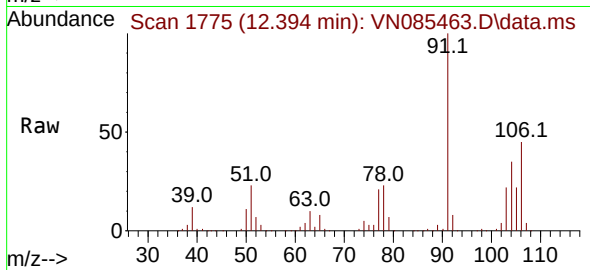




#69  
o-Xylene  
Concen: 56.724 ug/l  
RT: 12.394 min Scan# 1775  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

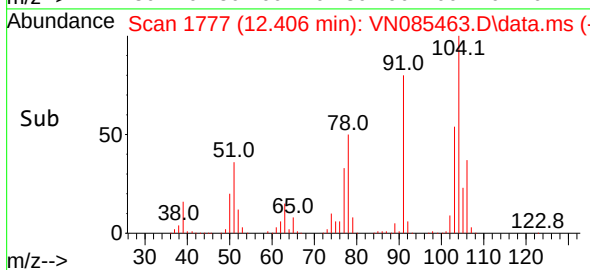
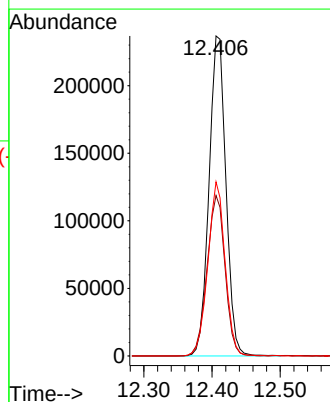
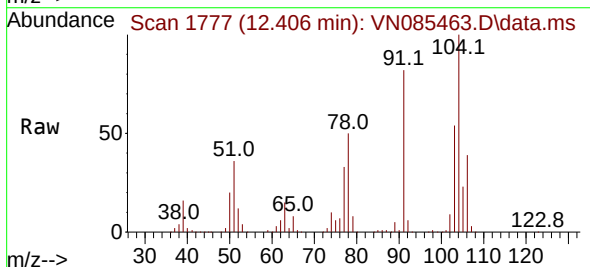
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:106 Resp: 236130  
Ion Ratio Lower Upper  
106 100  
91 222.0 110.4 331.2

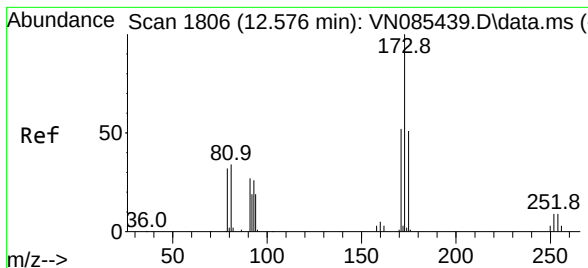


#70  
Styrene  
Concen: 59.312 ug/l  
RT: 12.406 min Scan# 1777  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:104 Resp: 408614  
Ion Ratio Lower Upper  
104 100  
78 53.4 42.5 63.7  
103 55.4 43.8 65.8







#71

Bromoform

Concen: 55.344 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

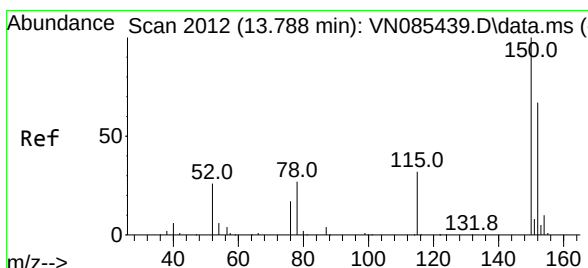
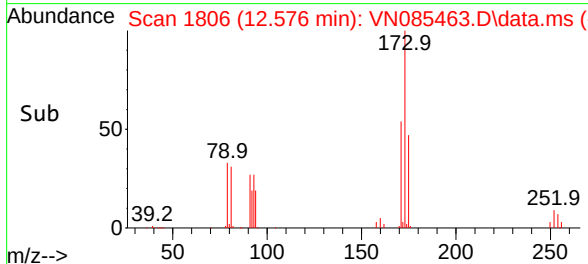
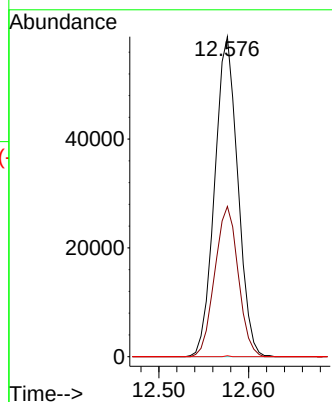
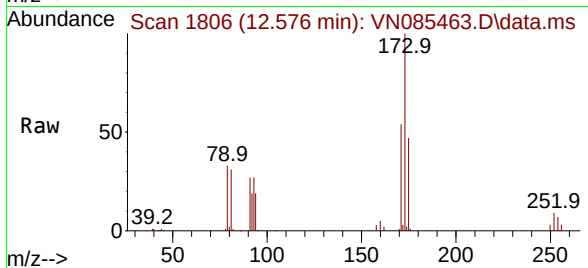
Tgt Ion:173 Resp: 105169

Ion Ratio Lower Upper

173 100

175 47.5 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: VN085463.D

Acq: 15 Jan 2025 15:58

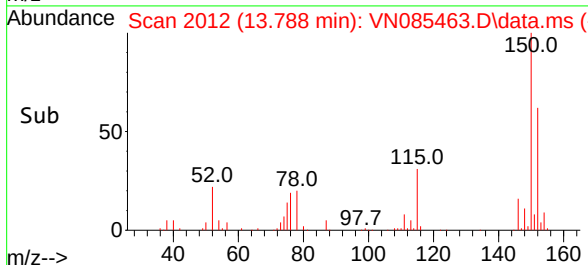
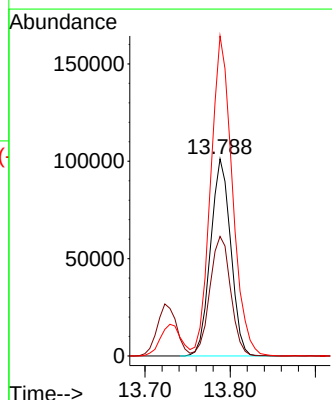
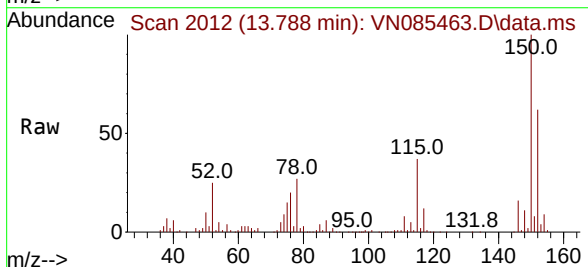
Tgt Ion:152 Resp: 166317

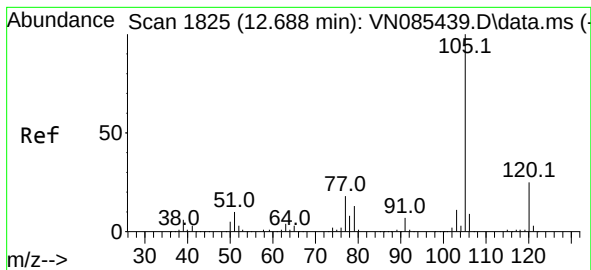
Ion Ratio Lower Upper

152 100

115 62.7 31.1 93.3

150 174.6 0.0 343.6





#73

Isopropylbenzene

Concen: 54.752 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.006 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

