

**DATA PACKAGE  
VOLATILE ORGANICS**

**PROJECT NAME : R36719**

**TETRA TECH, EMI  
240 Continental Drive, Suite 200**

**Newark, DE - 19713  
Phone No: 302-738-7551**

**ORDER ID : P5294  
ATTENTION : Ava Heiss**



**Laboratory Certification ID # 20012**



|                                                |     |
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**Order ID :** P5294

**Project ID :** R36719

**Client :** Tetra Tech, EMI

### Lab Sample Number

P5294-01  
P5294-02  
P5294-03

### Client Sample Number

C0AB6  
C0AB7  
C0AB8

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: 12/26/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





# SHIPPING DOCUMENTS

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## USEPA Lab Copy

DateShipped: 12/12/2024

CarrierName: FedEx

AirbillNo: 770554876381

## CHAIN OF CUSTODY RECORD

Site #: B3DA

DAS #: R36719

**No: 3-121024-132100-0016**

Cooler #:

**Lab: Alliance Technical Group**

Lab Phone: 908-789-8900

[illegible]

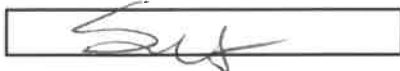
**Special Instructions:**

**SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #**

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time       | Received by (Signature and Organization)                                             | Date/Time        | Sample Condition Upon Receipt |
|--------------|----------------------------------------------|-----------------|--------------------------------------------------------------------------------------|------------------|-------------------------------|
|              | Bob Bentz                                    | 12/12/2024 0755 |  | 1000<br>12-13-24 |                               |
|              |                                              |                 |                                                                                      |                  |                               |
|              |                                              |                 |                                                                                      |                  |                               |
|              |                                              |                 |                                                                                      |                  |                               |

|                                                                                                                                                                                                                                                                                            |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|-------------------------|------------------------------------|------------------------------------|---------------------------|-------------------------|-----------------------------------------------------------------------------|-----------------------------------|--------------|---------|----------------------------------|----------------------------------|-------------|-------|---------------------|--|--------------------|--|----------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|
| Client Contact Information                                                                                                                                                                                                                                                                 |                |                          |                         | Bottle Order ID : <b>B2409035</b>  |                                    |                           |                         | Courier :                                                                   |                                   |              |         | _____ of _____ COCs              |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Client ID : <b>TETR16</b> Project ID : <b>R36671</b>                                                                                                                                                                                                                                       |                |                          |                         | Sampler Name(s) :                  |                                    |                           |                         | Analysis                                                                    |                                   |              |         | Matrix                           |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Customer Name : <b>Tetra Tech, EMI</b><br>Address : <b>240 Continental Drive, Suite 200</b><br>City : <b>Newark</b><br>State : <b>DE</b><br>Zip Code : <b>19713</b><br>Country :                                                                                                           |                |                          |                         | Project Manager : <b>AVA HEISS</b> |                                    |                           |                         | <b>AIR ANALYSIS<br/>CHAIN-OF-CUSTODY</b><br><br><b>Individual Certified</b> |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            |                |                          |                         | Phone Number : <b>302-738-7551</b> |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            |                |                          |                         | Fax Number : <b>302-454-5980</b>   |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            |                |                          |                         | Site Details:                      |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            |                |                          |                         | Analysis Turnaround Time           |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Standard : <b>10 business days</b> <b>OR</b>                                                                                                                                                                                                                                               |                |                          |                         | Data Package Type :                |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Rush (Specify): _____ <b>Days</b>                                                                                                                                                                                                                                                          |                |                          |                         | EDD Type :                         |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Sample Identification                                                                                                                                                                                                                                                                      | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start)  | Can Vacuum in Field ("Hg) (Stop)** | Outdoor Temp. (F) (Start) | Indoor Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab)                                           | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID  |                                  | Flow Controller Readout (ml/min) | Can Cert ID | TO-15 |                     |  | Indoor/Ambient Air |  | Soil Gas |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| ACVI-AA-01                                                                                                                                                                                                                                                                                 | 12/19/24       | 1010                     | 0829                    | -30                                | <7                                 | 52°F                      | 32°                     | -30                                                                         | -5-9                              | 10567        | 10054   | 6 L                              | 4.16                             | VL041545.D  | X     |                     |  | X                  |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Temperature (Fahrenheit) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table> |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              | Ambient | Maximum                          | Minimum                          | Start       |       |                     |  | Stop               |  |          |  | GC/MS Analyst Signature (TO-15) <span style="float: right; border: 1px solid black; padding: 5px;">[Signature]</span>                                    |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            | Ambient        | Maximum                  | Minimum                 |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Start                                                                                                                                                                                                                                                                                      |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Stop                                                                                                                                                                                                                                                                                       |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Pressure (Inches of Hg) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table>  |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              | Ambient | Maximum                          | Minimum                          | Start       |       |                     |  | Stop               |  |          |  | ** Submittal of this COC indicates approval of the analysis based on existing conditions.<br><br>Please follow the instructions on the back of this COC. |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                            | Ambient        | Maximum                  | Minimum                 |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Start                                                                                                                                                                                                                                                                                      |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Stop                                                                                                                                                                                                                                                                                       |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Special Instructions/QC Requirements & Comments :                                                                                                                                                                                                                                          |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Suspected Contamination:      High      Medium      Low      PID Readings:                                                                                                                                                                                                                 |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Sampling site (State): <b>WV</b>                                                                                                                                                                                                                                                           |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Quick Connector required : <b>NO</b>                                                                                                                                                                                                                                                       |                |                          |                         |                                    |                                    |                           |                         |                                                                             |                                   |              |         |                                  |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Canisters Shipped by: <b>Sam</b>                                                                                                                                                                                                                                                           |                |                          |                         | Date/Time: <b>11/25/24</b>         |                                    |                           |                         | Canisters Received by: <b>[Signature]</b>                                   |                                   |              |         | Date/Time: <b>12-13-24 10:20</b> |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Samples Relinquished by: <b>B. B. B. B.</b>                                                                                                                                                                                                                                                |                |                          |                         | Date/Time: <b>12/12/24 0634</b>    |                                    |                           |                         | Received by: <b>[Signature]</b>                                             |                                   |              |         | Date/Time:                       |                                  |             |       | <b>B2409035 - 1</b> |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |
| Relinquished by:                                                                                                                                                                                                                                                                           |                |                          |                         | Date/Time:                         |                                    |                           |                         | Received by:                                                                |                                   |              |         | Date/Time:                       |                                  |             |       |                     |  |                    |  |          |  |                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |

|                                                                                                                                                                                                                                                                                    |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|-------------------------|------------------------------------|------------------------------------|----------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------|---------|---------------------------------|----------------------------------|-------------|-------|----------------------|----------|------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| Client Contact Information                                                                                                                                                                                                                                                         |                |                          |                         | Bottle Order ID : <b>B2409035</b>  |                                    |                            |                           | Courier :                                                                                                                        |                                   |              |         | _____ of _____ COCs             |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Client ID : <b>TETR16</b>                                                                                                                                                                                                                                                          |                |                          |                         | Project ID : <b>R36671</b>         |                                    |                            |                           | Sampler Name(s) :                                                                                                                |                                   |              |         | Analysis                        |                                  | Matrix      |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Customer Name : <b>Tetra Tech, EMI</b><br><br>Address : <b>240 Continental Drive, Suite 200</b><br><br>City : <b>Newark</b><br><br>State : <b>DE</b><br><br>Zip Code : <b>19713</b><br><br>Country :                                                                               |                |                          |                         | Project Manager : <b>AVA HEISS</b> |                                    |                            |                           | <div style="text-align: center;"> <b>AIR ANALYSIS</b><br/> <b>CHAIN-OF-CUSTODY</b><br/> <br/> <b>Individual Certified</b> </div> |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    |                |                          |                         | Phone Number : <b>302-738-7551</b> |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    |                |                          |                         | Fax Number : <b>302-454-5980</b>   |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    |                |                          |                         | Site Details:                      |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    |                |                          |                         | Analysis Turnaround Time           |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Standard : <b>10 business days</b> <b>OR</b>                                                                                                                                                                                                                                       |                |                          |                         | Data Package Type :                |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Rush (Specify): <b>Days</b>                                                                                                                                                                                                                                                        |                |                          |                         | EDD Type :                         |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Sample Identification                                                                                                                                                                                                                                                              | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start)  | Can Vacuum in Field ("Hg) (Stop)** | Interior Temp. (F) (Start) | Interior Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab)                                                                                                | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID  |                                 | Flow Controller Readout (ml/min) | Can Cert ID | TO-15 | Indoor/Ambinet Air   | Soil Gas |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| ACVS-JA-01-120241210                                                                                                                                                                                                                                                               | 12/19/24       | 0845                     | 0845                    | -30                                | -7                                 | 72°F                       | 72°F                      | -30                                                                                                                              | -75                               | 10520        | 10401   | 6 L                             | 4.16                             | VL041614.D  | X     | X                    |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| <div style="text-align: center;">Temperature (Fahrenheit)</div> <table border="1"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table> |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              | Ambient | Maximum                         | Minimum                          | Start       |       |                      |          | Stop |  |  |  | <div style="text-align: center;">GC/MS Analyst Signature (TO-15)</div> <div style="text-align: right;">  </div>                |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    | Ambient        | Maximum                  | Minimum                 |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Start                                                                                                                                                                                                                                                                              |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Stop                                                                                                                                                                                                                                                                               |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| <div style="text-align: center;">Pressure (Inches of Hg)</div> <table border="1"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table>  |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              | Ambient | Maximum                         | Minimum                          | Start       |       |                      |          | Stop |  |  |  | <div style="text-align: center;"> <b>** Submittal of this COC indicates approval of the analysis based on existing conditions.</b><br/><br/> <b>Please follow the instructions on the back of this COC.</b> </div> |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                    | Ambient        | Maximum                  | Minimum                 |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Start                                                                                                                                                                                                                                                                              |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Stop                                                                                                                                                                                                                                                                               |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Special Instructions/QC Requirements & Comments :                                                                                                                                                                                                                                  |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Suspected Contamination:      High      Medium      Low      PID Readings:                                                                                                                                                                                                         |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Sampling site (State): <b>NJ</b>                                                                                                                                                                                                                                                   |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Quick Connector required : <b>No</b>                                                                                                                                                                                                                                               |                |                          |                         |                                    |                                    |                            |                           |                                                                                                                                  |                                   |              |         |                                 |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Canisters Shipped by: <b>Sam</b>                                                                                                                                                                                                                                                   |                |                          |                         | Date/Time: <b>12/25/24</b>         |                                    |                            |                           | Canisters Received by:                       |                                   |              |         | Date/Time: <b>12-13-24 1000</b> |                                  |             |       | <b>B2409035 - 12</b> |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Samples Relinquished by: <b>Bob B</b>                                                                                                                                                                                                                                              |                |                          |                         | Date/Time: <b>12/21/24 0639</b>    |                                    |                            |                           | Received by:                                                                                                                     |                                   |              |         | Date/Time:                      |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |
| Relinquished by:                                                                                                                                                                                                                                                                   |                |                          |                         | Date/Time:                         |                                    |                            |                           | Received by:                                                                                                                     |                                   |              |         | Date/Time:                      |                                  |             |       |                      |          |      |  |  |  |                                                                                                                                                                                                                    |  |  |  |  |  |  |  |

|                                                                                                                                                                                                      |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|-------------------------|----------------------------------------------|------------------------------------|----------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|----------------------------------|-------------|---|---------------------|----------|--|--|---|
| Client Contact Information                                                                                                                                                                           |                |                          |                         | Bottle Order ID : <b>B2409035</b>            |                                    |                            |                           | Courier :                                                                                                    |                                   |                                                                                                                                                          |        | _____ of _____ COCs        |                                  |             |   |                     |          |  |  |   |
| Client ID : <b>TETR16</b>                                                                                                                                                                            |                |                          |                         | Project ID : <b>R36671</b>                   |                                    |                            |                           | Sampler Name(s) :                                                                                            |                                   |                                                                                                                                                          |        | Analysis                   |                                  | Matrix      |   |                     |          |  |  |   |
| Customer Name : <b>Tetra Tech, EMI</b><br><br>Address : <b>240 Continental Drive, Suite 200</b><br><br>City : <b>Newark</b><br><br>State : <b>DE</b><br><br>Zip Code : <b>19713</b><br><br>Country : |                |                          |                         | Project Manager : <b>AVA HEISS</b>           |                                    |                            |                           | <b>AIR ANALYSIS<br/>CHAIN-OF-CUSTODY</b><br><br><b>Individual Certified</b>                                  |                                   |                                                                                                                                                          |        | TO-15                      |                                  |             |   | Indoor/Ambinet Air  | Soil Gas |  |  |   |
|                                                                                                                                                                                                      |                |                          |                         | Phone Number : <b>302-738-7551</b>           |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                |                          |                         | Fax Number : <b>302-454-5980</b>             |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                |                          |                         | Site Details:                                |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                |                          |                         | Analysis Turnaround Time                     |                                    |                            |                           | Data Package Type :                                                                                          |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                |                          |                         | Standard : <b>10 business days</b> <b>OR</b> |                                    |                            |                           | EDD Type :                                                                                                   |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Rush (Specify): _____ Days                                                                                                                                                                           |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Sample Identification                                                                                                                                                                                | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start)            | Can Vacuum in Field ("Hg) (Stop)** | Interior Temp. (F) (Start) | Interior Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab)                                                                            | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID                                                                                                                                             | Can ID |                            | Flow Controller Readout (ml/min) | Can Cert ID |   |                     |          |  |  |   |
| ALVI-SS-02-20241215                                                                                                                                                                                  | 12/10/24       | 0856                     | 0854                    | -29                                          | -4                                 | 72                         | 73.6                      | -30                                                                                                          | -3.5                              | 10482                                                                                                                                                    | 10197  | 6 L                        | 4.16                             | VL041612.D  | X |                     |          |  |  | X |
| Temperature (Fahrenheit)                                                                                                                                                                             |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   | GC/MS Analyst Signature (TO-15)                                      |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                | Ambient                  | Maximum                 | Minimum                                      |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Start                                                                                                                                                                                                |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Stop                                                                                                                                                                                                 |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Pressure (Inches of Hg)                                                                                                                                                                              |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   | ** Submittal of this COC indicates approval of the analysis based on existing conditions.<br><br>Please follow the instructions on the back of this COC. |        |                            |                                  |             |   |                     |          |  |  |   |
|                                                                                                                                                                                                      |                | Ambient                  | Maximum                 | Minimum                                      |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Start                                                                                                                                                                                                |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Stop                                                                                                                                                                                                 |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Special Instructions/QC Requirements & Comments :                                                                                                                                                    |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Suspected Contamination:                      High                      Medium                      Low                      PID Readings:                                                           |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Sampling site (State):                                                                                                                                                                               |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Quick Connector required : <b>NO</b>                                                                                                                                                                 |                |                          |                         |                                              |                                    |                            |                           |                                                                                                              |                                   |                                                                                                                                                          |        |                            |                                  |             |   |                     |          |  |  |   |
| Canisters Shipped by: <b>Sam</b>                                                                                                                                                                     |                |                          |                         | Date/Time: <b>11/25/24</b>                   |                                    |                            |                           | Canisters Received by:  |                                   |                                                                                                                                                          |        | Date/Time: <b>12-12-24</b> |                                  |             |   | <b>B2409035 - 3</b> |          |  |  |   |
| Samples Relinquished by: <b>72</b>                                                                                                                                                                   |                |                          |                         | Date/Time: <b>12/12/24 0701</b>              |                                    |                            |                           | Received by:                                                                                                 |                                   |                                                                                                                                                          |        | Date/Time:                 |                                  |             |   |                     |          |  |  |   |
| Relinquished by:                                                                                                                                                                                     |                |                          |                         | Date/Time:                                   |                                    |                            |                           | Received by:                                                                                                 |                                   |                                                                                                                                                          |        | Date/Time:                 |                                  |             |   |                     |          |  |  |   |

**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       |

## Internal Chain of Custody

**Instructions:** Use 1 form for each 20 samples of aliquot

### Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Chemtech

Location: 284 Sheffield Street, Mountainside, NJ 7092

~~NA55:~~

Title: Sample Custodian

Field Sample Seal No.: P5294

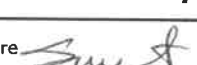
Date Broken: 12/16/2024 12/13/2024

Primary Time Seal Broken: 10:00:00

Case No.: R36719

Analytical Parameter/Fraction: TO-15

| Sample No. | Aliquot/Extract No. | Sample No. | Aliquot/Extract No. |
|------------|---------------------|------------|---------------------|
| P5294-01   | C0AB6               |            |                     |
| P5294-02   | C0AB7               |            |                     |
| P5294-03   | C0AB8               |            |                     |
|            |                     |            |                     |

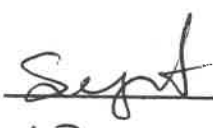
| Date     | Time  | Relinquished By                                                                             | Received By                                                                                 | Purpose of Change of Custody |
|----------|-------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------|
| 12-16-24 | 14:40 | Signature  | Signature  |                              |
|          |       | Printed Name <u>Catherine Puri</u>                                                          | Printed Name <u>Sample Custodian</u>                                                        |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |
|          |       | Signature                                                                                   | Signature                                                                                   |                              |
|          |       | Printed Name                                                                                | Printed Name                                                                                |                              |

Distribution: White - Original (Sent With Report)

Yellow - Contractor Archive

Pink - Sample Custodian - Interim Copy



AIR SAMPLE PRESSURE & DILUTION LOGBOOKAnalyst Signature: Supervisor Signature: 

METHOD: TO-15

Pressure Gauge ID: A2-55971

| Date     | Sample Number | Canister # | Initial Pressure psia | Initial Pressure Hg | Final Pressure psia | Final Pressure Hg | Dilution Factor | Comment |
|----------|---------------|------------|-----------------------|---------------------|---------------------|-------------------|-----------------|---------|
| 11/04/24 | P4696-01      | 10295      | 11.8                  | -5.9                |                     |                   |                 | sy      |
| "        | P4696-02      | 10283      | 13.6                  | -2.2                |                     |                   |                 | sy      |
| 11/18/24 | P4911-01      | 10279      | 12.2                  | -5.1                |                     |                   |                 | sy      |
| "        | P4911-02      | 10315      | 12.4                  | -4.7                |                     |                   |                 | ↓       |
| 12/5/24  | P5150-01      | 10443      | 12.0                  | -5.5                |                     |                   |                 | sy      |
| ↓        | P5150-02      | 10605      | 11.8                  | -5.9                |                     |                   |                 | ↓       |
|          | P5150-03      | 10060      | 11.8                  | -5.9                |                     |                   |                 | ↓       |
|          | P5150-04      | 10445      | 11.0                  | -7.5                |                     |                   |                 | ↓       |
|          | P5150-05      | 10609      | 11.4                  | -6.7                |                     |                   |                 | ↓       |
| ↓        | P5150-06      | 10597      | 12.8                  | -3.9                |                     |                   |                 | ↓       |
| 12/13/24 | P5292-01      | 10606      | 13.2                  | -3.5                |                     |                   |                 | sy      |
| ↓        | P5292-02      | 10300      | 9.6                   | -10.4               |                     |                   |                 | ↓       |
|          | P5293-01      | 10604      | 13.2                  | -3.1                |                     |                   |                 | ↓       |
|          | P5293-02      | 10153      | 11.2                  | -7.1                |                     |                   |                 | ↓       |
|          | P5293-03      | 10258      | 11.0                  | -7.5                |                     |                   |                 | ↓       |
|          | P5294-01      | 10054      | 11.8                  | -5.9                |                     |                   |                 | ↓       |
|          | P5294-02      | 10401      | 11.0                  | -7.5                |                     |                   |                 | ↓       |
|          | P5294-03      | 10197      | 13.0                  | -3.5                |                     |                   |                 | ↓       |
|          | P5295-01      | 10329      | 10.8                  | -8.0                |                     |                   |                 | ↓       |
|          | P5295-02      | 10601      | 10.8                  | -8.0                |                     |                   |                 | ↓       |
| ↓        | P5296-01      | 10326      | 11.0                  | -7.5                |                     |                   |                 | ↓       |



10054 5.9

|                     |                       |      |     |
|---------------------|-----------------------|------|-----|
| Initial Vacuum (Hg) | Final Vacuum (Hg/PSI) | Date | By: |
|                     |                       |      |     |

e vapors into

**CLP Sample # C0AB6 Sample# ACVT-AA01-20241210**  
 Date: 12/10/2024 10:10 6L Summa Canister  
 Location: Firestation Matrix Air  
 Analyses: VOCs (TO-15)  
 Preservation: None  
**Tag: 1016**  
 Das# R36671 TAT 21 Days

**Storage Location: Air Lab**  
**Sample: P5294-01**  
**Cust #: C0AB6**

10401 25

|                     |                       |      |     |
|---------------------|-----------------------|------|-----|
| Initial Vacuum (Hg) | Final Vacuum (Hg/PSI) | Date | By: |
|                     |                       |      |     |

**CLP Sample # C0AB7 Sample# ACVT-IA-01-20241210**  
 Date: 12/10/2024 08:45 6L Summa Canister  
 Location: HHG Conference Matrix Air  
 Analyses: VOCs (TO-15)  
 Preservation: None  
**Tag: 1017**  
 Das# R36671 TAT 21 Days

**Storage Location: Air Lab**  
**Sample: P5294-02**  
**Cust #: C0AB7**

32409035

10197 3.5

|                     |                       |      |     |
|---------------------|-----------------------|------|-----|
| Initial Vacuum (Hg) | Final Vacuum (Hg/PSI) | Date | By: |
|                     |                       |      |     |

**CLP Sample # C0AB8 Sample# ACVT-IA-02-20241210**  
 Date: 12/10/2024 08:58 6L Summa Canister  
 Location: HHG Office Matrix Air  
 Analyses: VOCs (TO-15)  
 Preservation: None  
**Tag: 1018**  
 Das# R36671 TAT 21 Days

**Storage Location: Air Lab**  
**Sample: P5294-03**  
**Cust #: C0AB8**

32409035

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## **CASE NARRATIVE**

**Tetra Tech, EMI**

**Project Name: R36719**

**Project # N/A**

**Chemtech Project # P5294**

**Test Name: TO-15**

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

3 Air samples were received on 12/13/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: TO-15. This data package contains results for TO-15.

### **C. Analytical Techniques:**

The analysis performed on instrument MSVOA\_L were done using GC column RTX-1, which is 60 meters, 0.32 mm id, 1.0 um df, Restek Cat. #10157. The Trap was supplied by Entech, glass bead and Tenax , Entech 7100A Preconcentrator. The analysis of TO-15 was based on method TO-15.

### **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 for {P5293-01DUP} with File ID: VL041798.D met criteria except for Hexane[33.3%], m/p-Xylene[200%] due to difference in results of Original and DUP.

The Blank Spike met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

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

The Sample #C0AB6, C0AB7, C0AB8 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

The Manual Integrations are performed for the followings.

| Manual Integration Report |          |            |         |
|---------------------------|----------|------------|---------|
| Sequence                  | VL121624 | Instrument | MSVOA_I |

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|

|             |            |                         |     |                       |          |                       |                                         |
|-------------|------------|-------------------------|-----|-----------------------|----------|-----------------------|-----------------------------------------|
| VSTDICCC010 | VL041752.D | m/p-Xylene              | SAM | 12/20/2024 4:34:05 AM | MMDadoda | 12/20/2024 4:37:21 AM | Peak Integrated by Software incorrectly |
| VSTDICCC002 | VL041753.D | 1,4-Dioxane             | SAM | 12/20/2024 4:34:06 AM | MMDadoda | 12/20/2024 4:37:23 AM | Peak Integrated by Software incorrectly |
| VSTDICCC002 | VL041753.D | cis-1,3-Dichloropropene | SAM | 12/20/2024 4:34:06 AM | MMDadoda | 12/20/2024 4:37:23 AM | Peak Integrated by Software incorrectly |
| VSTDICCC002 | VL041753.D | m/p-Xylene              | SAM | 12/20/2024 4:34:06 AM | MMDadoda | 12/20/2024 4:37:23 AM | Peak Integrated by Software incorrectly |
| VSTDICCC001 | VL041754.D | 1,1,2-Trichloroethane   | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectly |
| VSTDICCC001 | VL041754.D | Carbon Tetrachloride    | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectly |
| VSTDICCC001 | VL041754.D | cis-1,3-Dichloropropene | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectly |
| VSTDICCC001 | VL041754.D | Ethanol                 | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated                         |

|            |            |                           |     |                       |          |                       |                                          |
|------------|------------|---------------------------|-----|-----------------------|----------|-----------------------|------------------------------------------|
|            |            |                           |     | AM                    |          | AM                    | d by Software incorrectl y               |
| VSTDICC001 | VL041754.D | m/p-Xylene                | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectl y |
| VSTDICC001 | VL041754.D | Methyl Methacrylate       | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectl y |
| VSTDICC001 | VL041754.D | Tetrachloroethene         | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectl y |
| VSTDICC001 | VL041754.D | Trichloroethene           | SAM | 12/20/2024 4:34:08 AM | MMDadoda | 12/20/2024 4:37:25 AM | Peak Integrated by Software incorrectl y |
| VSTDICC0.5 | VL041755.D | 1,1,1,2-Tetrachloroethane | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectl y |
| VSTDICC0.5 | VL041755.D | 1,1,2-Trichloroethane     | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectl y |
| VSTDICC0.5 | VL041755.D | 1,2-Dibromoethane         | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectl y |
| VSTDICC0.5 | VL041755.D | 1,2-Dichloropropane       | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectl y |
| VSTDICC0.5 | VL041755.D | 1,4-Dioxane               | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software              |

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|            |            |                         |     |                       |          |                       | incorrectly                             |
| VSTDICC0.5 | VL041755.D | 2,2,4-Trimethylpentane  | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | 4-Methyl-2-Pentanone    | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Benzyl Chloride         | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Bromodichloromethane    | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Bromoform               | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Chlorobenzene           | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | cis-1,3-Dichloropropene | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Ethanol                 | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL041755.D | Heptane                 | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |

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|------------|------------|---------------------------|-----|-----------------------|----------|-----------------------|-----------------------------------------|
| VSTDIC0.5  | VL041755.D | m/p-Xylene                | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.5  | VL041755.D | t-1,3-Dichloropropene     | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.5  | VL041755.D | Trichloroethene           | SAM | 12/20/2024 4:34:10 AM | MMDadoda | 12/20/2024 4:37:27 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.1  | VL041756.D | 1,1,2,2-Tetrachloroethane | SAM | 12/20/2024 4:34:11 AM | MMDadoda | 12/20/2024 4:37:28 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.1  | VL041756.D | 1,2-Dibromoethane         | SAM | 12/20/2024 4:34:11 AM | MMDadoda | 12/20/2024 4:37:28 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.1  | VL041756.D | Tetrachloroethene         | SAM | 12/20/2024 4:34:11 AM | MMDadoda | 12/20/2024 4:37:28 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.1  | VL041756.D | Trichloroethene           | SAM | 12/20/2024 4:34:11 AM | MMDadoda | 12/20/2024 4:37:28 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.03 | VL041757.D | 1,1,1-Trichloroethane     | SAM | 12/20/2024 4:34:12 AM | MMDadoda | 12/20/2024 4:37:30 AM | Peak Integrated by Software incorrectly |
| VSTDIC0.03 | VL041757.D | Carbon Tetrachloride      | SAM | 12/20/2024 4:34:12 AM | MMDadoda | 12/20/2024 4:37:30 AM | Peak Integrated by Software incorrectly |
| STDIC0.03  | VL041757.D | Tetrachloroethene         | SAM | 12/20/2024 4:34:12    | MMDadoda | 12/20/2024 4:37:30    | Peak Integrate                          |

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|-------------|------------|-----------------------|-----|-----------------------|----------|-----------------------|------------------------------------------|
|             |            |                       |     | AM                    |          | AM                    | d by Software incorrectl y               |
| VSTDICC0.03 | VL041757.D | Trichloroethene       | SAM | 12/20/2024 4:34:12 AM | MMDadoda | 12/20/2024 4:37:30 AM | Peak Integrated by Software incorrectl y |
| VSTDICC015  | VL041758.D | m/p-Xylene            | SAM | 12/20/2024 4:34:14 AM | MMDadoda | 12/20/2024 4:37:32 AM | Peak Integrated by Software incorrectl y |
| VSTDICV010  | VL041759.D | 1,1,2-Trichloroethane | SAM | 12/20/2024 4:34:16 AM | MMDadoda | 12/20/2024 4:37:35 AM | Peak Integrated by Software incorrectl y |
| VSTDICV010  | VL041759.D | Ethanol               | SAM | 12/20/2024 4:34:16 AM | MMDadoda | 12/20/2024 4:37:35 AM | Peak Integrated by Software incorrectl y |
| VSTDICV010  | VL041759.D | m/p-Xylene            | SAM | 12/20/2024 4:34:16 AM | MMDadoda | 12/20/2024 4:37:35 AM | Peak Integrated by Software incorrectl y |

| Manual Integration Report |          |            |         |
|---------------------------|----------|------------|---------|
| Sequence                  | vl121824 | Instrument | MSVOA_I |

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|

|            |            |                         |     |                        |          |                       |                                          |
|------------|------------|-------------------------|-----|------------------------|----------|-----------------------|------------------------------------------|
| VSTDCCC010 | VL041788.D | cis-1,3-Dichloropropene | SAM | 12/19/2024 12:18:09 PM | MMDadoda | 12/19/2024 2:45:22 PM | Peak Integrated by Software incorrectl y |
| VSTDCCC010 | VL041788.D | Ethanol                 | SAM | 12/19/2024 12:18:09 PM | MMDadoda | 12/19/2024 2:45:22 PM | Peak Integrated by Software incorrectl y |



|             |            |                        |     |                           |          |                       |                                         |
|-------------|------------|------------------------|-----|---------------------------|----------|-----------------------|-----------------------------------------|
|             |            |                        |     |                           |          |                       | y                                       |
| VSTDCCC010  | VL041788.D | m/p-Xylene             | SAM | 12/19/2024<br>12:18:09 PM | MMDadoda | 12/19/2024 2:45:22 PM | Peak Integrated by Software incorrectly |
| VL1218ABS01 | VL041795.D | m/p-Xylene             | SAM | 12/19/2024<br>12:19:16 PM | MMDadoda | 12/19/2024 2:45:27 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | 2,2,4-Trimethylpentane | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | 4-Methyl-2-Pentanone   | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | Carbon Tetrachloride   | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | Chlorobenzene          | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | Chlorodifluoromethane  | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | Cyclohexane            | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | Heptane                | SAM | 12/19/2024<br>12:19:34 PM | MMDadoda | 12/19/2024 2:45:38 PM | Peak Integrated by Software incorrectly |
| P5294-01    | VL041802.D | m/p-Xylene             | SA  | 12/19/2024                | MMDadoda | 12/19/2024            | Peak                                    |



|          |                |                            |         |                                  |              |                              |                                                          |
|----------|----------------|----------------------------|---------|----------------------------------|--------------|------------------------------|----------------------------------------------------------|
|          | D              |                            | M       | 4<br>12:19:34<br>PM              | a            | 4 2:45:38<br>PM              | Integrate<br>d by<br>Software<br>incorrectl<br>y         |
| P5294-01 | VL041802.<br>D | Propene                    | SA<br>M | 12/19/202<br>4<br>12:19:34<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:38<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | 2,2,4-<br>Trimethylpentane | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Benzene                    | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Carbon Tetrachloride       | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Chlorodifluorometha<br>ne  | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Cyclohexane                | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Ethyl Acetate              | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | Heptane                    | SA<br>M | 12/19/202<br>4<br>12:18:36<br>PM | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by<br>Software<br>incorrectl<br>y |
| P5294-02 | VL041803.<br>D | m/p-Xylene                 | SA<br>M | 12/19/202<br>4<br>12:18:36       | MMDadod<br>a | 12/19/202<br>4 2:45:39<br>PM | Peak<br>Integrate<br>d by                                |

|          |            |                        |     |                           |          |                          |                                             |
|----------|------------|------------------------|-----|---------------------------|----------|--------------------------|---------------------------------------------|
|          |            |                        |     | PM                        |          |                          | Software incorrectl<br>y                    |
| P5294-02 | VL041803.D | Propene                | SAM | 12/19/2024<br>12:18:36 PM | MMDadoda | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | 2,2,4-Trimethylpentane | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | Carbon Tetrachloride   | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | Chlorodifluoromethane  | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | m/p-Xylene             | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | o-Xylene               | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |
| P5294-03 | VL041811.D | Propene                | SAM | 12/23/2024<br>5:30:45 AM  | MMDadoda | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software incorrectl<br>y |

#### F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed



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

above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

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## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Value     | If the result is a value greater than or equal to the detection limit, report the value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>U</b>  | 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.                                                                                                                                                                                                                                                                                      |
| <b>ND</b> | Indicates the analyte was analyzed for, but not detected                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>J</b>  | Indicates an estimated value. This flag is used: <ol style="list-style-type: none"> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(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.</li> </ol> |
| <b>B</b>  | Indicates the analyte was found in the blank as well as the sample report as “12 B”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>E</b>  | Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>D</b>  | This flag identifies all compounds identified in an analysis at a secondary dilution factor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>P</b>  | 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”.                                                                                                                                                                                                                                                                                                                                                                             |
| <b>N</b>  | 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.                                                                                                                                                                                                                                                                       |
| <b>A</b>  | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Q</b>  | Indicates the LCS did not meet the control limits requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5294

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 Custody

✓

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: 12/26/2024

LAB CHRONICLE

|          |                 |            |                        |
|----------|-----------------|------------|------------------------|
| OrderID: | P5294           | OrderDate: | 12/16/2024 11:35:00 AM |
| Client:  | Tetra Tech, EMI | Project:   | R36719                 |
| Contact: | Ava Heiss       | Location:  | Air Lab                |

| LabID    | ClientID | Matrix | Test  | Method | Sample Date | Prep Date | Anal Date | Received |
|----------|----------|--------|-------|--------|-------------|-----------|-----------|----------|
| P5294-01 | C0AB6    | Air    | TO-15 | TO-15  | 12/11/24    |           | 12/18/24  | 12/13/24 |
| P5294-02 | C0AB7    | Air    | TO-15 | TO-15  | 12/11/24    |           | 12/18/24  | 12/13/24 |
| P5294-03 | C0AB8    | Air    | TO-15 | TO-15  | 12/11/24    |           | 12/19/24  | 12/13/24 |

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

**SDG No.:** P5294

**Client:** Tetra Tech, EMI

| Sample ID         | Client ID    | Matrix | Parameter                   | Concentration | C    | MDL   | RDL  | Units |
|-------------------|--------------|--------|-----------------------------|---------------|------|-------|------|-------|
| <b>Client ID:</b> | <b>C0AB6</b> |        |                             |               |      |       |      |       |
| P5294-01          | C0AB6        | Air    | Dichlorodifluoromethane     | 1.68          | J    | 1.04  | 2.47 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Chloromethane               | 0.97          | J    | 0.21  | 1.03 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Tetrahydrofuran             | 1.83          |      | 0.38  | 1.47 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Trichlorofluoromethane      | 1.07          | J    | 0.90  | 2.81 | ug/m3 |
| P5294-01          | C0AB6        | Air    | tert-Butyl alcohol          | 1.58          |      | 0.58  | 1.52 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Heptane                     | 0.98          | J    | 0.45  | 2.05 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Acetone                     | 7.36          |      | 0.57  | 1.19 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Methylene Chloride          | 1.11          | J    | 0.66  | 1.74 | ug/m3 |
| P5294-01          | C0AB6        | Air    | 2-Butanone                  | 2.04          |      | 0.35  | 1.47 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Carbon Tetrachloride        | 0.31          |      | 0.060 | 0.19 | ug/m3 |
| P5294-01          | C0AB6        | Air    | 2,2,4-Trimethylpentane      | 0.47          | J    | 0.47  | 2.34 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Benzene                     | 0.70          | J    | 0.29  | 1.60 | ug/m3 |
| P5294-01          | C0AB6        | Air    | 4-Methyl-2-Pentanone        | 0.94          | J    | 0.37  | 2.05 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Toluene                     | 13.6          |      | 0.41  | 1.88 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Chlorobenzene               | 0.55          | J    | 0.37  | 2.30 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Ethyl Benzene               | 1.52          | J    | 0.52  | 2.17 | ug/m3 |
| P5294-01          | C0AB6        | Air    | m/p-Xylene                  | 5.65          |      | 0.91  | 4.34 | ug/m3 |
| P5294-01          | C0AB6        | Air    | o-Xylene                    | 2.17          |      | 0.52  | 2.17 | ug/m3 |
| P5294-01          | C0AB6        | Air    | Styrene                     | 1.23          | J    | 0.47  | 2.13 | ug/m3 |
|                   |              |        | <b>Total Voc :</b>          |               | 45.7 |       |      |       |
|                   |              |        | <b>Total Concentration:</b> |               | 45.7 |       |      |       |
| <b>Client ID:</b> | <b>C0AB7</b> |        |                             |               |      |       |      |       |
| P5294-02          | C0AB7        | Air    | Dichlorodifluoromethane     | 1.78          | J    | 1.04  | 2.47 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Chloromethane               | 1.38          |      | 0.21  | 1.03 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Trichlorofluoromethane      | 1.12          | J    | 0.90  | 2.81 | ug/m3 |
| P5294-02          | C0AB7        | Air    | tert-Butyl alcohol          | 2.00          |      | 0.58  | 1.52 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Heptane                     | 0.49          | J    | 0.45  | 2.05 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Acetone                     | 20.4          |      | 0.57  | 1.19 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Methylene Chloride          | 1.56          | J    | 0.66  | 1.74 | ug/m3 |
| P5294-02          | C0AB7        | Air    | 2-Butanone                  | 1.33          | J    | 0.35  | 1.47 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Carbon Tetrachloride        | 0.44          |      | 0.060 | 0.19 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Chloroform                  | 1.47          | J    | 0.39  | 2.44 | ug/m3 |
| P5294-02          | C0AB7        | Air    | 2,2,4-Trimethylpentane      | 0.84          | J    | 0.47  | 2.34 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Benzene                     | 1.02          | J    | 0.29  | 1.60 | ug/m3 |
| P5294-02          | C0AB7        | Air    | Toluene                     | 2.26          |      | 0.41  | 1.88 | ug/m3 |
| P5294-02          | C0AB7        | Air    | m/p-Xylene                  | 1.17          | J    | 0.91  | 4.34 | ug/m3 |

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

**SDG No.:** P5294

**Client:** Tetra Tech, EMI

| Sample ID         | Client ID    | Matrix | Parameter                   | Concentration | C | MDL   | RDL  | Units |
|-------------------|--------------|--------|-----------------------------|---------------|---|-------|------|-------|
| P5294-02          | C0AB7        | Air    | Hexane                      | 1.20          | J | 0.39  | 1.76 | ug/m3 |
|                   |              |        | <b>Total Voc :</b>          |               |   | 38.5  |      |       |
|                   |              |        | <b>Total Concentration:</b> |               |   | 38.5  |      |       |
| <b>Client ID:</b> | <b>C0AB8</b> |        |                             |               |   |       |      |       |
| P5294-03          | C0AB8        | Air    | Dichlorodifluoromethane     | 1.83          | J | 1.04  | 2.47 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Chloromethane               | 1.24          |   | 0.21  | 1.03 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Trichlorofluoromethane      | 1.12          | J | 0.90  | 2.81 | ug/m3 |
| P5294-03          | C0AB8        | Air    | tert-Butyl alcohol          | 0.82          | J | 0.58  | 1.52 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Acetone                     | 18.8          |   | 0.57  | 1.19 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Methylene Chloride          | 1.15          | J | 0.66  | 1.74 | ug/m3 |
| P5294-03          | C0AB8        | Air    | 2-Butanone                  | 2.77          |   | 0.35  | 1.47 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Carbon Tetrachloride        | 0.44          |   | 0.060 | 0.19 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Chloroform                  | 1.17          | J | 0.39  | 2.44 | ug/m3 |
| P5294-03          | C0AB8        | Air    | 2,2,4-Trimethylpentane      | 1.35          | J | 0.47  | 2.34 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Benzene                     | 1.31          | J | 0.29  | 1.60 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Toluene                     | 2.79          |   | 0.41  | 1.88 | ug/m3 |
| P5294-03          | C0AB8        | Air    | m/p-Xylene                  | 1.65          | J | 0.91  | 4.34 | ug/m3 |
| P5294-03          | C0AB8        | Air    | o-Xylene                    | 0.61          | J | 0.52  | 2.17 | ug/m3 |
| P5294-03          | C0AB8        | Air    | 1,2,4-Trimethylbenzene      | 0.64          | J | 0.39  | 2.46 | ug/m3 |
| P5294-03          | C0AB8        | Air    | Hexane                      | 1.30          | J | 0.39  | 1.76 | ug/m3 |
|                   |              |        | <b>Total Voc :</b>          |               |   | 39.0  |      |       |
|                   |              |        | <b>Total Concentration:</b> |               |   | 39.0  |      |       |



**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB6

**Analysis Date :** 12/18/24

**Laboratory Id Number :** P5294-01

**Target Analyts :** Air Results

| Chemical                       | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|--------------------------------|------------|------------------|------------------------|-----------|---------------------------|--------------|------------|
| Dichlorodifluoromethane        | 75-71-8    | 120.9            | 0.34                   | J         | 1.68                      |              |            |
| Chloromethane                  | 74-87-3    | 50.49            | 0.47                   | J         | 0.97                      |              |            |
| Vinyl Chloride                 | 75-01-4    | 62.5             | 0.01                   | U         | 0.03                      |              |            |
| Bromomethane                   | 74-83-9    | 94.94            | 0.14                   | U         | 0.54                      |              |            |
| Chloroethane                   | 75-00-3    | 64.52            | 0.17                   | U         | 0.45                      |              |            |
| Tetrahydrofuran                | 109-99-9   | 72.11            | 0.62                   |           | 1.83                      |              |            |
| Trichlorofluoromethane         | 75-69-4    | 137.4            | 0.19                   | J         | 1.07                      |              |            |
| Dichlorotetrafluoroethane      | 76-14-2    | 170.9            | 0.09                   | U         | 0.63                      |              |            |
| 1,1,2-Trichlorotrifluoroethane | 76-13-1    | 187.4            | 0.16                   | U         | 1.23                      |              |            |
| tert-Butyl alcohol             | 75-65-0    | 74.12            | 0.52                   |           | 1.58                      |              |            |
| Heptane                        | 142-82-5   | 100.2            | 0.24                   | J         | 0.98                      |              |            |
| 1,1-Dichloroethene             | 75-35-4    | 96.94            | 0.14                   | U         | 0.56                      |              |            |
| Acetone                        | 67-64-1    | 58.08            | 3.1                    |           | 7.36                      |              |            |
| Carbon Disulfide               | 75-15-0    | 76.14            | 0.16                   | U         | 0.5                       |              |            |
| Methyl tert-Butyl Ether        | 1634-04-4  | 88.15            | 0.12                   | U         | 0.43                      |              |            |
| Methylene Chloride             | 75-09-2    | 84.94            | 0.32                   | J         | 1.11                      |              |            |
| trans-1,2-Dichloroethene       | 156-60-5   | 96.94            | 0.19                   | U         | 0.75                      |              |            |
| 1,1-Dichloroethane             | 75-34-3    | 98.96            | 0.13                   | U         | 0.53                      |              |            |
| Cyclohexane                    | 110-82-7   | 84.16            | 0.22                   | U         | 0.76                      |              |            |
| 2-Butanone                     | 78-93-3    | 72.11            | 0.69                   |           | 2.04                      |              |            |
| Carbon Tetrachloride           | 56-23-5    | 153.8            | 0.05                   |           | 0.31                      |              |            |
| cis-1,2-Dichloroethene         | 156-59-2   | 96.94            | 0.09                   | U         | 0.36                      |              |            |
| Chloroform                     | 67-66-3    | 119.4            | 0.08                   | U         | 0.39                      |              |            |
| 1,1,1-Trichloroethane          | 71-55-6    | 133.4            | 0.01                   | U         | 0.05                      |              |            |
| 2,2,4-Trimethylpentane         | 540-84-1   | 114.2            | 0.1                    | J         | 0.47                      |              |            |
| Benzene                        | 71-43-2    | 78.11            | 0.22                   | J         | 0.7                       |              |            |
| 1,2-Dichloroethane             | 107-06-2   | 98.96            | 0.09                   | U         | 0.36                      |              |            |
| Trichloroethene                | 79-01-6    | 131.4            | 0.02                   | U         | 0.11                      |              |            |
| 1,2-Dichloropropane            | 78-87-5    | 113              | 0.11                   | U         | 0.51                      |              |            |
| Bromodichloromethane           | 75-27-4    | 163.8            | 0.08                   | U         | 0.54                      |              |            |
| 4-Methyl-2-Pentanone           | 108-10-1   | 100.2            | 0.23                   | J         | 0.94                      |              |            |
| Toluene                        | 108-88-3   | 92.14            | 3.6                    |           | 13.6                      |              |            |
| t-1,3-Dichloropropene          | 10061-02-6 | 111              | 0.06                   | U         | 0.27                      |              |            |
| cis-1,3-Dichloropropene        | 10061-01-5 | 111              | 0.06                   | U         | 0.27                      |              |            |
| 1,1,2-Trichloroethane          | 79-00-5    | 133.4            | 0.07                   | U         | 0.38                      |              |            |

**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB6

**Analysis Date :** 12/18/24

**Laboratory Id Number :** P5294-01

**Target Analyts :** Air Results

|                           |             |         |      |   |      |  |  |
|---------------------------|-------------|---------|------|---|------|--|--|
| Dibromochloromethane      | 124-48-1    | 208.3   | 0.07 | U | 0.6  |  |  |
| 1,2-Dibromoethane         | 106-93-4    | 187.9   | 0.07 | U | 0.54 |  |  |
| Tetrachloroethene         | 127-18-4    | 165.8   | 0.02 | U | 0.14 |  |  |
| Chlorobenzene             | 108-90-7    | 112.6   | 0.12 | J | 0.55 |  |  |
| Ethyl Benzene             | 100-41-4    | 106.2   | 0.35 | J | 1.52 |  |  |
| m/p-Xylene                | 179601-23-1 | 106.2   | 1.3  |   | 5.65 |  |  |
| o-Xylene                  | 95-47-6     | 106.2   | 0.5  |   | 2.17 |  |  |
| Styrene                   | 100-42-5    | 104.1   | 0.29 | J | 1.23 |  |  |
| Bromoform                 | 75-25-2     | 252.8   | 0.06 | U | 0.62 |  |  |
| 1,1,2,2-Tetrachloroethane | 79-34-5     | 167.9   | 0.01 | U | 0.07 |  |  |
| 2-Chlorotoluene           | 95-49-8     | 126.6   | 0.11 | U | 0.57 |  |  |
| 1,3,5-Trimethylbenzene    | 108-67-8    | 120.2   | 0.11 | U | 0.54 |  |  |
| 1,2,4-Trimethylbenzene    | 95-63-6     | 120.2   | 0.08 | U | 0.39 |  |  |
| 1,3-Dichlorobenzene       | 541-73-1    | 147     | 0.08 | U | 0.48 |  |  |
| 1,4-Dichlorobenzene       | 106-46-7    | 147     | 0.05 | U | 0.3  |  |  |
| 1,2-Dichlorobenzene       | 95-50-1     | 147     | 0.08 | U | 0.48 |  |  |
| 1,2,4-Trichlorobenzene    | 120-82-1    | 181.5   | 0.09 | U | 0.67 |  |  |
| Hexachloro-1,3-Butadiene  | 87-68-3     | 260.8   | 0.09 | U | 0.96 |  |  |
| Naphthalene               | 91-20-3     | 128.17  | 0.08 | U | 0.42 |  |  |
| 1,3-Butadiene             | 106-99-0    | 54.09   | 0.13 | U | 0.29 |  |  |
| 4-Ethyltoluene            | 622-96-8    | 120.2   | 0.12 | U | 0.59 |  |  |
| Hexane                    | 110-54-3    | 86.17   | 0.11 | U | 0.39 |  |  |
| Allyl Chloride            | 107-05-1    | 76.53   | 0.15 | U | 0.47 |  |  |
| 1,4-Dioxane               | 123-91-1    | 88.12   | 0.21 | U | 0.76 |  |  |
| Methyl Methacrylate       | 80-62-6     | 100.117 | 0.09 | U | 0.37 |  |  |

**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB7

**Analysis Date :** 12/18/24

**Laboratory Id Number :** P5294-02

**Target Analyts :** Air Results

| Chemical                       | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|--------------------------------|------------|------------------|------------------------|-----------|---------------------------|--------------|------------|
| Dichlorodifluoromethane        | 75-71-8    | 120.9            | 0.36                   | J         | 1.78                      |              |            |
| Chloromethane                  | 74-87-3    | 50.49            | 0.67                   |           | 1.38                      |              |            |
| Vinyl Chloride                 | 75-01-4    | 62.5             | 0.01                   | U         | 0.03                      |              |            |
| Bromomethane                   | 74-83-9    | 94.94            | 0.14                   | U         | 0.54                      |              |            |
| Chloroethane                   | 75-00-3    | 64.52            | 0.17                   | U         | 0.45                      |              |            |
| Tetrahydrofuran                | 109-99-9   | 72.11            | 0.13                   | U         | 0.38                      |              |            |
| Trichlorofluoromethane         | 75-69-4    | 137.4            | 0.2                    | J         | 1.12                      |              |            |
| Dichlorotetrafluoroethane      | 76-14-2    | 170.9            | 0.09                   | U         | 0.63                      |              |            |
| 1,1,2-Trichlorotrifluoroethane | 76-13-1    | 187.4            | 0.16                   | U         | 1.23                      |              |            |
| tert-Butyl alcohol             | 75-65-0    | 74.12            | 0.66                   |           | 2                         |              |            |
| Heptane                        | 142-82-5   | 100.2            | 0.12                   | J         | 0.49                      |              |            |
| 1,1-Dichloroethene             | 75-35-4    | 96.94            | 0.14                   | U         | 0.56                      |              |            |
| Acetone                        | 67-64-1    | 58.08            | 8.6                    |           | 20.4                      |              |            |
| Carbon Disulfide               | 75-15-0    | 76.14            | 0.16                   | U         | 0.5                       |              |            |
| Methyl tert-Butyl Ether        | 1634-04-4  | 88.15            | 0.12                   | U         | 0.43                      |              |            |
| Methylene Chloride             | 75-09-2    | 84.94            | 0.45                   | J         | 1.56                      |              |            |
| trans-1,2-Dichloroethene       | 156-60-5   | 96.94            | 0.19                   | U         | 0.75                      |              |            |
| 1,1-Dichloroethane             | 75-34-3    | 98.96            | 0.13                   | U         | 0.53                      |              |            |
| Cyclohexane                    | 110-82-7   | 84.16            | 0.22                   | U         | 0.76                      |              |            |
| 2-Butanone                     | 78-93-3    | 72.11            | 0.45                   | J         | 1.33                      |              |            |
| Carbon Tetrachloride           | 56-23-5    | 153.8            | 0.07                   |           | 0.44                      |              |            |
| cis-1,2-Dichloroethene         | 156-59-2   | 96.94            | 0.09                   | U         | 0.36                      |              |            |
| Chloroform                     | 67-66-3    | 119.4            | 0.3                    | J         | 1.47                      |              |            |
| 1,1,1-Trichloroethane          | 71-55-6    | 133.4            | 0.01                   | U         | 0.05                      |              |            |
| 2,2,4-Trimethylpentane         | 540-84-1   | 114.2            | 0.18                   | J         | 0.84                      |              |            |
| Benzene                        | 71-43-2    | 78.11            | 0.32                   | J         | 1.02                      |              |            |
| 1,2-Dichloroethane             | 107-06-2   | 98.96            | 0.09                   | U         | 0.36                      |              |            |
| Trichloroethene                | 79-01-6    | 131.4            | 0.02                   | U         | 0.11                      |              |            |
| 1,2-Dichloropropane            | 78-87-5    | 113              | 0.11                   | U         | 0.51                      |              |            |
| Bromodichloromethane           | 75-27-4    | 163.8            | 0.08                   | U         | 0.54                      |              |            |
| 4-Methyl-2-Pentanone           | 108-10-1   | 100.2            | 0.09                   | U         | 0.37                      |              |            |
| Toluene                        | 108-88-3   | 92.14            | 0.6                    |           | 2.26                      |              |            |
| t-1,3-Dichloropropene          | 10061-02-6 | 111              | 0.06                   | U         | 0.27                      |              |            |
| cis-1,3-Dichloropropene        | 10061-01-5 | 111              | 0.06                   | U         | 0.27                      |              |            |
| 1,1,2-Trichloroethane          | 79-00-5    | 133.4            | 0.07                   | U         | 0.38                      |              |            |

**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB7

**Analysis Date :** 12/18/24

**Laboratory Id Number :** P5294-02

**Target Analyts :** Air Results

|                           |             |         |      |   |      |  |  |
|---------------------------|-------------|---------|------|---|------|--|--|
| Dibromochloromethane      | 124-48-1    | 208.3   | 0.07 | U | 0.6  |  |  |
| 1,2-Dibromoethane         | 106-93-4    | 187.9   | 0.07 | U | 0.54 |  |  |
| Tetrachloroethene         | 127-18-4    | 165.8   | 0.02 | U | 0.14 |  |  |
| Chlorobenzene             | 108-90-7    | 112.6   | 0.08 | U | 0.37 |  |  |
| Ethyl Benzene             | 100-41-4    | 106.2   | 0.12 | U | 0.52 |  |  |
| m/p-Xylene                | 179601-23-1 | 106.2   | 0.27 | J | 1.17 |  |  |
| o-Xylene                  | 95-47-6     | 106.2   | 0.12 | U | 0.52 |  |  |
| Styrene                   | 100-42-5    | 104.1   | 0.11 | U | 0.47 |  |  |
| Bromoform                 | 75-25-2     | 252.8   | 0.06 | U | 0.62 |  |  |
| 1,1,2,2-Tetrachloroethane | 79-34-5     | 167.9   | 0.01 | U | 0.07 |  |  |
| 2-Chlorotoluene           | 95-49-8     | 126.6   | 0.11 | U | 0.57 |  |  |
| 1,3,5-Trimethylbenzene    | 108-67-8    | 120.2   | 0.11 | U | 0.54 |  |  |
| 1,2,4-Trimethylbenzene    | 95-63-6     | 120.2   | 0.08 | U | 0.39 |  |  |
| 1,3-Dichlorobenzene       | 541-73-1    | 147     | 0.08 | U | 0.48 |  |  |
| 1,4-Dichlorobenzene       | 106-46-7    | 147     | 0.05 | U | 0.3  |  |  |
| 1,2-Dichlorobenzene       | 95-50-1     | 147     | 0.08 | U | 0.48 |  |  |
| 1,2,4-Trichlorobenzene    | 120-82-1    | 181.5   | 0.09 | U | 0.67 |  |  |
| Hexachloro-1,3-Butadiene  | 87-68-3     | 260.8   | 0.09 | U | 0.96 |  |  |
| Naphthalene               | 91-20-3     | 128.17  | 0.08 | U | 0.42 |  |  |
| 1,3-Butadiene             | 106-99-0    | 54.09   | 0.13 | U | 0.29 |  |  |
| 4-Ethyltoluene            | 622-96-8    | 120.2   | 0.12 | U | 0.59 |  |  |
| Hexane                    | 110-54-3    | 86.17   | 0.34 | J | 1.2  |  |  |
| Allyl Chloride            | 107-05-1    | 76.53   | 0.15 | U | 0.47 |  |  |
| 1,4-Dioxane               | 123-91-1    | 88.12   | 0.21 | U | 0.76 |  |  |
| Methyl Methacrylate       | 80-62-6     | 100.117 | 0.09 | U | 0.37 |  |  |

**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB8

**Analysis Date :** 12/19/24

**Laboratory Id Number :** P5294-03

**Target Analyts :** Air Results

| Chemical                       | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|--------------------------------|------------|------------------|------------------------|-----------|---------------------------|--------------|------------|
| Dichlorodifluoromethane        | 75-71-8    | 120.9            | 0.37                   | J         | 1.83                      |              |            |
| Chloromethane                  | 74-87-3    | 50.49            | 0.6                    |           | 1.24                      |              |            |
| Vinyl Chloride                 | 75-01-4    | 62.5             | 0.01                   | U         | 0.03                      |              |            |
| Bromomethane                   | 74-83-9    | 94.94            | 0.14                   | U         | 0.54                      |              |            |
| Chloroethane                   | 75-00-3    | 64.52            | 0.17                   | U         | 0.45                      |              |            |
| Tetrahydrofuran                | 109-99-9   | 72.11            | 0.13                   | U         | 0.38                      |              |            |
| Trichlorofluoromethane         | 75-69-4    | 137.4            | 0.2                    | J         | 1.12                      |              |            |
| Dichlorotetrafluoroethane      | 76-14-2    | 170.9            | 0.09                   | U         | 0.63                      |              |            |
| 1,1,2-Trichlorotrifluoroethane | 76-13-1    | 187.4            | 0.16                   | U         | 1.23                      |              |            |
| tert-Butyl alcohol             | 75-65-0    | 74.12            | 0.27                   | J         | 0.82                      |              |            |
| Heptane                        | 142-82-5   | 100.2            | 0.11                   | U         | 0.45                      |              |            |
| 1,1-Dichloroethene             | 75-35-4    | 96.94            | 0.14                   | U         | 0.56                      |              |            |
| Acetone                        | 67-64-1    | 58.08            | 7.9                    |           | 18.8                      |              |            |
| Carbon Disulfide               | 75-15-0    | 76.14            | 0.16                   | U         | 0.5                       |              |            |
| Methyl tert-Butyl Ether        | 1634-04-4  | 88.15            | 0.12                   | U         | 0.43                      |              |            |
| Methylene Chloride             | 75-09-2    | 84.94            | 0.33                   | J         | 1.15                      |              |            |
| trans-1,2-Dichloroethene       | 156-60-5   | 96.94            | 0.19                   | U         | 0.75                      |              |            |
| 1,1-Dichloroethane             | 75-34-3    | 98.96            | 0.13                   | U         | 0.53                      |              |            |
| Cyclohexane                    | 110-82-7   | 84.16            | 0.22                   | U         | 0.76                      |              |            |
| 2-Butanone                     | 78-93-3    | 72.11            | 0.94                   |           | 2.77                      |              |            |
| Carbon Tetrachloride           | 56-23-5    | 153.8            | 0.07                   |           | 0.44                      |              |            |
| cis-1,2-Dichloroethene         | 156-59-2   | 96.94            | 0.09                   | U         | 0.36                      |              |            |
| Chloroform                     | 67-66-3    | 119.4            | 0.24                   | J         | 1.17                      |              |            |
| 1,1,1-Trichloroethane          | 71-55-6    | 133.4            | 0.01                   | U         | 0.05                      |              |            |
| 2,2,4-Trimethylpentane         | 540-84-1   | 114.2            | 0.29                   | J         | 1.35                      |              |            |
| Benzene                        | 71-43-2    | 78.11            | 0.41                   | J         | 1.31                      |              |            |
| 1,2-Dichloroethane             | 107-06-2   | 98.96            | 0.09                   | U         | 0.36                      |              |            |
| Trichloroethene                | 79-01-6    | 131.4            | 0.02                   | U         | 0.11                      |              |            |
| 1,2-Dichloropropane            | 78-87-5    | 113              | 0.11                   | U         | 0.51                      |              |            |
| Bromodichloromethane           | 75-27-4    | 163.8            | 0.08                   | U         | 0.54                      |              |            |
| 4-Methyl-2-Pentanone           | 108-10-1   | 100.2            | 0.09                   | U         | 0.37                      |              |            |
| Toluene                        | 108-88-3   | 92.14            | 0.74                   |           | 2.79                      |              |            |
| t-1,3-Dichloropropene          | 10061-02-6 | 111              | 0.06                   | U         | 0.27                      |              |            |
| cis-1,3-Dichloropropene        | 10061-01-5 | 111              | 0.06                   | U         | 0.27                      |              |            |
| 1,1,2-Trichloroethane          | 79-00-5    | 133.4            | 0.07                   | U         | 0.38                      |              |            |

**Project :** R36719

**Sampling Date :** 12/11/24

**Field Id Number :** C0AB8

**Analysis Date :** 12/19/24

**Laboratory Id Number :** P5294-03

**Target Analyts :** Air Results

|                           |             |         |      |   |      |  |  |
|---------------------------|-------------|---------|------|---|------|--|--|
| Dibromochloromethane      | 124-48-1    | 208.3   | 0.07 | U | 0.6  |  |  |
| 1,2-Dibromoethane         | 106-93-4    | 187.9   | 0.07 | U | 0.54 |  |  |
| Tetrachloroethene         | 127-18-4    | 165.8   | 0.02 | U | 0.14 |  |  |
| Chlorobenzene             | 108-90-7    | 112.6   | 0.08 | U | 0.37 |  |  |
| Ethyl Benzene             | 100-41-4    | 106.2   | 0.12 | U | 0.52 |  |  |
| m/p-Xylene                | 179601-23-1 | 106.2   | 0.38 | J | 1.65 |  |  |
| o-Xylene                  | 95-47-6     | 106.2   | 0.14 | J | 0.61 |  |  |
| Styrene                   | 100-42-5    | 104.1   | 0.11 | U | 0.47 |  |  |
| Bromoform                 | 75-25-2     | 252.8   | 0.06 | U | 0.62 |  |  |
| 1,1,2,2-Tetrachloroethane | 79-34-5     | 167.9   | 0.01 | U | 0.07 |  |  |
| 2-Chlorotoluene           | 95-49-8     | 126.6   | 0.11 | U | 0.57 |  |  |
| 1,3,5-Trimethylbenzene    | 108-67-8    | 120.2   | 0.11 | U | 0.54 |  |  |
| 1,2,4-Trimethylbenzene    | 95-63-6     | 120.2   | 0.13 | J | 0.64 |  |  |
| 1,3-Dichlorobenzene       | 541-73-1    | 147     | 0.08 | U | 0.48 |  |  |
| 1,4-Dichlorobenzene       | 106-46-7    | 147     | 0.05 | U | 0.3  |  |  |
| 1,2-Dichlorobenzene       | 95-50-1     | 147     | 0.08 | U | 0.48 |  |  |
| 1,2,4-Trichlorobenzene    | 120-82-1    | 181.5   | 0.09 | U | 0.67 |  |  |
| Hexachloro-1,3-Butadiene  | 87-68-3     | 260.8   | 0.09 | U | 0.96 |  |  |
| Naphthalene               | 91-20-3     | 128.17  | 0.08 | U | 0.42 |  |  |
| 1,3-Butadiene             | 106-99-0    | 54.09   | 0.13 | U | 0.29 |  |  |
| 4-Ethyltoluene            | 622-96-8    | 120.2   | 0.12 | U | 0.59 |  |  |
| Hexane                    | 110-54-3    | 86.17   | 0.37 | J | 1.3  |  |  |
| Allyl Chloride            | 107-05-1    | 76.53   | 0.15 | U | 0.47 |  |  |
| 1,4-Dioxane               | 123-91-1    | 88.12   | 0.21 | U | 0.76 |  |  |
| Methyl Methacrylate       | 80-62-6     | 100.117 | 0.09 | U | 0.37 |  |  |

| Method | Matrix | Parameter                      | Spike_Amt_<br>Added | Calculated MDL | MB Data | MB Datafile | New MDL TO<br>Be Used | MDL Unit |
|--------|--------|--------------------------------|---------------------|----------------|---------|-------------|-----------------------|----------|
| TO-15  | Air    | 1,1,1,2-Tetrachloroethane      | 0.4                 | 0.090683682    | 0       |             | 0.091                 | ppbv     |
| TO-15  | Air    | 1,1,1-Trichloroethane          | 0.03                | 0.00947589     | 0       |             | 0.0095                | ppbv     |
| TO-15  | Air    | 1,1,2,2-Tetrachloroethane      | 0.03                | 0.010183321    | 0       |             | 0.011                 | ppbv     |
| TO-15  | Air    | 1,1,2-Trichloroethane          | 0.4                 | 0.070112514    | 0       |             | 0.071                 | ppbv     |
| TO-15  | Air    | 1,1,2-Trichlorotrifluoroethane | 0.4                 | 0.155560652    | 0       |             | 0.16                  | ppbv     |
| TO-15  | Air    | 1,1-Dichloroethane             | 0.4                 | 0.122378743    | 0       |             | 0.13                  | ppbv     |
| TO-15  | Air    | 1,1-Dichloroethene             | 0.4                 | 0.139735617    | 0       |             | 0.14                  | ppbv     |
| TO-15  | Air    | 1,2,4-Trichlorobenzene         | 0.4                 | 0.084677012    | 0       |             | 0.085                 | ppbv     |
| TO-15  | Air    | 1,2,4-Trimethylbenzene         | 0.4                 | 0.077496367    | 0       |             | 0.078                 | ppbv     |
| TO-15  | Air    | 1,2-Dibromoethane              | 0.4                 | 0.071318853    | 0       |             | 0.072                 | ppbv     |
| TO-15  | Air    | 1,2-Dichlorobenzene            | 0.4                 | 0.074250332    | 0       |             | 0.075                 | ppbv     |
| TO-15  | Air    | 1,2-Dichloroethane             | 0.4                 | 0.090890005    | 0       |             | 0.091                 | ppbv     |
| TO-15  | Air    | 1,2-Dichloropropane            | 0.4                 | 0.073346868    | 0.109   | VL038919.D  | 0.11                  | ppbv     |
| TO-15  | Air    | 1,3,5-Trimethylbenzene         | 0.4                 | 0.101198372    | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | 1,3-Butadiene                  | 0.4                 | 0.124009143    | 0       |             | 0.13                  | ppbv     |
| TO-15  | Air    | 1,3-Dichlorobenzene            | 0.4                 | 0.079013305    | 0       |             | 0.08                  | ppbv     |
| TO-15  | Air    | 1,4-Dichlorobenzene            | 0.4                 | 0.052746151    | 0       |             | 0.053                 | ppbv     |
| TO-15  | Air    | 1,4-Dioxane                    | 0.4                 | 0.202123585    | 0       |             | 0.21                  | ppbv     |
| TO-15  | Air    | 2,2,4-Trimethylpentane         | 0.4                 | 0.09988427     | 0       |             | 0.10                  | ppbv     |
| TO-15  | Air    | 2-Butanone                     | 0.4                 | 0.118687999    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | 2-Chlorotoluene                | 0.4                 | 0.104141644    | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | 2-Hexanone                     | 0.4                 | 0.080656229    | 0       |             | 0.081                 | ppbv     |
| TO-15  | Air    | 4-Ethyltoluene                 | 0.4                 | 0.112037051    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | 4-Methyl-2-Pentanone           | 0.4                 | 0.092836933    | 0       |             | 0.093                 | ppbv     |
| TO-15  | Air    | Acetone                        | 0.4                 | 0.234416891    | 0       |             | 0.24                  | ppbv     |
| TO-15  | Air    | Allyl Chloride                 | 0.4                 | 0.145618654    | 0       |             | 0.15                  | ppbv     |
| TO-15  | Air    | Benzene                        | 0.4                 | 0.086407689    | 0       |             | 0.087                 | ppbv     |
| TO-15  | Air    | Benzyl Chloride                | 0.4                 | 0.173895169    | 0       |             | 0.18                  | ppbv     |
| TO-15  | Air    | Bromodichloromethane           | 0.4                 | 0.076780313    | 0       |             | 0.077                 | ppbv     |
| TO-15  | Air    | Bromoethene                    | 0.4                 | 0.115560124    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | Bromoform                      | 0.4                 | 0.056947551    | 0       |             | 0.057                 | ppbv     |
| TO-15  | Air    | Bromomethane                   | 0.4                 | 0.137678239    | 0       |             | 0.14                  | ppbv     |
| TO-15  | Air    | Carbon Disulfide               | 0.4                 | 0.157343925    | 0       |             | 0.16                  | ppbv     |
| TO-15  | Air    | Carbon Tetrachloride           | 0.03                | 0.010617308    | 0       |             | 0.011                 | ppbv     |
| TO-15  | Air    | Chlorobenzene                  | 0.4                 | 0.075202602    | 0       |             | 0.076                 | ppbv     |
| TO-15  | Air    | Chlorodifluoromethane          | 0.4                 | 0.087466815    | 0       |             | 0.088                 | ppbv     |
| TO-15  | Air    | Chloroethane                   | 0.4                 | 0.163530318    | 0       |             | 0.17                  | ppbv     |
| TO-15  | Air    | Chloroform                     | 0.4                 | 0.082232394    | 0       |             | 0.083                 | ppbv     |
| TO-15  | Air    | Chloromethane                  | 0.4                 | 0.097292998    | 0       |             | 0.098                 | ppbv     |
| TO-15  | Air    | cis-1,2-Dichloroethene         | 0.4                 | 0.088332535    | 0       |             | 0.089                 | ppbv     |
| TO-15  | Air    | cis-1,3-Dichloropropene        | 0.4                 | 0.063248763    | 0       |             | 0.064                 | ppbv     |
| TO-15  | Air    | Cyclohexane                    | 0.4                 | 0.217999816    | 0       |             | 0.22                  | ppbv     |
| TO-15  | Air    | Dibromochloromethane           | 0.4                 | 0.065703935    | 0       |             | 0.066                 | ppbv     |
| TO-15  | Air    | Dichlorodifluoromethane        | 0.4                 | 0.20957733     | 0       |             | 0.21                  | ppbv     |
| TO-15  | Air    | Dichlorotetrafluoroethane      | 0.4                 | 0.087348046    | 0       |             | 0.088                 | ppbv     |
| TO-15  | Air    | Ethyl Acetate                  | 0.4                 | 0.078161123    | 0       |             | 0.079                 | ppbv     |
| TO-15  | Air    | Ethyl Benzene                  | 0.4                 | 0.115413562    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | Heptane                        | 0.4                 | 0.100800637    | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | Hexachloro-1,3-Butadiene       | 0.4                 | 0.084169773    | 0       |             | 0.085                 | ppbv     |
| TO-15  | Air    | Hexane                         | 0.4                 | 0.106485082    | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | Isopropyl Alcohol              | 0.4                 | 0.068329134    | 0       |             | 0.069                 | ppbv     |
| TO-15  | Air    | Isopropylbenzene               | 0.4                 | 0.086744608    | 0       |             | 0.087                 | ppbv     |
| TO-15  | Air    | m/p-Xylene                     | 0.4                 | 0.205831125    | 0       |             | 0.21                  | ppbv     |
| TO-15  | Air    | Methyl Methacrylate            | 0.4                 | 0.085528753    | 0       |             | 0.086                 | ppbv     |
| TO-15  | Air    | Methyl tert-Butyl Ether        | 0.4                 | 0.119546728    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | Methylene Chloride             | 0.4                 | 0.18405265     | 0.11    | VL039022.D  | 0.19                  | ppbv     |
| TO-15  | Air    | Naphthalene                    | 0.4                 | 0.074961199    | 0       |             | 0.075                 | ppbv     |
| TO-15  | Air    | Naphthalene,2-methyl-          | 0.4                 | 0.148496389    | 0       |             | 0.15                  | ppbv     |
| TO-15  | Air    | n-Butylbenzene                 | 0.4                 | 0.08201719     | 0       |             | 0.083                 | ppbv     |
| TO-15  | Air    | n-propylbenzene                | 0.4                 | 0.0778963      | 0       |             | 0.078                 | ppbv     |
| TO-15  | Air    | o-Xylene                       | 0.4                 | 0.117630235    | 0       |             | 0.12                  | ppbv     |
| TO-15  | Air    | p-Isopropyltoluene             | 0.4                 | 0.085704866    | 0       |             | 0.086                 | ppbv     |
| TO-15  | Air    | Propene                        | 0.4                 | 0.143790814    | 0.14    | VL039337.D  | 0.15                  | ppbv     |
| TO-15  | Air    | sec-Butylbenzene               | 0.4                 | 0.093164076    | 0       |             | 0.094                 | ppbv     |
| TO-15  | Air    | Styrene                        | 0.4                 | 0.109444442    | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | t-1,3-Dichloropropene          | 0.4                 | 0.059734415    | 0       |             | 0.06                  | ppbv     |
| TO-15  | Air    | tert-Butyl alcohol             | 0.4                 | 0.187711954    | 0       |             | 0.19                  | ppbv     |
| TO-15  | Air    | tert-Butylbenzene              | 0.4                 | 0.092760327    | 0       |             | 0.093                 | ppbv     |
| TO-15  | Air    | Tetrachloroethene              | 0.03                | 0.014462962    | 0       |             | 0.015                 | ppbv     |
| TO-15  | Air    | Tetrahydrofuran                | 0.4                 | 0.122655048    | 0       |             | 0.13                  | ppbv     |
| TO-15  | Air    | Toluene                        | 0.4                 | 0.109284       | 0       |             | 0.11                  | ppbv     |
| TO-15  | Air    | trans-1,2-Dichloroethene       | 0.4                 | 0.185264638    | 0       |             | 0.19                  | ppbv     |
| TO-15  | Air    | Trichloroethene                | 0.03                | 0.016558175    | 0       |             | 0.017                 | ppbv     |
| TO-15  | Air    | Trichlorofluoromethane         | 0.4                 | 0.157465794    | 0       |             | 0.16                  | ppbv     |
| TO-15  | Air    | Vinyl Acetate                  | 0.4                 | 0.152371485    | 0       |             | 0.16                  | ppbv     |
| TO-15  | Air    | Vinyl Chloride                 | 0.03                | 0.013585954    | 0       |             | 0.014                 | ppbv     |
| TO-15  | Air    | Ethanol                        | 0.4                 | 0.317031286    | 0       |             | 0.32                  | ug/l     |



| StddevVal   | StudentsT<br>Value | Instrument<br>ID | Datafile1  | Concentration1 | Adate1            | Datafile2  | Concentration2 |
|-------------|--------------------|------------------|------------|----------------|-------------------|------------|----------------|
| 0.03485153  | 2.602              | MSVOA_L          | VL038602.D | 0.51           | 03142022T18:52:00 | VL038645.D | 0.494          |
| 0.003641772 | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.029          |
| 0.003913651 | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.035          |
| 0.026945624 | 2.602              | MSVOA_L          | VL038602.D | 0.44           | 03142022T18:52:00 | VL038645.D | 0.439          |
| 0.059785032 | 2.602              | MSVOA_L          | VL038602.D | 0.47           | 03142022T18:52:00 | VL038645.D | 0.466          |
| 0.047032569 | 2.602              | MSVOA_L          | VL038602.D | 0.45           | 03142022T18:52:00 | VL038645.D | 0.456          |
| 0.053703158 | 2.602              | MSVOA_L          | VL038602.D | 0.43           | 03142022T18:52:00 | VL038645.D | 0.411          |
| 0.032543048 | 2.602              | MSVOA_L          | VL038602.D | 0.3            | 03142022T18:52:00 | VL038645.D | 0.336          |
| 0.029783385 | 2.602              | MSVOA_L          | VL038602.D | 0.38           | 03142022T18:52:00 | VL038645.D | 0.396          |
| 0.027409244 | 2.602              | MSVOA_L          | VL038602.D | 0.38           | 03142022T18:52:00 | VL038645.D | 0.352          |
| 0.028535869 | 2.602              | MSVOA_L          | VL038602.D | 0.45           | 03142022T18:52:00 | VL038645.D | 0.407          |
| 0.034930824 | 2.602              | MSVOA_L          | VL038602.D | 0.41           | 03142022T18:52:00 | VL038645.D | 0.445          |
| 0.02818865  | 2.602              | MSVOA_L          | VL038602.D | 0.43           | 03142022T18:52:00 | VL038645.D | 0.406          |
| 0.038892534 | 2.602              | MSVOA_L          | VL038602.D | 0.33           | 03142022T18:52:00 | VL038645.D | 0.374          |
| 0.047659163 | 2.602              | MSVOA_L          | VL038602.D | 0.42           | 03142022T18:52:00 | VL038645.D | 0.419          |
| 0.030366374 | 2.602              | MSVOA_L          | VL038602.D | 0.42           | 03142022T18:52:00 | VL038645.D | 0.428          |
| 0.020271388 | 2.602              | MSVOA_L          | VL038602.D | 0.42           | 03142022T18:52:00 | VL038645.D | 0.418          |
| 0.077680086 | 2.602              | MSVOA_L          | VL038602.D | 0.46           | 03142022T18:52:00 | VL038645.D | 0.285          |
| 0.038387498 | 2.602              | MSVOA_L          | VL038602.D | 0.39           | 03142022T18:52:00 | VL038645.D | 0.383          |
| 0.045614143 | 2.602              | MSVOA_L          | VL038602.D | 0.4            | 03142022T18:52:00 | VL038645.D | 0.406          |
| 0.040023691 | 2.602              | MSVOA_L          | VL038602.D | 0.37           | 03142022T18:52:00 | VL038645.D | 0.375          |
| 0.030997782 | 2.602              | MSVOA_L          | VL038602.D | 0.3            | 03142022T18:52:00 | VL038645.D | 0.283          |
| 0.043058052 | 2.602              | MSVOA_L          | VL038602.D | 0.34           | 03142022T18:52:00 | VL038645.D | 0.356          |
| 0.035679067 | 2.602              | MSVOA_L          | VL038602.D | 0.3            | 03142022T18:52:00 | VL038645.D | 0.282          |
| 0.090091042 | 2.602              | MSVOA_L          | VL038602.D | 0.43           | 03142022T18:52:00 | VL038645.D | 0.468          |
| 0.055964125 | 2.602              | MSVOA_L          | VL038602.D | 0.4            | 03142022T18:52:00 | VL038645.D | 0.392          |
| 0.033208182 | 2.602              | MSVOA_L          | VL038602.D | 0.38           | 03142022T18:52:00 | VL038645.D | 0.407          |
| 0.066831349 | 2.602              | MSVOA_L          | VL038602.D | 0.44           | 03142022T18:52:00 | VL038645.D | 0.454          |
| 0.029508191 | 2.602              | MSVOA_L          | VL038602.D | 0.43           | 03142022T18:52:00 | VL038645.D | 0.408          |
| 0.044412039 | 2.602              | MSVOA_L          | VL038602.D | 0.42           | 03142022T18:52:00 | VL038645.D | 0.433          |
| 0.021886069 | 2.602              | MSVOA_L          | VL038602.D | 0.38           | 03142022T18:52:00 | VL038645.D | 0.31           |
| 0.052912467 | 2.602              | MSVOA_L          | VL038602.D | 0.43           | 03142022T18:52:00 | VL038645.D | 0.404          |
| 0.060470378 | 2.602              | MSVOA_L          | VL038602.D | 0.37           | 03142022T18:52:00 | VL038645.D | 0.357          |
| 0.004080441 | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.026          |
| 0.028901845 | 2.602              | MSVOA_L          | VL038602.D | 0.48           | 03142022T18:52:00 | VL038645.D | 0.467          |
| 0.033615225 | 2.602              | MSVOA_L          | VL038602.D | 0.45           | 03142022T18:52:00 | VL038645.D | 0.468          |
| 0.062847932 | 2.602              | MSVOA_L          | VL038602.D | 0.44           | 03142022T18:52:00 | VL038645.D | 0.453          |
| 0.031603534 | 2.602              | MSVOA_L          | VL038602.D | 0.45           | 03142022T18:52:00 | VL038645.D | 0.464          |
| 0.037391621 | 2.602              | MSVOA_L          | VL038602.D | 0.47           | 03142022T18:52:00 | VL038645.D | 0.439          |
| 0.033947938 | 2.602              | MSVOA_L          | VL038602.D | 0.36           | 03142022T18:52:00 | VL038645.D | 0.391          |
| 0.024307749 | 2.602              | MSVOA_L          | VL038602.D | 0.3            | 03142022T18:52:00 | VL038645.D | 0.317          |
| 0.083781636 | 2.602              | MSVOA_L          | VL038602.D | 0.42           | 03142022T18:52:00 | VL038645.D | 0.414          |
| 0.02525132  | 2.602              | MSVOA_L          | VL038602.D | 0.39           | 03142022T18:52:00 | VL038645.D | 0.359          |
| 0.080544708 | 2.602              | MSVOA_L          | VL038602.D | 0.49           | 03142022T18:52:00 | VL038645.D | 0.43           |
| 0.033569579 | 2.602              | MSVOA_L          | VL038602.D | 0.5            | 03142022T18:52:00 | VL038645.D | 0.472          |
| 0.030038864 | 2.602              | MSVOA_L          | VL038602.D | 0.39           | 03142022T18:52:00 | VL038645.D | 0.412          |
| 0.044355712 | 2.602              | MSVOA_L          | VL038602.D | 0.33           | 03142022T18:52:00 | VL038645.D | 0.357          |
| 0.038739676 | 2.602              | MSVOA_L          | VL038602.D | 0.35           | 03142022T18:52:00 | VL038645.D | 0.349          |
| 0.032348107 | 2.602              | MSVOA_L          | VL038602.D | 0.48           | 03142022T18:52:00 | VL038645.D | 0.5            |
| 0.04092432  | 2.602              | MSVOA_L          | VL038602.D | 0.37           | 03142022T18:52:00 | VL038645.D | 0.411          |
| 0.026260236 | 2.602              | MSVOA_L          | VL038602.D | 0.47           | 03142022T18:52:00 | VL038645.D | 0.44           |
| 0.033337666 | 2.602              | MSVOA_L          | VL038602.D | 0.4            | 03142022T18:52:00 | VL038645.D | 0.387          |
| 0.079104967 | 2.602              | MSVOA_L          | VL038602.D | 0.76           | 03142022T18:52:00 | VL038645.D | 0.762          |
| 0.032870389 | 2.602              | MSVOA_L          | VL038602.D | 0.31           | 03142022T18:52:00 | VL038645.D | 0.334          |
| 0.045944169 | 2.602              | MSVOA_L          | VL038602.D | 0.41           | 03142022T18:52:00 | VL038645.D | 0.418          |
| 0.070735069 | 2.602              | MSVOA_L          | VL038602.D | 0.49           | 03142022T18:52:00 | VL038645.D | 0.479          |
| 0.02880907  | 2.602              | MSVOA_L          | VL038602.D | 0.25           | 03142022T18:52:00 | VL038645.D | 0.289          |
| 0.057070096 | 2.602              | MSVOA_L          | VL038602.D | 0.14           | 03142022T18:52:00 | VL038645.D | 0.074          |
| 0.031520826 | 2.602              | MSVOA_L          | VL038602.D | 0.35           | 03142022T18:52:00 | VL038645.D | 0.366          |
| 0.029937087 | 2.602              | MSVOA_L          | VL038602.D | 0.37           | 03142022T18:52:00 | VL038645.D | 0.365          |
| 0.045207623 | 2.602              | MSVOA_L          | VL038602.D | 0.36           | 03142022T18:52:00 | VL038645.D | 0.368          |
| 0.032938073 | 2.602              | MSVOA_L          | VL038602.D | 0.35           | 03142022T18:52:00 | VL038645.D | 0.366          |
| 0.05526165  | 2.602              | MSVOA_L          | VL038602.D | 0.44           | 03142022T18:52:00 | VL038645.D | 0.443          |
| 0.035804795 | 2.602              | MSVOA_L          | VL038602.D | 0.38           | 03142022T18:52:00 | VL038645.D | 0.392          |
| 0.042061661 | 2.602              | MSVOA_L          | VL038602.D | 0.26           | 03142022T18:52:00 | VL038645.D | 0.275          |
| 0.022957116 | 2.602              | MSVOA_L          | VL038602.D | 0.27           | 03142022T18:52:00 | VL038645.D | 0.29           |
| 0.072141412 | 2.602              | MSVOA_L          | VL038602.D | 0.44           | 03142022T18:52:00 | VL038645.D | 0.459          |
| 0.035649626 | 2.602              | MSVOA_L          | VL038602.D | 0.37           | 03142022T18:52:00 | VL038645.D | 0.405          |
| 0.005558402 | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.031          |
| 0.047138758 | 2.602              | MSVOA_L          | VL038602.D | 0.3            | 03142022T18:52:00 | VL038645.D | 0.324          |
| 0.042       | 2.602              | MSVOA_L          | VL038602.D | 0.31           | 03142022T18:52:00 | VL038645.D | 0.332          |
| 0.07120086  | 2.602              | MSVOA_L          | VL038602.D | 0.4            | 03142022T18:52:00 | VL038645.D | 0.396          |
| 0.006363634 | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.035          |
| 0.060517215 | 2.602              | MSVOA_L          | VL038602.D | 0.46           | 03142022T18:52:00 | VL038645.D | 0.472          |
| 0.058559372 | 2.602              | MSVOA_L          | VL038602.D | 0.4            | 03142022T18:52:00 | VL038645.D | 0.389          |
| 0.00522135  | 2.602              | MSVOA_L          | VL038599.D | 0.03           | 03142022T17:01:00 | VL038658.D | 0.031          |
| 0.105747594 | 2.998              | MSVOA_L          | VL040210.D | 0.438          | 02222023T00:52:00 | VL040220.D | 0.43           |



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| Concentration5 | Adate5            | Datafile6  | Concentration6 | Adate6            | Datafile7  | Concentration7 | Adate7            |
|----------------|-------------------|------------|----------------|-------------------|------------|----------------|-------------------|
| 0.433          | 08182022T21:04:00 | VL039600.D | 0.463          | 08262022T12:33:00 | VL039709.D | 0.402          | 10102022T23:30:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.031          | 08252022T20:23:00 | VL039711.D | 0.03           | 10112022T00:45:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.029          | 08252022T20:23:00 | VL039711.D | 0.03           | 10112022T00:45:00 |
| 0.404          | 08182022T21:04:00 | VL039600.D | 0.424          | 08262022T12:33:00 | VL039709.D | 0.412          | 10102022T23:30:00 |
| 0.448          | 08182022T21:04:00 | VL039600.D | 0.454          | 08262022T12:33:00 | VL039709.D | 0.438          | 10102022T23:30:00 |
| 0.426          | 08182022T21:04:00 | VL039600.D | 0.451          | 08262022T12:33:00 | VL039709.D | 0.445          | 10102022T23:30:00 |
| 0.394          | 08182022T21:04:00 | VL039600.D | 0.387          | 08262022T12:33:00 | VL039709.D | 0.427          | 10102022T23:30:00 |
| 0.314          | 08182022T21:04:00 | VL039600.D | 0.367          | 08262022T12:33:00 | VL039709.D | 0.373          | 10102022T23:30:00 |
| 0.342          | 08182022T21:04:00 | VL039600.D | 0.389          | 08262022T12:33:00 | VL039709.D | 0.389          | 10102022T23:30:00 |
| 0.361          | 08182022T21:04:00 | VL039600.D | 0.402          | 08262022T12:33:00 | VL039709.D | 0.375          | 10102022T23:30:00 |
| 0.408          | 08182022T21:04:00 | VL039600.D | 0.431          | 08262022T12:33:00 | VL039709.D | 0.448          | 10102022T23:30:00 |
| 0.411          | 08182022T21:04:00 | VL039600.D | 0.455          | 08262022T12:33:00 | VL039709.D | 0.418          | 10102022T23:30:00 |
| 0.444          | 08182022T21:04:00 | VL039600.D | 0.429          | 08262022T12:33:00 | VL039709.D | 0.373          | 10102022T23:30:00 |
| 0.331          | 08182022T21:04:00 | VL039600.D | 0.357          | 08262022T12:33:00 | VL039709.D | 0.342          | 10102022T23:30:00 |
| 0.405          | 08182022T21:04:00 | VL039600.D | 0.449          | 08262022T12:33:00 | VL039709.D | 0.422          | 10102022T23:30:00 |
| 0.368          | 08182022T21:04:00 | VL039600.D | 0.414          | 08262022T12:33:00 | VL039709.D | 0.399          | 10102022T23:30:00 |
| 0.404          | 08182022T21:04:00 | VL039600.D | 0.384          | 08262022T12:33:00 | VL039709.D | 0.439          | 10102022T23:30:00 |
| 0.373          | 08182022T21:04:00 | VL039600.D | 0.341          | 08262022T12:33:00 | VL039709.D | 0.418          | 10102022T23:30:00 |
| 0.348          | 08182022T21:04:00 | VL039600.D | 0.379          | 08262022T12:33:00 | VL039709.D | 0.392          | 10102022T23:30:00 |
| 0.314          | 08182022T21:04:00 | VL039600.D | 0.451          | 08262022T12:33:00 | VL039709.D | 0.354          | 10102022T23:30:00 |
| 0.312          | 08182022T21:04:00 | VL039600.D | 0.359          | 08262022T12:33:00 | VL039709.D | 0.348          | 10102022T23:30:00 |
| 0.27           | 08182022T21:04:00 | VL039600.D | 0.294          | 08262022T12:33:00 | VL039709.D | 0.326          | 10102022T23:30:00 |
| 0.284          | 08182022T21:04:00 | VL039600.D | 0.348          | 08262022T12:33:00 | VL039709.D | 0.355          | 10102022T23:30:00 |
| 0.322          | 08182022T21:04:00 | VL039600.D | 0.335          | 08262022T12:33:00 | VL039709.D | 0.32           | 10102022T23:30:00 |
| 0.363          | 08182022T21:04:00 | VL039600.D | 0.484          | 08262022T12:33:00 | VL039709.D | 0.5            | 10102022T23:30:00 |
| 0.418          | 08182022T21:04:00 | VL039600.D | 0.459          | 08262022T12:33:00 | VL039709.D | 0.379          | 10102022T23:30:00 |
| 0.345          | 08182022T21:04:00 | VL039600.D | 0.376          | 08262022T12:33:00 | VL039709.D | 0.398          | 10102022T23:30:00 |
| 0.394          | 08182022T21:04:00 | VL039600.D | 0.336          | 08262022T12:33:00 | VL039709.D | 0.356          | 10102022T23:30:00 |
| 0.382          | 08182022T21:04:00 | VL039600.D | 0.367          | 08262022T12:33:00 | VL039709.D | 0.377          | 10102022T23:30:00 |
| 0.408          | 08182022T21:04:00 | VL039600.D | 0.441          | 08262022T12:33:00 | VL039709.D | 0.388          | 10102022T23:30:00 |
| 0.305          | 08182022T21:04:00 | VL039600.D | 0.303          | 08262022T12:33:00 | VL039709.D | 0.293          | 10102022T23:30:00 |
| 0.364          | 08182022T21:04:00 | VL039600.D | 0.494          | 08262022T12:33:00 | VL039709.D | 0.464          | 10102022T23:30:00 |
| 0.399          | 08182022T21:04:00 | VL039600.D | 0.268          | 08262022T12:33:00 | VL039709.D | 0.332          | 10102022T23:30:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.027          | 08252022T20:23:00 | VL039711.D | 0.03           | 10112022T00:45:00 |
| 0.431          | 08182022T21:04:00 | VL039600.D | 0.466          | 08262022T12:33:00 | VL039709.D | 0.46           | 10102022T23:30:00 |
| 0.456          | 08182022T21:04:00 | VL039600.D | 0.504          | 08262022T12:33:00 | VL039709.D | 0.446          | 10102022T23:30:00 |
| 0.462          | 08182022T21:04:00 | VL039600.D | 0.504          | 08262022T12:33:00 | VL039709.D | 0.531          | 10102022T23:30:00 |
| 0.423          | 08182022T21:04:00 | VL039600.D | 0.46           | 08262022T12:33:00 | VL039709.D | 0.411          | 10102022T23:30:00 |
| 0.392          | 08182022T21:04:00 | VL039600.D | 0.472          | 08262022T12:33:00 | VL039709.D | 0.485          | 10102022T23:30:00 |
| 0.36           | 08182022T21:04:00 | VL039600.D | 0.407          | 08262022T12:33:00 | VL039709.D | 0.438          | 10102022T23:30:00 |
| 0.277          | 08182022T21:04:00 | VL039600.D | 0.291          | 08262022T12:33:00 | VL039709.D | 0.284          | 10102022T23:30:00 |
| 0.376          | 08182022T21:04:00 | VL039600.D | 0.395          | 08262022T12:33:00 | VL039709.D | 0.383          | 10102022T23:30:00 |
| 0.339          | 08182022T21:04:00 | VL039600.D | 0.335          | 08262022T12:33:00 | VL039709.D | 0.301          | 10102022T23:30:00 |
| 0.62           | 08182022T21:04:00 | VL039600.D | 0.643          | 08262022T12:33:00 | VL039709.D | 0.694          | 10102022T23:30:00 |
| 0.454          | 08182022T21:04:00 | VL039600.D | 0.508          | 08262022T12:33:00 | VL039709.D | 0.473          | 10102022T23:30:00 |
| 0.341          | 08182022T21:04:00 | VL039600.D | 0.432          | 08262022T12:33:00 | VL039709.D | 0.395          | 10102022T23:30:00 |
| 0.297          | 08182022T21:04:00 | VL039600.D | 0.338          | 08262022T12:33:00 | VL039709.D | 0.334          | 10102022T23:30:00 |
| 0.347          | 08182022T21:04:00 | VL039600.D | 0.382          | 08262022T12:33:00 | VL039709.D | 0.407          | 10102022T23:30:00 |
| 0.447          | 08182022T21:04:00 | VL039600.D | 0.502          | 08262022T12:33:00 | VL039709.D | 0.468          | 10102022T23:30:00 |
| 0.385          | 08182022T21:04:00 | VL039600.D | 0.405          | 08262022T12:33:00 | VL039709.D | 0.435          | 10102022T23:30:00 |
| 0.458          | 08182022T21:04:00 | VL039600.D | 0.434          | 08262022T12:33:00 | VL039709.D | 0.481          | 10102022T23:30:00 |
| 0.361          | 08182022T21:04:00 | VL039600.D | 0.388          | 08262022T12:33:00 | VL039709.D | 0.405          | 10102022T23:30:00 |
| 0.673          | 08182022T21:04:00 | VL039600.D | 0.719          | 08262022T12:33:00 | VL039709.D | 0.688          | 10102022T23:30:00 |
| 0.3            | 08182022T21:04:00 | VL039600.D | 0.323          | 08262022T12:33:00 | VL039709.D | 0.346          | 10102022T23:30:00 |
| 0.337          | 08182022T21:04:00 | VL039600.D | 0.355          | 08262022T12:33:00 | VL039709.D | 0.396          | 10102022T23:30:00 |
| 0.536          | 08182022T21:04:00 | VL039600.D | 0.634          | 08262022T12:33:00 | VL039709.D | 0.499          | 10102022T23:30:00 |
| 0.28           | 08182022T21:04:00 | VL039600.D | 0.302          | 08262022T12:33:00 | VL039709.D | 0.291          | 10102022T23:30:00 |
| 0.158          | 08182022T21:04:00 | VL039600.D | 0.094          | 08262022T12:33:00 | VL039709.D | 0.149          | 10102022T23:30:00 |
| 0.321          | 08182022T21:04:00 | VL039600.D | 0.354          | 08262022T12:33:00 | VL039709.D | 0.358          | 10102022T23:30:00 |
| 0.332          | 08182022T21:04:00 | VL039600.D | 0.338          | 08262022T12:33:00 | VL039709.D | 0.347          | 10102022T23:30:00 |
| 0.315          | 08182022T21:04:00 | VL039600.D | 0.347          | 08262022T12:33:00 | VL039709.D | 0.354          | 10102022T23:30:00 |
| 0.316          | 08182022T21:04:00 | VL039600.D | 0.362          | 08262022T12:33:00 | VL039709.D | 0.358          | 10102022T23:30:00 |
| 0.499          | 08182022T21:04:00 | VL039600.D | 0.578          | 08262022T12:33:00 | VL039709.D | 0.533          | 10102022T23:30:00 |
| 0.359          | 08182022T21:04:00 | VL039600.D | 0.382          | 08262022T12:33:00 | VL039709.D | 0.371          | 10102022T23:30:00 |
| 0.23           | 08182022T21:04:00 | VL039600.D | 0.257          | 08262022T12:33:00 | VL039709.D | 0.278          | 10102022T23:30:00 |
| 0.252          | 08182022T21:04:00 | VL039600.D | 0.252          | 08262022T12:33:00 | VL039709.D | 0.273          | 10102022T23:30:00 |
| 0.384          | 08182022T21:04:00 | VL039600.D | 0.382          | 08262022T12:33:00 | VL039709.D | 0.454          | 10102022T23:30:00 |
| 0.345          | 08182022T21:04:00 | VL039600.D | 0.399          | 08262022T12:33:00 | VL039709.D | 0.371          | 10102022T23:30:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.038          | 08252022T20:23:00 | VL039711.D | 0.03           | 10112022T00:45:00 |
| 0.299          | 08182022T21:04:00 | VL039600.D | 0.344          | 08262022T12:33:00 | VL039709.D | 0.389          | 10102022T23:30:00 |
| 0.288          | 08182022T21:04:00 | VL039600.D | 0.296          | 08262022T12:33:00 | VL039709.D | 0.33           | 10102022T23:30:00 |
| 0.375          | 08182022T21:04:00 | VL039600.D | 0.466          | 08262022T12:33:00 | VL039709.D | 0.437          | 10102022T23:30:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.031          | 08252022T20:23:00 | VL039711.D | 0.04           | 10112022T00:45:00 |
| 0.436          | 08182022T21:04:00 | VL039600.D | 0.47           | 08262022T12:33:00 | VL039709.D | 0.385          | 10102022T23:30:00 |
| 0.42           | 08182022T21:04:00 | VL039600.D | 0.483          | 08262022T12:33:00 | VL039709.D | 0.363          | 10102022T23:30:00 |
| 0.03           | 08182022T22:24:00 | VL039586.D | 0.029          | 08252022T20:23:00 | VL039711.D | 0.03           | 10112022T00:45:00 |
| 0.636          | 07272023T03:27:00 | VL040579.D | 0.42           | 07312023T19:20:00 | VL040747.D | 0.607          | 10042023T19:33:00 |

| Datafile8  | Concentration8 | Adate8            | Datafile9  | Concentration9 | Adate9            | Datafile10 | Concentration10 |
|------------|----------------|-------------------|------------|----------------|-------------------|------------|-----------------|
| VL040134.D | 0.42           | 01302023T15:54:00 | VL040210.D | 0.383          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.038          | 02232023T14:26:00 | VL040223.D | 0.033           |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.032          | 02232023T14:26:00 | VL040223.D | 0.027           |
| VL040134.D | 0.41           | 01302023T15:54:00 | VL040210.D | 0.395          | 02222023T00:52:00 | VL040220.D | 0.43            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.476          | 02222023T00:52:00 | VL040220.D | 0.47            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.436          | 02222023T00:52:00 | VL040220.D | 0.45            |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.452          | 02222023T00:52:00 | VL040220.D | 0.45            |
| VL040134.D | 0.32           | 01302023T15:54:00 | VL040210.D | 0.299          | 02222023T00:52:00 | VL040220.D | 0.32            |
| VL040134.D | 0.37           | 01302023T15:54:00 | VL040210.D | 0.375          | 02222023T00:52:00 | VL040220.D | 0.37            |
| VL040134.D | 0.39           | 01302023T15:54:00 | VL040210.D | 0.38           | 02222023T00:52:00 | VL040220.D | 0.38            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.378          | 02222023T00:52:00 | VL040220.D | 0.43            |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.434          | 02222023T00:52:00 | VL040220.D | 0.44            |
| VL040134.D | 0.41           | 01302023T15:54:00 | VL040210.D | 0.432          | 02222023T00:52:00 | VL040220.D | 0.43            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.344          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.43           | 01302023T15:54:00 | VL040210.D | 0.396          | 02222023T00:52:00 | VL040220.D | 0.41            |
| VL040134.D | 0.37           | 01302023T15:54:00 | VL040210.D | 0.395          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.402          | 02222023T00:52:00 | VL040220.D | 0.4             |
| VL040134.D | 0.41           | 01302023T15:54:00 | VL040210.D | 0.387          | 02222023T00:52:00 | VL040220.D | 0.43            |
| VL040134.D | 0.39           | 01302023T15:54:00 | VL040210.D | 0.352          | 02222023T00:52:00 | VL040220.D | 0.38            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.416          | 02222023T00:52:00 | VL040220.D | 0.44            |
| VL040134.D | 0.36           | 01302023T15:54:00 | VL040210.D | 0.34           | 02222023T00:52:00 | VL040220.D | 0.36            |
| VL040134.D | 0.32           | 01302023T15:54:00 | VL040210.D | 0.318          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.321          | 02222023T00:52:00 | VL040220.D | 0.36            |
| VL040134.D | 0.36           | 01302023T15:54:00 | VL040210.D | 0.337          | 02222023T00:52:00 | VL040220.D | 0.37            |
| VL040134.D | 0.45           | 01302023T15:54:00 | VL040210.D | 0.482          | 02222023T00:52:00 | VL040220.D | 0.5             |
| VL040134.D | 0.36           | 01302023T15:54:00 | VL040210.D | 0.411          | 02222023T00:52:00 | VL040220.D | 0.45            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.359          | 02222023T00:52:00 | VL040220.D | 0.39            |
| VL040134.D | 0.29           | 01302023T15:54:00 | VL040210.D | 0.311          | 02222023T00:52:00 | VL040220.D | 0.38            |
| VL040134.D | 0.37           | 01302023T15:54:00 | VL040210.D | 0.378          | 02222023T00:52:00 | VL040220.D | 0.38            |
| VL040134.D | 0.37           | 01302023T15:54:00 | VL040210.D | 0.413          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040134.D | 0.32           | 01302023T15:54:00 | VL040210.D | 0.32           | 02222023T00:52:00 | VL040220.D | 0.33            |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.408          | 02222023T00:52:00 | VL040220.D | 0.49            |
| VL040134.D | 0.31           | 01302023T15:54:00 | VL040210.D | 0.391          | 02222023T00:52:00 | VL040220.D | 0.37            |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.033          | 02232023T14:26:00 | VL040223.D | 0.037           |
| VL040134.D | 0.44           | 01302023T15:54:00 | VL040210.D | 0.414          | 02222023T00:52:00 | VL040220.D | 0.45            |
| VL040134.D | 0.43           | 01302023T15:54:00 | VL040210.D | 0.474          | 02222023T00:52:00 | VL040220.D | 0.46            |
| VL040134.D | 0.37           | 01302023T15:54:00 | VL040210.D | 0.416          | 02222023T00:52:00 | VL040220.D | 0.44            |
| VL040134.D | 0.47           | 01302023T15:54:00 | VL040210.D | 0.445          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040134.D | 0.46           | 01302023T15:54:00 | VL040210.D | 0.443          | 02222023T00:52:00 | VL040220.D | 0.47            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.435          | 02222023T00:52:00 | VL040220.D | 0.38            |
| VL040134.D | 0.33           | 01302023T15:54:00 | VL040210.D | 0.284          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.49           | 01302023T15:54:00 | VL040210.D | 0.521          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.343          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.48           | 01302023T15:54:00 | VL040210.D | 0.497          | 02222023T00:52:00 | VL040220.D | 0.49            |
| VL040134.D | 0.43           | 01302023T15:54:00 | VL040210.D | 0.431          | 02222023T00:52:00 | VL040220.D | 0.46            |
| VL040134.D | 0.39           | 01302023T15:54:00 | VL040210.D | 0.398          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040134.D | 0.36           | 01302023T15:54:00 | VL040210.D | 0.309          | 02222023T00:52:00 | VL040220.D | 0.33            |
| VL040134.D | 0.34           | 01302023T15:54:00 | VL040210.D | 0.336          | 02222023T00:52:00 | VL040220.D | 0.37            |
| VL040134.D | 0.43           | 01302023T15:54:00 | VL040210.D | 0.421          | 02222023T00:52:00 | VL040220.D | 0.44            |
| VL040134.D | 0.41           | 01302023T15:54:00 | VL040210.D | 0.4            | 02222023T00:52:00 | VL040220.D | 0.41            |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.479          | 02222023T00:52:00 | VL040220.D | 0.48            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.361          | 02222023T00:52:00 | VL040220.D | 0.4             |
| VL040134.D | 0.71           | 01302023T15:54:00 | VL040210.D | 0.699          | 02222023T00:52:00 | VL040220.D | 0.75            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.314          | 02222023T00:52:00 | VL040220.D | 0.35            |
| VL040134.D | 0.38           | 01302023T15:54:00 | VL040210.D | 0.421          | 02222023T00:52:00 | VL040220.D | 0.41            |
| VL040134.D | 0.44           | 01302023T15:54:00 | VL040210.D | 0.558          | 02222023T00:52:00 | VL040220.D | 0.57            |
| VL040134.D | 0.27           | 01302023T15:54:00 | VL040210.D | 0.246          | 02222023T00:52:00 | VL040220.D | 0.27            |
| VL040134.D | 0.19           | 01302023T15:54:00 | VL040210.D | 0.116          | 02222023T00:52:00 | VL040220.D | 0.21            |
| VL040134.D | 0.34           | 01302023T15:54:00 | VL040210.D | 0.349          | 02222023T00:52:00 | VL040220.D | 0.35            |
| VL040134.D | 0.34           | 01302023T15:54:00 | VL040210.D | 0.354          | 02222023T00:52:00 | VL040220.D | 0.36            |
| VL040134.D | 0.34           | 01302023T15:54:00 | VL040210.D | 0.331          | 02222023T00:52:00 | VL040220.D | 0.36            |
| VL040134.D | 0.33           | 01302023T15:54:00 | VL040210.D | 0.329          | 02222023T00:52:00 | VL040220.D | 0.34            |
| VL040134.D | 0.42           | 01302023T15:54:00 | VL040210.D | 0.432          | 02222023T00:52:00 | VL040220.D | 0.43            |
| VL040134.D | 0.36           | 01302023T15:54:00 | VL040210.D | 0.352          | 02222023T00:52:00 | VL040220.D | 0.37            |
| VL040134.D | 0.29           | 01302023T15:54:00 | VL040210.D | 0.262          | 02222023T00:52:00 | VL040220.D | 0.27            |
| VL040134.D | 0.3            | 01302023T15:54:00 | VL040210.D | 0.292          | 02222023T00:52:00 | VL040220.D | 0.3             |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.395          | 02222023T00:52:00 | VL040220.D | 0.44            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.349          | 02222023T00:52:00 | VL040220.D | 0.36            |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.029          | 02232023T14:26:00 | VL040223.D | 0.031           |
| VL040134.D | 0.42           | 01302023T15:54:00 | VL040210.D | 0.368          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040134.D | 0.34           | 01302023T15:54:00 | VL040210.D | 0.297          | 02222023T00:52:00 | VL040220.D | 0.33            |
| VL040134.D | 0.35           | 01302023T15:54:00 | VL040210.D | 0.397          | 02222023T00:52:00 | VL040220.D | 0.42            |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.027          | 02232023T14:26:00 | VL040223.D | 0.028           |
| VL040134.D | 0.4            | 01302023T15:54:00 | VL040210.D | 0.451          | 02222023T00:52:00 | VL040220.D | 0.45            |
| VL040134.D | 0.39           | 01302023T15:54:00 | VL040210.D | 0.438          | 02222023T00:52:00 | VL040220.D | 0.4             |
| VL040136.D | 0.03           | 01302023T17:08:00 | VL040222.D | 0.033          | 02232023T14:26:00 | VL040223.D | 0.038           |
| VL040805.D | 0.675          | 10252023T18:12:00 |            |                |                   |            |                 |

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| Concentration13 | Adate13           | Datafile14 | Concentration14 | Adate14           | Datafile15 | Concentration15 | Adate15           |
|-----------------|-------------------|------------|-----------------|-------------------|------------|-----------------|-------------------|
| 0.48            | 07272023T03:27:00 | VL040579.D | 0.42            | 07312023T19:20:00 | VL040747.D | 0.488           | 10042023T19:33:00 |
| 0.03            | 07312023T17:18:00 | VL040581.D | 0.031           | 07312023T20:41:00 | VL040772.D | 0.035           | 10122023T01:48:00 |
| 0.031           | 07312023T17:18:00 | VL040581.D | 0.026           | 07312023T20:41:00 | VL040772.D | 0.029           | 10122023T01:48:00 |
| 0.459           | 07272023T03:27:00 | VL040579.D | 0.36            | 07312023T19:20:00 | VL040747.D | 0.405           | 10042023T19:33:00 |
| 0.573           | 07272023T03:27:00 | VL040579.D | 0.5             | 07312023T19:20:00 | VL040747.D | 0.557           | 10042023T19:33:00 |
| 0.535           | 07272023T03:27:00 | VL040579.D | 0.43            | 07312023T19:20:00 | VL040747.D | 0.527           | 10042023T19:33:00 |
| 0.527           | 07272023T03:27:00 | VL040579.D | 0.42            | 07312023T19:20:00 | VL040747.D | 0.481           | 10042023T19:33:00 |
| 0.33            | 07272023T03:27:00 | VL040579.D | 0.23            | 07312023T19:20:00 | VL040747.D | 0.305           | 10042023T19:33:00 |
| 0.389           | 07272023T03:27:00 | VL040579.D | 0.3             | 07312023T19:20:00 | VL040747.D | 0.361           | 10042023T19:33:00 |
| 0.425           | 07272023T03:27:00 | VL040579.D | 0.32            | 07312023T19:20:00 | VL040747.D | 0.359           | 10042023T19:33:00 |
| 0.442           | 07272023T03:27:00 | VL040579.D | 0.36            | 07312023T19:20:00 | VL040747.D | 0.45            | 10042023T19:33:00 |
| 0.519           | 07272023T03:27:00 | VL040579.D | 0.41            | 07312023T19:20:00 | VL040747.D | 0.426           | 10042023T19:33:00 |
| 0.452           | 07272023T03:27:00 | VL040579.D | 0.36            | 07312023T19:20:00 | VL040747.D | 0.42            | 10042023T19:33:00 |
| 0.33            | 07272023T03:27:00 | VL040579.D | 0.26            | 07312023T19:20:00 | VL040747.D | 0.321           | 10042023T19:33:00 |
| 0.412           | 07272023T03:27:00 | VL040579.D | 0.41            | 07312023T19:20:00 | VL040747.D | 0.466           | 10042023T19:33:00 |
| 0.388           | 07272023T03:27:00 | VL040579.D | 0.33            | 07312023T19:20:00 | VL040747.D | 0.412           | 10042023T19:33:00 |
| 0.438           | 07272023T03:27:00 | VL040579.D | 0.36            | 07312023T19:20:00 | VL040747.D | 0.382           | 10042023T19:33:00 |
| 0.373           | 07272023T03:27:00 | VL040579.D | 0.29            | 07312023T19:20:00 | VL040747.D | 0.257           | 10042023T19:33:00 |
| 0.398           | 07272023T03:27:00 | VL040579.D | 0.27            | 07312023T19:20:00 | VL040747.D | 0.335           | 10042023T19:33:00 |
| 0.448           | 07272023T03:27:00 | VL040579.D | 0.37            | 07312023T19:20:00 | VL040747.D | 0.443           | 10042023T19:33:00 |
| 0.35            | 07272023T03:27:00 | VL040579.D | 0.27            | 07312023T19:20:00 | VL040747.D | 0.325           | 10042023T19:33:00 |
| 0.303           | 07272023T03:27:00 | VL040579.D | 0.22            | 07312023T19:20:00 | VL040747.D | 0.283           | 10042023T19:33:00 |
| 0.32            | 07272023T03:27:00 | VL040579.D | 0.23            | 07312023T19:20:00 | VL040747.D | 0.317           | 10042023T19:33:00 |
| 0.348           | 07272023T03:27:00 | VL040579.D | 0.27            | 07312023T19:20:00 | VL040747.D | 0.302           | 10042023T19:33:00 |
| 0.674           | 07272023T03:27:00 | VL040579.D | 0.48            | 07312023T19:20:00 | VL040747.D | 0.65            | 10042023T19:33:00 |
| 0.436           | 07272023T03:27:00 | VL040579.D | 0.37            | 07312023T19:20:00 | VL040747.D | 0.511           | 10042023T19:33:00 |
| 0.397           | 07272023T03:27:00 | VL040579.D | 0.3             | 07312023T19:20:00 | VL040747.D | 0.386           | 10042023T19:33:00 |
| 0.425           | 07272023T03:27:00 | VL040579.D | 0.34            | 07312023T19:20:00 | VL040747.D | 0.307           | 10042023T19:33:00 |
| 0.467           | 07272023T03:27:00 | VL040579.D | 0.4             | 07312023T19:20:00 | VL040747.D | 0.409           | 10042023T19:33:00 |
| 0.508           | 07272023T03:27:00 | VL040579.D | 0.42            | 07312023T19:20:00 | VL040747.D | 0.506           | 10042023T19:33:00 |
| 0.352           | 07272023T03:27:00 | VL040579.D | 0.33            | 07312023T19:20:00 | VL040747.D | 0.349           | 10042023T19:33:00 |
| 0.543           | 07272023T03:27:00 | VL040579.D | 0.46            | 07312023T19:20:00 | VL040747.D | 0.496           | 10042023T19:33:00 |
| 0.46            | 07272023T03:27:00 | VL040579.D | 0.42            | 07312023T19:20:00 | VL040747.D | 0.477           | 10042023T19:33:00 |
| 0.036           | 07312023T17:18:00 | VL040581.D | 0.033           | 07312023T20:41:00 | VL040772.D | 0.031           | 10122023T01:48:00 |
| 0.481           | 07272023T03:27:00 | VL040579.D | 0.38            | 07312023T19:20:00 | VL040747.D | 0.489           | 10042023T19:33:00 |
| 0.526           | 07272023T03:27:00 | VL040579.D | 0.45            | 07312023T19:20:00 | VL040747.D | 0.55            | 10042023T19:33:00 |
| 0.516           | 07272023T03:27:00 | VL040579.D | 0.43            | 07312023T19:20:00 | VL040747.D | 0.576           | 10042023T19:33:00 |
| 0.521           | 07272023T03:27:00 | VL040579.D | 0.41            | 07312023T19:20:00 | VL040747.D | 0.501           | 10042023T19:33:00 |
| 0.486           | 07272023T03:27:00 | VL040579.D | 0.39            | 07312023T19:20:00 | VL040747.D | 0.544           | 10042023T19:33:00 |
| 0.405           | 07272023T03:27:00 | VL040579.D | 0.32            | 07312023T19:20:00 | VL040747.D | 0.431           | 10042023T19:33:00 |
| 0.295           | 07272023T03:27:00 | VL040579.D | 0.25            | 07312023T19:20:00 | VL040747.D | 0.298           | 10042023T19:33:00 |
| 0.301           | 07272023T03:27:00 | VL040579.D | 0.21            | 07312023T19:20:00 | VL040747.D | 0.317           | 10042023T19:33:00 |
| 0.403           | 07272023T03:27:00 | VL040579.D | 0.35            | 07312023T19:20:00 | VL040747.D | 0.381           | 10042023T19:33:00 |
| 0.54            | 07272023T03:27:00 | VL040579.D | 0.47            | 07312023T19:20:00 | VL040747.D | 0.562           | 10042023T19:33:00 |
| 0.516           | 07272023T03:27:00 | VL040579.D | 0.46            | 07312023T19:20:00 | VL040747.D | 0.509           | 10042023T19:33:00 |
| 0.424           | 07272023T03:27:00 | VL040579.D | 0.34            | 07312023T19:20:00 | VL040747.D | 0.441           | 10042023T19:33:00 |
| 0.32            | 07272023T03:27:00 | VL040579.D | 0.21            | 07312023T19:20:00 | VL040747.D | 0.299           | 10042023T19:33:00 |
| 0.341           | 07272023T03:27:00 | VL040579.D | 0.25            | 07312023T19:20:00 | VL040747.D | 0.355           | 10042023T19:33:00 |
| 0.466           | 07272023T03:27:00 | VL040579.D | 0.37            | 07312023T19:20:00 | VL040747.D | 0.479           | 10042023T19:33:00 |
| 0.38            | 07272023T03:27:00 | VL040579.D | 0.31            | 07312023T19:20:00 | VL040747.D | 0.465           | 10042023T19:33:00 |
| 0.451           | 07272023T03:27:00 | VL040579.D | 0.43            | 07312023T19:20:00 | VL040747.D | 0.426           | 10042023T19:33:00 |
| 0.379           | 07272023T03:27:00 | VL040579.D | 0.29            | 07312023T19:20:00 | VL040747.D | 0.386           | 10042023T19:33:00 |
| 0.735           | 07272023T03:27:00 | VL040579.D | 0.54            | 07312023T19:20:00 | VL040747.D | 0.682           | 10042023T19:33:00 |
| 0.283           | 07272023T03:27:00 | VL040579.D | 0.23            | 07312023T19:20:00 | VL040747.D | 0.324           | 10042023T19:33:00 |
| 0.468           | 07272023T03:27:00 | VL040579.D | 0.38            | 07312023T19:20:00 | VL040747.D | 0.472           | 10042023T19:33:00 |
| 0.619           | 07272023T03:27:00 | VL040579.D | 0.62            | 07312023T19:20:00 | VL040747.D | 0.625           | 10042023T19:33:00 |
| 0.274           | 07272023T03:27:00 | VL040579.D | 0.19            | 07312023T19:20:00 | VL040747.D | 0.258           | 10042023T19:33:00 |
| 0.107           | 07272023T03:27:00 | VL040579.D | 0.06            | 07312023T19:20:00 | VL040747.D | 0.133           | 10042023T19:33:00 |
| 0.361           | 07272023T03:27:00 | VL040579.D | 0.27            | 07312023T19:20:00 | VL040747.D | 0.343           | 10042023T19:33:00 |
| 0.355           | 07272023T03:27:00 | VL040579.D | 0.27            | 07312023T19:20:00 | VL040747.D | 0.369           | 10042023T19:33:00 |
| 0.355           | 07272023T03:27:00 | VL040579.D | 0.26            | 07312023T19:20:00 | VL040747.D | 0.301           | 10042023T19:33:00 |
| 0.357           | 07272023T03:27:00 | VL040579.D | 0.26            | 07312023T19:20:00 | VL040747.D | 0.313           | 10042023T19:33:00 |
| 0.436           | 07272023T03:27:00 | VL040579.D | 0.34            | 07312023T19:20:00 | VL040747.D | 0.471           | 10042023T19:33:00 |
| 0.393           | 07272023T03:27:00 | VL040579.D | 0.29            | 07312023T19:20:00 | VL040747.D | 0.354           | 10042023T19:33:00 |
| 0.242           | 07272023T03:27:00 | VL040579.D | 0.17            | 07312023T19:20:00 | VL040747.D | 0.266           | 10042023T19:33:00 |
| 0.283           | 07272023T03:27:00 | VL040579.D | 0.23            | 07312023T19:20:00 | VL040747.D | 0.312           | 10042023T19:33:00 |
| 0.539           | 07272023T03:27:00 | VL040579.D | 0.43            | 07312023T19:20:00 | VL040747.D | 0.394           | 10042023T19:33:00 |
| 0.366           | 07272023T03:27:00 | VL040579.D | 0.28            | 07312023T19:20:00 | VL040747.D | 0.381           | 10042023T19:33:00 |
| 0.025           | 07312023T17:18:00 | VL040581.D | 0.028           | 07312023T20:41:00 | VL040772.D | 0.044           | 10122023T01:48:00 |
| 0.353           | 07272023T03:27:00 | VL040579.D | 0.26            | 07312023T19:20:00 | VL040747.D | 0.351           | 10042023T19:33:00 |
| 0.285           | 07272023T03:27:00 | VL040579.D | 0.2             | 07312023T19:20:00 | VL040747.D | 0.288           | 10042023T19:33:00 |
| 0.477           | 07272023T03:27:00 | VL040579.D | 0.4             | 07312023T19:20:00 | VL040747.D | 0.507           | 10042023T19:33:00 |
| 0.027           | 07312023T17:18:00 | VL040581.D | 0.027           | 07312023T20:41:00 | VL040772.D | 0.039           | 10122023T01:48:00 |
| 0.589           | 07272023T03:27:00 | VL040579.D | 0.52            | 07312023T19:20:00 | VL040747.D | 0.561           | 10042023T19:33:00 |
| 0.487           | 07272023T03:27:00 | VL040579.D | 0.46            | 07312023T19:20:00 | VL040747.D | 0.456           | 10042023T19:33:00 |
| 0.03            | 07312023T17:18:00 | VL040581.D | 0.033           | 07312023T20:41:00 | VL040772.D | 0.041           | 10122023T01:48:00 |

| Datafile16 | Concentration16 | Adate16           | Department | AVG<br>Concentration | Recovery |
|------------|-----------------|-------------------|------------|----------------------|----------|
| VL040805.D | 0.428           | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040787.D | 0.04            | 10232023T20:32:00 | VOC        | 0.032                | 110      |
| VL040787.D | 0.04            | 10232023T20:32:00 | VOC        | 0.03                 | 100      |
| VL040805.D | 0.471           | 10252023T18:12:00 | VOC        | 0.42                 | 110      |
| VL040805.D | 0.476           | 10252023T18:12:00 | VOC        | 0.48                 | 120      |
| VL040805.D | 0.427           | 10252023T18:12:00 | VOC        | 0.46                 | 110      |
| VL040805.D | 0.47            | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.288           | 10252023T18:12:00 | VOC        | 0.31                 | 79       |
| VL040805.D | 0.435           | 10252023T18:12:00 | VOC        | 0.37                 | 93       |
| VL040805.D | 0.433           | 10252023T18:12:00 | VOC        | 0.38                 | 95       |
| VL040805.D | 0.405           | 10252023T18:12:00 | VOC        | 0.41                 | 100      |
| VL040805.D | 0.501           | 10252023T18:12:00 | VOC        | 0.44                 | 110      |
| VL040805.D | 0.456           | 10252023T18:12:00 | VOC        | 0.42                 | 100      |
| VL040805.D | 0.403           | 10252023T18:12:00 | VOC        | 0.35                 | 87       |
| VL040805.D | 0.455           | 10252023T18:12:00 | VOC        | 0.44                 | 110      |
| VL040805.D | 0.412           | 10252023T18:12:00 | VOC        | 0.4                  | 100      |
| VL040805.D | 0.414           | 10252023T18:12:00 | VOC        | 0.4                  | 100      |
| VL040805.D | 0.486           | 10252023T18:12:00 | VOC        | 0.38                 | 96       |
| VL040805.D | 0.434           | 10252023T18:12:00 | VOC        | 0.37                 | 93       |
| VL040805.D | 0.467           | 10252023T18:12:00 | VOC        | 0.42                 | 100      |
| VL040805.D | 0.42            | 10252023T18:12:00 | VOC        | 0.35                 | 88       |
| VL040805.D | 0.353           | 10252023T18:12:00 | VOC        | 0.3                  | 75       |
| VL040805.D | 0.397           | 10252023T18:12:00 | VOC        | 0.34                 | 84       |
| VL040805.D | 0.403           | 10252023T18:12:00 | VOC        | 0.34                 | 84       |
| VL040805.D | 0.576           | 10252023T18:12:00 | VOC        | 0.53                 | 130      |
| VL040805.D | 0.422           | 10252023T18:12:00 | VOC        | 0.43                 | 110      |
| VL040805.D | 0.445           | 10252023T18:12:00 | VOC        | 0.38                 | 96       |
| VL040805.D | 0.205           | 10252023T18:12:00 | VOC        | 0.36                 | 91       |
| VL040805.D | 0.458           | 10252023T18:12:00 | VOC        | 0.4                  | 100      |
| VL040805.D | 0.436           | 10252023T18:12:00 | VOC        | 0.44                 | 110      |
| VL040805.D | 0.34            | 10252023T18:12:00 | VOC        | 0.33                 | 82       |
| VL040805.D | 0.508           | 10252023T18:12:00 | VOC        | 0.47                 | 120      |
| VL040805.D | 0.361           | 10252023T18:12:00 | VOC        | 0.38                 | 95       |
| VL040787.D | 0.04            | 10232023T20:32:00 | VOC        | 0.031                | 100      |
| VL040805.D | 0.454           | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.517           | 10252023T18:12:00 | VOC        | 0.48                 | 120      |
| VL040805.D | 0.435           | 10252023T18:12:00 | VOC        | 0.47                 | 120      |
| VL040805.D | 0.487           | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.458           | 10252023T18:12:00 | VOC        | 0.46                 | 120      |
| VL040805.D | 0.435           | 10252023T18:12:00 | VOC        | 0.4                  | 99       |
| VL040805.D | 0.335           | 10252023T18:12:00 | VOC        | 0.3                  | 75       |
| VL040805.D | 0.416           | 10252023T18:12:00 | VOC        | 0.39                 | 96       |
| VL040805.D | 0.384           | 10252023T18:12:00 | VOC        | 0.36                 | 89       |
| VL040805.D | 0.516           | 10252023T18:12:00 | VOC        | 0.54                 | 140      |
| VL040805.D | 0.505           | 10252023T18:12:00 | VOC        | 0.48                 | 120      |
| VL040805.D | 0.404           | 10252023T18:12:00 | VOC        | 0.4                  | 100      |
| VL040805.D | 0.406           | 10252023T18:12:00 | VOC        | 0.33                 | 82       |
| VL040805.D | 0.404           | 10252023T18:12:00 | VOC        | 0.35                 | 88       |
| VL040805.D | 0.446           | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.452           | 10252023T18:12:00 | VOC        | 0.4                  | 100      |
| VL040805.D | 0.442           | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.435           | 10252023T18:12:00 | VOC        | 0.38                 | 96       |
| VL040805.D | 0.888           | 10252023T18:12:00 | VOC        | 0.72                 | 180      |
| VL040805.D | 0.348           | 10252023T18:12:00 | VOC        | 0.32                 | 80       |
| VL040805.D | 0.353           | 10252023T18:12:00 | VOC        | 0.41                 | 100      |
| VL040805.D | 0.619           | 10252023T18:12:00 | VOC        | 0.56                 | 140      |
| VL040805.D | 0.226           | 10252023T18:12:00 | VOC        | 0.27                 | 66       |
| VL040805.D | 0               | 10252023T18:12:00 | VOC        | 0.14                 | 35       |
| VL040805.D | 0.415           | 10252023T18:12:00 | VOC        | 0.35                 | 88       |
| VL040805.D | 0.389           | 10252023T18:12:00 | VOC        | 0.35                 | 89       |
| VL040805.D | 0.439           | 10252023T18:12:00 | VOC        | 0.35                 | 87       |
| VL040805.D | 0.381           | 10252023T18:12:00 | VOC        | 0.34                 | 85       |
| VL040805.D | 0.467           | 10252023T18:12:00 | VOC        | 0.46                 | 110      |
| VL040805.D | 0.449           | 10252023T18:12:00 | VOC        | 0.37                 | 93       |
| VL040805.D | 0.35            | 10252023T18:12:00 | VOC        | 0.27                 | 67       |
| VL040805.D | 0.291           | 10252023T18:12:00 | VOC        | 0.28                 | 70       |
| VL040805.D | 0.37            | 10252023T18:12:00 | VOC        | 0.45                 | 110      |
| VL040805.D | 0.427           | 10252023T18:12:00 | VOC        | 0.37                 | 92       |
| VL040787.D | 0.04            | 10232023T20:32:00 | VOC        | 0.032                | 110      |
| VL040805.D | 0.416           | 10252023T18:12:00 | VOC        | 0.35                 | 88       |
| VL040805.D | 0.38            | 10252023T18:12:00 | VOC        | 0.31                 | 78       |
| VL040805.D | 0.435           | 10252023T18:12:00 | VOC        | 0.43                 | 110      |
| VL040787.D | 0.05            | 10232023T20:32:00 | VOC        | 0.033                | 110      |
| VL040805.D | 0.506           | 10252023T18:12:00 | VOC        | 0.48                 | 120      |
| VL040805.D | 0.341           | 10252023T18:12:00 | VOC        | 0.43                 | 110      |
| VL040787.D | 0.04            | 10232023T20:32:00 | VOC        | 0.033                | 110      |
|            |                 |                   | VOC        | 0.544                | 136      |

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# QC SUMMARY

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### Surrogate Summary

SDG No.: P5294

Client: Tetra Tech, EMI

Analytical Method: SWTO-15

| Lab Sample ID | Client ID   | Parameter               | Spike | Result | RecoveryQual | Limits |      |
|---------------|-------------|-------------------------|-------|--------|--------------|--------|------|
|               |             |                         |       |        |              | Low    | High |
| P5293-01DUP   | C0AB9DUP    | 1-Bromo-4-Fluorobenzene | 10    | 10.1   | 101          | 65     | 135  |
| P5294-01      | C0AB6       | 1-Bromo-4-Fluorobenzene | 10    | 9.72   | 97           | 65     | 135  |
| P5294-02      | C0AB7       | 1-Bromo-4-Fluorobenzene | 10    | 10.2   | 102          | 65     | 135  |
| P5294-03      | C0AB8       | 1-Bromo-4-Fluorobenzene | 10    | 10.1   | 101          | 65     | 135  |
| VL1218ABL02   | VL1218ABL02 | 1-Bromo-4-Fluorobenzene | 10    | 10.1   | 101          | 65     | 135  |
| VL1218ABS01   | VL1218ABS01 | 1-Bromo-4-Fluorobenzene | 10    | 10.8   | 108          | 65     | 135  |



## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5294

Client: Tetra Tech, EMI

Analytical Method: SWTO-15

Datafile : VL041795.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|-----|-------------|-----|
| VL1218ABS01   | Dichlorodifluoromethane        | 10    | 8.70   | ppbv | 87  |     |      | 70  | 130         |     |
|               | Chloromethane                  | 10    | 9.30   | ppbv | 93  |     |      | 70  | 130         |     |
|               | Vinyl Chloride                 | 10    | 8.70   | ppbv | 87  |     |      | 70  | 130         |     |
|               | Bromomethane                   | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | Chloroethane                   | 10    | 9.10   | ppbv | 91  |     |      | 70  | 130         |     |
|               | Tetrahydrofuran                | 10    | 8.10   | ppbv | 81  |     |      | 70  | 130         |     |
|               | Trichlorofluoromethane         | 10    | 9.60   | ppbv | 96  |     |      | 70  | 130         |     |
|               | 1,1,2-Trichlorotrifluoroethane | 10    | 9.20   | ppbv | 92  |     |      | 70  | 130         |     |
|               | Dichlorotetrafluoroethane      | 10    | 9.50   | ppbv | 95  |     |      | 70  | 130         |     |
|               | tert-Butyl Alcohol             | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | Heptane                        | 10    | 8.10   | ppbv | 81  |     |      | 70  | 130         |     |
|               | 1,1-Dichloroethene             | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | Acetone                        | 10    | 7.80   | ppbv | 78  |     |      | 70  | 130         |     |
|               | Carbon disulfide               | 10    | 8.50   | ppbv | 85  |     |      | 70  | 130         |     |
|               | Methyl tert-butyl Ether        | 10    | 7.90   | ppbv | 79  |     |      | 70  | 130         |     |
|               | Methylene Chloride             | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | trans-1,2-Dichloroethene       | 10    | 8.60   | ppbv | 86  |     |      | 70  | 130         |     |
|               | 1,1-Dichloroethane             | 10    | 9.10   | ppbv | 91  |     |      | 70  | 130         |     |
|               | Cyclohexane                    | 10    | 7.80   | ppbv | 78  |     |      | 70  | 130         |     |
|               | 2-Butanone                     | 10    | 8.50   | ppbv | 85  |     |      | 70  | 130         |     |
|               | Carbon Tetrachloride           | 10    | 10.9   | ppbv | 109 |     |      | 70  | 130         |     |
|               | cis-1,2-Dichloroethene         | 10    | 8.00   | ppbv | 80  |     |      | 70  | 130         |     |
|               | Chloroform                     | 10    | 9.20   | ppbv | 92  |     |      | 70  | 130         |     |
|               | 1,1,1-Trichloroethane          | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | 2,2,4-Trimethylpentane         | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | Benzene                        | 10    | 8.70   | ppbv | 87  |     |      | 70  | 130         |     |
|               | 1,2-Dichloroethane             | 10    | 9.60   | ppbv | 96  |     |      | 70  | 130         |     |
|               | Trichloroethene                | 10    | 7.90   | ppbv | 79  |     |      | 70  | 130         |     |
|               | 1,2-Dichloropropane            | 10    | 8.50   | ppbv | 85  |     |      | 70  | 130         |     |
|               | Bromodichloromethane           | 10    | 9.80   | ppbv | 98  |     |      | 70  | 130         |     |
|               | 4-Methyl-2-Pentanone           | 10    | 8.80   | ppbv | 88  |     |      | 70  | 130         |     |
|               | Toluene                        | 10    | 8.30   | ppbv | 83  |     |      | 70  | 130         |     |
|               | t-1,3-Dichloropropene          | 10    | 7.90   | ppbv | 79  |     |      | 70  | 130         |     |
|               | cis-1,3-Dichloropropene        | 10    | 7.80   | ppbv | 78  |     |      | 70  | 130         |     |
|               | 1,1,2-Trichloroethane          | 10    | 9.10   | ppbv | 91  |     |      | 70  | 130         |     |
|               | Dibromochloromethane           | 10    | 9.90   | ppbv | 99  |     |      | 70  | 130         |     |
|               | 1,2-Dibromoethane              | 10    | 9.20   | ppbv | 92  |     |      | 70  | 130         |     |
|               | Tetrachloroethene              | 10    | 7.70   | ppbv | 77  |     |      | 70  | 130         |     |
|               | Chlorobenzene                  | 10    | 9.40   | ppbv | 94  |     |      | 70  | 130         |     |
|               | Ethyl Benzene                  | 10    | 9.30   | ppbv | 93  |     |      | 70  | 130         |     |
|               | m/p-Xylene                     | 20    | 19.7   | ppbv | 99  |     |      | 70  | 130         |     |
|               | o-Xylene                       | 10    | 9.90   | ppbv | 99  |     |      | 70  | 130         |     |
|               | Styrene                        | 10    | 9.50   | ppbv | 95  |     |      | 70  | 130         |     |
|               | Bromoform                      | 10    | 10.1   | ppbv | 101 |     |      | 70  | 130         |     |
|               | 1,1,2,2-Tetrachloroethane      | 10    | 9.80   | ppbv | 98  |     |      | 70  | 130         |     |
|               | 2-Chlorotoluene                | 10    | 9.60   | ppbv | 96  |     |      | 70  | 130         |     |
|               | 1,3,5-Trimethylbenzene         | 10    | 10.6   | ppbv | 106 |     |      | 70  | 130         |     |
|               | 1,2,4-Trimethylbenzene         | 10    | 10.7   | ppbv | 107 |     |      | 70  | 130         |     |

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P5294

**Client:** Tetra Tech, EMI

**Analytical Method:** SWTO-15 **Datafile :** VL041795.D

| Lab Sample ID | Parameter                | Spike | Result | Unit | Rec | RPD | Qual | Low | Limits<br>High | RPD |
|---------------|--------------------------|-------|--------|------|-----|-----|------|-----|----------------|-----|
| VL1218ABS01   | 1,3-Dichlorobenzene      | 10    | 9.80   | ppbv | 98  |     |      | 70  | 130            |     |
|               | 1,4-Dichlorobenzene      | 10    | 9.90   | ppbv | 99  |     |      | 70  | 130            |     |
|               | 1,2-Dichlorobenzene      | 10    | 9.90   | ppbv | 99  |     |      | 70  | 130            |     |
|               | 1,2,4-Trichlorobenzene   | 10    | 9.60   | ppbv | 96  |     |      | 70  | 130            |     |
|               | Hexachloro-1,3-butadiene | 10    | 8.00   | ppbv | 80  |     |      | 70  | 130            |     |
|               | Naphthalene              | 10    | 11.2   | ppbv | 112 |     |      | 70  | 130            |     |
|               | 1,3-Butadiene            | 10    | 9.50   | ppbv | 95  |     |      | 70  | 130            |     |
|               | 4-Ethyltoluene           | 10    | 10.1   | ppbv | 101 |     |      | 70  | 130            |     |
|               | Hexane                   | 10    | 8.20   | ppbv | 82  |     |      | 70  | 130            |     |
|               | Allyl Chloride           | 10    | 8.90   | ppbv | 89  |     |      | 70  | 130            |     |
|               | 1,4-Dioxane              | 10    | 8.60   | ppbv | 86  |     |      | 70  | 130            |     |
|               | Methyl methacrylate      | 10    | 8.40   | ppbv | 84  |     |      | 70  | 130            |     |

## Duplicate Sample Summary

|                               |                  |                  |
|-------------------------------|------------------|------------------|
| <b>Lab Sample Id :</b>        | P5293-01DUP      | P5293-01         |
| <b>Client Id :</b>            | C0AB9DUP         | C0AB9            |
| <b>DF :</b>                   | 1                | 1                |
| <b>Datafile :</b>             | VL041798.D       | VL041797.D       |
| <b>Anal Date &amp; Time :</b> | 12/18/2024 17:43 | 12/18/2024 17:10 |

| Parameter                      | Result | Result | RPD  |
|--------------------------------|--------|--------|------|
| 1,1,1-Trichloroethane          | 0      | 0      | 0    |
| 1,1,2,2-Tetrachloroethane      | 0      | 0      | 0    |
| 1,1,2-Trichloroethane          | 0      | 0      | 0    |
| 1,1,2-Trichlorotrifluoroethane | 0      | 0      | 0    |
| 1,1-Dichloroethane             | 0      | 0      | 0    |
| 1,1-Dichloroethene             | 0      | 0      | 0    |
| 1,2,4-Trichlorobenzene         | 0      | 0      | 0    |
| 1,2,4-Trimethylbenzene         | 0      | 0      | 0    |
| 1,2-Dibromoethane              | 0      | 0      | 0    |
| 1,2-Dichlorobenzene            | 0      | 0      | 0    |
| 1,2-Dichloroethane             | 0      | 0      | 0    |
| 1,2-Dichloropropane            | 0      | 0      | 0    |
| 1,3,5-Trimethylbenzene         | 0      | 0      | 0    |
| 1,3-Butadiene                  | 0      | 0      | 0    |
| 1,3-Dichlorobenzene            | 0      | 0      | 0    |
| 1,4-Dichlorobenzene            | 0      | 0      | 0    |
| 1,4-Dioxane                    | 0      | 0      | 0    |
| 2,2,4-Trimethylpentane         | 0.12   | 0.11   | 8.7  |
| 2-Butanone                     | 0.21   | 0.2    | 4.9  |
| 2-Chlorotoluene                | 0      | 0      | 0    |
| 4-Ethyltoluene                 | 0      | 0      | 0    |
| 4-Methyl-2-Pentanone           | 0      | 0      | 0    |
| Acetone                        | 3.3    | 3.2    | 3.1  |
| Allyl Chloride                 | 0      | 0      | 0    |
| Benzene                        | 0.23   | 0.21   | 9.1  |
| Bromodichloromethane           | 0      | 0      | 0    |
| Bromoform                      | 0      | 0      | 0    |
| Bromomethane                   | 0      | 0      | 0    |
| Carbon Disulfide               | 0      | 0      | 0    |
| Carbon Tetrachloride           | 0.07   | 0.06   | 15.4 |
|                                |        |        |      |

### Duplicate Sample Summary

|                               |                  |                  |
|-------------------------------|------------------|------------------|
| <b>Lab Sample Id :</b>        | P5293-01DUP      | P5293-01         |
| <b>Client Id :</b>            | C0AB9DUP         | C0AB9            |
| <b>DF :</b>                   | 1                | 1                |
| <b>Datafile :</b>             | VL041798.D       | VL041797.D       |
| <b>Anal Date &amp; Time :</b> | 12/18/2024 17:43 | 12/18/2024 17:10 |

| Parameter                 | Result | Result | RPD    |
|---------------------------|--------|--------|--------|
| Chlorobenzene             | 0      | 0      | 0      |
| Chloroethane              | 0      | 0      | 0      |
| Chloroform                | 2.6    | 3      | 14.3   |
| Chloromethane             | 0.4    | 0.39   | 2.5    |
| cis-1,2-Dichloroethene    | 0      | 0      | 0      |
| cis-1,3-Dichloropropene   | 0      | 0      | 0      |
| Cyclohexane               | 0      | 0      | 0      |
| Dibromochloromethane      | 0      | 0      | 0      |
| Dichlorodifluoromethane   | 0.43   | 0.41   | 4.8    |
| Dichlorotetrafluoroethane | 0      | 0      | 0      |
| Ethyl Benzene             | 0      | 0      | 0      |
| Heptane                   | 0      | 0      | 0      |
| Hexachloro-1,3-Butadiene  | 0      | 0      | 0      |
| Hexane                    | 1.5    | 2.1    | 33.3 * |
| m/p-Xylene                | 0.13   | 0      | 200 *  |
| Methyl Methacrylate       | 0      | 0      | 0      |
| Methyl tert-Butyl Ether   | 0      | 0      | 0      |
| Methylene Chloride        | 10.6   | 12.7   | 18     |
| Naphthalene               | 0      | 0      | 0      |
| o-Xylene                  | 0      | 0      | 0      |
| Styrene                   | 0      | 0      | 0      |
| t-1,3-Dichloropropene     | 0      | 0      | 0      |
| tert-Butyl alcohol        | 0      | 0      | 0      |
| Tetrachloroethene         | 0      | 0      | 0      |
| Tetrahydrofuran           | 0      | 0      | 0      |
| Toluene                   | 0.33   | 0.3    | 9.5    |
| trans-1,2-Dichloroethene  | 0      | 0      | 0      |
| Trichloroethene           | 0      | 0      | 0      |
| Trichlorofluoromethane    | 0.2    | 0.21   | 4.9    |
| Vinyl Chloride            | 0      | 0      | 0      |

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL1218ABL02

Lab Name: CHEMTECH

Contract: TETR16

Lab Code: CHEM Case No.: P5294

SAS No.: P5294 SDG NO.: P5294

Lab File ID: VL041790.D

Lab Sample ID: VL1218ABL02

Date Analyzed: 12/18/2024

Time Analyzed: 12:28

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA\_L

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 |
|-------------------|------------------|----------------|------------------|
| VL1218ABS01       | VL1218ABS01      | VL041795.D     | 12/18/2024       |
| C0AB9DUP          | P5293-01DUP      | VL041798.D     | 12/18/2024       |
| C0AB6             | P5294-01         | VL041802.D     | 12/18/2024       |
| C0AB7             | P5294-02         | VL041803.D     | 12/18/2024       |
| C0AB8             | P5294-03         | VL041811.D     | 12/19/2024       |

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR16  
Lab Code: CHEM Case No.: P5294 SAS No.: P5294 SDG NO.: P5294  
Lab File ID: VL041750.D BFB Injection Date: 12/16/2024  
Instrument ID: MSVOA\_L BFB Injection Time: 12:02  
GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 8.0 - 40.0% of mass 95             | 25.4                 |
| 75  | 30.0 - 66.0% of mass 95            | 61.5                 |
| 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         | 0.0 ( 0.0 ) 1        |
| 174 | 50.0 - 120.0% of mass 95           | 63.2                 |
| 175 | 4.0 - 9.0% of mass 174             | 3.4 ( 5.5 ) 1        |
| 176 | 93.0 - 101.0% of mass 174          | 60 ( 95 ) 1          |
| 177 | 5.0 - 9.0% of mass 176             | 3.8 ( 6.3 ) 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 |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDICCC010       | VSTDICCC010      | VL041752.D     | 12/16/2024       | 13:30            |
| VSTDICCC002       | VSTDICCC002      | VL041753.D     | 12/16/2024       | 14:03            |
| VSTDICCC001       | VSTDICCC001      | VL041754.D     | 12/16/2024       | 14:34            |
| VSTDICCC0.5       | VSTDICCC0.5      | VL041755.D     | 12/16/2024       | 15:05            |
| VSTDICCC0.1       | VSTDICCC0.1      | VL041756.D     | 12/16/2024       | 15:37            |
| VSTDICCC0.03      | VSTDICCC0.03     | VL041757.D     | 12/16/2024       | 16:08            |
| VSTDICCC015       | VSTDICCC015      | VL041758.D     | 12/16/2024       | 16:41            |

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR16  
Lab Code: CHEM Case No.: P5294 SAS No.: P5294 SDG NO.: P5294  
Lab File ID: VL041787.D BFB Injection Date: 12/18/2024  
Instrument ID: MSVOA\_L BFB Injection Time: 08:06  
GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 8.0 - 40.0% of mass 95             | 27.5                 |
| 75  | 30.0 - 66.0% of mass 95            | 63.1                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 7.4                  |
| 173 | Less than 2.0% of mass 174         | 0.2 ( 0.4 ) 1        |
| 174 | 50.0 - 120.0% of mass 95           | 57.6                 |
| 175 | 4.0 - 9.0% of mass 174             | 4.2 ( 7.3 ) 1        |
| 176 | 93.0 - 101.0% of mass 174          | 55.5 ( 96.3 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 3.3 ( 5.9 ) 2        |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDCCC010        | VSTDCCC010       | VL041788.D     | 12/18/2024       | 10:29            |
| VL1218ABL02       | VL1218ABL02      | VL041790.D     | 12/18/2024       | 12:28            |
| VL1218ABS01       | VL1218ABS01      | VL041795.D     | 12/18/2024       | 16:06            |
| C0AB9DUP          | P5293-01DUP      | VL041798.D     | 12/18/2024       | 17:43            |
| C0AB6             | P5294-01         | VL041802.D     | 12/18/2024       | 19:58            |
| C0AB7             | P5294-02         | VL041803.D     | 12/18/2024       | 20:32            |
| C0AB8             | P5294-03         | VL041811.D     | 12/19/2024       | 00:44            |

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR16  
Lab Code: CHEM Case No.: P5294 SAS No.: P5294 SDG NO.: P5294  
Lab File ID: VL041788.D Date Analyzed: 12/18/2024  
Instrument ID: MSVOA\_L Time Analyzed: 10:29  
GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

|                | IS1<br>AREA # | RT # | IS2<br>AREA # | RT # | IS3<br>AREA # | RT # |
|----------------|---------------|------|---------------|------|---------------|------|
| 12 HOUR STD    | 76040         | 2.78 | 198370        | 3.95 | 172190        | 8.88 |
| UPPER LIMIT    | 106456        | 3.11 | 277718        | 4.28 | 241066        | 9.21 |
| LOWER LIMIT    | 45624         | 2.45 | 119022        | 3.62 | 103314        | 8.55 |
| EPA SAMPLE NO. |               |      |               |      |               |      |
| C0AB9DUP       | 72121         | 2.80 | 176581        | 3.98 | 152305        | 8.89 |
| C0AB6          | 77034         | 2.80 | 192884        | 3.97 | 185181        | 8.89 |
| C0AB7          | 76658         | 2.79 | 187828        | 3.97 | 164998        | 8.89 |
| C0AB8          | 77490         | 2.79 | 186355        | 3.97 | 163591        | 8.89 |
| VL1218ABL02    | 70249         | 2.79 | 175356        | 3.97 | 151060        | 8.89 |
| VL1218ABS01    | 72600         | 2.80 | 183255        | 3.97 | 159496        | 8.90 |

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

AREA UPPER LIMIT = +40% of internal standard area  
AREA LOWER LIMIT = -40% of internal standard area  
RT UPPER LIMIT = +0.33 minutes of internal standard RT  
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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





# SAMPLE DATA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB6           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-01        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041802.D        | 1         |           | 12/18/24 19:58 | VL121824      |

| CAS Number     | Parameter                      | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|----------------|--------------------------------|---------------|----------------|-----------|-------|------------|-------|
| <b>TARGETS</b> |                                |               |                |           |       |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.34          | 1.68           | J         | 1.04  | 2.47       | ug/m3 |
| 74-87-3        | Chloromethane                  | 0.47          | 0.97           | J         | 0.21  | 1.03       | ug/m3 |
| 75-01-4        | Vinyl Chloride                 | 0.010         | 0.030          | U         | 0.030 | 0.080      | ug/m3 |
| 74-83-9        | Bromomethane                   | 0.14          | 0.54           | U         | 0.54  | 1.94       | ug/m3 |
| 75-00-3        | Chloroethane                   | 0.17          | 0.45           | U         | 0.45  | 1.32       | ug/m3 |
| 109-99-9       | Tetrahydrofuran                | 0.62          | 1.83           |           | 0.38  | 1.47       | ug/m3 |
| 75-69-4        | Trichlorofluoromethane         | 0.19          | 1.07           | J         | 0.90  | 2.81       | ug/m3 |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.16          | 1.23           | U         | 1.23  | 3.83       | ug/m3 |
| 76-14-2        | Dichlorotetrafluoroethane      | 0.090         | 0.63           | U         | 0.63  | 3.49       | ug/m3 |
| 75-65-0        | tert-Butyl alcohol             | 0.52          | 1.58           |           | 0.58  | 1.52       | ug/m3 |
| 142-82-5       | Heptane                        | 0.24          | 0.98           | J         | 0.45  | 2.05       | ug/m3 |
| 75-35-4        | 1,1-Dichloroethene             | 0.14          | 0.56           | U         | 0.56  | 1.98       | ug/m3 |
| 67-64-1        | Acetone                        | 3.10          | 7.36           |           | 0.57  | 1.19       | ug/m3 |
| 75-15-0        | Carbon Disulfide               | 0.16          | 0.50           | U         | 0.50  | 1.56       | ug/m3 |
| 1634-04-4      | Methyl tert-Butyl Ether        | 0.12          | 0.43           | U         | 0.43  | 1.80       | ug/m3 |
| 75-09-2        | Methylene Chloride             | 0.32          | 1.11           | J         | 0.66  | 1.74       | ug/m3 |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.19          | 0.75           | U         | 0.75  | 1.98       | ug/m3 |
| 75-34-3        | 1,1-Dichloroethane             | 0.13          | 0.53           | U         | 0.53  | 2.02       | ug/m3 |
| 110-82-7       | Cyclohexane                    | 0.22          | 0.76           | U         | 0.76  | 1.72       | ug/m3 |
| 78-93-3        | 2-Butanone                     | 0.69          | 2.04           |           | 0.35  | 1.47       | ug/m3 |
| 56-23-5        | Carbon Tetrachloride           | 0.050         | 0.31           |           | 0.060 | 0.19       | ug/m3 |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.090         | 0.36           | U         | 0.36  | 1.98       | ug/m3 |
| 67-66-3        | Chloroform                     | 0.080         | 0.39           | U         | 0.39  | 2.44       | ug/m3 |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.010         | 0.050          | U         | 0.050 | 0.16       | ug/m3 |
| 540-84-1       | 2,2,4-Trimethylpentane         | 0.10          | 0.47           | J         | 0.47  | 2.34       | ug/m3 |
| 71-43-2        | Benzene                        | 0.22          | 0.70           | J         | 0.29  | 1.60       | ug/m3 |
| 107-06-2       | 1,2-Dichloroethane             | 0.090         | 0.36           | U         | 0.36  | 2.02       | ug/m3 |
| 79-01-6        | Trichloroethene                | 0.020         | 0.11           | U         | 0.11  | 0.16       | ug/m3 |
| 78-87-5        | 1,2-Dichloropropane            | 0.11          | 0.51           | U         | 0.51  | 2.31       | ug/m3 |
| 75-27-4        | Bromodichloromethane           | 0.080         | 0.54           | U         | 0.54  | 3.35       | ug/m3 |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.23          | 0.94           | J         | 0.37  | 2.05       | ug/m3 |
| 108-88-3       | Toluene                        | 3.60          | 13.6           |           | 0.41  | 1.88       | ug/m3 |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.070         | 0.38           | U         | 0.38  | 2.73       | ug/m3 |

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB6           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-01        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041802.D        | 1         |           | 12/18/24 19:58 | VL121824      |

| CAS Number                | Parameter                 | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL      | LOQ / CRQL | Units   |
|---------------------------|---------------------------|---------------|----------------|-----------|----------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 0.070         | 0.60           | U         | 0.60     | 4.26       | ug/m3   |
| 106-93-4                  | 1,2-Dibromoethane         | 0.070         | 0.54           | U         | 0.54     | 0.77       | ug/m3   |
| 127-18-4                  | Tetrachloroethene         | 0.020         | 0.14           | U         | 0.14     | 0.20       | ug/m3   |
| 108-90-7                  | Chlorobenzene             | 0.12          | 0.55           | J         | 0.37     | 2.30       | ug/m3   |
| 100-41-4                  | Ethyl Benzene             | 0.35          | 1.52           | J         | 0.52     | 2.17       | ug/m3   |
| 179601-23-1               | m/p-Xylene                | 1.30          | 5.65           |           | 0.91     | 4.34       | ug/m3   |
| 95-47-6                   | o-Xylene                  | 0.50          | 2.17           |           | 0.52     | 2.17       | ug/m3   |
| 100-42-5                  | Styrene                   | 0.29          | 1.23           | J         | 0.47     | 2.13       | ug/m3   |
| 75-25-2                   | Bromoform                 | 0.060         | 0.62           | U         | 0.62     | 5.17       | ug/m3   |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 0.010         | 0.070          | U         | 0.070    | 0.21       | ug/m3   |
| 95-49-8                   | 2-Chlorotoluene           | 0.11          | 0.57           | U         | 0.57     | 2.59       | ug/m3   |
| 108-67-8                  | 1,3,5-Trimethylbenzene    | 0.11          | 0.54           | U         | 0.54     | 2.46       | ug/m3   |
| 95-63-6                   | 1,2,4-Trimethylbenzene    | 0.080         | 0.39           | U         | 0.39     | 2.46       | ug/m3   |
| 541-73-1                  | 1,3-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 106-46-7                  | 1,4-Dichlorobenzene       | 0.050         | 0.30           | U         | 0.30     | 3.01       | ug/m3   |
| 95-50-1                   | 1,2-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 120-82-1                  | 1,2,4-Trichlorobenzene    | 0.090         | 0.67           | U         | 0.67     | 3.71       | ug/m3   |
| 87-68-3                   | Hexachloro-1,3-Butadiene  | 0.090         | 0.96           | U         | 0.96     | 5.33       | ug/m3   |
| 106-99-0                  | 1,3-Butadiene             | 0.13          | 0.29           | U         | 0.29     | 1.11       | ug/m3   |
| 91-20-3                   | Naphthalene               | 0.080         | 0.42           | U         | 0.42     | 0.52       | ug/m3   |
| 622-96-8                  | 4-Ethyltoluene            | 0.12          | 0.59           | U         | 0.59     | 2.46       | ug/m3   |
| 110-54-3                  | Hexane                    | 0.11          | 0.39           | U         | 0.39     | 1.76       | ug/m3   |
| 107-05-1                  | Allyl Chloride            | 0.15          | 0.47           | U         | 0.47     | 1.57       | ug/m3   |
| 123-91-1                  | 1,4-Dioxane               | 0.21          | 0.76           | U         | 0.76     | 1.80       | ug/m3   |
| 80-62-6                   | Methyl Methacrylate       | 0.090         | 0.37           | U         | 0.37     | 2.05       | ug/m3   |
| <b>SURROGATES</b>         |                           |               |                |           |          |            |         |
| 460-00-4                  | 1-Bromo-4-Fluorobenzene   | 9.70          |                |           | 65 - 135 | 97%        | SPK: 10 |
| <b>INTERNAL STANDARDS</b> |                           |               |                |           |          |            |         |
| 74-97-5                   | Bromochloromethane        | 77000         |                | 2.797     |          |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 193000        |                | 3.971     |          |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 185000        |                | 8.894     |          |            |         |

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB6           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-01        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041802.D        | 1         |           | 12/18/24 19:58 | VL121824      |

| CAS Number | Parameter | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|

U = Not Detected  
 RL = Reporting Limit  
 MDL = Method Detection Limit  
 E = Value Exceeds Calibration Range  
 D = Dilution

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041802.D  
 Acq On : 18 Dec 2024 19:58  
 Operator : SY/MD  
 Sample : P5294-01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB6

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

Quant Time: Dec 19 07:58:37 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 2.797  | 49    | 77034    | 10.000   | ppbv   | 0.01     |
| 33) 1,4-Difluorobenzene     | 3.971  | 114   | 192884   | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5        | 8.894  | 117   | 185181   | 10.000   | ppbv   | 0.02     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.390 | 95    | 150031   | 9.722    | ppbv   | 0.02     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 97.200%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 1.502  | 85    | 4687     | 0.342    | ppbv   | 96       |
| 3) Chlorodifluoromethane    | 1.479  | 51    | 3166m    | 0.252    | ppbv   |          |
| 4) Chloromethane            | 1.534  | 50    | 2543     | 0.474    | ppbv   | 96       |
| 9) Propene                  | 1.492  | 41    | 9245m    | 1.698    | ppbv   |          |
| 10) Heptane                 | 5.001  | 43    | 3400m    | 0.243    | ppbv   |          |
| 11) Trichlorofluoromethane  | 1.884  | 101   | 2709     | 0.186    | ppbv   | 96       |
| 13) Ethanol                 | 1.725  | 45    | 8754     | 19.416   | ppbv   | 94       |
| 15) Acetone                 | 1.842  | 43    | 46647    | 3.112    | ppbv   | 93       |
| 17) tert-Butyl alcohol      | 2.049  | 59    | 7709     | 0.518    | ppbv   | 96       |
| 19) Isopropyl Alcohol       | 1.890  | 45    | 11560    | 1.285    | ppbv # | 30       |
| 20) Methylene Chloride      | 2.068  | 84    | 1379     | 0.323    | ppbv # | 76       |
| 25) Ethyl Acetate           | 2.852  | 43    | 11451    | 0.411    | ppbv # | 92       |
| 30) Cyclohexane             | 3.878  | 84    | 1918m    | 0.213    | ppbv   |          |
| 34) 2-Butanone              | 2.570  | 43    | 10728    | 0.691    | ppbv   | 96       |
| 35) Carbon Tetrachloride    | 3.784  | 117   | 734m     | 0.054    | ppbv   |          |
| 36) Benzene                 | 3.670  | 78    | 4321     | 0.217    | ppbv   | 93       |
| 41) Tetrahydrofuran         | 3.075  | 42    | 5402     | 0.621    | ppbv   | 97       |
| 44) 2,2,4-Trimethylpentane  | 4.661  | 57    | 3553m    | 0.104    | ppbv   |          |
| 50) 4-Methyl-2-Pentanone    | 5.797  | 43    | 4749m    | 0.225    | ppbv   |          |
| 53) Toluene                 | 6.956  | 91    | 82132    | 3.631    | ppbv   | 99       |
| 57) Chlorobenzene           | 8.937  | 112   | 2231m    | 0.118    | ppbv   |          |
| 58) Ethyl Benzene           | 9.367  | 91    | 11534    | 0.346    | ppbv   | 95       |
| 59) m/p-Xylene              | 9.545  | 91    | 34427m   | 1.284    | ppbv   |          |
| 60) o-Xylene                | 9.979  | 91    | 13407    | 0.499    | ppbv   | 96       |
| 61) Styrene                 | 9.882  | 104   | 3334     | 0.287    | ppbv   | 99       |

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

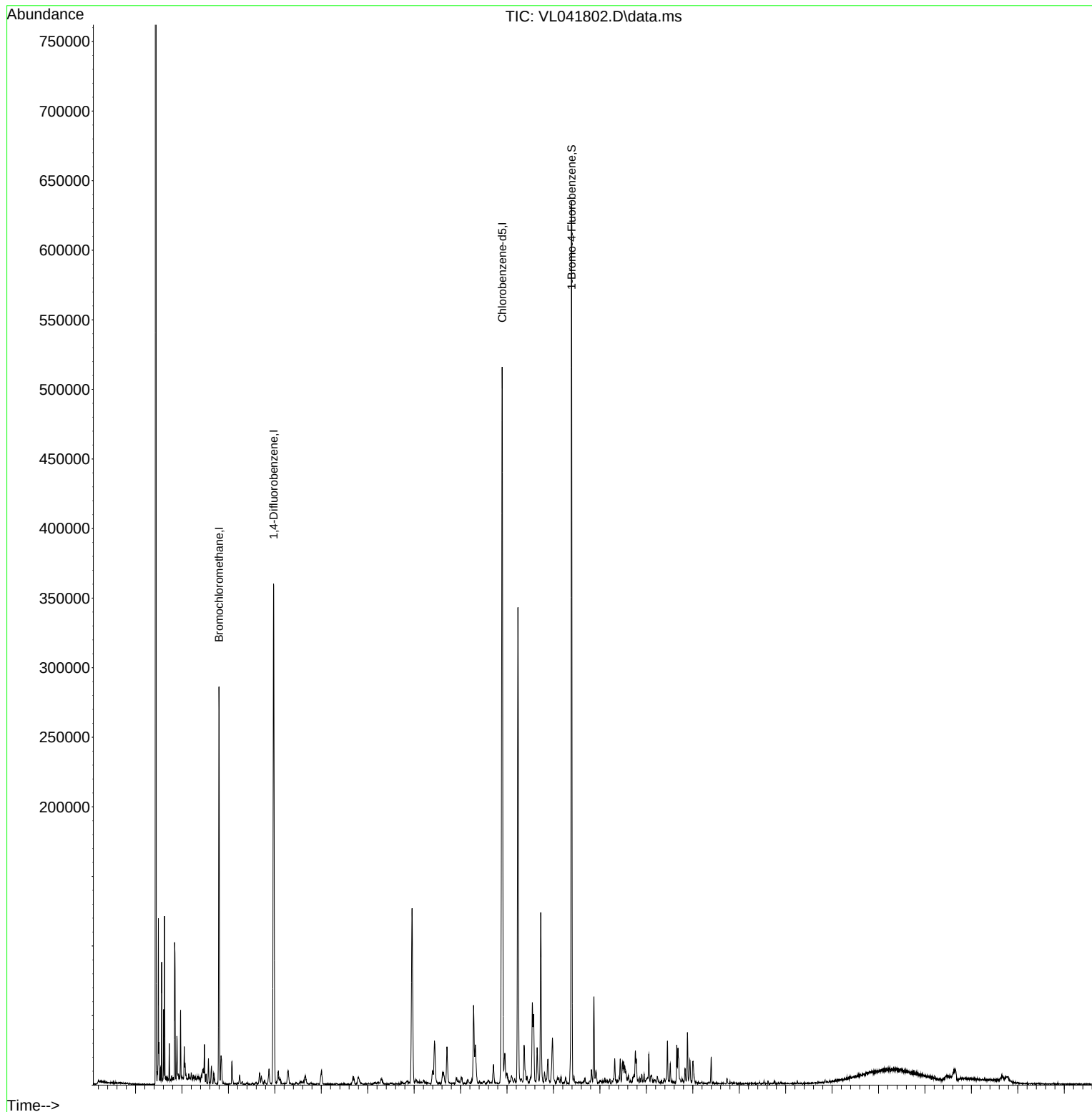
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041802.D  
Acq On : 18 Dec 2024 19:58  
Operator : SY/MD  
Sample : P5294-01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 10 Sample Multiplier: 1

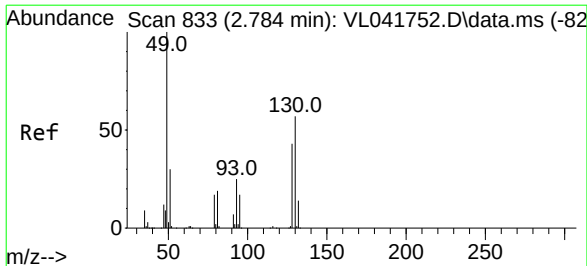
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Quant Time: Dec 19 07:58:37 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024





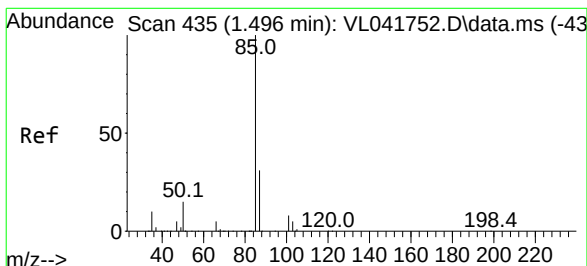
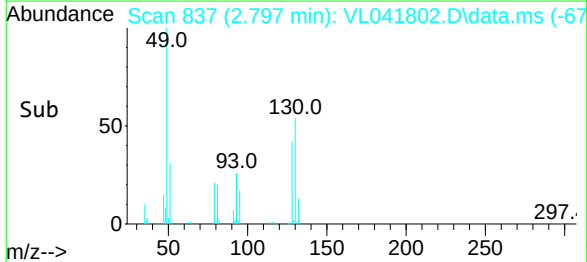
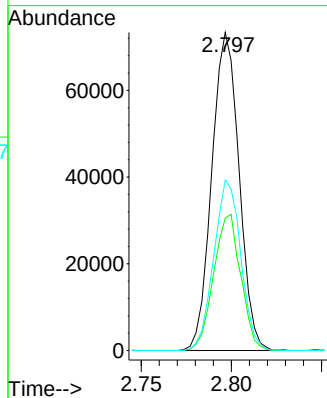
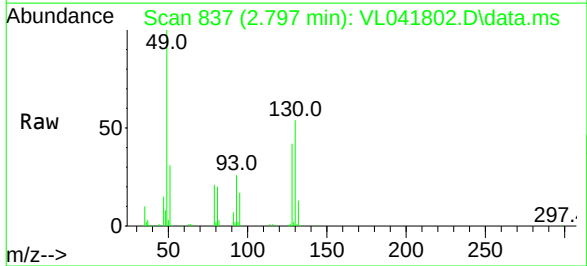
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.797 min Scan# 833  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 128     | 42.5  | 21.6  | 64.6  |
| 130     | 53.1  | 28.3  | 85.0  |

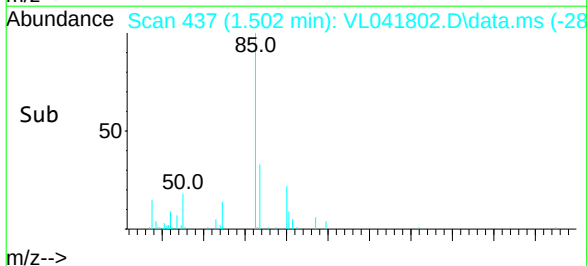
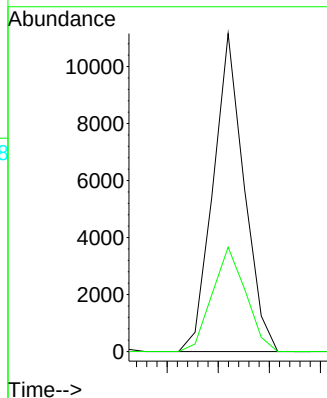
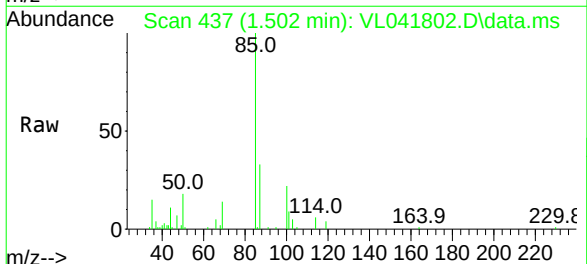
Manual Integrations  
APPROVED

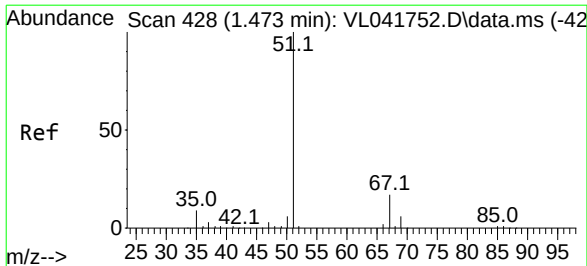
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#2  
Dichlorodifluoromethane  
Concen: 0.342 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 85      | 100   |       |       |
| 87      | 32.8  | 24.5  | 36.7  |





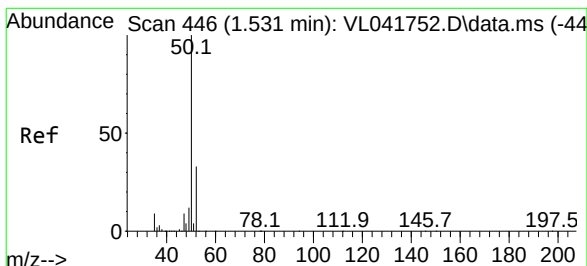
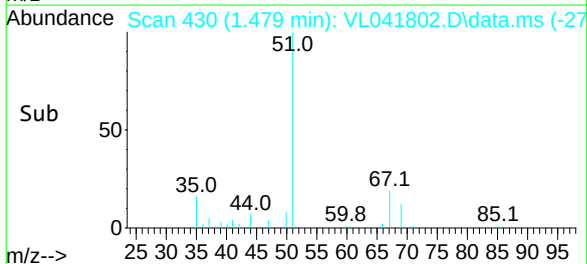
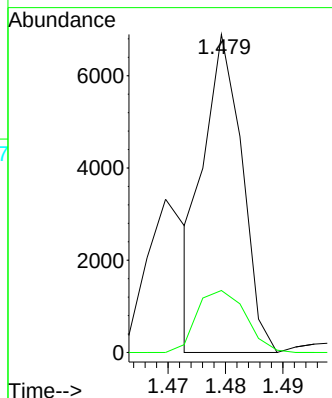
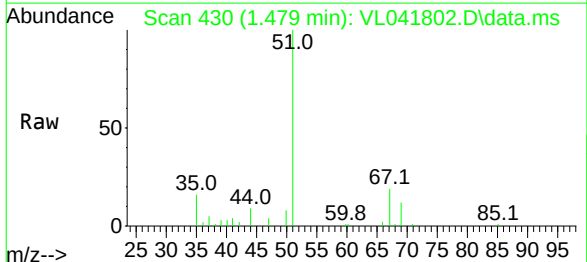
#3  
Chlorodifluoromethane  
Concen: 0.252 ppbv m  
RT: 1.479 min Scan# 43  
Delta R.T. 0.006 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 51 Resp: 3166  
Ion Ratio Lower Upper  
51 100  
67 3.3 15.0 22.4#

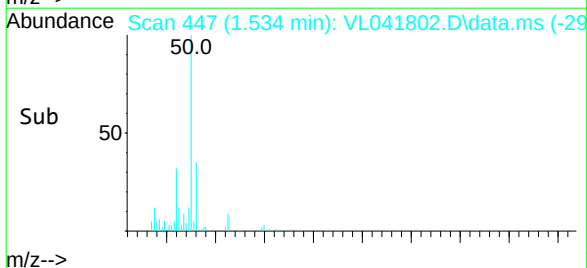
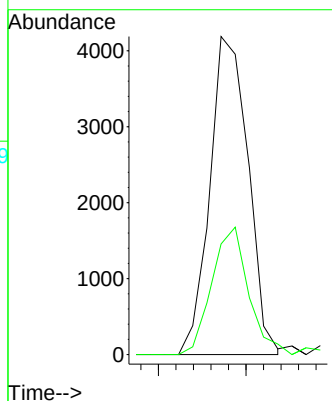
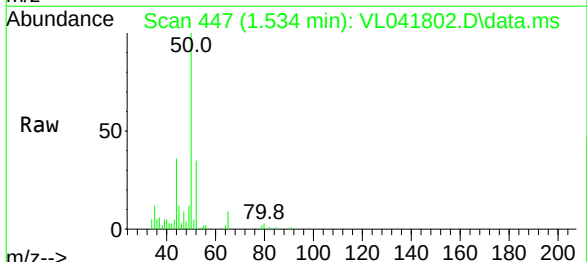
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

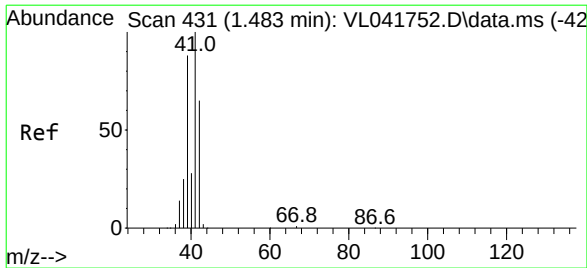


#4  
Chloromethane  
Concen: 0.474 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 50 Resp: 2543  
Ion Ratio Lower Upper  
50 100  
52 34.8 26.2 39.2

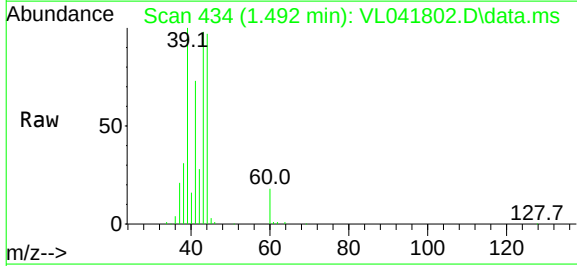






#9  
Propene  
Concen: 1.698 ppbv m  
RT: 1.492 min Scan# 431  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

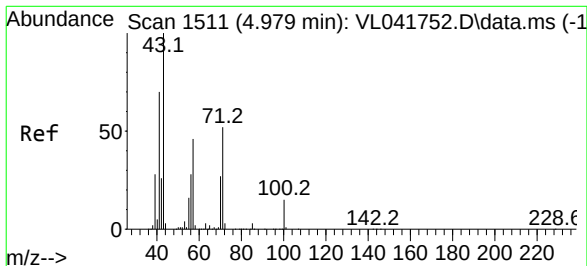
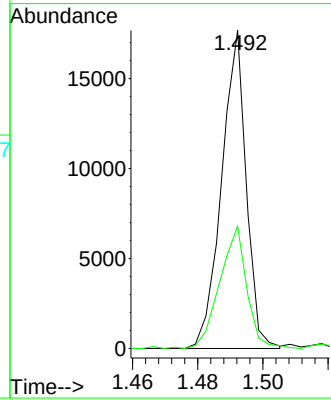
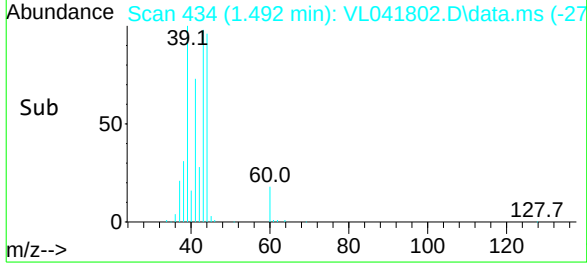
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



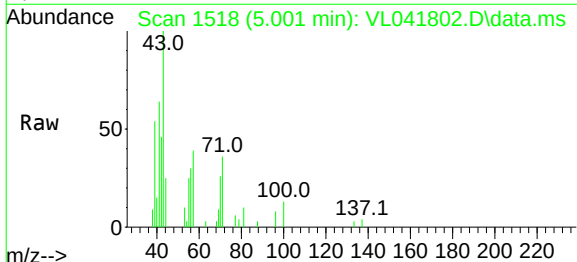
Tgt Ion: 41 Resp: 9245  
Ion Ratio Lower Upper  
41 100  
42 5.4 52.4 78.6#

Manual Integrations  
APPROVED

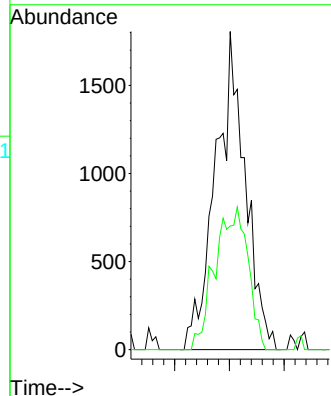
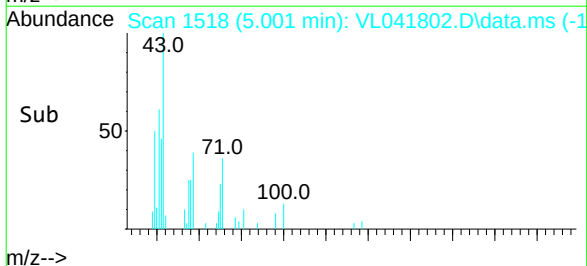
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

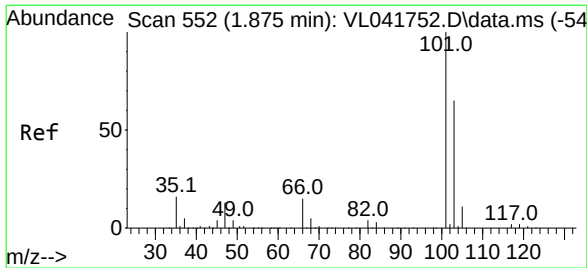


#10  
Heptane  
Concen: 0.243 ppbv m  
RT: 5.001 min Scan# 1518  
Delta R.T. 0.022 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58



Tgt Ion: 43 Resp: 3400  
Ion Ratio Lower Upper  
43 100  
57 49.9 38.5 57.7





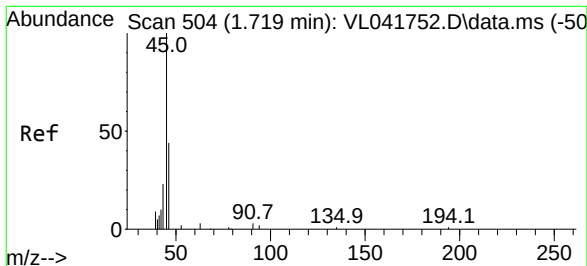
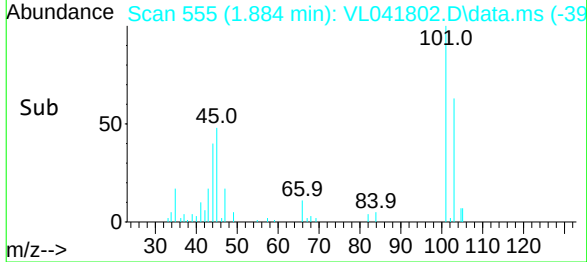
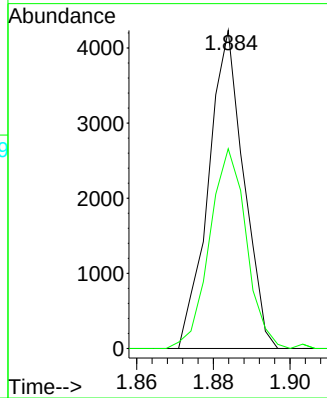
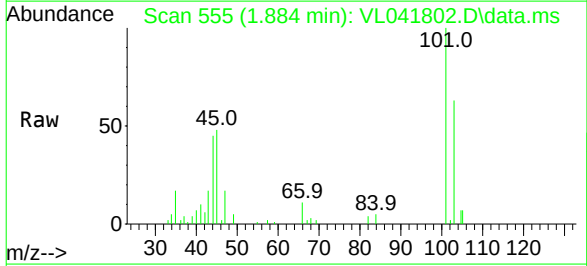
#11  
Trichlorofluoromethane  
Concen: 0.186 ppbv  
RT: 1.884 min Scan# 555  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 101 Resp: 2709  
Ion Ratio Lower Upper  
101 100  
103 61.5 51.8 77.8

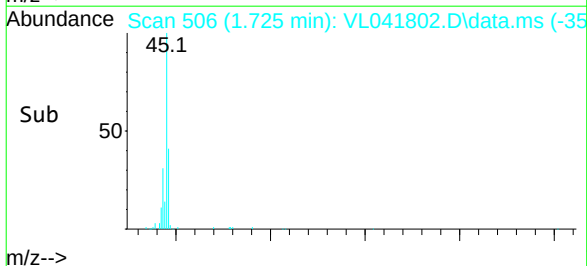
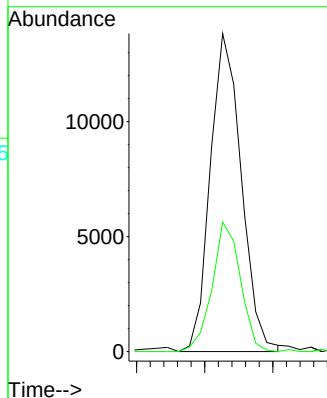
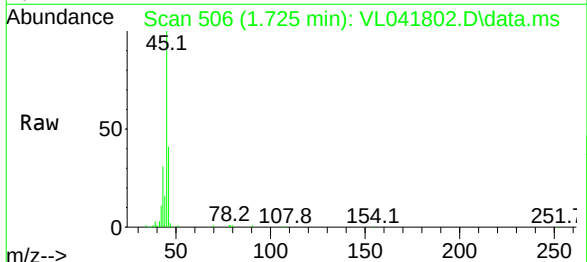
Manual Integrations  
APPROVED

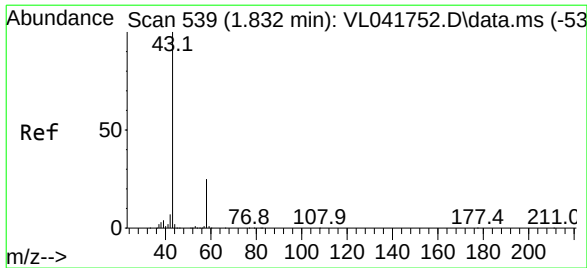
Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024



#13  
Ethanol  
Concen: 19.416 ppbv  
RT: 1.725 min Scan# 506  
Delta R.T. 0.006 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

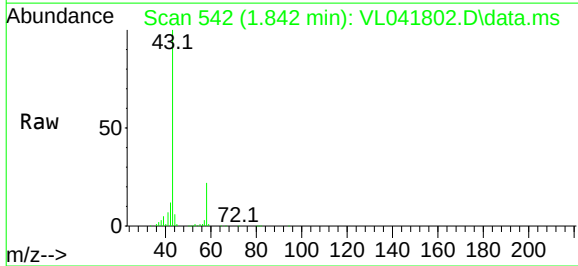
Tgt Ion: 45 Resp: 8754  
Ion Ratio Lower Upper  
45 100  
46 37.5 16.4 65.8





#15  
Acetone  
Concen: 3.112 ppbv  
RT: 1.842 min Scan# 54  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

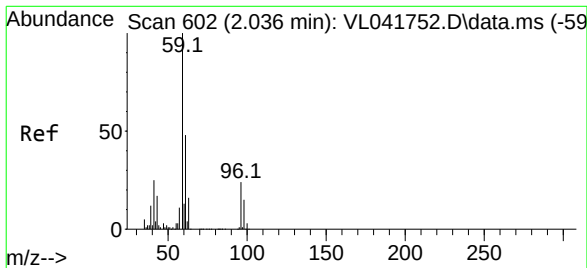
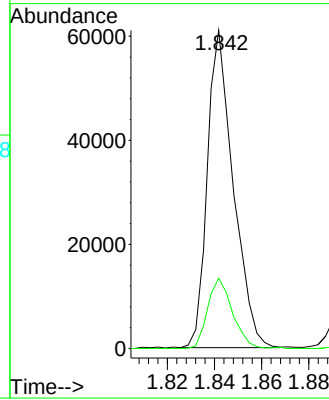
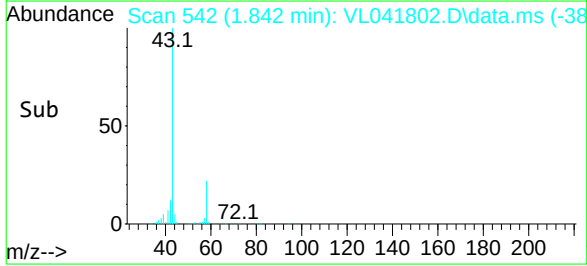
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



Tgt Ion: 43 Resp: 46647  
Ion Ratio Lower Upper  
43 100  
58 21.2 19.7 29.5

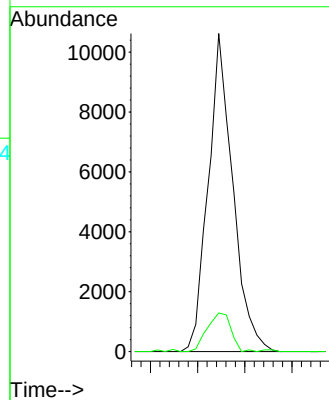
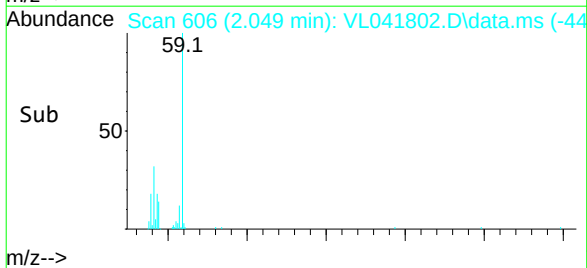
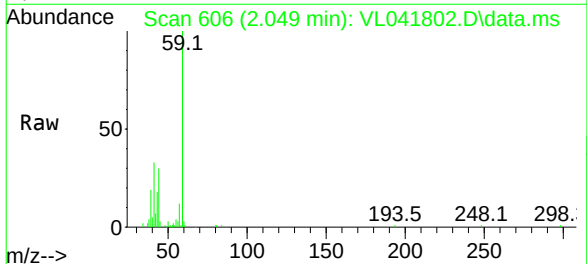
Manual Integrations  
APPROVED

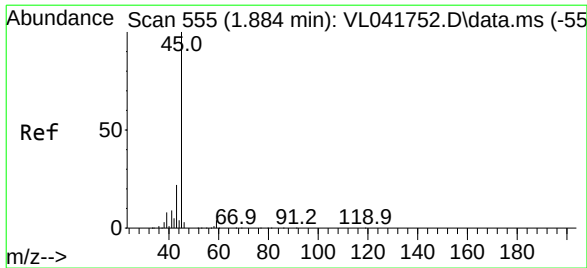
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#17  
tert-Butyl alcohol  
Concen: 0.518 ppbv  
RT: 2.049 min Scan# 606  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 59 Resp: 7709  
Ion Ratio Lower Upper  
59 100  
57 12.4 8.6 13.0





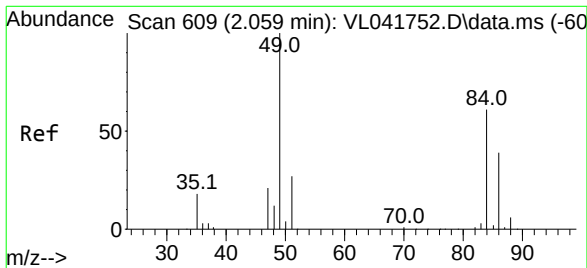
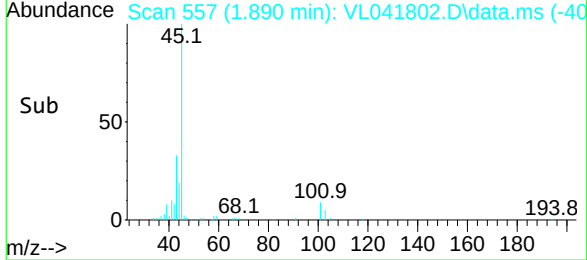
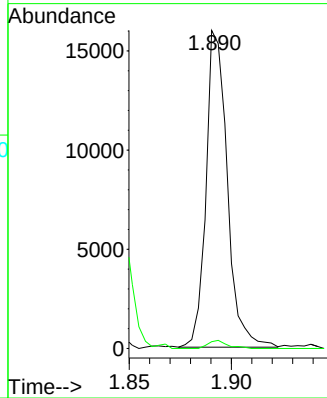
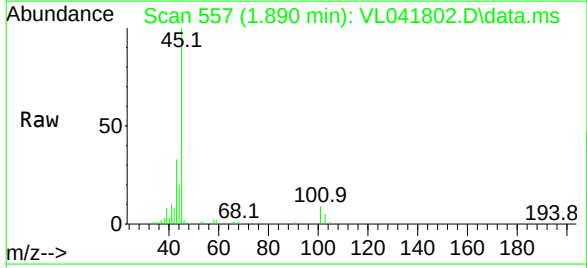
#19  
Isopropyl Alcohol  
Concen: 1.285 ppbv  
RT: 1.890 min Scan# 555  
Delta R.T. 0.006 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 45 Resp: 11560  
Ion Ratio Lower Upper  
45 100  
58 85.6 33.3 49.9#

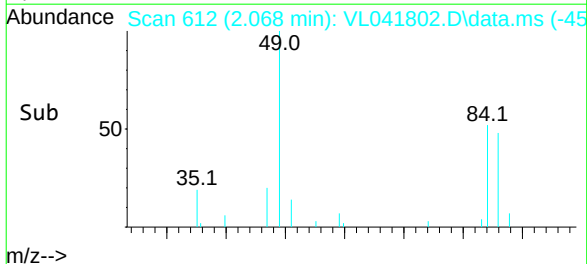
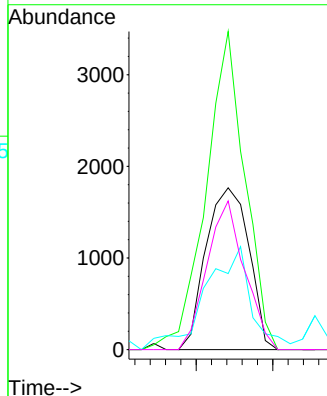
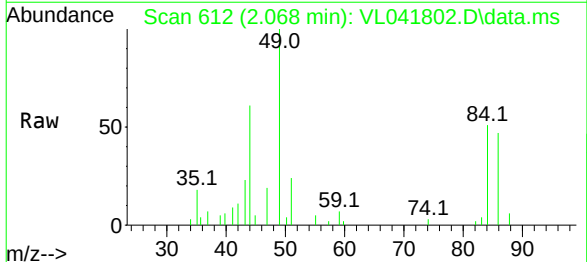
Manual Integrations  
APPROVED

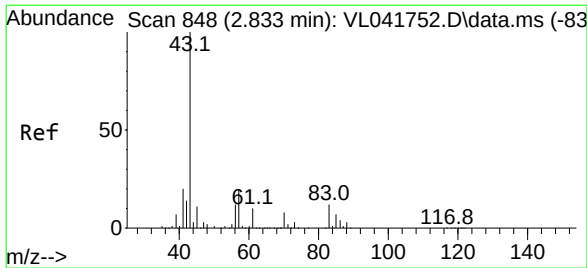
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#20  
Methylene Chloride  
Concen: 0.323 ppbv  
RT: 2.068 min Scan# 612  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

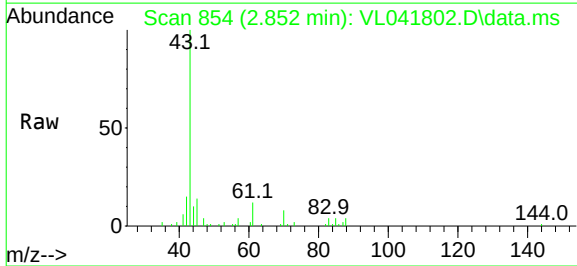
Tgt Ion: 84 Resp: 1379  
Ion Ratio Lower Upper  
84 100  
49 196.6 132.6 198.8  
51 38.9 37.6 56.4  
86 91.9 51.4 77.0#





#25  
Ethyl Acetate  
Concen: 0.411 ppbv  
RT: 2.852 min Scan# 851  
Delta R.T. 0.019 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

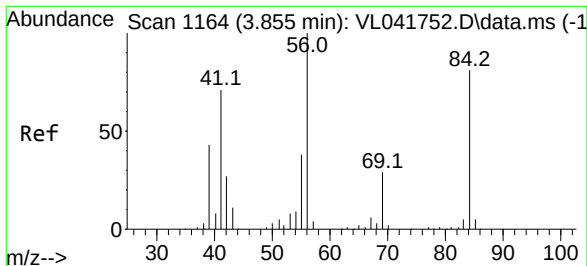
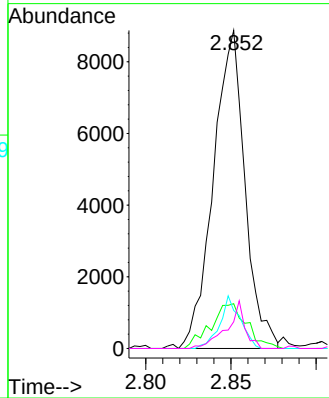
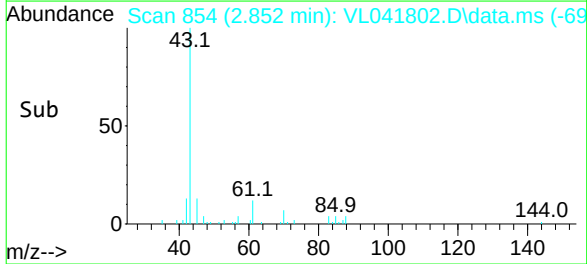
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 16.1  | 8.1   | 12.1  |
| 61      | 10.7  | 7.0   | 10.6  |
| 70      | 8.5   | 6.5   | 9.7   |

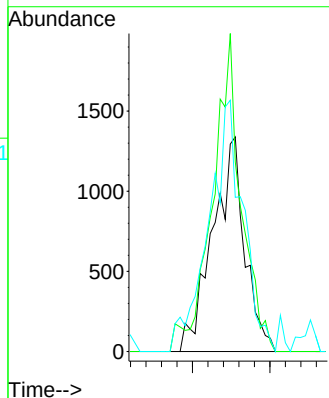
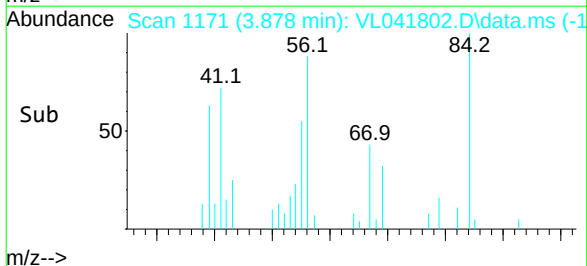
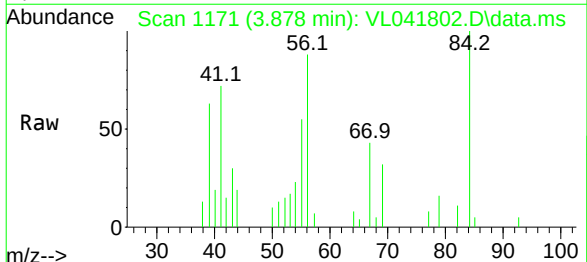
Manual Integrations  
APPROVED

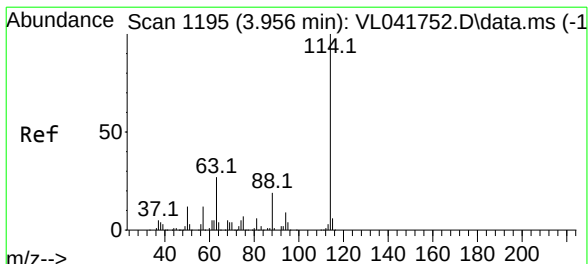
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#30  
Cyclohexane  
Concen: 0.213 ppbv m  
RT: 3.878 min Scan# 1171  
Delta R.T. 0.022 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

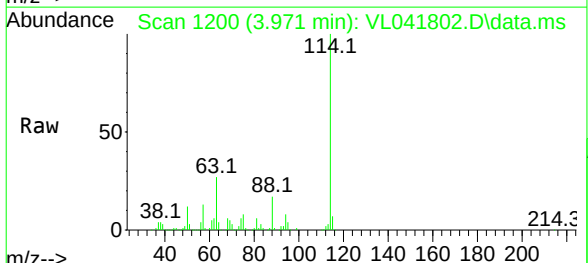
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 56      | 132.7 | 102.3 | 153.5 |
| 41      | 128.6 | 74.0  | 111.0 |





#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 3.971 min Scan# 12  
 Delta R.T. 0.016 min  
 Lab File: VL041802.D  
 Acq: 18 Dec 2024 19:58

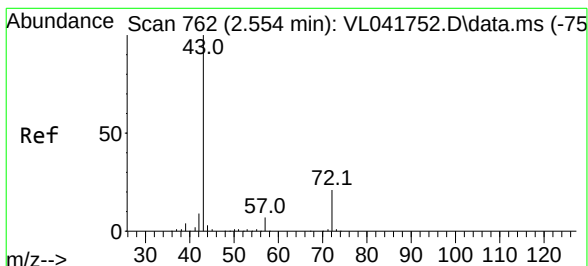
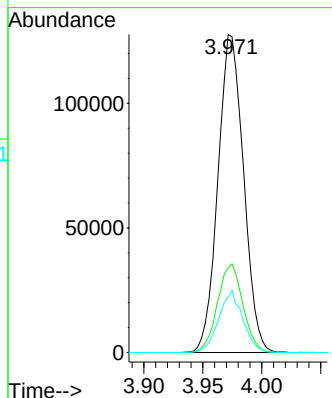
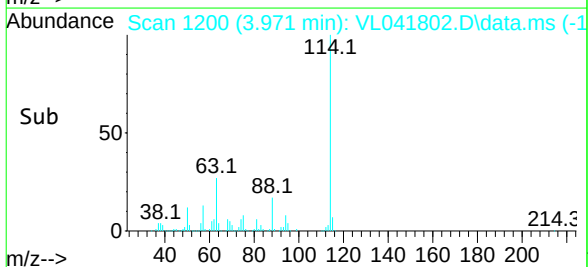
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB6



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 192884 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 27.6  | 21.8  | 32.8   |
| 88       | 18.2  | 14.8  | 22.2   |

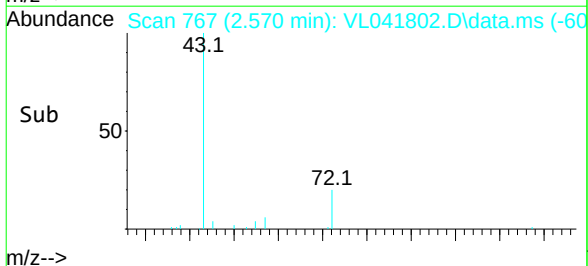
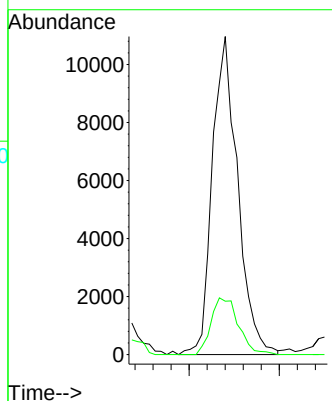
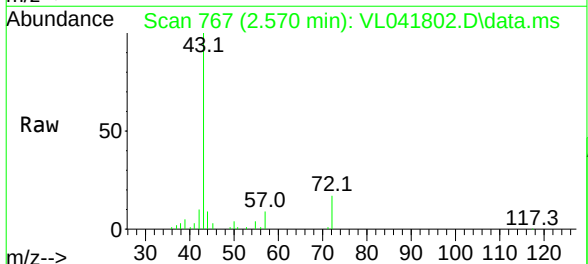
Manual Integrations  
 APPROVED

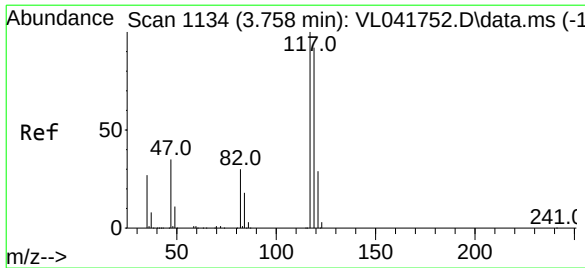
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024



#34  
 2-Butanone  
 Concen: 0.691 ppbv  
 RT: 2.570 min Scan# 767  
 Delta R.T. 0.016 min  
 Lab File: VL041802.D  
 Acq: 18 Dec 2024 19:58

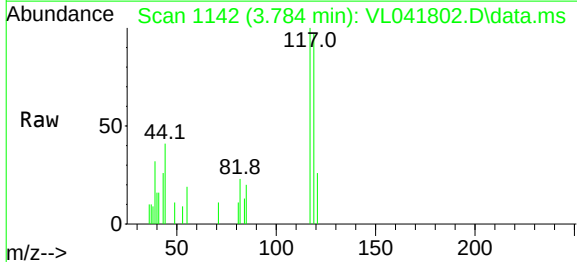
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 10728 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 19.2  | 16.8  | 25.2  |





#35  
Carbon Tetrachloride  
Concen: 0.054 ppbv m  
RT: 3.784 min Scan# 11  
Delta R.T. 0.025 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

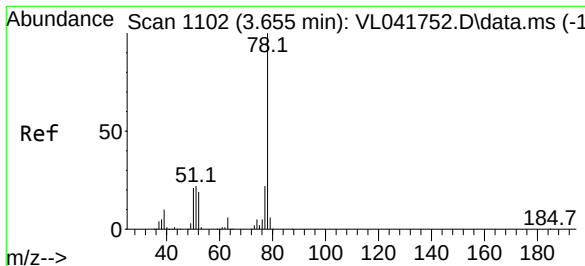
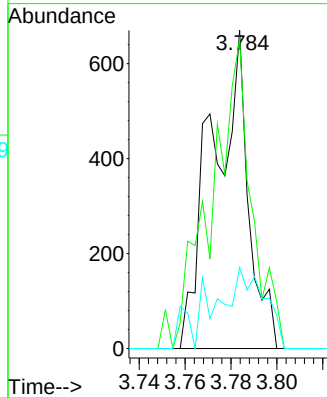
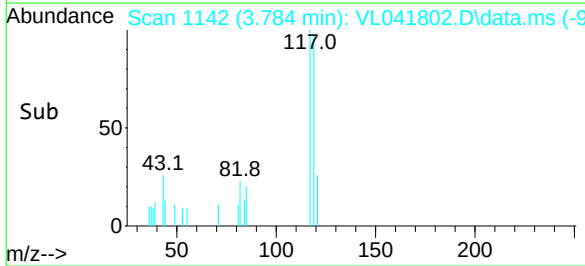
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



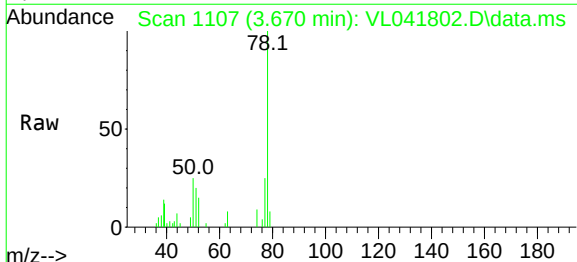
Tgt Ion: 117 Resp: 734  
Ion Ratio Lower Upper  
117 100  
119 97.3 73.7 110.5  
121 25.5 23.0 34.4

Manual Integrations  
APPROVED

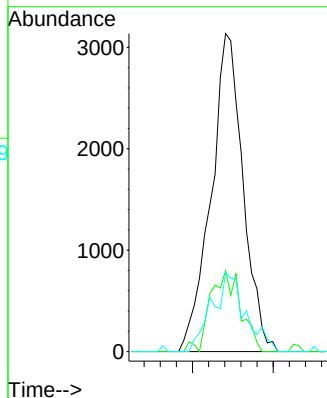
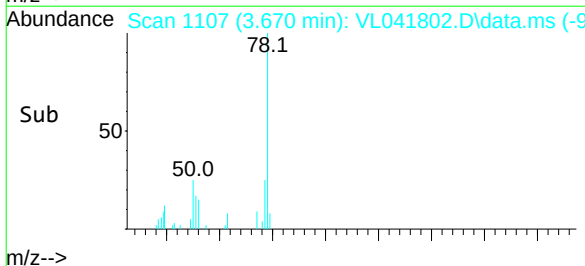
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

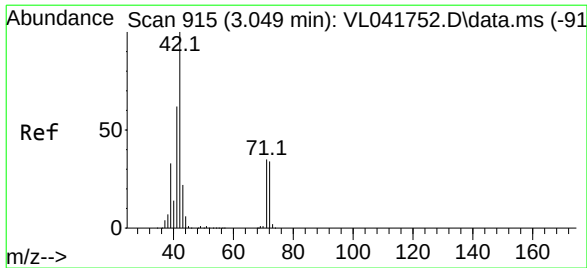


#36  
Benzene  
Concen: 0.217 ppbv  
RT: 3.670 min Scan# 1107  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58



Tgt Ion: 78 Resp: 4321  
Ion Ratio Lower Upper  
78 100  
77 25.4 17.8 26.6  
50 24.7 17.2 25.8





#41

Tetrahydrofuran

Concen: 0.621 ppbv

RT: 3.075 min Scan# 92

Delta R.T. 0.025 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

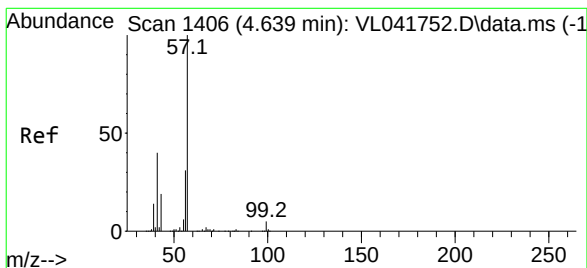
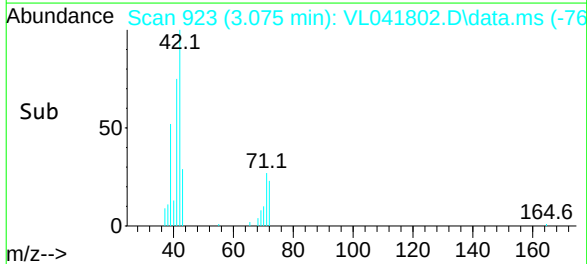
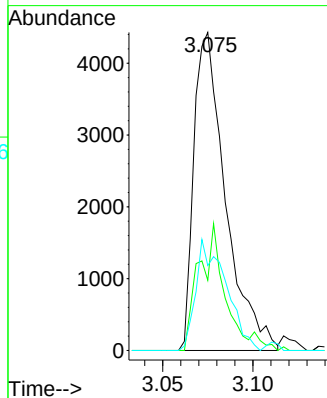
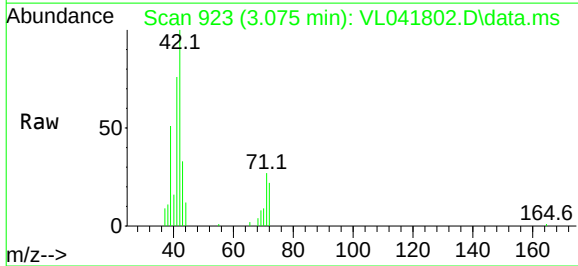
ClientSampleId :

C0AB6

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion: 42 | Resp: | 5402  |
| Ion | Ratio   | Lower | Upper |
| 42  | 100     |       |       |
| 72  | 33.8    | 29.1  | 43.7  |
| 71  | 34.3    | 28.4  | 42.6  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#44

2,2,4-Trimethylpentane

Concen: 0.104 ppbv m

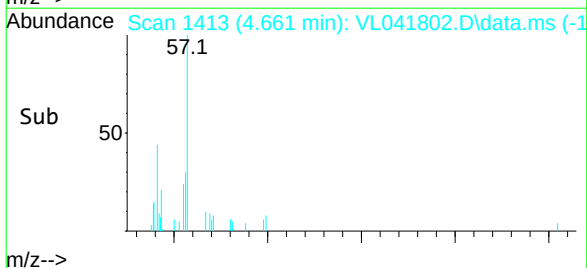
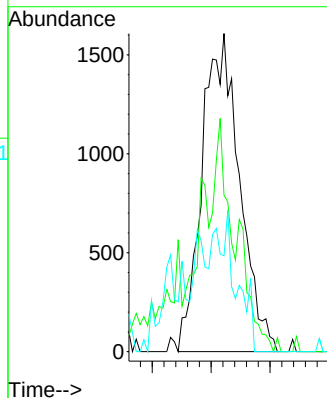
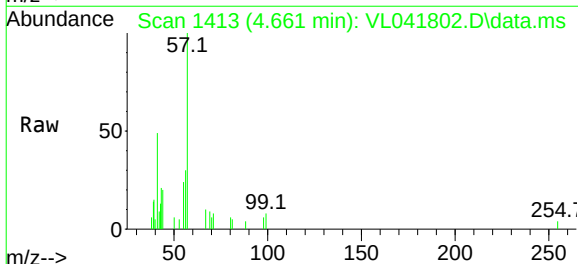
RT: 4.661 min Scan# 1413

Delta R.T. 0.022 min

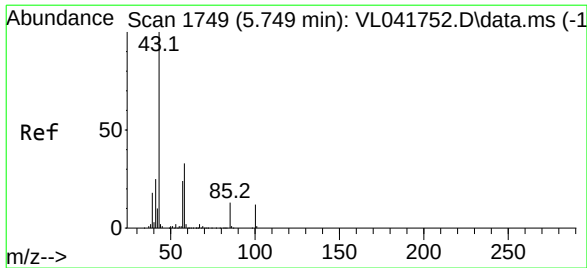
Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion: 57 | Resp: | 3553  |
| Ion | Ratio   | Lower | Upper |
| 57  | 100     |       |       |
| 41  | 81.1    | 30.7  | 46.1# |
| 56  | 56.3    | 25.4  | 38.0# |







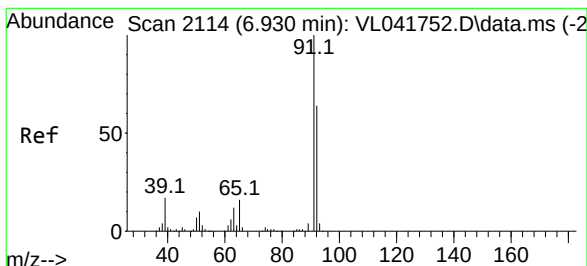
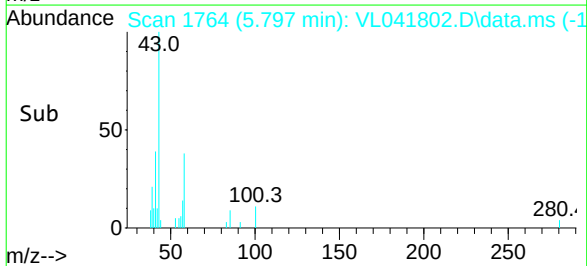
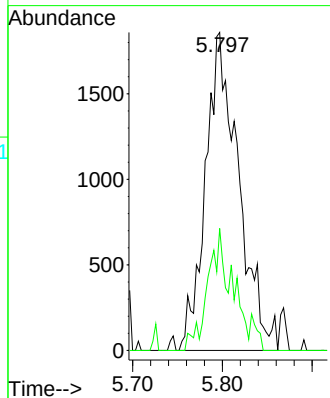
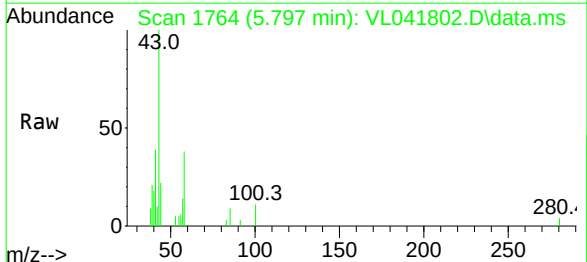
#50  
4-Methyl-2-Pentanone  
Concen: 0.225 ppbv m  
RT: 5.797 min Scan# 1749  
Delta R.T. 0.048 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 43 Resp: 4749  
Ion Ratio Lower Upper  
43 100  
58 0.0 26.8 40.2#

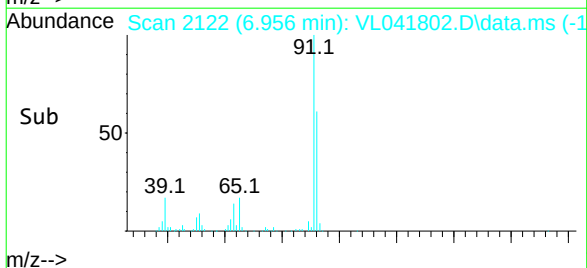
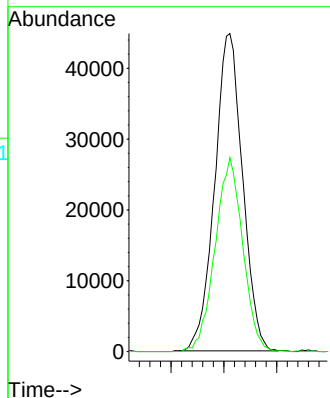
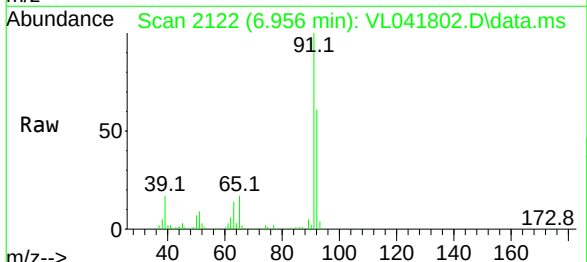
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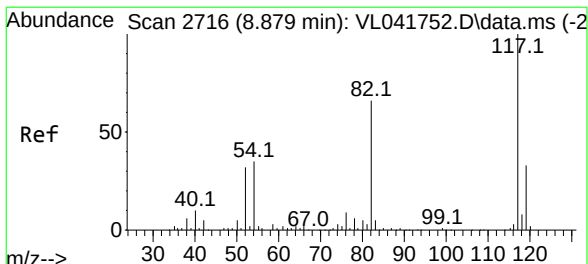
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#53  
Toluene  
Concen: 3.631 ppbv  
RT: 6.956 min Scan# 2122  
Delta R.T. 0.025 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

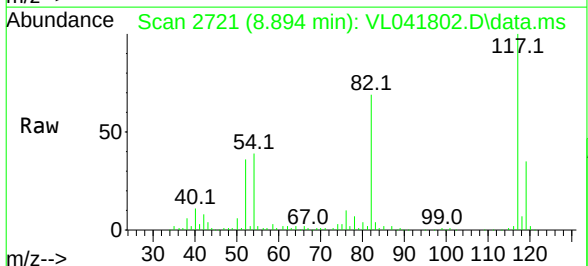
Tgt Ion: 91 Resp: 82132  
Ion Ratio Lower Upper  
91 100  
92 60.6 47.9 71.9





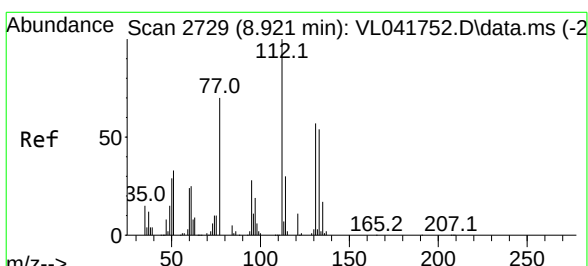
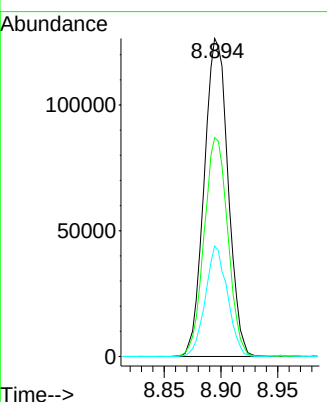
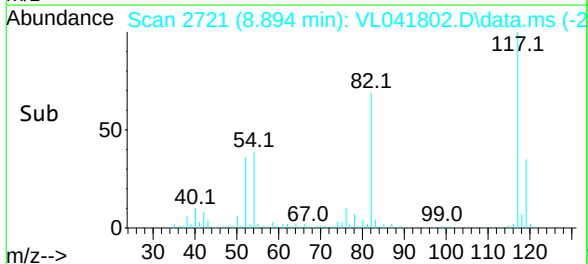
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.894 min Scan# 2716  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument : MSVOA\_L  
ClientSampleId : C0AB6

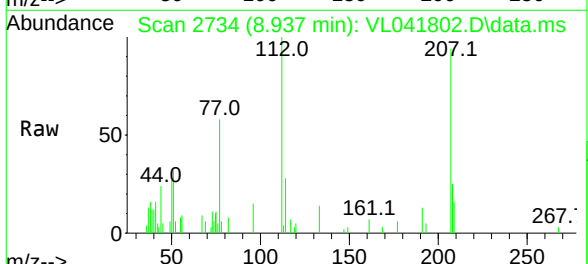


|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 185181 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 68.5  | 53.8  | 80.8   |
| 119      | 32.1  | 26.7  | 40.1   |

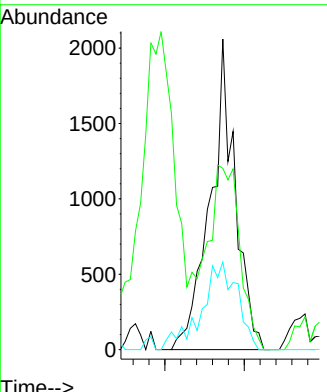
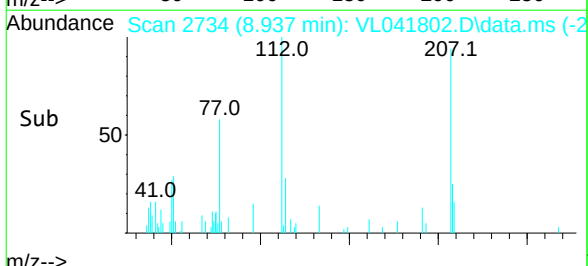
Manual Integrations  
**APPROVED**  
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

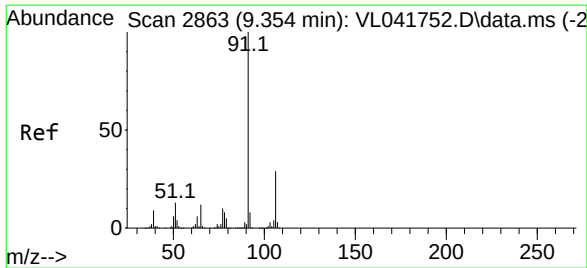


#57  
Chlorobenzene  
Concen: 0.118 ppbv m  
RT: 8.937 min Scan# 2734  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 112   | Resp: | 2231  |
| Ion      | Ratio | Lower | Upper |
| 112      | 100   |       |       |
| 77       | 58.4  | 57.4  | 86.0  |
| 114      | 28.2  | 27.4  | 33.4  |





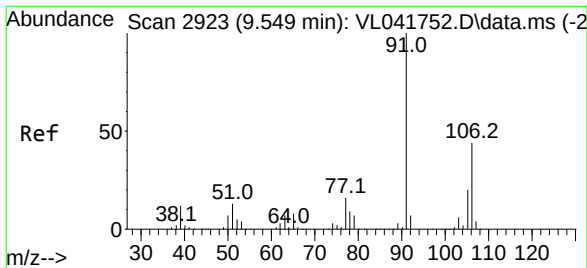
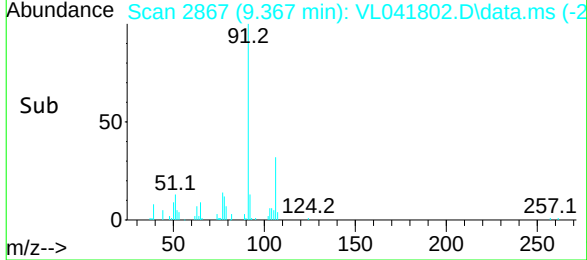
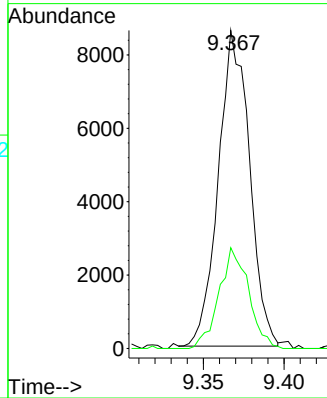
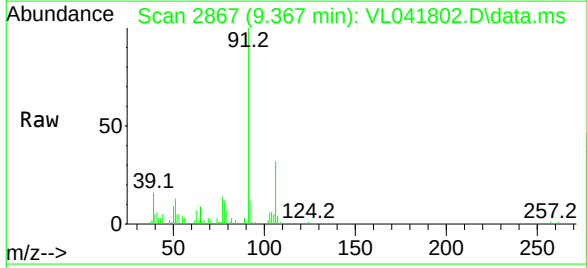
#58  
Ethyl Benzene  
Concen: 0.346 ppbv  
RT: 9.367 min Scan# 2867  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 91 Resp: 11534  
Ion Ratio Lower Upper  
91 100  
106 31.9 23.5 35.3

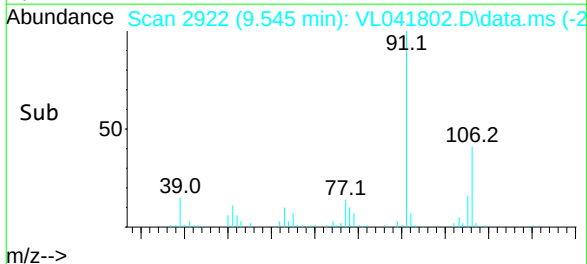
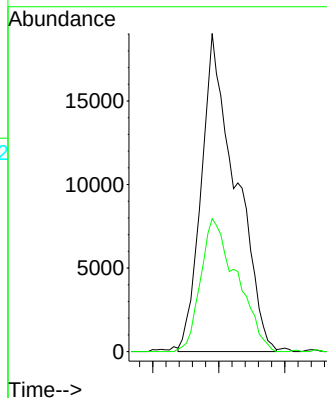
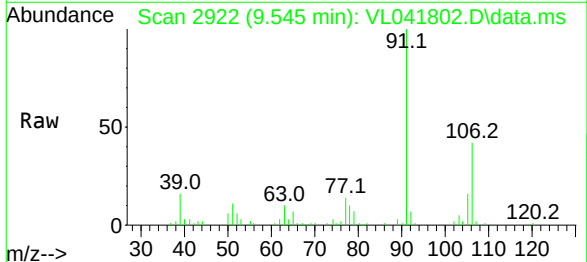
Manual Integrations  
APPROVED

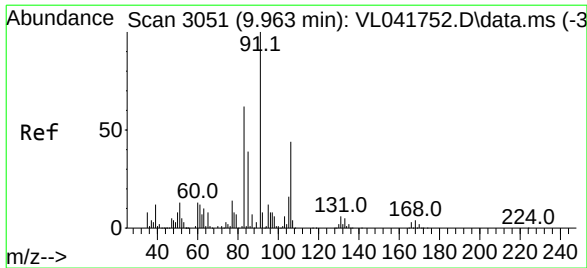
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#59  
m/p-Xylene  
Concen: 1.284 ppbv m  
RT: 9.545 min Scan# 2922  
Delta R.T. -0.004 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

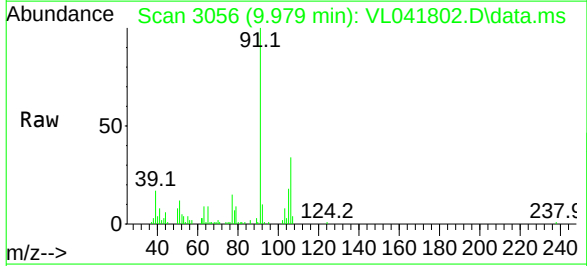
Tgt Ion: 91 Resp: 34427  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0





#60  
o-Xylene  
Concen: 0.499 ppbv  
RT: 9.979 min Scan# 3051  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

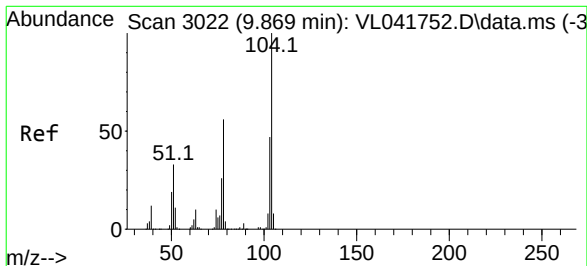
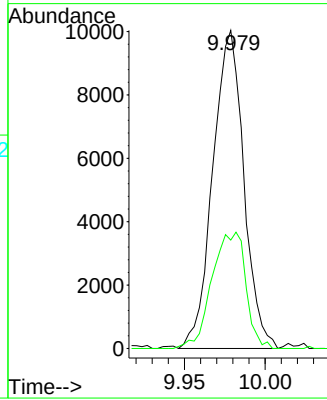
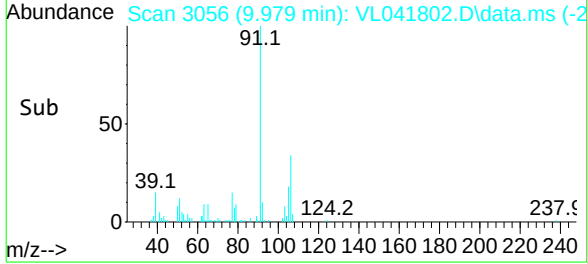
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



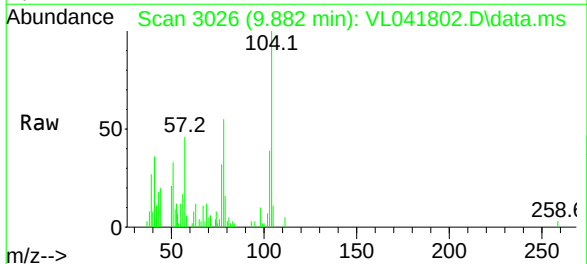
Tgt Ion: 91 Resp: 13407  
Ion Ratio Lower Upper  
91 100  
106 39.9 21.1 63.4

Manual Integrations  
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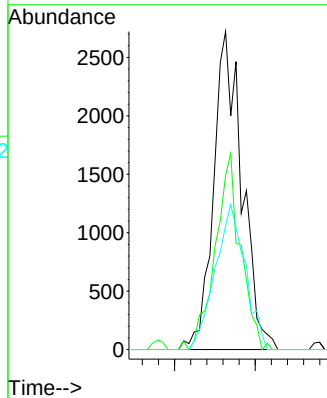
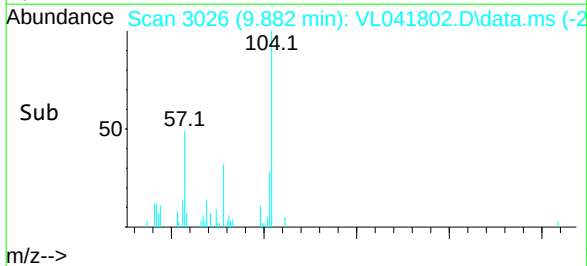
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

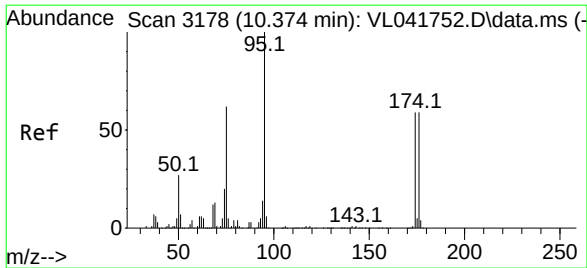


#61  
Styrene  
Concen: 0.287 ppbv  
RT: 9.882 min Scan# 3026  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58



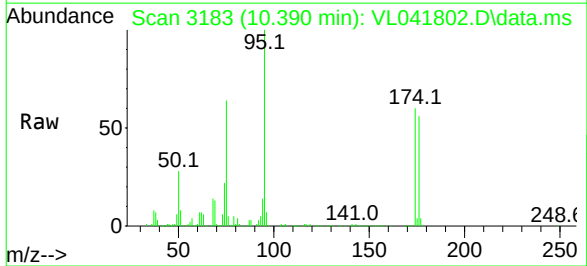
Tgt Ion:104 Resp: 3334  
Ion Ratio Lower Upper  
104 100  
78 55.8 43.8 65.6  
103 48.0 37.8 56.6





#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.722 ppbv  
RT: 10.390 min Scan# 3178  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

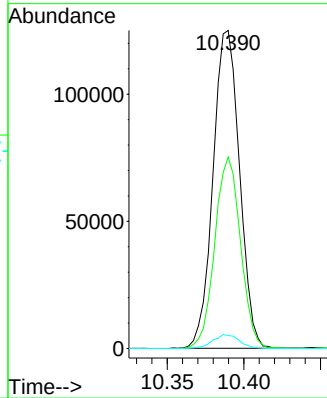
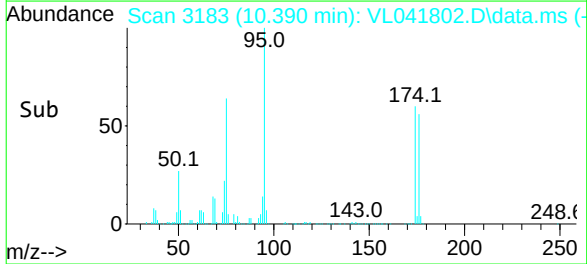
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6



| Tgt | Ion | Ratio | Lower | Upper |
|-----|-----|-------|-------|-------|
| 95  | 95  | 100   |       |       |
| 174 | 174 | 58.6  | 47.6  | 71.4  |
| 175 | 175 | 4.4   | 3.7   | 5.5   |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB7           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-02        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041803.D        | 1         |           | 12/18/24 20:32 | VL121824      |

| CAS Number     | Parameter                      | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|----------------|--------------------------------|---------------|----------------|-----------|-------|------------|-------|
| <b>TARGETS</b> |                                |               |                |           |       |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.36          | 1.78           | J         | 1.04  | 2.47       | ug/m3 |
| 74-87-3        | Chloromethane                  | 0.67          | 1.38           |           | 0.21  | 1.03       | ug/m3 |
| 75-01-4        | Vinyl Chloride                 | 0.010         | 0.030          | U         | 0.030 | 0.080      | ug/m3 |
| 74-83-9        | Bromomethane                   | 0.14          | 0.54           | U         | 0.54  | 1.94       | ug/m3 |
| 75-00-3        | Chloroethane                   | 0.17          | 0.45           | U         | 0.45  | 1.32       | ug/m3 |
| 109-99-9       | Tetrahydrofuran                | 0.13          | 0.38           | U         | 0.38  | 1.47       | ug/m3 |
| 75-69-4        | Trichlorofluoromethane         | 0.20          | 1.12           | J         | 0.90  | 2.81       | ug/m3 |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.16          | 1.23           | U         | 1.23  | 3.83       | ug/m3 |
| 76-14-2        | Dichlorotetrafluoroethane      | 0.090         | 0.63           | U         | 0.63  | 3.49       | ug/m3 |
| 75-65-0        | tert-Butyl alcohol             | 0.66          | 2.00           |           | 0.58  | 1.52       | ug/m3 |
| 142-82-5       | Heptane                        | 0.12          | 0.49           | J         | 0.45  | 2.05       | ug/m3 |
| 75-35-4        | 1,1-Dichloroethene             | 0.14          | 0.56           | U         | 0.56  | 1.98       | ug/m3 |
| 67-64-1        | Acetone                        | 8.60          | 20.4           |           | 0.57  | 1.19       | ug/m3 |
| 75-15-0        | Carbon Disulfide               | 0.16          | 0.50           | U         | 0.50  | 1.56       | ug/m3 |
| 1634-04-4      | Methyl tert-Butyl Ether        | 0.12          | 0.43           | U         | 0.43  | 1.80       | ug/m3 |
| 75-09-2        | Methylene Chloride             | 0.45          | 1.56           | J         | 0.66  | 1.74       | ug/m3 |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.19          | 0.75           | U         | 0.75  | 1.98       | ug/m3 |
| 75-34-3        | 1,1-Dichloroethane             | 0.13          | 0.53           | U         | 0.53  | 2.02       | ug/m3 |
| 110-82-7       | Cyclohexane                    | 0.22          | 0.76           | U         | 0.76  | 1.72       | ug/m3 |
| 78-93-3        | 2-Butanone                     | 0.45          | 1.33           | J         | 0.35  | 1.47       | ug/m3 |
| 56-23-5        | Carbon Tetrachloride           | 0.070         | 0.44           |           | 0.060 | 0.19       | ug/m3 |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.090         | 0.36           | U         | 0.36  | 1.98       | ug/m3 |
| 67-66-3        | Chloroform                     | 0.30          | 1.47           | J         | 0.39  | 2.44       | ug/m3 |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.010         | 0.050          | U         | 0.050 | 0.16       | ug/m3 |
| 540-84-1       | 2,2,4-Trimethylpentane         | 0.18          | 0.84           | J         | 0.47  | 2.34       | ug/m3 |
| 71-43-2        | Benzene                        | 0.32          | 1.02           | J         | 0.29  | 1.60       | ug/m3 |
| 107-06-2       | 1,2-Dichloroethane             | 0.090         | 0.36           | U         | 0.36  | 2.02       | ug/m3 |
| 79-01-6        | Trichloroethene                | 0.020         | 0.11           | U         | 0.11  | 0.16       | ug/m3 |
| 78-87-5        | 1,2-Dichloropropane            | 0.11          | 0.51           | U         | 0.51  | 2.31       | ug/m3 |
| 75-27-4        | Bromodichloromethane           | 0.080         | 0.54           | U         | 0.54  | 3.35       | ug/m3 |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.090         | 0.37           | U         | 0.37  | 2.05       | ug/m3 |
| 108-88-3       | Toluene                        | 0.60          | 2.26           |           | 0.41  | 1.88       | ug/m3 |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.070         | 0.38           | U         | 0.38  | 2.73       | ug/m3 |

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB7           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-02        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041803.D        | 1         |           | 12/18/24 20:32 | VL121824      |

| CAS Number  | Parameter                 | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|-------------|---------------------------|---------------|----------------|-----------|-------|------------|-------|
| 124-48-1    | Dibromochloromethane      | 0.070         | 0.60           | U         | 0.60  | 4.26       | ug/m3 |
| 106-93-4    | 1,2-Dibromoethane         | 0.070         | 0.54           | U         | 0.54  | 0.77       | ug/m3 |
| 127-18-4    | Tetrachloroethene         | 0.020         | 0.14           | U         | 0.14  | 0.20       | ug/m3 |
| 108-90-7    | Chlorobenzene             | 0.080         | 0.37           | U         | 0.37  | 2.30       | ug/m3 |
| 100-41-4    | Ethyl Benzene             | 0.12          | 0.52           | U         | 0.52  | 2.17       | ug/m3 |
| 179601-23-1 | m/p-Xylene                | 0.27          | 1.17           | J         | 0.91  | 4.34       | ug/m3 |
| 95-47-6     | o-Xylene                  | 0.12          | 0.52           | U         | 0.52  | 2.17       | ug/m3 |
| 100-42-5    | Styrene                   | 0.11          | 0.47           | U         | 0.47  | 2.13       | ug/m3 |
| 75-25-2     | Bromoform                 | 0.060         | 0.62           | U         | 0.62  | 5.17       | ug/m3 |
| 79-34-5     | 1,1,2,2-Tetrachloroethane | 0.010         | 0.070          | U         | 0.070 | 0.21       | ug/m3 |
| 95-49-8     | 2-Chlorotoluene           | 0.11          | 0.57           | U         | 0.57  | 2.59       | ug/m3 |
| 108-67-8    | 1,3,5-Trimethylbenzene    | 0.11          | 0.54           | U         | 0.54  | 2.46       | ug/m3 |
| 95-63-6     | 1,2,4-Trimethylbenzene    | 0.080         | 0.39           | U         | 0.39  | 2.46       | ug/m3 |
| 541-73-1    | 1,3-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48  | 3.01       | ug/m3 |
| 106-46-7    | 1,4-Dichlorobenzene       | 0.050         | 0.30           | U         | 0.30  | 3.01       | ug/m3 |
| 95-50-1     | 1,2-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48  | 3.01       | ug/m3 |
| 120-82-1    | 1,2,4-Trichlorobenzene    | 0.090         | 0.67           | U         | 0.67  | 3.71       | ug/m3 |
| 87-68-3     | Hexachloro-1,3-Butadiene  | 0.090         | 0.96           | U         | 0.96  | 5.33       | ug/m3 |
| 106-99-0    | 1,3-Butadiene             | 0.13          | 0.29           | U         | 0.29  | 1.11       | ug/m3 |
| 91-20-3     | Naphthalene               | 0.080         | 0.42           | U         | 0.42  | 0.52       | ug/m3 |
| 622-96-8    | 4-Ethyltoluene            | 0.12          | 0.59           | U         | 0.59  | 2.46       | ug/m3 |
| 110-54-3    | Hexane                    | 0.34          | 1.20           | J         | 0.39  | 1.76       | ug/m3 |
| 107-05-1    | Allyl Chloride            | 0.15          | 0.47           | U         | 0.47  | 1.57       | ug/m3 |
| 123-91-1    | 1,4-Dioxane               | 0.21          | 0.76           | U         | 0.76  | 1.80       | ug/m3 |
| 80-62-6     | Methyl Methacrylate       | 0.090         | 0.37           | U         | 0.37  | 2.05       | ug/m3 |

### SURROGATES

|          |                         |      |  |          |      |         |
|----------|-------------------------|------|--|----------|------|---------|
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 10.2 |  | 65 - 135 | 102% | SPK: 10 |
|----------|-------------------------|------|--|----------|------|---------|

### INTERNAL STANDARDS

|           |                     |        |       |
|-----------|---------------------|--------|-------|
| 74-97-5   | Bromochloromethane  | 76700  | 2.793 |
| 540-36-3  | 1,4-Difluorobenzene | 188000 | 3.972 |
| 3114-55-4 | Chlorobenzene-d5    | 165000 | 8.894 |

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB7           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-02        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041803.D        | 1         |           | 12/18/24 20:32 | VL121824      |

| CAS Number | Parameter | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|

U = Not Detected  
 RL = Reporting Limit  
 MDL = Method Detection Limit  
 E = Value Exceeds Calibration Range  
 D = Dilution

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 Q = indicates LCS control criteria did not meet requirements



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041803.D  
Acq On : 18 Dec 2024 20:32  
Operator : SY/MD  
Sample : P5294-02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

Quant Time: Dec 19 07:59:07 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|------------|----------|
| Internal Standards          |        |       |          |          |            |          |
| 1) Bromochloromethane       | 2.793  | 49    | 76658    | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene     | 3.972  | 114   | 187828   | 10.000   | ppbv       | 0.02     |
| 55) Chlorobenzene-d5        | 8.894  | 117   | 164998   | 10.000   | ppbv       | 0.02     |
| System Monitoring Compounds |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.387 | 95    | 139994   | 10.182   | ppbv       | 0.01     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | = 101.800% |          |
| Target Compounds            |        |       |          |          |            | Qvalue   |
| 2) Dichlorodifluoromethane  | 1.502  | 85    | 4836     | 0.355    | ppbv       | 99       |
| 3) Chlorodifluoromethane    | 1.479  | 51    | 3460m    | 0.277    | ppbv       |          |
| 4) Chloromethane            | 1.534  | 50    | 3556     | 0.666    | ppbv #     | 78       |
| 9) Propene                  | 1.492  | 41    | 54201m   | 10.003   | ppbv       |          |
| 10) Heptane                 | 4.994  | 43    | 1709m    | 0.123    | ppbv       |          |
| 11) Trichlorofluoromethane  | 1.884  | 101   | 2898     | 0.200    | ppbv #     | 80       |
| 13) Ethanol                 | 1.732  | 45    | 1977904  | 4408.380 | ppbv       | 99       |
| 15) Acetone                 | 1.839  | 43    | 128822   | 8.637    | ppbv #     | 89       |
| 17) tert-Butyl alcohol      | 2.049  | 59    | 9710     | 0.656    | ppbv #     | 71       |
| 19) Isopropyl Alcohol       | 1.890  | 45    | 155744   | 17.402   | ppbv #     | 59       |
| 20) Methylene Chloride      | 2.065  | 84    | 1921     | 0.452    | ppbv #     | 81       |
| 25) Ethyl Acetate           | 2.845  | 43    | 7001m    | 0.252    | ppbv       |          |
| 26) Hexane                  | 2.835  | 57    | 3564     | 0.338    | ppbv #     | 70       |
| 29) Chloroform              | 2.855  | 83    | 4772     | 0.297    | ppbv #     | 82       |
| 30) Cyclohexane             | 3.865  | 84    | 971m     | 0.108    | ppbv       |          |
| 34) 2-Butanone              | 2.570  | 43    | 6833     | 0.452    | ppbv       | 99       |
| 35) Carbon Tetrachloride    | 3.774  | 117   | 984m     | 0.074    | ppbv       |          |
| 36) Benzene                 | 3.674  | 78    | 6297m    | 0.324    | ppbv       |          |
| 44) 2,2,4-Trimethylpentane  | 4.661  | 57    | 6046m    | 0.182    | ppbv       |          |
| 53) Toluene                 | 6.949  | 91    | 13160    | 0.597    | ppbv       | 99       |
| 59) m/p-Xylene              | 9.542  | 91    | 6469m    | 0.271    | ppbv       |          |
| 60) o-Xylene                | 9.976  | 91    | 2612     | 0.109    | ppbv       | 97       |

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

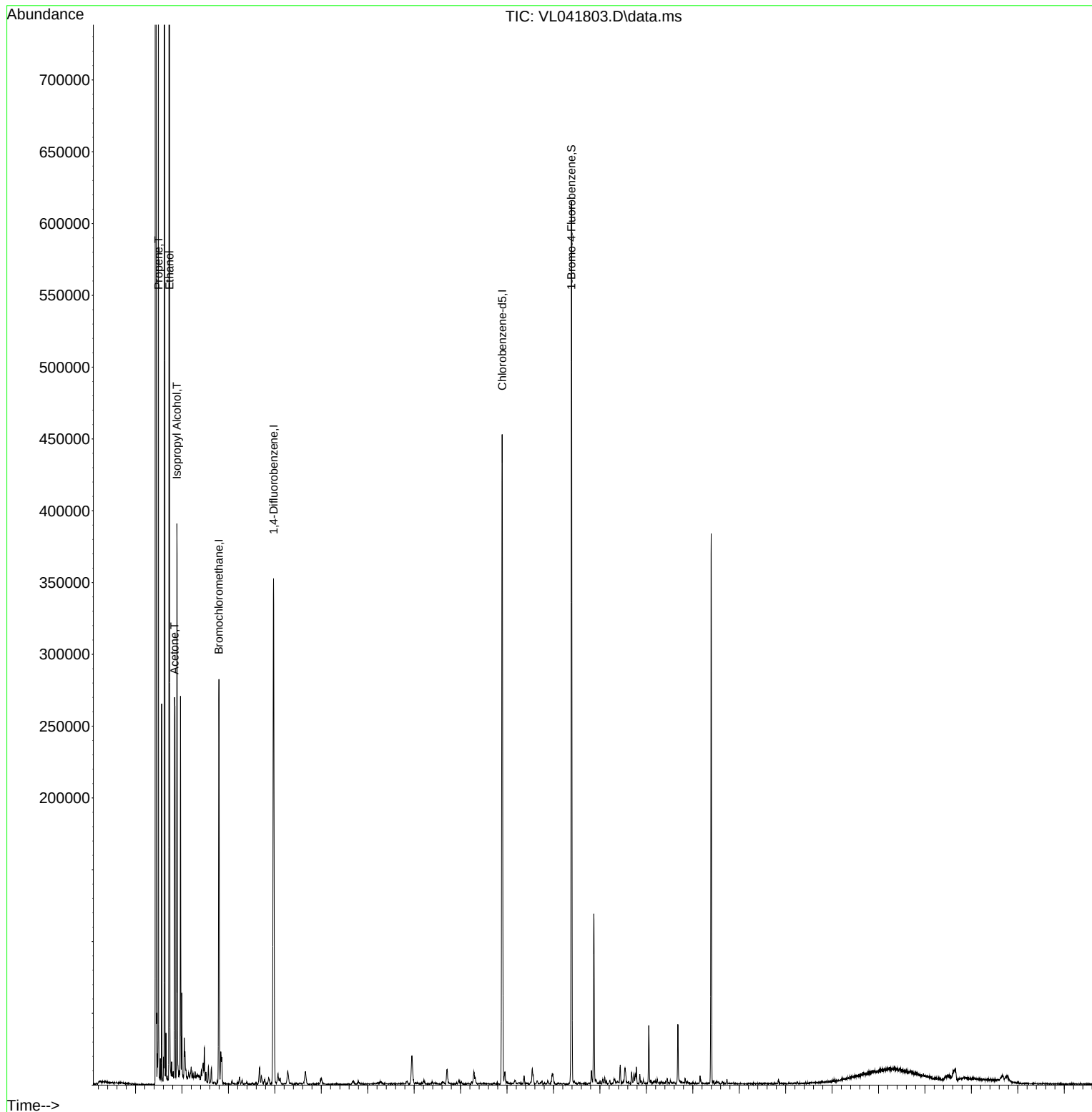
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Data File : VL041803.D  
Acq On : 18 Dec 2024 20:32  
Operator : SY/MD  
Sample : P5294-02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 11 Sample Multiplier: 1

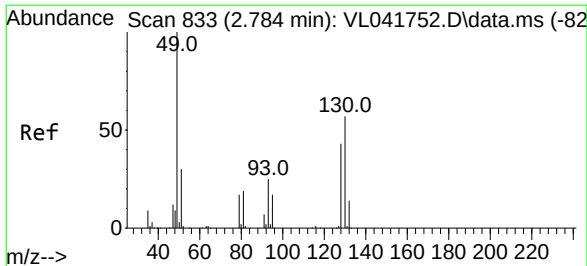
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

Quant Time: Dec 19 07:59:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

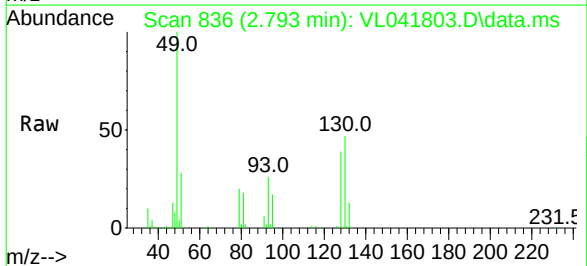
Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.793 min Scan# 833  
Delta R.T. 0.009 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

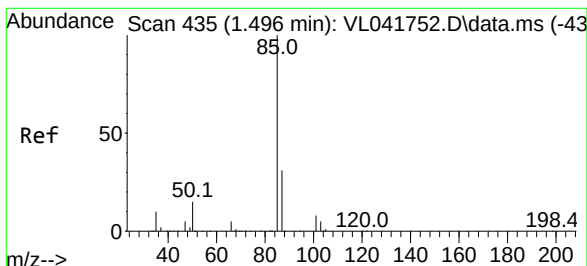
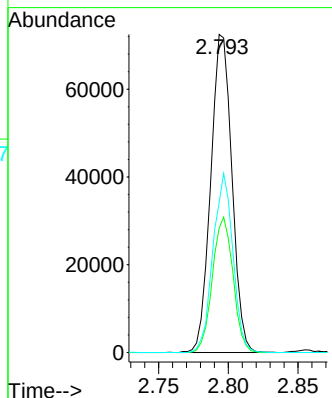
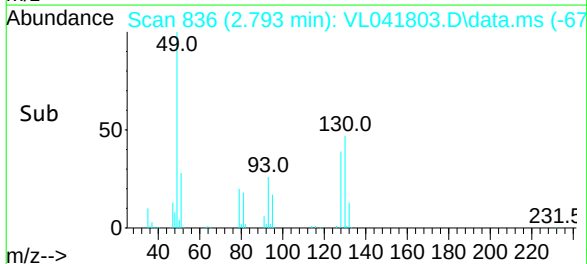
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



Tgt Ion: 49 Resp: 76658  
Ion Ratio Lower Upper  
49 100  
128 41.2 21.6 64.6  
130 52.9 28.3 85.0

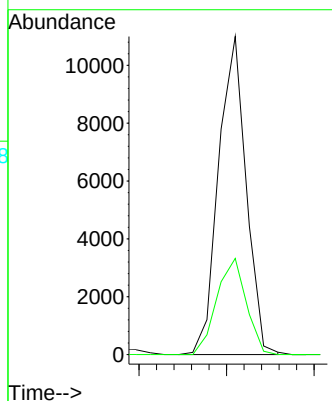
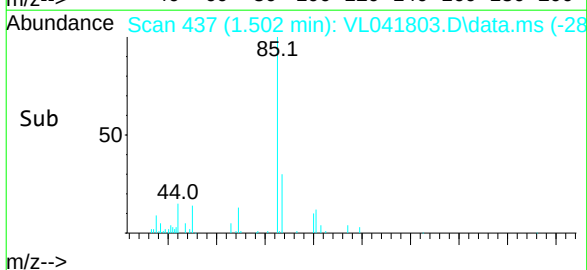
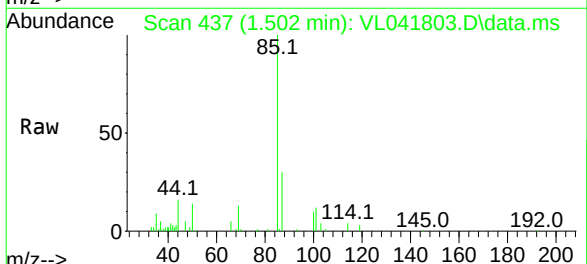
Manual Integrations  
APPROVED

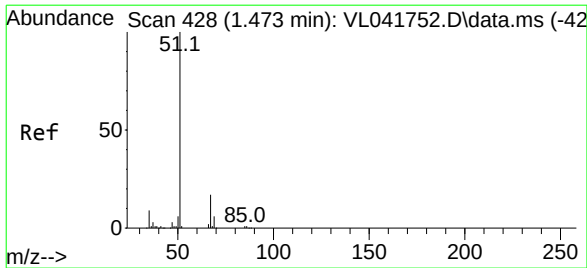
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#2  
Dichlorodifluoromethane  
Concen: 0.355 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

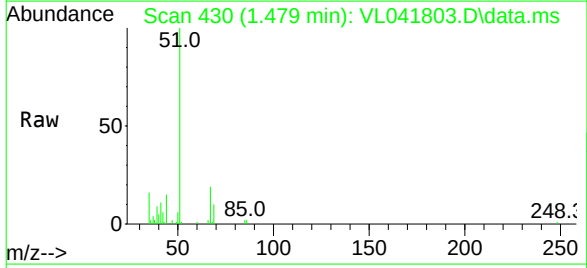
Tgt Ion: 85 Resp: 4836  
Ion Ratio Lower Upper  
85 100  
87 30.2 24.5 36.7





#3  
Chlorodifluoromethane  
Concen: 0.277 ppbv m  
RT: 1.479 min Scan# 43  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

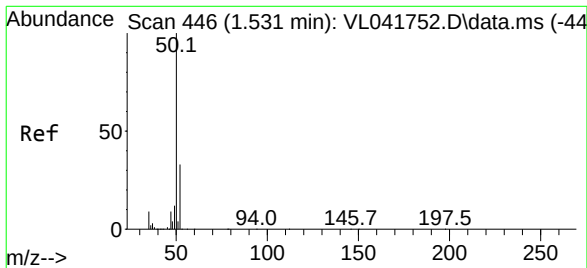
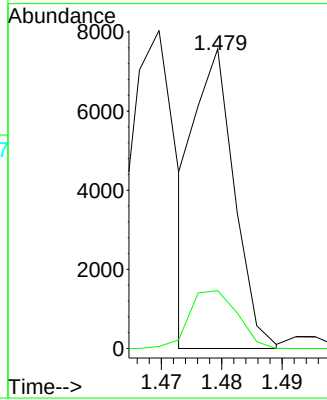
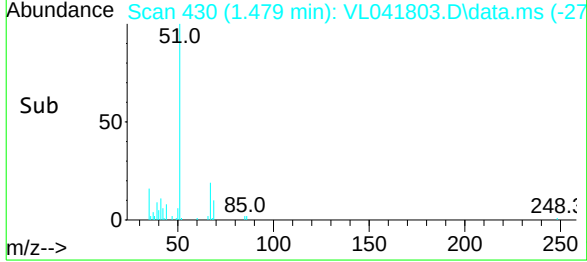
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



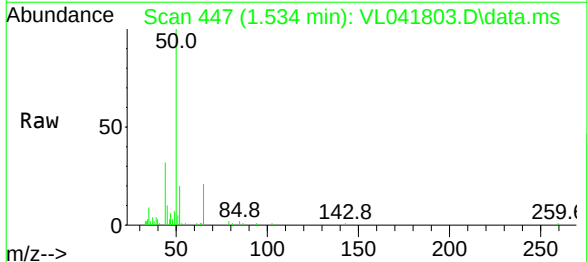
Tgt Ion: 51 Resp: 3460  
Ion Ratio Lower Upper  
51 100  
67 23.6 15.0 22.4#

Manual Integrations  
APPROVED

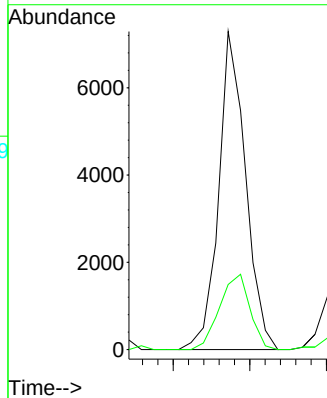
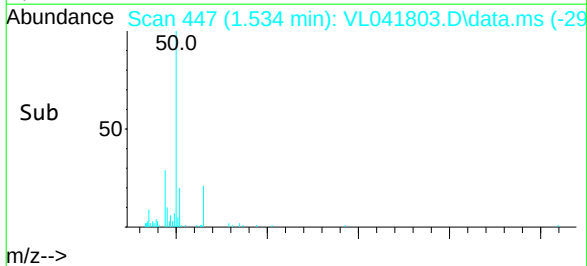
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

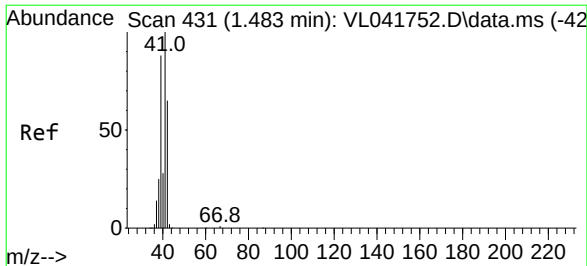


#4  
Chloromethane  
Concen: 0.666 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32



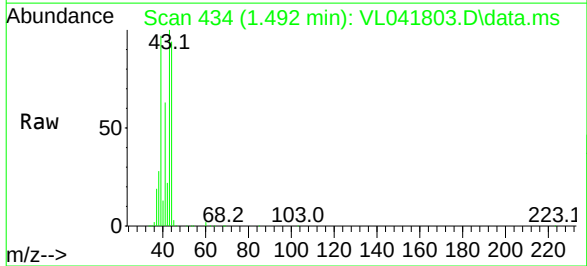
Tgt Ion: 50 Resp: 3556  
Ion Ratio Lower Upper  
50 100  
52 20.5 26.2 39.2#





#9  
Propene  
Concen: 10.003 ppbv m  
RT: 1.492 min Scan# 431  
Delta R.T. 0.009 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

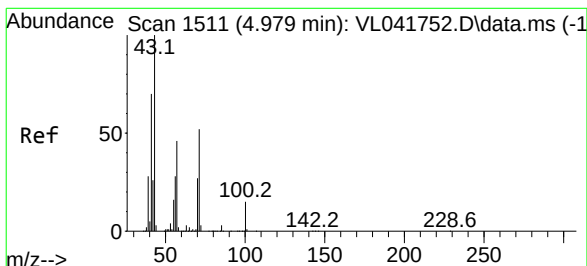
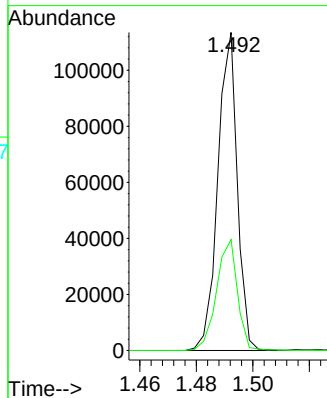
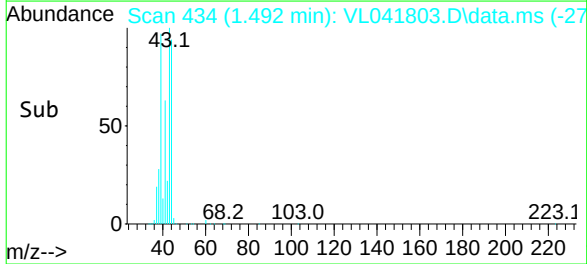
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



Tgt Ion: 41 Resp: 54201  
Ion Ratio Lower Upper  
41 100  
42 34.0 52.4 78.6#

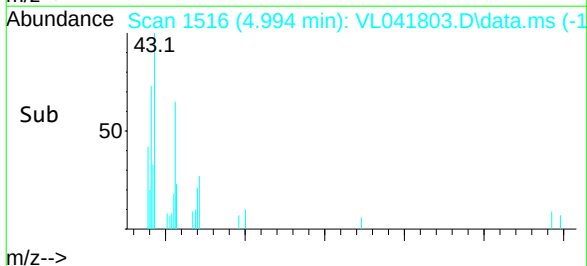
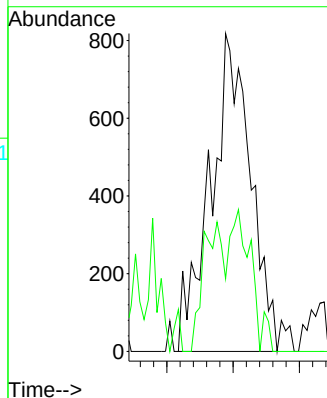
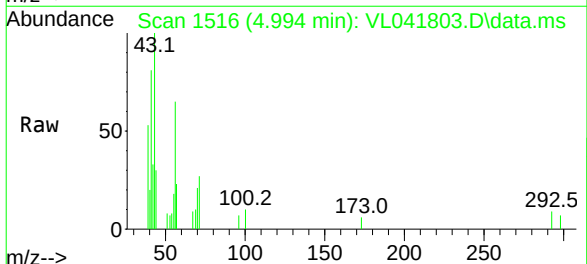
Manual Integrations  
APPROVED

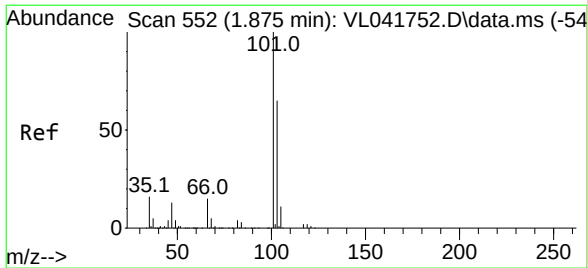
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#10  
Heptane  
Concen: 0.123 ppbv m  
RT: 4.994 min Scan# 1516  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

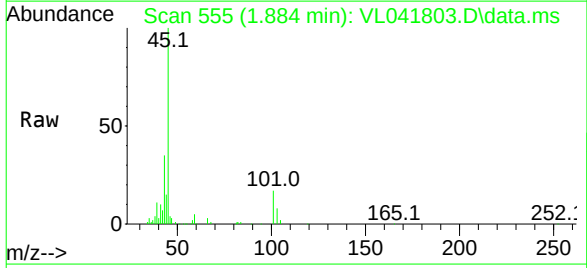
Tgt Ion: 43 Resp: 1709  
Ion Ratio Lower Upper  
43 100  
57 0.0 38.5 57.7#





#11  
Trichlorofluoromethane  
Concen: 0.200 ppbv  
RT: 1.884 min Scan# 555  
Delta R.T. 0.009 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

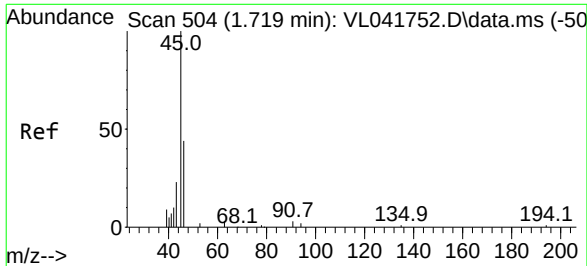
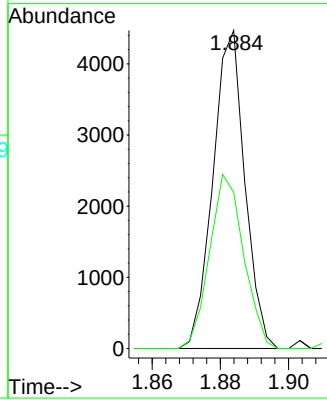
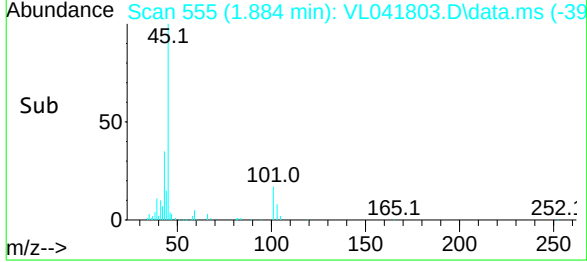
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



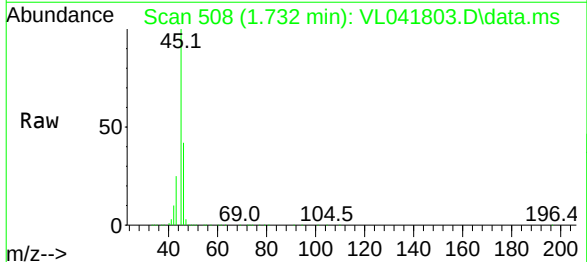
Tgt Ion: 101 Resp: 2898  
Ion Ratio Lower Upper  
101 100  
103 49.1 51.8 77.8#

Manual Integrations  
APPROVED

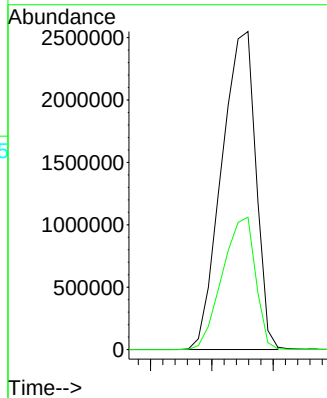
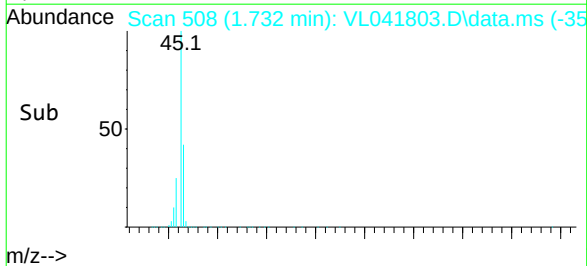
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

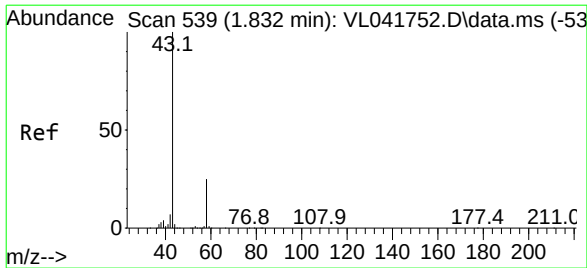


#13  
Ethanol  
Concen: 4408.380 ppbv  
RT: 1.732 min Scan# 508  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32



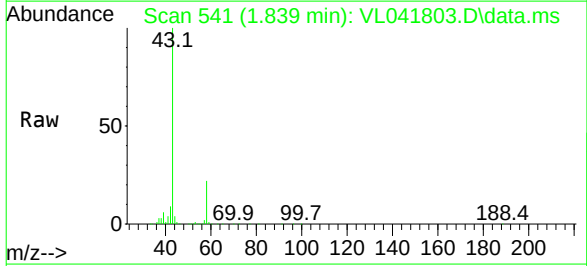
Tgt Ion: 45 Resp: 1977904  
Ion Ratio Lower Upper  
45 100  
46 40.3 16.4 65.8





#15  
Acetone  
Concen: 8.637 ppbv  
RT: 1.839 min Scan# 541  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

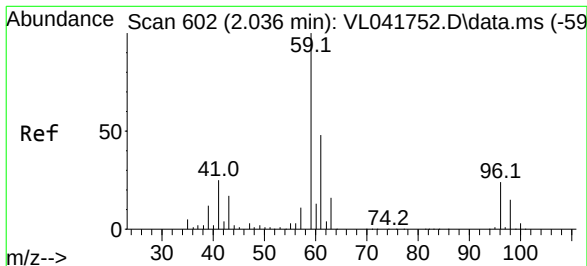
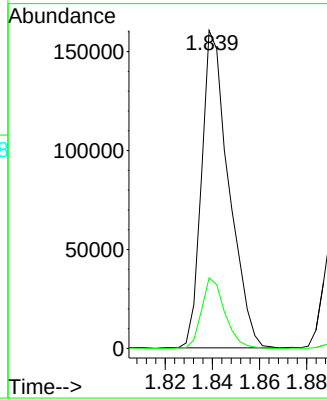
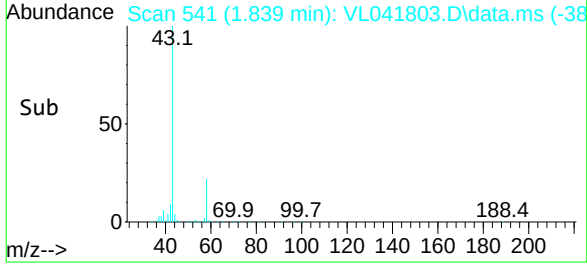
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



Tgt Ion: 43 Resp: 128822  
Ion Ratio Lower Upper  
43 100  
58 19.0 19.7 29.5#

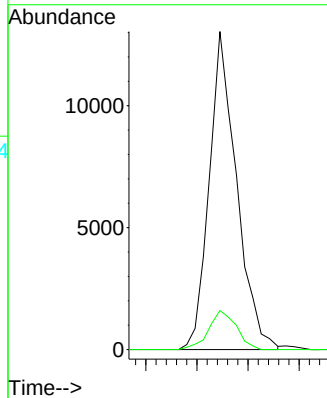
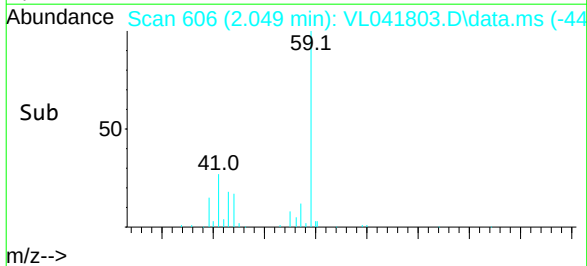
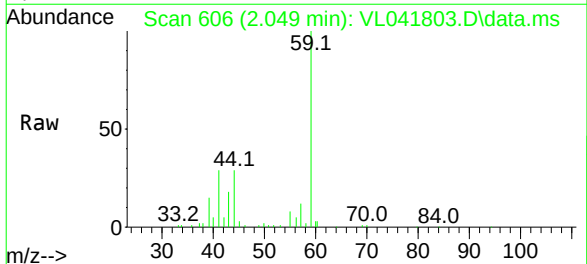
Manual Integrations  
APPROVED

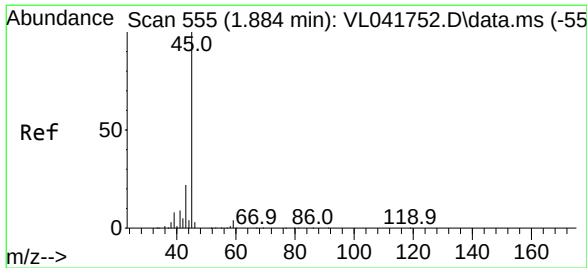
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#17  
tert-Butyl alcohol  
Concen: 0.656 ppbv  
RT: 2.049 min Scan# 606  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 59 Resp: 9710  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.6 13.0#





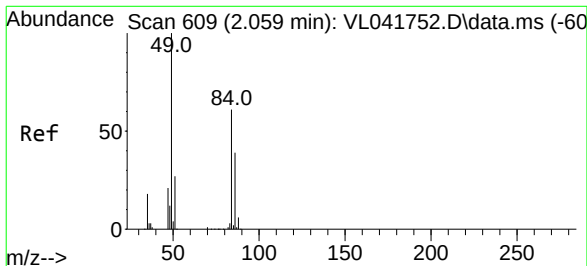
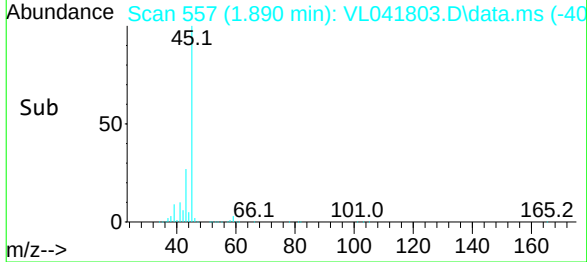
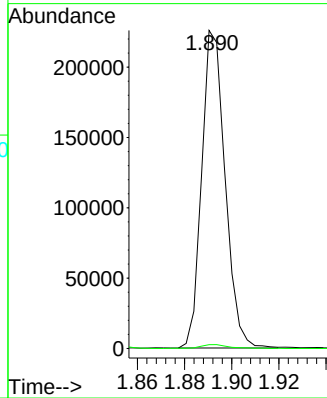
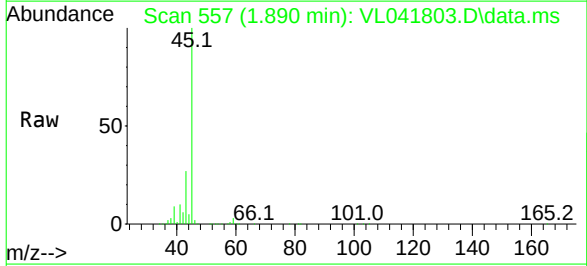
#19  
Isopropyl Alcohol  
Concen: 17.402 ppbv  
RT: 1.890 min Scan# 555  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

Tgt Ion: 45 Resp: 155744  
Ion Ratio Lower Upper  
45 100  
58 15.7 33.3 49.9#

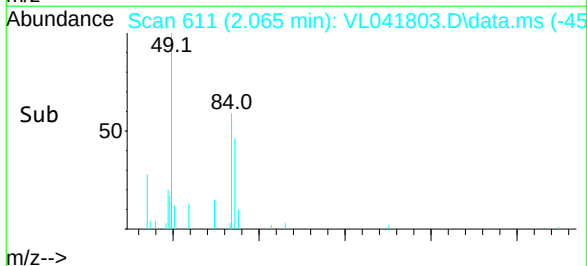
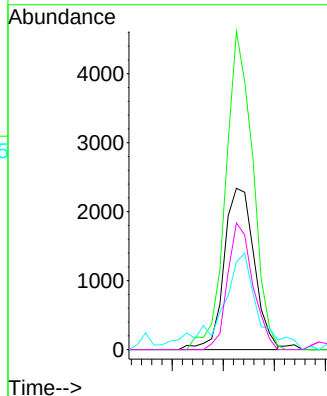
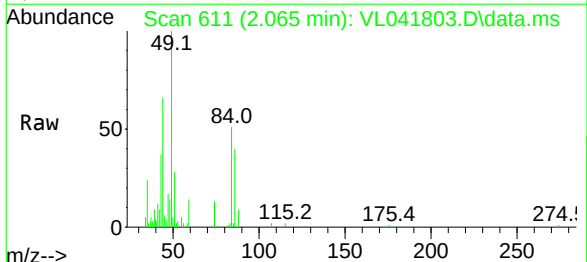
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

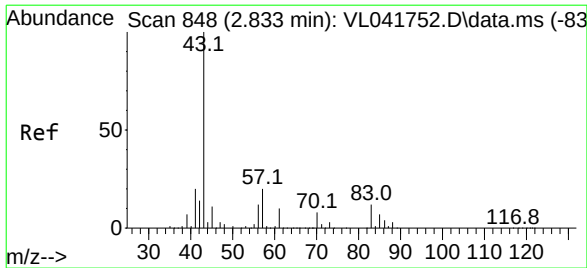


#20  
Methylene Chloride  
Concen: 0.452 ppbv  
RT: 2.065 min Scan# 611  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 84 Resp: 1921  
Ion Ratio Lower Upper  
84 100  
49 197.2 132.6 198.8  
51 48.5 37.6 56.4  
86 78.5 51.4 77.0#

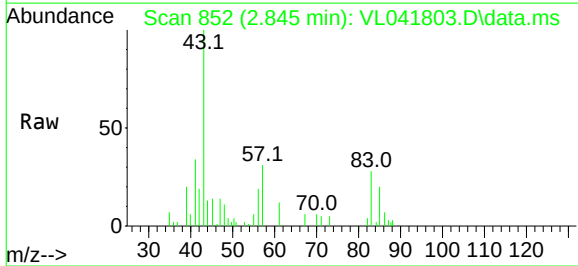






#25  
Ethyl Acetate  
Concen: 0.252 ppbv m  
RT: 2.845 min Scan# 851  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

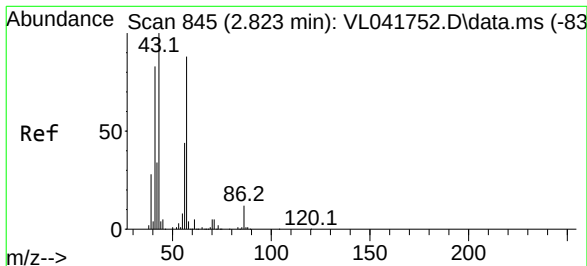
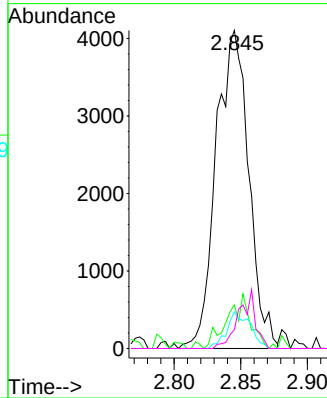
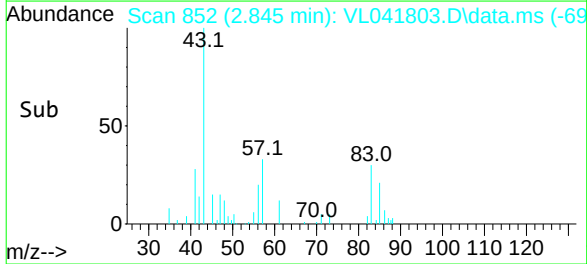
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 7001  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 13.2  | 8.1   | 12.1# |
| 61       | 8.3   | 7.0   | 10.6  |
| 70       | 9.5   | 6.5   | 9.7   |

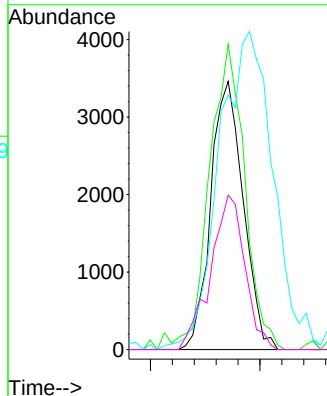
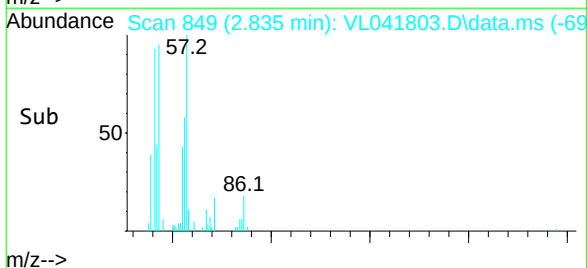
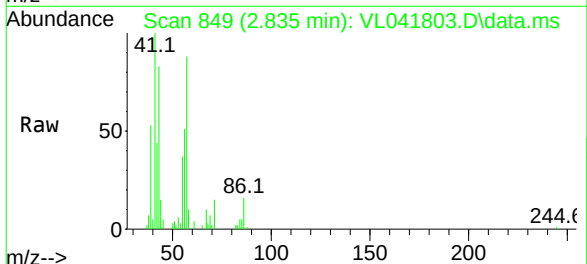
Manual Integrations  
APPROVED

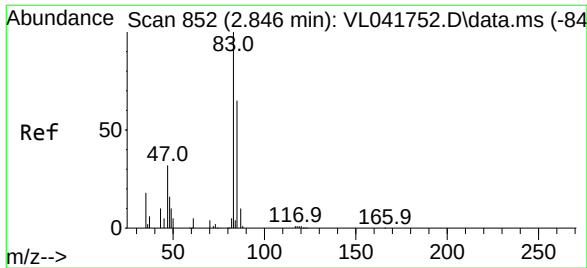
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#26  
Hexane  
Concen: 0.338 ppbv  
RT: 2.835 min Scan# 849  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 3564   |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 126.2 | 79.6  | 119.4# |
| 43       | 200.4 | 211.0 | 316.6# |
| 56       | 60.8  | 42.6  | 63.8   |





#29

Chloroform

Concen: 0.297 ppbv

RT: 2.855 min Scan# 85

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

Tgt Ion: 83 Resp: 4772

Ion Ratio Lower Upper

83 100

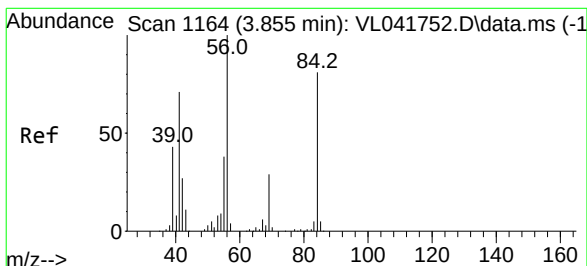
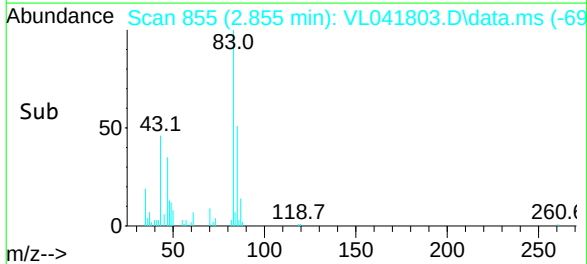
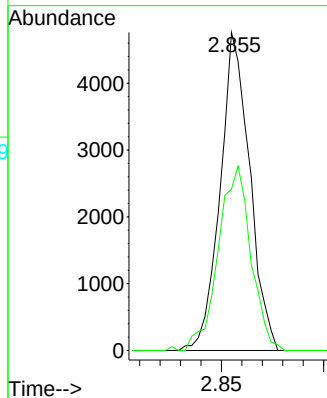
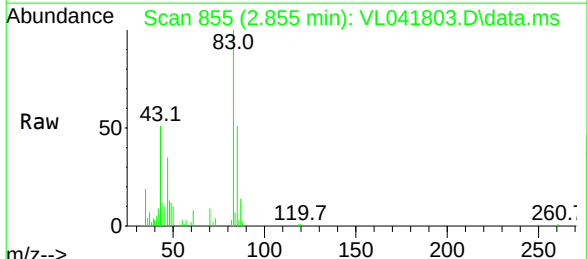
85 50.7 51.8 77.6#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024

Supervised By :Mahesh Dadoda 12/19/2024



#30

Cyclohexane

Concen: 0.108 ppbv m

RT: 3.865 min Scan# 1167

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

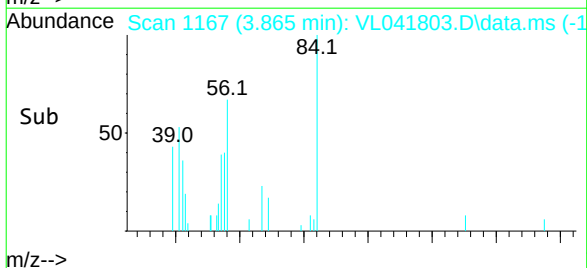
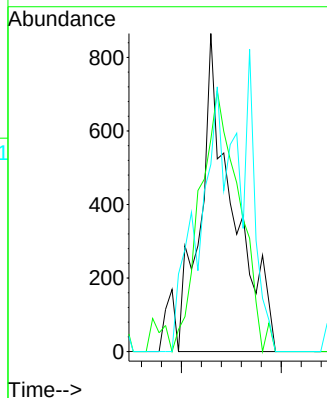
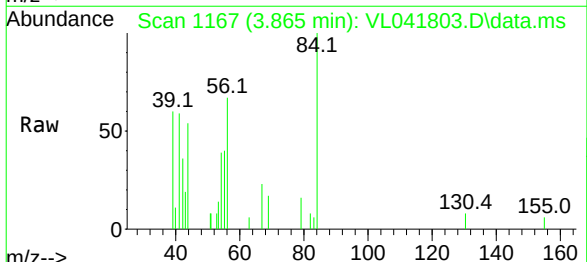
Tgt Ion: 84 Resp: 971

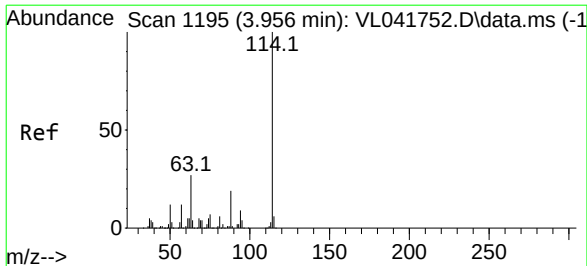
Ion Ratio Lower Upper

84 100

56 106.3 102.3 153.5

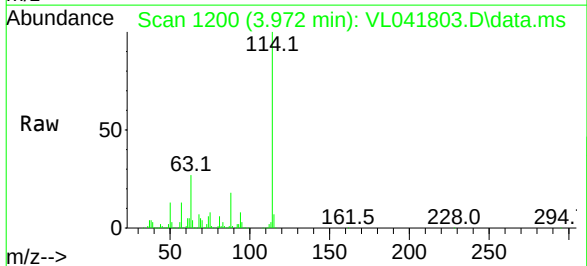
41 0.0 74.0 111.0#





#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.972 min Scan# 12  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

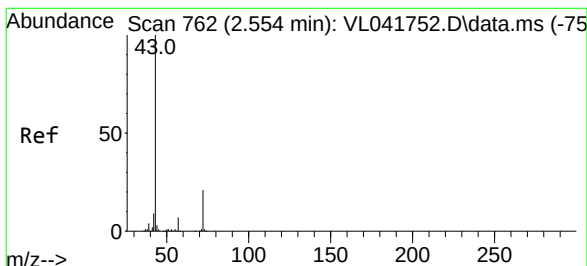
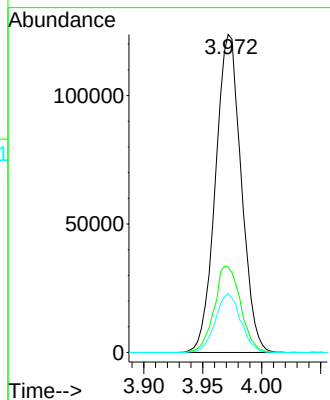
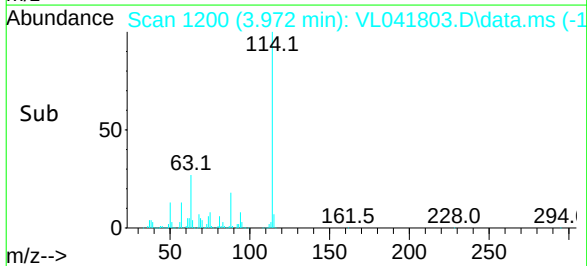
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



Tgt Ion: 114 Resp: 187828  
Ion Ratio Lower Upper  
114 100  
63 27.8 21.8 32.8  
88 18.2 14.8 22.2

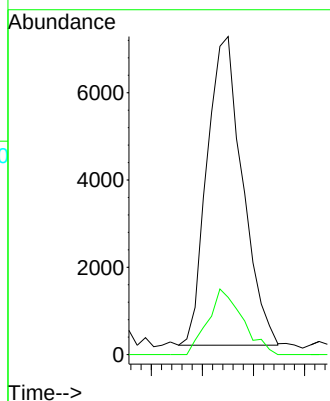
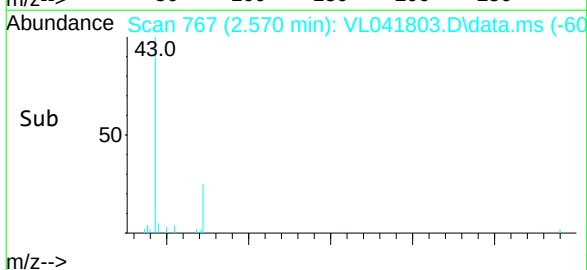
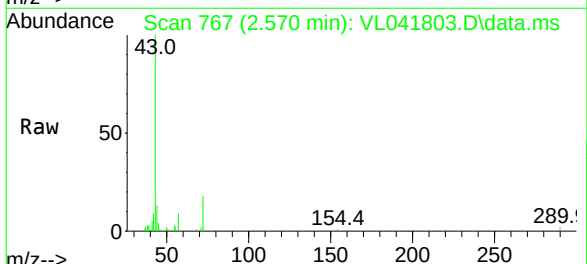
Manual Integrations  
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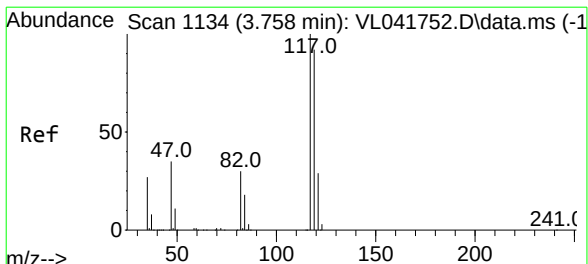
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#34  
2-Butanone  
Concen: 0.452 ppbv  
RT: 2.570 min Scan# 767  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

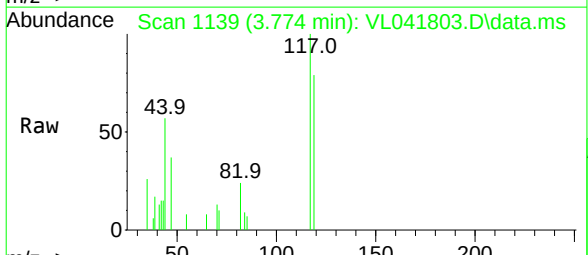
Tgt Ion: 43 Resp: 6833  
Ion Ratio Lower Upper  
43 100  
72 20.6 16.8 25.2





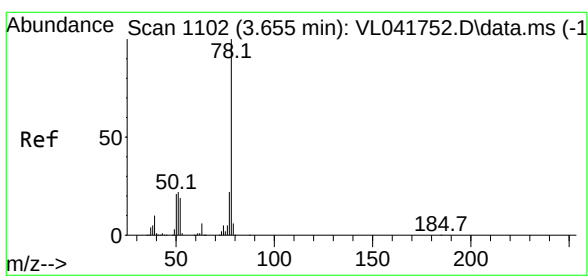
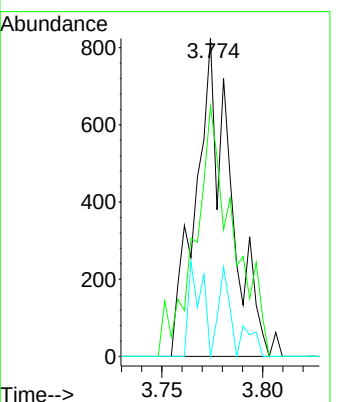
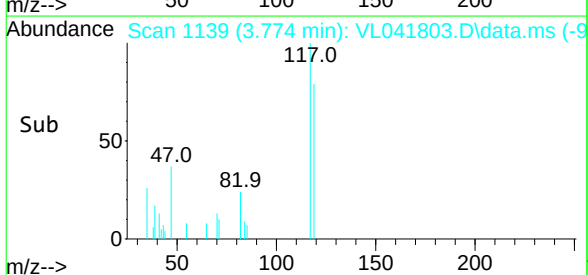
#35  
Carbon Tetrachloride  
Concen: 0.074 ppbv m  
RT: 3.774 min Scan# 111  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Instrument : MSVOA\_L  
ClientSampleId : C0AB7

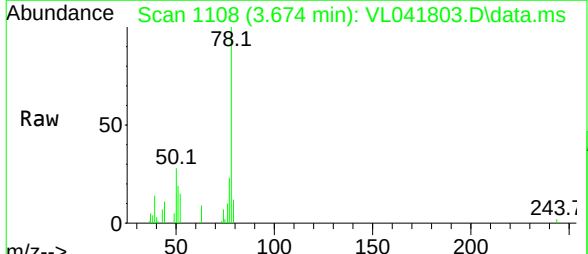


|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 984   |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 78.8  | 73.7  | 110.5 |
| 121      | 0.0   | 23.0  | 34.4# |

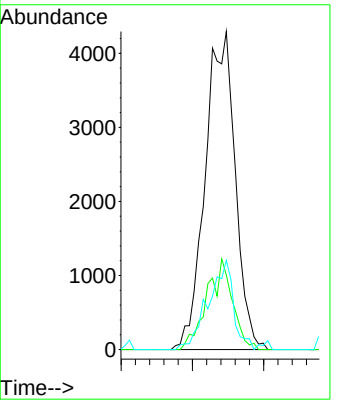
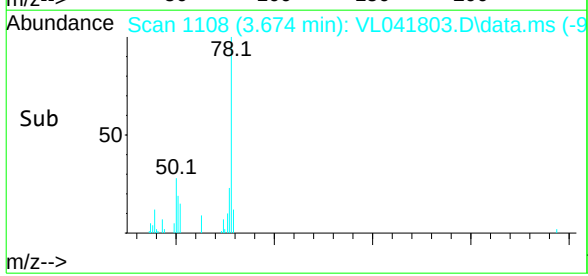
Manual Integrations  
**APPROVED**  
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

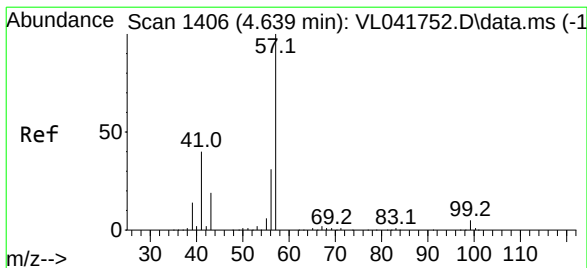


#36  
Benzene  
Concen: 0.324 ppbv m  
RT: 3.674 min Scan# 1108  
Delta R.T. 0.019 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32



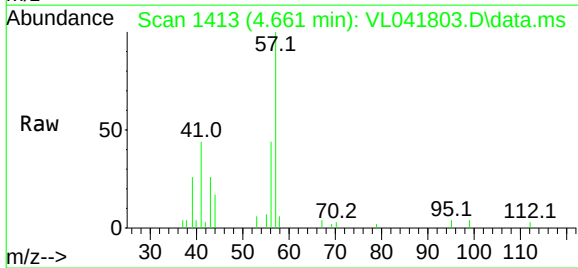
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 78    | Resp: | 6297  |
| Ion      | Ratio | Lower | Upper |
| 78       | 100   |       |       |
| 77       | 23.5  | 17.8  | 26.6  |
| 50       | 28.1  | 17.2  | 25.8# |





#44  
2,2,4-Trimethylpentane  
Concen: 0.182 ppbv  
RT: 4.661 min Scan# 1406  
Delta R.T. 0.022 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

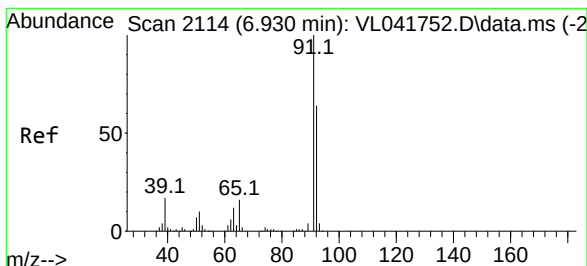
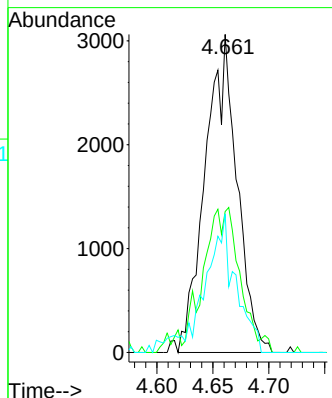
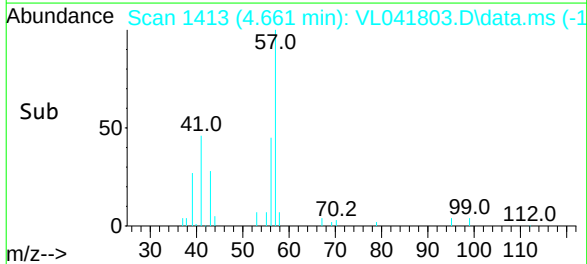
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



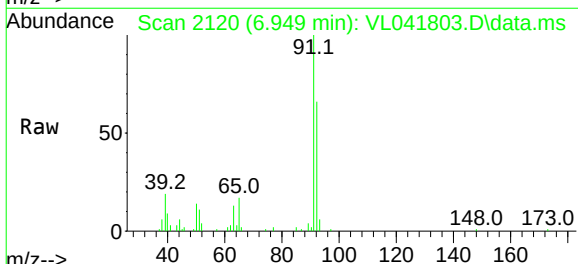
Tgt Ion: 57 Resp: 6046  
Ion Ratio Lower Upper  
57 100  
41 0.0 30.7 46.1  
56 0.0 25.4 38.0

Manual Integrations  
APPROVED

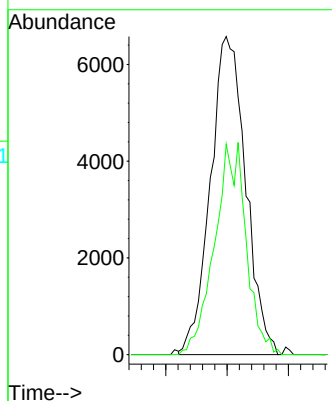
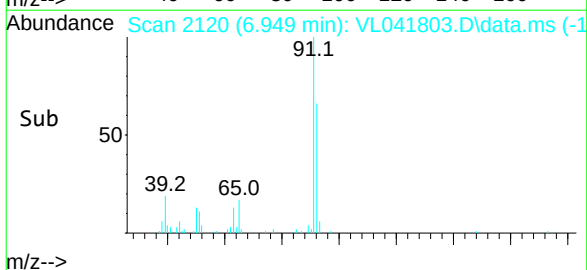
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

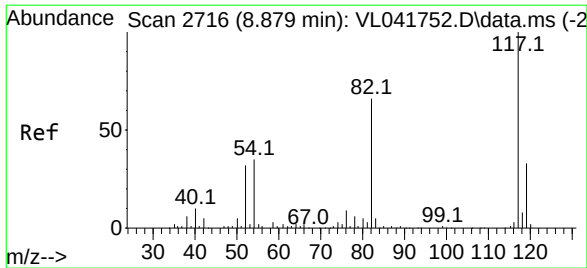


#53  
Toluene  
Concen: 0.597 ppbv  
RT: 6.949 min Scan# 2120  
Delta R.T. 0.019 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32



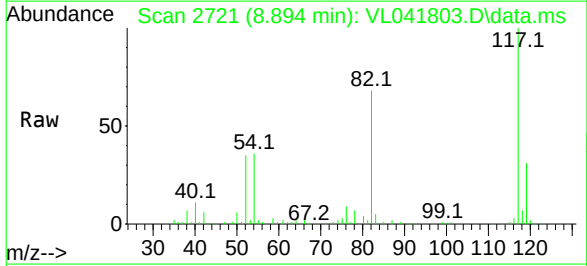
Tgt Ion: 91 Resp: 13160  
Ion Ratio Lower Upper  
91 100  
92 59.3 47.9 71.9





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.894 min Scan# 2716  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

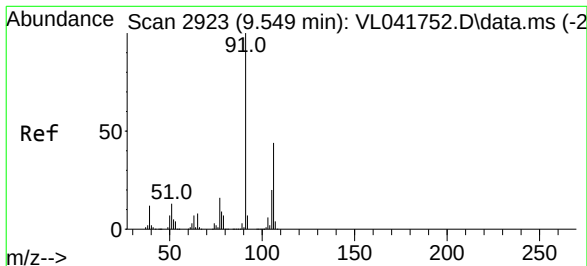
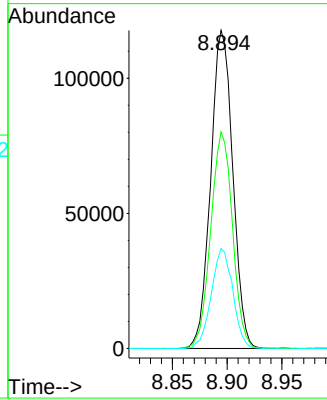
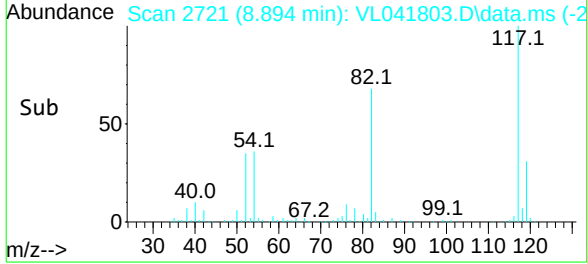
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



Tgt Ion: 117 Resp: 164998  
Ion Ratio Lower Upper  
117 100  
82 67.3 53.8 80.8  
119 30.9 26.7 40.1

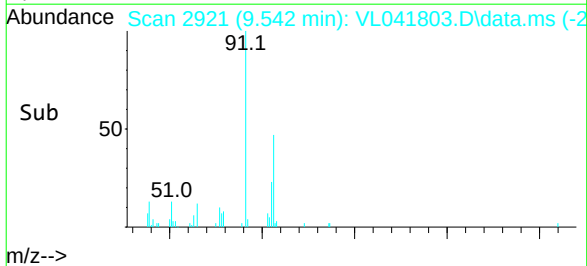
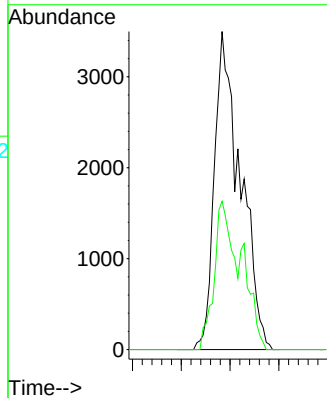
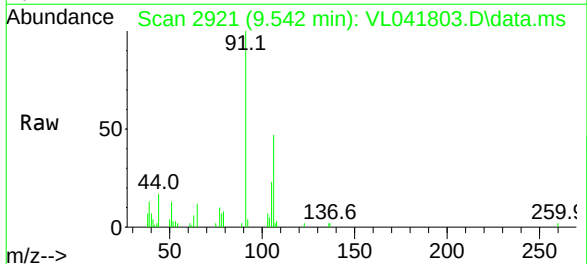
Manual Integrations  
APPROVED

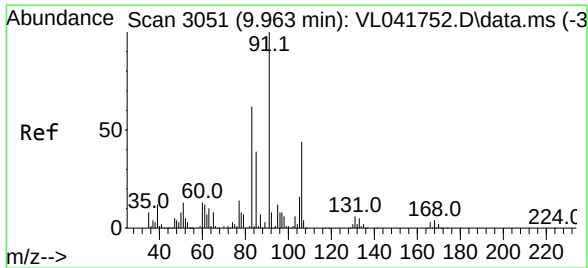
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#59  
m/p-Xylene  
Concen: 0.271 ppbv m  
RT: 9.542 min Scan# 2921  
Delta R.T. -0.007 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

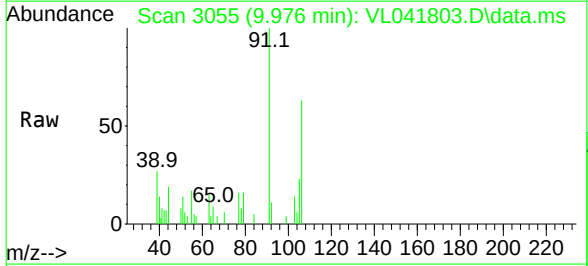
Tgt Ion: 91 Resp: 6469  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0





#60  
o-Xylene  
Concen: 0.109 ppbv  
RT: 9.976 min Scan# 3055  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

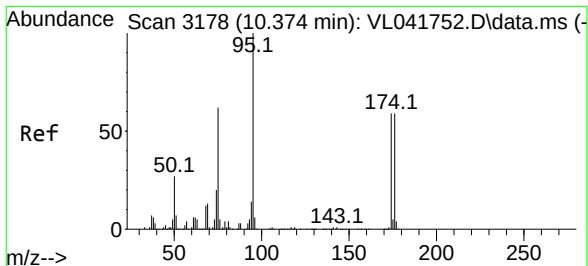
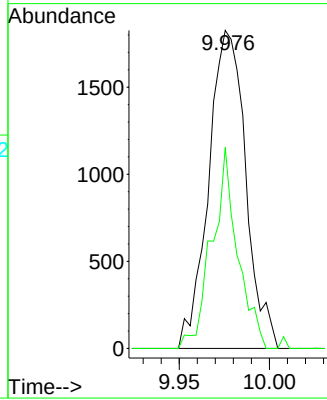
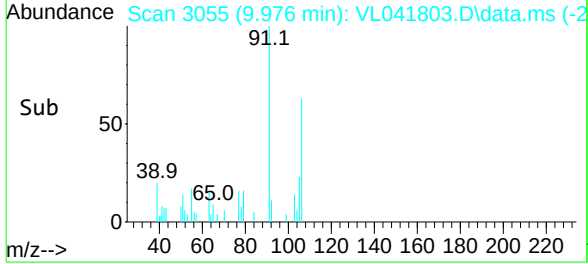
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7



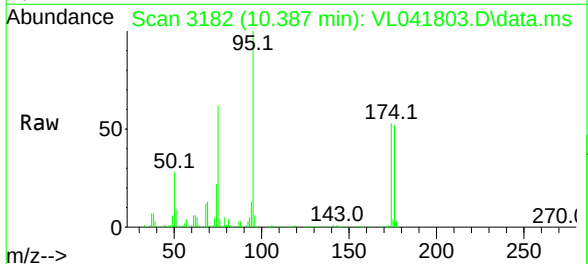
Tgt Ion: 91 Resp: 2612  
Ion Ratio Lower Upper  
91 100  
106 44.4 21.1 63.4

Manual Integrations  
APPROVED

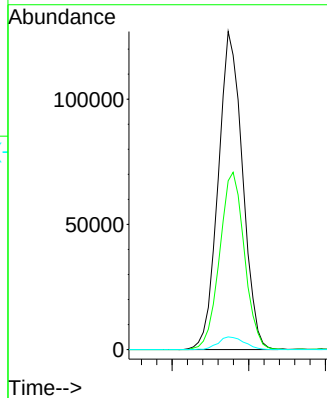
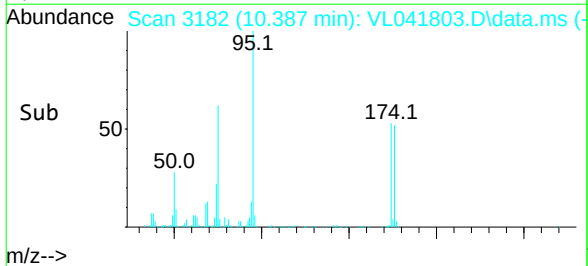
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.182 ppbv  
RT: 10.387 min Scan# 3182  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32



Tgt Ion: 95 Resp: 139994  
Ion Ratio Lower Upper  
95 100  
174 56.8 47.6 71.4  
175 4.3 3.7 5.5



## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB8           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-03        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041811.D        | 1         |           | 12/19/24 00:44 | VL121824      |

| CAS Number     | Parameter                      | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|----------------|--------------------------------|---------------|----------------|-----------|-------|------------|-------|
| <b>TARGETS</b> |                                |               |                |           |       |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.37          | 1.83           | J         | 1.04  | 2.47       | ug/m3 |
| 74-87-3        | Chloromethane                  | 0.60          | 1.24           |           | 0.21  | 1.03       | ug/m3 |
| 75-01-4        | Vinyl Chloride                 | 0.010         | 0.030          | U         | 0.030 | 0.080      | ug/m3 |
| 74-83-9        | Bromomethane                   | 0.14          | 0.54           | U         | 0.54  | 1.94       | ug/m3 |
| 75-00-3        | Chloroethane                   | 0.17          | 0.45           | U         | 0.45  | 1.32       | ug/m3 |
| 109-99-9       | Tetrahydrofuran                | 0.13          | 0.38           | U         | 0.38  | 1.47       | ug/m3 |
| 75-69-4        | Trichlorofluoromethane         | 0.20          | 1.12           | J         | 0.90  | 2.81       | ug/m3 |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.16          | 1.23           | U         | 1.23  | 3.83       | ug/m3 |
| 76-14-2        | Dichlorotetrafluoroethane      | 0.090         | 0.63           | U         | 0.63  | 3.49       | ug/m3 |
| 75-65-0        | tert-Butyl alcohol             | 0.27          | 0.82           | J         | 0.58  | 1.52       | ug/m3 |
| 142-82-5       | Heptane                        | 0.11          | 0.45           | U         | 0.45  | 2.05       | ug/m3 |
| 75-35-4        | 1,1-Dichloroethene             | 0.14          | 0.56           | U         | 0.56  | 1.98       | ug/m3 |
| 67-64-1        | Acetone                        | 7.90          | 18.8           |           | 0.57  | 1.19       | ug/m3 |
| 75-15-0        | Carbon Disulfide               | 0.16          | 0.50           | U         | 0.50  | 1.56       | ug/m3 |
| 1634-04-4      | Methyl tert-Butyl Ether        | 0.12          | 0.43           | U         | 0.43  | 1.80       | ug/m3 |
| 75-09-2        | Methylene Chloride             | 0.33          | 1.15           | J         | 0.66  | 1.74       | ug/m3 |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.19          | 0.75           | U         | 0.75  | 1.98       | ug/m3 |
| 75-34-3        | 1,1-Dichloroethane             | 0.13          | 0.53           | U         | 0.53  | 2.02       | ug/m3 |
| 110-82-7       | Cyclohexane                    | 0.22          | 0.76           | U         | 0.76  | 1.72       | ug/m3 |
| 78-93-3        | 2-Butanone                     | 0.94          | 2.77           |           | 0.35  | 1.47       | ug/m3 |
| 56-23-5        | Carbon Tetrachloride           | 0.070         | 0.44           |           | 0.060 | 0.19       | ug/m3 |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.090         | 0.36           | U         | 0.36  | 1.98       | ug/m3 |
| 67-66-3        | Chloroform                     | 0.24          | 1.17           | J         | 0.39  | 2.44       | ug/m3 |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.010         | 0.050          | U         | 0.050 | 0.16       | ug/m3 |
| 540-84-1       | 2,2,4-Trimethylpentane         | 0.29          | 1.35           | J         | 0.47  | 2.34       | ug/m3 |
| 71-43-2        | Benzene                        | 0.41          | 1.31           | J         | 0.29  | 1.60       | ug/m3 |
| 107-06-2       | 1,2-Dichloroethane             | 0.090         | 0.36           | U         | 0.36  | 2.02       | ug/m3 |
| 79-01-6        | Trichloroethene                | 0.020         | 0.11           | U         | 0.11  | 0.16       | ug/m3 |
| 78-87-5        | 1,2-Dichloropropane            | 0.11          | 0.51           | U         | 0.51  | 2.31       | ug/m3 |
| 75-27-4        | Bromodichloromethane           | 0.080         | 0.54           | U         | 0.54  | 3.35       | ug/m3 |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.090         | 0.37           | U         | 0.37  | 2.05       | ug/m3 |
| 108-88-3       | Toluene                        | 0.74          | 2.79           |           | 0.41  | 1.88       | ug/m3 |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.070         | 0.38           | U         | 0.38  | 2.73       | ug/m3 |



## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB8           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-03        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041811.D        | 1         |           | 12/19/24 00:44 | VL121824      |

| CAS Number                | Parameter                 | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL      | LOQ / CRQL | Units   |
|---------------------------|---------------------------|---------------|----------------|-----------|----------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 0.070         | 0.60           | U         | 0.60     | 4.26       | ug/m3   |
| 106-93-4                  | 1,2-Dibromoethane         | 0.070         | 0.54           | U         | 0.54     | 0.77       | ug/m3   |
| 127-18-4                  | Tetrachloroethene         | 0.020         | 0.14           | U         | 0.14     | 0.20       | ug/m3   |
| 108-90-7                  | Chlorobenzene             | 0.080         | 0.37           | U         | 0.37     | 2.30       | ug/m3   |
| 100-41-4                  | Ethyl Benzene             | 0.12          | 0.52           | U         | 0.52     | 2.17       | ug/m3   |
| 179601-23-1               | m/p-Xylene                | 0.38          | 1.65           | J         | 0.91     | 4.34       | ug/m3   |
| 95-47-6                   | o-Xylene                  | 0.14          | 0.61           | J         | 0.52     | 2.17       | ug/m3   |
| 100-42-5                  | Styrene                   | 0.11          | 0.47           | U         | 0.47     | 2.13       | ug/m3   |
| 75-25-2                   | Bromoform                 | 0.060         | 0.62           | U         | 0.62     | 5.17       | ug/m3   |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 0.010         | 0.070          | U         | 0.070    | 0.21       | ug/m3   |
| 95-49-8                   | 2-Chlorotoluene           | 0.11          | 0.57           | U         | 0.57     | 2.59       | ug/m3   |
| 108-67-8                  | 1,3,5-Trimethylbenzene    | 0.11          | 0.54           | U         | 0.54     | 2.46       | ug/m3   |
| 95-63-6                   | 1,2,4-Trimethylbenzene    | 0.13          | 0.64           | J         | 0.39     | 2.46       | ug/m3   |
| 541-73-1                  | 1,3-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 106-46-7                  | 1,4-Dichlorobenzene       | 0.050         | 0.30           | U         | 0.30     | 3.01       | ug/m3   |
| 95-50-1                   | 1,2-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 120-82-1                  | 1,2,4-Trichlorobenzene    | 0.090         | 0.67           | U         | 0.67     | 3.71       | ug/m3   |
| 87-68-3                   | Hexachloro-1,3-Butadiene  | 0.090         | 0.96           | U         | 0.96     | 5.33       | ug/m3   |
| 106-99-0                  | 1,3-Butadiene             | 0.13          | 0.29           | U         | 0.29     | 1.11       | ug/m3   |
| 91-20-3                   | Naphthalene               | 0.080         | 0.42           | U         | 0.42     | 0.52       | ug/m3   |
| 622-96-8                  | 4-Ethyltoluene            | 0.12          | 0.59           | U         | 0.59     | 2.46       | ug/m3   |
| 110-54-3                  | Hexane                    | 0.37          | 1.30           | J         | 0.39     | 1.76       | ug/m3   |
| 107-05-1                  | Allyl Chloride            | 0.15          | 0.47           | U         | 0.47     | 1.57       | ug/m3   |
| 123-91-1                  | 1,4-Dioxane               | 0.21          | 0.76           | U         | 0.76     | 1.80       | ug/m3   |
| 80-62-6                   | Methyl Methacrylate       | 0.090         | 0.37           | U         | 0.37     | 2.05       | ug/m3   |
| <b>SURROGATES</b>         |                           |               |                |           |          |            |         |
| 460-00-4                  | 1-Bromo-4-Fluorobenzene   | 10.1          |                |           | 65 - 135 | 101%       | SPK: 10 |
| <b>INTERNAL STANDARDS</b> |                           |               |                |           |          |            |         |
| 74-97-5                   | Bromochloromethane        | 77500         |                | 2.793     |          |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 186000        |                | 3.968     |          |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 164000        |                | 8.891     |          |            |         |

## Report of Analysis

|                    |                 |                 |          |
|--------------------|-----------------|-----------------|----------|
| Client:            | Tetra Tech, EMI | Date Collected: | 12/11/24 |
| Project:           | R36719          | Date Received:  | 12/13/24 |
| Client Sample ID:  | C0AB8           | SDG No.:        | P5294    |
| Lab Sample ID:     | P5294-03        | Matrix:         | Air      |
| Analytical Method: | TO-15           | Test:           | TO-15    |
| Sample Wt/Vol:     | 400             | Units:          | mL       |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041811.D        | 1         |           | 12/19/24 00:44 | VL121824      |

| CAS Number | Parameter | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|

U = Not Detected  
 RL = Reporting Limit  
 MDL = Method Detection Limit  
 E = Value Exceeds Calibration Range  
 D = Dilution

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041811.D  
 Acq On : 19 Dec 2024 00:44  
 Operator : SY/MD  
 Sample : P5294-03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB8

### Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 12/23/2024  
 Supervised By :Mahesh Dadoda 12/23/2024

Quant Time: Dec 19 08:02:26 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                    |  | R.T.   | QIon           | Response | Conc     | Units      | Dev(Min) |
|-----------------------------|--|--------|----------------|----------|----------|------------|----------|
| -----                       |  |        |                |          |          |            |          |
| Internal Standards          |  |        |                |          |          |            |          |
| 1) Bromochloromethane       |  | 2.793  | 49             | 77490    | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene     |  | 3.968  | 114            | 186355   | 10.000   | ppbv       | 0.01     |
| 55) Chlorobenzene-d5        |  | 8.891  | 117            | 163591   | 10.000   | ppbv       | 0.01     |
| System Monitoring Compounds |  |        |                |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene |  | 10.383 | 95             | 137750   | 10.105   | ppbv       | 0.00     |
| Spiked Amount               |  | 10.000 | Range 65 - 135 |          | Recovery | = 101.000% |          |
| Target Compounds            |  |        |                |          |          |            |          |
|                             |  |        |                |          |          |            | Qvalue   |
| 2) Dichlorodifluoromethane  |  | 1.499  | 85             | 5098     | 0.370    | ppbv       | 91       |
| 3) Chlorodifluoromethane    |  | 1.476  | 51             | 3679m    | 0.291    | ppbv       |          |
| 4) Chloromethane            |  | 1.534  | 50             | 3262     | 0.605    | ppbv #     | 79       |
| 9) Propene                  |  | 1.489  | 41             | 19667m   | 3.591    | ppbv       |          |
| 11) Trichlorofluoromethane  |  | 1.881  | 101            | 2991     | 0.204    | ppbv       | 99       |
| 13) Ethanol                 |  | 1.722  | 45             | 711075   | 1567.837 | ppbv       | 95       |
| 15) Acetone                 |  | 1.839  | 43             | 119725   | 7.941    | ppbv #     | 87       |
| 17) tert-Butyl alcohol      |  | 2.046  | 59             | 4030     | 0.269    | ppbv #     | 1        |
| 19) Isopropyl Alcohol       |  | 1.890  | 45             | 46673    | 5.159    | ppbv #     | 38       |
| 20) Methylene Chloride      |  | 2.065  | 84             | 1430     | 0.333    | ppbv       | 92       |
| 26) Hexane                  |  | 2.832  | 57             | 3902     | 0.367    | ppbv #     | 63       |
| 29) Chloroform              |  | 2.855  | 83             | 3971     | 0.245    | ppbv       | 91       |
| 34) 2-Butanone              |  | 2.564  | 43             | 14105    | 0.941    | ppbv       | 96       |
| 35) Carbon Tetrachloride    |  | 3.768  | 117            | 884m     | 0.067    | ppbv       |          |
| 36) Benzene                 |  | 3.664  | 78             | 7992     | 0.415    | ppbv       | 98       |
| 44) 2,2,4-Trimethylpentane  |  | 4.655  | 57             | 9590m    | 0.291    | ppbv       |          |
| 53) Toluene                 |  | 6.949  | 91             | 16221    | 0.742    | ppbv       | 99       |
| 58) Ethyl Benzene           |  | 9.361  | 91             | 3309     | 0.112    | ppbv       | 90       |
| 59) m/p-Xylene              |  | 9.542  | 91             | 8941m    | 0.378    | ppbv       |          |
| 60) o-Xylene                |  | 9.972  | 91             | 3319m    | 0.140    | ppbv       |          |
| 74) 1,2,4-Trimethylbenzene  |  | 11.542 | 105            | 3276     | 0.131    | ppbv #     | 50       |

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

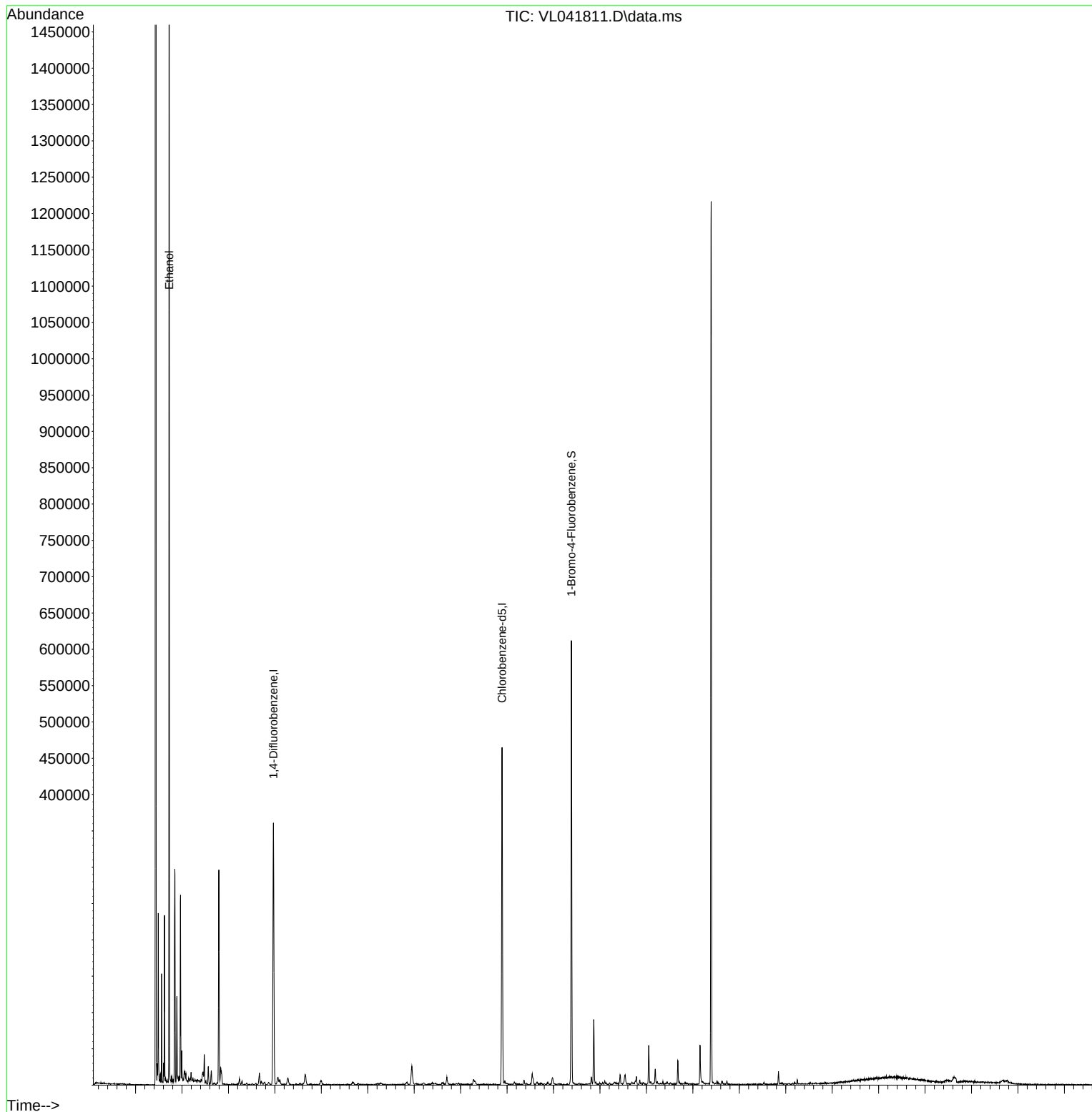
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Data File : VL041811.D  
Acq On : 19 Dec 2024 00:44  
Operator : SY/MD  
Sample : P5294-03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 12 Sample Multiplier: 1

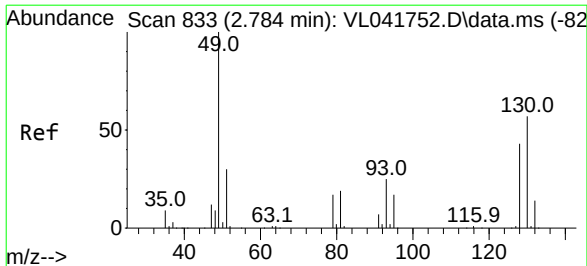
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

Quant Time: Dec 19 08:02:26 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

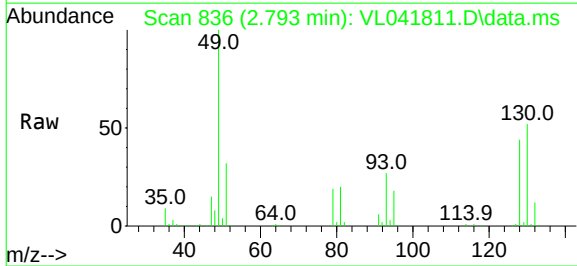
Reviewed By : Semsettin Yesilyurt 12/23/2024  
Supervised By : Mahesh Dadoda 12/23/2024





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.793 min Scan# 833  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

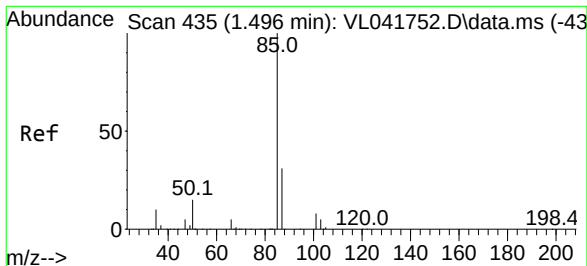
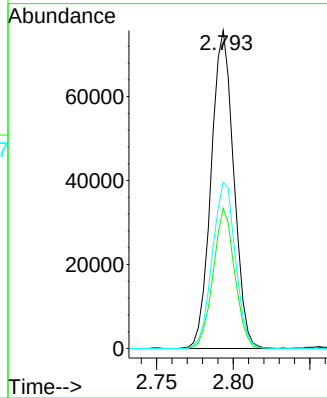
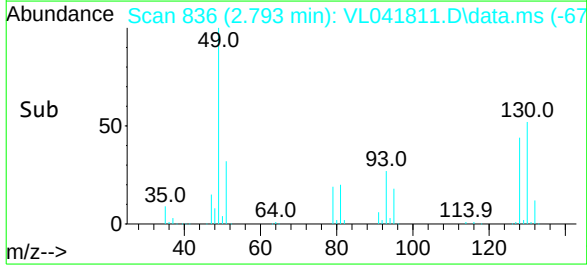
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



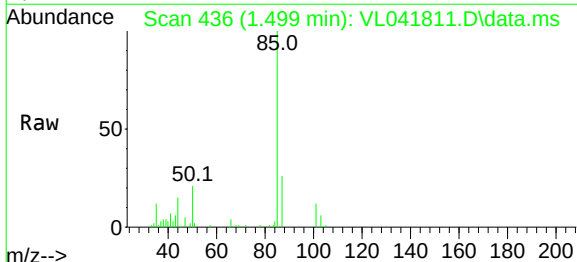
Tgt Ion: 49 Resp: 77496  
Ion Ratio Lower Upper  
49 100  
128 42.1 21.6 64.6  
130 53.5 28.3 85.0

Manual Integrations  
APPROVED

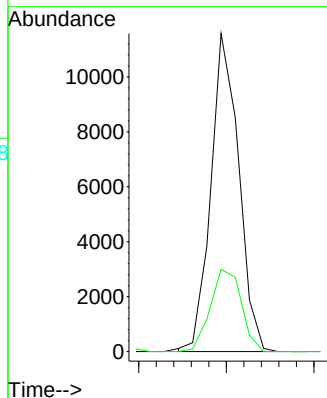
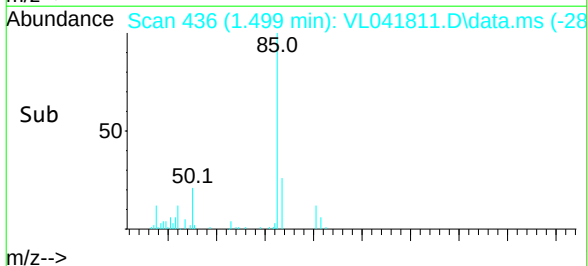
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024

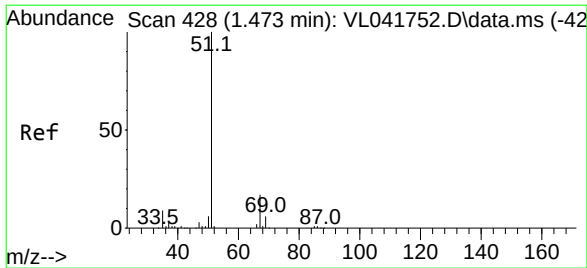


#2  
Dichlorodifluoromethane  
Concen: 0.370 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44



Tgt Ion: 85 Resp: 5098  
Ion Ratio Lower Upper  
85 100  
87 25.9 24.5 36.7





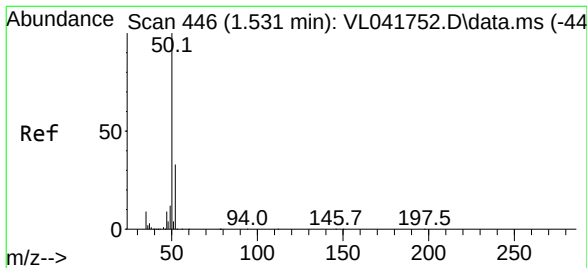
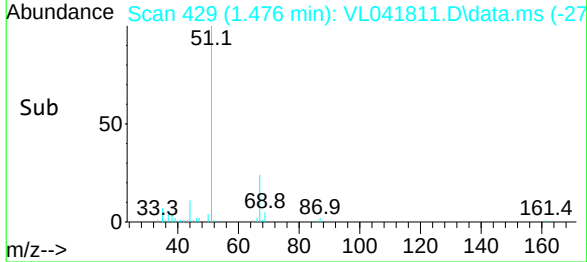
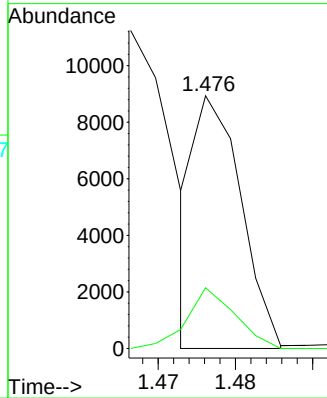
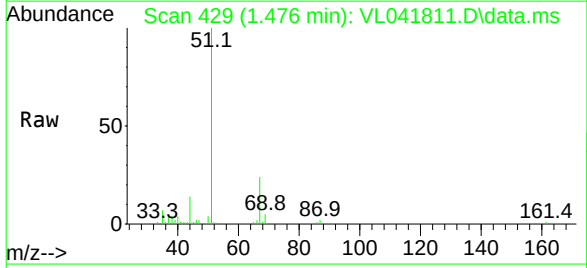
#3  
Chlorodifluoromethane  
Concen: 0.291 ppbv m  
RT: 1.476 min Scan# 428  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

Tgt Ion: 51 Resp: 3679  
Ion Ratio Lower Upper  
51 100  
67 25.5 15.0 22.4#

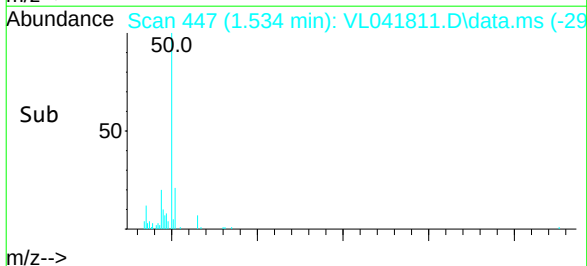
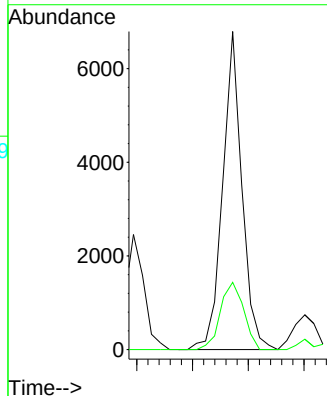
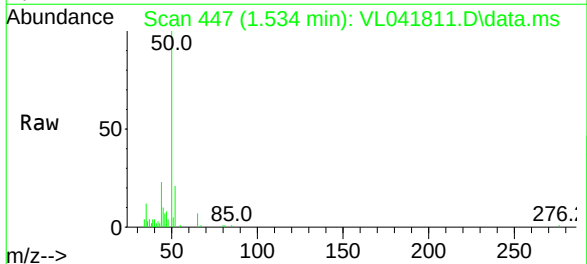
Manual Integrations  
APPROVED

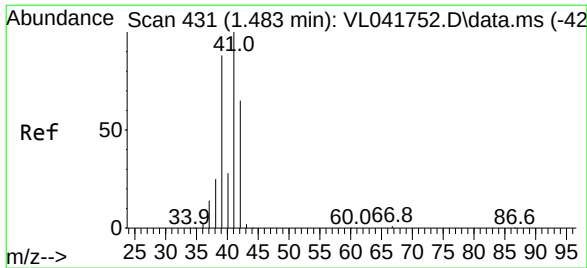
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#4  
Chloromethane  
Concen: 0.605 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

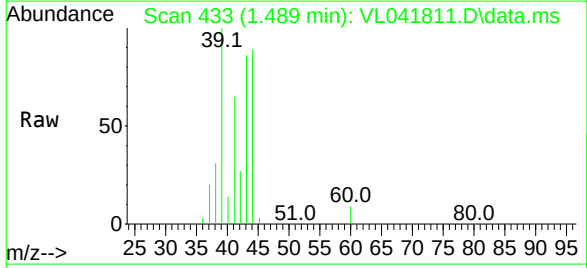
Tgt Ion: 50 Resp: 3262  
Ion Ratio Lower Upper  
50 100  
52 21.1 26.2 39.2#





#9  
Propene  
Concen: 3.591 ppbv m  
RT: 1.489 min Scan# 431  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

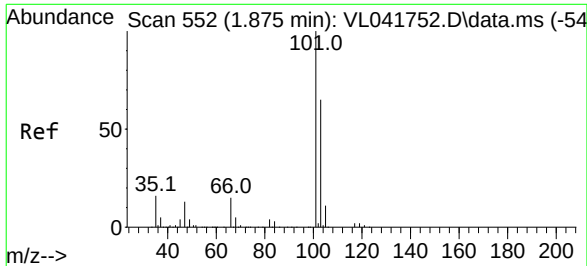
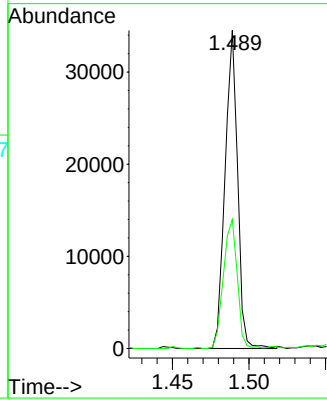
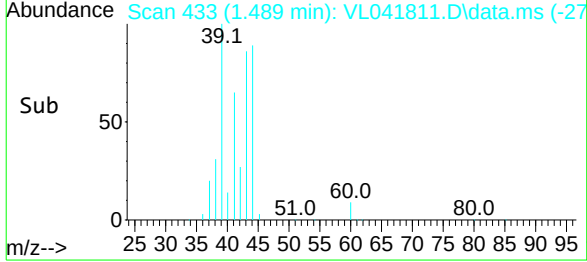
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



Tgt Ion: 41 Resp: 19667  
Ion Ratio Lower Upper  
41 100  
42 53.0 52.4 78.6

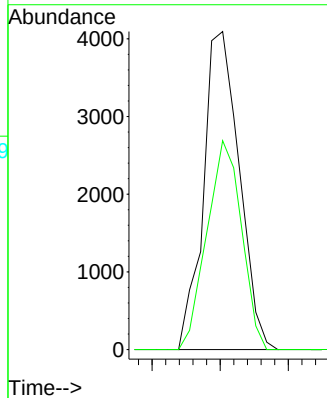
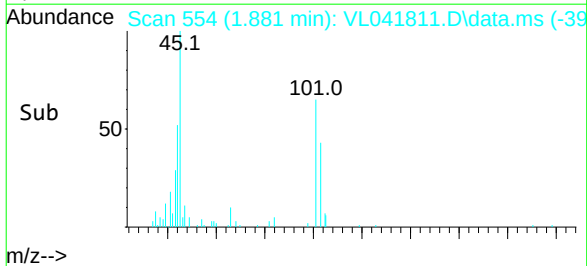
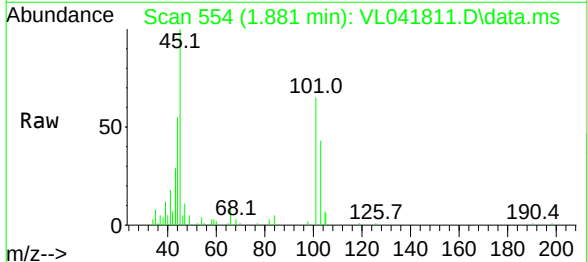
Manual Integrations  
APPROVED

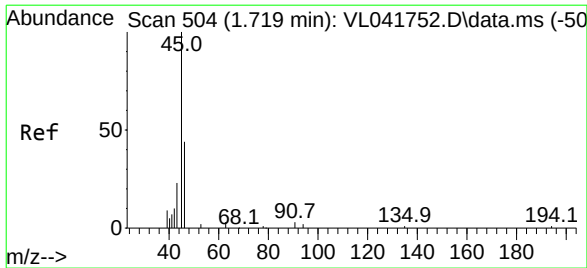
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#11  
Trichlorofluoromethane  
Concen: 0.204 ppbv  
RT: 1.881 min Scan# 554  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

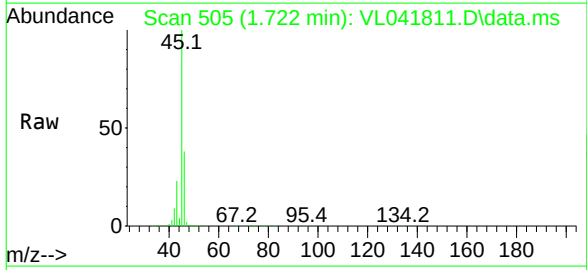
Tgt Ion:101 Resp: 2991  
Ion Ratio Lower Upper  
101 100  
103 65.7 51.8 77.8





#13  
Ethanol  
Concen: 1567.837 ppbv  
RT: 1.722 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

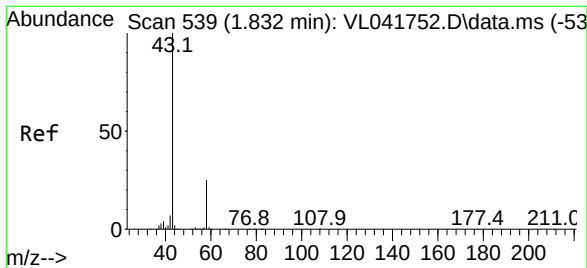
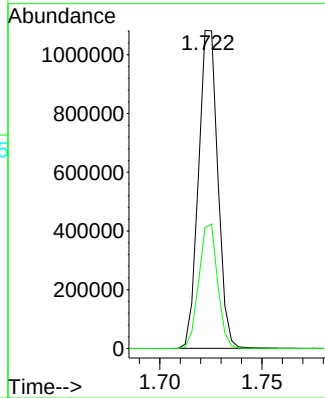
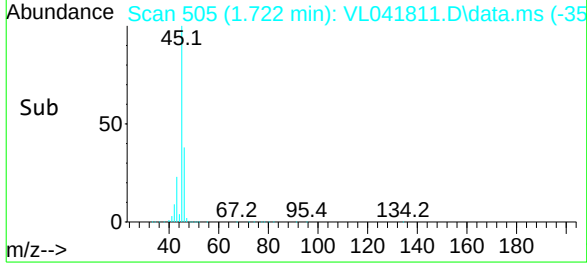
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



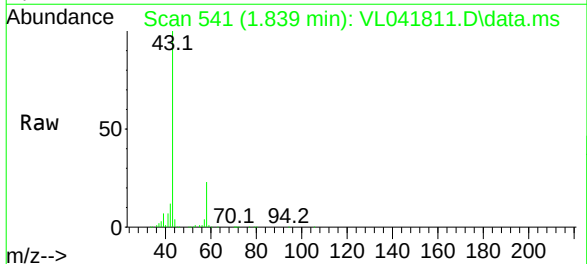
Tgt Ion: 45 Resp: 711075  
Ion Ratio Lower Upper  
45 100  
46 38.1 16.4 65.8

Manual Integrations  
APPROVED

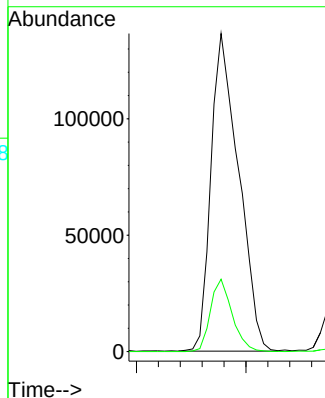
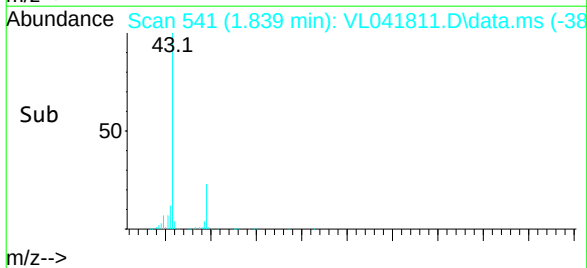
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



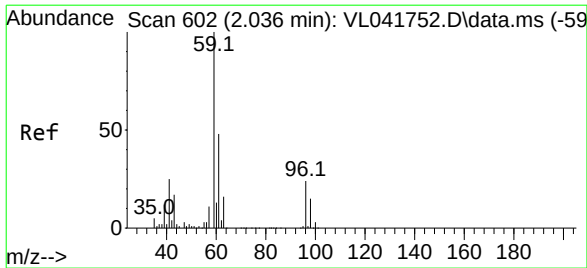
#15  
Acetone  
Concen: 7.941 ppbv  
RT: 1.839 min Scan# 541  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44



Tgt Ion: 43 Resp: 119725  
Ion Ratio Lower Upper  
43 100  
58 18.0 19.7 29.5#







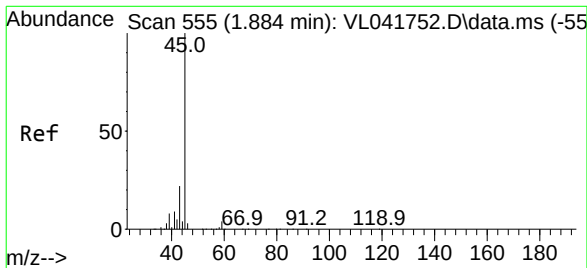
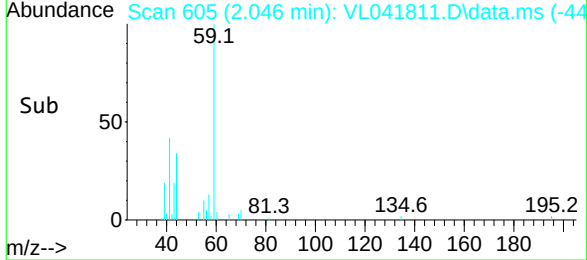
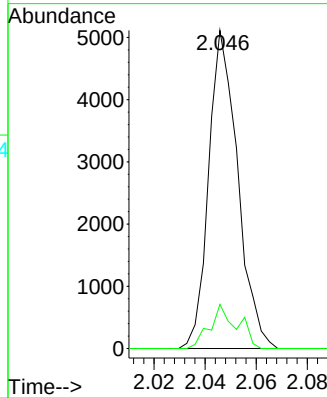
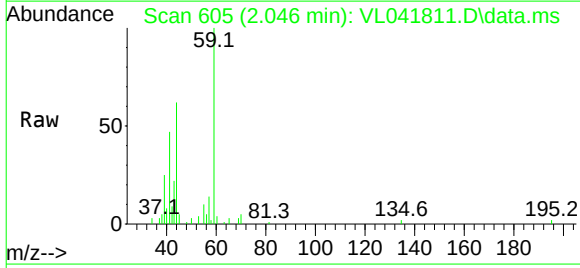
#17  
tert-Butyl alcohol  
Concen: 0.269 ppbv  
RT: 2.046 min Scan# 602  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

Tgt Ion: 59 Resp: 4036  
Ion Ratio Lower Upper  
59 100  
57 207.8 8.6 13.0#

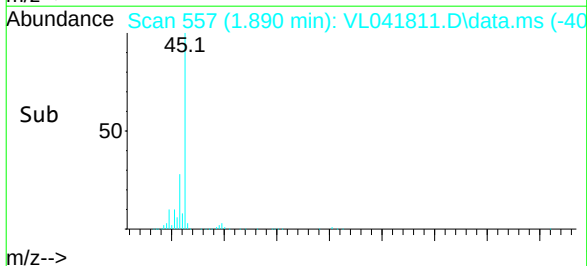
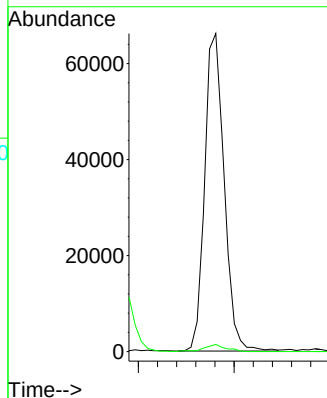
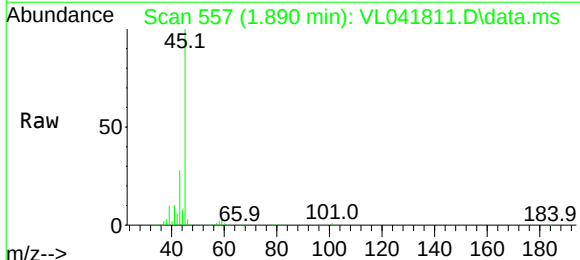
Manual Integrations  
APPROVED

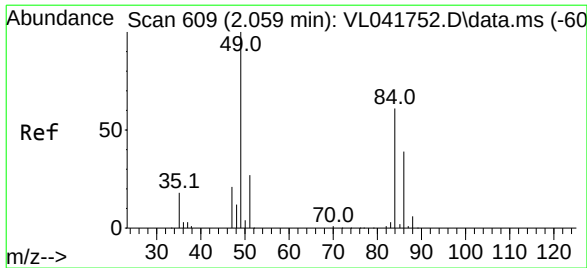
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#19  
Isopropyl Alcohol  
Concen: 5.159 ppbv  
RT: 1.890 min Scan# 557  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

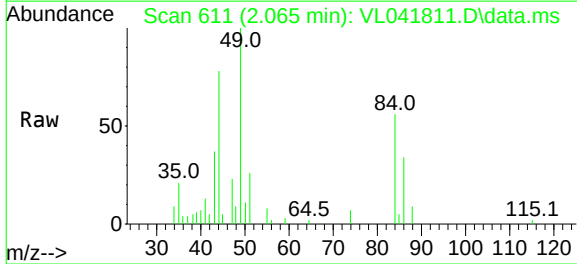
Tgt Ion: 45 Resp: 46673  
Ion Ratio Lower Upper  
45 100  
58 2.5 33.3 49.9#





#20  
Methylene Chloride  
Concen: 0.333 ppbv  
RT: 2.065 min Scan# 611  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

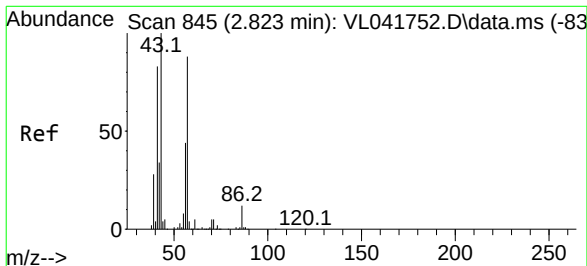
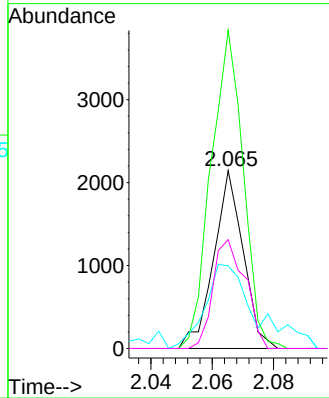
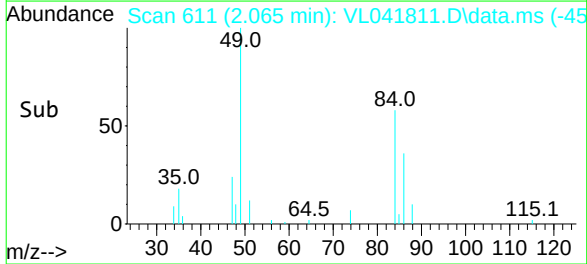
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



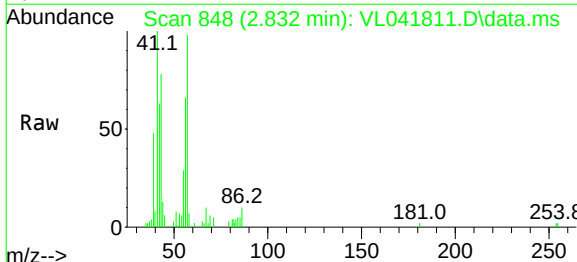
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 178.8 | 132.6 | 198.8 |
| 51      | 43.8  | 37.6  | 56.4  |
| 86      | 61.2  | 51.4  | 77.0  |

Manual Integrations  
APPROVED

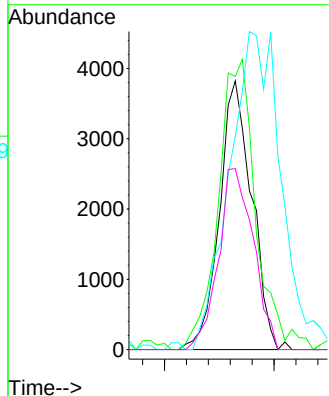
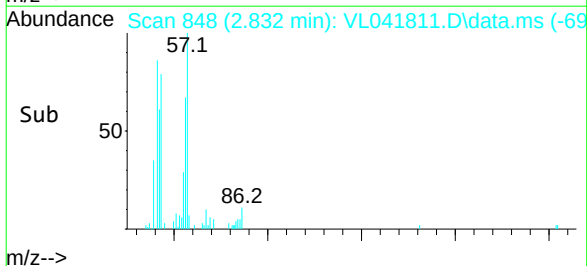
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024

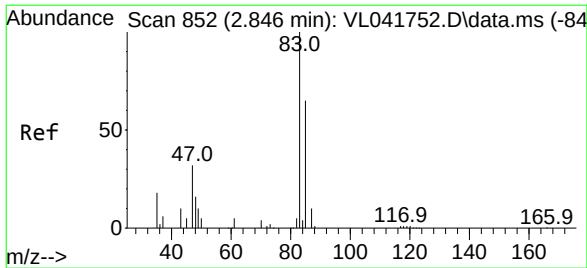


#26  
Hexane  
Concen: 0.367 ppbv  
RT: 2.832 min Scan# 848  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44



| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 57      | 100   |       |        |
| 41      | 131.0 | 79.6  | 119.4# |
| 43      | 191.5 | 211.0 | 316.6# |
| 56      | 73.1  | 42.6  | 63.8#  |





#29

Chloroform

Concen: 0.245 ppbv

RT: 2.855 min Scan# 85

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

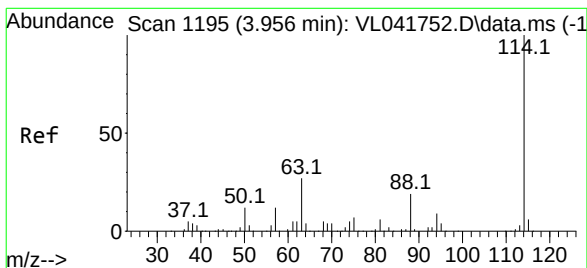
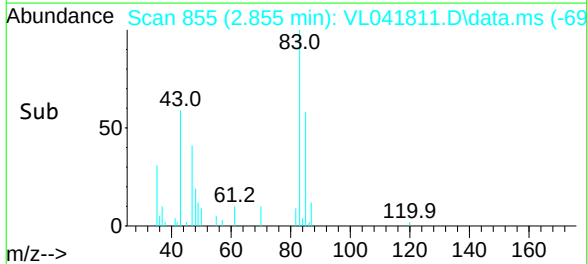
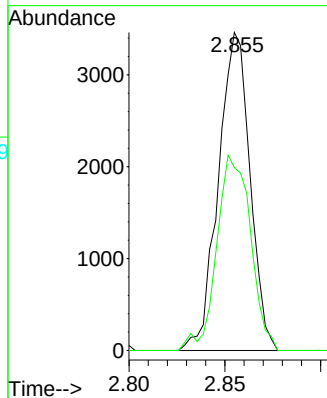
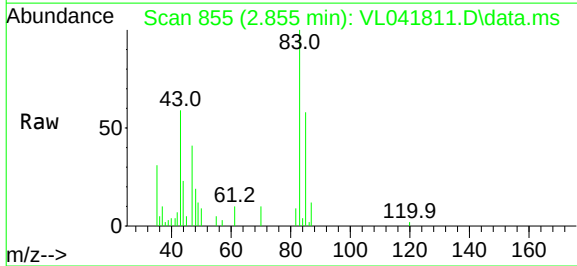
ClientSampleId :

C0AB8

| Tgt | Ion | Ratio | Lower | Upper |
|-----|-----|-------|-------|-------|
| 83  | 83  | 100   |       |       |
| 85  | 85  | 57.6  | 51.8  | 77.6  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

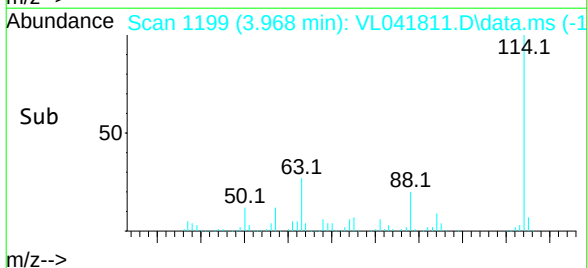
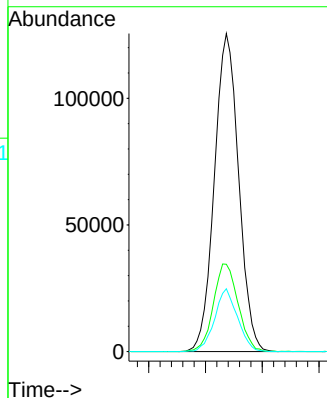
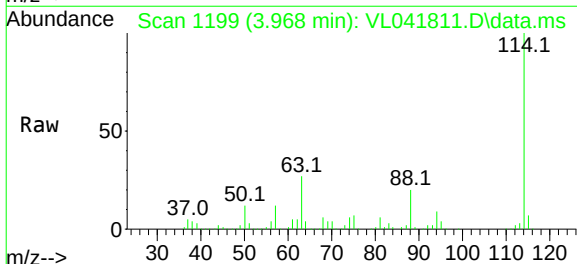
RT: 3.968 min Scan# 1199

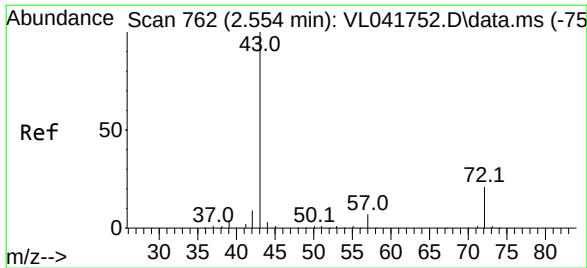
Delta R.T. 0.013 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

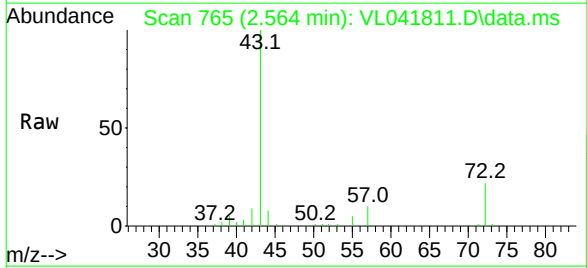
| Tgt | Ion | Ratio | Lower | Upper |
|-----|-----|-------|-------|-------|
| 114 | 114 | 100   |       |       |
| 63  | 63  | 28.1  | 21.8  | 32.8  |
| 88  | 88  | 18.6  | 14.8  | 22.2  |





#34  
2-Butanone  
Concen: 0.941 ppbv  
RT: 2.564 min Scan# 76  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

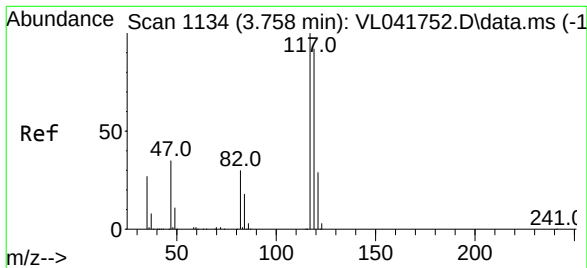
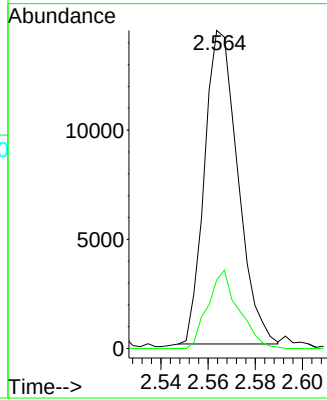
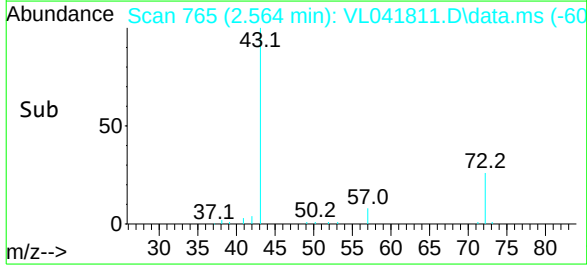
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



Tgt Ion: 43 Resp: 14105  
Ion Ratio Lower Upper  
43 100  
72 23.0 16.8 25.2

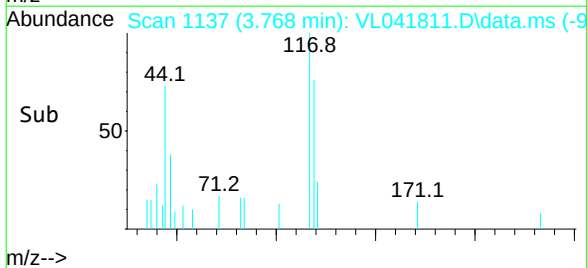
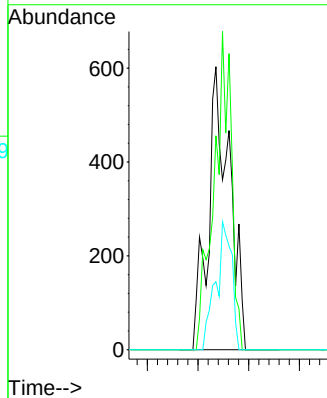
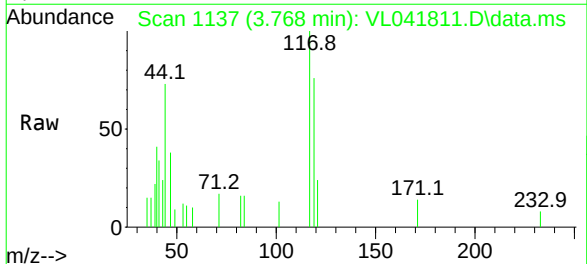
Manual Integrations  
APPROVED

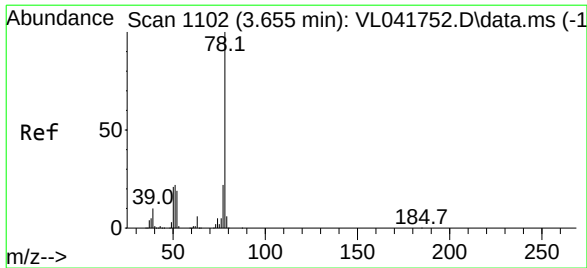
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#35  
Carbon Tetrachloride  
Concen: 0.067 ppbv m  
RT: 3.768 min Scan# 1137  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

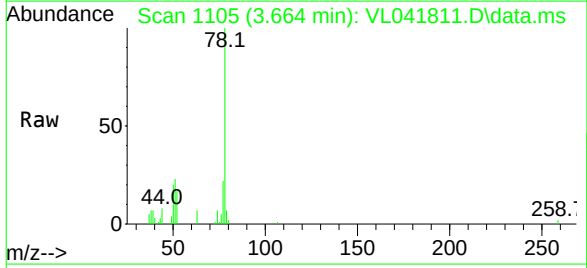
Tgt Ion:117 Resp: 884  
Ion Ratio Lower Upper  
117 100  
119 75.6 73.7 110.5  
121 24.0 23.0 34.4





#36  
Benzene  
Concen: 0.415 ppbv  
RT: 3.664 min Scan# 1102  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

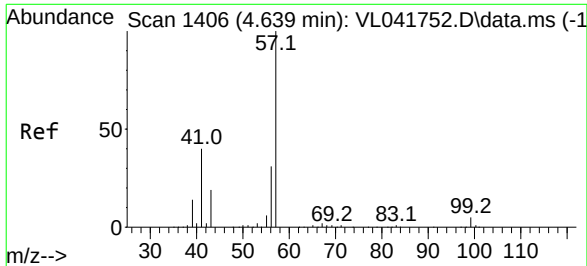
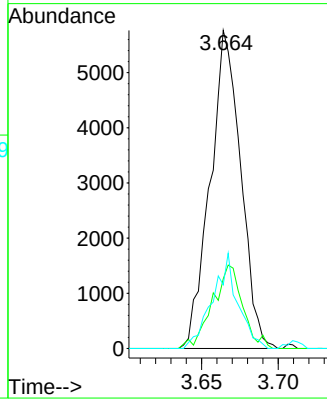
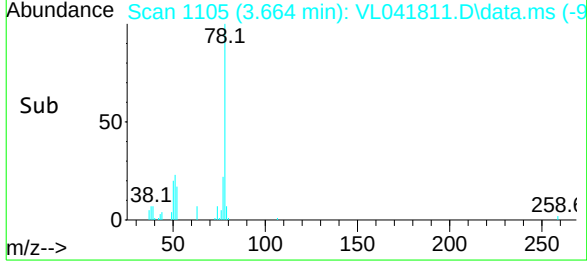
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



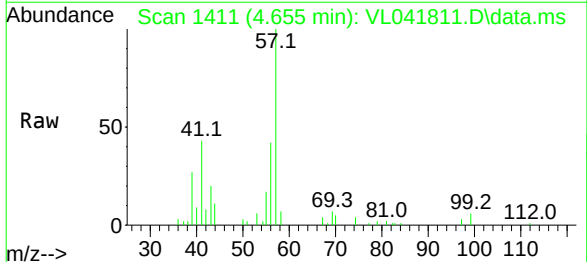
Tgt Ion: 78 Resp: 7992  
Ion Ratio Lower Upper  
78 100  
77 21.9 17.8 26.6  
50 20.0 17.2 25.8

Manual Integrations  
APPROVED

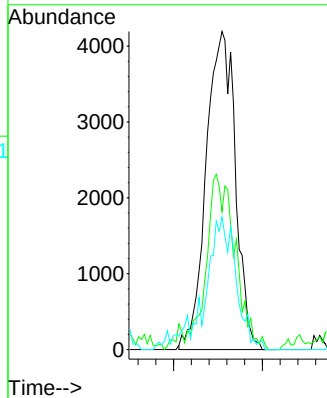
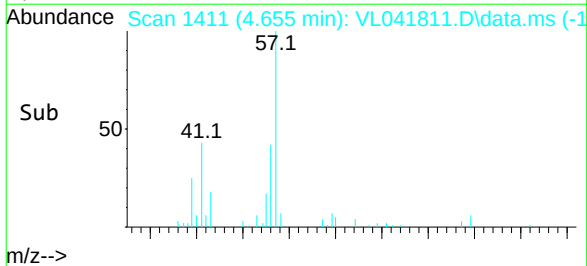
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024

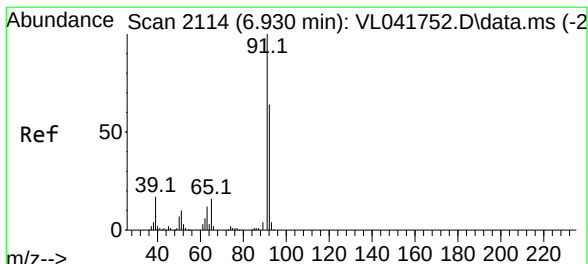


#44  
2,2,4-Trimethylpentane  
Concen: 0.291 ppbv m  
RT: 4.655 min Scan# 1411  
Delta R.T. 0.016 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44



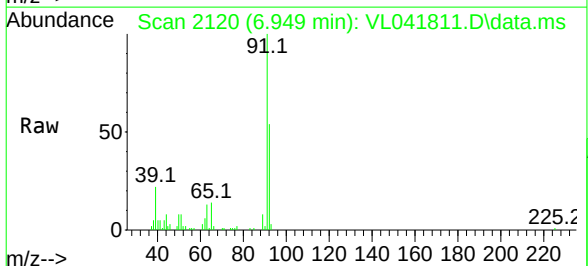
Tgt Ion: 57 Resp: 9590  
Ion Ratio Lower Upper  
57 100  
41 56.3 30.7 46.1#  
56 44.5 25.4 38.0#





#53  
Toluene  
Concen: 0.742 ppbv  
RT: 6.949 min Scan# 2114  
Delta R.T. 0.019 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

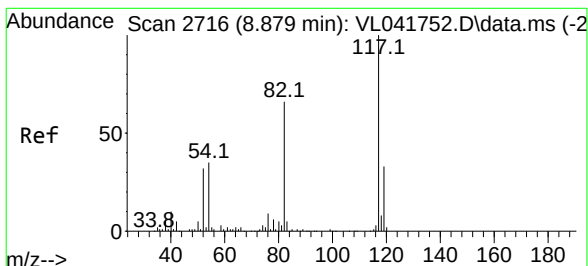
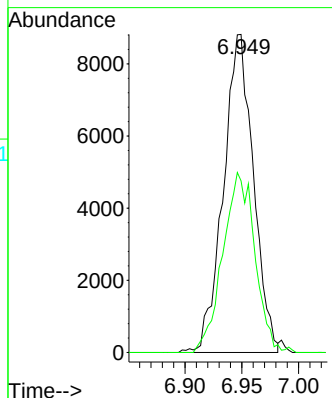
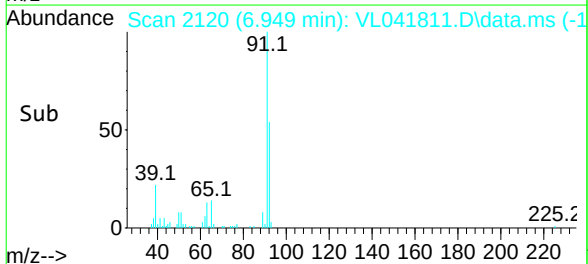
Instrument : MSVOA\_L  
ClientSampleId : C0AB8



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 60.5  | 47.9  | 71.9  |

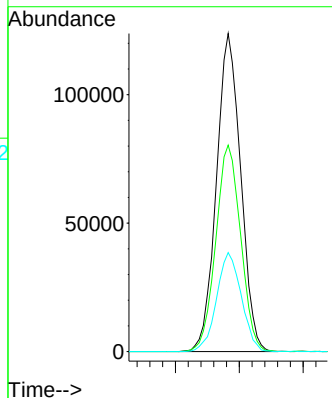
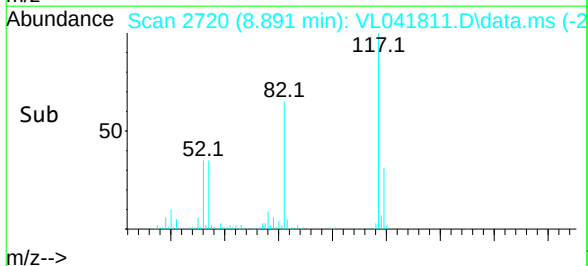
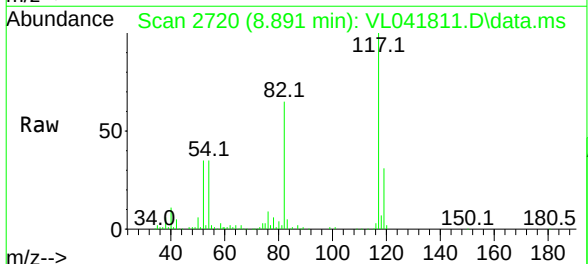
Manual Integrations  
APPROVED

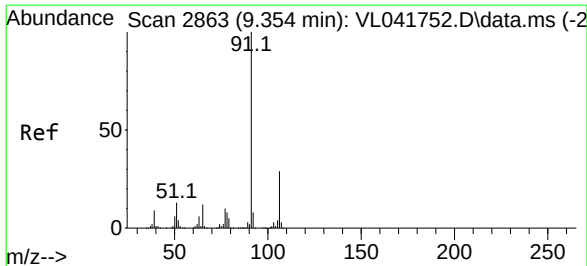
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.891 min Scan# 2720  
Delta R.T. 0.013 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 66.6  | 53.8  | 80.8  |
| 119     | 31.7  | 26.7  | 40.1  |





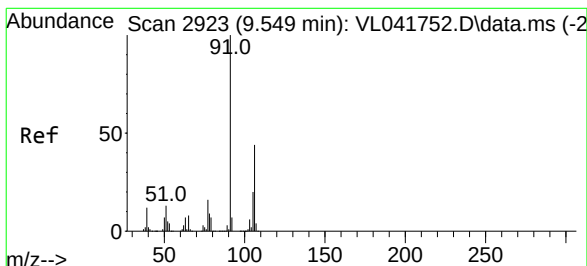
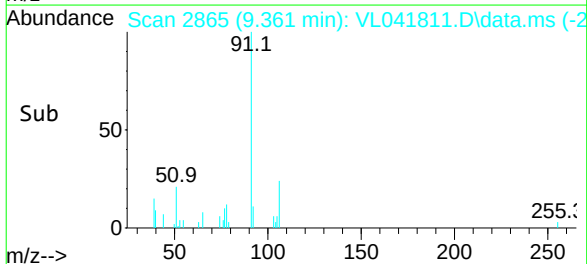
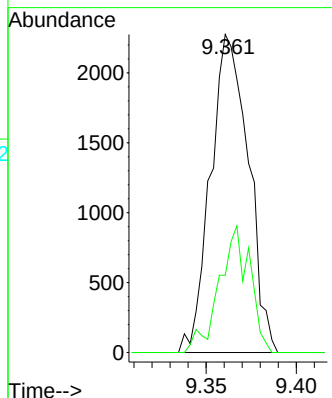
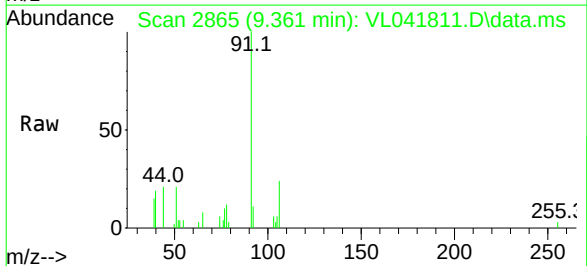
#58  
Ethyl Benzene  
Concen: 0.112 ppbv  
RT: 9.361 min Scan# 2863  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

| Tgt | Ion  | Ratio | Lower | Upper |
|-----|------|-------|-------|-------|
| 91  | 100  |       |       |       |
| 106 | 24.3 | 23.5  | 35.3  |       |

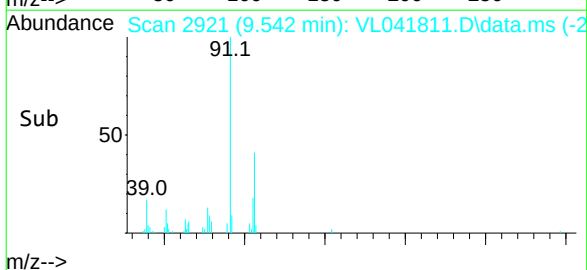
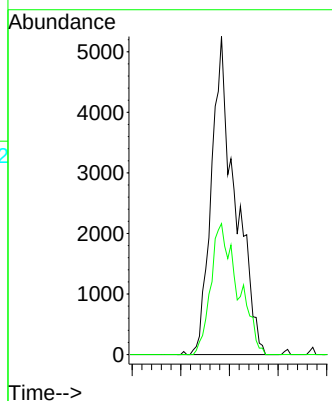
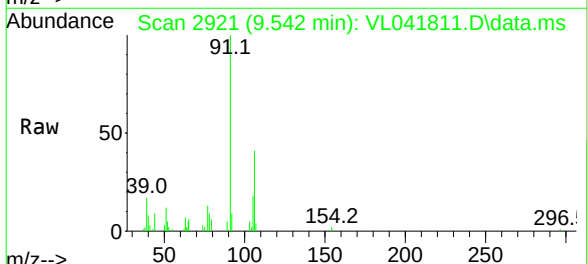
Manual Integrations  
APPROVED

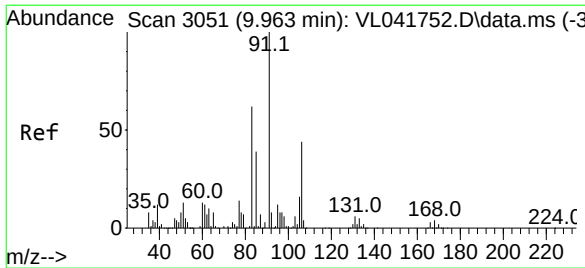
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



#59  
m/p-Xylene  
Concen: 0.378 ppbv m  
RT: 9.542 min Scan# 2921  
Delta R.T. -0.007 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

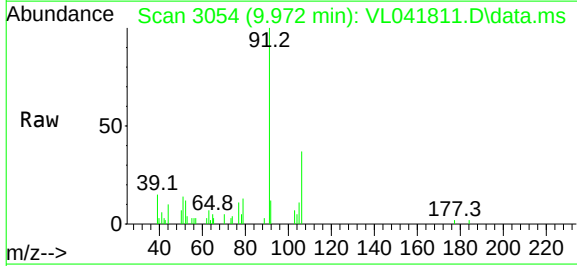
| Tgt | Ion | Ratio | Lower | Upper |
|-----|-----|-------|-------|-------|
| 91  | 100 |       |       |       |
| 106 | 0.0 | 0.0   | 0.0   |       |





#60  
o-Xylene  
Concen: 0.140 ppbv m  
RT: 9.972 min Scan# 3054  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

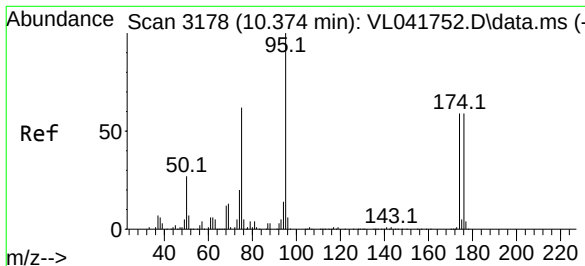
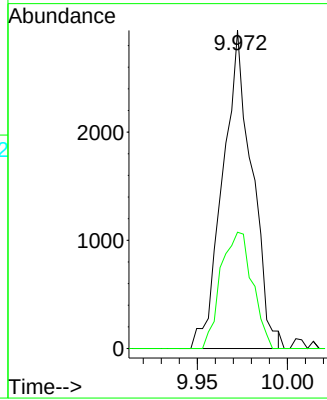
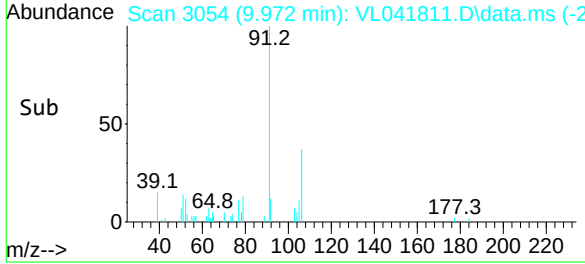
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



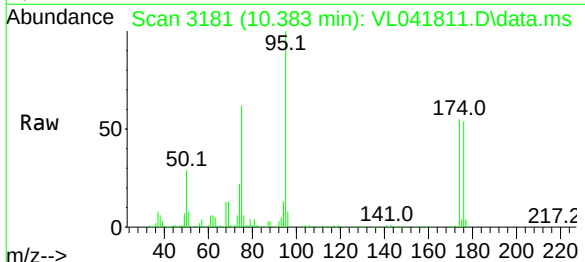
Tgt Ion: 91 Resp: 3319  
Ion Ratio Lower Upper  
91 100  
106 39.4 21.1 63.4

Manual Integrations  
APPROVED

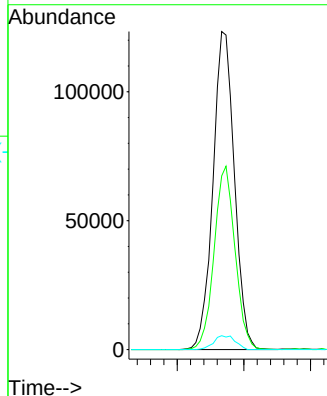
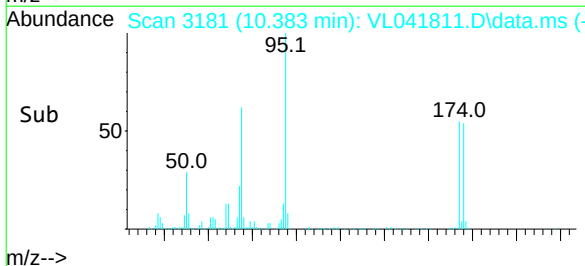
Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024



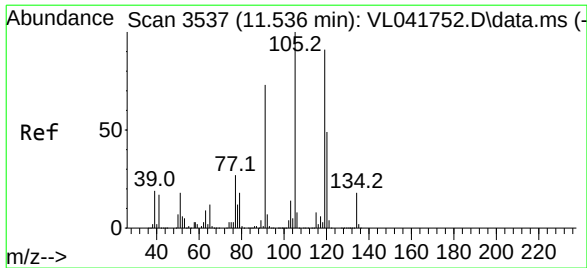
#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.105 ppbv  
RT: 10.383 min Scan# 3181  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44



Tgt Ion: 95 Resp: 137750  
Ion Ratio Lower Upper  
95 100  
174 56.6 47.6 71.4  
175 4.4 3.7 5.5

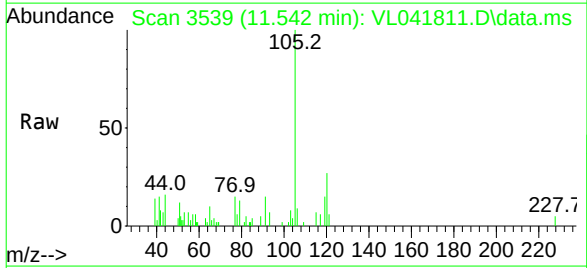






#74  
1,2,4-Trimethylbenzene  
Concen: 0.131 ppbv  
RT: 11.542 min Scan# 3539  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

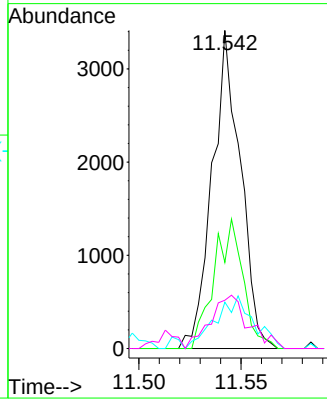
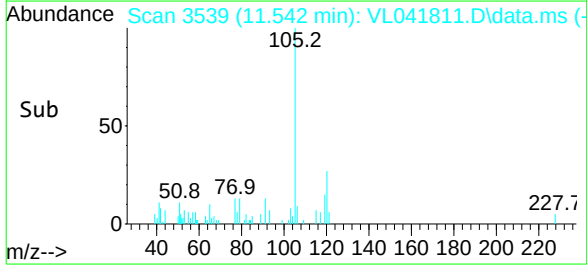
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8



|     |       |       |       |      |
|-----|-------|-------|-------|------|
| Tgt | Ion   | 105   | Resp  | 3276 |
| Ion | Ratio | Lower | Upper |      |
| 105 | 100   |       |       |      |
| 120 | 27.1  | 39.0  | 58.4  | #    |
| 91  | 13.0  | 58.1  | 87.1  | #    |
| 77  | 13.2  | 21.8  | 32.8  | #    |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/23/2024  
Supervised By :Mahesh Dadoda 12/23/2024





# CALIBRATION SUMMARY

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Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL121624AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Thu Dec 19 07:32:09 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041757.D 0.1 =VL041756.D 0.5 =VL041755.D 1 =VL041754.D 2 =VL041753.D 10 =VL041752.D 15 =VL041758.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg   | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----                     |                |       |       |       |       |       |       |       |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2) T Dichlorodifluo...    |                |       | 1.886 | 1.927 | 1.840 | 1.682 | 1.562 | 1.779 | 8.61  |
| 3) Chlorodifluoro...      |                |       | 1.679 | 1.697 | 1.653 | 1.566 | 1.559 | 1.631 | 3.94  |
| 4) Chloromethane          |                |       | 0.737 | 0.729 | 0.736 | 0.630 | 0.650 | 0.696 | 7.48  |
| 5) T Vinyl Chloride       | 0.909          | 0.673 | 0.682 | 0.695 | 0.689 | 0.625 | 0.637 | 0.701 | 13.60 |
| 6) T Bromomethane         |                |       | 0.343 | 0.363 | 0.343 | 0.295 | 0.310 | 0.331 | 8.32  |
| 7) Chloroethane           |                |       | 0.282 | 0.267 | 0.297 | 0.254 | 0.262 | 0.272 | 6.26  |
| 8) T Dichlorotetra...     |                |       | 1.712 | 1.659 | 1.616 | 1.461 | 1.516 | 1.593 | 6.49  |
| 9) T Propene              |                |       | 0.788 | 0.734 | 0.750 | 0.633 | 0.629 | 0.707 | 10.16 |
| 10) T Heptane             |                |       | 1.950 | 1.821 | 1.875 | 1.705 | 1.726 | 1.816 | 5.64  |
| 11) T Trichlorofluor...   |                |       | 1.981 | 1.915 | 1.943 | 1.791 | 1.820 | 1.890 | 4.31  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.491 | 1.504 | 1.466 | 1.341 | 1.386 | 1.437 | 4.92  |
| 13) Ethanol               |                |       | 0.081 | 0.080 | 0.059 | 0.036 | 0.037 | 0.059 | 37.17 |
| 14) T Bromoethene         |                |       | 0.509 | 0.477 | 0.484 | 0.474 | 0.482 | 0.485 | 2.84  |
| 15) T Acetone             |                |       | 2.474 | 2.284 | 2.047 | 1.461 | 1.462 | 1.946 | 24.00 |
| 16) T 1,3-Butadiene       |                |       | 0.891 | 0.779 | 0.777 | 0.685 | 0.699 | 0.766 | 10.74 |
| 17) tert-Butyl alc...     |                |       | 1.999 | 2.024 | 1.975 | 1.833 | 1.819 | 1.930 | 5.00  |
| 18) T 1,1-Dichloroet...   |                |       | 0.608 | 0.628 | 0.622 | 0.565 | 0.591 | 0.603 | 4.20  |
| 19) T Isopropyl Alcohol   |                |       | 1.709 | 1.320 | 1.107 | 0.860 | 0.841 | 1.167 | 30.91 |
| 20) T Methylene Chlo...   |                |       | 0.653 | 0.587 | 0.562 | 0.477 | 0.495 | 0.555 | 12.88 |
| 21) T Allyl Chloride      |                |       | 1.008 | 1.126 | 1.092 | 1.012 | 1.038 | 1.055 | 4.93  |
| 22) T trans-1,2-Dich...   |                |       | 0.749 | 0.698 | 0.697 | 0.640 | 0.665 | 0.690 | 5.96  |
| 23) T Vinyl Acetate       |                |       | 0.781 | 0.811 | 1.309 | 0.790 | 0.826 | 0.903 | 25.15 |
| 24) T 1,1-Dichloroet...   |                |       | 1.458 | 1.459 | 1.414 | 1.311 | 1.340 | 1.396 | 4.89  |
| 25) T Ethyl Acetate       |                |       | 3.618 | 3.813 | 3.745 | 3.430 | 3.492 | 3.620 | 4.48  |
| 26) T Hexane              |                |       | 1.423 | 1.403 | 1.423 | 1.303 | 1.316 | 1.374 | 4.32  |
| 27) T Carbon Disulfide    |                |       | 1.024 | 1.237 | 1.202 | 1.346 | 1.380 | 1.238 | 11.34 |
| 28) T Methyl tert-Bu...   |                |       | 1.033 | 1.295 | 1.115 | 1.098 | 1.030 | 1.114 | 9.69  |
| 29) T Chloroform          |                |       | 2.155 | 2.182 | 2.138 | 1.969 | 2.022 | 2.093 | 4.41  |
| 30) T Cyclohexane         |                |       | 1.217 | 1.187 | 1.215 | 1.096 | 1.130 | 1.169 | 4.62  |
| 31) T cis-1,2-Dichlo...   |                |       | 1.430 | 1.519 | 1.460 | 1.331 | 1.358 | 1.419 | 5.37  |
| 32) T 1,1,1-Trichlor...   | 2.218          | 2.113 | 2.158 | 2.186 | 2.101 | 2.028 | 2.091 | 2.128 | 3.03  |
| -----                     |                |       |       |       |       |       |       |       |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |       |
| 34) T 2-Butanone          |                |       | 0.869 | 0.820 | 0.860 | 0.736 | 0.737 | 0.805 | 8.05  |
| 35) T Carbon Tetrach...   | 0.671          | 0.657 | 0.634 | 0.716 | 0.758 | 0.756 | 0.777 | 0.710 | 7.94  |
| 36) T Benzene             |                |       | 1.079 | 1.080 | 1.059 | 0.975 | 0.979 | 1.034 | 5.16  |
| 37) T 1,2-Dichloroet...   |                |       | 0.690 | 0.642 | 0.650 | 0.608 | 0.628 | 0.644 | 4.71  |
| 38) T Trichloroethene     | 0.551          | 0.469 | 0.408 | 0.437 | 0.428 | 0.388 | 0.393 | 0.439 | 12.92 |
| 39) T 1,2-Dichloropr...   |                |       | 0.382 | 0.395 | 0.388 | 0.353 | 0.353 | 0.374 | 5.36  |

|                                                  |   |                    |       |       |                |       |       |       |       |       |       |
|--------------------------------------------------|---|--------------------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\ |   |                    |       |       |                |       |       |       |       |       |       |
| Method File : VL121624AIR.M                      |   |                    |       |       |                |       |       |       |       |       |       |
| 40)                                              | T | 1,4-Dioxane        |       |       | 0.212          | 0.181 | 0.187 | 0.167 | 0.167 | 0.183 | 10.12 |
| 41)                                              | T | Tetrahydrofuran    |       |       | 0.455          | 0.488 | 0.455 | 0.427 | 0.428 | 0.451 | 5.52  |
| 42)                                              | T | Bromodichlorom...  |       |       | 0.664          | 0.735 | 0.730 | 0.777 | 0.796 | 0.740 | 6.88  |
| 43)                                              |   | Methyl Methacr...  |       |       | 0.372          | 0.394 | 0.406 | 0.395 | 0.404 | 0.394 | 3.38  |
| 44)                                              | T | 2,2,4-Trimethy...  |       |       | 1.826          | 1.809 | 1.842 | 1.674 | 1.681 | 1.767 | 4.64  |
| 45)                                              | T | t-1,3-Dichloro...  |       |       | 0.382          | 0.393 | 0.407 | 0.423 | 0.434 | 0.408 | 5.25  |
| 46)                                              | T | cis-1,3-Dichlo...  |       |       | 0.500          | 0.493 | 0.522 | 0.533 | 0.540 | 0.518 | 3.96  |
| 47)                                              | T | 1,1,2-Trichlor...  |       |       | 0.408          | 0.402 | 0.406 | 0.368 | 0.371 | 0.391 | 5.06  |
| 48)                                              | T | Dibromochlorom...  |       |       | 0.433          | 0.493 | 0.540 | 0.593 | 0.609 | 0.534 | 13.58 |
| 49)                                              | T | Bromoform          |       |       | 0.328          | 0.395 | 0.443 | 0.498 | 0.519 | 0.437 | 17.80 |
| 50)                                              | T | 4-Methyl-2-Pen...  |       |       | 1.062          | 1.130 | 1.149 | 1.060 | 1.076 | 1.095 | 3.75  |
| 51)                                              | T | 2-Hexanone         |       |       | 0.831          | 0.923 | 0.953 | 0.857 | 0.876 | 0.888 | 5.59  |
| 52)                                              | T | Tetrachloroethene  | 0.555 | 0.333 | 0.346          | 0.395 | 0.372 | 0.343 | 0.351 | 0.385 | 20.18 |
| 53)                                              | T | Toluene            |       |       | 1.183          | 1.207 | 1.215 | 1.123 | 1.136 | 1.173 | 3.54  |
| 54)                                              | T | 1,2-Dibromoethane  |       | 0.565 | 0.540          | 0.545 | 0.542 | 0.512 | 0.527 | 0.538 | 3.32  |
|                                                  |   |                    |       |       |                |       |       |       |       |       |       |
| 55)                                              | I | Chlorobenzene-d5   |       |       | -----ISTD----- |       |       |       |       |       |       |
| 56)                                              |   | 1,1,1,2-Tetrac...  |       |       | 0.487          | 0.533 | 0.568 | 0.532 | 0.532 | 0.530 | 5.43  |
| 57)                                              | T | Chlorobenzene      |       |       | 1.053          | 1.078 | 1.088 | 0.951 | 0.946 | 1.023 | 6.78  |
| 58)                                              | T | Ethyl Benzene      |       |       | 1.694          | 1.834 | 1.931 | 1.774 | 1.769 | 1.800 | 4.90  |
| 59)                                              | T | m/p-Xylene         |       |       | 1.423          | 1.467 | 1.522 | 1.417 | 1.410 | 1.448 | 3.26  |
| 60)                                              | T | o-Xylene           |       |       | 1.382          | 1.492 | 1.560 | 1.421 | 1.404 | 1.452 | 5.04  |
| 61)                                              | T | Styrene            |       |       | 0.544          | 0.598 | 0.636 | 0.674 | 0.687 | 0.628 | 9.27  |
| 62)                                              |   | Isopropylbenzene   |       |       | 2.138          | 2.234 | 2.293 | 2.135 | 2.105 | 2.181 | 3.64  |
| 63)                                              | T | 1,1,2,2-Tetrac...  | 0.979 | 0.936 | 0.953          | 0.909 | 0.907 | 0.841 | 0.835 | 0.909 | 5.96  |
| 64)                                              |   | n-propylbenzene    |       |       | 0.520          | 0.581 | 0.584 | 0.535 | 0.537 | 0.551 | 5.28  |
| 65)                                              |   | tert-Butylbenzene  |       |       | 1.964          | 2.027 | 2.100 | 1.892 | 1.856 | 1.968 | 5.04  |
| 66)                                              | T | Benzyl Chloride    |       |       | 0.169          | 0.155 | 0.165 | 0.190 | 0.188 | 0.173 | 8.70  |
| 67)                                              |   | sec-Butylbenzene   |       |       | 2.682          | 2.774 | 2.926 | 2.638 | 2.595 | 2.723 | 4.84  |
| 68)                                              | S | 1-Bromo-4-Fluo...  | 0.827 | 0.829 | 0.834          | 0.819 | 0.844 | 0.848 | 0.833 | 0.833 | 1.18  |
| 69)                                              |   | p-Isopropyltol...  |       |       | 2.149          | 2.237 | 2.416 | 2.223 | 2.195 | 2.244 | 4.54  |
| 70)                                              |   | n-Butylbenzene     |       |       | 1.977          | 2.184 | 2.300 | 2.198 | 2.183 | 2.168 | 5.43  |
| 71)                                              |   | 2-Chlorotoluene    |       |       | 1.640          | 1.698 | 1.760 | 1.616 | 1.609 | 1.665 | 3.84  |
| 72)                                              | T | 4-Ethyltoluene     |       |       | 1.681          | 1.659 | 1.794 | 1.731 | 1.703 | 1.713 | 3.06  |
| 73)                                              | T | 1,3,5-Trimethy...  |       |       | 1.324          | 1.378 | 1.483 | 1.465 | 1.458 | 1.422 | 4.78  |
| 74)                                              | T | 1,2,4-Trimethy...  |       |       | 1.396          | 1.519 | 1.619 | 1.566 | 1.543 | 1.529 | 5.41  |
| 75)                                              | T | 1,3-Dichlorobe...  |       |       | 1.023          | 1.015 | 0.994 | 0.929 | 0.912 | 0.975 | 5.22  |
| 76)                                              | T | 1,4-Dichlorobe...  |       |       | 0.996          | 0.972 | 0.992 | 0.931 | 0.924 | 0.963 | 3.50  |
| 77)                                              | T | 1,2-Dichlorobe...  |       |       | 1.009          | 0.978 | 0.983 | 0.865 | 0.855 | 0.938 | 7.68  |
| 78)                                              | T | Hexachloro-1,3...  |       |       | 0.786          | 0.756 | 0.773 | 0.586 | 0.575 | 0.695 | 15.13 |
| 79)                                              | T | Naphthalene        |       | 0.754 | 0.928          | 1.046 | 1.154 | 1.258 | 1.251 | 1.065 | 18.57 |
| 80)                                              | T | Naphthalene,2- ... |       |       | 0.094          | 0.093 | 0.137 | 0.651 | 0.673 | 0.329 | 92.27 |
| 81)                                              | T | 1,2,4-Trichlor...  |       |       | 0.536          | 0.553 | 0.592 | 0.621 | 0.608 | 0.582 | 6.25  |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041752.D  
Acq On : 16 Dec 2024 13:30  
Operator : SY/MD  
Sample : VSTDICCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Quant Time: Dec 19 06:11:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 68599    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.956 | 114  | 183786   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.879 | 117  | 163333   | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 10.374 | 95    | 138451   | 10.172   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.700% |

Target Compounds

|                               |       |     |        |        | Qvalue     |
|-------------------------------|-------|-----|--------|--------|------------|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 115385 | 9.453  | ppbv 100   |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 107429 | 9.603  | ppbv 100   |
| 4) Chloromethane              | 1.531 | 50  | 43215  | 9.049  | ppbv 100   |
| 5) Vinyl Chloride             | 1.580 | 62  | 42849  | 8.905  | ppbv 100   |
| 6) Bromomethane               | 1.667 | 94  | 20252  | 8.919  | ppbv 100   |
| 7) Chloroethane               | 1.703 | 64  | 17403  | 9.311  | ppbv 100   |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 100191 | 9.171  | ppbv 100   |
| 9) Propene                    | 1.483 | 41  | 43440  | 8.959  | ppbv 100   |
| 10) Heptane                   | 4.979 | 43  | 116969 | 9.391  | ppbv 100   |
| 11) Trichlorofluoromethane    | 1.875 | 101 | 122831 | 9.474  | ppbv 100   |
| 12) 1,1,2-Trichlorotrifluo... | 2.137 | 101 | 91977  | 9.327  | ppbv 100   |
| 13) Ethanol                   | 1.719 | 45  | 2484   | 6.161  | ppbv 100   |
| 14) Bromoethene               | 1.781 | 108 | 32528  | 9.770  | ppbv 100   |
| 15) Acetone                   | 1.832 | 43  | 100229 | 7.509  | ppbv 100   |
| 16) 1,3-Butadiene             | 1.606 | 39  | 46989  | 8.940  | ppbv 100   |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 125757 | 9.497  | ppbv 100   |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 38775  | 9.379  | ppbv 100   |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 59026  | 7.370  | ppbv 100   |
| 20) Methylene Chloride        | 2.059 | 84  | 32734  | 8.601  | ppbv 100   |
| 21) Allyl Chloride            | 2.095 | 41  | 69406  | 9.588  | ppbv 100   |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 43898  | 9.276  | ppbv 100   |
| 23) Vinyl Acetate             | 2.457 | 43  | 54227  | 9.350  | ppbv 100   |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 89912  | 9.386  | ppbv 100   |
| 25) Ethyl Acetate             | 2.833 | 43  | 235305 | 9.432  | ppbv 100   |
| 26) Hexane                    | 2.823 | 57  | 89385  | 9.486  | ppbv 100   |
| 27) Carbon Disulfide          | 2.150 | 76  | 92329  | 10.873 | ppbv 100   |
| 28) Methyl tert-Butyl Ether   | 2.438 | 73  | 75330  | 9.854  | ppbv 100   |
| 29) Chloroform                | 2.846 | 83  | 135099 | 9.408  | ppbv 100   |
| 30) Cyclohexane               | 3.855 | 84  | 75156  | 9.374  | ppbv 100   |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 91276  | 9.374  | ppbv 100   |
| 32) 1,1,1-Trichloroethane     | 3.363 | 97  | 139102 | 9.733  | ppbv 100   |
| 34) 2-Butanone                | 2.554 | 43  | 135331 | 9.153  | ppbv 100   |
| 35) Carbon Tetrachloride      | 3.758 | 117 | 138952 | 10.650 | ppbv 100   |
| 36) Benzene                   | 3.655 | 78  | 179134 | 9.423  | ppbv 100   |
| 37) 1,2-Dichloroethane        | 3.215 | 62  | 111770 | 9.449  | ppbv 100   |
| 38) Trichloroethene           | 4.545 | 130 | 71297  | 8.907  | ppbv 100   |
| 39) 1,2-Dichloropropane       | 4.309 | 63  | 64789  | 9.423  | ppbv 100   |
| 40) 1,4-Dioxane               | 4.580 | 88  | 30658  | 9.128  | ppbv # 100 |
| 41) Tetrahydrofuran           | 3.049 | 42  | 78480  | 9.474  | ppbv 100   |
| 42) Bromodichloromethane      | 4.483 | 83  | 142819 | 10.494 | ppbv 100   |
| 43) Methyl Methacrylate       | 4.878 | 69  | 72578  | 10.020 | ppbv 100   |
| 44) 2,2,4-Trimethylpentane    | 4.639 | 57  | 307748 | 9.479  | ppbv 100   |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 77752  | 10.378 | ppbv 100   |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041752.D  
 Acq On : 16 Dec 2024 13:30  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Quant Time: Dec 19 06:11:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 97992    | 10.303 | ppbv  | 100      |
| 47) 1,1,2-Trichloroethane     | 6.577  | 97   | 67550    | 9.406  | ppbv  | 100      |
| 48) Dibromochloromethane      | 7.383  | 129  | 108899   | 11.105 | ppbv  | 100      |
| 49) Bromoform                 | 9.481  | 173  | 91587    | 11.410 | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 5.749  | 43   | 194838   | 9.678  | ppbv  | 100      |
| 51) 2-Hexanone                | 7.432  | 43   | 157473   | 9.650  | ppbv  | 100      |
| 52) Tetrachloroethene         | 8.222  | 164  | 62989    | 8.901  | ppbv  | 100      |
| 53) Toluene                   | 6.930  | 91   | 206354   | 9.574  | ppbv  | 100      |
| 54) 1,2-Dibromoethane         | 7.649  | 107  | 94016    | 9.501  | ppbv  | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 86831    | 10.027 | ppbv  | 100      |
| 57) Chlorobenzene             | 8.921  | 112  | 155349   | 9.295  | ppbv  | 100      |
| 58) Ethyl Benzene             | 9.354  | 91   | 289734   | 9.853  | ppbv  | 100      |
| 59) m/p-Xylene                | 9.549  | 91   | 462802m  | 19.568 | ppbv  |          |
| 60) o-Xylene                  | 9.963  | 91   | 232101   | 9.789  | ppbv  | 100      |
| 61) Styrene                   | 9.869  | 104  | 110041   | 10.733 | ppbv  | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 348684   | 9.788  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 137363   | 9.255  | ppbv  | 100      |
| 64) n-propylbenzene           | 10.989 | 120  | 87360    | 9.700  | ppbv  | 100      |
| 65) tert-Butylbenzene         | 11.529 | 119  | 309036   | 9.615  | ppbv  | 100      |
| 66) Benzyl Chloride           | 11.614 | 91   | 31039    | 10.954 | ppbv  | 100      |
| 67) sec-Butylbenzene          | 11.769 | 105  | 430810   | 9.687  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 11.924 | 119  | 363072   | 9.906  | ppbv  | 100      |
| 70) n-Butylbenzene            | 12.280 | 91   | 358993   | 10.137 | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 10.902 | 91   | 264002   | 9.708  | ppbv  | 100      |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 282698   | 10.120 | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 11.203 | 105  | 239261   | 10.304 | ppbv  | 100      |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 255780   | 10.244 | ppbv  | 100      |
| 75) 1,3-Dichlorobenzene       | 11.607 | 146  | 151752   | 9.532  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 152099   | 9.671  | ppbv  | 100      |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 141338   | 9.227  | ppbv  | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 95751    | 8.431  | ppbv  | 100      |
| 79) Naphthalene               | 13.514 | 128  | 205511   | 11.812 | ppbv  | 100      |
| 80) Naphthalene,2-methyl-     | 14.459 | 142  | 106311   | 19.755 | ppbv  | 100      |
| 81) 1,2,4-Trichlorobenzene    | 13.439 | 180  | 101461   | 10.672 | ppbv  | 100      |

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

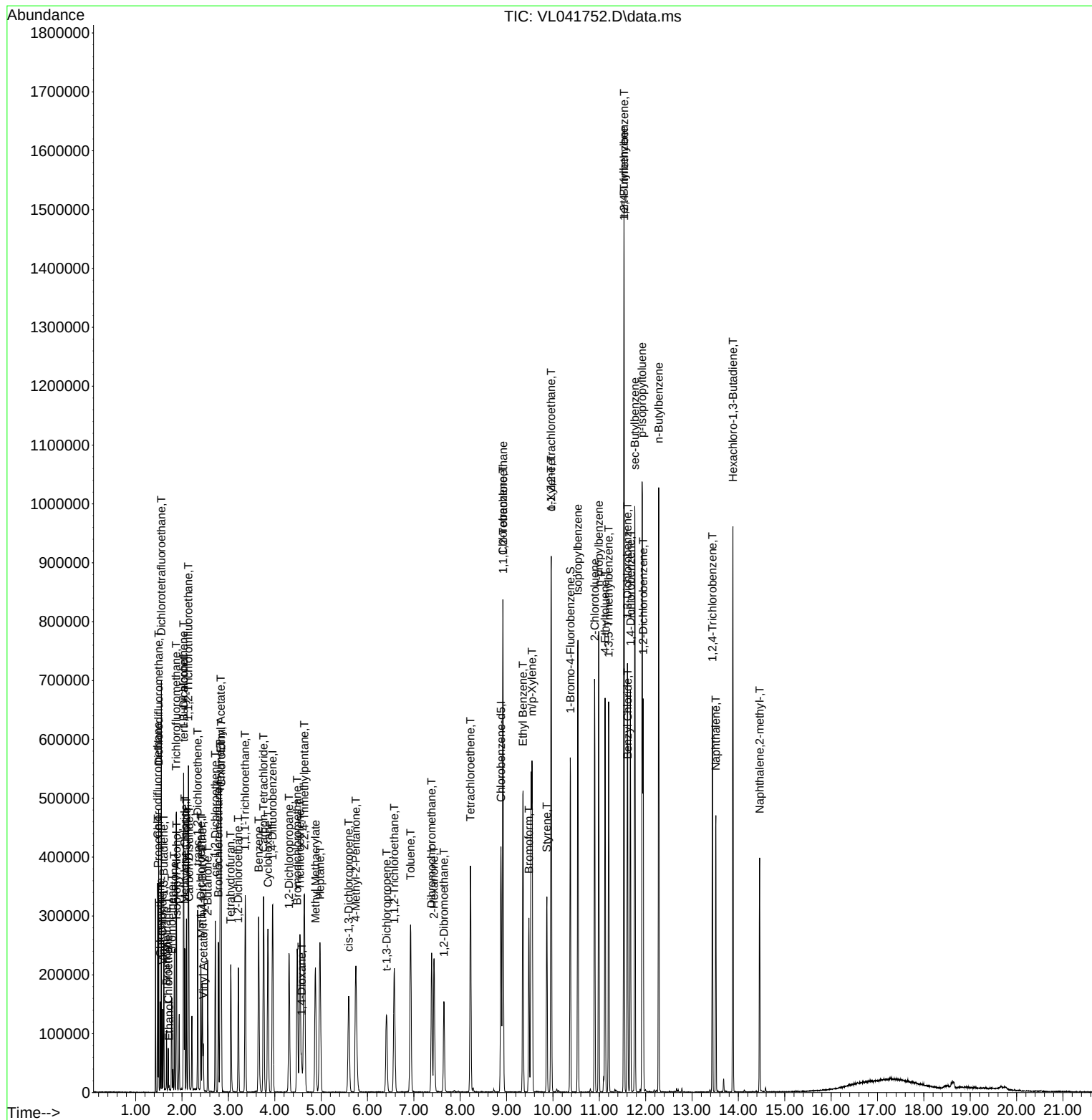
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Data File : VL041752.D  
Acq On : 16 Dec 2024 13:30  
Operator : SY/MD  
Sample : VSTDICCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

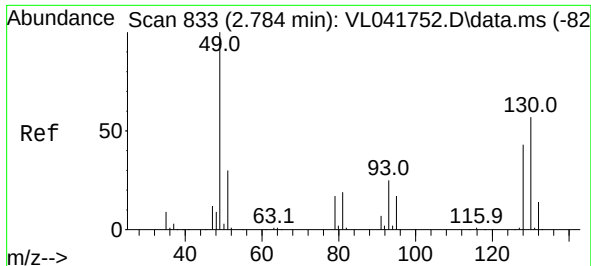
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Quant Time: Dec 19 06:11:54 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024





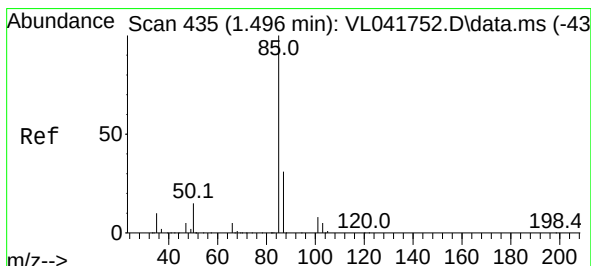
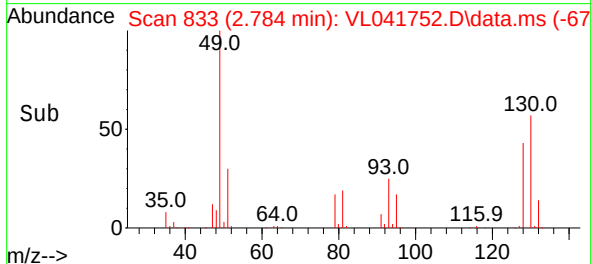
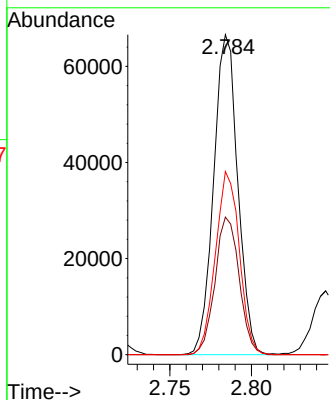
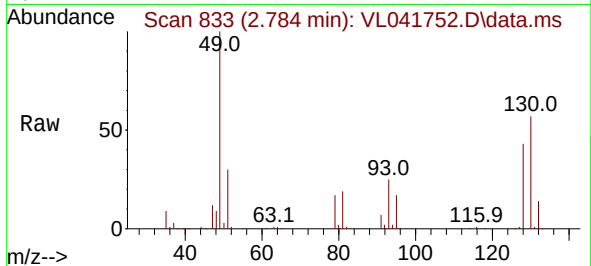
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 49 Resp: 68599  
Ion Ratio Lower Upper  
49 100  
128 43.1 21.6 64.6  
130 56.7 28.3 85.0

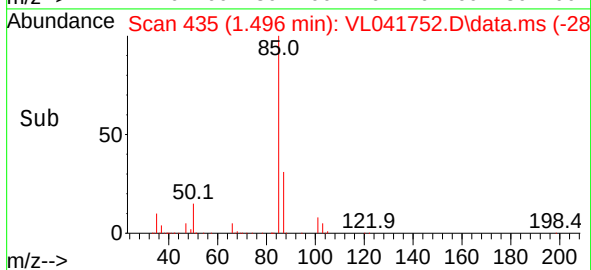
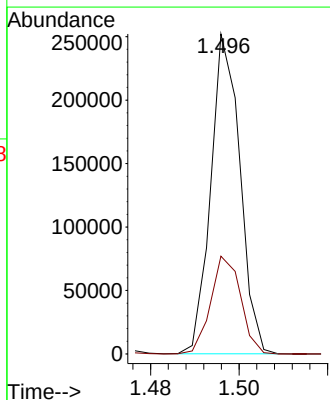
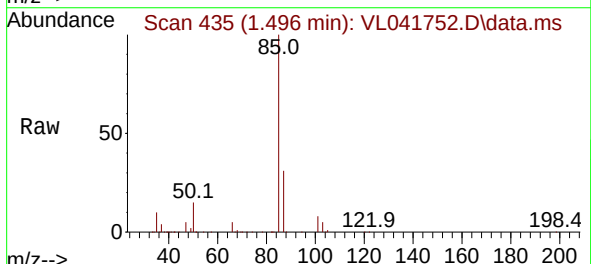
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

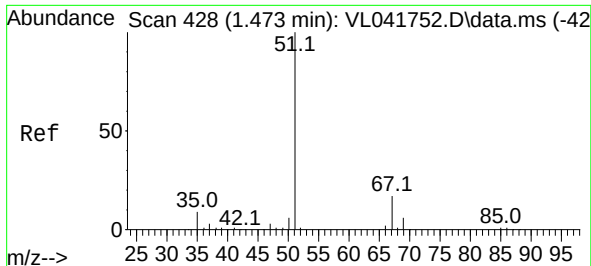


#2  
Dichlorodifluoromethane  
Concen: 9.453 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 85 Resp: 115385  
Ion Ratio Lower Upper  
85 100  
87 30.6 24.5 36.7







#3

Chlorodifluoromethane

Concen: 9.603 ppbv

RT: 1.473 min Scan# 428

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 51 Resp: 107429

Ion Ratio Lower Upper

51 100

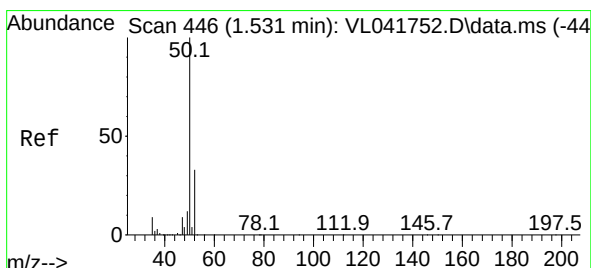
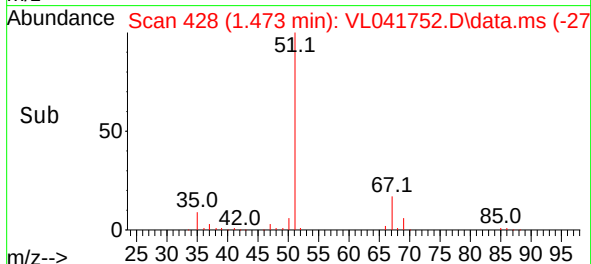
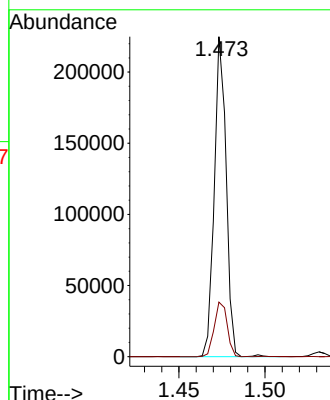
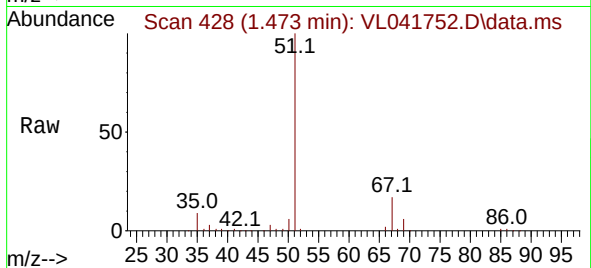
67 18.7 15.0 22.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#4

Chloromethane

Concen: 9.049 ppbv

RT: 1.531 min Scan# 446

Delta R.T. 0.000 min

Lab File: VL041752.D

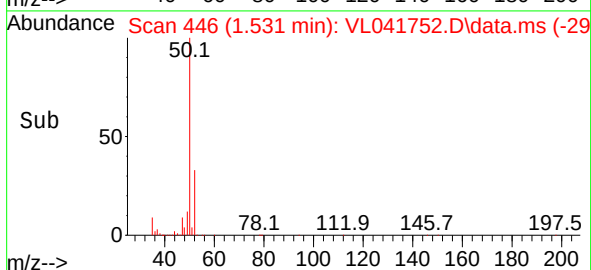
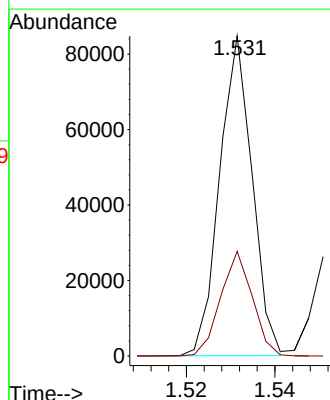
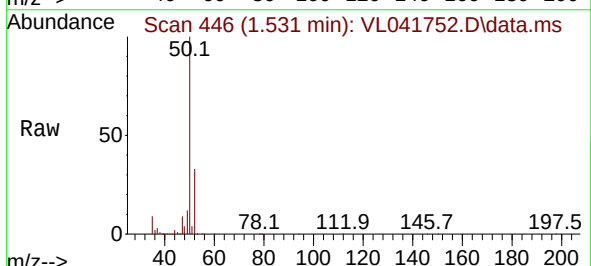
Acq: 16 Dec 2024 13:30

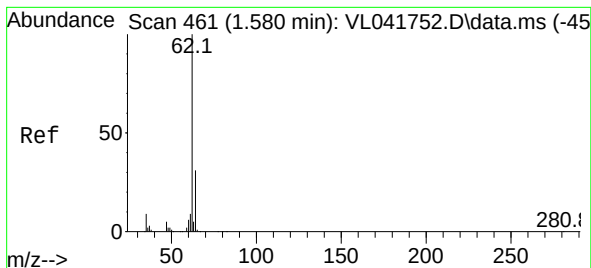
Tgt Ion: 50 Resp: 43215

Ion Ratio Lower Upper

50 100

52 32.7 26.2 39.2





#5

Vinyl Chloride

Concen: 8.905 ppbv

RT: 1.580 min Scan# 461

Delta R.T. 0.000 min

Lab File: VL041752.D

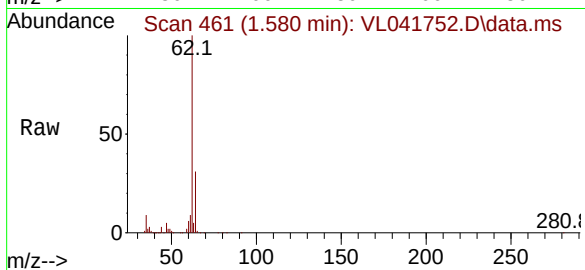
Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010



Tgt Ion: 62 Resp: 42849

Ion Ratio Lower Upper

62 100

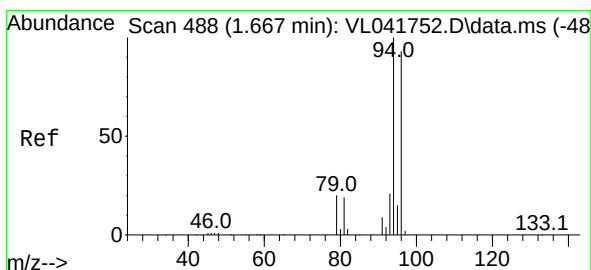
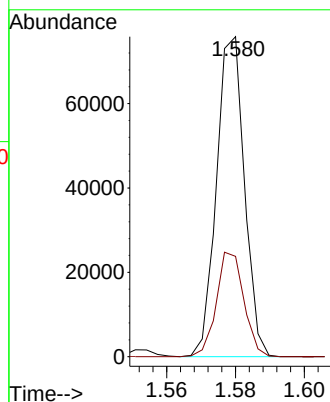
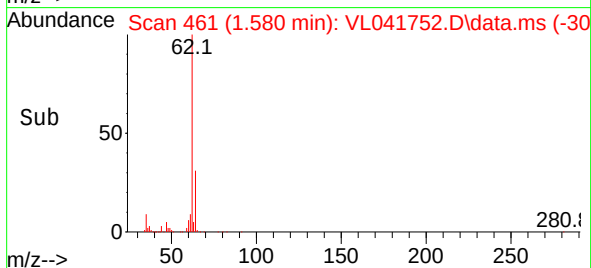
64 31.4 25.1 37.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#6

Bromomethane

Concen: 8.919 ppbv

RT: 1.667 min Scan# 488

Delta R.T. 0.000 min

Lab File: VL041752.D

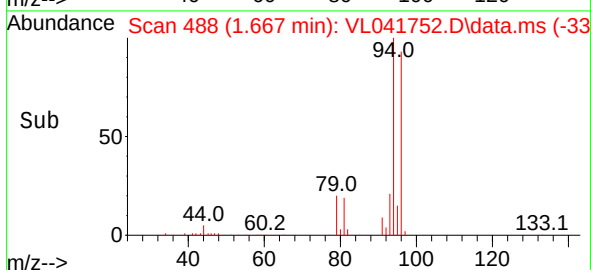
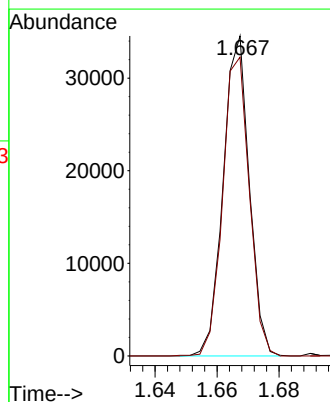
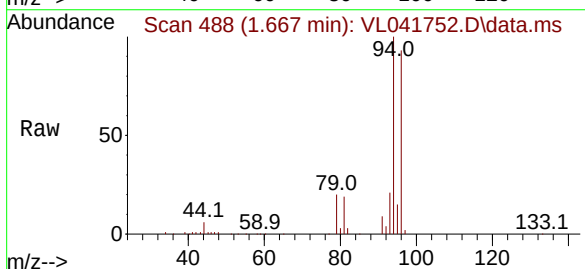
Acq: 16 Dec 2024 13:30

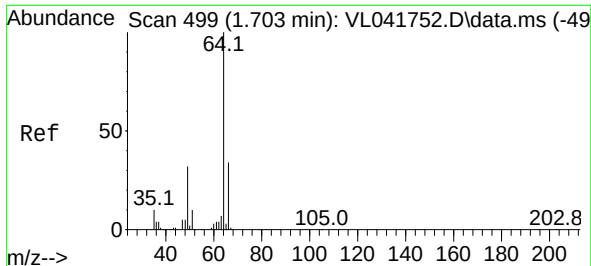
Tgt Ion: 94 Resp: 20252

Ion Ratio Lower Upper

94 100

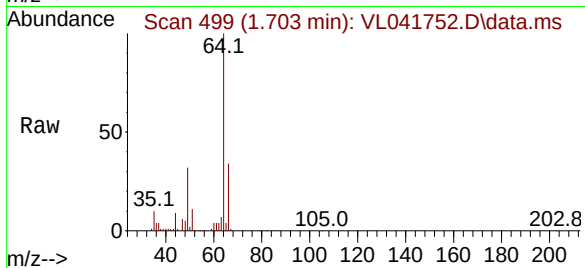
96 93.4 74.7 112.1





#7  
Chloroethane  
Concen: 9.311 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

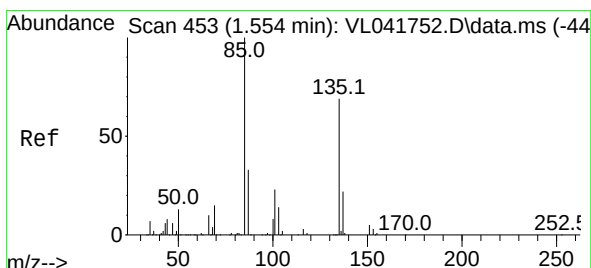
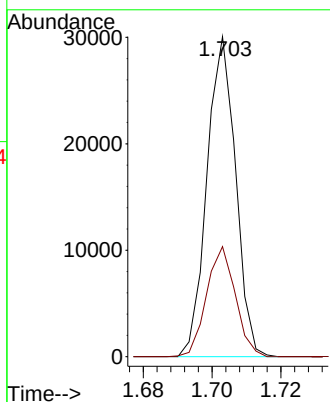
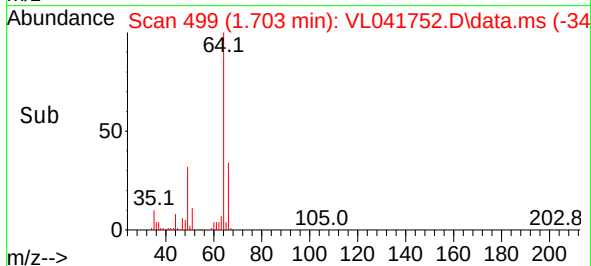
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



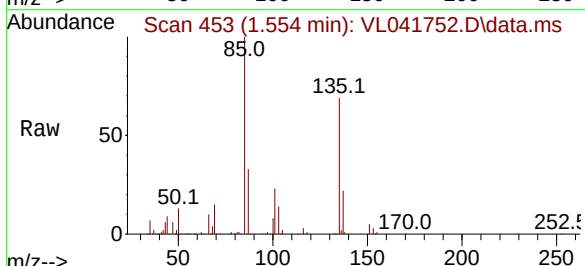
Tgt Ion: 64 Resp: 17400  
Ion Ratio Lower Upper  
64 100  
66 34.4 27.5 41.3

Manual Integrations  
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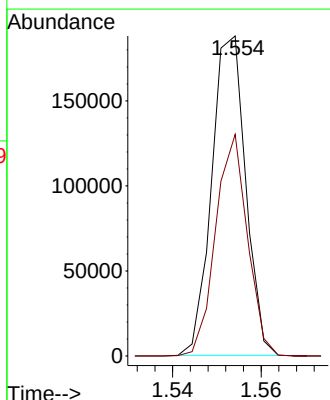
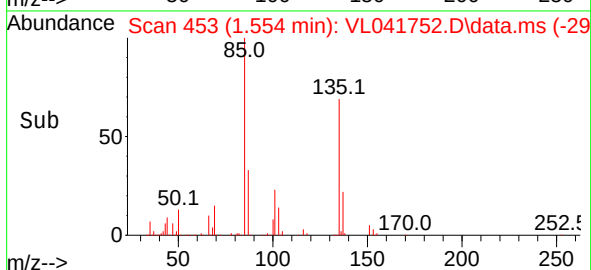
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

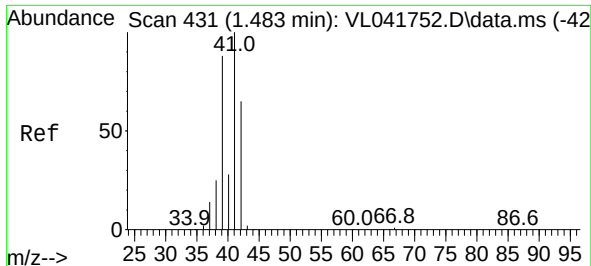


#8  
Dichlorotetrafluoroethane  
Concen: 9.171 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion: 85 Resp: 100191  
Ion Ratio Lower Upper  
85 100  
135 64.9 51.9 77.9





#9

Propene

Concen: 8.959 ppbv

RT: 1.483 min Scan# 431

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 41 Resp: 43440

Ion Ratio Lower Upper

41 100

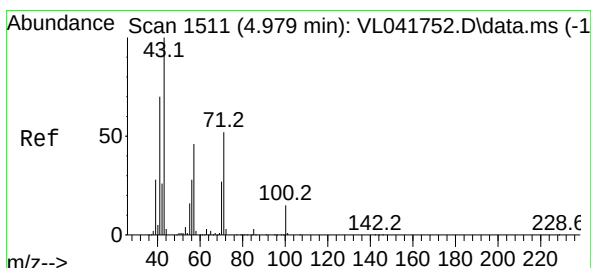
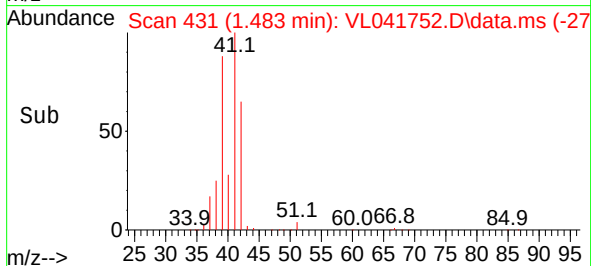
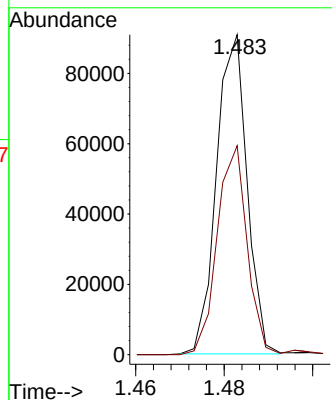
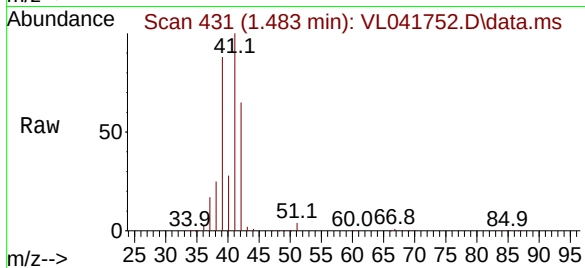
42 65.5 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 9.391 ppbv