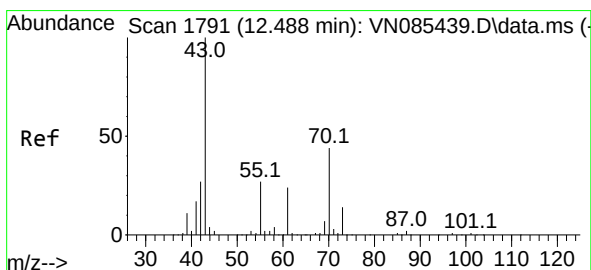
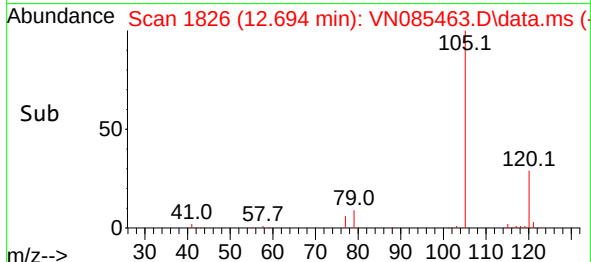
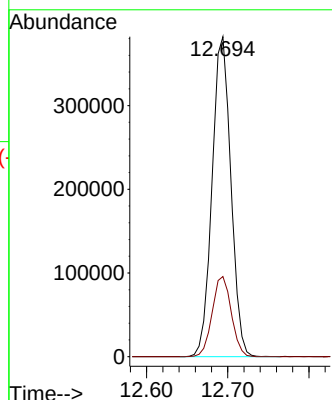
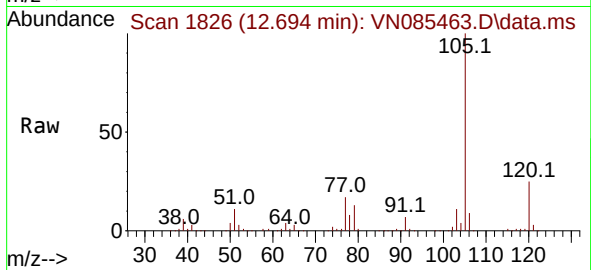
VSTDCCC050EC

Tgt Ion:105 Resp: 614595

Ion Ratio Lower Upper

105 100

120 25.5 12.8 38.3



#74

N-ethyl acetate

Concen: 56.244 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Tgt Ion: 43 Resp: 283775

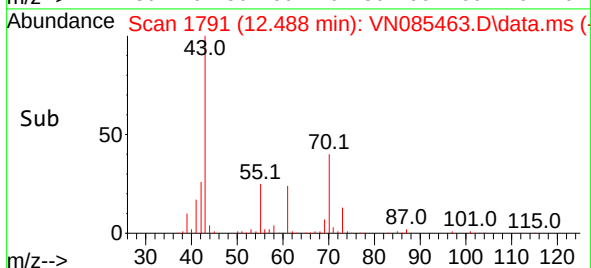
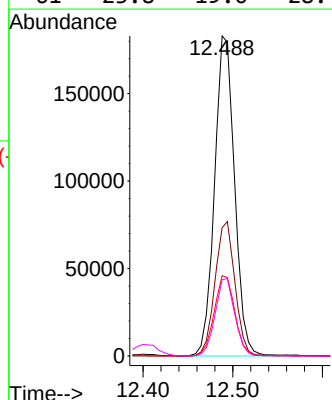
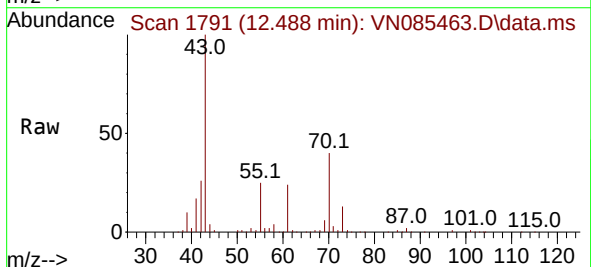
Ion Ratio Lower Upper

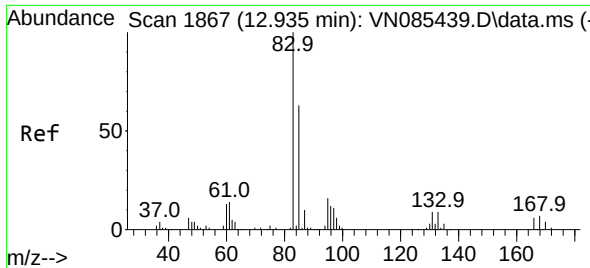
43 100

70 41.8 34.0 51.0

55 25.9 21.4 32.2

61 23.8 19.0 28.4

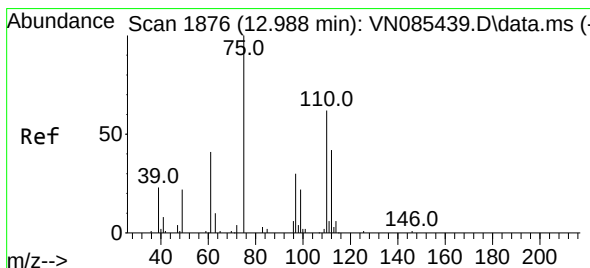
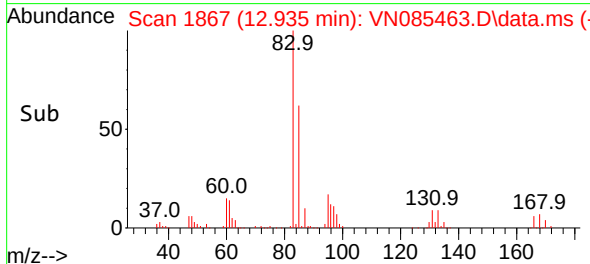
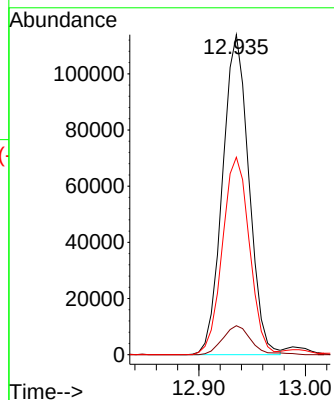
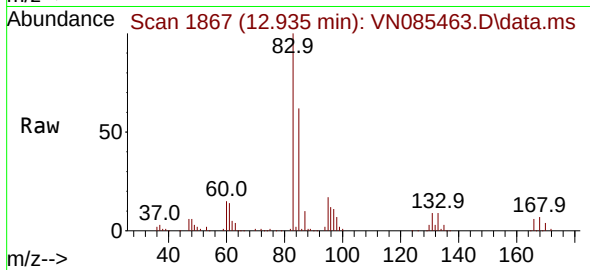




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 49.296 ug/l  
 RT: 12.935 min Scan# 1867  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

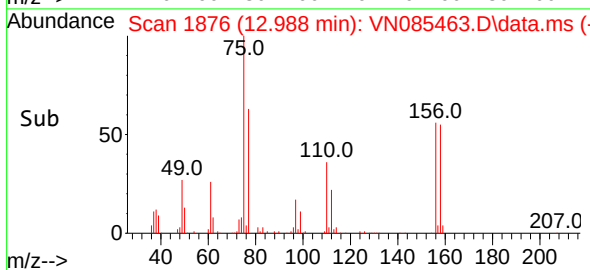
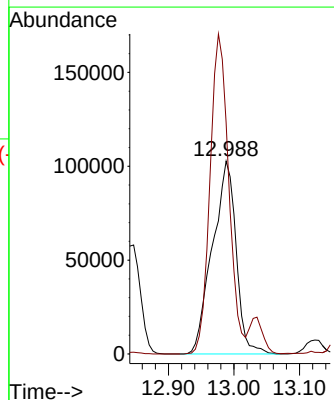
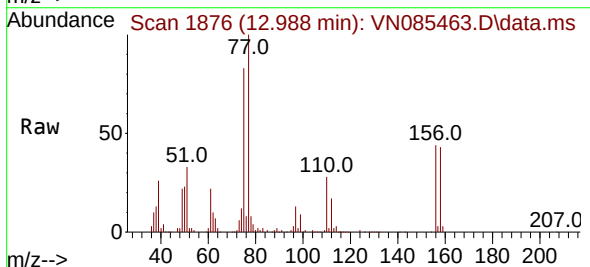
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

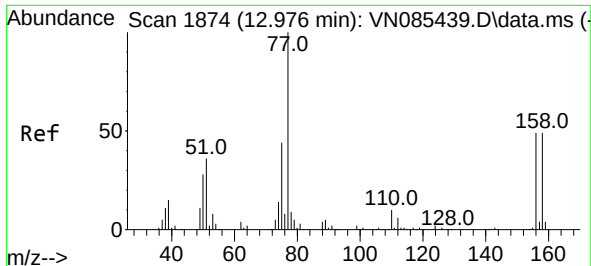
Tgt Ion: 83 Resp: 195465  
 Ion Ratio Lower Upper  
 83 100  
 131 9.7 4.8 14.4  
 85 63.5 32.2 96.6



#76  
 1,2,3-Trichloropropane  
 Concen: 76.171 ug/l  
 RT: 12.988 min Scan# 1876  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion: 75 Resp: 257490  
 Ion Ratio Lower Upper  
 75 100  
 77 131.3 109.7 329.2

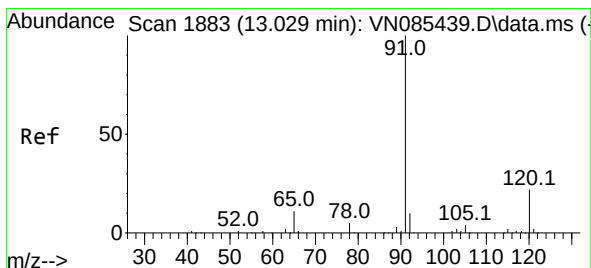
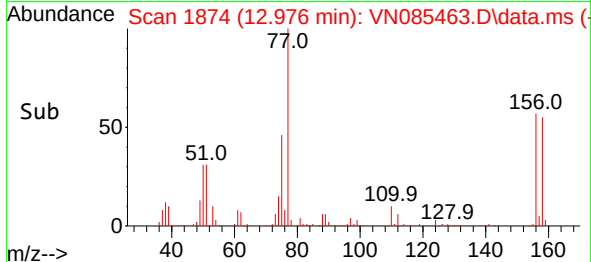
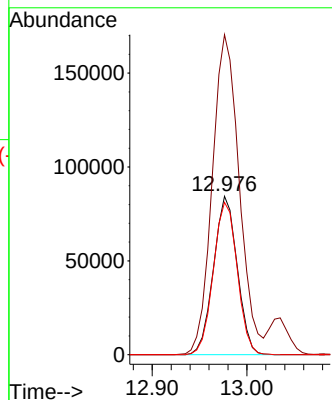
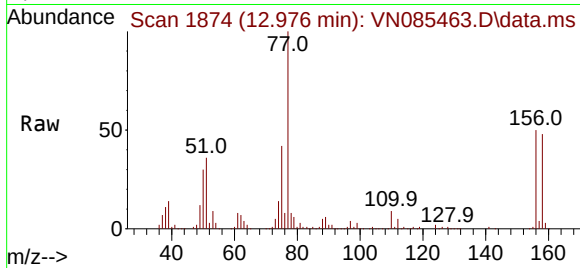




#77  
Bromobenzene  
Concen: 50.075 ug/l  
RT: 12.976 min Scan# 1874  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

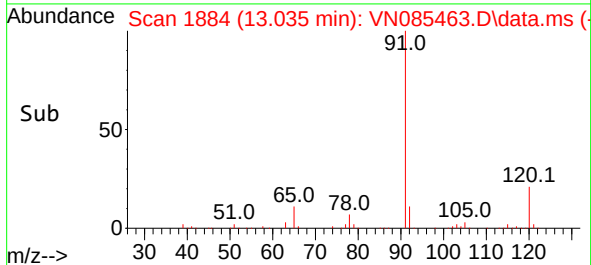
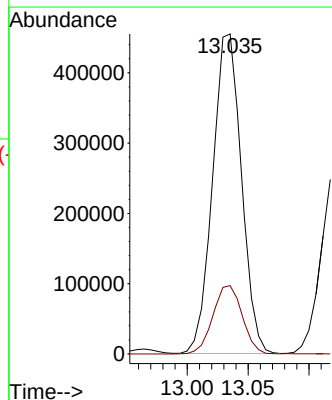
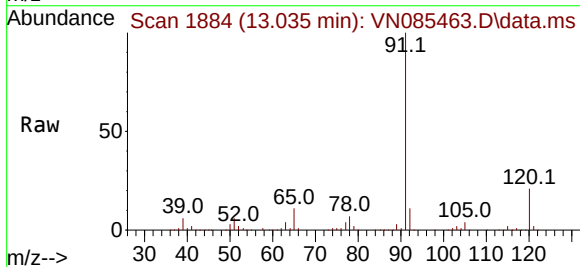
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

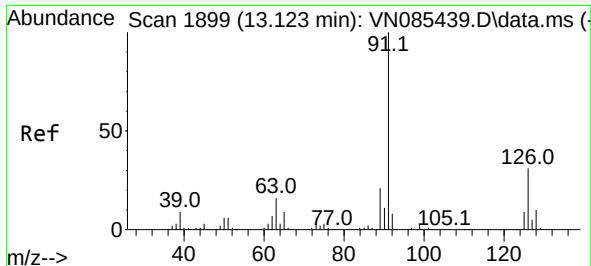
Tgt Ion:156 Resp: 146854  
Ion Ratio Lower Upper  
156 100  
77 230.3 114.1 342.4  
158 96.8 48.9 146.8



#78  
n-propylbenzene  
Concen: 56.324 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. 0.006 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 91 Resp: 748465  
Ion Ratio Lower Upper  
91 100  
120 21.8 10.9 32.6

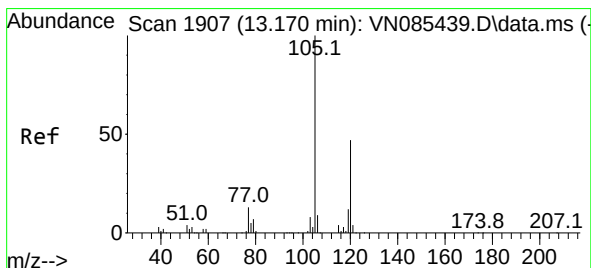
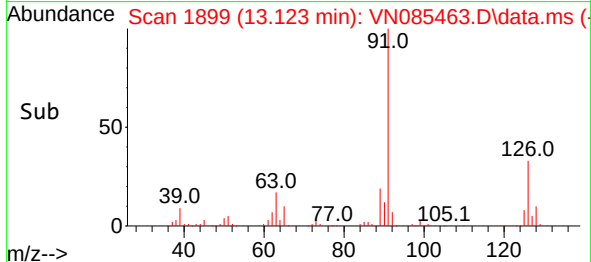
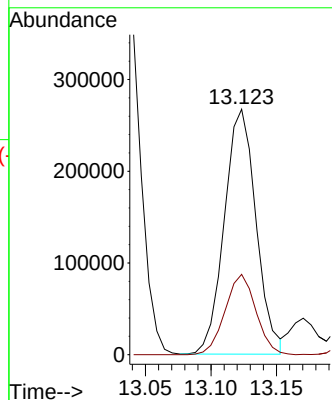
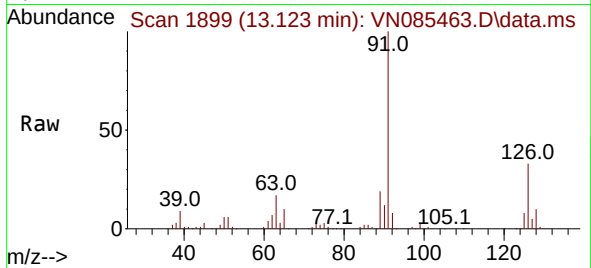