RT: 4.979 min Scan# 1511

Delta R.T. 0.000 min

Lab File: VL041752.D

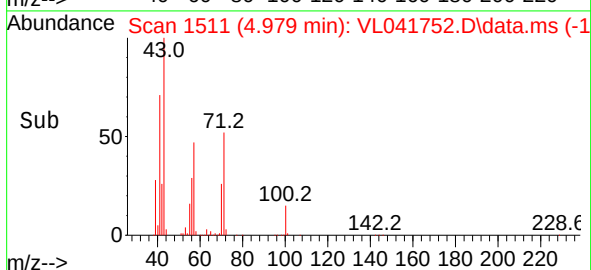
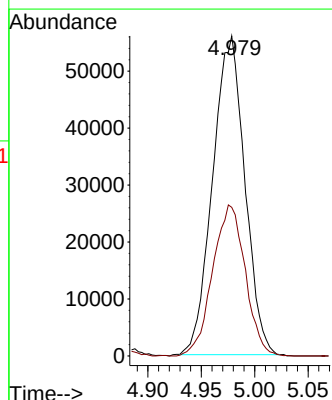
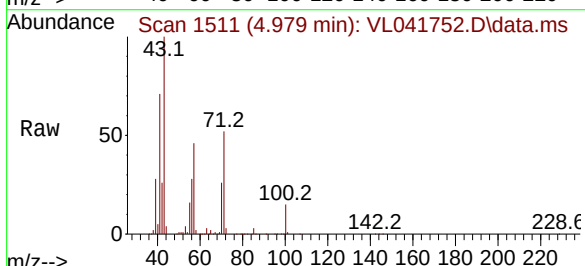
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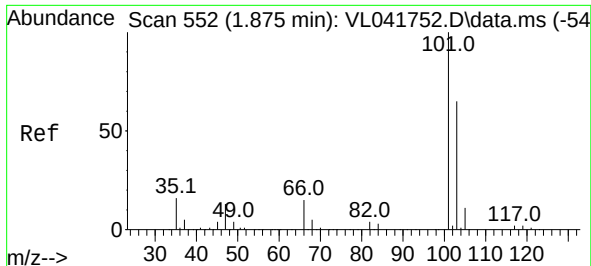
Tgt Ion: 43 Resp: 116969

Ion Ratio Lower Upper

43 100

57 48.1 38.5 57.7





#11

Trichlorofluoromethane

Concen: 9.474 ppbv

RT: 1.875 min Scan# 552

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion:101 Resp: 12283

Ion Ratio Lower Upper

101 100

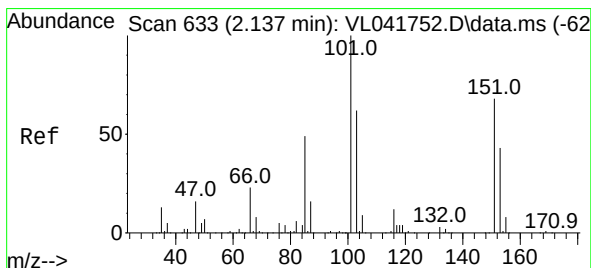
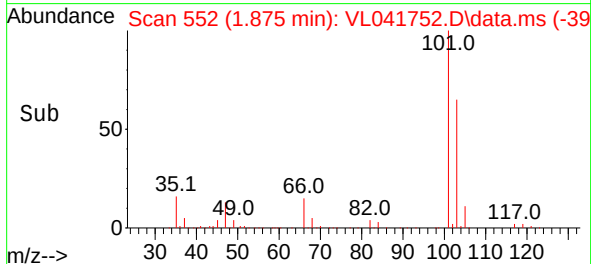
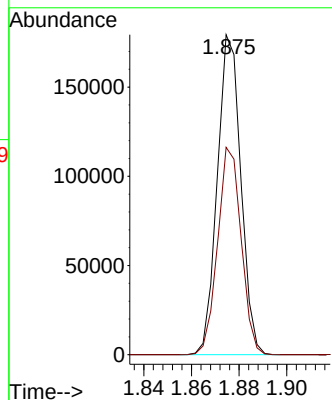
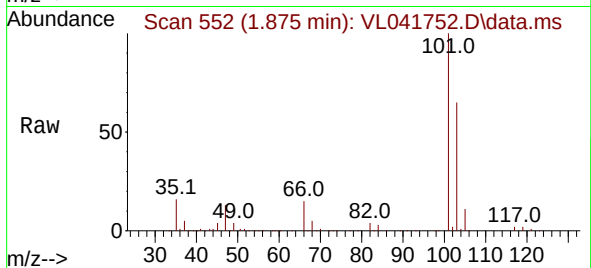
103 64.8 51.8 77.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.327 ppbv

RT: 2.137 min Scan# 633

Delta R.T. 0.000 min

Lab File: VL041752.D

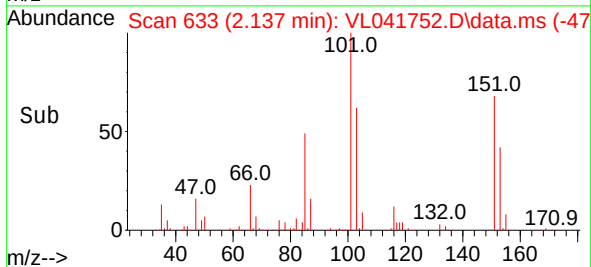
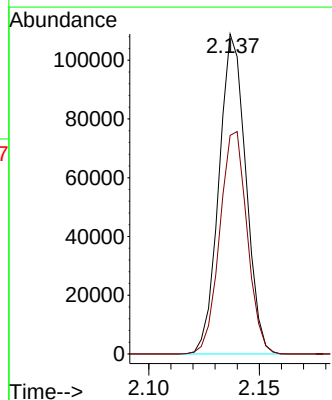
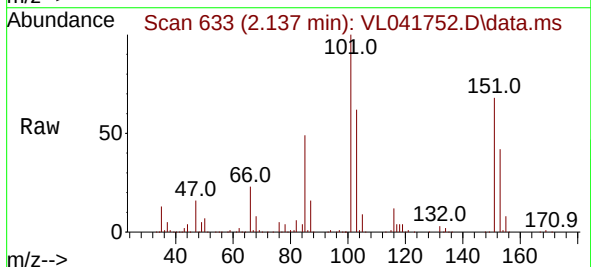
Acq: 16 Dec 2024 13:30

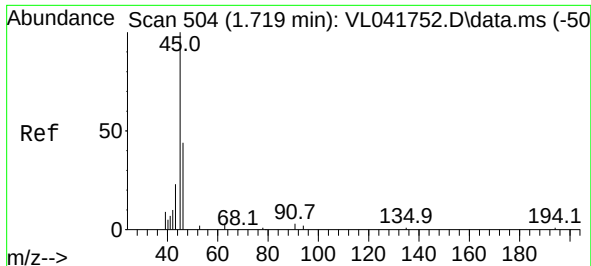
Tgt Ion:101 Resp: 91977

Ion Ratio Lower Upper

101 100

151 71.0 56.8 85.2





#13

Ethanol

Concen: 6.161 ppbv

RT: 1.719 min Scan# 504

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 45 Resp: 248

Ion Ratio Lower Upper

45 100

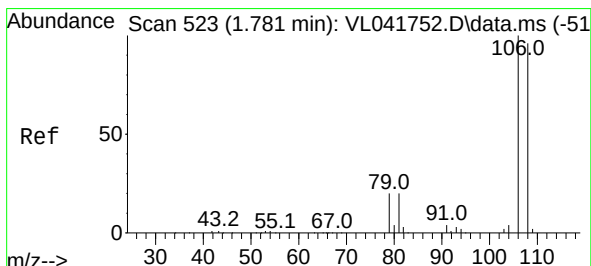
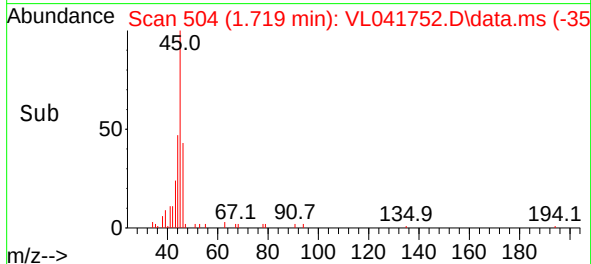
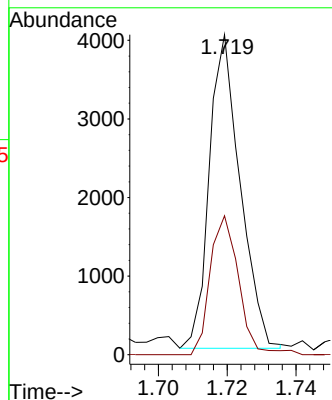
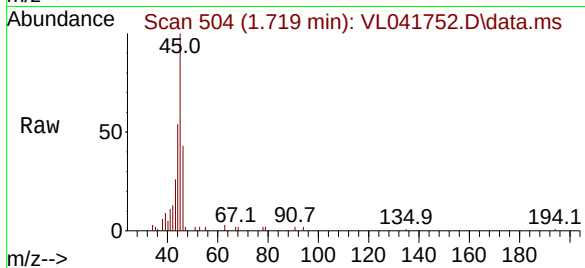
46 41.1 16.4 65.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 9.770 ppbv

RT: 1.781 min Scan# 523

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

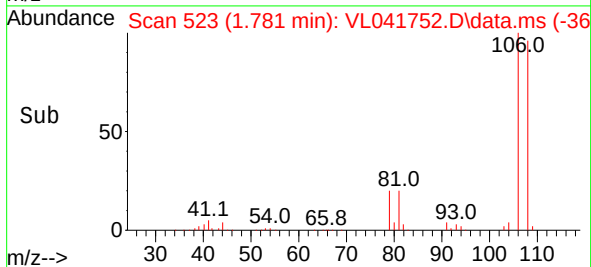
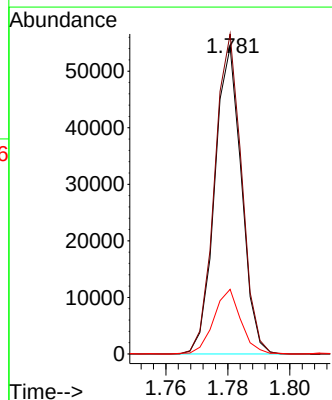
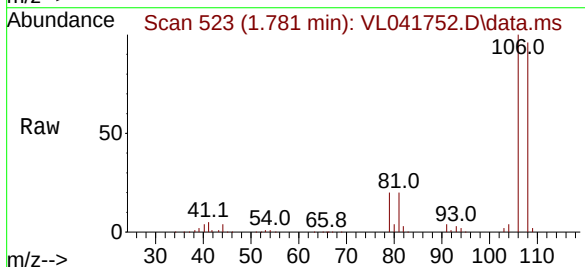
Tgt Ion:108 Resp: 32528

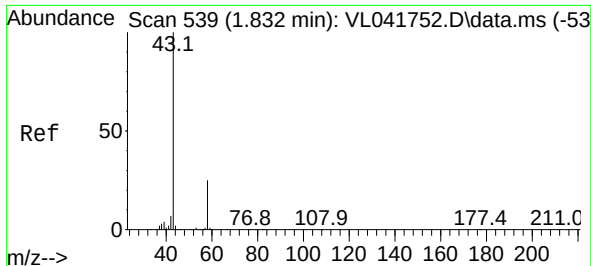
Ion Ratio Lower Upper

108 100

106 105.1 84.1 126.1

79 21.7 17.4 26.0





#15

Acetone

Concen: 7.509 ppbv

RT: 1.832 min Scan# 539

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 43 Resp: 100229

Ion Ratio Lower Upper

43 100

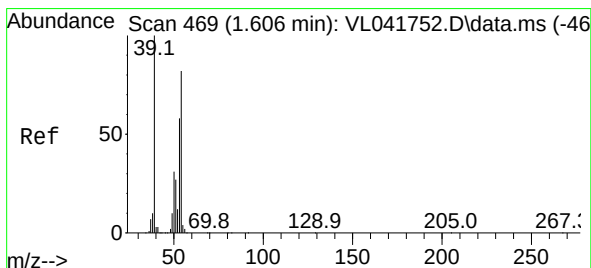
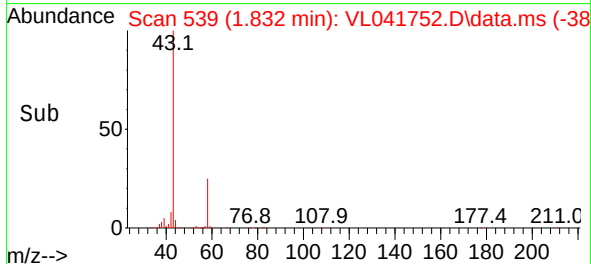
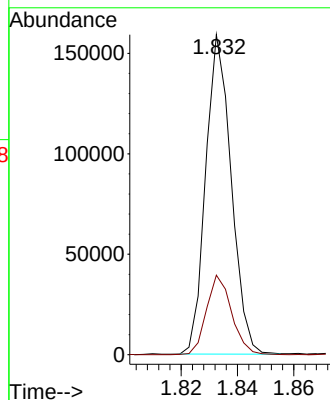
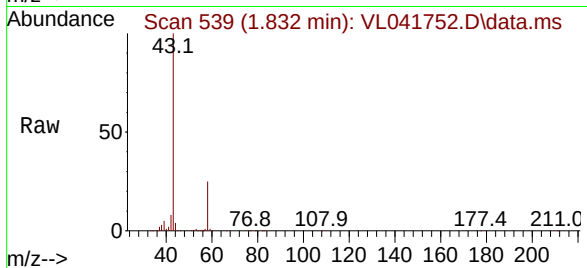
58 24.6 19.7 29.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#16

1,3-Butadiene

Concen: 8.940 ppbv

RT: 1.606 min Scan# 469

Delta R.T. 0.000 min

Lab File: VL041752.D

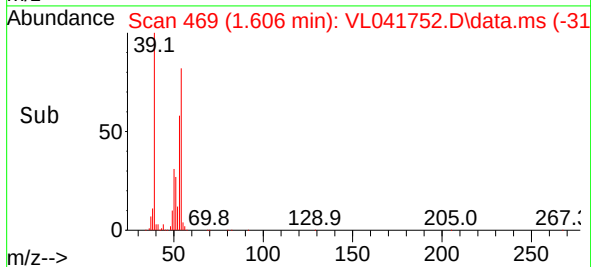
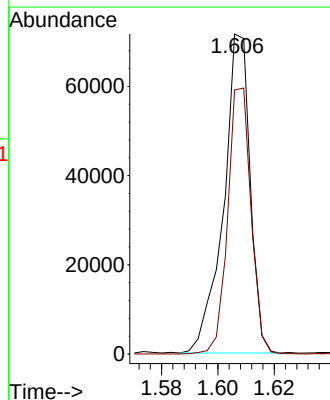
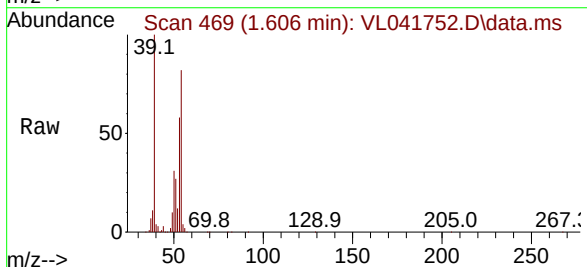
Acq: 16 Dec 2024 13:30

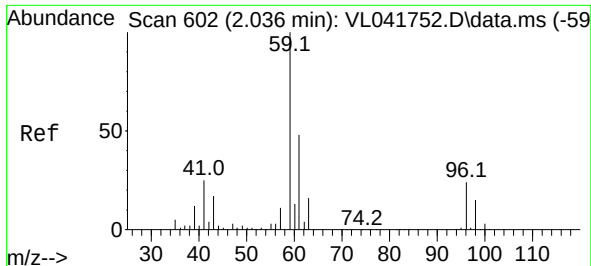
Tgt Ion: 39 Resp: 46989

Ion Ratio Lower Upper

39 100

54 73.0 58.4 87.6





#17

tert-Butyl alcohol

Concen: 9.497 ppbv

RT: 2.036 min Scan# 602

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 59 Resp: 12575

Ion Ratio Lower Upper

59 100

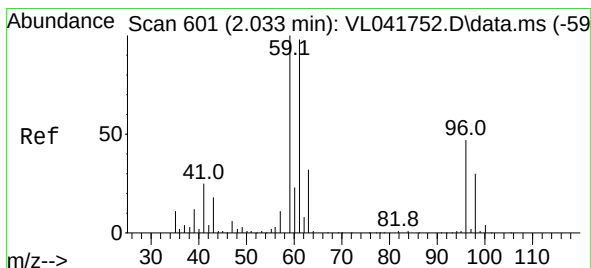
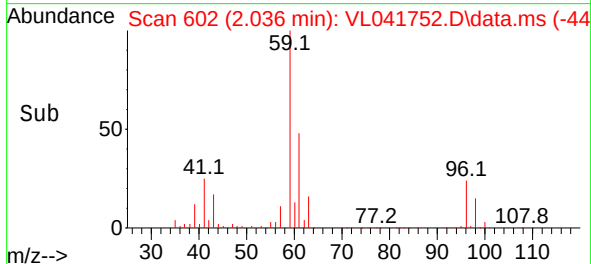
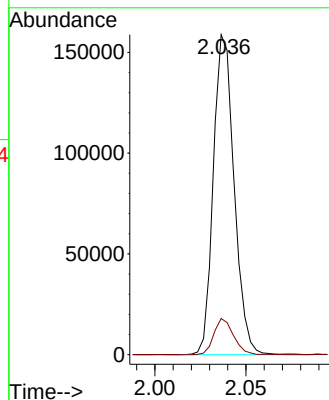
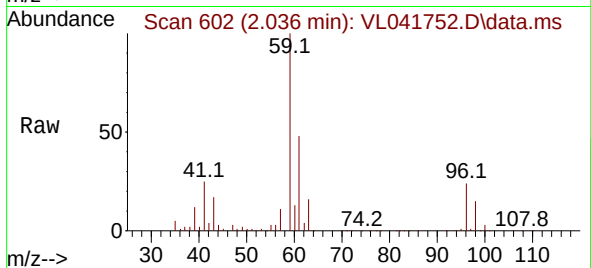
57 10.8 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#18

1,1-Dichloroethene

Concen: 9.379 ppbv

RT: 2.033 min Scan# 601

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

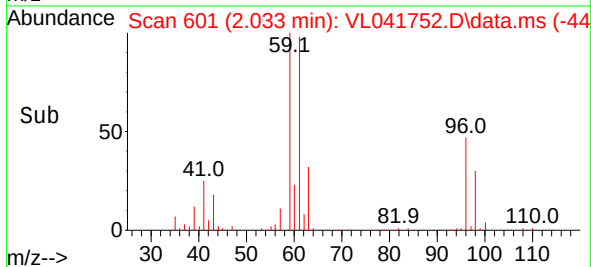
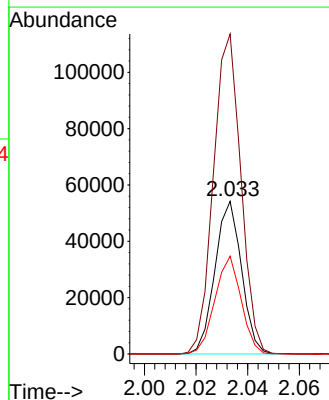
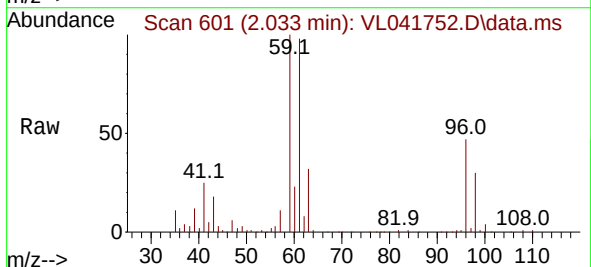
Tgt Ion: 96 Resp: 38775

Ion Ratio Lower Upper

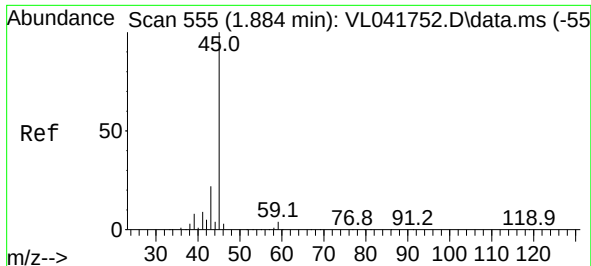
96 100

61 209.6 167.7 251.5

98 63.9 51.1 76.7







#19

Isopropyl Alcohol

Concen: 7.370 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 45 Resp: 59020

Ion Ratio Lower Upper

45 100

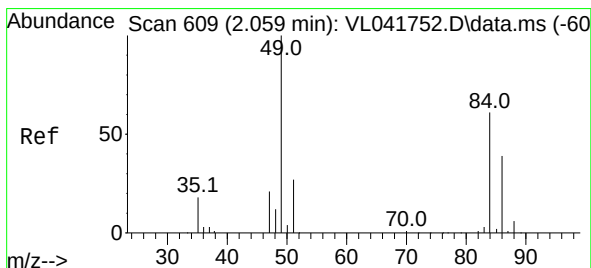
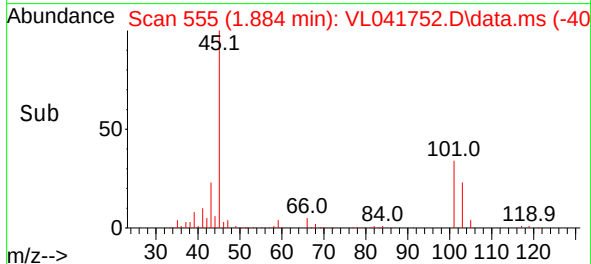
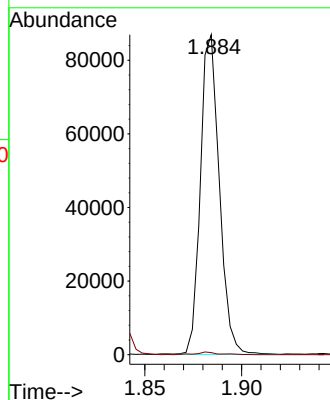
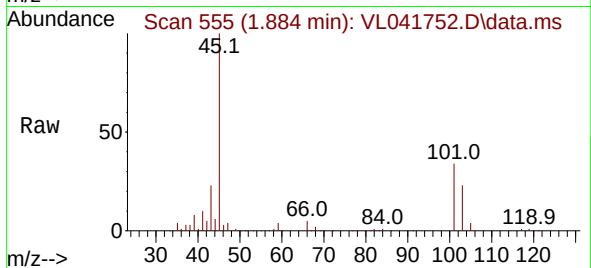
58 41.6 33.3 49.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 8.601 ppbv

RT: 2.059 min Scan# 609

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 84 Resp: 32734

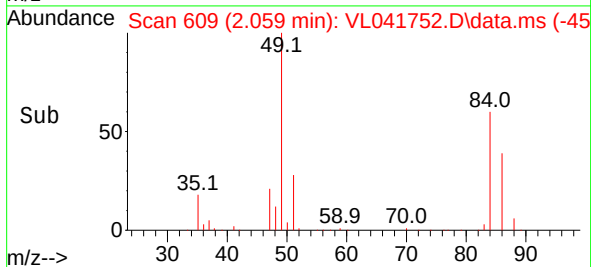
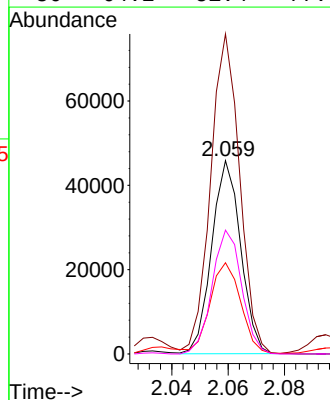
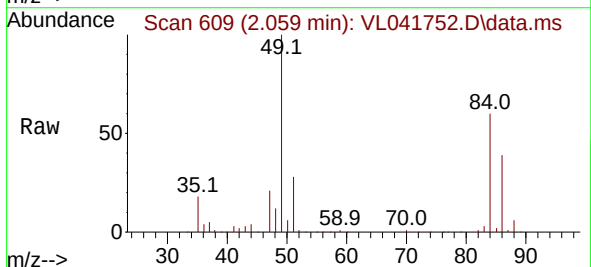
Ion Ratio Lower Upper

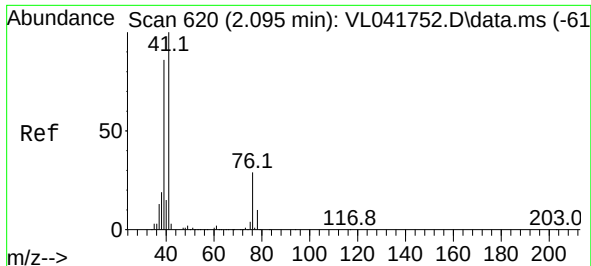
84 100

49 165.7 132.6 198.8

51 47.0 37.6 56.4

86 64.2 51.4 77.0





#21

Allyl Chloride

Concen: 9.588 ppbv

RT: 2.095 min Scan# 61

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

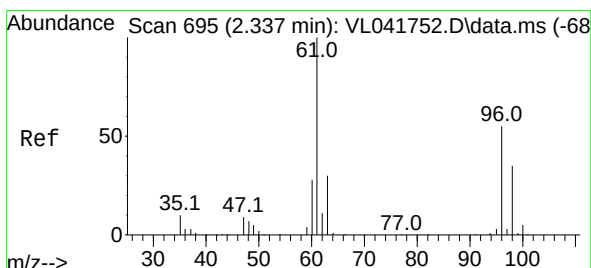
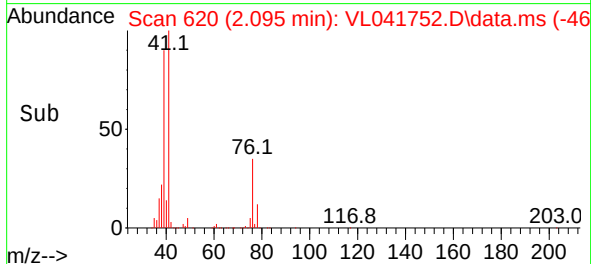
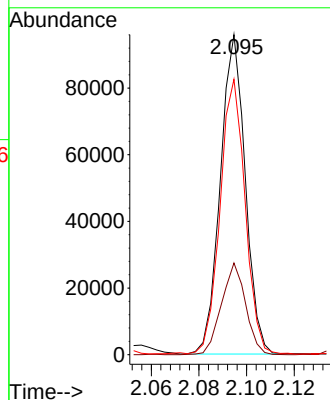
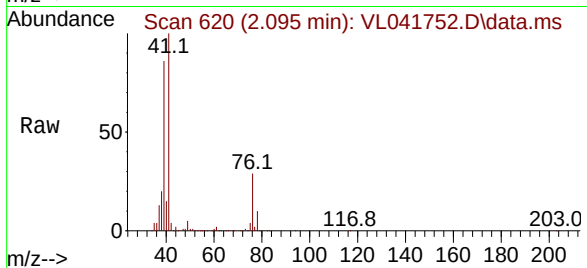
VSTDICCC010

|             |                 |
|-------------|-----------------|
| Tgt Ion: 41 | Resp: 69400     |
| Ion Ratio   | Lower Upper     |
| 41          | 100             |
| 76          | 27.9 22.3 33.5  |
| 39          | 86.5 69.2 103.8 |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#22

trans-1,2-Dichloroethene

Concen: 9.276 ppbv

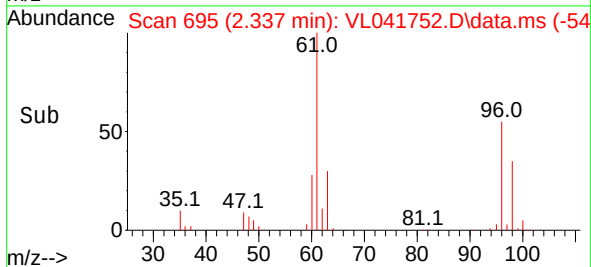
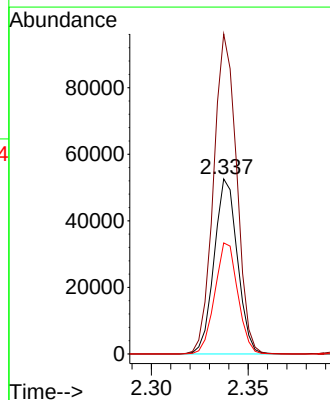
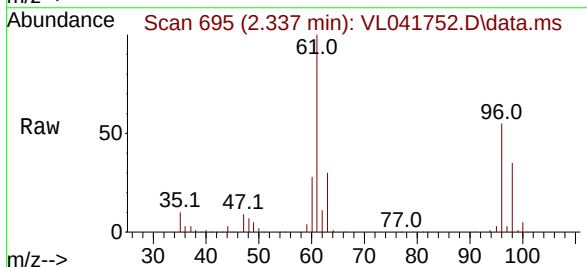
RT: 2.337 min Scan# 695

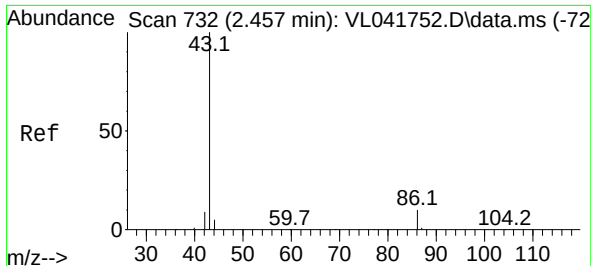
Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

|             |                   |
|-------------|-------------------|
| Tgt Ion: 96 | Resp: 43898       |
| Ion Ratio   | Lower Upper       |
| 96          | 100               |
| 61          | 182.9 146.3 219.5 |
| 98          | 63.5 50.8 76.2    |





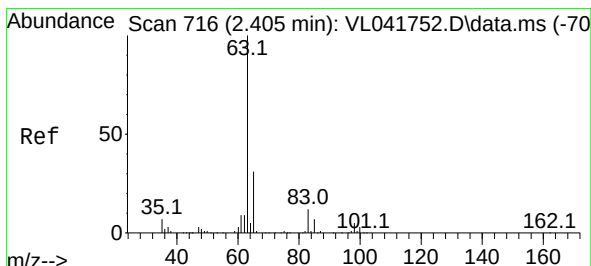
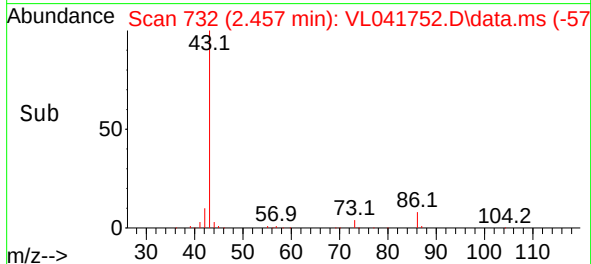
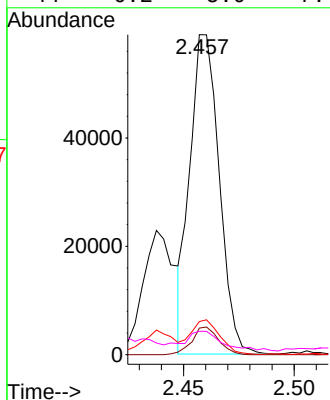
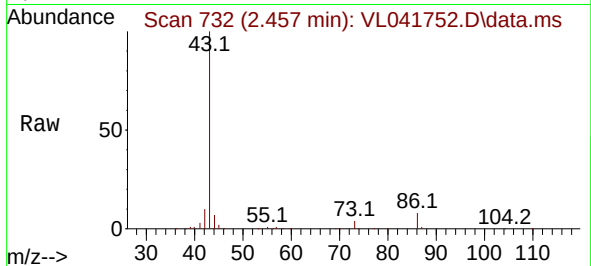
#23  
 Vinyl Acetate  
 Concen: 9.350 ppbv  
 RT: 2.457 min Scan# 732  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDICCC010

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 43    | Resp: | 5422 |
| Ion Ratio | Lower | Upper |      |
| 43        | 100   |       |      |
| 86        | 8.3   | 6.6   | 10.0 |
| 42        | 10.2  | 8.2   | 12.2 |
| 44        | 6.2   | 5.0   | 7.4  |

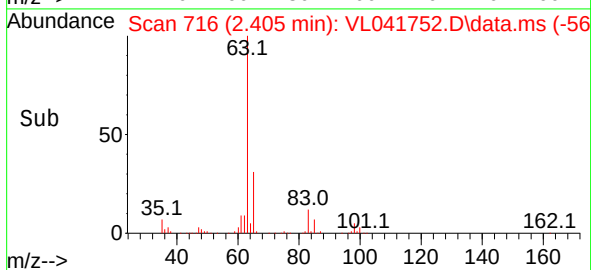
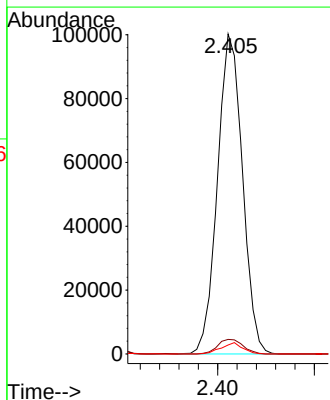
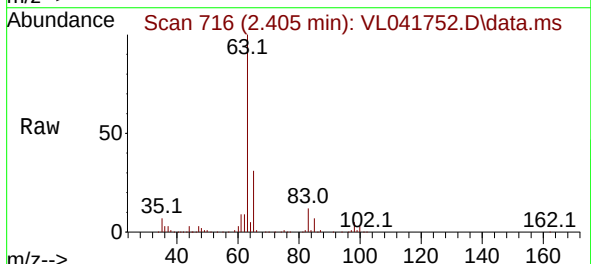
Manual Integrations  
 APPROVED

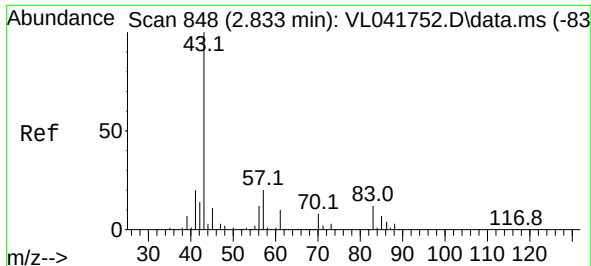
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#24  
 1,1-Dichloroethane  
 Concen: 9.386 ppbv  
 RT: 2.405 min Scan# 716  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 63    | Resp: | 89912 |
| Ion Ratio | Lower | Upper |       |
| 63        | 100   |       |       |
| 98        | 4.5   | 2.3   | 6.8   |
| 100       | 2.8   | 1.4   | 4.2   |





#25

Ethyl Acetate

Concen: 9.432 ppbv

RT: 2.833 min Scan# 848

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

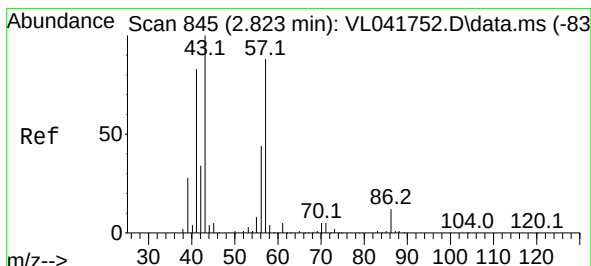
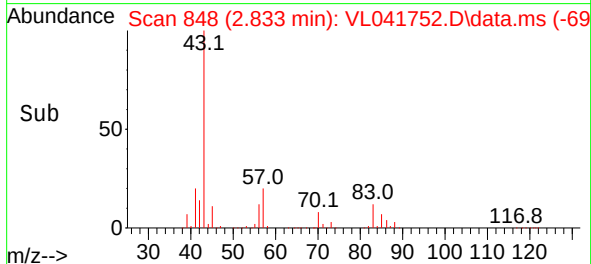
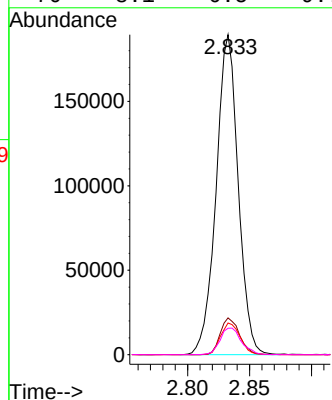
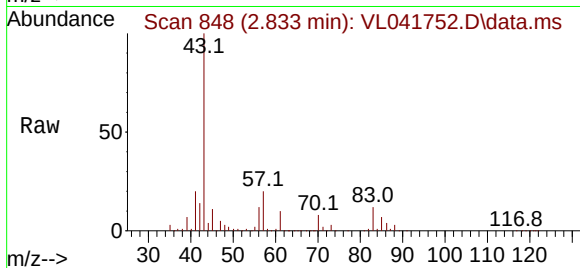
VSTDICCC010

|             |              |
|-------------|--------------|
| Tgt Ion: 43 | Resp: 235309 |
| Ion Ratio   | Lower Upper  |
| 43 100      |              |
| 45 10.1     | 8.1 12.1     |
| 61 8.8      | 7.0 10.6     |
| 70 8.1      | 6.5 9.7      |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#26

Hexane

Concen: 9.486 ppbv

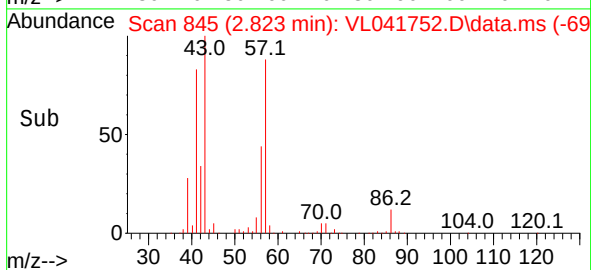
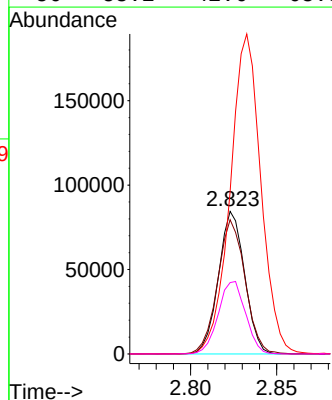
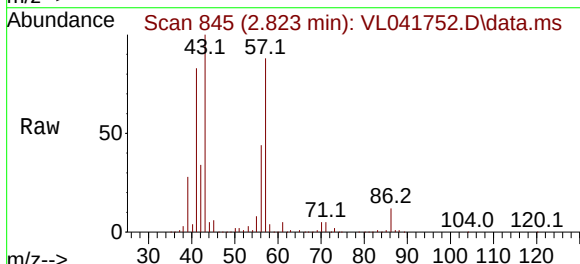
RT: 2.823 min Scan# 845

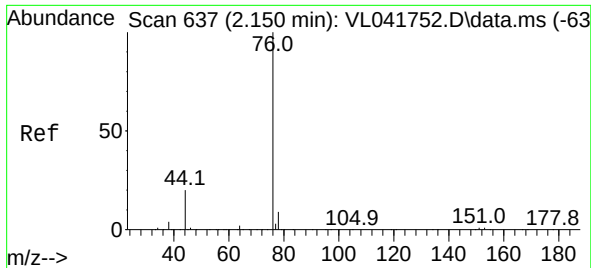
Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

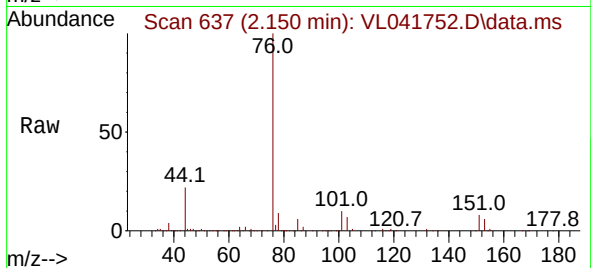
|             |             |
|-------------|-------------|
| Tgt Ion: 57 | Resp: 89385 |
| Ion Ratio   | Lower Upper |
| 57 100      |             |
| 41 99.5     | 79.6 119.4  |
| 43 263.8    | 211.0 316.6 |
| 56 53.2     | 42.6 63.8   |





#27  
Carbon Disulfide  
Concen: 10.873 ppbv  
RT: 2.150 min Scan# 637  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

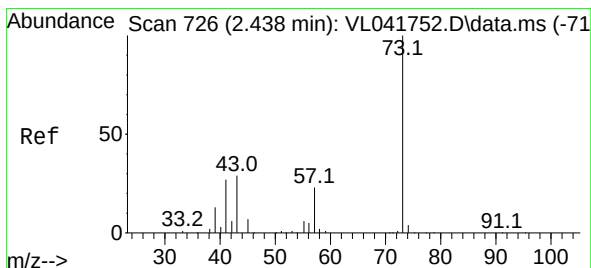
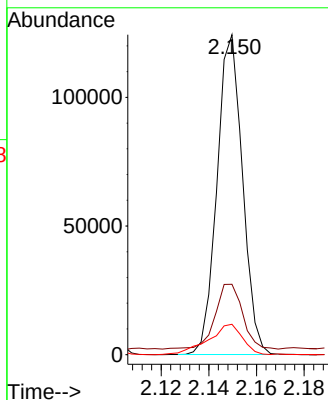
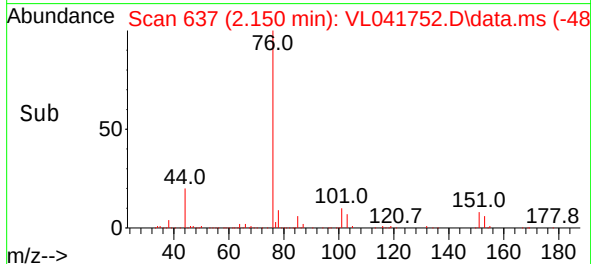
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



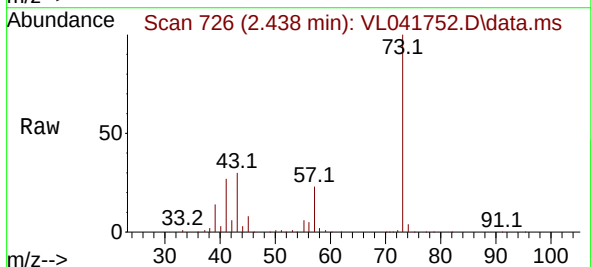
Tgt Ion: 76 Resp: 92329  
Ion Ratio Lower Upper  
76 100  
44 22.0 17.6 26.4  
78 12.8 10.2 15.4

Manual Integrations  
APPROVED

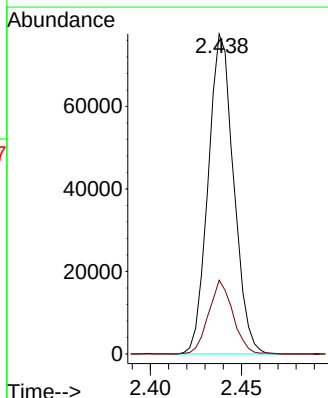
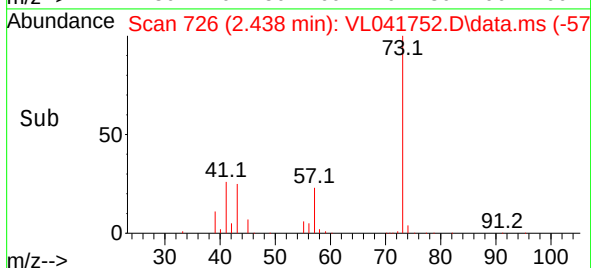
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

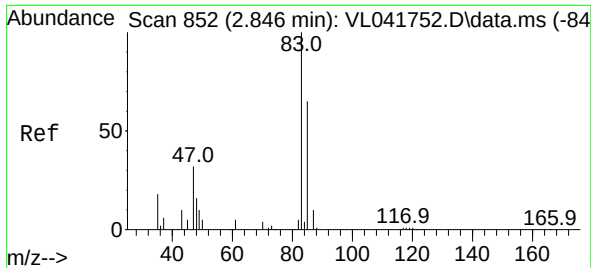


#28  
Methyl tert-Butyl Ether  
Concen: 9.854 ppbv  
RT: 2.438 min Scan# 726  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion: 73 Resp: 75330  
Ion Ratio Lower Upper  
73 100  
57 22.0 17.6 26.4





#29

Chloroform

Concen: 9.408 ppbv

RT: 2.846 min Scan# 852

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 83 Resp: 135099

Ion Ratio Lower Upper

83 100

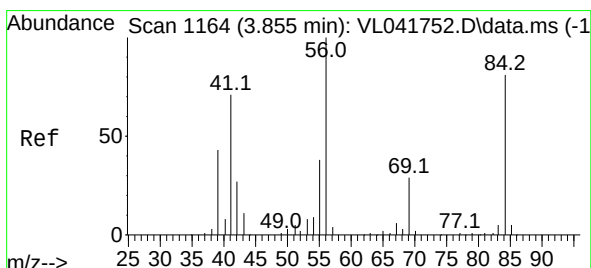
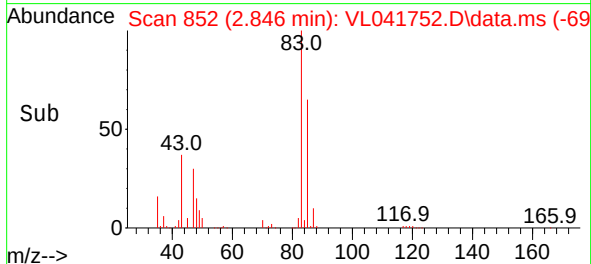
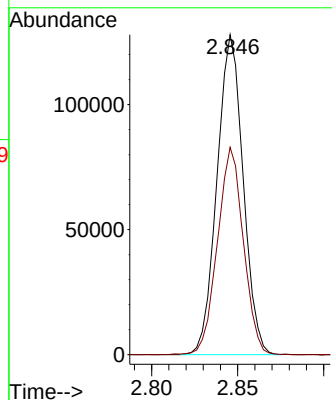
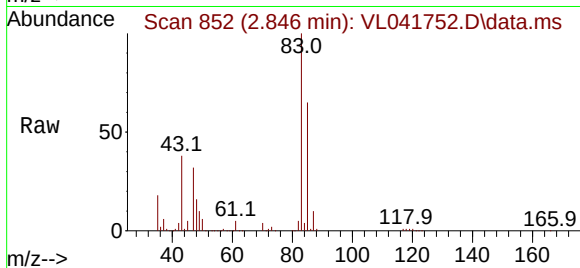
85 64.7 51.8 77.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#30

Cyclohexane

Concen: 9.374 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

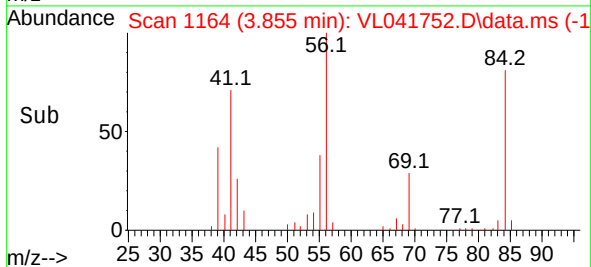
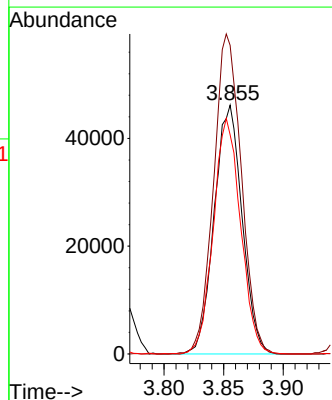
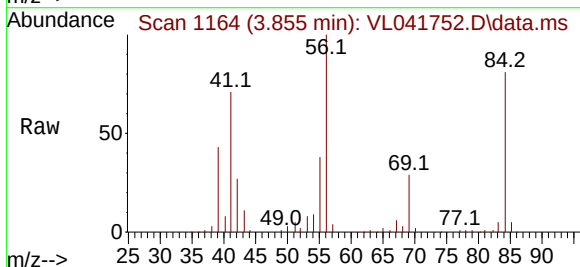
Tgt Ion: 84 Resp: 75156

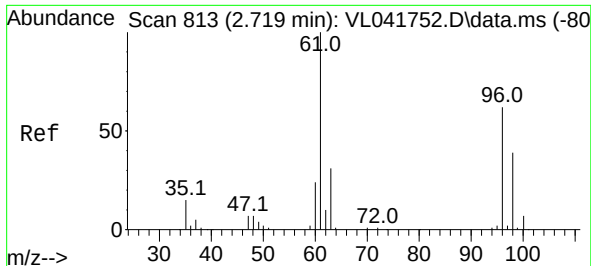
Ion Ratio Lower Upper

84 100

56 127.9 102.3 153.5

41 92.5 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 9.374 ppbv

RT: 2.719 min Scan# 813

Delta R.T. 0.000 min

Lab File: VL041752.D

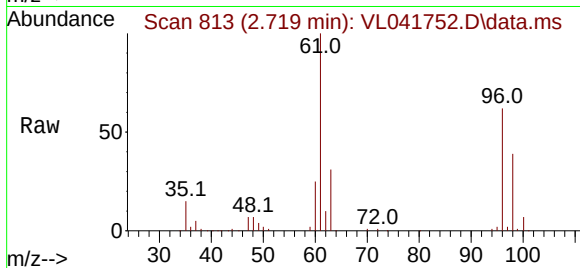
Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

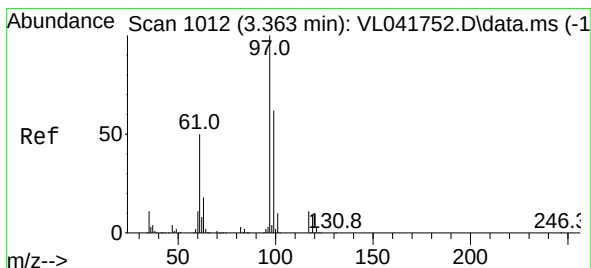
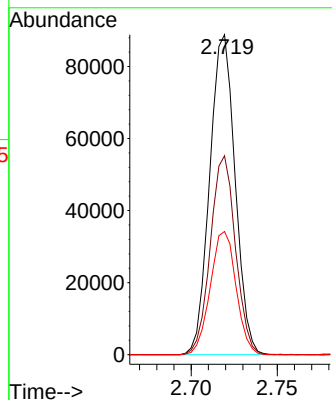
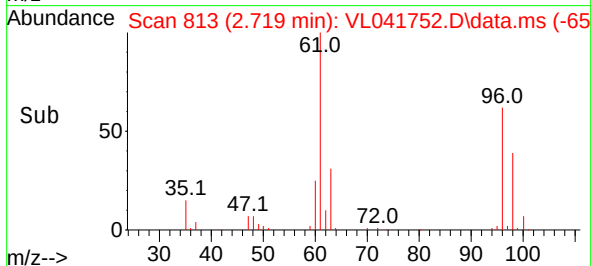


|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 61    | Resp: | 91270 |
| Ion Ratio | Lower | Upper |       |
| 61        | 100   |       |       |
| 96        | 62.1  | 49.7  | 74.5  |
| 98        | 38.5  | 30.8  | 46.2  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#32

1,1,1-Trichloroethane

Concen: 9.733 ppbv

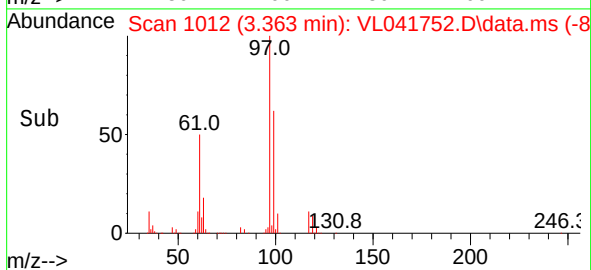
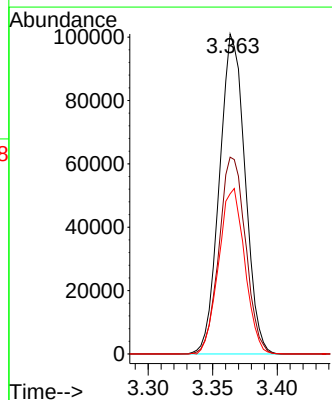
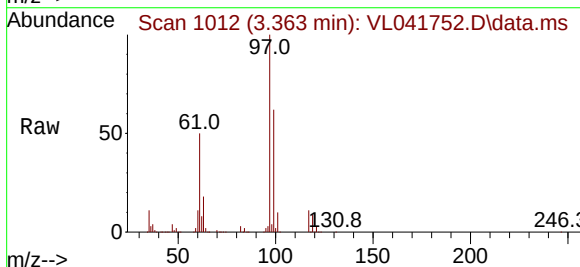
RT: 3.363 min Scan# 1012

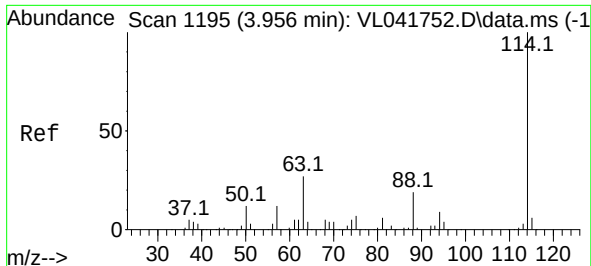
Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 97    | Resp: | 139102 |
| Ion Ratio | Lower | Upper |        |
| 97        | 100   |       |        |
| 99        | 63.7  | 51.0  | 76.4   |
| 61        | 52.7  | 42.2  | 63.2   |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.956 min Scan# 1195

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

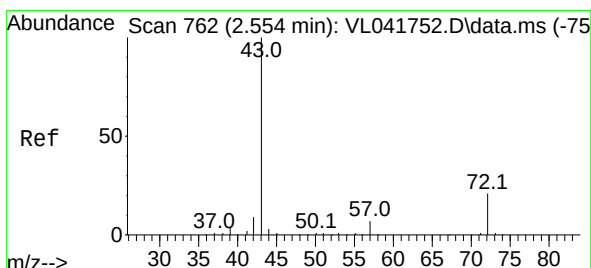
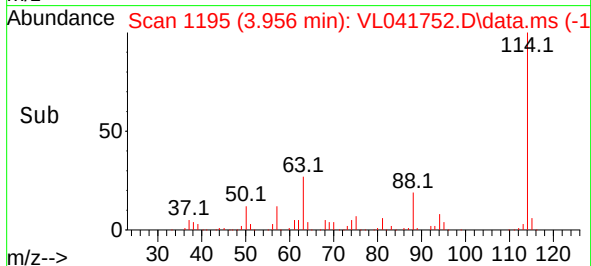
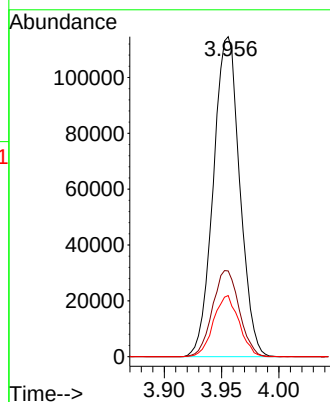
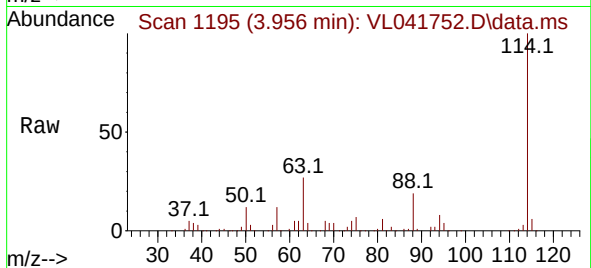
Tgt Ion:114 Resp: 183780

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 27.3  | 21.8  | 32.8  |
| 88  | 18.5  | 14.8  | 22.2  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#34

2-Butanone

Concen: 9.153 ppbv

RT: 2.554 min Scan# 762

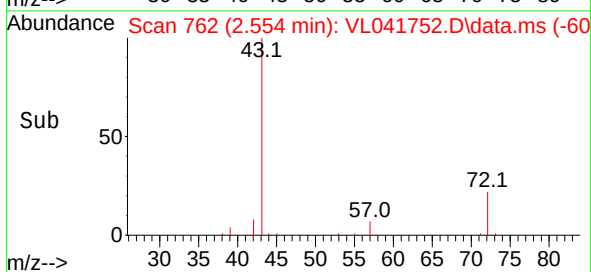
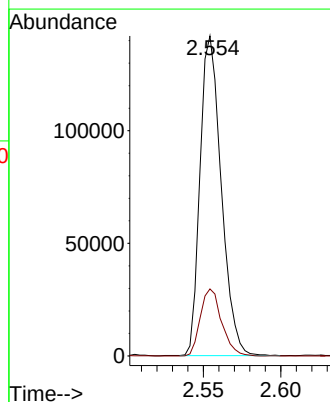
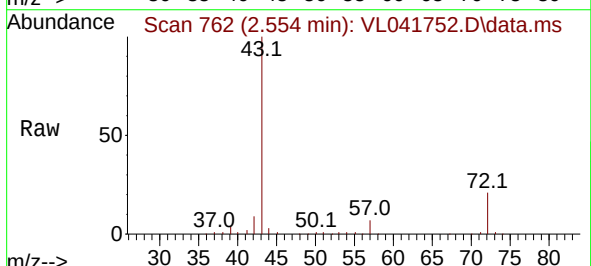
Delta R.T. 0.000 min

Lab File: VL041752.D

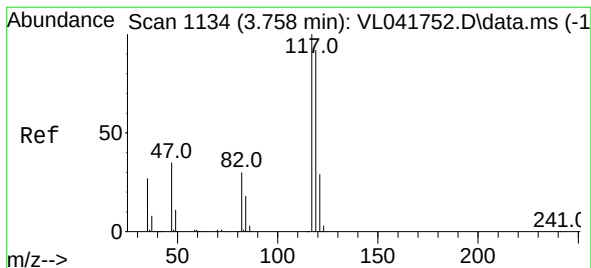
Acq: 16 Dec 2024 13:30

Tgt Ion: 43 Resp: 135331

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 21.0  | 16.8  | 25.2  |







#35

Carbon Tetrachloride

Concen: 10.650 ppbv

RT: 3.758 min Scan# 1134

Delta R.T. 0.000 min

Lab File: VL041752.D

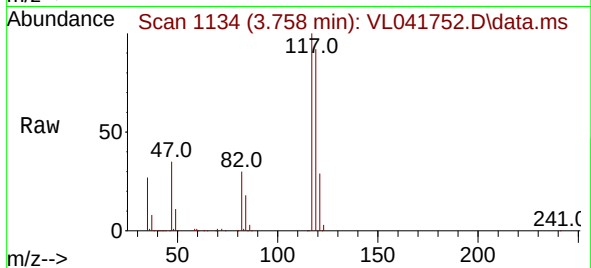
Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010



Tgt Ion:117 Resp: 138952

Ion Ratio Lower Upper

117 100

119 92.1 73.7 110.5

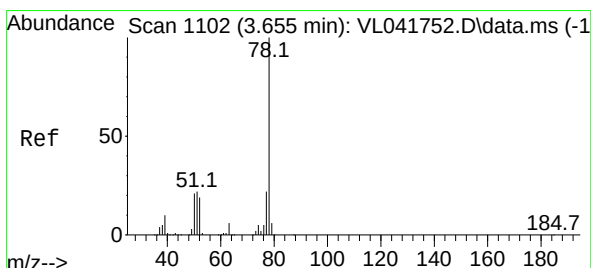
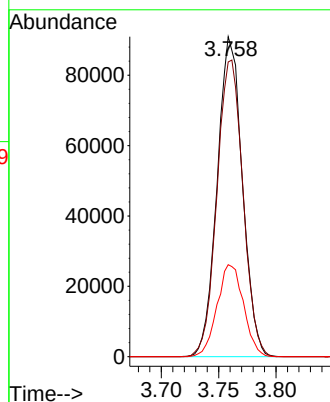
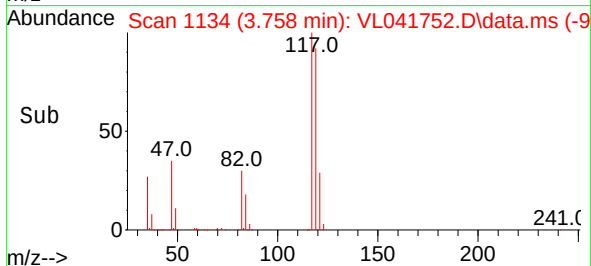
121 28.7 23.0 34.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#36

Benzene

Concen: 9.423 ppbv

RT: 3.655 min Scan# 1102

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

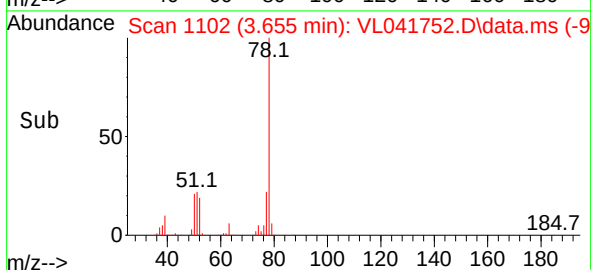
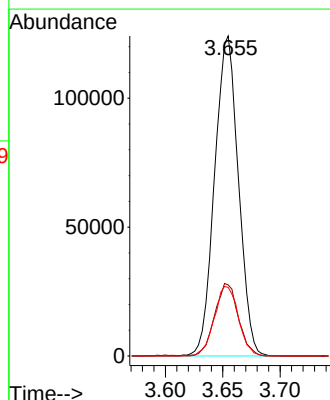
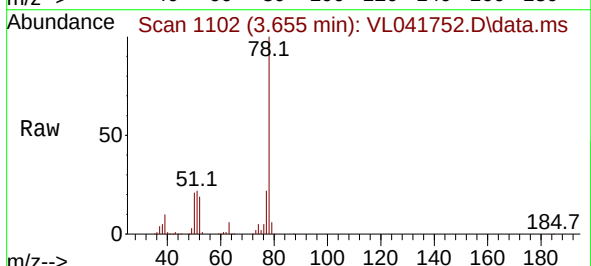
Tgt Ion: 78 Resp: 179134

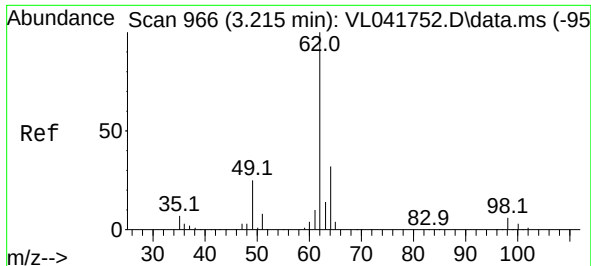
Ion Ratio Lower Upper

78 100

77 22.2 17.8 26.6

50 21.5 17.2 25.8





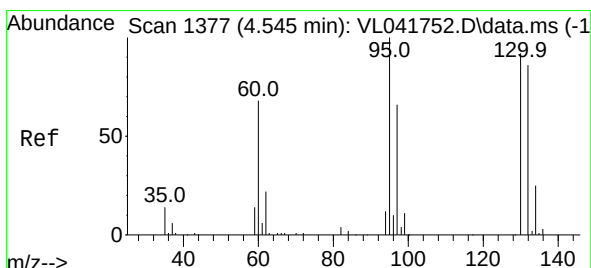
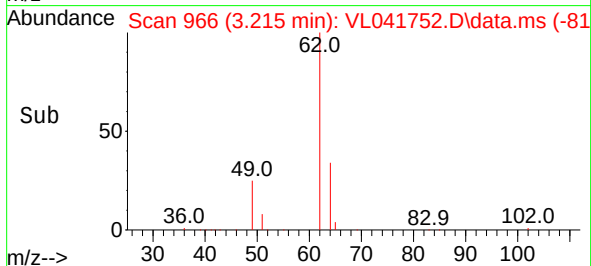
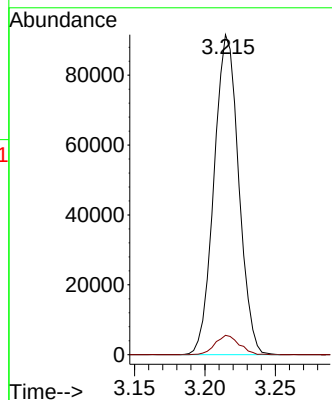
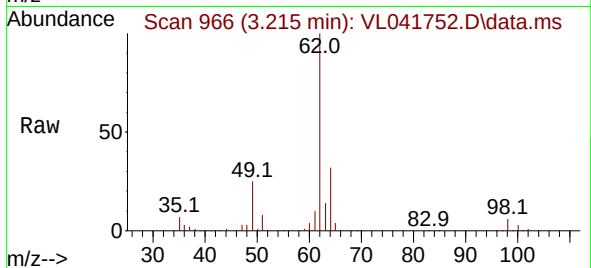
#37  
1,2-Dichloroethane  
Concen: 9.449 ppbv  
RT: 3.215 min Scan# 966  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 62 Resp: 111770  
Ion Ratio Lower Upper  
62 100  
98 5.9 4.7 7.1

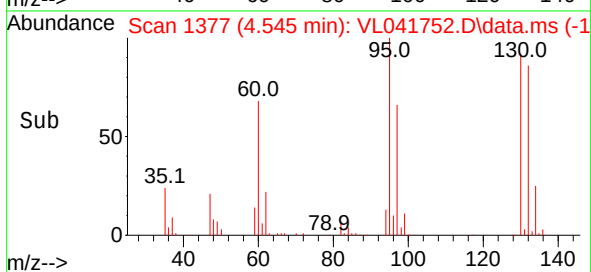
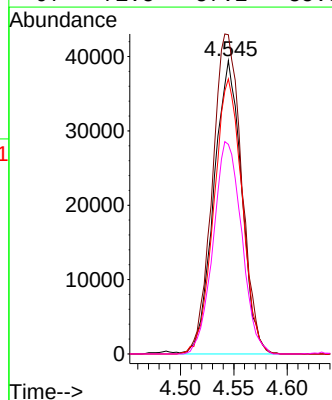
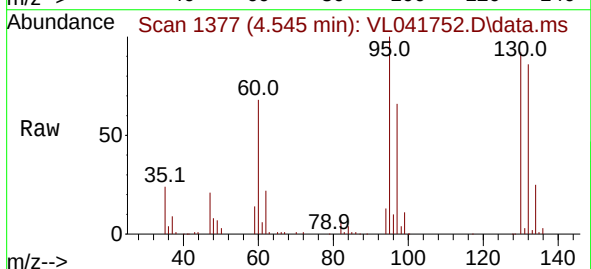
Manual Integrations  
APPROVED

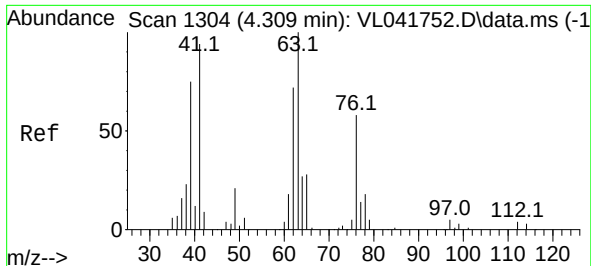
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38  
Trichloroethene  
Concen: 8.907 ppbv  
RT: 4.545 min Scan# 1377  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:130 Resp: 71297  
Ion Ratio Lower Upper  
130 100  
95 108.8 87.0 130.6  
132 93.8 75.0 112.6  
97 71.5 57.2 85.8





#39

1,2-Dichloropropane

Concen: 9.423 ppbv

RT: 4.309 min Scan# 1304

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

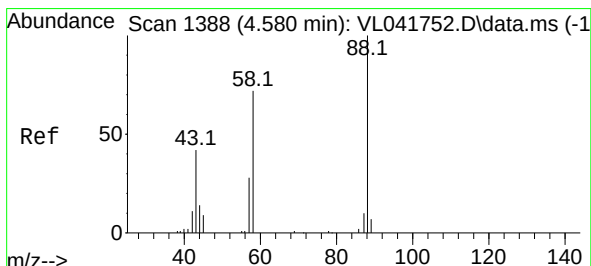
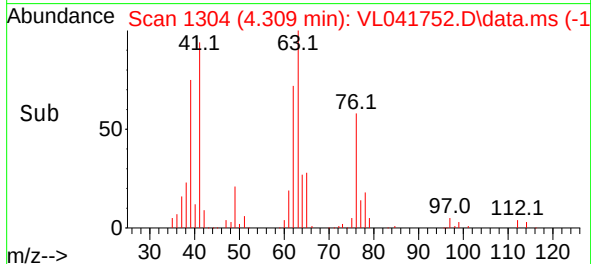
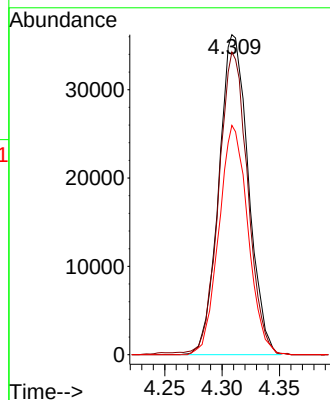
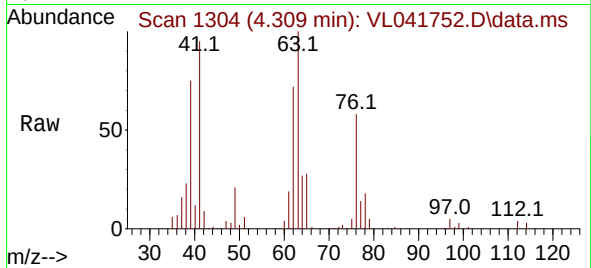
Tgt Ion: 63 Resp: 64789

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 41  | 94.1  | 75.3  | 112.9 |
| 62  | 71.6  | 57.3  | 85.9  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#40

1,4-Dioxane

Concen: 9.128 ppbv

RT: 4.580 min Scan# 1388

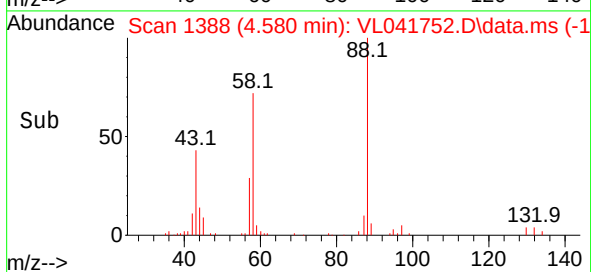
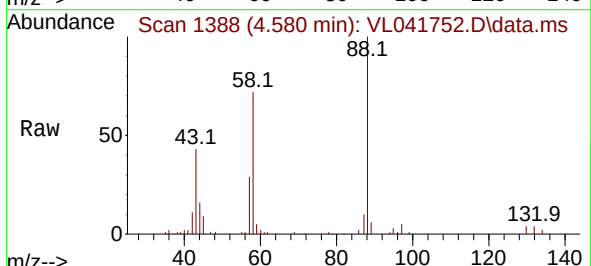
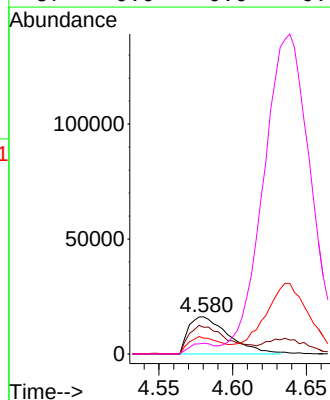
Delta R.T. 0.000 min

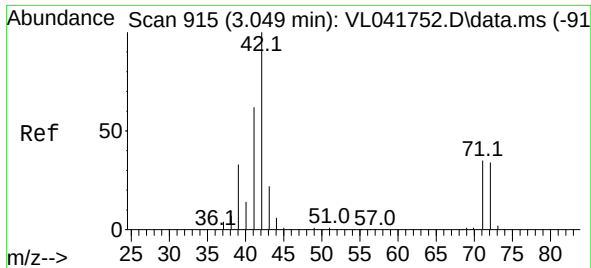
Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 88 Resp: 30658

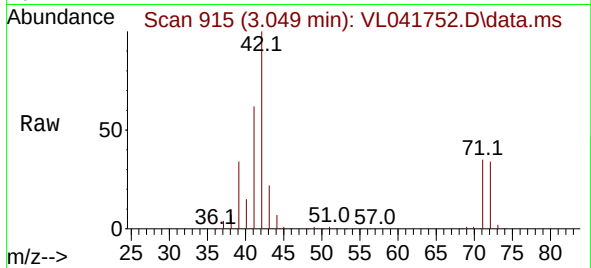
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 58  | 76.3  | 61.0  | 91.6  |
| 43  | 36.7  | 29.4  | 44.0  |
| 57  | 0.0   | 0.0   | 0.0   |





#41  
Tetrahydrofuran  
Concen: 9.474 ppbv  
RT: 3.049 min Scan# 915  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

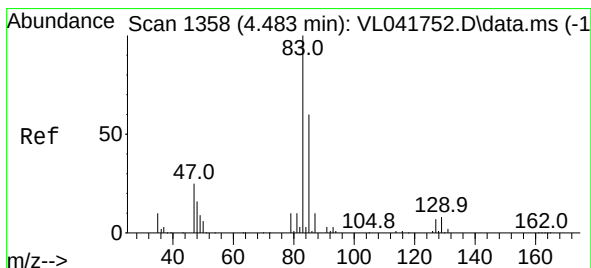
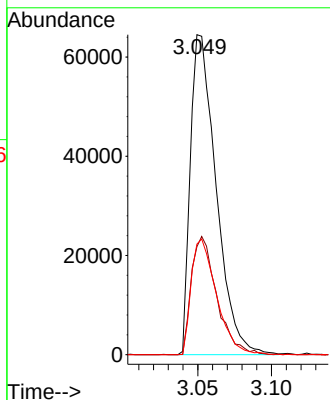
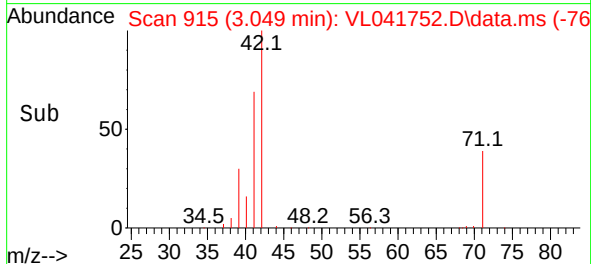
Instrument :  
MSVOA\_L  
Client Sample Id :  
VSTDICCC010



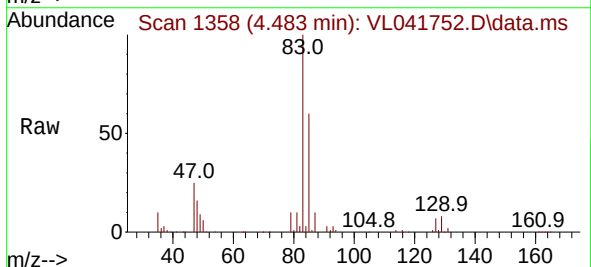
Tgt Ion: 42 Resp: 78480  
Ion Ratio Lower Upper  
42 100  
72 36.4 29.1 43.7  
71 35.5 28.4 42.6

Manual Integrations  
APPROVED

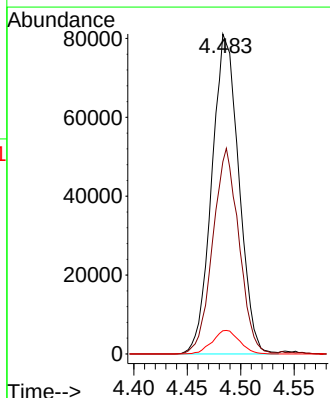
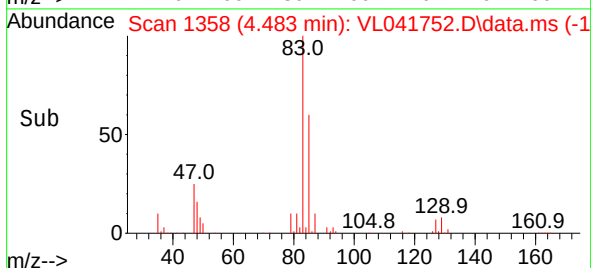
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

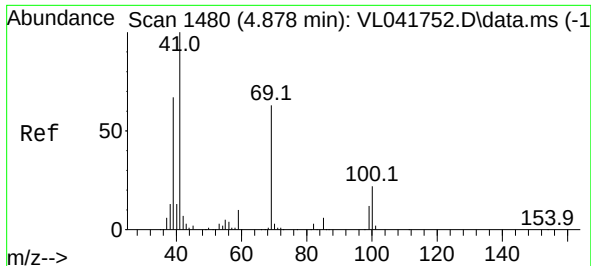


#42  
Bromodichloromethane  
Concen: 10.494 ppbv  
RT: 4.483 min Scan# 1358  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion: 83 Resp: 142819  
Ion Ratio Lower Upper  
83 100  
85 60.0 48.0 72.0  
127 7.3 5.8 8.8





#43

Methyl Methacrylate

Concen: 10.020 ppbv

RT: 4.878 min Scan# 1480

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

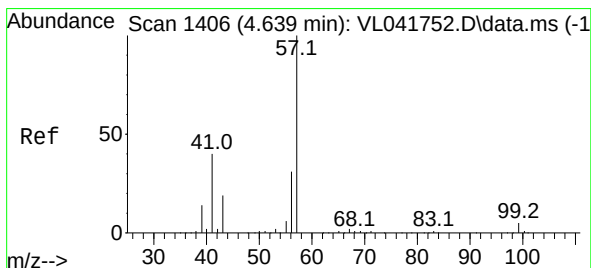
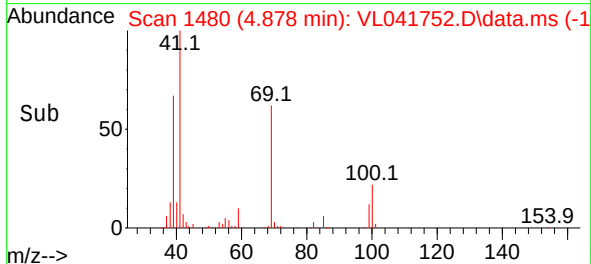
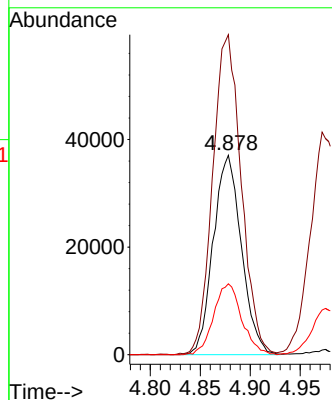
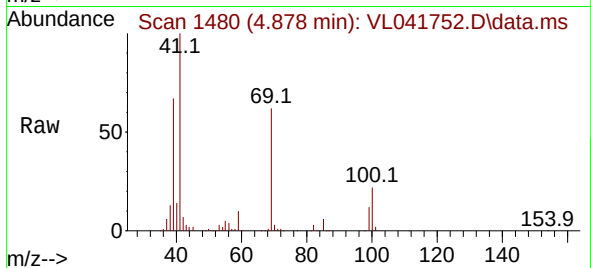
Tgt Ion: 69 Resp: 72578

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 162.9 | 130.3 | 195.5 |
| 100 | 35.4  | 28.3  | 42.5  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#44

2,2,4-Trimethylpentane

Concen: 9.479 ppbv

RT: 4.639 min Scan# 1406

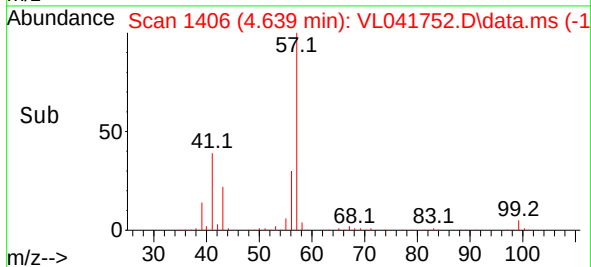
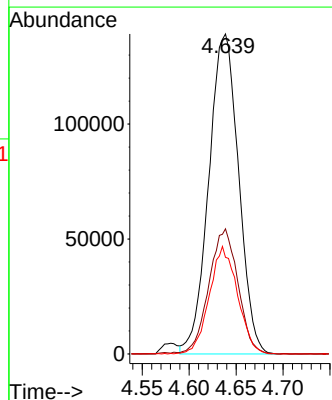
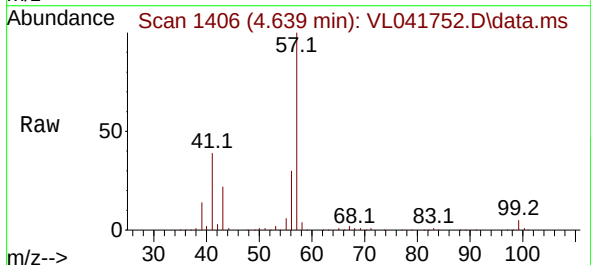
Delta R.T. 0.000 min

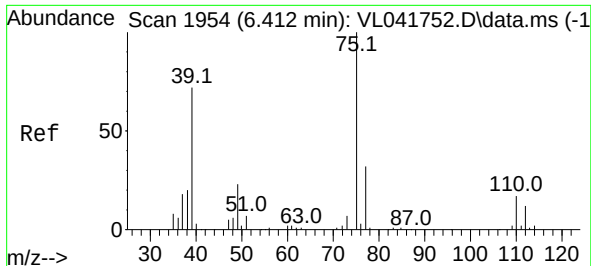
Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 57 Resp: 307748

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 38.4  | 30.7  | 46.1  |
| 56  | 31.7  | 25.4  | 38.0  |





#45

t-1,3-Dichloropropene

Concen: 10.378 ppbv

RT: 6.412 min Scan# 1954

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

Tgt Ion: 75 Resp: 7775

Ion Ratio Lower Upper

75 100

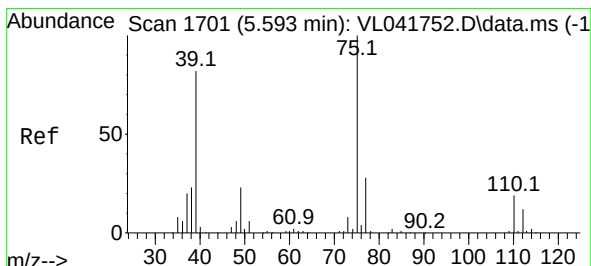
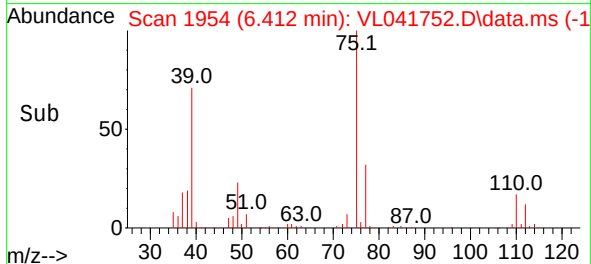
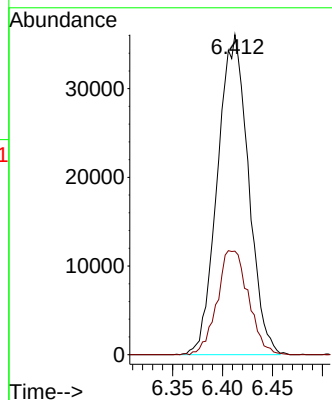
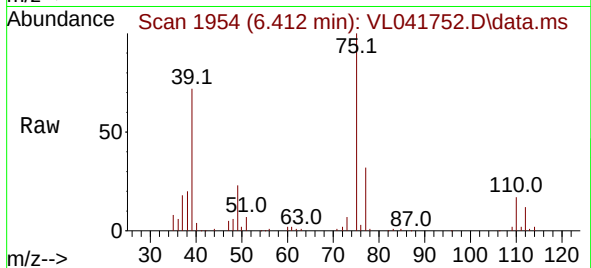
77 32.4 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#46

cis-1,3-Dichloropropene

Concen: 10.303 ppbv

RT: 5.593 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

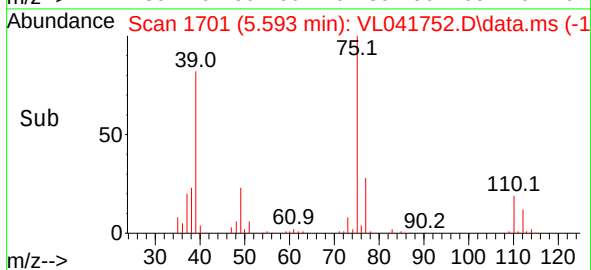
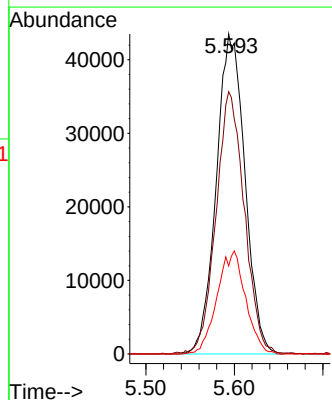
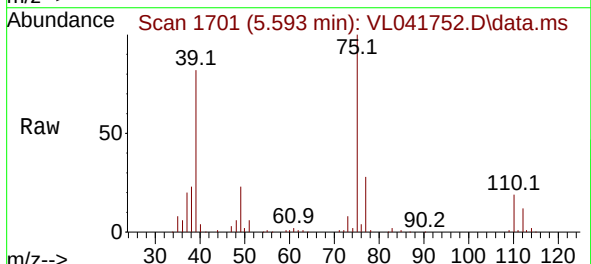
Tgt Ion: 75 Resp: 97992

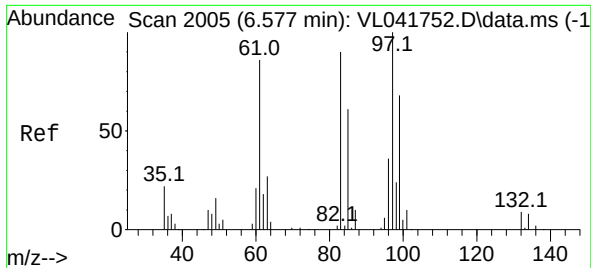
Ion Ratio Lower Upper

75 100

39 81.5 65.2 97.8

77 27.5 22.0 33.0





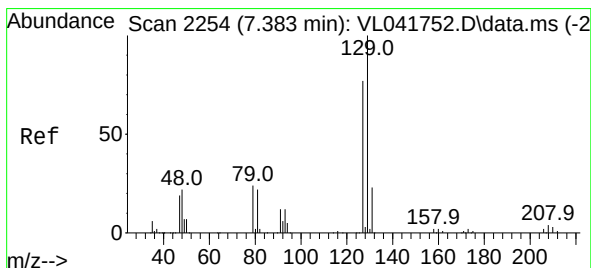
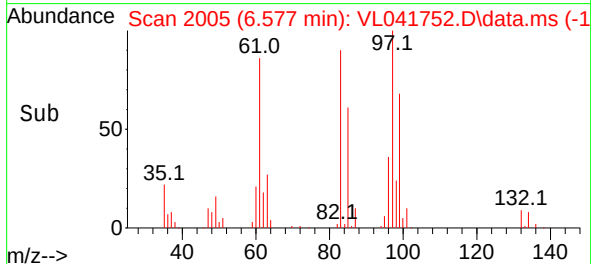
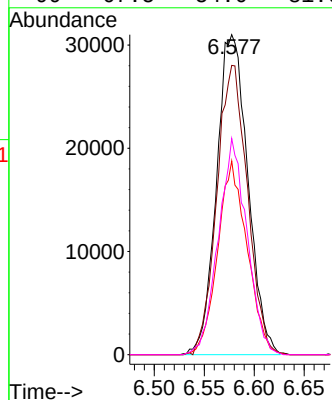
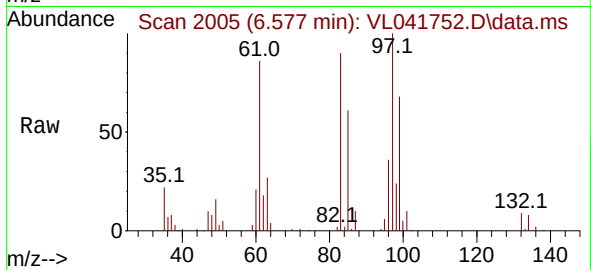
#47  
1,1,2-Trichloroethane  
Concen: 9.406 ppbv  
RT: 6.577 min Scan# 2005  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 97 Resp: 67550  
Ion Ratio Lower Upper  
97 100  
83 90.4 72.3 108.5  
85 60.6 48.5 72.7  
99 67.5 54.0 81.0

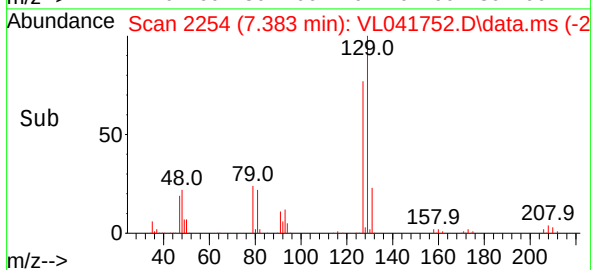
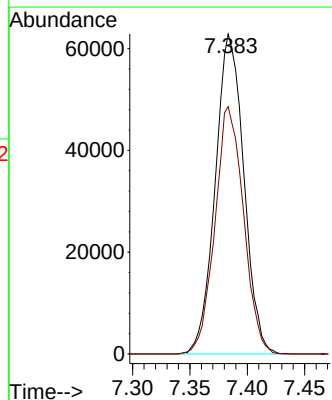
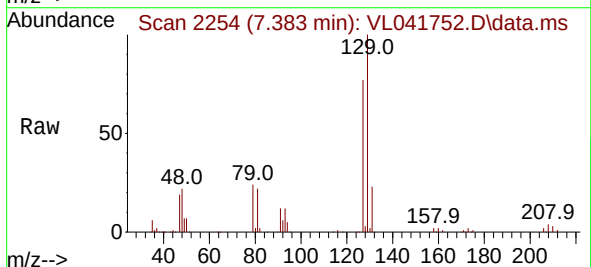
Manual Integrations  
APPROVED

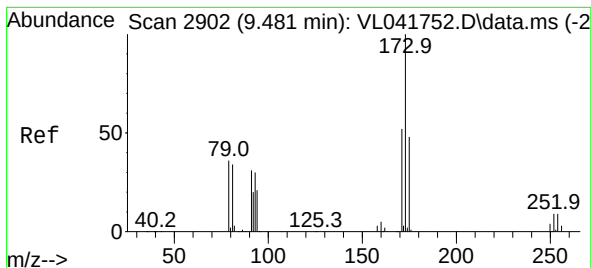
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#48  
Dibromochloromethane  
Concen: 11.105 ppbv  
RT: 7.383 min Scan# 2254  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:129 Resp: 108899  
Ion Ratio Lower Upper  
129 100  
127 77.5 38.8 116.3





#49

Bromoform

Concen: 11.410 ppbv

RT: 9.481 min Scan# 2902

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

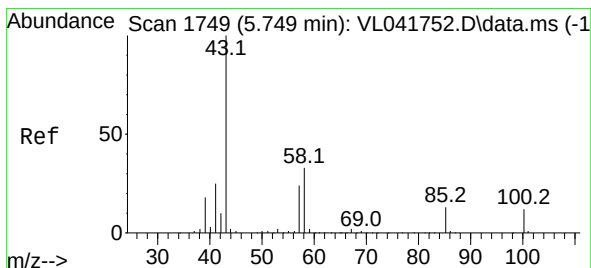
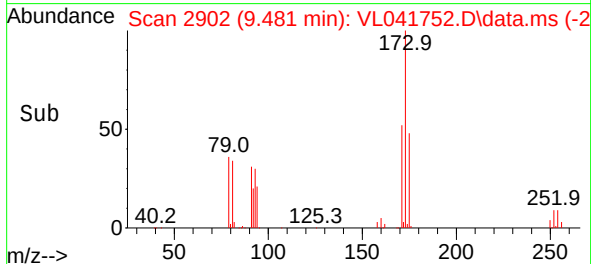
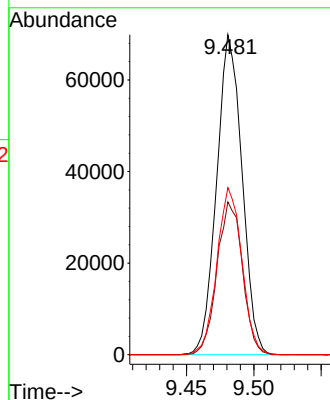
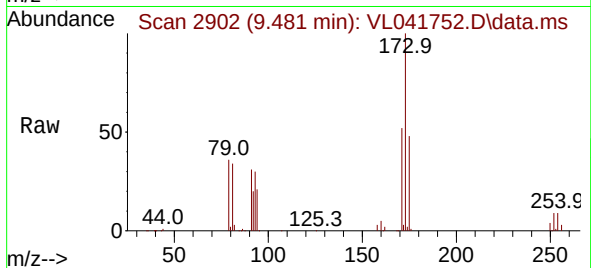
ClientSampleId :

VSTDICCC010

Tgt Ion:173 Resp: 9158  
 Ion Ratio Lower Upper  
 173 100  
 175 47.7 38.2 57.2  
 171 51.4 41.1 61.7

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#50

4-Methyl-2-Pentanone

Concen: 9.678 ppbv

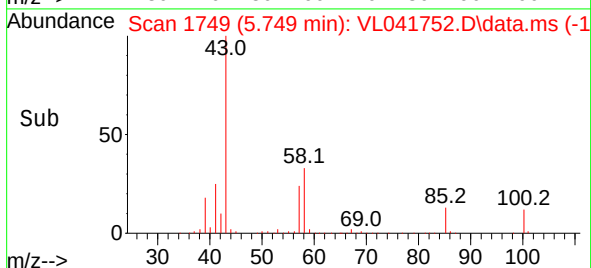
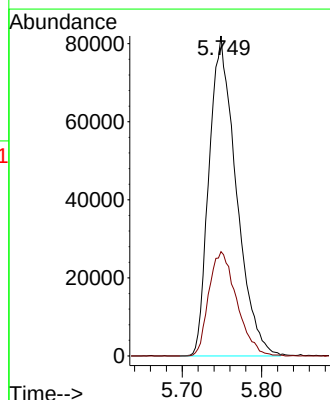
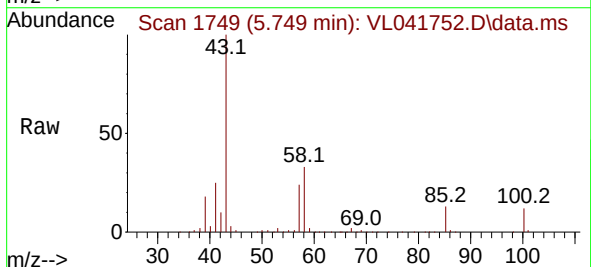
RT: 5.749 min Scan# 1749

Delta R.T. 0.000 min

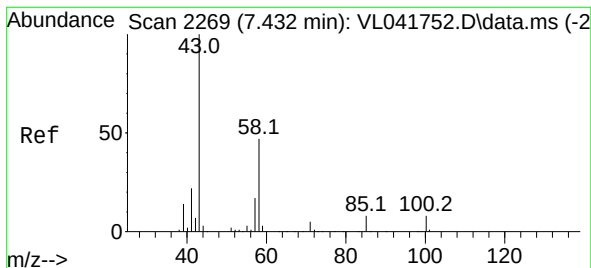
Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 43 Resp: 194838  
 Ion Ratio Lower Upper  
 43 100  
 58 33.5 26.8 40.2







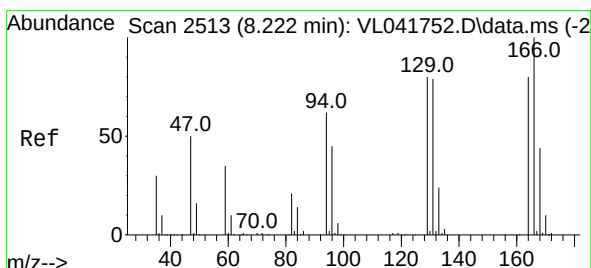
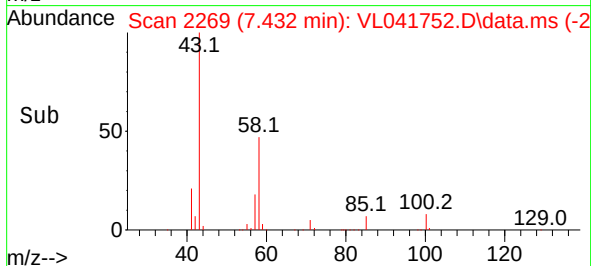
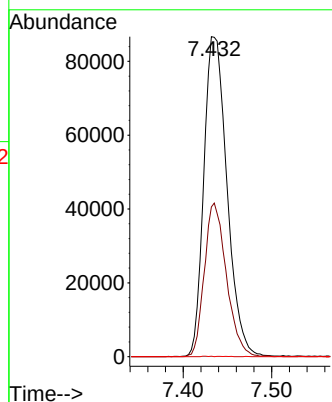
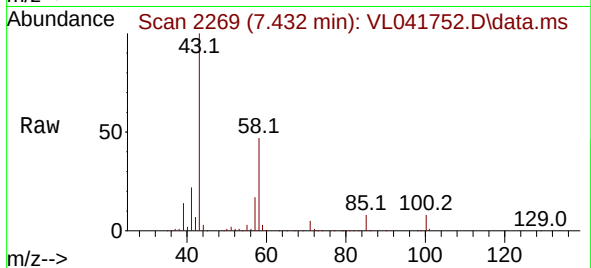
#51  
2-Hexanone  
Concen: 9.650 ppbv  
RT: 7.432 min Scan# 2269  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 43 Resp: 15747  
Ion Ratio Lower Upper  
43 100  
58 45.8 36.6 55.0  
98 0.1 0.1 0.1

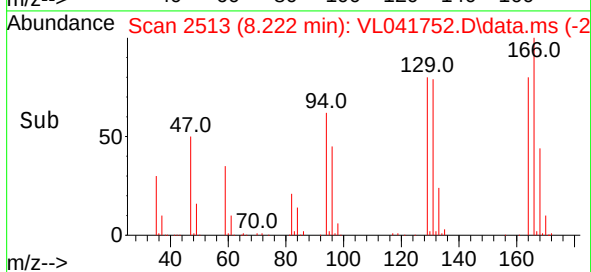
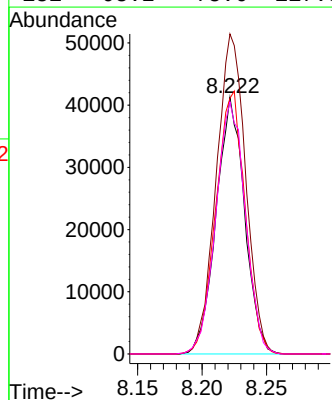
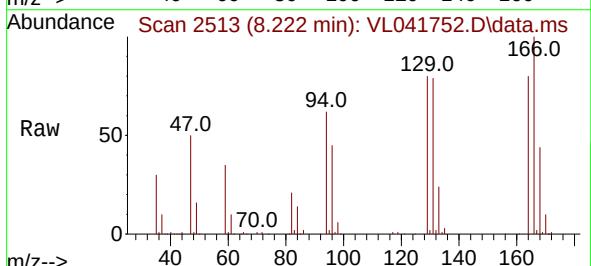
Manual Integrations  
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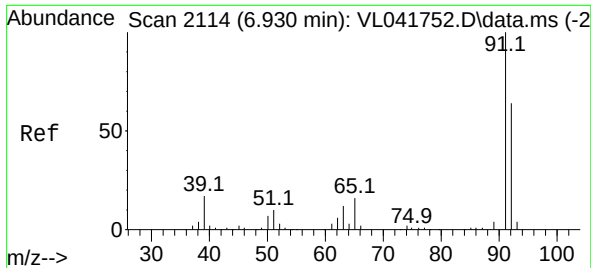
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#52  
Tetrachloroethene  
Concen: 8.901 ppbv  
RT: 8.222 min Scan# 2513  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:164 Resp: 62989  
Ion Ratio Lower Upper  
164 100  
166 124.7 99.8 149.6  
129 99.5 79.6 119.4  
131 98.2 78.6 117.8





#53

Toluene

Concen: 9.574 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion: 91 Resp: 20635

Ion Ratio Lower Upper

91 100

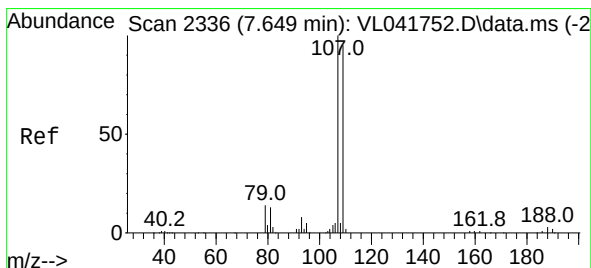
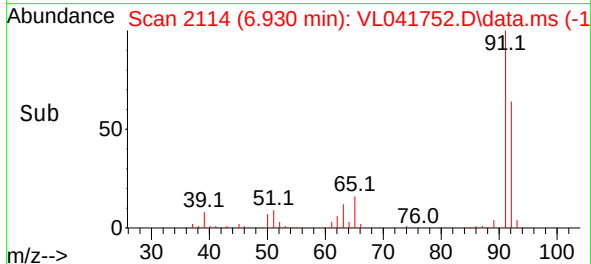
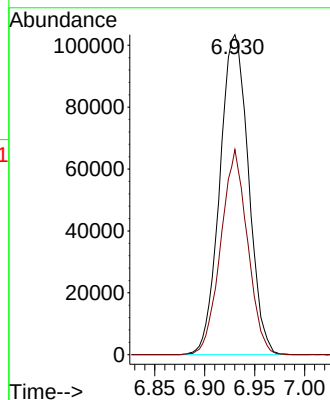
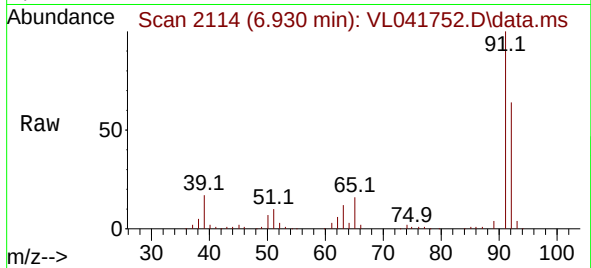
92 59.9 47.9 71.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#54

1,2-Dibromoethane

Concen: 9.501 ppbv

RT: 7.649 min Scan# 2336

Delta R.T. 0.000 min

Lab File: VL041752.D

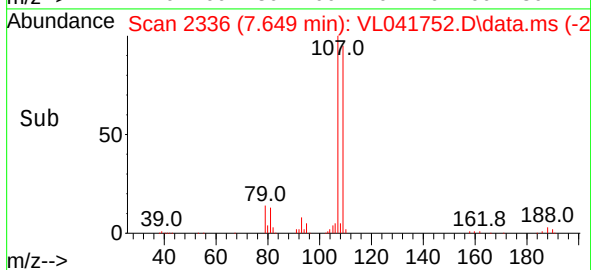
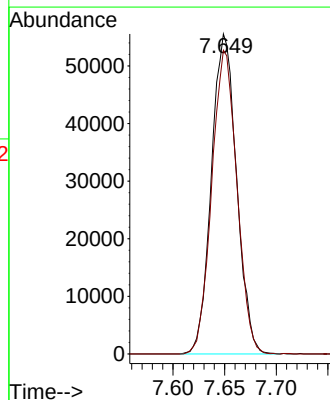
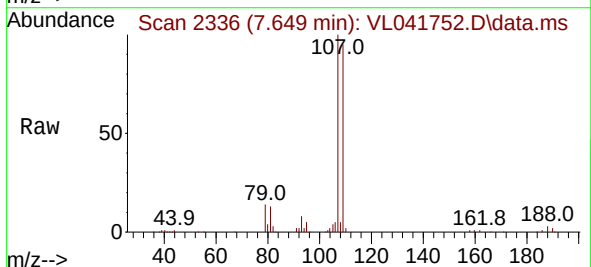
Acq: 16 Dec 2024 13:30

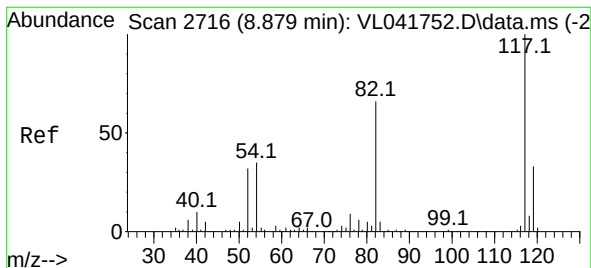
Tgt Ion:107 Resp: 94016

Ion Ratio Lower Upper

107 100

109 94.9 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.879 min Scan# 2716

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion:117 Resp: 16333

Ion Ratio Lower Upper

117 100

82 67.3 53.8 80.8

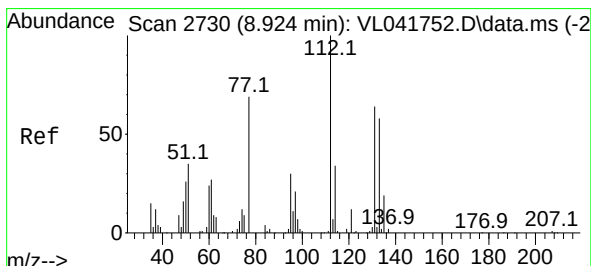
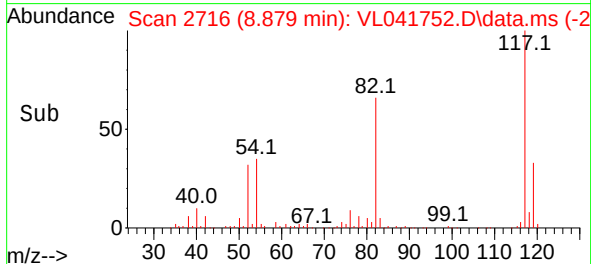
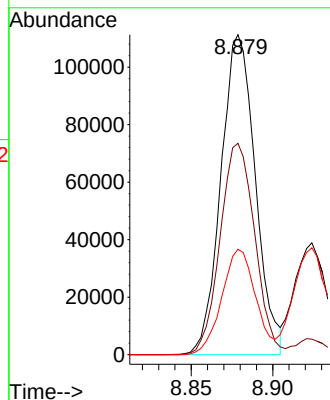
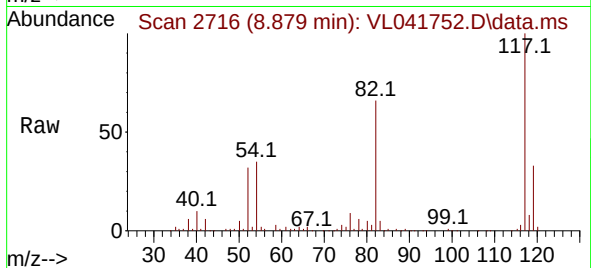
119 33.4 26.7 40.1

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#56

1,1,1,2-Tetrachloroethane

Concen: 10.027 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

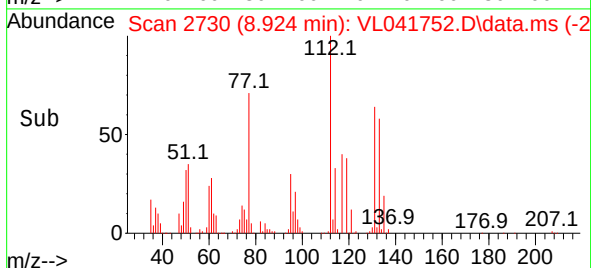
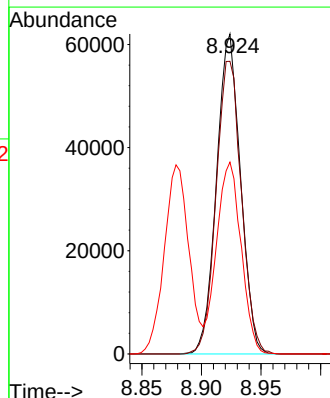
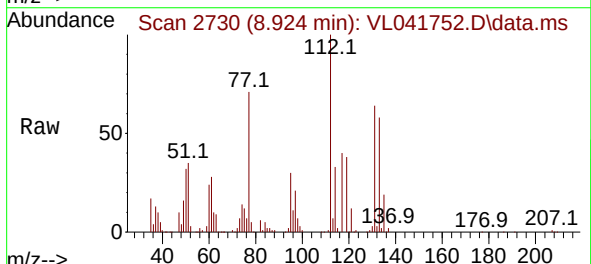
Tgt Ion:131 Resp: 86831

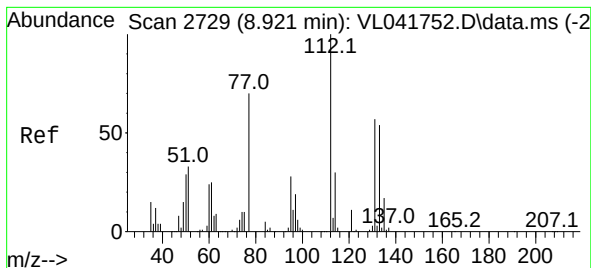
Ion Ratio Lower Upper

131 100

133 96.0 76.8 115.2

119 61.3 49.0 73.6





#57

Chlorobenzene

Concen: 9.295 ppbv

RT: 8.921 min Scan# 2729

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

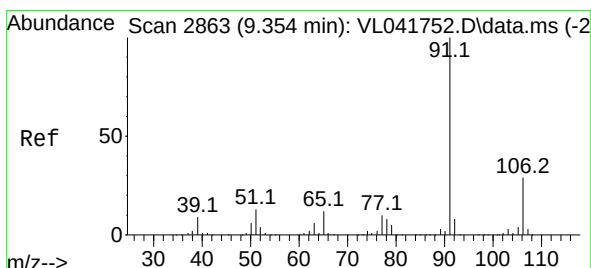
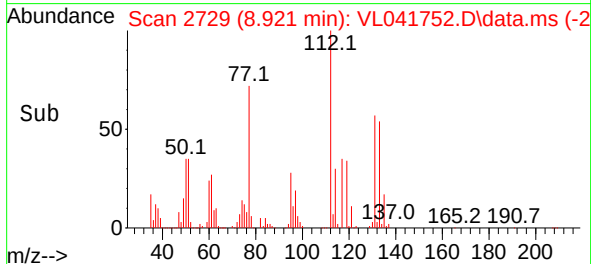
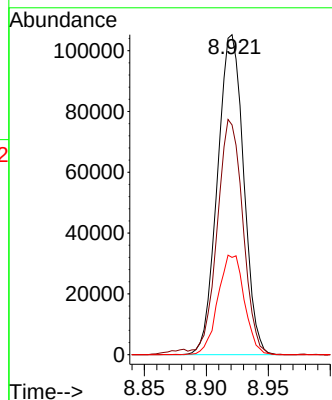
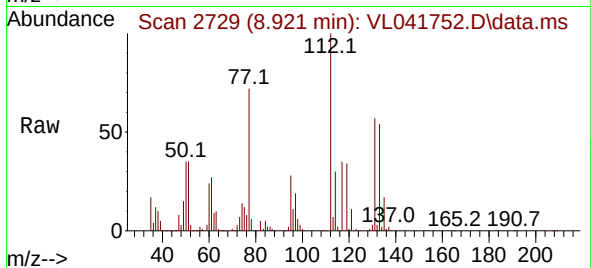
Tgt Ion: 112 Resp: 155349

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 77  | 71.7  | 57.4  | 86.0  |
| 114 | 30.4  | 27.4  | 33.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 9.853 ppbv

RT: 9.354 min Scan# 2863

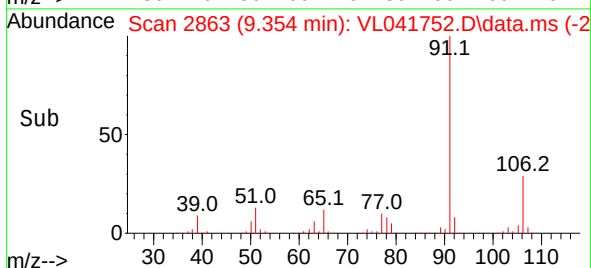
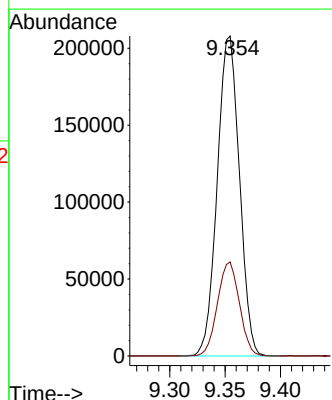
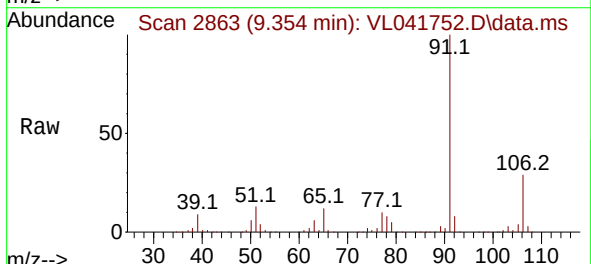
Delta R.T. 0.000 min

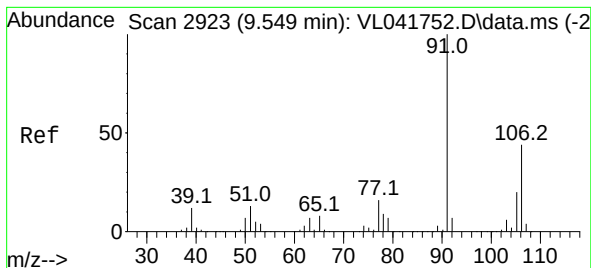
Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 91 Resp: 289734

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 29.4  | 23.5  | 35.3  |





#59

m/p-Xylene

Concen: 19.568 ppbv m

RT: 9.549 min Scan# 2923

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

Tgt Ion: 91 Resp: 46280

Ion Ratio Lower Upper

91 100

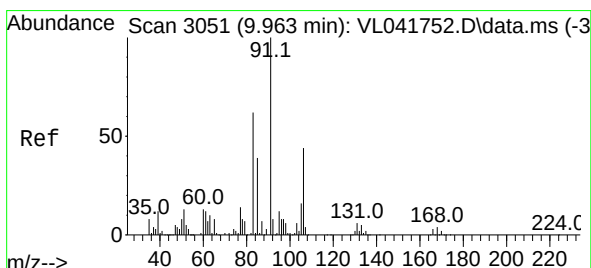
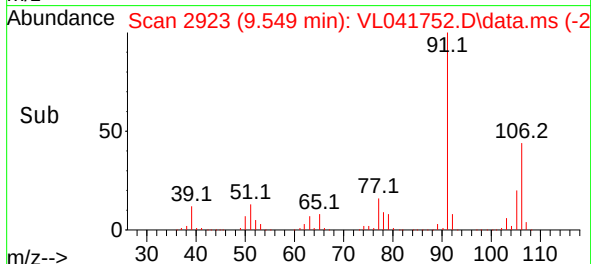
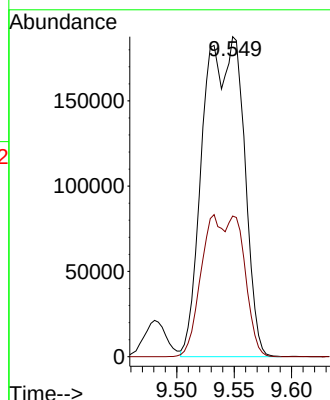
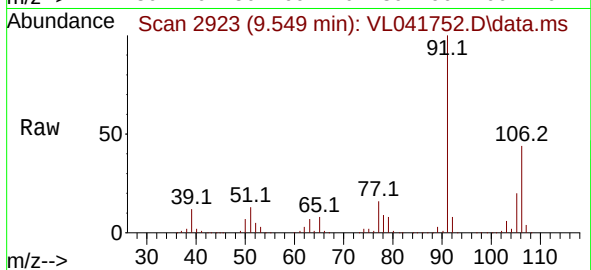
106 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#60

o-Xylene

Concen: 9.789 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. 0.000 min

Lab File: VL041752.D

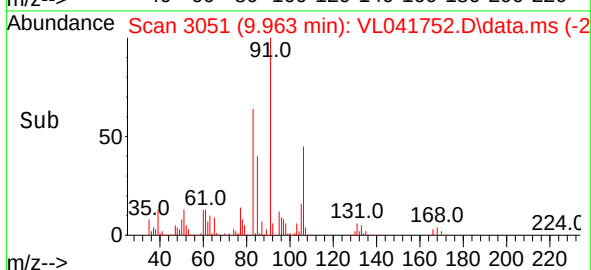
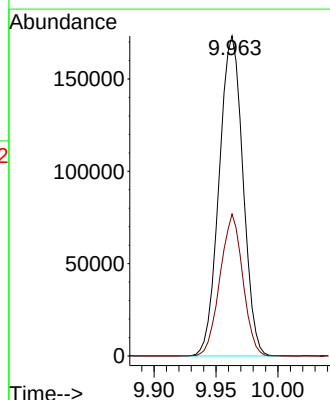
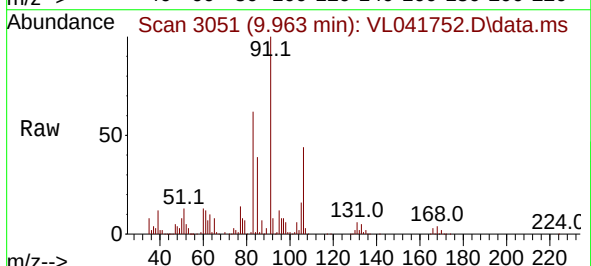
Acq: 16 Dec 2024 13:30

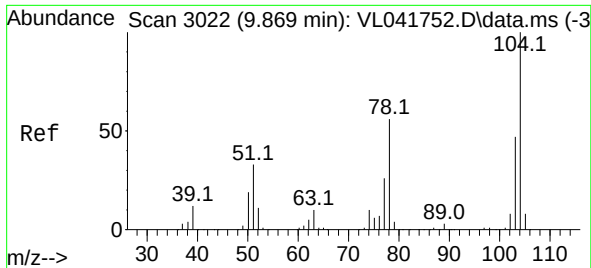
Tgt Ion: 91 Resp: 232101

Ion Ratio Lower Upper

91 100

106 42.3 21.1 63.4





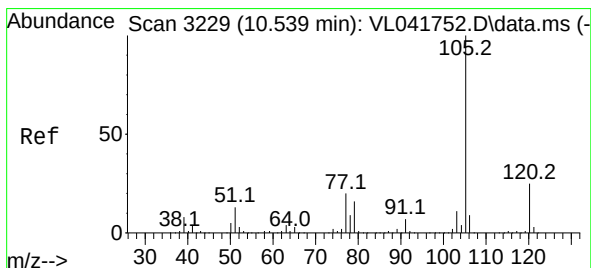
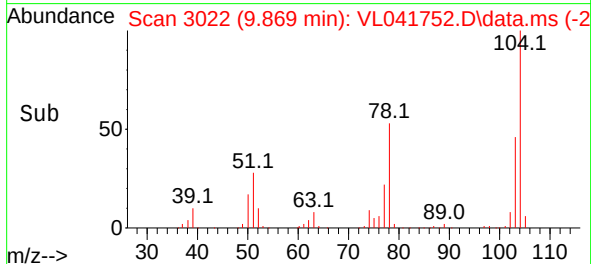
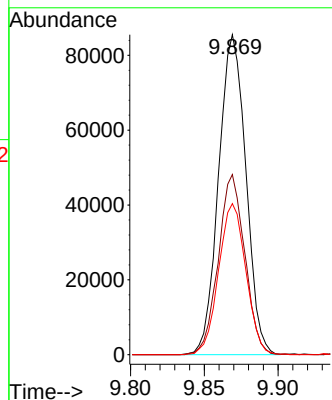
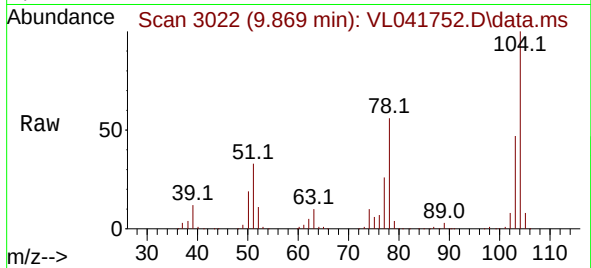
#61  
Styrene  
Concen: 10.733 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

Tgt Ion:104 Resp: 11004  
Ion Ratio Lower Upper  
104 100  
78 54.7 43.8 65.6  
103 47.2 37.8 56.6

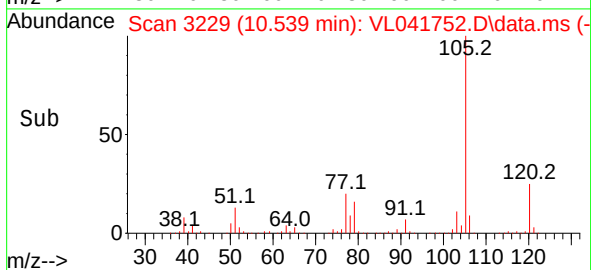
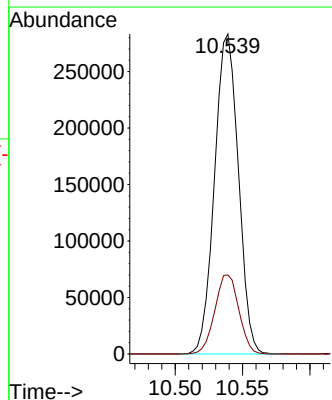
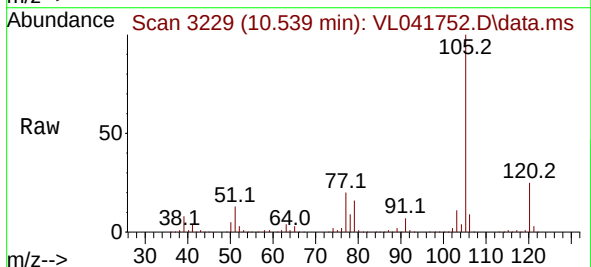
Manual Integrations  
APPROVED

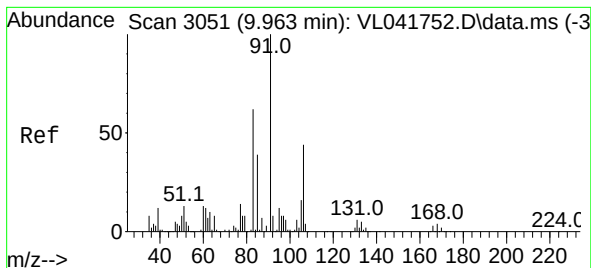
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#62  
Isopropylbenzene  
Concen: 9.788 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

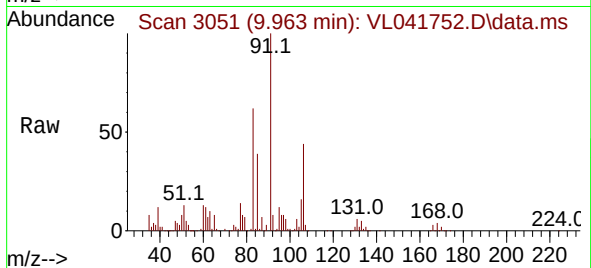
Tgt Ion:105 Resp: 348684  
Ion Ratio Lower Upper  
105 100  
120 24.8 19.8 29.8





#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.255 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

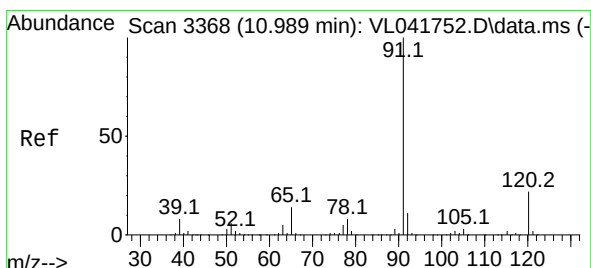
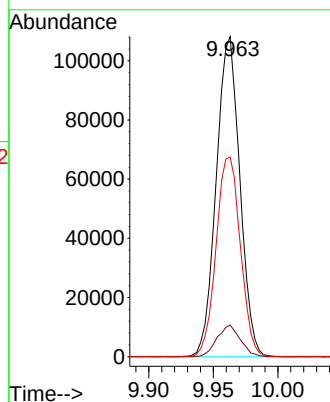
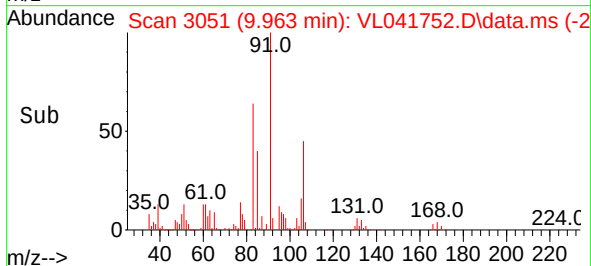
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



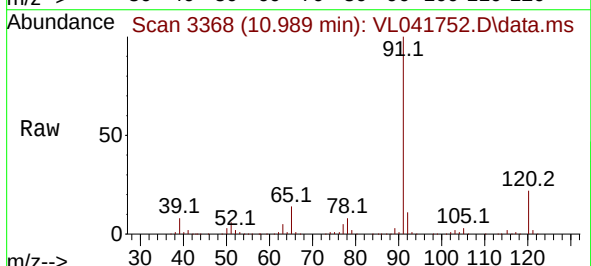
Tgt Ion: 83 Resp: 13736  
Ion Ratio Lower Upper  
83 100  
131 9.8 4.9 14.7  
85 64.1 32.0 96.2

Manual Integrations  
APPROVED

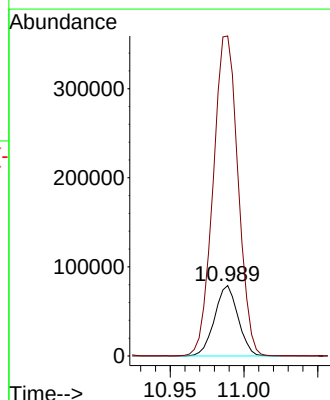
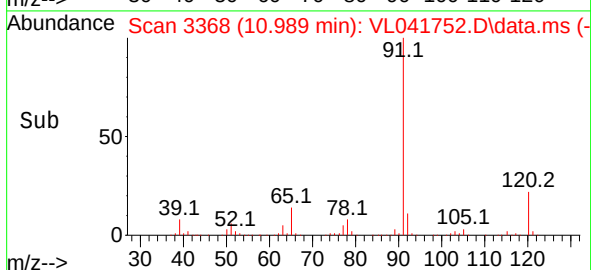
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

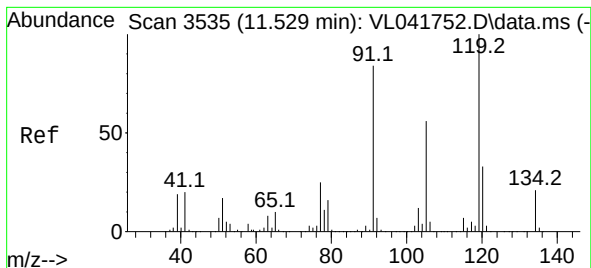


#64  
n-propylbenzene  
Concen: 9.700 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



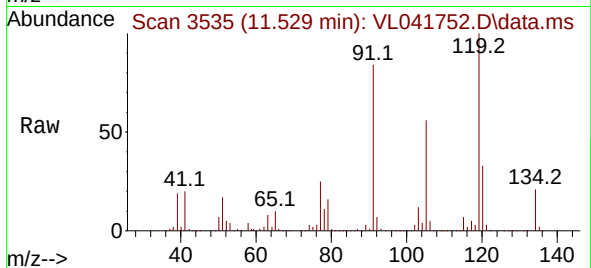
Tgt Ion:120 Resp: 87360  
Ion Ratio Lower Upper  
120 100  
91 484.1 387.3 580.9





#65  
tert-Butylbenzene  
Concen: 9.615 ppbv  
RT: 11.529 min Scan# 3535  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

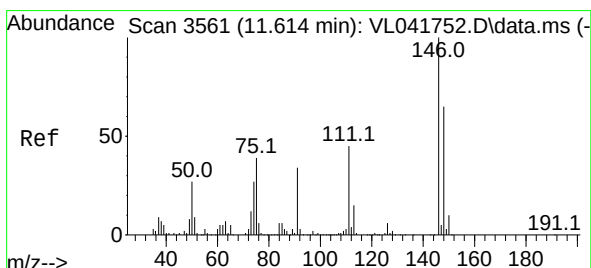
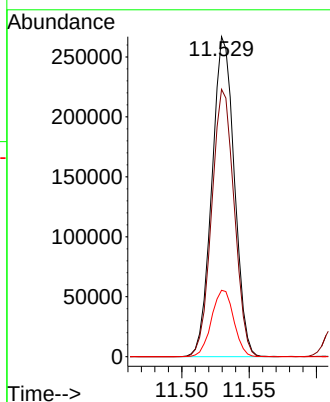
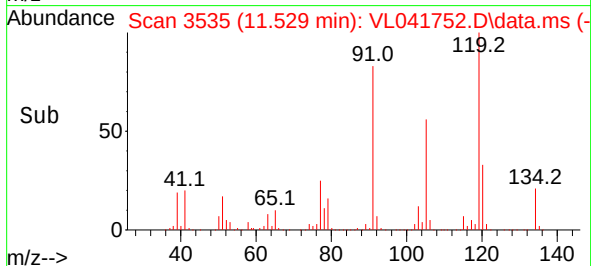
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



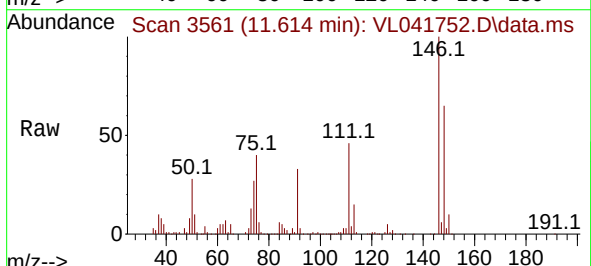
Tgt Ion:119 Resp: 309030  
Ion Ratio Lower Upper  
119 100  
91 83.7 67.0 100.4  
134 20.6 16.5 24.7

Manual Integrations  
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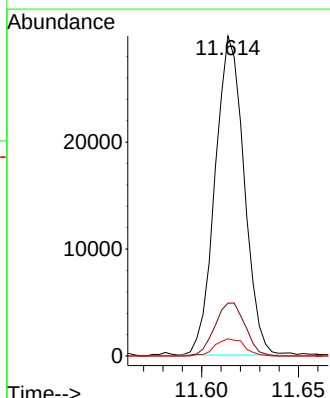
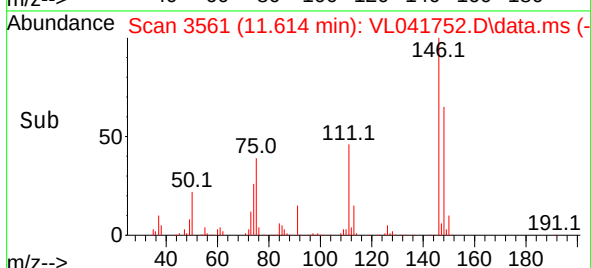
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



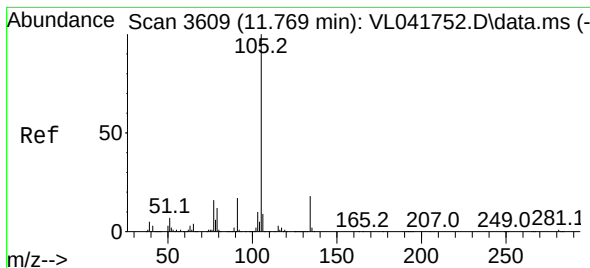
#66  
Benzyl Chloride  
Concen: 10.954 ppbv  
RT: 11.614 min Scan# 3561  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion: 91 Resp: 31039  
Ion Ratio Lower Upper  
91 100  
126 17.4 13.9 20.9  
128 5.5 4.4 6.6

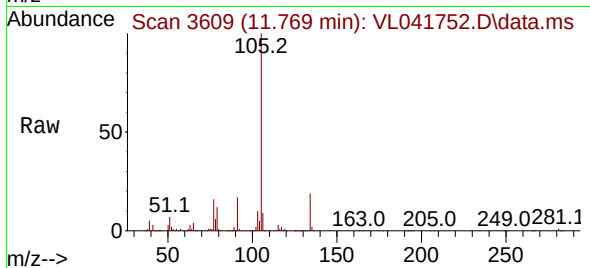






#67  
sec-Butylbenzene  
Concen: 9.687 ppbv  
RT: 11.769 min Scan# 3609  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

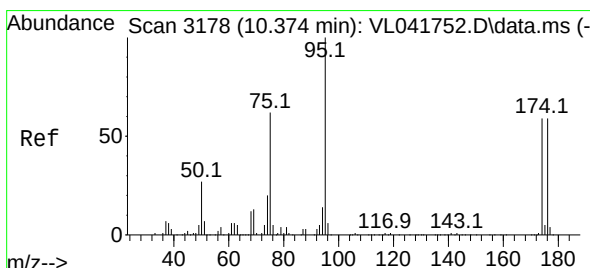
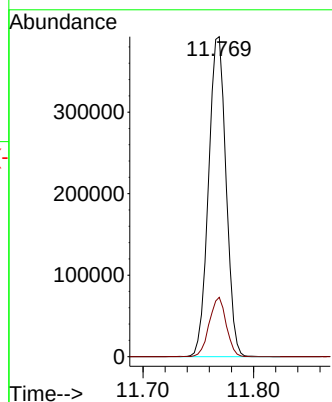
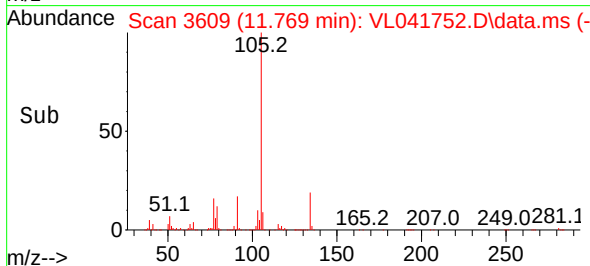
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



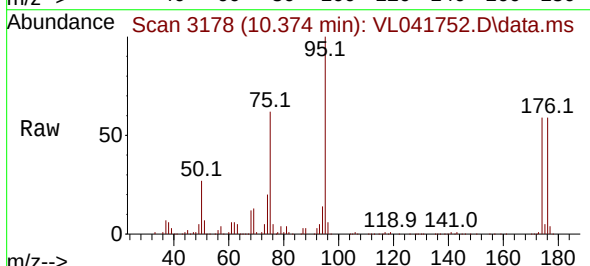
Tgt Ion:105 Resp: 430810  
Ion Ratio Lower Upper  
105 100  
134 18.1 14.5 21.7

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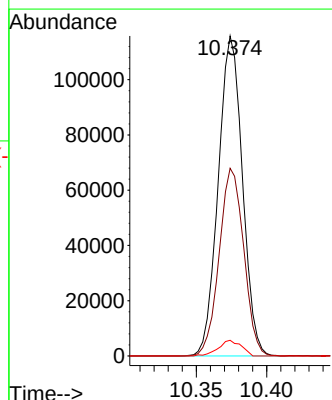
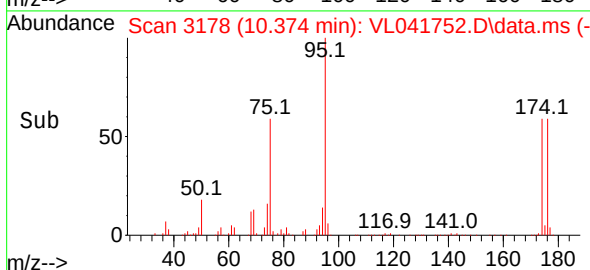
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

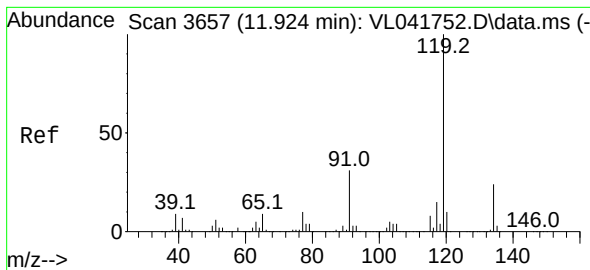


#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.172 ppbv  
RT: 10.374 min Scan# 3178  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion: 95 Resp: 138451  
Ion Ratio Lower Upper  
95 100  
174 59.5 47.6 71.4  
175 4.6 3.7 5.5





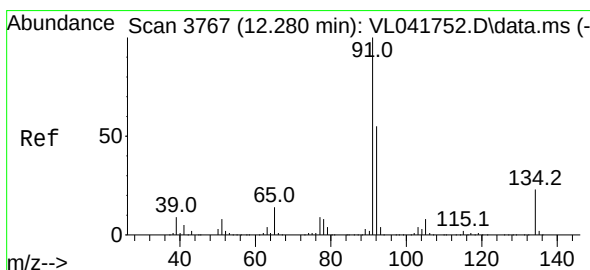
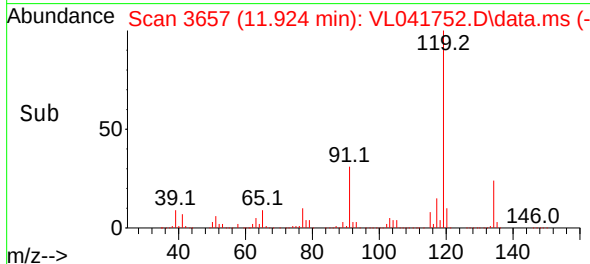
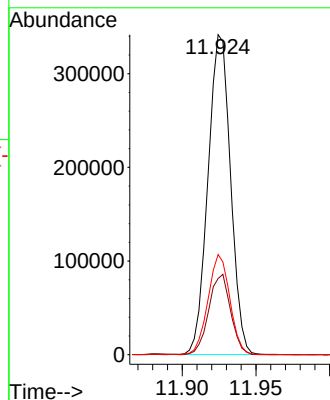
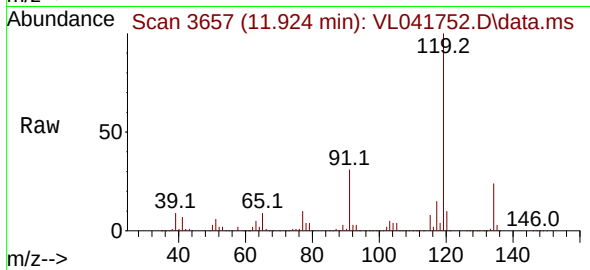
#69  
p-Isopropyltoluene  
Concen: 9.906 ppbv  
RT: 11.924 min Scan# 3657  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion:119 Resp: 363072  
Ion Ratio Lower Upper  
119 100  
134 24.5 19.6 29.4  
91 30.5 24.4 36.6

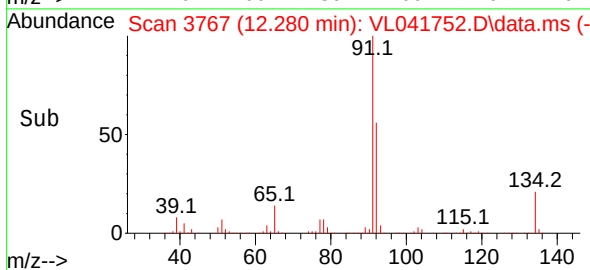
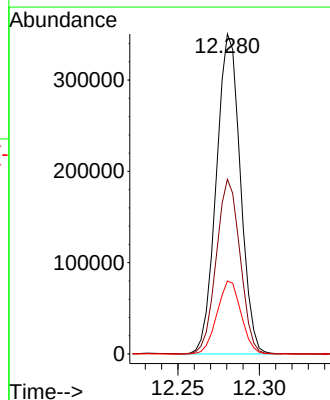
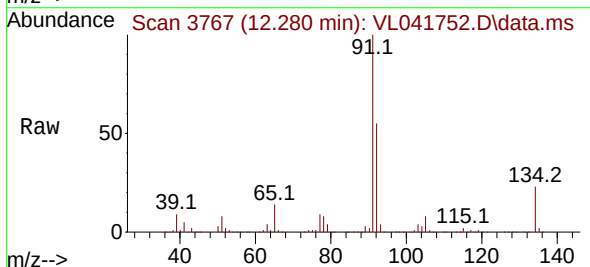
Manual Integrations  
APPROVED

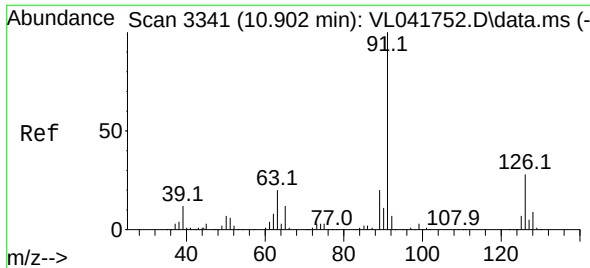
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#70  
n-Butylbenzene  
Concen: 10.137 ppbv  
RT: 12.280 min Scan# 3767  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 91 Resp: 358993  
Ion Ratio Lower Upper  
91 100  
92 54.0 43.2 64.8  
134 22.8 18.2 27.4





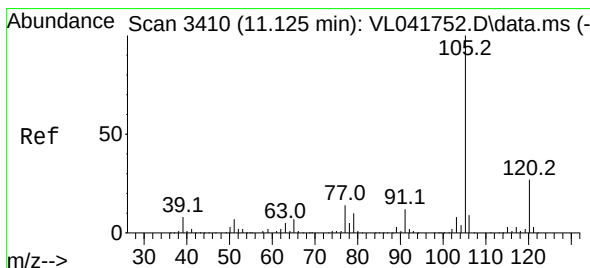
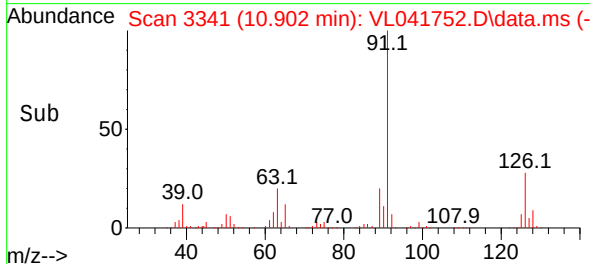
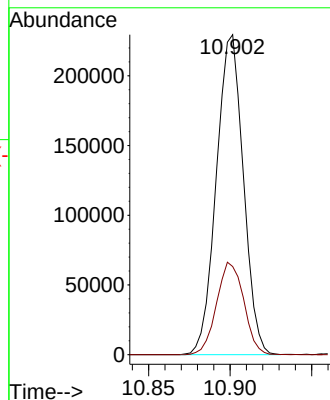
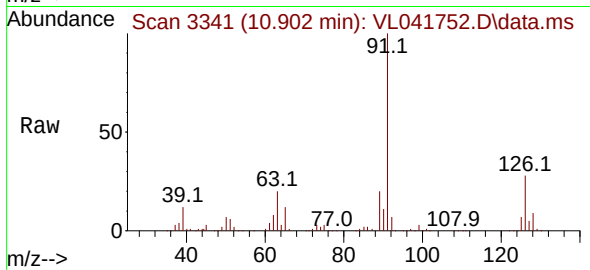
#71  
2-Chlorotoluene  
Concen: 9.708 ppbv  
RT: 10.902 min Scan# 3341  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 91 Resp: 264002  
Ion Ratio Lower Upper  
91 100  
126 29.0 11.6 46.4

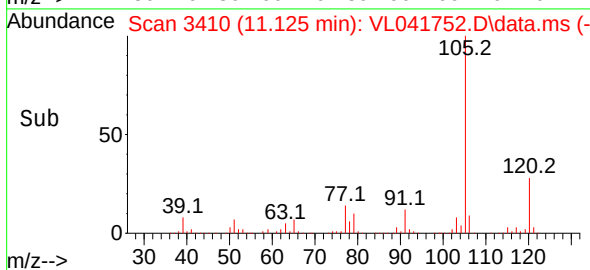
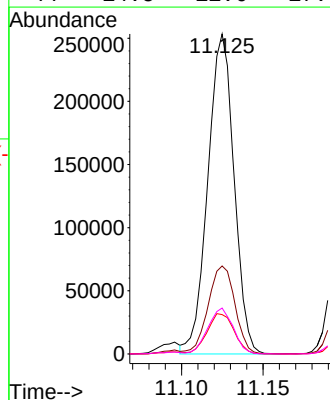
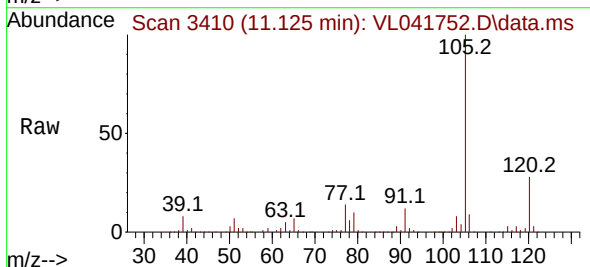
Manual Integrations  
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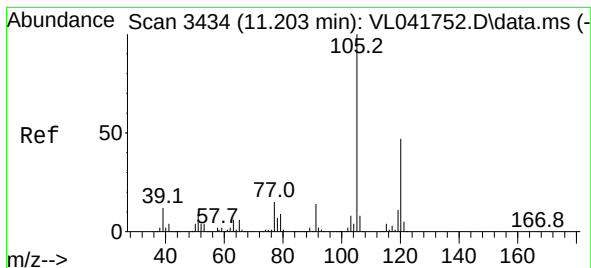
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 10.120 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:105 Resp: 282698  
Ion Ratio Lower Upper  
105 100  
120 29.1 23.3 34.9  
91 13.6 10.9 16.3  
77 14.5 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 10.304 ppbv

RT: 11.203 min Scan# 3434

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tgt Ion:105 Resp: 23926

Ion Ratio Lower Upper

105 100

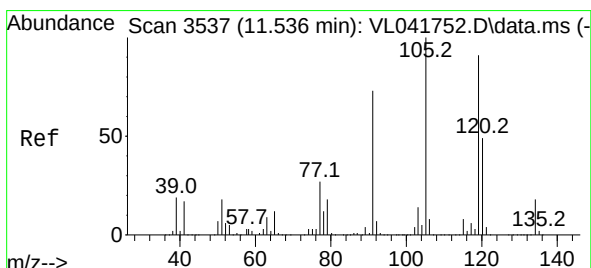
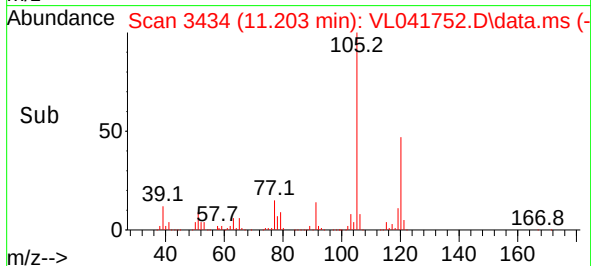
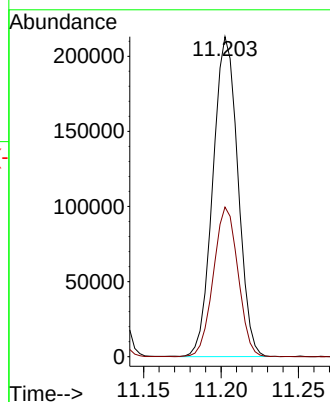
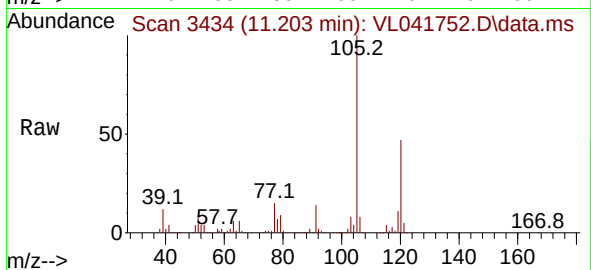
120 46.8 37.4 56.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#74

1,2,4-Trimethylbenzene

Concen: 10.244 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion:105 Resp: 255780

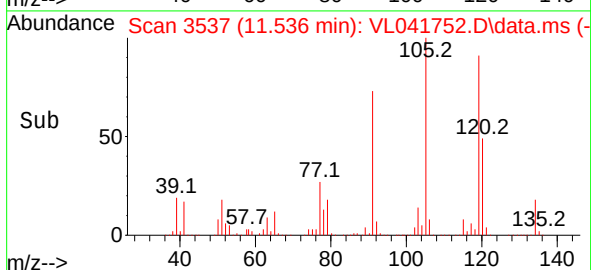
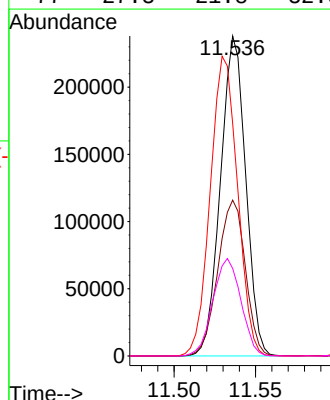
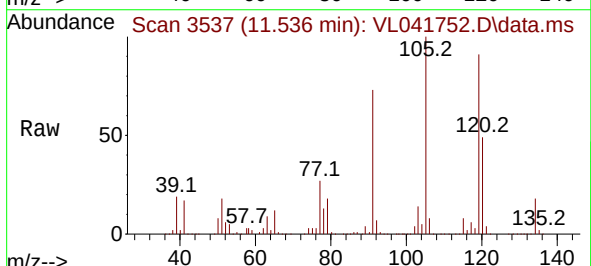
Ion Ratio Lower Upper

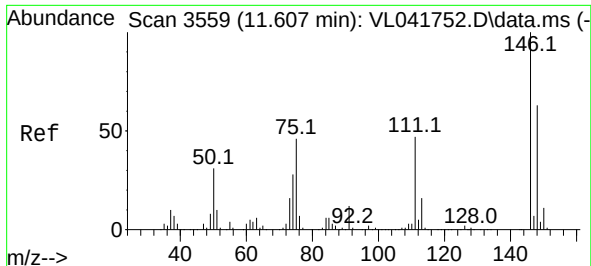
105 100

120 48.7 39.0 58.4

91 72.6 58.1 87.1

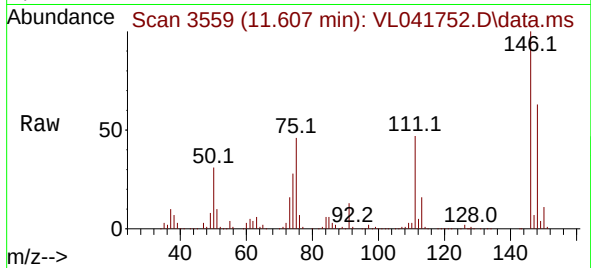
77 27.3 21.8 32.8





#75  
1,3-Dichlorobenzene  
Concen: 9.532 ppbv  
RT: 11.607 min Scan# 3559  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

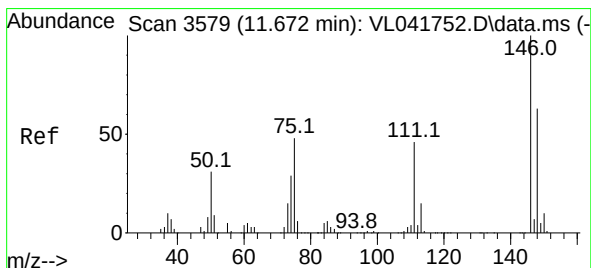
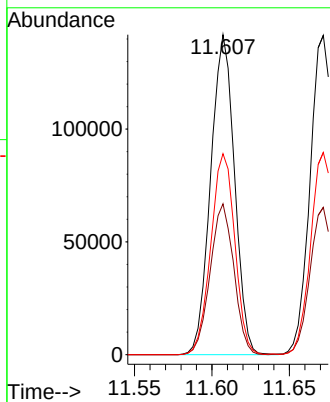
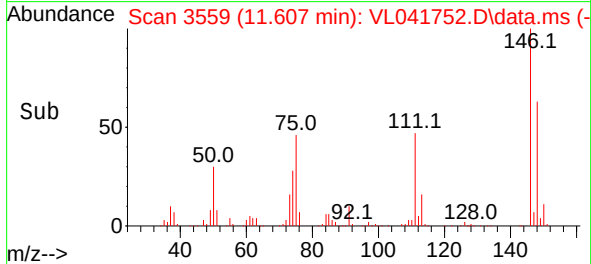
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



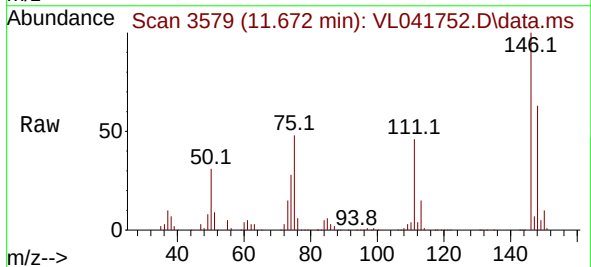
Tgt Ion:146 Resp: 151752  
Ion Ratio Lower Upper  
146 100  
111 46.9 23.4 70.3  
148 63.3 31.6 95.0

Manual Integrations  
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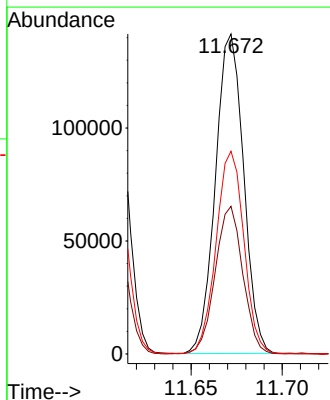
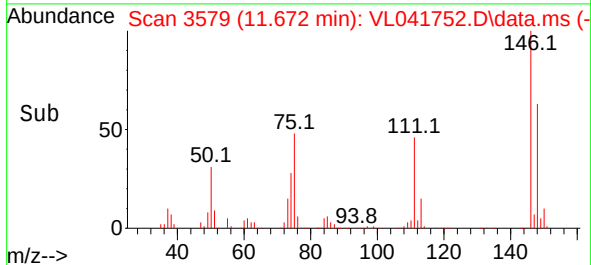
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

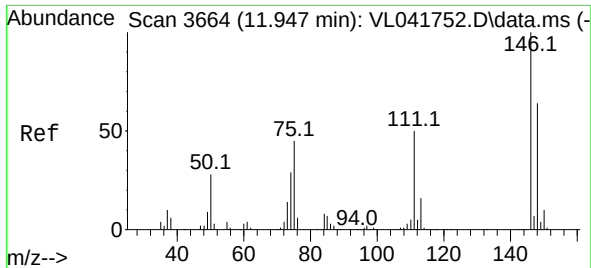


#76  
1,4-Dichlorobenzene  
Concen: 9.671 ppbv  
RT: 11.672 min Scan# 3579  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



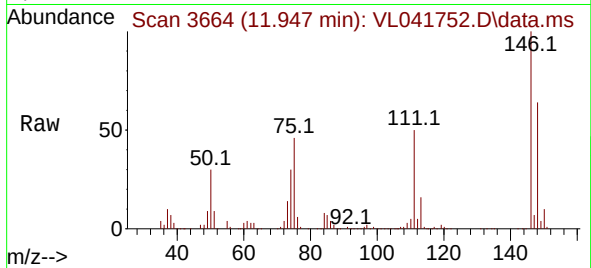
Tgt Ion:146 Resp: 152099  
Ion Ratio Lower Upper  
146 100  
111 45.4 22.7 68.1  
148 62.7 31.4 94.0





#77  
1,2-Dichlorobenzene  
Concen: 9.227 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

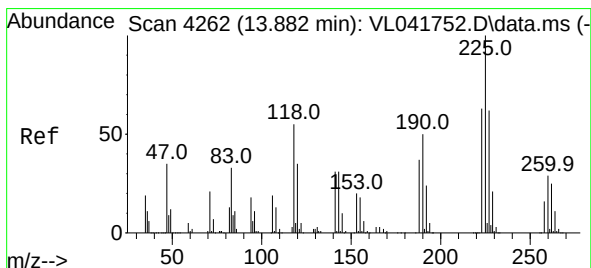
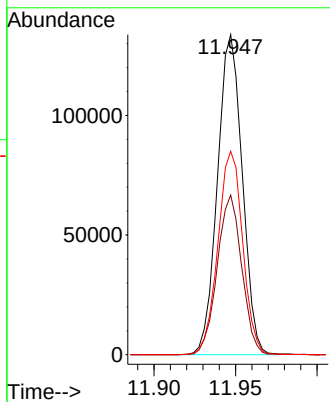
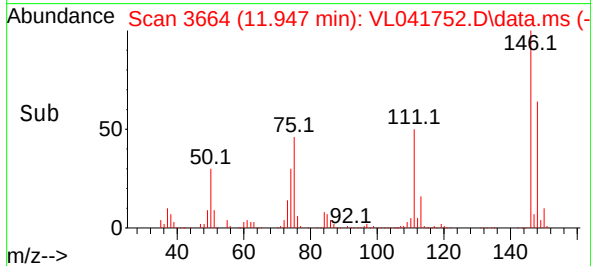
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



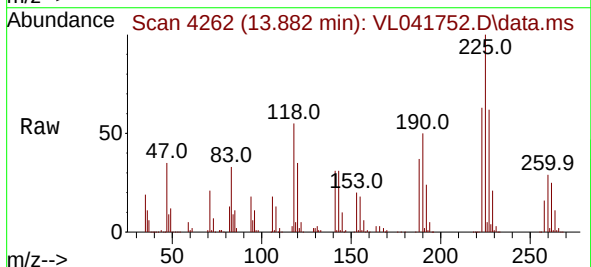
Tgt Ion:146 Resp: 141338  
Ion Ratio Lower Upper  
146 100  
111 49.5 24.8 74.3  
148 63.6 31.8 95.4

Manual Integrations  
APPROVED

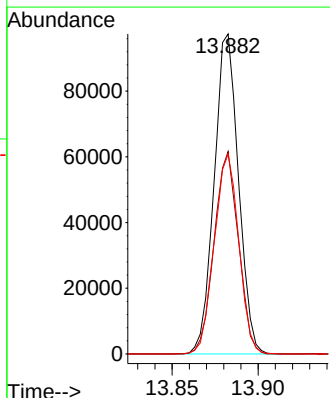
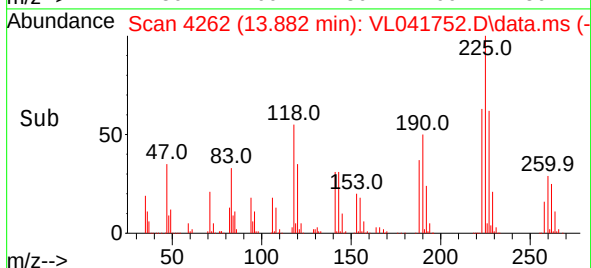
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

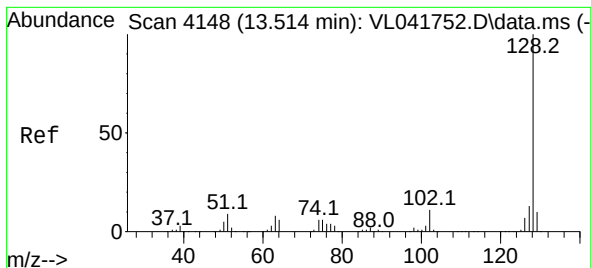


#78  
Hexachloro-1,3-Butadiene  
Concen: 8.431 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



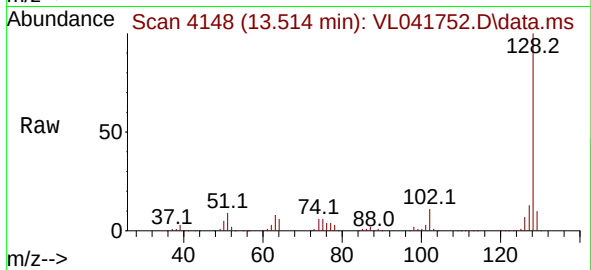
Tgt Ion:225 Resp: 95751  
Ion Ratio Lower Upper  
225 100  
223 63.1 50.5 75.7  
227 62.9 50.3 75.5





#79  
Naphthalene  
Concen: 11.812 ppbv  
RT: 13.514 min Scan# 4148  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

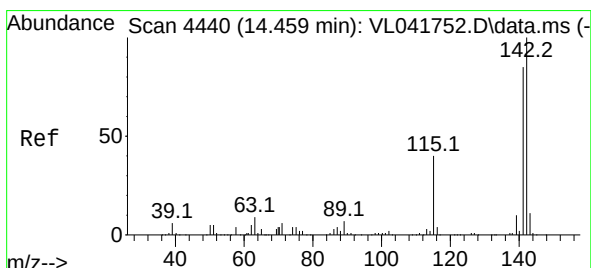
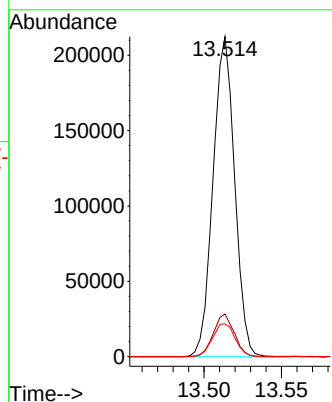
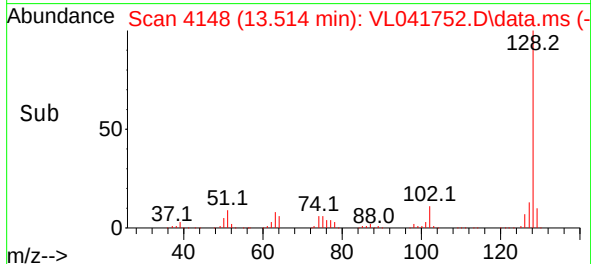
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010



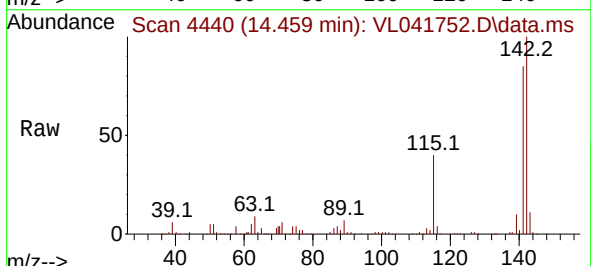
Tgt Ion:128 Resp: 205511  
Ion Ratio Lower Upper  
128 100  
127 13.4 10.7 16.1  
129 10.3 8.2 12.4

Manual Integrations  
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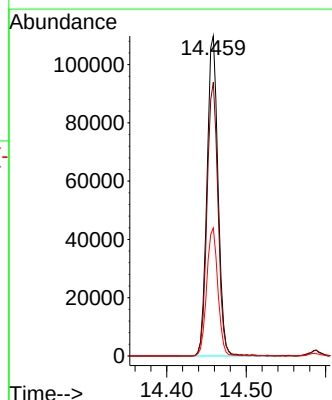
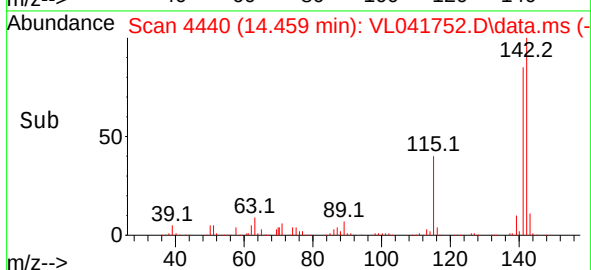
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

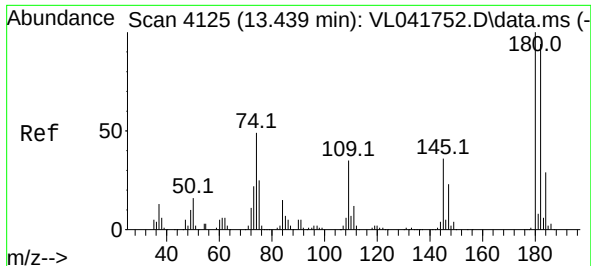


#80  
Naphthalene,2-methyl-  
Concen: 19.755 ppbv  
RT: 14.459 min Scan# 4440  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30



Tgt Ion:142 Resp: 106311  
Ion Ratio Lower Upper  
142 100  
141 85.5 68.4 102.6  
115 40.6 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 10.672 ppbv

RT: 13.439 min Scan# 41

Delta R.T. 0.000 min

Lab File: VL041752.D

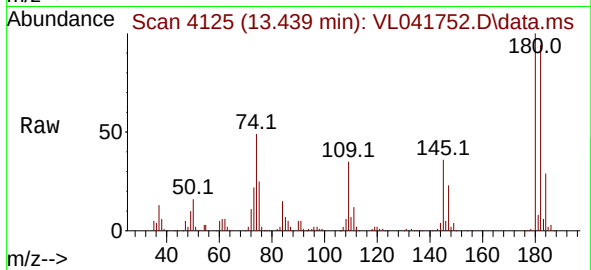
Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010



Tgt Ion:180 Resp: 10146

Ion Ratio Lower Upper

180 100

182 96.3 77.0 115.6

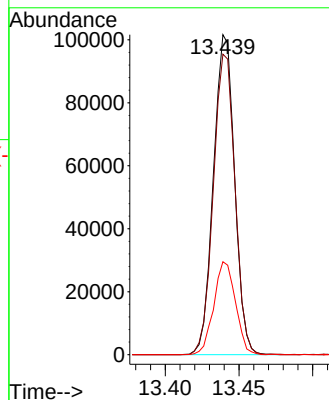
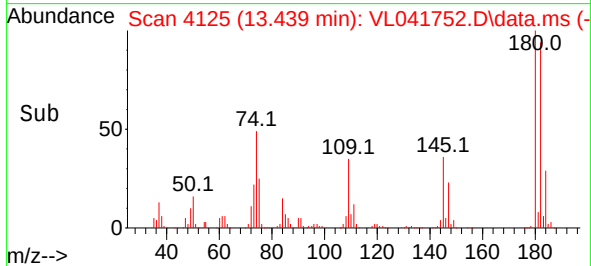
184 29.8 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041753.D  
 Acq On : 16 Dec 2024 14:03  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Dec 19 06:12:42 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 67443    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.962 | 114  | 182992   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.882 | 117  | 163971   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 138312 10.122 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.200%

#### Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.499 | 85  | 24819 | 2.068 | ppbv   | 98     |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 22299 | 2.027 | ppbv   | 96     |
| 4) Chloromethane              | 1.531 | 50  | 9926  | 2.114 | ppbv   | 99     |
| 5) Vinyl Chloride             | 1.580 | 62  | 9300  | 1.966 | ppbv   | 99     |
| 6) Bromomethane               | 1.667 | 94  | 4625  | 2.072 | ppbv   | 99     |
| 7) Chloroethane               | 1.706 | 64  | 4003  | 2.178 | ppbv # | 85     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 21791 | 2.029 | ppbv   | 100    |
| 9) Propene                    | 1.483 | 41  | 10115 | 2.122 | ppbv   | 97     |
| 10) Heptane                   | 4.978 | 43  | 25297 | 2.066 | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 1.878 | 101 | 26208 | 2.056 | ppbv   | 96     |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 19770 | 2.039 | ppbv   | 99     |
| 13) Ethanol                   | 1.722 | 45  | 792   | 1.998 | ppbv # | 49     |
| 14) Bromoethene               | 1.784 | 108 | 6527  | 1.994 | ppbv # | 90     |
| 15) Acetone                   | 1.835 | 43  | 27613 | 2.104 | ppbv   | 99     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 10478 | 2.028 | ppbv   | 96     |
| 17) tert-Butyl alcohol        | 2.043 | 59  | 26646 | 2.047 | ppbv   | 99     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 8389  | 2.064 | ppbv   | 92     |
| 19) Isopropyl Alcohol         | 1.887 | 45  | 14937 | 1.897 | ppbv   | 93     |
| 20) Methylene Chloride        | 2.062 | 84  | 7586  | 2.027 | ppbv   | 94     |
| 21) Allyl Chloride            | 2.094 | 41  | 14731 | 2.070 | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene  | 2.340 | 96  | 9407  | 2.022 | ppbv   | 94     |
| 23) Vinyl Acetate             | 2.463 | 43  | 17652 | 3.096 | ppbv # | 95     |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 19070 | 2.025 | ppbv   | 99     |
| 25) Ethyl Acetate             | 2.836 | 43  | 50510 | 2.059 | ppbv   | 99     |
| 26) Hexane                    | 2.826 | 57  | 19200 | 2.073 | ppbv   | 98     |
| 27) Carbon Disulfide          | 2.153 | 76  | 16214 | 1.942 | ppbv # | 34     |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 15039 | 2.001 | ppbv   | 98     |
| 29) Chloroform                | 2.849 | 83  | 28843 | 2.043 | ppbv   | 98     |
| 30) Cyclohexane               | 3.858 | 84  | 16384 | 2.079 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 19688 | 2.057 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane     | 3.370 | 97  | 28341 | 2.017 | ppbv   | 98     |
| 34) 2-Butanone                | 2.557 | 43  | 31483 | 2.138 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.765 | 117 | 27727 | 2.134 | ppbv   | 98     |
| 36) Benzene                   | 3.658 | 78  | 38759 | 2.048 | ppbv   | 94     |
| 37) 1,2-Dichloroethane        | 3.221 | 62  | 23800 | 2.021 | ppbv   | 98     |
| 38) Trichloroethene           | 4.548 | 130 | 15660 | 1.965 | ppbv   | 94     |
| 39) 1,2-Dichloropropane       | 4.315 | 63  | 14197 | 2.074 | ppbv   | 94     |
| 40) 1,4-Dioxane               | 4.603 | 88  | 6826m | 2.041 | ppbv   |        |
| 41) Tetrahydrofuran           | 3.059 | 42  | 16665 | 2.021 | ppbv   | 96     |
| 42) Bromodichloromethane      | 4.489 | 83  | 26716 | 1.972 | ppbv   | 98     |
| 43) Methyl Methacrylate       | 4.884 | 69  | 14849 | 2.059 | ppbv   | 100    |
| 44) 2,2,4-Trimethylpentane    | 4.642 | 57  | 67432 | 2.086 | ppbv   | 100    |
| 45) t-1,3-Dichloropropene     | 6.415 | 75  | 14885 | 1.995 | ppbv   | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041753.D  
 Acq On : 16 Dec 2024 14:03  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Dec 19 06:12:42 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

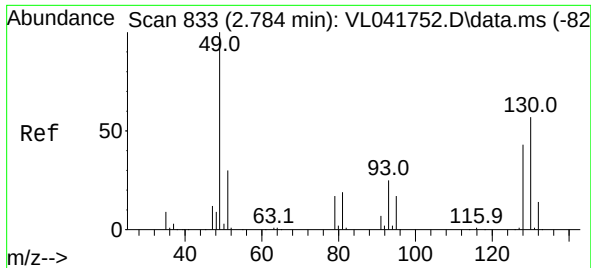
### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.606  | 75   | 19105m   | 2.017 | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 6.584  | 97   | 14858    | 2.078 | ppbv   | 89       |
| 48) Dibromochloromethane      | 7.390  | 129  | 19764    | 2.024 | ppbv   | 98       |
| 49) Bromoform                 | 9.484  | 173  | 16200    | 2.027 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 5.758  | 43   | 42045    | 2.098 | ppbv   | 97       |
| 51) 2-Hexanone                | 7.441  | 43   | 34878    | 2.147 | ppbv # | 98       |
| 52) Tetrachloroethene         | 8.225  | 164  | 13612    | 1.932 | ppbv   | 93       |
| 53) Toluene                   | 6.933  | 91   | 44470    | 2.072 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.655  | 107  | 19820    | 2.012 | ppbv   | 91       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 18613    | 2.141 | ppbv   | 98       |
| 57) Chlorobenzene             | 8.920  | 112  | 35685    | 2.127 | ppbv   | 99       |
| 58) Ethyl Benzene             | 9.354  | 91   | 63316    | 2.145 | ppbv   | 97       |
| 59) m/p-Xylene                | 9.535  | 91   | 99821m   | 4.204 | ppbv   |          |
| 60) o-Xylene                  | 9.966  | 91   | 51152    | 2.149 | ppbv   | 99       |
| 61) Styrene                   | 9.872  | 104  | 20842    | 2.025 | ppbv   | 96       |
| 62) Isopropylbenzene          | 10.539 | 105  | 75206    | 2.103 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 29751    | 1.997 | ppbv   | 100      |
| 64) n-propylbenzene           | 10.992 | 120  | 19146    | 2.117 | ppbv   | 99       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 68879    | 2.135 | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.617 | 91   | 5400     | 1.898 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 95968    | 2.149 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 79236    | 2.153 | ppbv   | 100      |
| 70) n-Butylbenzene            | 12.283 | 91   | 75430    | 2.122 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 57724    | 2.114 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 58841    | 2.098 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.206 | 105  | 48645    | 2.087 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.539 | 105  | 53084    | 2.118 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 32609    | 2.040 | ppbv   | 98       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 32527    | 2.060 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 32223    | 2.095 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 25358    | 2.224 | ppbv   | 98       |
| 79) Naphthalene               | 13.513 | 128  | 37855    | 2.167 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 14.462 | 142  | 4482     | 0.830 | ppbv   | 94       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 19425    | 2.035 | ppbv   | 99       |

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





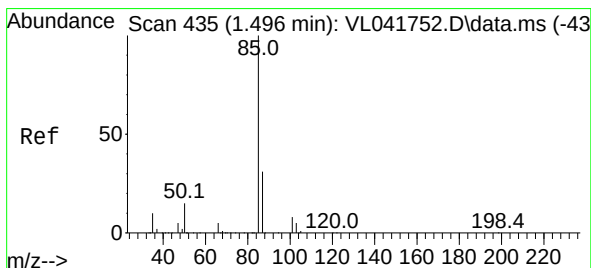
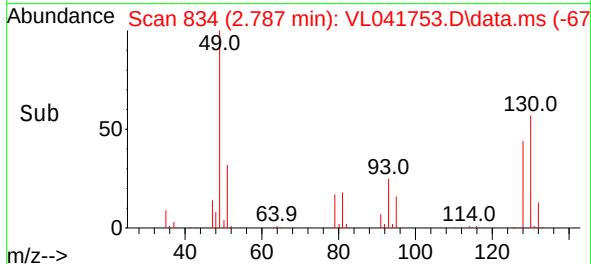
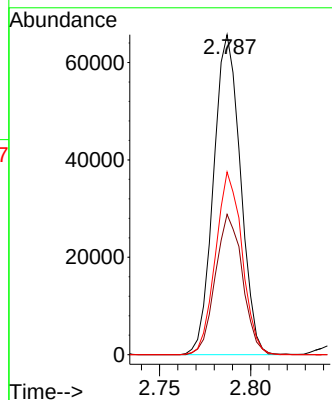
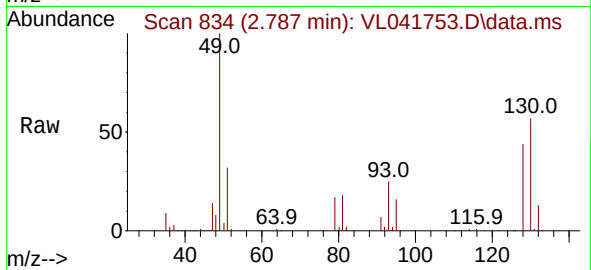
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 834  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 49 Resp: 6744  
Ion Ratio Lower Upper  
49 100  
128 44.1 21.6 64.6  
130 56.3 28.3 85.0

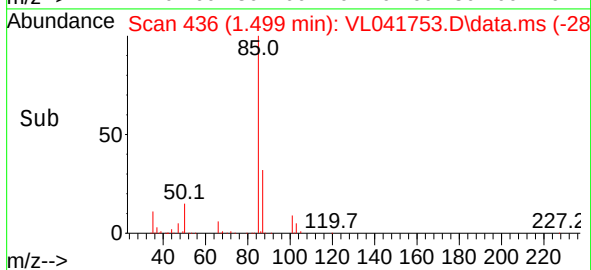
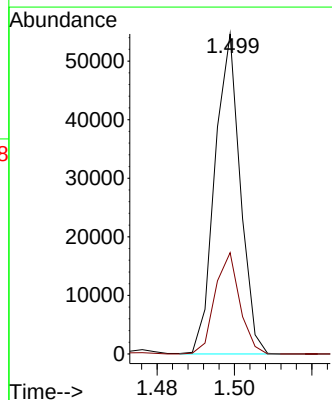
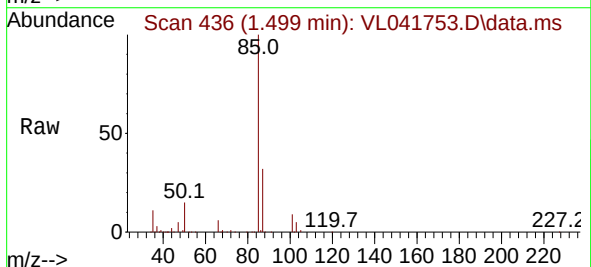
Manual Integrations  
APPROVED

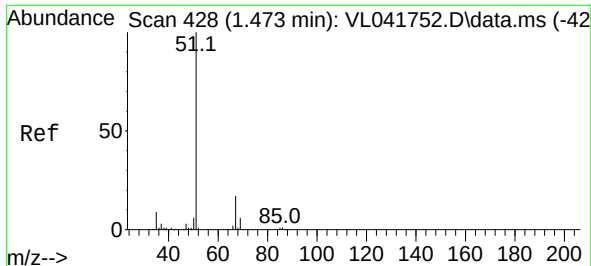
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#2  
Dichlorodifluoromethane  
Concen: 2.068 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 85 Resp: 24819  
Ion Ratio Lower Upper  
85 100  
87 31.6 24.5 36.7





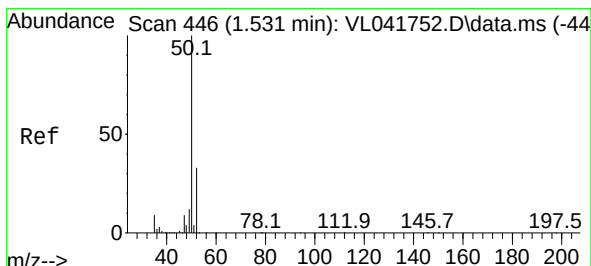
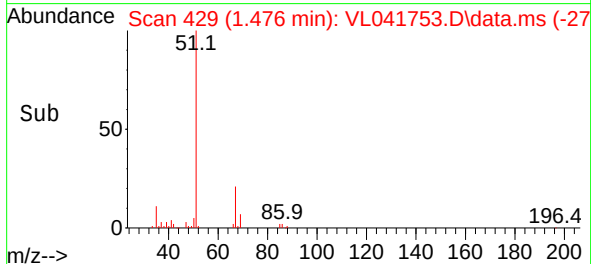
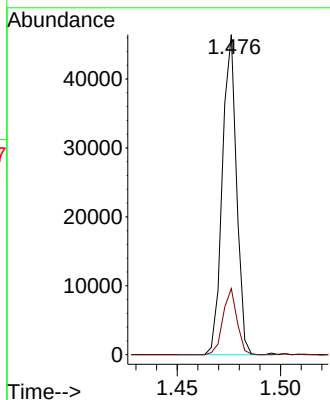
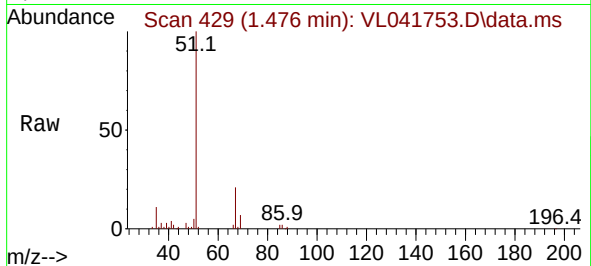
#3  
Chlorodifluoromethane  
Concen: 2.027 ppbv  
RT: 1.476 min Scan# 428  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 51 Resp: 22299  
Ion Ratio Lower Upper  
51 100  
67 20.5 15.0 22.4

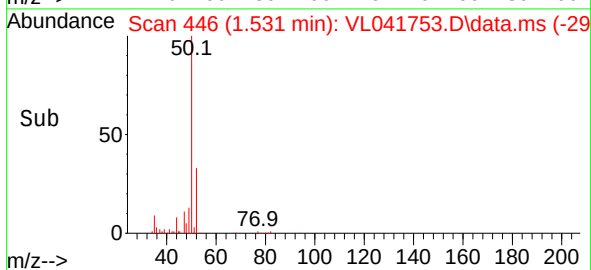
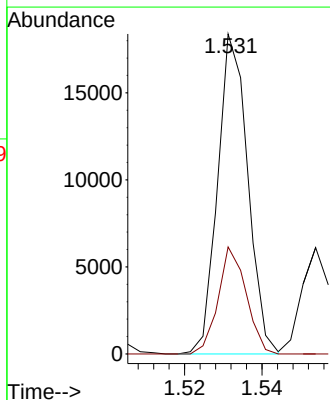
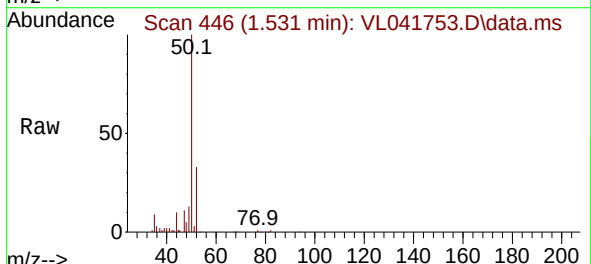
Manual Integrations  
APPROVED

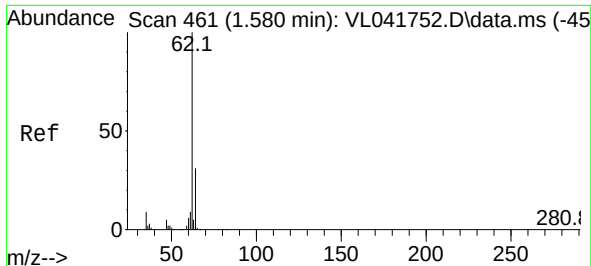
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#4  
Chloromethane  
Concen: 2.114 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

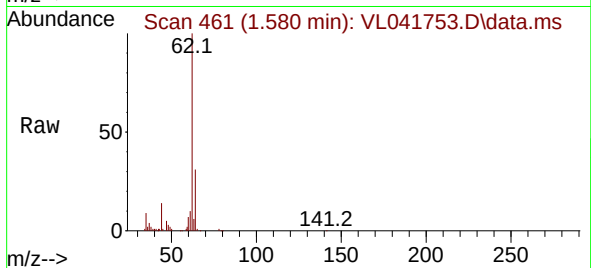
Tgt Ion: 50 Resp: 9926  
Ion Ratio Lower Upper  
50 100  
52 33.5 26.2 39.2





#5  
Vinyl Chloride  
Concen: 1.966 ppbv  
RT: 1.580 min Scan# 461  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

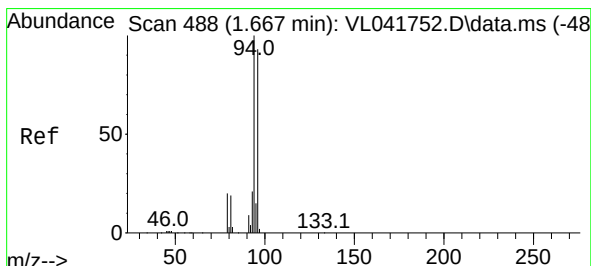
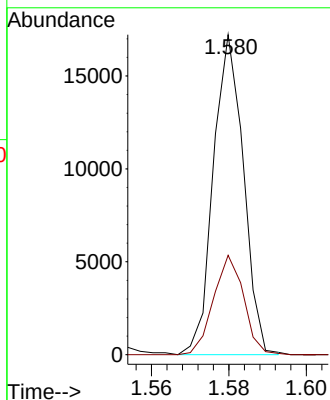
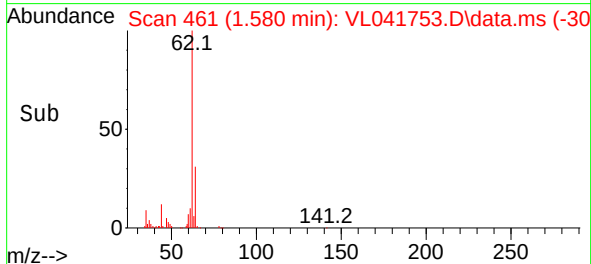
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



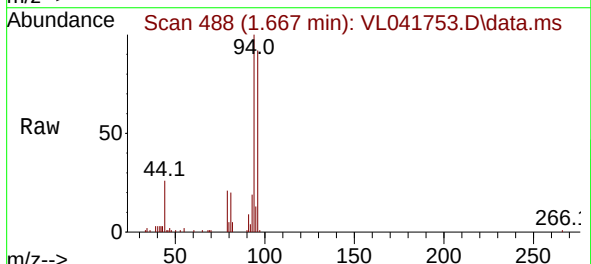
Tgt Ion: 62 Resp: 9300  
Ion Ratio Lower Upper  
62 100  
64 31.1 25.1 37.7

Manual Integrations  
APPROVED

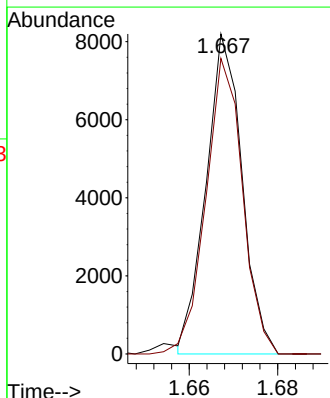
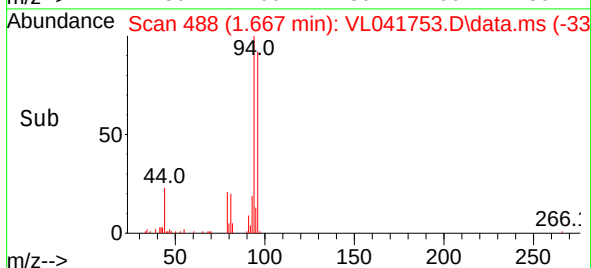
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

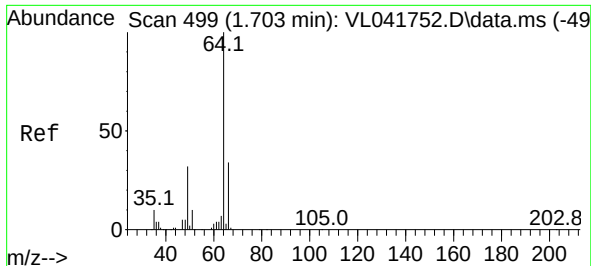


#6  
Bromomethane  
Concen: 2.072 ppbv  
RT: 1.667 min Scan# 488  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



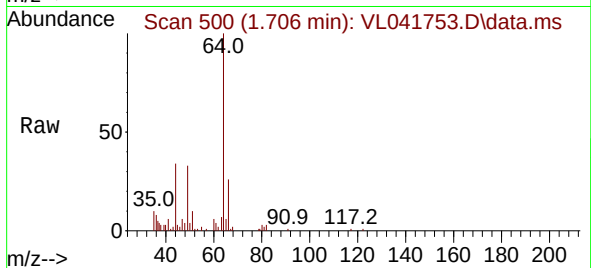
Tgt Ion: 94 Resp: 4625  
Ion Ratio Lower Upper  
94 100  
96 92.4 74.7 112.1





#7  
Chloroethane  
Concen: 2.178 ppbv  
RT: 1.706 min Scan# 500  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

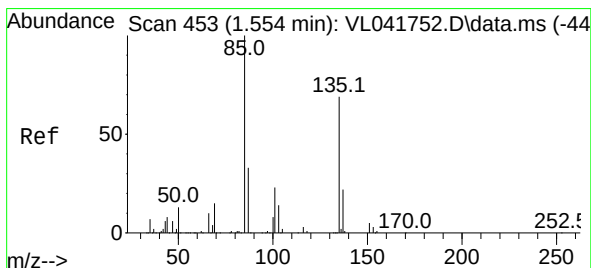
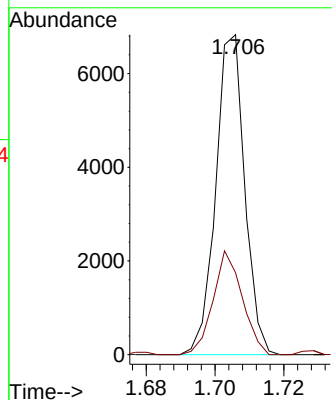
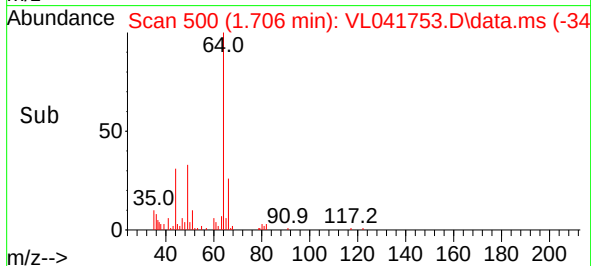
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



Tgt Ion: 64 Resp: 4000  
Ion Ratio Lower Upper  
64 100  
66 25.6 27.5 41.3

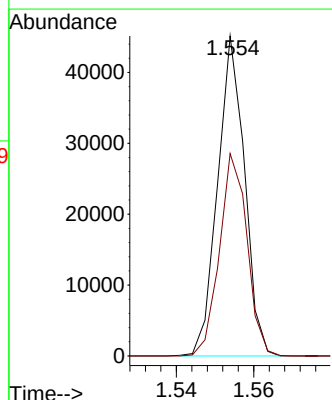
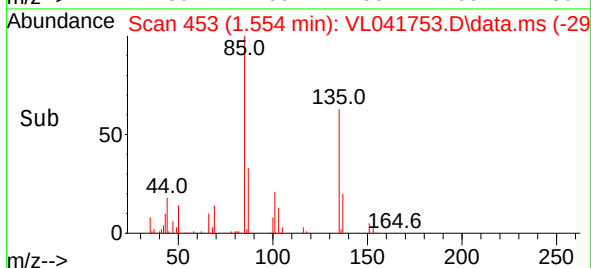
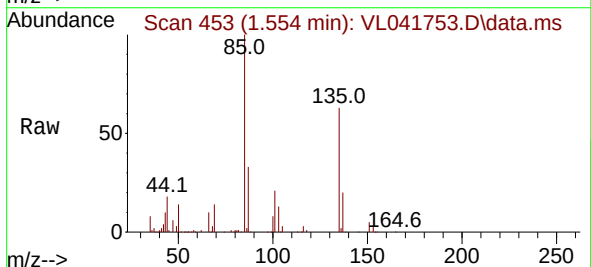
Manual Integrations  
APPROVED

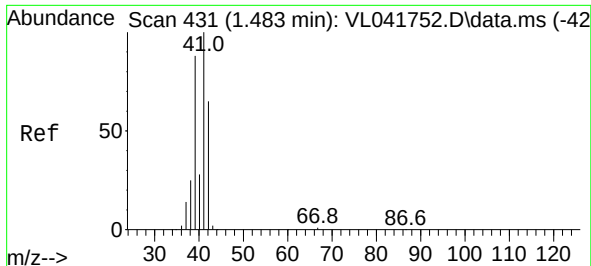
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#8  
Dichlorotetrafluoroethane  
Concen: 2.029 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 85 Resp: 21791  
Ion Ratio Lower Upper  
85 100  
135 64.8 51.9 77.9





#9

Propene

Concen: 2.122 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 41 Resp: 1011

Ion Ratio Lower Upper

41 100

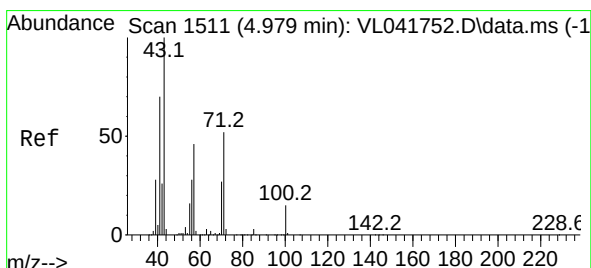
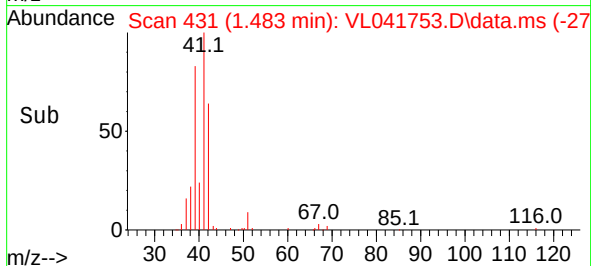
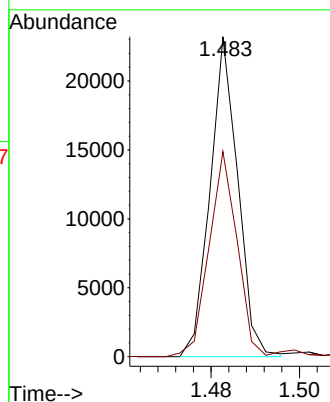
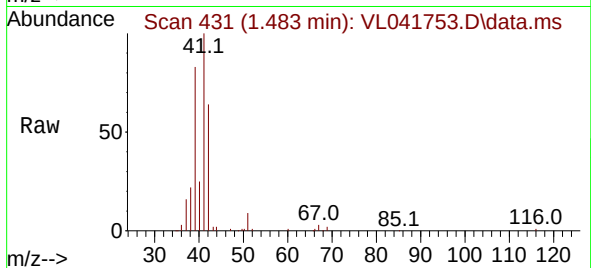
42 67.9 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 2.066 ppbv

RT: 4.978 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VL041753.D

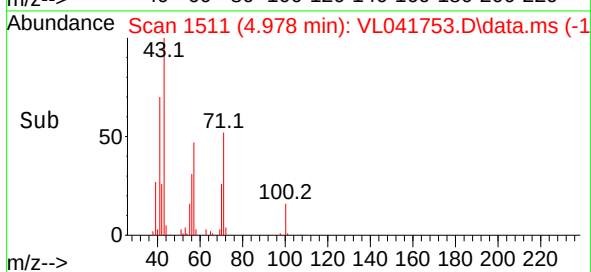
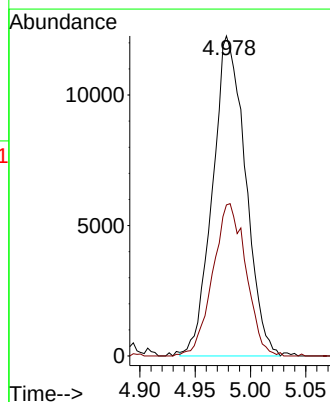
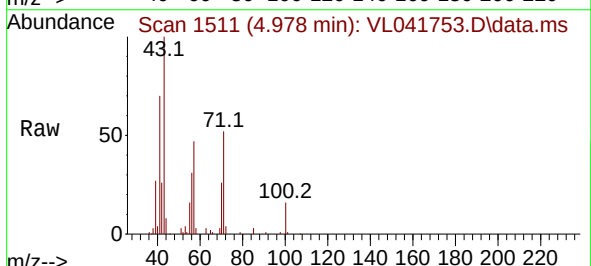
Acq: 16 Dec 2024 14:03

Tgt Ion: 43 Resp: 25297

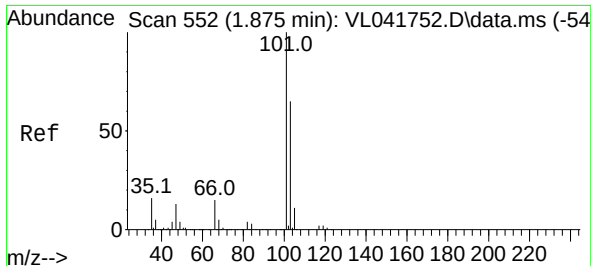
Ion Ratio Lower Upper

43 100

57 48.1 38.5 57.7

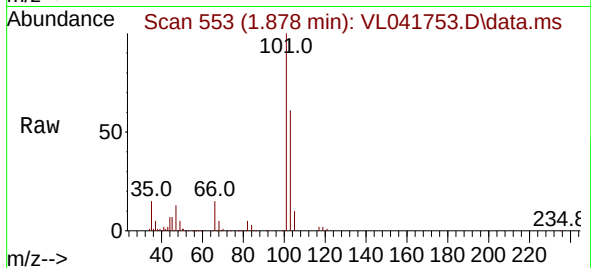






#11  
Trichlorofluoromethane  
Concen: 2.056 ppbv  
RT: 1.878 min Scan# 552  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

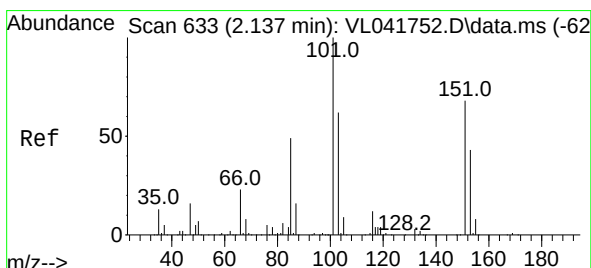
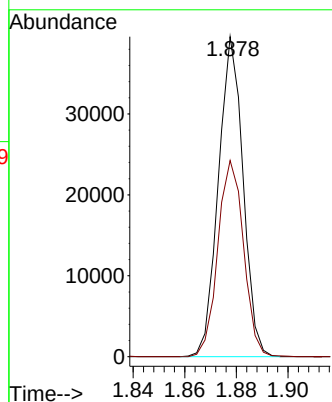
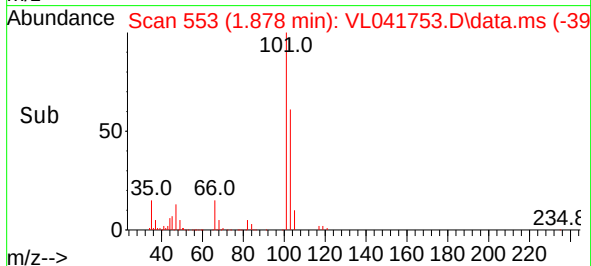
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



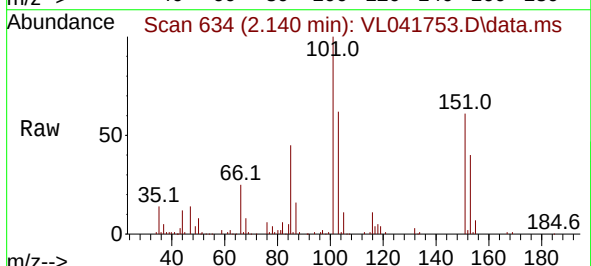
Tgt Ion:101 Resp: 26208  
Ion Ratio Lower Upper  
101 100  
103 61.3 51.8 77.8

Manual Integrations  
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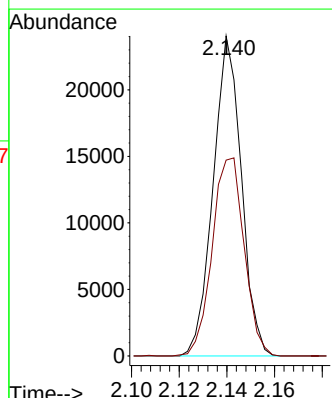
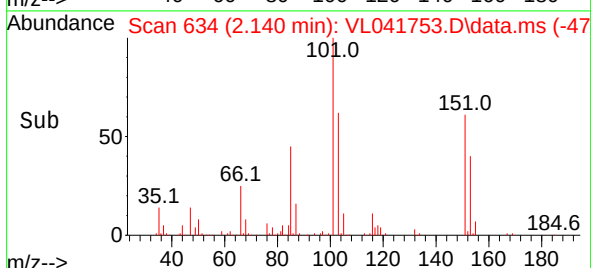
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

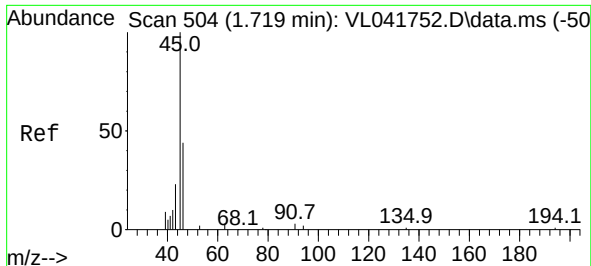


#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 2.039 ppbv  
RT: 2.140 min Scan# 634  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



Tgt Ion:101 Resp: 19770  
Ion Ratio Lower Upper  
101 100  
151 70.2 56.8 85.2





#13

Ethanol

Concen: 1.998 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

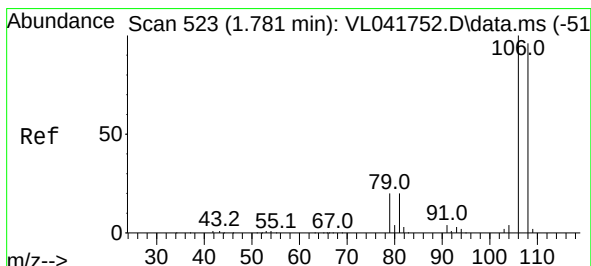
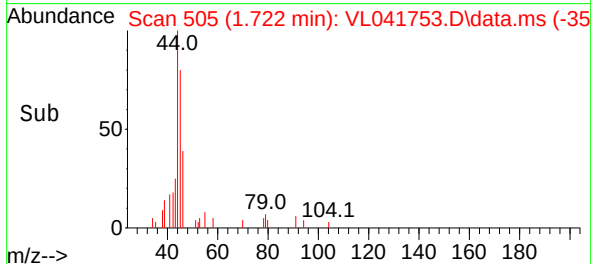
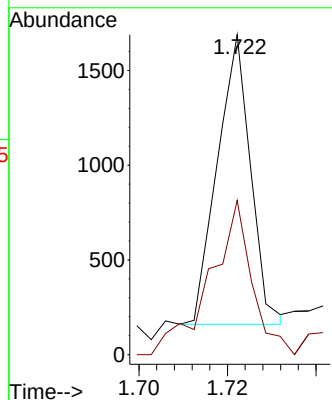
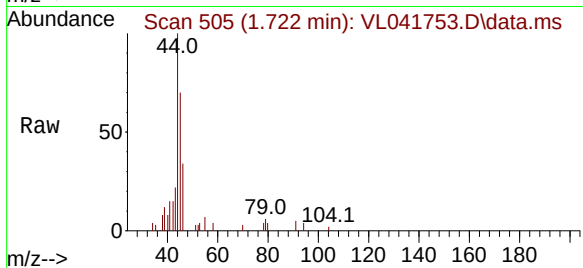
ClientSampleId :

VSTDICC002

Tgt Ion: 45 Resp: 792  
 Ion Ratio Lower Upper  
 45 100  
 46 72.9 16.4 65.8

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 1.994 ppbv

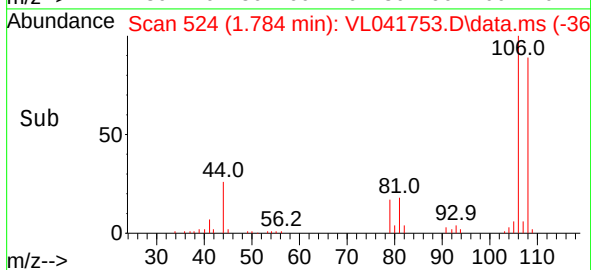
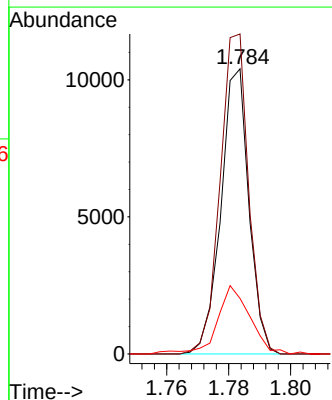
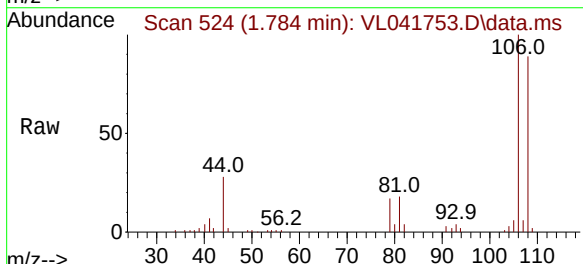
RT: 1.784 min Scan# 524

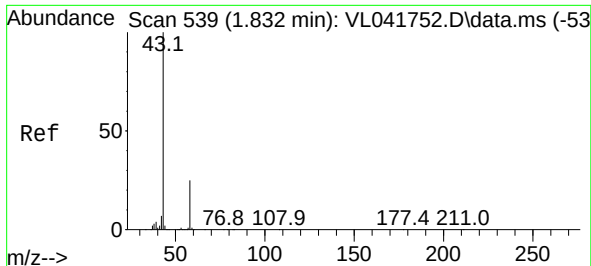
Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion:108 Resp: 6527  
 Ion Ratio Lower Upper  
 108 100  
 106 114.2 84.1 126.1  
 79 28.0 17.4 26.0





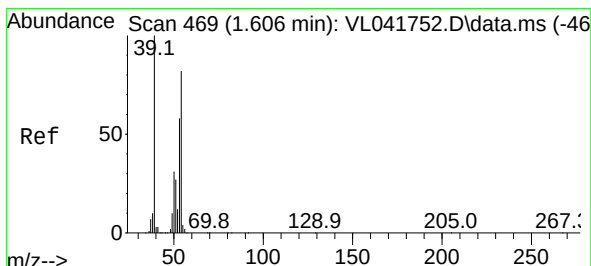
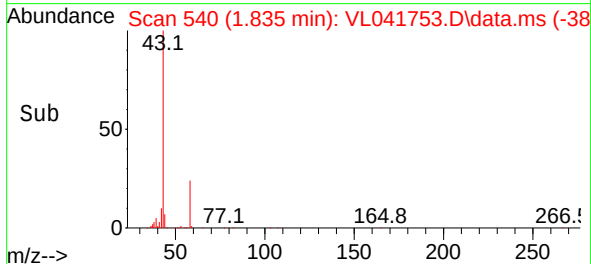
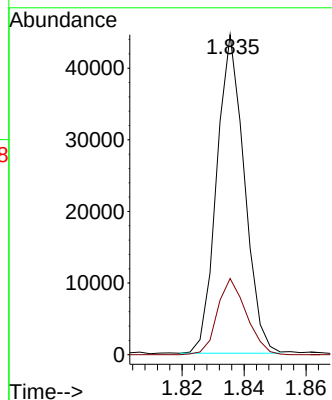
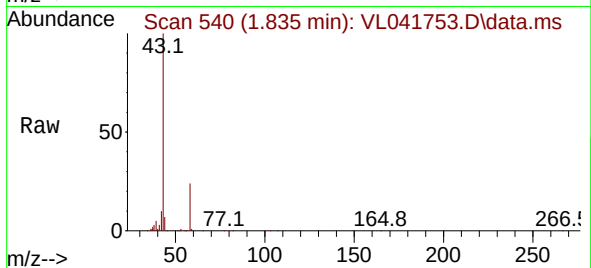
#15  
Acetone  
Concen: 2.104 ppbv  
RT: 1.835 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 43 Resp: 2761  
Ion Ratio Lower Upper  
43 100  
58 25.0 19.7 29.5

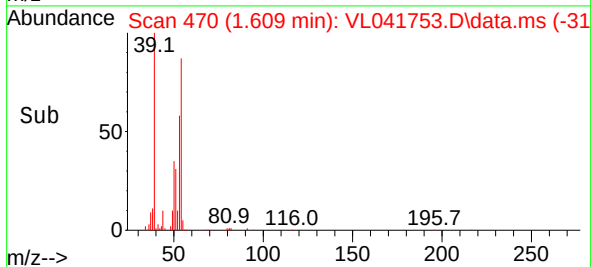
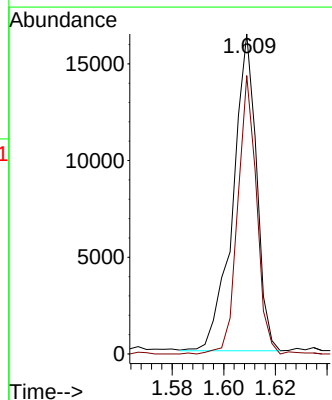
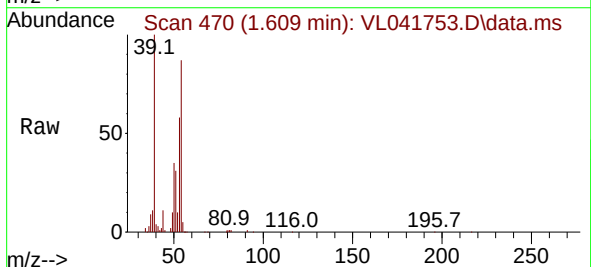
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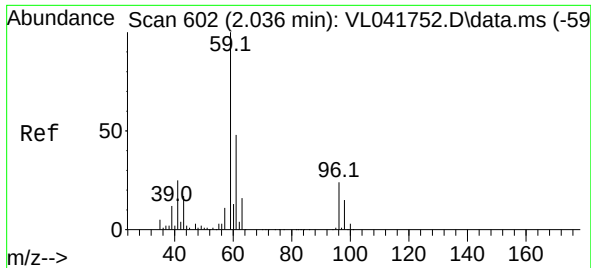
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#16  
1,3-Butadiene  
Concen: 2.028 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 39 Resp: 10478  
Ion Ratio Lower Upper  
39 100  
54 70.0 58.4 87.6





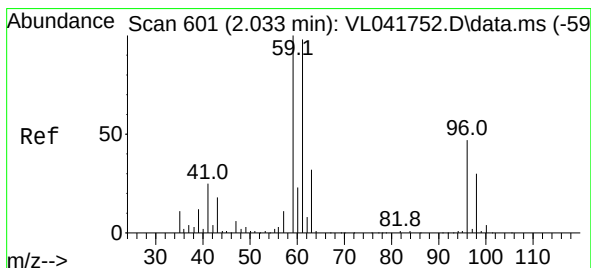
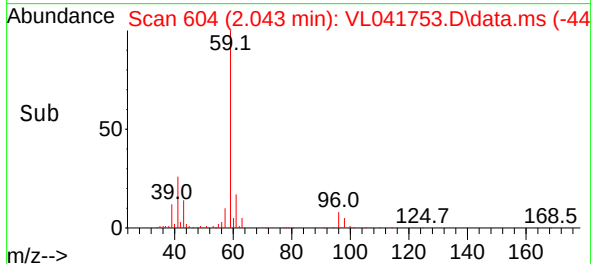
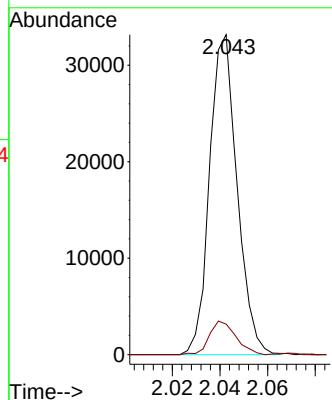
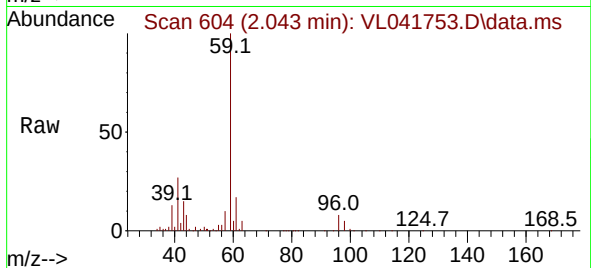
#17  
tert-Butyl alcohol  
Concen: 2.047 ppbv  
RT: 2.043 min Scan# 602  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 59 Resp: 26640  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0

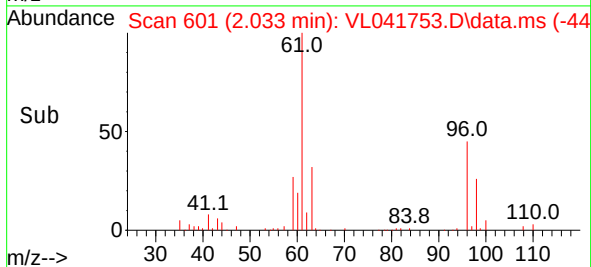
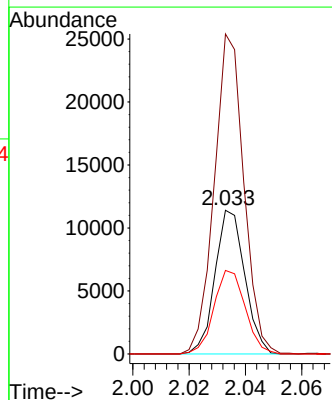
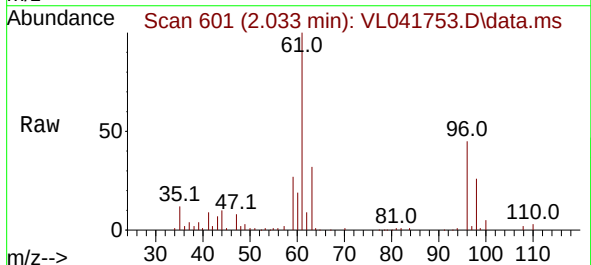
Manual Integrations  
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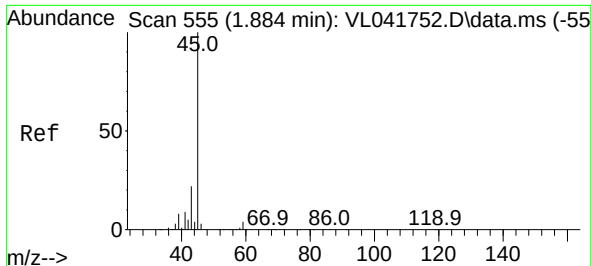
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#18  
1,1-Dichloroethene  
Concen: 2.064 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 96 Resp: 8389  
Ion Ratio Lower Upper  
96 100  
61 222.7 167.7 251.5  
98 58.2 51.1 76.7





#19

Isopropyl Alcohol

Concen: 1.897 ppbv

RT: 1.887 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 45 Resp: 1493

Ion Ratio Lower Upper

45 100

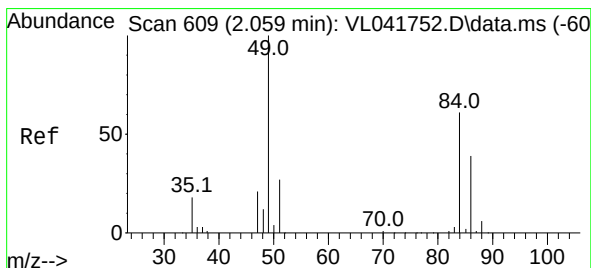
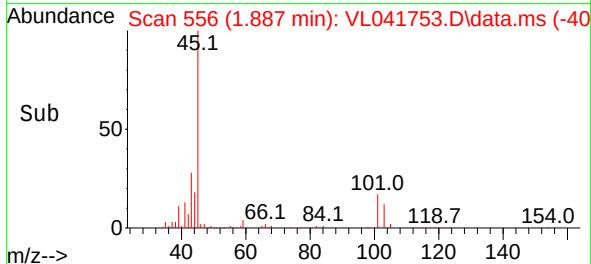
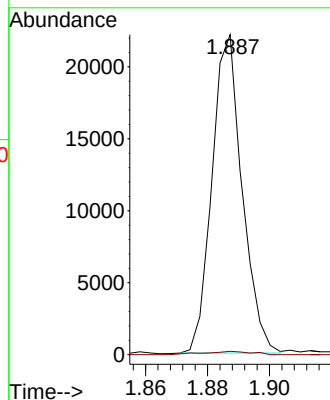
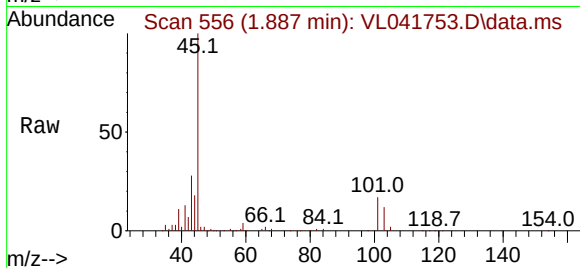
58 46.2 33.3 49.9

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 2.027 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 84 Resp: 7586

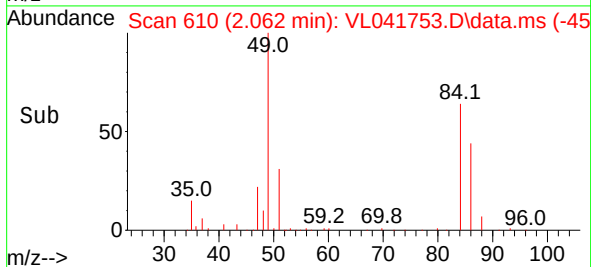
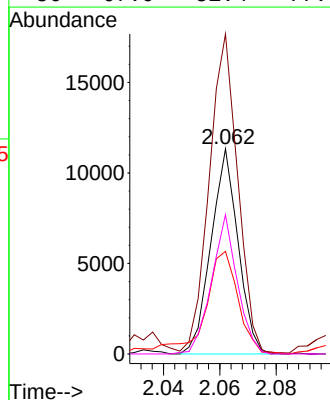
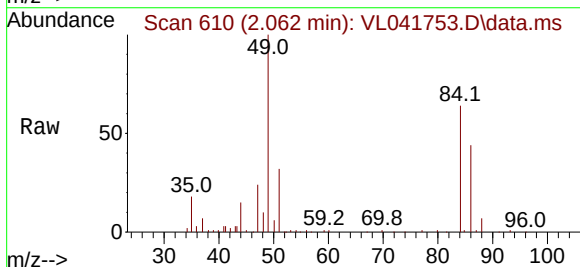
Ion Ratio Lower Upper

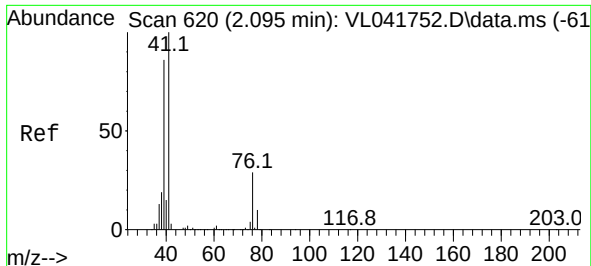
84 100

49 155.5 132.6 198.8

51 49.5 37.6 56.4

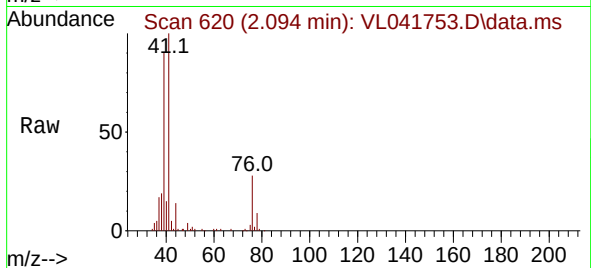
86 67.9 51.4 77.0





#21  
 Allyl Chloride  
 Concen: 2.070 ppbv  
 RT: 2.094 min Scan# 61  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

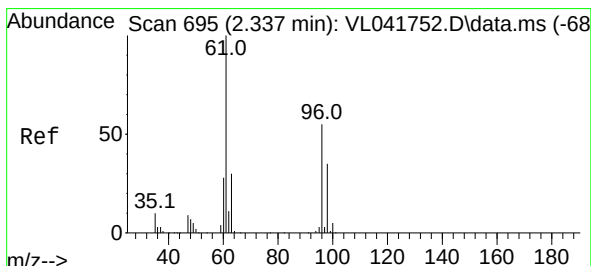
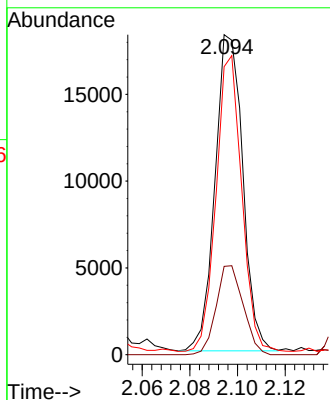
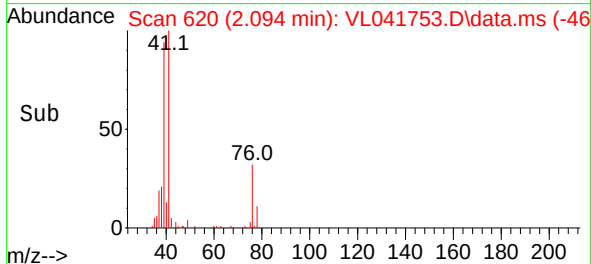
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002



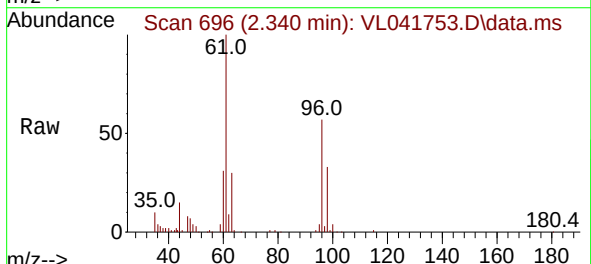
Tgt Ion: 41 Resp: 1473  
 Ion Ratio Lower Upper  
 41 100  
 76 27.4 22.3 33.5  
 39 85.3 69.2 103.8

Manual Integrations  
 APPROVED

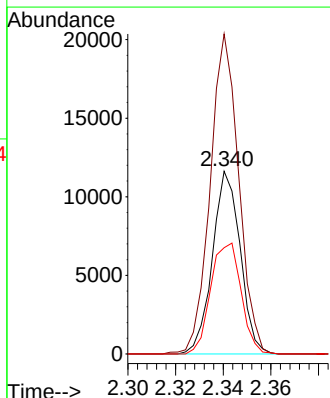
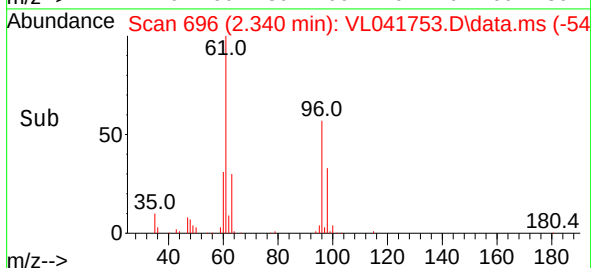
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

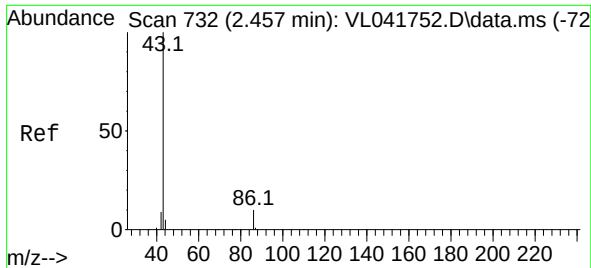


#22  
 trans-1,2-Dichloroethene  
 Concen: 2.022 ppbv  
 RT: 2.340 min Scan# 696  
 Delta R.T. 0.003 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03



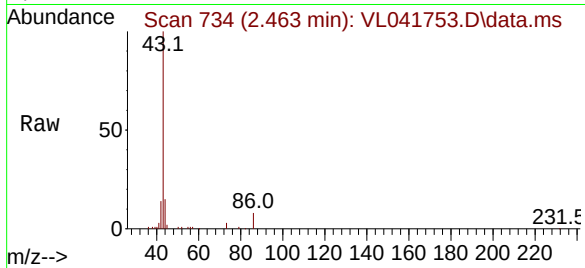
Tgt Ion: 96 Resp: 9407  
 Ion Ratio Lower Upper  
 96 100  
 61 175.1 146.3 219.5  
 98 58.2 50.8 76.2





#23  
 Vinyl Acetate  
 Concen: 3.096 ppbv  
 RT: 2.463 min Scan# 716  
 Delta R.T. 0.006 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

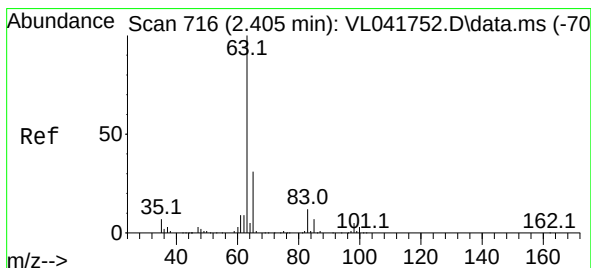
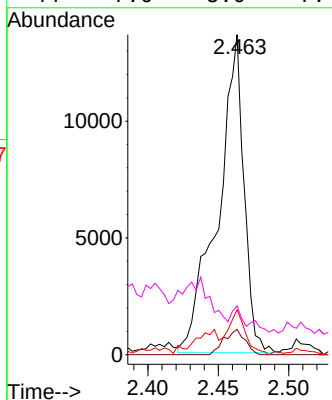
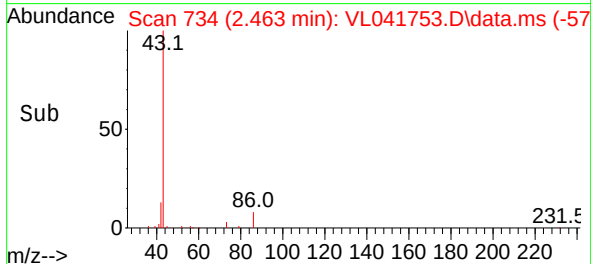
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002



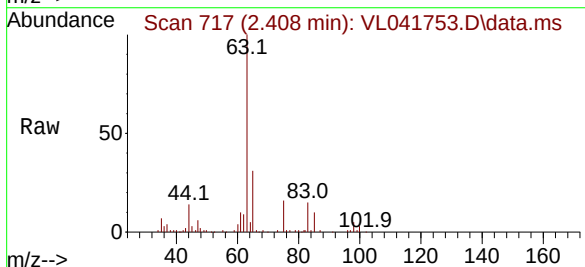
Tgt Ion: 43 Resp: 17652  
 Ion Ratio Lower Upper  
 43 100  
 86 8.0 6.6 10.0  
 42 13.0 8.2 12.2  
 44 7.6 5.0 7.4#

Manual Integrations  
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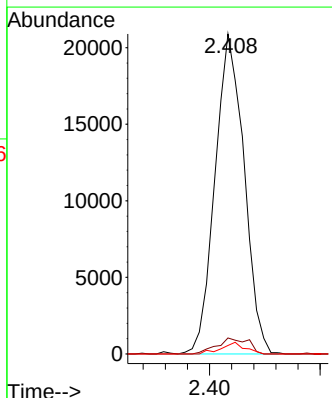
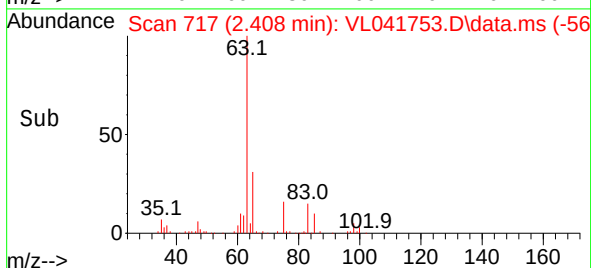
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

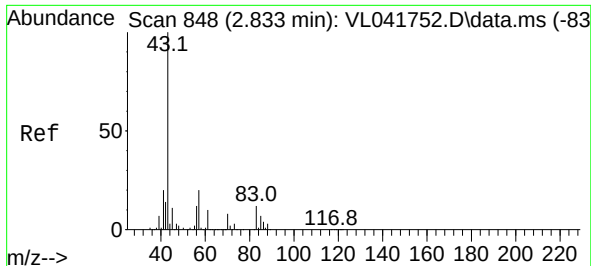


#24  
 1,1-Dichloroethane  
 Concen: 2.025 ppbv  
 RT: 2.408 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03



Tgt Ion: 63 Resp: 19070  
 Ion Ratio Lower Upper  
 63 100  
 98 5.0 2.3 6.8  
 100 2.7 1.4 4.2





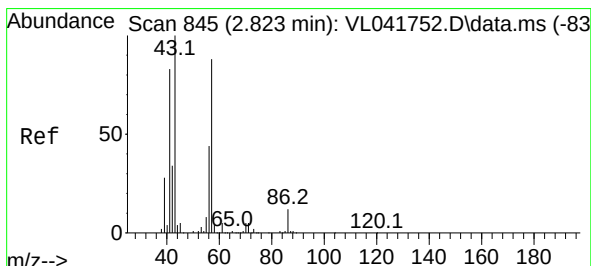
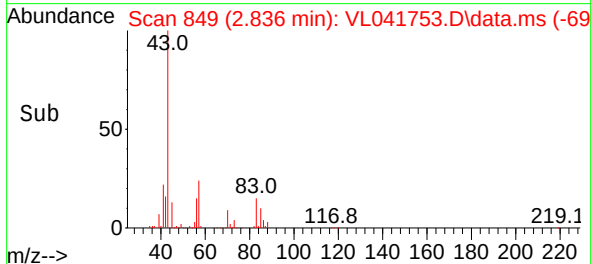
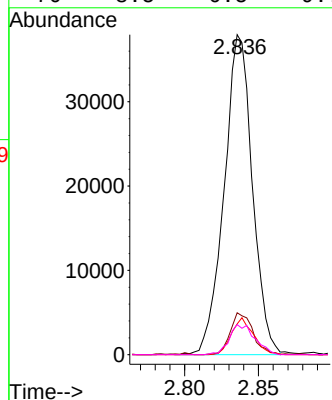
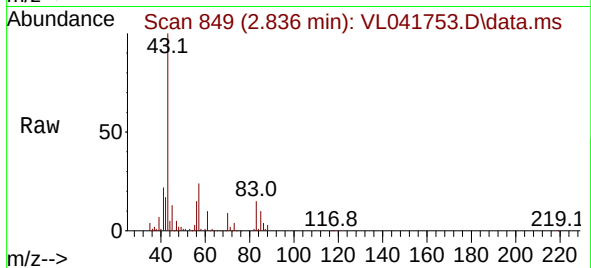
#25  
Ethyl Acetate  
Concen: 2.059 ppbv  
RT: 2.836 min Scan# 848  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 50510 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 45        | 10.9  | 8.1   | 12.1  |
| 61        | 9.0   | 7.0   | 10.6  |
| 70        | 8.5   | 6.5   | 9.7   |

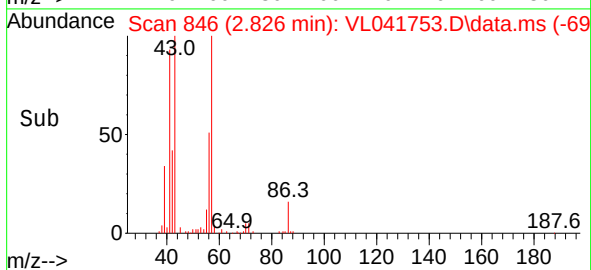
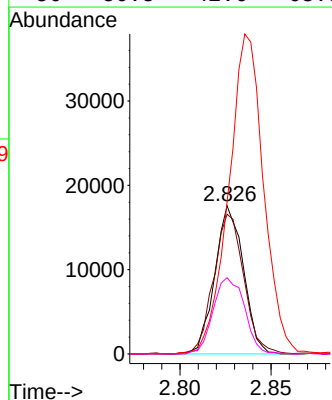
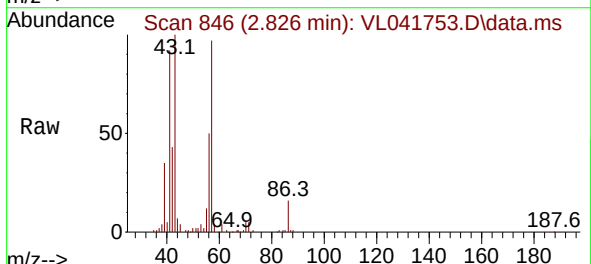
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

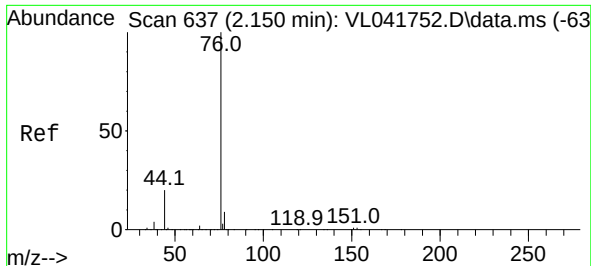


#26  
Hexane  
Concen: 2.073 ppbv  
RT: 2.826 min Scan# 846  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 57    | Resp: | 19200 |
| Ion Ratio | Lower | Upper |       |
| 57        | 100   |       |       |
| 41        | 100.7 | 79.6  | 119.4 |
| 43        | 266.5 | 211.0 | 316.6 |
| 56        | 56.5  | 42.6  | 63.8  |







#27

Carbon Disulfide

Concen: 1.942 ppbv

RT: 2.153 min Scan# 637

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

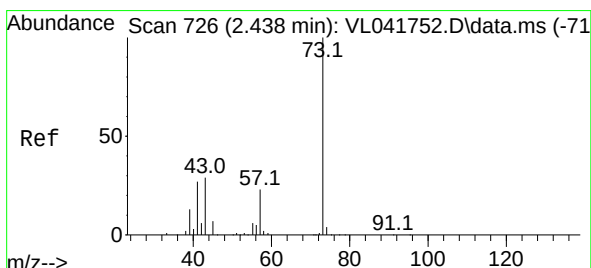
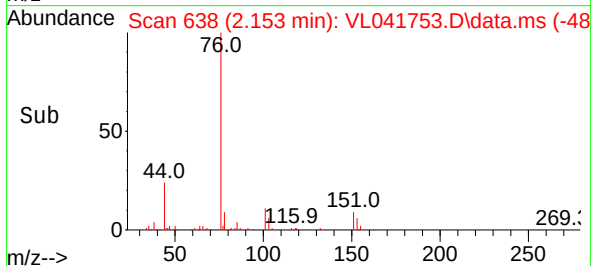
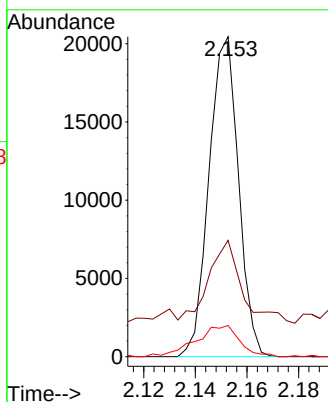
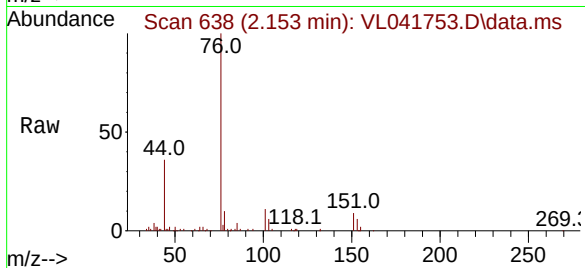
ClientSampleId :

VSTDICC002

|             |                |
|-------------|----------------|
| Tgt Ion: 76 | Resp: 16214    |
| Ion Ratio   | Lower Upper    |
| 76          | 100            |
| 44          | 70.4 17.6 26.4 |
| 78          | 14.6 10.2 15.4 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#28

Methyl tert-Butyl Ether

Concen: 2.001 ppbv

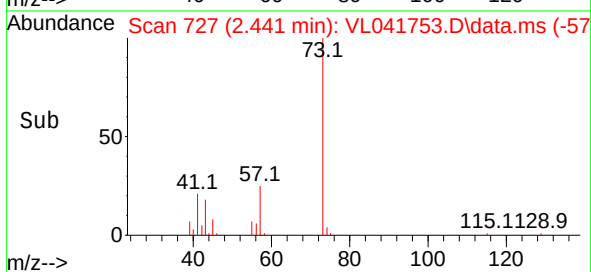
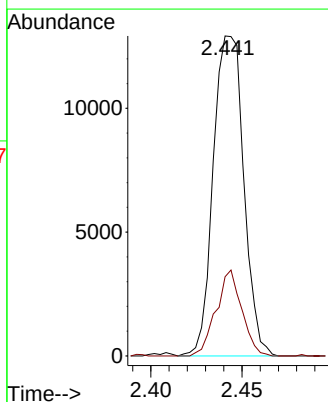
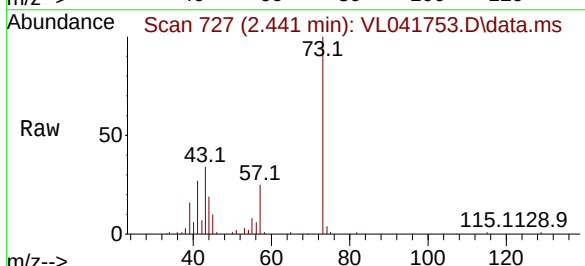
RT: 2.441 min Scan# 727

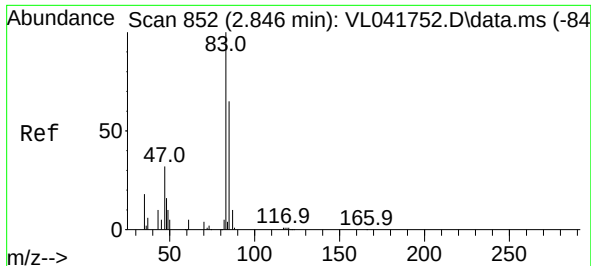
Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

|             |                |
|-------------|----------------|
| Tgt Ion: 73 | Resp: 15039    |
| Ion Ratio   | Lower Upper    |
| 73          | 100            |
| 57          | 22.8 17.6 26.4 |





#29

Chloroform

Concen: 2.043 ppbv

RT: 2.849 min Scan# 85

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 83 Resp: 2884

Ion Ratio Lower Upper

83 100

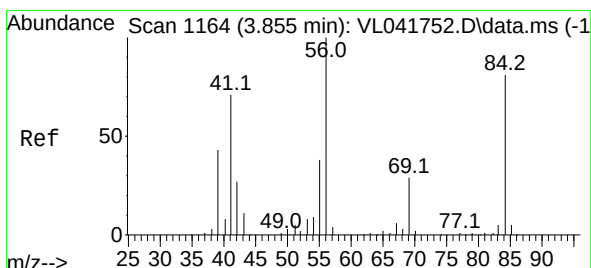
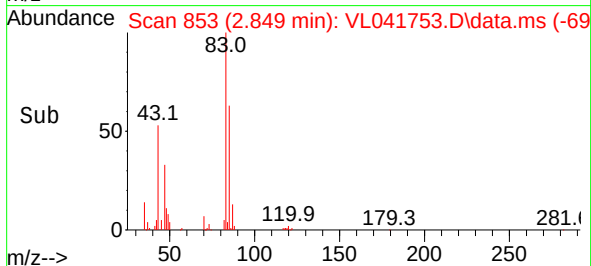
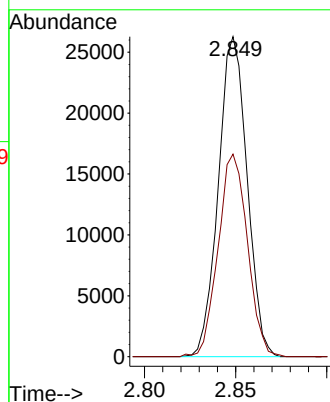
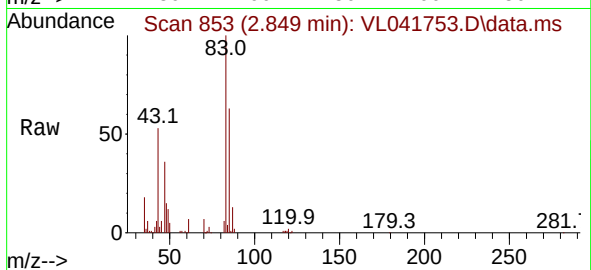
85 63.3 51.8 77.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#30

Cyclohexane

Concen: 2.079 ppbv

RT: 3.858 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

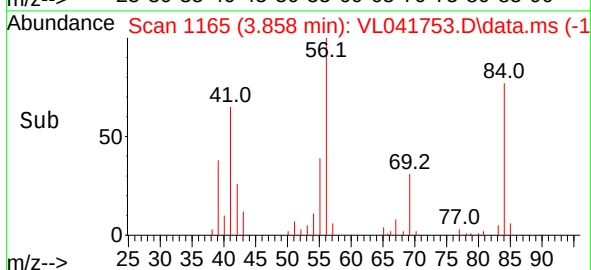
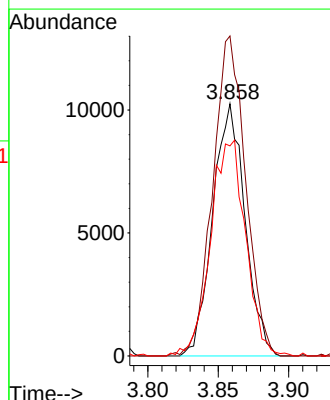
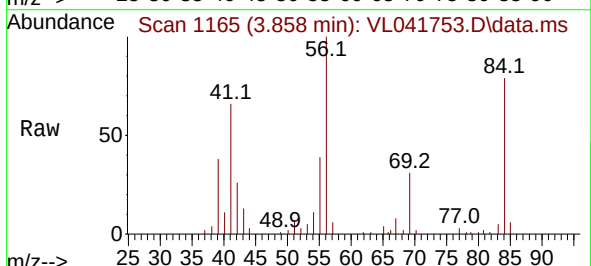
Tgt Ion: 84 Resp: 16384

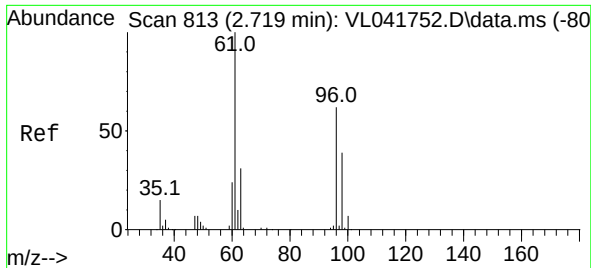
Ion Ratio Lower Upper

84 100

56 129.2 102.3 153.5

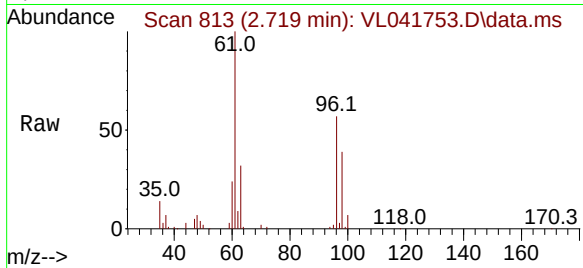
41 92.9 74.0 111.0





#31  
 cis-1,2-Dichloroethene  
 Concen: 2.057 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

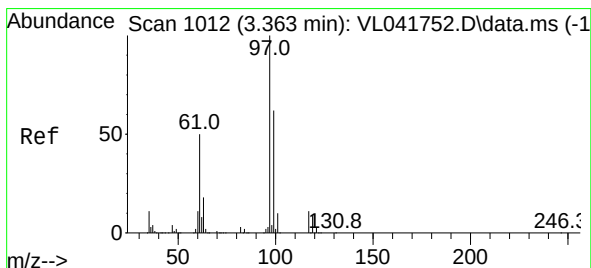
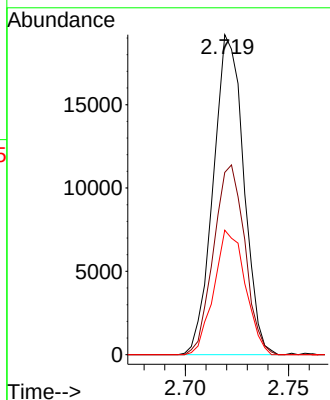
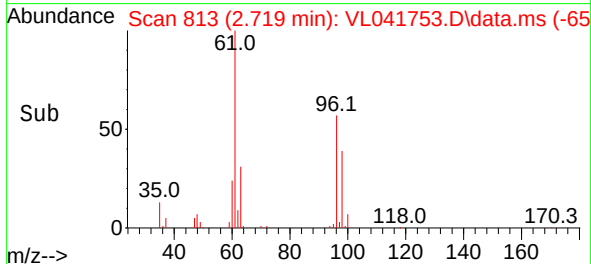
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002



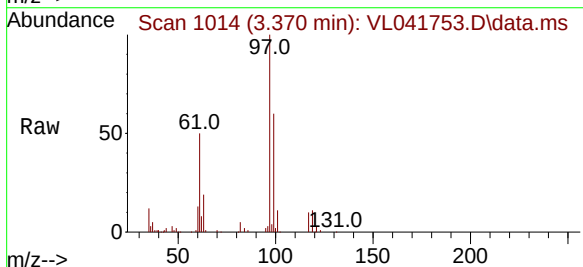
Tgt Ion: 61 Resp: 19688  
 Ion Ratio Lower Upper  
 61 100  
 96 56.9 49.7 74.5  
 98 38.9 30.8 46.2

Manual Integrations  
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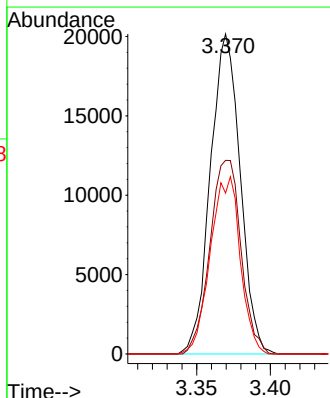
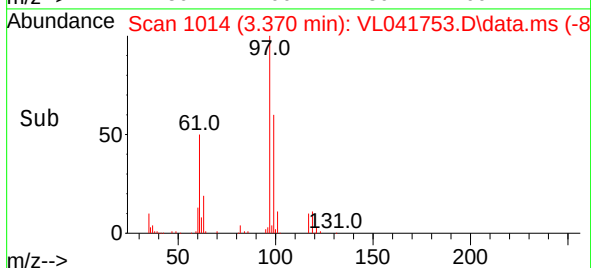
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

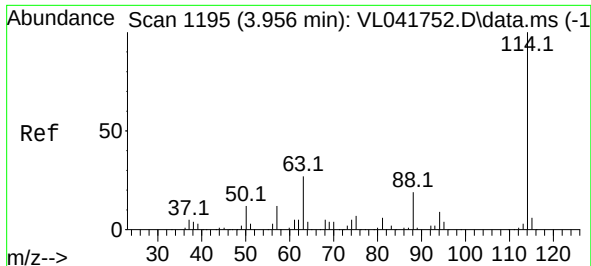


#32  
 1,1,1-Trichloroethane  
 Concen: 2.017 ppbv  
 RT: 3.370 min Scan# 1014  
 Delta R.T. 0.006 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03



Tgt Ion: 97 Resp: 28341  
 Ion Ratio Lower Upper  
 97 100  
 99 63.3 51.0 76.4  
 61 55.5 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1197

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

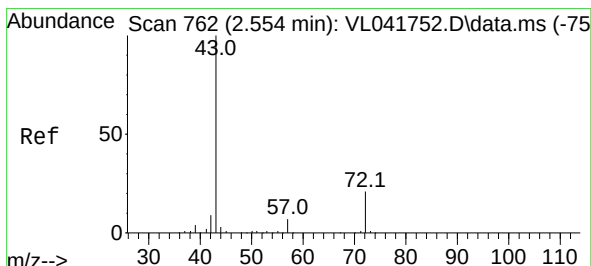
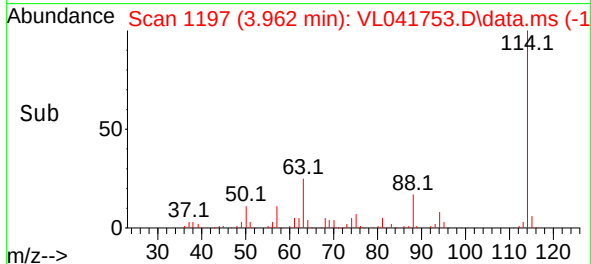
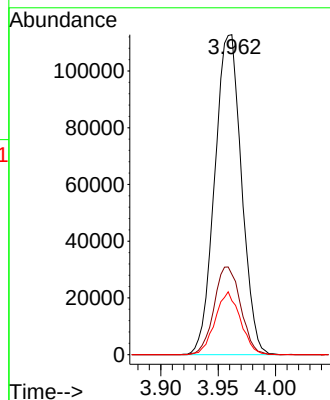
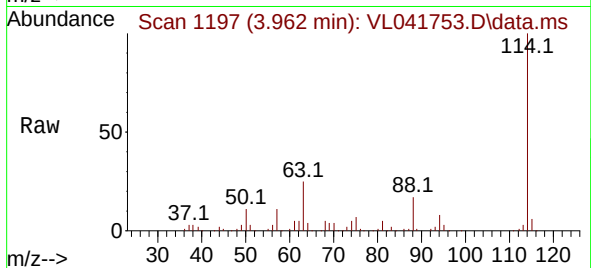
Tgt Ion:114 Resp: 182992

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 27.3  | 21.8  | 32.8  |
| 88  | 18.5  | 14.8  | 22.2  |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#34

2-Butanone

Concen: 2.138 ppbv

RT: 2.557 min Scan# 763

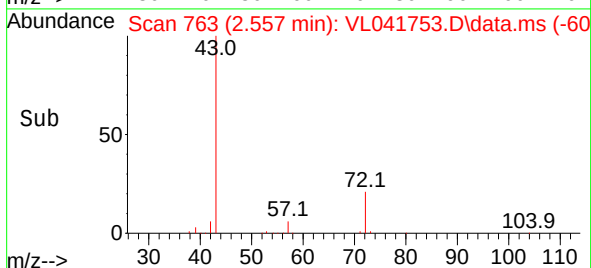
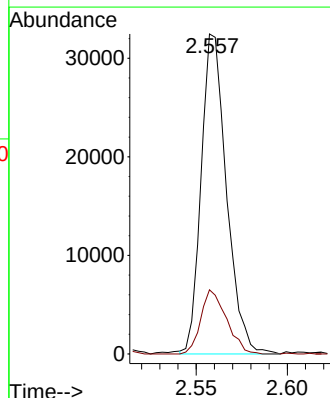
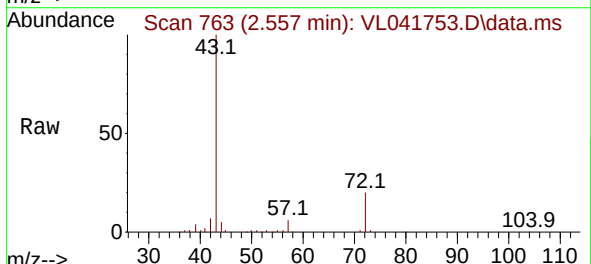
Delta R.T. 0.003 min

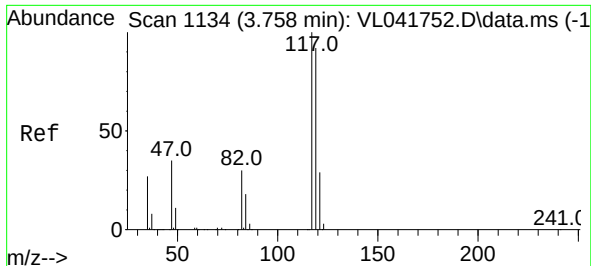
Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 43 Resp: 31483

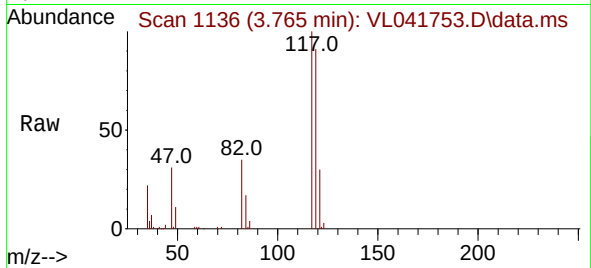
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 20.4  | 16.8  | 25.2  |





#35  
Carbon Tetrachloride  
Concen: 2.134 ppbv  
RT: 3.765 min Scan# 1136  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

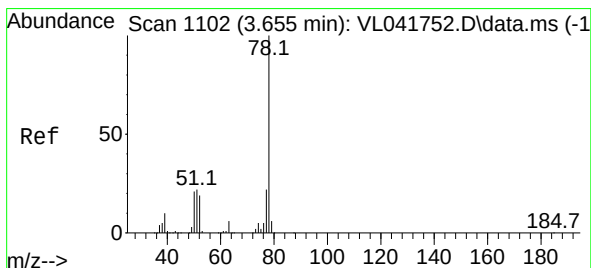
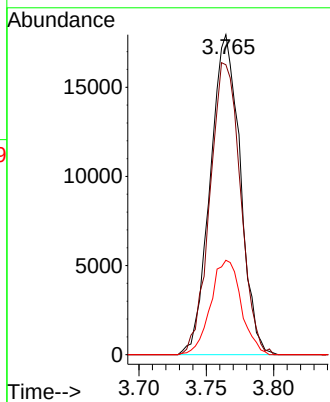
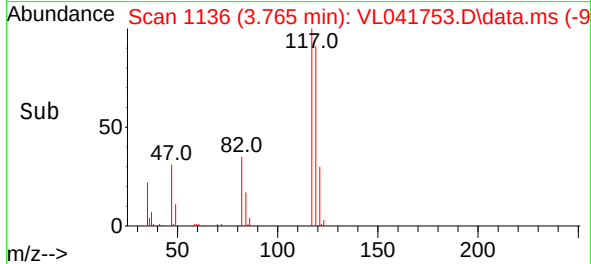
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



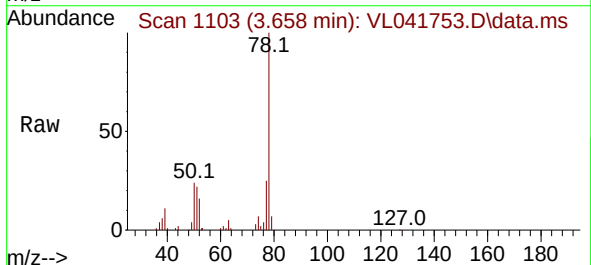
Tgt Ion:117 Resp: 2772  
Ion Ratio Lower Upper  
117 100  
119 90.6 73.7 110.5  
121 29.5 23.0 34.4

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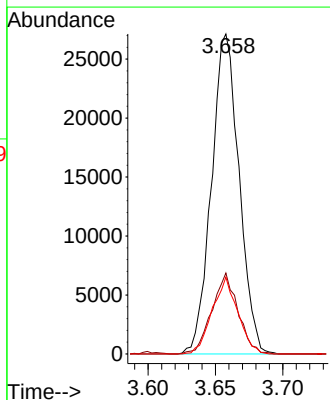
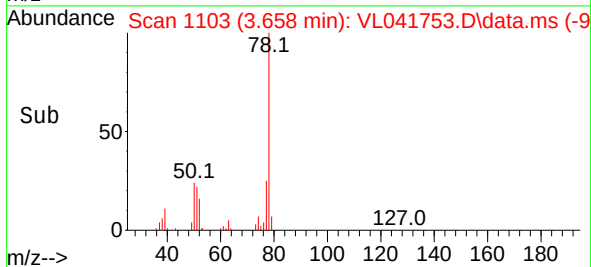
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

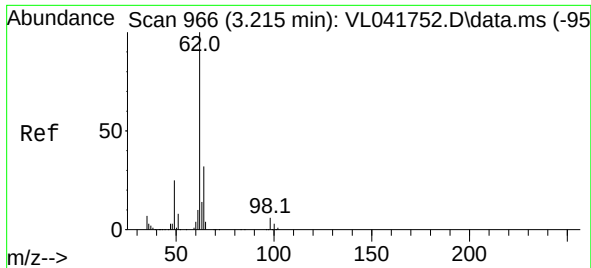


#36  
Benzene  
Concen: 2.048 ppbv  
RT: 3.658 min Scan# 1103  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



Tgt Ion: 78 Resp: 38759  
Ion Ratio Lower Upper  
78 100  
77 25.3 17.8 26.6  
50 24.0 17.2 25.8





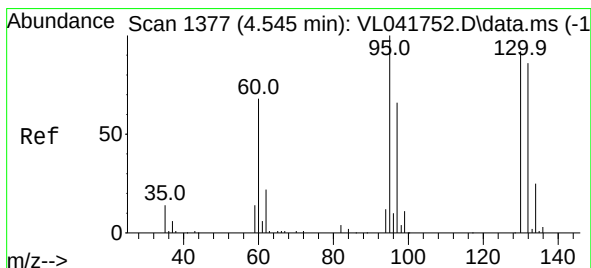
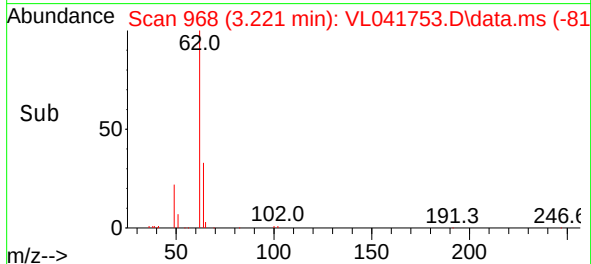
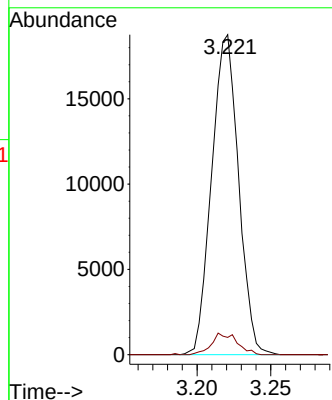
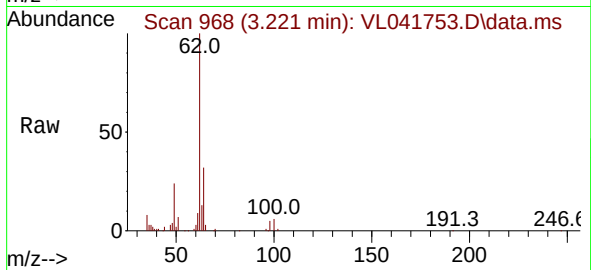
#37  
1,2-Dichloroethane  
Concen: 2.021 ppbv  
RT: 3.221 min Scan# 966  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 62 Resp: 23800  
Ion Ratio Lower Upper  
62 100  
98 6.4 4.7 7.1

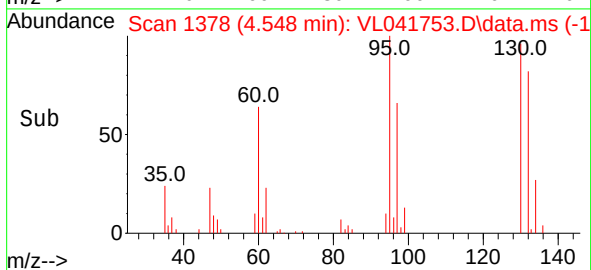
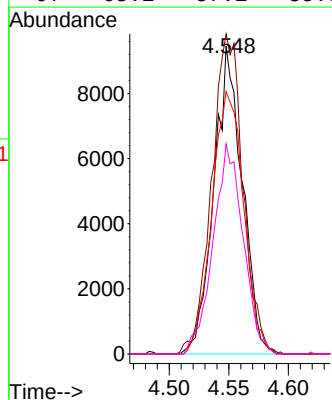
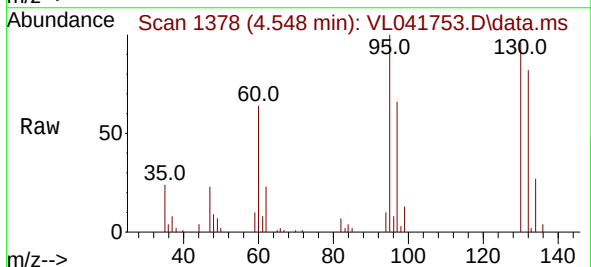
Manual Integrations  
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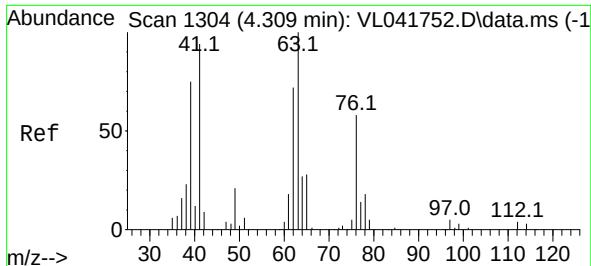
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38  
Trichloroethene  
Concen: 1.965 ppbv  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:130 Resp: 15660  
Ion Ratio Lower Upper  
130 100  
95 103.3 87.0 130.6  
132 85.2 75.0 112.6  
97 68.2 57.2 85.8





#39

1,2-Dichloropropane

Concen: 2.074 ppbv

RT: 4.315 min Scan# 1306

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

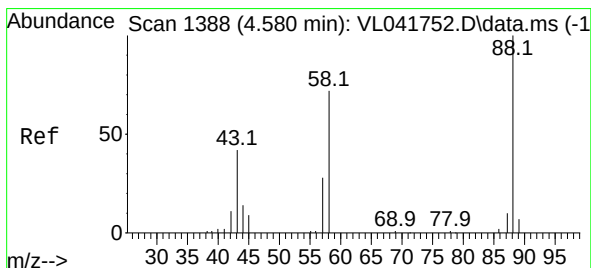
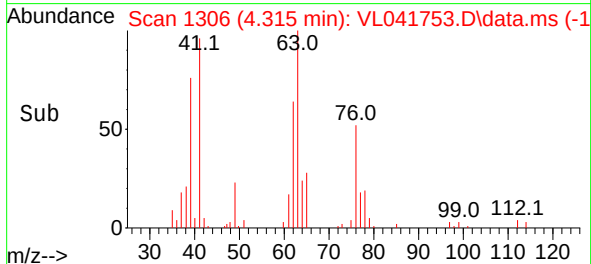
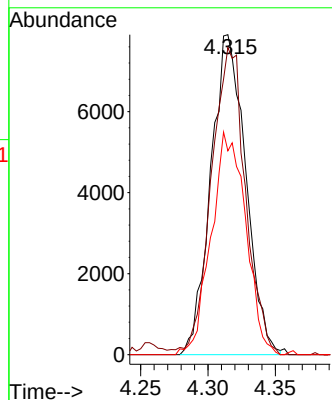
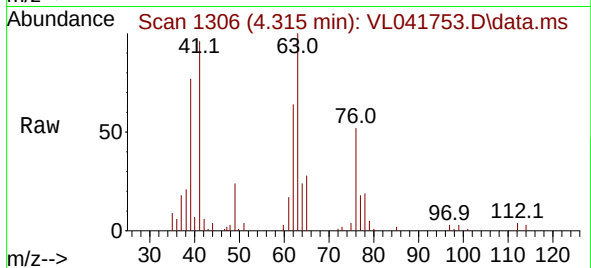
ClientSampleId :

VSTDIC002

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 1419  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 41       | 95.9  | 75.3  | 112.9 |
| 62       | 62.4  | 57.3  | 85.9  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#40

1,4-Dioxane

Concen: 2.041 ppbv m

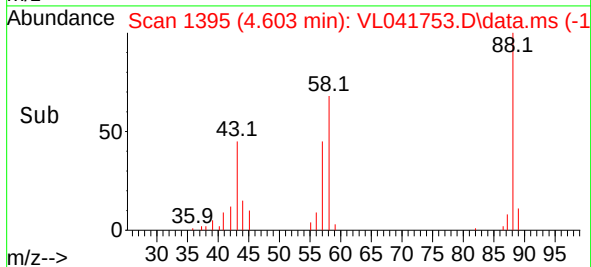
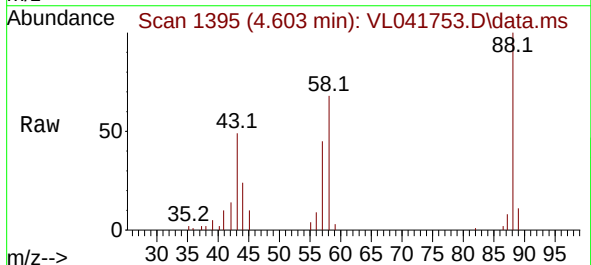
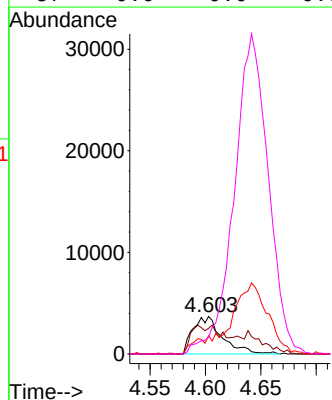
RT: 4.603 min Scan# 1395

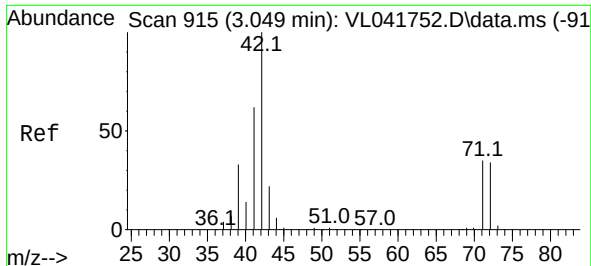
Delta R.T. 0.022 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 6826  |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 58       | 0.0   | 61.0  | 91.6# |
| 43       | 0.0   | 29.4  | 44.0# |
| 57       | 0.0   | 0.0   | 0.0   |





#41

Tetrahydrofuran

Concen: 2.021 ppbv

RT: 3.059 min Scan# 915

Delta R.T. 0.009 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

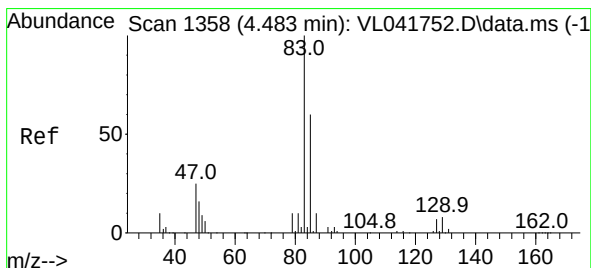
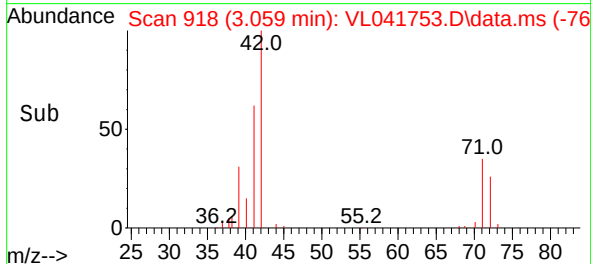
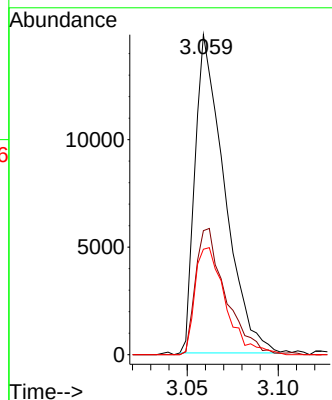
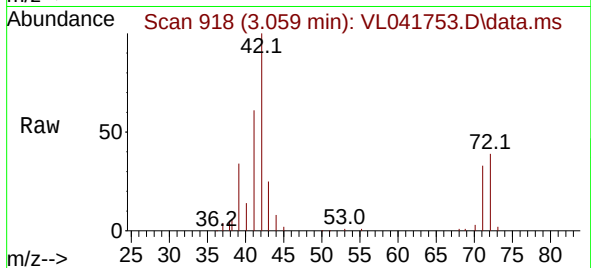
ClientSampleId :

VSTDICC002

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 42    | Resp: | 1666 |
| Ion Ratio | Lower | Upper |      |
| 42        | 100   |       |      |
| 72        | 40.7  | 29.1  | 43.7 |
| 71        | 34.9  | 28.4  | 42.6 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#42

Bromodichloromethane

Concen: 1.972 ppbv

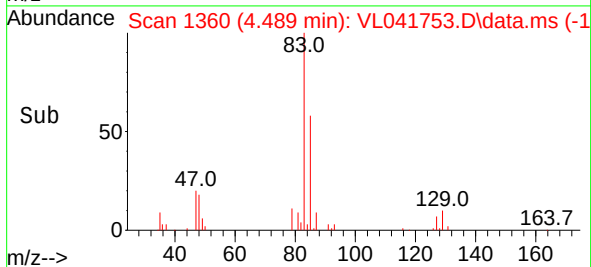
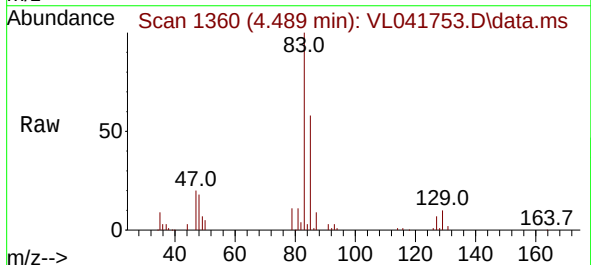
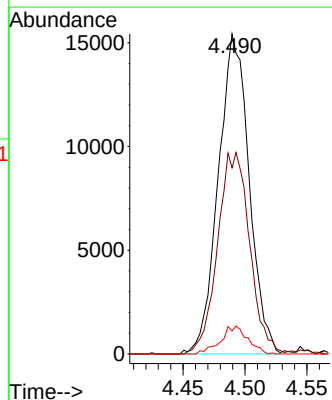
RT: 4.489 min Scan# 1360

Delta R.T. 0.006 min

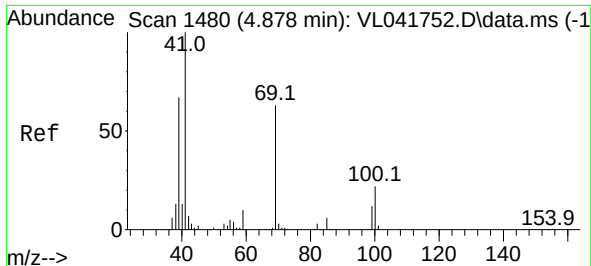
Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 26716 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 58.2  | 48.0  | 72.0  |
| 127       | 7.2   | 5.8   | 8.8   |







#43

Methyl Methacrylate

Concen: 2.059 ppbv

RT: 4.884 min Scan# 1484

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

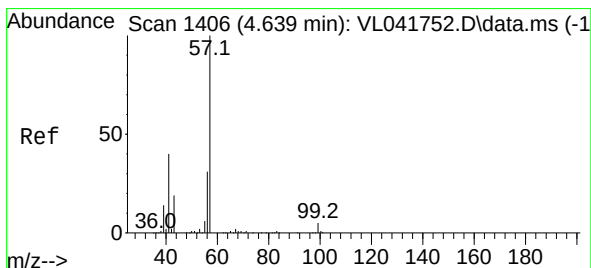
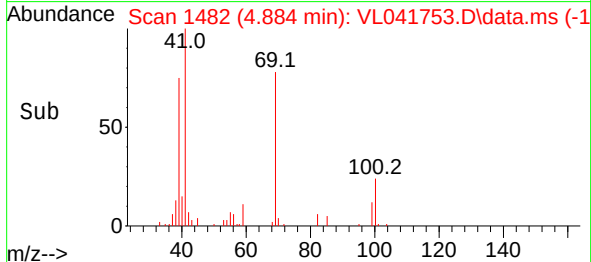
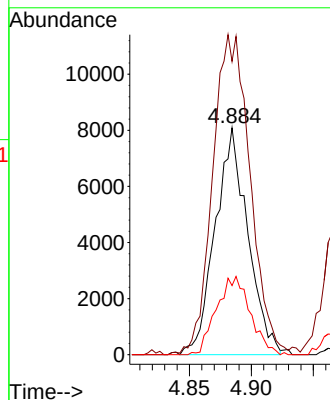
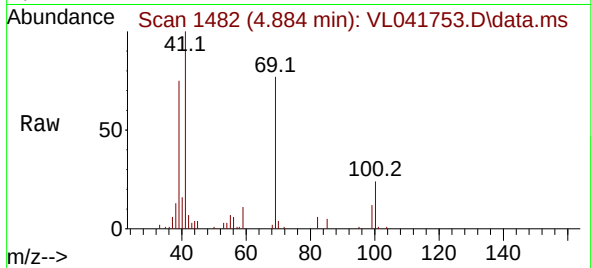
Tgt Ion: 69 Resp: 1484

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 162.7 | 130.3 | 195.5 |
| 100 | 35.7  | 28.3  | 42.5  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#44

2,2,4-Trimethylpentane

Concen: 2.086 ppbv

RT: 4.642 min Scan# 1407

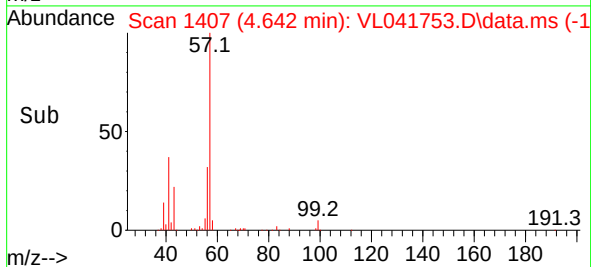
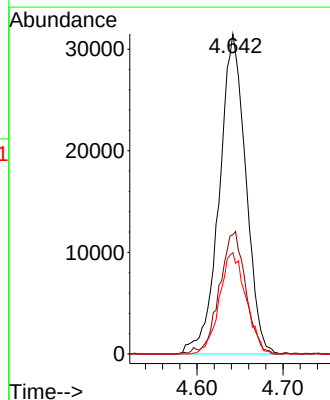
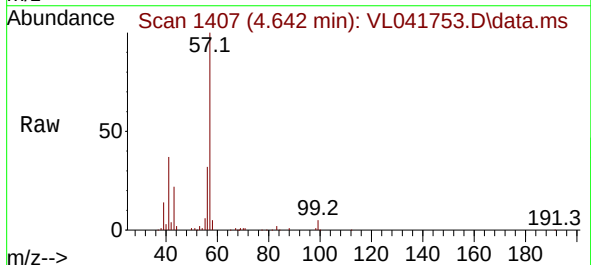
Delta R.T. 0.003 min

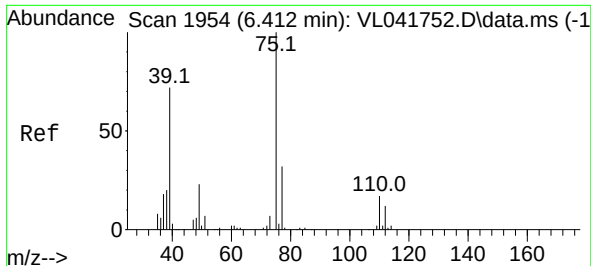
Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 57 Resp: 67432

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 37.9  | 30.7  | 46.1  |
| 56  | 31.7  | 25.4  | 38.0  |





#45

t-1,3-Dichloropropene

Concen: 1.995 ppbv

RT: 6.415 min Scan# 1954

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 75 Resp: 1488

Ion Ratio Lower Upper

75 100

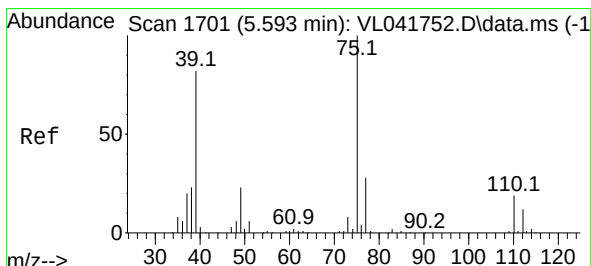
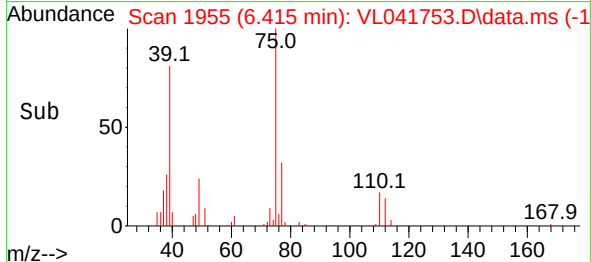
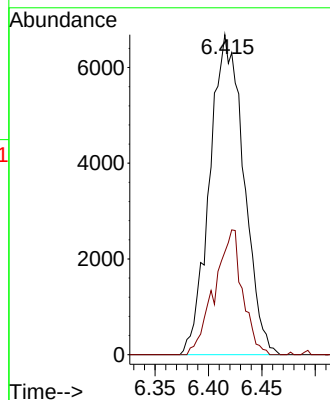
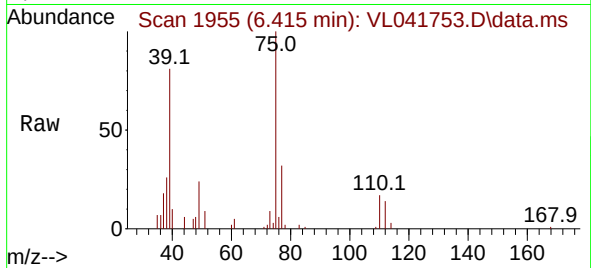
77 32.1 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#46

cis-1,3-Dichloropropene

Concen: 2.017 ppbv m

RT: 5.606 min Scan# 1705

Delta R.T. 0.013 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

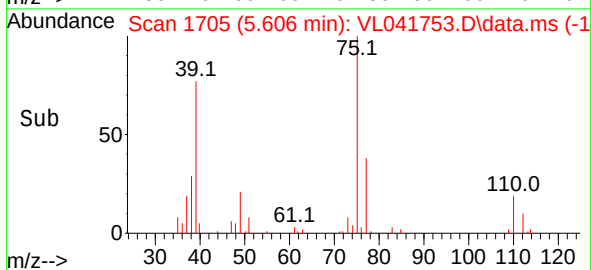
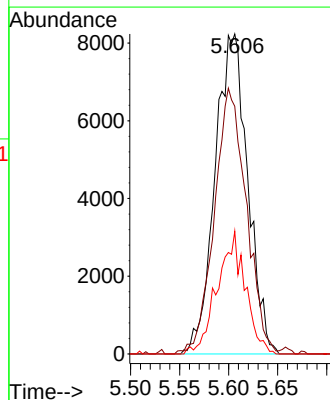
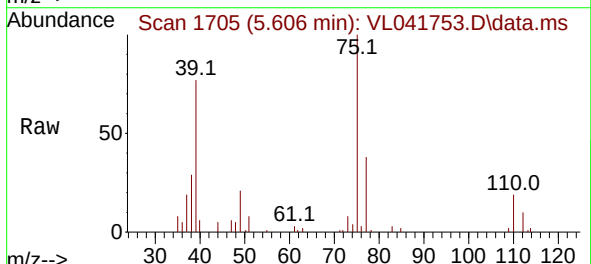
Tgt Ion: 75 Resp: 19105

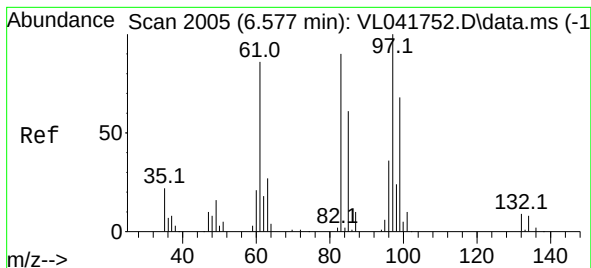
Ion Ratio Lower Upper

75 100

39 77.4 65.2 97.8

77 38.3 22.0 33.0#





#47

1,1,2-Trichloroethane

Concen: 2.078 ppbv

RT: 6.584 min Scan# 2005

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 97 Resp: 1485

Ion Ratio Lower Upper

97 100

83 78.0 72.3 108.5

85 56.8 48.5 72.7

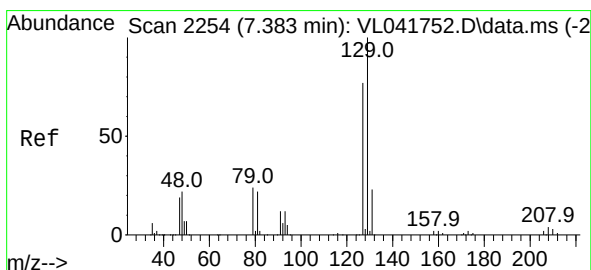
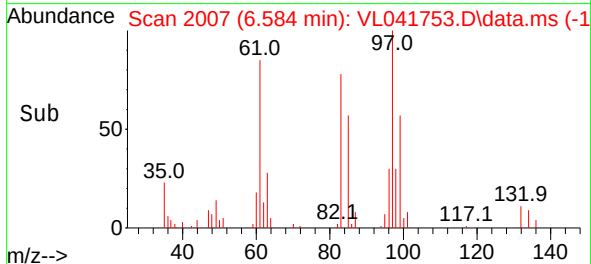
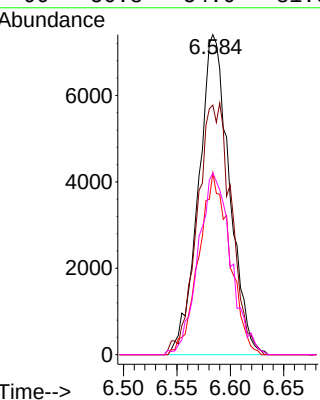
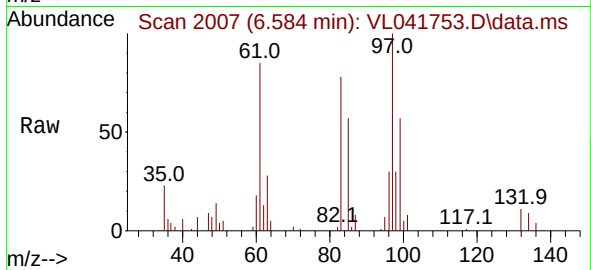
99 56.8 54.0 81.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#48

Dibromochloromethane

Concen: 2.024 ppbv

RT: 7.390 min Scan# 2256

Delta R.T. 0.006 min

Lab File: VL041753.D

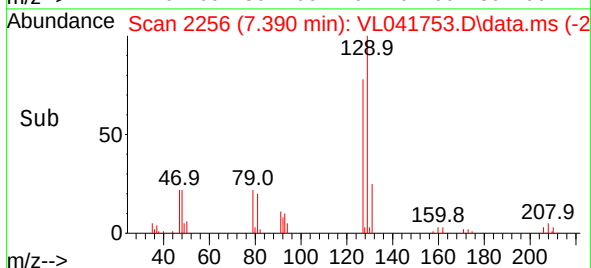
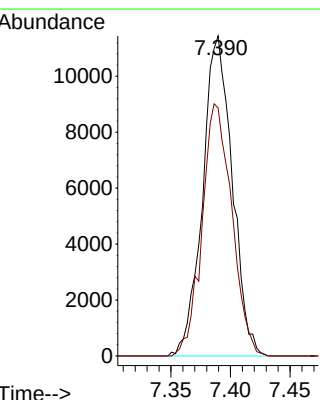
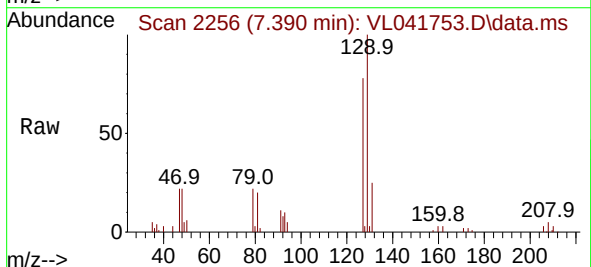
Acq: 16 Dec 2024 14:03

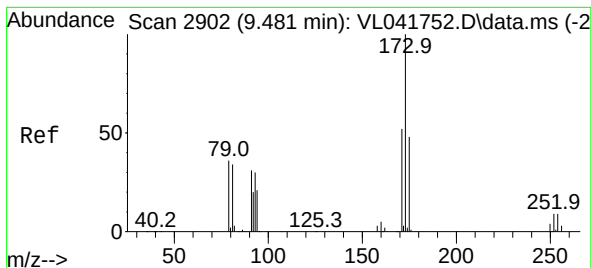
Tgt Ion:129 Resp: 19764

Ion Ratio Lower Upper

129 100

127 79.1 38.8 116.3





#49

Bromoform

Concen: 2.027 ppbv

RT: 9.484 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

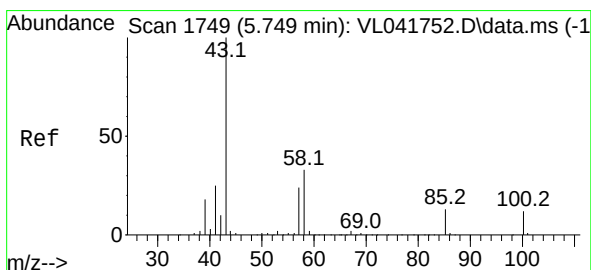
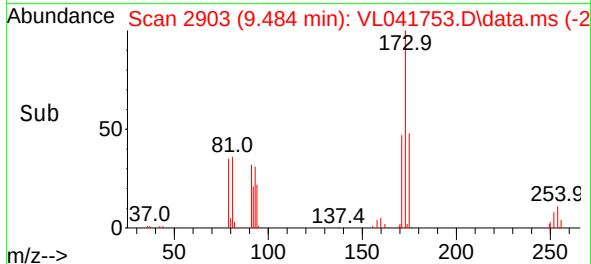
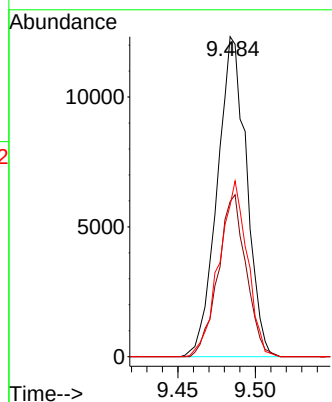
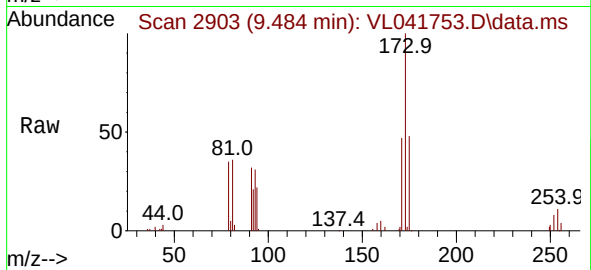
ClientSampleId :

VSTDICC002

Tgt Ion:173 Resp: 16200  
 Ion Ratio Lower Upper  
 173 100  
 175 48.5 38.2 57.2  
 171 52.9 41.1 61.7

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#50

4-Methyl-2-Pentanone

Concen: 2.098 ppbv

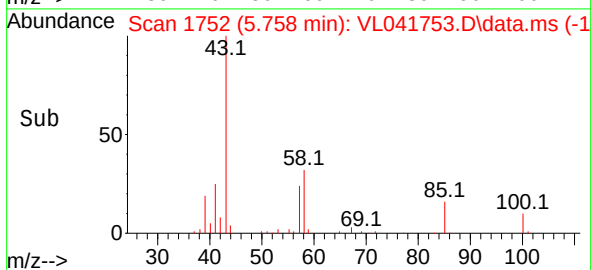
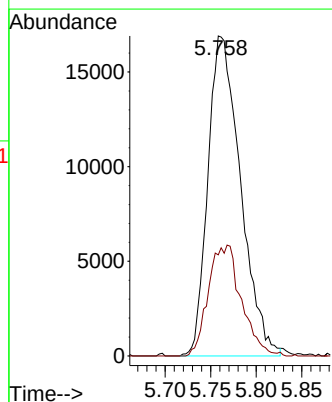
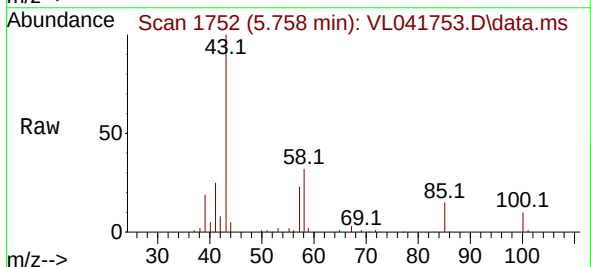
RT: 5.758 min Scan# 1752

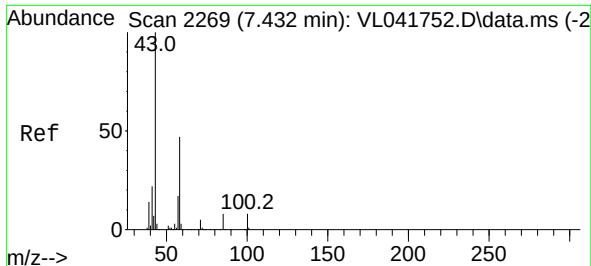
Delta R.T. 0.009 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 43 Resp: 42045  
 Ion Ratio Lower Upper  
 43 100  
 58 35.1 26.8 40.2





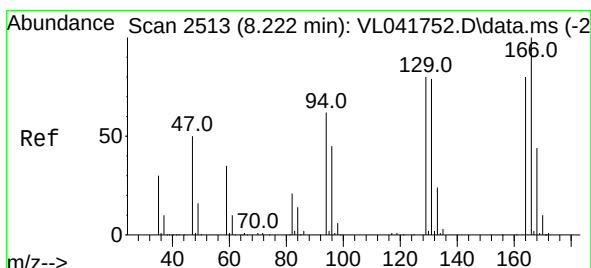
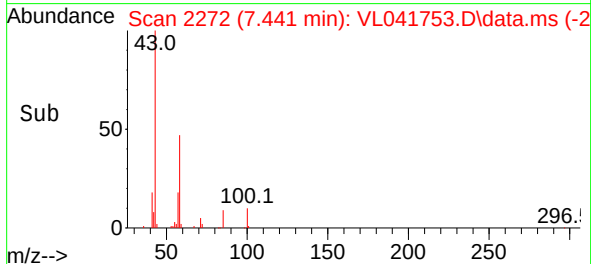
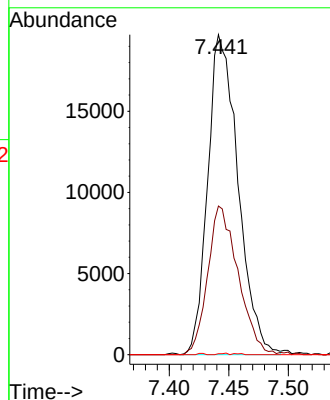
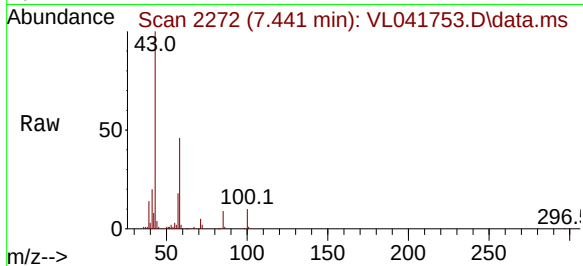
#51  
2-Hexanone  
Concen: 2.147 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

Tgt Ion: 43 Resp: 34878  
Ion Ratio Lower Upper  
43 100  
58 46.8 36.6 55.0  
98 0.3 0.1 0.1

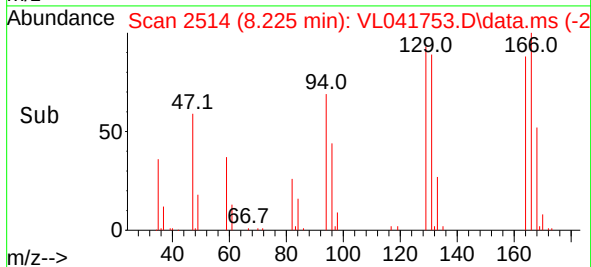
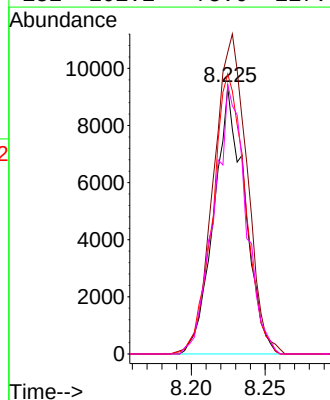
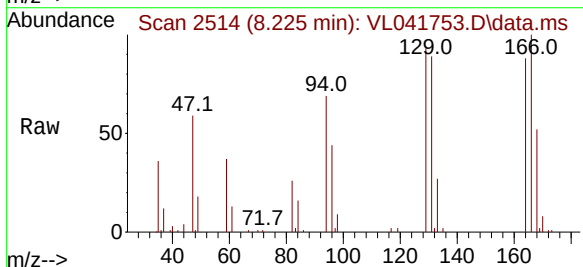
Manual Integrations  
APPROVED

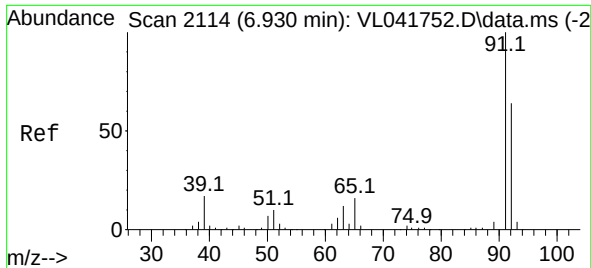
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#52  
Tetrachloroethene  
Concen: 1.932 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:164 Resp: 13612  
Ion Ratio Lower Upper  
164 100  
166 111.9 99.8 149.6  
129 104.9 79.6 119.4  
131 101.1 78.6 117.8





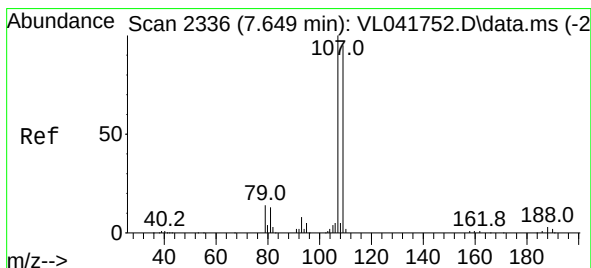
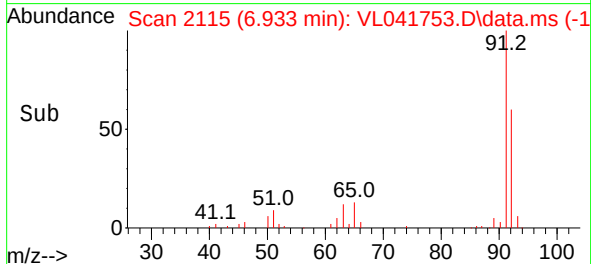
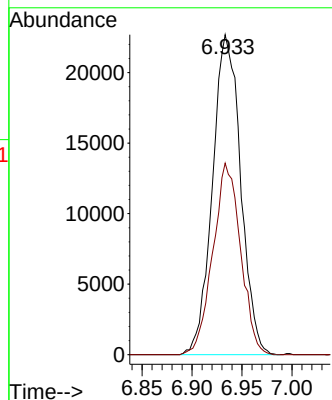
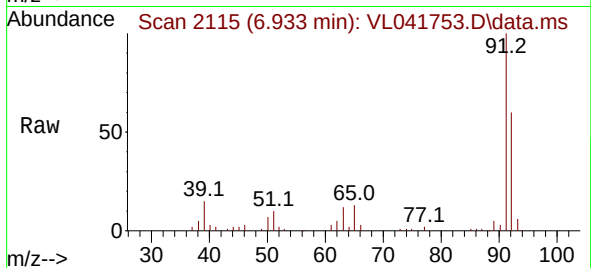
#53  
Toluene  
Concen: 2.072 ppbv  
RT: 6.933 min Scan# 2114  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 91 Resp: 44470  
Ion Ratio Lower Upper  
91 100  
92 58.8 47.9 71.9

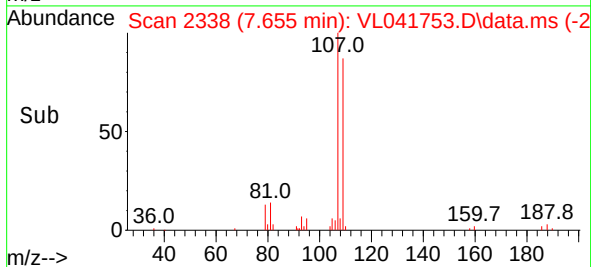
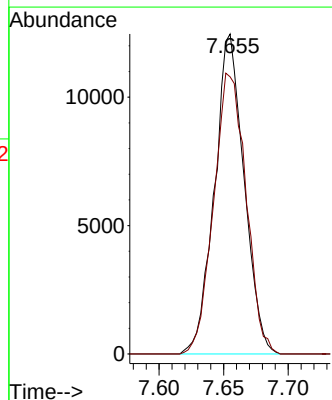
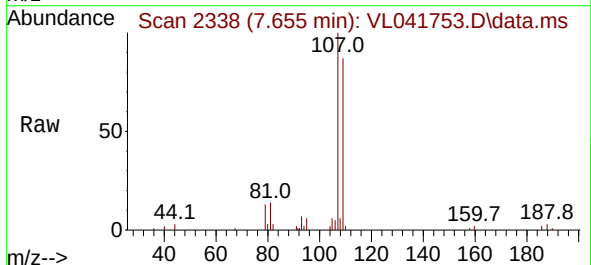
Manual Integrations  
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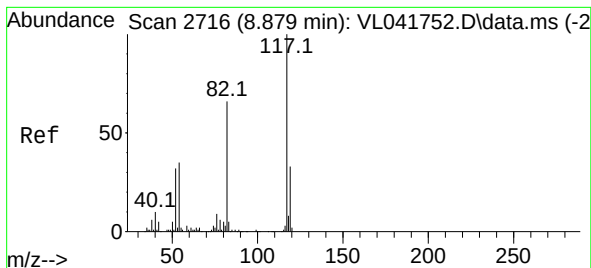
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#54  
1,2-Dibromoethane  
Concen: 2.012 ppbv  
RT: 7.655 min Scan# 2338  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:107 Resp: 19820  
Ion Ratio Lower Upper  
107 100  
109 86.6 75.9 113.9





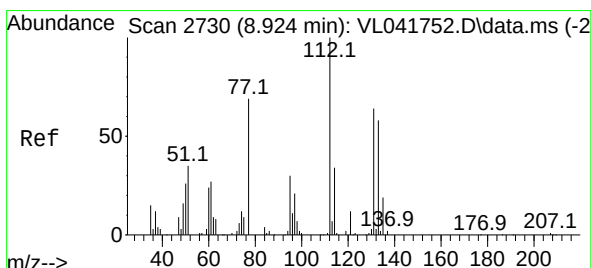
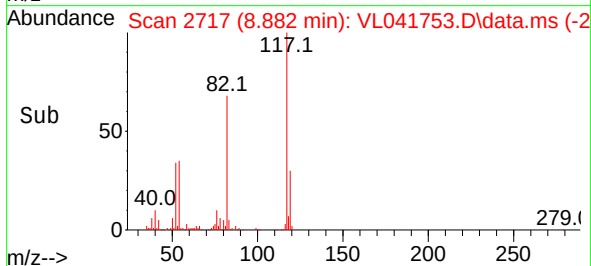
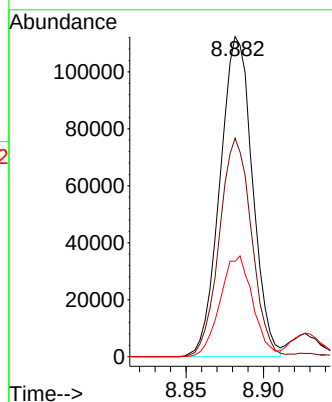
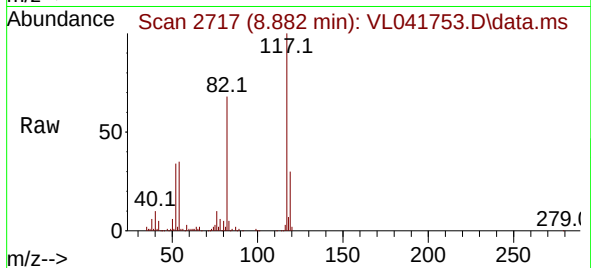
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.882 min Scan# 2717  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion:117 Resp: 16397  
Ion Ratio Lower Upper  
117 100  
82 68.5 53.8 80.8  
119 31.5 26.7 40.1

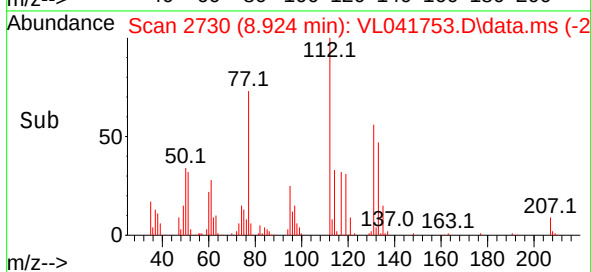
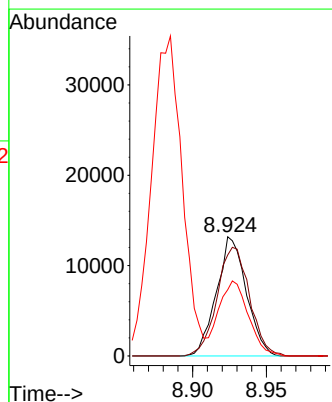
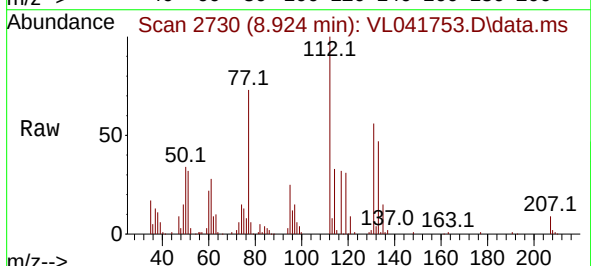
Manual Integrations  
APPROVED

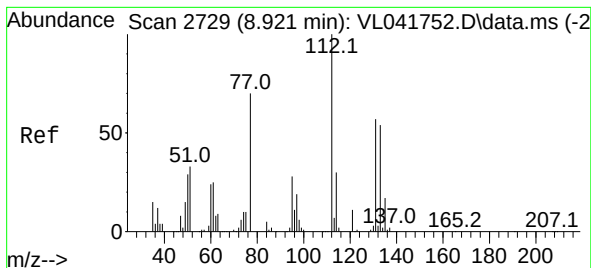
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#56  
1,1,1,2-Tetrachloroethane  
Concen: 2.141 ppbv  
RT: 8.924 min Scan# 2730  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:131 Resp: 18613  
Ion Ratio Lower Upper  
131 100  
133 99.0 76.8 115.2  
119 61.3 49.0 73.6





#57

Chlorobenzene

Concen: 2.127 ppbv

RT: 8.920 min Scan# 2729

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

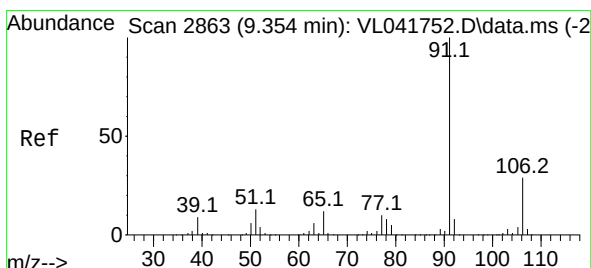
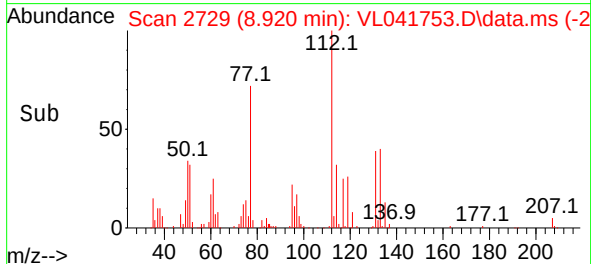
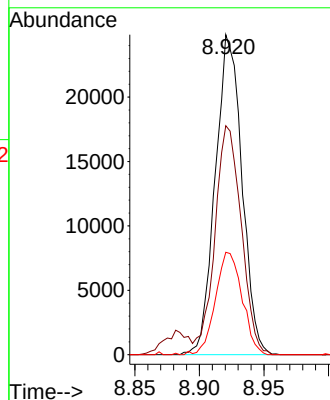
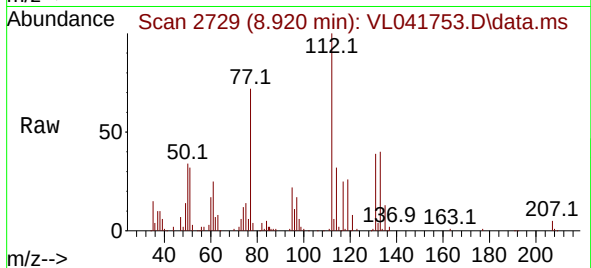
VSTDICC002

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 112   | Resp: | 3568 |
| Ion Ratio | Lower | Upper |      |
| 112       | 100   |       |      |
| 77        | 71.6  | 57.4  | 86.0 |
| 114       | 32.0  | 27.4  | 33.4 |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 2.145 ppbv

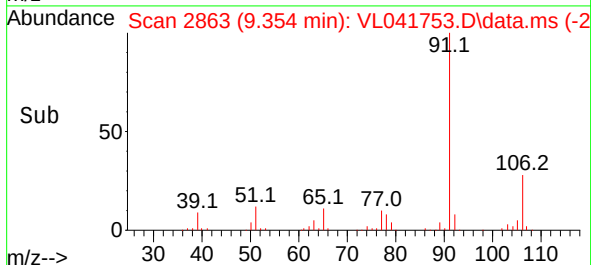
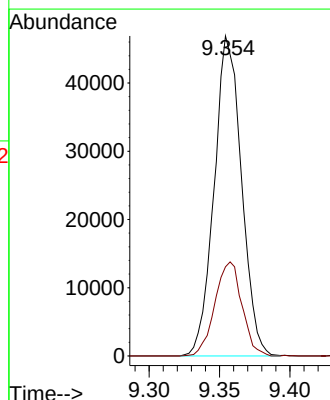
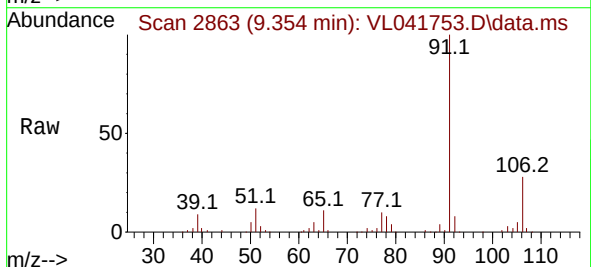
RT: 9.354 min Scan# 2863

Delta R.T. -0.000 min

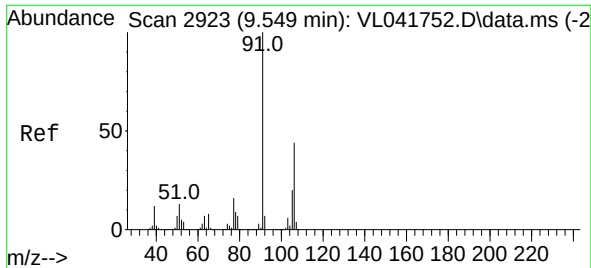
Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 63316 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 106       | 27.8  | 23.5  | 35.3  |







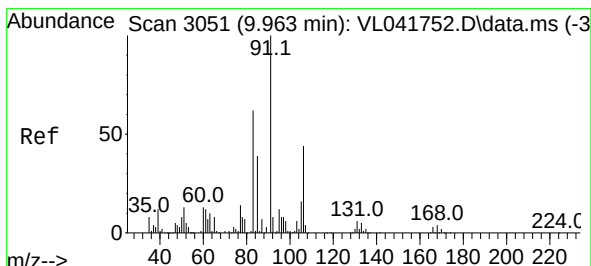
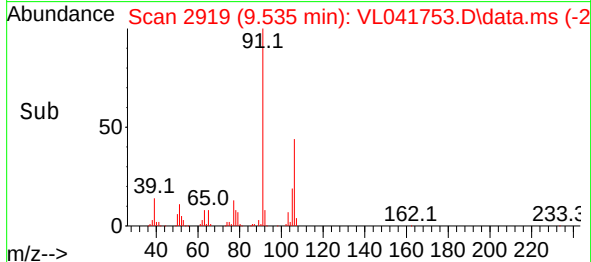
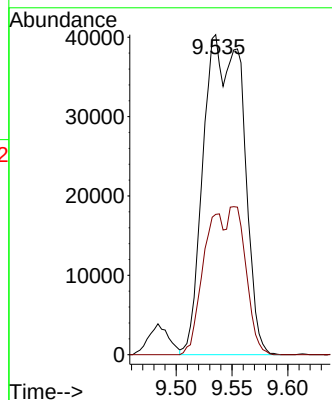
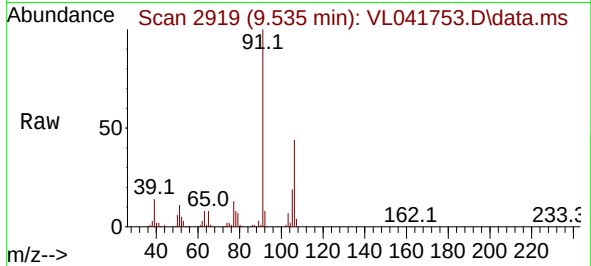
#59  
m/p-Xylene  
Concen: 4.204 ppbv m  
RT: 9.535 min Scan# 2923  
Delta R.T. -0.013 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

Tgt Ion: 91 Resp: 9982  
Ion Ratio Lower Upper  
91 100  
106 46.4 0.0 0.0

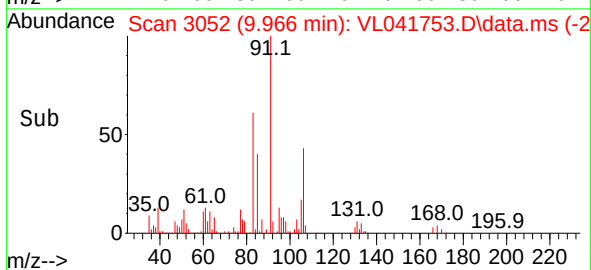
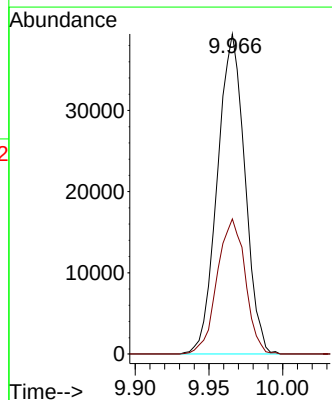
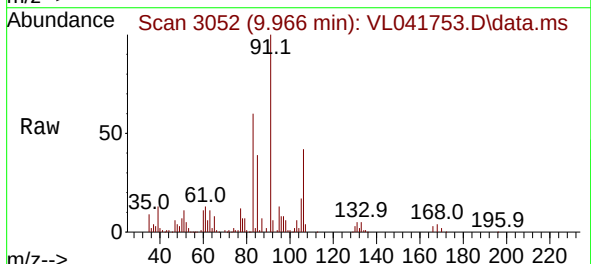
Manual Integrations  
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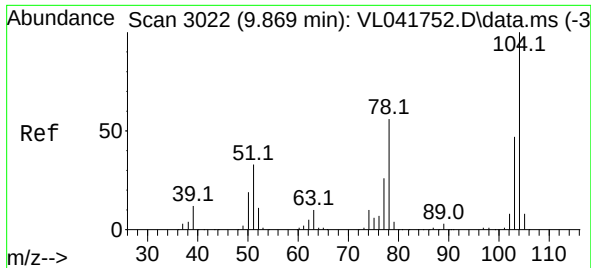
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#60  
o-Xylene  
Concen: 2.149 ppbv  
RT: 9.966 min Scan# 3052  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 91 Resp: 51152  
Ion Ratio Lower Upper  
91 100  
106 43.1 21.1 63.4





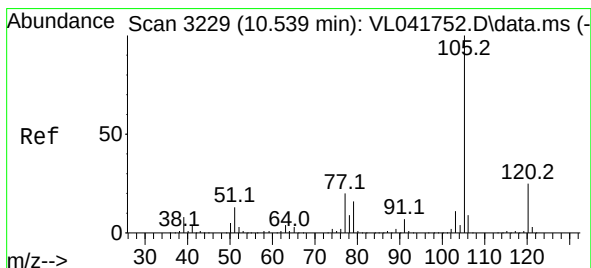
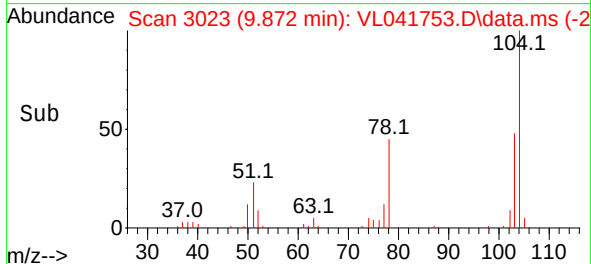
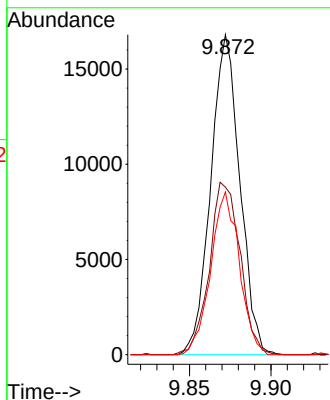
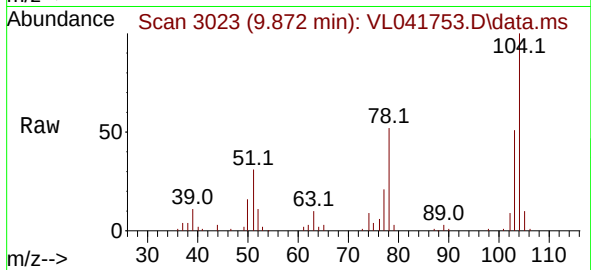
#61  
Styrene  
Concen: 2.025 ppbv  
RT: 9.872 min Scan# 3022  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion:104 Resp: 2084  
Ion Ratio Lower Upper  
104 100  
78 56.9 43.8 65.6  
103 50.2 37.8 56.6

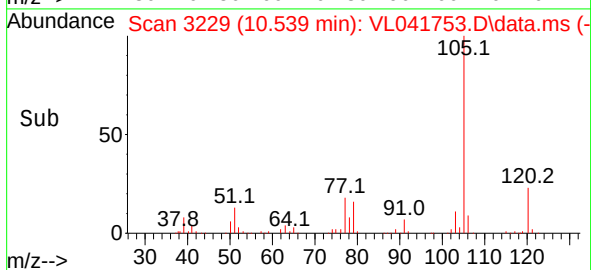
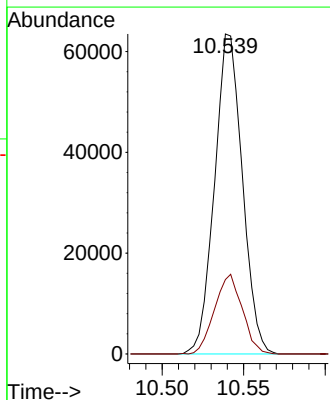
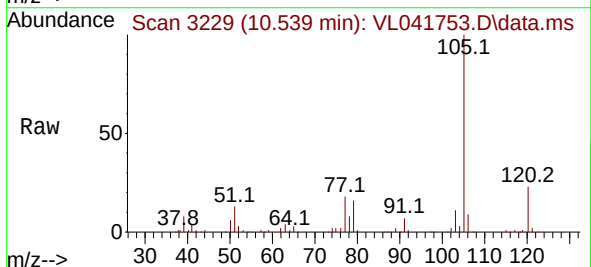
Manual Integrations  
APPROVED

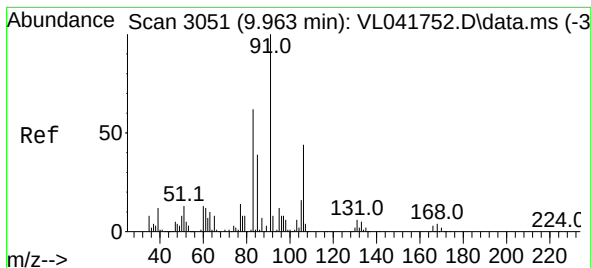
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#62  
Isopropylbenzene  
Concen: 2.103 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

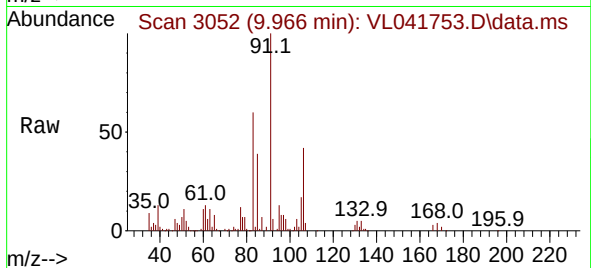
Tgt Ion:105 Resp: 75206  
Ion Ratio Lower Upper  
105 100  
120 24.8 19.8 29.8





#63  
1,1,2,2-Tetrachloroethane  
Concen: 1.997 ppbv  
RT: 9.966 min Scan# 3051  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

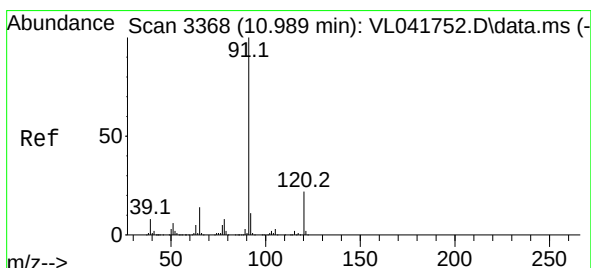
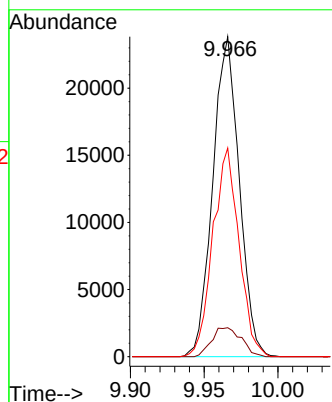
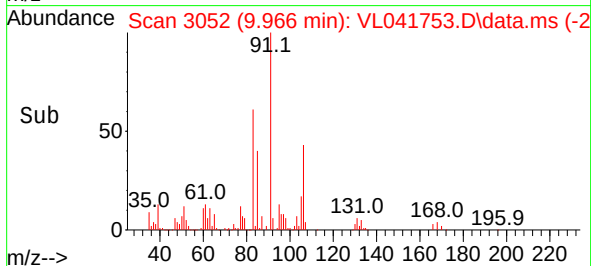
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



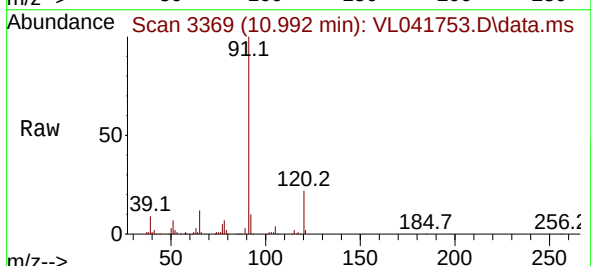
Tgt Ion: 83 Resp: 2975  
Ion Ratio Lower Upper  
83 100  
131 10.2 4.9 14.7  
85 64.4 32.0 96.2

Manual Integrations  
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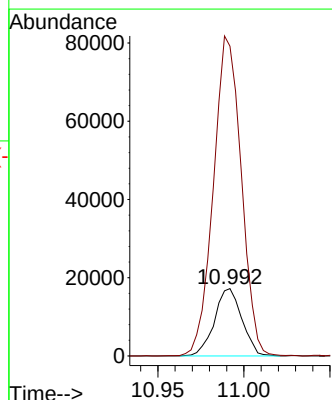
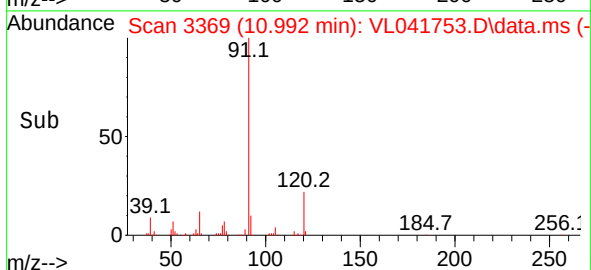
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

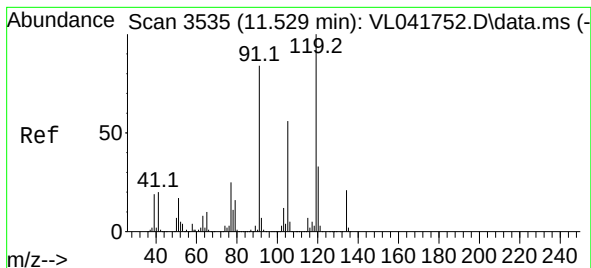


#64  
n-propylbenzene  
Concen: 2.117 ppbv  
RT: 10.992 min Scan# 3369  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



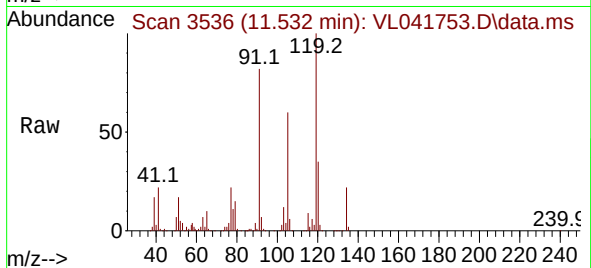
Tgt Ion:120 Resp: 19146  
Ion Ratio Lower Upper  
120 100  
91 482.0 387.3 580.9





#65  
tert-Butylbenzene  
Concen: 2.135 ppbv  
RT: 11.532 min Scan# 3536  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

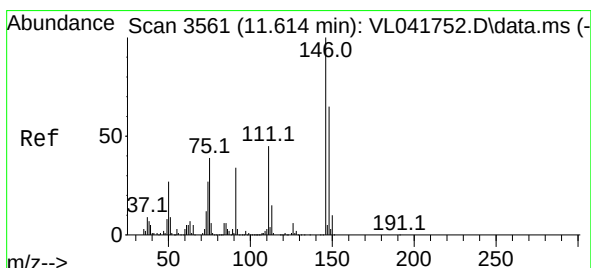
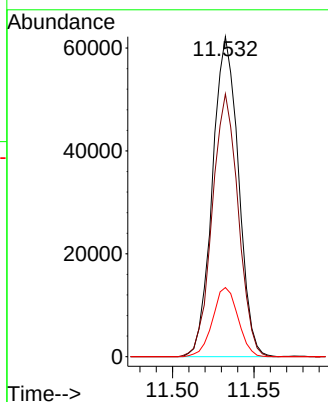
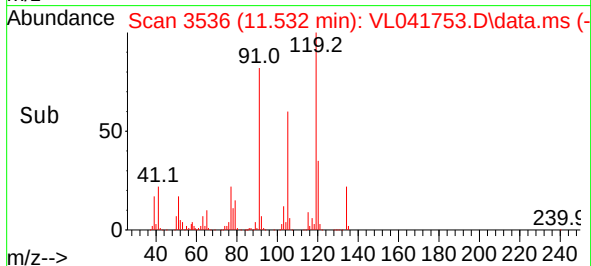
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



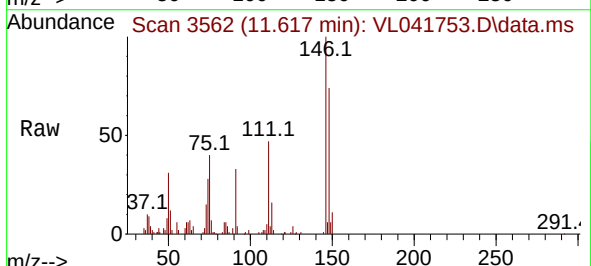
Tgt Ion: 119 Resp: 68879  
Ion Ratio Lower Upper  
119 100  
91 82.1 67.0 100.4  
134 21.1 16.5 24.7

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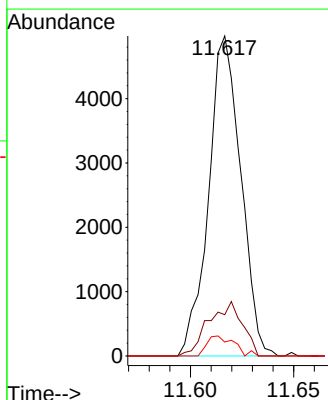
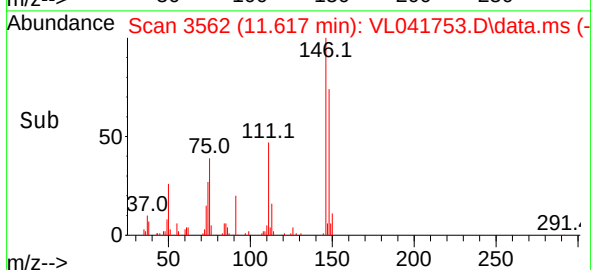
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

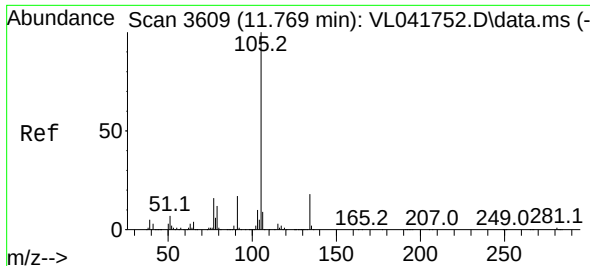


#66  
Benzyl Chloride  
Concen: 1.898 ppbv  
RT: 11.617 min Scan# 3562  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



Tgt Ion: 91 Resp: 5400  
Ion Ratio Lower Upper  
91 100  
126 17.7 13.9 20.9  
128 5.3 4.4 6.6





#67

sec-Butylbenzene

Concen: 2.149 ppbv

RT: 11.769 min Scan# 3609

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion:105 Resp: 95968

Ion Ratio Lower Upper

105 100

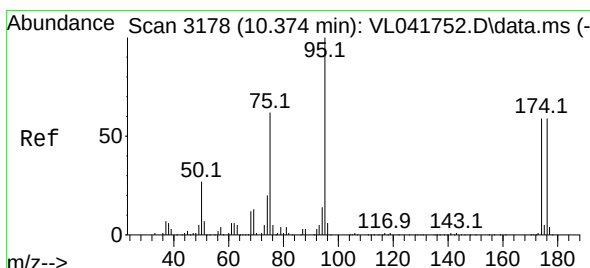
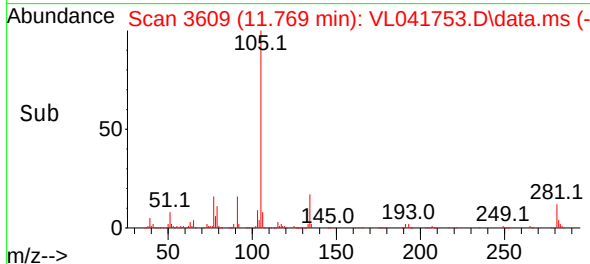
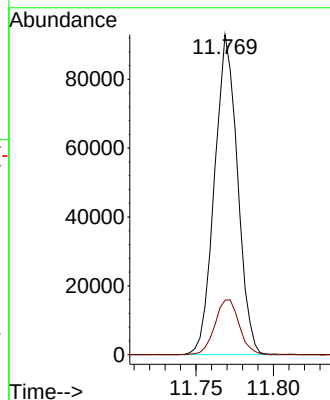
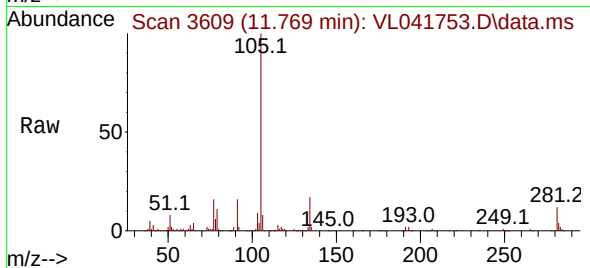
134 18.1 14.5 21.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#68

1-Bromo-4-Fluorobenzene

Concen: 10.122 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

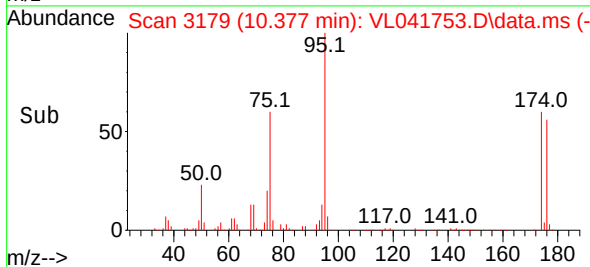
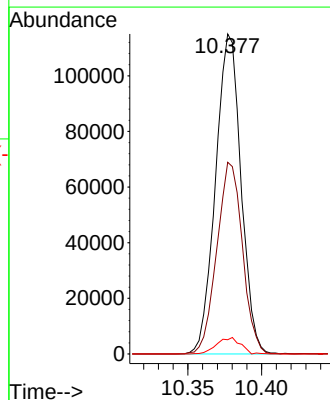
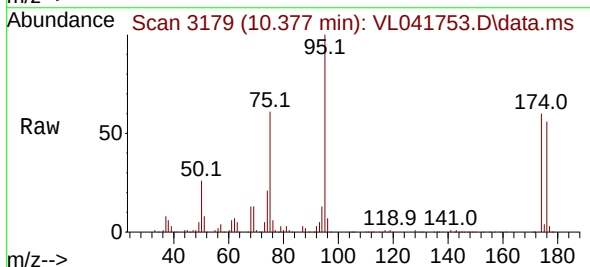
Tgt Ion: 95 Resp: 138312

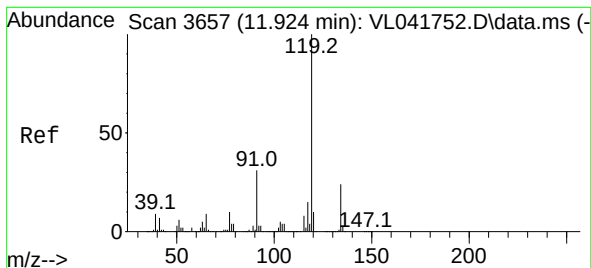
Ion Ratio Lower Upper

95 100

174 60.2 47.6 71.4

175 4.9 3.7 5.5





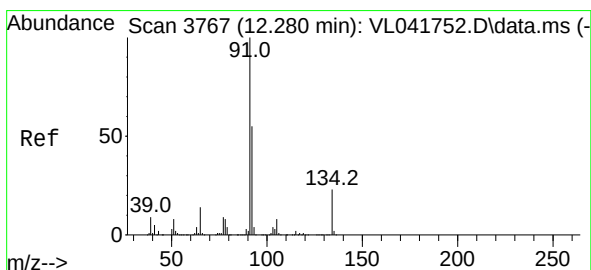
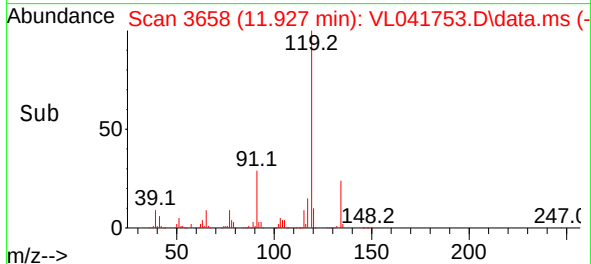
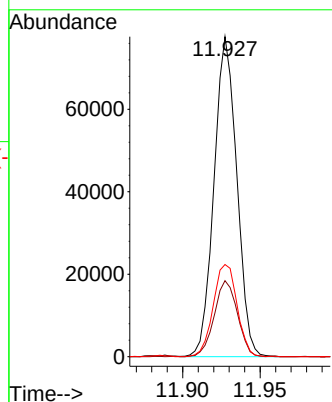
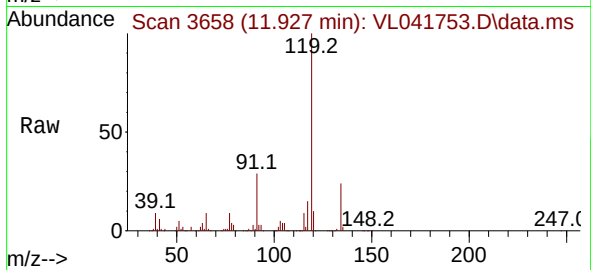
#69  
p-Isopropyltoluene  
Concen: 2.153 ppbv  
RT: 11.927 min Scan# 3658  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

Tgt Ion: 119 Resp: 79230  
Ion Ratio Lower Upper  
119 100  
134 24.3 19.6 29.4  
91 30.5 24.4 36.6

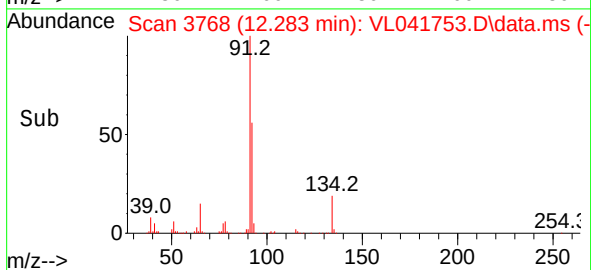
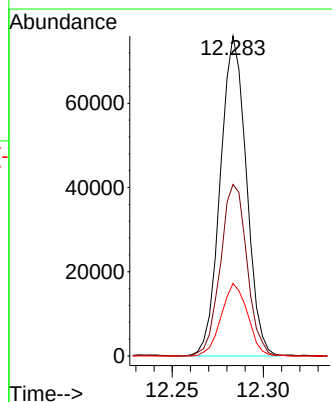
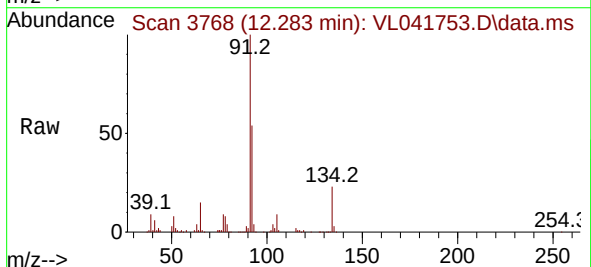
Manual Integrations  
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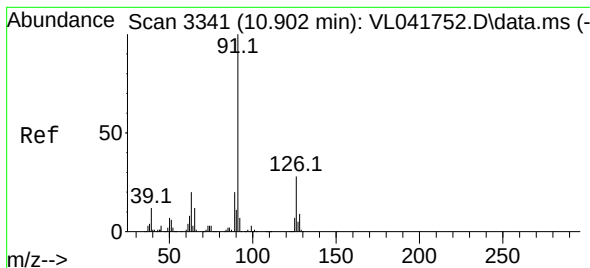
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#70  
n-Butylbenzene  
Concen: 2.122 ppbv  
RT: 12.283 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 91 Resp: 75430  
Ion Ratio Lower Upper  
91 100  
92 54.7 43.2 64.8  
134 23.0 18.2 27.4





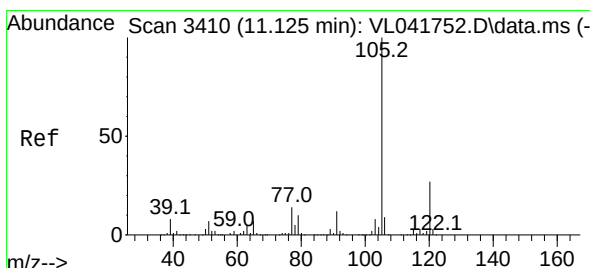
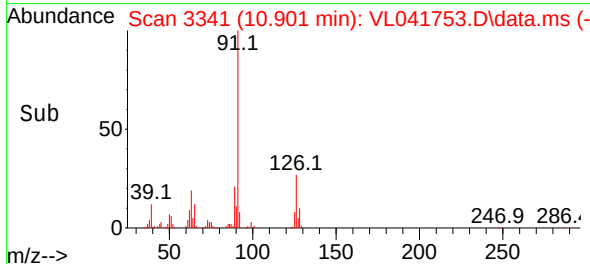
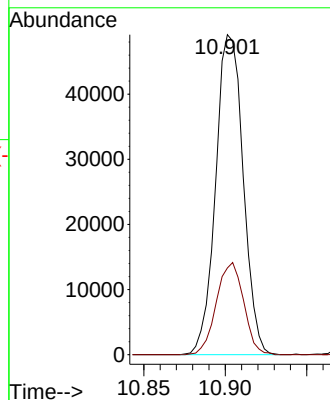
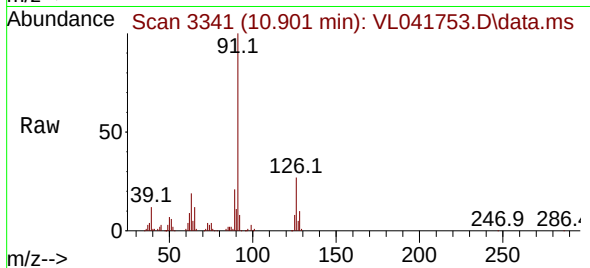
#71  
2-Chlorotoluene  
Concen: 2.114 ppbv  
RT: 10.901 min Scan# 3341  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion: 91 Resp: 57724  
Ion Ratio Lower Upper  
91 100  
126 28.5 11.6 46.4

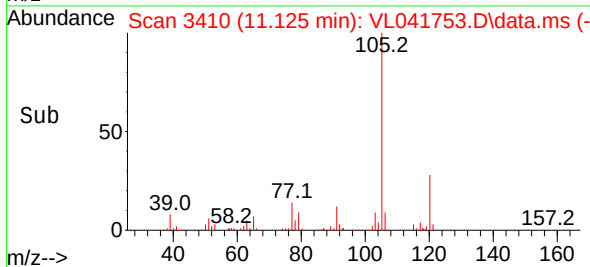
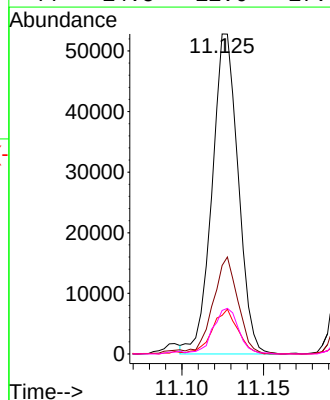
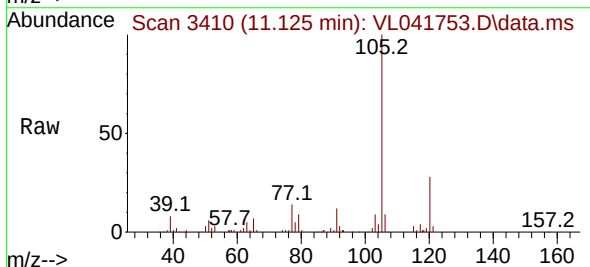
Manual Integrations  
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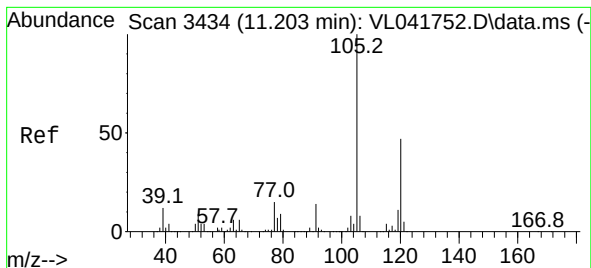
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 2.098 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:105 Resp: 58841  
Ion Ratio Lower Upper  
105 100  
120 29.7 23.3 34.9  
91 14.3 10.9 16.3  
77 14.5 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 2.087 ppbv

RT: 11.206 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion:105 Resp: 4864

Ion Ratio Lower Upper

105 100

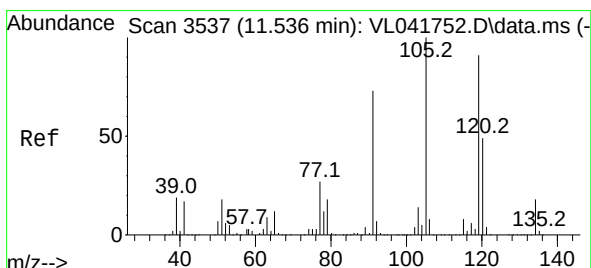
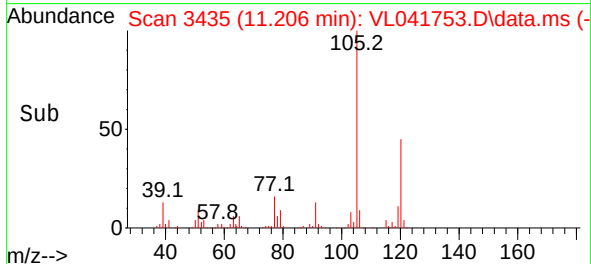
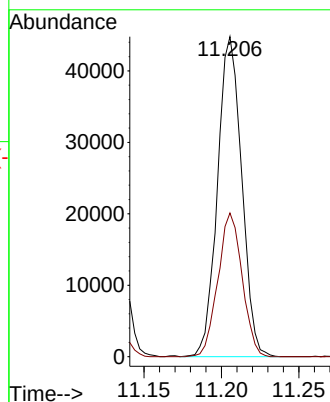
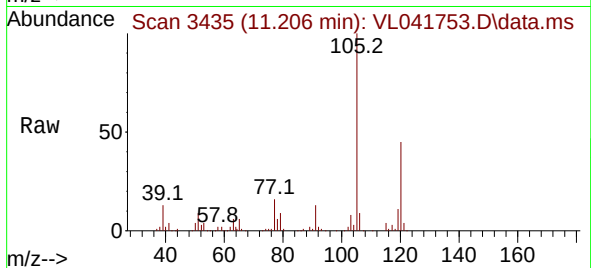
120 44.9 37.4 56.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#74

1,2,4-Trimethylbenzene

Concen: 2.118 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion:105 Resp: 53084

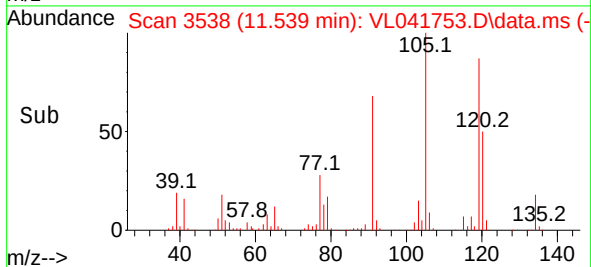
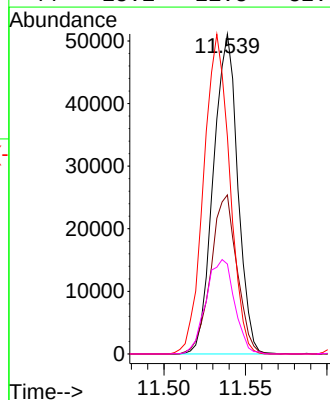
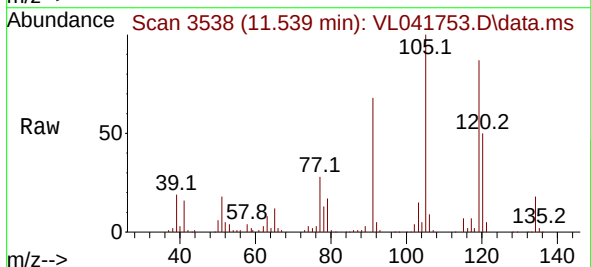
Ion Ratio Lower Upper

105 100

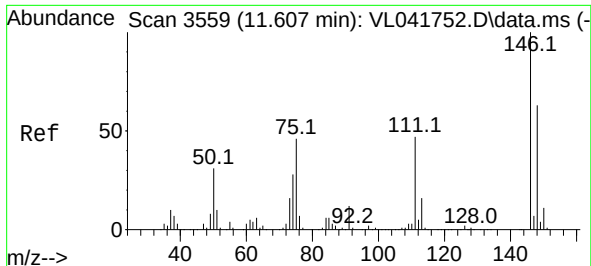
120 49.7 39.0 58.4

91 67.9 58.1 87.1

77 28.1 21.8 32.8

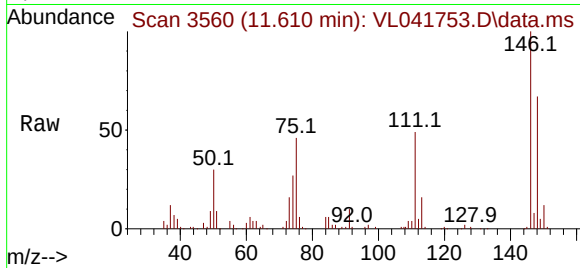






#75  
1,3-Dichlorobenzene  
Concen: 2.040 ppbv  
RT: 11.610 min Scan# 3559  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

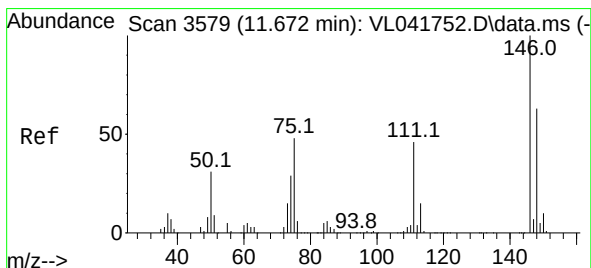
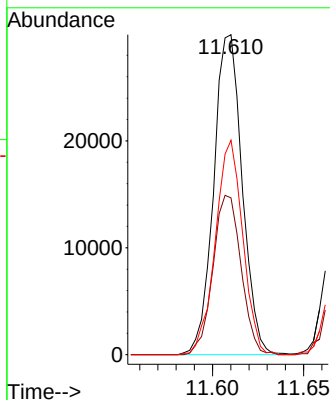
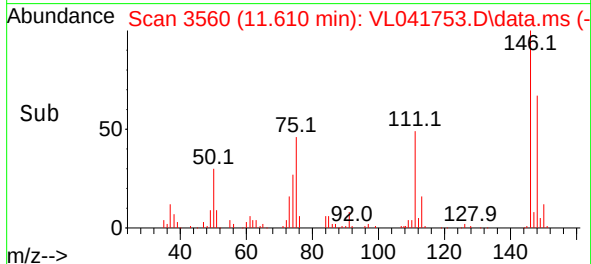
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002



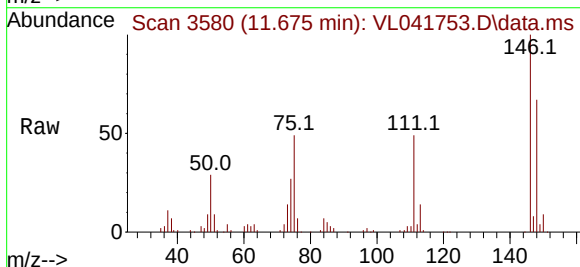
Tgt Ion:146 Resp: 32609  
Ion Ratio Lower Upper  
146 100  
111 49.1 23.4 70.3  
148 64.3 31.6 95.0

Manual Integrations  
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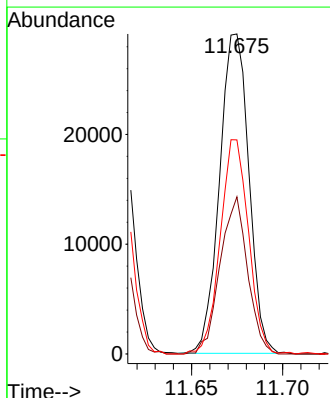
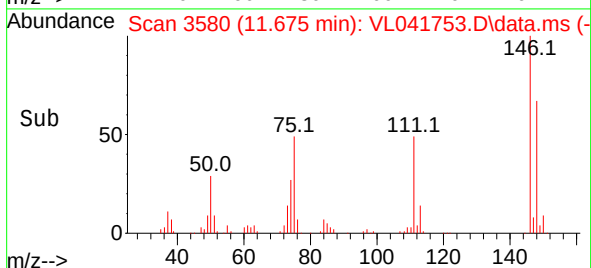
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

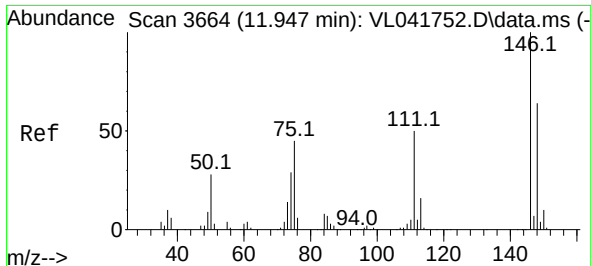


#76  
1,4-Dichlorobenzene  
Concen: 2.060 ppbv  
RT: 11.675 min Scan# 3580  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



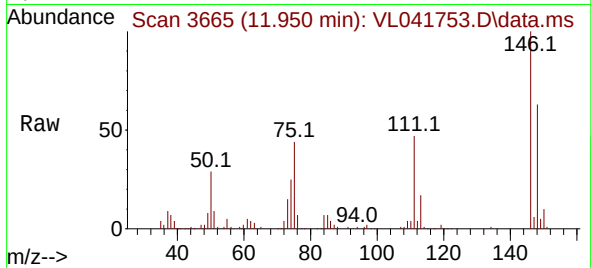
Tgt Ion:146 Resp: 32527  
Ion Ratio Lower Upper  
146 100  
111 46.1 22.7 68.1  
148 65.1 31.4 94.0





#77  
1,2-Dichlorobenzene  
Concen: 2.095 ppbv  
RT: 11.950 min Scan# 3665  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

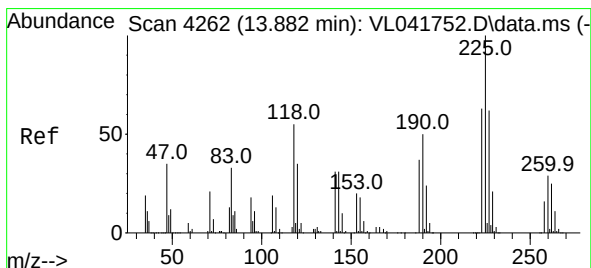
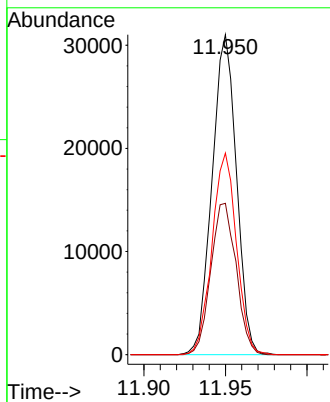
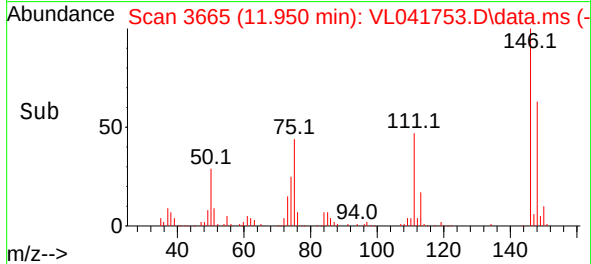
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



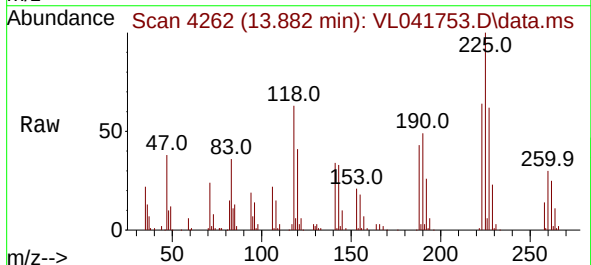
Tgt Ion:146 Resp: 32223  
Ion Ratio Lower Upper  
146 100  
111 49.2 24.8 74.3  
148 63.3 31.8 95.4

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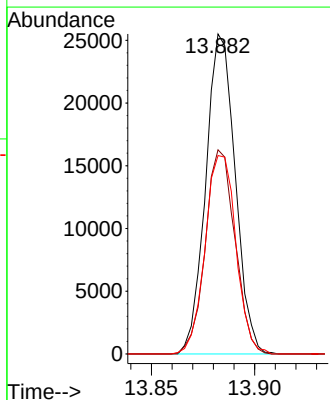
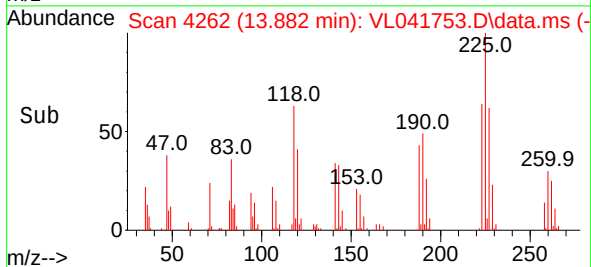
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

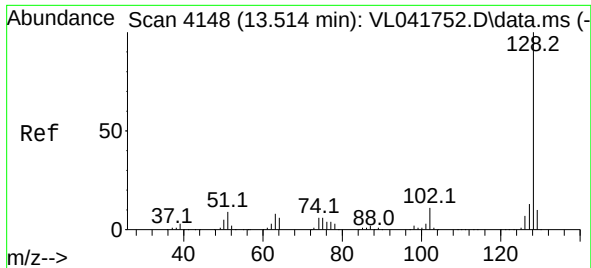


#78  
Hexachloro-1,3-Butadiene  
Concen: 2.224 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



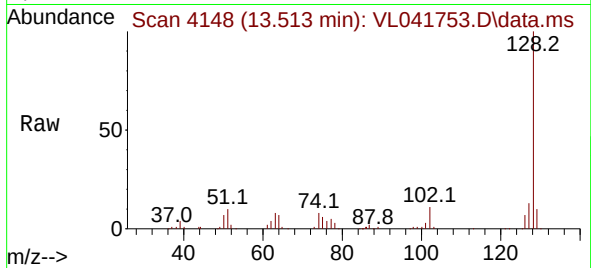
Tgt Ion:225 Resp: 25358  
Ion Ratio Lower Upper  
225 100  
223 64.2 50.5 75.7  
227 64.8 50.3 75.5





#79  
Naphthalene  
Concen: 2.167 ppbv  
RT: 13.513 min Scan# 4148  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

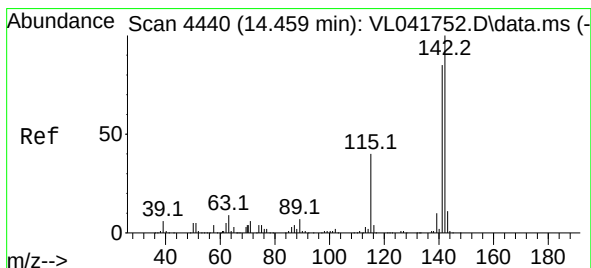
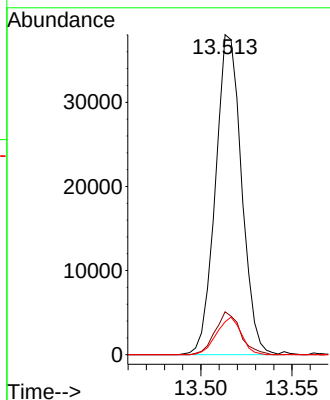
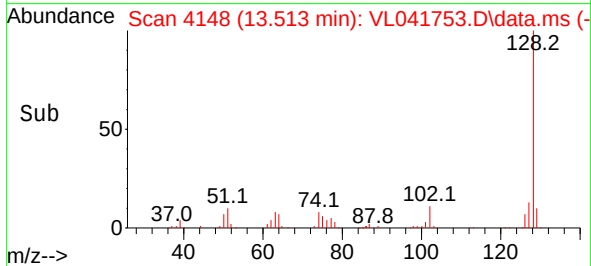
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002



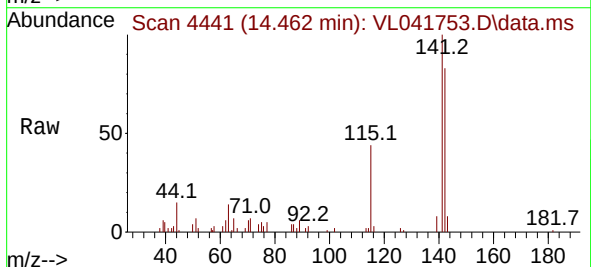
Tgt Ion:128 Resp: 3785  
Ion Ratio Lower Upper  
128 100  
127 13.4 10.7 16.1  
129 10.3 8.2 12.4

Manual Integrations  
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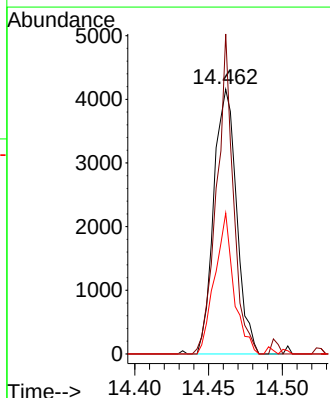
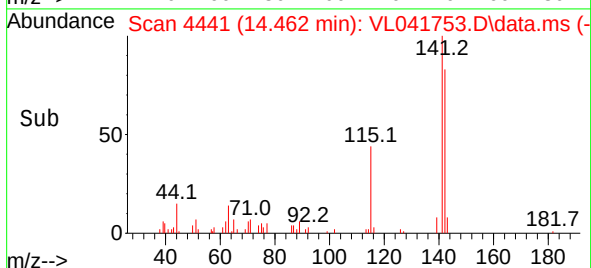
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

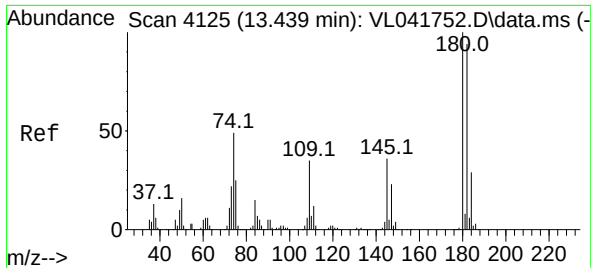


#80  
Naphthalene,2-methyl-  
Concen: 0.830 ppbv  
RT: 14.462 min Scan# 4441  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



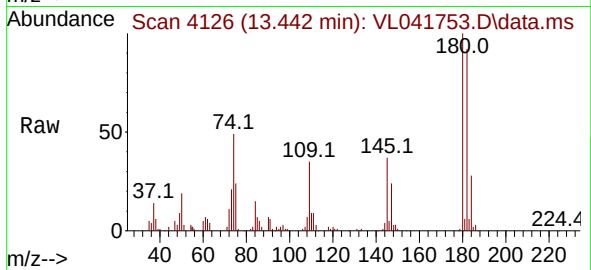
Tgt Ion:142 Resp: 4482  
Ion Ratio Lower Upper  
142 100  
141 90.1 68.4 102.6  
115 45.4 32.5 48.7





#81  
1,2,4-Trichlorobenzene  
Concen: 2.035 ppbv  
RT: 13.442 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

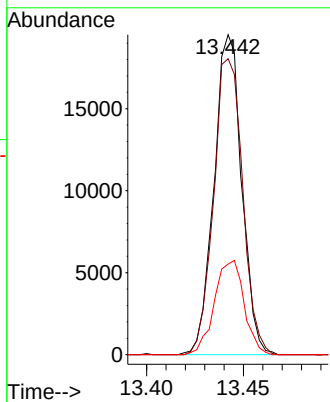
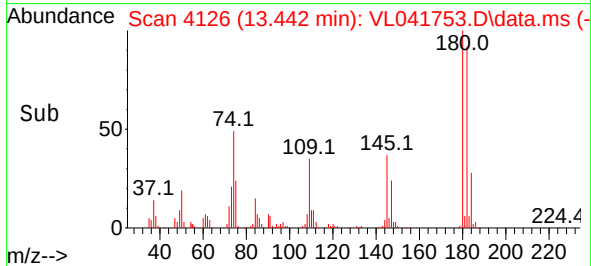
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002



Tgt Ion:180 Resp: 19429  
Ion Ratio Lower Upper  
180 100  
182 96.8 77.0 115.6  
184 31.5 23.8 35.8

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041754.D  
Acq On : 16 Dec 2024 14:34  
Operator : SY/MD  
Sample : VSTDICC001  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Quant Time: Dec 19 06:13:31 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 65928    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.955 | 114  | 178926   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.878 | 117  | 162267   | 10.000 | ppbv  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 10.374 | 95    | 132857   | 9.825    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.300% |

|                               |       |     |        |       |        |     |
|-------------------------------|-------|-----|--------|-------|--------|-----|
| Target Compounds              |       |     |        |       | Qvalue |     |
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 12706  | 1.083 | ppbv   | 98  |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 11187  | 1.041 | ppbv   | 98  |
| 4) Chloromethane              | 1.531 | 50  | 4805   | 1.047 | ppbv   | 99  |
| 5) Vinyl Chloride             | 1.580 | 62  | 4580   | 0.990 | ppbv   | 98  |
| 6) Bromomethane               | 1.667 | 94  | 2394   | 1.097 | ppbv   | 99  |
| 7) Chloroethane               | 1.703 | 64  | 1763   | 0.981 | ppbv   | 95  |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 10938  | 1.042 | ppbv   | 99  |
| 9) Propene                    | 1.483 | 41  | 4840   | 1.039 | ppbv   | 94  |
| 10) Heptane                   | 4.972 | 43  | 12004  | 1.003 | ppbv   | 93  |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 12625  | 1.013 | ppbv   | 94  |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 9915   | 1.046 | ppbv   | 98  |
| 13) Ethanol                   | 1.719 | 45  | 525m   | 1.355 | ppbv   |     |
| 14) Bromoethene               | 1.780 | 108 | 3148   | 0.984 | ppbv # | 86  |
| 15) Acetone                   | 1.832 | 43  | 15060  | 1.174 | ppbv   | 99  |
| 16) 1,3-Butadiene             | 1.609 | 39  | 5137   | 1.017 | ppbv   | 95  |
| 17) tert-Butyl alcohol        | 2.039 | 59  | 13341  | 1.048 | ppbv   | 96  |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 4139   | 1.042 | ppbv   | 96  |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 8703   | 1.131 | ppbv   | 100 |
| 20) Methylene Chloride        | 2.059 | 84  | 3868   | 1.057 | ppbv   | 92  |
| 21) Allyl Chloride            | 2.094 | 41  | 7425   | 1.067 | ppbv   | 98  |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 4599   | 1.011 | ppbv   | 96  |
| 23) Vinyl Acetate             | 2.460 | 43  | 5345   | 0.959 | ppbv # | 95  |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 9621   | 1.045 | ppbv   | 98  |
| 25) Ethyl Acetate             | 2.836 | 43  | 25141  | 1.049 | ppbv   | 99  |
| 26) Hexane                    | 2.826 | 57  | 9250   | 1.021 | ppbv   | 93  |
| 27) Carbon Disulfide          | 2.149 | 76  | 8152   | 0.999 | ppbv # | 19  |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 8539   | 1.162 | ppbv   | 94  |
| 29) Chloroform                | 2.845 | 83  | 14384  | 1.042 | ppbv   | 96  |
| 30) Cyclohexane               | 3.852 | 84  | 7824   | 1.015 | ppbv   | 94  |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 10013  | 1.070 | ppbv   | 96  |
| 32) 1,1,1-Trichloroethane     | 3.363 | 97  | 14415  | 1.049 | ppbv   | 98  |
| 34) 2-Butanone                | 2.557 | 43  | 14673  | 1.019 | ppbv   | 99  |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 12808m | 1.008 | ppbv   |     |
| 36) Benzene                   | 3.651 | 78  | 19331  | 1.044 | ppbv   | 97  |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 11490  | 0.998 | ppbv # | 94  |
| 38) Trichloroethene           | 4.551 | 130 | 7824m  | 1.004 | ppbv   |     |
| 39) 1,2-Dichloropropane       | 4.311 | 63  | 7068   | 1.056 | ppbv   | 86  |
| 40) 1,4-Dioxane               | 4.596 | 88  | 3241   | 0.991 | ppbv # | 40  |
| 41) Tetrahydrofuran           | 3.062 | 42  | 8727   | 1.082 | ppbv   | 97  |
| 42) Bromodichloromethane      | 4.489 | 83  | 13154  | 0.993 | ppbv   | 100 |
| 43) Methyl Methacrylate       | 4.875 | 69  | 7044m  | 0.999 | ppbv   |     |
| 44) 2,2,4-Trimethylpentane    | 4.638 | 57  | 32361  | 1.024 | ppbv   | 97  |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 7027   | 0.963 | ppbv   | 98  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041754.D  
 Acq On : 16 Dec 2024 14:34  
 Operator : SY/MD  
 Sample : VSTDICC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

Quant Time: Dec 19 06:13:31 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 8815m    | 0.952 | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 6.587  | 97   | 7189m    | 1.028 | ppbv   |          |
| 48) Dibromochloromethane      | 7.383  | 129  | 8817     | 0.924 | ppbv   | 97       |
| 49) Bromoform                 | 9.480  | 173  | 7073     | 0.905 | ppbv   | 96       |
| 50) 4-Methyl-2-Pentanone      | 5.761  | 43   | 20212    | 1.031 | ppbv   | 100      |
| 51) 2-Hexanone                | 7.441  | 43   | 16514    | 1.040 | ppbv # | 99       |
| 52) Tetrachloroethene         | 8.225  | 164  | 7067m    | 1.026 | ppbv   |          |
| 53) Toluene                   | 6.930  | 91   | 21594    | 1.029 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 7.648  | 107  | 9758     | 1.013 | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 8643     | 1.005 | ppbv   | 93       |
| 57) Chlorobenzene             | 8.920  | 112  | 17500    | 1.054 | ppbv   | 97       |
| 58) Ethyl Benzene             | 9.351  | 91   | 29762    | 1.019 | ppbv   | 98       |
| 59) m/p-Xylene                | 9.529  | 91   | 47599m   | 2.026 | ppbv   |          |
| 60) o-Xylene                  | 9.963  | 91   | 24210    | 1.028 | ppbv   | 98       |
| 61) Styrene                   | 9.869  | 104  | 9707     | 0.953 | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 36251    | 1.024 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 14752    | 1.001 | ppbv   | 98       |
| 64) n-propylbenzene           | 10.985 | 120  | 9432     | 1.054 | ppbv   | 91       |
| 65) tert-Butylbenzene         | 11.529 | 119  | 32887    | 1.030 | ppbv   | 100      |
| 66) Benzyl Chloride           | 11.610 | 91   | 2518     | 0.894 | ppbv   | 97       |
| 67) sec-Butylbenzene          | 11.765 | 105  | 45015    | 1.019 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 11.924 | 119  | 36298    | 0.997 | ppbv   | 98       |
| 70) n-Butylbenzene            | 12.280 | 91   | 35432    | 1.007 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 27561    | 1.020 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 26921    | 0.970 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 22360    | 0.969 | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 24654    | 0.994 | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 11.604 | 146  | 16476    | 1.042 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 11.668 | 146  | 15774    | 1.010 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 15866    | 1.043 | ppbv   | 97       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 12266    | 1.087 | ppbv   | 97       |
| 79) Naphthalene               | 13.513 | 128  | 16971    | 0.982 | ppbv   | 96       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 1504     | 0.281 | ppbv # | 90       |
| 81) 1,2,4-Trichlorobenzene    | 13.439 | 180  | 8973     | 0.950 | ppbv   | 96       |

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

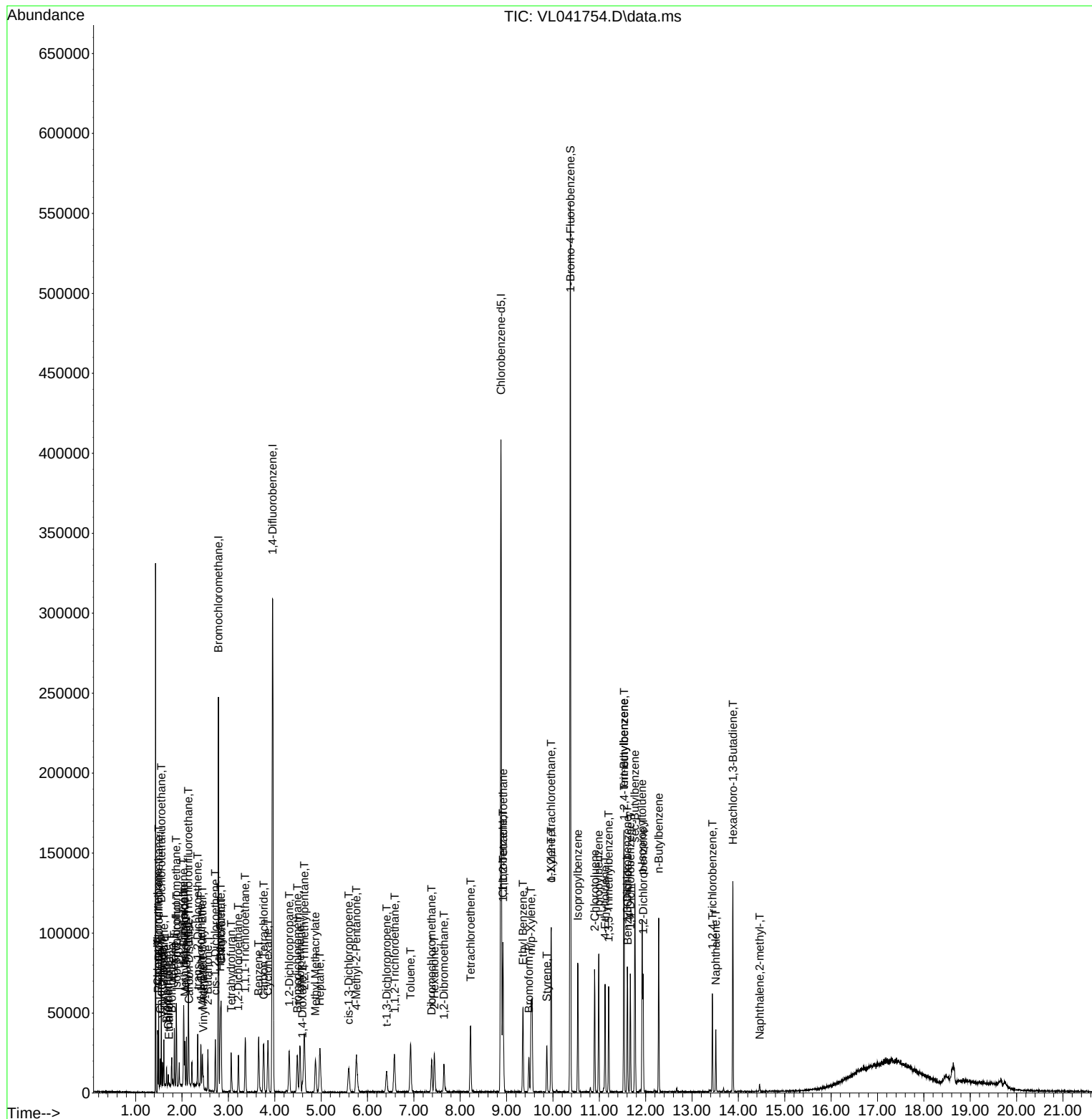
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041754.D  
Acq On : 16 Dec 2024 14:34  
Operator : SY/MD  
Sample : VSTDIC001  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

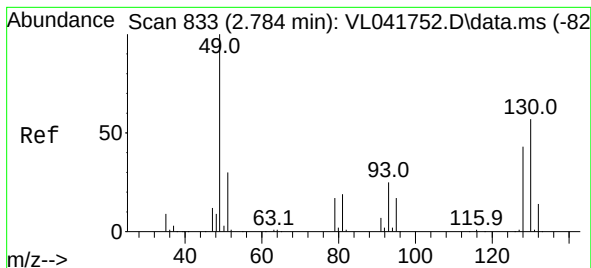
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Quant Time: Dec 19 06:13:31 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 2.784 min Scan# 833

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

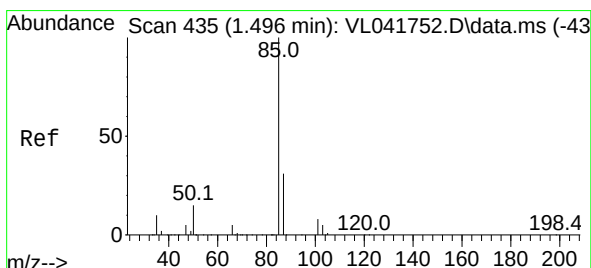
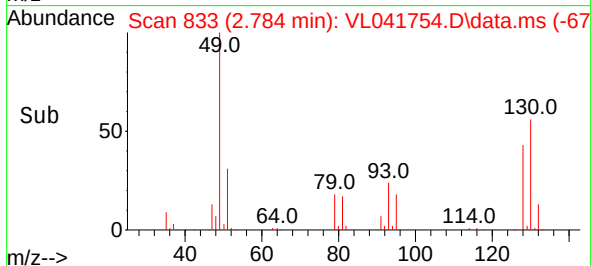
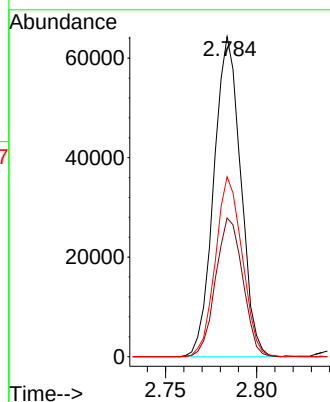
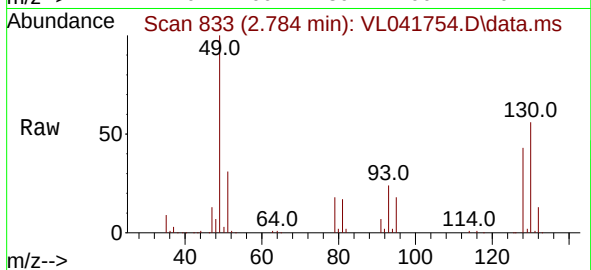
VSTDICC001

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 49    | Resp: | 65928 |
| Ion Ratio | Lower | Upper |       |
| 49        | 100   |       |       |
| 128       | 43.6  | 21.6  | 64.6  |
| 130       | 56.0  | 28.3  | 85.0  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#2

Dichlorodifluoromethane

Concen: 1.083 ppbv

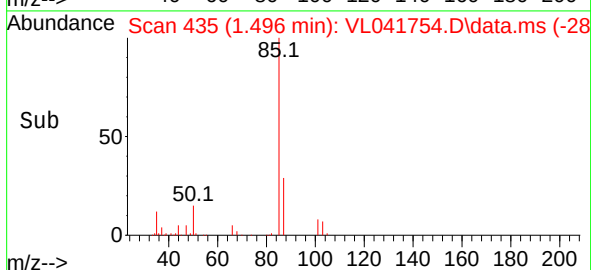
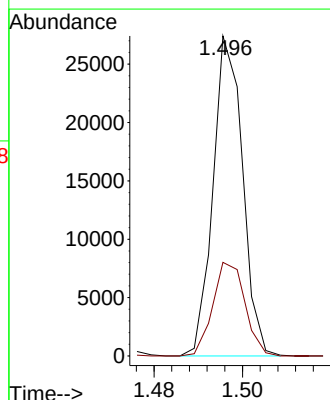
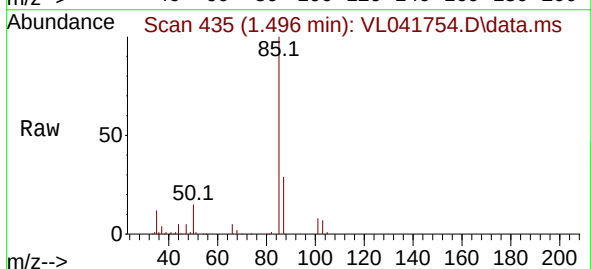
RT: 1.496 min Scan# 435

Delta R.T. -0.000 min

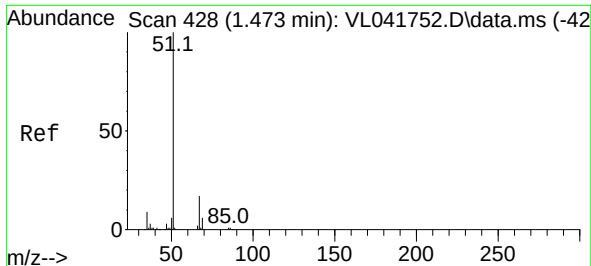
Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 85    | Resp: | 12706 |
| Ion Ratio | Lower | Upper |       |
| 85        | 100   |       |       |
| 87        | 29.3  | 24.5  | 36.7  |







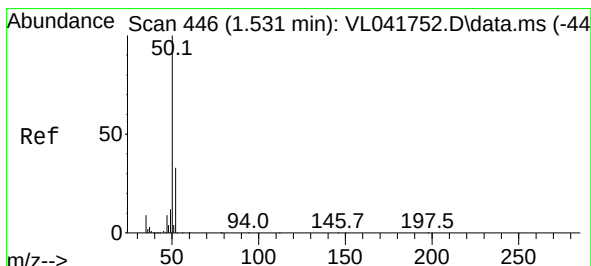
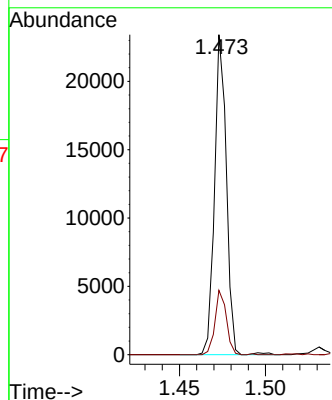
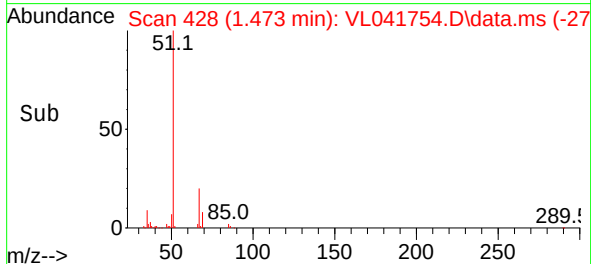
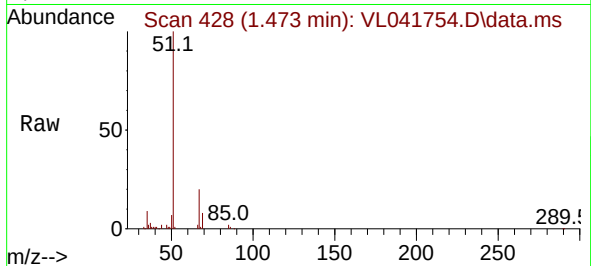
#3  
Chlorodifluoromethane  
Concen: 1.041 ppbv  
RT: 1.473 min Scan# 428  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion: 51 Resp: 1118  
Ion Ratio Lower Upper  
51 100  
67 19.4 15.0 22.4

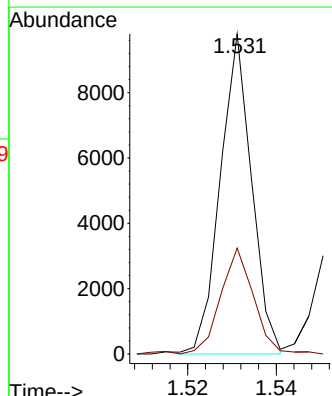
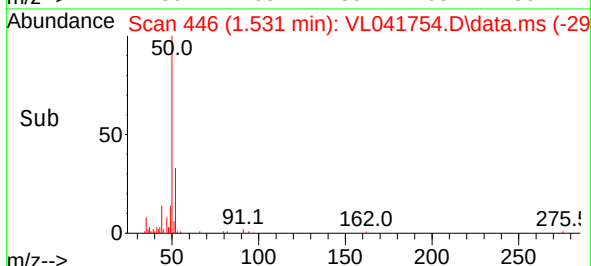
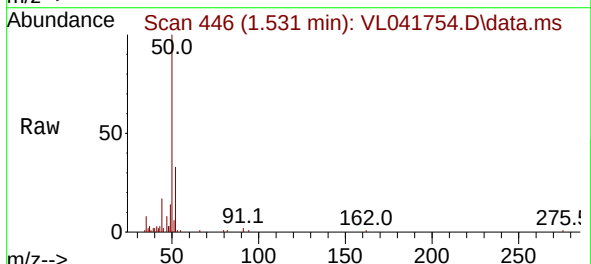
Manual Integrations  
APPROVED

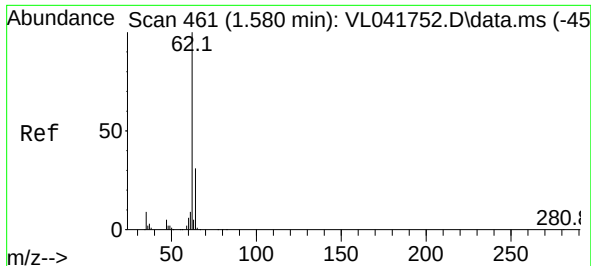
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#4  
Chloromethane  
Concen: 1.047 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

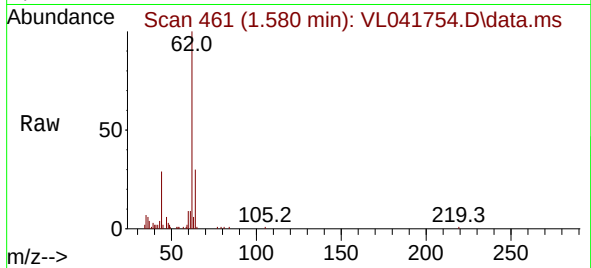
Tgt Ion: 50 Resp: 4805  
Ion Ratio Lower Upper  
50 100  
52 33.3 26.2 39.2





#5  
 Vinyl Chloride  
 Concen: 0.990 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

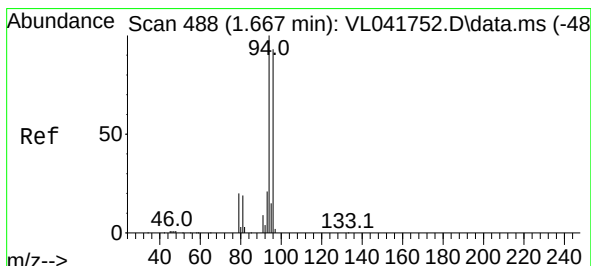
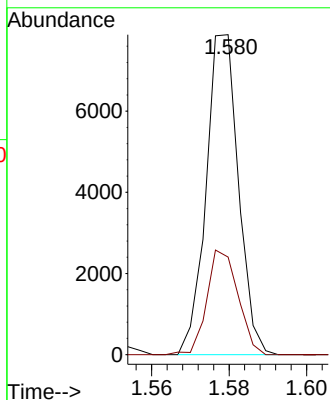
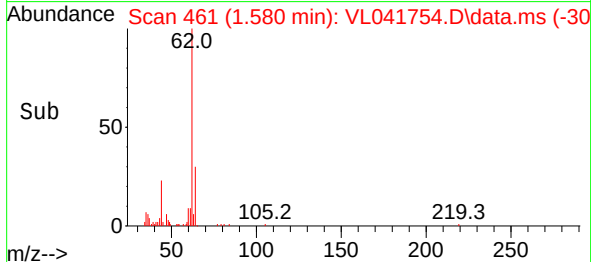
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001



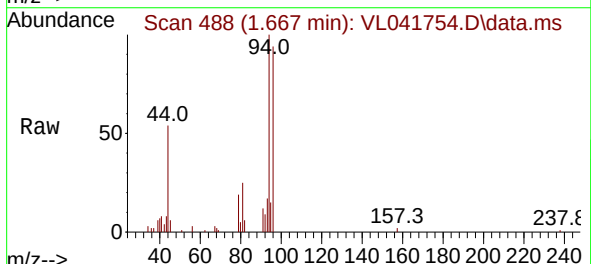
Tgt Ion: 62 Resp: 4580  
 Ion Ratio Lower Upper  
 62 100  
 64 30.5 25.1 37.7

Manual Integrations  
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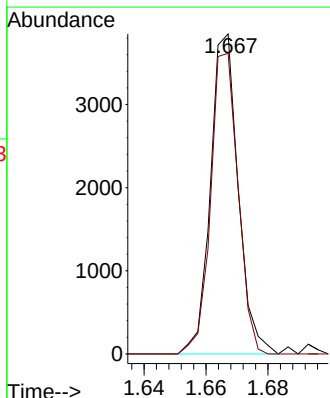
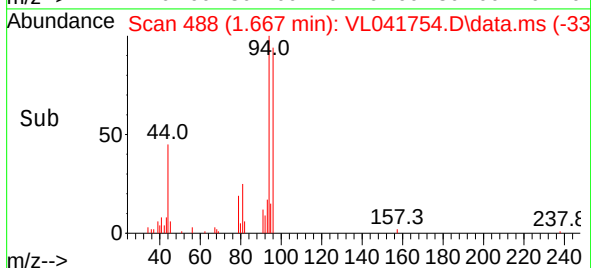
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

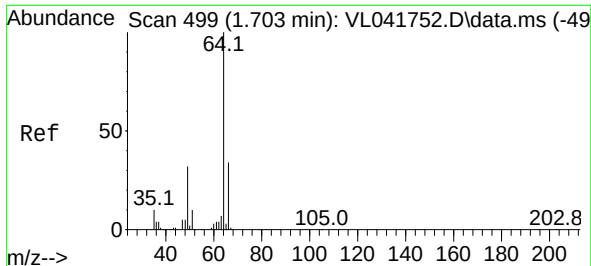


#6  
 Bromomethane  
 Concen: 1.097 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34



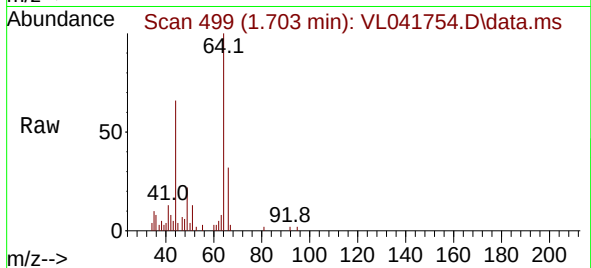
Tgt Ion: 94 Resp: 2394  
 Ion Ratio Lower Upper  
 94 100  
 96 94.0 74.7 112.1





#7  
Chloroethane  
Concen: 0.981 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

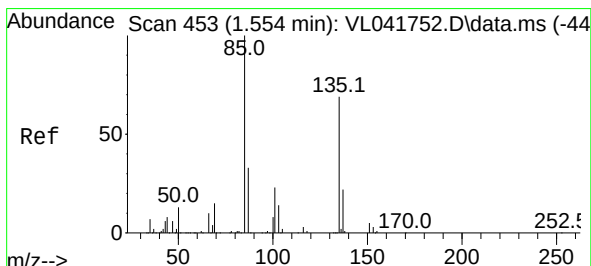
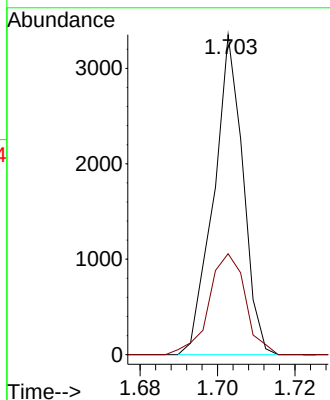
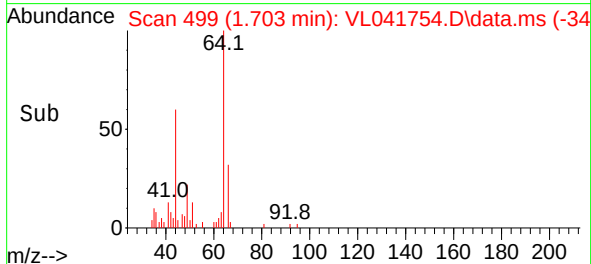
Instrument : MSVOA\_L  
ClientSampleId : VSTDICC001



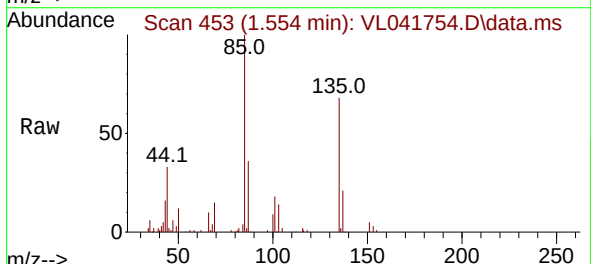
Tgt Ion: 64 Resp: 1763  
Ion Ratio Lower Upper  
64 100  
66 31.5 27.5 41.3

Manual Integrations  
APPROVED

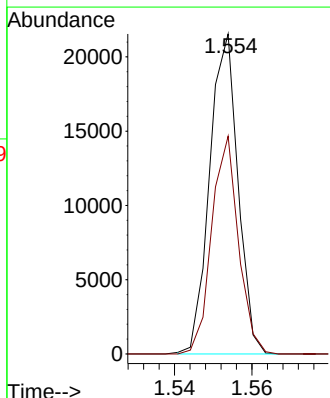
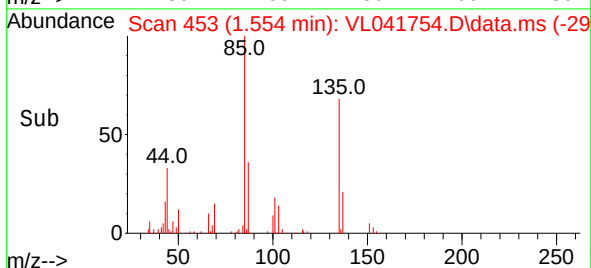
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

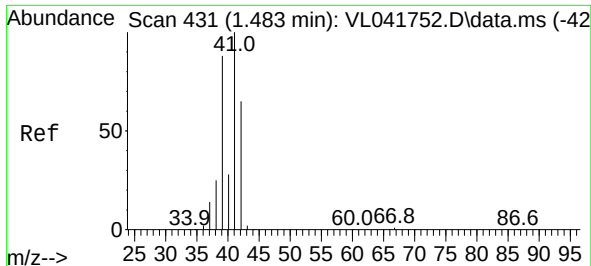


#8  
Dichlorotetrafluoroethane  
Concen: 1.042 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



Tgt Ion: 85 Resp: 10938  
Ion Ratio Lower Upper  
85 100  
135 64.3 51.9 77.9





#9

Propene

Concen: 1.039 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001

Tgt Ion: 41 Resp: 4840

Ion Ratio Lower Upper

41 100

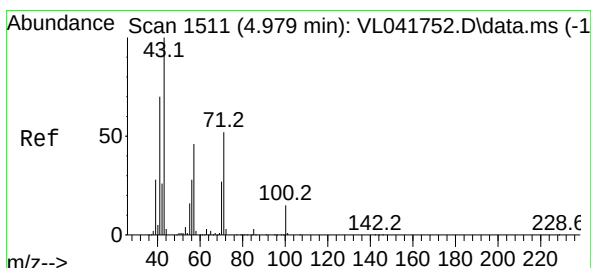
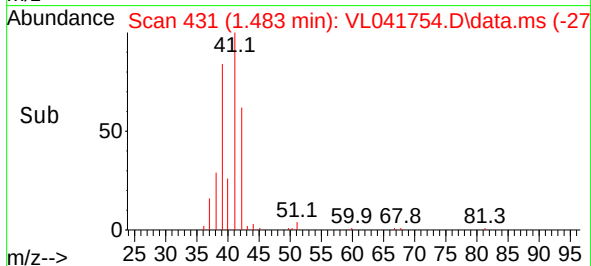
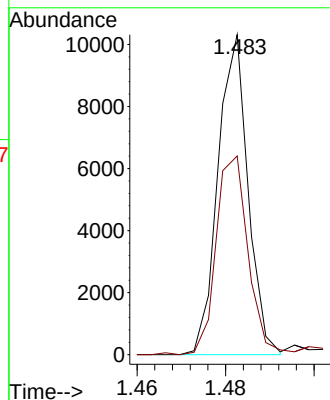
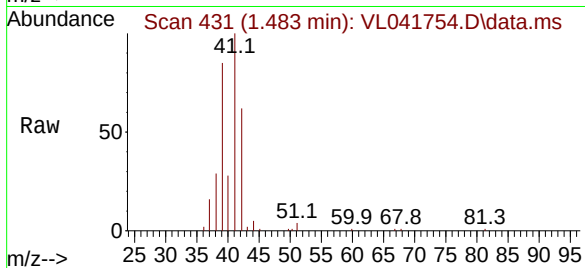
42 70.4 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 1.003 ppbv

RT: 4.972 min Scan# 1509

Delta R.T. -0.007 min

Lab File: VL041754.D

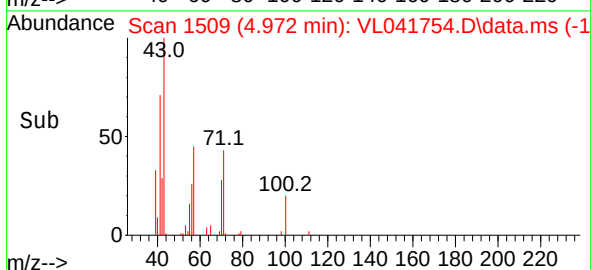
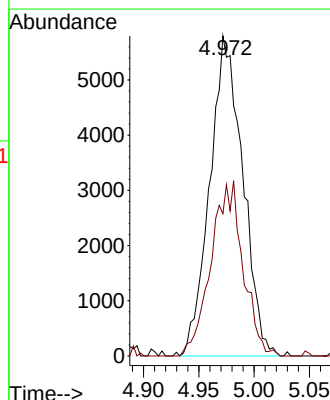
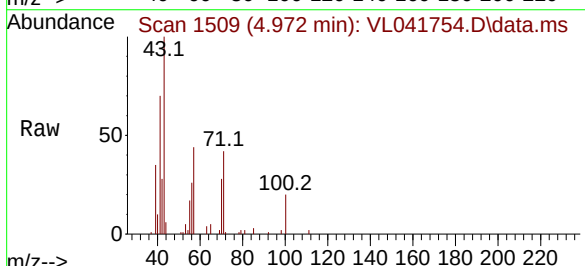
Acq: 16 Dec 2024 14:34

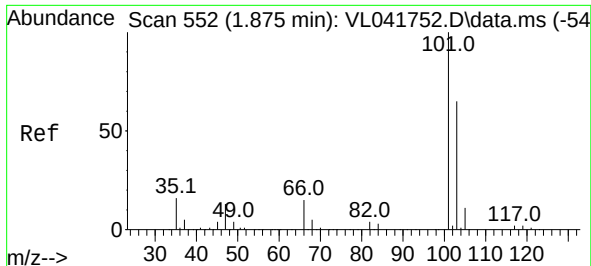
Tgt Ion: 43 Resp: 12004

Ion Ratio Lower Upper

43 100

57 53.0 38.5 57.7





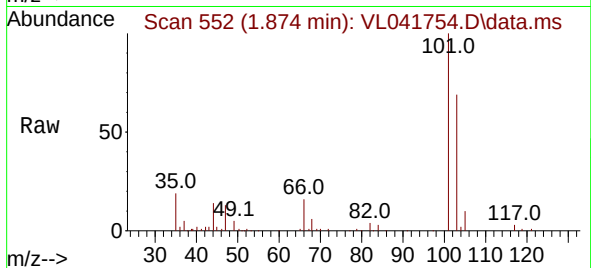
#11  
 Trichlorofluoromethane  
 Concen: 1.013 ppbv  
 RT: 1.874 min Scan# 552  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

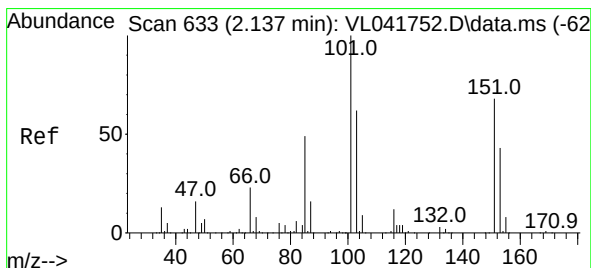
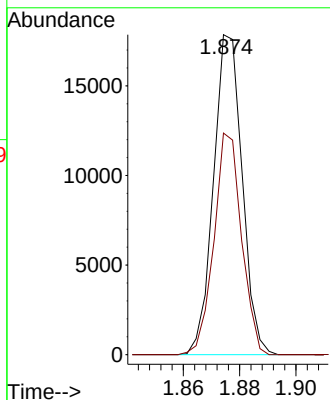
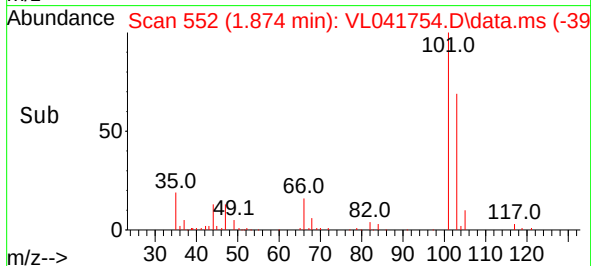
VSTDICC001



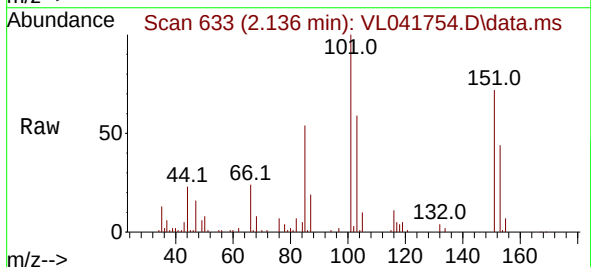
Tgt Ion:101 Resp: 12624  
 Ion Ratio Lower Upper  
 101 100  
 103 69.3 51.8 77.8

Manual Integrations  
 APPROVED

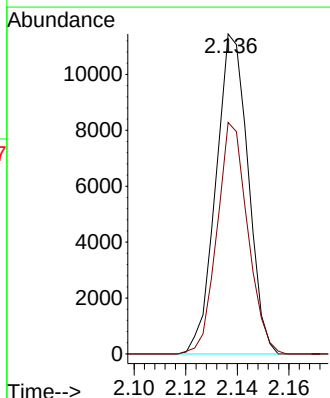
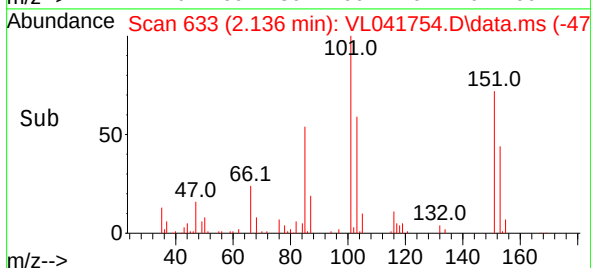
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

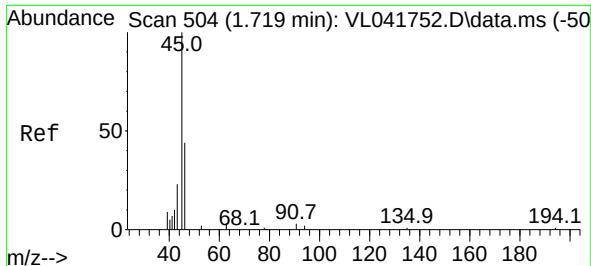


#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 1.046 ppbv  
 RT: 2.136 min Scan# 633  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34



Tgt Ion:101 Resp: 9915  
 Ion Ratio Lower Upper  
 101 100  
 151 69.1 56.8 85.2





#13

Ethanol

Concen: 1.355 ppbv m

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041754.D

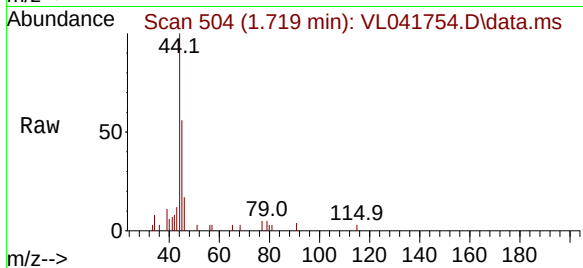
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

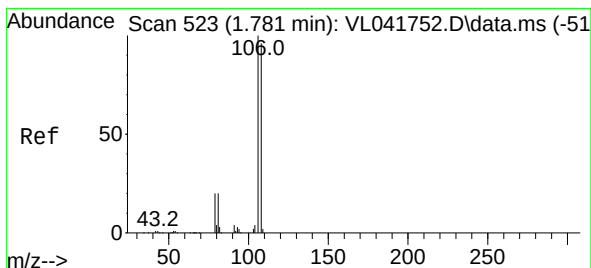
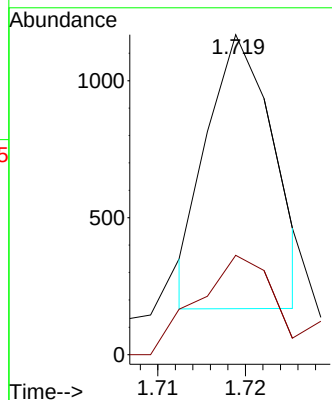
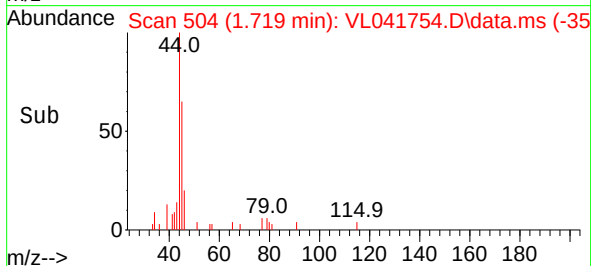
VSTDICC001



Tgt Ion: 45 Resp: 524  
 Ion Ratio Lower Upper  
 45 100  
 46 67.0 16.4 65.8

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 0.984 ppbv

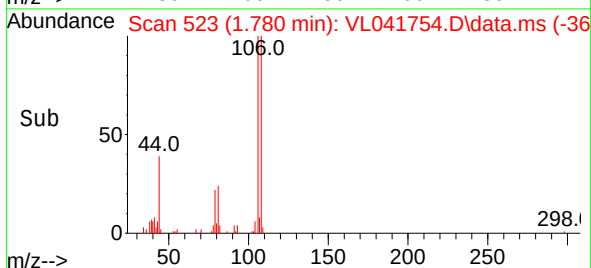
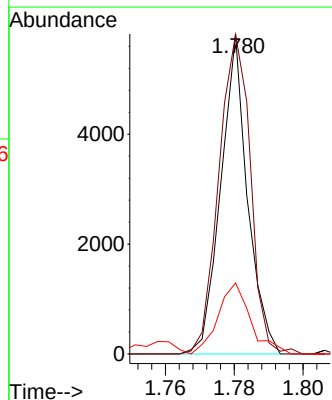
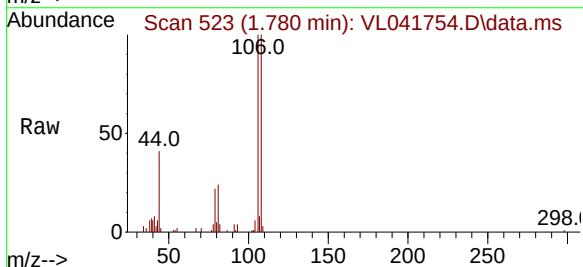
RT: 1.780 min Scan# 523

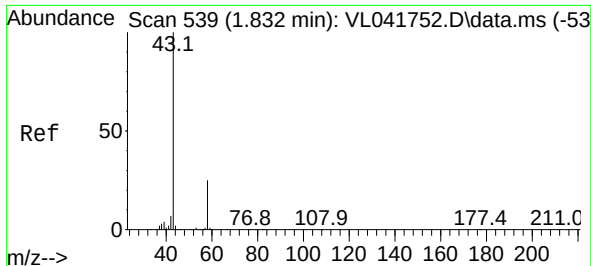
Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion:108 Resp: 3148  
 Ion Ratio Lower Upper  
 108 100  
 106 117.5 84.1 126.1  
 79 32.4 17.4 26.0





#15

Acetone

Concen: 1.174 ppbv

RT: 1.832 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001

Tgt Ion: 43 Resp: 1506

Ion Ratio Lower Upper

43 100

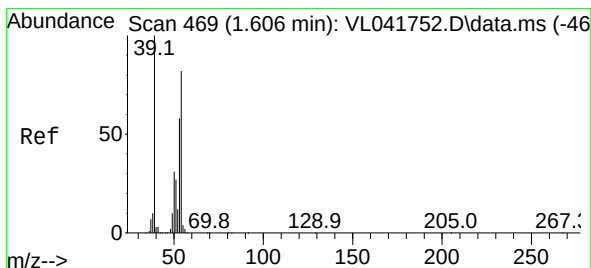
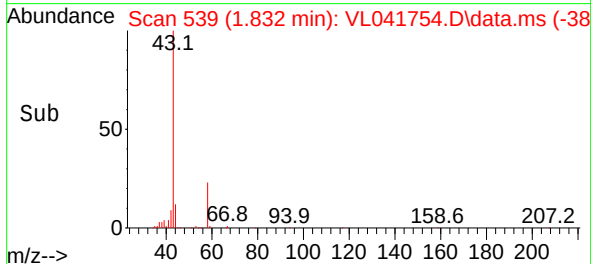
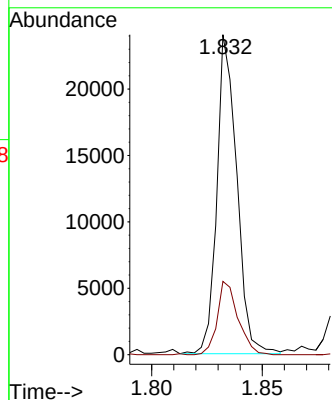
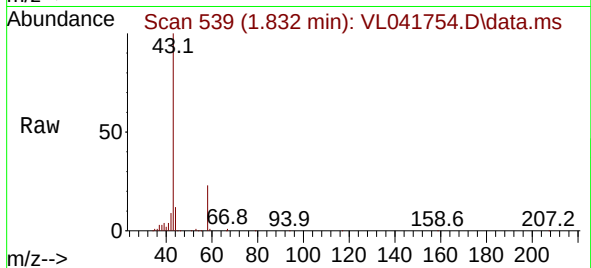
58 24.0 19.7 29.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#16

1,3-Butadiene

Concen: 1.017 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.003 min

Lab File: VL041754.D

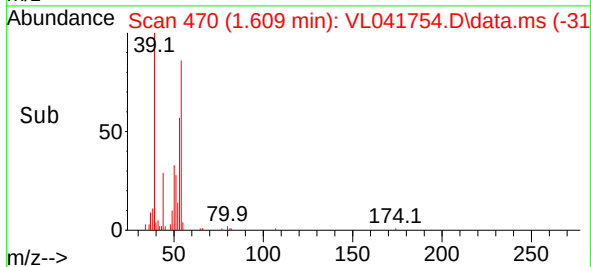
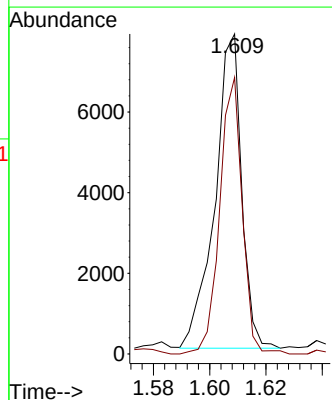
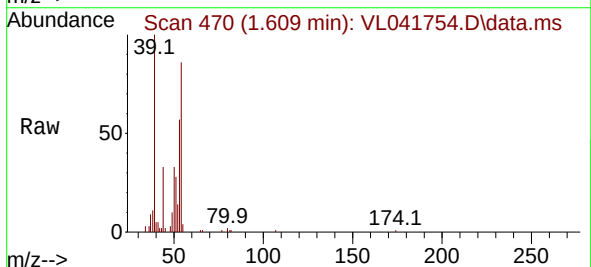
Acq: 16 Dec 2024 14:34

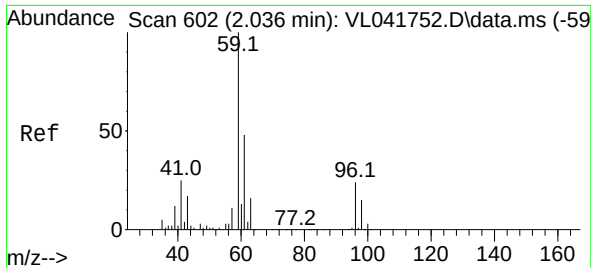
Tgt Ion: 39 Resp: 5137

Ion Ratio Lower Upper

39 100

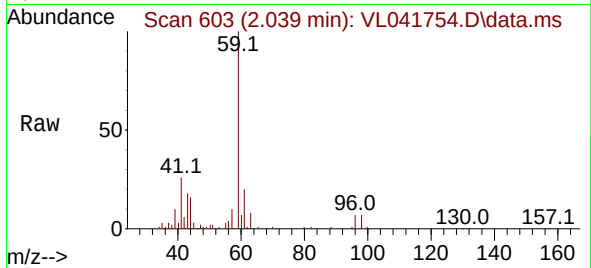
54 77.0 58.4 87.6





#17  
tert-Butyl alcohol  
Concen: 1.048 ppbv  
RT: 2.039 min Scan# 603  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

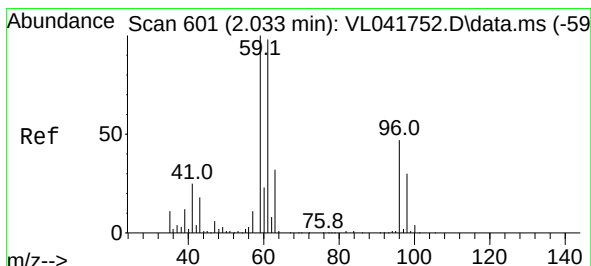
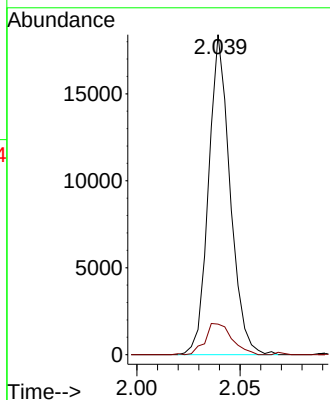
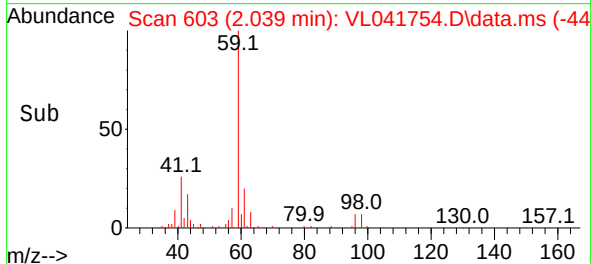
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC001



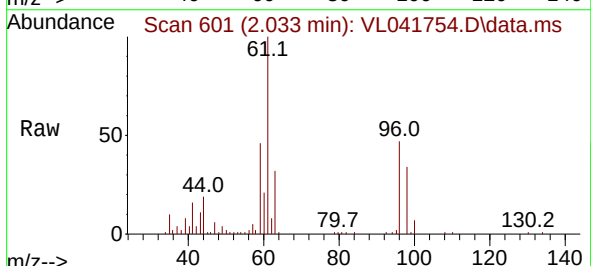
Tgt Ion: 59 Resp: 1334  
Ion Ratio Lower Upper  
59 100  
57 12.4 8.6 13.0

Manual Integrations  
APPROVED

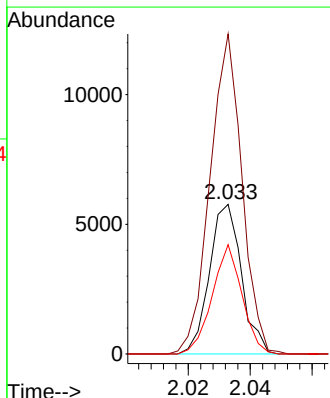
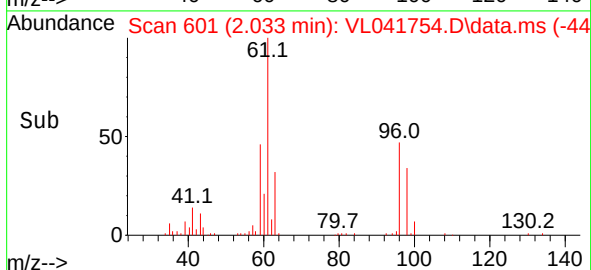
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



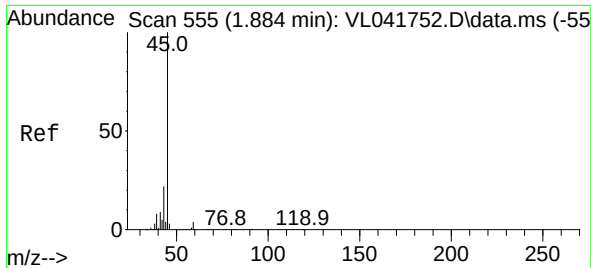
#18  
1,1-Dichloroethene  
Concen: 1.042 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



Tgt Ion: 96 Resp: 4139  
Ion Ratio Lower Upper  
96 100  
61 212.1 167.7 251.5  
98 73.0 51.1 76.7







#19

Isopropyl Alcohol

Concen: 1.131 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

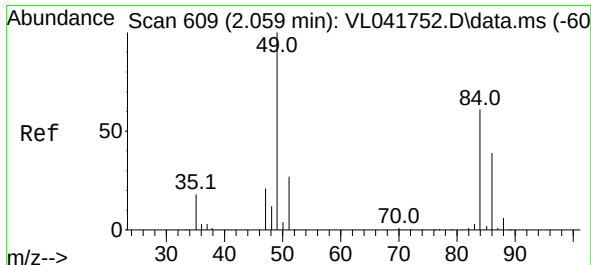
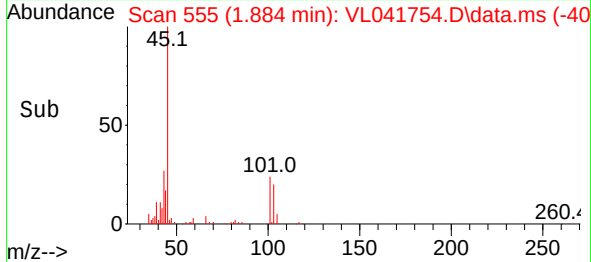
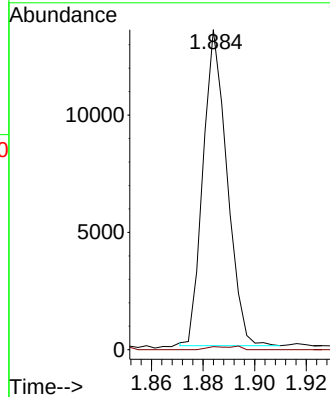
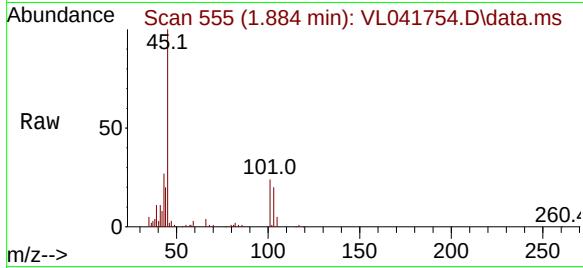
ClientSampleId :

VSTDICC001

Tgt Ion: 45 Resp: 8700  
 Ion Ratio Lower Upper  
 45 100  
 58 41.5 33.3 49.9

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 1.057 ppbv

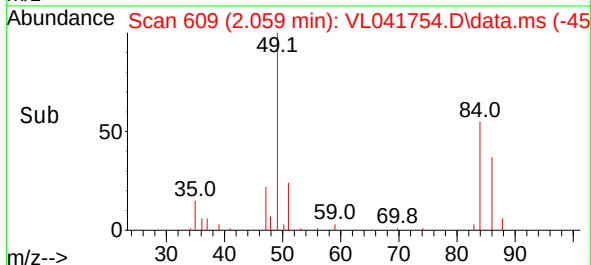
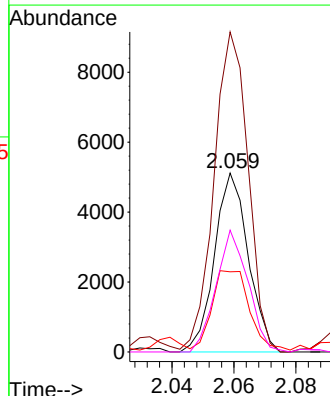
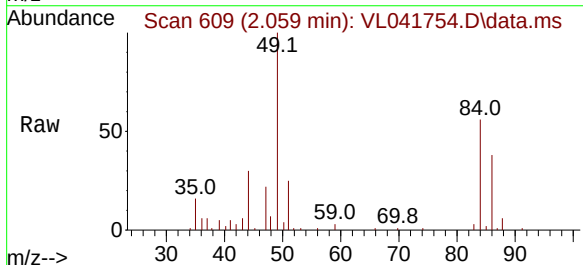
RT: 2.059 min Scan# 609

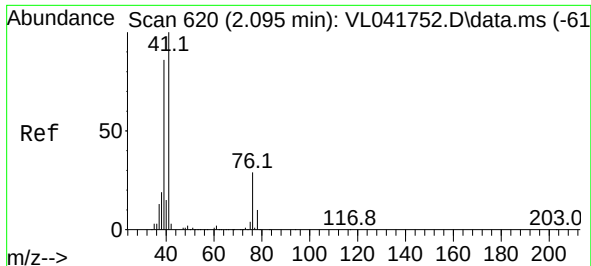
Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 84 Resp: 3868  
 Ion Ratio Lower Upper  
 84 100  
 49 178.8 132.6 198.8  
 51 41.9 37.6 56.4  
 86 68.0 51.4 77.0





#21

Allyl Chloride

Concen: 1.067 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

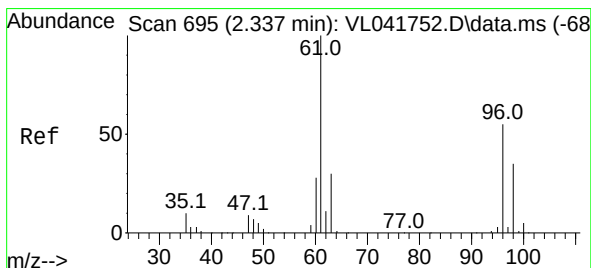
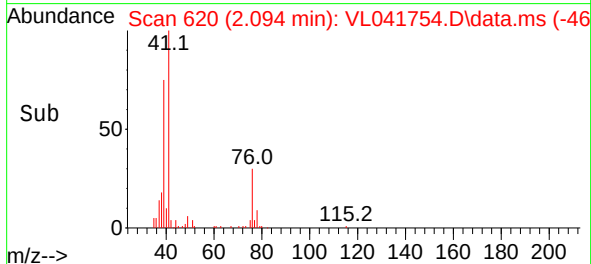
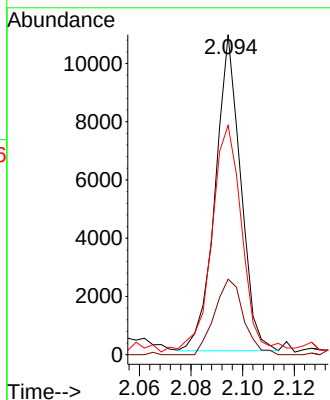
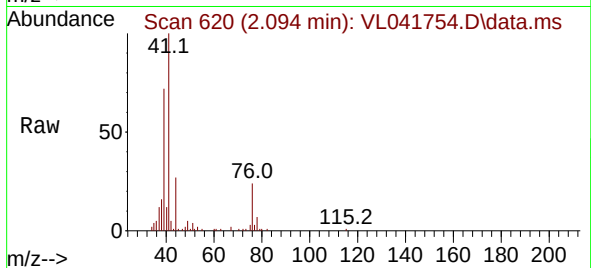
ClientSampleId :

VSTDICC001

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 41    | Resp: | 742   |
| Ion Ratio | Lower | Upper |       |
| 41        | 100   |       |       |
| 76        | 27.2  | 22.3  | 33.5  |
| 39        | 84.3  | 69.2  | 103.8 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#22

trans-1,2-Dichloroethene

Concen: 1.011 ppbv

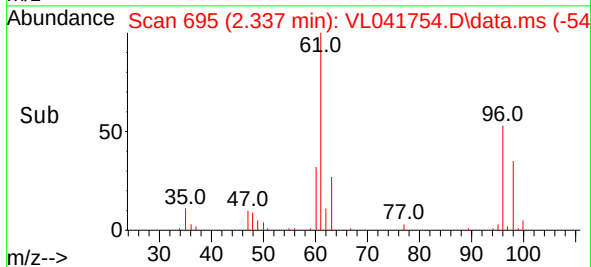
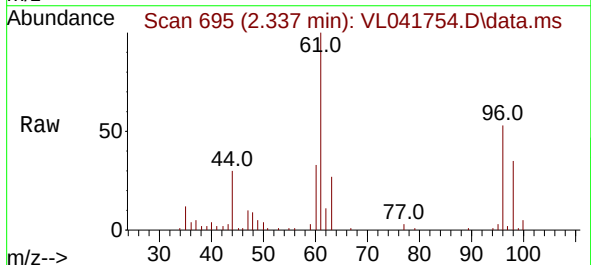
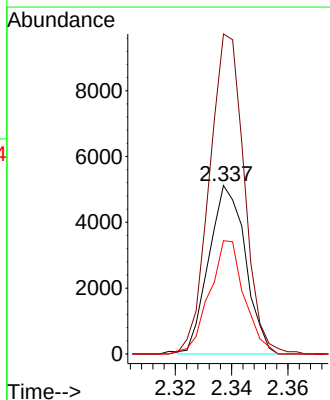
RT: 2.337 min Scan# 695

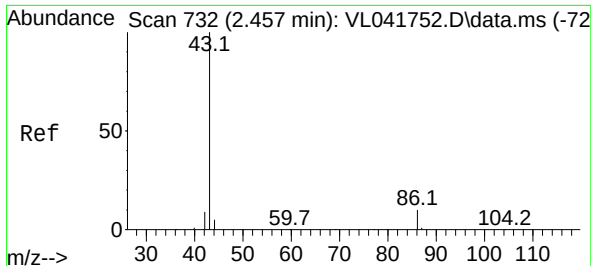
Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

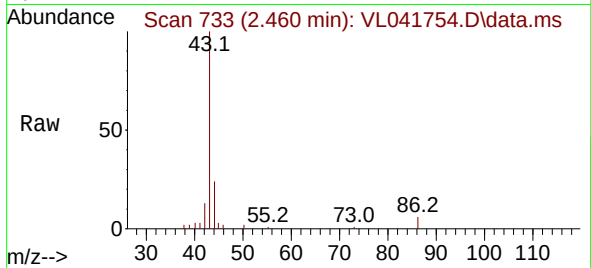
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 96    | Resp: | 4599  |
| Ion Ratio | Lower | Upper |       |
| 96        | 100   |       |       |
| 61        | 188.9 | 146.3 | 219.5 |
| 98        | 67.3  | 50.8  | 76.2  |





#23  
 Vinyl Acetate  
 Concen: 0.959 ppbv  
 RT: 2.460 min Scan# 716  
 Delta R.T. 0.003 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

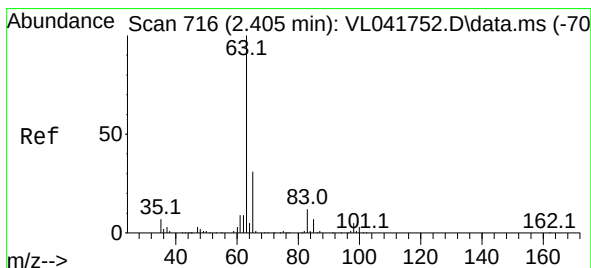
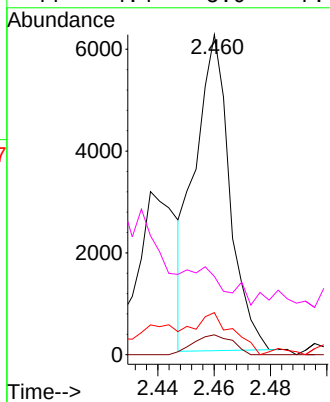
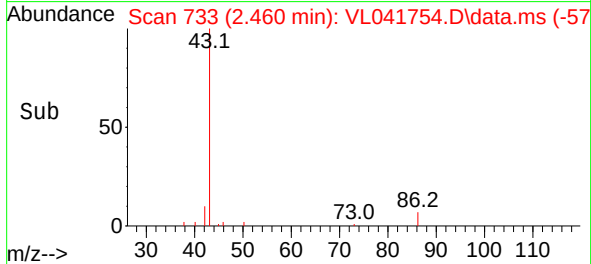
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC001



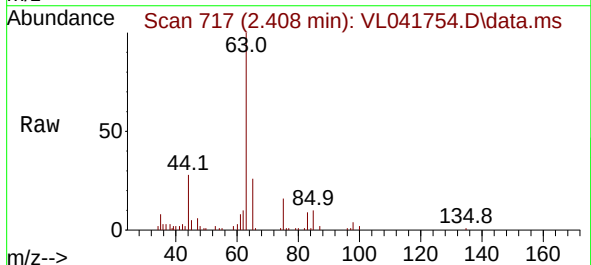
Tgt Ion: 43 Resp: 5349  
 Ion Ratio Lower Upper  
 43 100  
 86 6.3 6.6 10.0  
 42 11.4 8.2 12.2  
 44 4.4 5.0 7.4#

Manual Integrations  
 APPROVED

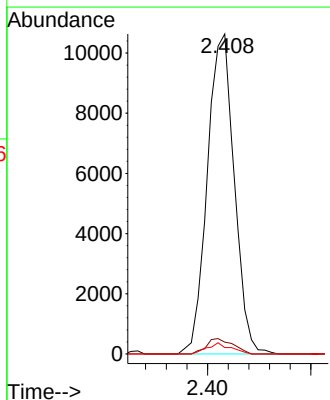
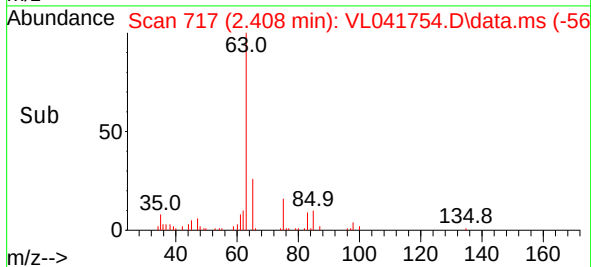
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

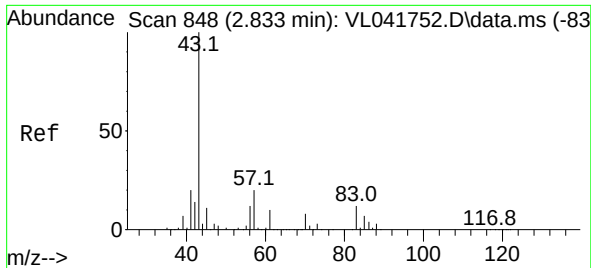


#24  
 1,1-Dichloroethane  
 Concen: 1.045 ppbv  
 RT: 2.408 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34



Tgt Ion: 63 Resp: 9621  
 Ion Ratio Lower Upper  
 63 100  
 98 3.7 2.3 6.8  
 100 2.0 1.4 4.2





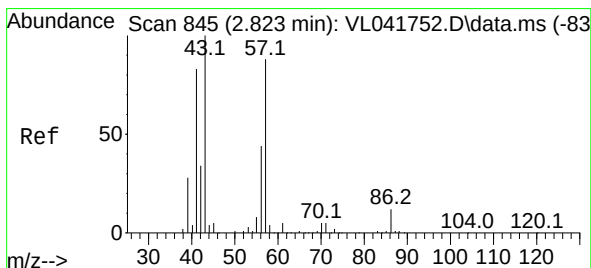
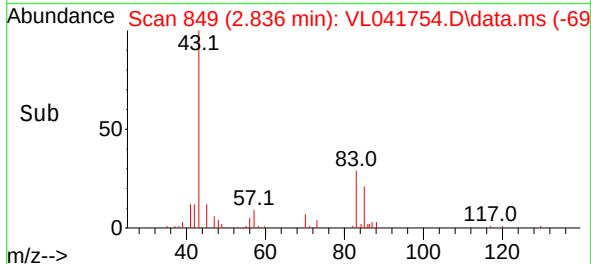
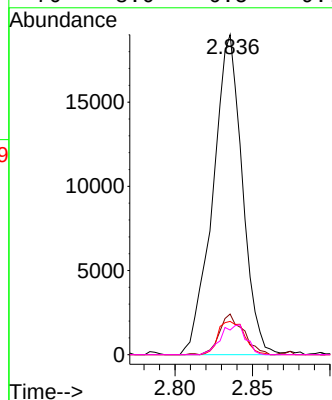
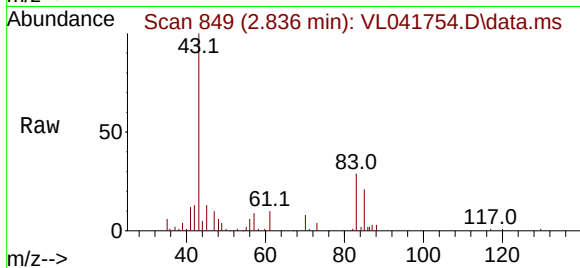
#25  
Ethyl Acetate  
Concen: 1.049 ppbv  
RT: 2.836 min Scan# 848  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 2514  |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 45 10.7     | 8.1 12.1    |
| 61 9.3      | 7.0 10.6    |
| 70 8.0      | 6.5 9.7     |

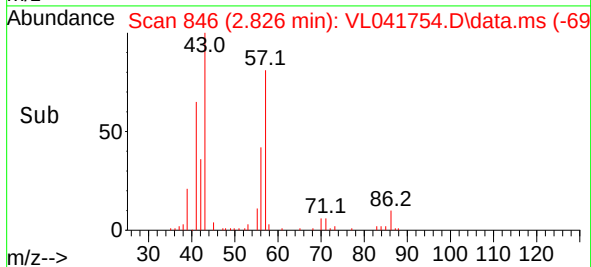
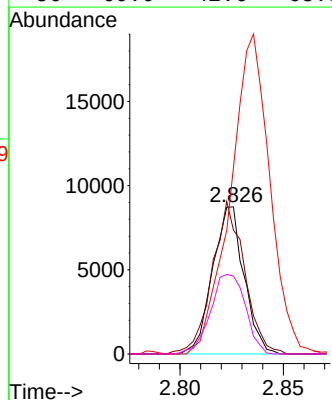
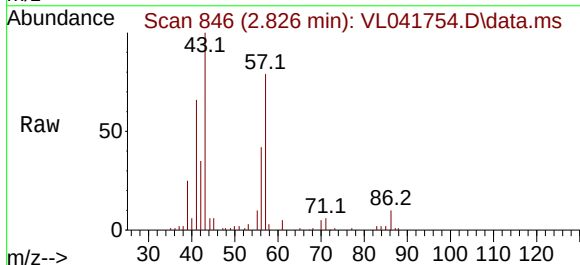
Manual Integrations  
APPROVED

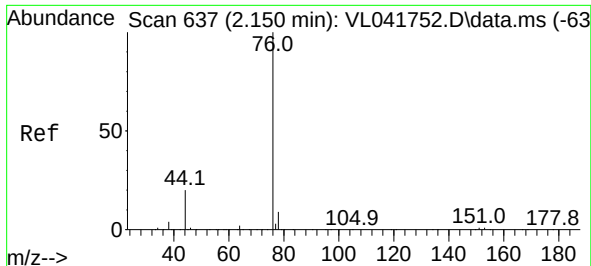
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#26  
Hexane  
Concen: 1.021 ppbv  
RT: 2.826 min Scan# 846  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|             |             |
|-------------|-------------|
| Tgt Ion: 57 | Resp: 9250  |
| Ion Ratio   | Lower Upper |
| 57 100      |             |
| 41 105.9    | 79.6 119.4  |
| 43 274.5    | 211.0 316.6 |
| 56 60.0     | 42.6 63.8   |





#27

Carbon Disulfide

Concen: 0.999 ppbv

RT: 2.149 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041754.D

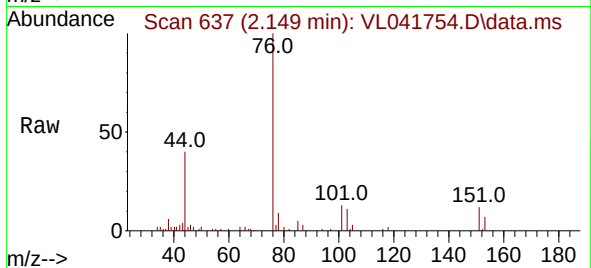
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001



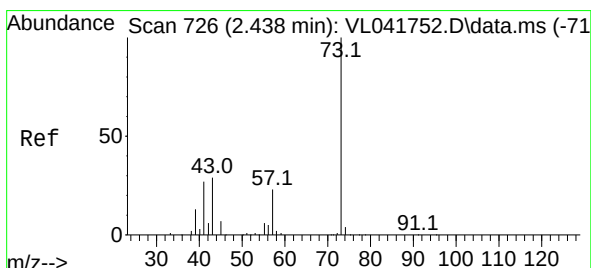
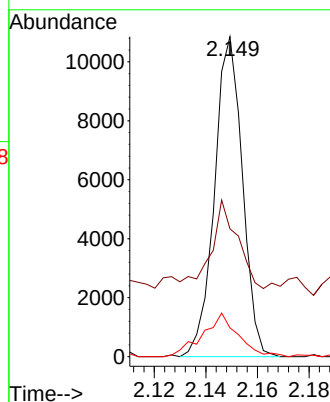
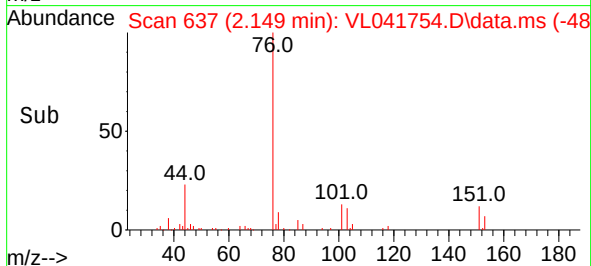
Tgt Ion: 76 Resp: 815

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 76  | 100   |       |       |
| 44  | 79.9  | 17.6  | 26.4  |
| 78  | 17.6  | 10.2  | 15.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#28

Methyl tert-Butyl Ether

Concen: 1.162 ppbv

RT: 2.441 min Scan# 727

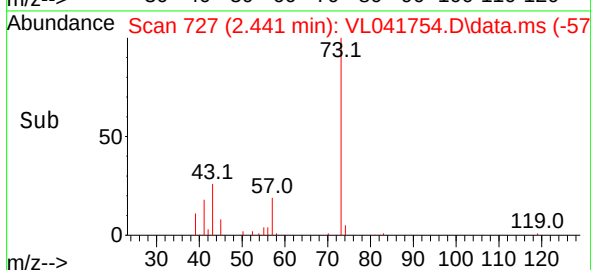
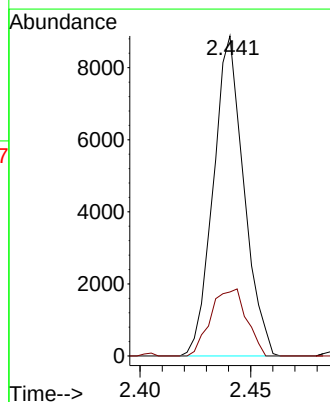
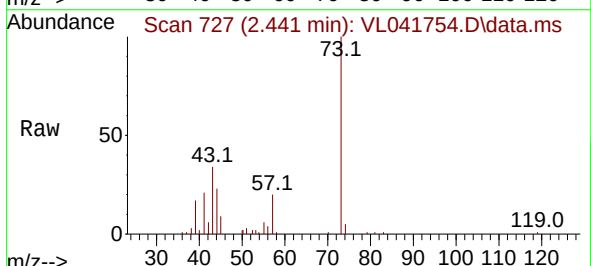
Delta R.T. 0.003 min

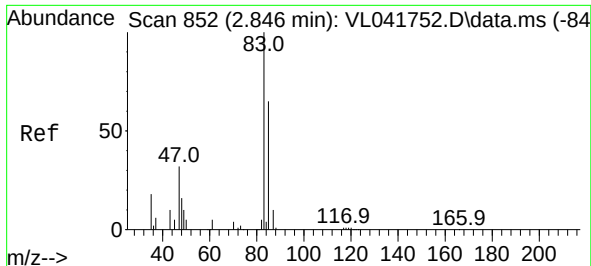
Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 73 Resp: 8539

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 73  | 100   |       |       |
| 57  | 24.7  | 17.6  | 26.4  |





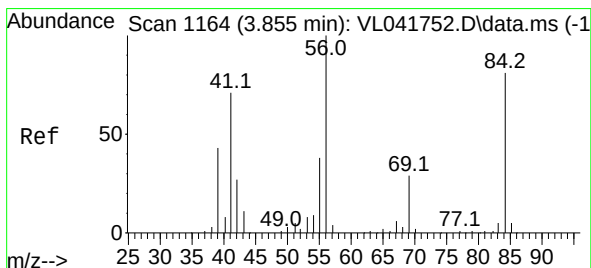
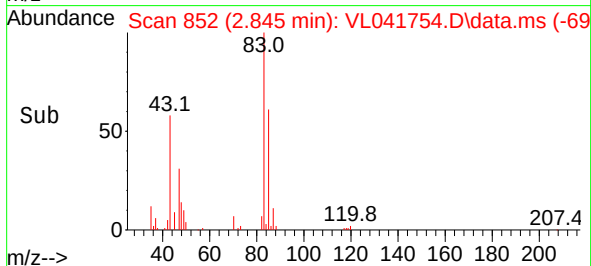
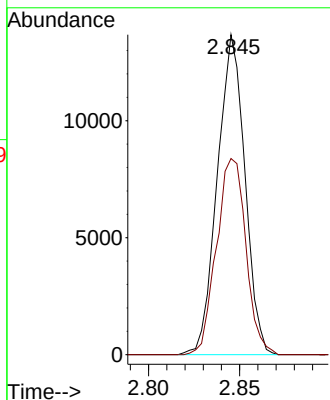
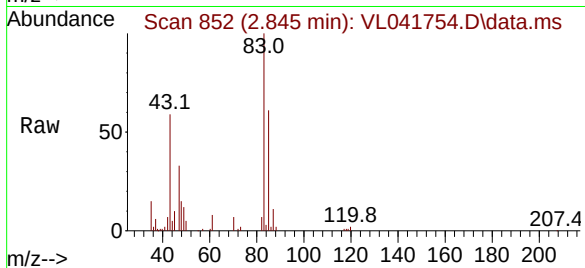
#29  
Chloroform  
Concen: 1.042 ppbv  
RT: 2.845 min Scan# 852  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion: 83 Resp: 14384  
Ion Ratio Lower Upper  
83 100  
85 61.3 51.8 77.6

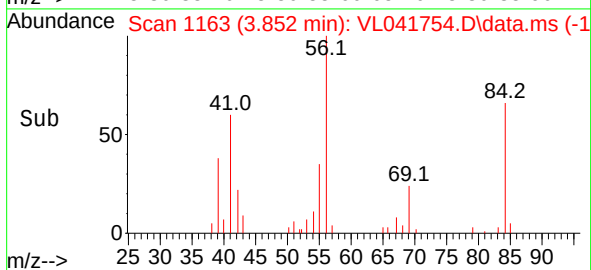
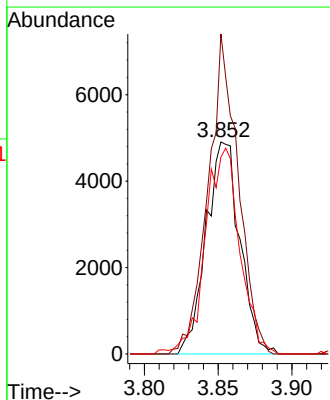
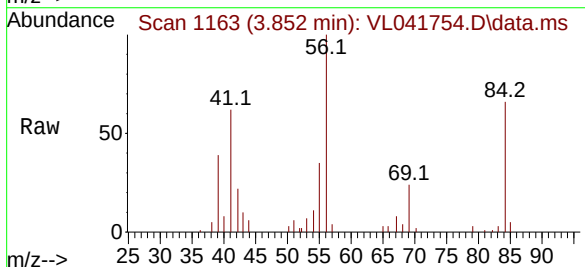
Manual Integrations  
APPROVED

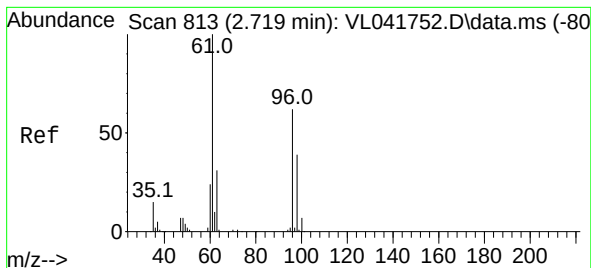
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#30  
Cyclohexane  
Concen: 1.015 ppbv  
RT: 3.852 min Scan# 1163  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 84 Resp: 7824  
Ion Ratio Lower Upper  
84 100  
56 134.4 102.3 153.5  
41 99.6 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 1.070 ppbv

RT: 2.719 min Scan# 813

Delta R.T. -0.000 min

Lab File: VL041754.D

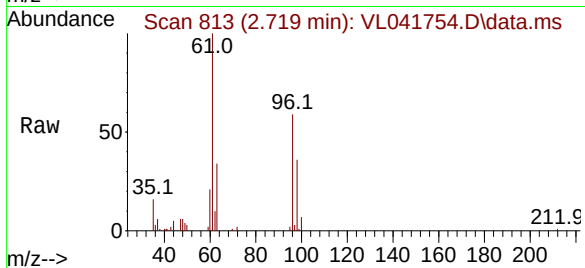
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001



Tgt Ion: 61 Resp: 1001

Ion Ratio Lower Upper

61 100

96 58.7 49.7 74.5

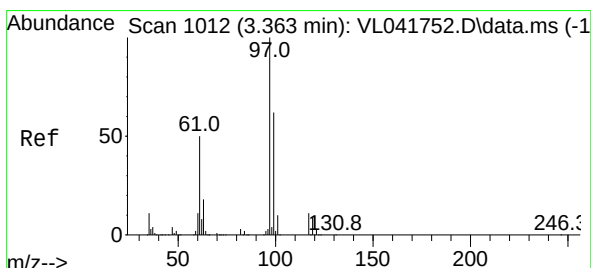
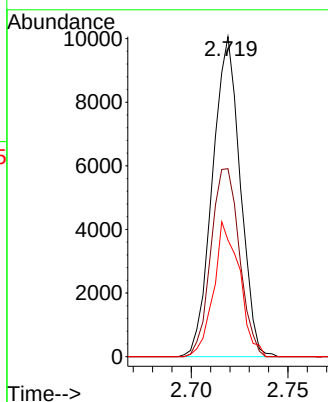
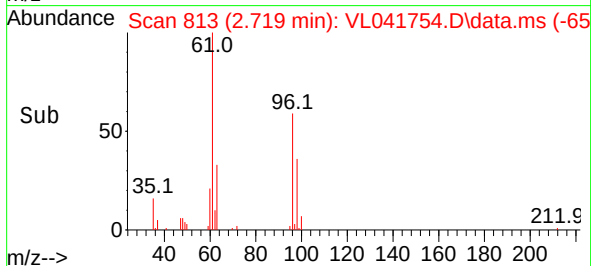
98 36.5 30.8 46.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#32

1,1,1-Trichloroethane

Concen: 1.049 ppbv

RT: 3.363 min Scan# 1012

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

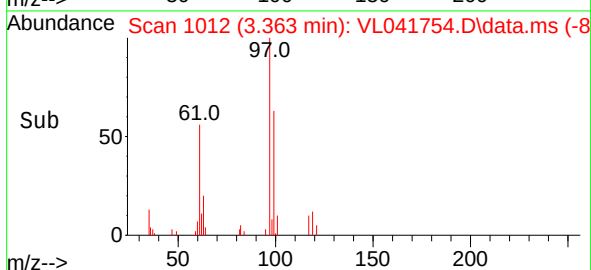
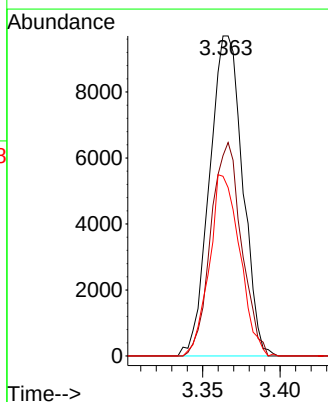
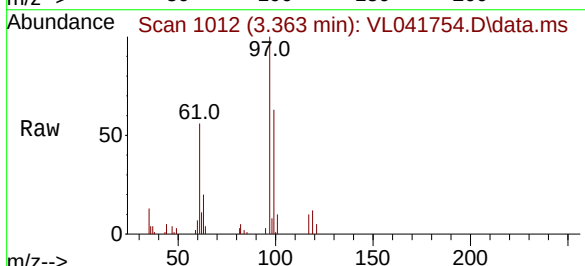
Tgt Ion: 97 Resp: 14415

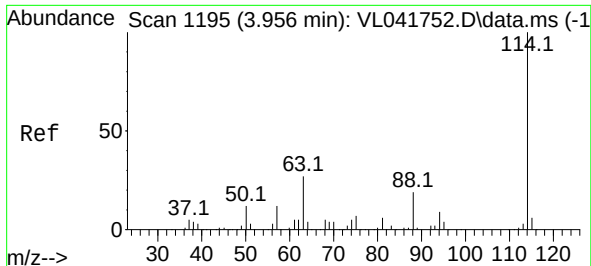
Ion Ratio Lower Upper

97 100

99 61.7 51.0 76.4

61 52.0 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

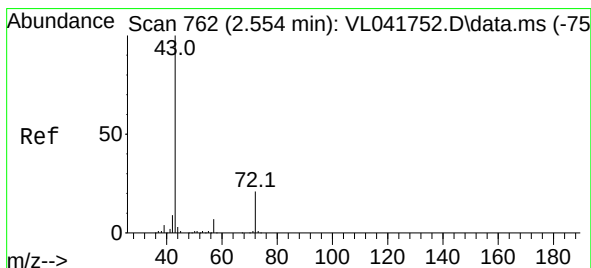
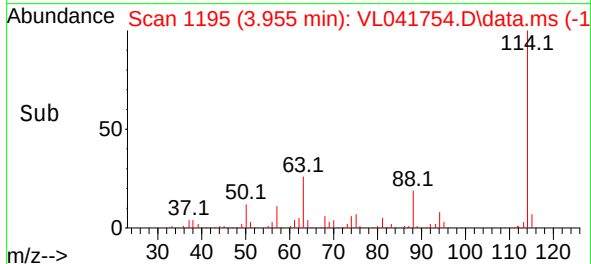
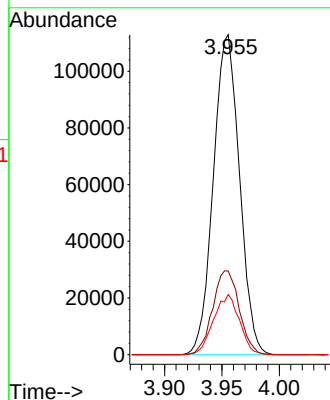
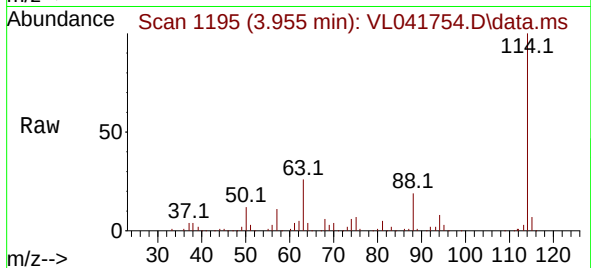
ClientSampleId :

VSTDICC001

Tgt Ion:114 Resp: 178920  
 Ion Ratio Lower Upper  
 114 100  
 63 26.7 21.8 32.8  
 88 18.6 14.8 22.2

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#34

2-Butanone

Concen: 1.019 ppbv

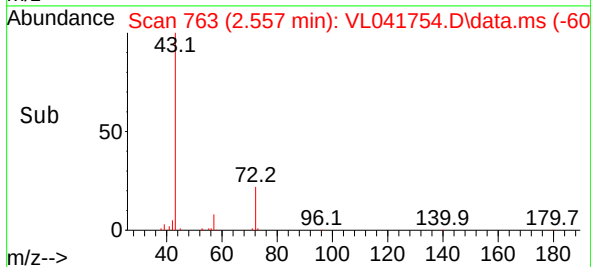
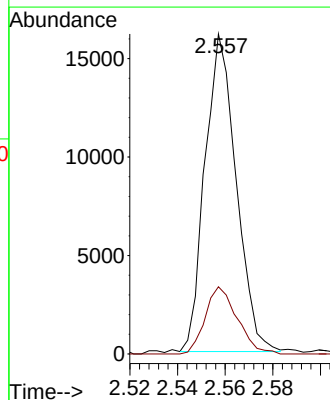
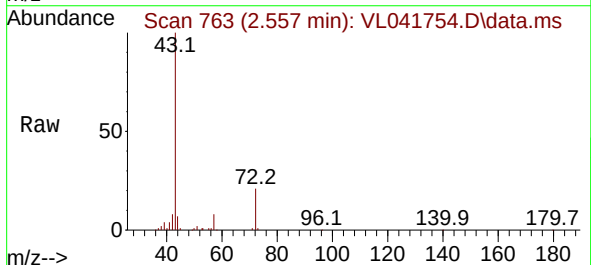
RT: 2.557 min Scan# 763

Delta R.T. 0.003 min

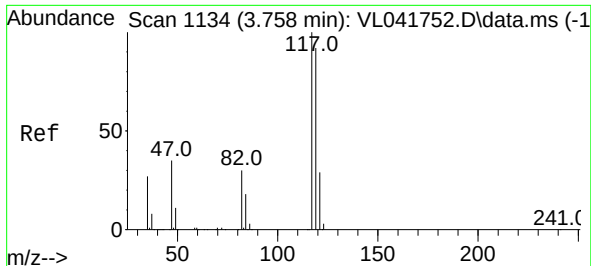
Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 43 Resp: 14673  
 Ion Ratio Lower Upper  
 43 100  
 72 21.7 16.8 25.2

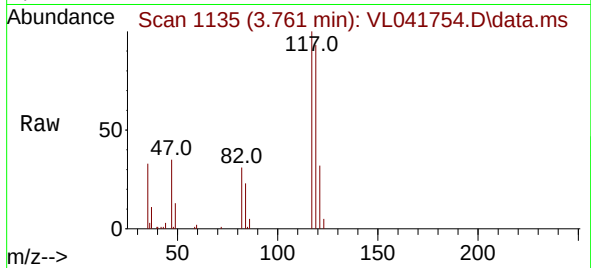






#35  
Carbon Tetrachloride  
Concen: 1.008 ppbv m  
RT: 3.761 min Scan# 1135  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

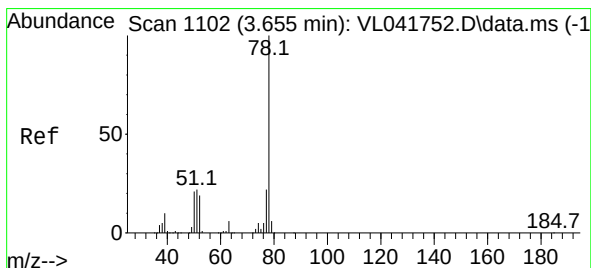
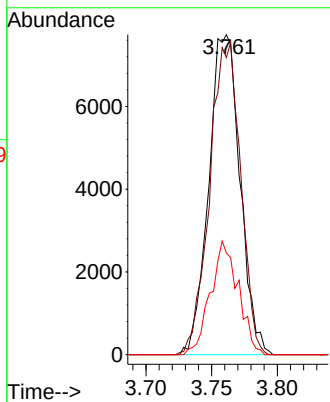
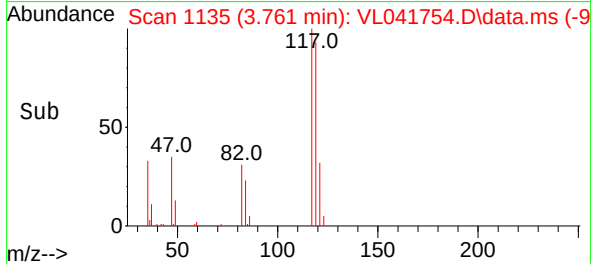
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001



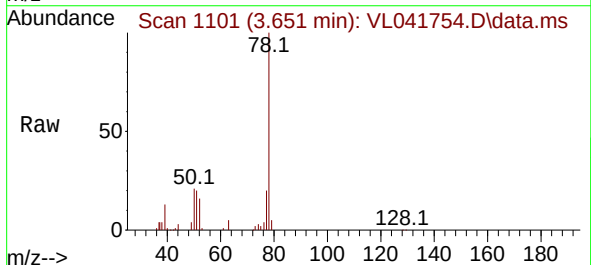
Tgt Ion: 117 Resp: 12800  
Ion Ratio Lower Upper  
117 100  
119 92.9 73.7 110.5  
121 31.8 23.0 34.4

Manual Integrations  
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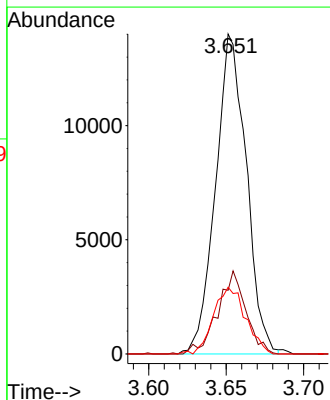
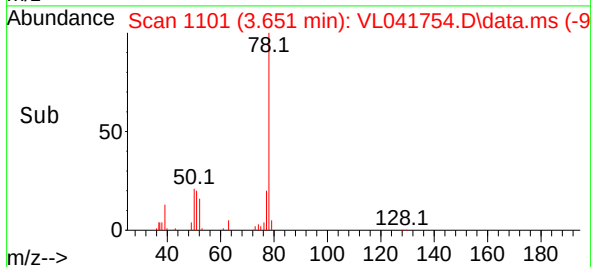
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

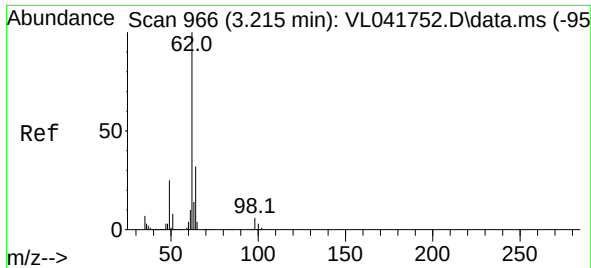


#36  
Benzene  
Concen: 1.044 ppbv  
RT: 3.651 min Scan# 1101  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



Tgt Ion: 78 Resp: 19331  
Ion Ratio Lower Upper  
78 100  
77 19.9 17.8 26.6  
50 20.8 17.2 25.8





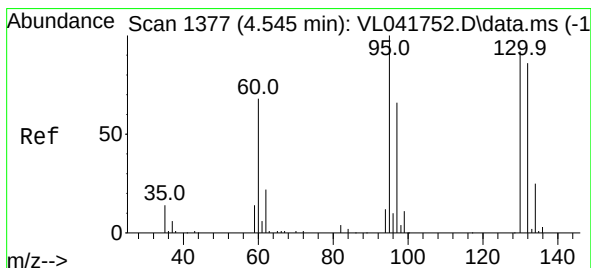
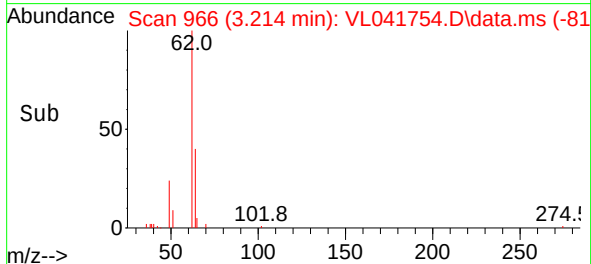
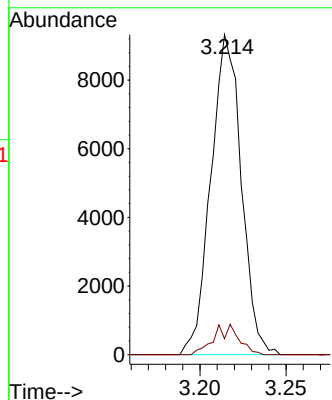
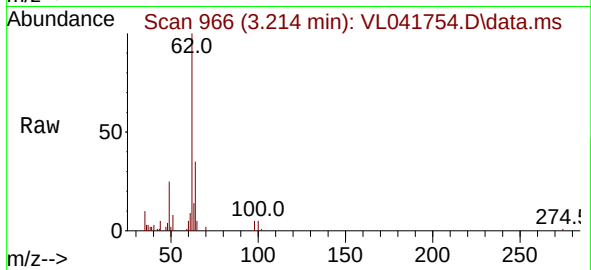
#37  
1,2-Dichloroethane  
Concen: 0.998 ppbv  
RT: 3.214 min Scan# 90  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion: 62 Resp: 11490  
Ion Ratio Lower Upper  
62 100  
98 7.8 4.7 7.1

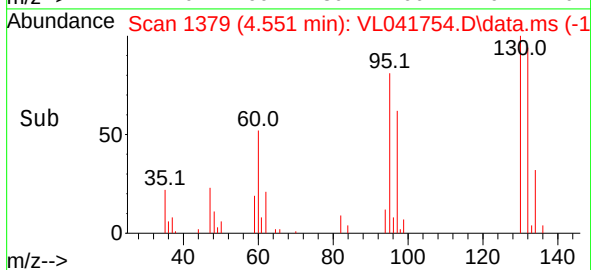
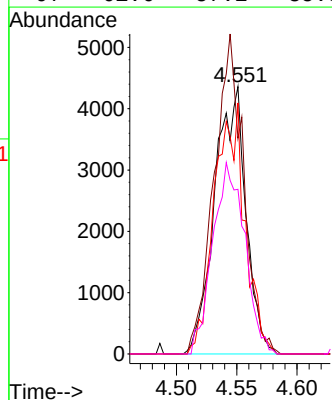
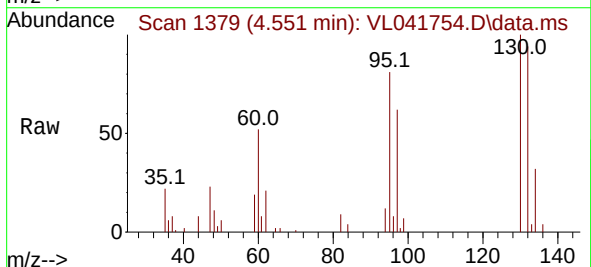
Manual Integrations  
APPROVED

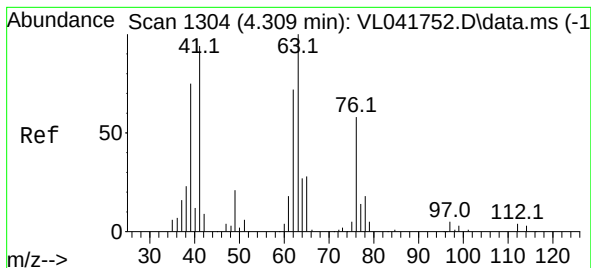
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38  
Trichloroethene  
Concen: 1.004 ppbv m  
RT: 4.551 min Scan# 1379  
Delta R.T. 0.006 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:130 Resp: 7824  
Ion Ratio Lower Upper  
130 100  
95 80.7 87.0 130.6#  
132 93.9 75.0 112.6  
97 61.6 57.2 85.8





#39

1,2-Dichloropropane

Concen: 1.056 ppbv

RT: 4.311 min Scan# 1305

Delta R.T. 0.003 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001

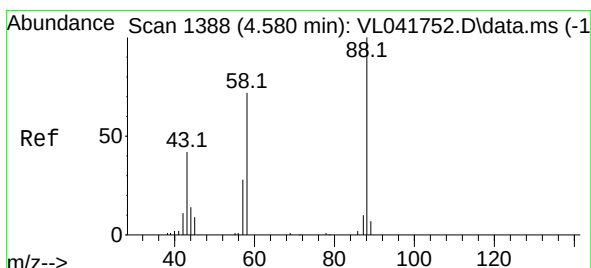
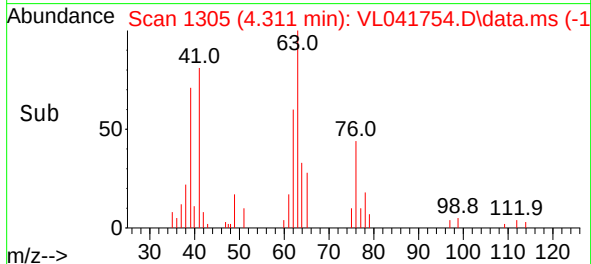
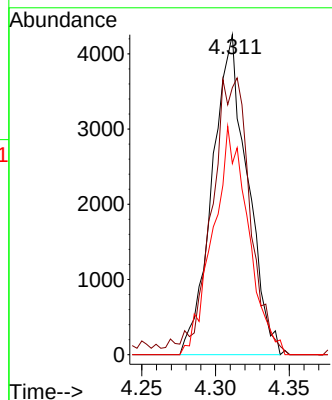
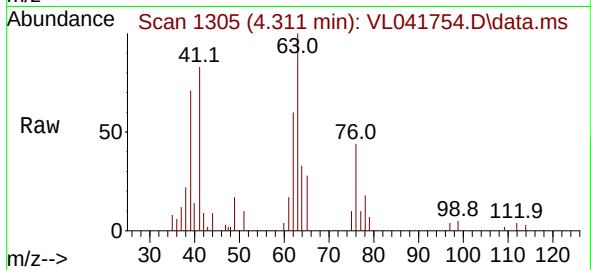
Tgt Ion: 63 Resp: 7068

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 41  | 80.8  | 75.3  | 112.9 |
| 62  | 59.8  | 57.3  | 85.9  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#40

1,4-Dioxane

Concen: 0.991 ppbv

RT: 4.596 min Scan# 1393

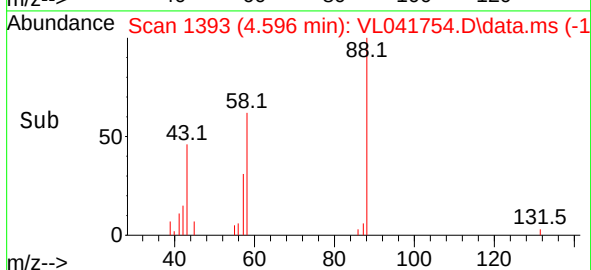
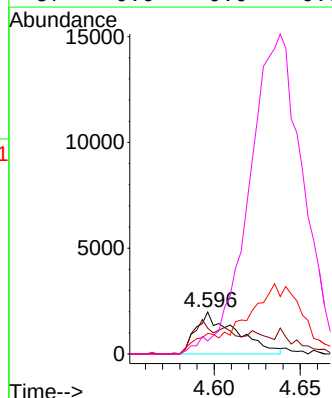
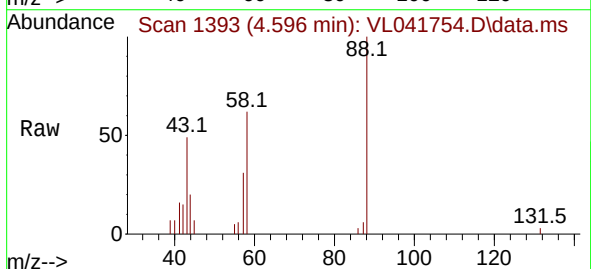
Delta R.T. 0.016 min

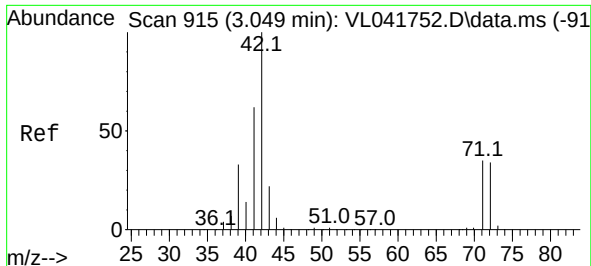
Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 88 Resp: 3241

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 58  | 127.2 | 61.0  | 91.6# |
| 43  | 0.0   | 29.4  | 44.0# |
| 57  | 0.0   | 0.0   | 0.0   |





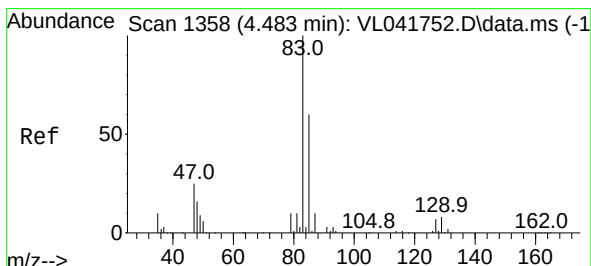
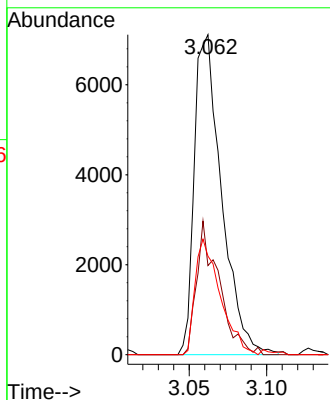
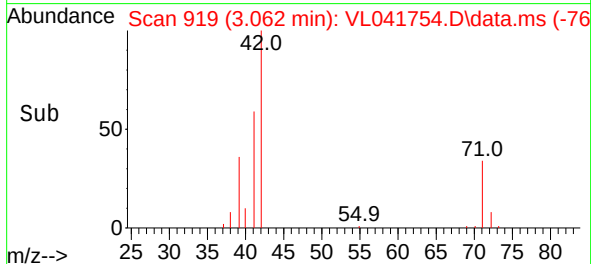
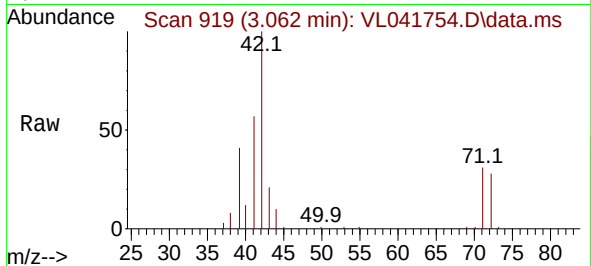
#41  
Tetrahydrofuran  
Concen: 1.082 ppbv  
RT: 3.062 min Scan# 915  
Delta R.T. 0.013 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 42    | Resp: | 872  |
| Ion Ratio | Lower | Upper |      |
| 42        | 100   |       |      |
| 72        | 34.4  | 29.1  | 43.7 |
| 71        | 34.0  | 28.4  | 42.6 |

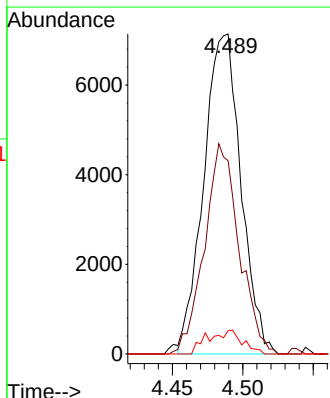
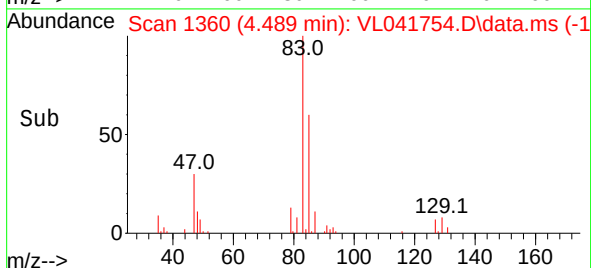
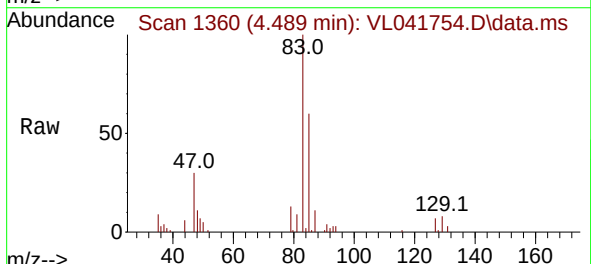
Manual Integrations  
APPROVED

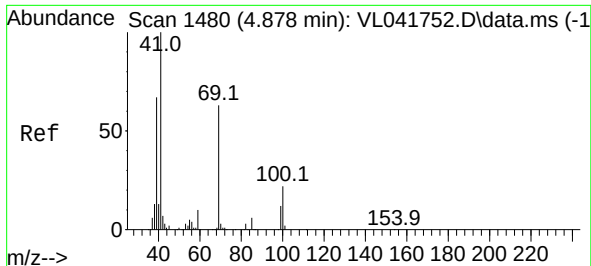
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#42  
Bromodichloromethane  
Concen: 0.993 ppbv  
RT: 4.489 min Scan# 1360  
Delta R.T. 0.006 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 13154 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 60.4  | 48.0  | 72.0  |
| 127       | 7.2   | 5.8   | 8.8   |





#43

Methyl Methacrylate

Concen: 0.999 ppbv m

RT: 4.875 min Scan# 1480

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

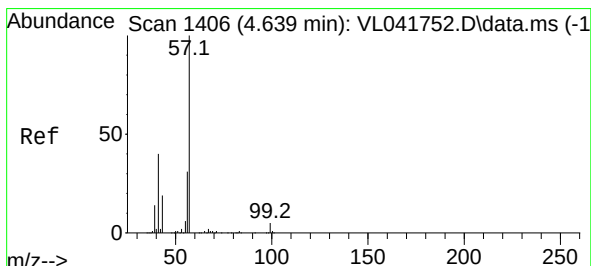
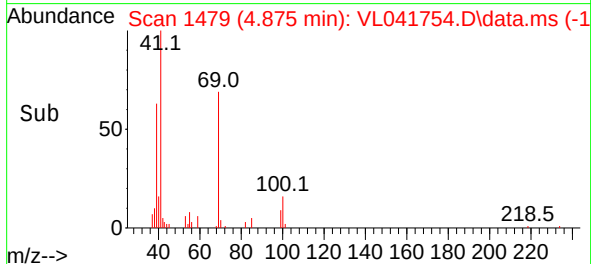
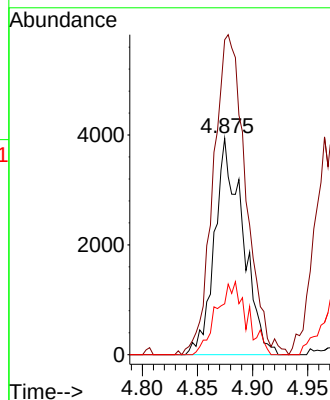
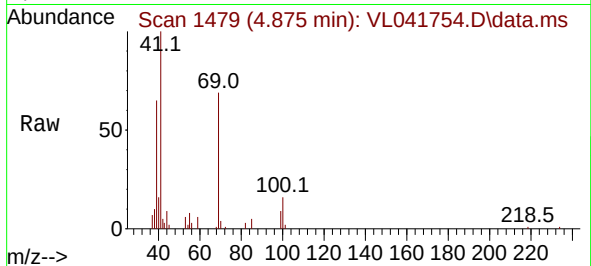
VSTDICC001

Tgt Ion: 69 Resp: 7044  
Ion Ratio Lower Upper  
69 100  
41 169.4 130.3 195.5  
100 0.0 28.3 42.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#44

2,2,4-Trimethylpentane

Concen: 1.024 ppbv

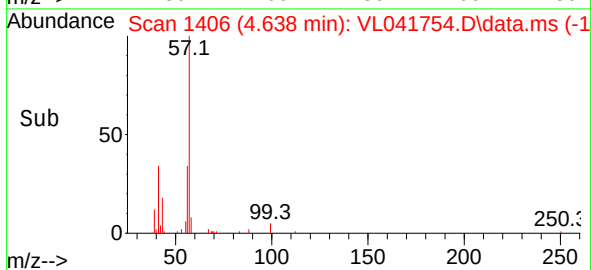
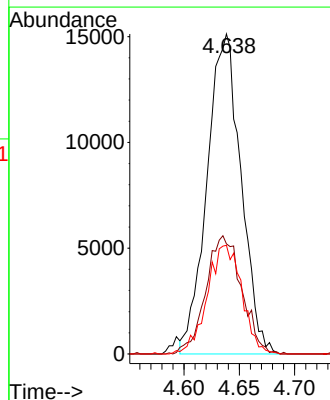
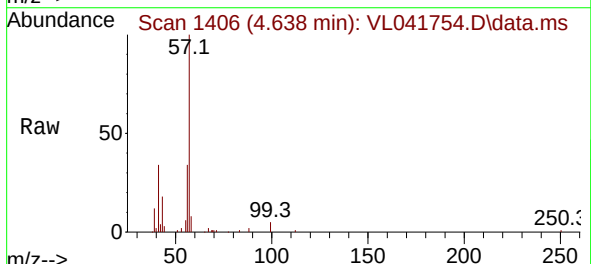
RT: 4.638 min Scan# 1406

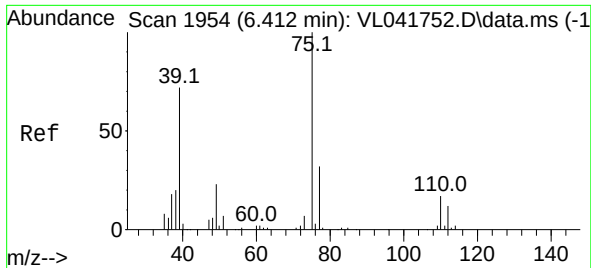
Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 57 Resp: 32361  
Ion Ratio Lower Upper  
57 100  
41 38.9 30.7 46.1  
56 34.5 25.4 38.0





#45  
t-1,3-Dichloropropene  
Concen: 0.963 ppbv  
RT: 6.412 min Scan# 1954  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

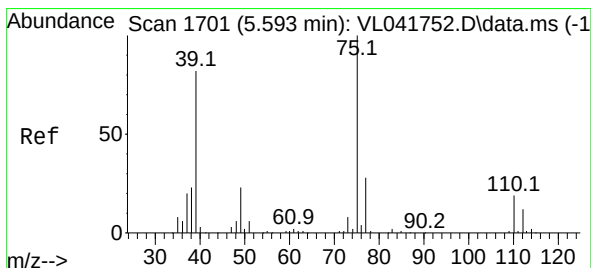
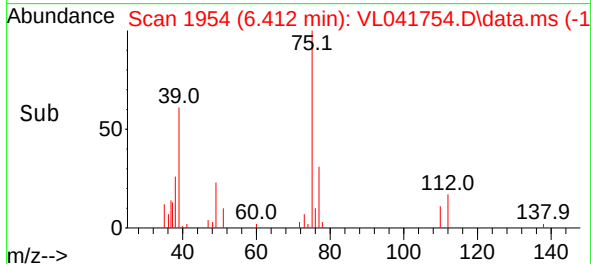
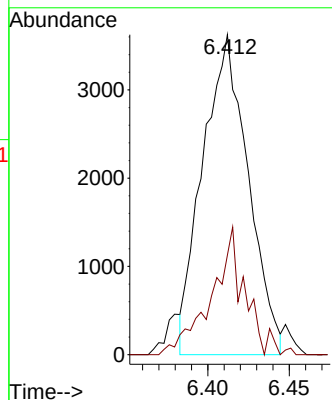
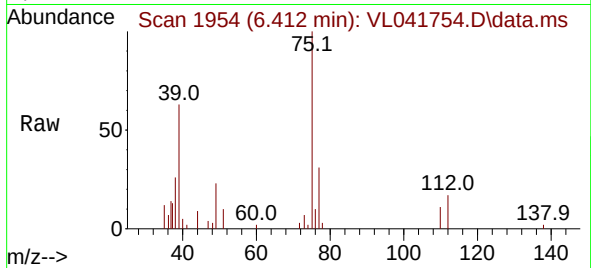
ClientSampleId :

VSTDICC001

Tgt Ion: 75 Resp: 702  
Ion Ratio Lower Upper  
75 100  
77 31.1 25.9 38.9

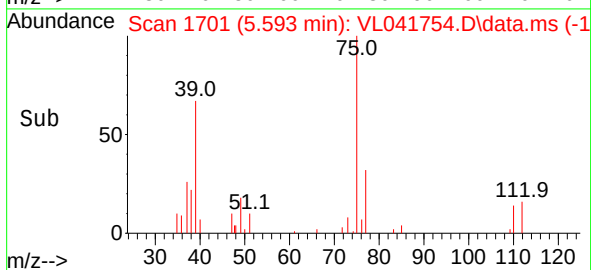
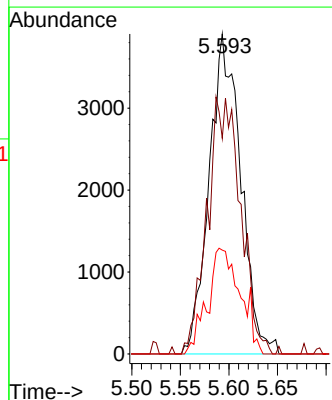
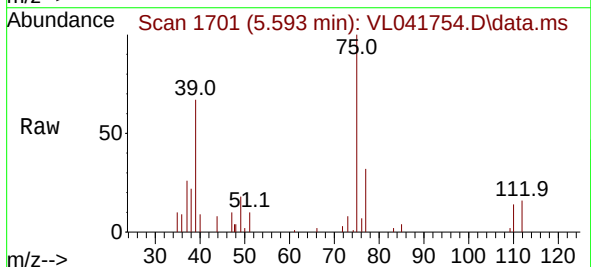
Manual Integrations  
APPROVED

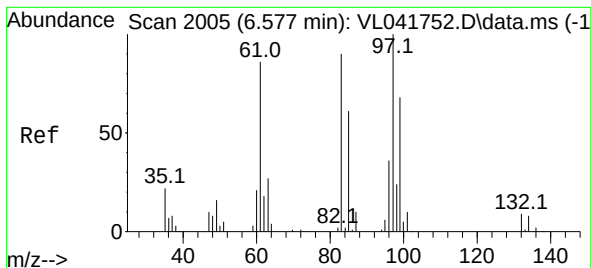
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#46  
cis-1,3-Dichloropropene  
Concen: 0.952 ppbv m  
RT: 5.593 min Scan# 1701  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

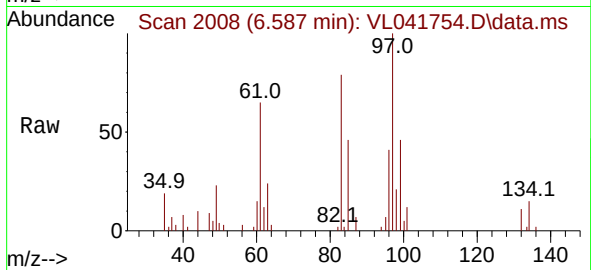
Tgt Ion: 75 Resp: 8815  
Ion Ratio Lower Upper  
75 100  
39 67.4 65.2 97.8  
77 32.5 22.0 33.0





#47  
1,1,2-Trichloroethane  
Concen: 1.028 ppbv m  
RT: 6.587 min Scan# 2005  
Delta R.T. 0.009 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

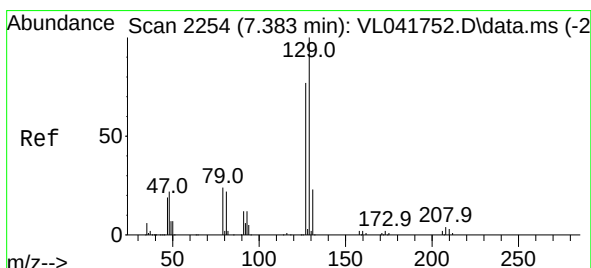
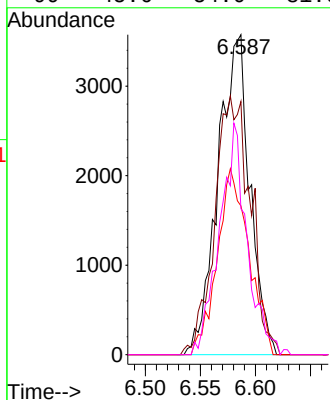
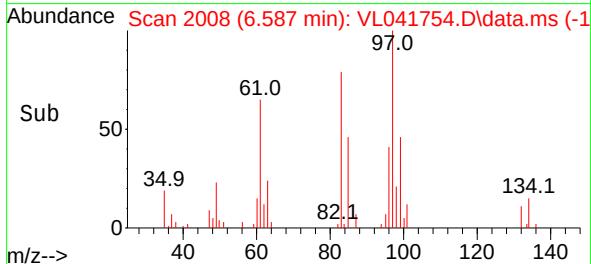
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001



Tgt Ion: 97 Resp: 7189  
Ion Ratio Lower Upper  
97 100  
83 79.1 72.3 108.5  
85 46.5 48.5 72.7  
99 45.6 54.0 81.0#

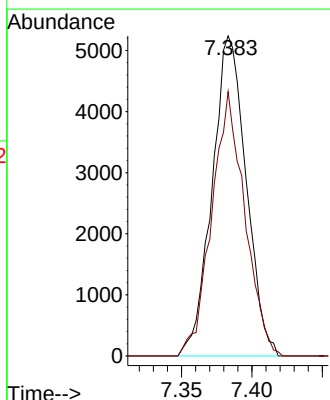
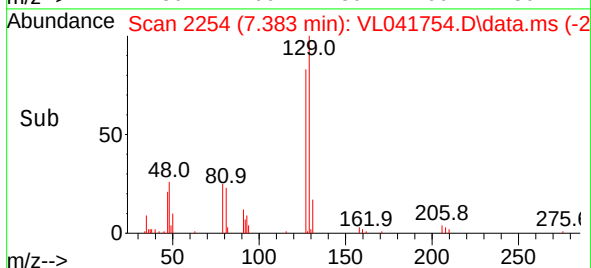
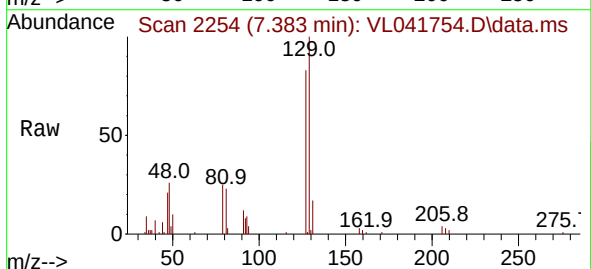
Manual Integrations  
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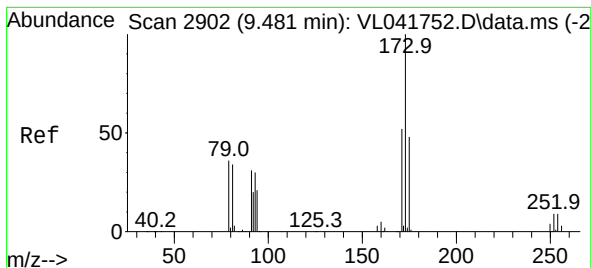
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#48  
Dibromochloromethane  
Concen: 0.924 ppbv  
RT: 7.383 min Scan# 2254  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:129 Resp: 8817  
Ion Ratio Lower Upper  
129 100  
127 80.2 38.8 116.3





#49

Bromoform

Concen: 0.905 ppbv

RT: 9.480 min Scan# 2902

Delta R.T. -0.000 min

Lab File: VL041754.D

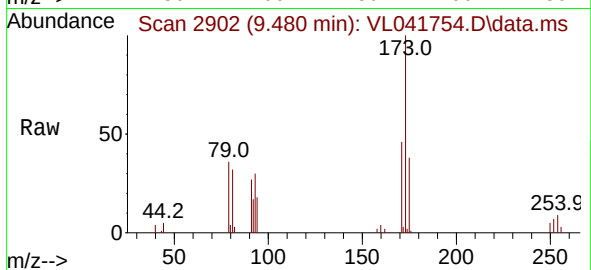
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001



Tgt Ion: 173 Resp: 707

Ion Ratio Lower Upper

173 100

175 44.7 38.2 57.2

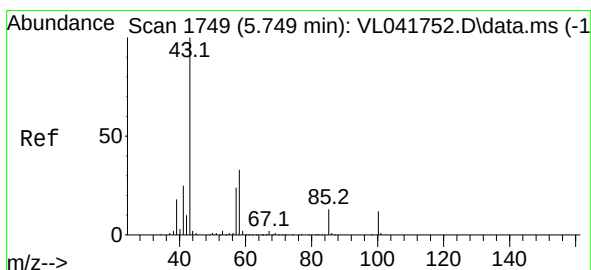
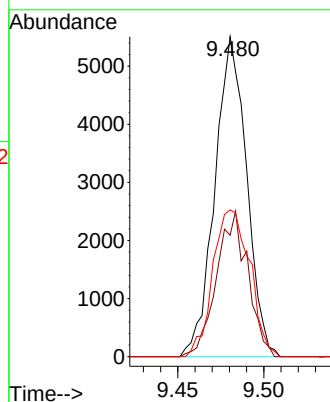
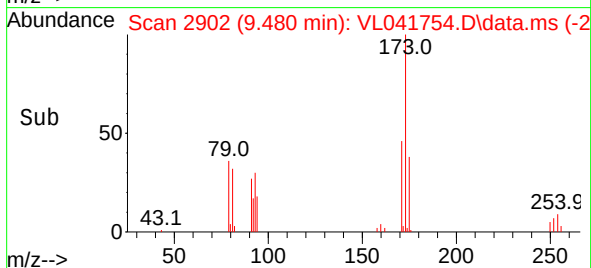
171 53.3 41.1 61.7

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#50

4-Methyl-2-Pentanone

Concen: 1.031 ppbv

RT: 5.761 min Scan# 1753

Delta R.T. 0.013 min

Lab File: VL041754.D

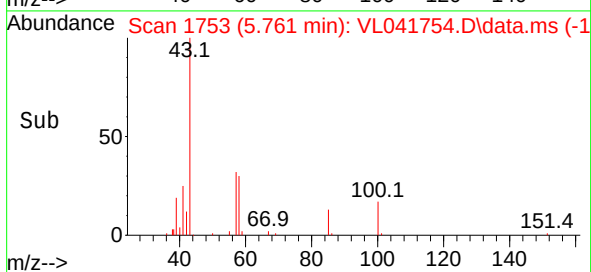
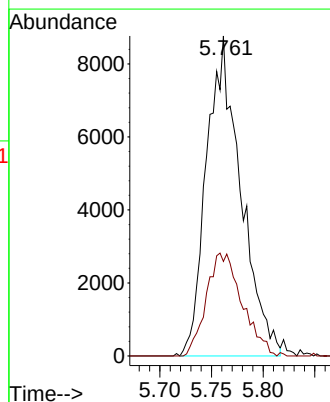
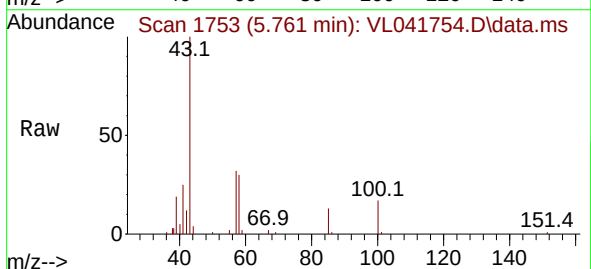
Acq: 16 Dec 2024 14:34

Tgt Ion: 43 Resp: 20212

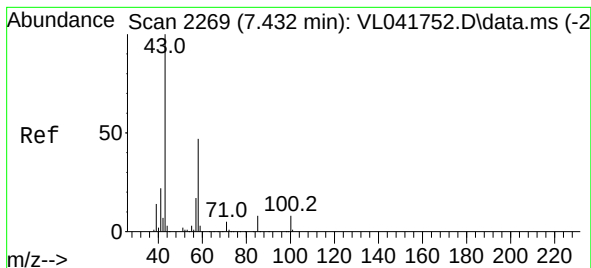
Ion Ratio Lower Upper

43 100

58 33.7 26.8 40.2







#51

2-Hexanone

Concen: 1.040 ppbv

RT: 7.441 min Scan# 2151

Delta R.T. 0.009 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

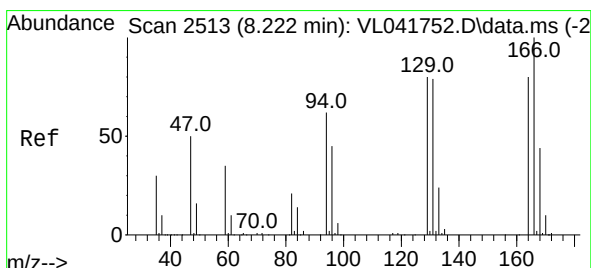
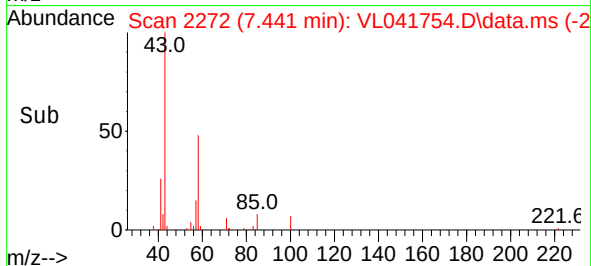
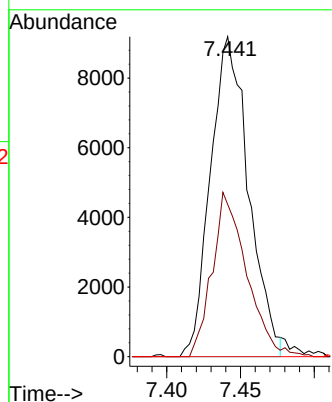
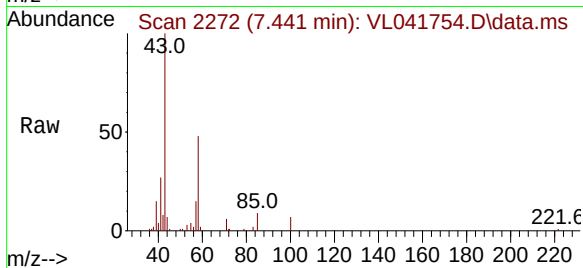
VSTDICC001

|             |                |
|-------------|----------------|
| Tgt Ion: 43 | Resp: 1651     |
| Ion Ratio   | Lower Upper    |
| 43          | 100            |
| 58          | 46.5 36.6 55.0 |
| 98          | 0.2 0.1 0.1    |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#52

Tetrachloroethene

Concen: 1.026 ppbv m

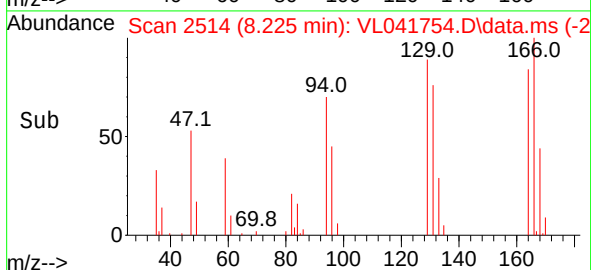
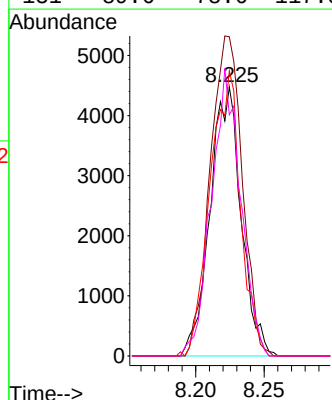
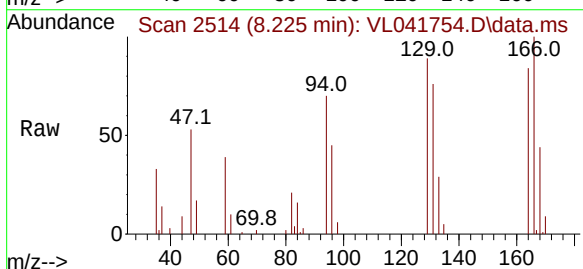
RT: 8.225 min Scan# 2514

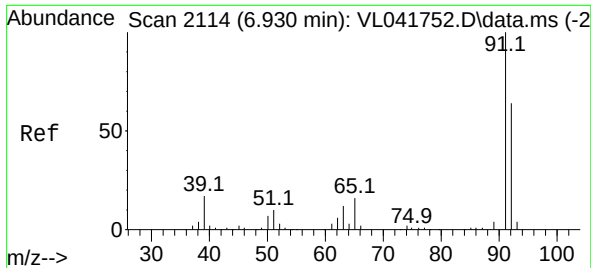
Delta R.T. 0.003 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

|              |                  |
|--------------|------------------|
| Tgt Ion: 164 | Resp: 7067       |
| Ion Ratio    | Lower Upper      |
| 164          | 100              |
| 166          | 118.7 99.8 149.6 |
| 129          | 106.0 79.6 119.4 |
| 131          | 89.6 78.6 117.8  |





#53

Toluene

Concen: 1.029 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

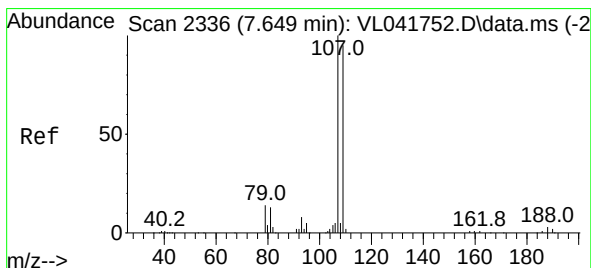
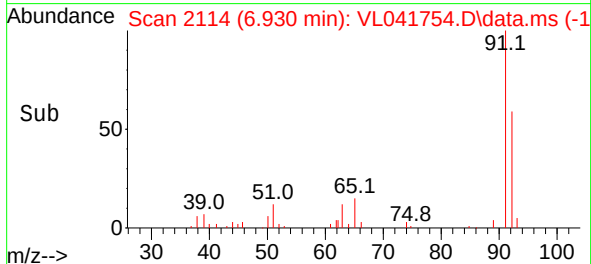
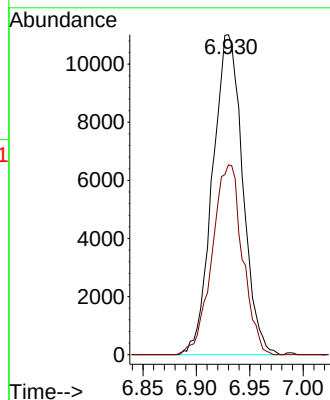
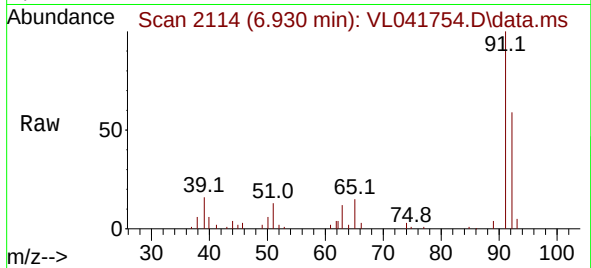
ClientSampleId :

VSTDICC001

Tgt Ion: 91 Resp: 21594  
 Ion Ratio Lower Upper  
 91 100  
 92 60.0 47.9 71.9

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#54

1,2-Dibromoethane

Concen: 1.013 ppbv

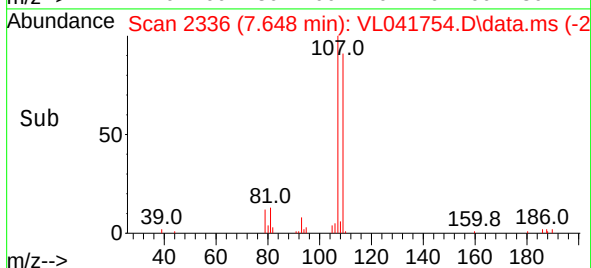
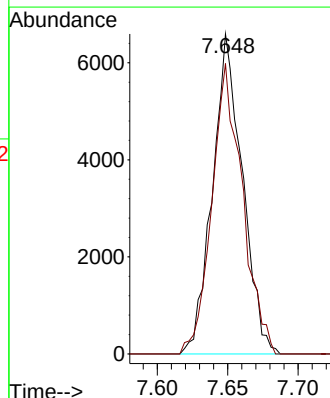
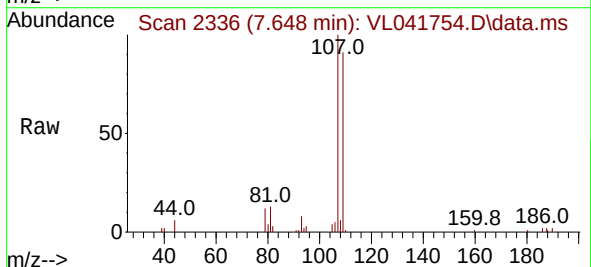
RT: 7.648 min Scan# 2336

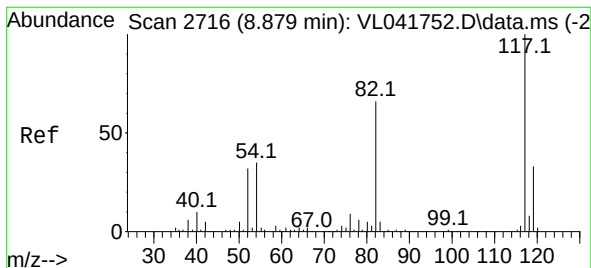
Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

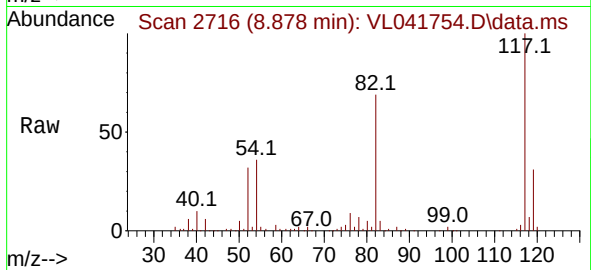
Tgt Ion:107 Resp: 9758  
 Ion Ratio Lower Upper  
 107 100  
 109 90.8 75.9 113.9





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.878 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

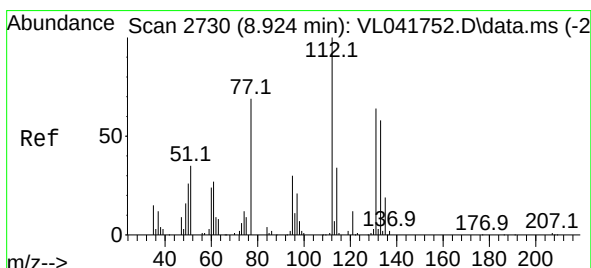
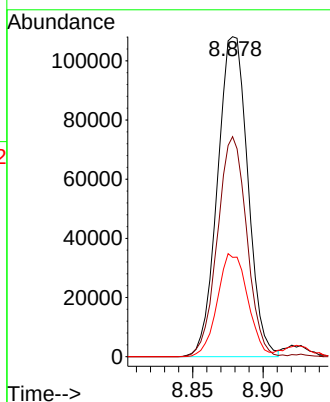
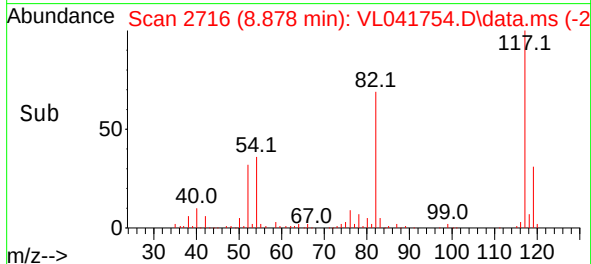
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001



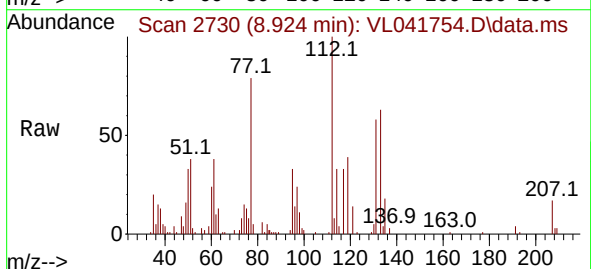
Tgt Ion:117 Resp: 16226  
Ion Ratio Lower Upper  
117 100  
82 66.9 53.8 80.8  
119 32.5 26.7 40.1

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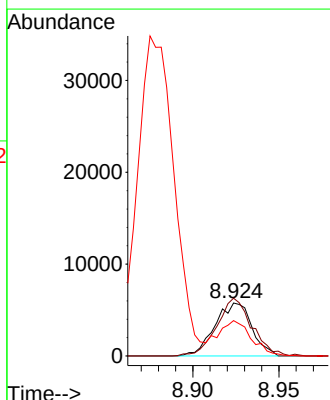
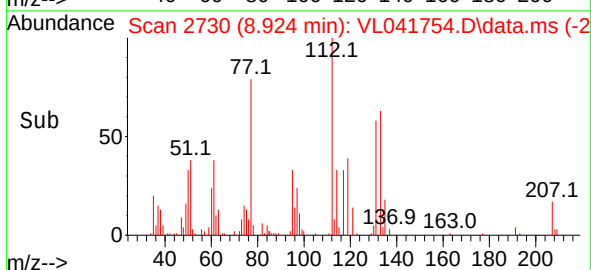
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

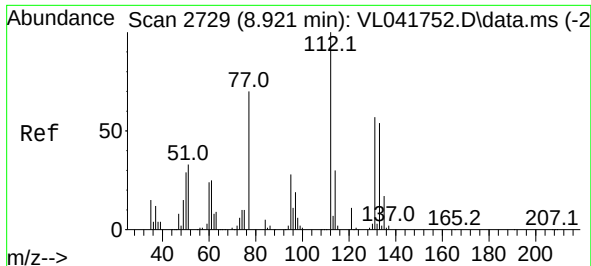


#56  
1,1,1,2-Tetrachloroethane  
Concen: 1.005 ppbv  
RT: 8.924 min Scan# 2730  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



Tgt Ion:131 Resp: 8643  
Ion Ratio Lower Upper  
131 100  
133 103.1 76.8 115.2  
119 55.4 49.0 73.6





#57

Chlorobenzene

Concen: 1.054 ppbv

RT: 8.920 min Scan# 2729

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001

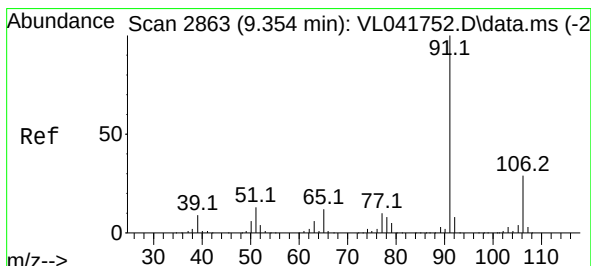
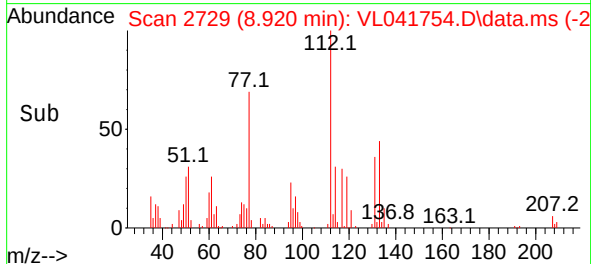
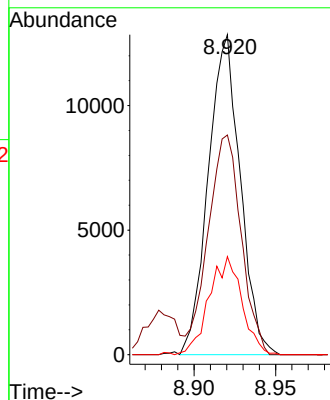
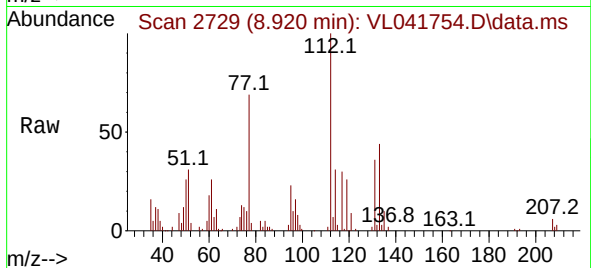
Tgt Ion: 112 Resp: 17500

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 77  | 68.6  | 57.4  | 86.0  |
| 114 | 30.7  | 27.4  | 33.4  |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 1.019 ppbv

RT: 9.351 min Scan# 2862

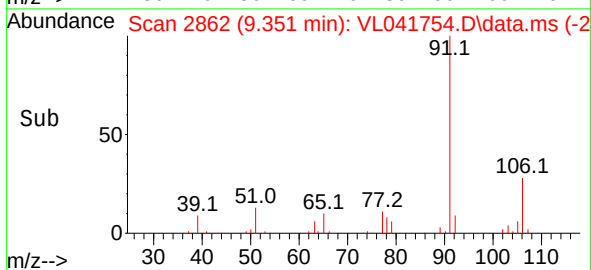
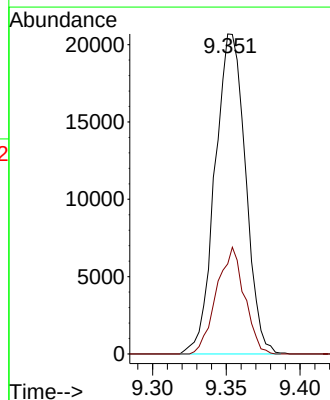
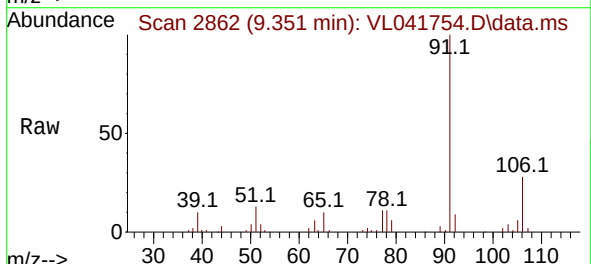
Delta R.T. -0.004 min

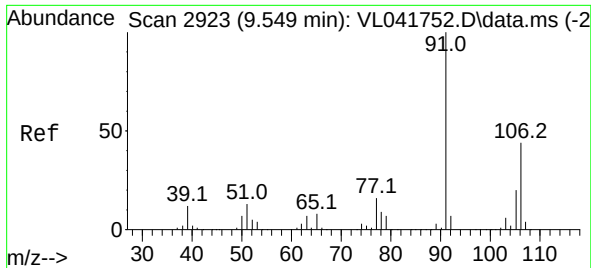
Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 29762

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 28.1  | 23.5  | 35.3  |





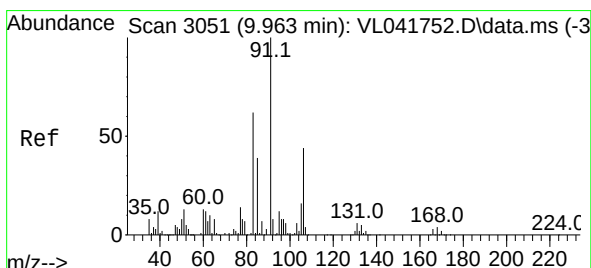
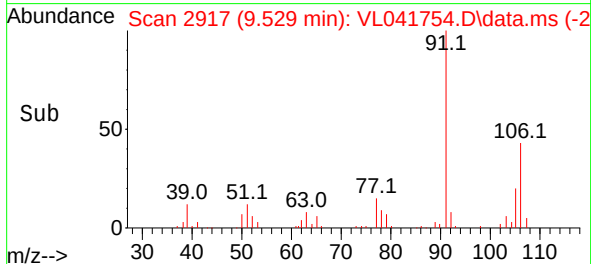
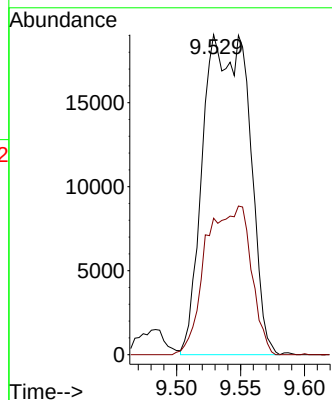
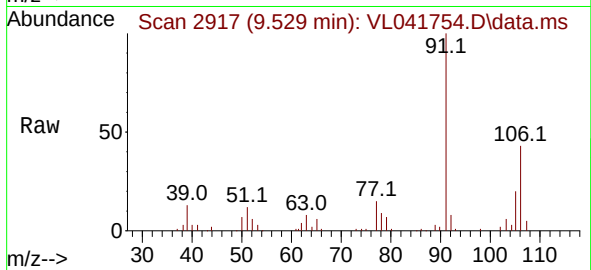
#59  
m/p-Xylene  
Concen: 2.026 ppbv m  
RT: 9.529 min Scan# 2923  
Delta R.T. -0.020 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

Tgt Ion: 91 Resp: 47599  
Ion Ratio Lower Upper  
91 100  
106 45.6 0.0 0.0

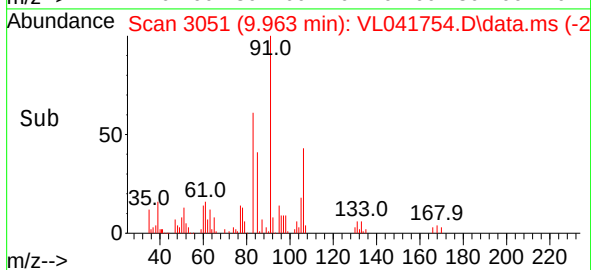
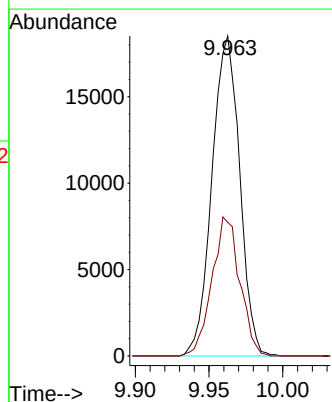
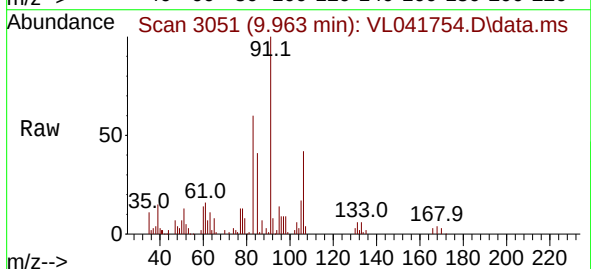
Manual Integrations  
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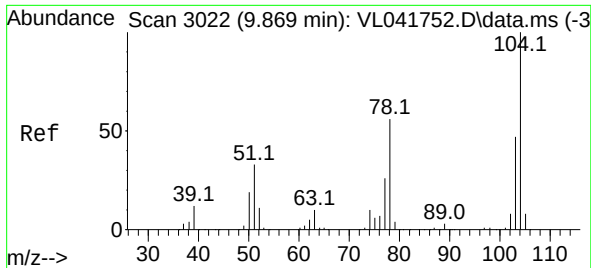
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#60  
o-Xylene  
Concen: 1.028 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 24210  
Ion Ratio Lower Upper  
91 100  
106 43.6 21.1 63.4





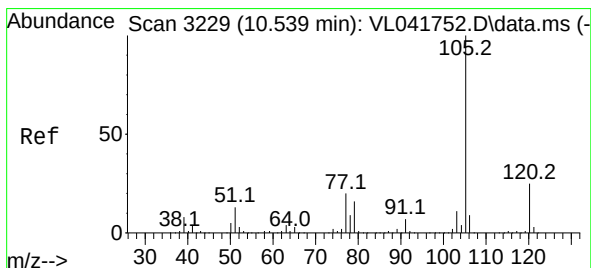
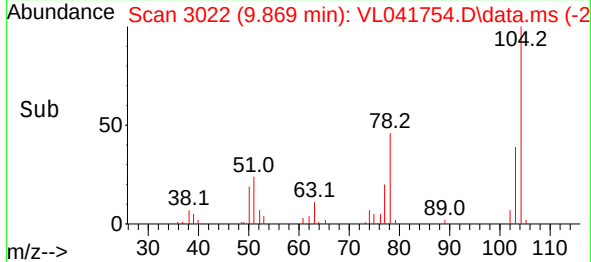
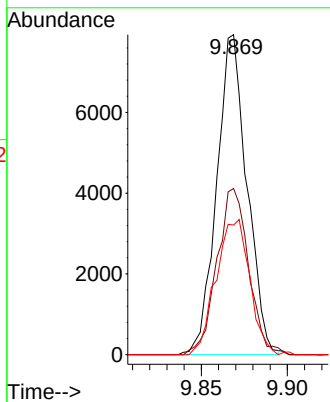
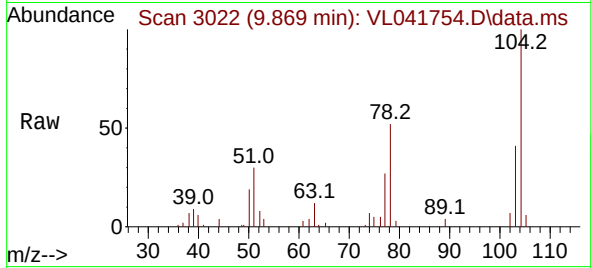
#61  
Styrene  
Concen: 0.953 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Tgt Ion:104 Resp: 970  
Ion Ratio Lower Upper  
104 100  
78 54.3 43.8 65.6  
103 47.2 37.8 56.6

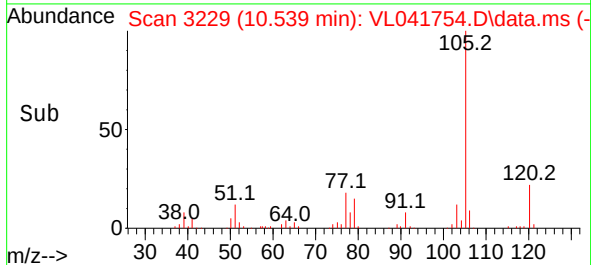
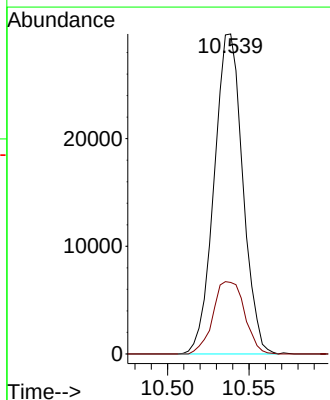
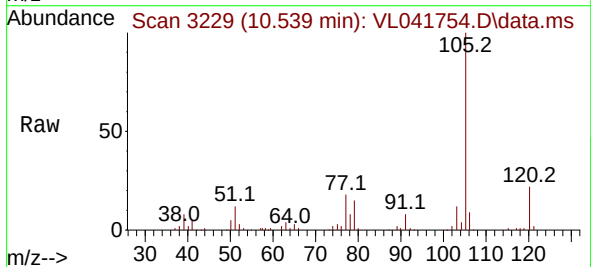
Manual Integrations  
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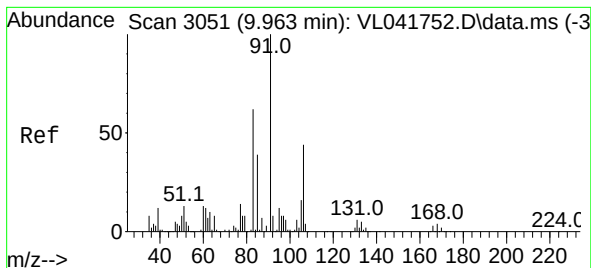
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#62  
Isopropylbenzene  
Concen: 1.024 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:105 Resp: 36251  
Ion Ratio Lower Upper  
105 100  
120 24.9 19.8 29.8





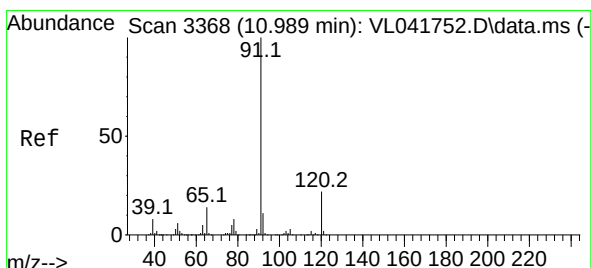
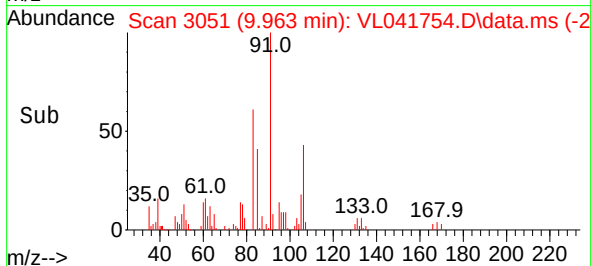
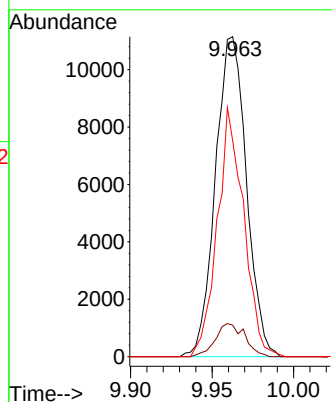
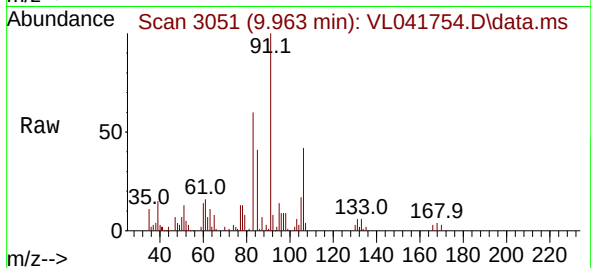
#63  
1,1,2,2-Tetrachloroethane  
Concen: 1.001 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Tgt Ion: 83 Resp: 14752  
Ion Ratio Lower Upper  
83 100  
131 9.8 4.9 14.7  
85 66.2 32.0 96.2

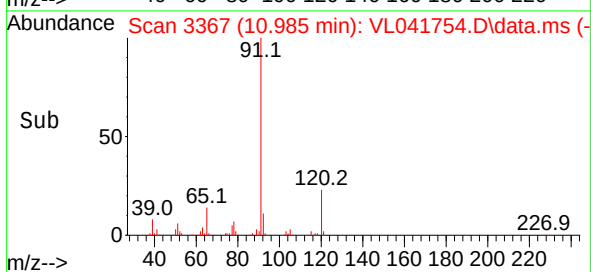
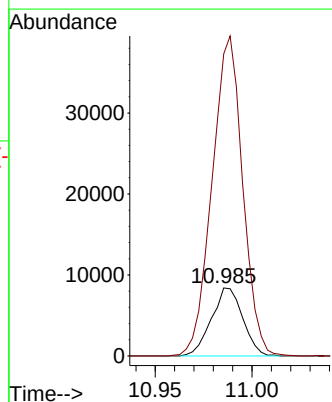
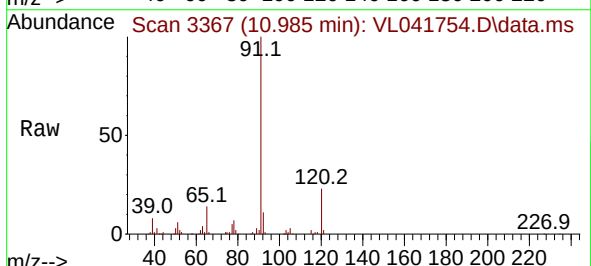
Manual Integrations  
APPROVED

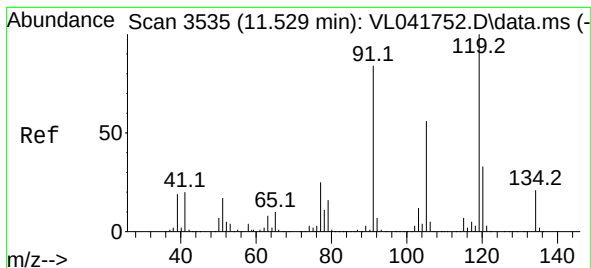
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#64  
n-propylbenzene  
Concen: 1.054 ppbv  
RT: 10.985 min Scan# 3367  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:120 Resp: 9432  
Ion Ratio Lower Upper  
120 100  
91 461.0 387.3 580.9





#65

tert-Butylbenzene

Concen: 1.030 ppbv

RT: 11.529 min Scan# 3535

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

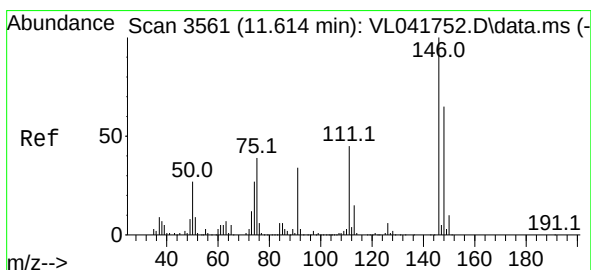
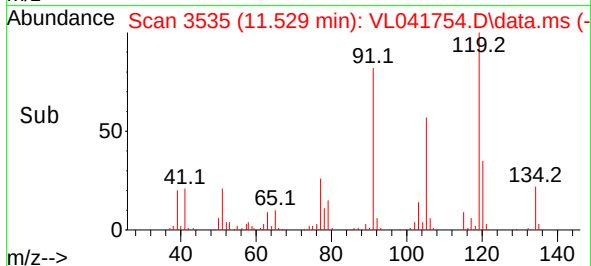
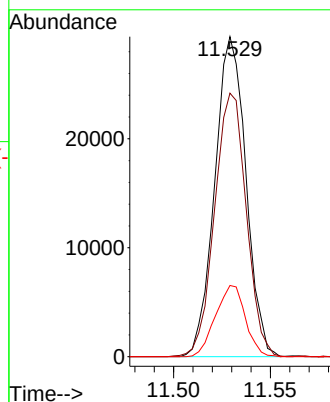
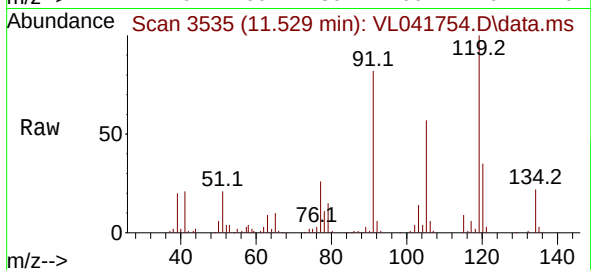
VSTDICC001

Tgt Ion: 119 Resp: 3288

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 119 | 100   |       |       |
| 91  | 83.8  | 67.0  | 100.4 |
| 134 | 21.3  | 16.5  | 24.7  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#66

Benzyl Chloride

Concen: 0.894 ppbv

RT: 11.610 min Scan# 3560

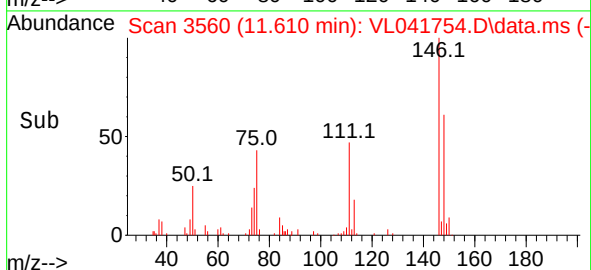
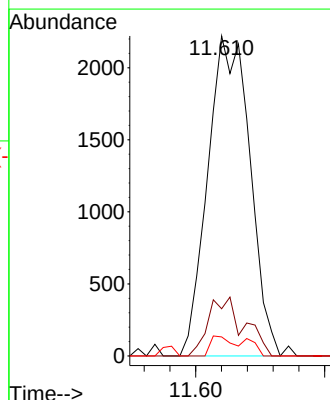
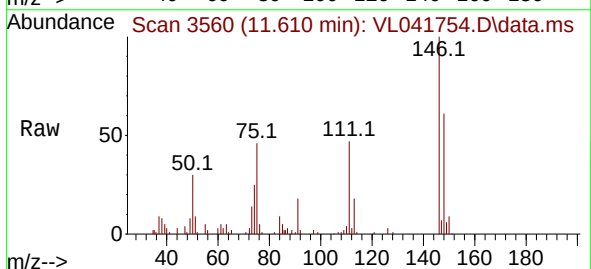
Delta R.T. -0.004 min

Lab File: VL041754.D

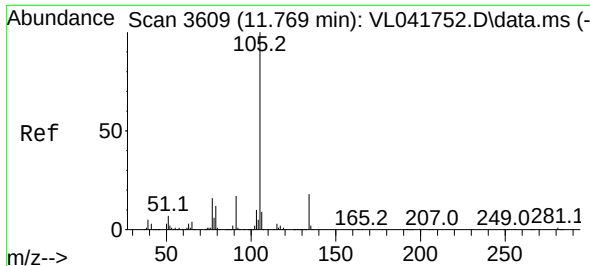
Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 2518

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 126 | 15.6  | 13.9  | 20.9  |
| 128 | 5.9   | 4.4   | 6.6   |







#67

sec-Butylbenzene

Concen: 1.019 ppbv

RT: 11.765 min Scan# 3609

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC001

Tgt Ion:105 Resp: 45015

Ion Ratio Lower Upper

105 100

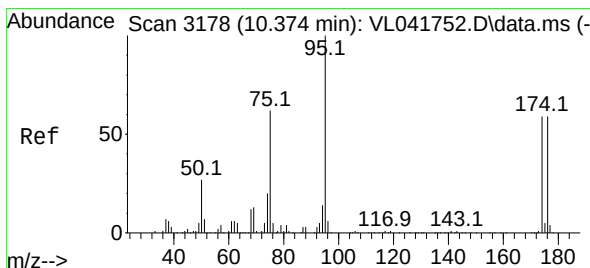
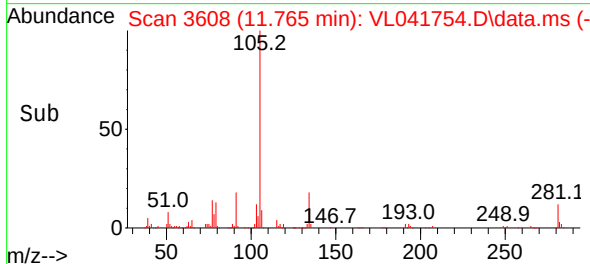
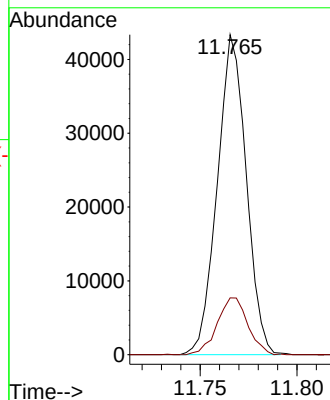
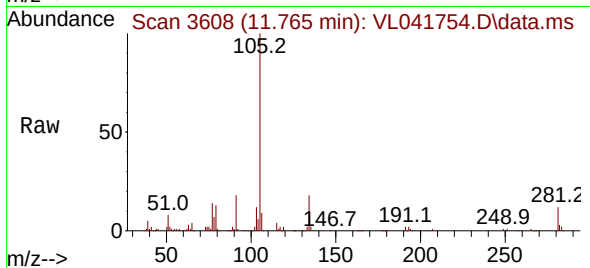
134 18.8 14.5 21.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#68

1-Bromo-4-Fluorobenzene

Concen: 9.825 ppbv

RT: 10.374 min Scan# 3178

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

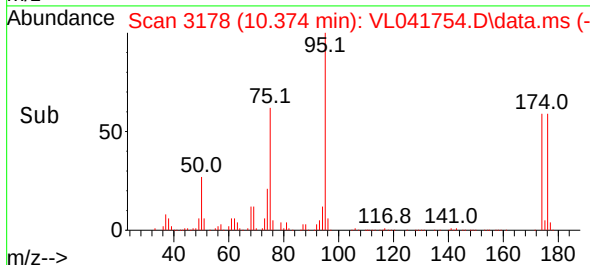
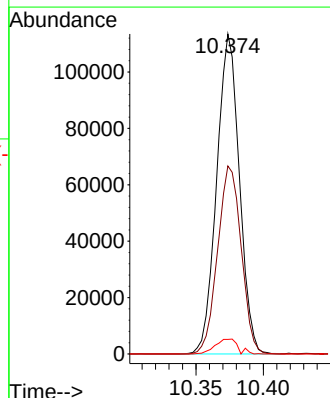
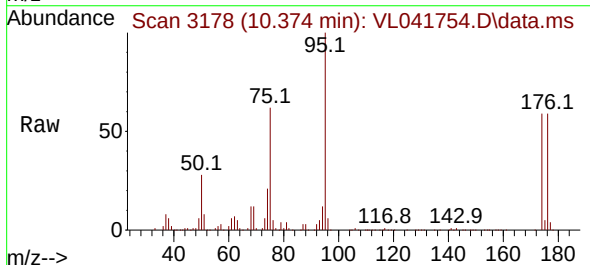
Tgt Ion: 95 Resp: 132857

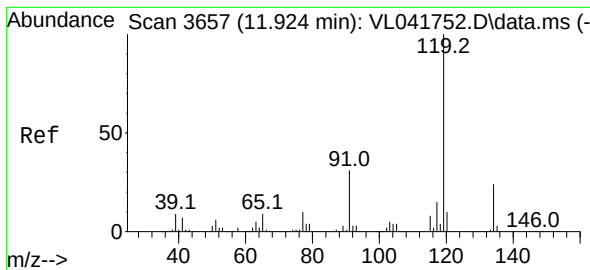
Ion Ratio Lower Upper

95 100

174 61.0 47.6 71.4

175 4.7 3.7 5.5





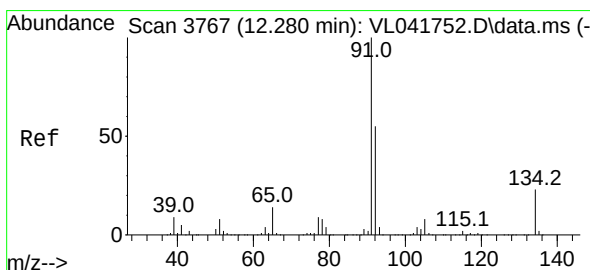
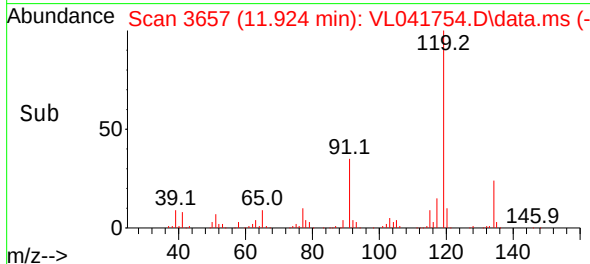
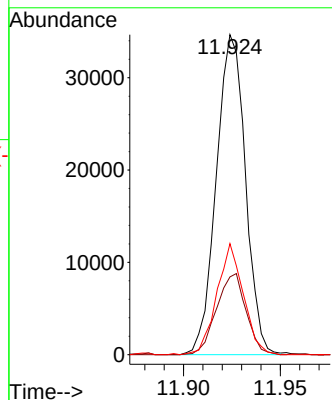
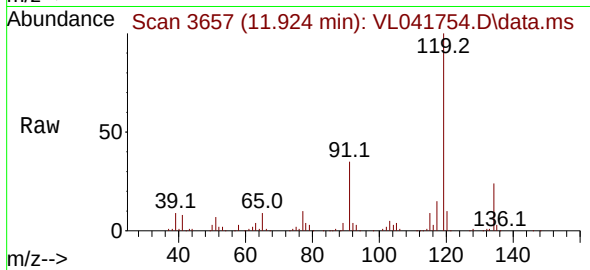
#69  
p-Isopropyltoluene  
Concen: 0.997 ppbv  
RT: 11.924 min Scan# 3657  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion: 119 Resp: 36298  
Ion Ratio Lower Upper  
119 100  
134 25.8 19.6 29.4  
91 31.8 24.4 36.6

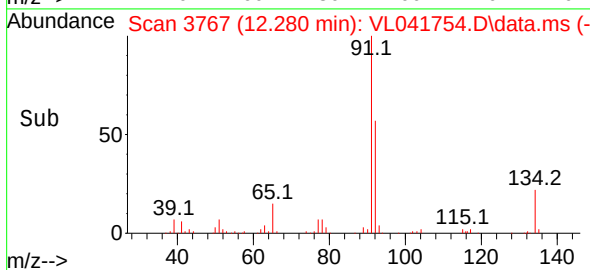
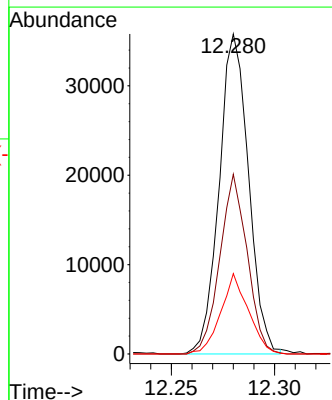
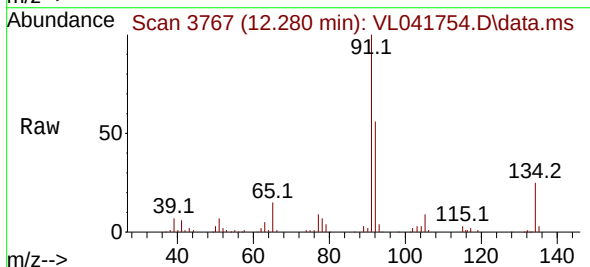
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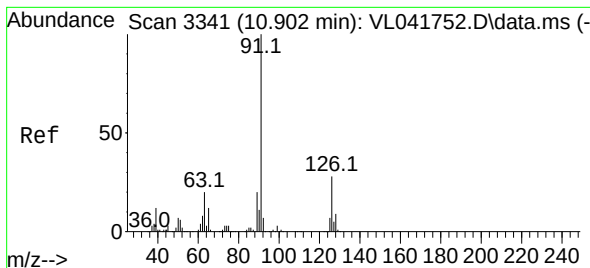
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#70  
n-Butylbenzene  
Concen: 1.007 ppbv  
RT: 12.280 min Scan# 3767  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 35432  
Ion Ratio Lower Upper  
91 100  
92 52.4 43.2 64.8  
134 23.6 18.2 27.4





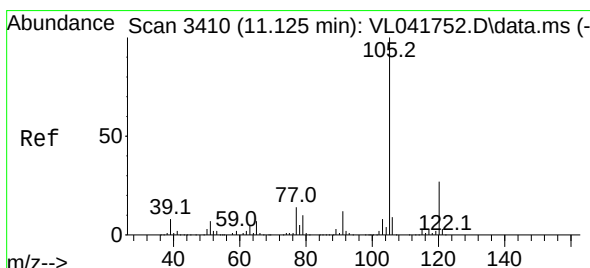
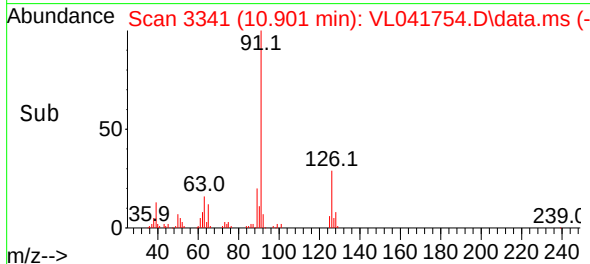
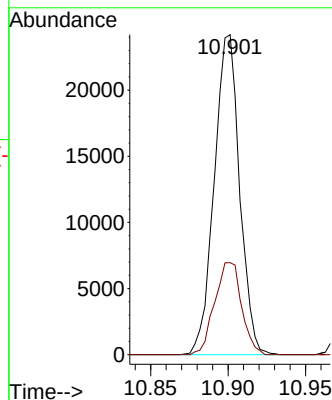
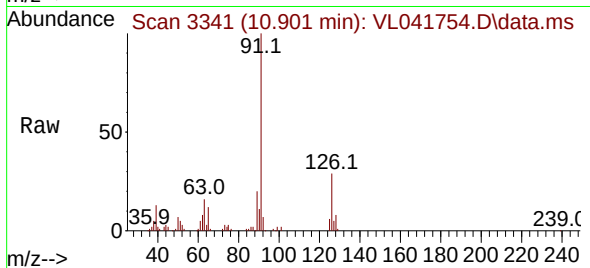
#71  
2-Chlorotoluene  
Concen: 1.020 ppbv  
RT: 10.901 min Scan# 3341  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Tgt Ion: 91 Resp: 2756  
Ion Ratio Lower Upper  
91 100  
126 30.5 11.6 46.4

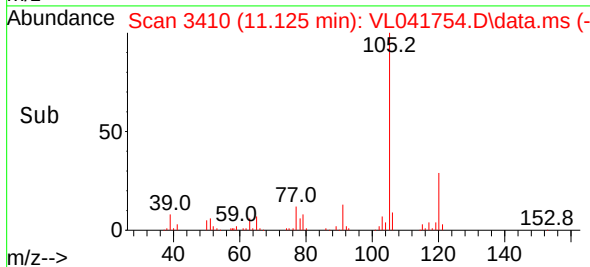
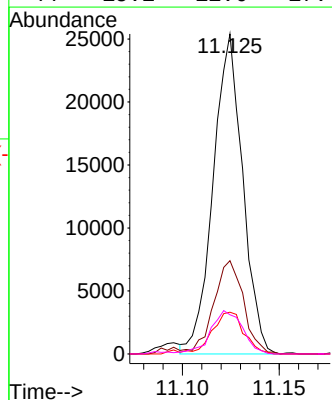
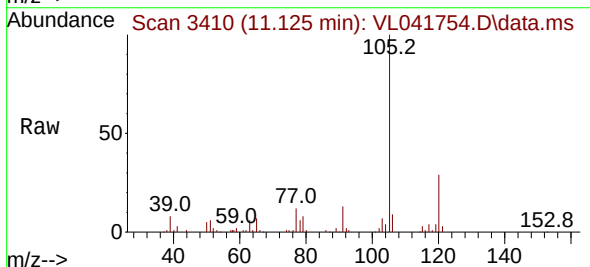
Manual Integrations  
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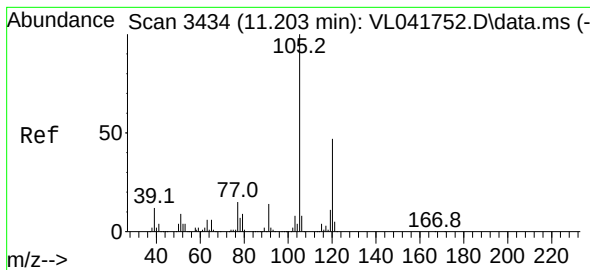
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 0.970 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:105 Resp: 26921  
Ion Ratio Lower Upper  
105 100  
120 30.7 23.3 34.9  
91 14.5 10.9 16.3  
77 15.1 11.6 17.4





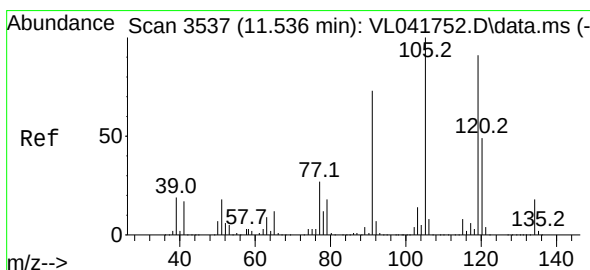
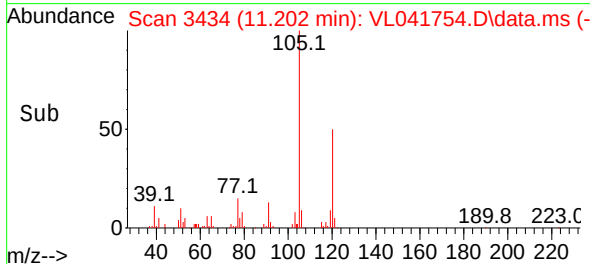
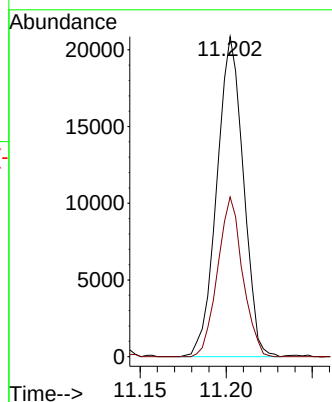
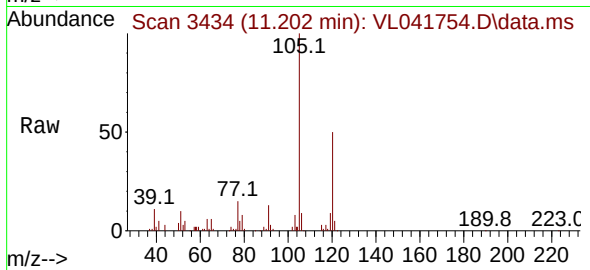
#73  
1,3,5-Trimethylbenzene  
Concen: 0.969 ppbv  
RT: 11.202 min Scan# 3434  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Tgt Ion:105 Resp: 22360  
Ion Ratio Lower Upper  
105 100  
120 49.9 37.4 56.2

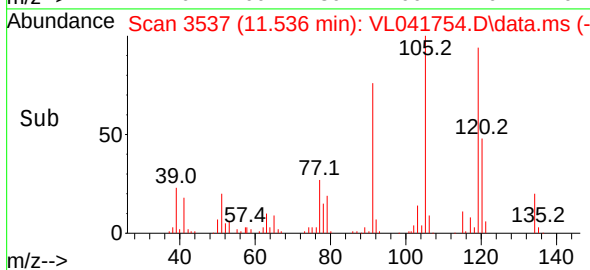
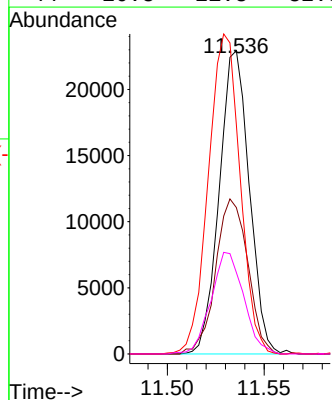
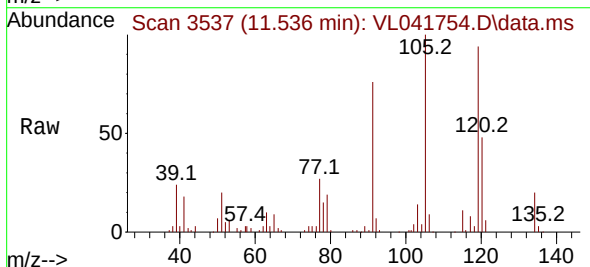
Manual Integrations  
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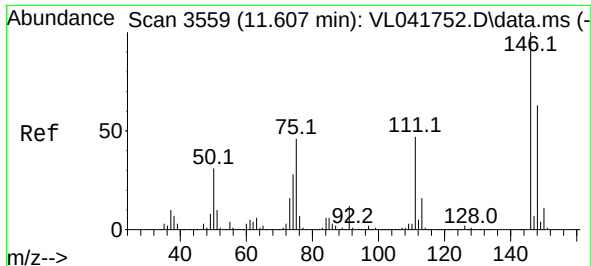
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#74  
1,2,4-Trimethylbenzene  
Concen: 0.994 ppbv  
RT: 11.536 min Scan# 3537  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:105 Resp: 24654  
Ion Ratio Lower Upper  
105 100  
120 48.3 39.0 58.4  
91 75.5 58.1 87.1  
77 26.8 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 1.042 ppbv

RT: 11.604 min Scan# 3559

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

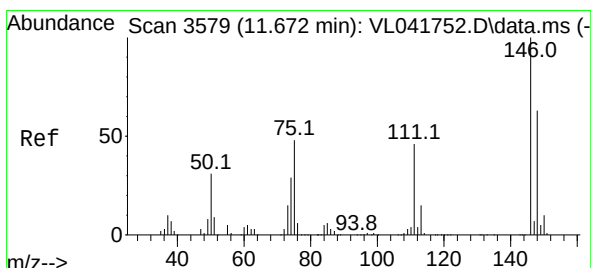
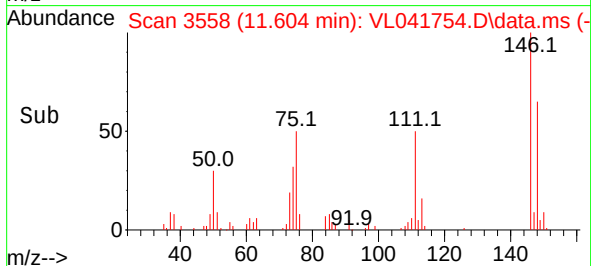
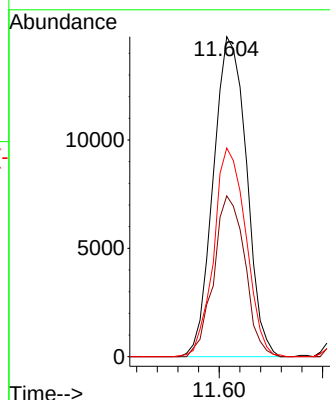
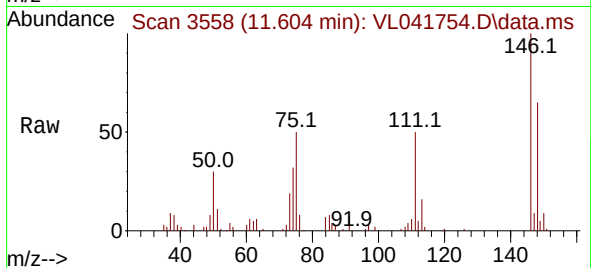
VSTDIC001

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 16470     |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 47.3  | 23.4 70.3 |
| 148         | 63.1  | 31.6 95.0 |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#76

1,4-Dichlorobenzene

Concen: 1.010 ppbv

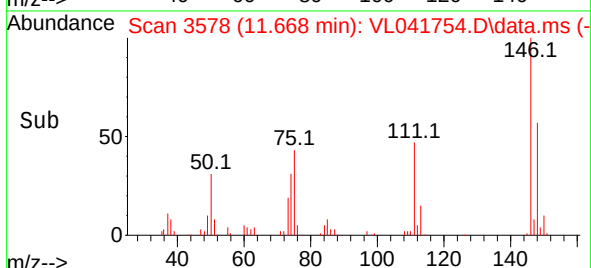
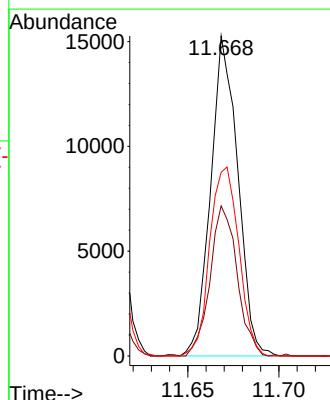
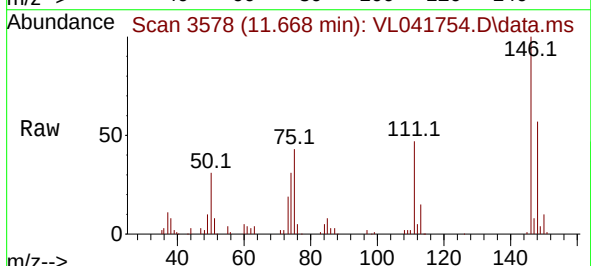
RT: 11.668 min Scan# 3578

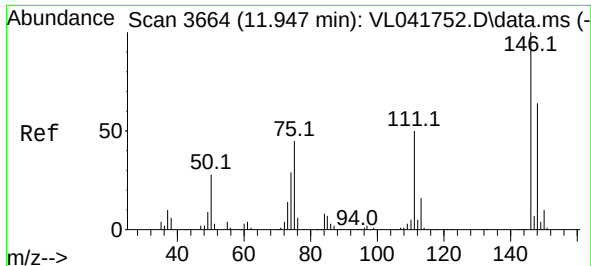
Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

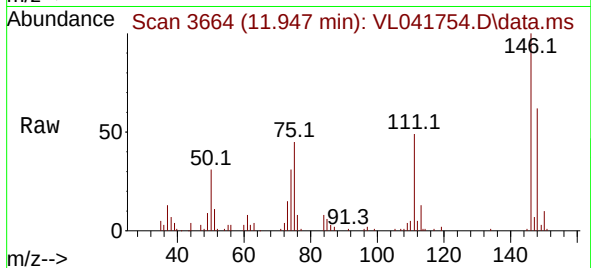
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 15774     |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 47.0  | 22.7 68.1 |
| 148         | 63.4  | 31.4 94.0 |





#77  
1,2-Dichlorobenzene  
Concen: 1.043 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

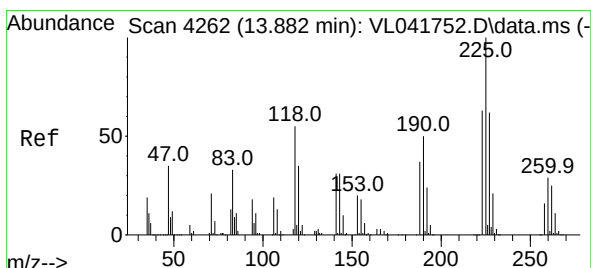
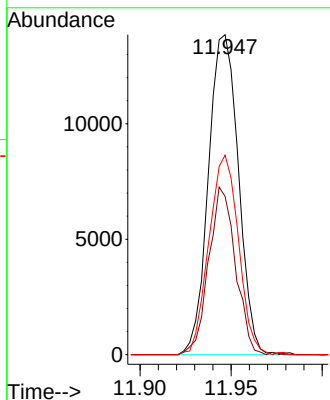
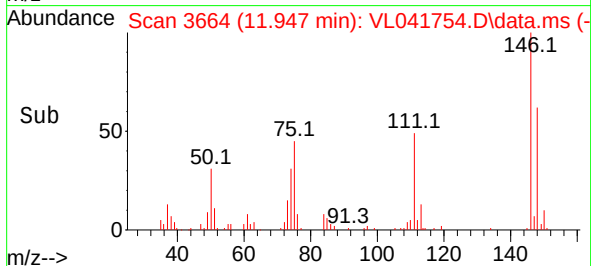
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001



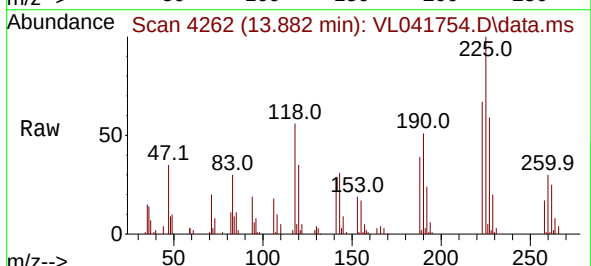
Tgt Ion:146 Resp: 1586  
Ion Ratio Lower Upper  
146 100  
111 47.0 24.8 74.3  
148 61.6 31.8 95.4

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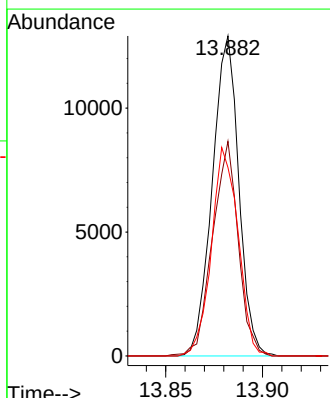
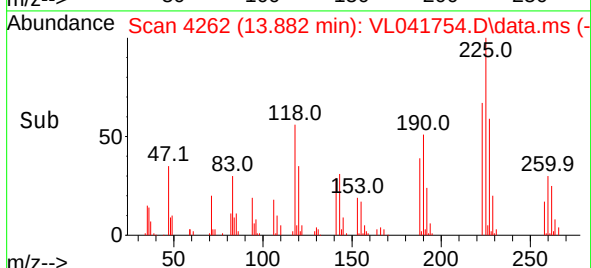
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

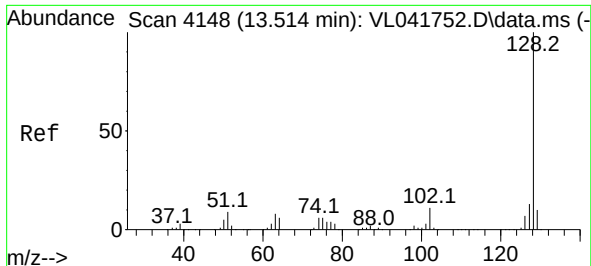


#78  
Hexachloro-1,3-Butadiene  
Concen: 1.087 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



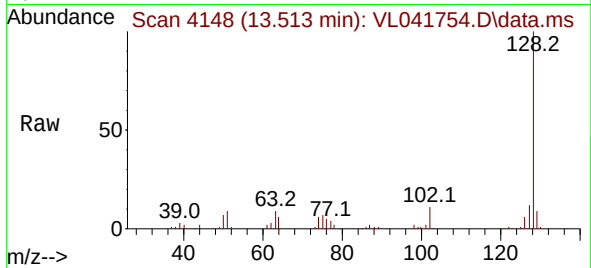
Tgt Ion:225 Resp: 12266  
Ion Ratio Lower Upper  
225 100  
223 65.0 50.5 75.7  
227 65.7 50.3 75.5





#79  
Naphthalene  
Concen: 0.982 ppbv  
RT: 13.513 min Scan# 4148  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

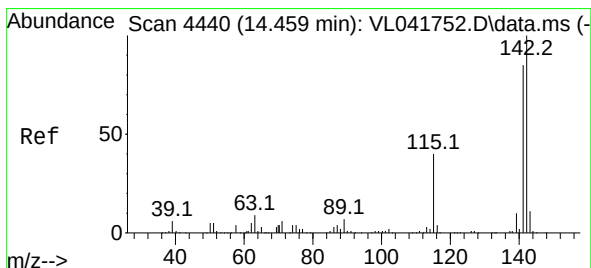
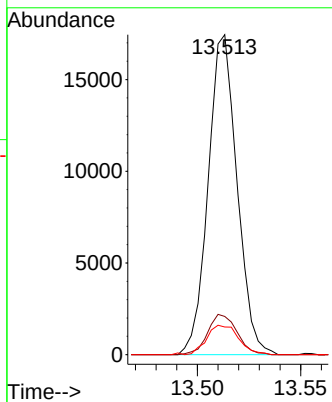
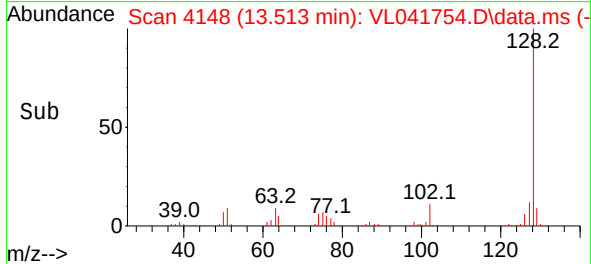
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001



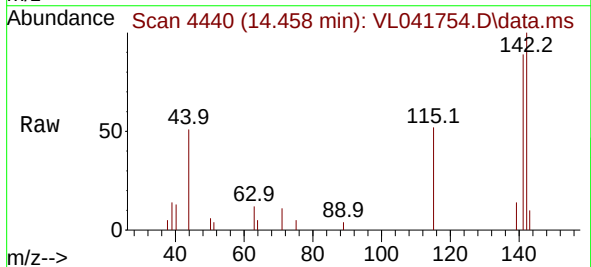
Tgt Ion:128 Resp: 1697  
Ion Ratio Lower Upper  
128 100  
127 12.0 10.7 16.1  
129 8.7 8.2 12.4

Manual Integrations  
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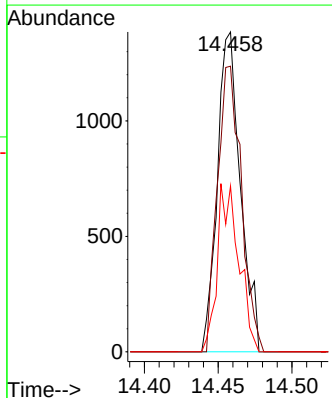
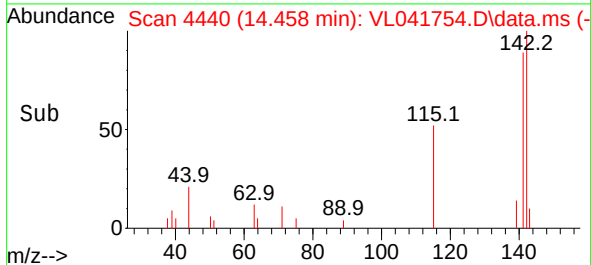
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

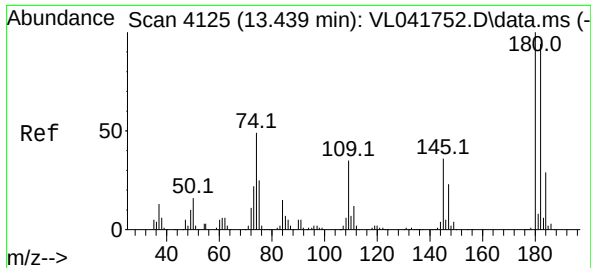


#80  
Naphthalene,2-methyl-  
Concen: 0.281 ppbv  
RT: 14.458 min Scan# 4440  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34



Tgt Ion:142 Resp: 1504  
Ion Ratio Lower Upper  
142 100  
141 92.8 68.4 102.6  
115 48.9 32.5 48.7#





#81

1,2,4-Trichlorobenzene

Concen: 0.950 ppbv

RT: 13.439 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041754.D

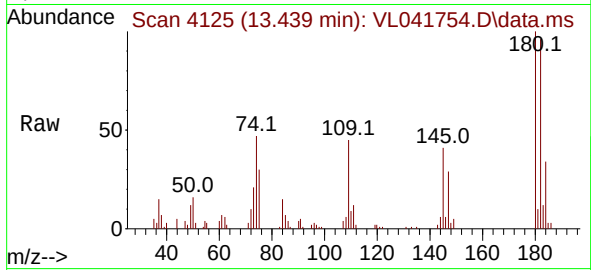
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001



Tgt Ion:180 Resp: 897

Ion Ratio Lower Upper

180 100

182 99.0 77.0 115.6

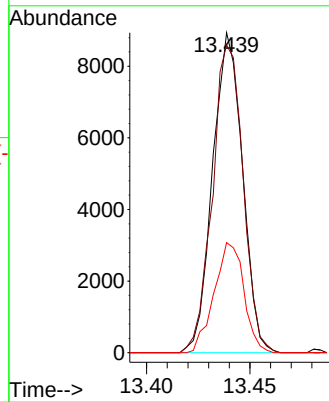
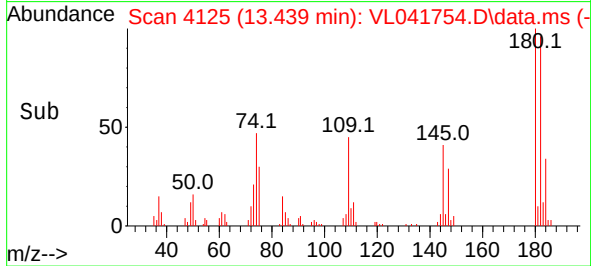
184 34.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041755.D  
 Acq On : 16 Dec 2024 15:05  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

Quant Time: Dec 19 06:14:17 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 66562    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.959 | 114  | 178453   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.882 | 117  | 158571   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 132273 10.010 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.100%

#### Target Compounds

|                               |       |     |        |       |        | Qvalue |
|-------------------------------|-------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 6277   | 0.530 | ppbv   | 94     |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 5587   | 0.515 | ppbv   | 95     |
| 4) Chloromethane              | 1.531 | 50  | 2452   | 0.529 | ppbv   | 90     |
| 5) Vinyl Chloride             | 1.580 | 62  | 2269   | 0.486 | ppbv   | 97     |
| 6) Bromomethane               | 1.667 | 94  | 1143   | 0.519 | ppbv # | 78     |
| 7) Chloroethane               | 1.703 | 64  | 939    | 0.518 | ppbv   | 88     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 5699   | 0.538 | ppbv   | 97     |
| 9) Propene                    | 1.483 | 41  | 2622   | 0.557 | ppbv # | 82     |
| 10) Heptane                   | 4.978 | 43  | 6491m  | 0.537 | ppbv   |        |
| 11) Trichlorofluoromethane    | 1.878 | 101 | 6594   | 0.524 | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 4962   | 0.519 | ppbv   | 96     |
| 13) Ethanol                   | 1.719 | 45  | 269m   | 0.688 | ppbv   |        |
| 14) Bromoethene               | 1.781 | 108 | 1694   | 0.524 | ppbv # | 93     |
| 15) Acetone                   | 1.836 | 43  | 8233   | 0.636 | ppbv   | 97     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 2966   | 0.582 | ppbv   | 88     |
| 17) tert-Butyl alcohol        | 2.043 | 59  | 6654   | 0.518 | ppbv # | 91     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 2022   | 0.504 | ppbv   | 96     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 5687   | 0.732 | ppbv # | 39     |
| 20) Methylene Chloride        | 2.062 | 84  | 2174   | 0.589 | ppbv # | 91     |
| 21) Allyl Chloride            | 2.098 | 41  | 3354   | 0.478 | ppbv   | 86     |
| 22) trans-1,2-Dichloroethene  | 2.341 | 96  | 2494   | 0.543 | ppbv   | 83     |
| 23) Vinyl Acetate             | 2.464 | 43  | 2599   | 0.462 | ppbv # | 98     |
| 24) 1,1-Dichloroethane        | 2.409 | 63  | 4854   | 0.522 | ppbv # | 97     |
| 25) Ethyl Acetate             | 2.839 | 43  | 12040  | 0.497 | ppbv # | 97     |
| 26) Hexane                    | 2.829 | 57  | 4735   | 0.518 | ppbv   | 96     |
| 27) Carbon Disulfide          | 2.153 | 76  | 3409   | 0.414 | ppbv # | 37     |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 3438   | 0.464 | ppbv   | 99     |
| 29) Chloroform                | 2.849 | 83  | 7172   | 0.515 | ppbv   | 98     |
| 30) Cyclohexane               | 3.859 | 84  | 4051   | 0.521 | ppbv   | 96     |
| 31) cis-1,2-Dichloroethene    | 2.723 | 61  | 4758   | 0.504 | ppbv   | 91     |
| 32) 1,1,1-Trichloroethane     | 3.367 | 97  | 7182   | 0.518 | ppbv   | 99     |
| 34) 2-Butanone                | 2.557 | 43  | 7756   | 0.540 | ppbv   | 94     |
| 35) Carbon Tetrachloride      | 3.765 | 117 | 5655   | 0.446 | ppbv   | 90     |
| 36) Benzene                   | 3.658 | 78  | 9629   | 0.522 | ppbv   | 97     |
| 37) 1,2-Dichloroethane        | 3.218 | 62  | 6154   | 0.536 | ppbv   | 99     |
| 38) Trichloroethene           | 4.551 | 130 | 3637m  | 0.468 | ppbv   |        |
| 39) 1,2-Dichloropropane       | 4.318 | 63  | 3410m  | 0.511 | ppbv   |        |
| 40) 1,4-Dioxane               | 4.606 | 88  | 1892m  | 0.580 | ppbv   |        |
| 41) Tetrahydrofuran           | 3.066 | 42  | 4061   | 0.505 | ppbv   | 99     |
| 42) Bromodichloromethane      | 4.490 | 83  | 5926m  | 0.448 | ppbv   |        |
| 43) Methyl Methacrylate       | 4.881 | 69  | 3322   | 0.472 | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 4.645 | 57  | 16294m | 0.517 | ppbv   |        |
| 45) t-1,3-Dichloropropene     | 6.422 | 75  | 3406m  | 0.468 | ppbv   |        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041755.D  
 Acq On : 16 Dec 2024 15:05  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

Quant Time: Dec 19 06:14:17 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

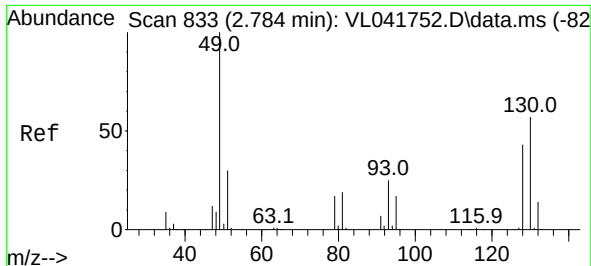
### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.597  | 75   | 4462m    | 0.483 | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 6.587  | 97   | 3636m    | 0.521 | ppbv   |          |
| 48) Dibromochloromethane      | 7.387  | 129  | 3865     | 0.406 | ppbv   | 99       |
| 49) Bromoform                 | 9.484  | 173  | 2928m    | 0.376 | ppbv   |          |
| 50) 4-Methyl-2-Pentanone      | 5.765  | 43   | 9479m    | 0.485 | ppbv   |          |
| 51) 2-Hexanone                | 7.451  | 43   | 7412     | 0.468 | ppbv # | 99       |
| 52) Tetrachloroethene         | 8.225  | 164  | 3091     | 0.450 | ppbv # | 78       |
| 53) Toluene                   | 6.933  | 91   | 10554    | 0.504 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.658  | 107  | 4819m    | 0.502 | ppbv   |          |
| 56) 1,1,1,2-Tetrachloroethane | 8.930  | 131  | 3858m    | 0.459 | ppbv   |          |
| 57) Chlorobenzene             | 8.927  | 112  | 8346m    | 0.514 | ppbv   |          |
| 58) Ethyl Benzene             | 9.358  | 91   | 13428    | 0.470 | ppbv   | 97       |
| 59) m/p-Xylene                | 9.552  | 91   | 22560m   | 0.983 | ppbv   |          |
| 60) o-Xylene                  | 9.963  | 91   | 10954    | 0.476 | ppbv   | 98       |
| 61) Styrene                   | 9.869  | 104  | 4314     | 0.433 | ppbv   | 94       |
| 62) Isopropylbenzene          | 10.542 | 105  | 16953    | 0.490 | ppbv   | 95       |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 7559     | 0.525 | ppbv   | 98       |
| 64) n-propylbenzene           | 10.989 | 120  | 4126     | 0.472 | ppbv   | 92       |
| 65) tert-Butylbenzene         | 11.529 | 119  | 15569    | 0.499 | ppbv   | 99       |
| 66) Benzyl Chloride           | 11.620 | 91   | 1340m    | 0.487 | ppbv   |          |
| 67) sec-Butylbenzene          | 11.769 | 105  | 21263    | 0.492 | ppbv   | 96       |
| 69) p-Isopropyltoluene        | 11.928 | 119  | 17041    | 0.479 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.284 | 91   | 15671    | 0.456 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.902 | 91   | 13000    | 0.492 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 11.128 | 105  | 13324    | 0.491 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 11.206 | 105  | 10497    | 0.466 | ppbv   | 91       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 11070    | 0.457 | ppbv # | 76       |
| 75) 1,3-Dichlorobenzene       | 11.604 | 146  | 8107     | 0.525 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 7893     | 0.517 | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 7997     | 0.538 | ppbv   | 96       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 6232     | 0.565 | ppbv   | 98       |
| 79) Naphthalene               | 13.517 | 128  | 7360     | 0.436 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.462 | 142  | 748      | 0.143 | ppbv   | 94       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 4248     | 0.460 | ppbv   | 93       |

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





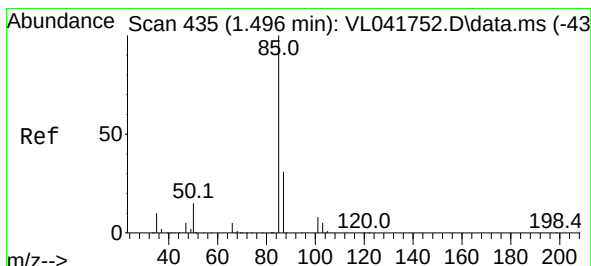
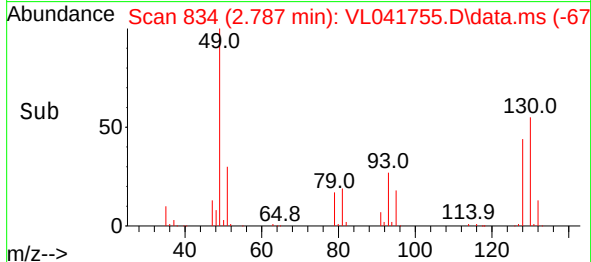
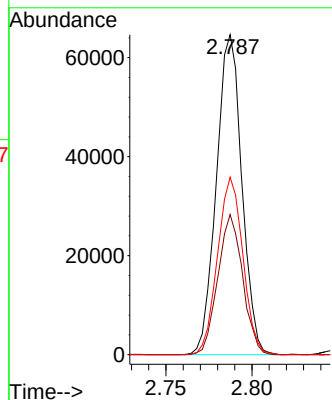
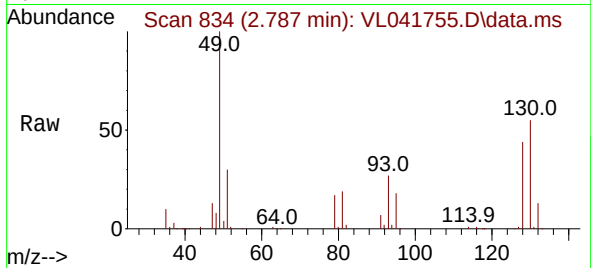
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Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 833  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 49 Resp: 66562  
Ion Ratio Lower Upper  
49 100  
128 42.6 21.6 64.6  
130 55.1 28.3 85.0

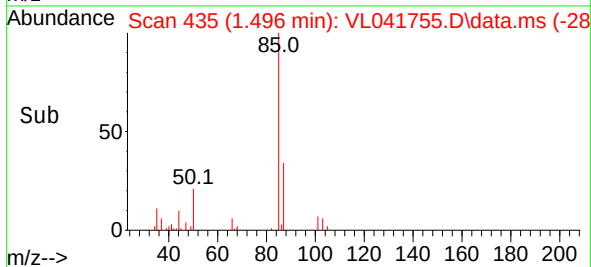
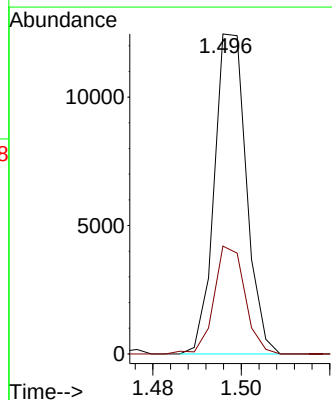
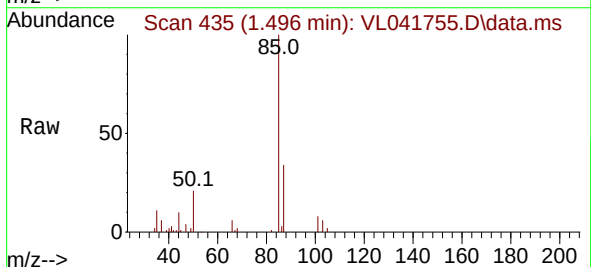
Manual Integrations  
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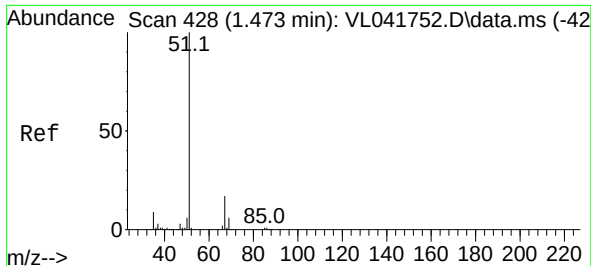
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#2  
Dichlorodifluoromethane  
Concen: 0.530 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

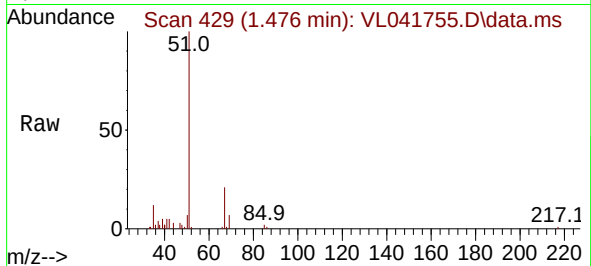
Tgt Ion: 85 Resp: 6277  
Ion Ratio Lower Upper  
85 100  
87 33.7 24.5 36.7





#3  
Chlorodifluoromethane  
Concen: 0.515 ppbv  
RT: 1.476 min Scan# 428  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

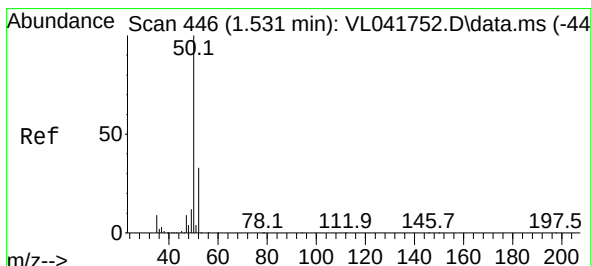
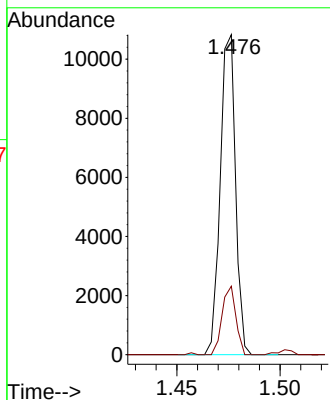
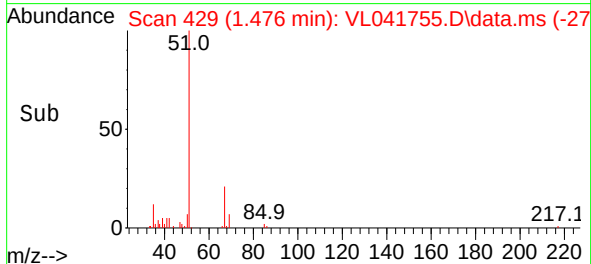
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.5



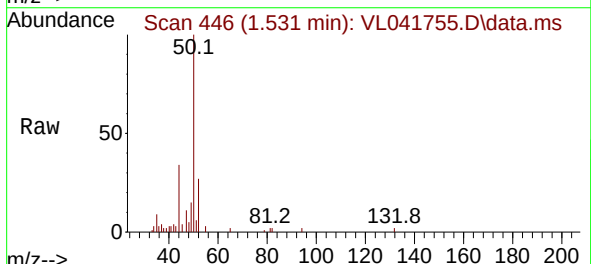
Tgt Ion: 51 Resp: 558  
Ion Ratio Lower Upper  
51 100  
67 21.0 15.0 22.4

Manual Integrations  
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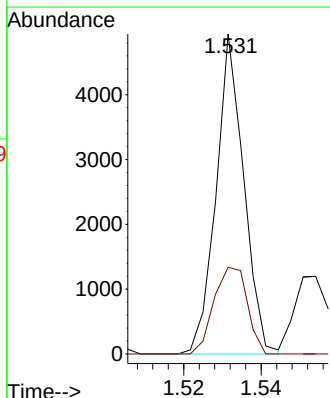
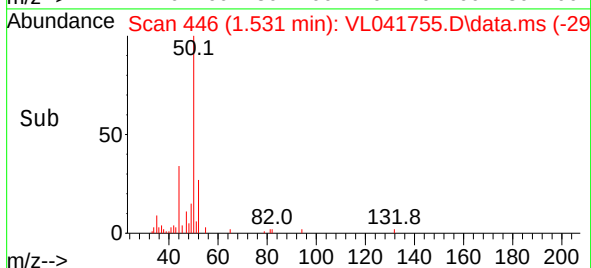
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

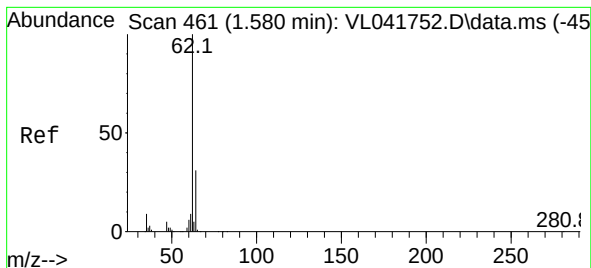


#4  
Chloromethane  
Concen: 0.529 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion: 50 Resp: 2452  
Ion Ratio Lower Upper  
50 100  
52 27.1 26.2 39.2





#5

Vinyl Chloride

Concen: 0.486 ppbv

RT: 1.580 min Scan# 461

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 62 Resp: 2269

Ion Ratio Lower Upper

62 100

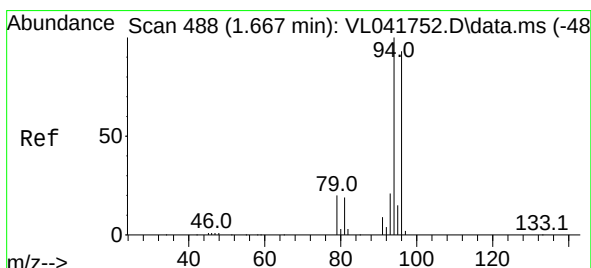
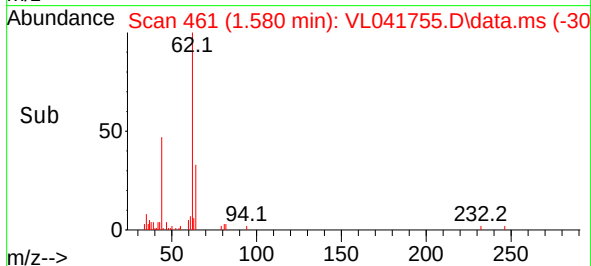
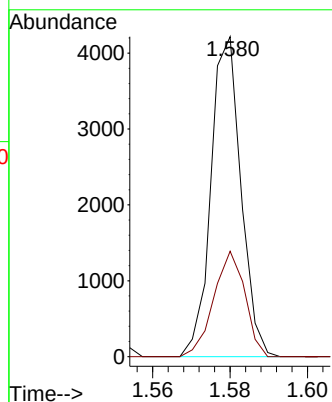
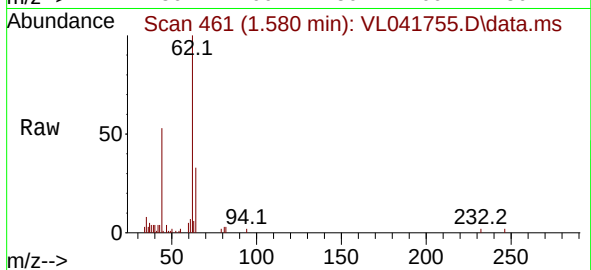
64 32.9 25.1 37.7

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#6

Bromomethane

Concen: 0.519 ppbv

RT: 1.667 min Scan# 488

Delta R.T. -0.000 min

Lab File: VL041755.D

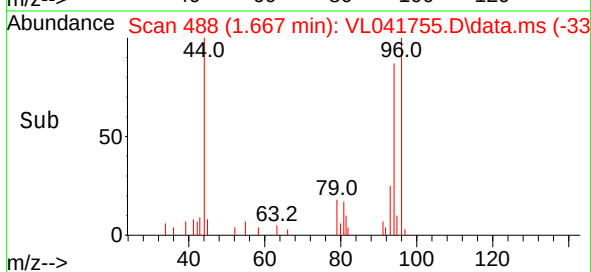
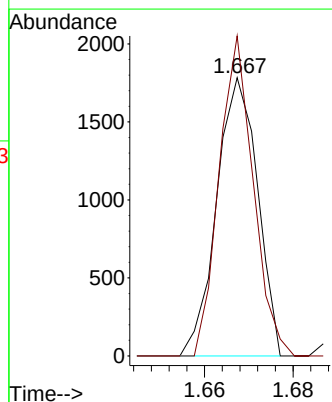
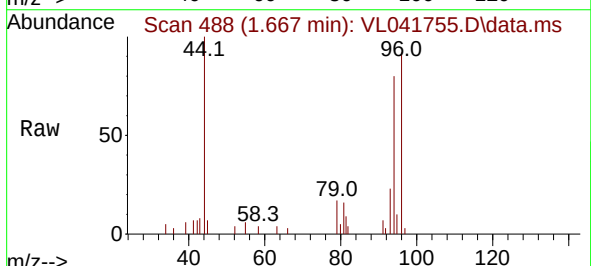
Acq: 16 Dec 2024 15:05

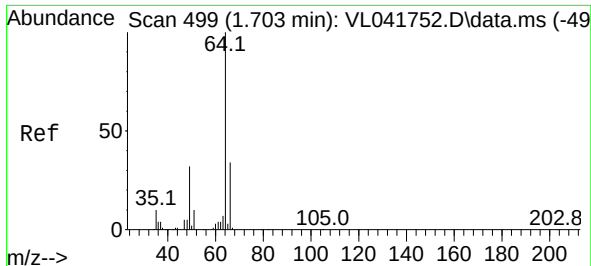
Tgt Ion: 94 Resp: 1143

Ion Ratio Lower Upper

94 100

96 115.0 74.7 112.1#





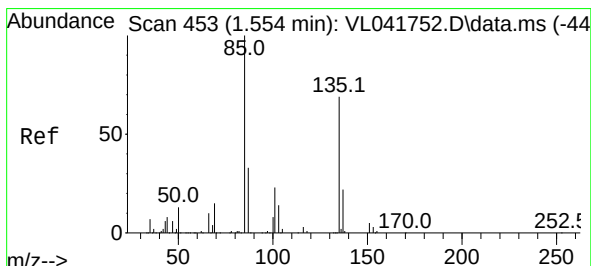
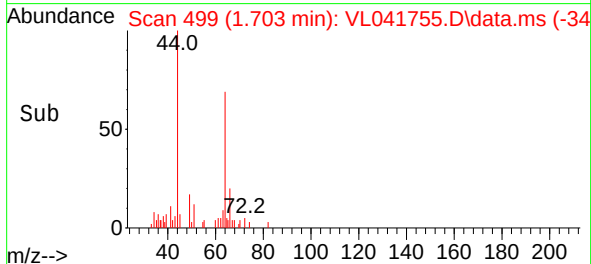
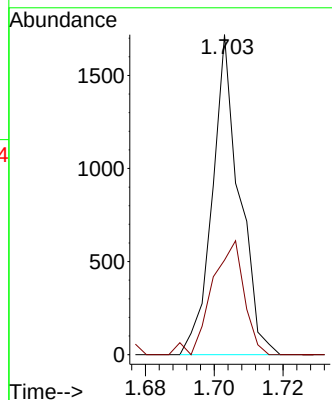
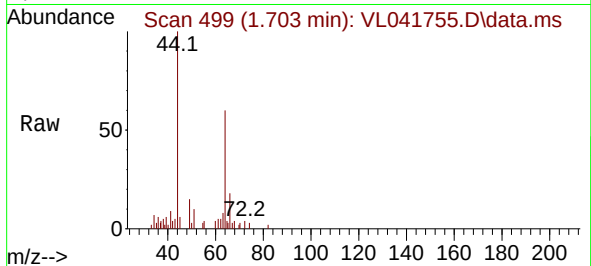
#7  
Chloroethane  
Concen: 0.518 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 64 Resp: 939  
Ion Ratio Lower Upper  
64 100  
66 27.6 27.5 41.3

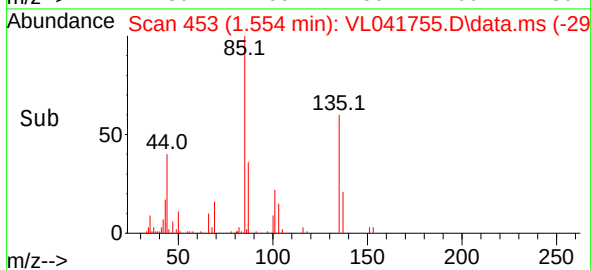
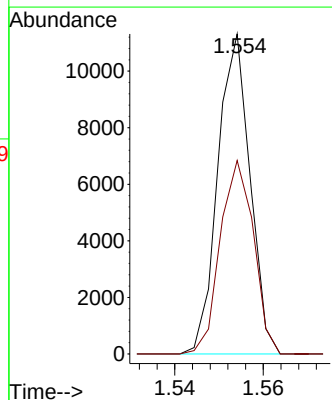
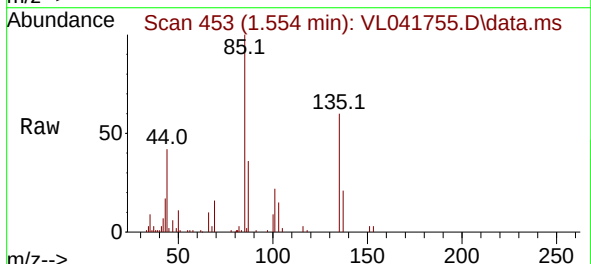
Manual Integrations  
APPROVED

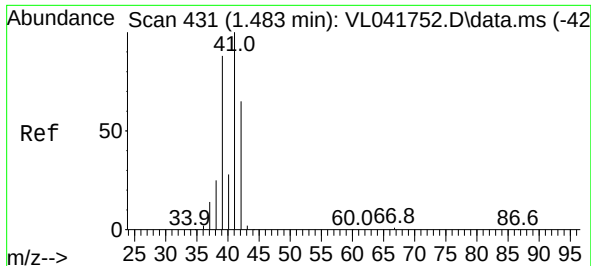
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#8  
Dichlorotetrafluoroethane  
Concen: 0.538 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 85 Resp: 5699  
Ion Ratio Lower Upper  
85 100  
135 62.8 51.9 77.9





#9

Propene

Concen: 0.557 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 41 Resp: 262

Ion Ratio Lower Upper

41 100

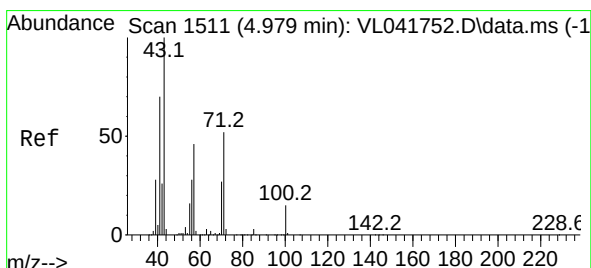
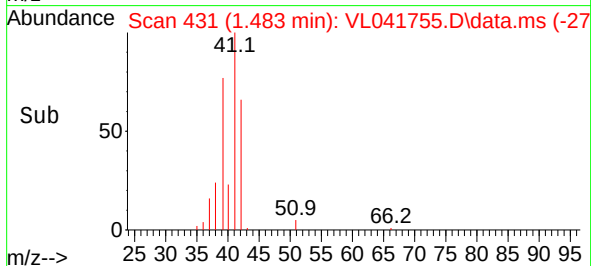
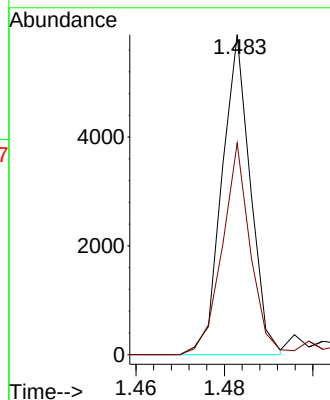
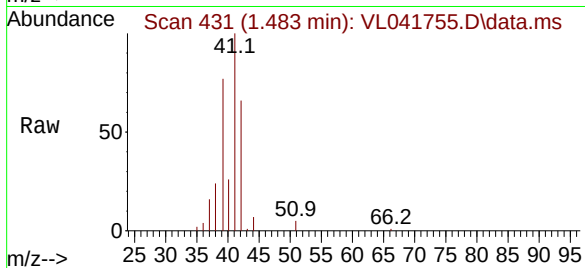
42 79.6 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 0.537 ppbv m

RT: 4.978 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VL041755.D

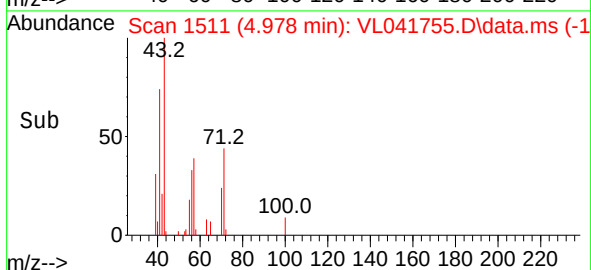
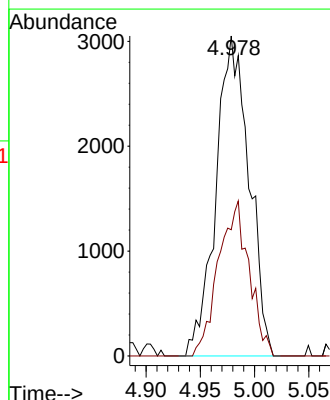
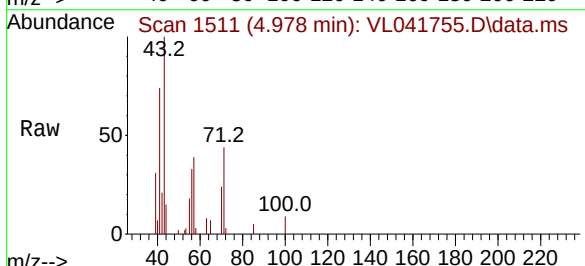
Acq: 16 Dec 2024 15:05

Tgt Ion: 43 Resp: 6491

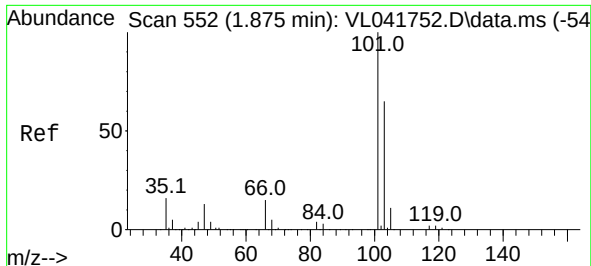
Ion Ratio Lower Upper

43 100

57 44.7 38.5 57.7







#11

Trichlorofluoromethane

Concen: 0.524 ppbv

RT: 1.878 min Scan# 552

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

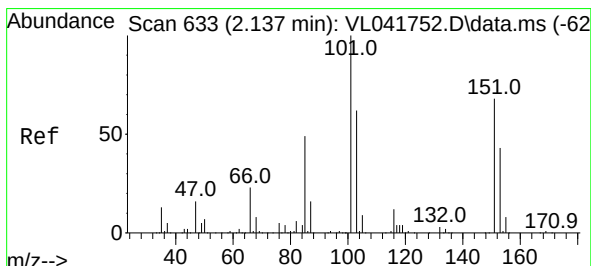
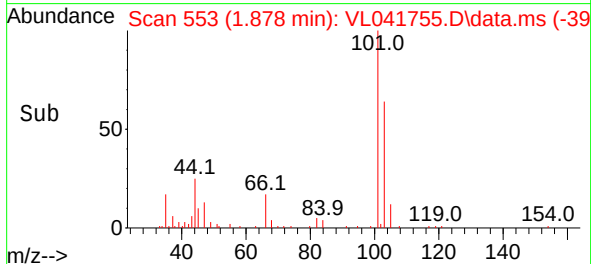
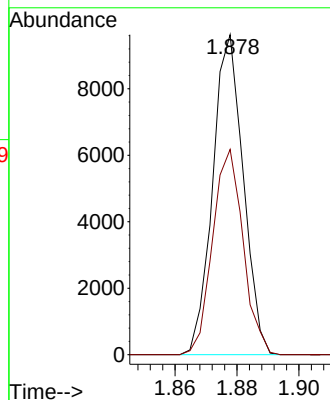
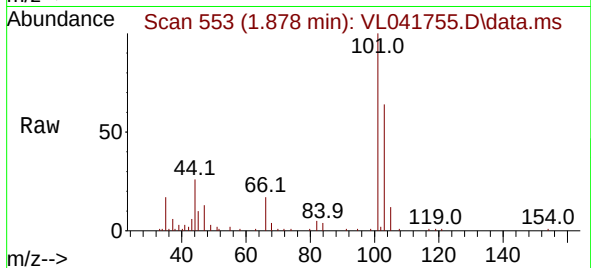
ClientSampleId :

VSTDICC0.5

Tgt Ion:101 Resp: 6594  
 Ion Ratio Lower Upper  
 101 100  
 103 64.2 51.8 77.8

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.519 ppbv

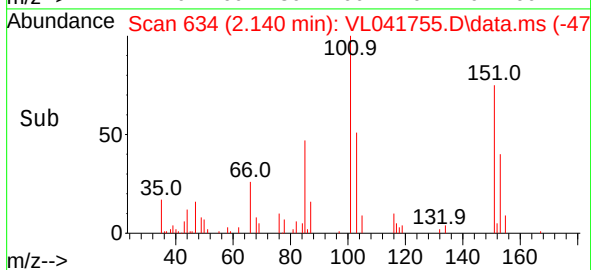
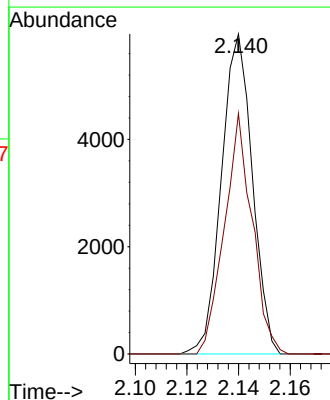
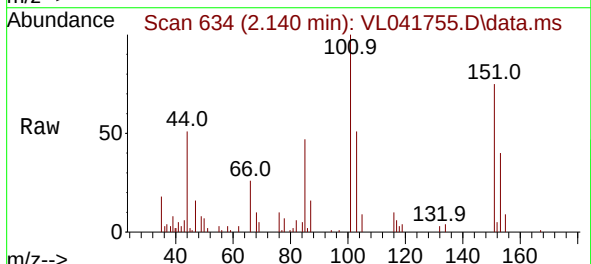
RT: 2.140 min Scan# 634

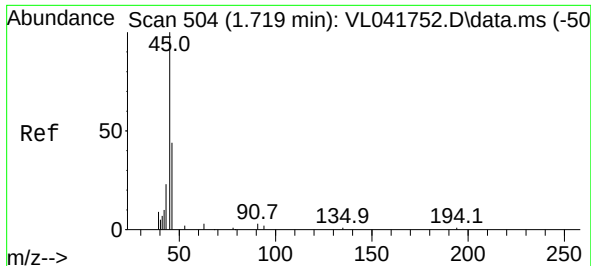
Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion:101 Resp: 4962  
 Ion Ratio Lower Upper  
 101 100  
 151 67.9 56.8 85.2





#13

Ethanol

Concen: 0.688 ppbv m

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

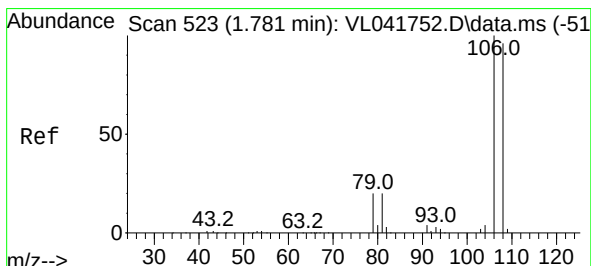
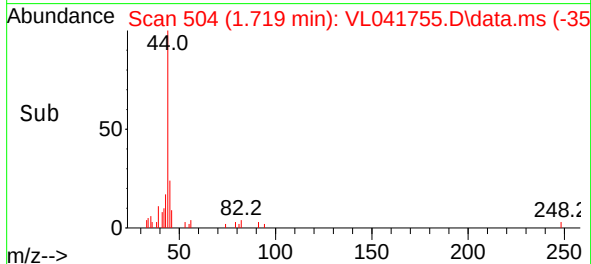
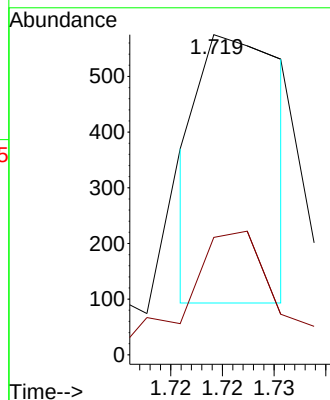
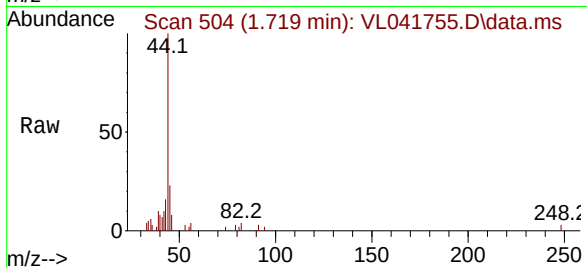
ClientSampleId :

VSTDIC0.5

Tgt Ion: 45 Resp: 269  
 Ion Ratio Lower Upper  
 45 100  
 46 61.7 16.4 65.8

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 0.524 ppbv

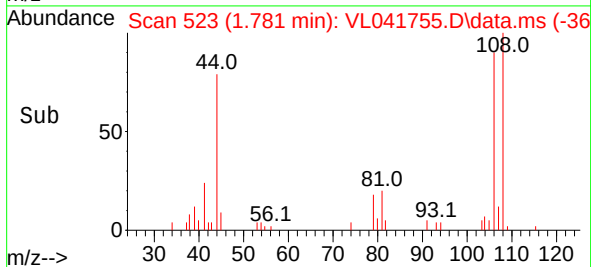
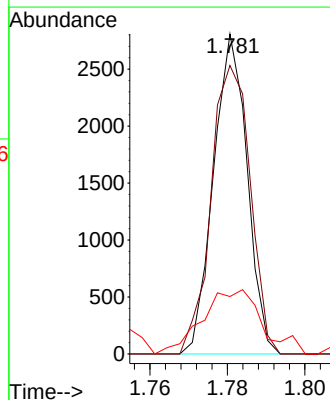
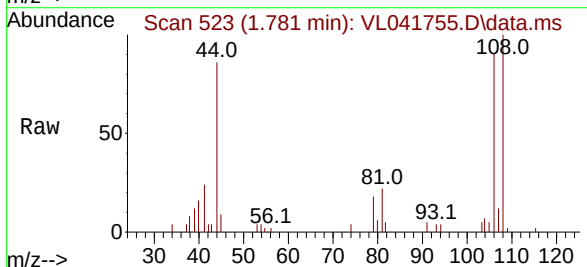
RT: 1.781 min Scan# 523

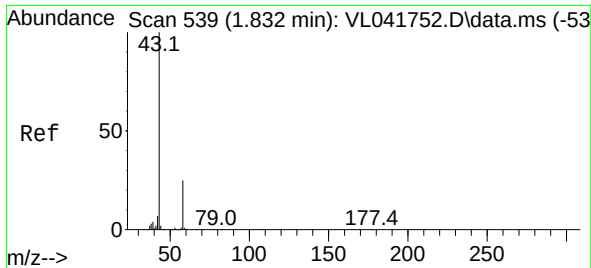
Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion:108 Resp: 1694  
 Ion Ratio Lower Upper  
 108 100  
 106 105.1 84.1 126.1  
 79 41.4 17.4 26.0#





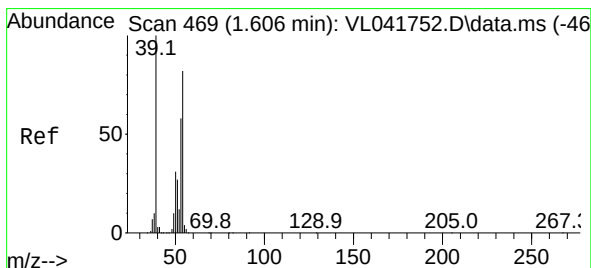
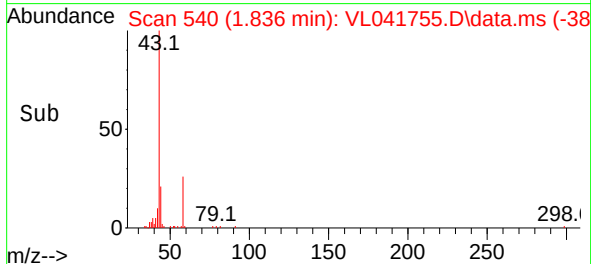
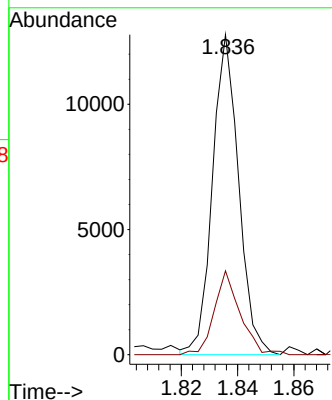
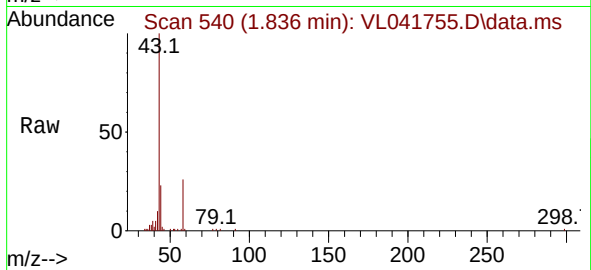
#15  
Acetone  
Concen: 0.636 ppbv  
RT: 1.836 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 43 Resp: 823  
Ion Ratio Lower Upper  
43 100  
58 26.0 19.7 29.5

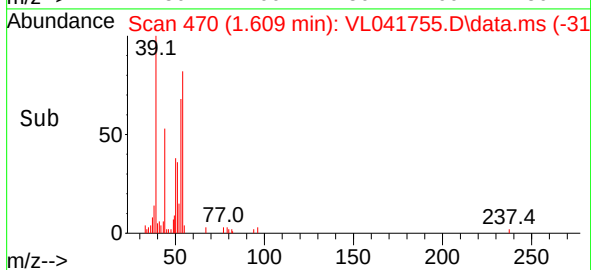
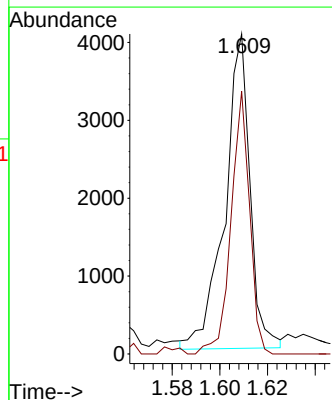
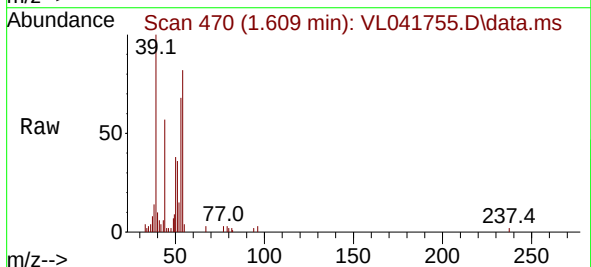
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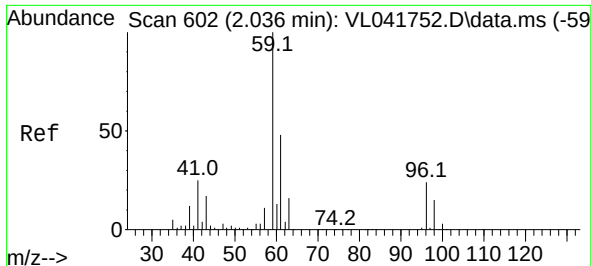
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#16  
1,3-Butadiene  
Concen: 0.582 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 39 Resp: 2966  
Ion Ratio Lower Upper  
39 100  
54 62.8 58.4 87.6





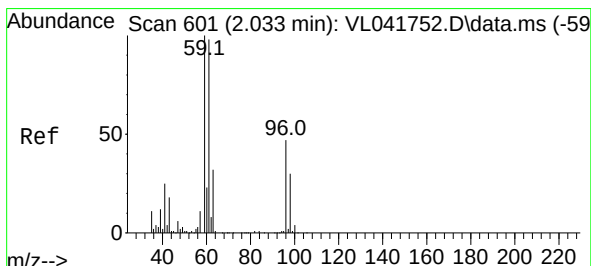
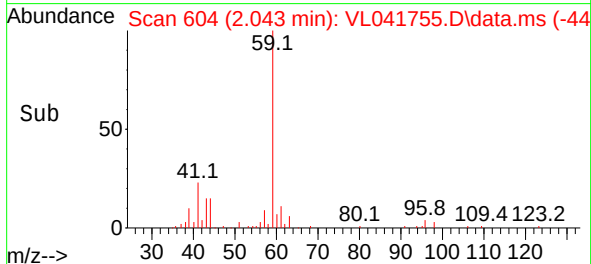
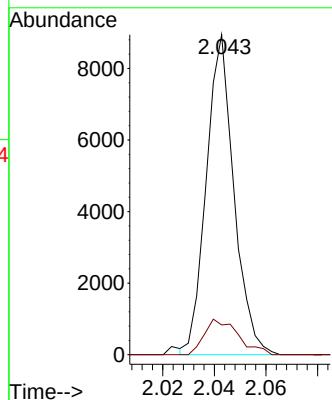
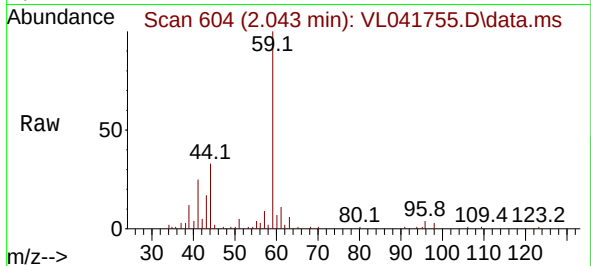
#17  
tert-Butyl alcohol  
Concen: 0.518 ppbv  
RT: 2.043 min Scan# 604  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC0.5

Tgt Ion: 59 Resp: 6654  
Ion Ratio Lower Upper  
59 100  
57 14.3 8.6 13.0

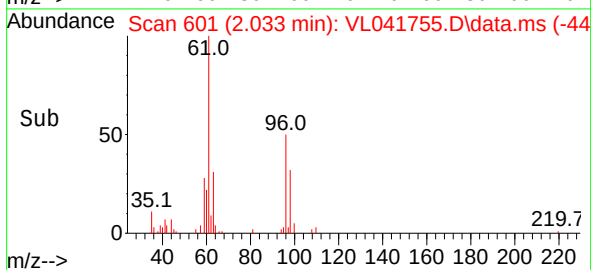
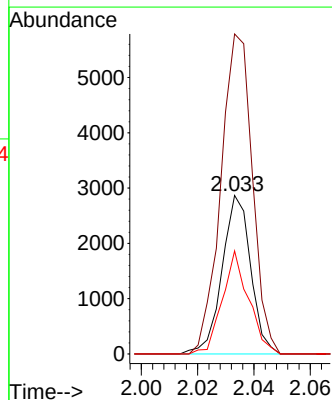
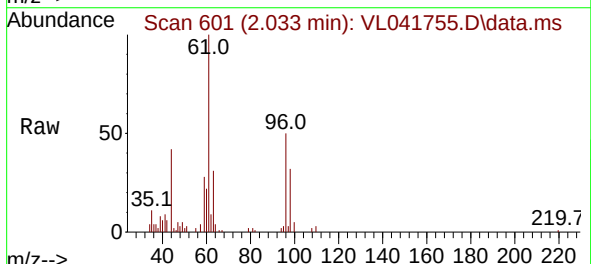
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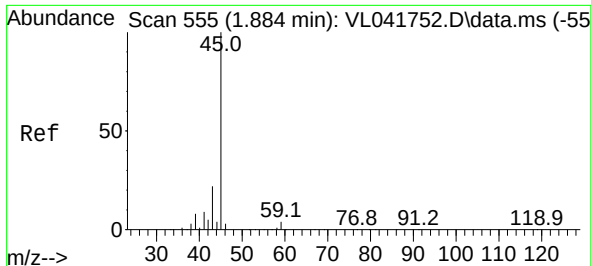
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#18  
1,1-Dichloroethene  
Concen: 0.504 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 96 Resp: 2022  
Ion Ratio Lower Upper  
96 100  
61 201.9 167.7 251.5  
98 65.1 51.1 76.7





#19

Isopropyl Alcohol

Concen: 0.732 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.5

Tgt Ion: 45 Resp: 568

Ion Ratio Lower Upper

45 100

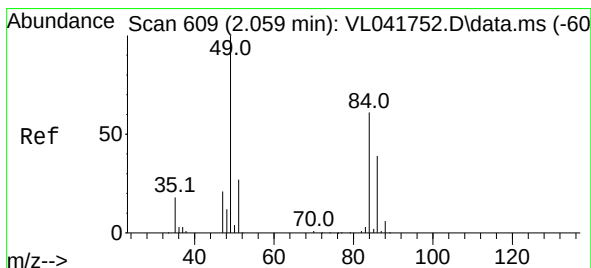
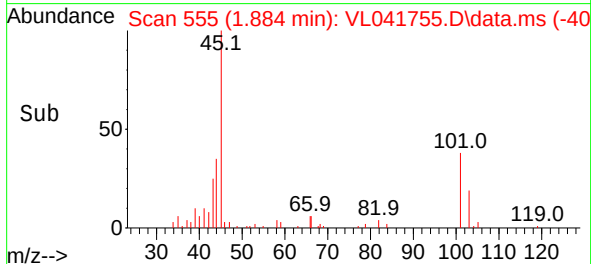
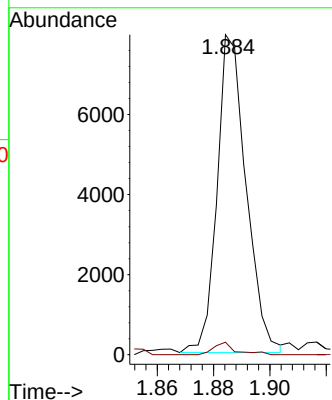
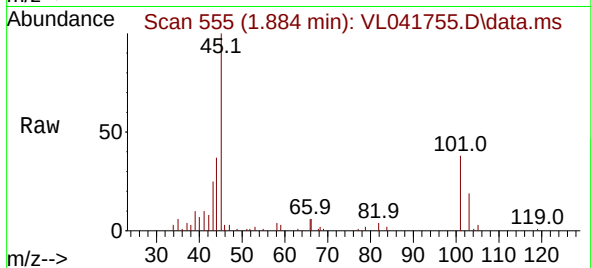
58 2.9 33.3 49.9

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 0.589 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion: 84 Resp: 2174

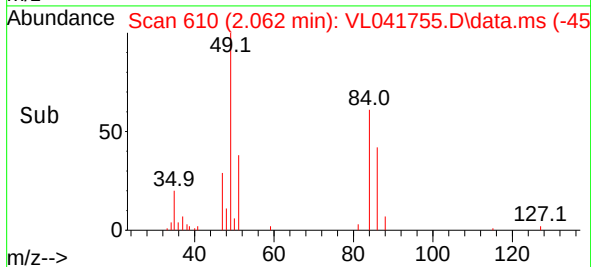
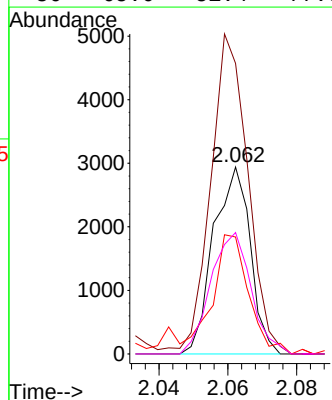
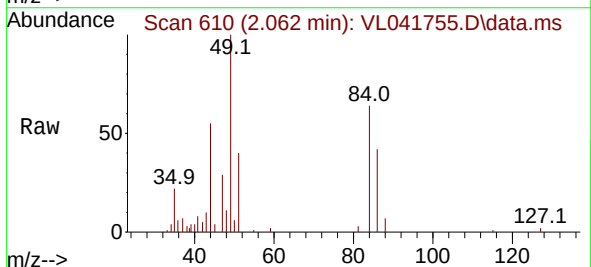
Ion Ratio Lower Upper

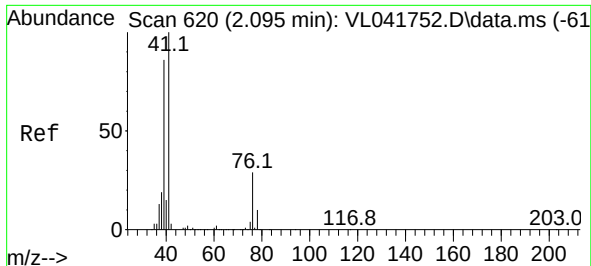
84 100

49 152.6 132.6 198.8

51 57.2 37.6 56.4

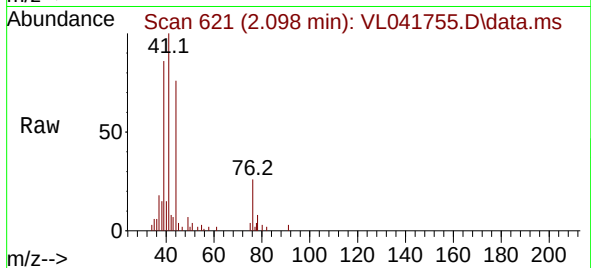
86 65.0 51.4 77.0





#21  
 Allyl Chloride  
 Concen: 0.478 ppbv  
 RT: 2.098 min Scan# 61  
 Delta R.T. 0.003 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

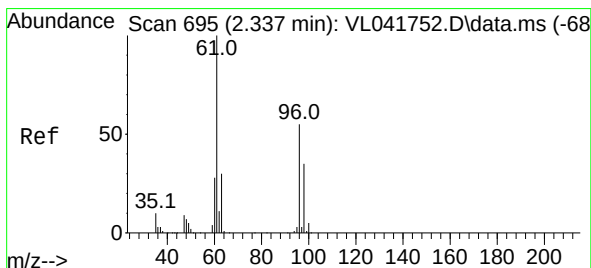
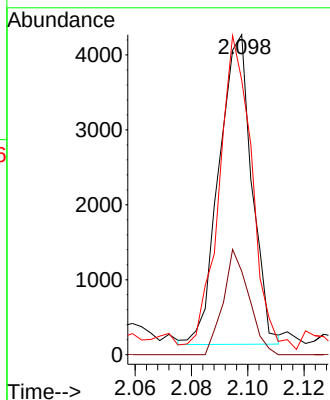
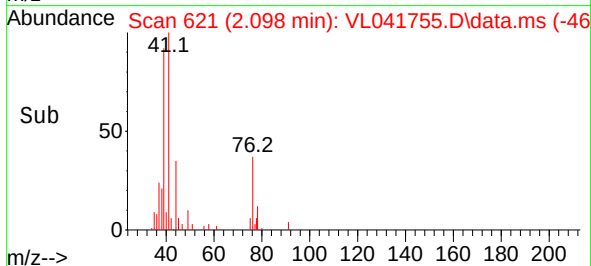
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5



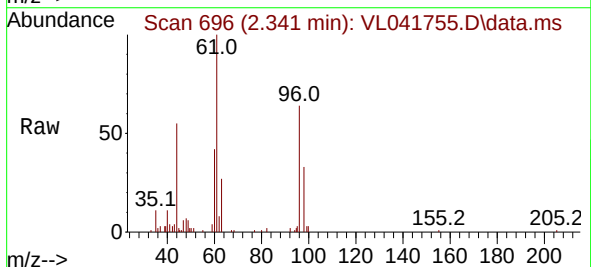
Tgt Ion: 41 Resp: 335  
 Ion Ratio Lower Upper  
 41 100  
 76 26.5 22.3 33.5  
 39 102.6 69.2 103.8

Manual Integrations  
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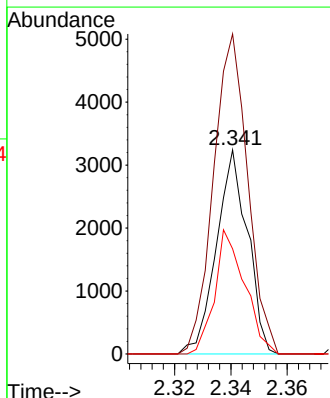
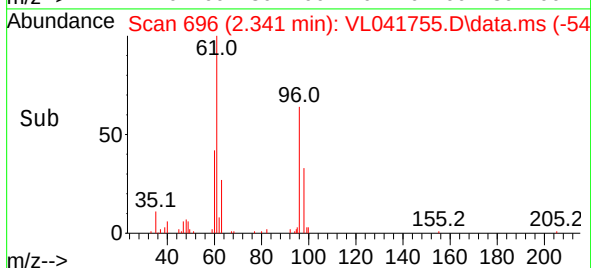
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

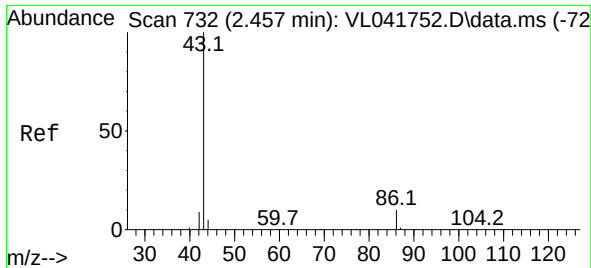


#22  
 trans-1,2-Dichloroethene  
 Concen: 0.543 ppbv  
 RT: 2.341 min Scan# 696  
 Delta R.T. 0.003 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05



Tgt Ion: 96 Resp: 2494  
 Ion Ratio Lower Upper  
 96 100  
 61 156.8 146.3 219.5  
 98 51.6 50.8 76.2





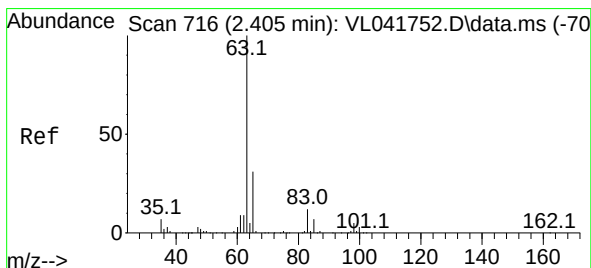
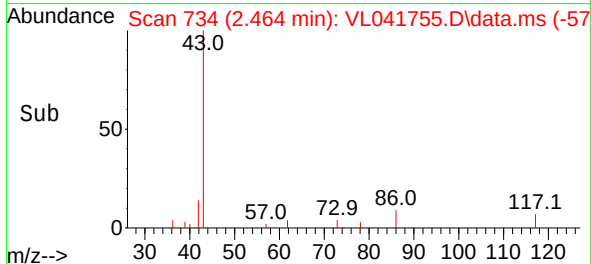
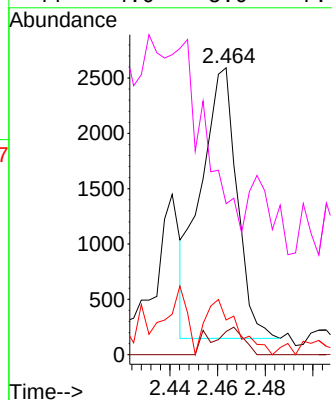
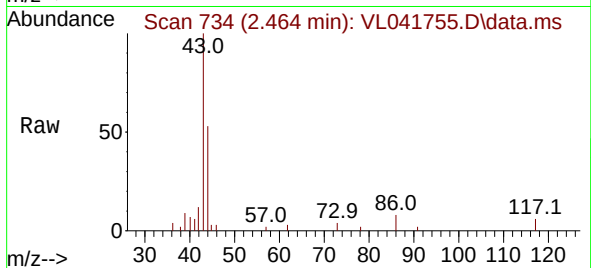
#23  
 Vinyl Acetate  
 Concen: 0.462 ppbv  
 RT: 2.464 min Scan# 717  
 Delta R.T. 0.006 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.5

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 2599  |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 86 8.6      | 6.6 10.0    |
| 42 10.2     | 8.2 12.2    |
| 44 4.0      | 5.0 7.4#    |

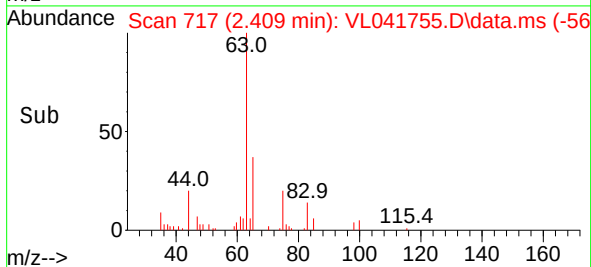
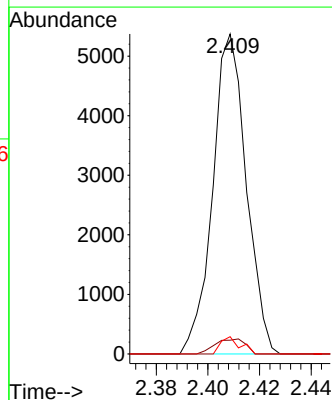
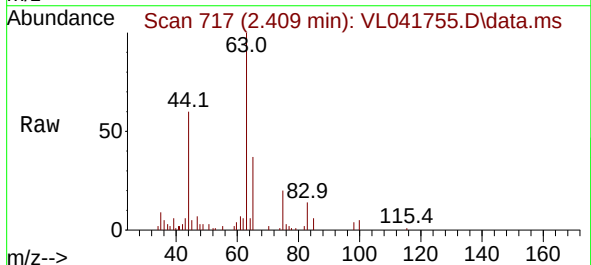
Manual Integrations  
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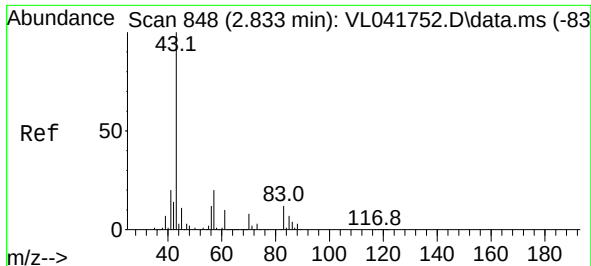
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#24  
 1,1-Dichloroethane  
 Concen: 0.522 ppbv  
 RT: 2.409 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

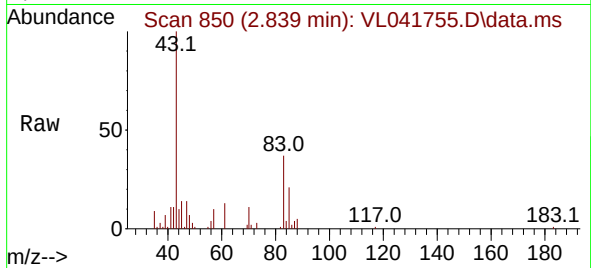
|             |             |
|-------------|-------------|
| Tgt Ion: 63 | Resp: 4854  |
| Ion Ratio   | Lower Upper |
| 63 100      |             |
| 98 4.3      | 2.3 6.8     |
| 100 5.4     | 1.4 4.2#    |





#25  
Ethyl Acetate  
Concen: 0.497 ppbv  
RT: 2.839 min Scan# 848  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

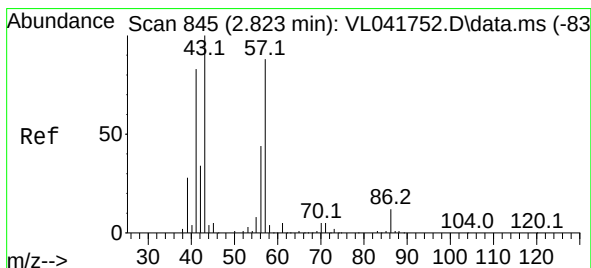
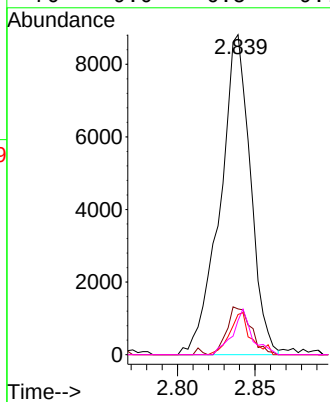
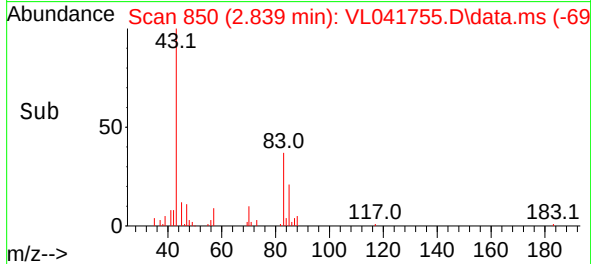
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



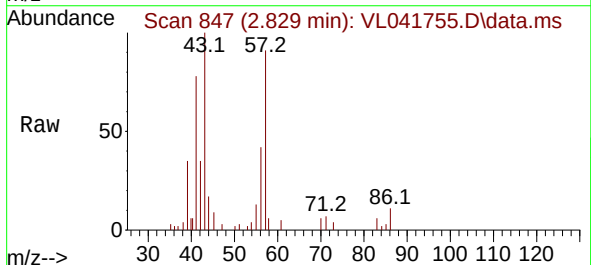
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 12040 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 45 12.2     | 8.1 12.1    |
| 61 9.0      | 7.0 10.6    |
| 70 9.0      | 6.5 9.7     |

Manual Integrations  
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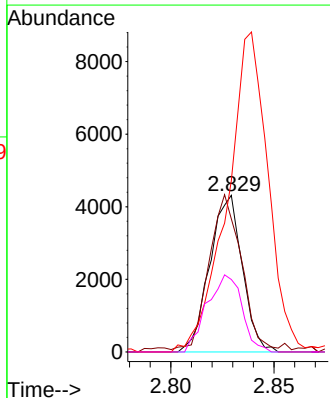
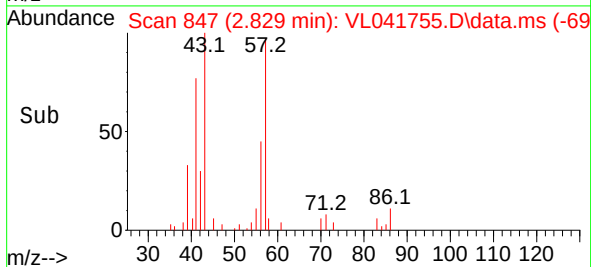
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



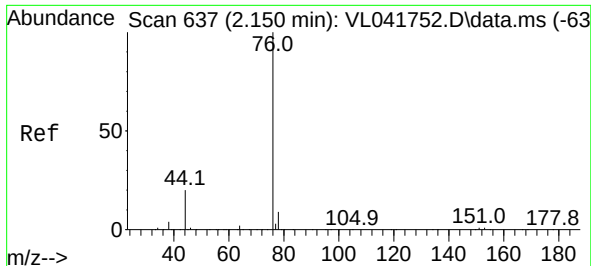
#26  
Hexane  
Concen: 0.518 ppbv  
RT: 2.829 min Scan# 847  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



|             |             |
|-------------|-------------|
| Tgt Ion: 57 | Resp: 4735  |
| Ion Ratio   | Lower Upper |
| 57 100      |             |
| 41 106.1    | 79.6 119.4  |
| 43 258.2    | 211.0 316.6 |
| 56 52.8     | 42.6 63.8   |







#27

Carbon Disulfide

Concen: 0.414 ppbv

RT: 2.153 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

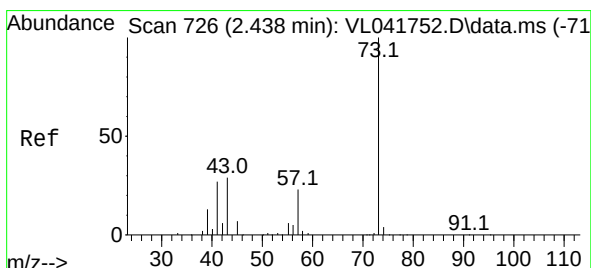
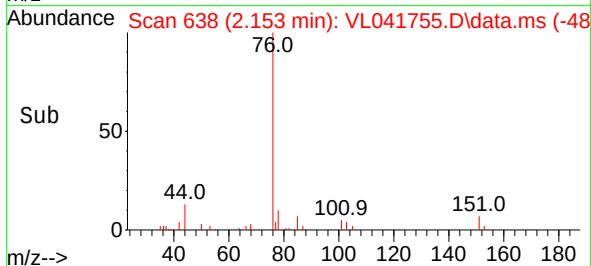
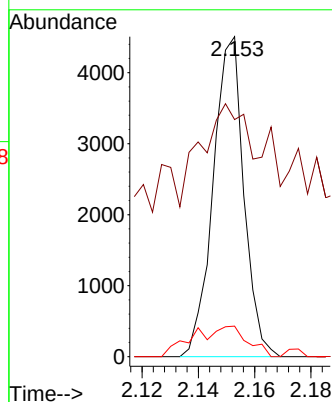
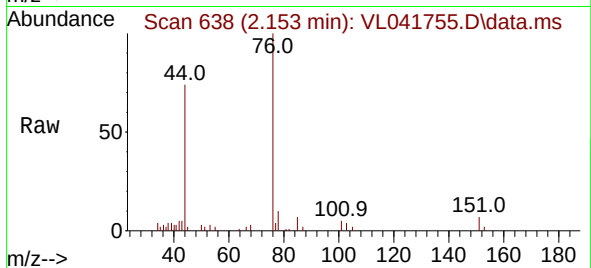
Tgt Ion: 76 Resp: 3409

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 76  | 100   |       |       |
| 44  | 65.5  | 17.6  | 26.4  |
| 78  | 18.2  | 10.2  | 15.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#28

Methyl tert-Butyl Ether

Concen: 0.464 ppbv

RT: 2.441 min Scan# 727

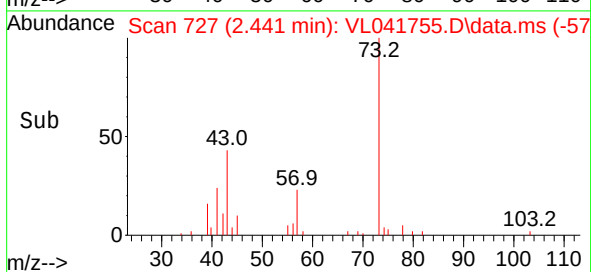
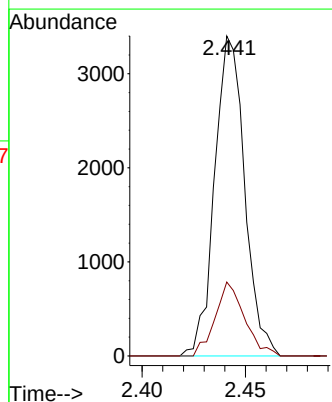
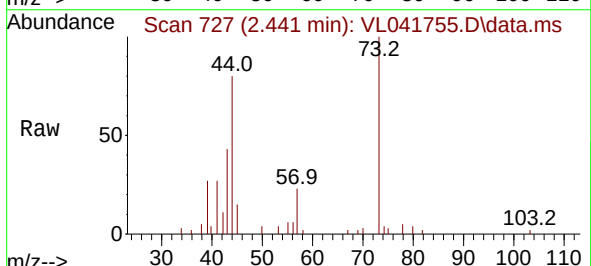
Delta R.T. 0.003 min

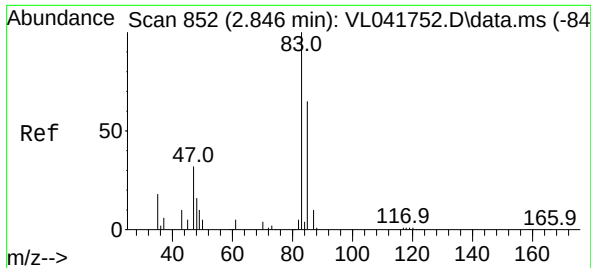
Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion: 73 Resp: 3438

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 73  | 100   |       |       |
| 57  | 22.6  | 17.6  | 26.4  |





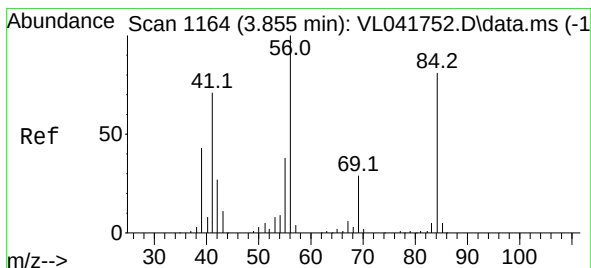
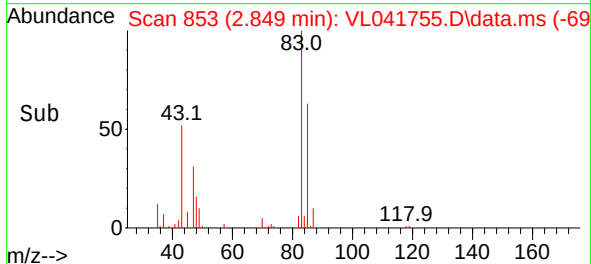
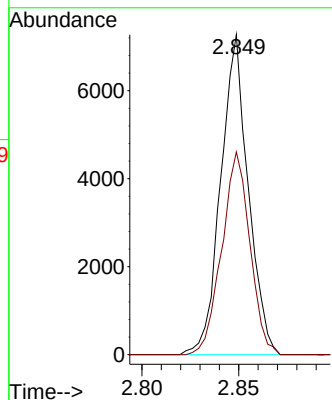
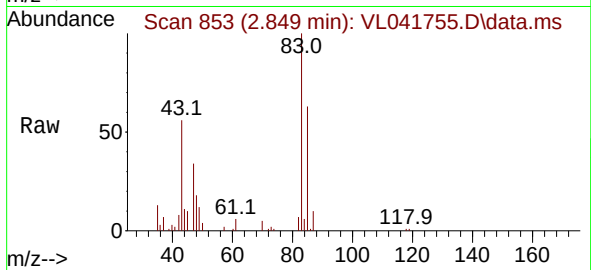
#29  
Chloroform  
Concen: 0.515 ppbv  
RT: 2.849 min Scan# 853  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 83 Resp: 7172  
Ion Ratio Lower Upper  
83 100  
85 63.3 51.8 77.6

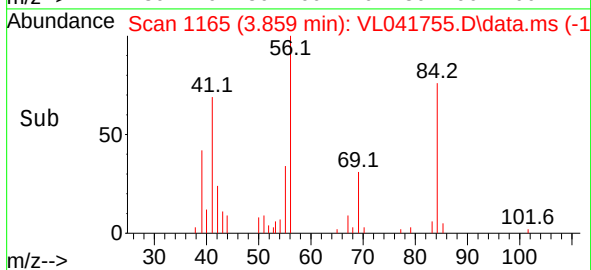
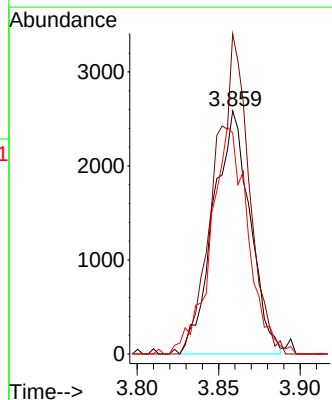
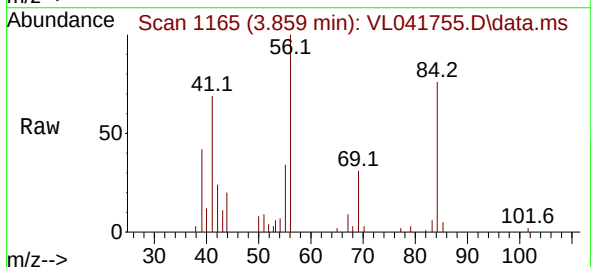
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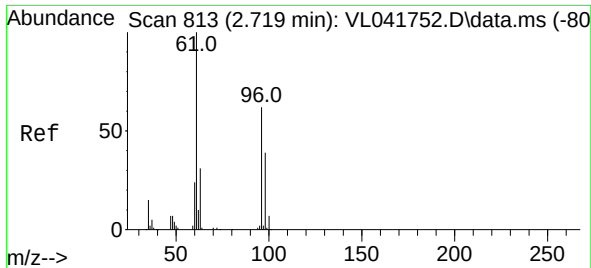
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#30  
Cyclohexane  
Concen: 0.521 ppbv  
RT: 3.859 min Scan# 1165  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 84 Resp: 4051  
Ion Ratio Lower Upper  
84 100  
56 122.5 102.3 153.5  
41 94.8 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 0.504 ppbv

RT: 2.723 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

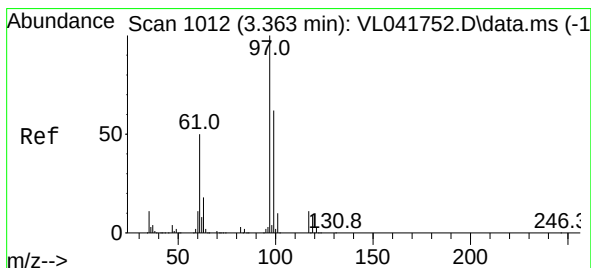
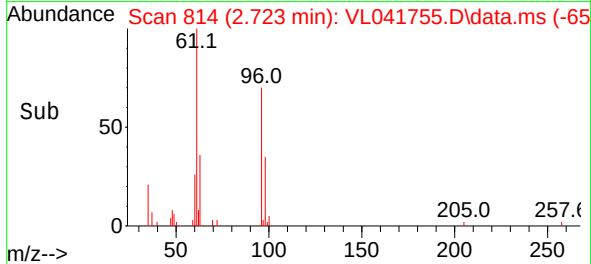
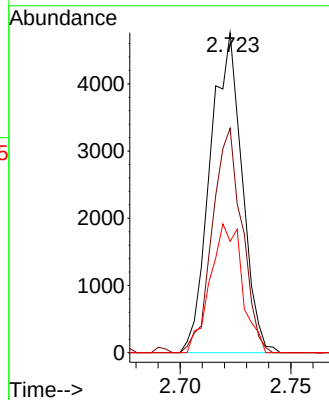
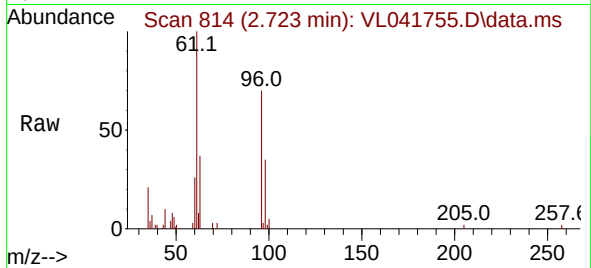
VSTDIC0.5

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 61    | Resp: | 475   |
| Ion      | Ratio | Lower | Upper |
| 61       | 100   |       |       |
| 96       | 70.2  | 49.7  | 74.5  |
| 98       | 34.8  | 30.8  | 46.2  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#32

1,1,1-Trichloroethane

Concen: 0.518 ppbv

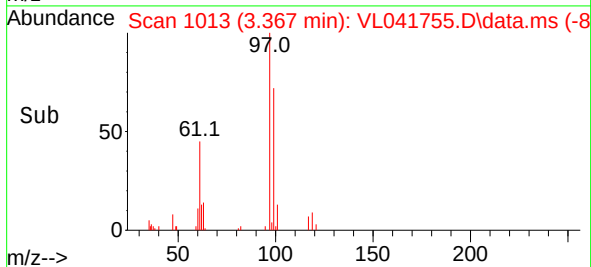
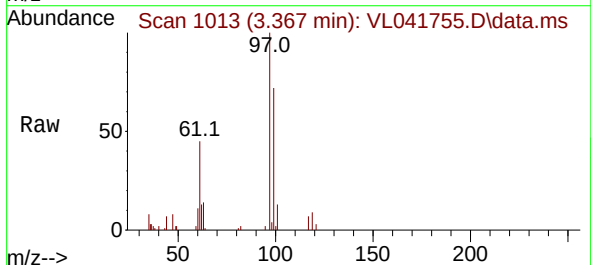
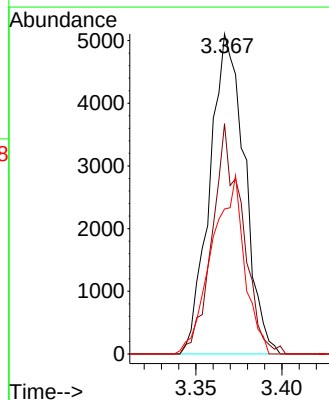
RT: 3.367 min Scan# 1013

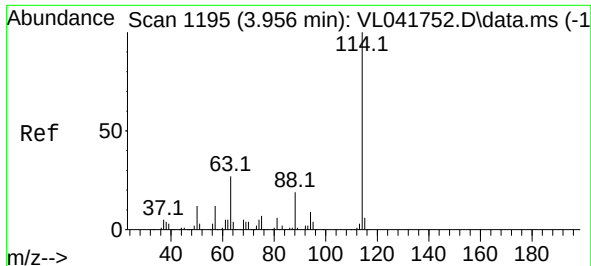
Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 7182  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 62.2  | 51.0  | 76.4  |
| 61       | 52.1  | 42.2  | 63.2  |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

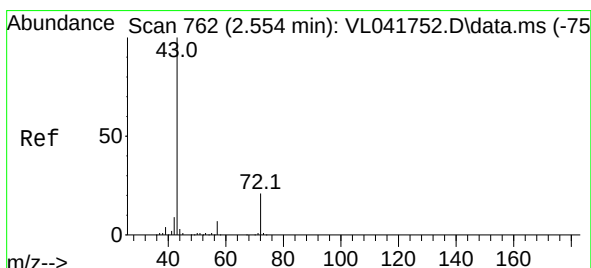
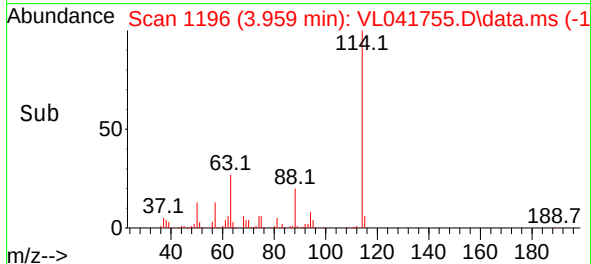
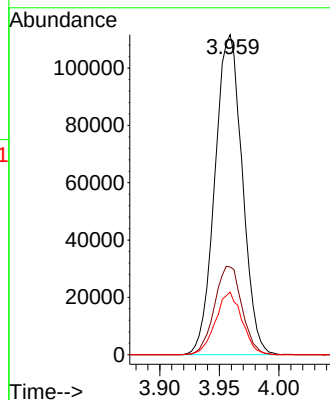
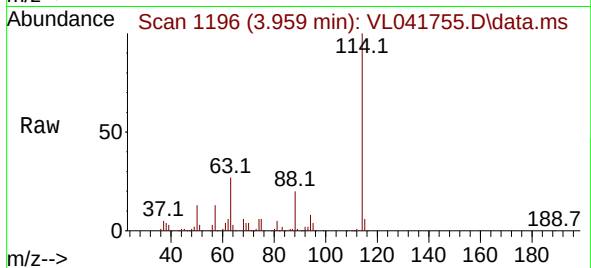
VSTDICC0.5

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 114   | Resp: | 17845 |
| Ion Ratio | Lower | Upper |       |
| 114       | 100   |       |       |
| 63        | 27.6  | 21.8  | 32.8  |
| 88        | 18.9  | 14.8  | 22.2  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#34

2-Butanone

Concen: 0.540 ppbv

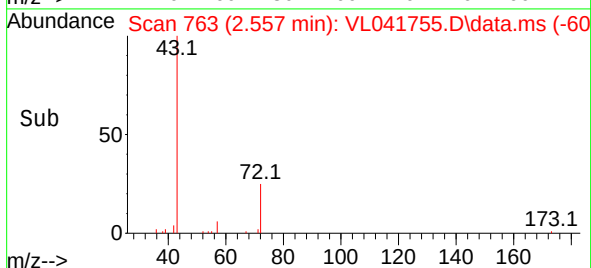
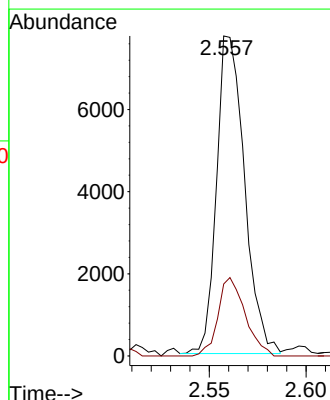
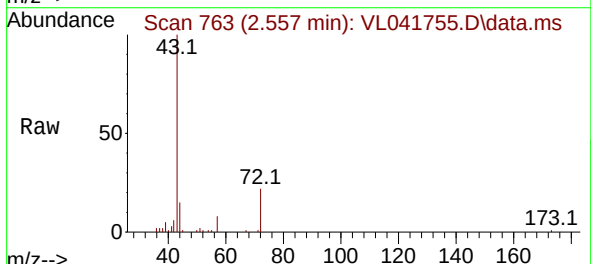
RT: 2.557 min Scan# 763

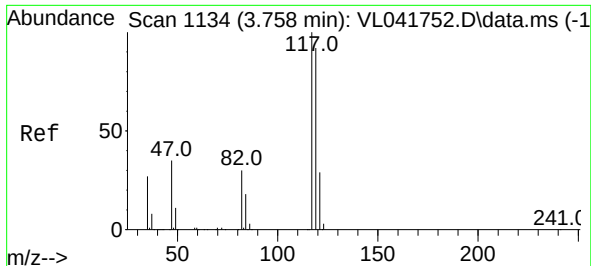
Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

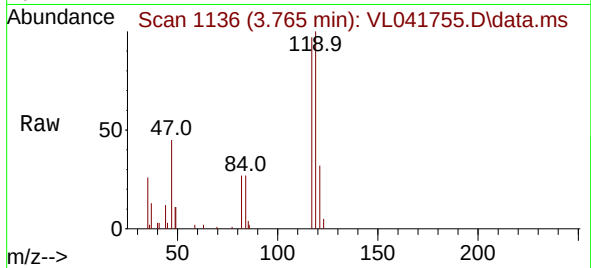
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 43    | Resp: | 7756 |
| Ion Ratio | Lower | Upper |      |
| 43        | 100   |       |      |
| 72        | 24.0  | 16.8  | 25.2 |





#35  
Carbon Tetrachloride  
Concen: 0.446 ppbv  
RT: 3.765 min Scan# 1134  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

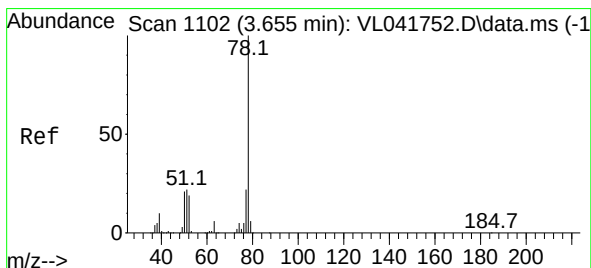
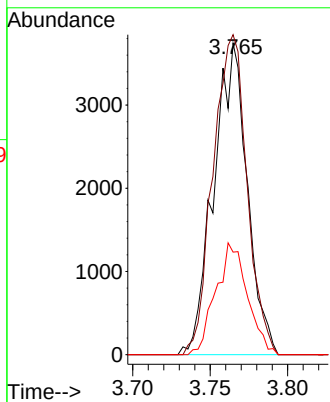
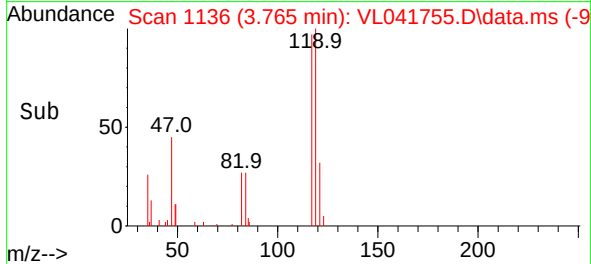
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



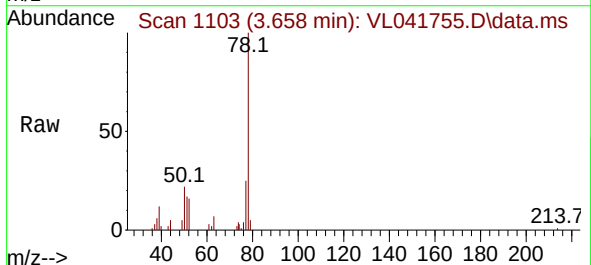
Tgt Ion: 117 Resp: 565  
Ion Ratio Lower Upper  
117 100  
119 102.7 73.7 110.5  
121 32.9 23.0 34.4

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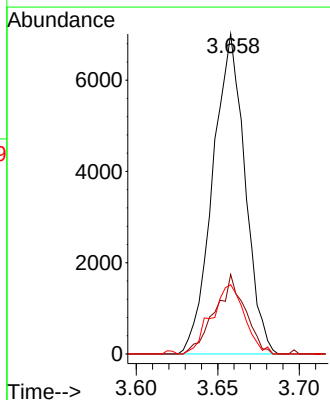
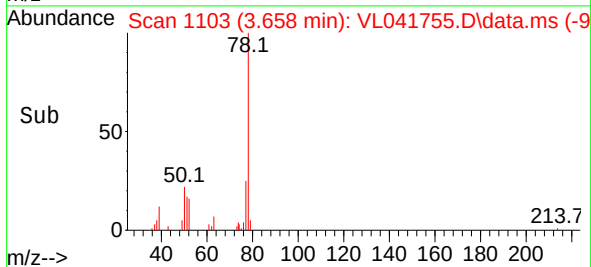
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

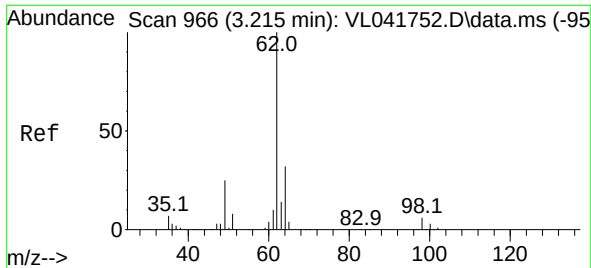


#36  
Benzene  
Concen: 0.522 ppbv  
RT: 3.658 min Scan# 1103  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion: 78 Resp: 9629  
Ion Ratio Lower Upper  
78 100  
77 24.8 17.8 26.6  
50 21.7 17.2 25.8





#37

1,2-Dichloroethane

Concen: 0.536 ppbv

RT: 3.218 min Scan# 9

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

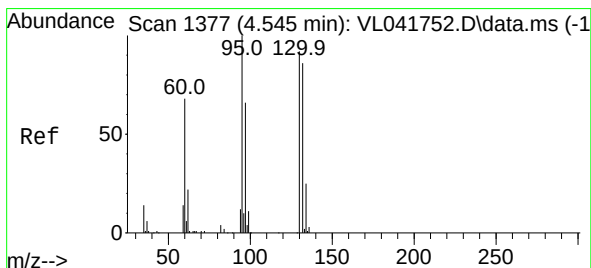
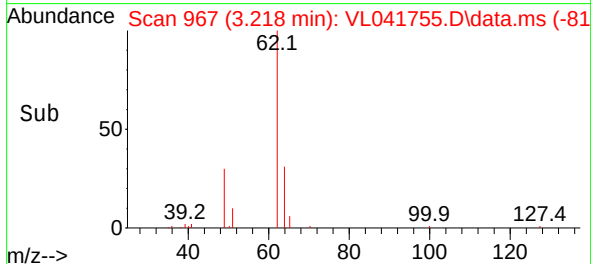
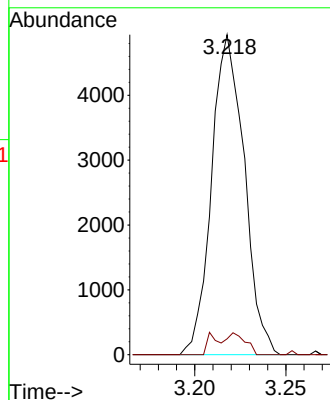
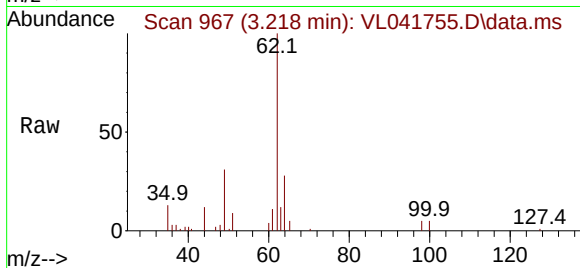
VSTDICC0.5

Tgt Ion: 62 Resp: 615  
 Ion Ratio Lower Upper  
 62 100  
 98 6.3 4.7 7.1

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#38

Trichloroethene

Concen: 0.468 ppbv m

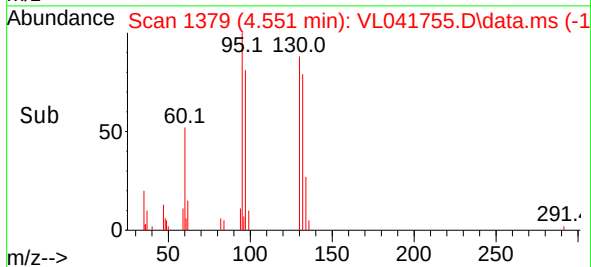
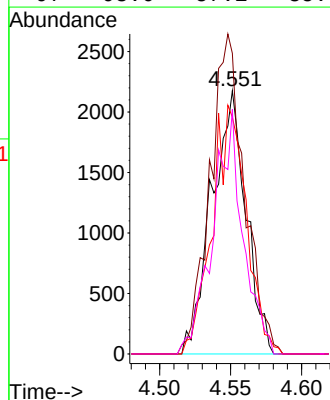
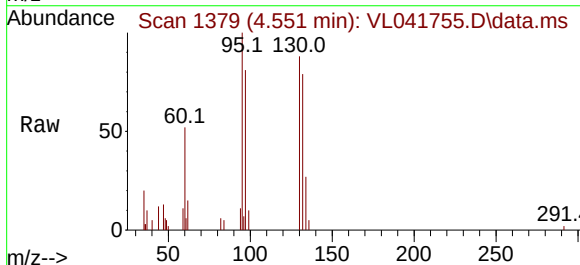
RT: 4.551 min Scan# 1379

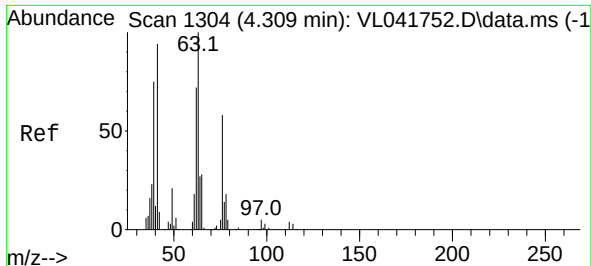
Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

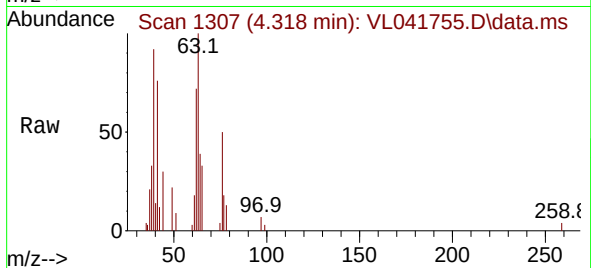
Tgt Ion:130 Resp: 3637  
 Ion Ratio Lower Upper  
 130 100  
 95 114.3 87.0 130.6  
 132 90.0 75.0 112.6  
 97 93.0 57.2 85.8#





#39  
1,2-Dichloropropane  
Concen: 0.511 ppbv m  
RT: 4.318 min Scan# 1307  
Delta R.T. 0.010 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

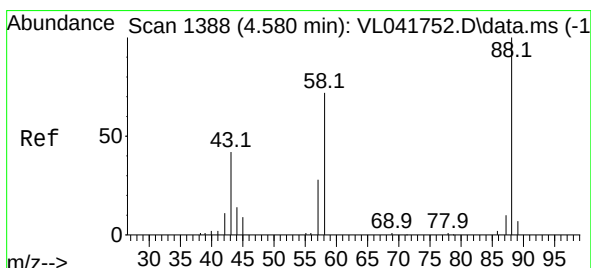
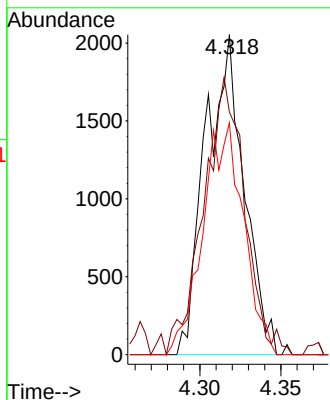
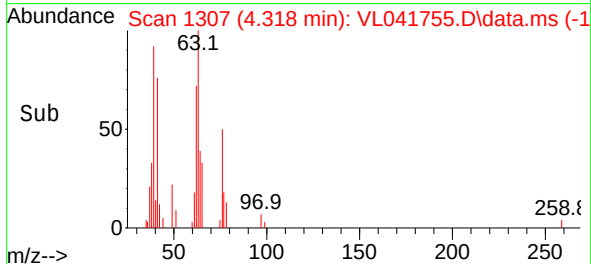
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



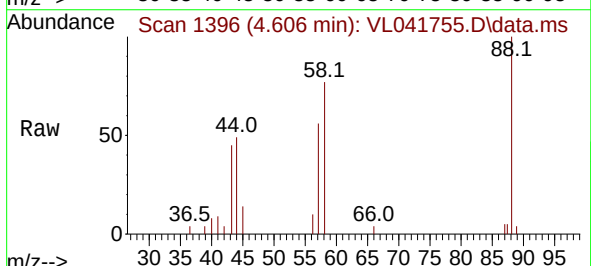
Tgt Ion: 63 Resp: 3410  
Ion Ratio Lower Upper  
63 100  
41 75.8 75.3 112.9  
62 72.4 57.3 85.9

Manual Integrations  
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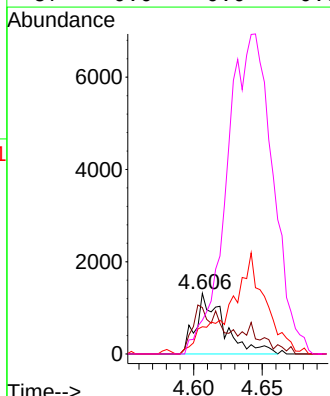
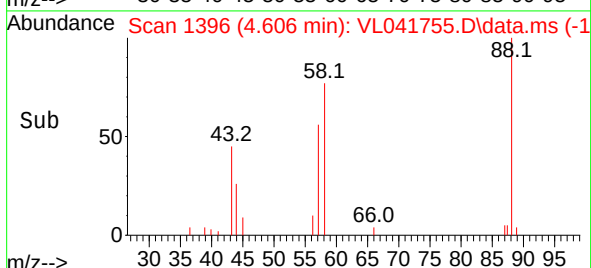
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

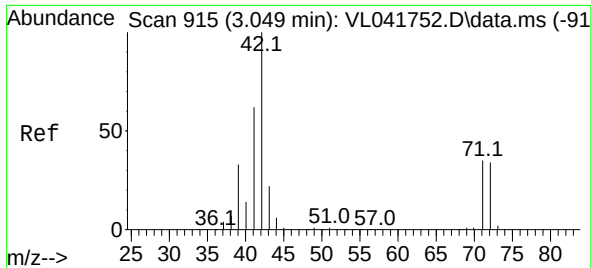


#40  
1,4-Dioxane  
Concen: 0.580 ppbv m  
RT: 4.606 min Scan# 1396  
Delta R.T. 0.026 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion: 88 Resp: 1892  
Ion Ratio Lower Upper  
88 100  
58 0.0 61.0 91.6#  
43 0.0 29.4 44.0#  
57 0.0 0.0 0.0





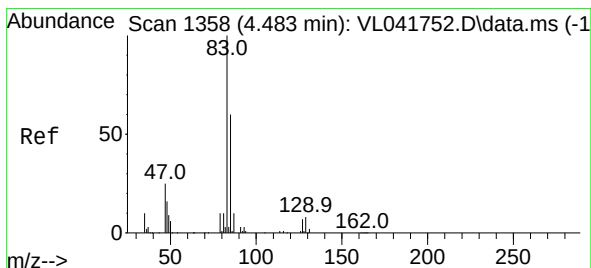
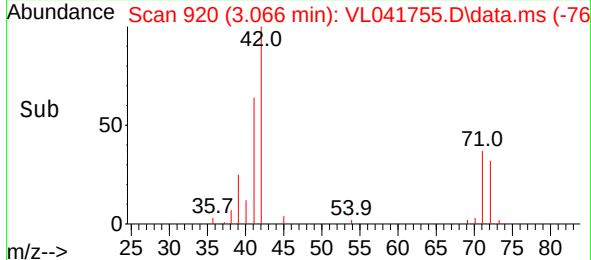
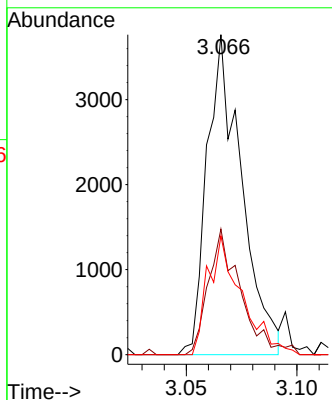
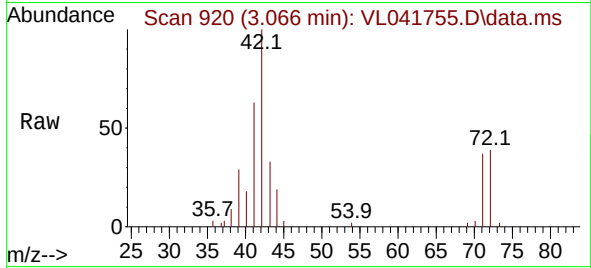
#41  
Tetrahydrofuran  
Concen: 0.505 ppbv  
RT: 3.066 min Scan# 915  
Delta R.T. 0.016 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 42 Resp: 406  
Ion Ratio Lower Upper  
42 100  
72 37.0 29.1 43.7  
71 36.5 28.4 42.6

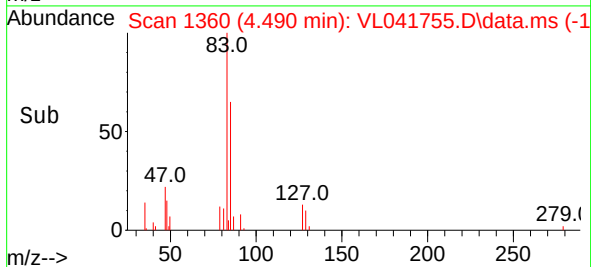
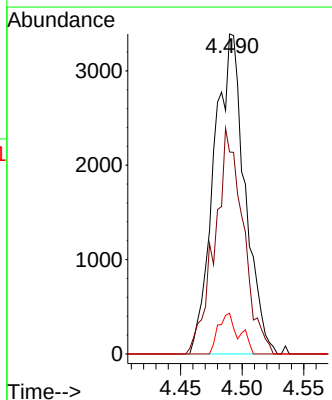
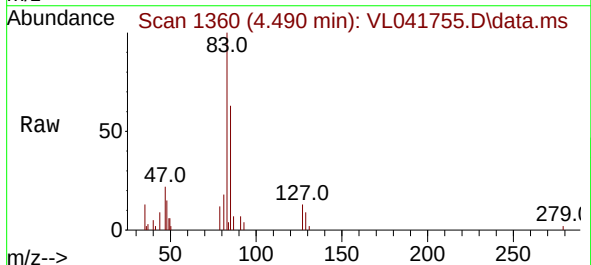
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

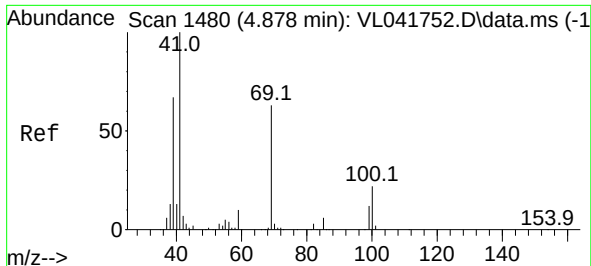


#42  
Bromodichloromethane  
Concen: 0.448 ppbv m  
RT: 4.490 min Scan# 1360  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 83 Resp: 5926  
Ion Ratio Lower Upper  
83 100  
85 63.1 48.0 72.0  
127 12.7 5.8 8.8#







#43

Methyl Methacrylate

Concen: 0.472 ppbv

RT: 4.881 min Scan# 1481

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

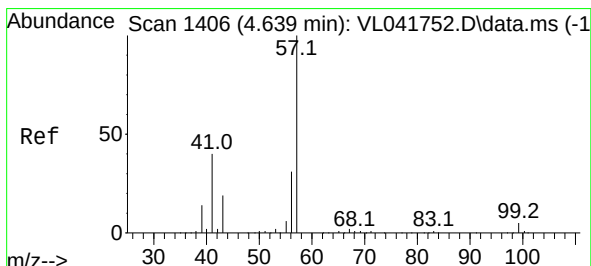
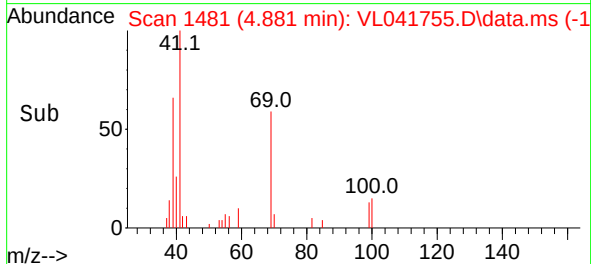
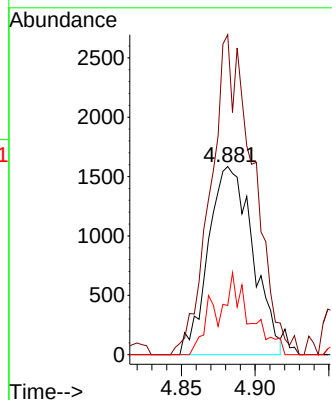
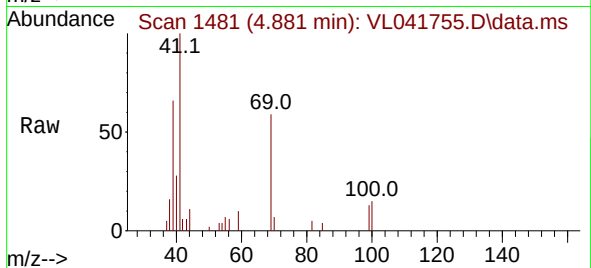
VSTDIC0.5

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 69    | Resp: | 332   |
| Ion Ratio | Lower | Upper |       |
| 69        | 100   |       |       |
| 41        | 163.7 | 130.3 | 195.5 |
| 100       | 33.2  | 28.3  | 42.5  |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#44

2,2,4-Trimethylpentane

Concen: 0.517 ppbv m

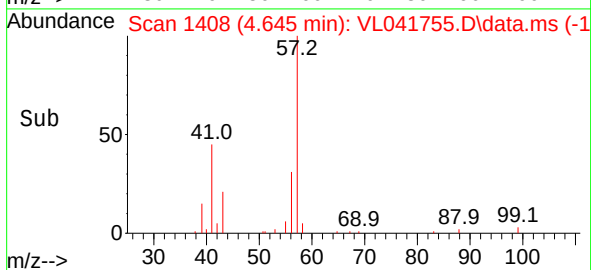
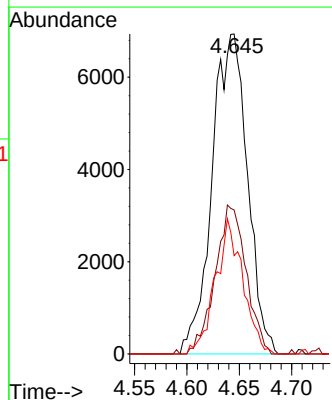
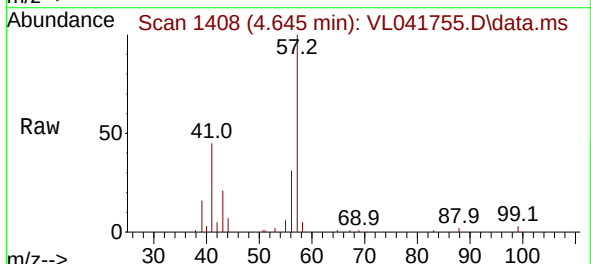
RT: 4.645 min Scan# 1408

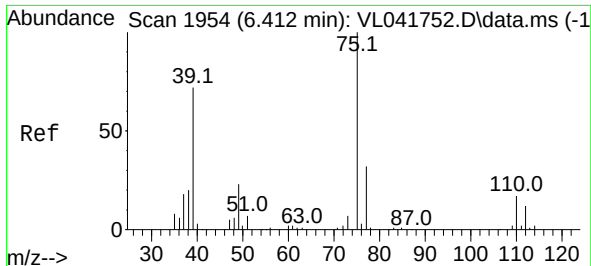
Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 57    | Resp: | 16294 |
| Ion Ratio | Lower | Upper |       |
| 57        | 100   |       |       |
| 41        | 0.0   | 30.7  | 46.1# |
| 56        | 0.0   | 25.4  | 38.0# |





#45

t-1,3-Dichloropropene

Concen: 0.468 ppbv m

RT: 6.422 min Scan# 1954

Delta R.T. 0.010 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 75 Resp: 3400

Ion Ratio Lower Upper

75 100

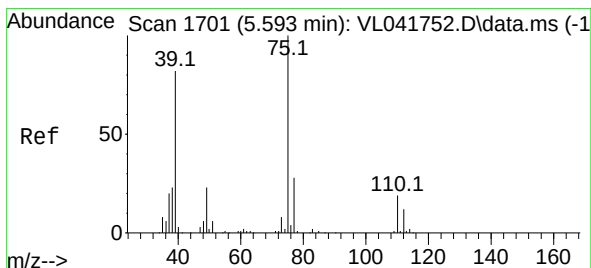
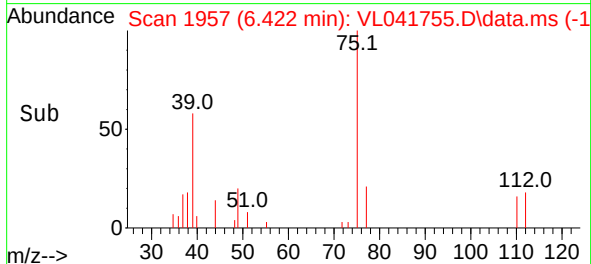
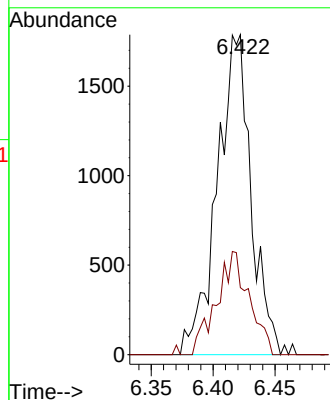
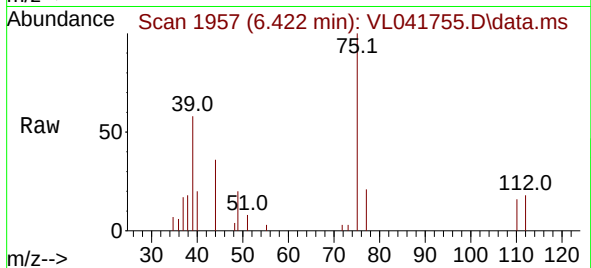
77 20.9 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#46

cis-1,3-Dichloropropene

Concen: 0.483 ppbv m

RT: 5.597 min Scan# 1702

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

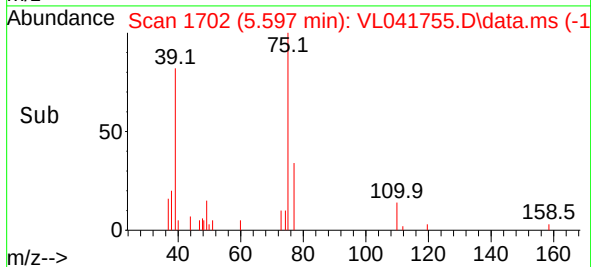
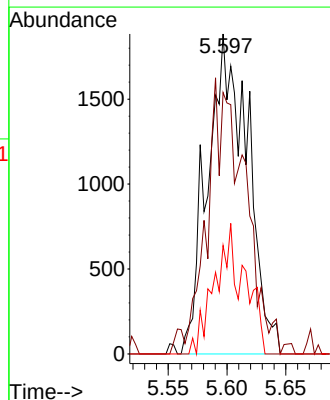
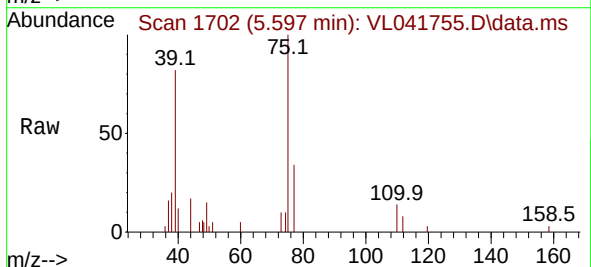
Tgt Ion: 75 Resp: 4462

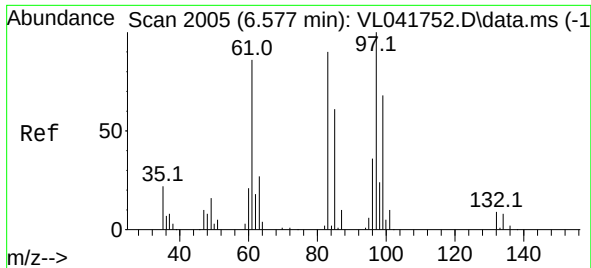
Ion Ratio Lower Upper

75 100

39 81.7 65.2 97.8

77 33.9 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 0.521 ppbv m

RT: 6.587 min Scan# 2005

Delta R.T. 0.010 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 97 Resp: 363

Ion Ratio Lower Upper

97 100

83 69.7 72.3 108.5

85 51.4 48.5 72.7

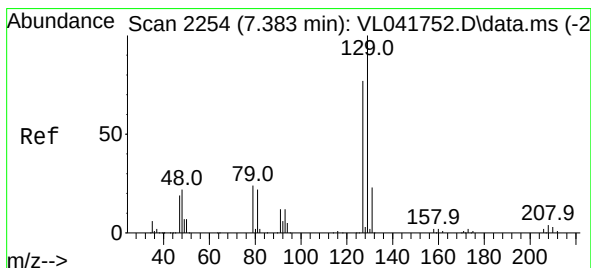
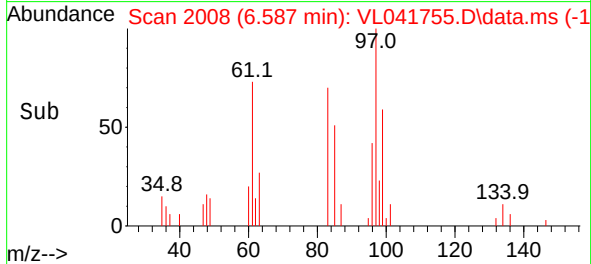
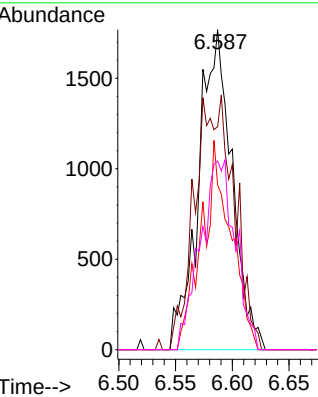
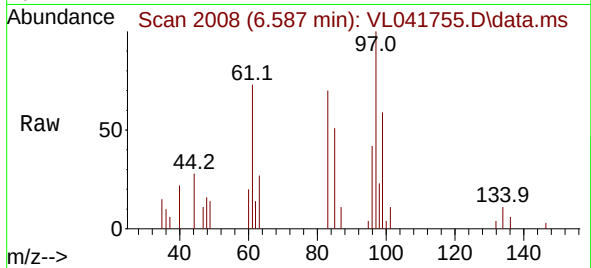
99 59.0 54.0 81.0

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#48

Dibromochloromethane

Concen: 0.406 ppbv

RT: 7.387 min Scan# 2255

Delta R.T. 0.003 min

Lab File: VL041755.D

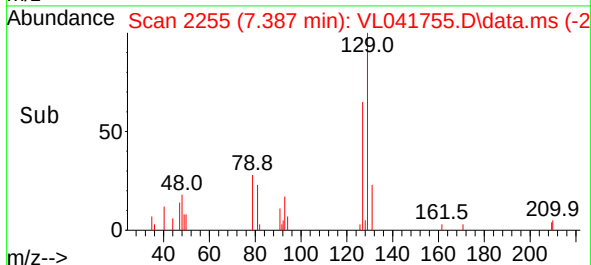
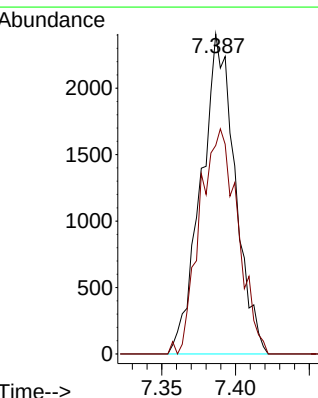
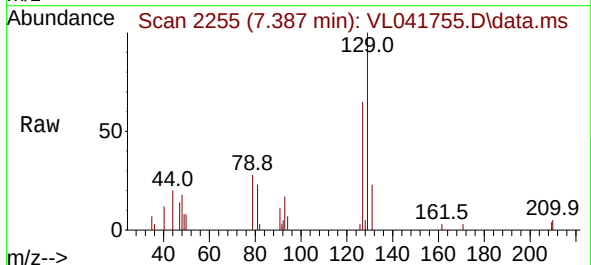
Acq: 16 Dec 2024 15:05

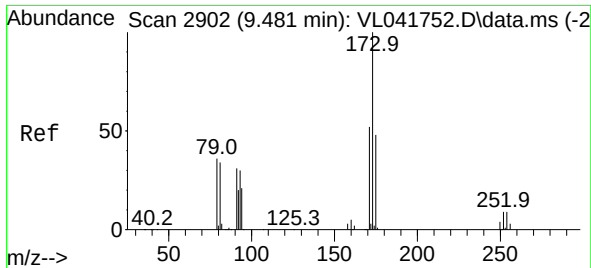
Tgt Ion:129 Resp: 3865

Ion Ratio Lower Upper

129 100

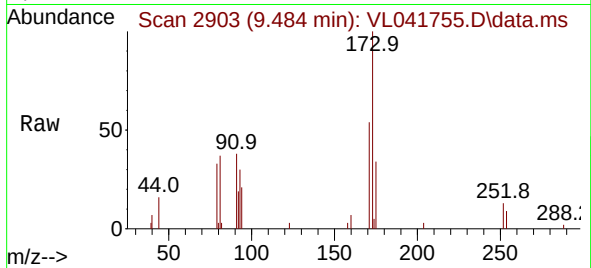
127 78.8 38.8 116.3





#49  
Bromoform  
Concen: 0.376 ppbv m  
RT: 9.484 min Scan# 2902  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

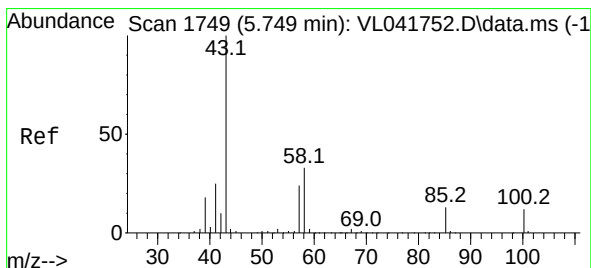
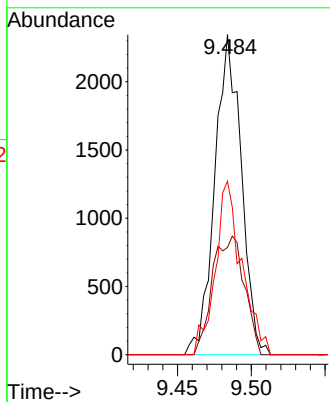
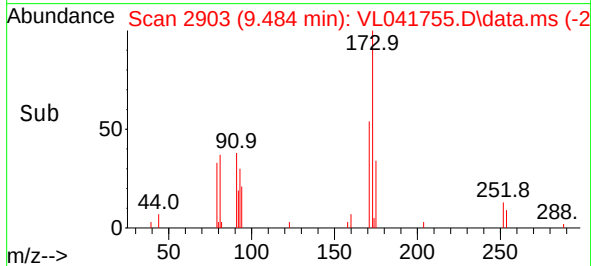
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



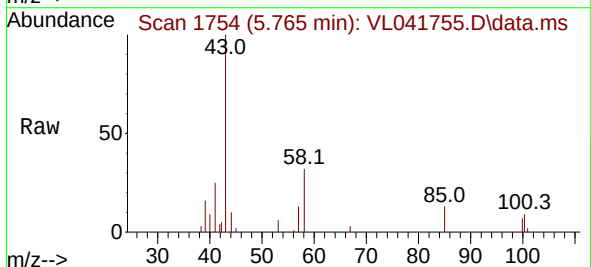
Tgt Ion:173 Resp: 2928  
Ion Ratio Lower Upper  
173 100  
175 44.6 38.2 57.2  
171 54.1 41.1 61.7

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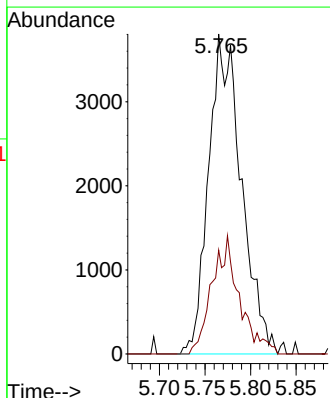
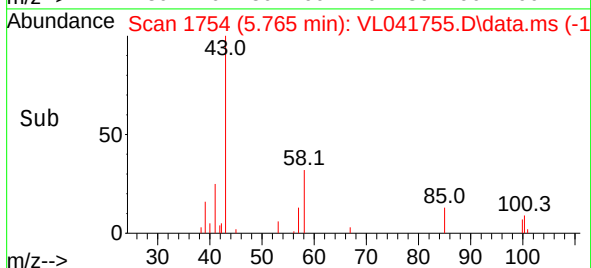
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

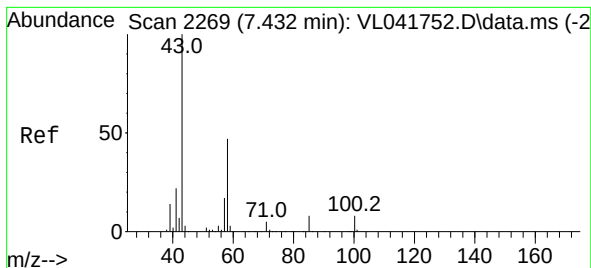


#50  
4-Methyl-2-Pentanone  
Concen: 0.485 ppbv m  
RT: 5.765 min Scan# 1754  
Delta R.T. 0.016 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion: 43 Resp: 9479  
Ion Ratio Lower Upper  
43 100  
58 0.0 26.8 40.2#





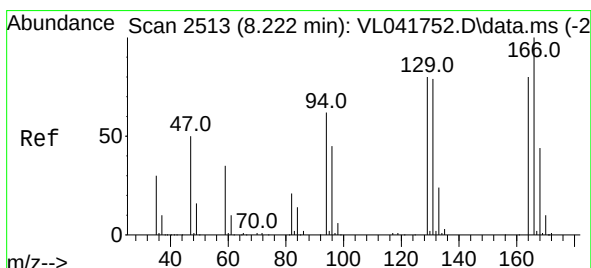
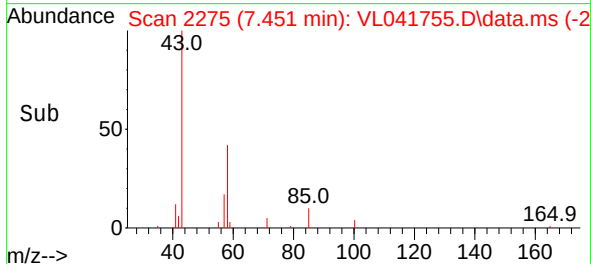
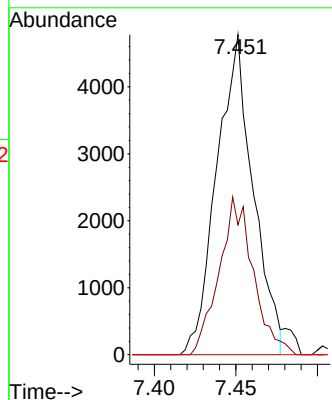
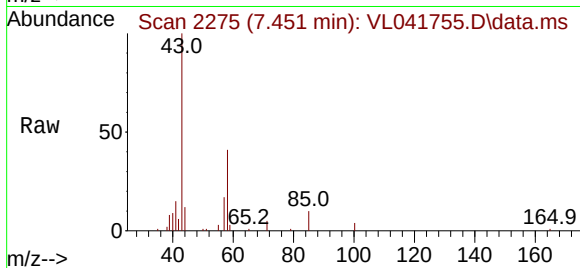
#51  
2-Hexanone  
Concen: 0.468 ppbv  
RT: 7.451 min Scan# 2114  
Delta R.T. 0.019 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 43 Resp: 7412  
Ion Ratio Lower Upper  
43 100  
58 46.2 36.6 55.0  
98 0.0 0.1 0.1

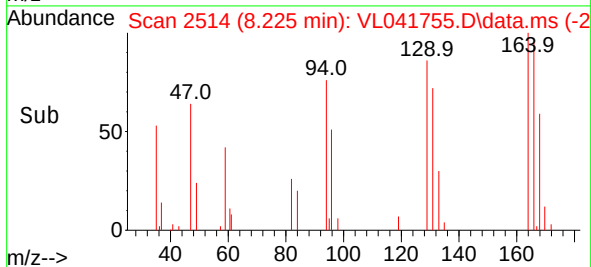
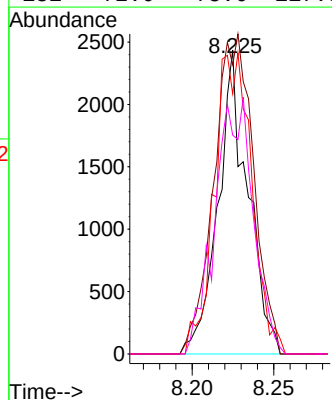
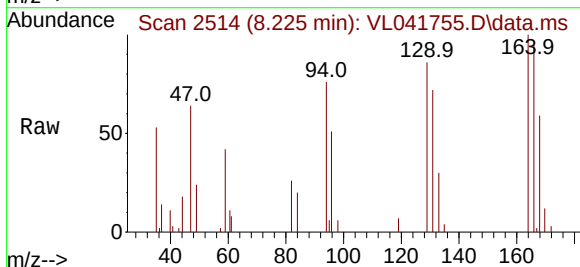
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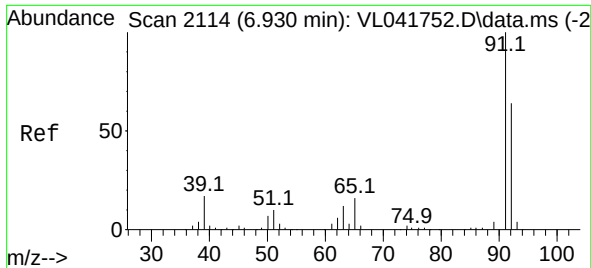
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#52  
Tetrachloroethene  
Concen: 0.450 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:164 Resp: 3091  
Ion Ratio Lower Upper  
164 100  
166 95.1 99.8 149.6#  
129 85.6 79.6 119.4  
131 72.0 78.6 117.8#





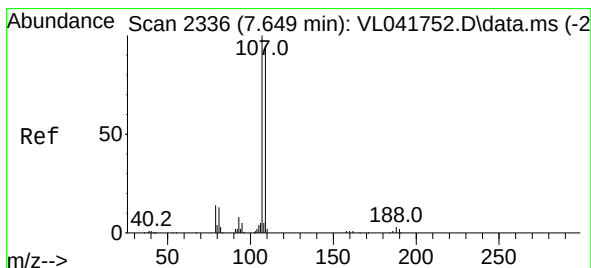
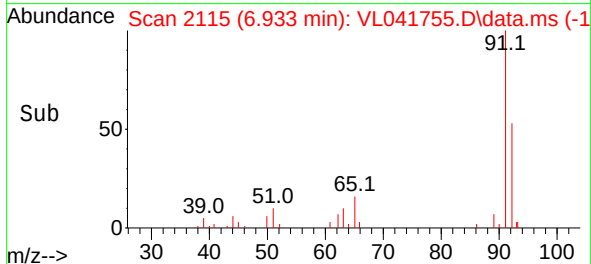
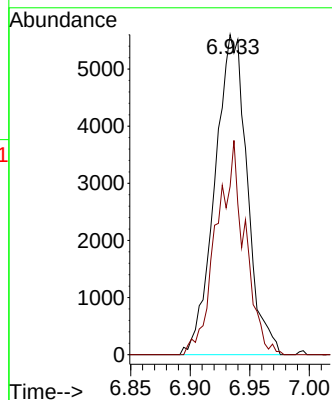
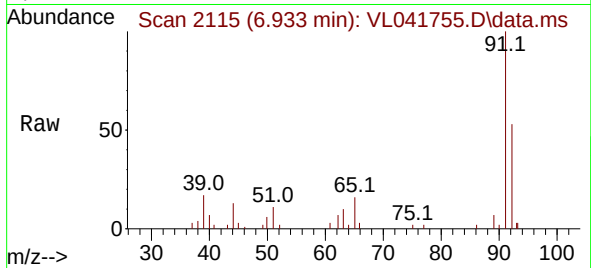
#53  
Toluene  
Concen: 0.504 ppbv  
RT: 6.933 min Scan# 2114  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 91 Resp: 1055  
Ion Ratio Lower Upper  
91 100  
92 59.2 47.9 71.9

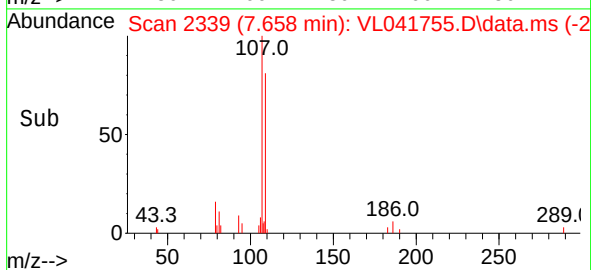
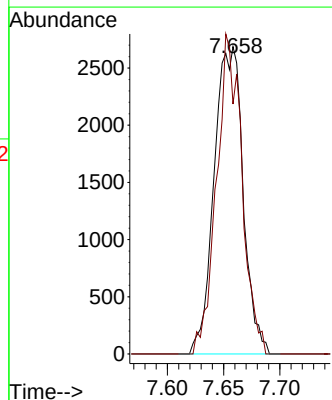
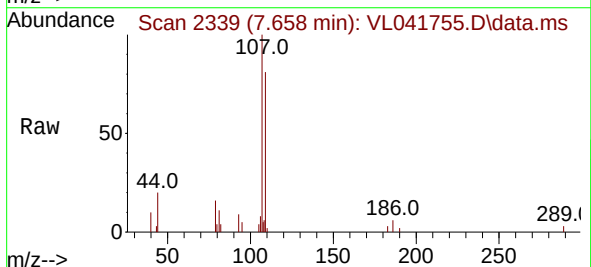
Manual Integrations  
APPROVED

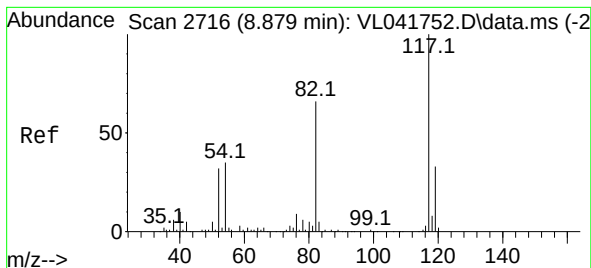
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#54  
1,2-Dibromoethane  
Concen: 0.502 ppbv m  
RT: 7.658 min Scan# 2339  
Delta R.T. 0.010 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:107 Resp: 4819  
Ion Ratio Lower Upper  
107 100  
109 81.3 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.882 min Scan# 2717

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

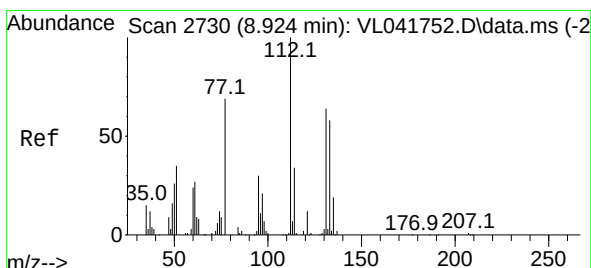
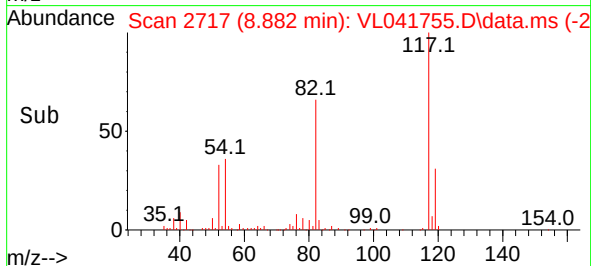
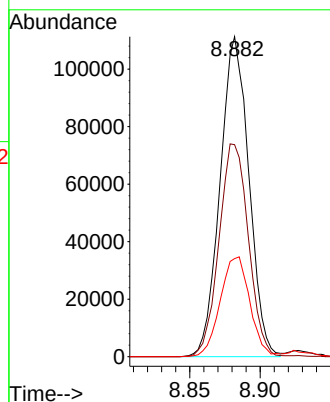
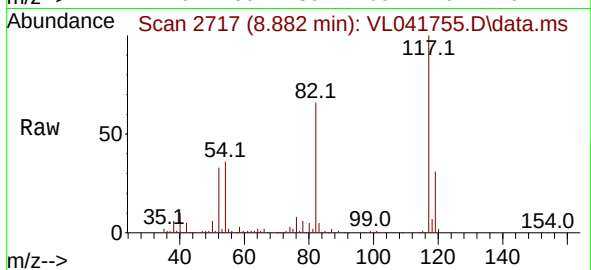
ClientSampleId :

VSTDIC0.5

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:117 | Resp: | 15857     |
| Ion Ratio   | Lower | Upper     |
| 117         | 100   |           |
| 82          | 68.1  | 53.8 80.8 |
| 119         | 33.6  | 26.7 40.1 |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#56

1,1,1,2-Tetrachloroethane

Concen: 0.459 ppbv m

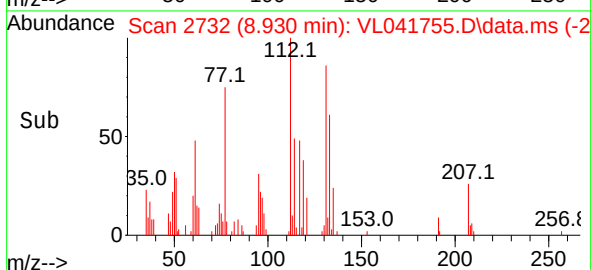
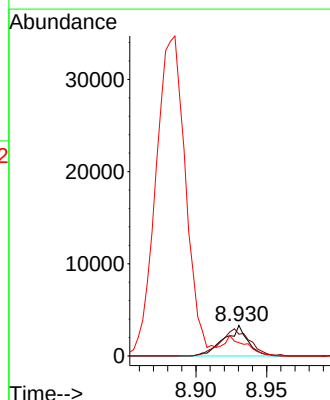
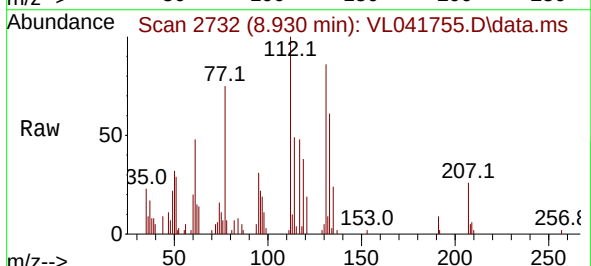
RT: 8.930 min Scan# 2732

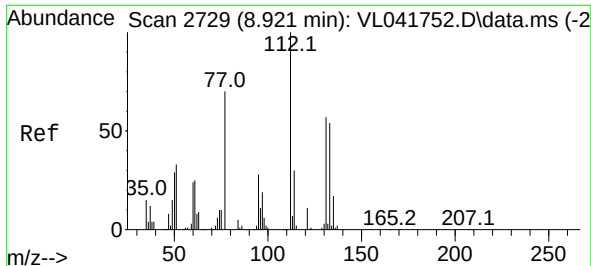
Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:131 | Resp: | 3858       |
| Ion Ratio   | Lower | Upper      |
| 131         | 100   |            |
| 133         | 110.1 | 76.8 115.2 |
| 119         | 0.0   | 49.0 73.6# |





#57

Chlorobenzene

Concen: 0.514 ppbv m

RT: 8.927 min Scan# 2729

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

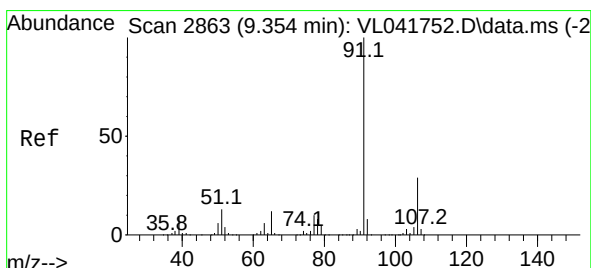
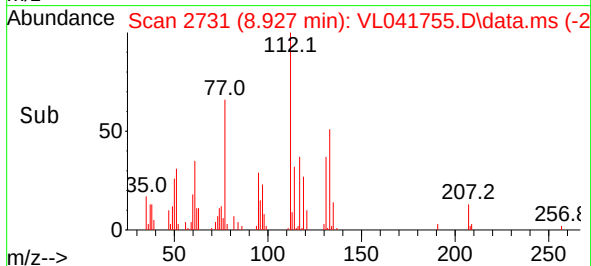
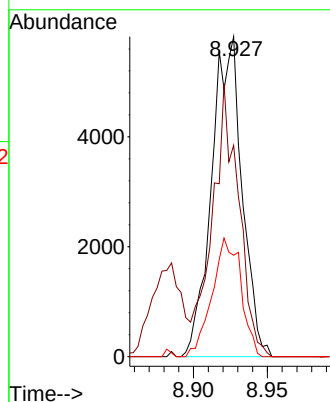
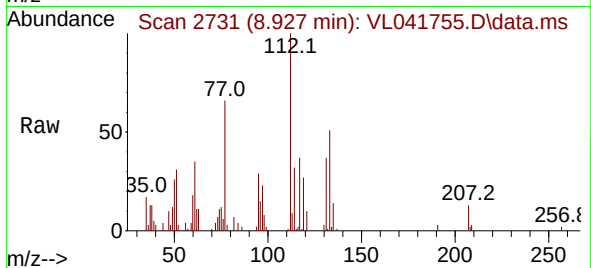
VSTDIC0.5

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:112 | Resp: | 8340      |
| Ion Ratio   | Lower | Upper     |
| 112         | 100   |           |
| 77          | 66.1  | 57.4 86.0 |
| 114         | 31.7  | 27.4 33.4 |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 0.470 ppbv

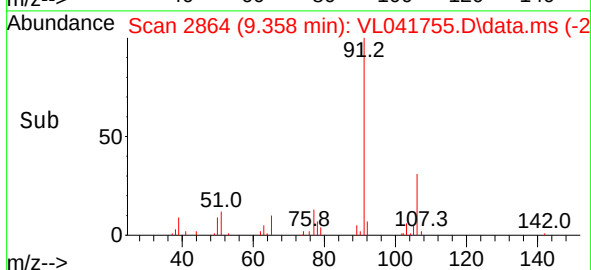
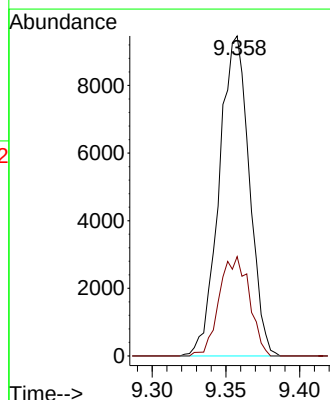
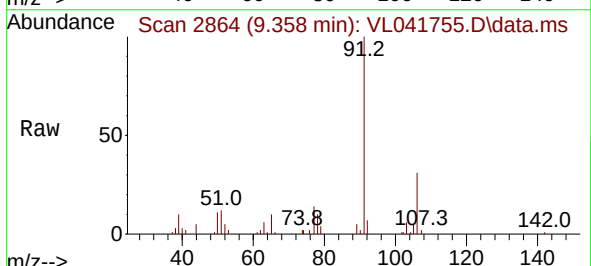
RT: 9.358 min Scan# 2864

Delta R.T. 0.003 min

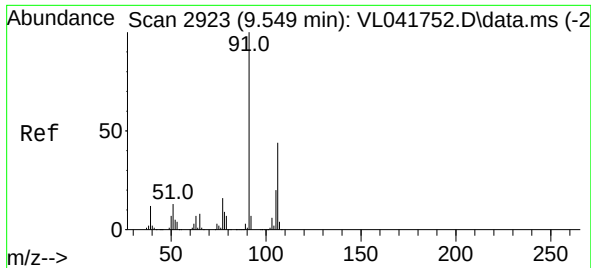
Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 91 | Resp: | 13428     |
| Ion Ratio   | Lower | Upper     |
| 91          | 100   |           |
| 106         | 31.0  | 23.5 35.3 |







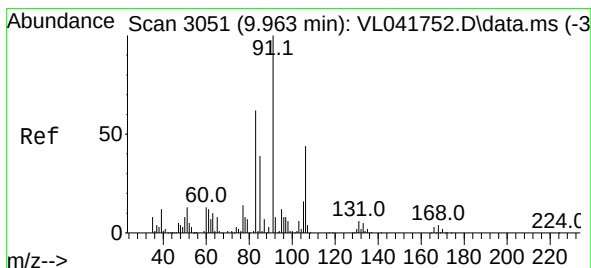
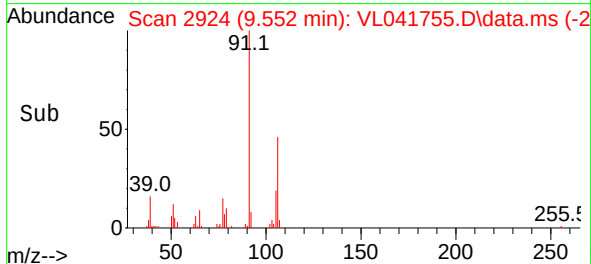
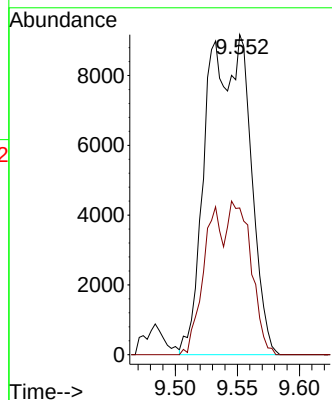
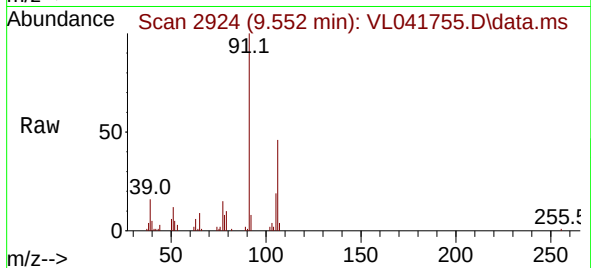
#59  
m/p-Xylene  
Concen: 0.983 ppbv m  
RT: 9.552 min Scan# 2923  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 91 Resp: 22560  
Ion Ratio Lower Upper  
91 100  
106 46.9 0.0 0.0

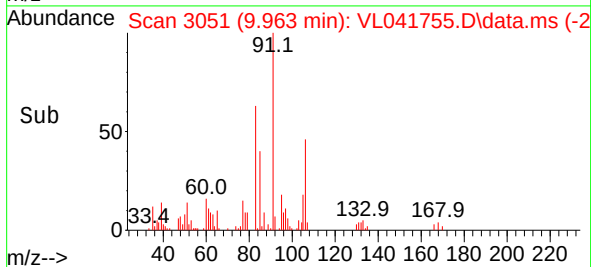
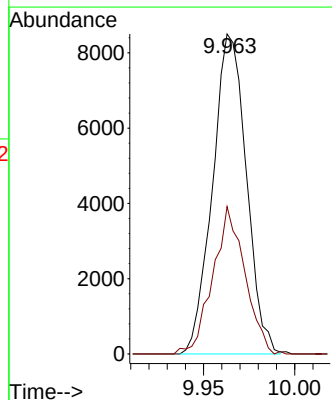
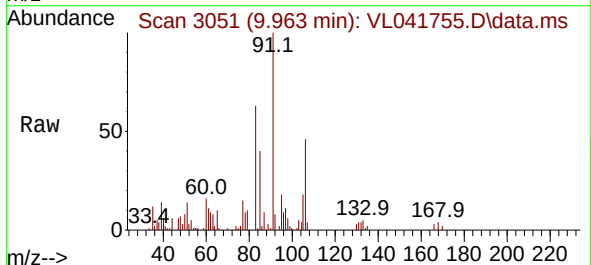
Manual Integrations  
APPROVED

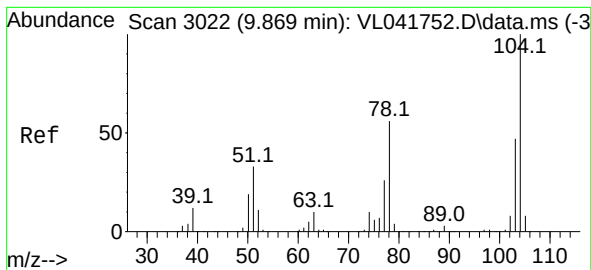
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#60  
o-Xylene  
Concen: 0.476 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 91 Resp: 10954  
Ion Ratio Lower Upper  
91 100  
106 43.7 21.1 63.4





#61

Styrene

Concen: 0.433 ppbv

RT: 9.869 min Scan# 3022

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

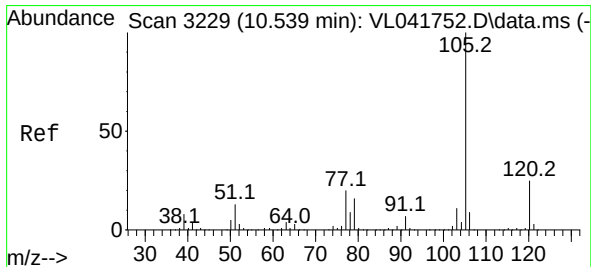
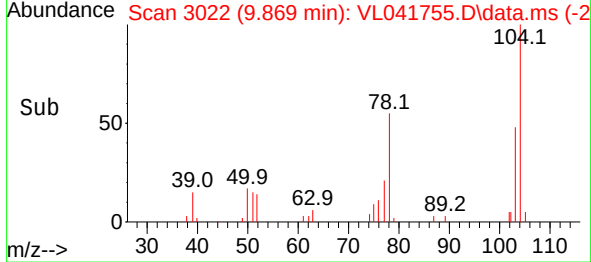
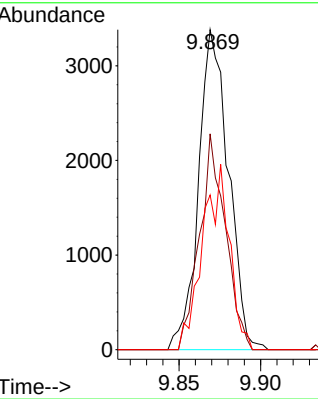
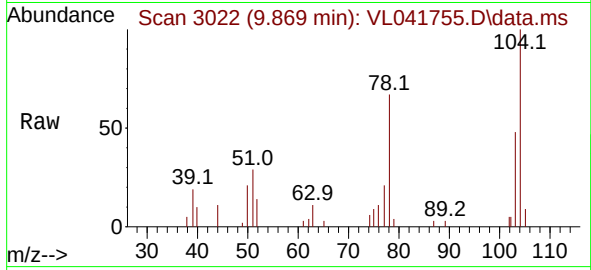
VSTDIC0.5

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:104 | Resp: | 4314      |
| Ion Ratio   | Lower | Upper     |
| 104         | 100   |           |
| 78          | 58.1  | 43.8 65.6 |
| 103         | 51.9  | 37.8 56.6 |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#62

Isopropylbenzene

Concen: 0.490 ppbv

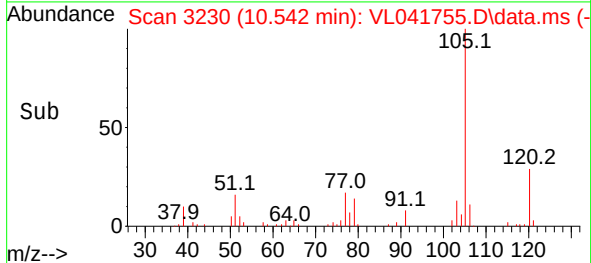
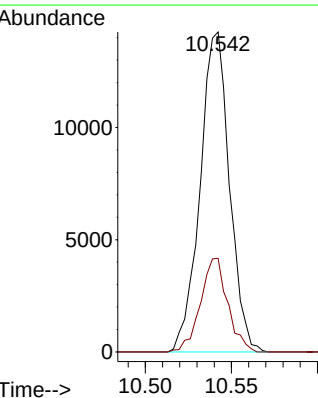
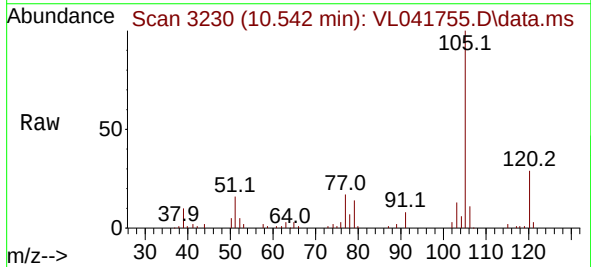
RT: 10.542 min Scan# 3230

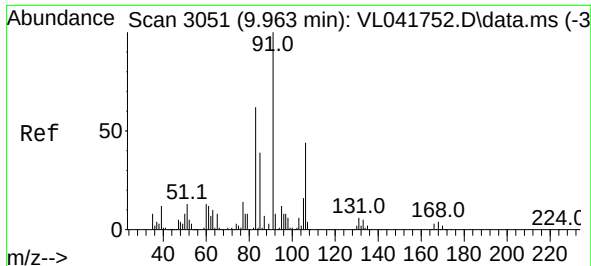
Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

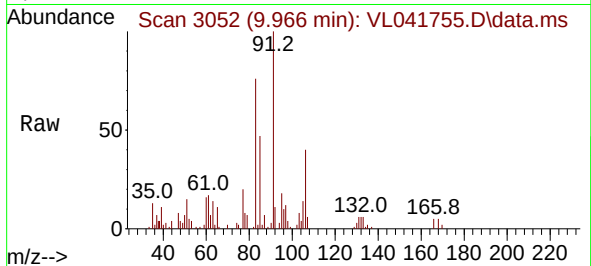
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:105 | Resp: | 16953     |
| Ion Ratio   | Lower | Upper     |
| 105         | 100   |           |
| 120         | 27.1  | 19.8 29.8 |





#63  
1,1,2,2-Tetrachloroethane  
Concen: 0.525 ppbv  
RT: 9.966 min Scan# 3051  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

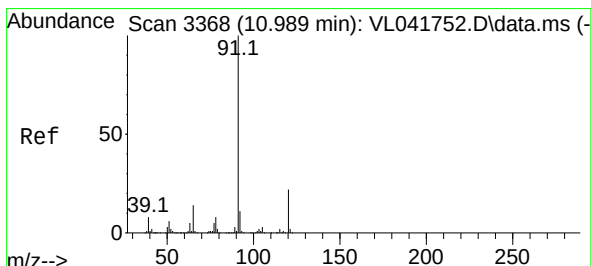
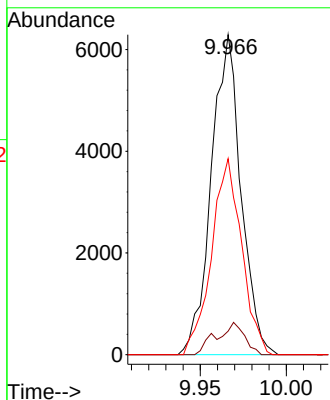
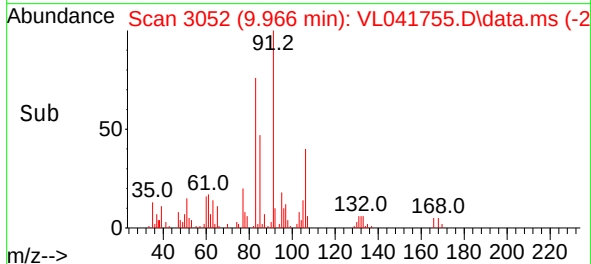
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.5



Tgt Ion: 83 Resp: 755  
Ion Ratio Lower Upper  
83 100  
131 9.5 4.9 14.7  
85 62.2 32.0 96.2

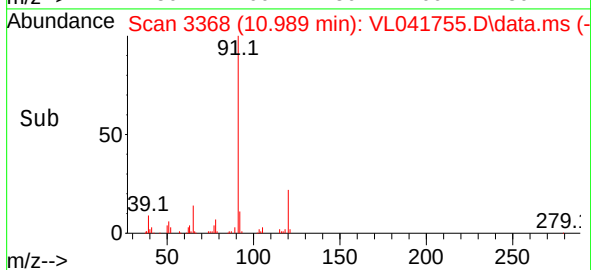
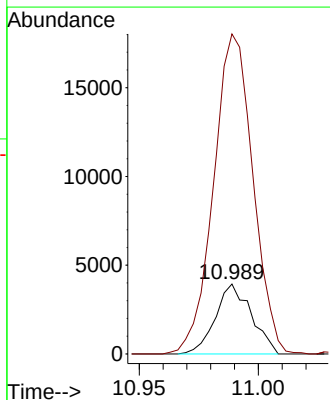
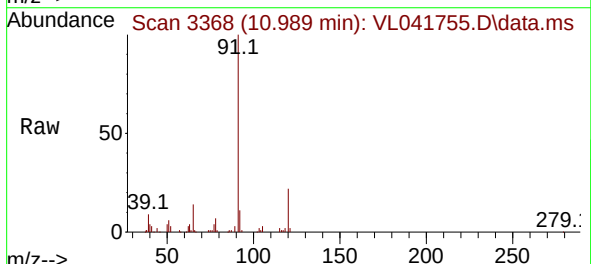
Manual Integrations  
APPROVED

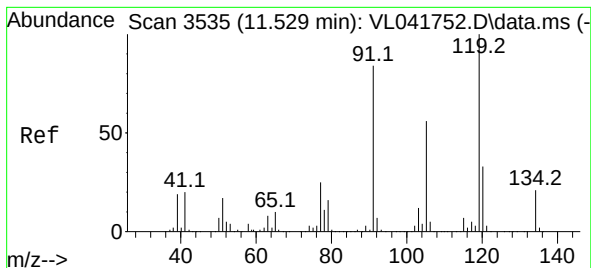
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#64  
n-propylbenzene  
Concen: 0.472 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:120 Resp: 4126  
Ion Ratio Lower Upper  
120 100  
91 504.6 387.3 580.9





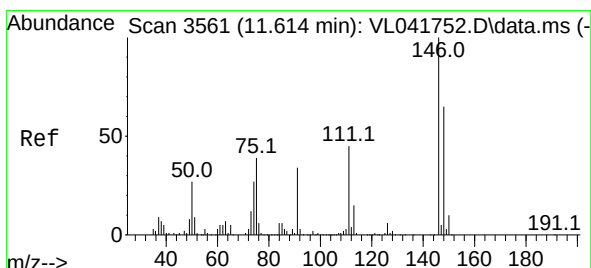
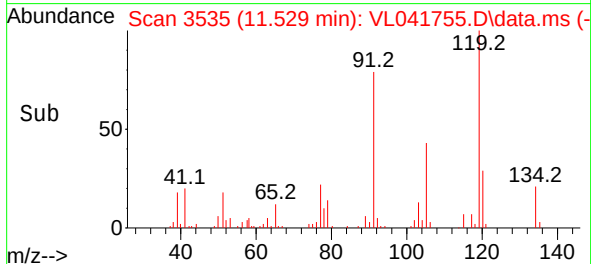
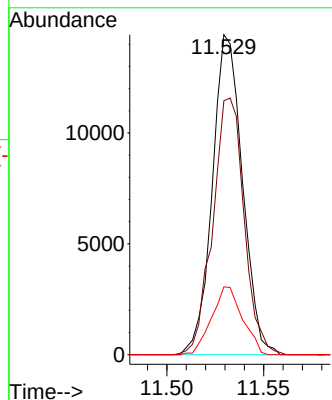
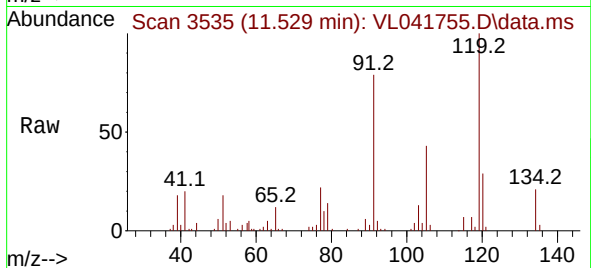
#65  
tert-Butylbenzene  
Concen: 0.499 ppbv  
RT: 11.529 min Scan# 3535  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 119 Resp: 1556  
Ion Ratio Lower Upper  
119 100  
91 83.6 67.0 100.4  
134 21.8 16.5 24.7

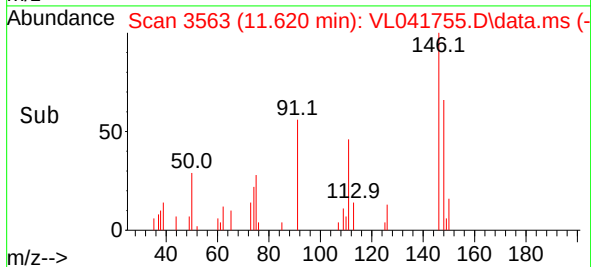
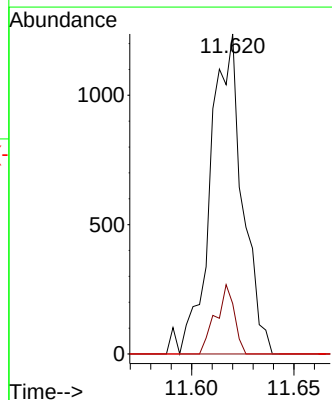
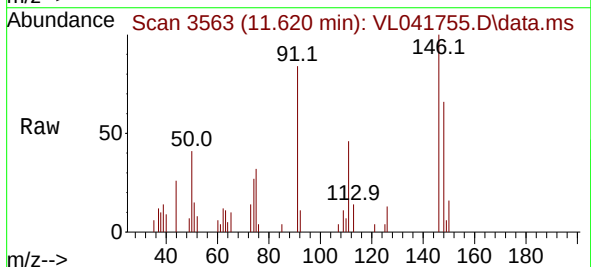
Manual Integrations  
APPROVED

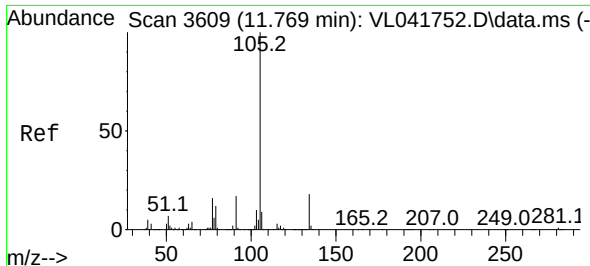
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#66  
Benzyl Chloride  
Concen: 0.487 ppbv m  
RT: 11.620 min Scan# 3563  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

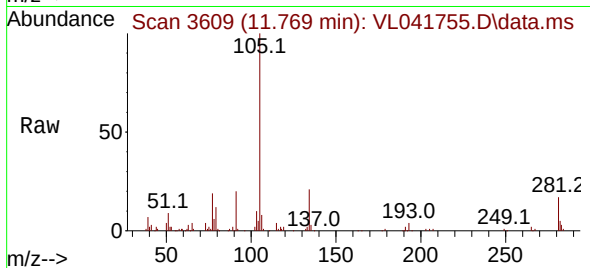
Tgt Ion: 91 Resp: 1340  
Ion Ratio Lower Upper  
91 100  
126 12.6 13.9 20.9#  
128 0.0 4.4 6.6#





#67  
sec-Butylbenzene  
Concen: 0.492 ppbv  
RT: 11.769 min Scan# 3609  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

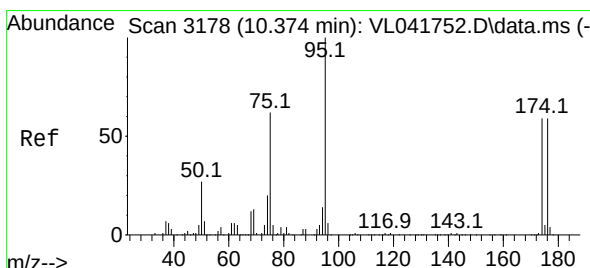
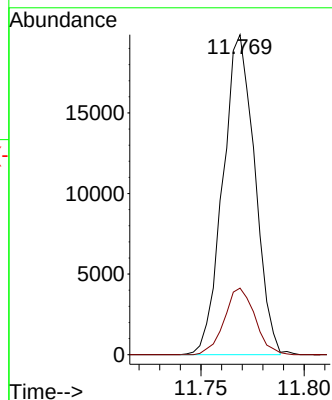
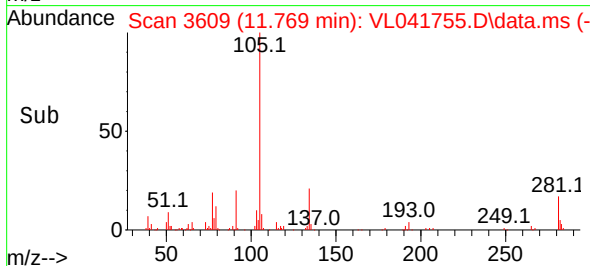
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5



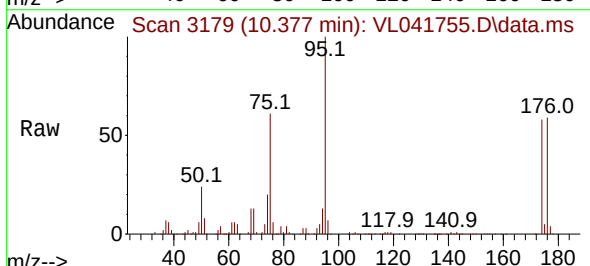
Tgt Ion:105 Resp: 21263  
Ion Ratio Lower Upper  
105 100  
134 20.1 14.5 21.7

Manual Integrations  
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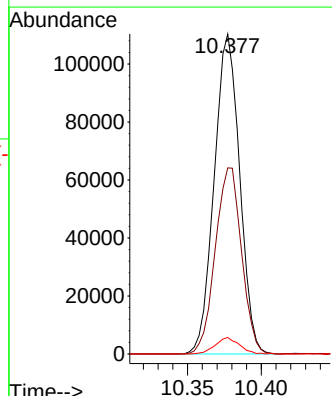
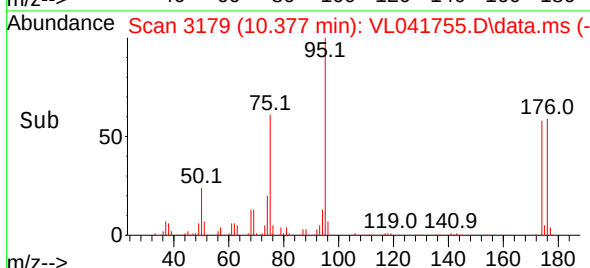
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

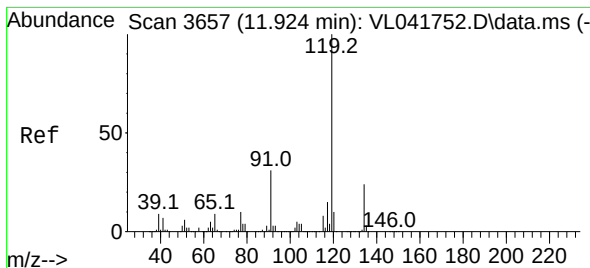


#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.010 ppbv  
RT: 10.377 min Scan# 3179  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion: 95 Resp: 132273  
Ion Ratio Lower Upper  
95 100  
174 60.1 47.6 71.4  
175 4.9 3.7 5.5





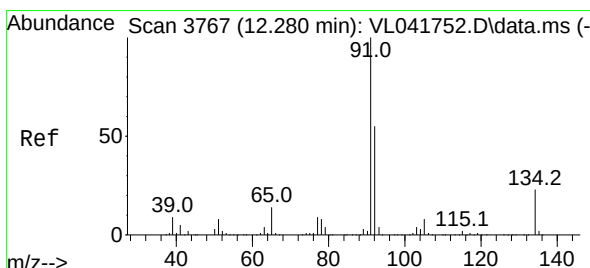
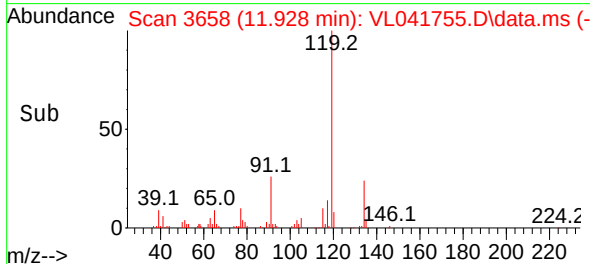
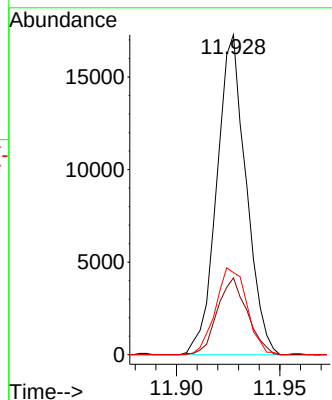
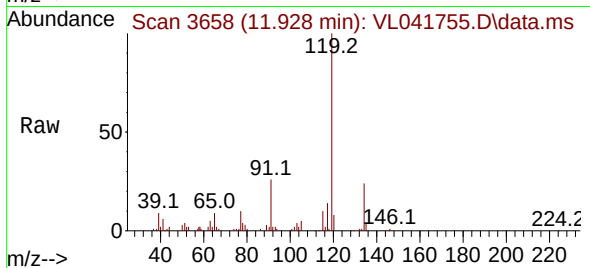
#69  
p-Isopropyltoluene  
Concen: 0.479 ppbv  
RT: 11.928 min Scan# 3658  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 119 Resp: 1704  
Ion Ratio Lower Upper  
119 100  
134 24.5 19.6 29.4  
91 29.2 24.4 36.6

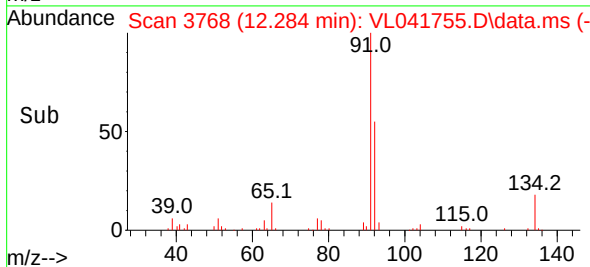
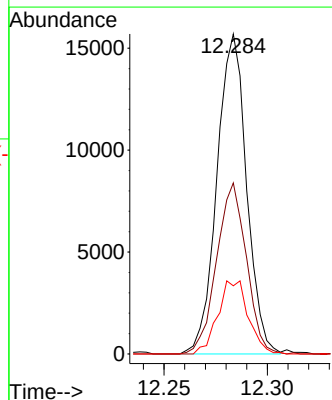
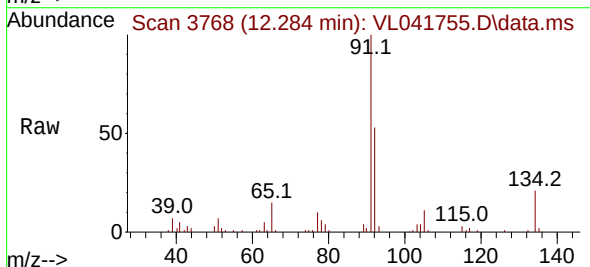
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APPROVED

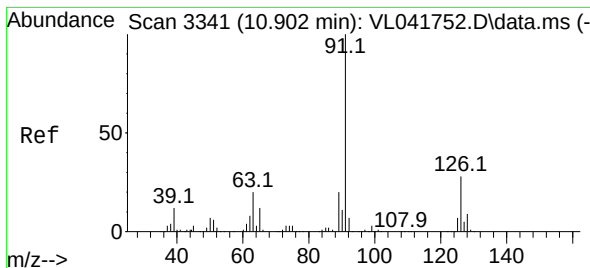
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#70  
n-Butylbenzene  
Concen: 0.456 ppbv  
RT: 12.284 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 91 Resp: 15671  
Ion Ratio Lower Upper  
91 100  
92 53.7 43.2 64.8  
134 23.5 18.2 27.4





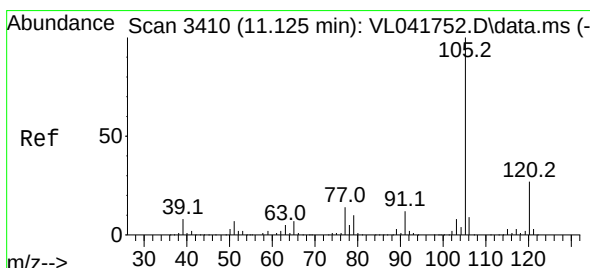
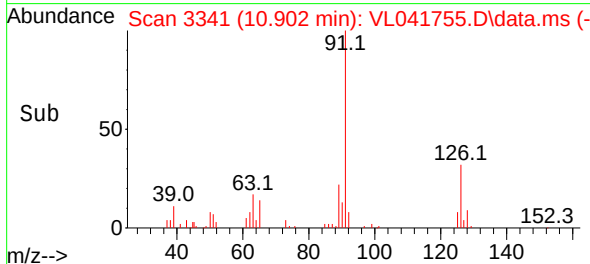
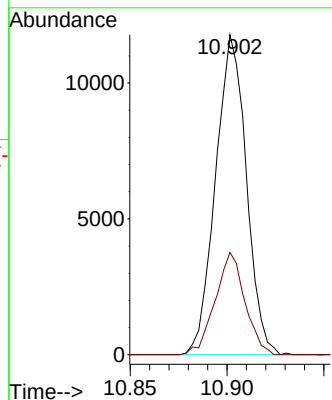
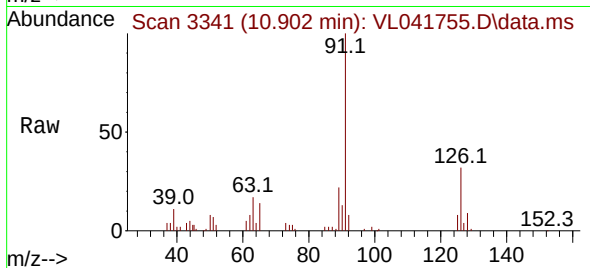
#71  
2-Chlorotoluene  
Concen: 0.492 ppbv  
RT: 10.902 min Scan# 3411  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 91 Resp: 13000  
Ion Ratio Lower Upper  
91 100  
126 30.8 11.6 46.4

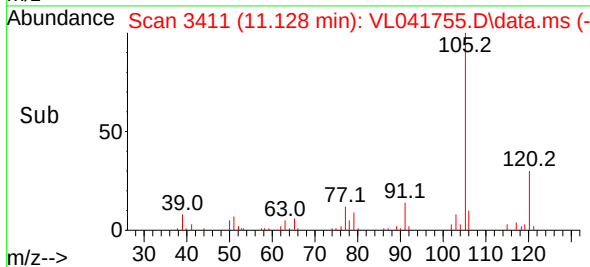
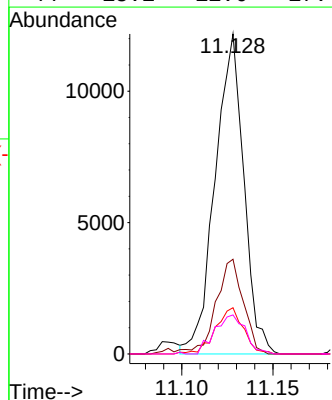
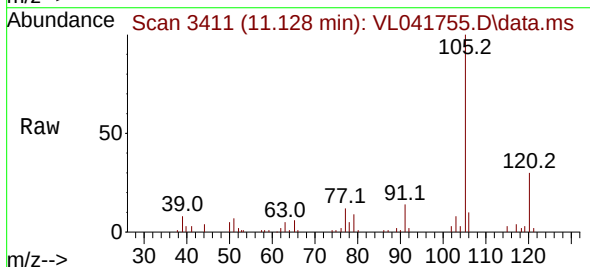
Manual Integrations  
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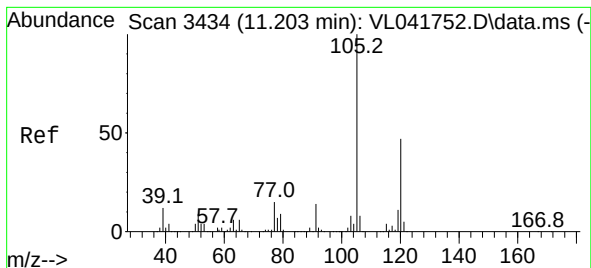
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 0.491 ppbv  
RT: 11.128 min Scan# 3411  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:105 Resp: 13324  
Ion Ratio Lower Upper  
105 100  
120 28.7 23.3 34.9  
91 14.1 10.9 16.3  
77 13.1 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 0.466 ppbv

RT: 11.206 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion:105 Resp: 1049

Ion Ratio Lower Upper

105 100

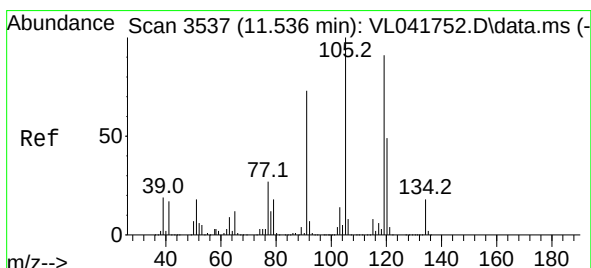
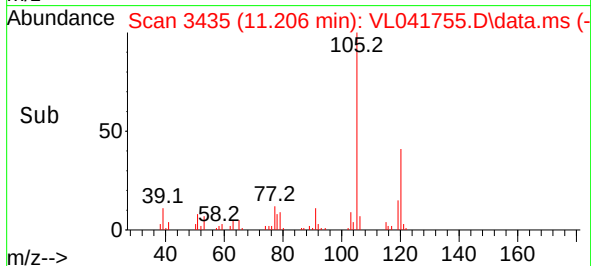
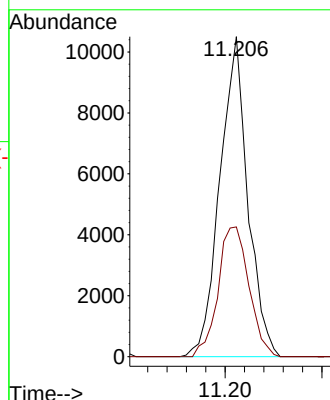
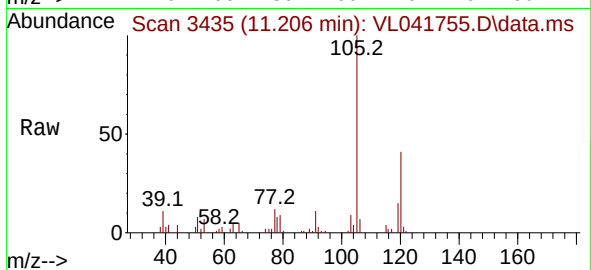
120 40.6 37.4 56.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#74

1,2,4-Trimethylbenzene

Concen: 0.457 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion:105 Resp: 11070

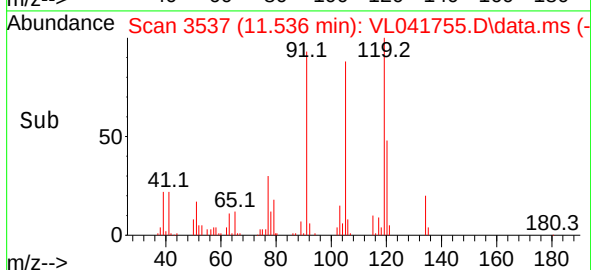
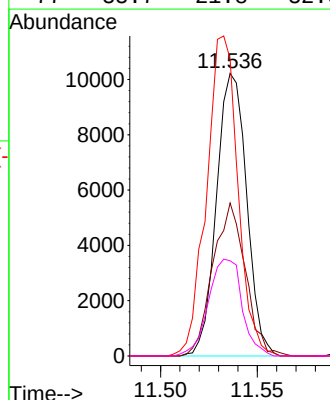
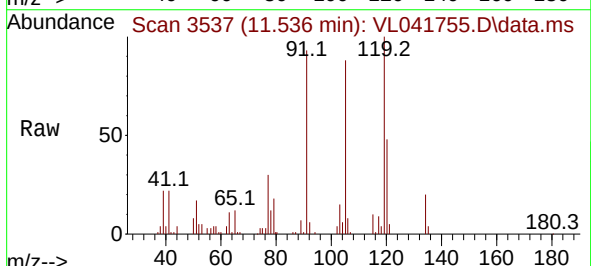
Ion Ratio Lower Upper

105 100

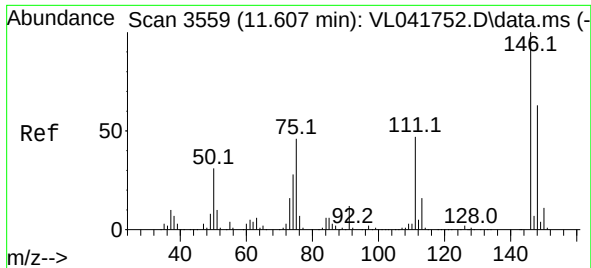
120 54.1 39.0 58.4

91 105.1 58.1 87.1#

77 33.7 21.8 32.8#

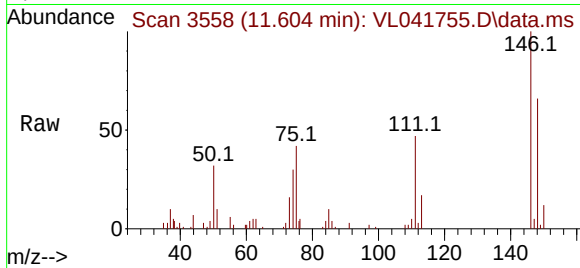






#75  
1,3-Dichlorobenzene  
Concen: 0.525 ppbv  
RT: 11.604 min Scan# 3558  
Delta R.T. -0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

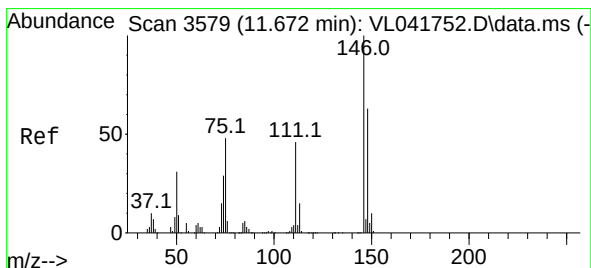
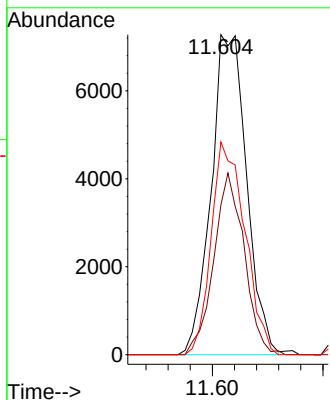
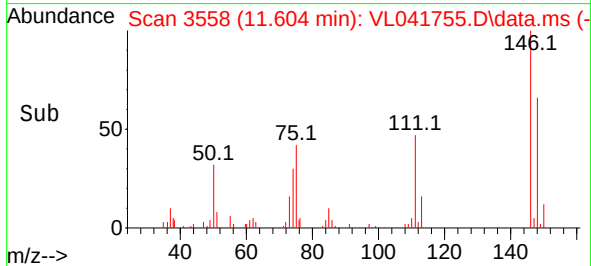
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



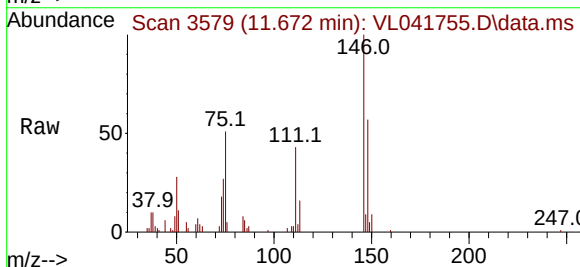
Tgt Ion:146 Resp: 810  
Ion Ratio Lower Upper  
146 100  
111 48.6 23.4 70.3  
148 63.1 31.6 95.0

Manual Integrations  
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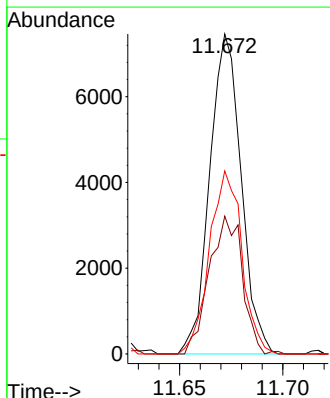
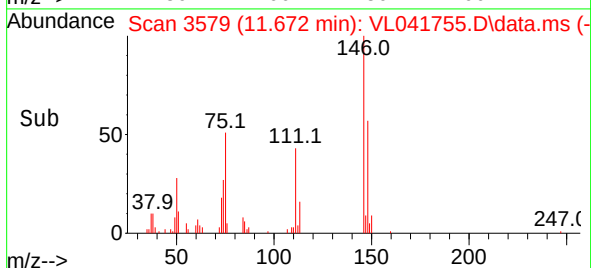
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

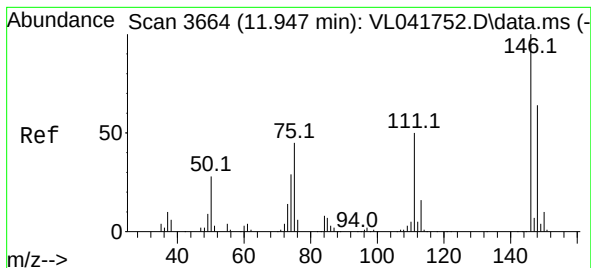


#76  
1,4-Dichlorobenzene  
Concen: 0.517 ppbv  
RT: 11.672 min Scan# 3579  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion:146 Resp: 7893  
Ion Ratio Lower Upper  
146 100  
111 45.4 22.7 68.1  
148 58.9 31.4 94.0





#77

1,2-Dichlorobenzene

Concen: 0.538 ppbv

RT: 11.950 min Scan# 3

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

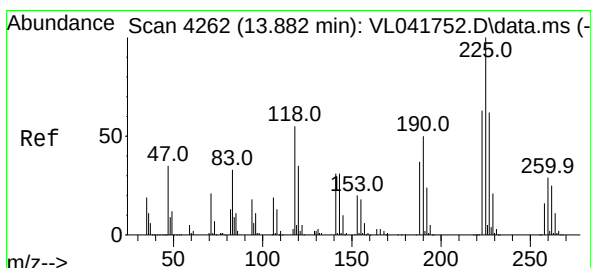
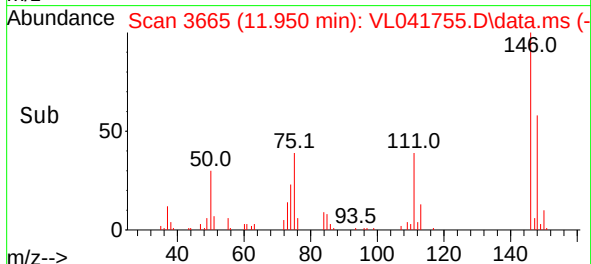
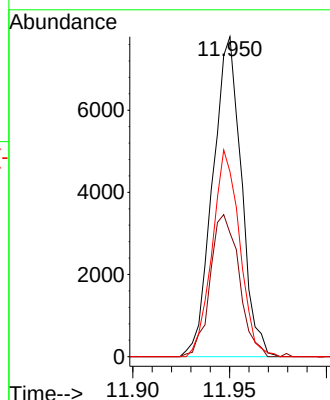
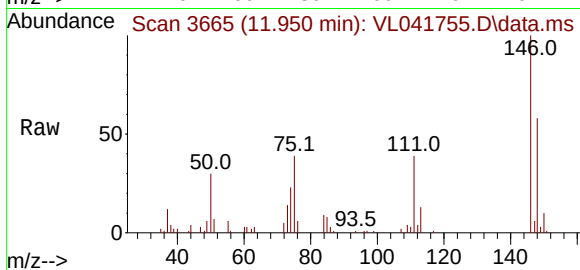
ClientSampleId :

VSTDICC0.5

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 799       |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 45.2  | 24.8 74.3 |
| 148         | 62.0  | 31.8 95.4 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#78

Hexachloro-1,3-Butadiene

Concen: 0.565 ppbv

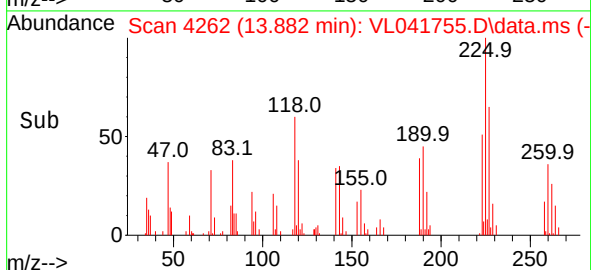
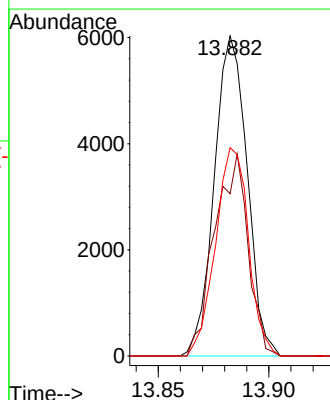
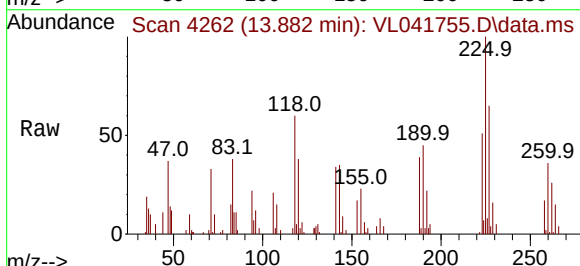
RT: 13.882 min Scan# 4262

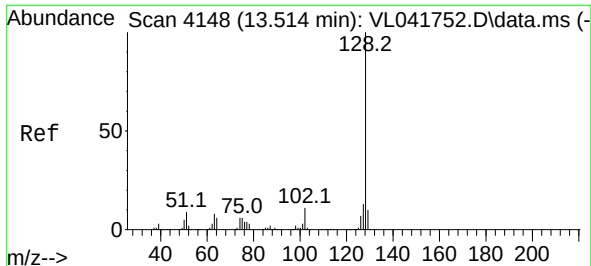
Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

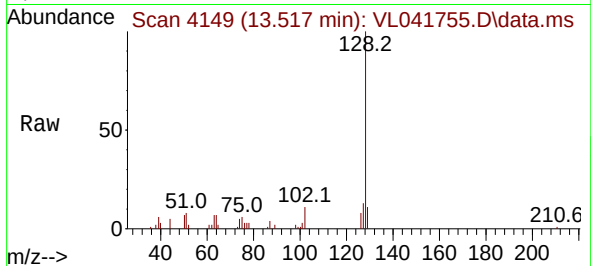
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:225 | Resp: | 6232      |
| Ion Ratio   | Lower | Upper     |
| 225         | 100   |           |
| 223         | 64.1  | 50.5 75.7 |
| 227         | 65.3  | 50.3 75.5 |





#79  
Naphthalene  
Concen: 0.436 ppbv  
RT: 13.517 min Scan# 4148  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

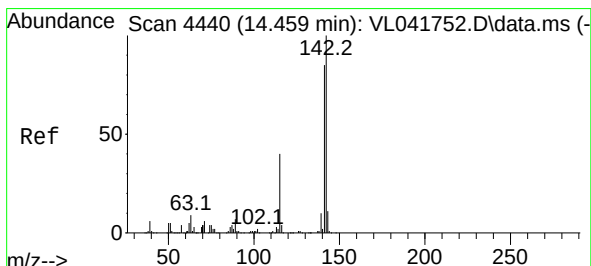
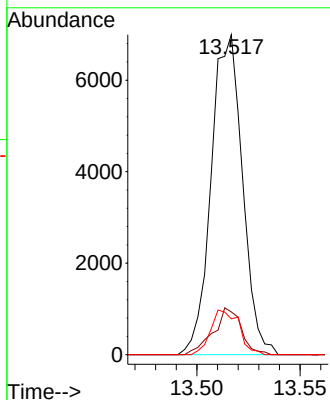
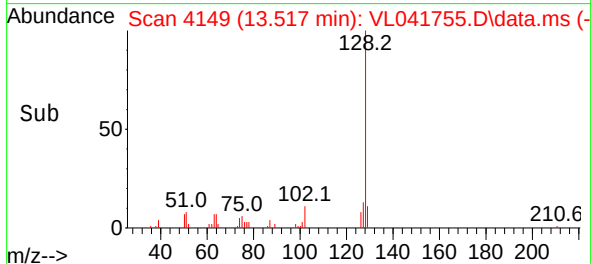
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5



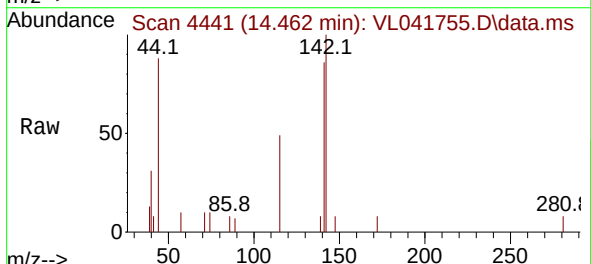
Tgt Ion:128 Resp: 7360  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.7 16.1  
129 11.2 8.2 12.4

Manual Integrations  
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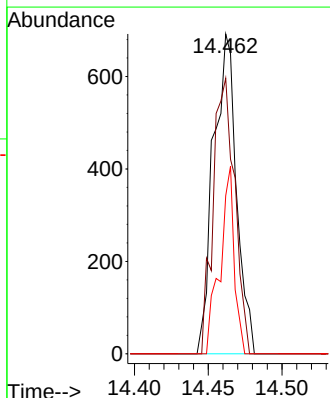
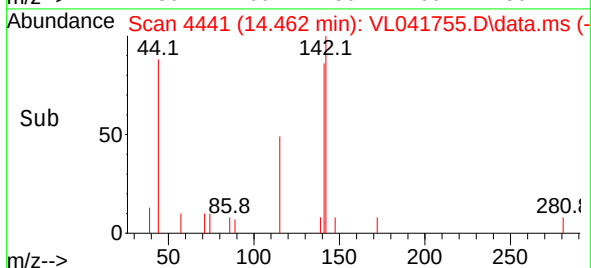
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

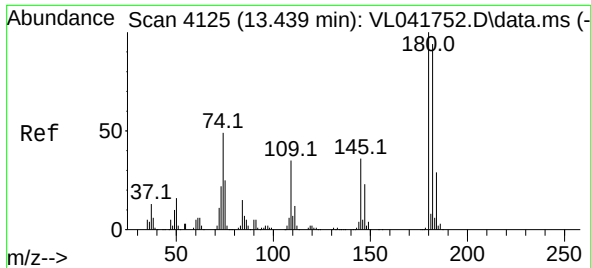


#80  
Naphthalene,2-methyl-  
Concen: 0.143 ppbv  
RT: 14.462 min Scan# 4441  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05



Tgt Ion:142 Resp: 748  
Ion Ratio Lower Upper  
142 100  
141 80.9 68.4 102.6  
115 36.4 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 0.460 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.5

Tgt Ion:180 Resp: 4248

Ion Ratio Lower Upper

180 100

182 104.5 77.0 115.6

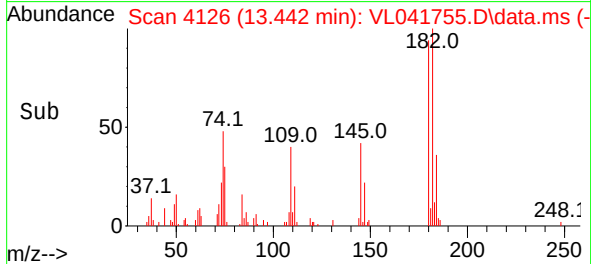
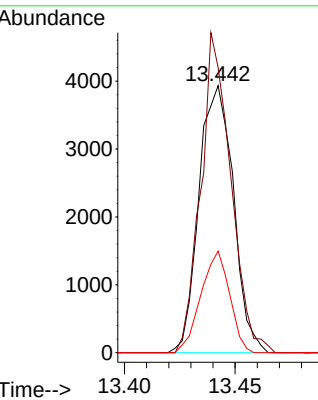
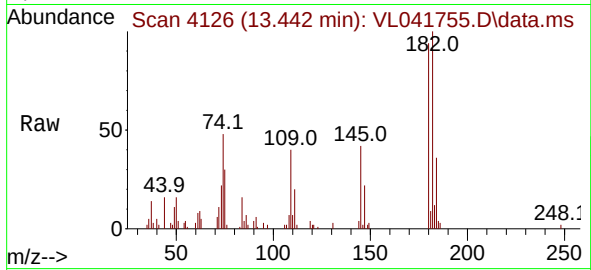
184 31.7 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041756.D  
Acq On : 16 Dec 2024 15:37  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Quant Time: Dec 19 06:15:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 2.790  | 49    | 65926    | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 3.962  | 114   | 177964   | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 8.885  | 117   | 158649   | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 10.380 | 95    | 131540   | 9.950    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 99.500%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 5) Vinyl Chloride             | 1.580  | 62    | 444      | 0.096    | ppbv # | 78       |
| 32) 1,1,1-Trichloroethane     | 3.370  | 97    | 1393     | 0.101    | ppbv   | 97       |
| 35) Carbon Tetrachloride      | 3.771  | 117   | 1170     | 0.093    | ppbv # | 84       |
| 38) Trichloroethene           | 4.548  | 130   | 835m     | 0.108    | ppbv   |          |
| 52) Tetrachloroethene         | 8.228  | 164   | 593m     | 0.087    | ppbv   |          |
| 54) 1,2-Dibromoethane         | 7.658  | 107   | 1005m    | 0.105    | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83    | 1485m    | 0.103    | ppbv   |          |
| 79) Naphthalene               | 13.523 | 128   | 1196     | 0.071    | ppbv # | 90       |

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

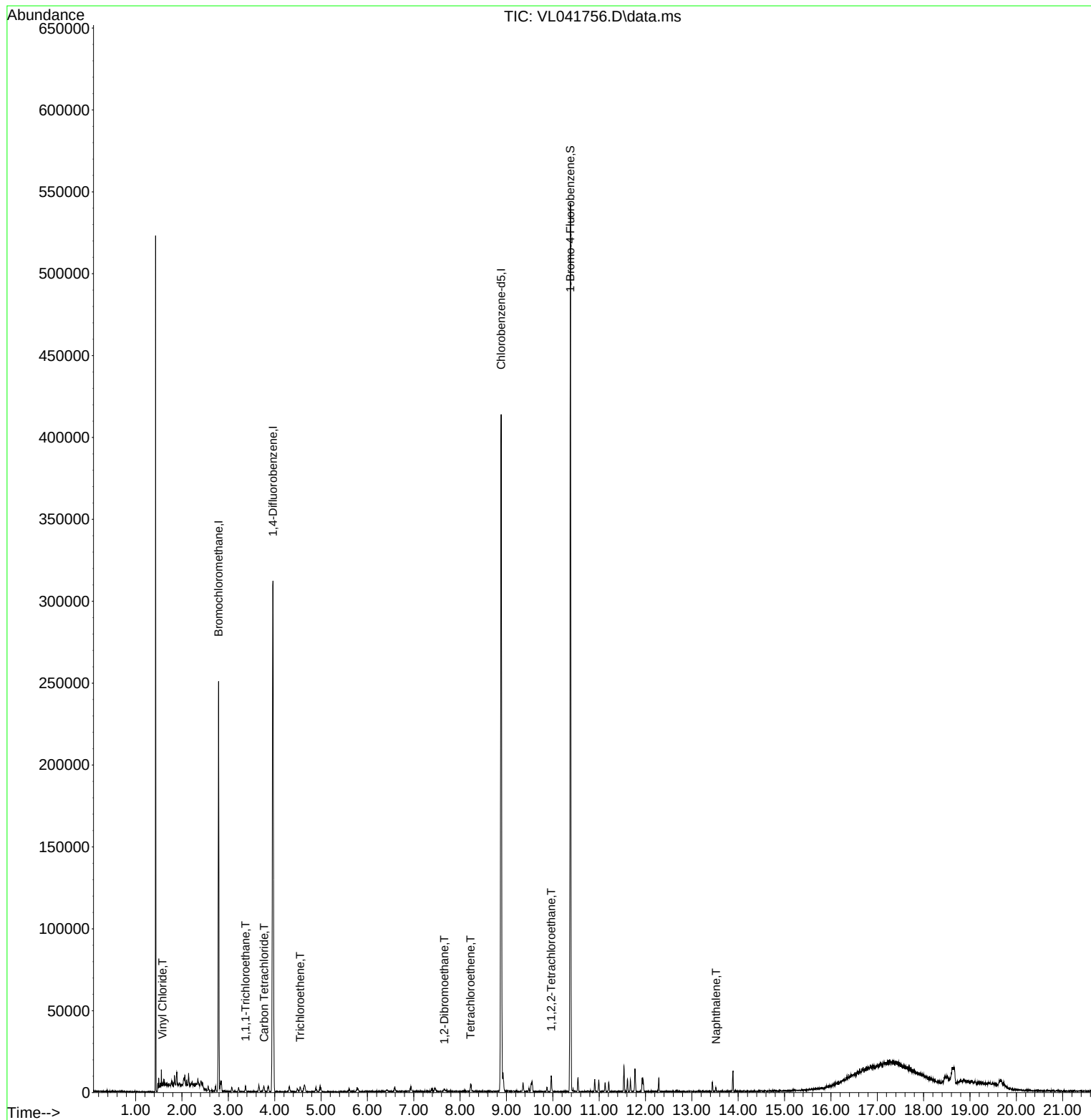
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041756.D  
Acq On : 16 Dec 2024 15:37  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

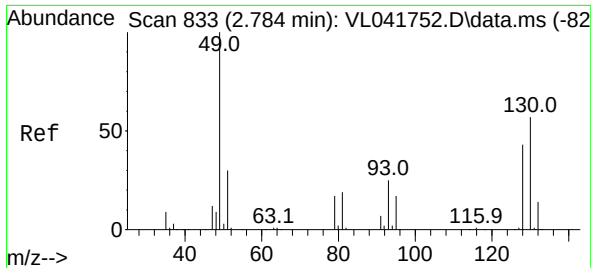
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Quant Time: Dec 19 06:15:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024





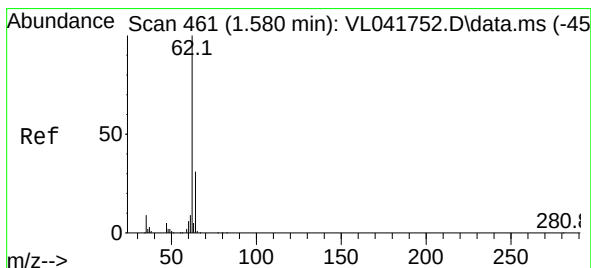
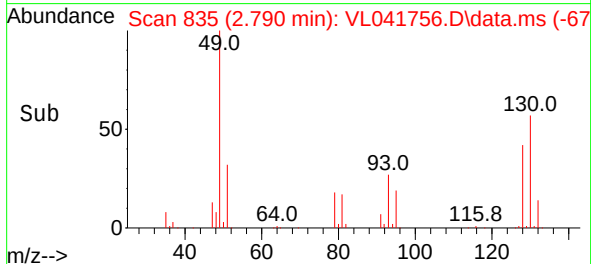
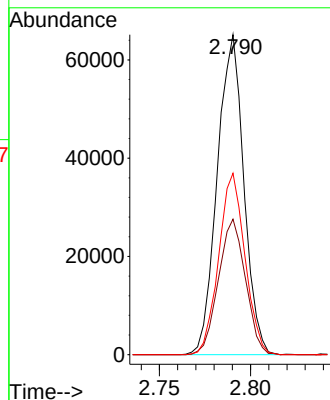
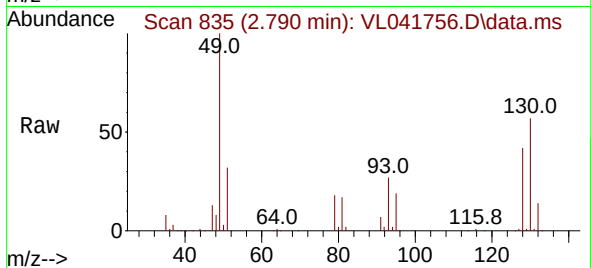
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.790 min Scan# 833  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.1

Tgt Ion: 49 Resp: 65920  
Ion Ratio Lower Upper  
49 100  
128 43.1 21.6 64.6  
130 55.9 28.3 85.0

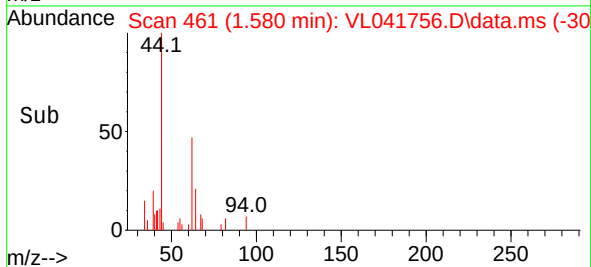
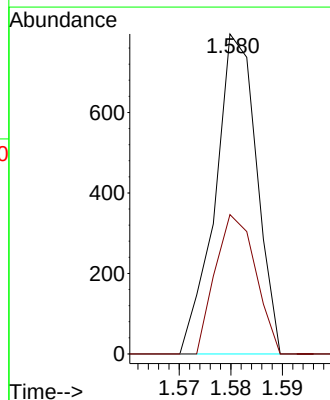
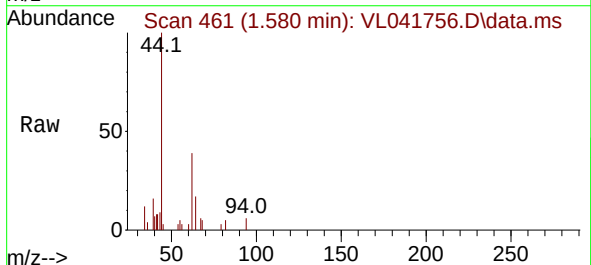
Manual Integrations  
APPROVED

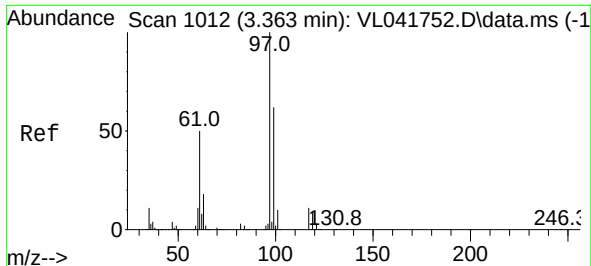
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#5  
Vinyl Chloride  
Concen: 0.096 ppbv  
RT: 1.580 min Scan# 461  
Delta R.T. -0.000 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 62 Resp: 444  
Ion Ratio Lower Upper  
62 100  
64 43.5 25.1 37.7#





#32

1,1,1-Trichloroethane

Concen: 0.101 ppbv

RT: 3.370 min Scan# 110

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

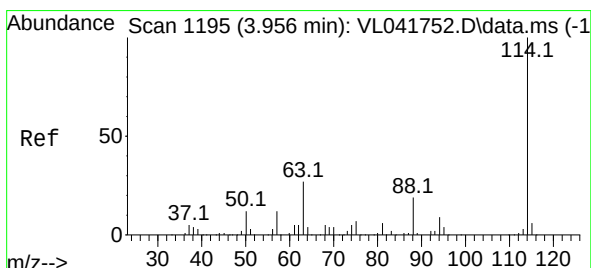
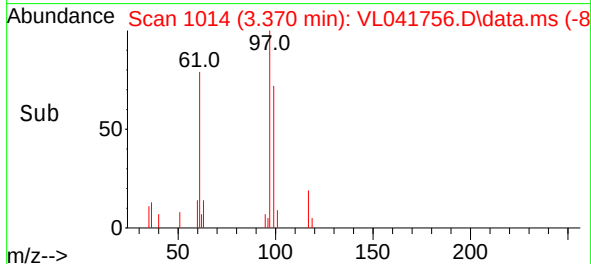
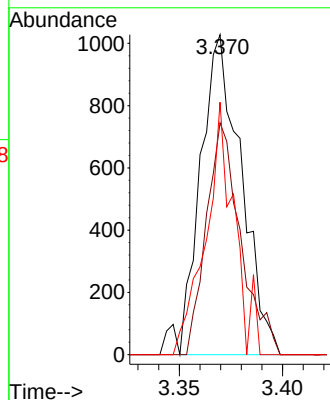
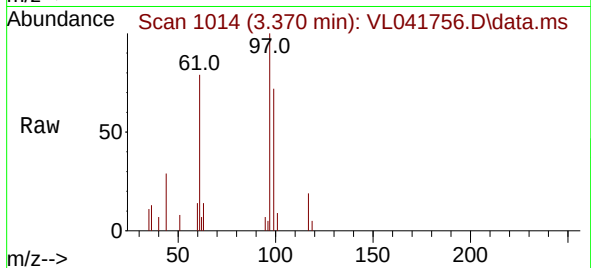
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 139   |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 99 61.9     | 51.0 76.4   |
| 61 55.9     | 42.2 63.2   |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

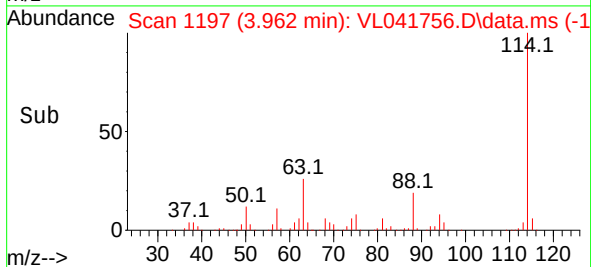
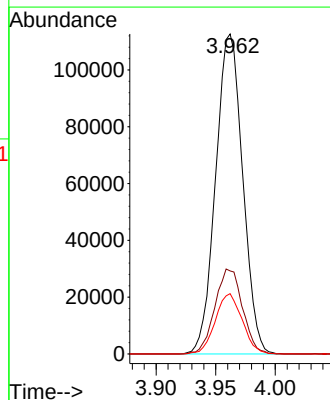
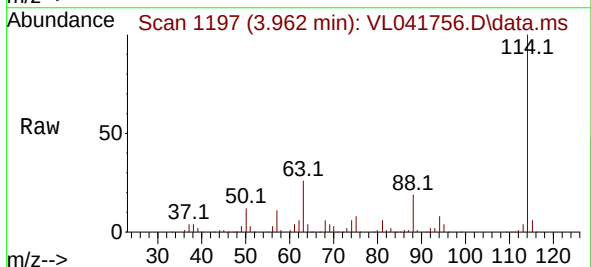
RT: 3.962 min Scan# 1197

Delta R.T. 0.006 min

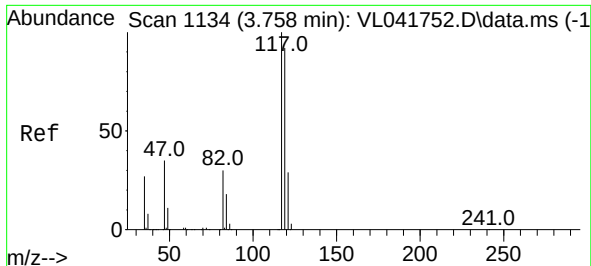
Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:114 | Resp: | 177964 |
| Ion | Ratio   | Lower | Upper  |
| 114 | 100     |       |        |
| 63  | 27.0    | 21.8  | 32.8   |
| 88  | 18.7    | 14.8  | 22.2   |

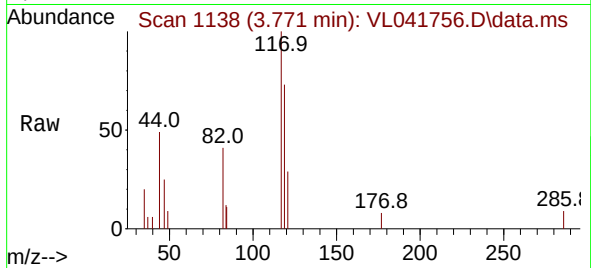






#35  
Carbon Tetrachloride  
Concen: 0.093 ppbv  
RT: 3.771 min Scan# 1138  
Delta R.T. 0.013 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

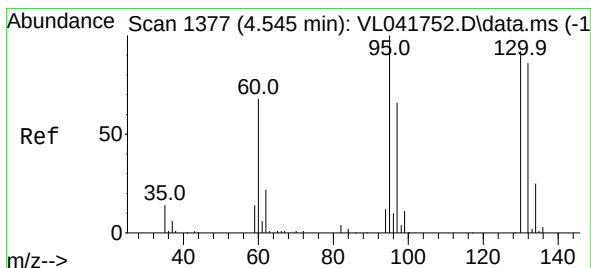
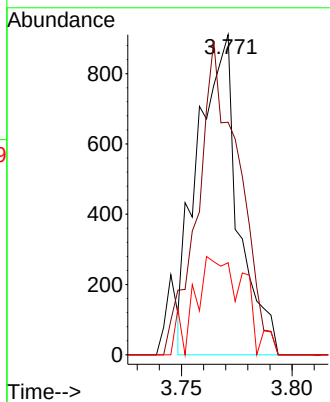
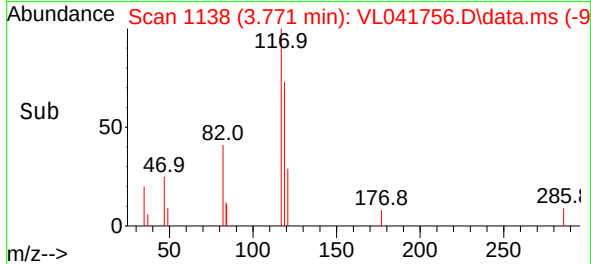
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.1



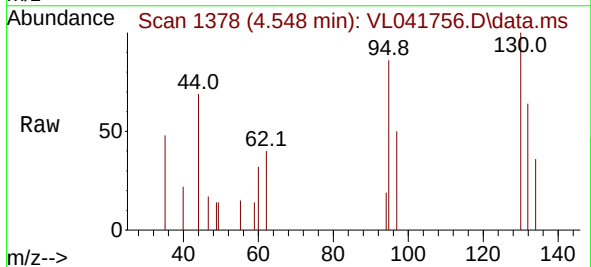
Tgt Ion:117 Resp: 1170  
Ion Ratio Lower Upper  
117 100  
119 72.7 73.7 110.5#  
121 28.8 23.0 34.4

Manual Integrations  
APPROVED

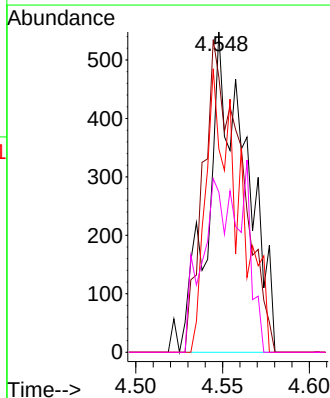
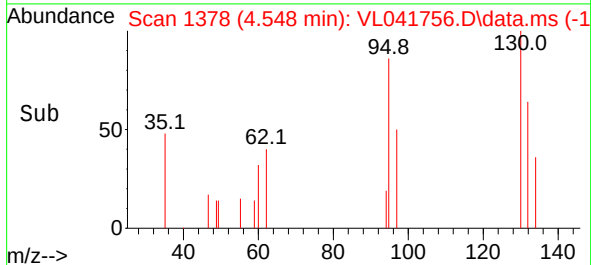
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

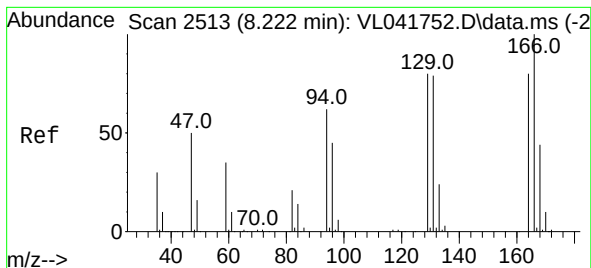


#38  
Trichloroethene  
Concen: 0.108 ppbv m  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37



Tgt Ion:130 Resp: 835  
Ion Ratio Lower Upper  
130 100  
95 85.9 87.0 130.6#  
132 63.5 75.0 112.6#  
97 50.0 57.2 85.8#





#52

Tetrachloroethene

Concen: 0.087 ppbv m

RT: 8.228 min Scan# 2513

Delta R.T. 0.006 min

Lab File: VL041756.D

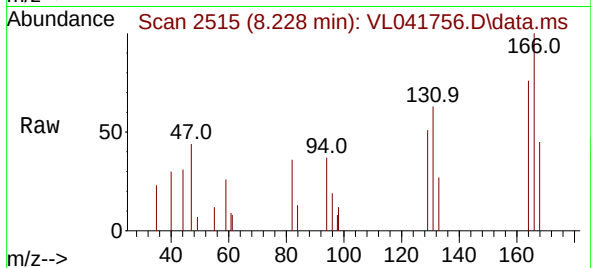
Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.1



Tgt Ion:164 Resp: 593

Ion Ratio Lower Upper

164 100

166 131.2 99.8 149.6

129 67.5 79.6 119.4

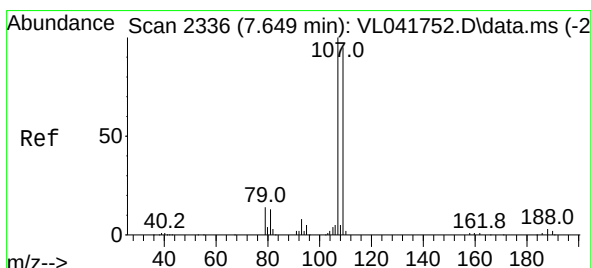
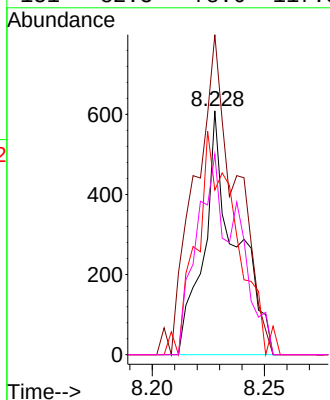
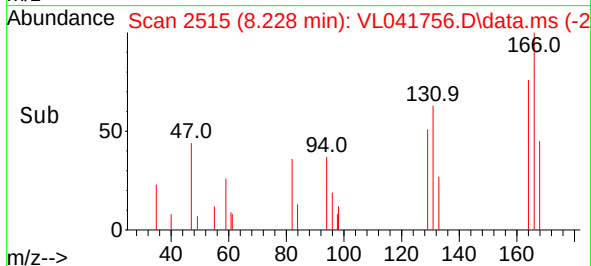
131 82.3 78.6 117.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#54

1,2-Dibromoethane

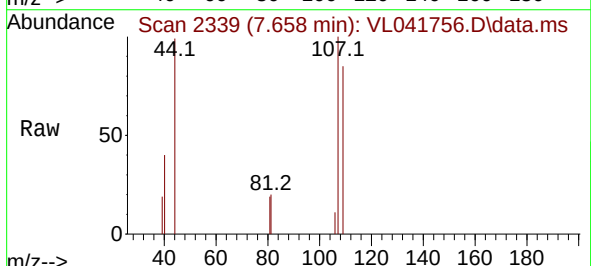
Concen: 0.105 ppbv m

RT: 7.658 min Scan# 2339

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

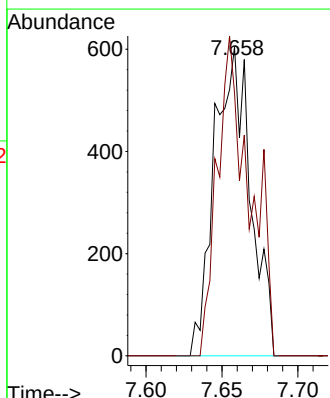
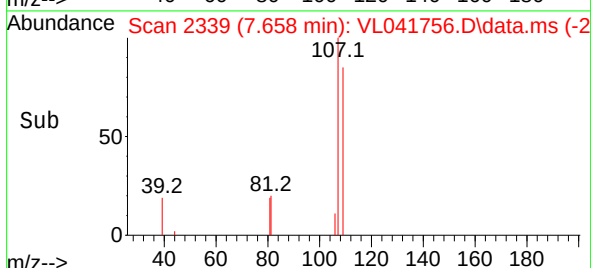


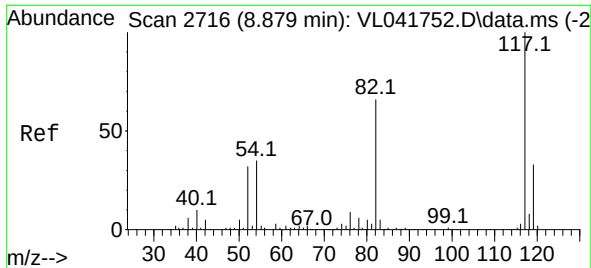
Tgt Ion:107 Resp: 1005

Ion Ratio Lower Upper

107 100

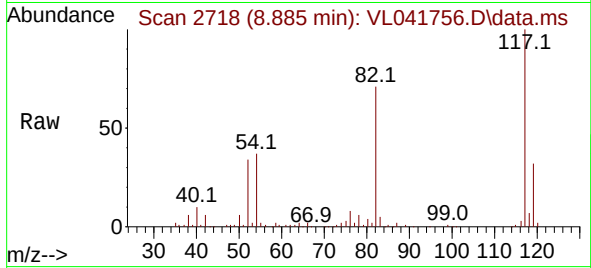
109 85.1 75.9 113.9





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.885 min Scan# 2716  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

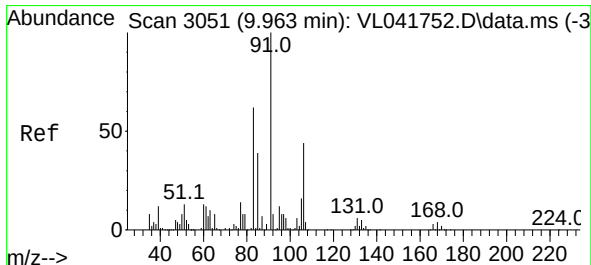
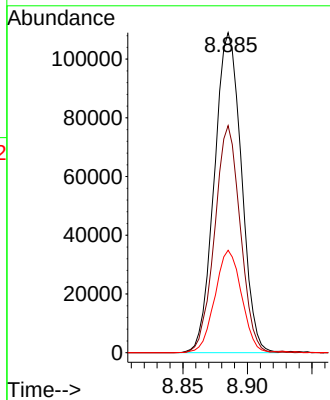
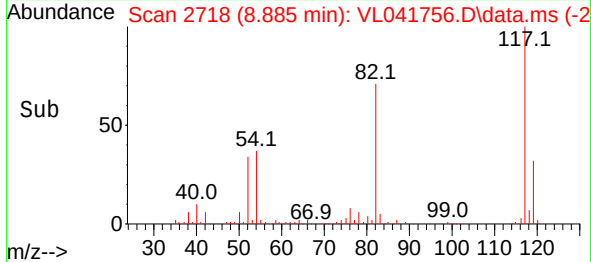
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1



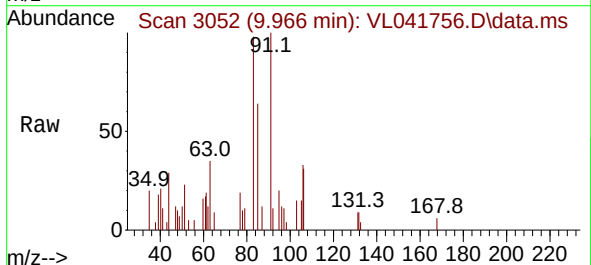
Tgt Ion:117 Resp: 158649  
Ion Ratio Lower Upper  
117 100  
82 67.4 53.8 80.8  
119 31.9 26.7 40.1

Manual Integrations  
APPROVED

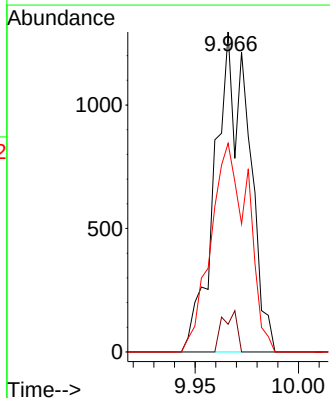
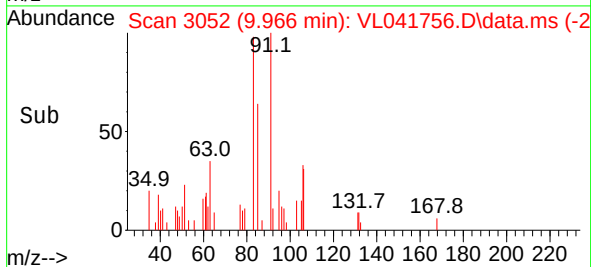
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

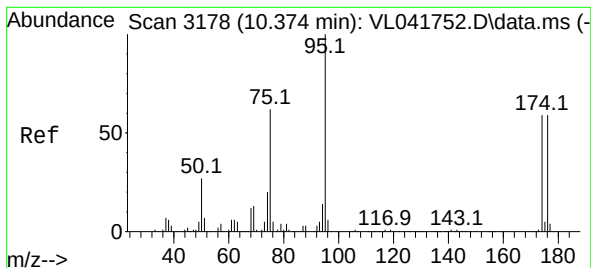


#63  
1,1,2,2-Tetrachloroethane  
Concen: 0.103 ppbv m  
RT: 9.966 min Scan# 3052  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37



Tgt Ion: 83 Resp: 1485  
Ion Ratio Lower Upper  
83 100  
131 0.0 4.9 14.7#  
85 0.0 32.0 96.2#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.950 ppbv

RT: 10.380 min Scan# 3178

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

Tgt Ion: 95 Resp: 131540

Ion Ratio Lower Upper

95 100

174 60.6 47.6 71.4

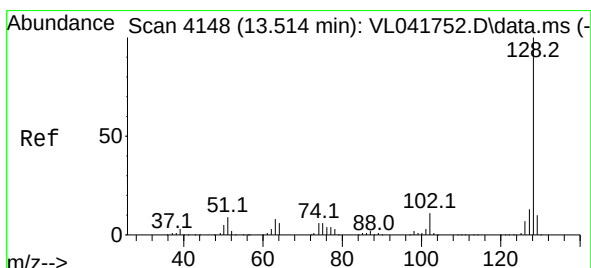
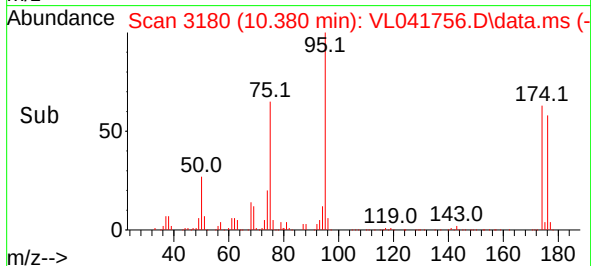
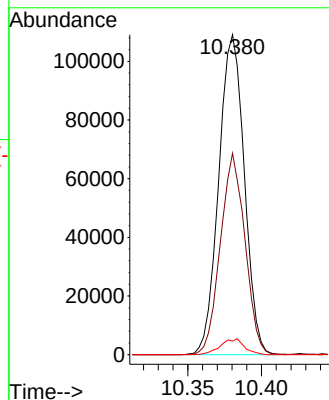
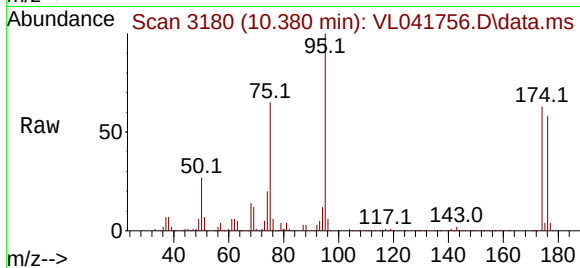
175 4.7 3.7 5.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#79

Naphthalene

Concen: 0.071 ppbv

RT: 13.523 min Scan# 4151

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

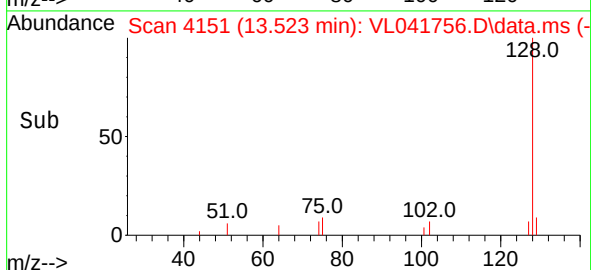
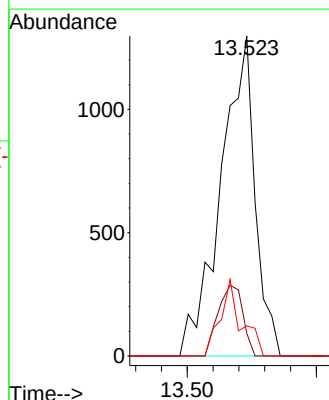
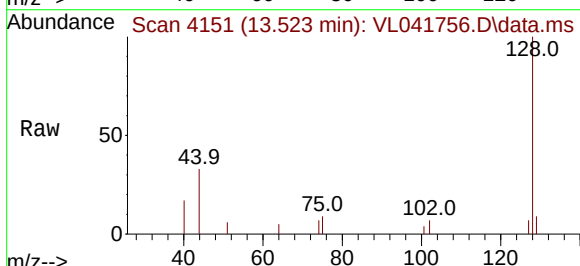
Tgt Ion:128 Resp: 1196

Ion Ratio Lower Upper

128 100

127 7.1 10.7 16.1#

129 9.4 8.2 12.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041757.D  
Acq On : 16 Dec 2024 16:08  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Dec 19 06:15:54 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 2.787  | 49    | 64158    | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 3.958  | 114   | 174825   | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 8.885  | 117   | 154998   | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 10.377 | 95    | 128167   | 9.923    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 99.200%  |
| Target Compounds              |        |       |          |          |        |          |
| 5) Vinyl Chloride             | 1.580  | 62    | 175      | 0.039    | ppbv # | 84       |
| 32) 1,1,1-Trichloroethane     | 3.369  | 97    | 427m     | 0.032    | ppbv   |          |
| 35) Carbon Tetrachloride      | 3.768  | 117   | 352m     | 0.028    | ppbv   |          |
| 38) Trichloroethene           | 4.551  | 130   | 289m     | 0.038    | ppbv   |          |
| 52) Tetrachloroethene         | 8.234  | 164   | 291m     | 0.043    | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 9.969  | 83    | 455      | 0.032    | ppbv # | 96       |

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

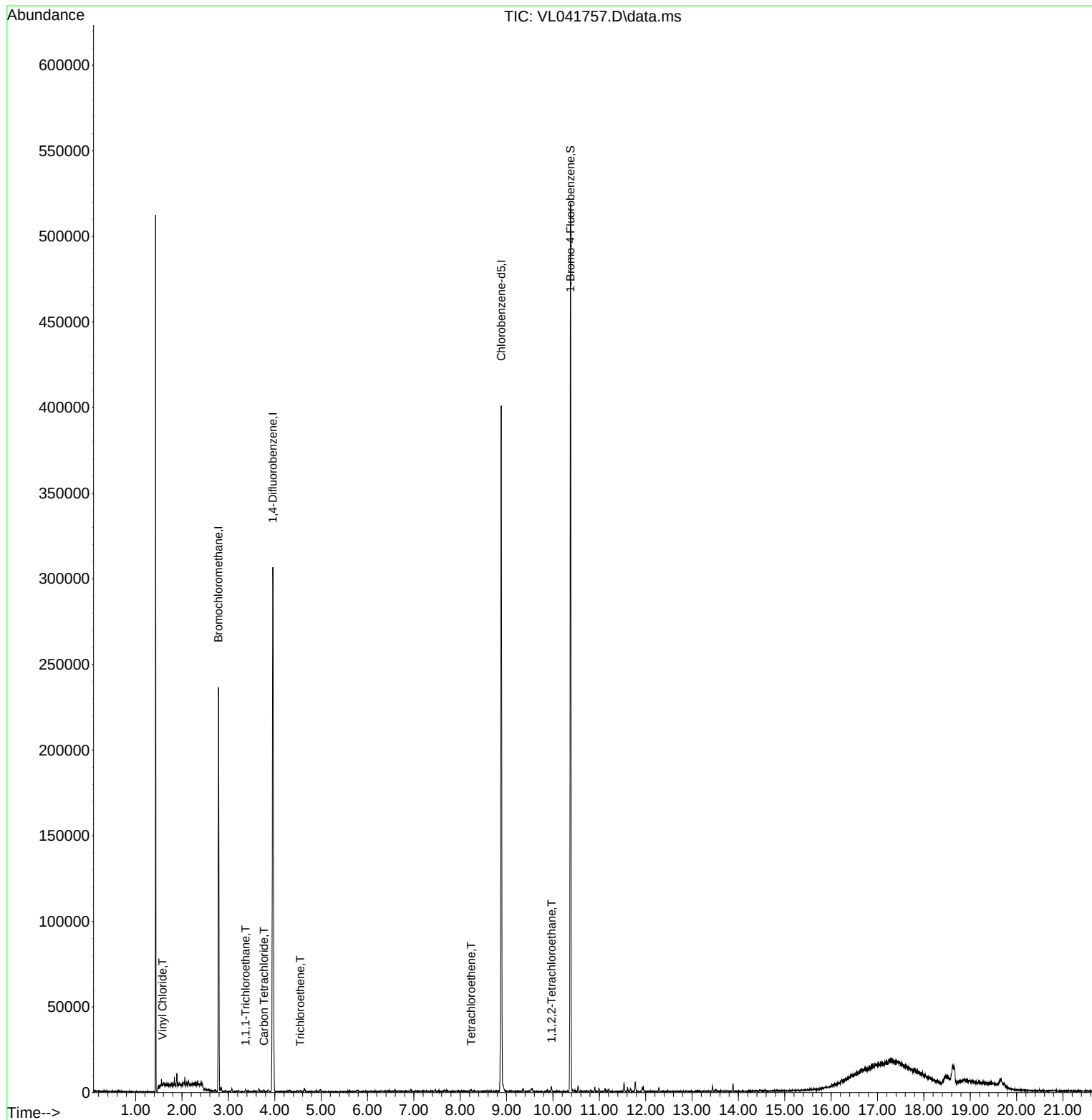
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041757.D  
Acq On : 16 Dec 2024 16:08  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

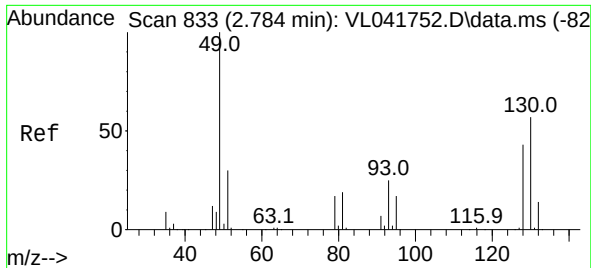
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Dec 19 06:15:54 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024





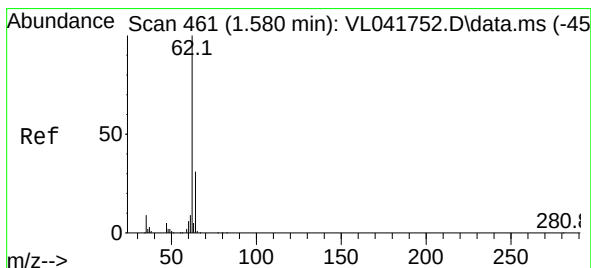
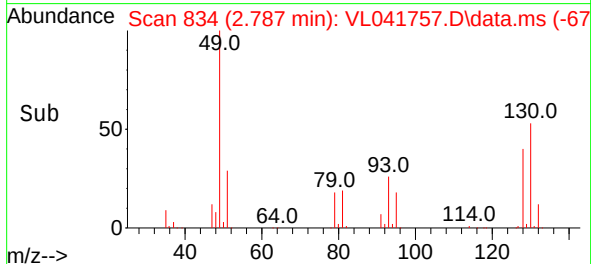
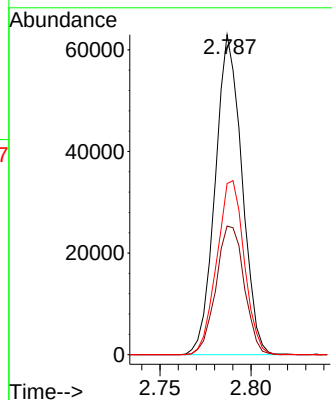
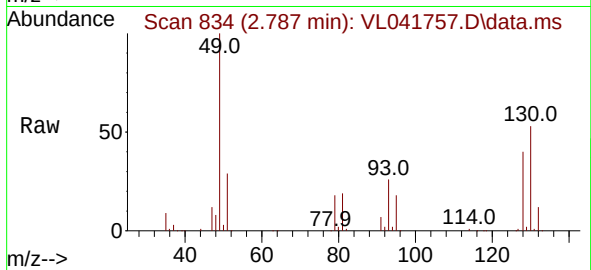
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 833  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Tgt Ion: 49 Resp: 64158  
Ion Ratio Lower Upper  
49 100  
128 42.4 21.6 64.6  
130 56.0 28.3 85.0

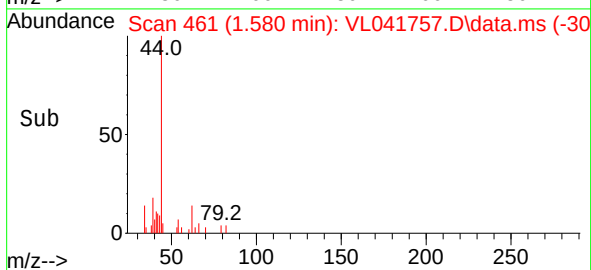
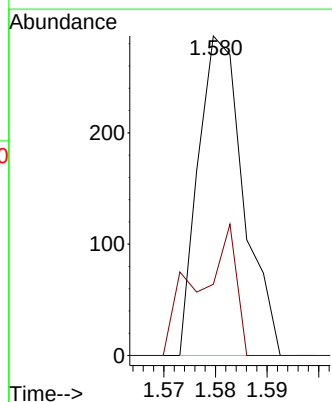
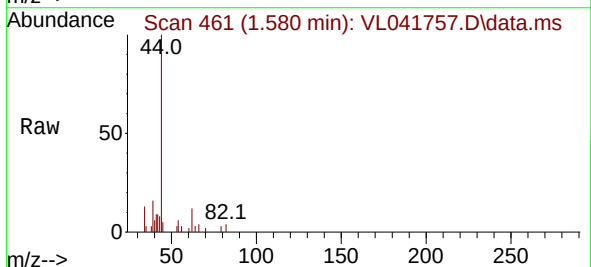
Manual Integrations  
APPROVED

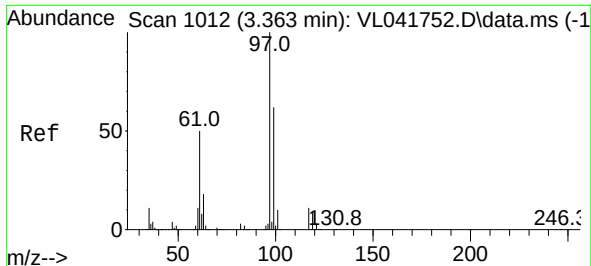
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#5  
Vinyl Chloride  
Concen: 0.039 ppbv  
RT: 1.580 min Scan# 461  
Delta R.T. -0.000 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 62 Resp: 175  
Ion Ratio Lower Upper  
62 100  
64 22.3 25.1 37.7#





#32

1,1,1-Trichloroethane

Concen: 0.032 ppbv m

RT: 3.369 min Scan# 1012

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

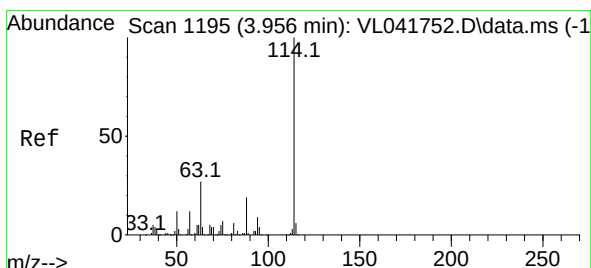
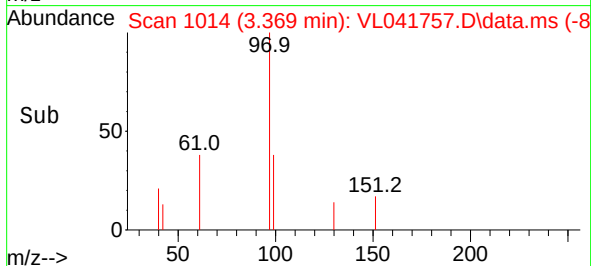
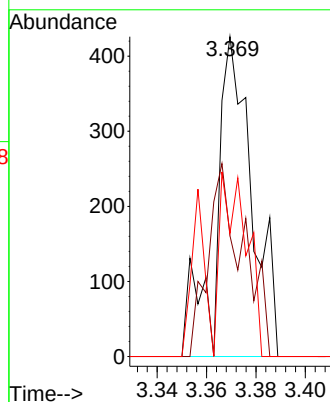
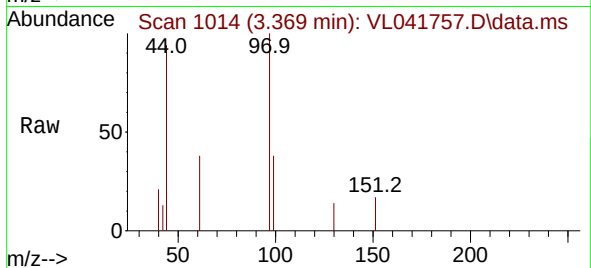
VSTDIC0.03

|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 42    |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 99 59.5     | 51.0 76.4   |
| 61 62.1     | 42.2 63.2   |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

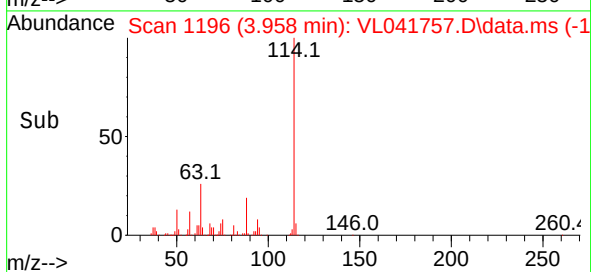
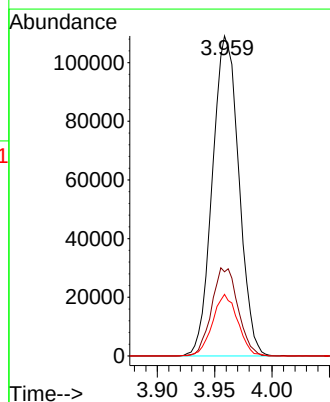
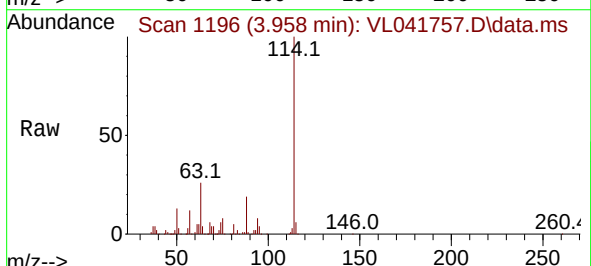
RT: 3.958 min Scan# 1196

Delta R.T. 0.003 min

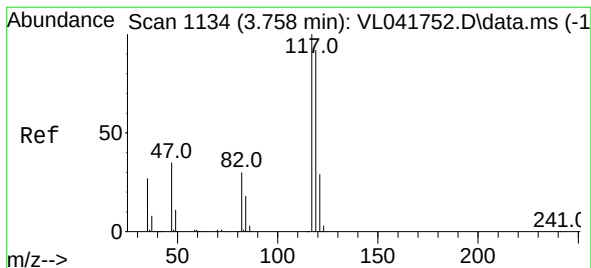
Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:114 | Resp: | 174825 |
| Ion | Ratio   | Lower | Upper  |
| 114 | 100     |       |        |
| 63  | 27.5    | 21.8  | 32.8   |
| 88  | 18.4    | 14.8  | 22.2   |







#35

Carbon Tetrachloride

Concen: 0.028 ppbv m

RT: 3.768 min Scan# 1134

Delta R.T. 0.009 min

Lab File: VL041757.D

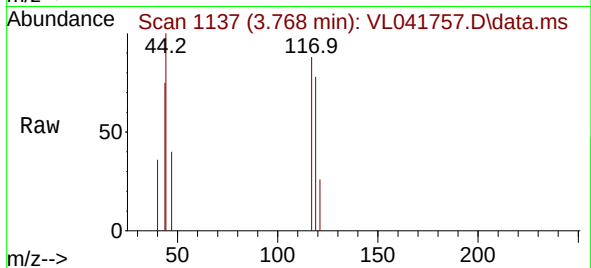
Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.03



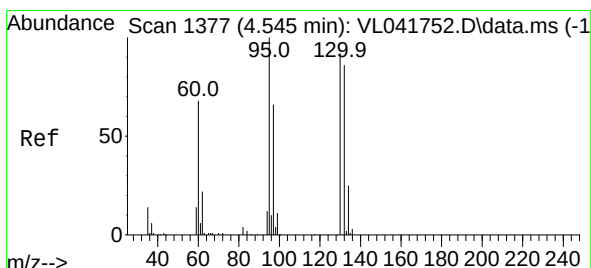
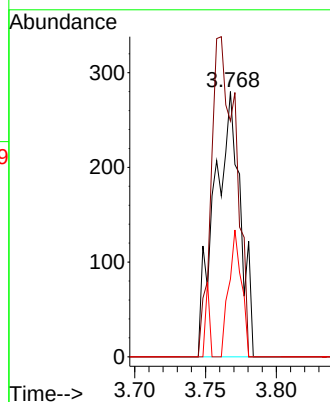
Tgt Ion:117 Resp: 352

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 119 | 88.9  | 73.7  | 110.5 |
| 121 | 29.3  | 23.0  | 34.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38

Trichloroethene

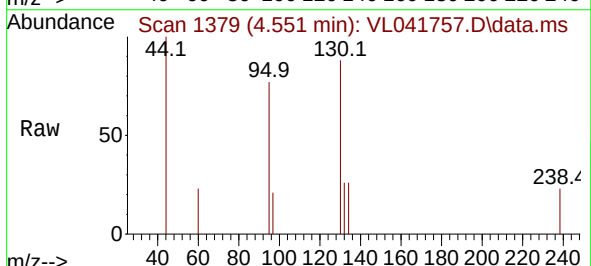
Concen: 0.038 ppbv m

RT: 4.551 min Scan# 1379

Delta R.T. 0.006 min

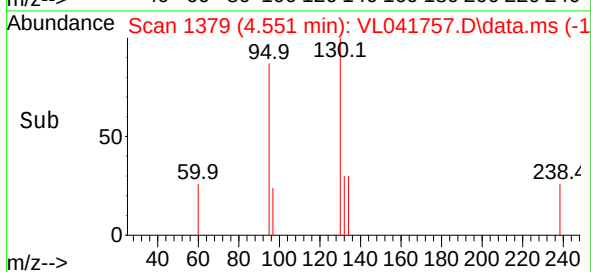
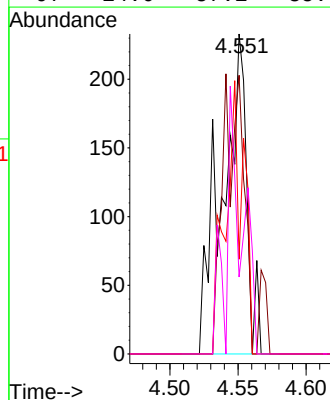
Lab File: VL041757.D

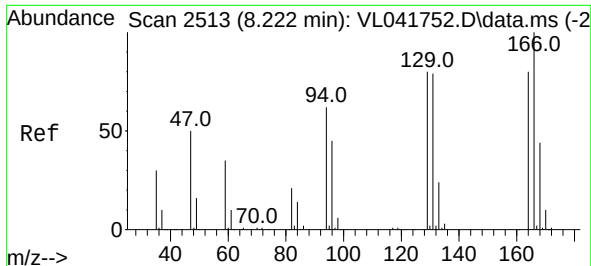
Acq: 16 Dec 2024 16:08



Tgt Ion:130 Resp: 289

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 130 | 100   |       |        |
| 95  | 87.1  | 87.0  | 130.6  |
| 132 | 29.6  | 75.0  | 112.6# |
| 97  | 24.0  | 57.2  | 85.8#  |





#52

Tetrachloroethene

Concen: 0.043 ppbv

RT: 8.234 min Scan# 2513

Delta R.T. 0.012 min

Lab File: VL041757.D

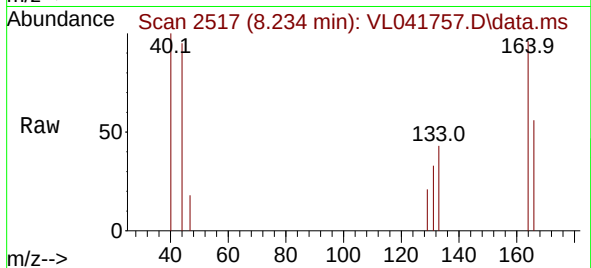
Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

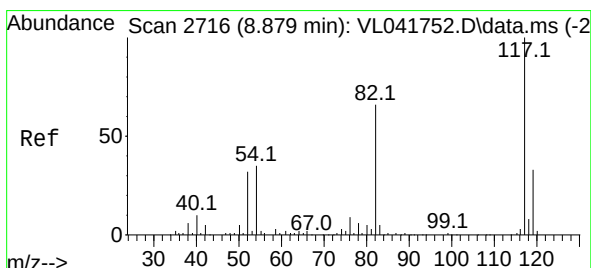
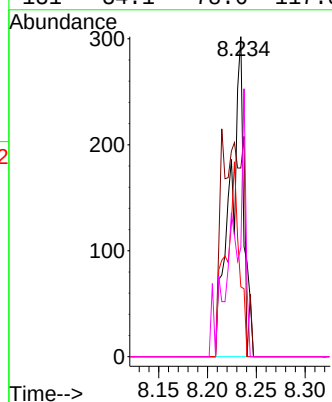
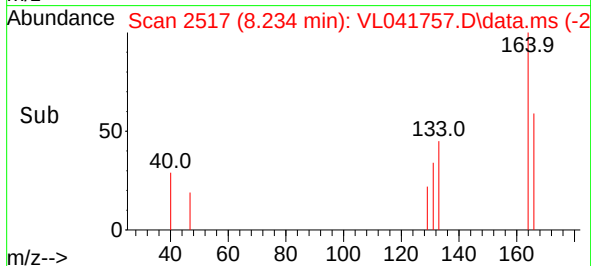


|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:164 | Resp: | 291         |
| Ion         | Ratio | Lower Upper |
| 164         | 100   |             |
| 166         | 58.9  | 99.8 149.6  |
| 129         | 21.9  | 79.6 119.4  |
| 131         | 34.1  | 78.6 117.8  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

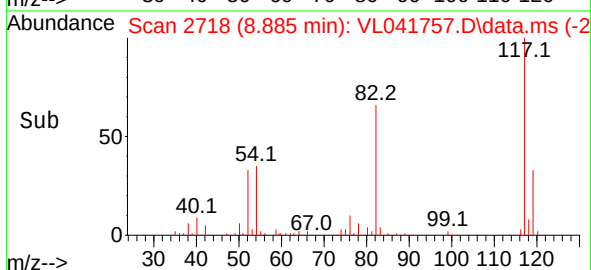
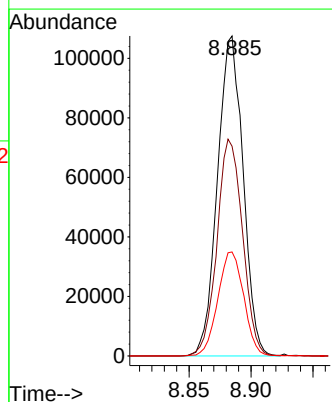
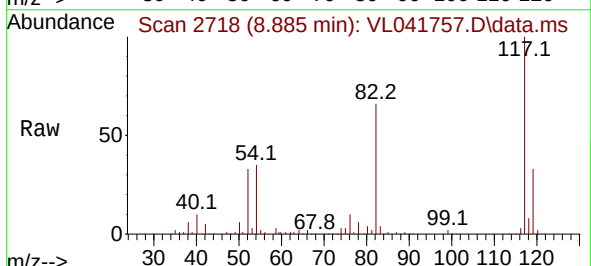
RT: 8.885 min Scan# 2718

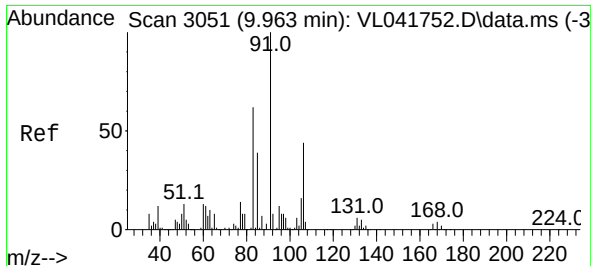
Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

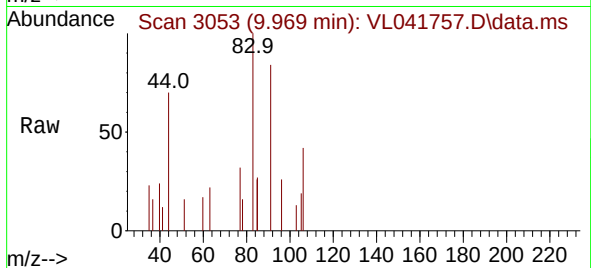
|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:117 | Resp: | 154998      |
| Ion         | Ratio | Lower Upper |
| 117         | 100   |             |
| 82          | 67.6  | 53.8 80.8   |
| 119         | 32.9  | 26.7 40.1   |





#63  
1,1,2,2-Tetrachloroethane  
Concen: 0.032 ppbv  
RT: 9.969 min Scan# 3051  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

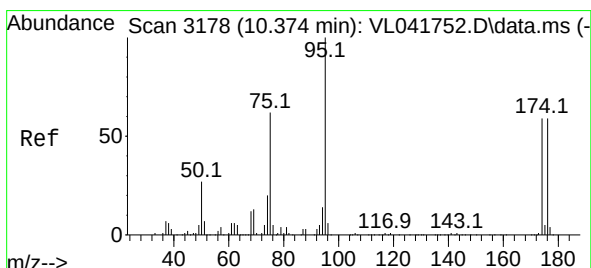
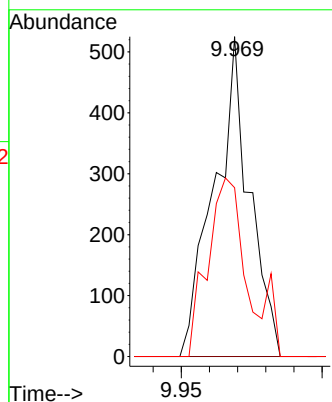
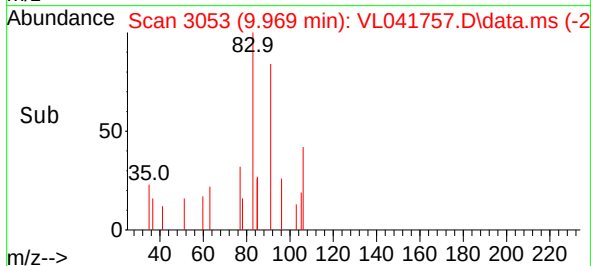
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03



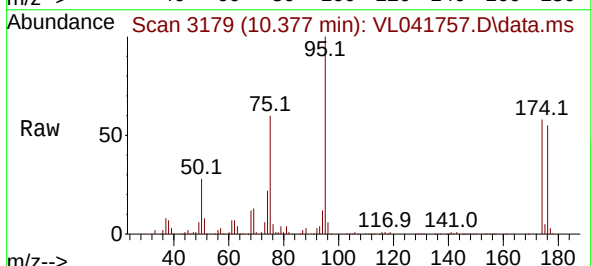
Tgt Ion: 83 Resp: 45  
Ion Ratio Lower Upper  
83 100  
131 0.0 4.9 14.7  
85 63.5 32.0 96.2

Manual Integrations  
APPROVED

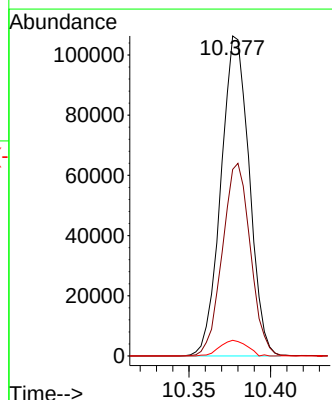
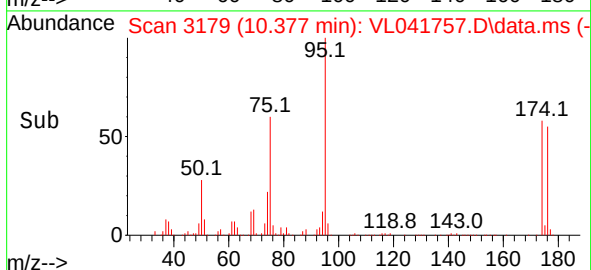
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.923 ppbv  
RT: 10.377 min Scan# 3179  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08



Tgt Ion: 95 Resp: 128167  
Ion Ratio Lower Upper  
95 100  
174 59.8 47.6 71.4  
175 4.7 3.7 5.5



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041758.D  
 Acq On : 16 Dec 2024 16:41  
 Operator : SY/MD  
 Sample : VSTDICC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC015

Quant Time: Dec 19 06:16:40 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 65186    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.955 | 114  | 176856   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.878 | 117  | 160457   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 133687 9.998 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.000%

#### Target Compounds

|                               |       |     |        |        | Qvalue |     |
|-------------------------------|-------|-----|--------|--------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 152683 | 13.163 | ppbv   | 95  |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 152455 | 14.341 | ppbv   | 98  |
| 4) Chloromethane              | 1.531 | 50  | 63517  | 13.996 | ppbv   | 98  |
| 5) Vinyl Chloride             | 1.577 | 62  | 62250  | 13.615 | ppbv   | 99  |
| 6) Bromomethane               | 1.667 | 94  | 30345  | 14.064 | ppbv   | 96  |
| 7) Chloroethane               | 1.703 | 64  | 25650  | 14.442 | ppbv   | 95  |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 148190 | 14.274 | ppbv   | 99  |
| 9) Propene                    | 1.483 | 41  | 61515  | 13.351 | ppbv   | 99  |
| 10) Heptane                   | 4.978 | 43  | 168804 | 14.263 | ppbv   | 100 |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 177984 | 14.446 | ppbv   | 99  |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 135538 | 14.464 | ppbv   | 98  |
| 13) Ethanol                   | 1.719 | 45  | 3643   | 9.509  | ppbv   | 100 |
| 14) Bromoethene               | 1.780 | 108 | 47132  | 14.898 | ppbv   | 99  |
| 15) Acetone                   | 1.832 | 43  | 142980 | 11.273 | ppbv   | 100 |
| 16) 1,3-Butadiene             | 1.606 | 39  | 68311  | 13.678 | ppbv   | 98  |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 177908 | 14.140 | ppbv   | 99  |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 57770  | 14.705 | ppbv   | 99  |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 82211  | 10.802 | ppbv   | 99  |
| 20) Methylene Chloride        | 2.059 | 84  | 48356  | 13.371 | ppbv   | 99  |
| 21) Allyl Chloride            | 2.094 | 41  | 101528 | 14.760 | ppbv   | 99  |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 65029  | 14.461 | ppbv   | 97  |
| 23) Vinyl Acetate             | 2.460 | 43  | 80795  | 14.661 | ppbv   | 98  |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 131030 | 14.394 | ppbv   | 100 |
| 25) Ethyl Acetate             | 2.832 | 43  | 341429 | 14.402 | ppbv   | 100 |
| 26) Hexane                    | 2.823 | 57  | 128657 | 14.369 | ppbv   | 99  |
| 27) Carbon Disulfide          | 2.149 | 76  | 134963 | 16.726 | ppbv   | 99  |
| 28) Methyl tert-Butyl Ether   | 2.438 | 73  | 100758 | 13.871 | ppbv   | 100 |
| 29) Chloroform                | 2.845 | 83  | 197713 | 14.489 | ppbv   | 99  |
| 30) Cyclohexane               | 3.855 | 84  | 110448 | 14.497 | ppbv   | 99  |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 132821 | 14.355 | ppbv   | 99  |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 204468 | 15.055 | ppbv   | 100 |
| 34) 2-Butanone                | 2.554 | 43  | 195439 | 13.736 | ppbv   | 99  |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 206252 | 16.428 | ppbv   | 94  |
| 36) Benzene                   | 3.654 | 78  | 259630 | 14.192 | ppbv   | 99  |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 166576 | 14.633 | ppbv   | 100 |
| 38) Trichloroethene           | 4.548 | 130 | 104184 | 13.525 | ppbv   | 95  |
| 39) 1,2-Dichloropropane       | 4.312 | 63  | 93624  | 14.150 | ppbv   | 97  |
| 40) 1,4-Dioxane               | 4.577 | 88  | 44377  | 13.730 | ppbv # | 96  |
| 41) Tetrahydrofuran           | 3.052 | 42  | 113618 | 14.254 | ppbv   | 100 |
| 42) Bromodichloromethane      | 4.486 | 83  | 211145 | 16.123 | ppbv   | 96  |
| 43) Methyl Methacrylate       | 4.878 | 69  | 107165 | 15.374 | ppbv   | 100 |
| 44) 2,2,4-Trimethylpentane    | 4.638 | 57  | 445947 | 14.274 | ppbv   | 99  |
| 45) t-1,3-Dichloropropene     | 6.409 | 75  | 115159 | 15.973 | ppbv   | 97  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041758.D  
 Acq On : 16 Dec 2024 16:41  
 Operator : SY/MD  
 Sample : VSTDICC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC015

Quant Time: Dec 19 06:16:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.600  | 75   | 143172   | 15.643 | ppbv   | 95       |
| 47) 1,1,2-Trichloroethane     | 6.580  | 97   | 98426    | 14.242 | ppbv   | 94       |
| 48) Dibromochloromethane      | 7.386  | 129  | 161661   | 17.131 | ppbv   | 100      |
| 49) Bromoform                 | 9.484  | 173  | 137786   | 17.838 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.749  | 43   | 285467   | 14.735 | ppbv   | 99       |
| 51) 2-Hexanone                | 7.435  | 43   | 232363   | 14.798 | ppbv # | 100      |
| 52) Tetrachloroethene         | 8.225  | 164  | 93120    | 13.675 | ppbv   | 98       |
| 53) Toluene                   | 6.930  | 91   | 301428   | 14.533 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 7.652  | 107  | 139889   | 14.690 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 128108   | 15.059 | ppbv   | 99       |
| 57) Chlorobenzene             | 8.924  | 112  | 227716   | 13.869 | ppbv   | 100      |
| 58) Ethyl Benzene             | 9.354  | 91   | 425852   | 14.742 | ppbv   | 99       |
| 59) m/p-Xylene                | 9.552  | 91   | 678656m  | 29.209 | ppbv   |          |
| 60) o-Xylene                  | 9.963  | 91   | 337891   | 14.506 | ppbv   | 100      |
| 61) Styrene                   | 9.869  | 104  | 165328   | 16.415 | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 506570   | 14.475 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 201057   | 13.790 | ppbv   | 100      |
| 64) n-propylbenzene           | 10.989 | 120  | 129200   | 14.602 | ppbv   | 97       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 446690   | 14.148 | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.617 | 91   | 45189    | 16.234 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 624565   | 14.295 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 528265   | 14.671 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.283 | 91   | 525377   | 15.101 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 387300   | 14.498 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 409822   | 14.934 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 350895   | 15.383 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.539 | 105  | 371476   | 15.144 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 219506   | 14.036 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 222290   | 14.388 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 205737   | 13.672 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 138481   | 12.412 | ppbv   | 100      |
| 79) Naphthalene               | 13.513 | 128  | 301006   | 17.611 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 161927   | 30.630 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 146340   | 15.669 | ppbv   | 99       |

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

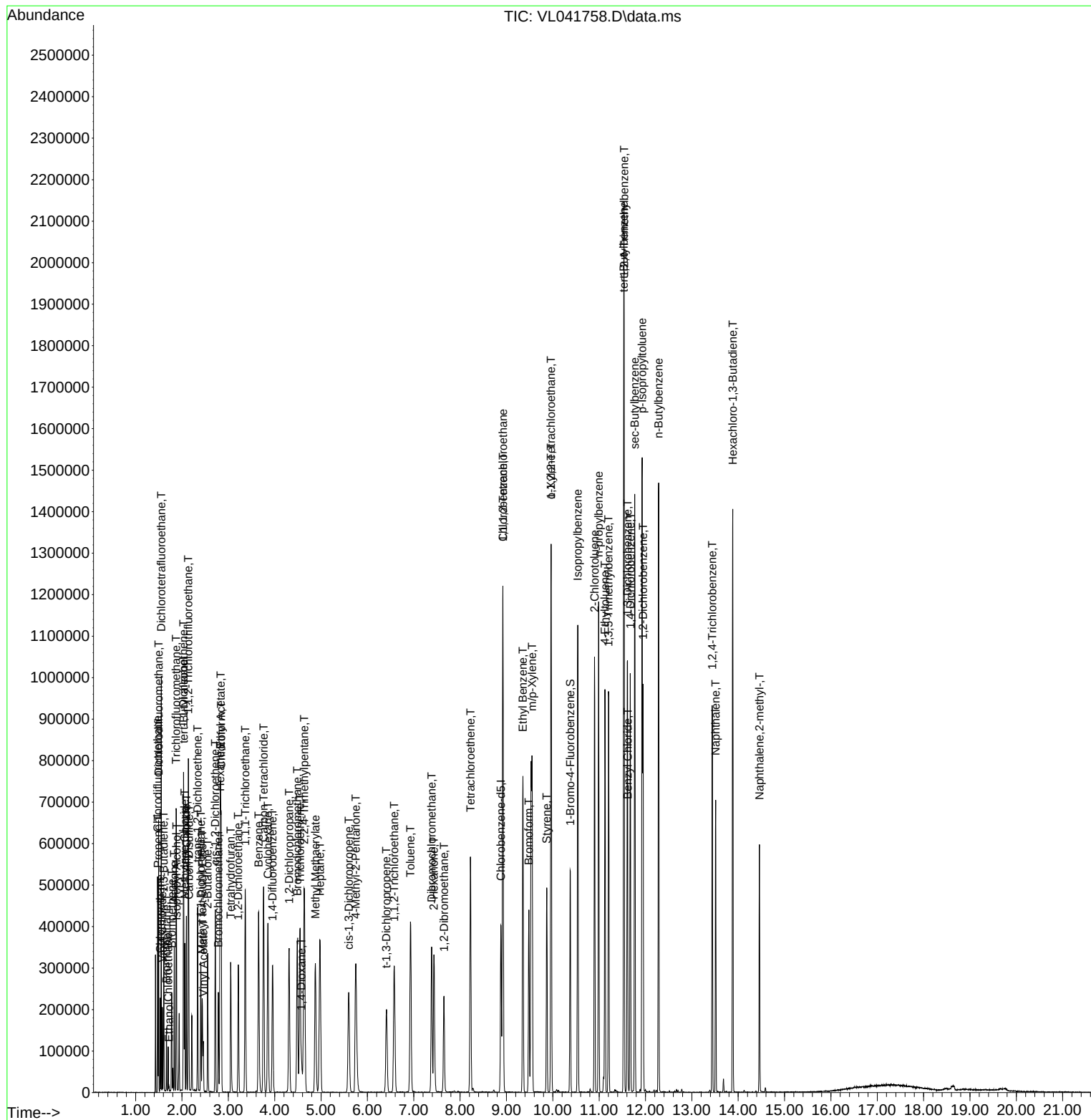
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Data File : VL041758.D  
Acq On : 16 Dec 2024 16:41  
Operator : SY/MD  
Sample : VSTDIC015  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

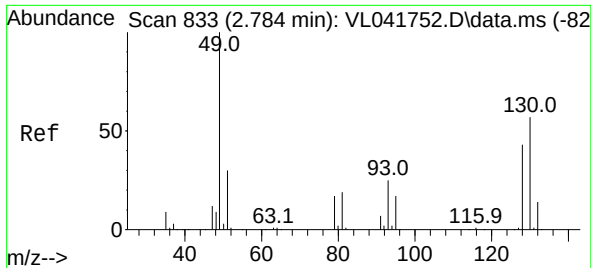
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

Quant Time: Dec 19 06:16:40 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_LFri Aug  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration





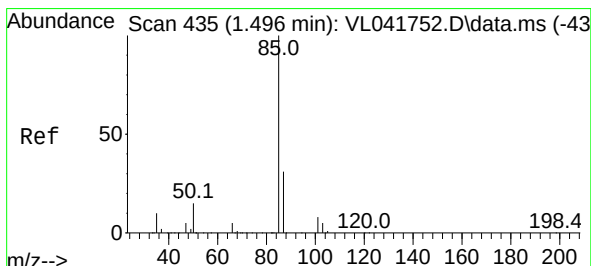
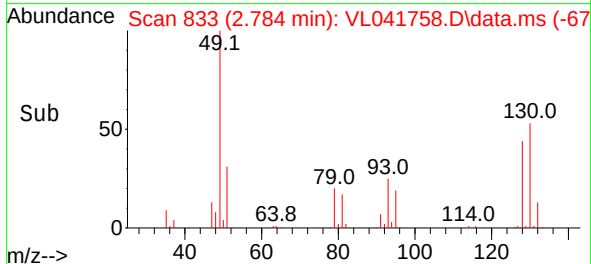
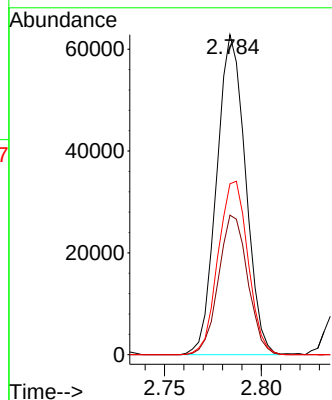
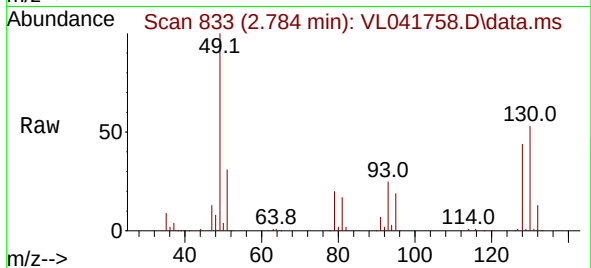
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015

Tgt Ion: 49 Resp: 65180  
Ion Ratio Lower Upper  
49 100  
128 44.0 21.6 64.6  
130 56.0 28.3 85.0

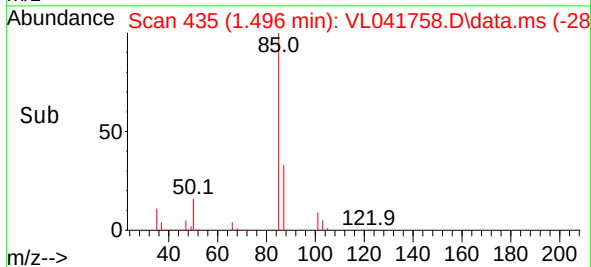
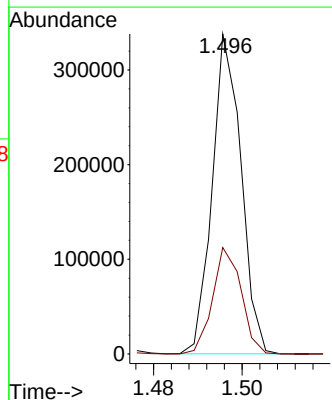
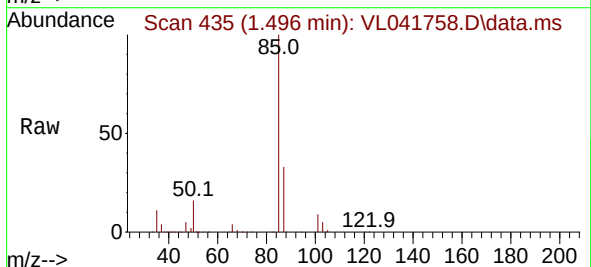
Manual Integrations  
APPROVED

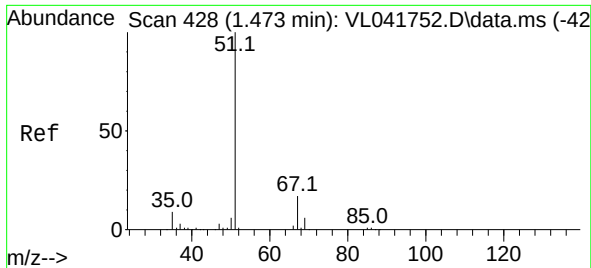
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#2  
Dichlorodifluoromethane  
Concen: 13.163 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 85 Resp: 152683  
Ion Ratio Lower Upper  
85 100  
87 33.3 24.5 36.7





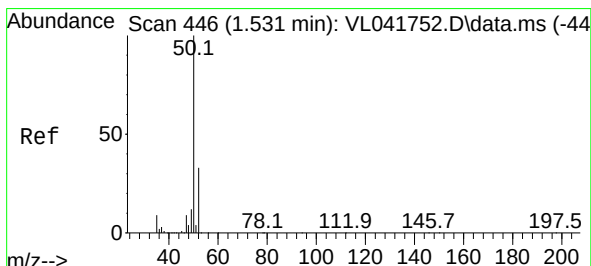
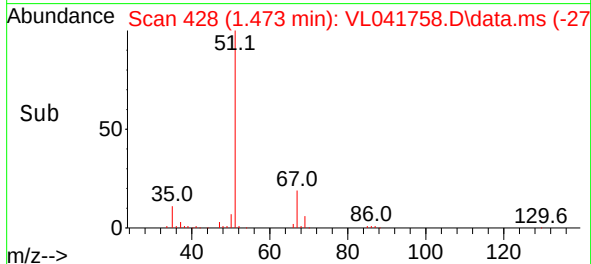
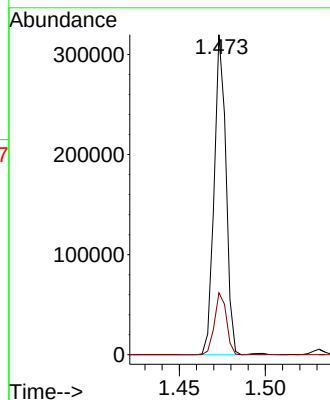
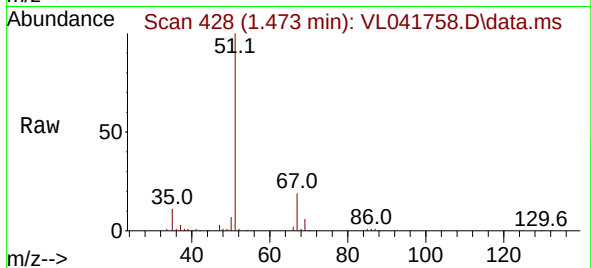
#3  
Chlorodifluoromethane  
Concen: 14.341 ppbv  
RT: 1.473 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015

Tgt Ion: 51 Resp: 15245  
Ion Ratio Lower Upper  
51 100  
67 19.6 15.0 22.4

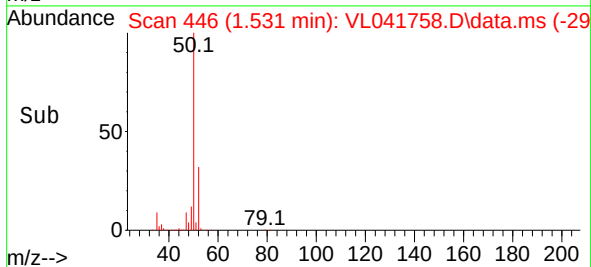
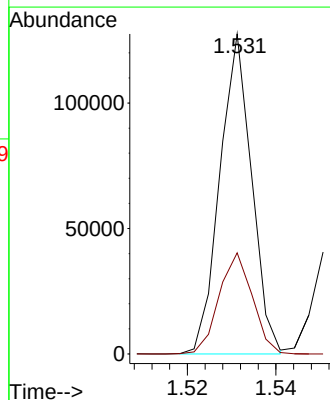
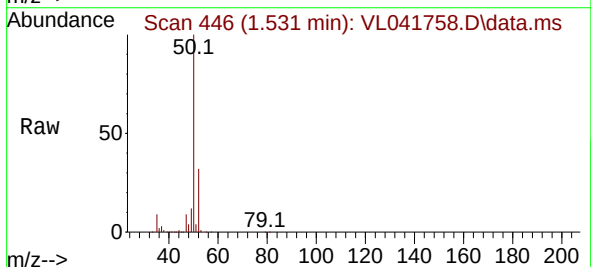
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

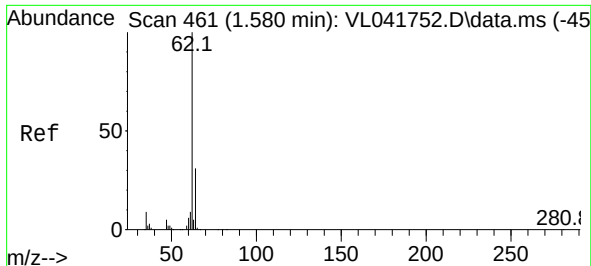


#4  
Chloromethane  
Concen: 13.996 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 50 Resp: 63517  
Ion Ratio Lower Upper  
50 100  
52 31.5 26.2 39.2

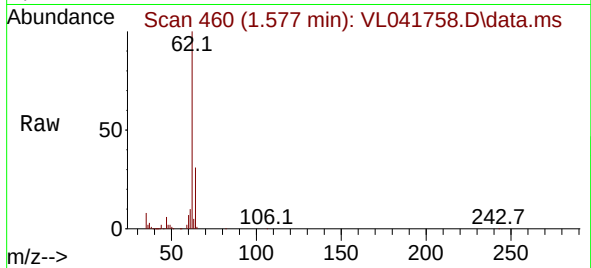






#5  
Vinyl Chloride  
Concen: 13.615 ppbv  
RT: 1.577 min Scan# 460  
Delta R.T. -0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

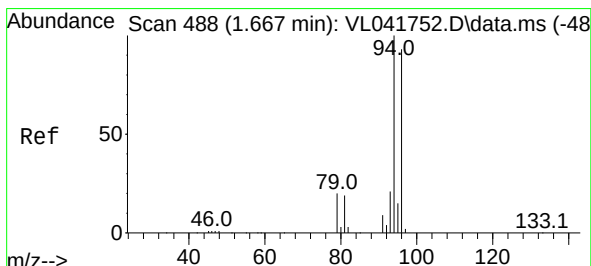
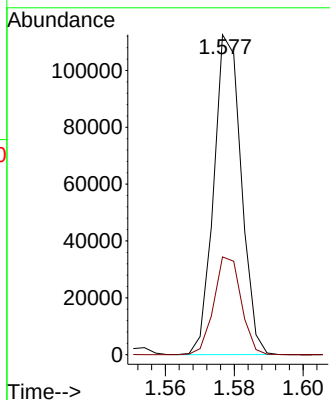
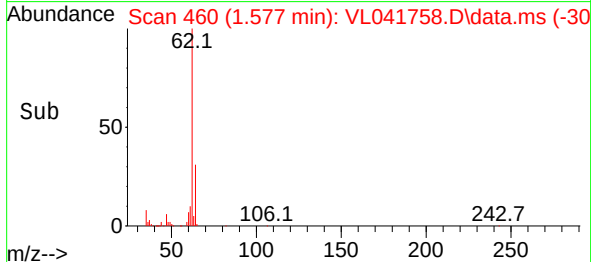
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



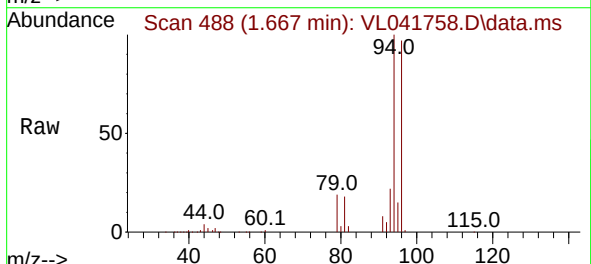
Tgt Ion: 62 Resp: 62250  
Ion Ratio Lower Upper  
62 100  
64 30.6 25.1 37.7

Manual Integrations  
APPROVED

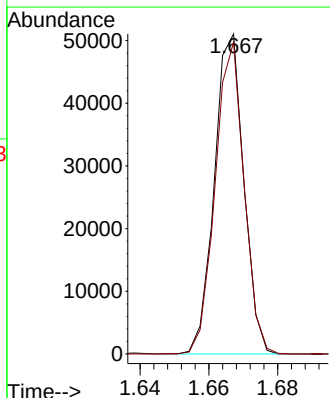
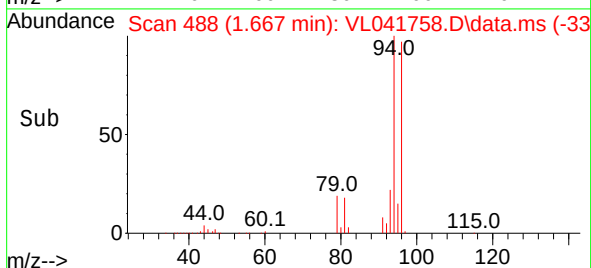
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

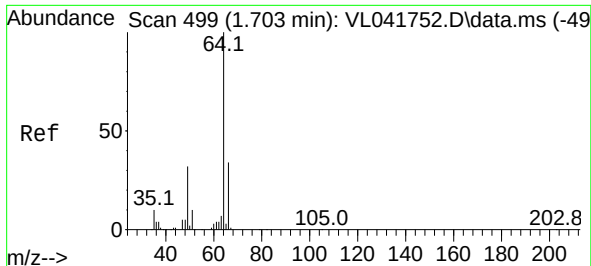


#6  
Bromomethane  
Concen: 14.064 ppbv  
RT: 1.667 min Scan# 488  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



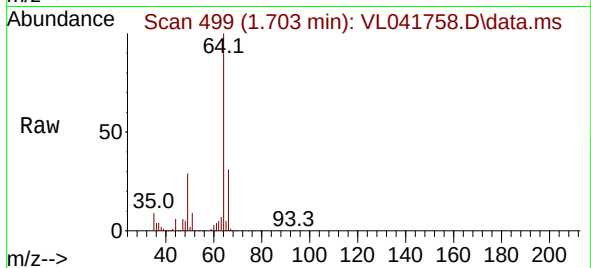
Tgt Ion: 94 Resp: 30345  
Ion Ratio Lower Upper  
94 100  
96 97.3 74.7 112.1





#7  
Chloroethane  
Concen: 14.442 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

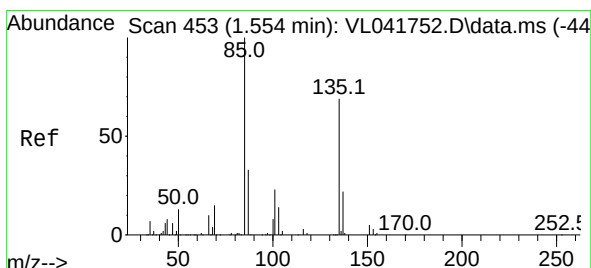
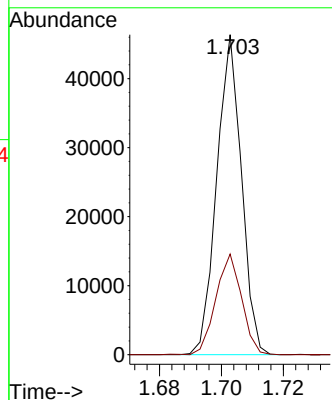
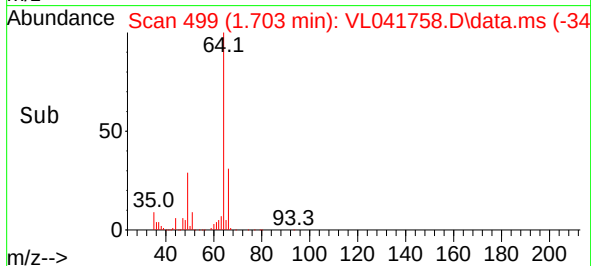
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



Tgt Ion: 64 Resp: 25650  
Ion Ratio Lower Upper  
64 100  
66 31.5 27.5 41.3

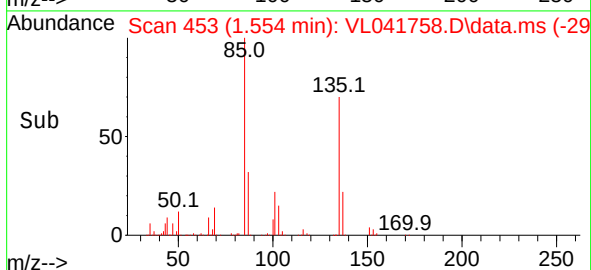
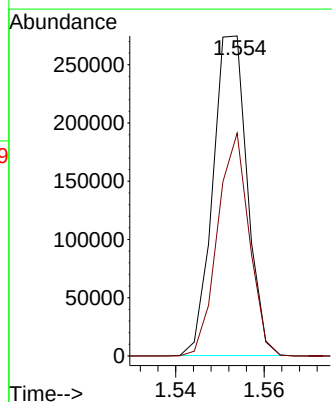
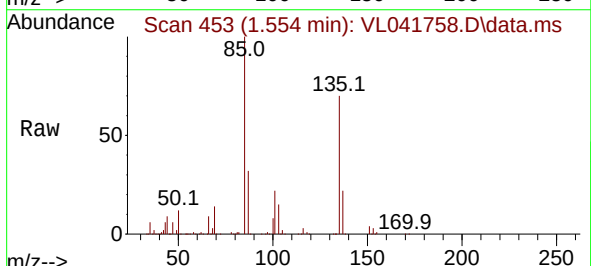
Manual Integrations  
APPROVED

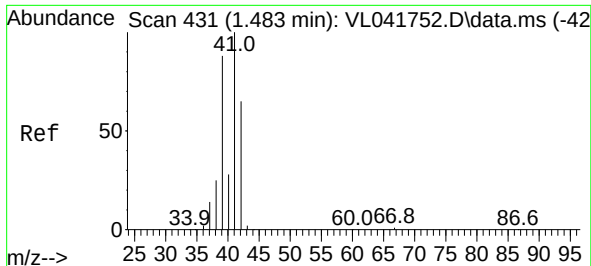
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#8  
Dichlorotetrafluoroethane  
Concen: 14.274 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 85 Resp: 148190  
Ion Ratio Lower Upper  
85 100  
135 64.1 51.9 77.9





#9

Propene

Concen: 13.351 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 41 Resp: 6151