#79  
2-Chlorotoluene  
Concen: 52.351 ug/l  
RT: 13.123 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

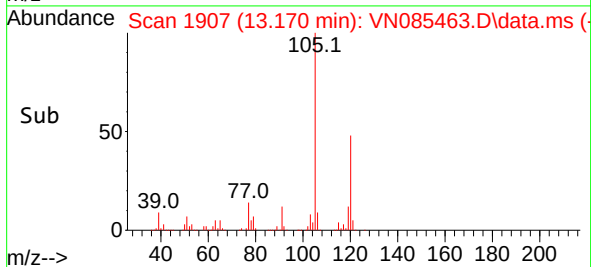
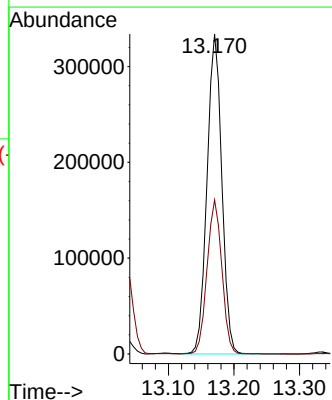
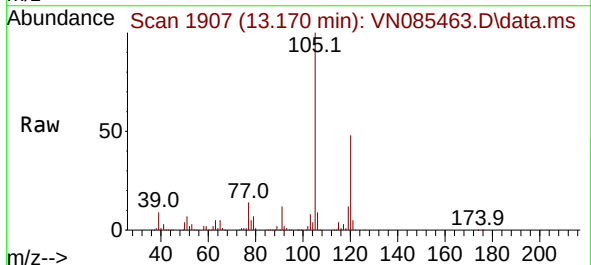
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

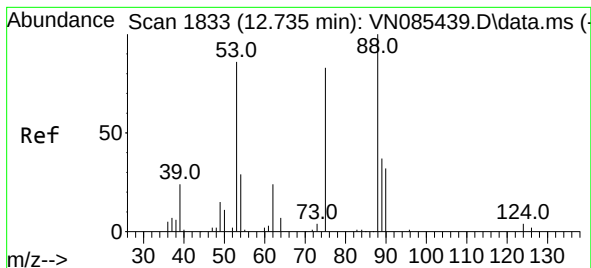
Tgt Ion: 91 Resp: 450235  
Ion Ratio Lower Upper  
91 100  
126 31.8 15.7 47.1



#80  
1,3,5-Trimethylbenzene  
Concen: 56.485 ug/l  
RT: 13.170 min Scan# 1907  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 105 Resp: 523728  
Ion Ratio Lower Upper  
105 100  
120 48.2 23.9 71.7

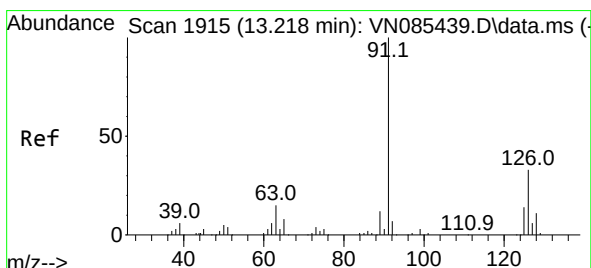
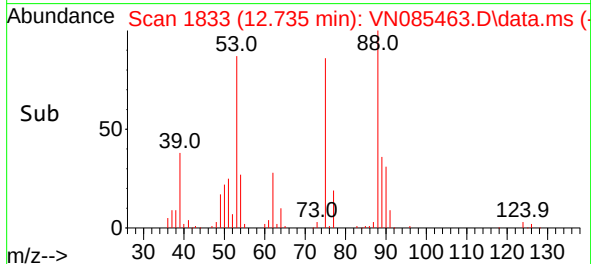
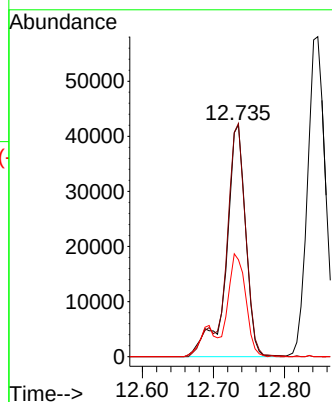
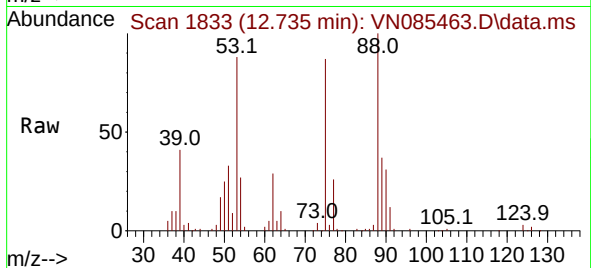




#81  
trans-1,4-Dichloro-2-butene  
Concen: 63.816 ug/l  
RT: 12.735 min Scan# 1833  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

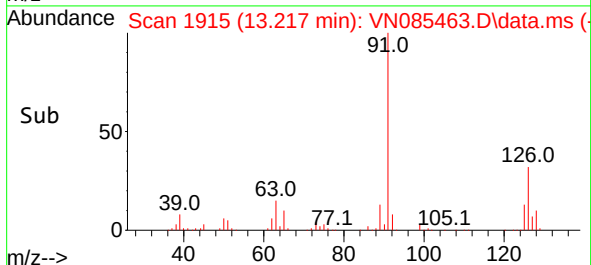
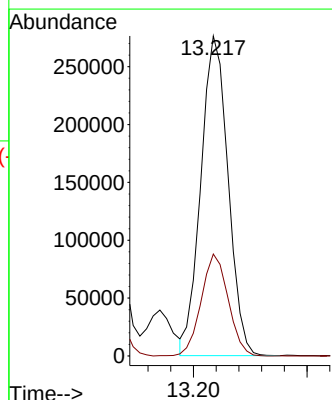
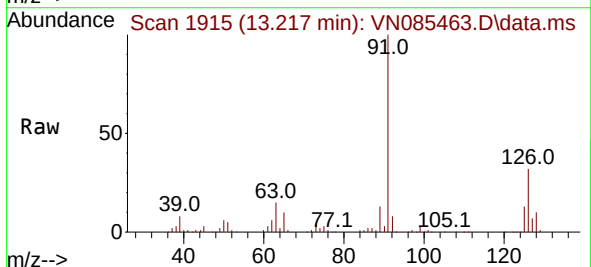
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

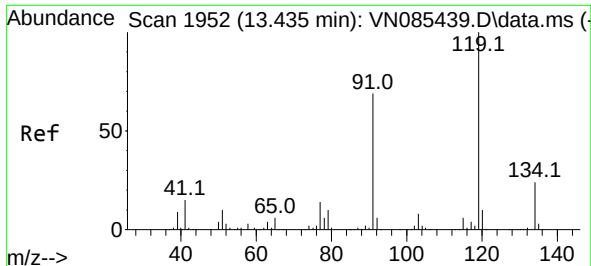
Tgt Ion: 75 Resp: 79734  
Ion Ratio Lower Upper  
75 100  
53 101.6 95.6 143.4  
89 40.6 37.0 55.6



#82  
4-Chlorotoluene  
Concen: 53.678 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 91 Resp: 459658  
Ion Ratio Lower Upper  
91 100  
126 31.6 15.9 47.7