Ion Ratio Lower Upper

41 100

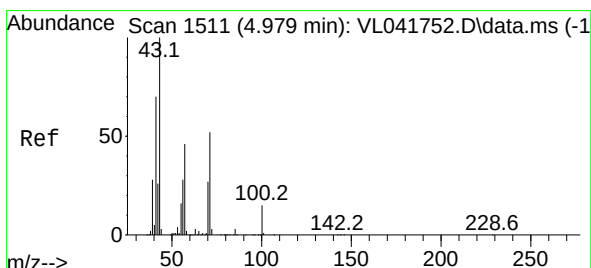
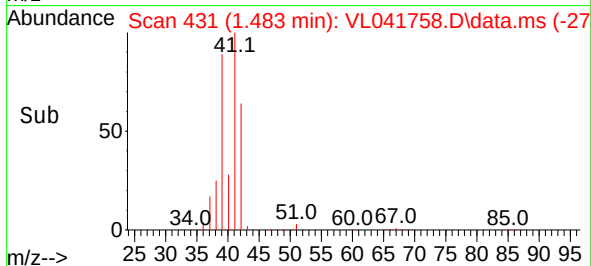
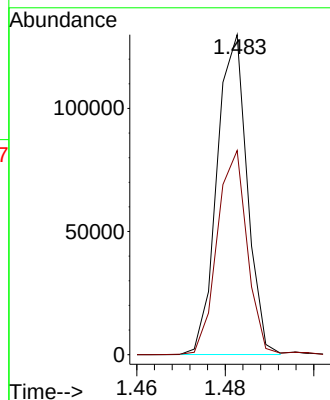
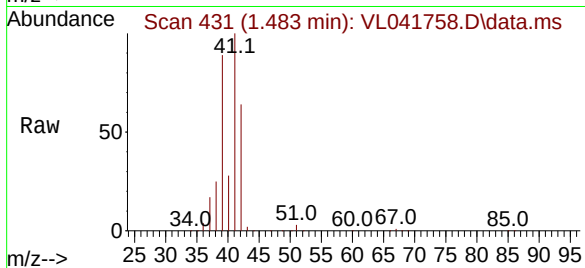
42 64.4 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 14.263 ppbv

RT: 4.978 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VL041758.D

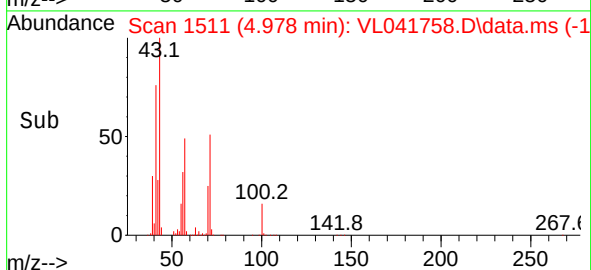
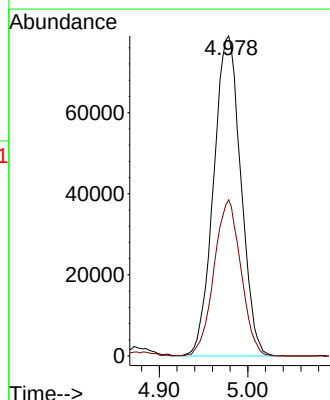
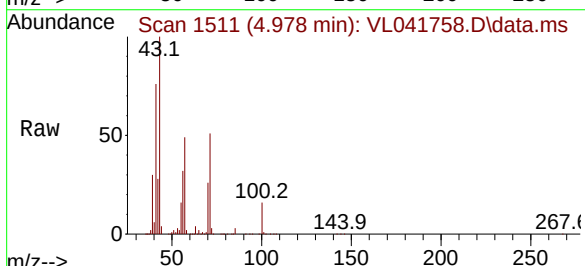
Acq: 16 Dec 2024 16:41

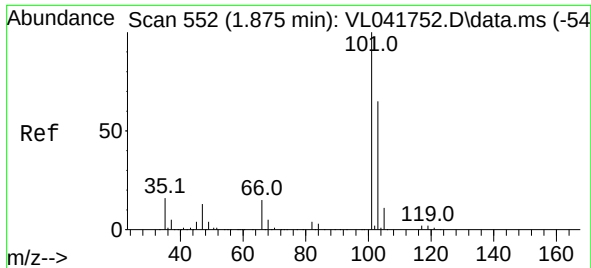
Tgt Ion: 43 Resp: 168804

Ion Ratio Lower Upper

43 100

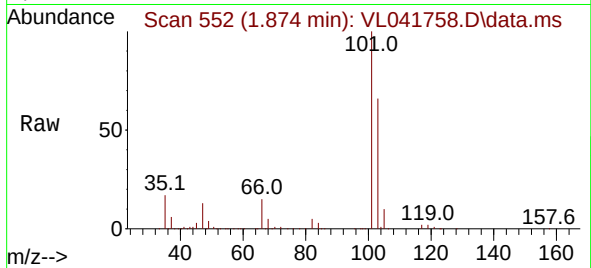
57 48.2 38.5 57.7





#11  
Trichlorofluoromethane  
Concen: 14.446 ppbv  
RT: 1.874 min Scan# 552  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

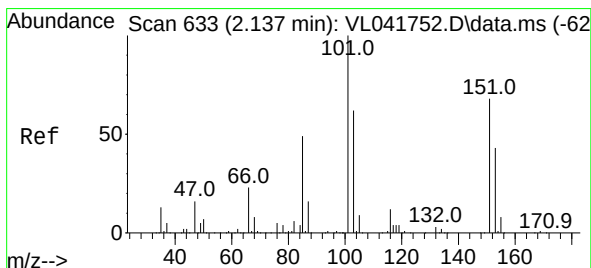
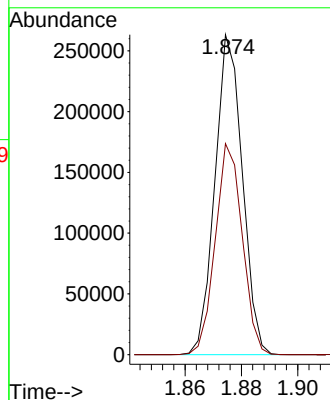
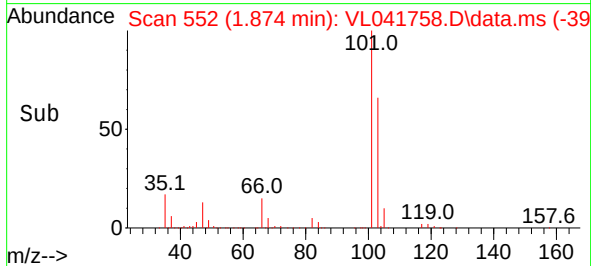
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015



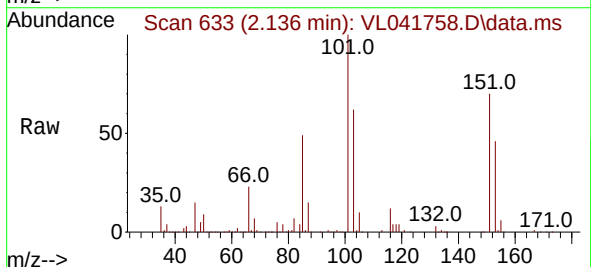
Tgt Ion:101 Resp: 177984  
Ion Ratio Lower Upper  
101 100  
103 65.9 51.8 77.8

Manual Integrations  
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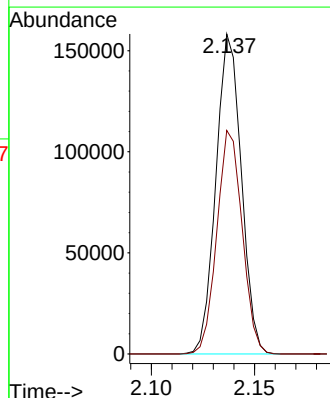
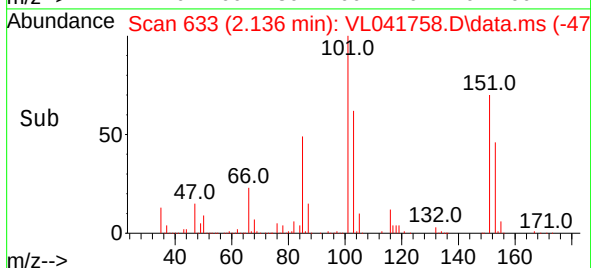
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

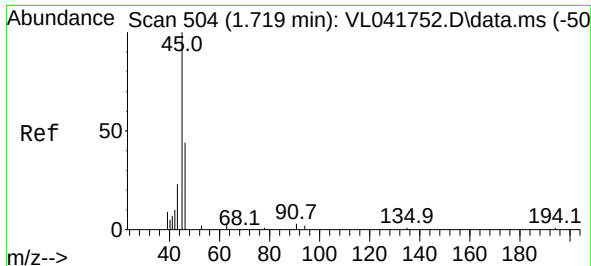


#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 14.464 ppbv  
RT: 2.136 min Scan# 633  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion:101 Resp: 135538  
Ion Ratio Lower Upper  
101 100  
151 69.6 56.8 85.2





#13

Ethanol

Concen: 9.509 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion: 45 Resp: 364

Ion Ratio Lower Upper

45 100

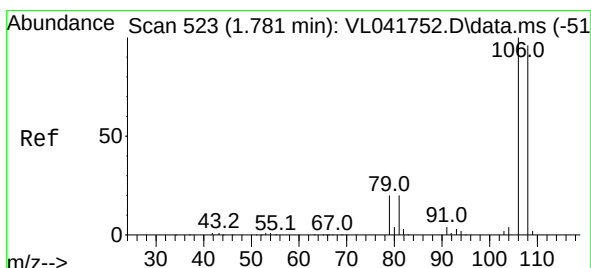
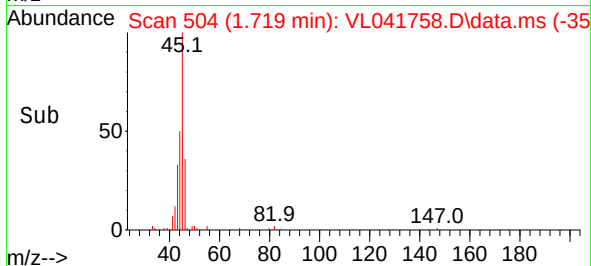
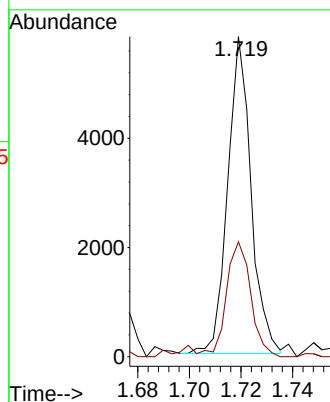
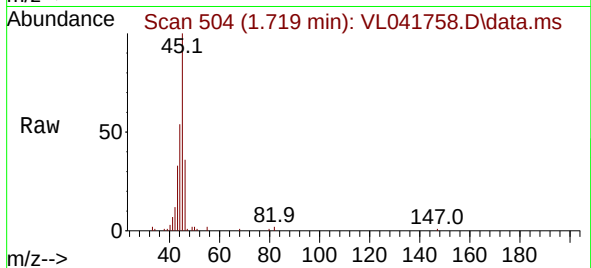
46 41.2 16.4 65.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 14.898 ppbv

RT: 1.780 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

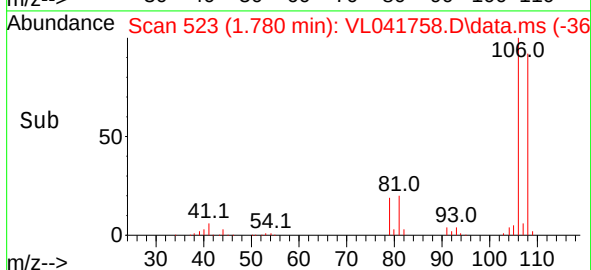
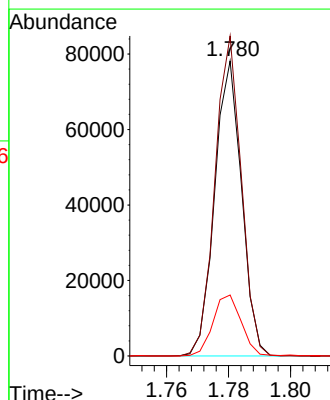
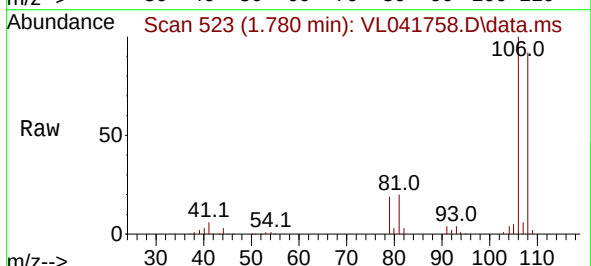
Tgt Ion:108 Resp: 47132

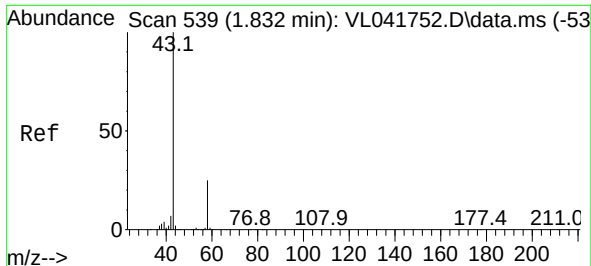
Ion Ratio Lower Upper

108 100

106 105.9 84.1 126.1

79 22.1 17.4 26.0





#15

Acetone

Concen: 11.273 ppbv

RT: 1.832 min Scan# 539

Delta R.T. -0.000 min

Lab File: VL041758.D

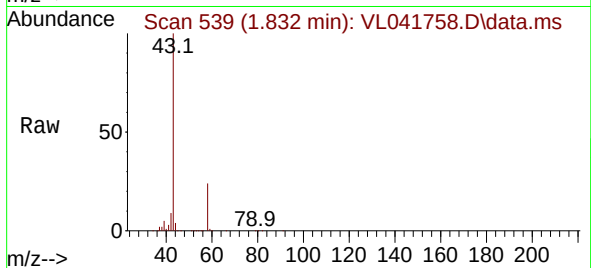
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015



Tgt Ion: 43 Resp: 142980

Ion Ratio Lower Upper

43 100

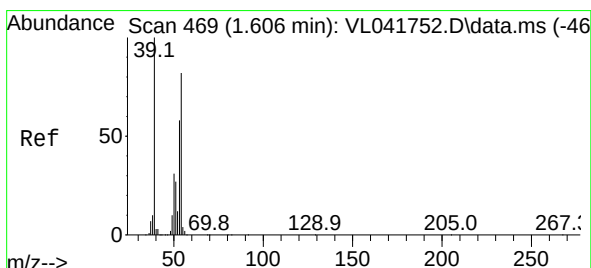
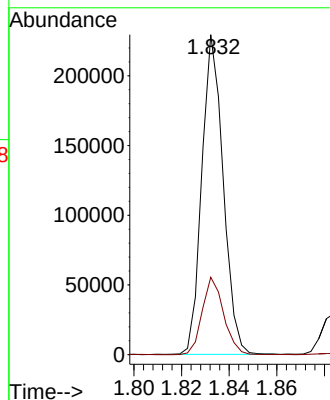
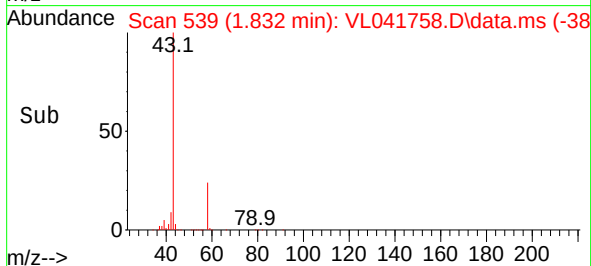
58 24.4 19.7 29.5

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#16

1,3-Butadiene

Concen: 13.678 ppbv

RT: 1.606 min Scan# 469

Delta R.T. -0.000 min

Lab File: VL041758.D

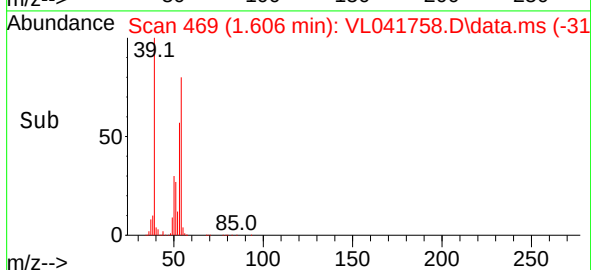
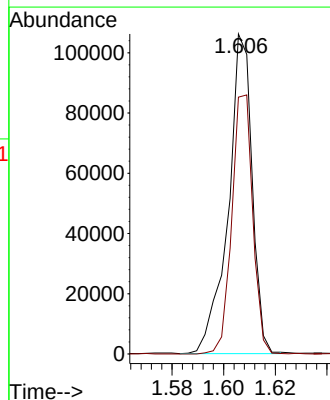
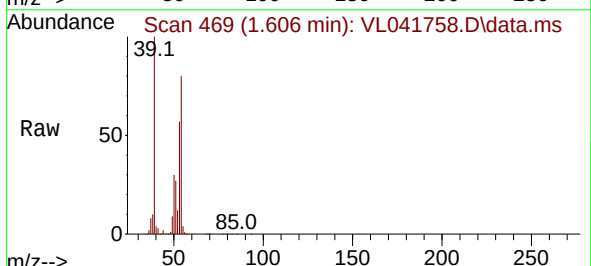
Acq: 16 Dec 2024 16:41

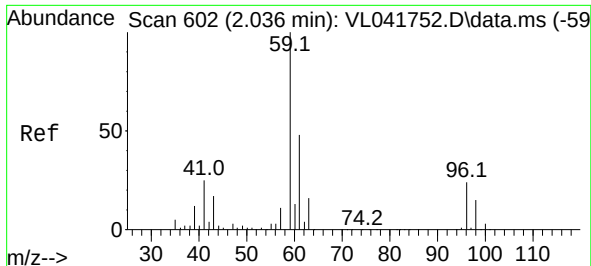
Tgt Ion: 39 Resp: 68311

Ion Ratio Lower Upper

39 100

54 71.3 58.4 87.6





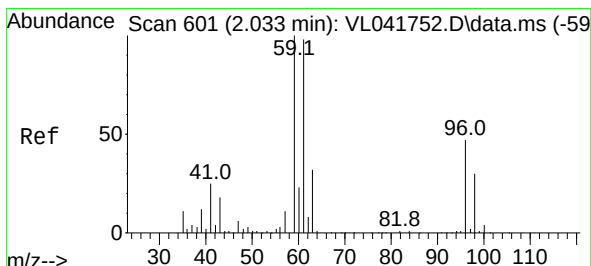
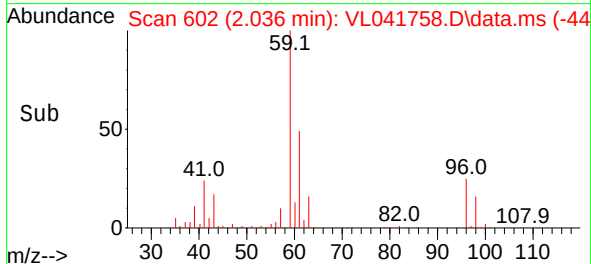
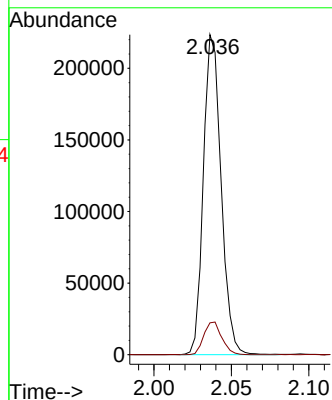
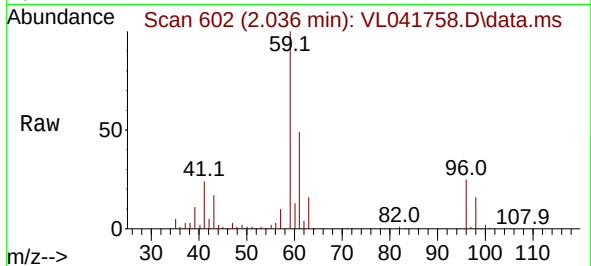
#17  
tert-Butyl alcohol  
Concen: 14.140 ppbv  
RT: 2.036 min Scan# 602  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 59 Resp: 177908  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0

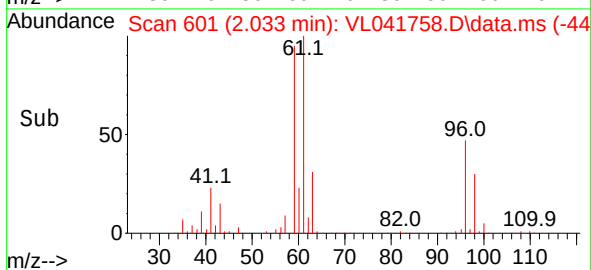
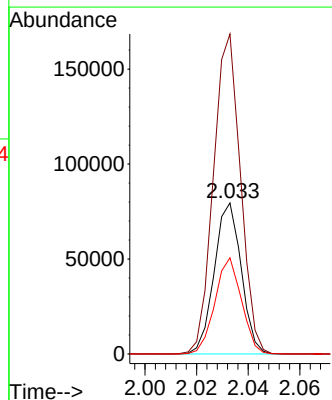
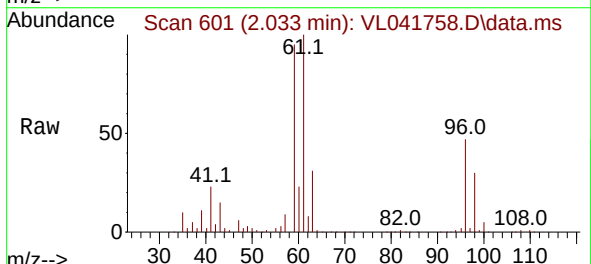
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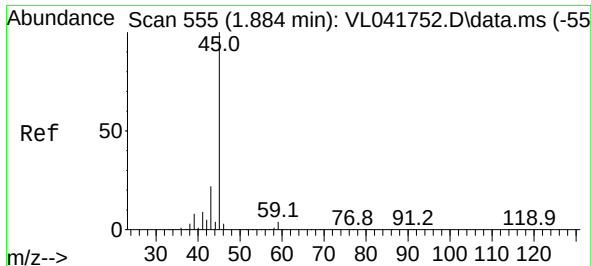
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#18  
1,1-Dichloroethene  
Concen: 14.705 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 96 Resp: 57770  
Ion Ratio Lower Upper  
96 100  
61 211.8 167.7 251.5  
98 63.6 51.1 76.7





#19

Isopropyl Alcohol

Concen: 10.802 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 45 Resp: 8221

Ion Ratio Lower Upper

45 100

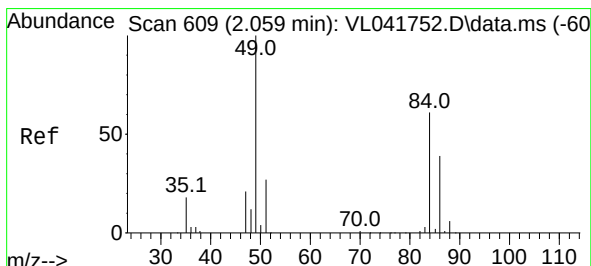
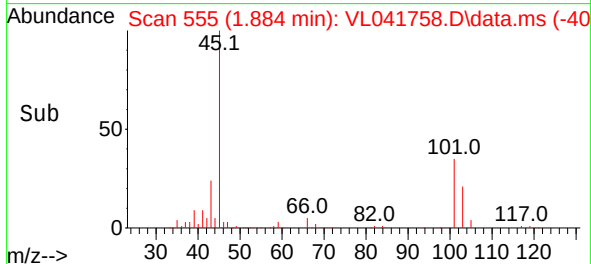
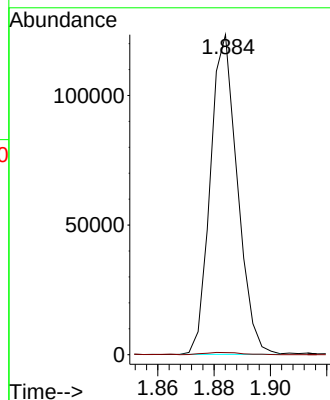
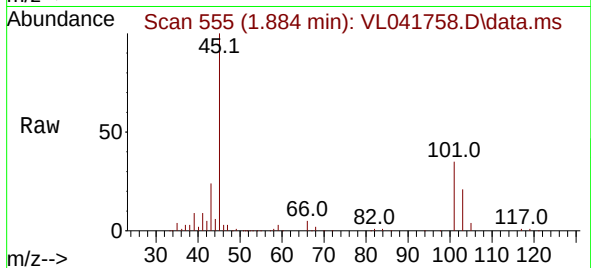
58 42.5 33.3 49.9

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 13.371 ppbv

RT: 2.059 min Scan# 609

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion: 84 Resp: 48356

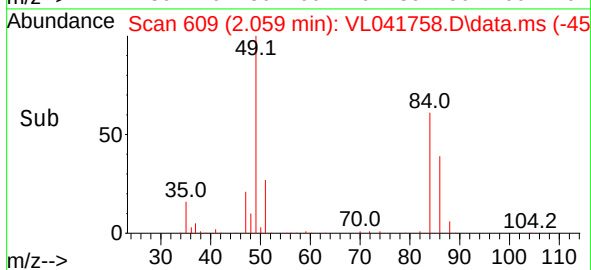
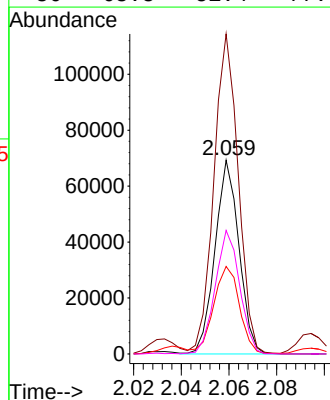
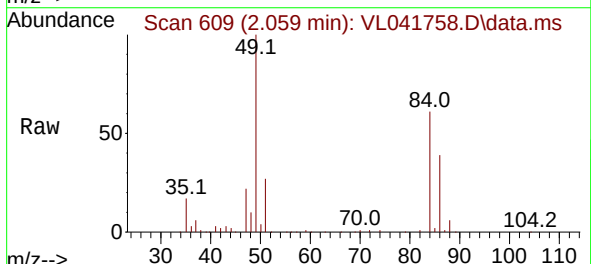
Ion Ratio Lower Upper

84 100

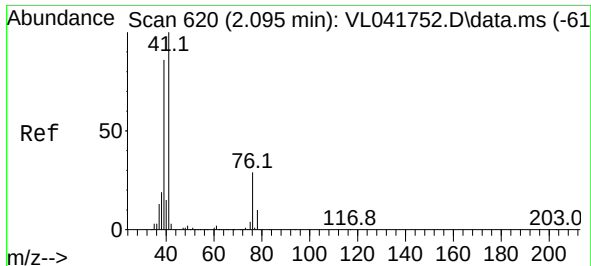
49 164.9 132.6 198.8

51 44.9 37.6 56.4

86 63.8 51.4 77.0







#21

Allyl Chloride

Concen: 14.760 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041758.D

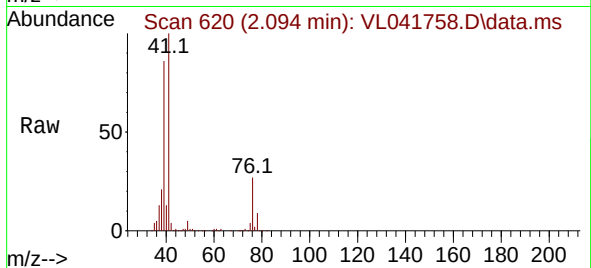
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

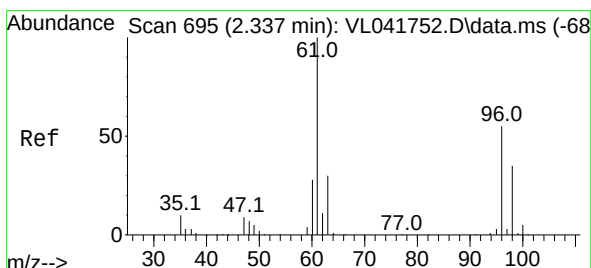
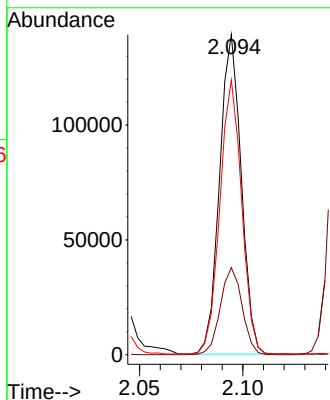
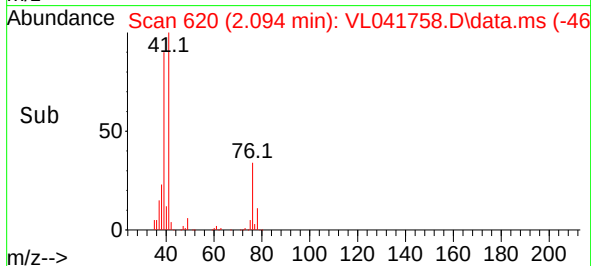
VSTDICC015



|             |                 |
|-------------|-----------------|
| Tgt Ion: 41 | Resp: 101528    |
| Ion Ratio   | Lower Upper     |
| 41          | 100             |
| 76          | 27.3 22.3 33.5  |
| 39          | 86.2 69.2 103.8 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#22

trans-1,2-Dichloroethene

Concen: 14.461 ppbv

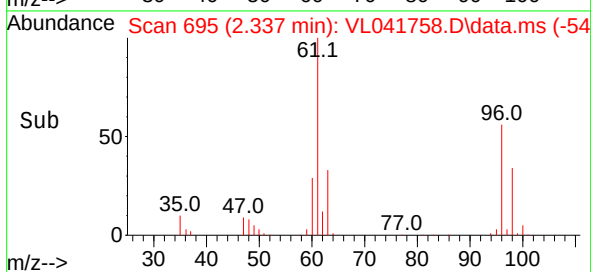
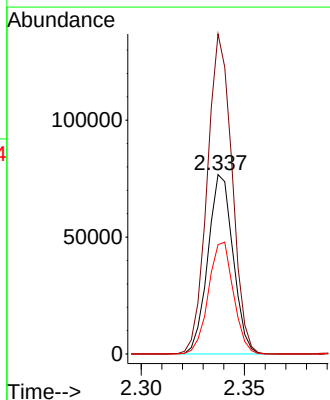
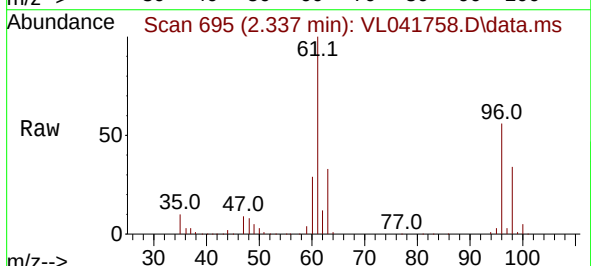
RT: 2.337 min Scan# 695

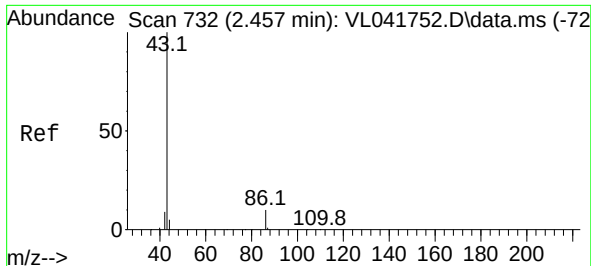
Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

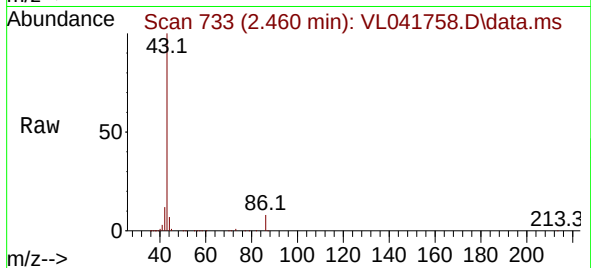
|             |                   |
|-------------|-------------------|
| Tgt Ion: 96 | Resp: 65029       |
| Ion Ratio   | Lower Upper       |
| 96          | 100               |
| 61          | 178.4 146.3 219.5 |
| 98          | 60.9 50.8 76.2    |





#23  
Vinyl Acetate  
Concen: 14.661 ppbv  
RT: 2.460 min Scan# 732  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

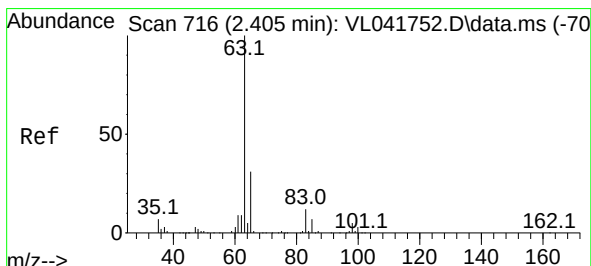
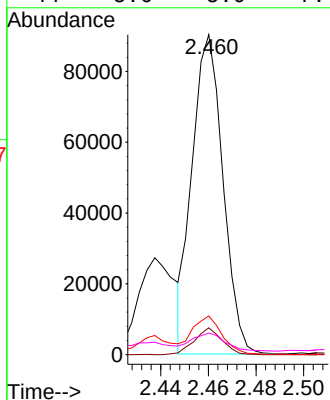
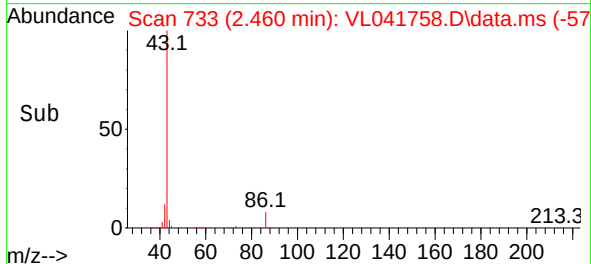
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



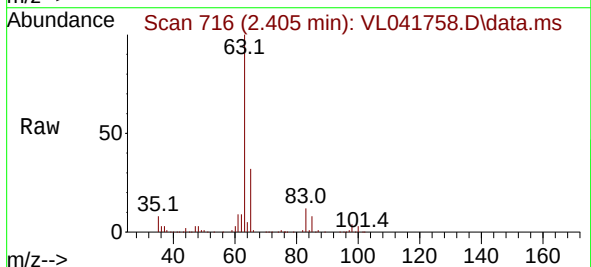
Tgt Ion: 43 Resp: 80795  
Ion Ratio Lower Upper  
43 100  
86 8.4 6.6 10.0  
42 11.8 8.2 12.2  
44 5.6 5.0 7.4

Manual Integrations  
APPROVED

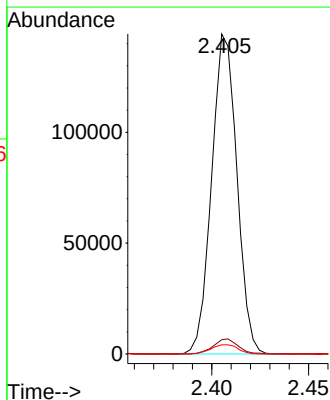
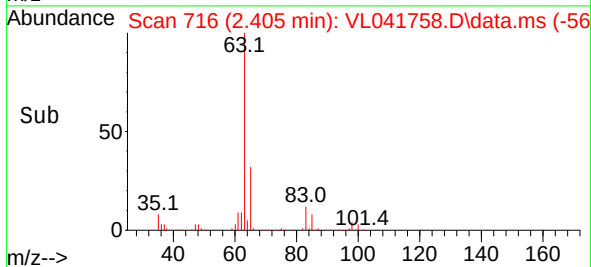
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

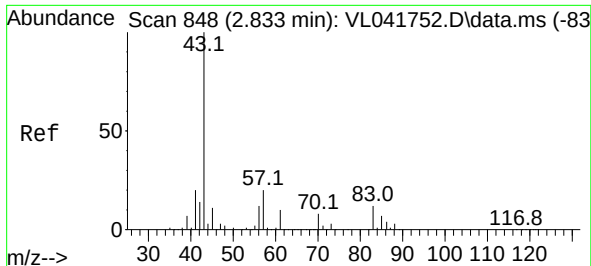


#24  
1,1-Dichloroethane  
Concen: 14.394 ppbv  
RT: 2.405 min Scan# 716  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion: 63 Resp: 131030  
Ion Ratio Lower Upper  
63 100  
98 4.5 2.3 6.8  
100 2.8 1.4 4.2





#25

Ethyl Acetate

Concen: 14.402 ppbv

RT: 2.832 min Scan# 848

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

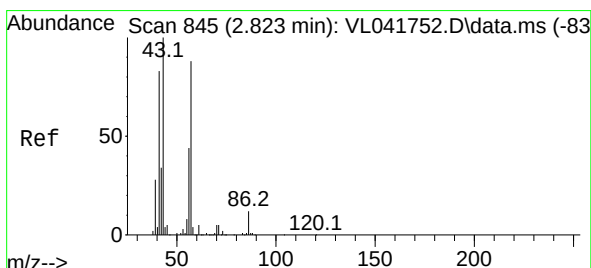
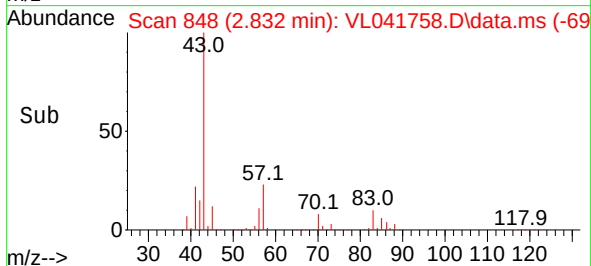
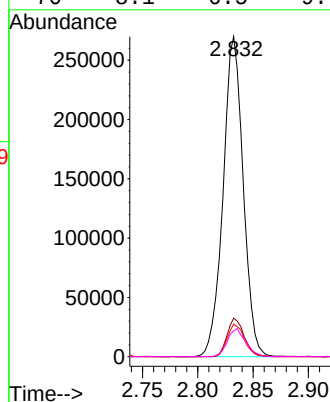
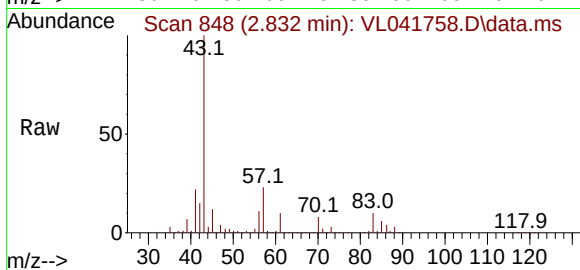
VSTDICC015

| Tgt Ion: 43 | Resp: 341429 |       |       |
|-------------|--------------|-------|-------|
| Ion         | Ratio        | Lower | Upper |
| 43          | 100          |       |       |
| 45          | 10.3         | 8.1   | 12.1  |
| 61          | 8.7          | 7.0   | 10.6  |
| 70          | 8.1          | 6.5   | 9.7   |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#26

Hexane

Concen: 14.369 ppbv

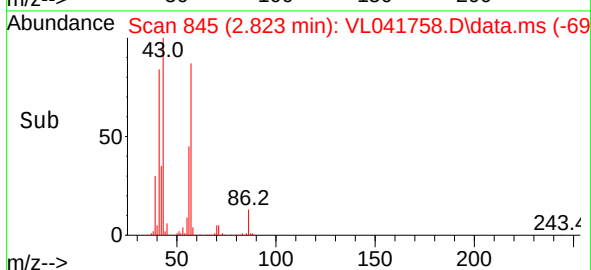
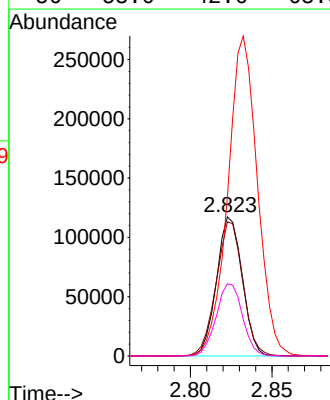
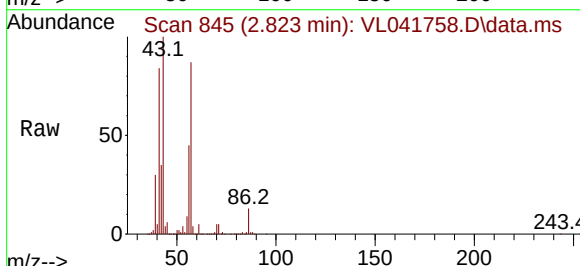
RT: 2.823 min Scan# 845

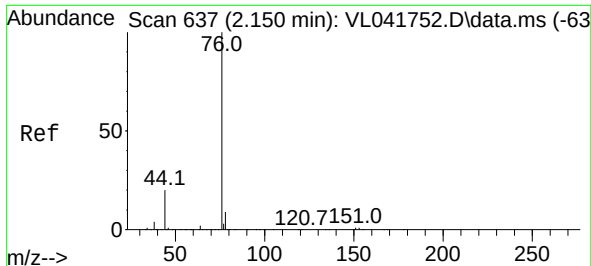
Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion: 57 | Resp: | 128657 |
| Ion | Ratio   | Lower | Upper  |
| 57  | 100     |       |        |
| 41  | 100.1   | 79.6  | 119.4  |
| 43  | 265.4   | 211.0 | 316.6  |
| 56  | 53.0    | 42.6  | 63.8   |





#27

Carbon Disulfide

Concen: 16.726 ppbv

RT: 2.149 min Scan# 637

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion: 76 Resp: 134963

Ion Ratio Lower Upper

76 100

44 22.4 17.6 26.4

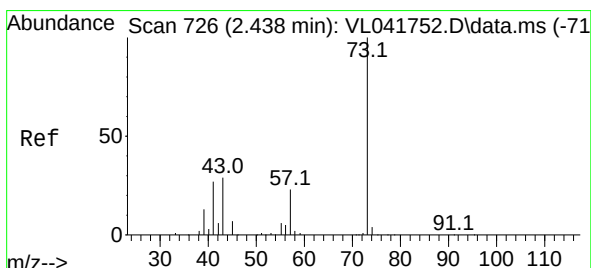
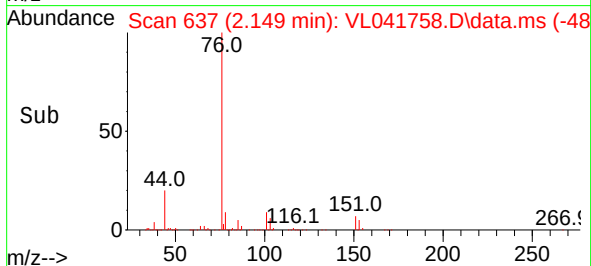
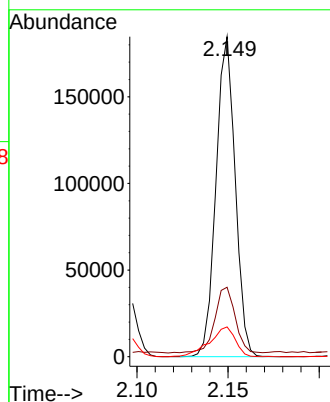
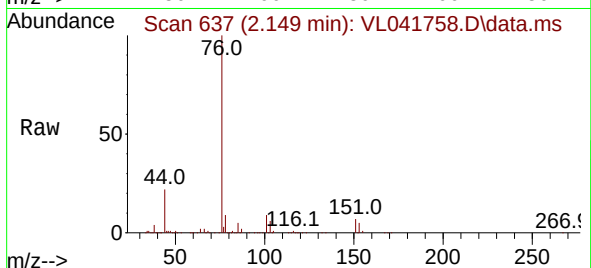
78 12.5 10.2 15.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#28

Methyl tert-Butyl Ether

Concen: 13.871 ppbv

RT: 2.438 min Scan# 726

Delta R.T. -0.000 min

Lab File: VL041758.D

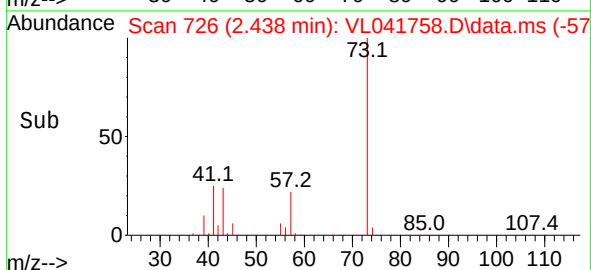
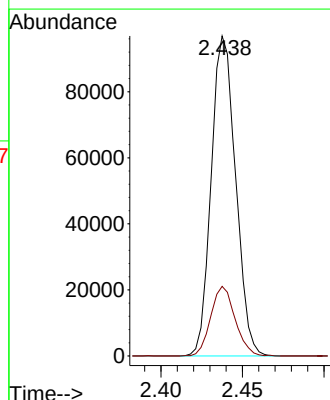
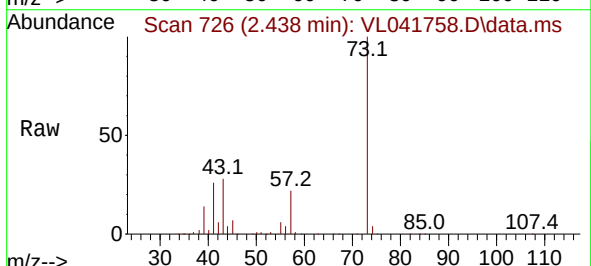
Acq: 16 Dec 2024 16:41

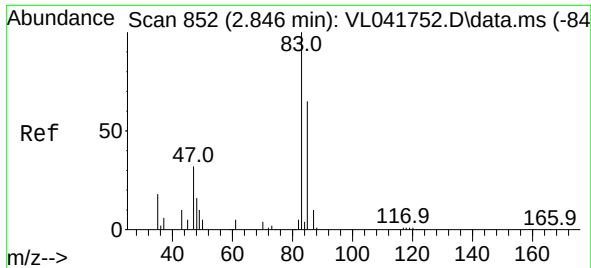
Tgt Ion: 73 Resp: 100758

Ion Ratio Lower Upper

73 100

57 21.8 17.6 26.4





#29

Chloroform

Concen: 14.489 ppbv

RT: 2.845 min Scan# 852

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion: 83 Resp: 197713

Ion Ratio Lower Upper

83 100

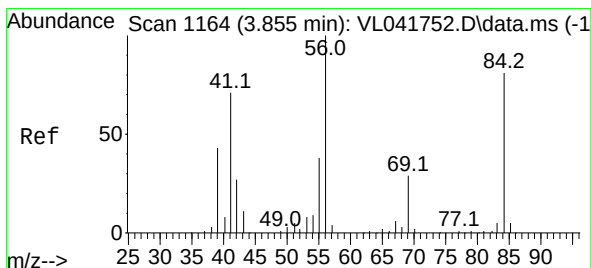
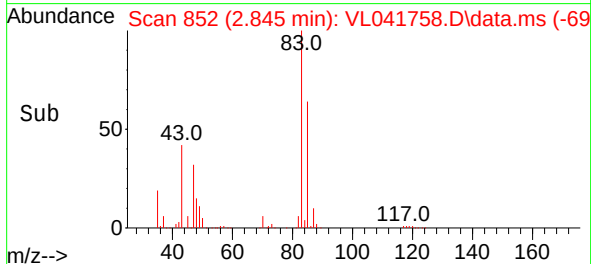
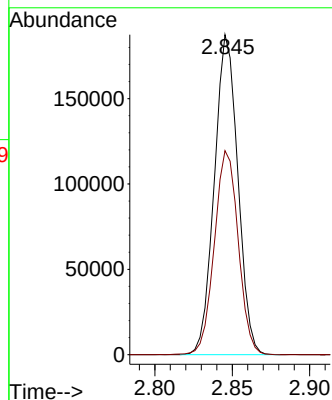
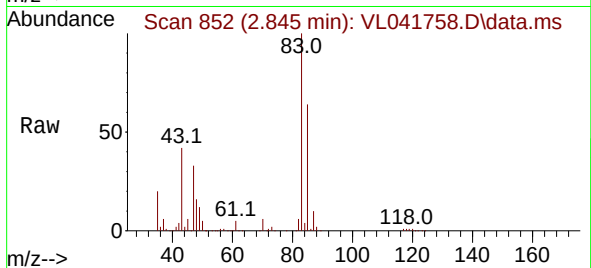
85 63.7 51.8 77.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#30

Cyclohexane

Concen: 14.497 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

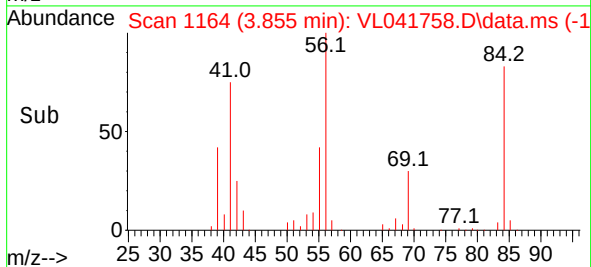
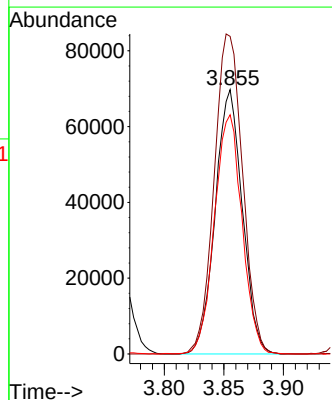
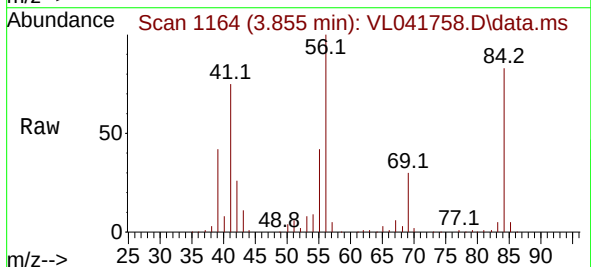
Tgt Ion: 84 Resp: 110448

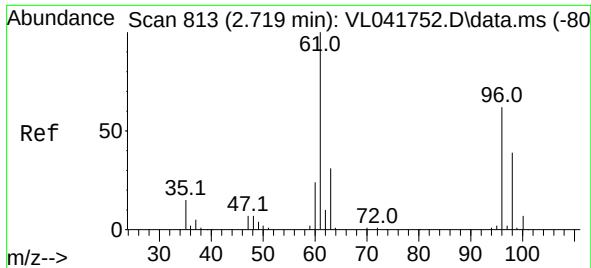
Ion Ratio Lower Upper

84 100

56 126.9 102.3 153.5

41 92.2 74.0 111.0





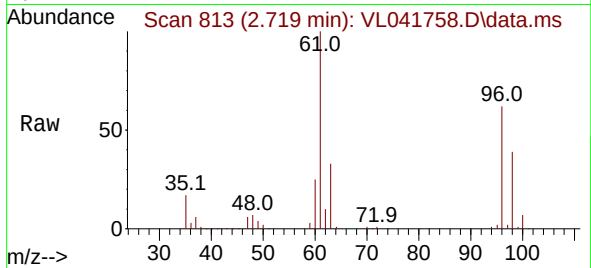
#31  
 cis-1,2-Dichloroethene  
 Concen: 14.355 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. -0.000 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

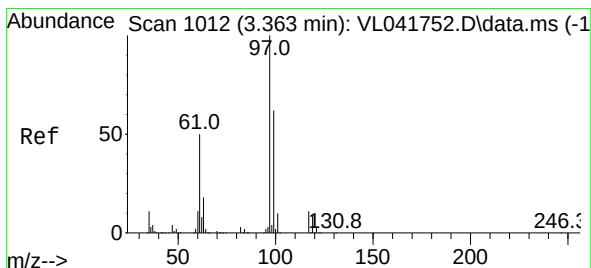
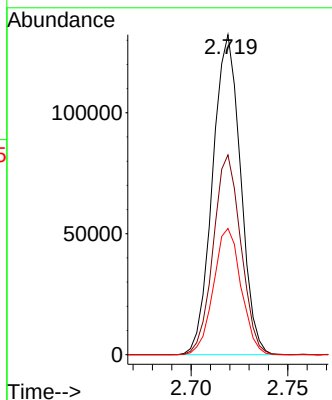
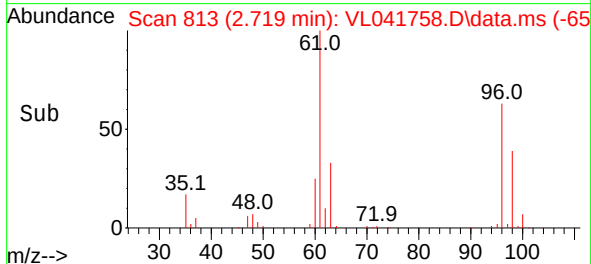
VSTDICC015



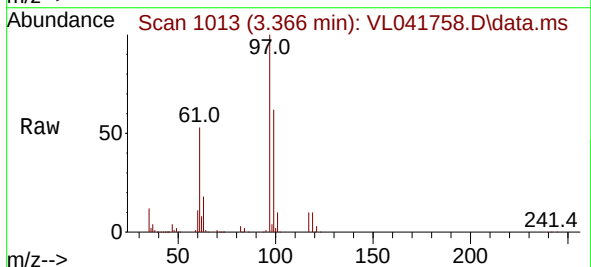
Tgt Ion: 61 Resp: 13282  
 Ion Ratio Lower Upper  
 61 100  
 96 62.4 49.7 74.5  
 98 39.4 30.8 46.2

Manual Integrations  
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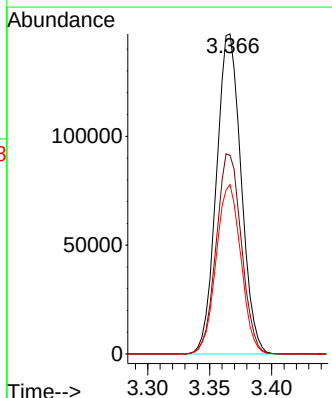
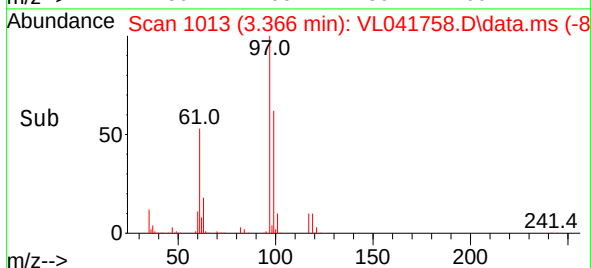
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

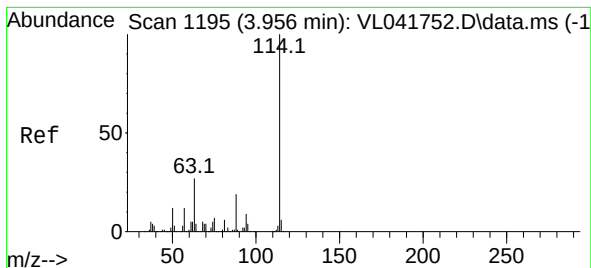


#32  
 1,1,1-Trichloroethane  
 Concen: 15.055 ppbv  
 RT: 3.366 min Scan# 1013  
 Delta R.T. 0.003 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41



Tgt Ion: 97 Resp: 204468  
 Ion Ratio Lower Upper  
 97 100  
 99 63.6 51.0 76.4  
 61 53.1 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion:114 Resp: 17685

Ion Ratio Lower Upper

114 100

63 27.5 21.8 32.8

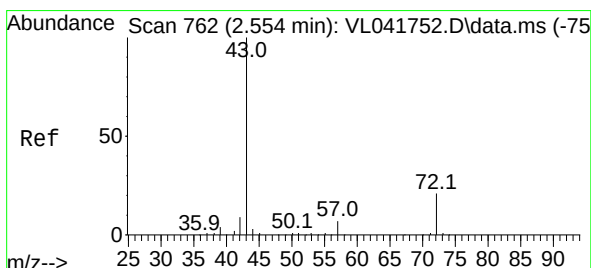
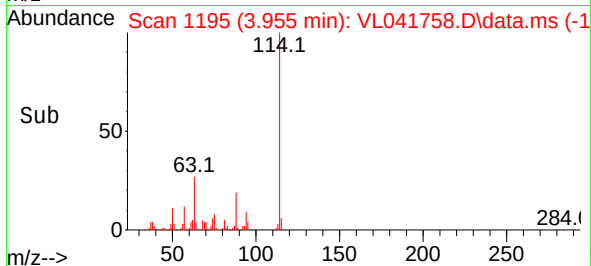
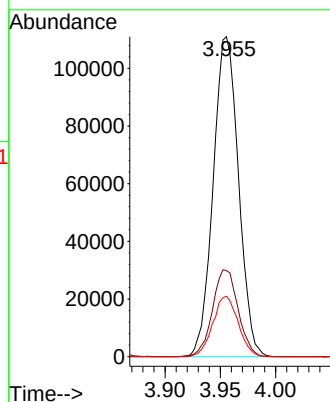
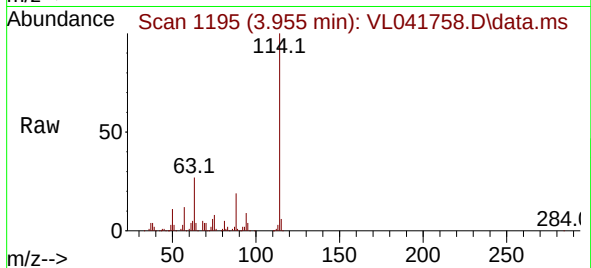
88 18.9 14.8 22.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#34

2-Butanone

Concen: 13.736 ppbv

RT: 2.554 min Scan# 762

Delta R.T. -0.000 min

Lab File: VL041758.D

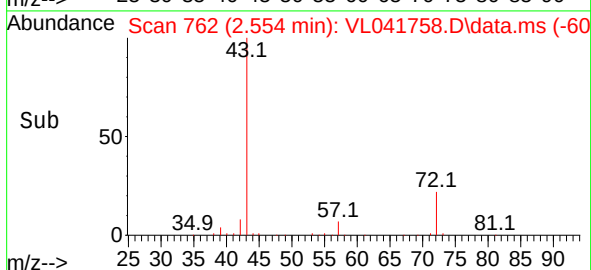
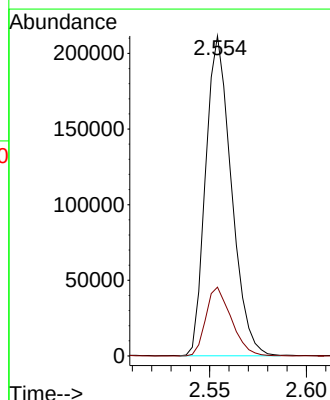
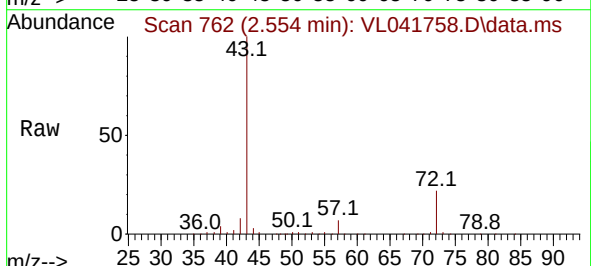
Acq: 16 Dec 2024 16:41

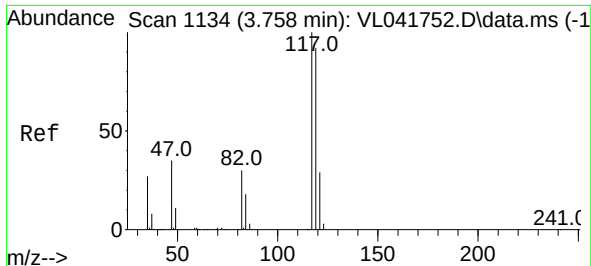
Tgt Ion: 43 Resp: 195439

Ion Ratio Lower Upper

43 100

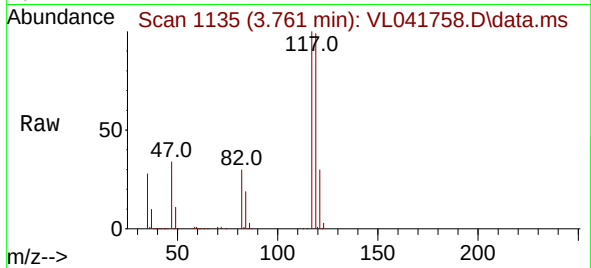
72 21.4 16.8 25.2





#35  
Carbon Tetrachloride  
Concen: 16.428 ppbv  
RT: 3.761 min Scan# 1135  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

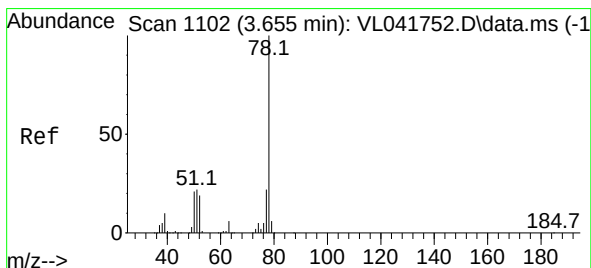
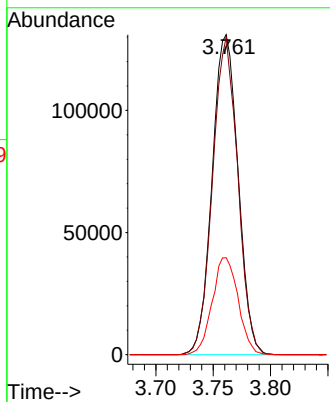
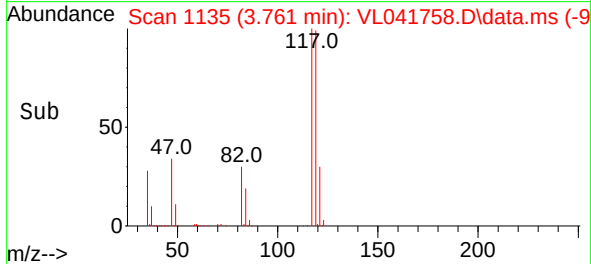
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



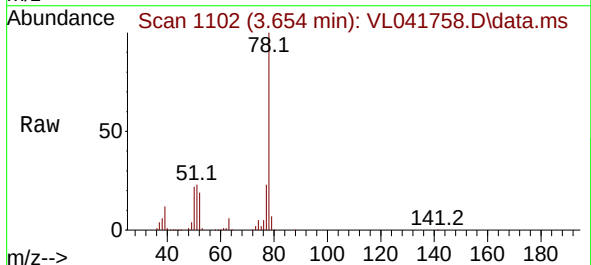
Tgt Ion:117 Resp: 20625  
Ion Ratio Lower Upper  
117 100  
119 99.2 73.7 110.5  
121 30.3 23.0 34.4

Manual Integrations  
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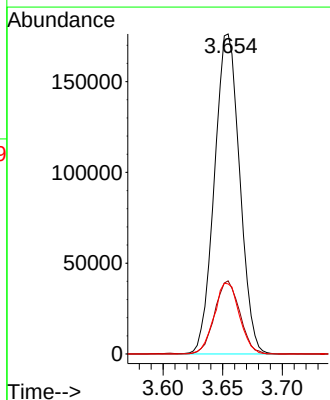
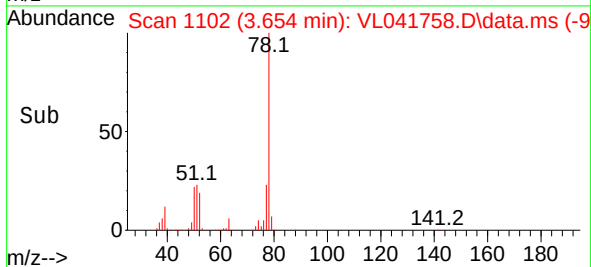
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



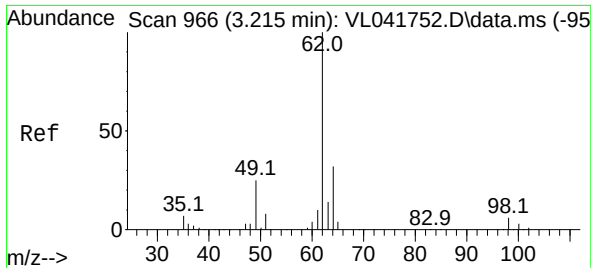
#36  
Benzene  
Concen: 14.192 ppbv  
RT: 3.654 min Scan# 1102  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion: 78 Resp: 259630  
Ion Ratio Lower Upper  
78 100  
77 22.8 17.8 26.6  
50 21.9 17.2 25.8







#37  
1,2-Dichloroethane  
Concen: 14.633 ppbv  
RT: 3.214 min Scan# 9  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

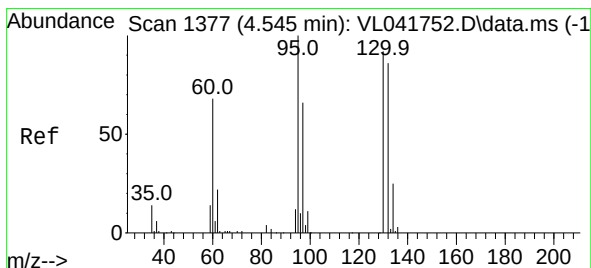
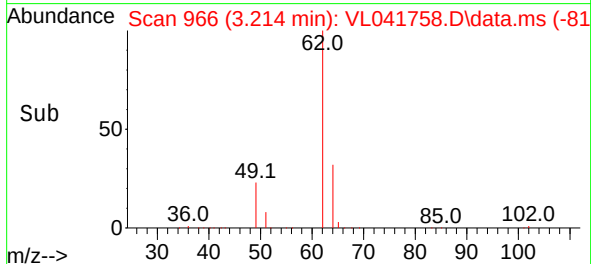
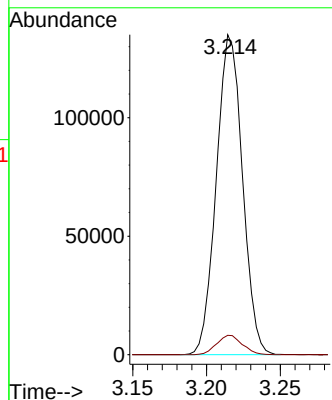
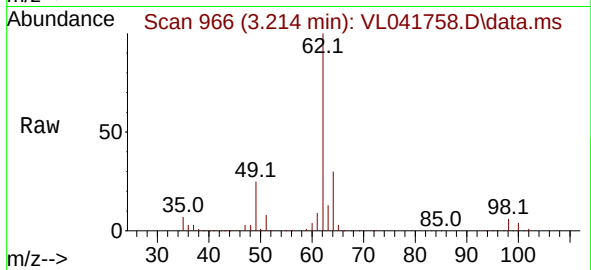
VSTDICC015

Tgt Ion: 62 Resp: 166570  
Ion Ratio Lower Upper  
62 100  
98 5.9 4.7 7.1

Manual Integrations

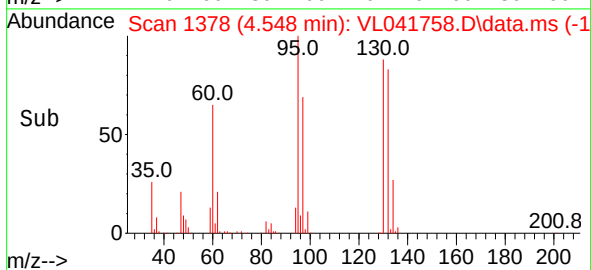
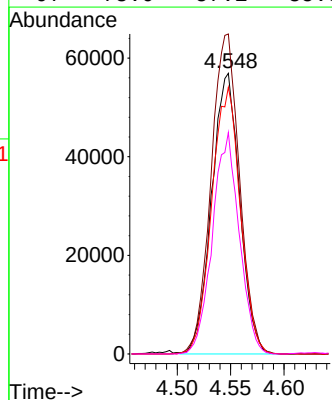
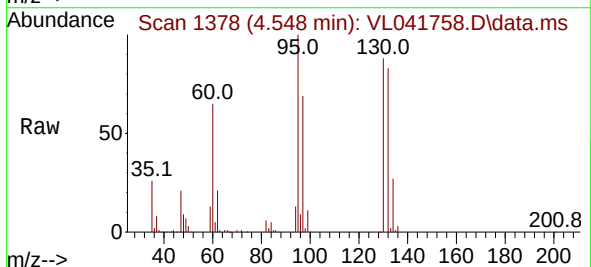
APPROVED

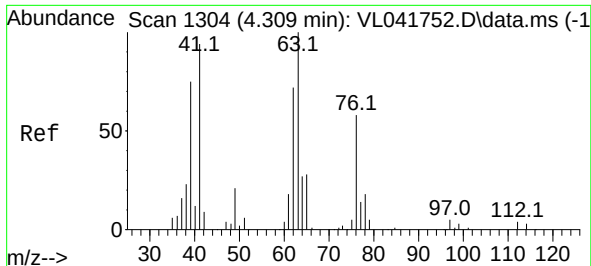
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38  
Trichloroethene  
Concen: 13.525 ppbv  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

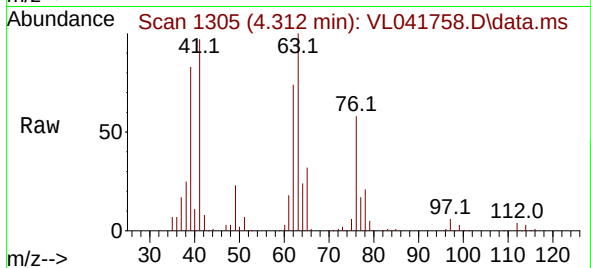
Tgt Ion:130 Resp: 104184  
Ion Ratio Lower Upper  
130 100  
95 114.0 87.0 130.6  
132 95.0 75.0 112.6  
97 78.9 57.2 85.8





#39  
1,2-Dichloropropane  
Concen: 14.150 ppbv  
RT: 4.312 min Scan# 1305  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

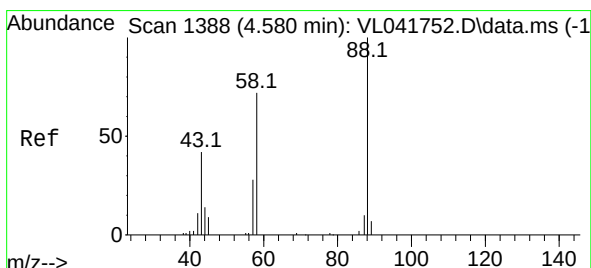
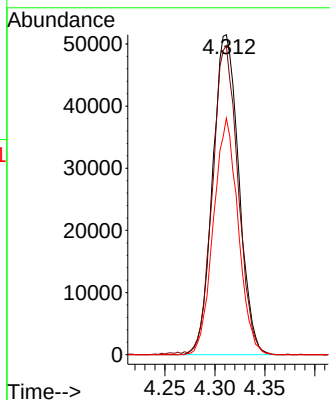
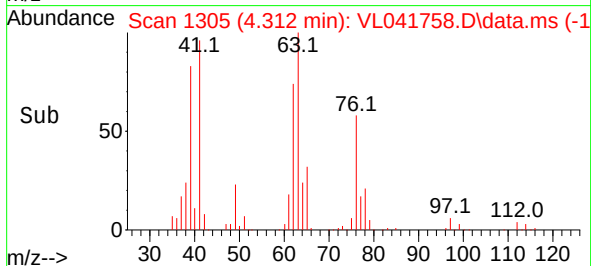
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



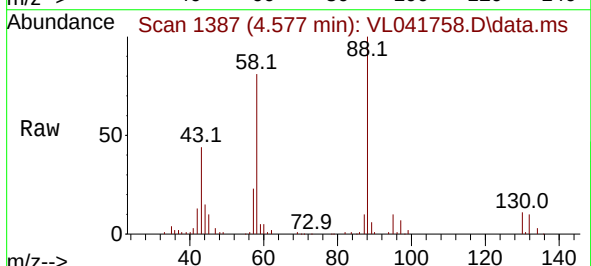
Tgt Ion: 63 Resp: 93624  
Ion Ratio Lower Upper  
63 100  
41 96.6 75.3 112.9  
62 73.9 57.3 85.9

Manual Integrations  
APPROVED

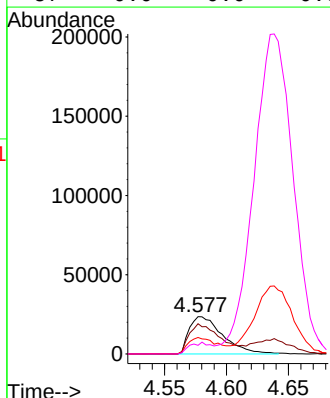
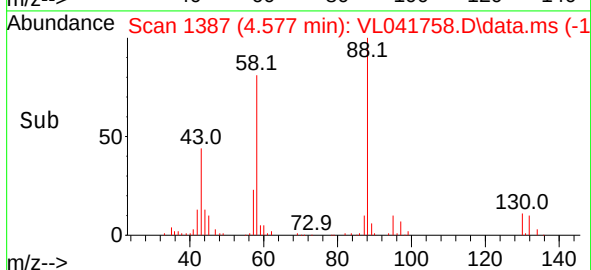
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

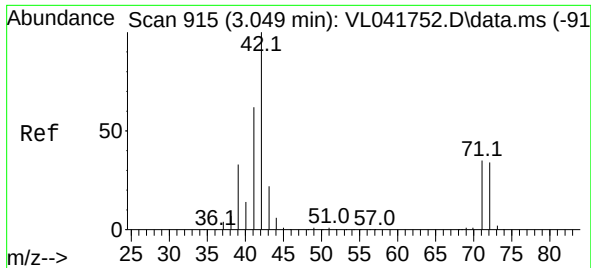


#40  
1,4-Dioxane  
Concen: 13.730 ppbv  
RT: 4.577 min Scan# 1387  
Delta R.T. -0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



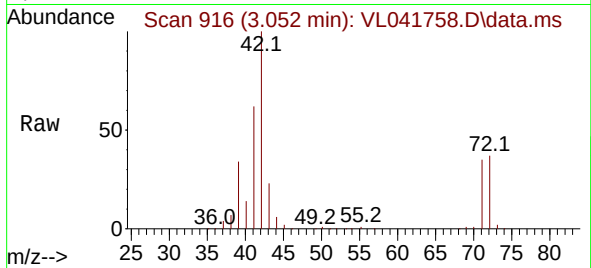
Tgt Ion: 88 Resp: 44377  
Ion Ratio Lower Upper  
88 100  
58 77.8 61.0 91.6  
43 42.4 29.4 44.0  
57 0.0 0.0 0.0





#41  
Tetrahydrofuran  
Concen: 14.254 ppbv  
RT: 3.052 min Scan# 915  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

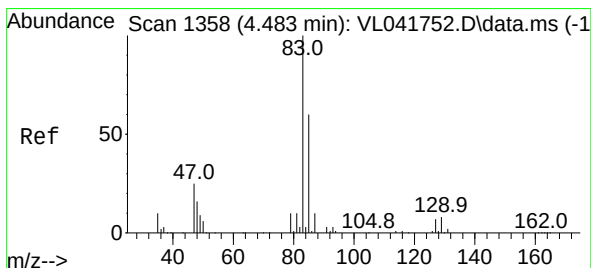
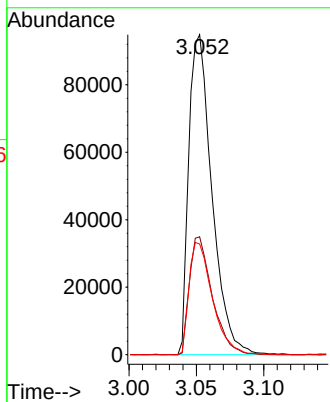
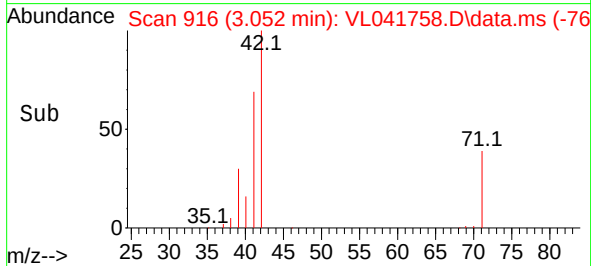
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



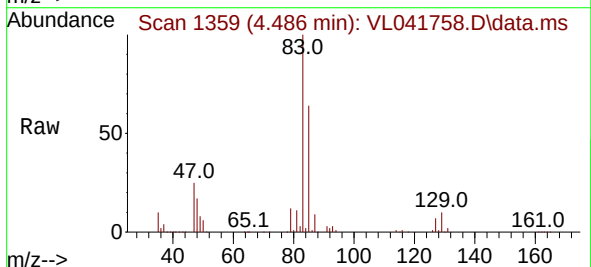
Tgt Ion: 42 Resp: 113618  
Ion Ratio Lower Upper  
42 100  
72 36.4 29.1 43.7  
71 35.3 28.4 42.6

Manual Integrations  
APPROVED

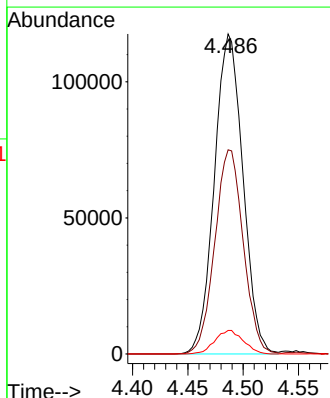
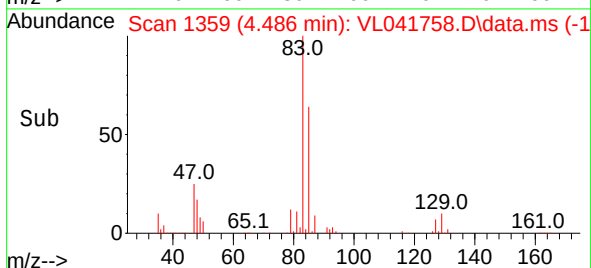
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

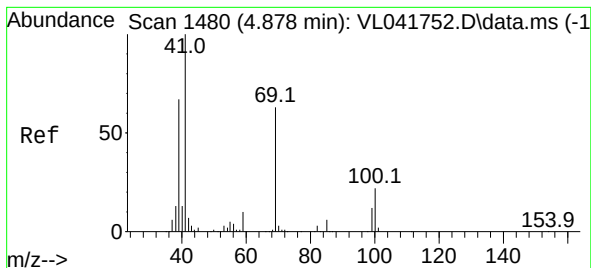


#42  
Bromodichloromethane  
Concen: 16.123 ppbv  
RT: 4.486 min Scan# 1359  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion: 83 Resp: 211145  
Ion Ratio Lower Upper  
83 100  
85 63.7 48.0 72.0  
127 7.3 5.8 8.8





#43

Methyl Methacrylate

Concen: 15.374 ppbv

RT: 4.878 min Scan# 1480

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

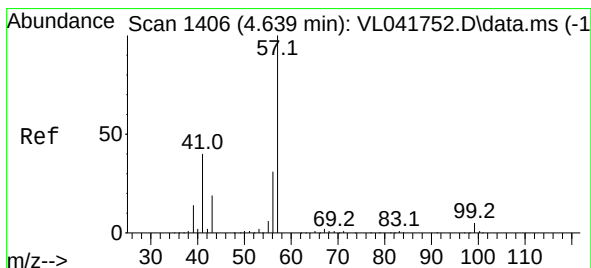
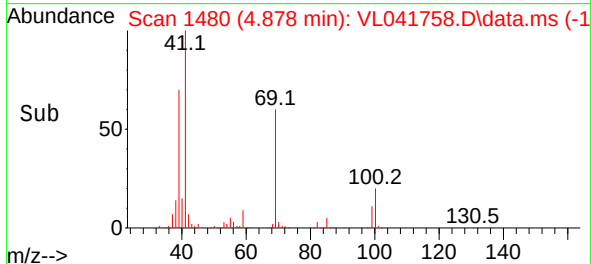
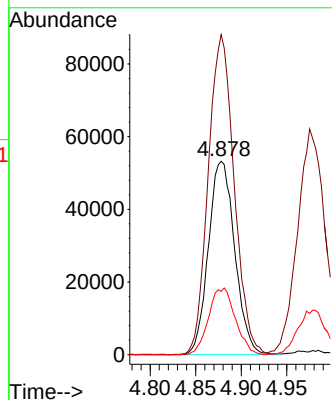
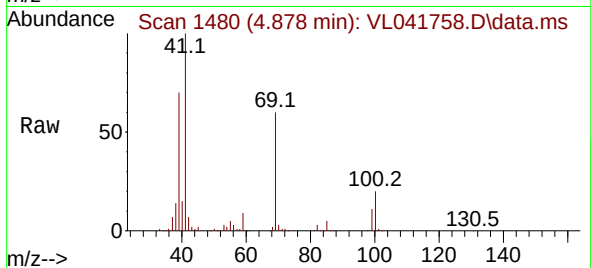
VSTDICC015

Tgt Ion: 69 Resp: 10716  
Ion Ratio Lower Upper  
69 100  
41 162.6 130.3 195.5  
100 35.0 28.3 42.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#44

2,2,4-Trimethylpentane

Concen: 14.274 ppbv

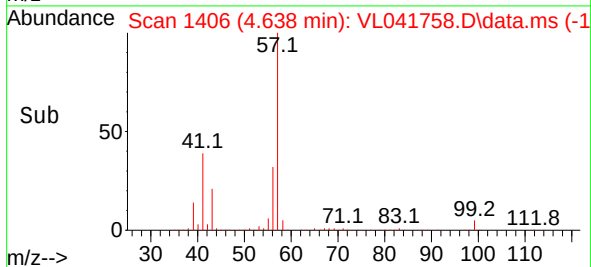
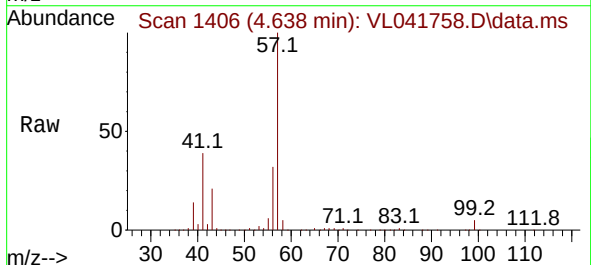
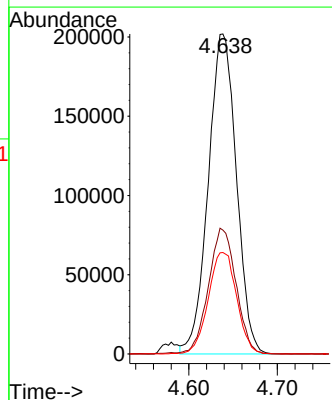
RT: 4.638 min Scan# 1406

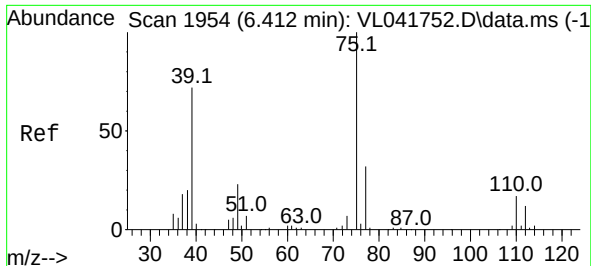
Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

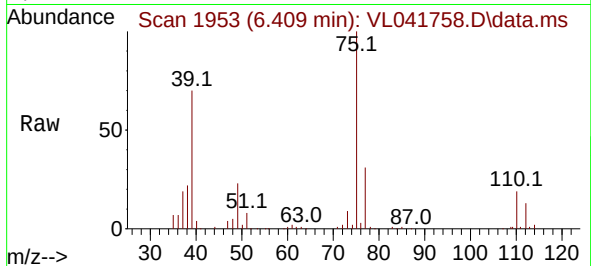
Tgt Ion: 57 Resp: 445947  
Ion Ratio Lower Upper  
57 100  
41 38.8 30.7 46.1  
56 32.1 25.4 38.0





#45  
t-1,3-Dichloropropene  
Concen: 15.973 ppbv  
RT: 6.409 min Scan# 1954  
Delta R.T. -0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

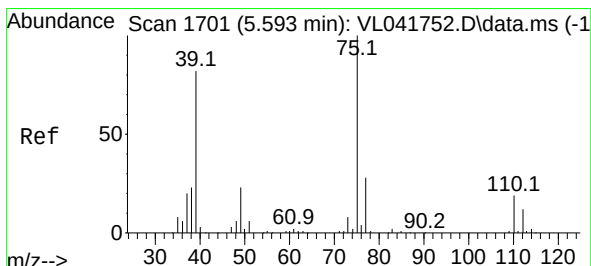
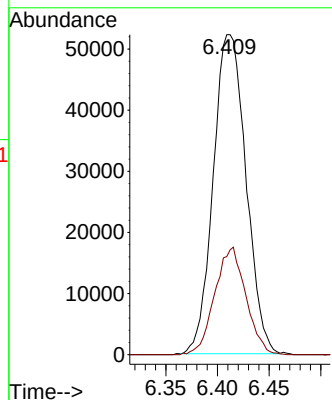
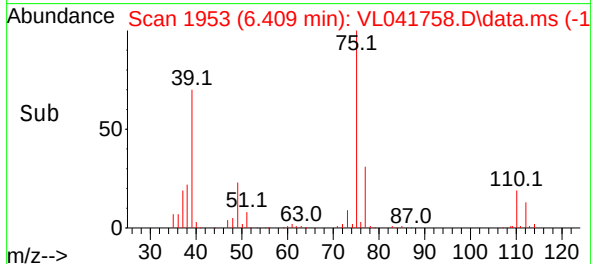
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015



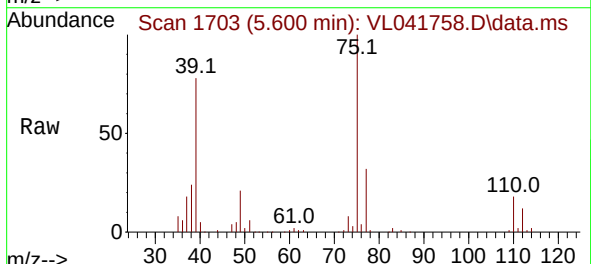
Tgt Ion: 75 Resp: 115159  
Ion Ratio Lower Upper  
75 100  
77 30.6 25.9 38.9

Manual Integrations  
APPROVED

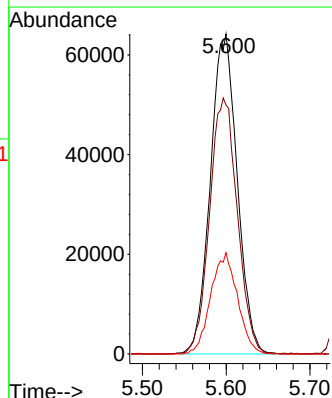
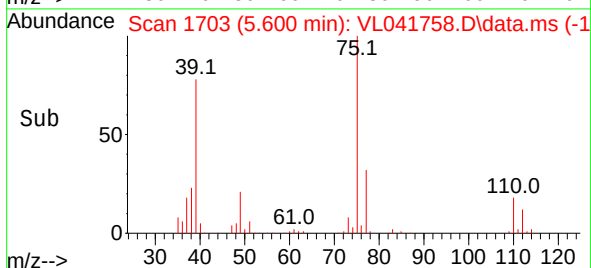
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

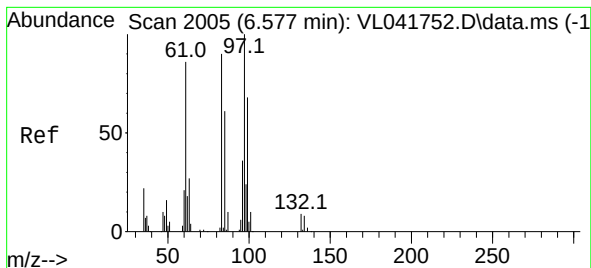


#46  
cis-1,3-Dichloropropene  
Concen: 15.643 ppbv  
RT: 5.600 min Scan# 1703  
Delta R.T. 0.006 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion: 75 Resp: 143172  
Ion Ratio Lower Upper  
75 100  
39 77.8 65.2 97.8  
77 31.6 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 14.242 ppbv

RT: 6.580 min Scan# 2005

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion: 97 Resp: 98420

Ion Ratio Lower Upper

97 100

83 88.0 72.3 108.5

85 58.6 48.5 72.7

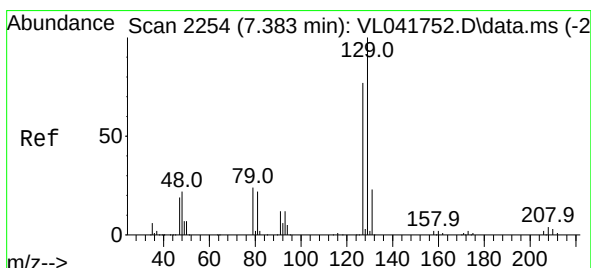
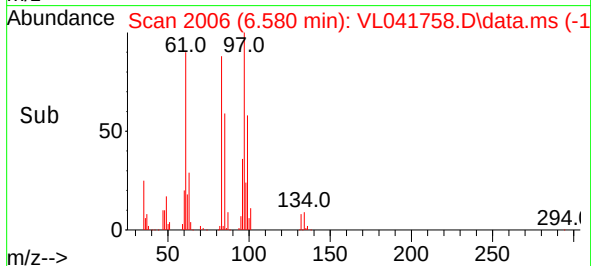
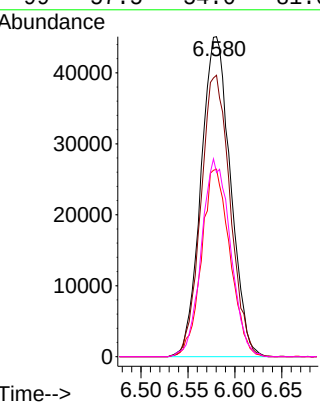
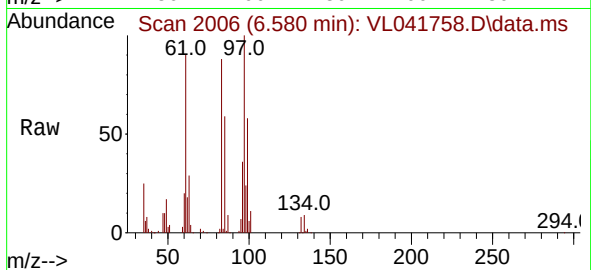
99 57.5 54.0 81.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#48

Dibromochloromethane

Concen: 17.131 ppbv

RT: 7.386 min Scan# 2255

Delta R.T. 0.003 min

Lab File: VL041758.D

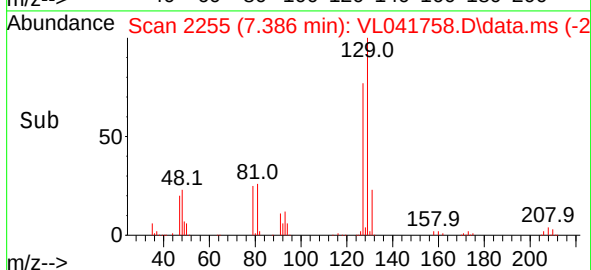
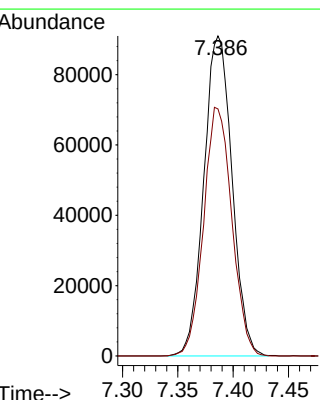
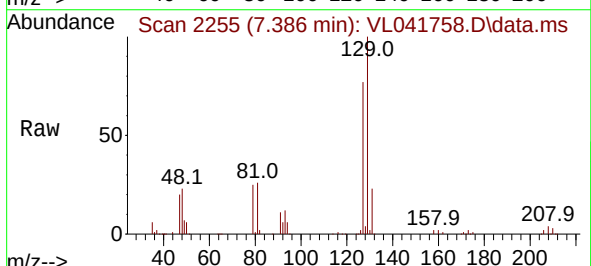
Acq: 16 Dec 2024 16:41

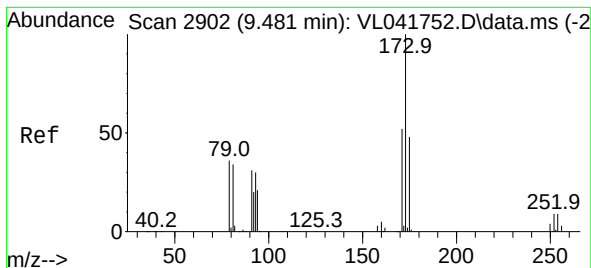
Tgt Ion:129 Resp: 161661

Ion Ratio Lower Upper

129 100

127 77.6 38.8 116.3





#49

Bromoform

Concen: 17.838 ppbv

RT: 9.484 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041758.D

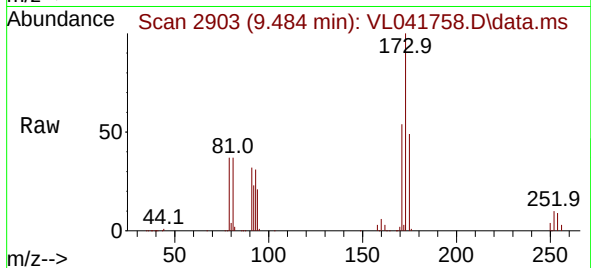
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015



Tgt Ion:173 Resp: 137780

Ion Ratio Lower Upper

173 100

175 48.2 38.2 57.2

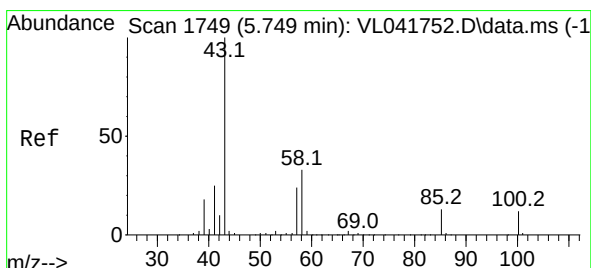
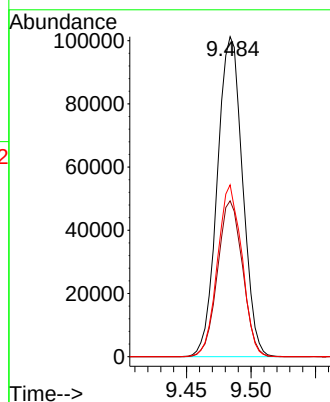
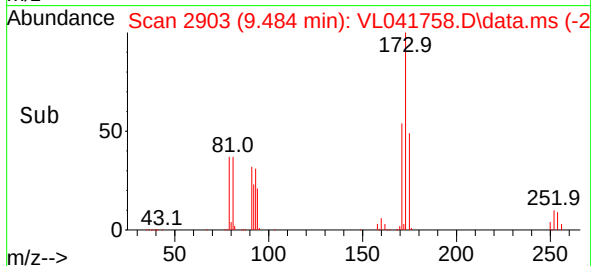
171 51.8 41.1 61.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#50

4-Methyl-2-Pentanone

Concen: 14.735 ppbv

RT: 5.749 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VL041758.D

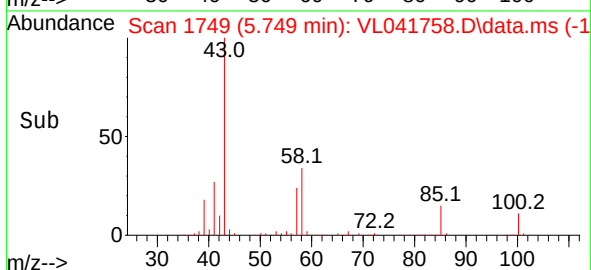
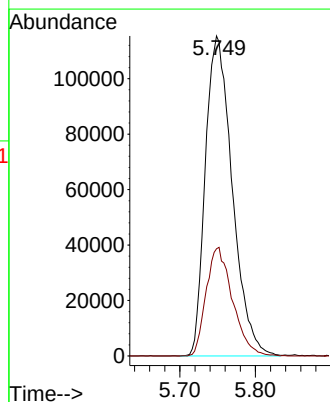
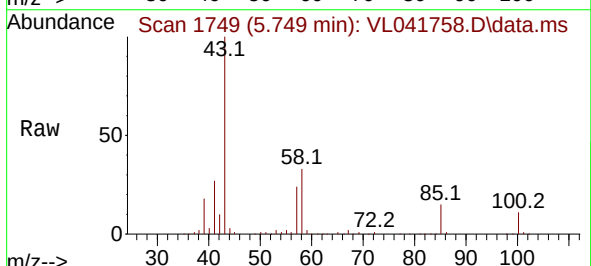
Acq: 16 Dec 2024 16:41

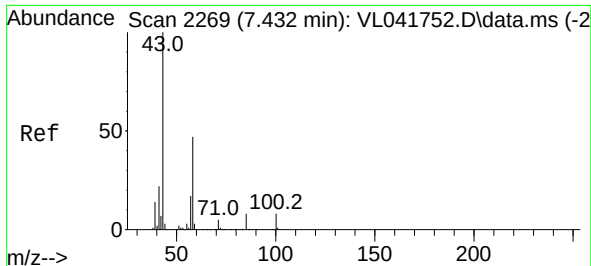
Tgt Ion: 43 Resp: 285467

Ion Ratio Lower Upper

43 100

58 33.2 26.8 40.2





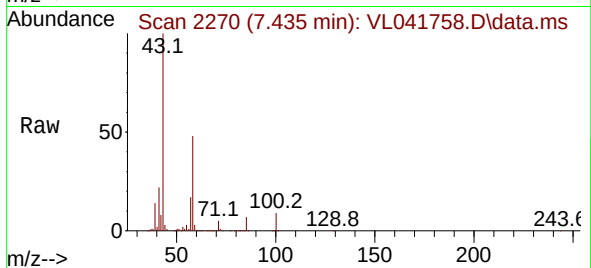
#51  
2-Hexanone  
Concen: 14.798 ppbv  
RT: 7.435 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

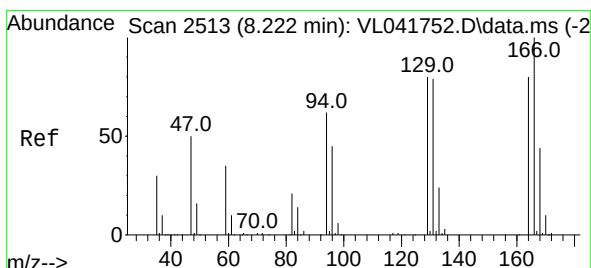
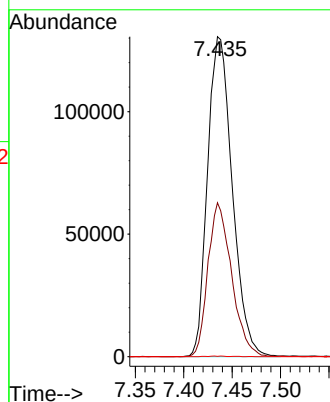
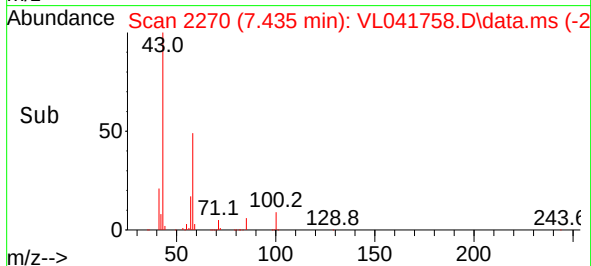


Tgt Ion: 43 Resp: 23236  
Ion Ratio Lower Upper  
43 100  
58 46.0 36.6 55.0  
98 0.2 0.1 0.1

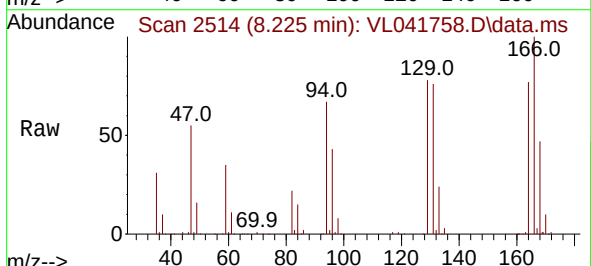
Manual Integrations

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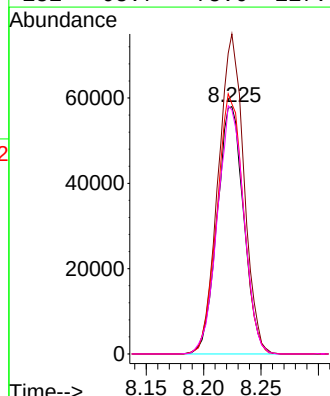
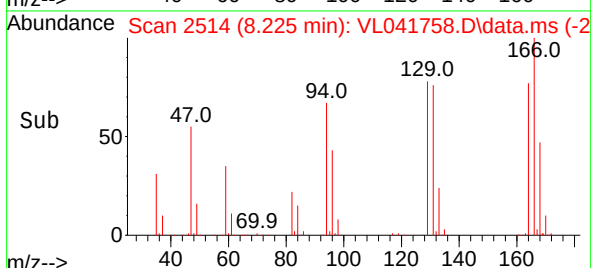
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



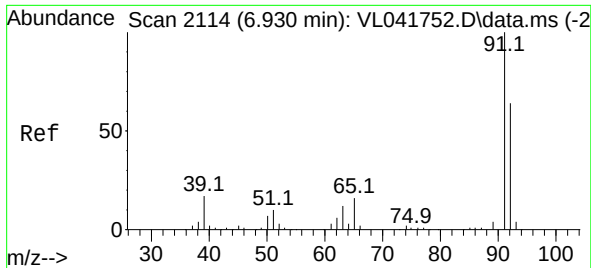
#52  
Tetrachloroethene  
Concen: 13.675 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion:164 Resp: 93120  
Ion Ratio Lower Upper  
164 100  
166 129.3 99.8 149.6  
129 101.1 79.6 119.4  
131 98.7 78.6 117.8







#53

Toluene

Concen: 14.533 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

Tgt Ion: 91 Resp: 301428

Ion Ratio Lower Upper

91 100

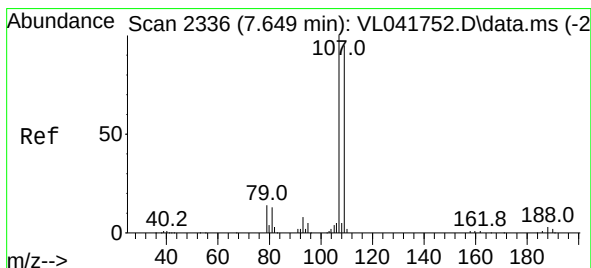
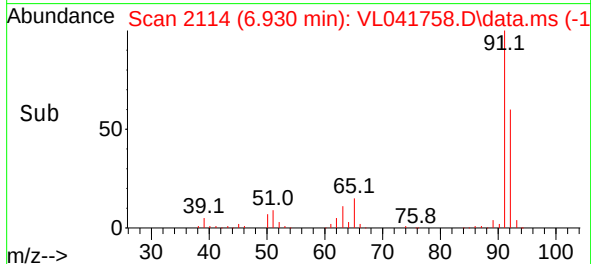
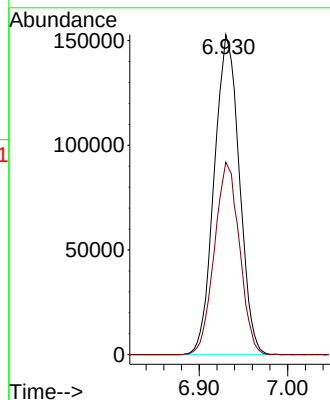
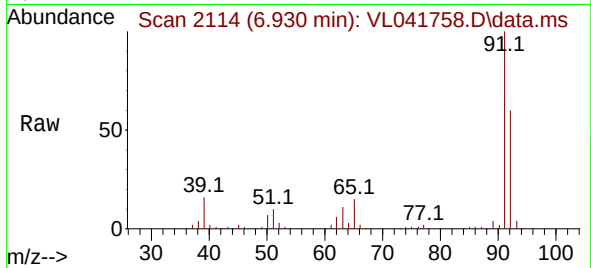
92 59.9 47.9 71.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#54

1,2-Dibromoethane

Concen: 14.690 ppbv

RT: 7.652 min Scan# 2337

Delta R.T. 0.003 min

Lab File: VL041758.D

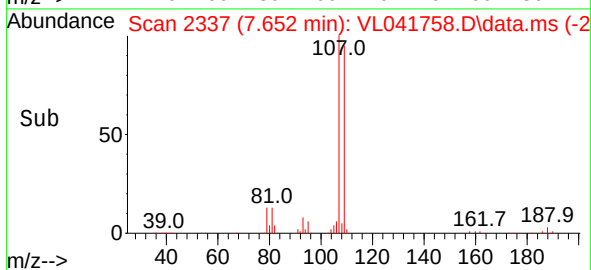
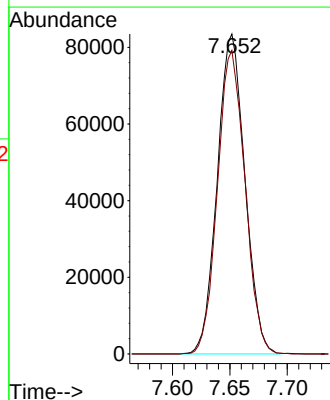
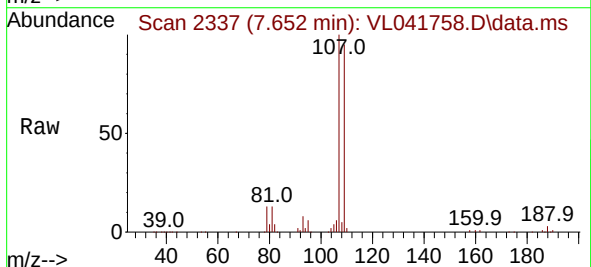
Acq: 16 Dec 2024 16:41

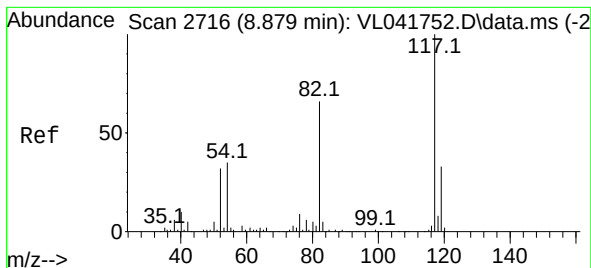
Tgt Ion:107 Resp: 139889

Ion Ratio Lower Upper

107 100

109 94.9 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 21

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

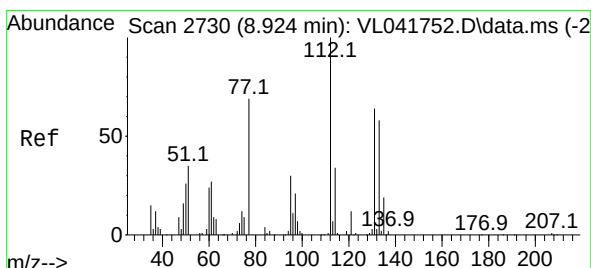
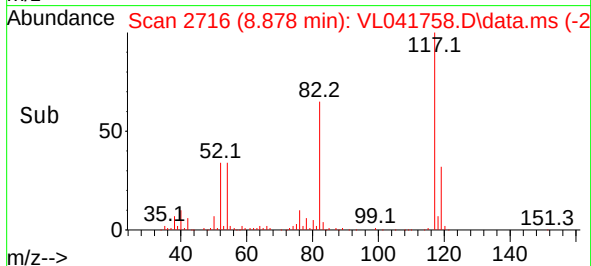
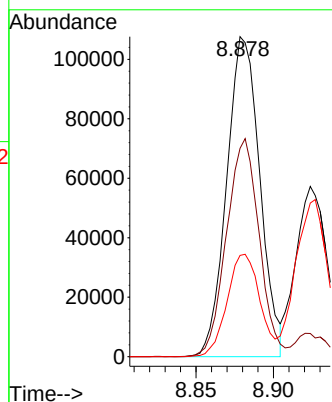
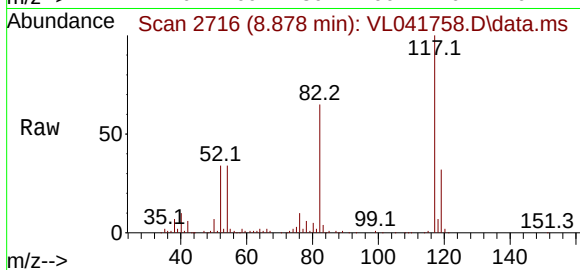
ClientSampleId :

VSTDICC015

|             |                |
|-------------|----------------|
| Tgt Ion:117 | Resp: 16045    |
| Ion Ratio   | Lower Upper    |
| 117         | 100            |
| 82          | 67.5 53.8 80.8 |
| 119         | 31.6 26.7 40.1 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#56

1,1,1,2-Tetrachloroethane

Concen: 15.059 ppbv

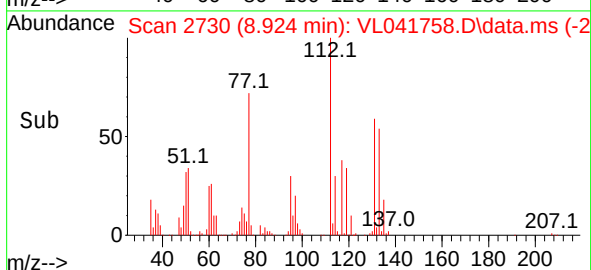
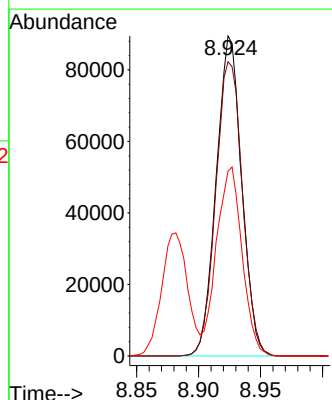
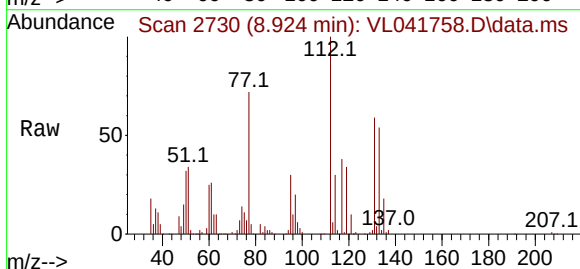
RT: 8.924 min Scan# 2730

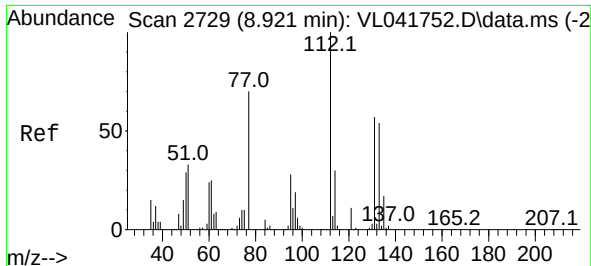
Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

|             |                 |
|-------------|-----------------|
| Tgt Ion:131 | Resp: 128108    |
| Ion Ratio   | Lower Upper     |
| 131         | 100             |
| 133         | 96.7 76.8 115.2 |
| 119         | 59.9 49.0 73.6  |





#57

Chlorobenzene

Concen: 13.869 ppbv

RT: 8.924 min Scan# 2729

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015

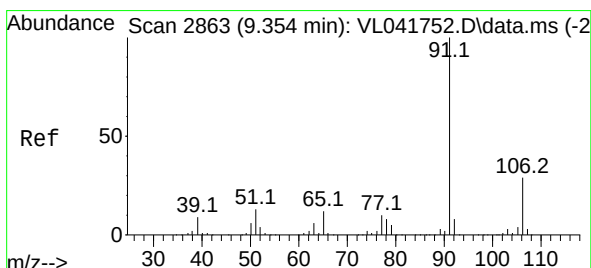
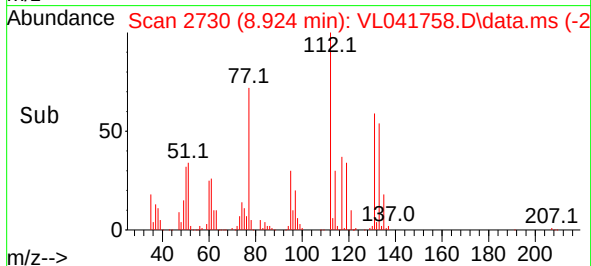
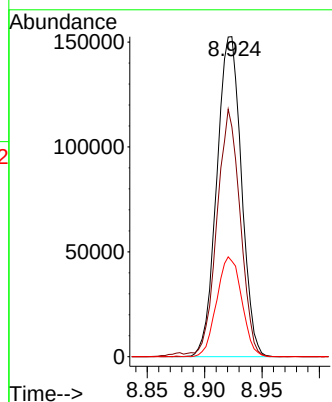
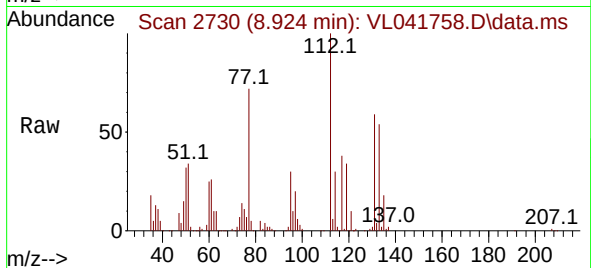
Tgt Ion: 112 Resp: 227710

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 77  | 71.8  | 57.4  | 86.0  |
| 114 | 29.8  | 27.4  | 33.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 14.742 ppbv

RT: 9.354 min Scan# 2863

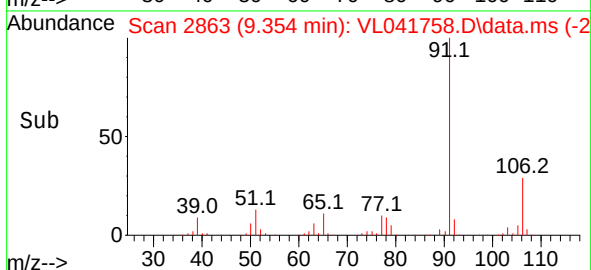
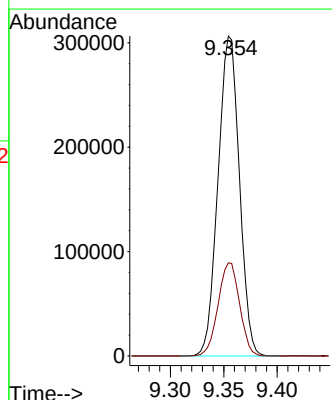
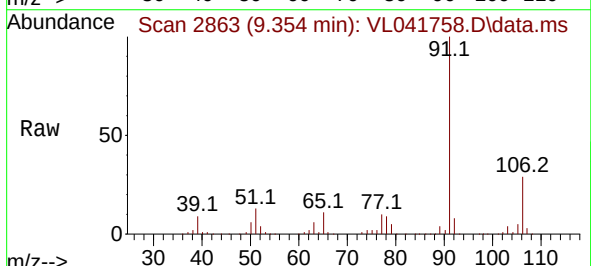
Delta R.T. -0.000 min

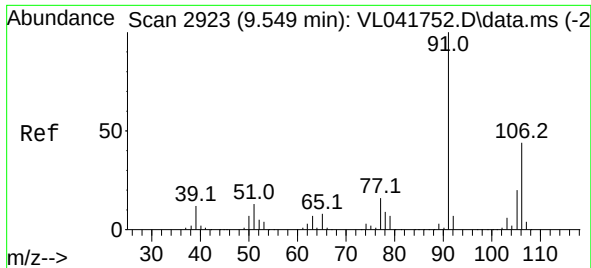
Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion: 91 Resp: 425852

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 29.1  | 23.5  | 35.3  |





#59

m/p-Xylene

Concen: 29.209 ppbv m

RT: 9.552 min Scan# 2923

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC015

Tgt Ion: 91 Resp: 67865

Ion Ratio Lower Upper

91 100

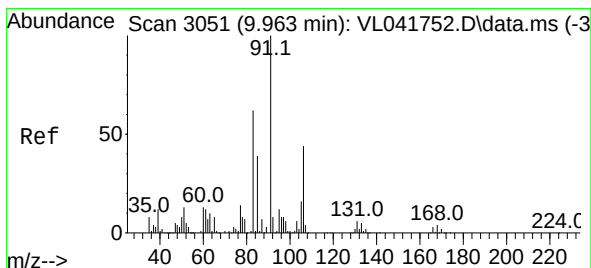
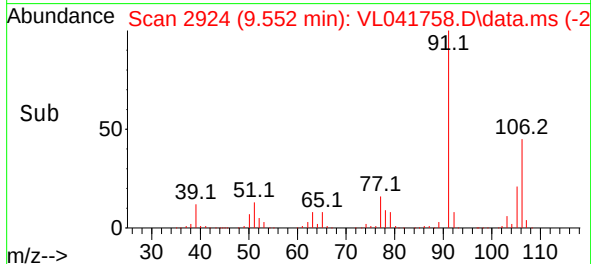
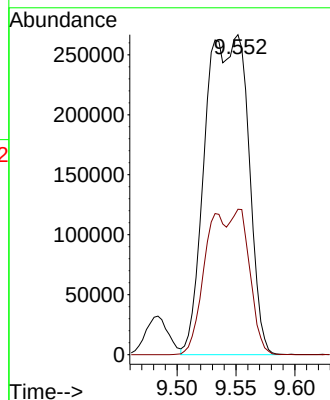
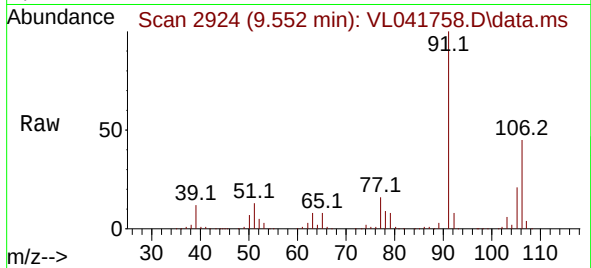
106 44.8 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#60

o-Xylene

Concen: 14.506 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041758.D

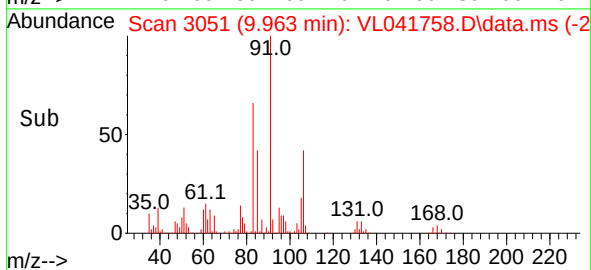
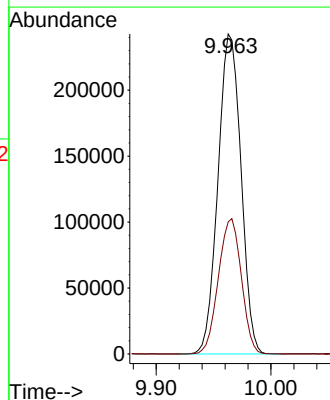
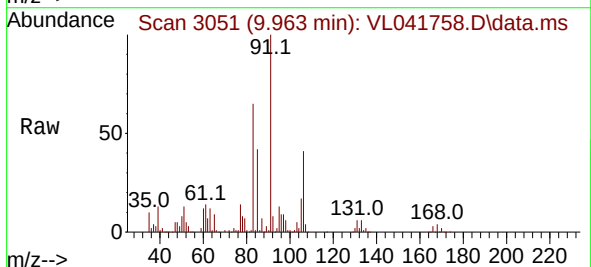
Acq: 16 Dec 2024 16:41

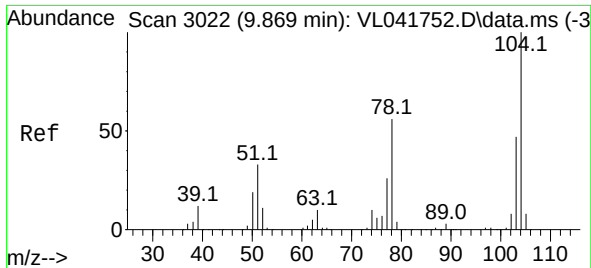
Tgt Ion: 91 Resp: 337891

Ion Ratio Lower Upper

91 100

106 42.2 21.1 63.4





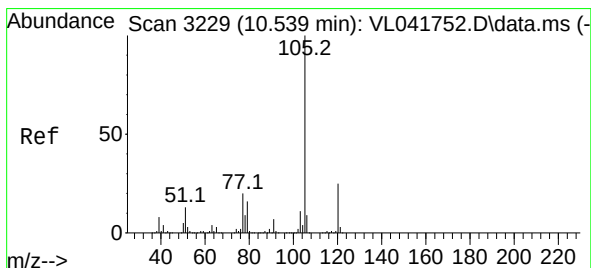
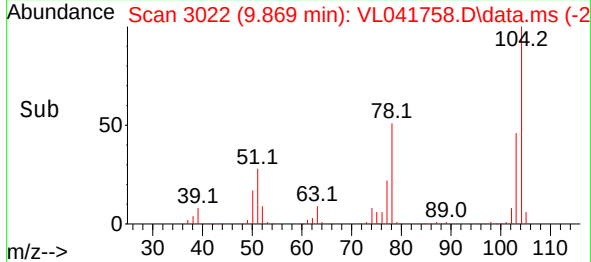
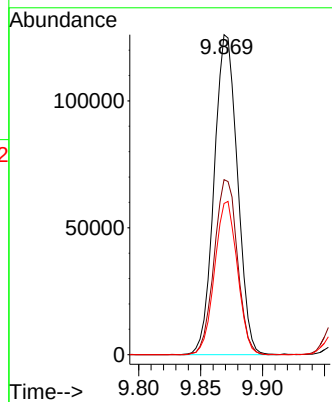
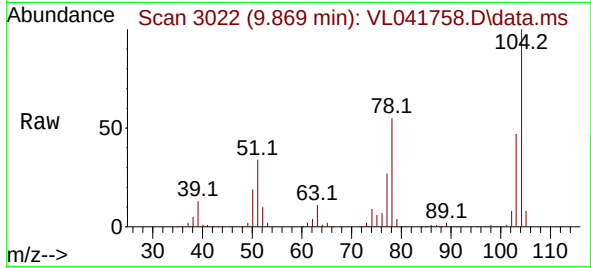
#61  
Styrene  
Concen: 16.415 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015

Tgt Ion:104 Resp: 165328  
Ion Ratio Lower Upper  
104 100  
78 54.5 43.8 65.6  
103 46.9 37.8 56.6

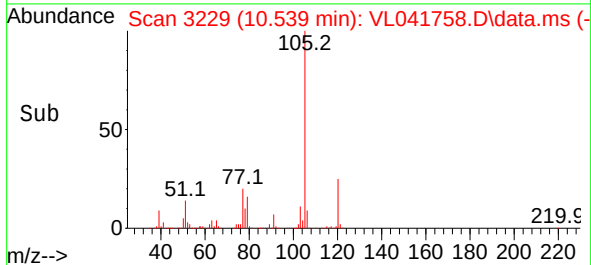
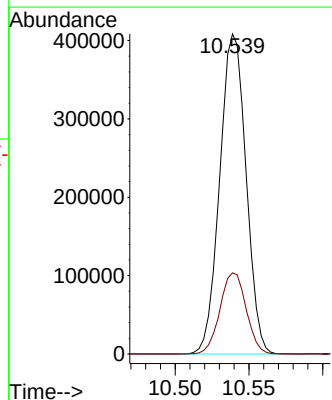
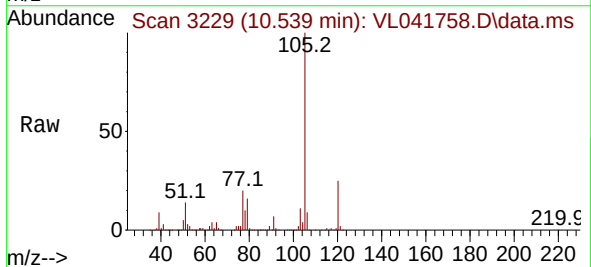
Manual Integrations  
APPROVED

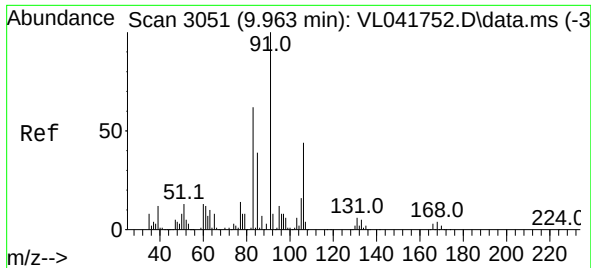
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#62  
Isopropylbenzene  
Concen: 14.475 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

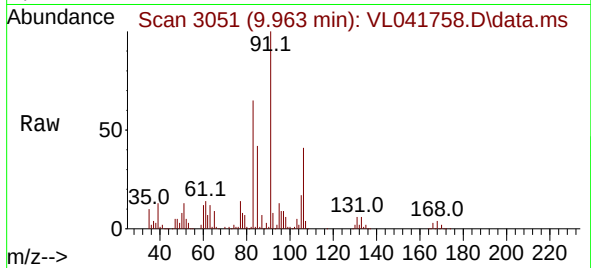
Tgt Ion:105 Resp: 506570  
Ion Ratio Lower Upper  
105 100  
120 25.2 19.8 29.8





#63  
1,1,2,2-Tetrachloroethane  
Concen: 13.790 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

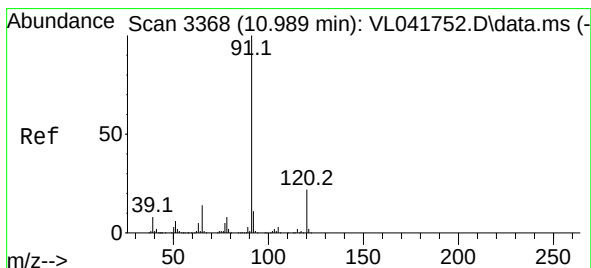
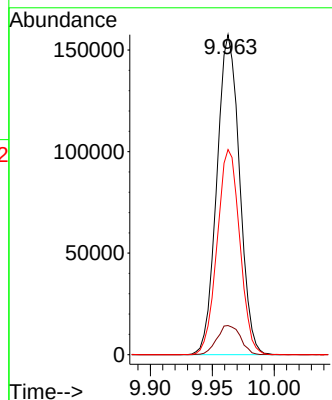
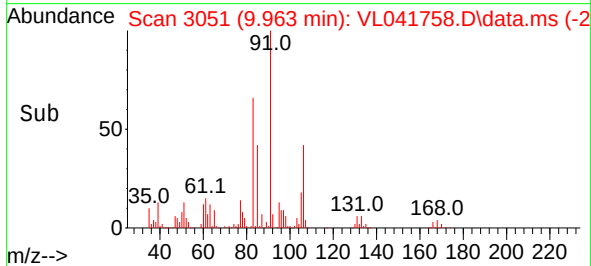
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



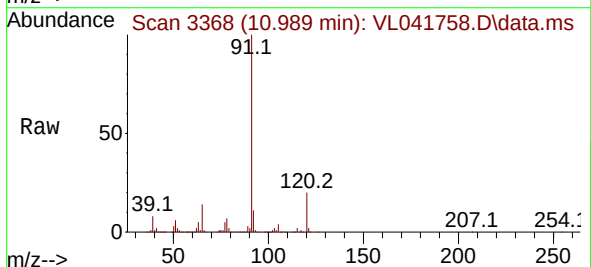
Tgt Ion: 83 Resp: 20105  
Ion Ratio Lower Upper  
83 100  
131 9.5 4.9 14.7  
85 64.0 32.0 96.2

Manual Integrations  
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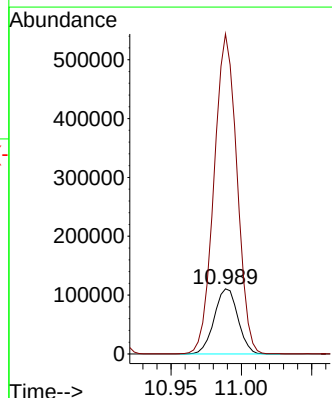
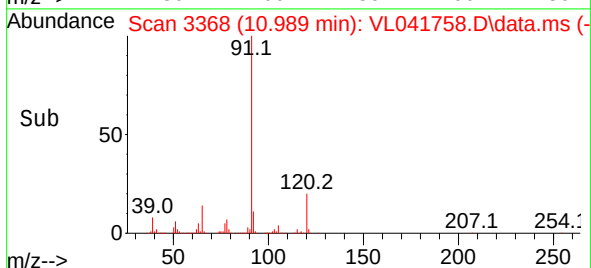
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

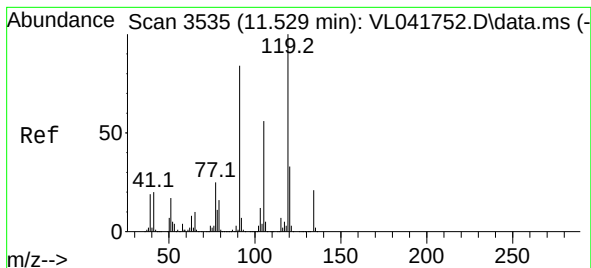


#64  
n-propylbenzene  
Concen: 14.602 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



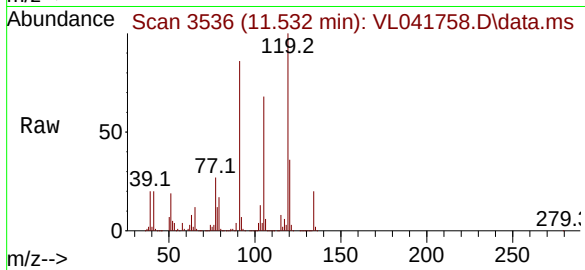
Tgt Ion:120 Resp: 129200  
Ion Ratio Lower Upper  
120 100  
91 475.8 387.3 580.9





#65  
tert-Butylbenzene  
Concen: 14.148 ppbv  
RT: 11.532 min Scan# 3536  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

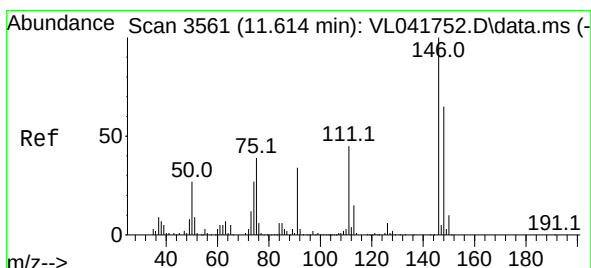
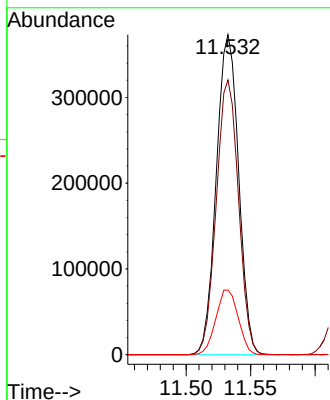
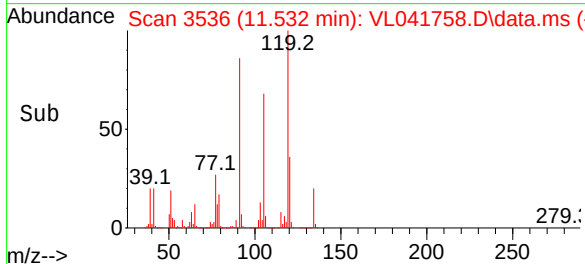
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



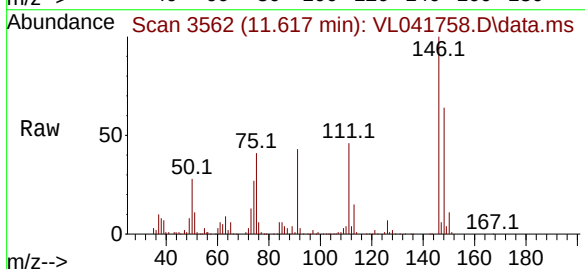
Tgt Ion:119 Resp: 446690  
Ion Ratio Lower Upper  
119 100  
91 85.7 67.0 100.4  
134 20.3 16.5 24.7

Manual Integrations  
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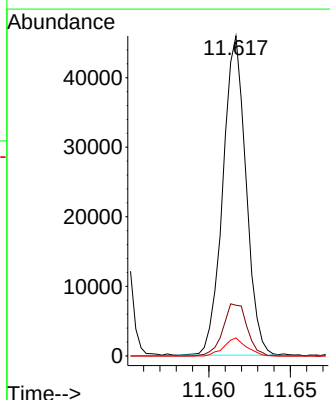
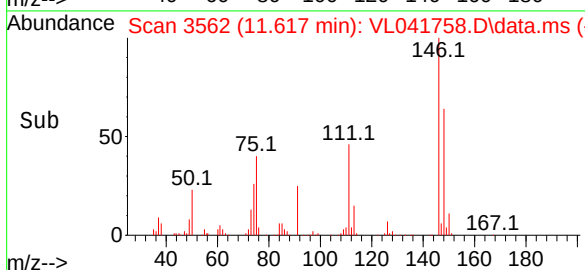
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

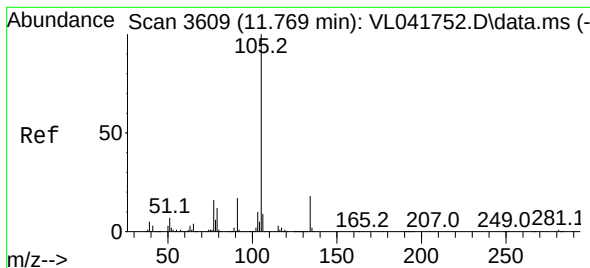


#66  
Benzyl Chloride  
Concen: 16.234 ppbv  
RT: 11.617 min Scan# 3562  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



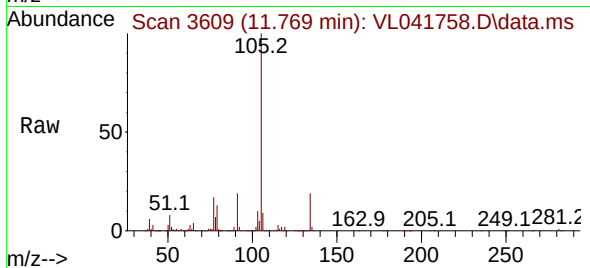
Tgt Ion: 91 Resp: 45189  
Ion Ratio Lower Upper  
91 100  
126 17.1 13.9 20.9  
128 5.5 4.4 6.6





#67  
 sec-Butylbenzene  
 Concen: 14.295 ppbv  
 RT: 11.769 min Scan# 3609  
 Delta R.T. -0.000 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41

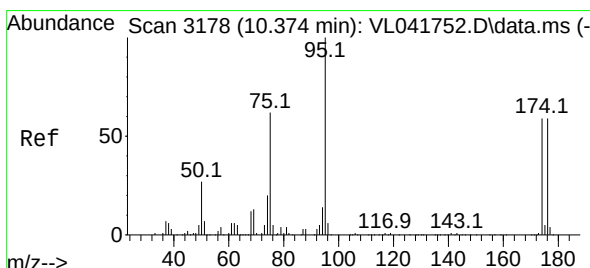
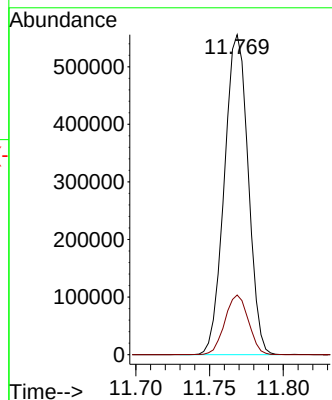
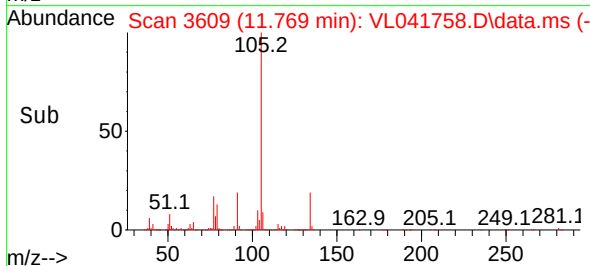
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015



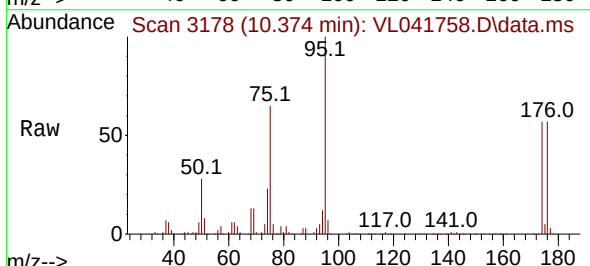
Tgt Ion: 105 Resp: 62456  
 Ion Ratio Lower Upper  
 105 100  
 134 18.5 14.5 21.7

Manual Integrations  
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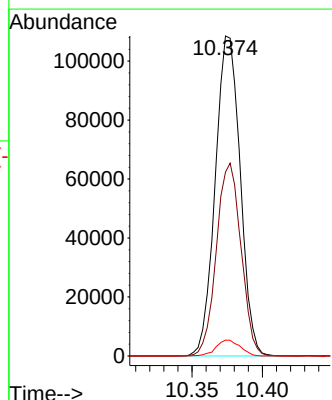
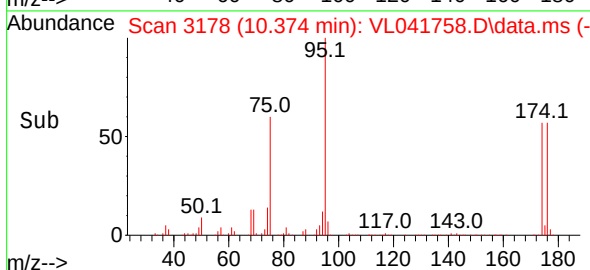
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



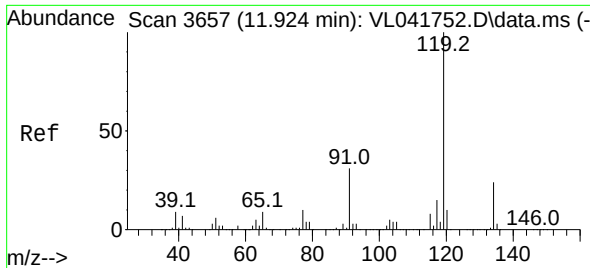
#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.998 ppbv  
 RT: 10.374 min Scan# 3178  
 Delta R.T. -0.000 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41



Tgt Ion: 95 Resp: 133687  
 Ion Ratio Lower Upper  
 95 100  
 174 59.4 47.6 71.4  
 175 4.8 3.7 5.5

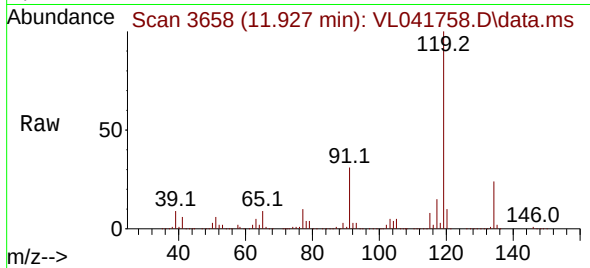






#69  
p-Isopropyltoluene  
Concen: 14.671 ppbv  
RT: 11.927 min Scan# 3658  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

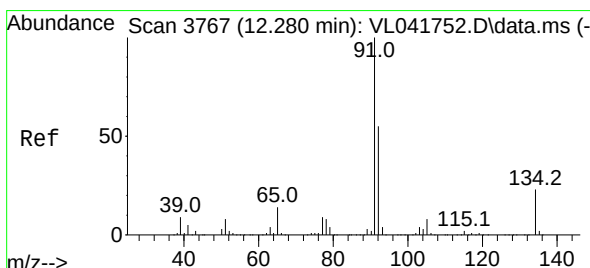
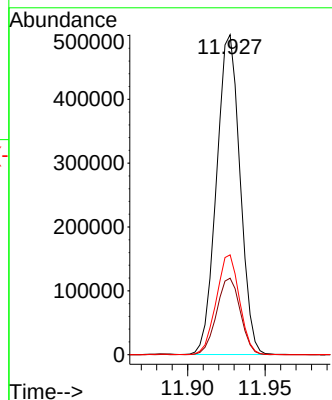
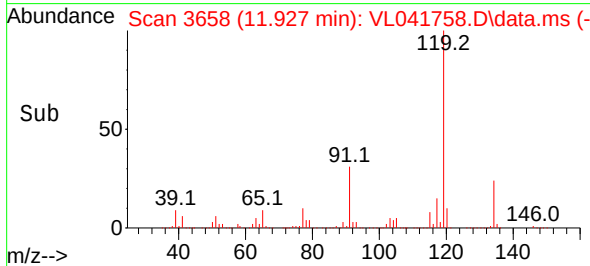
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015



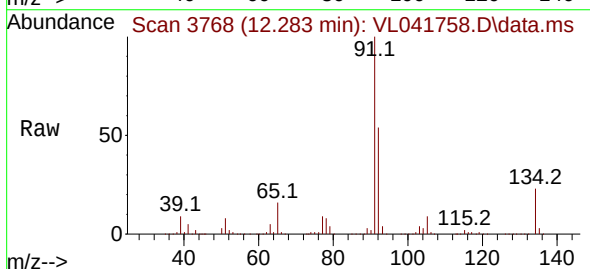
Tgt Ion: 119 Resp: 52826  
Ion Ratio Lower Upper  
119 100  
134 24.3 19.6 29.4  
91 31.0 24.4 36.6

Manual Integrations  
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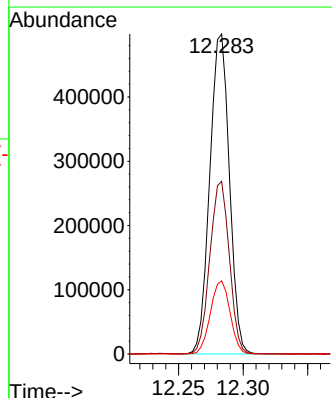
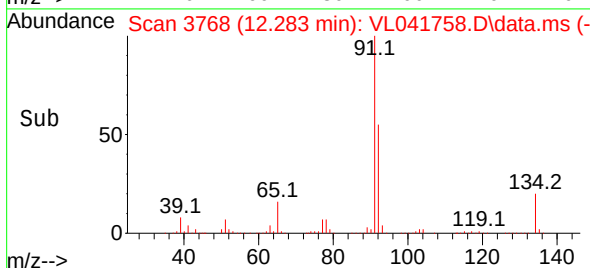
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

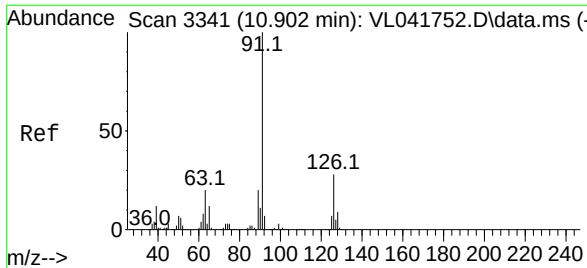


#70  
n-Butylbenzene  
Concen: 15.101 ppbv  
RT: 12.283 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion: 91 Resp: 525377  
Ion Ratio Lower Upper  
91 100  
92 53.8 43.2 64.8  
134 22.8 18.2 27.4





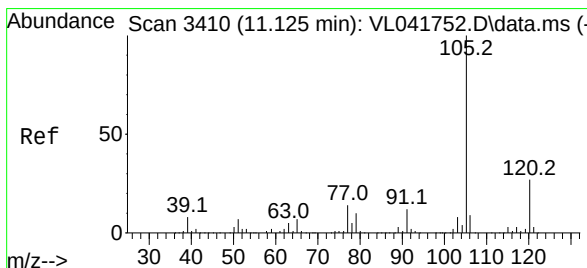
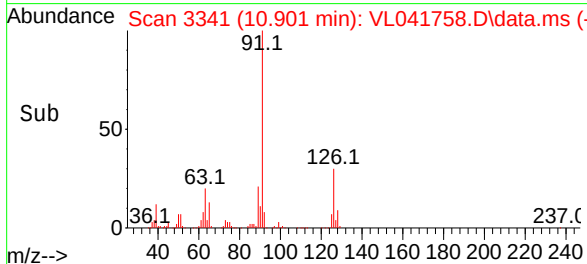
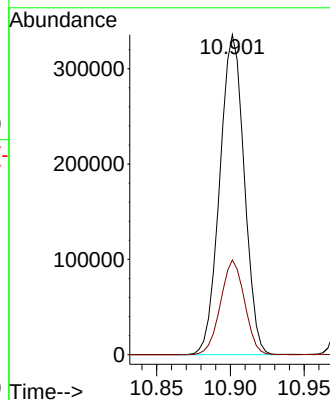
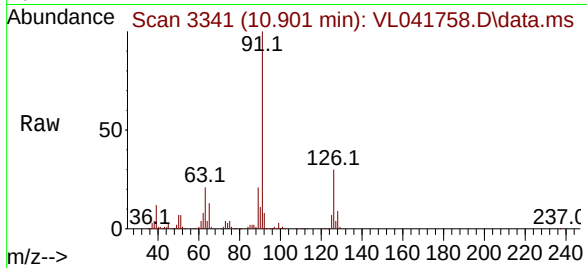
#71  
2-Chlorotoluene  
Concen: 14.498 ppbv  
RT: 10.901 min Scan# 3341  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 91 Resp: 387300  
Ion Ratio Lower Upper  
91 100  
126 29.0 11.6 46.4

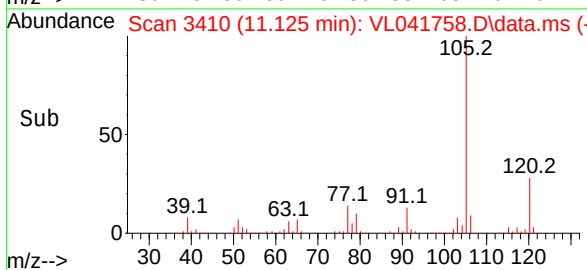
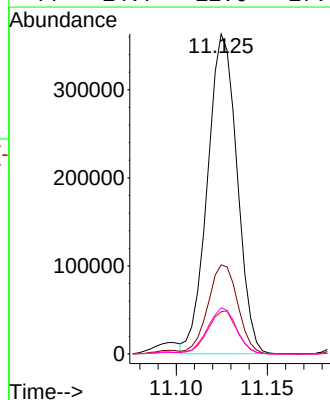
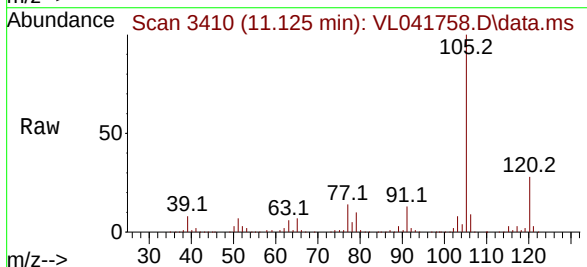
Manual Integrations  
APPROVED

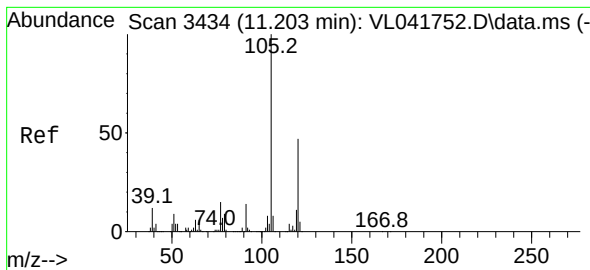
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 14.934 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion:105 Resp: 409822  
Ion Ratio Lower Upper  
105 100  
120 29.2 23.3 34.9  
91 13.9 10.9 16.3  
77 14.7 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 15.383 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion:105 Resp: 350894

Ion Ratio Lower Upper

105 100

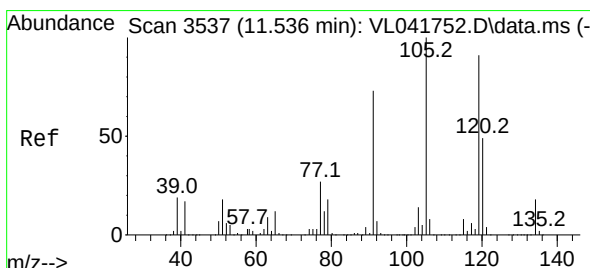
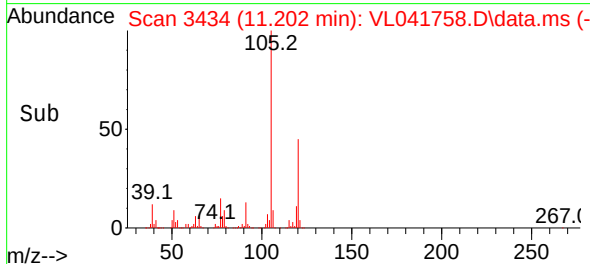
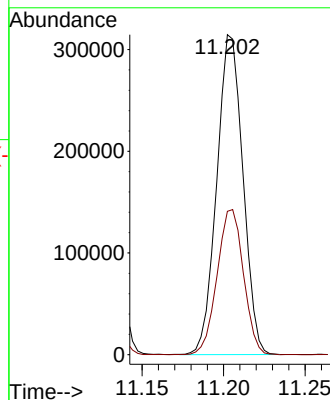
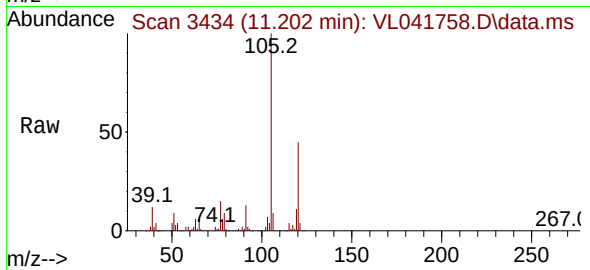
120 44.8 37.4 56.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#74

1,2,4-Trimethylbenzene

Concen: 15.144 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion:105 Resp: 371476

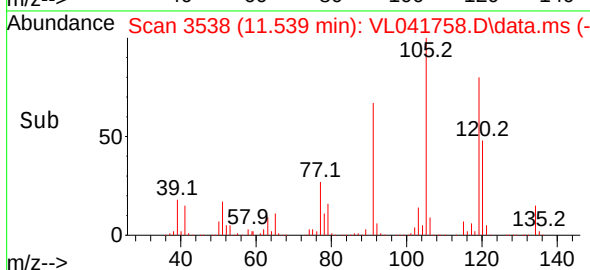
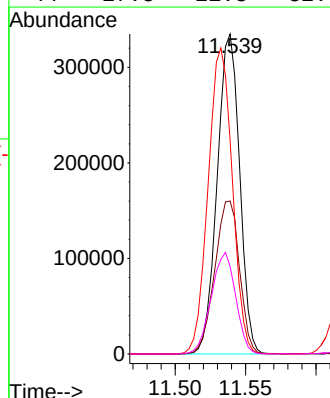
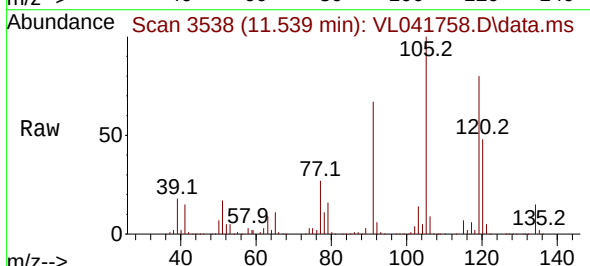
Ion Ratio Lower Upper

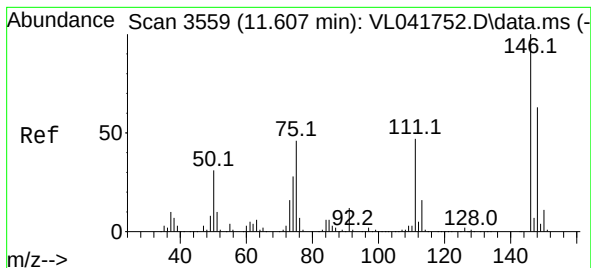
105 100

120 47.8 39.0 58.4

91 66.6 58.1 87.1

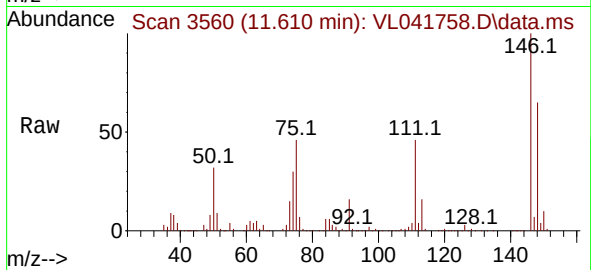
77 27.3 21.8 32.8





#75  
1,3-Dichlorobenzene  
Concen: 14.036 ppbv  
RT: 11.610 min Scan# 3560  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

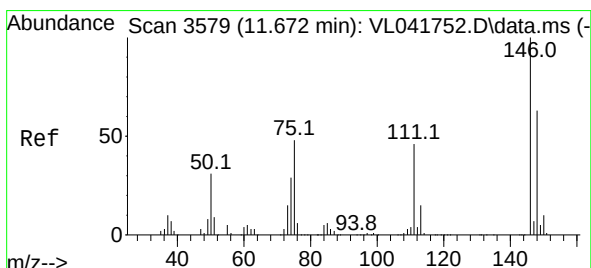
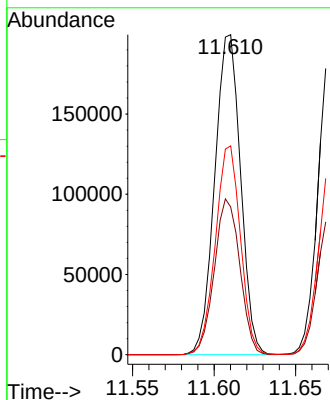
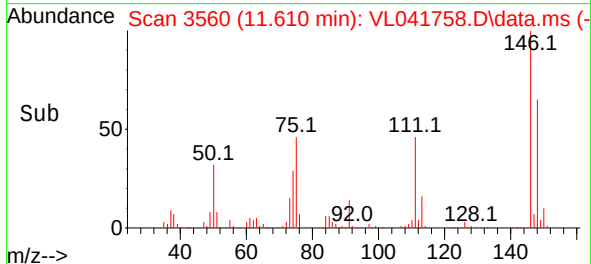
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015



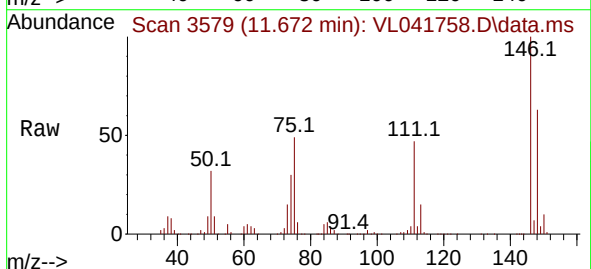
Tgt Ion:146 Resp: 219500  
Ion Ratio Lower Upper  
146 100  
111 48.2 23.4 70.3  
148 63.5 31.6 95.0

Manual Integrations  
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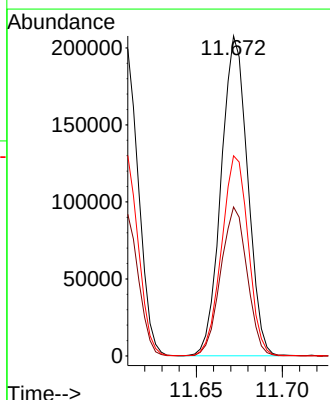
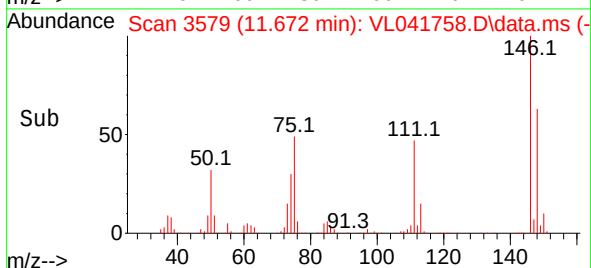
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

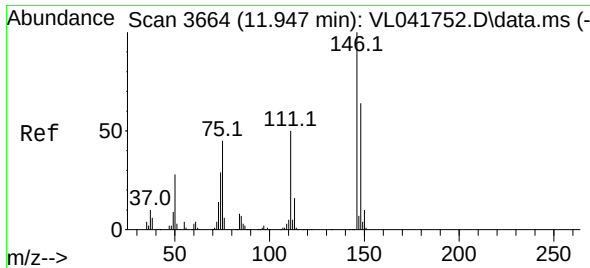


#76  
1,4-Dichlorobenzene  
Concen: 14.388 ppbv  
RT: 11.672 min Scan# 3579  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



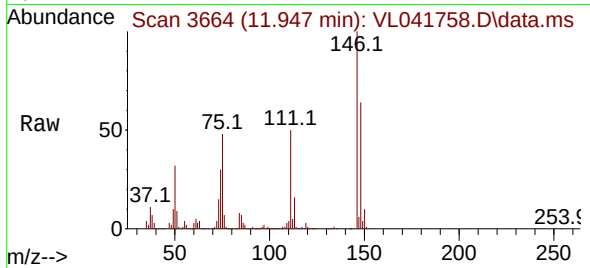
Tgt Ion:146 Resp: 222290  
Ion Ratio Lower Upper  
146 100  
111 46.6 22.7 68.1  
148 63.2 31.4 94.0





#77  
1,2-Dichlorobenzene  
Concen: 13.672 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

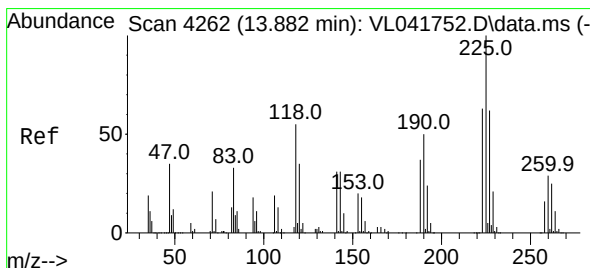
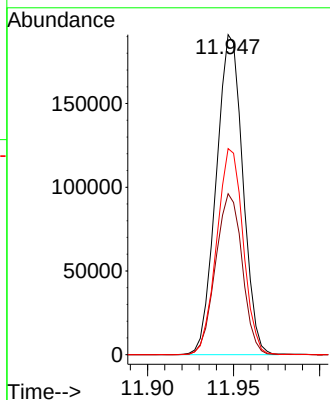
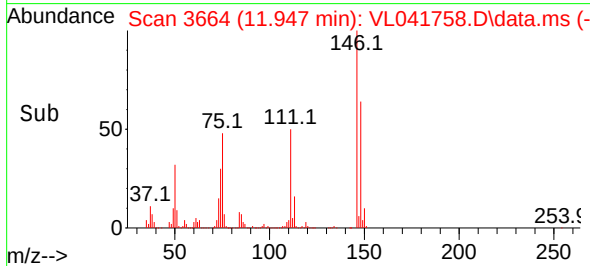
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015



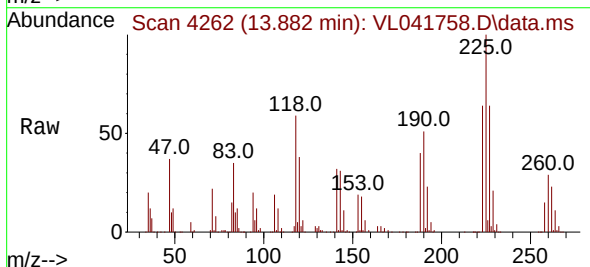
Tgt Ion:146 Resp: 20573  
Ion Ratio Lower Upper  
146 100  
111 50.4 24.8 74.3  
148 63.9 31.8 95.4

Manual Integrations  
APPROVED

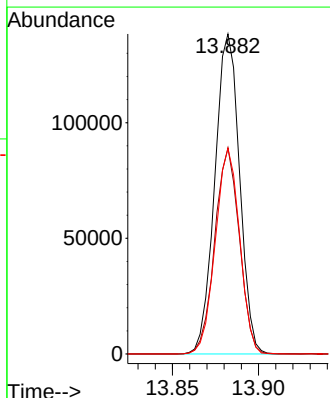
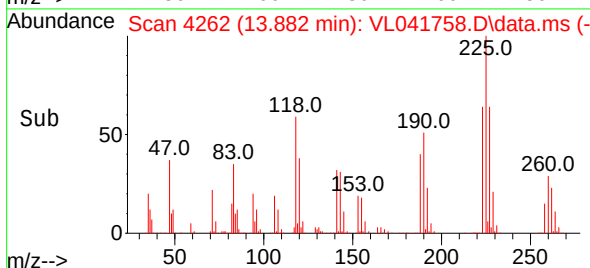
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

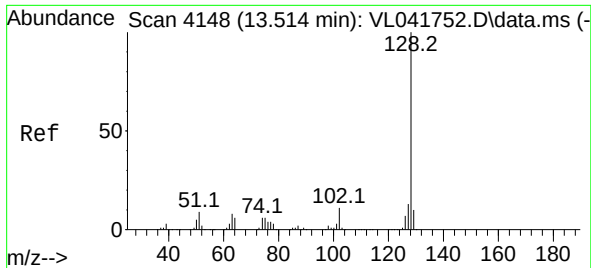


#78  
Hexachloro-1,3-Butadiene  
Concen: 12.412 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



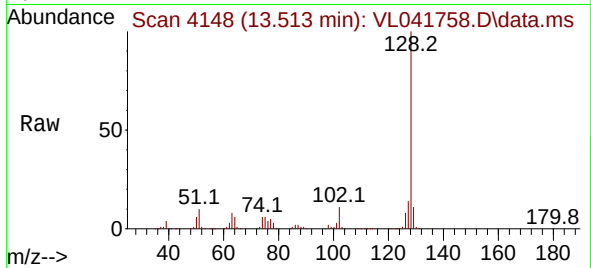
Tgt Ion:225 Resp: 138481  
Ion Ratio Lower Upper  
225 100  
223 63.7 50.5 75.7  
227 63.1 50.3 75.5





#79  
Naphthalene  
Concen: 17.611 ppbv  
RT: 13.513 min Scan# 4148  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

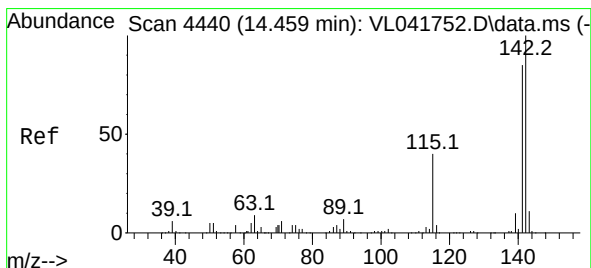
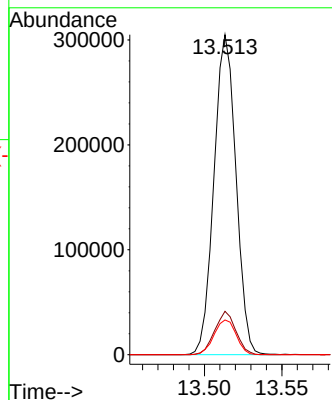
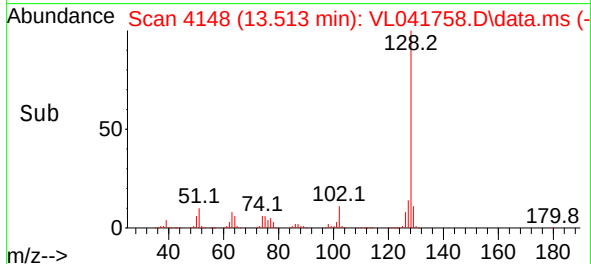
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015



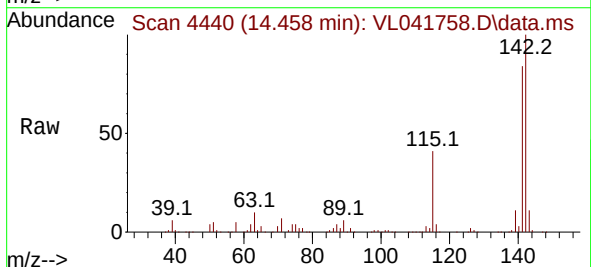
Tgt Ion:128 Resp: 301000  
Ion Ratio Lower Upper  
128 100  
127 13.6 10.7 16.1  
129 10.9 8.2 12.4

Manual Integrations  
APPROVED

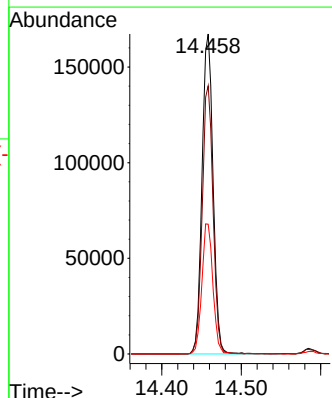
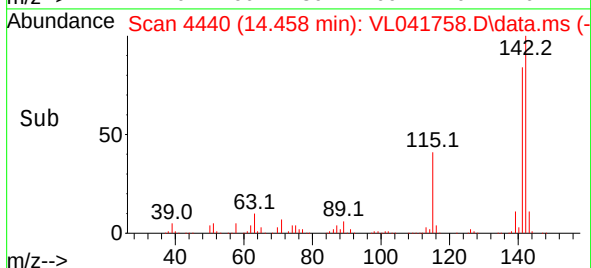
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

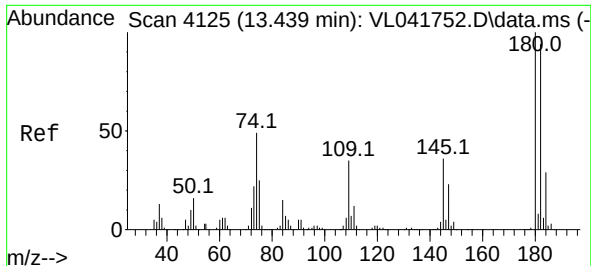


#80  
Naphthalene, 2-methyl-  
Concen: 30.630 ppbv  
RT: 14.458 min Scan# 4440  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41



Tgt Ion:142 Resp: 161927  
Ion Ratio Lower Upper  
142 100  
141 82.6 68.4 102.6  
115 40.9 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 15.669 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041758.D

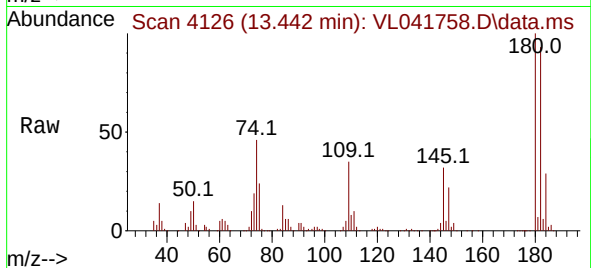
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC015



Tgt Ion:180 Resp: 146340

Ion Ratio Lower Upper

180 100

182 94.8 77.0 115.6

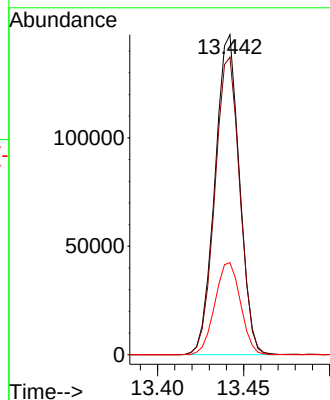
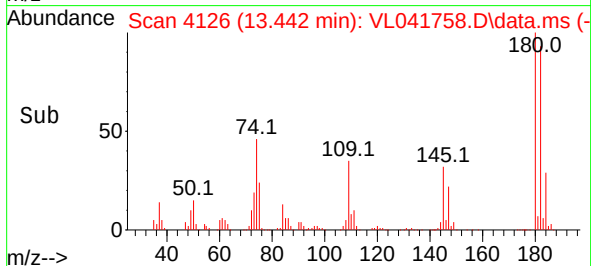
184 30.0 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041759.D  
Acq On : 16 Dec 2024 18:59  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Quant Time: Dec 19 07:36:00 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
Supervised By : Mahesh Dadoda 12/20/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 64976    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.959 | 114  | 174378   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.885 | 117  | 153443   | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 10.380 | 95    | 129985   | 10.166   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.700% |

Target Compounds

|                               |       |     |        |        |        | Qvalue |
|-------------------------------|-------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.499 | 85  | 106780 | 9.236  | ppbv   | 95     |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 105141 | 9.922  | ppbv   | 99     |
| 4) Chloromethane              | 1.531 | 50  | 43409  | 9.596  | ppbv   | 96     |
| 5) Vinyl Chloride             | 1.580 | 62  | 40956  | 8.986  | ppbv   | 97     |
| 6) Bromomethane               | 1.667 | 94  | 19590  | 9.109  | ppbv   | 94     |
| 7) Chloroethane               | 1.703 | 64  | 17356  | 9.803  | ppbv   | 92     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 99858  | 9.650  | ppbv   | 98     |
| 9) Propene                    | 1.483 | 41  | 41721  | 9.084  | ppbv   | 98     |
| 10) Heptane                   | 4.981 | 43  | 115804 | 9.816  | ppbv   | 99     |
| 11) Trichlorofluoromethane    | 1.877 | 101 | 115785 | 9.428  | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 88265  | 9.450  | ppbv   | 100    |
| 13) Ethanol                   | 1.722 | 45  | 2749m  | 7.229  | ppbv   |        |
| 14) Bromoethene               | 1.780 | 108 | 31492  | 9.987  | ppbv   | 98     |
| 15) Acetone                   | 1.835 | 43  | 94879  | 7.505  | ppbv   | 99     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 45119  | 9.063  | ppbv   | 98     |
| 17) tert-Butyl alcohol        | 2.039 | 59  | 122035 | 9.730  | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 37466  | 9.568  | ppbv   | 98     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 57577  | 7.590  | ppbv   | 98     |
| 20) Methylene Chloride        | 2.062 | 84  | 32325  | 8.967  | ppbv   | 96     |
| 21) Allyl Chloride            | 2.094 | 41  | 67596  | 9.859  | ppbv   | 97     |
| 22) trans-1,2-Dichloroethene  | 2.340 | 96  | 42651  | 9.515  | ppbv   | 97     |
| 23) Vinyl Acetate             | 2.463 | 43  | 51812  | 8.826  | ppbv # | 98     |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 87006  | 9.589  | ppbv   | 100    |
| 25) Ethyl Acetate             | 2.835 | 43  | 234370 | 9.965  | ppbv   | 100    |
| 26) Hexane                    | 2.826 | 57  | 87034  | 9.752  | ppbv   | 97     |
| 27) Carbon Disulfide          | 2.149 | 76  | 85650  | 10.649 | ppbv   | 100    |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 62189  | 8.589  | ppbv   | 99     |
| 29) Chloroform                | 2.848 | 83  | 134541 | 9.892  | ppbv   | 98     |
| 30) Cyclohexane               | 3.858 | 84  | 75274  | 9.912  | ppbv   | 98     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 91628  | 9.935  | ppbv   | 97     |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 137978 | 9.979  | ppbv   | 99     |
| 34) 2-Butanone                | 2.557 | 43  | 133939 | 9.547  | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.764 | 117 | 138537 | 11.191 | ppbv   | 97     |
| 36) Benzene                   | 3.658 | 78  | 176537 | 9.787  | ppbv   | 99     |
| 37) 1,2-Dichloroethane        | 3.221 | 62  | 112037 | 9.982  | ppbv   | 99     |
| 38) Trichloroethene           | 4.551 | 130 | 70108  | 9.156  | ppbv   | 96     |
| 39) 1,2-Dichloropropane       | 4.318 | 63  | 63675  | 9.761  | ppbv   | 95     |
| 40) 1,4-Dioxane               | 4.583 | 88  | 30891  | 9.693  | ppbv # | 98     |
| 41) Tetrahydrofuran           | 3.056 | 42  | 77472  | 9.857  | ppbv   | 99     |
| 42) Bromodichloromethane      | 4.493 | 83  | 139717 | 10.821 | ppbv   | 95     |
| 43) Methyl Methacrylate       | 4.881 | 69  | 70299  | 10.229 | ppbv   | 100    |
| 44) 2,2,4-Trimethylpentane    | 4.641 | 57  | 301772 | 9.796  | ppbv   | 100    |
| 45) t-1,3-Dichloropropene     | 6.415 | 75  | 77534  | 10.907 | ppbv   | 94     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041759.D  
 Acq On : 16 Dec 2024 18:59  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL121624

Quant Time: Dec 19 07:36:00 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 07:32:09 2024  
 Response via : Initial Calibration

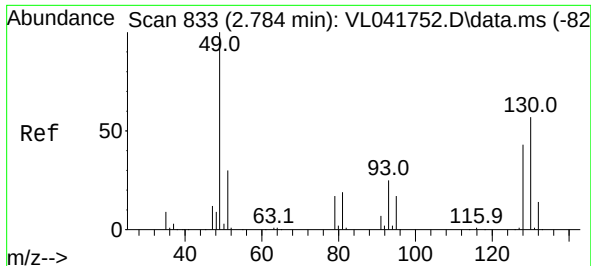
### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/20/2024  
 Supervised By : Mahesh Dadoda 12/20/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.603  | 75   | 95812    | 10.617 | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 6.587  | 97   | 66169m   | 9.711  | ppbv   |          |
| 48) Dibromochloromethane      | 7.389  | 129  | 105378   | 11.326 | ppbv   | 100      |
| 49) Bromoform                 | 9.487  | 173  | 88971    | 11.682 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 5.758  | 43   | 190637   | 9.980  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.441  | 43   | 155646   | 10.053 | ppbv # | 100      |
| 52) Tetrachloroethene         | 8.228  | 164  | 62782    | 9.351  | ppbv   | 96       |
| 53) Toluene                   | 6.933  | 91   | 199754   | 9.768  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.655  | 107  | 93439    | 9.952  | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 8.927  | 131  | 85883    | 10.558 | ppbv   | 99       |
| 57) Chlorobenzene             | 8.924  | 112  | 155257   | 9.888  | ppbv   | 98       |
| 58) Ethyl Benzene             | 9.357  | 91   | 284770   | 10.308 | ppbv   | 98       |
| 59) m/p-Xylene                | 9.555  | 91   | 459102m  | 20.669 | ppbv   |          |
| 60) o-Xylene                  | 9.966  | 91   | 229517   | 10.304 | ppbv   | 98       |
| 61) Styrene                   | 9.875  | 104  | 106841   | 11.093 | ppbv   | 99       |
| 62) Isopropylbenzene          | 10.542 | 105  | 348887   | 10.425 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 137547   | 9.865  | ppbv   | 99       |
| 64) n-propylbenzene           | 10.992 | 120  | 87865    | 10.384 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 11.536 | 119  | 307790   | 10.194 | ppbv   | 100      |
| 66) Benzyl Chloride           | 11.620 | 91   | 29398    | 11.054 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.772 | 105  | 430521   | 10.304 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 365667   | 10.620 | ppbv   | 100      |
| 70) n-Butylbenzene            | 12.283 | 91   | 356880   | 10.727 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.904 | 91   | 264123   | 10.340 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.128 | 105  | 280580   | 10.672 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.205 | 105  | 237804   | 10.902 | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 11.542 | 105  | 256141   | 10.919 | ppbv # | 88       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 149927   | 10.025 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 152212   | 10.302 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 142734   | 9.919  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.885 | 225  | 94671    | 8.873  | ppbv   | 99       |
| 79) Naphthalene               | 13.516 | 128  | 202413   | 12.384 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 14.461 | 142  | 102431   | 20.261 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 98468    | 11.025 | ppbv   | 99       |

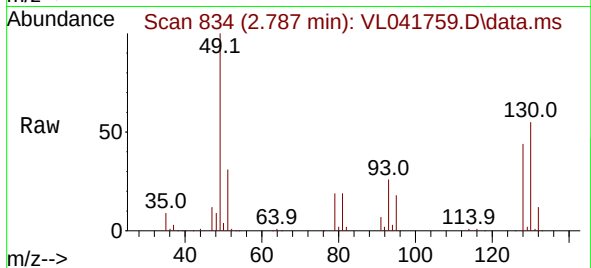
(#) = qualifier out of range (m) = manual integration (+) = signals summed





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 833  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

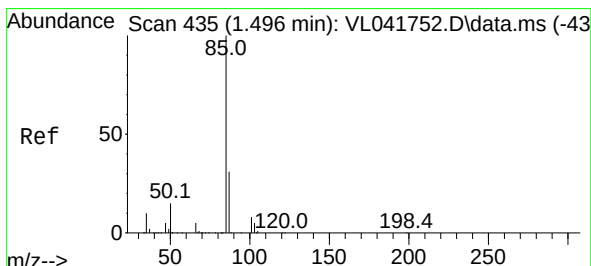
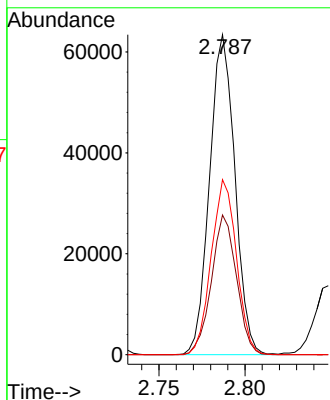
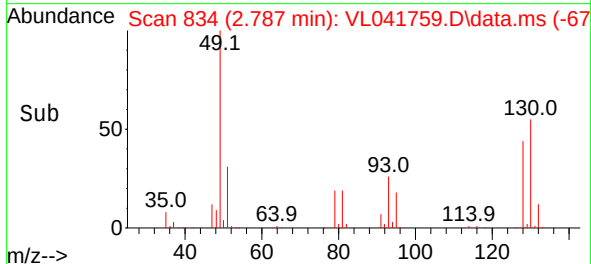
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



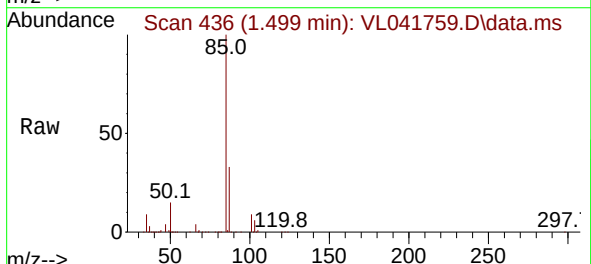
Tgt Ion: 49 Resp: 64970  
Ion Ratio Lower Upper  
49 100  
128 43.2 21.6 64.6  
130 54.5 28.3 85.0

Manual Integrations  
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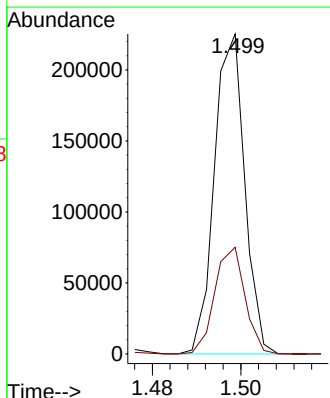
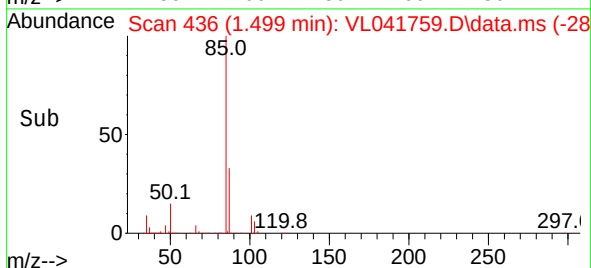
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

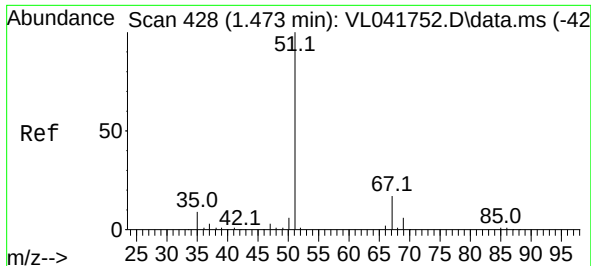


#2  
Dichlorodifluoromethane  
Concen: 9.236 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 85 Resp: 106780  
Ion Ratio Lower Upper  
85 100  
87 33.4 24.5 36.7





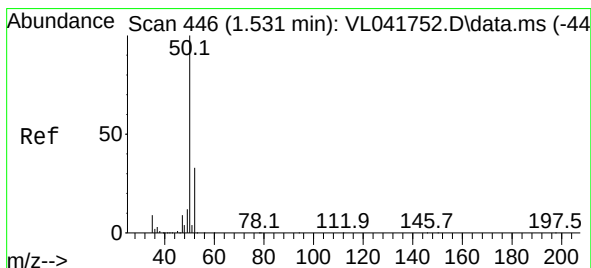
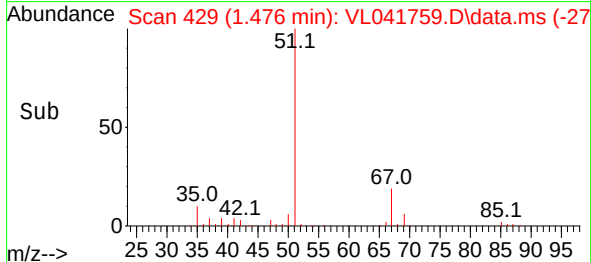
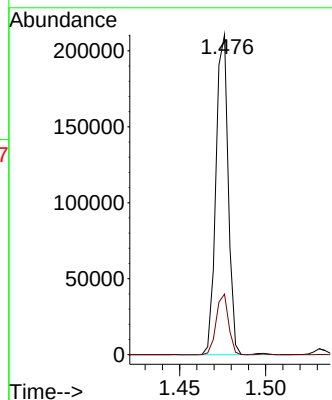
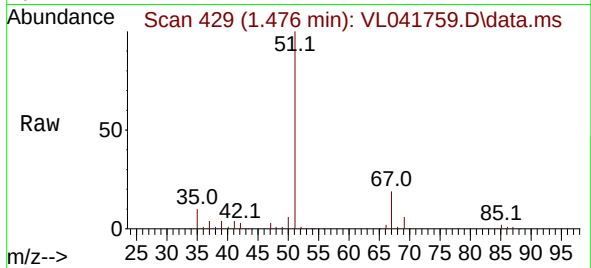
#3  
Chlorodifluoromethane  
Concen: 9.922 ppbv  
RT: 1.476 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 51 Resp: 10514  
Ion Ratio Lower Upper  
51 100  
67 19.1 15.0 22.4

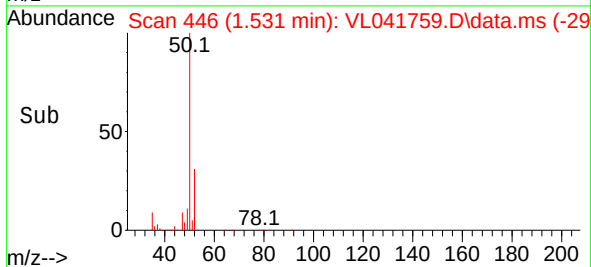
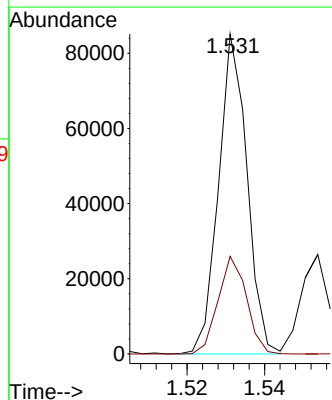
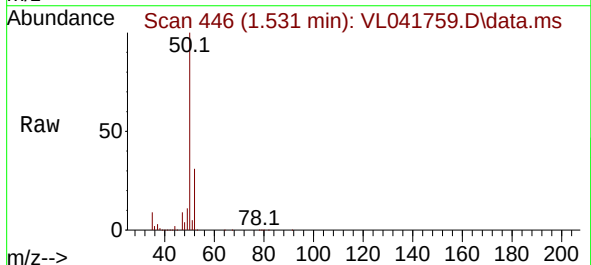
Manual Integrations  
APPROVED

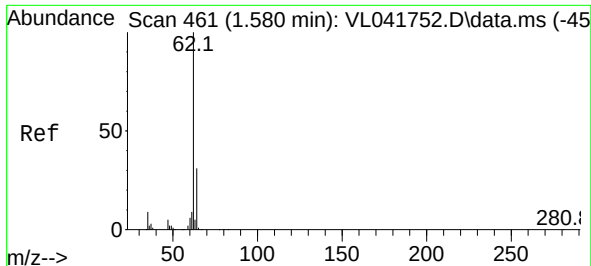
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#4  
Chloromethane  
Concen: 9.596 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

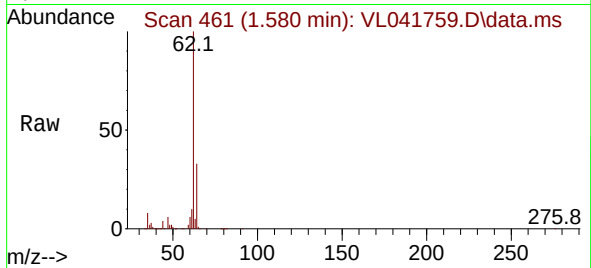
Tgt Ion: 50 Resp: 43409  
Ion Ratio Lower Upper  
50 100  
52 30.6 26.2 39.2





#5  
 Vinyl Chloride  
 Concen: 8.986 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

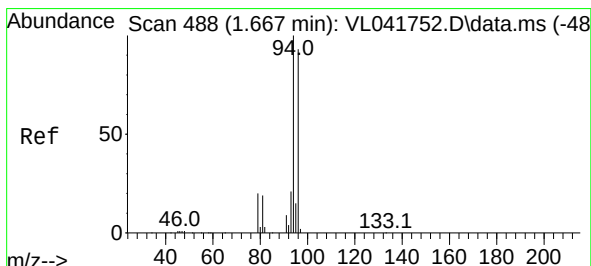
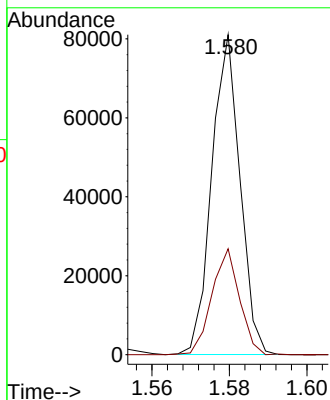
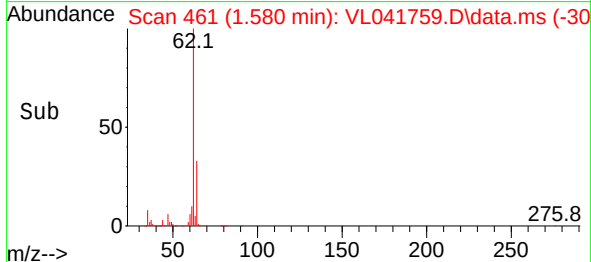
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL121624



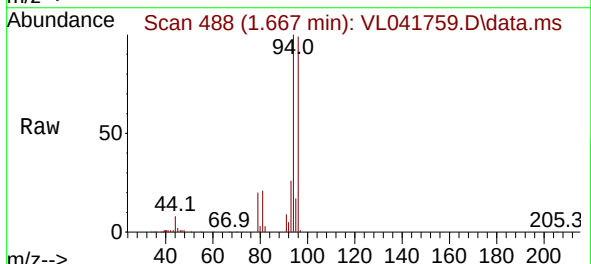
Tgt Ion: 62 Resp: 40950  
 Ion Ratio Lower Upper  
 62 100  
 64 33.0 25.1 37.7

Manual Integrations  
 APPROVED

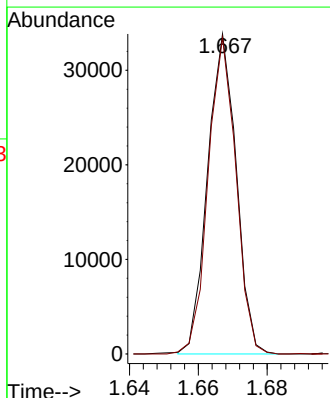
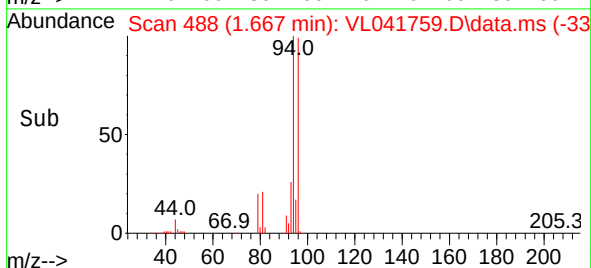
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

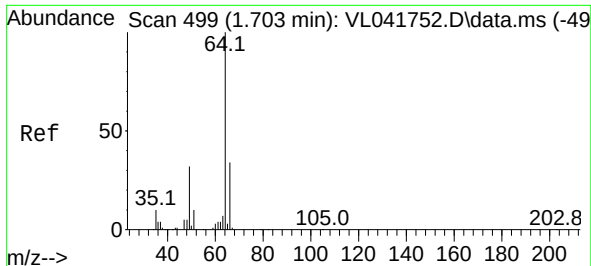


#6  
 Bromomethane  
 Concen: 9.109 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59



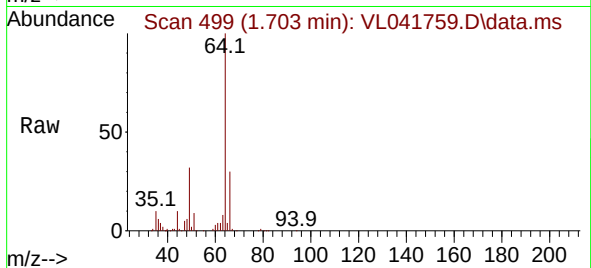
Tgt Ion: 94 Resp: 19590  
 Ion Ratio Lower Upper  
 94 100  
 96 98.9 74.7 112.1





#7  
Chloroethane  
Concen: 9.803 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

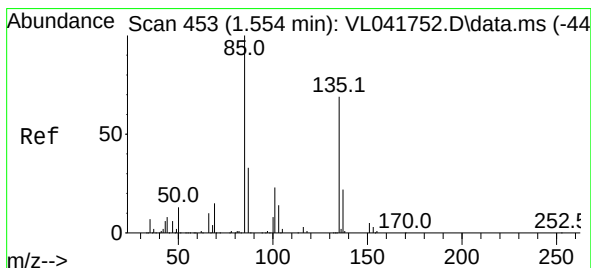
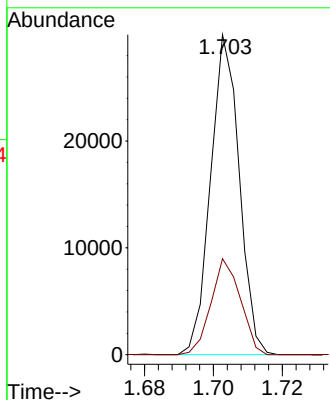
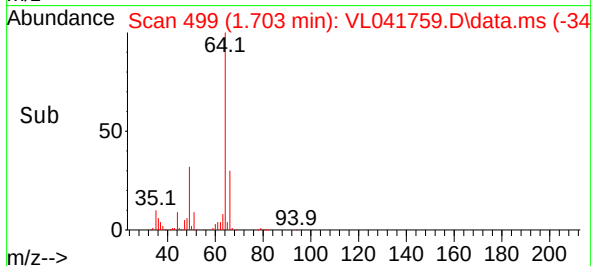
Instrument : MSVOA\_L  
ClientSampleId : ICVVL121624



Tgt Ion: 64 Resp: 17350  
Ion Ratio Lower Upper  
64 100  
66 30.0 27.5 41.3

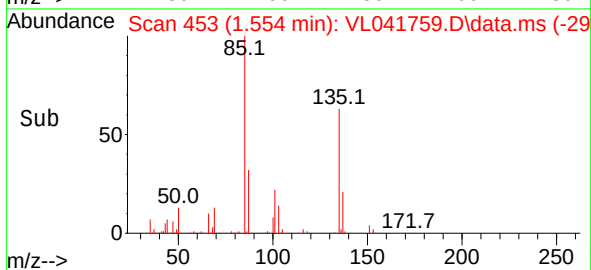
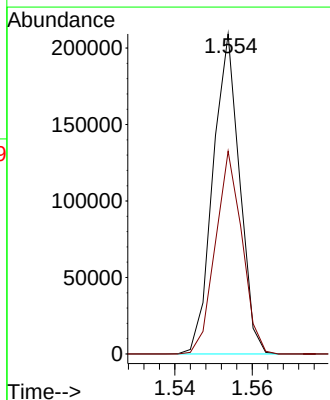
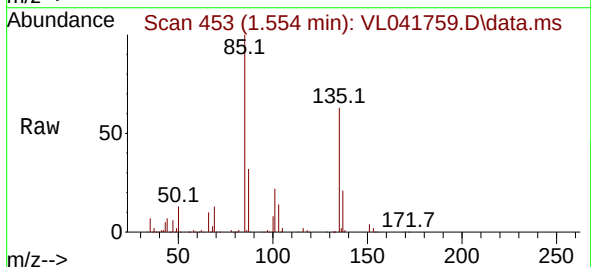
Manual Integrations  
APPROVED

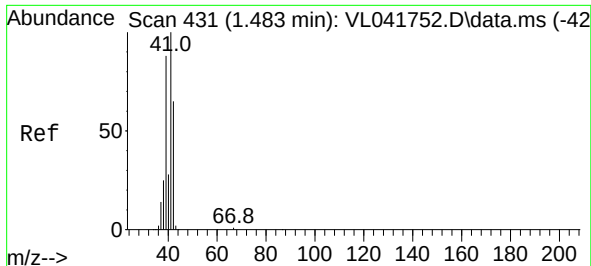
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#8  
Dichlorotetrafluoroethane  
Concen: 9.650 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 85 Resp: 99858  
Ion Ratio Lower Upper  
85 100  
135 63.6 51.9 77.9





#9

Propene

Concen: 9.084 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 41 Resp: 4172

Ion Ratio Lower Upper

41 100

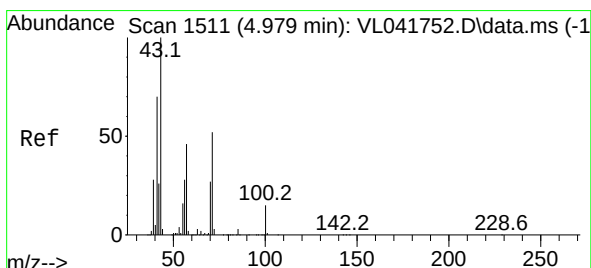
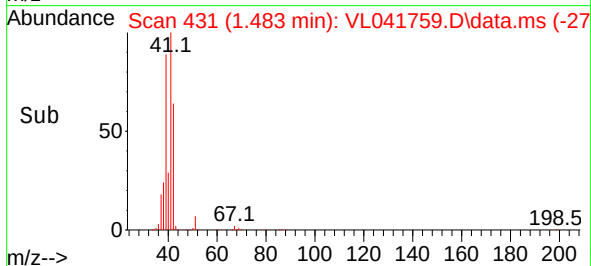
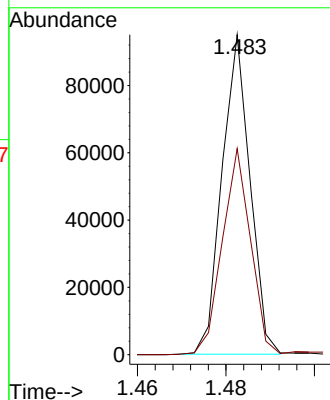
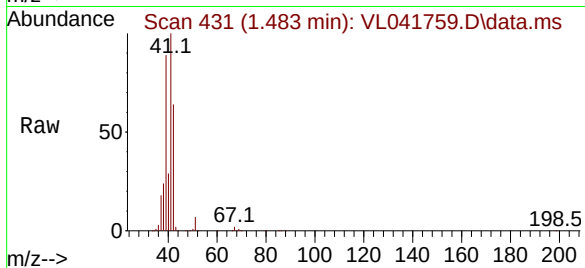
42 66.7 52.4 78.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#10

Heptane

Concen: 9.816 ppbv

RT: 4.981 min Scan# 1512

Delta R.T. 0.003 min

Lab File: VL041759.D

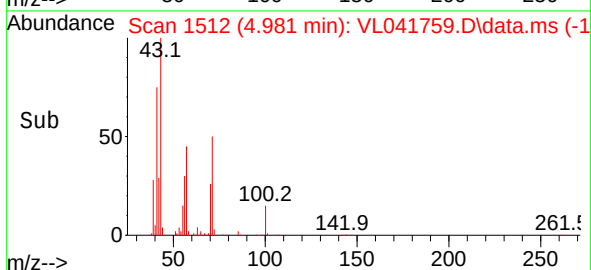
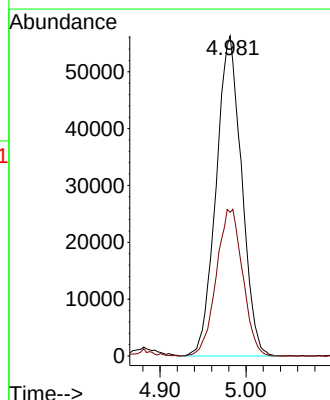
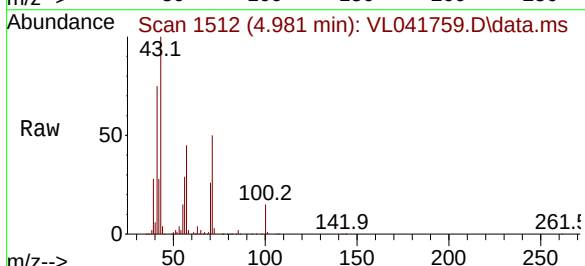
Acq: 16 Dec 2024 18:59

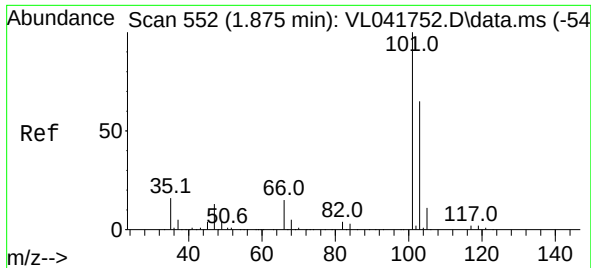
Tgt Ion: 43 Resp: 115804

Ion Ratio Lower Upper

43 100

57 47.4 38.5 57.7





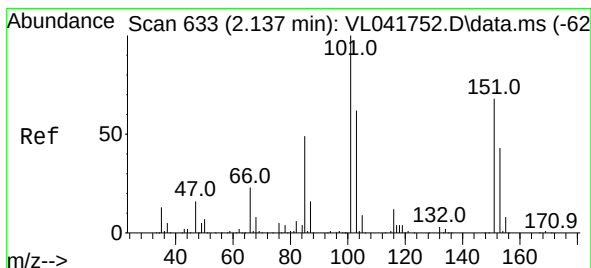
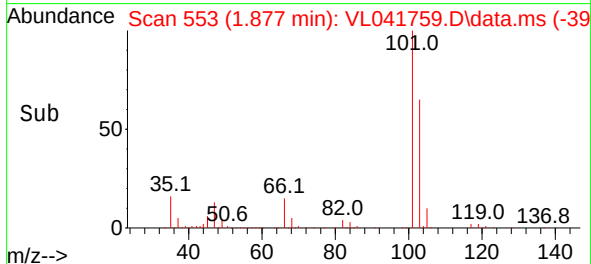
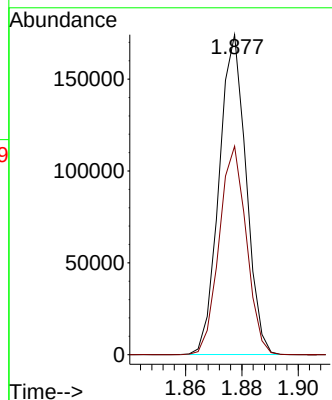
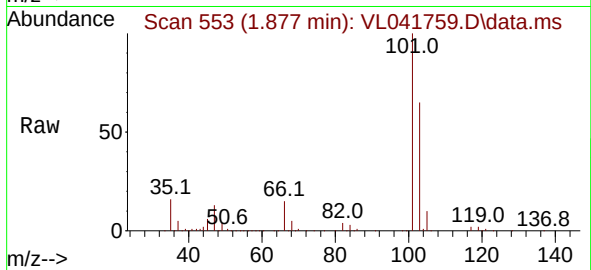
#11  
Trichlorofluoromethane  
Concen: 9.428 ppbv  
RT: 1.877 min Scan# 51  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion:101 Resp: 115785  
Ion Ratio Lower Upper  
101 100  
103 65.2 51.8 77.8

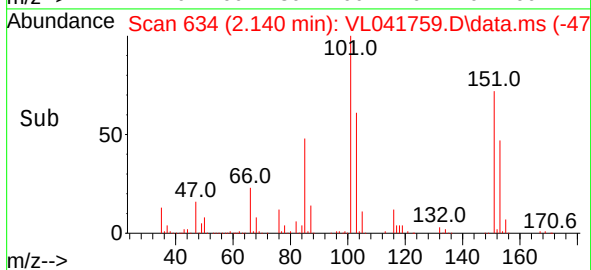
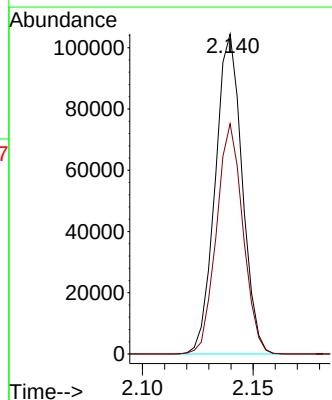
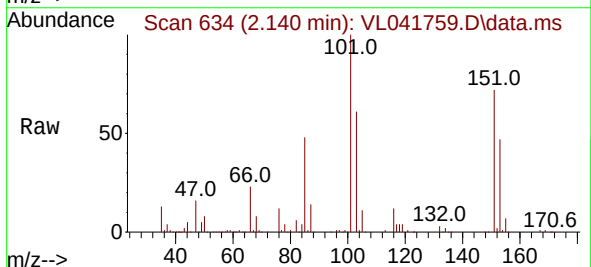
Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

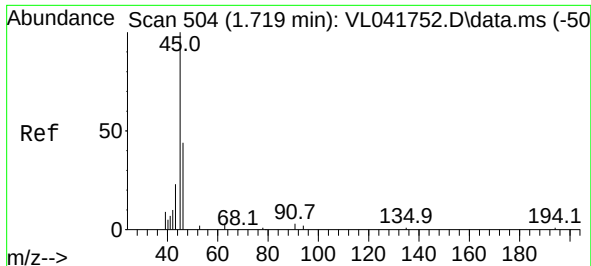


#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.450 ppbv  
RT: 2.140 min Scan# 634  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:101 Resp: 88265  
Ion Ratio Lower Upper  
101 100  
151 70.8 56.8 85.2







#13

Ethanol

Concen: 7.229 ppbv m

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 45 Resp: 2749

Ion Ratio Lower Upper

45 100

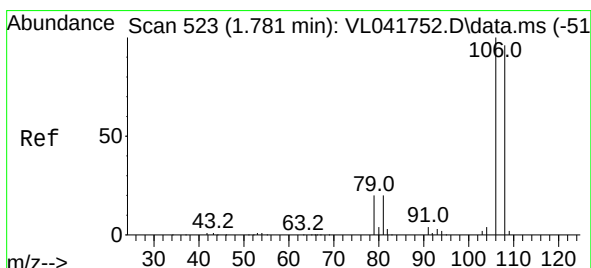
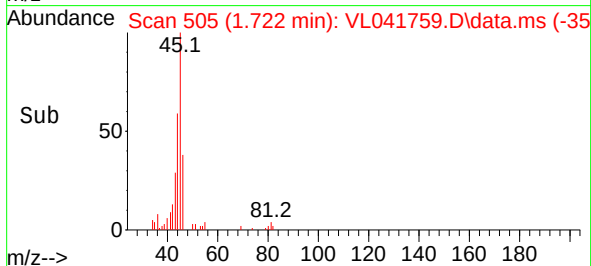
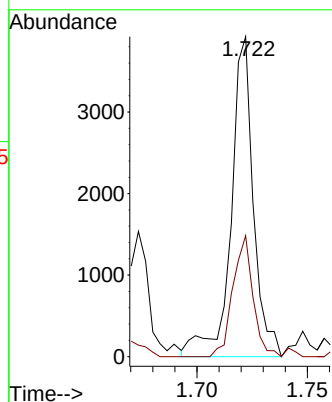
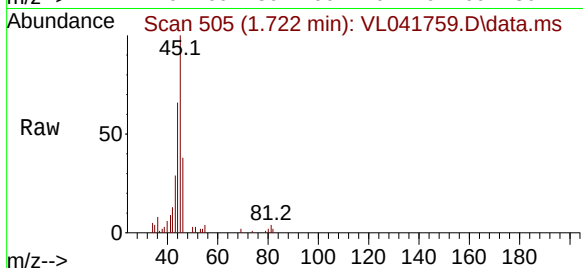
46 35.2 16.4 65.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#14

Bromoethene

Concen: 9.987 ppbv

RT: 1.780 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

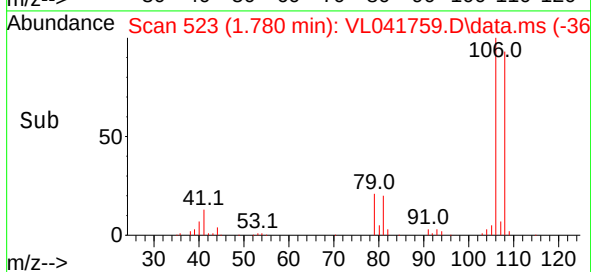
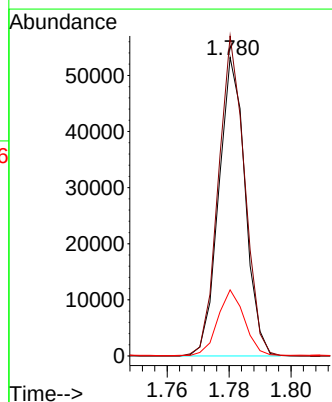
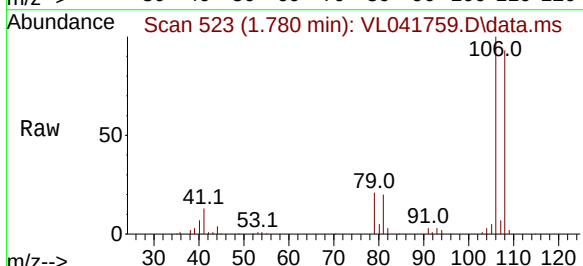
Tgt Ion:108 Resp: 31492

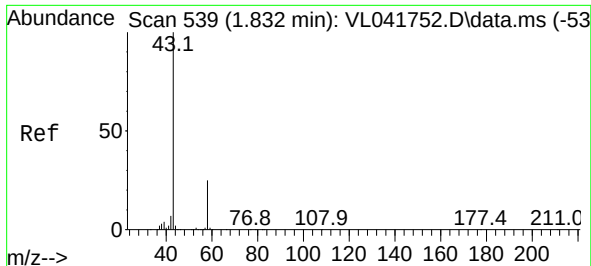
Ion Ratio Lower Upper

108 100

106 106.4 84.1 126.1

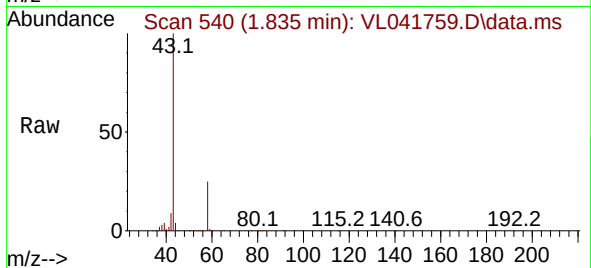
79 23.4 17.4 26.0





#15  
Acetone  
Concen: 7.505 ppbv  
RT: 1.835 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

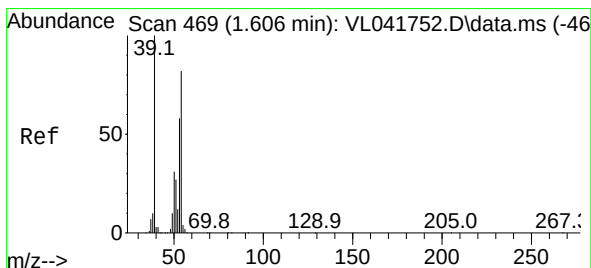
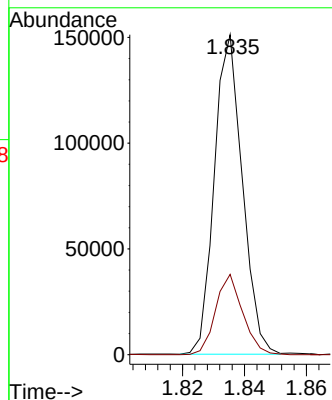
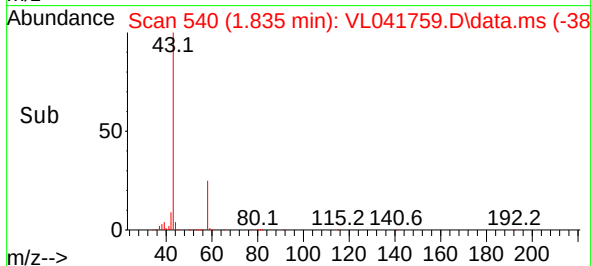
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



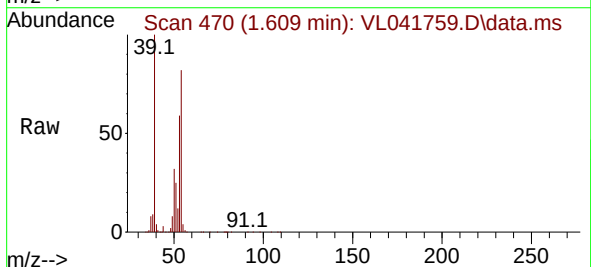
Tgt Ion: 43 Resp: 94879  
Ion Ratio Lower Upper  
43 100  
58 24.3 19.7 29.5

Manual Integrations  
APPROVED

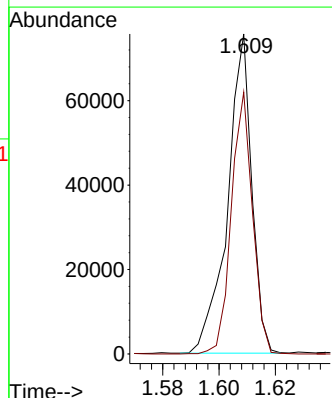
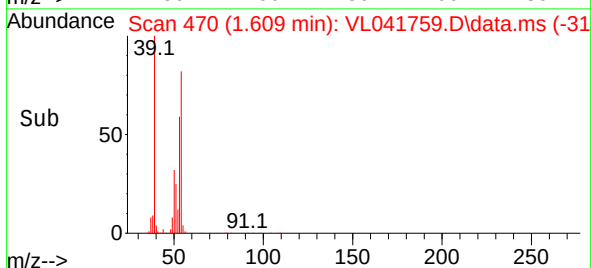
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

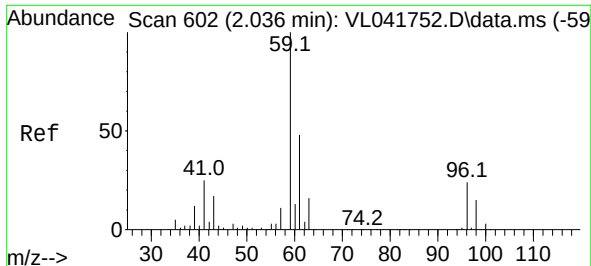


#16  
1,3-Butadiene  
Concen: 9.063 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



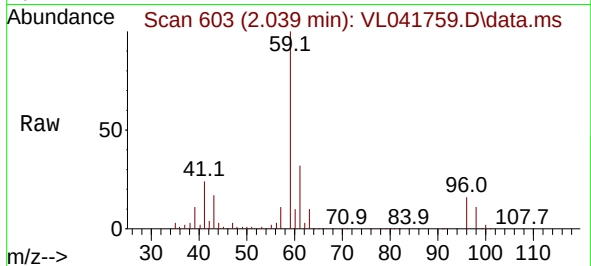
Tgt Ion: 39 Resp: 45119  
Ion Ratio Lower Upper  
39 100  
54 71.7 58.4 87.6





#17  
tert-Butyl alcohol  
Concen: 9.730 ppbv  
RT: 2.039 min Scan# 602  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

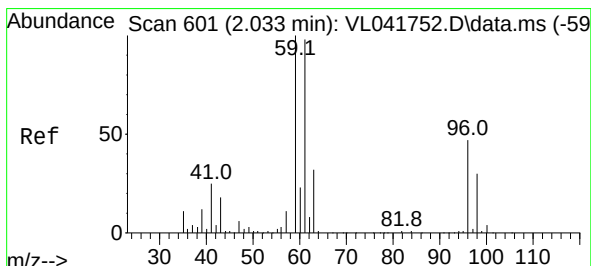
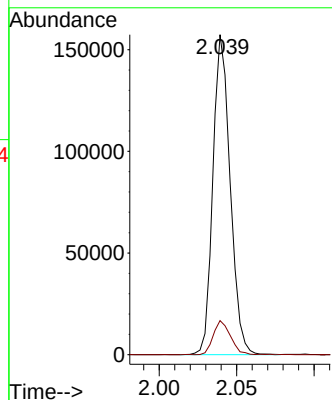
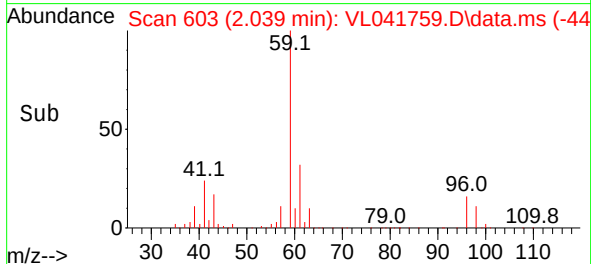
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



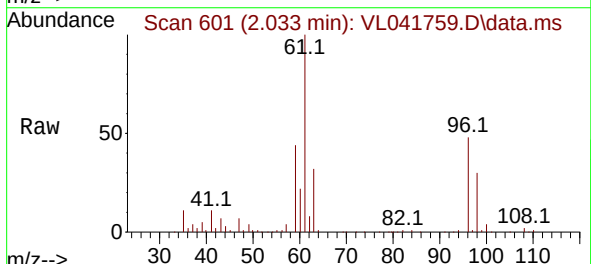
Tgt Ion: 59 Resp: 122034  
Ion Ratio Lower Upper  
59 100  
57 10.6 8.6 13.0

Manual Integrations  
APPROVED

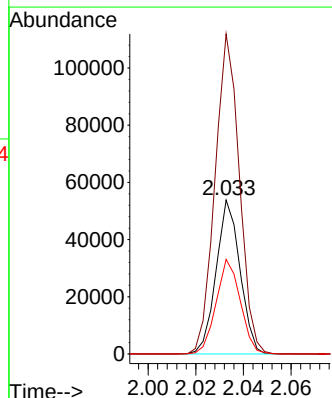
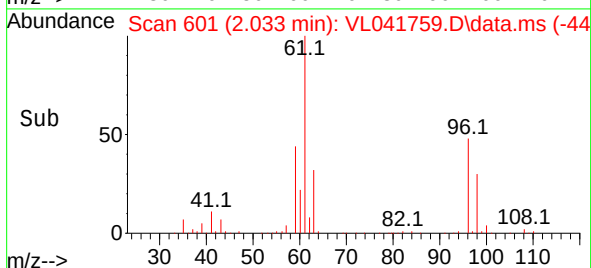
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

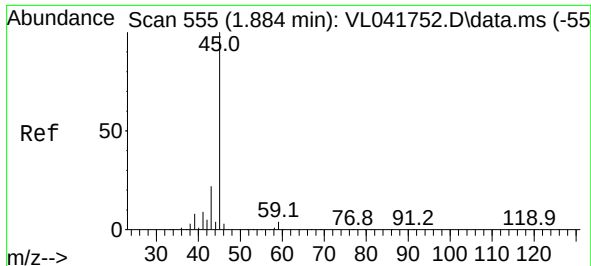


#18  
1,1-Dichloroethene  
Concen: 9.568 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 96 Resp: 37466  
Ion Ratio Lower Upper  
96 100  
61 207.9 167.7 251.5  
98 61.5 51.1 76.7





#19

Isopropyl Alcohol

Concen: 7.590 ppbv

RT: 1.884 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

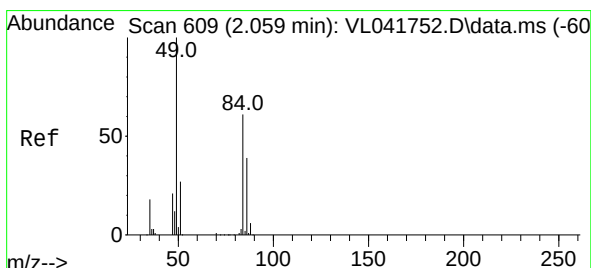
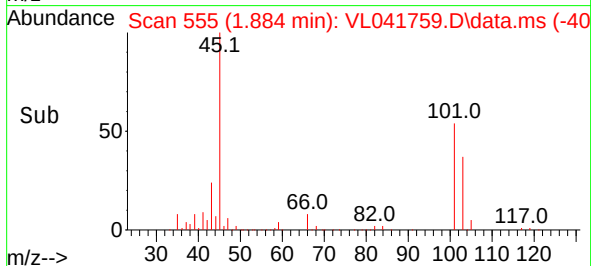
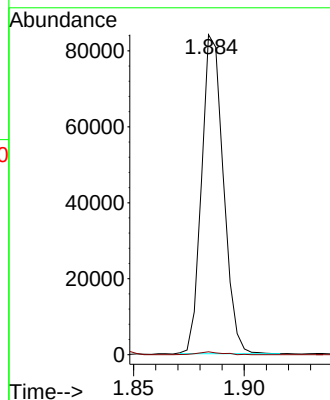
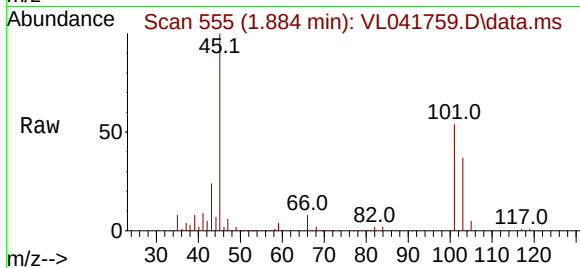
ClientSampleId :

ICVVL121624

Tgt Ion: 45 Resp: 5757  
 Ion Ratio Lower Upper  
 45 100  
 58 40.1 33.3 49.9

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#20

Methylene Chloride

Concen: 8.967 ppbv

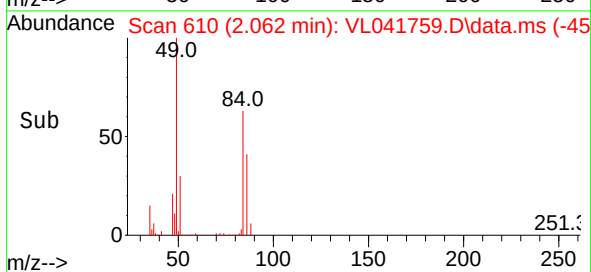
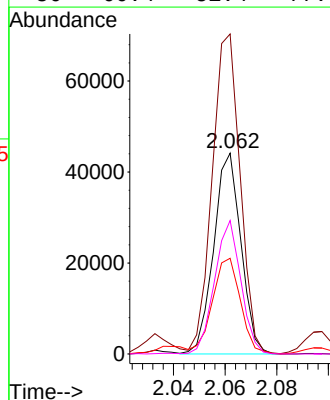
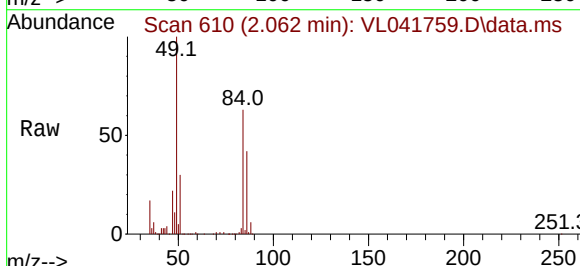
RT: 2.062 min Scan# 610

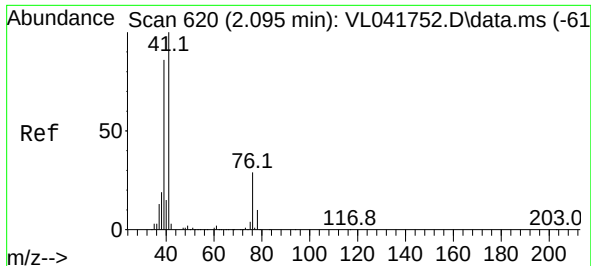
Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 84 Resp: 32325  
 Ion Ratio Lower Upper  
 84 100  
 49 159.1 132.6 198.8  
 51 47.7 37.6 56.4  
 86 66.4 51.4 77.0





#21

Allyl Chloride

Concen: 9.859 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

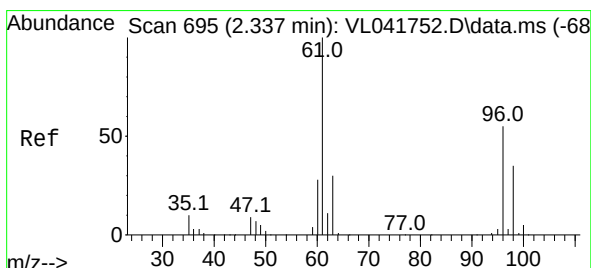
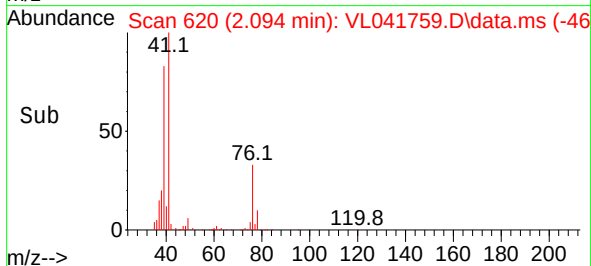
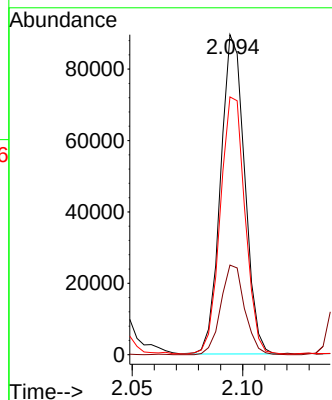
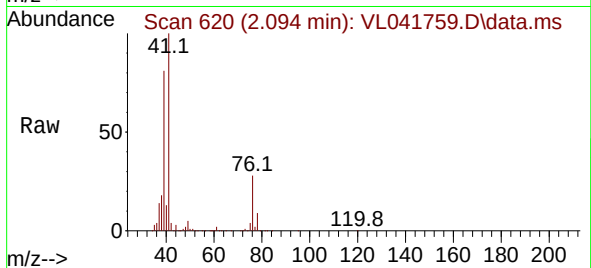
ClientSampleId :

ICVVL121624

|             |                 |
|-------------|-----------------|
| Tgt Ion: 41 | Resp: 67590     |
| Ion Ratio   | Lower Upper     |
| 41          | 100             |
| 76          | 27.9 22.3 33.5  |
| 39          | 82.6 69.2 103.8 |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#22

trans-1,2-Dichloroethene

Concen: 9.515 ppbv

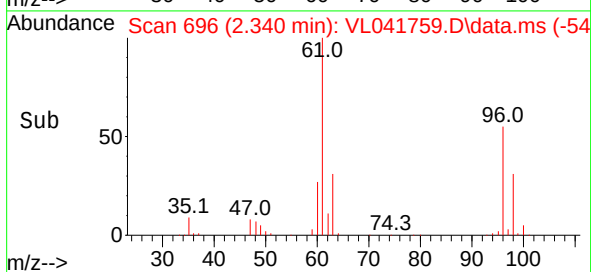
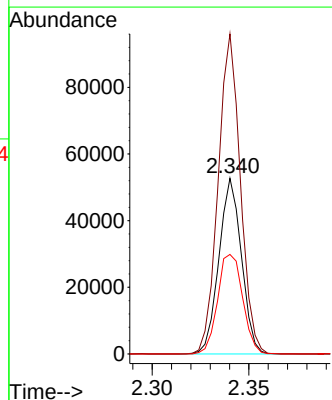
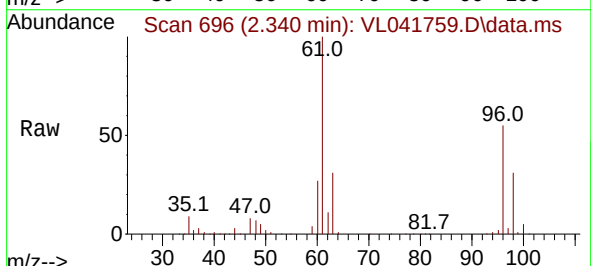
RT: 2.340 min Scan# 696

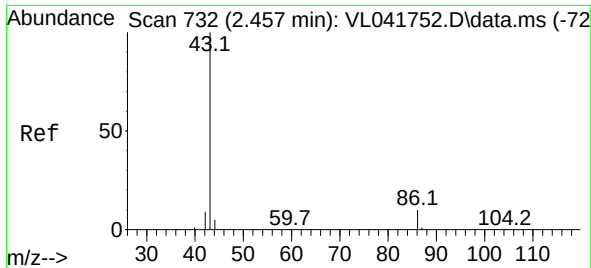
Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

|             |                   |
|-------------|-------------------|
| Tgt Ion: 96 | Resp: 42651       |
| Ion Ratio   | Lower Upper       |
| 96          | 100               |
| 61          | 182.2 146.3 219.5 |
| 98          | 56.7 50.8 76.2    |





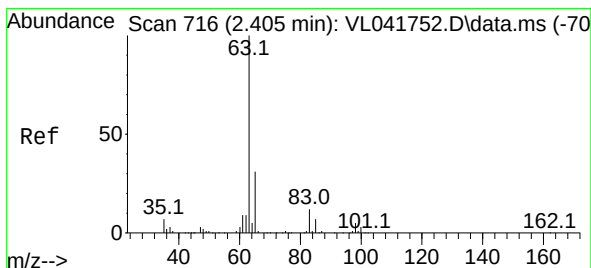
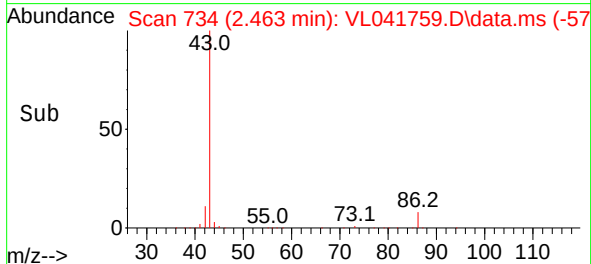
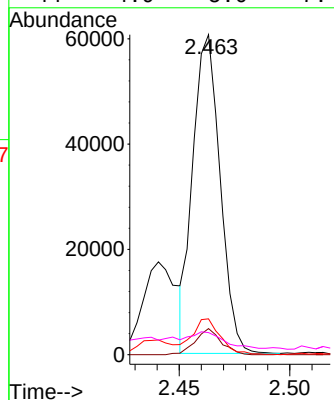
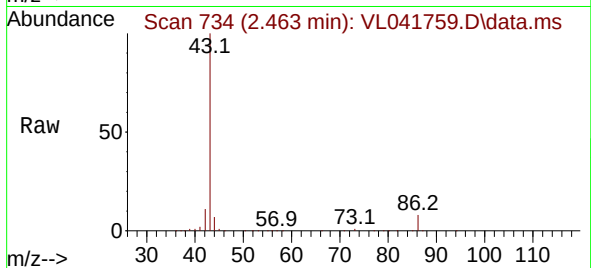
#23  
 Vinyl Acetate  
 Concen: 8.826 ppbv  
 RT: 2.463 min Scan# 716  
 Delta R.T. 0.006 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 ICVVL121624

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 43    | Resp: | 5181 |
| Ion Ratio | Lower | Upper |      |
| 43        | 100   |       |      |
| 86        | 8.1   | 6.6   | 10.0 |
| 42        | 11.2  | 8.2   | 12.2 |
| 44        | 4.9   | 5.0   | 7.4  |

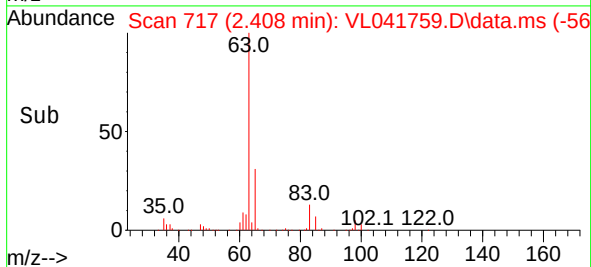
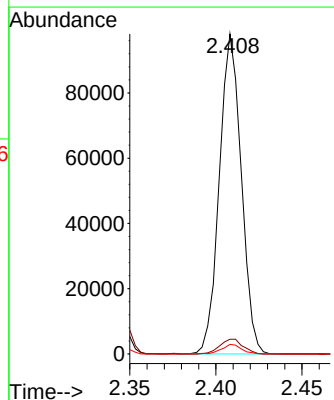
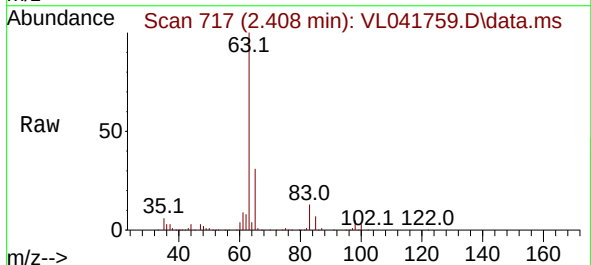
Manual Integrations  
 APPROVED

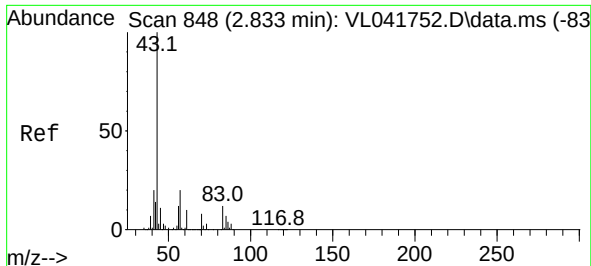
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024



#24  
 1,1-Dichloroethane  
 Concen: 9.589 ppbv  
 RT: 2.408 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 63    | Resp: | 87006 |
| Ion Ratio | Lower | Upper |       |
| 63        | 100   |       |       |
| 98        | 4.6   | 2.3   | 6.8   |
| 100       | 3.0   | 1.4   | 4.2   |





#25

Ethyl Acetate

Concen: 9.965 ppbv

RT: 2.835 min Scan# 84

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 43 Resp: 234370

Ion Ratio Lower Upper

43 100

45 10.2 8.1 12.1

61 8.6 7.0 10.6

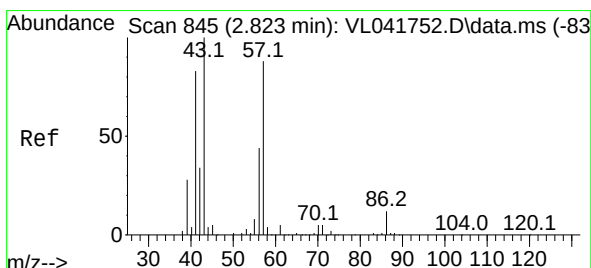
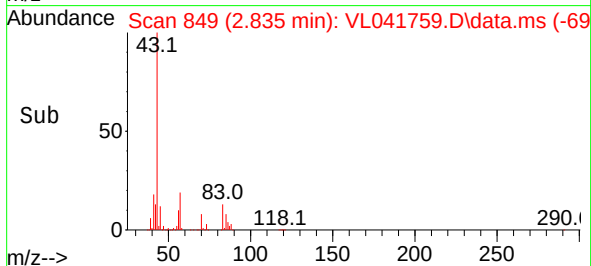
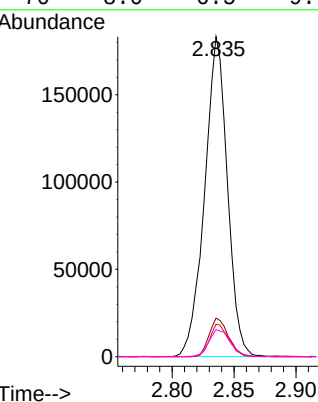
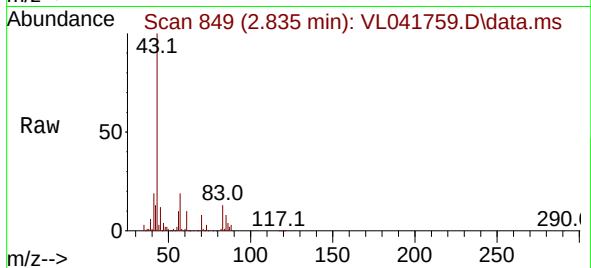
70 8.0 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#26

Hexane

Concen: 9.752 ppbv

RT: 2.826 min Scan# 846

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 57 Resp: 87034

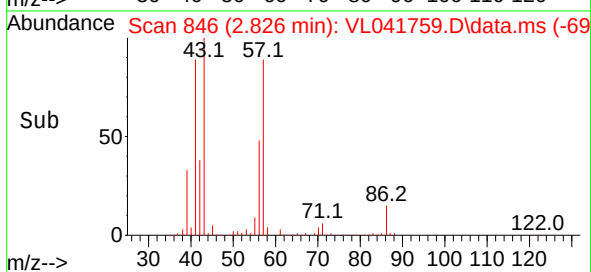
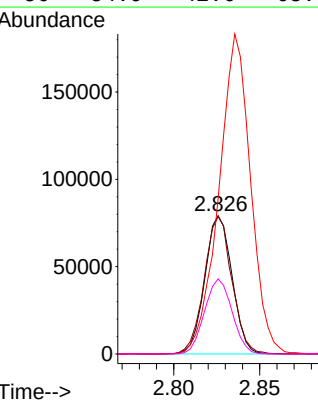
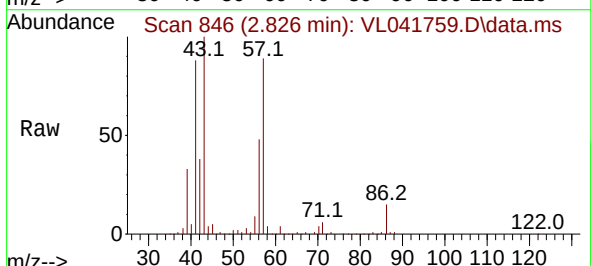
Ion Ratio Lower Upper

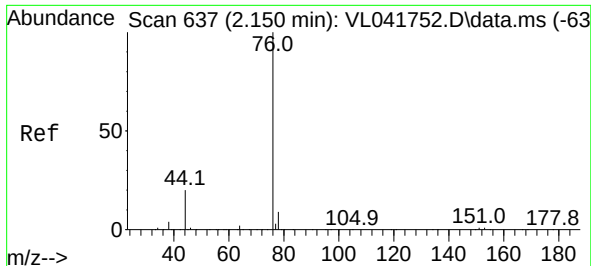
57 100

41 101.5 79.6 119.4

43 270.5 211.0 316.6

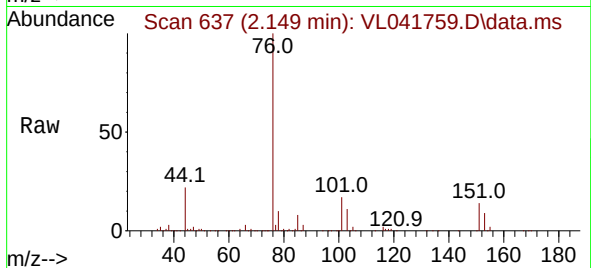
56 54.9 42.6 63.8





#27  
Carbon Disulfide  
Concen: 10.649 ppbv  
RT: 2.149 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

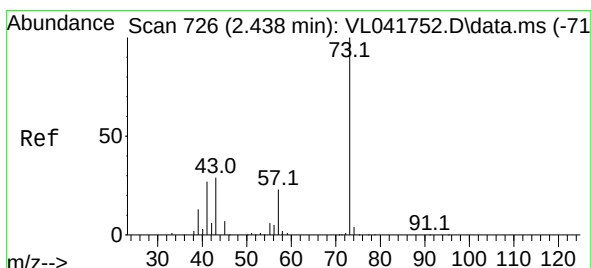
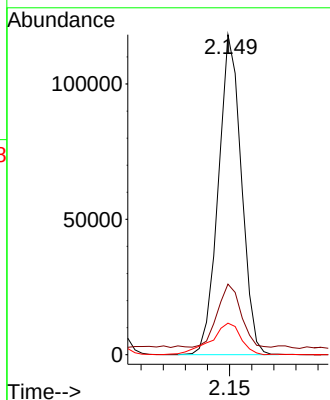
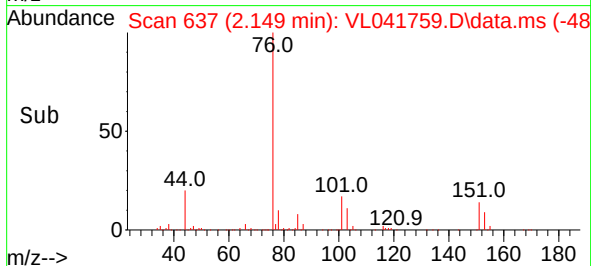
Instrument : MSVOA\_1  
ClientSampleId : ICVVL121624



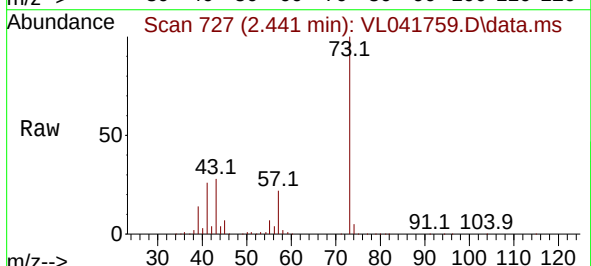
Tgt Ion: 76 Resp: 85650  
Ion Ratio Lower Upper  
76 100  
44 22.3 17.6 26.4  
78 12.9 10.2 15.4

Manual Integrations  
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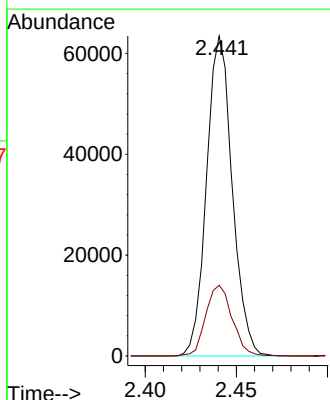
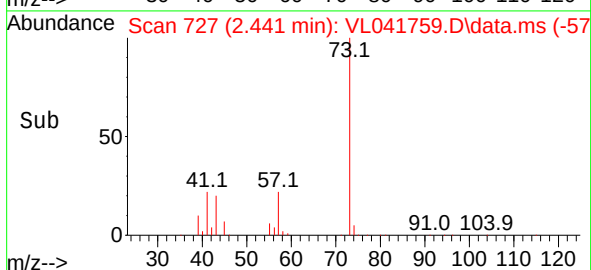
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



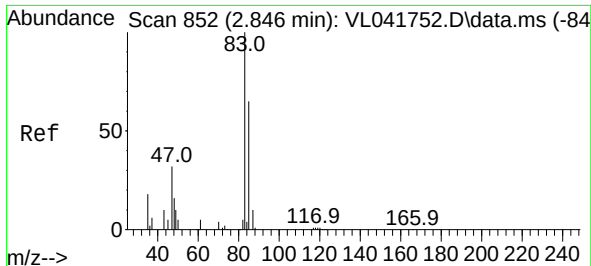
#28  
Methyl tert-Butyl Ether  
Concen: 8.589 ppbv  
RT: 2.441 min Scan# 727  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 73 Resp: 62189  
Ion Ratio Lower Upper  
73 100  
57 22.7 17.6 26.4







#29

Chloroform

Concen: 9.892 ppbv

RT: 2.848 min Scan# 85

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 83 Resp: 13454

Ion Ratio Lower Upper

83 100

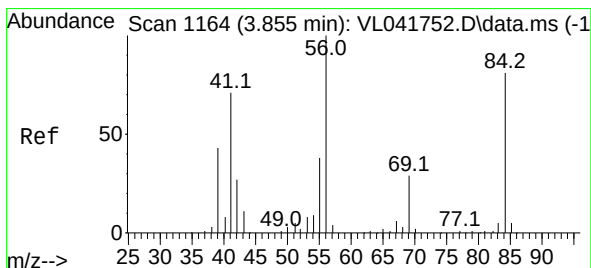
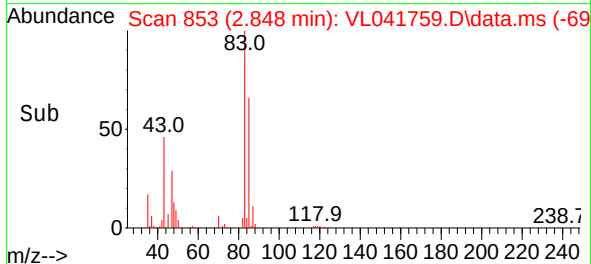
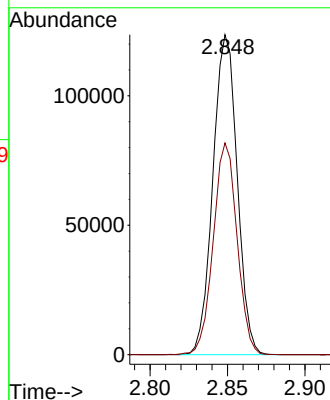
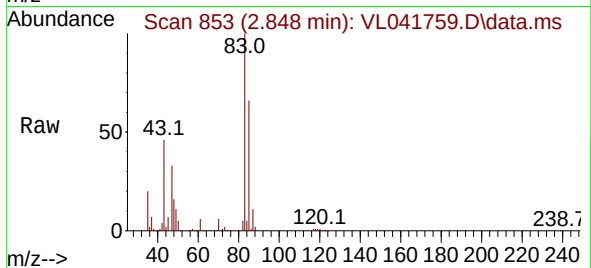
85 66.2 51.8 77.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#30

Cyclohexane

Concen: 9.912 ppbv

RT: 3.858 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

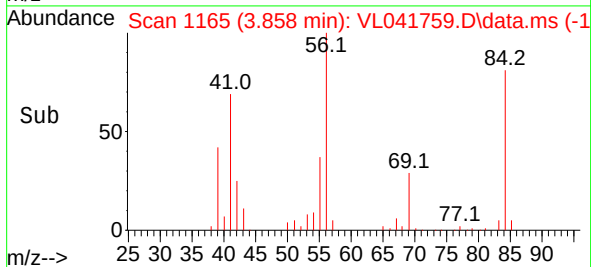
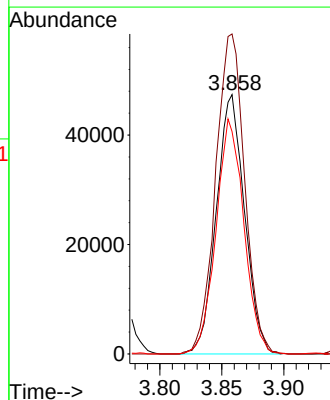
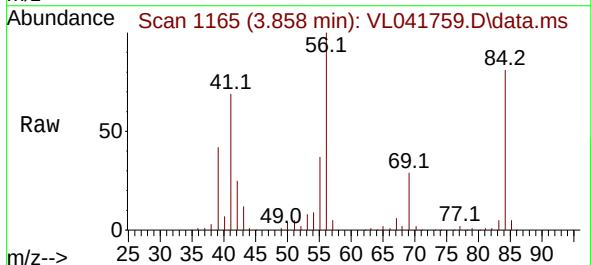
Tgt Ion: 84 Resp: 75274

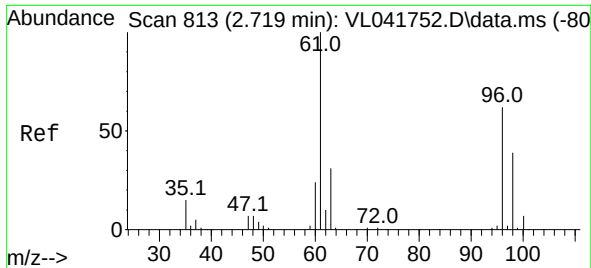
Ion Ratio Lower Upper

84 100

56 126.5 102.3 153.5

41 89.3 74.0 111.0





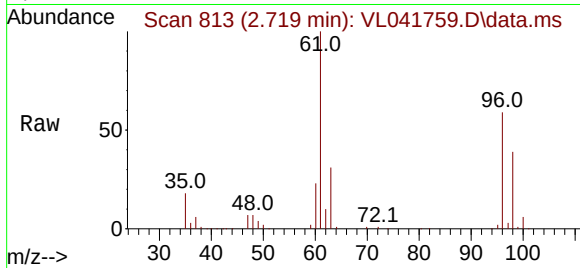
#31  
cis-1,2-Dichloroethene  
Concen: 9.935 ppbv  
RT: 2.719 min Scan# 813  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

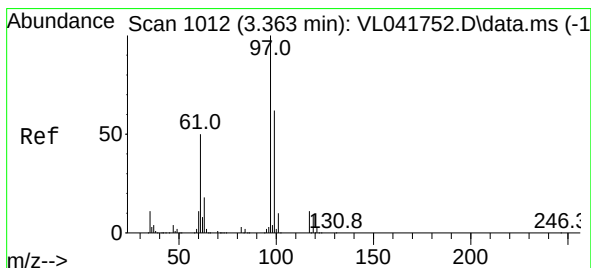
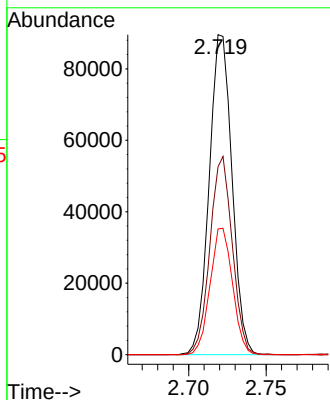
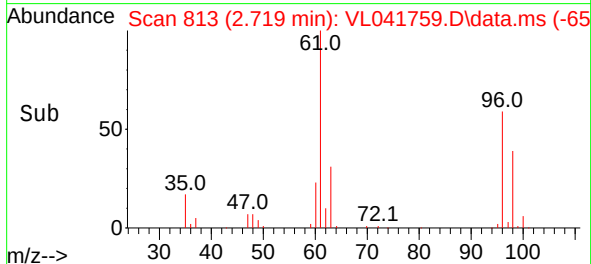
ICVVL121624



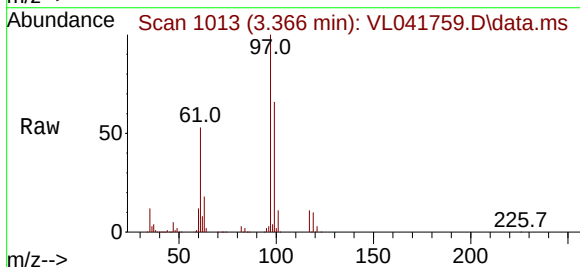
Tgt Ion: 61 Resp: 91628  
Ion Ratio Lower Upper  
61 100  
96 58.7 49.7 74.5  
98 39.3 30.8 46.2

Manual Integrations  
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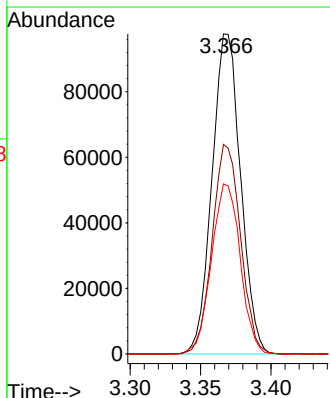
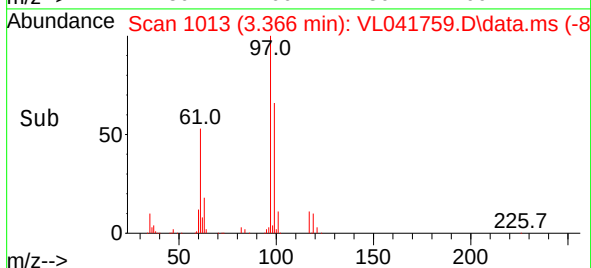
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

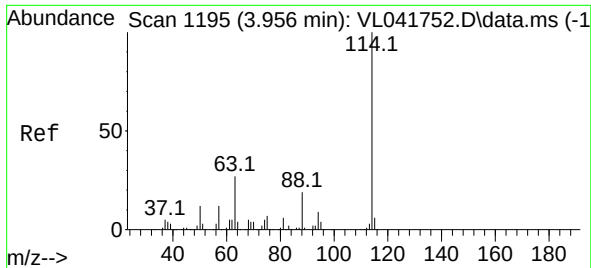


#32  
1,1,1-Trichloroethane  
Concen: 9.979 ppbv  
RT: 3.366 min Scan# 1013  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 97 Resp: 137978  
Ion Ratio Lower Upper  
97 100  
99 64.8 51.0 76.4  
61 53.5 42.2 63.2





#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.959 min Scan# 1196  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

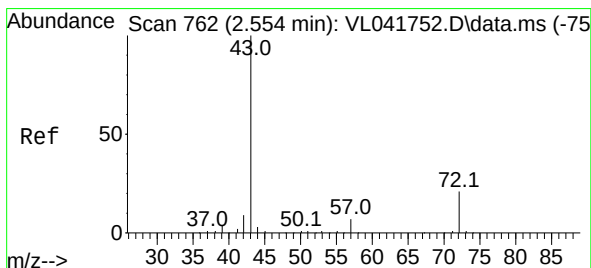
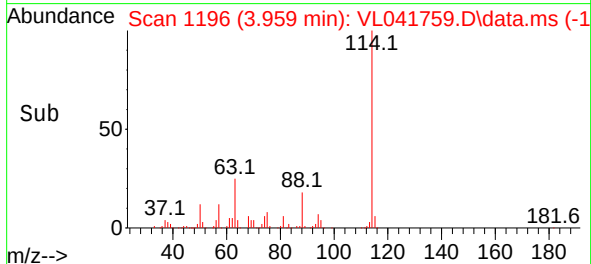
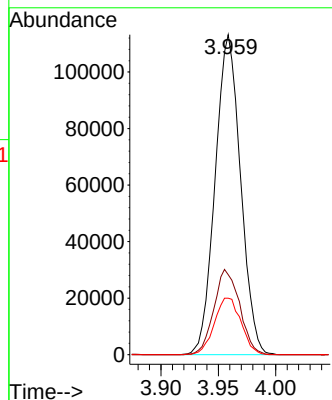
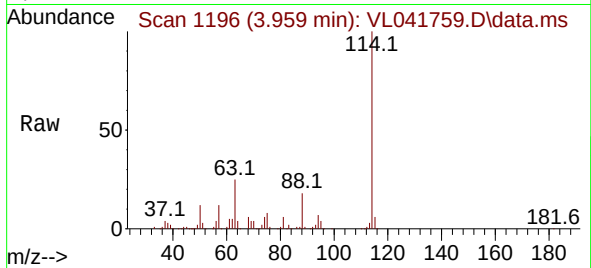
ICVVL121624

Tgt Ion:114 Resp: 174378  
Ion Ratio Lower Upper  
114 100  
63 27.0 21.8 32.8  
88 18.6 14.8 22.2

Manual Integrations

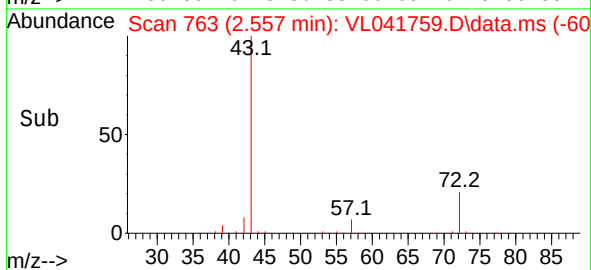
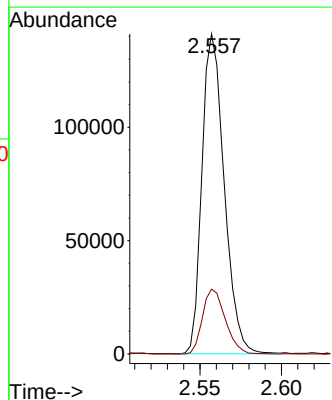
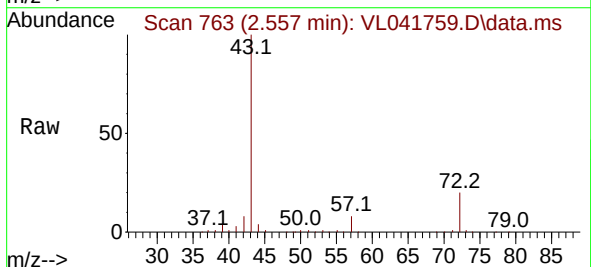
APPROVED

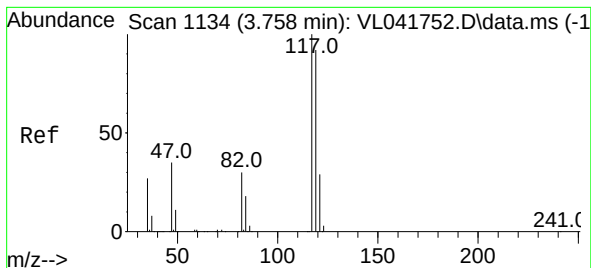
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#34  
2-Butanone  
Concen: 9.547 ppbv  
RT: 2.557 min Scan# 763  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 43 Resp: 133939  
Ion Ratio Lower Upper  
43 100  
72 20.7 16.8 25.2





#35

Carbon Tetrachloride

Concen: 11.191 ppbv

RT: 3.764 min Scan# 1136

Delta R.T. 0.006 min

Lab File: VL041759.D

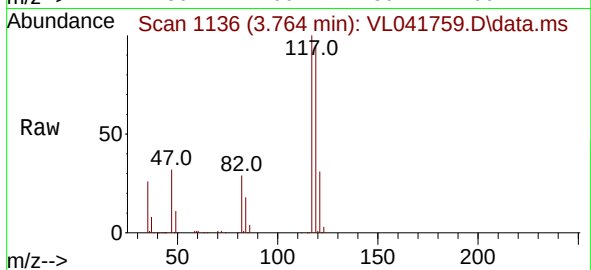
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624



Tgt Ion:117 Resp: 13853

Ion Ratio Lower Upper

117 100

119 94.8 73.7 110.5

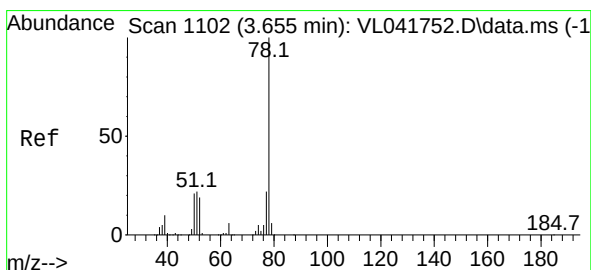
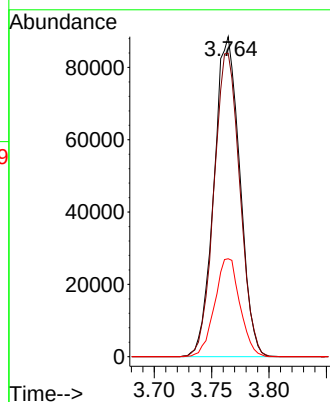
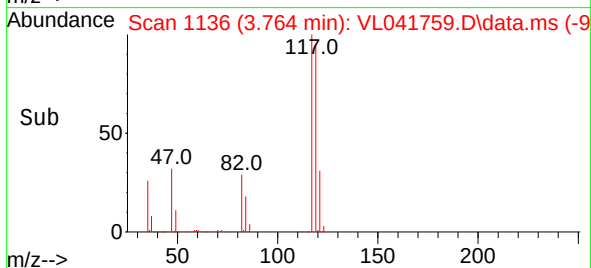
121 30.6 23.0 34.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#36

Benzene

Concen: 9.787 ppbv

RT: 3.658 min Scan# 1103

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

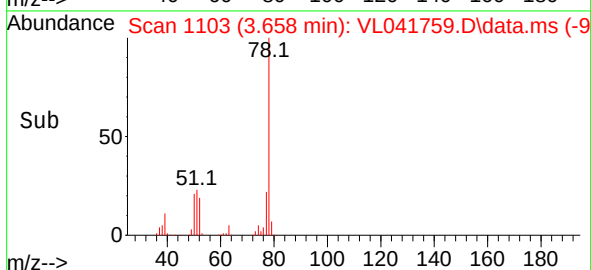
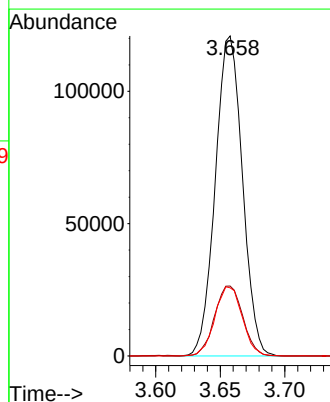
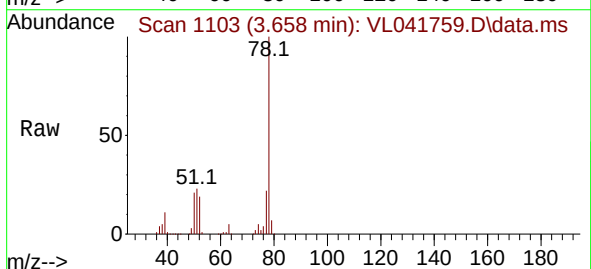
Tgt Ion: 78 Resp: 176537

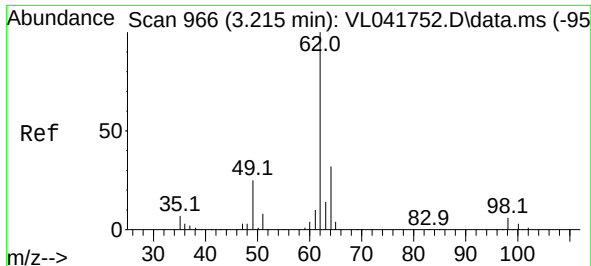
Ion Ratio Lower Upper

78 100

77 21.8 17.8 26.6

50 21.3 17.2 25.8





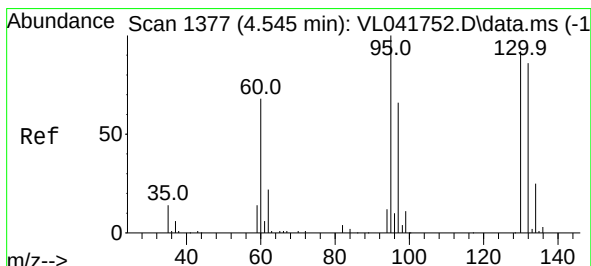
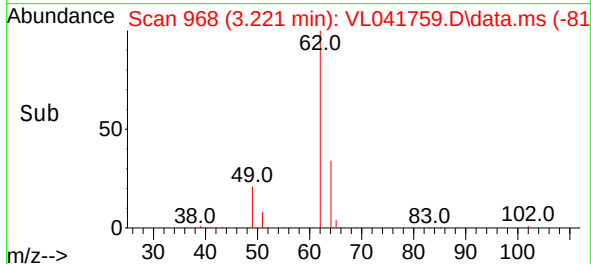
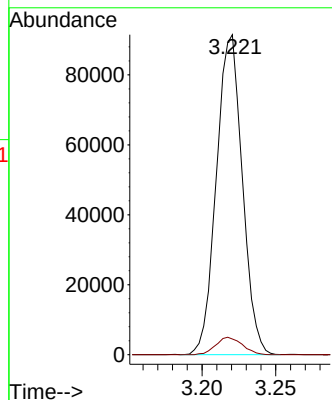
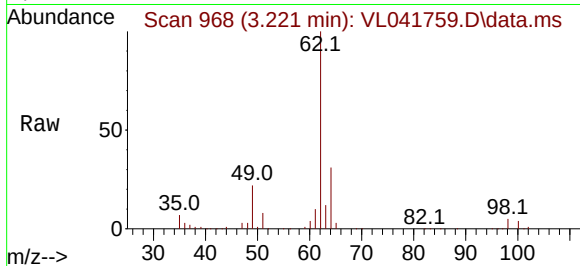
#37  
1,2-Dichloroethane  
Concen: 9.982 ppbv  
RT: 3.221 min Scan# 90  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 62 Resp: 11203  
Ion Ratio Lower Upper  
62 100  
98 5.5 4.7 7.1

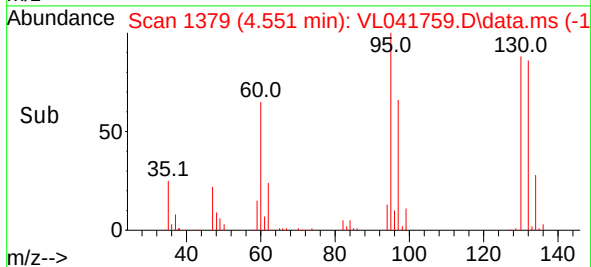
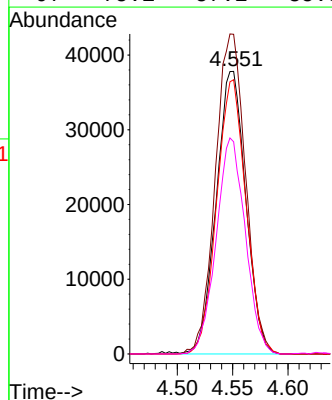
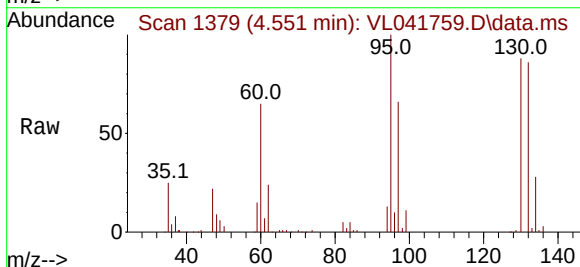
Manual Integrations  
APPROVED

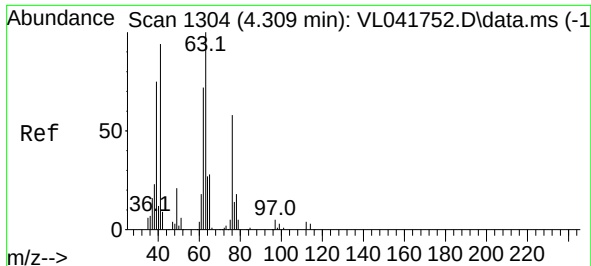
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#38  
Trichloroethene  
Concen: 9.156 ppbv  
RT: 4.551 min Scan# 1379  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:130 Resp: 70108  
Ion Ratio Lower Upper  
130 100  
95 113.2 87.0 130.6  
132 97.0 75.0 112.6  
97 75.1 57.2 85.8





#39

1,2-Dichloropropane

Concen: 9.761 ppbv

RT: 4.318 min Scan# 1307

Delta R.T. 0.009 min

Lab File: VL041759.D

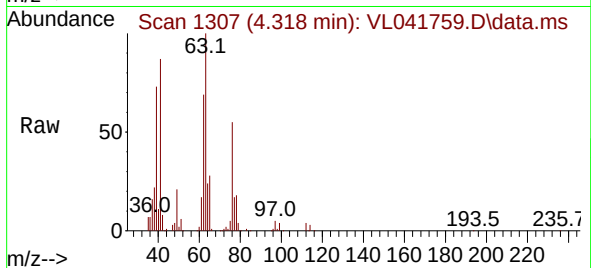
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624



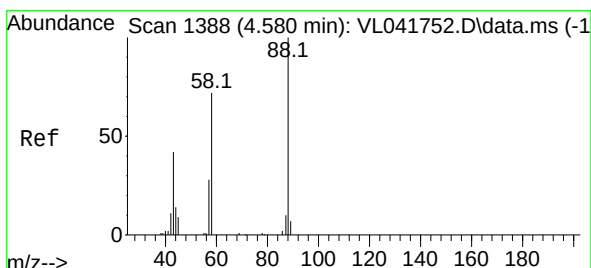
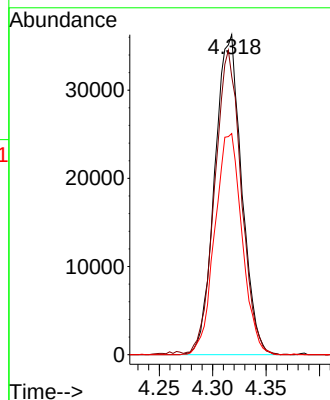
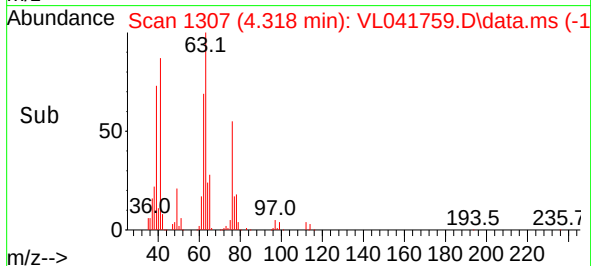
Tgt Ion: 63 Resp: 63679

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 41  | 87.0  | 75.3  | 112.9 |
| 62  | 69.1  | 57.3  | 85.9  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#40

1,4-Dioxane

Concen: 9.693 ppbv

RT: 4.583 min Scan# 1389

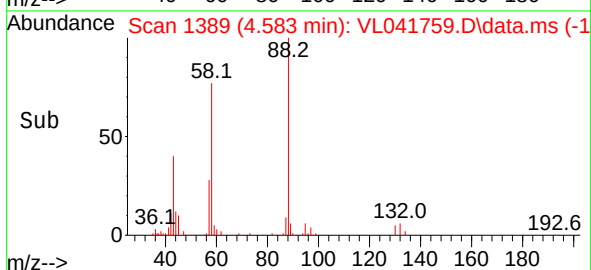
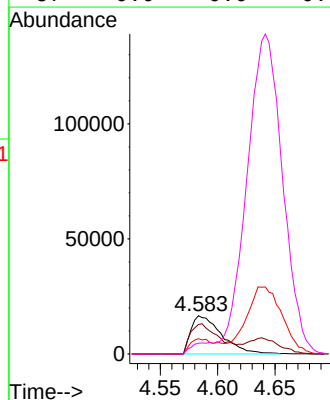
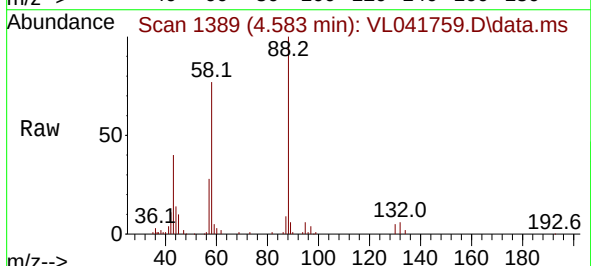
Delta R.T. 0.003 min

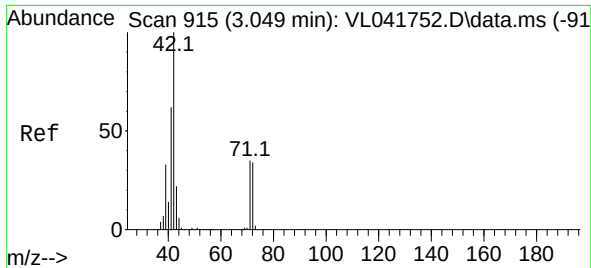
Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 88 Resp: 30891

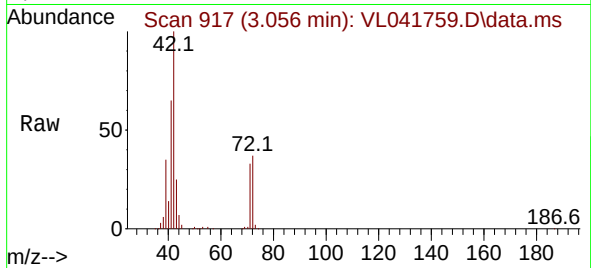
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 58  | 76.6  | 61.0  | 91.6  |
| 43  | 39.2  | 29.4  | 44.0  |
| 57  | 0.0   | 0.0   | 0.0   |





#41  
Tetrahydrofuran  
Concen: 9.857 ppbv  
RT: 3.056 min Scan# 915  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

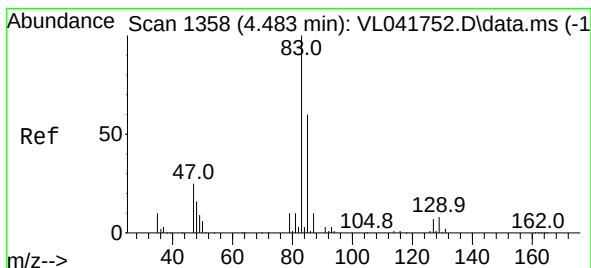
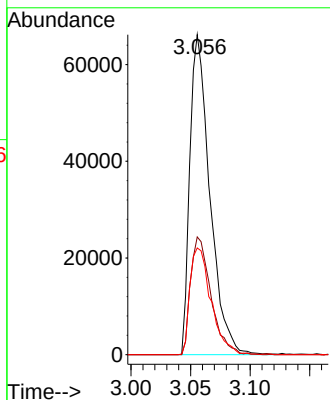
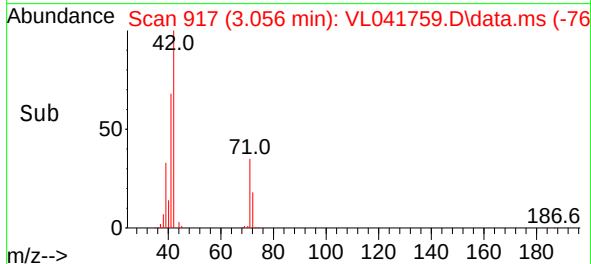
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



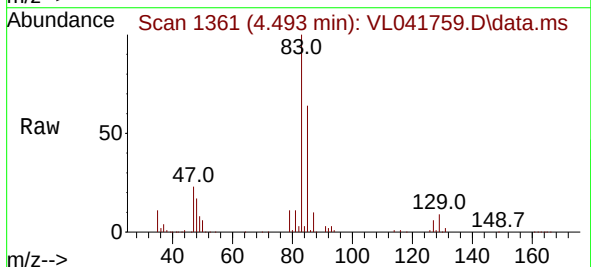
Tgt Ion: 42 Resp: 77472  
Ion Ratio Lower Upper  
42 100  
72 37.5 29.1 43.7  
71 35.4 28.4 42.6

Manual Integrations  
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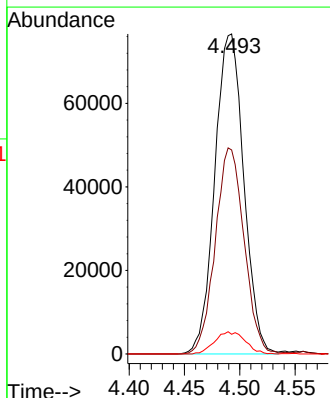
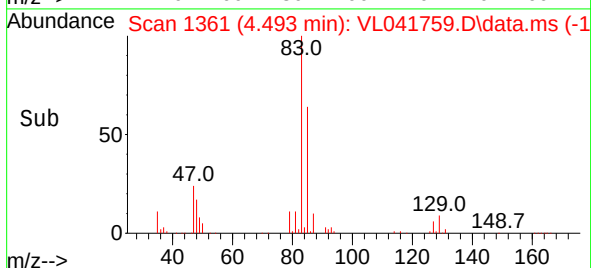
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

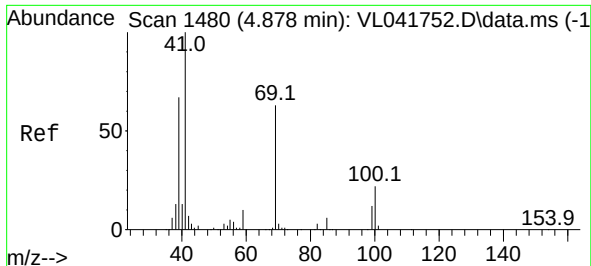


#42  
Bromodichloromethane  
Concen: 10.821 ppbv  
RT: 4.493 min Scan# 1361  
Delta R.T. 0.009 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



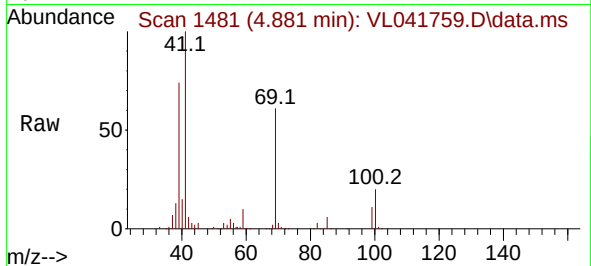
Tgt Ion: 83 Resp: 139717  
Ion Ratio Lower Upper  
83 100  
85 63.7 48.0 72.0  
127 6.2 5.8 8.8





#43  
Methyl Methacrylate  
Concen: 10.229 ppbv  
RT: 4.881 min Scan# 1481  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

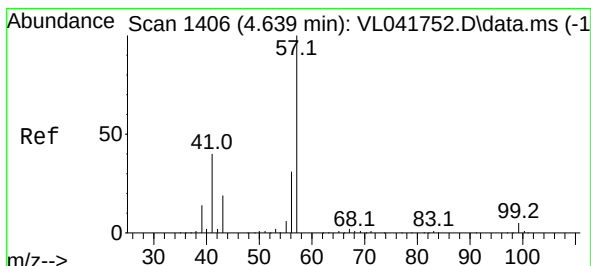
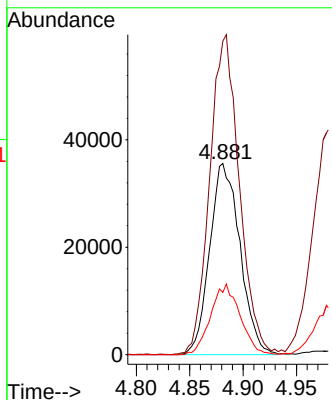
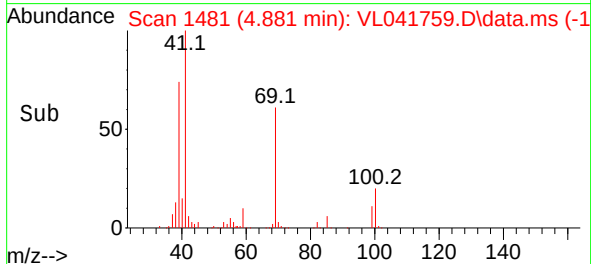
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



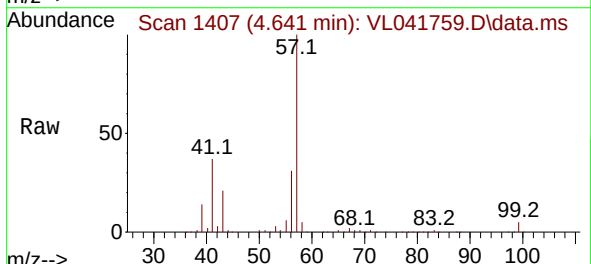
Tgt Ion: 69 Resp: 70299  
Ion Ratio Lower Upper  
69 100  
41 162.5 130.3 195.5  
100 35.8 28.3 42.5

Manual Integrations  
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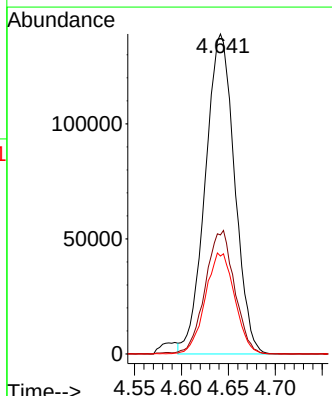
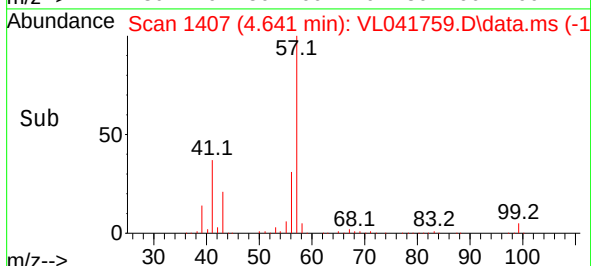
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



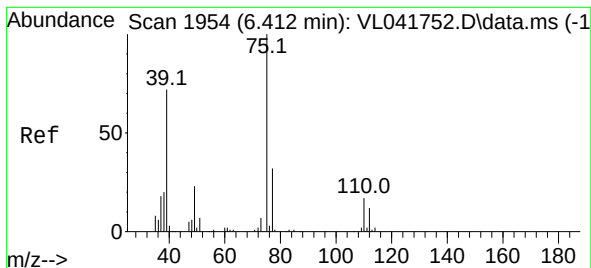
#44  
2,2,4-Trimethylpentane  
Concen: 9.796 ppbv  
RT: 4.641 min Scan# 1407  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 57 Resp: 301772  
Ion Ratio Lower Upper  
57 100  
41 38.8 30.7 46.1  
56 31.7 25.4 38.0







#45

t-1,3-Dichloropropene

Concen: 10.907 ppbv

RT: 6.415 min Scan# 1954

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 75 Resp: 77534

Ion Ratio Lower Upper

75 100

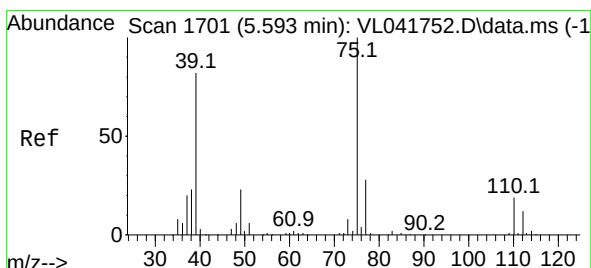
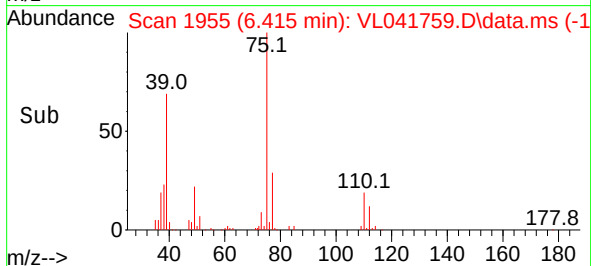
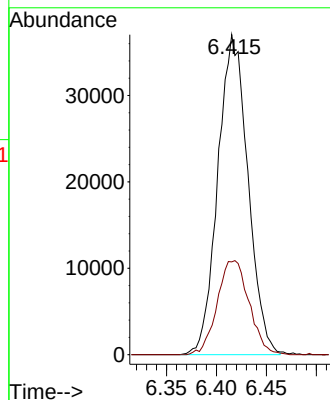
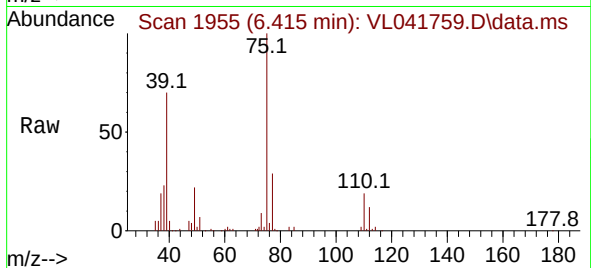
77 29.0 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#46

cis-1,3-Dichloropropene

Concen: 10.617 ppbv

RT: 5.603 min Scan# 1704

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

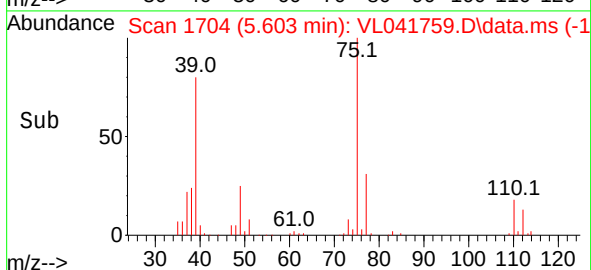
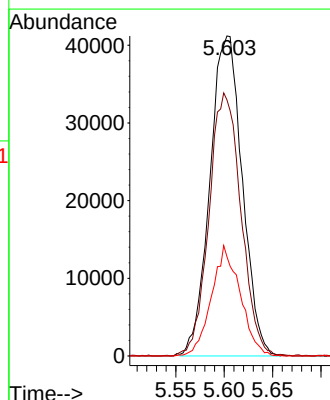
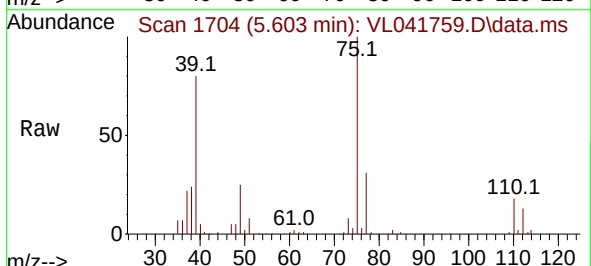
Tgt Ion: 75 Resp: 95812

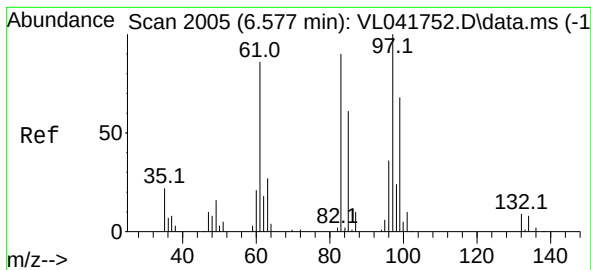
Ion Ratio Lower Upper

75 100

39 79.5 65.2 97.8

77 30.9 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 9.711 ppbv m

RT: 6.587 min Scan# 2005

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion: 97 Resp: 66169

Ion Ratio Lower Upper

97 100

83 83.7 72.3 108.5

85 54.8 48.5 72.7

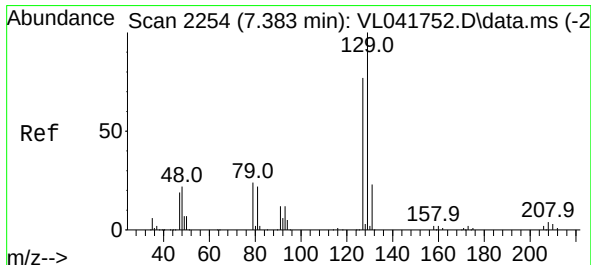
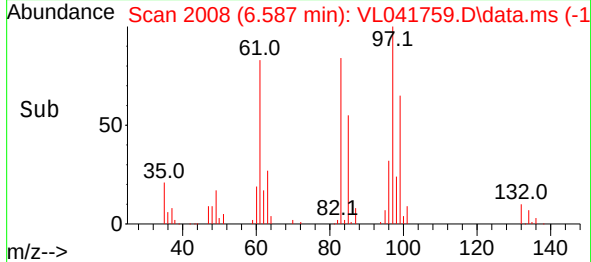
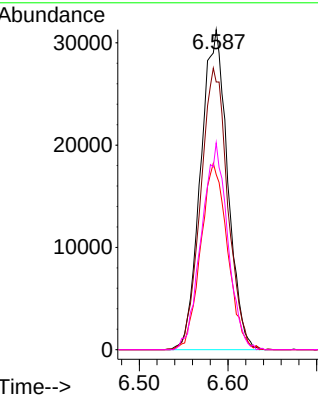
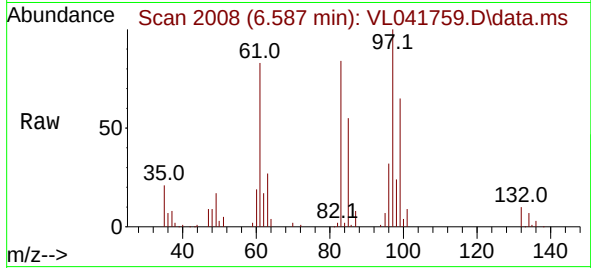
99 64.7 54.0 81.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#48

Dibromochloromethane

Concen: 11.326 ppbv

RT: 7.389 min Scan# 2256

Delta R.T. 0.006 min

Lab File: VL041759.D

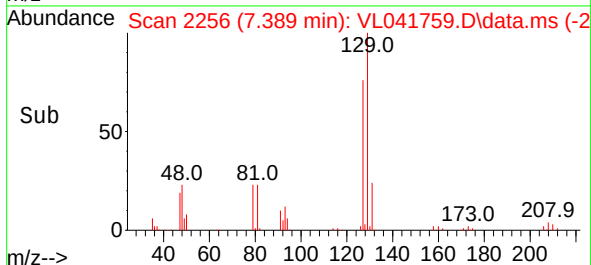
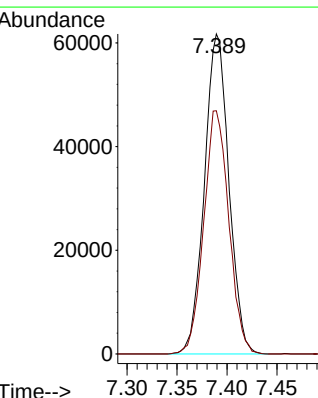
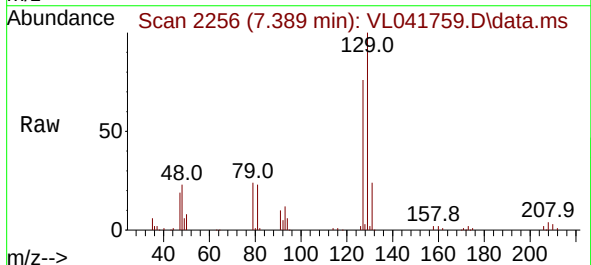
Acq: 16 Dec 2024 18:59

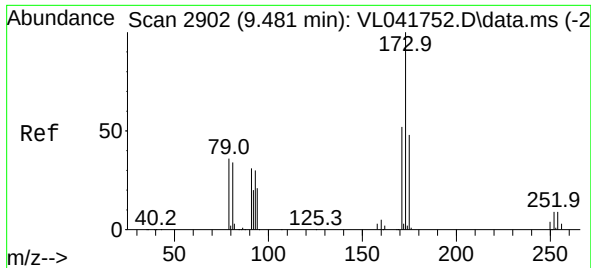
Tgt Ion:129 Resp: 105378

Ion Ratio Lower Upper

129 100

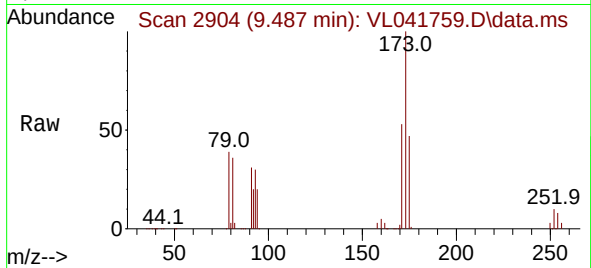
127 77.8 38.8 116.3





#49  
Bromoform  
Concen: 11.682 ppbv  
RT: 9.487 min Scan# 2902  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

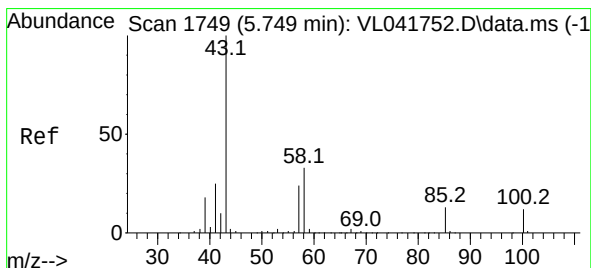
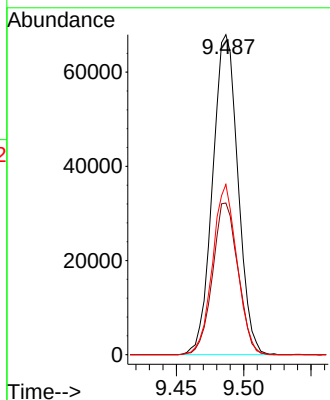
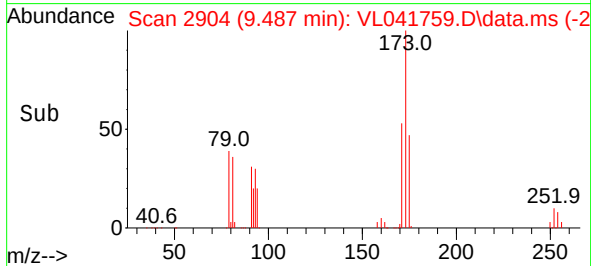
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



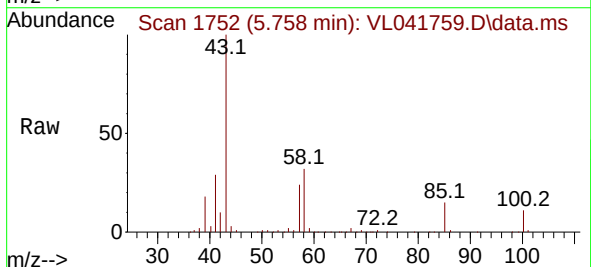
Tgt Ion:173 Resp: 8897  
Ion Ratio Lower Upper  
173 100  
175 47.6 38.2 57.2  
171 51.4 41.1 61.7

Manual Integrations  
APPROVED

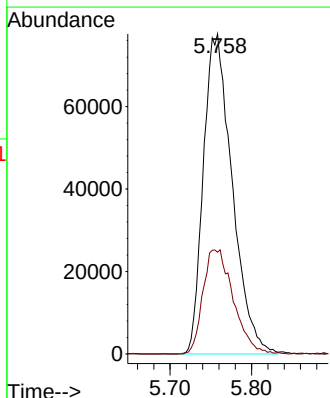
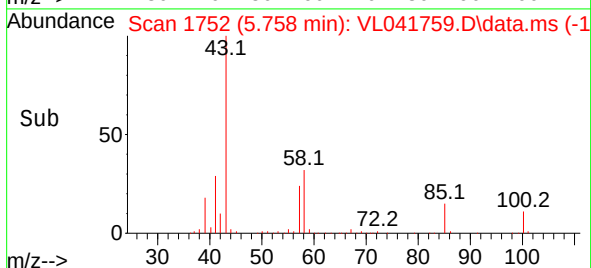
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

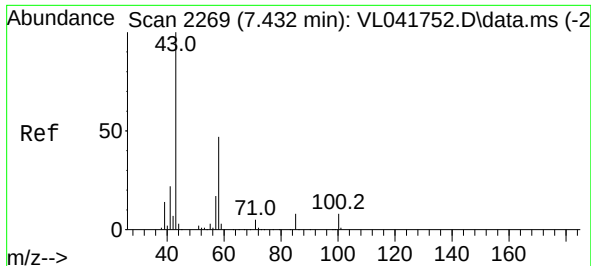


#50  
4-Methyl-2-Pentanone  
Concen: 9.980 ppbv  
RT: 5.758 min Scan# 1752  
Delta R.T. 0.009 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion: 43 Resp: 190637  
Ion Ratio Lower Upper  
43 100  
58 34.3 26.8 40.2





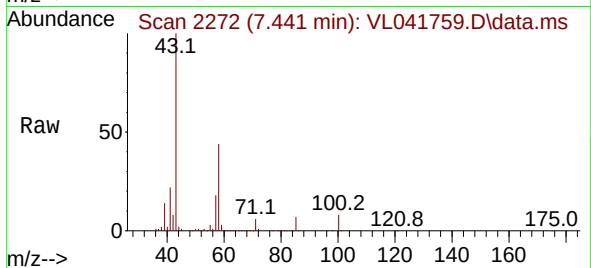
#51  
2-Hexanone  
Concen: 10.053 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

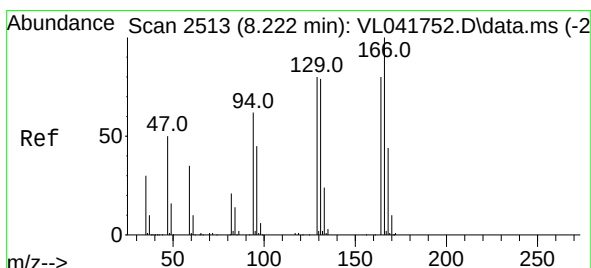
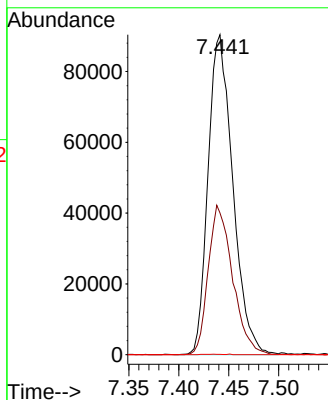
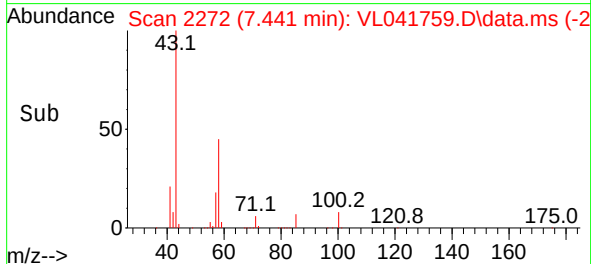


Tgt Ion: 43 Resp: 15564  
Ion Ratio Lower Upper  
43 100  
58 46.0 36.6 55.0  
98 0.1 0.1 0.1

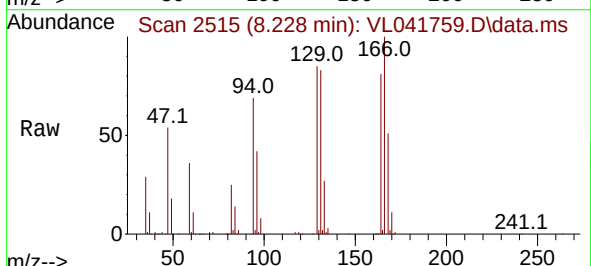
Manual Integrations

APPROVED

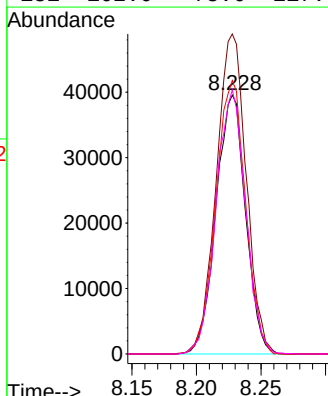
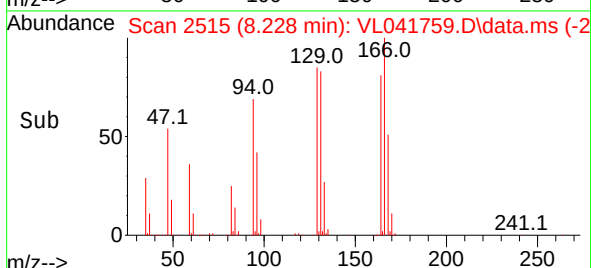
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

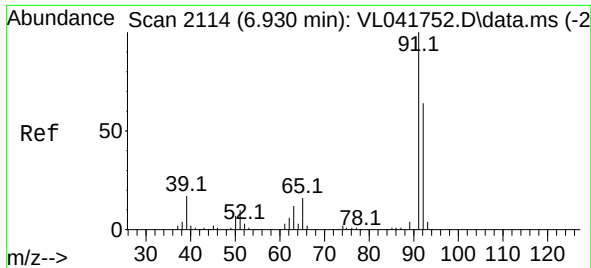


#52  
Tetrachloroethene  
Concen: 9.351 ppbv  
RT: 8.228 min Scan# 2515  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion:164 Resp: 62782  
Ion Ratio Lower Upper  
164 100  
166 123.4 99.8 149.6  
129 105.6 79.6 119.4  
131 102.0 78.6 117.8





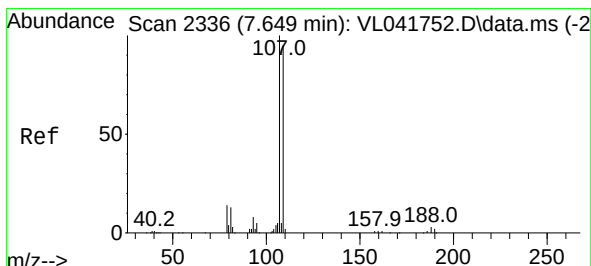
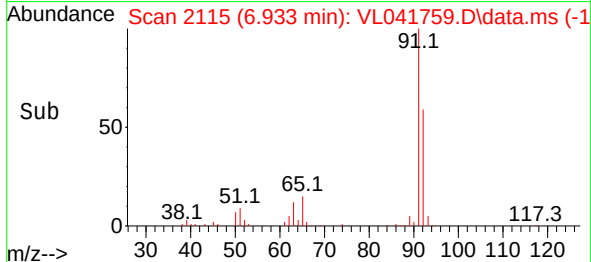
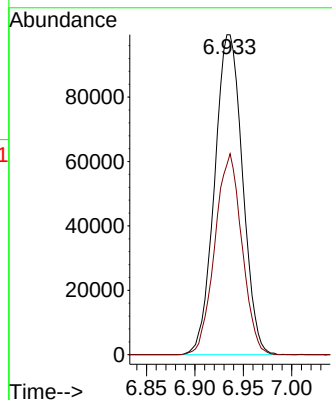
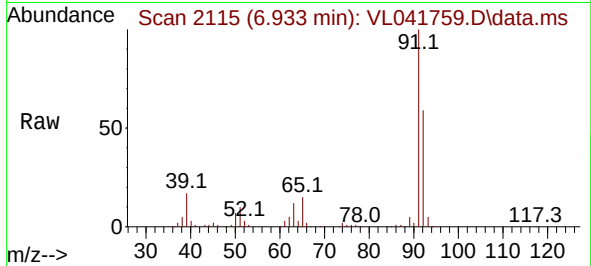
#53  
Toluene  
Concen: 9.768 ppbv  
RT: 6.933 min Scan# 2114  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 91 Resp: 19975  
Ion Ratio Lower Upper  
91 100  
92 60.8 47.9 71.9

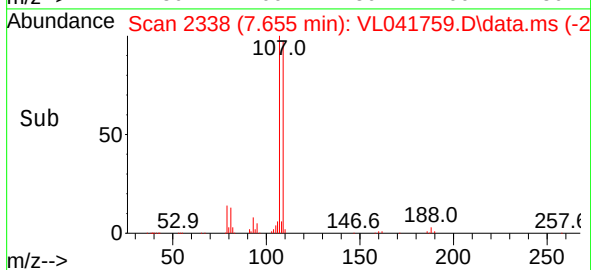
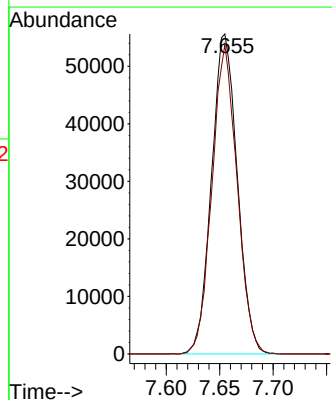
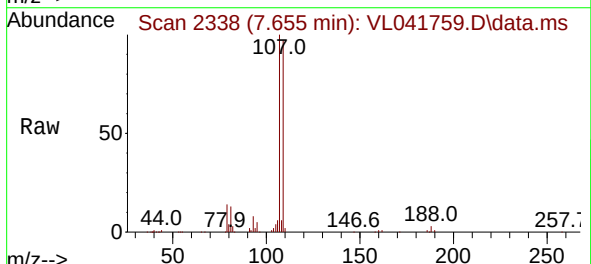
Manual Integrations  
APPROVED

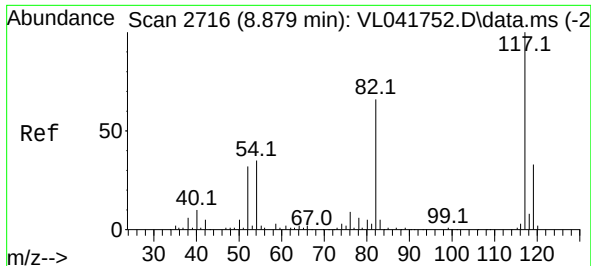
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#54  
1,2-Dibromoethane  
Concen: 9.952 ppbv  
RT: 7.655 min Scan# 2338  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:107 Resp: 93439  
Ion Ratio Lower Upper  
107 100  
109 96.6 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 2718

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

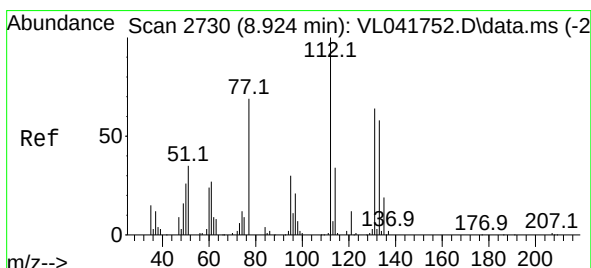
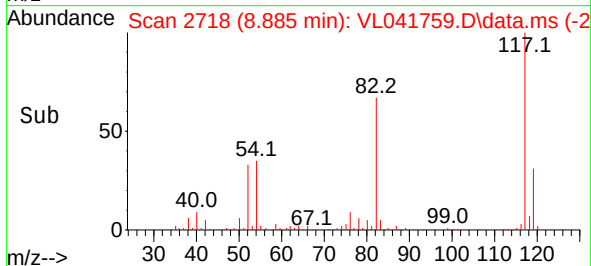
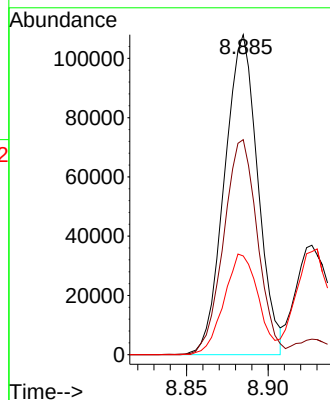
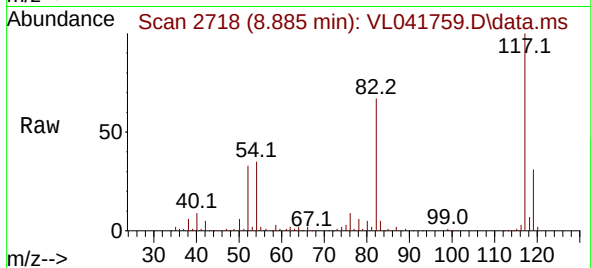
ICVVL121624

Tgt Ion:117 Resp: 15344

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 73.4  | 53.8  | 80.8  |
| 119 | 32.8  | 26.7  | 40.1  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#56

1,1,1,2-Tetrachloroethane

Concen: 10.558 ppbv

RT: 8.927 min Scan# 2731

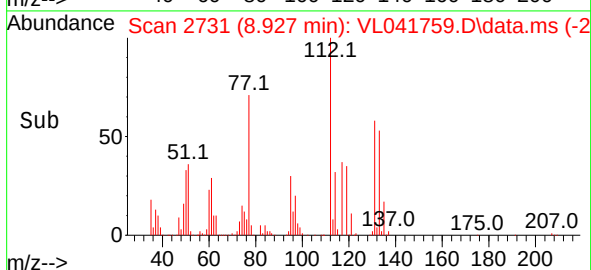
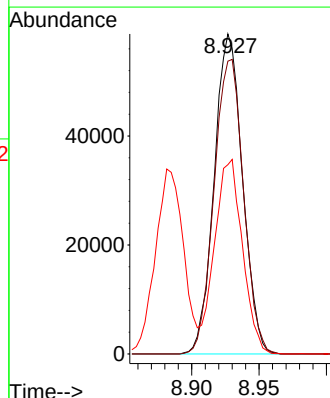
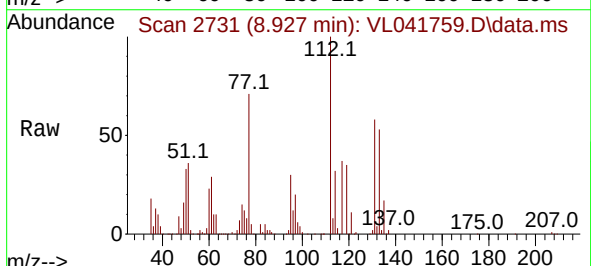
Delta R.T. 0.003 min

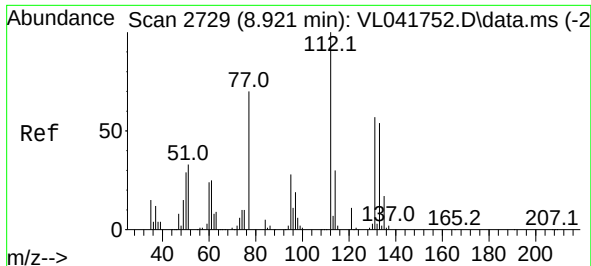
Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion:131 Resp: 85883

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 131 | 100   |       |       |
| 133 | 95.7  | 76.8  | 115.2 |
| 119 | 60.2  | 49.0  | 73.6  |





#57

Chlorobenzene

Concen: 9.888 ppbv

RT: 8.924 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

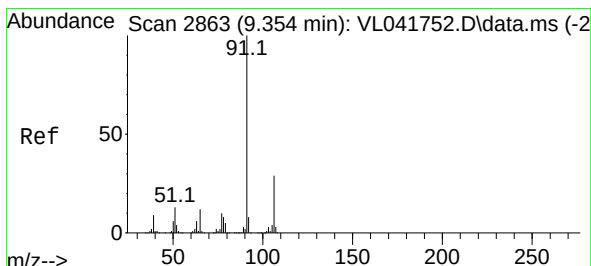
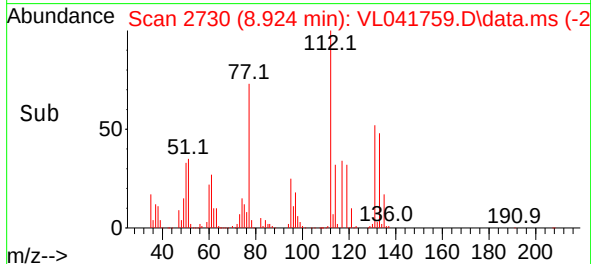
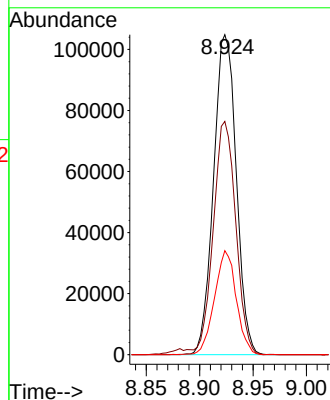
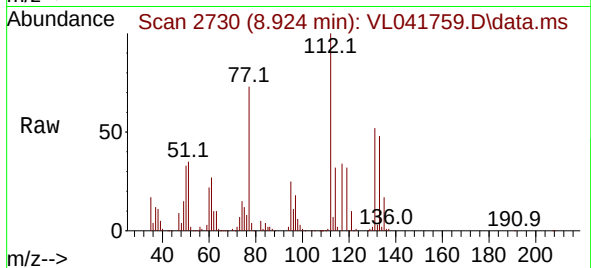
ICVVL121624

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 112   | Resp: | 15525 |
| Ion Ratio | Lower | Upper |       |
| 112       | 100   |       |       |
| 77        | 72.9  | 57.4  | 86.0  |
| 114       | 32.5  | 27.4  | 33.4  |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#58

Ethyl Benzene

Concen: 10.308 ppbv

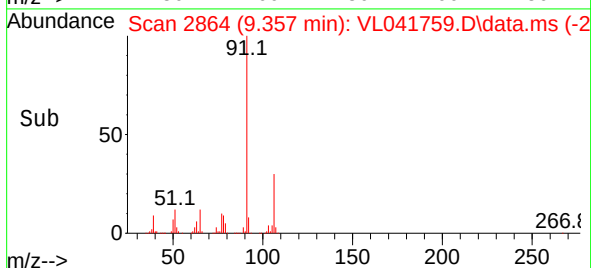
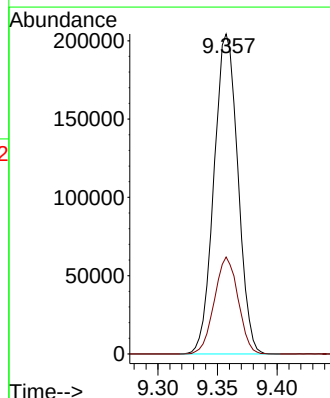
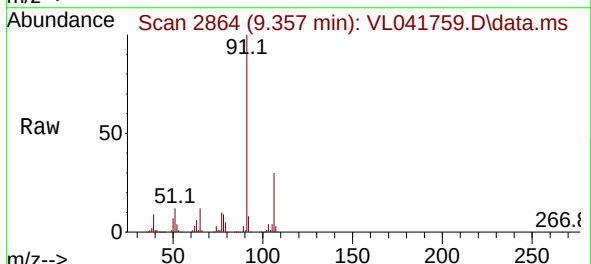
RT: 9.357 min Scan# 2864

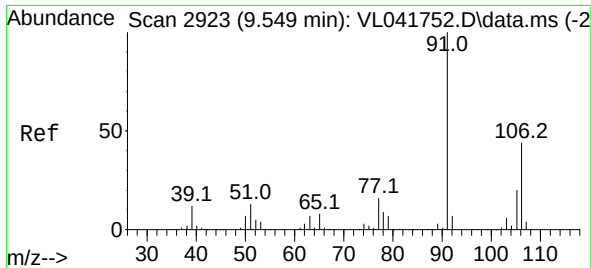
Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 91    | Resp: | 284770 |
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 106       | 30.3  | 23.5  | 35.3   |





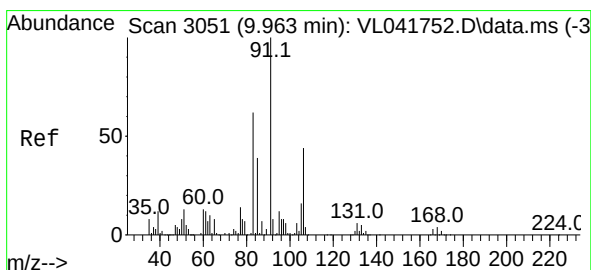
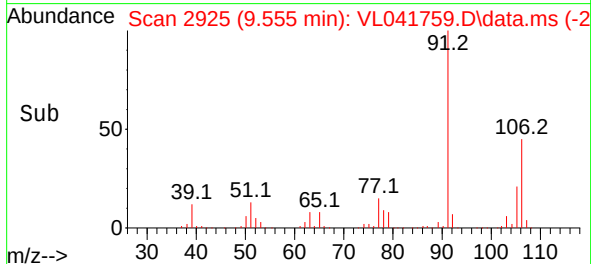
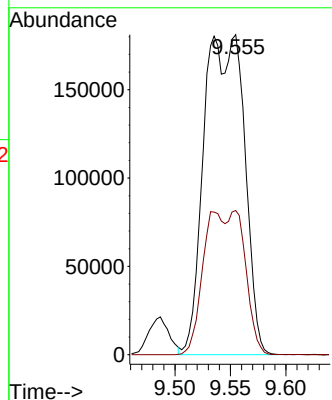
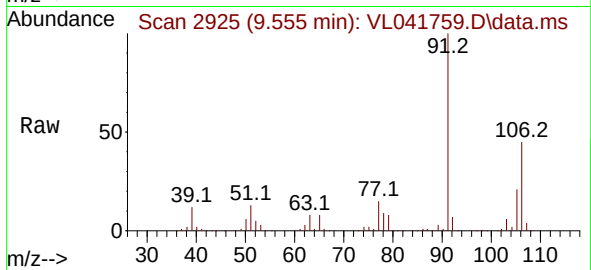
#59  
m/p-Xylene  
Concen: 20.669 ppbv m  
RT: 9.555 min Scan# 2923  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 91 Resp: 45910  
Ion Ratio Lower Upper  
91 100  
106 45.5 0.0 0.0

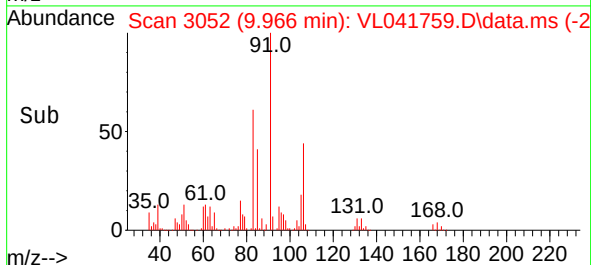
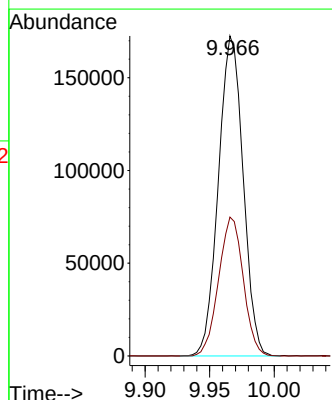
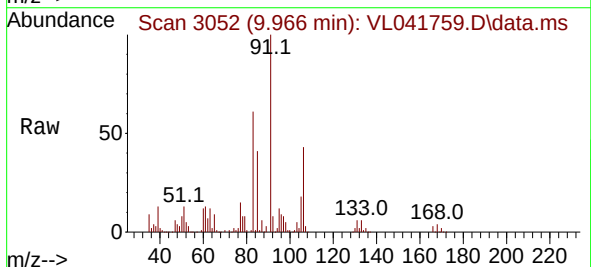
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

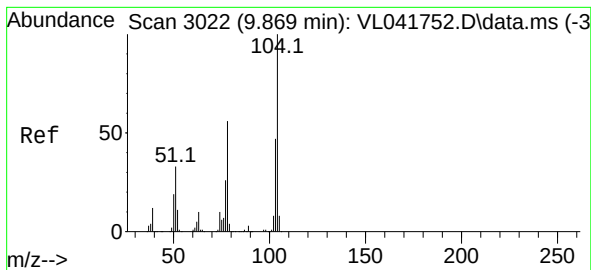


#60  
o-Xylene  
Concen: 10.304 ppbv  
RT: 9.966 min Scan# 3052  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 91 Resp: 229517  
Ion Ratio Lower Upper  
91 100  
106 43.3 21.1 63.4

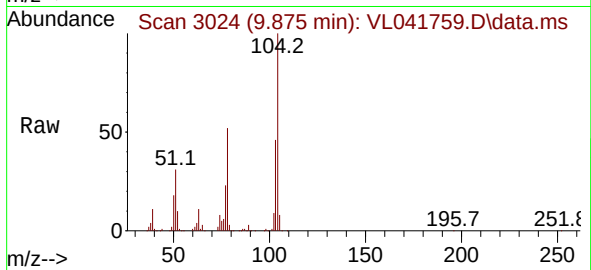






#61  
Styrene  
Concen: 11.093 ppbv  
RT: 9.875 min Scan# 3022  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

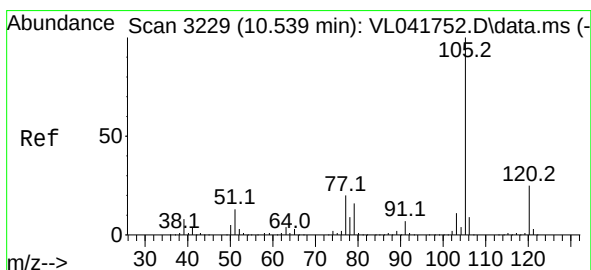
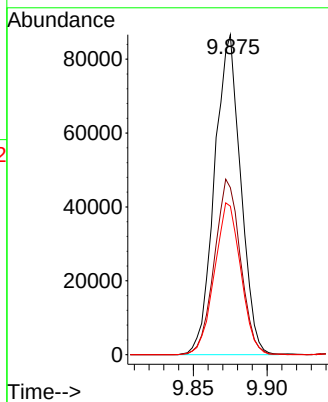
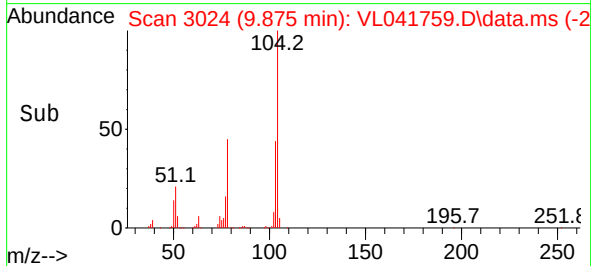
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



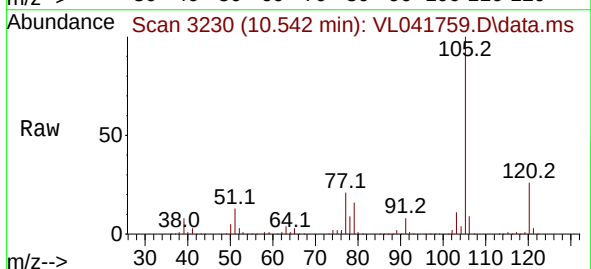
Tgt Ion:104 Resp: 10684  
Ion Ratio Lower Upper  
104 100  
78 54.8 43.8 65.6  
103 47.9 37.8 56.6

Manual Integrations  
APPROVED

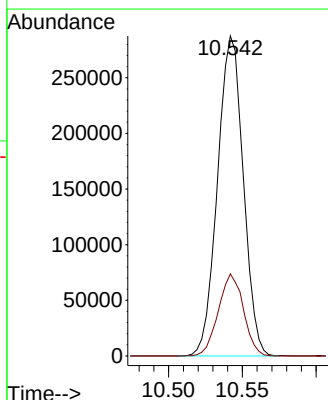
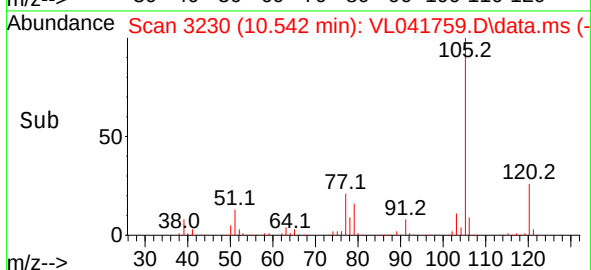
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

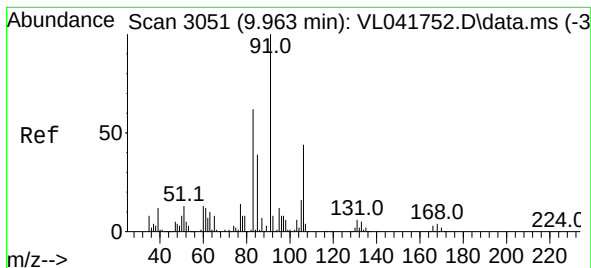


#62  
Isopropylbenzene  
Concen: 10.425 ppbv  
RT: 10.542 min Scan# 3230  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion:105 Resp: 348887  
Ion Ratio Lower Upper  
105 100  
120 25.0 19.8 29.8





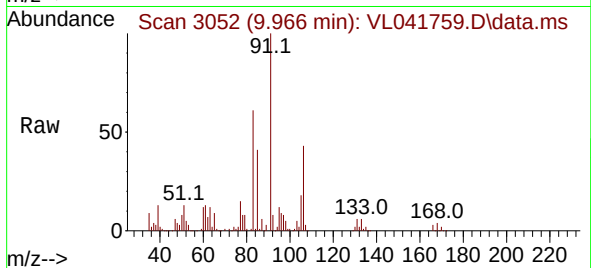
#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.865 ppbv  
RT: 9.966 min Scan# 3051  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

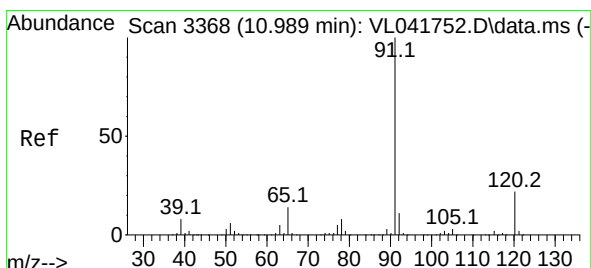
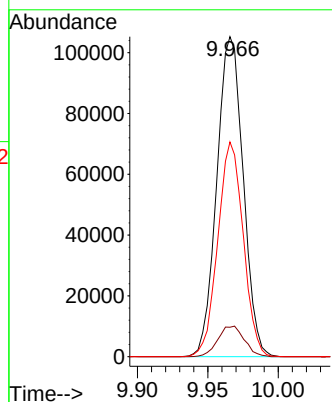
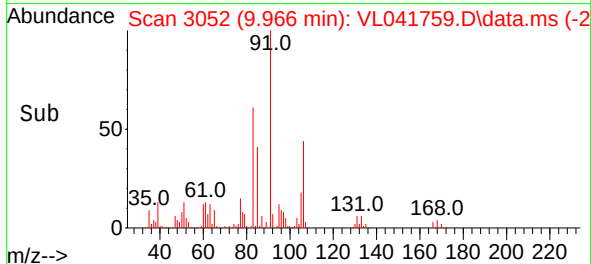
ICVVL121624



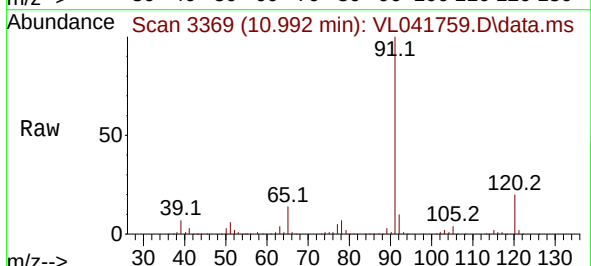
Tgt Ion: 83 Resp: 13754  
Ion Ratio Lower Upper  
83 100  
131 9.6 4.9 14.7  
85 64.6 32.0 96.2

Manual Integrations  
APPROVED

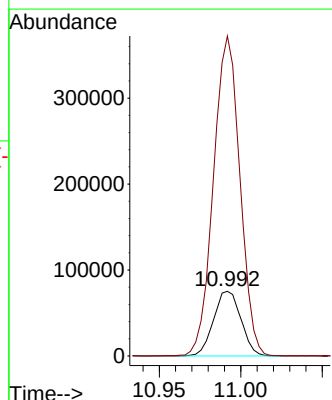
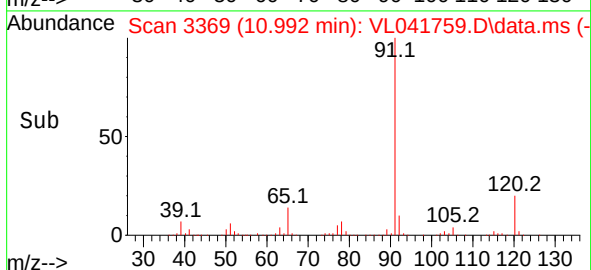
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

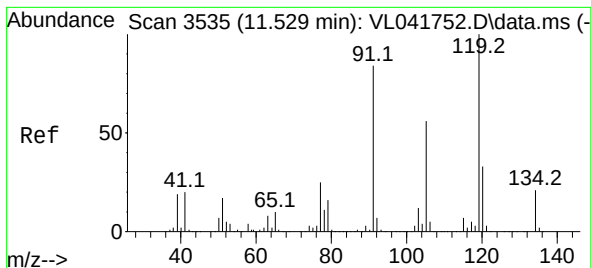


#64  
n-propylbenzene  
Concen: 10.384 ppbv  
RT: 10.992 min Scan# 3369  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion:120 Resp: 87865  
Ion Ratio Lower Upper  
120 100  
91 479.0 387.3 580.9





#65

tert-Butylbenzene

Concen: 10.194 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

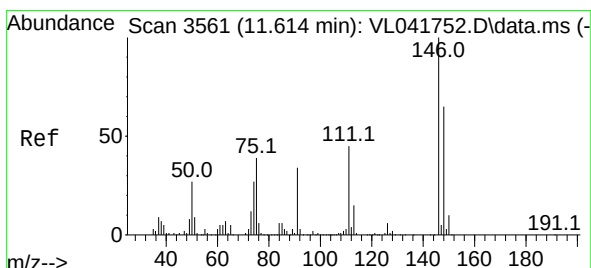
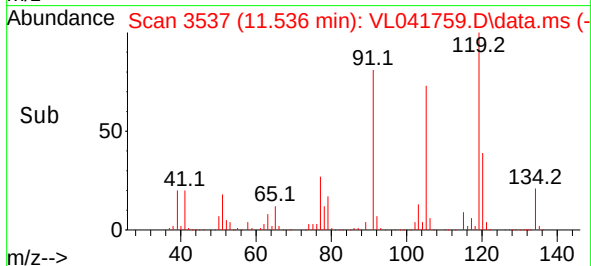
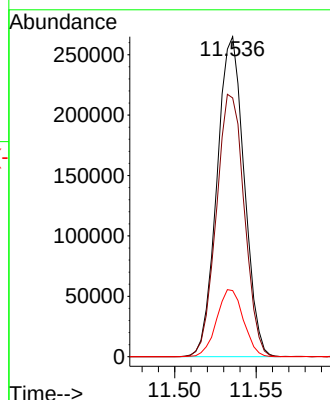
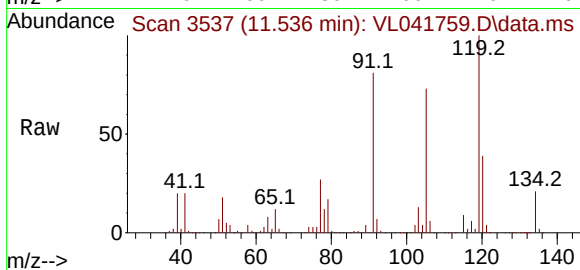
ICVVL121624

Tgt Ion:119 Resp: 307790

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 119 | 100   |       |       |
| 91  | 84.2  | 67.0  | 100.4 |
| 134 | 20.5  | 16.5  | 24.7  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#66

Benzyl Chloride

Concen: 11.054 ppbv

RT: 11.620 min Scan# 3563

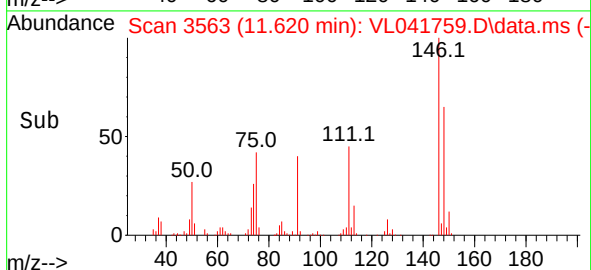
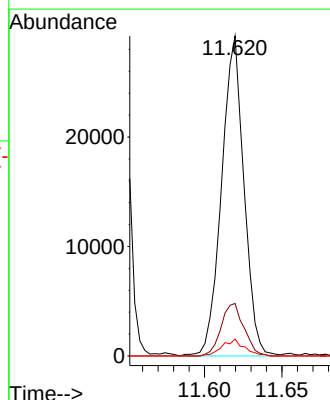
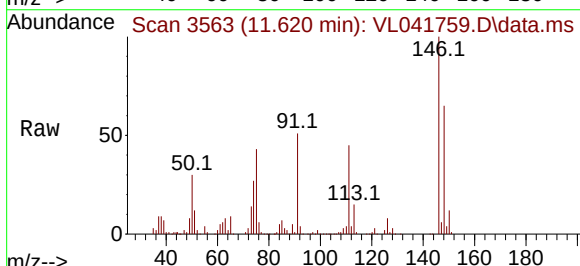
Delta R.T. 0.006 min

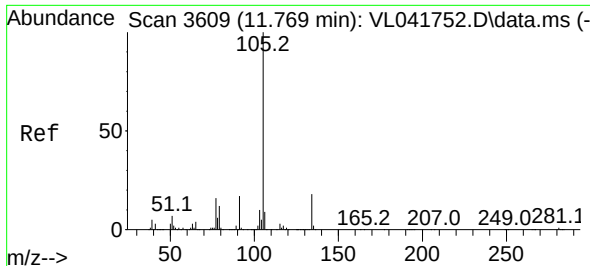
Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 91 Resp: 29398

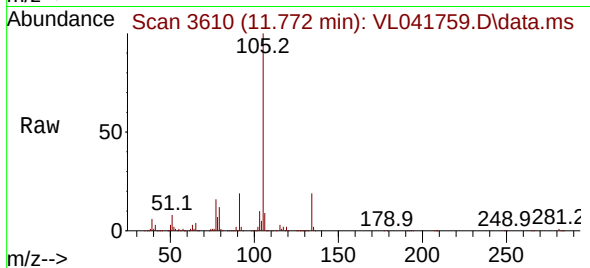
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 126 | 16.7  | 13.9  | 20.9  |
| 128 | 5.2   | 4.4   | 6.6   |





#67  
 sec-Butylbenzene  
 Concen: 10.304 ppbv  
 RT: 11.772 min Scan# 3610  
 Delta R.T. 0.003 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

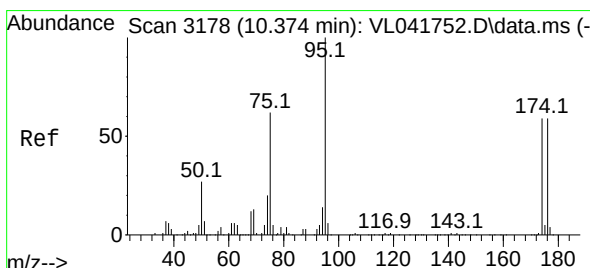
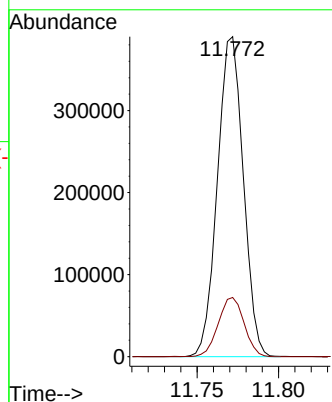
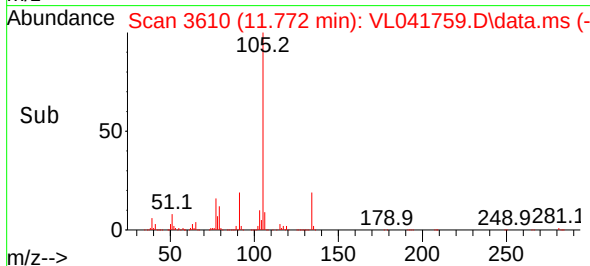
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL121624



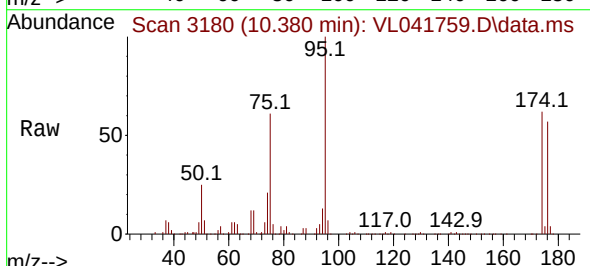
Tgt Ion: 105 Resp: 43052  
 Ion Ratio Lower Upper  
 105 100  
 134 18.5 14.5 21.7

Manual Integrations  
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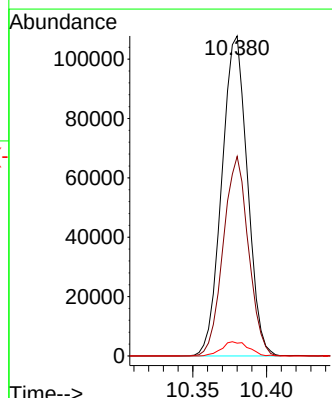
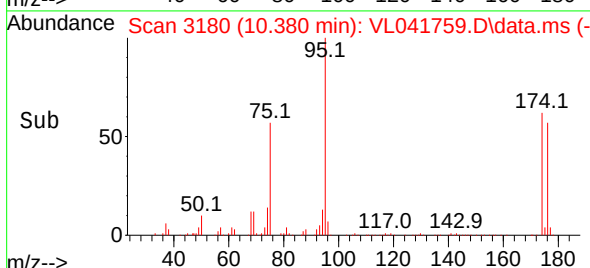
Reviewed By :Semsettin Yesilyurt 12/20/2024  
 Supervised By :Mahesh Dadoda 12/20/2024

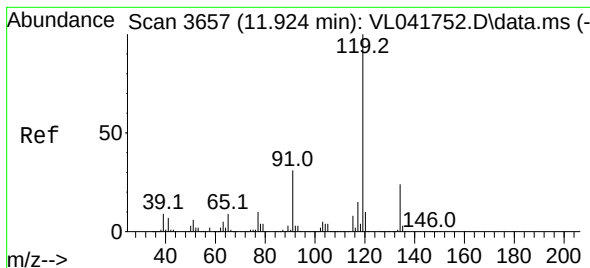


#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.166 ppbv  
 RT: 10.380 min Scan# 3180  
 Delta R.T. 0.006 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59



Tgt Ion: 95 Resp: 129985  
 Ion Ratio Lower Upper  
 95 100  
 174 61.3 47.6 71.4  
 175 4.7 3.7 5.5





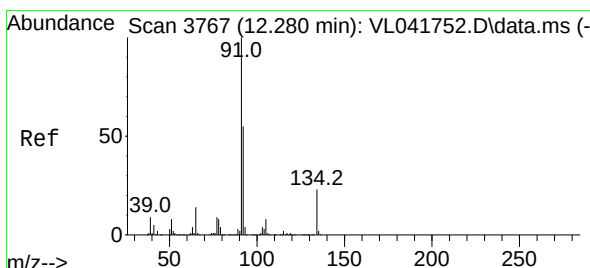
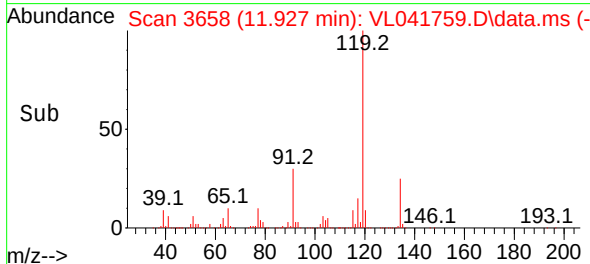
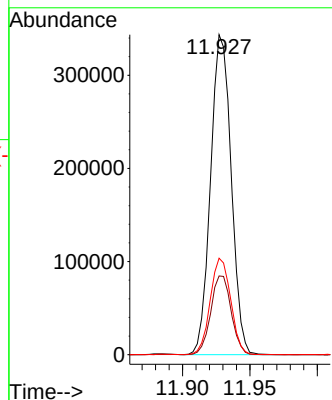
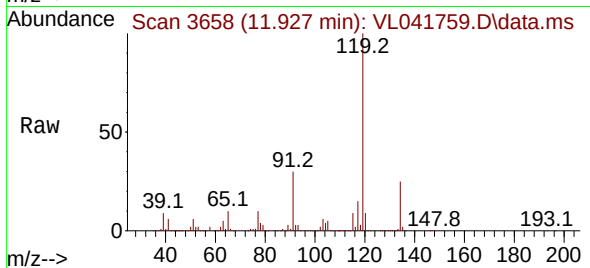
#69  
p-Isopropyltoluene  
Concen: 10.620 ppbv  
RT: 11.927 min Scan# 3656  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 119 Resp: 36566  
Ion Ratio Lower Upper  
119 100  
134 24.5 19.6 29.4  
91 30.1 24.4 36.6

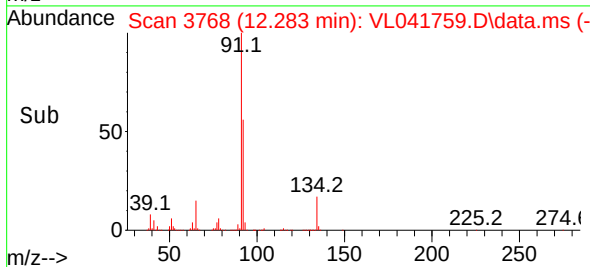
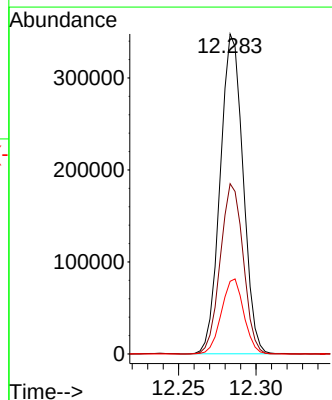
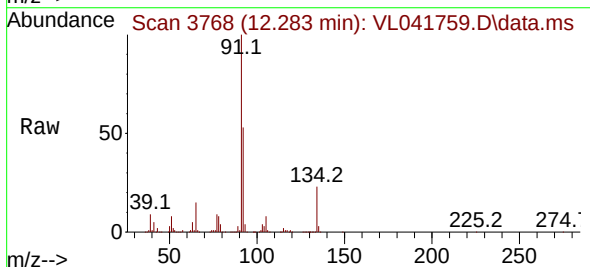
Manual Integrations  
APPROVED

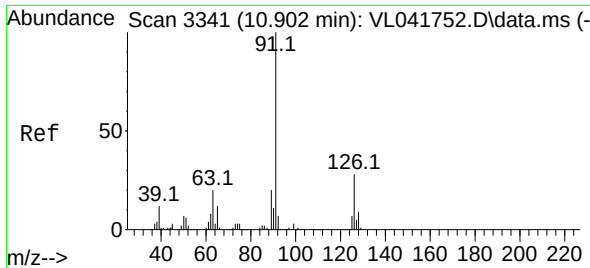
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#70  
n-Butylbenzene  
Concen: 10.727 ppbv  
RT: 12.283 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 91 Resp: 356880  
Ion Ratio Lower Upper  
91 100  
92 53.6 43.2 64.8  
134 23.0 18.2 27.4





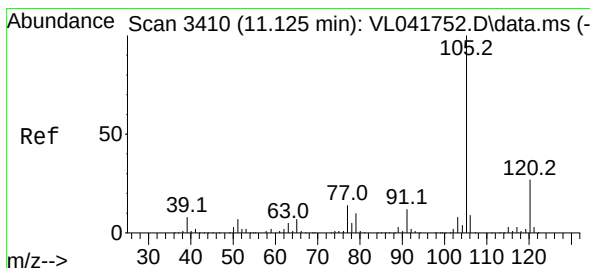
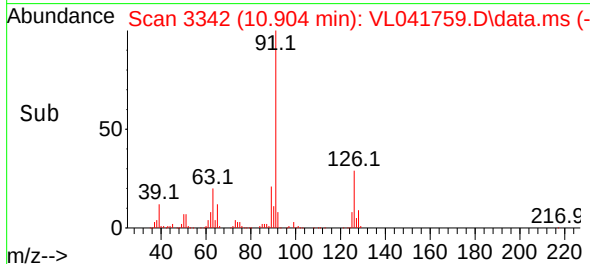
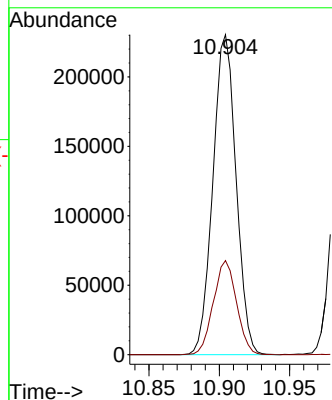
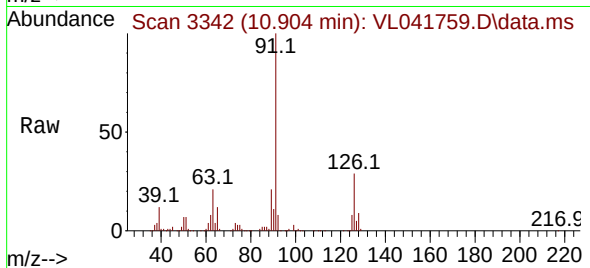
#71  
2-Chlorotoluene  
Concen: 10.340 ppbv  
RT: 10.904 min Scan# 3341  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion: 91 Resp: 26412  
Ion Ratio Lower Upper  
91 100  
126 29.4 11.6 46.4

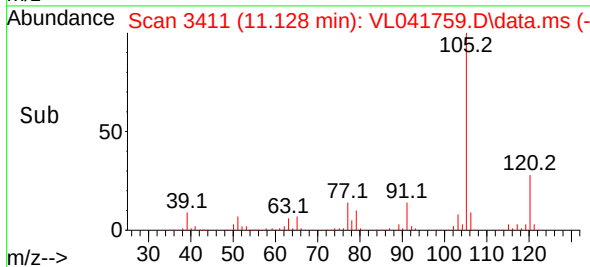
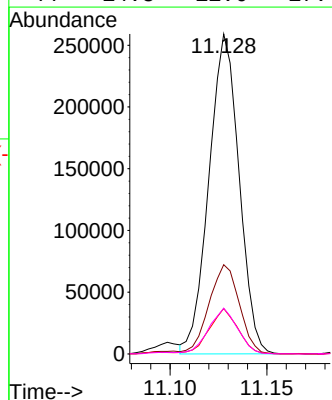
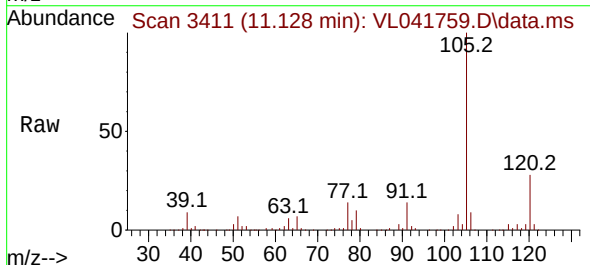
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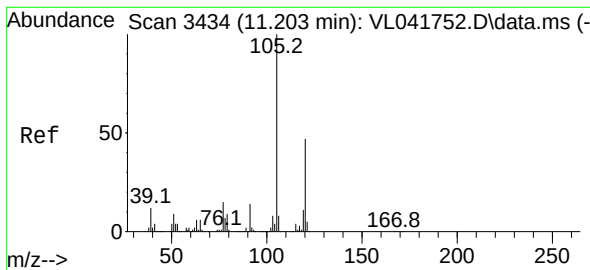
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#72  
4-Ethyltoluene  
Concen: 10.672 ppbv  
RT: 11.128 min Scan# 3411  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:105 Resp: 280580  
Ion Ratio Lower Upper  
105 100  
120 29.0 23.3 34.9  
91 14.1 10.9 16.3  
77 14.3 11.6 17.4





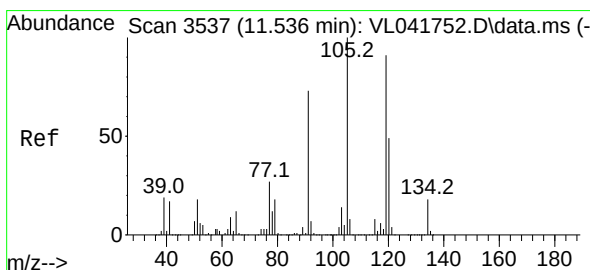
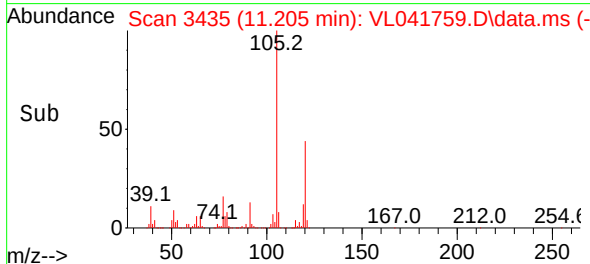
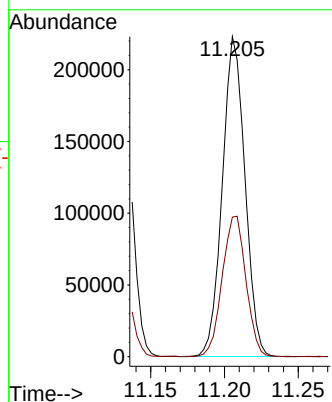
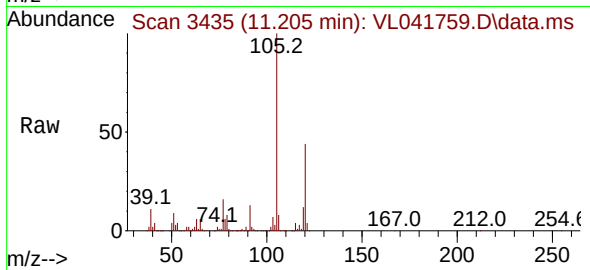
#73  
1,3,5-Trimethylbenzene  
Concen: 10.902 ppbv  
RT: 11.205 min Scan# 3434  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion:105 Resp: 237804  
Ion Ratio Lower Upper  
105 100  
120 43.6 37.4 56.2

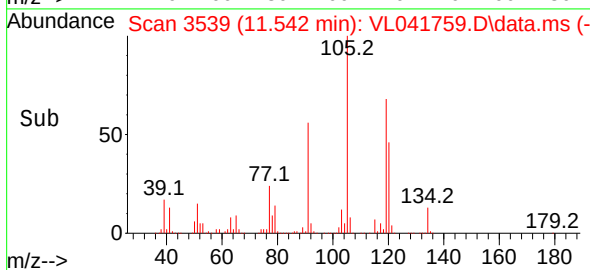
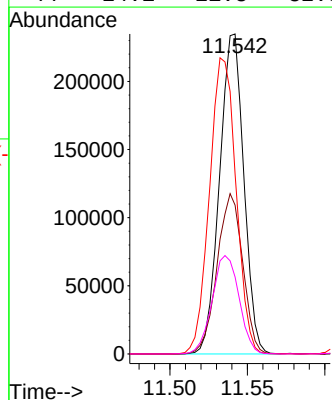
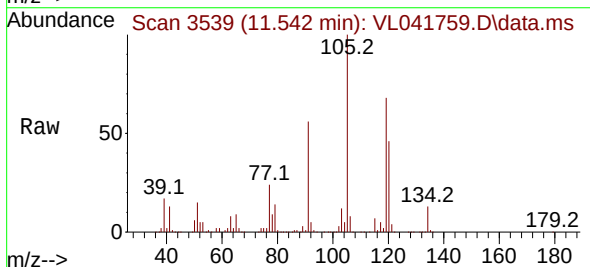
Manual Integrations  
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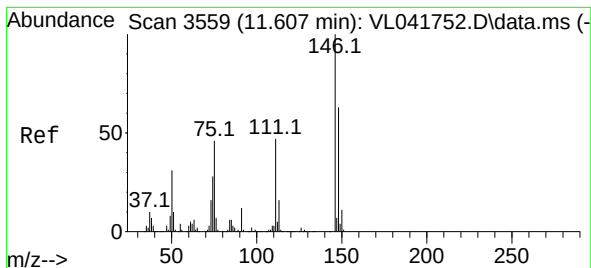
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#74  
1,2,4-Trimethylbenzene  
Concen: 10.919 ppbv  
RT: 11.542 min Scan# 3539  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:105 Resp: 256141  
Ion Ratio Lower Upper  
105 100  
120 46.5 39.0 58.4  
91 56.2 58.1 87.1#  
77 24.1 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 10.025 ppbv

RT: 11.610 min Scan# 3559

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

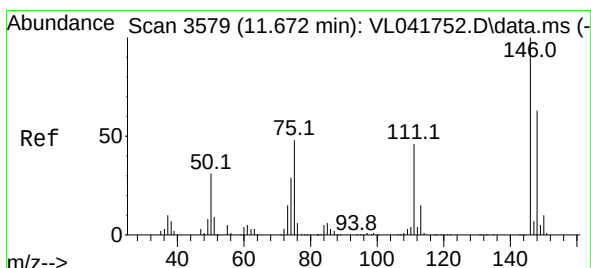
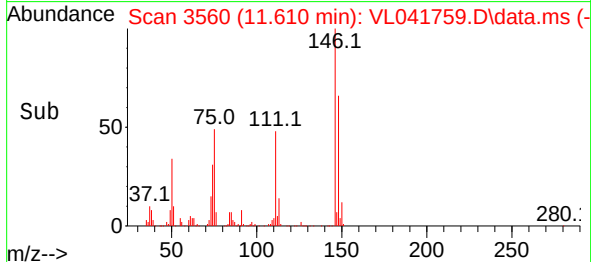
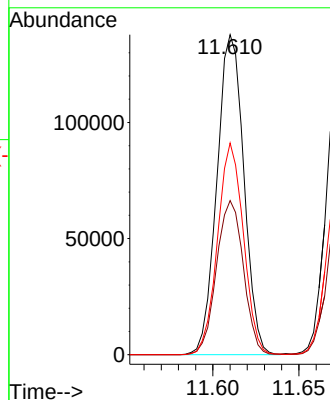
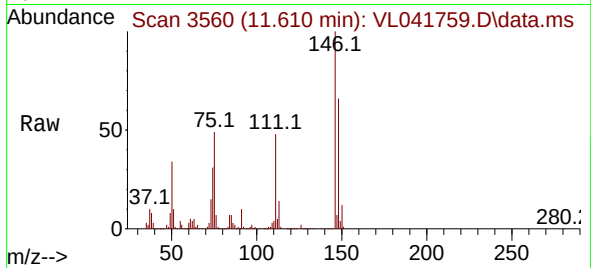
ICVVL121624

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 14992     |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 48.2  | 23.4 70.3 |
| 148         | 63.5  | 31.6 95.0 |

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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



#76

1,4-Dichlorobenzene

Concen: 10.302 ppbv

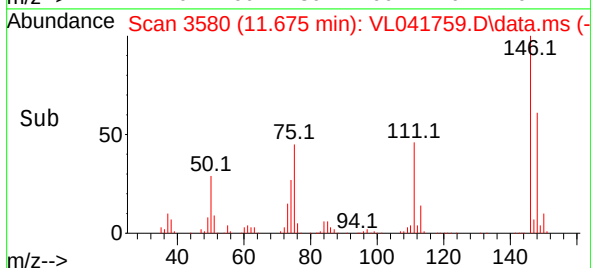
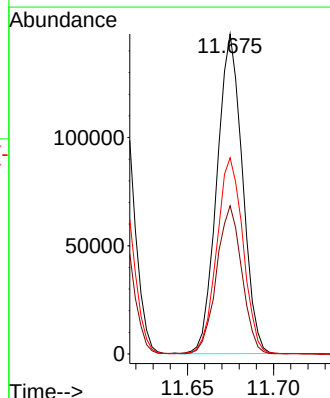
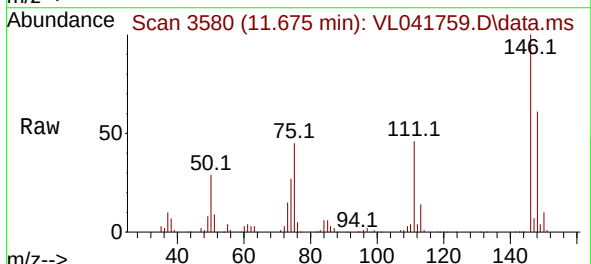
RT: 11.675 min Scan# 3580

Delta R.T. 0.003 min

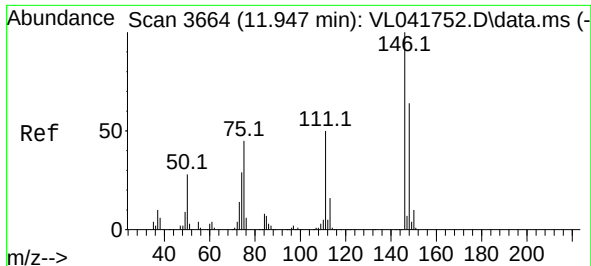
Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 152212    |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 46.1  | 22.7 68.1 |
| 148         | 63.4  | 31.4 94.0 |

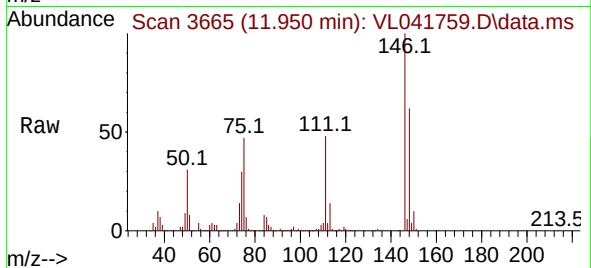






#77  
1,2-Dichlorobenzene  
Concen: 9.919 ppbv  
RT: 11.950 min Scan# 3665  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

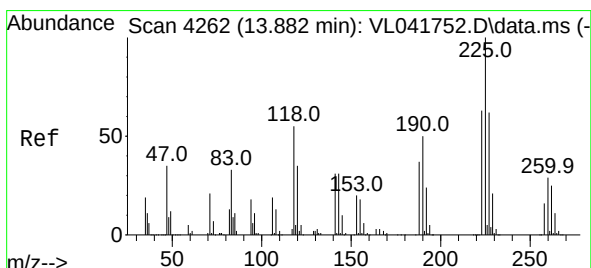
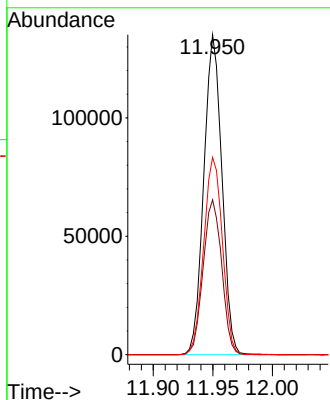
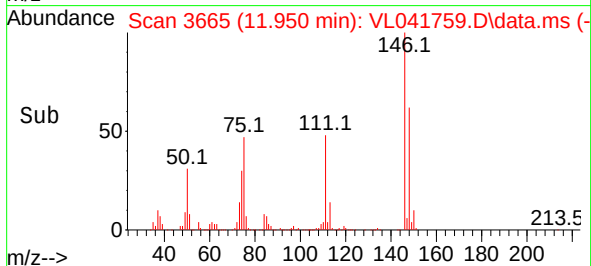
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



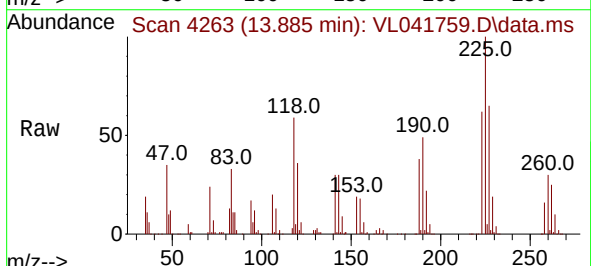
Tgt Ion:146 Resp: 142734  
Ion Ratio Lower Upper  
146 100  
111 49.7 24.8 74.3  
148 63.7 31.8 95.4

Manual Integrations  
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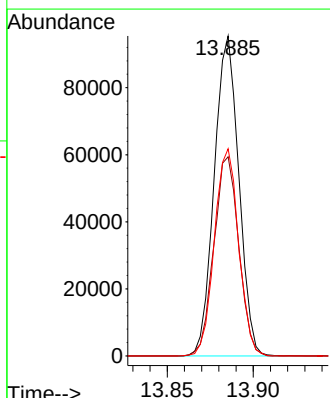
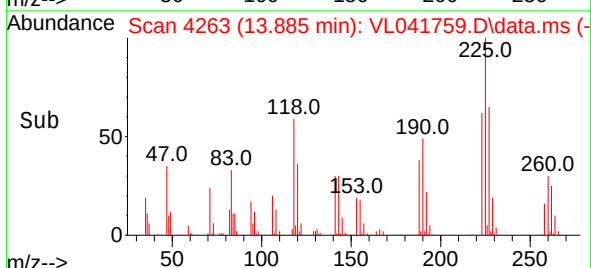
Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024

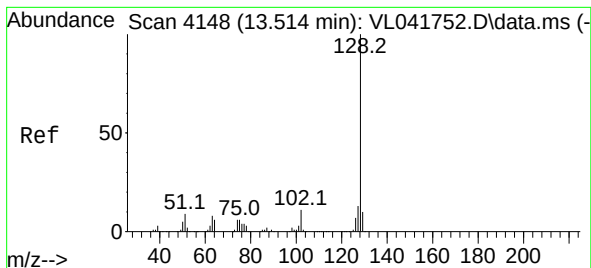


#78  
Hexachloro-1,3-Butadiene  
Concen: 8.873 ppbv  
RT: 13.885 min Scan# 4263  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59



Tgt Ion:225 Resp: 94671  
Ion Ratio Lower Upper  
225 100  
223 63.2 50.5 75.7  
227 63.8 50.3 75.5





#79

Naphthalene

Concen: 12.384 ppbv

RT: 13.516 min Scan# 4148

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

Tgt Ion:128 Resp: 20241

Ion Ratio Lower Upper

128 100

127 13.4 10.7 16.1

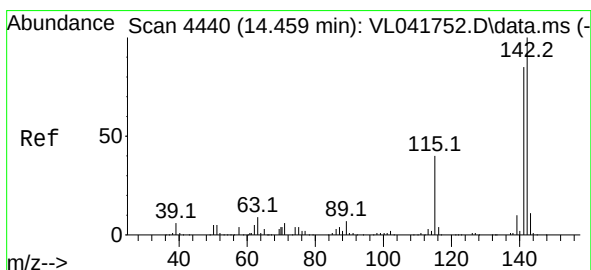
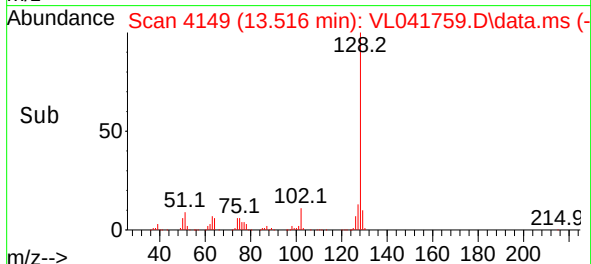
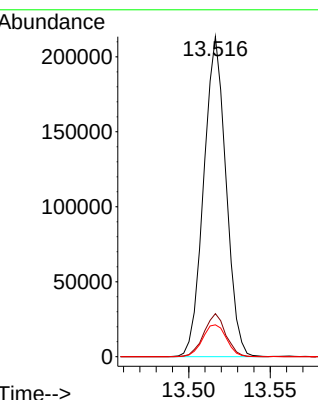
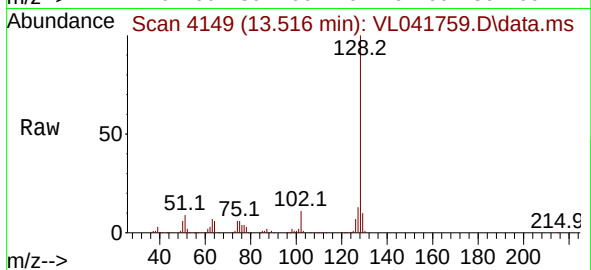
129 10.0 8.2 12.4

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/20/2024

Supervised By :Mahesh Dadoda 12/20/2024



#80

Naphthalene,2-methyl-

Concen: 20.261 ppbv

RT: 14.461 min Scan# 4441

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

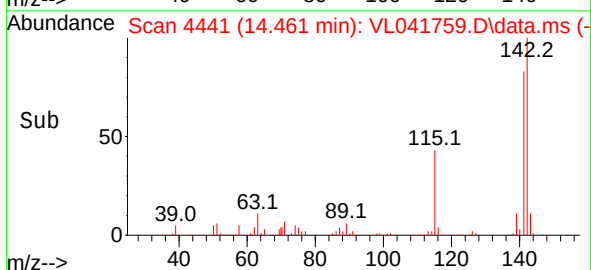
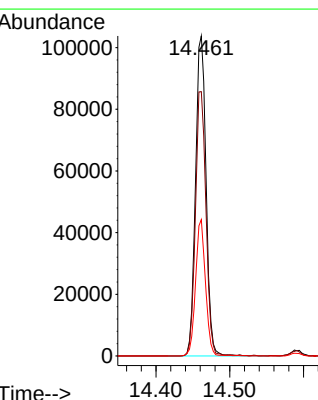
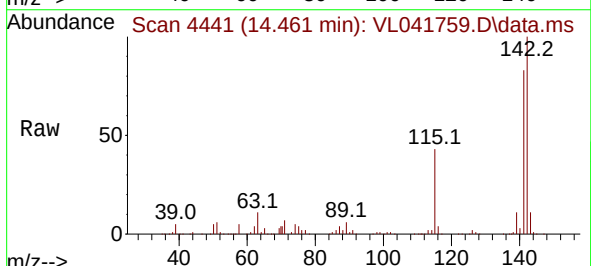
Tgt Ion:142 Resp: 102431

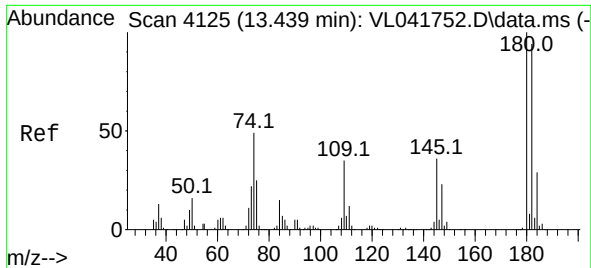
Ion Ratio Lower Upper

142 100

141 83.2 68.4 102.6

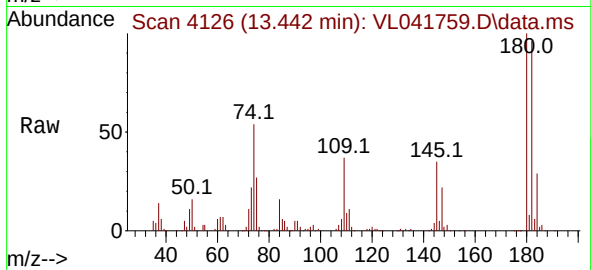
115 40.4 32.5 48.7





#81  
1,2,4-Trichlorobenzene  
Concen: 11.025 ppbv  
RT: 13.442 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

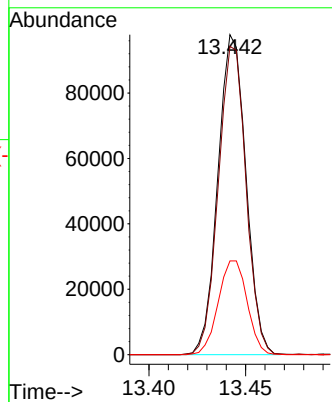
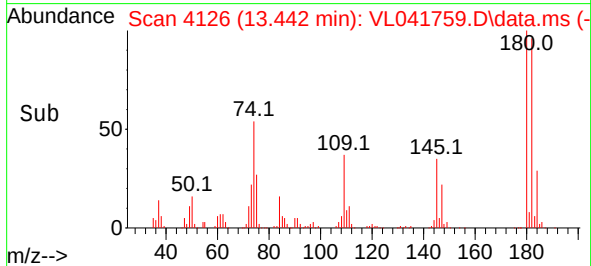
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624



Tgt Ion:180 Resp: 98468  
Ion Ratio Lower Upper  
180 100  
182 95.3 77.0 115.6  
184 30.2 23.8 35.8

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/20/2024  
Supervised By :Mahesh Dadoda 12/20/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041759.D  
Acq On : 16 Dec 2024 18:59  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Quant Time: Dec 19 07:36:00 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 95    | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.779 | 1.643  | 7.6   | 93    | 0.00     |
| 3    | Chlorodifluoromethane       | 1.631 | 1.618  | 0.8   | 98    | 0.00     |
| 4    | Chloromethane               | 0.696 | 0.668  | 4.0   | 100   | 0.00     |
| 5 T  | Vinyl Chloride              | 0.701 | 0.630  | 10.1  | 96    | 0.00     |
| 6 T  | Bromomethane                | 0.331 | 0.301  | 9.1   | 97    | 0.00     |
| 7    | Chloroethane                | 0.272 | 0.267  | 1.8   | 100   | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.593 | 1.537  | 3.5   | 100   | 0.00     |
| 9 T  | Propene                     | 0.707 | 0.642  | 9.2   | 96    | 0.00     |
| 10 T | Heptane                     | 1.816 | 1.782  | 1.9   | 99    | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.890 | 1.782  | 5.7   | 94    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.437 | 1.358  | 5.5   | 96    | 0.00     |
| 13   | Ethanol                     | 0.059 | 0.042# | 28.8  | 111   | 0.00     |
| 14 T | Bromoethene                 | 0.485 | 0.485  | 0.0   | 97    | 0.00     |
| 15 T | Acetone                     | 1.946 | 1.460  | 25.0  | 95    | 0.00     |
| 16 T | 1,3-Butadiene               | 0.766 | 0.694  | 9.4   | 96    | 0.00     |
| 17   | tert-Butyl alcohol          | 1.930 | 1.878  | 2.7   | 97    | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.603 | 0.577  | 4.3   | 97    | 0.00     |
| 19 T | Isopropyl Alcohol           | 1.167 | 0.886  | 24.1  | 98    | 0.00     |
| 20 T | Methylene Chloride          | 0.555 | 0.497  | 10.5  | 99    | 0.00     |
| 21 T | Allyl Chloride              | 1.055 | 1.040  | 1.4   | 97    | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.690 | 0.656  | 4.9   | 97    | 0.00     |
| 23 T | Vinyl Acetate               | 0.903 | 0.797  | 11.7  | 96    | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.396 | 1.339  | 4.1   | 97    | 0.00     |
| 25 T | Ethyl Acetate               | 3.620 | 3.607  | 0.4   | 100   | 0.00     |
| 26 T | Hexane                      | 1.374 | 1.339  | 2.5   | 97    | 0.00     |
| 27 T | Carbon Disulfide            | 1.238 | 1.318  | -6.5  | 93    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 1.114 | 0.957  | 14.1  | 83    | 0.00     |
| 29 T | Chloroform                  | 2.093 | 2.071  | 1.1   | 100   | 0.00     |
| 30 T | Cyclohexane                 | 1.169 | 1.158  | 0.9   | 100   | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 1.419 | 1.410  | 0.6   | 100   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 2.128 | 2.124  | 0.2   | 99    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 95    | 0.00     |
| 34 T | 2-Butanone                  | 0.805 | 0.768  | 4.6   | 99    | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.710 | 0.794  | -11.8 | 100   | 0.00     |
| 36 T | Benzene                     | 1.034 | 1.012  | 2.1   | 99    | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.644 | 0.642  | 0.3   | 100   | 0.00     |
| 38 T | Trichloroethene             | 0.439 | 0.402  | 8.4   | 98    | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.374 | 0.365  | 2.4   | 98    | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.183 | 0.177  | 3.3   | 101   | 0.00     |
| 41 T | Tetrahydrofuran             | 0.451 | 0.444  | 1.6   | 99    | 0.00     |
| 42 T | Bromodichloromethane        | 0.740 | 0.801  | -8.2  | 98    | 0.00     |
| 43   | Methyl Methacrylate         | 0.394 | 0.403  | -2.3  | 97    | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.767 | 1.731  | 2.0   | 98    | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.408 | 0.445  | -9.1  | 100   | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.518 | 0.549  | -6.0  | 98    | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.391 | 0.379  | 3.1   | 98    | 0.00     |
| 48 T | Dibromochloromethane        | 0.534 | 0.604  | -13.1 | 97    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041759.D  
Acq On : 16 Dec 2024 18:59  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Quant Time: Dec 19 07:36:00 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev    | Area% | Dev(min) |
|------|---------------------------|-------|-------|---------|-------|----------|
| 49 T | Bromoform                 | 0.437 | 0.510 | -16.7   | 97    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 1.095 | 1.093 | 0.2     | 98    | 0.00     |
| 51 T | 2-Hexanone                | 0.888 | 0.893 | -0.6    | 99    | 0.00     |
| 52 T | Tetrachloroethene         | 0.385 | 0.360 | 6.5     | 100   | 0.00     |
| 53 T | Toluene                   | 1.173 | 1.146 | 2.3     | 97    | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.538 | 0.536 | 0.4     | 99    | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0     | 94    | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.530 | 0.560 | -5.7    | 99    | 0.00     |
| 57 T | Chlorobenzene             | 1.023 | 1.012 | 1.1     | 100   | 0.00     |
| 58 T | Ethyl Benzene             | 1.800 | 1.856 | -3.1    | 98    | 0.00     |
| 59 T | m/p-Xylene                | 1.448 | 1.496 | -3.3    | 99    | 0.00     |
| 60 T | o-Xylene                  | 1.452 | 1.496 | -3.0    | 99    | 0.00     |
| 61 T | Styrene                   | 0.628 | 0.696 | -10.8   | 97    | 0.00     |
| 62   | Isopropylbenzene          | 2.181 | 2.274 | -4.3    | 100   | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.909 | 0.896 | 1.4     | 100   | 0.00     |
| 64   | n-propylbenzene           | 0.551 | 0.573 | -4.0    | 101   | 0.00     |
| 65   | tert-Butylbenzene         | 1.968 | 2.006 | -1.9    | 100   | 0.00     |
| 66 T | Benzyl Chloride           | 0.173 | 0.192 | -11.0   | 95    | 0.00     |
| 67   | sec-Butylbenzene          | 2.723 | 2.806 | -3.0    | 100   | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.833 | 0.847 | -1.7    | 94    | 0.00     |
| 69   | p-Isopropyltoluene        | 2.244 | 2.383 | -6.2    | 101   | 0.00     |
| 70   | n-Butylbenzene            | 2.168 | 2.326 | -7.3    | 99    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.665 | 1.721 | -3.4    | 100   | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.713 | 1.829 | -6.8    | 99    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 1.422 | 1.550 | -9.0    | 99    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.529 | 1.669 | -9.2    | 100   | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.975 | 0.977 | -0.2    | 99    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.963 | 0.992 | -3.0    | 100   | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.938 | 0.930 | 0.9     | 101   | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.695 | 0.617 | 11.2    | 99    | 0.00     |
| 79 T | Naphthalene               | 1.065 | 1.319 | -23.8   | 98    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.329 | 0.668 | -103.0# | 96    | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.582 | 0.642 | -10.3   | 97    | 0.00     |

(#) = Out of Range

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETRI6

Lab Code: CHEM Case No.: P5294 SAS No.: P5294 SDG No.: P5294

Instrument ID: MSVOA\_L Calibration Date/Time: 12/18/2024 10:29

Lab File ID: VL041788.D Init. Calib. Date(s): 12/16/2024 12/16/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 13:30 16:41

GC Column: RTX-1 ID: 0.32 (mm)

| COMPOUND                       | RRF   | RRF010 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Dichlorodifluoromethane        | 1.779 | 1.484  |            | -16.58 | 30    |
| Chloromethane                  | 0.696 | 0.637  |            | -8.48  | 30    |
| Vinyl Chloride                 | 0.701 | 0.613  |            | -12.55 | 30    |
| Bromomethane                   | 0.331 | 0.292  |            | -11.78 | 30    |
| Chloroethane                   | 0.272 | 0.253  |            | -6.99  | 30    |
| Tetrahydrofuran                | 0.451 | 0.377  |            | -16.41 | 30    |
| Trichlorofluoromethane         | 1.890 | 1.767  |            | -6.51  | 30    |
| 1,1,2-Trichlorotrifluoroethane | 1.438 | 1.269  |            | -11.75 | 30    |
| Dichlorotetrafluoroethane      | 1.593 | 1.468  |            | -7.85  | 30    |
| tert-Butyl alcohol             | 1.930 | 1.782  |            | -7.67  | 30    |
| Heptane                        | 1.816 | 1.468  |            | -19.16 | 30    |
| 1,1-Dichloroethene             | 0.603 | 0.542  |            | -10.12 | 30    |
| Acetone                        | 1.946 | 1.464  |            | -24.77 | 30    |
| Carbon Disulfide               | 1.238 | 1.122  |            | -9.37  | 30    |
| Methyl tert-Butyl Ether        | 1.114 | 0.894  |            | -19.75 | 30    |
| Methylene Chloride             | 0.555 | 0.469  |            | -15.49 | 30    |
| trans-1,2-Dichloroethene       | 0.690 | 0.596  |            | -13.62 | 30    |
| 1,1-Dichloroethane             | 1.396 | 1.260  |            | -9.74  | 30    |
| Cyclohexane                    | 1.169 | 0.978  |            | -16.34 | 30    |
| 2-Butanone                     | 0.805 | 0.703  |            | -12.67 | 30    |
| Carbon Tetrachloride           | 0.710 | 0.745  |            | 4.93   | 30    |
| cis-1,2-Dichloroethene         | 1.419 | 1.216  |            | -14.31 | 30    |
| Chloroform                     | 2.093 | 1.914  |            | -8.55  | 30    |
| 1,1,1-Trichloroethane          | 2.128 | 1.894  |            | -11    | 30    |
| 2,2,4-Trimethylpentane         | 1.767 | 1.524  |            | -13.75 | 30    |
| Benzene                        | 1.034 | 0.898  |            | -13.15 | 30    |
| 1,2-Dichloroethane             | 0.644 | 0.612  |            | -4.97  | 30    |
| Trichloroethene                | 0.439 | 0.354  |            | -19.36 | 30    |
| 1,2-Dichloropropane            | 0.374 | 0.323  |            | -13.64 | 30    |
| Bromodichloromethane           | 0.740 | 0.710  |            | -4.05  | 30    |
| 4-Methyl-2-Pentanone           | 1.095 | 0.942  |            | -13.97 | 30    |
| Toluene                        | 1.173 | 0.984  |            | -16.11 | 30    |
| t-1,3-Dichloropropene          | 0.408 | 0.351  |            | -13.97 | 30    |
| cis-1,3-Dichloropropene        | 0.518 | 0.450  |            | -13.13 | 30    |
| 1,1,2-Trichloroethane          | 0.391 | 0.341  |            | -12.79 | 30    |
| Dibromochloromethane           | 0.534 | 0.514  |            | -3.74  | 30    |
| 1,2-Dibromoethane              | 0.538 | 0.475  |            | -11.71 | 30    |
| Tetrachloroethene              | 0.385 | 0.301  |            | -21.82 | 30    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR16

Lab Code: CHEM Case No.: P5294 SAS No.: P5294 SDG No.: P5294

Instrument ID: MSVOA\_L Calibration Date/Time: 12/18/2024 10:29

Lab File ID: VL041788.D Init. Calib. Date(s): 12/16/2024 12/16/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 13:30 16:41

GC Column: RTX-1 ID: 0.32 (mm)

| COMPOUND                  | RRF     | RRF010  | MIN RRF | %D     | MAX%D |
|---------------------------|---------|---------|---------|--------|-------|
| Chlorobenzene             | 1.023   | 0.912   |         | -10.85 | 30    |
| Ethyl Benzene             | 1.800   | 1.634   |         | -9.22  | 30    |
| m/p-Xylene                | 1.448   | 1.355   |         | -6.42  | 30    |
| o-Xylene                  | 1.452   | 1.348   |         | -7.16  | 30    |
| Styrene                   | 0.628   | 0.599   |         | -4.62  | 30    |
| Bromoform                 | 0.437   | 0.422   |         | -3.43  | 30    |
| 1,1,2,2-Tetrachloroethane | 0.909   | 0.837   |         | -7.92  | 30    |
| 2-Chlorotoluene           | 1.665   | 1.538   |         | -7.63  | 30    |
| 1,3,5-Trimethylbenzene    | 1.422   | 1.410   |         | -0.84  | 30    |
| 1,2,4-Trimethylbenzene    | 1.529   | 1.529   |         | 0      | 30    |
| 1,3-Dichlorobenzene       | 0.975   | 0.899   |         | -7.8   | 30    |
| 1,4-Dichlorobenzene       | 0.963   | 0.895   |         | -7.06  | 30    |
| 1,2-Dichlorobenzene       | 0.938   | 0.844   |         | -10.02 | 30    |
| 1,2,4-Trichlorobenzene    | 0.582   | 0.544   |         | -6.53  | 30    |
| Hexachloro-1,3-Butadiene  | 0.695   | 0.543   |         | -21.87 | 30    |
| 1,3-Butadiene             | 0.766   | 0.701   |         | -8.49  | 30    |
| Naphthalene               | 1.065   | 1.163   |         | 9.2    | 30    |
| 4-Ethyltoluene            | 1.713   | 1.658   |         | -3.21  | 30    |
| 1-Bromo-4-Fluorobenzene   | 0.833   | 0.875   |         | 5.04   | 30    |
| Hexane                    | 1.374   | 1.152   |         | -16.16 | 30    |
| Allyl Chloride            | 1.055   | 0.979   |         | -7.2   | 30    |
| 1,4-Dioxane               | 182.757 | 152.553 |         | -16.53 | 30    |
| Methyl Methacrylate       | 0.394   | 0.351   |         | -10.91 | 30    |

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\_L\Data\VL121824\  
 Data File : VL041788.D  
 Acq On : 18 Dec 2024 10:29  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Dec 19 07:49:00 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 07:32:09 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/19/2024  
 Supervised By : Mahesh Dadoda 12/19/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 76040    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.952 | 114  | 198370   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.881 | 117  | 172190   | 10.000 | ppbv  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.377 | 95    | 150705   | 10.503   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 105.000% |

| Target Compounds              |       |     |        |        |        | Qvalue |
|-------------------------------|-------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.495 | 85  | 112841 | 8.340  | ppbv   | 96     |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 112096 | 9.040  | ppbv   | 98     |
| 4) Chloromethane              | 1.531 | 50  | 48418  | 9.146  | ppbv   | 99     |
| 5) Vinyl Chloride             | 1.580 | 62  | 46631  | 8.743  | ppbv   | 99     |
| 6) Bromomethane               | 1.667 | 94  | 22202  | 8.821  | ppbv   | 98     |
| 7) Chloroethane               | 1.703 | 64  | 19203  | 9.269  | ppbv   | 99     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 111653 | 9.220  | ppbv   | 96     |
| 9) Propene                    | 1.483 | 41  | 41427  | 7.708  | ppbv   | 96     |
| 10) Heptane                   | 4.975 | 43  | 111650 | 8.087  | ppbv   | 96     |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 134331 | 9.347  | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 96469  | 8.825  | ppbv   | 98     |
| 13) Ethanol                   | 1.719 | 45  | 3276m  | 7.361  | ppbv   |        |
| 14) Bromoethene               | 1.780 | 108 | 33118  | 8.974  | ppbv   | 97     |
| 15) Acetone                   | 1.832 | 43  | 111294 | 7.522  | ppbv   | 99     |
| 16) 1,3-Butadiene             | 1.606 | 39  | 53299  | 9.149  | ppbv   | 97     |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 135516 | 9.233  | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 41224  | 8.996  | ppbv   | 93     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 64831  | 7.303  | ppbv   | 99     |
| 20) Methylene Chloride        | 2.059 | 84  | 35699  | 8.462  | ppbv   | 96     |
| 21) Allyl Chloride            | 2.094 | 41  | 74468  | 9.281  | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 45331  | 8.641  | ppbv   | 94     |
| 23) Vinyl Acetate             | 2.460 | 43  | 52709  | 7.673  | ppbv # | 95     |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 95779  | 9.020  | ppbv   | 99     |
| 25) Ethyl Acetate             | 2.832 | 43  | 238771 | 8.675  | ppbv   | 100    |
| 26) Hexane                    | 2.822 | 57  | 87593  | 8.386  | ppbv   | 95     |
| 27) Carbon Disulfide          | 2.149 | 76  | 85318  | 9.064  | ppbv   | 98     |
| 28) Methyl tert-Butyl Ether   | 2.437 | 73  | 67965  | 8.021  | ppbv   | 97     |
| 29) Chloroform                | 2.845 | 83  | 145536 | 9.143  | ppbv   | 97     |
| 30) Cyclohexane               | 3.855 | 84  | 74346  | 8.366  | ppbv   | 97     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 92460  | 8.567  | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 144038 | 8.902  | ppbv   | 99     |
| 34) 2-Butanone                | 2.554 | 43  | 139509 | 8.742  | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 147726 | 10.490 | ppbv   | 99     |
| 36) Benzene                   | 3.654 | 78  | 178114 | 8.680  | ppbv   | 98     |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 121412 | 9.509  | ppbv   | 100    |
| 38) Trichloroethene           | 4.548 | 130 | 70175  | 8.057  | ppbv   | 98     |
| 39) 1,2-Dichloropropane       | 4.308 | 63  | 64154  | 8.645  | ppbv   | 97     |
| 40) 1,4-Dioxane               | 4.583 | 88  | 30262  | 8.347  | ppbv # | 96     |
| 41) Tetrahydrofuran           | 3.052 | 42  | 74734  | 8.359  | ppbv   | 98     |
| 42) Bromodichloromethane      | 4.486 | 83  | 140832 | 9.588  | ppbv   | 95     |
| 43) Methyl Methacrylate       | 4.878 | 69  | 69545  | 8.895  | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 4.635 | 57  | 302332 | 8.627  | ppbv   | 97     |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 69601  | 8.607  | ppbv   | 96     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041788.D  
 Acq On : 18 Dec 2024 10:29  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Dec 19 07:49:00 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 07:32:09 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/19/2024  
 Supervised By : Mahesh Dadoda 12/19/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 89328m   | 8.701  | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 6.580  | 97   | 67717    | 8.736  | ppbv   | 93       |
| 48) Dibromochloromethane      | 7.386  | 129  | 101875   | 9.625  | ppbv   | 97       |
| 49) Bromoform                 | 9.483  | 173  | 83649    | 9.655  | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.752  | 43   | 186865   | 8.600  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.438  | 43   | 149217   | 8.472  | ppbv # | 98       |
| 52) Tetrachloroethene         | 8.224  | 164  | 59756    | 7.824  | ppbv   | 93       |
| 53) Toluene                   | 6.930  | 91   | 195158   | 8.389  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.648  | 107  | 94138    | 8.814  | ppbv   | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 87869    | 9.626  | ppbv   | 99       |
| 57) Chlorobenzene             | 8.920  | 112  | 157039   | 8.912  | ppbv   | 97       |
| 58) Ethyl Benzene             | 9.354  | 91   | 281290   | 9.074  | ppbv   | 97       |
| 59) m/p-Xylene                | 9.548  | 91   | 466737m  | 18.725 | ppbv   |          |
| 60) o-Xylene                  | 9.963  | 91   | 232028   | 9.283  | ppbv   | 100      |
| 61) Styrene                   | 9.869  | 104  | 103216   | 9.550  | ppbv   | 99       |
| 62) Isopropylbenzene          | 10.539 | 105  | 352903   | 9.397  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 144197   | 9.216  | ppbv   | 99       |
| 64) n-propylbenzene           | 10.989 | 120  | 90043    | 9.483  | ppbv   | 99       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 314940   | 9.295  | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.616 | 91   | 22164    | 7.426  | ppbv   | 100      |
| 67) sec-Butylbenzene          | 11.769 | 105  | 442201   | 9.431  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 369746   | 9.569  | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.283 | 91   | 373294   | 9.999  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 264866   | 9.240  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 11.124 | 105  | 285469   | 9.676  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 242783   | 9.918  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 263301   | 10.003 | ppbv   | 90       |
| 75) 1,3-Dichlorobenzene       | 11.607 | 146  | 154857   | 9.227  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.671 | 146  | 154115   | 9.296  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 145375   | 9.002  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 93437    | 7.804  | ppbv   | 100      |
| 79) Naphthalene               | 13.513 | 128  | 200311   | 10.921 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 94903    | 16.728 | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 93675    | 9.346  | ppbv   | 99       |

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

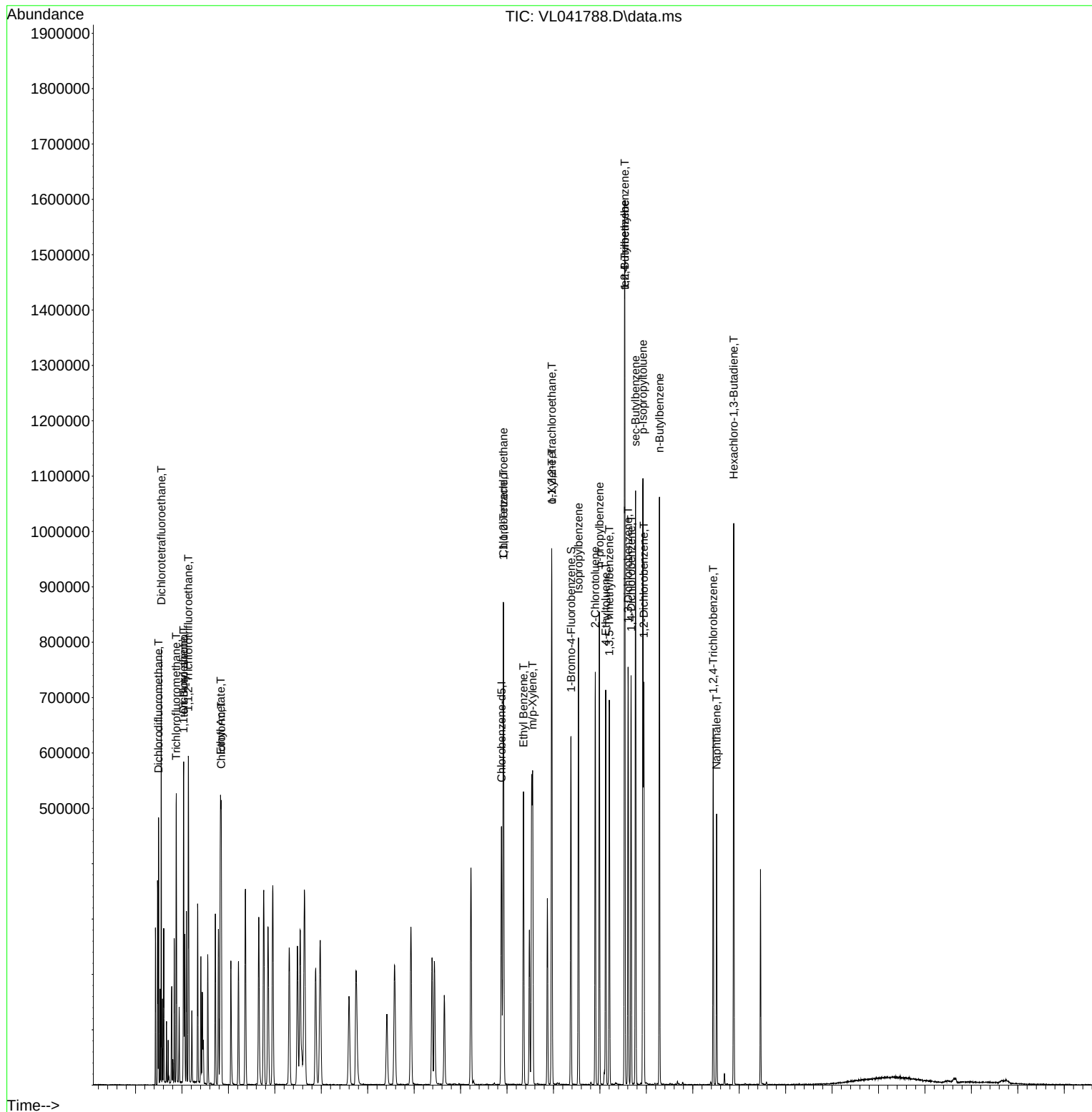
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Data File : VL041788.D  
Acq On : 18 Dec 2024 10:29  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

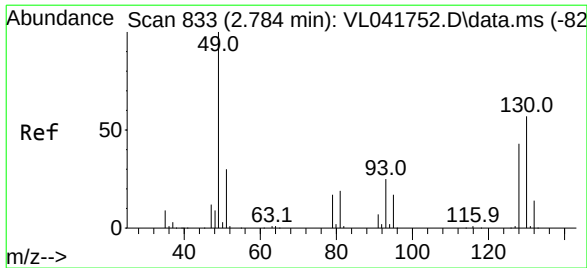
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

Quant Time: Dec 19 07:49:00 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration





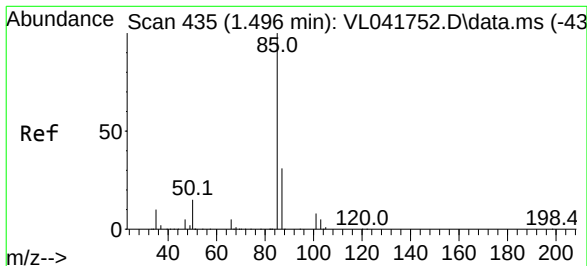
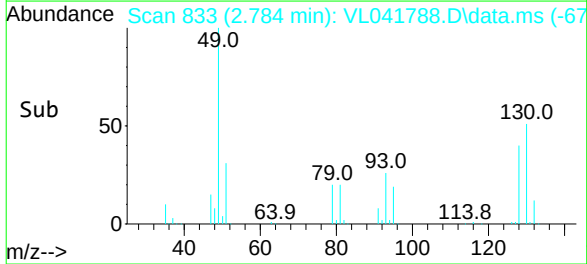
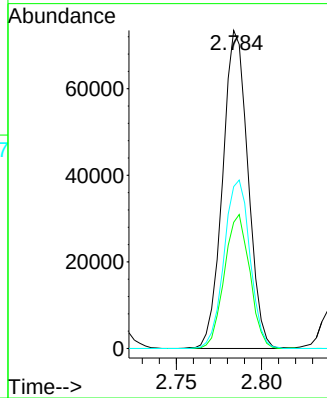
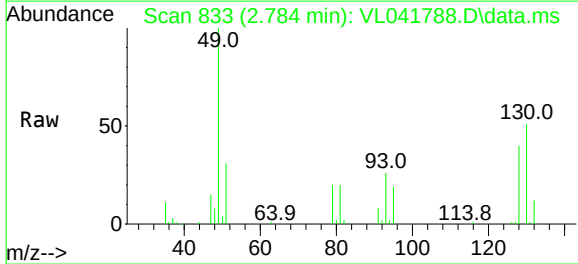
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 49 Resp: 76040  
Ion Ratio Lower Upper  
49 100  
128 42.2 21.6 64.6  
130 54.2 28.3 85.0

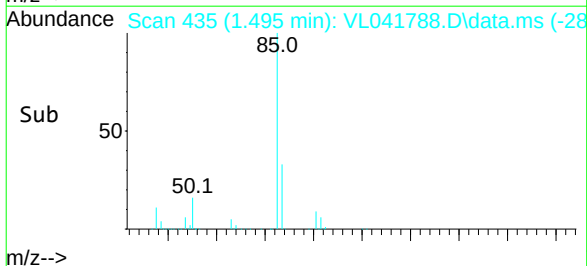
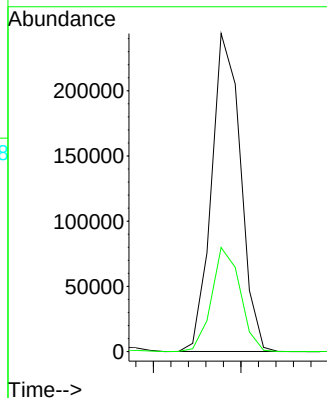
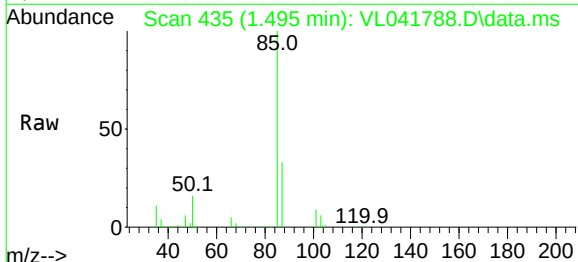
Manual Integrations  
APPROVED

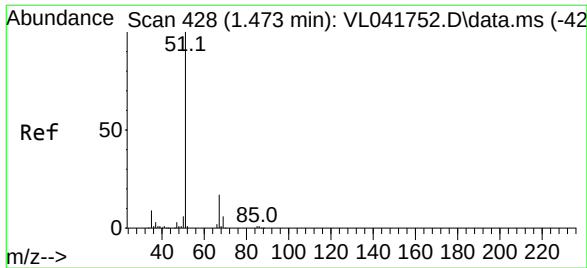
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#2  
Dichlorodifluoromethane  
Concen: 8.340 ppbv  
RT: 1.495 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 85 Resp: 112841  
Ion Ratio Lower Upper  
85 100  
87 32.7 24.5 36.7





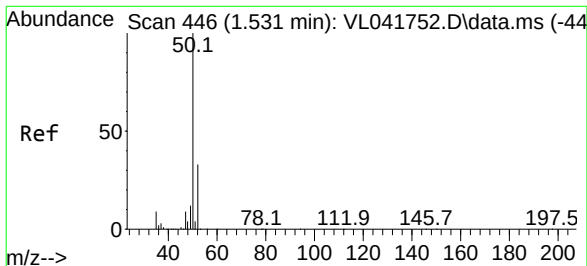
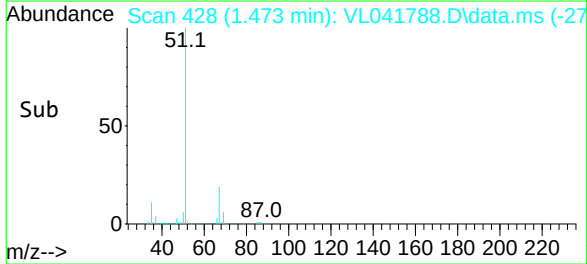
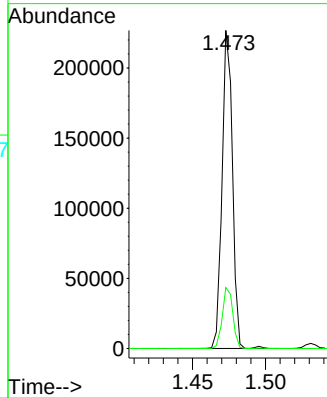
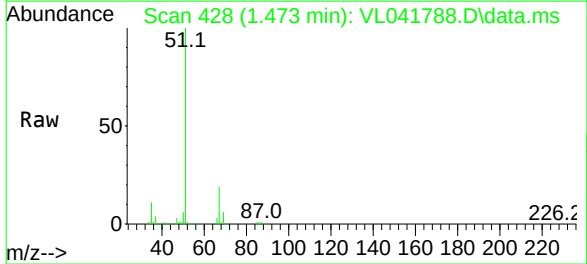
#3  
Chlorodifluoromethane  
Concen: 9.040 ppbv  
RT: 1.473 min Scan# 428  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 51 Resp: 112096  
Ion Ratio Lower Upper  
51 100  
67 19.5 15.0 22.4

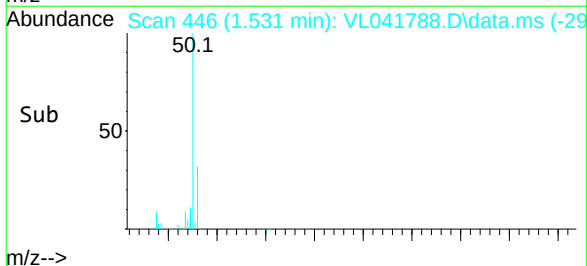
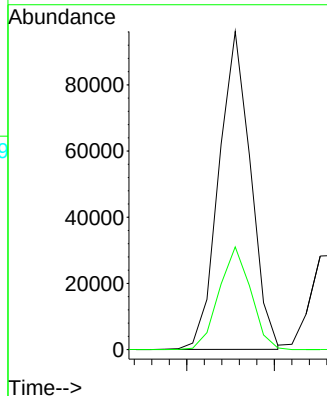
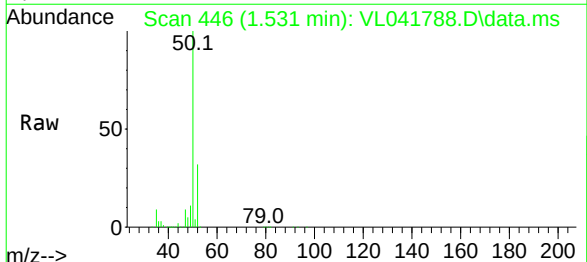
Manual Integrations  
APPROVED

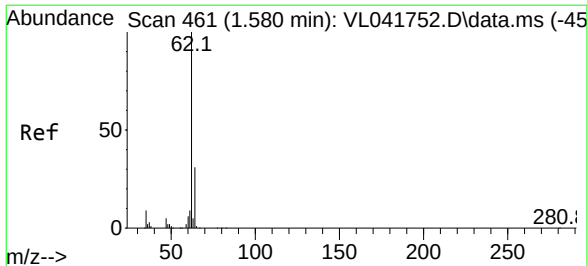
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#4  
Chloromethane  
Concen: 9.146 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 50 Resp: 48418  
Ion Ratio Lower Upper  
50 100  
52 32.3 26.2 39.2





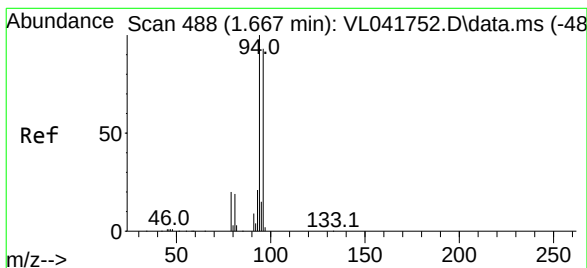
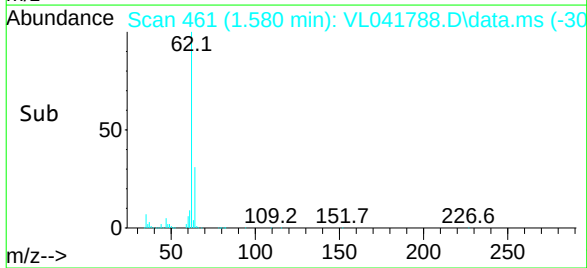
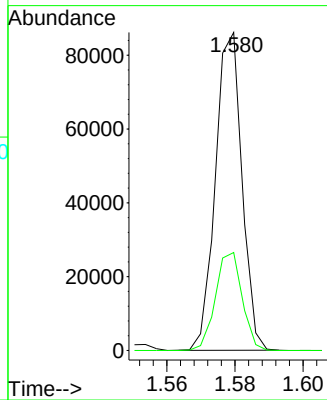
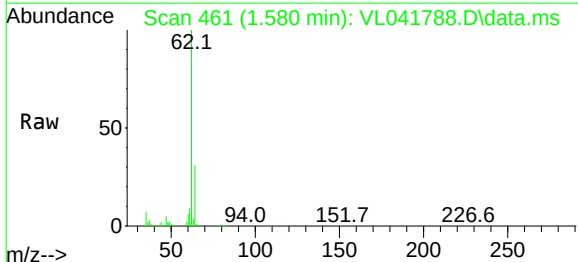
#5  
 Vinyl Chloride  
 Concen: 8.743 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 62 Resp: 46631  
 Ion Ratio Lower Upper  
 62 100  
 64 30.8 25.1 37.7

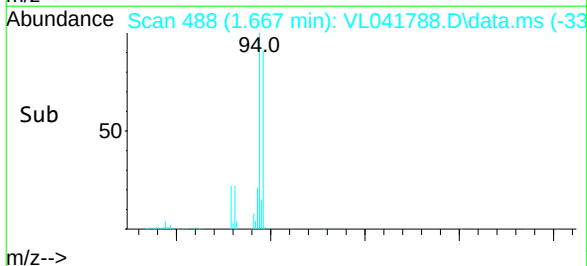
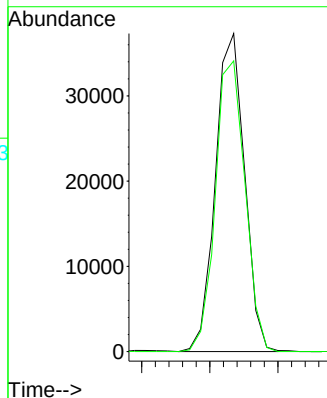
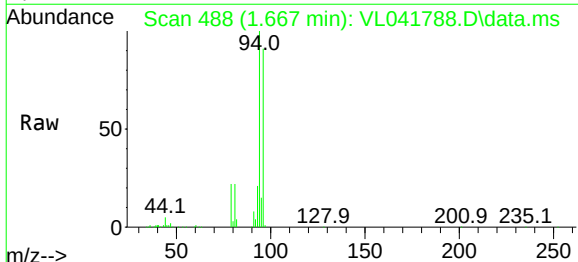
Manual Integrations  
 APPROVED

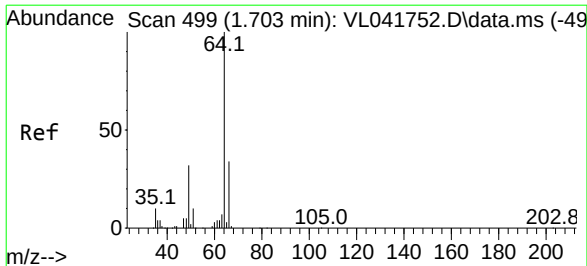
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024



#6  
 Bromomethane  
 Concen: 8.821 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

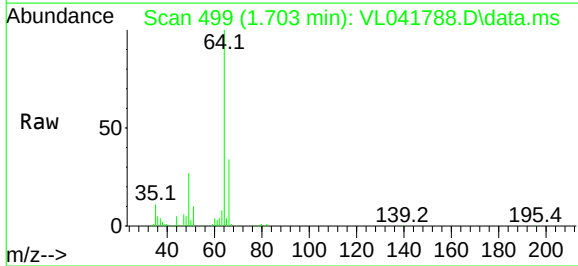
Tgt Ion: 94 Resp: 22202  
 Ion Ratio Lower Upper  
 94 100  
 96 91.4 74.7 112.1





#7  
Chloroethane  
Concen: 9.269 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

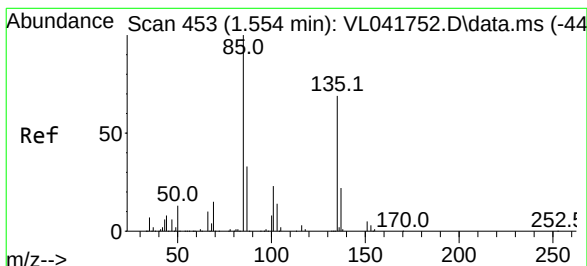
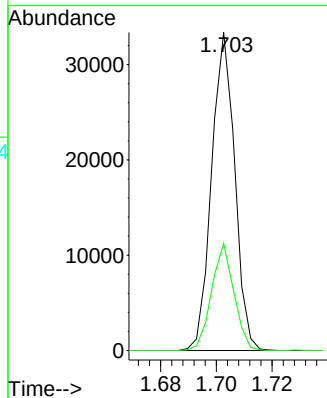
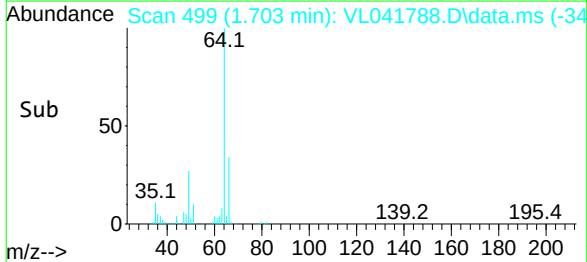
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



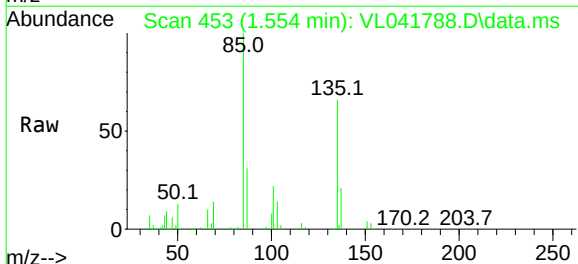
Tgt Ion: 64 Resp: 19203  
Ion Ratio Lower Upper  
64 100  
66 33.6 27.5 41.3

Manual Integrations  
APPROVED

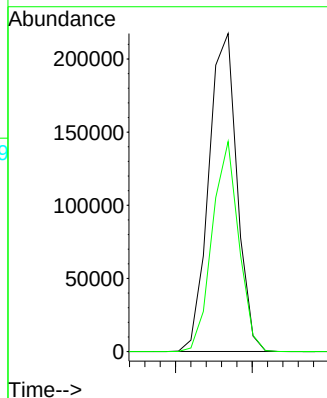
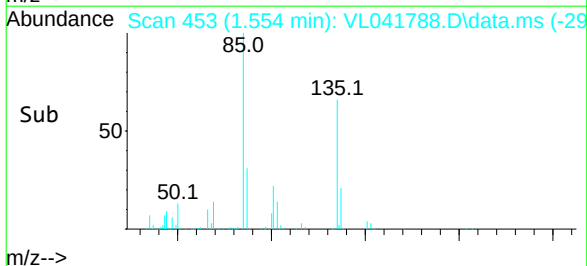
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

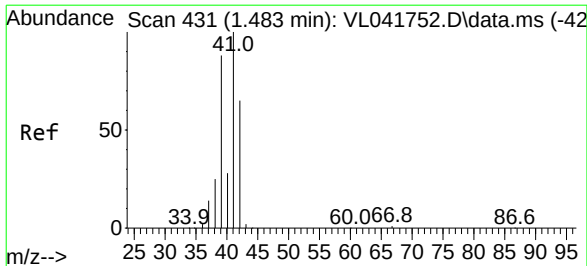


#8  
Dichlorotetrafluoroethane  
Concen: 9.220 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



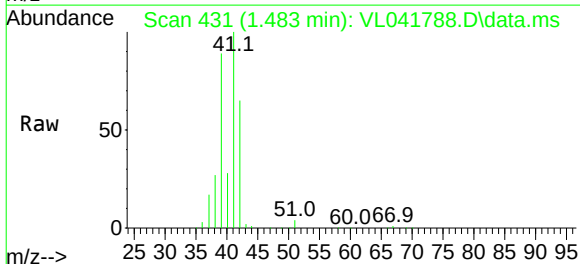
Tgt Ion: 85 Resp: 111653  
Ion Ratio Lower Upper  
85 100  
135 62.0 51.9 77.9





#9  
 Propene  
 Concen: 7.708 ppbv  
 RT: 1.483 min Scan# 431  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

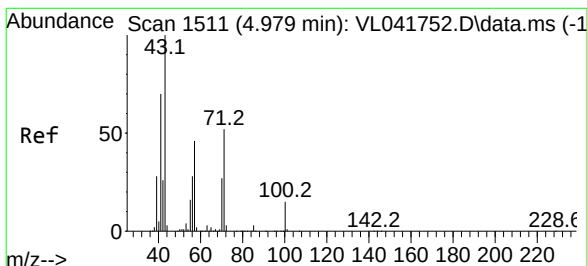
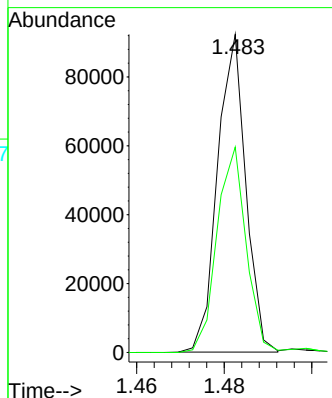
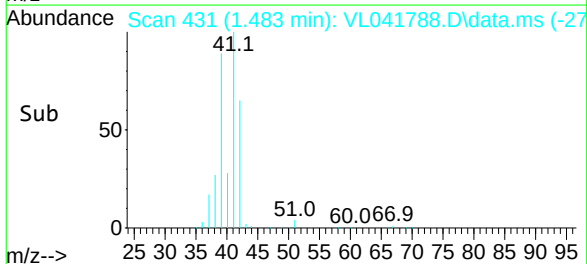
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010



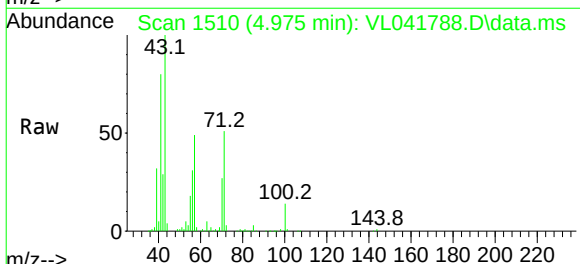
Tgt Ion: 41 Resp: 41427  
 Ion Ratio Lower Upper  
 41 100  
 42 68.5 52.4 78.6

Manual Integrations  
 APPROVED

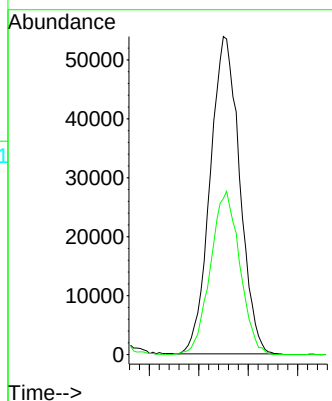
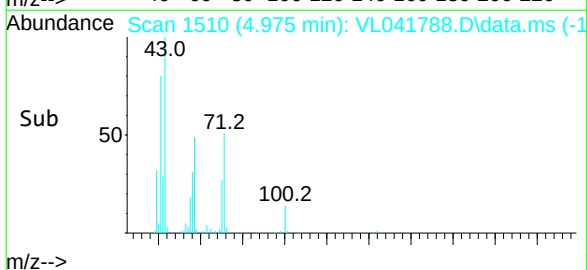
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

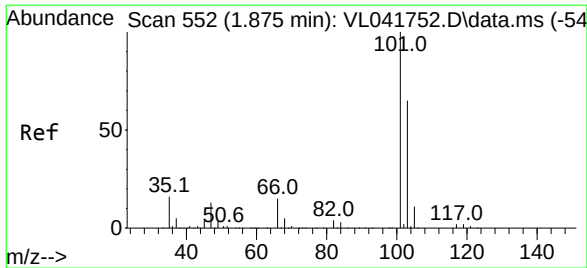


#10  
 Heptane  
 Concen: 8.087 ppbv  
 RT: 4.975 min Scan# 1510  
 Delta R.T. -0.004 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



Tgt Ion: 43 Resp: 111650  
 Ion Ratio Lower Upper  
 43 100  
 57 51.1 38.5 57.7





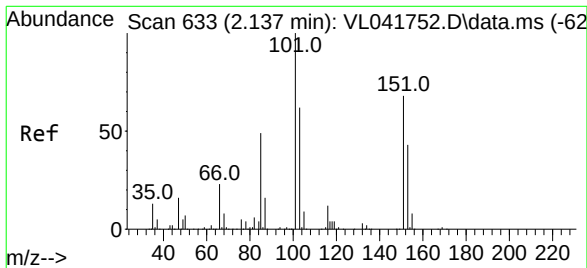
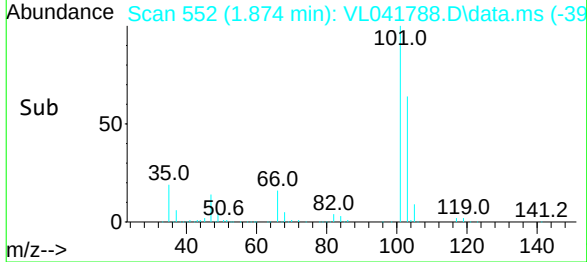
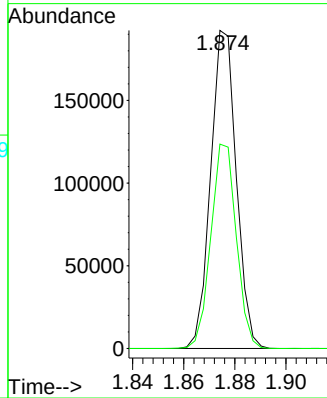
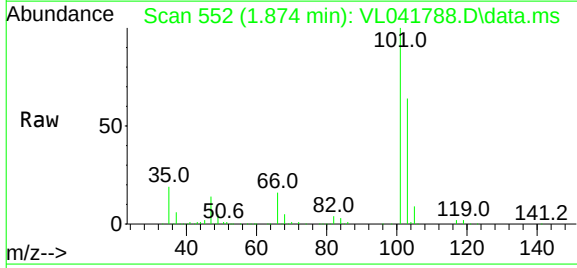
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 Trichlorofluoromethane  
 Concen: 9.347 ppbv  
 RT: 1.874 min Scan# 552  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion:101 Resp: 134331  
 Ion Ratio Lower Upper  
 101 100  
 103 64.3 51.8 77.8

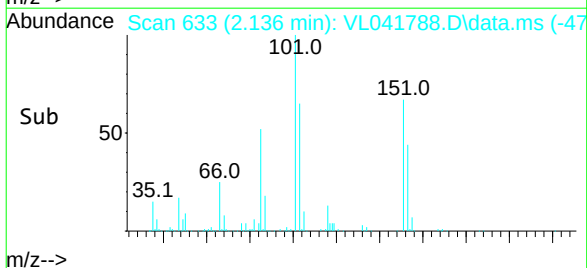
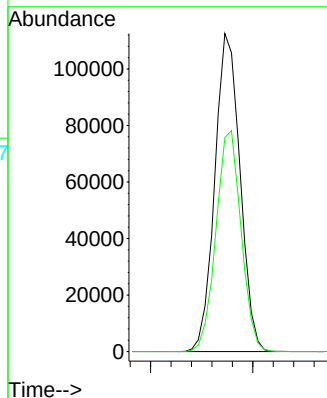
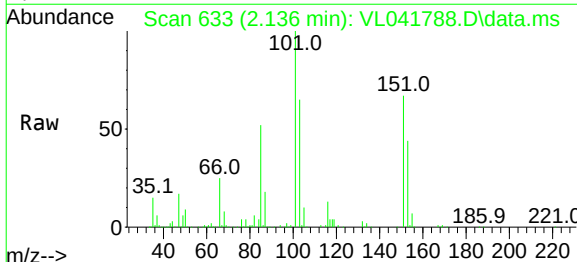
Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

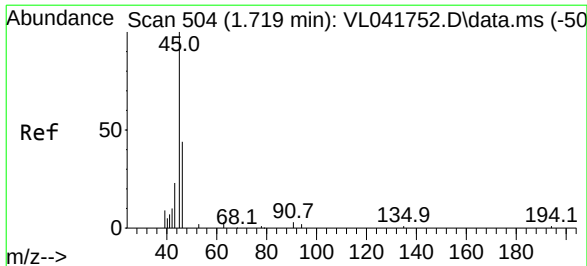


#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 8.825 ppbv  
 RT: 2.136 min Scan# 633  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Tgt Ion:101 Resp: 96469  
 Ion Ratio Lower Upper  
 101 100  
 151 69.2 56.8 85.2

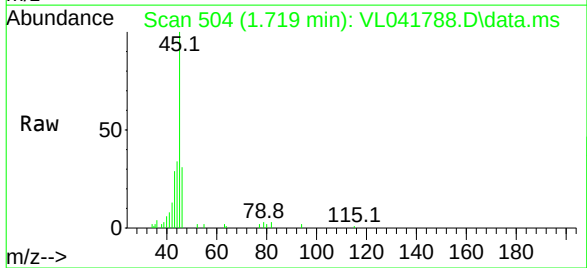






#13  
Ethanol  
Concen: 7.361 ppbv m  
RT: 1.719 min Scan# 504  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

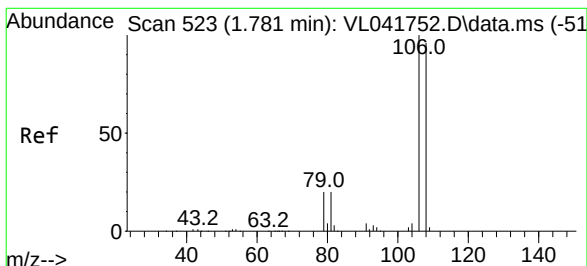
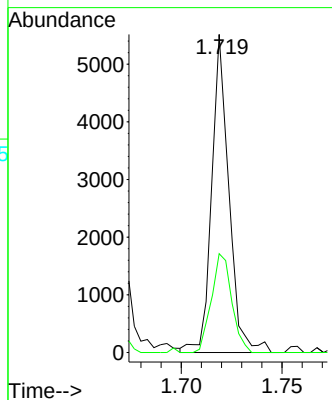
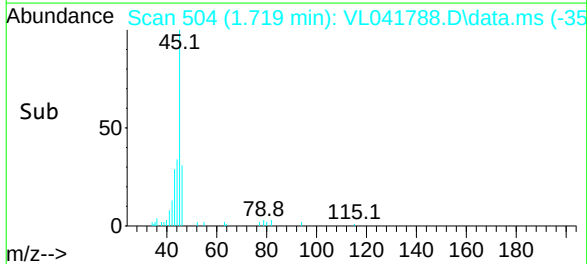
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ClientSampleId : VSTDCCC010



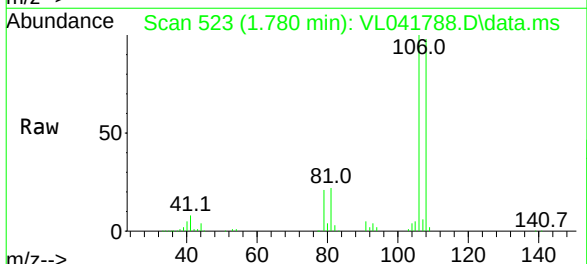
Tgt Ion: 45 Resp: 3276  
Ion Ratio Lower Upper  
45 100  
46 37.1 16.4 65.8

Manual Integrations  
APPROVED

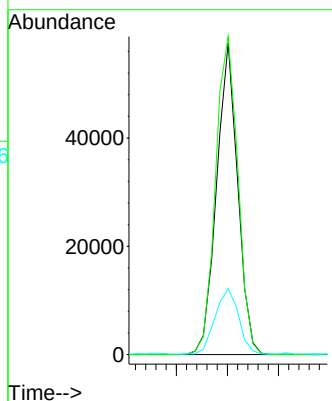
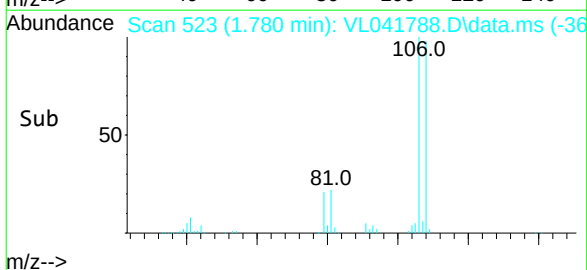
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

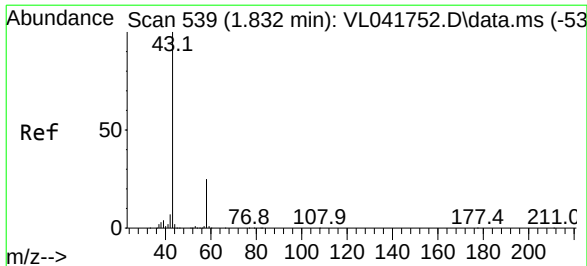


#14  
Bromoethene  
Concen: 8.974 ppbv  
RT: 1.780 min Scan# 523  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



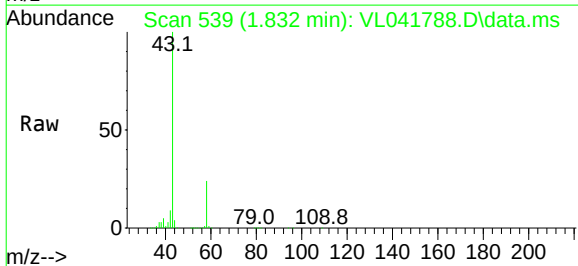
Tgt Ion:108 Resp: 33118  
Ion Ratio Lower Upper  
108 100  
106 107.8 84.1 126.1  
79 24.4 17.4 26.0





#15  
Acetone  
Concen: 7.522 ppbv  
RT: 1.832 min Scan# 539  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

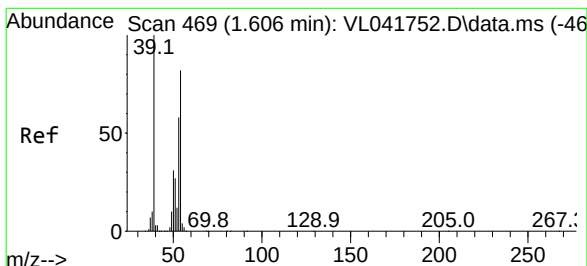
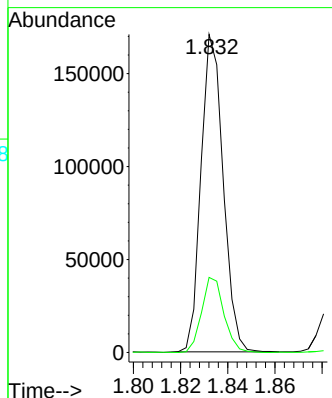
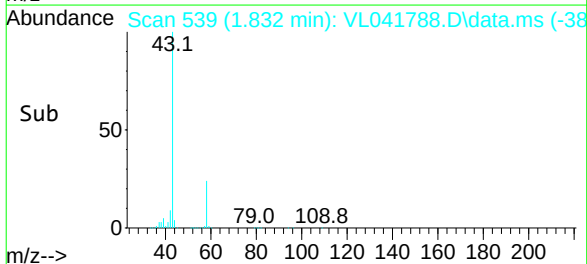
Instrument : MSVOA\_L  
ClientSampleId : VSTDCCC010



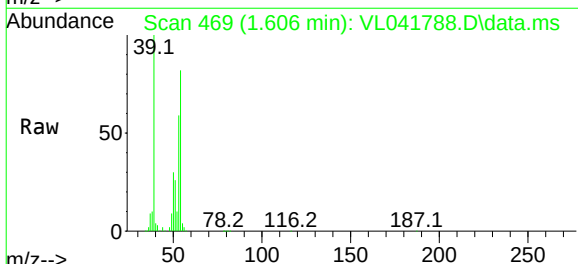
Tgt Ion: 43 Resp: 111294  
Ion Ratio Lower Upper  
43 100  
58 24.0 19.7 29.5

Manual Integrations  
APPROVED

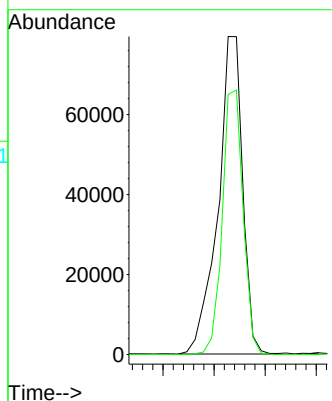
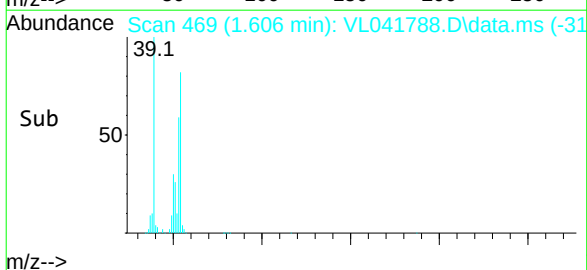
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