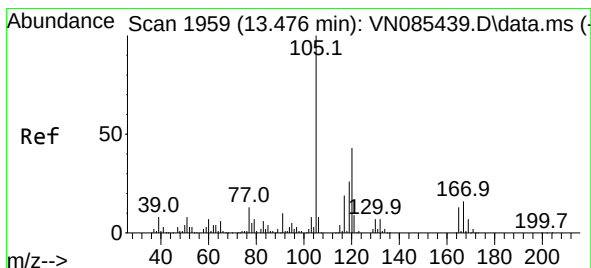
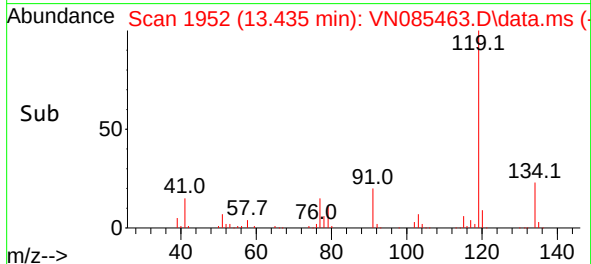
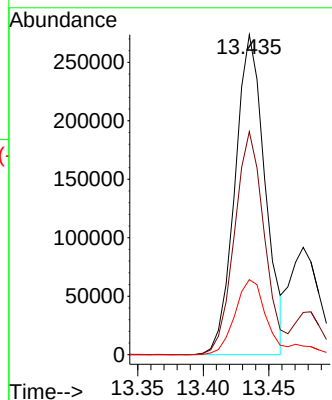
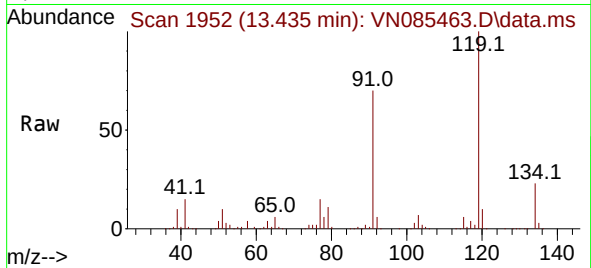




#83  
tert-Butylbenzene  
Concen: 56.211 ug/l  
RT: 13.435 min Scan# 1952  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

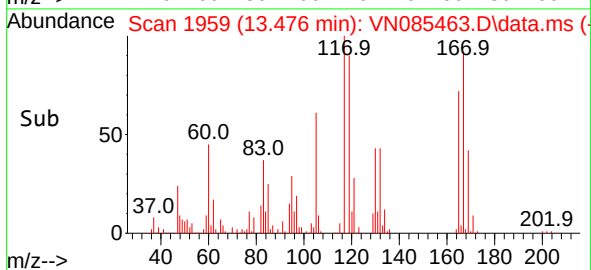
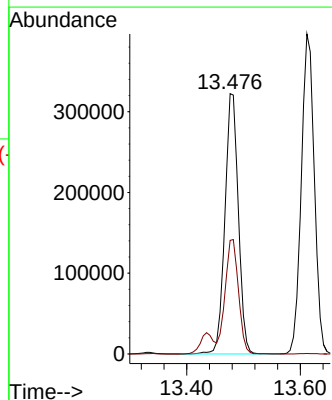
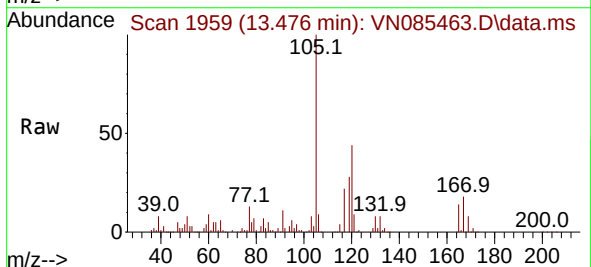
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

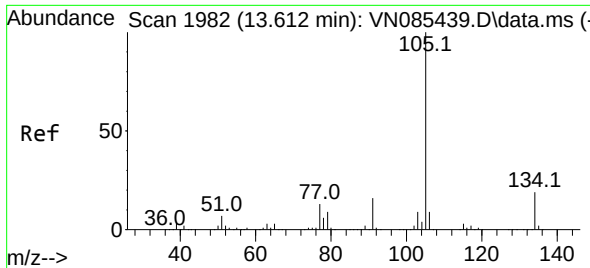
Tgt Ion:119 Resp: 437674  
Ion Ratio Lower Upper  
119 100  
91 69.9 35.1 105.3  
134 24.1 12.0 36.1



#84  
1,2,4-Trimethylbenzene  
Concen: 57.491 ug/l  
RT: 13.476 min Scan# 1959  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:105 Resp: 531276  
Ion Ratio Lower Upper  
105 100  
120 43.5 21.6 65.0

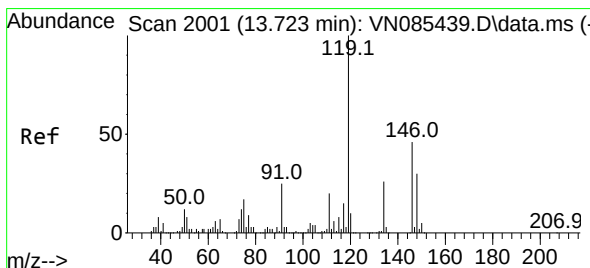
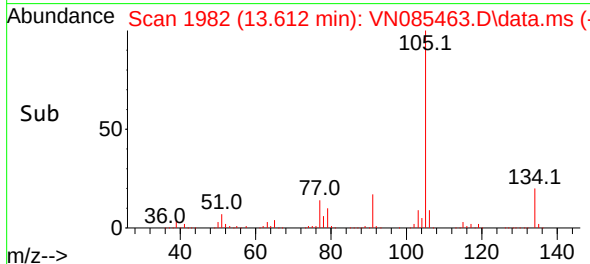
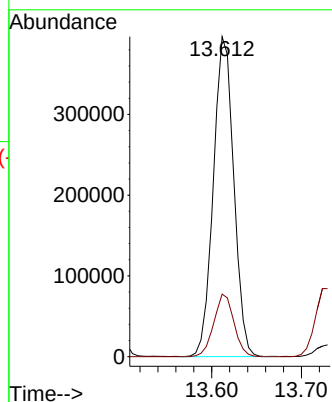
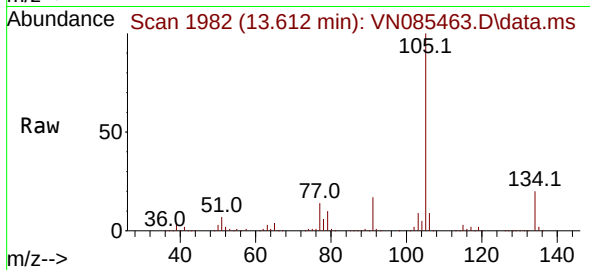




#85  
 sec-Butylbenzene  
 Concen: 58.063 ug/l  
 RT: 13.612 min Scan# 1982  
 Delta R.T. -0.000 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

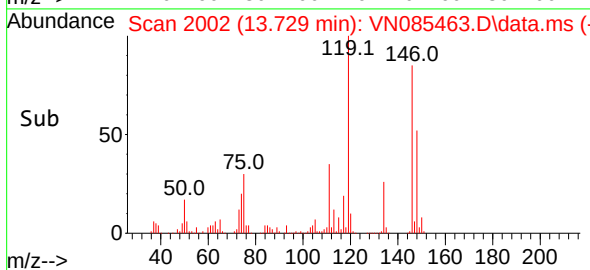
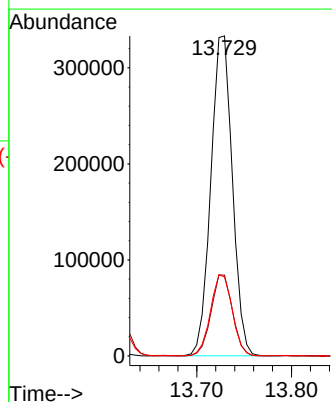
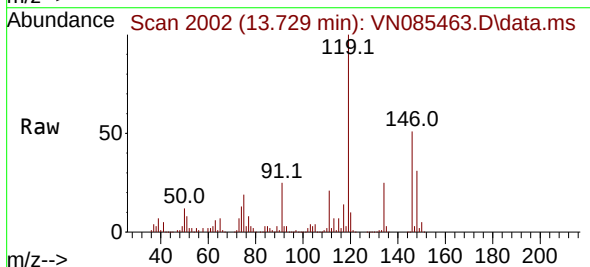
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Tgt Ion:105 Resp: 626587  
 Ion Ratio Lower Upper  
 105 100  
 134 19.2 9.7 28.9