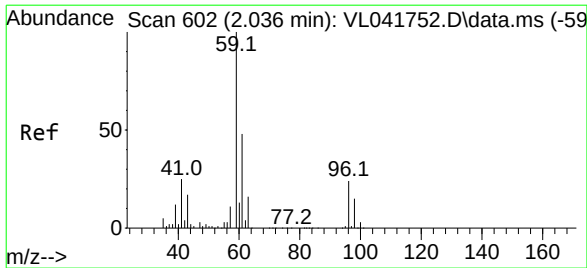


#16  
1,3-Butadiene  
Concen: 9.149 ppbv  
RT: 1.606 min Scan# 469  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



Tgt Ion: 39 Resp: 53299  
Ion Ratio Lower Upper  
39 100  
54 70.3 58.4 87.6





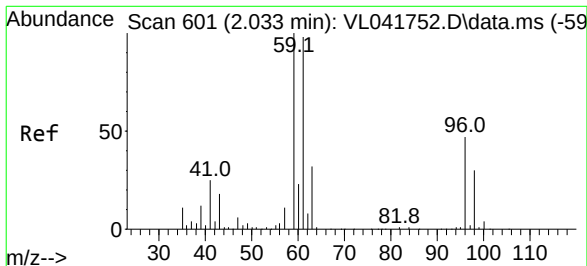
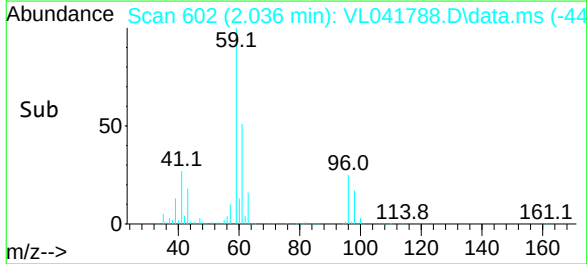
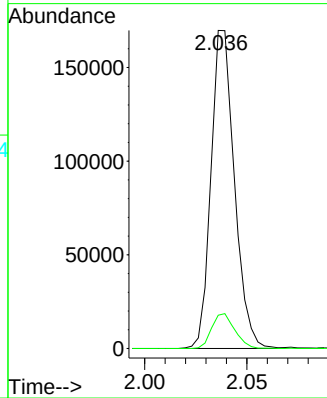
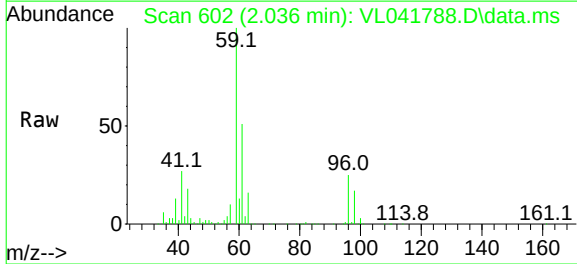
#17  
tert-Butyl alcohol  
Concen: 9.233 ppbv  
RT: 2.036 min Scan# 602  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 59 Resp: 135516  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 13.0

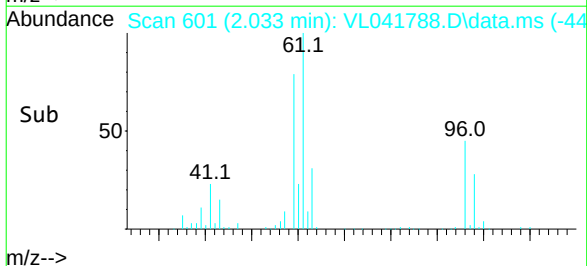
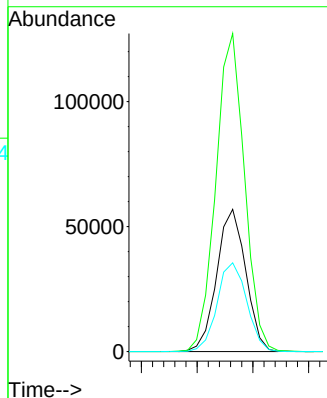
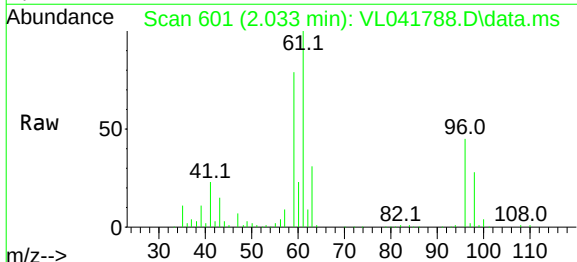
Manual Integrations  
APPROVED

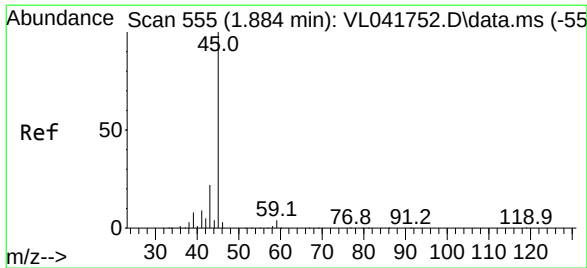
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#18  
1,1-Dichloroethene  
Concen: 8.996 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 96 Resp: 41224  
Ion Ratio Lower Upper  
96 100  
61 223.2 167.7 251.5  
98 62.3 51.1 76.7





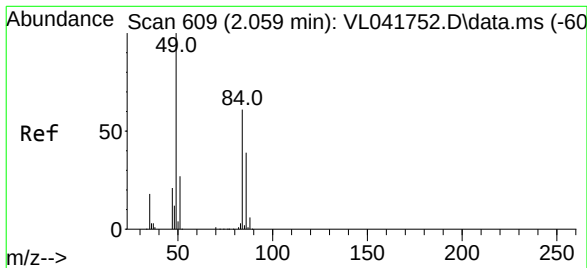
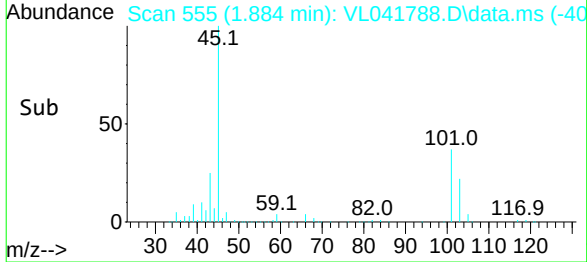
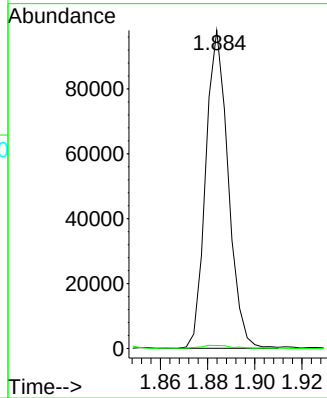
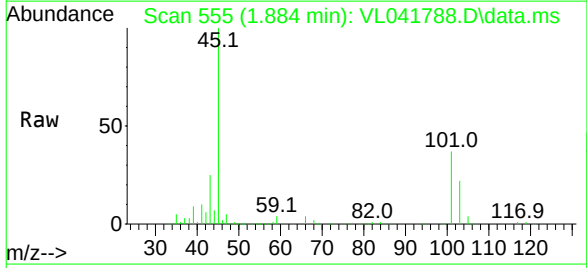
#19  
Isopropyl Alcohol  
Concen: 7.303 ppbv  
RT: 1.884 min Scan# 555  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 45 Resp: 64831  
Ion Ratio Lower Upper  
45 100  
58 41.3 33.3 49.9

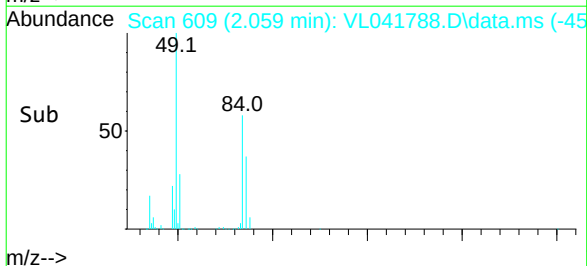
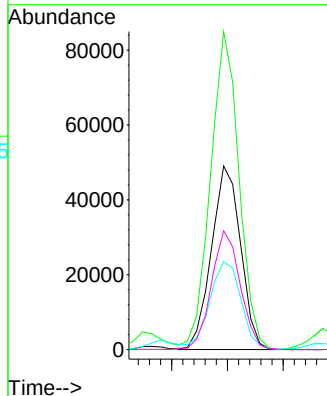
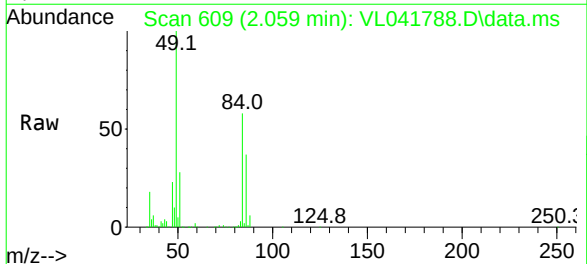
Manual Integrations  
APPROVED

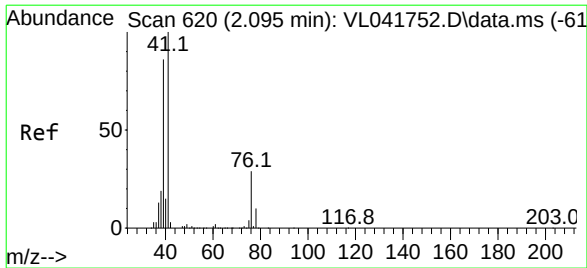
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#20  
Methylene Chloride  
Concen: 8.462 ppbv  
RT: 2.059 min Scan# 609  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

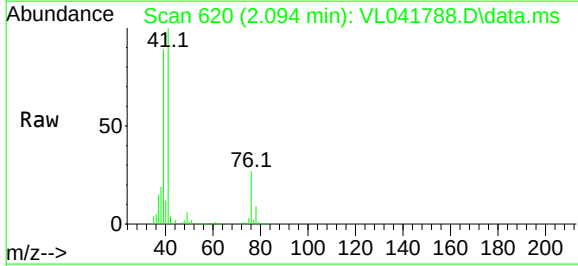
Tgt Ion: 84 Resp: 35699  
Ion Ratio Lower Upper  
84 100  
49 173.2 132.6 198.8  
51 47.7 37.6 56.4  
86 64.4 51.4 77.0





#21  
 Allyl Chloride  
 Concen: 9.281 ppbv  
 RT: 2.094 min Scan# 620  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

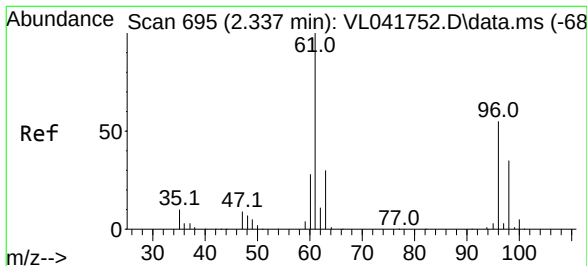
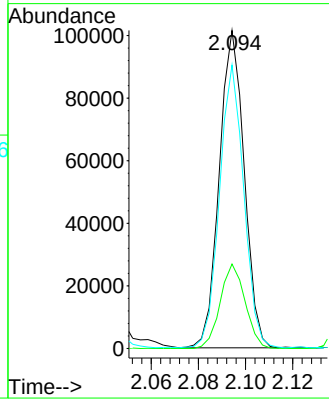
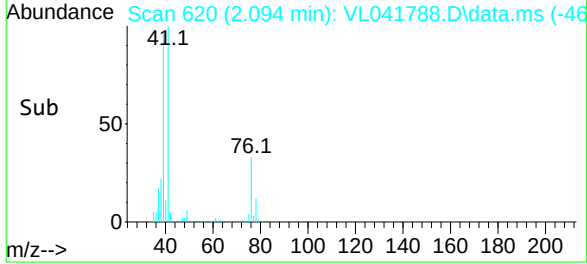
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010



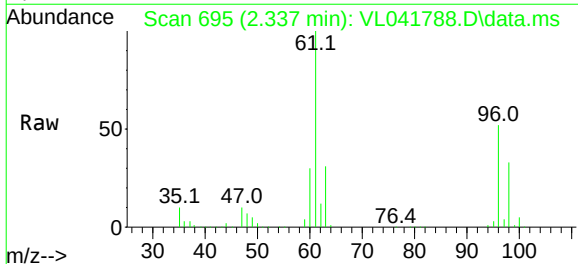
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 74468 |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 76 26.7     | 22.3 33.5   |
| 39 86.9     | 69.2 103.8  |

Manual Integrations  
 APPROVED

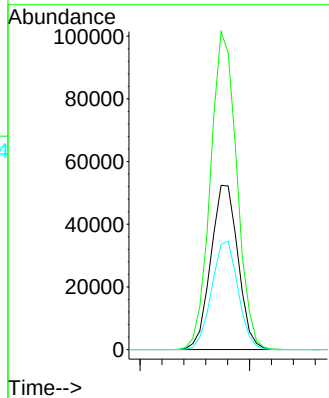
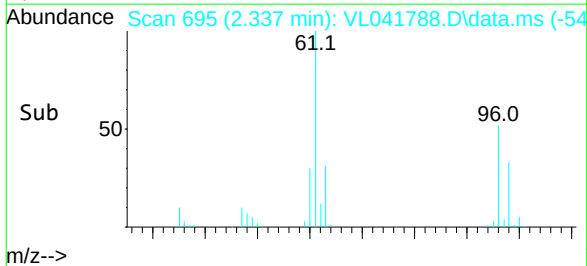
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

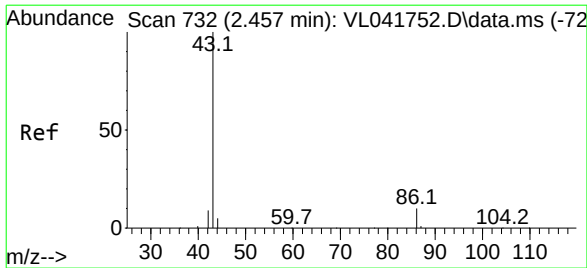


#22  
 trans-1,2-Dichloroethene  
 Concen: 8.641 ppbv  
 RT: 2.337 min Scan# 695  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



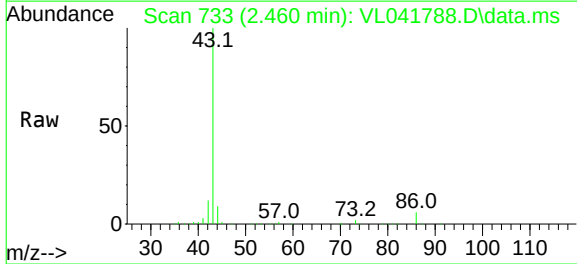
|             |             |
|-------------|-------------|
| Tgt Ion: 96 | Resp: 45331 |
| Ion Ratio   | Lower Upper |
| 96 100      |             |
| 61 193.5    | 146.3 219.5 |
| 98 64.1     | 50.8 76.2   |





#23  
 Vinyl Acetate  
 Concen: 7.673 ppbv  
 RT: 2.460 min Scan# 73  
 Delta R.T. 0.003 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

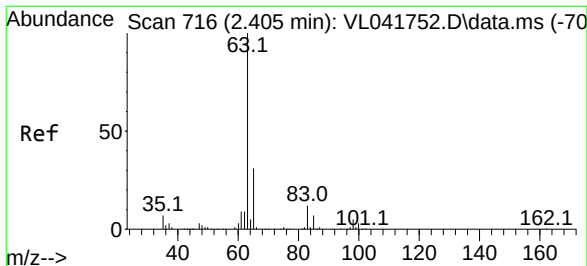
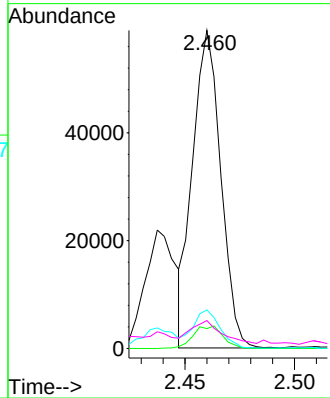
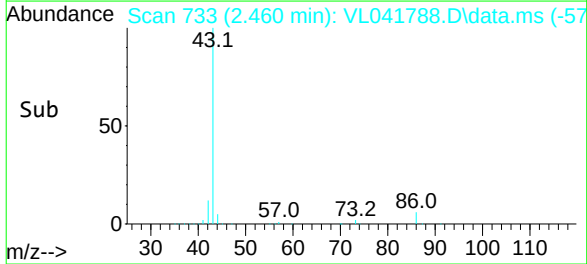
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010



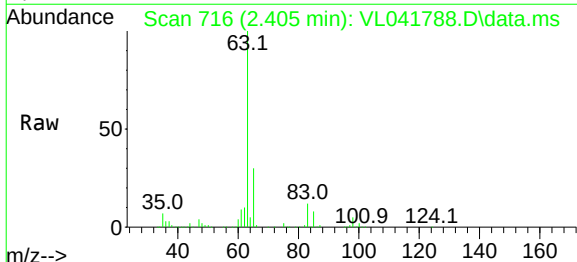
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 52709 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 86 6.3      | 6.6 10.0    |
| 42 12.0     | 8.2 12.2    |
| 44 7.1      | 5.0 7.4     |

Manual Integrations  
 APPROVED

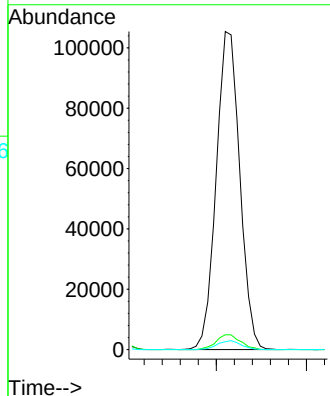
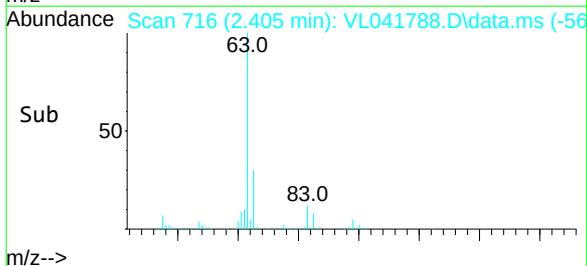
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

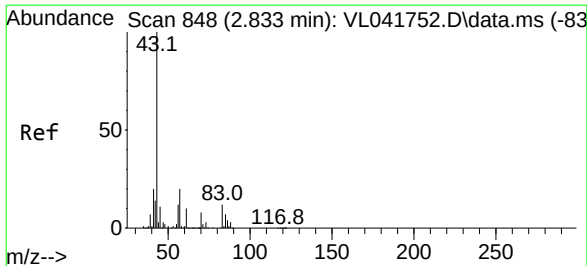


#24  
 1,1-Dichloroethane  
 Concen: 9.020 ppbv  
 RT: 2.405 min Scan# 716  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



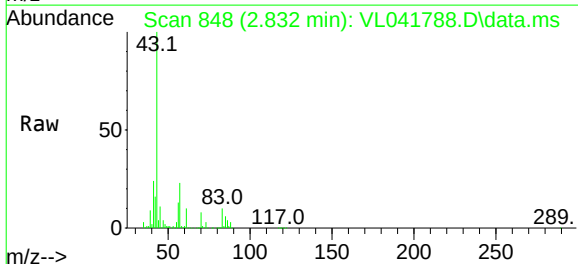
|             |             |
|-------------|-------------|
| Tgt Ion: 63 | Resp: 95779 |
| Ion Ratio   | Lower Upper |
| 63 100      |             |
| 98 4.7      | 2.3 6.8     |
| 100 2.5     | 1.4 4.2     |





#25  
Ethyl Acetate  
Concen: 8.675 ppbv  
RT: 2.832 min Scan# 848  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

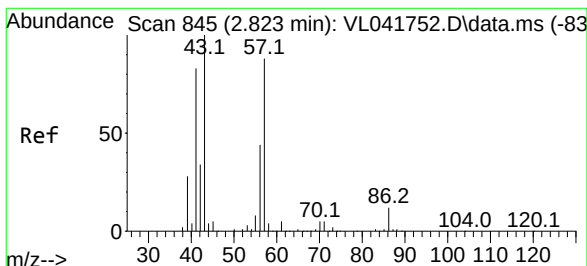
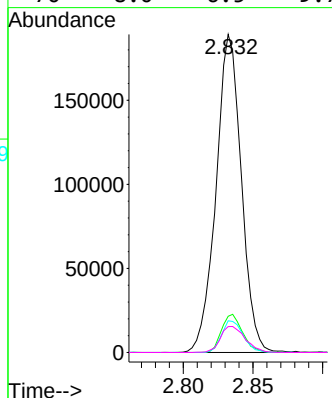
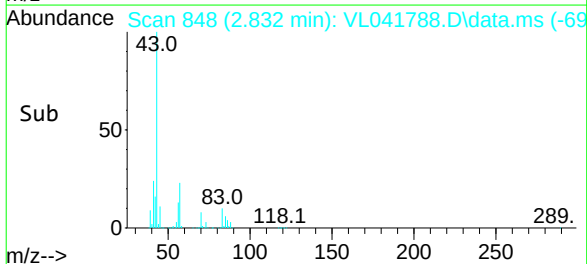
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



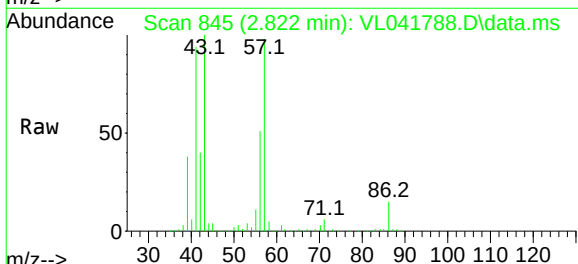
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.1  | 8.1   | 12.1  |
| 61      | 8.6   | 7.0   | 10.6  |
| 70      | 8.0   | 6.5   | 9.7   |

Manual Integrations  
APPROVED

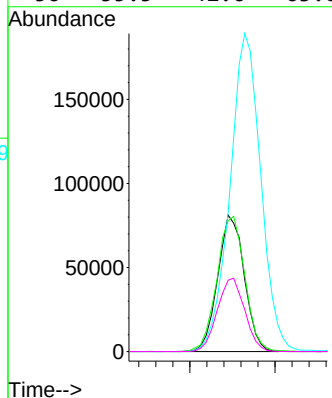
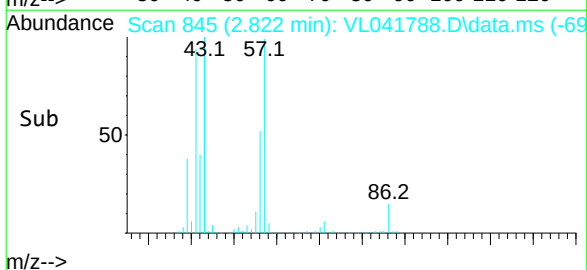
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

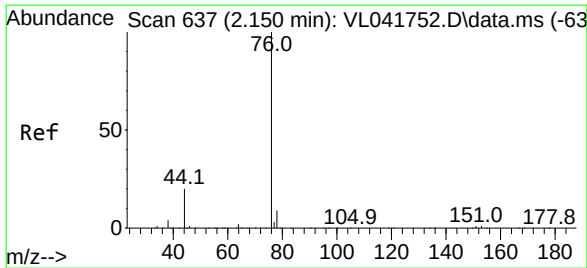


#26  
Hexane  
Concen: 8.386 ppbv  
RT: 2.822 min Scan# 845  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



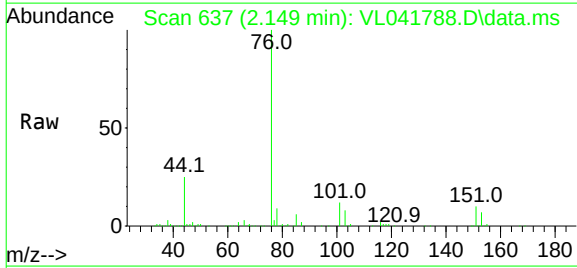
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 104.9 | 79.6  | 119.4 |
| 43      | 273.5 | 211.0 | 316.6 |
| 56      | 55.5  | 42.6  | 63.8  |





#27  
Carbon Disulfide  
Concen: 9.064 ppbv  
RT: 2.149 min Scan# 637  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

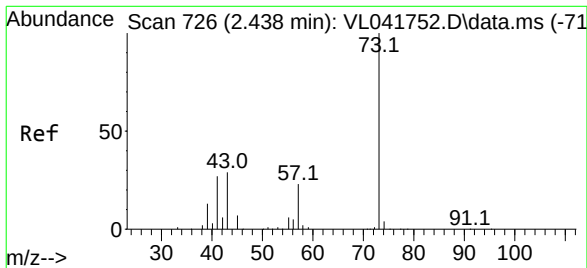
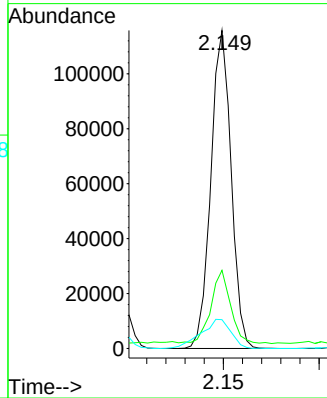
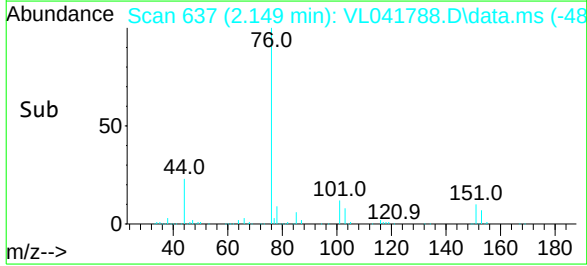
Instrument : MSVOA\_L  
ClientSampleId : VSTDCCC010



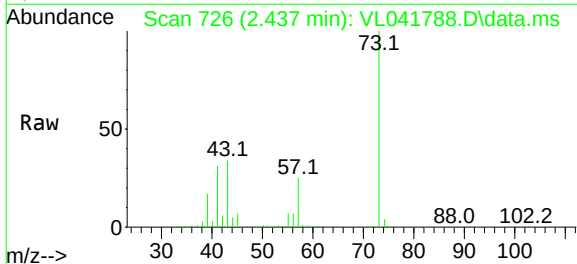
Tgt Ion: 76 Resp: 85318  
Ion Ratio Lower Upper  
76 100  
44 22.8 17.6 26.4  
78 13.5 10.2 15.4

Manual Integrations  
APPROVED

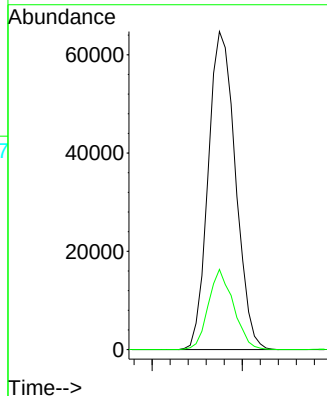
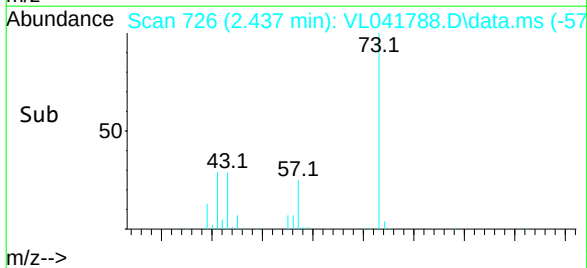
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



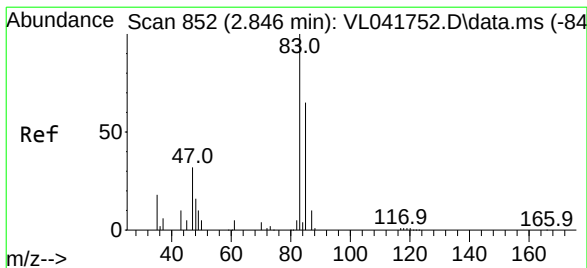
#28  
Methyl tert-Butyl Ether  
Concen: 8.021 ppbv  
RT: 2.437 min Scan# 726  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



Tgt Ion: 73 Resp: 67965  
Ion Ratio Lower Upper  
73 100  
57 23.3 17.6 26.4







#29

Chloroform

Concen: 9.143 ppbv

RT: 2.845 min Scan# 85

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 83 Resp: 145536

Ion Ratio Lower Upper

83 100

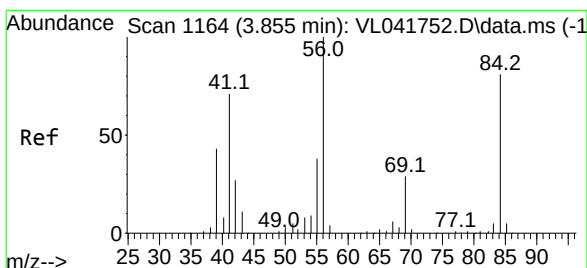
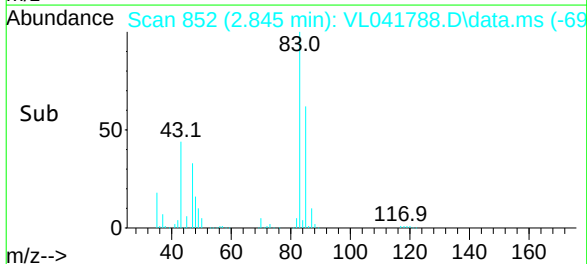
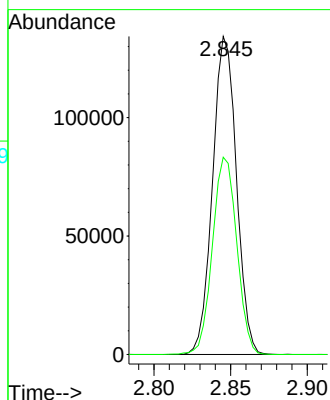
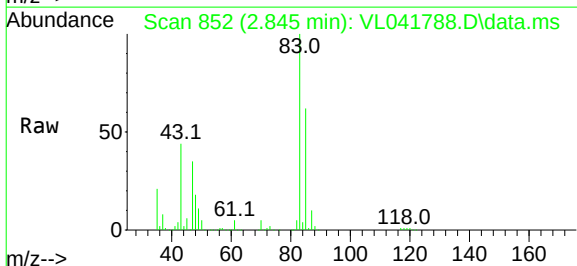
85 62.0 51.8 77.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024

Supervised By :Mahesh Dadoda 12/19/2024



#30

Cyclohexane

Concen: 8.366 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

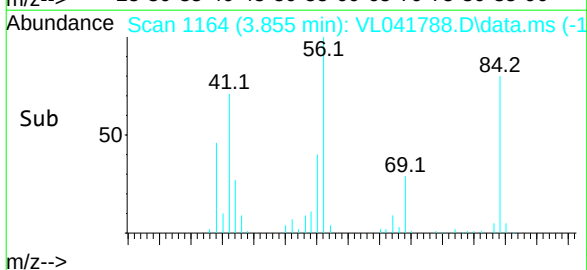
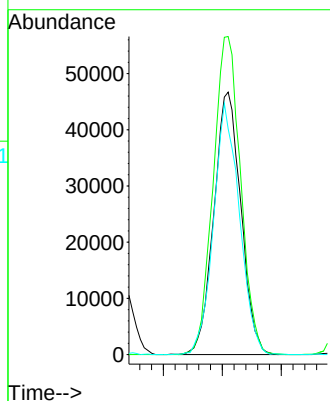
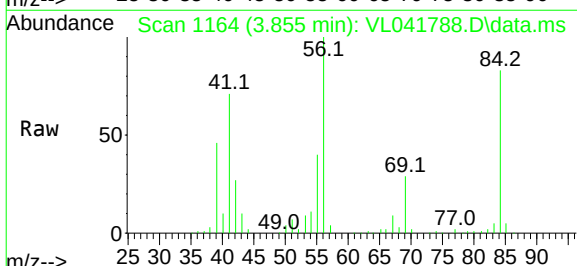
Tgt Ion: 84 Resp: 74346

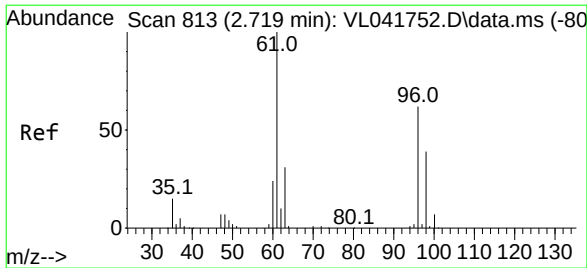
Ion Ratio Lower Upper

84 100

56 122.7 102.3 153.5

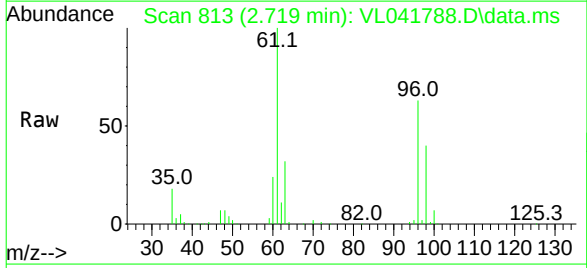
41 91.8 74.0 111.0





#31  
cis-1,2-Dichloroethene  
Concen: 8.567 ppbv  
RT: 2.719 min Scan# 81  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

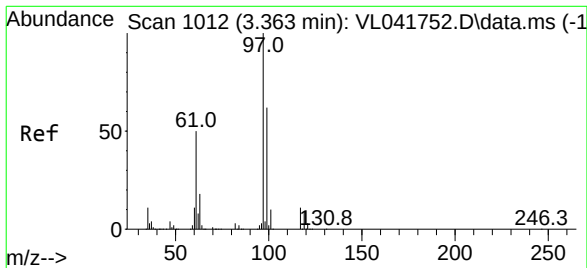
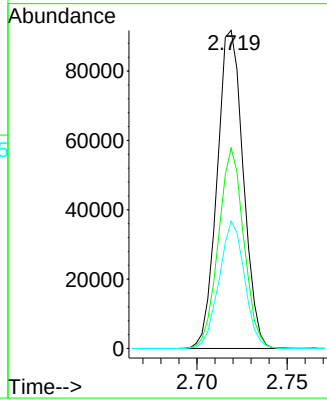
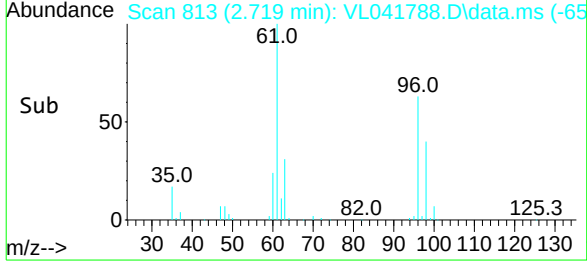
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



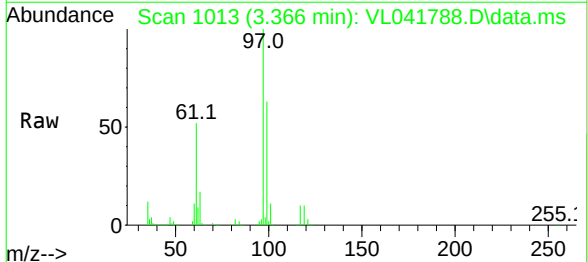
Tgt Ion: 61 Resp: 92460  
Ion Ratio Lower Upper  
61 100  
96 63.0 49.7 74.5  
98 40.0 30.8 46.2

Manual Integrations  
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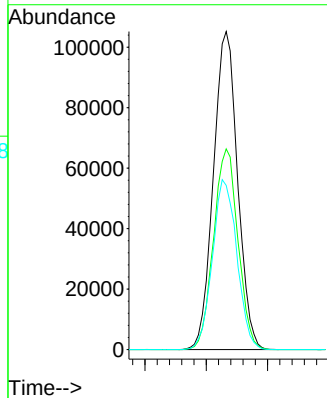
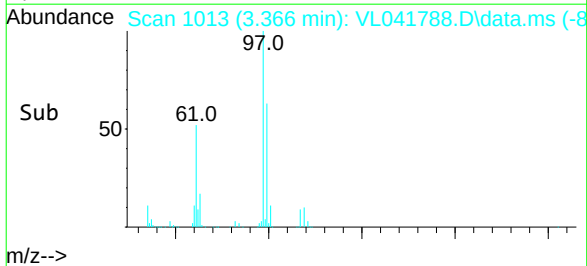
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

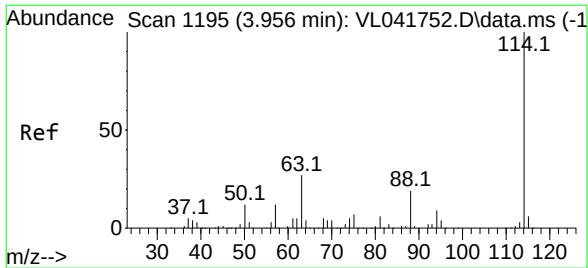


#32  
1,1,1-Trichloroethane  
Concen: 8.902 ppbv  
RT: 3.366 min Scan# 1013  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



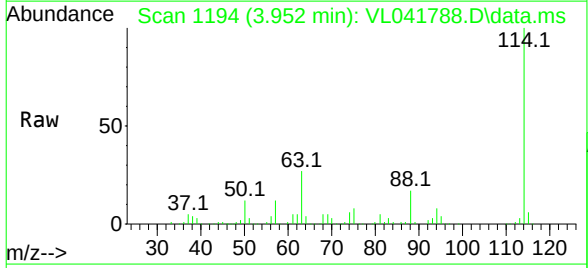
Tgt Ion: 97 Resp: 144038  
Ion Ratio Lower Upper  
97 100  
99 63.8 51.0 76.4  
61 54.0 42.2 63.2





#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.952 min Scan# 1114  
Delta R.T. -0.004 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

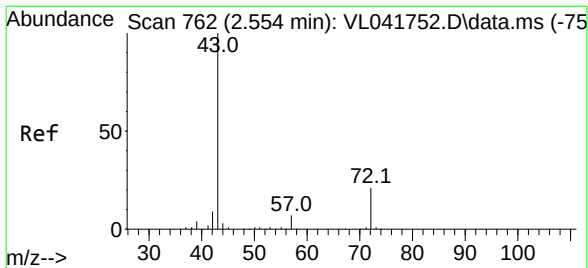
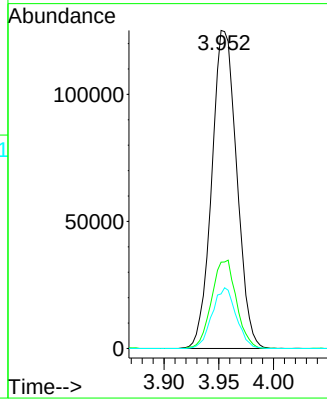
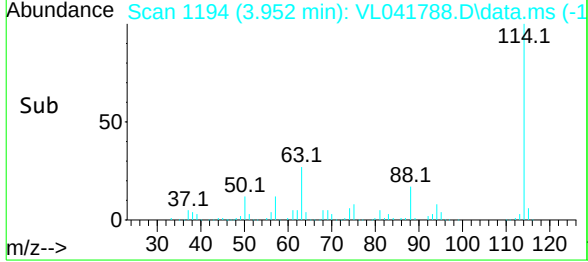
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



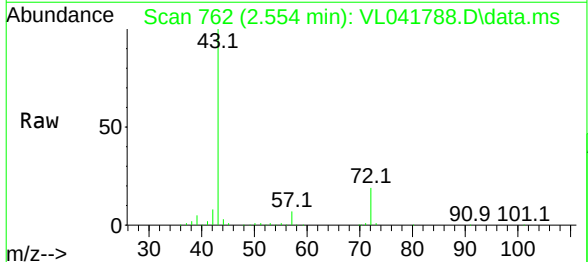
Tgt Ion: 114 Resp: 198376  
Ion Ratio Lower Upper  
114 100  
63 27.6 21.8 32.8  
88 18.4 14.8 22.2

Manual Integrations  
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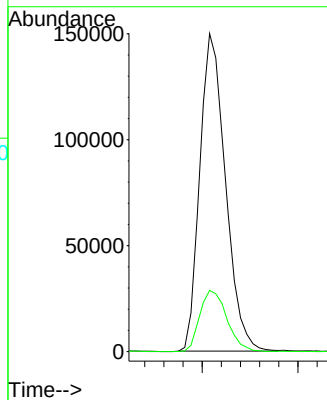
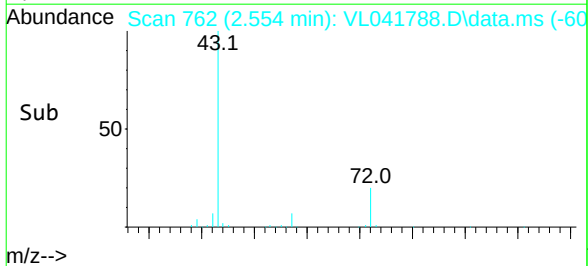
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

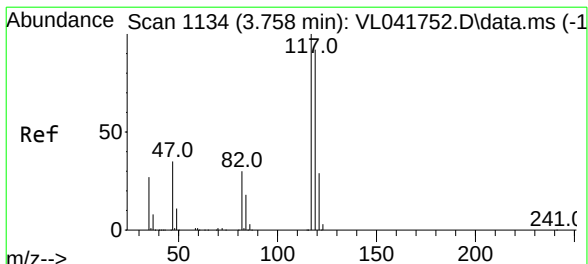


#34  
2-Butanone  
Concen: 8.742 ppbv  
RT: 2.554 min Scan# 762  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



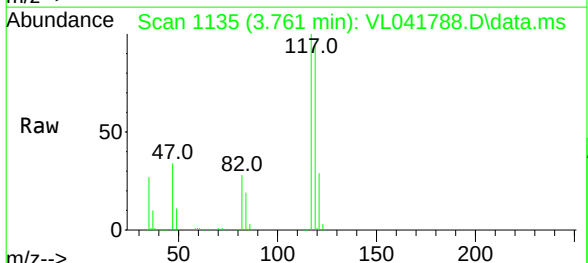
Tgt Ion: 43 Resp: 139509  
Ion Ratio Lower Upper  
43 100  
72 20.5 16.8 25.2





#35  
Carbon Tetrachloride  
Concen: 10.490 ppbv  
RT: 3.761 min Scan# 111  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

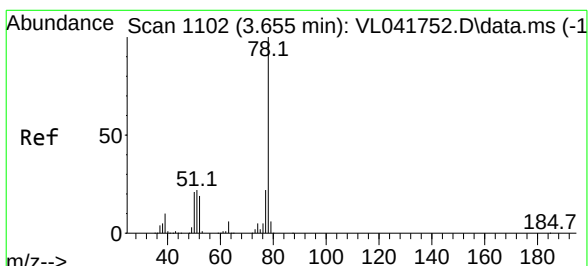
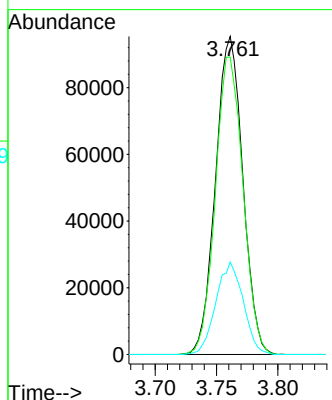
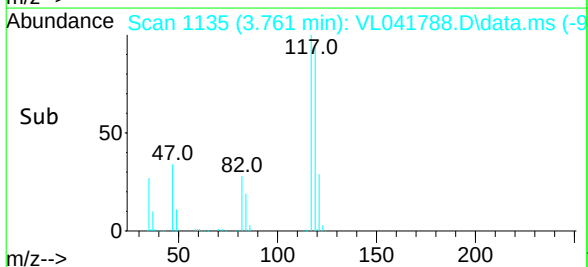


Tgt Ion: 117 Resp: 147726

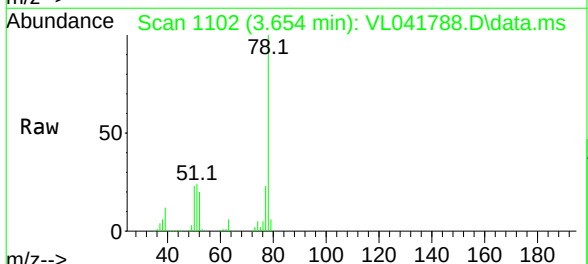
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 119 | 93.5  | 73.7  | 110.5 |
| 121 | 29.1  | 23.0  | 34.4  |

Manual Integrations  
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Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024

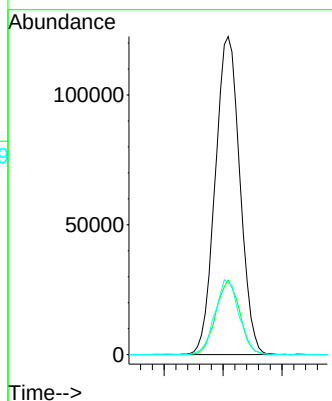
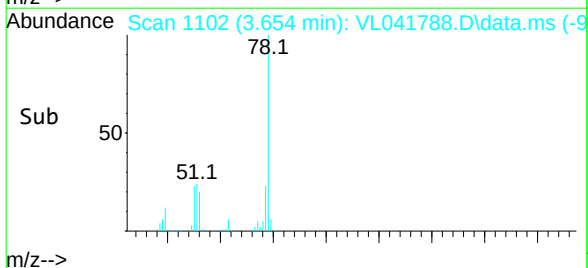


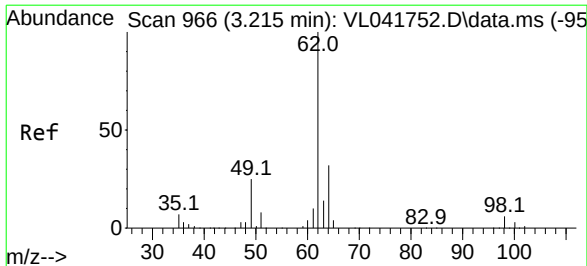
#36  
Benzene  
Concen: 8.680 ppbv  
RT: 3.654 min Scan# 1102  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



Tgt Ion: 78 Resp: 178114

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 23.3  | 17.8  | 26.6  |
| 50  | 22.6  | 17.2  | 25.8  |





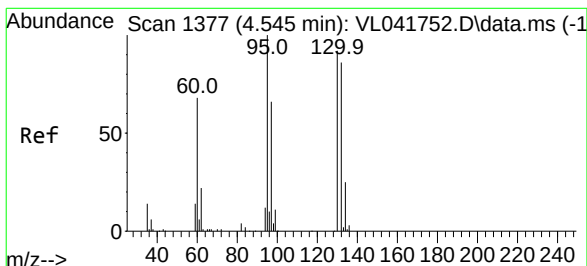
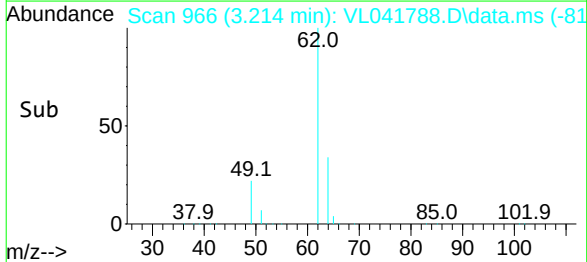
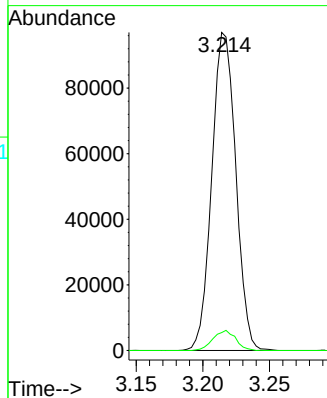
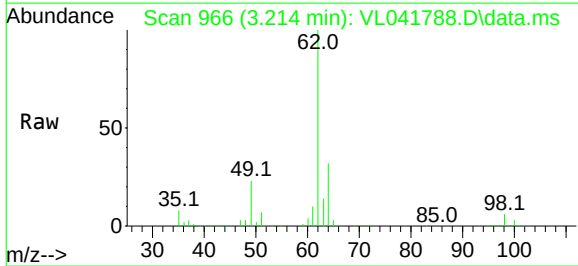
#37  
1,2-Dichloroethane  
Concen: 9.509 ppbv  
RT: 3.214 min Scan# 96  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 62 Resp: 121412  
Ion Ratio Lower Upper  
62 100  
98 6.0 4.7 7.1

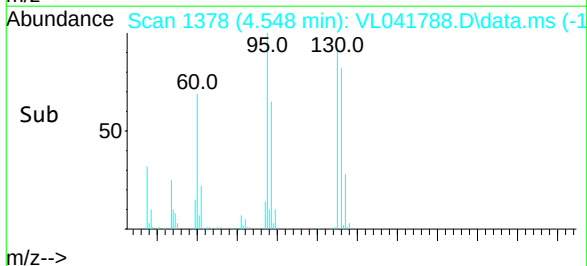
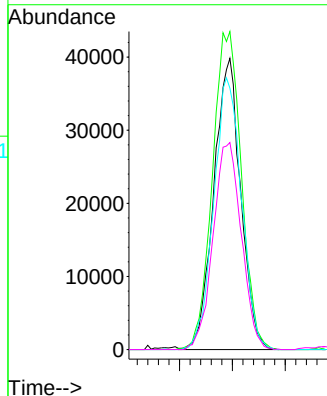
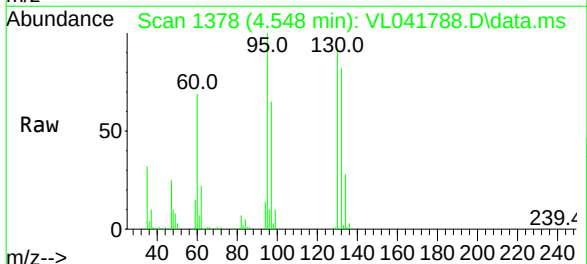
Manual Integrations  
APPROVED

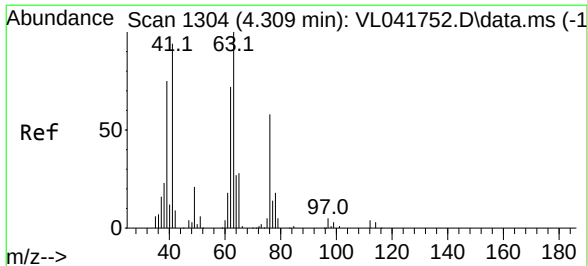
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#38  
Trichloroethene  
Concen: 8.057 ppbv  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

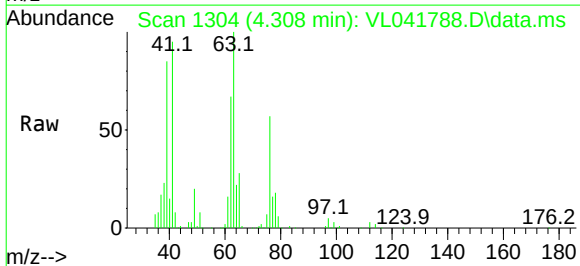
Tgt Ion:130 Resp: 70175  
Ion Ratio Lower Upper  
130 100  
95 109.2 87.0 130.6  
132 89.8 75.0 112.6  
97 71.1 57.2 85.8





#39  
1,2-Dichloropropane  
Concen: 8.645 ppbv  
RT: 4.308 min Scan# 1304  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

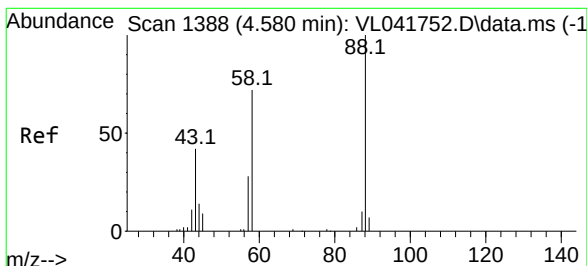
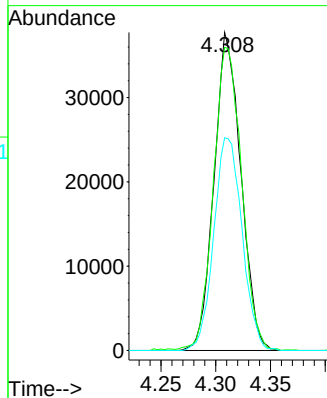
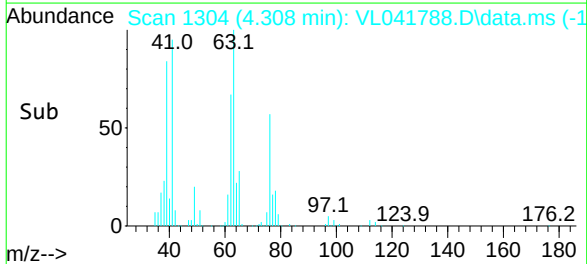
Instrument : MSVOA\_1  
ClientSampleId : VSTDCCC010



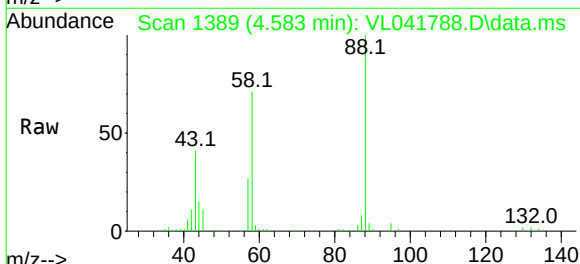
Tgt Ion: 63 Resp: 64154  
Ion Ratio Lower Upper  
63 100  
41 94.8 75.3 112.9  
62 66.9 57.3 85.9

Manual Integrations  
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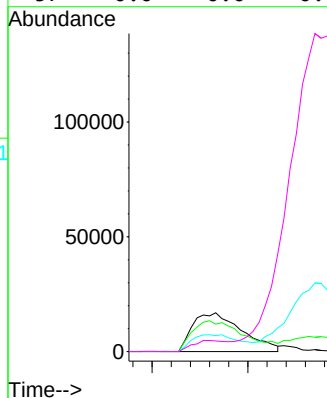
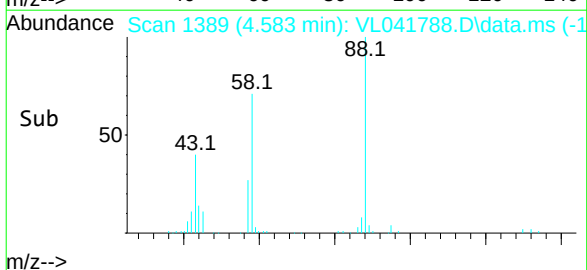
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

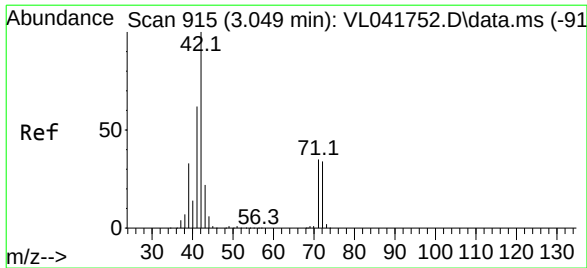


#40  
1,4-Dioxane  
Concen: 8.347 ppbv  
RT: 4.583 min Scan# 1389  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



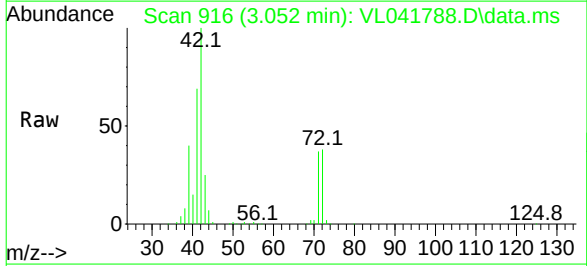
Tgt Ion: 88 Resp: 30262  
Ion Ratio Lower Upper  
88 100  
58 79.3 61.0 91.6  
43 40.5 29.4 44.0  
57 0.0 0.0 0.0





#41  
Tetrahydrofuran  
Concen: 8.359 ppbv  
RT: 3.052 min Scan# 915  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

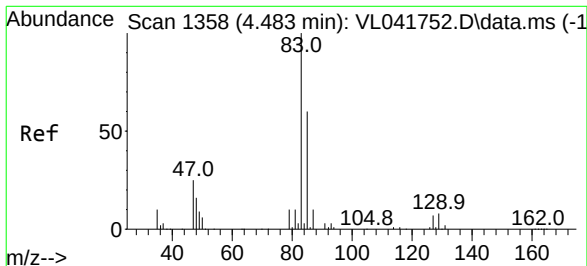
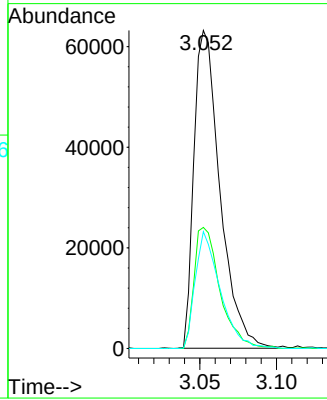
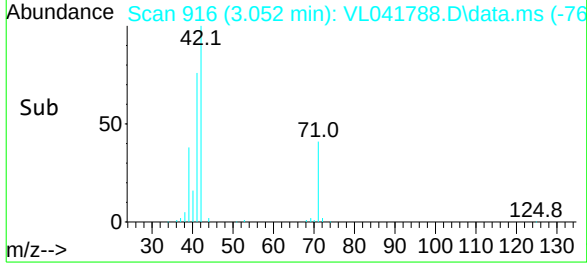
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



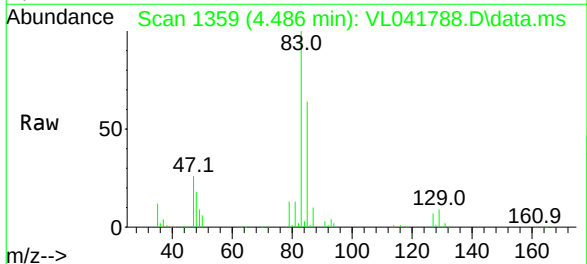
Tgt Ion: 42 Resp: 74734  
Ion Ratio Lower Upper  
42 100  
72 38.0 29.1 43.7  
71 35.3 28.4 42.6

Manual Integrations  
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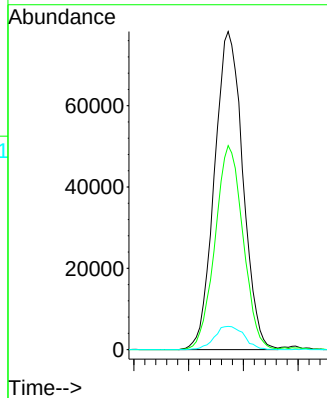
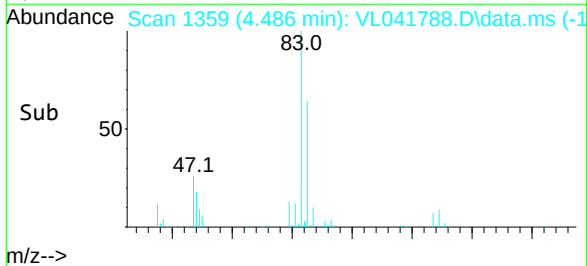
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

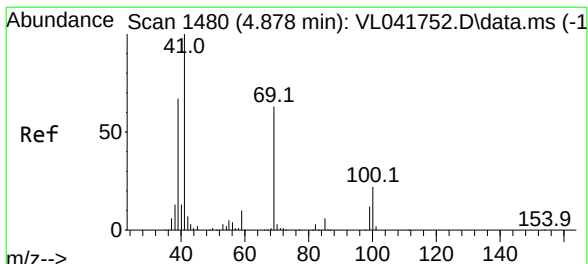


#42  
Bromodichloromethane  
Concen: 9.588 ppbv  
RT: 4.486 min Scan# 1359  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



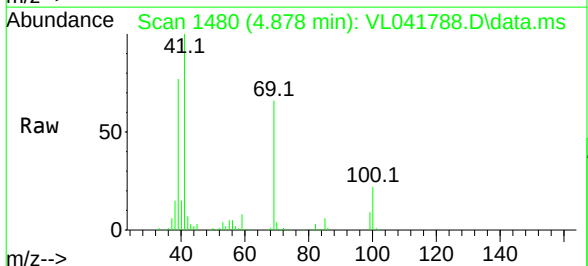
Tgt Ion: 83 Resp: 140832  
Ion Ratio Lower Upper  
83 100  
85 64.1 48.0 72.0  
127 7.3 5.8 8.8





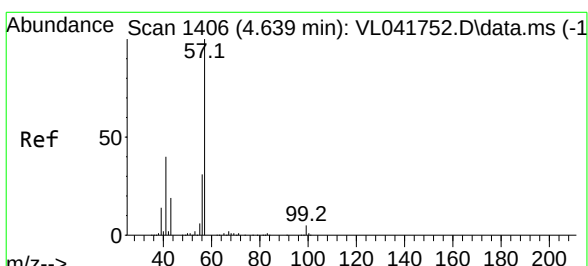
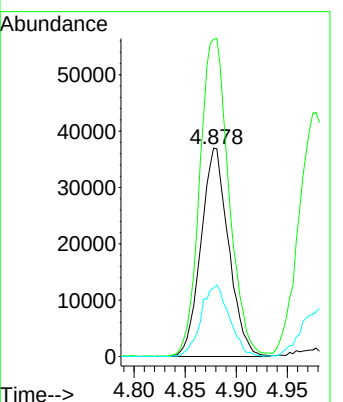
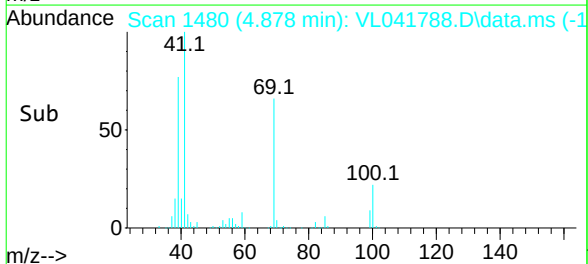
#43  
Methyl Methacrylate  
Concen: 8.895 ppbv  
RT: 4.878 min Scan# 1480  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument : MSVOA\_1  
ClientSampleId : VSTDCCC010

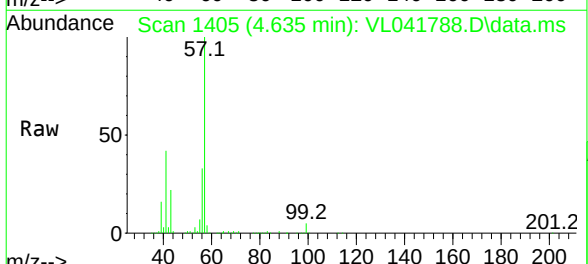


|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 69    | Resp: | 69545 |
| Ion      | Ratio | Lower | Upper |
| 69       | 100   |       |       |
| 41       | 161.4 | 130.3 | 195.5 |
| 100      | 35.2  | 28.3  | 42.5  |

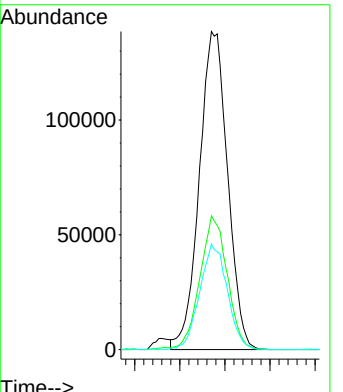
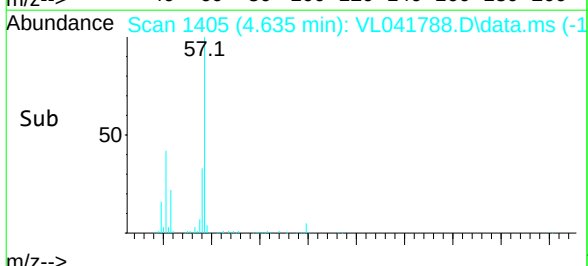
Manual Integrations  
**APPROVED**  
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



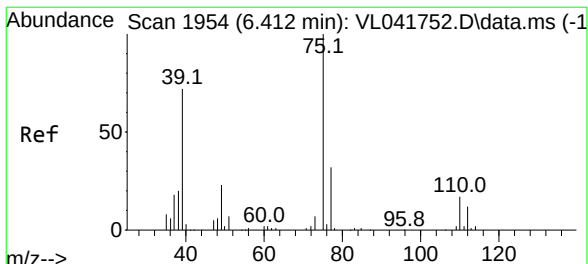
#44  
2,2,4-Trimethylpentane  
Concen: 8.627 ppbv  
RT: 4.635 min Scan# 1405  
Delta R.T. -0.004 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 302332 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 40.7  | 30.7  | 46.1   |
| 56       | 32.3  | 25.4  | 38.0   |

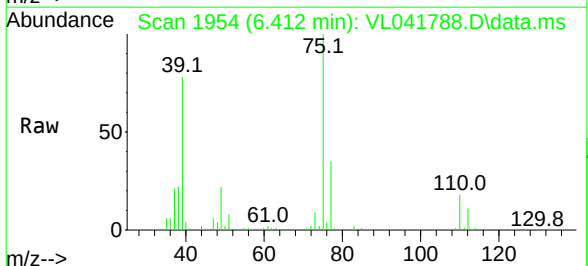






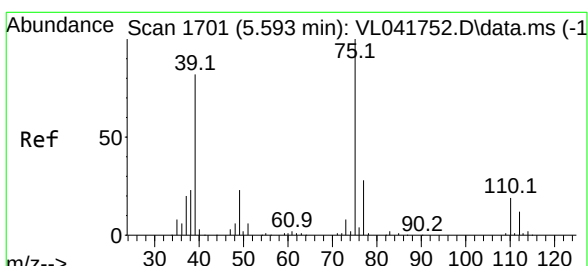
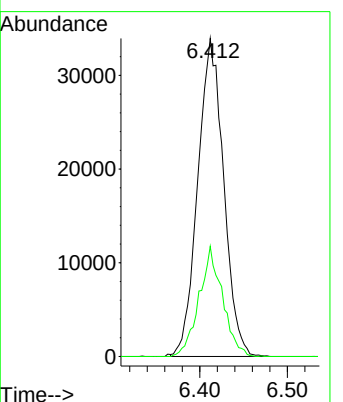
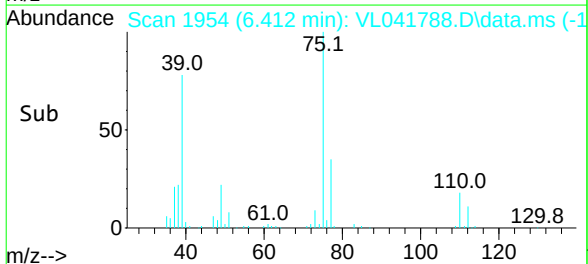
#45  
 t-1,3-Dichloropropene  
 Concen: 8.607 ppbv  
 RT: 6.412 min Scan# 1954  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Instrument : MSVOA\_L  
 ClientSampleId : VSTDCCC010

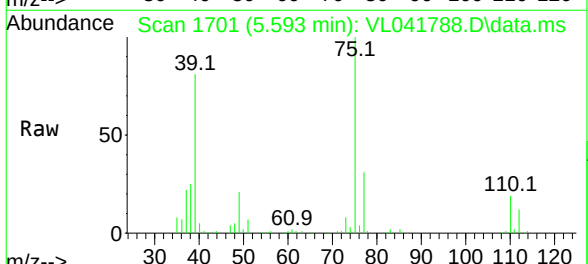


|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 75    | Resp: | 69601 |
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 77        | 34.6  | 25.9  | 38.9  |

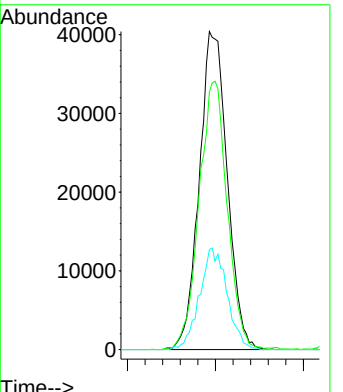
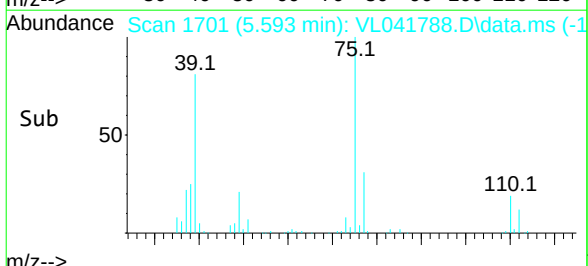
Manual Integrations  
**APPROVED**  
 Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

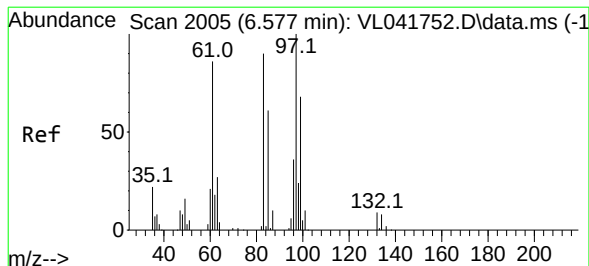


#46  
 cis-1,3-Dichloropropene  
 Concen: 8.701 ppbv m  
 RT: 5.593 min Scan# 1701  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



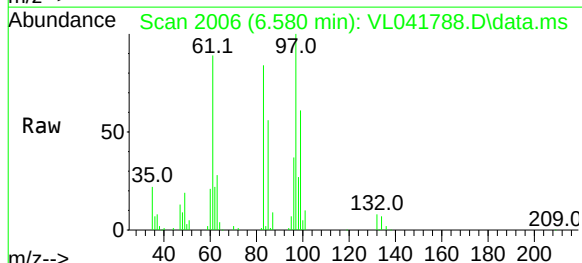
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 75    | Resp: | 89328 |
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 39        | 81.0  | 65.2  | 97.8  |
| 77        | 31.4  | 22.0  | 33.0  |





#47  
1,1,2-Trichloroethane  
Concen: 8.736 ppbv  
RT: 6.580 min Scan# 2005  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

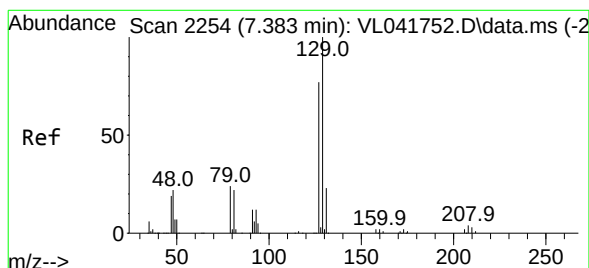
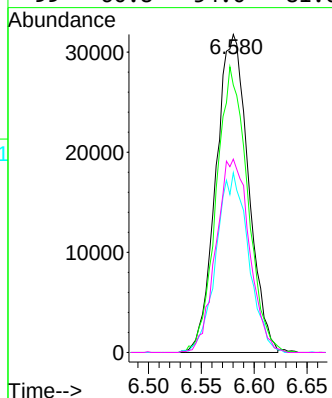
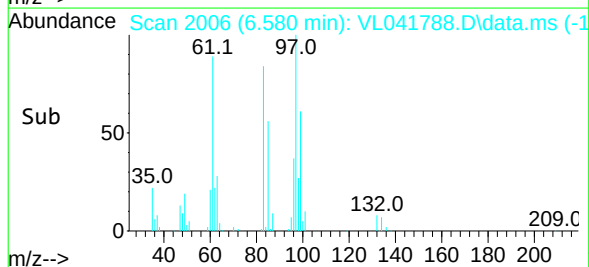
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



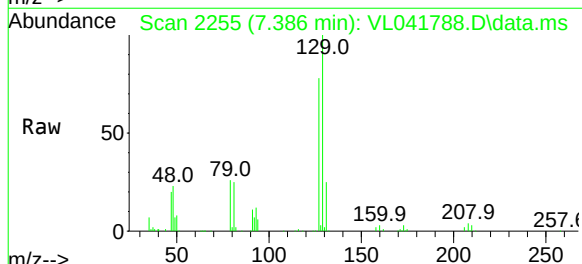
Tgt Ion: 97 Resp: 67717  
Ion Ratio Lower Upper  
97 100  
83 84.1 72.3 108.5  
85 56.5 48.5 72.7  
99 60.8 54.0 81.0

Manual Integrations  
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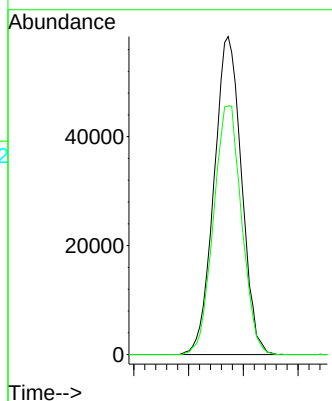
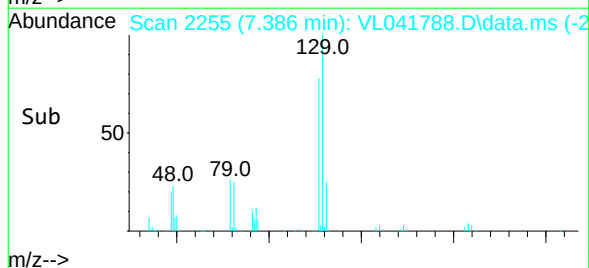
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

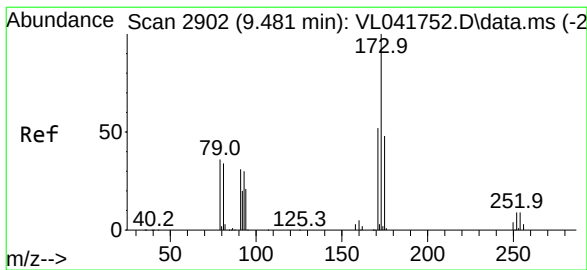


#48  
Dibromochloromethane  
Concen: 9.625 ppbv  
RT: 7.386 min Scan# 2255  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



Tgt Ion:129 Resp: 101875  
Ion Ratio Lower Upper  
129 100  
127 80.0 38.8 116.3





#49

Bromoform

Concen: 9.655 ppbv

RT: 9.483 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

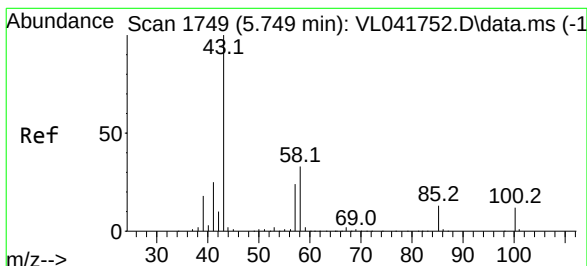
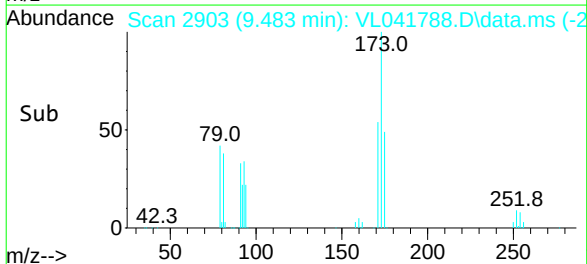
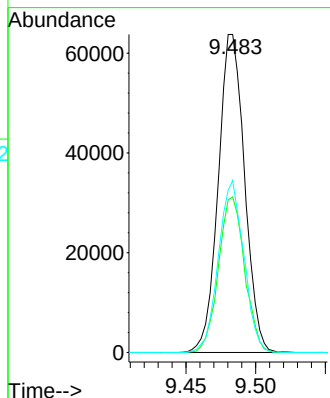
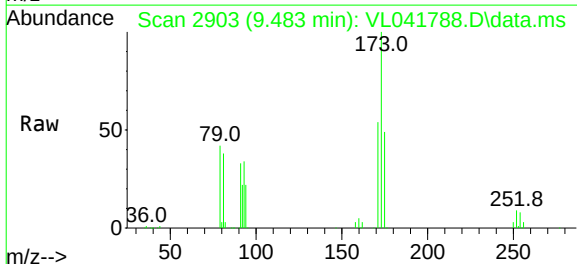
ClientSampleId :

VSTDCCC010

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 83649 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 48.6  | 38.2  | 57.2  |
| 171       | 52.2  | 41.1  | 61.7  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#50

4-Methyl-2-Pentanone

Concen: 8.600 ppbv

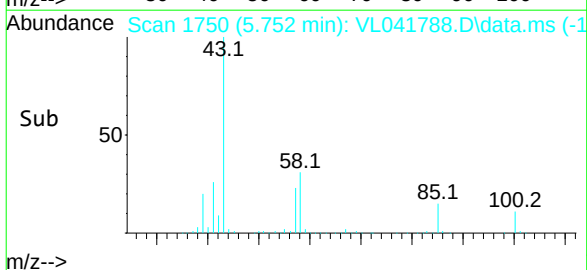
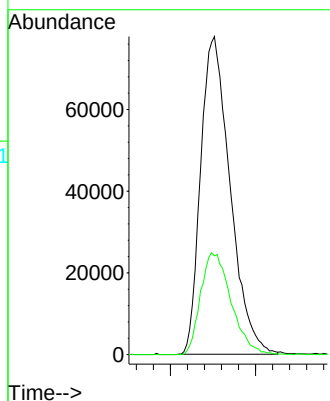
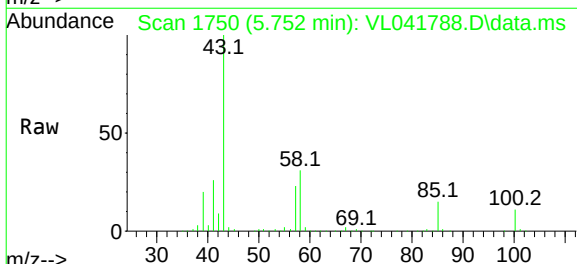
RT: 5.752 min Scan# 1750

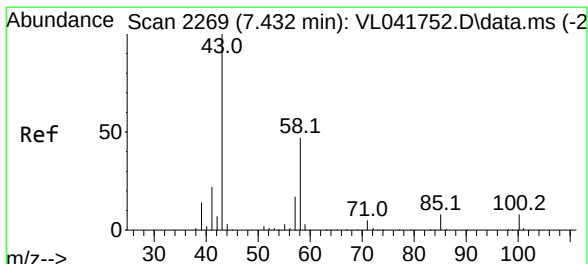
Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

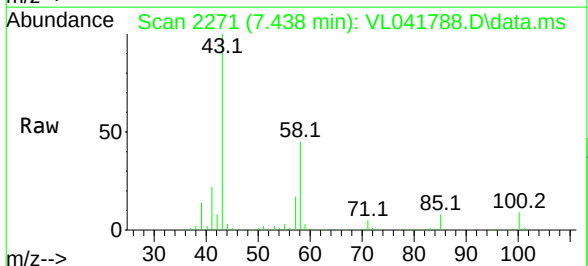
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 43    | Resp: | 186865 |
| Ion Ratio | Lower | Upper |        |
| 43        | 100   |       |        |
| 58        | 33.2  | 26.8  | 40.2   |





#51  
 2-Hexanone  
 Concen: 8.472 ppbv  
 RT: 7.438 min Scan# 2269  
 Delta R.T. 0.006 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Instrument : MSVOA\_L  
 ClientSampleId : VSTDCCC010

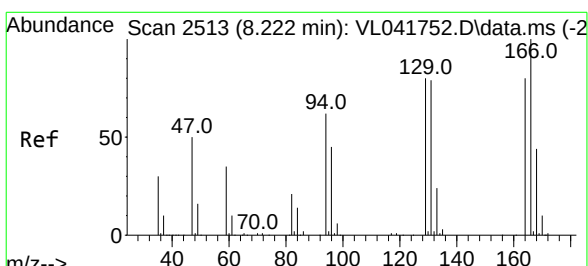
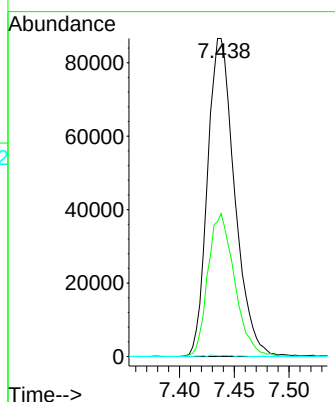
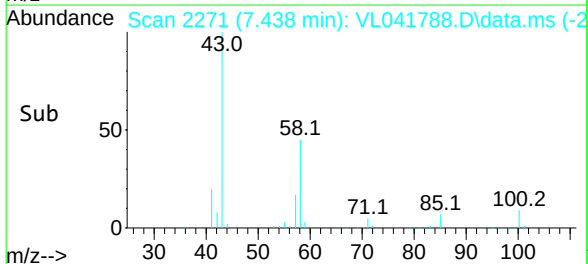


Tgt Ion: 43 Resp: 149217

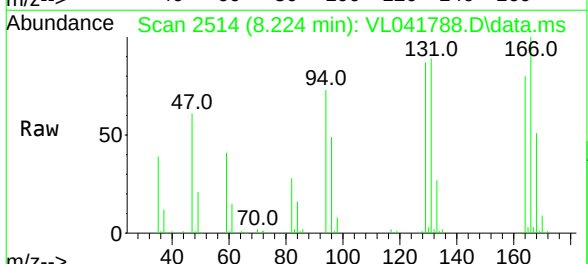
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 44.3  | 36.6  | 55.0  |
| 98  | 0.4   | 0.1   | 0.1   |

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Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

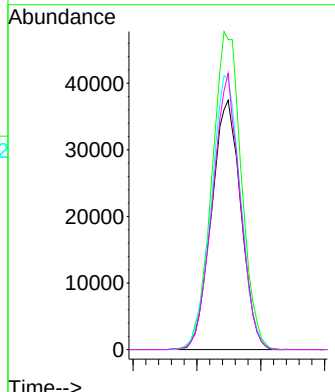
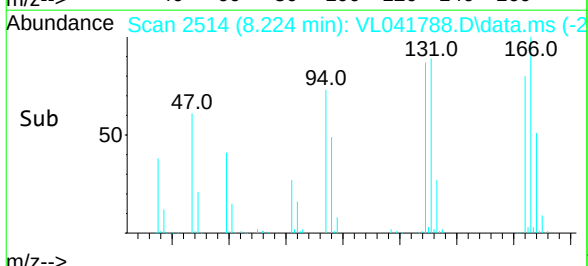


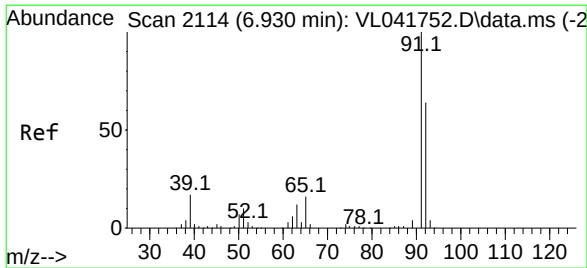
#52  
 Tetrachloroethene  
 Concen: 7.824 ppbv  
 RT: 8.224 min Scan# 2514  
 Delta R.T. 0.003 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



Tgt Ion:164 Resp: 59756

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 166 | 124.1 | 99.8  | 149.6 |
| 129 | 108.3 | 79.6  | 119.4 |
| 131 | 110.9 | 78.6  | 117.8 |





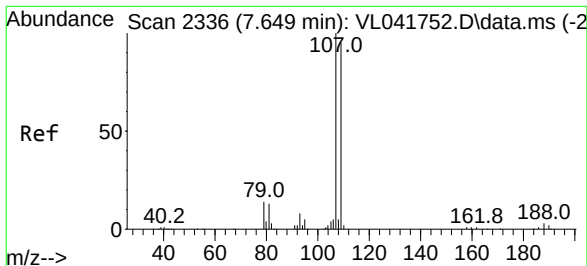
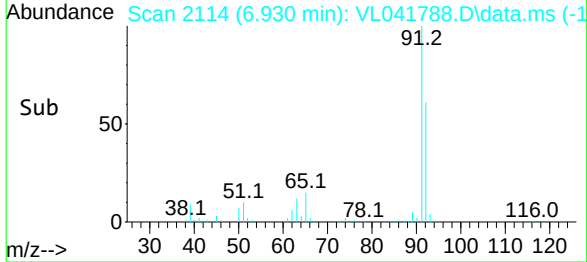
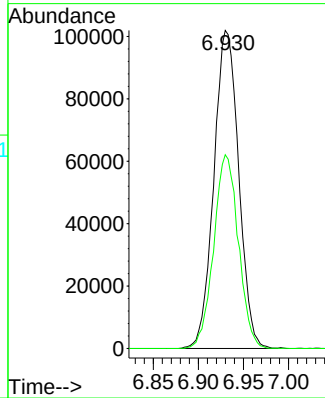
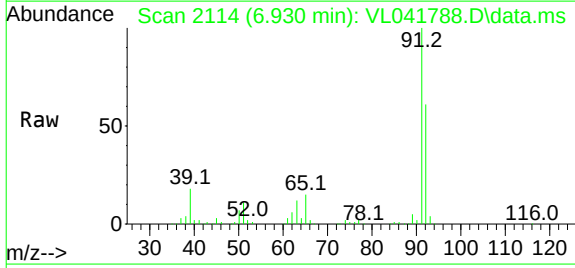
#53  
Toluene  
Concen: 8.389 ppbv  
RT: 6.930 min Scan# 2114  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 91 Resp: 195158  
Ion Ratio Lower Upper  
91 100  
92 60.5 47.9 71.9

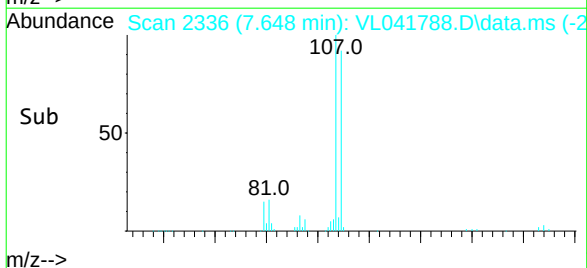
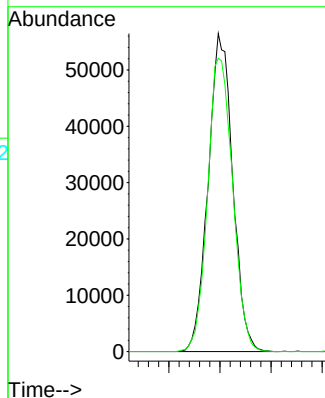
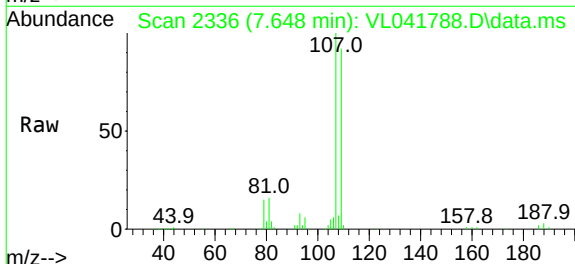
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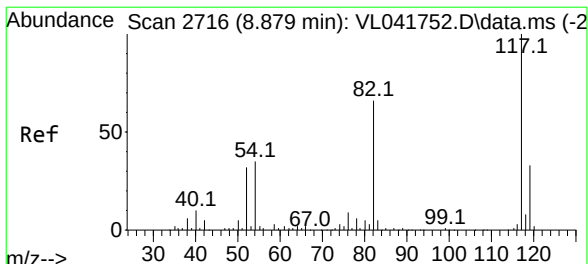
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#54  
1,2-Dibromoethane  
Concen: 8.814 ppbv  
RT: 7.648 min Scan# 2336  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

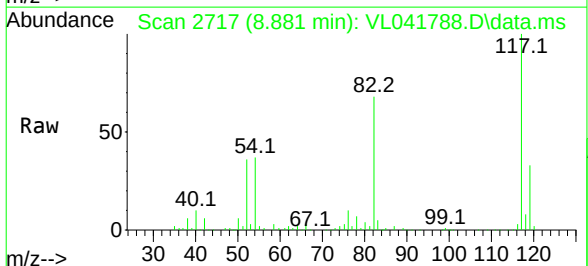
Tgt Ion:107 Resp: 94138  
Ion Ratio Lower Upper  
107 100  
109 92.2 75.9 113.9





#55  
 Chlorobenzene-d5  
 Concen: 10.000 ppbv  
 RT: 8.881 min Scan# 2716  
 Delta R.T. 0.003 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

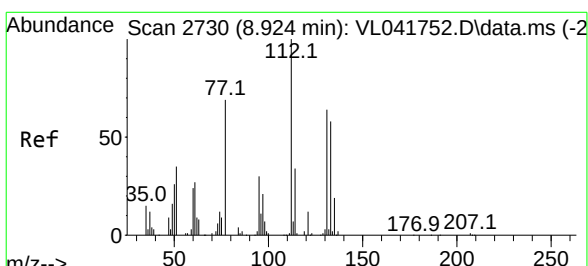
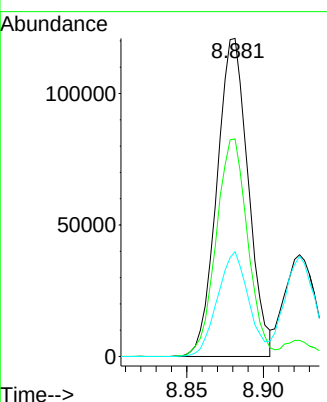
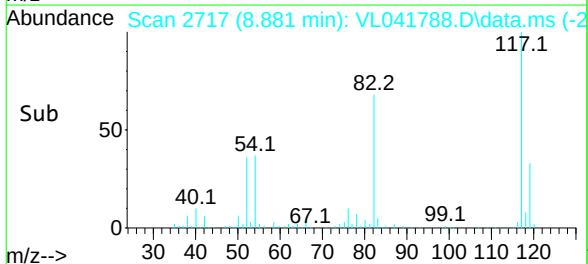
Instrument : MSVOA\_1  
 ClientSampleId : VSTDCCC010



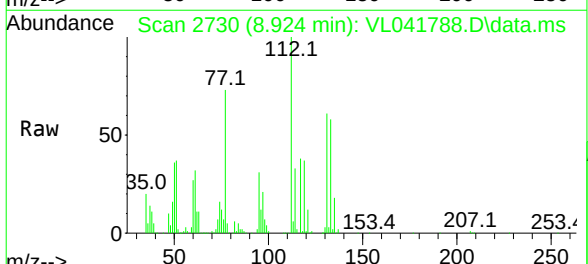
Tgt Ion: 117 Resp: 172190

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 73.5  | 53.8  | 80.8  |
| 119 | 33.1  | 26.7  | 40.1  |

Manual Integrations  
**APPROVED**  
 Reviewed By : Semsettin Yesilyurt 12/19/2024  
 Supervised By : Mahesh Dadoda 12/19/2024

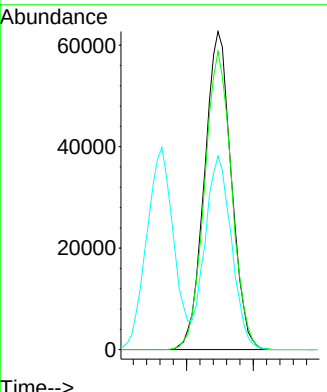
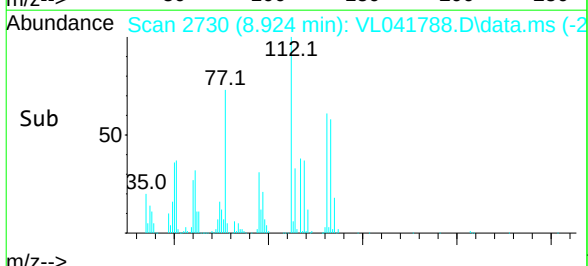


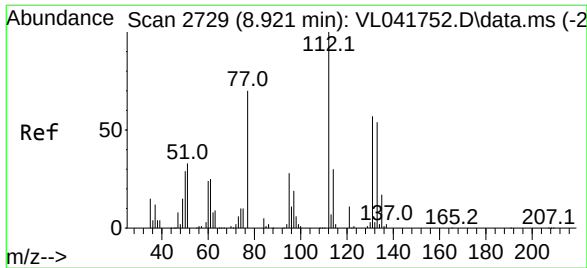
#56  
 1,1,1,2-Tetrachloroethane  
 Concen: 9.626 ppbv  
 RT: 8.924 min Scan# 2730  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29



Tgt Ion: 131 Resp: 87869

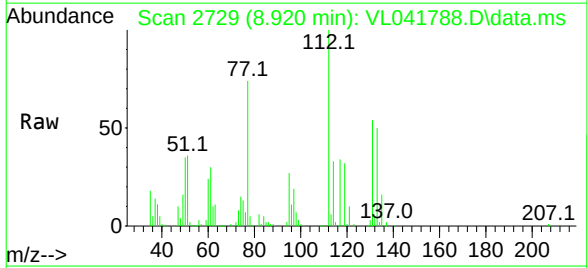
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 131 | 100   |       |       |
| 133 | 94.8  | 76.8  | 115.2 |
| 119 | 60.8  | 49.0  | 73.6  |





#57  
Chlorobenzene  
Concen: 8.912 ppbv  
RT: 8.920 min Scan# 2729  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

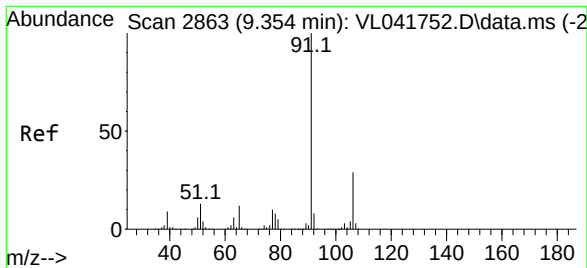
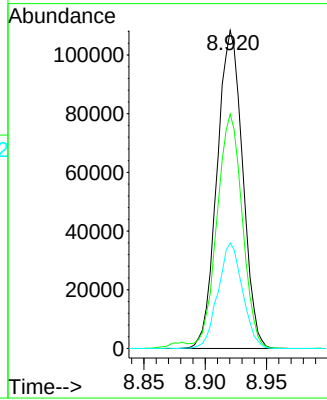
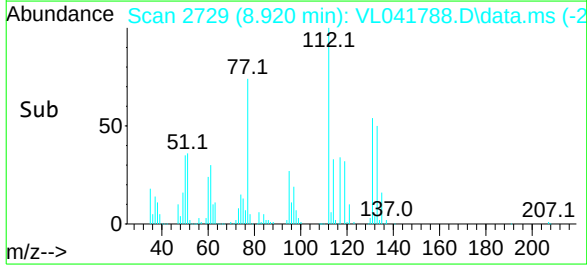
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



Tgt Ion: 112 Resp: 157039  
Ion Ratio Lower Upper  
112 100  
77 73.6 57.4 86.0  
114 33.2 27.4 33.4

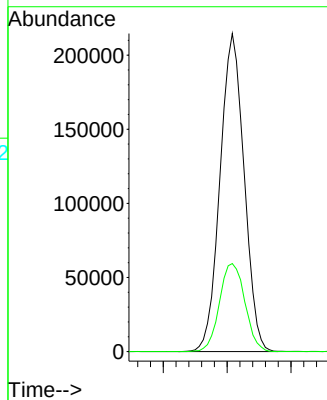
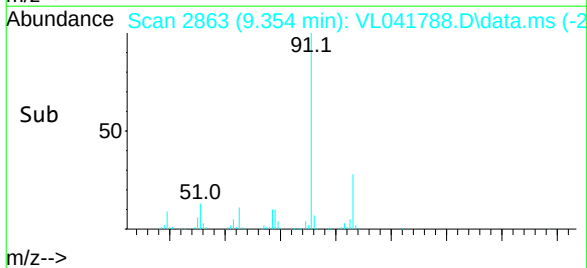
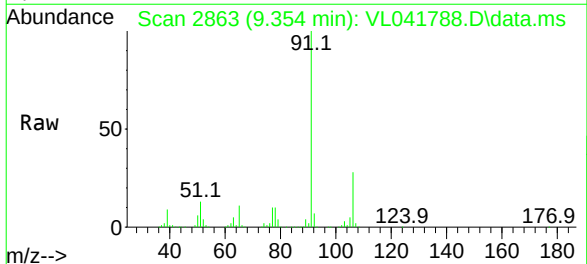
Manual Integrations  
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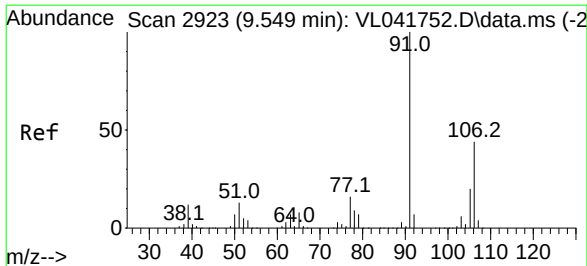
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#58  
Ethyl Benzene  
Concen: 9.074 ppbv  
RT: 9.354 min Scan# 2863  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 91 Resp: 281290  
Ion Ratio Lower Upper  
91 100  
106 27.7 23.5 35.3





#59

m/p-Xylene

Concen: 18.725 ppbv m

RT: 9.548 min Scan# 29

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 91 Resp: 466737

Ion Ratio Lower Upper

91 100

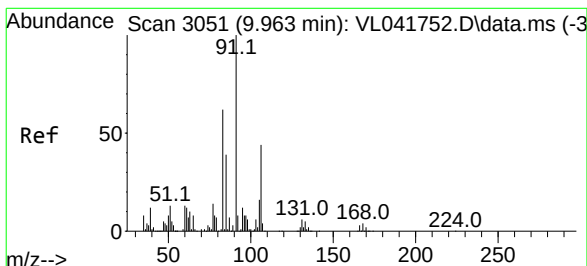
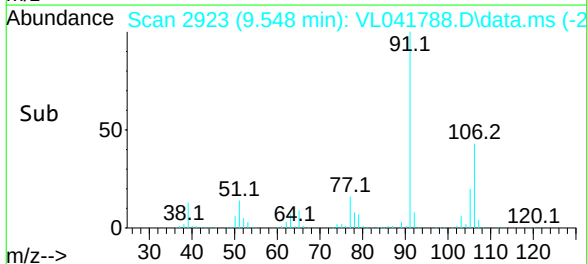
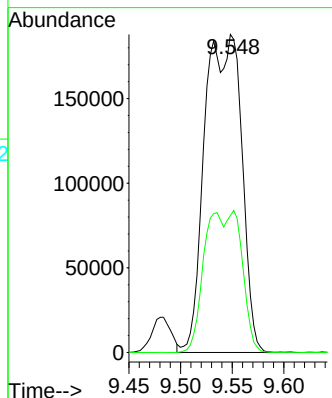
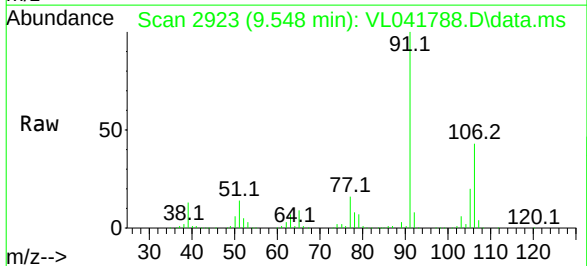
106 45.2 0.0 0.0

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 12/19/2024

Supervised By :Mahesh Dadoda 12/19/2024



#60

o-Xylene

Concen: 9.283 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041788.D

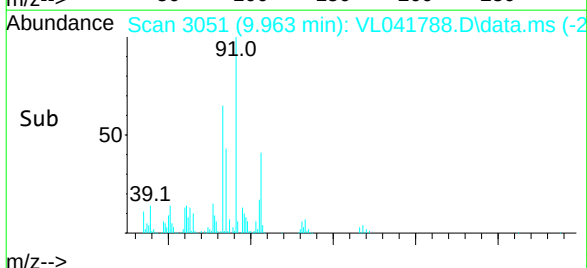
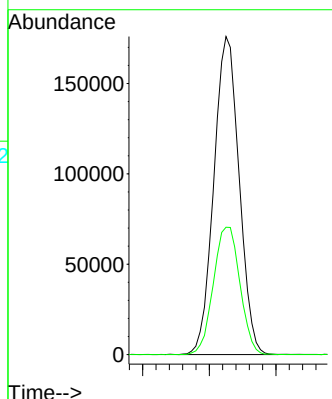
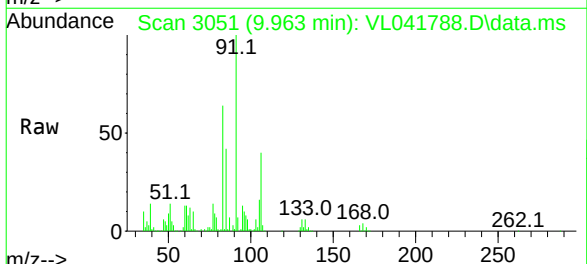
Acq: 18 Dec 2024 10:29

Tgt Ion: 91 Resp: 232028

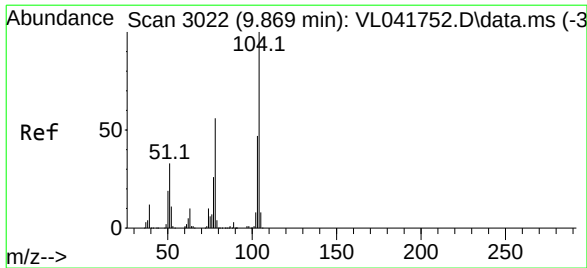
Ion Ratio Lower Upper

91 100

106 42.1 21.1 63.4







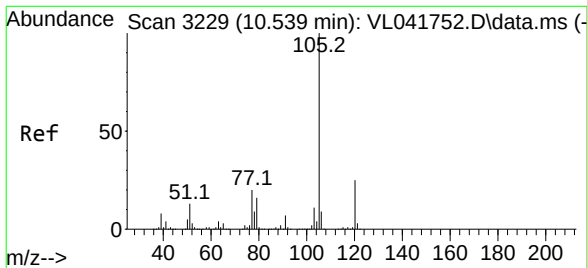
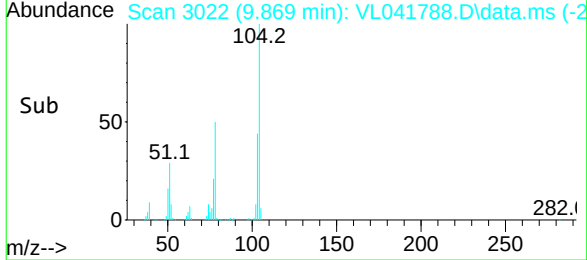
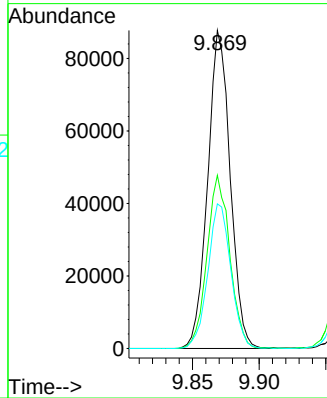
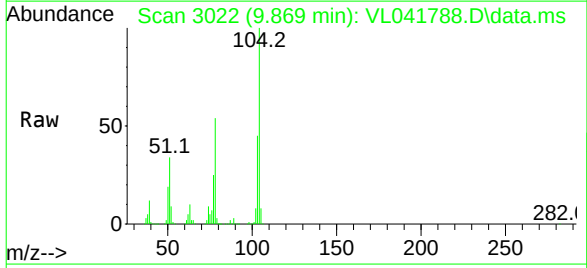
#61  
Styrene  
Concen: 9.550 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument : MSVOA\_L  
ClientSampleId : VSTDCCC010

Tgt Ion:104 Resp: 103216  
Ion Ratio Lower Upper  
104 100  
78 55.1 43.8 65.6  
103 46.5 37.8 56.6

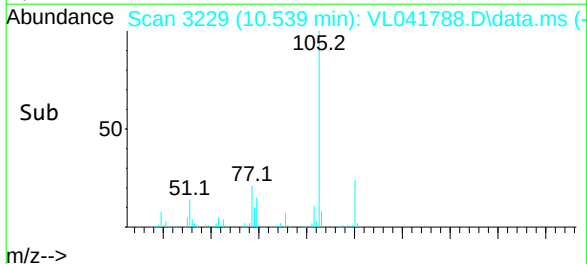
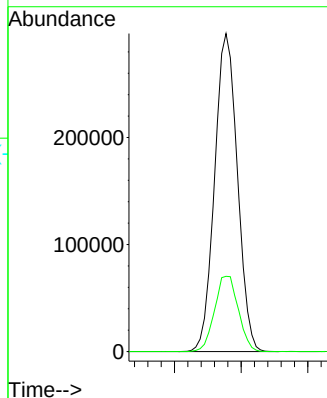
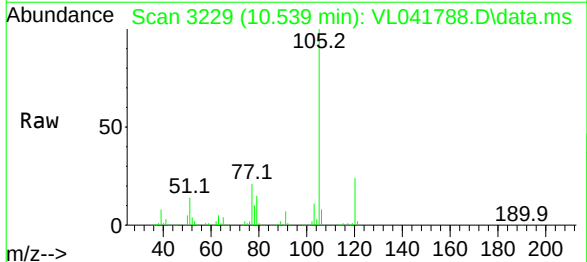
Manual Integrations  
APPROVED

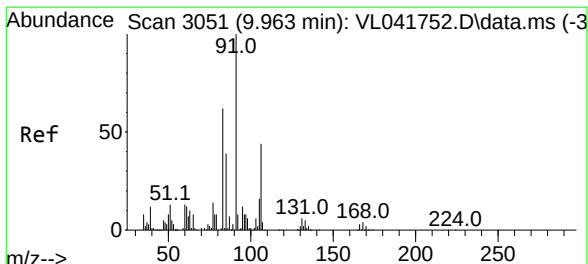
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#62  
Isopropylbenzene  
Concen: 9.397 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 352903  
Ion Ratio Lower Upper  
105 100  
120 24.7 19.8 29.8





#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.216 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

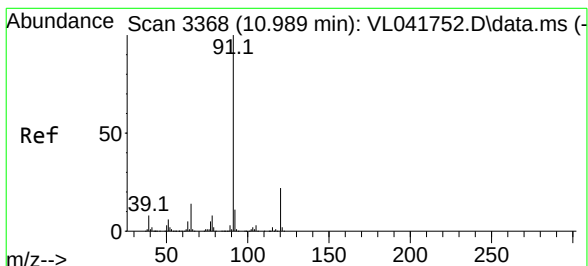
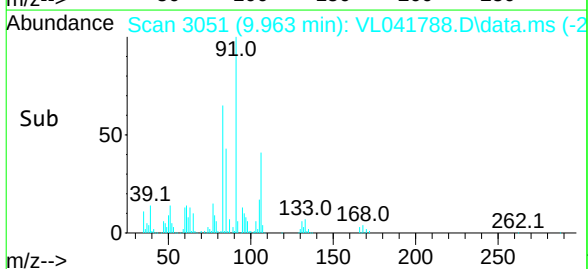
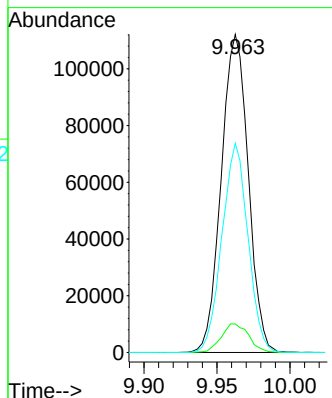
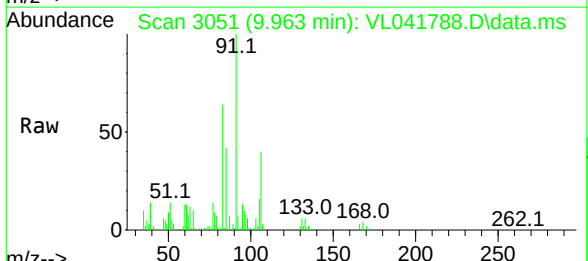
ClientSampleId :

VSTDCCC010

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 144197 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 131      | 9.2   | 4.9   | 14.7   |
| 85       | 63.4  | 32.0  | 96.2   |

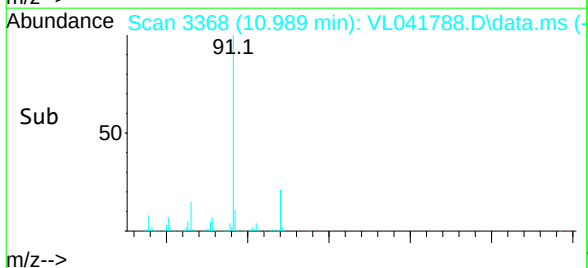
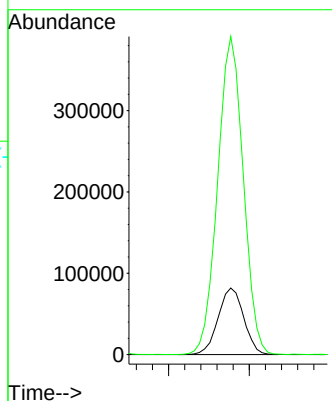
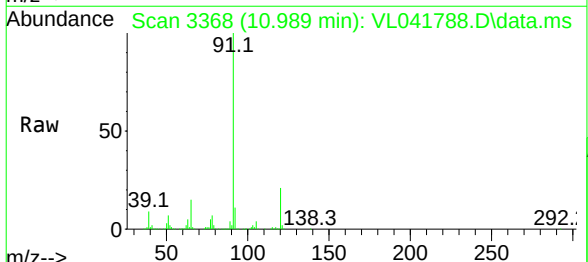
Manual Integrations  
APPROVED

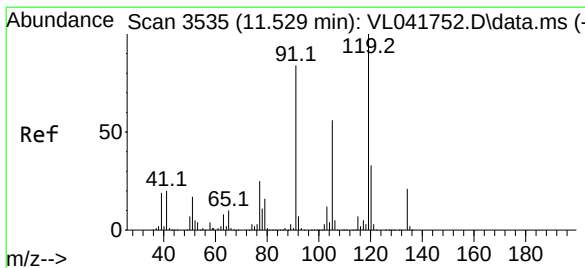
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#64  
n-propylbenzene  
Concen: 9.483 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

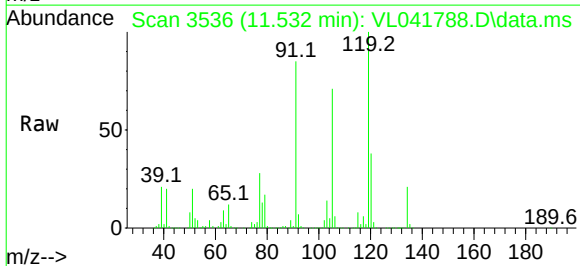
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 120   | Resp: | 90043 |
| Ion      | Ratio | Lower | Upper |
| 120      | 100   |       |       |
| 91       | 480.1 | 387.3 | 580.9 |





#65  
tert-Butylbenzene  
Concen: 9.295 ppbv  
RT: 11.532 min Scan# 3535  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

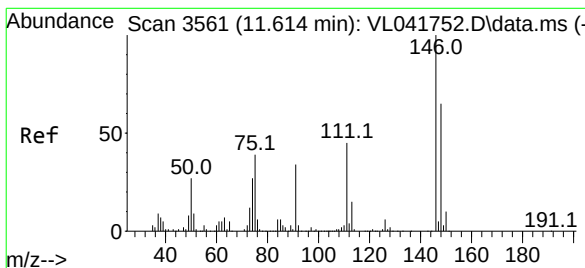
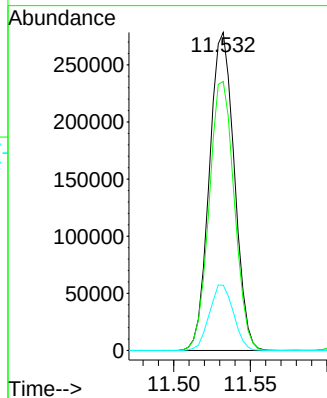
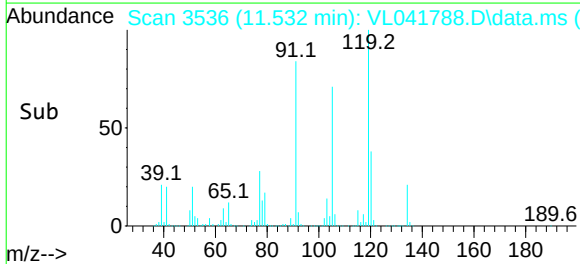
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



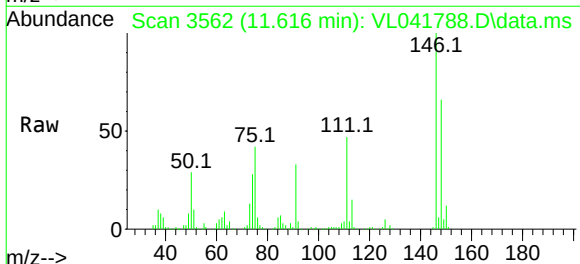
Tgt Ion: 119 Resp: 314940  
Ion Ratio Lower Upper  
119 100  
91 85.5 67.0 100.4  
134 19.9 16.5 24.7

Manual Integrations  
APPROVED

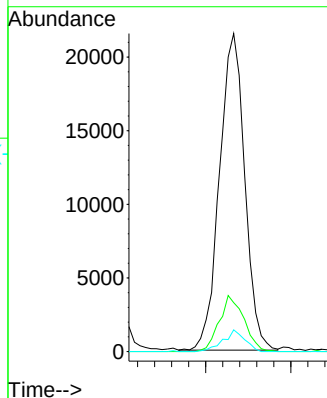
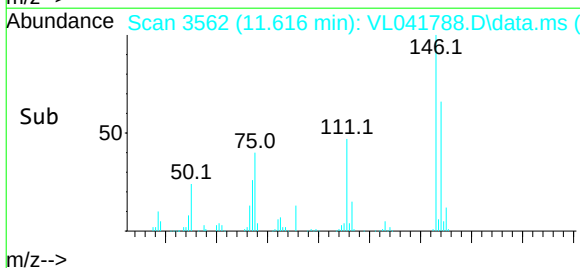
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

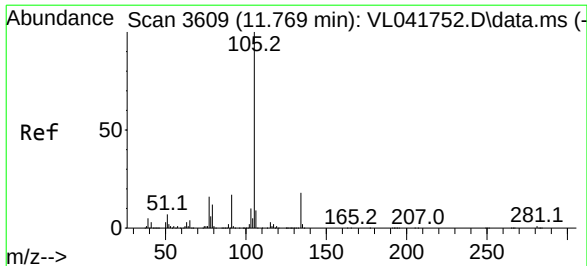


#66  
Benzyl Chloride  
Concen: 7.426 ppbv  
RT: 11.616 min Scan# 3562  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



Tgt Ion: 91 Resp: 22164  
Ion Ratio Lower Upper  
91 100  
126 17.3 13.9 20.9  
128 5.8 4.4 6.6





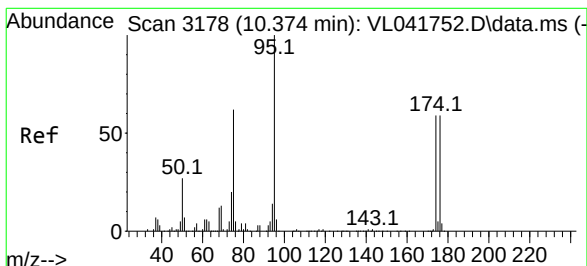
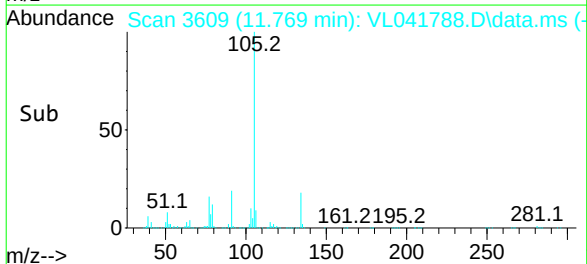
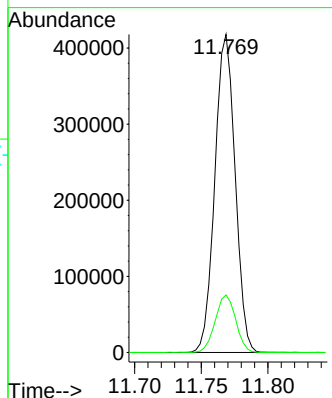
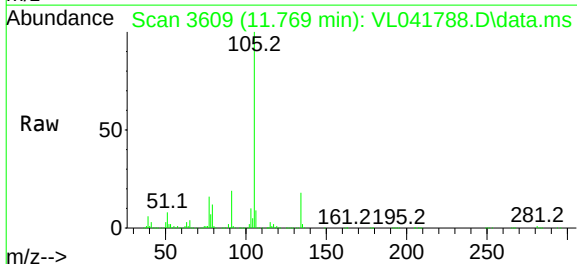
#67  
sec-Butylbenzene  
Concen: 9.431 ppbv  
RT: 11.769 min Scan# 3609  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 105 Resp: 442201  
Ion Ratio Lower Upper  
105 100  
134 18.3 14.5 21.7

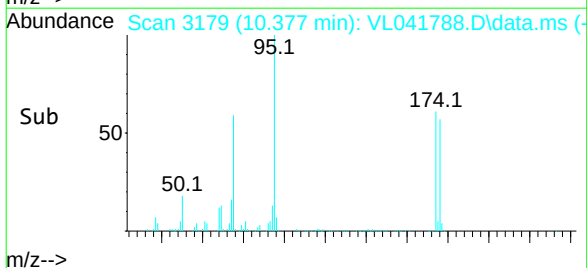
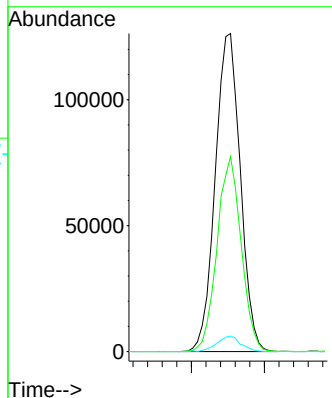
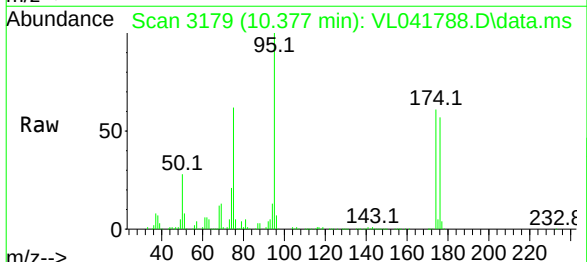
Manual Integrations  
APPROVED

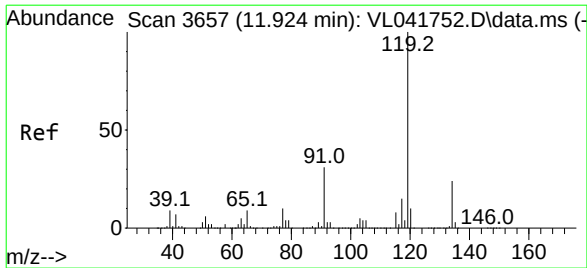
Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.503 ppbv  
RT: 10.377 min Scan# 3179  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 95 Resp: 150705  
Ion Ratio Lower Upper  
95 100  
174 59.0 47.6 71.4  
175 4.7 3.7 5.5





#69

p-Isopropyltoluene

Concen: 9.569 ppbv

RT: 11.927 min Scan# 3657

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

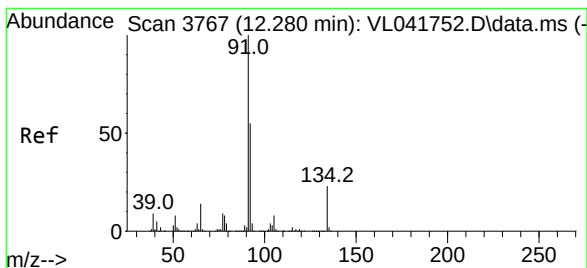
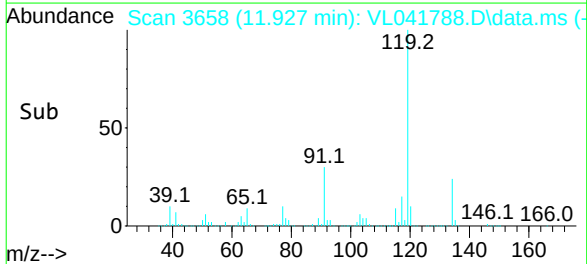
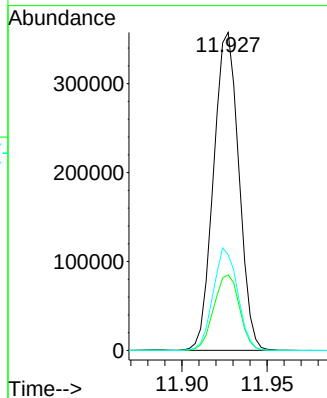
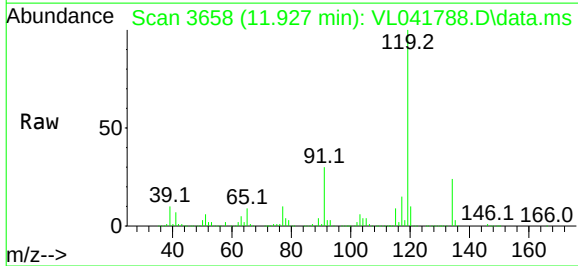
VSTDCCC010

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 119   | Resp: | 369746 |
| Ion      | Ratio | Lower | Upper  |
| 119      | 100   |       |        |
| 134      | 24.2  | 19.6  | 29.4   |
| 91       | 31.4  | 24.4  | 36.6   |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#70

n-Butylbenzene

Concen: 9.999 ppbv

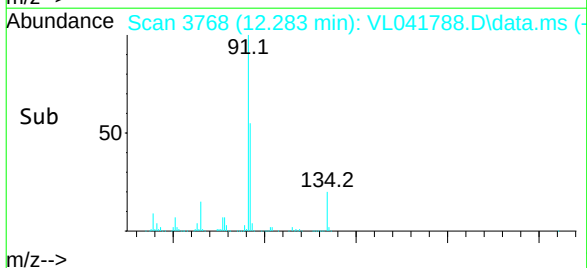
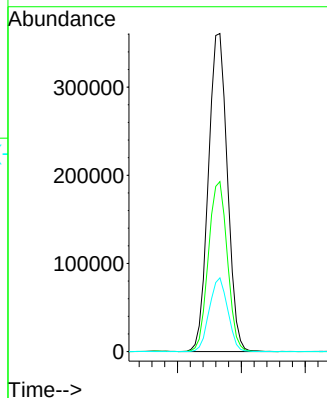
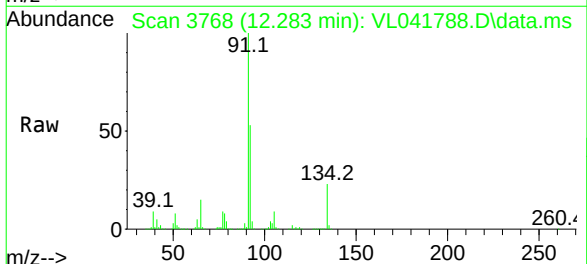
RT: 12.283 min Scan# 3768

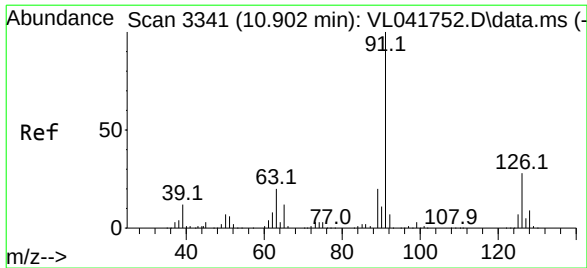
Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 373294 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 53.4  | 43.2  | 64.8   |
| 134      | 22.5  | 18.2  | 27.4   |





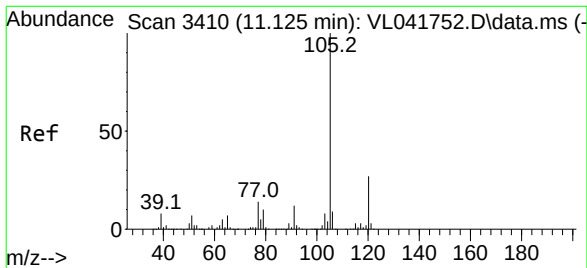
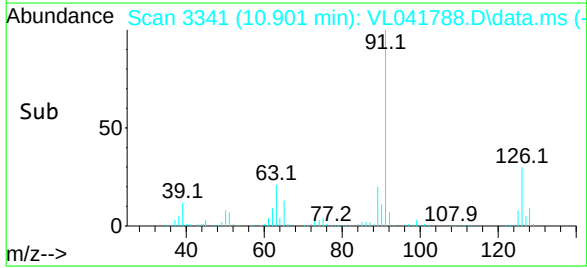
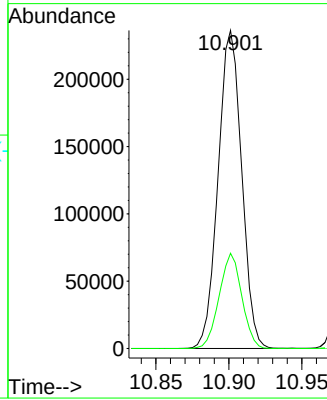
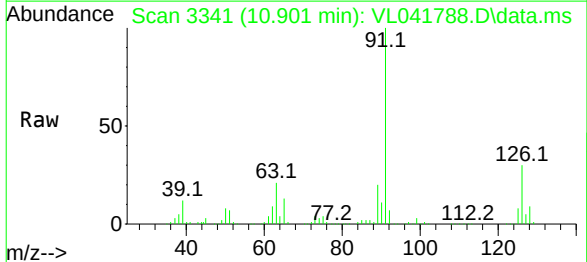
#71  
2-Chlorotoluene  
Concen: 9.240 ppbv  
RT: 10.901 min Scan# 3341  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Instrument : MSVOA\_L  
ClientSampleId : VSTDCCC010

Tgt Ion: 91 Resp: 264866  
Ion Ratio Lower Upper  
91 100  
126 28.7 11.6 46.4

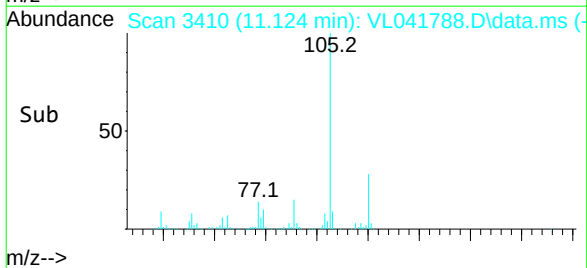
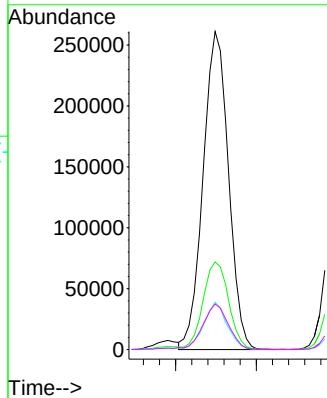
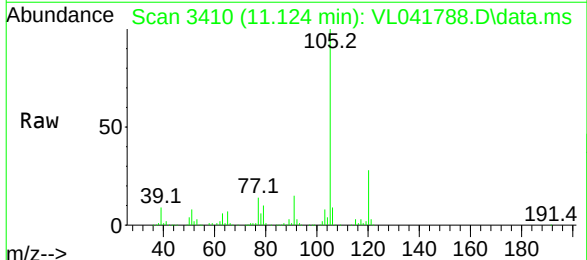
Manual Integrations  
APPROVED

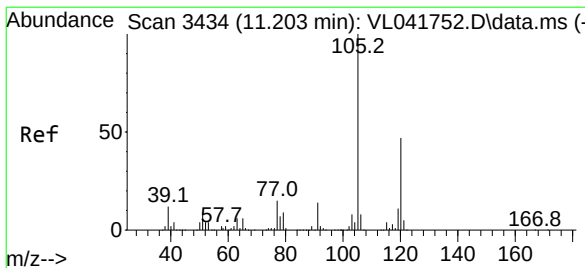
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#72  
4-Ethyltoluene  
Concen: 9.676 ppbv  
RT: 11.124 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 285469  
Ion Ratio Lower Upper  
105 100  
120 28.7 23.3 34.9  
91 14.4 10.9 16.3  
77 14.8 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 9.918 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion:105 Resp: 242783

Ion Ratio Lower Upper

105 100

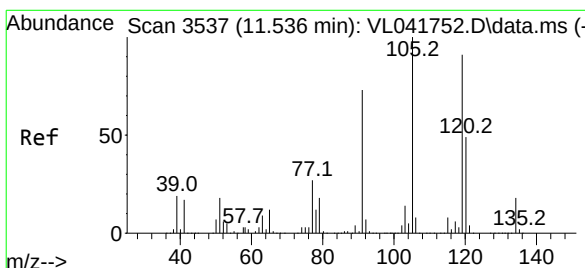
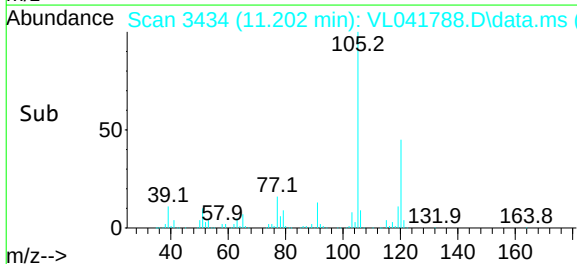
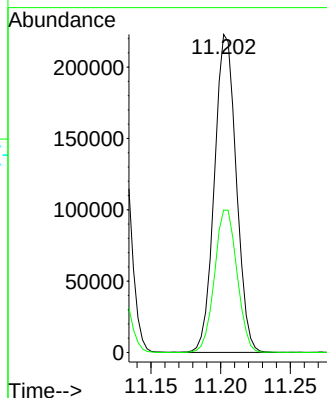
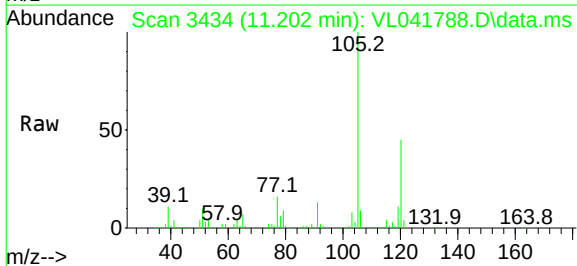
120 44.8 37.4 56.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024

Supervised By :Mahesh Dadoda 12/19/2024



#74

1,2,4-Trimethylbenzene

Concen: 10.003 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 263301

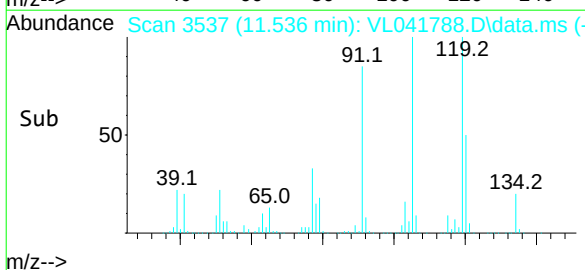
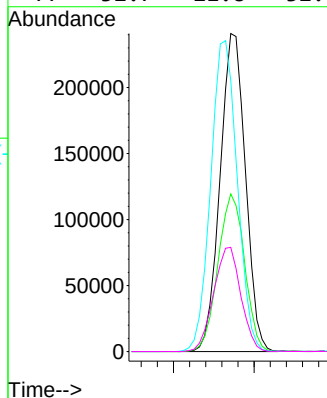
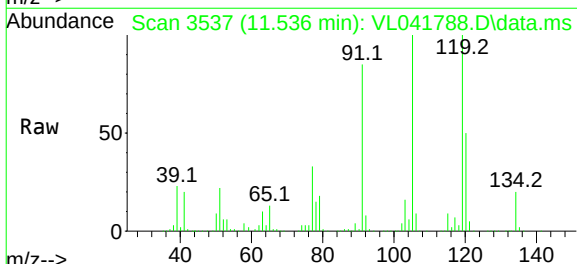
Ion Ratio Lower Upper

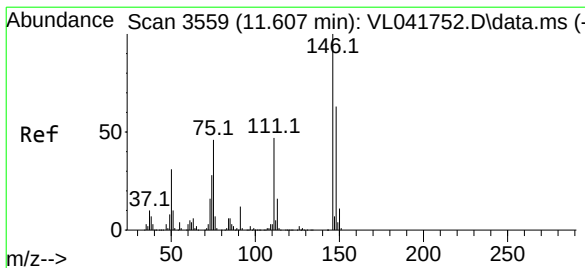
105 100

120 49.6 39.0 58.4

91 85.2 58.1 87.1

77 32.7 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 9.227 ppbv

RT: 11.607 min Scan# 3559

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

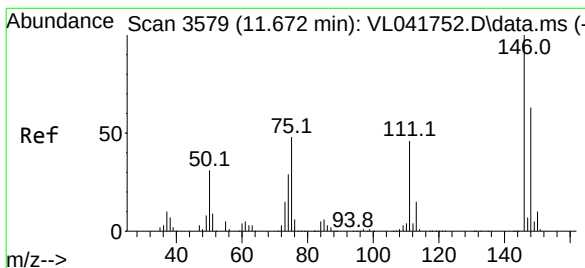
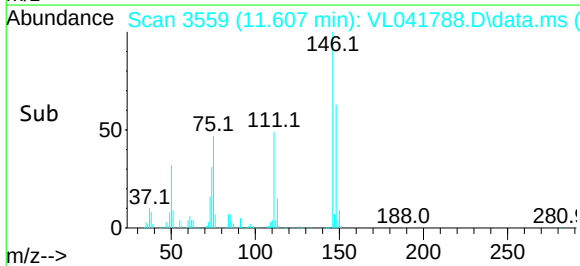
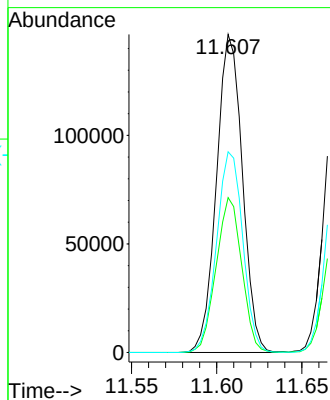
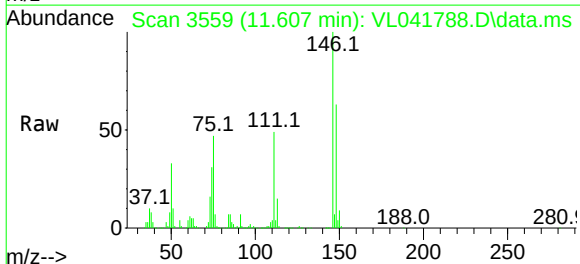
ClientSampleId :

VSTDCCC010

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 146   | Resp: | 154857 |
| Ion Ratio | Lower | Upper |        |
| 146       | 100   |       |        |
| 111       | 48.3  | 23.4  | 70.3   |
| 148       | 64.0  | 31.6  | 95.0   |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#76

1,4-Dichlorobenzene

Concen: 9.296 ppbv

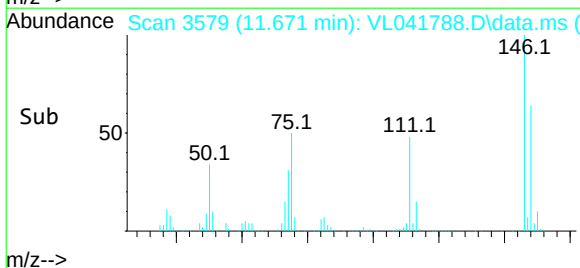
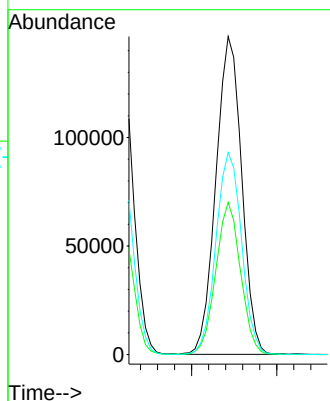
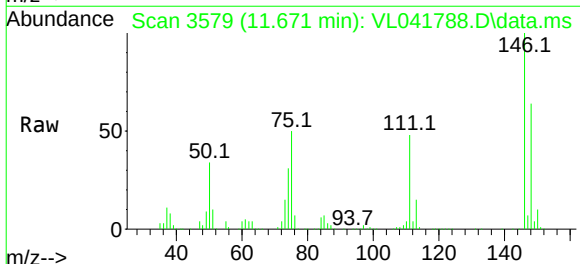
RT: 11.671 min Scan# 3579

Delta R.T. -0.000 min

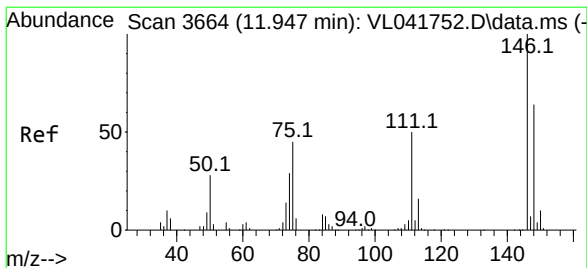
Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 146   | Resp: | 154115 |
| Ion Ratio | Lower | Upper |        |
| 146       | 100   |       |        |
| 111       | 46.1  | 22.7  | 68.1   |
| 148       | 63.5  | 31.4  | 94.0   |

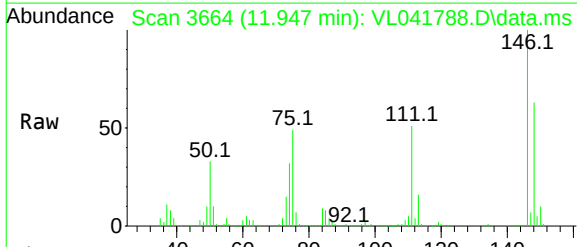






#77  
1,2-Dichlorobenzene  
Concen: 9.002 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

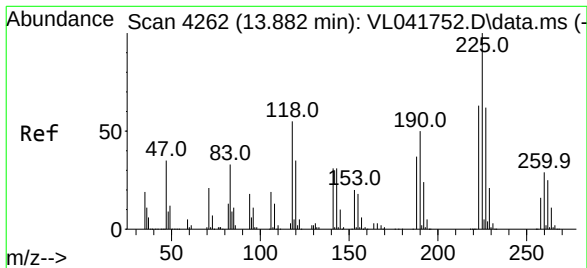
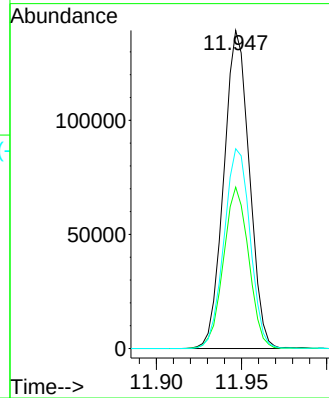
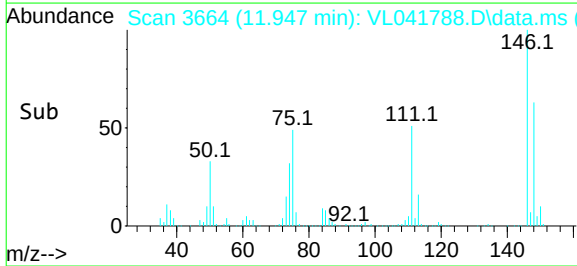
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDC010



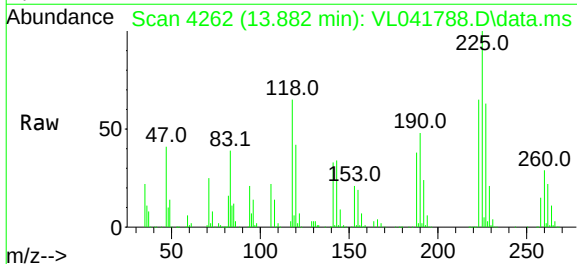
Tgt Ion:146 Resp: 145375  
Ion Ratio Lower Upper  
146 100  
111 50.2 24.8 74.3  
148 64.4 31.8 95.4

Manual Integrations  
APPROVED

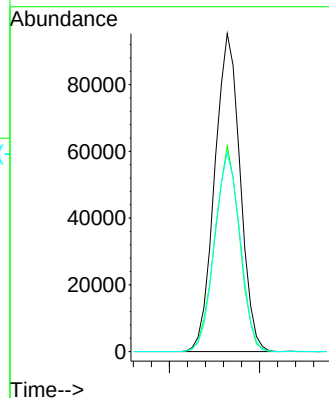
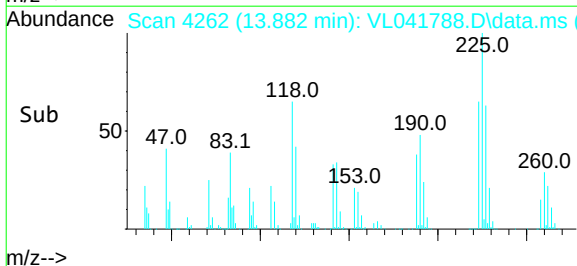
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

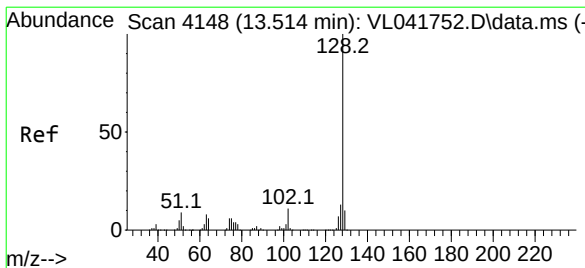


#78  
Hexachloro-1,3-Butadiene  
Concen: 7.804 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29



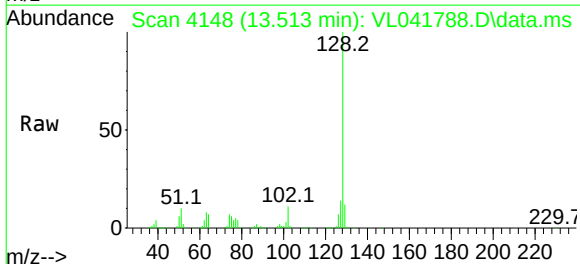
Tgt Ion:225 Resp: 93437  
Ion Ratio Lower Upper  
225 100  
223 62.8 50.5 75.7  
227 63.0 50.3 75.5





#79  
Naphthalene  
Concen: 10.921 ppbv  
RT: 13.513 min Scan# 4148  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

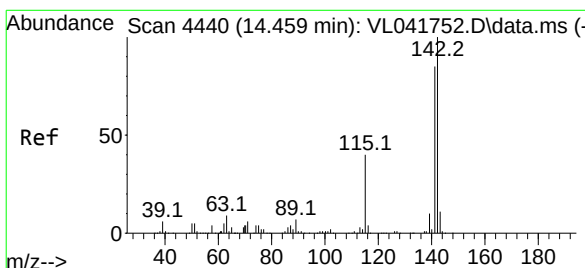
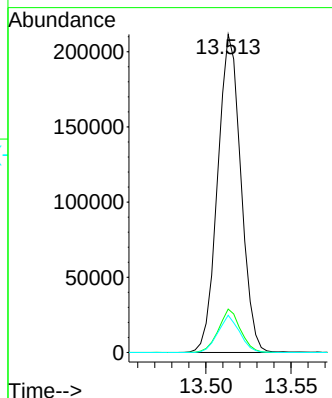
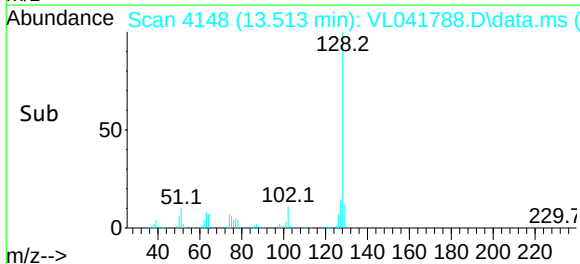
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010



Tgt Ion:128 Resp: 200311  
Ion Ratio Lower Upper  
128 100  
127 13.7 10.7 16.1  
129 11.7 8.2 12.4

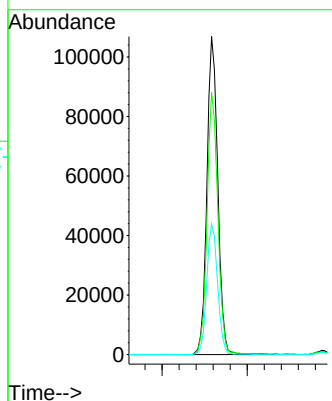
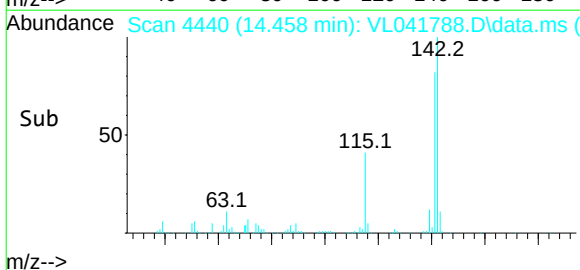
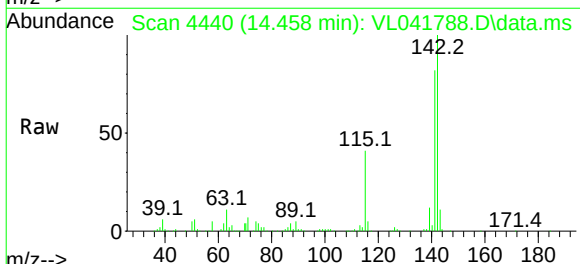
Manual Integrations  
APPROVED

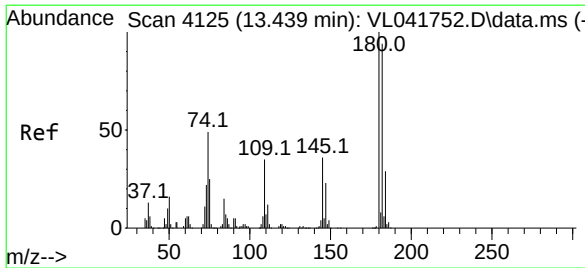
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#80  
Naphthalene,2-methyl-  
Concen: 16.728 ppbv  
RT: 14.458 min Scan# 4440  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

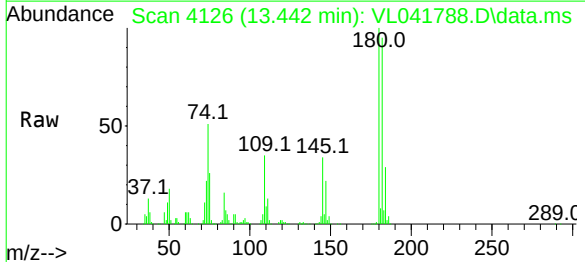
Tgt Ion:142 Resp: 94903  
Ion Ratio Lower Upper  
142 100  
141 81.8 68.4 102.6  
115 41.3 32.5 48.7





#81  
 1,2,4-Trichlorobenzene  
 Concen: 9.346 ppbv  
 RT: 13.442 min Scan# 41  
 Delta R.T. 0.003 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

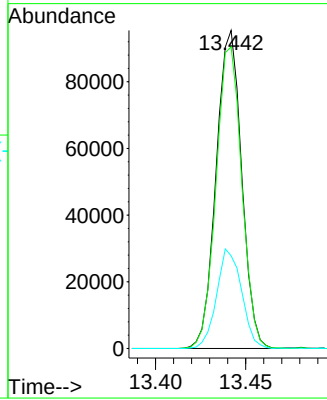
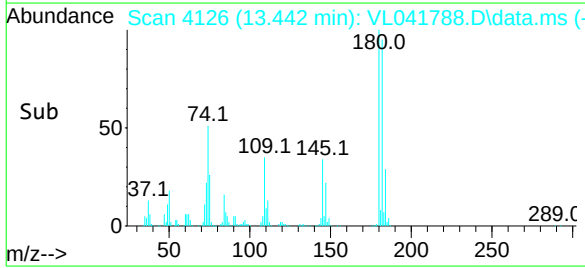
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 93675 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 96.0  | 77.0  | 115.6 |
| 184       | 30.8  | 23.8  | 35.8  |

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041788.D  
Acq On : 18 Dec 2024 10:29  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Dec 19 07:49:00 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|--------|------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0  | 111   | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.779 | 1.484  | 16.6 | 98    | 0.00     |
| 3    | Chlorodifluoromethane       | 1.631 | 1.474  | 9.6  | 104   | 0.00     |
| 4    | Chloromethane               | 0.696 | 0.637  | 8.5  | 112   | 0.00     |
| 5 T  | Vinyl Chloride              | 0.701 | 0.613  | 12.6 | 109   | 0.00     |
| 6 T  | Bromomethane                | 0.331 | 0.292  | 11.8 | 110   | 0.00     |
| 7    | Chloroethane                | 0.272 | 0.253  | 7.0  | 110   | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.593 | 1.468  | 7.8  | 111   | 0.00     |
| 9 T  | Propene                     | 0.707 | 0.545  | 22.9 | 95    | 0.00     |
| 10 T | Heptane                     | 1.816 | 1.468  | 19.2 | 95    | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.890 | 1.767  | 6.5  | 109   | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.437 | 1.269  | 11.7 | 105   | 0.00     |
| 13   | Ethanol                     | 0.059 | 0.043# | 27.1 | 132   | 0.00     |
| 14 T | Bromoethene                 | 0.485 | 0.436  | 10.1 | 102   | 0.00     |
| 15 T | Acetone                     | 1.946 | 1.464  | 24.8 | 111   | 0.00     |
| 16 T | 1,3-Butadiene               | 0.766 | 0.701  | 8.5  | 113   | 0.00     |
| 17   | tert-Butyl alcohol          | 1.930 | 1.782  | 7.7  | 108   | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.603 | 0.542  | 10.1 | 106   | 0.00     |
| 19 T | Isopropyl Alcohol           | 1.167 | 0.853  | 26.9 | 110   | 0.00     |
| 20 T | Methylene Chloride          | 0.555 | 0.469  | 15.5 | 109   | 0.00     |
| 21 T | Allyl Chloride              | 1.055 | 0.979  | 7.2  | 107   | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.690 | 0.596  | 13.6 | 103   | 0.00     |
| 23 T | Vinyl Acetate               | 0.903 | 0.693  | 23.3 | 97    | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.396 | 1.260  | 9.7  | 107   | 0.00     |
| 25 T | Ethyl Acetate               | 3.620 | 3.140  | 13.3 | 101   | 0.00     |
| 26 T | Hexane                      | 1.374 | 1.152  | 16.2 | 98    | 0.00     |
| 27 T | Carbon Disulfide            | 1.238 | 1.122  | 9.4  | 92    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 1.114 | 0.894  | 19.7 | 90    | 0.00     |
| 29 T | Chloroform                  | 2.093 | 1.914  | 8.6  | 108   | 0.00     |
| 30 T | Cyclohexane                 | 1.169 | 0.978  | 16.3 | 99    | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 1.419 | 1.216  | 14.3 | 101   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 2.128 | 1.894  | 11.0 | 104   | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0  | 108   | 0.00     |
| 34 T | 2-Butanone                  | 0.805 | 0.703  | 12.7 | 103   | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.710 | 0.745  | -4.9 | 106   | 0.00     |
| 36 T | Benzene                     | 1.034 | 0.898  | 13.2 | 99    | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.644 | 0.612  | 5.0  | 109   | 0.00     |
| 38 T | Trichloroethene             | 0.439 | 0.354  | 19.4 | 98    | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.374 | 0.323  | 13.6 | 99    | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.183 | 0.153  | 16.4 | 99    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.451 | 0.377  | 16.4 | 95    | 0.00     |
| 42 T | Bromodichloromethane        | 0.740 | 0.710  | 4.1  | 99    | 0.00     |
| 43   | Methyl Methacrylate         | 0.394 | 0.351  | 10.9 | 96    | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.767 | 1.524  | 13.8 | 98    | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.408 | 0.351  | 14.0 | 90    | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.518 | 0.450  | 13.1 | 91    | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.391 | 0.341  | 12.8 | 100   | 0.00     |
| 48 T | Dibromochloromethane        | 0.534 | 0.514  | 3.7  | 94    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041788.D  
Acq On : 18 Dec 2024 10:29  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Dec 19 07:49:00 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|-------|-------|--------|-------|----------|
| 49 T | Bromoform                 | 0.437 | 0.422 | 3.4    | 91    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 1.095 | 0.942 | 14.0   | 96    | 0.00     |
| 51 T | 2-Hexanone                | 0.888 | 0.752 | 15.3   | 95    | 0.00     |
| 52 T | Tetrachloroethene         | 0.385 | 0.301 | 21.8   | 95    | 0.00     |
| 53 T | Toluene                   | 1.173 | 0.984 | 16.1   | 95    | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.538 | 0.475 | 11.7   | 100   | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 105   | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.530 | 0.510 | 3.8    | 101   | 0.00     |
| 57 T | Chlorobenzene             | 1.023 | 0.912 | 10.9   | 101   | 0.00     |
| 58 T | Ethyl Benzene             | 1.800 | 1.634 | 9.2    | 97    | 0.00     |
| 59 T | m/p-Xylene                | 1.448 | 1.355 | 6.4    | 101   | 0.00     |
| 60 T | o-Xylene                  | 1.452 | 1.348 | 7.2    | 100   | 0.00     |
| 61 T | Styrene                   | 0.628 | 0.599 | 4.6    | 94    | 0.00     |
| 62   | Isopropylbenzene          | 2.181 | 2.049 | 6.1    | 101   | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.909 | 0.837 | 7.9    | 105   | 0.00     |
| 64   | n-propylbenzene           | 0.551 | 0.523 | 5.1    | 103   | 0.00     |
| 65   | tert-Butylbenzene         | 1.968 | 1.829 | 7.1    | 102   | 0.00     |
| 66 T | Benzyl Chloride           | 0.173 | 0.129 | 25.4   | 71    | 0.00     |
| 67   | sec-Butylbenzene          | 2.723 | 2.568 | 5.7    | 103   | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.833 | 0.875 | -5.0   | 109   | 0.00     |
| 69   | p-Isopropyltoluene        | 2.244 | 2.147 | 4.3    | 102   | 0.00     |
| 70   | n-Butylbenzene            | 2.168 | 2.168 | 0.0    | 104   | 0.00     |
| 71   | 2-Chlorotoluene           | 1.665 | 1.538 | 7.6    | 100   | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.713 | 1.658 | 3.2    | 101   | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 1.422 | 1.410 | 0.8    | 101   | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.529 | 1.529 | 0.0    | 103   | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.975 | 0.899 | 7.8    | 102   | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.963 | 0.895 | 7.1    | 101   | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.938 | 0.844 | 10.0   | 103   | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.695 | 0.543 | 21.9   | 98    | 0.00     |
| 79 T | Naphthalene               | 1.065 | 1.163 | -9.2   | 97    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.329 | 0.551 | -67.5# | 89    | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.582 | 0.544 | 6.5    | 92    | 0.00     |

(#) = Out of Range

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



# QC SAMPLE DATA

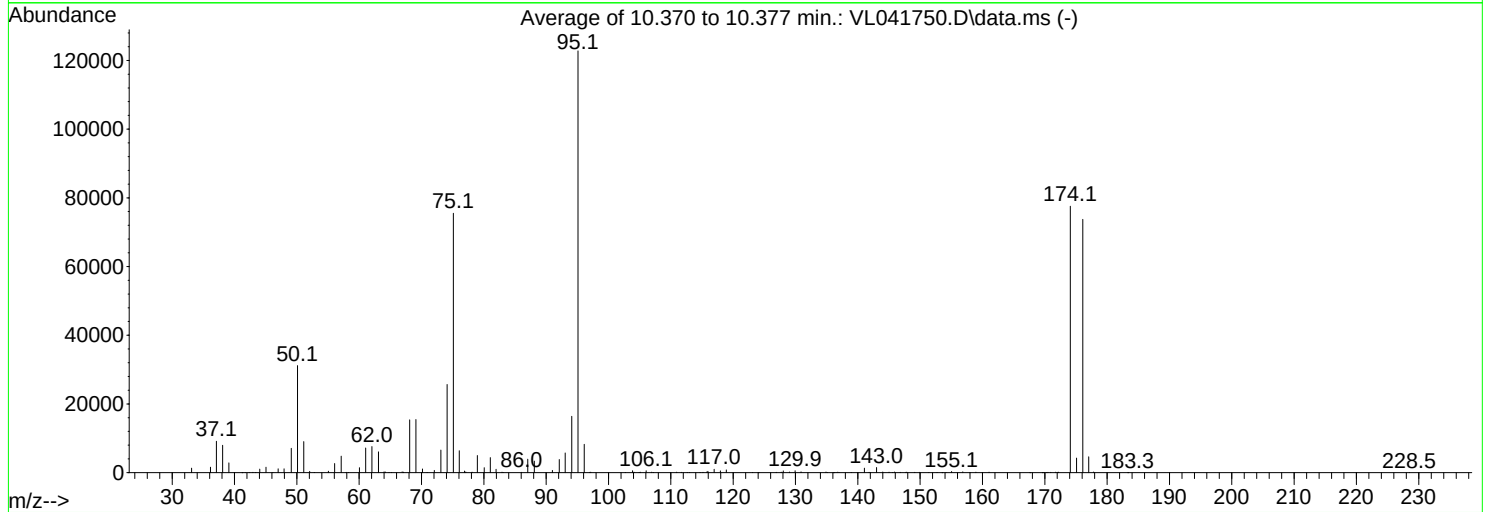
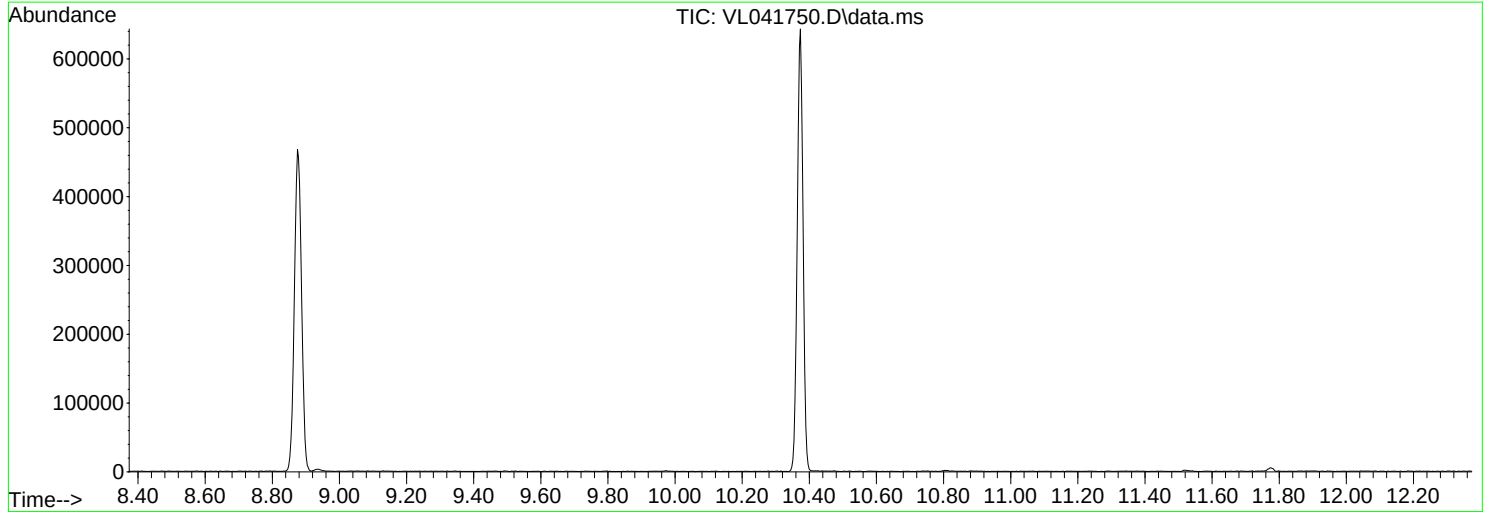
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041750.D  
Acq On : 16 Dec 2024 12:02  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Thu Dec 19 07:32:09 2024



AutoFind: Scans 3177, 3178, 3179; Background Corrected with Scan 3162

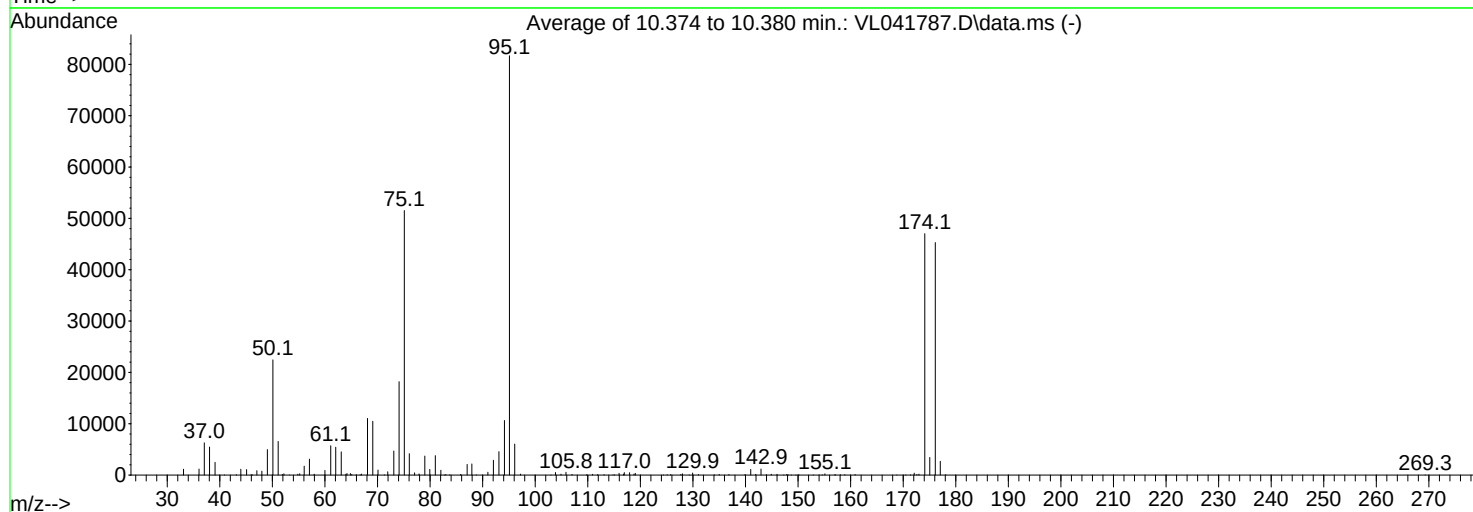
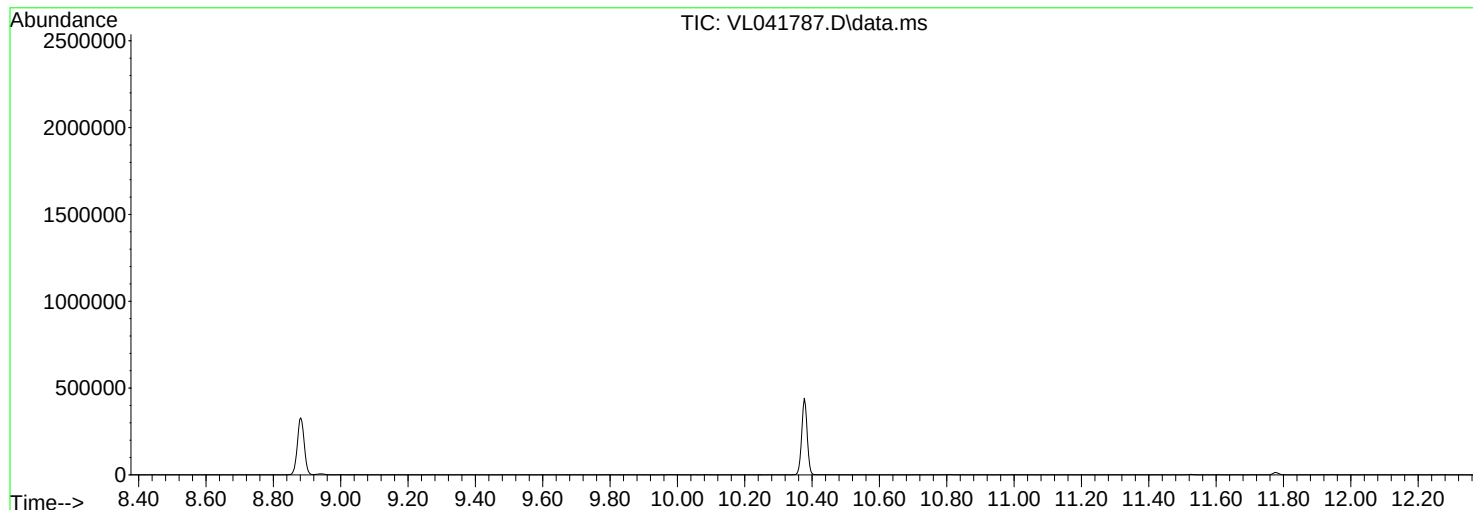
| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 25.4  | 31157  | PASS      |
| 75     | 95      | 30     | 66     | 61.5  | 75504  | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 122797 | PASS      |
| 96     | 95      | 5      | 9      | 6.7   | 8239   | PASS      |
| 173    | 174     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 174    | 95      | 50     | 120    | 63.2  | 77565  | PASS      |
| 175    | 174     | 4      | 9      | 5.5   | 4234   | PASS      |
| 176    | 174     | 93     | 101    | 95.0  | 73717  | PASS      |
| 177    | 176     | 5      | 9      | 6.3   | 4630   | PASS      |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041787.D  
Acq On : 18 Dec 2024 08:06  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Thu Dec 19 07:32:09 2024



AutoFind: Scans 3178, 3179, 3180; Background Corrected with Scan 3165

| 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              | 8               | 40              | 27.5         | 22445      | PASS                |
| 75             | 95              | 30              | 66              | 63.1         | 51533      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 81685      | PASS                |
| 96             | 95              | 5               | 9               | 7.4          | 6040       | PASS                |
| 173            | 174             | 0.00            | 2               | 0.4          | 189        | PASS                |
| 174            | 95              | 50              | 120             | 57.6         | 47024      | PASS                |
| 175            | 174             | 4               | 9               | 7.3          | 3435       | PASS                |
| 176            | 174             | 93              | 101             | 96.3         | 45299      | PASS                |
| 177            | 176             | 5               | 9               | 5.9          | 2683       | PASS                |



## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABL02     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABL02     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041790.D        | 1         |           | 12/18/24 12:28 | VL121824      |

| CAS Number     | Parameter                      | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|----------------|--------------------------------|---------------|----------------|-----------|-------|------------|-------|
| <b>TARGETS</b> |                                |               |                |           |       |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.21          | 1.04           | U         | 1.04  | 2.47       | ug/m3 |
| 74-87-3        | Chloromethane                  | 0.10          | 0.21           | U         | 0.21  | 1.03       | ug/m3 |
| 75-01-4        | Vinyl Chloride                 | 0.010         | 0.030          | U         | 0.030 | 0.080      | ug/m3 |
| 74-83-9        | Bromomethane                   | 0.14          | 0.54           | U         | 0.54  | 1.94       | ug/m3 |
| 75-00-3        | Chloroethane                   | 0.17          | 0.45           | U         | 0.45  | 1.32       | ug/m3 |
| 109-99-9       | Tetrahydrofuran                | 0.13          | 0.38           | U         | 0.38  | 1.47       | ug/m3 |
| 75-69-4        | Trichlorofluoromethane         | 0.16          | 0.90           | U         | 0.90  | 2.81       | ug/m3 |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.16          | 1.23           | U         | 1.23  | 3.83       | ug/m3 |
| 76-14-2        | Dichlorotetrafluoroethane      | 0.090         | 0.63           | U         | 0.63  | 3.49       | ug/m3 |
| 75-65-0        | tert-Butyl alcohol             | 0.19          | 0.58           | U         | 0.58  | 1.52       | ug/m3 |
| 142-82-5       | Heptane                        | 0.11          | 0.45           | U         | 0.45  | 2.05       | ug/m3 |
| 75-35-4        | 1,1-Dichloroethene             | 0.14          | 0.56           | U         | 0.56  | 1.98       | ug/m3 |
| 67-64-1        | Acetone                        | 0.24          | 0.57           | U         | 0.57  | 1.19       | ug/m3 |
| 75-15-0        | Carbon Disulfide               | 0.16          | 0.50           | U         | 0.50  | 1.56       | ug/m3 |
| 1634-04-4      | Methyl tert-Butyl Ether        | 0.12          | 0.43           | U         | 0.43  | 1.80       | ug/m3 |
| 75-09-2        | Methylene Chloride             | 0.19          | 0.66           | U         | 0.66  | 1.74       | ug/m3 |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.19          | 0.75           | U         | 0.75  | 1.98       | ug/m3 |
| 75-34-3        | 1,1-Dichloroethane             | 0.13          | 0.53           | U         | 0.53  | 2.02       | ug/m3 |
| 110-82-7       | Cyclohexane                    | 0.22          | 0.76           | U         | 0.76  | 1.72       | ug/m3 |
| 78-93-3        | 2-Butanone                     | 0.12          | 0.35           | U         | 0.35  | 1.47       | ug/m3 |
| 56-23-5        | Carbon Tetrachloride           | 0.010         | 0.060          | U         | 0.060 | 0.19       | ug/m3 |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.090         | 0.36           | U         | 0.36  | 1.98       | ug/m3 |
| 67-66-3        | Chloroform                     | 0.080         | 0.39           | U         | 0.39  | 2.44       | ug/m3 |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.010         | 0.050          | U         | 0.050 | 0.16       | ug/m3 |
| 540-84-1       | 2,2,4-Trimethylpentane         | 0.10          | 0.47           | U         | 0.47  | 2.34       | ug/m3 |
| 71-43-2        | Benzene                        | 0.090         | 0.29           | U         | 0.29  | 1.60       | ug/m3 |
| 107-06-2       | 1,2-Dichloroethane             | 0.090         | 0.36           | U         | 0.36  | 2.02       | ug/m3 |
| 79-01-6        | Trichloroethene                | 0.020         | 0.11           | U         | 0.11  | 0.16       | ug/m3 |
| 78-87-5        | 1,2-Dichloropropane            | 0.11          | 0.51           | U         | 0.51  | 2.31       | ug/m3 |
| 75-27-4        | Bromodichloromethane           | 0.080         | 0.54           | U         | 0.54  | 3.35       | ug/m3 |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.090         | 0.37           | U         | 0.37  | 2.05       | ug/m3 |
| 108-88-3       | Toluene                        | 0.11          | 0.41           | U         | 0.41  | 1.88       | ug/m3 |
| 10061-02-6     | t-1,3-Dichloropropene          | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 10061-01-5     | cis-1,3-Dichloropropene        | 0.060         | 0.27           | U         | 0.27  | 2.27       | ug/m3 |
| 79-00-5        | 1,1,2-Trichloroethane          | 0.070         | 0.38           | U         | 0.38  | 2.73       | ug/m3 |

## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABL02     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABL02     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041790.D        | 1         |           | 12/18/24 12:28 | VL121824      |

| CAS Number                | Parameter                 | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL      | LOQ / CRQL | Units   |
|---------------------------|---------------------------|---------------|----------------|-----------|----------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 0.070         | 0.60           | U         | 0.60     | 4.26       | ug/m3   |
| 106-93-4                  | 1,2-Dibromoethane         | 0.070         | 0.54           | U         | 0.54     | 0.77       | ug/m3   |
| 127-18-4                  | Tetrachloroethene         | 0.020         | 0.14           | U         | 0.14     | 0.20       | ug/m3   |
| 108-90-7                  | Chlorobenzene             | 0.080         | 0.37           | U         | 0.37     | 2.30       | ug/m3   |
| 100-41-4                  | Ethyl Benzene             | 0.12          | 0.52           | U         | 0.52     | 2.17       | ug/m3   |
| 179601-23-1               | m/p-Xylene                | 0.21          | 0.91           | U         | 0.91     | 4.34       | ug/m3   |
| 95-47-6                   | o-Xylene                  | 0.12          | 0.52           | U         | 0.52     | 2.17       | ug/m3   |
| 100-42-5                  | Styrene                   | 0.11          | 0.47           | U         | 0.47     | 2.13       | ug/m3   |
| 75-25-2                   | Bromoform                 | 0.060         | 0.62           | U         | 0.62     | 5.17       | ug/m3   |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 0.010         | 0.070          | U         | 0.070    | 0.21       | ug/m3   |
| 95-49-8                   | 2-Chlorotoluene           | 0.11          | 0.57           | U         | 0.57     | 2.59       | ug/m3   |
| 108-67-8                  | 1,3,5-Trimethylbenzene    | 0.11          | 0.54           | U         | 0.54     | 2.46       | ug/m3   |
| 95-63-6                   | 1,2,4-Trimethylbenzene    | 0.080         | 0.39           | U         | 0.39     | 2.46       | ug/m3   |
| 541-73-1                  | 1,3-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 106-46-7                  | 1,4-Dichlorobenzene       | 0.050         | 0.30           | U         | 0.30     | 3.01       | ug/m3   |
| 95-50-1                   | 1,2-Dichlorobenzene       | 0.080         | 0.48           | U         | 0.48     | 3.01       | ug/m3   |
| 120-82-1                  | 1,2,4-Trichlorobenzene    | 0.090         | 0.67           | U         | 0.67     | 3.71       | ug/m3   |
| 87-68-3                   | Hexachloro-1,3-Butadiene  | 0.090         | 0.96           | U         | 0.96     | 5.33       | ug/m3   |
| 106-99-0                  | 1,3-Butadiene             | 0.13          | 0.29           | U         | 0.29     | 1.11       | ug/m3   |
| 91-20-3                   | Naphthalene               | 0.080         | 0.42           | U         | 0.42     | 0.52       | ug/m3   |
| 622-96-8                  | 4-Ethyltoluene            | 0.12          | 0.59           | U         | 0.59     | 2.46       | ug/m3   |
| 110-54-3                  | Hexane                    | 0.11          | 0.39           | U         | 0.39     | 1.76       | ug/m3   |
| 107-05-1                  | Allyl Chloride            | 0.15          | 0.47           | U         | 0.47     | 1.57       | ug/m3   |
| 123-91-1                  | 1,4-Dioxane               | 0.21          | 0.76           | U         | 0.76     | 1.80       | ug/m3   |
| 80-62-6                   | Methyl Methacrylate       | 0.090         | 0.37           | U         | 0.37     | 2.05       | ug/m3   |
| <b>SURROGATES</b>         |                           |               |                |           |          |            |         |
| 460-00-4                  | 1-Bromo-4-Fluorobenzene   | 10.1          |                |           | 65 - 135 | 101%       | SPK: 10 |
| <b>INTERNAL STANDARDS</b> |                           |               |                |           |          |            |         |
| 74-97-5                   | Bromochloromethane        | 70200         |                | 2.793     |          |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 175000        |                | 3.965     |          |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 151000        |                | 8.891     |          |            |         |

## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABL02     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABL02     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041790.D        | 1         |           | 12/18/24 12:28 | VL121824      |

| CAS Number | Parameter | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|

U = Not Detected  
 RL = Reporting Limit  
 MDL = Method Detection Limit  
 E = Value Exceeds Calibration Range  
 D = Dilution

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041790.D  
Acq On : 18 Dec 2024 12:28  
Operator : SY/MD  
Sample : VL1218ABL02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABL02

Quant Time: Dec 19 07:52:46 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.793 | 49   | 70249    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.965 | 114  | 175356   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.891 | 117  | 151060   | 10.000 | ppbv  | 0.01     |

System Monitoring Compounds

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 10.383 | 95    | 127683   | 10.143   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.400% |

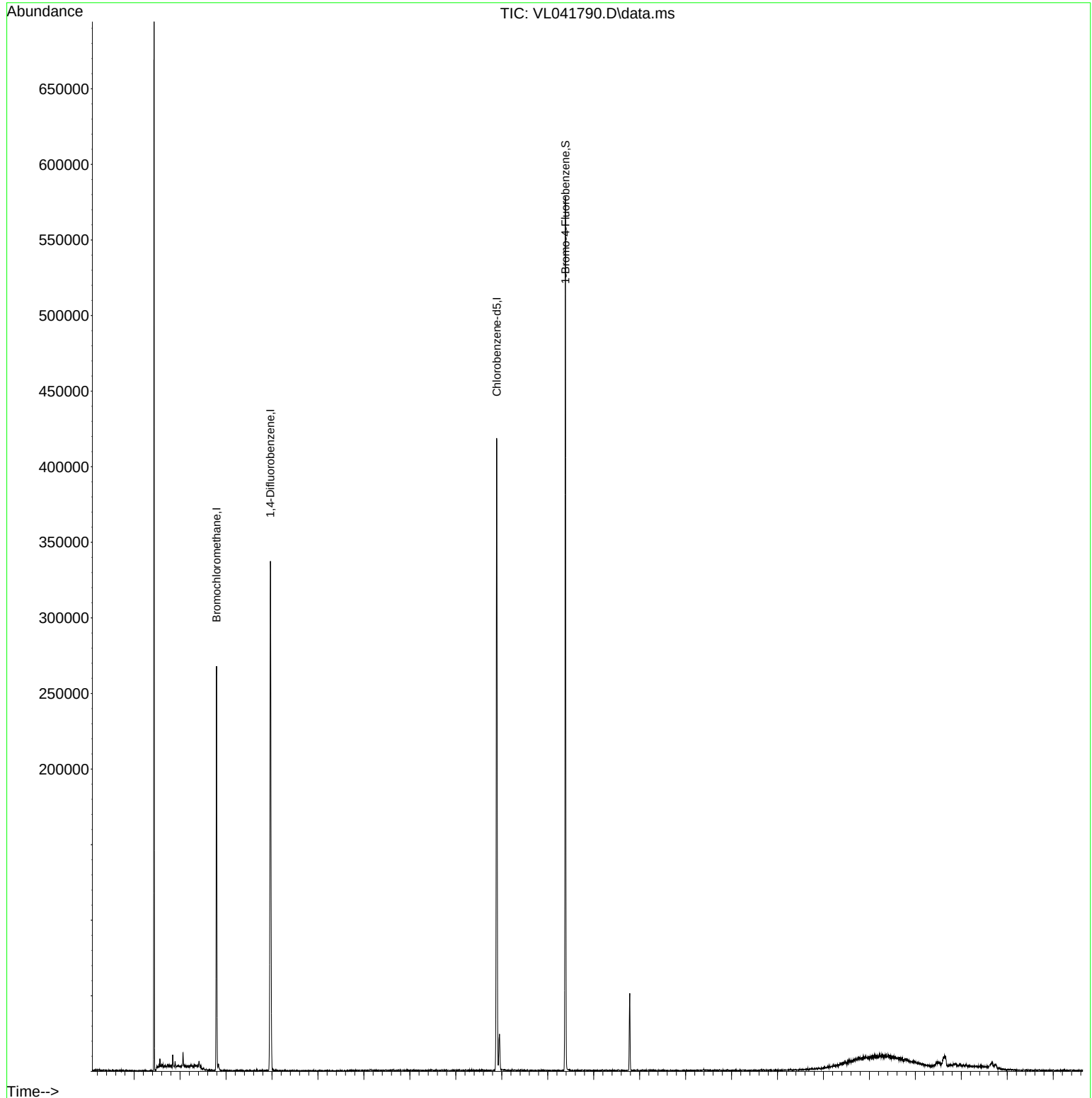
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

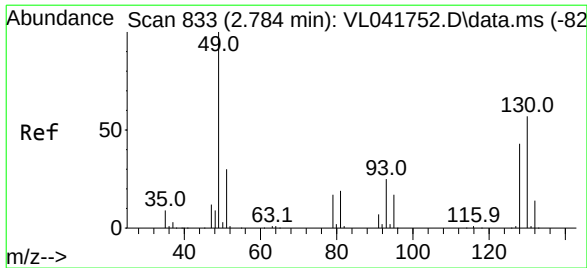
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041790.D  
Acq On : 18 Dec 2024 12:28  
Operator : SY/MD  
Sample : VL1218ABL02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABL02

Quant Time: Dec 19 07:52:46 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration





Bromochloromethane

Concen: 10.000 ppbv

RT: 2.793 min Scan# 833

Delta R.T. 0.009 min

Lab File: VL041790.D

Acq: 18 Dec 2024 12:28

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABL02

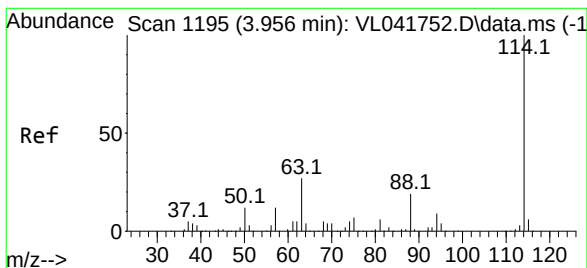
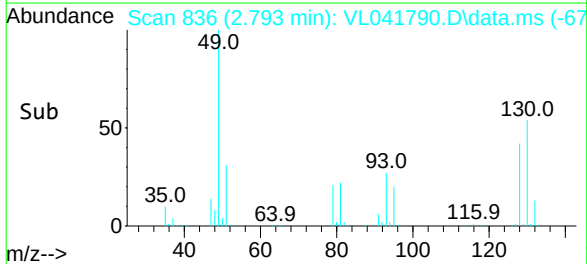
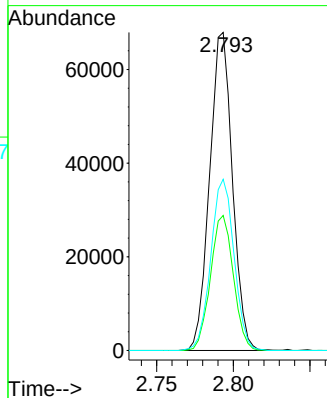
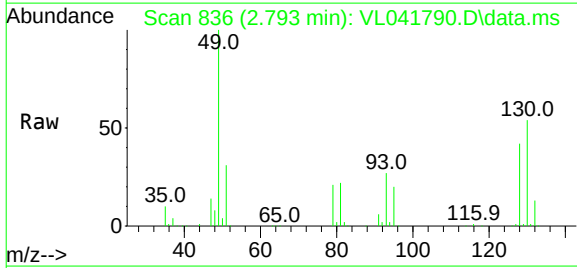
Tgt Ion: 49 Resp: 70249

Ion Ratio Lower Upper

49 100

128 42.7 21.6 64.6

130 55.0 28.3 85.0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.965 min Scan# 1198

Delta R.T. 0.009 min

Lab File: VL041790.D

Acq: 18 Dec 2024 12:28

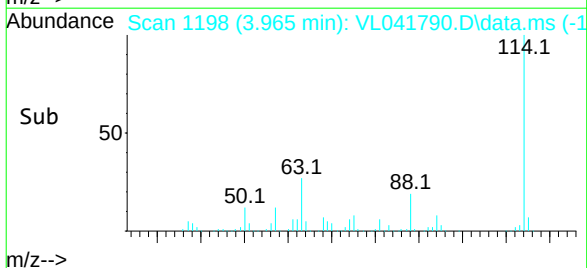
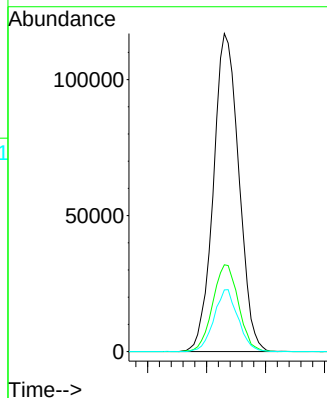
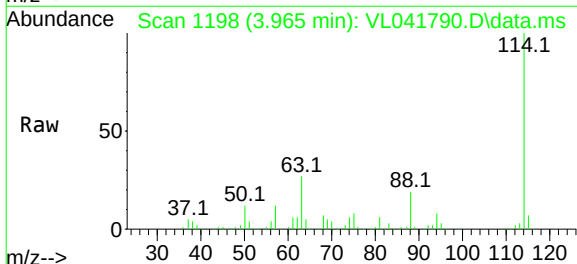
Tgt Ion: 114 Resp: 175356

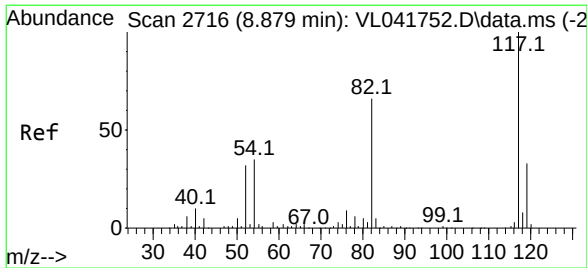
Ion Ratio Lower Upper

114 100

63 27.7 21.8 32.8

88 18.5 14.8 22.2

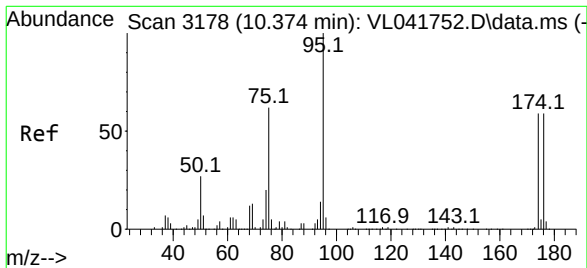
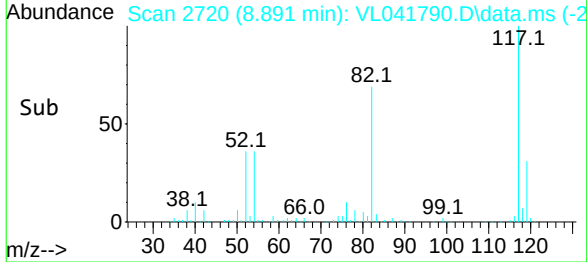
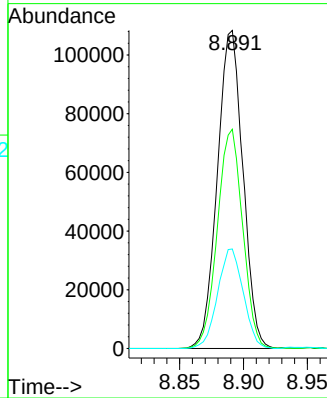
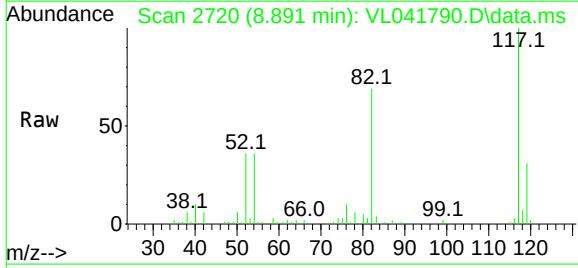




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.891 min Scan# 2716  
Delta R.T. 0.013 min  
Lab File: VL041790.D  
Acq: 18 Dec 2024 12:28

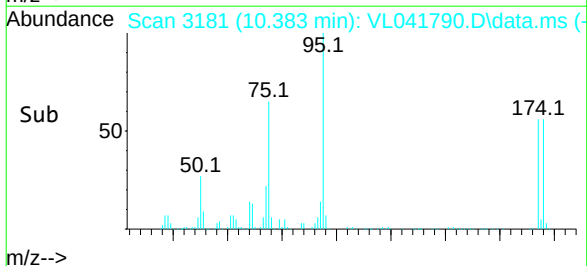
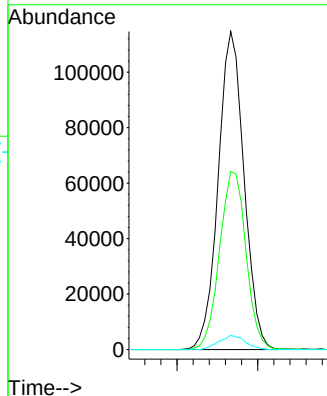
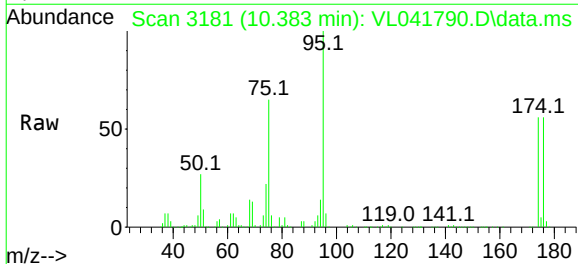
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABL02

Tgt Ion:117 Resp: 151060  
Ion Ratio Lower Upper  
117 100  
82 68.3 53.8 80.8  
119 31.4 26.7 40.1



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.143 ppbv  
RT: 10.383 min Scan# 3181  
Delta R.T. 0.009 min  
Lab File: VL041790.D  
Acq: 18 Dec 2024 12:28

Tgt Ion: 95 Resp: 127683  
Ion Ratio Lower Upper  
95 100  
174 57.4 47.6 71.4  
175 4.6 3.7 5.5



## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABS01     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABS01     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041795.D        | 1         |           | 12/18/24 16:06 | VL121824      |

| CAS Number     | Parameter                      | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL   | LOQ / CRQL | Units |
|----------------|--------------------------------|---------------|----------------|-----------|-------|------------|-------|
| <b>TARGETS</b> |                                |               |                |           |       |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 8.70          | 43.0           |           | 1.04  | 2.47       | ug/m3 |
| 74-87-3        | Chloromethane                  | 9.30          | 19.2           |           | 0.21  | 1.03       | ug/m3 |
| 75-01-4        | Vinyl Chloride                 | 8.70          | 22.2           |           | 0.030 | 0.080      | ug/m3 |
| 74-83-9        | Bromomethane                   | 8.80          | 34.2           |           | 0.54  | 1.94       | ug/m3 |
| 75-00-3        | Chloroethane                   | 9.10          | 24.0           |           | 0.45  | 1.32       | ug/m3 |
| 109-99-9       | Tetrahydrofuran                | 8.10          | 23.9           |           | 0.38  | 1.47       | ug/m3 |
| 75-69-4        | Trichlorofluoromethane         | 9.60          | 54.0           |           | 0.90  | 2.81       | ug/m3 |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 9.20          | 70.5           |           | 1.23  | 3.83       | ug/m3 |
| 76-14-2        | Dichlorotetrafluoroethane      | 9.50          | 66.4           |           | 0.63  | 3.49       | ug/m3 |
| 75-65-0        | tert-Butyl alcohol             | 8.80          | 26.7           |           | 0.58  | 1.52       | ug/m3 |
| 142-82-5       | Heptane                        | 8.10          | 33.2           |           | 0.45  | 2.05       | ug/m3 |
| 75-35-4        | 1,1-Dichloroethene             | 8.80          | 34.9           |           | 0.56  | 1.98       | ug/m3 |
| 67-64-1        | Acetone                        | 7.80          | 18.5           |           | 0.57  | 1.19       | ug/m3 |
| 75-15-0        | Carbon Disulfide               | 8.50          | 26.5           |           | 0.50  | 1.56       | ug/m3 |
| 1634-04-4      | Methyl tert-Butyl Ether        | 7.90          | 28.5           |           | 0.43  | 1.80       | ug/m3 |
| 75-09-2        | Methylene Chloride             | 8.80          | 30.6           |           | 0.66  | 1.74       | ug/m3 |
| 156-60-5       | trans-1,2-Dichloroethene       | 8.60          | 34.1           |           | 0.75  | 1.98       | ug/m3 |
| 75-34-3        | 1,1-Dichloroethane             | 9.10          | 36.8           |           | 0.53  | 2.02       | ug/m3 |
| 110-82-7       | Cyclohexane                    | 7.80          | 26.9           |           | 0.76  | 1.72       | ug/m3 |
| 78-93-3        | 2-Butanone                     | 8.50          | 25.1           |           | 0.35  | 1.47       | ug/m3 |
| 56-23-5        | Carbon Tetrachloride           | 10.9          | 68.6           |           | 0.060 | 0.19       | ug/m3 |
| 156-59-2       | cis-1,2-Dichloroethene         | 8.00          | 31.7           |           | 0.36  | 1.98       | ug/m3 |
| 67-66-3        | Chloroform                     | 9.20          | 44.9           |           | 0.39  | 2.44       | ug/m3 |
| 71-55-6        | 1,1,1-Trichloroethane          | 8.80          | 48.0           |           | 0.050 | 0.16       | ug/m3 |
| 540-84-1       | 2,2,4-Trimethylpentane         | 8.80          | 41.1           |           | 0.47  | 2.34       | ug/m3 |
| 71-43-2        | Benzene                        | 8.70          | 27.8           |           | 0.29  | 1.60       | ug/m3 |
| 107-06-2       | 1,2-Dichloroethane             | 9.60          | 38.9           |           | 0.36  | 2.02       | ug/m3 |
| 79-01-6        | Trichloroethene                | 7.90          | 42.5           |           | 0.11  | 0.16       | ug/m3 |
| 78-87-5        | 1,2-Dichloropropane            | 8.50          | 39.3           |           | 0.51  | 2.31       | ug/m3 |
| 75-27-4        | Bromodichloromethane           | 9.80          | 65.7           |           | 0.54  | 3.35       | ug/m3 |
| 108-10-1       | 4-Methyl-2-Pentanone           | 8.80          | 36.1           |           | 0.37  | 2.05       | ug/m3 |
| 108-88-3       | Toluene                        | 8.30          | 31.3           |           | 0.41  | 1.88       | ug/m3 |
| 10061-02-6     | t-1,3-Dichloropropene          | 7.90          | 35.9           |           | 0.27  | 2.27       | ug/m3 |
| 10061-01-5     | cis-1,3-Dichloropropene        | 7.80          | 35.4           |           | 0.27  | 2.27       | ug/m3 |
| 79-00-5        | 1,1,2-Trichloroethane          | 9.10          | 49.6           |           | 0.38  | 2.73       | ug/m3 |



## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABS01     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABS01     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041795.D        | 1         |           | 12/18/24 16:06 | VL121824      |

| CAS Number                | Parameter                 | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL      | LOQ / CRQL | Units   |
|---------------------------|---------------------------|---------------|----------------|-----------|----------|------------|---------|
| 124-48-1                  | Dibromochloromethane      | 9.90          | 84.3           |           | 0.60     | 4.26       | ug/m3   |
| 106-93-4                  | 1,2-Dibromoethane         | 9.20          | 70.7           |           | 0.54     | 0.77       | ug/m3   |
| 127-18-4                  | Tetrachloroethene         | 7.70          | 52.2           |           | 0.14     | 0.20       | ug/m3   |
| 108-90-7                  | Chlorobenzene             | 9.40          | 43.3           |           | 0.37     | 2.30       | ug/m3   |
| 100-41-4                  | Ethyl Benzene             | 9.30          | 40.4           |           | 0.52     | 2.17       | ug/m3   |
| 179601-23-1               | m/p-Xylene                | 19.7          | 85.6           |           | 0.91     | 4.34       | ug/m3   |
| 95-47-6                   | o-Xylene                  | 9.90          | 43.0           |           | 0.52     | 2.17       | ug/m3   |
| 100-42-5                  | Styrene                   | 9.50          | 40.5           |           | 0.47     | 2.13       | ug/m3   |
| 75-25-2                   | Bromoform                 | 10.1          | 104            |           | 0.62     | 5.17       | ug/m3   |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane | 9.80          | 67.3           |           | 0.070    | 0.21       | ug/m3   |
| 95-49-8                   | 2-Chlorotoluene           | 9.60          | 49.7           |           | 0.57     | 2.59       | ug/m3   |
| 108-67-8                  | 1,3,5-Trimethylbenzene    | 10.6          | 52.1           |           | 0.54     | 2.46       | ug/m3   |
| 95-63-6                   | 1,2,4-Trimethylbenzene    | 10.7          | 52.6           |           | 0.39     | 2.46       | ug/m3   |
| 541-73-1                  | 1,3-Dichlorobenzene       | 9.80          | 58.9           |           | 0.48     | 3.01       | ug/m3   |
| 106-46-7                  | 1,4-Dichlorobenzene       | 9.90          | 59.5           |           | 0.30     | 3.01       | ug/m3   |
| 95-50-1                   | 1,2-Dichlorobenzene       | 9.90          | 59.5           |           | 0.48     | 3.01       | ug/m3   |
| 120-82-1                  | 1,2,4-Trichlorobenzene    | 9.60          | 71.3           |           | 0.67     | 3.71       | ug/m3   |
| 87-68-3                   | Hexachloro-1,3-Butadiene  | 8.00          | 85.3           |           | 0.96     | 5.33       | ug/m3   |
| 106-99-0                  | 1,3-Butadiene             | 9.50          | 21.0           |           | 0.29     | 1.11       | ug/m3   |
| 91-20-3                   | Naphthalene               | 11.2          | 58.7           |           | 0.42     | 0.52       | ug/m3   |
| 622-96-8                  | 4-Ethyltoluene            | 10.1          | 49.6           |           | 0.59     | 2.46       | ug/m3   |
| 110-54-3                  | Hexane                    | 8.20          | 28.9           |           | 0.39     | 1.76       | ug/m3   |
| 107-05-1                  | Allyl Chloride            | 8.90          | 27.9           |           | 0.47     | 1.57       | ug/m3   |
| 123-91-1                  | 1,4-Dioxane               | 8.60          | 31.0           |           | 0.76     | 1.80       | ug/m3   |
| 80-62-6                   | Methyl Methacrylate       | 8.40          | 34.4           |           | 0.37     | 2.05       | ug/m3   |
| <b>SURROGATES</b>         |                           |               |                |           |          |            |         |
| 460-00-4                  | 1-Bromo-4-Fluorobenzene   | 10.8          |                |           | 65 - 135 | 108%       | SPK: 10 |
| <b>INTERNAL STANDARDS</b> |                           |               |                |           |          |            |         |
| 74-97-5                   | Bromochloromethane        | 72600         |                | 2.797     |          |            |         |
| 540-36-3                  | 1,4-Difluorobenzene       | 183000        |                | 3.972     |          |            |         |
| 3114-55-4                 | Chlorobenzene-d5          | 159000        |                | 8.898     |          |            |         |

## Report of Analysis

|                    |                 |                 |       |
|--------------------|-----------------|-----------------|-------|
| Client:            | Tetra Tech, EMI | Date Collected: |       |
| Project:           | R36719          | Date Received:  |       |
| Client Sample ID:  | VL1218ABS01     | SDG No.:        | P5294 |
| Lab Sample ID:     | VL1218ABS01     | Matrix:         | Air   |
| Analytical Method: | TO-15           | Test:           | TO-15 |
| Sample Wt/Vol:     | 400             | Units:          | mL    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VL041795.D        | 1         |           | 12/18/24 16:06 | VL121824      |

| CAS Number | Parameter | Conc.<br>ppbv | Conc.<br>ug/M3 | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|
|------------|-----------|---------------|----------------|-----------|-----|------------|-------|

U = Not Detected  
 RL = Reporting Limit  
 MDL = Method Detection Limit  
 E = Value Exceeds Calibration Range  
 D = Dilution

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041795.D  
 Acq On : 18 Dec 2024 16:06  
 Operator : SY/MD  
 Sample : VL1218ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1218ABS01

Quant Time: Dec 19 07:55:13 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 12/19/2024  
 Supervised By : Mahesh Dadoda 12/19/2024

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.797 | 49   | 72600    | 10.000 | ppbv  | 0.01     |
| 33) 1,4-Difluorobenzene | 3.972 | 114  | 183255   | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 8.898 | 117  | 159496   | 10.000 | ppbv  | 0.02     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.390 95 143879 10.825 ppbv 0.02  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 108.300%

#### Target Compounds

|                               |       |     |        |        |        | Qvalue |
|-------------------------------|-------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.502 | 85  | 112657 | 8.721  | ppbv   | 99     |
| 3) Chlorodifluoromethane      | 1.479 | 51  | 102210 | 8.633  | ppbv   | 97     |
| 4) Chloromethane              | 1.538 | 50  | 46901  | 9.279  | ppbv   | 100    |
| 5) Vinyl Chloride             | 1.583 | 62  | 44104  | 8.661  | ppbv   | 98     |
| 6) Bromomethane               | 1.674 | 94  | 21119  | 8.788  | ppbv   | 99     |
| 7) Chloroethane               | 1.709 | 64  | 18047  | 9.123  | ppbv   | 98     |
| 8) Dichlorotetrafluoroethane  | 1.557 | 85  | 110410 | 9.549  | ppbv   | 93     |
| 9) Propene                    | 1.486 | 41  | 35133  | 6.846  | ppbv   | 98     |
| 10) Heptane                   | 5.001 | 43  | 106572 | 8.085  | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 1.884 | 101 | 132171 | 9.632  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluo... | 2.146 | 101 | 96243  | 9.222  | ppbv   | 95     |
| 13) Ethanol                   | 1.725 | 45  | 2865   | 6.742  | ppbv   | 98     |
| 14) Bromoethene               | 1.787 | 108 | 30065  | 8.533  | ppbv   | 96     |
| 15) Acetone                   | 1.842 | 43  | 110277 | 7.807  | ppbv   | 97     |
| 16) 1,3-Butadiene             | 1.612 | 39  | 52562  | 9.450  | ppbv   | 92     |
| 17) tert-Butyl alcohol        | 2.046 | 59  | 122872 | 8.768  | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 2.039 | 96  | 38415  | 8.780  | ppbv   | 80     |
| 19) Isopropyl Alcohol         | 1.890 | 45  | 59665  | 7.039  | ppbv # | 37     |
| 20) Methylene Chloride        | 2.068 | 84  | 35310  | 8.766  | ppbv   | 94     |
| 21) Allyl Chloride            | 2.104 | 41  | 68525  | 8.945  | ppbv   | 95     |
| 22) trans-1,2-Dichloroethene  | 2.350 | 96  | 42821  | 8.550  | ppbv   | 98     |
| 23) Vinyl Acetate             | 2.470 | 43  | 43463  | 6.627  | ppbv   | 97     |
| 24) 1,1-Dichloroethane        | 2.418 | 63  | 92680  | 9.142  | ppbv   | 99     |
| 25) Ethyl Acetate             | 2.845 | 43  | 223419 | 8.502  | ppbv   | 99     |
| 26) Hexane                    | 2.835 | 57  | 81413  | 8.164  | ppbv   | 93     |
| 27) Carbon Disulfide          | 2.159 | 76  | 76433  | 8.505  | ppbv   | 94     |
| 28) Methyl tert-Butyl Ether   | 2.447 | 73  | 64037  | 7.915  | ppbv   | 99     |
| 29) Chloroform                | 2.858 | 83  | 139818 | 9.200  | ppbv   | 99     |
| 30) Cyclohexane               | 3.871 | 84  | 66237  | 7.806  | ppbv   | 98     |
| 31) cis-1,2-Dichloroethene    | 2.732 | 61  | 82779  | 8.033  | ppbv   | 99     |
| 32) 1,1,1-Trichloroethane     | 3.379 | 97  | 136055 | 8.807  | ppbv   | 98     |
| 34) 2-Butanone                | 2.564 | 43  | 125687 | 8.525  | ppbv   | 100    |
| 35) Carbon Tetrachloride      | 3.777 | 117 | 141202 | 10.854 | ppbv   | 97     |
| 36) Benzene                   | 3.667 | 78  | 164423 | 8.674  | ppbv   | 98     |
| 37) 1,2-Dichloroethane        | 3.230 | 62  | 113600 | 9.631  | ppbv   | 99     |
| 38) Trichloroethene           | 4.564 | 130 | 63280  | 7.864  | ppbv   | 93     |
| 39) 1,2-Dichloropropane       | 4.331 | 63  | 58553  | 8.541  | ppbv   | 92     |
| 40) 1,4-Dioxane               | 4.599 | 88  | 28884  | 8.624  | ppbv # | 92     |
| 41) Tetrahydrofuran           | 3.065 | 42  | 67017  | 8.114  | ppbv   | 99     |
| 42) Bromodichloromethane      | 4.509 | 83  | 133513 | 9.839  | ppbv   | 95     |
| 43) Methyl Methacrylate       | 4.897 | 69  | 61014  | 8.448  | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 4.658 | 57  | 284140 | 8.777  | ppbv   | 96     |
| 45) t-1,3-Dichloropropene     | 6.438 | 75  | 58865  | 7.879  | ppbv   | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041795.D  
 Acq On : 18 Dec 2024 16:06  
 Operator : SY/MD  
 Sample : VL1218ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1218ABS01

Quant Time: Dec 19 07:55:13 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Dec 19 07:32:09 2024  
 Response via : Initial Calibration

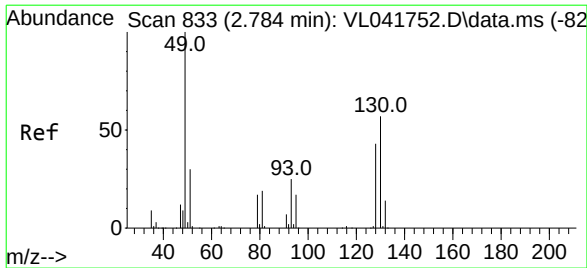
### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 12/19/2024  
 Supervised By : Mahesh Dadoda 12/19/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.625  | 75   | 74198    | 7.824  | ppbv   | 89       |
| 47) 1,1,2-Trichloroethane     | 6.603  | 97   | 64954    | 9.071  | ppbv   | 93       |
| 48) Dibromochloromethane      | 7.406  | 129  | 96996    | 9.920  | ppbv   | 99       |
| 49) Bromoform                 | 9.500  | 173  | 80840    | 10.100 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.774  | 43   | 175817   | 8.759  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.457  | 43   | 142403   | 8.752  | ppbv # | 96       |
| 52) Tetrachloroethene         | 8.244  | 164  | 54531    | 7.729  | ppbv   | 93       |
| 53) Toluene                   | 6.952  | 91   | 177625   | 8.265  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.671  | 107  | 90389    | 9.161  | ppbv   | 92       |
| 56) 1,1,1,2-Tetrachloroethane | 8.943  | 131  | 86262    | 10.202 | ppbv   | 100      |
| 57) Chlorobenzene             | 8.937  | 112  | 153659   | 9.415  | ppbv   | 99       |
| 58) Ethyl Benzene             | 9.370  | 91   | 267795   | 9.326  | ppbv   | 98       |
| 59) m/p-Xylene                | 9.564  | 91   | 455916m  | 19.747 | ppbv   |          |
| 60) o-Xylene                  | 9.975  | 91   | 229919   | 9.930  | ppbv   | 100      |
| 61) Styrene                   | 9.885  | 104  | 95536    | 9.543  | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.552 | 105  | 339599   | 9.762  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.975  | 83   | 142272   | 9.817  | ppbv   | 100      |
| 64) n-propylbenzene           | 11.002 | 120  | 86896    | 9.880  | ppbv   | 97       |
| 65) tert-Butylbenzene         | 11.542 | 119  | 307835   | 9.808  | ppbv   | 97       |
| 66) Benzyl Chloride           | 11.626 | 91   | 21939    | 7.936  | ppbv   | 97       |
| 67) sec-Butylbenzene          | 11.778 | 105  | 441578   | 10.167 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.937 | 119  | 366111   | 10.229 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.293 | 91   | 366451   | 10.597 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 10.914 | 91   | 255490   | 9.622  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.137 | 105  | 277025   | 10.137 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.215 | 105  | 240648   | 10.613 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 11.548 | 105  | 260378   | 10.679 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.620 | 146  | 152493   | 9.809  | ppbv   | 98       |
| 76) 1,4-Dichlorobenzene       | 11.684 | 146  | 152432   | 9.926  | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 11.960 | 146  | 148412   | 9.922  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.892 | 225  | 88582    | 7.987  | ppbv   | 100      |
| 79) Naphthalene               | 13.523 | 128  | 189506   | 11.154 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.468 | 142  | 82155    | 15.634 | ppbv   | 96       |
| 81) 1,2,4-Trichlorobenzene    | 13.452 | 180  | 89052    | 9.592  | ppbv   | 99       |

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





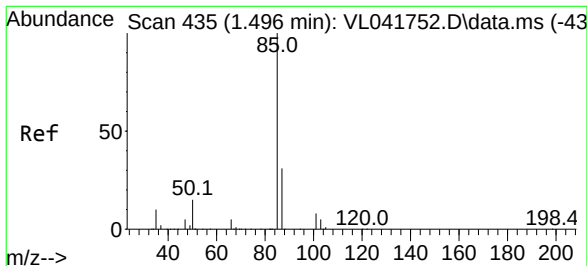
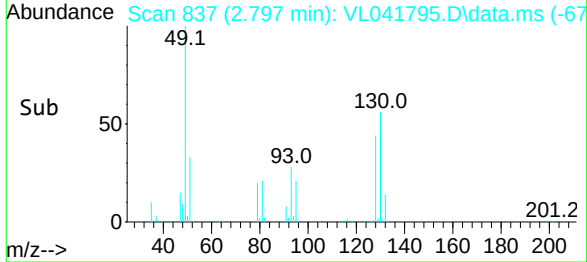
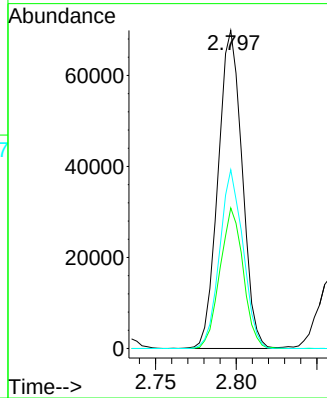
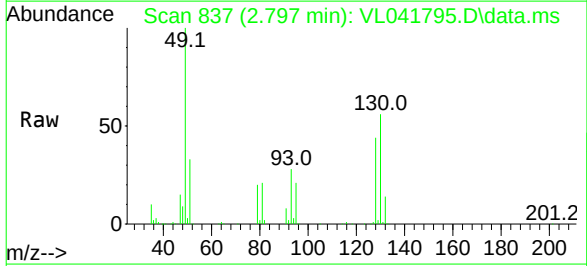
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Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.797 min Scan# 833  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

| Tgt Ion: | 49    | 128  | 130  |
|----------|-------|------|------|
| Resp:    | 72600 |      |      |
| Ratio    | 100   | 42.5 | 54.6 |
| Lower    |       | 21.6 | 28.3 |
| Upper    |       | 64.6 | 85.0 |

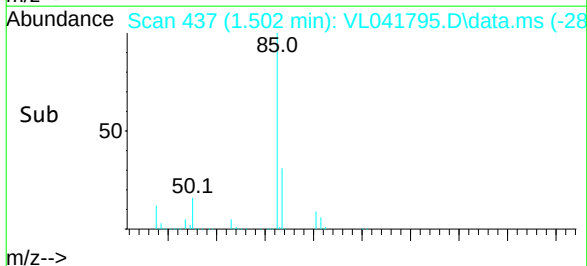
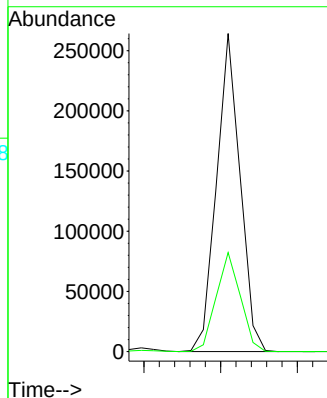
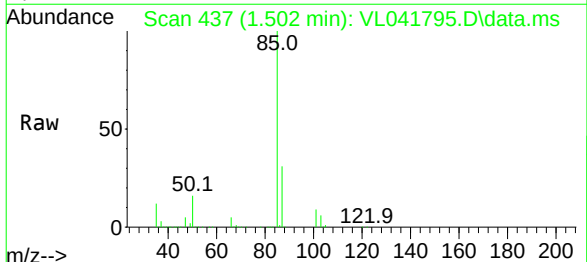
Manual Integrations  
APPROVED

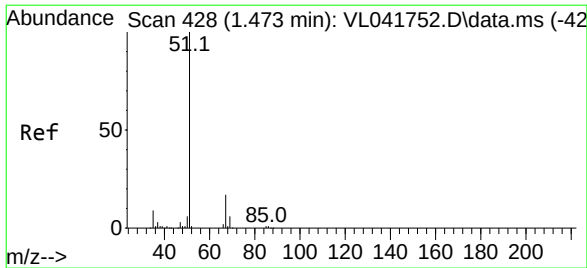
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#2  
Dichlorodifluoromethane  
Concen: 8.721 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

| Tgt Ion: | 85     | 87   |
|----------|--------|------|
| Resp:    | 112657 |      |
| Ratio    | 100    | 31.1 |
| Lower    |        | 24.5 |
| Upper    |        | 36.7 |





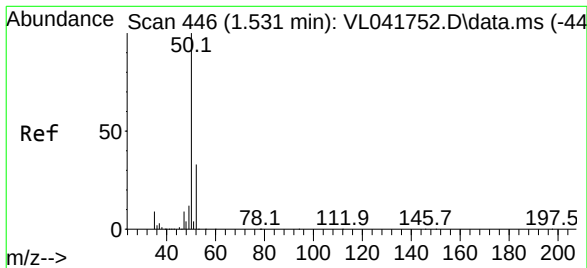
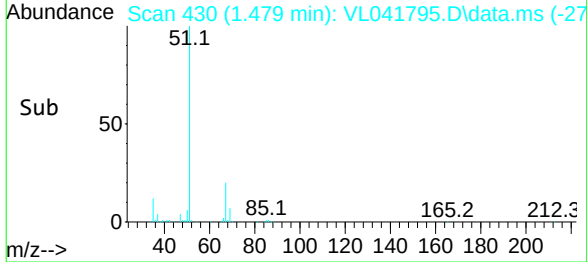
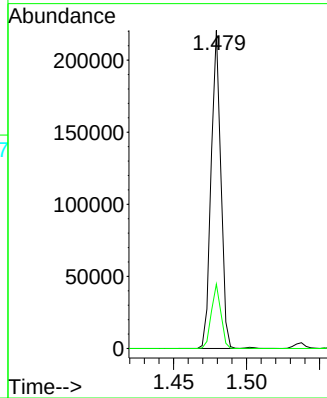
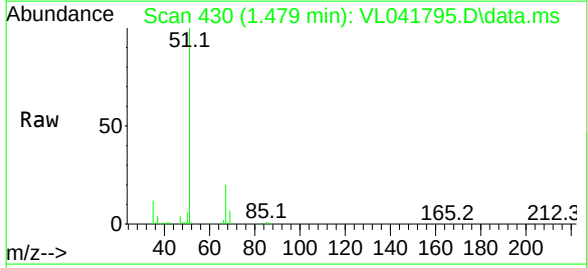
#3  
Chlorodifluoromethane  
Concen: 8.633 ppbv  
RT: 1.479 min Scan# 431  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 51 Resp: 102210  
Ion Ratio Lower Upper  
51 100  
67 19.9 15.0 22.4

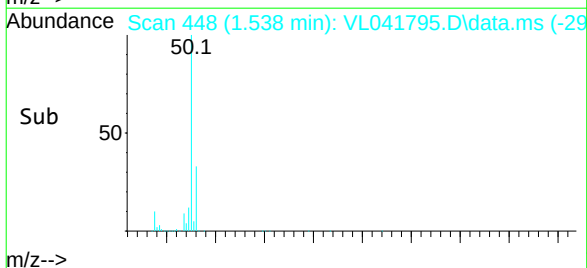
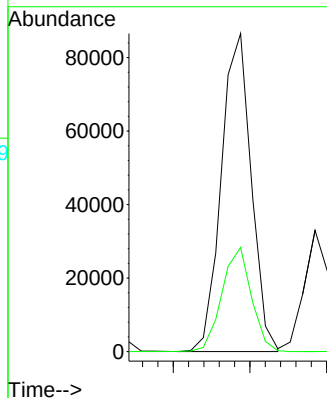
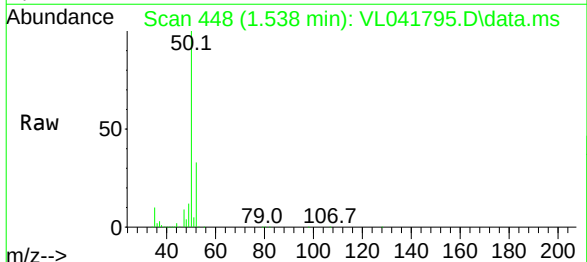
Manual Integrations  
APPROVED

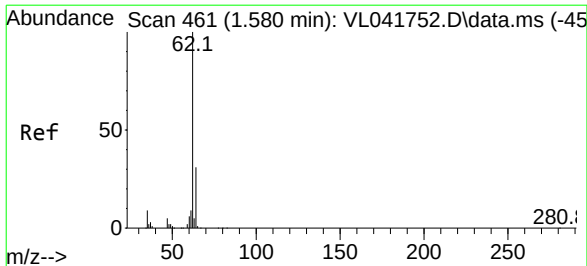
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#4  
Chloromethane  
Concen: 9.279 ppbv  
RT: 1.538 min Scan# 448  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 50 Resp: 46901  
Ion Ratio Lower Upper  
50 100  
52 32.7 26.2 39.2





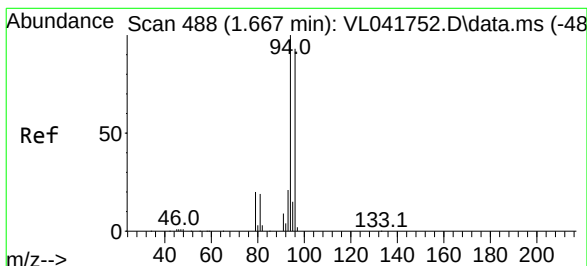
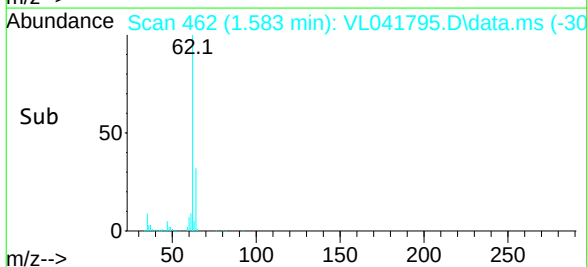
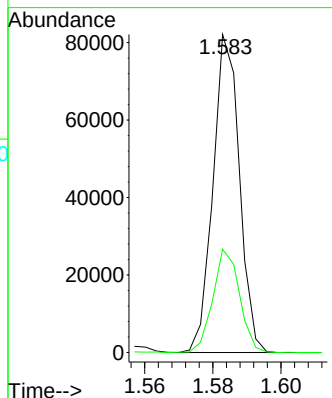
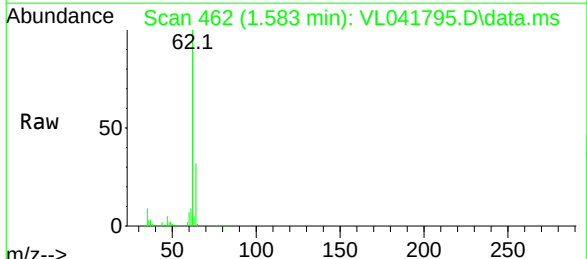
#5  
Vinyl Chloride  
Concen: 8.661 ppbv  
RT: 1.583 min Scan# 461  
Delta R.T. 0.003 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 62 Resp: 44104  
Ion Ratio Lower Upper  
62 100  
64 32.5 25.1 37.7

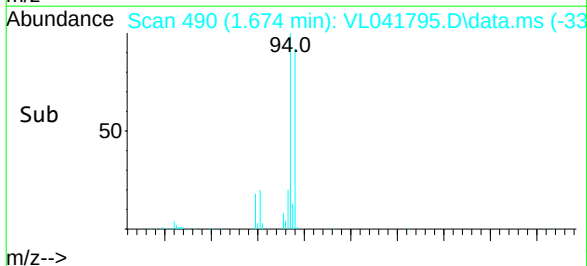
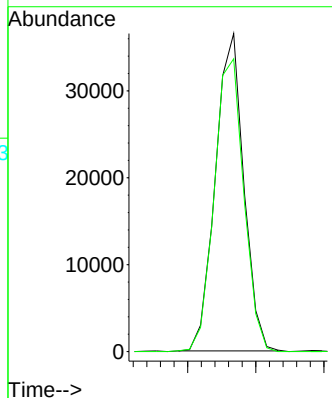
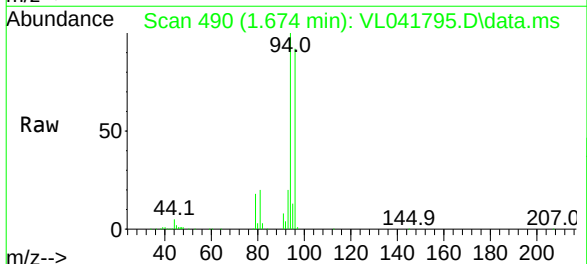
Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

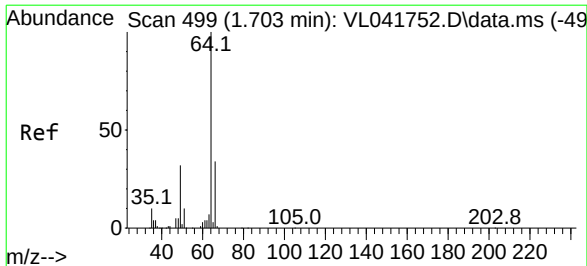


#6  
Bromomethane  
Concen: 8.788 ppbv  
RT: 1.674 min Scan# 490  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 94 Resp: 21119  
Ion Ratio Lower Upper  
94 100  
96 92.2 74.7 112.1







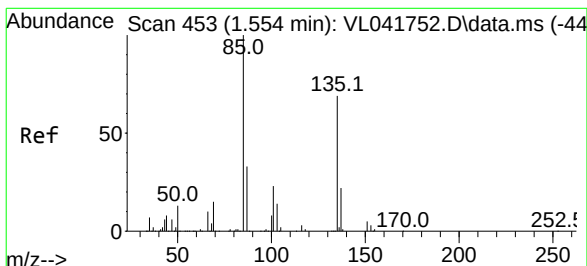
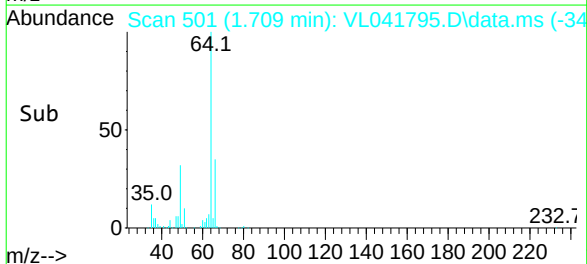
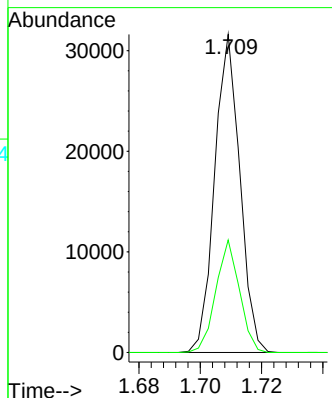
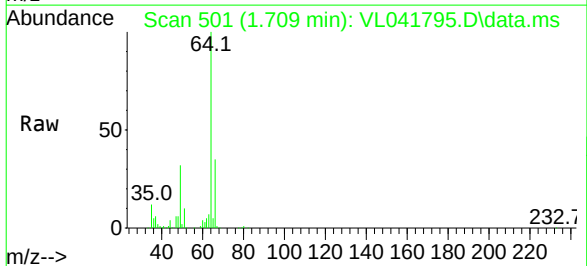
#7  
Chloroethane  
Concen: 9.123 ppbv  
RT: 1.709 min Scan# 501  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 64 Resp: 18047  
Ion Ratio Lower Upper  
64 100  
66 35.4 27.5 41.3

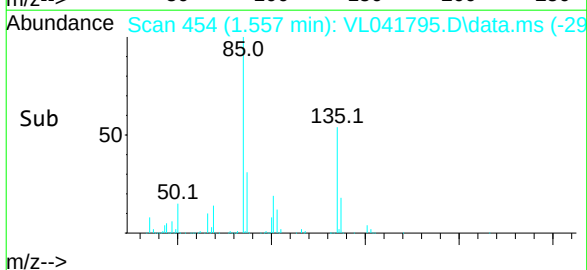
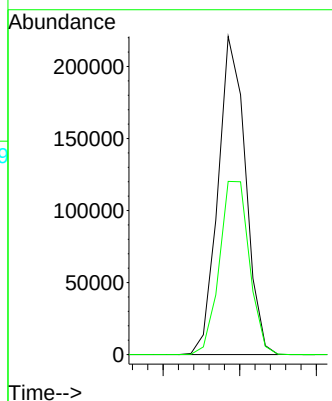
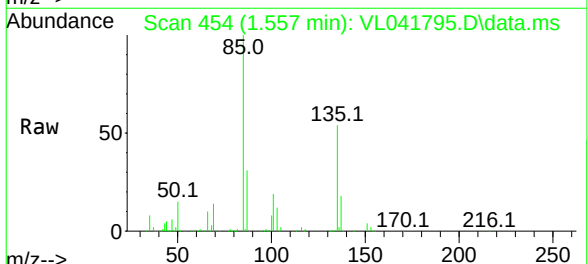
Manual Integrations  
APPROVED

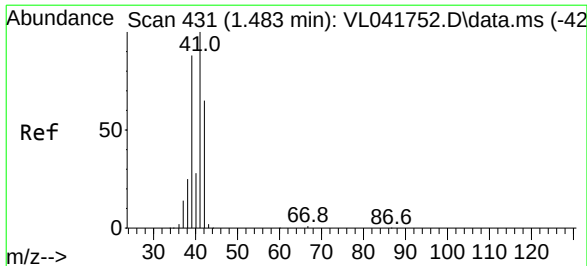
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#8  
Dichlorotetrafluoroethane  
Concen: 9.549 ppbv  
RT: 1.557 min Scan# 454  
Delta R.T. 0.003 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 85 Resp: 110410  
Ion Ratio Lower Upper  
85 100  
135 59.3 51.9 77.9





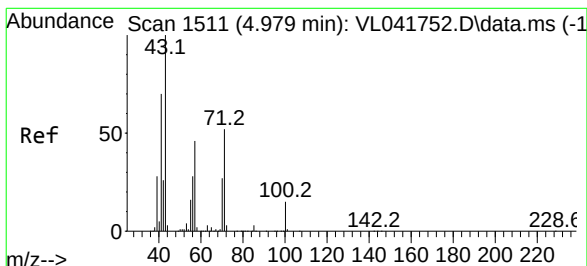
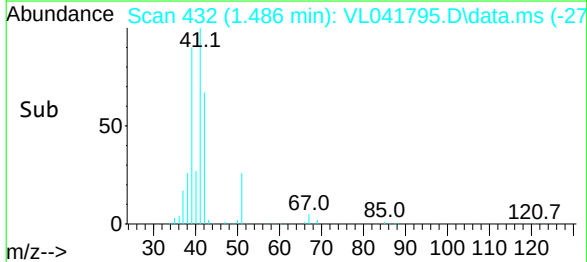
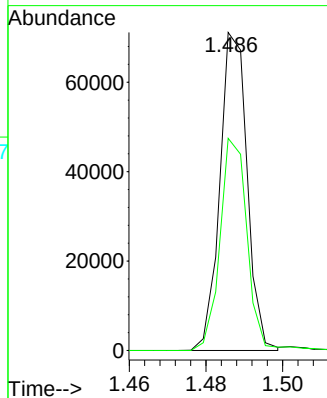
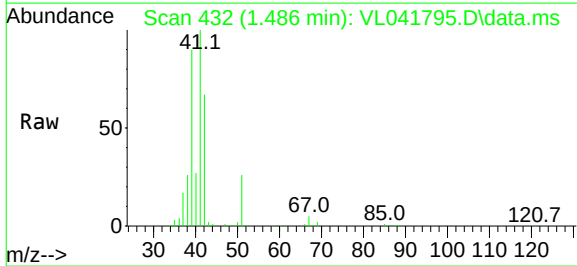
#9  
Propene  
Concen: 6.846 ppbv  
RT: 1.486 min Scan# 431  
Delta R.T. 0.003 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 41 Resp: 35133  
Ion Ratio Lower Upper  
41 100  
42 67.4 52.4 78.6

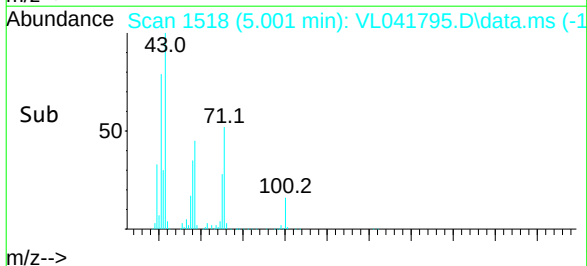
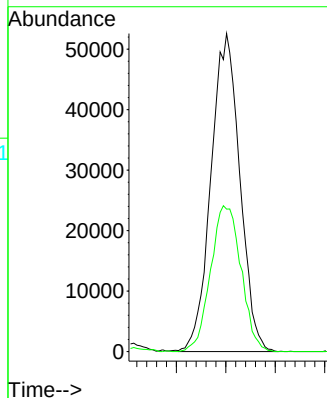
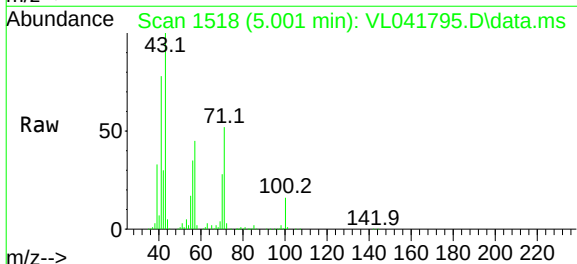
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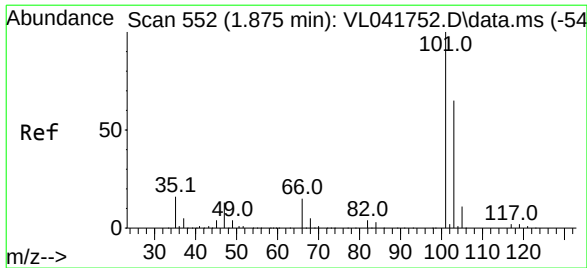
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#10  
Heptane  
Concen: 8.085 ppbv  
RT: 5.001 min Scan# 1518  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

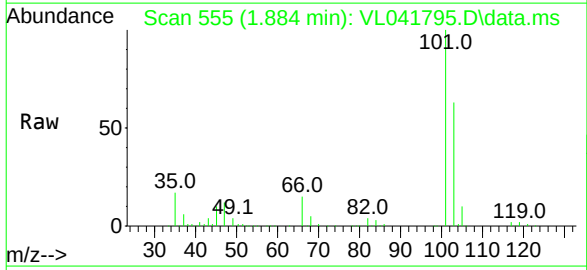
Tgt Ion: 43 Resp: 106572  
Ion Ratio Lower Upper  
43 100  
57 48.3 38.5 57.7





#11  
Trichlorofluoromethane  
Concen: 9.632 ppbv  
RT: 1.884 min Scan# 552  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

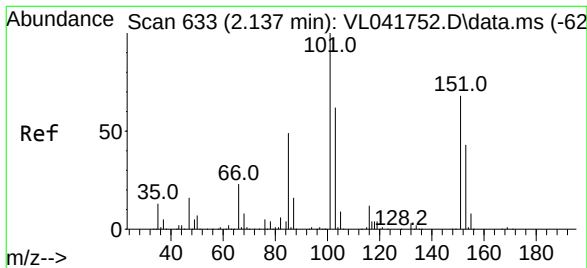
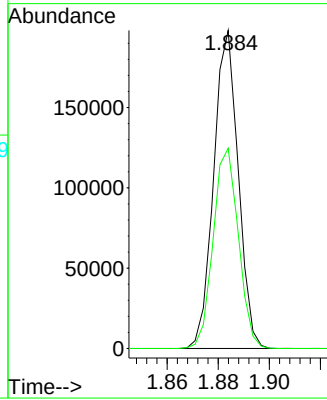
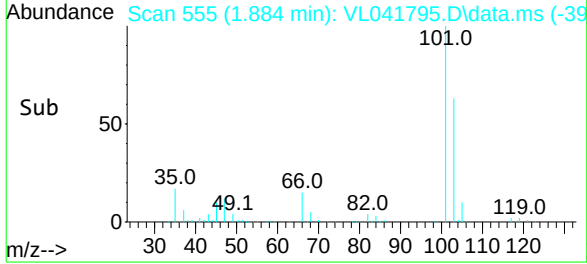
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



Tgt Ion:101 Resp: 132171  
Ion Ratio Lower Upper  
101 100  
103 62.9 51.8 77.8

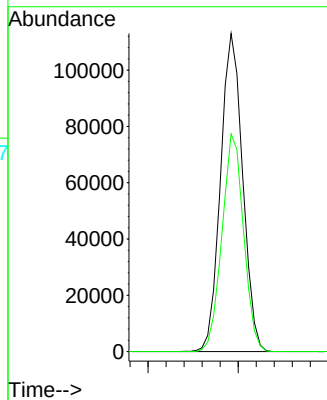
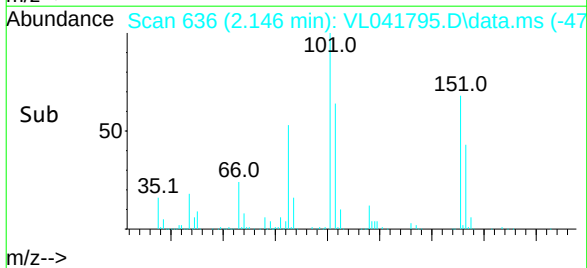
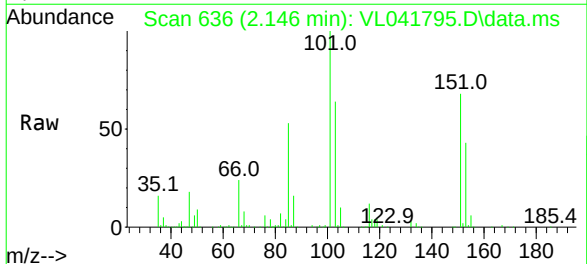
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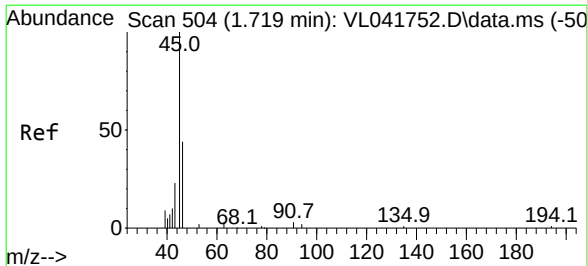
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.222 ppbv  
RT: 2.146 min Scan# 636  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

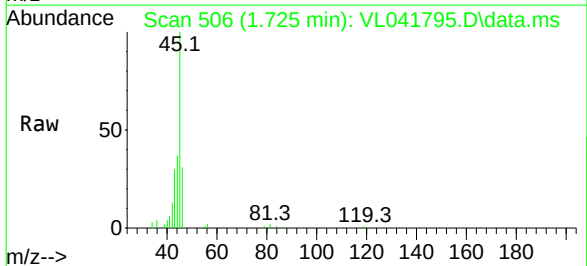
Tgt Ion:101 Resp: 96243  
Ion Ratio Lower Upper  
101 100  
151 66.8 56.8 85.2





#13  
Ethanol  
Concen: 6.742 ppbv  
RT: 1.725 min Scan# 504  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

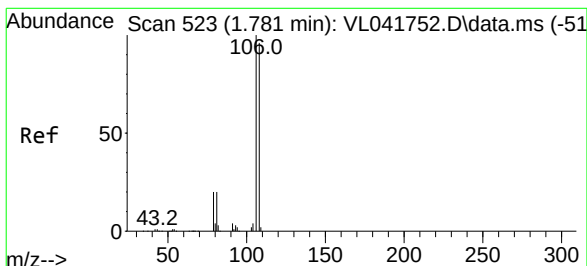
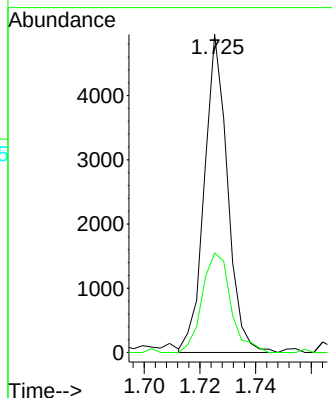
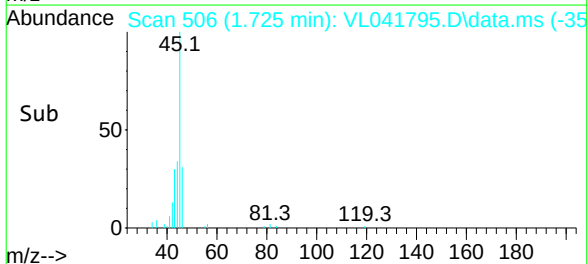
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



Tgt Ion: 45 Resp: 2865  
Ion Ratio Lower Upper  
45 100  
46 39.7 16.4 65.8

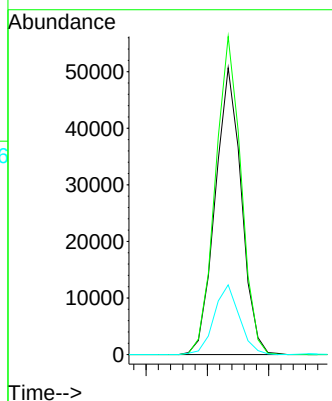
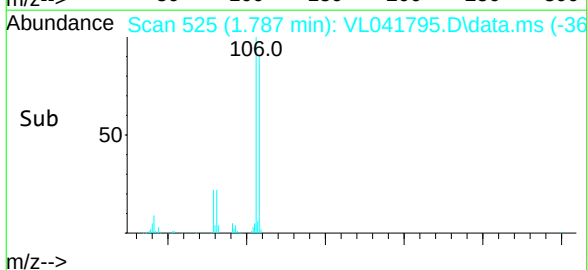
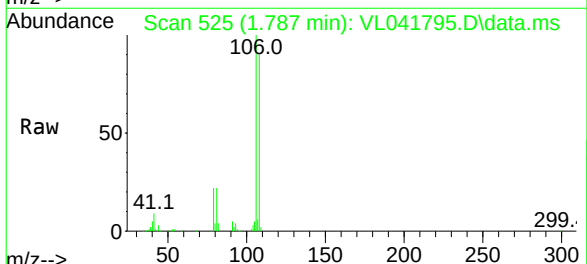
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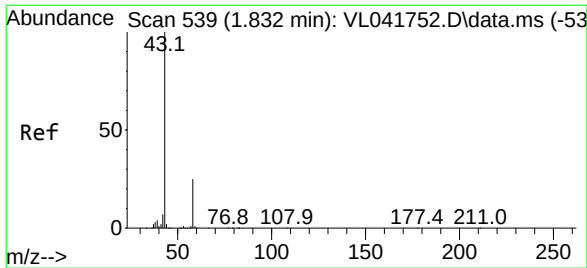
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#14  
Bromoethene  
Concen: 8.533 ppbv  
RT: 1.787 min Scan# 525  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:108 Resp: 30065  
Ion Ratio Lower Upper  
108 100  
106 108.9 84.1 126.1  
79 23.9 17.4 26.0





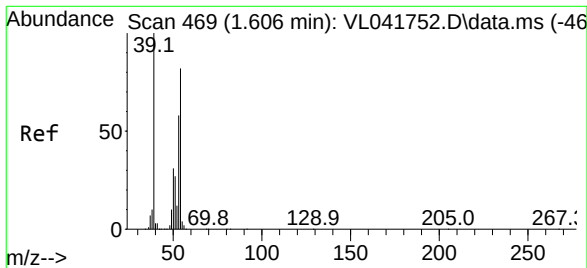
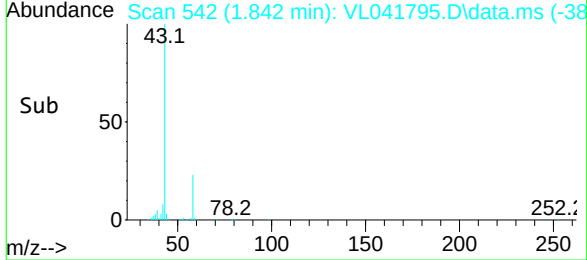
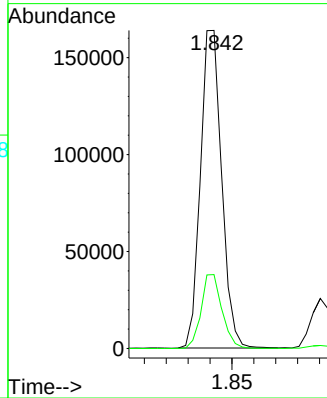
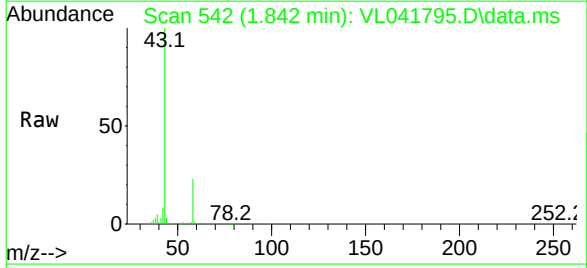
#15  
Acetone  
Concen: 7.807 ppbv  
RT: 1.842 min Scan# 54  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 43 Resp: 110277  
Ion Ratio Lower Upper  
43 100  
58 23.0 19.7 29.5

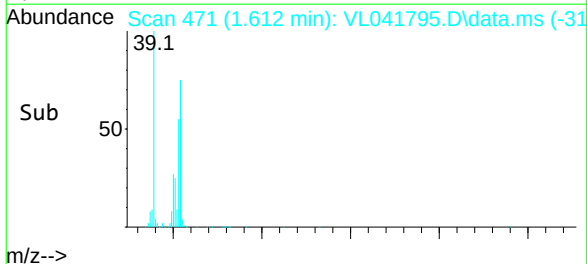
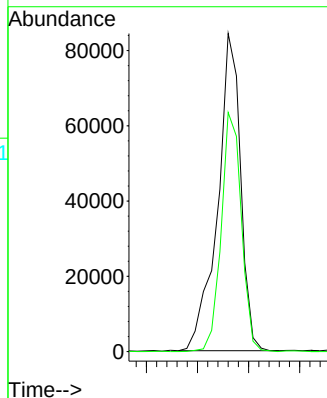
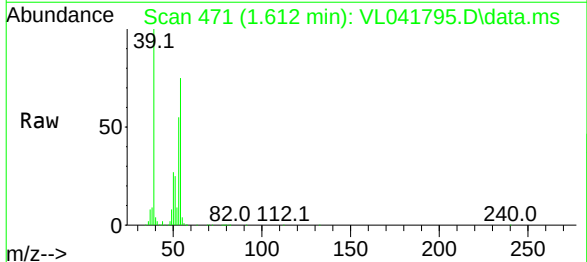
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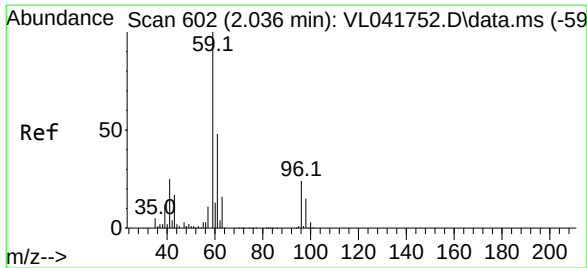
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#16  
1,3-Butadiene  
Concen: 9.450 ppbv  
RT: 1.612 min Scan# 471  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

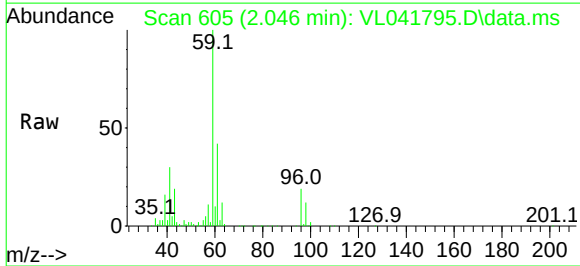
Tgt Ion: 39 Resp: 52562  
Ion Ratio Lower Upper  
39 100  
54 66.3 58.4 87.6





#17  
tert-Butyl alcohol  
Concen: 8.768 ppbv  
RT: 2.046 min Scan# 602  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

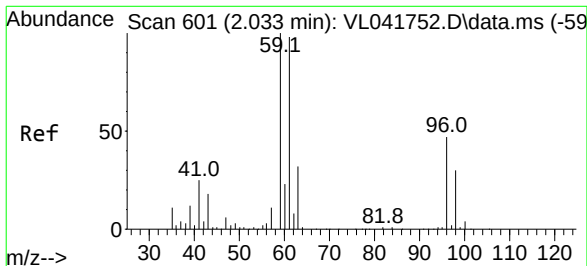
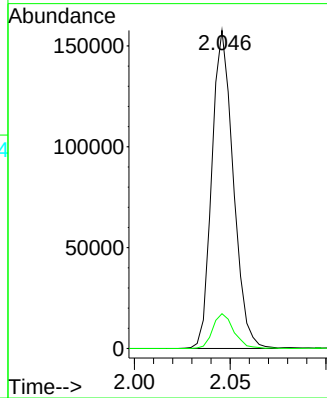
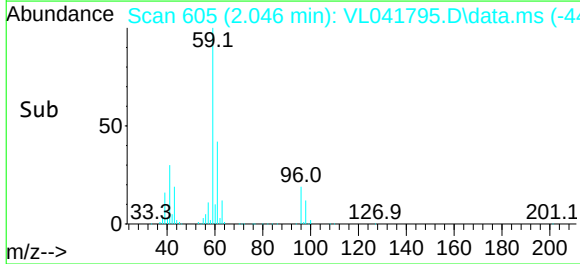
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01



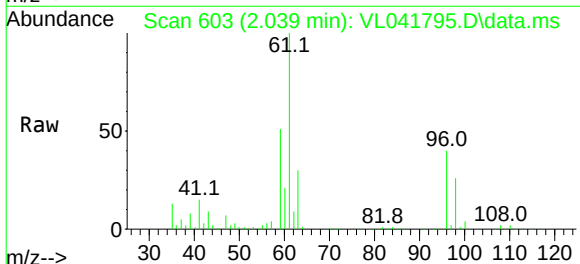
Tgt Ion: 59 Resp: 122872  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 13.0

Manual Integrations  
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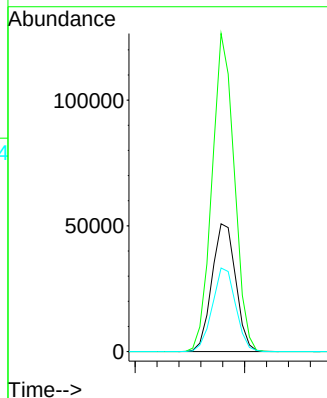
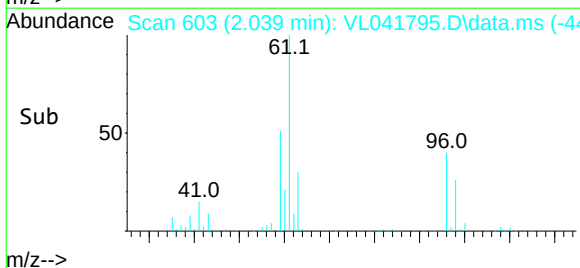
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

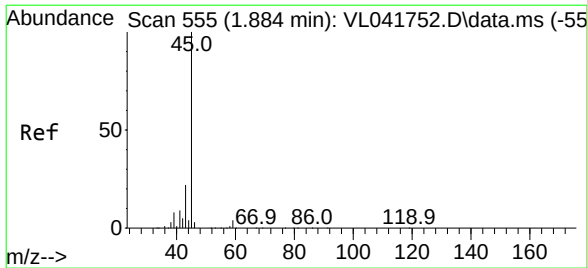


#18  
1,1-Dichloroethene  
Concen: 8.780 ppbv  
RT: 2.039 min Scan# 603  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



Tgt Ion: 96 Resp: 38415  
Ion Ratio Lower Upper  
96 100  
61 248.9 167.7 251.5  
98 65.4 51.1 76.7





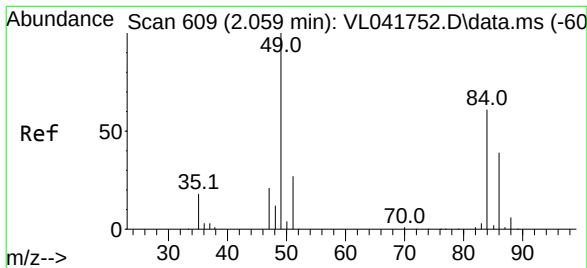
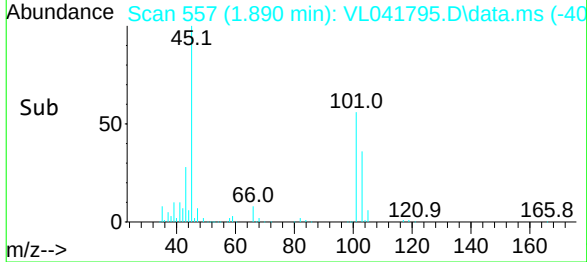
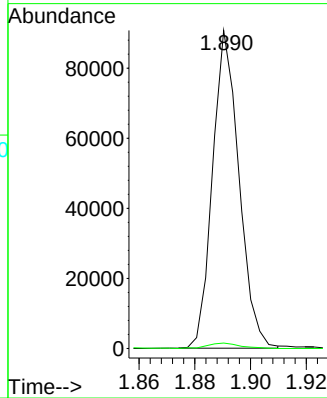
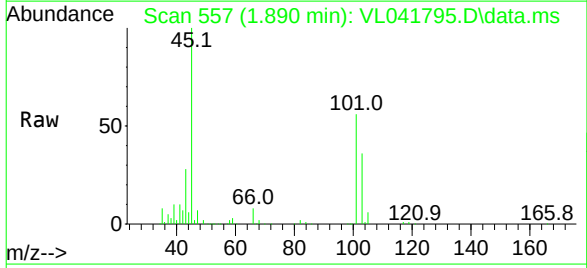
#19  
Isopropyl Alcohol  
Concen: 7.039 ppbv  
RT: 1.890 min Scan# 555  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 45 Resp: 59665  
Ion Ratio Lower Upper  
45 100  
58 2.1 33.3 49.9#

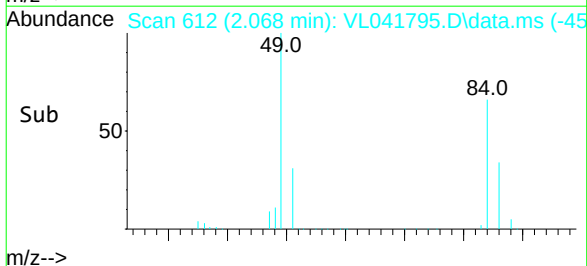
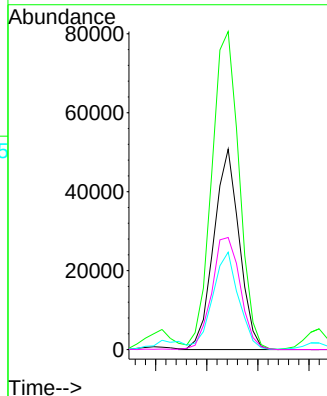
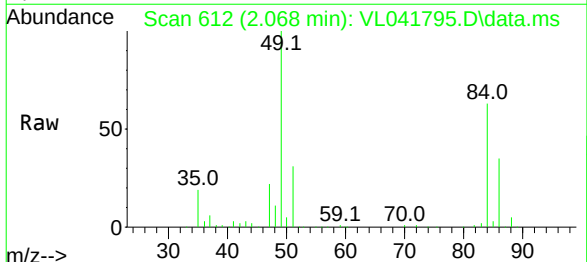
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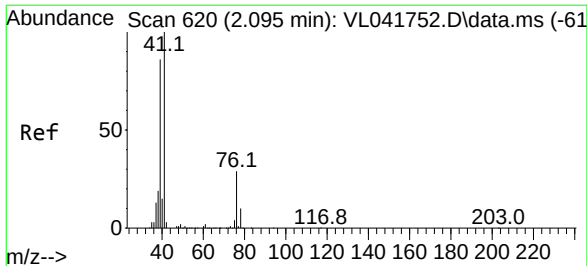
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#20  
Methylene Chloride  
Concen: 8.766 ppbv  
RT: 2.068 min Scan# 612  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 84 Resp: 35310  
Ion Ratio Lower Upper  
84 100  
49 158.5 132.6 198.8  
51 48.4 37.6 56.4  
86 55.9 51.4 77.0





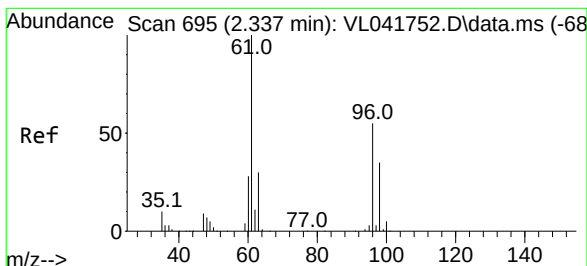
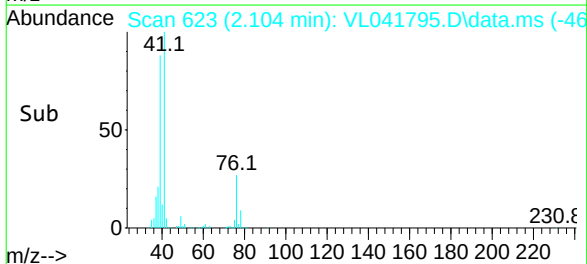
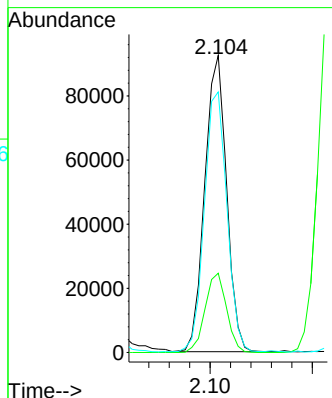
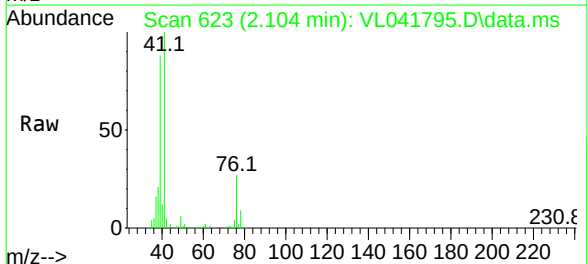
#21  
 Allyl Chloride  
 Concen: 8.945 ppbv  
 RT: 2.104 min Scan# 621  
 Delta R.T. 0.009 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1218ABS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 68525 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 76       | 26.2  | 22.3  | 33.5  |
| 39       | 91.2  | 69.2  | 103.8 |

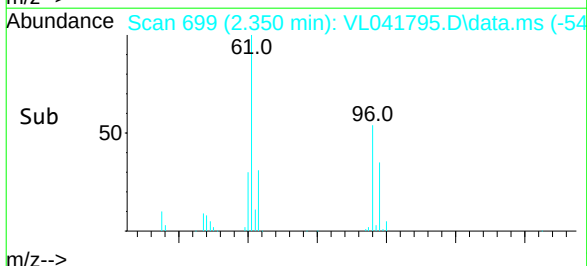
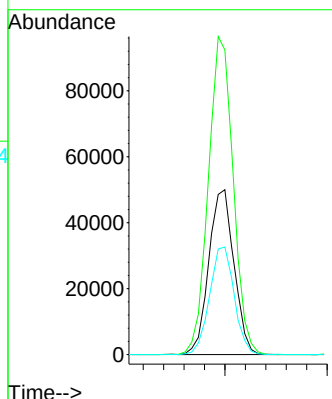
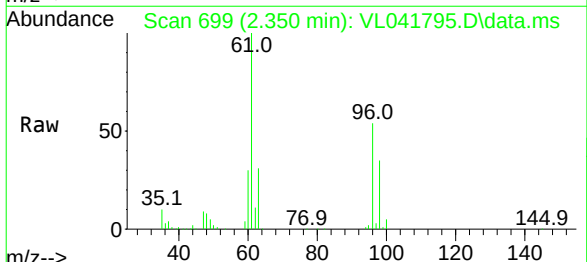
Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024

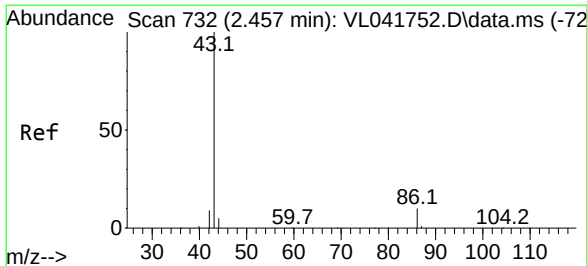


#22  
 trans-1,2-Dichloroethene  
 Concen: 8.550 ppbv  
 RT: 2.350 min Scan# 699  
 Delta R.T. 0.013 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 42821 |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 184.8 | 146.3 | 219.5 |
| 98       | 65.2  | 50.8  | 76.2  |







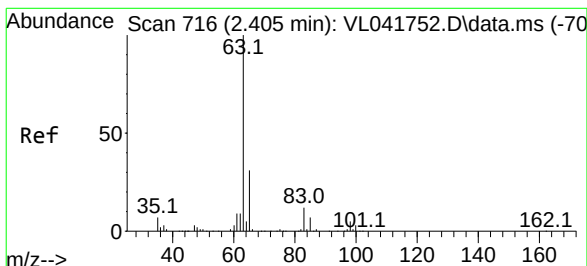
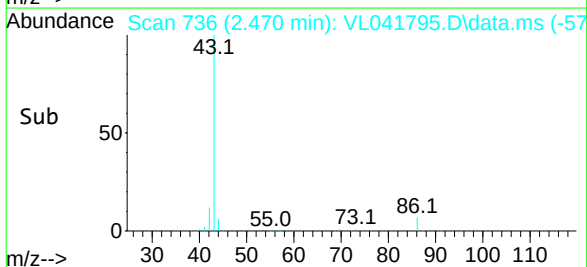
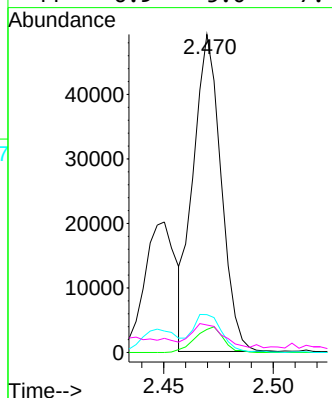
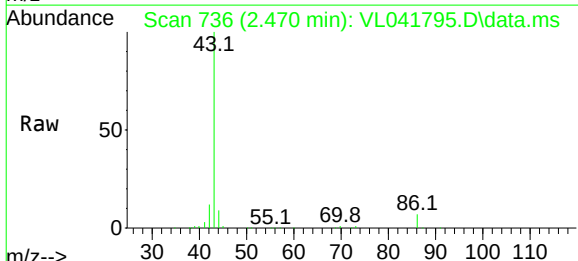
#23  
 Vinyl Acetate  
 Concen: 6.627 ppbv  
 RT: 2.470 min Scan# 732  
 Delta R.T. 0.013 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VL1218ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 86      | 7.3   | 6.6   | 10.0  |
| 42      | 11.5  | 8.2   | 12.2  |
| 44      | 6.9   | 5.0   | 7.4   |

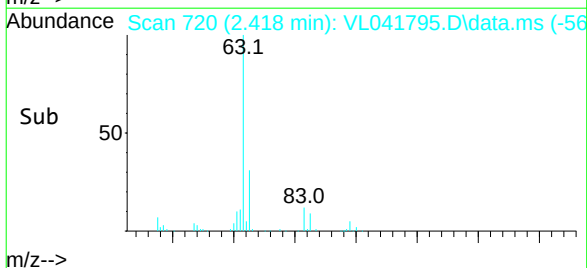
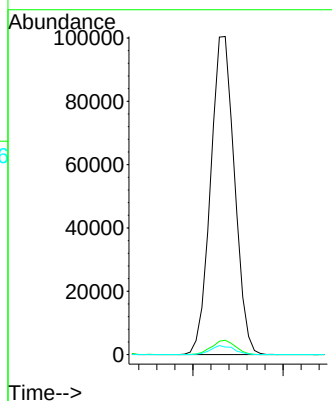
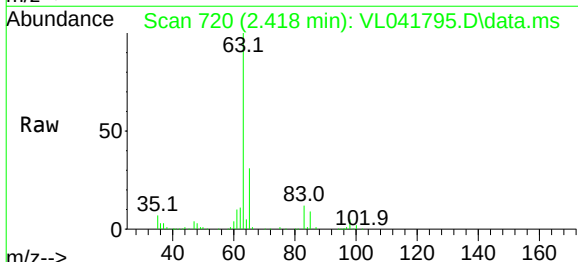
Manual Integrations  
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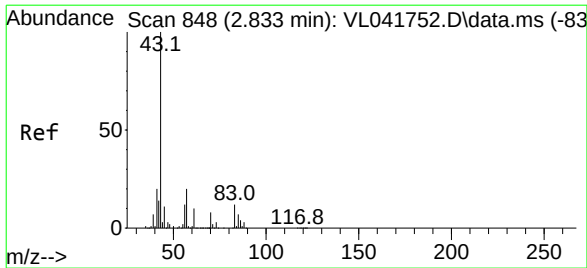
Reviewed By :Semsettin Yesilyurt 12/19/2024  
 Supervised By :Mahesh Dadoda 12/19/2024



#24  
 1,1-Dichloroethane  
 Concen: 9.142 ppbv  
 RT: 2.418 min Scan# 720  
 Delta R.T. 0.013 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

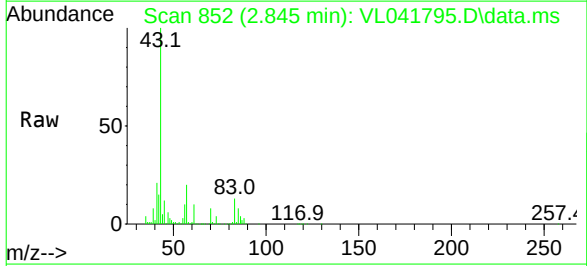
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 98      | 4.5   | 2.3   | 6.8   |
| 100     | 2.4   | 1.4   | 4.2   |





#25  
Ethyl Acetate  
Concen: 8.502 ppbv  
RT: 2.845 min Scan# 851  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

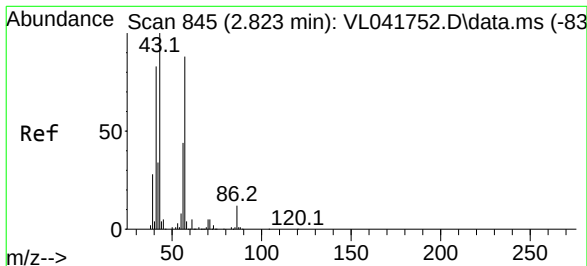
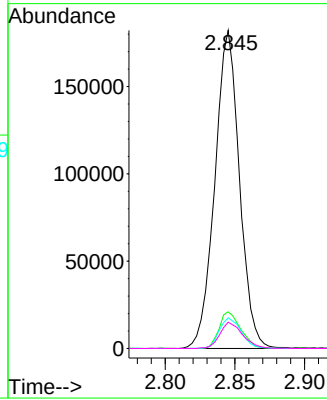
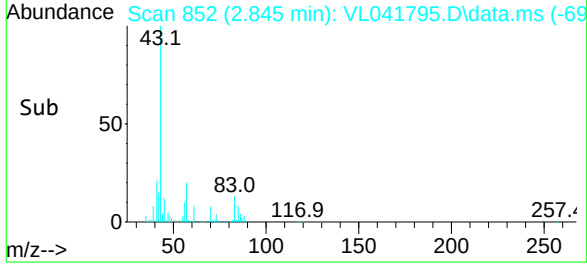
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



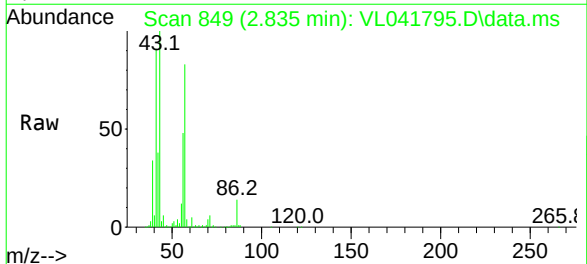
|                       |              |
|-----------------------|--------------|
| Tgt Ion: 43           | Resp: 223419 |
| Ion Ratio Lower Upper |              |
| 43 100                |              |
| 45 10.2 8.1 12.1      |              |
| 61 8.7 7.0 10.6       |              |
| 70 7.7 6.5 9.7        |              |

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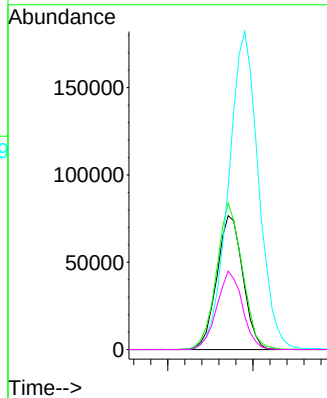
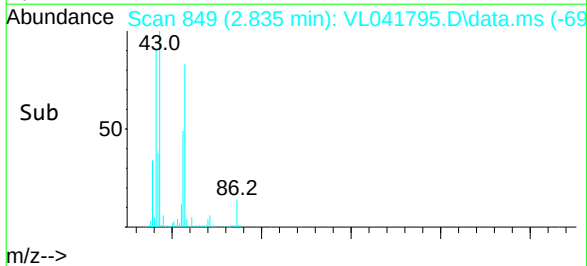
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

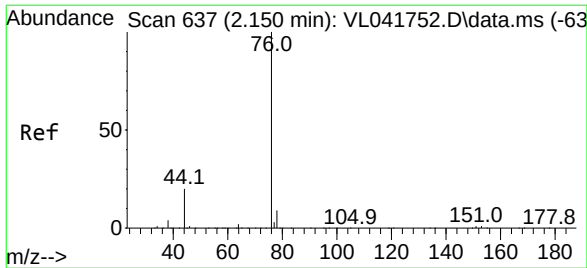


#26  
Hexane  
Concen: 8.164 ppbv  
RT: 2.835 min Scan# 849  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



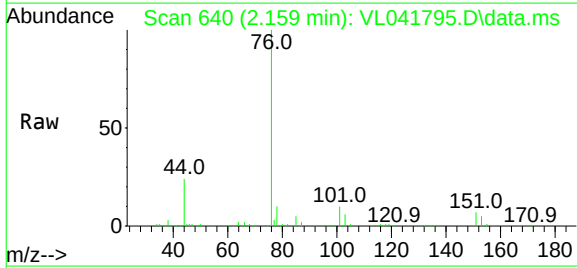
|                       |             |
|-----------------------|-------------|
| Tgt Ion: 57           | Resp: 81413 |
| Ion Ratio Lower Upper |             |
| 57 100                |             |
| 41 109.0 79.6 119.4   |             |
| 43 275.9 211.0 316.6  |             |
| 56 57.7 42.6 63.8     |             |





#27  
Carbon Disulfide  
Concen: 8.505 ppbv  
RT: 2.159 min Scan# 64  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

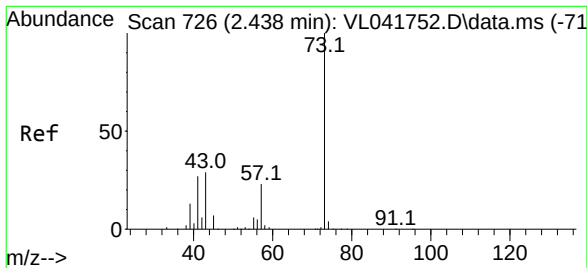
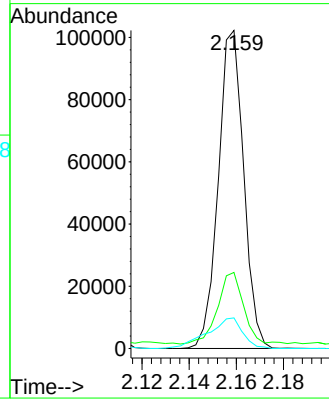
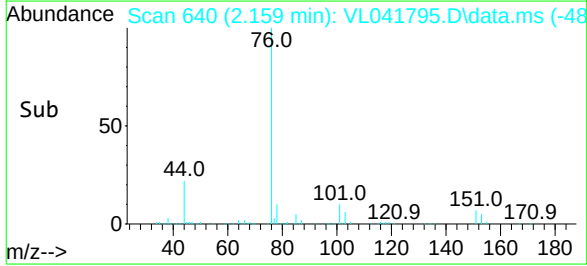
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



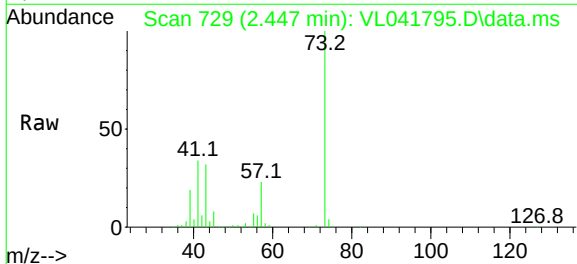
Tgt Ion: 76 Resp: 76433  
Ion Ratio Lower Upper  
76 100  
44 25.9 17.6 26.4  
78 13.3 10.2 15.4

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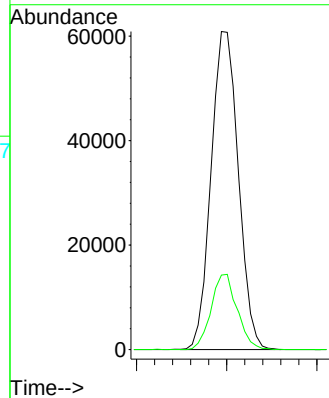
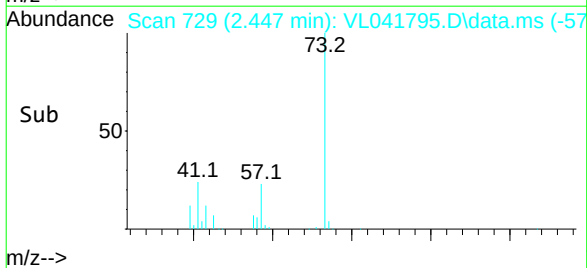
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

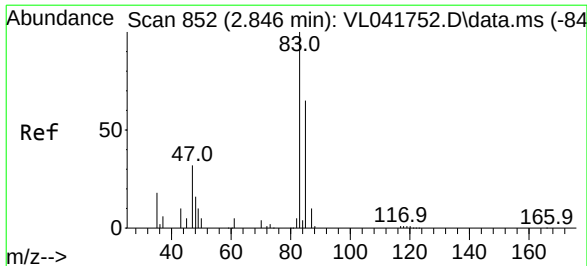


#28  
Methyl tert-Butyl Ether  
Concen: 7.915 ppbv  
RT: 2.447 min Scan# 729  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



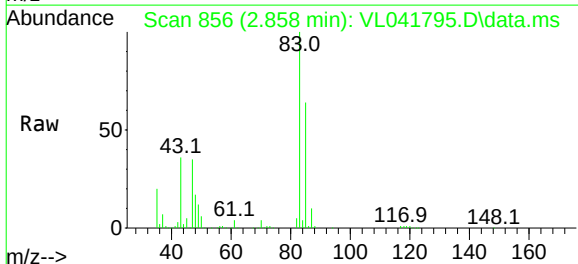
Tgt Ion: 73 Resp: 64037  
Ion Ratio Lower Upper  
73 100  
57 22.6 17.6 26.4





#29  
Chloroform  
Concen: 9.200 ppbv  
RT: 2.858 min Scan# 85  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

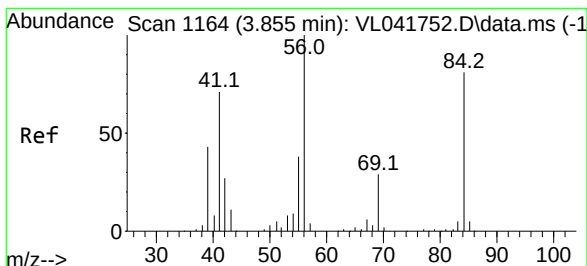
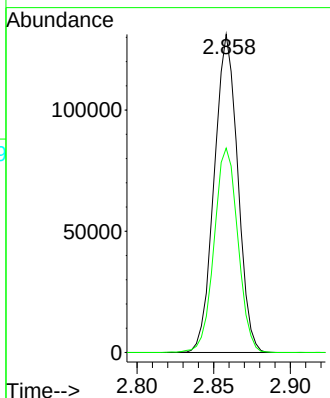
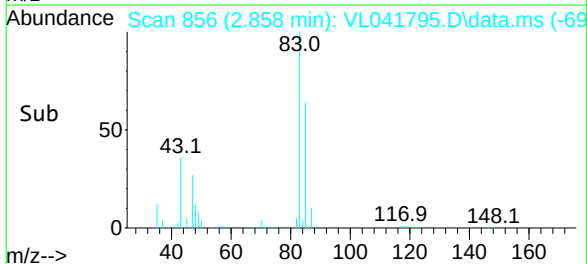
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



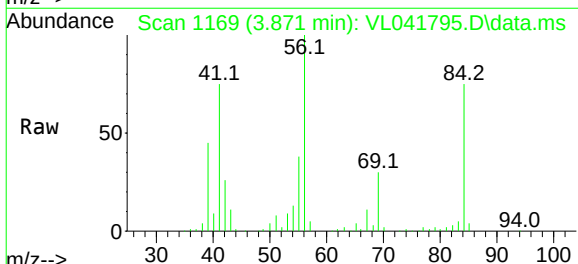
Tgt Ion: 83 Resp: 139818  
Ion Ratio Lower Upper  
83 100  
85 64.2 51.8 77.6

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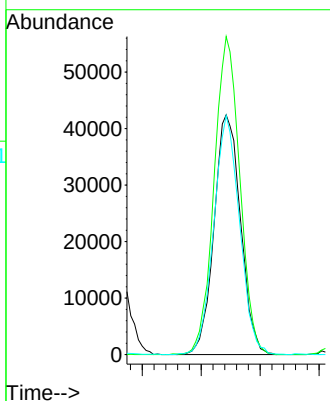
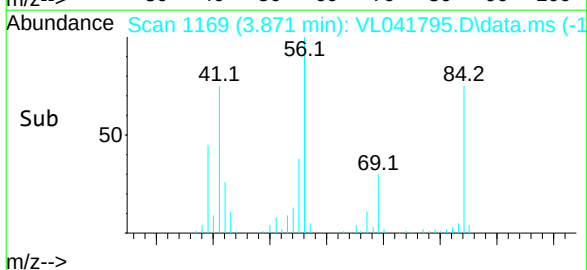
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

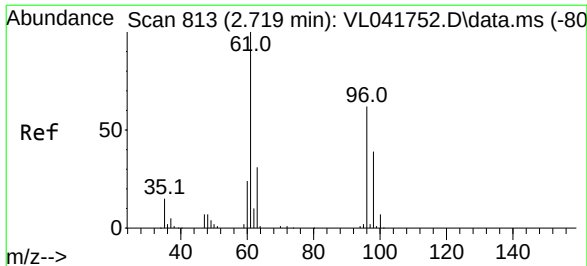


#30  
Cyclohexane  
Concen: 7.806 ppbv  
RT: 3.871 min Scan# 1169  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



Tgt Ion: 84 Resp: 66237  
Ion Ratio Lower Upper  
84 100  
56 128.6 102.3 153.5  
41 97.1 74.0 111.0





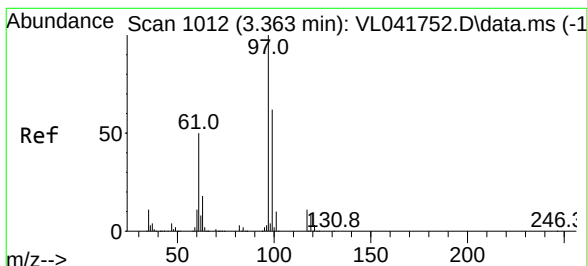
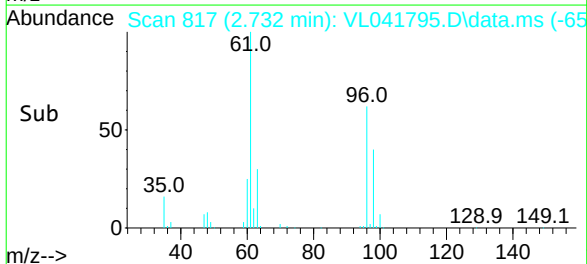
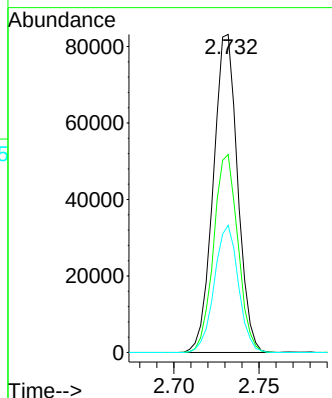
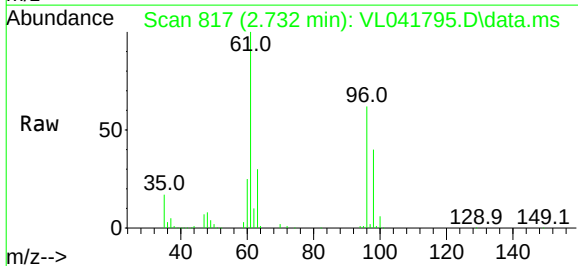
#31  
cis-1,2-Dichloroethene  
Concen: 8.033 ppbv  
RT: 2.732 min Scan# 817  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 61    | Resp: | 82779 |
| Ion      | Ratio | Lower | Upper |
| 61       | 100   |       |       |
| 96       | 62.2  | 49.7  | 74.5  |
| 98       | 40.0  | 30.8  | 46.2  |

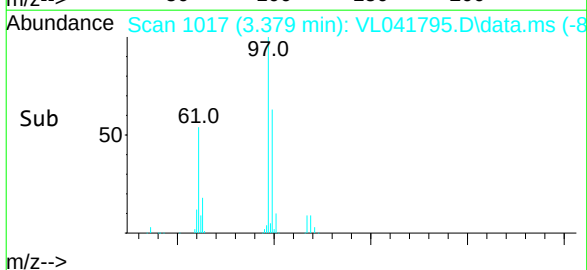
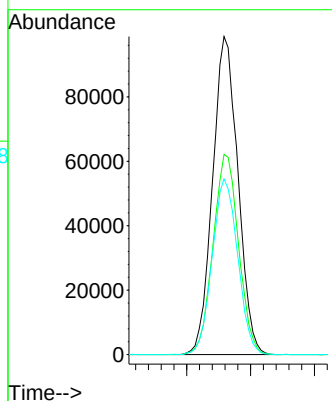
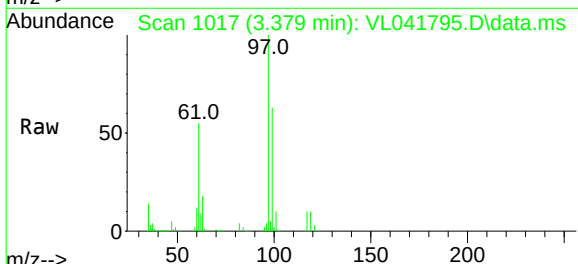
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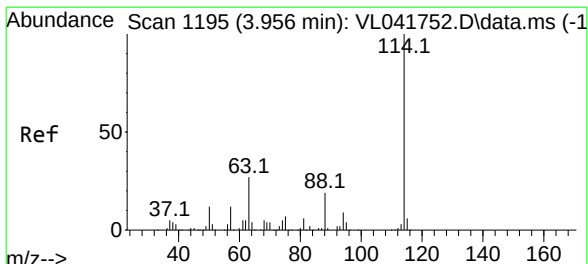
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#32  
1,1,1-Trichloroethane  
Concen: 8.807 ppbv  
RT: 3.379 min Scan# 1017  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 136055 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 63.4  | 51.0  | 76.4   |
| 61       | 55.6  | 42.2  | 63.2   |

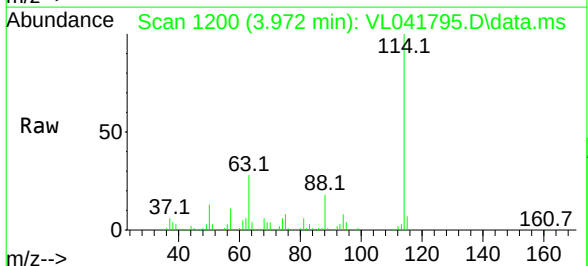




#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.972 min Scan# 12  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :

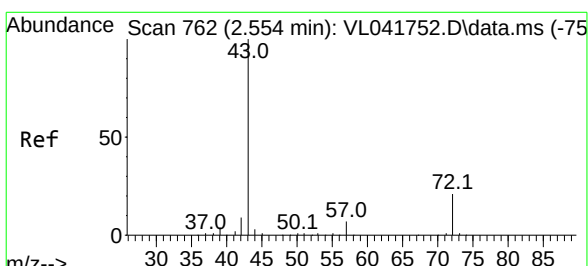
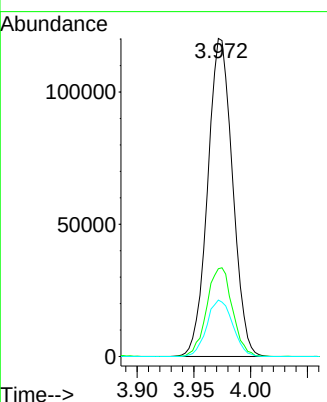
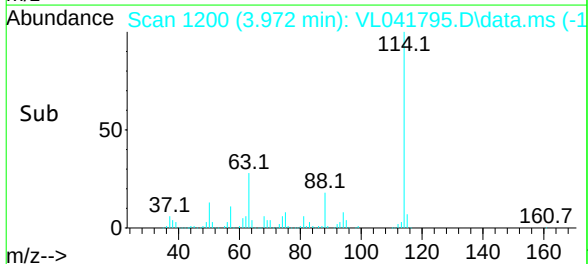
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



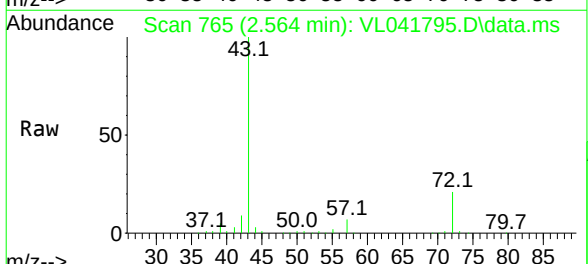
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 114   | Resp: | 183255 |
| Ion Ratio | Lower | Upper |        |
| 114       | 100   |       |        |
| 63        | 28.8  | 21.8  | 32.8   |
| 88        | 18.4  | 14.8  | 22.2   |

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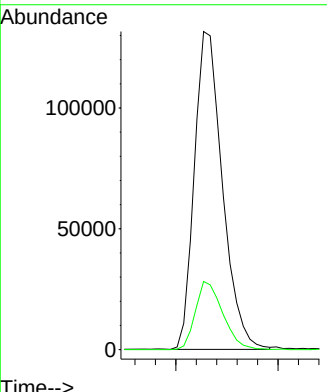
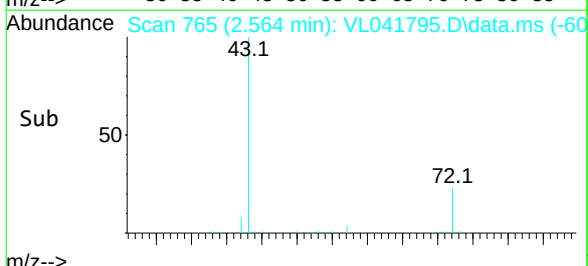
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

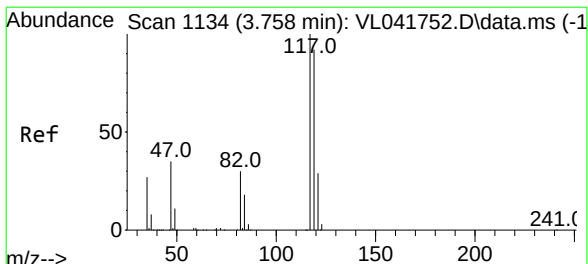


#34  
2-Butanone  
Concen: 8.525 ppbv  
RT: 2.564 min Scan# 765  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



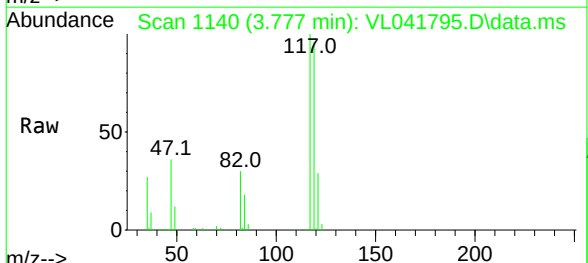
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 43    | Resp: | 125687 |
| Ion Ratio | Lower | Upper |        |
| 43        | 100   |       |        |
| 72        | 20.9  | 16.8  | 25.2   |





#35  
Carbon Tetrachloride  
Concen: 10.854 ppbv  
RT: 3.777 min Scan# 111  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

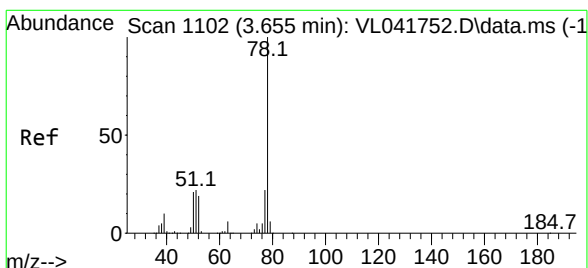
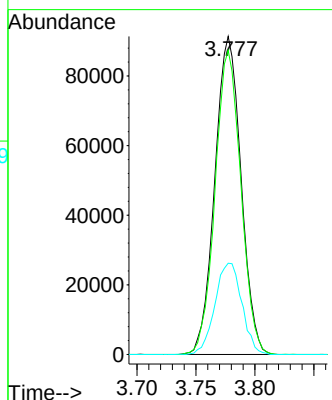
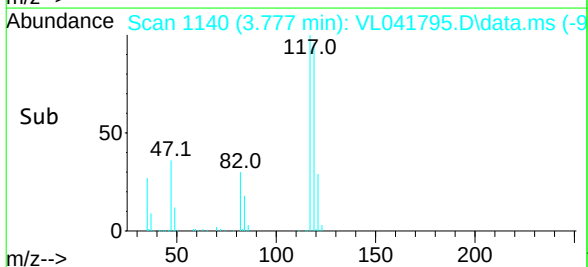


Tgt Ion: 117 Resp: 141202

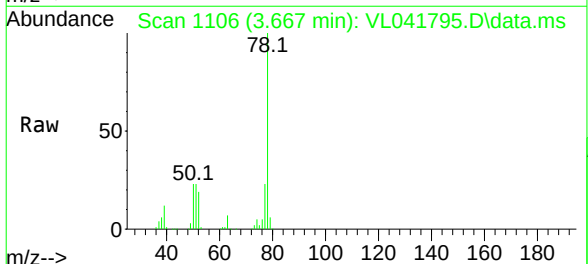
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 119 | 95.6  | 73.7  | 110.5 |
| 121 | 28.7  | 23.0  | 34.4  |

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Reviewed By : Semsettin Yesilyurt 12/19/2024  
Supervised By : Mahesh Dadoda 12/19/2024

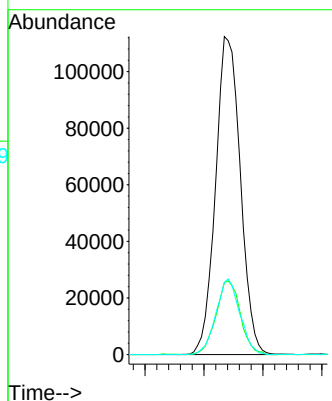
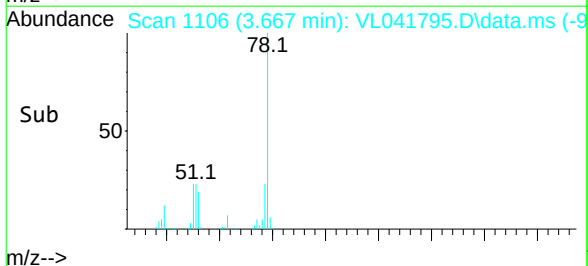


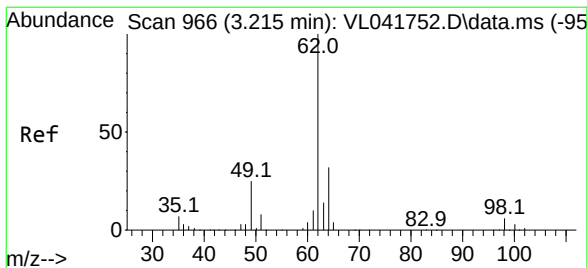
#36  
Benzene  
Concen: 8.674 ppbv  
RT: 3.667 min Scan# 1106  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



Tgt Ion: 78 Resp: 164423

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 22.6  | 17.8  | 26.6  |
| 50  | 22.8  | 17.2  | 25.8  |





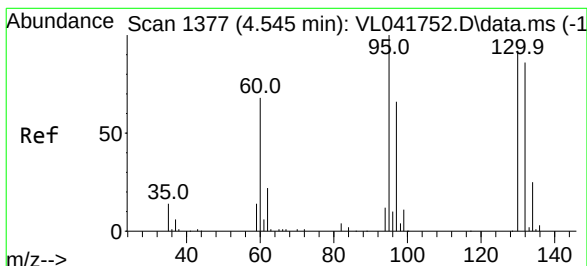
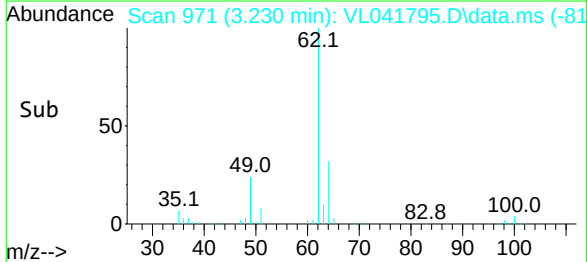
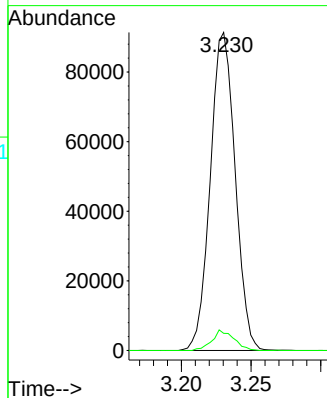
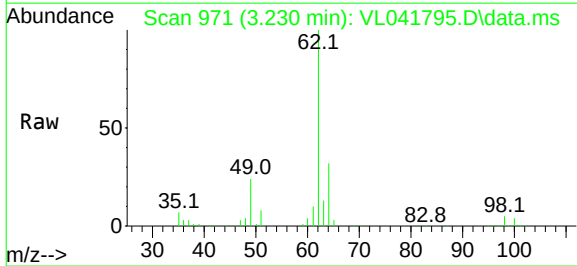
#37  
1,2-Dichloroethane  
Concen: 9.631 ppbv  
RT: 3.230 min Scan# 971  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 62 Resp: 113600  
Ion Ratio Lower Upper  
62 100  
98 5.7 4.7 7.1

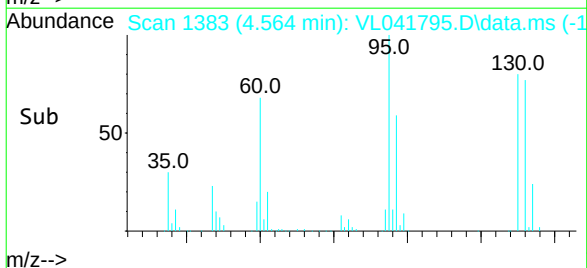
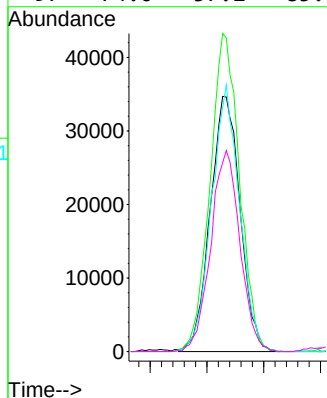
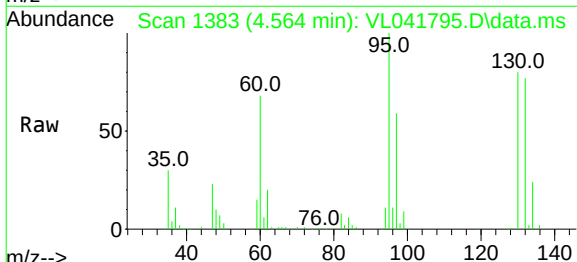
Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

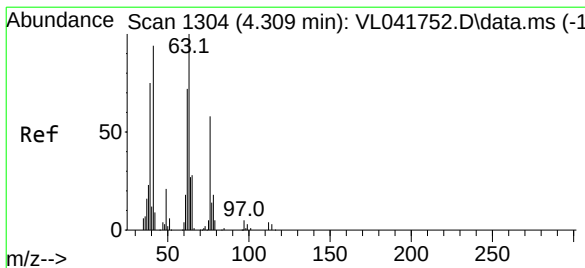


#38  
Trichloroethene  
Concen: 7.864 ppbv  
RT: 4.564 min Scan# 1383  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:130 Resp: 63280  
Ion Ratio Lower Upper  
130 100  
95 124.4 87.0 130.6  
132 95.7 75.0 112.6  
97 74.0 57.2 85.8







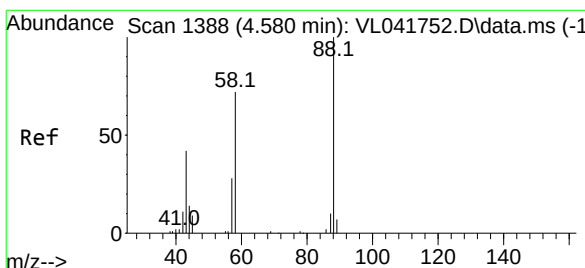
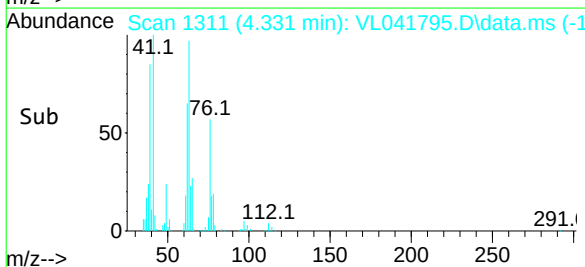
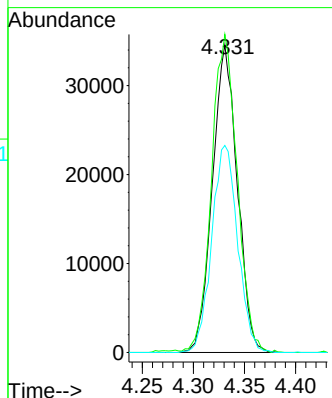
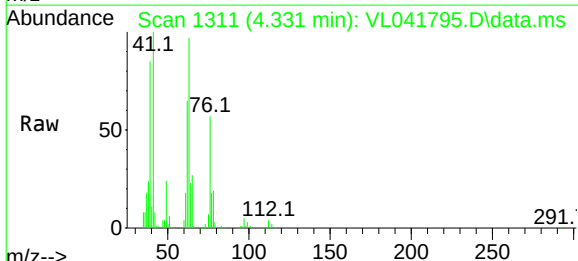
#39  
1,2-Dichloropropane  
Concen: 8.541 ppbv  
RT: 4.331 min Scan# 1304  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 63 Resp: 58553  
Ion Ratio Lower Upper  
63 100  
41 103.2 75.3 112.9  
62 67.3 57.3 85.9

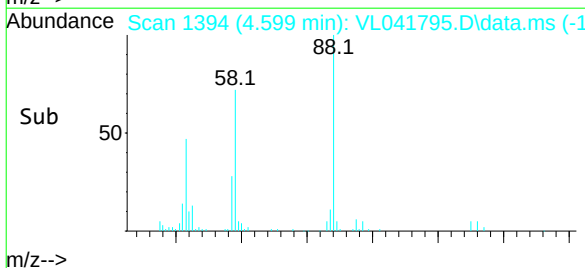
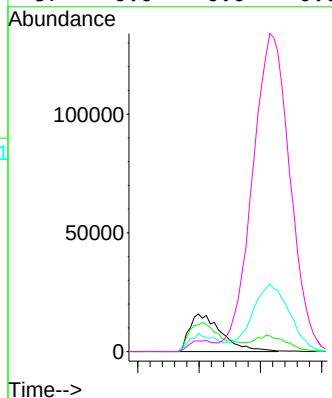
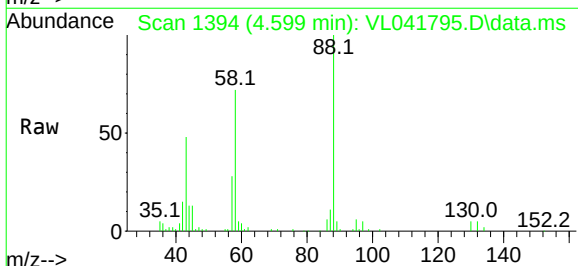
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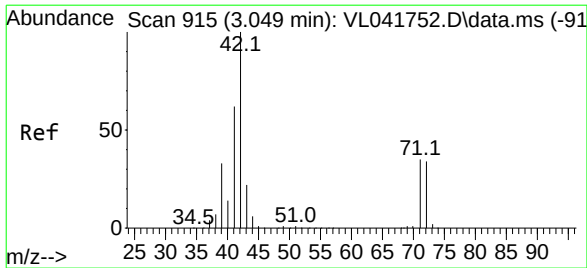
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#40  
1,4-Dioxane  
Concen: 8.624 ppbv  
RT: 4.599 min Scan# 1394  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 88 Resp: 28884  
Ion Ratio Lower Upper  
88 100  
58 83.5 61.0 91.6  
43 40.2 29.4 44.0  
57 0.0 0.0 0.0





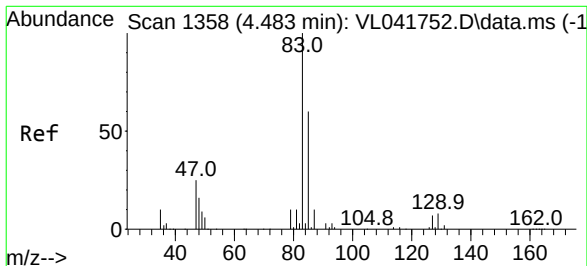
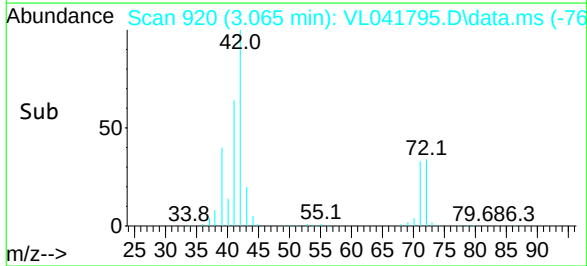
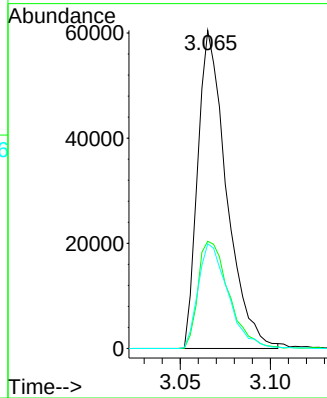
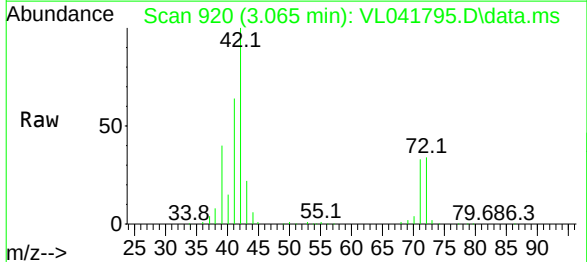
#41  
Tetrahydrofuran  
Concen: 8.114 ppbv  
RT: 3.065 min Scan# 92  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 67017 |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 36.3  | 29.1  | 43.7  |
| 71       | 34.4  | 28.4  | 42.6  |

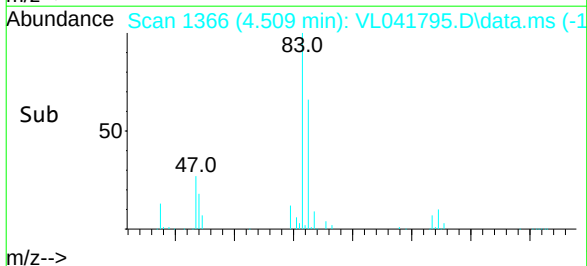
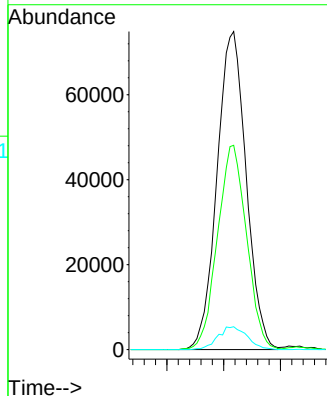
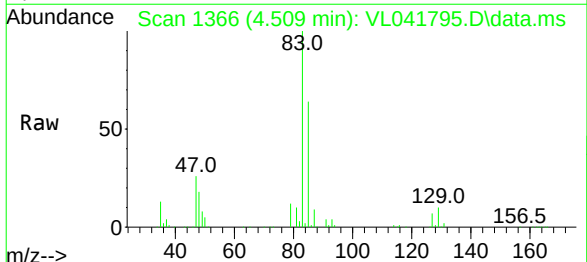
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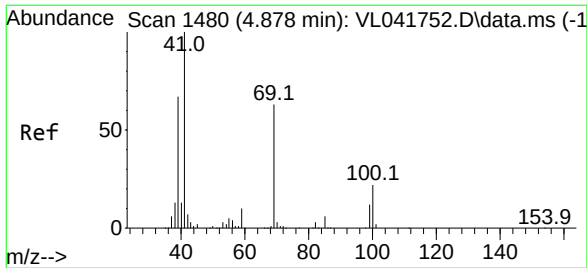
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#42  
Bromodichloromethane  
Concen: 9.839 ppbv  
RT: 4.509 min Scan# 1366  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 133513 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 85       | 64.2  | 48.0  | 72.0   |
| 127      | 7.2   | 5.8   | 8.8    |





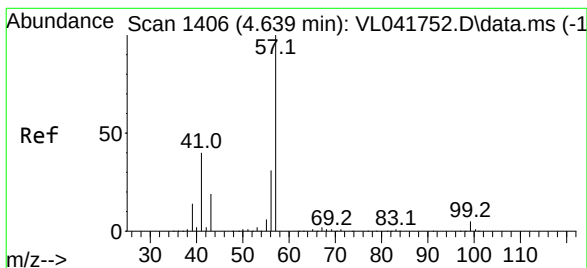
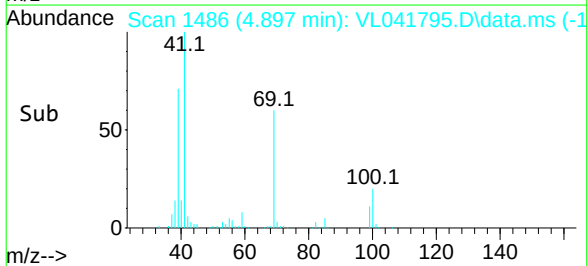
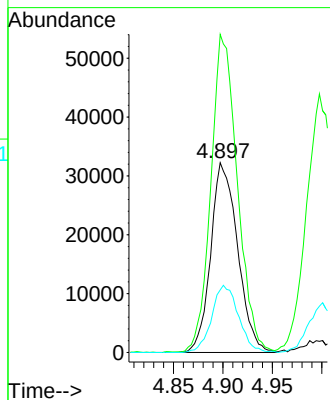
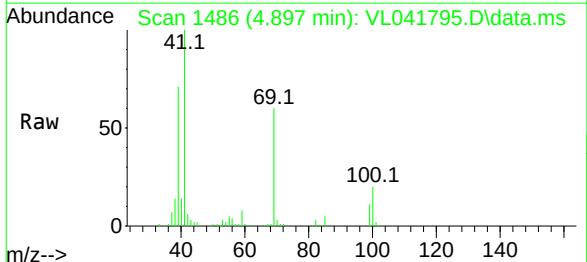
#43  
Methyl Methacrylate  
Concen: 8.448 ppbv  
RT: 4.897 min Scan# 1412  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 69    | Resp: | 61014 |
| Ion      | Ratio | Lower | Upper |
| 69       | 100   |       |       |
| 41       | 165.0 | 130.3 | 195.5 |
| 100      | 35.3  | 28.3  | 42.5  |

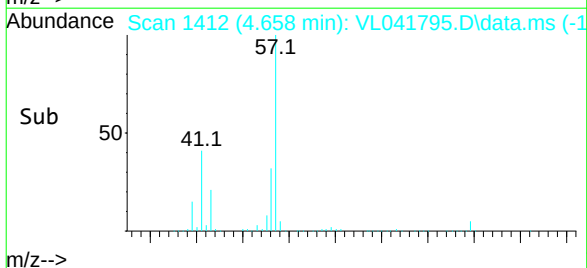
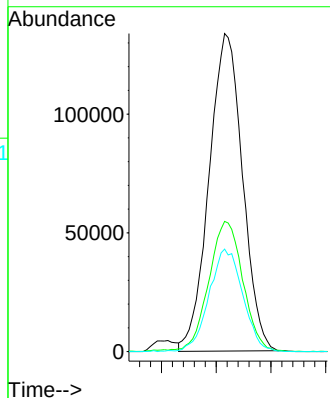
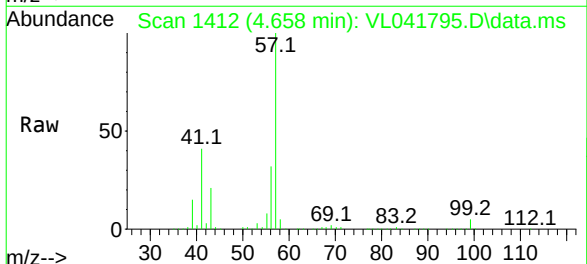
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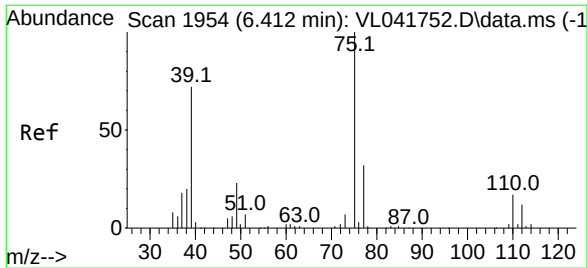
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#44  
2,2,4-Trimethylpentane  
Concen: 8.777 ppbv  
RT: 4.658 min Scan# 1412  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 284140 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 42.1  | 30.7  | 46.1   |
| 56       | 32.6  | 25.4  | 38.0   |





#45

t-1,3-Dichloropropene

Concen: 7.879 ppbv

RT: 6.438 min Scan# 19

Delta R.T. 0.026 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

VL1218ABS01

Tgt Ion: 75 Resp: 58865

Ion Ratio Lower Upper

75 100

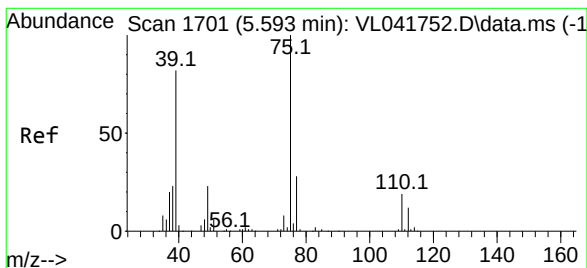
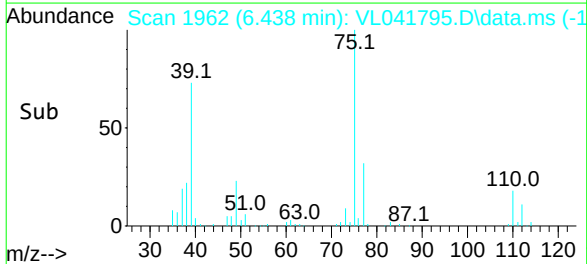
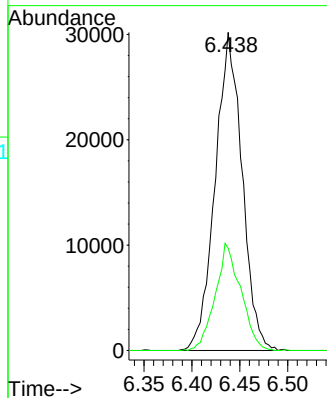
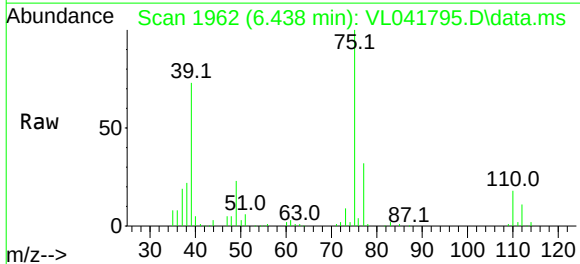
77 32.1 25.9 38.9

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Supervised By :Mahesh Dadoda 12/19/2024



#46

cis-1,3-Dichloropropene

Concen: 7.824 ppbv

RT: 5.625 min Scan# 1711

Delta R.T. 0.032 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

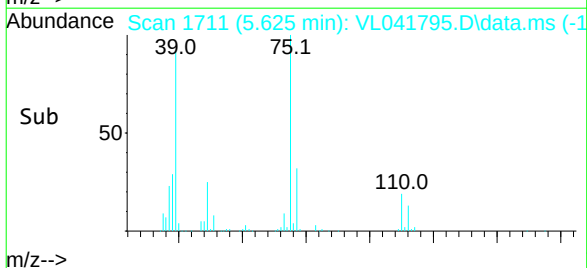
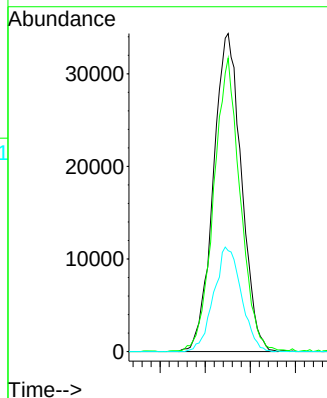
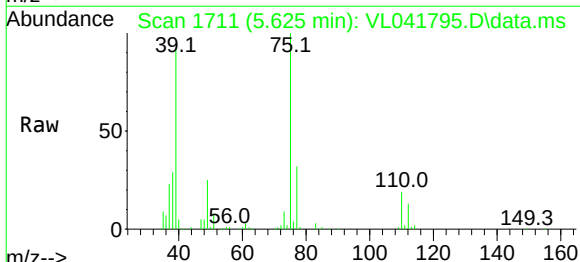
Tgt Ion: 75 Resp: 74198

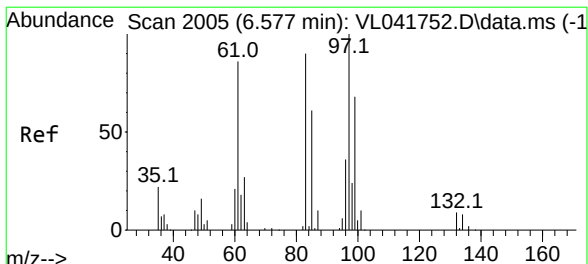
Ion Ratio Lower Upper

75 100

39 92.0 65.2 97.8

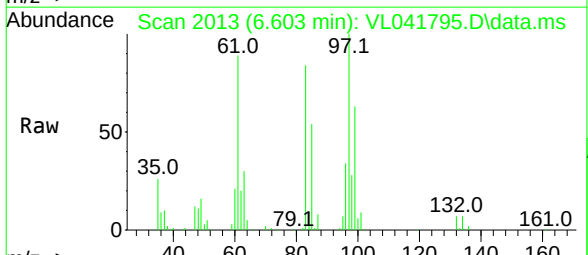
77 31.7 22.0 33.0





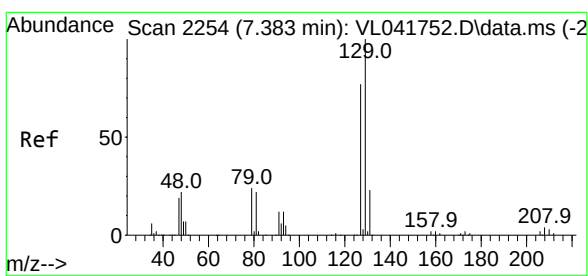
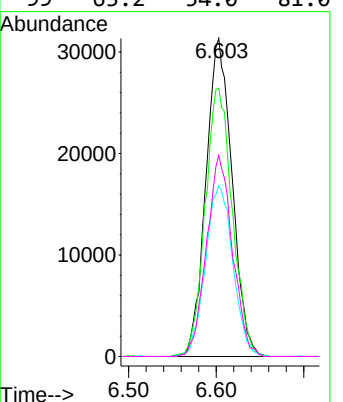
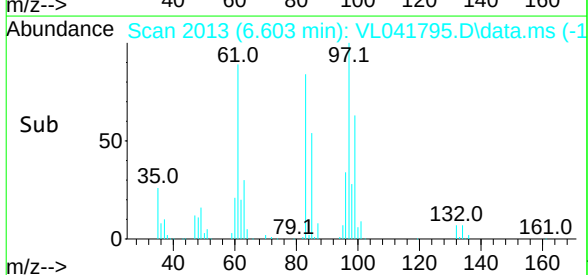
#47  
1,1,2-Trichloroethane  
Concen: 9.071 ppbv  
RT: 6.603 min Scan# 20  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument : MSVOA\_L  
ClientSampleId : VL1218ABS01

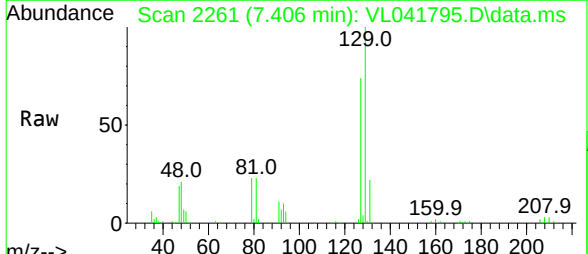


|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 64954 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 84.4  | 72.3  | 108.5 |
| 85       | 53.7  | 48.5  | 72.7  |
| 99       | 63.2  | 54.0  | 81.0  |

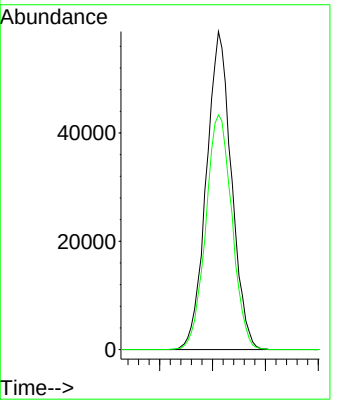
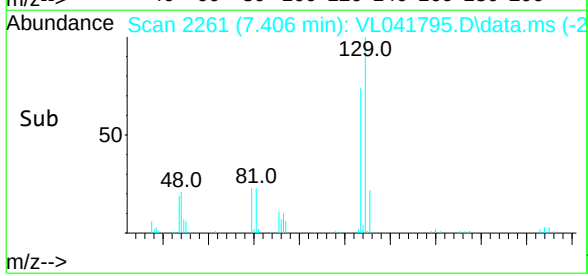
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Supervised By :Mahesh Dadoda 12/19/2024

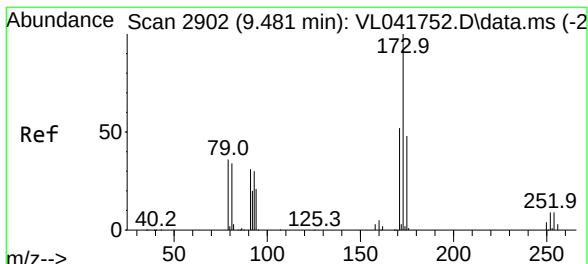


#48  
Dibromochloromethane  
Concen: 9.920 ppbv  
RT: 7.406 min Scan# 2261  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 96996 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 76.8  | 38.8  | 116.3 |





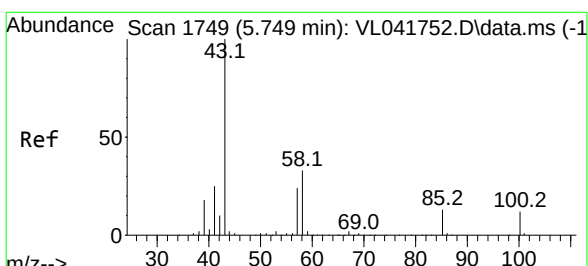
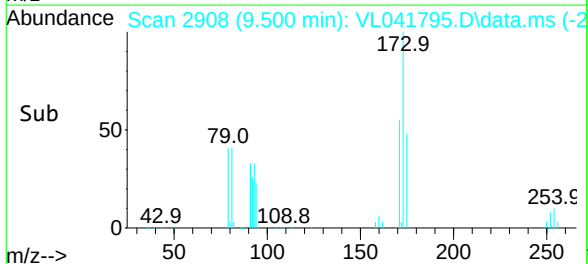
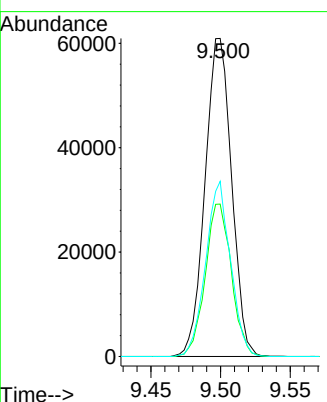
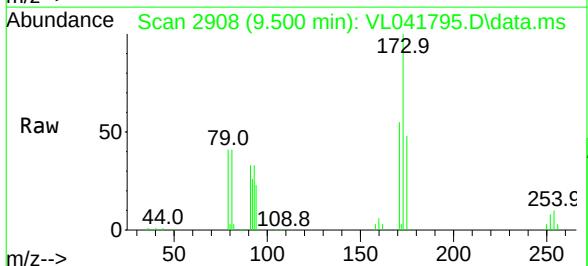
#49  
Bromoform  
Concen: 10.100 ppbv  
RT: 9.500 min Scan# 2908  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument : MSVOA\_1  
ClientSampleId : VL1218ABS01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 80840 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 47.1  | 38.2  | 57.2  |
| 171       | 51.5  | 41.1  | 61.7  |

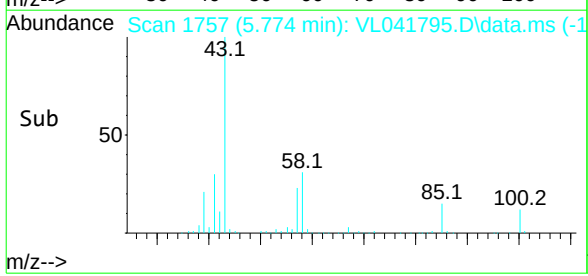
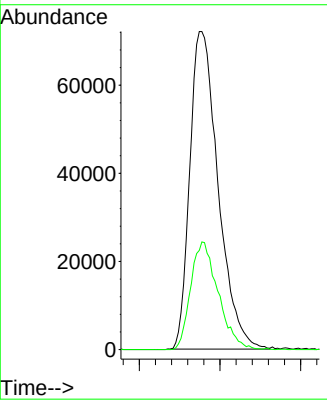
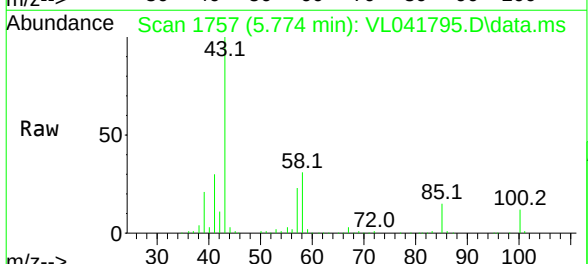
Manual Integrations  
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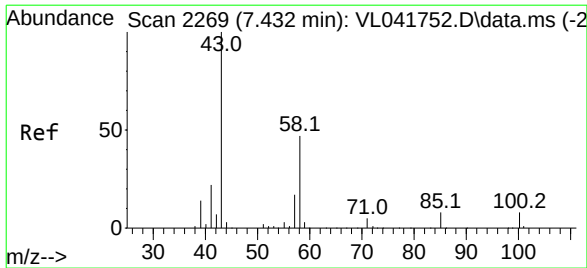
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#50  
4-Methyl-2-Pentanone  
Concen: 8.759 ppbv  
RT: 5.774 min Scan# 1757  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 43    | Resp: | 175817 |
| Ion Ratio | Lower | Upper |        |
| 43        | 100   |       |        |
| 58        | 32.9  | 26.8  | 40.2   |





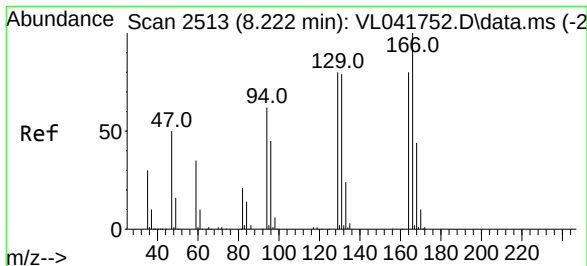
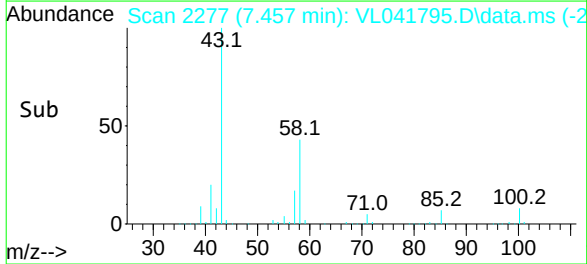
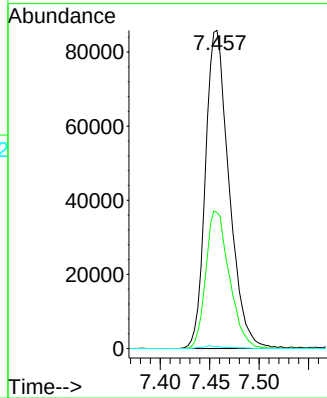
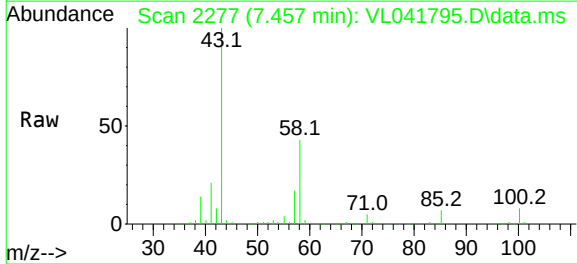
#51  
2-Hexanone  
Concen: 8.752 ppbv  
RT: 7.457 min Scan# 2269  
Delta R.T. 0.025 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 43 Resp: 142403  
Ion Ratio Lower Upper  
43 100  
58 43.1 36.6 55.0  
98 0.8 0.1 0.1

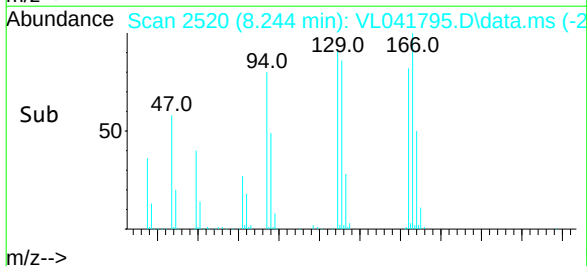
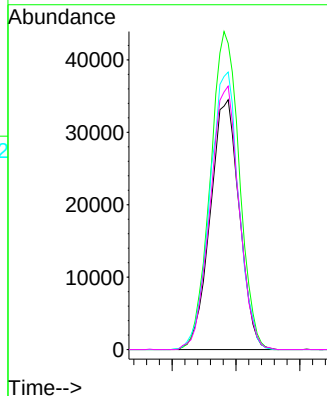
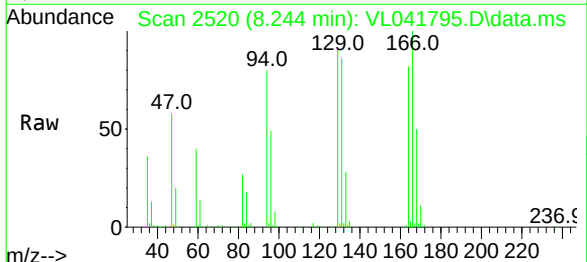
Manual Integrations  
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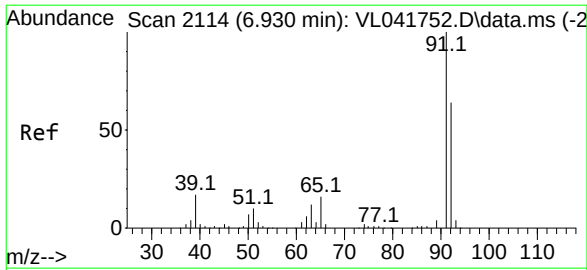
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#52  
Tetrachloroethene  
Concen: 7.729 ppbv  
RT: 8.244 min Scan# 2520  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:164 Resp: 54531  
Ion Ratio Lower Upper  
164 100  
166 122.5 99.8 149.6  
129 111.1 79.6 119.4  
131 105.4 78.6 117.8





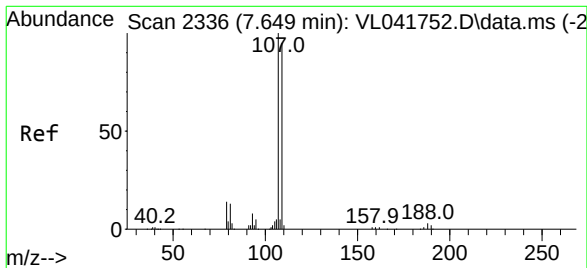
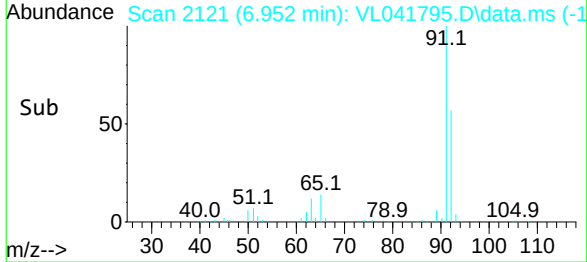
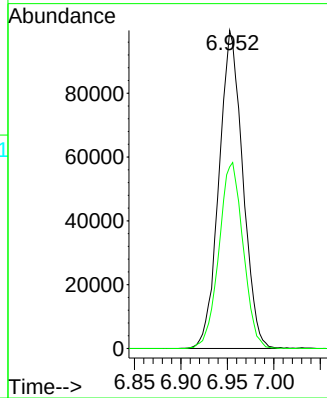
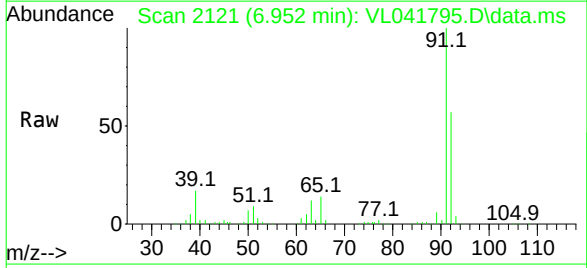
#53  
Toluene  
Concen: 8.265 ppbv  
RT: 6.952 min Scan# 2114  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 91 Resp: 177625  
Ion Ratio Lower Upper  
91 100  
92 59.4 47.9 71.9

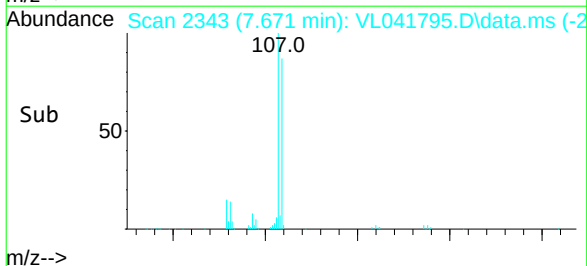
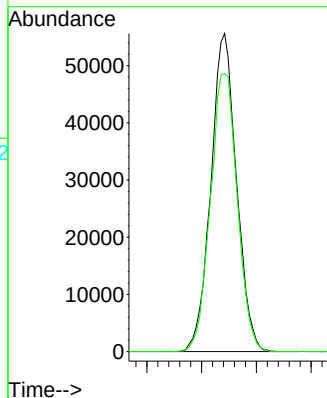
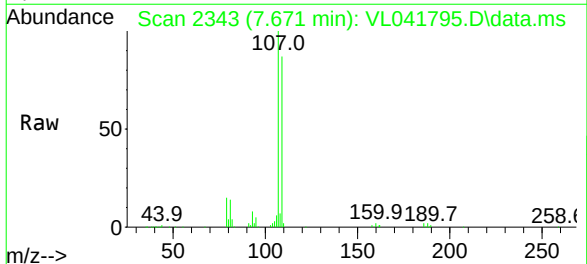
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

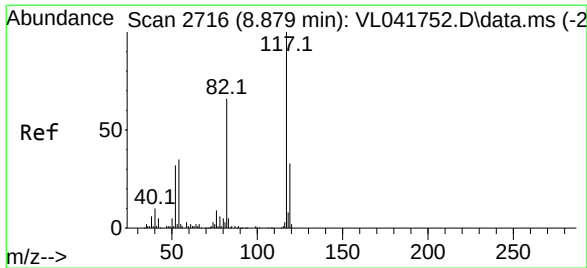


#54  
1,2-Dibromoethane  
Concen: 9.161 ppbv  
RT: 7.671 min Scan# 2343  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:107 Resp: 90389  
Ion Ratio Lower Upper  
107 100  
109 87.4 75.9 113.9







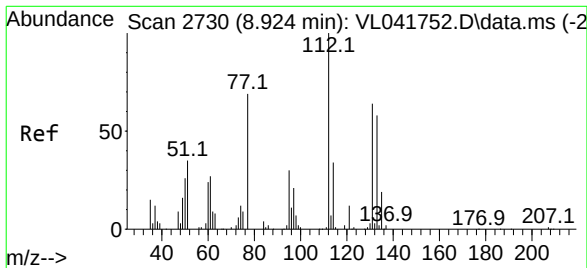
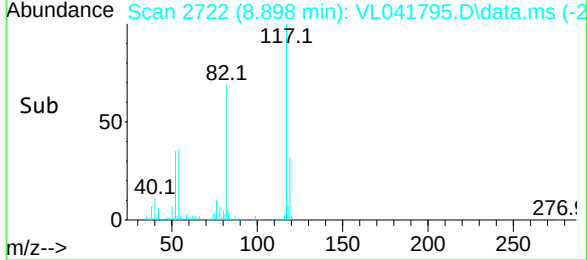
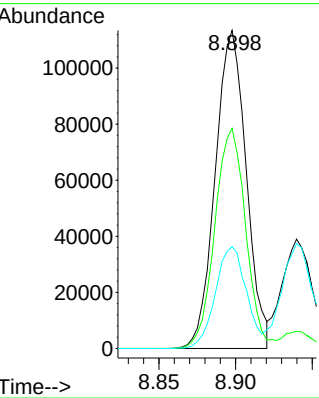
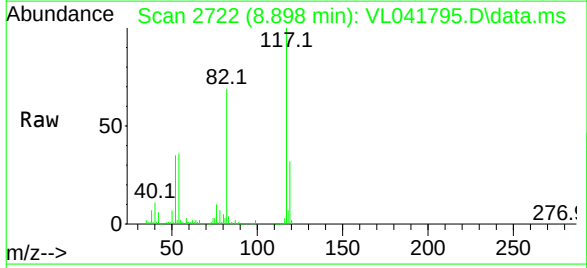
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.898 min Scan# 2716  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion:117 Resp: 159496  
Ion Ratio Lower Upper  
117 100  
82 74.0 53.8 80.8  
119 32.0 26.7 40.1

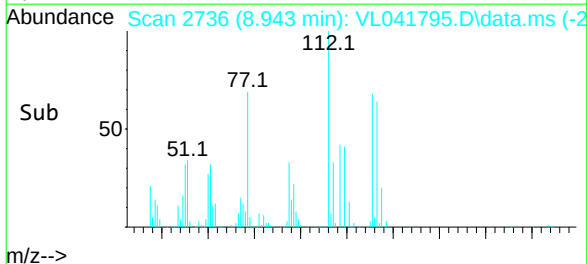
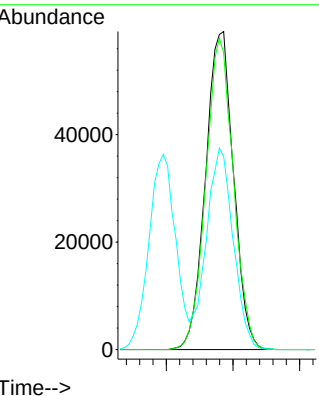
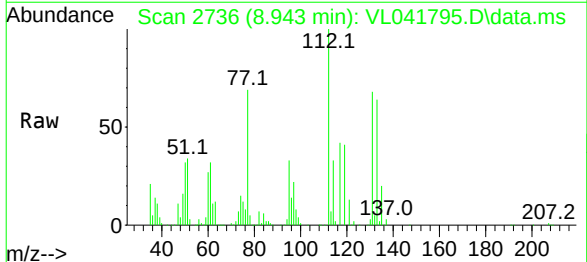
Manual Integrations  
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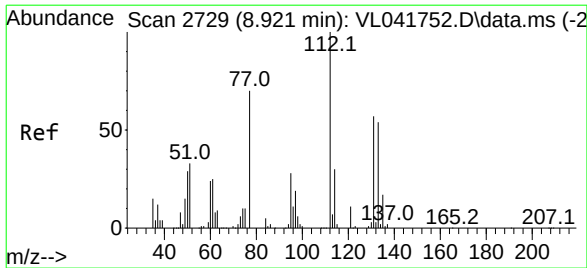
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#56  
1,1,1,2-Tetrachloroethane  
Concen: 10.202 ppbv  
RT: 8.943 min Scan# 2736  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:131 Resp: 86262  
Ion Ratio Lower Upper  
131 100  
133 96.4 76.8 115.2  
119 61.2 49.0 73.6





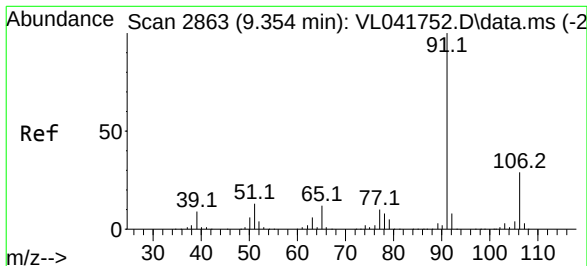
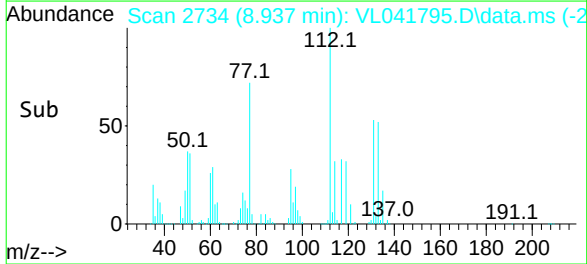
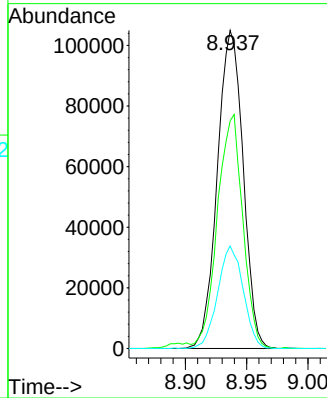
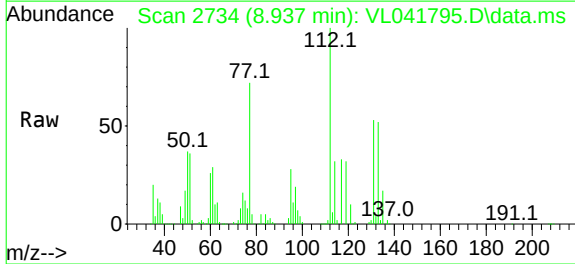
#57  
Chlorobenzene  
Concen: 9.415 ppbv  
RT: 8.937 min Scan# 2729  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 112 Resp: 153659  
Ion Ratio Lower Upper  
112 100  
77 71.6 57.4 86.0  
114 32.2 27.4 33.4

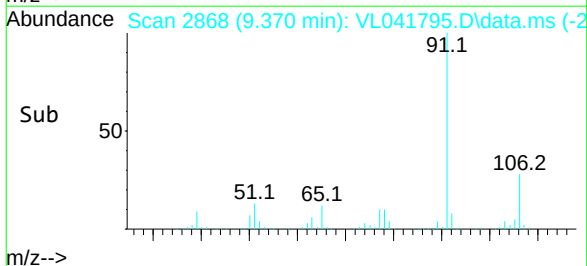
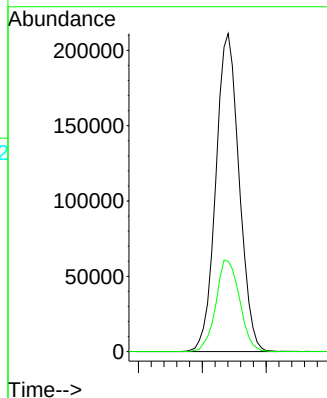
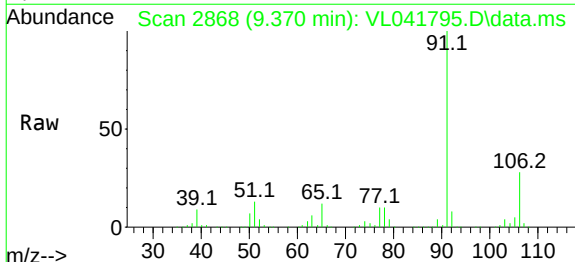
Manual Integrations  
APPROVED

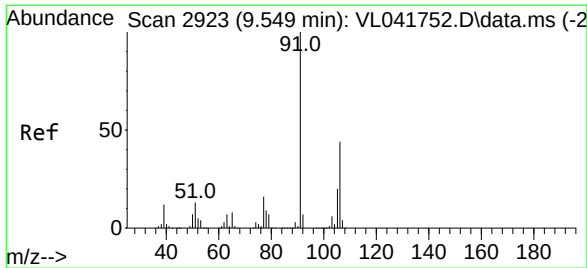
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#58  
Ethyl Benzene  
Concen: 9.326 ppbv  
RT: 9.370 min Scan# 2868  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 91 Resp: 267795  
Ion Ratio Lower Upper  
91 100  
106 28.4 23.5 35.3





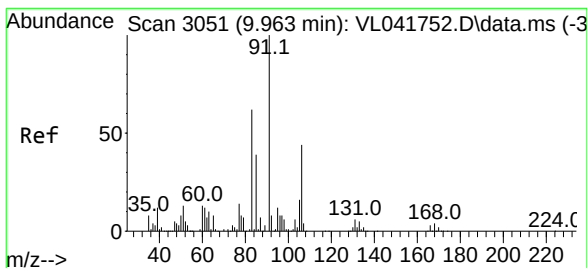
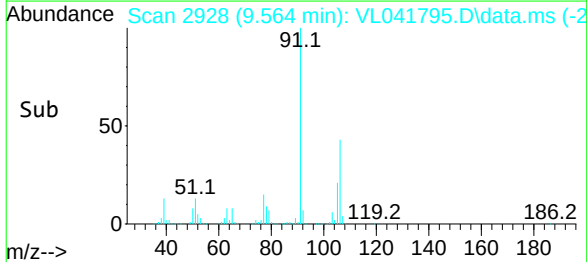
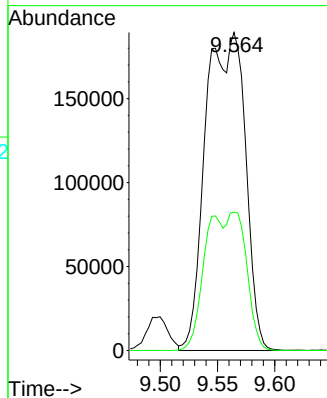
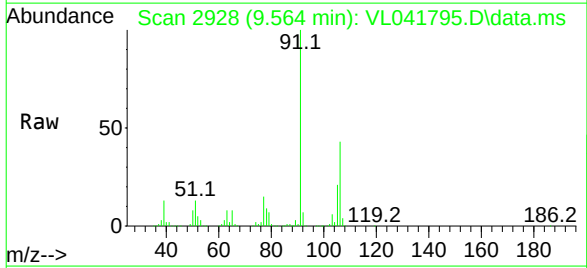
#59  
m/p-Xylene  
Concen: 19.747 ppbv m  
RT: 9.564 min Scan# 29  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 91 Resp: 455916  
Ion Ratio Lower Upper  
91 100  
106 45.0 0.0 0.0#

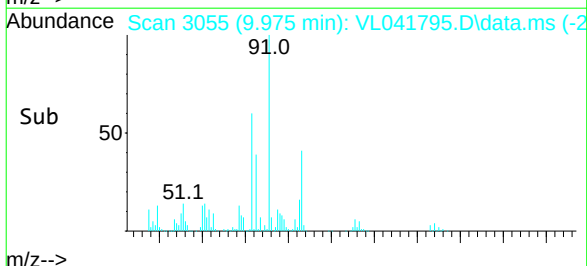
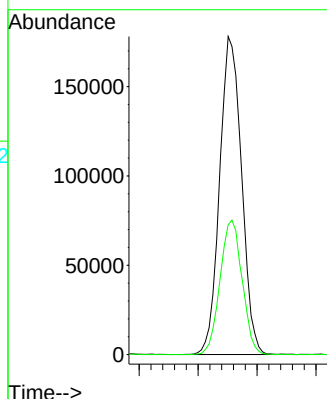
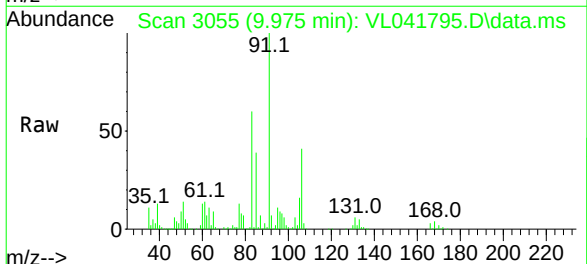
Manual Integrations  
APPROVED

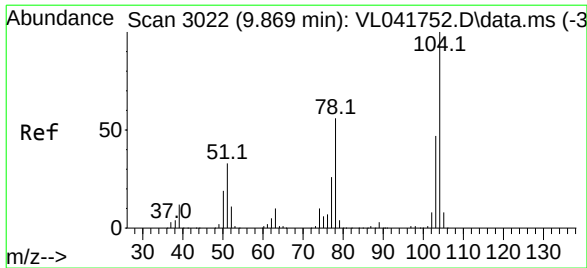
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#60  
o-Xylene  
Concen: 9.930 ppbv  
RT: 9.975 min Scan# 3055  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 91 Resp: 229919  
Ion Ratio Lower Upper  
91 100  
106 42.5 21.1 63.4





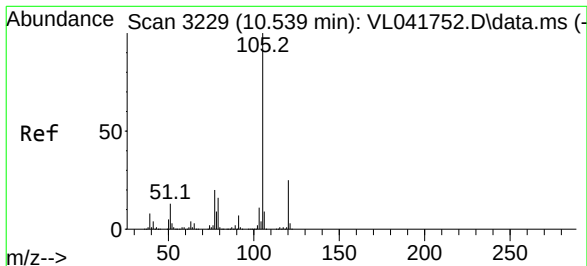
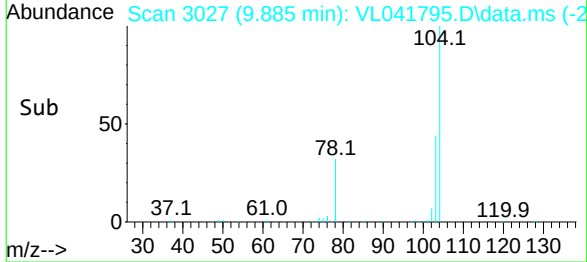
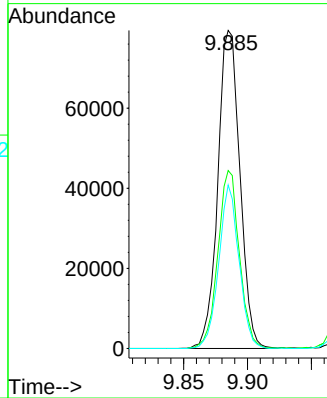
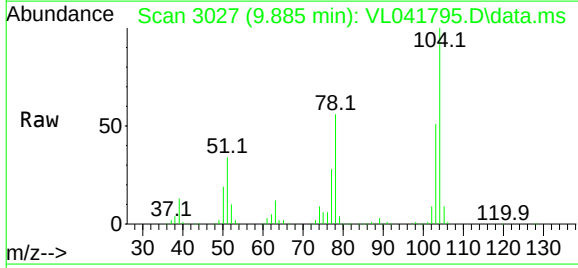
#61  
Styrene  
Concen: 9.543 ppbv  
RT: 9.885 min Scan# 3022  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion:104 Resp: 95536  
Ion Ratio Lower Upper  
104 100  
78 54.4 43.8 65.6  
103 47.1 37.8 56.6

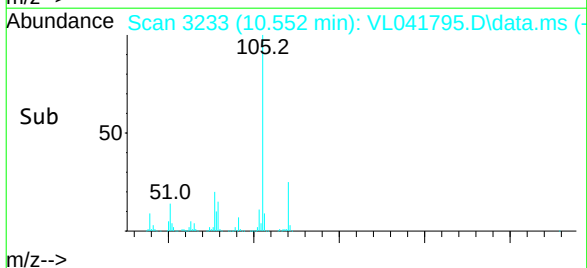
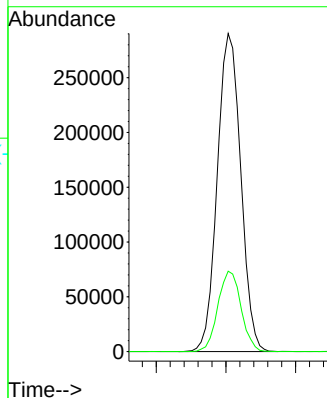
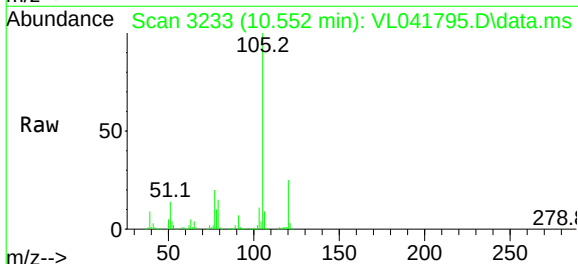
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APPROVED

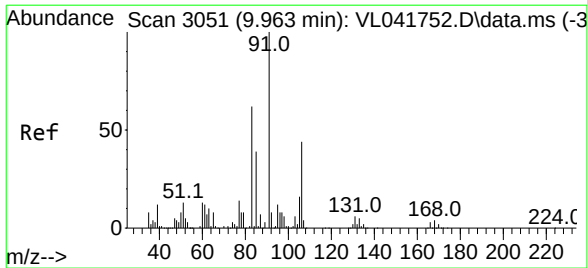
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#62  
Isopropylbenzene  
Concen: 9.762 ppbv  
RT: 10.552 min Scan# 3233  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:105 Resp: 339599  
Ion Ratio Lower Upper  
105 100  
120 24.9 19.8 29.8





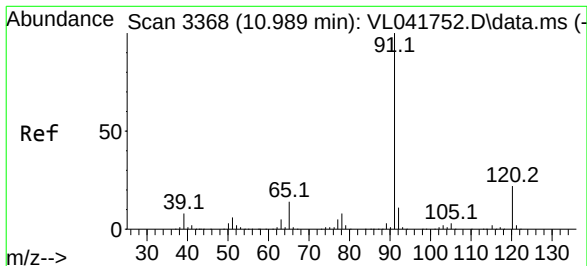
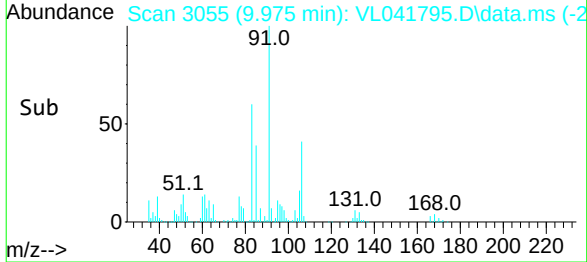
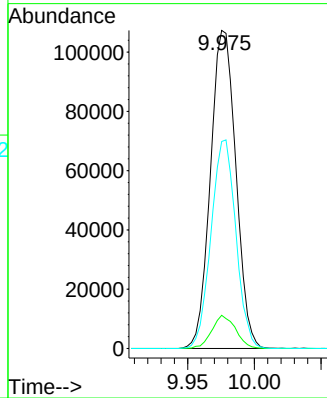
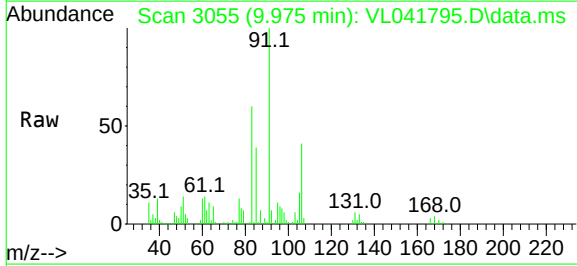
#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.817 ppbv  
RT: 9.975 min Scan# 3051  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 83 Resp: 142272  
Ion Ratio Lower Upper  
83 100  
131 9.8 4.9 14.7  
85 64.1 32.0 96.2

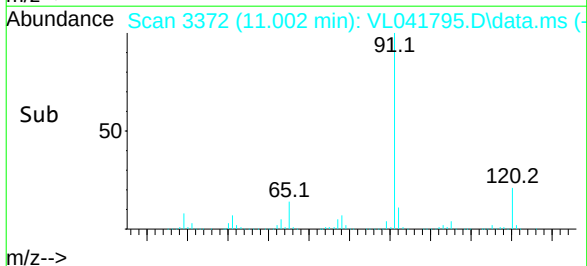
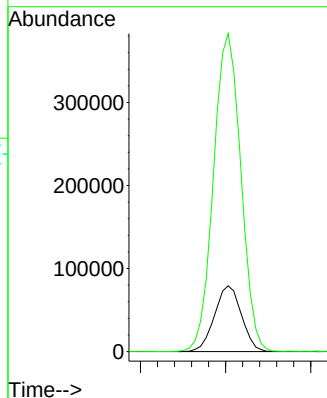
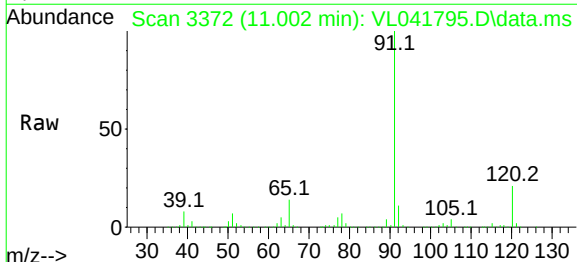
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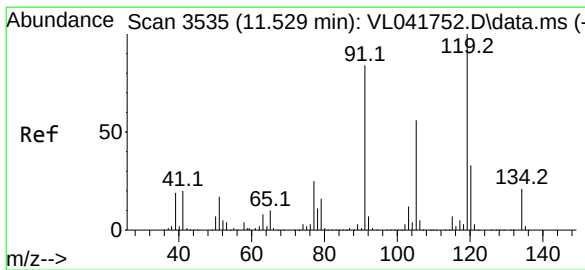
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#64  
n-propylbenzene  
Concen: 9.880 ppbv  
RT: 11.002 min Scan# 3372  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:120 Resp: 86896  
Ion Ratio Lower Upper  
120 100  
91 493.0 387.3 580.9





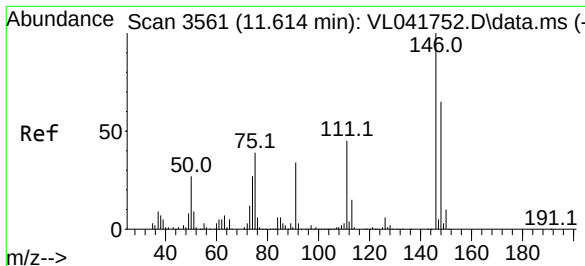
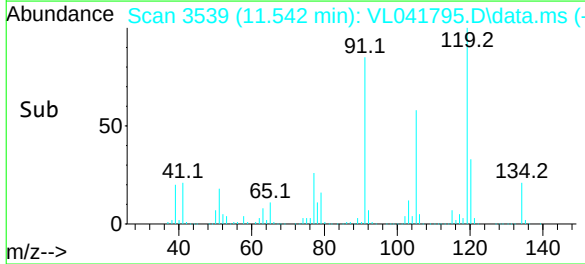
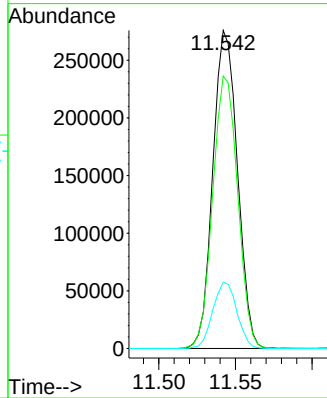
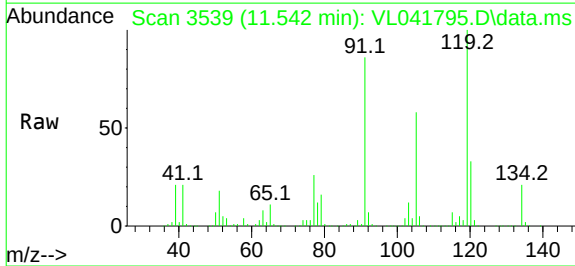
#65  
tert-Butylbenzene  
Concen: 9.808 ppbv  
RT: 11.542 min Scan# 3535  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 119   | Resp: | 307835 |
| Ion      | Ratio | Lower | Upper  |
| 119      | 100   |       |        |
| 91       | 87.3  | 67.0  | 100.4  |
| 134      | 20.4  | 16.5  | 24.7   |

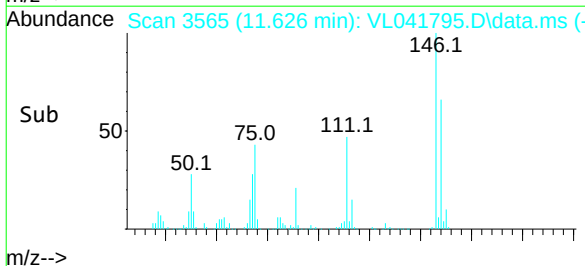
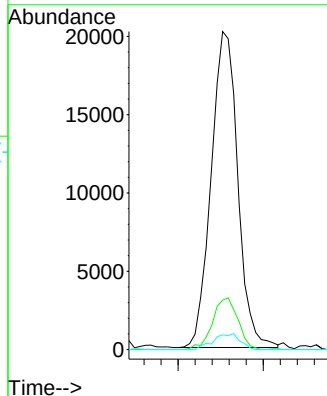
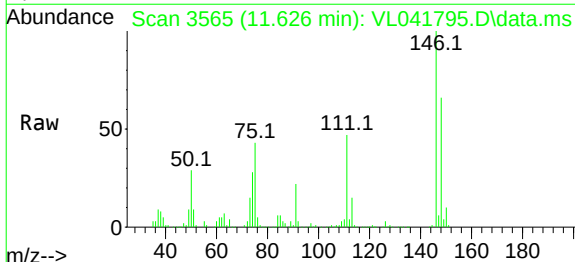
Manual Integrations  
APPROVED

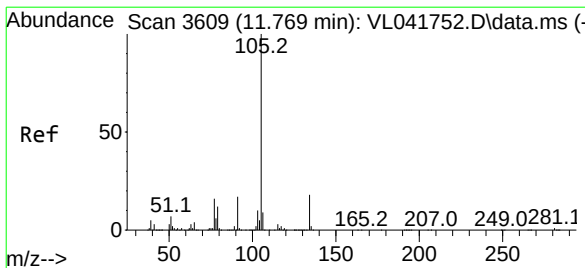
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#66  
Benzyl Chloride  
Concen: 7.936 ppbv  
RT: 11.626 min Scan# 3565  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

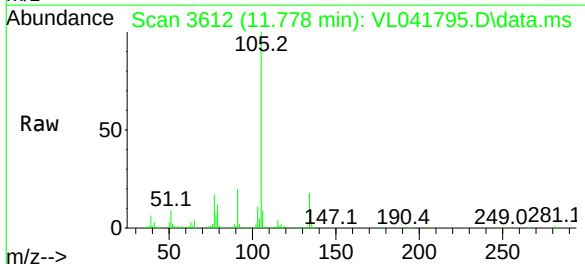
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 21939 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 126      | 15.7  | 13.9  | 20.9  |
| 128      | 5.1   | 4.4   | 6.6   |





#67  
sec-Butylbenzene  
Concen: 10.167 ppbv  
RT: 11.778 min Scan# 3609  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

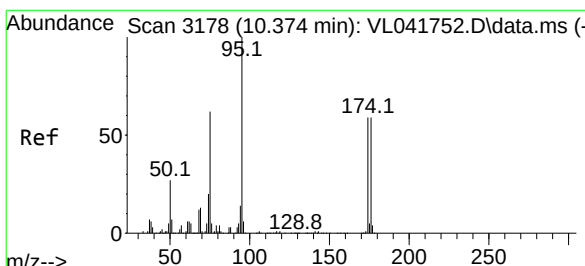
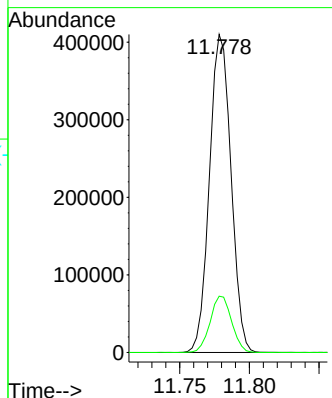
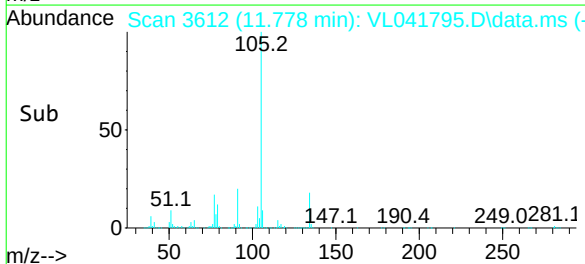
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



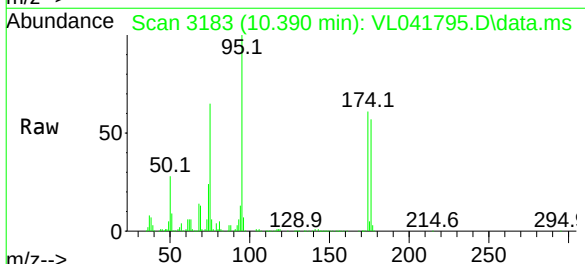
Tgt Ion: 105 Resp: 441578  
Ion Ratio Lower Upper  
105 100  
134 17.6 14.5 21.7

Manual Integrations  
APPROVED

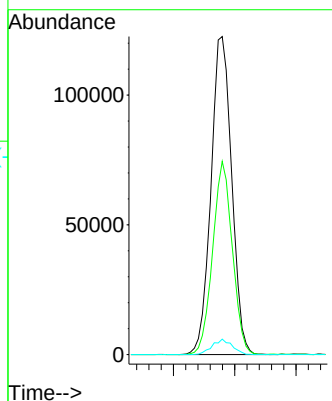
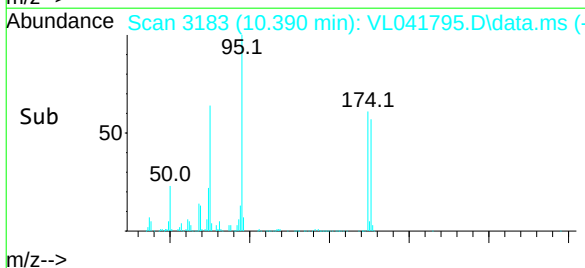
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024

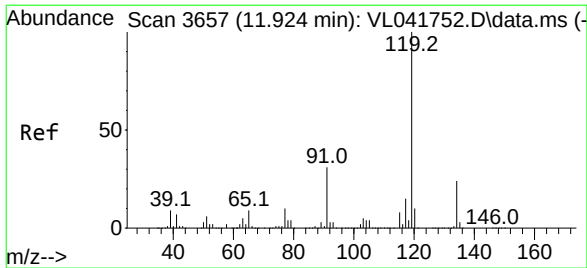


#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.825 ppbv  
RT: 10.390 min Scan# 3183  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06



Tgt Ion: 95 Resp: 143879  
Ion Ratio Lower Upper  
95 100  
174 57.9 47.6 71.4  
175 4.6 3.7 5.5





#69

p-Isopropyltoluene

Concen: 10.229 ppbv

RT: 11.937 min Scan# 3661

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

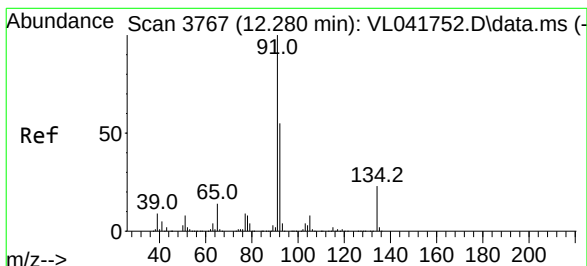
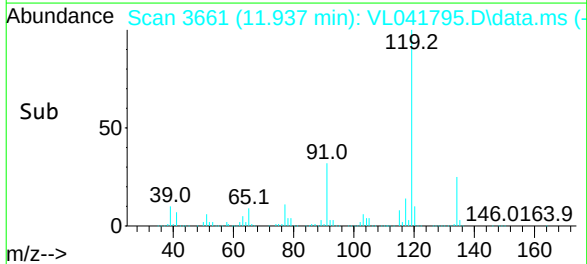
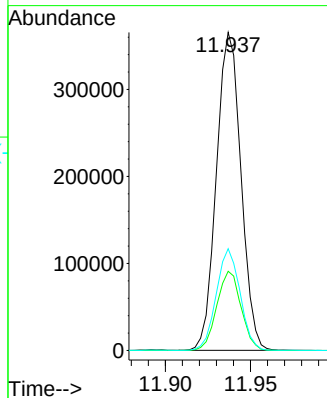
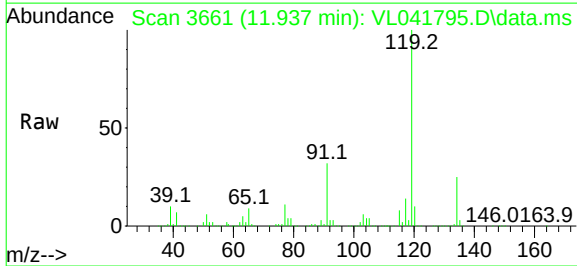
ClientSampleId :

VL1218ABS01

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 119   | Resp: | 366111 |
| Ion      | Ratio | Lower | Upper  |
| 119      | 100   |       |        |
| 134      | 24.7  | 19.6  | 29.4   |
| 91       | 31.3  | 24.4  | 36.6   |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#70

n-Butylbenzene

Concen: 10.597 ppbv

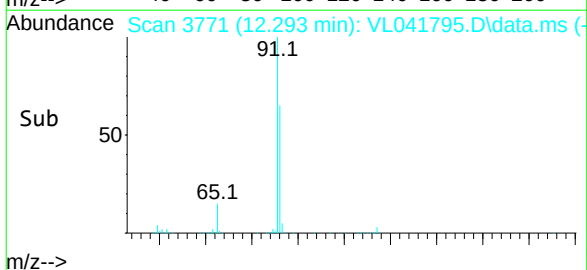
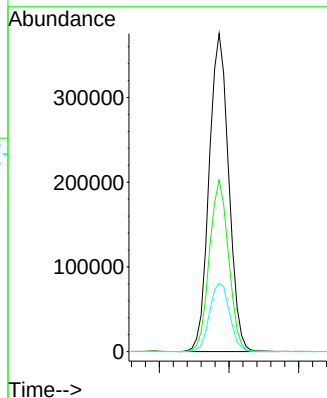
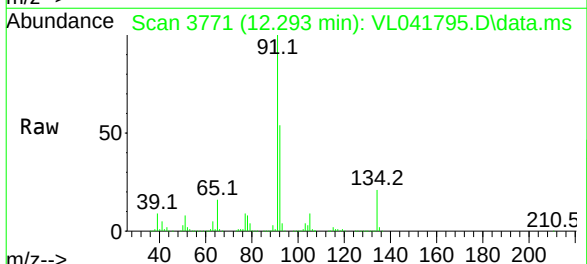
RT: 12.293 min Scan# 3771

Delta R.T. 0.013 min

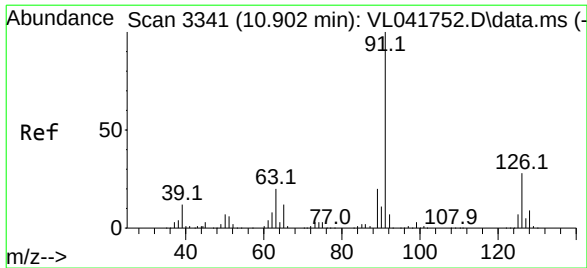
Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 366451 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 52.8  | 43.2  | 64.8   |
| 134      | 22.0  | 18.2  | 27.4   |







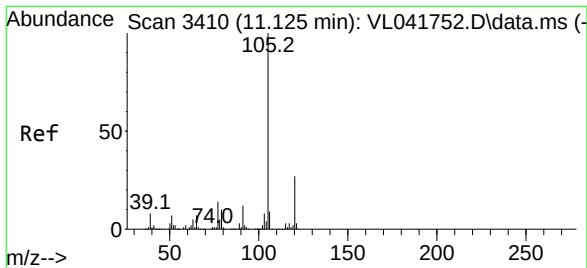
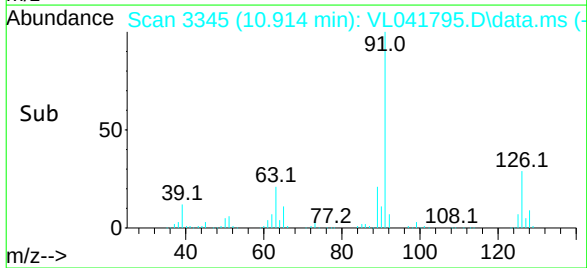
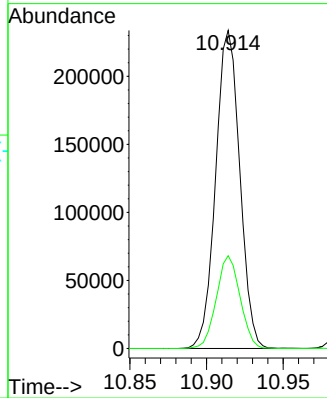
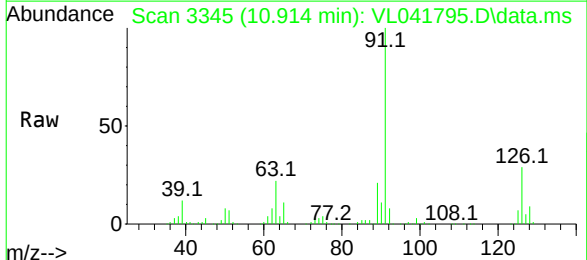
#71  
2-Chlorotoluene  
Concen: 9.622 ppbv  
RT: 10.914 min Scan# 3345  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 91 Resp: 255496  
Ion Ratio Lower Upper  
91 100  
126 28.7 11.6 46.4

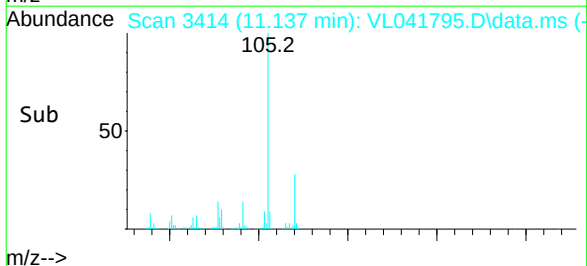
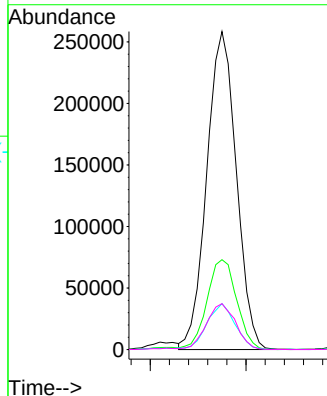
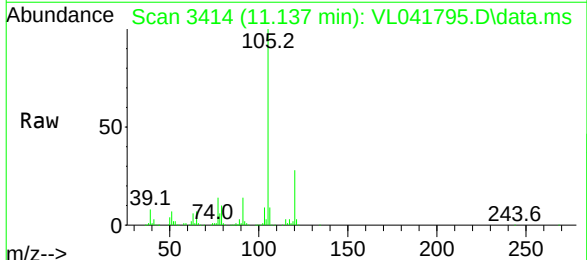
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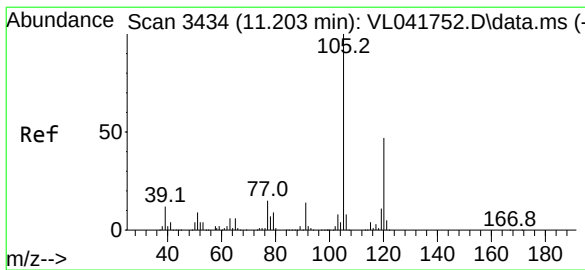
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#72  
4-Ethyltoluene  
Concen: 10.137 ppbv  
RT: 11.137 min Scan# 3414  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:105 Resp: 277025  
Ion Ratio Lower Upper  
105 100  
120 29.1 23.3 34.9  
91 14.4 10.9 16.3  
77 14.8 11.6 17.4





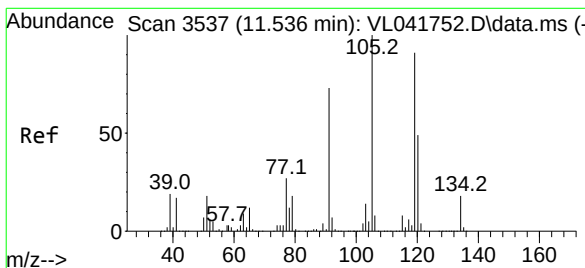
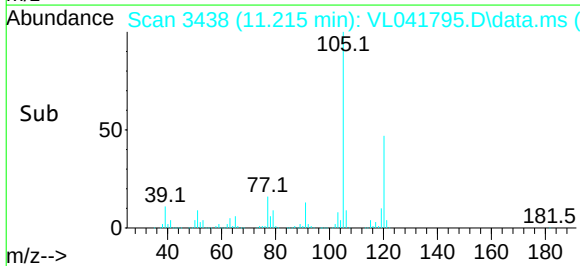
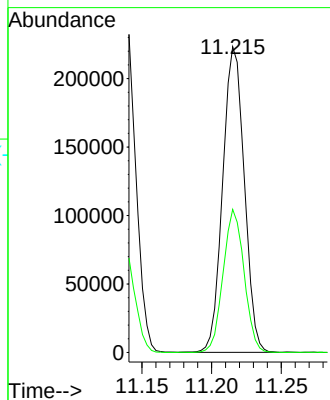
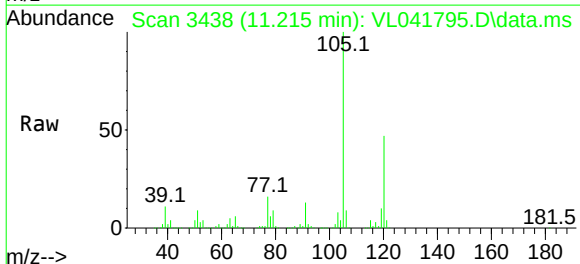
#73  
1,3,5-Trimethylbenzene  
Concen: 10.613 ppbv  
RT: 11.215 min Scan# 341  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01

Tgt Ion:105 Resp: 240648  
Ion Ratio Lower Upper  
105 100  
120 46.8 37.4 56.2

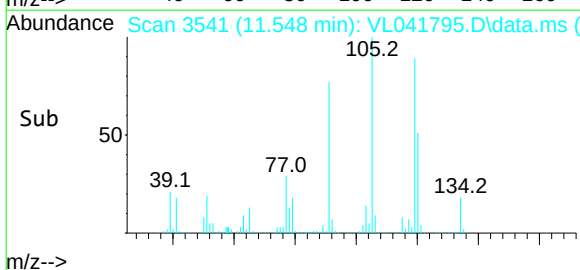
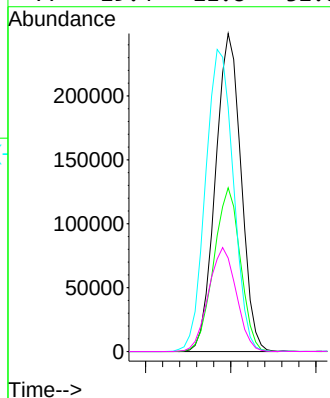
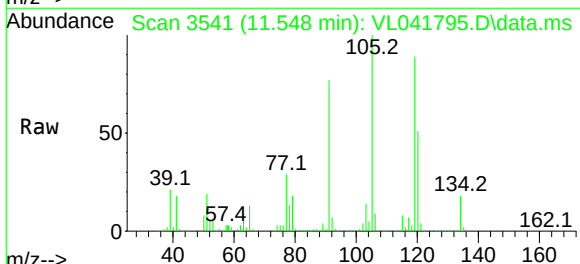
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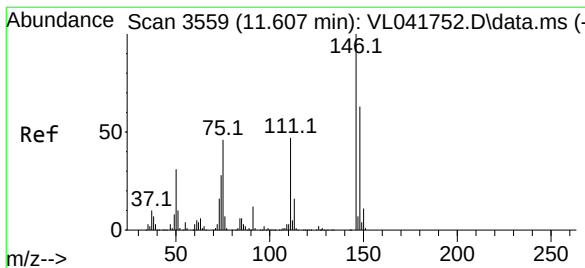
Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#74  
1,2,4-Trimethylbenzene  
Concen: 10.679 ppbv  
RT: 11.548 min Scan# 3541  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:105 Resp: 260378  
Ion Ratio Lower Upper  
105 100  
120 51.5 39.0 58.4  
91 76.7 58.1 87.1  
77 29.4 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 9.809 ppbv

RT: 11.620 min Scan# 3559

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

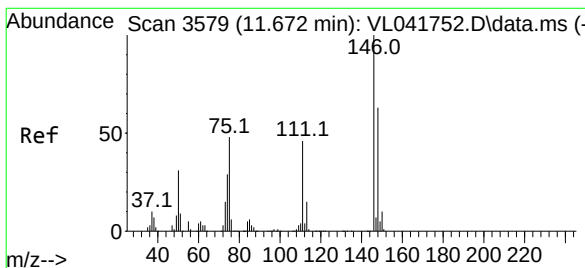
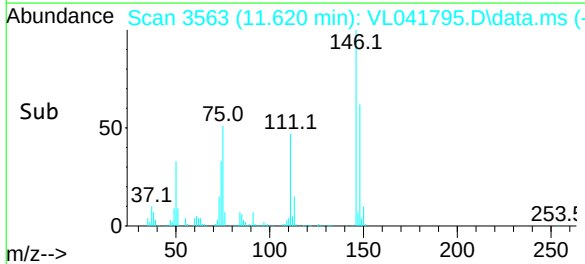
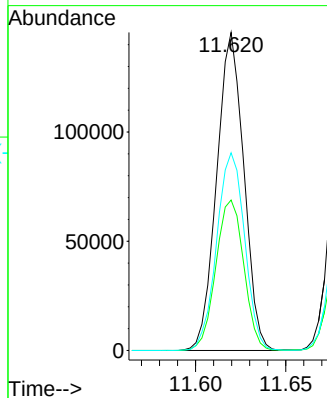
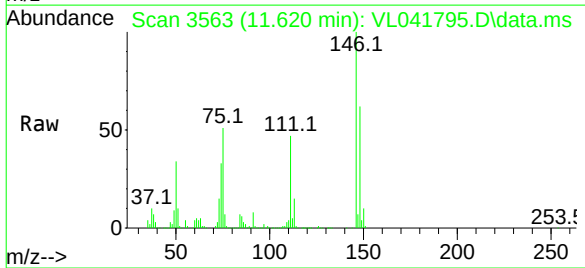
VL1218ABS01

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:146 | Resp: | 152493 |
| Ion | Ratio   | Lower | Upper  |
| 146 | 100     |       |        |
| 111 | 48.7    | 23.4  | 70.3   |
| 148 | 64.1    | 31.6  | 95.0   |

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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#76

1,4-Dichlorobenzene

Concen: 9.926 ppbv

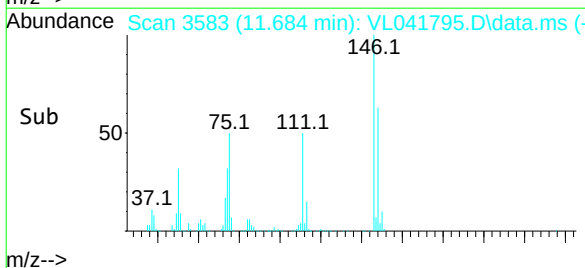
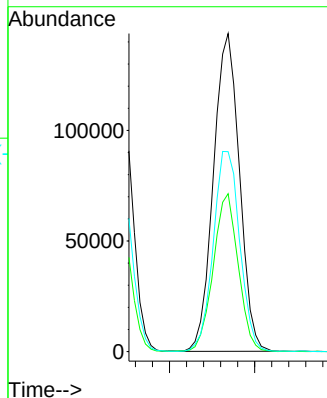
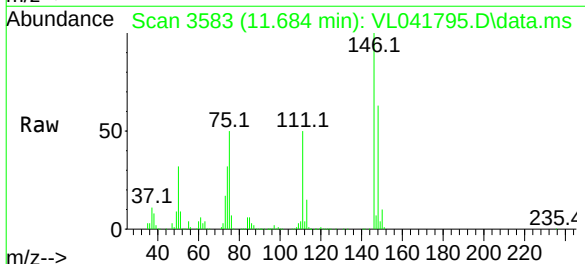
RT: 11.684 min Scan# 3583

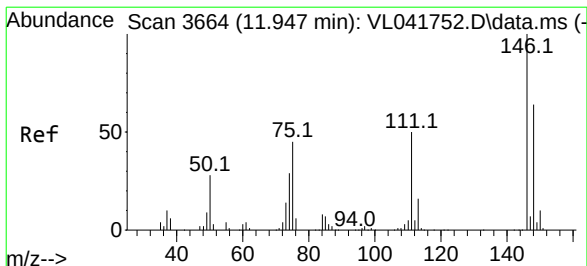
Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:146 | Resp: | 152432 |
| Ion | Ratio   | Lower | Upper  |
| 146 | 100     |       |        |
| 111 | 47.8    | 22.7  | 68.1   |
| 148 | 64.5    | 31.4  | 94.0   |





#77

1,2-Dichlorobenzene

Concen: 9.922 ppbv

RT: 11.960 min Scan# 3668

Delta R.T. 0.013 min

Lab File: VL041795.D

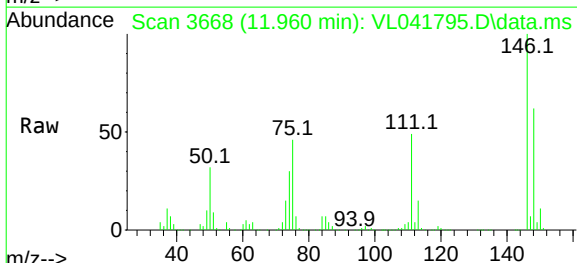
Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

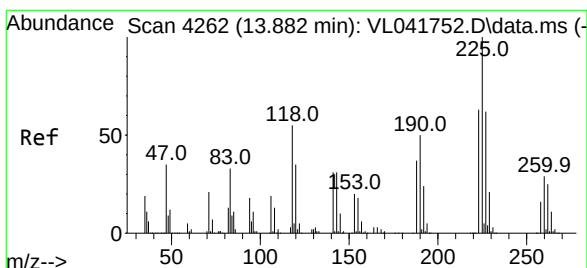
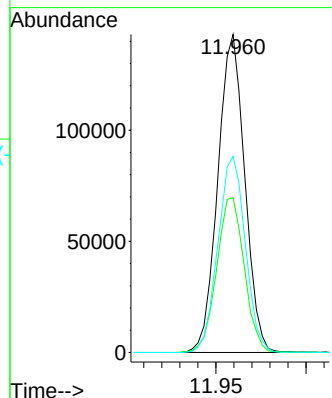
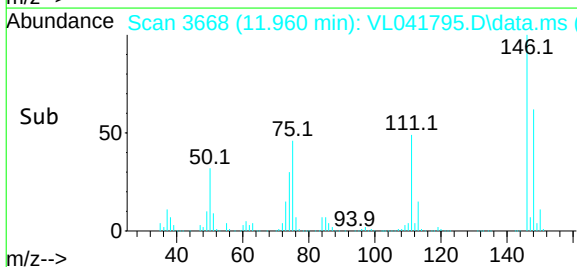
VL1218ABS01



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 146   | Resp: | 148412 |
| Ion Ratio | Lower | Upper |        |
| 146       | 100   |       |        |
| 111       | 50.0  | 24.8  | 74.3   |
| 148       | 62.8  | 31.8  | 95.4   |

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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#78

Hexachloro-1,3-Butadiene

Concen: 7.987 ppbv

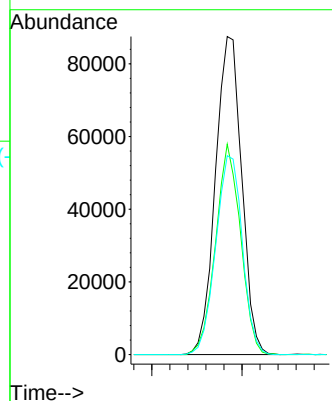
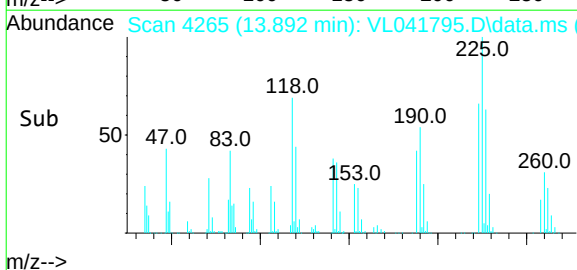
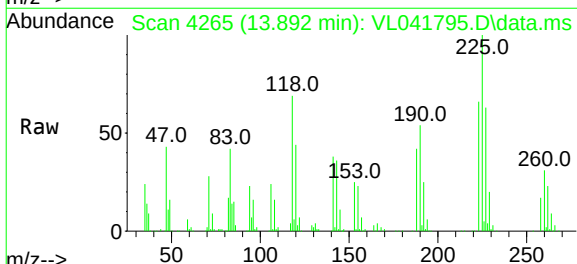
RT: 13.892 min Scan# 4265

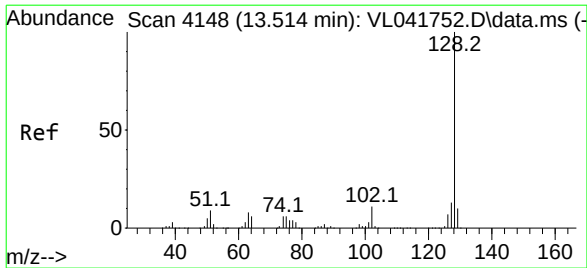
Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 225   | Resp: | 88582 |
| Ion Ratio | Lower | Upper |       |
| 225       | 100   |       |       |
| 223       | 62.9  | 50.5  | 75.7  |
| 227       | 63.3  | 50.3  | 75.5  |





#79

Naphthalene

Concen: 11.154 ppbv

RT: 13.523 min Scan# 4148

Delta R.T. 0.009 min

Lab File: VL041795.D

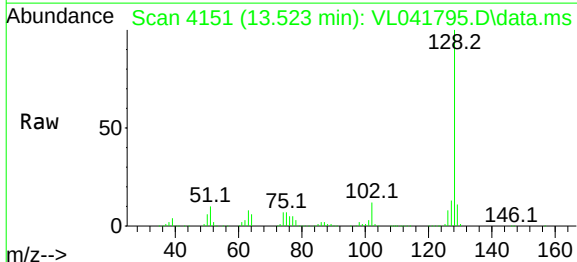
Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

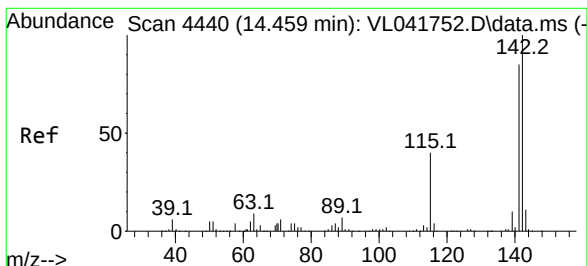
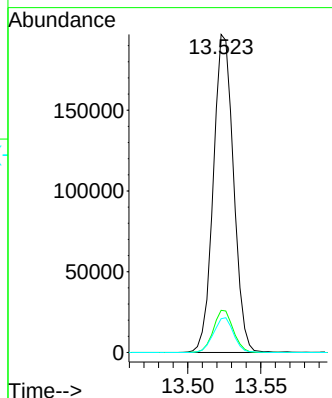
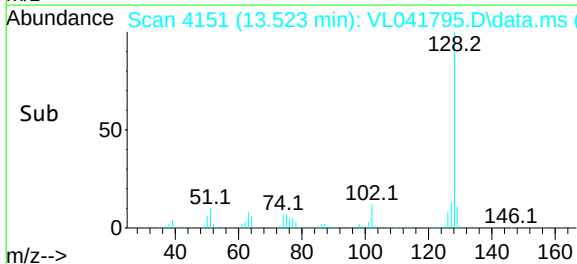
VL1218ABS01



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 189506 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 127       | 13.3  | 10.7  | 16.1   |
| 129       | 10.6  | 8.2   | 12.4   |

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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



#80

Naphthalene, 2-methyl-

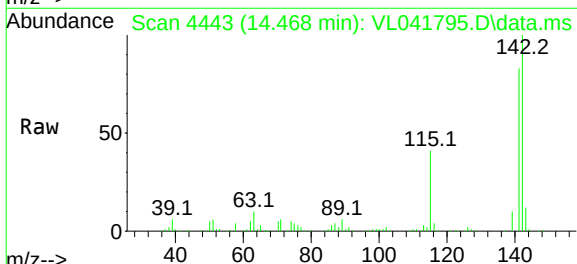
Concen: 15.634 ppbv

RT: 14.468 min Scan# 4443

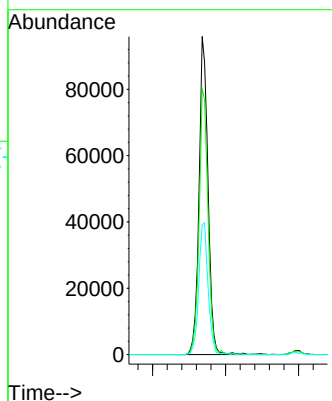
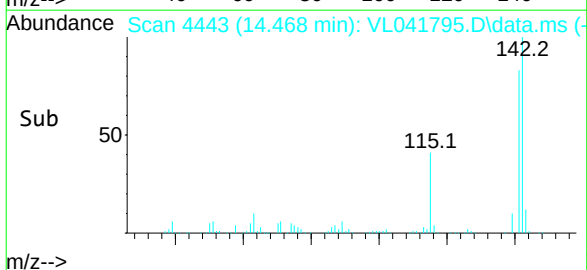
Delta R.T. 0.009 min

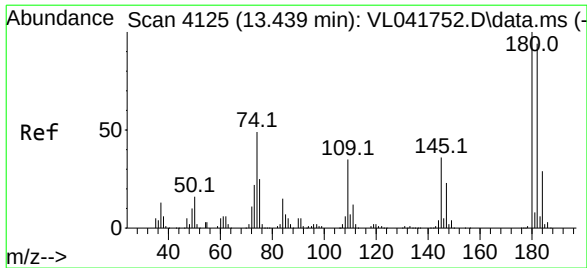
Lab File: VL041795.D

Acq: 18 Dec 2024 16:06



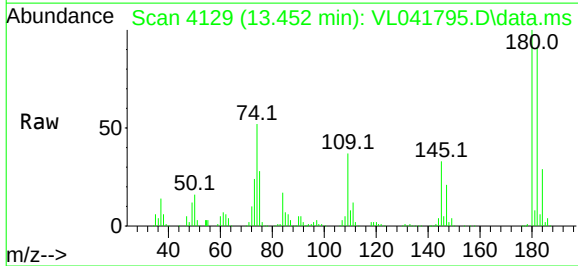
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 82155 |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 82.5  | 68.4  | 102.6 |
| 115       | 43.2  | 32.5  | 48.7  |





#81  
1,2,4-Trichlorobenzene  
Concen: 9.592 ppbv  
RT: 13.452 min Scan# 41  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

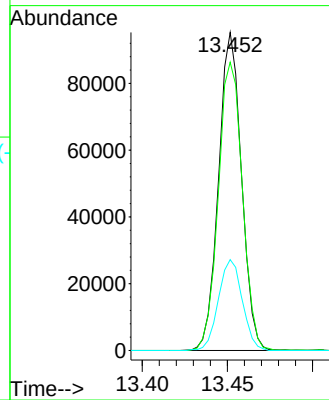
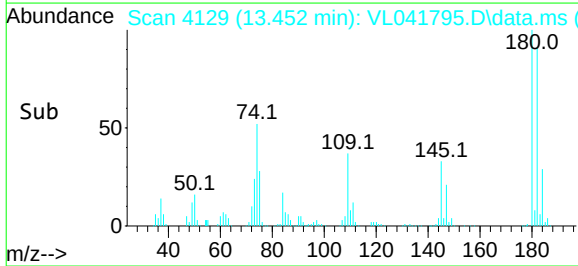
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1218ABS01



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 89052 |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 95.5  | 77.0  | 115.6 |
| 184       | 29.8  | 23.8  | 35.8  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 12/19/2024  
Supervised By :Mahesh Dadoda 12/19/2024



## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121624 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID   | File ID    | Parameter                 | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|-------------|------------|---------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDICCC010 | VL041752.D | m/p-Xylene                | SAM       | 12/20/2024<br>4:34:05 AM | MMDadoda      | 12/20/2024<br>4:37:21 AM | Peak Integrated by Software |
| VSTDICCC002 | VL041753.D | 1,4-Dioxane               | SAM       | 12/20/2024<br>4:34:06 AM | MMDadoda      | 12/20/2024<br>4:37:23 AM | Peak Integrated by Software |
| VSTDICCC002 | VL041753.D | cis-1,3-Dichloropropene   | SAM       | 12/20/2024<br>4:34:06 AM | MMDadoda      | 12/20/2024<br>4:37:23 AM | Peak Integrated by Software |
| VSTDICCC002 | VL041753.D | m/p-Xylene                | SAM       | 12/20/2024<br>4:34:06 AM | MMDadoda      | 12/20/2024<br>4:37:23 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | 1,1,2-Trichloroethane     | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | Carbon Tetrachloride      | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | cis-1,3-Dichloropropene   | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | Ethanol                   | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | m/p-Xylene                | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | Methyl Methacrylate       | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | Tetrachloroethene         | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC001 | VL041754.D | Trichloroethene           | SAM       | 12/20/2024<br>4:34:08 AM | MMDadoda      | 12/20/2024<br>4:37:25 AM | Peak Integrated by Software |
| VSTDICCC0.5 | VL041755.D | 1,1,1,2-Tetrachloroethane | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121624 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID  | File ID    | Parameter               | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|------------|------------|-------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDICC0.5 | VL041755.D | 1,1,2-Trichloroethane   | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | 1,2-Dibromoethane       | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | 1,2-Dichloropropane     | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | 1,4-Dioxane             | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | 2,2,4-Trimethylpentane  | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | 4-Methyl-2-Pentanone    | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Benzyl Chloride         | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Bromodichloromethane    | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Bromoform               | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Chlorobenzene           | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | cis-1,3-Dichloropropene | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Ethanol                 | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5 | VL041755.D | Heptane                 | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |



## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121624 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID   | File ID    | Parameter                 | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|-------------|------------|---------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDICC0.5  | VL041755.D | m/p-Xylene                | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5  | VL041755.D | t-1,3-Dichloropropene     | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.5  | VL041755.D | Trichloroethene           | SAM       | 12/20/2024<br>4:34:10 AM | MMDadoda      | 12/20/2024<br>4:37:27 AM | Peak Integrated by Software |
| VSTDICC0.1  | VL041756.D | 1,1,2,2-Tetrachloroethane | SAM       | 12/20/2024<br>4:34:11 AM | MMDadoda      | 12/20/2024<br>4:37:28 AM | Peak Integrated by Software |
| VSTDICC0.1  | VL041756.D | 1,2-Dibromoethane         | SAM       | 12/20/2024<br>4:34:11 AM | MMDadoda      | 12/20/2024<br>4:37:28 AM | Peak Integrated by Software |
| VSTDICC0.1  | VL041756.D | Tetrachloroethene         | SAM       | 12/20/2024<br>4:34:11 AM | MMDadoda      | 12/20/2024<br>4:37:28 AM | Peak Integrated by Software |
| VSTDICC0.1  | VL041756.D | Trichloroethene           | SAM       | 12/20/2024<br>4:34:11 AM | MMDadoda      | 12/20/2024<br>4:37:28 AM | Peak Integrated by Software |
| VSTDICC0.03 | VL041757.D | 1,1,1-Trichloroethane     | SAM       | 12/20/2024<br>4:34:12 AM | MMDadoda      | 12/20/2024<br>4:37:30 AM | Peak Integrated by Software |
| VSTDICC0.03 | VL041757.D | Carbon Tetrachloride      | SAM       | 12/20/2024<br>4:34:12 AM | MMDadoda      | 12/20/2024<br>4:37:30 AM | Peak Integrated by Software |
| VSTDICC0.03 | VL041757.D | Tetrachloroethene         | SAM       | 12/20/2024<br>4:34:12 AM | MMDadoda      | 12/20/2024<br>4:37:30 AM | Peak Integrated by Software |
| VSTDICC0.03 | VL041757.D | Trichloroethene           | SAM       | 12/20/2024<br>4:34:12 AM | MMDadoda      | 12/20/2024<br>4:37:30 AM | Peak Integrated by Software |
| VSTDICC015  | VL041758.D | m/p-Xylene                | SAM       | 12/20/2024<br>4:34:14 AM | MMDadoda      | 12/20/2024<br>4:37:32 AM | Peak Integrated by Software |
| VSTDICV010  | VL041759.D | 1,1,2-Trichloroethane     | SAM       | 12/20/2024<br>4:34:16 AM | MMDadoda      | 12/20/2024<br>4:37:35 AM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121624 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID  | File ID    | Parameter           | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|------------|------------|---------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDICV010 | VL041759.D | Ethanol             | SAM       | 12/20/2024<br>4:34:16 AM | MMDadoda      | 12/20/2024<br>4:37:35 AM | Peak Integrated by Software |
| VSTDICV010 | VL041759.D | m/p-Xylene          | SAM       | 12/20/2024<br>4:34:16 AM | MMDadoda      | 12/20/2024<br>4:37:35 AM | Peak Integrated by Software |
| VSTDCCC010 | VL041769.D | m/p-Xylene          | SAM       | 12/20/2024<br>4:34:46 AM | MMDadoda      | 12/20/2024<br>4:38:03 AM | Peak Integrated by Software |
| VSTDCCC010 | VL041769.D | Methyl Methacrylate | SAM       | 12/20/2024<br>4:34:46 AM | MMDadoda      | 12/20/2024<br>4:38:03 AM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121824 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID   | File ID    | Parameter               | Review By | Review On                 | Supervised By | Supervised On            | Reason                      |
|-------------|------------|-------------------------|-----------|---------------------------|---------------|--------------------------|-----------------------------|
| VSTDCCC010  | VL041788.D | cis-1,3-Dichloropropene | SAM       | 12/19/2024<br>12:18:09 PM | MMDadoda      | 12/19/2024<br>2:45:22 PM | Peak Integrated by Software |
| VSTDCCC010  | VL041788.D | Ethanol                 | SAM       | 12/19/2024<br>12:18:09 PM | MMDadoda      | 12/19/2024<br>2:45:22 PM | Peak Integrated by Software |
| VSTDCCC010  | VL041788.D | m/p-Xylene              | SAM       | 12/19/2024<br>12:18:09 PM | MMDadoda      | 12/19/2024<br>2:45:22 PM | Peak Integrated by Software |
| VL1218ABS01 | VL041795.D | m/p-Xylene              | SAM       | 12/19/2024<br>12:19:16 PM | MMDadoda      | 12/19/2024<br>2:45:27 PM | Peak Integrated by Software |
| P5293-01DUP | VL041798.D | 2,2,4-Trimethylpentane  | SAM       | 12/19/2024<br>12:19:02 PM | MMDadoda      | 12/19/2024<br>2:45:30 PM | Peak Integrated by Software |
| P5293-01DUP | VL041798.D | Carbon Tetrachloride    | SAM       | 12/19/2024<br>12:19:02 PM | MMDadoda      | 12/19/2024<br>2:45:30 PM | Peak Integrated by Software |
| P5293-01DUP | VL041798.D | Chlorodifluoromethane   | SAM       | 12/19/2024<br>12:19:02 PM | MMDadoda      | 12/19/2024<br>2:45:30 PM | Peak Integrated by Software |
| P5293-01DUP | VL041798.D | m/p-Xylene              | SAM       | 12/19/2024<br>12:19:02 PM | MMDadoda      | 12/19/2024<br>2:45:30 PM | Peak Integrated by Software |
| P5293-01DUP | VL041798.D | Propene                 | SAM       | 12/19/2024<br>12:19:02 PM | MMDadoda      | 12/19/2024<br>2:45:30 PM | Peak Integrated by Software |
| P5294-01    | VL041802.D | 2,2,4-Trimethylpentane  | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01    | VL041802.D | 4-Methyl-2-Pentanone    | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01    | VL041802.D | Carbon Tetrachloride    | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01    | VL041802.D | Chlorobenzene           | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | VL121824 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID | File ID    | Parameter              | Review By | Review On                 | Supervised By | Supervised On            | Reason                      |
|-----------|------------|------------------------|-----------|---------------------------|---------------|--------------------------|-----------------------------|
| P5294-01  | VL041802.D | Chlorodifluoromethane  | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01  | VL041802.D | Cyclohexane            | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01  | VL041802.D | Heptane                | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01  | VL041802.D | m/p-Xylene             | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-01  | VL041802.D | Propene                | SAM       | 12/19/2024<br>12:19:34 PM | MMDadoda      | 12/19/2024<br>2:45:38 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | 2,2,4-Trimethylpentane | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Benzene                | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Carbon Tetrachloride   | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Chlorodifluoromethane  | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Cyclohexane            | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Ethyl Acetate          | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | Heptane                | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-02  | VL041803.D | m/p-Xylene             | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | vl121824 | Instrument | MSVOA_I |
|-----------|----------|------------|---------|

| Sample ID | File ID    | Parameter              | Review By | Review On                 | Supervised By | Supervised On            | Reason                      |
|-----------|------------|------------------------|-----------|---------------------------|---------------|--------------------------|-----------------------------|
| P5294-02  | VL041803.D | Propene                | SAM       | 12/19/2024<br>12:18:36 PM | MMDadoda      | 12/19/2024<br>2:45:39 PM | Peak Integrated by Software |
| P5294-03  | VL041811.D | 2,2,4-Trimethylpentane | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |
| P5294-03  | VL041811.D | Carbon Tetrachloride   | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |
| P5294-03  | VL041811.D | Chlorodifluoromethane  | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |
| P5294-03  | VL041811.D | m/p-Xylene             | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |
| P5294-03  | VL041811.D | o-Xylene               | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |
| P5294-03  | VL041811.D | Propene                | SAM       | 12/23/2024<br>5:30:45 AM  | MMDadoda      | 12/23/2024<br>5:32:43 AM | Peak Integrated by Software |

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121624**

| Review By                | Mahesh Dadoda            | Review On         | 12/18/2024 8:44:47 AM |                      |               |
|--------------------------|--------------------------|-------------------|-----------------------|----------------------|---------------|
| Supervise By             | Semsettin Yesilyurt      | Supervise On      | 12/18/2024 8:48:10 AM |                      |               |
| SubDirectory             | VL121624                 | HP Acquire Method | TO15AIR.M             | HP Processing Method | VL121624AIR.M |
| STD. NAME                |                          | STD REF.#         |                       |                      |               |
| Tune/Reschk              | AP2556                   |                   |                       |                      |               |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |                   |                       |                      |               |
| CCC                      | AP2560,MDL,AP2561,AP2562 |                   |                       |                      |               |
| Internal Standard/PEM    | AP2556                   |                   |                       |                      |               |
| ICV/I.BLK                | AP2558                   |                   |                       |                      |               |
| Surrogate Standard       |                          |                   |                       |                      |               |
| MS/MSD Standard          |                          |                   |                       |                      |               |
| LCS Standard             |                          |                   |                       |                      |               |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | BFB         | VL041750.D     | 16 Dec 2024 12:02 | SY/MD    | Ok     |
| 2   | VSTDICC0.5  | VL041751.D     | 16 Dec 2024 12:59 | SY/MD    | Not Ok |
| 3   | VSTDICCC010 | VL041752.D     | 16 Dec 2024 13:30 | SY/MD    | Ok,M   |
| 4   | VSTDICC002  | VL041753.D     | 16 Dec 2024 14:03 | SY/MD    | Ok,M   |
| 5   | VSTDICC001  | VL041754.D     | 16 Dec 2024 14:34 | SY/MD    | Ok,M   |
| 6   | VSTDICC0.5  | VL041755.D     | 16 Dec 2024 15:05 | SY/MD    | Ok,M   |
| 7   | VSTDICC0.1  | VL041756.D     | 16 Dec 2024 15:37 | SY/MD    | Ok,M   |
| 8   | VSTDICC0.03 | VL041757.D     | 16 Dec 2024 16:08 | SY/MD    | Ok,M   |
| 9   | VSTDICC015  | VL041758.D     | 16 Dec 2024 16:41 | SY/MD    | Ok,M   |
| 10  | VSTDICV010  | VL041759.D     | 16 Dec 2024 18:59 | SY/MD    | Ok,M   |
| 11  | VL1216ABL01 | VL041760.D     | 16 Dec 2024 20:20 | SY/MD    | Ok     |
| 12  | VL1216ABL02 | VL041761.D     | 16 Dec 2024 20:51 | SY/MD    | Ok     |
| 13  | VL1216ABL03 | VL041762.D     | 16 Dec 2024 21:21 | SY/MD    | Ok     |
| 14  | MDL 0.4     | VL041763.D     | 16 Dec 2024 21:52 | SY/MD    | Ok,M   |
| 15  | MDL 0.4     | VL041764.D     | 16 Dec 2024 22:23 | SY/MD    | Ok,M   |
| 16  | MDL 0.4     | VL041765.D     | 16 Dec 2024 22:54 | SY/MD    | Ok,M   |
| 17  | MDL 0.03    | VL041766.D     | 16 Dec 2024 23:24 | SY/MD    | Ok,M   |
| 18  | MDL 0.03    | VL041767.D     | 16 Dec 2024 23:55 | SY/MD    | Ok,M   |
| 19  | VL1216ABS01 | VL041768.D     | 17 Dec 2024 00:57 | SY/MD    | Ok,M   |
| 20  | VSTDCCC010  | VL041769.D     | 17 Dec 2024 07:59 | SY/MD    | Ok,M   |

M : Manual Integration

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121824**

|                          |                     |                          |                       |                      |               |
|--------------------------|---------------------|--------------------------|-----------------------|----------------------|---------------|
| Review By                | Semsettin Yesilyurt | Review On                | 12/19/2024 1:32:59 PM |                      |               |
| Supervise By             | Maresh Dadoda       | Supervise On             | 12/19/2024 2:45:49 PM |                      |               |
| SubDirectory             | VL121824            | HP Acquire Method        | TO15AIR.M             | HP Processing Method | VL121624AIR.M |
| STD. NAME                |                     | STD REF.#                |                       |                      |               |
| Tune/Reschk              |                     | AP2556                   |                       |                      |               |
| Initial Calibration Stds |                     | AP2560,AP2561,AP2562     |                       |                      |               |
| CCC                      |                     | AP2560,MDL,AP2561,AP2562 |                       |                      |               |
| Internal Standard/PEM    |                     | AP2556                   |                       |                      |               |
| ICV/I.BLK                |                     | AP2558                   |                       |                      |               |
| Surrogate Standard       |                     |                          |                       |                      |               |
| MS/MSD Standard          |                     |                          |                       |                      |               |
| LCS Standard             |                     |                          |                       |                      |               |

| Sr# | Sampleld           | Data File Name | Date-Time         | Operator | Status   |
|-----|--------------------|----------------|-------------------|----------|----------|
| 1   | BFB                | VL041787.D     | 18 Dec 2024 08:06 | SY/MD    | Ok       |
| 2   | VSTDCCC010         | VL041788.D     | 18 Dec 2024 10:29 | SY/MD    | Ok,M     |
| 3   | VL1218ABL01        | VL041789.D     | 18 Dec 2024 11:57 | SY/MD    | Ok       |
| 4   | VL1218ABL02        | VL041790.D     | 18 Dec 2024 12:28 | SY/MD    | Ok       |
| 5   | MDL 0.4            | VL041791.D     | 18 Dec 2024 12:59 | SY/MD    | Ok,M     |
| 6   | MDL 0.4            | VL041792.D     | 18 Dec 2024 13:30 | SY/MD    | Ok,M     |
| 7   | MDL 0.03           | VL041793.D     | 18 Dec 2024 14:32 | SY/MD    | Ok,M     |
| 8   | MDL 0.03           | VL041794.D     | 18 Dec 2024 15:03 | SY/MD    | Ok,M     |
| 9   | VL1218ABS01        | VL041795.D     | 18 Dec 2024 16:06 | SY/MD    | Ok,M     |
| 10  | QC121724 CAN 10158 | VL041796.D     | 18 Dec 2024 16:37 | SY/MD    | Ok       |
| 11  | P5293-01           | VL041797.D     | 18 Dec 2024 17:10 | SY/MD    | Ok,M     |
| 12  | P5293-01DUP        | VL041798.D     | 18 Dec 2024 17:43 | SY/MD    | Ok,M     |
| 13  | P5293-02           | VL041799.D     | 18 Dec 2024 18:17 | SY/MD    | Ok,M     |
| 14  | P5293-03           | VL041800.D     | 18 Dec 2024 18:50 | SY/MD    | Dilution |
| 15  | P5296-01           | VL041801.D     | 18 Dec 2024 19:24 | SY/MD    | Ok,M     |
| 16  | P5294-01           | VL041802.D     | 18 Dec 2024 19:58 | SY/MD    | Ok,M     |
| 17  | P5294-02           | VL041803.D     | 18 Dec 2024 20:32 | SY/MD    | Ok,M     |
| 18  | P5294-03           | VL041804.D     | 18 Dec 2024 21:03 | SY/MD    | Not Ok   |
| 19  | P5292-01           | VL041805.D     | 18 Dec 2024 21:35 | SY/MD    | Not Ok   |
| 20  | P5292-02           | VL041806.D     | 18 Dec 2024 22:06 | SY/MD    | Not Ok   |
| 21  | P5295-01           | VL041807.D     | 18 Dec 2024 22:37 | SY/MD    | Dilution |

Instrument ID: **MSVOA\_L**

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121824**

| Review By                | Semsettin Yesilyurt      | Review On         | 12/19/2024 1:32:59 PM |                      |               |
|--------------------------|--------------------------|-------------------|-----------------------|----------------------|---------------|
| Supervise By             | Mahesh Dadoda            | Supervise On      | 12/19/2024 2:45:49 PM |                      |               |
| SubDirectory             | VL121824                 | HP Acquire Method | TO15AIR.M             | HP Processing Method | VL121624AIR.M |
| STD. NAME                |                          | STD REF.#         |                       |                      |               |
| Tune/Reschk              | AP2556                   |                   |                       |                      |               |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |                   |                       |                      |               |
| CCC                      | AP2560,MDL,AP2561,AP2562 |                   |                       |                      |               |
| Internal Standard/PEM    | AP2556                   |                   |                       |                      |               |
| ICV/I.BLK                | AP2558                   |                   |                       |                      |               |
| Surrogate Standard       |                          |                   |                       |                      |               |
| MS/MSD Standard          |                          |                   |                       |                      |               |
| LCS Standard             |                          |                   |                       |                      |               |

|    |            |            |                   |       |          |
|----|------------|------------|-------------------|-------|----------|
| 22 | P5295-02DL | VL041808.D | 18 Dec 2024 23:08 | SY/MD | Ok,M     |
| 23 | VIBLK      | VL041809.D | 18 Dec 2024 23:40 | SY/MD | Ok       |
| 24 | P5293-03DL | VL041810.D | 19 Dec 2024 00:11 | SY/MD | Ok,M     |
| 25 | P5294-03   | VL041811.D | 19 Dec 2024 00:44 | SY/MD | Ok,M     |
| 26 | P5292-01   | VL041812.D | 19 Dec 2024 01:18 | SY/MD | Ok,M     |
| 27 | P5292-02   | VL041813.D | 19 Dec 2024 01:55 | SY/MD | Ok,M     |
| 28 | P5295-01DL | VL041814.D | 19 Dec 2024 02:26 | SY/MD | Ok,M     |
| 29 | P5295-02   | VL041815.D | 19 Dec 2024 02:59 | SY/MD | Dilution |
| 30 | VSTDCCC010 | VL041816.D | 19 Dec 2024 03:31 | SY/MD | Ok       |

M : Manual Integration



Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121624**

|              |                     |                      |                       |
|--------------|---------------------|----------------------|-----------------------|
| Review By    | Mahesh Dadoda       | Review On            | 12/18/2024 8:44:47 AM |
| Supervise By | Semsettin Yesilyurt | Supervise On         | 12/18/2024 8:48:10 AM |
| SubDirectory | VL121624            | HP Acquire Method    | TO15AIR.M             |
|              |                     | HP Processing Method | VL121624AIR.M         |

| STD. NAME                | STD REF.#                |
|--------------------------|--------------------------|
| Tune/Reschk              | AP2556                   |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |
| CCC                      | AP2560,MDL,AP2561,AP2562 |
| Internal Standard/PEM    | AP2556                   |
| ICV/I.BLK                | AP2558                   |
| Surrogate Standard       |                          |
| MS/MSD Standard          |                          |
| LCS Standard             |                          |

| Sr# | SampleID    | ClientID    | Data File Name | Date-Time         | Comment                     | Operator | Status |
|-----|-------------|-------------|----------------|-------------------|-----------------------------|----------|--------|
| 1   | BFB         | BFB         | VL041750.D     | 16 Dec 2024 12:02 |                             | SY/MD    | Ok     |
| 2   | VSTDIC0.5   | VSTDIC0.5   | VL041751.D     | 16 Dec 2024 12:59 | Not used                    | SY/MD    | Not Ok |
| 3   | VSTDICCC010 | VSTDICCC010 | VL041752.D     | 16 Dec 2024 13:30 | Method failed for Comp.#,80 | SY/MD    | Ok,M   |
| 4   | VSTDIC002   | VSTDIC002   | VL041753.D     | 16 Dec 2024 14:03 |                             | SY/MD    | Ok,M   |
| 5   | VSTDIC001   | VSTDIC001   | VL041754.D     | 16 Dec 2024 14:34 |                             | SY/MD    | Ok,M   |
| 6   | VSTDIC0.5   | VSTDIC0.5   | VL041755.D     | 16 Dec 2024 15:05 |                             | SY/MD    | Ok,M   |
| 7   | VSTDIC0.1   | VSTDIC0.1   | VL041756.D     | 16 Dec 2024 15:37 |                             | SY/MD    | Ok,M   |
| 8   | VSTDIC0.03  | VSTDIC0.03  | VL041757.D     | 16 Dec 2024 16:08 |                             | SY/MD    | Ok,M   |
| 9   | VSTDIC015   | VSTDIC015   | VL041758.D     | 16 Dec 2024 16:41 |                             | SY/MD    | Ok,M   |
| 10  | VSTDICV010  | ICVVL121624 | VL041759.D     | 16 Dec 2024 18:59 |                             | SY/MD    | Ok,M   |
| 11  | VL1216ABL01 | VL1216ABL01 | VL041760.D     | 16 Dec 2024 20:20 |                             | SY/MD    | Ok     |
| 12  | VL1216ABL02 | VL1216ABL02 | VL041761.D     | 16 Dec 2024 20:51 |                             | SY/MD    | Ok     |
| 13  | VL1216ABL03 | VL1216ABL03 | VL041762.D     | 16 Dec 2024 21:21 |                             | SY/MD    | Ok     |
| 14  | MDL 0.4     | MDL 0.4     | VL041763.D     | 16 Dec 2024 21:52 |                             | SY/MD    | Ok,M   |
| 15  | MDL 0.4     | MDL 0.4     | VL041764.D     | 16 Dec 2024 22:23 |                             | SY/MD    | Ok,M   |
| 16  | MDL 0.4     | MDL 0.4     | VL041765.D     | 16 Dec 2024 22:54 |                             | SY/MD    | Ok,M   |
| 17  | MDL 0.03    | MDL 0.03    | VL041766.D     | 16 Dec 2024 23:24 |                             | SY/MD    | Ok,M   |
| 18  | MDL 0.03    | MDL 0.03    | VL041767.D     | 16 Dec 2024 23:55 |                             | SY/MD    | Ok,M   |

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121624**

|                          |                          |                   |                       |                      |               |
|--------------------------|--------------------------|-------------------|-----------------------|----------------------|---------------|
| Review By                | Mahesh Dadoda            | Review On         | 12/18/2024 8:44:47 AM |                      |               |
| Supervise By             | Semsettin Yesilyurt      | Supervise On      | 12/18/2024 8:48:10 AM |                      |               |
| SubDirectory             | VL121624                 | HP Acquire Method | TO15AIR.M             | HP Processing Method | VL121624AIR.M |
| STD. NAME                |                          | STD REF.#         |                       |                      |               |
| Tune/Reschk              | AP2556                   |                   |                       |                      |               |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |                   |                       |                      |               |
| CCC                      | AP2560,MDL,AP2561,AP2562 |                   |                       |                      |               |
| Internal Standard/PEM    | AP2556                   |                   |                       |                      |               |
| ICV/I.BLK                | AP2558                   |                   |                       |                      |               |
| Surrogate Standard       |                          |                   |                       |                      |               |
| MS/MSD Standard          |                          |                   |                       |                      |               |
| LCS Standard             |                          |                   |                       |                      |               |

|    |             |              |            |                   |  |       |      |
|----|-------------|--------------|------------|-------------------|--|-------|------|
| 19 | VL1216ABS01 | VL1216ABS01  | VL041768.D | 17 Dec 2024 00:57 |  | SY/MD | Ok,M |
| 20 | VSTDCCC010  | VSTDCCC010EC | VL041769.D | 17 Dec 2024 07:59 |  | SY/MD | Ok,M |

M : Manual Integration

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121824**

|              |                     |                      |                       |
|--------------|---------------------|----------------------|-----------------------|
| Review By    | Semsettin Yesilyurt | Review On            | 12/19/2024 1:32:59 PM |
| Supervise By | Mahesh Dadoda       | Supervise On         | 12/19/2024 2:45:49 PM |
| SubDirectory | VL121824            | HP Acquire Method    | TO15AIR.M             |
|              |                     | HP Processing Method | VL121624AIR.M         |

| STD. NAME                | STD REF.#                |
|--------------------------|--------------------------|
| Tune/Reschk              | AP2556                   |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |
| CCC                      | AP2560,MDL,AP2561,AP2562 |
| Internal Standard/PEM    | AP2556                   |
| ICV/I.BLK                | AP2558                   |
| Surrogate Standard       |                          |
| MS/MSD Standard          |                          |
| LCS Standard             |                          |

| Sr# | SampleID           | ClientID           | Data File Name | Date-Time         | Comment               | Operator | Status   |
|-----|--------------------|--------------------|----------------|-------------------|-----------------------|----------|----------|
| 1   | BFB                | BFB                | VL041787.D     | 18 Dec 2024 08:06 |                       | SY/MD    | Ok       |
| 2   | VSTDCCC010         | VSTDCCC010         | VL041788.D     | 18 Dec 2024 10:29 |                       | SY/MD    | Ok,M     |
| 3   | VL1218ABL01        | VL1218ABL01        | VL041789.D     | 18 Dec 2024 11:57 |                       | SY/MD    | Ok       |
| 4   | VL1218ABL02        | VL1218ABL02        | VL041790.D     | 18 Dec 2024 12:28 |                       | SY/MD    | Ok       |
| 5   | MDL 0.4            | MDL 0.4            | VL041791.D     | 18 Dec 2024 12:59 |                       | SY/MD    | Ok,M     |
| 6   | MDL 0.4            | MDL 0.4            | VL041792.D     | 18 Dec 2024 13:30 |                       | SY/MD    | Ok,M     |
| 7   | MDL 0.03           | MDL 0.03           | VL041793.D     | 18 Dec 2024 14:32 |                       | SY/MD    | Ok,M     |
| 8   | MDL 0.03           | MDL 0.03           | VL041794.D     | 18 Dec 2024 15:03 |                       | SY/MD    | Ok,M     |
| 9   | VL1218ABS01        | VL1218ABS01        | VL041795.D     | 18 Dec 2024 16:06 |                       | SY/MD    | Ok,M     |
| 10  | QC121724 CAN 10158 | QC121724 CAN 10158 | VL041796.D     | 18 Dec 2024 16:37 |                       | SY/MD    | Ok       |
| 11  | P5293-01           | C0AB9              | VL041797.D     | 18 Dec 2024 17:10 |                       | SY/MD    | Ok,M     |
| 12  | P5293-01DUP        | C0AB9DUP           | VL041798.D     | 18 Dec 2024 17:43 | Not match for Ethanol | SY/MD    | Ok,M     |
| 13  | P5293-02           | C0AC0              | VL041799.D     | 18 Dec 2024 18:17 |                       | SY/MD    | Ok,M     |
| 14  | P5293-03           | C0AC1              | VL041800.D     | 18 Dec 2024 18:50 | Need 2X               | SY/MD    | Dilution |
| 15  | P5296-01           | C0AC2              | VL041801.D     | 18 Dec 2024 19:24 |                       | SY/MD    | Ok,M     |
| 16  | P5294-01           | C0AB6              | VL041802.D     | 18 Dec 2024 19:58 |                       | SY/MD    | Ok,M     |
| 17  | P5294-02           | C0AB7              | VL041803.D     | 18 Dec 2024 20:32 |                       | SY/MD    | Ok,M     |
| 18  | P5294-03           | C0AB8              | VL041804.D     | 18 Dec 2024 21:03 | Need Straight Run     | SY/MD    | Not Ok   |

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL121824**

| Review By                | Semsettin Yesilyurt      | Review On            | 12/19/2024 1:32:59 PM |
|--------------------------|--------------------------|----------------------|-----------------------|
| Supervise By             | Maresh Dadoda            | Supervise On         | 12/19/2024 2:45:49 PM |
| SubDirectory             | VL121824                 | HP Acquire Method    | TO15AIR.M             |
|                          |                          | HP Processing Method | VL121624AIR.M         |
| STD. NAME                | STD REF.#                |                      |                       |
| Tune/Reschk              | AP2556                   |                      |                       |
| Initial Calibration Stds | AP2560,AP2561,AP2562     |                      |                       |
| CCC                      | AP2560,MDL,AP2561,AP2562 |                      |                       |
| Internal Standard/PEM    | AP2556                   |                      |                       |
| ICV/I.BLK                | AP2558                   |                      |                       |
| Surrogate Standard       |                          |                      |                       |
| MS/MSD Standard          |                          |                      |                       |
| LCS Standard             |                          |                      |                       |

|    |            |              |            |                   |                   |       |          |
|----|------------|--------------|------------|-------------------|-------------------|-------|----------|
| 19 | P5292-01   | C0AC5        | VL041805.D | 18 Dec 2024 21:35 | Need Straight Run | SY/MD | Not Ok   |
| 20 | P5292-02   | C0AC6        | VL041806.D | 18 Dec 2024 22:06 | Need Straight Run | SY/MD | Not Ok   |
| 21 | P5295-01   | C0AC8        | VL041807.D | 18 Dec 2024 22:37 | Need 10X          | SY/MD | Dilution |
| 22 | P5295-02DL | C0AC9DL      | VL041808.D | 18 Dec 2024 23:08 |                   | SY/MD | Ok,M     |
| 23 | VIBLK      | VIBLK        | VL041809.D | 18 Dec 2024 23:40 |                   | SY/MD | Ok       |
| 24 | P5293-03DL | C0AC1DL      | VL041810.D | 19 Dec 2024 00:11 |                   | SY/MD | Ok,M     |
| 25 | P5294-03   | C0AB8        | VL041811.D | 19 Dec 2024 00:44 |                   | SY/MD | Ok,M     |
| 26 | P5292-01   | C0AC5        | VL041812.D | 19 Dec 2024 01:18 |                   | SY/MD | Ok,M     |
| 27 | P5292-02   | C0AC6        | VL041813.D | 19 Dec 2024 01:55 |                   | SY/MD | Ok,M     |
| 28 | P5295-01DL | C0AC8DL      | VL041814.D | 19 Dec 2024 02:26 |                   | SY/MD | Ok,M     |
| 29 | P5295-02   | C0AC9        | VL041815.D | 19 Dec 2024 02:59 | Need 4X           | SY/MD | Dilution |
| 30 | VSTDCCC010 | VSTDCCC010EC | VL041816.D | 19 Dec 2024 03:31 |                   | SY/MD | Ok       |

M : Manual Integration

## Prep Standard - Chemical Standard Summary

**Order ID :** P5294

**Test :** TO-15

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** v1121824,

**Standard ID :**

AP2556,AP2558,AP2560,AP2561,AP2562,

**Chemical ID :**

A1117,A1135,A1136,A1137,MDL,

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## Air 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> |
|------------------|-----------------------------------------|------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 47               | Internal Standard/Surrogate Mix-80 ppbv | <a href="#">AP2556</a> | 12/06/2024       | 01/04/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 12/20/2024       |                                         |                        |                  |                        |                     |                |                  |                      |

**FROM** 2.40000psi of A1135 + 27.60000psi of A1117 = Final Quantity: 30.000 psi

| <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> |
|------------------|-----------------------|------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 2396             | TO-15 15 PPBV CAL MIX | <a href="#">AP2558</a> | 12/06/2024       | 01/04/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 12/20/2024       |                       |                        |                  |                        |                     |                |                  |                      |

**FROM** 14.55000SCCM of A1117 + 45.00000SCCM of A1137 = Final Quantity: 30.000 psi

## Air 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> |
|------------------|-----------------------|------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 2396             | TO-15 15 PPBV CAL MIX | <a href="#">AP2560</a> | 12/06/2024       | 01/04/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 12/20/2024       |                       |                        |                  |                        |                     |                |                  |                      |

**FROM** 1455.00000SCCM of A1117 + 45.00000SCCM of A1136 = Final Quantity: 30.000 psi

| <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> |
|------------------|-----------------------|------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 2397             | TO-15 -2 PPBV CAL.MIX | <a href="#">AP2561</a> | 12/06/2024       | 01/04/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| 12/20/2024       |                       |                        |                  |                        |                     |                |                  |                      |

**FROM** 26.00000psi of A1117 + 4.00000psi of AP2560 = Final Quantity: 30.000 psi

## Air 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> |
|--------------------------------------------------------------------------------------|------------------|------------------------|------------------|------------------------|---------------------|----------------|------------------|----------------------|
| 2668                                                                                 | 0.5 PPBV CAL.MIX | <a href="#">AP2562</a> | 12/06/2024       | 01/04/2025             | Semsettin Yesilyurt | None           | None             | Maresh Dadoda        |
| <b>FROM</b> 29.00000psi of A1117 + 1.00000psi of AP2560 = Final Quantity: 30.000 psi |                  |                        |                  |                        |                     |                |                  |                      |

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## CHEMICAL RECEIPT LOG BOOK

| Supplier    | ItemCode / ItemName       | Lot #          | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------|---------------------------|----------------|-----------------|-------------------------|-----------------------------|----------------|
| AIR LIQUIDE | 365A-49 / AIR, Compressed | 90402401186-01 | 04/01/2026      | 04/01/2022 / apatel     | 04/01/2022 / SAM            | A1117          |

| Supplier            | ItemCode / ItemName                                       | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---------------------|-----------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| CUSTOMGAS Solutions | TB500009-110 / TO-15 Internal Standard/Surrogate Standard | BC275465 | 07/16/2025      | 07/22/2024 / SAM        | 07/22/2024 / SAM            | A1135          |

| Supplier            | ItemCode / ItemName                                                                       | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---------------------|-------------------------------------------------------------------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| CUSTOMGAS Solutions | TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene) | 040424-003A | 07/16/2025      | 07/25/2024 / SAM        | 07/22/2024 / SAM            | A1136          |

| Supplier            | ItemCode / ItemName                                                                       | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---------------------|-------------------------------------------------------------------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| CUSTOMGAS Solutions | TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene) | 040424-003B | 07/16/2025      | 07/25/2024 / SAM        | 07/22/2024 / SAM            | A1137          |

# CUSTOMGAS SOLUTIONS



1750 East Club Boulevard

Durham, NC 27704

Phone: (919) 220-2570

Fax: (919) 220-4540

## Certificate of Analysis

### Customer:

Chem Tech  
284 Sheffield Street  
Mountainside, NJ 07092

Tel: (908) 789-8900

Cylinder Number: BC275465  
Cylinder Size/CGA: 170/180SS  
Fill Pressure: 1815 PSIA  
Gas Volume: ~170 liters  
Date of Mfg: 07/16/2024  
Expiration Date: 07/16/2025

Ship To : Chem Tech  
284 Sheffield Street  
Mountainside, NJ 07092

| Customer Number | Ship VIA | Job No.    | Customer PO | Mixture Type |
|-----------------|----------|------------|-------------|--------------|
| 00107092NJ      | Best Way | 040424-003 | 240404-10   | Gravimetric  |

| Component            | Nominal Concentration | Actual Concentration*  | Mixture Type           |
|----------------------|-----------------------|------------------------|------------------------|
| Bromochloromethane   | 1 ppm                 | 1.014 ppm +/- 0.02 ppm | Gravimetric Master Gas |
| 4-Bromofluorobenzene | 1 ppm                 | 1.008 ppm +/- 0.02 ppm |                        |
| Chlorobenzene-D5     | 1 ppm                 | 0.993 ppm +/- 0.02 ppm |                        |
| 1,4-Difluorobenzene  | 1 ppm                 | 0.979 ppm +/- 0.02 ppm |                        |
| Nitrogen             | balance               | balance                |                        |
|                      |                       |                        |                        |
|                      |                       |                        |                        |
|                      |                       |                        |                        |

**NOTES:** Blend Tolerance: +/- 10 %

Analytical Tolerance: +/- 5 %

Traceability: NIST by weight set. NIST Traceability No MT001810.  
Internal Standards by analysis

Reactive Mixtures: Analyzed twice with required agreement between analyses of 2%.  
Required wait time between analyses of >7 days.