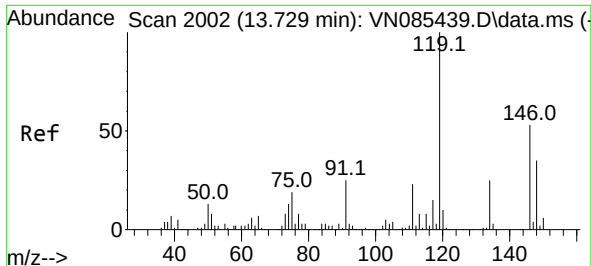


#86  
 p-Isopropyltoluene  
 Concen: 53.560 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.006 min  
 Lab File: VN085463.D  
 Acq: 15 Jan 2025 15:58

Tgt Ion:119 Resp: 525049  
 Ion Ratio Lower Upper  
 119 100  
 134 25.2 12.7 38.0  
 91 25.6 12.7 38.1



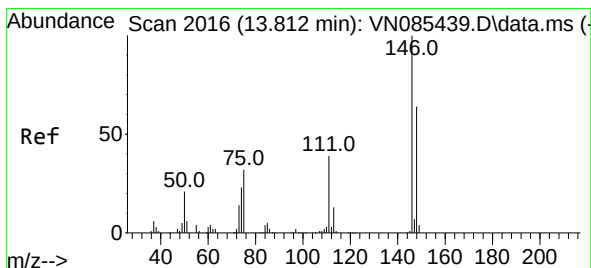
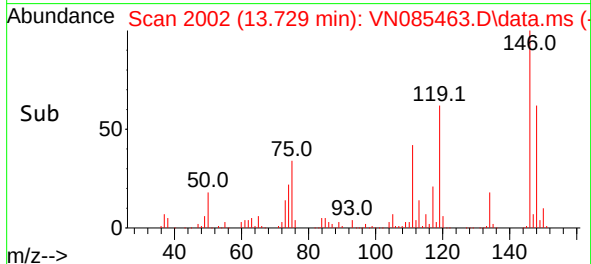
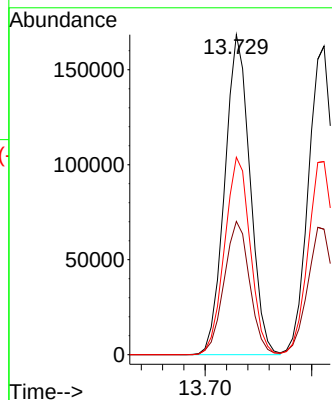
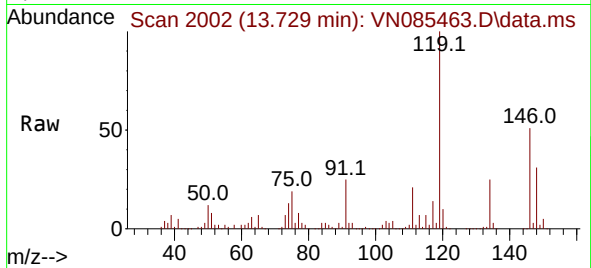




#87  
1,3-Dichlorobenzene  
Concen: 51.364 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

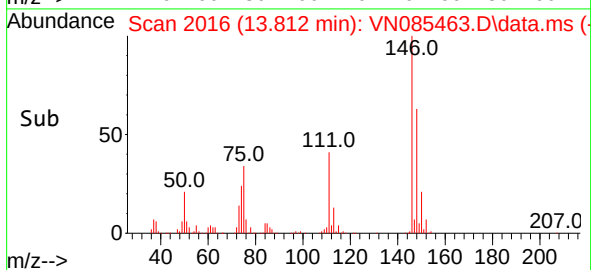
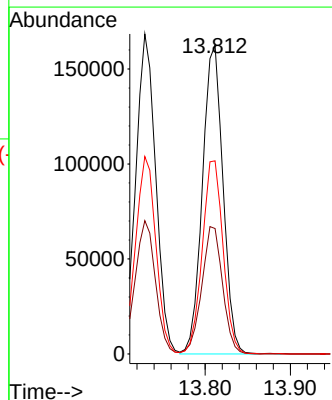
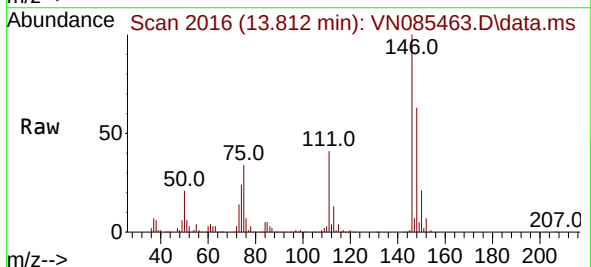
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

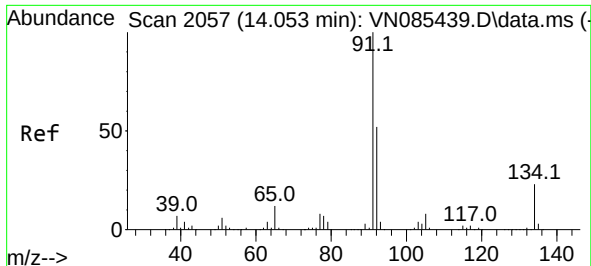
Tgt Ion:146 Resp: 277409  
Ion Ratio Lower Upper  
146 100  
111 42.2 21.4 64.3  
148 62.6 32.3 96.9



#88  
1,4-Dichlorobenzene  
Concen: 48.694 ug/l  
RT: 13.812 min Scan# 2016  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:146 Resp: 272594  
Ion Ratio Lower Upper  
146 100  
111 41.7 21.3 63.7  
148 63.5 32.4 97.0

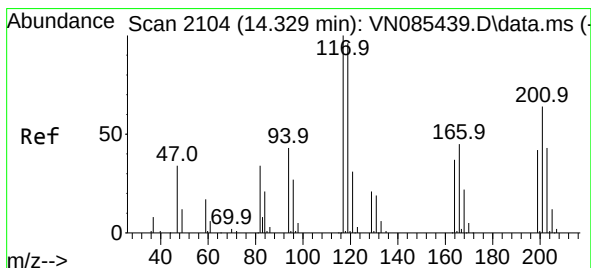
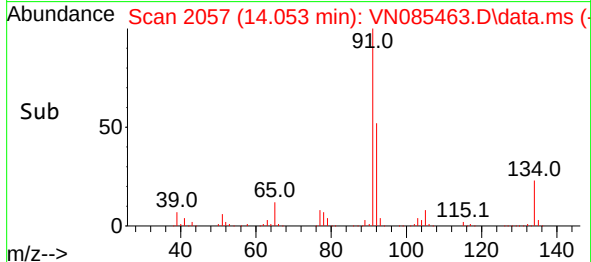
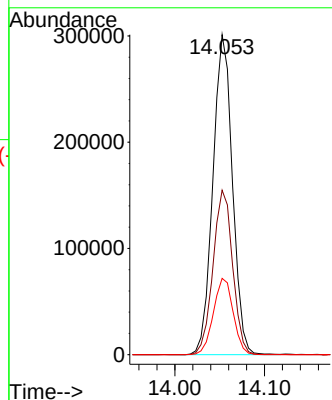
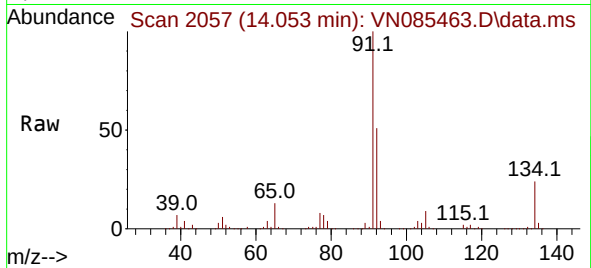