Caution: Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

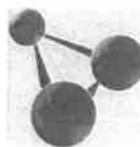
QA Signature: 

Signature: 

Date: 07/16/2024

\*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

# CUSTOMGAS SOLUTIONS



1750 East Club Boulevard  
Durham, NC 27704  
Phone: (919) 220-2570  
Fax: (919) 220-4540

## Certificate of Analysis

### Customer:

ChemTech  
284 Sheffield Street  
Mountainside, NJ 07092

Cylinder Number: BC917782  
Cylinder Size/CGA: 170/180  
Fill Pressure: 1815 PSIA  
Gas Volume: 110 liters  
Date of Mfg: 07/16/2024  
Expiration Date: 07/16/2025  
Lot Number: 040424-003A

Ship To : Chemtech  
284 Sheffield Street  
Mountainside, NJ 07092

| Customer Number | Ship VIA | Job No.    | Customer PO | Mixture Type |
|-----------------|----------|------------|-------------|--------------|
| 00107092NJ      | Best Way | 040424-003 | 240404-10   | Gravimetric  |

| Component                     | Nominal Concentration | Actual Concentration* | Mixture Type           |
|-------------------------------|-----------------------|-----------------------|------------------------|
| Acetone                       | 500 ppb               | 517 ppb +/- 50 ppb    | Gravimetric Master Gas |
| Acetonitrile                  | 500 ppb               | 534 ppb +/- 50 ppb    |                        |
| Acrolein                      | 500 ppb               | 545 ppb +/- 50 ppb    |                        |
| Acrylonitrile                 | 500 ppb               | 539 ppb +/- 50 ppb    | -                      |
| Allyl chloride                | 500 ppb               | 509 ppb +/- 50 ppb    |                        |
| Benzene                       | 500 ppb               | 483 ppb +/- 50 ppb    |                        |
| Benzyl Chloride               | 500 ppb               | 489 ppb +/- 50 ppb    |                        |
| Bromodichloromethane          | 500 ppb               | 509 ppb +/- 50 ppb    |                        |
| Bromoform                     | 500 ppb               | 495 ppb +/- 50 ppb    |                        |
| 1,3-Butadiene                 | 500 ppb               | 504 ppb +/- 50 ppb    |                        |
| tert-Butyl alcohol            | 500 ppb               | 532 ppb +/- 50 ppb    |                        |
| n-Butyl benzene               | 500 ppb               | 529 ppb +/- 50 ppb    |                        |
| sec-Butyl benzene             | 500 ppb               | 529 ppb +/- 50 ppb    |                        |
| tert-Butyl benzene            | 500 ppb               | 529 ppb +/- 50 ppb    |                        |
| Carbon disulfide              | 500 ppb               | 485 ppb +/- 50 ppb    |                        |
| Carbon tetrachloride          | 500 ppb               | 506 ppb +/- 50 ppb    |                        |
| Chlorobenzene                 | 500 ppb               | 491 ppb +/- 50 ppb    |                        |
| Chlorodibromomethane          | 500 ppb               | 488 ppb +/- 50 ppb    |                        |
| Chloroform                    | 500 ppb               | 492 ppb +/- 50 ppb    |                        |
| 2-Chlorotoluene               | 500 ppb               | 532 ppb +/- 50 ppb    |                        |
| Cyclohexane                   | 500 ppb               | 482 ppb +/- 50 ppb    |                        |
| 1,2-Dibromoethane             | 500 ppb               | 491 ppb +/- 50 ppb    |                        |
| 1,2-Dichlorobenzene           | 500 ppb               | 510 ppb +/- 50 ppb    |                        |
| 1,3-Dichlorobenzene           | 500 ppb               | 489 ppb +/- 50 ppb    |                        |
| 1,4-Dichlorobenzene           | 500 ppb               | 490 ppb +/- 50 ppb    |                        |
| Dichlorodifluoromethane (R12) | 500 ppb               | 508 ppb +/- 50 ppb    |                        |

|                                |         |                    |  |
|--------------------------------|---------|--------------------|--|
| 1,1-Dichloroethane             | 500 ppb | 492 ppb +/- 50 ppb |  |
| 1,2-Dichloroethane             | 500 ppb | 497 ppb +/- 50 ppb |  |
| 1,1-Dichloroethylene           | 500 ppb | 493 ppb +/- 50 ppb |  |
| cis 1,2-Dichloroethylene       | 500 ppb | 488 ppb +/- 50 ppb |  |
| trans 1,2-Dichloroethylene     | 500 ppb | 488 ppb +/- 50 ppb |  |
| 1,2-Dichloropropane            | 500 ppb | 490 ppb +/- 50 ppb |  |
| cis 1,3-Dichloropropylene      | 500 ppb | 516 ppb +/- 50 ppb |  |
| trans 1,3-Dichloropropylene    | 500 ppb | 466 ppb +/- 50 ppb |  |
| 1,2-Dichlorotetrafluoroethane  | 500 ppb | 505 ppb +/- 50 ppb |  |
| 1,4-Dioxane                    | 500 ppb | 484 ppb +/- 50 ppb |  |
| Ethyl acetate                  | 500 ppb | 486 ppb +/- 50 ppb |  |
| Ethyl Alcohol                  | 500 ppb | 555 ppb +/- 50 ppb |  |
| Ethyl benzene                  | 500 ppb | 497 ppb +/- 50 ppb |  |
| Ethyl Chloride                 | 500 ppb | 506 ppb +/- 50 ppb |  |
| 4-Ethyltoluene                 | 500 ppb | 485 ppb +/- 50 ppb |  |
| n-Heptane                      | 500 ppb | 487 ppb +/- 50 ppb |  |
| Hexachloro-1,3-butadiene       | 500 ppb | 489 ppb +/- 50 ppb |  |
| 2-Hexanone                     | 500 ppb | 490 ppb +/- 50 ppb |  |
| n-Hexane                       | 500 ppb | 485 ppb +/- 50 ppb |  |
| Isopropyl alcohol              | 500 ppb | 511 ppb +/- 50 ppb |  |
| Isopropyl benzene              | 500 ppb | 527 ppb +/- 50 ppb |  |
| p-Isopropyl toluene            | 500 ppb | 534 ppb +/- 50 ppb |  |
| Methyl Bromide                 | 500 ppb | 505 ppb +/- 50 ppb |  |
| Methyl Chloride                | 500 ppb | 509 ppb +/- 50 ppb |  |
| Methyl ethyl ketone            | 500 ppb | 496 ppb +/- 50 ppb |  |
| Methyl isobutyl ketone         | 500 ppb | 493 ppb +/- 50 ppb |  |
| Methyl methacrylate            | 500 ppb | 532 ppb +/- 50 ppb |  |
| Methyl tertiary butyl ether    | 500 ppb | 483 ppb +/- 50 ppb |  |
| Methylene chloride             | 500 ppb | 498 ppb +/- 50 ppb |  |
| Naphthalene                    | 500 ppb | 542 ppb +/- 50 ppb |  |
| n-Propylbenzene                | 500 ppb | 529 ppb +/- 50 ppb |  |
| Propylene                      | 500 ppb | 508 ppb +/- 50 ppb |  |
| Styrene                        | 500 ppb | 485 ppb +/- 50 ppb |  |
| 1,1,1,2-Tetrachloroethane      | 500 ppb | 483 ppb +/- 50 ppb |  |
| 1,1,2,2-Tetrachloroethane      | 500 ppb | 534 ppb +/- 50 ppb |  |
| Tetrachloroethylene            | 500 ppb | 487 ppb +/- 50 ppb |  |
| Tetrahydrofuran                | 500 ppb | 535 ppb +/- 50 ppb |  |
| Toluene                        | 500 ppb | 491 ppb +/- 50 ppb |  |
| 1,2,4-Trichlorobenzene         | 500 ppb | 494 ppb +/- 50 ppb |  |
| 1,1,1-Trichloroethane          | 500 ppb | 494 ppb +/- 50 ppb |  |
| 1,1,2-Trichloroethane          | 500 ppb | 494 ppb +/- 50 ppb |  |
| Trichloroethylene              | 500 ppb | 488 ppb +/- 50 ppb |  |
| Trichlorofluoromethane         | 500 ppb | 508 ppb +/- 50 ppb |  |
| 1,1,2-Trichlorotrifluoroethane | 500 ppb | 495 ppb +/- 50 ppb |  |
| 1,2,4-Trimethylbenzene         | 500 ppb | 494 ppb +/- 50 ppb |  |
| 1,3,5-Trimethylbenzene         | 500 ppb | 498 ppb +/- 50 ppb |  |
| 2,2,4-Trimethylpentane         | 500 ppb | 489 ppb +/- 50 ppb |  |
| Vinyl acetate                  | 500 ppb | 499 ppb +/- 50 ppb |  |
| Vinyl bromide                  | 500 ppb | 505 ppb +/- 50 ppb |  |
| Vinyl chloride                 | 500 ppb | 507 ppb +/- 50 ppb |  |
| m-Xylene                       | 500 ppb | 492 ppb +/- 50 ppb |  |
| o-Xylene                       | 500 ppb | 480 ppb +/- 50 ppb |  |
| p-Xylene                       | 500 ppb | 486 ppb +/- 50 ppb |  |
| 2-Methyl Naphthalene           | 500 ppb | 498 ppb +/- 50 ppb |  |
| R-22                           | 500 ppb | 590 ppb +/- 50 ppb |  |
| Nitrogen                       | balance | balance            |  |
|                                |         |                    |  |
|                                |         |                    |  |

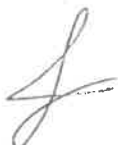
**NOTES:** Blend Tolerance: +/- 20 %  
Analytical Tolerance: +/- 10 %  
Traceability: NIST by weight set. NIST Traceability No MT001810.  
Internal Standards by analysis  
Reactive Mixtures: Analyzed twice with required agreement between analyses of 2%.  
Required wait time between analyses of >7 days.  
Caution: Do not use below 150 PSIG.

**Analyst Name:** Joseph A. Ernst

**QA Signature:** 

**Signature:**

**Date:** 07/16/2024

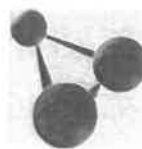


\*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.



# CUSTOMGAS

## SOLUTIONS



1750 East Club Boulevard  
Durham, NC 27704  
Phone: (919) 220-2570  
Fax: (919) 220-4540

### Certificate of Analysis

#### Customer:

ChemTech  
284 Sheffield Street  
Mountainside, NJ 07092

Cylinder Number: BC169552  
Cylinder Size/CGA: 170/180  
Fill Pressure: 1815 PSIA  
Gas Volume: 110 liters  
Date of Mfg: 07/16/2024  
Expiration Date: 07/16/2025  
Lot Number: 040424-003B

Ship To : Chemtech  
284 Sheffield Street  
Mountainside, NJ 07092

| Customer Number | Ship VIA | Job No.    | Customer PO | Mixture Type |
|-----------------|----------|------------|-------------|--------------|
| 00107092NJ      | Best Way | 040424-003 | 240404-10   | Gravimetric  |

| Component                     | Nominal Concentration | Actual Concentration* | Mixture Type           |
|-------------------------------|-----------------------|-----------------------|------------------------|
| Acetone                       | 500 ppb               | 502 ppb +/- 50 ppb    | Gravimetric Master Gas |
| Acetonitrile                  | 500 ppb               | 530 ppb +/- 50 ppb    |                        |
| Acrolein                      | 500 ppb               | 540 ppb +/- 50 ppb    |                        |
| Acrylonitrile                 | 500 ppb               | 535 ppb +/- 50 ppb    |                        |
| Allyl chloride                | 500 ppb               | 494 ppb +/- 50 ppb    |                        |
| Benzene                       | 500 ppb               | 470 ppb +/- 50 ppb    |                        |
| Benzyl Chloride               | 500 ppb               | 476 ppb +/- 50 ppb    |                        |
| Bromodichloromethane          | 500 ppb               | 495 ppb +/- 50 ppb    |                        |
| Bromoform                     | 500 ppb               | 481 ppb +/- 50 ppb    |                        |
| 1,3-Butadiene                 | 500 ppb               | 490 ppb +/- 50 ppb    |                        |
| tert-Butyl alcohol            | 500 ppb               | 527 ppb +/- 50 ppb    |                        |
| n-Butyl benzene               | 500 ppb               | 525 ppb +/- 50 ppb    |                        |
| sec-Butyl benzene             | 500 ppb               | 525 ppb +/- 50 ppb    |                        |
| tert-Butyl benzene            | 500 ppb               | 525 ppb +/- 50 ppb    |                        |
| Carbon disulfide              | 500 ppb               | 471 ppb +/- 50 ppb    |                        |
| Carbon tetrachloride          | 500 ppb               | 492 ppb +/- 50 ppb    |                        |
| Chlorobenzene                 | 500 ppb               | 478 ppb +/- 50 ppb    |                        |
| Chlorodibromomethane          | 500 ppb               | 474 ppb +/- 50 ppb    |                        |
| Chloroform                    | 500 ppb               | 478 ppb +/- 50 ppb    |                        |
| 2-Chlorotoluene               | 500 ppb               | 527 ppb +/- 50 ppb    |                        |
| Cyclohexane                   | 500 ppb               | 469 ppb +/- 50 ppb    |                        |
| 1,2-Dibromoethane             | 500 ppb               | 477 ppb +/- 50 ppb    |                        |
| 1,2-Dichlorobenzene           | 500 ppb               | 495 ppb +/- 50 ppb    |                        |
| 1,3-Dichlorobenzene           | 500 ppb               | 475 ppb +/- 50 ppb    |                        |
| 1,4-Dichlorobenzene           | 500 ppb               | 476 ppb +/- 50 ppb    |                        |
| Dichlorodifluoromethane (R12) | 500 ppb               | 494 ppb +/- 50 ppb    |                        |

|                                |         |                    |  |
|--------------------------------|---------|--------------------|--|
| 1,1-Dichloroethane             | 500 ppb | 478 ppb +/- 50 ppb |  |
| 1,2-Dichloroethane             | 500 ppb | 483 ppb +/- 50 ppb |  |
| 1,1-Dichloroethylene           | 500 ppb | 479 ppb +/- 50 ppb |  |
| cis 1,2-Dichloroethylene       | 500 ppb | 475 ppb +/- 50 ppb |  |
| trans 1,2-Dichloroethylene     | 500 ppb | 475 ppb +/- 50 ppb |  |
| 1,2-Dichloropropane            | 500 ppb | 476 ppb +/- 50 ppb |  |
| cis 1,3-Dichloropropylene      | 500 ppb | 501 ppb +/- 50 ppb |  |
| trans 1,3-Dichloropropylene    | 500 ppb | 466 ppb +/- 50 ppb |  |
| 1,2-Dichlorotetrafluoroethane  | 500 ppb | 491 ppb +/- 50 ppb |  |
| 1,4-Dioxane                    | 500 ppb | 470 ppb +/- 50 ppb |  |
| Ethyl acetate                  | 500 ppb | 472 ppb +/- 50 ppb |  |
| Ethyl Alcohol                  | 500 ppb | 550 ppb +/- 50 ppb |  |
| Ethyl benzene                  | 500 ppb | 483 ppb +/- 50 ppb |  |
| Ethyl Chloride                 | 500 ppb | 492 ppb +/- 50 ppb |  |
| 4-Ethyltoluene                 | 500 ppb | 472 ppb +/- 50 ppb |  |
| n-Heptane                      | 500 ppb | 473 ppb +/- 50 ppb |  |
| Hexachloro-1,3-butadiene       | 500 ppb | 475 ppb +/- 50 ppb |  |
| 2-Hexanone                     | 500 ppb | 477 ppb +/- 50 ppb |  |
| n-Hexane                       | 500 ppb | 471 ppb +/- 50 ppb |  |
| Isopropyl alcohol              | 500 ppb | 497 ppb +/- 50 ppb |  |
| Isopropyl benzene              | 500 ppb | 522 ppb +/- 50 ppb |  |
| p-Isopropyl toluene            | 500 ppb | 530 ppb +/- 50 ppb |  |
| Methyl Bromide                 | 500 ppb | 491 ppb +/- 50 ppb |  |
| Methyl Chloride                | 500 ppb | 494 ppb +/- 50 ppb |  |
| Methyl ethyl ketone            | 500 ppb | 482 ppb +/- 50 ppb |  |
| Methyl isobutyl ketone         | 500 ppb | 479 ppb +/- 50 ppb |  |
| Methyl methacrylate            | 500 ppb | 527 ppb +/- 50 ppb |  |
| Methyl tertiary butyl ether    | 500 ppb | 470 ppb +/- 50 ppb |  |
| Methylene chloride             | 500 ppb | 484 ppb +/- 50 ppb |  |
| Naphthalene                    | 500 ppb | 537 ppb +/- 50 ppb |  |
| n-Propylbenzene                | 500 ppb | 525 ppb +/- 50 ppb |  |
| Propylene                      | 500 ppb | 494 ppb +/- 50 ppb |  |
| Styrene                        | 500 ppb | 472 ppb +/- 50 ppb |  |
| 1,1,1,2-Tetrachloroethane      | 500 ppb | 530 ppb +/- 50 ppb |  |
| 1,1,2,2-Tetrachloroethane      | 500 ppb | 470 ppb +/- 50 ppb |  |
| Tetrachloroethylene            | 500 ppb | 473 ppb +/- 50 ppb |  |
| Tetrahydrofuran                | 500 ppb | 520 ppb +/- 50 ppb |  |
| Toluene                        | 500 ppb | 477 ppb +/- 50 ppb |  |
| 1,2,4-Trichlorobenzene         | 500 ppb | 480 ppb +/- 50 ppb |  |
| 1,1,1-Trichloroethane          | 500 ppb | 480 ppb +/- 50 ppb |  |
| 1,1,2-Trichloroethane          | 500 ppb | 481 ppb +/- 50 ppb |  |
| Trichloroethylene              | 500 ppb | 474 ppb +/- 50 ppb |  |
| Trichlorofluoromethane         | 500 ppb | 494 ppb +/- 50 ppb |  |
| 1,1,2-Trichlorotrifluoroethane | 500 ppb | 481 ppb +/- 50 ppb |  |
| 1,2,4-Trimethylbenzene         | 500 ppb | 480 ppb +/- 50 ppb |  |
| 1,3,5-Trimethylbenzene         | 500 ppb | 484 ppb +/- 50 ppb |  |
| 2,2,4-Trimethylpentane         | 500 ppb | 475 ppb +/- 50 ppb |  |
| Vinyl acetate                  | 500 ppb | 485 ppb +/- 50 ppb |  |
| Vinyl bromide                  | 500 ppb | 491 ppb +/- 50 ppb |  |
| Vinyl chloride                 | 500 ppb | 493 ppb +/- 50 ppb |  |
| m-Xylene                       | 500 ppb | 479 ppb +/- 50 ppb |  |
| o-Xylene                       | 500 ppb | 466 ppb +/- 50 ppb |  |
| p-Xylene                       | 500 ppb | 473 ppb +/- 50 ppb |  |
| 2-Methyl Naphthalene           | 500 ppb | 497 ppb +/- 50 ppb |  |
| R-22                           | 500 ppb | 589 ppb +/- 50 ppb |  |
| Nitrogen                       | balance | balance            |  |
|                                |         |                    |  |
|                                |         |                    |  |

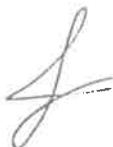
**NOTES:** Blend Tolerance: +/- 20 %  
Analytical Tolerance: +/- 10 %  
Traceability: NIST by weight set. NIST Traceability No MT001810.  
Internal Standards by analysis  
Reactive Mixtures: Analyzed twice with required agreement between analyses of 2%.  
Required wait time between analyses of >7 days.  
Caution: Do not use below 150 PSIG.

**Analyst Name:** Joseph A. Ernst

**QA Signature:** 

**Signature:**

**Date:** 07/16/2024



\*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.



**Order ID :** P5294

| Date       | Bottle ID | Lab Sample Number | InComing Vacuum | Canister ID | Can Size | Reg ID | Reg Size | Batch Code | Certification ID                                                                                                     |
|------------|-----------|-------------------|-----------------|-------------|----------|--------|----------|------------|----------------------------------------------------------------------------------------------------------------------|
| 12/17/2024 | B2409035  | P5294-02          | -7.5            | 10401       | 6 L      | 10520  |          | C2409002   | <b>VL041614.D</b><br>Seq :vl091824<br>TUNE : VL041600.D<br>ICAL : VL041597.D<br>CCAL : VL041601.D<br>MB : VL041602.D |
| 12/17/2024 | B2409035  | P5294-03          | -3.5            | 10197       | 6 L      | 10482  |          | C2409001   | <b>VL041612.D</b><br>Seq :vl091824<br>TUNE : VL041600.D<br>ICAL : VL041597.D<br>CCAL : VL041601.D<br>MB : VL041602.D |
| 12/17/2024 | B2409035  | P5294-01          | -5.9            | 10054       | 6 L      | 10567  |          | C2408005   | <b>VL041545.D</b><br>Seq :vl081924<br>TUNE : VL041539.D<br>ICAL : VL041404.D<br>CCAL : VL041540.D<br>MB : VL041541.D |



## Canister Cleaning

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

**Canister Batch :** C2408005

**Type of Canister :** 6 L

**Cleaning Date :** 08/15/2024

**Analyst :** SAM

**Oven Temperature :** 125.0 c

| Canister | Vaccum<br>After<br>Cleaning<br>("Hg) | Vaccum<br>After<br>Cleaning<br>Date | Analysis<br>Date | VAC<br>24Hr<br>("Hg) | Vaccum<br>After<br>24hr<br>Date | New<br>Sample<br>Number | QC<br>Canister | File       |
|----------|--------------------------------------|-------------------------------------|------------------|----------------------|---------------------------------|-------------------------|----------------|------------|
| 10282    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      |                         | 10054          | VL041545.D |
| 10306    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      |                         | 10054          | VL041545.D |
| 10279    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      | P4911-01                | 10054          | VL041545.D |
| 10608    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      |                         | 10054          | VL041545.D |
| 10315    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      | P4911-02                | 10054          | VL041545.D |
| 10054    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      | P5294-01                | 10054          | VL041545.D |
| 10588    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      |                         | 10054          | VL041545.D |
| 10024    | -30                                  | 08/16/2024                          | 08/19/2024       | -30                  | 08/19/2024                      |                         | 10054          | VL041545.D |



## Canister Cleaning

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

**Canister Batch :** C2409001

**Type of Canister :** 6 L

**Cleaning Date :** 09/03/2024

**Analyst :** SAM

**Oven Temperature :** 125.0 c

| Canister | Vaccum<br>After<br>Cleaning<br>("Hg) | Vaccum<br>After<br>Cleaning<br>Date | Analysis<br>Date | VAC<br>24Hr<br>("Hg) | Vaccum<br>After<br>24hr<br>Date | New<br>Sample<br>Number | QC<br>Canister | File       |
|----------|--------------------------------------|-------------------------------------|------------------|----------------------|---------------------------------|-------------------------|----------------|------------|
| 10439    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10296    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10197    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      | P5294-03                | 10197          | VL041612.D |
| 10598    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10333    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10599    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10321    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |
| 10602    | -30                                  | 09/04/2024                          | 09/18/2024       | -30                  | 09/05/2024                      |                         | 10197          | VL041612.D |



## Canister Cleaning

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

**Canister Batch :** C2409002

**Type of Canister :** 6 L

**Cleaning Date :** 09/04/2024

**Analyst :** SAM

**Oven Temperature :** 125.0 c

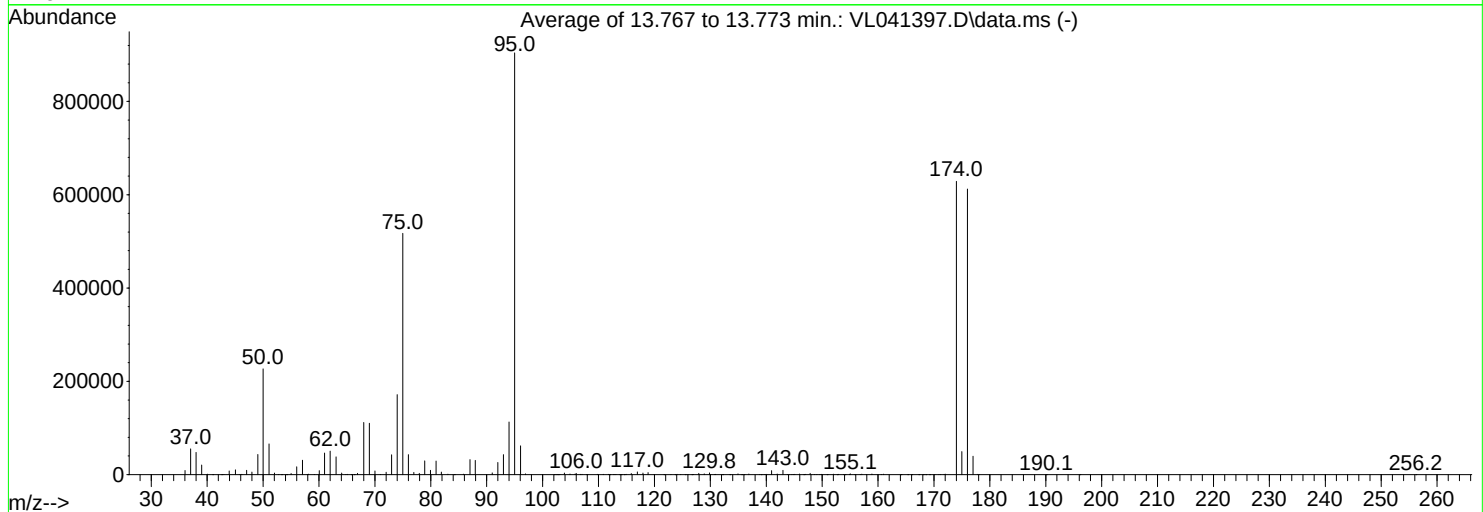
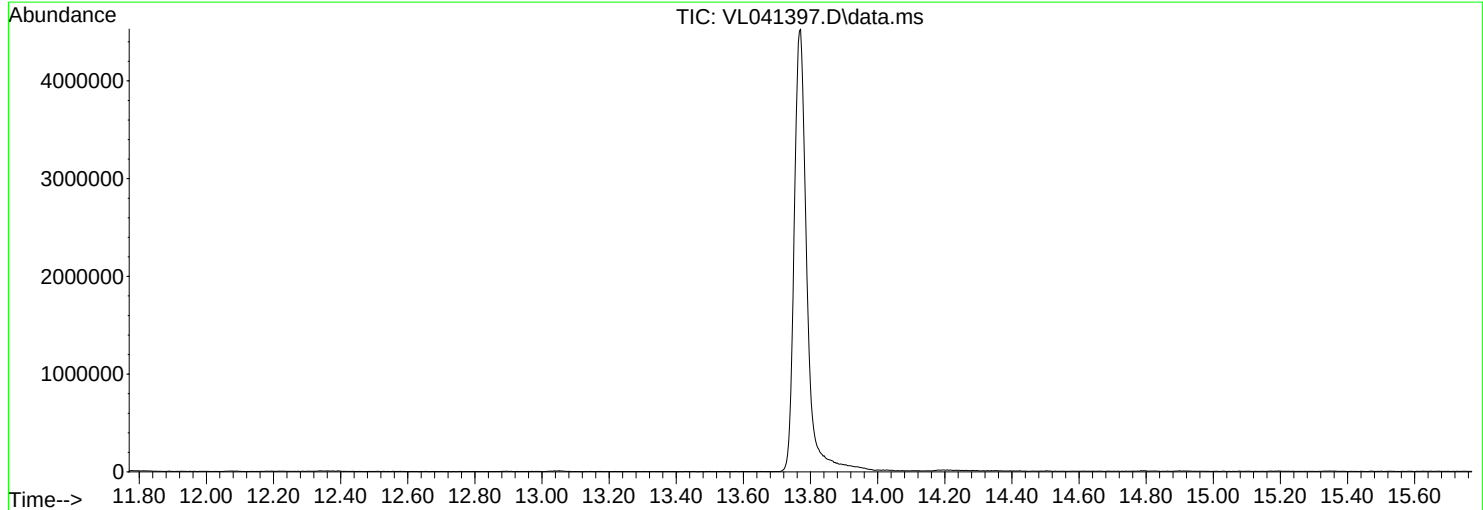
| Canister | Vaccum<br>After<br>Cleaning<br>("Hg) | Vaccum<br>After<br>Cleaning<br>Date | Analysis<br>Date | VAC<br>24Hr<br>("Hg) | Vaccum<br>After<br>24hr<br>Date | New<br>Sample<br>Number | QC<br>Canister | File       |
|----------|--------------------------------------|-------------------------------------|------------------|----------------------|---------------------------------|-------------------------|----------------|------------|
| 10334    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      | P5298-02                | 10334          | VL041666.D |
| 10281    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      |                         | 10334          | VL041614.D |
| 10258    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      | P5293-03                | 10258          | VL041664.D |
| 10332    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      |                         | 10334          | VL041614.D |
| 10590    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      | P5298-03                | 10590          | VL041665.D |
| 10401    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      | P5294-02                | 10401          | VL041614.D |
| 10607    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      |                         | 10334          | VL041614.D |
| 10323    | -30                                  | 09/05/2024                          | 09/18/2024       | -30                  | 09/06/2024                      |                         | 10334          | VL041614.D |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041397.D  
Acq On : 25 Jul 2024 12:29  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Fri Jul 26 07:31:14 2024



AutoFind: Scans 3472, 3473, 3474; Background Corrected with Scan 3447

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 25.1  | 226560 | PASS      |
| 75     | 95      | 30     | 66     | 57.2  | 517099 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 904149 | PASS      |
| 96     | 95      | 5      | 9      | 6.8   | 61827  | PASS      |
| 173    | 174     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 174    | 95      | 50     | 120    | 69.5  | 628715 | PASS      |
| 175    | 174     | 4      | 9      | 7.9   | 49563  | PASS      |
| 176    | 174     | 93     | 101    | 97.4  | 612373 | PASS      |
| 177    | 176     | 5      | 9      | 6.5   | 39536  | PASS      |

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL072524AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Fri Jul 26 07:31:14 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041404.D 0.1 =VL041403.D 0.5 =VL041398.D 1 =VL041401.D 2 =VL041400.D 10 =VL041399.D 15 =VL041405.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg    | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|--------|-------|
| -----                     |                |       |       |       |       |       |       |        |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |        |       |
| 2) T Dichlorodifluo...    |                |       | 1.883 | 2.019 | 2.126 | 1.425 | 1.148 | 1.720  | 24.23 |
| 3) Chlorodifluoro...      |                |       | 1.302 | 1.262 | 1.264 | 1.070 | 1.054 | 1.190  | 9.97  |
| 4) Chloromethane          |                |       | 0.682 | 0.685 | 0.687 | 0.564 | 0.548 | 0.633  | 11.12 |
| 5) T Vinyl Chloride       | 0.719          | 0.563 | 0.628 | 0.663 | 0.653 | 0.570 | 0.571 | 0.624  | 9.45  |
| 6) T Bromomethane         |                |       | 0.331 | 0.344 | 0.333 | 0.295 | 0.301 | 0.321  | 6.69  |
| 7) Chloroethane           |                |       | 0.240 | 0.210 | 0.226 | 0.202 | 0.198 | 0.215  | 8.14  |
| 8) T Dichlorotetra...     |                |       | 1.593 | 1.646 | 1.681 | 1.381 | 1.321 | 1.524  | 10.69 |
| 9) T Propene              |                |       | 0.576 | 0.586 | 0.588 | 0.489 | 0.495 | 0.547  | 9.16  |
| 10) T Heptane             |                |       | 1.139 | 1.240 | 1.371 | 1.200 | 1.194 | 1.229  | 7.09  |
| 11) T Trichlorofluor...   |                |       | 1.621 | 1.638 | 1.636 | 1.383 | 1.362 | 1.528  | 9.32  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.154 | 1.154 | 1.201 | 0.999 | 0.992 | 1.100  | 8.85  |
| 13) Ethanol               |                |       | 0.044 | 0.066 | 0.065 | 0.035 | 0.035 | 0.049# | 31.91 |
| 14) T Bromoethene         |                |       | 0.417 | 0.430 | 0.468 | 0.412 | 0.417 | 0.429  | 5.27  |
| 15) T Acetone             |                |       | 1.292 | 1.192 | 1.231 | 0.996 | 0.969 | 1.136  | 12.76 |
| 16) T 1,3-Butadiene       |                |       | 0.605 | 0.652 | 0.664 | 0.556 | 0.558 | 0.607  | 8.38  |
| 17) tert-Butyl alc...     |                |       | 1.032 | 1.100 | 0.986 | 1.053 | 1.011 | 1.036  | 4.17  |
| 18) T 1,1-Dichloroet...   |                |       | 0.460 | 0.479 | 0.515 | 0.455 | 0.444 | 0.471  | 5.93  |
| 19) T Isopropyl Alcohol   |                |       | 0.711 | 0.674 | 0.661 | 0.646 | 0.630 | 0.664  | 4.64  |
| 20) T Methylene Chlo...   |                |       | 0.502 | 0.430 | 0.444 | 0.371 | 0.372 | 0.424  | 12.91 |
| 21) T Allyl Chloride      |                |       | 0.714 | 0.783 | 0.796 | 0.726 | 0.707 | 0.745  | 5.53  |
| 22) T trans-1,2-Dich...   |                |       | 0.462 | 0.481 | 0.516 | 0.448 | 0.446 | 0.471  | 6.16  |
| 23) T Vinyl Acetate       |                |       | 0.777 | 0.874 | 0.939 | 0.884 | 0.865 | 0.868  | 6.71  |
| 24) T 1,1-Dichloroet...   |                |       | 1.083 | 1.045 | 1.116 | 0.941 | 0.923 | 1.022  | 8.40  |
| 25) T Ethyl Acetate       |                |       | 2.177 | 2.381 | 2.517 | 2.116 | 2.094 | 2.257  | 8.16  |
| 26) T Hexane              |                |       | 0.897 | 0.951 | 1.056 | 0.889 | 0.889 | 0.936  | 7.64  |
| 27) T Carbon Disulfide    |                |       | 1.055 | 1.020 | 1.160 | 1.120 | 1.122 | 1.095  | 5.18  |
| 28) T Methyl tert-Bu...   |                |       | 0.565 | 0.637 | 0.652 | 0.555 | 0.543 | 0.591  | 8.53  |
| 29) T Chloroform          |                |       | 1.554 | 1.612 | 1.659 | 1.414 | 1.398 | 1.527  | 7.65  |
| 30) T Cyclohexane         |                |       | 0.602 | 0.795 | 0.875 | 0.764 | 0.777 | 0.763  | 13.04 |
| 31) T cis-1,2-Dichlo...   |                |       | 0.879 | 0.937 | 1.022 | 0.890 | 0.896 | 0.925  | 6.35  |
| 32) T 1,1,1-Trichlor...   | 1.713          | 1.310 | 1.498 | 1.517 | 1.581 | 1.398 | 1.388 | 1.487  | 9.11  |
| -----                     |                |       |       |       |       |       |       |        |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |       |
| 34) T 2-Butanone          |                |       | 0.465 | 0.491 | 0.528 | 0.467 | 0.467 | 0.484  | 5.58  |
| 35) T Carbon Tetrach...   | 0.584          | 0.500 | 0.542 | 0.558 | 0.589 | 0.548 | 0.540 | 0.552  | 5.42  |
| 36) T Benzene             |                |       | 0.691 | 0.778 | 0.792 | 0.705 | 0.689 | 0.731  | 6.82  |
| 37) T 1,2-Dichloroet...   |                |       | 0.413 | 0.416 | 0.428 | 0.393 | 0.396 | 0.409  | 3.55  |
| 38) T Trichloroethene     | 0.394          | 0.288 | 0.326 | 0.349 | 0.349 | 0.320 | 0.317 | 0.335  | 9.99  |
| 39) T 1,2-Dichloropr...   |                |       | 0.267 | 0.294 | 0.303 | 0.266 | 0.269 | 0.280  | 6.21  |

|                                                  |                   |                |       |       |       |       |       |       |       |       |
|--------------------------------------------------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\ |                   |                |       |       |       |       |       |       |       |       |
| Method File : VL072524AIR.M                      |                   |                |       |       |       |       |       |       |       |       |
| 40) T                                            | 1,4-Dioxane       |                |       | 0.130 | 0.110 | 0.106 | 0.115 | 0.101 | 0.112 | 9.70  |
| 41) T                                            | Tetrahydrofuran   |                |       | 0.226 | 0.291 | 0.308 | 0.278 | 0.280 | 0.277 | 11.09 |
| 42) T                                            | Bromodichlorom... |                |       | 0.573 | 0.613 | 0.622 | 0.576 | 0.568 | 0.591 | 4.26  |
| 43) T                                            | Methyl Methacr... |                |       | 0.205 | 0.252 | 0.287 | 0.283 | 0.284 | 0.262 | 13.30 |
| 44) T                                            | 2,2,4-Trimethy... |                |       | 1.168 | 1.294 | 1.342 | 1.165 | 1.132 | 1.220 | 7.54  |
| 45) T                                            | t-1,3-Dichloro... |                |       | 0.166 | 0.202 | 0.248 | 0.287 | 0.302 | 0.241 | 23.76 |
| 46) T                                            | cis-1,3-Dichlo... |                |       | 0.270 | 0.325 | 0.372 | 0.382 | 0.392 | 0.348 | 14.53 |
| 47) T                                            | 1,1,2-Trichlor... |                |       | 0.310 | 0.313 | 0.334 | 0.294 | 0.291 | 0.308 | 5.62  |
| 48) T                                            | Dibromochlorom... |                |       | 0.447 | 0.503 | 0.526 | 0.505 | 0.503 | 0.497 | 5.97  |
| 49) T                                            | Bromoform         |                |       | 0.354 | 0.401 | 0.455 | 0.446 | 0.443 | 0.420 | 10.10 |
| 50) T                                            | 4-Methyl-2-Pen... |                |       | 0.644 | 0.773 | 0.860 | 0.776 | 0.763 | 0.763 | 10.08 |
| 51) T                                            | 2-Hexanone        |                |       | 0.398 | 0.569 | 0.640 | 0.639 | 0.640 | 0.577 | 18.10 |
| 52) T                                            | Tetrachloroethene | 0.308          | 0.260 | 0.275 | 0.289 | 0.304 | 0.271 | 0.270 | 0.282 | 6.49  |
| 53) T                                            | Toluene           |                |       | 0.678 | 0.851 | 0.889 | 0.829 | 0.822 | 0.814 | 9.86  |
| 54) T                                            | 1,2-Dibromoethane | 0.340          |       | 0.377 | 0.424 | 0.463 | 0.429 | 0.429 | 0.410 | 10.74 |
| 55) I                                            | Chlorobenzene-d5  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 56) T                                            | 1,1,1,2-Tetrac... |                |       | 0.401 | 0.401 | 0.412 | 0.372 | 0.353 | 0.388 | 6.36  |
| 57) T                                            | Chlorobenzene     |                |       | 0.747 | 0.762 | 0.758 | 0.667 | 0.626 | 0.712 | 8.71  |
| 58) T                                            | Ethyl Benzene     |                |       | 1.028 | 1.229 | 1.262 | 1.151 | 1.092 | 1.153 | 8.35  |
| 59) T                                            | m/p-Xylene        |                |       | 0.934 | 1.065 | 1.083 | 0.979 | 0.914 | 0.995 | 7.68  |
| 60) T                                            | o-Xylene          |                |       | 0.842 | 1.015 | 1.038 | 0.931 | 0.880 | 0.941 | 8.96  |
| 61) T                                            | Styrene           |                |       | 0.313 | 0.424 | 0.468 | 0.464 | 0.455 | 0.425 | 15.32 |
| 62) T                                            | Isopropylbenzene  |                |       | 1.404 | 1.552 | 1.560 | 1.368 | 1.270 | 1.431 | 8.68  |
| 63) T                                            | 1,1,2,2-Tetrac... | 0.575          | 0.568 | 0.626 | 0.641 | 0.650 | 0.569 | 0.533 | 0.594 | 7.45  |
| 64) T                                            | n-propylbenzene   |                |       | 0.353 | 0.393 | 0.408 | 0.370 | 0.347 | 0.374 | 6.89  |
| 65) T                                            | tert-Butylbenzene |                |       | 1.229 | 1.412 | 1.448 | 1.235 | 1.138 | 1.292 | 10.21 |
| 66) T                                            | Benzyl Chloride   |                |       | 0.069 | 0.076 | 0.080 | 0.092 | 0.097 | 0.083 | 13.50 |
| 67) T                                            | sec-Butylbenzene  |                |       | 1.641 | 1.940 | 2.017 | 1.719 | 1.586 | 1.781 | 10.59 |
| 68) S                                            | 1-Bromo-4-Fluo... | 0.772          | 0.783 | 0.774 | 0.764 | 0.764 | 0.782 | 0.747 | 0.770 | 1.63  |
| 69) T                                            | p-Isopropyltol... |                |       | 1.299 | 1.617 | 1.674 | 1.453 | 1.346 | 1.478 | 11.11 |
| 70) T                                            | n-Butylbenzene    |                |       | 1.347 | 1.622 | 1.731 | 1.488 | 1.386 | 1.515 | 10.64 |
| 71) T                                            | 2-Chlorotoluene   |                |       | 0.990 | 1.133 | 1.154 | 1.033 | 0.966 | 1.055 | 8.00  |
| 72) T                                            | 4-Ethyltoluene    |                |       | 0.976 | 1.143 | 1.229 | 1.138 | 1.054 | 1.108 | 8.70  |
| 73) T                                            | 1,3,5-Trimethy... |                |       | 0.831 | 0.987 | 1.072 | 0.974 | 0.909 | 0.955 | 9.46  |
| 74) T                                            | 1,2,4-Trimethy... |                |       | 1.034 | 1.199 | 1.238 | 1.074 | 1.003 | 1.110 | 9.32  |
| 75) T                                            | 1,3-Dichlorobe... |                |       | 0.663 | 0.751 | 0.768 | 0.672 | 0.634 | 0.698 | 8.33  |
| 76) T                                            | 1,4-Dichlorobe... |                |       | 0.673 | 0.710 | 0.716 | 0.656 | 0.623 | 0.676 | 5.74  |
| 77) T                                            | 1,2-Dichlorobe... |                |       | 0.692 | 0.731 | 0.767 | 0.654 | 0.614 | 0.692 | 8.73  |
| 78) T                                            | Hexachloro-1,3... |                |       | 0.621 | 0.680 | 0.665 | 0.499 | 0.484 | 0.590 | 15.69 |
| 79) T                                            | Naphthalene       | 0.490          |       | 0.808 | 1.106 | 1.252 | 1.125 | 1.096 | 0.980 | 28.67 |
| 80) T                                            | Naphthalene,2-... |                |       | 0.499 | 0.667 | 0.911 | 0.992 | 1.036 | 0.821 | 27.97 |
| 81) T                                            | 1,2,4-Trichlor... |                |       | 0.504 | 0.606 | 0.646 | 0.587 | 0.573 | 0.583 | 8.95  |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041398.D  
Acq On : 25 Jul 2024 13:19  
Operator : SY/MD  
Sample : VSTDICC0.5  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.5

Quant Time: Jul 26 05:07:21 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 05:07:02 2024

Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
Supervised By : Mahesh Dadoda 07/29/2024

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1163290  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.639  | 114  | 3245422  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.458 | 117  | 3043708  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2357044 10.071 ppbv 0.00  
Spiked Amount 10.000 Range 65 - 135 Recovery = 100.700%

Target Compounds

|                               |       |     |        |              | Qvalue |
|-------------------------------|-------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane    | 2.709 | 85  | 109541 | 0.539 ppbv   | 98     |
| 3) Chlorodifluoromethane      | 2.655 | 51  | 75741  | 0.549 ppbv   | 100    |
| 4) Chloromethane              | 2.793 | 50  | 39649  | 0.546 ppbv   | 96     |
| 5) Vinyl Chloride             | 2.906 | 62  | 36538  | 0.508 ppbv # | 87     |
| 6) Bromomethane               | 3.102 | 94  | 19255  | 0.523 ppbv   | 93     |
| 7) Chloroethane               | 3.179 | 64  | 13984  | 0.572 ppbv   | 92     |
| 8) Dichlorotetrafluoroethane  | 2.838 | 85  | 92652  | 0.521 ppbv   | 93     |
| 9) Propene                    | 2.671 | 41  | 33491  | 0.523 ppbv   | 98     |
| 10) Heptane                   | 7.568 | 43  | 66249  | 0.465 ppbv   | 97     |
| 11) Trichlorofluoromethane    | 3.545 | 101 | 94267  | 0.536 ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 4.050 | 101 | 67103  | 0.527 ppbv   | 99     |
| 13) Ethanol                   | 3.237 | 45  | 2541m  | 0.454 ppbv   |        |
| 14) Bromoethene               | 3.346 | 108 | 24275  | 0.495 ppbv # | 90     |
| 15) Acetone                   | 3.462 | 43  | 75165  | 0.574 ppbv   | 100    |
| 16) 1,3-Butadiene             | 2.963 | 39  | 35196m | 0.505 ppbv   |        |
| 17) tert-Butyl alcohol        | 3.870 | 59  | 59997  | 0.504 ppbv   | 99     |
| 18) 1,1-Dichloroethene        | 3.864 | 96  | 26744  | 0.484 ppbv   | 90     |
| 19) Isopropyl Alcohol         | 3.568 | 45  | 41335m | 0.559 ppbv   |        |
| 20) Methylene Chloride        | 3.915 | 84  | 29173  | 0.603 ppbv # | 93     |
| 21) Allyl Chloride            | 3.979 | 41  | 41531  | 0.483 ppbv   | 94     |
| 22) trans-1,2-Dichloroethene  | 4.433 | 96  | 26864  | 0.500 ppbv   | 93     |
| 23) Vinyl Acetate             | 4.616 | 43  | 45209  | 0.444 ppbv # | 97     |
| 24) 1,1-Dichloroethane        | 4.545 | 63  | 62999  | 0.542 ppbv # | 97     |
| 25) Ethyl Acetate             | 5.195 | 43  | 126641 | 0.485 ppbv   | 99     |
| 26) Hexane                    | 5.192 | 57  | 52190  | 0.475 ppbv   | 91     |
| 27) Carbon Disulfide          | 4.111 | 76  | 61342  | 0.489 ppbv # | 93     |
| 28) Methyl tert-Butyl Ether   | 4.581 | 73  | 32882  | 0.475 ppbv   | 95     |
| 29) Chloroform                | 5.256 | 83  | 90359  | 0.503 ppbv   | 99     |
| 30) Cyclohexane               | 6.594 | 84  | 35035  | 0.389 ppbv # | 88     |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 51136  | 0.472 ppbv # | 87     |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 87155  | 0.508 ppbv   | 97     |
| 34) 2-Butanone                | 4.787 | 43  | 75522m | 0.481 ppbv   |        |
| 35) Carbon Tetrachloride      | 6.478 | 117 | 88027  | 0.495 ppbv   | 86     |
| 36) Benzene                   | 6.356 | 78  | 112067 | 0.470 ppbv   | 95     |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 66949  | 0.507 ppbv   | 98     |
| 38) Trichloroethene           | 7.282 | 130 | 52825  | 0.488 ppbv   | 98     |
| 39) 1,2-Dichloropropane       | 7.060 | 63  | 43368  | 0.473 ppbv   | 95     |
| 40) 1,4-Dioxane               | 7.304 | 88  | 21057m | 0.633 ppbv   |        |
| 41) Tetrahydrofuran           | 5.568 | 42  | 36699  | 0.403 ppbv   | 98     |
| 42) Bromodichloromethane      | 7.237 | 83  | 92906  | 0.486 ppbv   | 98     |
| 43) Methyl Methacrylate       | 7.465 | 69  | 33258  | 0.386 ppbv   | 91     |
| 44) 2,2,4-Trimethylpentane    | 7.314 | 57  | 189569 | 0.479 ppbv   | 94     |
| 45) t-1,3-Dichloropropene     | 8.700 | 75  | 26864m | 0.341 ppbv   |        |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041398.D  
 Acq On : 25 Jul 2024 13:19  
 Operator : SY/MD  
 Sample : VSTDIC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Quant Time: Jul 26 05:07:21 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 05:07:02 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

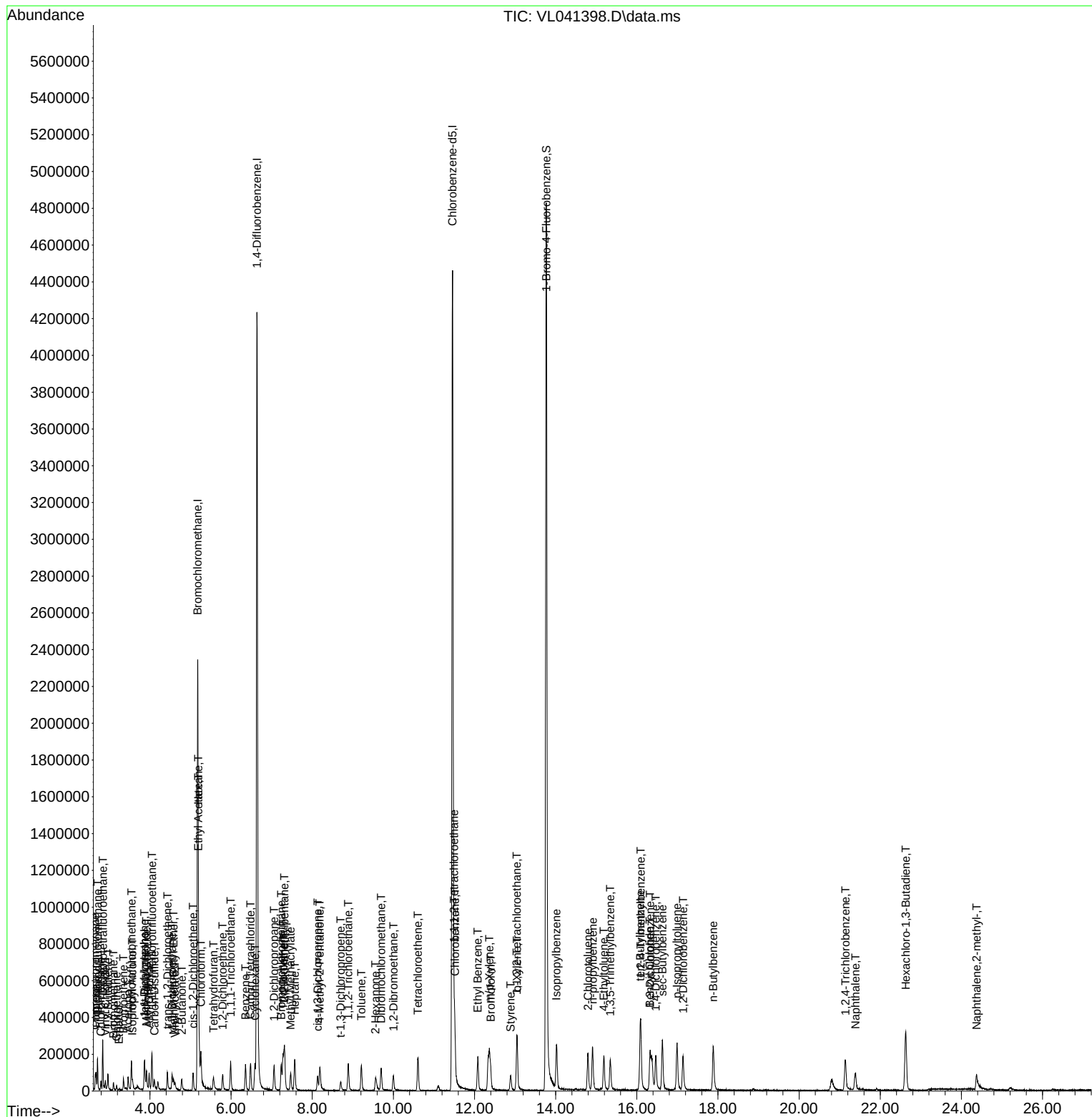
Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 43823m   | 0.384 | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 8.886  | 97   | 50232    | 0.505 | ppbv   | 95       |
| 48) Dibromochloromethane      | 9.700  | 129  | 72480    | 0.452 | ppbv   | 100      |
| 49) Bromoform                 | 12.400 | 173  | 57383    | 0.423 | ppbv   | 95       |
| 50) 4-Methyl-2-Pentanone      | 8.185  | 43   | 104559m  | 0.417 | ppbv   |          |
| 51) 2-Hexanone                | 9.558  | 43   | 64659    | 0.338 | ppbv # | 97       |
| 52) Tetrachloroethene         | 10.600 | 164  | 44583    | 0.486 | ppbv   | 92       |
| 53) Toluene                   | 9.211  | 91   | 110057   | 0.411 | ppbv   | 98       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 61242    | 0.455 | ppbv   | 89       |
| 56) 1,1,1,2-Tetrachloroethane | 11.497 | 131  | 61039    | 0.519 | ppbv # | 1        |
| 57) Chlorobenzene             | 11.516 | 112  | 113739   | 0.524 | ppbv   | 94       |
| 58) Ethyl Benzene             | 12.079 | 91   | 156513   | 0.441 | ppbv   | 96       |
| 59) m/p-Xylene                | 12.365 | 91   | 284326m  | 0.936 | ppbv   |          |
| 60) o-Xylene                  | 13.050 | 91   | 128195   | 0.440 | ppbv   | 99       |
| 61) Styrene                   | 12.889 | 104  | 47561    | 0.362 | ppbv   | 94       |
| 62) Isopropylbenzene          | 14.018 | 105  | 213603m  | 0.492 | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83   | 95214    | 0.526 | ppbv   | 97       |
| 64) n-propylbenzene           | 14.915 | 120  | 53748m   | 0.473 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.082 | 119  | 187031m  | 0.476 | ppbv   |          |
| 66) Benzyl Chloride           | 16.323 | 91   | 10564m   | 0.422 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.632 | 105  | 249741   | 0.458 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 197625   | 0.434 | ppbv   | 96       |
| 70) n-Butylbenzene            | 17.886 | 91   | 204999   | 0.443 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 150717   | 0.465 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 148551   | 0.441 | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 126480   | 0.429 | ppbv   | 92       |
| 74) 1,2,4-Trimethylbenzene    | 16.098 | 105  | 157396m  | 0.463 | ppbv   |          |
| 75) 1,3-Dichlorobenzene       | 16.326 | 146  | 100938   | 0.476 | ppbv   | 94       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 102368m  | 0.492 | ppbv   |          |
| 77) 1,2-Dichlorobenzene       | 17.143 | 146  | 105386m  | 0.503 | ppbv   |          |
| 78) Hexachloro-1,3-Butadiene  | 22.631 | 225  | 94555m   | 0.520 | ppbv   |          |
| 79) Naphthalene               | 21.387 | 128  | 123028m  | 0.412 | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.374 | 142  | 75989    | 0.313 | ppbv   | 93       |
| 81) 1,2,4-Trichlorobenzene    | 21.143 | 180  | 76641m   | 0.428 | ppbv   |          |

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

## Manual Integrations

Quant Time: Jul 26 05:07:21 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug  
QLast Update : Fri Jul 26 05:07:02 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041399.D  
 Acq On : 25 Jul 2024 13:59  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

### Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 05:05:14 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Fri Jul 26 04:51:44 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1227171  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.645  | 114  | 3353351  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.465 | 117  | 3260833m | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2550034 10.170 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.700%

#### Target Compounds

|                               |       |     |         |             | Qvalue |
|-------------------------------|-------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane    | 2.706 | 85  | 1748662 | 8.150 ppbv  | 100    |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 1312868 | 9.025 ppbv  | 100    |
| 4) Chloromethane              | 2.790 | 50  | 692256  | 9.024 ppbv  | 99     |
| 5) Vinyl Chloride             | 2.899 | 62  | 699389  | 9.214 ppbv  | 100    |
| 6) Bromomethane               | 3.099 | 94  | 361665  | 9.227 ppbv  | 100    |
| 7) Chloroethane               | 3.176 | 64  | 248340  | 9.630 ppbv  | 100    |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 1694634 | 9.039 ppbv  | 100    |
| 9) Propene                    | 2.671 | 41  | 600396  | 8.889 ppbv  | 100    |
| 10) Heptane                   | 7.568 | 43  | 1472225 | 9.801 ppbv  | 99     |
| 11) Trichlorofluoromethane    | 3.542 | 101 | 1696907 | 9.145 ppbv  | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 4.047 | 101 | 1226328 | 9.136 ppbv  | 100    |
| 13) Ethanol                   | 3.224 | 45  | 43077m  | 7.073 ppbv  |        |
| 14) Bromoethene               | 3.346 | 108 | 505960  | 9.786 ppbv  | 100    |
| 15) Acetone                   | 3.446 | 43  | 1222864 | 8.859 ppbv  | 100    |
| 16) 1,3-Butadiene             | 2.964 | 39  | 681843  | 9.269 ppbv  | 100    |
| 17) tert-Butyl alcohol        | 3.861 | 59  | 1291681 | 10.276 ppbv | 100    |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 558470  | 9.575 ppbv  | 100    |
| 19) Isopropyl Alcohol         | 3.555 | 45  | 792740  | 10.155 ppbv | 100    |
| 20) Methylene Chloride        | 3.915 | 84  | 455611  | 8.929 ppbv  | 100    |
| 21) Allyl Chloride            | 3.980 | 41  | 890718  | 9.827 ppbv  | 100    |
| 22) trans-1,2-Dichloroethene  | 4.430 | 96  | 549902  | 9.711 ppbv  | 100    |
| 23) Vinyl Acetate             | 4.610 | 43  | 1085315 | 10.104 ppbv | 100    |
| 24) 1,1-Dichloroethane        | 4.549 | 63  | 1154644 | 9.415 ppbv  | 100    |
| 25) Ethyl Acetate             | 5.189 | 43  | 2597295 | 9.430 ppbv  | 100    |
| 26) Hexane                    | 5.198 | 57  | 1090849 | 9.420 ppbv  | 100    |
| 27) Carbon Disulfide          | 4.105 | 76  | 1375021 | 10.384 ppbv | 99     |
| 28) Methyl tert-Butyl Ether   | 4.568 | 73  | 681033  | 9.329 ppbv  | 100    |
| 29) Chloroform                | 5.259 | 83  | 1735318 | 9.163 ppbv  | 100    |
| 30) Cyclohexane               | 6.590 | 84  | 937363  | 9.878 ppbv  | 100    |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 1091838 | 9.548 ppbv  | 100    |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 1715896 | 9.483 ppbv  | 100    |
| 34) 2-Butanone                | 4.771 | 43  | 1567685 | 9.654 ppbv  | 100    |
| 35) Carbon Tetrachloride      | 6.484 | 117 | 1836059 | 9.983 ppbv  | 100    |
| 36) Benzene                   | 6.359 | 78  | 2363293 | 9.591 ppbv  | 100    |
| 37) 1,2-Dichloroethane        | 5.796 | 62  | 1317693 | 9.664 ppbv  | 99     |
| 38) Trichloroethene           | 7.282 | 130 | 1074518 | 9.605 ppbv  | 100    |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 891517  | 9.403 ppbv  | 100    |
| 40) 1,4-Dioxane               | 7.275 | 88  | 384473  | 11.177 ppbv | 100    |
| 41) Tetrahydrofuran           | 5.542 | 42  | 931064  | 9.892 ppbv  | 100    |
| 42) Bromodichloromethane      | 7.240 | 83  | 1932798 | 9.793 ppbv  | 100    |
| 43) Methyl Methacrylate       | 7.465 | 69  | 948521  | 10.646 ppbv | 100    |
| 44) 2,2,4-Trimethylpentane    | 7.317 | 57  | 3907968 | 9.554 ppbv  | 100    |
| 45) t-1,3-Dichloropropene     | 8.703 | 75  | 963383  | 11.835 ppbv | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041399.D  
 Acq On : 25 Jul 2024 13:59  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Quant Time: Jul 26 05:05:14 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 04:51:44 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 1281640  | 10.855 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 987016   | 9.602  | ppbv   | 100      |
| 48) Dibromochloromethane      | 9.706  | 129  | 1692234  | 10.224 | ppbv   | 100      |
| 49) Bromoform                 | 12.404 | 173  | 1496236  | 10.670 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.172  | 43   | 2603717  | 10.051 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.542  | 43   | 2141345  | 10.819 | ppbv   | 100      |
| 52) Tetrachloroethene         | 10.613 | 164  | 907950   | 9.585  | ppbv   | 100      |
| 53) Toluene                   | 9.214  | 91   | 2779504  | 10.036 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 1438535  | 10.342 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 1213659  | 9.640  | ppbv # | 58       |
| 57) Chlorobenzene             | 11.523 | 112  | 2174265  | 9.343  | ppbv   | 100      |
| 58) Ethyl Benzene             | 12.085 | 91   | 3752771  | 9.870  | ppbv   | 100      |
| 59) m/p-Xylene                | 12.368 | 91   | 6382118m | 19.609 | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 3036791  | 9.732  | ppbv   | 100      |
| 61) Styrene                   | 12.896 | 104  | 1513410  | 10.748 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.024 | 105  | 4462038  | 9.595  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83   | 1853886  | 9.567  | ppbv   | 100      |
| 64) n-propylbenzene           | 14.912 | 120  | 1205437  | 9.895  | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.085 | 119  | 4027165  | 9.564  | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.323 | 91   | 299511   | 11.162 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 16.635 | 105  | 5605419  | 9.602  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 16.989 | 119  | 4737222  | 9.713  | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.883 | 91   | 4851380  | 9.796  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.799 | 91   | 3368997  | 9.707  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 3711228  | 10.293 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 3175291  | 10.049 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 3502689  | 9.621  | ppbv   | 100      |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 2192883  | 9.642  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.471 | 146  | 2140459  | 9.596  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 2131506  | 9.501  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 1626038  | 8.347  | ppbv   | 100      |
| 79) Naphthalene               | 21.381 | 128  | 3669460  | 11.481 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 24.371 | 142  | 3235986  | 12.454 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.133 | 180  | 1912951  | 9.962  | ppbv   | 100      |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041400.D  
 Acq On : 25 Jul 2024 14:40  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Jul 25 15:37:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1187869  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.642  | 114   | 3361544  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.462 | 117   | 3300753  | 10.000   | ppbv   | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.773 | 95    | 2521024  | 10.190   | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 101.900% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.710  | 85    | 505198   | 2.492    | ppbv   | 99       |
| 3) Chlorodifluoromethane      | 2.652  | 51    | 300375   | 1.467    | ppbv   | 99       |
| 4) Chloromethane              | 2.793  | 50    | 163139   | 2.084    | ppbv   | 96       |
| 5) Vinyl Chloride             | 2.899  | 62    | 155185   | 1.835    | ppbv   | 99       |
| 6) Bromomethane               | 3.102  | 94    | 79103    | 2.956    | ppbv   | 98       |
| 7) Chloroethane               | 3.176  | 64    | 53717    | 1.922    | ppbv   | 94       |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 399415   | 2.027    | ppbv   | 100      |
| 9) Propene                    | 2.671  | 41    | 139773   | 1.972    | ppbv   | 99       |
| 10) Heptane                   | 7.568  | 43    | 325614   | 1.956    | ppbv   | 100      |
| 11) Trichlorofluoromethane    | 3.546  | 101   | 388765   | 1.970    | ppbv   | 99       |
| 12) 1,1,2-Trichlorotrifluo... | 4.050  | 101   | 285420   | 2.064    | ppbv   | 100      |
| 13) Ethanol                   | 3.237  | 45    | 15410m   | 0.980    | ppbv   |          |
| 14) Bromoethene               | 3.346  | 108   | 111081   | 2.003    | ppbv   | 93       |
| 15) Acetone                   | 3.456  | 43    | 292550   | 1.865    | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.967  | 39    | 157764   | 2.113    | ppbv   | 99       |
| 17) tert-Butyl alcohol        | 3.861  | 59    | 234318   | 1.936    | ppbv   | 99       |
| 18) 1,1-Dichloroethene        | 3.861  | 96    | 122348   | 2.013    | ppbv   | 97       |
| 19) Isopropyl Alcohol         | 3.562  | 45    | 156947m  | 1.822    | ppbv   |          |
| 20) Methylene Chloride        | 3.915  | 84    | 105428   | 1.852    | ppbv   | 98       |
| 21) Allyl Chloride            | 3.980  | 41    | 189033   | 1.998    | ppbv   | 90       |
| 22) trans-1,2-Dichloroethene  | 4.427  | 96    | 122560   | 2.030    | ppbv   | 90       |
| 23) Vinyl Acetate             | 4.613  | 43    | 223002   | 1.442    | ppbv   | # 98     |
| 24) 1,1-Dichloroethane        | 4.546  | 63    | 265124   | 1.977    | ppbv   | 98       |
| 25) Ethyl Acetate             | 5.192  | 43    | 597999   | 2.070    | ppbv   | 99       |
| 26) Hexane                    | 5.198  | 57    | 250786   | 1.961    | ppbv   | 98       |
| 27) Carbon Disulfide          | 4.108  | 76    | 275637   | 1.771    | ppbv   | 94       |
| 28) Methyl tert-Butyl Ether   | 4.578  | 73    | 154942   | 1.633    | ppbv   | 97       |
| 29) Chloroform                | 5.259  | 83    | 394045   | 1.997    | ppbv   | 99       |
| 30) Cyclohexane               | 6.587  | 84    | 207896   | 2.040    | ppbv   | 93       |
| 31) cis-1,2-Dichloroethene    | 5.063  | 61    | 242910   | 1.981    | ppbv   | 97       |
| 32) 1,1,1-Trichloroethane     | 5.992  | 97    | 375703   | 1.814    | ppbv   | 97       |
| 34) 2-Butanone                | 4.774  | 43    | 355170   | 2.002    | ppbv   | 98       |
| 35) Carbon Tetrachloride      | 6.481  | 117   | 395969   | 1.784    | ppbv   | 98       |
| 36) Benzene                   | 6.359  | 78    | 532213   | 1.913    | ppbv   | 97       |
| 37) 1,2-Dichloroethane        | 5.793  | 62    | 287587   | 1.802    | ppbv   | 98       |
| 38) Trichloroethene           | 7.282  | 130   | 234513   | 1.935    | ppbv   | 93       |
| 39) 1,2-Dichloropropane       | 7.060  | 63    | 203420   | 1.892    | ppbv   | 96       |
| 40) 1,4-Dioxane               | 7.288  | 88    | 71274    | 2.068    | ppbv   | # 1      |
| 41) Tetrahydrofuran           | 5.552  | 42    | 207220   | 1.886    | ppbv   | 99       |
| 42) Bromodichloromethane      | 7.237  | 83    | 418292   | 1.873    | ppbv   | 98       |
| 43) Methyl Methacrylate       | 7.468  | 69    | 192639   | 1.843    | ppbv   | 94       |
| 44) 2,2,4-Trimethylpentane    | 7.317  | 57    | 902570   | 1.909    | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.700  | 75    | 166952   | 2.524    | ppbv   | 95       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041400.D  
 Acq On : 25 Jul 2024 14:40  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Jul 25 15:37:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 249911   | 2.810    | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 8.889  | 97   | 224865   | 1.950    | ppbv   | 94       |
| 48) Dibromochloromethane      | 9.703  | 129  | 353718   | 1.910    | ppbv   | 100      |
| 49) Bromoform                 | 12.401 | 173  | 305646   | 2.073    | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.176  | 43   | 577958   | 2.029    | ppbv   | 99       |
| 51) 2-Hexanone                | 9.555  | 43   | 430093   | 2.124    | ppbv # | 96       |
| 52) Tetrachloroethene         | 10.606 | 164  | 204374   | 1.829    | ppbv   | 98       |
| 53) Toluene                   | 9.214  | 91   | 597804   | 1.905    | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.005 | 107  | 311374   | 2.182    | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 272178   | 1.832    | ppbv # | 1        |
| 57) Chlorobenzene             | 11.520 | 112  | 500573   | 1.933    | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.082 | 91   | 833428   | 1.887    | ppbv   | 96       |
| 59) m/p-Xylene                | 12.365 | 91   | 1430508m | 3.743    | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 685320   | 1.900    | ppbv   | 99       |
| 61) Styrene                   | 12.896 | 104  | 308833   | 1.763    | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.027 | 105  | 1029899  | 1.850    | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.044 | 83   | 428827   | 1.509    | ppbv   | 98       |
| 64) n-propylbenzene           | 14.912 | 120  | 269236   | 1.852    | ppbv   | 91       |
| 65) tert-Butylbenzene         | 16.085 | 119  | 956093   | 1.928    | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.326 | 91   | 52950m   | 1.625    | ppbv   |          |
| 67) sec-Butylbenzene          | 16.635 | 105  | 1331315  | 1.898    | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 1105164  | 1.908    | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.886 | 91   | 1142994  | 1.931    | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 14.799 | 91   | 762002   | 1.842    | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 811504   | 1.889    | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 707827   | 1.925    | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 817315   | 1.972    | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 16.326 | 146  | 506675   | 2.061    | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 472957   | 1.931    | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 506084   | 2.019    | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 438766   | 2.407    | ppbv   | 98       |
| 79) Naphthalene               | 21.384 | 128  | 826782   | 3.710    | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 24.371 | 142  | 601537   | 1025.625 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.140 | 180  | 426225   | 3.095    | ppbv   | 94       |

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





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041401.D  
 Acq On : 25 Jul 2024 15:19  
 Operator : SY/MD  
 Sample : VSTDICC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

Quant Time: Jul 26 02:43:04 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1198624  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3342988  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.459 | 117   | 3161618  | 10.000   | ppbv   | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.774 | 95    | 2414921  | 10.191   | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 101.900% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.706  | 85    | 241964   | 1.183    | ppbv   | 95       |
| 3) Chlorodifluoromethane      | 2.652  | 51    | 151299   | 0.732    | ppbv   | 98       |
| 4) Chloromethane              | 2.793  | 50    | 82099    | 1.039    | ppbv   | 96       |
| 5) Vinyl Chloride             | 2.899  | 62    | 79527    | 0.932    | ppbv   | 98       |
| 6) Bromomethane               | 3.099  | 94    | 41204    | 1.526    | ppbv   | 92       |
| 7) Chloroethane               | 3.179  | 64    | 25119    | 0.891    | ppbv   | 92       |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 197281   | 0.992    | ppbv   | 99       |
| 9) Propene                    | 2.674  | 41    | 70203    | 0.982    | ppbv   | 97       |
| 10) Heptane                   | 7.568  | 43    | 148675   | 0.885    | ppbv   | 96       |
| 11) Trichlorofluoromethane    | 3.542  | 101   | 196294   | 0.986    | ppbv   | 96       |
| 12) 1,1,2-Trichlorotrifluo... | 4.050  | 101   | 138368   | 0.992    | ppbv   | 99       |
| 13) Ethanol                   | 3.240  | 45    | 7925m    | 0.500    | ppbv   |          |
| 14) Bromoethene               | 3.350  | 108   | 51557    | 0.921    | ppbv # | 85       |
| 15) Acetone                   | 3.456  | 43    | 142863   | 0.902    | ppbv   | 97       |
| 16) 1,3-Butadiene             | 2.967  | 39    | 78187    | 1.038    | ppbv   | 96       |
| 17) tert-Butyl alcohol        | 3.867  | 59    | 131833   | 1.080    | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.861  | 96    | 57445    | 0.937    | ppbv   | 99       |
| 19) Isopropyl Alcohol         | 3.568  | 45    | 80830    | 0.930    | ppbv # | 98       |
| 20) Methylene Chloride        | 3.912  | 84    | 51566    | 0.898    | ppbv   | 96       |
| 21) Allyl Chloride            | 3.980  | 41    | 93864    | 0.983    | ppbv   | 95       |
| 22) trans-1,2-Dichloroethene  | 4.433  | 96    | 57666    | 0.947    | ppbv   | 91       |
| 23) Vinyl Acetate             | 4.613  | 43    | 104758   | 0.671    | ppbv # | 94       |
| 24) 1,1-Dichloroethane        | 4.546  | 63    | 125314   | 0.926    | ppbv   | 100      |
| 25) Ethyl Acetate             | 5.195  | 43    | 285442   | 0.979    | ppbv   | 98       |
| 26) Hexane                    | 5.198  | 57    | 113990   | 0.883    | ppbv   | 88       |
| 27) Carbon Disulfide          | 4.112  | 76    | 122266   | 0.779    | ppbv   | 97       |
| 28) Methyl tert-Butyl Ether   | 4.575  | 73    | 76370    | 0.798    | ppbv   | 99       |
| 29) Chloroform                | 5.259  | 83    | 193219   | 0.970    | ppbv   | 91       |
| 30) Cyclohexane               | 6.594  | 84    | 95243m   | 0.926    | ppbv   |          |
| 31) cis-1,2-Dichloroethene    | 5.066  | 61    | 112360   | 0.908    | ppbv   | 96       |
| 32) 1,1,1-Trichloroethane     | 5.986  | 97    | 181889   | 0.870    | ppbv   | 99       |
| 34) 2-Butanone                | 4.777  | 43    | 163975   | 0.930    | ppbv   | 97       |
| 35) Carbon Tetrachloride      | 6.481  | 117   | 186609   | 0.845    | ppbv   | 99       |
| 36) Benzene                   | 6.356  | 78    | 259942   | 0.940    | ppbv   | 95       |
| 37) 1,2-Dichloroethane        | 5.793  | 62    | 138981   | 0.875    | ppbv   | 100      |
| 38) Trichloroethene           | 7.279  | 130   | 116586m  | 0.967    | ppbv   |          |
| 39) 1,2-Dichloropropane       | 7.063  | 63    | 98425m   | 0.921    | ppbv   |          |
| 40) 1,4-Dioxane               | 7.298  | 88    | 36813m   | 1.074    | ppbv   |          |
| 41) Tetrahydrofuran           | 5.558  | 42    | 97249    | 0.890    | ppbv   | 98       |
| 42) Bromodichloromethane      | 7.240  | 83    | 204988   | 0.923    | ppbv   | 99       |
| 43) Methyl Methacrylate       | 7.472  | 69    | 84268    | 0.811    | ppbv   | 88       |
| 44) 2,2,4-Trimethylpentane    | 7.317  | 57    | 432528   | 0.920    | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.706  | 75    | 67675    | 1.029    | ppbv   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041401.D  
 Acq On : 25 Jul 2024 15:19  
 Operator : SY/MD  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Quant Time: Jul 26 02:43:04 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Jul 25 14:31:18 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 108779   | 1.230   | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 8.889  | 97   | 104479   | 0.911   | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.703  | 129  | 168168   | 0.913   | ppbv   | 97       |
| 49) Bromoform                 | 12.404 | 173  | 133988   | 0.914   | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.182  | 43   | 258275   | 0.912   | ppbv   | 96       |
| 51) 2-Hexanone                | 9.558  | 43   | 190138   | 0.944   | ppbv # | 100      |
| 52) Tetrachloroethene         | 10.613 | 164  | 96753m   | 0.871   | ppbv   |          |
| 53) Toluene                   | 9.211  | 91   | 284562   | 0.912   | ppbv   | 98       |
| 54) 1,2-Dibromoethane         | 10.005 | 107  | 141838   | 0.999   | ppbv   | 91       |
| 56) 1,1,1,2-Tetrachloroethane | 11.504 | 131  | 126753   | 0.891   | ppbv # | 1        |
| 57) Chlorobenzene             | 11.520 | 112  | 240871   | 0.971   | ppbv   | 95       |
| 58) Ethyl Benzene             | 12.086 | 91   | 388676   | 0.919   | ppbv   | 98       |
| 59) m/p-Xylene                | 12.368 | 91   | 673526m  | 1.840   | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 320813   | 0.929   | ppbv   | 99       |
| 61) Styrene                   | 12.896 | 104  | 133924   | 0.798   | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.024 | 105  | 490658   | 0.920   | ppbv   | 97       |
| 63) 1,1,2,2-Tetrachloroethane | 13.047 | 83   | 202749   | 0.745   | ppbv   | 98       |
| 64) n-propylbenzene           | 14.915 | 120  | 124102   | 0.891   | ppbv   | 83       |
| 65) tert-Butylbenzene         | 16.085 | 119  | 446299   | 0.940   | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.326 | 91   | 24142m   | 0.774   | ppbv   |          |
| 67) sec-Butylbenzene          | 16.632 | 105  | 613358   | 0.913   | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 511080   | 0.921   | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.886 | 91   | 512783   | 0.904   | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 358079   | 0.904   | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 361470   | 0.878   | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 312184   | 0.886   | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.101 | 105  | 379183   | 0.955   | ppbv # | 91       |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 237337   | 1.008   | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 224373   | 0.956   | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 231111   | 0.963   | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 22.632 | 225  | 215079   | 1.232   | ppbv   | 99       |
| 79) Naphthalene               | 21.387 | 128  | 349592m  | 1.638   | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.374 | 142  | 210840   | 375.304 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 21.143 | 180  | 191623   | 1.452   | ppbv   | 98       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041403.D  
Acq On : 25 Jul 2024 16:42  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:44:42 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units | Dev(Min)  |
|-------------------------------|--------|-------|----------|----------|-------|-----------|
| Internal Standards            |        |       |          |          |       |           |
| 1) Bromochloromethane         | 5.176  | 49    | 1207844  | 10.000   | ppbv  | 0.00      |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3343894  | 10.000   | ppbv  | 0.00      |
| 55) Chlorobenzene-d5          | 11.458 | 117   | 3087423  | 10.000   | ppbv  | # 0.00    |
| System Monitoring Compounds   |        |       |          |          |       |           |
| 68) 1-Bromo-4-Fluorobenzene   | 13.767 | 95    | 2418801  | 10.453   | ppbv  | 0.00      |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =     | 104.500%  |
| Target Compounds              |        |       |          |          |       |           |
| 5) Vinyl Chloride             | 2.899  | 62    | 6804     | 0.079    | ppbv  | Qvalue 94 |
| 32) 1,1,1-Trichloroethane     | 5.989  | 97    | 15825m   | 0.075    | ppbv  |           |
| 35) Carbon Tetrachloride      | 6.478  | 117   | 16719m   | 0.076    | ppbv  |           |
| 38) Trichloroethene           | 7.278  | 130   | 9639m    | 0.080    | ppbv  |           |
| 52) Tetrachloroethene         | 10.593 | 164   | 8679m    | 0.078    | ppbv  |           |
| 54) 1,2-Dibromoethane         | 9.995  | 107   | 11367m   | 0.080    | ppbv  |           |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83    | 17530m   | 0.066    | ppbv  |           |
| 79) Naphthalene               | 21.403 | 128   | 15122m   | 0.073    | ppbv  |           |

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

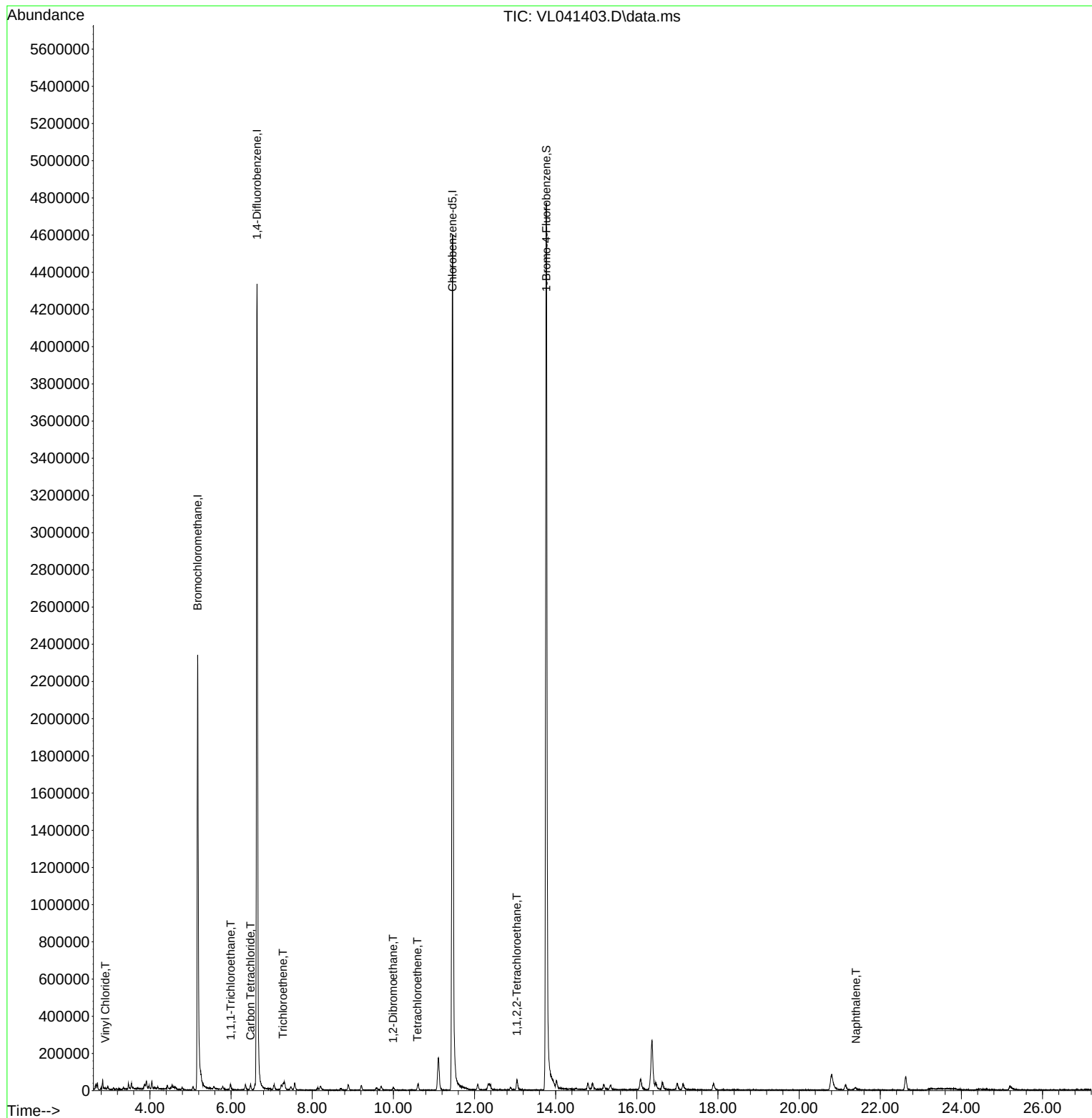
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041403.D  
Acq On : 25 Jul 2024 16:42  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Quant Time: Jul 26 02:44:42 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
Supervised By : Mahesh Dadoda 07/29/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041404.D  
Acq On : 25 Jul 2024 17:24  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Jul 26 02:45:18 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
Supervised By :Mahesh Dadoda 07/29/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|------------|----------|
| -----                         |        |       |          |          |            |          |
| Internal Standards            |        |       |          |          |            |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1173154  | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3272729  | 10.000   | ppbv       | 0.00     |
| 55) Chlorobenzene-d5          | 11.458 | 117   | 3056197  | 10.000   | ppbv       | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.767 | 95    | 2360153  | 10.303   | ppbv       | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | = 103.000% |          |
| Target Compounds              |        |       |          |          |            |          |
|                               |        |       |          |          | Qvalue     |          |
| 5) Vinyl Chloride             | 2.899  | 62    | 2531m    | 0.030    | ppbv       |          |
| 32) 1,1,1-Trichloroethane     | 5.983  | 97    | 6029m    | 0.029    | ppbv       |          |
| 35) Carbon Tetrachloride      | 6.478  | 117   | 5730m    | 0.027    | ppbv       |          |
| 38) Trichloroethene           | 7.275  | 130   | 3872m    | 0.033    | ppbv       |          |
| 52) Tetrachloroethene         | 10.610 | 164   | 3020m    | 0.028    | ppbv       |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.037 | 83    | 5269m    | 0.020    | ppbv       |          |
| -----                         |        |       |          |          |            |          |

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

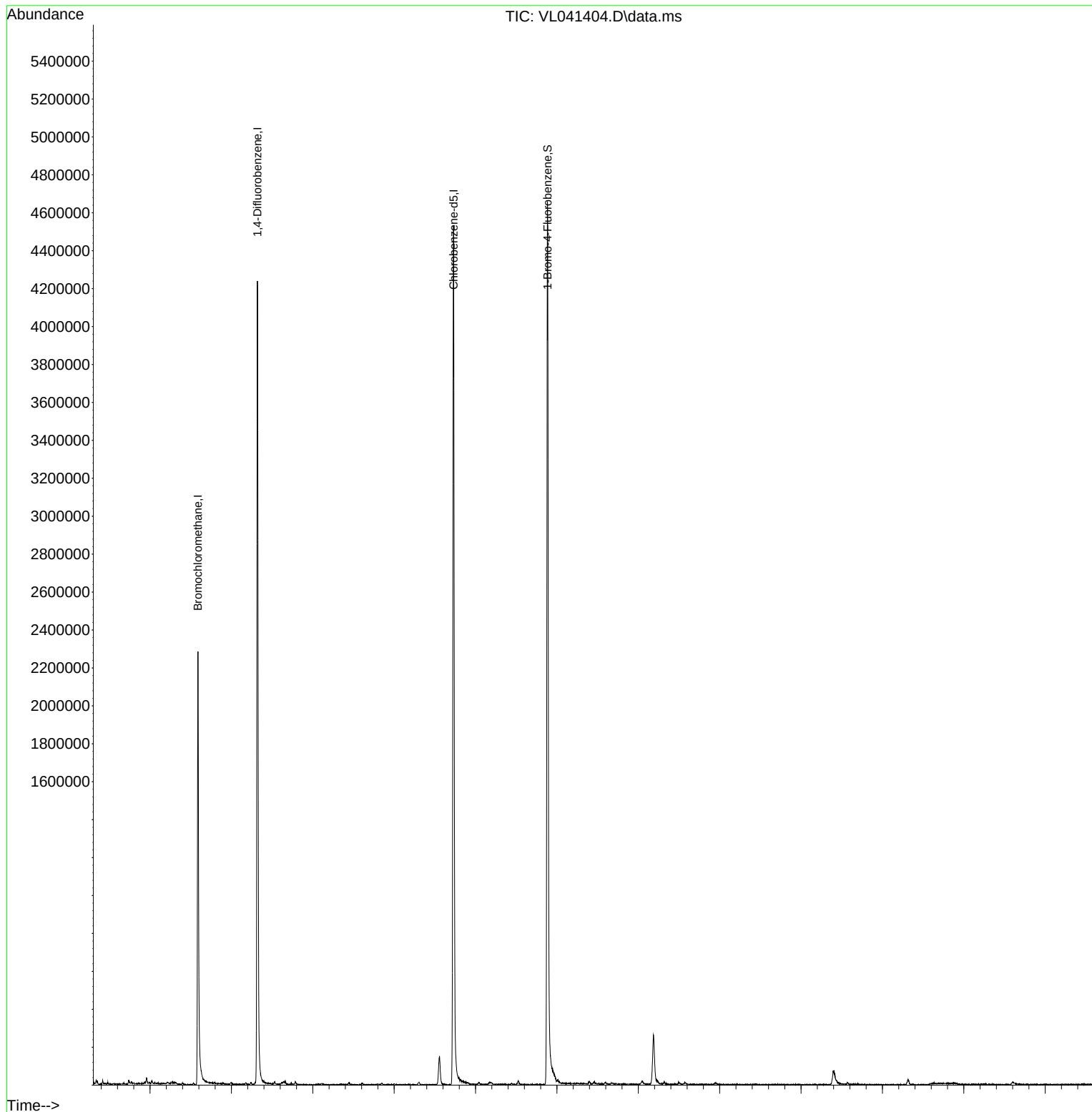
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041404.D  
Acq On : 25 Jul 2024 17:24  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Jul 26 02:45:18 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
Supervised By : Mahesh Dadoda 07/29/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041405.D  
 Acq On : 25 Jul 2024 18:06  
 Operator : SY/MD  
 Sample : VSTDIC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

### Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:45:39 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.179  | 49   | 1211244  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.642  | 114  | 3327019  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.458 | 117  | 3365868  | 10.000 | ppbv  | # 0.00   |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2515088 9.970 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 99.700%

#### Target Compounds

|                               |       |     |         |        | Qvalue   |
|-------------------------------|-------|-----|---------|--------|----------|
| 2) Dichlorodifluoromethane    | 2.706 | 85  | 2086477 | 10.095 | ppbv 99  |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 1914240 | 9.165  | ppbv 100 |
| 4) Chloromethane              | 2.790 | 50  | 996482  | 12.485 | ppbv 99  |
| 5) Vinyl Chloride             | 2.899 | 62  | 1038128 | 12.036 | ppbv 98  |
| 6) Bromomethane               | 3.099 | 94  | 547488  | 20.067 | ppbv 96  |
| 7) Chloroethane               | 3.176 | 64  | 360614  | 12.655 | ppbv 95  |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 2399417 | 11.943 | ppbv 99  |
| 9) Propene                    | 2.671 | 41  | 899840  | 12.451 | ppbv 98  |
| 10) Heptane                   | 7.571 | 43  | 2169367 | 12.780 | ppbv 99  |
| 11) Trichlorofluoromethane    | 3.542 | 101 | 2473823 | 12.296 | ppbv 100 |
| 12) 1,1,2-Trichlorotrifluo... | 4.047 | 101 | 1802452 | 12.784 | ppbv 99  |
| 13) Ethanol                   | 3.221 | 45  | 62897m  | 3.923  | ppbv     |
| 14) Bromoethene               | 3.346 | 108 | 757933  | 13.400 | ppbv 98  |
| 15) Acetone                   | 3.446 | 43  | 1760479 | 11.005 | ppbv 99  |
| 16) 1,3-Butadiene             | 2.964 | 39  | 1014052 | 13.319 | ppbv 99  |
| 17) tert-Butyl alcohol        | 3.857 | 59  | 1836705 | 14.883 | ppbv 99  |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 806522  | 13.011 | ppbv 100 |
| 19) Isopropyl Alcohol         | 3.555 | 45  | 1143994 | 13.027 | ppbv 100 |
| 20) Methylene Chloride        | 3.915 | 84  | 675282  | 11.634 | ppbv 99  |
| 21) Allyl Chloride            | 3.980 | 41  | 1284615 | 13.313 | ppbv 97  |
| 22) trans-1,2-Dichloroethene  | 4.430 | 96  | 809963  | 13.156 | ppbv 99  |
| 23) Vinyl Acetate             | 4.613 | 43  | 1570687 | 9.960  | ppbv 98  |
| 24) 1,1-Dichloroethane        | 4.545 | 63  | 1677304 | 12.269 | ppbv 99  |
| 25) Ethyl Acetate             | 5.189 | 43  | 3804371 | 12.915 | ppbv 100 |
| 26) Hexane                    | 5.198 | 57  | 1615258 | 12.384 | ppbv 98  |
| 27) Carbon Disulfide          | 4.105 | 76  | 2038049 | 12.842 | ppbv 99  |
| 28) Methyl tert-Butyl Ether   | 4.568 | 73  | 986442  | 10.196 | ppbv 100 |
| 29) Chloroform                | 5.263 | 83  | 2540539 | 12.624 | ppbv 99  |
| 30) Cyclohexane               | 6.590 | 84  | 1411237 | 13.581 | ppbv 96  |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 1628471 | 13.023 | ppbv 100 |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 2522136 | 11.940 | ppbv 100 |
| 34) 2-Butanone                | 4.771 | 43  | 2330483 | 13.274 | ppbv 99  |
| 35) Carbon Tetrachloride      | 6.481 | 117 | 2695636 | 12.269 | ppbv 98  |
| 36) Benzene                   | 6.359 | 78  | 3438269 | 12.487 | ppbv 100 |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 1975307 | 12.503 | ppbv 100 |
| 38) Trichloroethene           | 7.282 | 130 | 1582683 | 13.195 | ppbv 98  |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 1340584 | 12.599 | ppbv 96  |
| 40) 1,4-Dioxane               | 7.269 | 88  | 505735  | 14.825 | ppbv 80  |
| 41) Tetrahydrofuran           | 5.542 | 42  | 1399340 | 12.868 | ppbv 100 |
| 42) Bromodichloromethane      | 7.240 | 83  | 2836611 | 12.832 | ppbv 99  |
| 43) Methyl Methacrylate       | 7.465 | 69  | 1415809 | 13.686 | ppbv 100 |
| 44) 2,2,4-Trimethylpentane    | 7.314 | 57  | 5650271 | 12.075 | ppbv 99  |
| 45) t-1,3-Dichloropropene     | 8.703 | 75  | 1508473 | 23.041 | ppbv 99  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041405.D  
 Acq On : 25 Jul 2024 18:06  
 Operator : SY/MD  
 Sample : VSTDIC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:45:39 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 1956016  | 22.219   | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 1451859  | 12.721   | ppbv   | 96       |
| 48) Dibromochloromethane      | 9.706  | 129  | 2512083  | 13.707   | ppbv   | 100      |
| 49) Bromoform                 | 12.404 | 173  | 2210280  | 15.143   | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.169  | 43   | 3807510  | 13.505   | ppbv   | 99       |
| 51) 2-Hexanone                | 9.542  | 43   | 3193628  | 15.936   | ppbv   | 100      |
| 52) Tetrachloroethene         | 10.610 | 164  | 1349134  | 12.202   | ppbv   | 98       |
| 53) Toluene                   | 9.214  | 91   | 4102245  | 13.210   | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 2140365  | 15.154   | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 1780102  | 11.753   | ppbv # | 58       |
| 57) Chlorobenzene             | 11.523 | 112  | 3158639  | 11.963   | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.082 | 91   | 5512808  | 12.242   | ppbv   | 99       |
| 59) m/p-Xylene                | 12.365 | 91   | 9224976m | 23.671   | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 4441698  | 12.076   | ppbv   | 100      |
| 61) Styrene                   | 12.892 | 104  | 2297760  | 12.864   | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.027 | 105  | 6413793  | 11.295   | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.044 | 83   | 2691069  | 9.287    | ppbv   | 99       |
| 64) n-propylbenzene           | 14.915 | 120  | 1752978  | 11.826   | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.088 | 119  | 5746630  | 11.366   | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.323 | 91   | 487926   | 14.686   | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.632 | 105  | 8009840  | 11.201   | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 6796381  | 11.508   | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.883 | 91   | 6996243  | 11.589   | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 4875167  | 11.557   | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 5320289  | 12.144   | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 4587750  | 12.234   | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 5066348  | 11.990   | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 3202871  | 12.778   | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.471 | 146  | 3142958  | 12.585   | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 3101661  | 12.137   | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 2444092  | 13.150   | ppbv   | 99       |
| 79) Naphthalene               | 21.381 | 128  | 5532989  | 24.347   | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.368 | 142  | 5230189  | 8744.993 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.136 | 180  | 2891669  | 20.588   | ppbv   | 99       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 07/29/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 29 01:38:18 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 07:31:14 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1233360  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.642  | 114   | 3392081  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.462 | 117   | 3403283m | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.770 | 95    | 2574566  | 9.830    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 98.300%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.709  | 85    | 2089346  | 9.847    | ppbv   | 98       |
| 3) Chlorodifluoromethane      | 2.655  | 51    | 1318682  | 8.981    | ppbv   | 99       |
| 4) Chloromethane              | 2.793  | 50    | 699978   | 8.963    | ppbv   | 100      |
| 5) Vinyl Chloride             | 2.899  | 62    | 713101   | 9.264    | ppbv   | 97       |
| 6) Bromomethane               | 3.099  | 94    | 364517   | 9.214    | ppbv   | 95       |
| 7) Chloroethane               | 3.176  | 64    | 252261   | 9.496    | ppbv   | 96       |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 1697946  | 9.031    | ppbv   | 99       |
| 9) Propene                    | 2.674  | 41    | 639582   | 9.482    | ppbv   | 96       |
| 10) Heptane                   | 7.568  | 43    | 1491349  | 9.841    | ppbv   | 99       |
| 11) Trichlorofluoromethane    | 3.545  | 101   | 1658278  | 8.800    | ppbv   | 100      |
| 12) 1,1,2-Trichlorotrifluo... | 4.050  | 101   | 1213196  | 8.941    | ppbv   | 99       |
| 13) Ethanol                   | 3.224  | 45    | 37793m   | 6.269    | ppbv   |          |
| 14) Bromoethene               | 3.346  | 108   | 507449   | 9.593    | ppbv   | 100      |
| 15) Acetone                   | 3.449  | 43    | 1230438  | 8.780    | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.964  | 39    | 668082   | 8.923    | ppbv   | 96       |
| 17) tert-Butyl alcohol        | 3.857  | 59    | 1324286  | 10.362   | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.861  | 96    | 557323   | 9.602    | ppbv   | 98       |
| 19) Isopropyl Alcohol         | 3.555  | 45    | 721368   | 8.805    | ppbv   | 99       |
| 20) Methylene Chloride        | 3.915  | 84    | 448788   | 8.588    | ppbv   | 97       |
| 21) Allyl Chloride            | 3.980  | 41    | 895495   | 9.744    | ppbv   | 99       |
| 22) trans-1,2-Dichloroethene  | 4.430  | 96    | 558720   | 9.627    | ppbv   | 99       |
| 23) Vinyl Acetate             | 4.610  | 43    | 1095721  | 10.238   | ppbv   | 99       |
| 24) 1,1-Dichloroethane        | 4.545  | 63    | 1130815  | 8.974    | ppbv   | 100      |
| 25) Ethyl Acetate             | 5.189  | 43    | 2667366  | 9.581    | ppbv   | 99       |
| 26) Hexane                    | 5.198  | 57    | 1124469  | 9.737    | ppbv   | 99       |
| 27) Carbon Disulfide          | 4.105  | 76    | 1334231  | 9.875    | ppbv   | 98       |
| 28) Methyl tert-Butyl Ether   | 4.571  | 73    | 697129   | 9.572    | ppbv   | 99       |
| 29) Chloroform                | 5.259  | 83    | 1729039  | 9.179    | ppbv   | 97       |
| 30) Cyclohexane               | 6.587  | 84    | 960876   | 10.217   | ppbv   | 100      |
| 31) cis-1,2-Dichloroethene    | 5.063  | 61    | 1119982  | 9.817    | ppbv   | 95       |
| 32) 1,1,1-Trichloroethane     | 5.989  | 97    | 1701553  | 9.280    | ppbv   | 99       |
| 34) 2-Butanone                | 4.771  | 43    | 1622167  | 9.886    | ppbv   | 100      |
| 35) Carbon Tetrachloride      | 6.481  | 117   | 1763315  | 9.425    | ppbv   | 99       |
| 36) Benzene                   | 6.359  | 78    | 2398715  | 9.678    | ppbv   | 99       |
| 37) 1,2-Dichloroethane        | 5.793  | 62    | 1330637  | 9.592    | ppbv   | 99       |
| 38) Trichloroethene           | 7.282  | 130   | 1077080  | 9.485    | ppbv   | 98       |
| 39) 1,2-Dichloropropane       | 7.063  | 63    | 922512   | 9.722    | ppbv   | 97       |
| 40) 1,4-Dioxane               | 7.278  | 88    | 291753   | 7.654    | ppbv # | 37       |
| 41) Tetrahydrofuran           | 5.542  | 42    | 998498   | 10.640   | ppbv   | 99       |
| 42) Bromodichloromethane      | 7.240  | 83    | 1912987  | 9.550    | ppbv   | 98       |
| 43) Methyl Methacrylate       | 7.465  | 69    | 968598   | 10.898   | ppbv   | 99       |
| 44) 2,2,4-Trimethylpentane    | 7.314  | 57    | 3920496  | 9.470    | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 8.700  | 75    | 983393   | 12.021   | ppbv   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 07/29/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 29 01:38:18 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 07:31:14 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 1301297  | 11.015 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 988701   | 9.452  | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.703  | 129  | 1650868  | 9.797  | ppbv   | 100      |
| 49) Bromoform                 | 12.404 | 173  | 1471871  | 10.340 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.169  | 43   | 2646380  | 10.222 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.542  | 43   | 2152180  | 10.994 | ppbv # | 100      |
| 52) Tetrachloroethene         | 10.606 | 164  | 919784   | 9.604  | ppbv   | 99       |
| 53) Toluene                   | 9.211  | 91   | 2811445  | 10.183 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 1435862  | 10.313 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 1179925  | 8.940  | ppbv # | 56       |
| 57) Chlorobenzene             | 11.519 | 112  | 2154494  | 8.892  | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.082 | 91   | 3742890  | 9.542  | ppbv   | 97       |
| 59) m/p-Xylene                | 12.368 | 91   | 6295312m | 18.591 | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 3021924  | 9.434  | ppbv   | 99       |
| 61) Styrene                   | 12.889 | 104  | 1515228  | 10.485 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.021 | 105  | 4395572  | 9.026  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.037 | 83   | 1799183  | 8.895  | ppbv   | 99       |
| 64) n-propylbenzene           | 14.908 | 120  | 1178085  | 9.254  | ppbv   | 99       |
| 65) tert-Butylbenzene         | 16.082 | 119  | 3927896  | 8.930  | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.326 | 91   | 311587m  | 11.045 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.629 | 105  | 5460239  | 9.010  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.989 | 119  | 4608861  | 9.165  | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.879 | 91   | 4724502  | 9.165  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.793 | 91   | 3319940  | 9.245  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.185 | 105  | 3595789  | 9.535  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 3106784  | 9.563  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.101 | 105  | 3420961  | 9.057  | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 16.323 | 146  | 2143246  | 9.027  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 2089633  | 9.089  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.137 | 146  | 2088726  | 8.874  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.625 | 225  | 1608282  | 8.012  | ppbv   | 100      |
| 79) Naphthalene               | 21.374 | 128  | 3604007  | 10.810 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.365 | 142  | 3294736  | 11.790 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.130 | 180  | 1888152  | 9.517  | ppbv   | 100      |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041406.D  
Acq On : 25 Jul 2024 19:31  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Fri Jul 26 07:31:14 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 101   | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.720 | 1.694  | 1.5   | 119   | 0.00     |
| 3    | Chlorodifluoromethane       | 1.190 | 1.069  | 10.2  | 100   | 0.00     |
| 4    | Chloromethane               | 0.633 | 0.568  | 10.3  | 101   | 0.00     |
| 5 T  | Vinyl Chloride              | 0.624 | 0.578  | 7.4   | 102   | 0.00     |
| 6 T  | Bromomethane                | 0.321 | 0.296  | 7.8   | 101   | 0.00     |
| 7    | Chloroethane                | 0.215 | 0.205  | 4.7   | 102   | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.524 | 1.377  | 9.6   | 100   | 0.00     |
| 9 T  | Propene                     | 0.547 | 0.519  | 5.1   | 107   | 0.00     |
| 10 T | Heptane                     | 1.229 | 1.209  | 1.6   | 101   | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.528 | 1.345  | 12.0  | 98    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.100 | 0.984  | 10.5  | 99    | 0.00     |
| 13   | Ethanol                     | 0.049 | 0.031# | 36.7# | 88    | 0.00     |
| 14 T | Bromoethene                 | 0.429 | 0.411  | 4.2   | 100   | 0.00     |
| 15 T | Acetone                     | 1.136 | 0.998  | 12.1  | 101   | 0.00     |
| 16 T | 1,3-Butadiene               | 0.607 | 0.542  | 10.7  | 98    | 0.00     |
| 17   | tert-Butyl alcohol          | 1.036 | 1.074  | -3.7  | 103   | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.452  | 4.0   | 100   | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.664 | 0.585  | 11.9  | 91    | 0.00     |
| 20 T | Methylene Chloride          | 0.424 | 0.364  | 14.2  | 99    | 0.00     |
| 21 T | Allyl Chloride              | 0.745 | 0.726  | 2.6   | 101   | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.471 | 0.453  | 3.8   | 102   | 0.00     |
| 23 T | Vinyl Acetate               | 0.868 | 0.888  | -2.3  | 101   | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.022 | 0.917  | 10.3  | 98    | 0.00     |
| 25 T | Ethyl Acetate               | 2.257 | 2.163  | 4.2   | 103   | 0.00     |
| 26 T | Hexane                      | 0.936 | 0.912  | 2.6   | 103   | 0.00     |
| 27 T | Carbon Disulfide            | 1.095 | 1.082  | 1.2   | 97    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 0.591 | 0.565  | 4.4   | 102   | 0.00     |
| 29 T | Chloroform                  | 1.527 | 1.402  | 8.2   | 100   | 0.00     |
| 30 T | Cyclohexane                 | 0.763 | 0.779  | -2.1  | 103   | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.925 | 0.908  | 1.8   | 103   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.487 | 1.380  | 7.2   | 99    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 101   | 0.00     |
| 34 T | 2-Butanone                  | 0.484 | 0.478  | 1.2   | 103   | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.552 | 0.520  | 5.8   | 96    | 0.00     |
| 36 T | Benzene                     | 0.731 | 0.707  | 3.3   | 101   | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.409 | 0.392  | 4.2   | 101   | 0.00     |
| 38 T | Trichloroethene             | 0.335 | 0.318  | 5.1   | 100   | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.280 | 0.272  | 2.9   | 103   | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.112 | 0.086  | 23.2  | 76    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.277 | 0.294  | -6.1  | 107   | 0.00     |
| 42 T | Bromodichloromethane        | 0.591 | 0.564  | 4.6   | 99    | 0.00     |
| 43   | Methyl Methacrylate         | 0.262 | 0.286  | -9.2  | 102   | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.220 | 1.156  | 5.2   | 100   | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.241 | 0.290  | -20.3 | 102   | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.348 | 0.384  | -10.3 | 102   | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.308 | 0.291  | 5.5   | 100   | 0.00     |
| 48 T | Dibromochloromethane        | 0.497 | 0.487  | 2.0   | 98    | 0.00     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041406.D  
Acq On : 25 Jul 2024 19:31  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Fri Jul 26 07:31:14 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|---------------------------|-------|-------|-------|-------|----------|
| 49 T | Bromoform                 | 0.420 | 0.434 | -3.3  | 98    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.763 | 0.780 | -2.2  | 102   | 0.00     |
| 51 T | 2-Hexanone                | 0.577 | 0.634 | -9.9  | 101   | 0.00     |
| 52 T | Tetrachloroethene         | 0.282 | 0.271 | 3.9   | 101   | 0.00     |
| 53 T | Toluene                   | 0.814 | 0.829 | -1.8  | 101   | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.410 | 0.423 | -3.2  | 100   | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.388 | 0.347 | 10.6  | 97    | 0.00     |
| 57 T | Chlorobenzene             | 0.712 | 0.633 | 11.1  | 99    | 0.00     |
| 58 T | Ethyl Benzene             | 1.153 | 1.100 | 4.6   | 100   | 0.00     |
| 59 T | m/p-Xylene                | 0.995 | 0.925 | 7.0   | 99    | 0.00     |
| 60 T | o-Xylene                  | 0.941 | 0.888 | 5.6   | 100   | 0.00     |
| 61 T | Styrene                   | 0.425 | 0.445 | -4.7  | 100   | 0.00     |
| 62   | Isopropylbenzene          | 1.431 | 1.292 | 9.7   | 99    | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.594 | 0.529 | 10.9  | 97    | 0.00     |
| 64   | n-propylbenzene           | 0.374 | 0.346 | 7.5   | 98    | 0.00     |
| 65   | tert-Butylbenzene         | 1.292 | 1.154 | 10.7  | 98    | 0.00     |
| 66 T | Benzyl Chloride           | 0.083 | 0.092 | -10.8 | 104   | 0.00     |
| 67   | sec-Butylbenzene          | 1.781 | 1.604 | 9.9   | 97    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.770 | 0.756 | 1.8   | 101   | 0.00     |
| 69   | p-Isopropyltoluene        | 1.478 | 1.354 | 8.4   | 97    | 0.00     |
| 70   | n-Butylbenzene            | 1.515 | 1.388 | 8.4   | 97    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.055 | 0.976 | 7.5   | 99    | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.108 | 1.057 | 4.6   | 97    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.955 | 0.913 | 4.4   | 98    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.110 | 1.005 | 9.5   | 98    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.698 | 0.630 | 9.7   | 98    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.676 | 0.614 | 9.2   | 98    | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.692 | 0.614 | 11.3  | 98    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.590 | 0.473 | 19.8  | 99    | 0.00     |
| 79 T | Naphthalene               | 0.980 | 1.059 | -8.1  | 98    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.821 | 0.968 | -17.9 | 102   | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.583 | 0.555 | 4.8   | 99    | 0.00     |

(#) = Out of Range

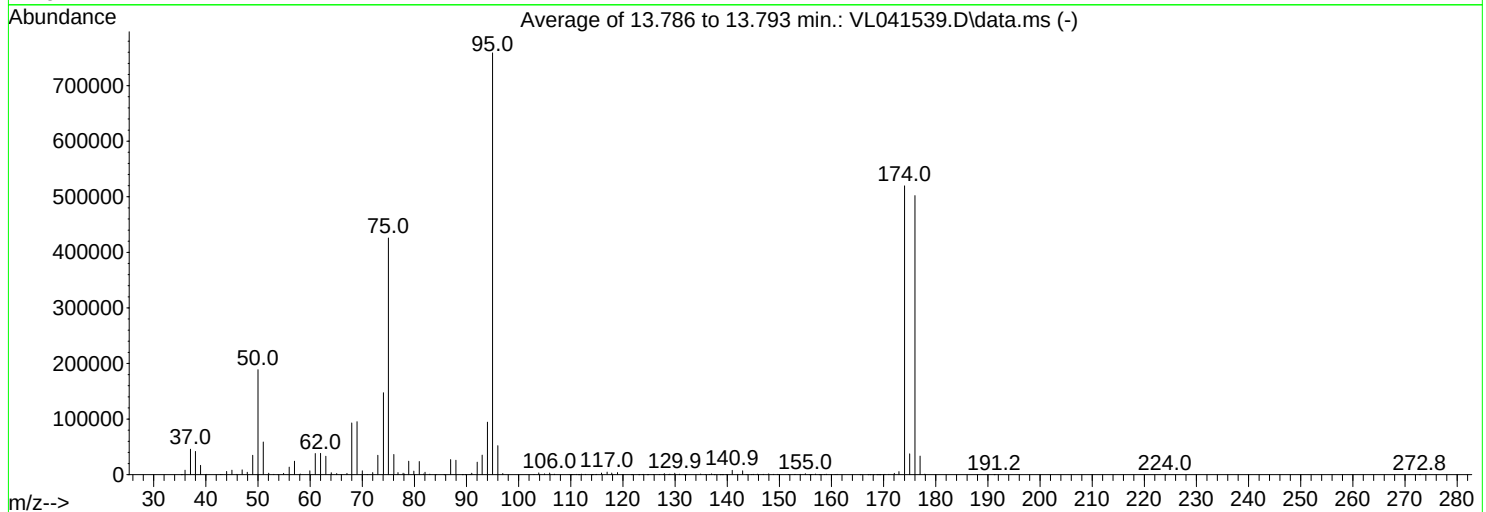
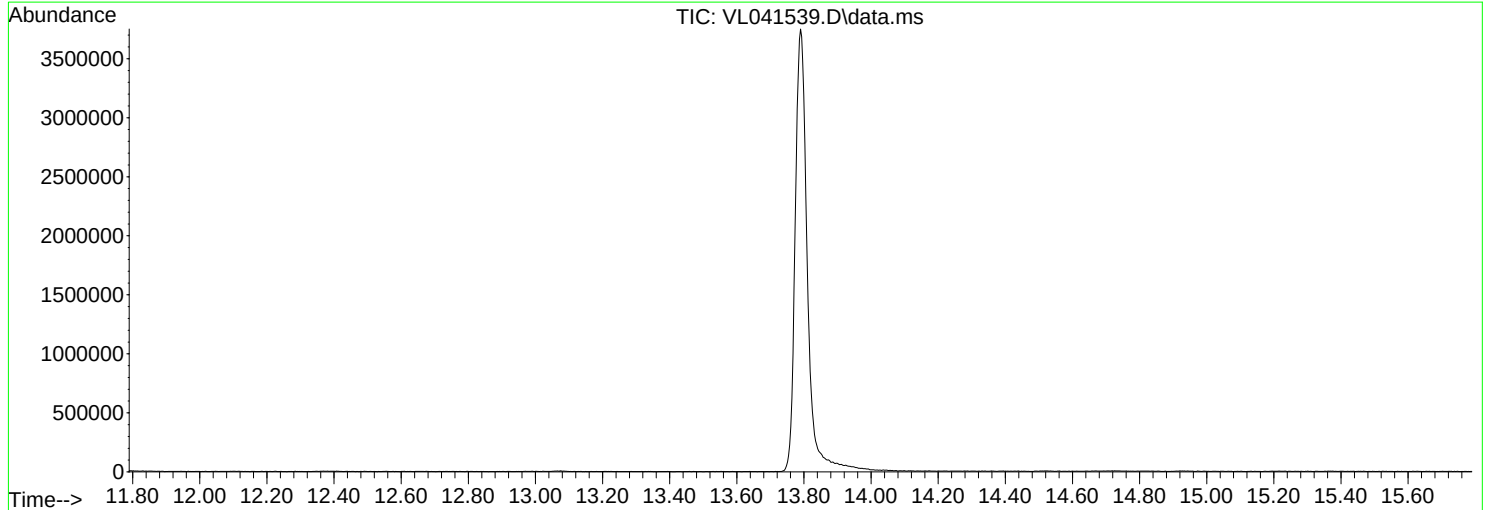
SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041539.D  
Acq On : 19 Aug 2024 8:10  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Tue Aug 20 02:10:04 2024



AutoFind: Scans 3478, 3479, 3480; Background Corrected with Scan 3456

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 24.9  | 188907 | PASS      |
| 75     | 95      | 30     | 66     | 56.1  | 425728 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 758997 | PASS      |
| 96     | 95      | 5      | 9      | 6.9   | 52083  | PASS      |
| 173    | 174     | 0.00   | 2      | 1.0   | 5439   | PASS      |
| 174    | 95      | 50     | 120    | 68.5  | 519701 | PASS      |
| 175    | 174     | 4      | 9      | 7.2   | 37573  | PASS      |
| 176    | 174     | 93     | 101    | 96.6  | 502080 | PASS      |
| 177    | 176     | 5      | 9      | 6.6   | 33307  | PASS      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Aug 20 02:13:28 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.211  | 49    | 949994   | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.671  | 114   | 2559374  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.491 | 117   | 2515938m | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.799 | 95    | 1947516  | 10.059   | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 100.600% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane    | 2.748  | 85    | 884681   | 5.413    | ppbv   | 99       |
| 3) Chlorodifluoromethane      | 2.693  | 51    | 1159695  | 10.254   | ppbv   | 100      |
| 4) Chloromethane              | 2.832  | 50    | 629369   | 10.463   | ppbv   | 99       |
| 5) Vinyl Chloride             | 2.938  | 62    | 619805   | 10.454   | ppbv   | 99       |
| 6) Bromomethane               | 3.137  | 94    | 327691   | 10.754   | ppbv   | 92       |
| 7) Chloroethane               | 3.214  | 64    | 229324   | 11.207   | ppbv   | 97       |
| 8) Dichlorotetrafluoroethane  | 2.874  | 85    | 1383474  | 9.554    | ppbv   | 100      |
| 9) Propene                    | 2.713  | 41    | 521016   | 10.029   | ppbv   | 98       |
| 10) Heptane                   | 7.597  | 43    | 1321671  | 11.323   | ppbv   | 99       |
| 11) Trichlorofluoromethane    | 3.581  | 101   | 1519219  | 10.467   | ppbv   | 98       |
| 12) 1,1,2-Trichlorotrifluo... | 4.082  | 101   | 1094070  | 10.468   | ppbv   | 98       |
| 13) Ethanol                   | 3.256  | 45    | 36044m   | 7.762    | ppbv   |          |
| 14) Bromoethene               | 3.385  | 108   | 440924   | 10.821   | ppbv   | 99       |
| 15) Acetone                   | 3.484  | 43    | 1130098  | 10.470   | ppbv   | 100      |
| 16) 1,3-Butadiene             | 3.002  | 39    | 624120   | 10.822   | ppbv   | 97       |
| 17) tert-Butyl alcohol        | 3.893  | 59    | 1096646  | 11.140   | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.899  | 96    | 487068   | 10.895   | ppbv   | 92       |
| 19) Isopropyl Alcohol         | 3.591  | 45    | 651343   | 10.322   | ppbv # | 96       |
| 20) Methylene Chloride        | 3.951  | 84    | 412911   | 10.258   | ppbv   | 98       |
| 21) Allyl Chloride            | 4.012  | 41    | 770702   | 10.888   | ppbv   | 100      |
| 22) trans-1,2-Dichloroethene  | 4.462  | 96    | 491446   | 10.994   | ppbv   | 98       |
| 23) Vinyl Acetate             | 4.642  | 43    | 966046   | 11.719   | ppbv # | 98       |
| 24) 1,1-Dichloroethane        | 4.581  | 63    | 1045215  | 10.768   | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.221  | 43    | 2381732  | 11.107   | ppbv   | 99       |
| 26) Hexane                    | 5.230  | 57    | 979260   | 11.009   | ppbv   | 99       |
| 27) Carbon Disulfide          | 4.144  | 76    | 1163109  | 11.177   | ppbv   | 99       |
| 28) Methyl tert-Butyl Ether   | 4.603  | 73    | 587594   | 10.474   | ppbv   | 100      |
| 29) Chloroform                | 5.295  | 83    | 1547234  | 10.664   | ppbv   | 99       |
| 30) Cyclohexane               | 6.623  | 84    | 817710   | 11.288   | ppbv   | 99       |
| 31) cis-1,2-Dichloroethene    | 5.095  | 61    | 948884   | 10.798   | ppbv   | 98       |
| 32) 1,1,1-Trichloroethane     | 6.021  | 97    | 1527033  | 10.812   | ppbv   | 99       |
| 34) 2-Butanone                | 4.803  | 43    | 1405398  | 11.352   | ppbv   | 99       |
| 35) Carbon Tetrachloride      | 6.513  | 117   | 1609727  | 11.403   | ppbv   | 99       |
| 36) Benzene                   | 6.391  | 78    | 2059410  | 11.012   | ppbv   | 99       |
| 37) 1,2-Dichloroethane        | 5.825  | 62    | 1153588  | 11.021   | ppbv   | 99       |
| 38) Trichloroethene           | 7.311  | 130   | 978782   | 11.424   | ppbv   | 97       |
| 39) 1,2-Dichloropropane       | 7.095  | 63    | 811438   | 11.333   | ppbv   | 97       |
| 40) 1,4-Dioxane               | 7.307  | 88    | 311632   | 10.835   | ppbv   | 78       |
| 41) Tetrahydrofuran           | 5.574  | 42    | 831216   | 11.739   | ppbv   | 98       |
| 42) Bromodichloromethane      | 7.269  | 83    | 1693152  | 11.203   | ppbv   | 99       |
| 43) Methyl Methacrylate       | 7.494  | 69    | 821493   | 12.250   | ppbv   | 97       |
| 44) 2,2,4-Trimethylpentane    | 7.343  | 57    | 3513799  | 11.249   | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.729  | 75    | 843236   | 13.661   | ppbv   | 95       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Aug 20 02:13:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 20 02:13:28 2024  
 QLast Update : Tue Aug 20 02:10:04 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.163  | 75   | 1113175  | 12.489 | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 8.918  | 97   | 874878   | 11.085 | ppbv   | 96       |
| 48) Dibromochloromethane      | 9.732  | 129  | 1471389  | 11.573 | ppbv   | 100      |
| 49) Bromoform                 | 12.429 | 173  | 1290363  | 12.015 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.198  | 43   | 2348083  | 12.021 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.571  | 43   | 1889904  | 12.796 | ppbv # | 98       |
| 52) Tetrachloroethene         | 10.635 | 164  | 785134   | 10.865 | ppbv   | 98       |
| 53) Toluene                   | 9.240  | 91   | 2434932  | 11.689 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.031 | 107  | 1279830  | 12.183 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 11.529 | 131  | 1082376  | 11.093 | ppbv # | 57       |
| 57) Chlorobenzene             | 11.545 | 112  | 1917343  | 10.704 | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.111 | 91   | 3295215  | 11.363 | ppbv   | 100      |
| 59) m/p-Xylene                | 12.394 | 91   | 5677231m | 22.679 | ppbv   |          |
| 60) o-Xylene                  | 13.079 | 91   | 2717555  | 11.476 | ppbv   | 100      |
| 61) Styrene                   | 12.918 | 104  | 1314555  | 12.305 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.050 | 105  | 3944805  | 10.958 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.069 | 83   | 1675653  | 11.206 | ppbv   | 99       |
| 64) n-propylbenzene           | 14.937 | 120  | 1056999  | 11.231 | ppbv   | 95       |
| 65) tert-Butylbenzene         | 16.111 | 119  | 3568987  | 10.976 | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.346 | 91   | 294537   | 14.122 | ppbv   | 98       |
| 67) sec-Butylbenzene          | 16.658 | 105  | 5012445  | 11.189 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.018 | 119  | 4225410  | 11.366 | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.908 | 91   | 4335585  | 11.376 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.822 | 91   | 2983953  | 11.240 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.214 | 105  | 3230798  | 11.588 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 15.371 | 105  | 2794784  | 11.636 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.127 | 105  | 3136247  | 11.232 | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.355 | 146  | 1953807  | 11.131 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.494 | 146  | 1933808  | 11.378 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.162 | 146  | 1900542  | 10.922 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.657 | 225  | 1416463  | 9.546  | ppbv   | 99       |
| 79) Naphthalene               | 21.410 | 128  | 3145958  | 12.765 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.390 | 142  | 2696816  | 13.054 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.162 | 180  | 1663658  | 11.343 | ppbv   | 99       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041540.D  
Acq On : 19 Aug 2024 8:59  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Aug 20 02:13:28 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|--------|--------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0    | 77    | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.720 | 0.931  | 45.9#  | 51    | 0.00     |
| 3    | Chlorodifluoromethane       | 1.190 | 1.221  | -2.6   | 88    | 0.00     |
| 4    | Chloromethane               | 0.633 | 0.662  | -4.6   | 91    | 0.00     |
| 5 T  | Vinyl Chloride              | 0.624 | 0.652  | -4.5   | 89    | 0.00     |
| 6 T  | Bromomethane                | 0.321 | 0.345  | -7.5   | 91    | 0.00     |
| 7    | Chloroethane                | 0.215 | 0.241  | -12.1  | 92    | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.524 | 1.456  | 4.5    | 82    | 0.00     |
| 9 T  | Propene                     | 0.547 | 0.548  | -0.2   | 87    | 0.00     |
| 10 T | Heptane                     | 1.229 | 1.391  | -13.2  | 90    | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.528 | 1.599  | -4.6   | 90    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.100 | 1.152  | -4.7   | 89    | 0.00     |
| 13   | Ethanol                     | 0.049 | 0.038# | 22.4   | 84    | 0.00     |
| 14 T | Bromoethene                 | 0.429 | 0.464  | -8.2   | 87    | 0.00     |
| 15 T | Acetone                     | 1.136 | 1.190  | -4.8   | 92    | 0.00     |
| 16 T | 1,3-Butadiene               | 0.607 | 0.657  | -8.2   | 92    | 0.00     |
| 17   | tert-Butyl alcohol          | 1.036 | 1.154  | -11.4  | 85    | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.513  | -8.9   | 87    | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.664 | 0.686  | -3.3   | 82    | 0.00     |
| 20 T | Methylene Chloride          | 0.424 | 0.435  | -2.6   | 91    | 0.00     |
| 21 T | Allyl Chloride              | 0.745 | 0.811  | -8.9   | 87    | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.471 | 0.517  | -9.8   | 89    | 0.00     |
| 23 T | Vinyl Acetate               | 0.868 | 1.017  | -17.2  | 89    | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.022 | 1.100  | -7.6   | 91    | 0.00     |
| 25 T | Ethyl Acetate               | 2.257 | 2.507  | -11.1  | 92    | 0.00     |
| 26 T | Hexane                      | 0.936 | 1.031  | -10.1  | 90    | 0.00     |
| 27 T | Carbon Disulfide            | 1.095 | 1.224  | -11.8  | 85    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 0.591 | 0.619  | -4.7   | 86    | 0.00     |
| 29 T | Chloroform                  | 1.527 | 1.629  | -6.7   | 89    | 0.00     |
| 30 T | Cyclohexane                 | 0.763 | 0.861  | -12.8  | 87    | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.925 | 0.999  | -8.0   | 87    | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.487 | 1.607  | -8.1   | 89    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0    | 76    | 0.00     |
| 34 T | 2-Butanone                  | 0.484 | 0.549  | -13.4  | 90    | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.552 | 0.629  | -13.9  | 88    | 0.00     |
| 36 T | Benzene                     | 0.731 | 0.805  | -10.1  | 87    | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.409 | 0.451  | -10.3  | 88    | 0.00     |
| 38 T | Trichloroethene             | 0.335 | 0.382  | -14.0  | 91    | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.280 | 0.317  | -13.2  | 91    | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.112 | 0.122  | -8.9   | 81    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.277 | 0.325  | -17.3  | 89    | 0.00     |
| 42 T | Bromodichloromethane        | 0.591 | 0.662  | -12.0  | 88    | 0.00     |
| 43   | Methyl Methacrylate         | 0.262 | 0.321  | -22.5  | 87    | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.220 | 1.373  | -12.5  | 90    | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.241 | 0.329  | -36.5# | 88    | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.348 | 0.435  | -25.0  | 87    | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.308 | 0.342  | -11.0  | 89    | 0.00     |
| 48 T | Dibromochloromethane        | 0.497 | 0.575  | -15.7  | 87    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041540.D  
Acq On : 19 Aug 2024 8:59  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Aug 20 02:13:28 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|-------|-------|--------|-------|----------|
| 49 T | Bromoform                 | 0.420 | 0.504 | -20.0  | 86    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.763 | 0.917 | -20.2  | 90    | 0.00     |
| 51 T | 2-Hexanone                | 0.577 | 0.738 | -27.9  | 88    | 0.00     |
| 52 T | Tetrachloroethene         | 0.282 | 0.307 | -8.9   | 86    | 0.00     |
| 53 T | Toluene                   | 0.814 | 0.951 | -16.8  | 88    | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.410 | 0.500 | -22.0  | 89    | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 77    | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.388 | 0.430 | -10.8  | 89    | 0.00     |
| 57 T | Chlorobenzene             | 0.712 | 0.762 | -7.0   | 88    | 0.00     |
| 58 T | Ethyl Benzene             | 1.153 | 1.310 | -13.6  | 88    | 0.00     |
| 59 T | m/p-Xylene                | 0.995 | 1.128 | -13.4  | 89    | 0.00     |
| 60 T | o-Xylene                  | 0.941 | 1.080 | -14.8  | 89    | 0.00     |
| 61 T | Styrene                   | 0.425 | 0.522 | -22.8  | 87    | 0.00     |
| 62   | Isopropylbenzene          | 1.431 | 1.568 | -9.6   | 88    | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.594 | 0.666 | -12.1  | 90    | 0.00     |
| 64   | n-propylbenzene           | 0.374 | 0.420 | -12.3  | 88    | 0.00     |
| 65   | tert-Butylbenzene         | 1.292 | 1.419 | -9.8   | 89    | 0.00     |
| 66 T | Benzyl Chloride           | 0.083 | 0.117 | -41.0# | 98    | 0.00     |
| 67   | sec-Butylbenzene          | 1.781 | 1.992 | -11.8  | 89    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.770 | 0.774 | -0.5   | 76    | 0.00     |
| 69   | p-Isopropyltoluene        | 1.478 | 1.679 | -13.6  | 89    | 0.00     |
| 70   | n-Butylbenzene            | 1.515 | 1.723 | -13.7  | 89    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.055 | 1.186 | -12.4  | 89    | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.108 | 1.284 | -15.9  | 87    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.955 | 1.111 | -16.3  | 88    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.110 | 1.247 | -12.3  | 90    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.698 | 0.777 | -11.3  | 89    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.676 | 0.769 | -13.8  | 90    | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.692 | 0.755 | -9.1   | 89    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.590 | 0.563 | 4.6    | 87    | 0.00     |
| 79 T | Naphthalene               | 0.980 | 1.250 | -27.6  | 86    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.821 | 1.072 | -30.6# | 83    | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.583 | 0.661 | -13.4  | 87    | 0.00     |

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041541.D  
Acq On : 19 Aug 2024 10:07  
Operator : SY/MD  
Sample : VL0819ABL01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0819ABL01

Quant Time: Aug 20 02:14:14 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 895764   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.671  | 114  | 2374230  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.484 | 117  | 2131055  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.799 | 95    | 1588219  | 9.684    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.800% |

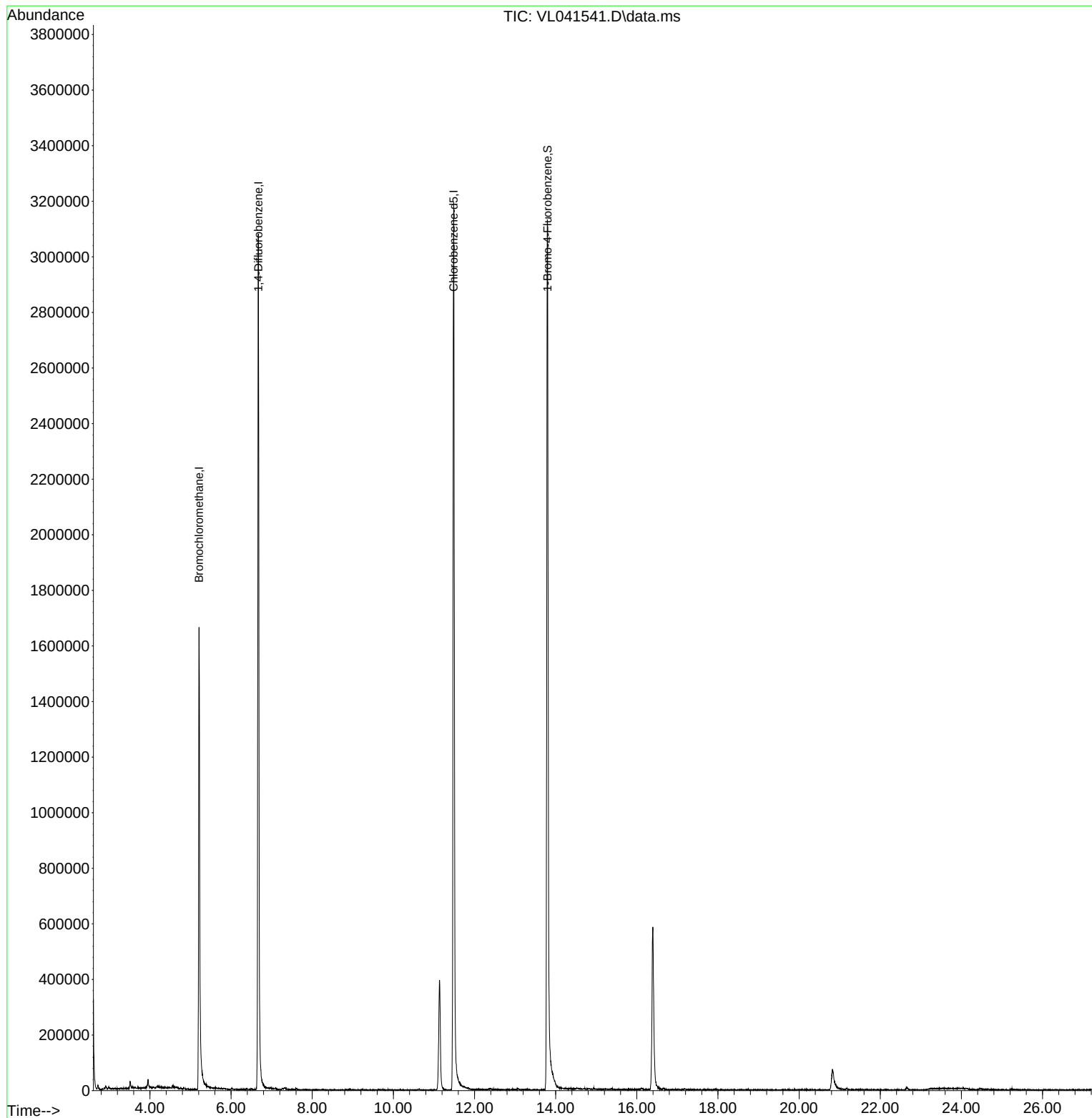
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041541.D  
Acq On : 19 Aug 2024 10:07  
Operator : SY/MD  
Sample : VL0819ABL01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0819ABL01

Quant Time: Aug 20 02:14:14 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041542.D  
Acq On : 19 Aug 2024 10:48  
Operator : SY/MD  
Sample : VL0819ABS01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0819ABS01

Quant Time: Aug 20 02:14:35 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
Supervised By : Mahesh Dadoda 08/20/2024

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 953834   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.674  | 114  | 2568604  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.487 | 117  | 2570572  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.796 | 95    | 1934486  | 9.779    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 97.800% |

Target Compounds

|                               |       |     |         |        | Qvalue    |
|-------------------------------|-------|-----|---------|--------|-----------|
| 2) Dichlorodifluoromethane    | 2.748 | 85  | 866011  | 5.278  | ppbv 100  |
| 3) Chlorodifluoromethane      | 2.694 | 51  | 1148497 | 10.115 | ppbv 100  |
| 4) Chloromethane              | 2.832 | 50  | 626957  | 10.381 | ppbv 99   |
| 5) Vinyl Chloride             | 2.941 | 62  | 632244  | 10.621 | ppbv 96   |
| 6) Bromomethane               | 3.141 | 94  | 337860  | 11.043 | ppbv 98   |
| 7) Chloroethane               | 3.214 | 64  | 227400  | 11.069 | ppbv 96   |
| 8) Dichlorotetrafluoroethane  | 2.877 | 85  | 1381485 | 9.502  | ppbv 99   |
| 9) Propene                    | 2.713 | 41  | 529749  | 10.156 | ppbv 98   |
| 10) Heptane                   | 7.600 | 43  | 1331349 | 11.360 | ppbv 100  |
| 11) Trichlorofluoromethane    | 3.581 | 101 | 1495695 | 10.264 | ppbv 97   |
| 12) 1,1,2-Trichlorotrifluo... | 4.086 | 101 | 1072747 | 10.223 | ppbv 100  |
| 13) Ethanol                   | 3.259 | 45  | 36448m  | 7.818  | ppbv      |
| 14) Bromoethene               | 3.385 | 108 | 429951  | 10.510 | ppbv 99   |
| 15) Acetone                   | 3.488 | 43  | 1136536 | 10.487 | ppbv 99   |
| 16) 1,3-Butadiene             | 3.005 | 39  | 616058  | 10.640 | ppbv 99   |
| 17) tert-Butyl alcohol        | 3.896 | 59  | 1138725 | 11.521 | ppbv 100  |
| 18) 1,1-Dichloroethene        | 3.899 | 96  | 490575  | 10.929 | ppbv 96   |
| 19) Isopropyl Alcohol         | 3.594 | 45  | 662593  | 10.458 | ppbv # 98 |
| 20) Methylene Chloride        | 3.951 | 84  | 468002  | 11.580 | ppbv 95   |
| 21) Allyl Chloride            | 4.015 | 41  | 776304  | 10.923 | ppbv 100  |
| 22) trans-1,2-Dichloroethene  | 4.465 | 96  | 469979  | 10.471 | ppbv 97   |
| 23) Vinyl Acetate             | 4.645 | 43  | 984169  | 11.890 | ppbv # 98 |
| 24) 1,1-Dichloroethane        | 4.581 | 63  | 1033773 | 10.608 | ppbv 99   |
| 25) Ethyl Acetate             | 5.224 | 43  | 2417577 | 11.229 | ppbv 99   |
| 26) Hexane                    | 5.234 | 57  | 1027698 | 11.507 | ppbv 97   |
| 27) Carbon Disulfide          | 4.144 | 76  | 1155043 | 11.055 | ppbv 99   |
| 28) Methyl tert-Butyl Ether   | 4.603 | 73  | 589223  | 10.461 | ppbv 100  |
| 29) Chloroform                | 5.295 | 83  | 1534946 | 10.536 | ppbv 99   |
| 30) Cyclohexane               | 6.623 | 84  | 826550  | 11.364 | ppbv 99   |
| 31) cis-1,2-Dichloroethene    | 5.099 | 61  | 959317  | 10.873 | ppbv 99   |
| 32) 1,1,1-Trichloroethane     | 6.025 | 97  | 1517453 | 10.701 | ppbv 100  |
| 34) 2-Butanone                | 4.806 | 43  | 1409794 | 11.346 | ppbv 100  |
| 35) Carbon Tetrachloride      | 6.513 | 117 | 1592749 | 11.242 | ppbv 98   |
| 36) Benzene                   | 6.391 | 78  | 2079587 | 11.080 | ppbv 98   |
| 37) 1,2-Dichloroethane        | 5.829 | 62  | 1168791 | 11.126 | ppbv 100  |
| 38) Trichloroethene           | 7.311 | 130 | 970933  | 11.292 | ppbv 97   |
| 39) 1,2-Dichloropropane       | 7.095 | 63  | 802701  | 11.171 | ppbv 96   |
| 40) 1,4-Dioxane               | 7.308 | 88  | 276693  | 9.586  | ppbv # 52 |
| 41) Tetrahydrofuran           | 5.574 | 42  | 830620  | 11.688 | ppbv 98   |
| 42) Bromodichloromethane      | 7.269 | 83  | 1674518 | 11.039 | ppbv 98   |
| 43) Methyl Methacrylate       | 7.494 | 69  | 830856  | 12.345 | ppbv 99   |
| 44) 2,2,4-Trimethylpentane    | 7.346 | 57  | 3498360 | 11.160 | ppbv 99   |
| 45) t-1,3-Dichloropropene     | 8.732 | 75  | 832465  | 13.438 | ppbv 96   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041542.D  
 Acq On : 19 Aug 2024 10:48  
 Operator : SY/MD  
 Sample : VL0819ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0819ABS01

Quant Time: Aug 20 02:14:35 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.166  | 75   | 1134089  | 12.678 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 8.922  | 97   | 871843   | 11.007 | ppbv   | 98       |
| 48) Dibromochloromethane      | 9.732  | 129  | 1455263  | 11.405 | ppbv   | 100      |
| 49) Bromoform                 | 12.430 | 173  | 1269504  | 11.778 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.201  | 43   | 2350707  | 11.991 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.571  | 43   | 1863582  | 12.572 | ppbv # | 99       |
| 52) Tetrachloroethene         | 10.639 | 164  | 782284   | 10.787 | ppbv   | 98       |
| 53) Toluene                   | 9.243  | 91   | 2430940  | 11.628 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.031 | 107  | 1250868  | 11.865 | ppbv   | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 11.529 | 131  | 1071372  | 10.747 | ppbv # | 59       |
| 57) Chlorobenzene             | 11.549 | 112  | 1920481  | 10.493 | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.111 | 91   | 3271939  | 11.043 | ppbv   | 98       |
| 59) m/p-Xylene                | 12.391 | 91   | 5625619m | 21.995 | ppbv   |          |
| 60) o-Xylene                  | 13.079 | 91   | 2684986  | 11.097 | ppbv   | 100      |
| 61) Styrene                   | 12.918 | 104  | 1314788  | 12.045 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.050 | 105  | 3916892  | 10.649 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.069 | 83   | 1660380  | 10.867 | ppbv   | 100      |
| 64) n-propylbenzene           | 14.937 | 120  | 1051699  | 10.937 | ppbv   | 95       |
| 65) tert-Butylbenzene         | 16.111 | 119  | 3561329  | 10.720 | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.349 | 91   | 293870   | 13.791 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.658 | 105  | 4963512  | 10.844 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.015 | 119  | 4185466  | 11.019 | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.908 | 91   | 4322218  | 11.100 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.822 | 91   | 2956439  | 10.899 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.214 | 105  | 3303117  | 11.596 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.372 | 105  | 2807444  | 11.440 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.130 | 105  | 3111891  | 10.908 | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 16.352 | 146  | 1936719  | 10.799 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.494 | 146  | 1874477  | 10.794 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.166 | 146  | 1866349  | 10.498 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.654 | 225  | 1419954  | 9.366  | ppbv   | 100      |
| 79) Naphthalene               | 21.407 | 128  | 3143301  | 12.483 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.394 | 142  | 2571622  | 12.183 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.166 | 180  | 1655281  | 11.046 | ppbv   | 100      |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041545.D  
Acq On : 19 Aug 2024 12:51  
Operator : SY/MD  
Sample : QC081424 CAN 10054  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC081424 CAN 10054

Quant Time: Aug 20 02:16:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.214  | 49   | 919015   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.674  | 114  | 2504237  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.491 | 117  | 2251168  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.799 | 95    | 1729778  | 9.985    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.800% |

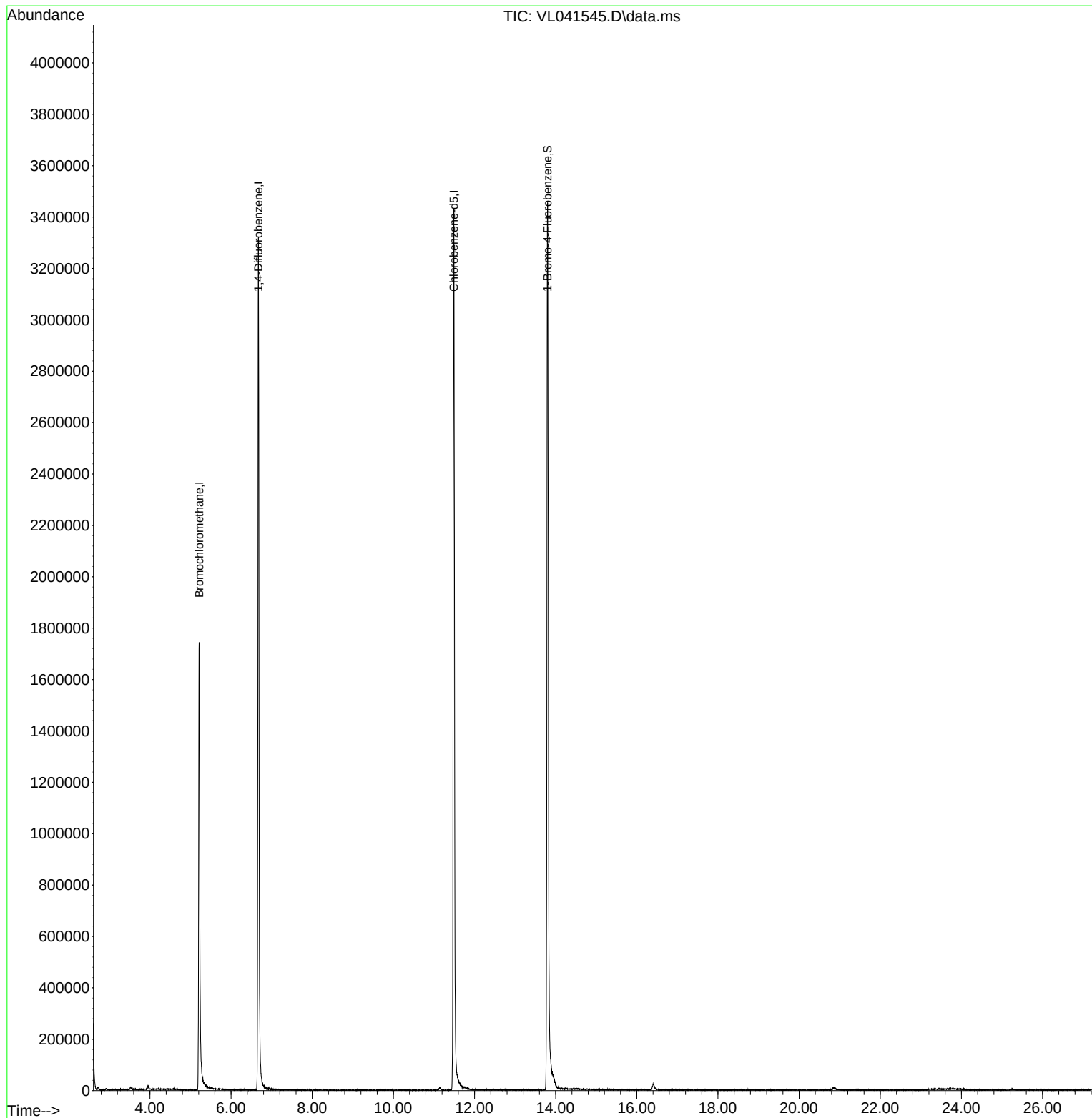
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041545.D  
Acq On : 19 Aug 2024 12:51  
Operator : SY/MD  
Sample : QC081424 CAN 10054  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC081424 CAN 10054

Quant Time: Aug 20 02:16:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration

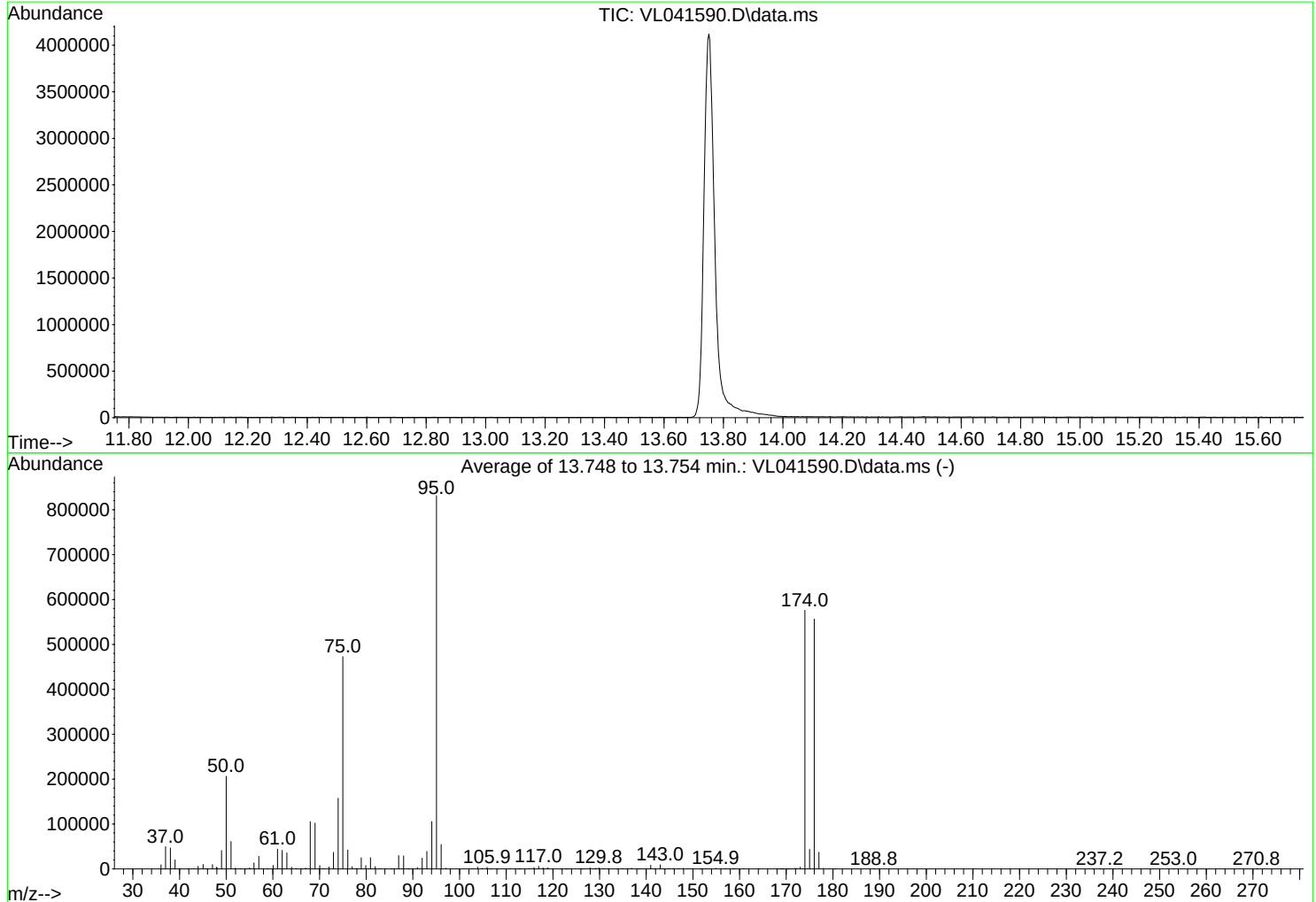


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041590.D  
Acq On : 16 Sep 2024 11:50  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Tue Sep 17 09:12:21 2024



AutoFind: Scans 3466, 3467, 3468; Background Corrected with Scan 3441

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 24.8  | 206293 | PASS      |
| 75     | 95      | 30     | 66     | 56.9  | 472747 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 831488 | PASS      |
| 96     | 95      | 5      | 9      | 6.6   | 54749  | PASS      |
| 173    | 174     | 0.00   | 2      | 0.7   | 4144   | PASS      |
| 174    | 95      | 50     | 120    | 69.3  | 576085 | PASS      |
| 175    | 174     | 4      | 9      | 7.6   | 43507  | PASS      |
| 176    | 174     | 93     | 101    | 96.6  | 556480 | PASS      |
| 177    | 176     | 5      | 9      | 6.7   | 37259  | PASS      |

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL091624AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Tue Sep 17 09:12:21 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041597.D 0.1 =VL041596.D 0.5 =VL041591.D 1 =VL041594.D 2 =VL041593.D 10 =VL041592.D 15 =VL041598.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg    | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|--------|-------|
| -----                     |                |       |       |       |       |       |       |        |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |        |       |
| 2) T Dichlorodifluo...    |                |       | 2.008 | 1.517 | 1.307 | 1.311 | 1.078 | 1.444  | 24.33 |
| 3) Chlorodifluoro...      |                |       | 1.427 | 1.234 | 1.245 | 1.104 | 1.055 | 1.213  | 11.94 |
| 4) Chloromethane          |                |       | 0.775 | 0.677 | 0.681 | 0.611 | 0.592 | 0.667  | 10.74 |
| 5) T Vinyl Chloride       | 0.459          | 0.525 | 0.634 | 0.633 | 0.625 | 0.587 | 0.580 | 0.578  | 11.28 |
| 6) T Bromomethane         |                |       | 0.325 | 0.277 | 0.298 | 0.274 | 0.262 | 0.287  | 8.62  |
| 7) Chloroethane           |                |       | 0.264 | 0.222 | 0.219 | 0.213 | 0.205 | 0.225  | 10.30 |
| 8) T Dichlorotetra...     |                |       | 1.783 | 1.546 | 1.526 | 1.422 | 1.298 | 1.515  | 11.84 |
| 9) T Propene              |                |       | 0.501 | 0.517 | 0.538 | 0.513 | 0.489 | 0.512  | 3.61  |
| 10) T Heptane             |                |       | 1.051 | 1.173 | 1.259 | 1.270 | 1.237 | 1.198  | 7.55  |
| 11) T Trichlorofluor...   |                |       | 1.732 | 1.636 | 1.535 | 1.429 | 1.353 | 1.537  | 9.95  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.226 | 1.162 | 1.152 | 1.040 | 0.986 | 1.113  | 8.77  |
| 13) Ethanol               |                |       | 0.047 | 0.057 | 0.046 | 0.024 | 0.018 | 0.038# | 42.94 |
| 14) T Bromoethene         |                |       | 0.429 | 0.421 | 0.427 | 0.423 | 0.410 | 0.422  | 1.76  |
| 15) T Acetone             |                |       | 1.775 | 1.244 | 1.240 | 1.027 | 0.990 | 1.255  | 24.97 |
| 16) T 1,3-Butadiene       |                |       | 0.674 | 0.612 | 0.622 | 0.579 | 0.566 | 0.611  | 6.93  |
| 17) tert-Butyl alc...     |                |       | 1.085 | 1.138 | 1.172 | 1.090 | 1.036 | 1.104  | 4.75  |
| 18) T 1,1-Dichloroet...   |                |       | 0.463 | 0.490 | 0.482 | 0.476 | 0.445 | 0.471  | 3.79  |
| 19) T Isopropyl Alcohol   |                |       | 0.690 | 0.659 | 0.674 | 0.625 | 0.566 | 0.643  | 7.61  |
| 20) T Methylene Chlo...   |                |       | 0.675 | 0.478 | 0.453 | 0.388 | 0.365 | 0.472  | 26.01 |
| 21) T Allyl Chloride      |                |       | 0.729 | 0.717 | 0.763 | 0.734 | 0.695 | 0.728  | 3.40  |
| 22) T trans-1,2-Dich...   |                |       | 0.497 | 0.462 | 0.488 | 0.460 | 0.443 | 0.470  | 4.65  |
| 23) T Vinyl Acetate       |                |       | 0.710 | 0.652 | 0.713 | 0.690 | 0.688 | 0.691  | 3.54  |
| 24) T 1,1-Dichloroet...   |                |       | 1.141 | 1.056 | 1.053 | 0.992 | 0.939 | 1.036  | 7.31  |
| 25) T Ethyl Acetate       |                |       | 2.106 | 2.286 | 2.408 | 2.286 | 2.184 | 2.254  | 5.08  |
| 26) T Hexane              |                |       | 0.979 | 0.924 | 0.974 | 0.927 | 0.895 | 0.940  | 3.81  |
| 27) T Carbon Disulfide    |                |       | 0.865 | 0.940 | 1.005 | 1.108 | 1.077 | 0.999  | 9.93  |
| 28) T Methyl tert-Bu...   |                |       | 0.628 | 0.578 | 0.604 | 0.558 | 0.530 | 0.579  | 6.60  |
| 29) T Chloroform          |                |       | 1.715 | 1.573 | 1.543 | 1.457 | 1.402 | 1.538  | 7.81  |
| 30) T Cyclohexane         |                |       | 0.603 | 0.670 | 0.780 | 0.785 | 0.785 | 0.725  | 11.57 |
| 31) T cis-1,2-Dichlo...   |                |       | 0.837 | 0.885 | 0.948 | 0.900 | 0.892 | 0.892  | 4.44  |
| 32) T 1,1,1-Trichlor...   | 1.165          | 1.138 | 1.529 | 1.452 | 1.479 | 1.438 | 1.389 | 1.370  | 11.32 |
| -----                     |                |       |       |       |       |       |       |        |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |       |
| 34) T 2-Butanone          |                |       | 0.521 | 0.437 | 0.500 | 0.470 | 0.456 | 0.477  | 7.07  |
| 35) T Carbon Tetrach...   | 0.363          | 0.395 | 0.536 | 0.518 | 0.555 | 0.543 | 0.525 | 0.491  | 15.89 |
| 36) T Benzene             |                |       | 0.640 | 0.677 | 0.746 | 0.714 | 0.696 | 0.694  | 5.71  |
| 37) T 1,2-Dichloroet...   |                |       | 0.409 | 0.406 | 0.413 | 0.399 | 0.388 | 0.403  | 2.48  |
| 38) T Trichloroethene     | 0.347          | 0.305 | 0.358 | 0.357 | 0.394 | 0.378 | 0.364 | 0.358  | 7.80  |
| 39) T 1,2-Dichloropr...   |                |       | 0.293 | 0.278 | 0.297 | 0.275 | 0.270 | 0.283  | 4.16  |

|                                                  |                   |                |       |       |       |       |       |       |       |       |
|--------------------------------------------------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\ |                   |                |       |       |       |       |       |       |       |       |
| Method File : VL091624AIR.M                      |                   |                |       |       |       |       |       |       |       |       |
| 40) T                                            | 1,4-Dioxane       |                |       | 0.111 | 0.100 | 0.115 | 0.114 | 0.093 | 0.107 | 9.00  |
| 41) T                                            | Tetrahydrofuran   |                |       | 0.209 | 0.257 | 0.272 | 0.289 | 0.285 | 0.262 | 12.31 |
| 42) T                                            | Bromodichlorom... |                |       | 0.546 | 0.557 | 0.572 | 0.573 | 0.554 | 0.561 | 2.07  |
| 43) T                                            | Methyl Methacr... |                |       | 0.195 | 0.225 | 0.261 | 0.281 | 0.280 | 0.249 | 15.02 |
| 44) T                                            | 2,2,4-Trimethy... |                |       | 1.133 | 1.210 | 1.304 | 1.210 | 1.150 | 1.202 | 5.59  |
| 45) T                                            | t-1,3-Dichloro... |                |       | 0.146 | 0.157 | 0.194 | 0.247 | 0.259 | 0.200 | 25.54 |
| 46) T                                            | cis-1,3-Dichlo... |                |       | 0.197 | 0.256 | 0.306 | 0.353 | 0.355 | 0.294 | 22.93 |
| 47) T                                            | 1,1,2-Trichlor... |                |       | 0.297 | 0.303 | 0.312 | 0.299 | 0.290 | 0.300 | 2.69  |
| 48) T                                            | Dibromochlorom... |                |       | 0.402 | 0.428 | 0.461 | 0.493 | 0.487 | 0.455 | 8.52  |
| 49) T                                            | Bromoform         |                |       | 0.324 | 0.363 | 0.401 | 0.432 | 0.431 | 0.390 | 11.89 |
| 50) T                                            | 4-Methyl-2-Pen... |                |       | 0.616 | 0.697 | 0.804 | 0.793 | 0.771 | 0.736 | 10.74 |
| 51) T                                            | 2-Hexanone        |                |       | 0.419 | 0.510 | 0.603 | 0.631 | 0.622 | 0.557 | 16.33 |
| 52) T                                            | Tetrachloroethene | 0.218          | 0.216 | 0.248 | 0.268 | 0.277 | 0.267 | 0.266 | 0.251 | 9.96  |
| 53) T                                            | Toluene           |                |       | 0.526 | 0.703 | 0.806 | 0.834 | 0.816 | 0.737 | 17.42 |
| 54) T                                            | 1,2-Dibromoethane | 0.259          |       | 0.370 | 0.379 | 0.402 | 0.407 | 0.399 | 0.369 | 15.11 |
| 55) I                                            | Chlorobenzene-d5  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 56) T                                            | 1,1,1,2-Tetrac... |                |       | 0.421 | 0.401 | 0.406 | 0.378 | 0.345 | 0.390 | 7.55  |
| 57) T                                            | Chlorobenzene     |                |       | 0.793 | 0.767 | 0.739 | 0.685 | 0.621 | 0.721 | 9.51  |
| 58) T                                            | Ethyl Benzene     |                |       | 0.838 | 1.096 | 1.179 | 1.173 | 1.067 | 1.070 | 12.97 |
| 59) T                                            | m/p-Xylene        |                |       | 0.830 | 0.974 | 1.061 | 0.996 | 0.904 | 0.953 | 9.31  |
| 60) T                                            | o-Xylene          |                |       | 0.782 | 0.931 | 1.016 | 0.960 | 0.878 | 0.913 | 9.75  |
| 61) T                                            | Styrene           |                |       | 0.247 | 0.338 | 0.413 | 0.468 | 0.442 | 0.382 | 23.54 |
| 62) T                                            | Isopropylbenzene  |                |       | 1.282 | 1.461 | 1.522 | 1.394 | 1.260 | 1.384 | 8.14  |
| 63) T                                            | 1,1,2,2-Tetrac... | 0.418          | 0.394 | 0.547 | 0.532 | 0.510 | 0.456 | 0.413 | 0.467 | 13.31 |
| 64) T                                            | n-propylbenzene   |                |       | 0.308 | 0.356 | 0.401 | 0.375 | 0.347 | 0.357 | 9.56  |
| 65) T                                            | tert-Butylbenzene |                |       | 1.181 | 1.338 | 1.433 | 1.256 | 1.134 | 1.269 | 9.47  |
| 66) T                                            | Benzyl Chloride   |                |       | 0.064 | 0.064 | 0.065 | 0.067 | 0.069 | 0.066 | 3.08  |
| 67) T                                            | sec-Butylbenzene  |                |       | 1.575 | 1.882 | 2.001 | 1.770 | 1.572 | 1.760 | 10.74 |
| 68) S                                            | 1-Bromo-4-Fluo... | 0.737          | 0.751 | 0.749 | 0.749 | 0.723 | 0.744 | 0.701 | 0.736 | 2.47  |
| 69) T                                            | p-Isopropyltol... |                |       | 1.164 | 1.476 | 1.677 | 1.481 | 1.325 | 1.425 | 13.46 |
| 70) T                                            | n-Butylbenzene    |                |       | 1.271 | 1.572 | 1.732 | 1.520 | 1.368 | 1.492 | 12.04 |
| 71) T                                            | 2-Chlorotoluene   |                |       | 0.917 | 1.047 | 1.121 | 1.050 | 0.957 | 1.018 | 8.00  |
| 72) T                                            | 4-Ethyltoluene    |                |       | 0.850 | 1.086 | 1.197 | 1.154 | 1.052 | 1.068 | 12.57 |
| 73) T                                            | 1,3,5-Trimethy... |                |       | 0.790 | 0.975 | 1.054 | 0.988 | 0.907 | 0.943 | 10.63 |
| 74) T                                            | 1,2,4-Trimethy... |                |       | 0.986 | 1.181 | 1.267 | 1.095 | 0.989 | 1.104 | 11.09 |
| 75) T                                            | 1,3-Dichlorobe... |                |       | 0.676 | 0.712 | 0.766 | 0.680 | 0.624 | 0.692 | 7.56  |
| 76) T                                            | 1,4-Dichlorobe... |                |       | 0.598 | 0.708 | 0.733 | 0.661 | 0.614 | 0.663 | 8.77  |
| 77) T                                            | 1,2-Dichlorobe... |                |       | 0.687 | 0.711 | 0.754 | 0.658 | 0.604 | 0.683 | 8.25  |
| 78) T                                            | Hexachloro-1,3... |                |       | 0.607 | 0.621 | 0.635 | 0.491 | 0.461 | 0.563 | 14.33 |
| 79) T                                            | Naphthalene       | 0.311          |       | 0.570 | 0.869 | 1.107 | 1.031 | 0.985 | 0.812 | 38.05 |
| 80) T                                            | Naphthalene,2-... |                |       | 0.267 | 0.435 | 0.613 | 0.749 | 0.781 | 0.569 | 38.19 |
| 81) T                                            | 1,2,4-Trichlor... |                |       | 0.405 | 0.503 | 0.607 | 0.543 | 0.524 | 0.516 | 14.24 |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041591.D  
 Acq On : 16 Sep 2024 12:36  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

Quant Time: Sep 17 07:23:30 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 05:12:12 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.166  | 49    | 1007876  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.626  | 114   | 2828824  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.439 | 117   | 2557349  | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.751 | 95    | 1914464  | 10.111   | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 101.100% |
| Target Compounds              |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane    | 2.710  | 85    | 101189   | 0.723    | ppbv   | 96       |
| 3) Chlorodifluoromethane      | 2.655  | 51    | 71898    | 0.601    | ppbv   | 99       |
| 4) Chloromethane              | 2.793  | 50    | 39035    | 0.689    | ppbv   | 90       |
| 5) Vinyl Chloride             | 2.896  | 62    | 31972    | 0.554    | ppbv   | 91       |
| 6) Bromomethane               | 3.099  | 94    | 16392    | 0.584    | ppbv   | 99       |
| 7) Chloroethane               | 3.179  | 64    | 13318    | 0.613    | ppbv   | 98       |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 89844    | 0.600    | ppbv   | 95       |
| 9) Propene                    | 2.677  | 41    | 25238    | 0.485    | ppbv   | 88       |
| 10) Heptane                   | 7.549  | 43    | 52953m   | 0.447    | ppbv   |          |
| 11) Trichlorofluoromethane    | 3.539  | 101   | 87284    | 0.576    | ppbv   | 98       |
| 12) 1,1,2-Trichlorotrifluo... | 4.041  | 101   | 61766    | 0.562    | ppbv   | 93       |
| 13) Ethanol                   | 3.227  | 45    | 2374m    | 0.709    | ppbv   |          |
| 14) Bromoethene               | 3.343  | 108   | 21604    | 0.511    | ppbv # | 91       |
| 15) Acetone                   | 3.455  | 43    | 89461    | 0.777    | ppbv   | 92       |
| 16) 1,3-Butadiene             | 2.967  | 39    | 33974    | 0.578    | ppbv   | 93       |
| 17) tert-Butyl alcohol        | 3.870  | 59    | 54674    | 0.500    | ppbv   | 95       |
| 18) 1,1-Dichloroethene        | 3.861  | 96    | 23326    | 0.483    | ppbv   | 96       |
| 19) Isopropyl Alcohol         | 3.565  | 45    | 34766m   | 0.560    | ppbv   |          |
| 20) Methylene Chloride        | 3.909  | 84    | 34011    | 0.768    | ppbv   | 93       |
| 21) Allyl Chloride            | 3.976  | 41    | 36721    | 0.501    | ppbv   | 88       |
| 22) trans-1,2-Dichloroethene  | 4.420  | 96    | 25050    | 0.536    | ppbv # | 81       |
| 23) Vinyl Acetate             | 4.610  | 43    | 35784    | 0.523    | ppbv # | 87       |
| 24) 1,1-Dichloroethane        | 4.539  | 63    | 57495    | 0.562    | ppbv # | 95       |
| 25) Ethyl Acetate             | 5.185  | 43    | 106139   | 0.465    | ppbv # | 95       |
| 26) Hexane                    | 5.189  | 57    | 49338    | 0.535    | ppbv   | 90       |
| 27) Carbon Disulfide          | 4.105  | 76    | 43606    | 0.435    | ppbv # | 87       |
| 28) Methyl tert-Butyl Ether   | 4.571  | 73    | 31629m   | 0.552    | ppbv   |          |
| 29) Chloroform                | 5.246  | 83    | 86434    | 0.566    | ppbv   | 97       |
| 30) Cyclohexane               | 6.578  | 84    | 30381m   | 0.419    | ppbv   |          |
| 31) cis-1,2-Dichloroethene    | 5.053  | 61    | 42156    | 0.473    | ppbv   | 93       |
| 32) 1,1,1-Trichloroethane     | 5.979  | 97    | 77056    | 0.568    | ppbv   | 96       |
| 34) 2-Butanone                | 4.777  | 43    | 73717m   | 0.569    | ppbv   |          |
| 35) Carbon Tetrachloride      | 6.471  | 117   | 75844    | 0.554    | ppbv # | 94       |
| 36) Benzene                   | 6.346  | 78    | 90490    | 0.465    | ppbv # | 95       |
| 37) 1,2-Dichloroethane        | 5.783  | 62    | 57866    | 0.511    | ppbv # | 96       |
| 38) Trichloroethene           | 7.269  | 130   | 50656m   | 0.502    | ppbv   |          |
| 39) 1,2-Dichloropropane       | 7.044  | 63    | 41453m   | 0.523    | ppbv   |          |
| 40) 1,4-Dioxane               | 7.304  | 88    | 15716m   | 0.554    | ppbv   |          |
| 41) Tetrahydrofuran           | 5.558  | 42    | 29577    | 0.397    | ppbv   | 96       |
| 42) Bromodichloromethane      | 7.224  | 83    | 77287    | 0.499    | ppbv # | 96       |
| 43) Methyl Methacrylate       | 7.452  | 69    | 27616    | 0.393    | ppbv   | 95       |
| 44) 2,2,4-Trimethylpentane    | 7.304  | 57    | 160219   | 0.479    | ppbv # | 90       |
| 45) t-1,3-Dichloropropene     | 8.690  | 75    | 20590m   | 0.367    | ppbv   |          |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041591.D  
 Acq On : 16 Sep 2024 12:36  
 Operator : SY/MD  
 Sample : VSTDIC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Quant Time: Sep 17 07:23:30 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 05:12:12 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.121  | 75   | 27915    | 0.331 | ppbv   | 90       |
| 47) 1,1,2-Trichloroethane     | 8.876  | 97   | 41983    | 0.499 | ppbv   | 92       |
| 48) Dibromochloromethane      | 9.687  | 129  | 56924m   | 0.447 | ppbv   |          |
| 49) Bromoform                 | 12.375 | 173  | 45890m   | 0.424 | ppbv   |          |
| 50) 4-Methyl-2-Pentanone      | 8.176  | 43   | 87157m   | 0.424 | ppbv   |          |
| 51) 2-Hexanone                | 9.555  | 43   | 59285m   | 0.378 | ppbv   |          |
| 52) Tetrachloroethene         | 10.587 | 164  | 35100m   | 0.496 | ppbv   |          |
| 53) Toluene                   | 9.192  | 91   | 74445    | 0.355 | ppbv   | 95       |
| 54) 1,2-Dibromoethane         | 9.983  | 107  | 52272m   | 0.509 | ppbv   |          |
| 56) 1,1,1,2-Tetrachloroethane | 11.487 | 131  | 53872    | 0.548 | ppbv # | 1        |
| 57) Chlorobenzene             | 11.503 | 112  | 101381m  | 0.554 | ppbv   |          |
| 58) Ethyl Benzene             | 12.063 | 91   | 107104   | 0.390 | ppbv   | 94       |
| 59) m/p-Xylene                | 12.349 | 91   | 212193m  | 0.867 | ppbv   |          |
| 60) o-Xylene                  | 13.037 | 91   | 99984m   | 0.428 | ppbv   |          |
| 61) Styrene                   | 12.876 | 104  | 31545    | 0.319 | ppbv   | 94       |
| 62) Isopropylbenzene          | 14.005 | 105  | 163927   | 0.462 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.021 | 83   | 69917m   | 0.592 | ppbv   |          |
| 64) n-propylbenzene           | 14.899 | 120  | 39445m   | 0.429 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.066 | 119  | 151018m  | 0.474 | ppbv   |          |
| 66) Benzyl Chloride           | 16.304 | 91   | 8202m    | 0.484 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.616 | 105  | 201367   | 0.442 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.973 | 119  | 148897   | 0.407 | ppbv   | 94       |
| 70) n-Butylbenzene            | 17.870 | 91   | 162469   | 0.426 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.780 | 91   | 117206m  | 0.454 | ppbv   |          |
| 72) 4-Ethyltoluene            | 15.172 | 105  | 108676   | 0.395 | ppbv # | 95       |
| 73) 1,3,5-Trimethylbenzene    | 15.333 | 105  | 100995m  | 0.423 | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene    | 16.079 | 105  | 126032   | 0.442 | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 86427    | 0.491 | ppbv   | 93       |
| 76) 1,4-Dichlorobenzene       | 16.452 | 146  | 76460    | 0.441 | ppbv   | 87       |
| 77) 1,2-Dichlorobenzene       | 17.117 | 146  | 87843m   | 0.507 | ppbv   |          |
| 78) Hexachloro-1,3-Butadiene  | 22.609 | 225  | 77655m   | 0.537 | ppbv   |          |
| 79) Naphthalene               | 21.358 | 128  | 72907m   | 0.360 | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.355 | 142  | 34080    | 0.240 | ppbv   | 92       |
| 81) 1,2,4-Trichlorobenzene    | 21.124 | 180  | 51734m   | 0.392 | ppbv   |          |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041592.D  
 Acq On : 16 Sep 2024 13:15  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Quant Time: Sep 17 02:35:11 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 02:32:57 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.169  | 49    | 1153662  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.629  | 114   | 3191034  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.445 | 117   | 3069576m | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.751 | 95    | 2284732  | 9.739    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 97.400%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.709  | 85    | 1512734  | 7.724    | ppbv   | 100      |
| 3) Chlorodifluoromethane      | 2.652  | 51    | 1273490  | 9.220    | ppbv   | 100      |
| 4) Chloromethane              | 2.790  | 50    | 704969   | 9.499    | ppbv   | 100      |
| 5) Vinyl Chloride             | 2.896  | 62    | 676970   | 9.366    | ppbv   | 100      |
| 6) Bromomethane               | 3.095  | 94    | 316373   | 8.660    | ppbv   | 100      |
| 7) Chloroethane               | 3.172  | 64    | 246025   | 9.802    | ppbv   | 100      |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 1640863  | 9.280    | ppbv   | 100      |
| 9) Propene                    | 2.671  | 41    | 591499   | 9.296    | ppbv   | 100      |
| 10) Heptane                   | 7.555  | 43    | 1465058  | 10.218   | ppbv   | 100      |
| 11) Trichlorofluoromethane    | 3.539  | 101   | 1648291  | 9.296    | ppbv   | 100      |
| 12) 1,1,2-Trichlorotrifluo... | 4.041  | 101   | 1199947  | 9.385    | ppbv   | 100      |
| 13) Ethanol                   | 3.224  | 45    | 27404m   | 5.148    | ppbv   |          |
| 14) Bromoethene               | 3.343  | 108   | 488418   | 9.820    | ppbv   | 100      |
| 15) Acetone                   | 3.443  | 43    | 1184767  | 8.990    | ppbv   | 100      |
| 16) 1,3-Butadiene             | 2.963  | 39    | 668292   | 9.469    | ppbv   | 100      |
| 17) tert-Butyl alcohol        | 3.851  | 59    | 1256999  | 10.440   | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.857  | 96    | 549303   | 10.028   | ppbv   | 100      |
| 19) Isopropyl Alcohol         | 3.552  | 45    | 721155   | 9.470    | ppbv   | 100      |
| 20) Methylene Chloride        | 3.909  | 84    | 447422   | 9.082    | ppbv   | 100      |
| 21) Allyl Chloride            | 3.973  | 41    | 846436   | 9.826    | ppbv   | 100      |
| 22) trans-1,2-Dichloroethene  | 4.420  | 96    | 531058   | 9.732    | ppbv   | 100      |
| 23) Vinyl Acetate             | 4.603  | 43    | 796205   | 8.326    | ppbv   | 100      |
| 24) 1,1-Dichloroethane        | 4.539  | 63    | 1144566  | 9.614    | ppbv   | 100      |
| 25) Ethyl Acetate             | 5.179  | 43    | 2636978  | 9.977    | ppbv   | 100      |
| 26) Hexane                    | 5.188  | 57    | 1069971  | 9.824    | ppbv   | 100      |
| 27) Carbon Disulfide          | 4.098  | 76    | 1278721  | 10.141   | ppbv   | 100      |
| 28) Methyl tert-Butyl Ether   | 4.561  | 73    | 643194   | 9.433    | ppbv   | 100      |
| 29) Chloroform                | 5.250  | 83    | 1680555  | 9.485    | ppbv   | 100      |
| 30) Cyclohexane               | 6.577  | 84    | 905301   | 10.235   | ppbv   | 100      |
| 31) cis-1,2-Dichloroethene    | 5.053  | 61    | 1038715  | 9.711    | ppbv   | 100      |
| 32) 1,1,1-Trichloroethane     | 5.979  | 97    | 1658808  | 9.635    | ppbv   | 100      |
| 34) 2-Butanone                | 4.761  | 43    | 1501240  | 9.714    | ppbv   | 100      |
| 35) Carbon Tetrachloride      | 6.471  | 117   | 1733798  | 9.862    | ppbv   | 100      |
| 36) Benzene                   | 6.346  | 78    | 2276805  | 9.741    | ppbv   | 100      |
| 37) 1,2-Dichloroethane        | 5.783  | 62    | 1272445  | 9.723    | ppbv   | 100      |
| 38) Trichloroethene           | 7.266  | 130   | 1207402  | 11.030   | ppbv   | 100      |
| 39) 1,2-Dichloropropane       | 7.050  | 63    | 877299   | 9.764    | ppbv   | 100      |
| 40) 1,4-Dioxane               | 7.262  | 88    | 362562   | 10.129   | ppbv # | 100      |
| 41) Tetrahydrofuran           | 5.532  | 42    | 921404   | 10.354   | ppbv   | 100      |
| 42) Bromodichloromethane      | 7.227  | 83    | 1829048  | 9.717    | ppbv   | 100      |
| 43) Methyl Methacrylate       | 7.449  | 69    | 895478   | 10.728   | ppbv   | 100      |
| 44) 2,2,4-Trimethylpentane    | 7.304  | 57    | 3860881  | 9.842    | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 8.687  | 75    | 786684   | 10.580   | ppbv   | 100      |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041592.D  
 Acq On : 16 Sep 2024 13:15  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Quant Time: Sep 17 02:35:11 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 02:32:57 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 46) cis-1,3-Dichloropropene   | 8.121  | 75   | 1127288  | 10.315 | ppbv  | 100      |
| 47) 1,1,2-Trichloroethane     | 8.873  | 97   | 952785   | 9.656  | ppbv  | 100      |
| 48) Dibromochloromethane      | 9.687  | 129  | 1573314  | 9.972  | ppbv  | 100      |
| 49) Bromoform                 | 12.384 | 173  | 1380117  | 10.374 | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.156  | 43   | 2529791  | 10.343 | ppbv  | 100      |
| 51) 2-Hexanone                | 9.526  | 43   | 2011980  | 10.956 | ppbv  | 100      |
| 52) Tetrachloroethene         | 10.590 | 164  | 852321   | 9.478  | ppbv  | 100      |
| 53) Toluene                   | 9.198  | 91   | 2661666  | 10.235 | ppbv  | 100      |
| 54) 1,2-Dibromoethane         | 9.986  | 107  | 1299501  | 10.010 | ppbv  | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 11.487 | 131  | 1161709  | 9.726  | ppbv  | 100      |
| 57) Chlorobenzene             | 11.503 | 112  | 2103559  | 9.574  | ppbv  | 100      |
| 58) Ethyl Benzene             | 12.066 | 91   | 3600157  | 10.136 | ppbv  | 100      |
| 59) m/p-Xylene                | 12.346 | 91   | 6116054m | 19.957 | ppbv  |          |
| 60) o-Xylene                  | 13.034 | 91   | 2948315  | 10.140 | ppbv  | 100      |
| 61) Styrene                   | 12.873 | 104  | 1437066  | 11.003 | ppbv  | 100      |
| 62) Isopropylbenzene          | 14.005 | 105  | 4279685  | 9.708  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.024 | 83   | 1398913  | 7.881  | ppbv  | 100      |
| 64) n-propylbenzene           | 14.895 | 120  | 1149808  | 9.986  | ppbv  | 100      |
| 65) tert-Butylbenzene         | 16.066 | 119  | 3855478  | 9.686  | ppbv  | 100      |
| 66) Benzyl Chloride           | 16.304 | 91   | 205903   | 8.606  | ppbv  | 100      |
| 67) sec-Butylbenzene          | 16.612 | 105  | 5434135  | 9.884  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 16.973 | 119  | 4544895  | 9.982  | ppbv  | 100      |
| 70) n-Butylbenzene            | 17.863 | 91   | 4664460  | 9.989  | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 14.776 | 91   | 3221836  | 9.915  | ppbv  | 100      |
| 72) 4-Ethyltoluene            | 15.169 | 105  | 3541706  | 10.382 | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 15.326 | 105  | 3032119  | 10.316 | ppbv  | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.085 | 105  | 3360833  | 9.827  | ppbv  | 100      |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 2088291  | 9.728  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 16.452 | 146  | 2030349  | 9.776  | ppbv  | 100      |
| 77) 1,2-Dichlorobenzene       | 17.120 | 146  | 2019099  | 9.498  | ppbv  | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.609 | 225  | 1508307  | 8.351  | ppbv  | 100      |
| 79) Naphthalene               | 21.358 | 128  | 3163696  | 10.692 | ppbv  | 100      |
| 80) Naphthalene,2-methyl-     | 24.352 | 142  | 2300402  | 9.700  | ppbv  | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.114 | 180  | 1667878  | 9.460  | ppbv  | 100      |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041593.D  
 Acq On : 16 Sep 2024 13:56  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Sep 17 02:38:44 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 02:32:57 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.166  | 49    | 1182080  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.629  | 114   | 3244465  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.439 | 117   | 3052584  | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.754 | 95    | 2207152  | 9.461    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 94.600%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.706  | 85    | 309050   | 1.540    | ppbv   | 97       |
| 3) Chlorodifluoromethane      | 2.652  | 51    | 294373   | 2.080    | ppbv   | 98       |
| 4) Chloromethane              | 2.793  | 50    | 160883   | 2.116    | ppbv   | 95       |
| 5) Vinyl Chloride             | 2.899  | 62    | 147802   | 1.996    | ppbv   | 95       |
| 6) Bromomethane               | 3.095  | 94    | 70434    | 1.882    | ppbv   | 99       |
| 7) Chloroethane               | 3.173  | 64    | 51705    | 2.010    | ppbv   | 98       |
| 8) Dichlorotetrafluoroethane  | 2.835  | 85    | 360778   | 1.991    | ppbv   | 97       |
| 9) Propene                    | 2.671  | 41    | 127237   | 1.952    | ppbv   | 92       |
| 10) Heptane                   | 7.555  | 43    | 297624   | 2.026    | ppbv   | 98       |
| 11) Trichlorofluoromethane    | 3.539  | 101   | 362790   | 1.997    | ppbv   | 100      |
| 12) 1,1,2-Trichlorotrifluo... | 4.044  | 101   | 272276   | 2.078    | ppbv   | 99       |
| 13) Ethanol                   | 3.234  | 45    | 10961m   | 2.010    | ppbv   |          |
| 14) Bromoethene               | 3.340  | 108   | 101050   | 1.983    | ppbv   | 92       |
| 15) Acetone                   | 3.449  | 43    | 293207   | 2.171    | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.964  | 39    | 147142   | 2.035    | ppbv   | 97       |
| 17) tert-Butyl alcohol        | 3.857  | 59    | 277171   | 2.247    | ppbv   | 99       |
| 18) 1,1-Dichloroethene        | 3.857  | 96    | 113969   | 2.031    | ppbv   | 90       |
| 19) Isopropyl Alcohol         | 3.558  | 45    | 159227   | 2.041    | ppbv # | 97       |
| 20) Methylene Chloride        | 3.909  | 84    | 107110   | 2.122    | ppbv   | 92       |
| 21) Allyl Chloride            | 3.973  | 41    | 180432   | 2.044    | ppbv   | 99       |
| 22) trans-1,2-Dichloroethene  | 4.420  | 96    | 115268   | 2.062    | ppbv   | 92       |
| 23) Vinyl Acetate             | 4.607  | 43    | 168539   | 1.720    | ppbv # | 97       |
| 24) 1,1-Dichloroethane        | 4.539  | 63    | 249059   | 2.042    | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.185  | 43    | 569204   | 2.102    | ppbv   | 99       |
| 26) Hexane                    | 5.185  | 57    | 230270   | 2.063    | ppbv   | 95       |
| 27) Carbon Disulfide          | 4.102  | 76    | 237668   | 1.840    | ppbv   | 98       |
| 28) Methyl tert-Butyl Ether   | 4.565  | 73    | 142865   | 2.045    | ppbv   | 99       |
| 29) Chloroform                | 5.250  | 83    | 364849   | 2.010    | ppbv   | 91       |
| 30) Cyclohexane               | 6.574  | 84    | 184390   | 2.035    | ppbv   | 95       |
| 31) cis-1,2-Dichloroethene    | 5.054  | 61    | 224037   | 2.044    | ppbv   | 93       |
| 32) 1,1,1-Trichloroethane     | 5.980  | 97    | 349584   | 1.982    | ppbv   | 98       |
| 34) 2-Butanone                | 4.764  | 43    | 324173   | 2.063    | ppbv   | 98       |
| 35) Carbon Tetrachloride      | 6.468  | 117   | 360310   | 2.016    | ppbv   | 99       |
| 36) Benzene                   | 6.346  | 78    | 483918   | 2.036    | ppbv   | 98       |
| 37) 1,2-Dichloroethane        | 5.780  | 62    | 268163   | 2.015    | ppbv   | 98       |
| 38) Trichloroethene           | 7.266  | 130   | 255796   | 2.298    | ppbv   | 94       |
| 39) 1,2-Dichloropropane       | 7.050  | 63    | 192586   | 2.108    | ppbv   | 97       |
| 40) 1,4-Dioxane               | 7.272  | 88    | 74476    | 2.046    | ppbv # | 97       |
| 41) Tetrahydrofuran           | 5.542  | 42    | 176742   | 1.953    | ppbv   | 95       |
| 42) Bromodichloromethane      | 7.224  | 83    | 371085   | 1.939    | ppbv   | 95       |
| 43) Methyl Methacrylate       | 7.452  | 69    | 169666   | 1.999    | ppbv   | 99       |
| 44) 2,2,4-Trimethylpentane    | 7.301  | 57    | 846282   | 2.122    | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.687  | 75    | 125807m  | 1.664    | ppbv   |          |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041593.D  
 Acq On : 16 Sep 2024 13:56  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Sep 17 02:38:44 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Tue Sep 17 02:32:57 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.118  | 75   | 198614   | 1.787 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 8.870  | 97   | 202286   | 2.016 | ppbv   | 95       |
| 48) Dibromochloromethane      | 9.684  | 129  | 299312   | 1.866 | ppbv   | 98       |
| 49) Bromoform                 | 12.384 | 173  | 259933   | 1.922 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 8.163  | 43   | 521882   | 2.099 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.536  | 43   | 391600   | 2.097 | ppbv # | 99       |
| 52) Tetrachloroethene         | 10.594 | 164  | 179606   | 1.964 | ppbv   | 97       |
| 53) Toluene                   | 9.198  | 91   | 523040   | 1.978 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 9.986  | 107  | 260693   | 1.975 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 11.484 | 131  | 247944   | 2.087 | ppbv # | 1        |
| 57) Chlorobenzene             | 11.503 | 112  | 451222   | 2.065 | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.066 | 91   | 719793   | 2.038 | ppbv   | 96       |
| 59) m/p-Xylene                | 12.346 | 91   | 1294945m | 4.249 | ppbv   |          |
| 60) o-Xylene                  | 13.034 | 91   | 620587   | 2.146 | ppbv   | 100      |
| 61) Styrene                   | 12.880 | 104  | 252259   | 1.942 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.005 | 105  | 929045   | 2.119 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.024 | 83   | 311063   | 1.762 | ppbv   | 98       |
| 64) n-propylbenzene           | 14.892 | 120  | 244643   | 2.137 | ppbv   | 93       |
| 65) tert-Butylbenzene         | 16.069 | 119  | 874824   | 2.210 | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.310 | 91   | 39929m   | 1.678 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.613 | 105  | 1221574  | 2.234 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.973 | 119  | 1023815  | 2.261 | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.863 | 91   | 1057176  | 2.276 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 14.777 | 91   | 684496   | 2.118 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.172 | 105  | 730570   | 2.153 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.330 | 105  | 643556   | 2.202 | ppbv   | 96       |
| 74) 1,2,4-Trimethylbenzene    | 16.082 | 105  | 773729   | 2.275 | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 467558   | 2.190 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.449 | 146  | 447493   | 2.167 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.121 | 146  | 460299   | 2.177 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.606 | 225  | 387729   | 2.159 | ppbv   | 100      |
| 79) Naphthalene               | 21.362 | 128  | 675872   | 2.297 | ppbv   | 97       |
| 80) Naphthalene,2-methyl-     | 24.358 | 142  | 374380   | 1.587 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.114 | 180  | 370420   | 2.113 | ppbv   | 99       |

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





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041594.D  
 Acq On : 16 Sep 2024 14:36  
 Operator : SY/MD  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Quant Time: Sep 16 20:15:06 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Mon Sep 16 20:14:05 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.172  | 49    | 1163991  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.632  | 114   | 3218358  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.445 | 117   | 2901355  | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.754 | 95    | 2171693  | 9.726    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 97.300%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.716  | 85    | 176543   | 0.882    | ppbv   | 100      |
| 3) Chlorodifluoromethane      | 2.658  | 51    | 143593   | 1.036    | ppbv   | 99       |
| 4) Chloromethane              | 2.796  | 50    | 78805m   | 1.069    | ppbv   |          |
| 5) Vinyl Chloride             | 2.906  | 62    | 73731    | 1.015    | ppbv   | 99       |
| 6) Bromomethane               | 3.105  | 94    | 32268    | 0.864    | ppbv   | 86       |
| 7) Chloroethane               | 3.182  | 64    | 25889    | 1.033    | ppbv   | 91       |
| 8) Dichlorotetrafluoroethane  | 2.841  | 85    | 179916   | 1.014    | ppbv   | 91       |
| 9) Propene                    | 2.681  | 41    | 60205    | 0.946    | ppbv   | 94       |
| 10) Heptane                   | 7.565  | 43    | 136494   | 0.954    | ppbv   | 99       |
| 11) Trichlorofluoromethane    | 3.545  | 101   | 190406   | 1.071    | ppbv   | 99       |
| 12) 1,1,2-Trichlorotrifluo... | 4.050  | 101   | 135246   | 1.056    | ppbv   | 98       |
| 13) Ethanol                   | 3.246  | 45    | 6603m    | 1.161    | ppbv   |          |
| 14) Bromoethene               | 3.353  | 108   | 48959    | 0.981    | ppbv # | 92       |
| 15) Acetone                   | 3.462  | 43    | 144857   | 1.095    | ppbv   | 97       |
| 16) 1,3-Butadiene             | 2.970  | 39    | 71179    | 1.007    | ppbv   | 100      |
| 17) tert-Butyl alcohol        | 3.867  | 59    | 132423   | 1.098    | ppbv   | 96       |
| 18) 1,1-Dichloroethene        | 3.861  | 96    | 57053    | 1.042    | ppbv   | 91       |
| 19) Isopropyl Alcohol         | 3.571  | 45    | 76655    | 0.991    | ppbv # | 95       |
| 20) Methylene Chloride        | 3.915  | 84    | 55627    | 1.128    | ppbv   | 97       |
| 21) Allyl Chloride            | 3.976  | 41    | 83509    | 0.963    | ppbv   | 89       |
| 22) trans-1,2-Dichloroethene  | 4.426  | 96    | 53748    | 0.981    | ppbv   | 96       |
| 23) Vinyl Acetate             | 4.610  | 43    | 75873    | 0.751    | ppbv # | 93       |
| 24) 1,1-Dichloroethane        | 4.542  | 63    | 122972   | 1.034    | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.192  | 43    | 266035   | 1.013    | ppbv   | 98       |
| 26) Hexane                    | 5.195  | 57    | 107564   | 0.987    | ppbv   | 92       |
| 27) Carbon Disulfide          | 4.105  | 76    | 109406   | 0.858    | ppbv   | 96       |
| 28) Methyl tert-Butyl Ether   | 4.574  | 73    | 67246    | 0.978    | ppbv   | 99       |
| 29) Chloroform                | 5.253  | 83    | 183121   | 1.030    | ppbv   | 96       |
| 30) Cyclohexane               | 6.577  | 84    | 77992    | 0.879    | ppbv   | 87       |
| 31) cis-1,2-Dichloroethene    | 5.060  | 61    | 103032   | 0.957    | ppbv   | 98       |
| 32) 1,1,1-Trichloroethane     | 5.979  | 97    | 168967   | 0.976    | ppbv   | 98       |
| 34) 2-Butanone                | 4.774  | 43    | 140700   | 0.904    | ppbv   | 95       |
| 35) Carbon Tetrachloride      | 6.475  | 117   | 166616   | 0.939    | ppbv   | 97       |
| 36) Benzene                   | 6.349  | 78    | 217922   | 0.927    | ppbv   | 97       |
| 37) 1,2-Dichloroethane        | 5.787  | 62    | 130607   | 0.992    | ppbv   | 97       |
| 38) Trichloroethene           | 7.269  | 130   | 114753   | 1.065    | ppbv   | 94       |
| 39) 1,2-Dichloropropane       | 7.050  | 63    | 89452    | 0.994    | ppbv   | 92       |
| 40) 1,4-Dioxane               | 7.294  | 88    | 32240    | 0.891    | ppbv # | 87       |
| 41) Tetrahydrofuran           | 5.552  | 42    | 82665m   | 0.928    | ppbv   |          |
| 42) Bromodichloromethane      | 7.230  | 83    | 179366   | 0.944    | ppbv   | 99       |
| 43) Methyl Methacrylate       | 7.462  | 69    | 72483    | 0.860    | ppbv   | 93       |
| 44) 2,2,4-Trimethylpentane    | 7.304  | 57    | 389526   | 0.992    | ppbv   | 96       |
| 45) t-1,3-Dichloropropene     | 8.693  | 75    | 50543    | 0.651    | ppbv   | 95       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041594.D  
 Acq On : 16 Sep 2024 14:36  
 Operator : SY/MD  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Quant Time: Sep 16 20:15:06 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Mon Sep 16 20:14:05 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.118  | 75   | 82468    | 0.736 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 8.873  | 97   | 97460    | 0.982 | ppbv   | 94       |
| 48) Dibromochloromethane      | 9.687  | 129  | 137881   | 0.862 | ppbv   | 99       |
| 49) Bromoform                 | 12.388 | 173  | 116706   | 0.864 | ppbv   | 97       |
| 50) 4-Methyl-2-Pentanone      | 8.172  | 43   | 224369   | 0.913 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.552  | 43   | 163976m  | 0.883 | ppbv   |          |
| 52) Tetrachloroethene         | 10.593 | 164  | 86388    | 0.951 | ppbv   | 94       |
| 53) Toluene                   | 9.198  | 91   | 226360   | 0.864 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 9.986  | 107  | 121996   | 0.924 | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 11.487 | 131  | 116306   | 1.034 | ppbv # | 1        |
| 57) Chlorobenzene             | 11.503 | 112  | 222410   | 1.077 | ppbv # | 94       |
| 58) Ethyl Benzene             | 12.072 | 91   | 318095   | 0.951 | ppbv   | 97       |
| 59) m/p-Xylene                | 12.346 | 91   | 564895m  | 1.957 | ppbv   |          |
| 60) o-Xylene                  | 13.037 | 91   | 270052   | 0.989 | ppbv   | 100      |
| 61) Styrene                   | 12.879 | 104  | 98015    | 0.796 | ppbv   | 97       |
| 62) Isopropylbenzene          | 14.008 | 105  | 423939   | 1.021 | ppbv   | 98       |
| 63) 1,1,2,2-Tetrachloroethane | 13.027 | 83   | 154402   | 0.895 | ppbv   | 99       |
| 64) n-propylbenzene           | 14.895 | 120  | 103274   | 0.952 | ppbv   | 80       |
| 65) tert-Butylbenzene         | 16.072 | 119  | 388333   | 1.036 | ppbv   | 98       |
| 66) Benzyl Chloride           | 16.313 | 91   | 18633m   | 0.775 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.616 | 105  | 546134   | 1.057 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.976 | 119  | 428199   | 0.999 | ppbv   | 97       |
| 70) n-Butylbenzene            | 17.870 | 91   | 456221   | 1.038 | ppbv   | 96       |
| 71) 2-Chlorotoluene           | 14.780 | 91   | 303828   | 0.992 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.172 | 105  | 315109   | 0.980 | ppbv # | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.330 | 105  | 282986   | 1.022 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.082 | 105  | 342646m  | 1.064 | ppbv   |          |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 206679   | 1.021 | ppbv   | 96       |
| 76) 1,4-Dichlorobenzene       | 16.452 | 146  | 205278   | 1.047 | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 17.124 | 146  | 206345   | 1.028 | ppbv   | 96       |
| 78) Hexachloro-1,3-Butadiene  | 22.609 | 225  | 180258m  | 1.053 | ppbv   |          |
| 79) Naphthalene               | 21.368 | 128  | 252197m  | 0.887 | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.358 | 142  | 126259m  | 0.530 | ppbv   |          |
| 81) 1,2,4-Trichlorobenzene    | 21.124 | 180  | 145946   | 0.863 | ppbv   | 97       |

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

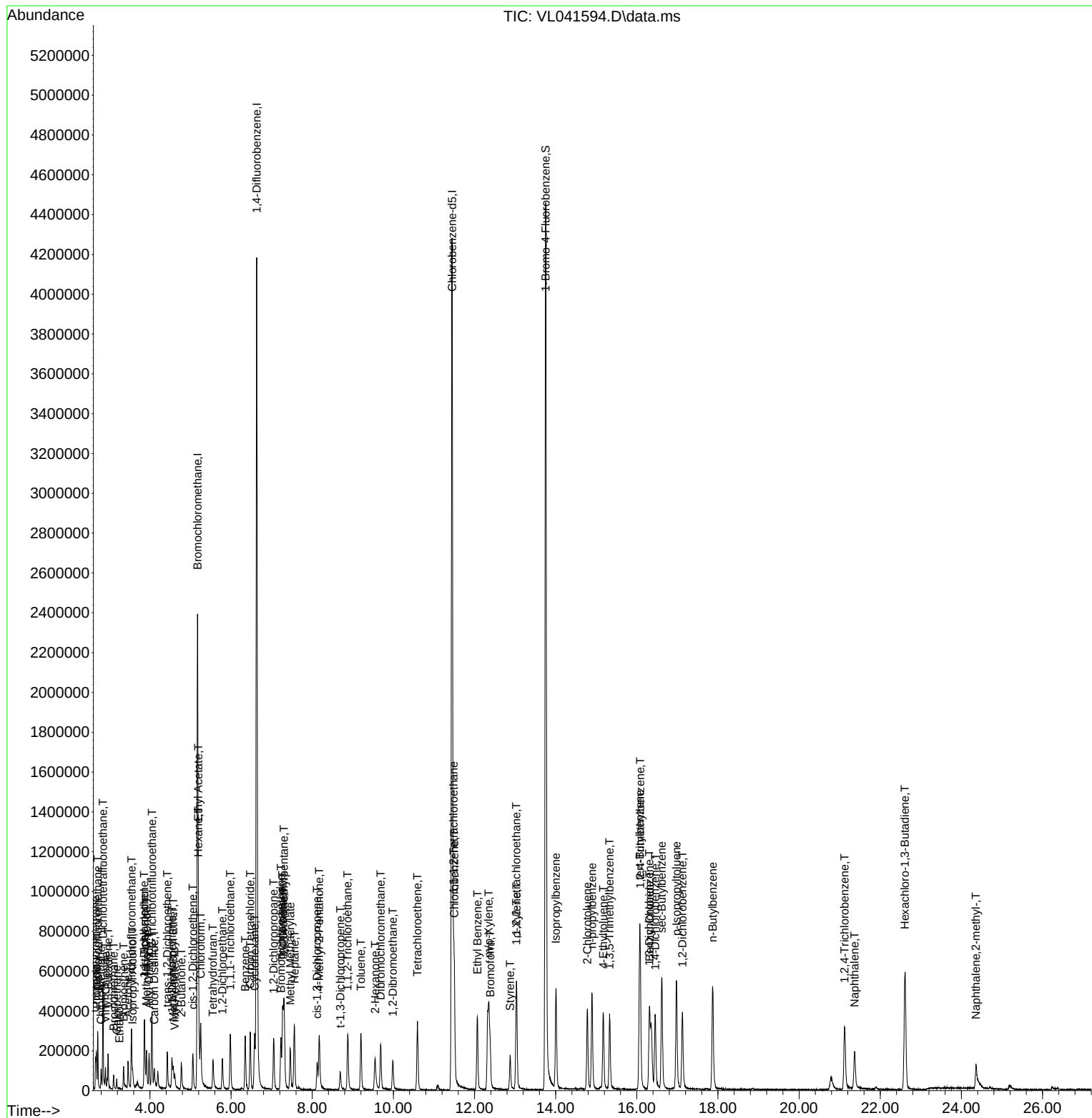
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041594.D  
Acq On : 16 Sep 2024 14:36  
Operator : SY/MD  
Sample : VSTDIC001  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Quant Time: Sep 16 20:15:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Mon Sep 16 20:14:05 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
Supervised By : Mahesh Dadoda 09/17/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041596.D  
Acq On : 16 Sep 2024 15:56  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Quant Time: Sep 17 03:12:36 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
QLast Update : Tue Sep 17 02:32:57 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|-------|----------|
| Internal Standards            |        |       |          |          |       |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1150062  | 10.000   | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.632  | 114   | 3120058  | 10.000   | ppbv  | 0.00     |
| 55) Chlorobenzene-d5          | 11.445 | 117   | 2779435  | 10.000   | ppbv  | 0.00     |
| System Monitoring Compounds   |        |       |          |          |       |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.754 | 95    | 2086516  | 9.823    | ppbv  | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =     | 98.200%  |
| Target Compounds              |        |       |          |          |       |          |
| 5) Vinyl Chloride             | 2.915  | 62    | 6034m    | 0.084    | ppbv  | Qvalue   |
| 32) 1,1,1-Trichloroethane     | 5.986  | 97    | 13088m   | 0.076    | ppbv  |          |
| 35) Carbon Tetrachloride      | 6.468  | 117   | 12312m   | 0.072    | ppbv  |          |
| 38) Trichloroethene           | 7.272  | 130   | 9519m    | 0.089    | ppbv  |          |
| 52) Tetrachloroethene         | 10.590 | 164   | 6744m    | 0.077    | ppbv  |          |
| 54) 1,2-Dibromoethane         | 9.979  | 107   | 8094m    | 0.064    | ppbv  |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.037 | 83    | 10963m   | 0.068    | ppbv  |          |
| 79) Naphthalene               | 21.374 | 128   | 8646m    | 0.032    | ppbv  |          |

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

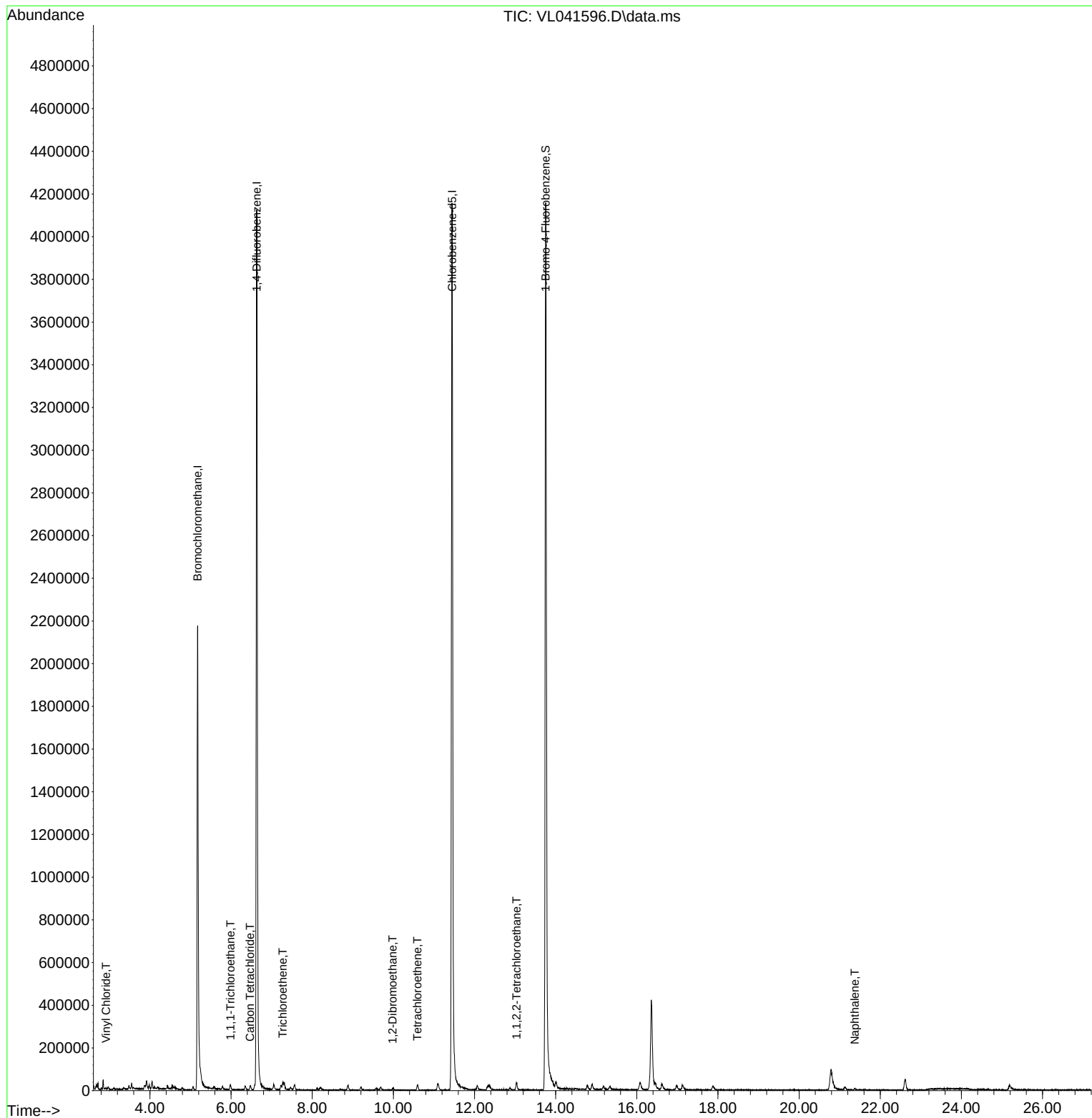
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041596.D  
Acq On : 16 Sep 2024 15:56  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Quant Time: Sep 17 03:12:36 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Sep 17 02:32:57 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
Supervised By : Mahesh Dadoda 09/17/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041597.D  
Acq On : 16 Sep 2024 16:38  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 09/17/2024  
Supervised By :Mahesh Dadoda 09/17/2024

Quant Time: Sep 17 05:05:22 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2  
QLast Update : Tue Sep 17 04:57:28 2024  
Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.173  | 49    | 1115440  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.632  | 114   | 3030679  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.439 | 117   | 2692276  | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.751 | 95    | 1983531  | 9.951    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 99.500%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 5) Vinyl Chloride             | 2.906  | 62    | 1537m    | 0.024    | ppbv   |          |
| 32) 1,1,1-Trichloroethane     | 5.976  | 97    | 3900m    | 0.026    | ppbv   |          |
| 35) Carbon Tetrachloride      | 6.475  | 117   | 3299m    | 0.023    | ppbv   |          |
| 38) Trichloroethene           | 7.269  | 130   | 3158m    | 0.029    | ppbv   |          |
| 52) Tetrachloroethene         | 10.581 | 164   | 1981m    | 0.026    | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83    | 3376m    | 0.027    | ppbv   |          |

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

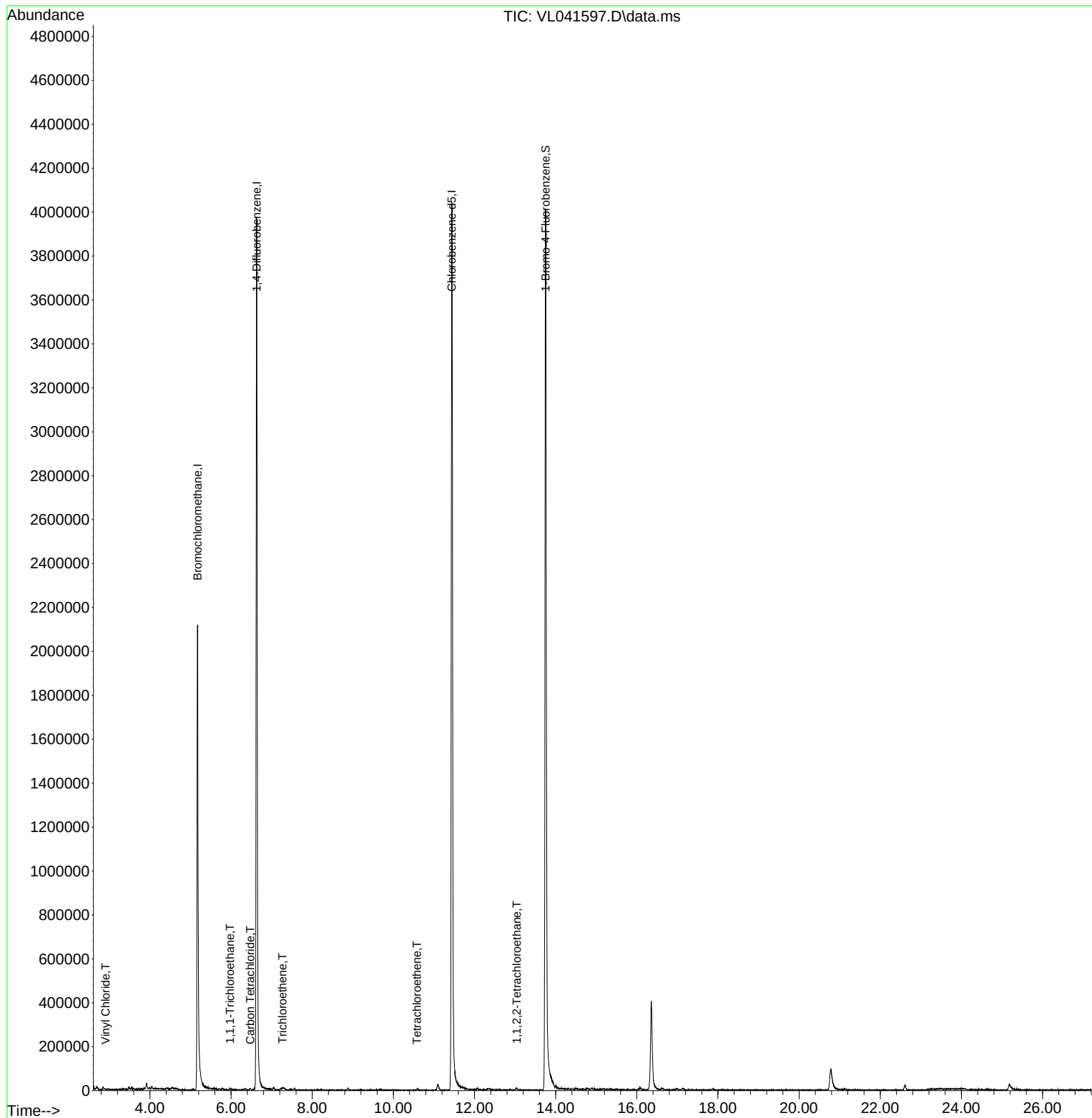
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041597.D  
Acq On : 16 Sep 2024 16:38  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Sep 17 05:05:22 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Sep 17 04:57:28 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
Supervised By : Mahesh Dadoda 09/17/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041598.D  
 Acq On : 16 Sep 2024 17:20  
 Operator : SY/MD  
 Sample : VSTDIC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Quant Time: Sep 17 09:14:19 2024  
 Quant Title :  
 QLast Update : Tue Sep 17 09:12:21 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/17/2024  
 Supervised By :Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1175483  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3256634  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.449 | 117   | 3327610m | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.757 | 95    | 2332788  | 9.110    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 91.100%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.719  | 85    | 1900049  | 9.396    | ppbv   | 100      |
| 3) Chlorodifluoromethane      | 2.664  | 51    | 1860879  | 13.298   | ppbv   | 99       |
| 4) Chloromethane              | 2.803  | 50    | 1044613m | 14.035   | ppbv   |          |
| 5) Vinyl Chloride             | 2.909  | 62    | 1021949  | 13.930   | ppbv   | 99       |
| 6) Bromomethane               | 3.105  | 94    | 462431   | 12.264   | ppbv   | 99       |
| 7) Chloroethane               | 3.185  | 64    | 360774   | 14.249   | ppbv   | 98       |
| 8) Dichlorotetrafluoroethane  | 2.845  | 85    | 2287936  | 12.769   | ppbv   | 99       |
| 9) Propene                    | 2.684  | 41    | 862437   | 13.416   | ppbv   | 100      |
| 10) Heptane                   | 7.561  | 43    | 2181339  | 15.103   | ppbv   | 100      |
| 11) Trichlorofluoromethane    | 3.549  | 101   | 2384942  | 13.280   | ppbv   | 99       |
| 12) 1,1,2-Trichlorotrifluo... | 4.050  | 101   | 1737916  | 13.439   | ppbv   | 99       |
| 13) Ethanol                   | 3.234  | 45    | 32379m   | 5.636    | ppbv   |          |
| 14) Bromoethene               | 3.353  | 108   | 722975   | 14.340   | ppbv   | 100      |
| 15) Acetone                   | 3.452  | 43    | 1746071  | 13.073   | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.973  | 39    | 997661   | 13.981   | ppbv   | 99       |
| 17) tert-Butyl alcohol        | 3.861  | 59    | 1826662  | 14.996   | ppbv   | 99       |
| 18) 1,1-Dichloroethene        | 3.864  | 96    | 783989   | 14.172   | ppbv   | 98       |
| 19) Isopropyl Alcohol         | 3.562  | 45    | 998621   | 12.789   | ppbv   | 100      |
| 20) Methylene Chloride        | 3.918  | 84    | 642783   | 12.906   | ppbv   | 93       |
| 21) Allyl Chloride            | 3.979  | 41    | 1225956  | 13.997   | ppbv   | 99       |
| 22) trans-1,2-Dichloroethene  | 4.430  | 96    | 781882   | 14.136   | ppbv   | 99       |
| 23) Vinyl Acetate             | 4.610  | 43    | 1212589  | 11.888   | ppbv # | 98       |
| 24) 1,1-Dichloroethane        | 4.549  | 63    | 1656513  | 13.792   | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.185  | 43    | 3850317  | 14.511   | ppbv   | 99       |
| 26) Hexane                    | 5.195  | 57    | 1577948  | 14.336   | ppbv   | 99       |
| 27) Carbon Disulfide          | 4.108  | 76    | 1898447  | 14.743   | ppbv   | 99       |
| 28) Methyl tert-Butyl Ether   | 4.568  | 73    | 934921   | 13.469   | ppbv   | 100      |
| 29) Chloroform                | 5.259  | 83    | 2472134  | 13.770   | ppbv   | 98       |
| 30) Cyclohexane               | 6.584  | 84    | 1384242  | 15.443   | ppbv   | 96       |
| 31) cis-1,2-Dichloroethene    | 5.063  | 61    | 1572482  | 14.462   | ppbv   | 99       |
| 32) 1,1,1-Trichloroethane     | 5.986  | 97    | 2449235  | 14.015   | ppbv   | 99       |
| 34) 2-Butanone                | 4.767  | 43    | 2226315  | 14.132   | ppbv   | 99       |
| 35) Carbon Tetrachloride      | 6.478  | 117   | 2562607  | 14.267   | ppbv   | 99       |
| 36) Benzene                   | 6.352  | 78    | 3400759  | 14.291   | ppbv   | 98       |
| 37) 1,2-Dichloroethane        | 5.790  | 62    | 1894411  | 14.224   | ppbv   | 99       |
| 38) Trichloroethene           | 7.272  | 130   | 1777141  | 16.301   | ppbv   | 97       |
| 39) 1,2-Dichloropropane       | 7.057  | 63    | 1318620  | 14.474   | ppbv   | 99       |
| 40) 1,4-Dioxane               | 7.266  | 88    | 453503   | 12.392   | ppbv # | 47       |
| 41) Tetrahydrofuran           | 5.536  | 42    | 1391996  | 15.449   | ppbv   | 100      |
| 42) Bromodichloromethane      | 7.233  | 83    | 2707351  | 14.078   | ppbv   | 97       |
| 43) Methyl Methacrylate       | 7.455  | 69    | 1368120  | 16.033   | ppbv   | 98       |
| 44) 2,2,4-Trimethylpentane    | 7.307  | 57    | 5619291  | 14.138   | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.693  | 75    | 1264444  | 16.099   | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 8.124  | 75    | 1733083  | 15.281   | ppbv   | 100      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041598.D  
Acq On : 16 Sep 2024 17:20  
Operator : SY/MD  
Sample : VSTDICC015  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC015

Quant Time: Sep 17 09:14:19 2024  
Quant Title :  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 09/17/2024  
Supervised By :Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 47) 1,1,2-Trichloroethane     | 8.880  | 97   | 1416240  | 14.103 | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.693  | 129  | 2380715  | 14.716 | ppbv   | 99       |
| 49) Bromoform                 | 12.388 | 173  | 2103505  | 15.393 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.159  | 43   | 3768387  | 15.162 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.529  | 43   | 3039864  | 16.175 | ppbv   | 98       |
| 52) Tetrachloroethene         | 10.597 | 164  | 1298509  | 14.122 | ppbv   | 99       |
| 53) Toluene                   | 9.204  | 91   | 3987119  | 15.042 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 9.989  | 107  | 1951435  | 14.599 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 11.490 | 131  | 1724113  | 13.360 | ppbv # | 92       |
| 57) Chlorobenzene             | 11.507 | 112  | 3100633  | 13.087 | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.069 | 91   | 5323752  | 13.880 | ppbv   | 100      |
| 59) m/p-Xylene                | 12.352 | 91   | 9021854m | 27.249 | ppbv   |          |
| 60) o-Xylene                  | 13.037 | 91   | 4380559  | 13.986 | ppbv   | 99       |
| 61) Styrene                   | 12.879 | 104  | 2207148  | 15.620 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.011 | 105  | 6290796  | 13.212 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.027 | 83   | 2059305  | 10.412 | ppbv   | 99       |
| 64) n-propylbenzene           | 14.899 | 120  | 1733510  | 13.926 | ppbv   | 94       |
| 65) tert-Butylbenzene         | 16.072 | 119  | 5661694  | 13.165 | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.304 | 91   | 343877   | 12.466 | ppbv   | 97       |
| 67) sec-Butylbenzene          | 16.616 | 105  | 7844186  | 13.238 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 16.976 | 119  | 6613794  | 13.451 | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.863 | 91   | 6825900  | 13.542 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 14.780 | 91   | 4774971  | 13.599 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.172 | 105  | 5251979  | 14.243 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 15.330 | 105  | 4527850  | 14.254 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.088 | 105  | 4937113  | 13.368 | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 16.313 | 146  | 3113298  | 13.410 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.455 | 146  | 3063921  | 13.630 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.120 | 146  | 3015374  | 13.102 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.609 | 225  | 2302119  | 11.730 | ppbv   | 99       |
| 79) Naphthalene               | 21.358 | 128  | 4916804  | 15.084 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.355 | 142  | 3899900  | 14.273 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.117 | 180  | 2616194  | 13.487 | ppbv   | 99       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041599.D  
 Acq On : 16 Sep 2024 18:46  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL091624

Quant Time: Sep 17 09:18:19 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1211658  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.636  | 114   | 3308799  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.449 | 117   | 3161469m | 10.000   | ppbv   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.751 | 95    | 2308391  | 9.919    | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 99.200%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.723  | 85    | 1544917  | 8.829    | ppbv   | 99       |
| 3) Chlorodifluoromethane      | 2.668  | 51    | 1323860  | 9.008    | ppbv   | 99       |
| 4) Chloromethane              | 2.806  | 50    | 724772   | 8.966    | ppbv   | 95       |
| 5) Vinyl Chloride             | 2.912  | 62    | 707659   | 10.111   | ppbv   | 99       |
| 6) Bromomethane               | 3.108  | 94    | 319232   | 9.168    | ppbv   | 99       |
| 7) Chloroethane               | 3.189  | 64    | 251821   | 9.251    | ppbv   | 99       |
| 8) Dichlorotetrafluoroethane  | 2.848  | 85    | 1641100  | 8.941    | ppbv   | 98       |
| 9) Propene                    | 2.687  | 41    | 640849   | 10.338   | ppbv   | 100      |
| 10) Heptane                   | 7.565  | 43    | 1512434  | 10.420   | ppbv   | 100      |
| 11) Trichlorofluoromethane    | 3.552  | 101   | 1652570  | 8.875    | ppbv   | 99       |
| 12) 1,1,2-Trichlorotrifluo... | 4.054  | 101   | 1197204  | 8.877    | ppbv   | 99       |
| 13) Ethanol                   | 3.240  | 45    | 22445m   | 4.816    | ppbv   |          |
| 14) Bromoethene               | 3.356  | 108   | 497665   | 9.732    | ppbv   | 98       |
| 15) Acetone                   | 3.456  | 43    | 1235854  | 8.124    | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.977  | 39    | 708349   | 9.574    | ppbv   | 99       |
| 17) tert-Butyl alcohol        | 3.864  | 59    | 1338127  | 10.002   | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.867  | 96    | 531734   | 9.314    | ppbv   | 99       |
| 19) Isopropyl Alcohol         | 3.562  | 45    | 679011   | 8.720    | ppbv   | 99       |
| 20) Methylene Chloride        | 3.919  | 84    | 447442   | 7.830    | ppbv   | 95       |
| 21) Allyl Chloride            | 3.983  | 41    | 870229   | 9.870    | ppbv   | 100      |
| 22) trans-1,2-Dichloroethene  | 4.433  | 96    | 544525   | 9.561    | ppbv   | 99       |
| 23) Vinyl Acetate             | 4.610  | 43    | 879864   | 10.516   | ppbv # | 97       |
| 24) 1,1-Dichloroethane        | 4.549  | 63    | 1155920  | 9.204    | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.189  | 43    | 2756002  | 10.092   | ppbv   | 99       |
| 26) Hexane                    | 5.195  | 57    | 1129442  | 9.917    | ppbv   | 99       |
| 27) Carbon Disulfide          | 4.112  | 76    | 1301729  | 10.753   | ppbv   | 99       |
| 28) Methyl tert-Butyl Ether   | 4.571  | 73    | 708243   | 10.087   | ppbv   | 99       |
| 29) Chloroform                | 5.259  | 83    | 1692873  | 9.084    | ppbv   | 100      |
| 30) Cyclohexane               | 6.587  | 84    | 939832   | 10.706   | ppbv   | 98       |
| 31) cis-1,2-Dichloroethene    | 5.063  | 61    | 1109424  | 10.261   | ppbv   | 98       |
| 32) 1,1,1-Trichloroethane     | 5.986  | 97    | 1671780  | 10.071   | ppbv   | 99       |
| 34) 2-Butanone                | 4.771  | 43    | 1595025  | 10.110   | ppbv   | 99       |
| 35) Carbon Tetrachloride      | 6.475  | 117   | 1729977  | 10.656   | ppbv   | 98       |
| 36) Benzene                   | 6.353  | 78    | 2377400  | 10.346   | ppbv   | 100      |
| 37) 1,2-Dichloroethane        | 5.790  | 62    | 1303965  | 9.780    | ppbv   | 99       |
| 38) Trichloroethene           | 7.272  | 130   | 1220709  | 10.316   | ppbv   | 99       |
| 39) 1,2-Dichloropropane       | 7.057  | 63    | 924715   | 9.892    | ppbv   | 97       |
| 40) 1,4-Dioxane               | 7.269  | 88    | 268441m  | 7.618    | ppbv   |          |
| 41) Tetrahydrofuran           | 5.539  | 42    | 998000   | 11.494   | ppbv   | 100      |
| 42) Bromodichloromethane      | 7.230  | 83    | 1853470  | 9.992    | ppbv   | 99       |
| 43) Methyl Methacrylate       | 7.455  | 69    | 952193   | 11.579   | ppbv   | 98       |
| 44) 2,2,4-Trimethylpentane    | 7.308  | 57    | 3942109  | 9.916    | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 8.693  | 75    | 854719   | 12.892   | ppbv   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
 Data File : VL041599.D  
 Acq On : 16 Sep 2024 18:46  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL091624

Quant Time: Sep 17 09:18:19 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/17/2024  
 Supervised By : Mahesh Dadoda 09/17/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.124  | 75   | 1179959  | 12.148 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 8.880  | 97   | 965904   | 9.731  | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.690  | 129  | 1596069  | 10.613 | ppbv   | 100      |
| 49) Bromoform                 | 12.388 | 173  | 1398574  | 10.834 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.163  | 43   | 2618515  | 10.747 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.529  | 43   | 2107044  | 11.433 | ppbv # | 99       |
| 52) Tetrachloroethene         | 10.594 | 164  | 876069   | 10.529 | ppbv   | 97       |
| 53) Toluene                   | 9.201  | 91   | 2736931  | 11.220 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 9.989  | 107  | 1334237  | 10.916 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 11.487 | 131  | 1153971  | 9.349  | ppbv   | 100      |
| 57) Chlorobenzene             | 11.507 | 112  | 2110664  | 9.260  | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.066 | 91   | 3636857  | 10.746 | ppbv   | 100      |
| 59) m/p-Xylene                | 12.352 | 91   | 6119550m | 20.317 | ppbv   |          |
| 60) o-Xylene                  | 13.034 | 91   | 2941243  | 10.185 | ppbv   | 99       |
| 61) Styrene                   | 12.873 | 104  | 1461911  | 12.117 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.008 | 105  | 4273531  | 9.768  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.028 | 83   | 1389186  | 9.409  | ppbv   | 99       |
| 64) n-propylbenzene           | 14.896 | 120  | 1144513  | 10.129 | ppbv   | 99       |
| 65) tert-Butylbenzene         | 16.069 | 119  | 3822907  | 9.532  | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.304 | 91   | 212798   | 10.206 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 16.613 | 105  | 5350490  | 9.616  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 16.973 | 119  | 4497521  | 9.986  | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.863 | 91   | 4595438  | 9.740  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.780 | 91   | 3223465  | 10.013 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.169 | 105  | 3524544  | 10.441 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.327 | 105  | 3014196  | 10.112 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.085 | 105  | 3320425  | 9.517  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 2073354  | 9.482  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.452 | 146  | 2027061  | 9.675  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.117 | 146  | 1996843  | 9.250  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.612 | 225  | 1507968m | 8.468  | ppbv   |          |
| 79) Naphthalene               | 21.355 | 128  | 3203623  | 12.476 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 24.349 | 142  | 2446937  | 13.599 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.114 | 180  | 1671079  | 10.236 | ppbv   | 98       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041599.D  
Acq On : 16 Sep 2024 18:46  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL091624

Quant Time: Sep 17 09:18:19 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 105   | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.444 | 1.275  | 11.7  | 102   | 0.01     |
| 3    | Chlorodifluoromethane       | 1.213 | 1.093  | 9.9   | 104   | 0.02     |
| 4    | Chloromethane               | 0.667 | 0.598  | 10.3  | 103   | 0.02     |
| 5 T  | Vinyl Chloride              | 0.578 | 0.584  | -1.0  | 105   | 0.02     |
| 6 T  | Bromomethane                | 0.287 | 0.263  | 8.4   | 101   | 0.01     |
| 7    | Chloroethane                | 0.225 | 0.208  | 7.6   | 102   | 0.02     |
| 8 T  | Dichlorotetrafluoroethane   | 1.515 | 1.354  | 10.6  | 100   | 0.01     |
| 9 T  | Propene                     | 0.512 | 0.529  | -3.3  | 108   | 0.02     |
| 10 T | Heptane                     | 1.198 | 1.248  | -4.2  | 103   | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.537 | 1.364  | 11.3  | 100   | 0.01     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.113 | 0.988  | 11.2  | 100   | 0.01     |
| 13   | Ethanol                     | 0.038 | 0.019# | 50.0# | 82    | 0.02     |
| 14 T | Bromoethene                 | 0.422 | 0.411  | 2.6   | 102   | 0.01     |
| 15 T | Acetone                     | 1.255 | 1.020  | 18.7  | 104   | 0.01     |
| 16 T | 1,3-Butadiene               | 0.611 | 0.585  | 4.3   | 106   | 0.01     |
| 17   | tert-Butyl alcohol          | 1.104 | 1.104  | 0.0   | 106   | 0.01     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.439  | 6.8   | 97    | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.643 | 0.560  | 12.9  | 94    | 0.00     |
| 20 T | Methylene Chloride          | 0.472 | 0.369  | 21.8  | 100   | 0.00     |
| 21 T | Allyl Chloride              | 0.728 | 0.718  | 1.4   | 103   | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.470 | 0.449  | 4.5   | 103   | 0.01     |
| 23 T | Vinyl Acetate               | 0.691 | 0.726  | -5.1  | 111   | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.036 | 0.954  | 7.9   | 101   | 0.00     |
| 25 T | Ethyl Acetate               | 2.254 | 2.275  | -0.9  | 105   | 0.00     |
| 26 T | Hexane                      | 0.940 | 0.932  | 0.9   | 106   | 0.00     |
| 27 T | Carbon Disulfide            | 0.999 | 1.074  | -7.5  | 102   | 0.01     |
| 28 T | Methyl tert-Butyl Ether     | 0.579 | 0.585  | -1.0  | 110   | 0.00     |
| 29 T | Chloroform                  | 1.538 | 1.397  | 9.2   | 101   | 0.00     |
| 30 T | Cyclohexane                 | 0.725 | 0.776  | -7.0  | 104   | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.892 | 0.916  | -2.7  | 107   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.370 | 1.380  | -0.7  | 101   | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 104   | 0.00     |
| 34 T | 2-Butanone                  | 0.477 | 0.482  | -1.0  | 106   | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.491 | 0.523  | -6.5  | 100   | 0.00     |
| 36 T | Benzene                     | 0.694 | 0.719  | -3.6  | 104   | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.403 | 0.394  | 2.2   | 102   | 0.00     |
| 38 T | Trichloroethene             | 0.358 | 0.369  | -3.1  | 101   | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.283 | 0.279  | 1.4   | 105   | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.107 | 0.081  | 24.3  | 74    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.262 | 0.302  | -15.3 | 108   | 0.00     |
| 42 T | Bromodichloromethane        | 0.561 | 0.560  | 0.2   | 101   | 0.00     |
| 43   | Methyl Methacrylate         | 0.249 | 0.288  | -15.7 | 106   | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.202 | 1.191  | 0.9   | 102   | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.200 | 0.258  | -29.0 | 109   | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.294 | 0.357  | -21.4 | 105   | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.300 | 0.292  | 2.7   | 101   | 0.00     |
| 48 T | Dibromochloromethane        | 0.455 | 0.482  | -5.9  | 101   | 0.00     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091624\  
Data File : VL041599.D  
Acq On : 16 Sep 2024 18:46  
Operator : SY/MD  
Sample : VSTDICV010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL091624

Quant Time: Sep 17 09:18:19 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|-------|-------|--------|-------|----------|
| 49 T | Bromoform                 | 0.390 | 0.423 | -8.5   | 101   | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.736 | 0.791 | -7.5   | 104   | 0.00     |
| 51 T | 2-Hexanone                | 0.557 | 0.637 | -14.4  | 105   | 0.00     |
| 52 T | Tetrachloroethene         | 0.251 | 0.265 | -5.6   | 103   | 0.00     |
| 53 T | Toluene                   | 0.737 | 0.827 | -12.2  | 103   | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.369 | 0.403 | -9.2   | 103   | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 103   | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.390 | 0.365 | 6.4    | 99    | 0.00     |
| 57 T | Chlorobenzene             | 0.721 | 0.668 | 7.4    | 100   | 0.00     |
| 58 T | Ethyl Benzene             | 1.070 | 1.150 | -7.5   | 101   | 0.00     |
| 59 T | m/p-Xylene                | 0.953 | 0.968 | -1.6   | 100   | 0.00     |
| 60 T | o-Xylene                  | 0.913 | 0.930 | -1.9   | 100   | 0.00     |
| 61 T | Styrene                   | 0.382 | 0.462 | -20.9  | 102   | 0.00     |
| 62   | Isopropylbenzene          | 1.384 | 1.352 | 2.3    | 100   | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.467 | 0.439 | 6.0    | 99    | 0.00     |
| 64   | n-propylbenzene           | 0.357 | 0.362 | -1.4   | 100   | 0.00     |
| 65   | tert-Butylbenzene         | 1.269 | 1.209 | 4.7    | 99    | 0.00     |
| 66 T | Benzyl Chloride           | 0.066 | 0.067 | -1.5   | 103   | 0.00     |
| 67   | sec-Butylbenzene          | 1.760 | 1.692 | 3.9    | 98    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.736 | 0.730 | 0.8    | 101   | 0.00     |
| 69   | p-Isopropyltoluene        | 1.425 | 1.423 | 0.1    | 99    | 0.00     |
| 70   | n-Butylbenzene            | 1.492 | 1.454 | 2.5    | 99    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.018 | 1.020 | -0.2   | 100   | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.068 | 1.115 | -4.4   | 100   | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.943 | 0.953 | -1.1   | 99    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.104 | 1.050 | 4.9    | 99    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.692 | 0.656 | 5.2    | 99    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.663 | 0.641 | 3.3    | 100   | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.683 | 0.632 | 7.5    | 99    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.563 | 0.477 | 15.3   | 100   | 0.00     |
| 79 T | Naphthalene               | 0.812 | 1.013 | -24.8  | 101   | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.569 | 0.774 | -36.0# | 106   | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.516 | 0.529 | -2.5   | 100   | 0.00     |

(#) = Out of Range

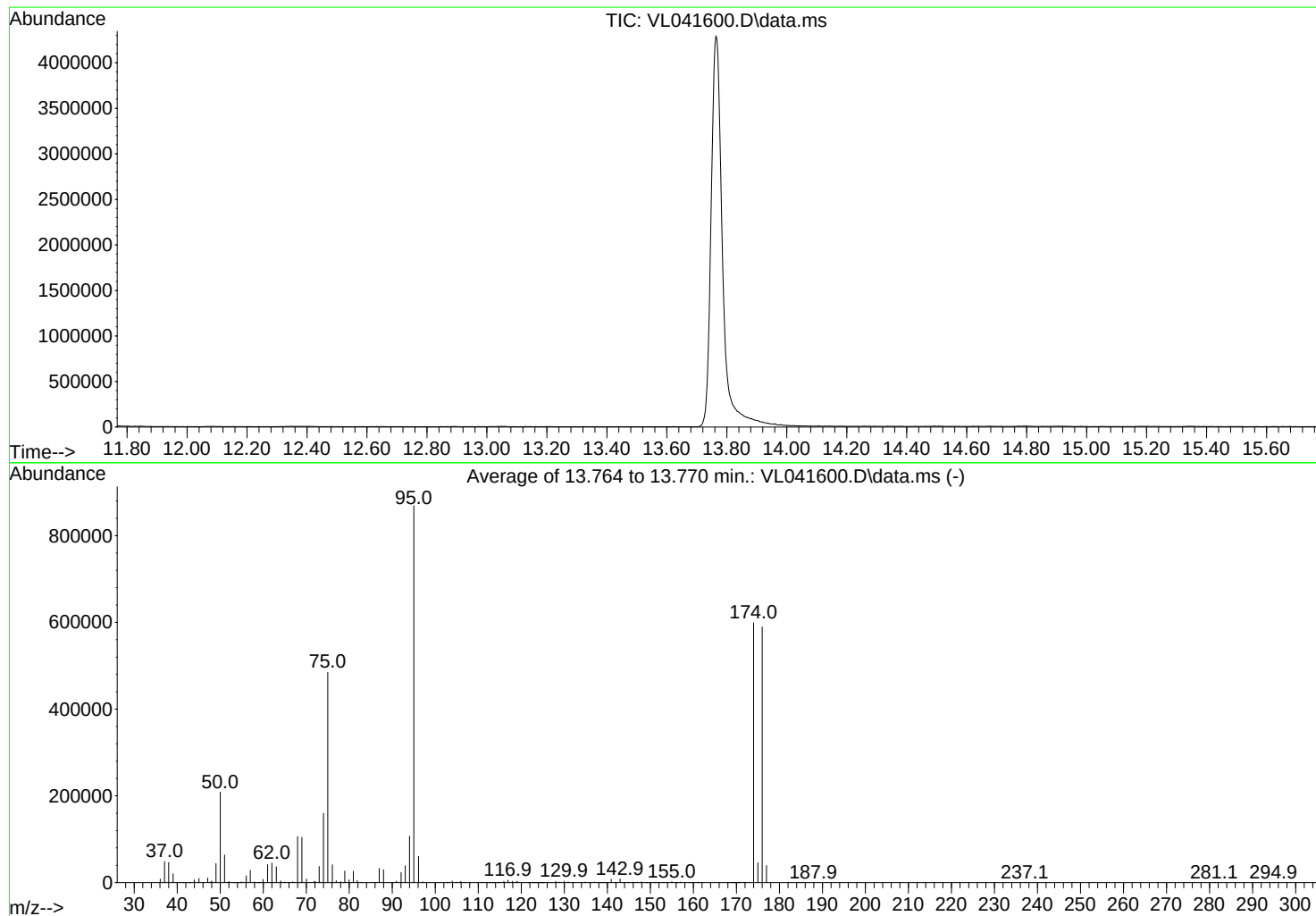
SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041600.D  
Acq On : 18 Sep 2024 8:06  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Tue Sep 17 09:12:21 2024



AutoFind: Scans 3471, 3472, 3473; Background Corrected with Scan 3447

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 24.0  | 208555 | PASS      |
| 75     | 95      | 30     | 66     | 55.8  | 485056 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 869077 | PASS      |
| 96     | 95      | 5      | 9      | 7.0   | 60467  | PASS      |
| 173    | 174     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 174    | 95      | 50     | 120    | 68.9  | 599040 | PASS      |
| 175    | 174     | 4      | 9      | 7.6   | 45741  | PASS      |
| 176    | 174     | 93     | 101    | 98.5  | 589888 | PASS      |
| 177    | 176     | 5      | 9      | 6.7   | 39323  | PASS      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
 Data File : VL041601.D  
 Acq On : 18 Sep 2024 8:46  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Sep 19 01:28:02 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/19/2024  
 Supervised By : Mahesh Dadoda 09/19/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.185  | 49    | 1176243  | 10.000   | ppbv   | 0.02     |
| 33) 1,4-Difluorobenzene       | 6.645  | 114   | 3208665  | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5          | 11.458 | 117   | 3110660  | 10.000   | ppbv   | 0.01     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.767 | 95    | 2275993  | 9.939    | ppbv   | 0.02     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 99.400%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.726  | 85    | 1344207  | 7.913    | ppbv   | 99       |
| 3) Chlorodifluoromethane      | 2.671  | 51    | 1296141  | 9.085    | ppbv   | 99       |
| 4) Chloromethane              | 2.809  | 50    | 708455   | 9.028    | ppbv   | 97       |
| 5) Vinyl Chloride             | 2.915  | 62    | 705961   | 10.390   | ppbv   | 98       |
| 6) Bromomethane               | 3.115  | 94    | 311784   | 9.223    | ppbv   | 97       |
| 7) Chloroethane               | 3.192  | 64    | 251005   | 9.499    | ppbv   | 98       |
| 8) Dichlorotetrafluoroethane  | 2.851  | 85    | 1646174  | 9.238    | ppbv   | 100      |
| 9) Propene                    | 2.690  | 41    | 612014   | 10.170   | ppbv   | 98       |
| 10) Heptane                   | 7.571  | 43    | 1478682  | 10.495   | ppbv   | 100      |
| 11) Trichlorofluoromethane    | 3.555  | 101   | 1639385  | 9.069    | ppbv   | 100      |
| 12) 1,1,2-Trichlorotrifluo... | 4.060  | 101   | 1214036  | 9.273    | ppbv   | 100      |
| 13) Ethanol                   | 3.243  | 45    | 26533m   | 5.865    | ppbv   |          |
| 14) Bromoethene               | 3.359  | 108   | 499377   | 10.060   | ppbv   | 100      |
| 15) Acetone                   | 3.462  | 43    | 1208787  | 8.186    | ppbv   | 100      |
| 16) 1,3-Butadiene             | 2.980  | 39    | 673454   | 9.376    | ppbv   | 98       |
| 17) tert-Butyl alcohol        | 3.870  | 59    | 1261877  | 9.716    | ppbv   | 100      |
| 18) 1,1-Dichloroethene        | 3.873  | 96    | 530425   | 9.571    | ppbv   | 97       |
| 19) Isopropyl Alcohol         | 3.568  | 45    | 715591   | 9.466    | ppbv # | 98       |
| 20) Methylene Chloride        | 3.925  | 84    | 450417   | 8.119    | ppbv   | 91       |
| 21) Allyl Chloride            | 3.989  | 41    | 858301   | 10.028   | ppbv   | 100      |
| 22) trans-1,2-Dichloroethene  | 4.436  | 96    | 534697   | 9.671    | ppbv   | 98       |
| 23) Vinyl Acetate             | 4.619  | 43    | 863997   | 10.637   | ppbv   | 99       |
| 24) 1,1-Dichloroethane        | 4.555  | 63    | 1158084  | 9.499    | ppbv   | 100      |
| 25) Ethyl Acetate             | 5.198  | 43    | 2686598  | 10.134   | ppbv   | 100      |
| 26) Hexane                    | 5.205  | 57    | 1094009  | 9.896    | ppbv   | 99       |
| 27) Carbon Disulfide          | 4.118  | 76    | 1309474  | 11.142   | ppbv   | 99       |
| 28) Methyl tert-Butyl Ether   | 4.578  | 73    | 673643   | 9.883    | ppbv   | 98       |
| 29) Chloroform                | 5.266  | 83    | 1702540  | 9.411    | ppbv   | 99       |
| 30) Cyclohexane               | 6.594  | 84    | 911409   | 10.695   | ppbv   | 98       |
| 31) cis-1,2-Dichloroethene    | 5.073  | 61    | 1082135  | 10.310   | ppbv   | 100      |
| 32) 1,1,1-Trichloroethane     | 5.996  | 97    | 1681151  | 10.433   | ppbv   | 99       |
| 34) 2-Butanone                | 4.780  | 43    | 1525364  | 9.970    | ppbv   | 99       |
| 35) Carbon Tetrachloride      | 6.484  | 117   | 1762225  | 11.193   | ppbv   | 97       |
| 36) Benzene                   | 6.362  | 78    | 2328102  | 10.448   | ppbv   | 99       |
| 37) 1,2-Dichloroethane        | 5.799  | 62    | 1282907  | 9.922    | ppbv   | 100      |
| 38) Trichloroethene           | 7.285  | 130   | 1247903  | 10.874   | ppbv   | 99       |
| 39) 1,2-Dichloropropane       | 7.063  | 63    | 902201   | 9.952    | ppbv   | 98       |
| 40) 1,4-Dioxane               | 7.278  | 88    | 375300   | 10.982   | ppbv # | 97       |
| 41) Tetrahydrofuran           | 5.549  | 42    | 940519   | 11.170   | ppbv   | 99       |
| 42) Bromodichloromethane      | 7.240  | 83    | 1854610  | 10.310   | ppbv   | 100      |
| 43) Methyl Methacrylate       | 7.465  | 69    | 916154   | 11.489   | ppbv   | 99       |
| 44) 2,2,4-Trimethylpentane    | 7.320  | 57    | 3916909  | 10.160   | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 8.700  | 75    | 816302   | 12.697   | ppbv   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
 Data File : VL041601.D  
 Acq On : 18 Sep 2024 8:46  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/19/2024  
 Supervised By : Mahesh Dadoda 09/19/2024

Quant Time: Sep 19 01:28:02 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 46) cis-1,3-Dichloropropene   | 8.137  | 75   | 1139357  | 12.096 | ppbv  | 97       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 973665   | 10.116 | ppbv  | 99       |
| 48) Dibromochloromethane      | 9.703  | 129  | 1597346  | 10.953 | ppbv  | 99       |
| 49) Bromoform                 | 12.400 | 173  | 1390368  | 11.106 | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.172  | 43   | 2573409  | 10.892 | ppbv  | 100      |
| 51) 2-Hexanone                | 9.542  | 43   | 2058868  | 11.520 | ppbv  | 100      |
| 52) Tetrachloroethene         | 10.606 | 164  | 868142   | 10.759 | ppbv  | 98       |
| 53) Toluene                   | 9.214  | 91   | 2687707  | 11.362 | ppbv  | 99       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 1304646  | 11.007 | ppbv  | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 11.500 | 131  | 1174008  | 9.667  | ppbv  | 98       |
| 57) Chlorobenzene             | 11.519 | 112  | 2106729  | 9.393  | ppbv  | 99       |
| 58) Ethyl Benzene             | 12.079 | 91   | 3644079  | 10.943 | ppbv  | 98       |
| 59) m/p-Xylene                | 12.365 | 91   | 6150817m | 20.754 | ppbv  |          |
| 60) o-Xylene                  | 13.050 | 91   | 2949502  | 10.380 | ppbv  | 99       |
| 61) Styrene                   | 12.889 | 104  | 1446412  | 12.185 | ppbv  | 100      |
| 62) Isopropylbenzene          | 14.018 | 105  | 4295725  | 9.979  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.037 | 83   | 1399331  | 9.632  | ppbv  | 99       |
| 64) n-propylbenzene           | 14.908 | 120  | 1163729  | 10.467 | ppbv  | 99       |
| 65) tert-Butylbenzene         | 16.082 | 119  | 3881352  | 9.836  | ppbv  | 99       |
| 66) Benzyl Chloride           | 16.317 | 91   | 210631   | 10.268 | ppbv  | 100      |
| 67) sec-Butylbenzene          | 16.629 | 105  | 5423308  | 9.906  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 16.985 | 119  | 4552021  | 10.272 | ppbv  | 99       |
| 70) n-Butylbenzene            | 17.876 | 91   | 4680037  | 10.082 | ppbv  | 99       |
| 71) 2-Chlorotoluene           | 14.789 | 91   | 3243345  | 10.240 | ppbv  | 99       |
| 72) 4-Ethyltoluene            | 15.182 | 105  | 3543918  | 10.670 | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 15.342 | 105  | 3032687  | 10.340 | ppbv  | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.098 | 105  | 3382442  | 9.853  | ppbv  | 99       |
| 75) 1,3-Dichlorobenzene       | 16.320 | 146  | 2085381  | 9.693  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 16.465 | 146  | 2059008  | 9.987  | ppbv  | 99       |
| 77) 1,2-Dichlorobenzene       | 17.133 | 146  | 2033227  | 9.573  | ppbv  | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.619 | 225  | 1515419  | 8.649  | ppbv  | 100      |
| 79) Naphthalene               | 21.371 | 128  | 3186137  | 12.611 | ppbv  | 99       |
| 80) Naphthalene,2-methyl-     | 24.361 | 142  | 2359812  | 13.329 | ppbv  | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.127 | 180  | 1691433  | 10.530 | ppbv  | 99       |

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

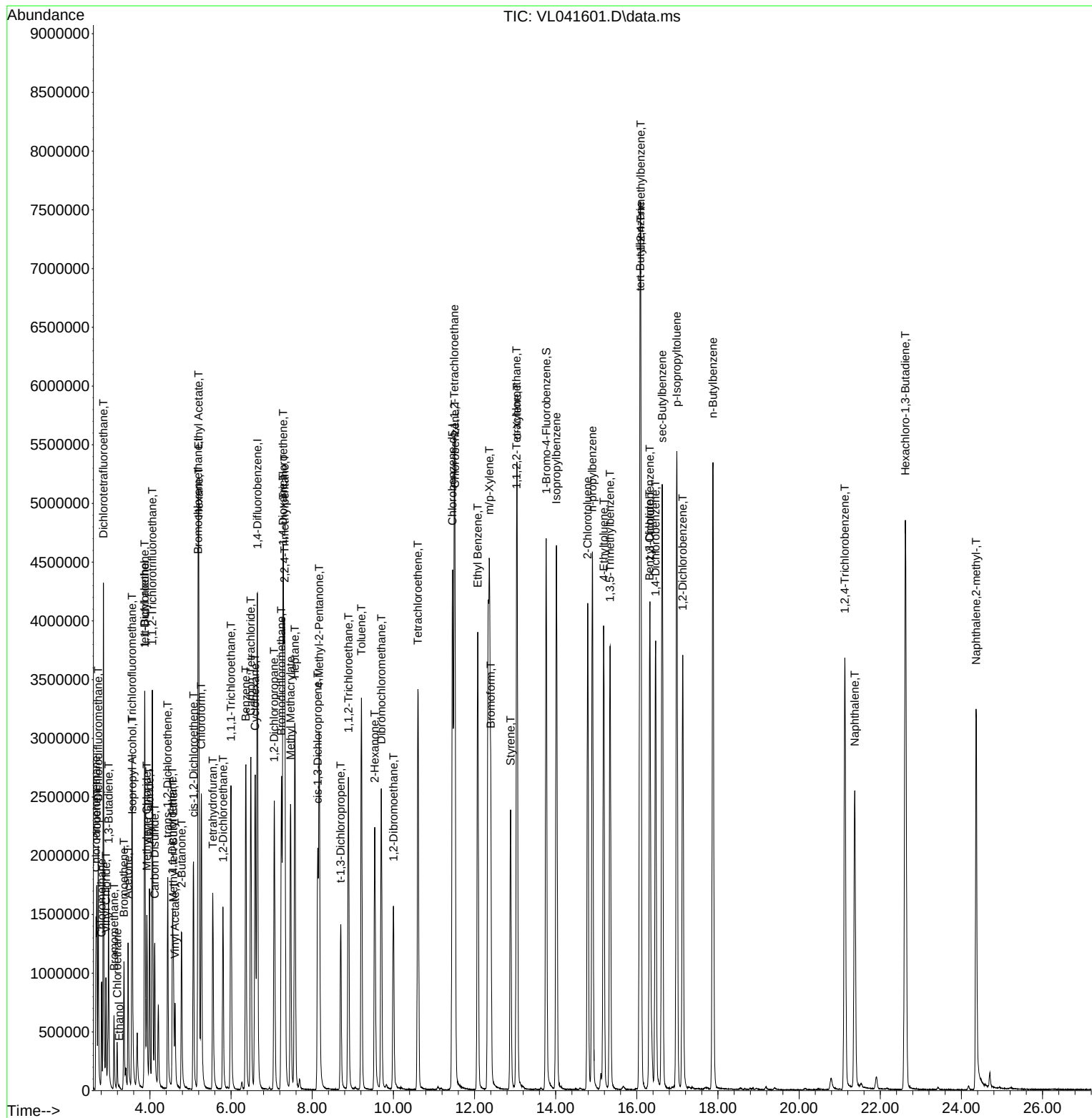
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041601.D  
Acq On : 18 Sep 2024 8:46  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Quant Time: Sep 19 01:28:02 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 09/19/2024  
Supervised By : Mahesh Dadoda 09/19/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041601.D  
Acq On : 18 Sep 2024 8:46  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Sep 19 01:28:02 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 102   | 0.02     |
| 2 T  | Dichlorodifluoromethane     | 1.444 | 1.143  | 20.8  | 89    | 0.02     |
| 3    | Chlorodifluoromethane       | 1.213 | 1.102  | 9.2   | 102   | 0.02     |
| 4    | Chloromethane               | 0.667 | 0.602  | 9.7   | 100   | 0.02     |
| 5 T  | Vinyl Chloride              | 0.578 | 0.600  | -3.8  | 104   | 0.02     |
| 6 T  | Bromomethane                | 0.287 | 0.265  | 7.7   | 99    | 0.02     |
| 7    | Chloroethane                | 0.225 | 0.213  | 5.3   | 102   | 0.02     |
| 8 T  | Dichlorotetrafluoroethane   | 1.515 | 1.400  | 7.6   | 100   | 0.02     |
| 9 T  | Propene                     | 0.512 | 0.520  | -1.6  | 103   | 0.02     |
| 10 T | Heptane                     | 1.198 | 1.257  | -4.9  | 101   | 0.02     |
| 11 T | Trichlorofluoromethane      | 1.537 | 1.394  | 9.3   | 99    | 0.02     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.113 | 1.032  | 7.3   | 101   | 0.02     |
| 13   | Ethanol                     | 0.038 | 0.023# | 39.5# | 97    | 0.02     |
| 14 T | Bromoethene                 | 0.422 | 0.425  | -0.7  | 102   | 0.02     |
| 15 T | Acetone                     | 1.255 | 1.028  | 18.1  | 102   | 0.02     |
| 16 T | 1,3-Butadiene               | 0.611 | 0.573  | 6.2   | 101   | 0.02     |
| 17   | tert-Butyl alcohol          | 1.104 | 1.073  | 2.8   | 100   | 0.02     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.451  | 4.2   | 97    | 0.02     |
| 19 T | Isopropyl Alcohol           | 0.643 | 0.608  | 5.4   | 99    | 0.02     |
| 20 T | Methylene Chloride          | 0.472 | 0.383  | 18.9  | 101   | 0.02     |
| 21 T | Allyl Chloride              | 0.728 | 0.730  | -0.3  | 101   | 0.02     |
| 22 T | trans-1,2-Dichloroethene    | 0.470 | 0.455  | 3.2   | 101   | 0.02     |
| 23 T | Vinyl Acetate               | 0.691 | 0.735  | -6.4  | 109   | 0.02     |
| 24 T | 1,1-Dichloroethane          | 1.036 | 0.985  | 4.9   | 101   | 0.02     |
| 25 T | Ethyl Acetate               | 2.254 | 2.284  | -1.3  | 102   | 0.02     |
| 26 T | Hexane                      | 0.940 | 0.930  | 1.1   | 102   | 0.02     |
| 27 T | Carbon Disulfide            | 0.999 | 1.113  | -11.4 | 102   | 0.02     |
| 28 T | Methyl tert-Butyl Ether     | 0.579 | 0.573  | 1.0   | 105   | 0.02     |
| 29 T | Chloroform                  | 1.538 | 1.447  | 5.9   | 101   | 0.02     |
| 30 T | Cyclohexane                 | 0.725 | 0.775  | -6.9  | 101   | 0.02     |
| 31 T | cis-1,2-Dichloroethene      | 0.892 | 0.920  | -3.1  | 104   | 0.02     |
| 32 T | 1,1,1-Trichloroethane       | 1.370 | 1.429  | -4.3  | 101   | 0.02     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 101   | 0.02     |
| 34 T | 2-Butanone                  | 0.477 | 0.475  | 0.4   | 102   | 0.02     |
| 35 T | Carbon Tetrachloride        | 0.491 | 0.549  | -11.8 | 102   | 0.01     |
| 36 T | Benzene                     | 0.694 | 0.726  | -4.6  | 102   | 0.02     |
| 37 T | 1,2-Dichloroethane          | 0.403 | 0.400  | 0.7   | 101   | 0.02     |
| 38 T | Trichloroethene             | 0.358 | 0.389  | -8.7  | 103   | 0.02     |
| 39 T | 1,2-Dichloropropane         | 0.283 | 0.281  | 0.7   | 103   | 0.01     |
| 40 T | 1,4-Dioxane                 | 0.107 | 0.117  | -9.3  | 104   | 0.02     |
| 41 T | Tetrahydrofuran             | 0.262 | 0.293  | -11.8 | 102   | 0.02     |
| 42 T | Bromodichloromethane        | 0.561 | 0.578  | -3.0  | 101   | 0.01     |
| 43   | Methyl Methacrylate         | 0.249 | 0.286  | -14.9 | 102   | 0.02     |
| 44 T | 2,2,4-Trimethylpentane      | 1.202 | 1.221  | -1.6  | 101   | 0.02     |
| 45 T | t-1,3-Dichloropropene       | 0.200 | 0.254  | -27.0 | 104   | 0.01     |
| 46 T | cis-1,3-Dichloropropene     | 0.294 | 0.355  | -20.7 | 101   | 0.02     |
| 47 T | 1,1,2-Trichloroethane       | 0.300 | 0.303  | -1.0  | 102   | 0.02     |
| 48 T | Dibromochloromethane        | 0.455 | 0.498  | -9.5  | 102   | 0.02     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041601.D  
Acq On : 18 Sep 2024 8:46  
Operator : SY/MD  
Sample : VSTDCCC010  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
LabSampleId :  
VSTDCCC010

Quant Time: Sep 19 01:28:02 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|-------|-------|--------|-------|----------|
| 49 T | Bromoform                 | 0.390 | 0.433 | -11.0  | 101   | 0.02     |
| 50 T | 4-Methyl-2-Pentanone      | 0.736 | 0.802 | -9.0   | 102   | 0.02     |
| 51 T | 2-Hexanone                | 0.557 | 0.642 | -15.3  | 102   | 0.02     |
| 52 T | Tetrachloroethene         | 0.251 | 0.271 | -8.0   | 102   | 0.02     |
| 53 T | Toluene                   | 0.737 | 0.838 | -13.7  | 101   | 0.02     |
| 54 T | 1,2-Dibromoethane         | 0.369 | 0.407 | -10.3  | 100   | 0.02     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 101   | 0.01     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.390 | 0.377 | 3.3    | 101   | 0.01     |
| 57 T | Chlorobenzene             | 0.721 | 0.677 | 6.1    | 100   | 0.02     |
| 58 T | Ethyl Benzene             | 1.070 | 1.171 | -9.4   | 101   | 0.01     |
| 59 T | m/p-Xylene                | 0.953 | 0.989 | -3.8   | 101   | 0.02     |
| 60 T | o-Xylene                  | 0.913 | 0.948 | -3.8   | 100   | 0.02     |
| 61 T | Styrene                   | 0.382 | 0.465 | -21.7  | 101   | 0.02     |
| 62   | Isopropylbenzene          | 1.384 | 1.381 | 0.2    | 100   | 0.01     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.467 | 0.450 | 3.6    | 100   | 0.01     |
| 64   | n-propylbenzene           | 0.357 | 0.374 | -4.8   | 101   | 0.01     |
| 65   | tert-Butylbenzene         | 1.269 | 1.248 | 1.7    | 101   | 0.02     |
| 66 T | Benzyl Chloride           | 0.066 | 0.068 | -3.0   | 102   | 0.01     |
| 67   | sec-Butylbenzene          | 1.760 | 1.743 | 1.0    | 100   | 0.02     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.736 | 0.732 | 0.5    | 100   | 0.02     |
| 69   | p-Isopropyltoluene        | 1.425 | 1.463 | -2.7   | 100   | 0.01     |
| 70   | n-Butylbenzene            | 1.492 | 1.505 | -0.9   | 100   | 0.01     |
| 71   | 2-Chlorotoluene           | 1.018 | 1.043 | -2.5   | 101   | 0.01     |
| 72 T | 4-Ethyltoluene            | 1.068 | 1.139 | -6.6   | 100   | 0.01     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.943 | 0.975 | -3.4   | 100   | 0.02     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.104 | 1.087 | 1.5    | 101   | 0.01     |
| 75 T | 1,3-Dichlorobenzene       | 0.692 | 0.670 | 3.2    | 100   | 0.01     |
| 76 T | 1,4-Dichlorobenzene       | 0.663 | 0.662 | 0.2    | 101   | 0.01     |
| 77 T | 1,2-Dichlorobenzene       | 0.683 | 0.654 | 4.2    | 101   | 0.01     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.563 | 0.487 | 13.5   | 100   | 0.00     |
| 79 T | Naphthalene               | 0.812 | 1.024 | -26.1  | 101   | 0.01     |
| 80 T | Naphthalene,2-methyl-     | 0.569 | 0.759 | -33.4# | 103   | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.516 | 0.544 | -5.4   | 101   | 0.01     |

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041602.D  
Acq On : 18 Sep 2024 9:36  
Operator : SY/MD  
Sample : VL0918ABL01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0918ABL01

Quant Time: Sep 19 01:29:04 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.185  | 49   | 1177899  | 10.000 | ppbv  | 0.02     |
| 33) 1,4-Difluorobenzene | 6.645  | 114  | 3241896  | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 11.452 | 117  | 2826139  | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.761 | 95    | 2076380  | 9.981    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.800% |

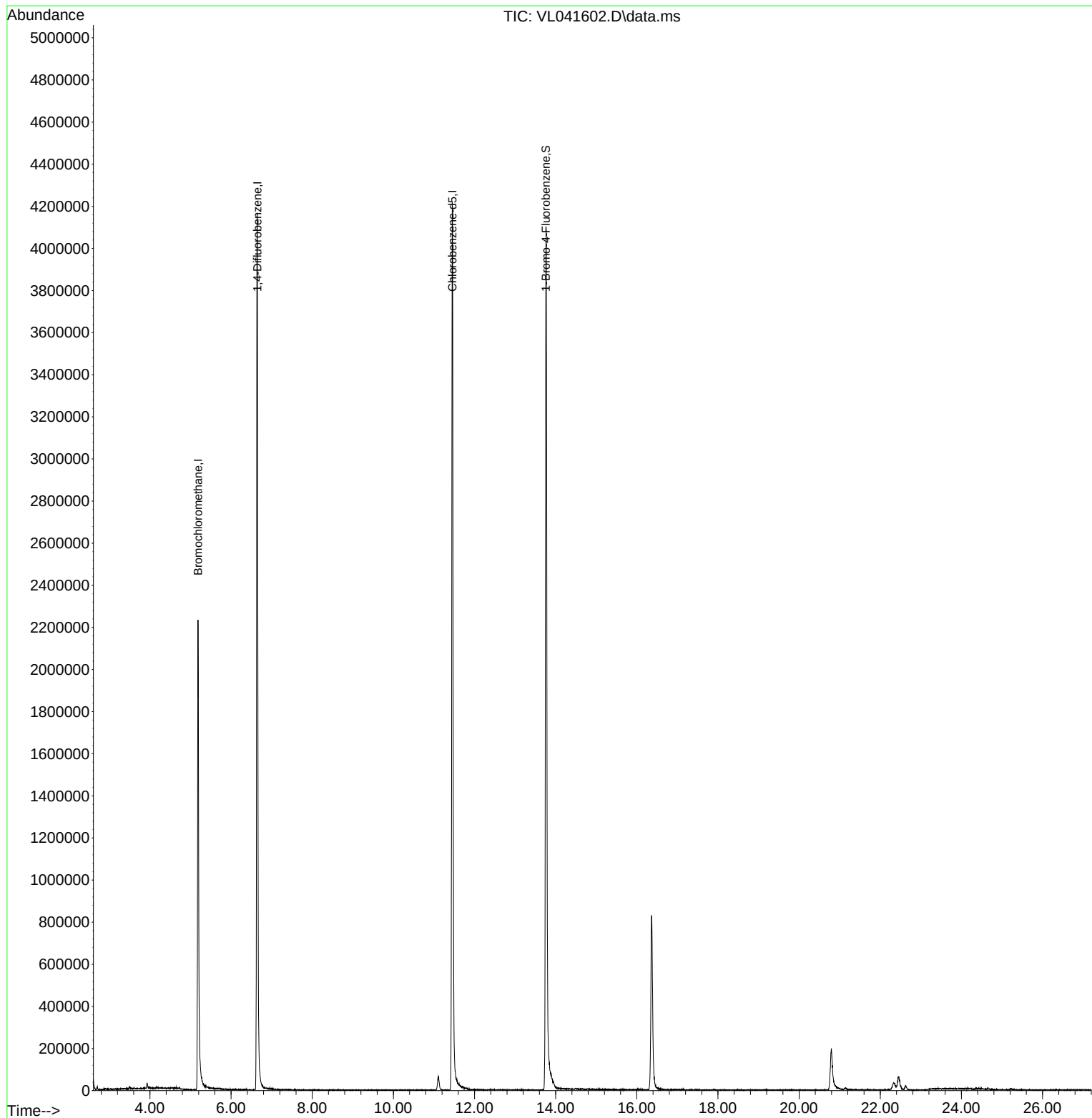
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041602.D  
Acq On : 18 Sep 2024 9:36  
Operator : SY/MD  
Sample : VL0918ABL01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0918ABL01

Quant Time: Sep 19 01:29:04 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
 Data File : VL041603.D  
 Acq On : 18 Sep 2024 10:16  
 Operator : SY/MD  
 Sample : VL0918ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0918ABS01

Quant Time: Sep 19 01:29:22 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/19/2024  
 Supervised By : Mahesh Dadoda 09/19/2024

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.189  | 49    | 1156371  | 10.000   | ppbv   | 0.02     |
| 33) 1,4-Difluorobenzene       | 6.648  | 114   | 3163270  | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5          | 11.462 | 117   | 3156402  | 10.000   | ppbv   | 0.02     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.770 | 95    | 2259237  | 9.723    | ppbv   | 0.02     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 97.200%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.732  | 85    | 1884134  | 11.282   | ppbv   | 99       |
| 3) Chlorodifluoromethane      | 2.677  | 51    | 1281112  | 9.134    | ppbv   | 99       |
| 4) Chloromethane              | 2.816  | 50    | 707023   | 9.165    | ppbv   | 98       |
| 5) Vinyl Chloride             | 2.922  | 62    | 686540   | 10.278   | ppbv   | 99       |
| 6) Bromomethane               | 3.121  | 94    | 316275   | 9.517    | ppbv   | 99       |
| 7) Chloroethane               | 3.198  | 64    | 236020   | 9.085    | ppbv   | 98       |
| 8) Dichlorotetrafluoroethane  | 2.858  | 85    | 1659459  | 9.473    | ppbv   | 99       |
| 9) Propene                    | 2.697  | 41    | 588244   | 9.943    | ppbv   | 99       |
| 10) Heptane                   | 7.574  | 43    | 1457487  | 10.522   | ppbv   | 99       |
| 11) Trichlorofluoromethane    | 3.562  | 101   | 1615013  | 9.088    | ppbv   | 96       |
| 12) 1,1,2-Trichlorotrifluo... | 4.063  | 101   | 1190198  | 9.248    | ppbv   | 99       |
| 13) Ethanol                   | 3.250  | 45    | 26862m   | 6.039    | ppbv   |          |
| 14) Bromoethene               | 3.366  | 108   | 487861   | 9.997    | ppbv   | 98       |
| 15) Acetone                   | 3.468  | 43    | 1192968  | 8.217    | ppbv   | 99       |
| 16) 1,3-Butadiene             | 2.986  | 39    | 693352   | 9.819    | ppbv   | 96       |
| 17) tert-Butyl alcohol        | 3.877  | 59    | 1224256  | 9.589    | ppbv   | 99       |
| 18) 1,1-Dichloroethene        | 3.880  | 96    | 535313   | 9.825    | ppbv   | 99       |
| 19) Isopropyl Alcohol         | 3.575  | 45    | 656028   | 8.827    | ppbv # | 98       |
| 20) Methylene Chloride        | 3.931  | 84    | 441509   | 8.095    | ppbv   | 98       |
| 21) Allyl Chloride            | 3.993  | 41    | 813252   | 9.665    | ppbv   | 98       |
| 22) trans-1,2-Dichloroethene  | 4.443  | 96    | 522406   | 9.611    | ppbv   | 99       |
| 23) Vinyl Acetate             | 4.623  | 43    | 835177   | 10.459   | ppbv   | 98       |
| 24) 1,1-Dichloroethane        | 4.562  | 63    | 1142671  | 9.534    | ppbv   | 99       |
| 25) Ethyl Acetate             | 5.201  | 43    | 2647300  | 10.158   | ppbv   | 99       |
| 26) Hexane                    | 5.208  | 57    | 1074230  | 9.884    | ppbv   | 100      |
| 27) Carbon Disulfide          | 4.121  | 76    | 1270273  | 10.995   | ppbv   | 100      |
| 28) Methyl tert-Butyl Ether   | 4.584  | 73    | 657790   | 9.816    | ppbv   | 99       |
| 29) Chloroform                | 5.272  | 83    | 1685499  | 9.477    | ppbv   | 98       |
| 30) Cyclohexane               | 6.597  | 84    | 909681   | 10.858   | ppbv   | 100      |
| 31) cis-1,2-Dichloroethene    | 5.076  | 61    | 1045127  | 10.129   | ppbv   | 98       |
| 32) 1,1,1-Trichloroethane     | 5.999  | 97    | 1637346  | 10.336   | ppbv   | 98       |
| 34) 2-Butanone                | 4.784  | 43    | 1503091  | 9.965    | ppbv   | 99       |
| 35) Carbon Tetrachloride      | 6.491  | 117   | 1732518  | 11.163   | ppbv   | 98       |
| 36) Benzene                   | 6.365  | 78    | 2307599  | 10.504   | ppbv   | 99       |
| 37) 1,2-Dichloroethane        | 5.803  | 62    | 1290133  | 10.122   | ppbv   | 100      |
| 38) Trichloroethene           | 7.288  | 130   | 1229916  | 10.871   | ppbv   | 98       |
| 39) 1,2-Dichloropropane       | 7.070  | 63    | 887630   | 9.932    | ppbv   | 99       |
| 40) 1,4-Dioxane               | 7.282  | 88    | 364111   | 10.808   | ppbv # | 98       |
| 41) Tetrahydrofuran           | 5.552  | 42    | 920914   | 11.094   | ppbv   | 99       |
| 42) Bromodichloromethane      | 7.246  | 83    | 1840578  | 10.379   | ppbv   | 97       |
| 43) Methyl Methacrylate       | 7.468  | 69    | 905817   | 11.522   | ppbv   | 99       |
| 44) 2,2,4-Trimethylpentane    | 7.320  | 57    | 3875181  | 10.196   | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 8.703  | 75    | 809504   | 12.771   | ppbv   | 99       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
 Data File : VL041603.D  
 Acq On : 18 Sep 2024 10:16  
 Operator : SY/MD  
 Sample : VL0918ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0918ABS01

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/19/2024  
 Supervised By :Mahesh Dadoda 09/19/2024

Quant Time: Sep 19 01:29:22 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Tue Sep 17 09:12:21 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.140  | 75   | 1131086  | 12.181 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 963708   | 10.156 | ppbv   | 98       |
| 48) Dibromochloromethane      | 9.706  | 129  | 1586368  | 11.034 | ppbv   | 99       |
| 49) Bromoform                 | 12.404 | 173  | 1395106  | 11.304 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.176  | 43   | 2558165  | 10.982 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.542  | 43   | 1996601  | 11.332 | ppbv # | 99       |
| 52) Tetrachloroethene         | 10.610 | 164  | 870327   | 10.941 | ppbv   | 98       |
| 53) Toluene                   | 9.214  | 91   | 2660302  | 11.408 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 1300569  | 11.130 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 11.500 | 131  | 1174089  | 9.527  | ppbv   | 98       |
| 57) Chlorobenzene             | 11.523 | 112  | 2083591  | 9.156  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.082 | 91   | 3610725  | 10.686 | ppbv   | 98       |
| 59) m/p-Xylene                | 12.365 | 91   | 6126839m | 20.373 | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 2952785  | 10.241 | ppbv   | 100      |
| 61) Styrene                   | 12.889 | 104  | 1434081  | 11.906 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.024 | 105  | 4303632  | 9.852  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.044 | 83   | 1395823  | 9.469  | ppbv   | 99       |
| 64) n-propylbenzene           | 14.912 | 120  | 1163609  | 10.315 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.085 | 119  | 3844766  | 9.602  | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.320 | 91   | 212184   | 10.193 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.632 | 105  | 5382674  | 9.689  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 16.989 | 119  | 4506080  | 10.021 | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.879 | 91   | 4641102  | 9.853  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 3239678  | 10.080 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 3572445  | 10.600 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 3028398  | 10.176 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.101 | 105  | 3355900  | 9.634  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 16.323 | 146  | 2087035  | 9.560  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 2006487  | 9.592  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.137 | 146  | 2006971  | 9.312  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.625 | 225  | 1497828  | 8.425  | ppbv   | 99       |
| 79) Naphthalene               | 21.374 | 128  | 3150966  | 12.291 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 24.368 | 142  | 2210947  | 12.308 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.133 | 180  | 1664970  | 10.215 | ppbv   | 99       |

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041612.D  
Acq On : 18 Sep 2024 18:31  
Operator : SY/MD  
Sample : QC090324 CAN10197  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC090324 CAN10197

Quant Time: Sep 19 01:36:11 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.195  | 49   | 1014390  | 10.000 | ppbv  | 0.03     |
| 33) 1,4-Difluorobenzene | 6.651  | 114  | 2762018  | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 11.462 | 117  | 2360330  | 10.000 | ppbv  | 0.02     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.773 | 95    | 1677517  | 9.655    | ppbv | 0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.500% |

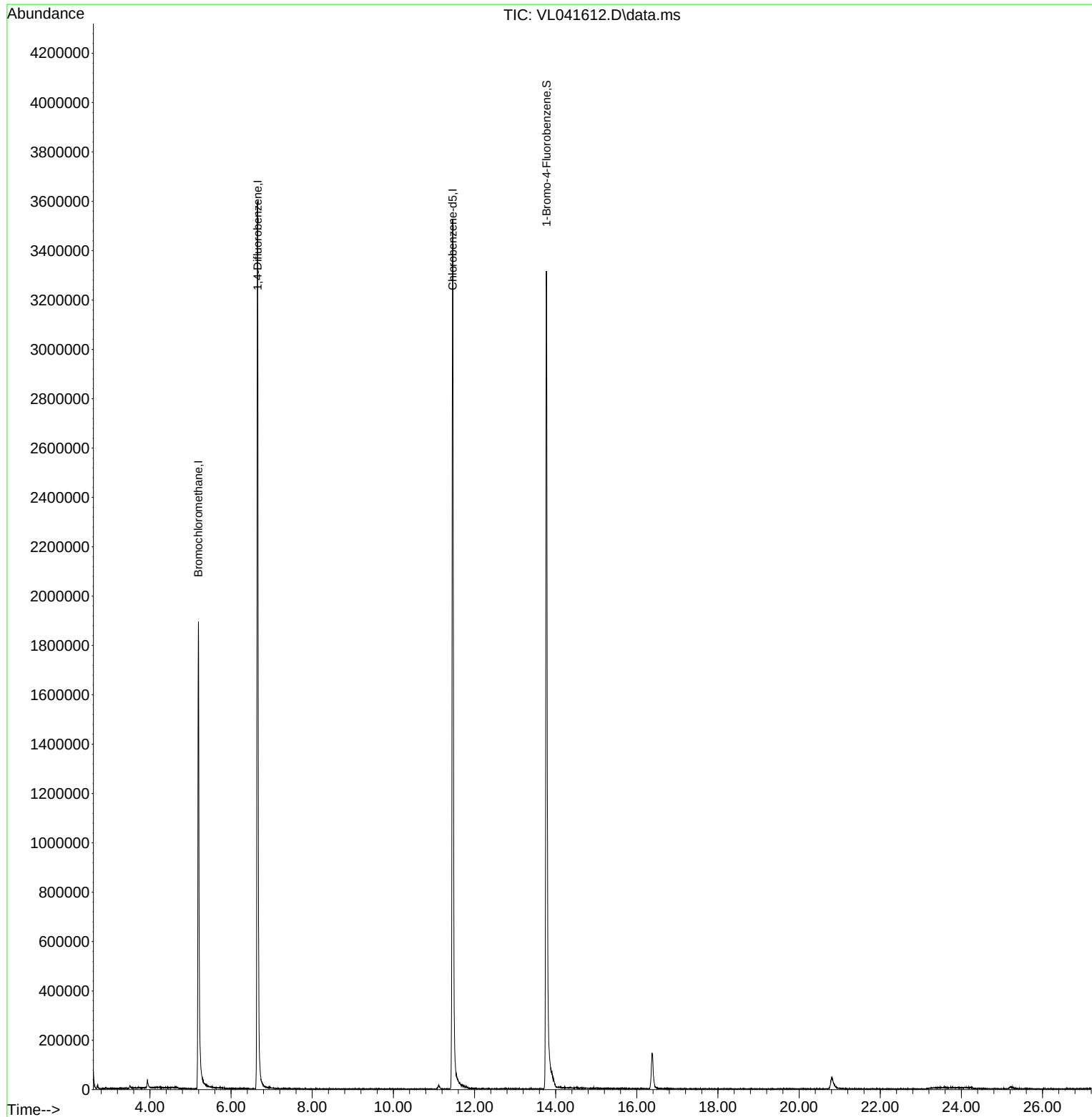
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041612.D  
Acq On : 18 Sep 2024 18:31  
Operator : SY/MD  
Sample : QC090324 CAN10197  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC090324 CAN10197

Quant Time: Sep 19 01:36:11 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041614.D  
Acq On : 18 Sep 2024 19:56  
Operator : SY/MD  
Sample : QC090424 CAN10401  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC090424 CAN10401

Quant Time: Sep 19 03:39:44 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.198  | 49   | 967493   | 10.000 | ppbv  | 0.03     |
| 33) 1,4-Difluorobenzene | 6.655  | 114  | 2704848  | 10.000 | ppbv  | 0.03     |
| 55) Chlorobenzene-d5    | 11.462 | 117  | 2397524  | 10.000 | ppbv  | 0.02     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 13.774 | 95    | 1756733  | 9.954    | ppbv | 0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.500% |

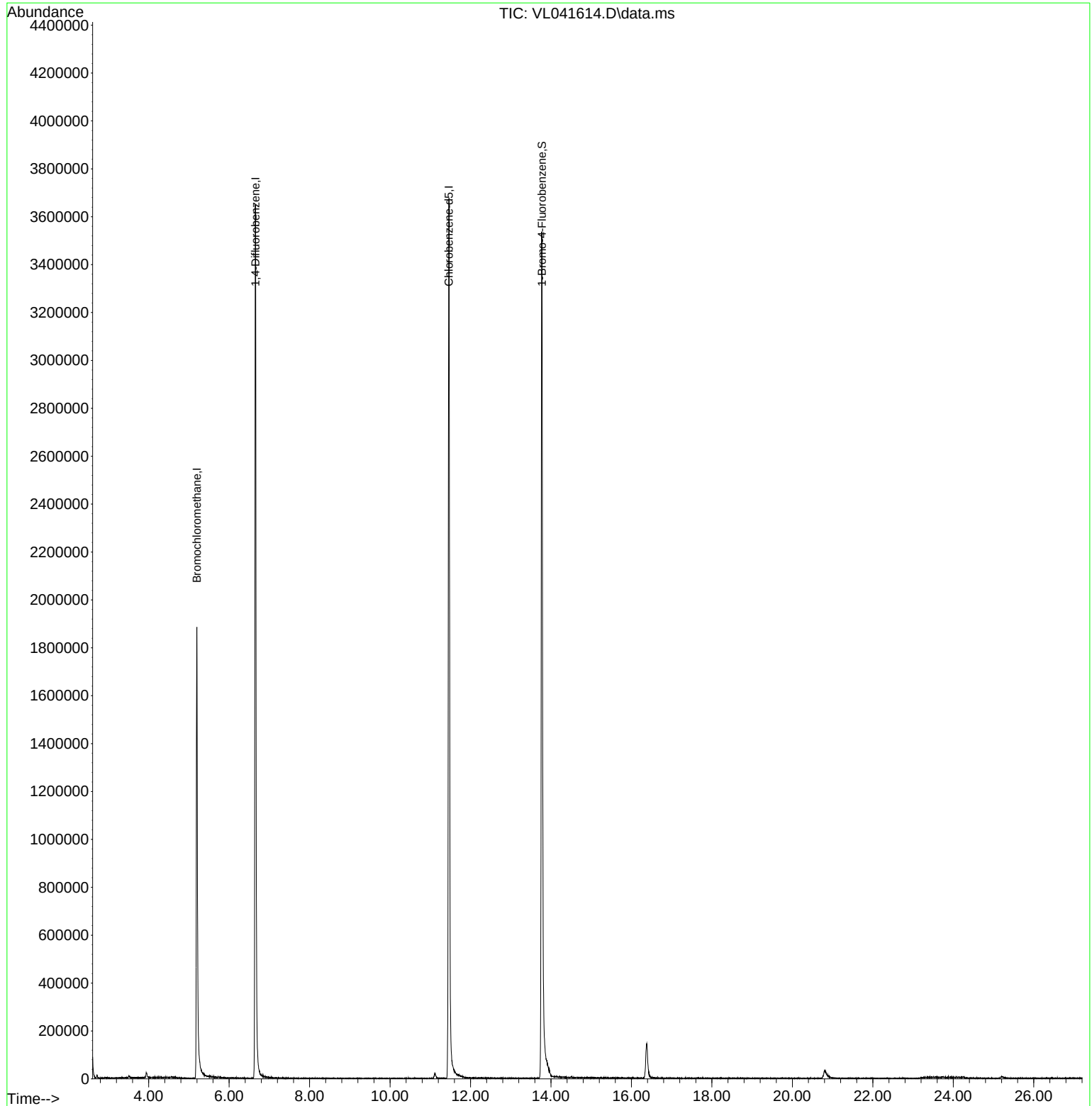
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL091824\  
Data File : VL041614.D  
Acq On : 18 Sep 2024 19:56  
Operator : SY/MD  
Sample : QC090424 CAN10401  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC090424 CAN10401

Quant Time: Sep 19 03:39:44 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 17 09:12:21 2024  
Response via : Initial Calibration



Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL072524**

|                          |                      |                      |                       |
|--------------------------|----------------------|----------------------|-----------------------|
| Review By                | Semsettin Yesilyurt  | Review On            | 7/29/2024 10:58:46 AM |
| Supervise By             | Maresh Dadoda        | Supervise On         | 7/29/2024 5:57:16 PM  |
| SubDirectory             | VL072524             | HP Acquire Method    | AIR-TO15              |
|                          |                      | HP Processing Method | VL072524AIR.M         |
| <b>STD. NAME</b>         | <b>STD REF.#</b>     |                      |                       |
| Tune/Reschk              | AP2535               |                      |                       |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                      |                       |
| CCC                      | AP2539               |                      |                       |
| Internal Standard/PEM    | AP2535               |                      |                       |
| ICV/I.BLK                | AP2537               |                      |                       |
| Surrogate Standard       |                      |                      |                       |
| MS/MSD Standard          |                      |                      |                       |
| LCS Standard             |                      |                      |                       |

| Sr# | Sampleld    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | BFB         | VL041397.D     | 25 Jul 2024 12:29 | SY/MD    | Ok       |
| 2   | VSTDIC0.5   | VL041398.D     | 25 Jul 2024 13:19 | SY/MD    | Ok,M     |
| 3   | VSTDICCC010 | VL041399.D     | 25 Jul 2024 13:59 | SY/MD    | Ok,M     |
| 4   | VSTDIC002   | VL041400.D     | 25 Jul 2024 14:40 | SY/MD    | Ok,M     |
| 5   | VSTDIC001   | VL041401.D     | 25 Jul 2024 15:19 | SY/MD    | Ok,M     |
| 6   | VSTDIC0.5   | VL041402.D     | 25 Jul 2024 16:00 | SY/MD    | Not Ok   |
| 7   | VSTDIC0.1   | VL041403.D     | 25 Jul 2024 16:42 | SY/MD    | Ok,M     |
| 8   | VSTDIC0.03  | VL041404.D     | 25 Jul 2024 17:24 | SY/MD    | Ok,M     |
| 9   | VSTDIC015   | VL041405.D     | 25 Jul 2024 18:06 | SY/MD    | Ok,M     |
| 10  | VSTDICV010  | VL041406.D     | 25 Jul 2024 19:31 | SY/MD    | Ok,M     |
| 11  | VL0725ABL01 | VL041407.D     | 25 Jul 2024 20:56 | SY/MD    | Ok       |
| 12  | VL0725ABS01 | VL041408.D     | 25 Jul 2024 21:38 | SY/MD    | Ok,M     |
| 13  | VIBLK       | VL041409.D     | 25 Jul 2024 22:20 | SY/MD    | Ok       |
| 14  | P3320-01    | VL041410.D     | 26 Jul 2024 7:22  | SY/MD    | Ok,M     |
| 15  | P3320-01DUP | VL041411.D     | 26 Jul 2024 8:02  | SY/MD    | Ok,M     |
| 16  | P3320-02    | VL041412.D     | 26 Jul 2024 8:43  | SY/MD    | Dilution |
| 17  | P3342-04    | VL041413.D     | 26 Jul 2024 9:24  | SY/MD    | Ok,M     |
| 18  | P3356-01    | VL041414.D     | 26 Jul 2024 10:04 | SY/MD    | Dilution |
| 19  | P3356-02    | VL041415.D     | 26 Jul 2024 10:45 | SY/MD    | Ok,M     |
| 20  | P3320-02DL  | VL041416.D     | 26 Jul 2024 11:25 | SY/MD    | Ok,M     |
| 21  | P3356-01DL  | VL041417.D     | 26 Jul 2024 12:05 | SY/MD    | Ok,M     |

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QCBatch ID # VL072524**

| Review By                | Semsettin Yesilyurt  | Review On         | 7/29/2024 10:58:46 AM |                      |               |
|--------------------------|----------------------|-------------------|-----------------------|----------------------|---------------|
| Supervise By             | Mahesh Dadoda        | Supervise On      | 7/29/2024 5:57:16 PM  |                      |               |
| SubDirectory             | VL072524             | HP Acquire Method | AIR-TO15              | HP Processing Method | VL072524AIR.M |
| STD. NAME                | STD REF.#            |                   |                       |                      |               |
| Tune/Reschk              | AP2535               |                   |                       |                      |               |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                   |                       |                      |               |
| CCC                      | AP2539               |                   |                       |                      |               |
| Internal Standard/PEM    | AP2535               |                   |                       |                      |               |
| ICV/I.BLK                | AP2537               |                   |                       |                      |               |
| Surrogate Standard       |                      |                   |                       |                      |               |
| MS/MSD Standard          |                      |                   |                       |                      |               |
| LCS Standard             |                      |                   |                       |                      |               |

|    |            |            |                   |       |        |
|----|------------|------------|-------------------|-------|--------|
| 22 | VSTDCCC010 | VL041418.D | 26 Jul 2024 12:45 | SY/MD | Not Ok |
|----|------------|------------|-------------------|-------|--------|

M : Manual Integration



Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL081924**

|                          |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|
| Review By                | Semsettin Yesilyurt  | Review On            | 8/20/2024 2:35:55 PM |
| Supervise By             | Maresh Dadoda        | Supervise On         | 8/20/2024 4:35:44 PM |
| SubDirectory             | VL081924             | HP Acquire Method    | AIR-TO15             |
|                          |                      | HP Processing Method | VL072524AIR.M        |
| <b>STD. NAME</b>         | <b>STD REF.#</b>     |                      |                      |
| Tune/Reschk              | AP2536               |                      |                      |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                      |                      |
| CCC                      | AP2539               |                      |                      |
| Internal Standard/PEM    | AP2536               |                      |                      |
| ICV/I.BLK                | AP2537               |                      |                      |
| Surrogate Standard       |                      |                      |                      |
| MS/MSD Standard          |                      |                      |                      |
| LCS Standard             |                      |                      |                      |

| Sr# | Sampleld           | Data File Name | Date-Time         | Operator | Status   |
|-----|--------------------|----------------|-------------------|----------|----------|
| 1   | BFB                | VL041539.D     | 19 Aug 2024 8:10  | SY/MD    | Ok       |
| 2   | VSTDCCC010         | VL041540.D     | 19 Aug 2024 8:59  | SY/MD    | Ok,M     |
| 3   | VL0819ABL01        | VL041541.D     | 19 Aug 2024 10:07 | SY/MD    | Ok       |
| 4   | VL0819ABS01        | VL041542.D     | 19 Aug 2024 10:48 | SY/MD    | Ok,M     |
| 5   | QC081324 CAN 10604 | VL041543.D     | 19 Aug 2024 11:29 | SY/MD    | Ok       |
| 6   | QC081424 CAN 10280 | VL041544.D     | 19 Aug 2024 12:10 | SY/MD    | Ok       |
| 7   | QC081424 CAN 10054 | VL041545.D     | 19 Aug 2024 12:51 | SY/MD    | Ok       |
| 8   | P3658-01           | VL041546.D     | 19 Aug 2024 13:33 | SY/MD    | Ok,M     |
| 9   | P3658-01DUP        | VL041547.D     | 19 Aug 2024 14:14 | SY/MD    | Ok,M     |
| 10  | P3658-02           | VL041548.D     | 19 Aug 2024 14:56 | SY/MD    | Ok,M     |
| 11  | P3659-01           | VL041549.D     | 19 Aug 2024 15:40 | SY/MD    | Ok,M     |
| 12  | P3658-03           | VL041550.D     | 19 Aug 2024 16:25 | SY/MD    | Ok,M     |
| 13  | P3658-03DL         | VL041551.D     | 19 Aug 2024 17:11 | SY/MD    | Not Ok   |
| 14  | P3658-04           | VL041552.D     | 19 Aug 2024 17:56 | SY/MD    | Ok,M     |
| 15  | P3658-04DL         | VL041553.D     | 19 Aug 2024 18:40 | SY/MD    | Not Ok   |
| 16  | P3658-05           | VL041554.D     | 19 Aug 2024 19:24 | SY/MD    | Ok,M     |
| 17  | P3658-05DL         | VL041555.D     | 19 Aug 2024 20:09 | SY/MD    | Not Ok   |
| 18  | P3659-02           | VL041556.D     | 19 Aug 2024 20:53 | SY/MD    | Dilution |
| 19  | P3659-02DL         | VL041557.D     | 19 Aug 2024 21:36 | SY/MD    | Dilution |

M : Manual Integration

Instrument ID: **MSVOA\_L**

**Daily Analysis Runlog For Sequence/QC Batch ID # VL091624**

|                          |                     |                      |                       |                      |               |
|--------------------------|---------------------|----------------------|-----------------------|----------------------|---------------|
| Review By                | Semsettin Yesilyurt | Review On            | 9/17/2024 11:23:42 AM |                      |               |
| Supervise By             | Maresh Dadoda       | Supervise On         | 9/17/2024 6:52:14 PM  |                      |               |
| SubDirectory             | VL091624            | HP Acquire Method    | AIR-TO15              | HP Processing Method | VL091624AIR.M |
| STD. NAME                |                     | STD REF.#            |                       |                      |               |
| Tune/Reschk              |                     | AP2542               |                       |                      |               |
| Initial Calibration Stds |                     | AP2546,AP2547,AP2548 |                       |                      |               |
| CCC                      |                     | AP2546               |                       |                      |               |
| Internal Standard/PEM    |                     | AP2542               |                       |                      |               |
| ICV/I.BLK                |                     | AP2544               |                       |                      |               |
| Surrogate Standard       |                     |                      |                       |                      |               |
| MS/MSD Standard          |                     |                      |                       |                      |               |
| LCS Standard             |                     |                      |                       |                      |               |

| Sr# | Sampled     | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | BFB         | VL041590.D     | 16 Sep 2024 11:50 | SY/MD    | Ok     |
| 2   | VSTDICC0.5  | VL041591.D     | 16 Sep 2024 12:36 | SY/MD    | Ok,M   |
| 3   | VSTDICCC010 | VL041592.D     | 16 Sep 2024 13:15 | SY/MD    | Ok,M   |
| 4   | VSTDICC002  | VL041593.D     | 16 Sep 2024 13:56 | SY/MD    | Ok,M   |
| 5   | VSTDICC001  | VL041594.D     | 16 Sep 2024 14:36 | SY/MD    | Ok,M   |
| 6   | VSTDICC0.5  | VL041595.D     | 16 Sep 2024 15:16 | SY/MD    | Not Ok |
| 7   | VSTDICC0.1  | VL041596.D     | 16 Sep 2024 15:56 | SY/MD    | Ok,M   |
| 8   | VSTDICC0.03 | VL041597.D     | 16 Sep 2024 16:38 | SY/MD    | Ok,M   |
| 9   | VSTDICC015  | VL041598.D     | 16 Sep 2024 17:20 | SY/MD    | Ok,M   |
| 10  | VSTDICV010  | VL041599.D     | 16 Sep 2024 18:46 | SY/MD    | Ok,M   |

M : Manual Integration

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL091824**

|                          |                      |                      |                       |
|--------------------------|----------------------|----------------------|-----------------------|
| Review By                | Semsettin Yesilyurt  | Review On            | 9/19/2024 10:46:15 AM |
| Supervise By             | Maresh Dadoda        | Supervise On         | 9/19/2024 2:44:52 PM  |
| SubDirectory             | VL091824             | HP Acquire Method    | AIR-TO15              |
|                          |                      | HP Processing Method | VL091624AIR.M         |
| <b>STD. NAME</b>         | <b>STD REF.#</b>     |                      |                       |
| Tune/Reschk              | AP2542               |                      |                       |
| Initial Calibration Stds | AP2546,AP2547,AP2548 |                      |                       |
| CCC                      | AP2546               |                      |                       |
| Internal Standard/PEM    | AP2542               |                      |                       |
| ICV/I.BLK                | AP2544               |                      |                       |
| Surrogate Standard       |                      |                      |                       |
| MS/MSD Standard          |                      |                      |                       |
| LCS Standard             |                      |                      |                       |

| Sr# | SampleId          | Data File Name | Date-Time         | Operator | Status |
|-----|-------------------|----------------|-------------------|----------|--------|
| 1   | BFB               | VL041600.D     | 18 Sep 2024 8:06  | SY/MD    | Ok     |
| 2   | VSTDCCC010        | VL041601.D     | 18 Sep 2024 8:46  | SY/MD    | Ok,M   |
| 3   | VL0918ABL01       | VL041602.D     | 18 Sep 2024 9:36  | SY/MD    | Ok     |
| 4   | VL0918ABS01       | VL041603.D     | 18 Sep 2024 10:16 | SY/MD    | Ok,M   |
| 5   | VIBLK             | VL041604.D     | 18 Sep 2024 13:01 | SY/MD    | Ok     |
| 6   | P4028-02          | VL041605.D     | 18 Sep 2024 13:42 | SY/MD    | Ok,M   |
| 7   | P4028-02DUP       | VL041606.D     | 18 Sep 2024 14:23 | SY/MD    | Ok,M   |
| 8   | P4028-04          | VL041607.D     | 18 Sep 2024 15:03 | SY/MD    | Ok,M   |
| 9   | P4028-01          | VL041608.D     | 18 Sep 2024 15:43 | SY/MD    | Ok,M   |
| 10  | P4028-01DL        | VL041609.D     | 18 Sep 2024 16:24 | SY/MD    | Not Ok |
| 11  | P4028-03          | VL041610.D     | 18 Sep 2024 17:06 | SY/MD    | Ok,M   |
| 12  | P4028-03DL        | VL041611.D     | 18 Sep 2024 17:49 | SY/MD    | Not Ok |
| 13  | QC090324 CAN10197 | VL041612.D     | 18 Sep 2024 18:31 | SY/MD    | Ok     |
| 14  | QC090324 CAN10197 | VL041613.D     | 18 Sep 2024 19:14 | SY/MD    | Not Ok |
| 15  | QC090424 CAN10401 | VL041614.D     | 18 Sep 2024 19:56 | SY/MD    | Ok,M   |
| 16  | QC090524 CAN10153 | VL041615.D     | 18 Sep 2024 20:38 | SY/MD    | Ok,M   |
| 17  | VIBLK             | VL041616.D     | 18 Sep 2024 21:20 | SY/MD    | Ok,M   |
| 18  | P4028-03DUP       | VL041617.D     | 18 Sep 2024 22:03 | SY/MD    | Ok,M   |
| 19  | VSTDCCC010        | VL041618.D     | 18 Sep 2024 22:44 | SY/MD    | Ok,M   |

M : Manual Integration

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041752.D  
 Acq On : 16 Dec 2024 13:30  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Quant Time: Dec 19 06:11:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 68599    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.956 | 114  | 183786   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.879 | 117  | 163333   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 138451 10.172 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.700%

#### Target Compounds

|                               |       |     |        |        | Qvalue |     |
|-------------------------------|-------|-----|--------|--------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 115385 | 9.453  | ppbv   | 100 |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 107429 | 9.603  | ppbv   | 100 |
| 4) Chloromethane              | 1.531 | 50  | 43215  | 9.049  | ppbv   | 100 |
| 5) Vinyl Chloride             | 1.580 | 62  | 42849  | 8.905  | ppbv   | 100 |
| 6) Bromomethane               | 1.667 | 94  | 20252  | 8.919  | ppbv   | 100 |
| 7) Chloroethane               | 1.703 | 64  | 17403  | 9.311  | ppbv   | 100 |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 100191 | 9.171  | ppbv   | 100 |
| 9) Propene                    | 1.483 | 41  | 43440  | 8.959  | ppbv   | 100 |
| 10) Heptane                   | 4.979 | 43  | 116969 | 9.391  | ppbv   | 100 |
| 11) Trichlorofluoromethane    | 1.875 | 101 | 122831 | 9.474  | ppbv   | 100 |
| 12) 1,1,2-Trichlorotrifluo... | 2.137 | 101 | 91977  | 9.327  | ppbv   | 100 |
| 13) Ethanol                   | 1.719 | 45  | 2484   | 6.161  | ppbv   | 100 |
| 14) Bromoethene               | 1.781 | 108 | 32528  | 9.770  | ppbv   | 100 |
| 15) Acetone                   | 1.832 | 43  | 100229 | 7.509  | ppbv   | 100 |
| 16) 1,3-Butadiene             | 1.606 | 39  | 46989  | 8.940  | ppbv   | 100 |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 125757 | 9.497  | ppbv   | 100 |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 38775  | 9.379  | ppbv   | 100 |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 59026  | 7.370  | ppbv   | 100 |
| 20) Methylene Chloride        | 2.059 | 84  | 32734  | 8.601  | ppbv   | 100 |
| 21) Allyl Chloride            | 2.095 | 41  | 69406  | 9.588  | ppbv   | 100 |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 43898  | 9.276  | ppbv   | 100 |
| 23) Vinyl Acetate             | 2.457 | 43  | 54227  | 9.350  | ppbv   | 100 |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 89912  | 9.386  | ppbv   | 100 |
| 25) Ethyl Acetate             | 2.833 | 43  | 235305 | 9.432  | ppbv   | 100 |
| 26) Hexane                    | 2.823 | 57  | 89385  | 9.486  | ppbv   | 100 |
| 27) Carbon Disulfide          | 2.150 | 76  | 92329  | 10.873 | ppbv   | 100 |
| 28) Methyl tert-Butyl Ether   | 2.438 | 73  | 75330  | 9.854  | ppbv   | 100 |
| 29) Chloroform                | 2.846 | 83  | 135099 | 9.408  | ppbv   | 100 |
| 30) Cyclohexane               | 3.855 | 84  | 75156  | 9.374  | ppbv   | 100 |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 91276  | 9.374  | ppbv   | 100 |
| 32) 1,1,1-Trichloroethane     | 3.363 | 97  | 139102 | 9.733  | ppbv   | 100 |
| 34) 2-Butanone                | 2.554 | 43  | 135331 | 9.153  | ppbv   | 100 |
| 35) Carbon Tetrachloride      | 3.758 | 117 | 138952 | 10.650 | ppbv   | 100 |
| 36) Benzene                   | 3.655 | 78  | 179134 | 9.423  | ppbv   | 100 |
| 37) 1,2-Dichloroethane        | 3.215 | 62  | 111770 | 9.449  | ppbv   | 100 |
| 38) Trichloroethene           | 4.545 | 130 | 71297  | 8.907  | ppbv   | 100 |
| 39) 1,2-Dichloropropane       | 4.309 | 63  | 64789  | 9.423  | ppbv   | 100 |
| 40) 1,4-Dioxane               | 4.580 | 88  | 30658  | 9.128  | ppbv # | 100 |
| 41) Tetrahydrofuran           | 3.049 | 42  | 78480  | 9.474  | ppbv   | 100 |
| 42) Bromodichloromethane      | 4.483 | 83  | 142819 | 10.494 | ppbv   | 100 |
| 43) Methyl Methacrylate       | 4.878 | 69  | 72578  | 10.020 | ppbv   | 100 |
| 44) 2,2,4-Trimethylpentane    | 4.639 | 57  | 307748 | 9.479  | ppbv   | 100 |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 77752  | 10.378 | ppbv   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041752.D  
 Acq On : 16 Dec 2024 13:30  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

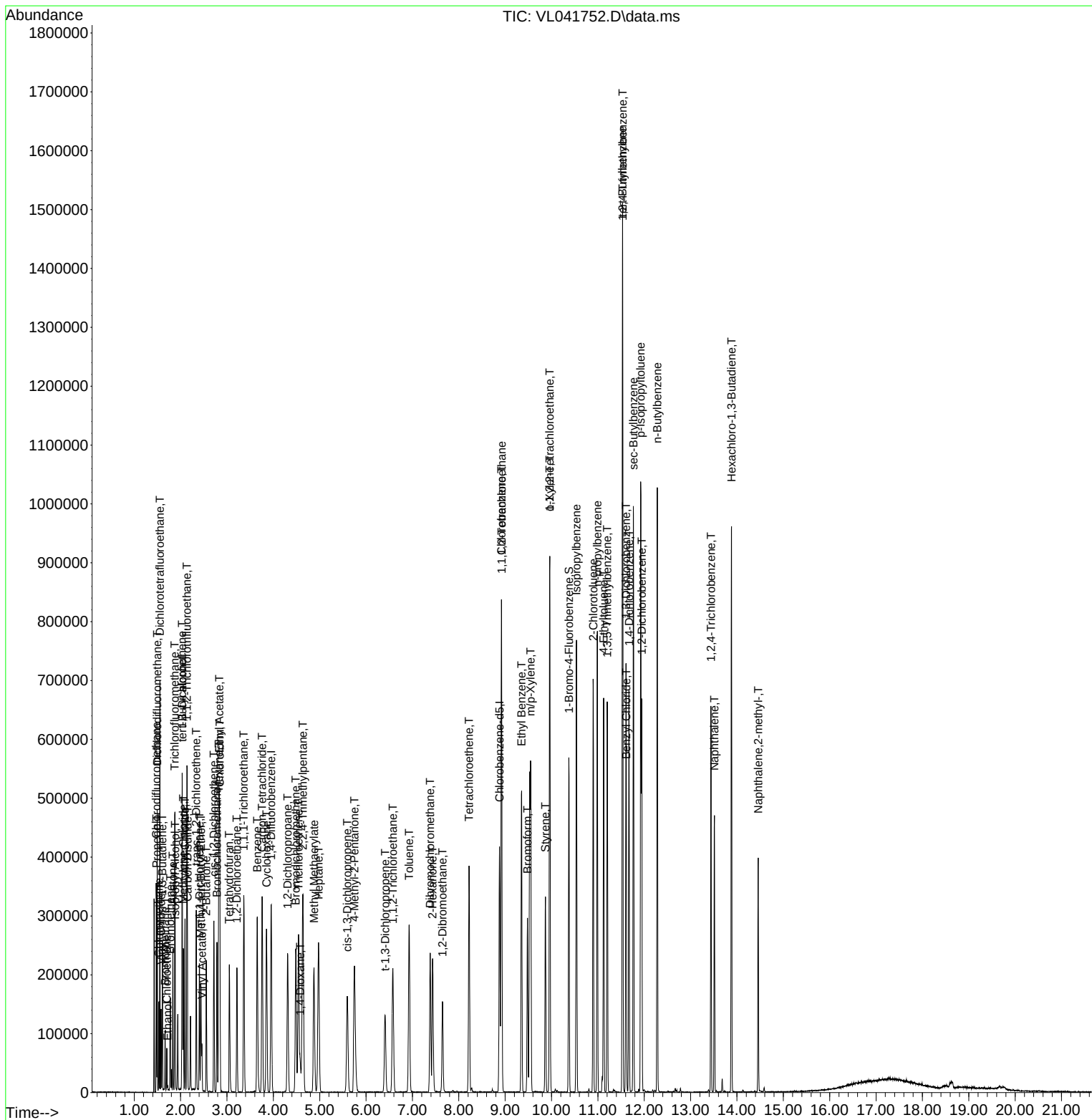
Quant Time: Dec 19 06:11:54 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

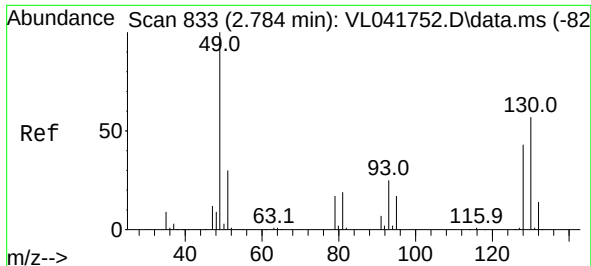
| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 97992    | 10.303 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 6.577  | 97   | 67550    | 9.406  | ppbv   | 100      |
| 48) Dibromochloromethane      | 7.383  | 129  | 108899   | 11.105 | ppbv   | 100      |
| 49) Bromoform                 | 9.481  | 173  | 91587    | 11.410 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 5.749  | 43   | 194838   | 9.678  | ppbv   | 100      |
| 51) 2-Hexanone                | 7.432  | 43   | 157473   | 9.650  | ppbv   | 100      |
| 52) Tetrachloroethene         | 8.222  | 164  | 62989    | 8.901  | ppbv   | 100      |
| 53) Toluene                   | 6.930  | 91   | 206354   | 9.574  | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 7.649  | 107  | 94016    | 9.501  | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 86831    | 10.027 | ppbv   | 100      |
| 57) Chlorobenzene             | 8.921  | 112  | 155349   | 9.295  | ppbv   | 100      |
| 58) Ethyl Benzene             | 9.354  | 91   | 289734   | 9.853  | ppbv   | 100      |
| 59) m/p-Xylene                | 9.549  | 91   | 229713   | 9.713  | ppbv # | 100      |
| 60) o-Xylene                  | 9.963  | 91   | 232101   | 9.789  | ppbv   | 100      |
| 61) Styrene                   | 9.869  | 104  | 110041   | 10.733 | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 348684   | 9.788  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 137363   | 9.255  | ppbv   | 100      |
| 64) n-propylbenzene           | 10.989 | 120  | 87360    | 9.700  | ppbv   | 100      |
| 65) tert-Butylbenzene         | 11.529 | 119  | 309036   | 9.615  | ppbv   | 100      |
| 66) Benzyl Chloride           | 11.614 | 91   | 31039    | 10.954 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 11.769 | 105  | 430810   | 9.687  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 11.924 | 119  | 363072   | 9.906  | ppbv   | 100      |
| 70) n-Butylbenzene            | 12.280 | 91   | 358993   | 10.137 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 10.902 | 91   | 264002   | 9.708  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 282698   | 10.120 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 11.203 | 105  | 239261   | 10.304 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 255780   | 10.244 | ppbv   | 100      |
| 75) 1,3-Dichlorobenzene       | 11.607 | 146  | 151752   | 9.532  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 152099   | 9.671  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 141338   | 9.227  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 95751    | 8.431  | ppbv   | 100      |
| 79) Naphthalene               | 13.514 | 128  | 205511   | 11.812 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 14.459 | 142  | 106311   | 19.755 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 13.439 | 180  | 101461   | 10.672 | ppbv   | 100      |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDICCC010

Quant Time: Dec 19 06:11:54 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

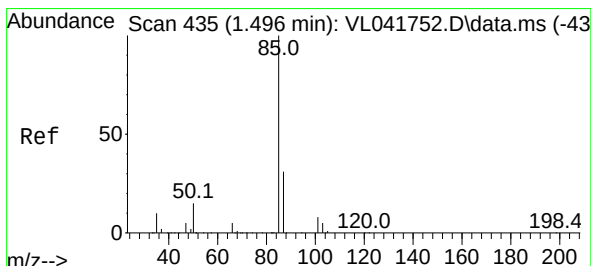
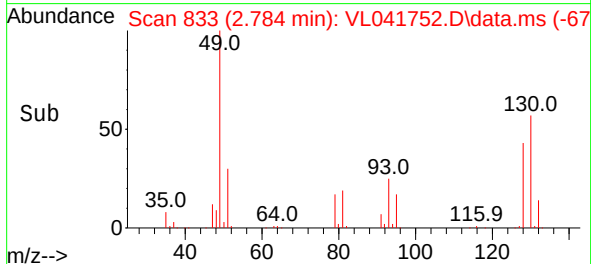
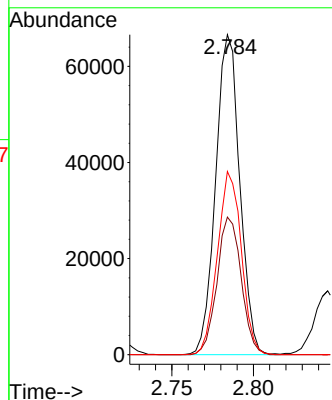
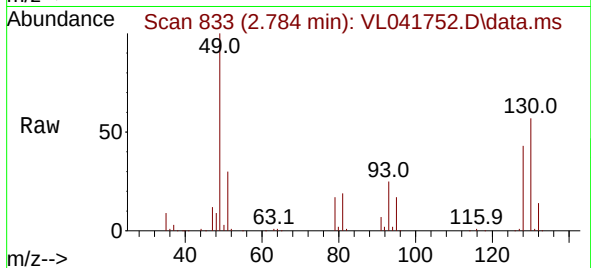




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

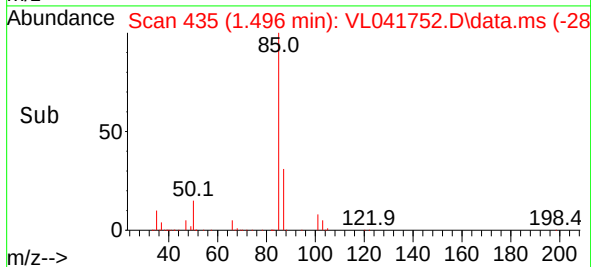
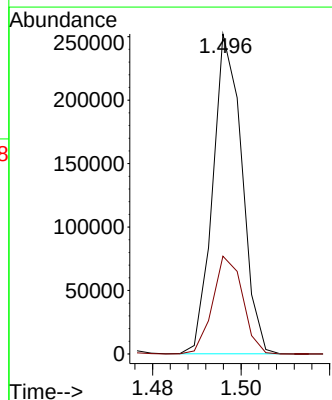
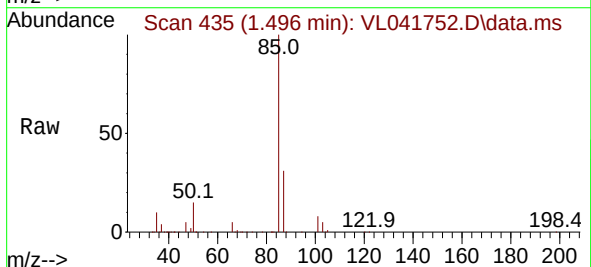
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

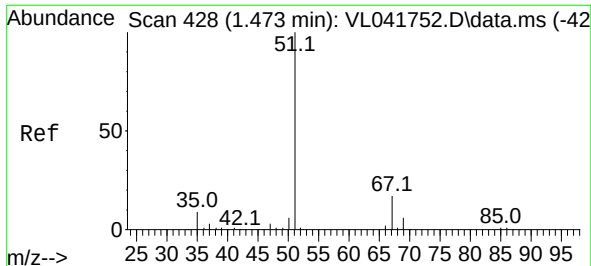
Tgt Ion: 49 Resp: 68599  
Ion Ratio Lower Upper  
49 100  
128 43.1 21.6 64.6  
130 56.7 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 9.453 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 85 Resp: 115385  
Ion Ratio Lower Upper  
85 100  
87 30.6 24.5 36.7

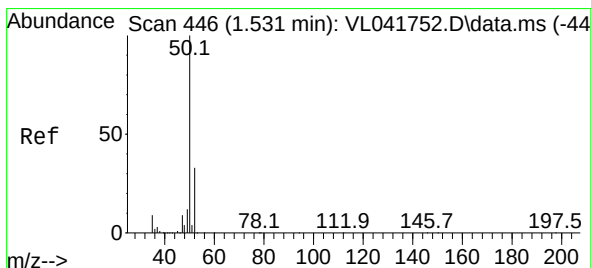
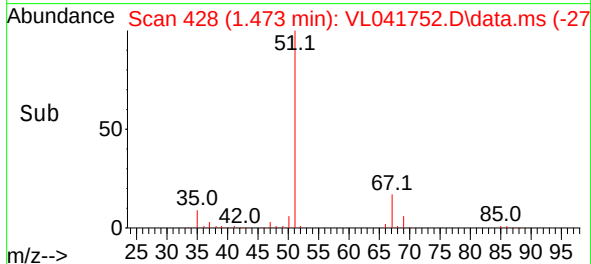
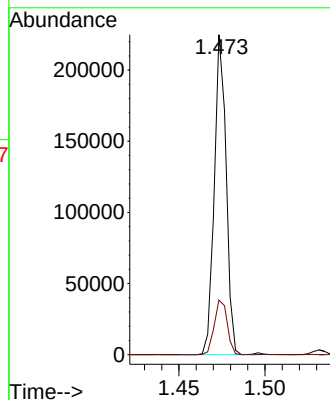
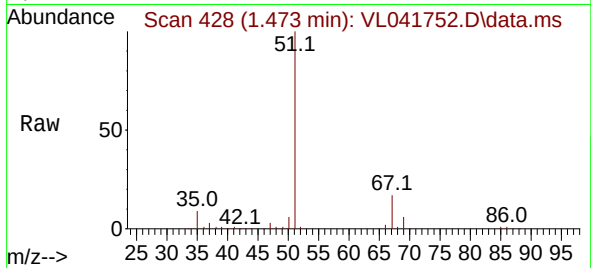




#3  
Chlorodifluoromethane  
Concen: 9.603 ppbv  
RT: 1.473 min Scan# 428  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

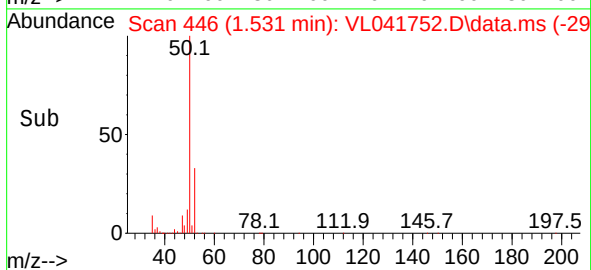
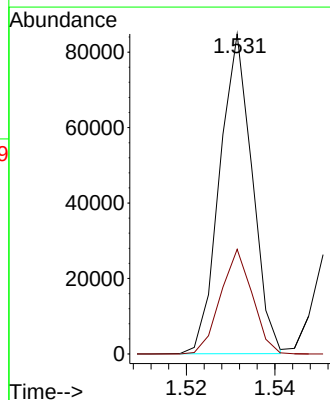
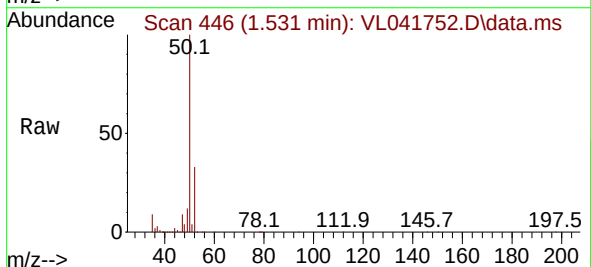
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 51 Resp: 107429  
Ion Ratio Lower Upper  
51 100  
67 18.7 15.0 22.4

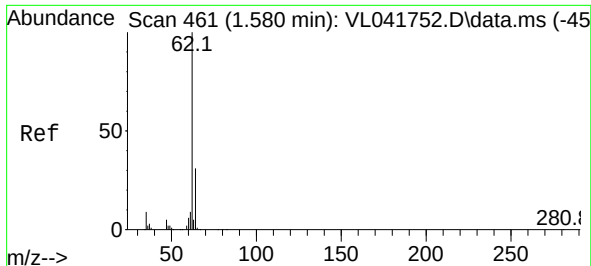


#4  
Chloromethane  
Concen: 9.049 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 50 Resp: 43215  
Ion Ratio Lower Upper  
50 100  
52 32.7 26.2 39.2



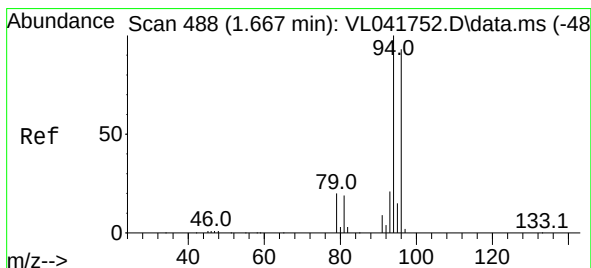
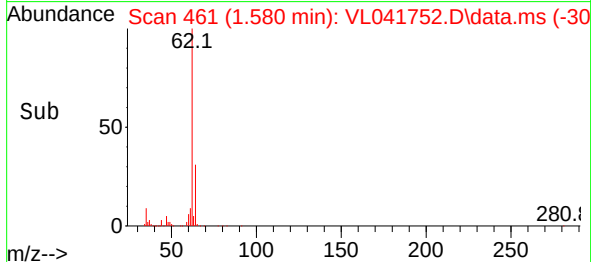
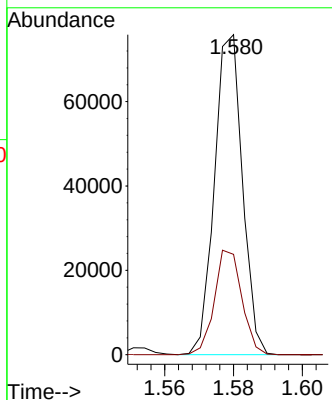
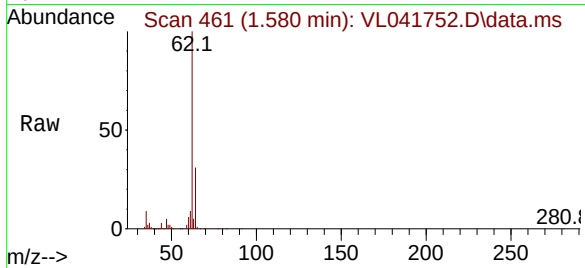




#5  
 Vinyl Chloride  
 Concen: 8.905 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

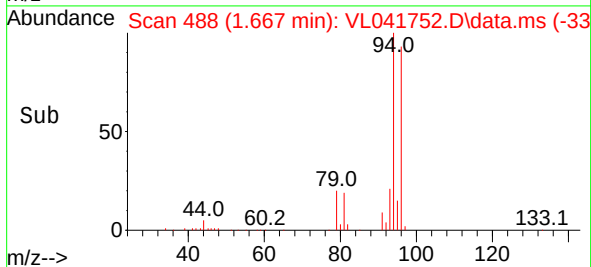
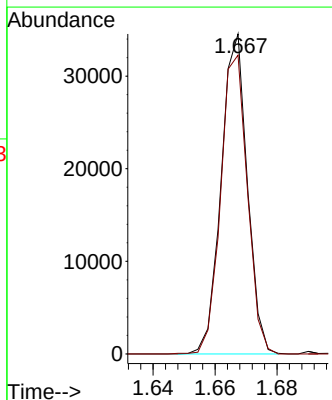
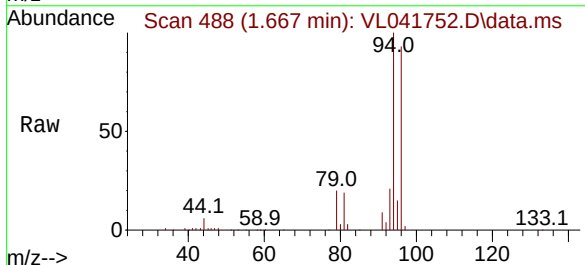
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDICCC010

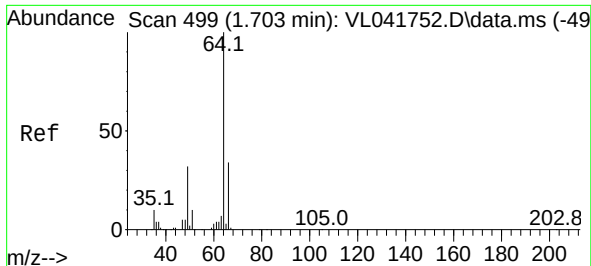
Tgt Ion: 62 Resp: 42849  
 Ion Ratio Lower Upper  
 62 100  
 64 31.4 25.1 37.7



#6  
 Bromomethane  
 Concen: 8.919 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

Tgt Ion: 94 Resp: 20252  
 Ion Ratio Lower Upper  
 94 100  
 96 93.4 74.7 112.1

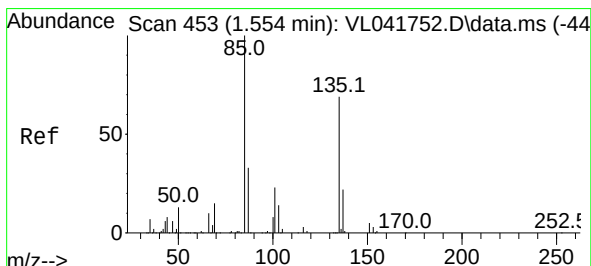
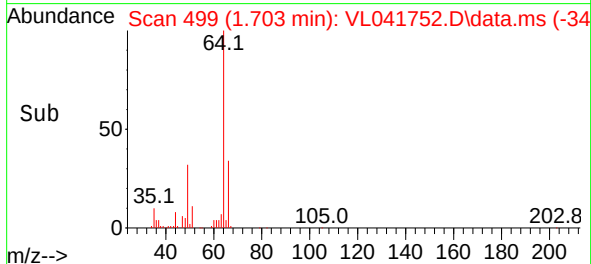
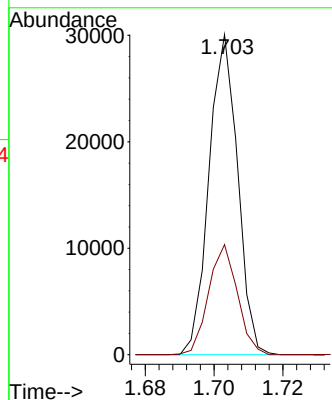
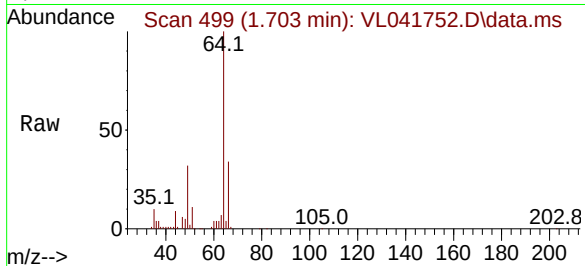




#7  
Chloroethane  
Concen: 9.311 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

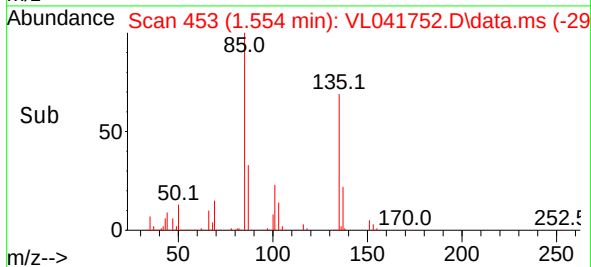
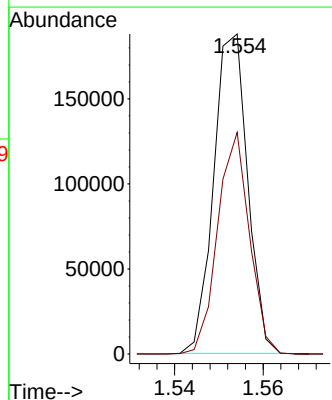
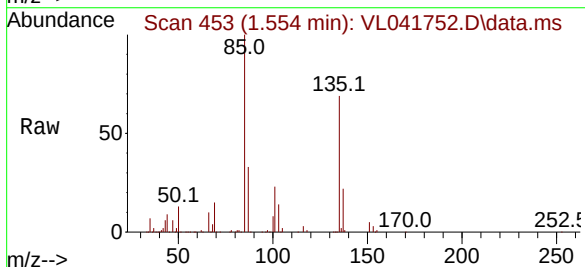
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

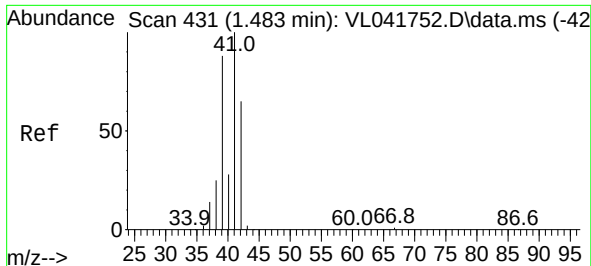
Tgt Ion: 64 Resp: 17403  
Ion Ratio Lower Upper  
64 100  
66 34.4 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 9.171 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 85 Resp: 100191  
Ion Ratio Lower Upper  
85 100  
135 64.9 51.9 77.9





#9

Propene

Concen: 8.959 ppbv

RT: 1.483 min Scan# 431

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

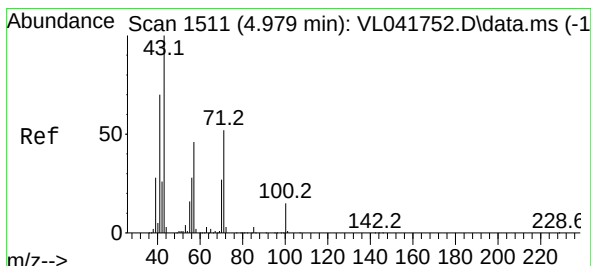
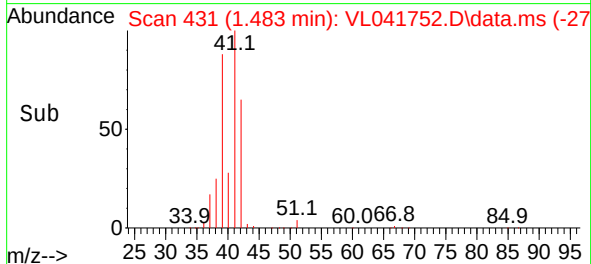
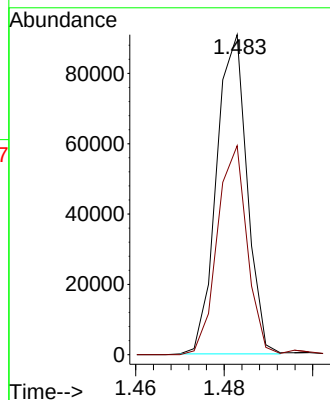
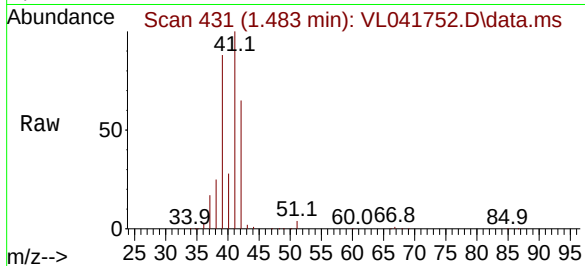
VSTDICCC010

Tgt Ion: 41 Resp: 43440

Ion Ratio Lower Upper

41 100

42 65.5 52.4 78.6



#10

Heptane

Concen: 9.391 ppbv

RT: 4.979 min Scan# 1511

Delta R.T. 0.000 min

Lab File: VL041752.D

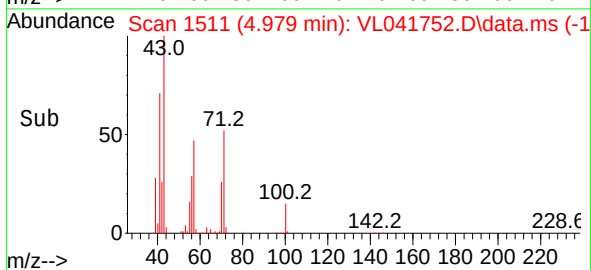
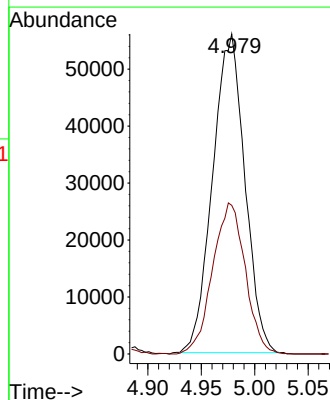
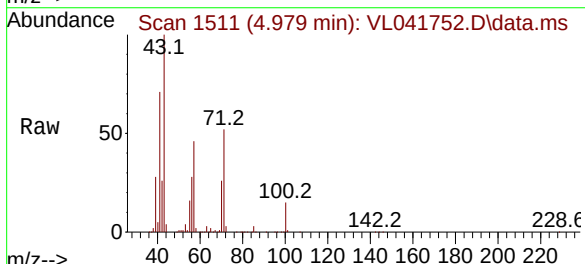
Acq: 16 Dec 2024 13:30

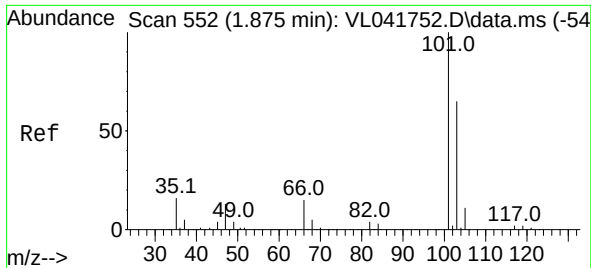
Tgt Ion: 43 Resp: 116969

Ion Ratio Lower Upper

43 100

57 48.1 38.5 57.7





#11

Trichlorofluoromethane

Concen: 9.474 ppbv

RT: 1.875 min Scan# 552

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

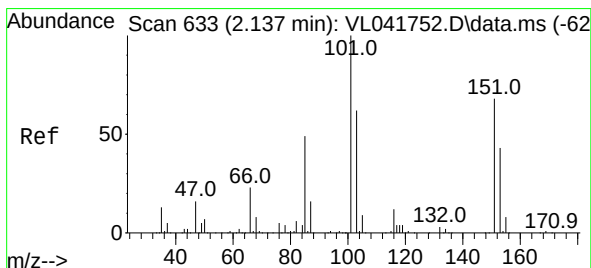
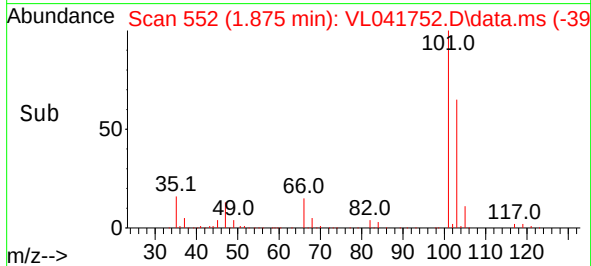
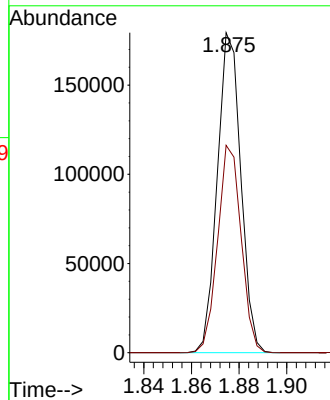
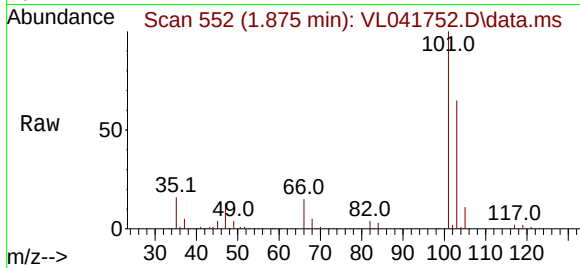
VSTDICCC010

Tgt Ion:101 Resp: 122831

Ion Ratio Lower Upper

101 100

103 64.8 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.327 ppbv

RT: 2.137 min Scan# 633

Delta R.T. 0.000 min

Lab File: VL041752.D

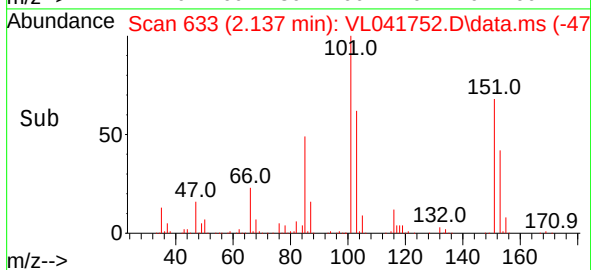
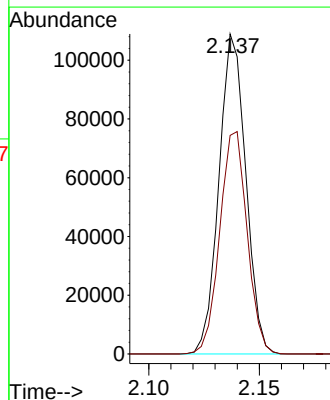
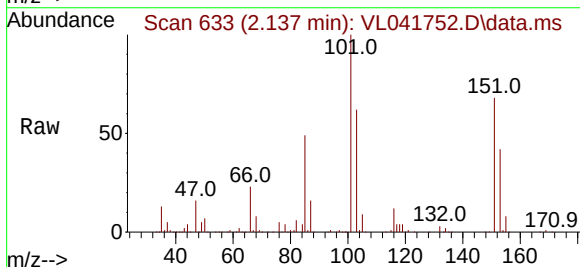
Acq: 16 Dec 2024 13:30

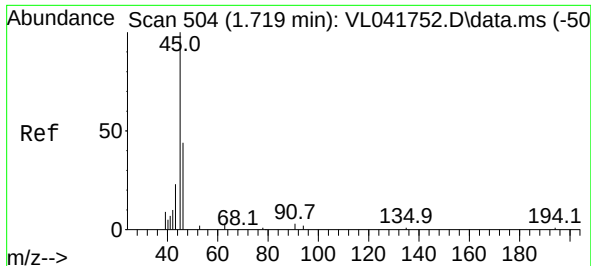
Tgt Ion:101 Resp: 91977

Ion Ratio Lower Upper

101 100

151 71.0 56.8 85.2





#13

Ethanol

Concen: 6.161 ppbv

RT: 1.719 min Scan# 504

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

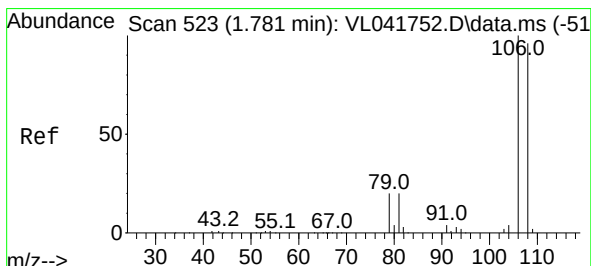
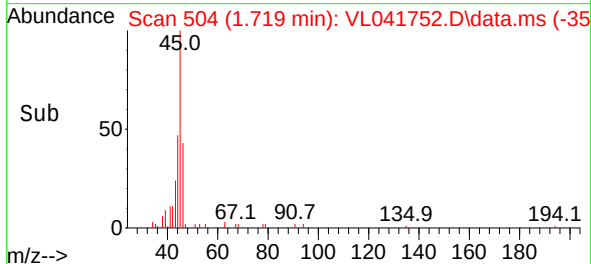
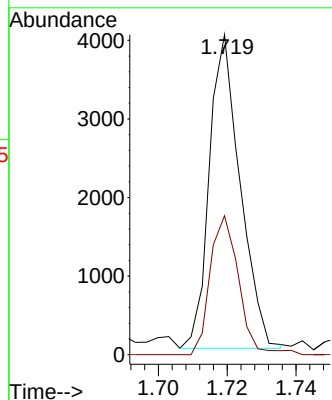
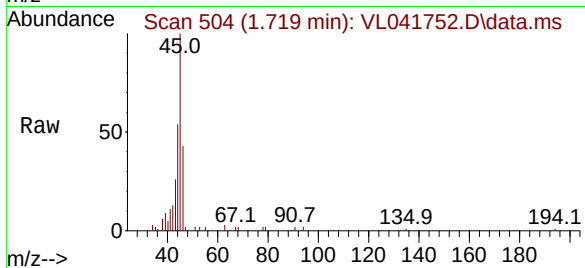
VSTDICCC010

Tgt Ion: 45 Resp: 2484

Ion Ratio Lower Upper

45 100

46 41.1 16.4 65.8



#14

Bromoethene

Concen: 9.770 ppbv

RT: 1.781 min Scan# 523

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

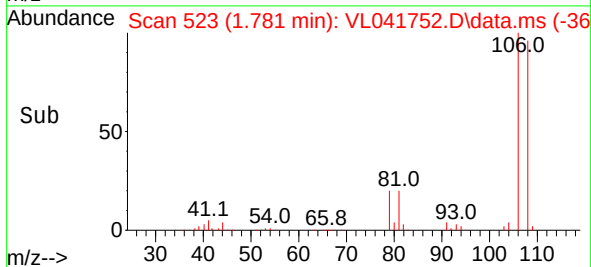
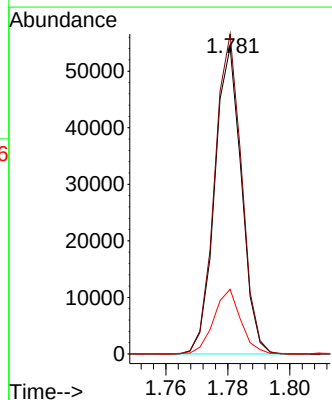
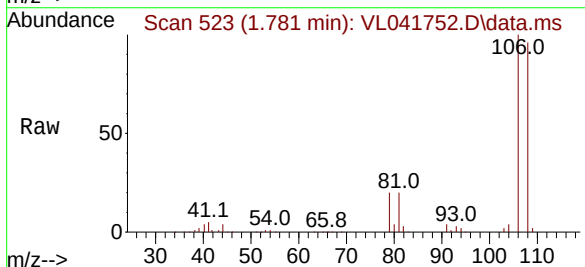
Tgt Ion: 108 Resp: 32528

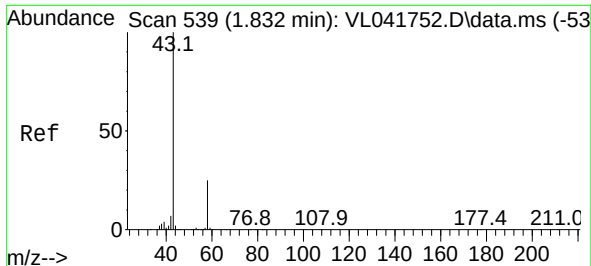
Ion Ratio Lower Upper

108 100

106 105.1 84.1 126.1

79 21.7 17.4 26.0





#15

Acetone

Concen: 7.509 ppbv

RT: 1.832 min Scan# 539

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

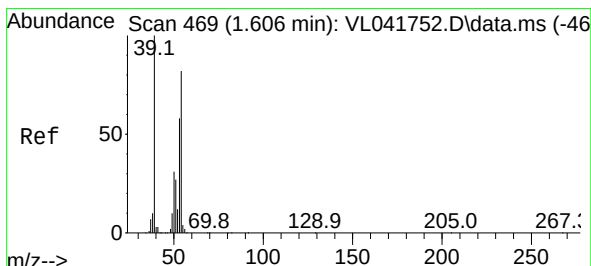
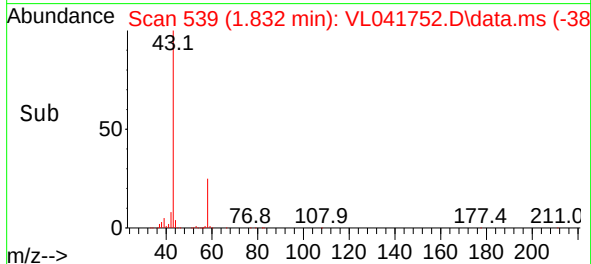
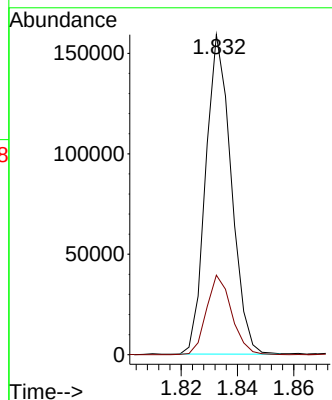
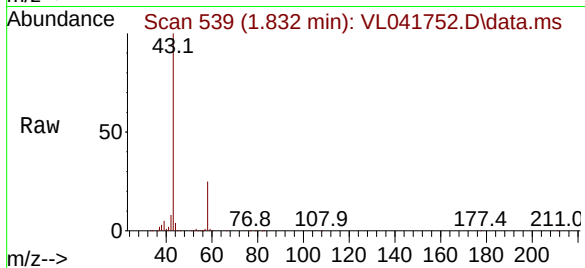
VSTDICCC010

Tgt Ion: 43 Resp: 100229

Ion Ratio Lower Upper

43 100

58 24.6 19.7 29.5



#16

1,3-Butadiene

Concen: 8.940 ppbv

RT: 1.606 min Scan# 469

Delta R.T. 0.000 min

Lab File: VL041752.D

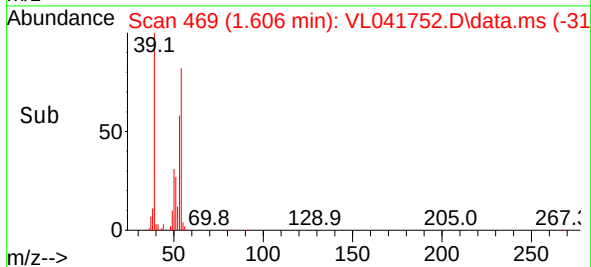
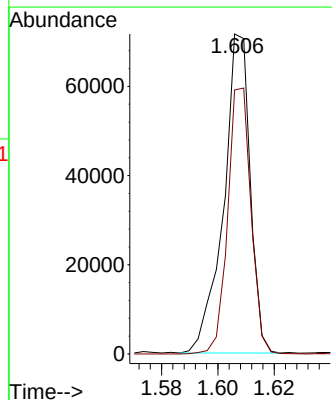
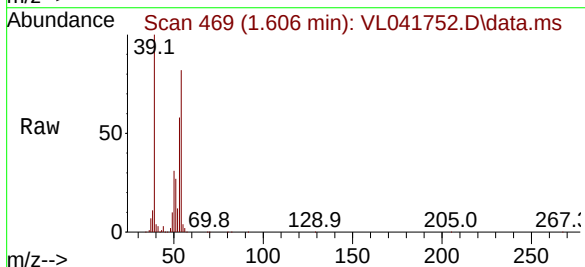
Acq: 16 Dec 2024 13:30

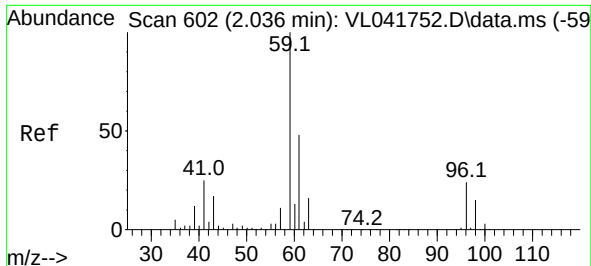
Tgt Ion: 39 Resp: 46989

Ion Ratio Lower Upper

39 100

54 73.0 58.4 87.6





#17

tert-Butyl alcohol

Concen: 9.497 ppbv

RT: 2.036 min Scan# 602

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

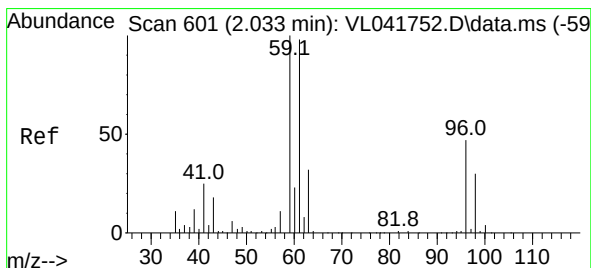
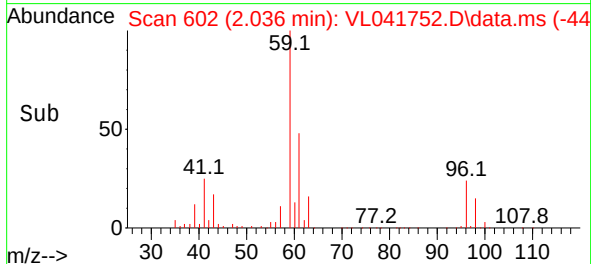
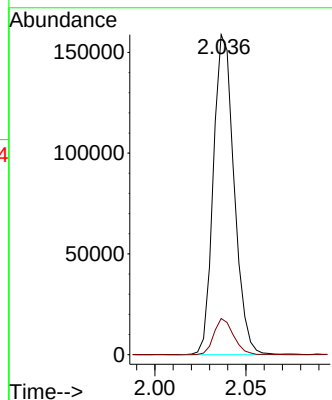
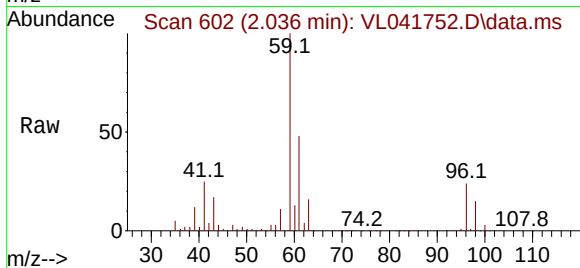
VSTDICCC010

Tgt Ion: 59 Resp: 125757

Ion Ratio Lower Upper

59 100

57 10.8 8.6 13.0



#18

1,1-Dichloroethene

Concen: 9.379 ppbv

RT: 2.033 min Scan# 601

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

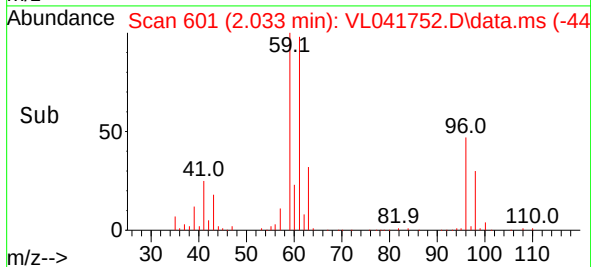
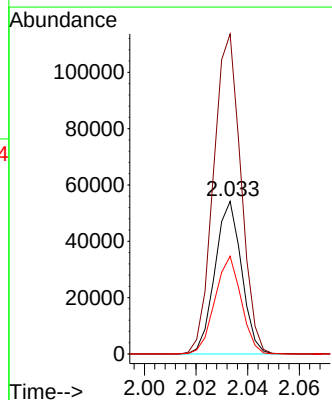
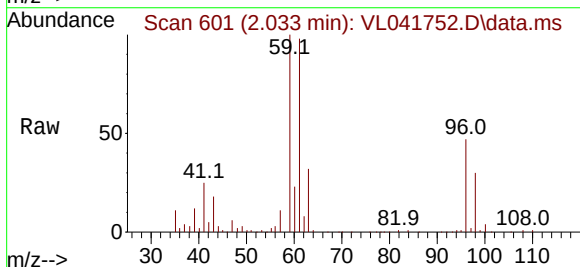
Tgt Ion: 96 Resp: 38775

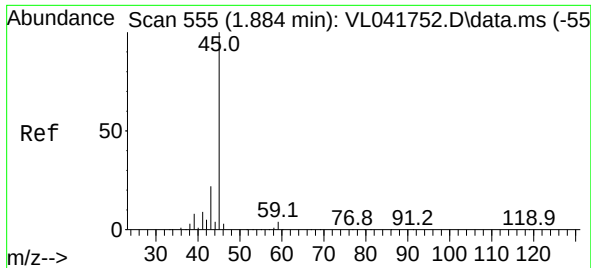
Ion Ratio Lower Upper

96 100

61 209.6 167.7 251.5

98 63.9 51.1 76.7

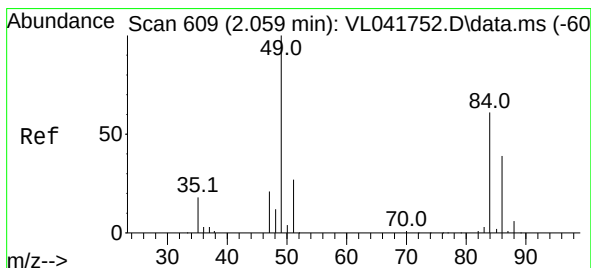
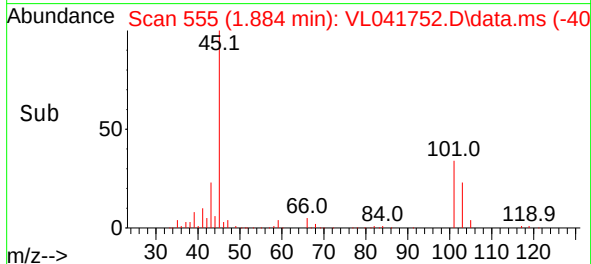
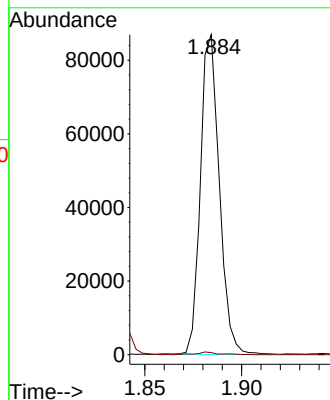
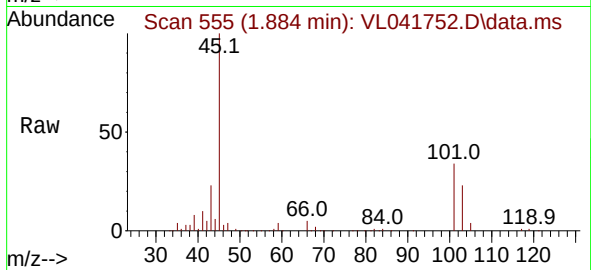




#19  
Isopropyl Alcohol  
Concen: 7.370 ppbv  
RT: 1.884 min Scan# 511  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

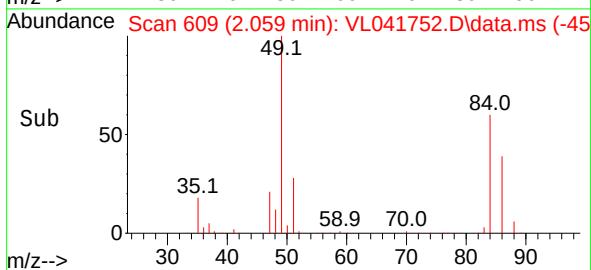
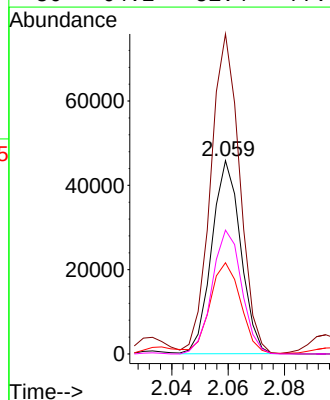
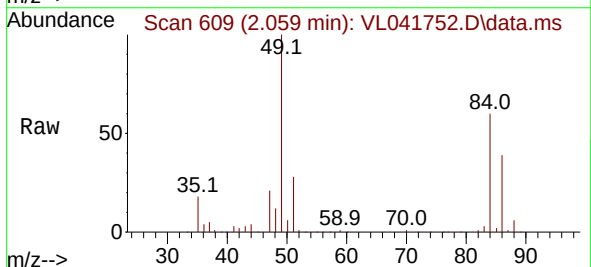
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 45 Resp: 59026  
Ion Ratio Lower Upper  
45 100  
58 41.6 33.3 49.9

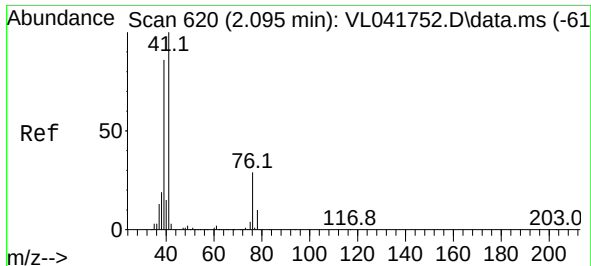


#20  
Methylene Chloride  
Concen: 8.601 ppbv  
RT: 2.059 min Scan# 609  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 84 Resp: 32734  
Ion Ratio Lower Upper  
84 100  
49 165.7 132.6 198.8  
51 47.0 37.6 56.4  
86 64.2 51.4 77.0







#21

Allyl Chloride

Concen: 9.588 ppbv

RT: 2.095 min Scan# 61

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

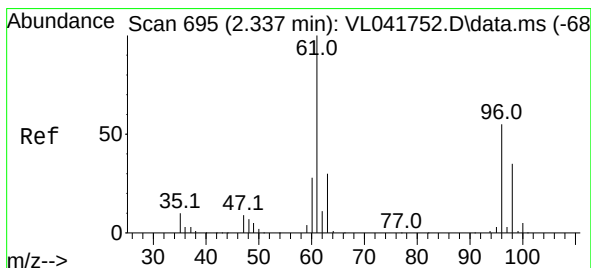
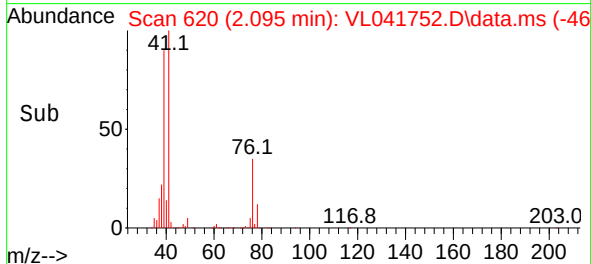
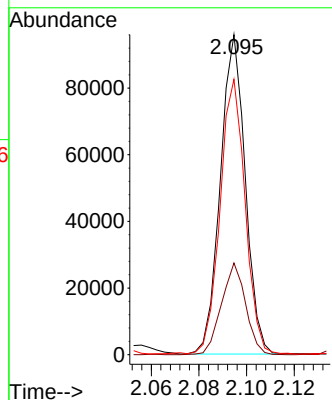
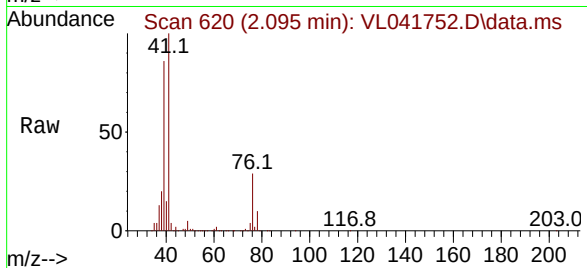
Tgt Ion: 41 Resp: 69406

Ion Ratio Lower Upper

41 100

76 27.9 22.3 33.5

39 86.5 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 9.276 ppbv

RT: 2.337 min Scan# 695

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

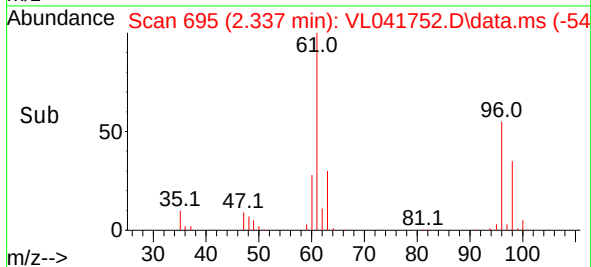
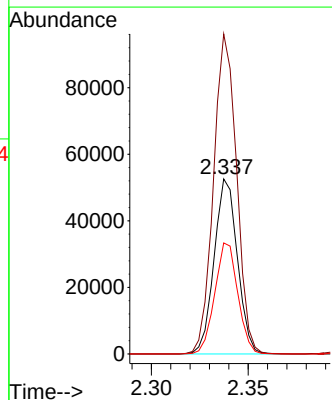
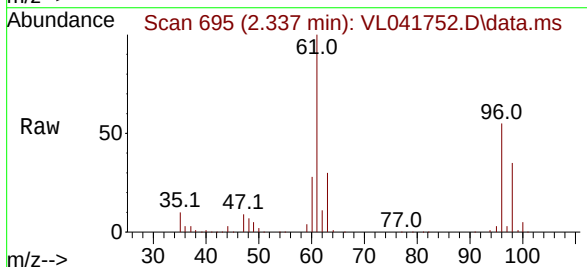
Tgt Ion: 96 Resp: 43898

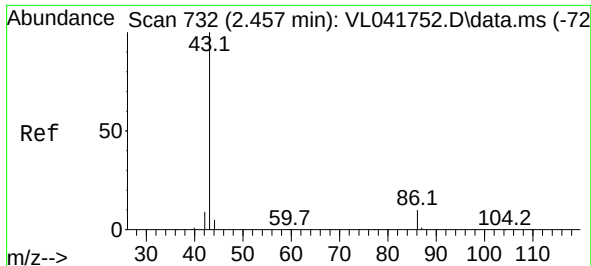
Ion Ratio Lower Upper

96 100

61 182.9 146.3 219.5

98 63.5 50.8 76.2

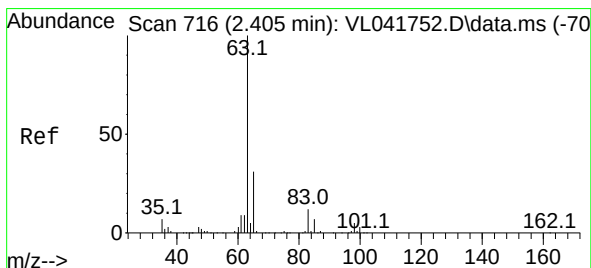
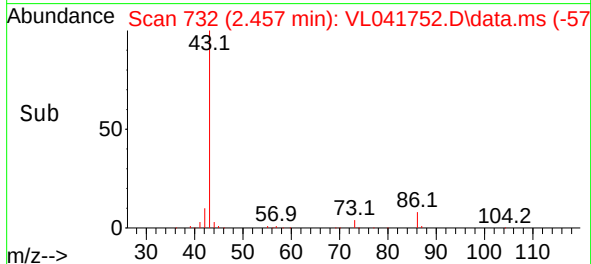
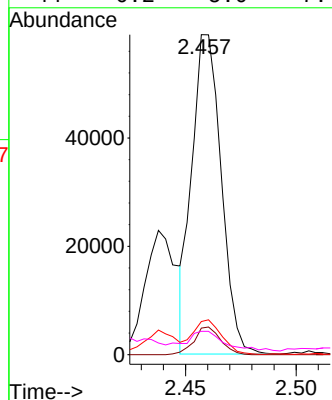
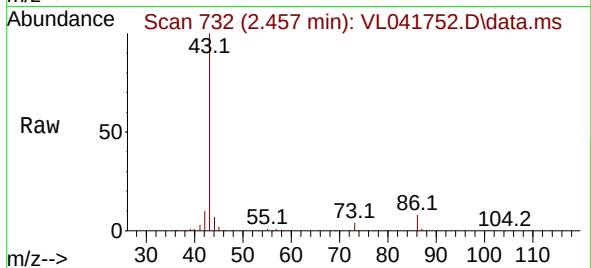




#23  
 Vinyl Acetate  
 Concen: 9.350 ppbv  
 RT: 2.457 min Scan# 716  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

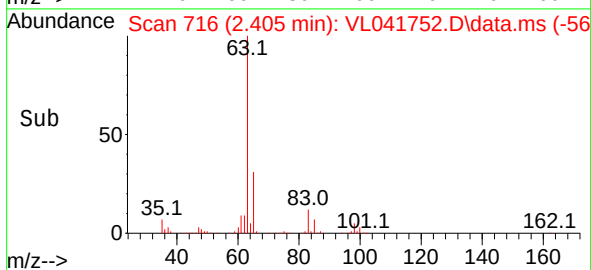
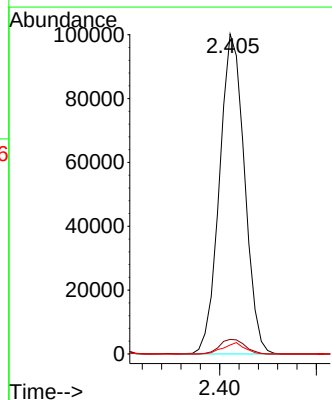
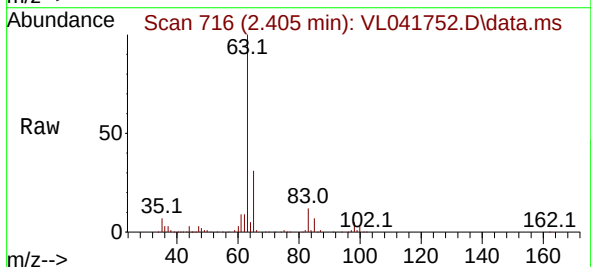
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDICCC010

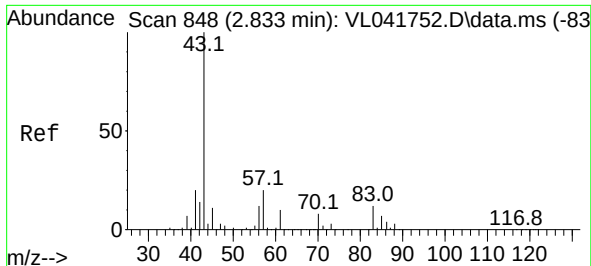
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 54227 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 8.3   | 6.6   | 10.0  |
| 42       | 10.2  | 8.2   | 12.2  |
| 44       | 6.2   | 5.0   | 7.4   |



#24  
 1,1-Dichloroethane  
 Concen: 9.386 ppbv  
 RT: 2.405 min Scan# 716  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 89912 |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 4.5   | 2.3   | 6.8   |
| 100      | 2.8   | 1.4   | 4.2   |

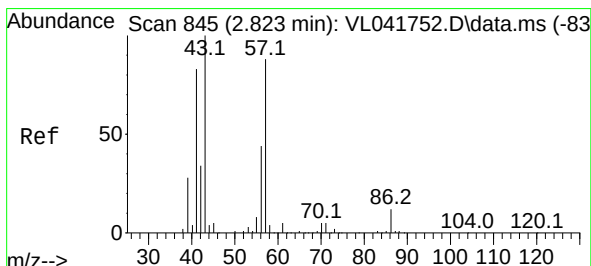
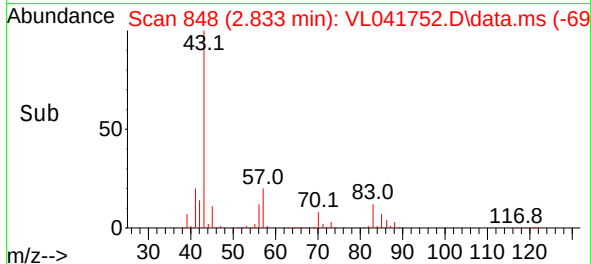
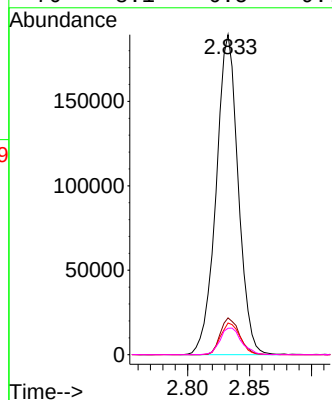
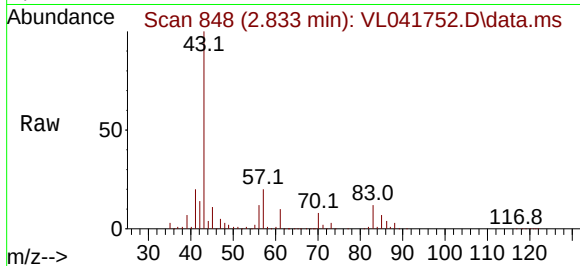




#25  
Ethyl Acetate  
Concen: 9.432 ppbv  
RT: 2.833 min Scan# 848  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

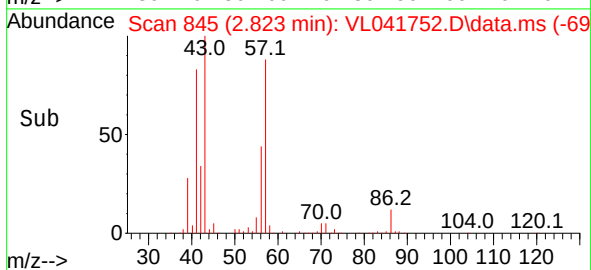
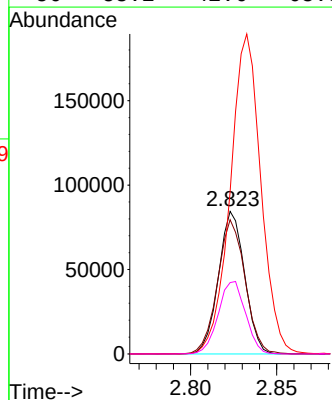
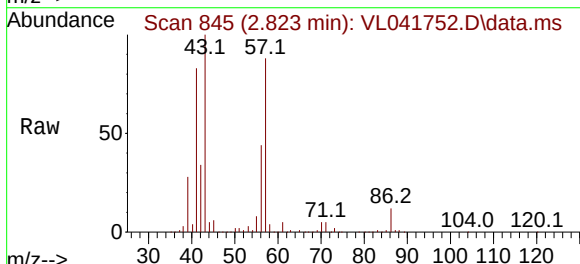
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

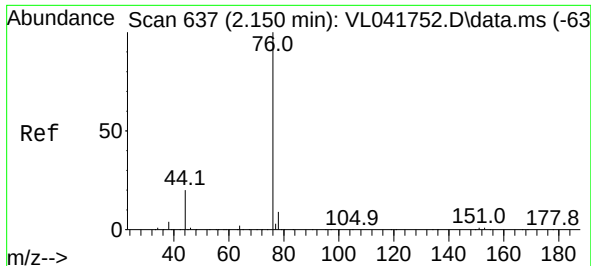
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 235305 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 10.1  | 8.1   | 12.1   |
| 61       | 8.8   | 7.0   | 10.6   |
| 70       | 8.1   | 6.5   | 9.7    |



#26  
Hexane  
Concen: 9.486 ppbv  
RT: 2.823 min Scan# 845  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 57    | Resp: | 89385 |
| Ion      | Ratio | Lower | Upper |
| 57       | 100   |       |       |
| 41       | 99.5  | 79.6  | 119.4 |
| 43       | 263.8 | 211.0 | 316.6 |
| 56       | 53.2  | 42.6  | 63.8  |





#27

Carbon Disulfide

Concen: 10.873 ppbv

RT: 2.150 min Scan# 637

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

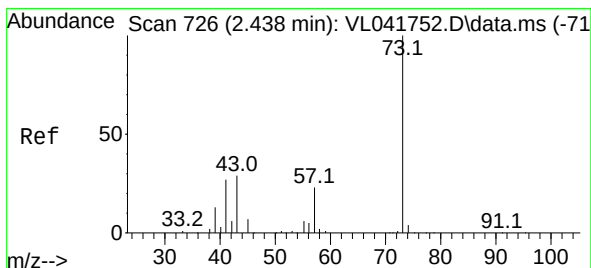
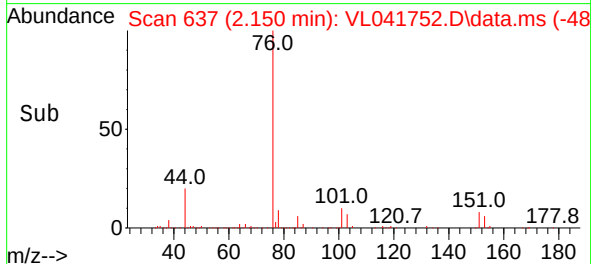
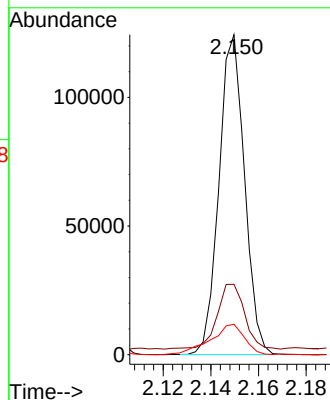
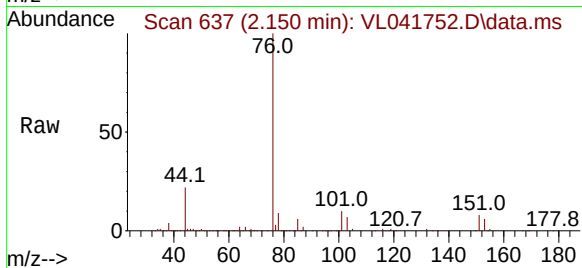
Tgt Ion: 76 Resp: 92329

Ion Ratio Lower Upper

76 100

44 22.0 17.6 26.4

78 12.8 10.2 15.4



#28

Methyl tert-Butyl Ether

Concen: 9.854 ppbv

RT: 2.438 min Scan# 726

Delta R.T. 0.000 min

Lab File: VL041752.D

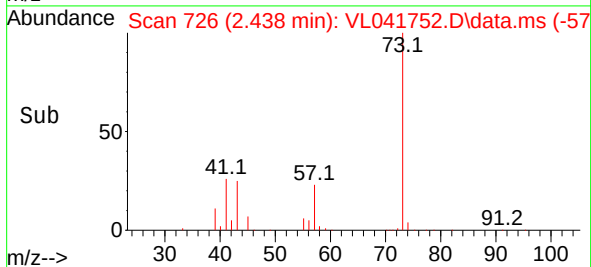
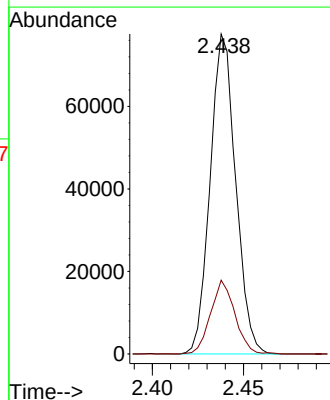
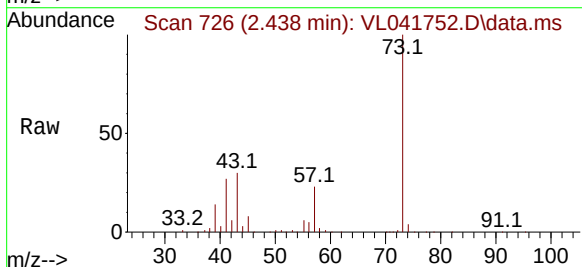
Acq: 16 Dec 2024 13:30

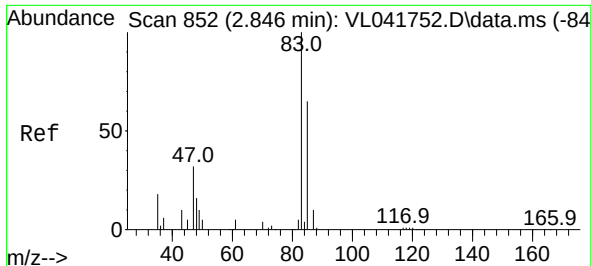
Tgt Ion: 73 Resp: 75330

Ion Ratio Lower Upper

73 100

57 22.0 17.6 26.4





#29

Chloroform

Concen: 9.408 ppbv

RT: 2.846 min Scan# 852

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

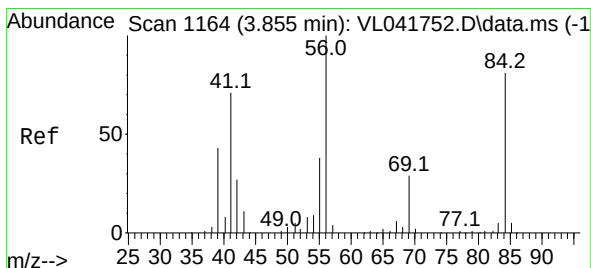
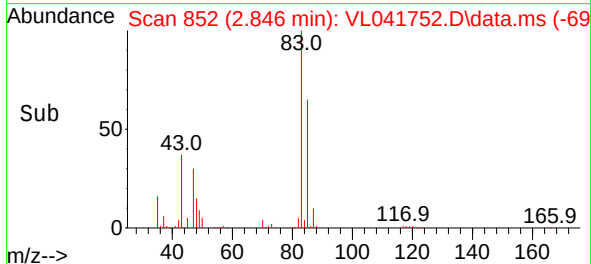
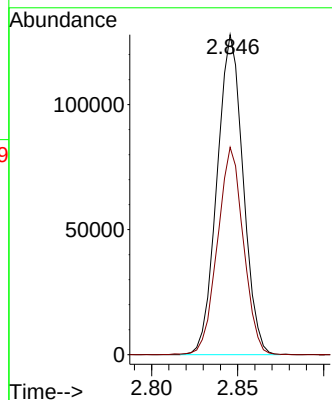
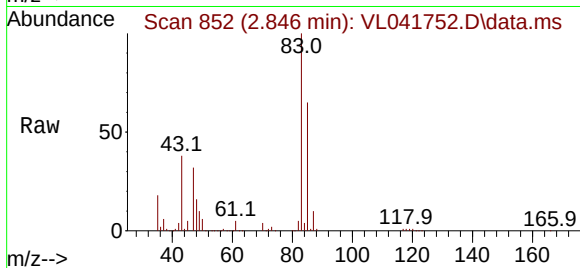
VSTDICCC010

Tgt Ion: 83 Resp: 135099

Ion Ratio Lower Upper

83 100

85 64.7 51.8 77.6



#30

Cyclohexane

Concen: 9.374 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

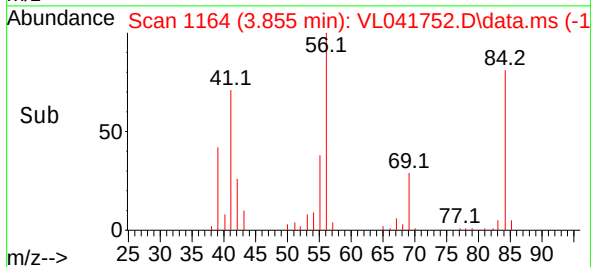
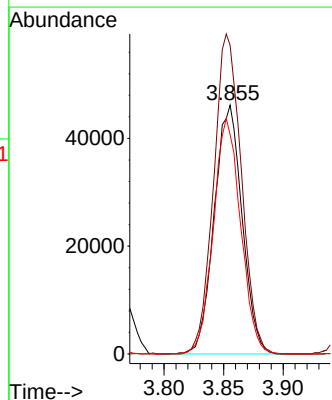
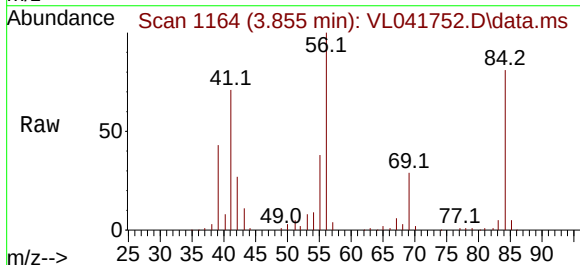
Tgt Ion: 84 Resp: 75156

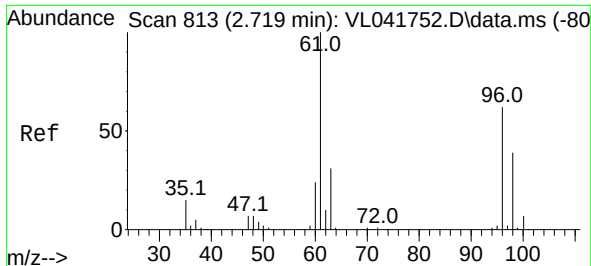
Ion Ratio Lower Upper

84 100

56 127.9 102.3 153.5

41 92.5 74.0 111.0

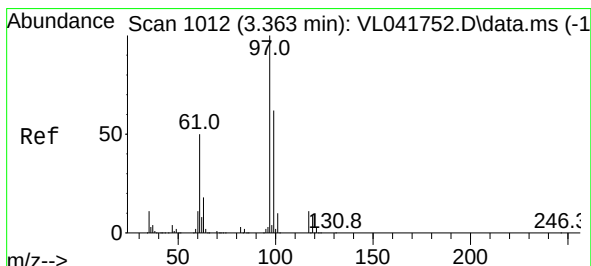
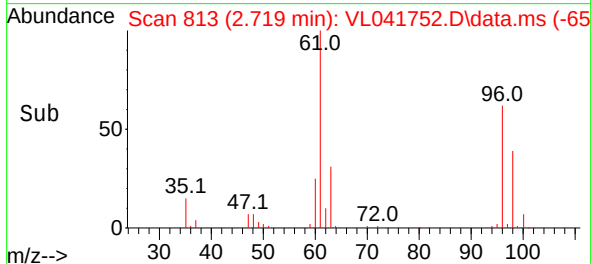
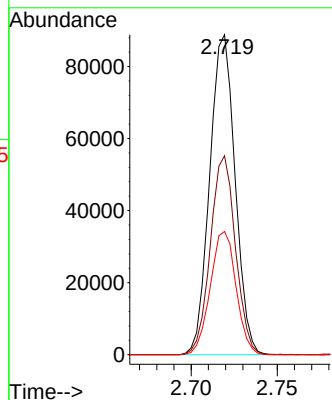
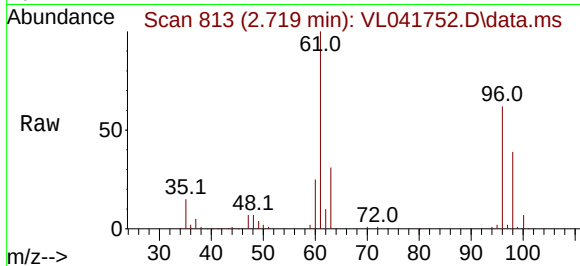




#31  
 cis-1,2-Dichloroethene  
 Concen: 9.374 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

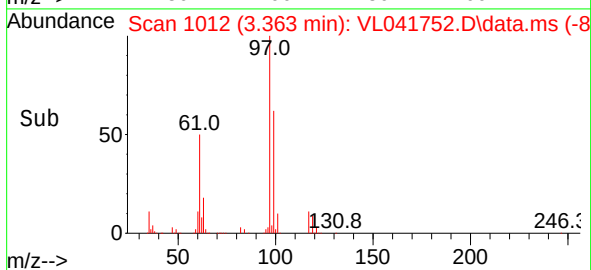
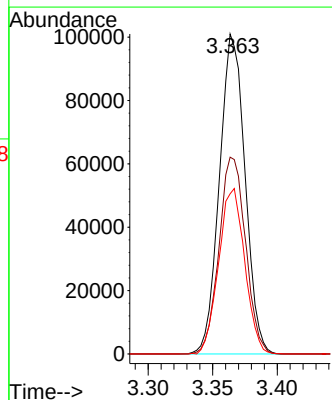
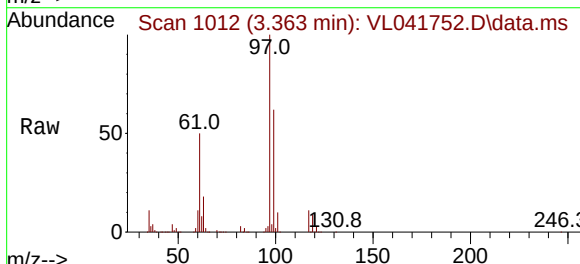
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDICCC010

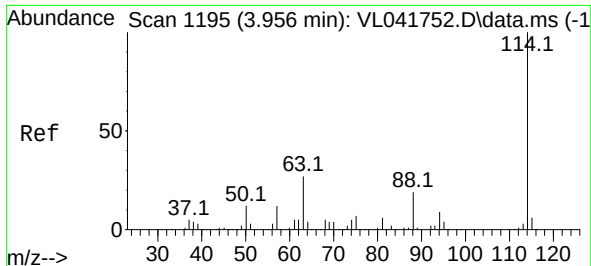
Tgt Ion: 61 Resp: 91276  
 Ion Ratio Lower Upper  
 61 100  
 96 62.1 49.7 74.5  
 98 38.5 30.8 46.2



#32  
 1,1,1-Trichloroethane  
 Concen: 9.733 ppbv  
 RT: 3.363 min Scan# 1012  
 Delta R.T. 0.000 min  
 Lab File: VL041752.D  
 Acq: 16 Dec 2024 13:30

Tgt Ion: 97 Resp: 139102  
 Ion Ratio Lower Upper  
 97 100  
 99 63.7 51.0 76.4  
 61 52.7 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.956 min Scan# 1195

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

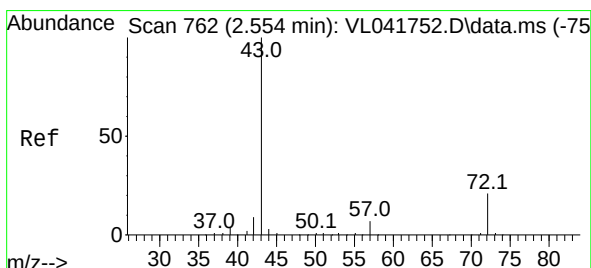
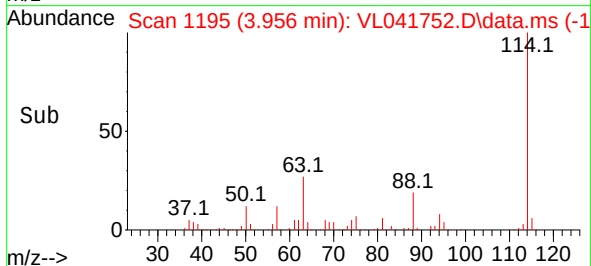
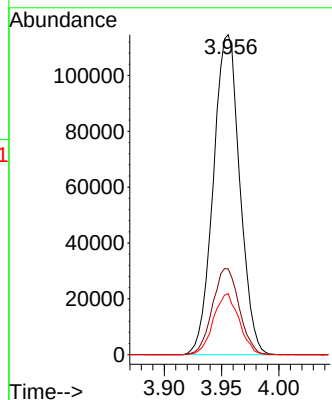
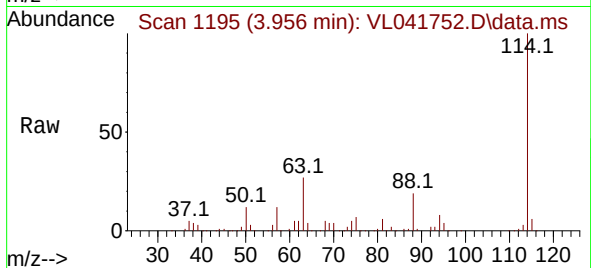
Tgt Ion:114 Resp: 183786

Ion Ratio Lower Upper

114 100

63 27.3 21.8 32.8

88 18.5 14.8 22.2



#34

2-Butanone

Concen: 9.153 ppbv

RT: 2.554 min Scan# 762

Delta R.T. 0.000 min

Lab File: VL041752.D

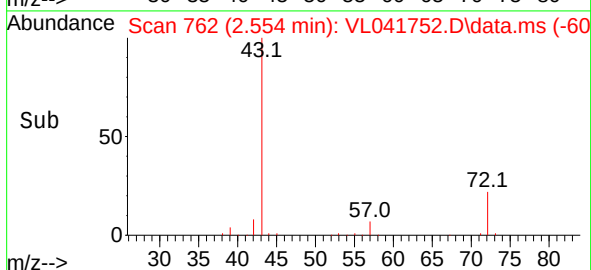
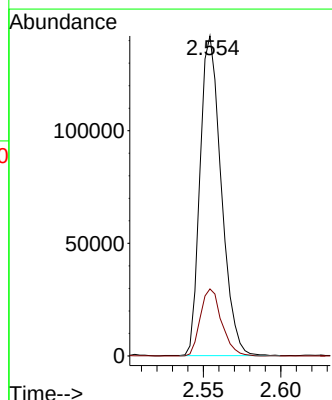
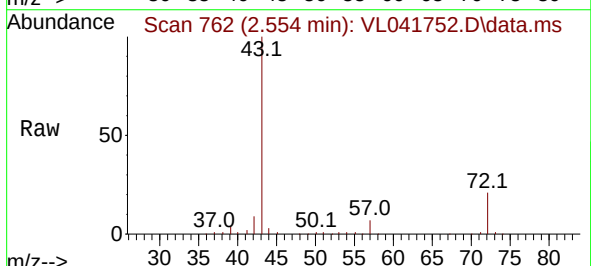
Acq: 16 Dec 2024 13:30

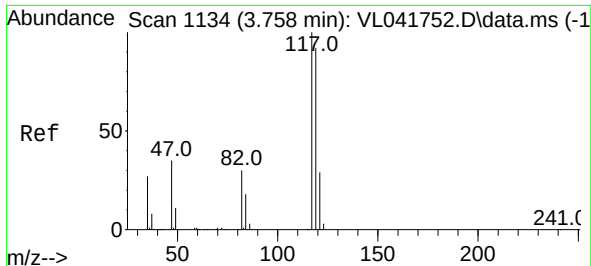
Tgt Ion: 43 Resp: 135331

Ion Ratio Lower Upper

43 100

72 21.0 16.8 25.2





#35

Carbon Tetrachloride

Concen: 10.650 ppbv

RT: 3.758 min Scan# 1134

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

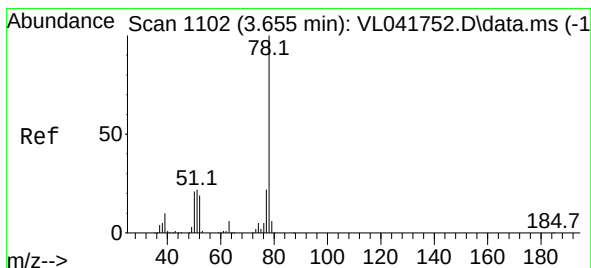
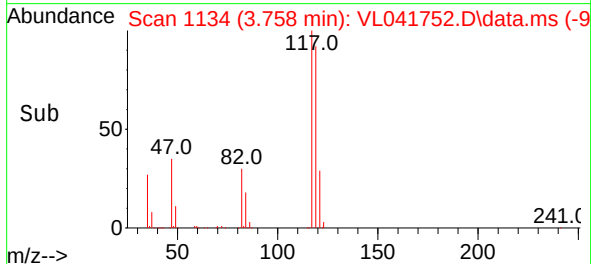
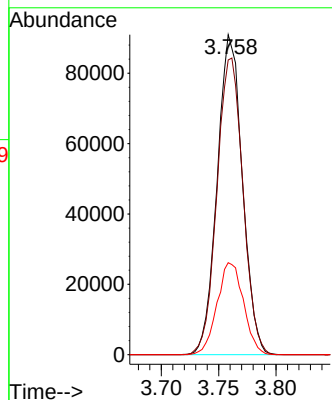
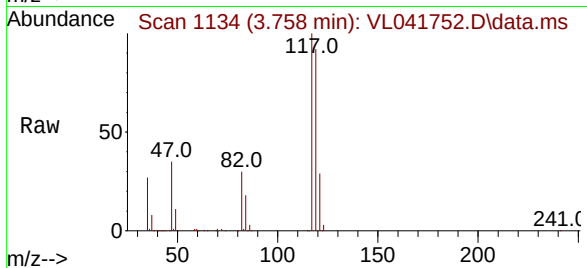
Tgt Ion:117 Resp: 138952

Ion Ratio Lower Upper

117 100

119 92.1 73.7 110.5

121 28.7 23.0 34.4



#36

Benzene

Concen: 9.423 ppbv

RT: 3.655 min Scan# 1102

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

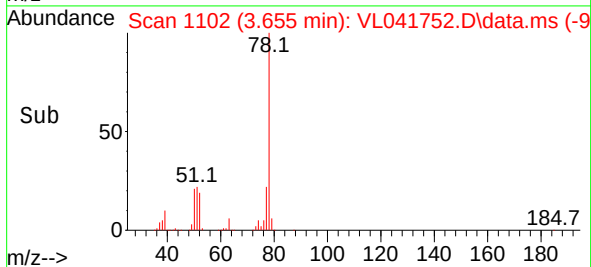
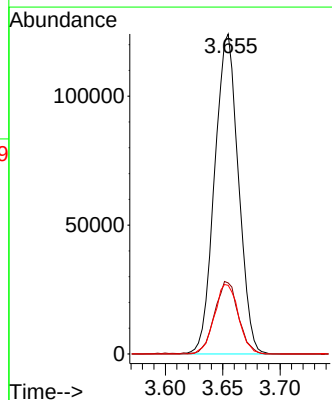
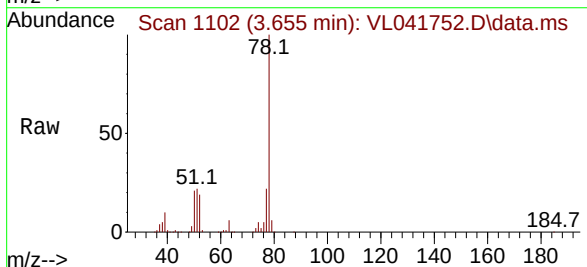
Tgt Ion: 78 Resp: 179134

Ion Ratio Lower Upper

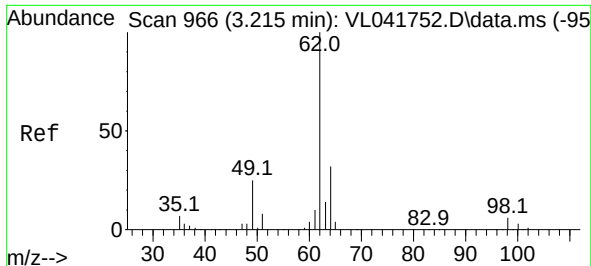
78 100

77 22.2 17.8 26.6

50 21.5 17.2 25.8



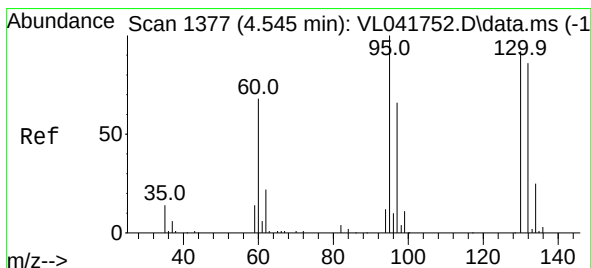
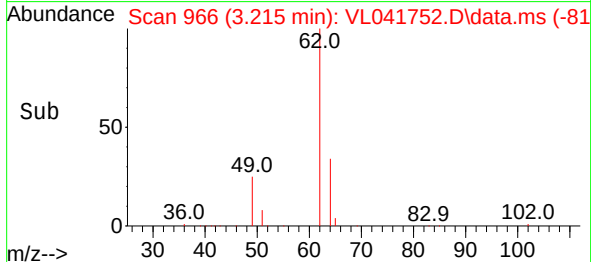
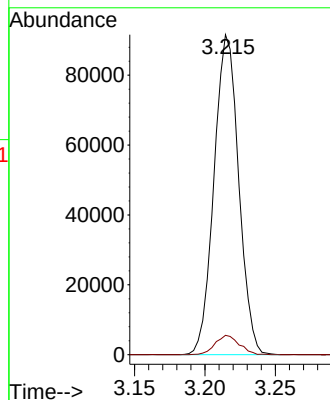
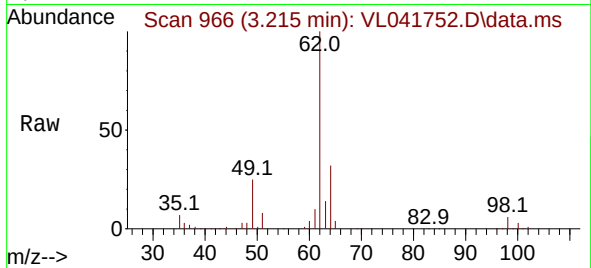




#37  
1,2-Dichloroethane  
Concen: 9.449 ppbv  
RT: 3.215 min Scan# 966  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

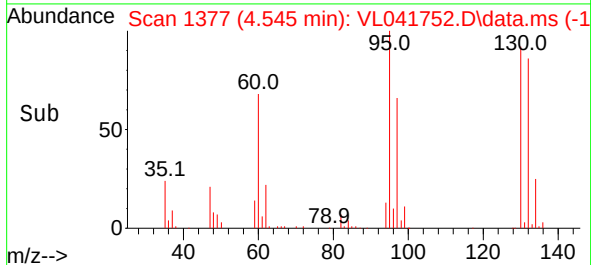
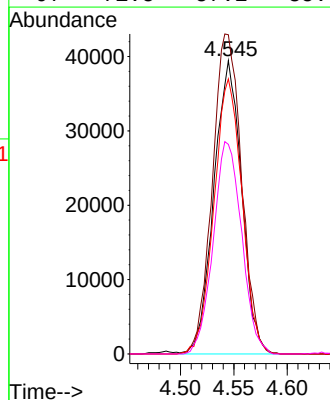
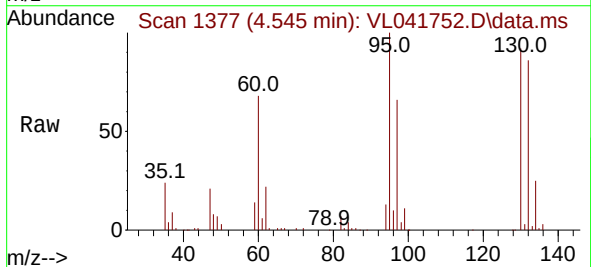
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

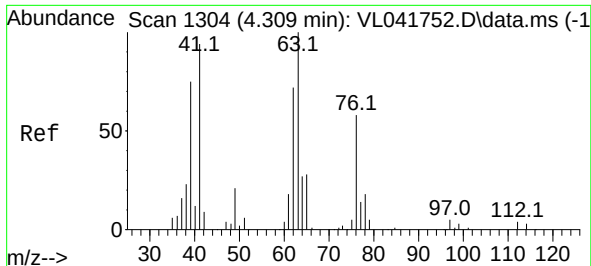
Tgt Ion: 62 Resp: 111770  
Ion Ratio Lower Upper  
62 100  
98 5.9 4.7 7.1



#38  
Trichloroethene  
Concen: 8.907 ppbv  
RT: 4.545 min Scan# 1377  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:130 Resp: 71297  
Ion Ratio Lower Upper  
130 100  
95 108.8 87.0 130.6  
132 93.8 75.0 112.6  
97 71.5 57.2 85.8





#39

1,2-Dichloropropane

Concen: 9.423 ppbv

RT: 4.309 min Scan# 1304

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

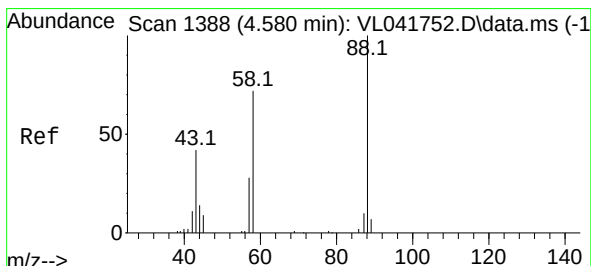
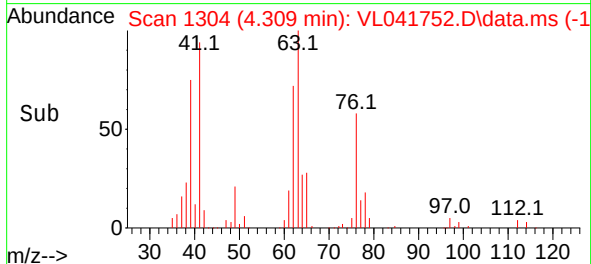
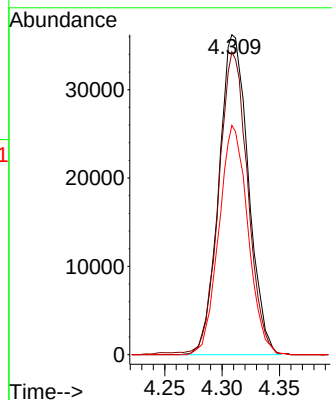
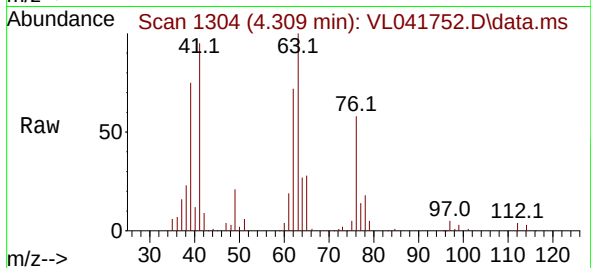
Tgt Ion: 63 Resp: 64789

Ion Ratio Lower Upper

63 100

41 94.1 75.3 112.9

62 71.6 57.3 85.9



#40

1,4-Dioxane

Concen: 9.128 ppbv

RT: 4.580 min Scan# 1388

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion: 88 Resp: 30658

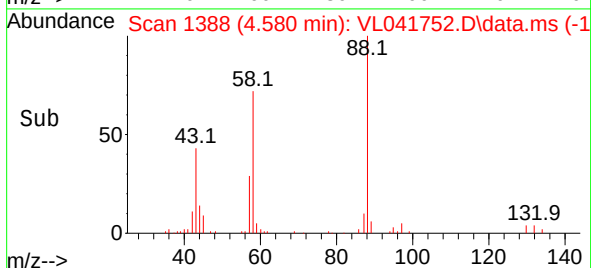
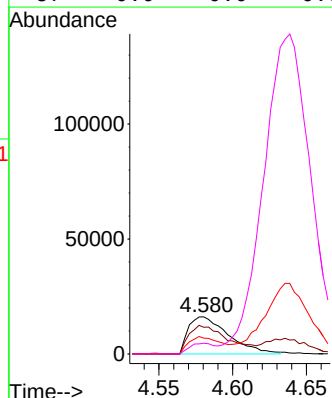
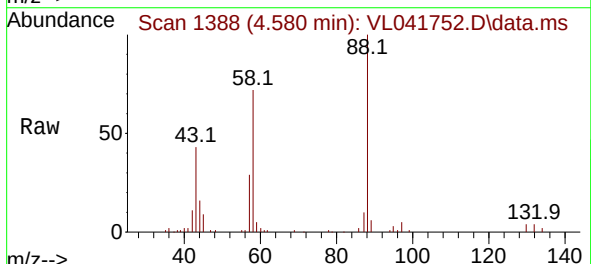
Ion Ratio Lower Upper

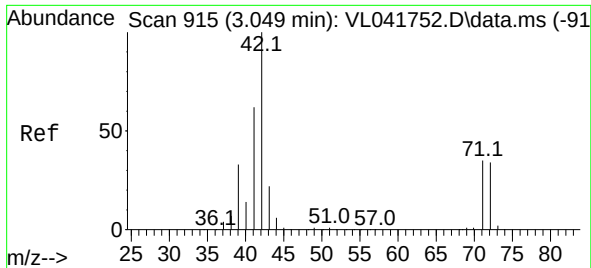
88 100

58 76.3 61.0 91.6

43 36.7 29.4 44.0

57 0.0 0.0 0.0

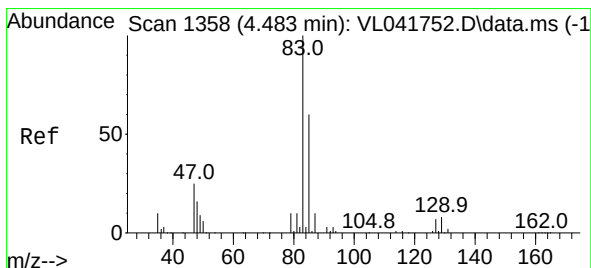
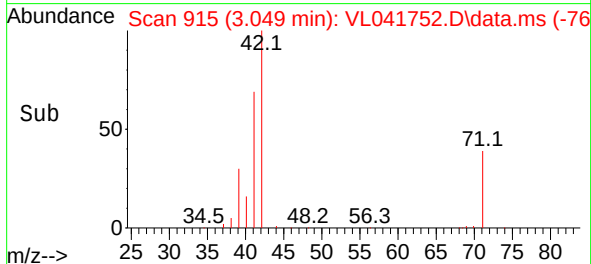
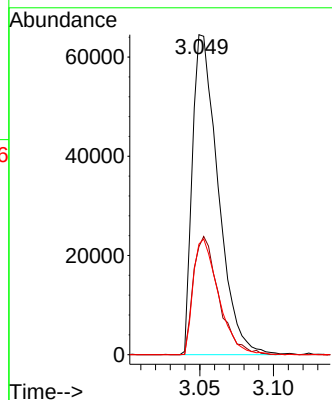
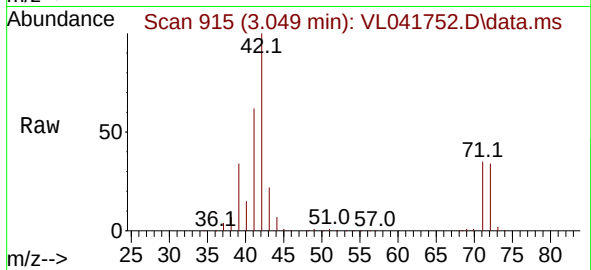




#41  
Tetrahydrofuran  
Concen: 9.474 ppbv  
RT: 3.049 min Scan# 915  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

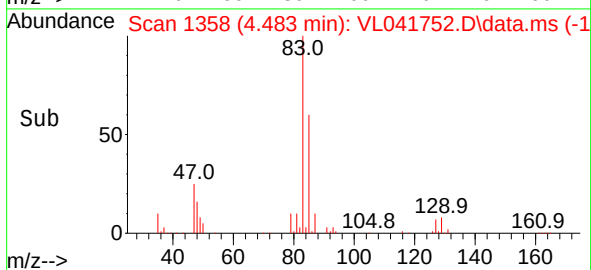
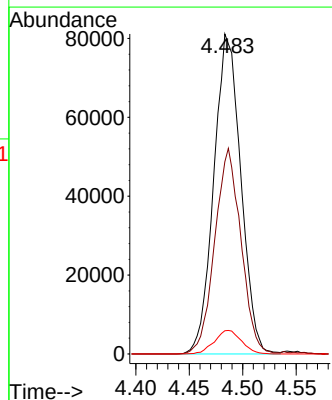
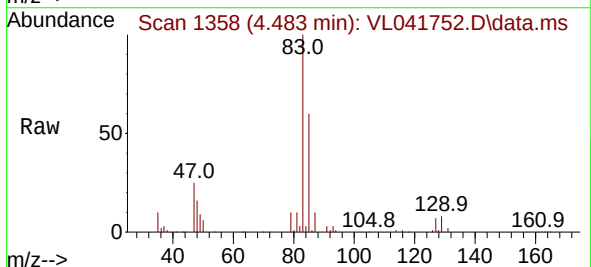
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

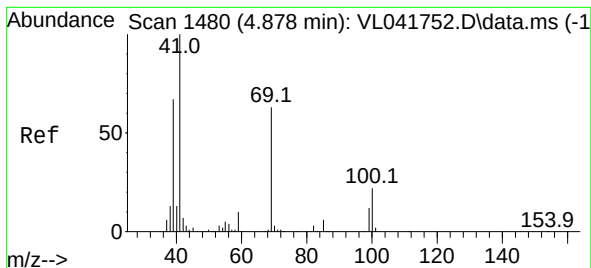
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 78480 |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 36.4  | 29.1  | 43.7  |
| 71       | 35.5  | 28.4  | 42.6  |



#42  
Bromodichloromethane  
Concen: 10.494 ppbv  
RT: 4.483 min Scan# 1358  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 142819 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 85       | 60.0  | 48.0  | 72.0   |
| 127      | 7.3   | 5.8   | 8.8    |





#43

Methyl Methacrylate

Concen: 10.020 ppbv

RT: 4.878 min Scan# 1480

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

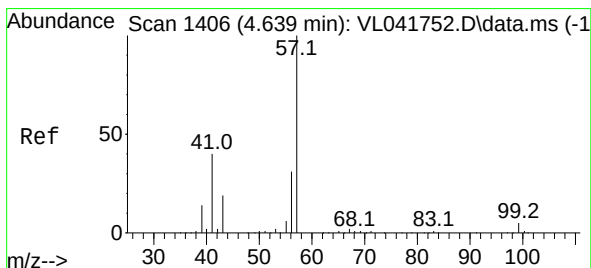
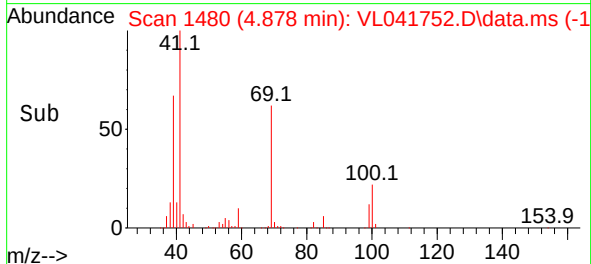
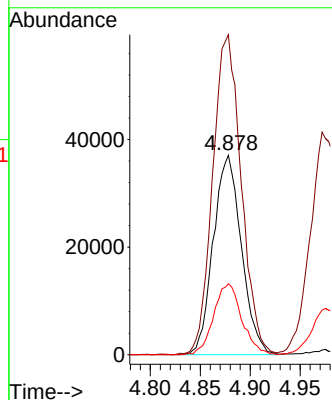
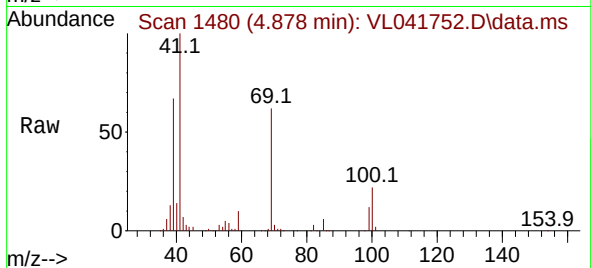
Tgt Ion: 69 Resp: 72578

Ion Ratio Lower Upper

69 100

41 162.9 130.3 195.5

100 35.4 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 9.479 ppbv

RT: 4.639 min Scan# 1406

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

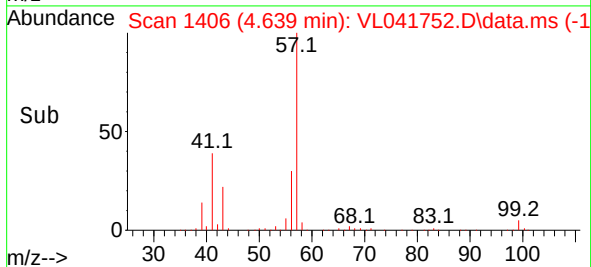
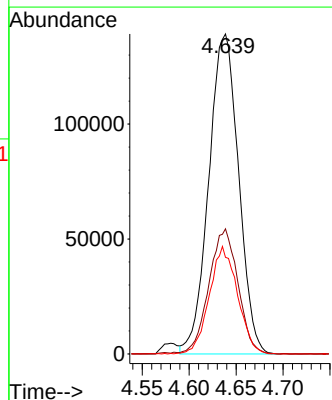
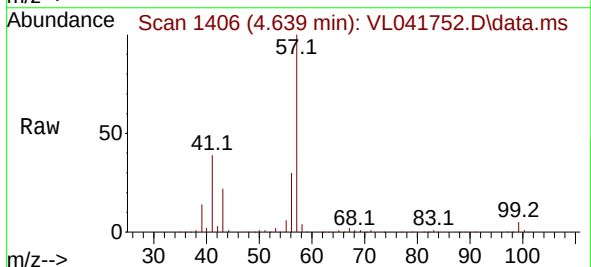
Tgt Ion: 57 Resp: 307748

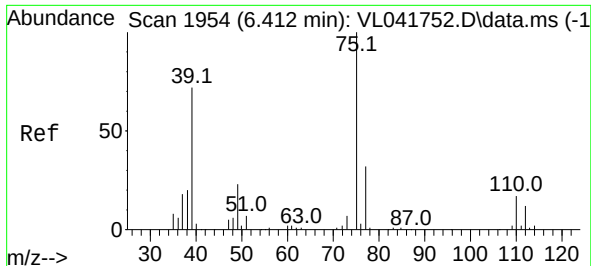
Ion Ratio Lower Upper

57 100

41 38.4 30.7 46.1

56 31.7 25.4 38.0





#45

t-1,3-Dichloropropene

Concen: 10.378 ppbv

RT: 6.412 min Scan# 1954

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

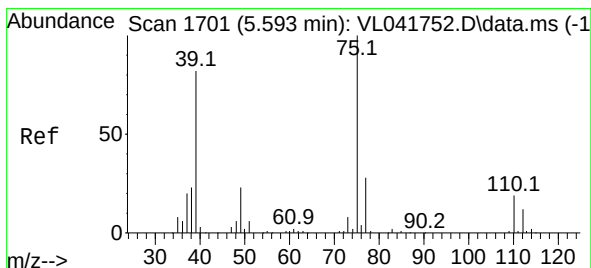
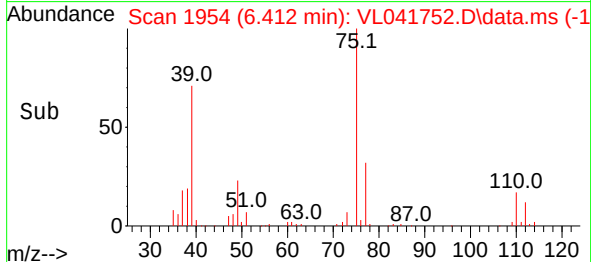
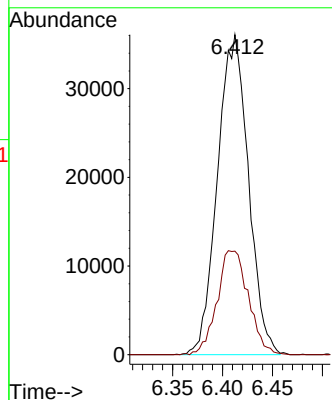
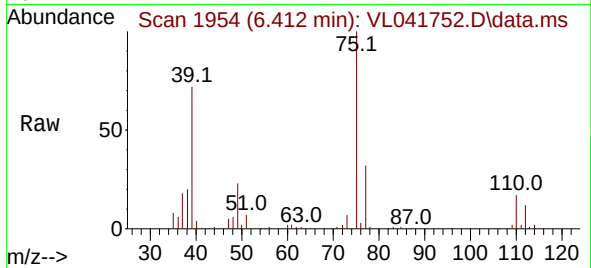
VSTDICCC010

Tgt Ion: 75 Resp: 77752

Ion Ratio Lower Upper

75 100

77 32.4 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 10.303 ppbv

RT: 5.593 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

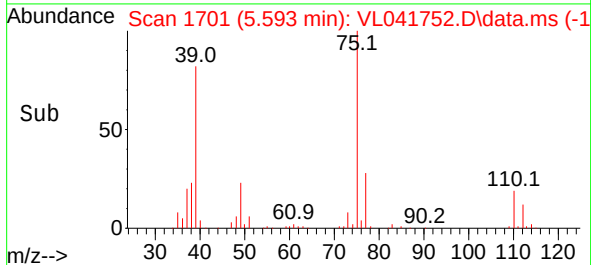
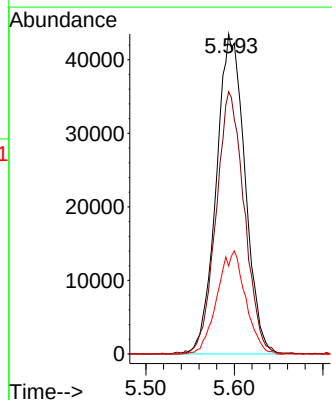
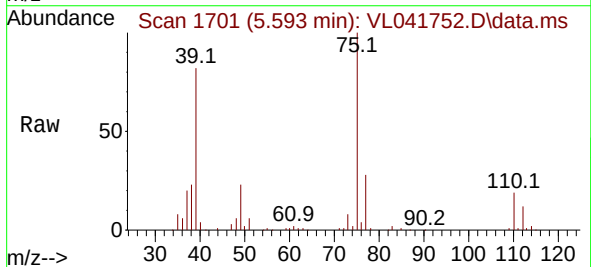
Tgt Ion: 75 Resp: 97992

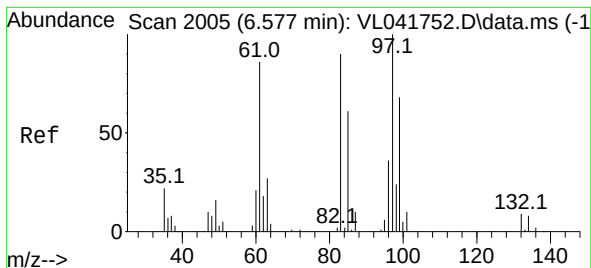
Ion Ratio Lower Upper

75 100

39 81.5 65.2 97.8

77 27.5 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 9.406 ppbv

RT: 6.577 min Scan# 2005

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

Tgt Ion: 97 Resp: 67550

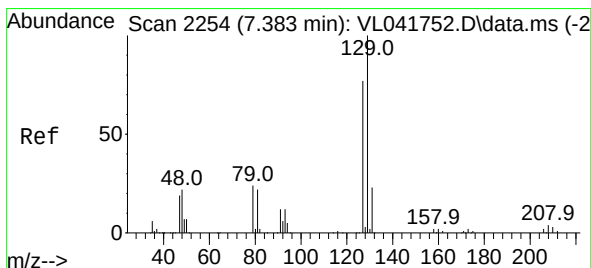
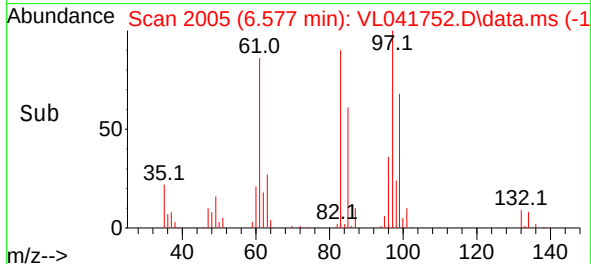
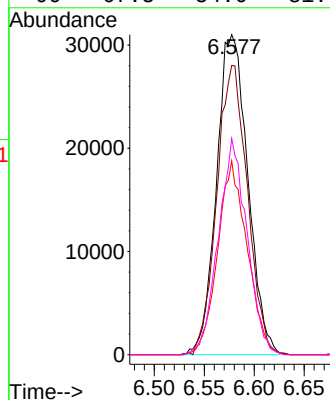
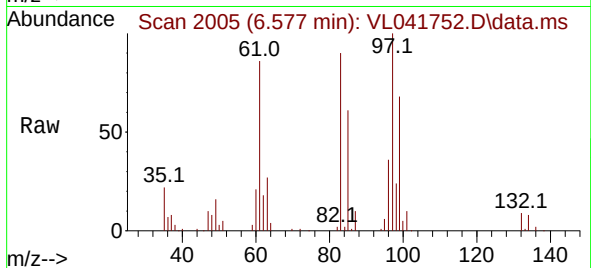
Ion Ratio Lower Upper

97 100

83 90.4 72.3 108.5

85 60.6 48.5 72.7

99 67.5 54.0 81.0



#48

Dibromochloromethane

Concen: 11.105 ppbv

RT: 7.383 min Scan# 2254

Delta R.T. 0.000 min

Lab File: VL041752.D

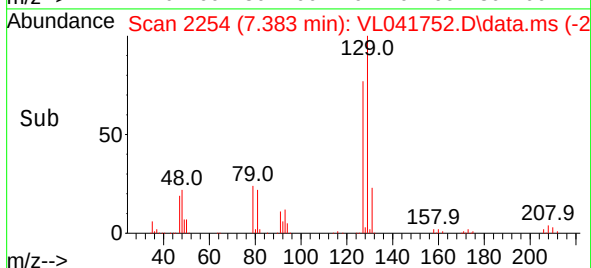
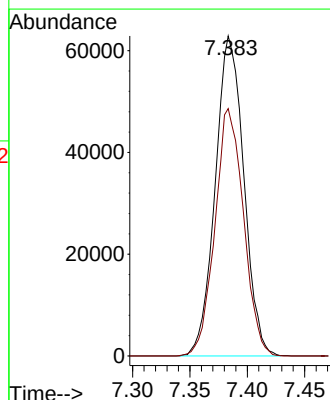
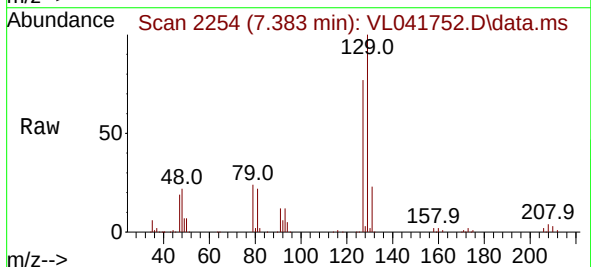
Acq: 16 Dec 2024 13:30

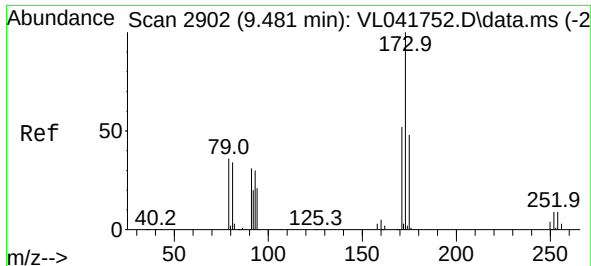
Tgt Ion: 129 Resp: 108899

Ion Ratio Lower Upper

129 100

127 77.5 38.8 116.3





#49

Bromoform

Concen: 11.410 ppbv

RT: 9.481 min Scan# 2902

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

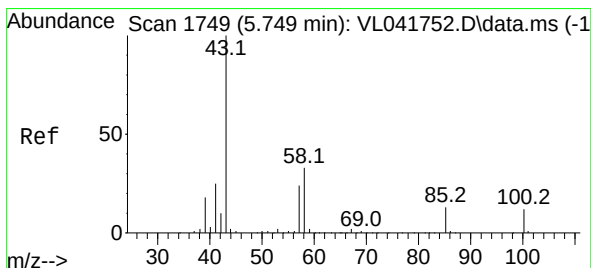
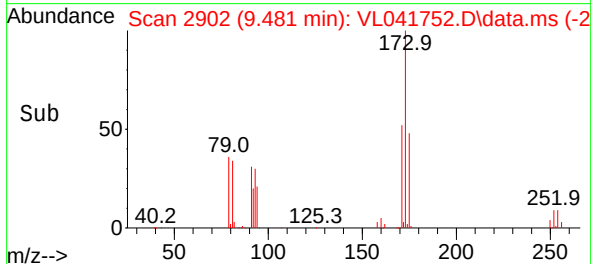
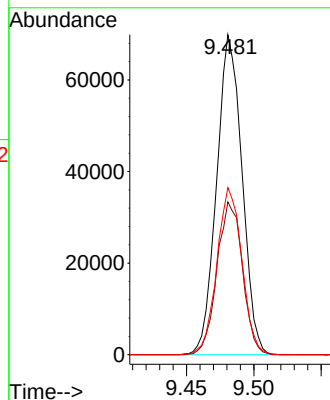
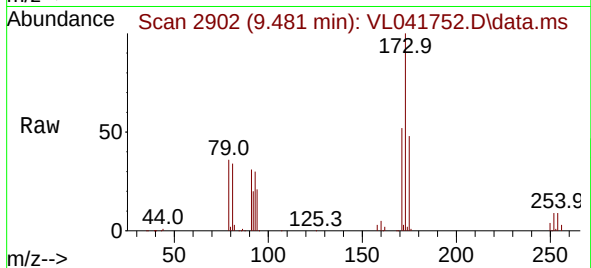
Tgt Ion:173 Resp: 91587