#89  
n-Butylbenzene  
Concen: 58.802 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

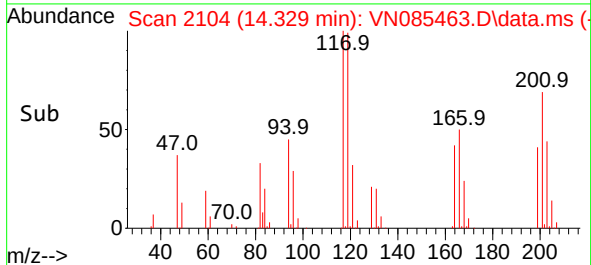
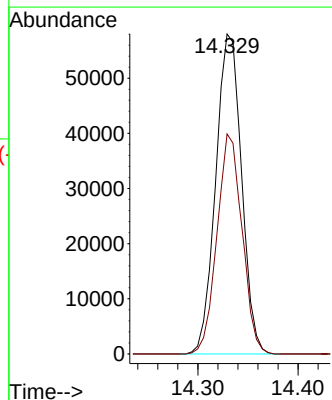
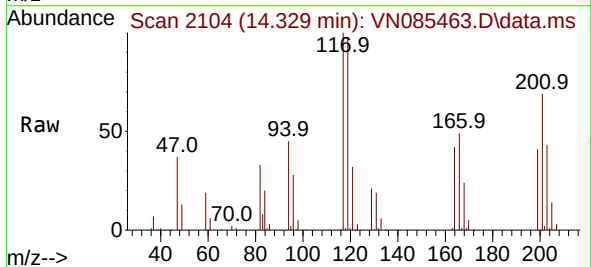
Instrument :  
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ClientSampleId :  
VSTDCCC050EC

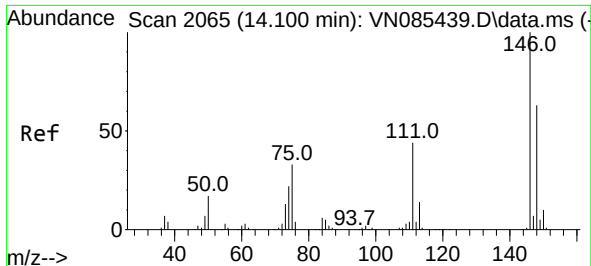
Tgt Ion: 91 Resp: 455243  
Ion Ratio Lower Upper  
91 100  
92 51.7 25.8 77.3  
134 24.2 11.7 35.1



#90  
Hexachloroethane  
Concen: 50.491 ug/l  
RT: 14.329 min Scan# 2104  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 117 Resp: 103728  
Ion Ratio Lower Upper  
117 100  
201 66.7 33.7 101.0

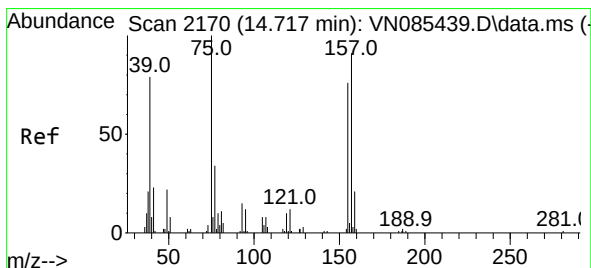
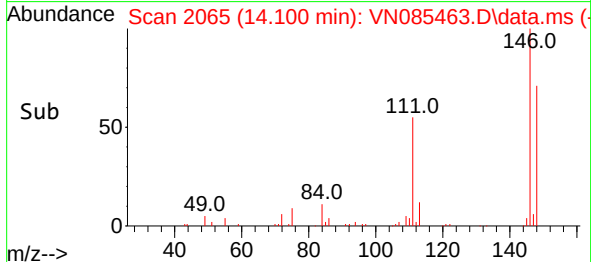
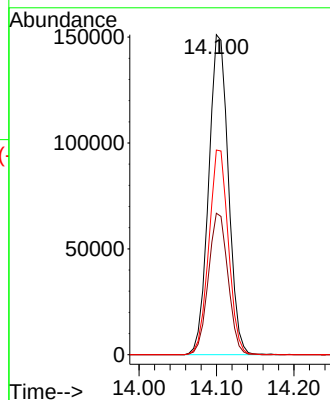
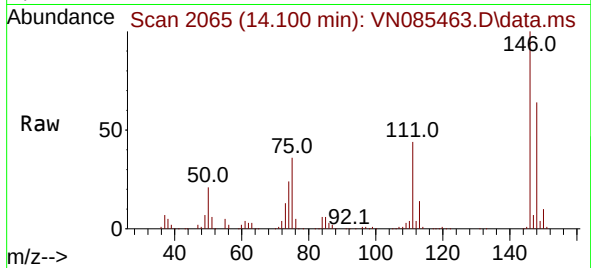




#91  
1,2-Dichlorobenzene  
Concen: 49.494 ug/l  
RT: 14.100 min Scan# 2065  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

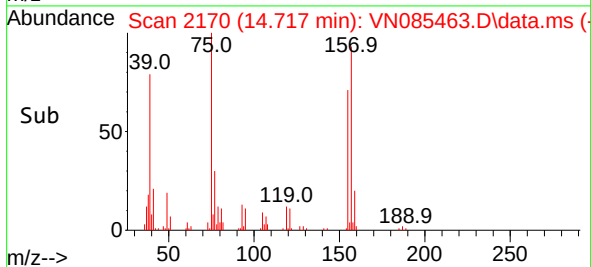
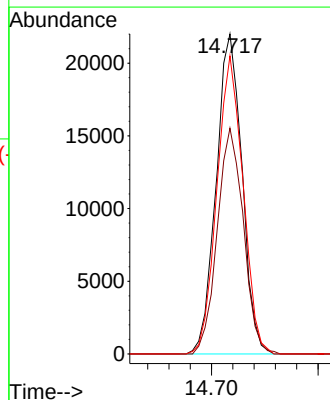
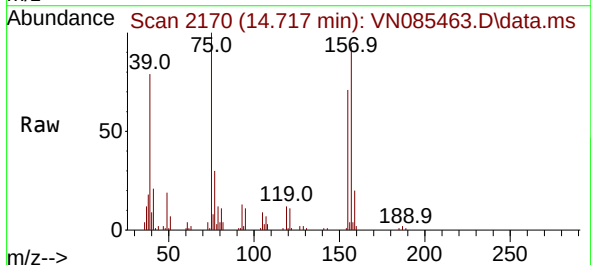
Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

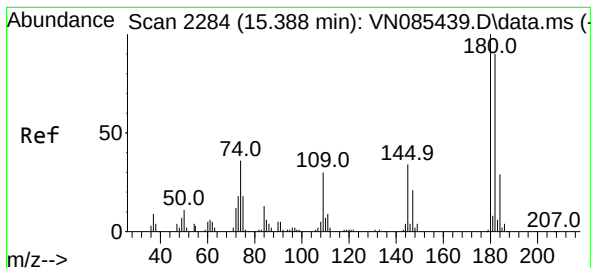
Tgt Ion:146 Resp: 266635  
Ion Ratio Lower Upper  
146 100  
111 44.1 21.7 65.1  
148 63.3 31.4 94.2