Ion Ratio Lower Upper

173 100

175 47.7 38.2 57.2

171 51.4 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 9.678 ppbv

RT: 5.749 min Scan# 1749

Delta R.T. 0.000 min

Lab File: VL041752.D

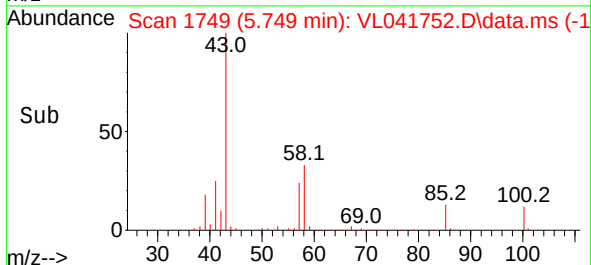
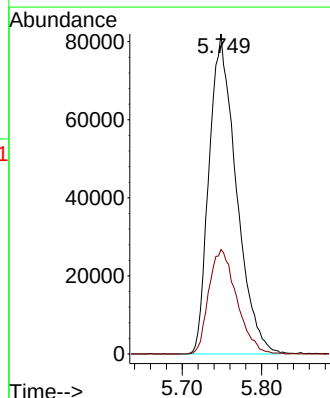
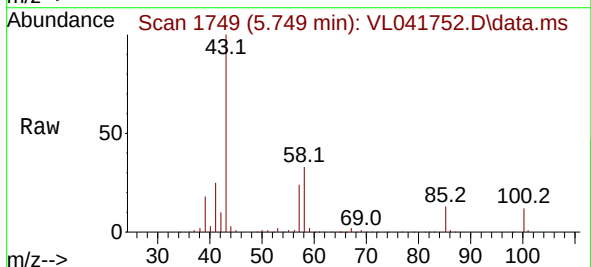
Acq: 16 Dec 2024 13:30

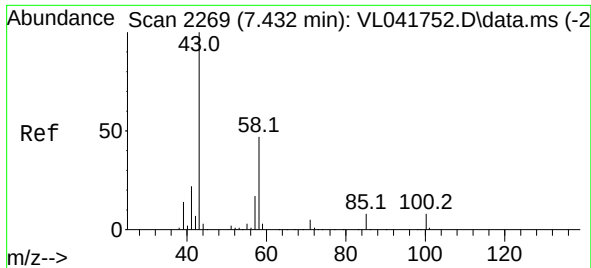
Tgt Ion: 43 Resp: 194838

Ion Ratio Lower Upper

43 100

58 33.5 26.8 40.2

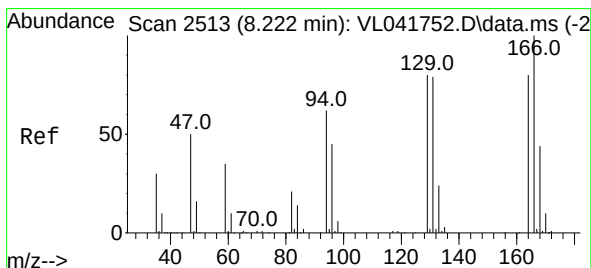
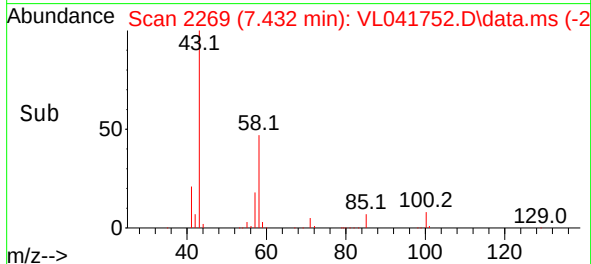
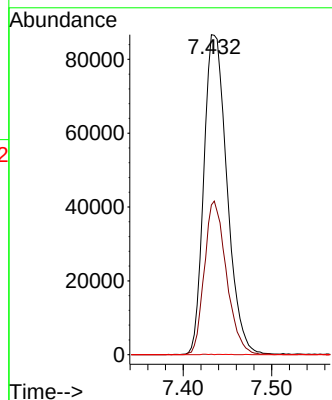
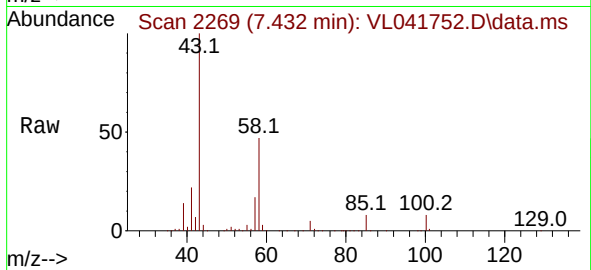




#51  
2-Hexanone  
Concen: 9.650 ppbv  
RT: 7.432 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

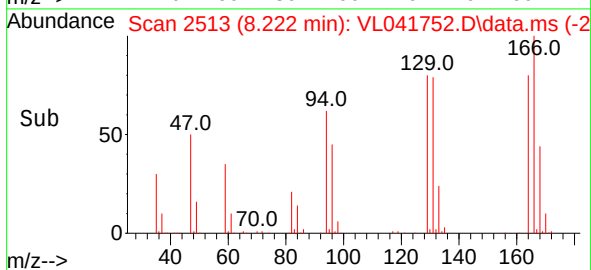
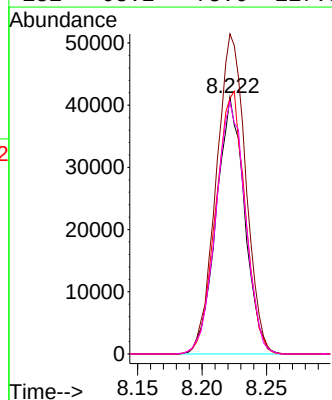
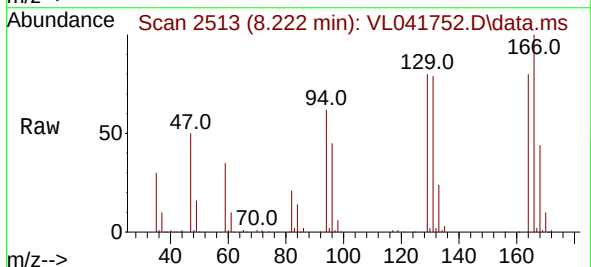
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tgt Ion: 43 Resp: 157473  
Ion Ratio Lower Upper  
43 100  
58 45.8 36.6 55.0  
98 0.1 0.1 0.1

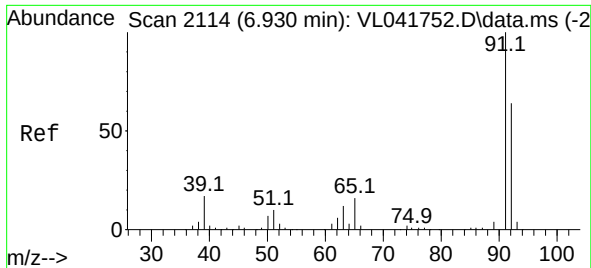


#52  
Tetrachloroethene  
Concen: 8.901 ppbv  
RT: 8.222 min Scan# 2513  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 164 Resp: 62989  
Ion Ratio Lower Upper  
164 100  
166 124.7 99.8 149.6  
129 99.5 79.6 119.4  
131 98.2 78.6 117.8







#53

Toluene

Concen: 9.574 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

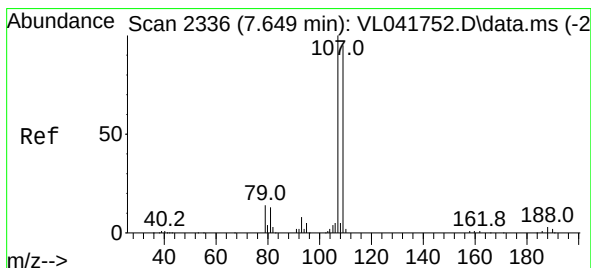
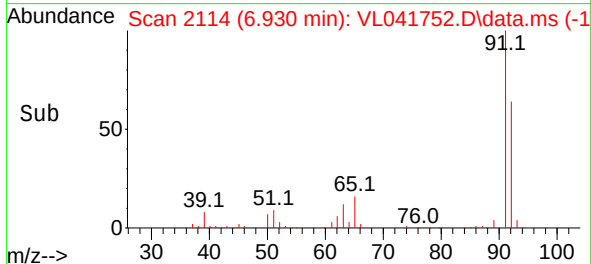
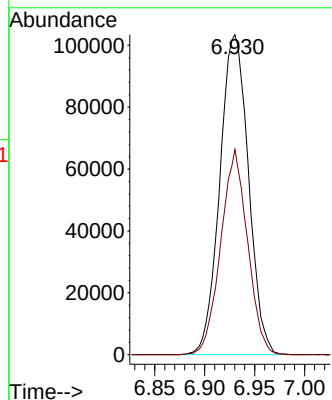
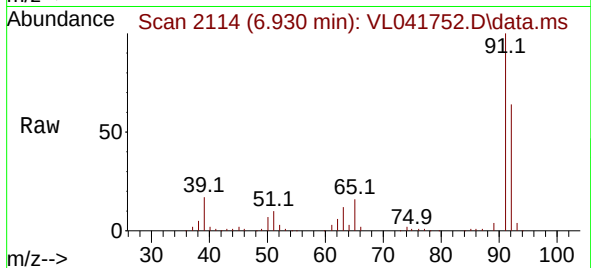
VSTDICCC010

Tgt Ion: 91 Resp: 206354

Ion Ratio Lower Upper

91 100

92 59.9 47.9 71.9



#54

1,2-Dibromoethane

Concen: 9.501 ppbv

RT: 7.649 min Scan# 2336

Delta R.T. 0.000 min

Lab File: VL041752.D

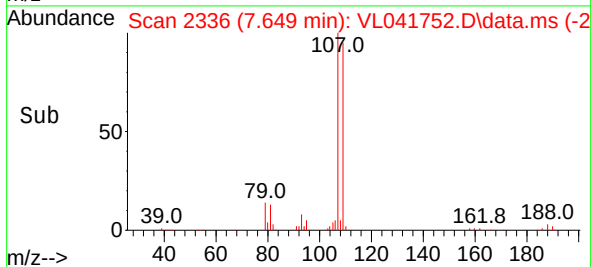
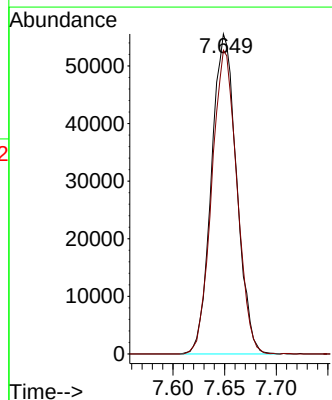
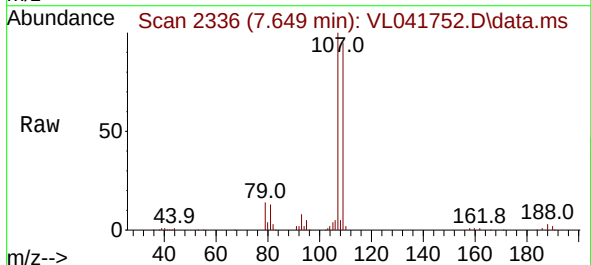
Acq: 16 Dec 2024 13:30

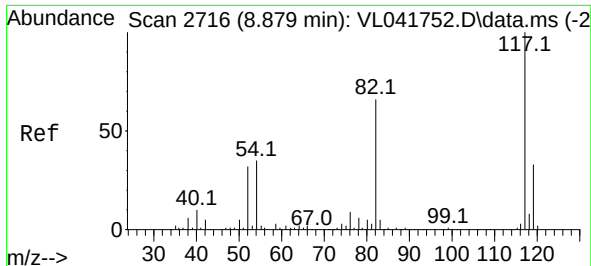
Tgt Ion:107 Resp: 94016

Ion Ratio Lower Upper

107 100

109 94.9 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.879 min Scan# 2716

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

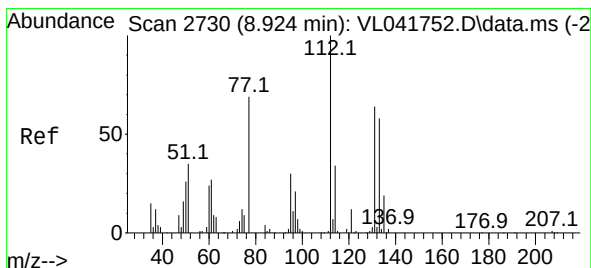
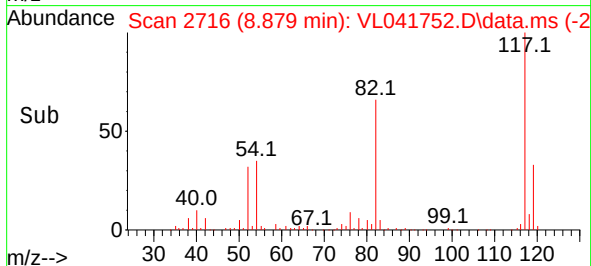
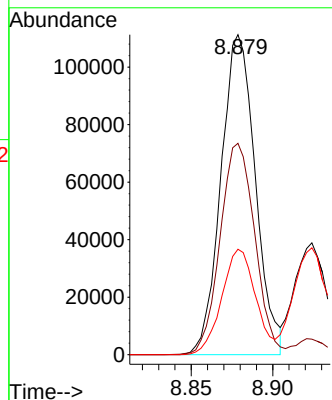
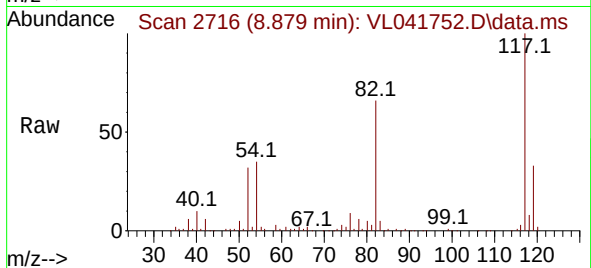
Tgt Ion:117 Resp: 163333

Ion Ratio Lower Upper

117 100

82 67.3 53.8 80.8

119 33.4 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 10.027 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

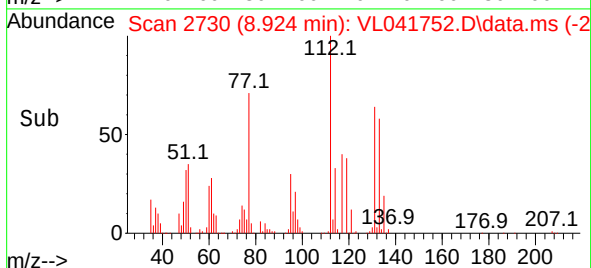
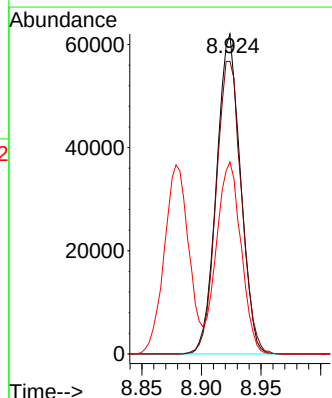
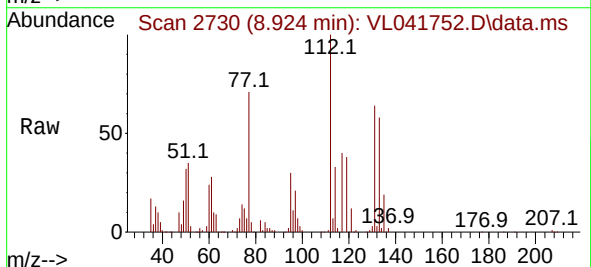
Tgt Ion:131 Resp: 86831

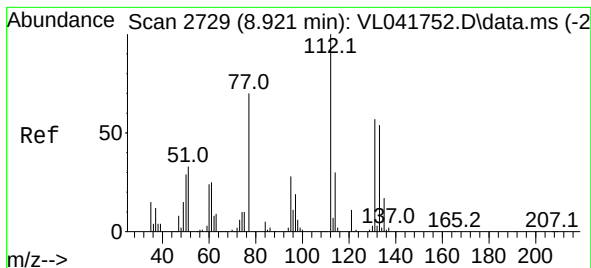
Ion Ratio Lower Upper

131 100

133 96.0 76.8 115.2

119 61.3 49.0 73.6





#57

Chlorobenzene

Concen: 9.295 ppbv

RT: 8.921 min Scan# 21

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

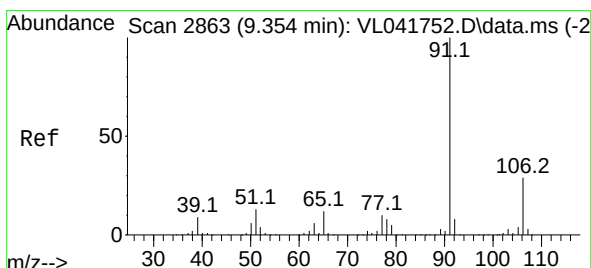
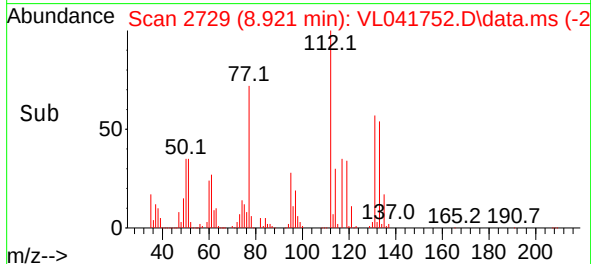
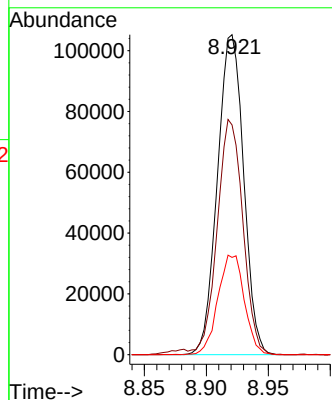
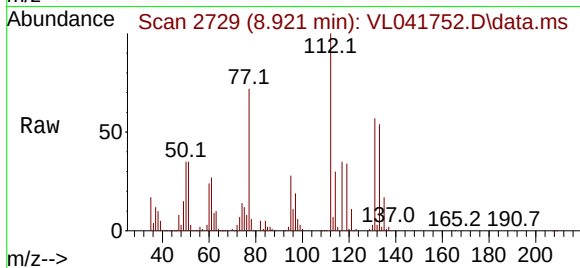
Tgt Ion:112 Resp: 155349

Ion Ratio Lower Upper

112 100

77 71.7 57.4 86.0

114 30.4 27.4 33.4



#58

Ethyl Benzene

Concen: 9.853 ppbv

RT: 9.354 min Scan# 2863

Delta R.T. 0.000 min

Lab File: VL041752.D

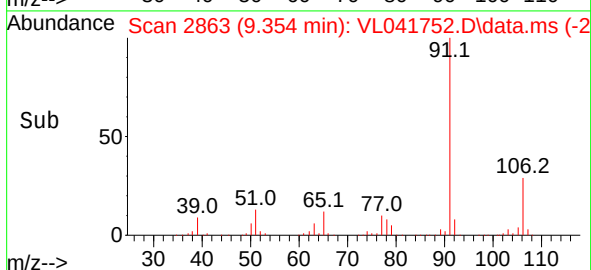
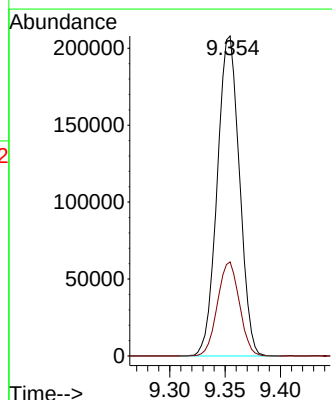
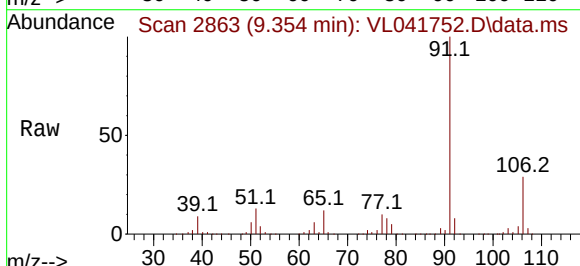
Acq: 16 Dec 2024 13:30

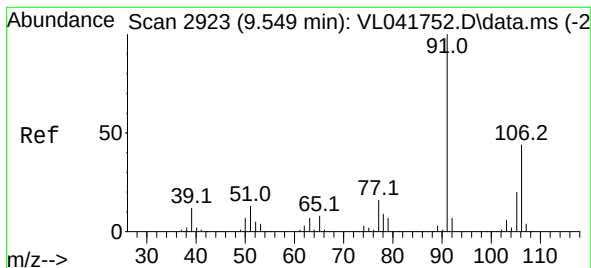
Tgt Ion: 91 Resp: 289734

Ion Ratio Lower Upper

91 100

106 29.4 23.5 35.3

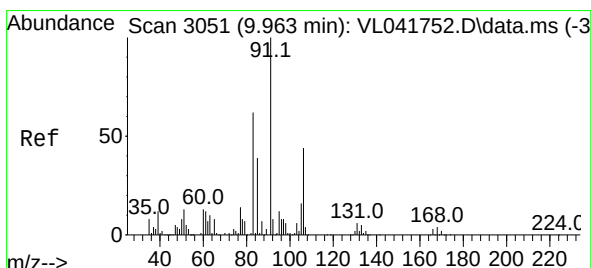
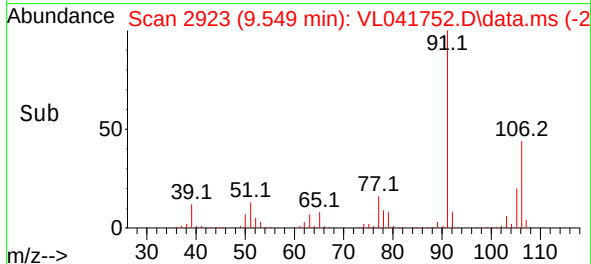
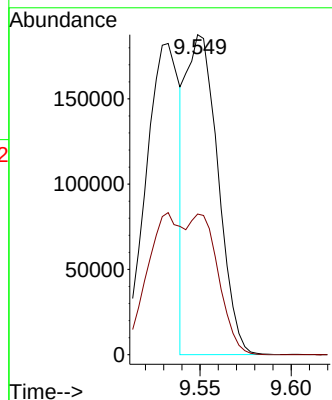
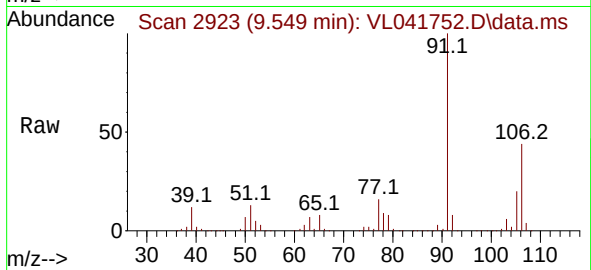




#59  
m/p-Xylene  
Concen: 9.713 ppbv  
RT: 9.549 min Scan# 2923  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

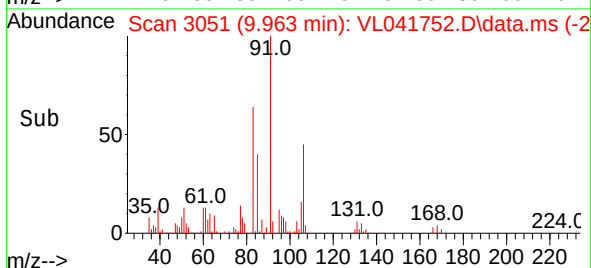
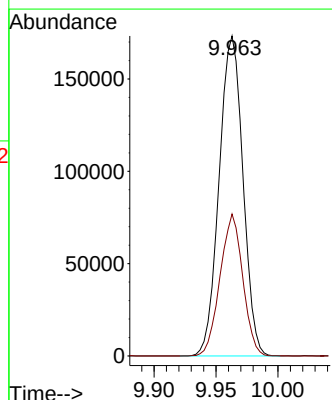
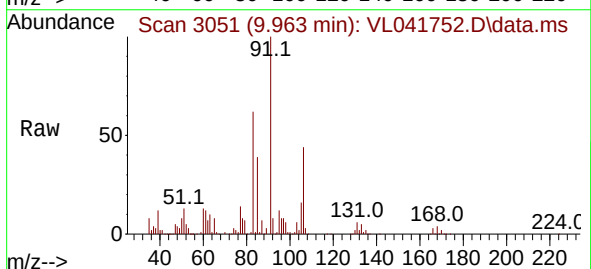
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

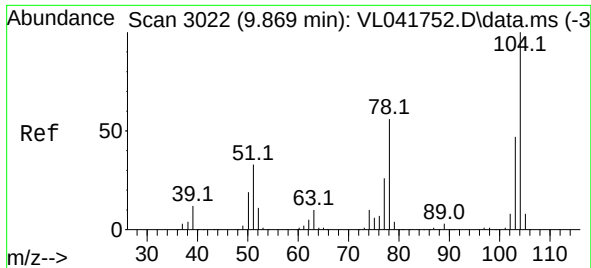
Tgt Ion: 91 Resp: 229713  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0



#60  
o-Xylene  
Concen: 9.789 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 91 Resp: 232101  
Ion Ratio Lower Upper  
91 100  
106 42.3 21.1 63.4

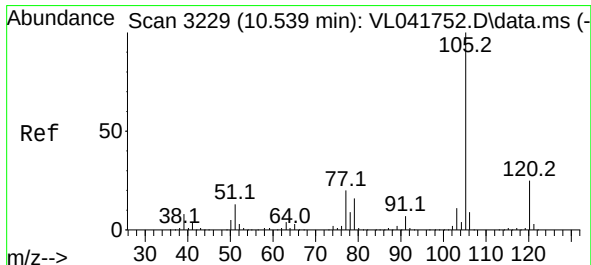
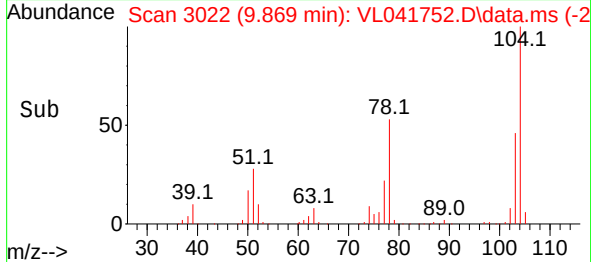
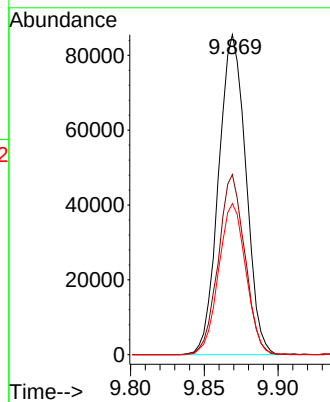
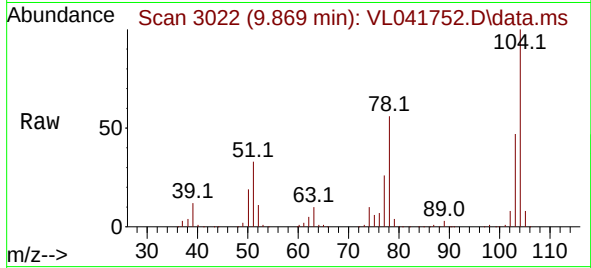




#61  
Styrene  
Concen: 10.733 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

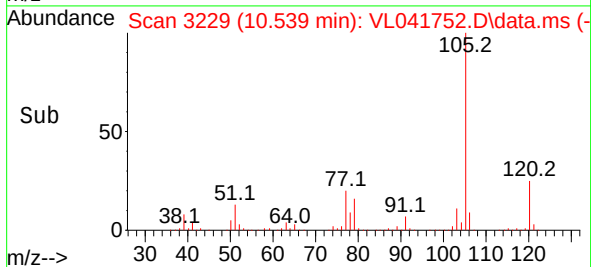
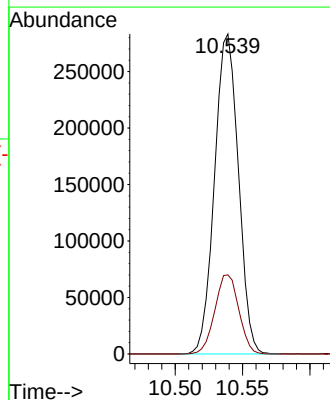
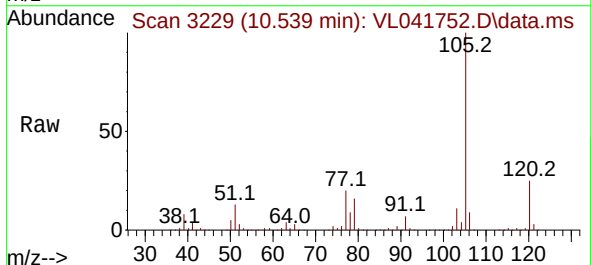
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

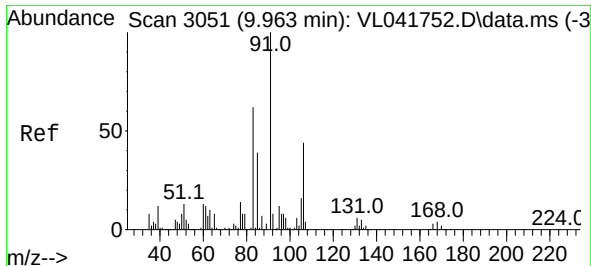
Tgt Ion:104 Resp: 110041  
Ion Ratio Lower Upper  
104 100  
78 54.7 43.8 65.6  
103 47.2 37.8 56.6



#62  
Isopropylbenzene  
Concen: 9.788 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:105 Resp: 348684  
Ion Ratio Lower Upper  
105 100  
120 24.8 19.8 29.8

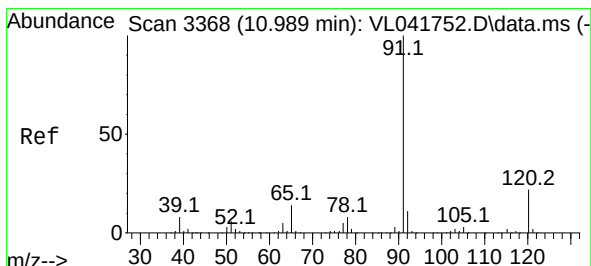
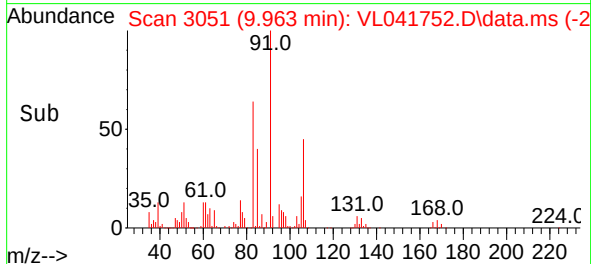
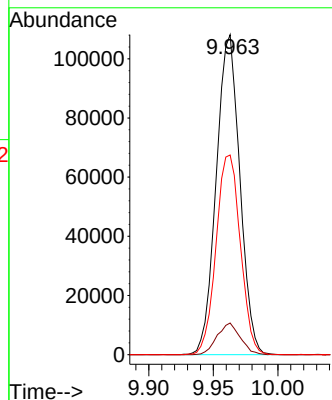
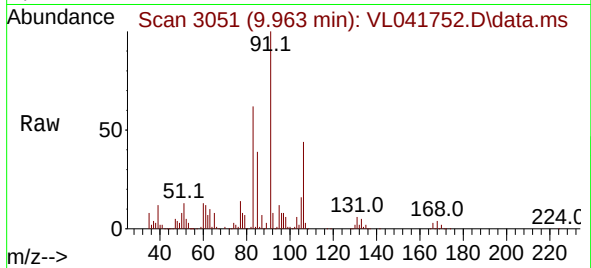




#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.255 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

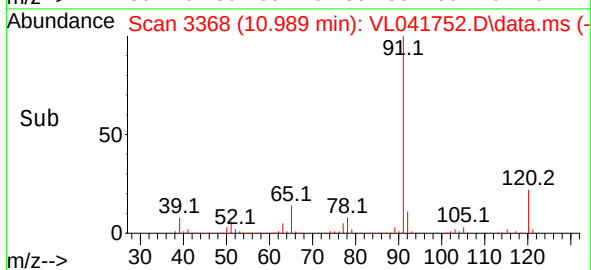
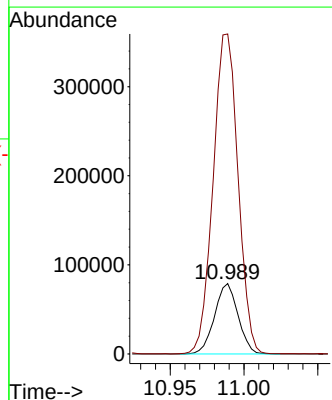
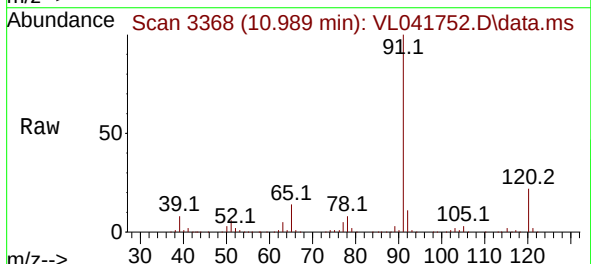
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

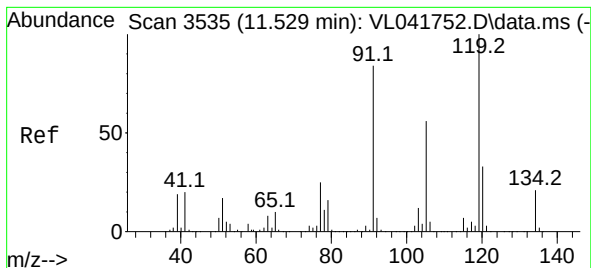
Tgt Ion: 83 Resp: 137363  
Ion Ratio Lower Upper  
83 100  
131 9.8 4.9 14.7  
85 64.1 32.0 96.2



#64  
n-propylbenzene  
Concen: 9.700 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 120 Resp: 87360  
Ion Ratio Lower Upper  
120 100  
91 484.1 387.3 580.9

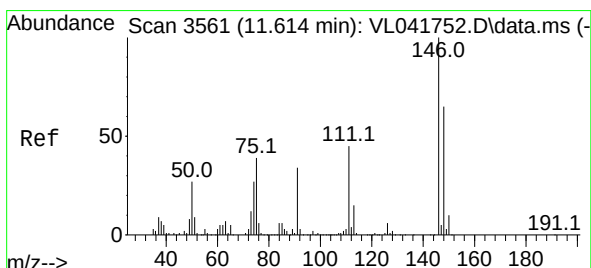
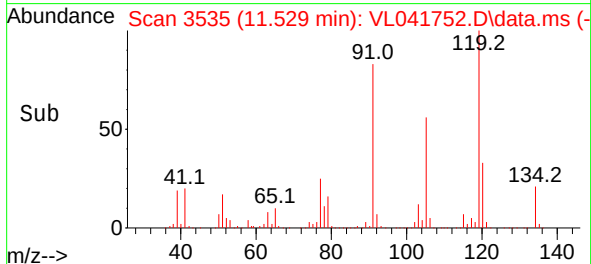
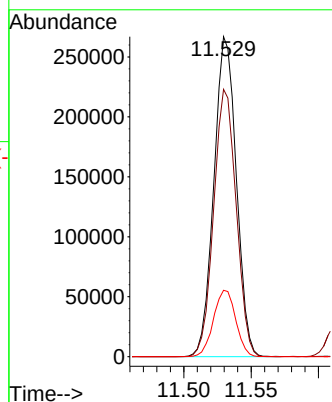
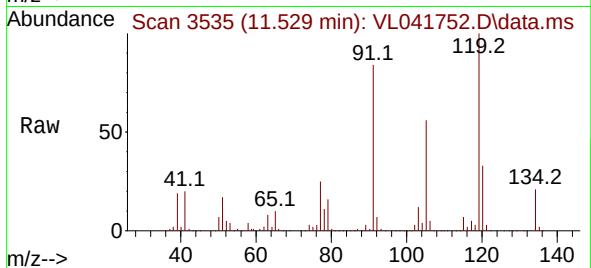




#65  
tert-Butylbenzene  
Concen: 9.615 ppbv  
RT: 11.529 min Scan# 3535  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

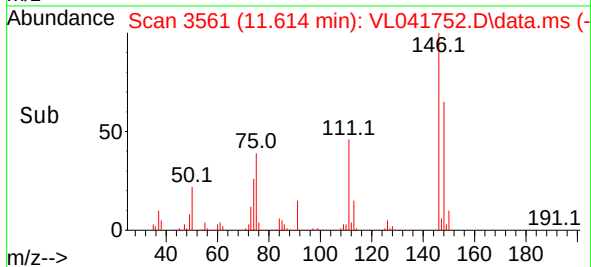
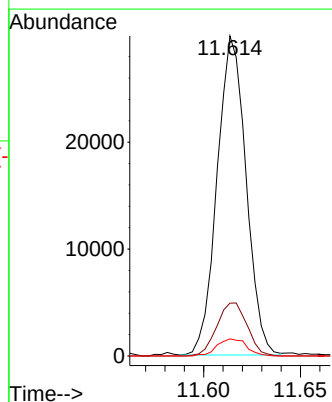
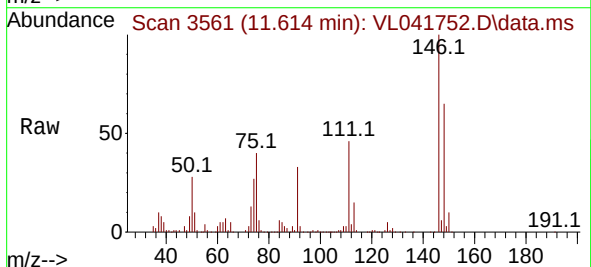
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

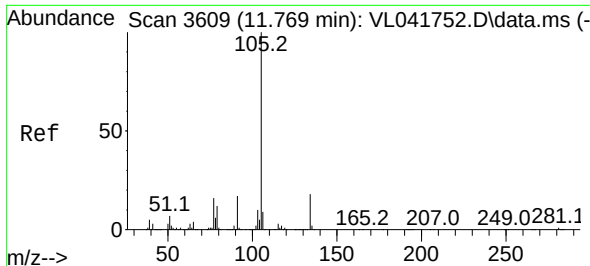
Tgt Ion:119 Resp: 309036  
Ion Ratio Lower Upper  
119 100  
91 83.7 67.0 100.4  
134 20.6 16.5 24.7



#66  
Benzyl Chloride  
Concen: 10.954 ppbv  
RT: 11.614 min Scan# 3561  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion: 91 Resp: 31039  
Ion Ratio Lower Upper  
91 100  
126 17.4 13.9 20.9  
128 5.5 4.4 6.6





#67

sec-Butylbenzene

Concen: 9.687 ppbv

RT: 11.769 min Scan# 3609

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

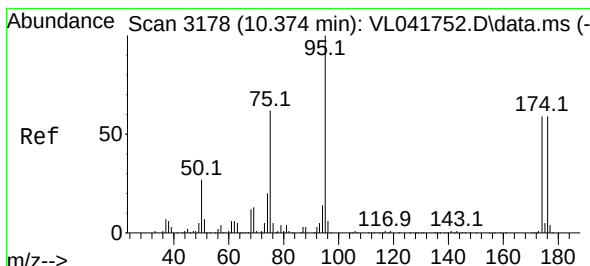
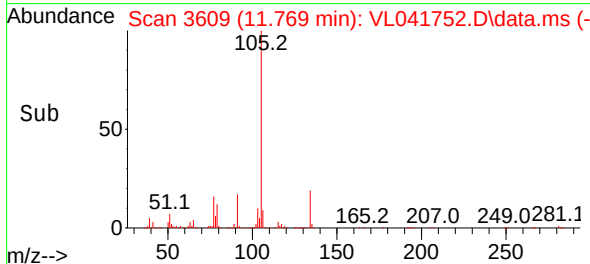
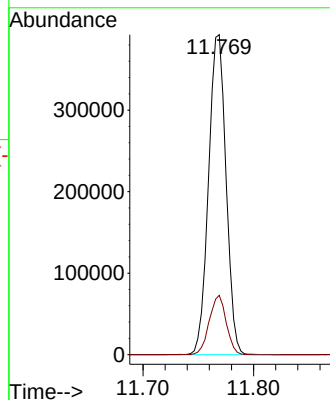
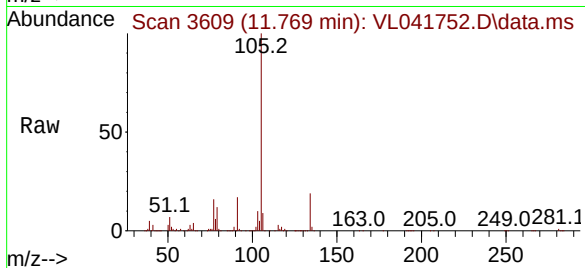
VSTDICCC010

Tgt Ion:105 Resp: 430810

Ion Ratio Lower Upper

105 100

134 18.1 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.172 ppbv

RT: 10.374 min Scan# 3178

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

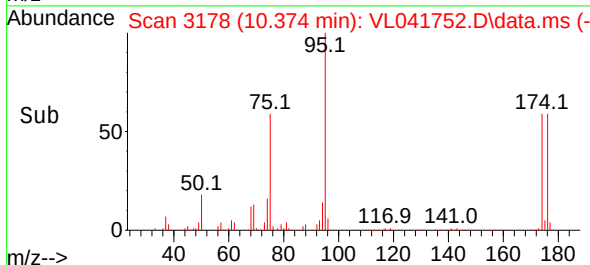
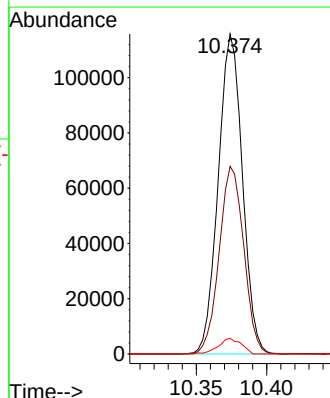
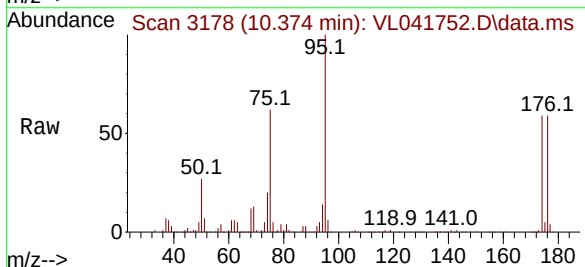
Tgt Ion: 95 Resp: 138451

Ion Ratio Lower Upper

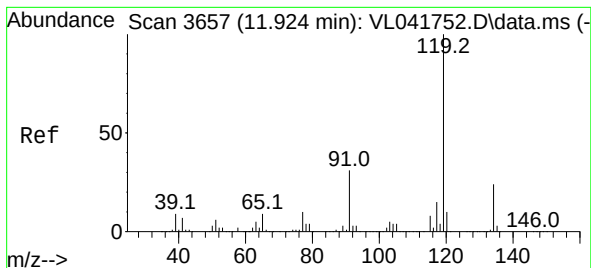
95 100

174 59.5 47.6 71.4

175 4.6 3.7 5.5







#69

p-Isopropyltoluene

Concen: 9.906 ppbv

RT: 11.924 min Scan# 3657

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

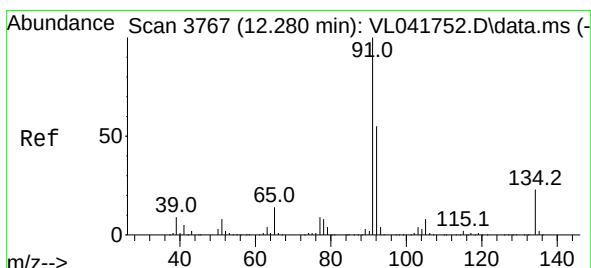
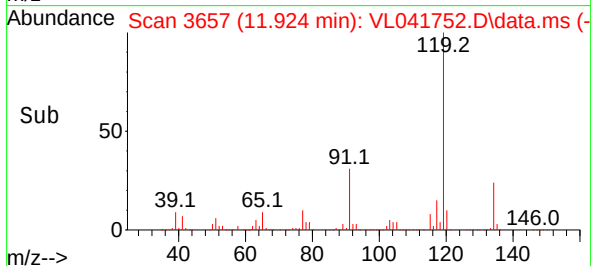
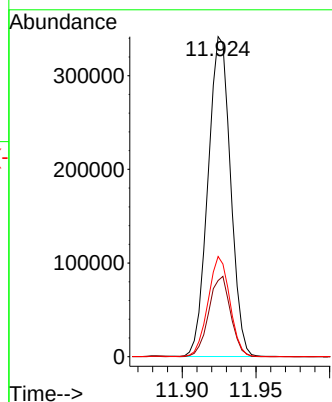
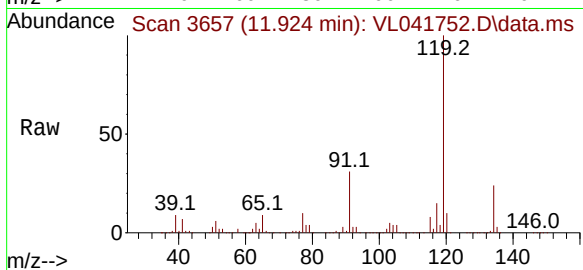
Tgt Ion:119 Resp: 363072

Ion Ratio Lower Upper

119 100

134 24.5 19.6 29.4

91 30.5 24.4 36.6



#70

n-Butylbenzene

Concen: 10.137 ppbv

RT: 12.280 min Scan# 3767

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

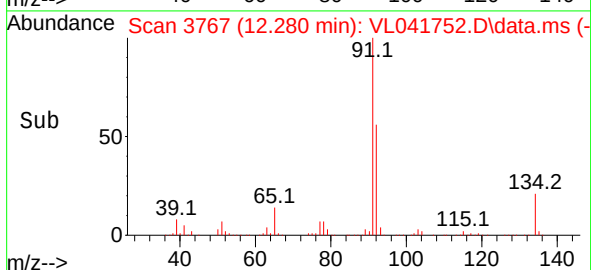
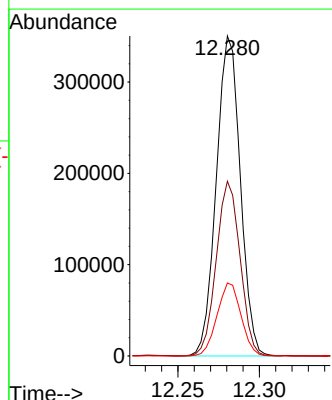
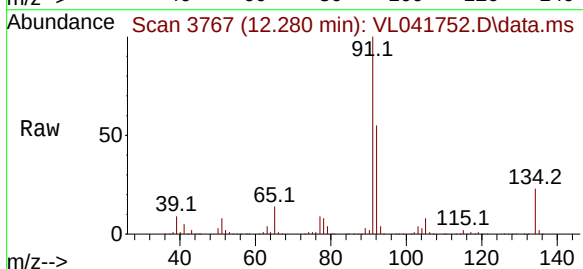
Tgt Ion: 91 Resp: 358993

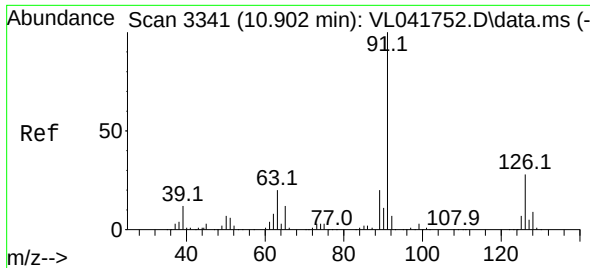
Ion Ratio Lower Upper

91 100

92 54.0 43.2 64.8

134 22.8 18.2 27.4

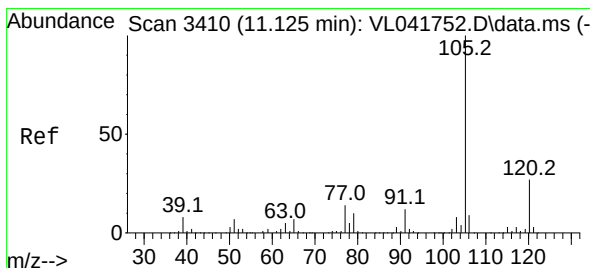
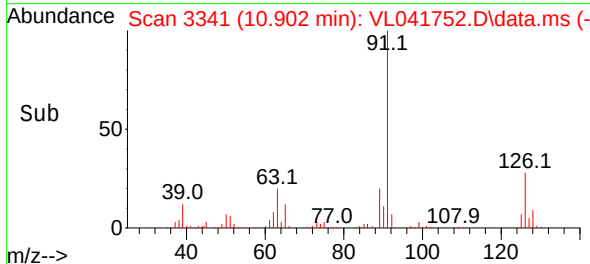
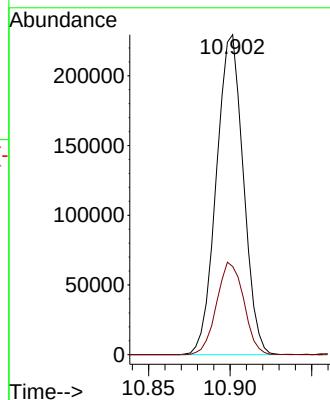
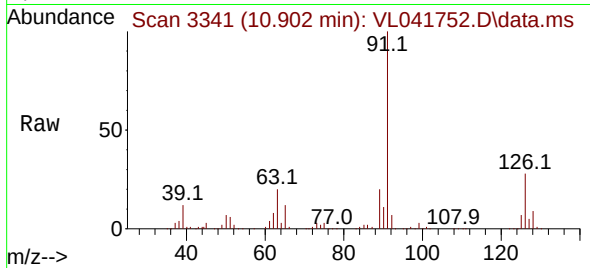




#71  
2-Chlorotoluene  
Concen: 9.708 ppbv  
RT: 10.902 min Scan# 3341  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

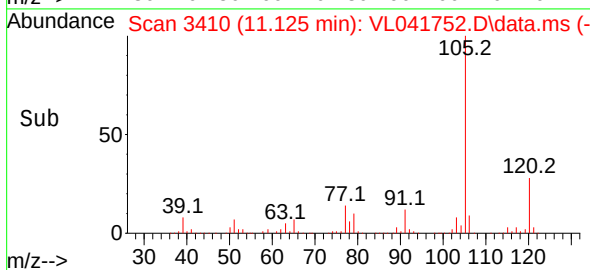
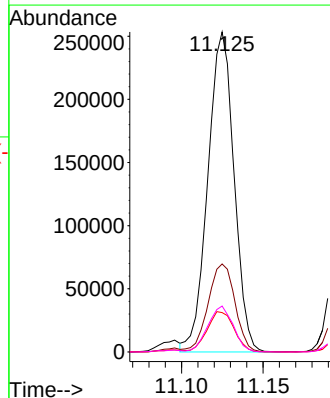
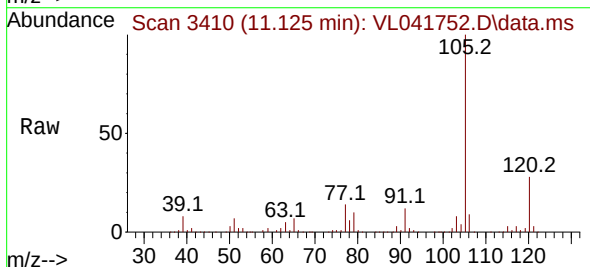
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

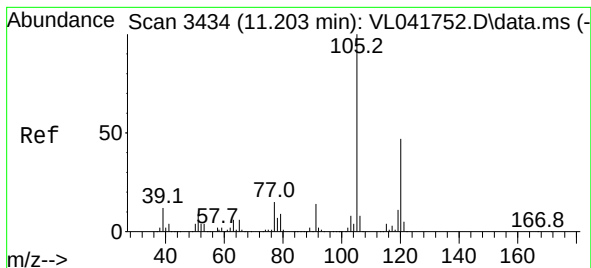
Tgt Ion: 91 Resp: 264002  
Ion Ratio Lower Upper  
91 100  
126 29.0 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 10.120 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:105 Resp: 282698  
Ion Ratio Lower Upper  
105 100  
120 29.1 23.3 34.9  
91 13.6 10.9 16.3  
77 14.5 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 10.304 ppbv

RT: 11.203 min Scan# 3434

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

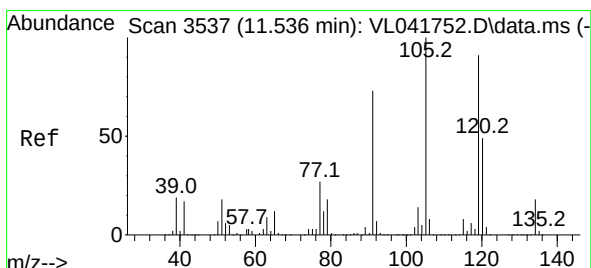
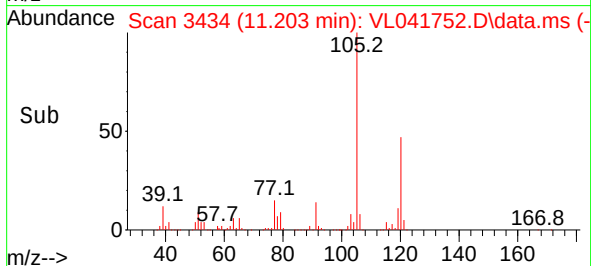
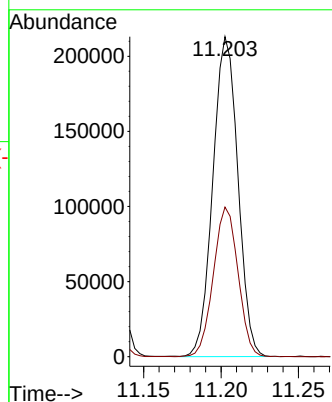
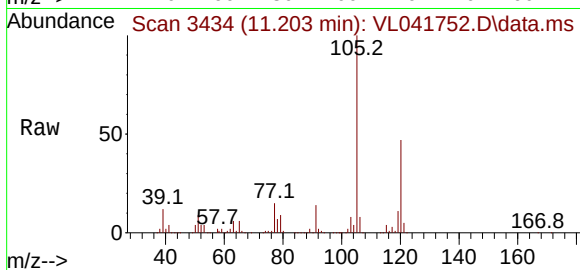
VSTDICCC010

Tgt Ion:105 Resp: 239261

Ion Ratio Lower Upper

105 100

120 46.8 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 10.244 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Tgt Ion:105 Resp: 255780

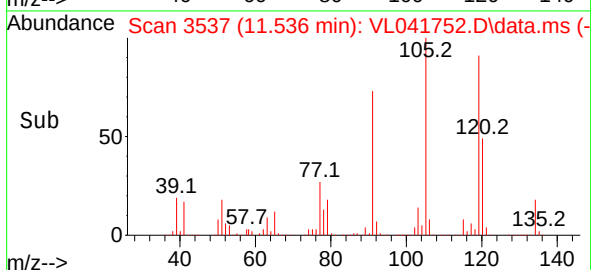
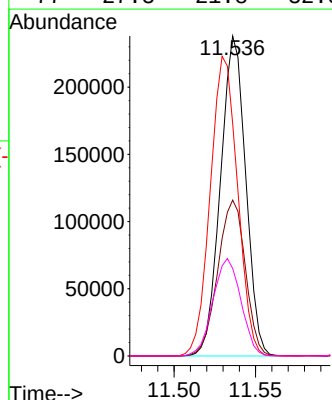
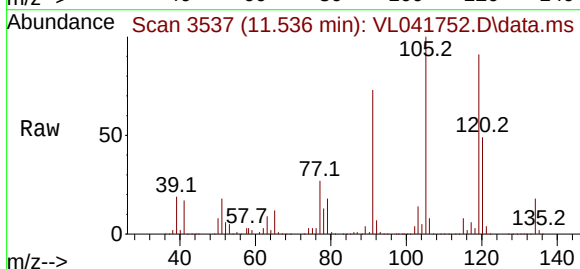
Ion Ratio Lower Upper

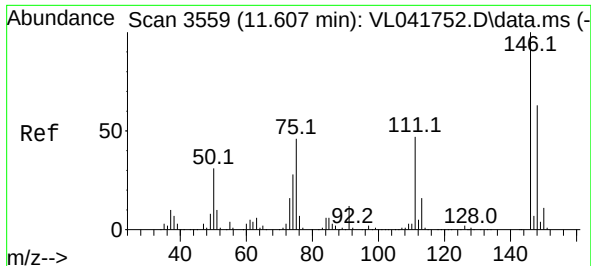
105 100

120 48.7 39.0 58.4

91 72.6 58.1 87.1

77 27.3 21.8 32.8

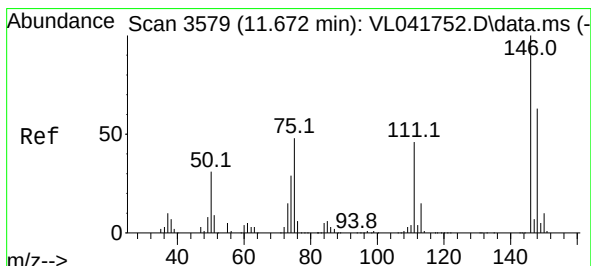
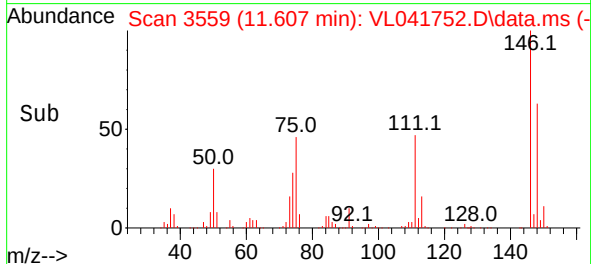
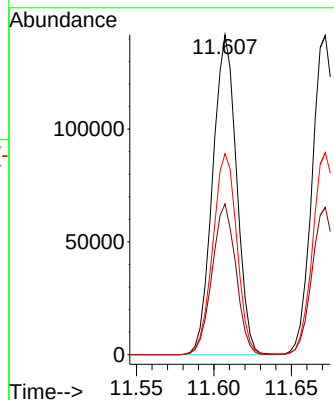
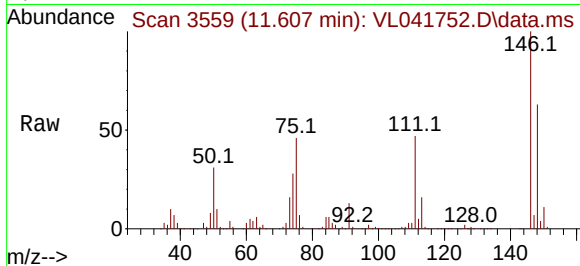




#75  
1,3-Dichlorobenzene  
Concen: 9.532 ppbv  
RT: 11.607 min Scan# 3559  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

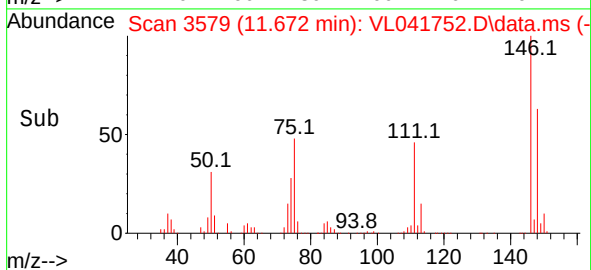
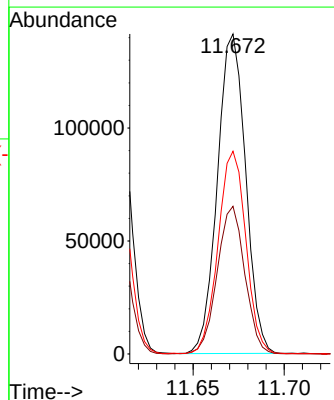
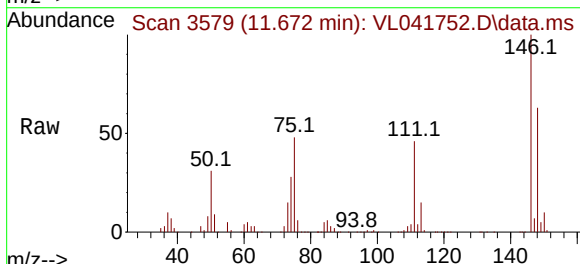
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

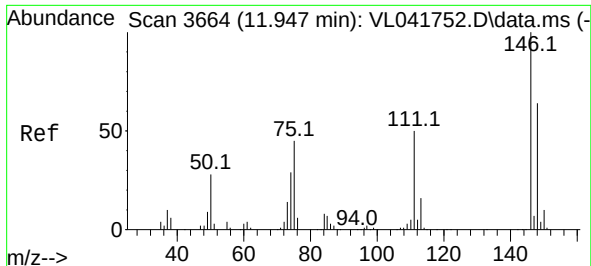
Tgt Ion:146 Resp: 151752  
Ion Ratio Lower Upper  
146 100  
111 46.9 23.4 70.3  
148 63.3 31.6 95.0



#76  
1,4-Dichlorobenzene  
Concen: 9.671 ppbv  
RT: 11.672 min Scan# 3579  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:146 Resp: 152099  
Ion Ratio Lower Upper  
146 100  
111 45.4 22.7 68.1  
148 62.7 31.4 94.0

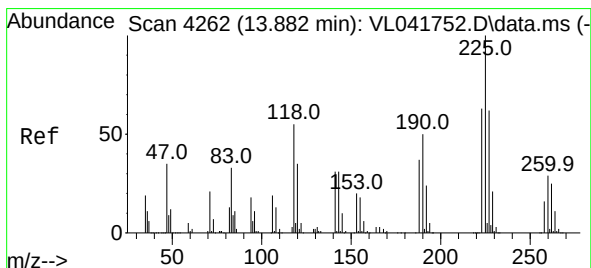
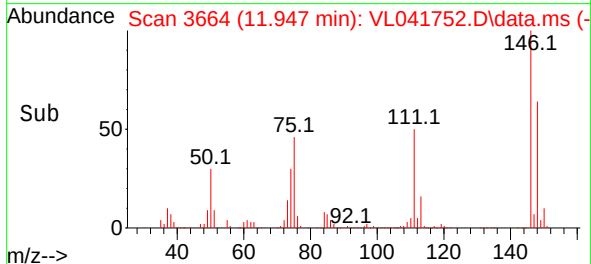
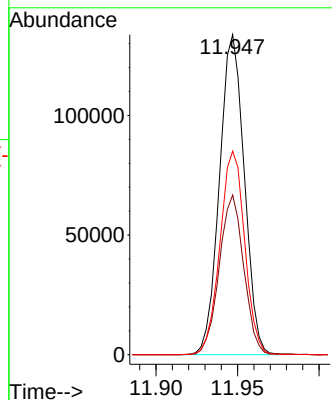
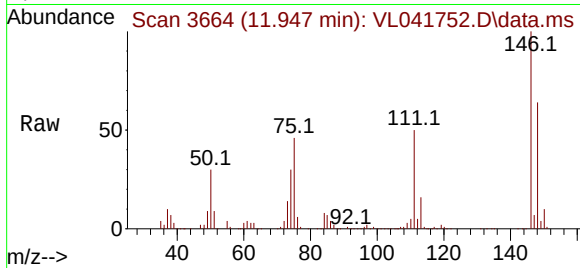




#77  
1,2-Dichlorobenzene  
Concen: 9.227 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

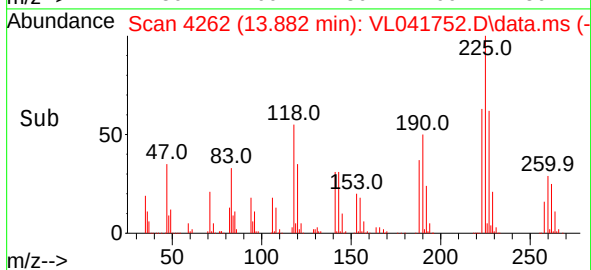
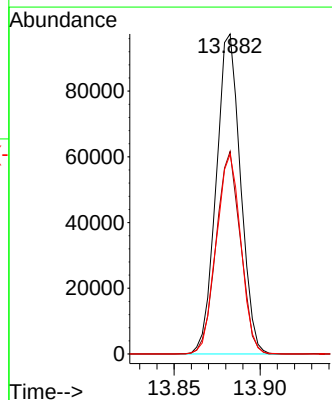
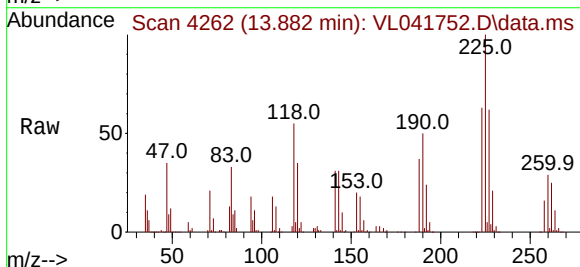
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICCC010

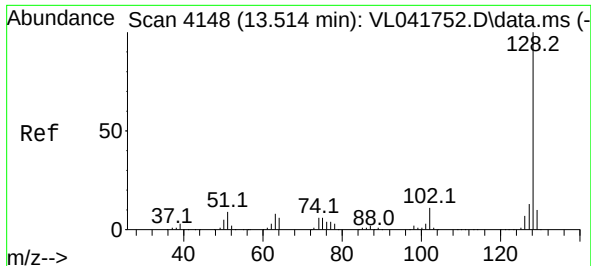
Tgt Ion:146 Resp: 141338  
Ion Ratio Lower Upper  
146 100  
111 49.5 24.8 74.3  
148 63.6 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 8.431 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. 0.000 min  
Lab File: VL041752.D  
Acq: 16 Dec 2024 13:30

Tgt Ion:225 Resp: 95751  
Ion Ratio Lower Upper  
225 100  
223 63.1 50.5 75.7  
227 62.9 50.3 75.5





#79

Naphthalene

Concen: 11.812 ppbv

RT: 13.514 min Scan# 4148

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICCC010

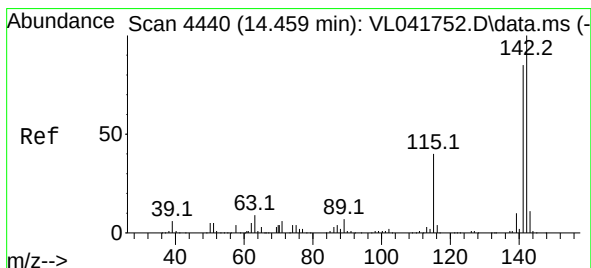
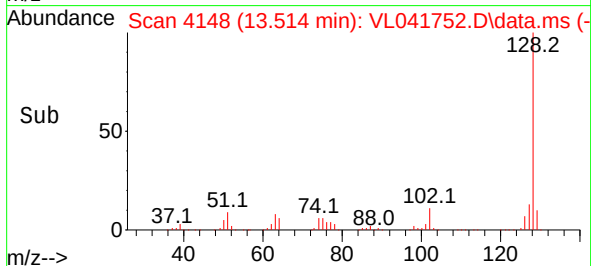
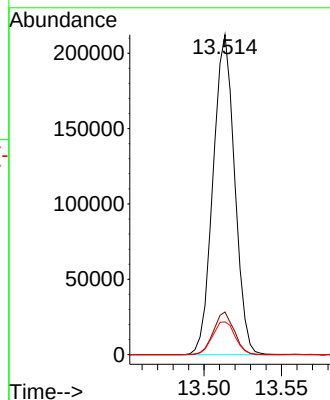
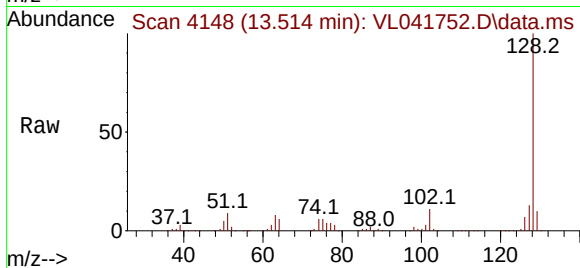
Tgt Ion:128 Resp: 205511

Ion Ratio Lower Upper

128 100

127 13.4 10.7 16.1

129 10.3 8.2 12.4



#80

Naphthalene,2-methyl-

Concen: 19.755 ppbv

RT: 14.459 min Scan# 4440

Delta R.T. 0.000 min

Lab File: VL041752.D

Acq: 16 Dec 2024 13:30

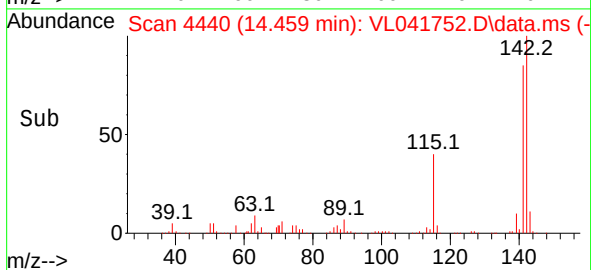
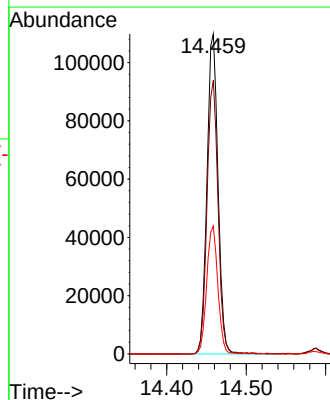
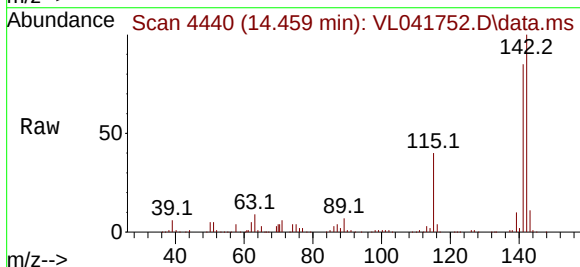
Tgt Ion:142 Resp: 106311

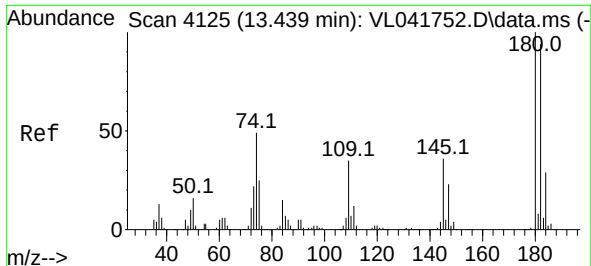
Ion Ratio Lower Upper

142 100

141 85.5 68.4 102.6

115 40.6 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 10.672 ppbv

RT: 13.439 min Scan# 41

Delta R.T. 0.000 min

Lab File: VL041752.D

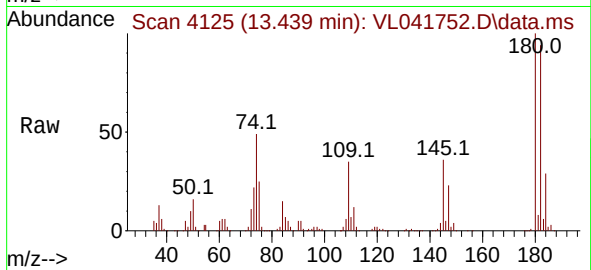
Acq: 16 Dec 2024 13:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010



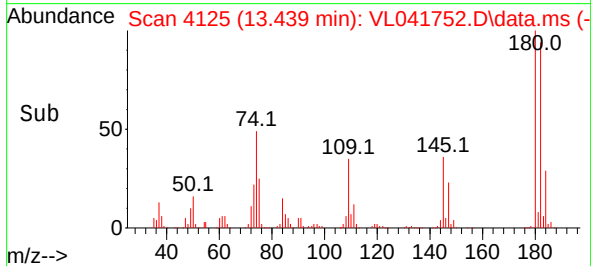
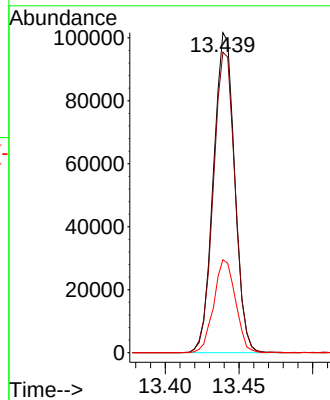
Tgt Ion:180 Resp: 101461

Ion Ratio Lower Upper

180 100

182 96.3 77.0 115.6

184 29.8 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041753.D  
 Acq On : 16 Dec 2024 14:03  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Dec 19 06:12:42 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 67443    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.962 | 114  | 182992   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.882 | 117  | 163971   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 10.377 | 95    | 138312   | 10.122   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.200% |

#### Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.499 | 85  | 24819 | 2.068 | ppbv   | 98     |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 22299 | 2.027 | ppbv   | 96     |
| 4) Chloromethane              | 1.531 | 50  | 9926  | 2.114 | ppbv   | 99     |
| 5) Vinyl Chloride             | 1.580 | 62  | 9300  | 1.966 | ppbv   | 99     |
| 6) Bromomethane               | 1.667 | 94  | 4625  | 2.072 | ppbv   | 99     |
| 7) Chloroethane               | 1.706 | 64  | 4003  | 2.178 | ppbv # | 85     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 21791 | 2.029 | ppbv   | 100    |
| 9) Propene                    | 1.483 | 41  | 10115 | 2.122 | ppbv   | 97     |
| 10) Heptane                   | 4.978 | 43  | 25297 | 2.066 | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 1.878 | 101 | 26208 | 2.056 | ppbv   | 96     |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 19770 | 2.039 | ppbv   | 99     |
| 13) Ethanol                   | 1.722 | 45  | 792   | 1.998 | ppbv # | 49     |
| 14) Bromoethene               | 1.784 | 108 | 6527  | 1.994 | ppbv # | 90     |
| 15) Acetone                   | 1.835 | 43  | 27613 | 2.104 | ppbv   | 99     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 10478 | 2.028 | ppbv   | 96     |
| 17) tert-Butyl alcohol        | 2.043 | 59  | 26646 | 2.047 | ppbv   | 99     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 8389  | 2.064 | ppbv   | 92     |
| 19) Isopropyl Alcohol         | 1.887 | 45  | 14937 | 1.897 | ppbv   | 93     |
| 20) Methylene Chloride        | 2.062 | 84  | 7586  | 2.027 | ppbv   | 94     |
| 21) Allyl Chloride            | 2.094 | 41  | 14731 | 2.070 | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene  | 2.340 | 96  | 9407  | 2.022 | ppbv   | 94     |
| 23) Vinyl Acetate             | 2.463 | 43  | 17652 | 3.096 | ppbv # | 95     |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 19070 | 2.025 | ppbv   | 99     |
| 25) Ethyl Acetate             | 2.836 | 43  | 50510 | 2.059 | ppbv   | 99     |
| 26) Hexane                    | 2.826 | 57  | 19200 | 2.073 | ppbv   | 98     |
| 27) Carbon Disulfide          | 2.153 | 76  | 16214 | 1.942 | ppbv # | 34     |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 15039 | 2.001 | ppbv   | 98     |
| 29) Chloroform                | 2.849 | 83  | 28843 | 2.043 | ppbv   | 98     |
| 30) Cyclohexane               | 3.858 | 84  | 16384 | 2.079 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 19688 | 2.057 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane     | 3.370 | 97  | 28341 | 2.017 | ppbv   | 98     |
| 34) 2-Butanone                | 2.557 | 43  | 31483 | 2.138 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.765 | 117 | 27727 | 2.134 | ppbv   | 98     |
| 36) Benzene                   | 3.658 | 78  | 38759 | 2.048 | ppbv   | 94     |
| 37) 1,2-Dichloroethane        | 3.221 | 62  | 23800 | 2.021 | ppbv   | 98     |
| 38) Trichloroethene           | 4.548 | 130 | 15660 | 1.965 | ppbv   | 94     |
| 39) 1,2-Dichloropropane       | 4.315 | 63  | 14197 | 2.074 | ppbv   | 94     |
| 40) 1,4-Dioxane               | 4.596 | 88  | 3078  | 0.920 | ppbv # | 20     |
| 41) Tetrahydrofuran           | 3.059 | 42  | 16665 | 2.021 | ppbv   | 96     |
| 42) Bromodichloromethane      | 4.489 | 83  | 26716 | 1.972 | ppbv   | 98     |
| 43) Methyl Methacrylate       | 4.884 | 69  | 14849 | 2.059 | ppbv   | 100    |
| 44) 2,2,4-Trimethylpentane    | 4.642 | 57  | 67432 | 2.086 | ppbv   | 100    |
| 45) t-1,3-Dichloropropene     | 6.415 | 75  | 14885 | 1.995 | ppbv   | 99     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041753.D  
 Acq On : 16 Dec 2024 14:03  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Quant Time: Dec 19 06:12:42 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

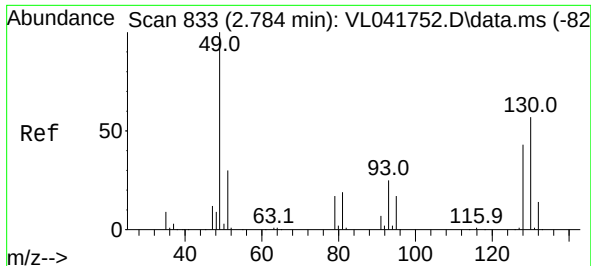
QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 7224     | 0.763 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 6.584  | 97   | 14858    | 2.078 | ppbv   | 89       |
| 48) Dibromochloromethane      | 7.390  | 129  | 19764    | 2.024 | ppbv   | 98       |
| 49) Bromoform                 | 9.484  | 173  | 16200    | 2.027 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 5.758  | 43   | 42045    | 2.098 | ppbv   | 97       |
| 51) 2-Hexanone                | 7.441  | 43   | 34878    | 2.147 | ppbv # | 98       |
| 52) Tetrachloroethene         | 8.225  | 164  | 13612    | 1.932 | ppbv   | 93       |
| 53) Toluene                   | 6.933  | 91   | 44470    | 2.072 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.655  | 107  | 19820    | 2.012 | ppbv   | 91       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 18613    | 2.141 | ppbv   | 98       |
| 57) Chlorobenzene             | 8.920  | 112  | 35685    | 2.127 | ppbv   | 99       |
| 58) Ethyl Benzene             | 9.354  | 91   | 63316    | 2.145 | ppbv   | 97       |
| 59) m/p-Xylene                | 9.555  | 91   | 48921    | 2.060 | ppbv # | 100      |
| 60) o-Xylene                  | 9.966  | 91   | 51152    | 2.149 | ppbv   | 99       |
| 61) Styrene                   | 9.872  | 104  | 20842    | 2.025 | ppbv   | 96       |
| 62) Isopropylbenzene          | 10.539 | 105  | 75206    | 2.103 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 29751    | 1.997 | ppbv   | 100      |
| 64) n-propylbenzene           | 10.992 | 120  | 19146    | 2.117 | ppbv   | 99       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 68879    | 2.135 | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.617 | 91   | 5400     | 1.898 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 95968    | 2.149 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 79236    | 2.153 | ppbv   | 100      |
| 70) n-Butylbenzene            | 12.283 | 91   | 75430    | 2.122 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 57724    | 2.114 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 58841    | 2.098 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.206 | 105  | 48645    | 2.087 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.539 | 105  | 53084    | 2.118 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 32609    | 2.040 | ppbv   | 98       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 32527    | 2.060 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 32223    | 2.095 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 25358    | 2.224 | ppbv   | 98       |
| 79) Naphthalene               | 13.513 | 128  | 37855    | 2.167 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 14.462 | 142  | 4482     | 0.830 | ppbv   | 94       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 19425    | 2.035 | ppbv   | 99       |

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

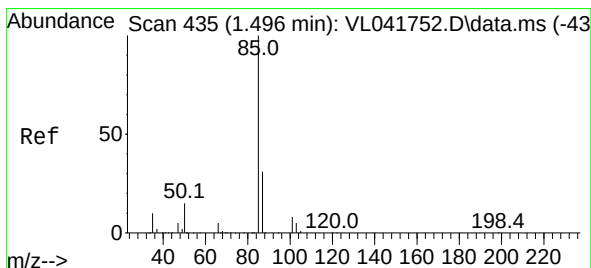
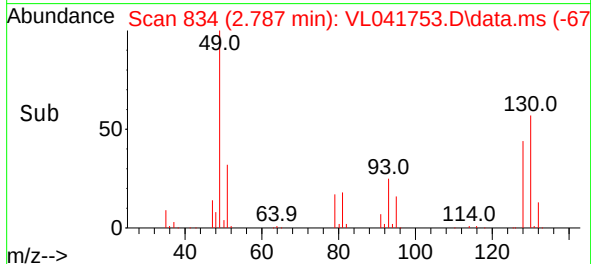
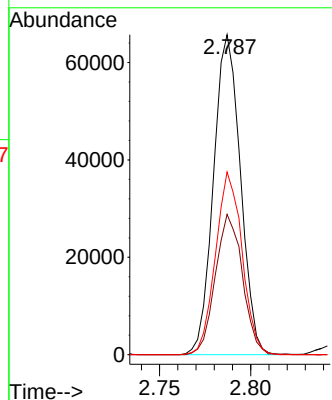
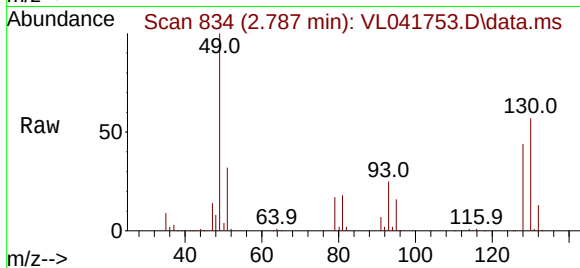




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 84  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

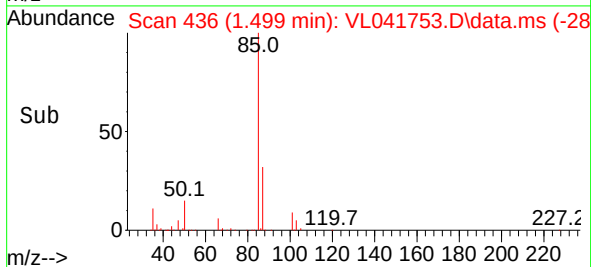
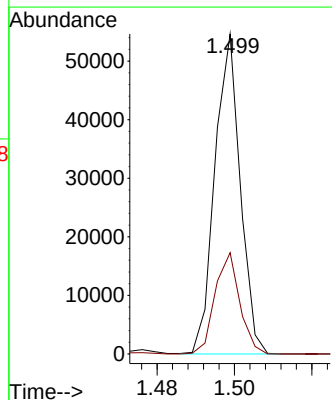
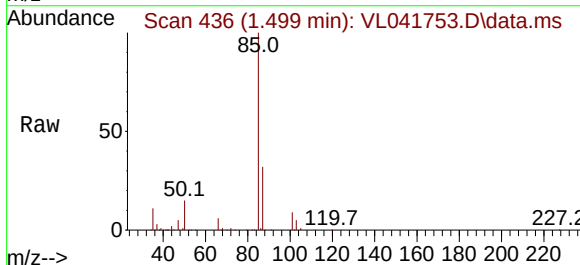
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

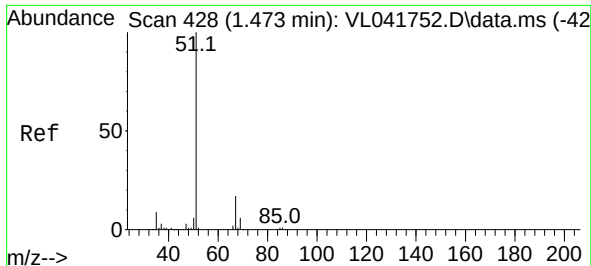
Tgt Ion: 49 Resp: 67443  
Ion Ratio Lower Upper  
49 100  
128 44.1 21.6 64.6  
130 56.3 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 2.068 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 85 Resp: 24819  
Ion Ratio Lower Upper  
85 100  
87 31.6 24.5 36.7

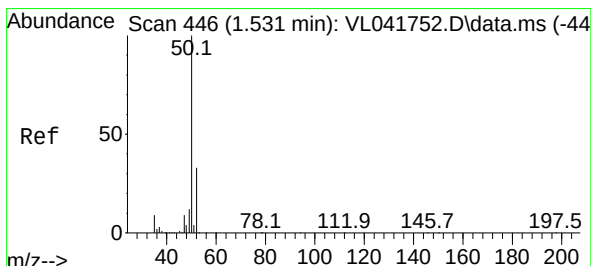
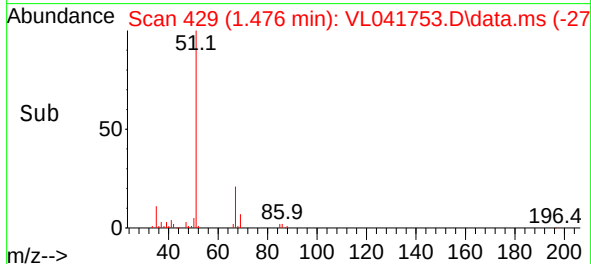
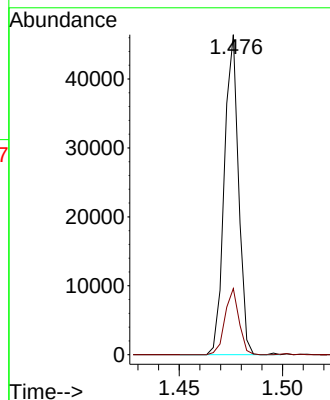
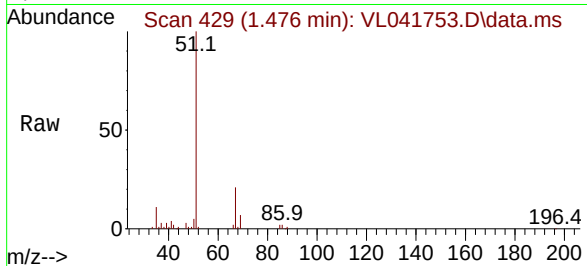




#3  
Chlorodifluoromethane  
Concen: 2.027 ppbv  
RT: 1.476 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

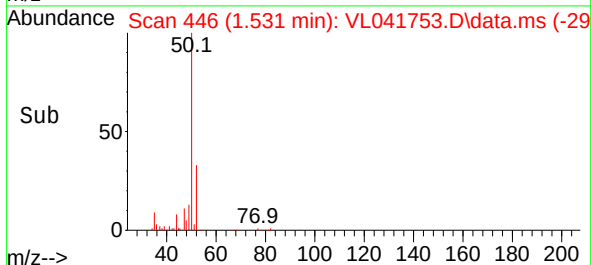
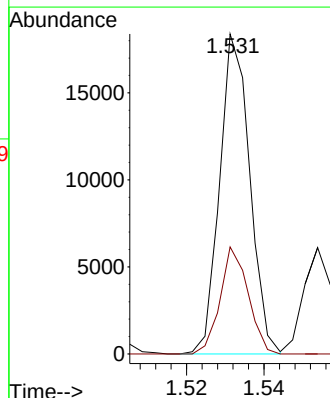
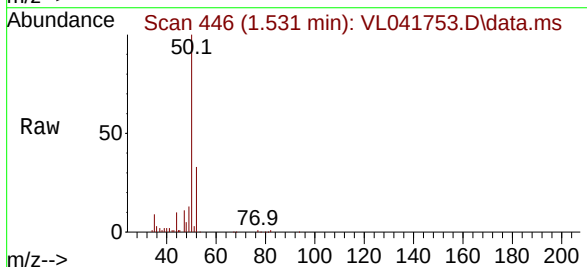
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

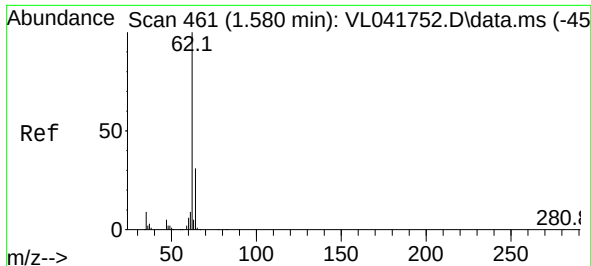
Tgt Ion: 51 Resp: 22299  
Ion Ratio Lower Upper  
51 100  
67 20.5 15.0 22.4



#4  
Chloromethane  
Concen: 2.114 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 50 Resp: 9926  
Ion Ratio Lower Upper  
50 100  
52 33.5 26.2 39.2

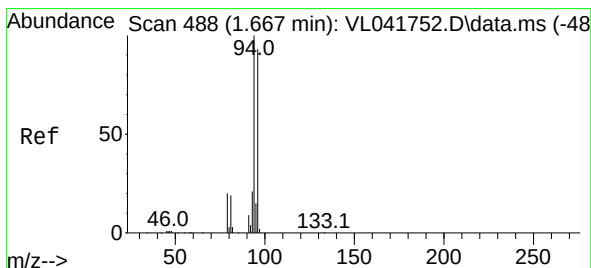
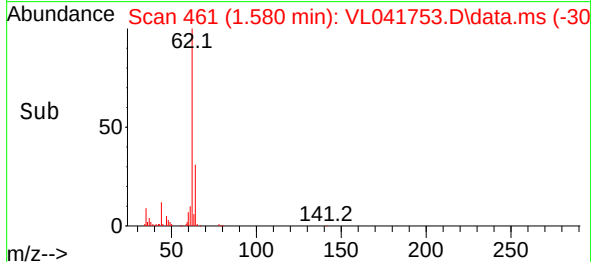
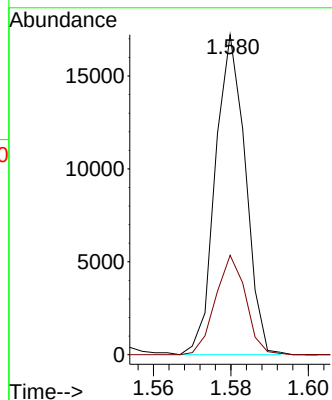
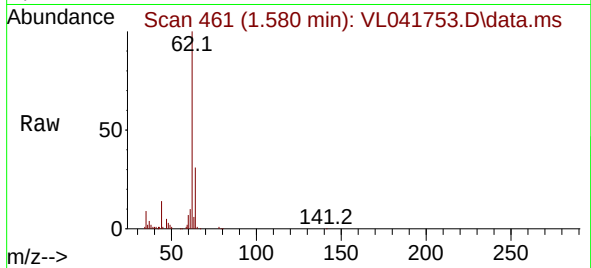




#5  
 Vinyl Chloride  
 Concen: 1.966 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

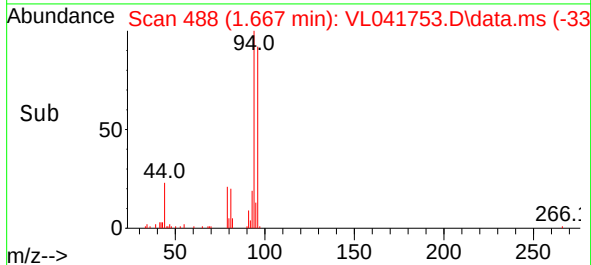
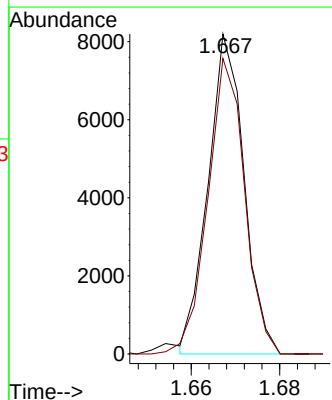
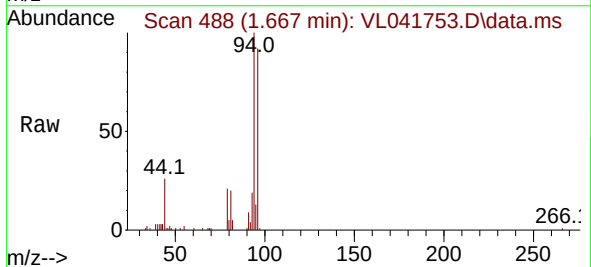
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

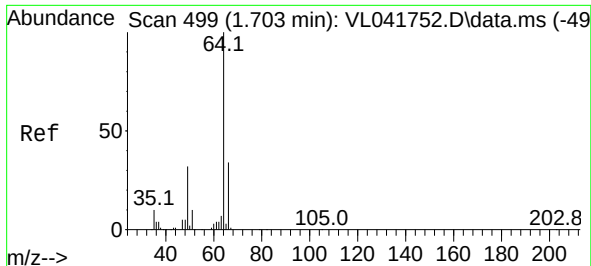
Tgt Ion: 62 Resp: 9300  
 Ion Ratio Lower Upper  
 62 100  
 64 31.1 25.1 37.7



#6  
 Bromomethane  
 Concen: 2.072 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

Tgt Ion: 94 Resp: 4625  
 Ion Ratio Lower Upper  
 94 100  
 96 92.4 74.7 112.1

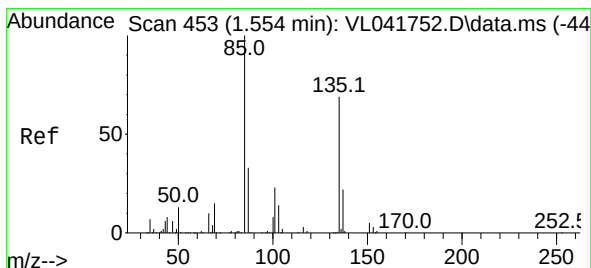
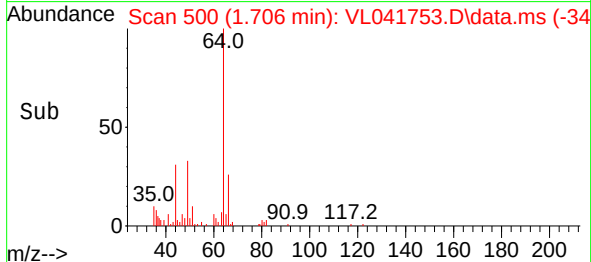
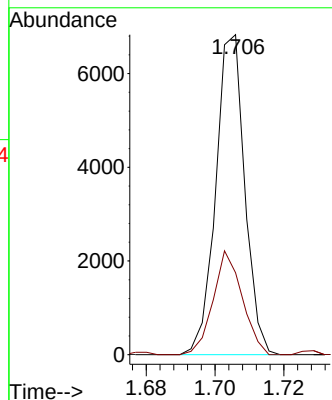
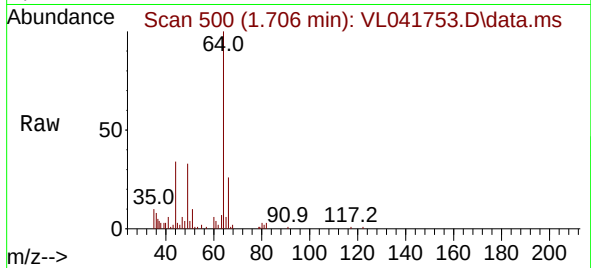




#7  
Chloroethane  
Concen: 2.178 ppbv  
RT: 1.706 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

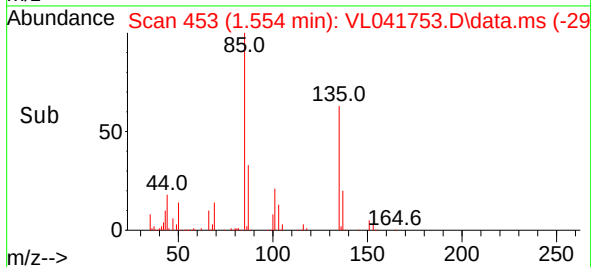
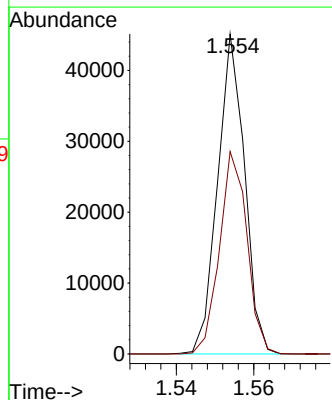
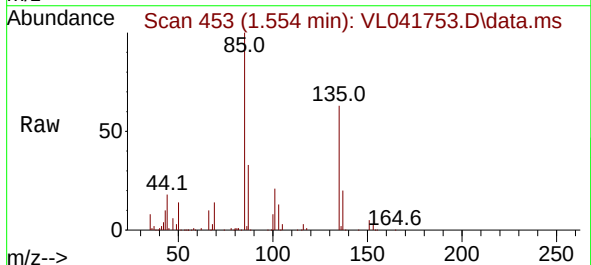
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

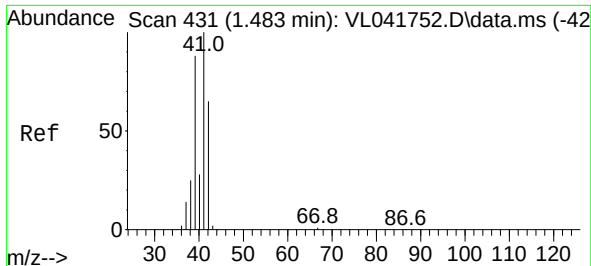
Tgt Ion: 64 Resp: 4003  
Ion Ratio Lower Upper  
64 100  
66 25.6 27.5 41.3#



#8  
Dichlorotetrafluoroethane  
Concen: 2.029 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 85 Resp: 21791  
Ion Ratio Lower Upper  
85 100  
135 64.8 51.9 77.9

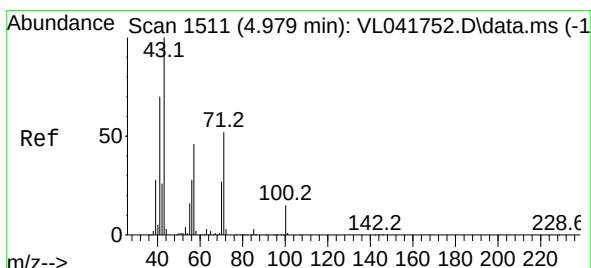
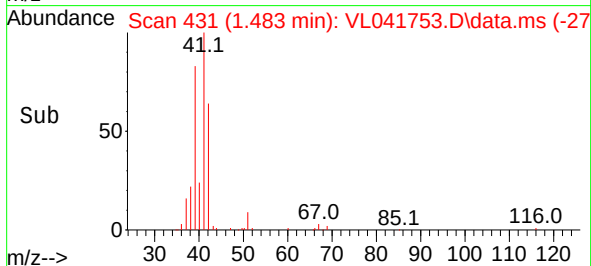
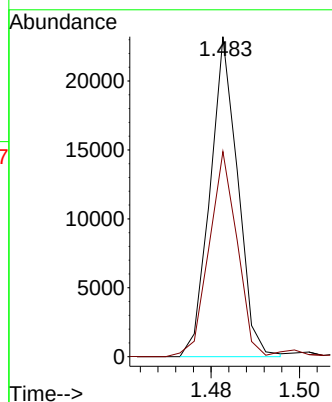
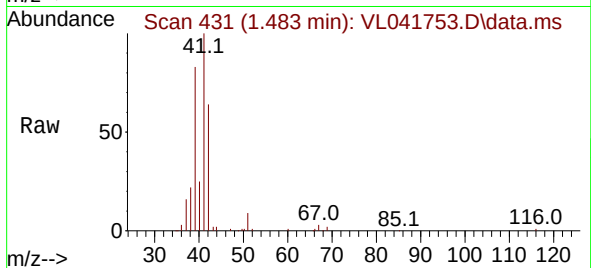




#9  
Propene  
Concen: 2.122 ppbv  
RT: 1.483 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

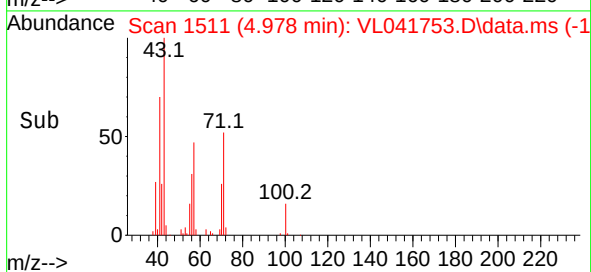
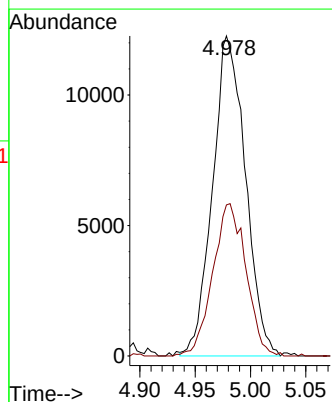
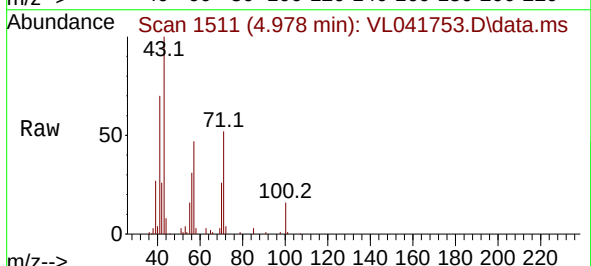
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

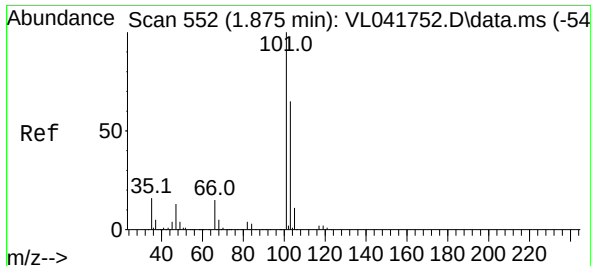
Tgt Ion: 41 Resp: 10115  
Ion Ratio Lower Upper  
41 100  
42 67.9 52.4 78.6



#10  
Heptane  
Concen: 2.066 ppbv  
RT: 4.978 min Scan# 1511  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 43 Resp: 25297  
Ion Ratio Lower Upper  
43 100  
57 48.1 38.5 57.7

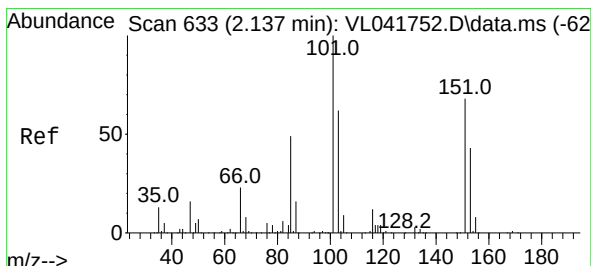
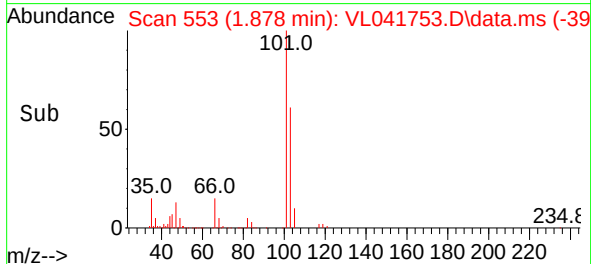
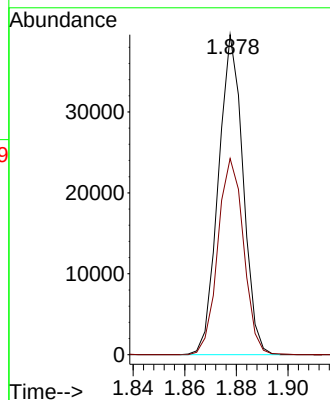
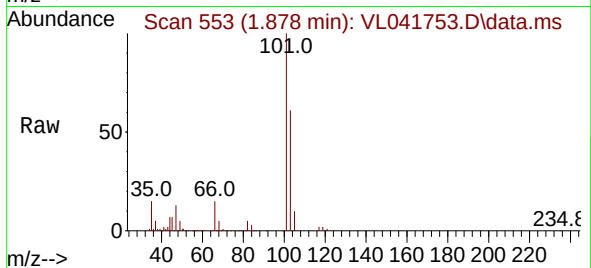




#11  
Trichlorofluoromethane  
Concen: 2.056 ppbv  
RT: 1.878 min Scan# 51  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

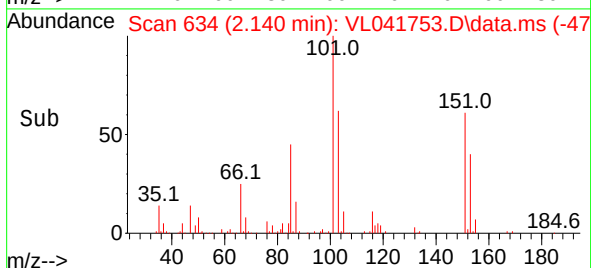
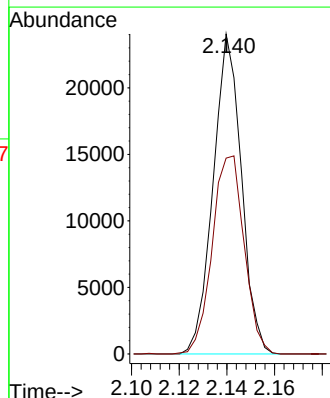
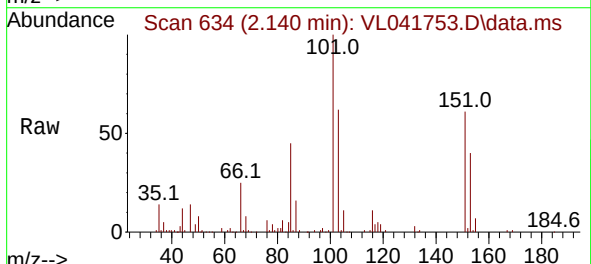
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC002

Tgt Ion:101 Resp: 26208  
Ion Ratio Lower Upper  
101 100  
103 61.3 51.8 77.8

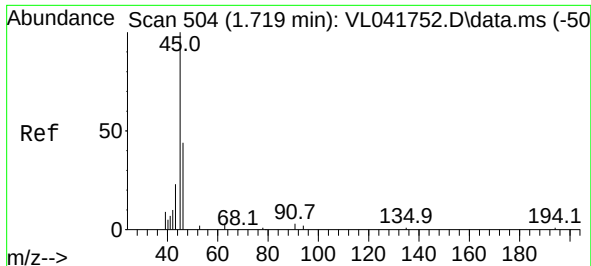


#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 2.039 ppbv  
RT: 2.140 min Scan# 634  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:101 Resp: 19770  
Ion Ratio Lower Upper  
101 100  
151 70.2 56.8 85.2







#13

Ethanol

Concen: 1.998 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

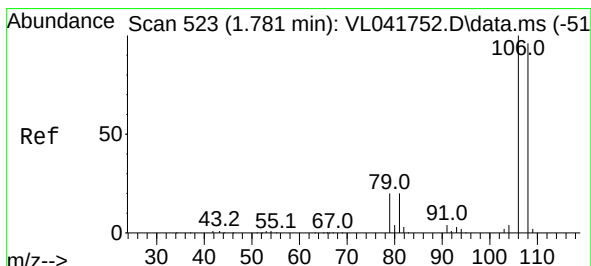
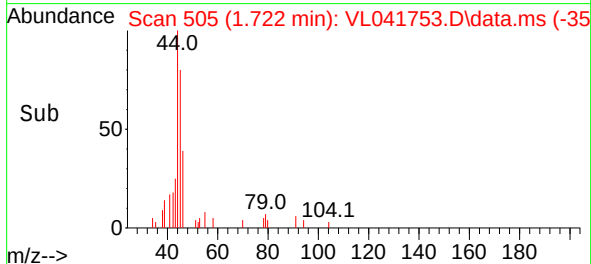
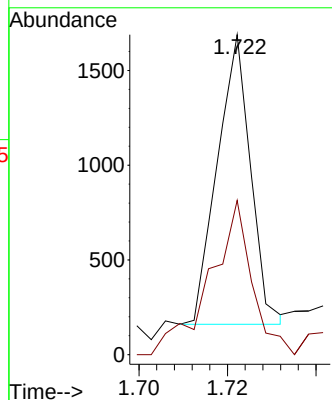
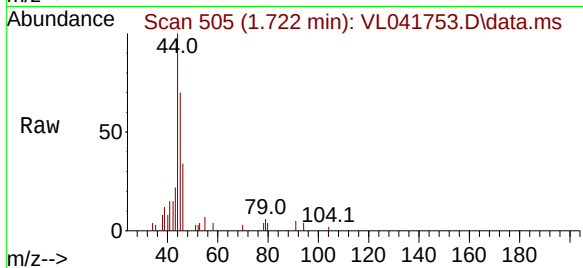
VSTDIC002

Tgt Ion: 45 Resp: 792

Ion Ratio Lower Upper

45 100

46 72.9 16.4 65.8#



#14

Bromoethene

Concen: 1.994 ppbv

RT: 1.784 min Scan# 524

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

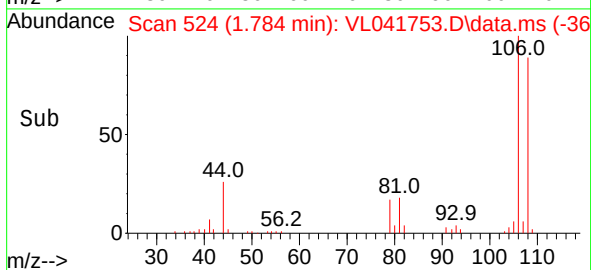
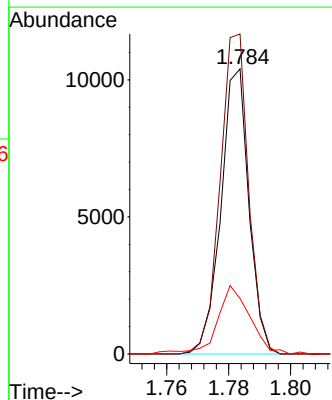
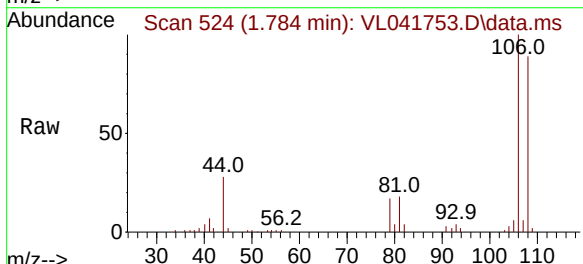
Tgt Ion: 108 Resp: 6527

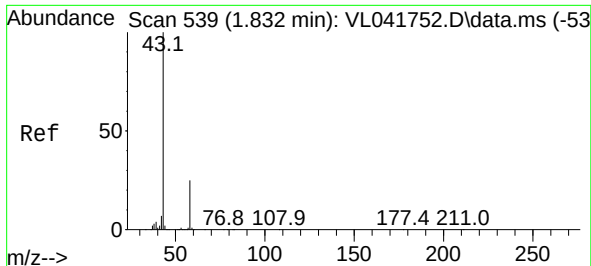
Ion Ratio Lower Upper

108 100

106 114.2 84.1 126.1

79 28.0 17.4 26.0#

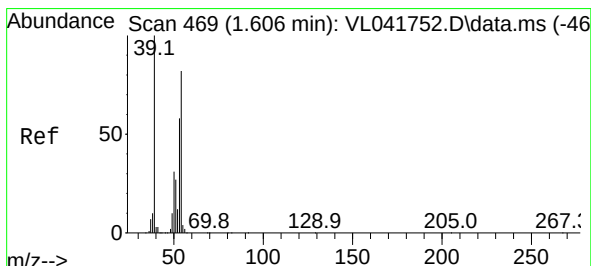
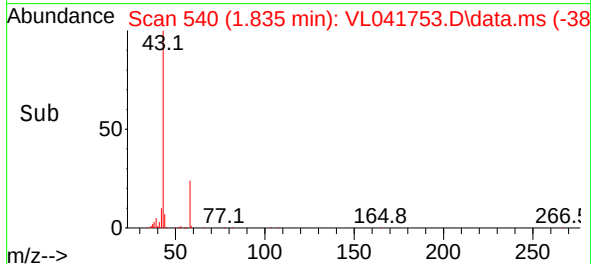
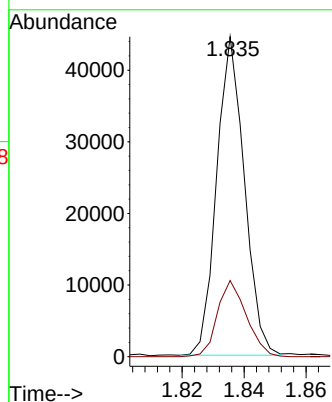
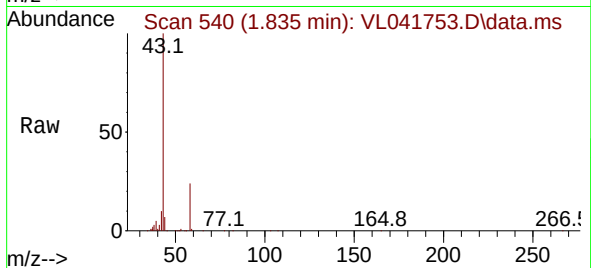




#15  
Acetone  
Concen: 2.104 ppbv  
RT: 1.835 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

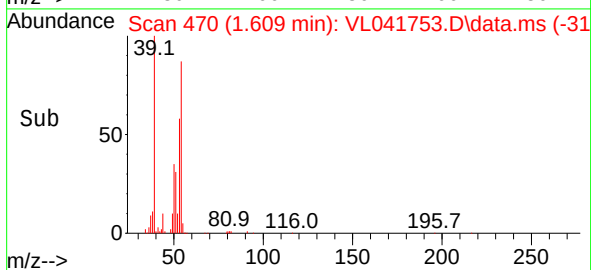
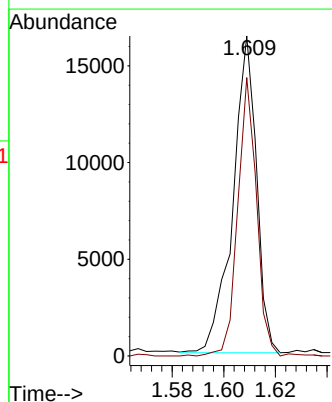
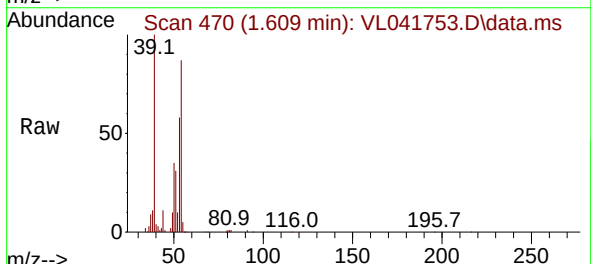
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

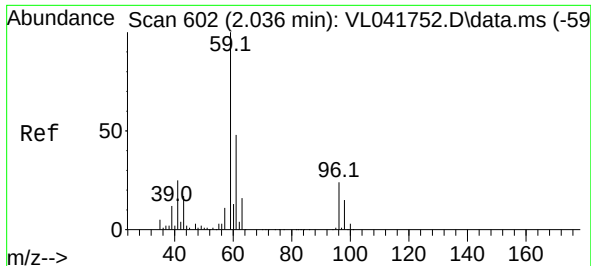
Tgt Ion: 43 Resp: 27613  
Ion Ratio Lower Upper  
43 100  
58 25.0 19.7 29.5



#16  
1,3-Butadiene  
Concen: 2.028 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 39 Resp: 10478  
Ion Ratio Lower Upper  
39 100  
54 70.0 58.4 87.6

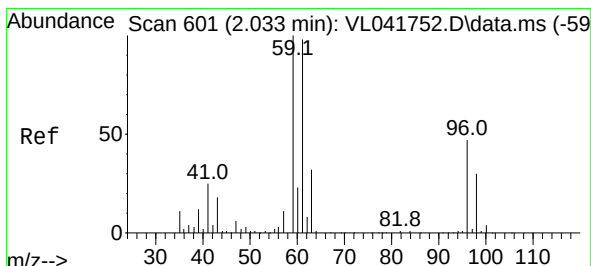
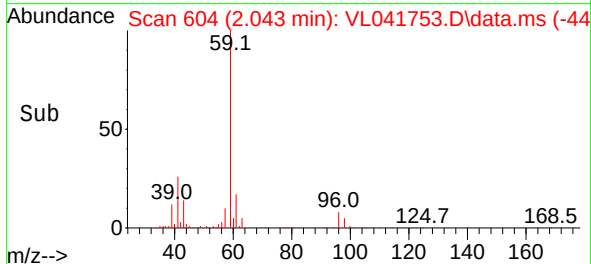
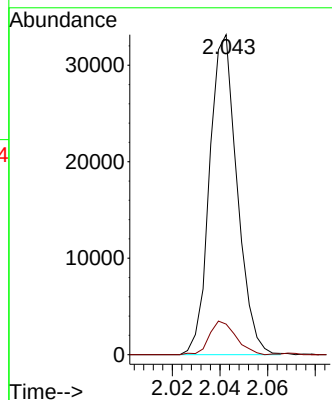
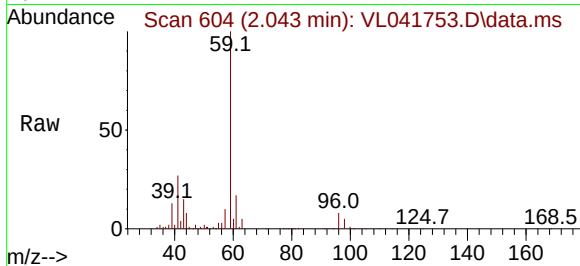




#17  
tert-Butyl alcohol  
Concen: 2.047 ppbv  
RT: 2.043 min Scan# 602  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

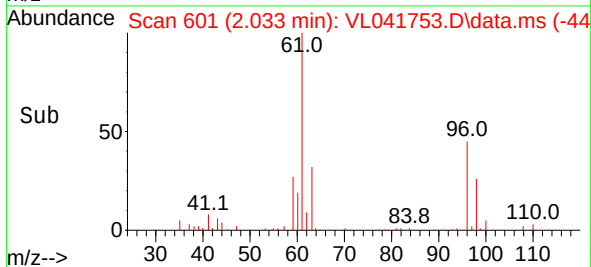
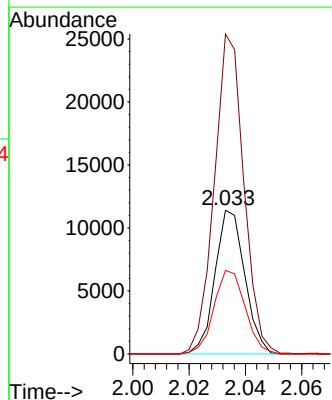
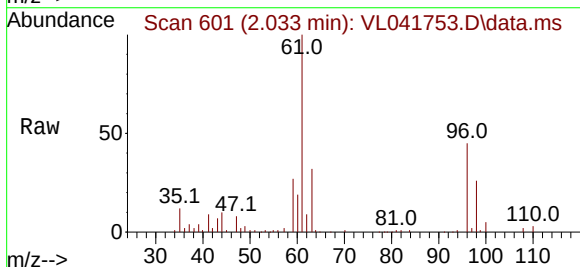
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC002

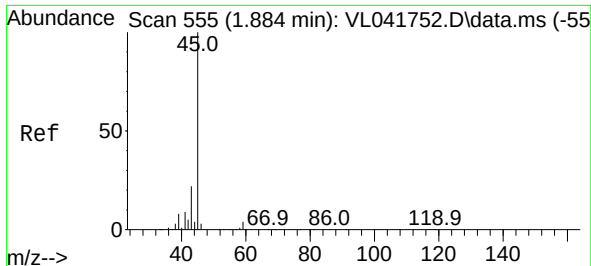
Tgt Ion: 59 Resp: 26646  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0



#18  
1,1-Dichloroethene  
Concen: 2.064 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 96 Resp: 8389  
Ion Ratio Lower Upper  
96 100  
61 222.7 167.7 251.5  
98 58.2 51.1 76.7





#19

Isopropyl Alcohol

Concen: 1.897 ppbv

RT: 1.887 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

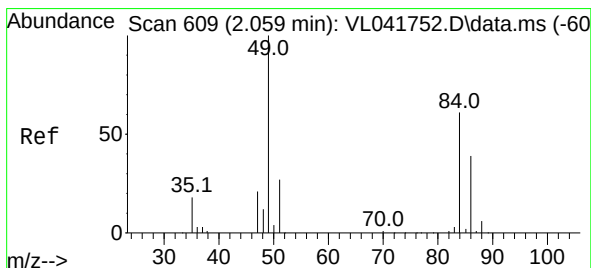
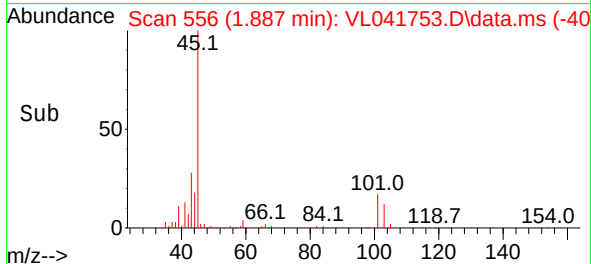
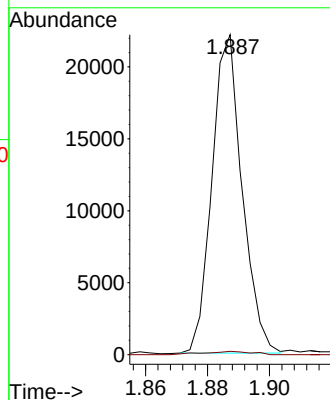
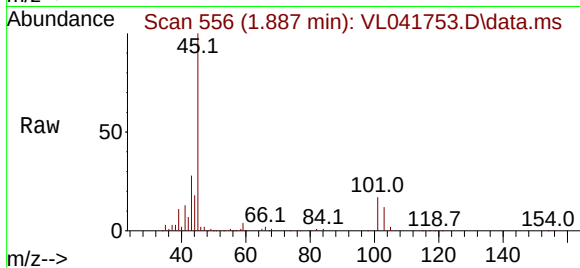
VSTDIC002

Tgt Ion: 45 Resp: 14937

Ion Ratio Lower Upper

45 100

58 46.2 33.3 49.9



#20

Methylene Chloride

Concen: 2.027 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 84 Resp: 7586

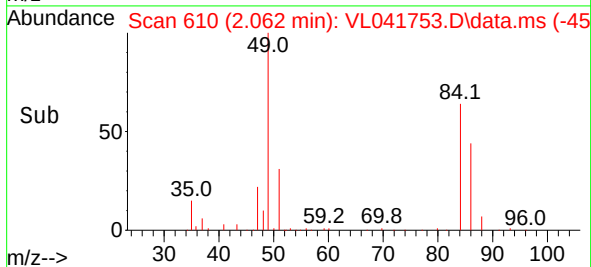
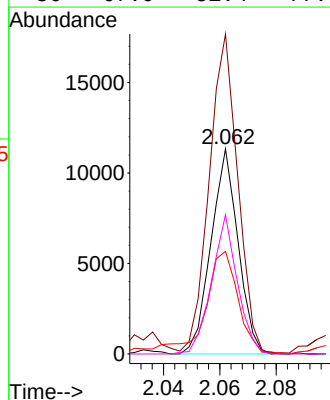
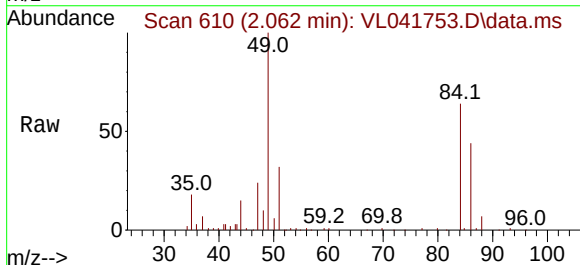
Ion Ratio Lower Upper

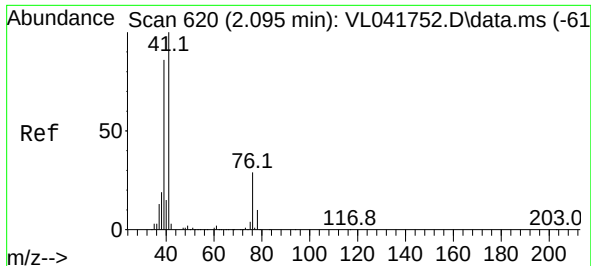
84 100

49 155.5 132.6 198.8

51 49.5 37.6 56.4

86 67.9 51.4 77.0





#21

Allyl Chloride

Concen: 2.070 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

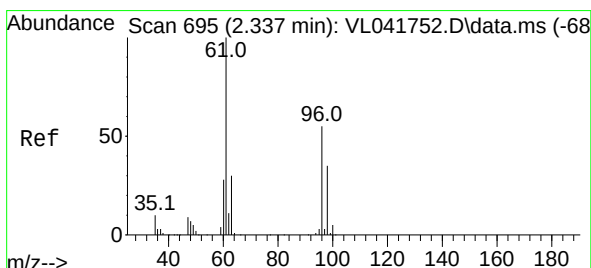
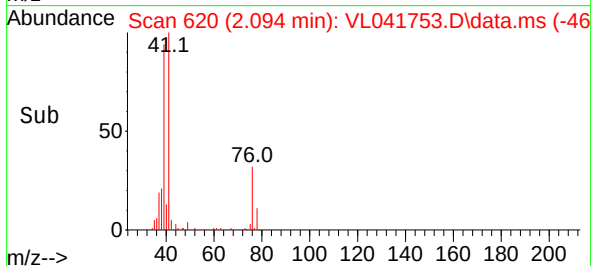
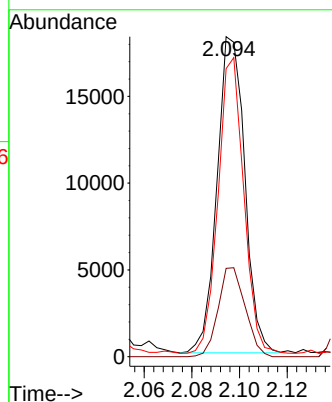
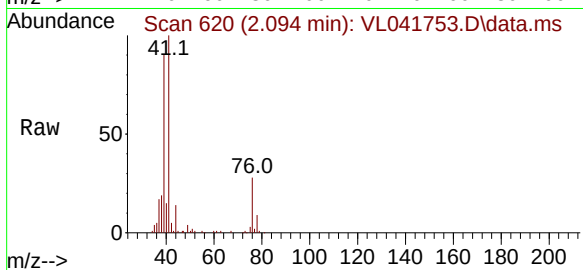
Tgt Ion: 41 Resp: 14731

Ion Ratio Lower Upper

41 100

76 27.4 22.3 33.5

39 85.3 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 2.022 ppbv

RT: 2.340 min Scan# 696

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

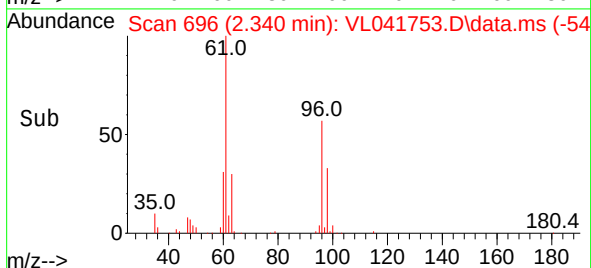
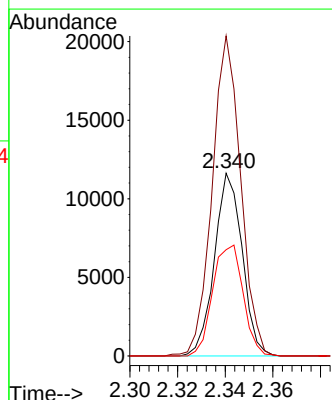
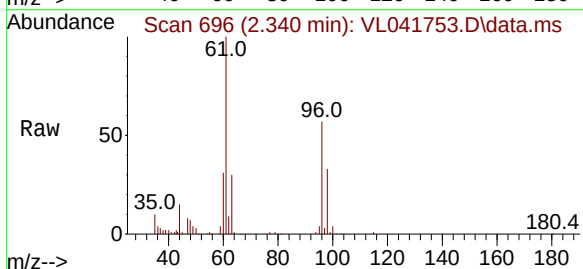
Tgt Ion: 96 Resp: 9407

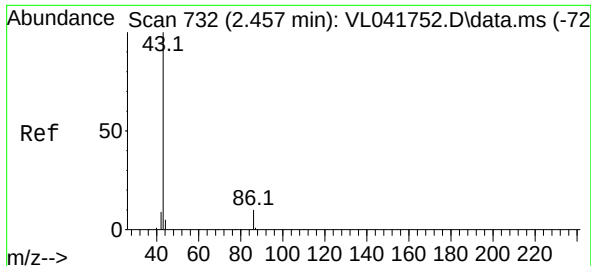
Ion Ratio Lower Upper

96 100

61 175.1 146.3 219.5

98 58.2 50.8 76.2





#23

Vinyl Acetate

Concen: 3.096 ppbv

RT: 2.463 min Scan# 716

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC002

Tgt Ion: 43 Resp: 17652

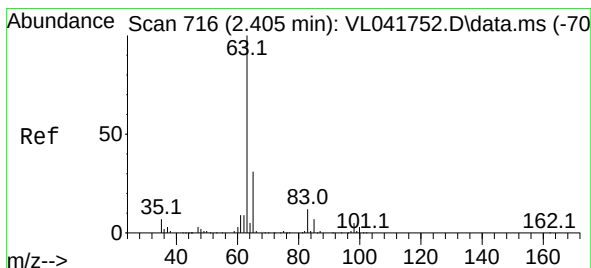
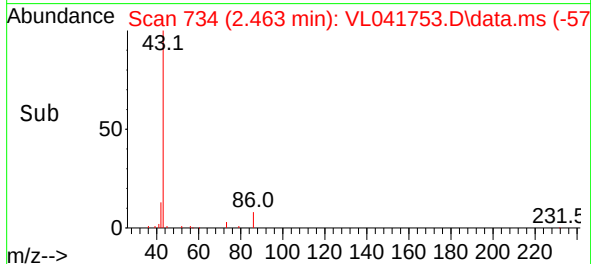
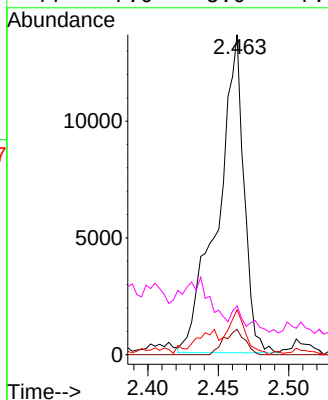
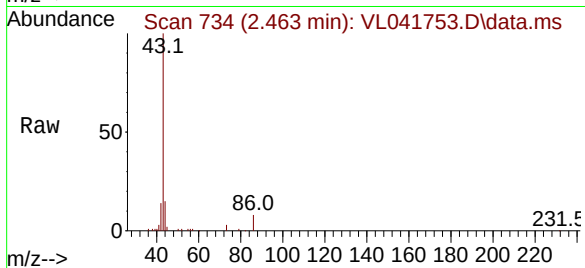
Ion Ratio Lower Upper

43 100

86 8.0 6.6 10.0

42 13.0 8.2 12.2#

44 7.6 5.0 7.4#



#24

1,1-Dichloroethane

Concen: 2.025 ppbv

RT: 2.408 min Scan# 717

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

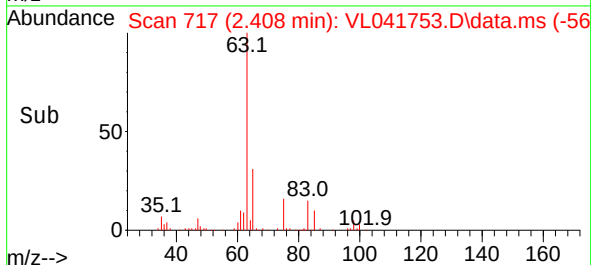
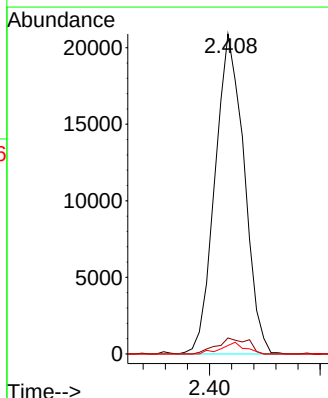
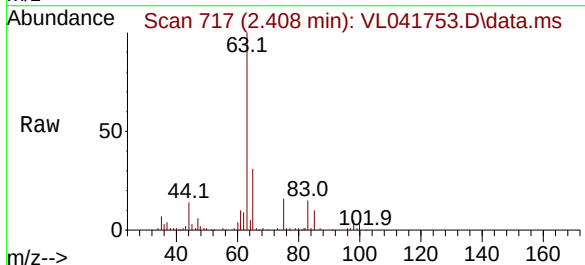
Tgt Ion: 63 Resp: 19070

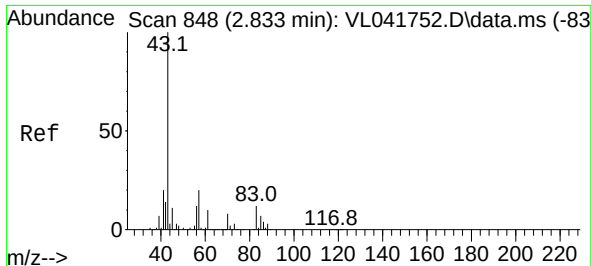
Ion Ratio Lower Upper

63 100

98 5.0 2.3 6.8

100 2.7 1.4 4.2





#25

Ethyl Acetate

Concen: 2.059 ppbv

RT: 2.836 min Scan# 84

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

Tgt Ion: 43 Resp: 50510

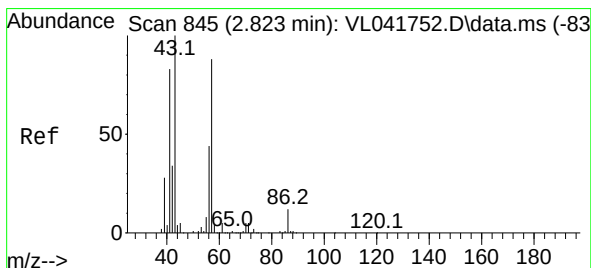
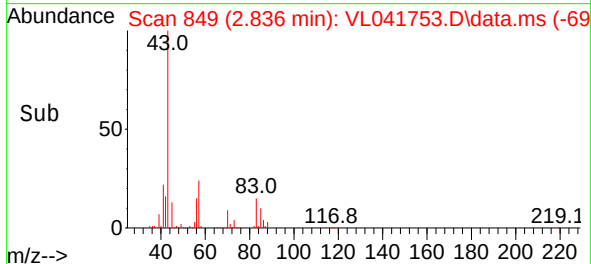
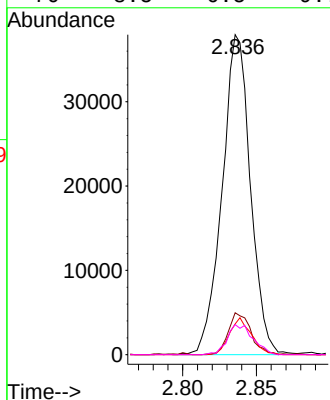
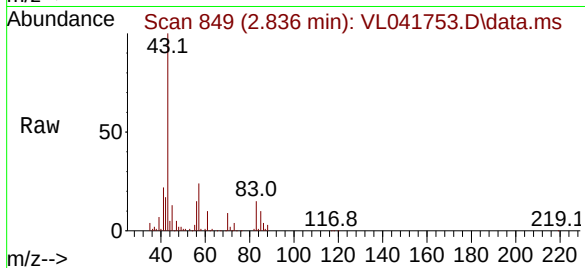
Ion Ratio Lower Upper

43 100

45 10.9 8.1 12.1

61 9.0 7.0 10.6

70 8.5 6.5 9.7



#26

Hexane

Concen: 2.073 ppbv

RT: 2.826 min Scan# 846

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion: 57 Resp: 19200

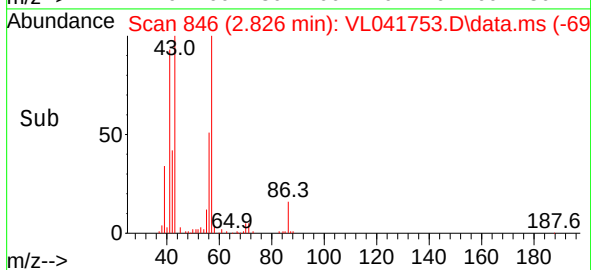
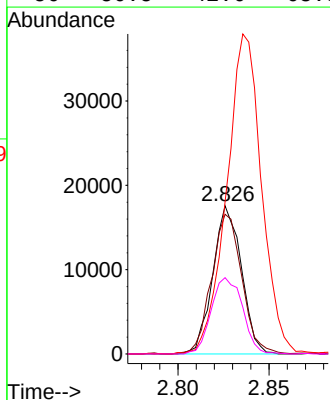
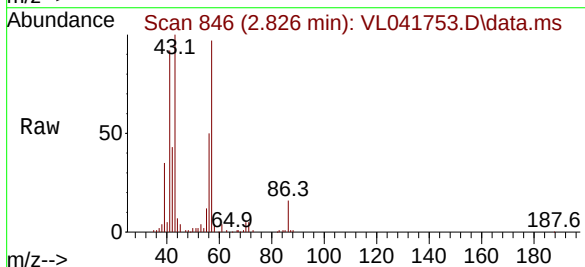
Ion Ratio Lower Upper

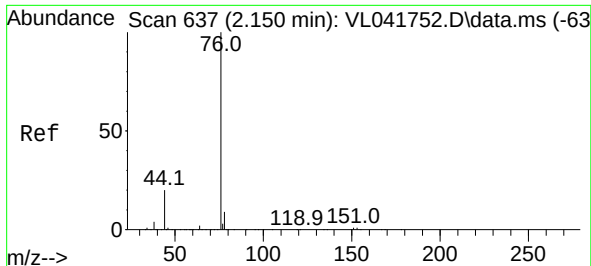
57 100

41 100.7 79.6 119.4

43 266.5 211.0 316.6

56 56.5 42.6 63.8





#27

Carbon Disulfide

Concen: 1.942 ppbv

RT: 2.153 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC002

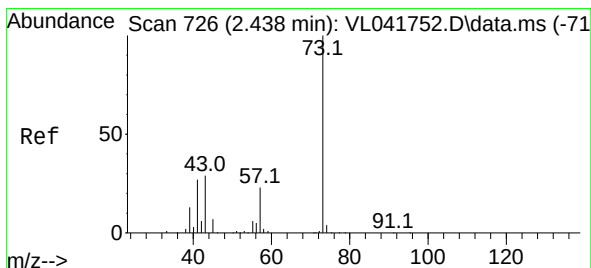
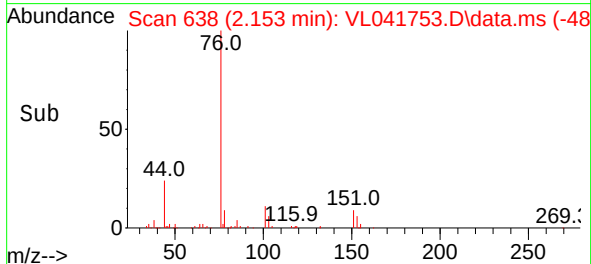
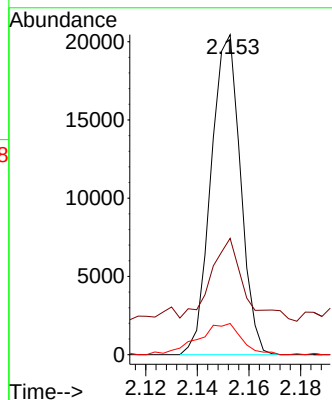
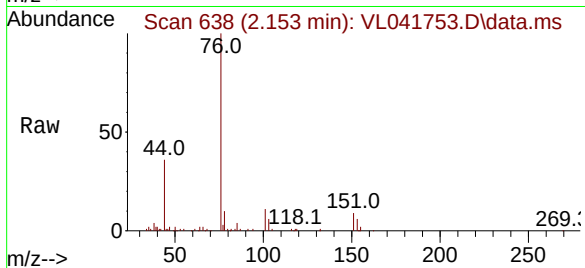
Tgt Ion: 76 Resp: 16214

Ion Ratio Lower Upper

76 100

44 70.4 17.6 26.4#

78 14.6 10.2 15.4



#28

Methyl tert-Butyl Ether

Concen: 2.001 ppbv

RT: 2.441 min Scan# 727

Delta R.T. 0.003 min

Lab File: VL041753.D

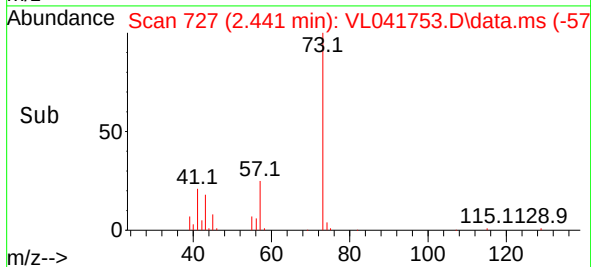
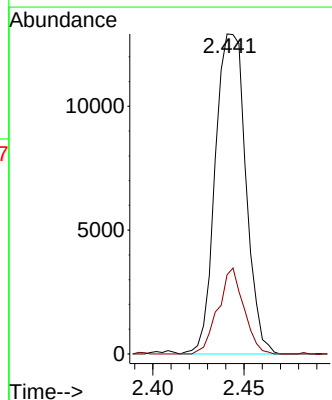
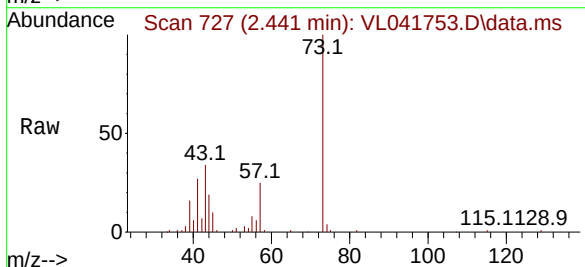
Acq: 16 Dec 2024 14:03

Tgt Ion: 73 Resp: 15039

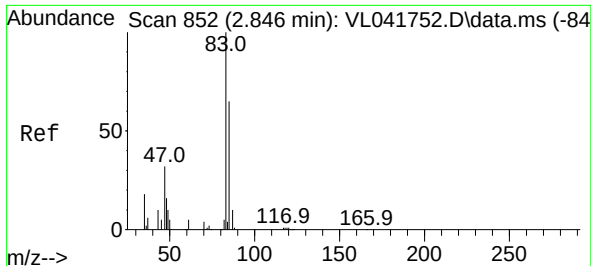
Ion Ratio Lower Upper

73 100

57 22.8 17.6 26.4







#29

Chloroform

Concen: 2.043 ppbv

RT: 2.849 min Scan# 85

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

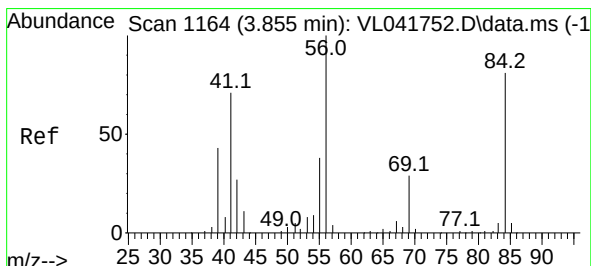
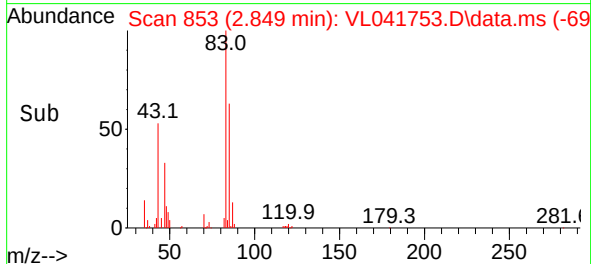
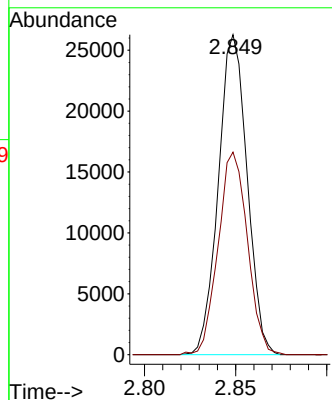
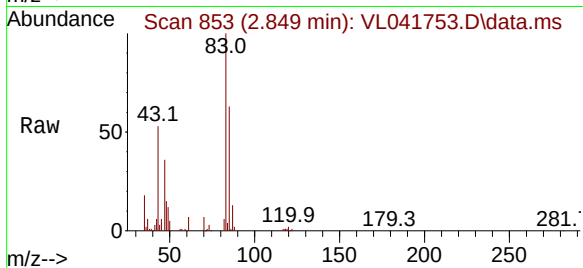
VSTDIC002

Tgt Ion: 83 Resp: 28843

Ion Ratio Lower Upper

83 100

85 63.3 51.8 77.6



#30

Cyclohexane

Concen: 2.079 ppbv

RT: 3.858 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

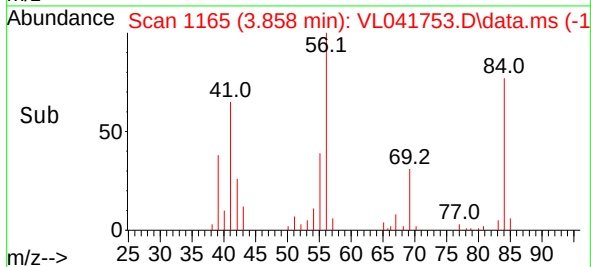
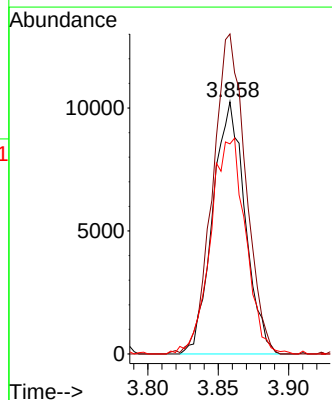
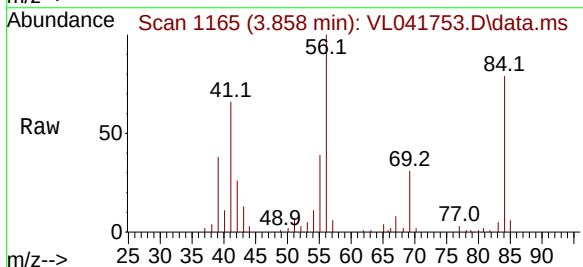
Tgt Ion: 84 Resp: 16384

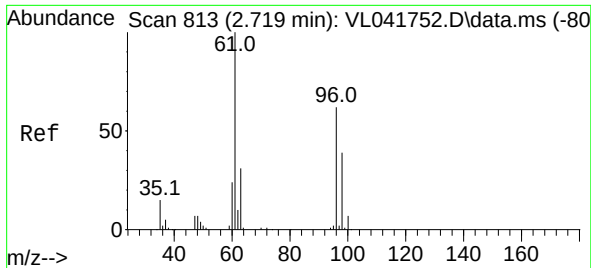
Ion Ratio Lower Upper

84 100

56 129.2 102.3 153.5

41 92.9 74.0 111.0

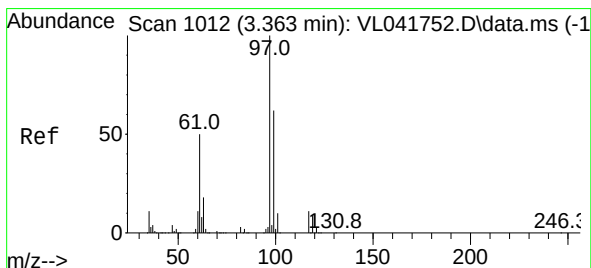
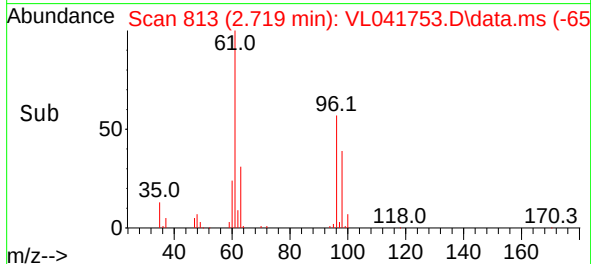
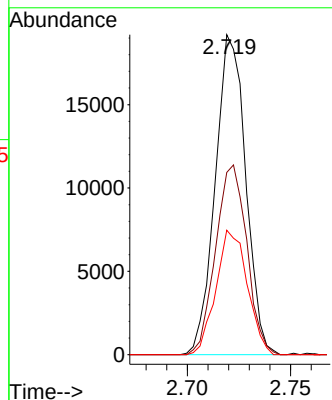
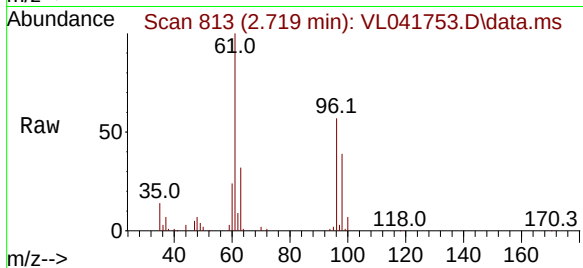




#31  
 cis-1,2-Dichloroethene  
 Concen: 2.057 ppbv  
 RT: 2.719 min Scan# 81  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

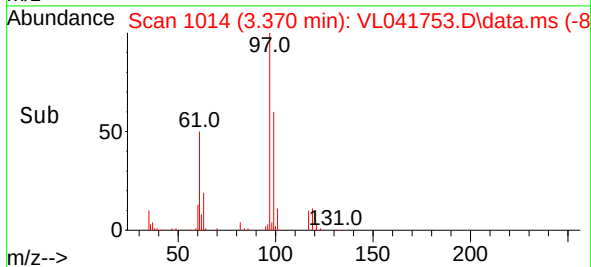
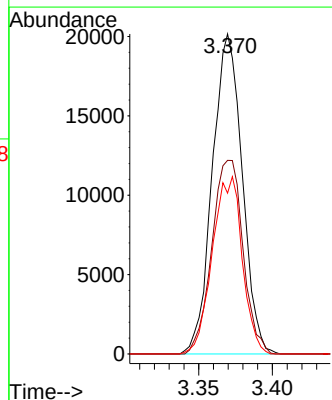
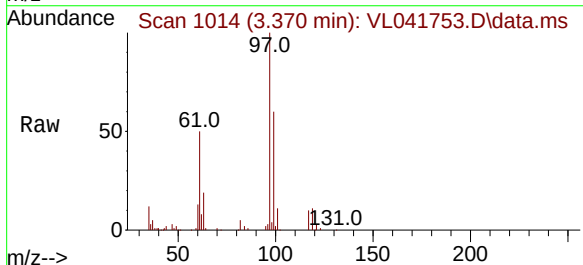
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

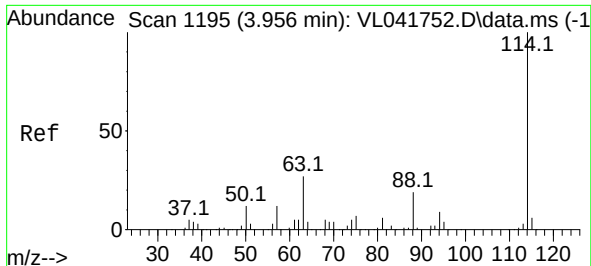
Tgt Ion: 61 Resp: 19688  
 Ion Ratio Lower Upper  
 61 100  
 96 56.9 49.7 74.5  
 98 38.9 30.8 46.2



#32  
 1,1,1-Trichloroethane  
 Concen: 2.017 ppbv  
 RT: 3.370 min Scan# 1014  
 Delta R.T. 0.006 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

Tgt Ion: 97 Resp: 28341  
 Ion Ratio Lower Upper  
 97 100  
 99 63.3 51.0 76.4  
 61 55.5 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1195

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

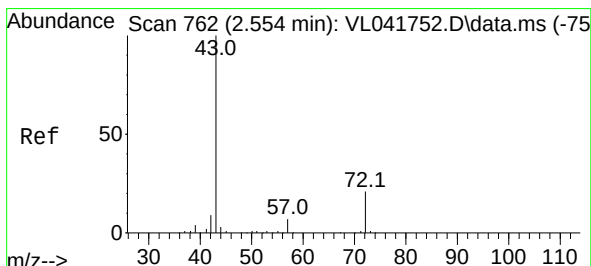
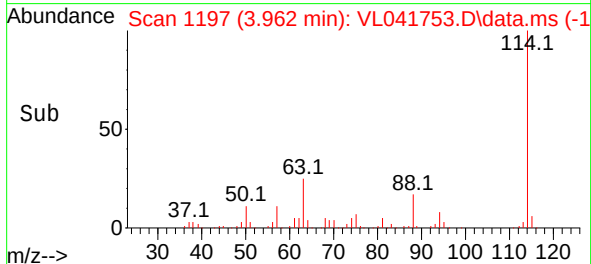
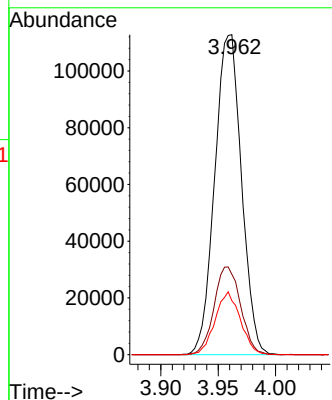
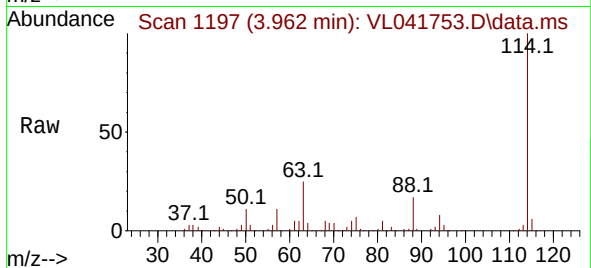
Tgt Ion:114 Resp: 182992

Ion Ratio Lower Upper

114 100

63 27.3 21.8 32.8

88 18.5 14.8 22.2



#34

2-Butanone

Concen: 2.138 ppbv

RT: 2.557 min Scan# 763

Delta R.T. 0.003 min

Lab File: VL041753.D

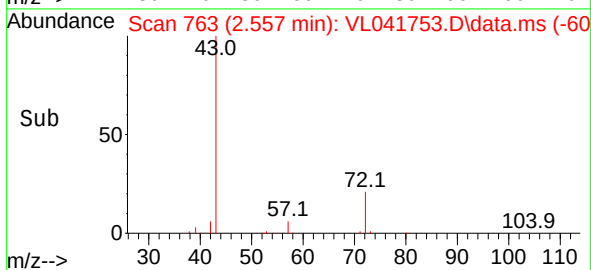
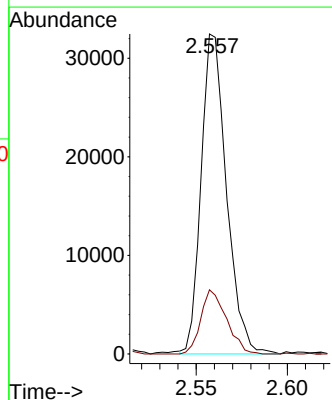
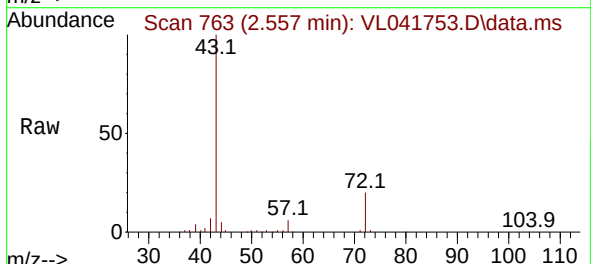
Acq: 16 Dec 2024 14:03

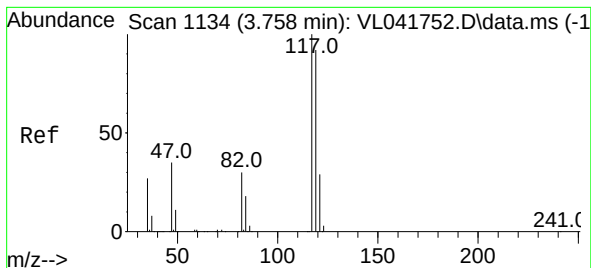
Tgt Ion: 43 Resp: 31483

Ion Ratio Lower Upper

43 100

72 20.4 16.8 25.2





#35

Carbon Tetrachloride

Concen: 2.134 ppbv

RT: 3.765 min Scan# 1136

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

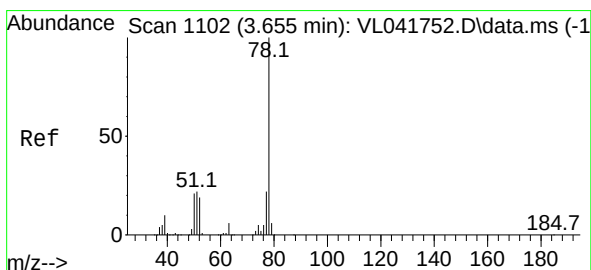
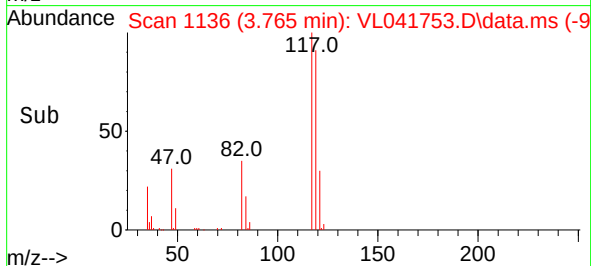
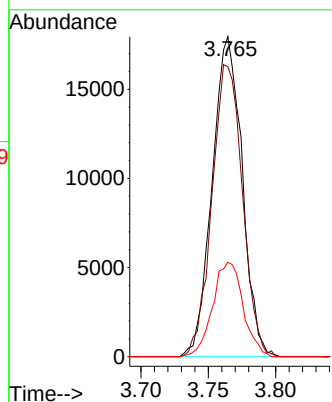
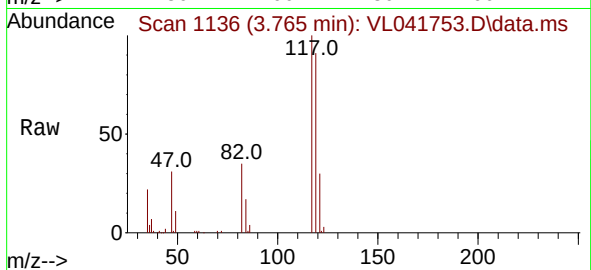
Tgt Ion:117 Resp: 27727

Ion Ratio Lower Upper

117 100

119 90.6 73.7 110.5

121 29.5 23.0 34.4



#36

Benzene

Concen: 2.048 ppbv

RT: 3.658 min Scan# 1103

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

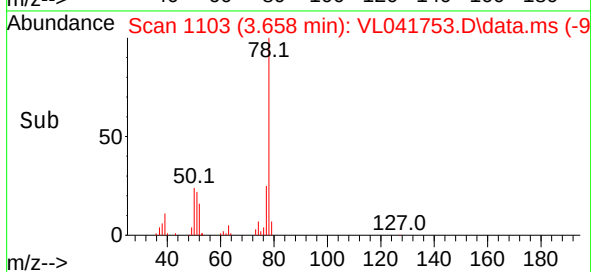
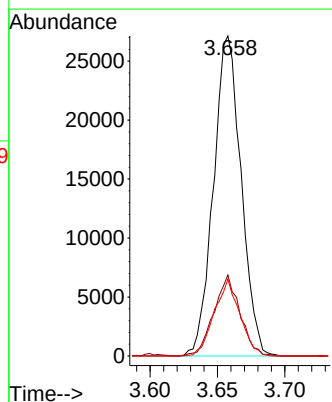
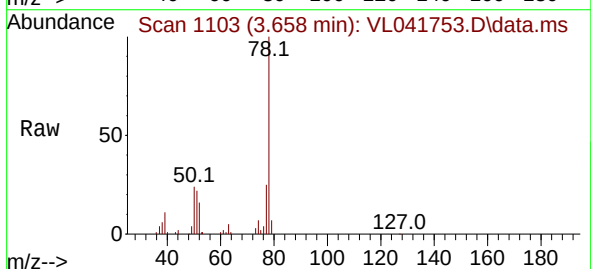
Tgt Ion: 78 Resp: 38759

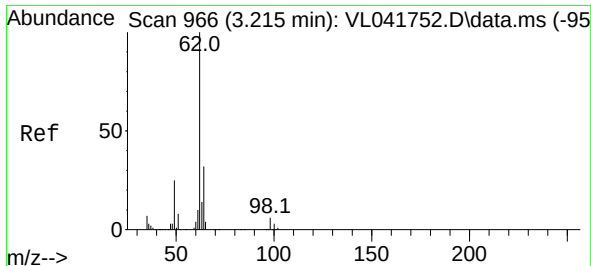
Ion Ratio Lower Upper

78 100

77 25.3 17.8 26.6

50 24.0 17.2 25.8

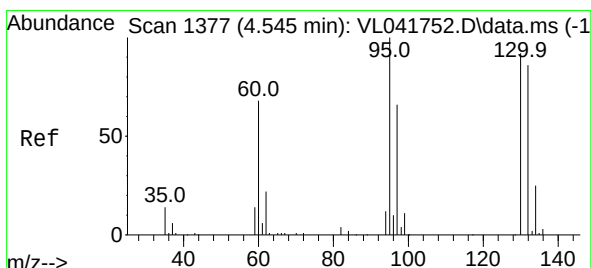
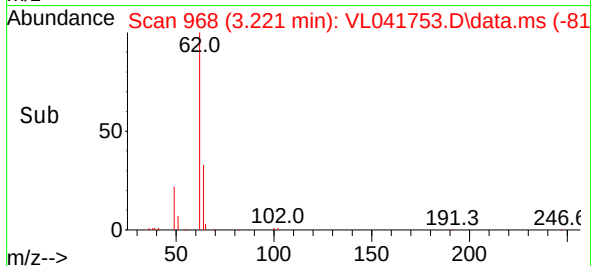
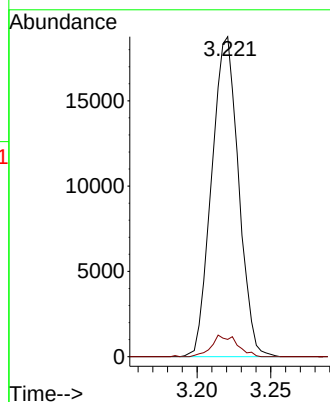
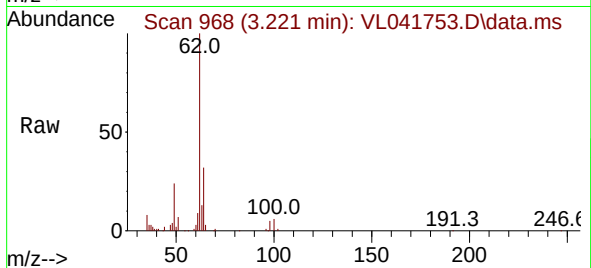




#37  
1,2-Dichloroethane  
Concen: 2.021 ppbv  
RT: 3.221 min Scan# 966  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

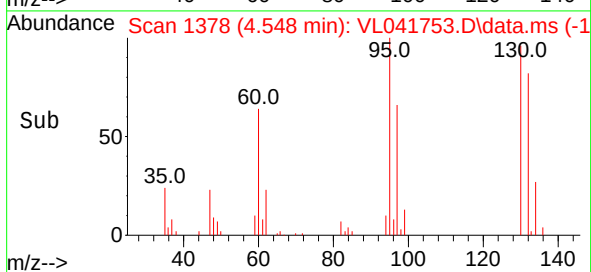
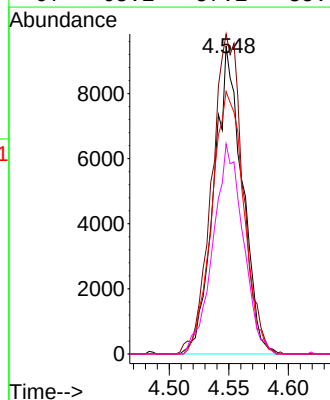
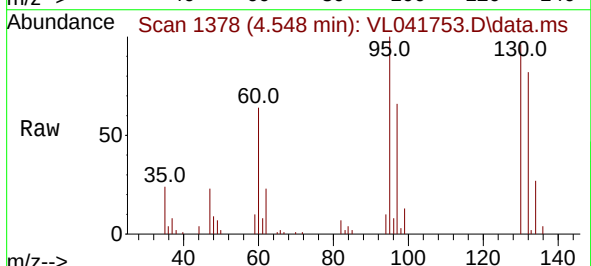
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

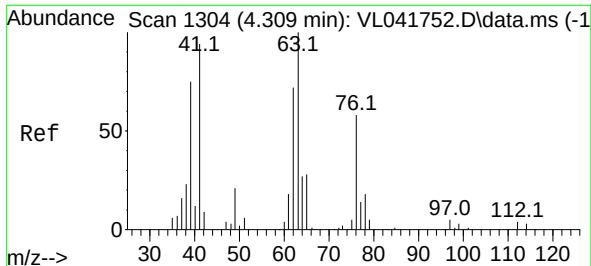
Tgt Ion: 62 Resp: 23800  
Ion Ratio Lower Upper  
62 100  
98 6.4 4.7 7.1



#38  
Trichloroethene  
Concen: 1.965 ppbv  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:130 Resp: 15660  
Ion Ratio Lower Upper  
130 100  
95 103.3 87.0 130.6  
132 85.2 75.0 112.6  
97 68.2 57.2 85.8

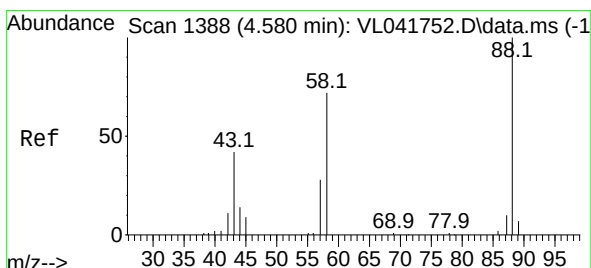
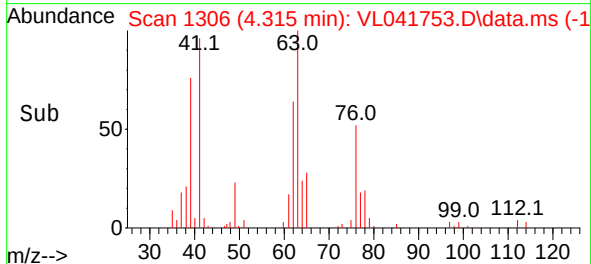
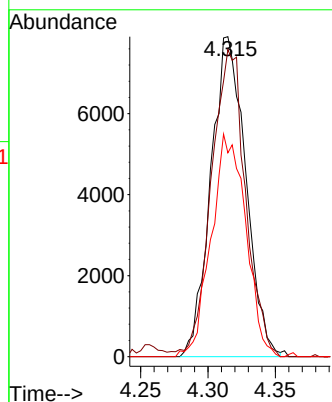
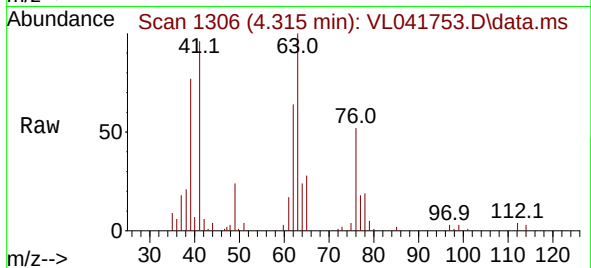




#39  
1,2-Dichloropropane  
Concen: 2.074 ppbv  
RT: 4.315 min Scan# 14  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

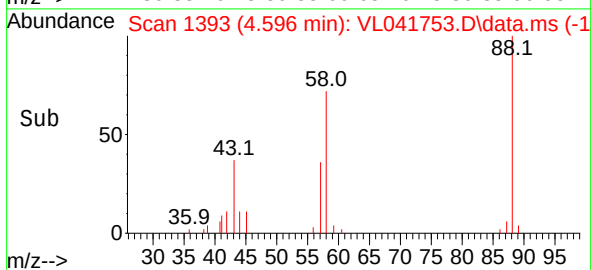
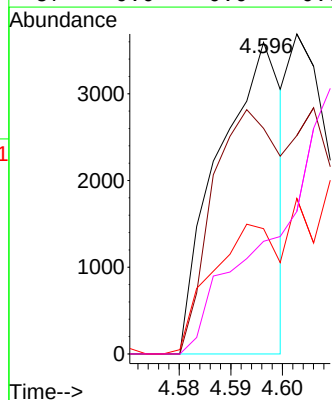
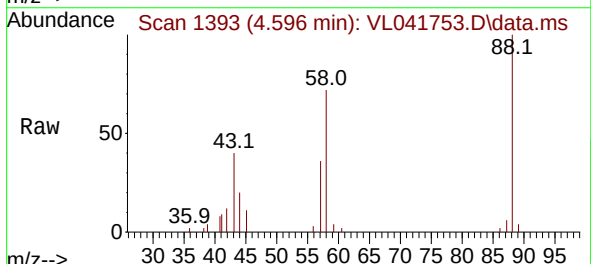
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC002

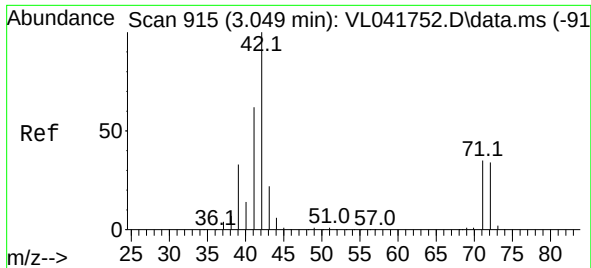
Tgt Ion: 63 Resp: 14197  
Ion Ratio Lower Upper  
63 100  
41 95.9 75.3 112.9  
62 62.4 57.3 85.9



#40  
1,4-Dioxane  
Concen: 0.920 ppbv  
RT: 4.596 min Scan# 1393  
Delta R.T. 0.016 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 88 Resp: 3078  
Ion Ratio Lower Upper  
88 100  
58 0.0 61.0 91.6#  
43 0.0 29.4 44.0#  
57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 2.021 ppbv

RT: 3.059 min Scan# 91

Delta R.T. 0.009 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

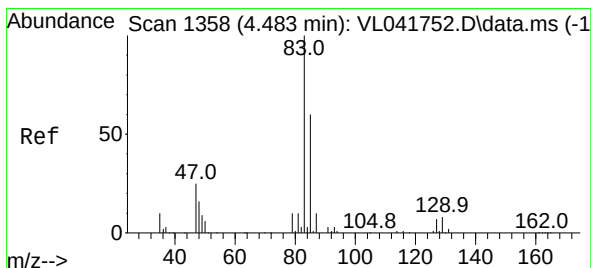
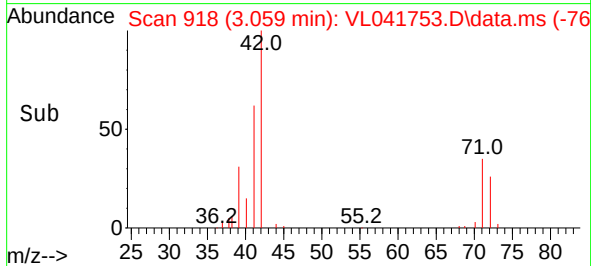
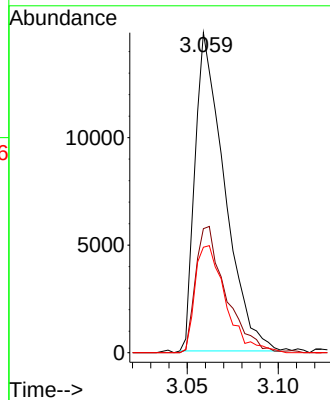
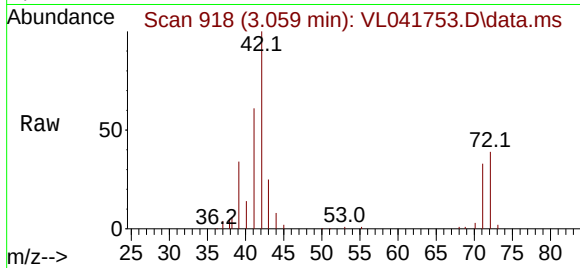
Tgt Ion: 42 Resp: 16665

Ion Ratio Lower Upper

42 100

72 40.7 29.1 43.7

71 34.9 28.4 42.6



#42

Bromodichloromethane

Concen: 1.972 ppbv

RT: 4.489 min Scan# 1360

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

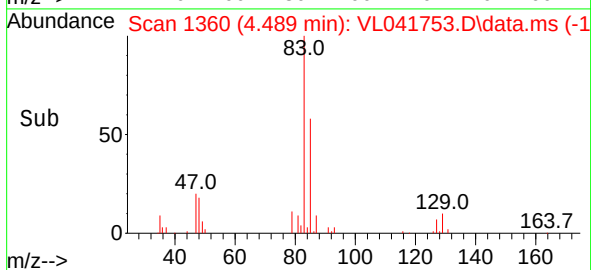
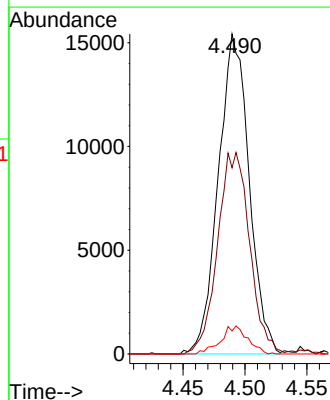
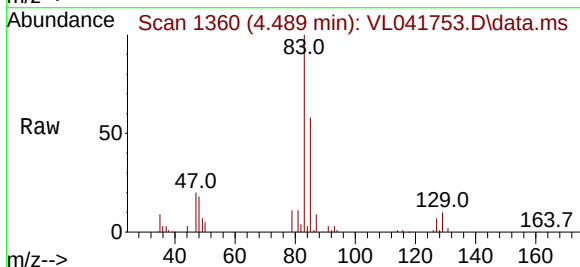
Tgt Ion: 83 Resp: 26716

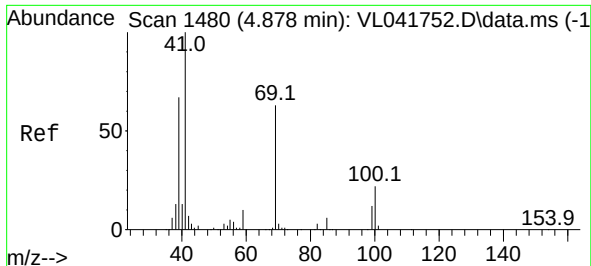
Ion Ratio Lower Upper

83 100

85 58.2 48.0 72.0

127 7.2 5.8 8.8





#43

Methyl Methacrylate

Concen: 2.059 ppbv

RT: 4.884 min Scan# 1480

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

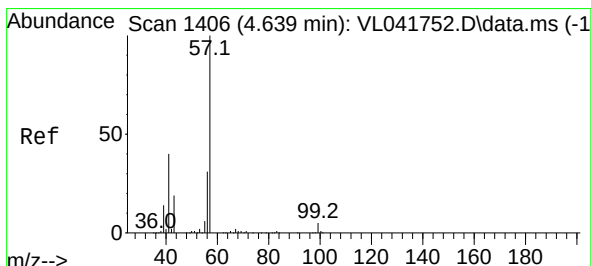
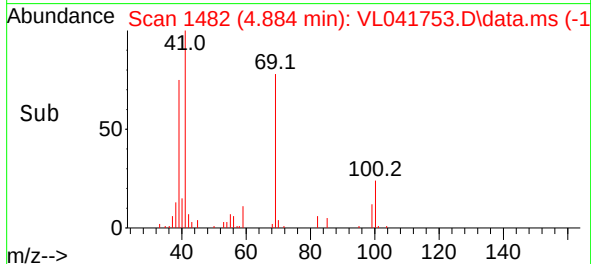
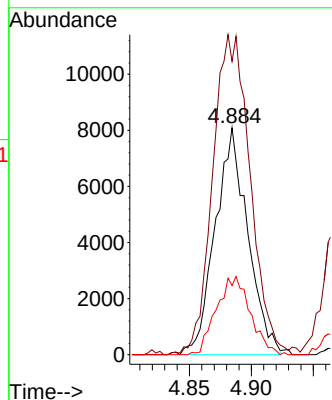
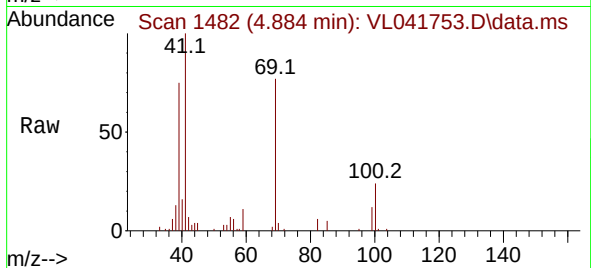
Tgt Ion: 69 Resp: 14849

Ion Ratio Lower Upper

69 100

41 162.7 130.3 195.5

100 35.7 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 2.086 ppbv

RT: 4.642 min Scan# 1407

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

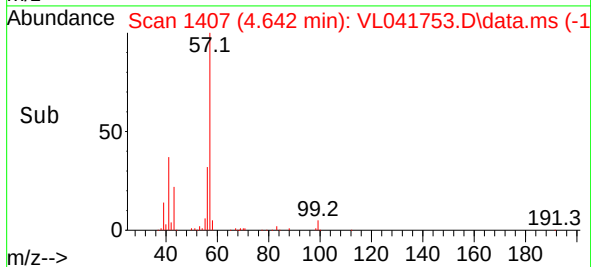
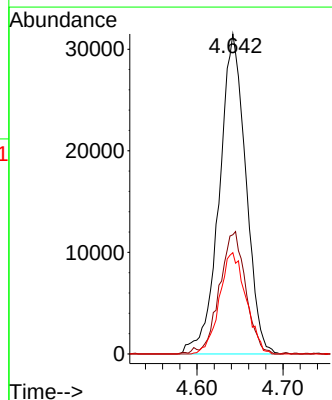
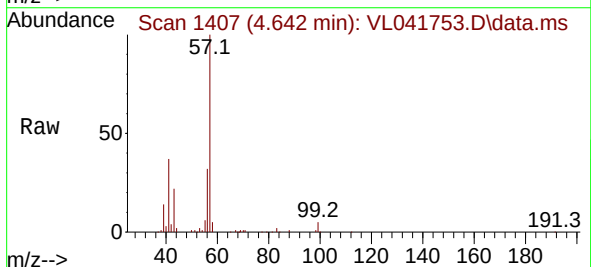
Tgt Ion: 57 Resp: 67432

Ion Ratio Lower Upper

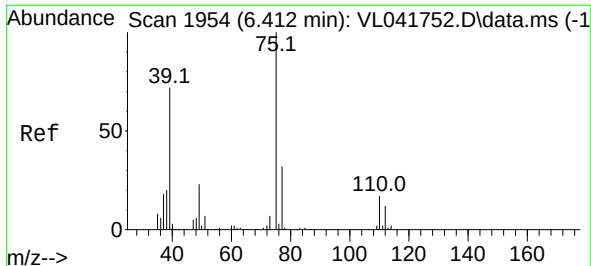
57 100

41 37.9 30.7 46.1

56 31.7 25.4 38.0







#45

t-1,3-Dichloropropene

Concen: 1.995 ppbv

RT: 6.415 min Scan# 1954

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

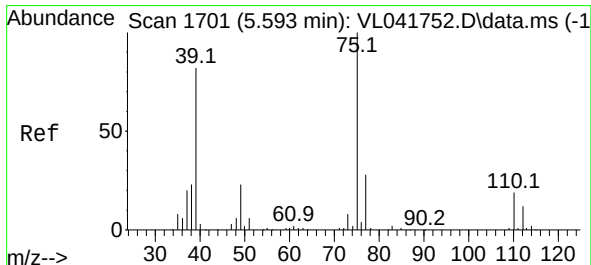
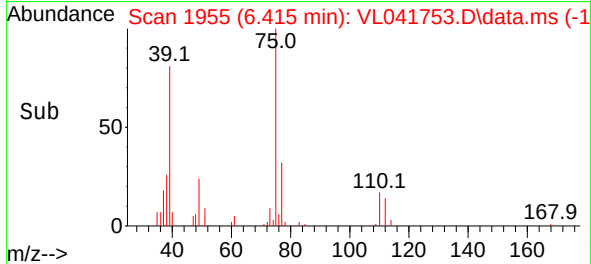
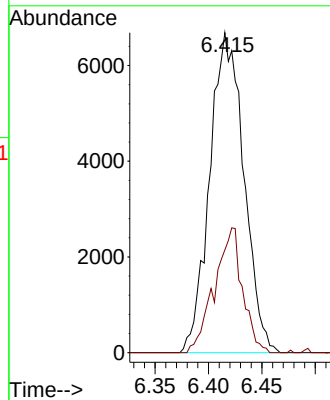
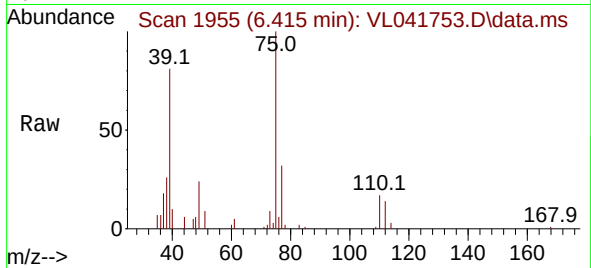
VSTDIC002

Tgt Ion: 75 Resp: 14885

Ion Ratio Lower Upper

75 100

77 32.1 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 0.763 ppbv

RT: 5.593 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

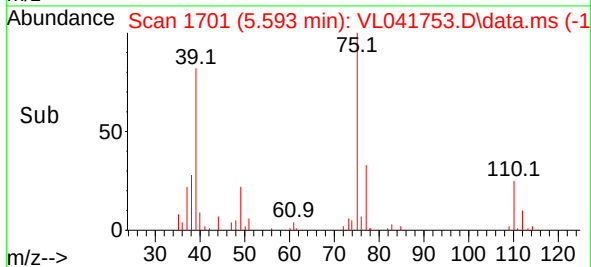
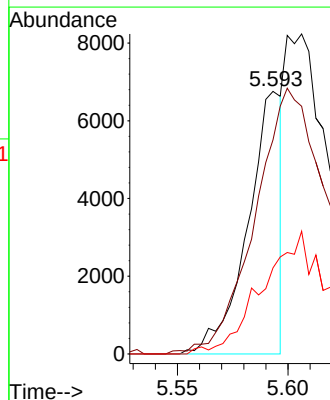
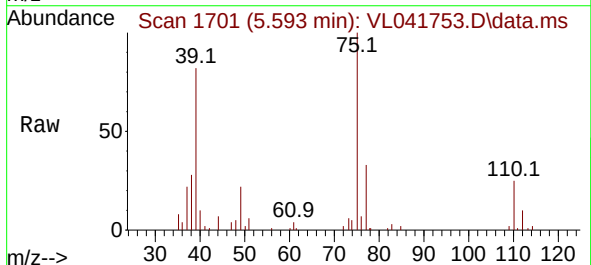
Tgt Ion: 75 Resp: 7224

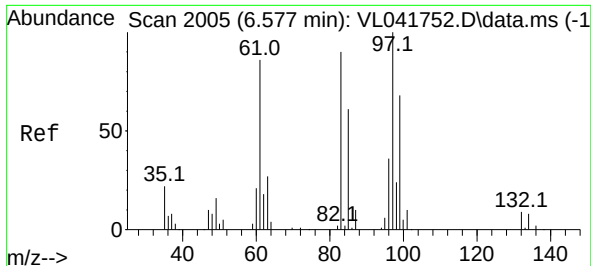
Ion Ratio Lower Upper

75 100

39 80.2 65.2 97.8

77 32.8 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 2.078 ppbv

RT: 6.584 min Scan# 2005

Delta R.T. 0.006 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

Tgt Ion: 97 Resp: 14858

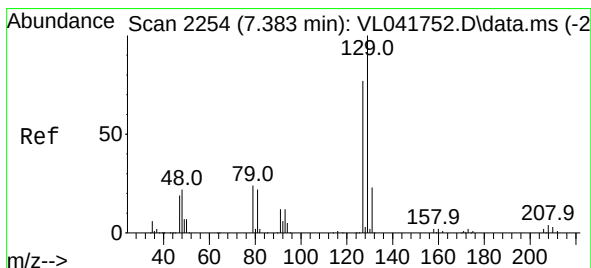
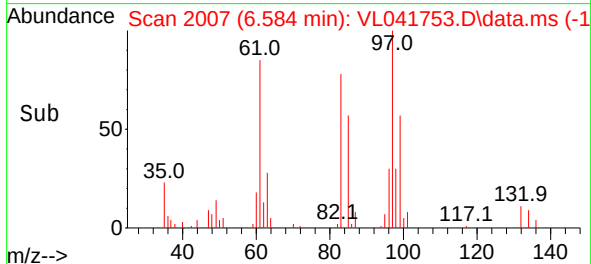
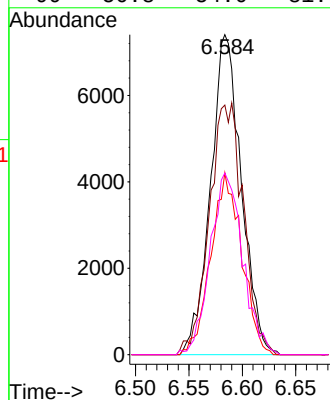
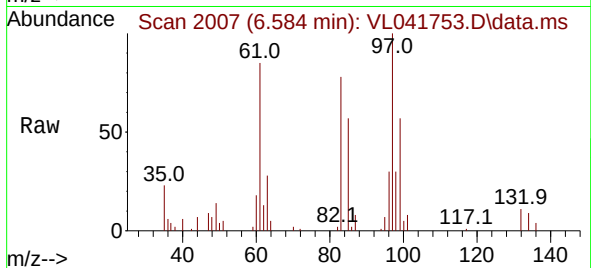
Ion Ratio Lower Upper

97 100

83 78.0 72.3 108.5

85 56.8 48.5 72.7

99 56.8 54.0 81.0



#48

Dibromochloromethane

Concen: 2.024 ppbv

RT: 7.390 min Scan# 2256

Delta R.T. 0.006 min

Lab File: VL041753.D

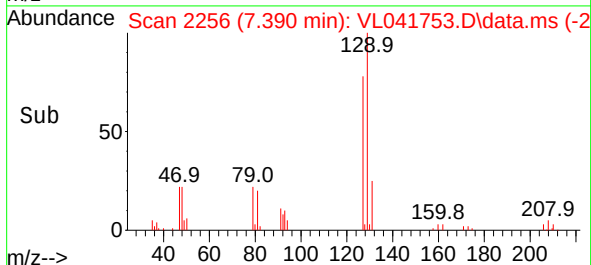
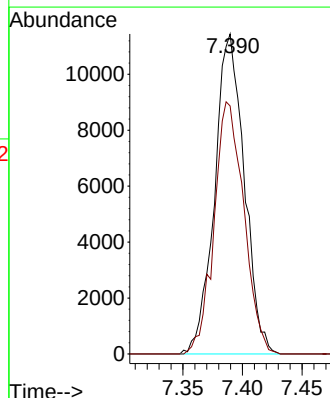
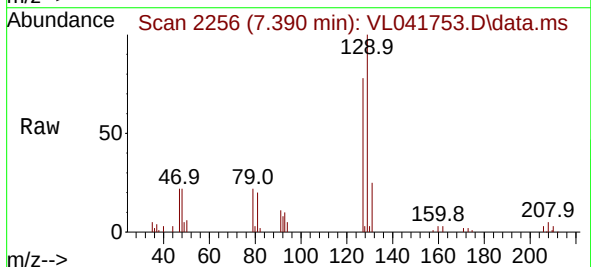
Acq: 16 Dec 2024 14:03

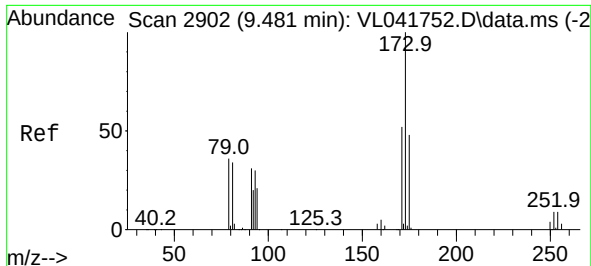
Tgt Ion: 129 Resp: 19764

Ion Ratio Lower Upper

129 100

127 79.1 38.8 116.3





#49

Bromoform

Concen: 2.027 ppbv

RT: 9.484 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC002

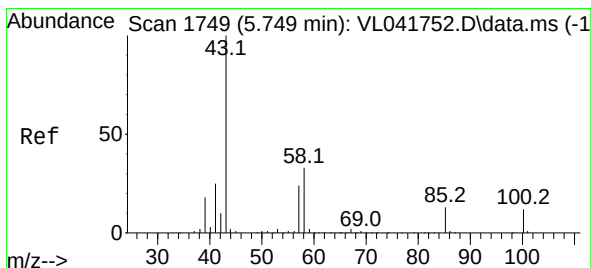
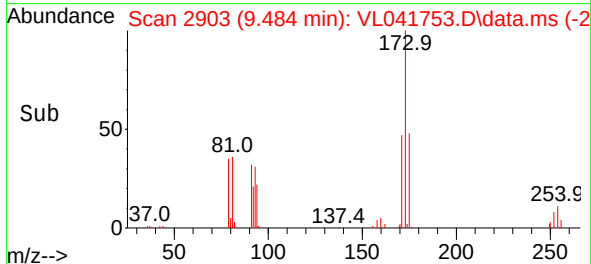
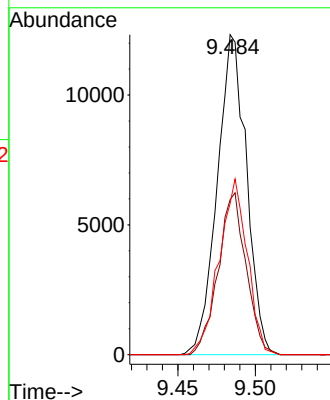
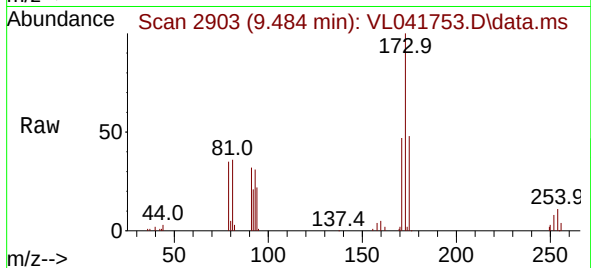
Tgt Ion:173 Resp: 16200

Ion Ratio Lower Upper

173 100

175 48.5 38.2 57.2

171 52.9 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 2.098 ppbv

RT: 5.758 min Scan# 1752

Delta R.T. 0.009 min

Lab File: VL041753.D

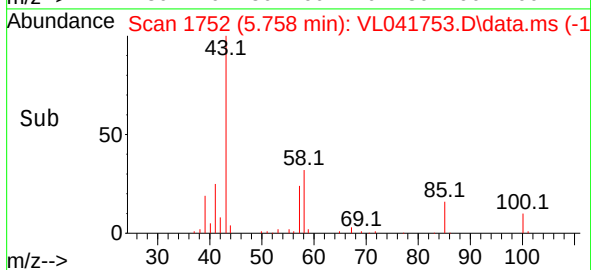
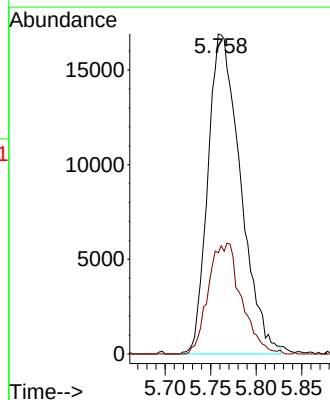
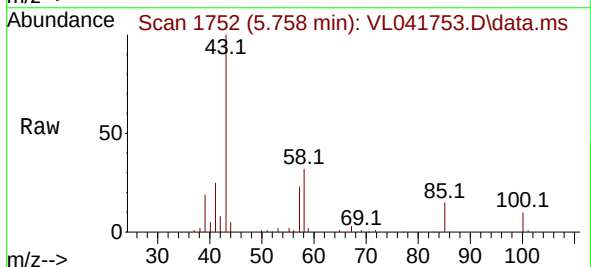
Acq: 16 Dec 2024 14:03

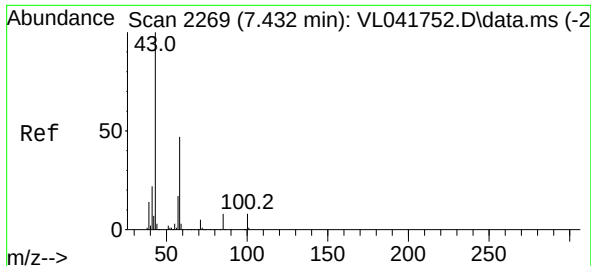
Tgt Ion: 43 Resp: 42045

Ion Ratio Lower Upper

43 100

58 35.1 26.8 40.2

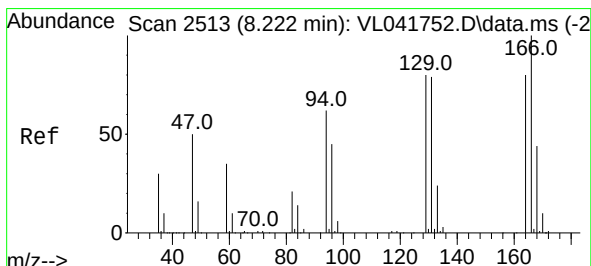
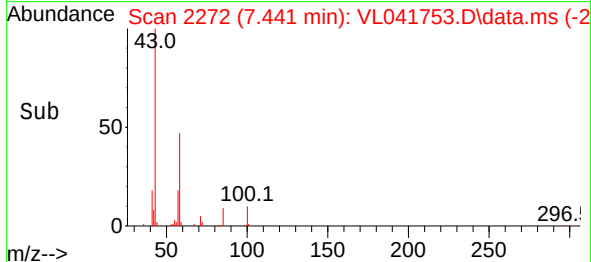
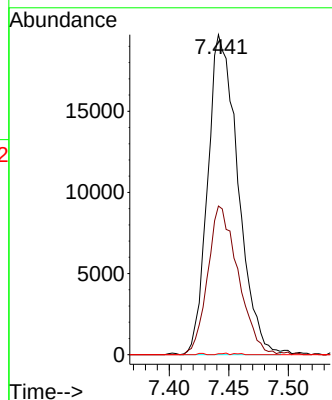
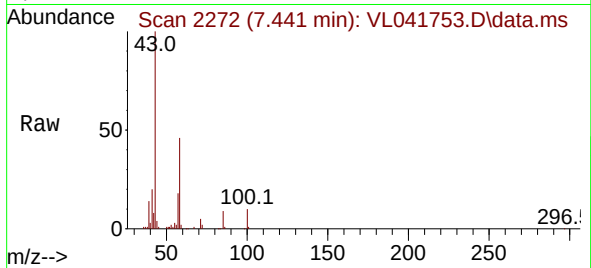




#51  
2-Hexanone  
Concen: 2.147 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

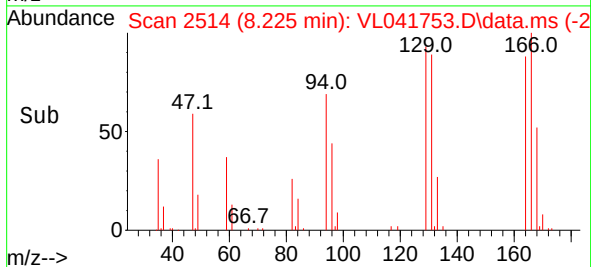
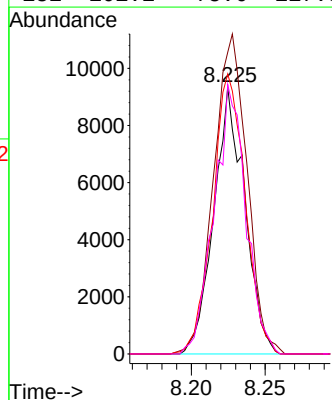
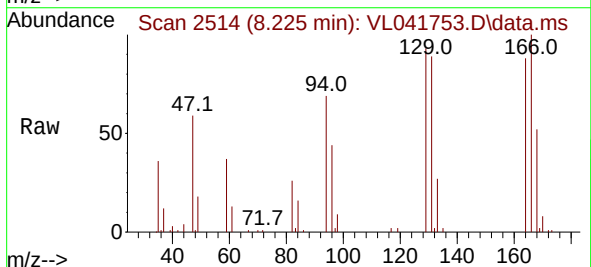
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

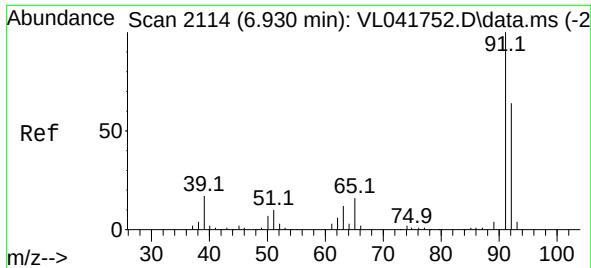
Tgt Ion: 43 Resp: 34878  
Ion Ratio Lower Upper  
43 100  
58 46.8 36.6 55.0  
98 0.3 0.1 0.1#



#52  
Tetrachloroethene  
Concen: 1.932 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 164 Resp: 13612  
Ion Ratio Lower Upper  
164 100  
166 111.9 99.8 149.6  
129 104.9 79.6 119.4  
131 101.1 78.6 117.8





#53

Toluene

Concen: 2.072 ppbv

RT: 6.933 min Scan# 2115

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

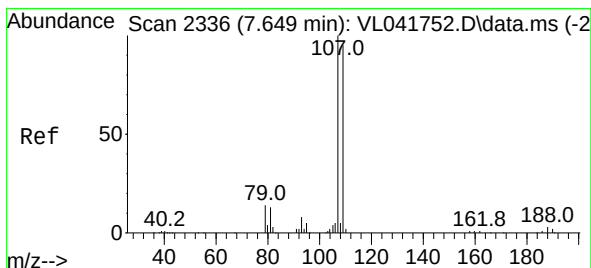
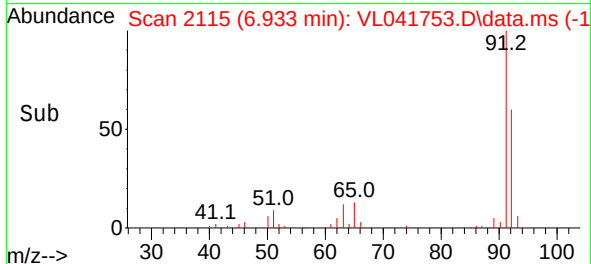
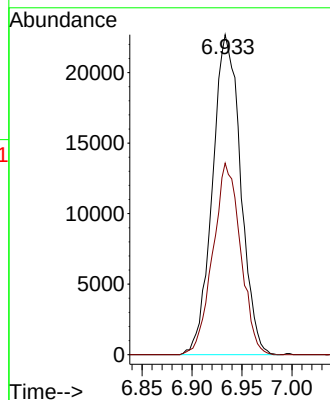
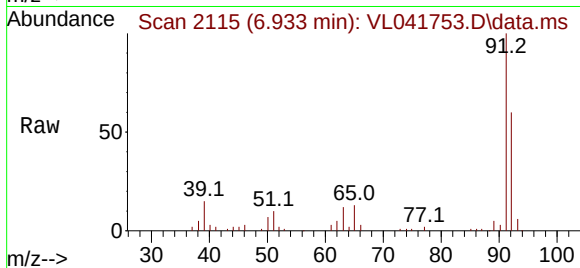
VSTDIC002

Tgt Ion: 91 Resp: 44470

Ion Ratio Lower Upper

91 100

92 58.8 47.9 71.9



#54

1,2-Dibromoethane

Concen: 2.012 ppbv

RT: 7.655 min Scan# 2338

Delta R.T. 0.006 min

Lab File: VL041753.D

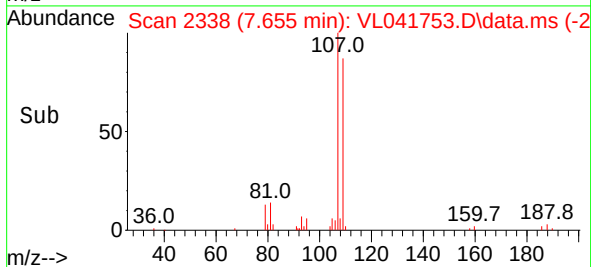
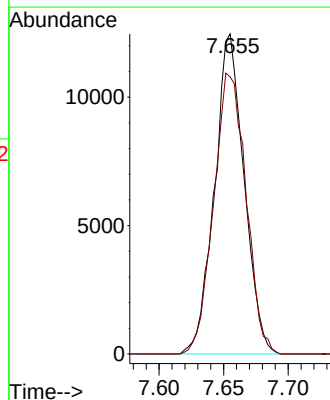
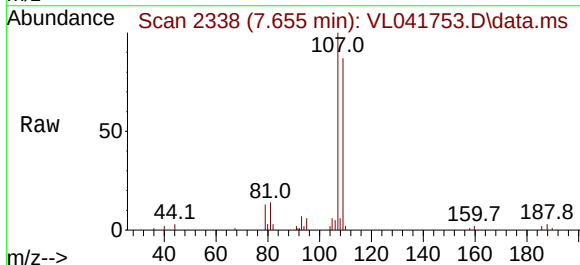
Acq: 16 Dec 2024 14:03

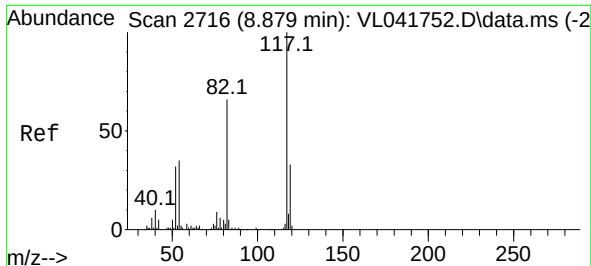
Tgt Ion: 107 Resp: 19820

Ion Ratio Lower Upper

107 100

109 86.6 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.882 min Scan# 2717

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC002

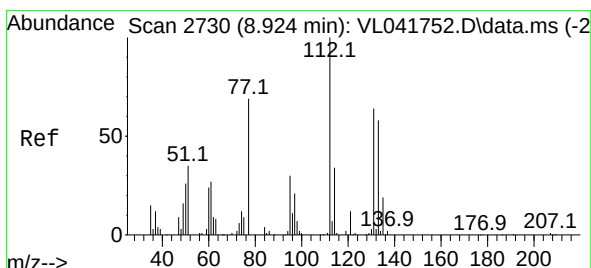
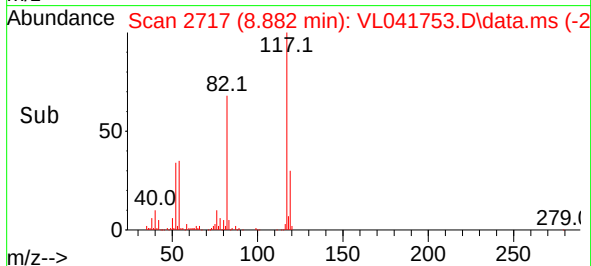
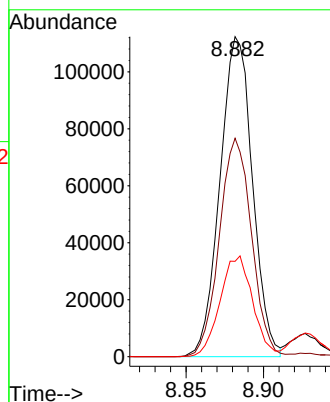
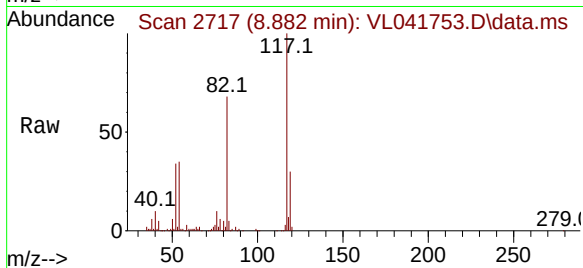
Tgt Ion:117 Resp: 163971

Ion Ratio Lower Upper

117 100

82 68.5 53.8 80.8

119 31.5 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 2.141 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

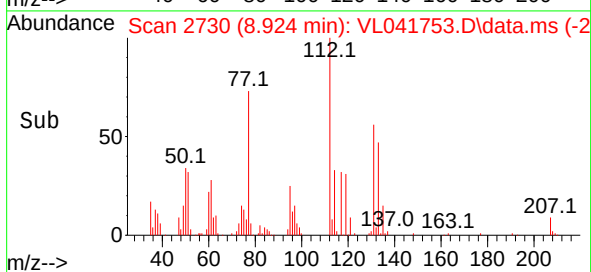
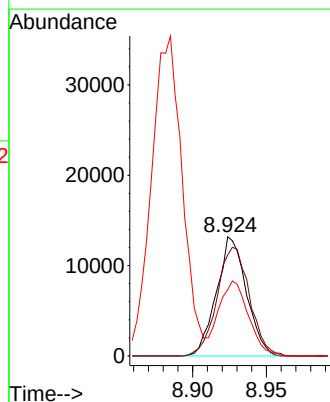
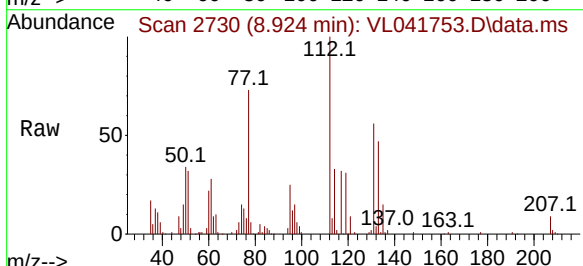
Tgt Ion:131 Resp: 18613

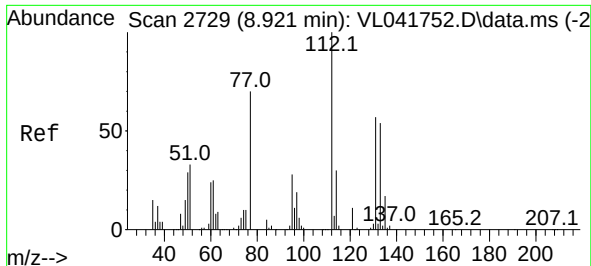
Ion Ratio Lower Upper

131 100

133 99.0 76.8 115.2

119 61.3 49.0 73.6





#57

Chlorobenzene

Concen: 2.127 ppbv

RT: 8.920 min Scan# 21

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC002

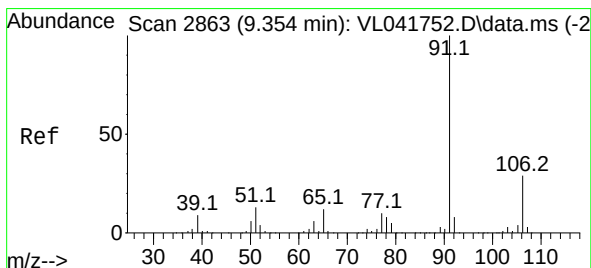
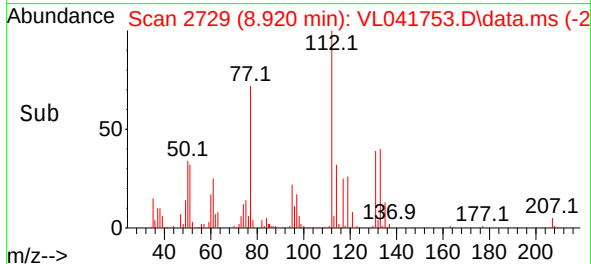
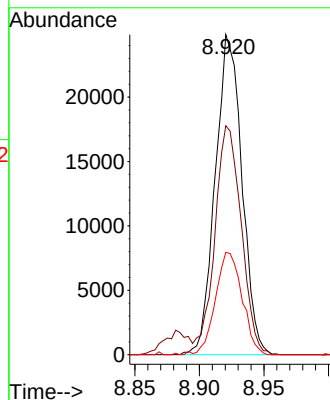
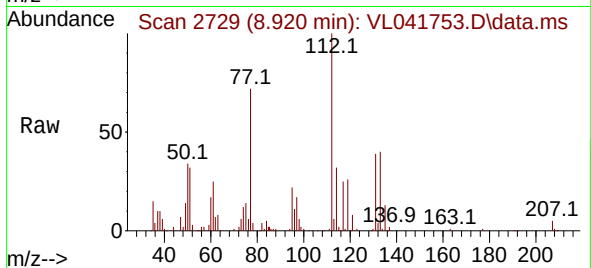
Tgt Ion:112 Resp: 35685

Ion Ratio Lower Upper

112 100

77 71.6 57.4 86.0

114 32.0 27.4 33.4



#58

Ethyl Benzene

Concen: 2.145 ppbv

RT: 9.354 min Scan# 2863

Delta R.T. -0.000 min

Lab File: VL041753.D

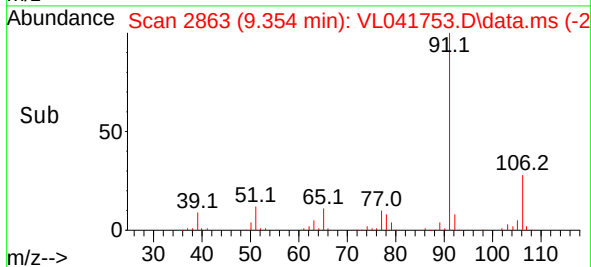
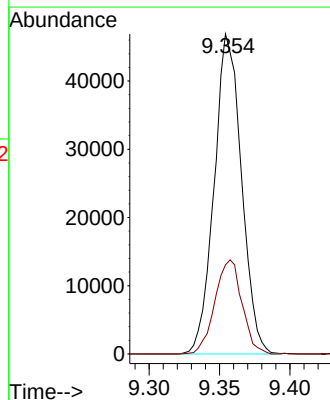
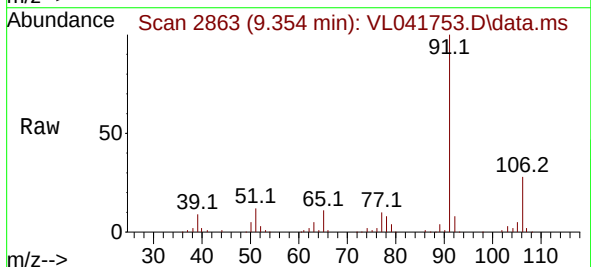
Acq: 16 Dec 2024 14:03

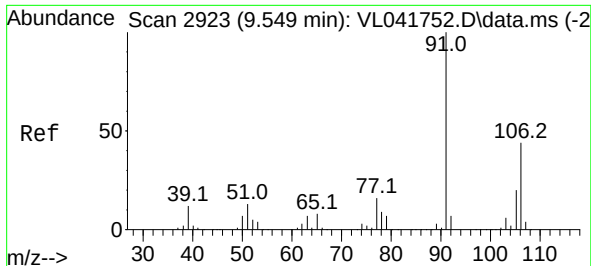
Tgt Ion: 91 Resp: 63316

Ion Ratio Lower Upper

91 100

106 27.8 23.5 35.3

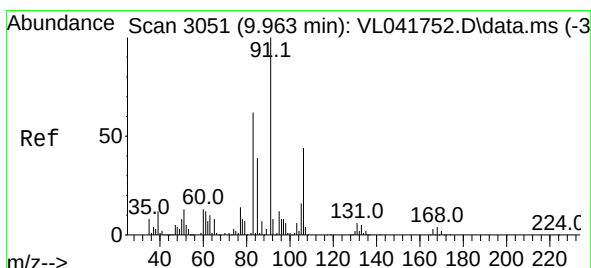
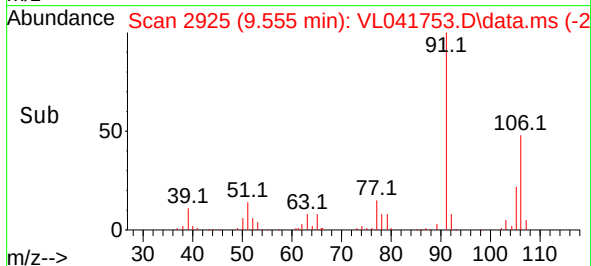
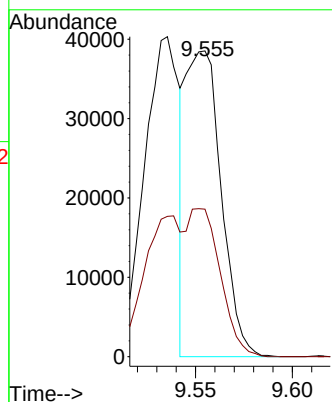
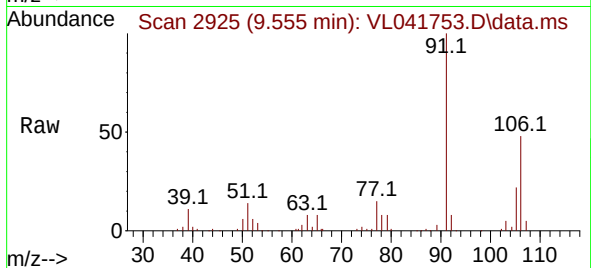




#59  
m/p-Xylene  
Concen: 2.060 ppbv  
RT: 9.555 min Scan# 20  
Delta R.T. 0.006 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

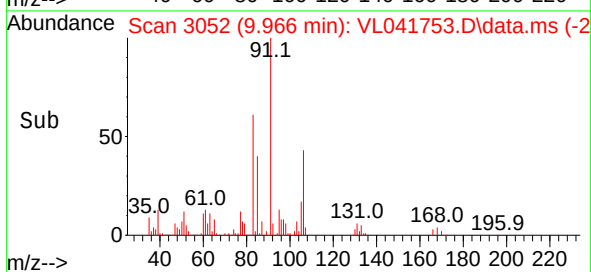
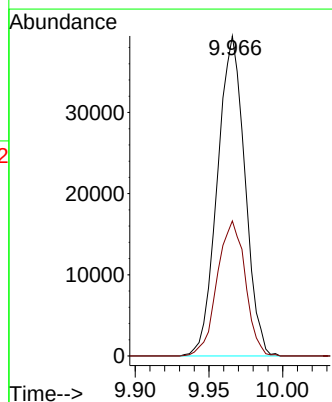
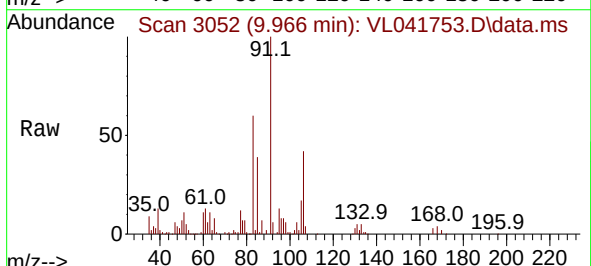
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC002

Tgt Ion: 91 Resp: 48921  
Ion Ratio Lower Upper  
91 100  
106 94.6 0.0 0.0#

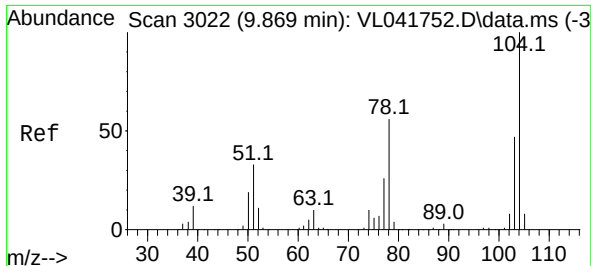


#60  
o-Xylene  
Concen: 2.149 ppbv  
RT: 9.966 min Scan# 3052  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 91 Resp: 51152  
Ion Ratio Lower Upper  
91 100  
106 43.1 21.1 63.4



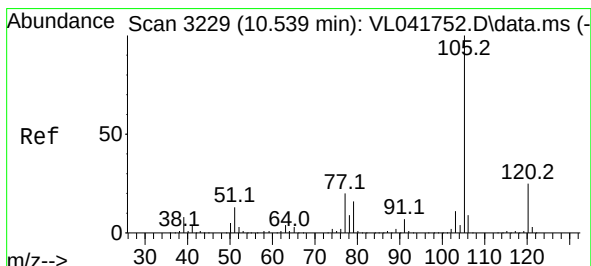
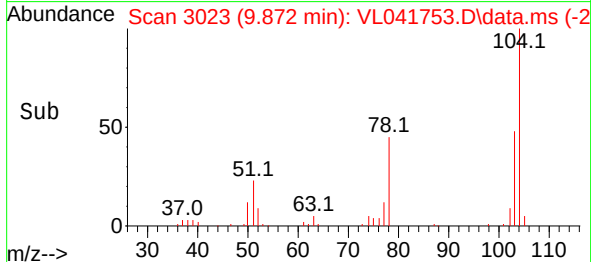
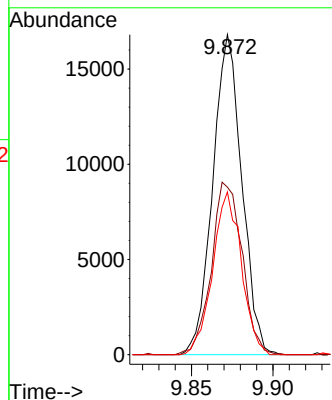
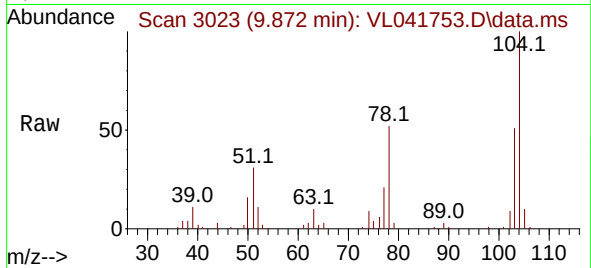




#61  
Styrene  
Concen: 2.025 ppbv  
RT: 9.872 min Scan# 3022  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

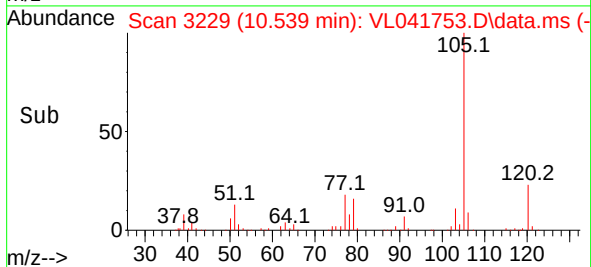
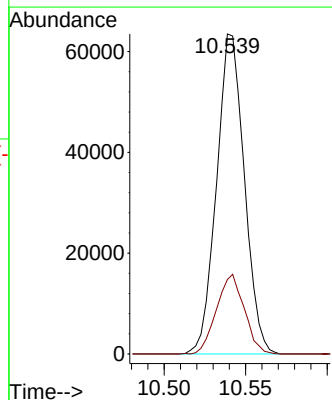
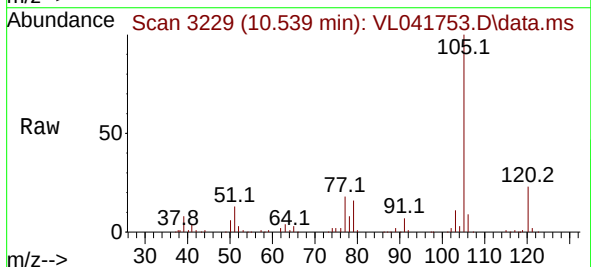
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

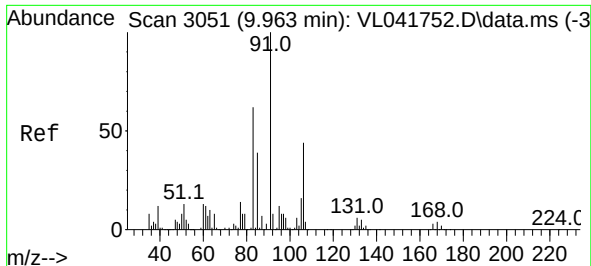
Tgt Ion:104 Resp: 20842  
Ion Ratio Lower Upper  
104 100  
78 56.9 43.8 65.6  
103 50.2 37.8 56.6



#62  
Isopropylbenzene  
Concen: 2.103 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion:105 Resp: 75206  
Ion Ratio Lower Upper  
105 100  
120 24.8 19.8 29.8

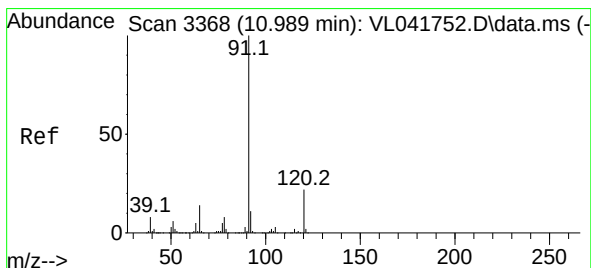
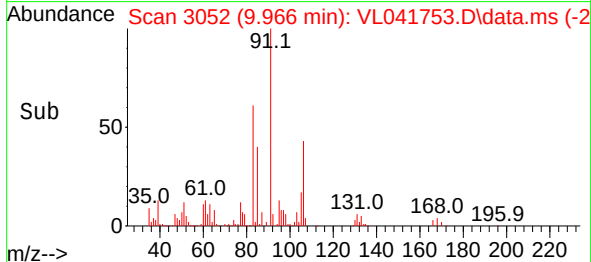
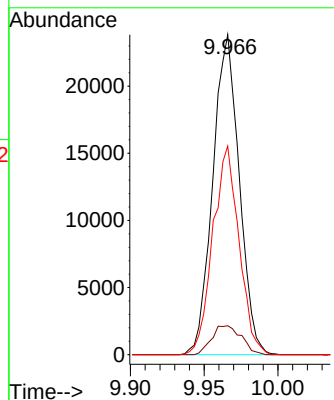
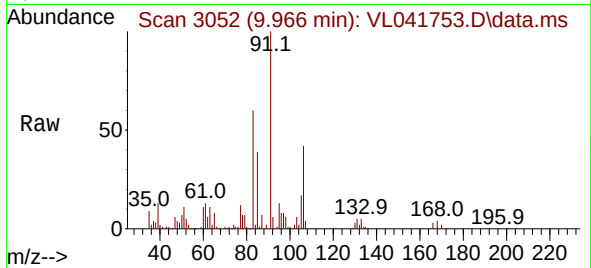




#63  
1,1,2,2-Tetrachloroethane  
Concen: 1.997 ppbv  
RT: 9.966 min Scan# 3051  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

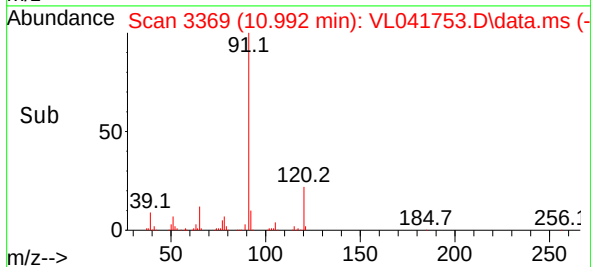
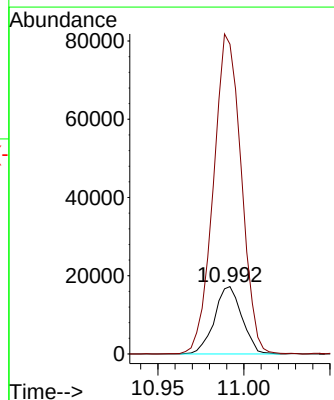
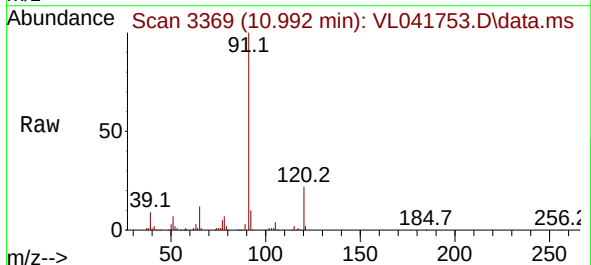
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC002

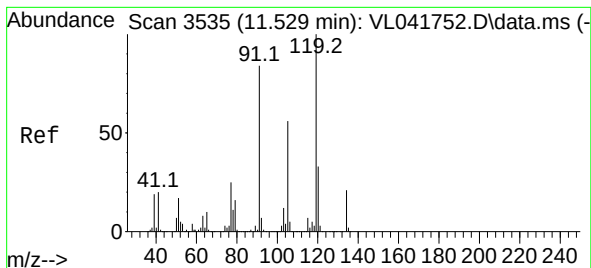
Tgt Ion: 83 Resp: 29751  
Ion Ratio Lower Upper  
83 100  
131 10.2 4.9 14.7  
85 64.4 32.0 96.2



#64  
n-propylbenzene  
Concen: 2.117 ppbv  
RT: 10.992 min Scan# 3369  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 120 Resp: 19146  
Ion Ratio Lower Upper  
120 100  
91 482.0 387.3 580.9





#65

tert-Butylbenzene

Concen: 2.135 ppbv

RT: 11.532 min Scan# 3536

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

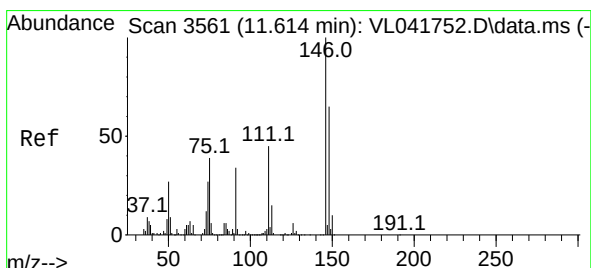
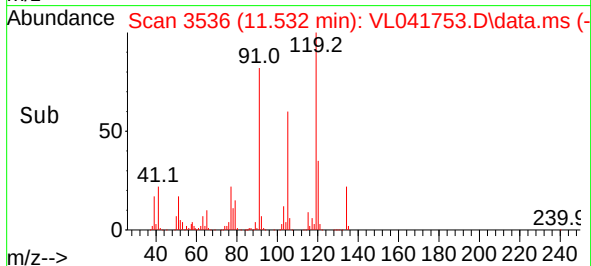
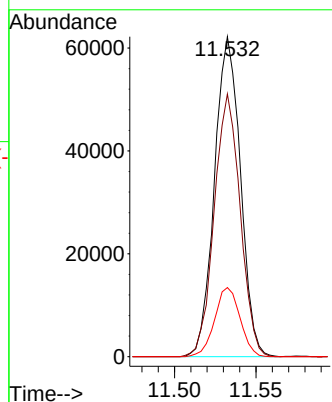
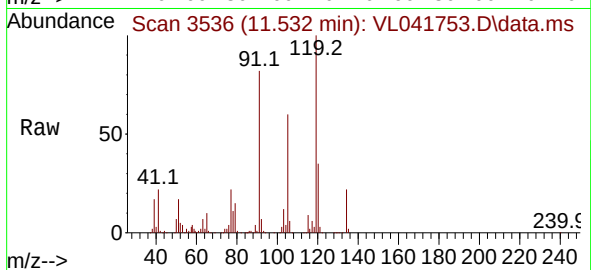
Tgt Ion:119 Resp: 68879

Ion Ratio Lower Upper

119 100

91 82.1 67.0 100.4

134 21.1 16.5 24.7



#66

Benzyl Chloride

Concen: 1.898 ppbv

RT: 11.617 min Scan# 3562

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

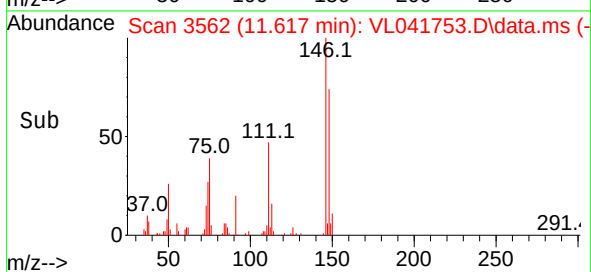
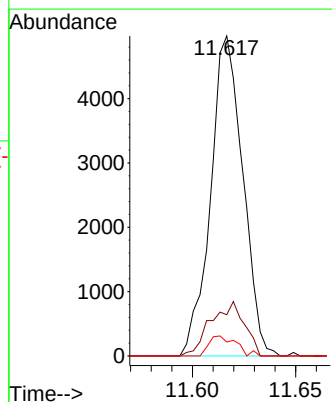
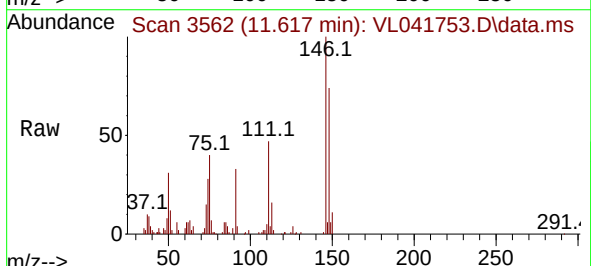
Tgt Ion: 91 Resp: 5400

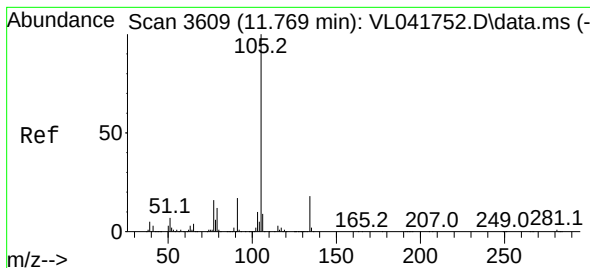
Ion Ratio Lower Upper

91 100

126 17.7 13.9 20.9

128 5.3 4.4 6.6

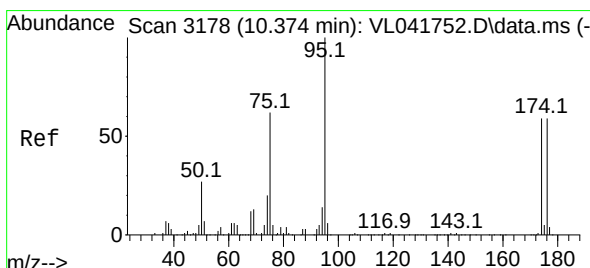
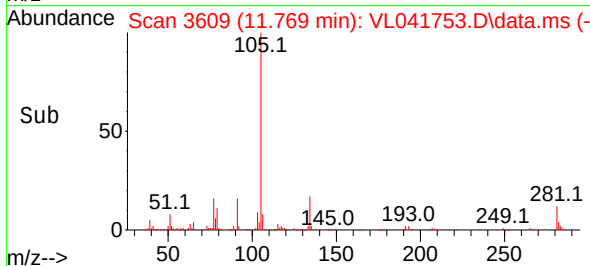
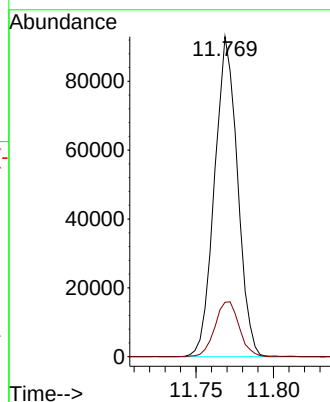
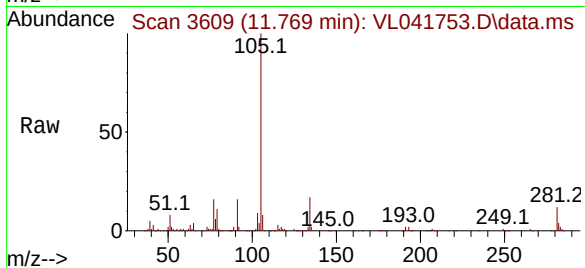




#67  
 sec-Butylbenzene  
 Concen: 2.149 ppbv  
 RT: 11.769 min Scan# 3179  
 Delta R.T. -0.000 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

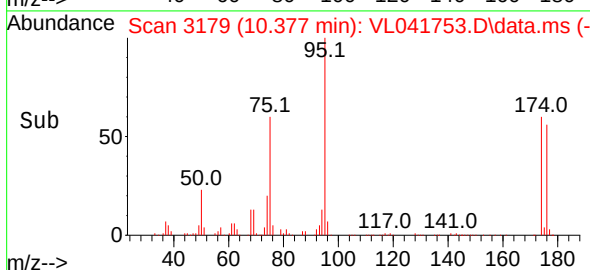
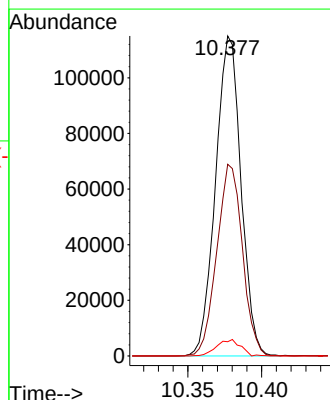
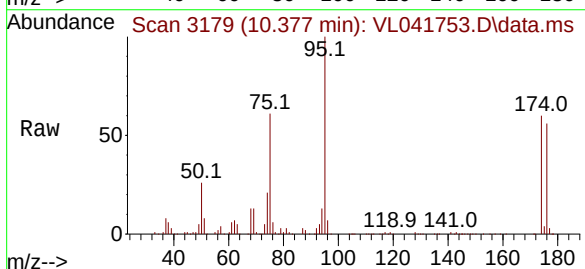
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC002

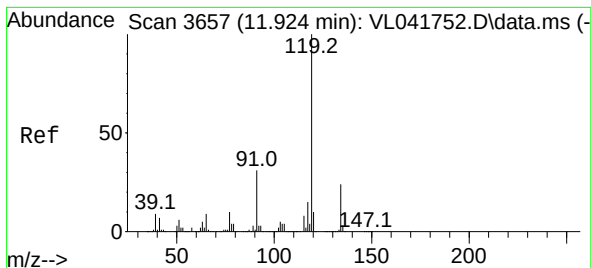
Tgt Ion:105 Resp: 95968  
 Ion Ratio Lower Upper  
 105 100  
 134 18.1 14.5 21.7



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.122 ppbv  
 RT: 10.377 min Scan# 3179  
 Delta R.T. 0.003 min  
 Lab File: VL041753.D  
 Acq: 16 Dec 2024 14:03

Tgt Ion: 95 Resp: 138312  
 Ion Ratio Lower Upper  
 95 100  
 174 60.2 47.6 71.4  
 175 4.9 3.7 5.5





#69

p-Isopropyltoluene

Concen: 2.153 ppbv

RT: 11.927 min Scan# 3658

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC002

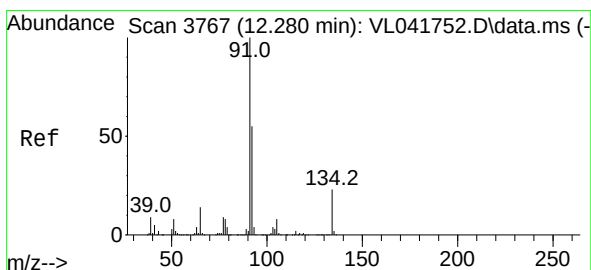
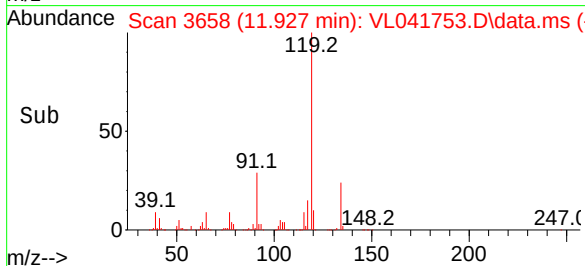
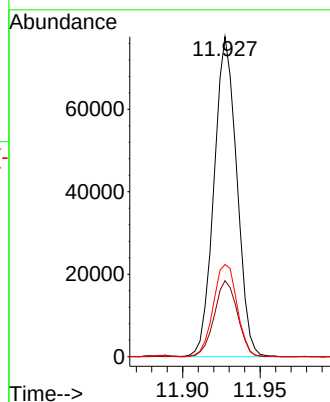
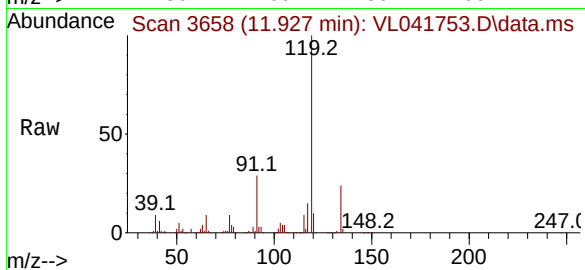
Tgt Ion:119 Resp: 79236

Ion Ratio Lower Upper

119 100

134 24.3 19.6 29.4

91 30.5 24.4 36.6



#70

n-Butylbenzene

Concen: 2.122 ppbv

RT: 12.283 min Scan# 3768

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

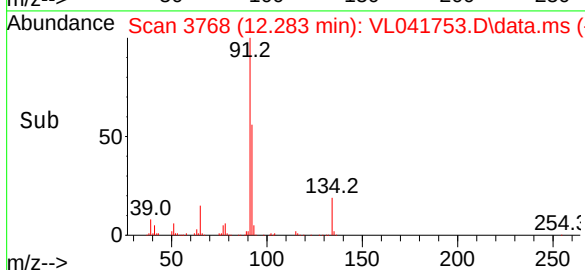
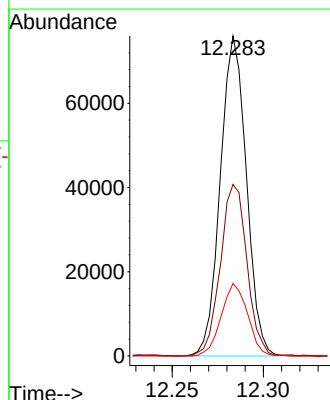
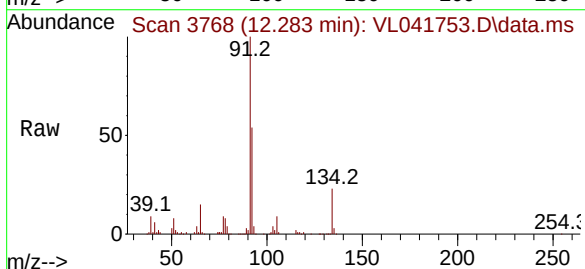
Tgt Ion: 91 Resp: 75430

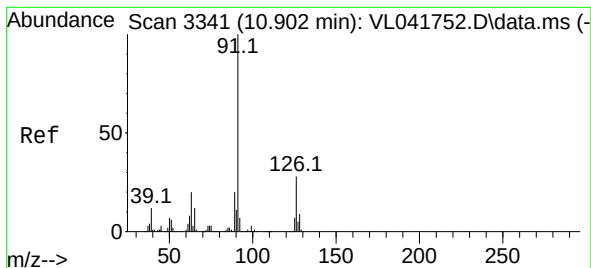
Ion Ratio Lower Upper

91 100

92 54.7 43.2 64.8

134 23.0 18.2 27.4

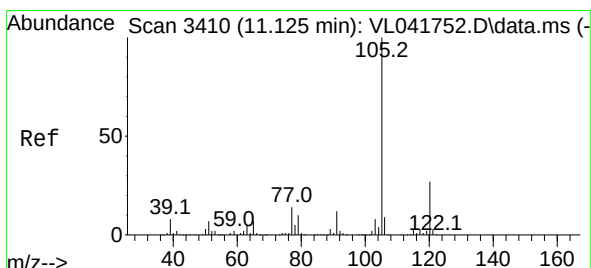
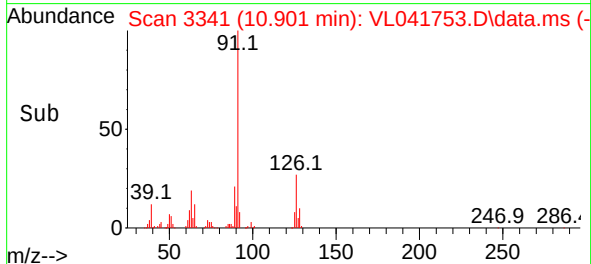
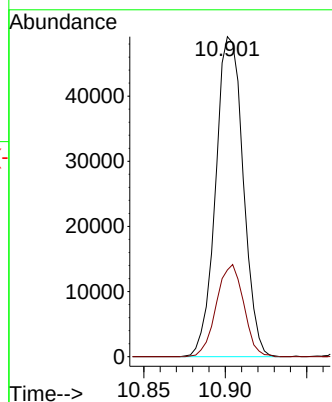
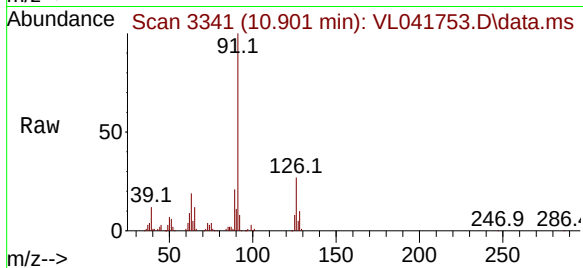




#71  
2-Chlorotoluene  
Concen: 2.114 ppbv  
RT: 10.901 min Scan# 3341  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

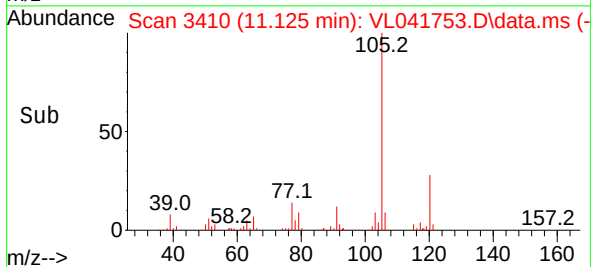
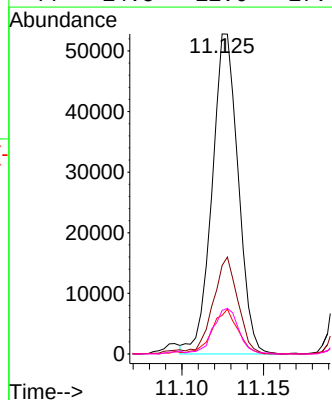
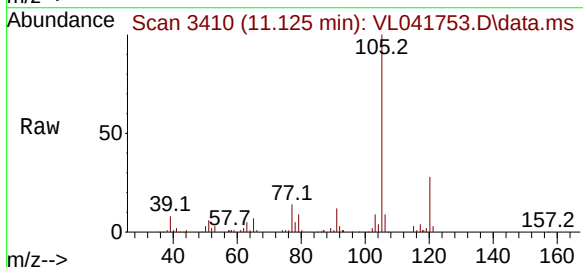
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

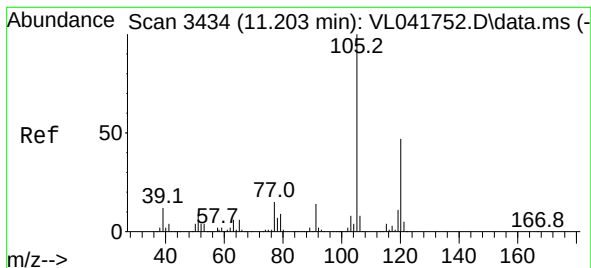
Tgt Ion: 91 Resp: 57724  
Ion Ratio Lower Upper  
91 100  
126 28.5 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 2.098 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

Tgt Ion: 105 Resp: 58841  
Ion Ratio Lower Upper  
105 100  
120 29.7 23.3 34.9  
91 14.3 10.9 16.3  
77 14.5 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 2.087 ppbv

RT: 11.206 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

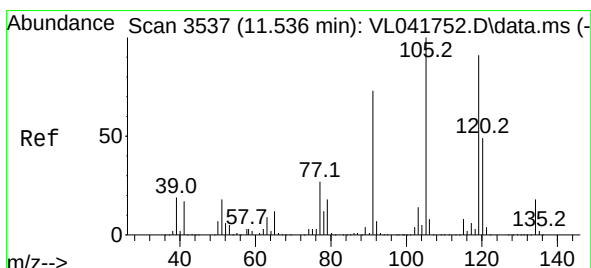
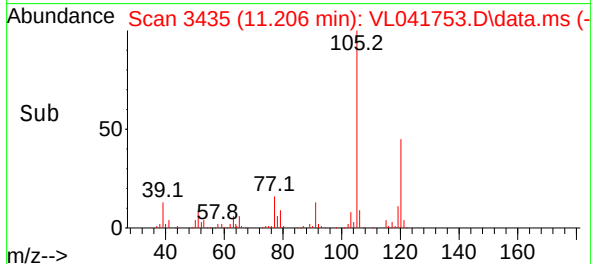
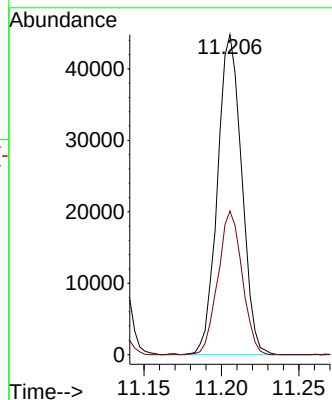
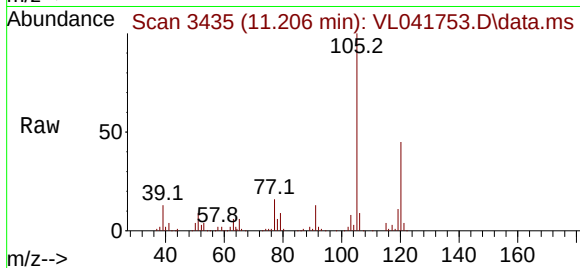
VSTDIC002

Tgt Ion:105 Resp: 48645

Ion Ratio Lower Upper

105 100

120 44.9 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 2.118 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Tgt Ion:105 Resp: 53084

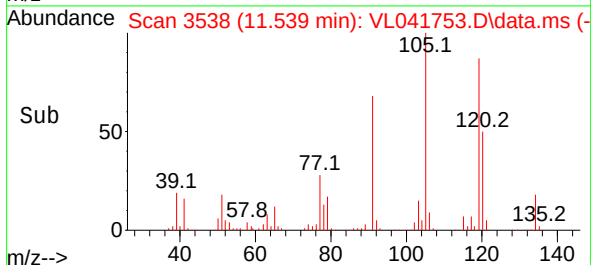
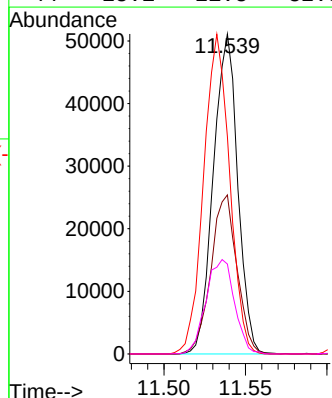
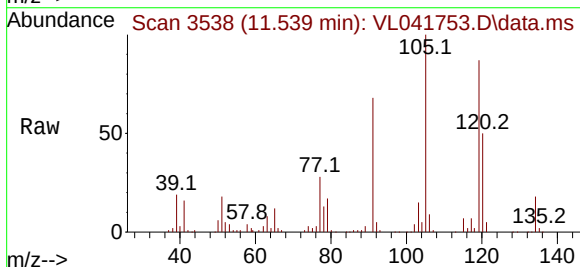
Ion Ratio Lower Upper

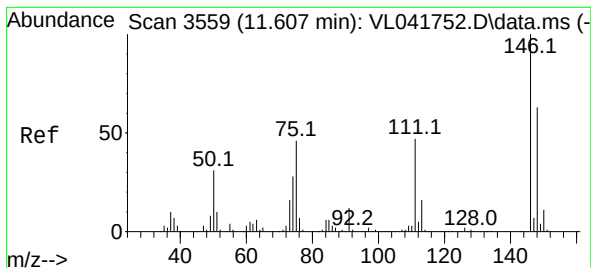
105 100

120 49.7 39.0 58.4

91 67.9 58.1 87.1

77 28.1 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 2.040 ppbv

RT: 11.610 min Scan# 3560

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC002

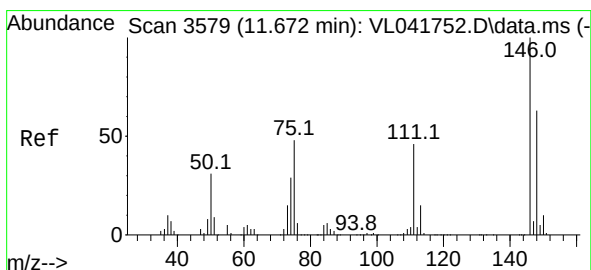
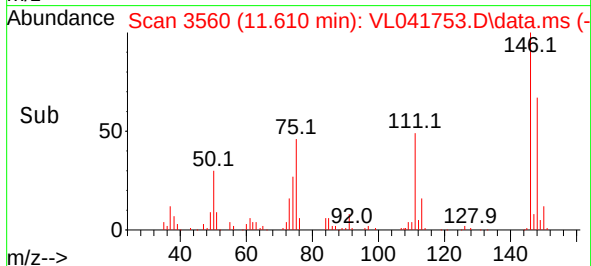
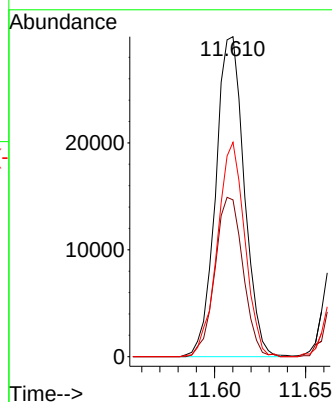
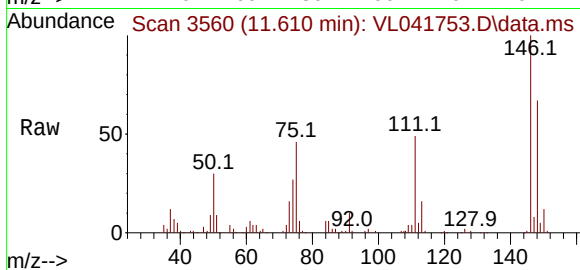
Tgt Ion:146 Resp: 32609

Ion Ratio Lower Upper

146 100

111 49.1 23.4 70.3

148 64.3 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 2.060 ppbv

RT: 11.675 min Scan# 3580

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

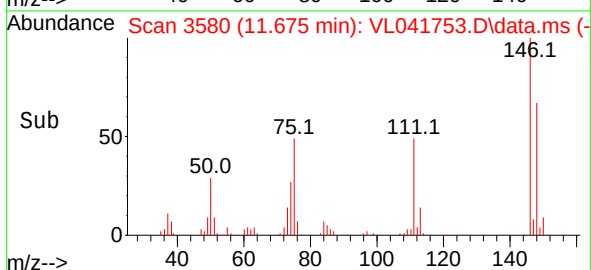
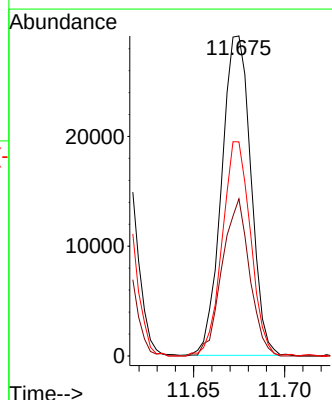
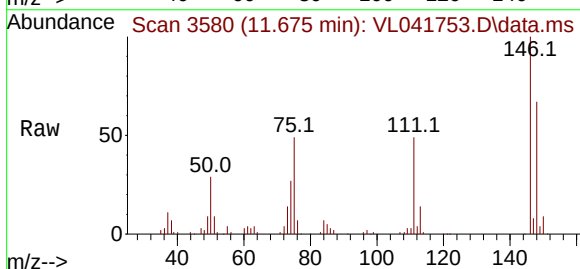
Tgt Ion:146 Resp: 32527

Ion Ratio Lower Upper

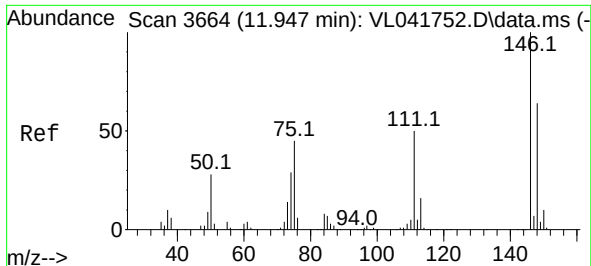
146 100

111 46.1 22.7 68.1

148 65.1 31.4 94.0

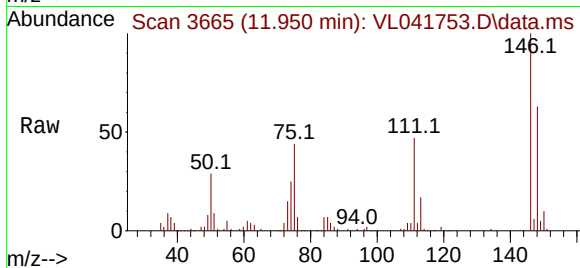




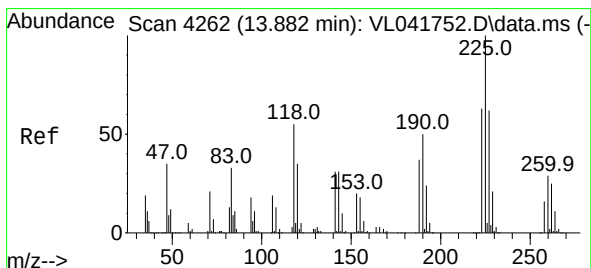
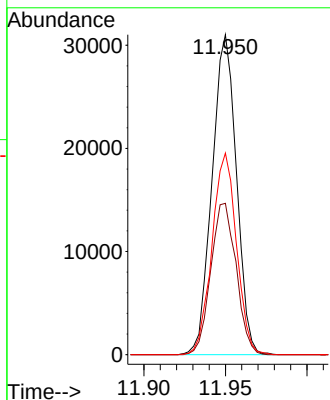
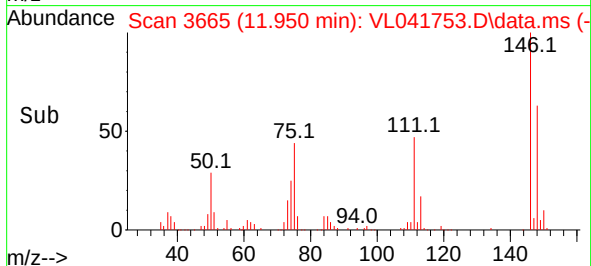


#77  
1,2-Dichlorobenzene  
Concen: 2.095 ppbv  
RT: 11.950 min Scan# 3665  
Delta R.T. 0.003 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03

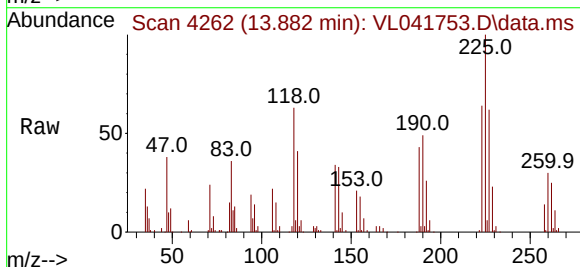
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002



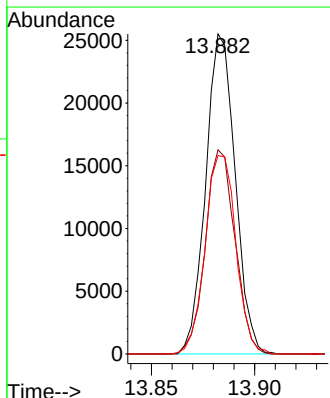
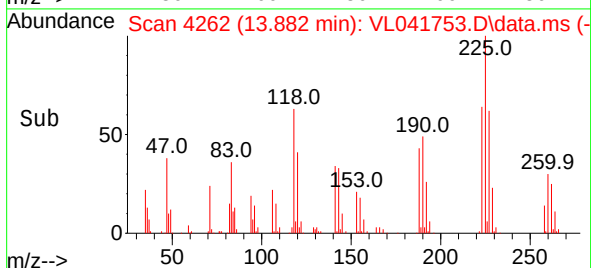
Tgt Ion:146 Resp: 32223  
Ion Ratio Lower Upper  
146 100  
111 49.2 24.8 74.3  
148 63.3 31.8 95.4

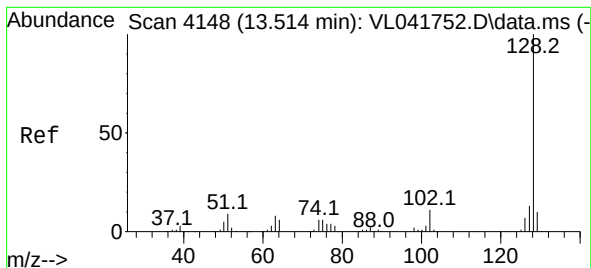


#78  
Hexachloro-1,3-Butadiene  
Concen: 2.224 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041753.D  
Acq: 16 Dec 2024 14:03



Tgt Ion:225 Resp: 25358  
Ion Ratio Lower Upper  
225 100  
223 64.2 50.5 75.7  
227 64.8 50.3 75.5





#79

Naphthalene

Concen: 2.167 ppbv

RT: 13.513 min Scan# 4148

Delta R.T. -0.000 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC002

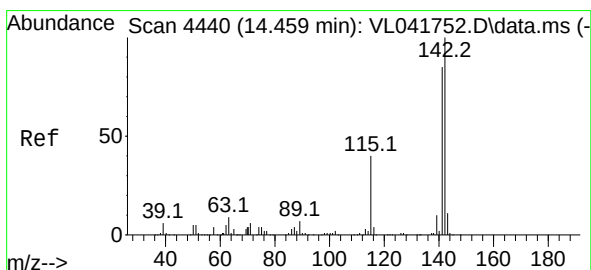
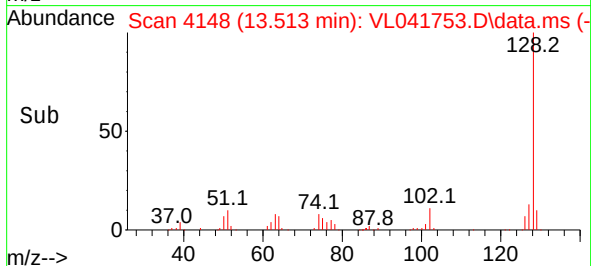
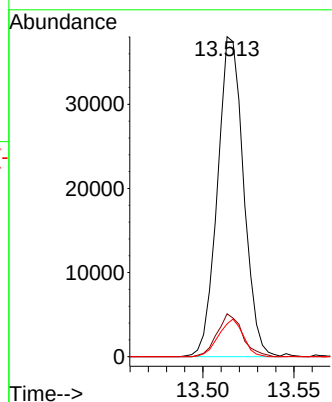
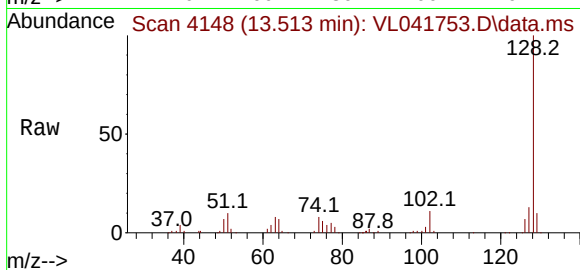
Tgt Ion:128 Resp: 37855

Ion Ratio Lower Upper

128 100

127 13.4 10.7 16.1

129 10.3 8.2 12.4



#80

Naphthalene,2-methyl-

Concen: 0.830 ppbv

RT: 14.462 min Scan# 4441

Delta R.T. 0.003 min

Lab File: VL041753.D

Acq: 16 Dec 2024 14:03

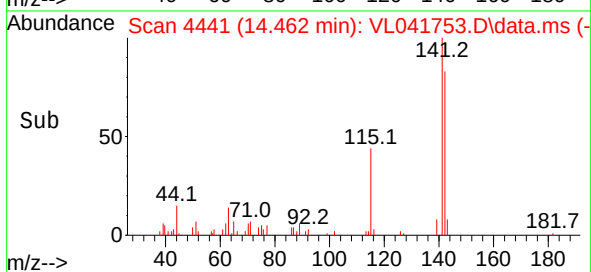
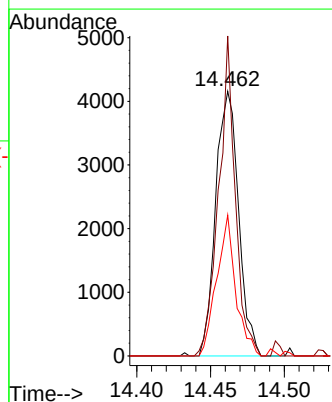
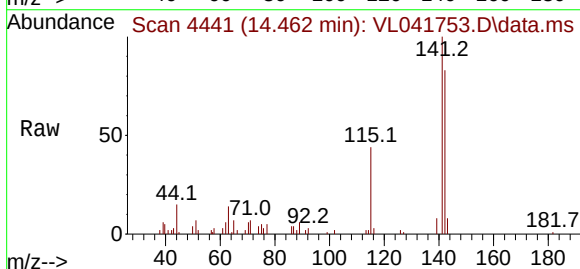
Tgt Ion:142 Resp: 4482

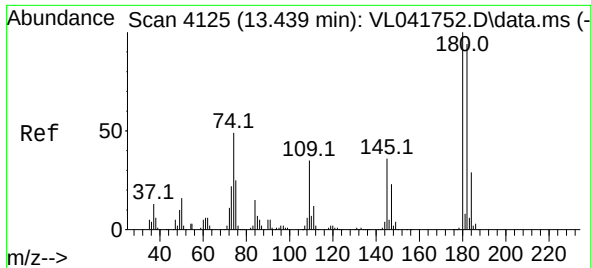
Ion Ratio Lower Upper

142 100

141 90.1 68.4 102.6

115 45.4 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 2.035 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041753.D

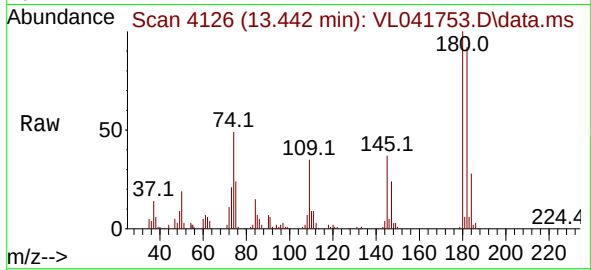
Acq: 16 Dec 2024 14:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002



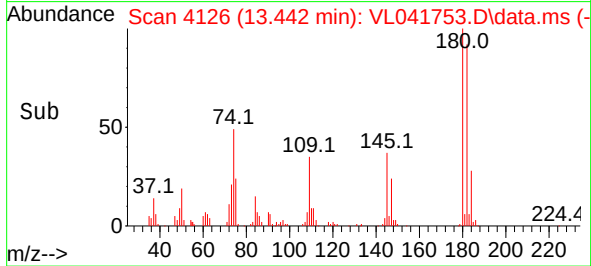
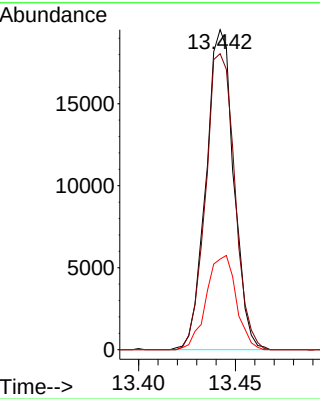
Tgt Ion:180 Resp: 19425

Ion Ratio Lower Upper

180 100

182 96.8 77.0 115.6

184 31.5 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041754.D  
 Acq On : 16 Dec 2024 14:34  
 Operator : SY/MD  
 Sample : VSTDICC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

Quant Time: Dec 19 06:13:31 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 65928    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.955 | 114  | 178926   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.878 | 117  | 162267   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 10.374 | 95    | 132857   | 9.825    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.300% |

#### Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 12706 | 1.083 | ppbv   | 98     |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 11187 | 1.041 | ppbv   | 98     |
| 4) Chloromethane              | 1.531 | 50  | 4805  | 1.047 | ppbv   | 99     |
| 5) Vinyl Chloride             | 1.580 | 62  | 4580  | 0.990 | ppbv   | 98     |
| 6) Bromomethane               | 1.667 | 94  | 2394  | 1.097 | ppbv   | 99     |
| 7) Chloroethane               | 1.703 | 64  | 1763  | 0.981 | ppbv   | 95     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 10938 | 1.042 | ppbv   | 99     |
| 9) Propene                    | 1.483 | 41  | 4840  | 1.039 | ppbv   | 94     |
| 10) Heptane                   | 4.972 | 43  | 12004 | 1.003 | ppbv   | 93     |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 12625 | 1.013 | ppbv   | 94     |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 9915  | 1.046 | ppbv   | 98     |
| 13) Ethanol                   | 1.719 | 45  | 615   | 1.587 | ppbv   | 74     |
| 14) Bromoethene               | 1.780 | 108 | 3148  | 0.984 | ppbv # | 86     |
| 15) Acetone                   | 1.832 | 43  | 15060 | 1.174 | ppbv   | 99     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 5137  | 1.017 | ppbv   | 95     |
| 17) tert-Butyl alcohol        | 2.039 | 59  | 13341 | 1.048 | ppbv   | 96     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 4139  | 1.042 | ppbv   | 96     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 8703  | 1.131 | ppbv   | 100    |
| 20) Methylene Chloride        | 2.059 | 84  | 3868  | 1.057 | ppbv   | 92     |
| 21) Allyl Chloride            | 2.094 | 41  | 7425  | 1.067 | ppbv   | 98     |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 4599  | 1.011 | ppbv   | 96     |
| 23) Vinyl Acetate             | 2.460 | 43  | 5345  | 0.959 | ppbv # | 95     |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 9621  | 1.045 | ppbv   | 98     |
| 25) Ethyl Acetate             | 2.836 | 43  | 25141 | 1.049 | ppbv   | 99     |
| 26) Hexane                    | 2.826 | 57  | 9250  | 1.021 | ppbv   | 93     |
| 27) Carbon Disulfide          | 2.149 | 76  | 8152  | 0.999 | ppbv # | 19     |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 8539  | 1.162 | ppbv   | 94     |
| 29) Chloroform                | 2.845 | 83  | 14384 | 1.042 | ppbv   | 96     |
| 30) Cyclohexane               | 3.852 | 84  | 7824  | 1.015 | ppbv   | 94     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 10013 | 1.070 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane     | 3.363 | 97  | 14415 | 1.049 | ppbv   | 98     |
| 34) 2-Butanone                | 2.557 | 43  | 14673 | 1.019 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 6520  | 0.513 | ppbv   | 98     |
| 36) Benzene                   | 3.651 | 78  | 19331 | 1.044 | ppbv   | 97     |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 11490 | 0.998 | ppbv # | 94     |
| 38) Trichloroethene           | 4.541 | 130 | 4300  | 0.552 | ppbv   | 94     |
| 39) 1,2-Dichloropropane       | 4.311 | 63  | 7068  | 1.056 | ppbv   | 86     |
| 40) 1,4-Dioxane               | 4.596 | 88  | 3241  | 0.991 | ppbv # | 40     |
| 41) Tetrahydrofuran           | 3.062 | 42  | 8727  | 1.082 | ppbv   | 97     |
| 42) Bromodichloromethane      | 4.489 | 83  | 13154 | 0.993 | ppbv   | 100    |
| 43) Methyl Methacrylate       | 4.875 | 69  | 4727  | 0.670 | ppbv # | 34     |
| 44) 2,2,4-Trimethylpentane    | 4.638 | 57  | 32361 | 1.024 | ppbv   | 97     |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 7027  | 0.963 | ppbv   | 98     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041754.D  
 Acq On : 16 Dec 2024 14:34  
 Operator : SY/MD  
 Sample : VSTDICC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

Quant Time: Dec 19 06:13:31 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

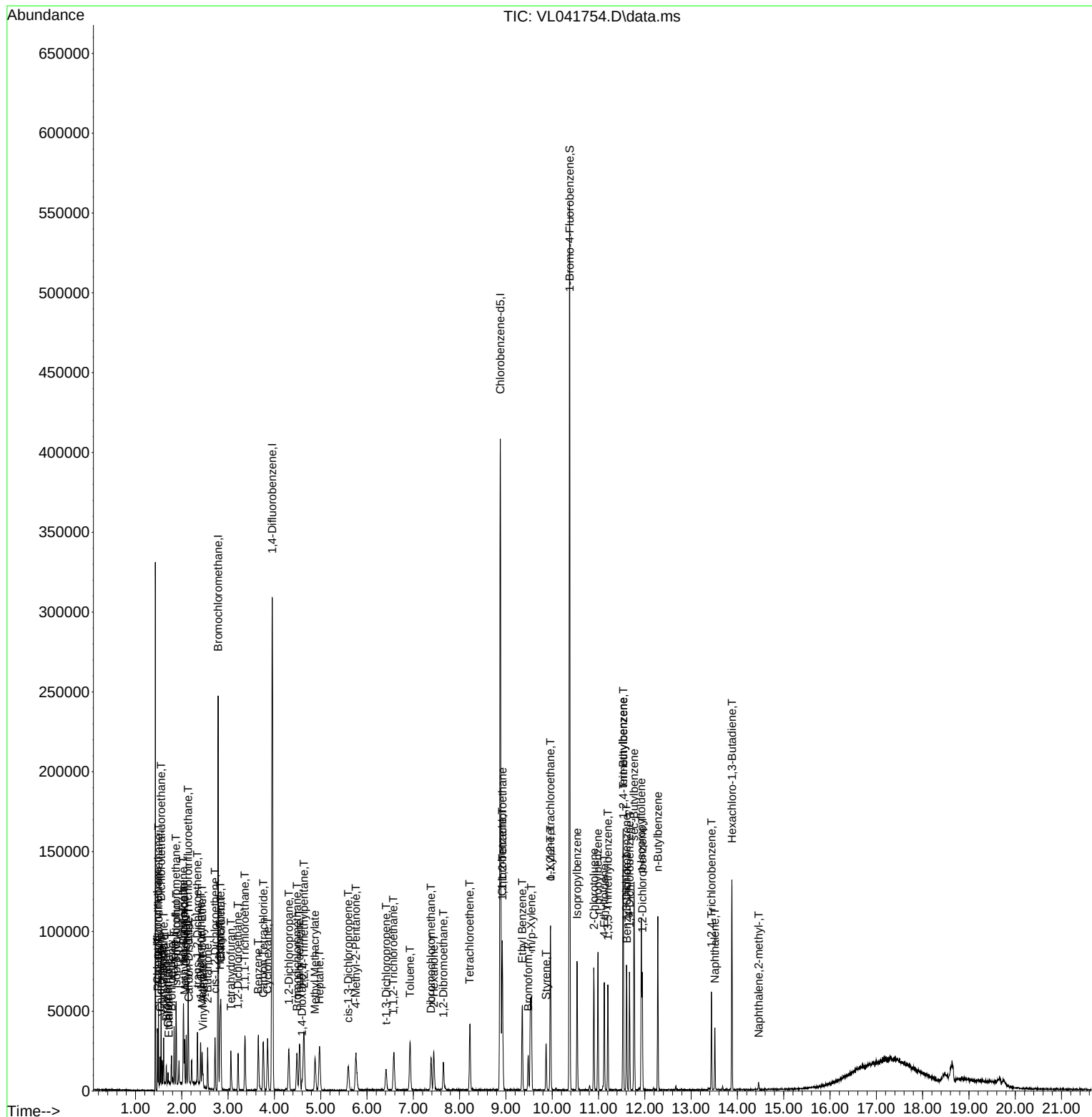
| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 5402     | 0.583 | ppbv   | 86       |
| 47) 1,1,2-Trichloroethane     | 6.571  | 97   | 2694     | 0.385 | ppbv   | 93       |
| 48) Dibromochloromethane      | 7.383  | 129  | 8817     | 0.924 | ppbv   | 97       |
| 49) Bromoform                 | 9.480  | 173  | 7073     | 0.905 | ppbv   | 96       |
| 50) 4-Methyl-2-Pentanone      | 5.761  | 43   | 20212    | 1.031 | ppbv   | 100      |
| 51) 2-Hexanone                | 7.441  | 43   | 16514    | 1.040 | ppbv # | 99       |
| 52) Tetrachloroethene         | 8.218  | 164  | 3765     | 0.547 | ppbv   | 92       |
| 53) Toluene                   | 6.930  | 91   | 21594    | 1.029 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 7.648  | 107  | 9758     | 1.013 | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 8643     | 1.005 | ppbv   | 93       |
| 57) Chlorobenzene             | 8.920  | 112  | 17500    | 1.054 | ppbv   | 97       |
| 58) Ethyl Benzene             | 9.351  | 91   | 29762    | 1.019 | ppbv   | 98       |
| 59) m/p-Xylene                | 9.548  | 91   | 16252    | 0.692 | ppbv # | 100      |
| 60) o-Xylene                  | 9.963  | 91   | 24210    | 1.028 | ppbv   | 98       |
| 61) Styrene                   | 9.869  | 104  | 9707     | 0.953 | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 36251    | 1.024 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 14752    | 1.001 | ppbv   | 98       |
| 64) n-propylbenzene           | 10.985 | 120  | 9432     | 1.054 | ppbv   | 91       |
| 65) tert-Butylbenzene         | 11.529 | 119  | 32887    | 1.030 | ppbv   | 100      |
| 66) Benzyl Chloride           | 11.610 | 91   | 2518     | 0.894 | ppbv   | 97       |
| 67) sec-Butylbenzene          | 11.765 | 105  | 45015    | 1.019 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 11.924 | 119  | 36298    | 0.997 | ppbv   | 98       |
| 70) n-Butylbenzene            | 12.280 | 91   | 35432    | 1.007 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 27561    | 1.020 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 26921    | 0.970 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 22360    | 0.969 | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 24654    | 0.994 | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 11.604 | 146  | 16476    | 1.042 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 11.668 | 146  | 15774    | 1.010 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 15866    | 1.043 | ppbv   | 97       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 12266    | 1.087 | ppbv   | 97       |
| 79) Naphthalene               | 13.513 | 128  | 16971    | 0.982 | ppbv   | 96       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 1504     | 0.281 | ppbv # | 90       |
| 81) 1,2,4-Trichlorobenzene    | 13.439 | 180  | 8973     | 0.950 | ppbv   | 96       |

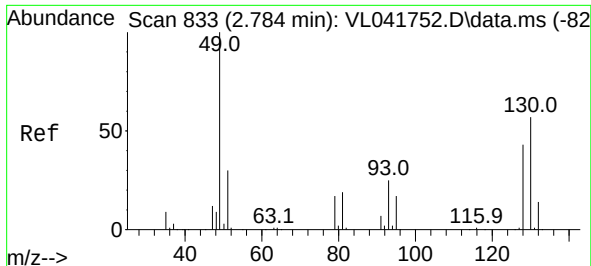
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
Data File : VL041754.D  
Acq On : 16 Dec 2024 14:34  
Operator : SY/MD  
Sample : VSTDIC001  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Quant Time: Dec 19 06:13:31 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 06:09:59 2024  
Response via : Initial Calibration

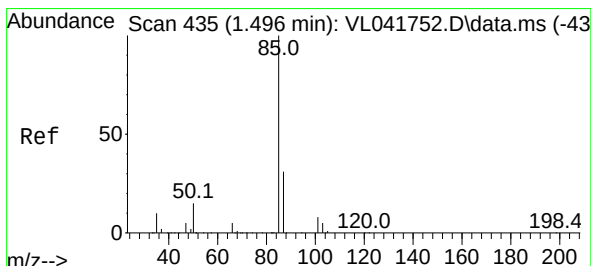
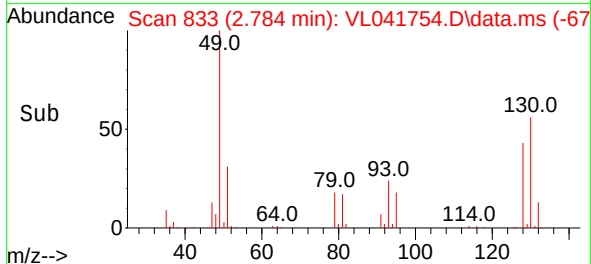
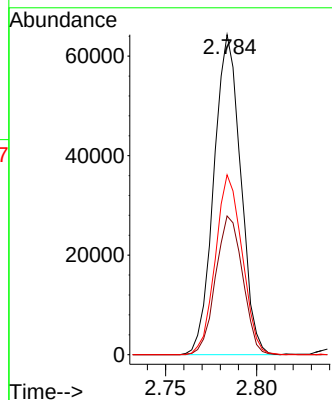
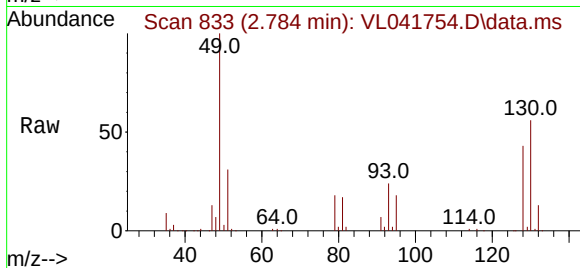




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

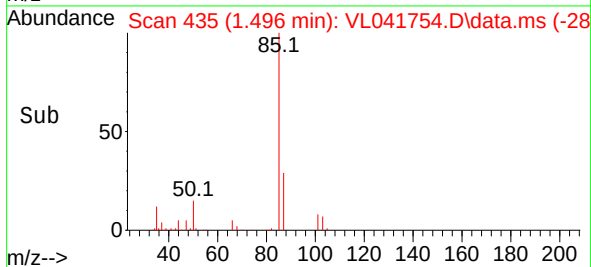
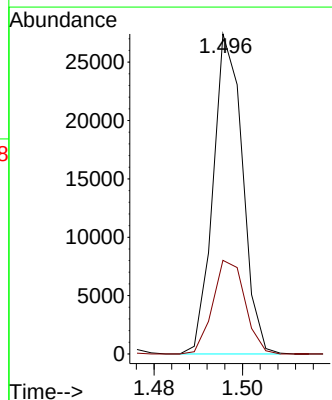
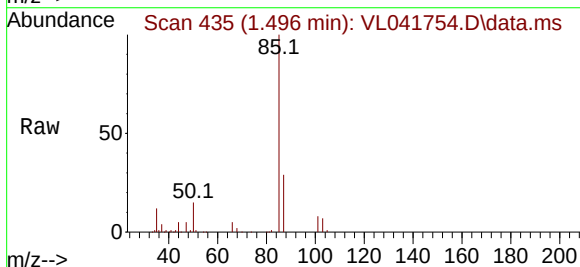
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC001

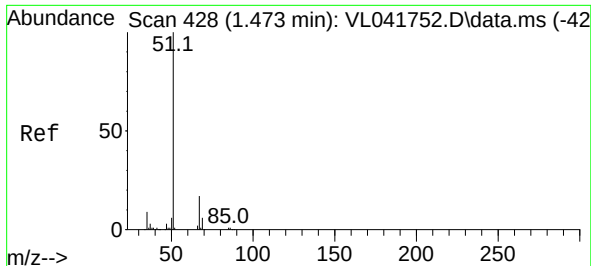
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 49    | Resp: | 65928 |
| Ion Ratio | Lower | Upper |       |
| 49        | 100   |       |       |
| 128       | 43.6  | 21.6  | 64.6  |
| 130       | 56.0  | 28.3  | 85.0  |



#2  
Dichlorodifluoromethane  
Concen: 1.083 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 85    | Resp: | 12706 |
| Ion Ratio | Lower | Upper |       |
| 85        | 100   |       |       |
| 87        | 29.3  | 24.5  | 36.7  |

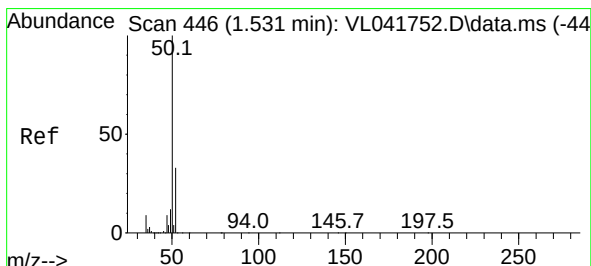
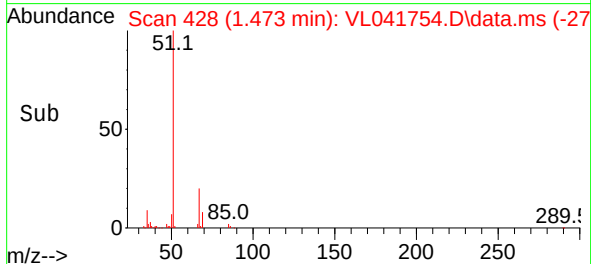
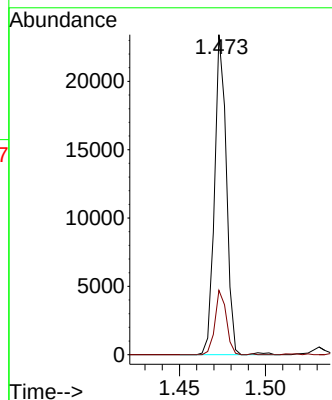
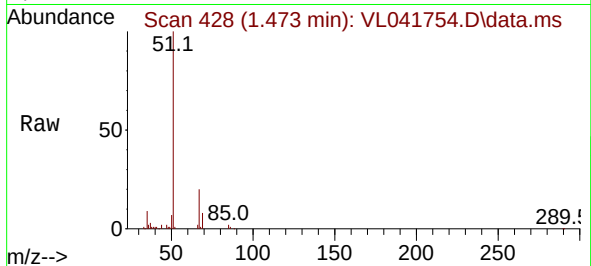




#3  
Chlorodifluoromethane  
Concen: 1.041 ppbv  
RT: 1.473 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

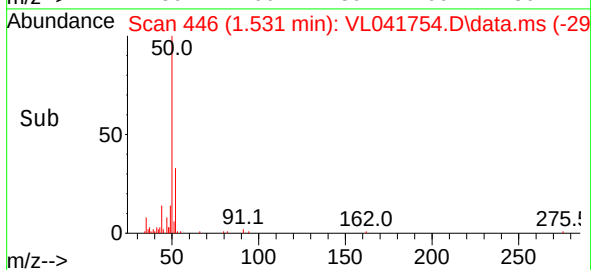
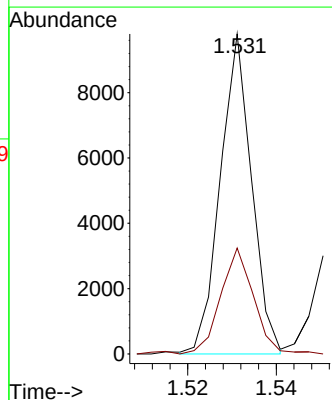
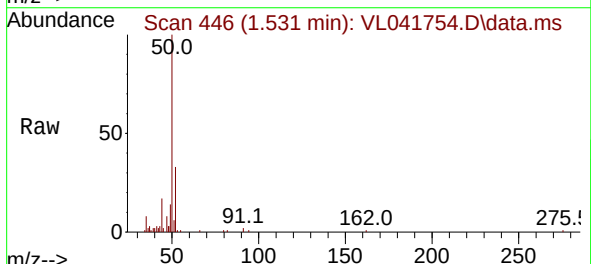
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion: 51 Resp: 11187  
Ion Ratio Lower Upper  
51 100  
67 19.4 15.0 22.4

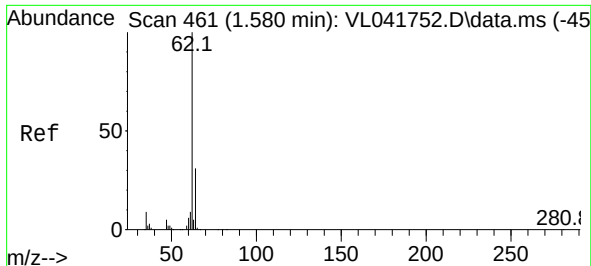


#4  
Chloromethane  
Concen: 1.047 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 50 Resp: 4805  
Ion Ratio Lower Upper  
50 100  
52 33.3 26.2 39.2



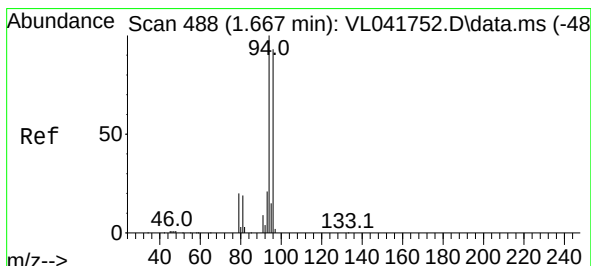
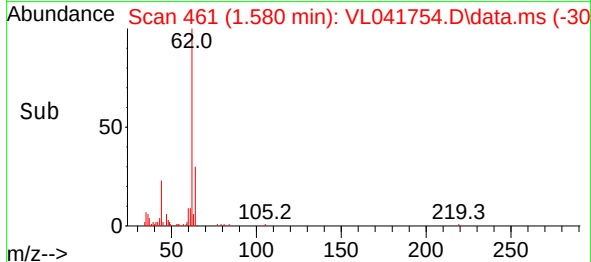
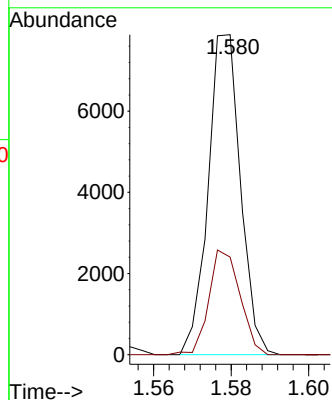
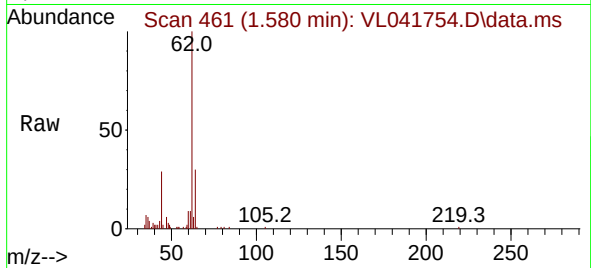




#5  
 Vinyl Chloride  
 Concen: 0.990 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

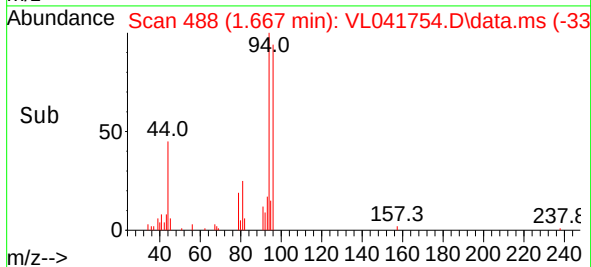
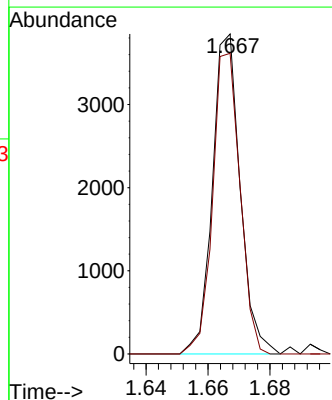
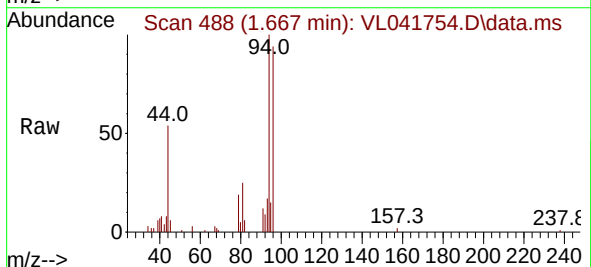
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC001

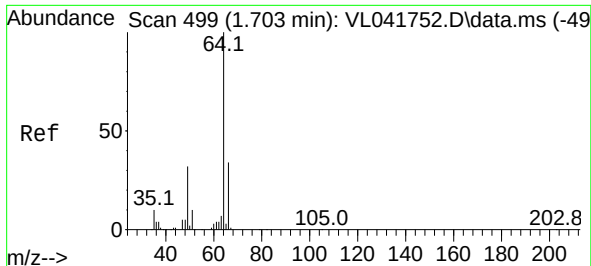
Tgt Ion: 62 Resp: 4580  
 Ion Ratio Lower Upper  
 62 100  
 64 30.5 25.1 37.7



#6  
 Bromomethane  
 Concen: 1.097 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

Tgt Ion: 94 Resp: 2394  
 Ion Ratio Lower Upper  
 94 100  
 96 94.0 74.7 112.1

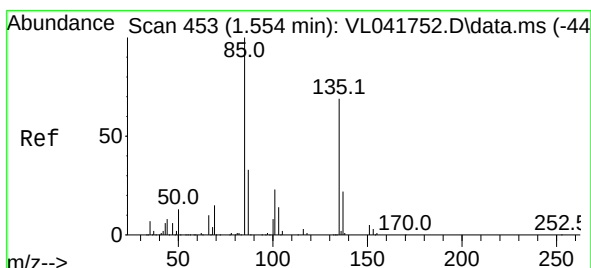
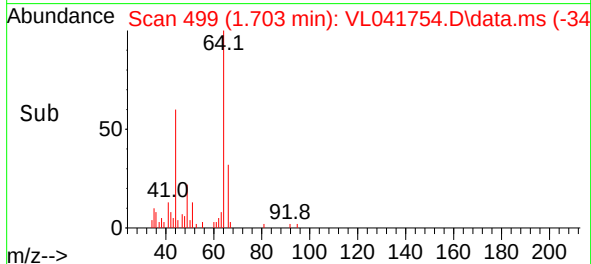
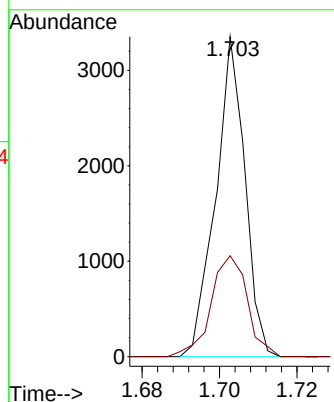
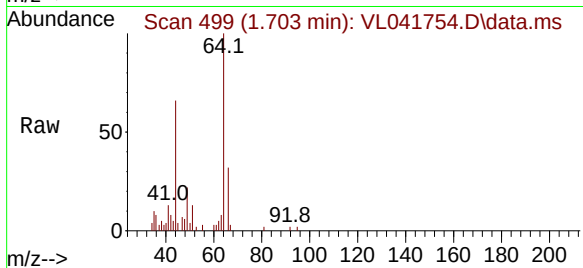




#7  
Chloroethane  
Concen: 0.981 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

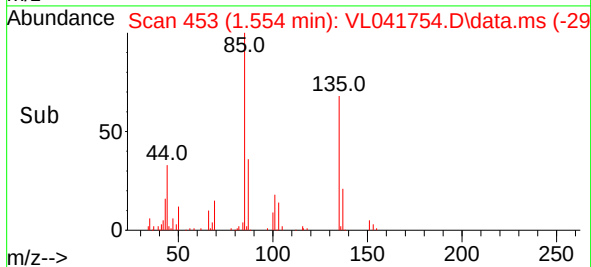
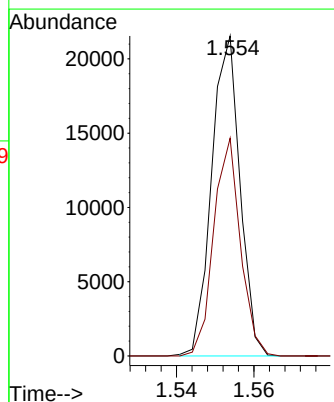
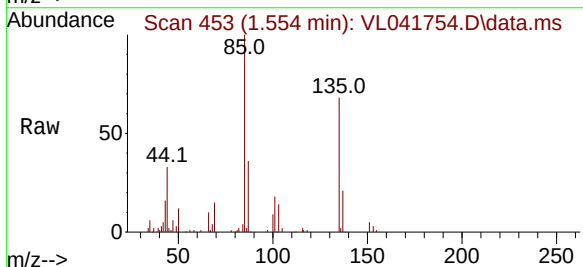
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

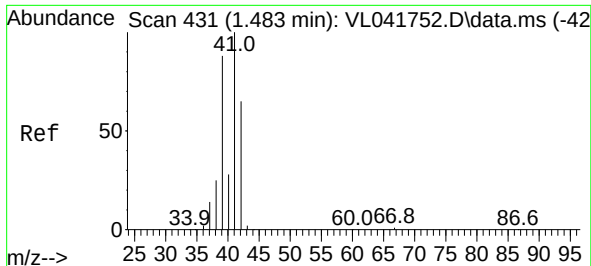
Tgt Ion: 64 Resp: 1763  
Ion Ratio Lower Upper  
64 100  
66 31.5 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 1.042 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 85 Resp: 10938  
Ion Ratio Lower Upper  
85 100  
135 64.3 51.9 77.9





#9

Propene

Concen: 1.039 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

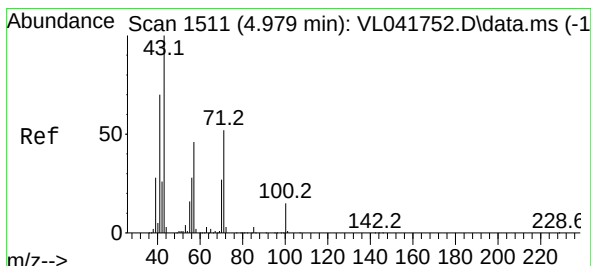
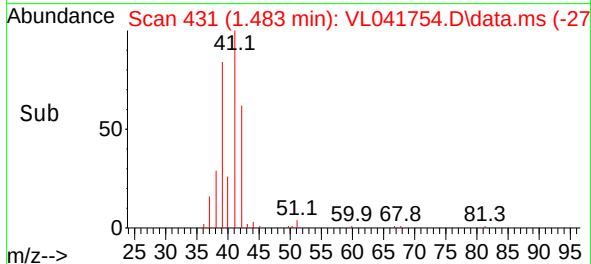
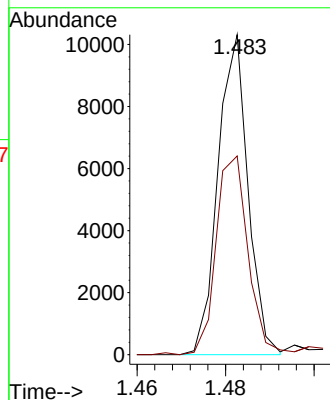
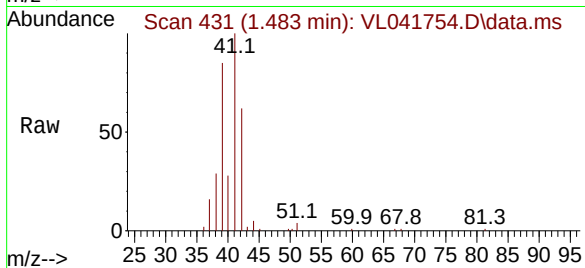
VSTDIC001

Tgt Ion: 41 Resp: 4840

Ion Ratio Lower Upper

41 100

42 70.4 52.4 78.6



#10

Heptane

Concen: 1.003 ppbv

RT: 4.972 min Scan# 1509

Delta R.T. -0.007 min

Lab File: VL041754.D

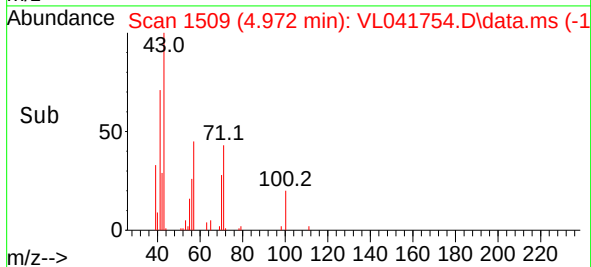
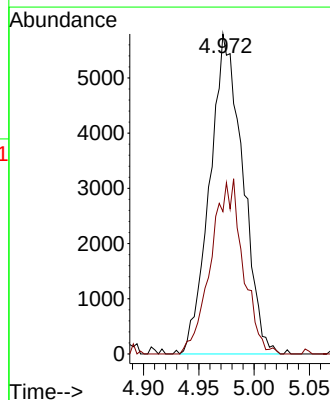
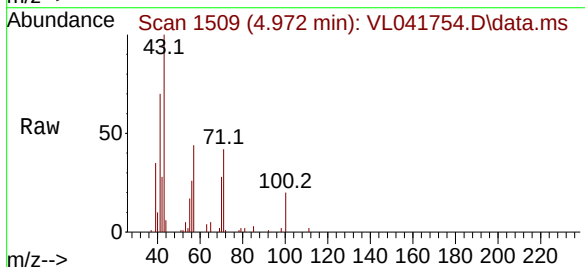
Acq: 16 Dec 2024 14:34

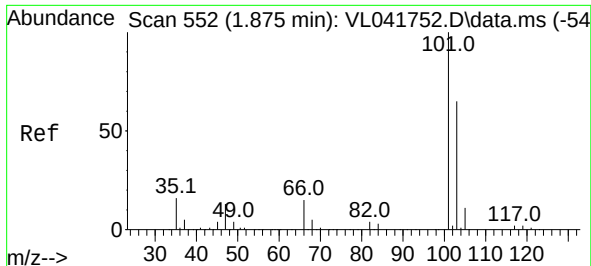
Tgt Ion: 43 Resp: 12004

Ion Ratio Lower Upper

43 100

57 53.0 38.5 57.7





#11

Trichlorofluoromethane

Concen: 1.013 ppbv

RT: 1.874 min Scan# 552

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

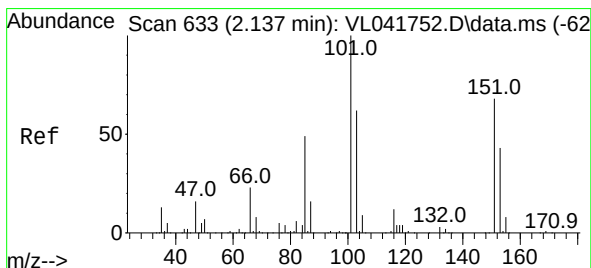
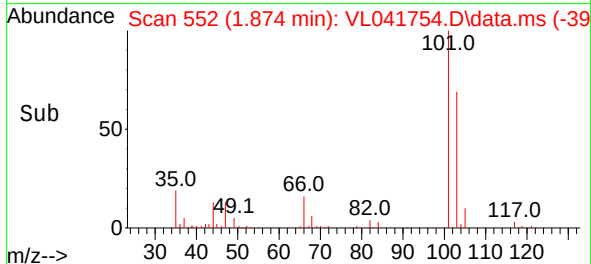
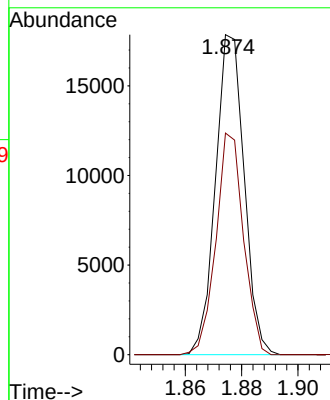
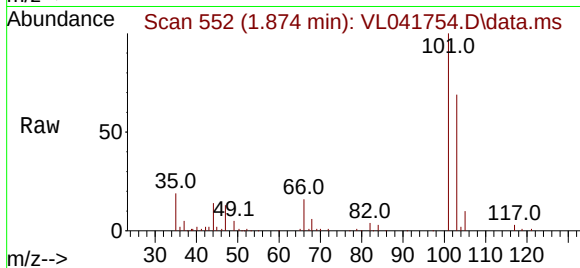
VSTDICC001

Tgt Ion:101 Resp: 12625

Ion Ratio Lower Upper

101 100

103 69.3 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 1.046 ppbv

RT: 2.136 min Scan# 633

Delta R.T. -0.000 min

Lab File: VL041754.D

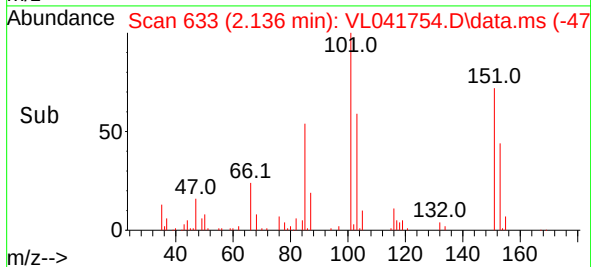
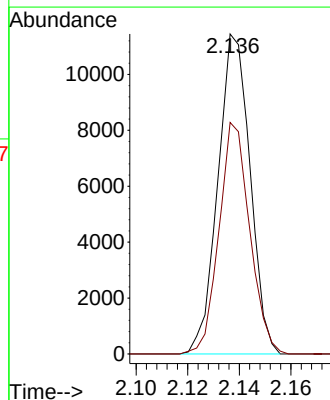
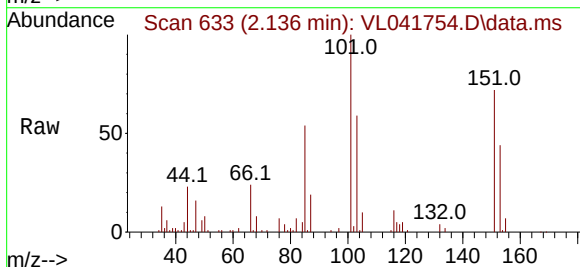
Acq: 16 Dec 2024 14:34

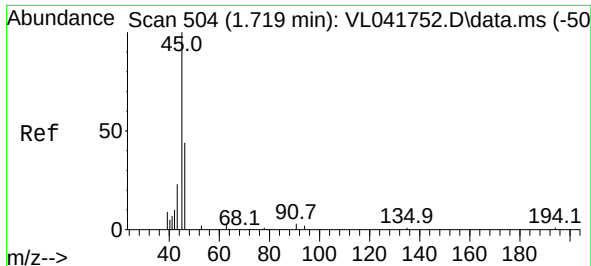
Tgt Ion:101 Resp: 9915

Ion Ratio Lower Upper

101 100

151 69.1 56.8 85.2





#13

Ethanol

Concen: 1.587 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

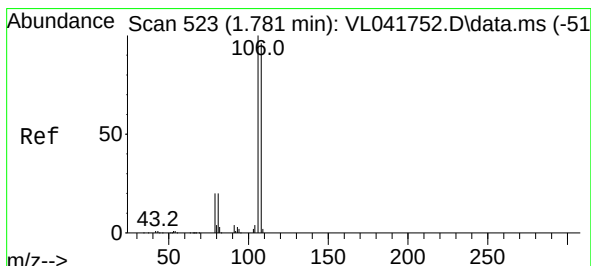
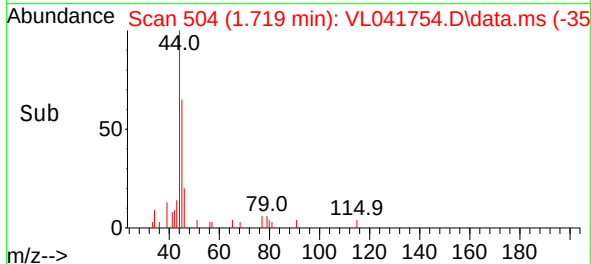
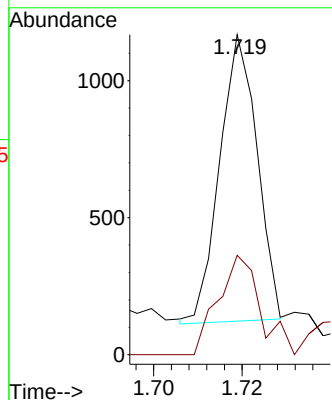
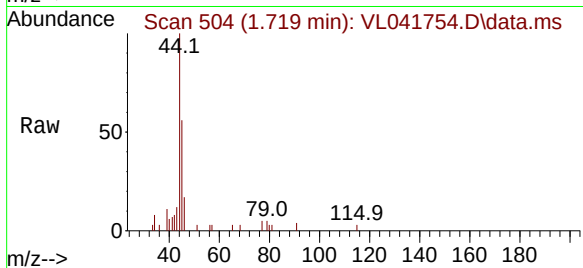
VSTDICC001

Tgt Ion: 45 Resp: 615

Ion Ratio Lower Upper

45 100

46 57.2 16.4 65.8



#14

Bromoethene

Concen: 0.984 ppbv

RT: 1.780 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

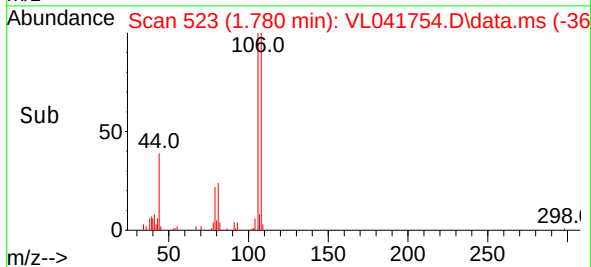
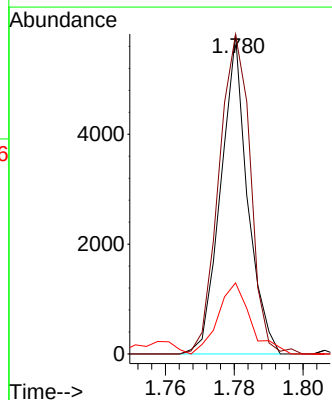
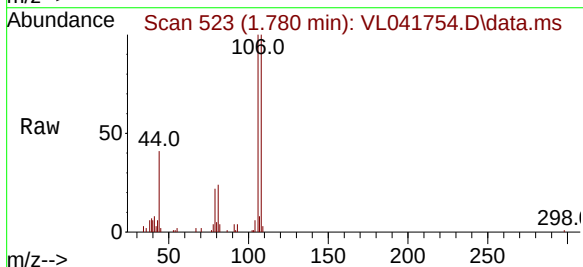
Tgt Ion:108 Resp: 3148

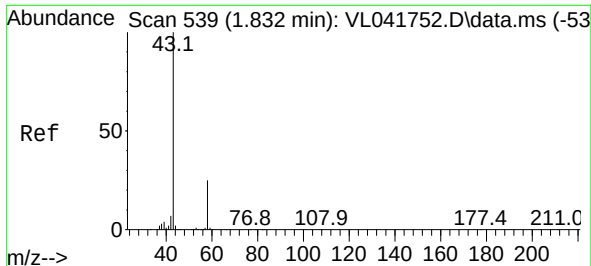
Ion Ratio Lower Upper

108 100

106 117.5 84.1 126.1

79 32.4 17.4 26.0#

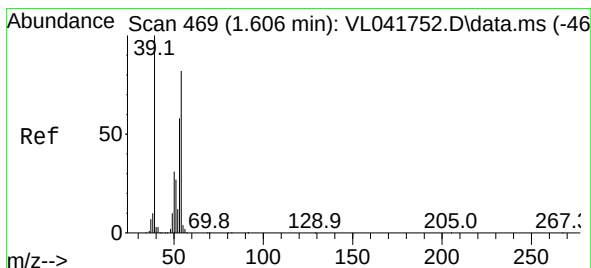
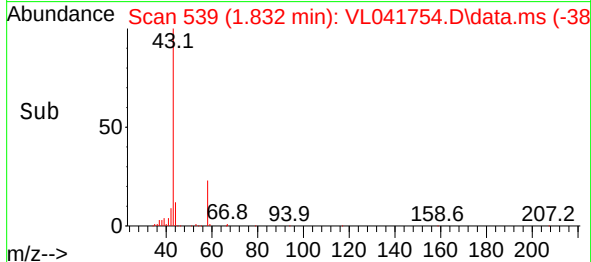
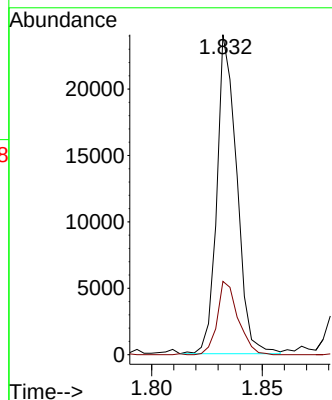
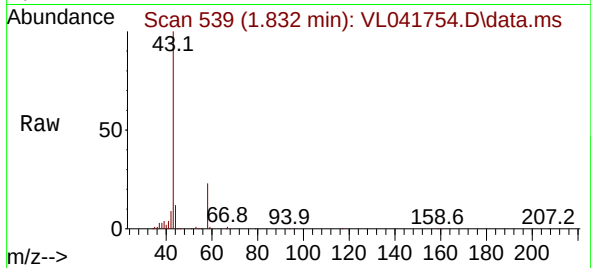




#15  
Acetone  
Concen: 1.174 ppbv  
RT: 1.832 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

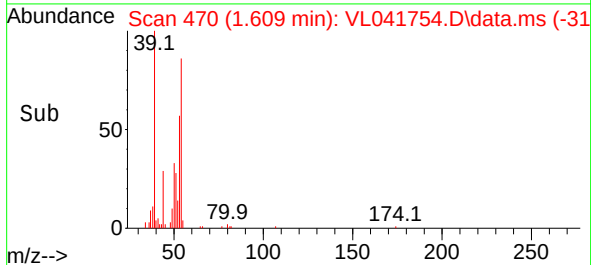
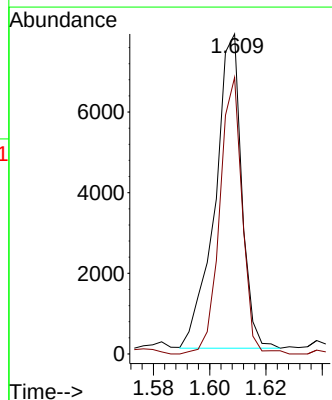
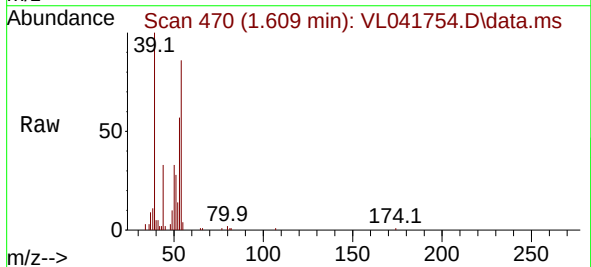
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

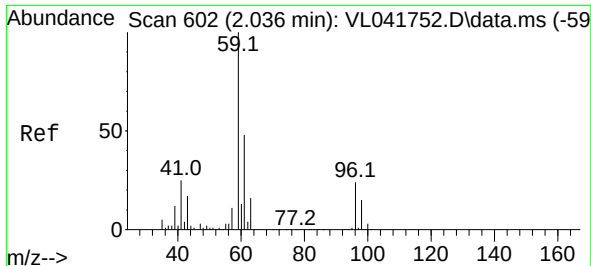
Tgt Ion: 43 Resp: 15060  
Ion Ratio Lower Upper  
43 100  
58 24.0 19.7 29.5



#16  
1,3-Butadiene  
Concen: 1.017 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 39 Resp: 5137  
Ion Ratio Lower Upper  
39 100  
54 77.0 58.4 87.6

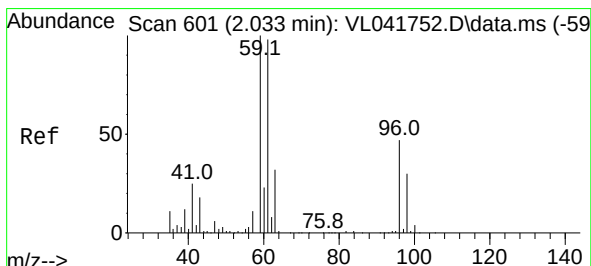
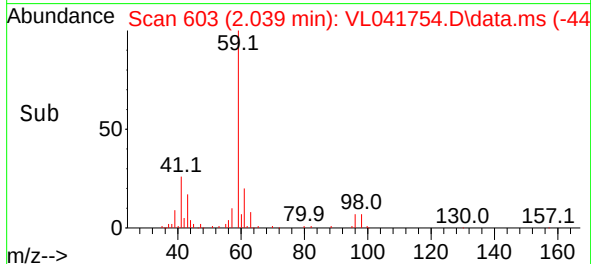
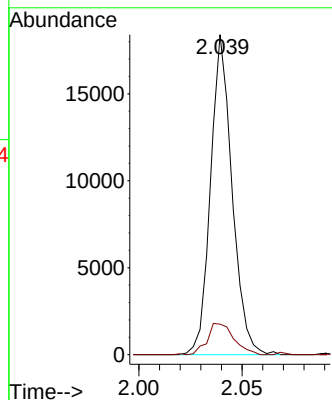
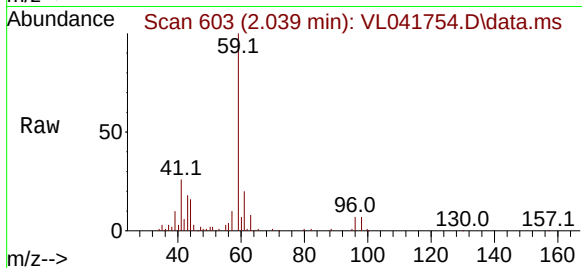




#17  
tert-Butyl alcohol  
Concen: 1.048 ppbv  
RT: 2.039 min Scan# 602  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

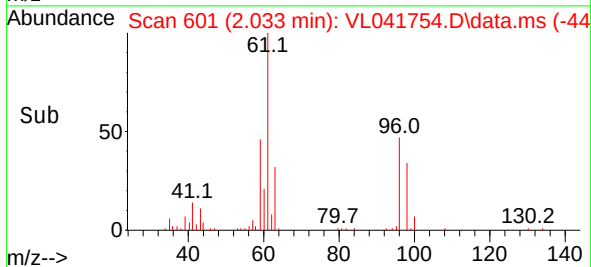
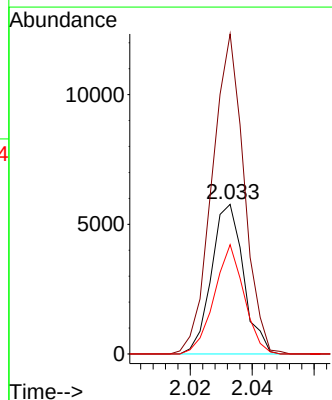
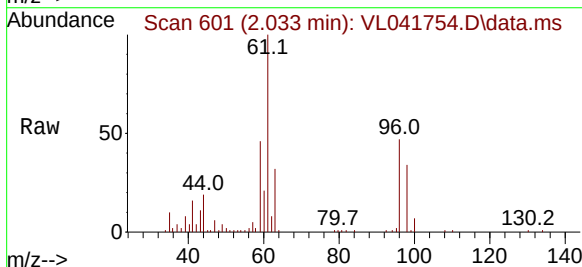
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

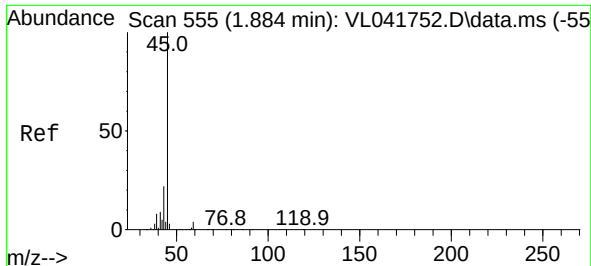
Tgt Ion: 59 Resp: 13341  
Ion Ratio Lower Upper  
59 100  
57 12.4 8.6 13.0



#18  
1,1-Dichloroethene  
Concen: 1.042 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 96 Resp: 4139  
Ion Ratio Lower Upper  
96 100  
61 212.1 167.7 251.5  
98 73.0 51.1 76.7





#19

Isopropyl Alcohol

Concen: 1.131 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

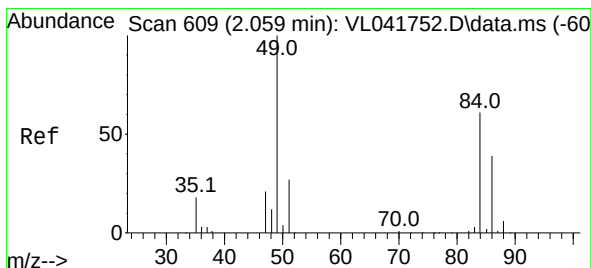
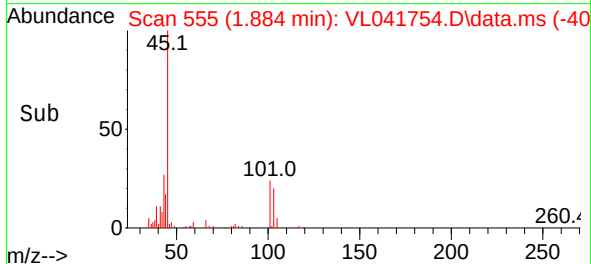
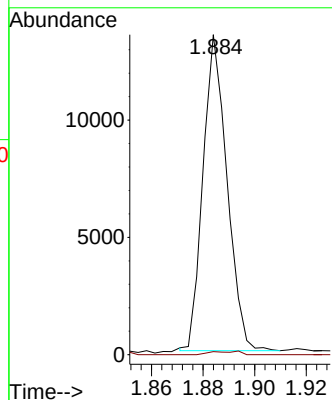
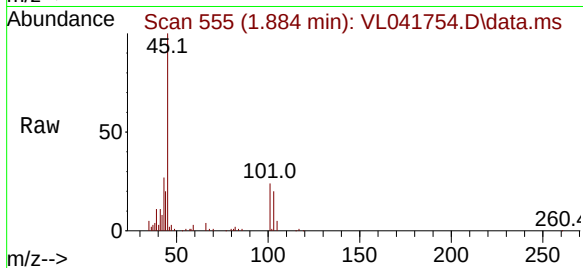
VSTDIC001

Tgt Ion: 45 Resp: 8703

Ion Ratio Lower Upper

45 100

58 41.5 33.3 49.9



#20

Methylene Chloride

Concen: 1.057 ppbv

RT: 2.059 min Scan# 609

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 84 Resp: 3868

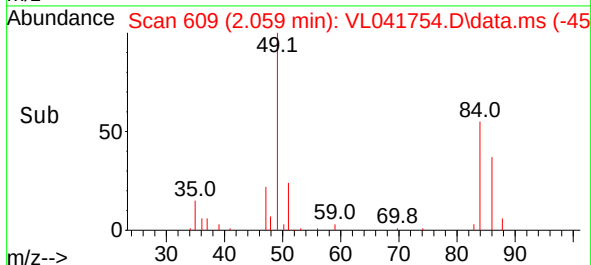
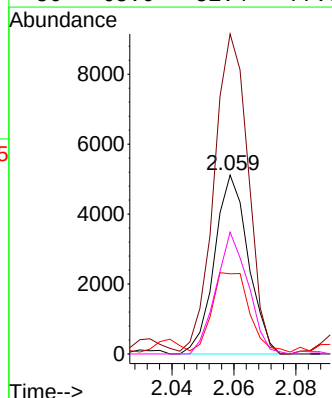
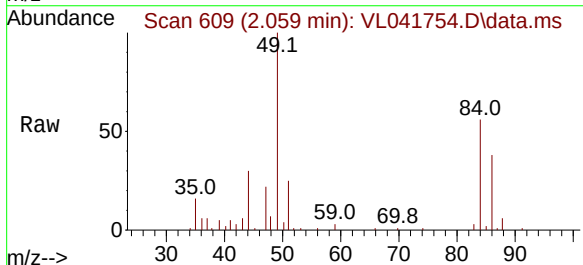
Ion Ratio Lower Upper

84 100

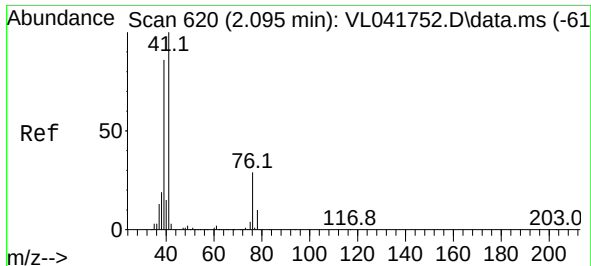
49 178.8 132.6 198.8

51 41.9 37.6 56.4

86 68.0 51.4 77.0







#21

Allyl Chloride

Concen: 1.067 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001

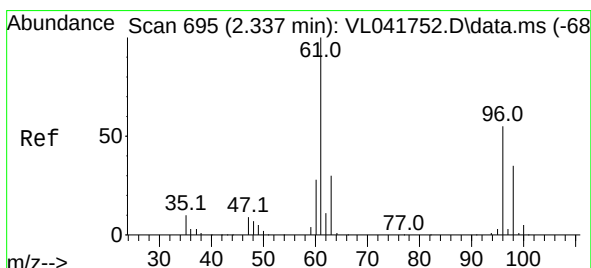
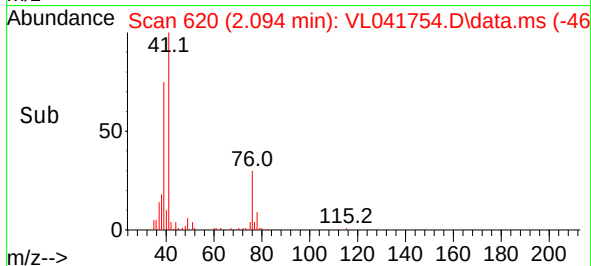
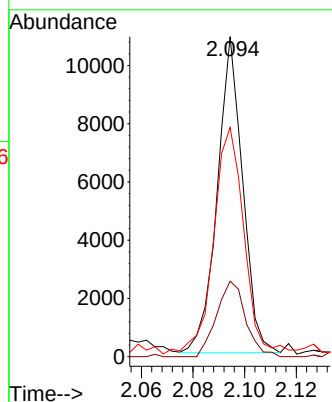
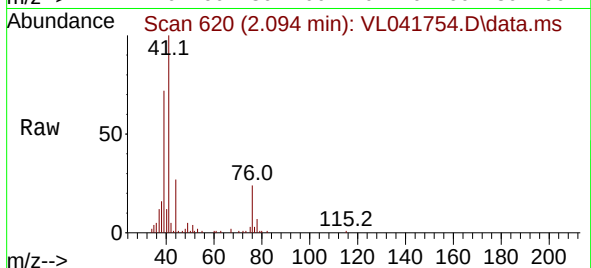
Tgt Ion: 41 Resp: 7425

Ion Ratio Lower Upper

41 100

76 27.2 22.3 33.5

39 84.3 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 1.011 ppbv

RT: 2.337 min Scan# 695

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

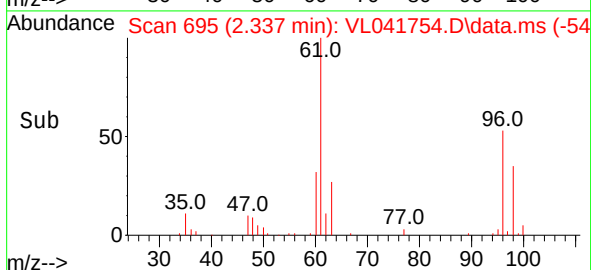
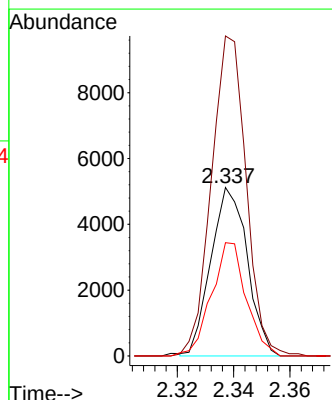
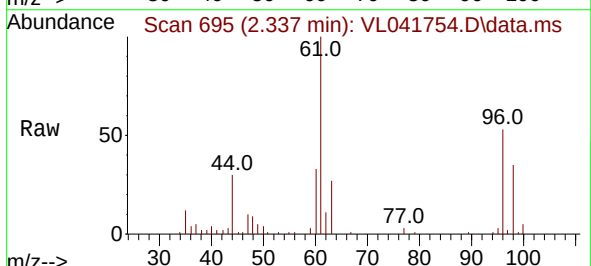
Tgt Ion: 96 Resp: 4599

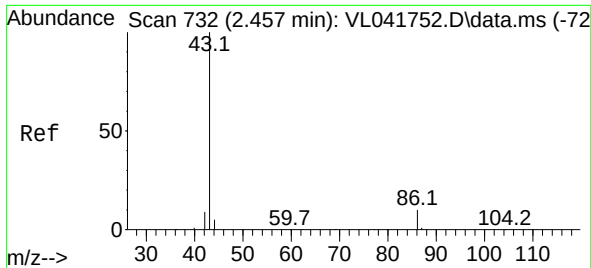
Ion Ratio Lower Upper

96 100

61 188.9 146.3 219.5

98 67.3 50.8 76.2

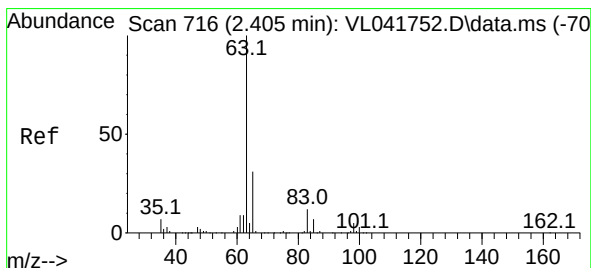
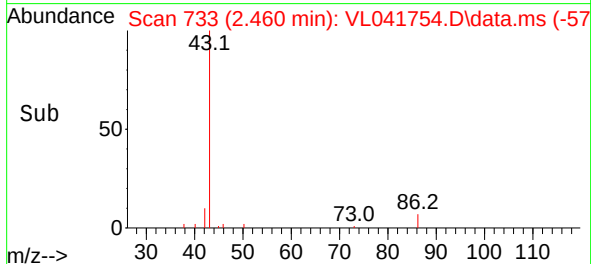
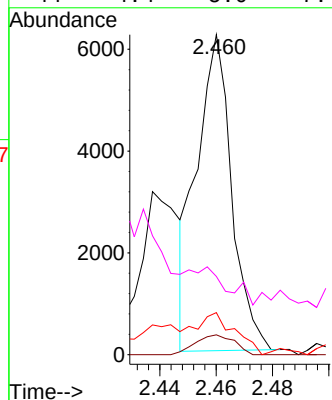
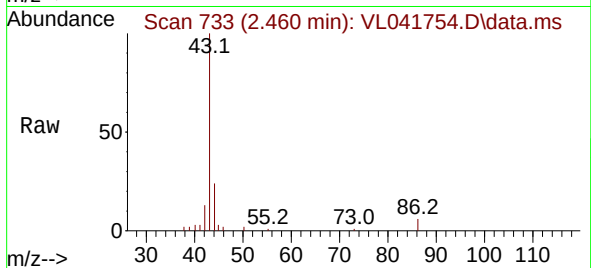




#23  
Vinyl Acetate  
Concen: 0.959 ppbv  
RT: 2.460 min Scan# 716  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

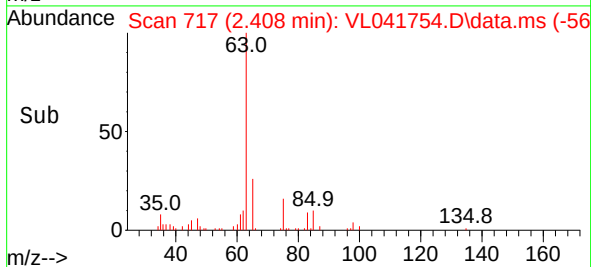
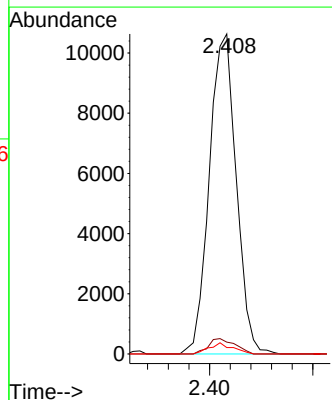
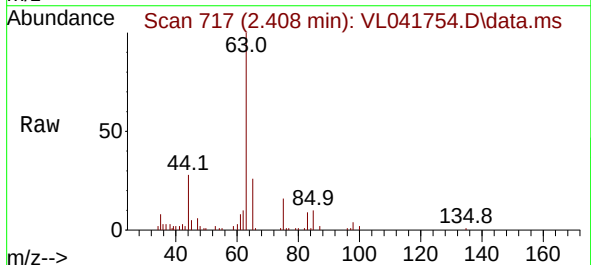
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

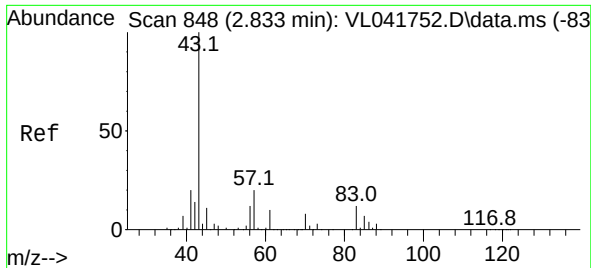
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 5345  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 6.3   | 6.6   | 10.0# |
| 42       | 11.4  | 8.2   | 12.2  |
| 44       | 4.4   | 5.0   | 7.4#  |



#24  
1,1-Dichloroethane  
Concen: 1.045 ppbv  
RT: 2.408 min Scan# 717  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 9621  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 3.7   | 2.3   | 6.8   |
| 100      | 2.0   | 1.4   | 4.2   |

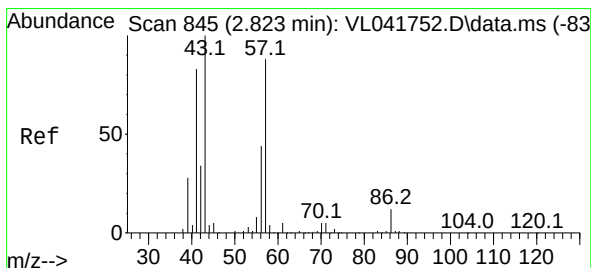
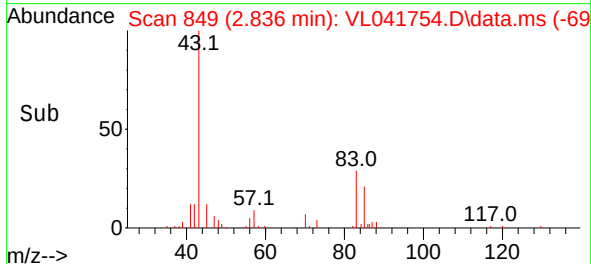
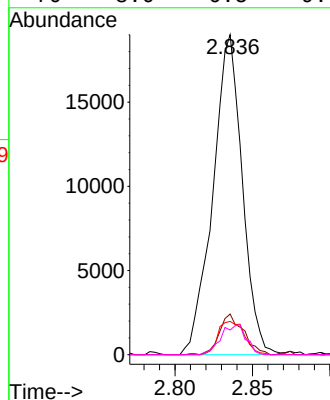
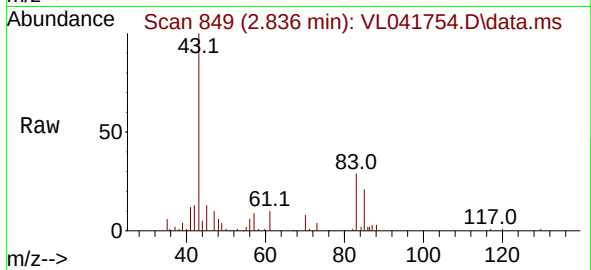




#25  
Ethyl Acetate  
Concen: 1.049 ppbv  
RT: 2.836 min Scan# 848  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

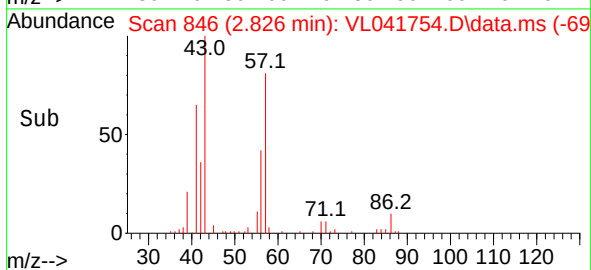
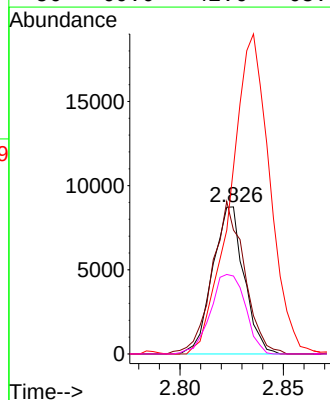
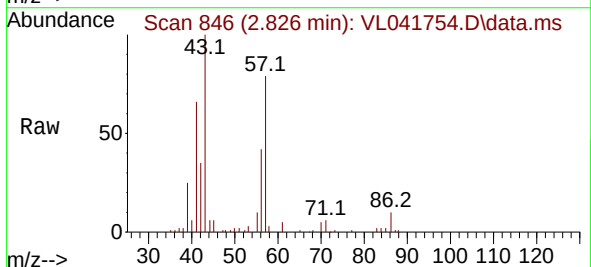
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

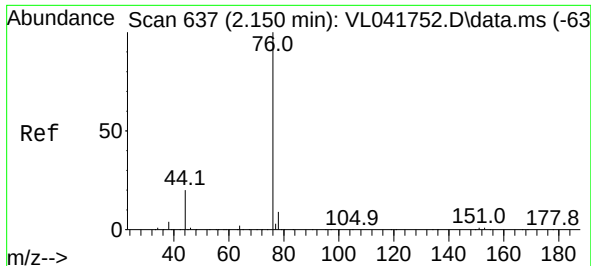
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 25141 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 10.7  | 8.1   | 12.1  |
| 61       | 9.3   | 7.0   | 10.6  |
| 70       | 8.0   | 6.5   | 9.7   |



#26  
Hexane  
Concen: 1.021 ppbv  
RT: 2.826 min Scan# 846  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 57    | Resp: | 9250  |
| Ion      | Ratio | Lower | Upper |
| 57       | 100   |       |       |
| 41       | 105.9 | 79.6  | 119.4 |
| 43       | 274.5 | 211.0 | 316.6 |
| 56       | 60.0  | 42.6  | 63.8  |





#27

Carbon Disulfide

Concen: 0.999 ppbv

RT: 2.149 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001

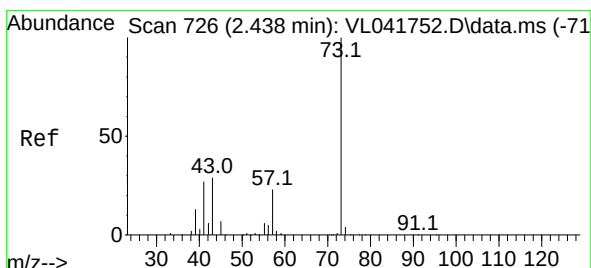
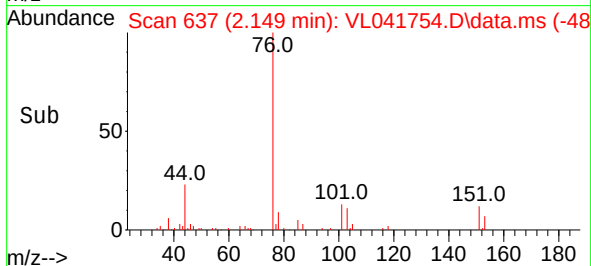
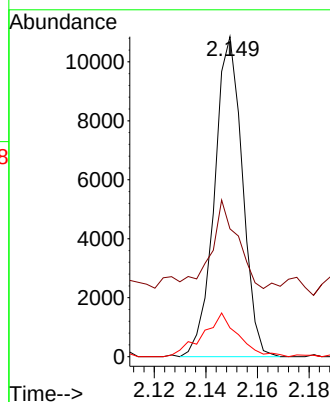
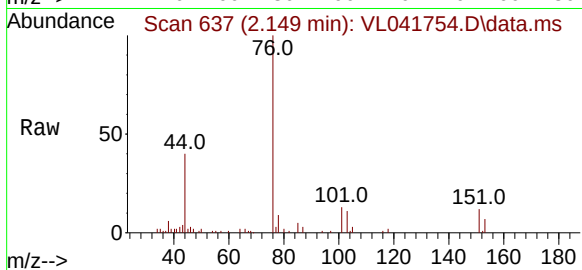
Tgt Ion: 76 Resp: 8152

Ion Ratio Lower Upper

76 100

44 79.9 17.6 26.4#

78 17.6 10.2 15.4#



#28

Methyl tert-Butyl Ether

Concen: 1.162 ppbv

RT: 2.441 min Scan# 727

Delta R.T. 0.003 min

Lab File: VL041754.D

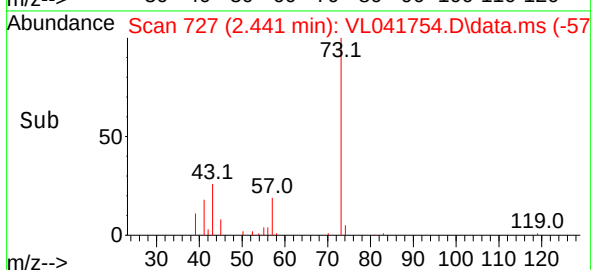
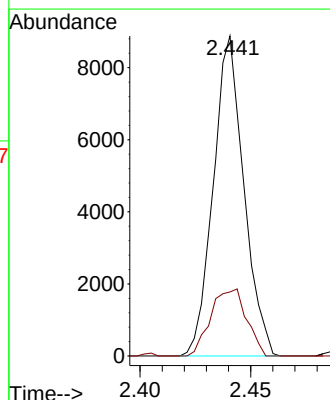
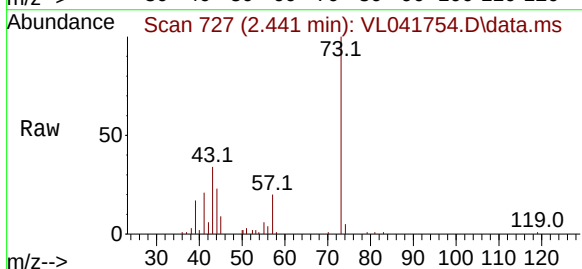
Acq: 16 Dec 2024 14:34

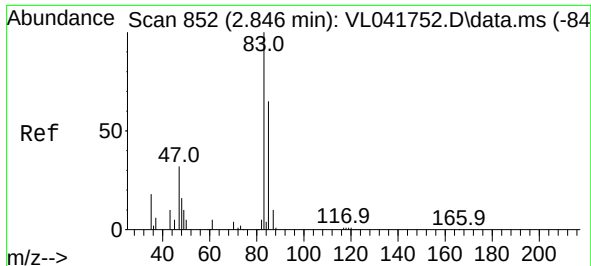
Tgt Ion: 73 Resp: 8539

Ion Ratio Lower Upper

73 100

57 24.7 17.6 26.4





#29

Chloroform

Concen: 1.042 ppbv

RT: 2.845 min Scan# 852

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

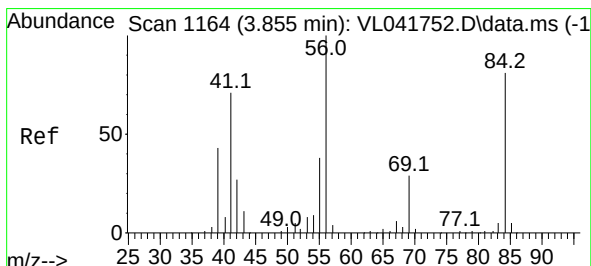
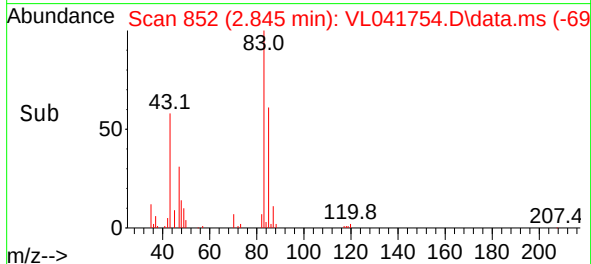
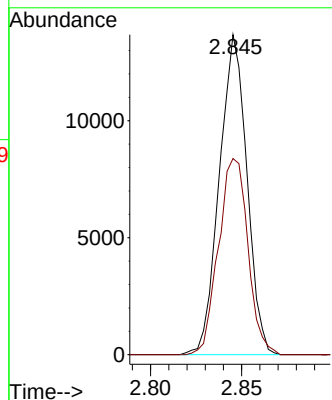
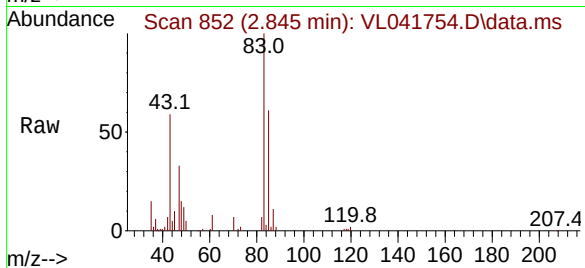
VSTDIC001

Tgt Ion: 83 Resp: 14384

Ion Ratio Lower Upper

83 100

85 61.3 51.8 77.6



#30

Cyclohexane

Concen: 1.015 ppbv

RT: 3.852 min Scan# 1163

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

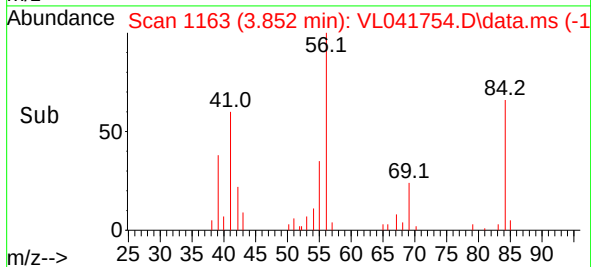
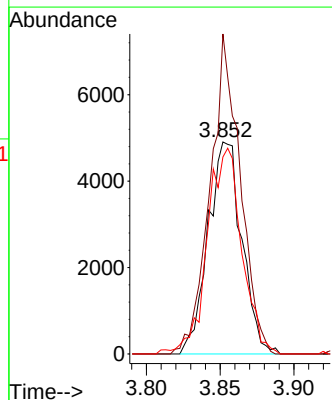
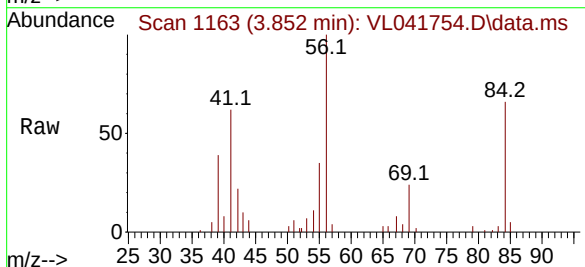
Tgt Ion: 84 Resp: 7824

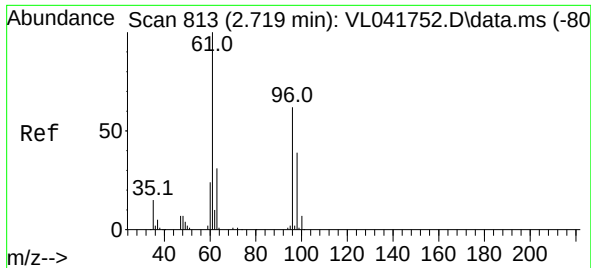
Ion Ratio Lower Upper

84 100

56 134.4 102.3 153.5

41 99.6 74.0 111.0

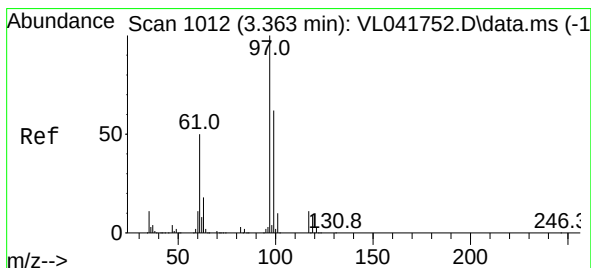
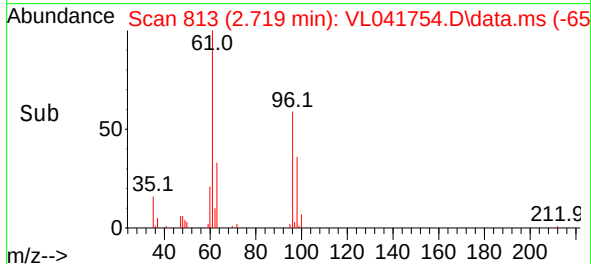
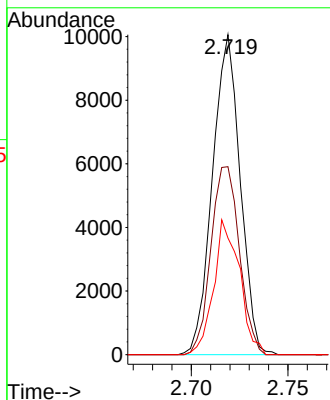
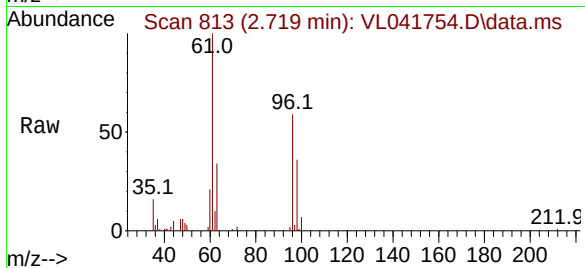




#31  
 cis-1,2-Dichloroethene  
 Concen: 1.070 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

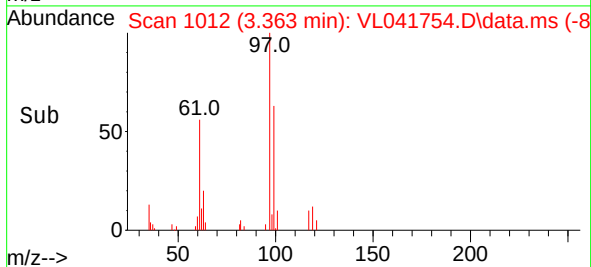
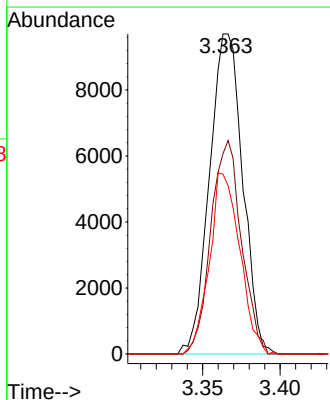
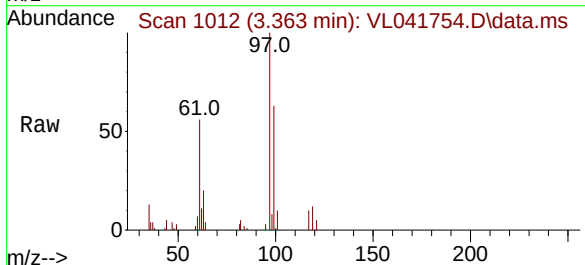
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

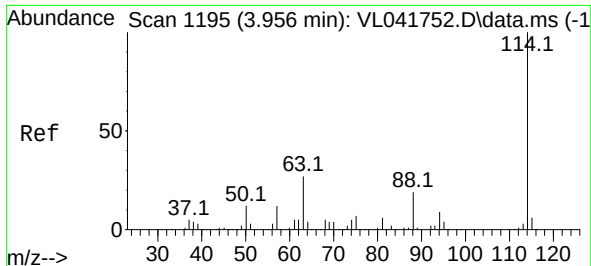
Tgt Ion: 61 Resp: 10013  
 Ion Ratio Lower Upper  
 61 100  
 96 58.7 49.7 74.5  
 98 36.5 30.8 46.2



#32  
 1,1,1-Trichloroethane  
 Concen: 1.049 ppbv  
 RT: 3.363 min Scan# 1012  
 Delta R.T. -0.000 min  
 Lab File: VL041754.D  
 Acq: 16 Dec 2024 14:34

Tgt Ion: 97 Resp: 14415  
 Ion Ratio Lower Upper  
 97 100  
 99 61.7 51.0 76.4  
 61 52.0 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC001

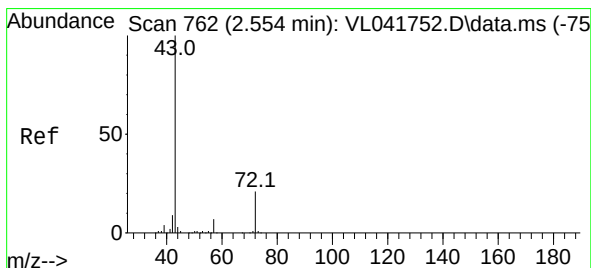
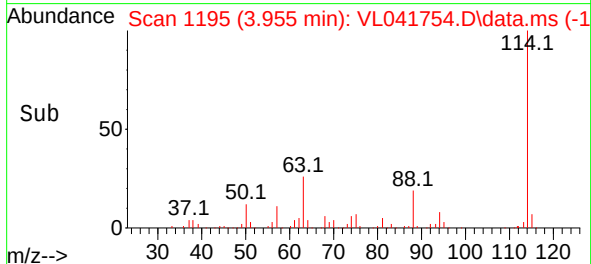
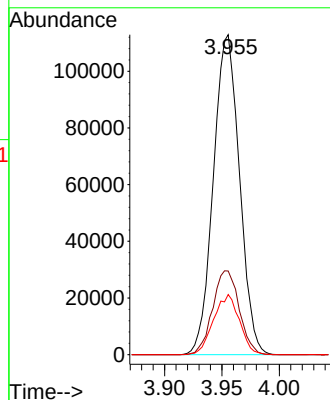
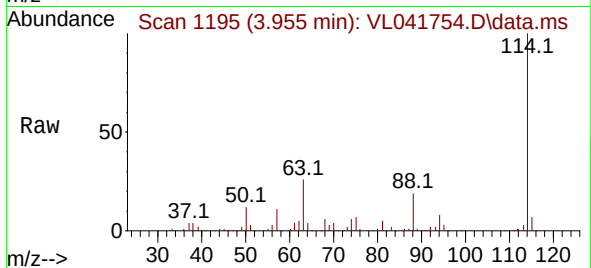
Tgt Ion:114 Resp: 178926

Ion Ratio Lower Upper

114 100

63 26.7 21.8 32.8

88 18.6 14.8 22.2



#34

2-Butanone

Concen: 1.019 ppbv

RT: 2.557 min Scan# 763

Delta R.T. 0.003 min

Lab File: VL041754.D

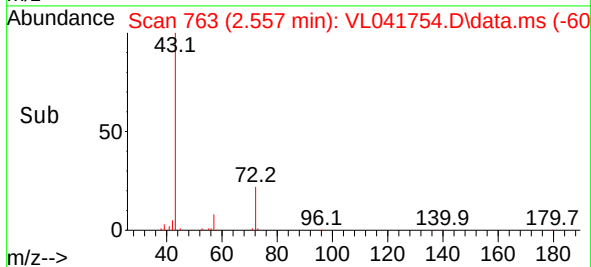
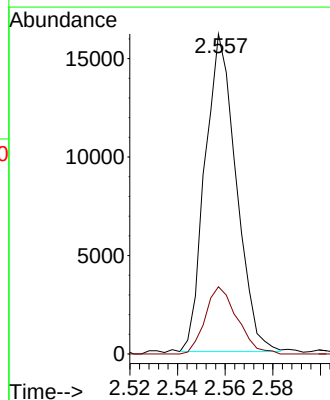
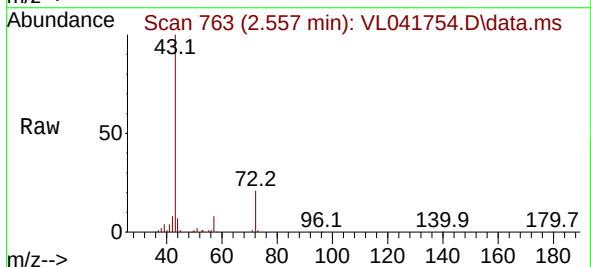
Acq: 16 Dec 2024 14:34

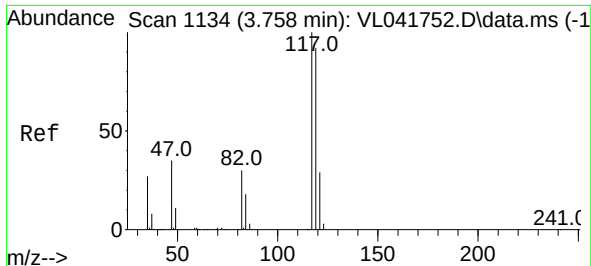
Tgt Ion: 43 Resp: 14673

Ion Ratio Lower Upper

43 100

72 21.7 16.8 25.2

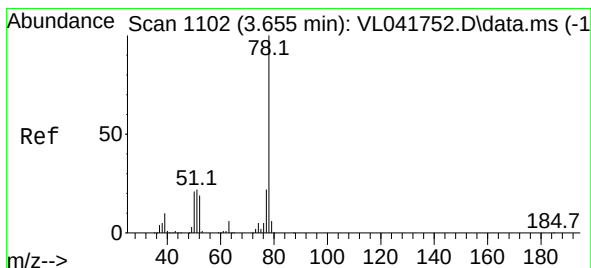
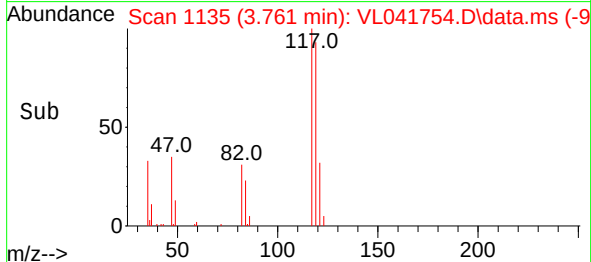
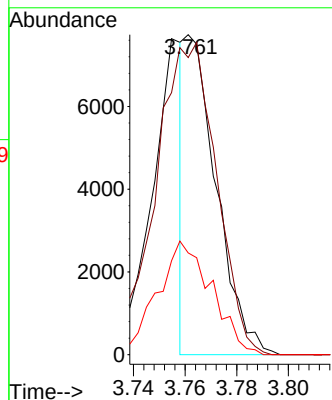
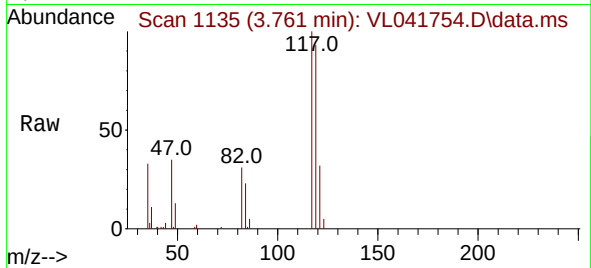




#35  
Carbon Tetrachloride  
Concen: 0.513 ppbv  
RT: 3.761 min Scan# 1135  
Delta R.T. 0.003 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

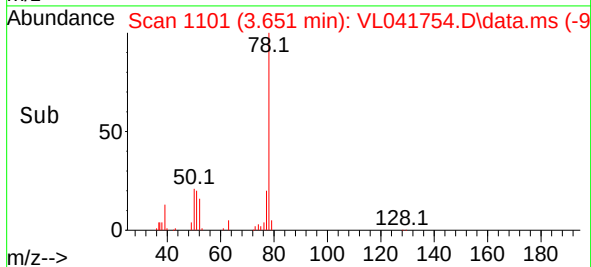
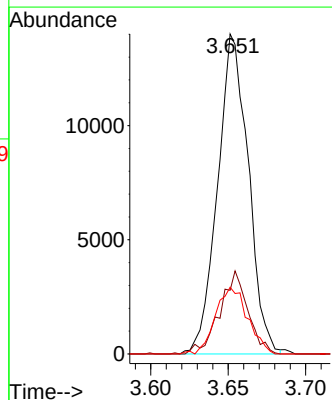
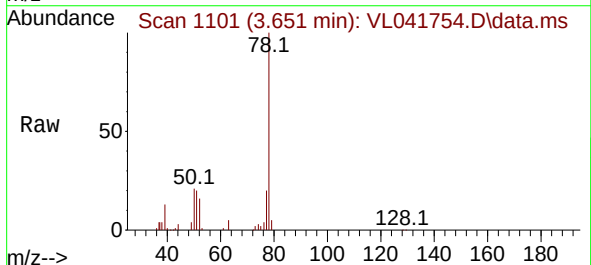
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

Tgt Ion:117 Resp: 6520  
Ion Ratio Lower Upper  
117 100  
119 92.9 73.7 110.5  
121 31.8 23.0 34.4

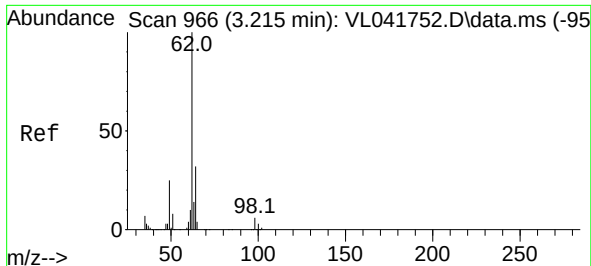


#36  
Benzene  
Concen: 1.044 ppbv  
RT: 3.651 min Scan# 1101  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 78 Resp: 19331  
Ion Ratio Lower Upper  
78 100  
77 19.9 17.8 26.6  
50 20.8 17.2 25.8



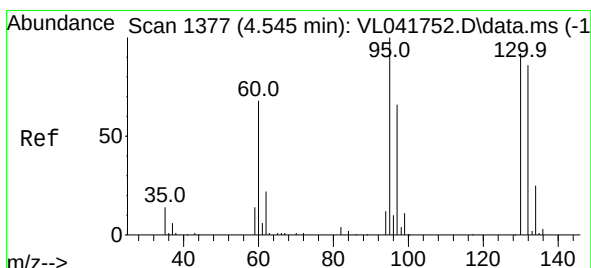
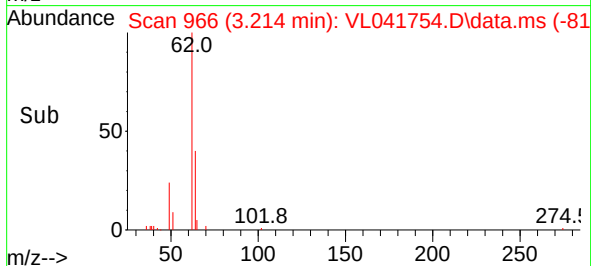
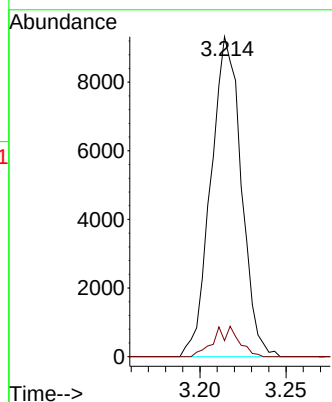
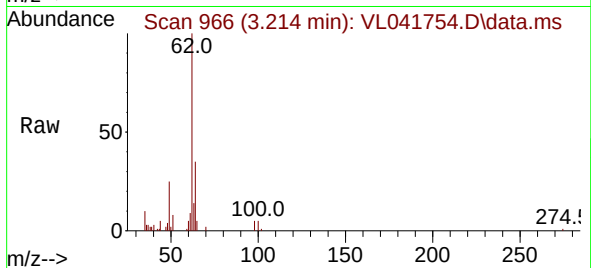




#37  
1,2-Dichloroethane  
Concen: 0.998 ppbv  
RT: 3.214 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

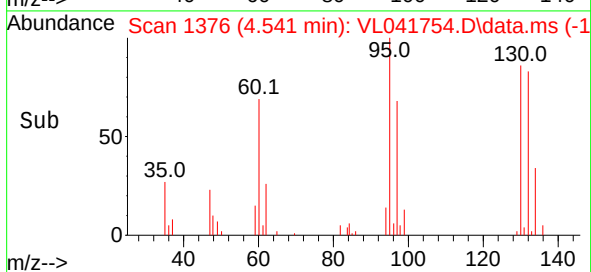
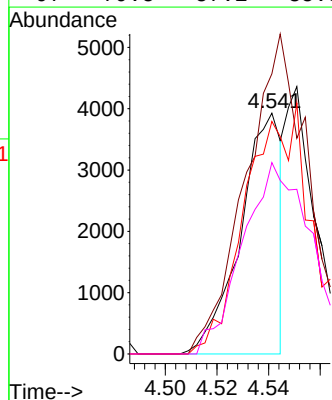
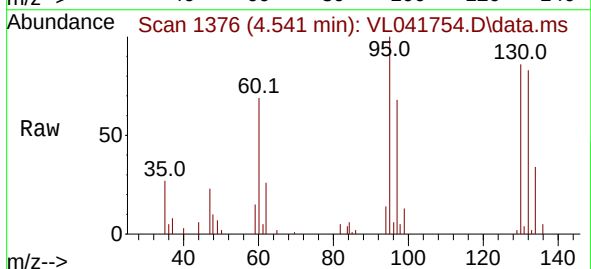
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

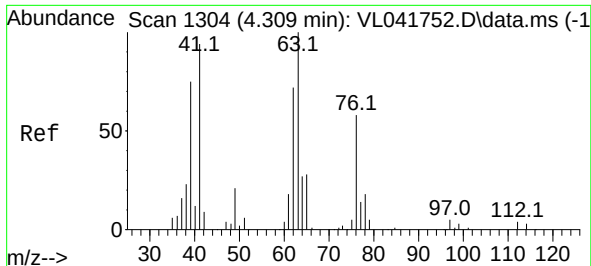
Tgt Ion: 62 Resp: 11490  
Ion Ratio Lower Upper  
62 100  
98 7.8 4.7 7.1#



#38  
Trichloroethene  
Concen: 0.552 ppbv  
RT: 4.541 min Scan# 1376  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:130 Resp: 4300  
Ion Ratio Lower Upper  
130 100  
95 116.3 87.0 130.6  
132 96.6 75.0 112.6  
97 79.5 57.2 85.8





#39

1,2-Dichloropropane

Concen: 1.056 ppbv

RT: 4.311 min Scan# 1305

Delta R.T. 0.003 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001

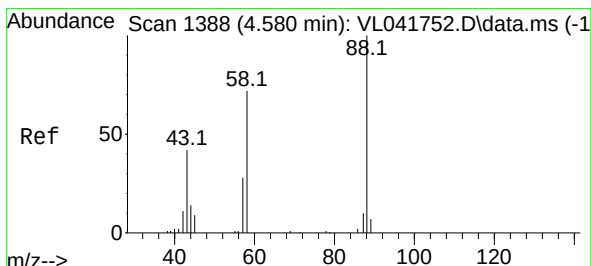
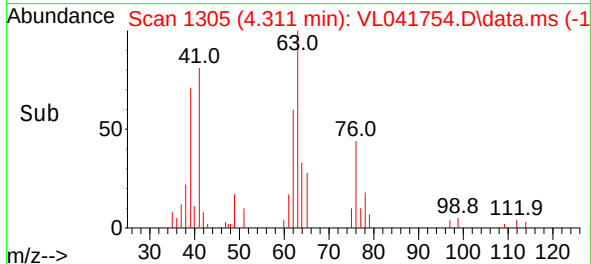
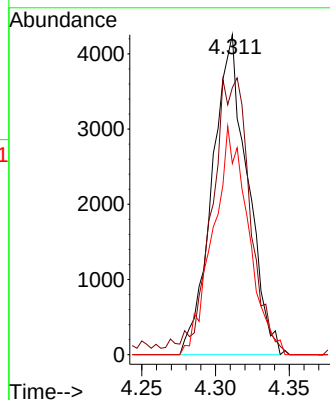
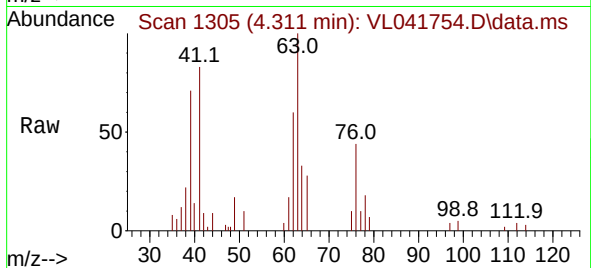
Tgt Ion: 63 Resp: 7068

Ion Ratio Lower Upper

63 100

41 80.8 75.3 112.9

62 59.8 57.3 85.9



#40

1,4-Dioxane

Concen: 0.991 ppbv

RT: 4.596 min Scan# 1393

Delta R.T. 0.016 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 88 Resp: 3241

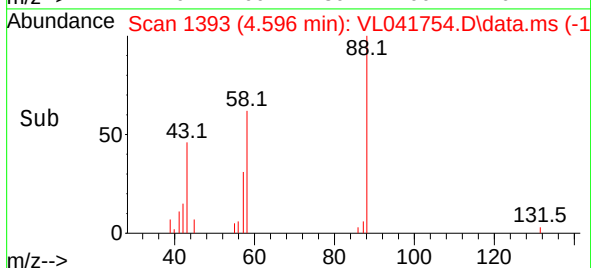
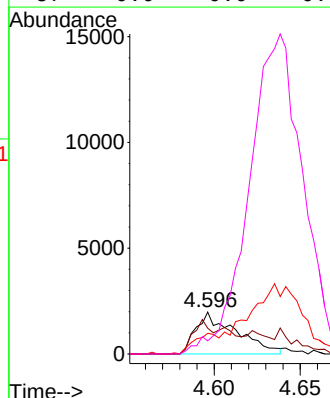
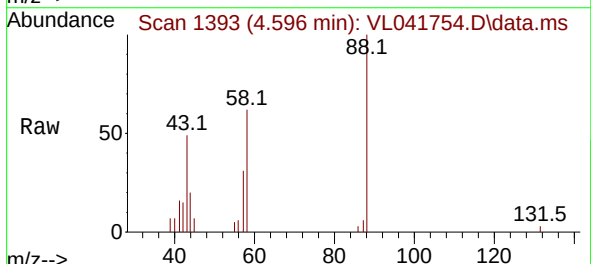
Ion Ratio Lower Upper

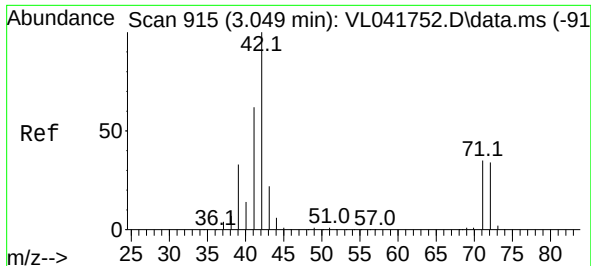
88 100

58 127.2 61.0 91.6#

43 0.0 29.4 44.0#

57 0.0 0.0 0.0

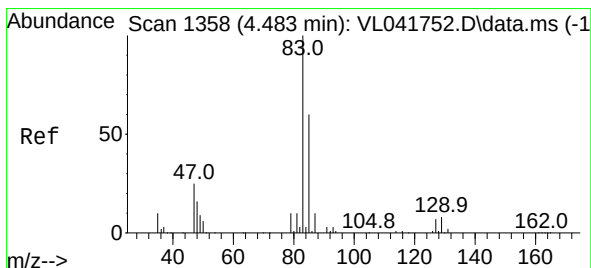
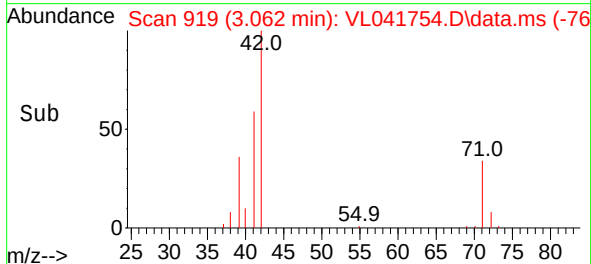
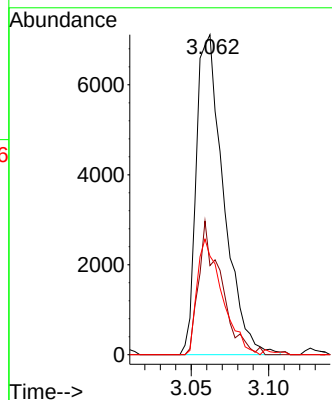
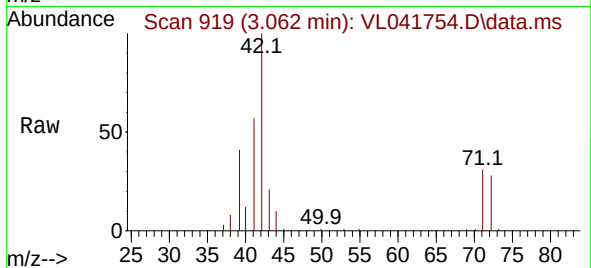




#41  
Tetrahydrofuran  
Concen: 1.082 ppbv  
RT: 3.062 min Scan# 915  
Delta R.T. 0.013 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

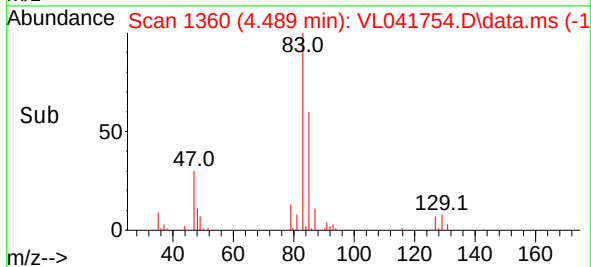
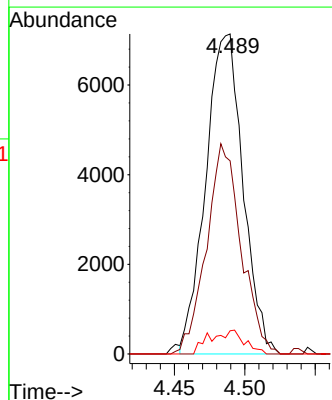
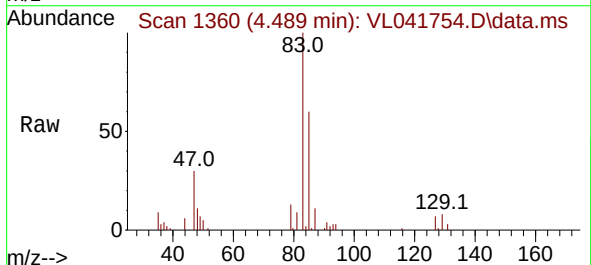
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC001

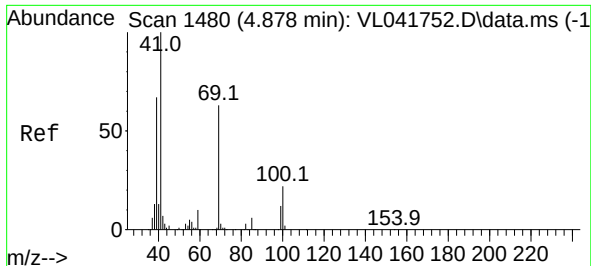
Tgt Ion: 42 Resp: 8727  
Ion Ratio Lower Upper  
42 100  
72 34.4 29.1 43.7  
71 34.0 28.4 42.6



#42  
Bromodichloromethane  
Concen: 0.993 ppbv  
RT: 4.489 min Scan# 1360  
Delta R.T. 0.006 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 83 Resp: 13154  
Ion Ratio Lower Upper  
83 100  
85 60.4 48.0 72.0  
127 7.2 5.8 8.8





#43

Methyl Methacrylate

Concen: 0.670 ppbv

RT: 4.875 min Scan# 1479

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC001

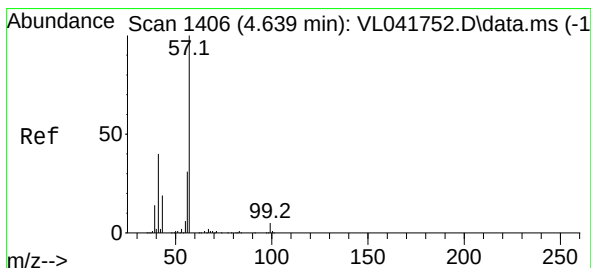
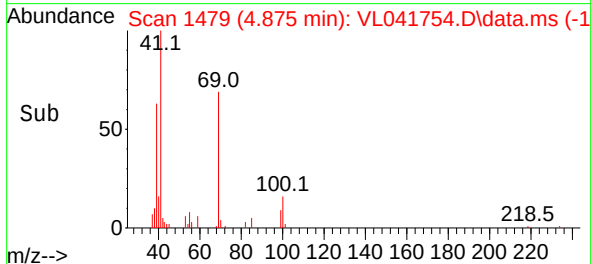
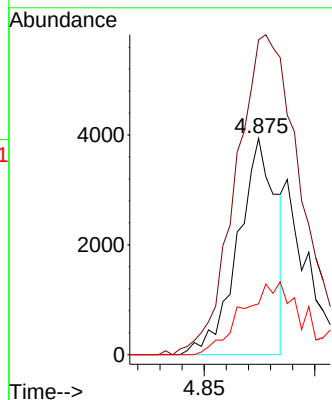
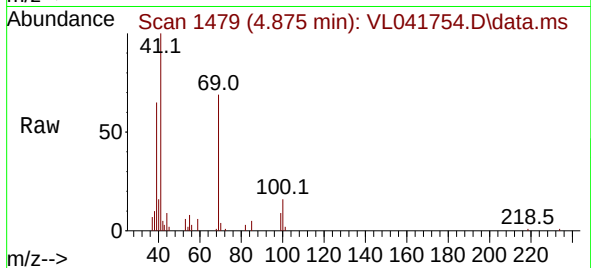
Tgt Ion: 69 Resp: 4727

Ion Ratio Lower Upper

69 100

41 252.5 130.3 195.5#

100 0.0 28.3 42.5#



#44

2,2,4-Trimethylpentane

Concen: 1.024 ppbv

RT: 4.638 min Scan# 1406

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

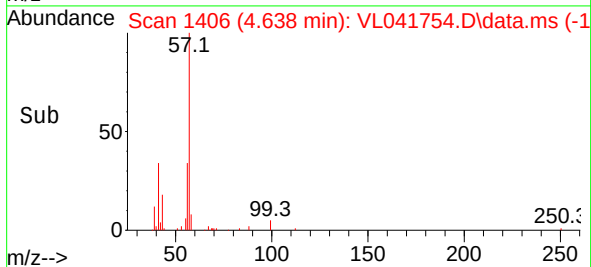
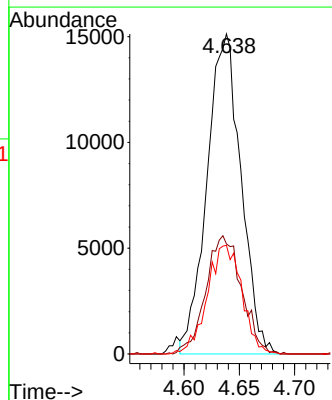
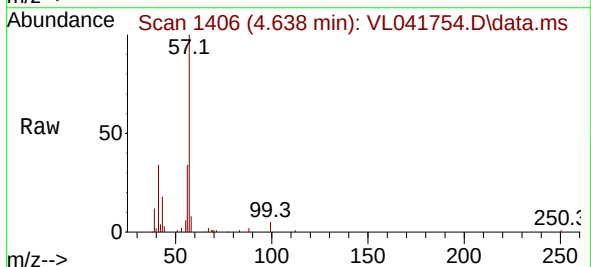
Tgt Ion: 57 Resp: 32361

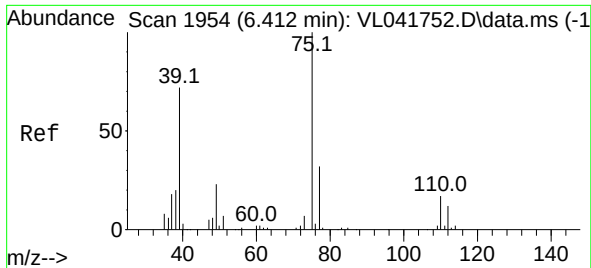
Ion Ratio Lower Upper

57 100

41 38.9 30.7 46.1

56 34.5 25.4 38.0





#45

t-1,3-Dichloropropene

Concen: 0.963 ppbv

RT: 6.412 min Scan# 1954

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

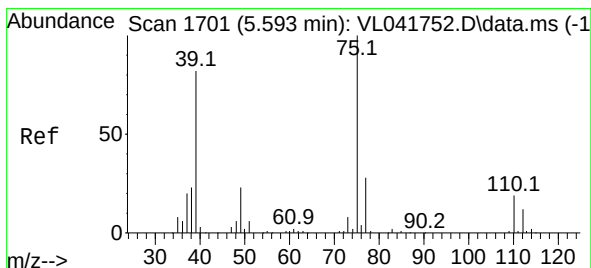
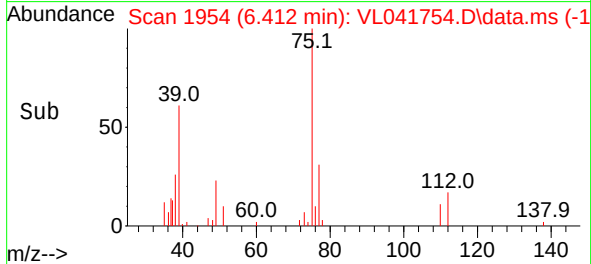
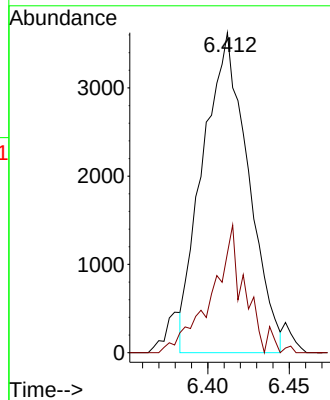
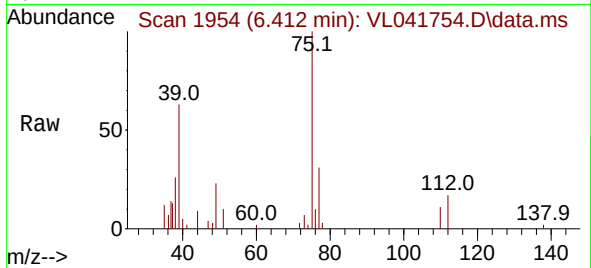
VSTDIC001

Tgt Ion: 75 Resp: 7027

Ion Ratio Lower Upper

75 100

77 31.1 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 0.583 ppbv

RT: 5.593 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

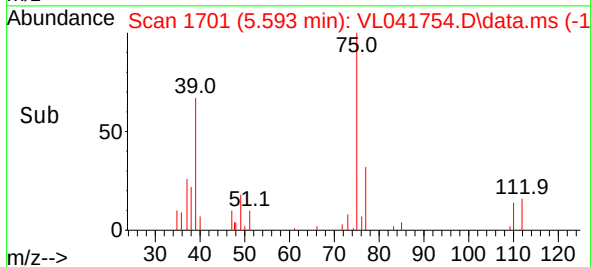
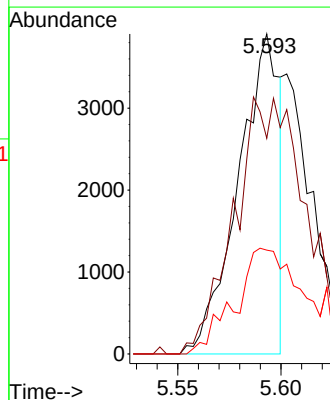
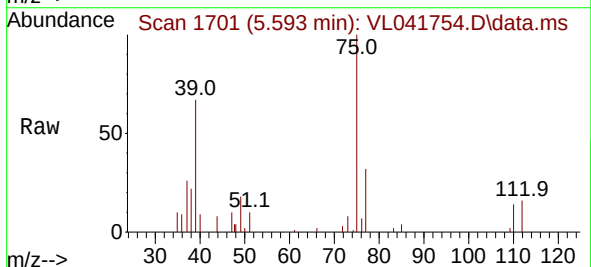
Tgt Ion: 75 Resp: 5402

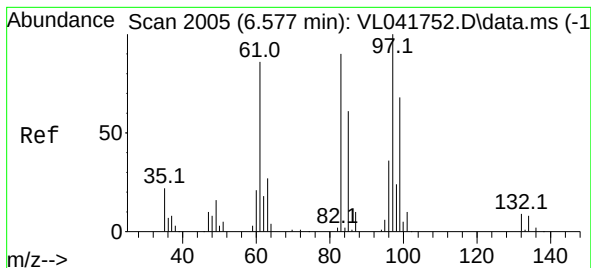
Ion Ratio Lower Upper

75 100

39 67.4 65.2 97.8

77 32.5 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 0.385 ppbv

RT: 6.571 min Scan# 2005

Delta R.T. -0.007 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC001

Tgt Ion: 97 Resp: 2694

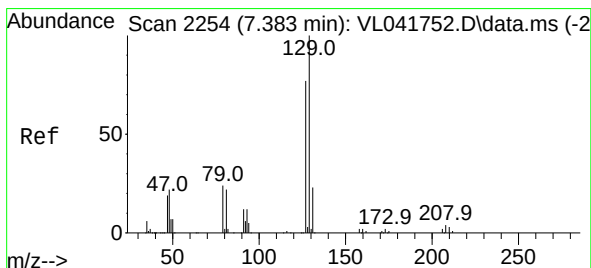
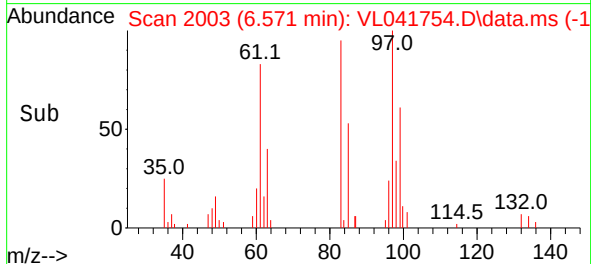
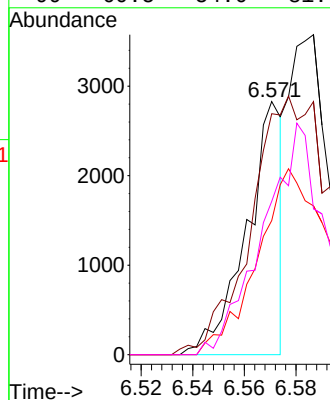
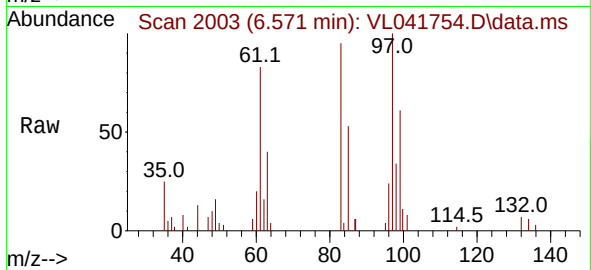
Ion Ratio Lower Upper

97 100

83 93.0 72.3 108.5

85 53.0 48.5 72.7

99 60.5 54.0 81.0



#48

Dibromochloromethane

Concen: 0.924 ppbv

RT: 7.383 min Scan# 2254

Delta R.T. -0.000 min

Lab File: VL041754.D

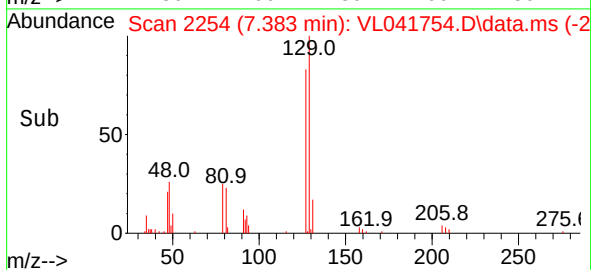
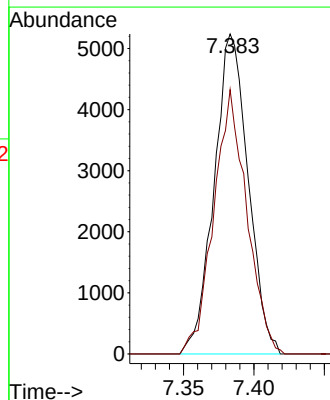
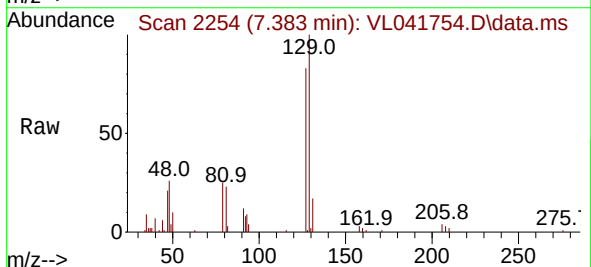
Acq: 16 Dec 2024 14:34

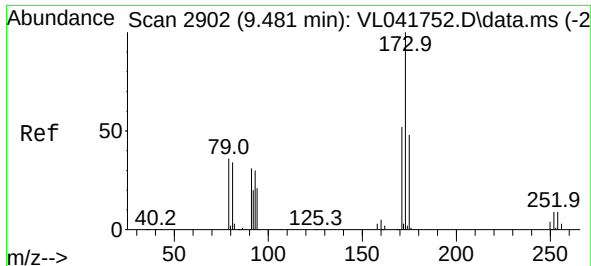
Tgt Ion: 129 Resp: 8817

Ion Ratio Lower Upper

129 100

127 80.2 38.8 116.3





#49

Bromoform

Concen: 0.905 ppbv

RT: 9.480 min Scan# 2902

Delta R.T. -0.000 min

Lab File: VL041754.D

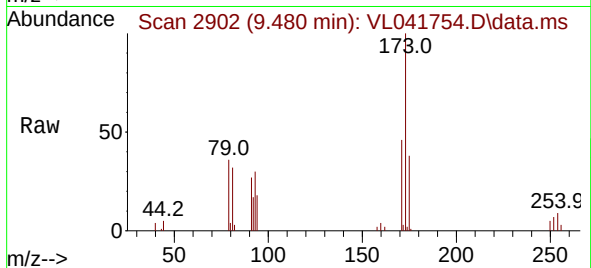
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC001



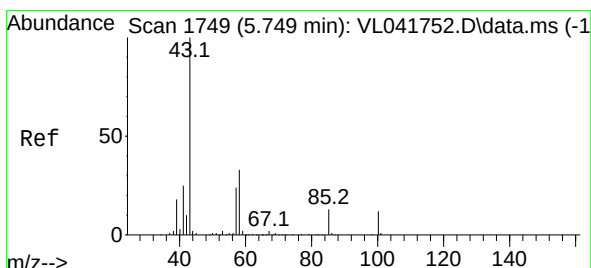
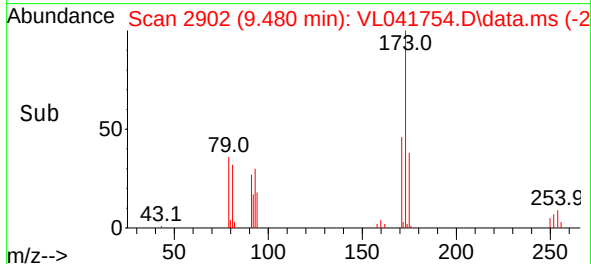
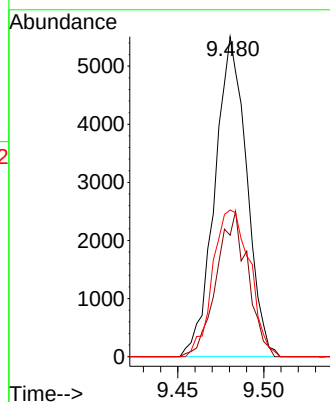
Tgt Ion:173 Resp: 7073

Ion Ratio Lower Upper

173 100

175 44.7 38.2 57.2

171 53.3 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 1.031 ppbv

RT: 5.761 min Scan# 1753

Delta R.T. 0.013 min

Lab File: VL041754.D

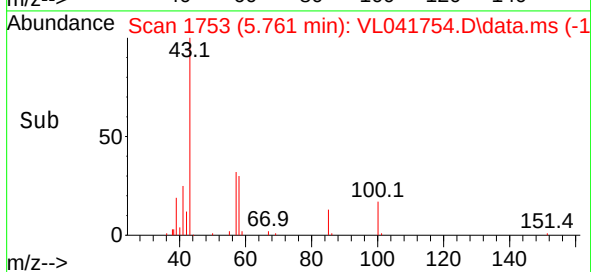
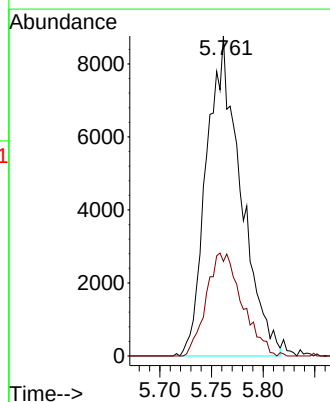
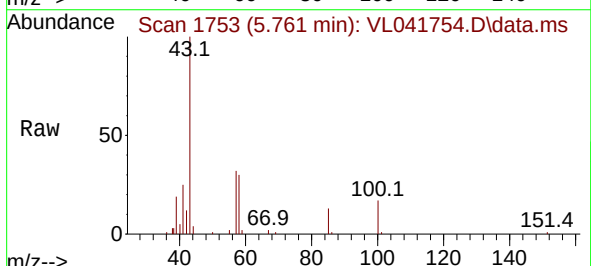
Acq: 16 Dec 2024 14:34

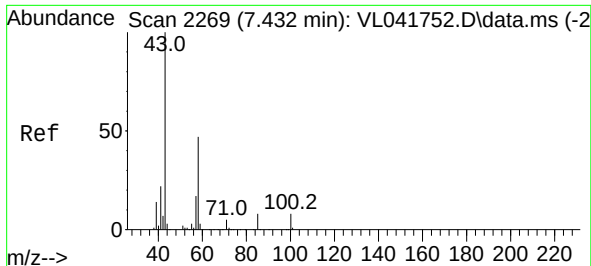
Tgt Ion: 43 Resp: 20212

Ion Ratio Lower Upper

43 100

58 33.7 26.8 40.2

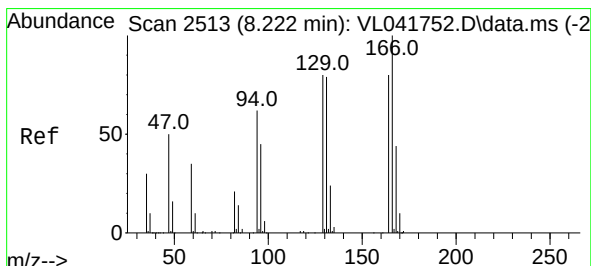
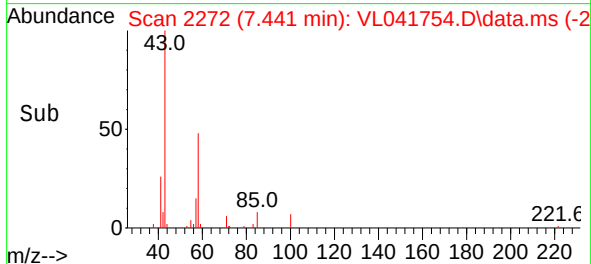
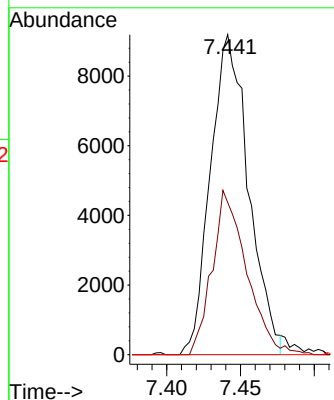
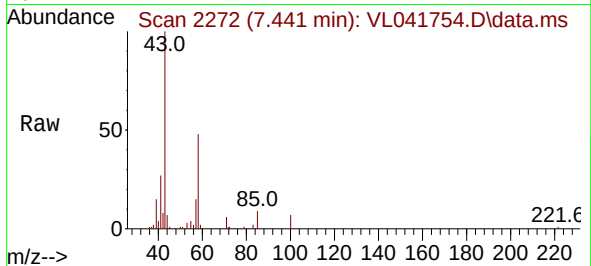




#51  
2-Hexanone  
Concen: 1.040 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

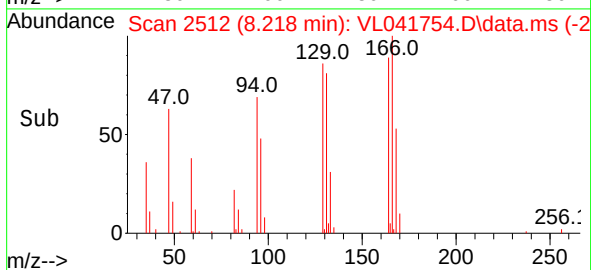
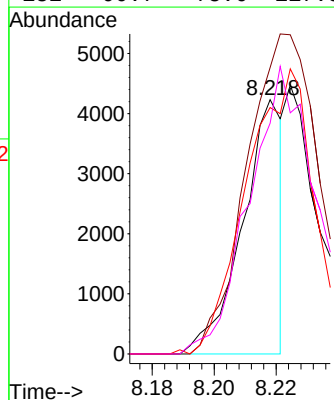
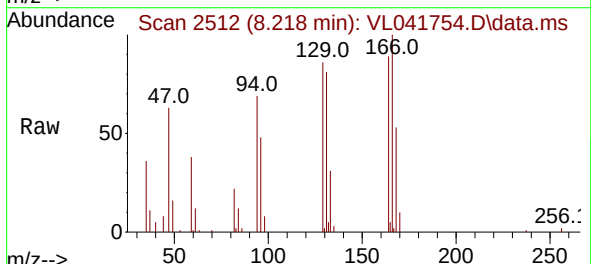
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC001

Tgt Ion: 43 Resp: 16514  
Ion Ratio Lower Upper  
43 100  
58 46.5 36.6 55.0  
98 0.2 0.1 0.1#

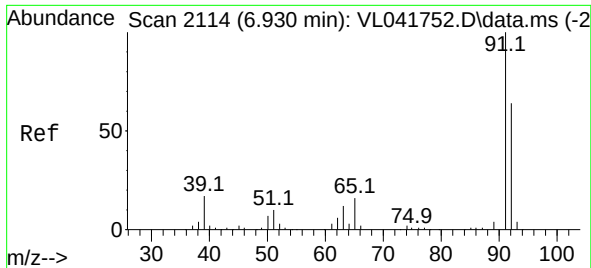


#52  
Tetrachloroethene  
Concen: 0.547 ppbv  
RT: 8.218 min Scan# 2512  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 164 Resp: 3765  
Ion Ratio Lower Upper  
164 100  
166 112.6 99.8 149.6  
129 95.3 79.6 119.4  
131 90.7 78.6 117.8







#53

Toluene

Concen: 1.029 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

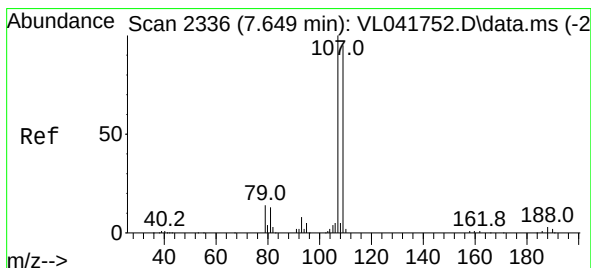
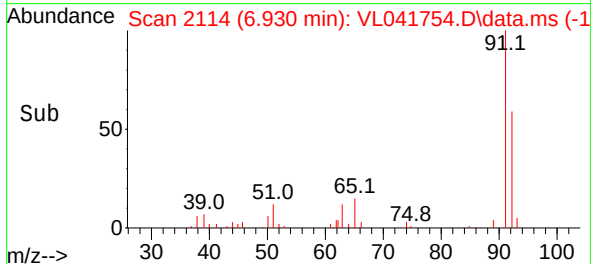
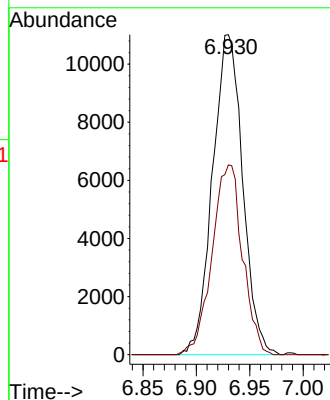
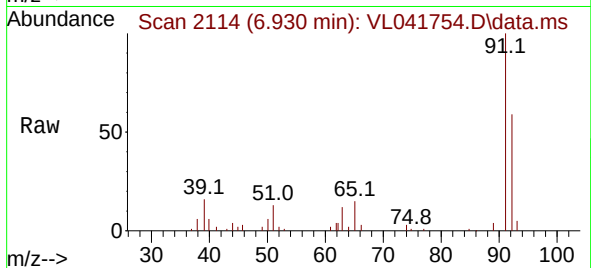
VSTDIC001

Tgt Ion: 91 Resp: 21594

Ion Ratio Lower Upper

91 100

92 60.0 47.9 71.9



#54

1,2-Dibromoethane

Concen: 1.013 ppbv

RT: 7.648 min Scan# 2336

Delta R.T. -0.000 min

Lab File: VL041754.D

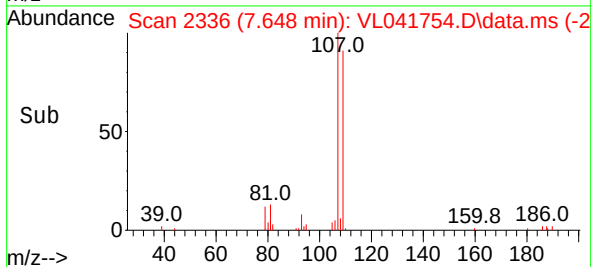
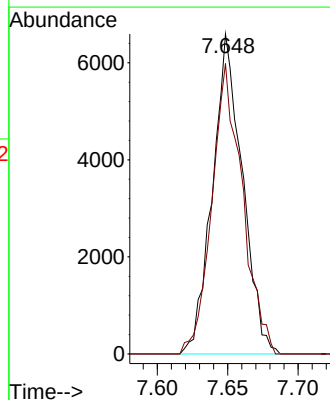
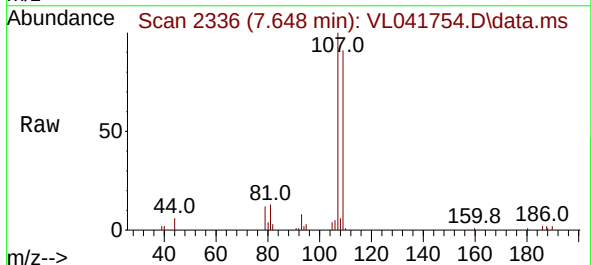
Acq: 16 Dec 2024 14:34

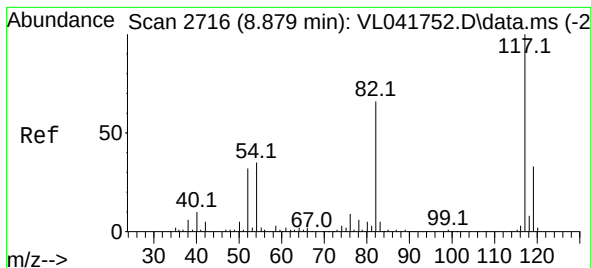
Tgt Ion: 107 Resp: 9758

Ion Ratio Lower Upper

107 100

109 90.8 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 21

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC001

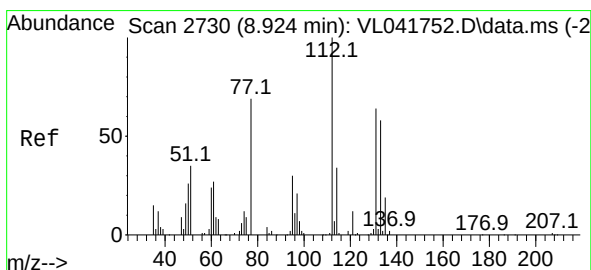
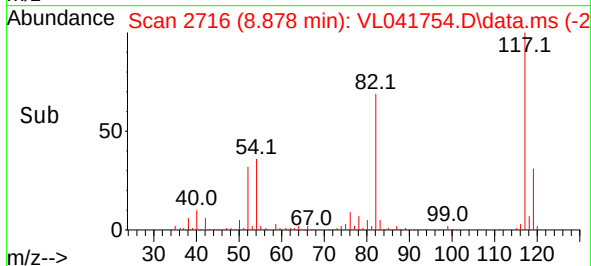
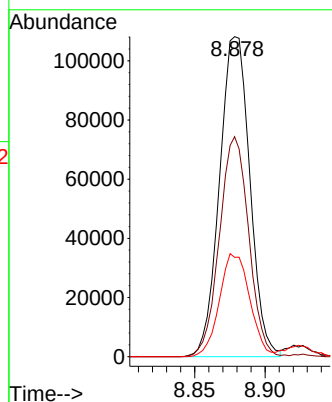
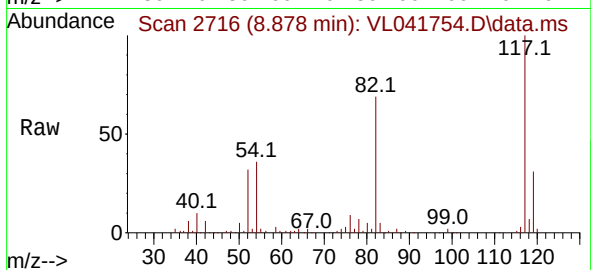
Tgt Ion:117 Resp: 162267

Ion Ratio Lower Upper

117 100

82 66.9 53.8 80.8

119 32.5 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 1.005 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

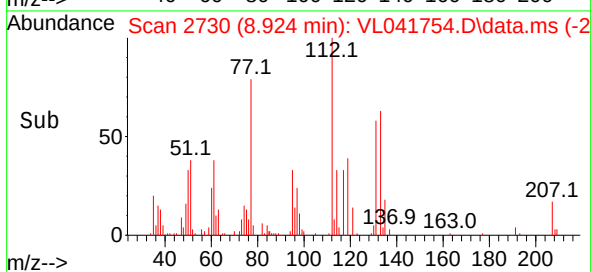
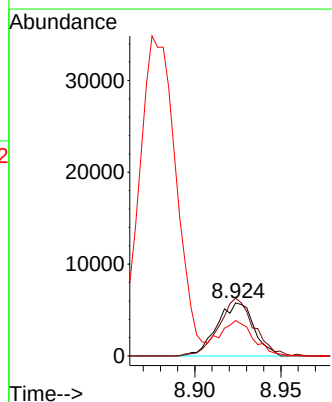
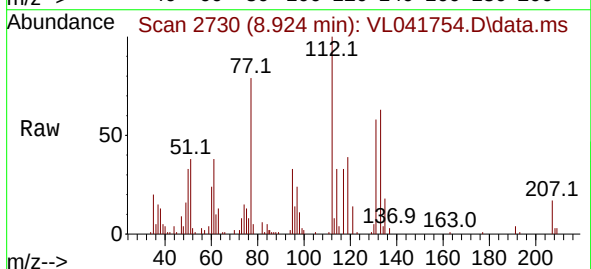
Tgt Ion:131 Resp: 8643

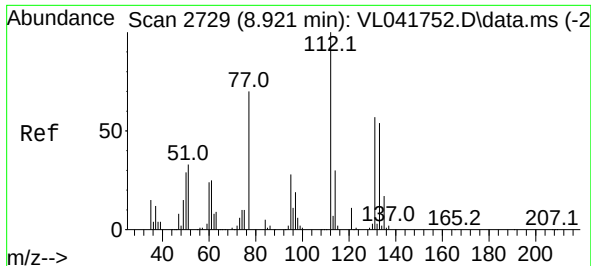
Ion Ratio Lower Upper

131 100

133 103.1 76.8 115.2

119 55.4 49.0 73.6

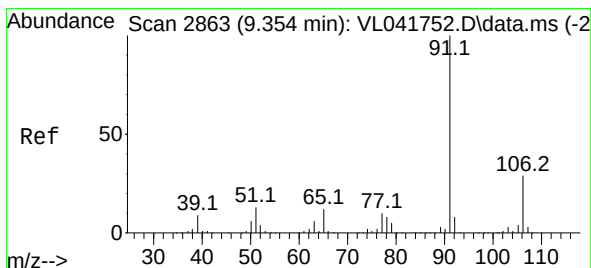
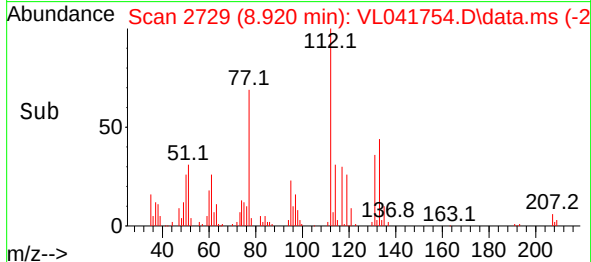
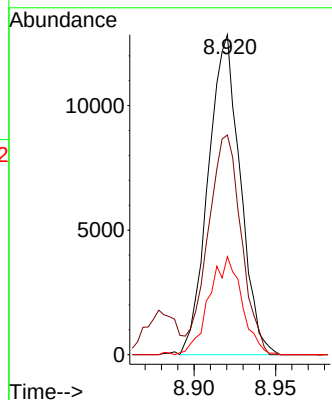
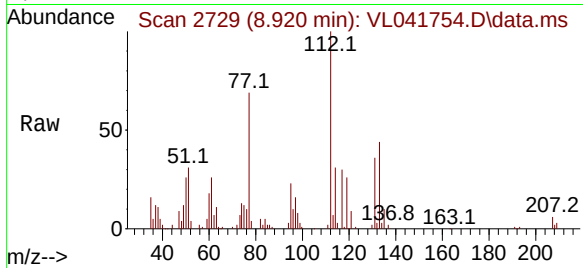




#57  
Chlorobenzene  
Concen: 1.054 ppbv  
RT: 8.920 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

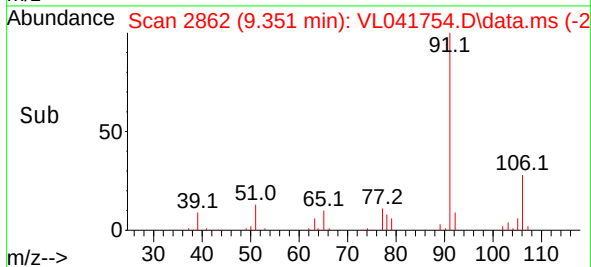
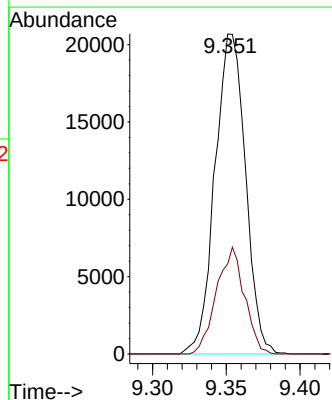
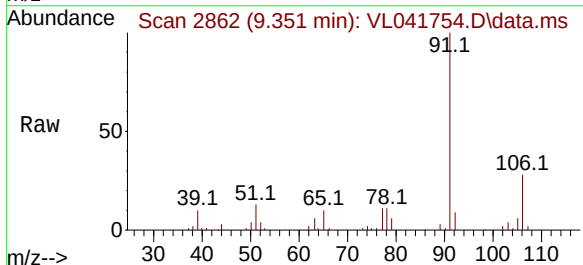
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

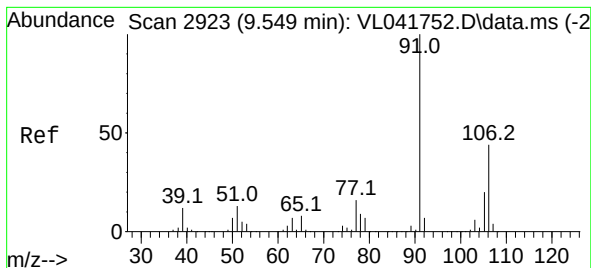
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 68.6  | 57.4  | 86.0  |
| 114     | 30.7  | 27.4  | 33.4  |



#58  
Ethyl Benzene  
Concen: 1.019 ppbv  
RT: 9.351 min Scan# 2862  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 28.1  | 23.5  | 35.3  |

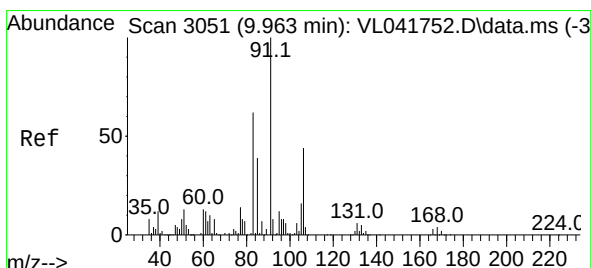
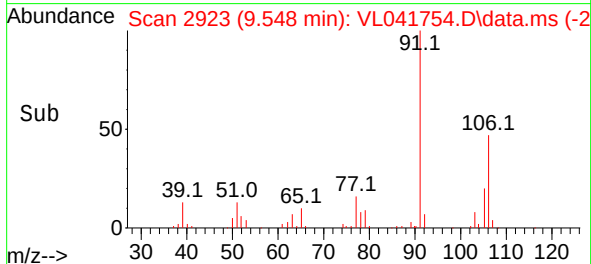
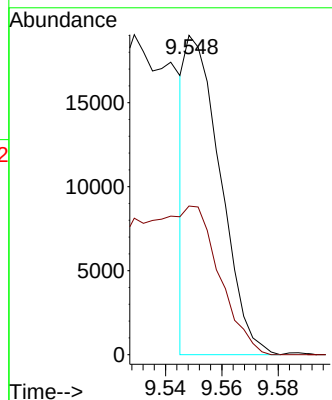
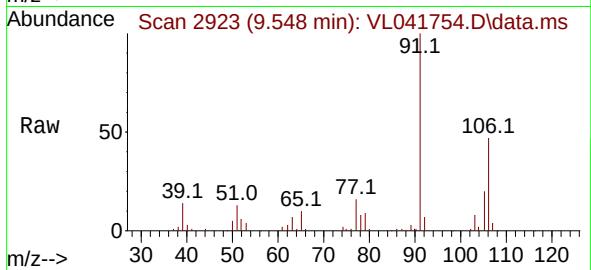




#59  
m/p-Xylene  
Concen: 0.692 ppbv  
RT: 9.548 min Scan# 2923  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

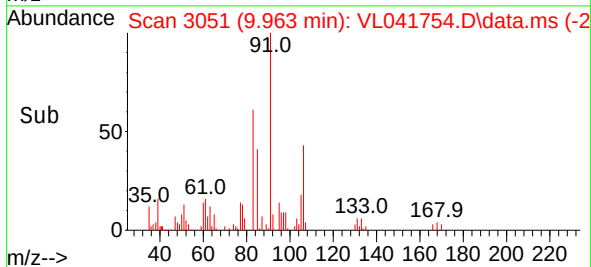
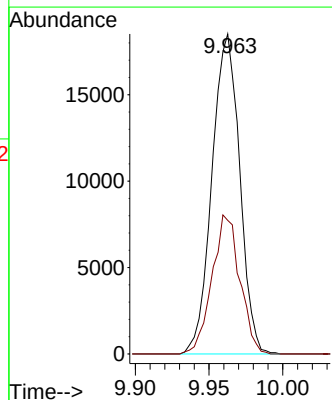
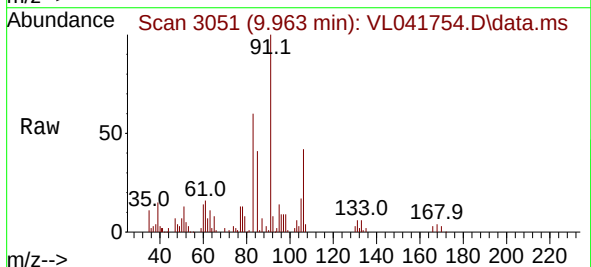
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

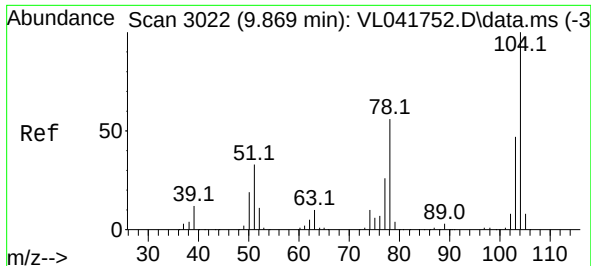
Tgt Ion: 91 Resp: 16252  
Ion Ratio Lower Upper  
91 100  
106 133.5 0.0 0.0#



#60  
o-Xylene  
Concen: 1.028 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 24210  
Ion Ratio Lower Upper  
91 100  
106 43.6 21.1 63.4

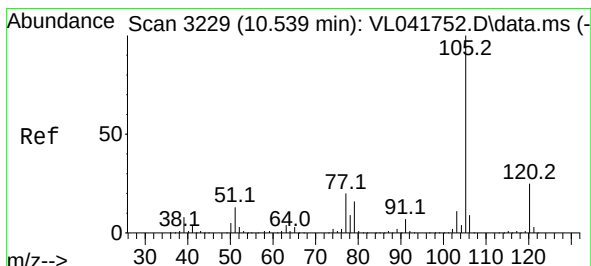
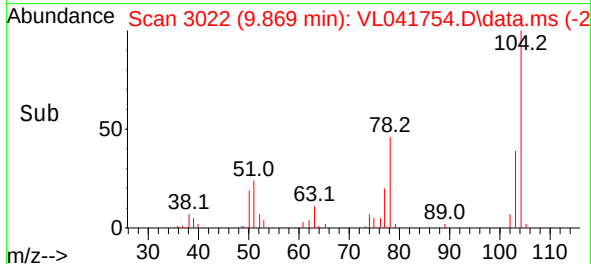
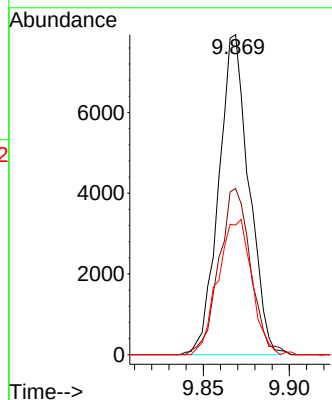
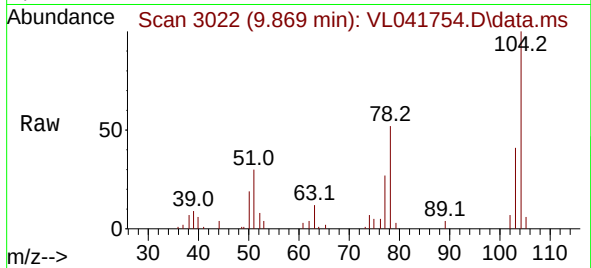




#61  
Styrene  
Concen: 0.953 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

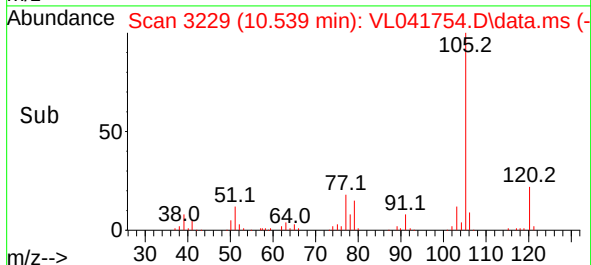
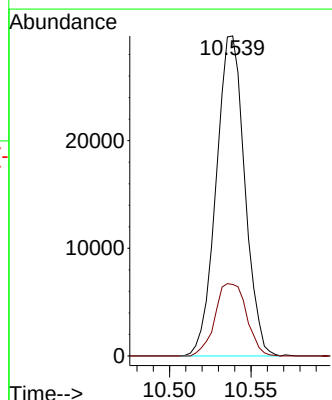
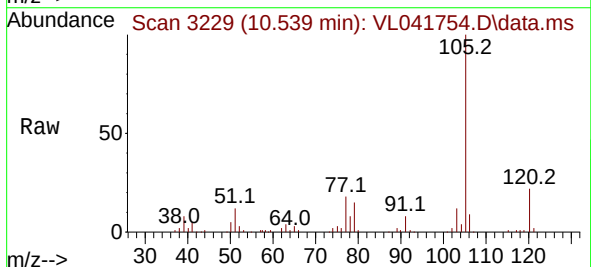
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

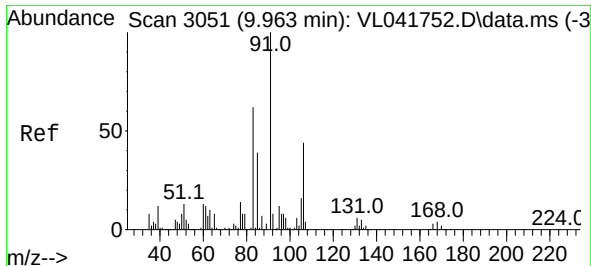
Tgt Ion:104 Resp: 9707  
Ion Ratio Lower Upper  
104 100  
78 54.3 43.8 65.6  
103 47.2 37.8 56.6



#62  
Isopropylbenzene  
Concen: 1.024 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion:105 Resp: 36251  
Ion Ratio Lower Upper  
105 100  
120 24.9 19.8 29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 1.001 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC001

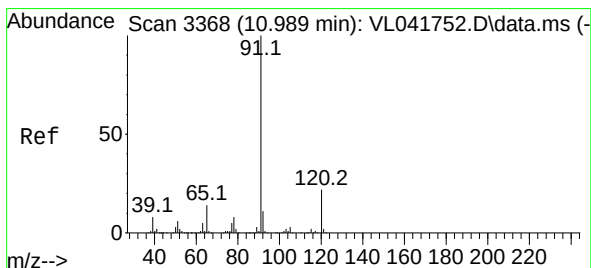
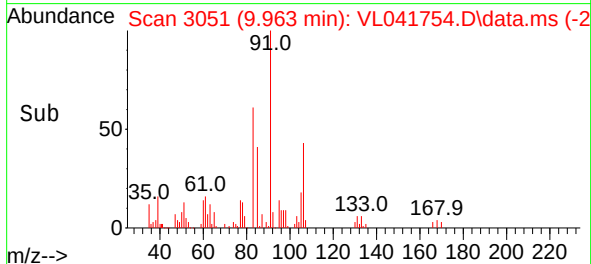
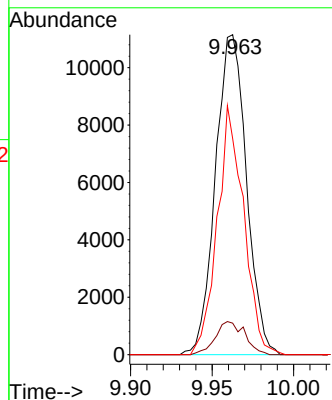
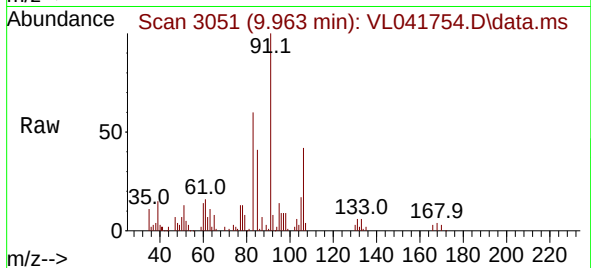
Tgt Ion: 83 Resp: 14752

Ion Ratio Lower Upper

83 100

131 9.8 4.9 14.7

85 66.2 32.0 96.2



#64

n-propylbenzene

Concen: 1.054 ppbv

RT: 10.985 min Scan# 3367

Delta R.T. -0.004 min

Lab File: VL041754.D

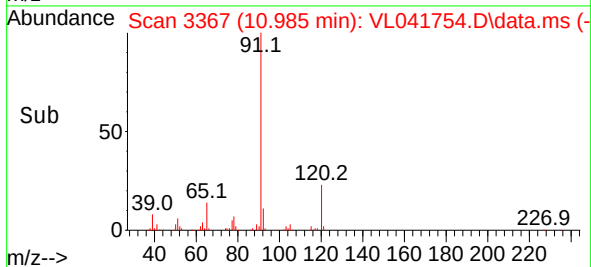
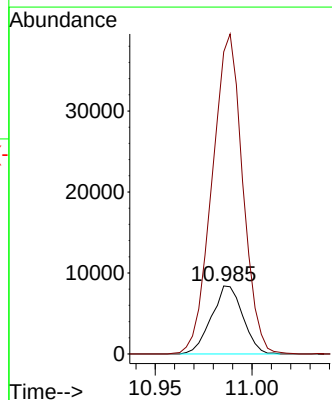
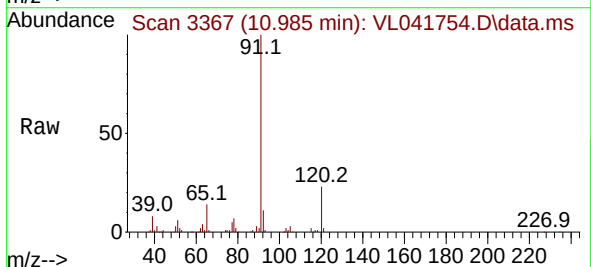
Acq: 16 Dec 2024 14:34