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 51.081 ug/l  
RT: 14.717 min Scan# 2170  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion: 75 Resp: 36986  
Ion Ratio Lower Upper  
75 100  
155 71.4 36.4 109.2  
157 94.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 53.324 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

Instrument :

MSVOA\_N

ClientSampleId :

VSTDCCC050EC

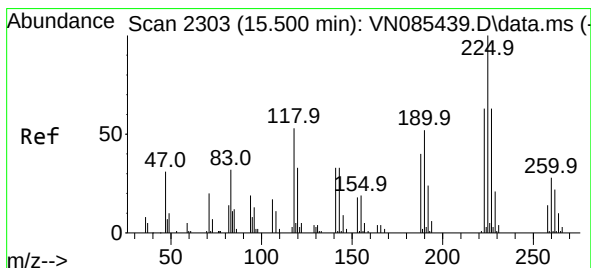
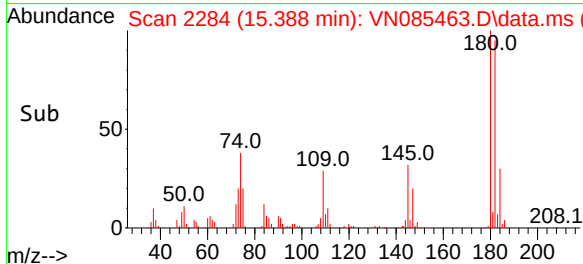
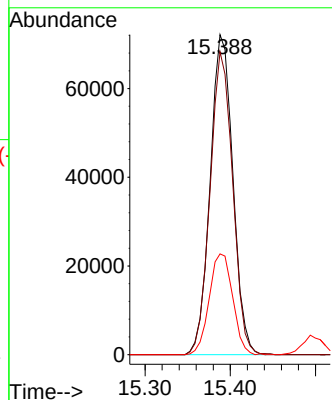
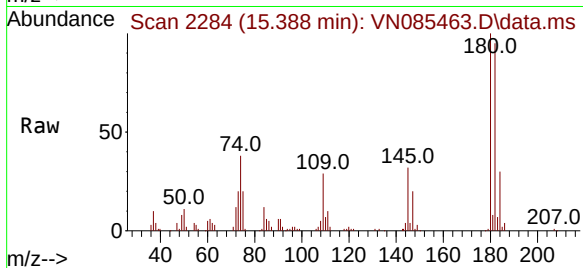
Tgt Ion:180 Resp: 133515

Ion Ratio Lower Upper

180 100

182 94.2 46.8 140.3

145 32.5 16.0 48.0



#94

Hexachlorobutadiene

Concen: 48.771 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085463.D

Acq: 15 Jan 2025 15:58

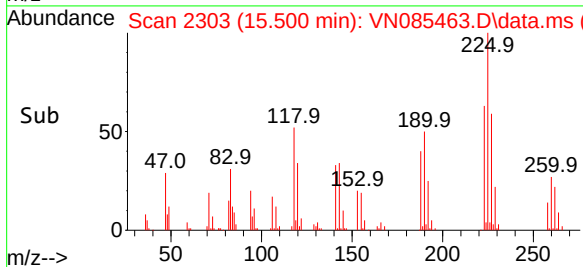
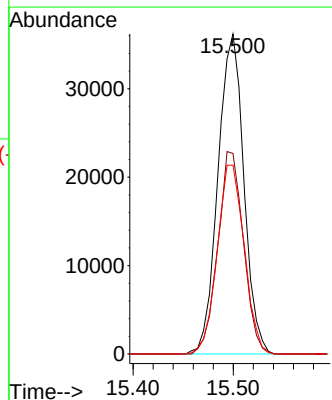
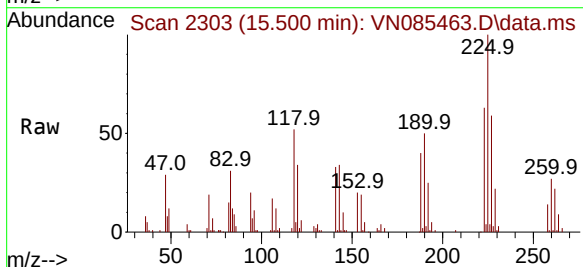
Tgt Ion:225 Resp: 64832

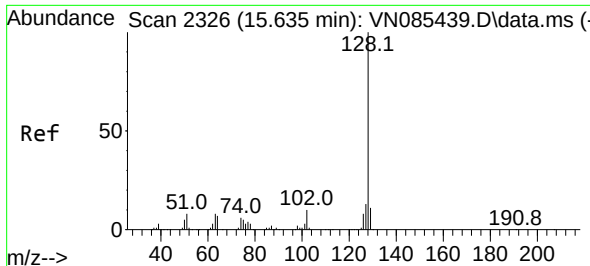
Ion Ratio Lower Upper

225 100

223 62.7 30.7 92.1

227 61.7 30.9 92.5

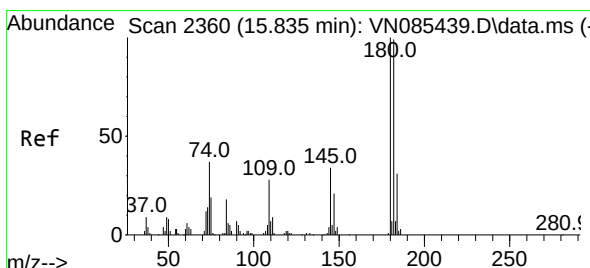
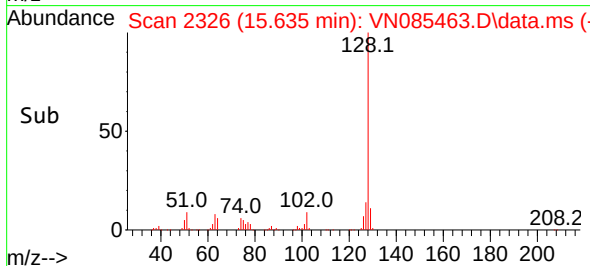
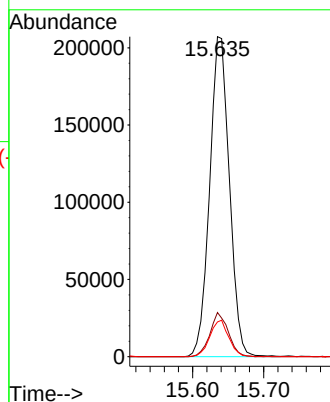
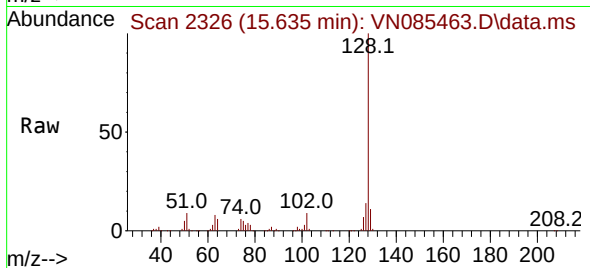




#95  
Naphthalene  
Concen: 53.462 ug/l  
RT: 15.635 min Scan# 2326  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Tgt Ion:128 Resp: 399446  
Ion Ratio Lower Upper  
128 100  
127 12.9 10.6 16.0  
129 11.0 8.8 13.2



#96  
1,2,3-Trichlorobenzene  
Concen: 50.856 ug/l  
RT: 15.835 min Scan# 2360  
Delta R.T. -0.000 min  
Lab File: VN085463.D  
Acq: 15 Jan 2025 15:58

Tgt Ion:180 Resp: 128843  
Ion Ratio Lower Upper  
180 100  
182 93.6 47.4 142.2  
145 34.0 16.9 50.7