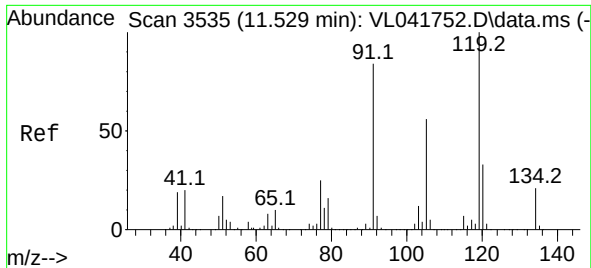
Tgt Ion: 120 Resp: 9432

Ion Ratio Lower Upper

120 100

91 461.0 387.3 580.9

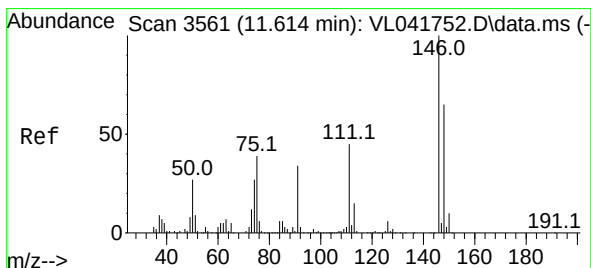
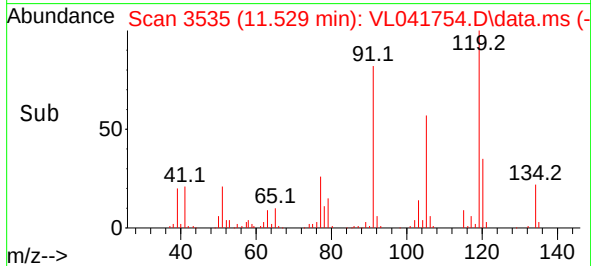
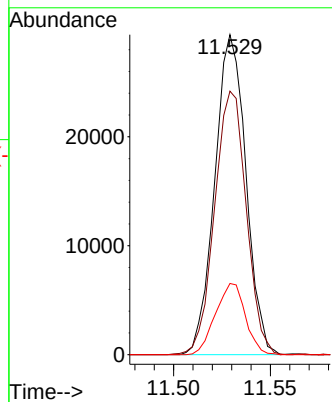
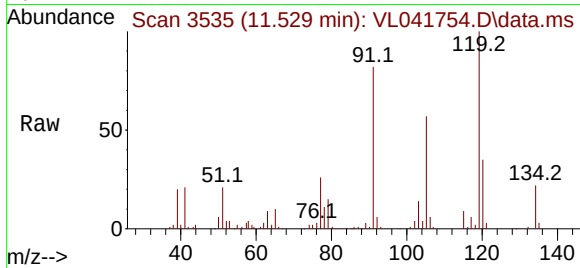




#65  
tert-Butylbenzene  
Concen: 1.030 ppbv  
RT: 11.529 min Scan# 3535  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

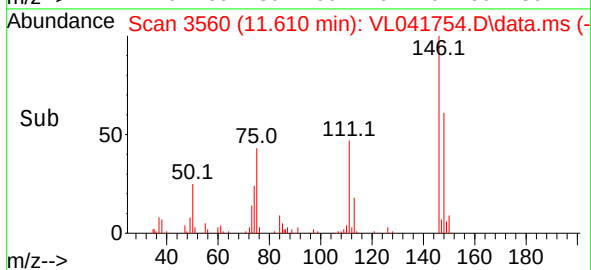
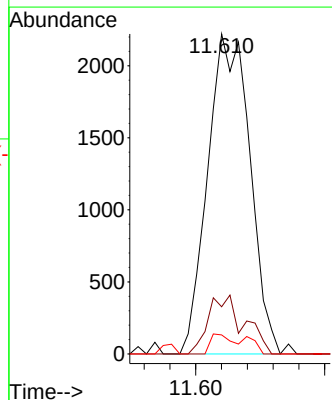
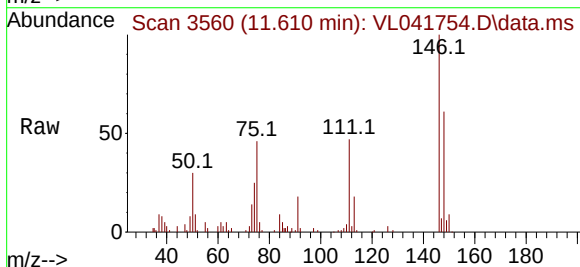
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC001

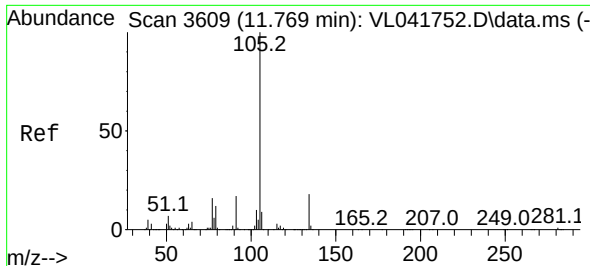
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 119   | Resp: | 32887 |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 91       | 83.8  | 67.0  | 100.4 |
| 134      | 21.3  | 16.5  | 24.7  |



#66  
Benzyl Chloride  
Concen: 0.894 ppbv  
RT: 11.610 min Scan# 3560  
Delta R.T. -0.004 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 2518  |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 126      | 15.6  | 13.9  | 20.9  |
| 128      | 5.9   | 4.4   | 6.6   |





#67

sec-Butylbenzene

Concen: 1.019 ppbv

RT: 11.765 min Scan# 3609

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

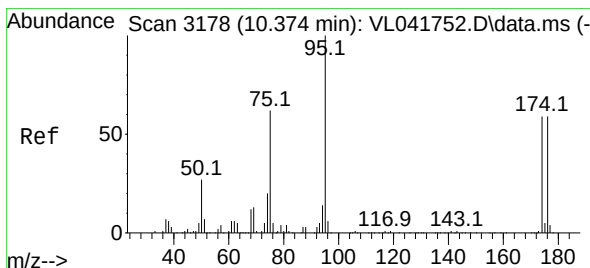
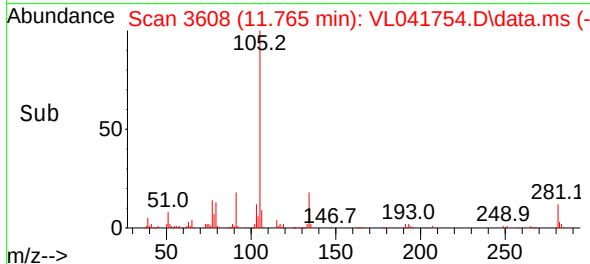
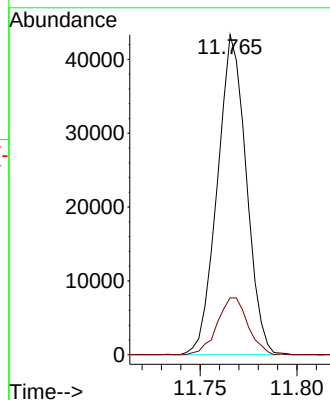
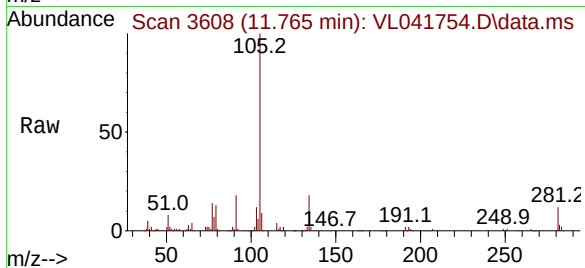
VSTDIC001

Tgt Ion:105 Resp: 45015

Ion Ratio Lower Upper

105 100

134 18.8 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 9.825 ppbv

RT: 10.374 min Scan# 3178

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

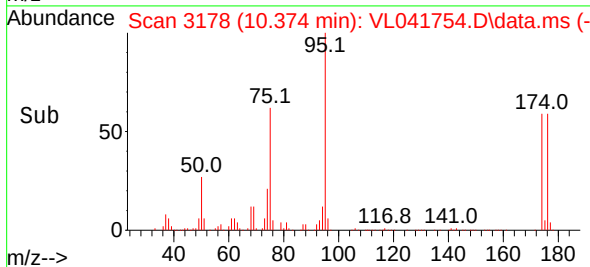
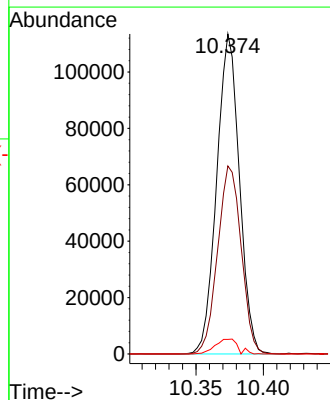
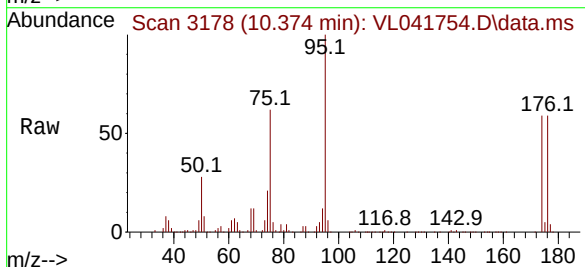
Tgt Ion: 95 Resp: 132857

Ion Ratio Lower Upper

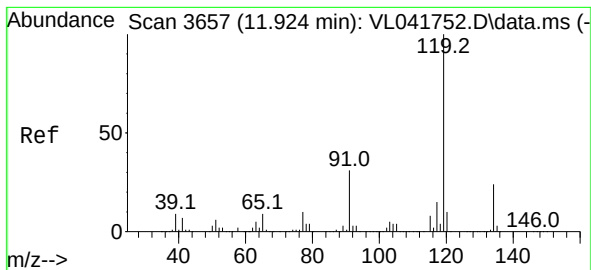
95 100

174 61.0 47.6 71.4

175 4.7 3.7 5.5



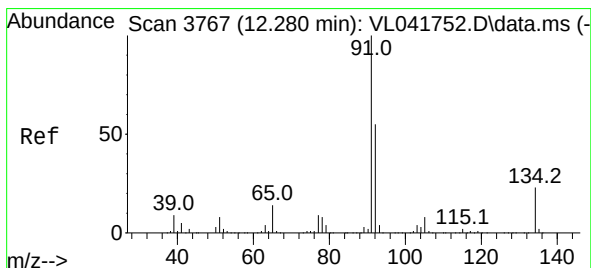
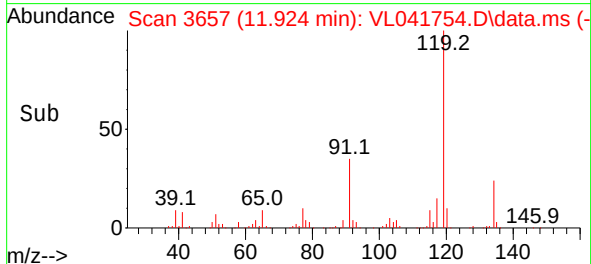
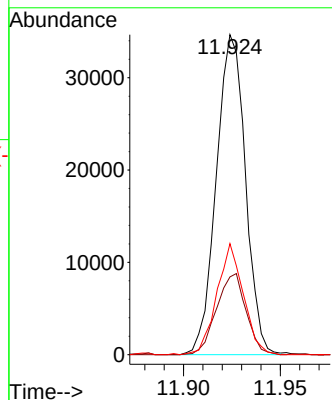
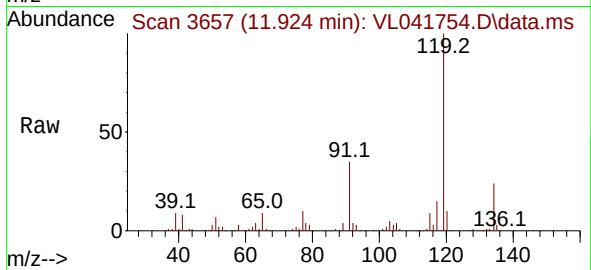




#69  
p-Isopropyltoluene  
Concen: 0.997 ppbv  
RT: 11.924 min Scan# 3657  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

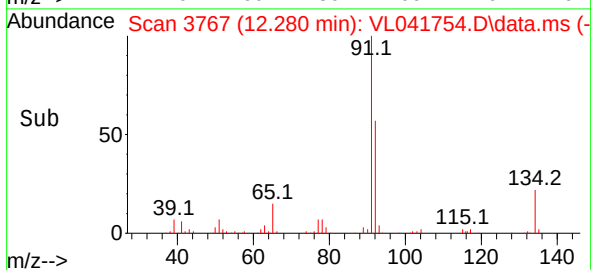
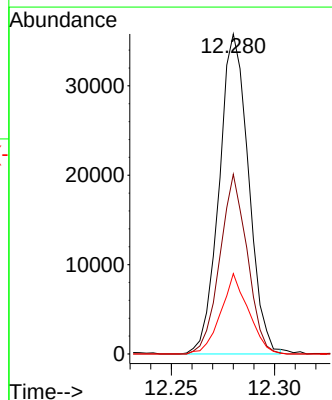
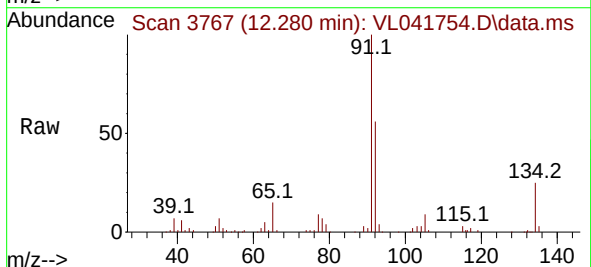
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC001

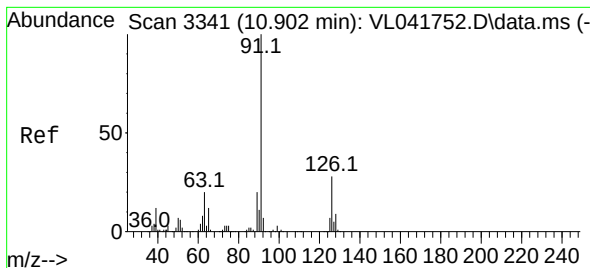
Tgt Ion:119 Resp: 36298  
Ion Ratio Lower Upper  
119 100  
134 25.8 19.6 29.4  
91 31.8 24.4 36.6



#70  
n-Butylbenzene  
Concen: 1.007 ppbv  
RT: 12.280 min Scan# 3767  
Delta R.T. -0.000 min  
Lab File: VL041754.D  
Acq: 16 Dec 2024 14:34

Tgt Ion: 91 Resp: 35432  
Ion Ratio Lower Upper  
91 100  
92 52.4 43.2 64.8  
134 23.6 18.2 27.4





#71

2-Chlorotoluene

Concen: 1.020 ppbv

RT: 10.901 min Scan# 3341

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

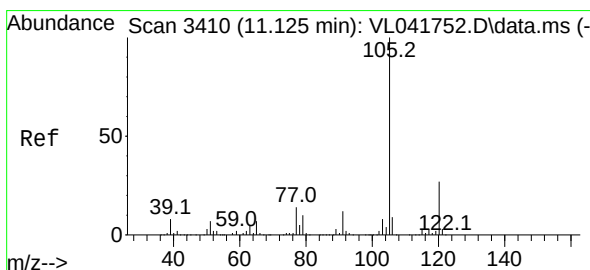
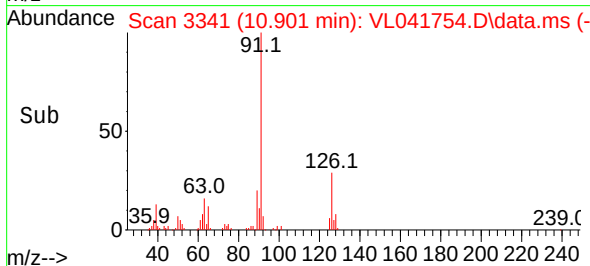
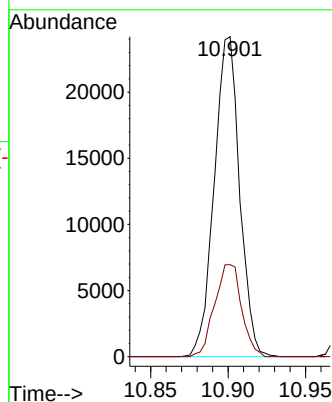
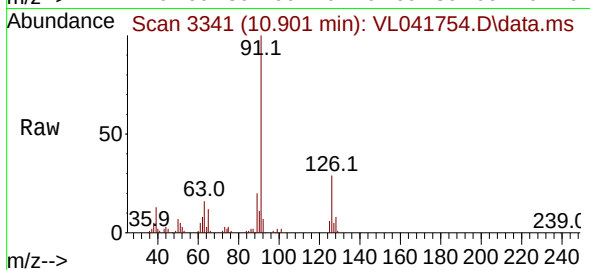
VSTDIC001

Tgt Ion: 91 Resp: 27561

Ion Ratio Lower Upper

91 100

126 30.5 11.6 46.4



#72

4-Ethyltoluene

Concen: 0.970 ppbv

RT: 11.125 min Scan# 3410

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion: 105 Resp: 26921

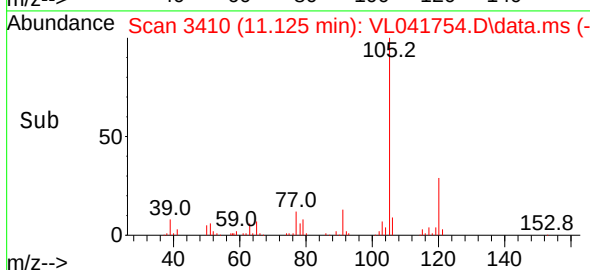
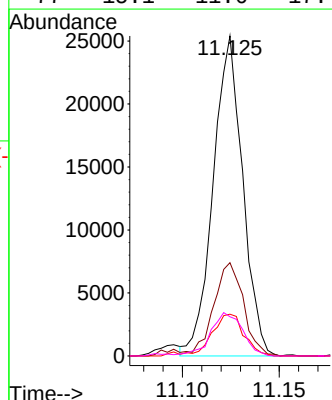
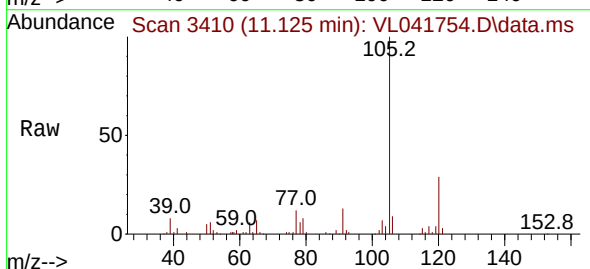
Ion Ratio Lower Upper

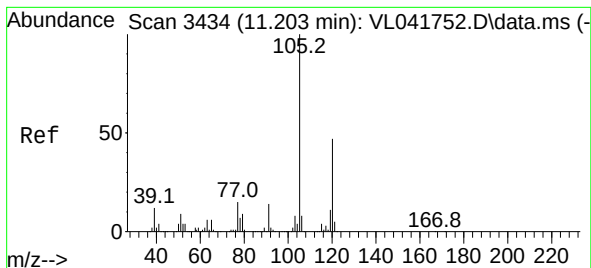
105 100

120 30.7 23.3 34.9

91 14.5 10.9 16.3

77 15.1 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 0.969 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

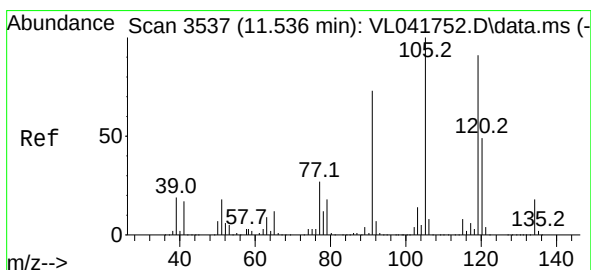
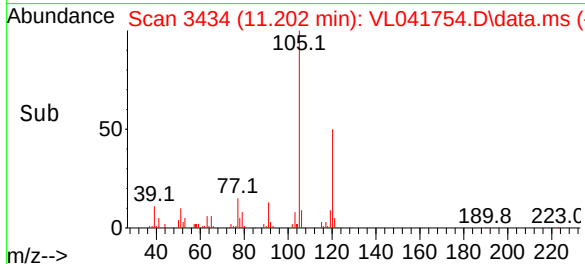
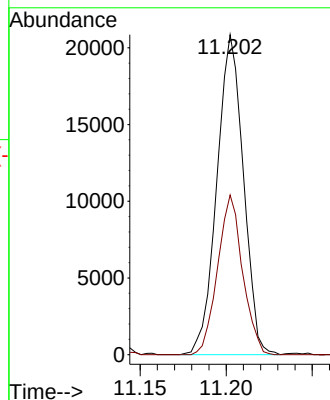
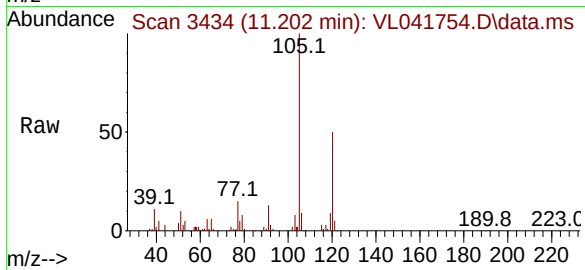
VSTDIC001

Tgt Ion:105 Resp: 22360

Ion Ratio Lower Upper

105 100

120 49.9 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 0.994 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Tgt Ion:105 Resp: 24654

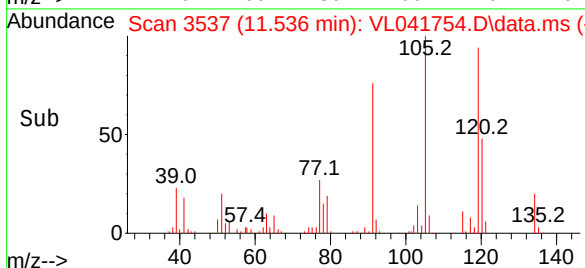
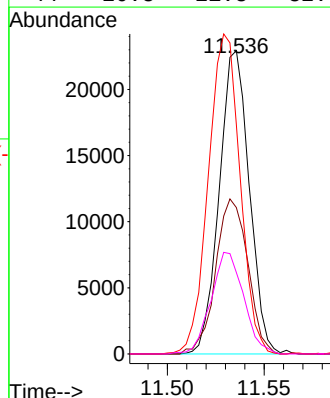
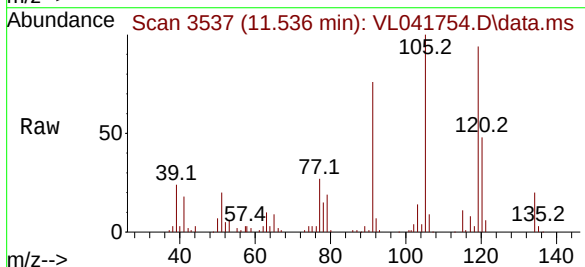
Ion Ratio Lower Upper

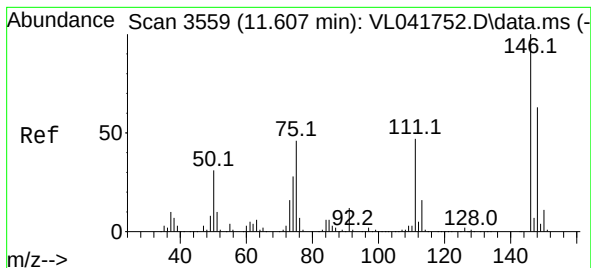
105 100

120 48.3 39.0 58.4

91 75.5 58.1 87.1

77 26.8 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 1.042 ppbv

RT: 11.604 min Scan# 3558

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC001

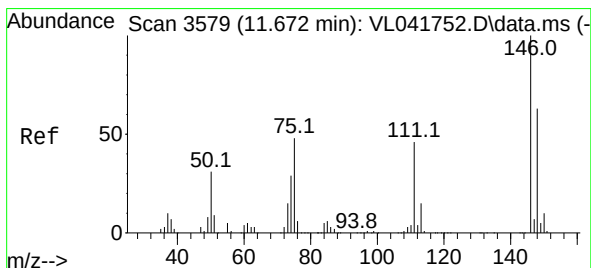
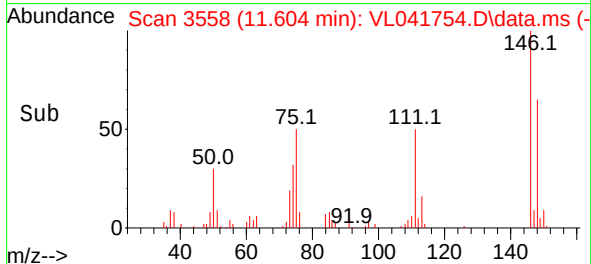
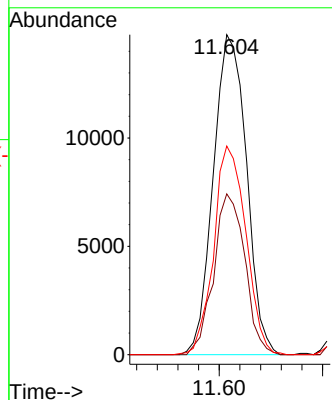
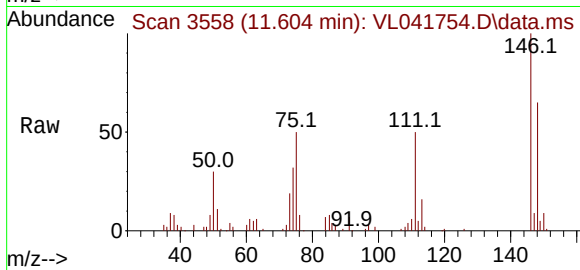
Tgt Ion:146 Resp: 16476

Ion Ratio Lower Upper

146 100

111 47.3 23.4 70.3

148 63.1 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 1.010 ppbv

RT: 11.668 min Scan# 3578

Delta R.T. -0.004 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

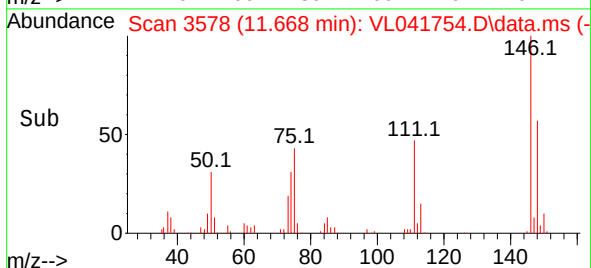
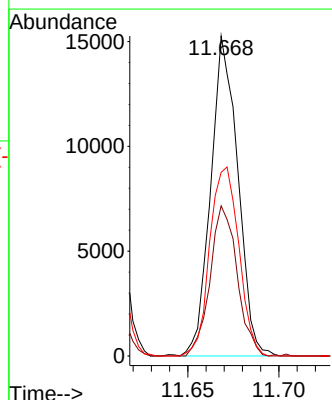
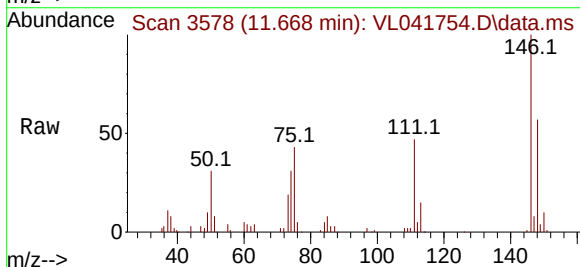
Tgt Ion:146 Resp: 15774

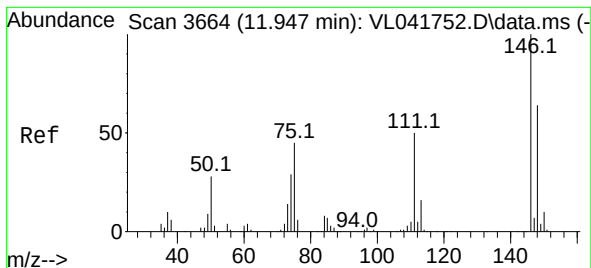
Ion Ratio Lower Upper

146 100

111 47.0 22.7 68.1

148 63.4 31.4 94.0





#77

1,2-Dichlorobenzene

Concen: 1.043 ppbv

RT: 11.947 min Scan# 3

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001

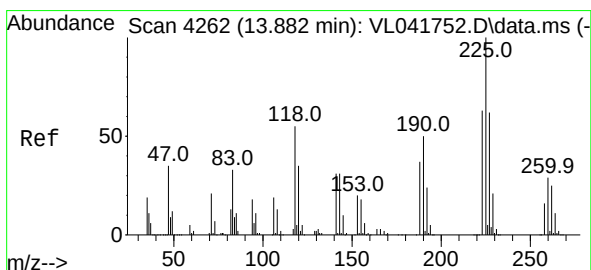
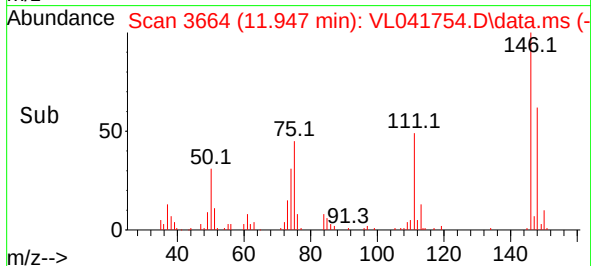
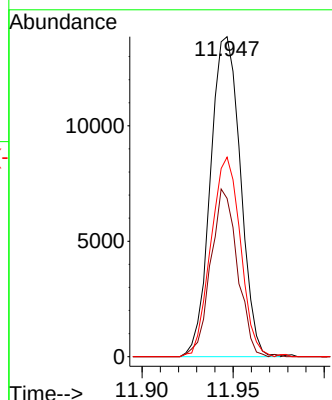
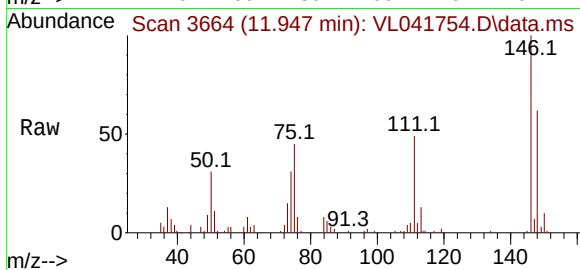
Tgt Ion:146 Resp: 15866

Ion Ratio Lower Upper

146 100

111 47.0 24.8 74.3

148 61.6 31.8 95.4



#78

Hexachloro-1,3-Butadiene

Concen: 1.087 ppbv

RT: 13.882 min Scan# 4262

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

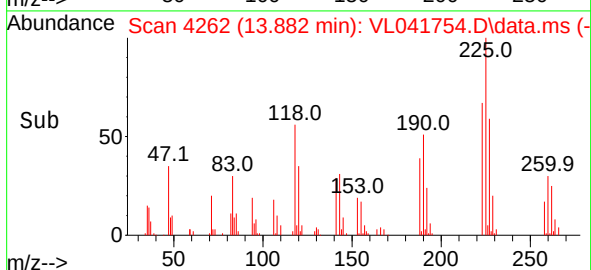
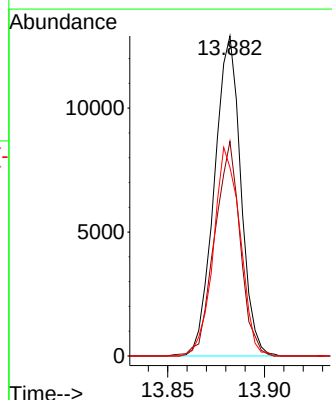
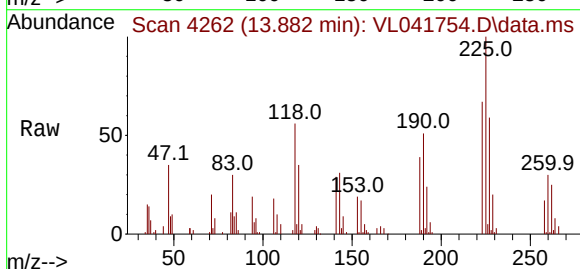
Tgt Ion:225 Resp: 12266

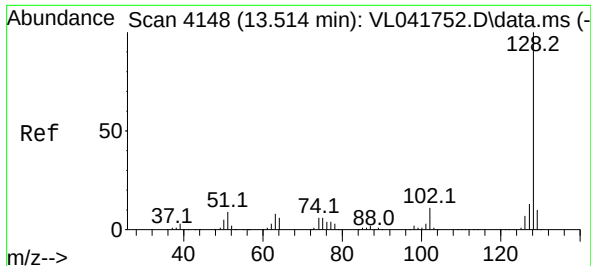
Ion Ratio Lower Upper

225 100

223 65.0 50.5 75.7

227 65.7 50.3 75.5





#79

Naphthalene

Concen: 0.982 ppbv

RT: 13.513 min Scan# 4148

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001

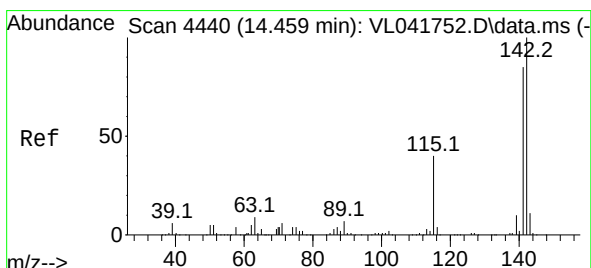
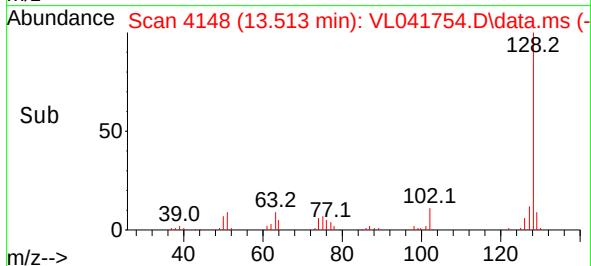
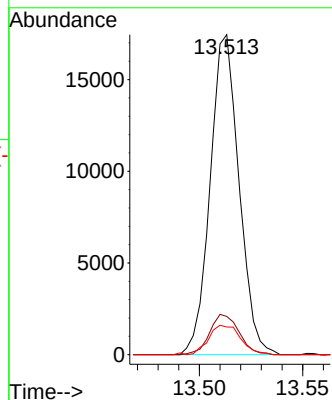
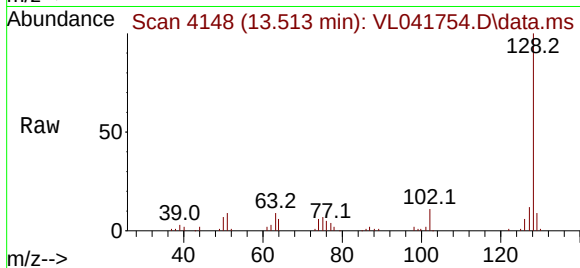
Tgt Ion:128 Resp: 16971

Ion Ratio Lower Upper

128 100

127 12.0 10.7 16.1

129 8.7 8.2 12.4



#80

Naphthalene, 2-methyl-

Concen: 0.281 ppbv

RT: 14.458 min Scan# 4440

Delta R.T. -0.000 min

Lab File: VL041754.D

Acq: 16 Dec 2024 14:34

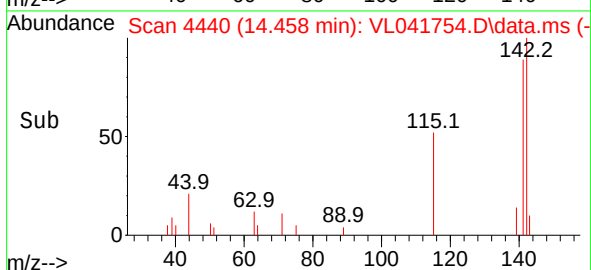
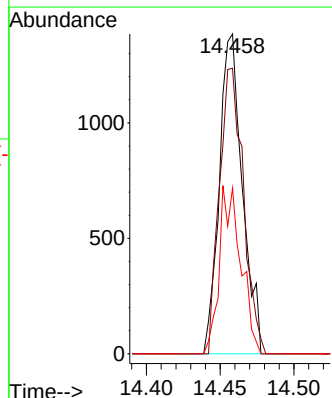
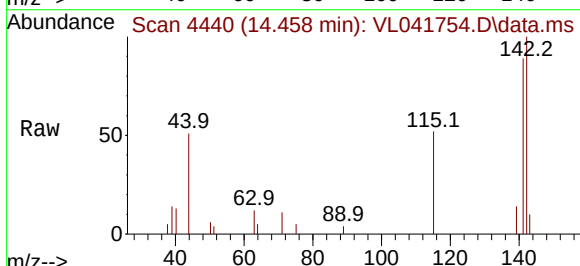
Tgt Ion:142 Resp: 1504

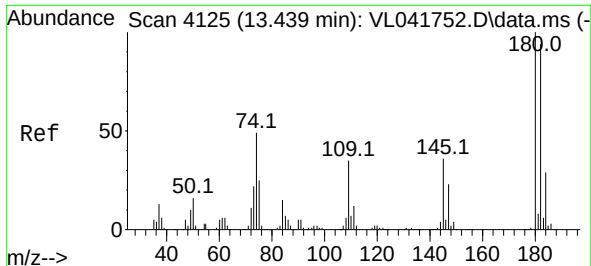
Ion Ratio Lower Upper

142 100

141 92.8 68.4 102.6

115 48.9 32.5 48.7#





#81

1,2,4-Trichlorobenzene

Concen: 0.950 ppbv

RT: 13.439 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041754.D

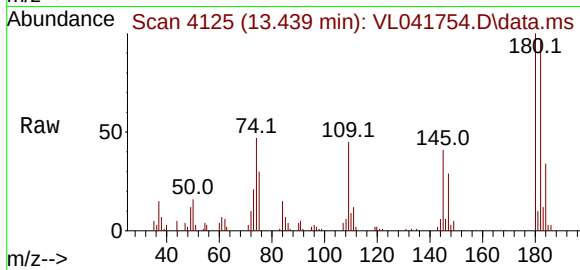
Acq: 16 Dec 2024 14:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC001



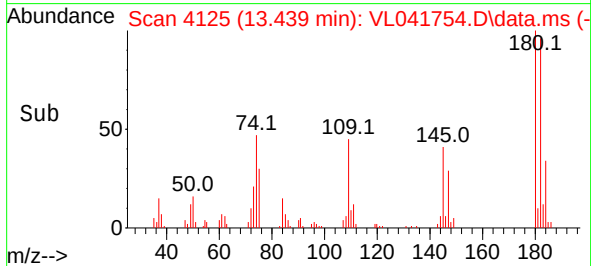
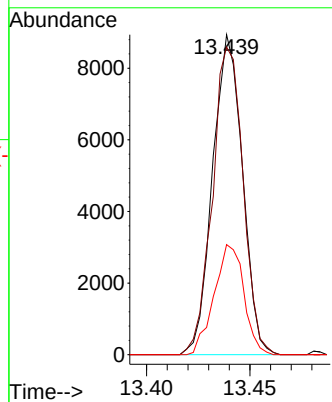
Tgt Ion:180 Resp: 8973

Ion Ratio Lower Upper

180 100

182 99.0 77.0 115.6

184 34.2 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041755.D  
 Acq On : 16 Dec 2024 15:05  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

Quant Time: Dec 19 06:14:17 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 66562    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.959 | 114  | 178453   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.882 | 117  | 158571   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 10.377 | 95    | 132273   | 10.010   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.100% |

#### Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 6277  | 0.530 | ppbv   | 94     |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 5587  | 0.515 | ppbv   | 95     |
| 4) Chloromethane              | 1.531 | 50  | 2452  | 0.529 | ppbv   | 90     |
| 5) Vinyl Chloride             | 1.580 | 62  | 2269  | 0.486 | ppbv   | 97     |
| 6) Bromomethane               | 1.667 | 94  | 1143  | 0.519 | ppbv # | 78     |
| 7) Chloroethane               | 1.703 | 64  | 939   | 0.518 | ppbv   | 88     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 5699  | 0.538 | ppbv   | 97     |
| 9) Propene                    | 1.483 | 41  | 2622  | 0.557 | ppbv # | 82     |
| 10) Heptane                   | 4.978 | 43  | 5865  | 0.485 | ppbv   | 98     |
| 11) Trichlorofluoromethane    | 1.878 | 101 | 6594  | 0.524 | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 4962  | 0.519 | ppbv   | 96     |
| 13) Ethanol                   | 1.719 | 45  | 378   | 0.966 | ppbv   | 96     |
| 14) Bromoethene               | 1.781 | 108 | 1694  | 0.524 | ppbv # | 93     |
| 15) Acetone                   | 1.836 | 43  | 8233  | 0.636 | ppbv   | 97     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 2966  | 0.582 | ppbv   | 88     |
| 17) tert-Butyl alcohol        | 2.043 | 59  | 6654  | 0.518 | ppbv # | 91     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 2022  | 0.504 | ppbv   | 96     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 5687  | 0.732 | ppbv # | 39     |
| 20) Methylene Chloride        | 2.062 | 84  | 2174  | 0.589 | ppbv # | 91     |
| 21) Allyl Chloride            | 2.098 | 41  | 3354  | 0.478 | ppbv   | 86     |
| 22) trans-1,2-Dichloroethene  | 2.341 | 96  | 2494  | 0.543 | ppbv   | 83     |
| 23) Vinyl Acetate             | 2.464 | 43  | 2599  | 0.462 | ppbv # | 98     |
| 24) 1,1-Dichloroethane        | 2.409 | 63  | 4854  | 0.522 | ppbv # | 97     |
| 25) Ethyl Acetate             | 2.839 | 43  | 12040 | 0.497 | ppbv # | 97     |
| 26) Hexane                    | 2.829 | 57  | 4735  | 0.518 | ppbv   | 96     |
| 27) Carbon Disulfide          | 2.153 | 76  | 3409  | 0.414 | ppbv # | 37     |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 3438  | 0.464 | ppbv   | 99     |
| 29) Chloroform                | 2.849 | 83  | 7172  | 0.515 | ppbv   | 98     |
| 30) Cyclohexane               | 3.859 | 84  | 4051  | 0.521 | ppbv   | 96     |
| 31) cis-1,2-Dichloroethene    | 2.723 | 61  | 4758  | 0.504 | ppbv   | 91     |
| 32) 1,1,1-Trichloroethane     | 3.367 | 97  | 7182  | 0.518 | ppbv   | 99     |
| 34) 2-Butanone                | 2.557 | 43  | 7756  | 0.540 | ppbv   | 94     |
| 35) Carbon Tetrachloride      | 3.765 | 117 | 5655  | 0.446 | ppbv   | 90     |
| 36) Benzene                   | 3.658 | 78  | 9629  | 0.522 | ppbv   | 97     |
| 37) 1,2-Dichloroethane        | 3.218 | 62  | 6154  | 0.536 | ppbv   | 99     |
| 38) Trichloroethene           | 4.551 | 130 | 2613  | 0.336 | ppbv # | 88     |
| 39) 1,2-Dichloropropane       | 4.318 | 63  | 2224  | 0.333 | ppbv # | 84     |
| 40) 1,4-Dioxane               | 4.597 | 88  | 229   | 0.070 | ppbv # | 20     |
| 41) Tetrahydrofuran           | 3.066 | 42  | 4061  | 0.505 | ppbv   | 99     |
| 42) Bromodichloromethane      | 4.490 | 83  | 3315  | 0.251 | ppbv # | 95     |
| 43) Methyl Methacrylate       | 4.881 | 69  | 3322  | 0.472 | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 4.645 | 57  | 9729  | 0.309 | ppbv # | 39     |
| 45) t-1,3-Dichloropropene     | 6.438 | 75  | 279   | 0.038 | ppbv   | 92     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041755.D  
 Acq On : 16 Dec 2024 15:05  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

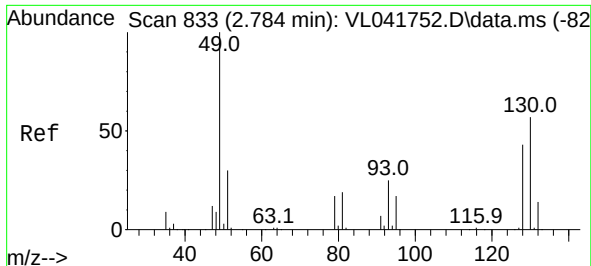
Quant Time: Dec 19 06:14:17 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.597  | 75   | 1656     | 0.179 | ppbv # | 81       |
| 47) 1,1,2-Trichloroethane     | 6.587  | 97   | 2388     | 0.342 | ppbv # | 84       |
| 48) Dibromochloromethane      | 7.387  | 129  | 3865     | 0.406 | ppbv   | 99       |
| 49) Bromoform                 | 9.484  | 173  | 2869     | 0.368 | ppbv   | 96       |
| 50) 4-Methyl-2-Pentanone      | 5.765  | 43   | 4771     | 0.244 | ppbv # | 41       |
| 51) 2-Hexanone                | 7.451  | 43   | 7412     | 0.468 | ppbv # | 99       |
| 52) Tetrachloroethene         | 8.225  | 164  | 3091     | 0.450 | ppbv # | 78       |
| 53) Toluene                   | 6.933  | 91   | 10554    | 0.504 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.652  | 107  | 2762     | 0.287 | ppbv   | 88       |
| 56) 1,1,1,2-Tetrachloroethane | 8.930  | 131  | 1785     | 0.212 | ppbv # | 1        |
| 57) Chlorobenzene             | 8.927  | 112  | 4266     | 0.263 | ppbv   | 95       |
| 58) Ethyl Benzene             | 9.358  | 91   | 13428    | 0.470 | ppbv   | 97       |
| 59) m/p-Xylene                | 9.552  | 91   | 10592    | 0.461 | ppbv # | 100      |
| 60) o-Xylene                  | 9.963  | 91   | 10954    | 0.476 | ppbv   | 98       |
| 61) Styrene                   | 9.869  | 104  | 4314     | 0.433 | ppbv   | 94       |
| 62) Isopropylbenzene          | 10.542 | 105  | 16953    | 0.490 | ppbv   | 95       |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 7559     | 0.525 | ppbv   | 98       |
| 64) n-propylbenzene           | 10.989 | 120  | 4126     | 0.472 | ppbv   | 92       |
| 65) tert-Butylbenzene         | 11.529 | 119  | 15569    | 0.499 | ppbv   | 99       |
| 66) Benzyl Chloride           | 11.620 | 91   | 580      | 0.211 | ppbv # | 76       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 21263    | 0.492 | ppbv   | 96       |
| 69) p-Isopropyltoluene        | 11.928 | 119  | 17041    | 0.479 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.284 | 91   | 15671    | 0.456 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.902 | 91   | 13000    | 0.492 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 11.128 | 105  | 13324    | 0.491 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 11.206 | 105  | 10497    | 0.466 | ppbv   | 91       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 11070    | 0.457 | ppbv # | 76       |
| 75) 1,3-Dichlorobenzene       | 11.604 | 146  | 8107     | 0.525 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 7893     | 0.517 | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 7997     | 0.538 | ppbv   | 96       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 6232     | 0.565 | ppbv   | 98       |
| 79) Naphthalene               | 13.517 | 128  | 7360     | 0.436 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.462 | 142  | 748      | 0.143 | ppbv   | 94       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 4248     | 0.460 | ppbv   | 93       |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDICC0.5

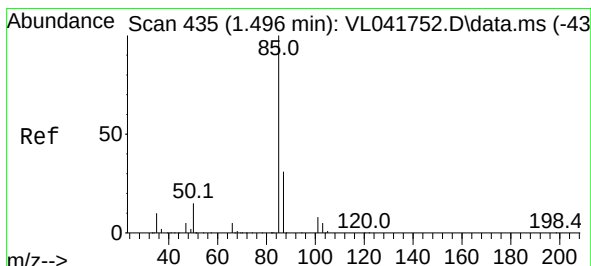
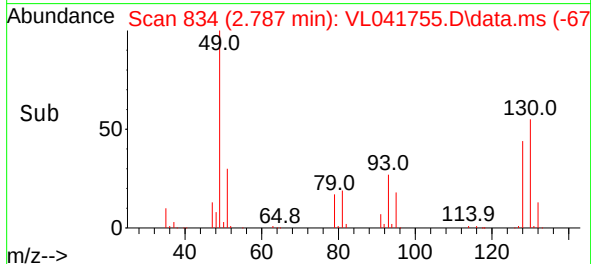
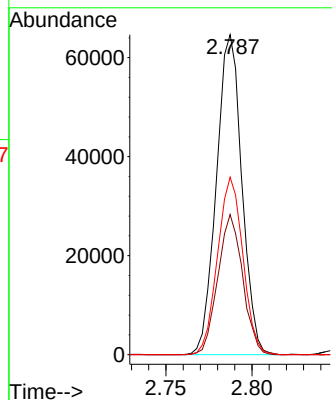
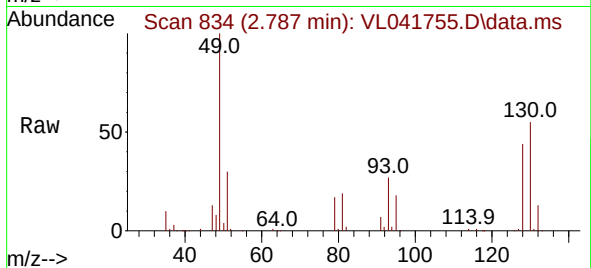
- 1
- 2
- 3
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- 5
- 6
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- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19



#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 834  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

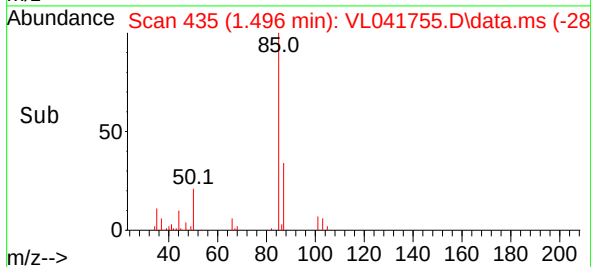
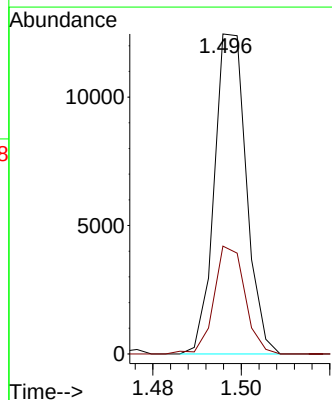
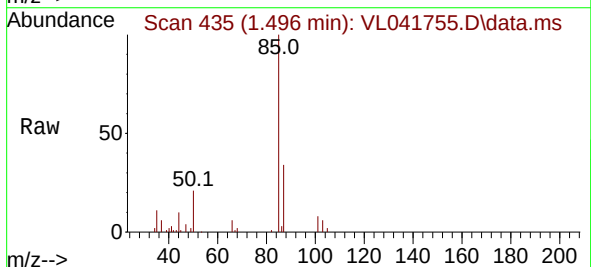
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

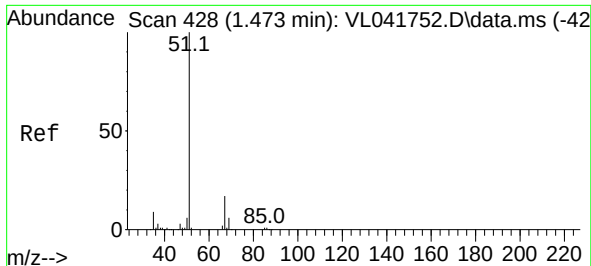
Tgt Ion: 49 Resp: 66562  
Ion Ratio Lower Upper  
49 100  
128 42.6 21.6 64.6  
130 55.1 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.530 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 85 Resp: 6277  
Ion Ratio Lower Upper  
85 100  
87 33.7 24.5 36.7

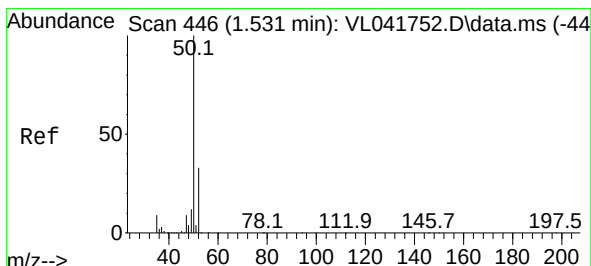
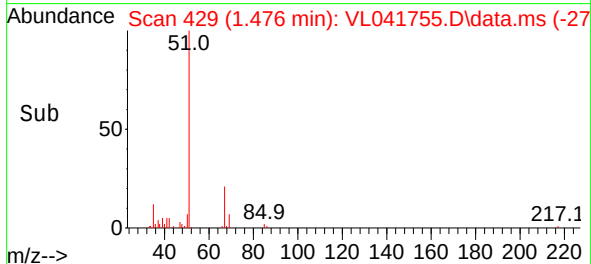
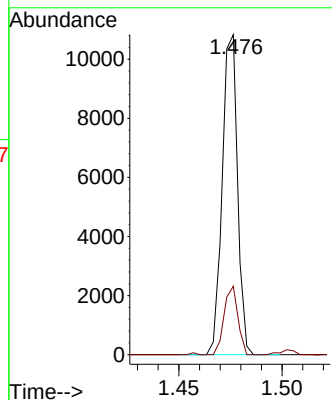
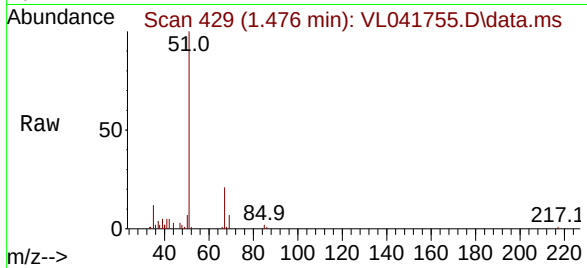




#3  
Chlorodifluoromethane  
Concen: 0.515 ppbv  
RT: 1.476 min Scan# 428  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

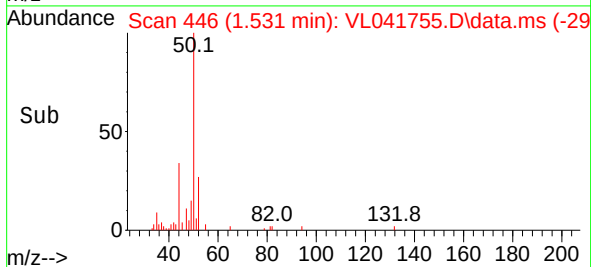
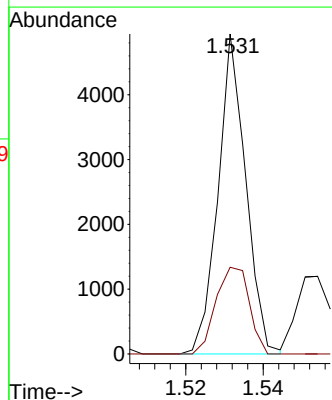
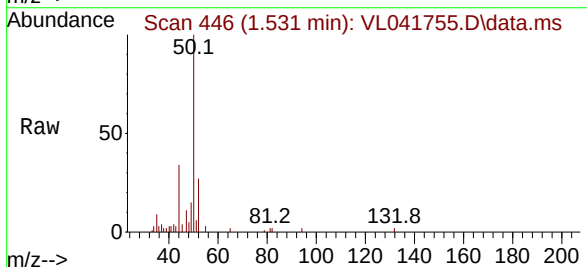
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC0.5

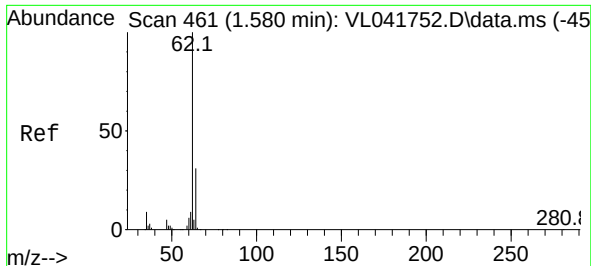
Tgt Ion: 51 Resp: 5587  
Ion Ratio Lower Upper  
51 100  
67 21.0 15.0 22.4



#4  
Chloromethane  
Concen: 0.529 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 50 Resp: 2452  
Ion Ratio Lower Upper  
50 100  
52 27.1 26.2 39.2

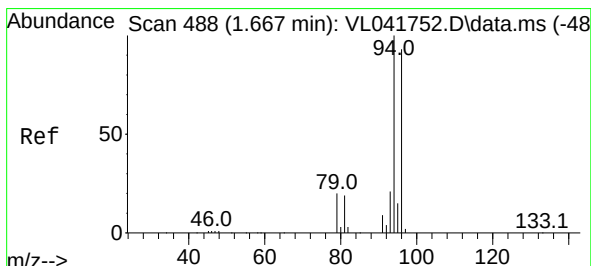
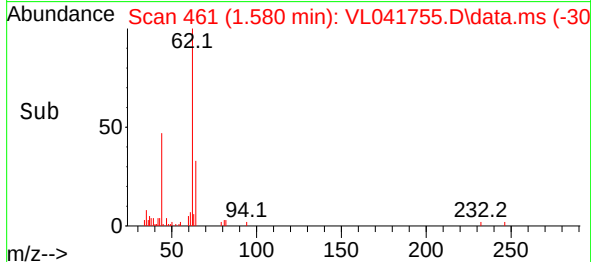
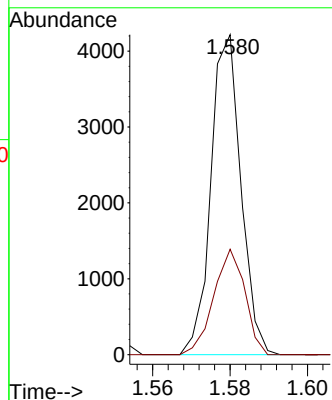
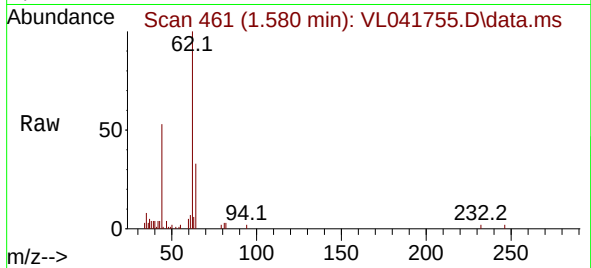




#5  
 Vinyl Chloride  
 Concen: 0.486 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

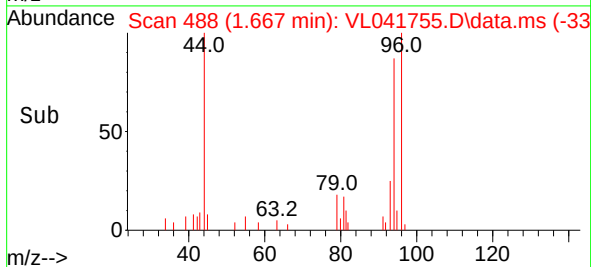
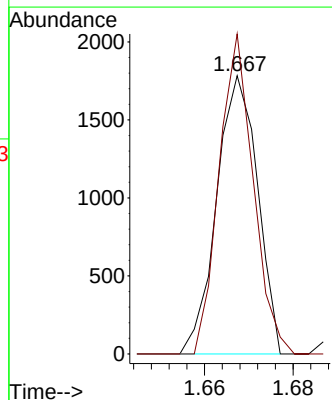
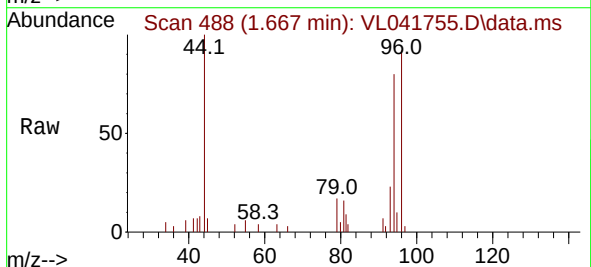
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.5

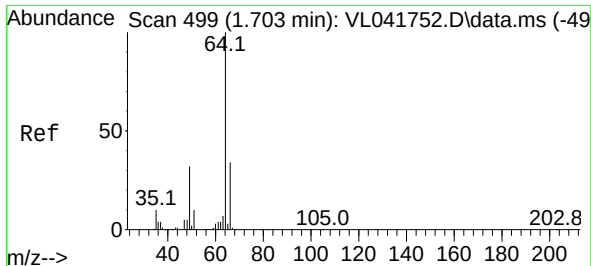
Tgt Ion: 62 Resp: 2269  
 Ion Ratio Lower Upper  
 62 100  
 64 32.9 25.1 37.7



#6  
 Bromomethane  
 Concen: 0.519 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

Tgt Ion: 94 Resp: 1143  
 Ion Ratio Lower Upper  
 94 100  
 96 115.0 74.7 112.1#

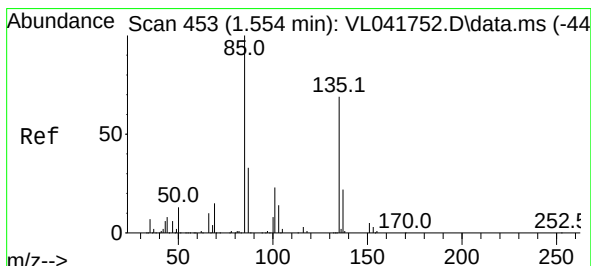
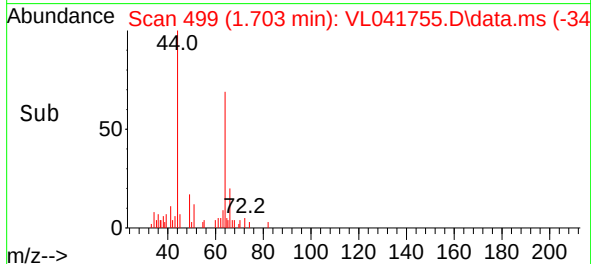
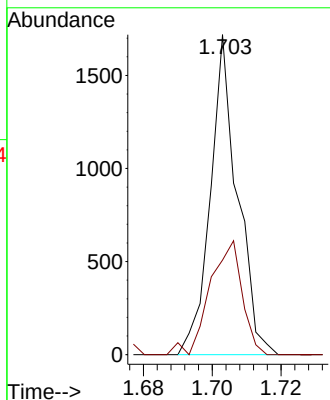
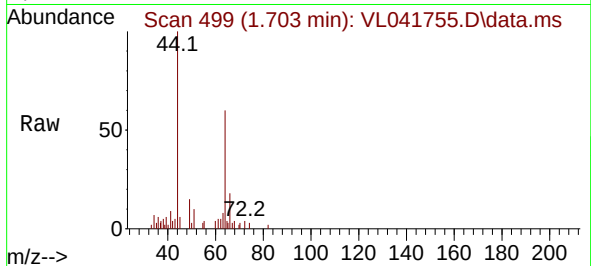




#7  
Chloroethane  
Concen: 0.518 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

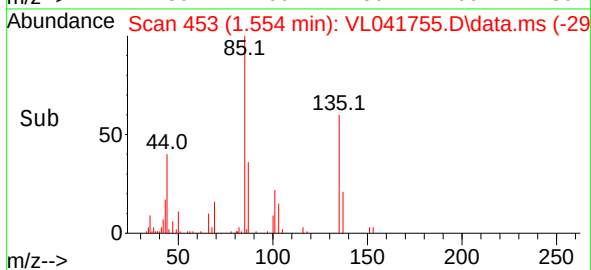
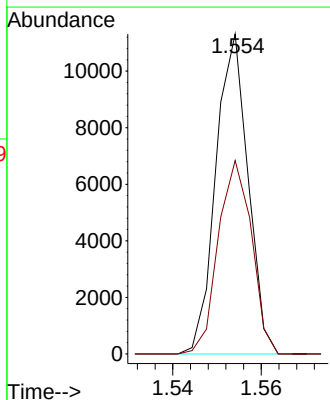
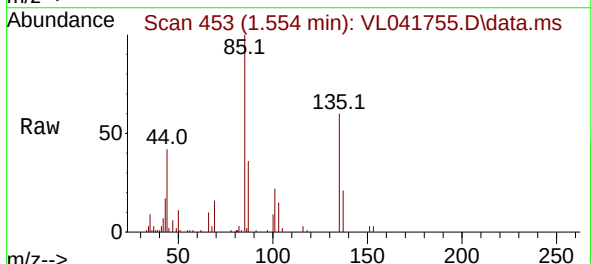
Instrument : MSVOA\_1  
ClientSampleId : VSTDIC0.5

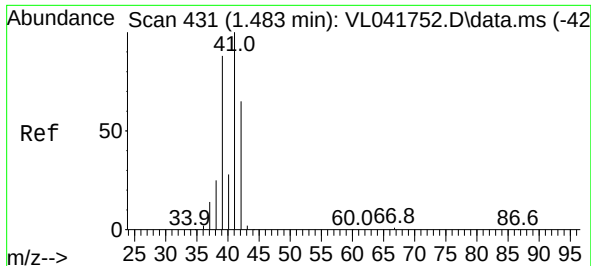
Tgt Ion: 64 Resp: 939  
Ion Ratio Lower Upper  
64 100  
66 27.6 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 0.538 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 85 Resp: 5699  
Ion Ratio Lower Upper  
85 100  
135 62.8 51.9 77.9

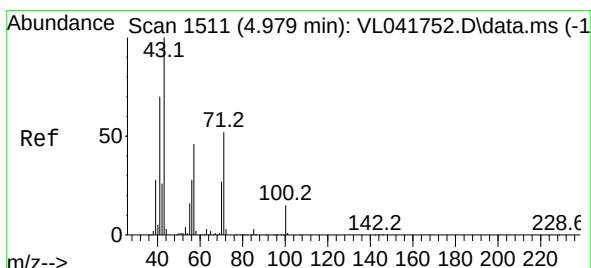
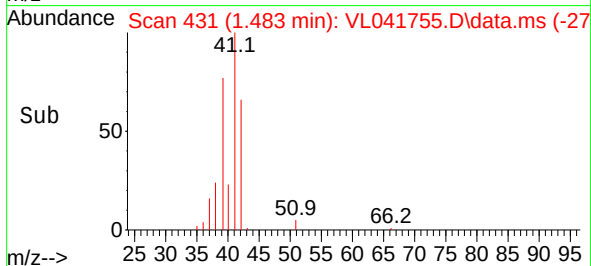
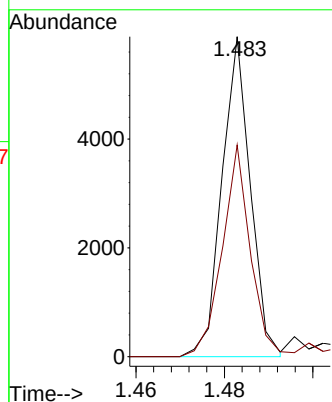
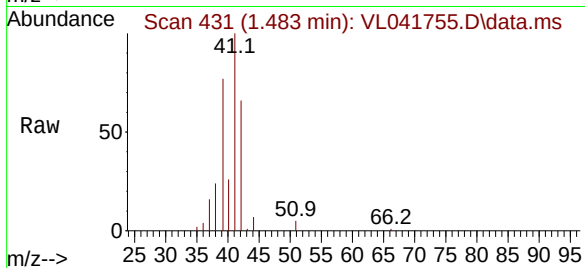




#9  
 Propene  
 Concen: 0.557 ppbv  
 RT: 1.483 min Scan# 41  
 Delta R.T. -0.000 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

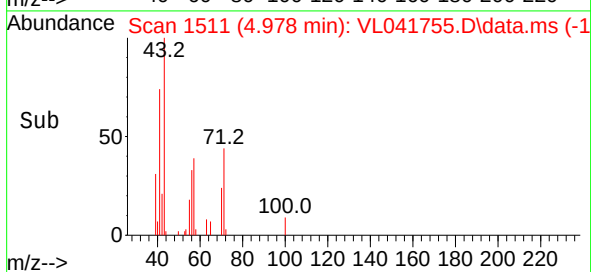
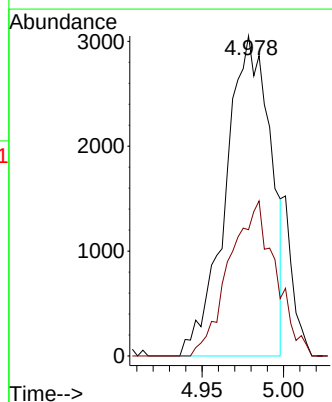
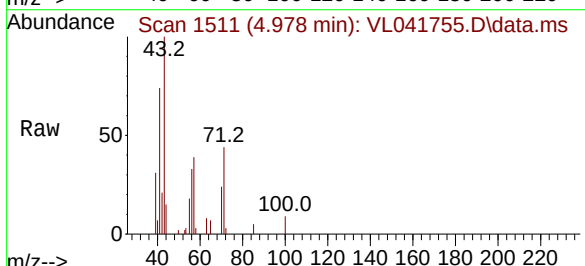
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.5

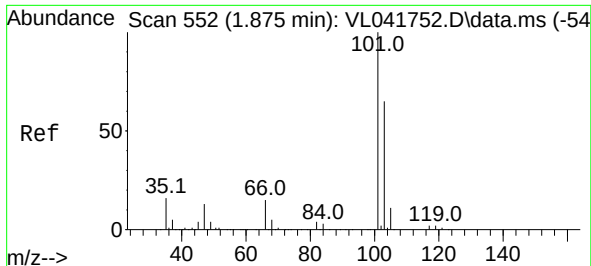
Tgt Ion: 41 Resp: 2622  
 Ion Ratio Lower Upper  
 41 100  
 42 79.6 52.4 78.6#



#10  
 Heptane  
 Concen: 0.485 ppbv  
 RT: 4.978 min Scan# 1511  
 Delta R.T. -0.000 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

Tgt Ion: 43 Resp: 5865  
 Ion Ratio Lower Upper  
 43 100  
 57 49.5 38.5 57.7





#11

Trichlorofluoromethane

Concen: 0.524 ppbv

RT: 1.878 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

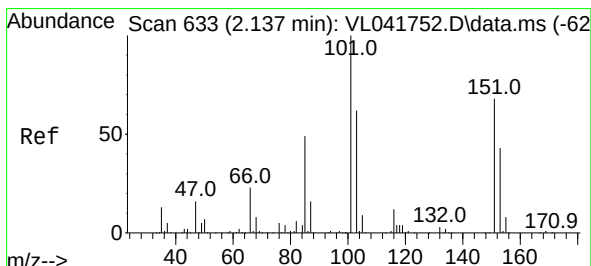
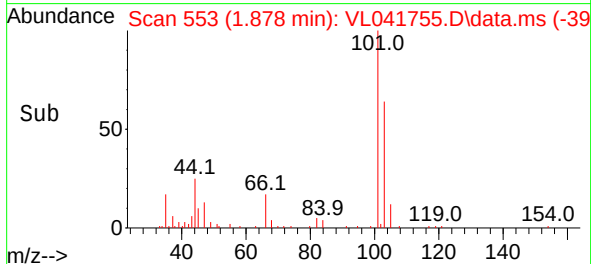
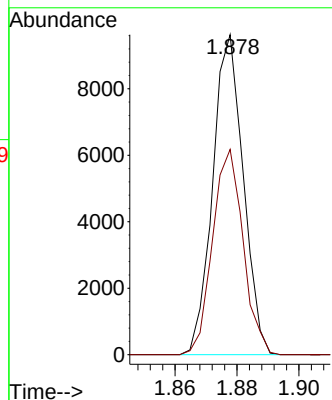
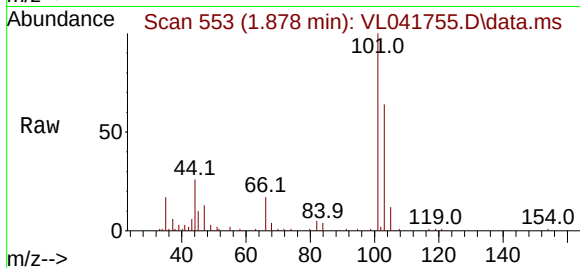
VSTDICC0.5

Tgt Ion:101 Resp: 6594

Ion Ratio Lower Upper

101 100

103 64.2 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.519 ppbv

RT: 2.140 min Scan# 634

Delta R.T. 0.003 min

Lab File: VL041755.D

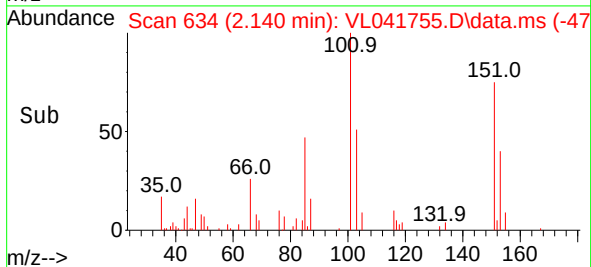
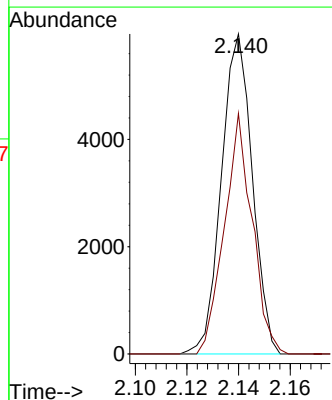
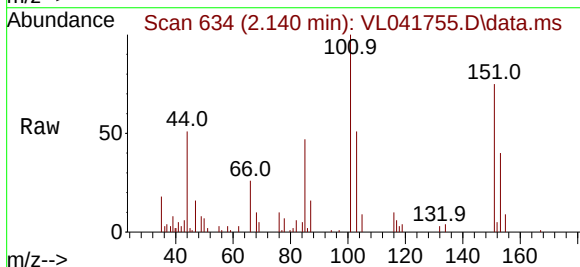
Acq: 16 Dec 2024 15:05

Tgt Ion:101 Resp: 4962

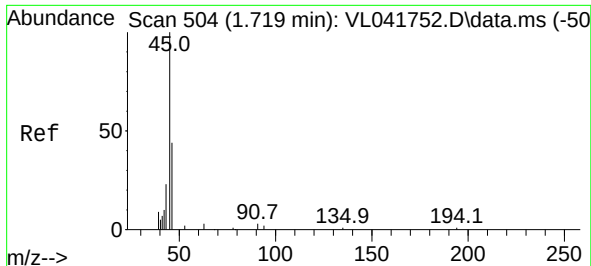
Ion Ratio Lower Upper

101 100

151 67.9 56.8 85.2







#13

Ethanol

Concen: 0.966 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

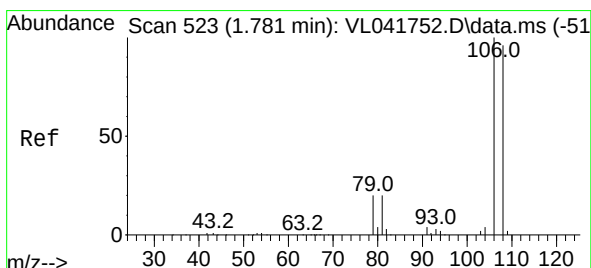
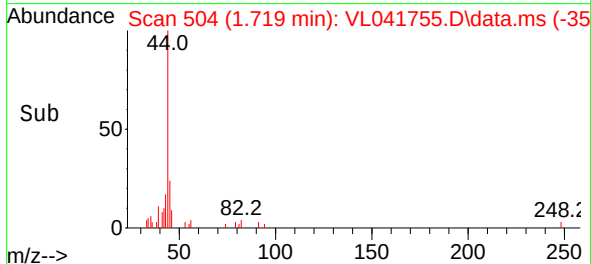
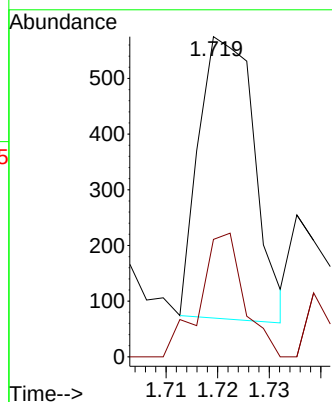
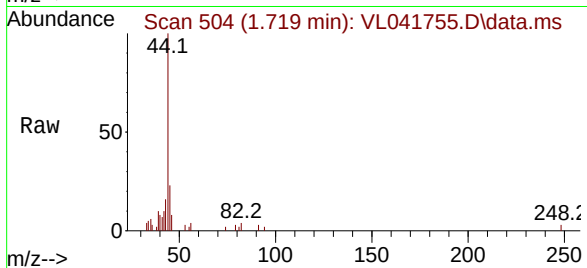
VSTDIC0.5

Tgt Ion: 45 Resp: 378

Ion Ratio Lower Upper

45 100

46 43.9 16.4 65.8



#14

Bromoethene

Concen: 0.524 ppbv

RT: 1.781 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

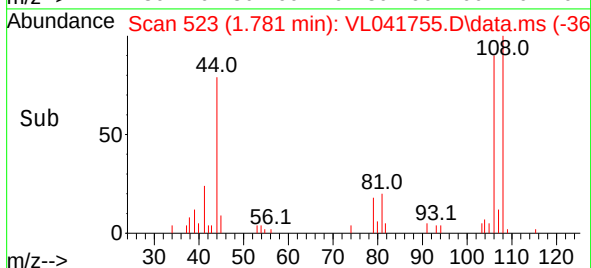
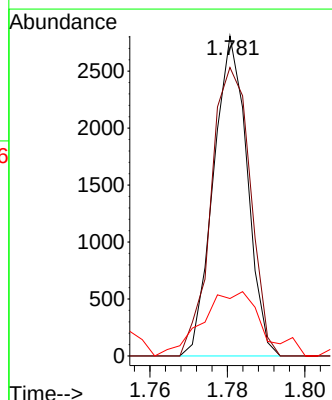
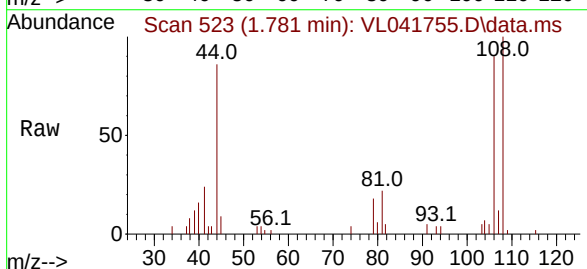
Tgt Ion: 108 Resp: 1694

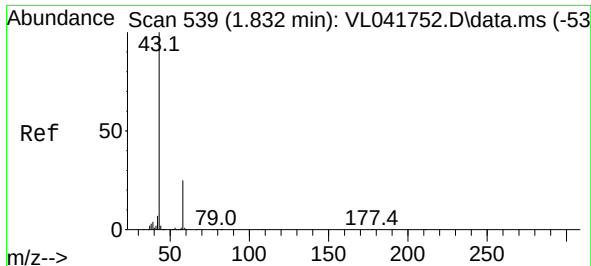
Ion Ratio Lower Upper

108 100

106 105.1 84.1 126.1

79 41.4 17.4 26.0#





#15

Acetone

Concen: 0.636 ppbv

RT: 1.836 min Scan# 54

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

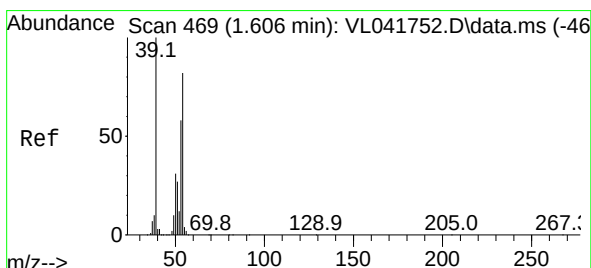
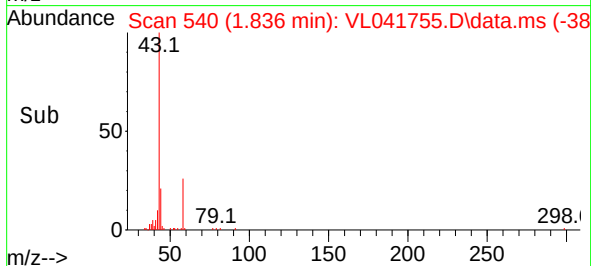
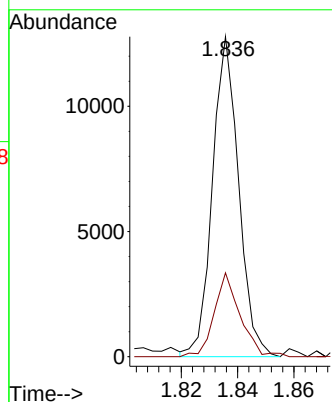
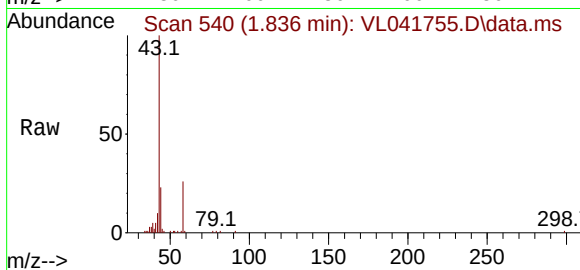
VSTDIC0.5

Tgt Ion: 43 Resp: 8233

Ion Ratio Lower Upper

43 100

58 26.0 19.7 29.5



#16

1,3-Butadiene

Concen: 0.582 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.003 min

Lab File: VL041755.D

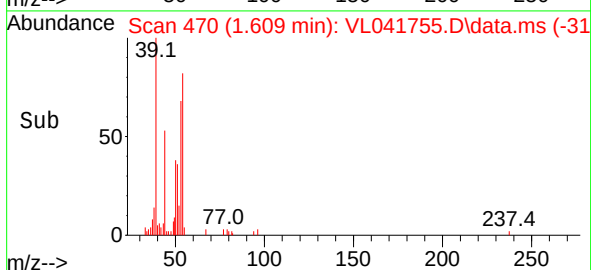
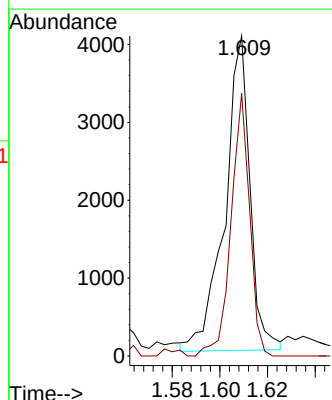
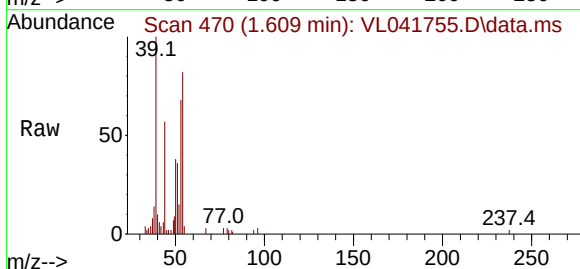
Acq: 16 Dec 2024 15:05

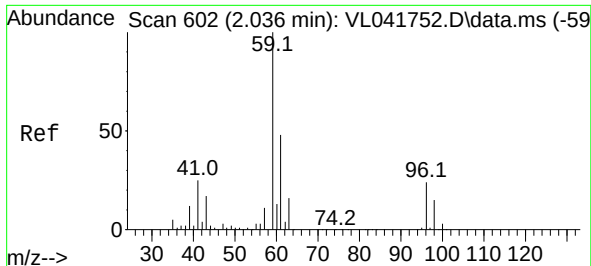
Tgt Ion: 39 Resp: 2966

Ion Ratio Lower Upper

39 100

54 62.8 58.4 87.6





#17

tert-Butyl alcohol

Concen: 0.518 ppbv

RT: 2.043 min Scan# 602

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

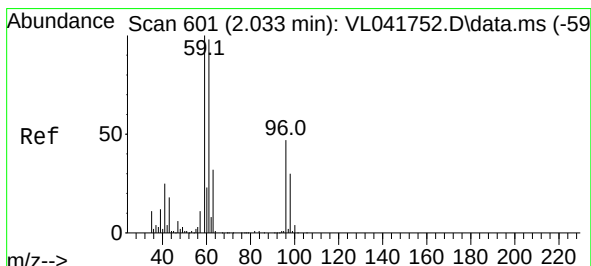
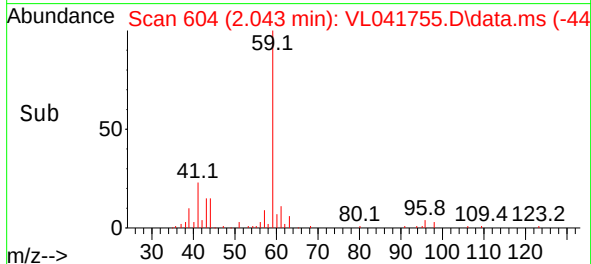
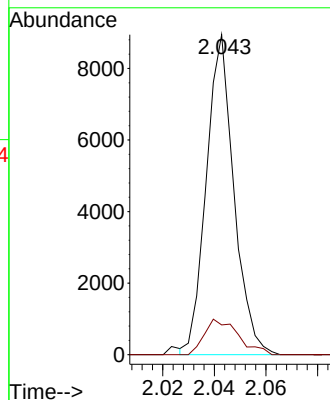
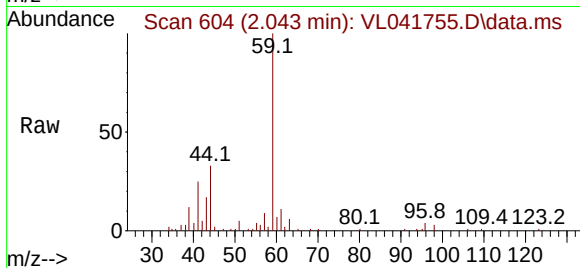
VSTDIC0.5

Tgt Ion: 59 Resp: 6654

Ion Ratio Lower Upper

59 100

57 14.3 8.6 13.0#



#18

1,1-Dichloroethene

Concen: 0.504 ppbv

RT: 2.033 min Scan# 601

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

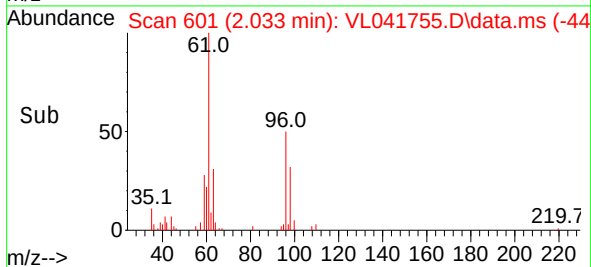
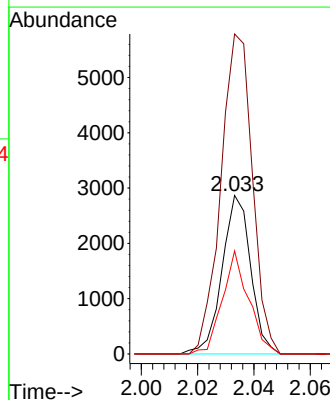
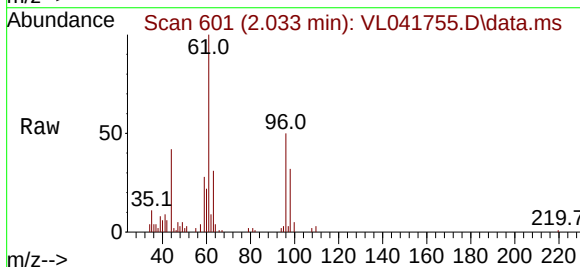
Tgt Ion: 96 Resp: 2022

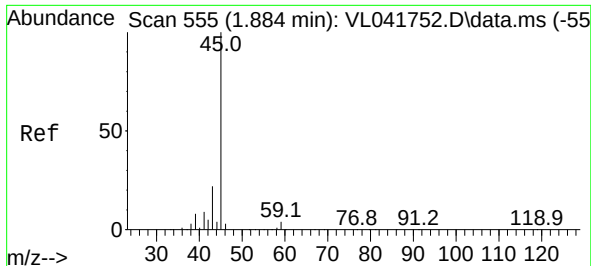
Ion Ratio Lower Upper

96 100

61 201.9 167.7 251.5

98 65.1 51.1 76.7





#19

Isopropyl Alcohol

Concen: 0.732 ppbv

RT: 1.884 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

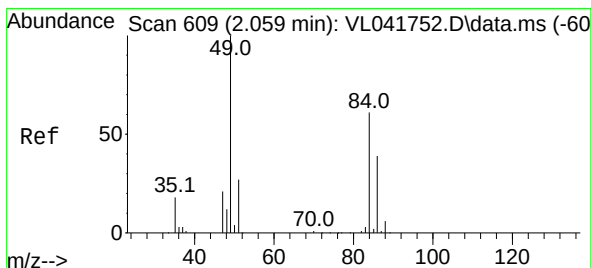
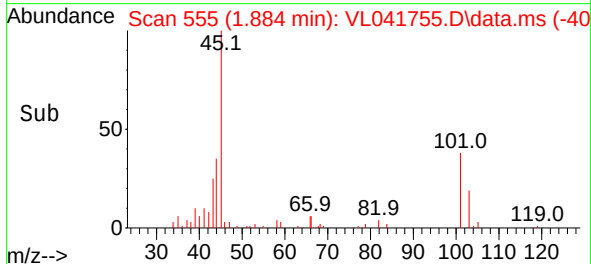
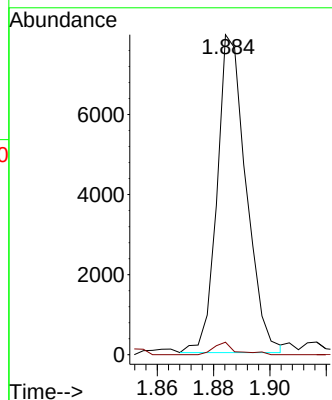
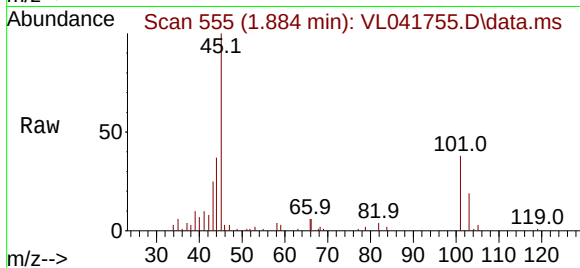
VSTDIC0.5

Tgt Ion: 45 Resp: 5687

Ion Ratio Lower Upper

45 100

58 2.9 33.3 49.9#



#20

Methylene Chloride

Concen: 0.589 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion: 84 Resp: 2174

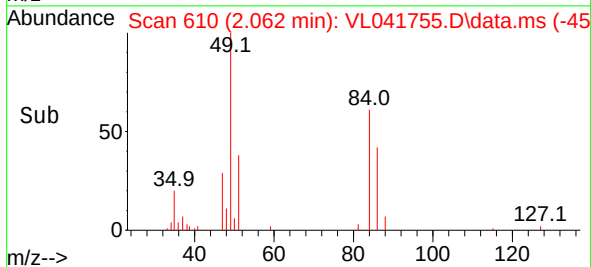
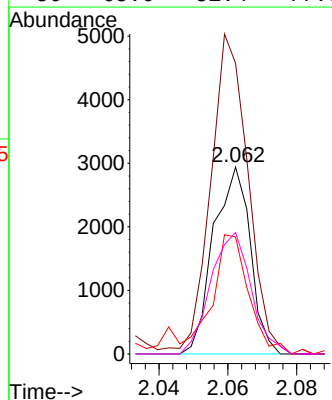
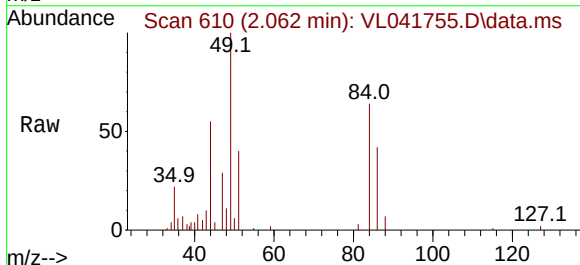
Ion Ratio Lower Upper

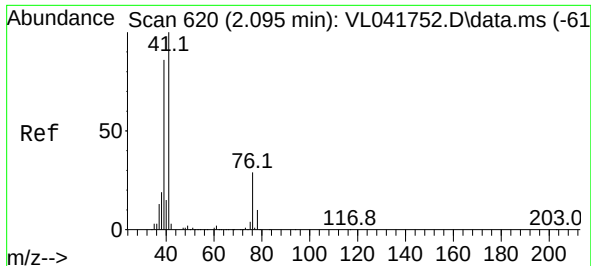
84 100

49 152.6 132.6 198.8

51 57.2 37.6 56.4#

86 65.0 51.4 77.0

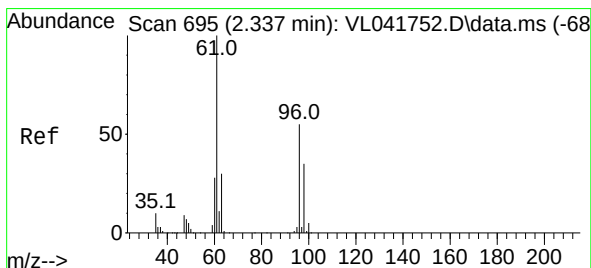
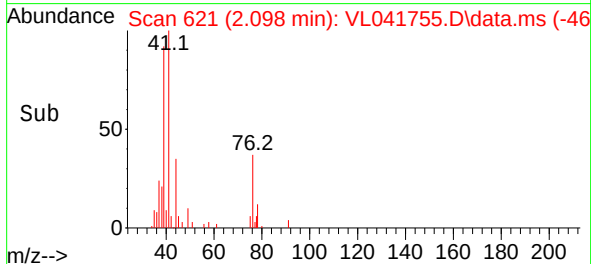
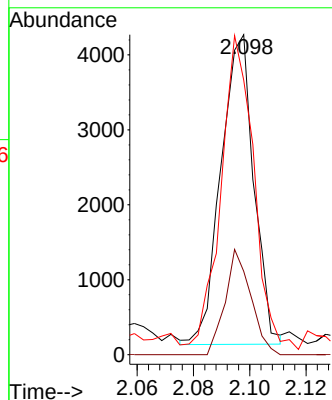
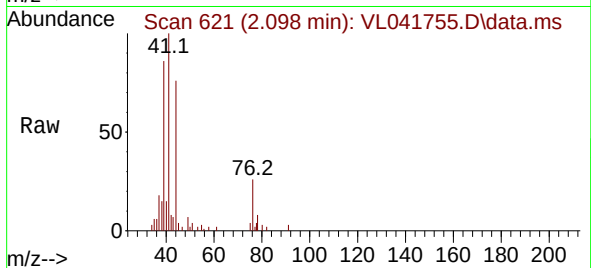




#21  
Allyl Chloride  
Concen: 0.478 ppbv  
RT: 2.098 min Scan# 61  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

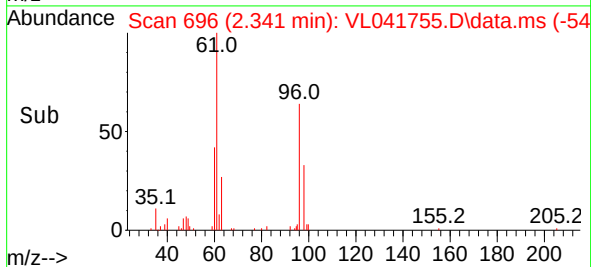
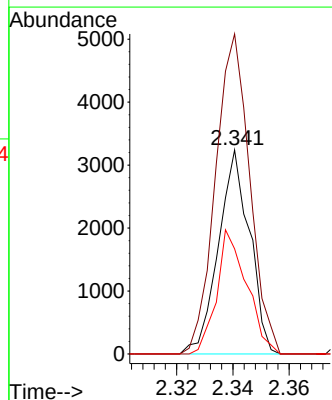
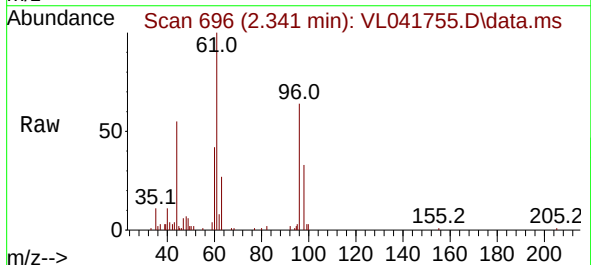
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

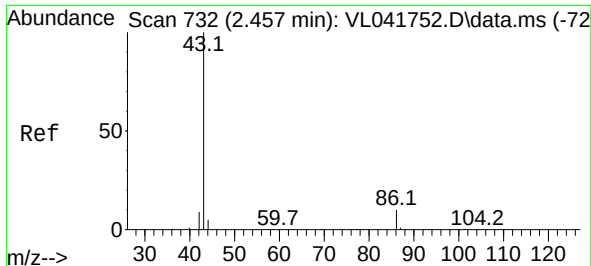
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 3354  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 76       | 26.5  | 22.3  | 33.5  |
| 39       | 102.6 | 69.2  | 103.8 |



#22  
trans-1,2-Dichloroethene  
Concen: 0.543 ppbv  
RT: 2.341 min Scan# 696  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 2494  |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 156.8 | 146.3 | 219.5 |
| 98       | 51.6  | 50.8  | 76.2  |

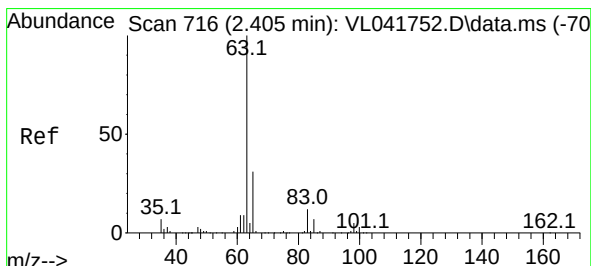
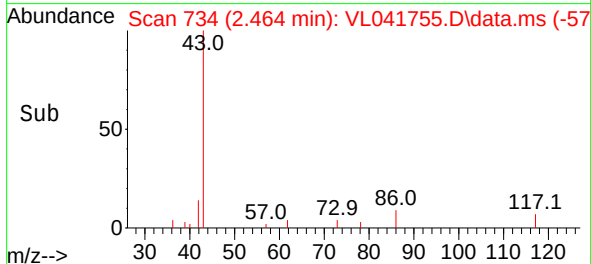
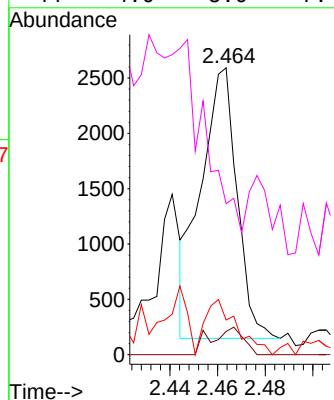
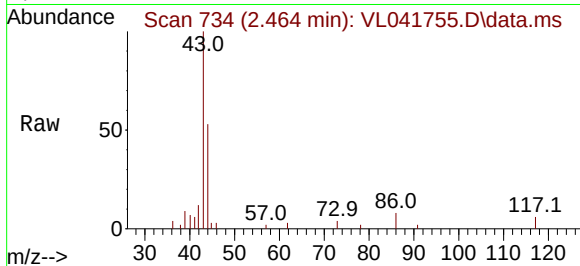




#23  
 Vinyl Acetate  
 Concen: 0.462 ppbv  
 RT: 2.464 min Scan# 717  
 Delta R.T. 0.006 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

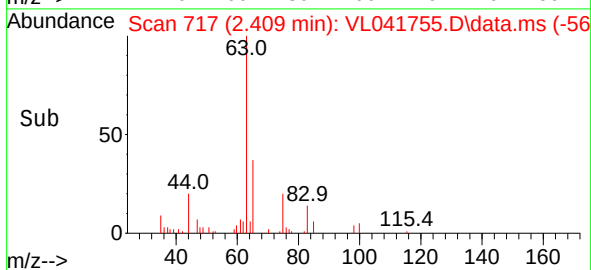
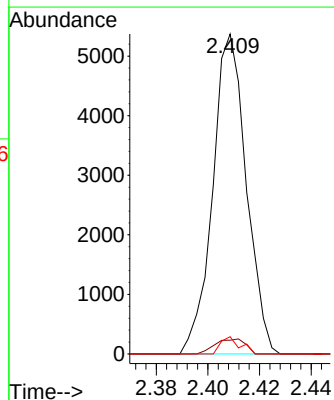
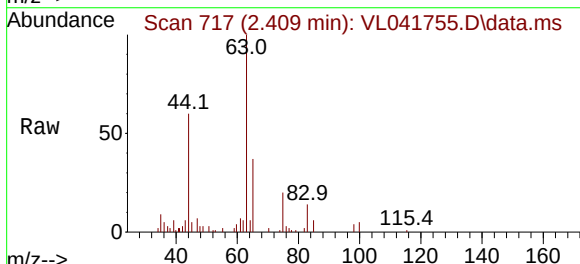
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.5

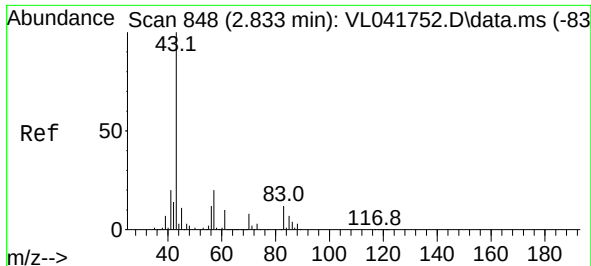
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 2599  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 8.6   | 6.6   | 10.0  |
| 42       | 10.2  | 8.2   | 12.2  |
| 44       | 4.0   | 5.0   | 7.4   |



#24  
 1,1-Dichloroethane  
 Concen: 0.522 ppbv  
 RT: 2.409 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041755.D  
 Acq: 16 Dec 2024 15:05

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 4854  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 4.3   | 2.3   | 6.8   |
| 100      | 5.4   | 1.4   | 4.2   |

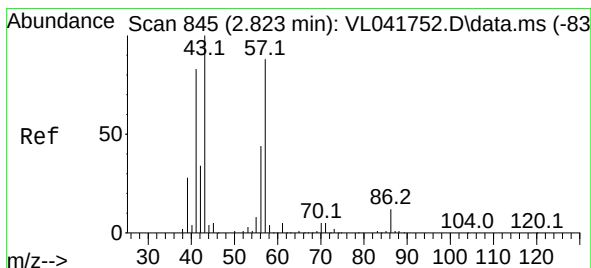
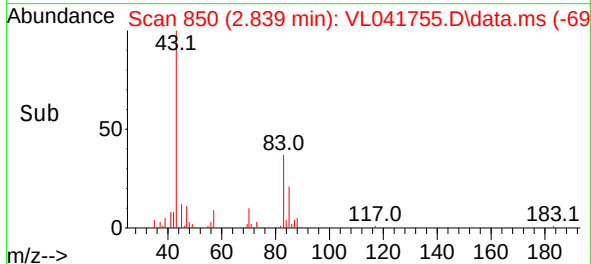
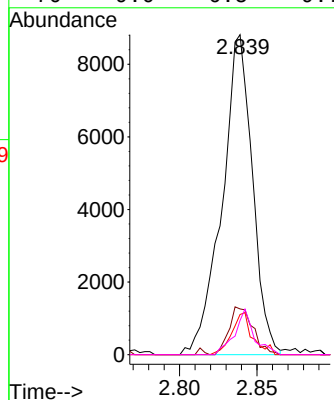
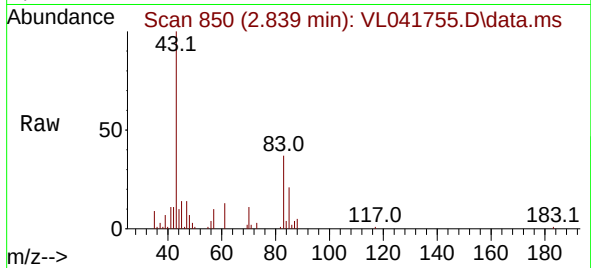




#25  
Ethyl Acetate  
Concen: 0.497 ppbv  
RT: 2.839 min Scan# 848  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

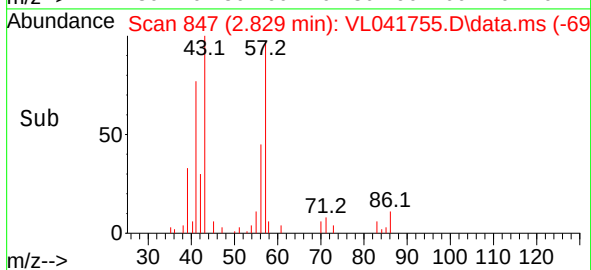
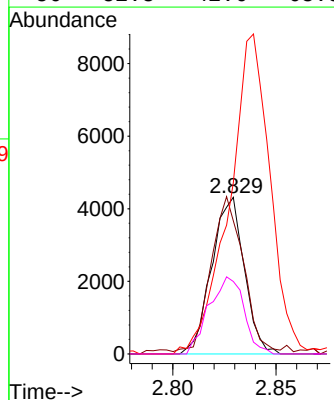
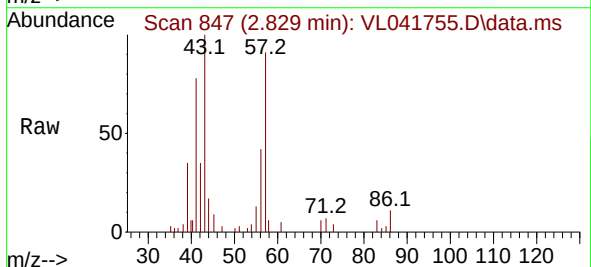
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

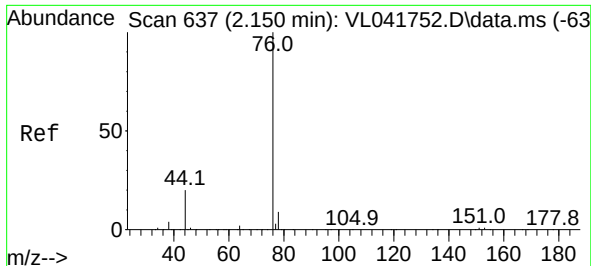
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 12040 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 45 12.2     | 8.1 12.1#   |
| 61 9.0      | 7.0 10.6    |
| 70 9.0      | 6.5 9.7     |



#26  
Hexane  
Concen: 0.518 ppbv  
RT: 2.829 min Scan# 847  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion: 57 | Resp: | 4735  |
| Ion | Ratio   | Lower | Upper |
| 57  | 100     |       |       |
| 41  | 106.1   | 79.6  | 119.4 |
| 43  | 258.2   | 211.0 | 316.6 |
| 56  | 52.8    | 42.6  | 63.8  |





#27

Carbon Disulfide

Concen: 0.414 ppbv

RT: 2.153 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

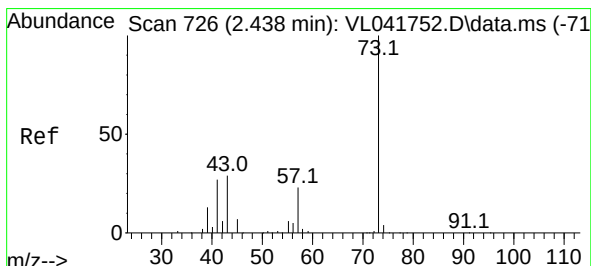
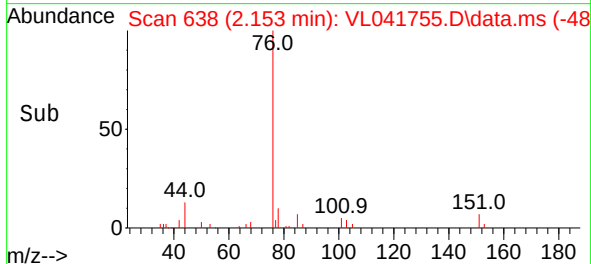
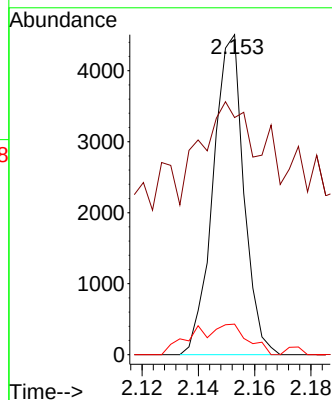
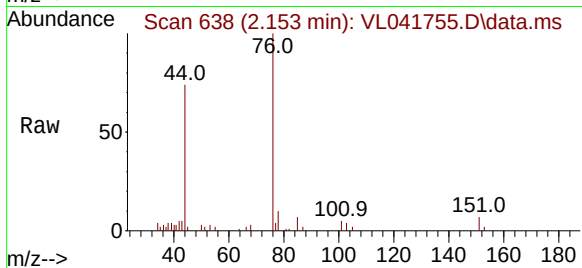
Tgt Ion: 76 Resp: 3409

Ion Ratio Lower Upper

76 100

44 65.5 17.6 26.4#

78 18.2 10.2 15.4#



#28

Methyl tert-Butyl Ether

Concen: 0.464 ppbv

RT: 2.441 min Scan# 727

Delta R.T. 0.003 min

Lab File: VL041755.D

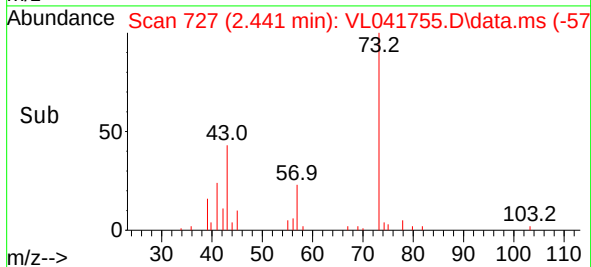
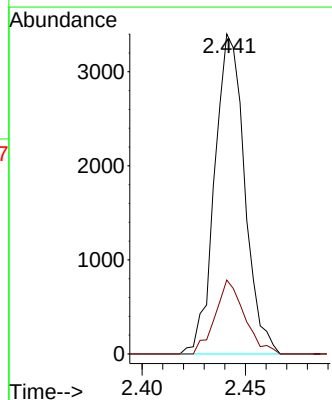
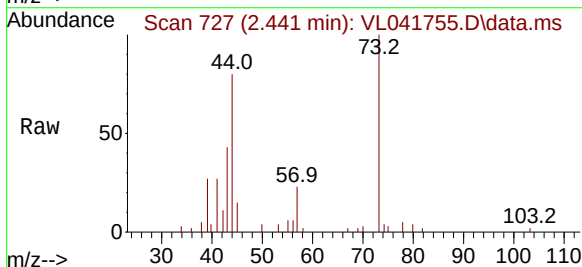
Acq: 16 Dec 2024 15:05

Tgt Ion: 73 Resp: 3438

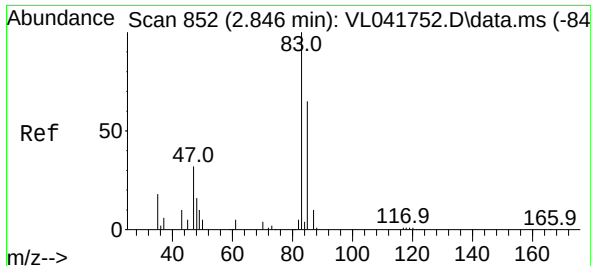
Ion Ratio Lower Upper

73 100

57 22.6 17.6 26.4







#29

Chloroform

Concen: 0.515 ppbv

RT: 2.849 min Scan# 84

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

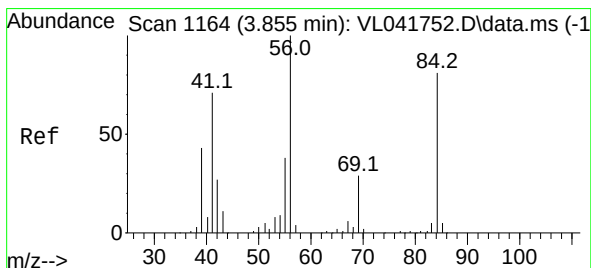
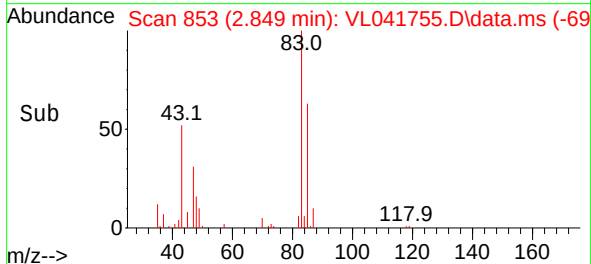
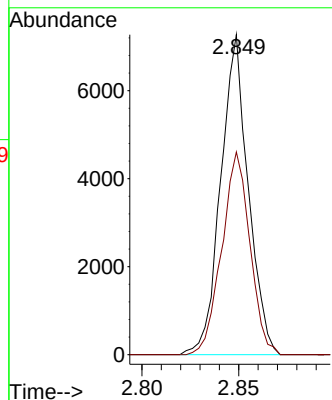
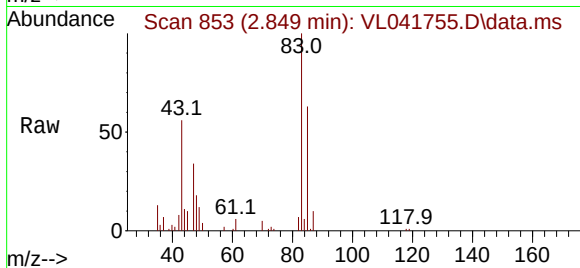
VSTDICC0.5

Tgt Ion: 83 Resp: 7172

Ion Ratio Lower Upper

83 100

85 63.3 51.8 77.6



#30

Cyclohexane

Concen: 0.521 ppbv

RT: 3.859 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

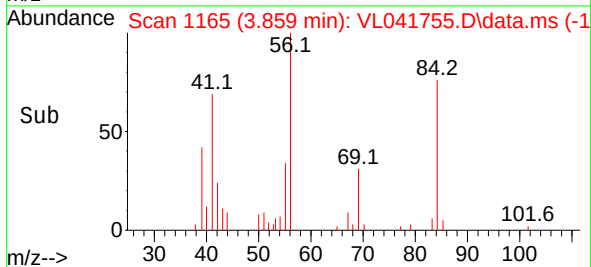
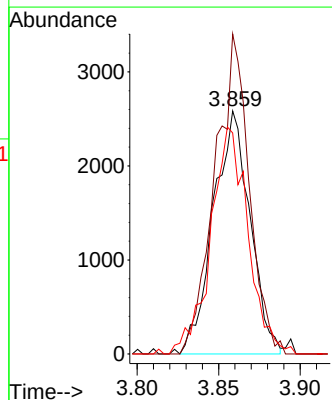
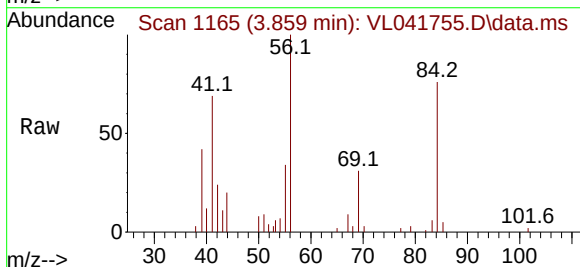
Tgt Ion: 84 Resp: 4051

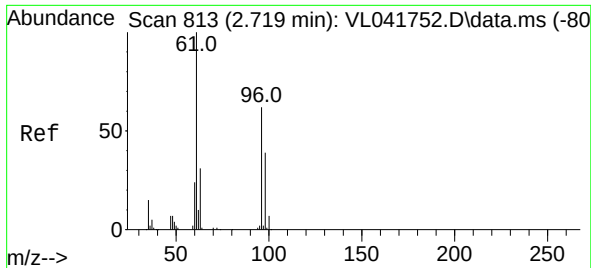
Ion Ratio Lower Upper

84 100

56 122.5 102.3 153.5

41 94.8 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 0.504 ppbv

RT: 2.723 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

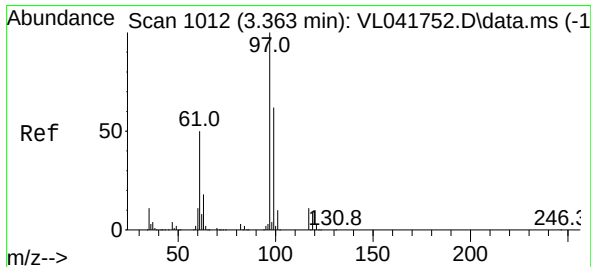
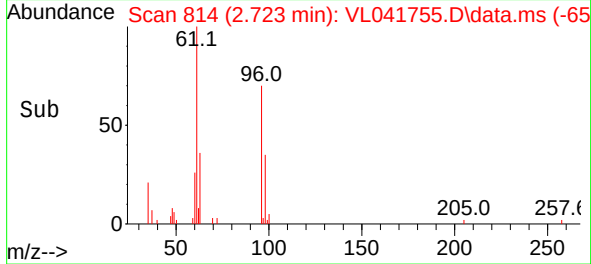
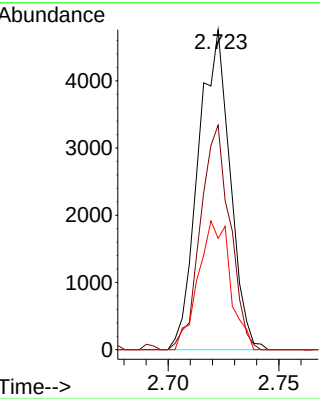
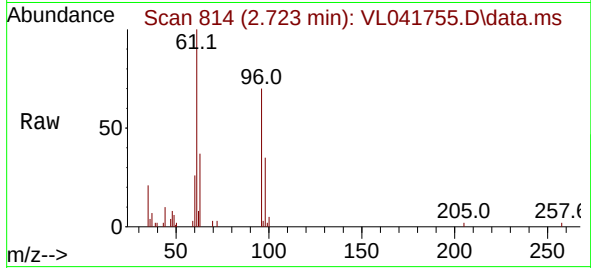
Tgt Ion: 61 Resp: 4758

Ion Ratio Lower Upper

61 100

96 70.2 49.7 74.5

98 34.8 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 0.518 ppbv

RT: 3.367 min Scan# 1013

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

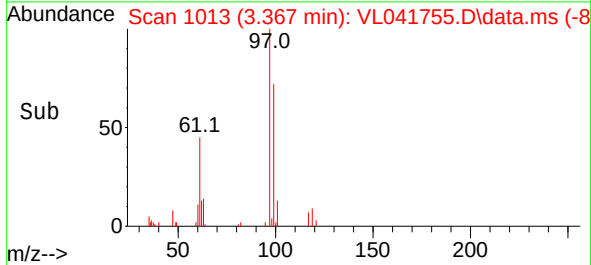
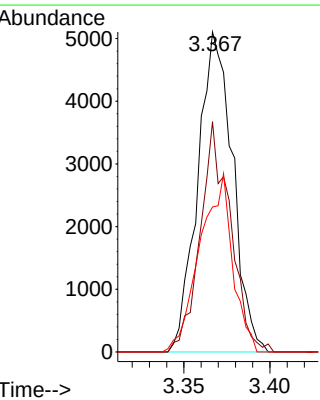
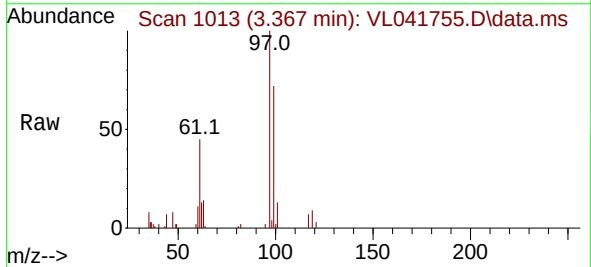
Tgt Ion: 97 Resp: 7182

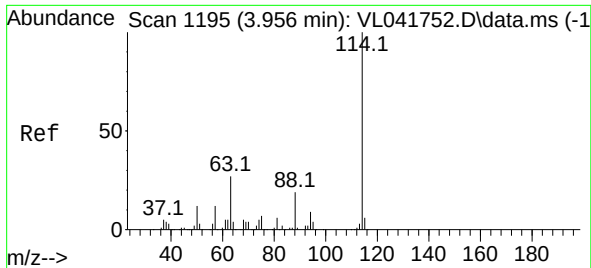
Ion Ratio Lower Upper

97 100

99 62.2 51.0 76.4

61 52.1 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC0.5

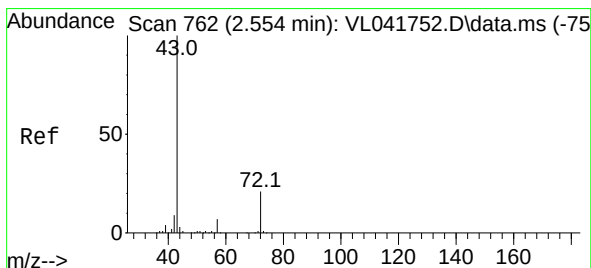
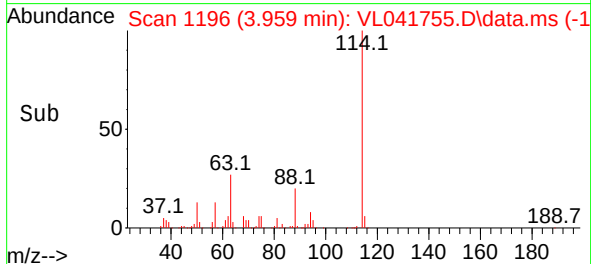
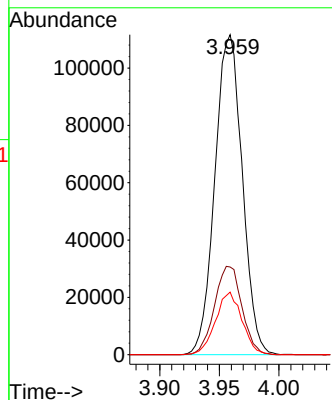
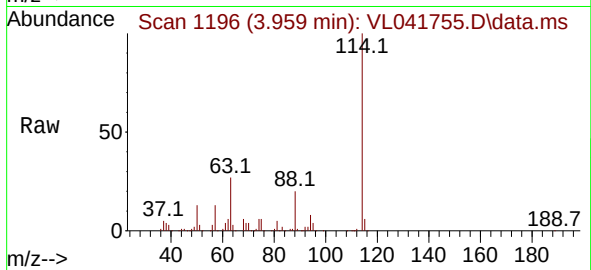
Tgt Ion:114 Resp: 178453

Ion Ratio Lower Upper

114 100

63 27.6 21.8 32.8

88 18.9 14.8 22.2



#34

2-Butanone

Concen: 0.540 ppbv

RT: 2.557 min Scan# 763

Delta R.T. 0.003 min

Lab File: VL041755.D

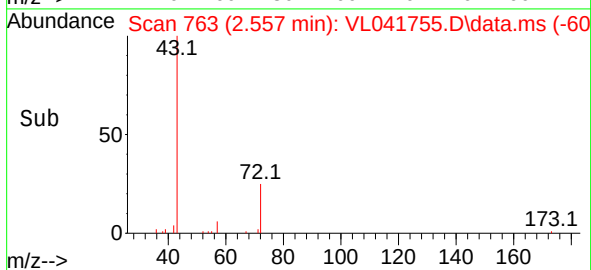
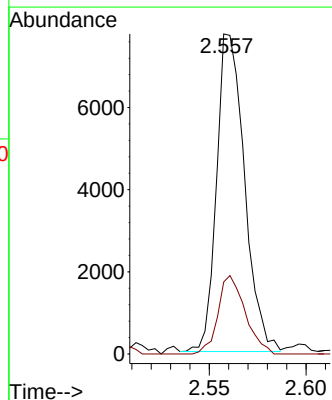
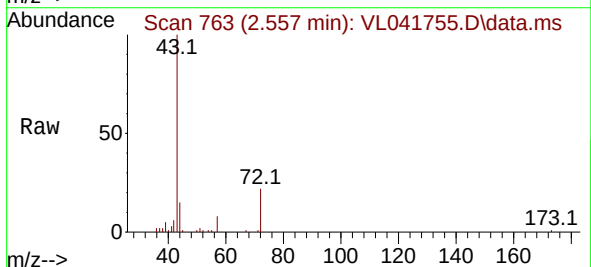
Acq: 16 Dec 2024 15:05

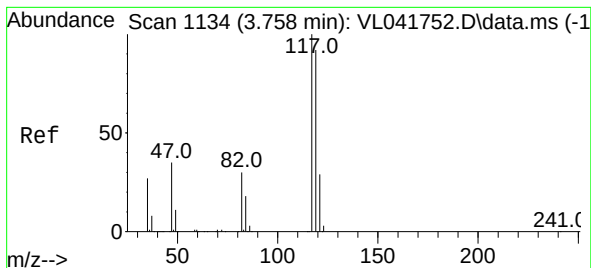
Tgt Ion: 43 Resp: 7756

Ion Ratio Lower Upper

43 100

72 24.0 16.8 25.2





#35

Carbon Tetrachloride

Concen: 0.446 ppbv

RT: 3.765 min Scan# 1136

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

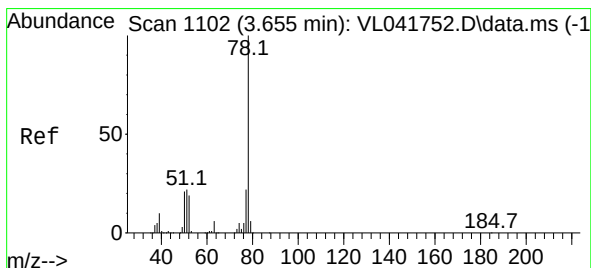
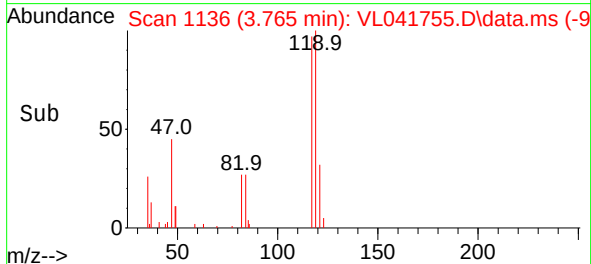
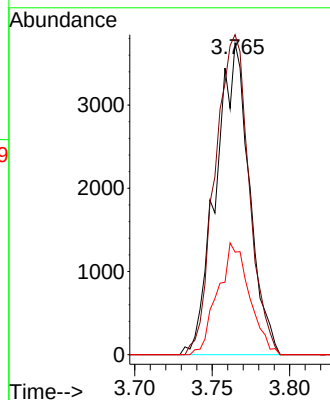
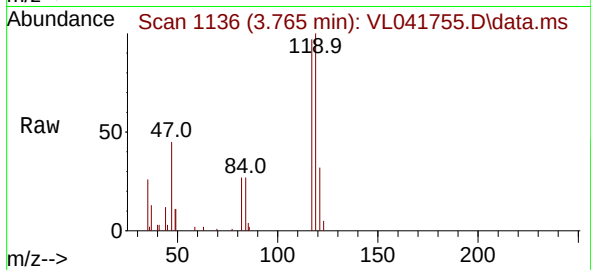
Tgt Ion:117 Resp: 5655

Ion Ratio Lower Upper

117 100

119 102.7 73.7 110.5

121 32.9 23.0 34.4



#36

Benzene

Concen: 0.522 ppbv

RT: 3.658 min Scan# 1103

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

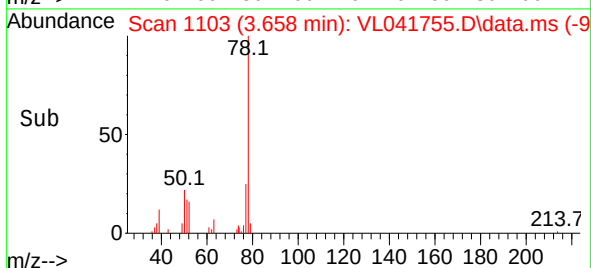
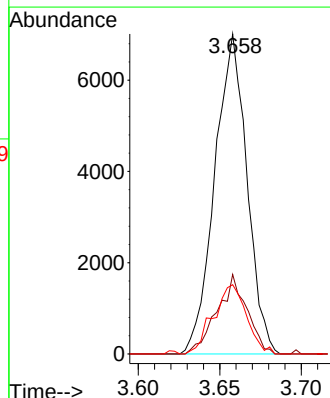
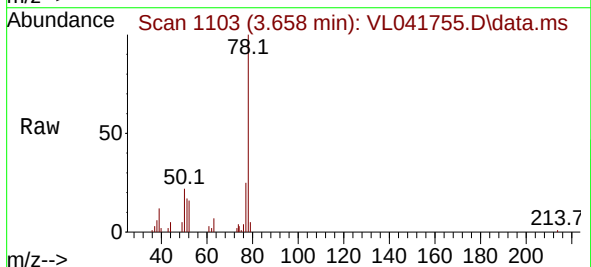
Tgt Ion: 78 Resp: 9629

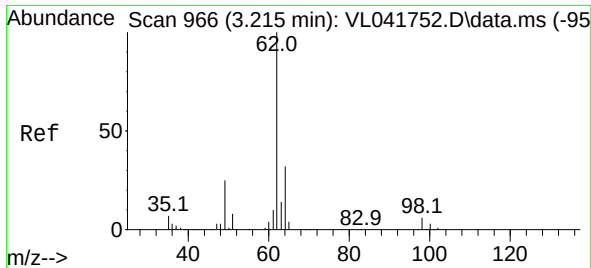
Ion Ratio Lower Upper

78 100

77 24.8 17.8 26.6

50 21.7 17.2 25.8

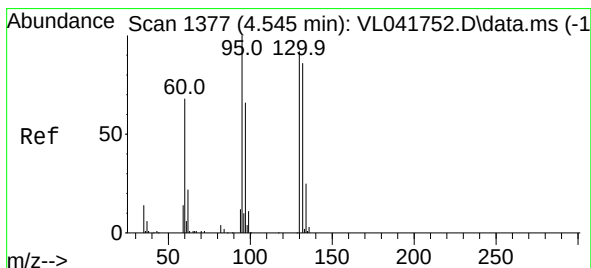
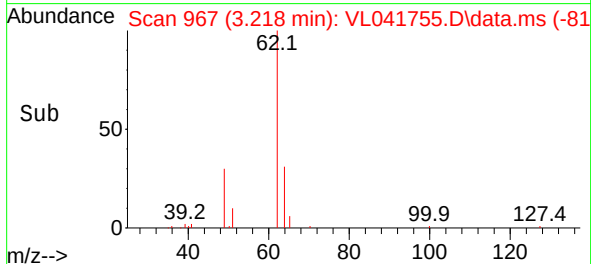
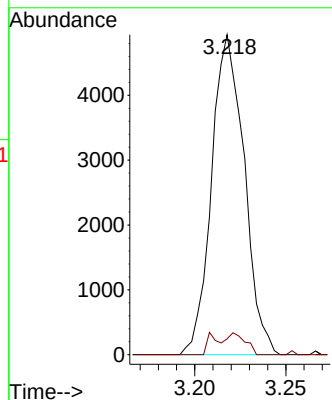
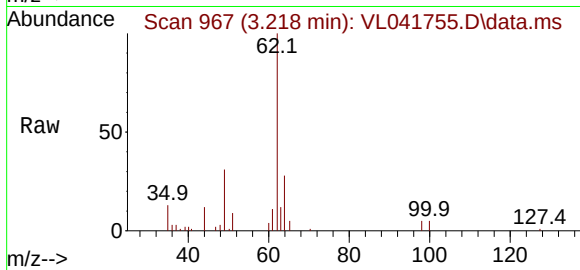




#37  
1,2-Dichloroethane  
Concen: 0.536 ppbv  
RT: 3.218 min Scan# 9  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

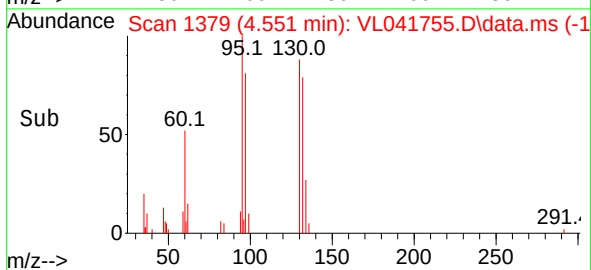
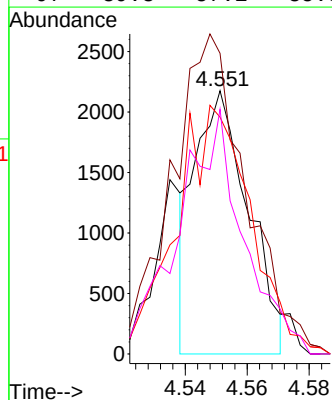
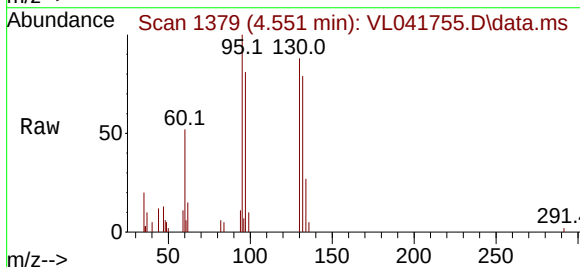
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

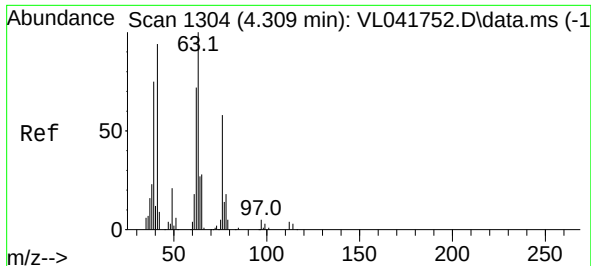
Tgt Ion: 62 Resp: 6154  
Ion Ratio Lower Upper  
62 100  
98 6.3 4.7 7.1



#38  
Trichloroethene  
Concen: 0.336 ppbv  
RT: 4.551 min Scan# 1379  
Delta R.T. 0.006 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:130 Resp: 2613  
Ion Ratio Lower Upper  
130 100  
95 116.2 87.0 130.6  
132 82.8 75.0 112.6  
97 89.3 57.2 85.8#





#39

1,2-Dichloropropane

Concen: 0.333 ppbv

RT: 4.318 min Scan# 1307

Delta R.T. 0.010 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

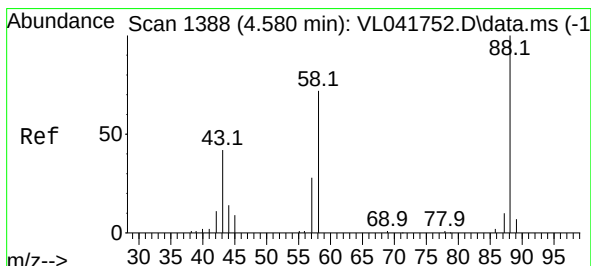
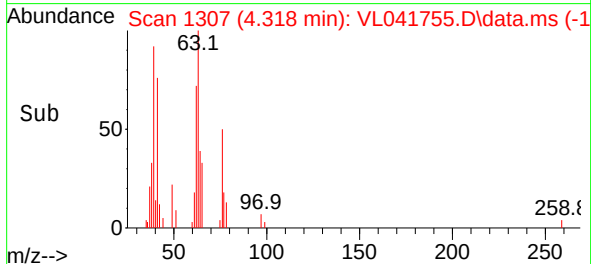
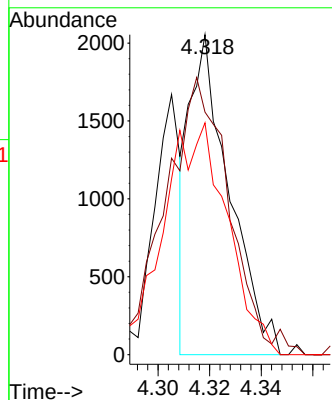
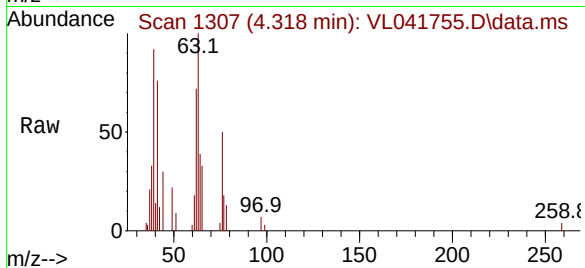
Tgt Ion: 63 Resp: 2224

Ion Ratio Lower Upper

63 100

41 67.9 75.3 112.9#

62 72.4 57.3 85.9



#40

1,4-Dioxane

Concen: 0.070 ppbv

RT: 4.597 min Scan# 1393

Delta R.T. 0.016 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion: 88 Resp: 229

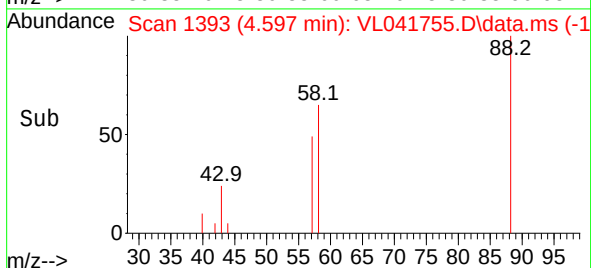
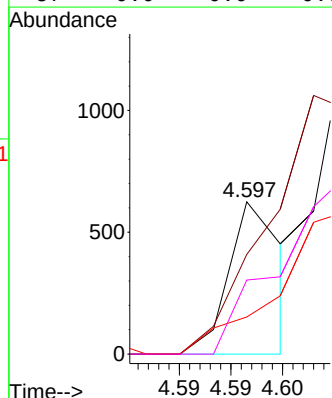
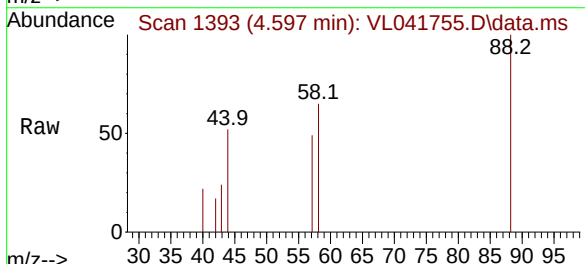
Ion Ratio Lower Upper

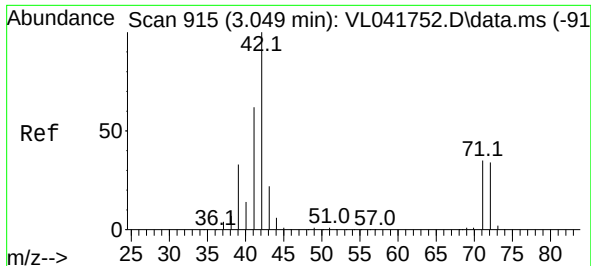
88 100

58 0.0 61.0 91.6#

43 0.0 29.4 44.0#

57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 0.505 ppbv

RT: 3.066 min Scan# 91

Delta R.T. 0.016 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

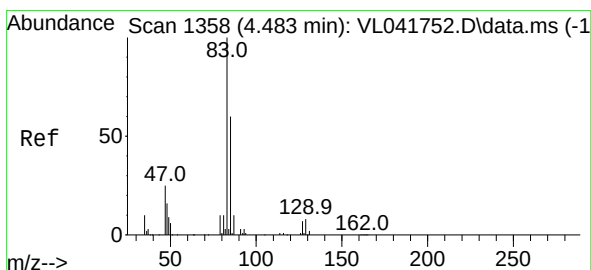
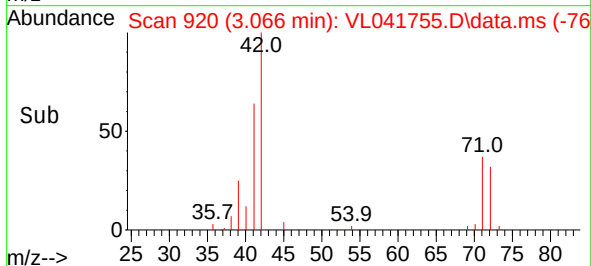
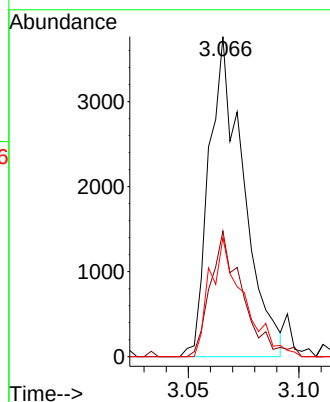
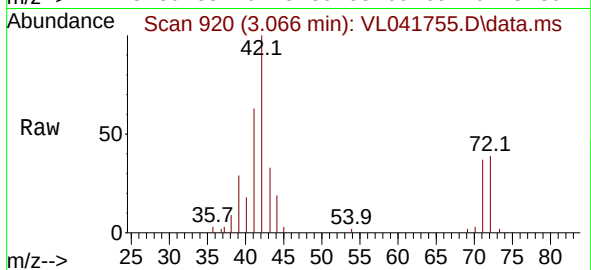
Tgt Ion: 42 Resp: 4061

Ion Ratio Lower Upper

42 100

72 37.0 29.1 43.7

71 36.5 28.4 42.6



#42

Bromodichloromethane

Concen: 0.251 ppbv

RT: 4.490 min Scan# 1360

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

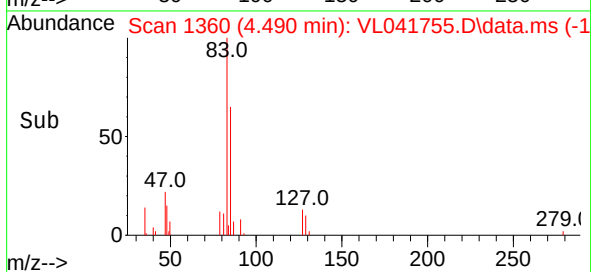
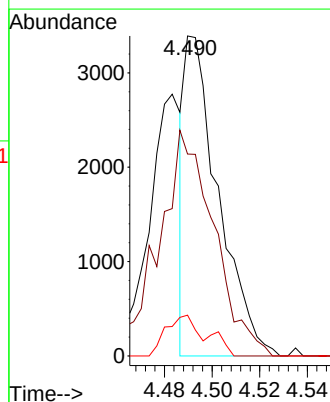
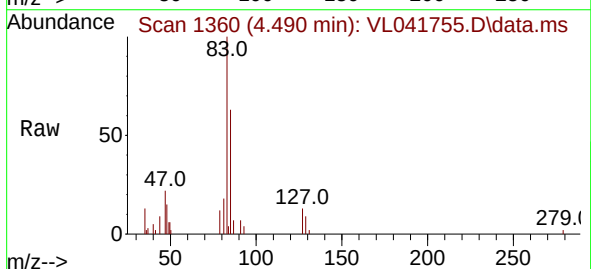
Tgt Ion: 83 Resp: 3315

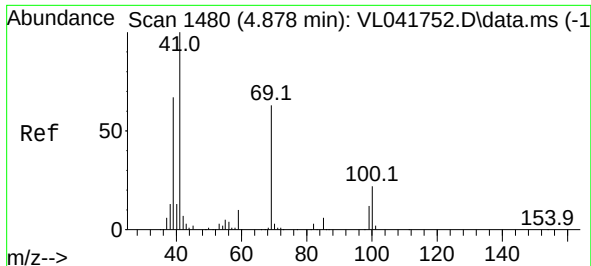
Ion Ratio Lower Upper

83 100

85 63.1 48.0 72.0

127 12.7 5.8 8.8#





#43

Methyl Methacrylate

Concen: 0.472 ppbv

RT: 4.881 min Scan# 1481

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.5

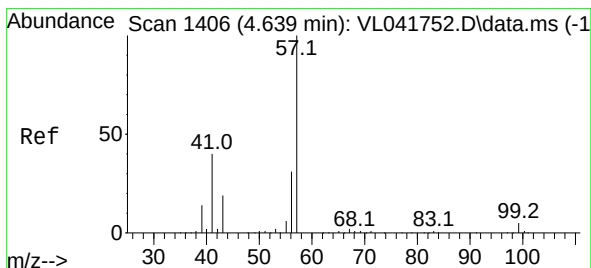
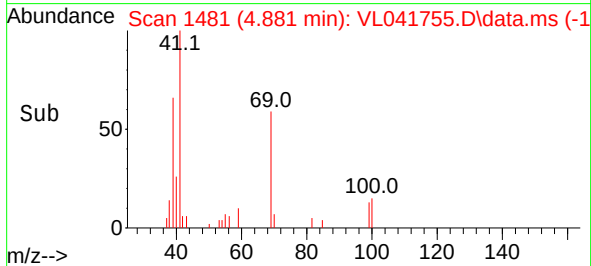
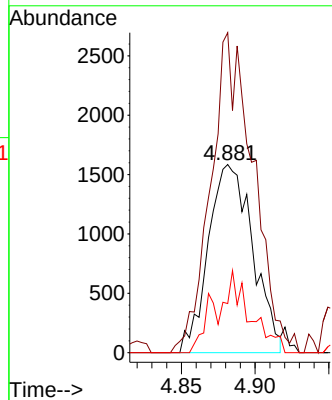
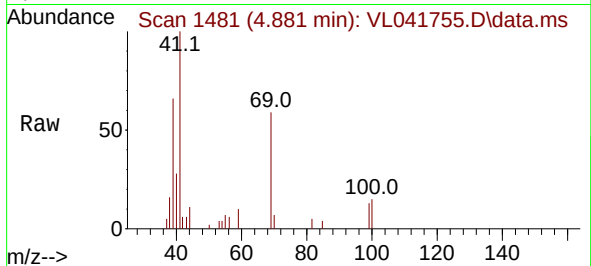
Tgt Ion: 69 Resp: 3322

Ion Ratio Lower Upper

69 100

41 163.7 130.3 195.5

100 33.2 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 0.309 ppbv

RT: 4.645 min Scan# 1408

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

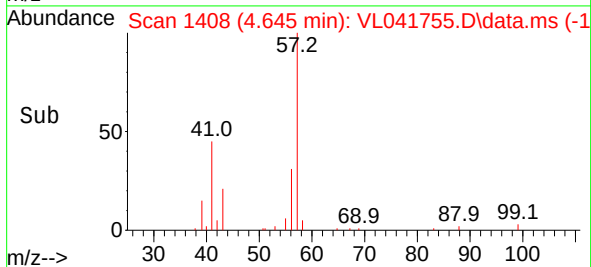
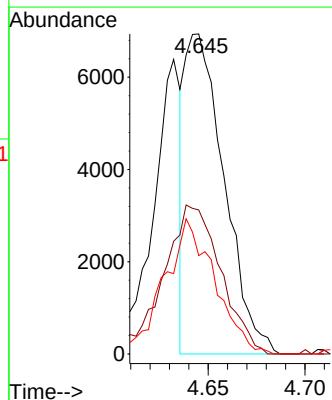
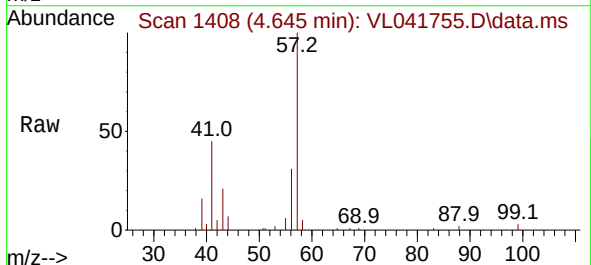
Tgt Ion: 57 Resp: 9729

Ion Ratio Lower Upper

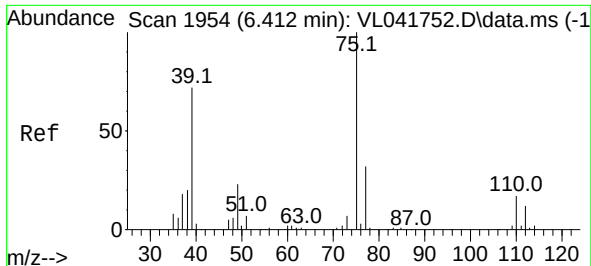
57 100

41 0.0 30.7 46.1#

56 0.0 25.4 38.0#







#45

t-1,3-Dichloropropene

Concen: 0.038 ppbv

RT: 6.438 min Scan# 1954

Delta R.T. 0.026 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

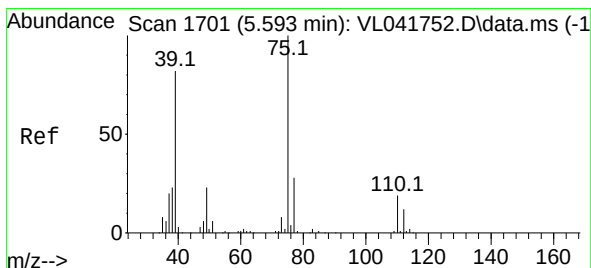
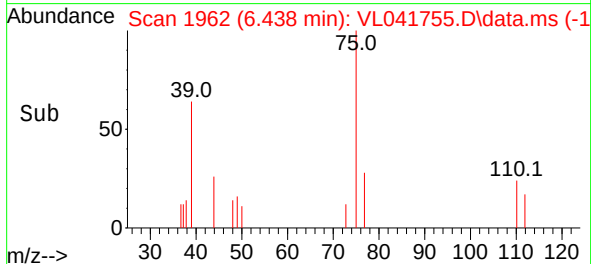
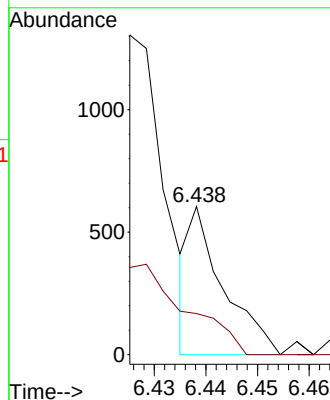
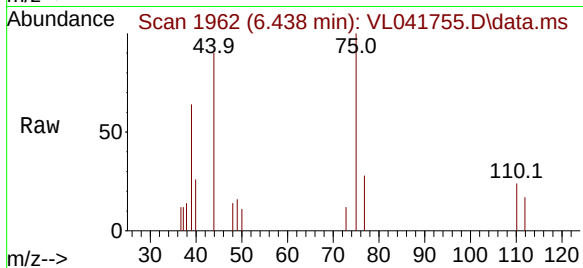
VSTDIC0.5

Tgt Ion: 75 Resp: 279

Ion Ratio Lower Upper

75 100

77 27.8 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 0.179 ppbv

RT: 5.597 min Scan# 1702

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

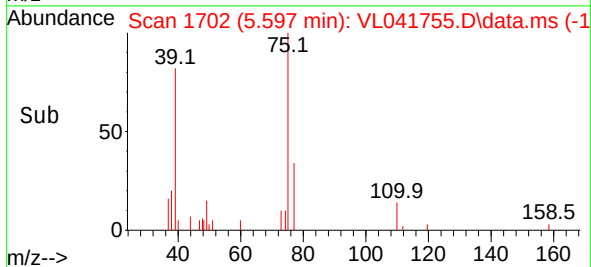
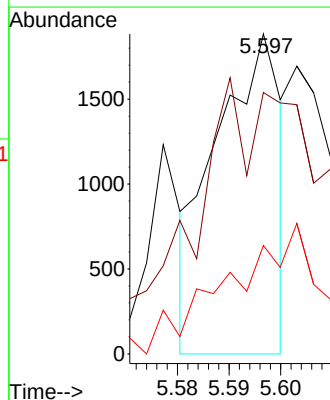
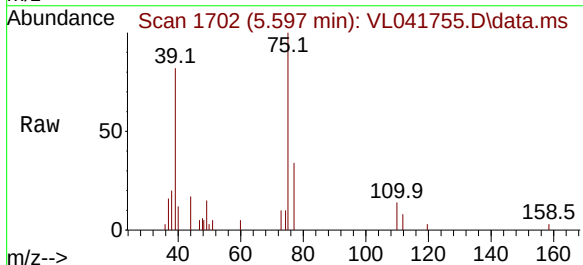
Tgt Ion: 75 Resp: 1656

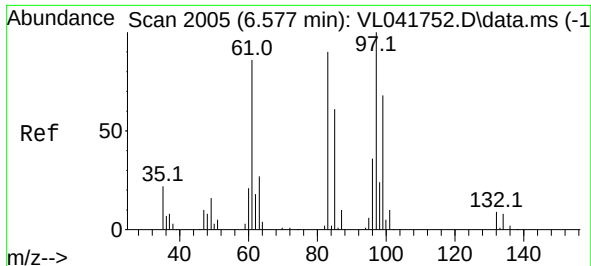
Ion Ratio Lower Upper

75 100

39 72.0 65.2 97.8

77 51.2 22.0 33.0#





#47

1,1,2-Trichloroethane

Concen: 0.342 ppbv

RT: 6.587 min Scan# 2005

Delta R.T. 0.010 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.5

Tgt Ion: 97 Resp: 2388

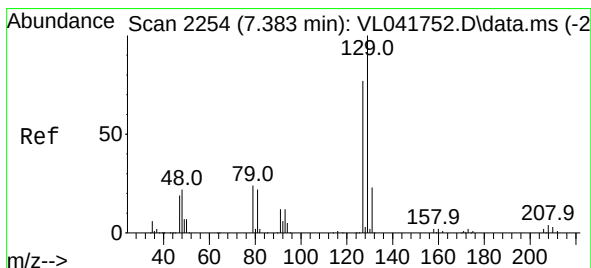
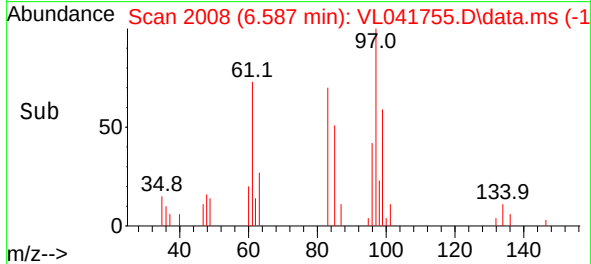
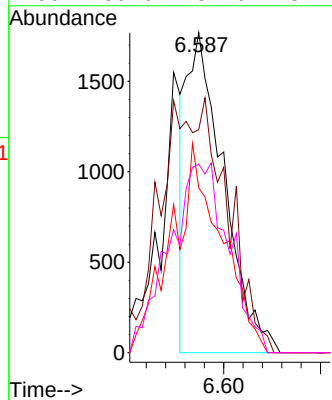
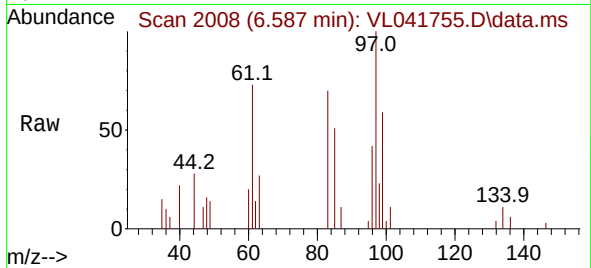
Ion Ratio Lower Upper

97 100

83 69.7 72.3 108.5#

85 51.4 48.5 72.7

99 59.0 54.0 81.0



#48

Dibromochloromethane

Concen: 0.406 ppbv

RT: 7.387 min Scan# 2255

Delta R.T. 0.003 min

Lab File: VL041755.D

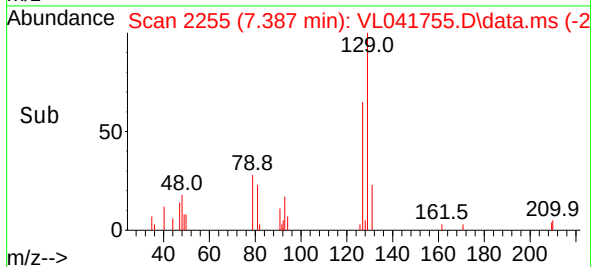
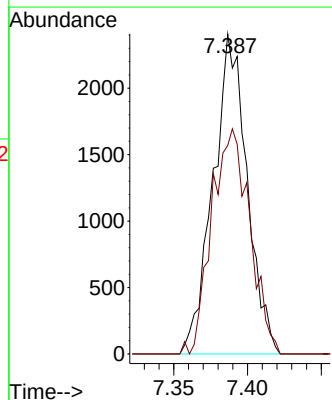
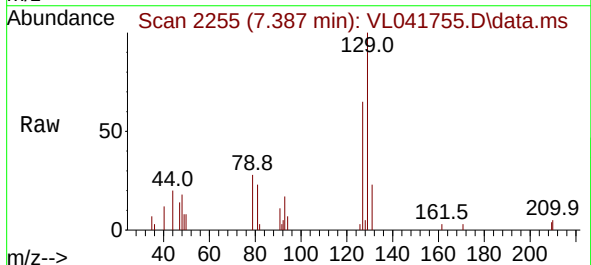
Acq: 16 Dec 2024 15:05

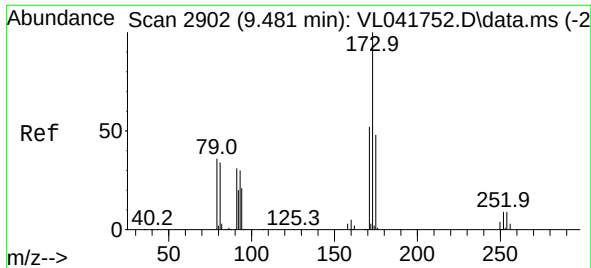
Tgt Ion: 129 Resp: 3865

Ion Ratio Lower Upper

129 100

127 78.8 38.8 116.3

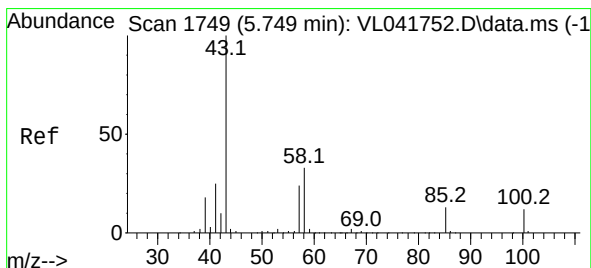
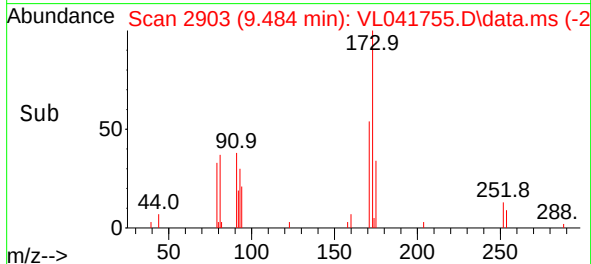
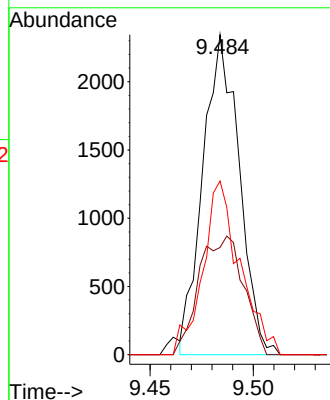
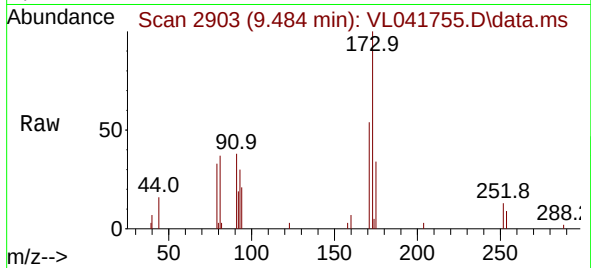




#49  
Bromoform  
Concen: 0.368 ppbv  
RT: 9.484 min Scan# 2902  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

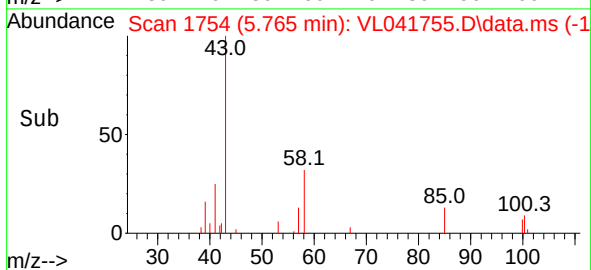
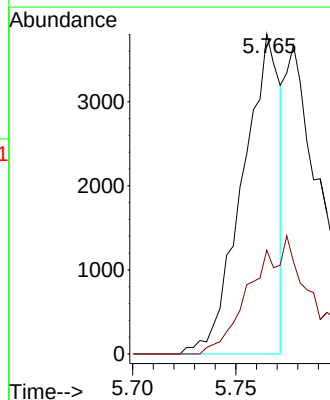
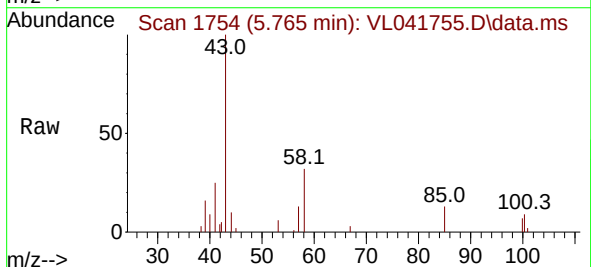
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

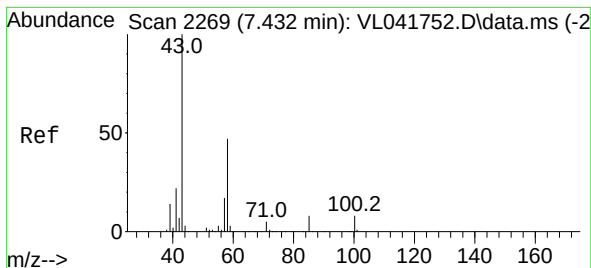
Tgt Ion:173 Resp: 2869  
Ion Ratio Lower Upper  
173 100  
175 45.6 38.2 57.2  
171 55.2 41.1 61.7



#50  
4-Methyl-2-Pentanone  
Concen: 0.244 ppbv  
RT: 5.765 min Scan# 1754  
Delta R.T. 0.016 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 43 Resp: 4771  
Ion Ratio Lower Upper  
43 100  
58 0.0 26.8 40.2#

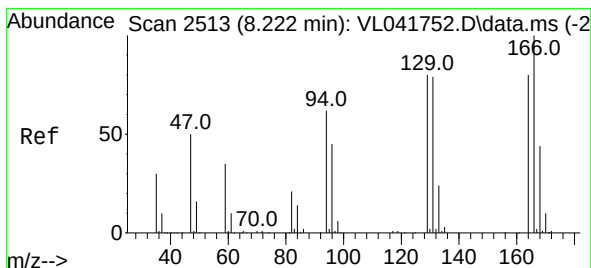
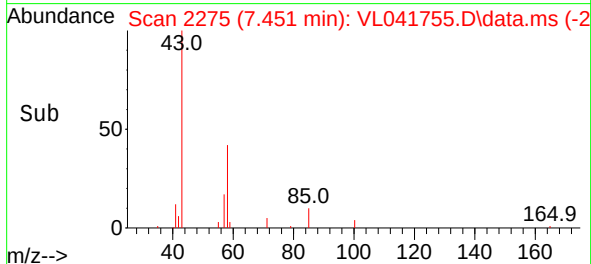
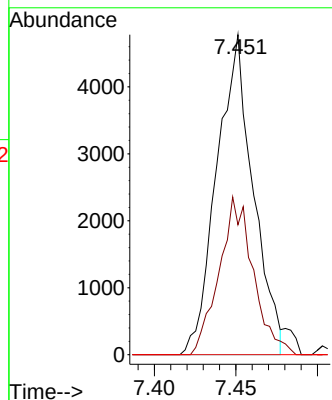
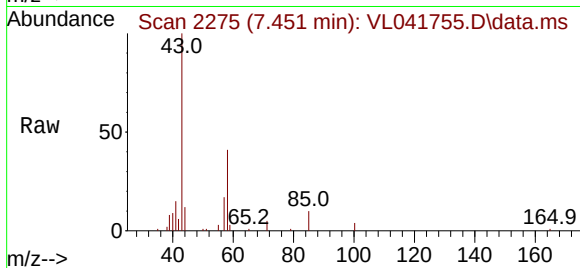




#51  
2-Hexanone  
Concen: 0.468 ppbv  
RT: 7.451 min Scan# 21  
Delta R.T. 0.019 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

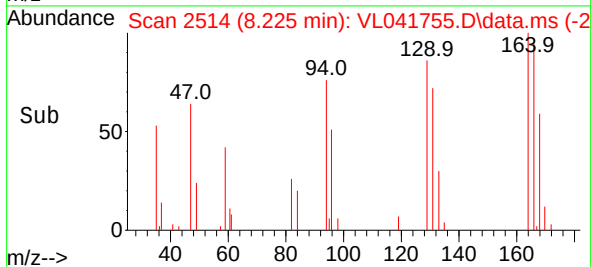
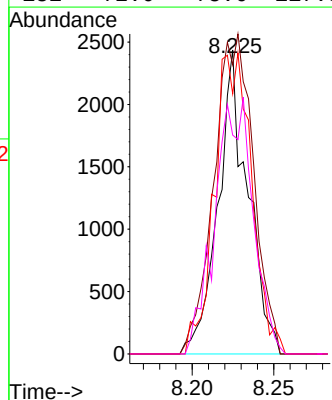
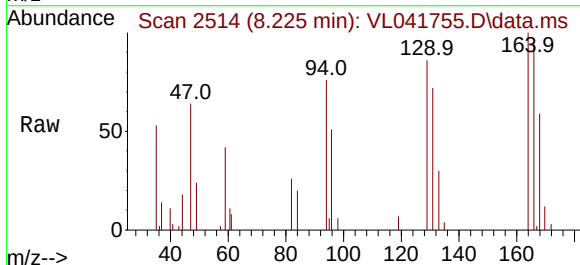
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

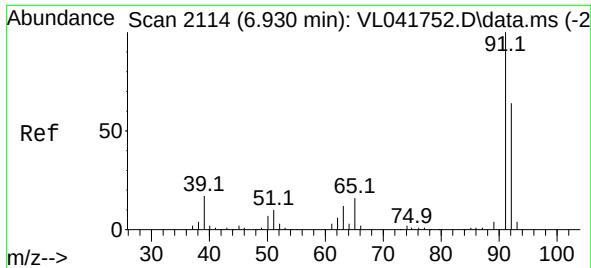
Tgt Ion: 43 Resp: 7412  
Ion Ratio Lower Upper  
43 100  
58 46.2 36.6 55.0  
98 0.0 0.1 0.1#



#52  
Tetrachloroethene  
Concen: 0.450 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 164 Resp: 3091  
Ion Ratio Lower Upper  
164 100  
166 95.1 99.8 149.6#  
129 85.6 79.6 119.4  
131 72.0 78.6 117.8#





#53

Toluene

Concen: 0.504 ppbv

RT: 6.933 min Scan# 2114

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

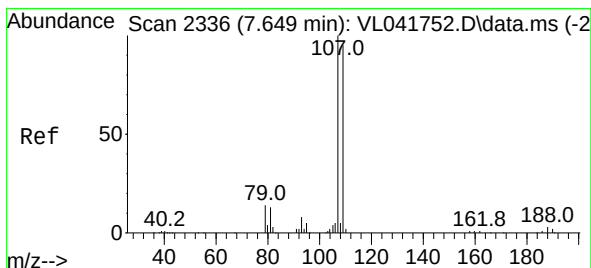
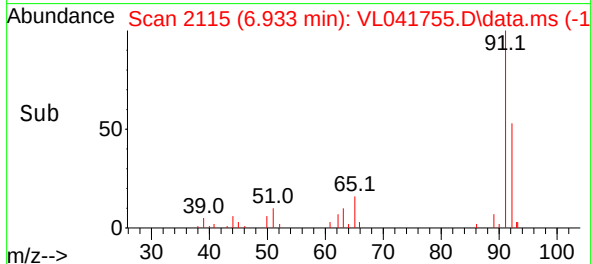
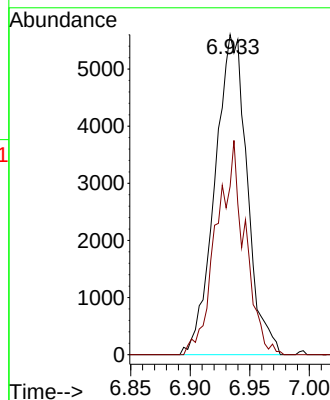
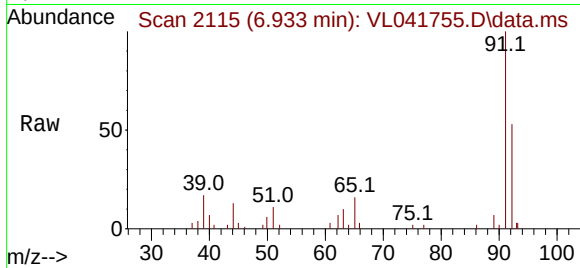
VSTDICC0.5

Tgt Ion: 91 Resp: 10554

Ion Ratio Lower Upper

91 100

92 59.2 47.9 71.9



#54

1,2-Dibromoethane

Concen: 0.287 ppbv

RT: 7.652 min Scan# 2337

Delta R.T. 0.003 min

Lab File: VL041755.D

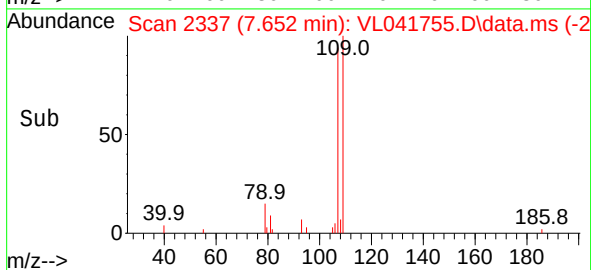
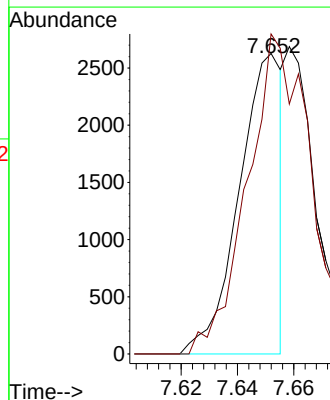
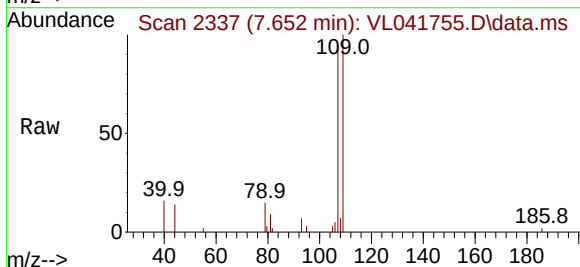
Acq: 16 Dec 2024 15:05

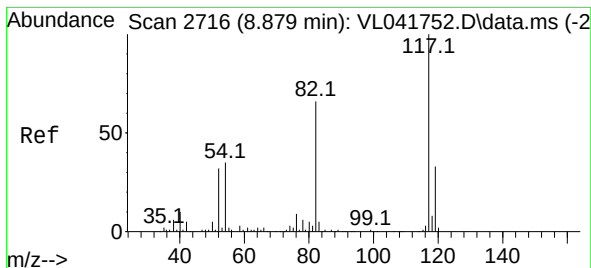
Tgt Ion: 107 Resp: 2762

Ion Ratio Lower Upper

107 100

109 106.5 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.882 min Scan# 2717

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.5

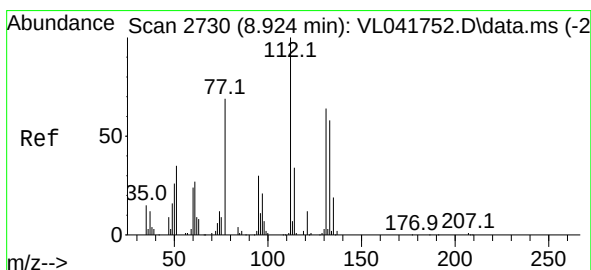
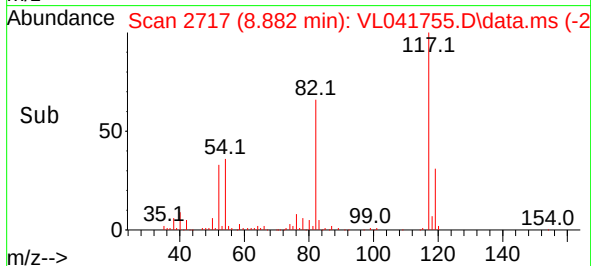
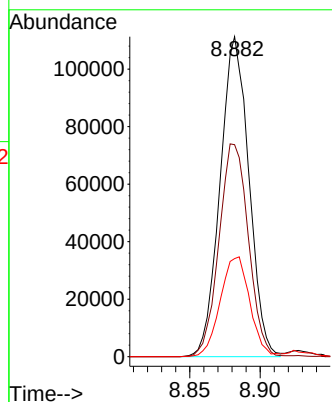
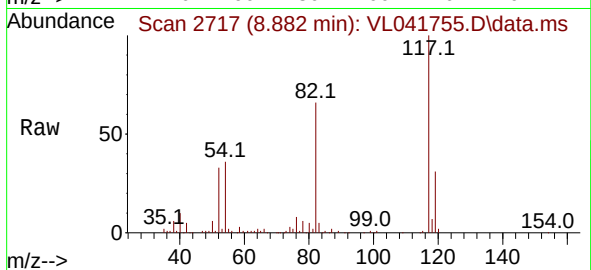
Tgt Ion:117 Resp: 158571

Ion Ratio Lower Upper

117 100

82 68.1 53.8 80.8

119 33.6 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 0.212 ppbv

RT: 8.930 min Scan# 2732

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

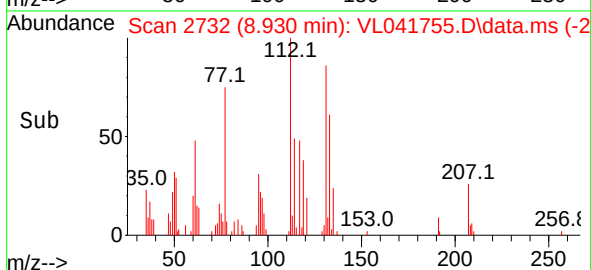
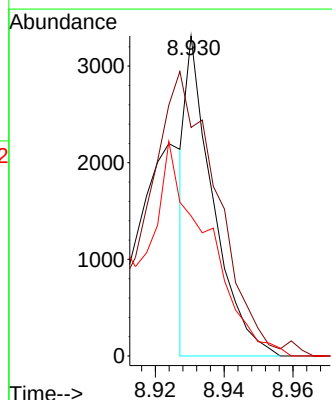
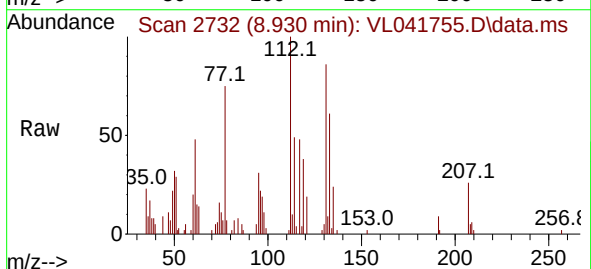
Tgt Ion:131 Resp: 1785

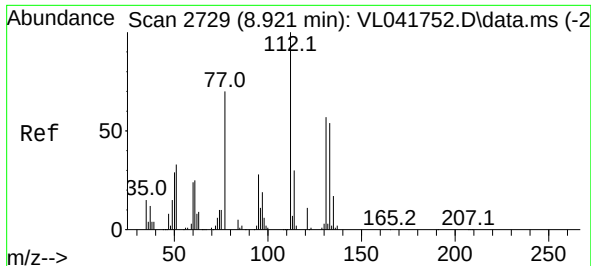
Ion Ratio Lower Upper

131 100

133 238.0 76.8 115.2#

119 0.0 49.0 73.6#





#57

Chlorobenzene

Concen: 0.263 ppbv

RT: 8.927 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

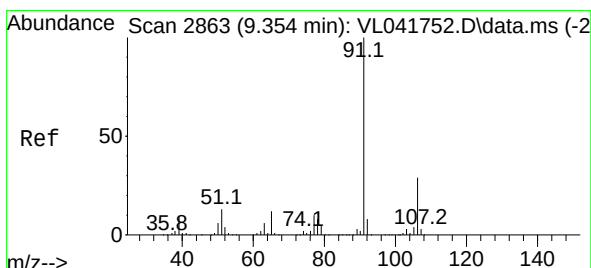
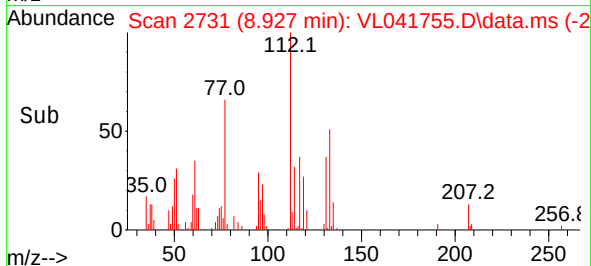
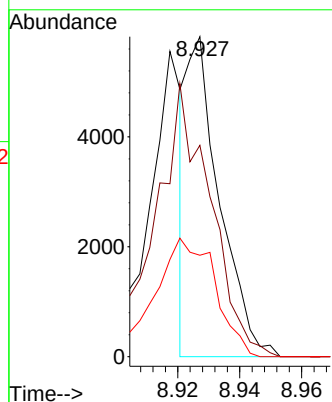
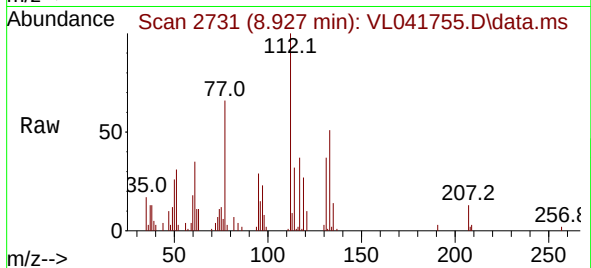
Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.5

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 112   | Resp: | 4266 |
| Ion Ratio | Lower | Upper |      |
| 112       | 100   |       |      |
| 77        | 66.1  | 57.4  | 86.0 |
| 114       | 31.7  | 27.4  | 33.4 |



#58

Ethyl Benzene

Concen: 0.470 ppbv

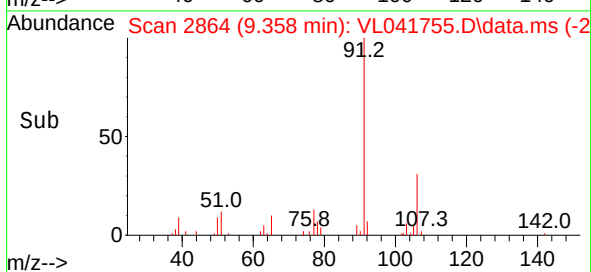
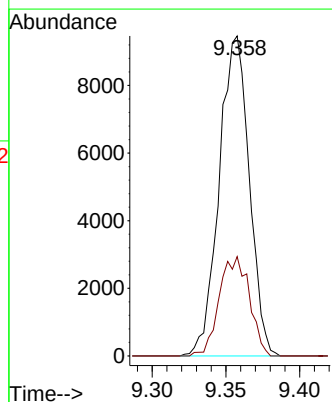
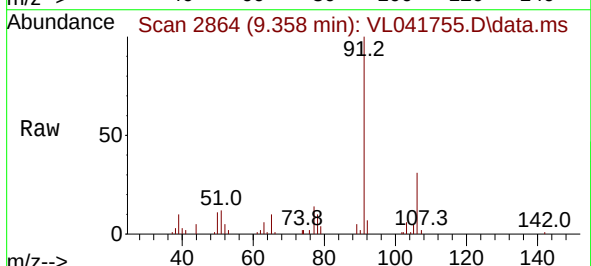
RT: 9.358 min Scan# 2864

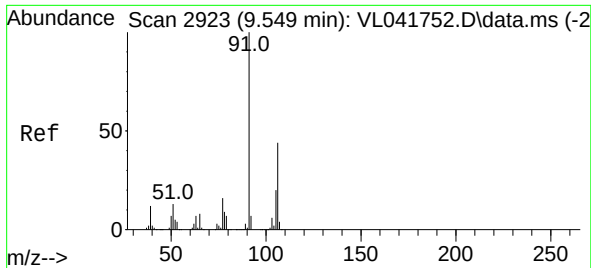
Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 13428 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 106       | 31.0  | 23.5  | 35.3  |

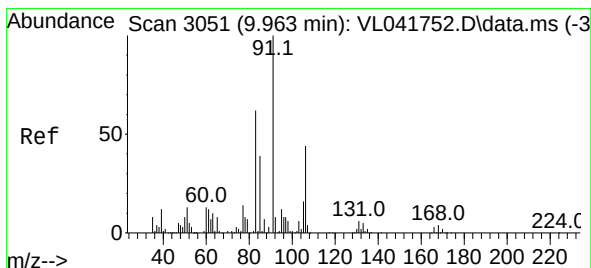
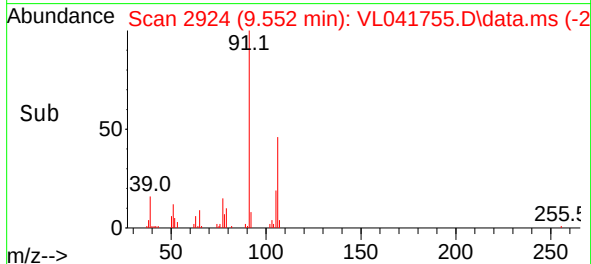
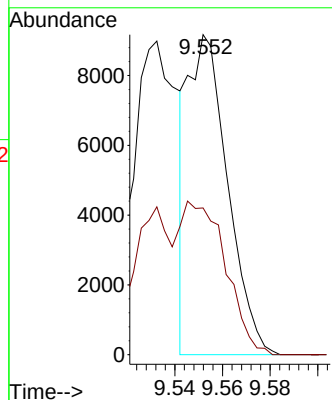
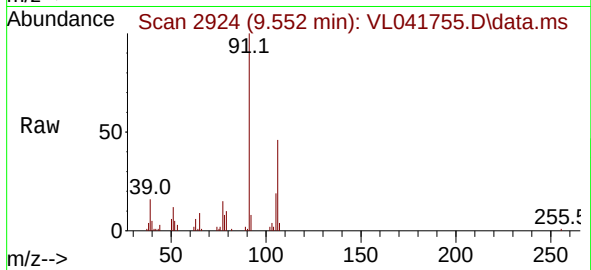




#59  
m/p-Xylene  
Concen: 0.461 ppbv  
RT: 9.552 min Scan# 2924  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

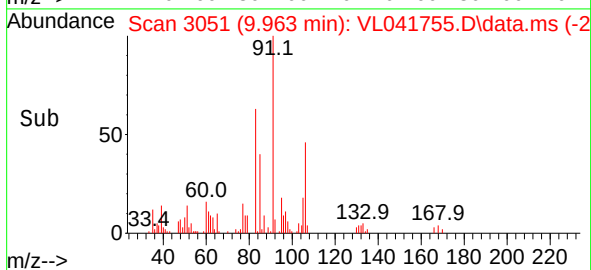
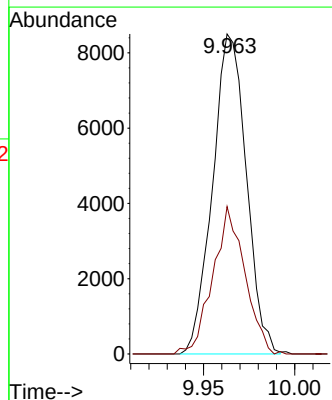
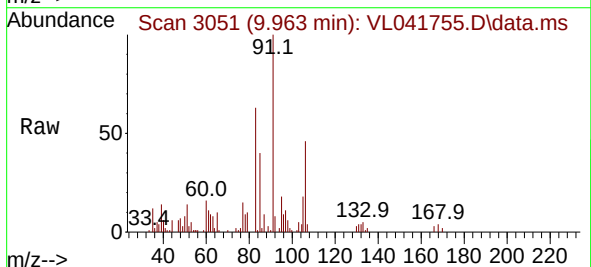
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 91 Resp: 10592  
Ion Ratio Lower Upper  
91 100  
106 100.0 0.0 0.0#

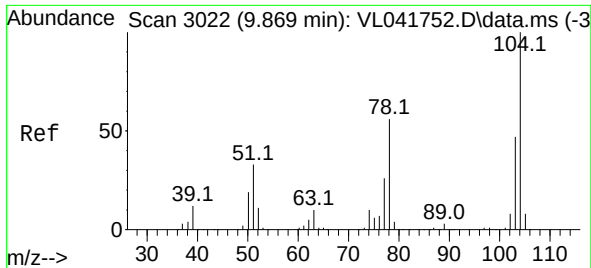


#60  
o-Xylene  
Concen: 0.476 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 91 Resp: 10954  
Ion Ratio Lower Upper  
91 100  
106 43.7 21.1 63.4



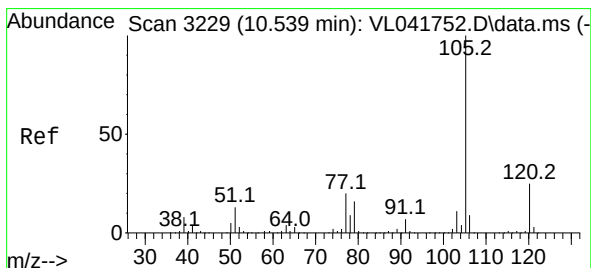
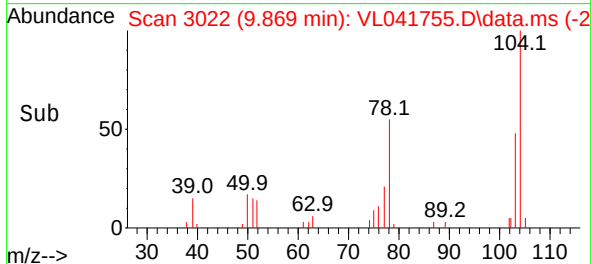
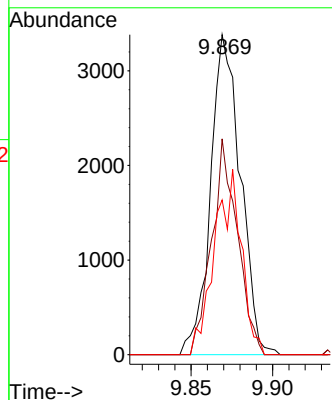
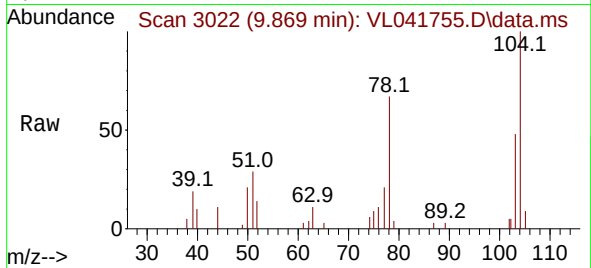




#61  
Styrene  
Concen: 0.433 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

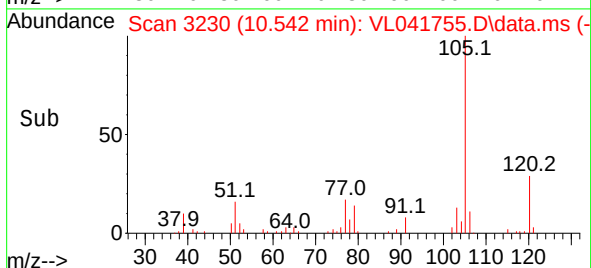
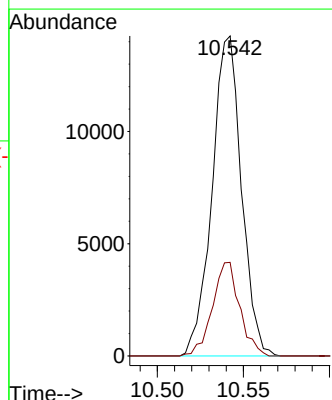
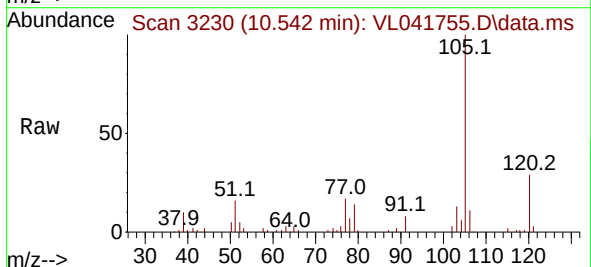
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

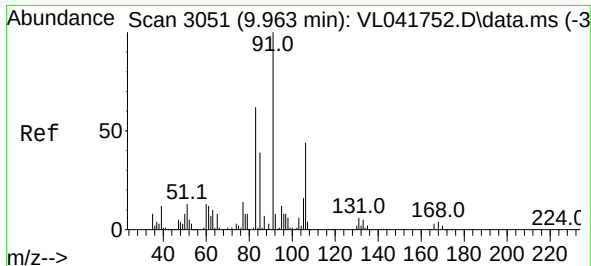
Tgt Ion:104 Resp: 4314  
Ion Ratio Lower Upper  
104 100  
78 58.1 43.8 65.6  
103 51.9 37.8 56.6



#62  
Isopropylbenzene  
Concen: 0.490 ppbv  
RT: 10.542 min Scan# 3230  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:105 Resp: 16953  
Ion Ratio Lower Upper  
105 100  
120 27.1 19.8 29.8

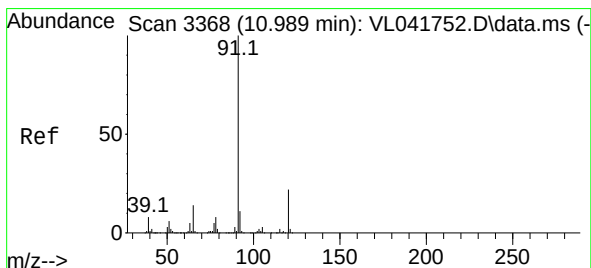
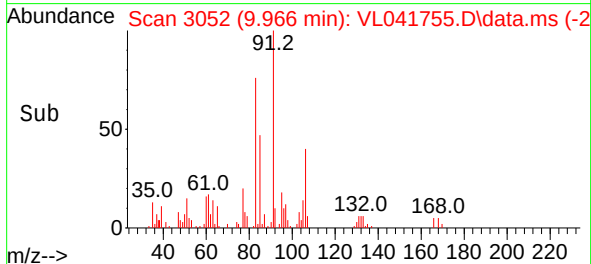
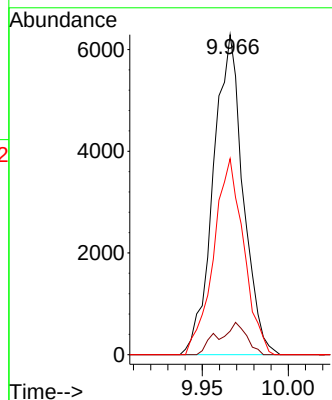
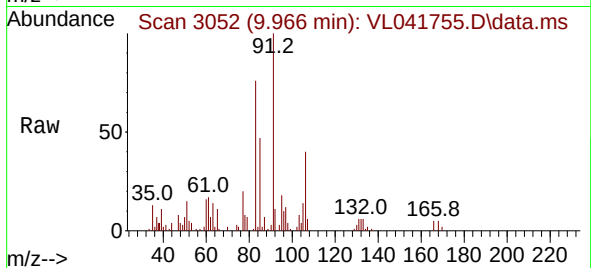




#63  
1,1,2,2-Tetrachloroethane  
Concen: 0.525 ppbv  
RT: 9.966 min Scan# 3051  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

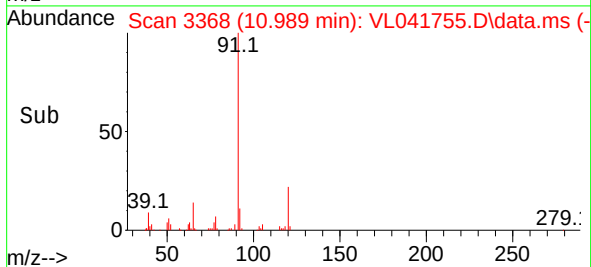
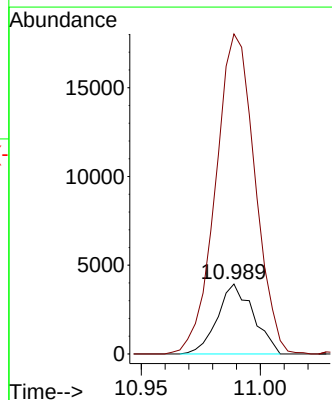
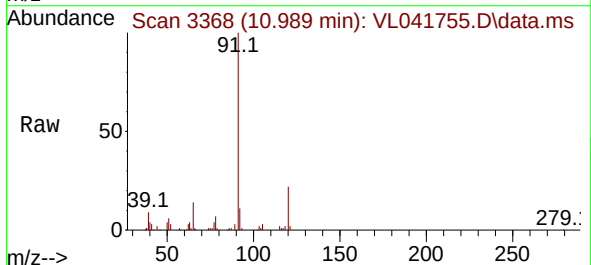
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

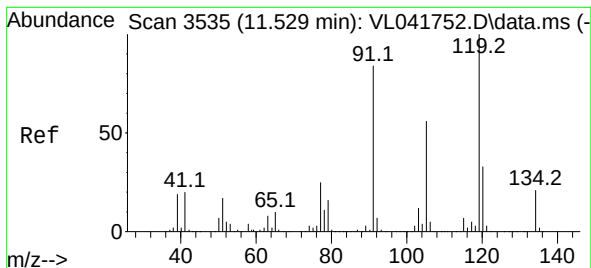
Tgt Ion: 83 Resp: 7559  
Ion Ratio Lower Upper  
83 100  
131 9.5 4.9 14.7  
85 62.2 32.0 96.2



#64  
n-propylbenzene  
Concen: 0.472 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion: 120 Resp: 4126  
Ion Ratio Lower Upper  
120 100  
91 504.6 387.3 580.9





#65

tert-Butylbenzene

Concen: 0.499 ppbv

RT: 11.529 min Scan# 3535

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.5

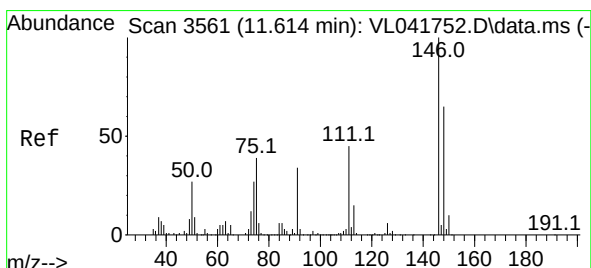
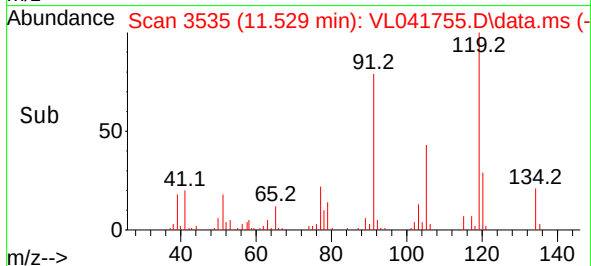
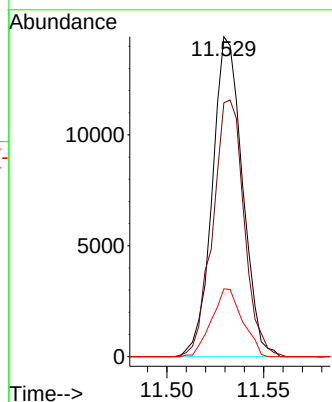
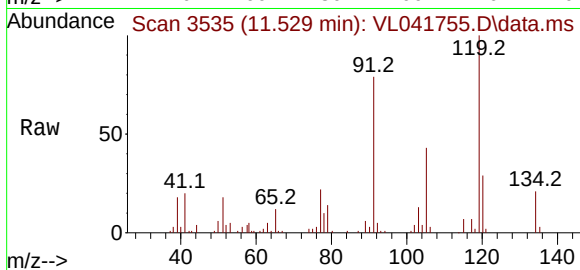
Tgt Ion:119 Resp: 15569

Ion Ratio Lower Upper

119 100

91 83.6 67.0 100.4

134 21.8 16.5 24.7



#66

Benzyl Chloride

Concen: 0.211 ppbv

RT: 11.620 min Scan# 3563

Delta R.T. 0.006 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

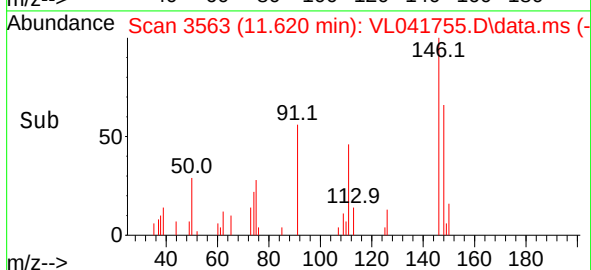
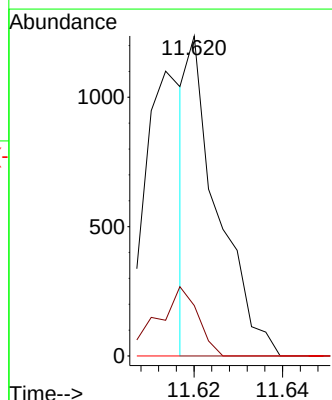
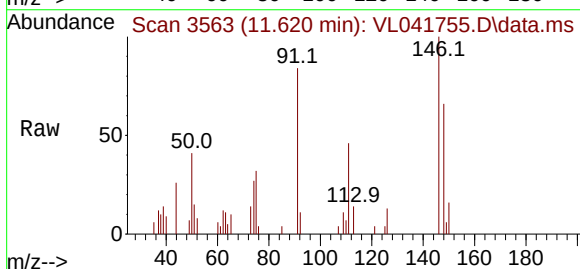
Tgt Ion: 91 Resp: 580

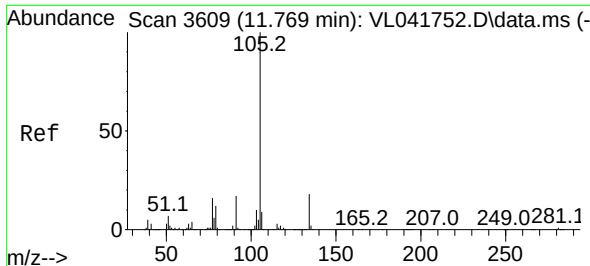
Ion Ratio Lower Upper

91 100

126 29.1 13.9 20.9#

128 0.0 4.4 6.6#





#67

sec-Butylbenzene

Concen: 0.492 ppbv

RT: 11.769 min Scan# 3

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

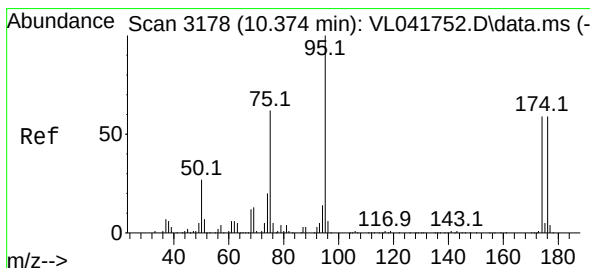
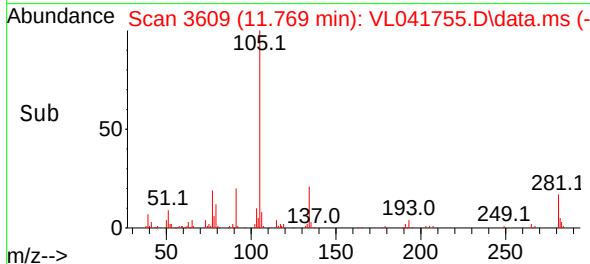
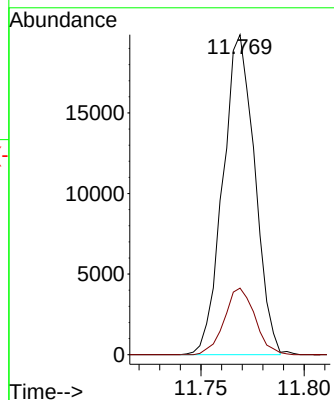
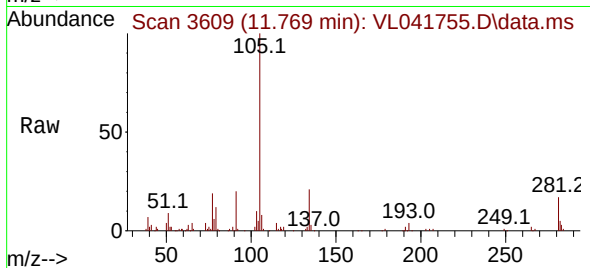
VSTDICC0.5

Tgt Ion:105 Resp: 21263

Ion Ratio Lower Upper

105 100

134 20.1 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.010 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

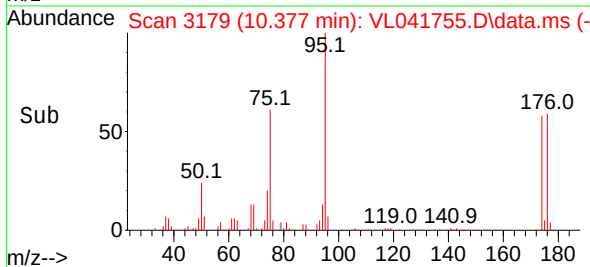
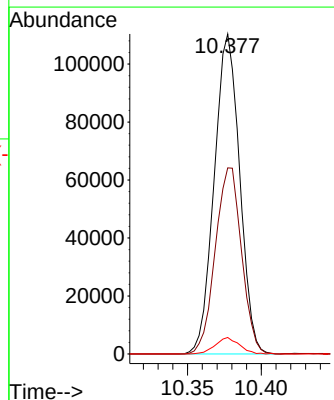
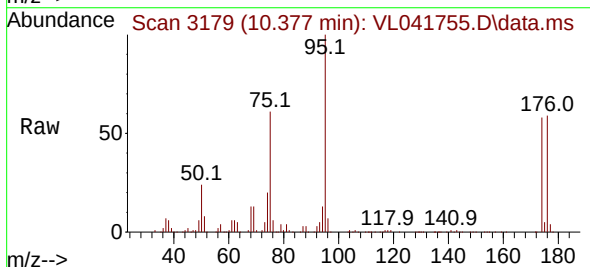
Tgt Ion: 95 Resp: 132273

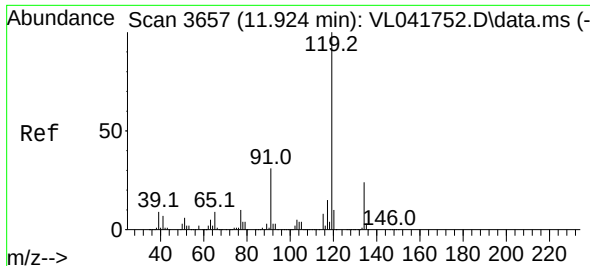
Ion Ratio Lower Upper

95 100

174 60.1 47.6 71.4

175 4.9 3.7 5.5





#69

p-Isopropyltoluene

Concen: 0.479 ppbv

RT: 11.928 min Scan# 3658

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.5

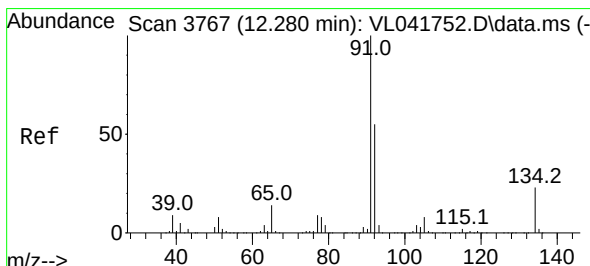
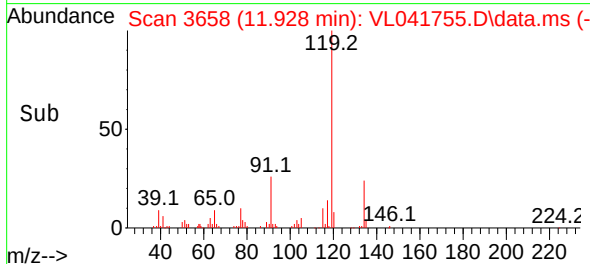
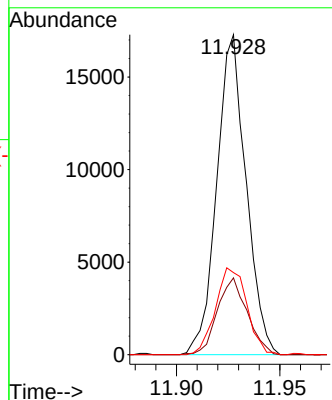
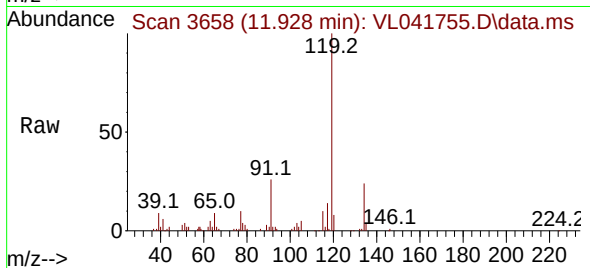
Tgt Ion:119 Resp: 17041

Ion Ratio Lower Upper

119 100

134 24.5 19.6 29.4

91 29.2 24.4 36.6



#70

n-Butylbenzene

Concen: 0.456 ppbv

RT: 12.284 min Scan# 3768

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

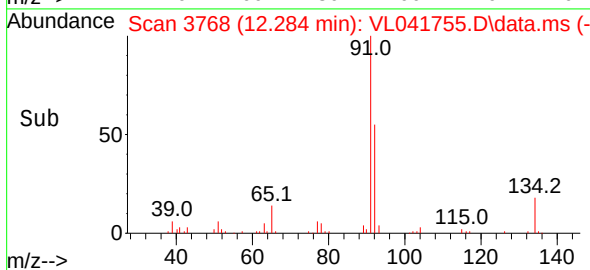
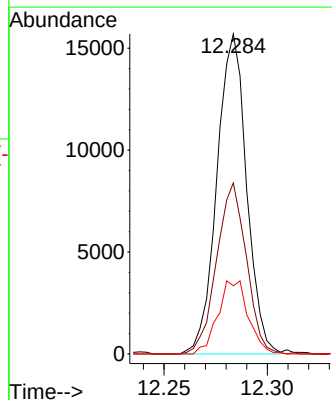
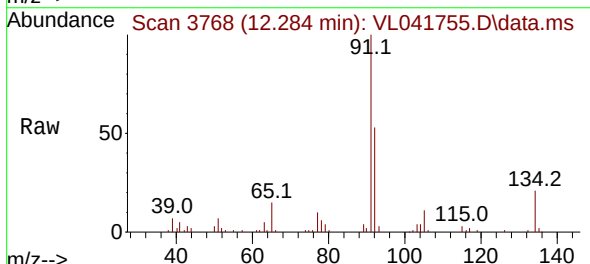
Tgt Ion: 91 Resp: 15671

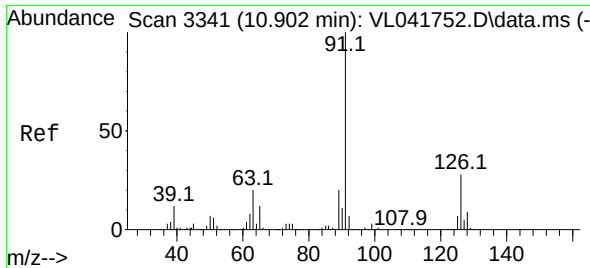
Ion Ratio Lower Upper

91 100

92 53.7 43.2 64.8

134 23.5 18.2 27.4

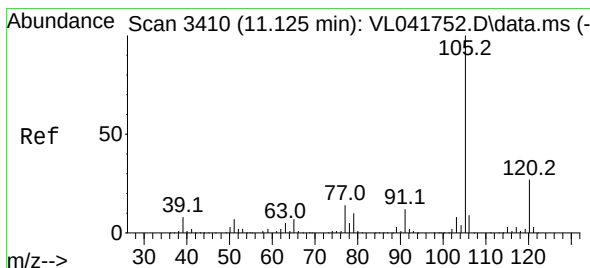
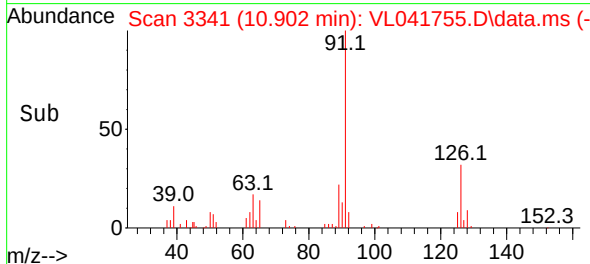
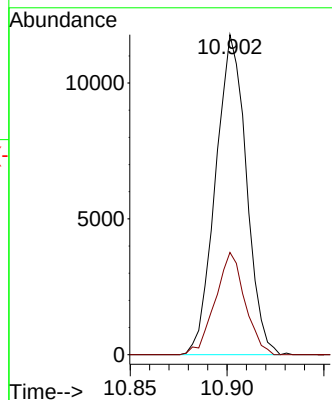
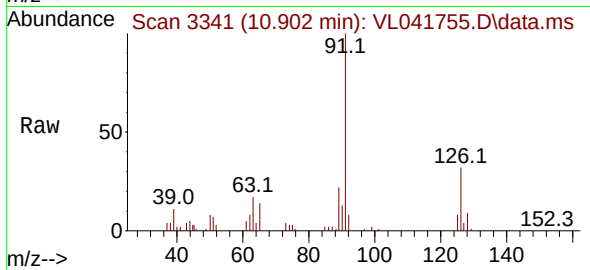




#71  
2-Chlorotoluene  
Concen: 0.492 ppbv  
RT: 10.902 min Scan# 3411  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

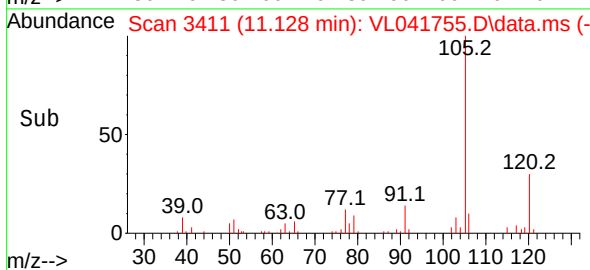
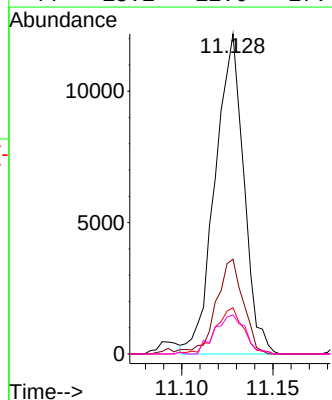
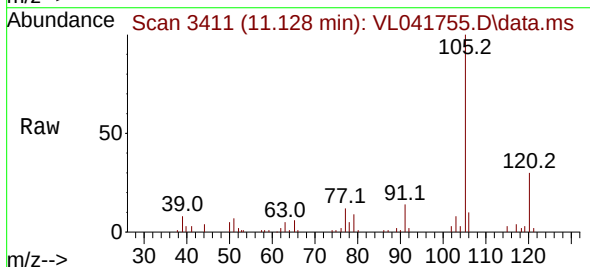
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC0.5

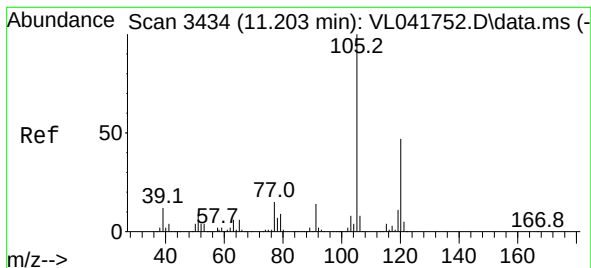
Tgt Ion: 91 Resp: 13000  
Ion Ratio Lower Upper  
91 100  
126 30.8 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 0.491 ppbv  
RT: 11.128 min Scan# 3411  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:105 Resp: 13324  
Ion Ratio Lower Upper  
105 100  
120 28.7 23.3 34.9  
91 14.1 10.9 16.3  
77 13.1 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 0.466 ppbv

RT: 11.206 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_1

ClientSampleId :

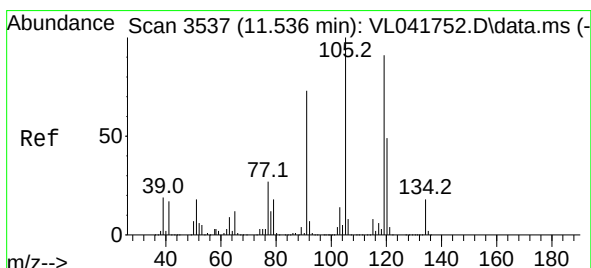
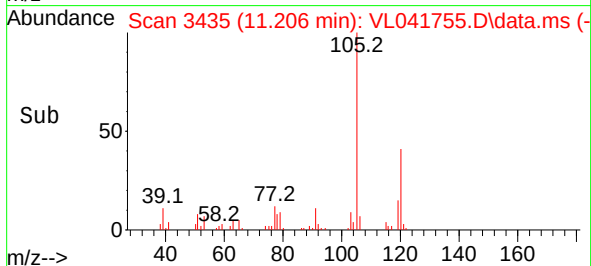
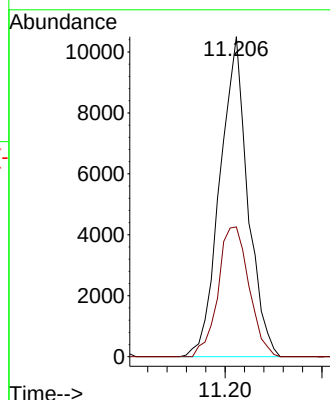
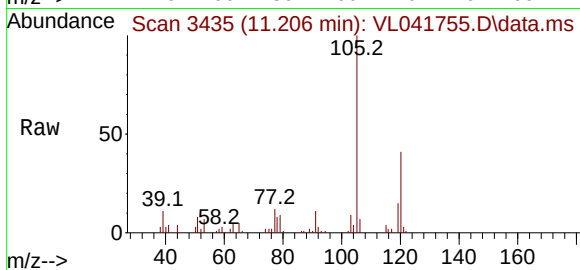
VSTDIC0.5

Tgt Ion:105 Resp: 10497

Ion Ratio Lower Upper

105 100

120 40.6 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 0.457 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL041755.D

Acq: 16 Dec 2024 15:05

Tgt Ion:105 Resp: 11070

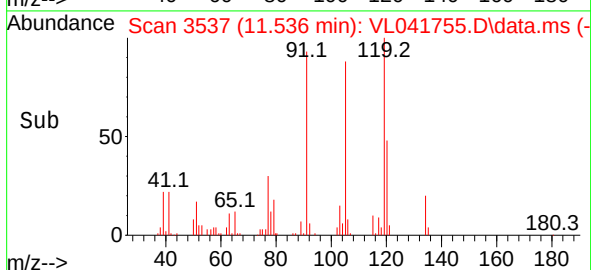
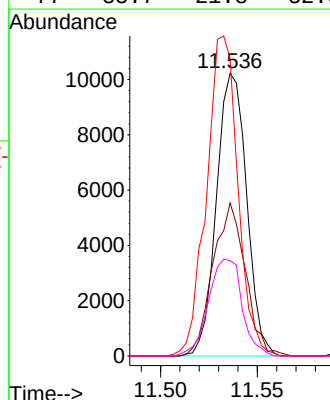
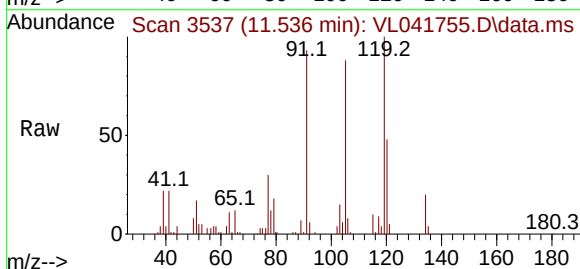
Ion Ratio Lower Upper

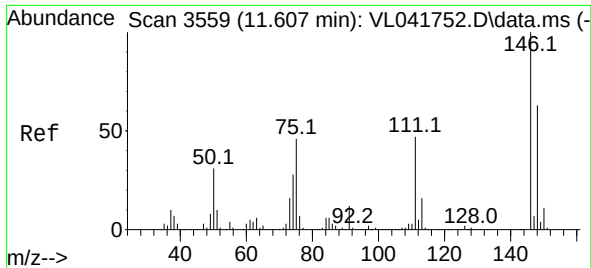
105 100

120 54.1 39.0 58.4

91 105.1 58.1 87.1#

77 33.7 21.8 32.8#

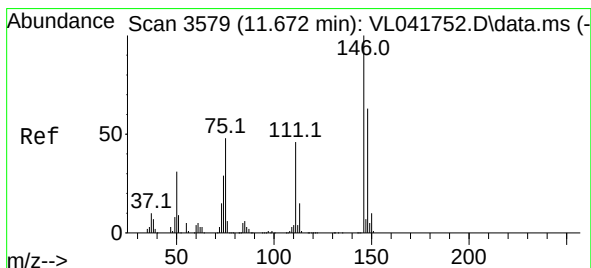
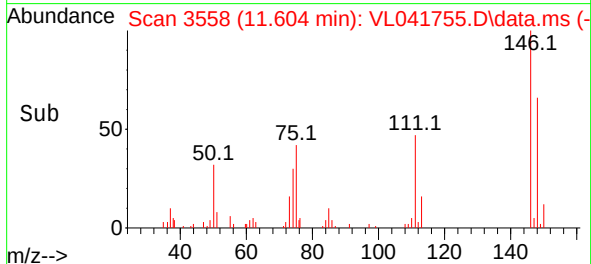
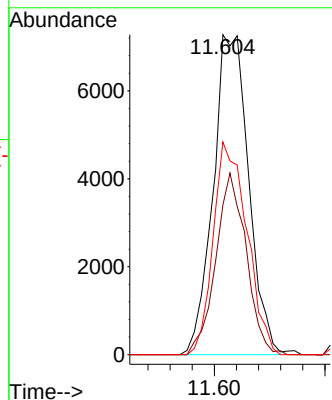
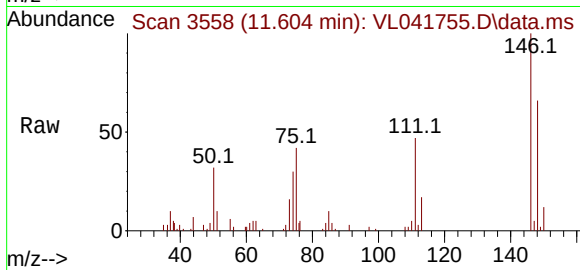




#75  
1,3-Dichlorobenzene  
Concen: 0.525 ppbv  
RT: 11.604 min Scan# 3558  
Delta R.T. -0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

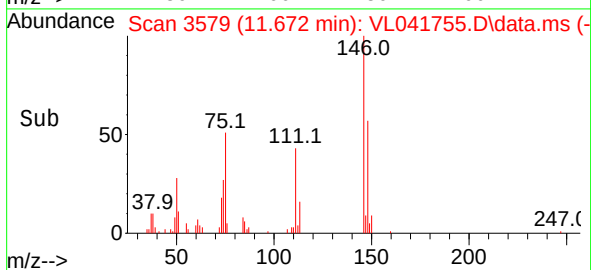
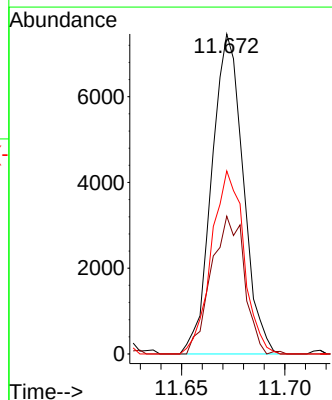
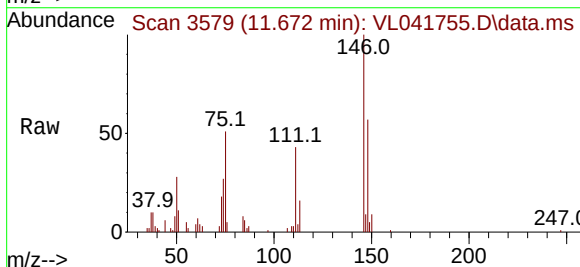
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

Tgt Ion:146 Resp: 8107  
Ion Ratio Lower Upper  
146 100  
111 48.6 23.4 70.3  
148 63.1 31.6 95.0

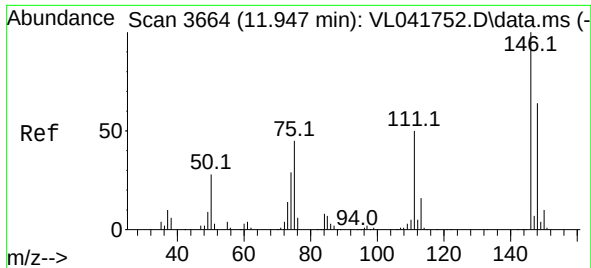


#76  
1,4-Dichlorobenzene  
Concen: 0.517 ppbv  
RT: 11.672 min Scan# 3579  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:146 Resp: 7893  
Ion Ratio Lower Upper  
146 100  
111 45.4 22.7 68.1  
148 58.9 31.4 94.0



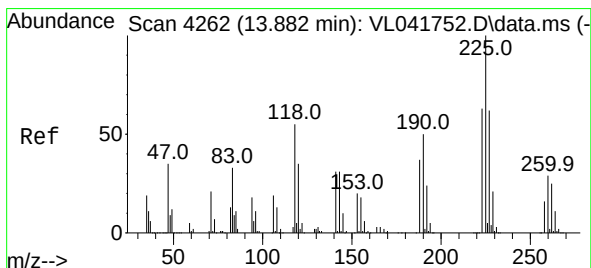
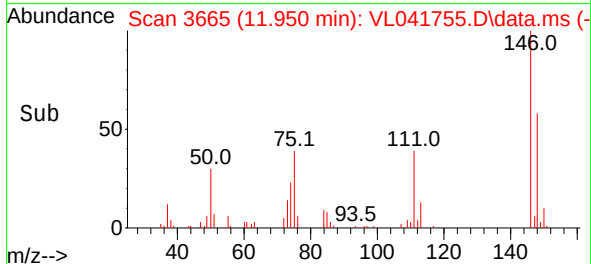
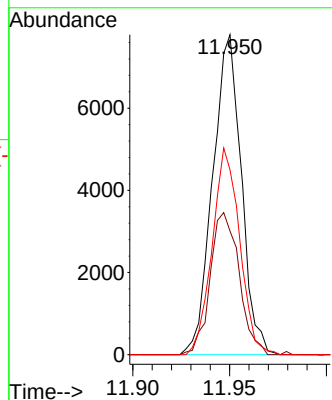
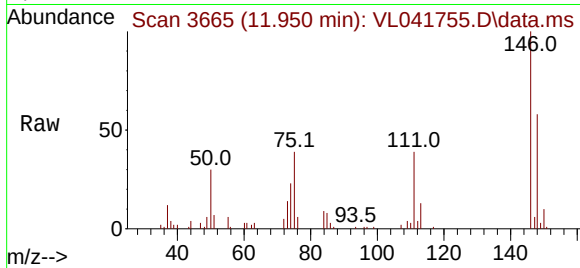




#77  
1,2-Dichlorobenzene  
Concen: 0.538 ppbv  
RT: 11.950 min Scan# 3665  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

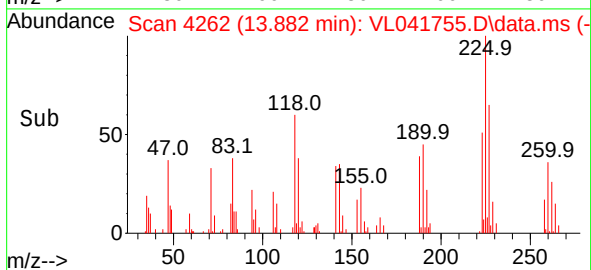
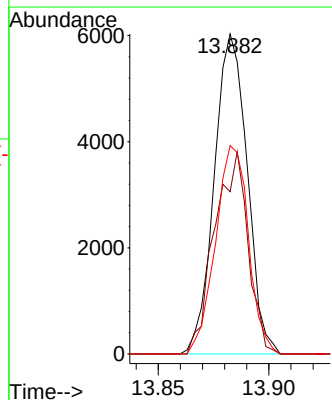
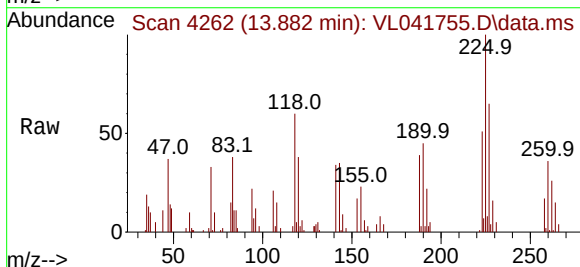
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

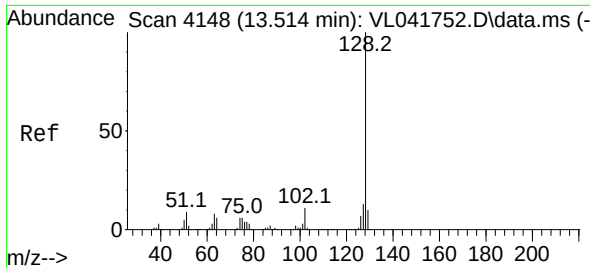
Tgt Ion:146 Resp: 7997  
Ion Ratio Lower Upper  
146 100  
111 45.2 24.8 74.3  
148 62.0 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 0.565 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:225 Resp: 6232  
Ion Ratio Lower Upper  
225 100  
223 64.1 50.5 75.7  
227 65.3 50.3 75.5

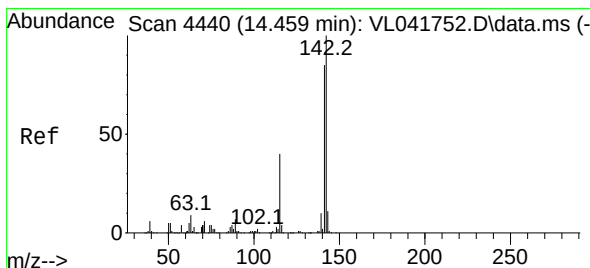
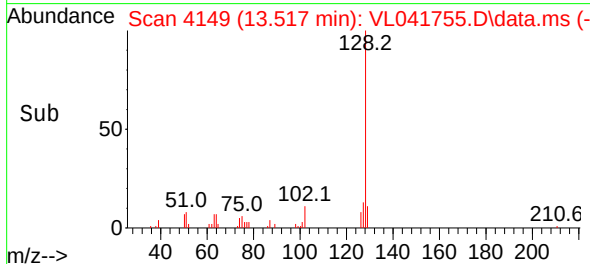
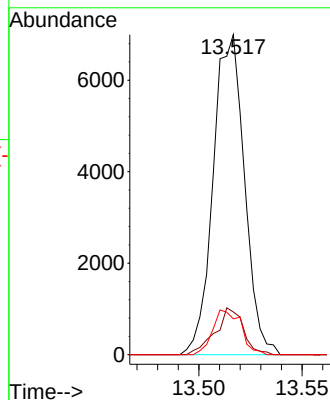
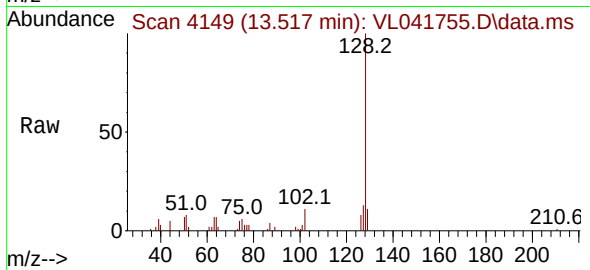




#79  
Naphthalene  
Concen: 0.436 ppbv  
RT: 13.517 min Scan# 4149  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

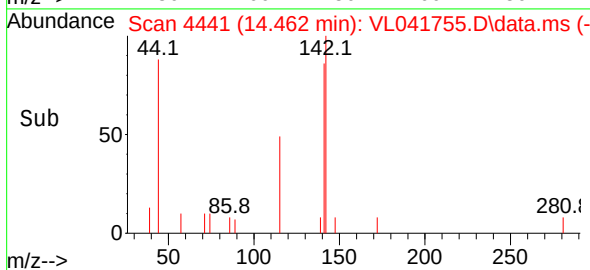
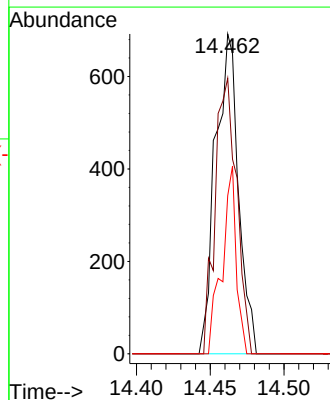
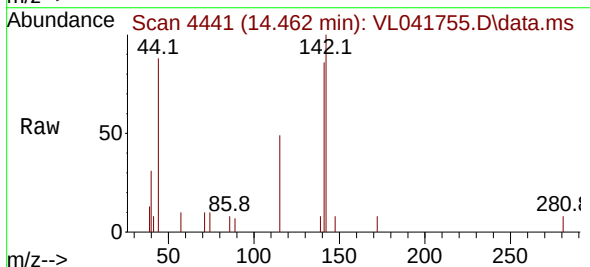
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.5

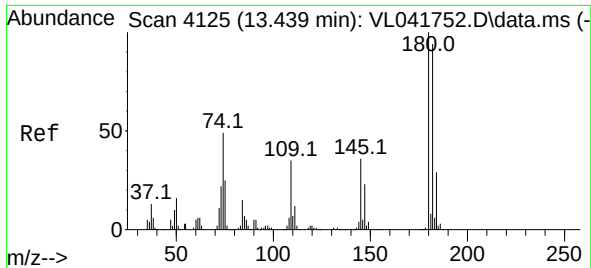
Tgt Ion:128 Resp: 7360  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.7 16.1  
129 11.2 8.2 12.4



#80  
Naphthalene, 2-methyl-  
Concen: 0.143 ppbv  
RT: 14.462 min Scan# 4441  
Delta R.T. 0.003 min  
Lab File: VL041755.D  
Acq: 16 Dec 2024 15:05

Tgt Ion:142 Resp: 748  
Ion Ratio Lower Upper  
142 100  
141 80.9 68.4 102.6  
115 36.4 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 0.460 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041755.D

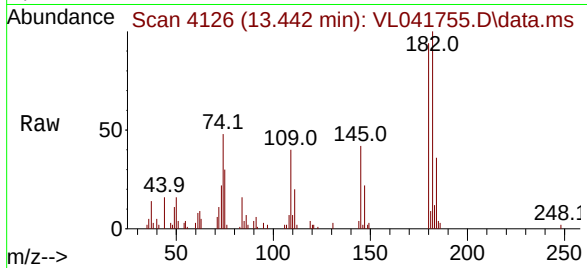
Acq: 16 Dec 2024 15:05

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.5



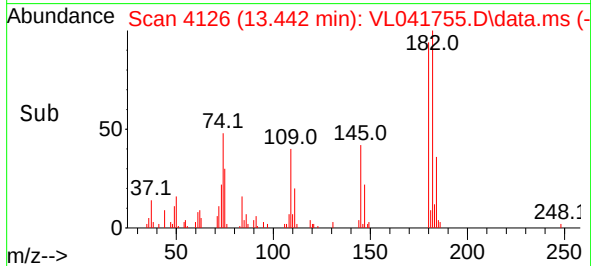
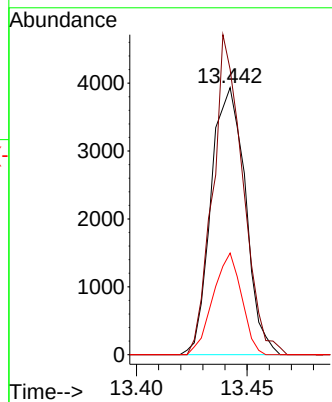
Tgt Ion:180 Resp: 4248

Ion Ratio Lower Upper

180 100

182 104.5 77.0 115.6

184 31.7 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041756.D  
 Acq On : 16 Dec 2024 15:37  
 Operator : SY/MD  
 Sample : VSTDICC0.1  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.1

Quant Time: Dec 19 06:15:07 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.790 | 49   | 65926    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.962 | 114  | 177964   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.885 | 117  | 158649   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 10.380 | 95    | 131540   | 9.950    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.500% |

#### Target Compounds

|                               |       |     |       |       | Qvalue |    |
|-------------------------------|-------|-----|-------|-------|--------|----|
| 2) Dichlorodifluoromethane    | 1.499 | 85  | 1430  | 0.122 | ppbv   | 96 |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 1363  | 0.127 | ppbv   | 95 |
| 4) Chloromethane              | 1.535 | 50  | 482   | 0.105 | ppbv # | 84 |
| 5) Vinyl Chloride             | 1.580 | 62  | 444   | 0.096 | ppbv # | 78 |
| 6) Bromomethane               | 1.670 | 94  | 174   | 0.080 | ppbv # | 79 |
| 7) Chloroethane               | 1.706 | 64  | 220   | 0.122 | ppbv # | 64 |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 1094  | 0.104 | ppbv   | 98 |
| 9) Propene                    | 1.483 | 41  | 740   | 0.159 | ppbv # | 78 |
| 10) Heptane                   | 4.988 | 43  | 527   | 0.044 | ppbv # | 29 |
| 11) Trichlorofluoromethane    | 1.878 | 101 | 1346  | 0.108 | ppbv   | 90 |
| 12) 1,1,2-Trichlorotrifluo... | 2.143 | 101 | 1007  | 0.106 | ppbv   | 92 |
| 13) Ethanol                   | 1.719 | 45  | 183   | 0.472 | ppbv   | 90 |
| 14) Bromoethene               | 1.784 | 108 | 432   | 0.135 | ppbv # | 55 |
| 15) Acetone                   | 1.839 | 43  | 2830  | 0.221 | ppbv   | 92 |
| 16) 1,3-Butadiene             | 1.609 | 39  | 815   | 0.161 | ppbv   | 96 |
| 17) tert-Butyl alcohol        | 2.046 | 59  | 1498  | 0.118 | ppbv # | 89 |
| 18) 1,1-Dichloroethene        | 2.036 | 96  | 498   | 0.125 | ppbv # | 93 |
| 19) Isopropyl Alcohol         | 1.887 | 45  | 3007  | 0.391 | ppbv # | 36 |
| 20) Methylene Chloride        | 2.065 | 84  | 925   | 0.253 | ppbv # | 73 |
| 21) Allyl Chloride            | 2.098 | 41  | 854   | 0.123 | ppbv # | 56 |
| 22) trans-1,2-Dichloroethene  | 2.344 | 96  | 476   | 0.105 | ppbv # | 60 |
| 23) Vinyl Acetate             | 2.460 | 43  | 1339  | 0.240 | ppbv # | 85 |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 1044  | 0.113 | ppbv # | 88 |
| 25) Ethyl Acetate             | 2.842 | 43  | 2227  | 0.093 | ppbv # | 92 |
| 26) Hexane                    | 2.829 | 57  | 1053  | 0.116 | ppbv   | 95 |
| 27) Carbon Disulfide          | 2.149 | 76  | 729   | 0.089 | ppbv # | 1  |
| 28) Methyl tert-Butyl Ether   | 2.444 | 73  | 774   | 0.105 | ppbv # | 55 |
| 29) Chloroform                | 2.852 | 83  | 1515  | 0.110 | ppbv   | 86 |
| 30) Cyclohexane               | 3.865 | 84  | 377   | 0.049 | ppbv # | 1  |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 940   | 0.100 | ppbv   | 85 |
| 32) 1,1,1-Trichloroethane     | 3.370 | 97  | 1393  | 0.101 | ppbv   | 97 |
| 34) 2-Butanone                | 2.564 | 43  | 1888  | 0.132 | ppbv   | 96 |
| 35) Carbon Tetrachloride      | 3.771 | 117 | 1170  | 0.093 | ppbv # | 84 |
| 36) Benzene                   | 3.658 | 78  | 976   | 0.053 | ppbv # | 84 |
| 37) 1,2-Dichloroethane        | 3.218 | 62  | 1264  | 0.110 | ppbv # | 92 |
| 38) Trichloroethene           | 4.548 | 130 | 339   | 0.044 | ppbv # | 38 |
| 39) 1,2-Dichloropropane       | 3.959 | 63  | 48044 | 7.216 | ppbv # | 18 |
| 40) 1,4-Dioxane               | 4.622 | 88  | 254   | 0.078 | ppbv # | 2  |
| 41) Tetrahydrofuran           | 3.069 | 42  | 593   | 0.074 | ppbv # | 76 |
| 42) Bromodichloromethane      | 4.490 | 83  | 756   | 0.057 | ppbv # | 66 |
| 43) Methyl Methacrylate       | 4.888 | 69  | 197   | 0.028 | ppbv # | 1  |
| 44) 2,2,4-Trimethylpentane    | 4.651 | 57  | 1584  | 0.050 | ppbv # | 18 |
| 45) t-1,3-Dichloropropene     | 6.419 | 75  | 247   | 0.034 | ppbv # | 74 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041756.D  
 Acq On : 16 Dec 2024 15:37  
 Operator : SY/MD  
 Sample : VSTDICC0.1  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.1

Quant Time: Dec 19 06:15:07 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

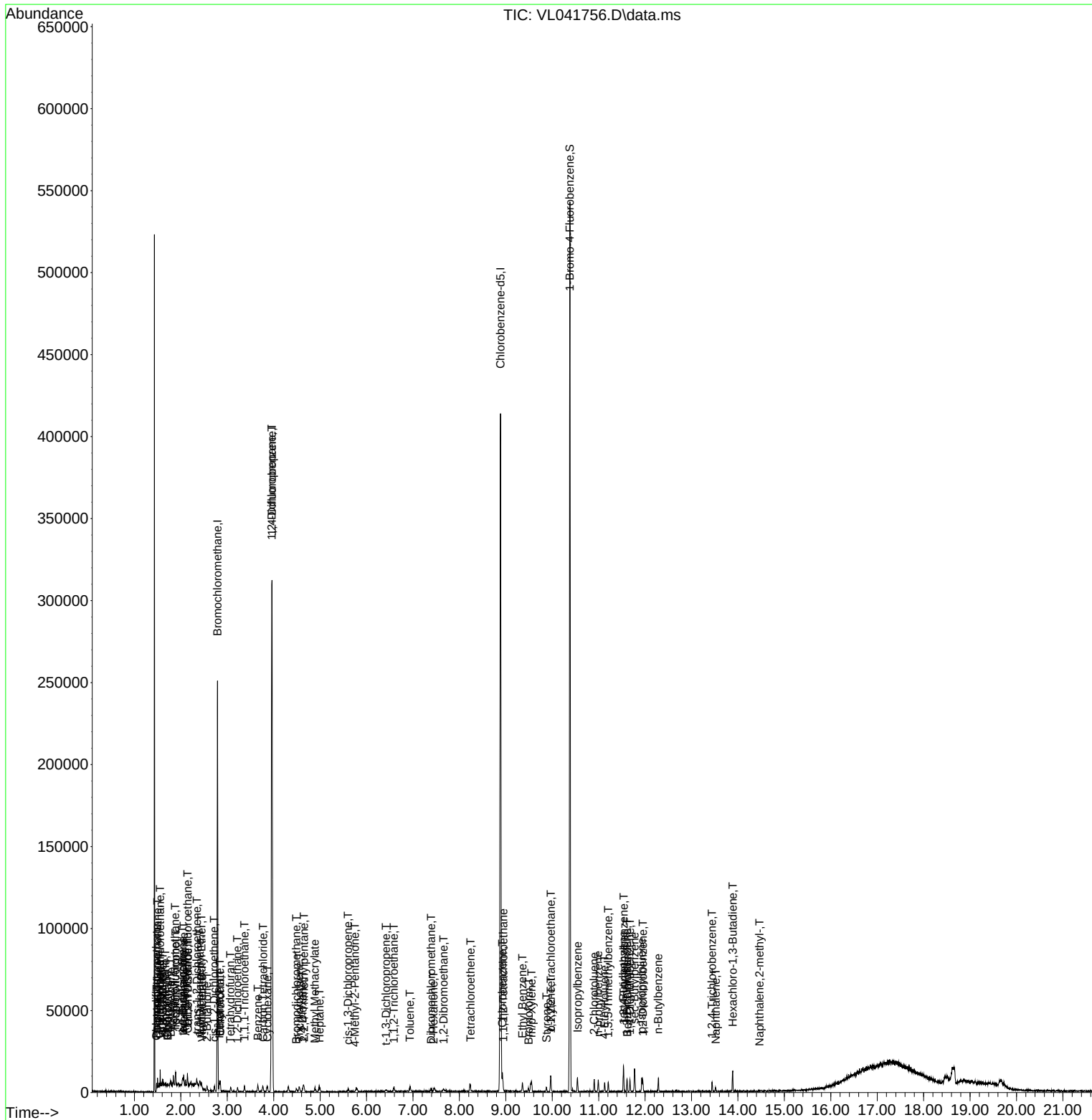
Response via : Initial Calibration

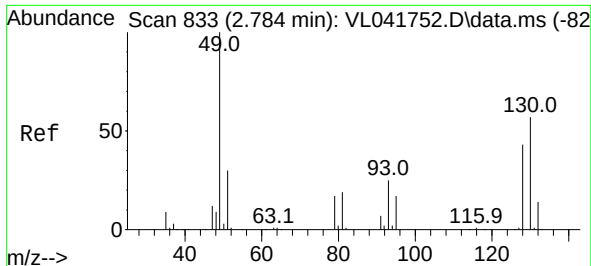
| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.600  | 75   | 315      | 0.034 | ppbv # | 63       |
| 47) 1,1,2-Trichloroethane     | 6.590  | 97   | 525      | 0.075 | ppbv # | 40       |
| 48) Dibromochloromethane      | 7.393  | 129  | 599      | 0.063 | ppbv   | 72       |
| 49) Bromoform                 | 9.493  | 173  | 172      | 0.022 | ppbv # | 1        |
| 50) 4-Methyl-2-Pentanone      | 5.749  | 43   | 36       | 0.002 | ppbv # | 41       |
| 51) 2-Hexanone                | 7.445  | 43   | 446      | 0.028 | ppbv # | 1        |
| 52) Tetrachloroethene         | 8.241  | 164  | 149      | 0.022 | ppbv # | 71       |
| 53) Toluene                   | 6.936  | 91   | 1529     | 0.073 | ppbv # | 56       |
| 54) 1,2-Dibromoethane         | 7.658  | 107  | 396      | 0.041 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 8.946  | 131  | 142      | 0.017 | ppbv # | 9        |
| 57) Chlorobenzene             | 8.927  | 112  | 2102     | 0.129 | ppbv # | 81       |
| 58) Ethyl Benzene             | 9.357  | 91   | 2667     | 0.093 | ppbv   | 97       |
| 59) m/p-Xylene                | 9.555  | 91   | 1768     | 0.077 | ppbv # | 100      |
| 60) o-Xylene                  | 9.969  | 91   | 1998     | 0.087 | ppbv   | 84       |
| 61) Styrene                   | 9.875  | 104  | 785      | 0.079 | ppbv   | 96       |
| 62) Isopropylbenzene          | 10.545 | 105  | 3559     | 0.103 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 9.972  | 83   | 592      | 0.041 | ppbv # | 25       |
| 64) n-propylbenzene           | 10.989 | 120  | 754      | 0.086 | ppbv   | 93       |
| 65) tert-Butylbenzene         | 11.533 | 119  | 2861     | 0.092 | ppbv   | 99       |
| 66) Benzyl Chloride           | 11.617 | 91   | 154      | 0.056 | ppbv # | 66       |
| 67) sec-Butylbenzene          | 11.772 | 105  | 4061     | 0.094 | ppbv   | 94       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 3070     | 0.086 | ppbv   | 98       |
| 70) n-Butylbenzene            | 12.283 | 91   | 2829     | 0.082 | ppbv   | 96       |
| 71) 2-Chlorotoluene           | 10.905 | 91   | 2731     | 0.103 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 2197     | 0.081 | ppbv # | 93       |
| 73) 1,3,5-Trimethylbenzene    | 11.206 | 105  | 2072     | 0.092 | ppbv   | 92       |
| 74) 1,2,4-Trimethylbenzene    | 11.539 | 105  | 2190     | 0.090 | ppbv   | 90       |
| 75) 1,3-Dichlorobenzene       | 11.607 | 146  | 1843     | 0.119 | ppbv   | 90       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 1590     | 0.104 | ppbv   | 96       |
| 77) 1,2-Dichlorobenzene       | 11.953 | 146  | 1439     | 0.097 | ppbv   | 87       |
| 78) Hexachloro-1,3-Butadiene  | 13.889 | 225  | 1172     | 0.106 | ppbv   | 92       |
| 79) Naphthalene               | 13.523 | 128  | 1196     | 0.071 | ppbv # | 90       |
| 80) Naphthalene,2-methyl-     | 14.468 | 142  | 124      | 0.024 | ppbv # | 64       |
| 81) 1,2,4-Trichlorobenzene    | 13.439 | 180  | 931      | 0.101 | ppbv   | 98       |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDICCO.1

- 1
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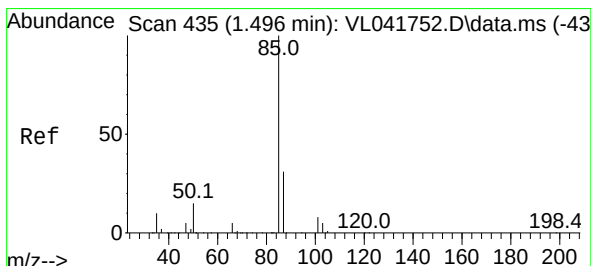
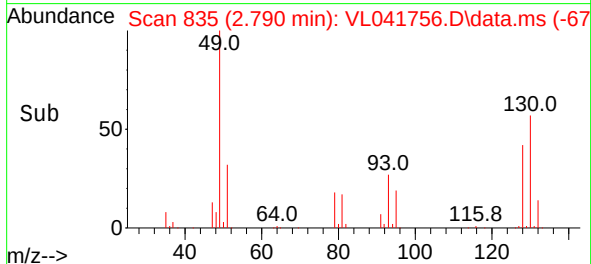
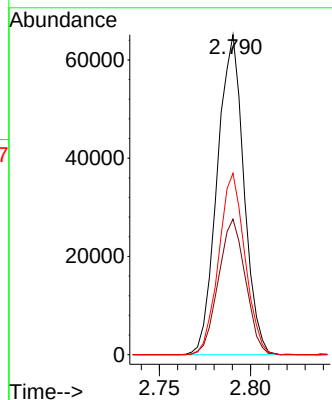
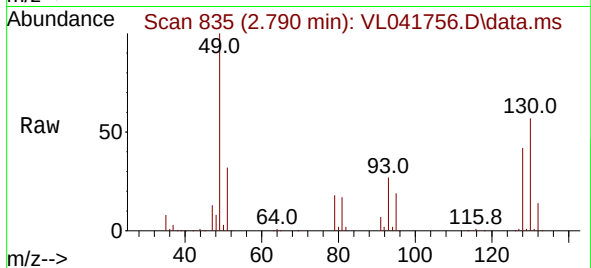




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.790 min Scan# 84  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

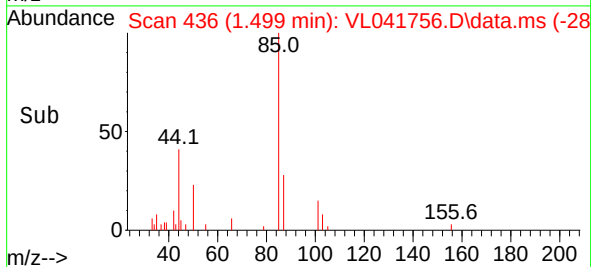
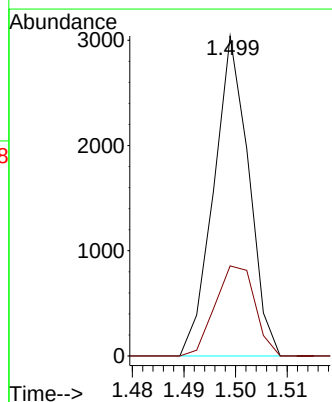
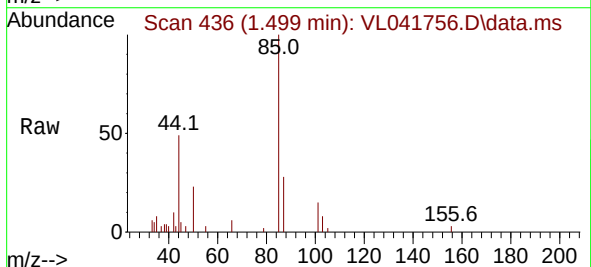
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ClientSampleId :  
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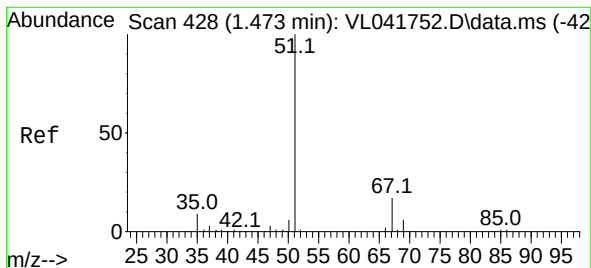
Tgt Ion: 49 Resp: 65926  
Ion Ratio Lower Upper  
49 100  
128 43.1 21.6 64.6  
130 55.9 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.122 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 85 Resp: 1430  
Ion Ratio Lower Upper  
85 100  
87 28.2 24.5 36.7





#3

Chlorodifluoromethane

Concen: 0.127 ppbv

RT: 1.476 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

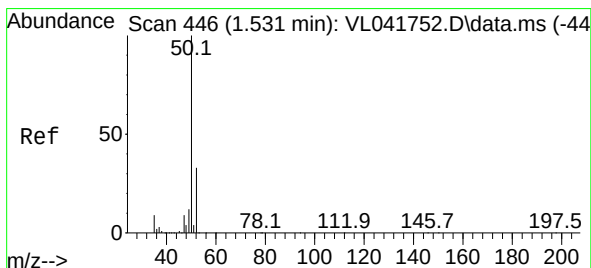
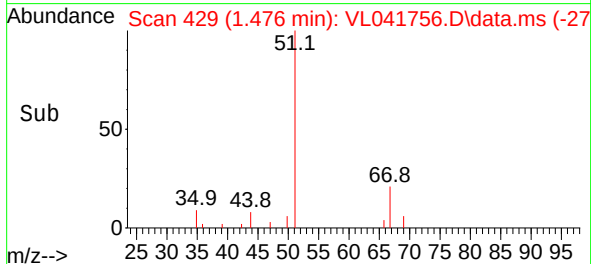
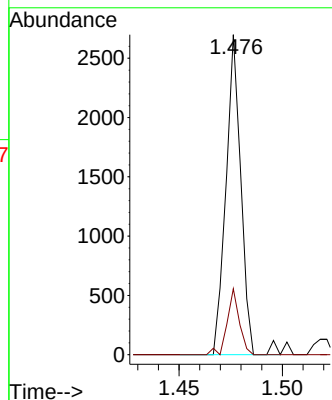
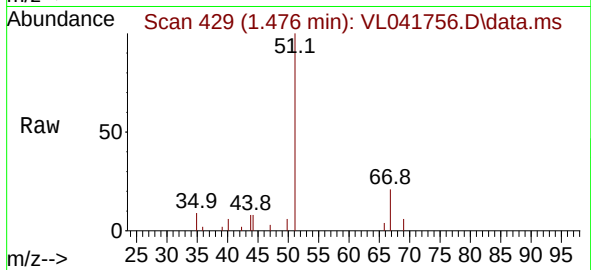
VSTDIC0.1

Tgt Ion: 51 Resp: 1363

Ion Ratio Lower Upper

51 100

67 16.6 15.0 22.4



#4

Chloromethane

Concen: 0.105 ppbv

RT: 1.535 min Scan# 447

Delta R.T. 0.003 min

Lab File: VL041756.D

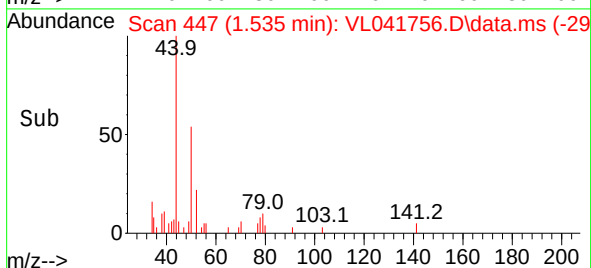
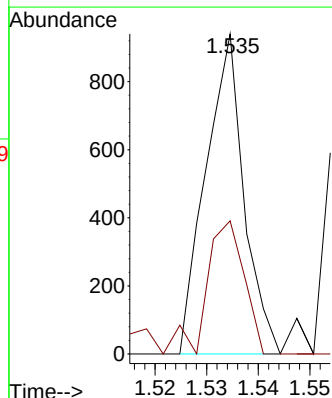
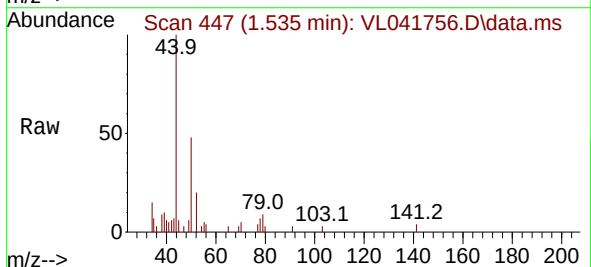
Acq: 16 Dec 2024 15:37

Tgt Ion: 50 Resp: 482

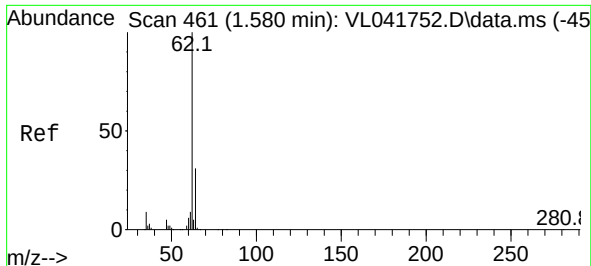
Ion Ratio Lower Upper

50 100

52 41.6 26.2 39.2#



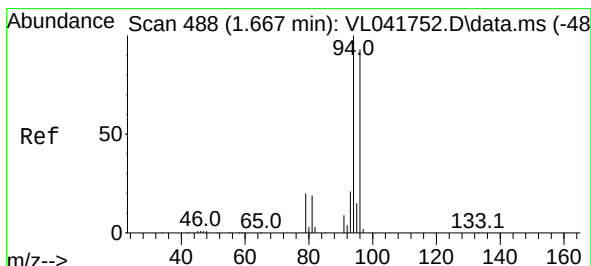
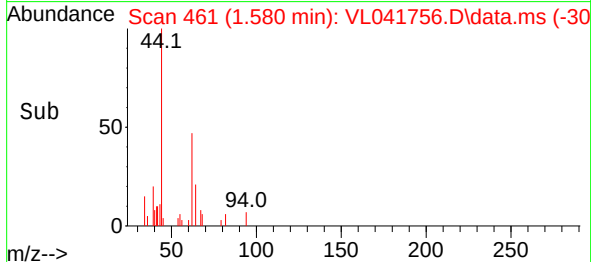
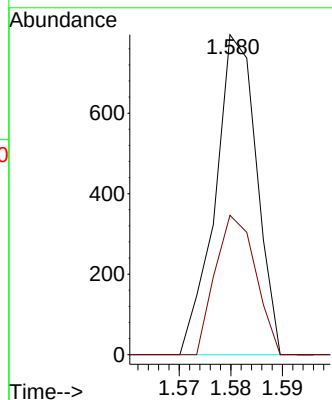
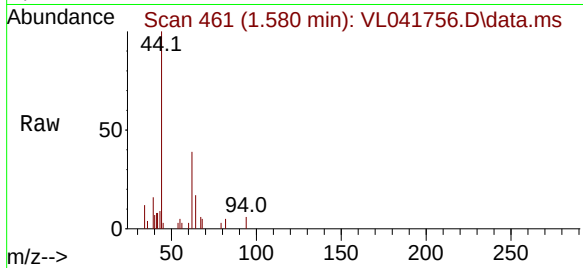




#5  
 Vinyl Chloride  
 Concen: 0.096 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

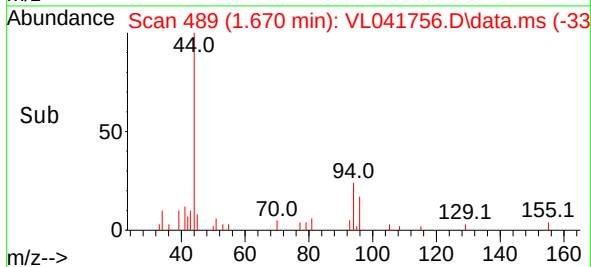
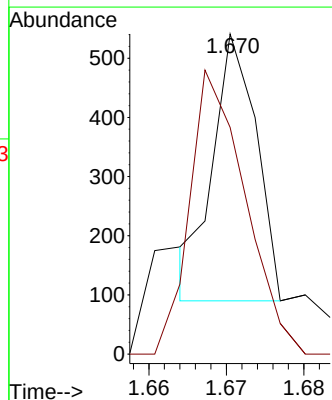
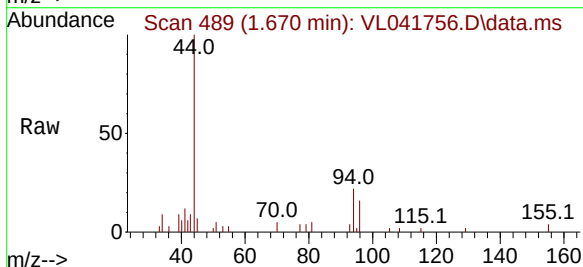
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 ClientSampleId :  
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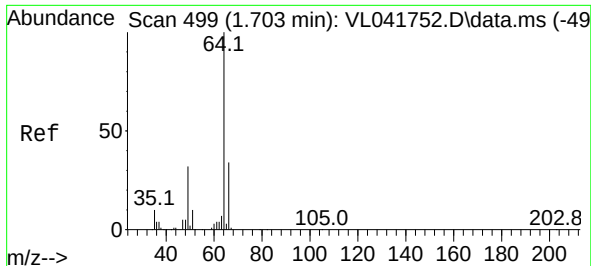
Tgt Ion: 62 Resp: 444  
 Ion Ratio Lower Upper  
 62 100  
 64 43.5 25.1 37.7#



#6  
 Bromomethane  
 Concen: 0.080 ppbv  
 RT: 1.670 min Scan# 489  
 Delta R.T. 0.003 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

Tgt Ion: 94 Resp: 174  
 Ion Ratio Lower Upper  
 94 100  
 96 73.4 74.7 112.1#

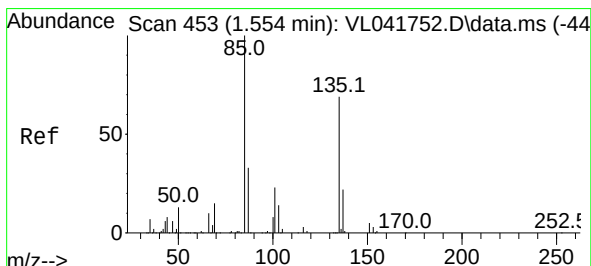
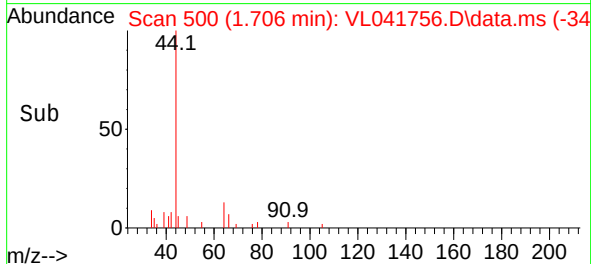
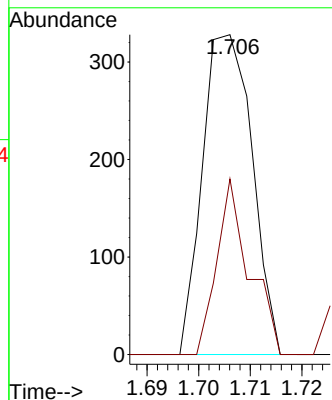
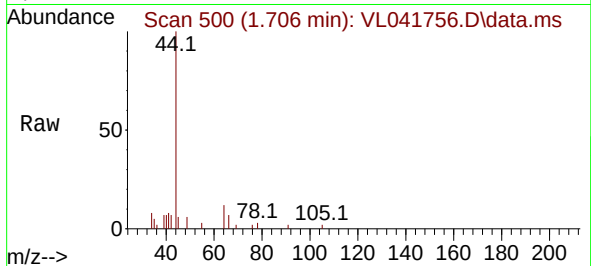




#7  
Chloroethane  
Concen: 0.122 ppbv  
RT: 1.706 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

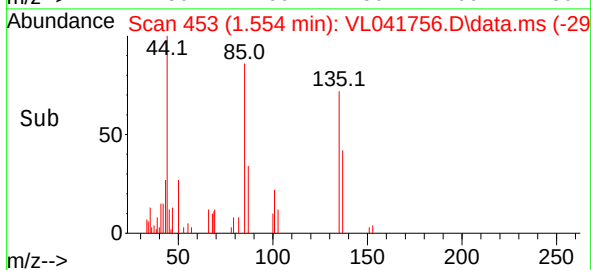
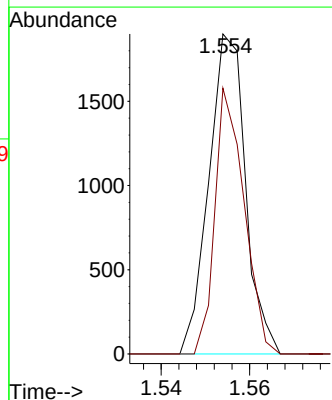
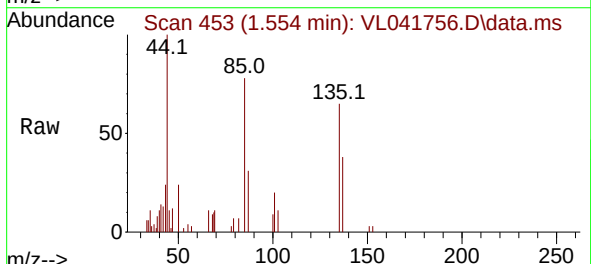
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

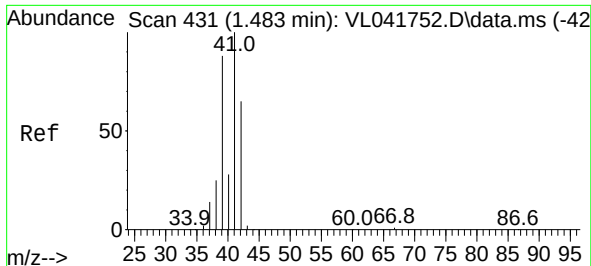
Tgt Ion: 64 Resp: 220  
Ion Ratio Lower Upper  
64 100  
66 54.9 27.5 41.3#



#8  
Dichlorotetrafluoroethane  
Concen: 0.104 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 85 Resp: 1094  
Ion Ratio Lower Upper  
85 100  
135 66.1 51.9 77.9





#9

Propene

Concen: 0.159 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

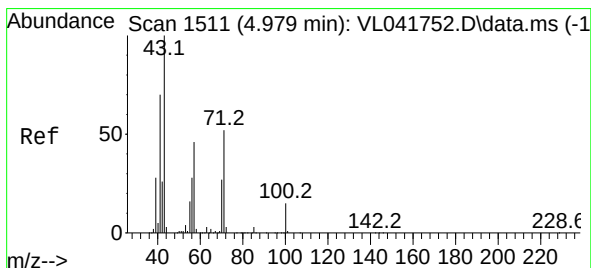
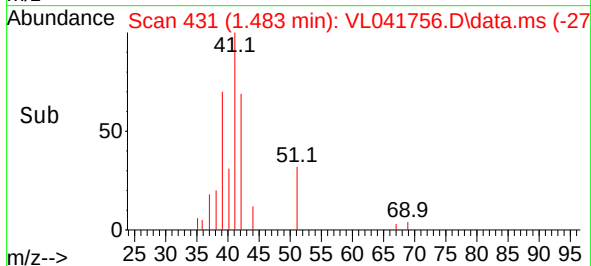
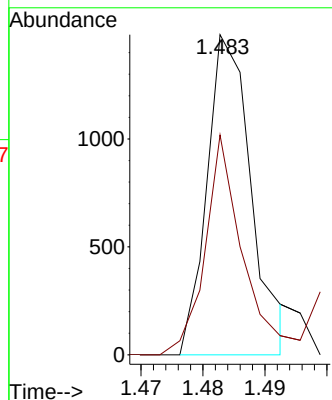
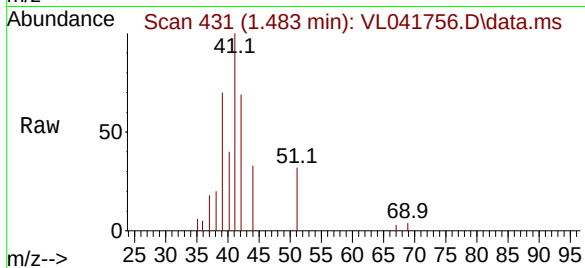
VSTDIC0.1

Tgt Ion: 41 Resp: 740

Ion Ratio Lower Upper

41 100

42 83.2 52.4 78.6#



#10

Heptane

Concen: 0.044 ppbv

RT: 4.988 min Scan# 1514

Delta R.T. 0.010 min

Lab File: VL041756.D

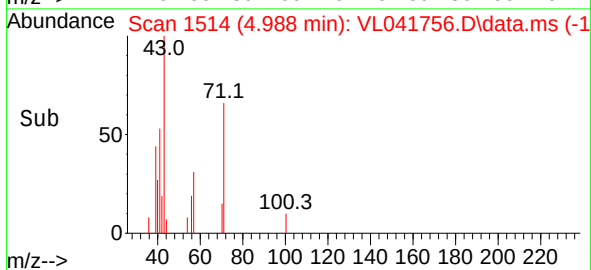
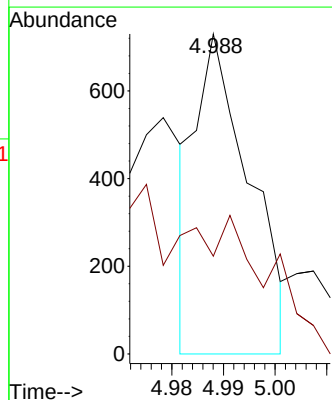
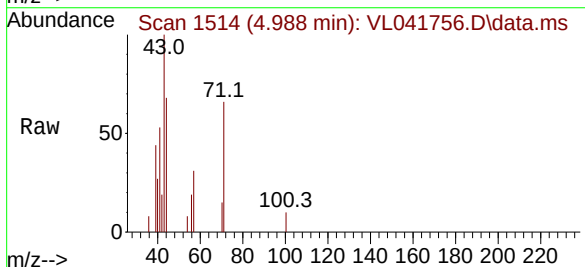
Acq: 16 Dec 2024 15:37

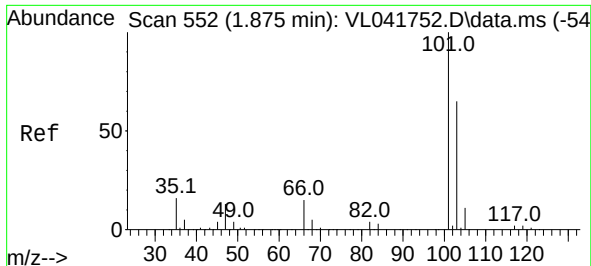
Tgt Ion: 43 Resp: 527

Ion Ratio Lower Upper

43 100

57 0.0 38.5 57.7#

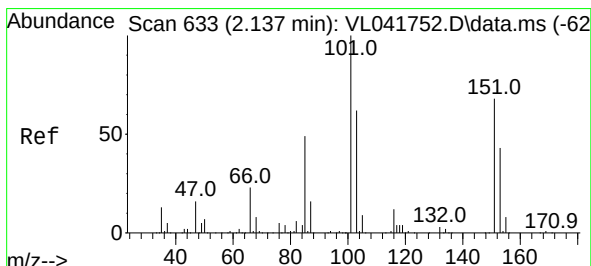
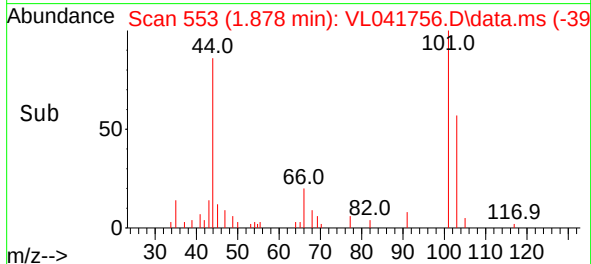
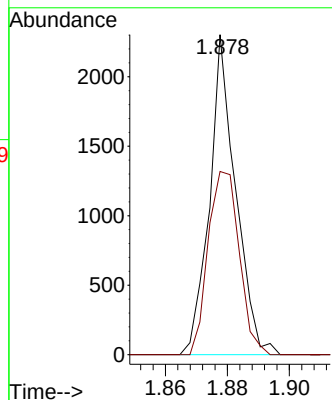
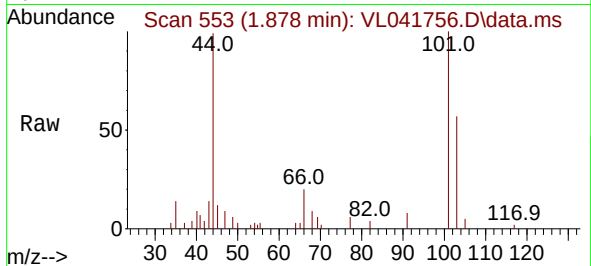




#11  
Trichlorofluoromethane  
Concen: 0.108 ppbv  
RT: 1.878 min Scan# 51  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

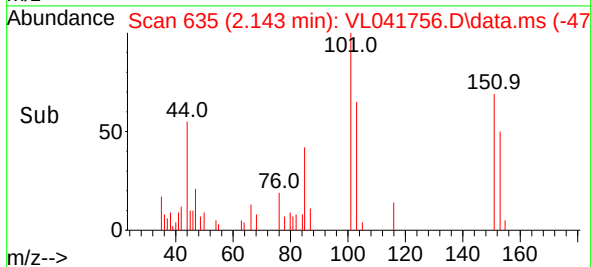
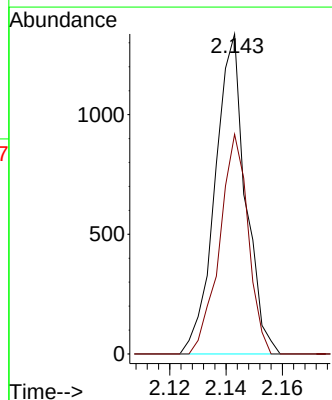
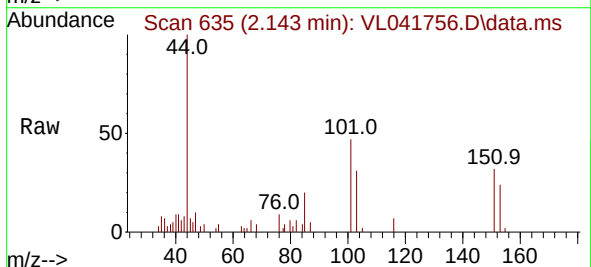
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ClientSampleId :  
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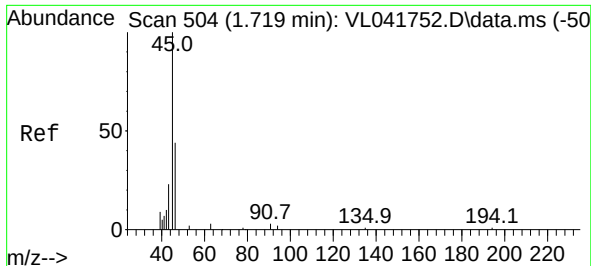
Tgt Ion:101 Resp: 1346  
Ion Ratio Lower Upper  
101 100  
103 57.3 51.8 77.8



#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.106 ppbv  
RT: 2.143 min Scan# 635  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion:101 Resp: 1007  
Ion Ratio Lower Upper  
101 100  
151 64.3 56.8 85.2

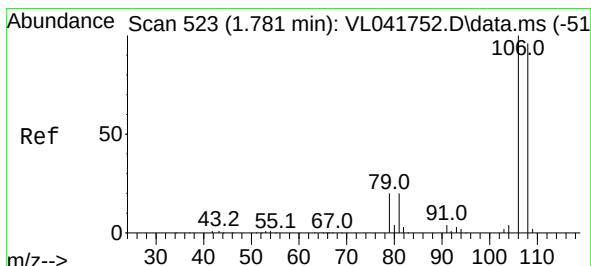
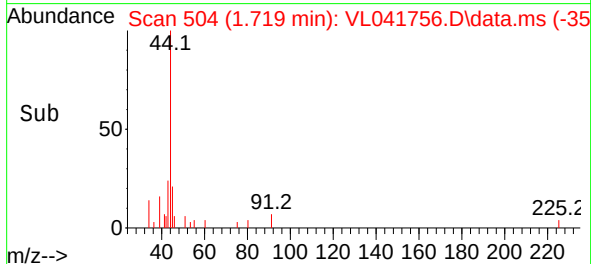
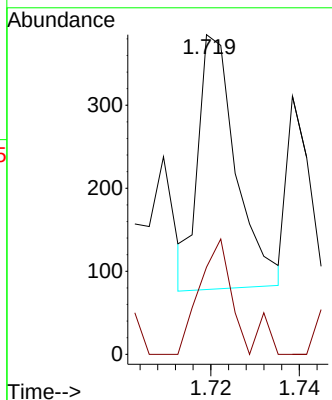
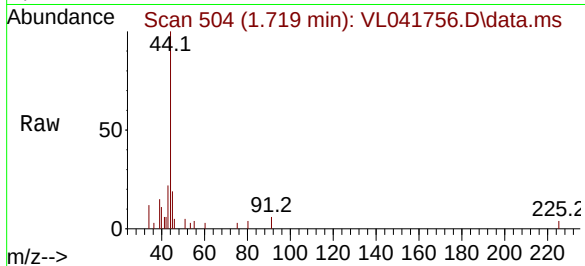




#13  
Ethanol  
Concen: 0.472 ppbv  
RT: 1.719 min Scan# 504  
Delta R.T. -0.000 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

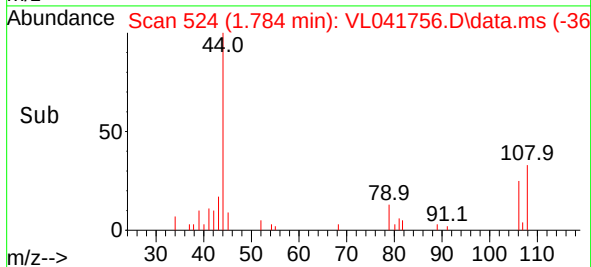
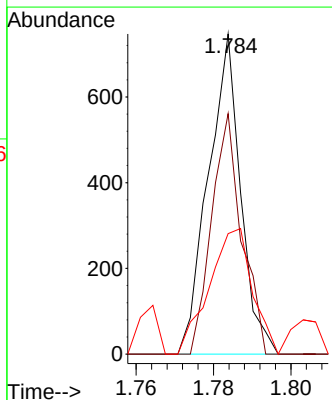
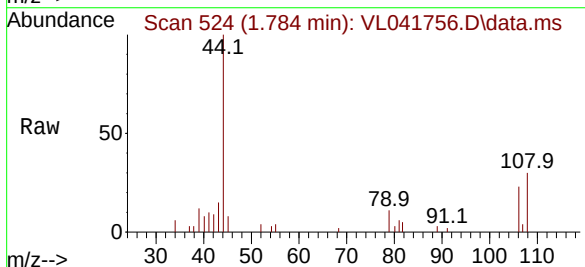
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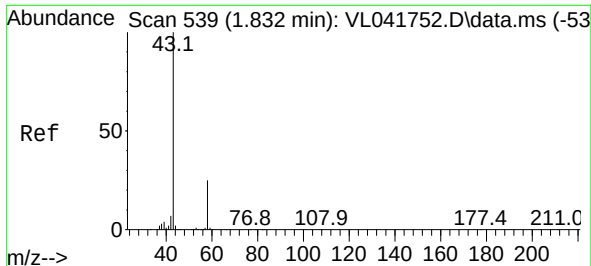
Tgt Ion: 45 Resp: 183  
Ion Ratio Lower Upper  
45 100  
46 47.5 16.4 65.8



#14  
Bromoethene  
Concen: 0.135 ppbv  
RT: 1.784 min Scan# 524  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 108 Resp: 432  
Ion Ratio Lower Upper  
108 100  
106 69.9 84.1 126.1#  
79 67.4 17.4 26.0#





#15

Acetone

Concen: 0.221 ppbv

RT: 1.839 min Scan# 54

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

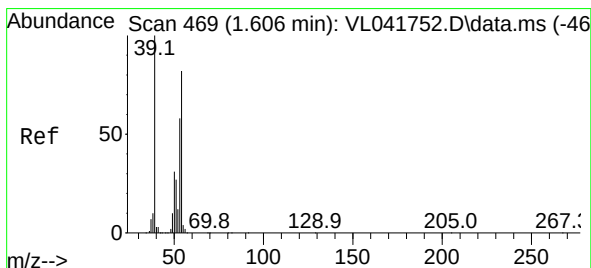
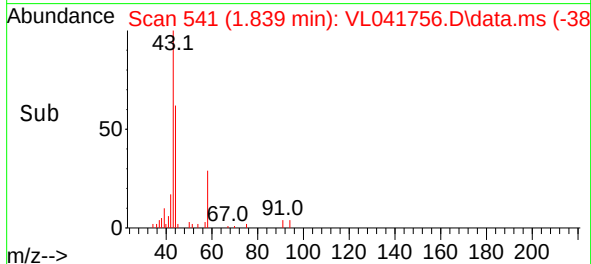
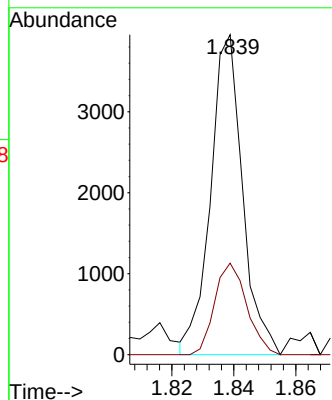
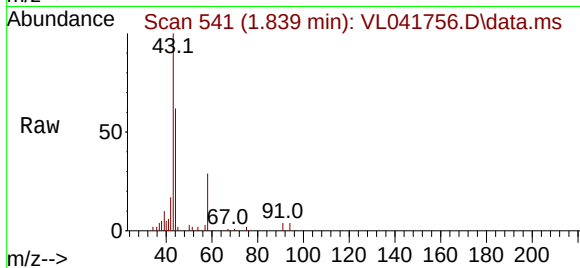
VSTDIC0.1

Tgt Ion: 43 Resp: 2830

Ion Ratio Lower Upper

43 100

58 28.7 19.7 29.5



#16

1,3-Butadiene

Concen: 0.161 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.003 min

Lab File: VL041756.D

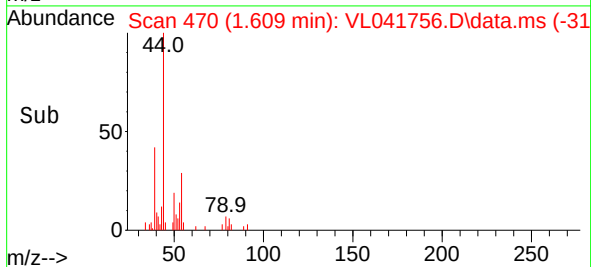
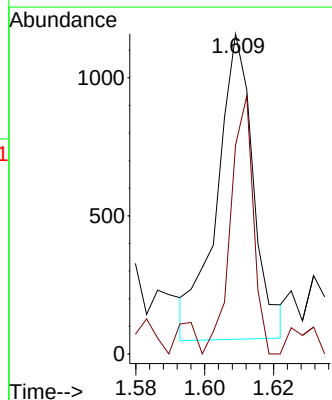
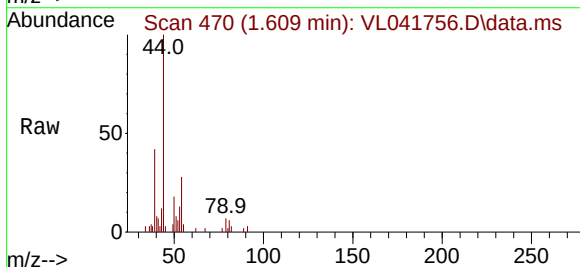
Acq: 16 Dec 2024 15:37

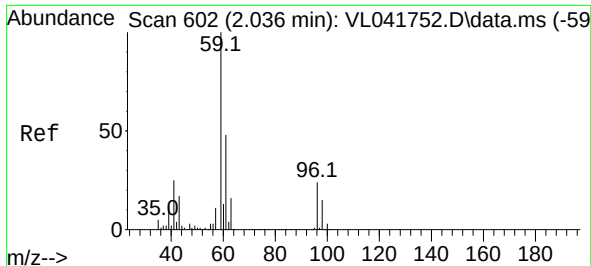
Tgt Ion: 39 Resp: 815

Ion Ratio Lower Upper

39 100

54 69.7 58.4 87.6





#17

tert-Butyl alcohol

Concen: 0.118 ppbv

RT: 2.046 min Scan# 605

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

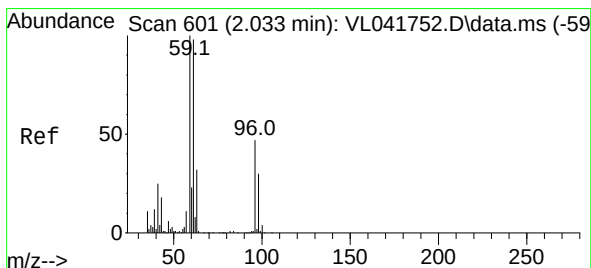
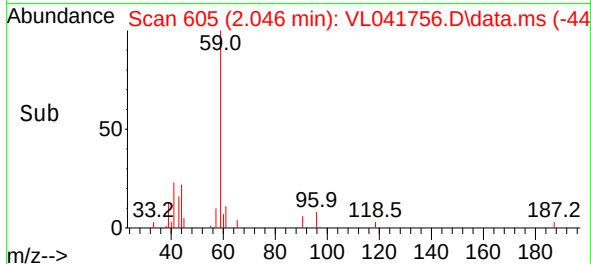
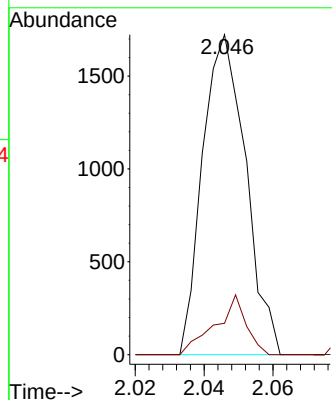
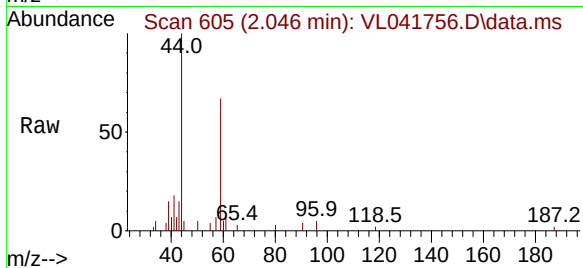
VSTDIC0.1

Tgt Ion: 59 Resp: 1498

Ion Ratio Lower Upper

59 100

57 15.0 8.6 13.0#



#18

1,1-Dichloroethene

Concen: 0.125 ppbv

RT: 2.036 min Scan# 602

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

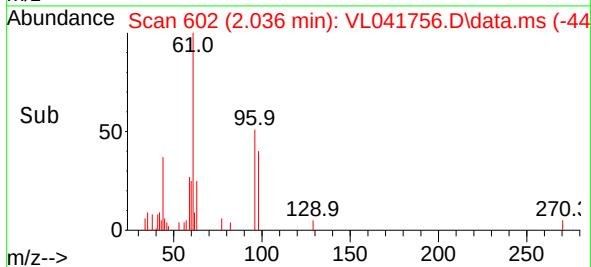
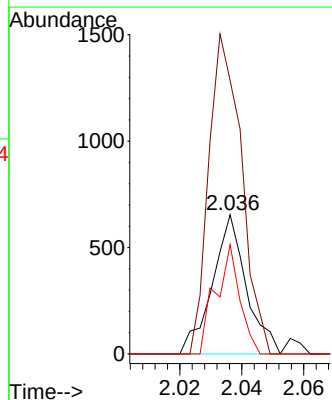
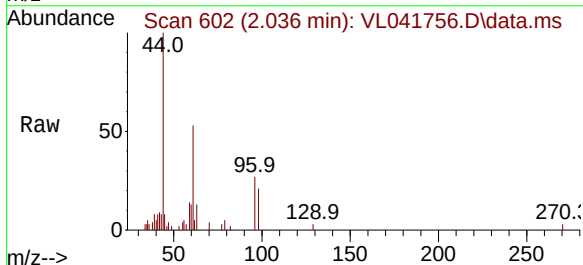
Tgt Ion: 96 Resp: 498

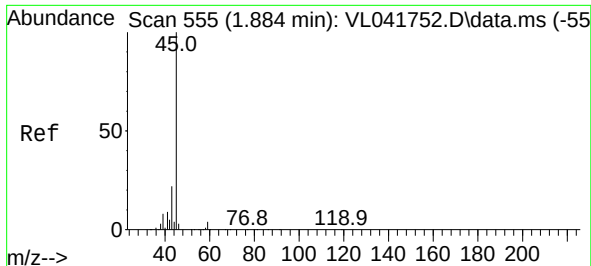
Ion Ratio Lower Upper

96 100

61 214.2 167.7 251.5

98 78.6 51.1 76.7#





#19

Isopropyl Alcohol

Concen: 0.391 ppbv

RT: 1.887 min Scan# 511

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

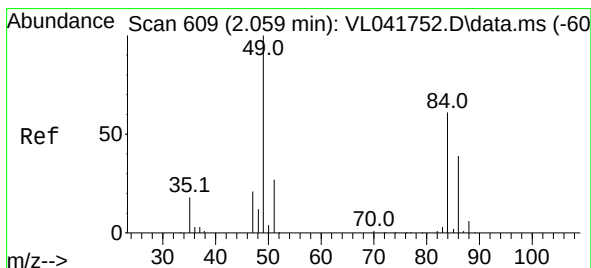
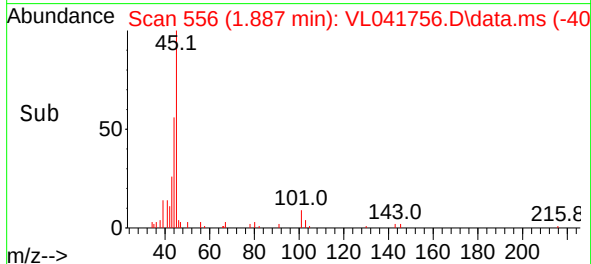
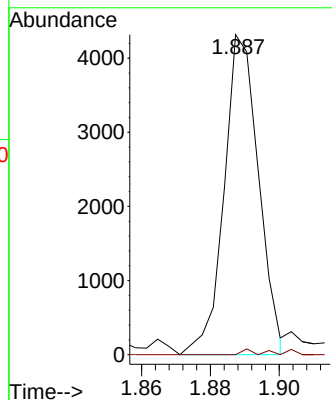
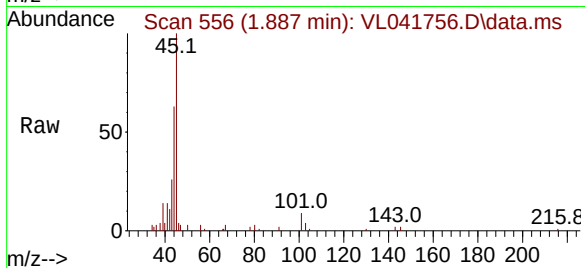
VSTDIC0.1

Tgt Ion: 45 Resp: 3007

Ion Ratio Lower Upper

45 100

58 1.3 33.3 49.9#



#20

Methylene Chloride

Concen: 0.253 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Tgt Ion: 84 Resp: 925

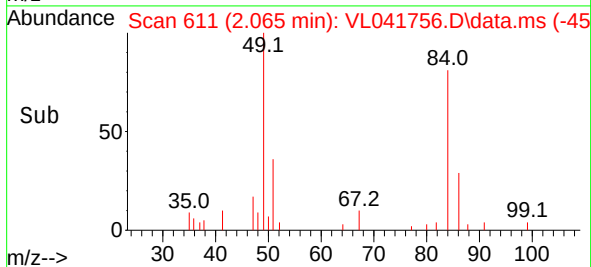
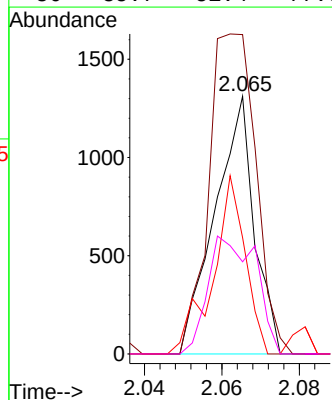
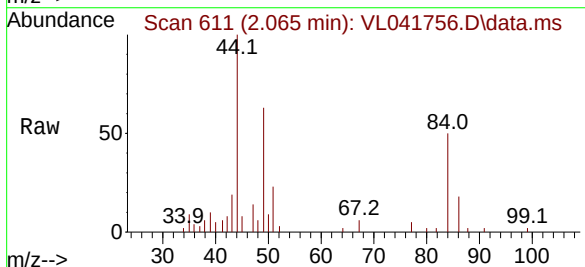
Ion Ratio Lower Upper

84 100

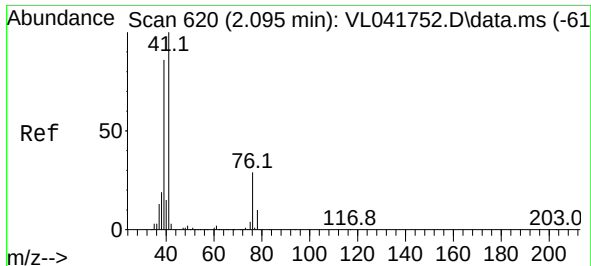
49 123.9 132.6 198.8#

51 45.1 37.6 56.4

86 35.7 51.4 77.0#







#21

Allyl Chloride

Concen: 0.123 ppbv

RT: 2.098 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

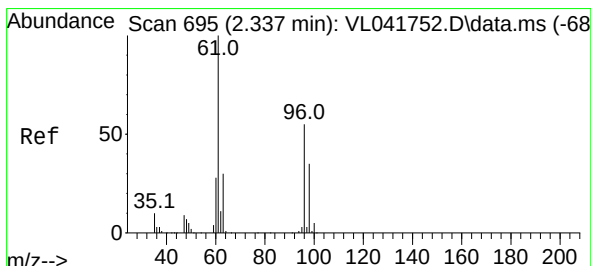
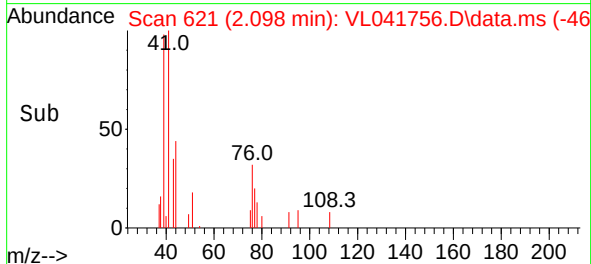
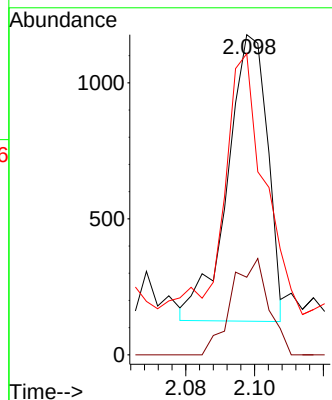
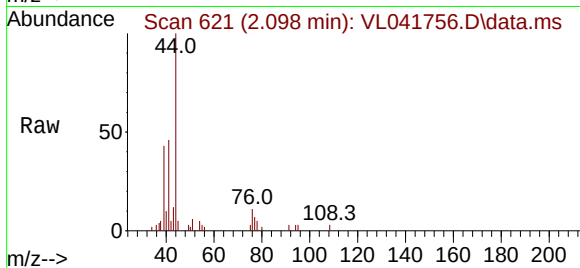
Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC0.1

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 854   |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 76       | 31.0  | 22.3  | 33.5  |
| 39       | 138.5 | 69.2  | 103.8 |



#22

trans-1,2-Dichloroethene

Concen: 0.105 ppbv

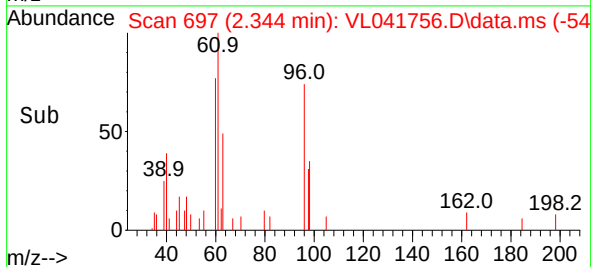
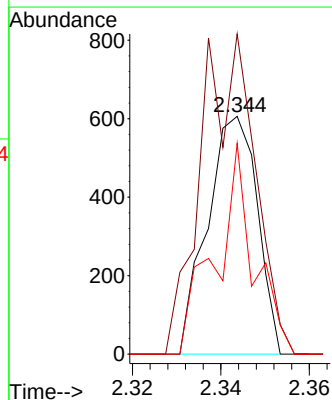
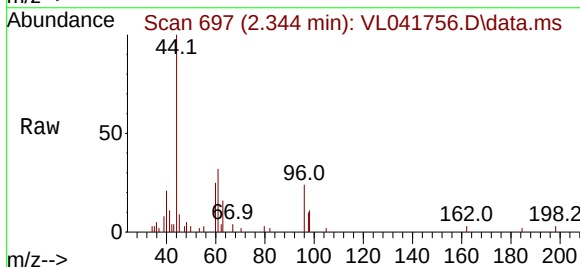
RT: 2.344 min Scan# 697

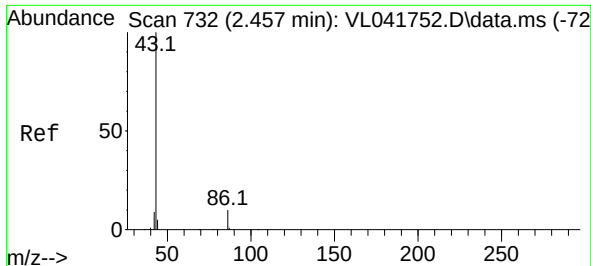
Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 476   |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 122.1 | 146.3 | 219.5 |
| 98       | 88.6  | 50.8  | 76.2  |

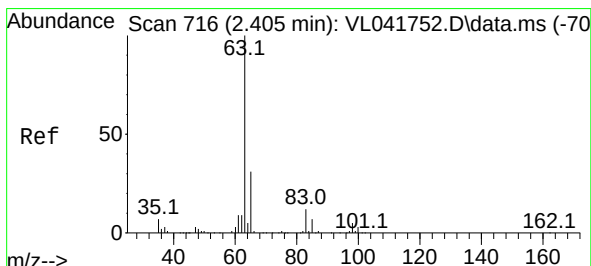
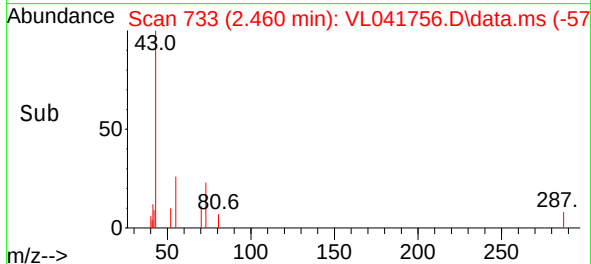
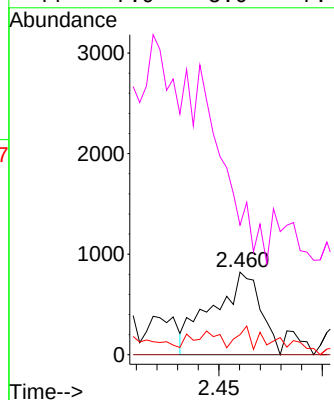
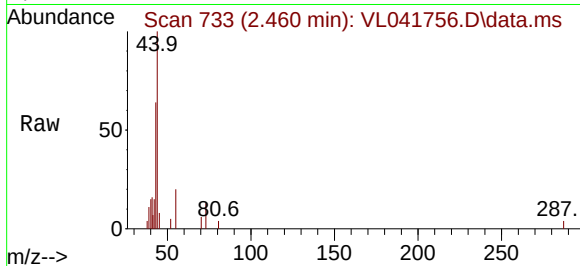




#23  
 Vinyl Acetate  
 Concen: 0.240 ppbv  
 RT: 2.460 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

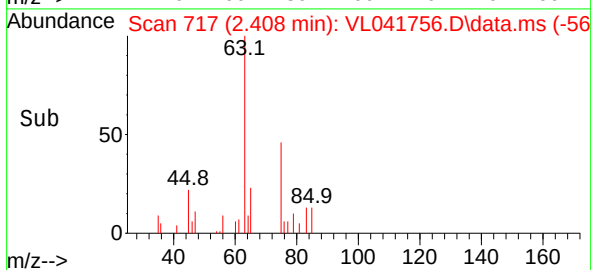
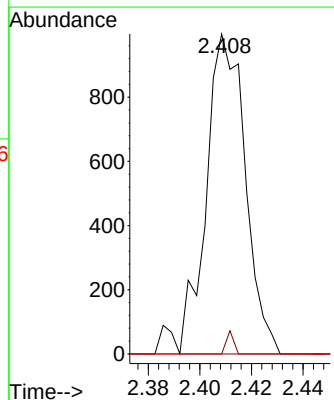
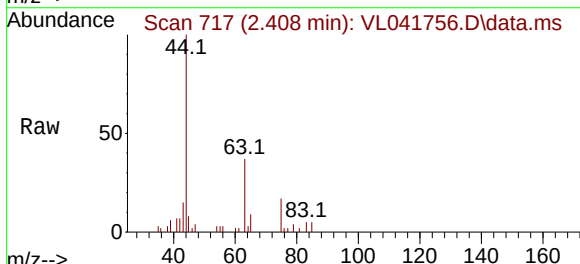
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.1

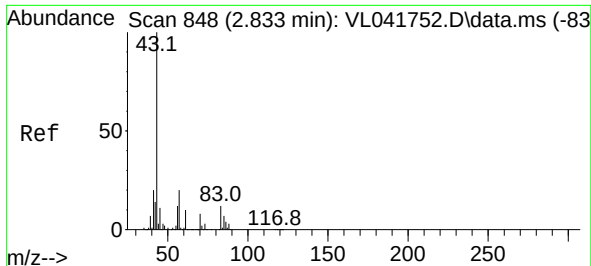
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 1339  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 0.0   | 6.6   | 10.0# |
| 42       | 15.5  | 8.2   | 12.2# |
| 44       | 7.9   | 5.0   | 7.4#  |



#24  
 1,1-Dichloroethane  
 Concen: 0.113 ppbv  
 RT: 2.408 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 1044  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 0.0   | 2.3   | 6.8#  |
| 100      | 0.0   | 1.4   | 4.2#  |





#25

Ethyl Acetate

Concen: 0.093 ppbv

RT: 2.842 min Scan# 848

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

Tgt Ion: 43 Resp: 2227

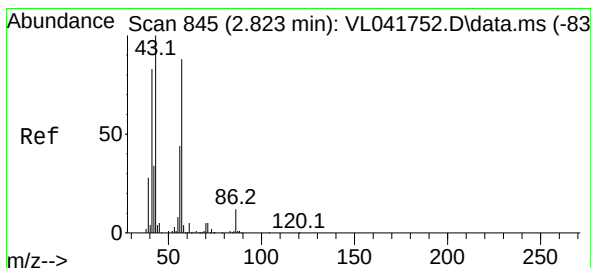
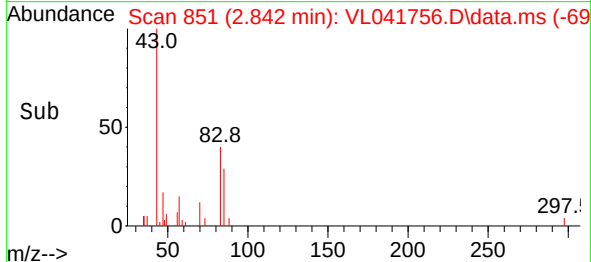
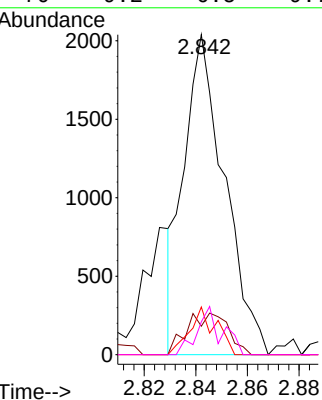
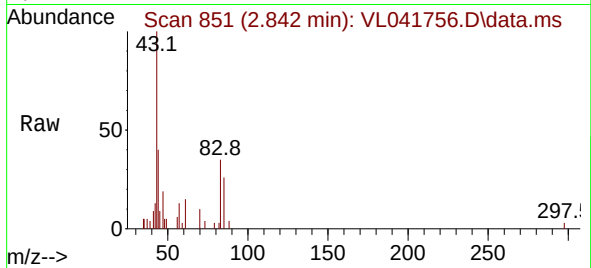
Ion Ratio Lower Upper

43 100

45 16.7 8.1 12.1#

61 9.7 7.0 10.6

70 9.2 6.5 9.7



#26

Hexane

Concen: 0.116 ppbv

RT: 2.829 min Scan# 847

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Tgt Ion: 57 Resp: 1053

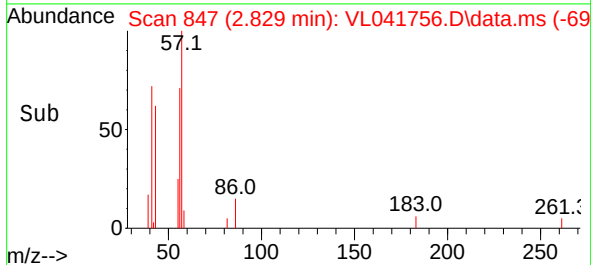
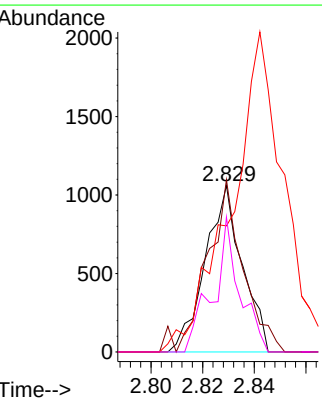
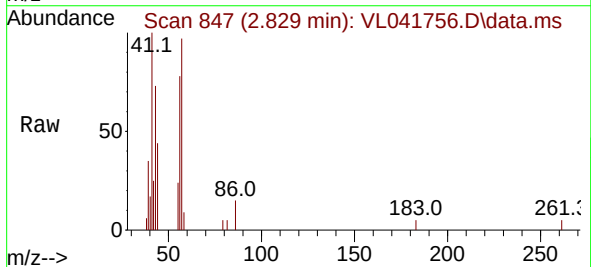
Ion Ratio Lower Upper

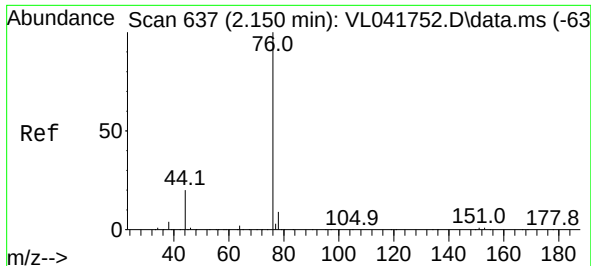
57 100

41 101.5 79.6 119.4

43 273.5 211.0 316.6

56 58.9 42.6 63.8





#27

Carbon Disulfide

Concen: 0.089 ppbv

RT: 2.149 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.1

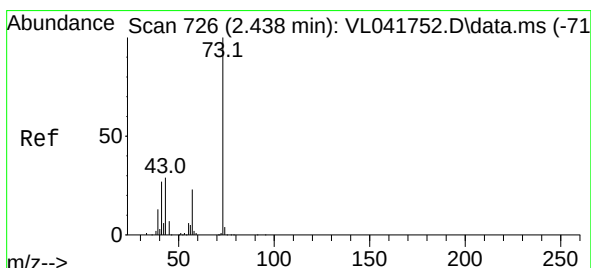
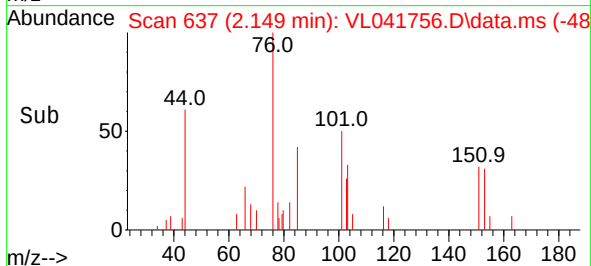
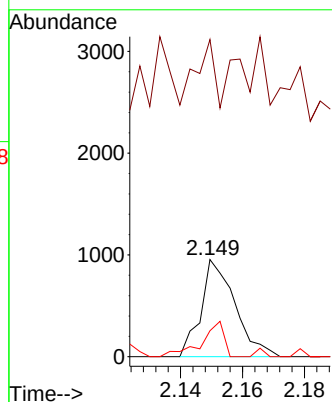
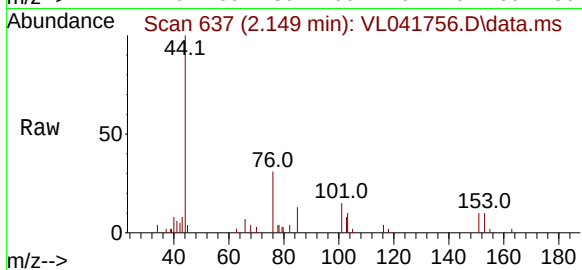
Tgt Ion: 76 Resp: 729

Ion Ratio Lower Upper

76 100

44 720.3 17.6 26.4#

78 25.8 10.2 15.4#



#28

Methyl tert-Butyl Ether

Concen: 0.105 ppbv

RT: 2.444 min Scan# 728

Delta R.T. 0.006 min

Lab File: VL041756.D

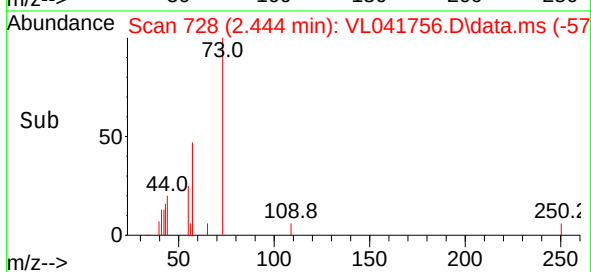
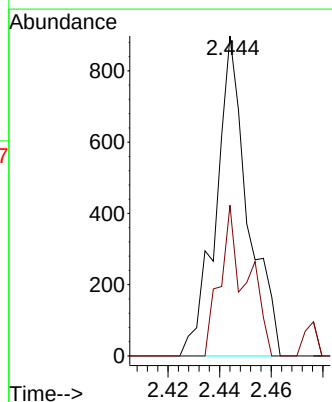
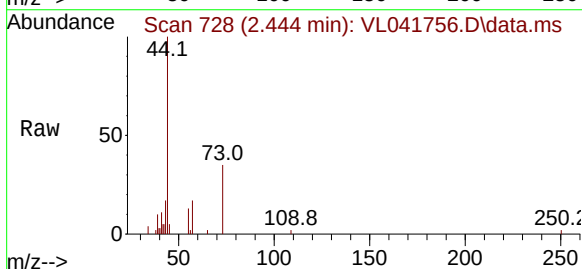
Acq: 16 Dec 2024 15:37

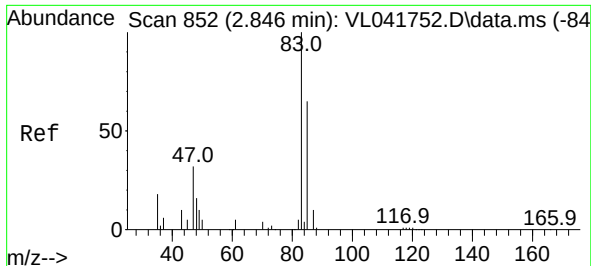
Tgt Ion: 73 Resp: 774

Ion Ratio Lower Upper

73 100

57 43.4 17.6 26.4#





#29

Chloroform

Concen: 0.110 ppbv

RT: 2.852 min Scan# 854

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

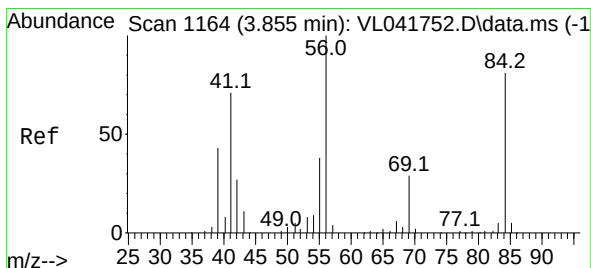
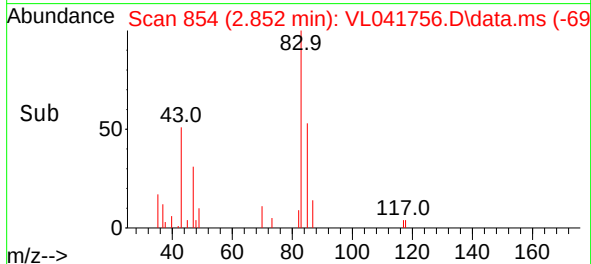
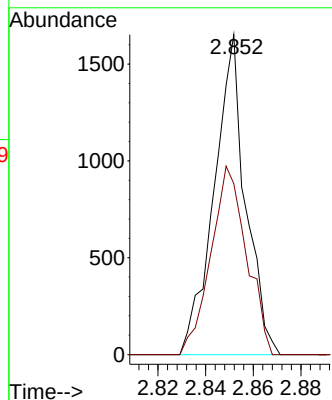
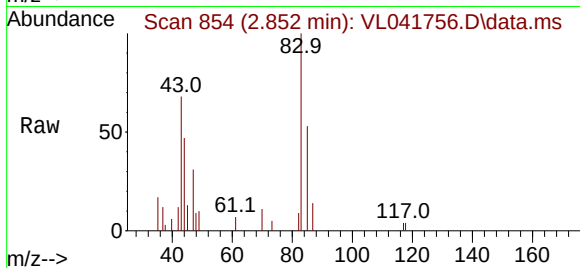
VSTDIC0.1

Tgt Ion: 83 Resp: 1515

Ion Ratio Lower Upper

83 100

85 53.5 51.8 77.6



#30

Cyclohexane

Concen: 0.049 ppbv

RT: 3.865 min Scan# 1167

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

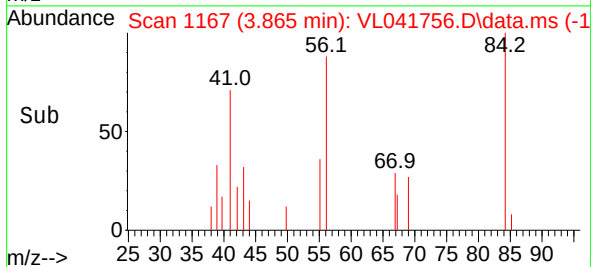
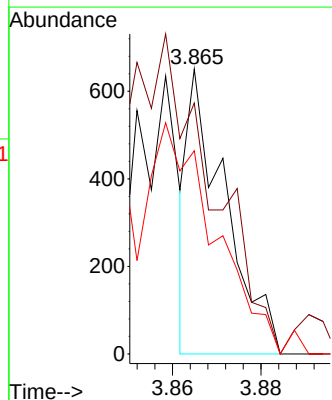
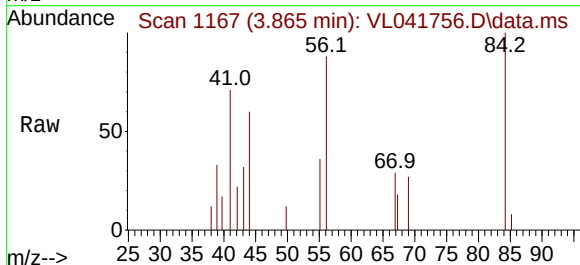
Tgt Ion: 84 Resp: 377

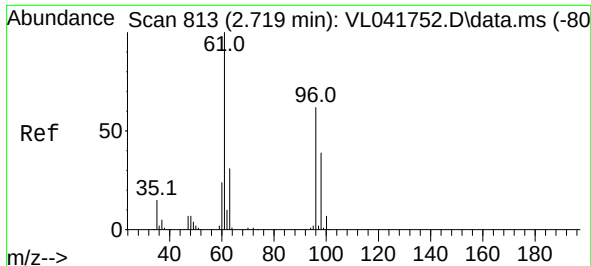
Ion Ratio Lower Upper

84 100

56 0.0 102.3 153.5#

41 0.0 74.0 111.0#

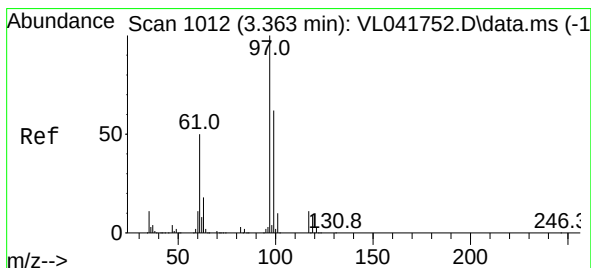
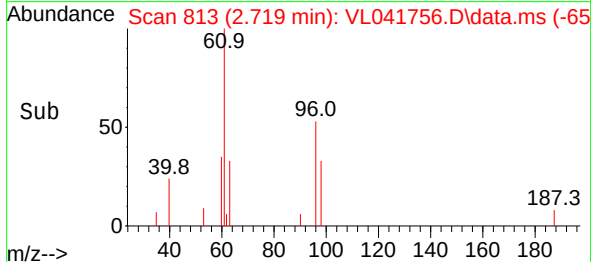
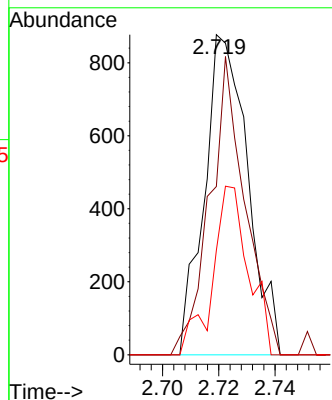
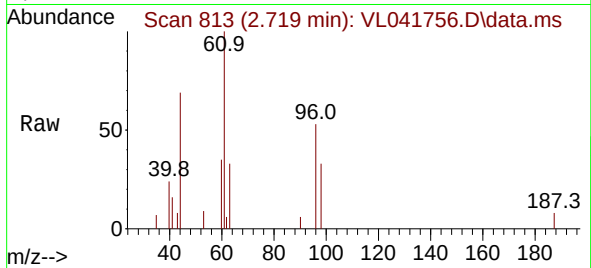




#31  
 cis-1,2-Dichloroethene  
 Concen: 0.100 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. -0.000 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

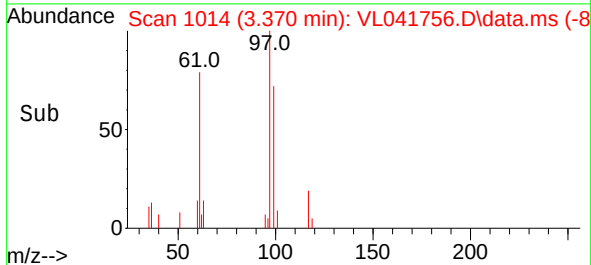
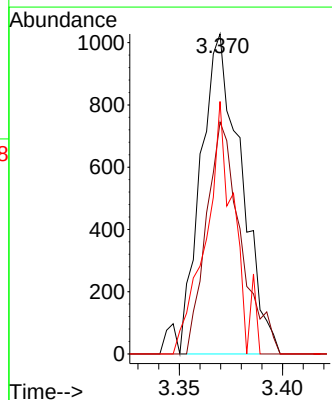
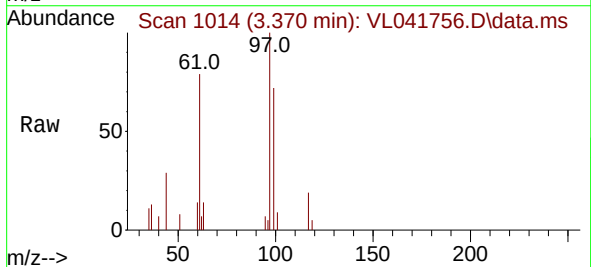
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.1

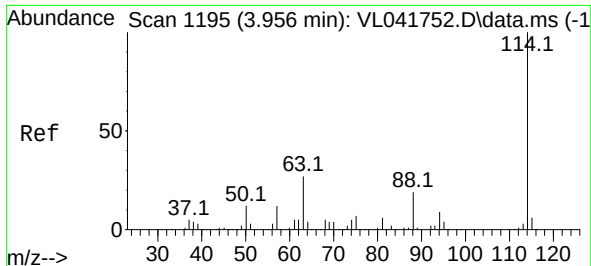
Tgt Ion: 61 Resp: 940  
 Ion Ratio Lower Upper  
 61 100  
 96 49.7 49.7 74.5  
 98 30.9 30.8 46.2



#32  
 1,1,1-Trichloroethane  
 Concen: 0.101 ppbv  
 RT: 3.370 min Scan# 1014  
 Delta R.T. 0.006 min  
 Lab File: VL041756.D  
 Acq: 16 Dec 2024 15:37

Tgt Ion: 97 Resp: 1393  
 Ion Ratio Lower Upper  
 97 100  
 99 61.9 51.0 76.4  
 61 55.9 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1195

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

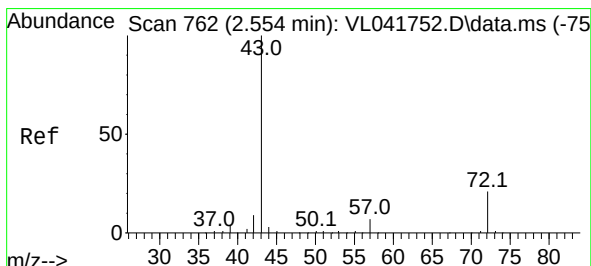
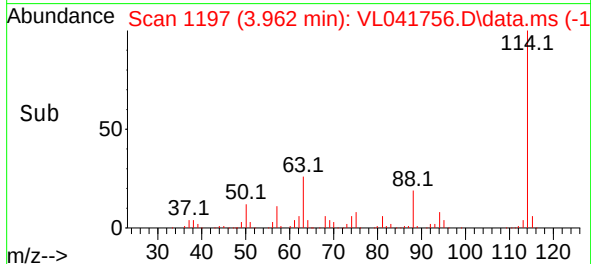
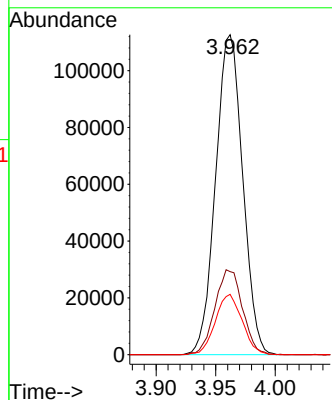
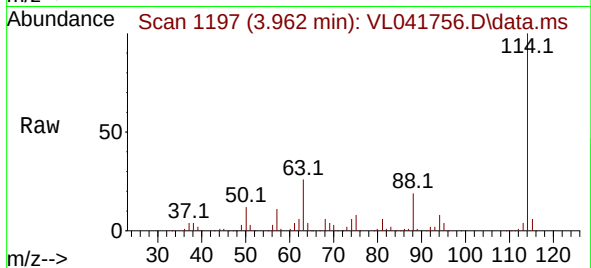
Tgt Ion:114 Resp: 177964

Ion Ratio Lower Upper

114 100

63 27.0 21.8 32.8

88 18.7 14.8 22.2



#34

2-Butanone

Concen: 0.132 ppbv

RT: 2.564 min Scan# 765

Delta R.T. 0.010 min

Lab File: VL041756.D

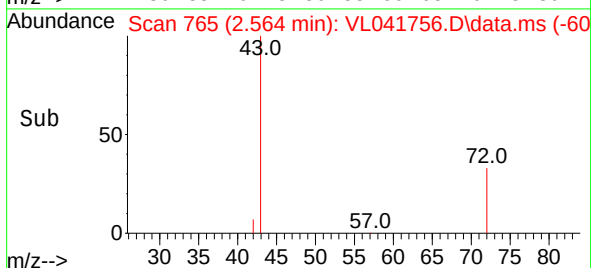
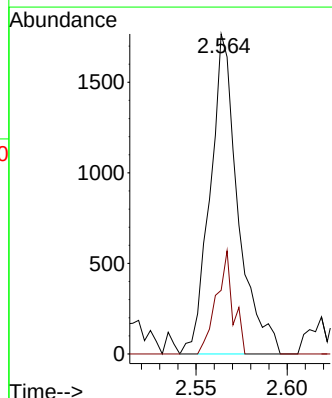
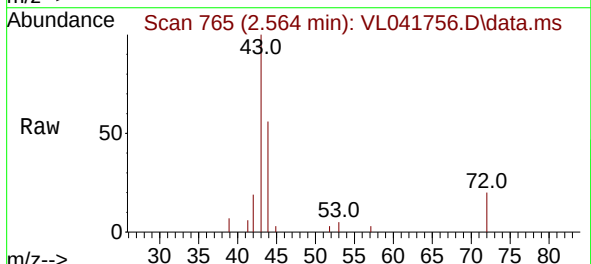
Acq: 16 Dec 2024 15:37

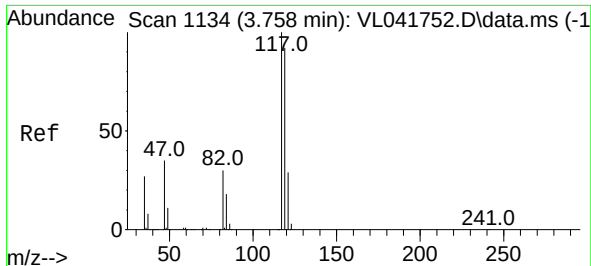
Tgt Ion: 43 Resp: 1888

Ion Ratio Lower Upper

43 100

72 19.2 16.8 25.2

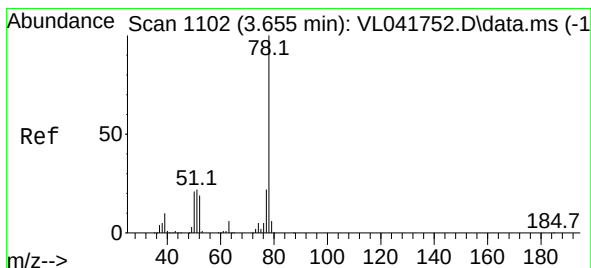
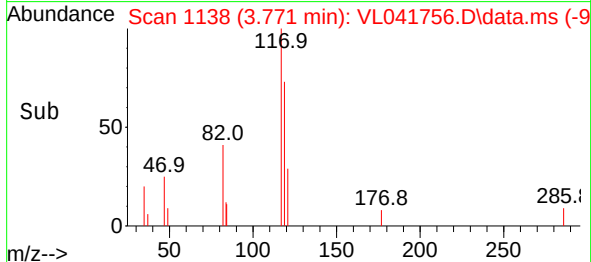
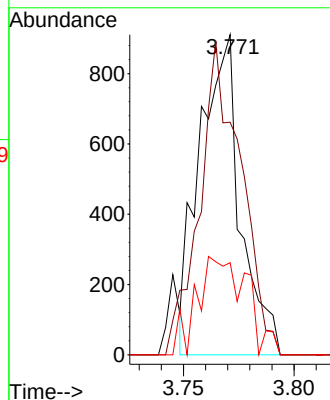
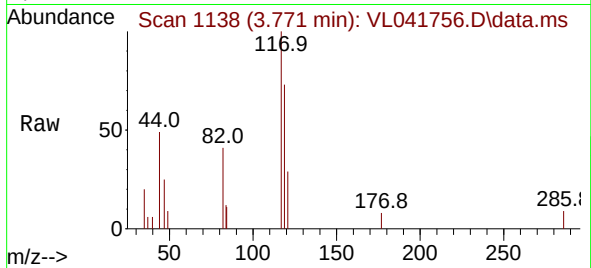




#35  
Carbon Tetrachloride  
Concen: 0.093 ppbv  
RT: 3.771 min Scan# 1138  
Delta R.T. 0.013 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

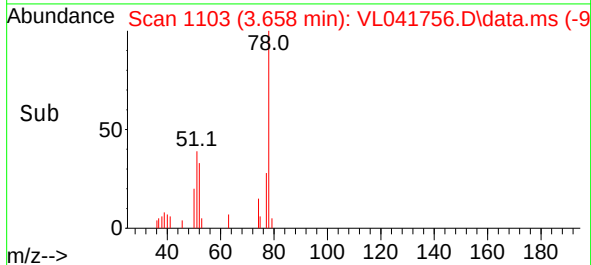
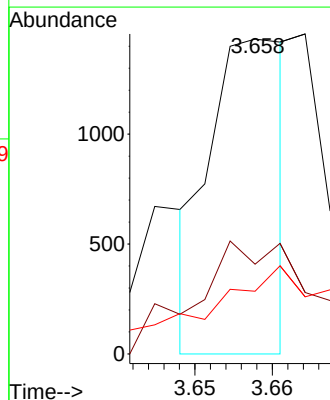
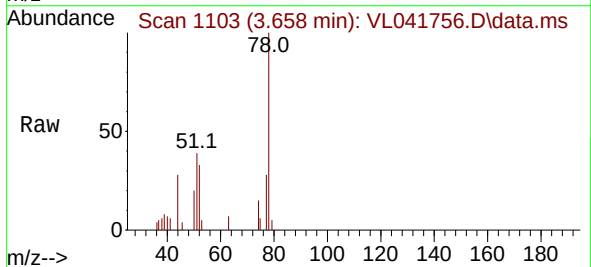
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

Tgt Ion:117 Resp: 1170  
Ion Ratio Lower Upper  
117 100  
119 72.7 73.7 110.5#  
121 28.8 23.0 34.4

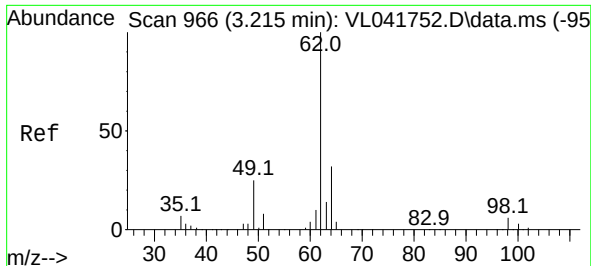


#36  
Benzene  
Concen: 0.053 ppbv  
RT: 3.658 min Scan# 1103  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 78 Resp: 976  
Ion Ratio Lower Upper  
78 100  
77 29.4 17.8 26.6#  
50 13.1 17.2 25.8#







#37

1,2-Dichloroethane

Concen: 0.110 ppbv

RT: 3.218 min Scan# 9

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

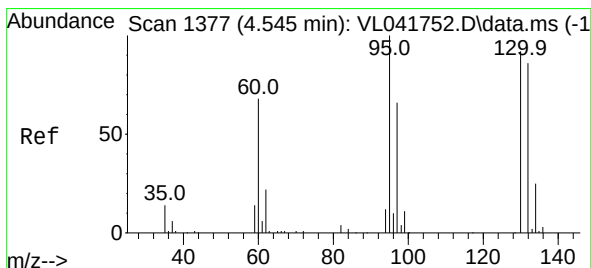
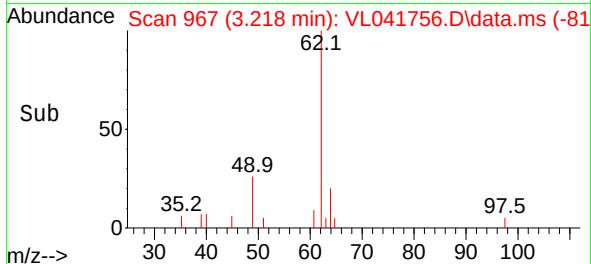
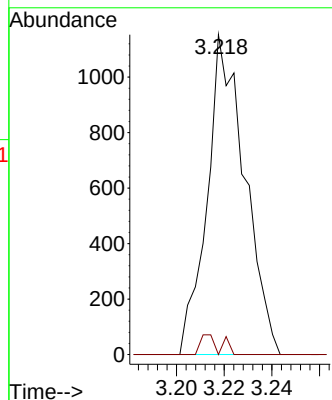
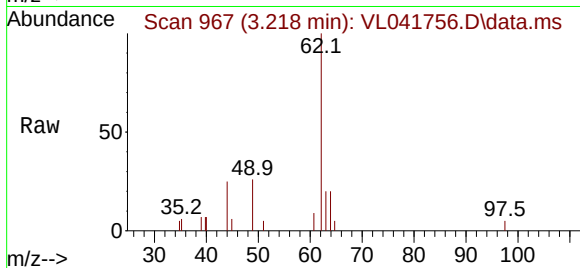
VSTDIC0.1

Tgt Ion: 62 Resp: 1264

Ion Ratio Lower Upper

62 100

98 3.2 4.7 7.1#



#38

Trichloroethene

Concen: 0.044 ppbv

RT: 4.548 min Scan# 1378

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Tgt Ion:130 Resp: 339

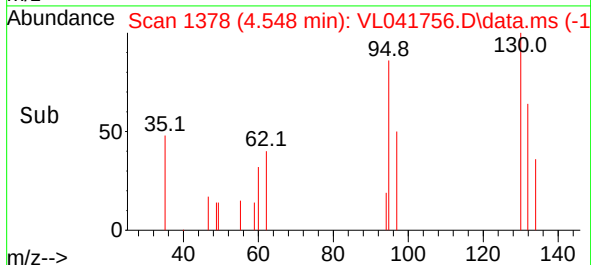
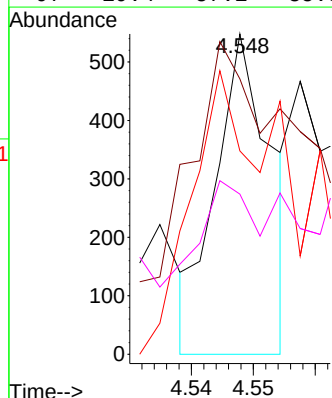
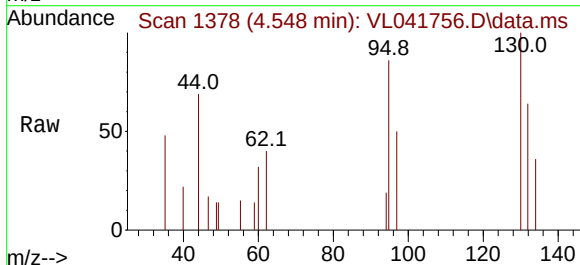
Ion Ratio Lower Upper

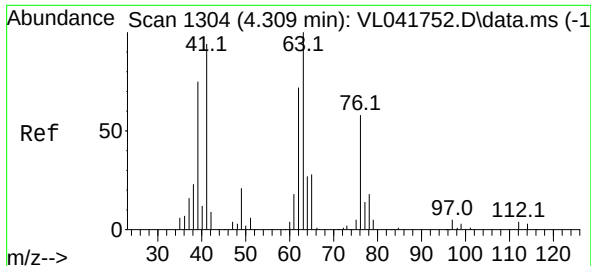
130 100

95 35.8 87.0 130.6#

132 33.6 75.0 112.6#

97 29.4 57.2 85.8#





#39

1,2-Dichloropropane

Concen: 7.216 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.350 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

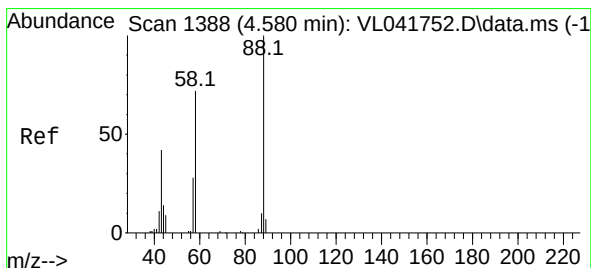
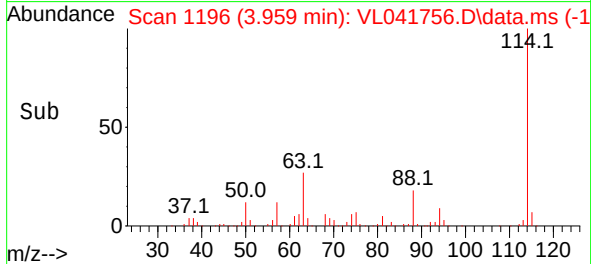
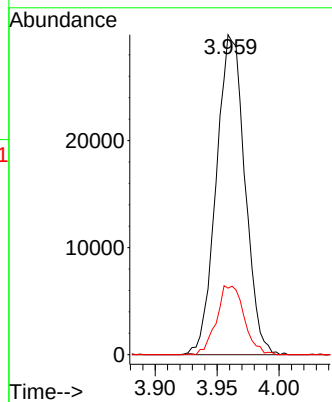
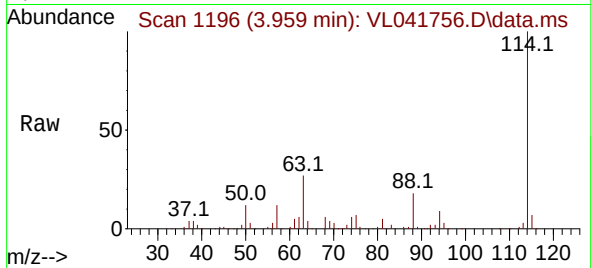
Tgt Ion: 63 Resp: 48044

Ion Ratio Lower Upper

63 100

41 0.0 75.3 112.9#

62 20.8 57.3 85.9#



#40

1,4-Dioxane

Concen: 0.078 ppbv

RT: 4.622 min Scan# 1401

Delta R.T. 0.042 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Tgt Ion: 88 Resp: 254

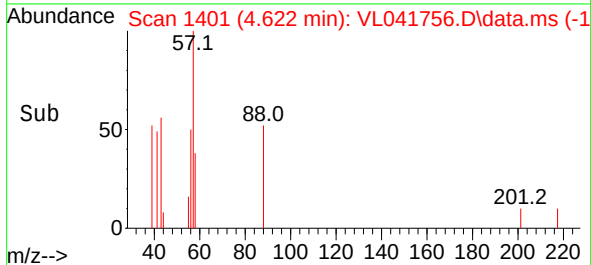
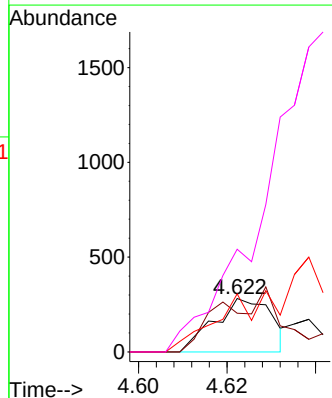
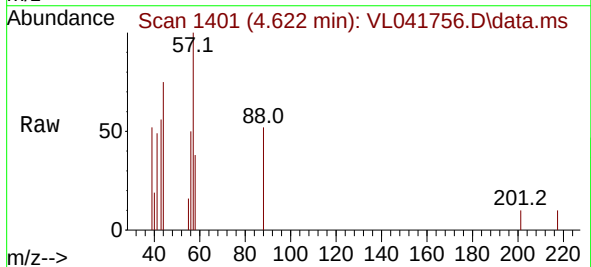
Ion Ratio Lower Upper

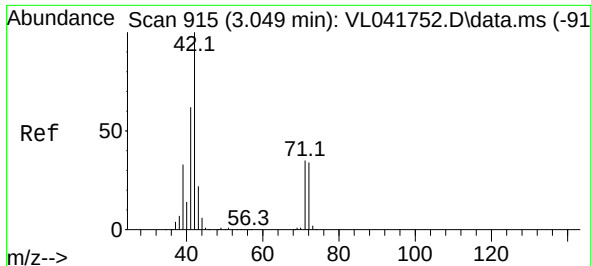
88 100

58 175.2 61.0 91.6#

43 0.0 29.4 44.0#

57 0.0 0.0 0.0

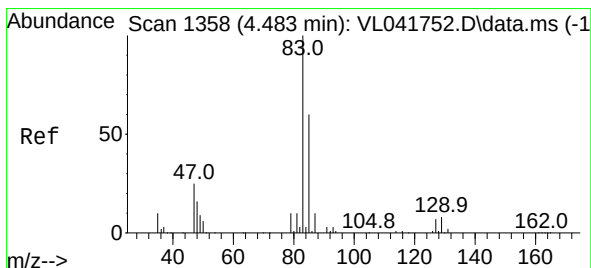
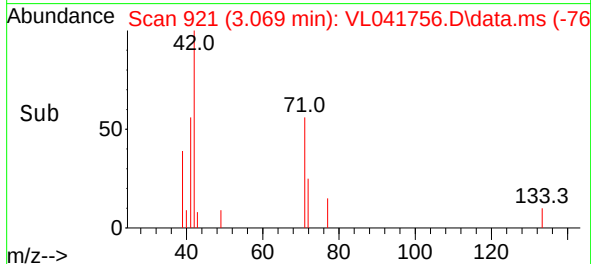
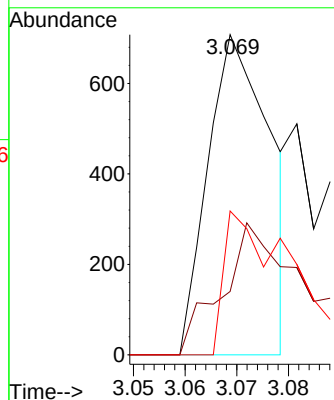
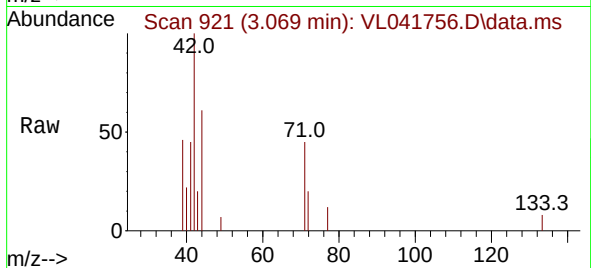




#41  
Tetrahydrofuran  
Concen: 0.074 ppbv  
RT: 3.069 min Scan# 915  
Delta R.T. 0.019 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

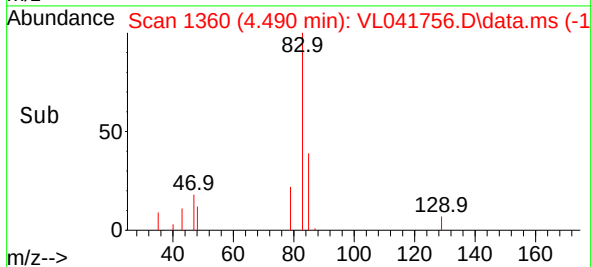
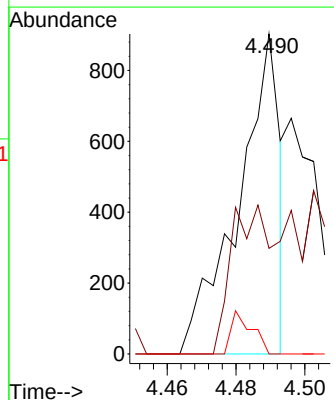
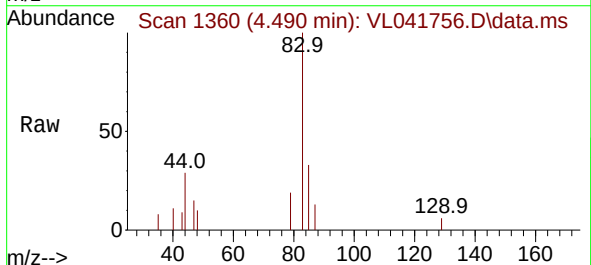
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

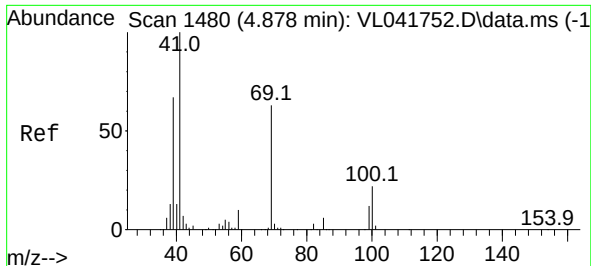
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 42    | Resp: | 593   |
| Ion Ratio | Lower | Upper |       |
| 42        | 100   |       |       |
| 72        | 52.3  | 29.1  | 43.7# |
| 71        | 47.6  | 28.4  | 42.6# |



#42  
Bromodichloromethane  
Concen: 0.057 ppbv  
RT: 4.490 min Scan# 1360  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 756   |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 33.0  | 48.0  | 72.0# |
| 127       | 0.0   | 5.8   | 8.8#  |





#43

Methyl Methacrylate

Concen: 0.028 ppbv

RT: 4.888 min Scan# 1483

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

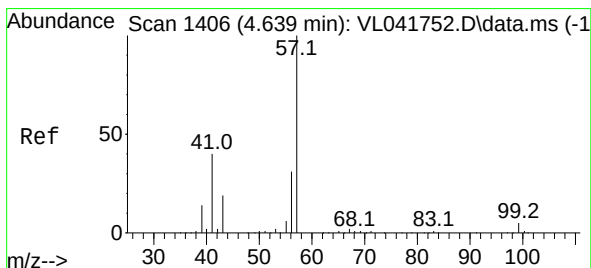
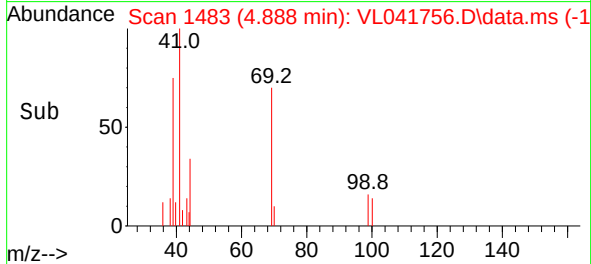
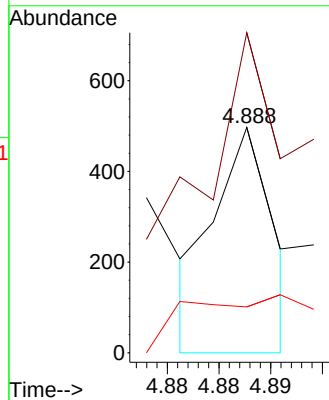
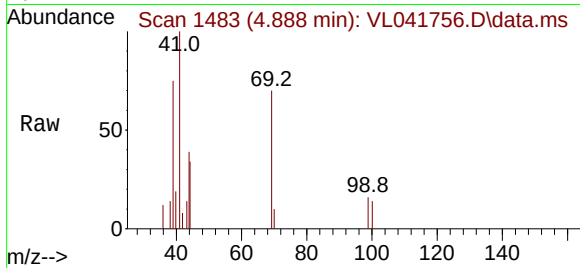
Tgt Ion: 69 Resp: 197

Ion Ratio Lower Upper

69 100

41 570.1 130.3 195.5#

100 0.0 28.3 42.5#



#44

2,2,4-Trimethylpentane

Concen: 0.050 ppbv

RT: 4.651 min Scan# 1410

Delta R.T. 0.013 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

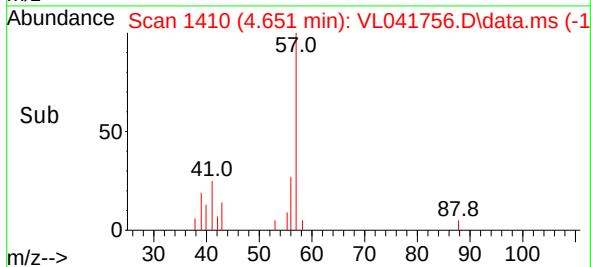
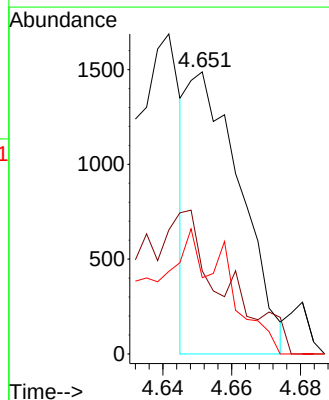
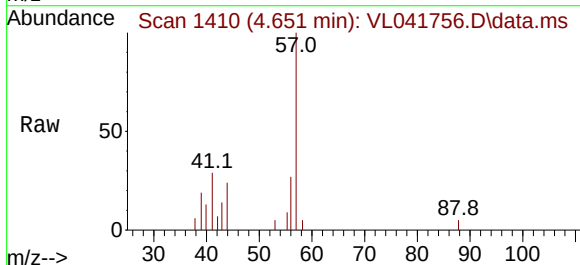
Tgt Ion: 57 Resp: 1584

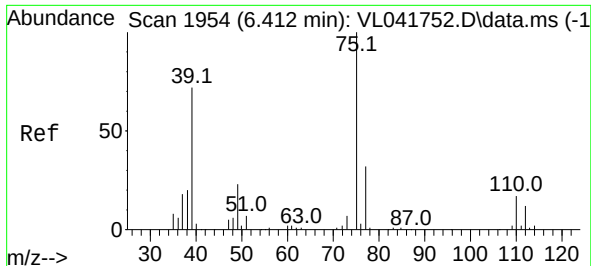
Ion Ratio Lower Upper

57 100

41 92.9 30.7 46.1#

56 72.0 25.4 38.0#





#45

t-1,3-Dichloropropene

Concen: 0.034 ppbv

RT: 6.419 min Scan# 1

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

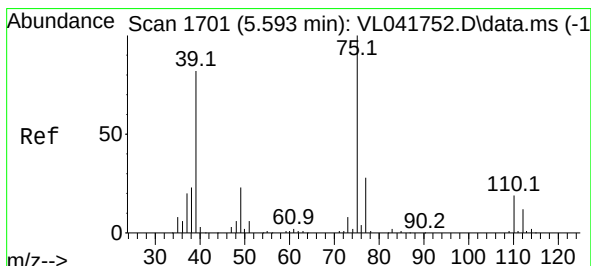
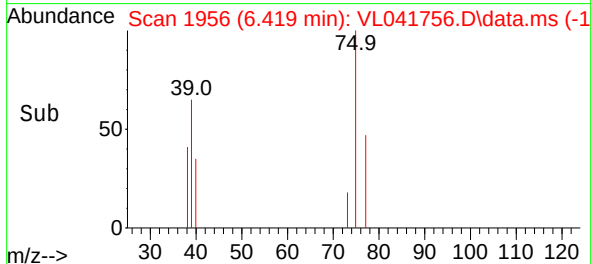
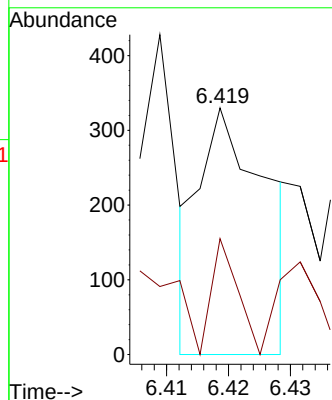
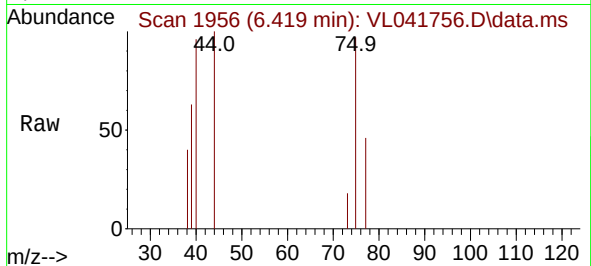
VSTDICC0.1

Tgt Ion: 75 Resp: 247

Ion Ratio Lower Upper

75 100

77 47.0 25.9 38.9#



#46

cis-1,3-Dichloropropene

Concen: 0.034 ppbv

RT: 5.600 min Scan# 1703

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

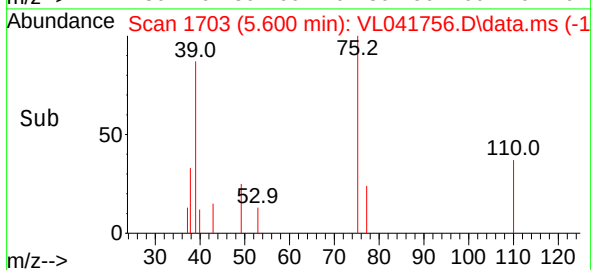
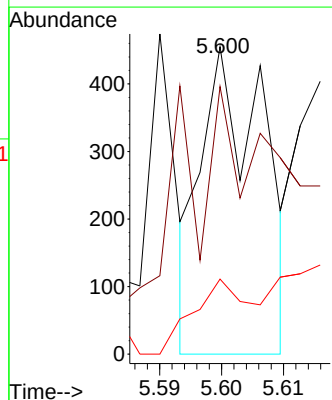
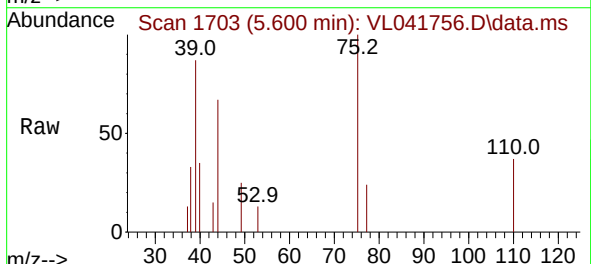
Tgt Ion: 75 Resp: 315

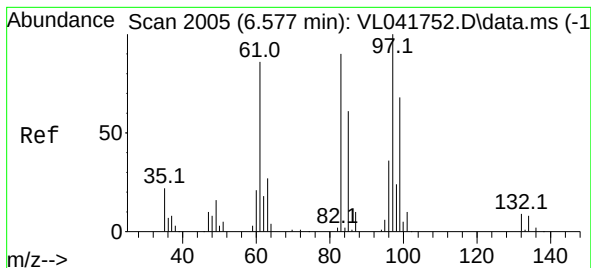
Ion Ratio Lower Upper

75 100

39 40.5 65.2 97.8#

77 22.8 22.0 33.0

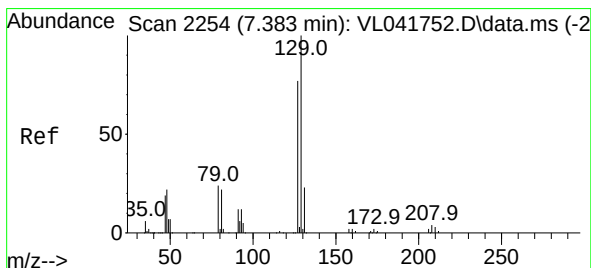
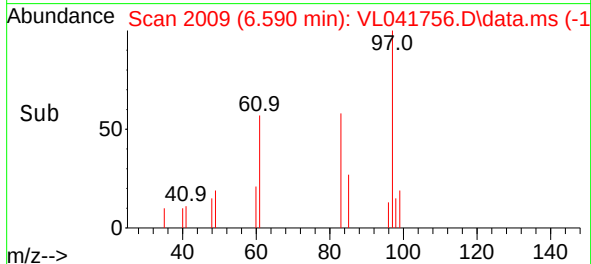
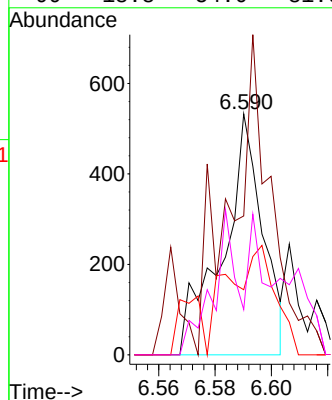
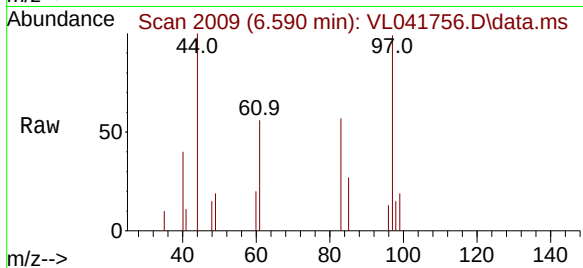




#47  
1,1,2-Trichloroethane  
Concen: 0.075 ppbv  
RT: 6.590 min Scan# 20  
Delta R.T. 0.013 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

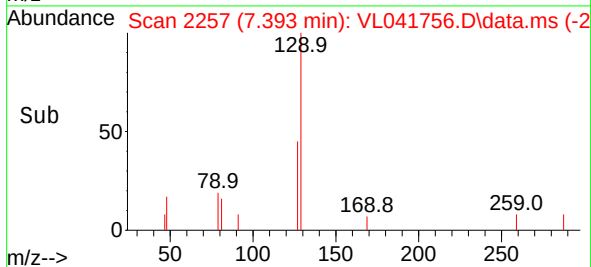
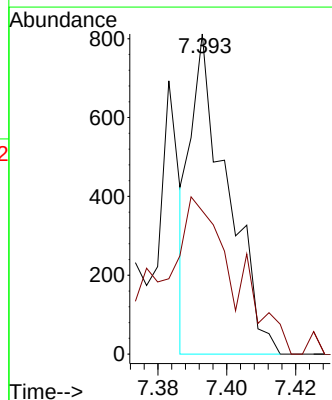
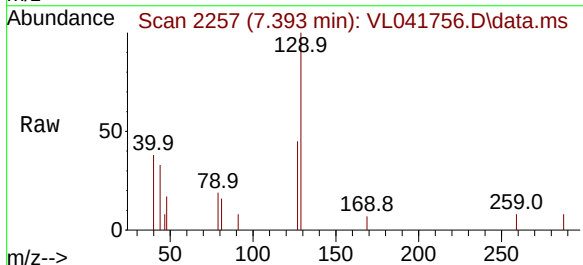
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

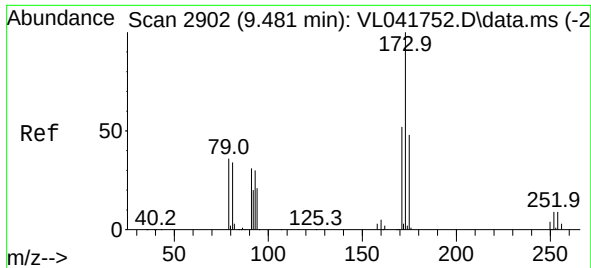
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 525    |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 83       | 40.5  | 72.3  | 108.5# |
| 85       | 6.9   | 48.5  | 72.7#  |
| 99       | 18.8  | 54.0  | 81.0#  |



#48  
Dibromochloromethane  
Concen: 0.063 ppbv  
RT: 7.393 min Scan# 2257  
Delta R.T. 0.010 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 599   |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 102.2 | 38.8  | 116.3 |





#49

Bromoform

Concen: 0.022 ppbv

RT: 9.493 min Scan# 2906

Delta R.T. 0.013 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC0.1

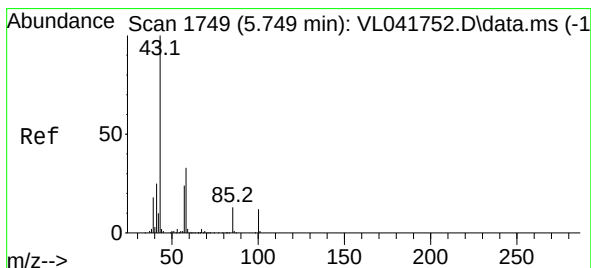
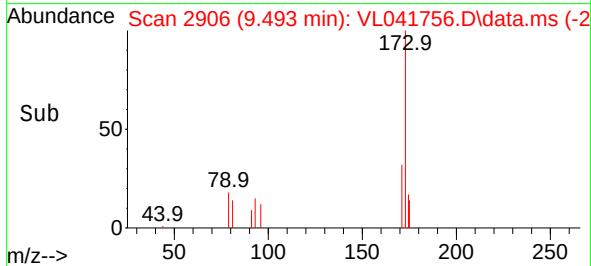
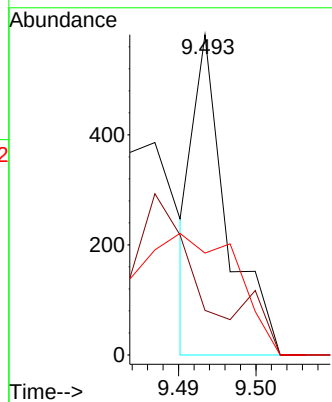
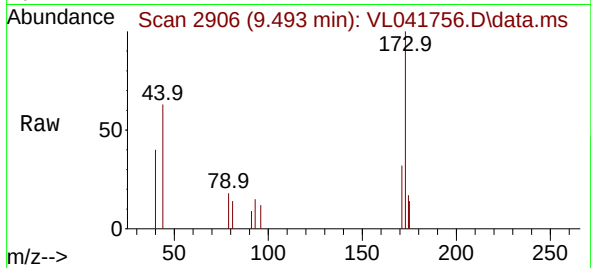
Tgt Ion:173 Resp: 172

Ion Ratio Lower Upper

173 100

175 0.0 38.2 57.2#

171 154.7 41.1 61.7#



#50

4-Methyl-2-Pentanone

Concen: 0.002 ppbv

RT: 5.749 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VL041756.D

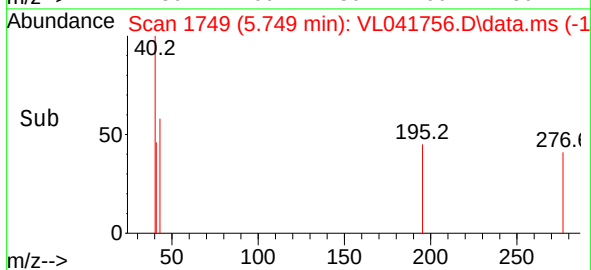
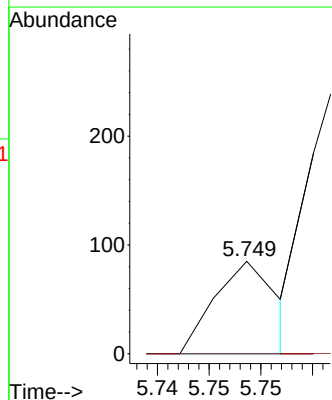
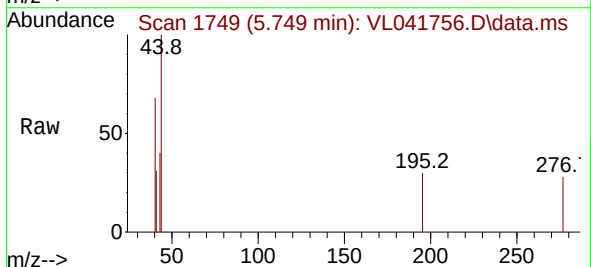
Acq: 16 Dec 2024 15:37

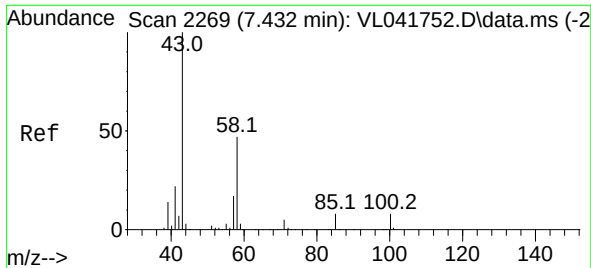
Tgt Ion: 43 Resp: 36

Ion Ratio Lower Upper

43 100

58 0.0 26.8 40.2#

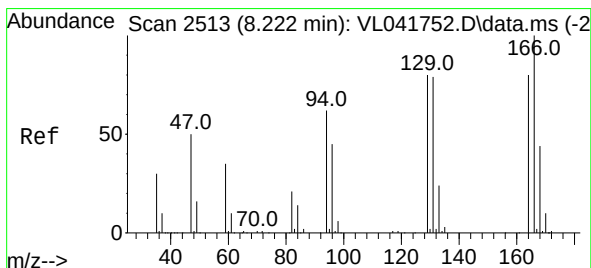
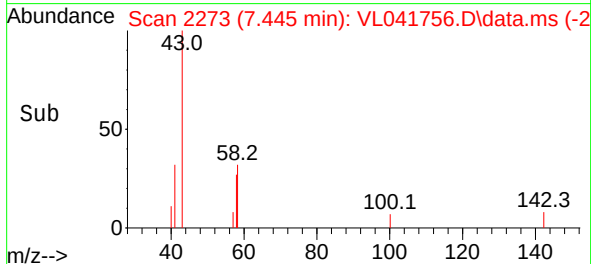
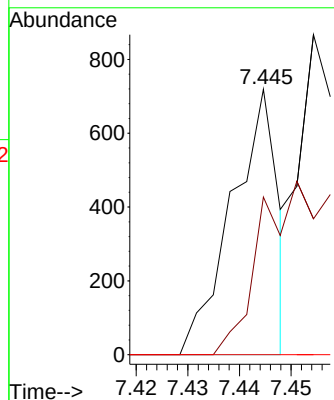
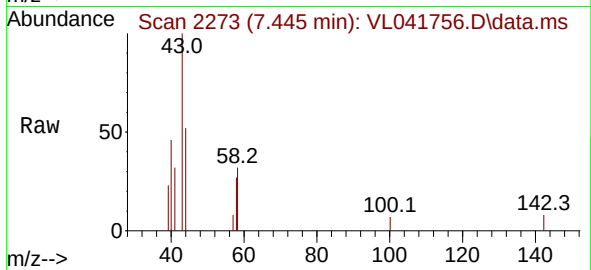




#51  
2-Hexanone  
Concen: 0.028 ppbv  
RT: 7.445 min Scan# 21  
Delta R.T. 0.013 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

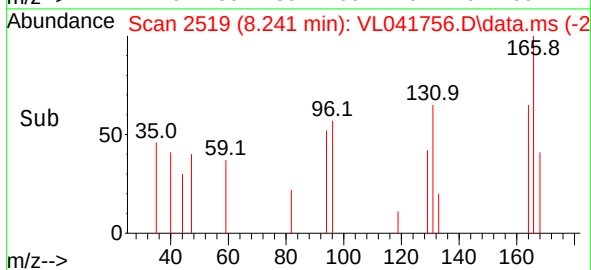
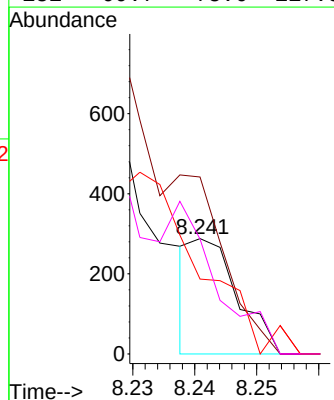
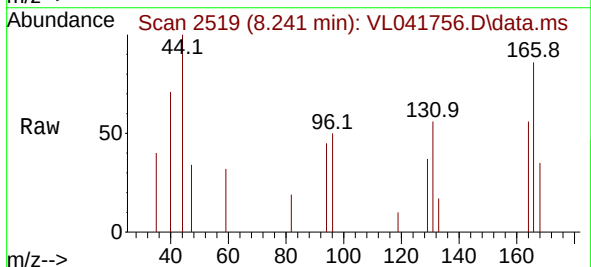
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 446   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 176.7 | 36.6  | 55.0# |
| 98       | 0.0   | 0.1   | 0.1#  |

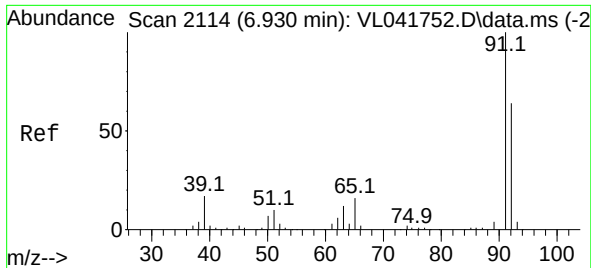


#52  
Tetrachloroethene  
Concen: 0.022 ppbv  
RT: 8.241 min Scan# 2519  
Delta R.T. 0.019 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 149    |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 166      | 153.5 | 99.8  | 149.6# |
| 129      | 40.3  | 79.6  | 119.4# |
| 131      | 99.7  | 78.6  | 117.8  |







#53

Toluene

Concen: 0.073 ppbv

RT: 6.936 min Scan# 2114

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

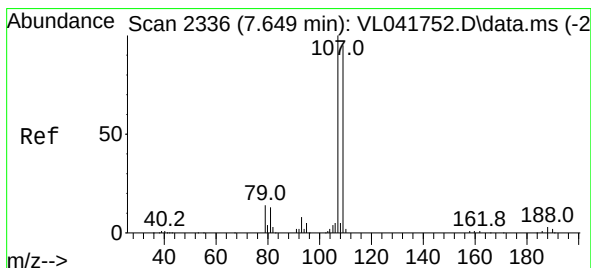
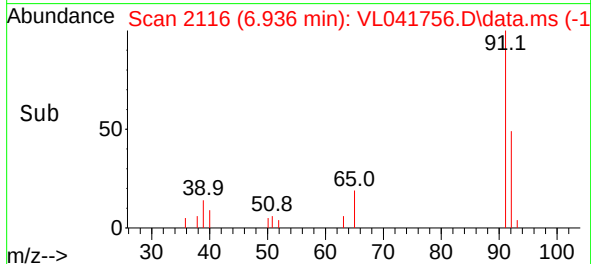
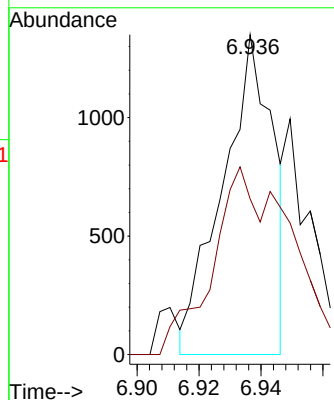
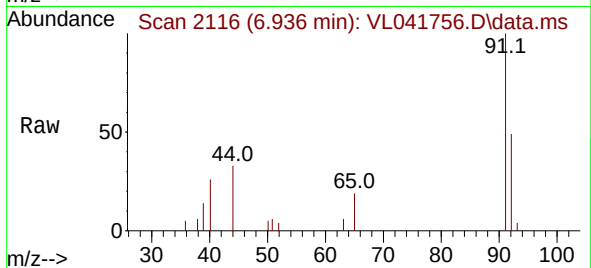
VSTDIC0.1

Tgt Ion: 91 Resp: 1529

Ion Ratio Lower Upper

91 100

92 92.8 47.9 71.9#



#54

1,2-Dibromoethane

Concen: 0.041 ppbv

RT: 7.658 min Scan# 2339

Delta R.T. 0.010 min

Lab File: VL041756.D

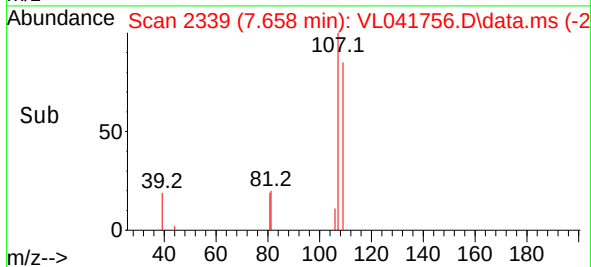
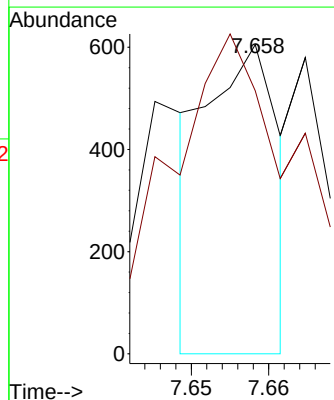
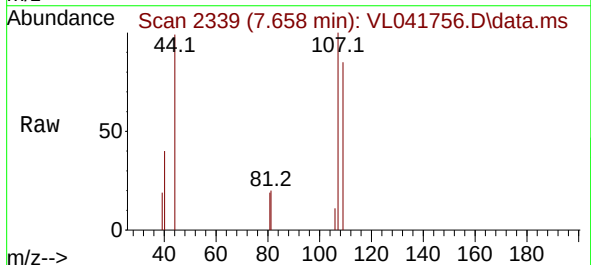
Acq: 16 Dec 2024 15:37

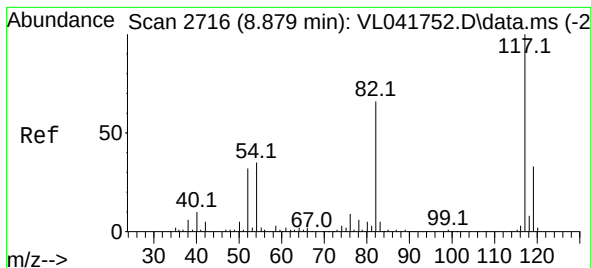
Tgt Ion: 107 Resp: 396

Ion Ratio Lower Upper

107 100

109 96.6 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 2718

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

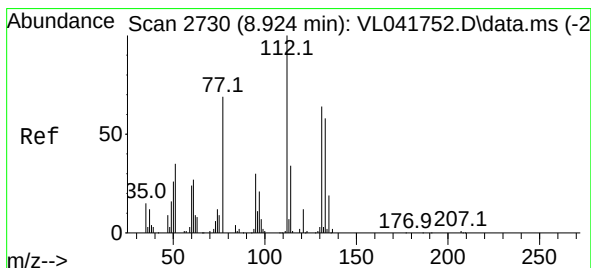
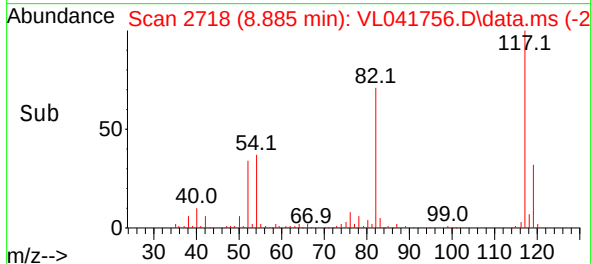
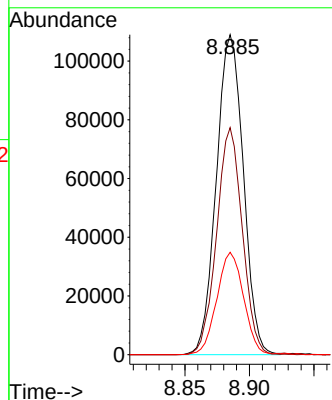
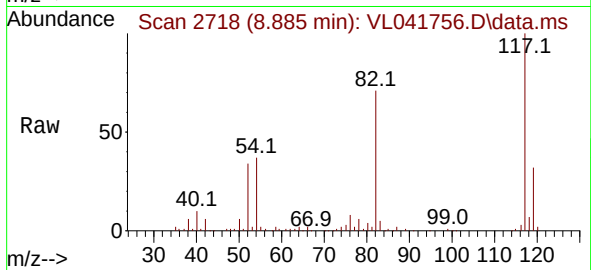
Tgt Ion:117 Resp: 158649

Ion Ratio Lower Upper

117 100

82 67.4 53.8 80.8

119 31.9 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 0.017 ppbv

RT: 8.946 min Scan# 2737

Delta R.T. 0.022 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

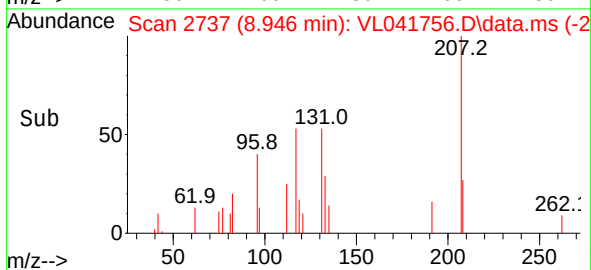
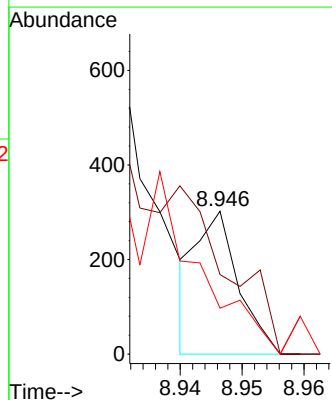
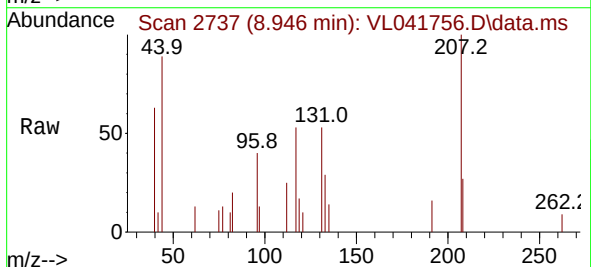
Tgt Ion:131 Resp: 142

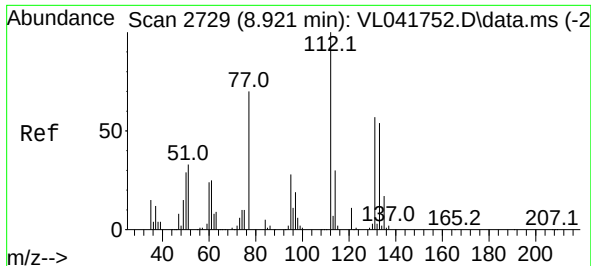
Ion Ratio Lower Upper

131 100

133 0.0 76.8 115.2#

119 0.0 49.0 73.6#





#57

Chlorobenzene

Concen: 0.129 ppbv

RT: 8.927 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

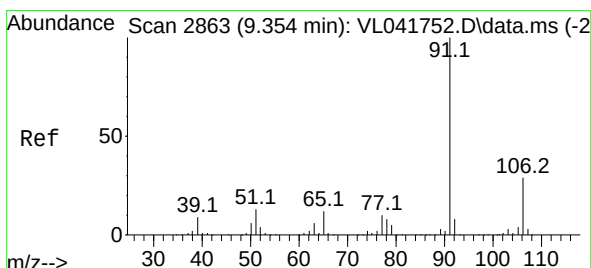
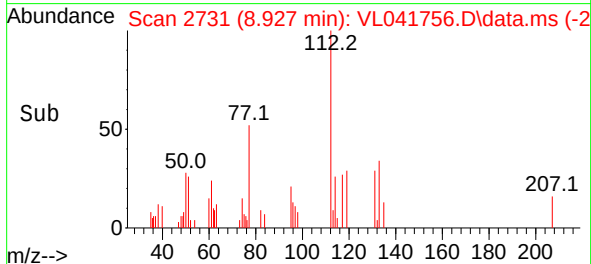
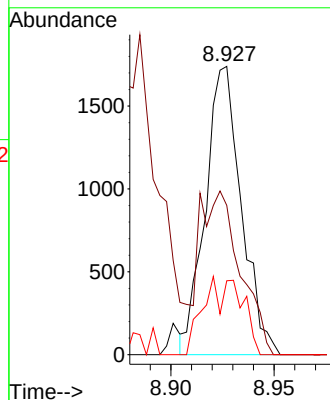
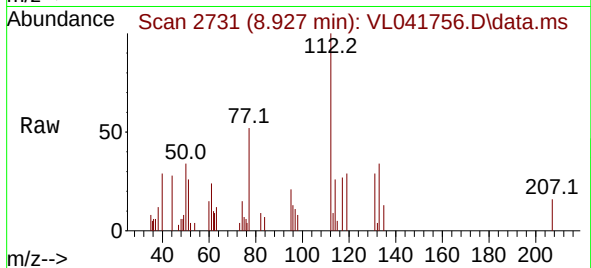
Tgt Ion:112 Resp: 2102

Ion Ratio Lower Upper

112 100

77 51.8 57.4 86.0#

114 25.6 27.4 33.4#



#58

Ethyl Benzene

Concen: 0.093 ppbv

RT: 9.357 min Scan# 2864

Delta R.T. 0.003 min

Lab File: VL041756.D

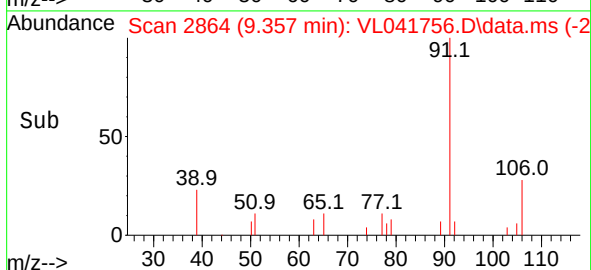
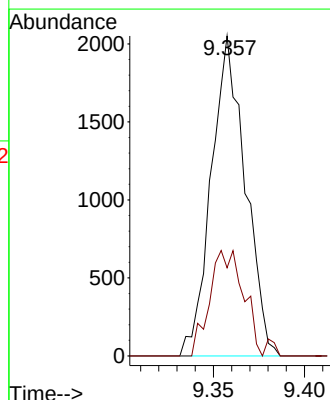
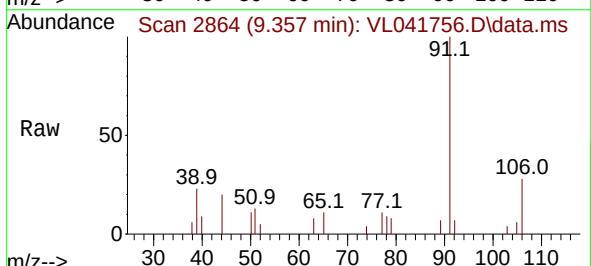
Acq: 16 Dec 2024 15:37

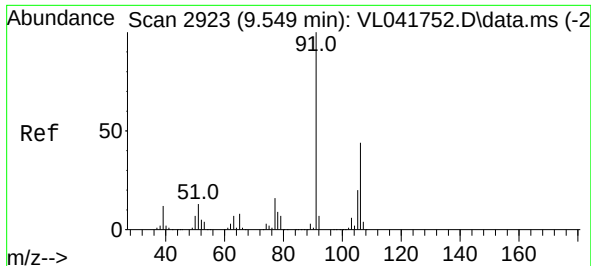
Tgt Ion: 91 Resp: 2667

Ion Ratio Lower Upper

91 100

106 27.5 23.5 35.3

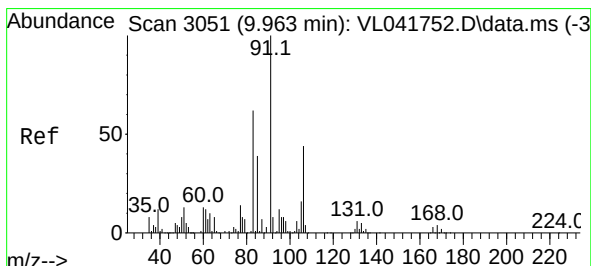
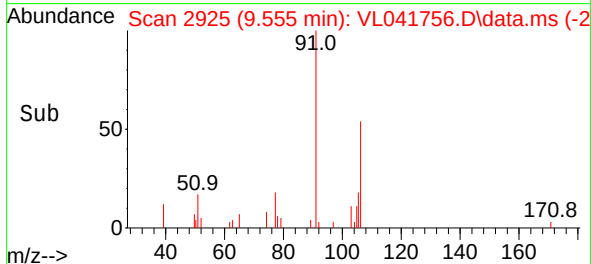
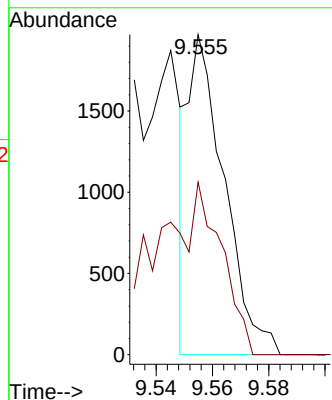
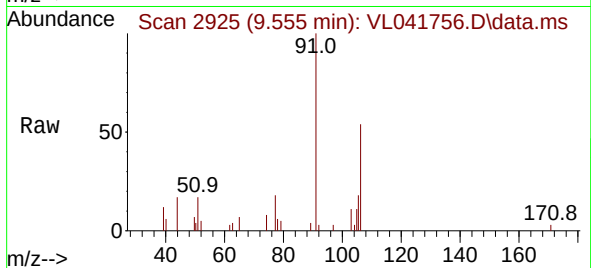




#59  
m/p-Xylene  
Concen: 0.077 ppbv  
RT: 9.555 min Scan# 2923  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

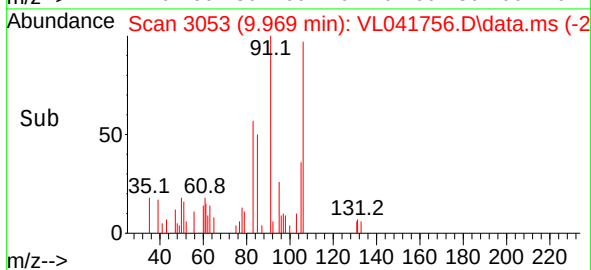
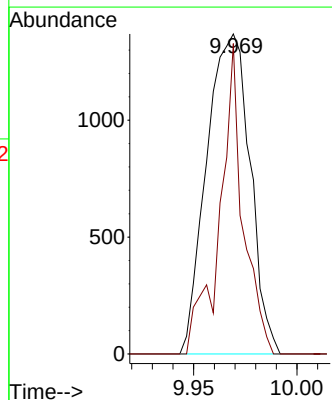
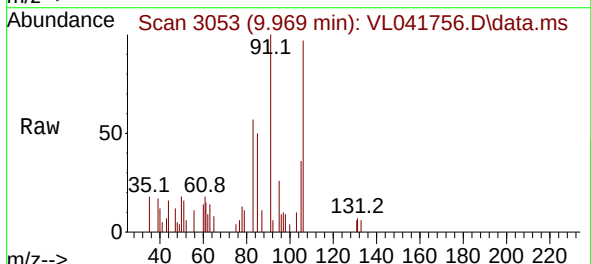
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

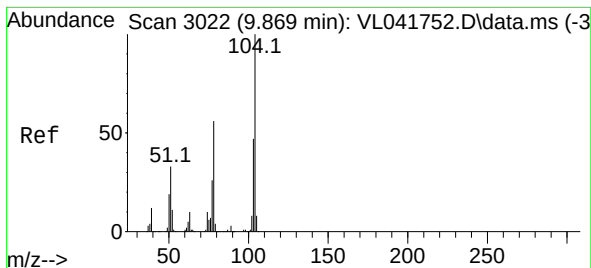
Tgt Ion: 91 Resp: 1768  
Ion Ratio Lower Upper  
91 100  
106 110.7 0.0 0.0#



#60  
o-Xylene  
Concen: 0.087 ppbv  
RT: 9.969 min Scan# 3053  
Delta R.T. 0.006 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 91 Resp: 1998  
Ion Ratio Lower Upper  
91 100  
106 52.4 21.1 63.4





#61

Styrene

Concen: 0.079 ppbv

RT: 9.875 min Scan# 3022

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

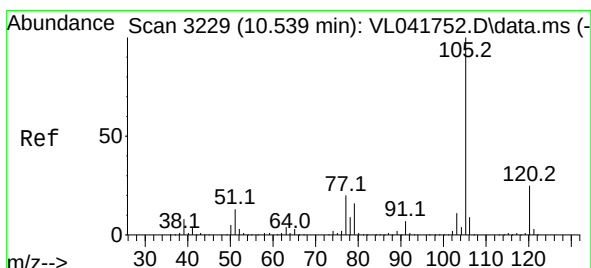
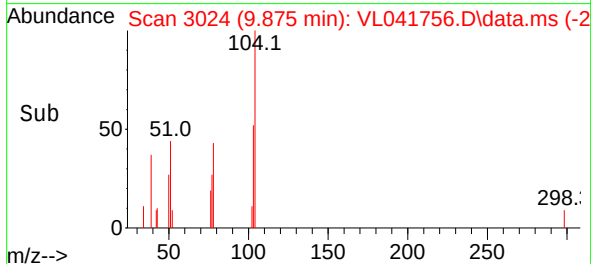
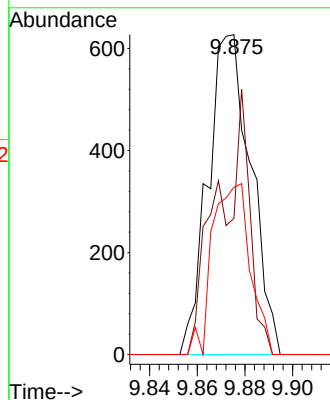
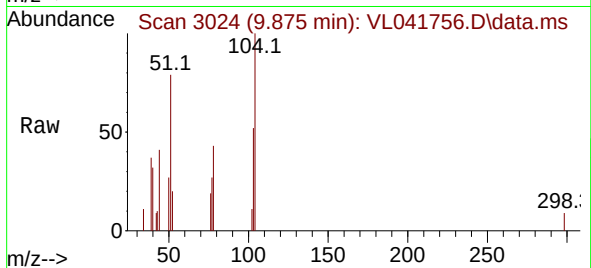
Tgt Ion:104 Resp: 785

Ion Ratio Lower Upper

104 100

78 59.5 43.8 65.6

103 47.1 37.8 56.6



#62

Isopropylbenzene

Concen: 0.103 ppbv

RT: 10.545 min Scan# 3231

Delta R.T. 0.006 min

Lab File: VL041756.D

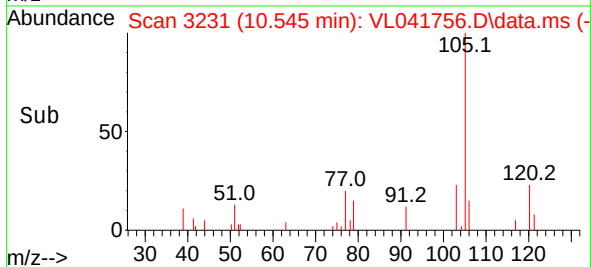
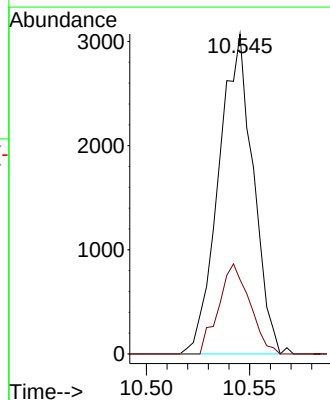
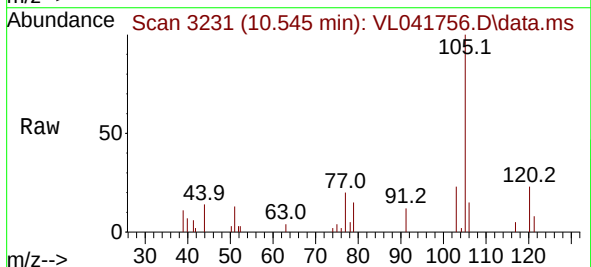
Acq: 16 Dec 2024 15:37

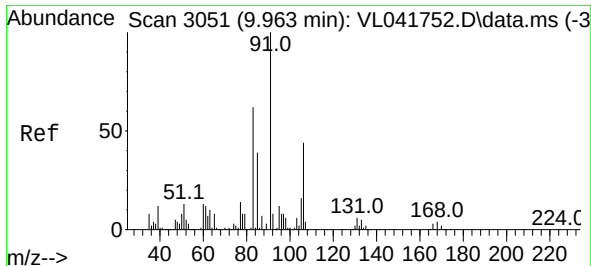
Tgt Ion:105 Resp: 3559

Ion Ratio Lower Upper

105 100

120 25.5 19.8 29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 0.041 ppbv

RT: 9.972 min Scan# 3051

Delta R.T. 0.010 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

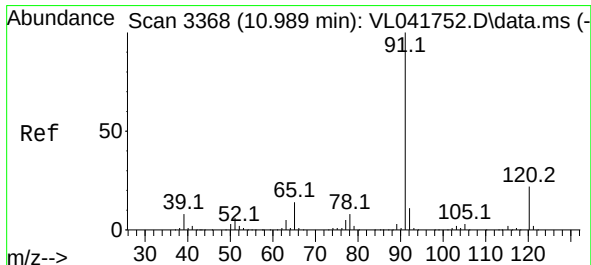
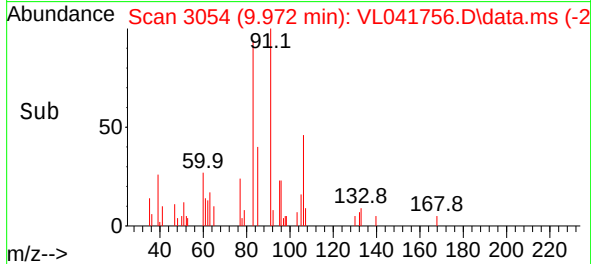
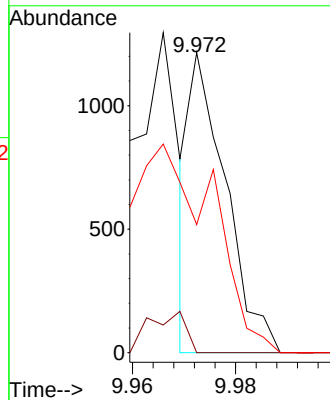
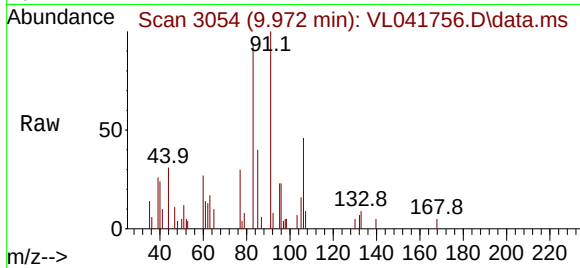
Tgt Ion: 83 Resp: 592

Ion Ratio Lower Upper

83 100

131 0.0 4.9 14.7#

85 0.0 32.0 96.2#



#64

n-propylbenzene

Concen: 0.086 ppbv

RT: 10.989 min Scan# 3368

Delta R.T. -0.000 min

Lab File: VL041756.D

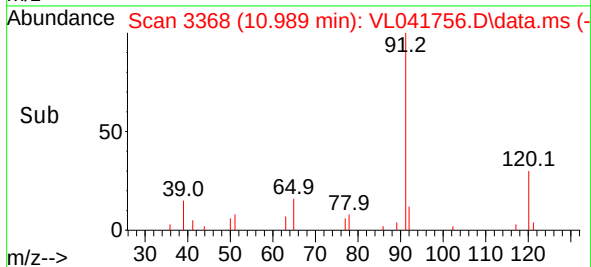
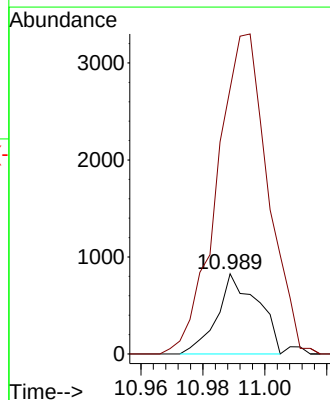
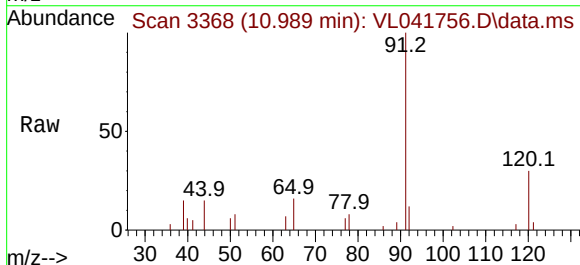
Acq: 16 Dec 2024 15:37

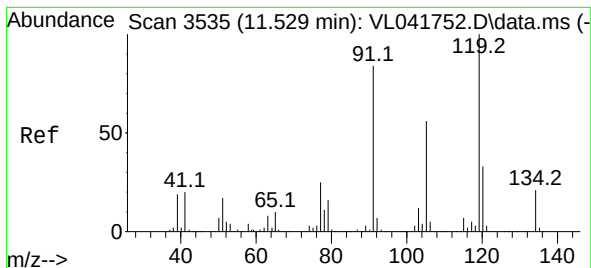
Tgt Ion: 120 Resp: 754

Ion Ratio Lower Upper

120 100

91 502.7 387.3 580.9





#65

tert-Butylbenzene

Concen: 0.092 ppbv

RT: 11.533 min Scan# 3536

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

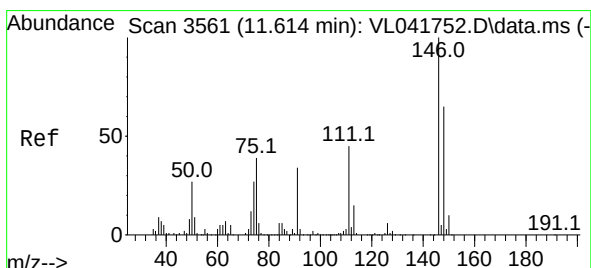
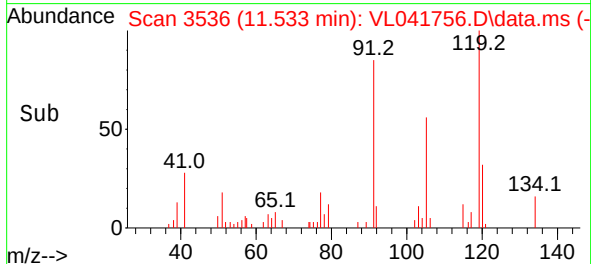
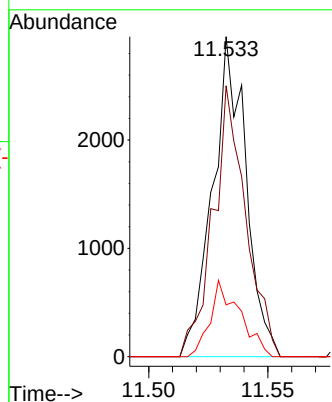
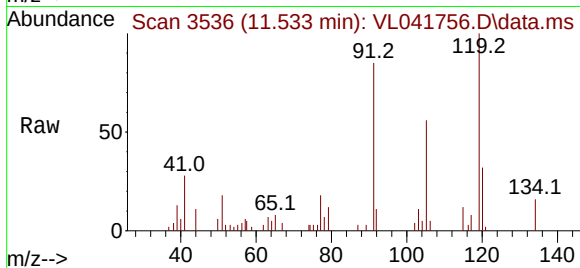
Tgt Ion:119 Resp: 2861

Ion Ratio Lower Upper

119 100

91 83.0 67.0 100.4

134 21.4 16.5 24.7



#66

Benzyl Chloride

Concen: 0.056 ppbv

RT: 11.617 min Scan# 3562

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

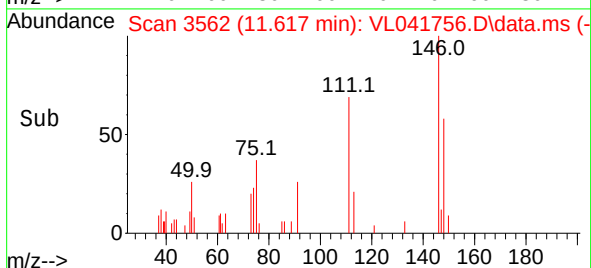
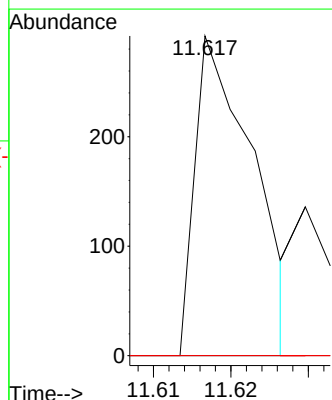
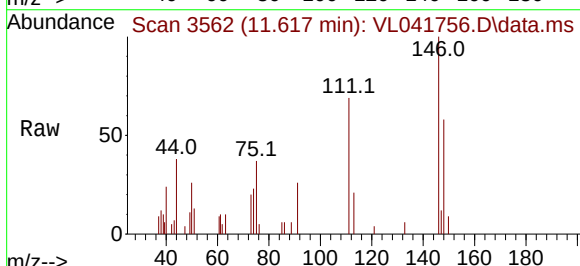
Tgt Ion: 91 Resp: 154

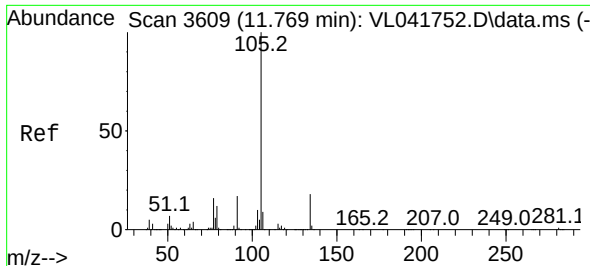
Ion Ratio Lower Upper

91 100

126 0.0 13.9 20.9#

128 0.0 4.4 6.6#





#67

sec-Butylbenzene

Concen: 0.094 ppbv

RT: 11.772 min Scan# 3610

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

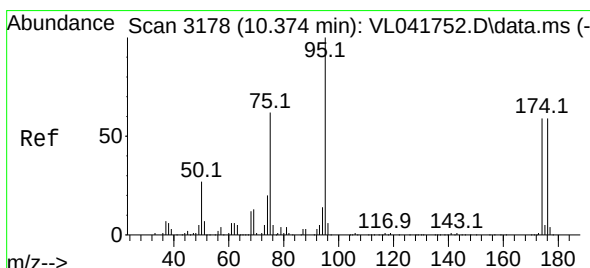
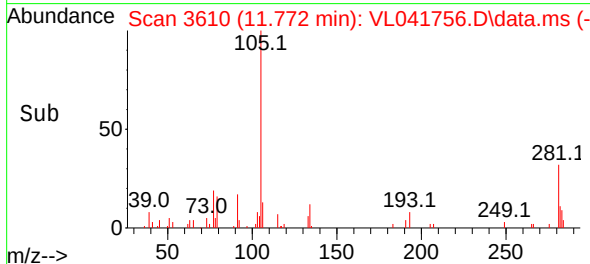
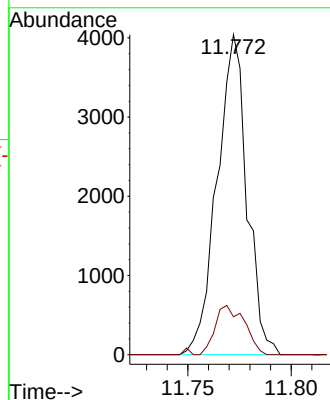
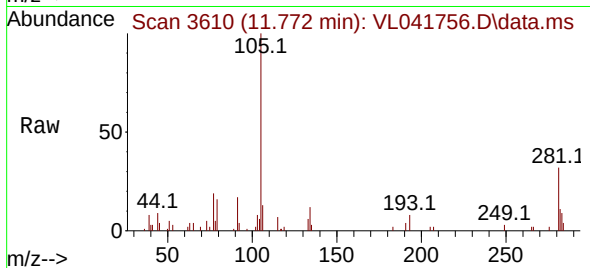
VSTDIC0.1

Tgt Ion:105 Resp: 4061

Ion Ratio Lower Upper

105 100

134 15.5 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 9.950 ppbv

RT: 10.380 min Scan# 3180

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

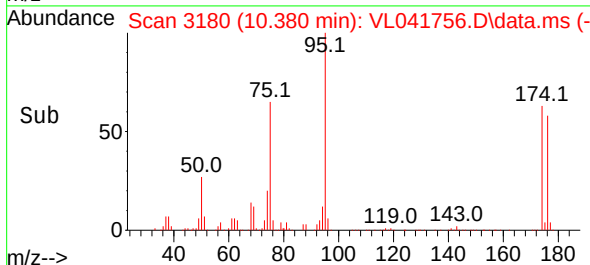
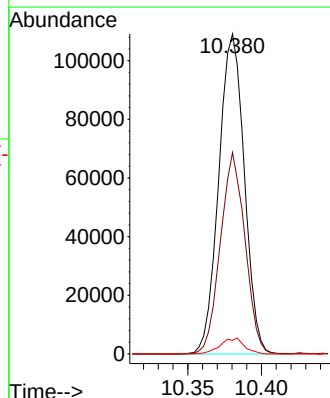
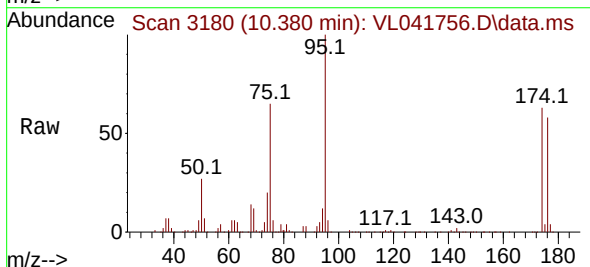
Tgt Ion: 95 Resp: 131540

Ion Ratio Lower Upper

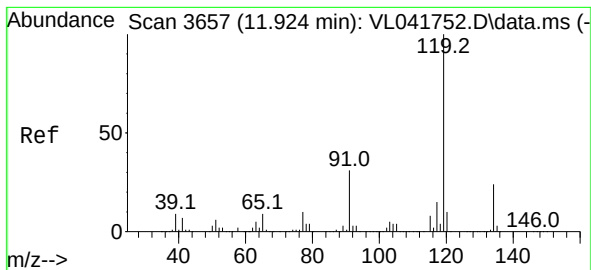
95 100

174 60.6 47.6 71.4

175 4.7 3.7 5.5



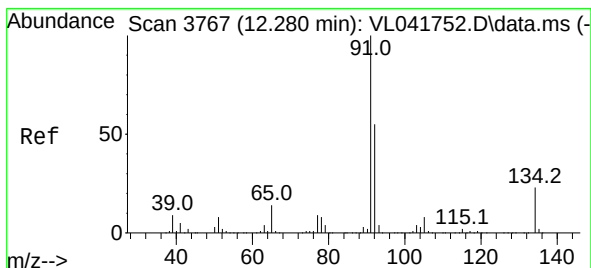
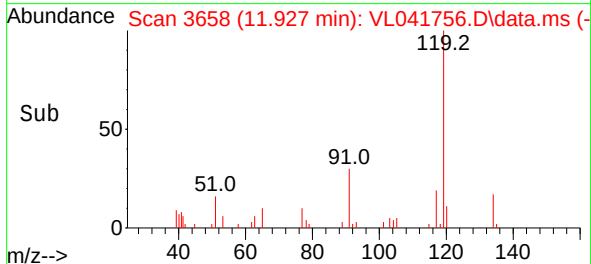
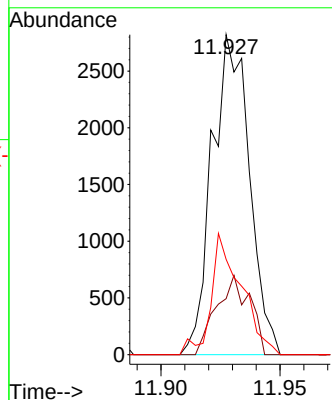
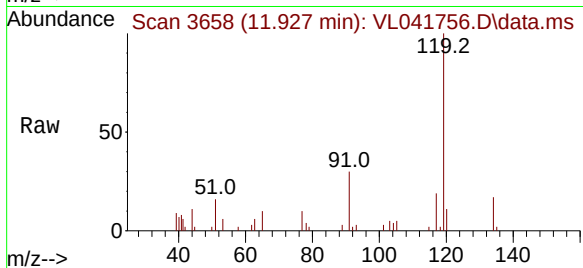




#69  
p-Isopropyltoluene  
Concen: 0.086 ppbv  
RT: 11.927 min Scan# 3658  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

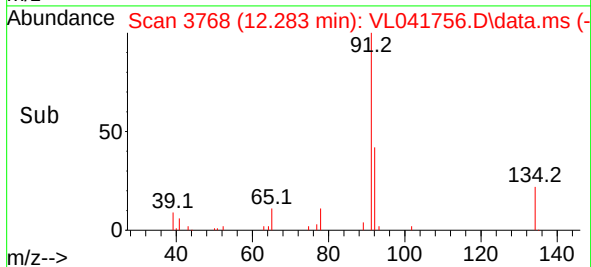
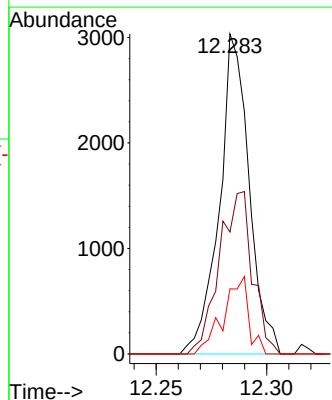
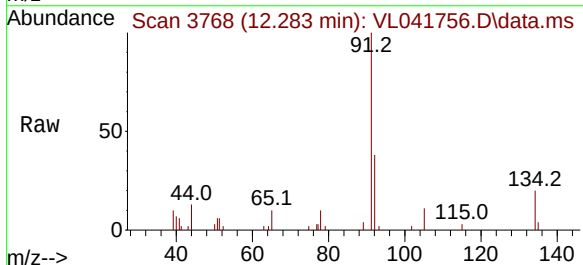
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

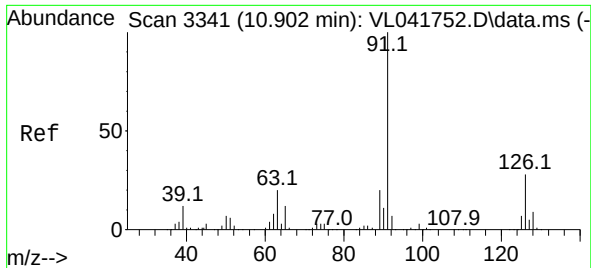
Tgt Ion:119 Resp: 3070  
Ion Ratio Lower Upper  
119 100  
134 22.1 19.6 29.4  
91 30.7 24.4 36.6



#70  
n-Butylbenzene  
Concen: 0.082 ppbv  
RT: 12.283 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 91 Resp: 2829  
Ion Ratio Lower Upper  
91 100  
92 56.9 43.2 64.8  
134 20.7 18.2 27.4

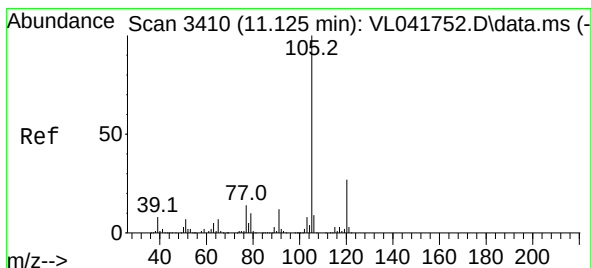
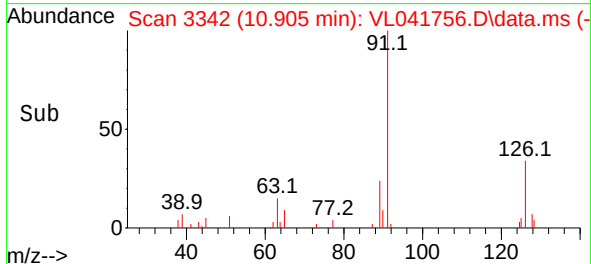
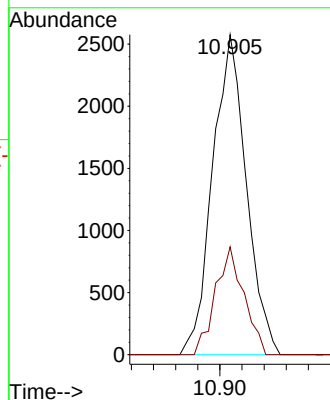
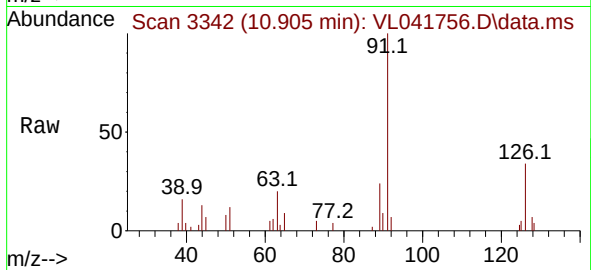




#71  
2-Chlorotoluene  
Concen: 0.103 ppbv  
RT: 10.905 min Scan# 3410  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

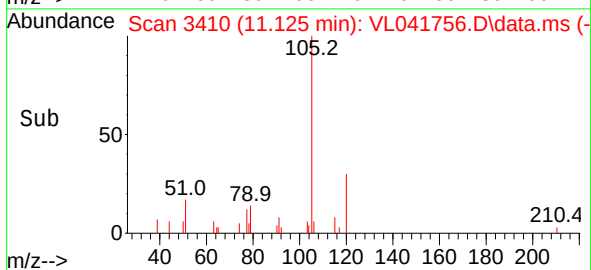
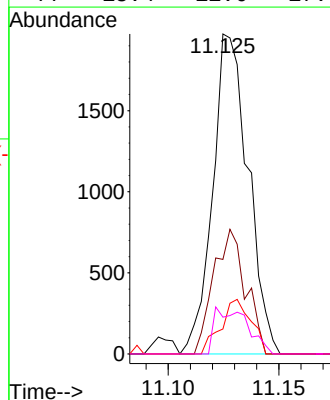
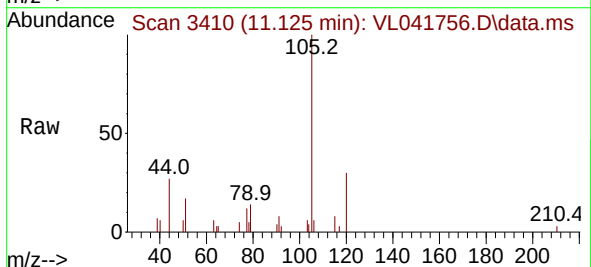
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

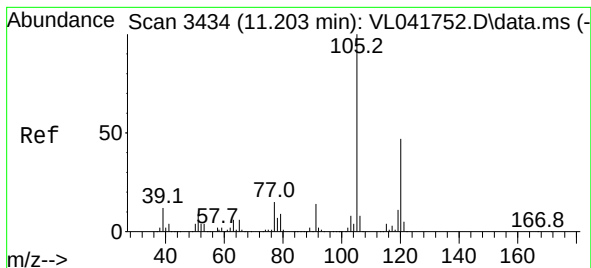
Tgt Ion: 91 Resp: 2731  
Ion Ratio Lower Upper  
91 100  
126 28.3 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 0.081 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion: 105 Resp: 2197  
Ion Ratio Lower Upper  
105 100  
120 35.4 23.3 34.9#  
91 14.6 10.9 16.3  
77 13.4 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 0.092 ppbv

RT: 11.206 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

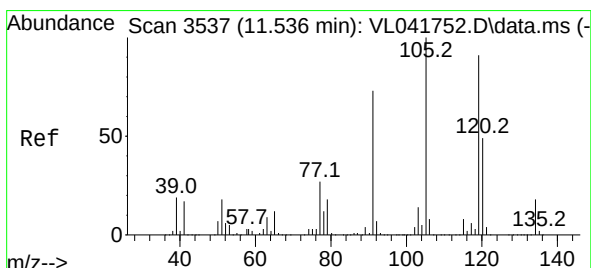
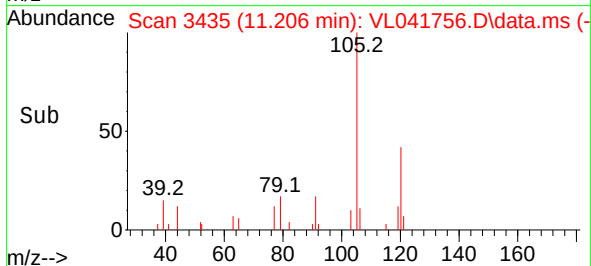
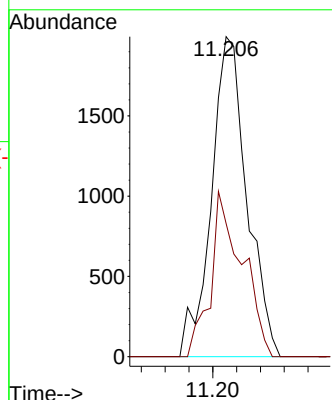
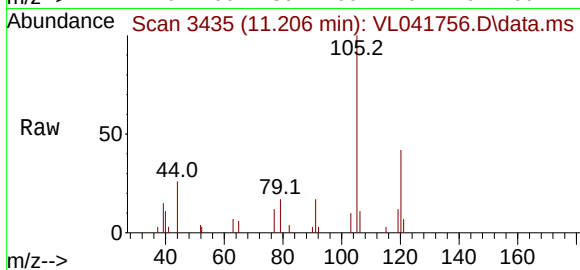
VSTDIC0.1

Tgt Ion:105 Resp: 2072

Ion Ratio Lower Upper

105 100

120 41.6 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 0.090 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Tgt Ion:105 Resp: 2190

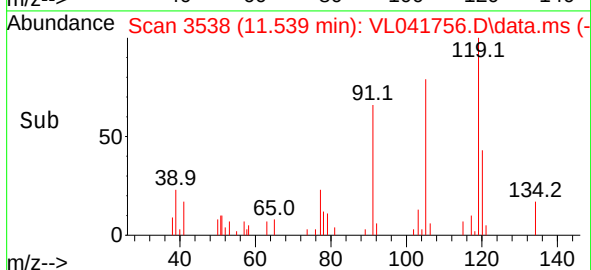
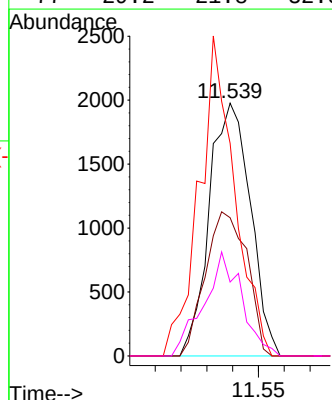
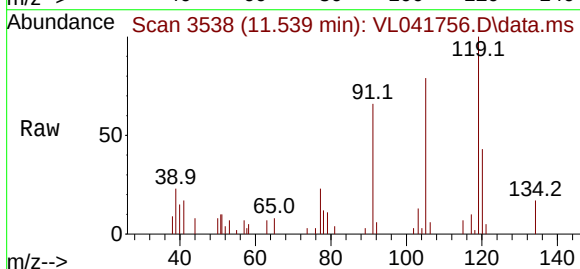
Ion Ratio Lower Upper

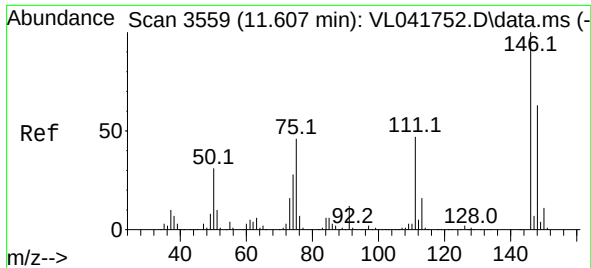
105 100

120 54.7 39.0 58.4

91 84.1 58.1 87.1

77 29.2 21.8 32.8

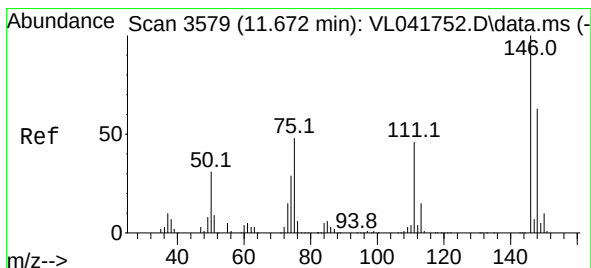
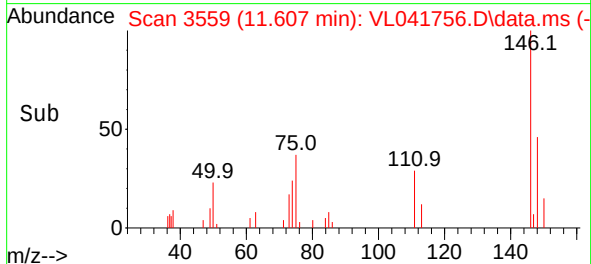
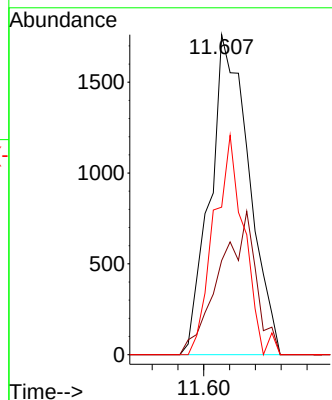
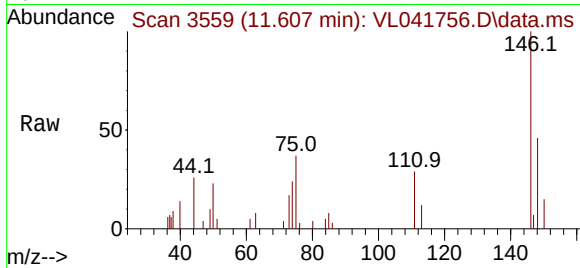




#75  
1,3-Dichlorobenzene  
Concen: 0.119 ppbv  
RT: 11.607 min Scan# 3559  
Delta R.T. -0.000 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

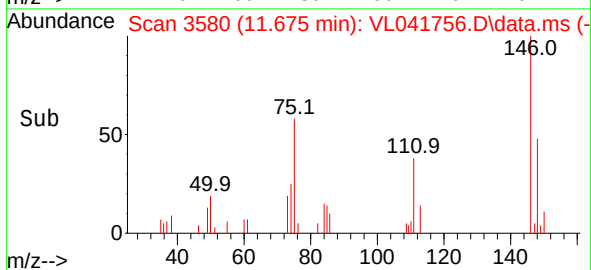
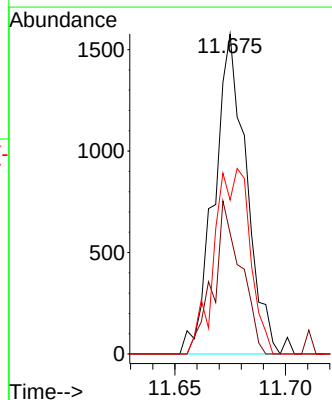
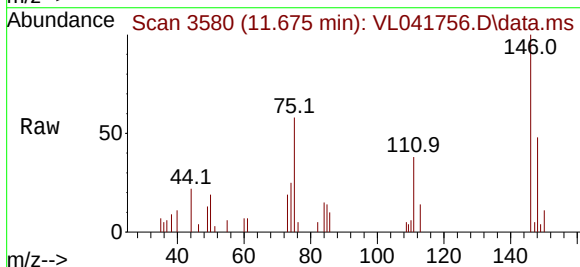
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.1

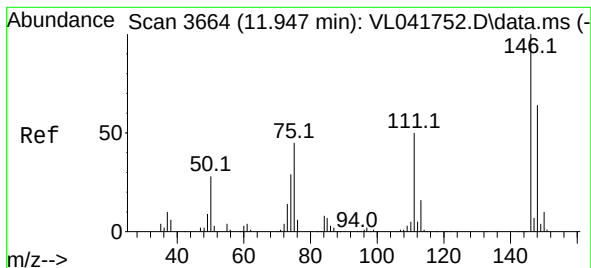
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 1843      |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 41.8  | 23.4 70.3 |
| 148         | 53.5  | 31.6 95.0 |



#76  
1,4-Dichlorobenzene  
Concen: 0.104 ppbv  
RT: 11.675 min Scan# 3580  
Delta R.T. 0.003 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 1590      |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 41.1  | 22.7 68.1 |
| 148         | 64.4  | 31.4 94.0 |





#77

1,2-Dichlorobenzene

Concen: 0.097 ppbv

RT: 11.953 min Scan# 3

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.1

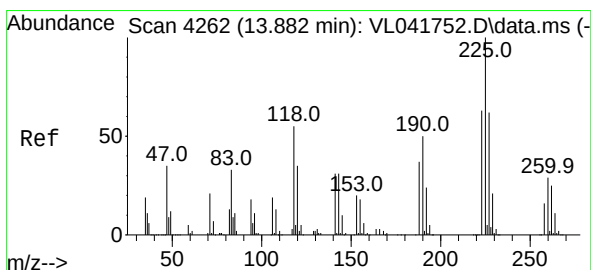
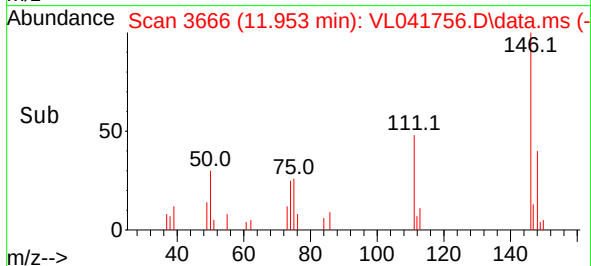
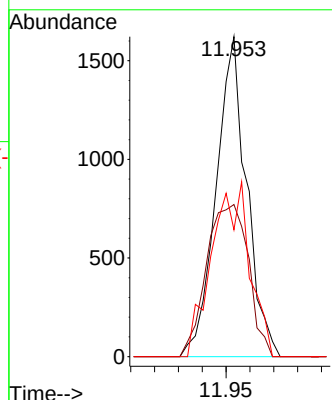
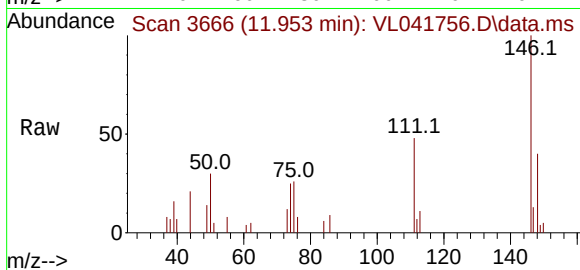
Tgt Ion:146 Resp: 1439

Ion Ratio Lower Upper

146 100

111 65.5 24.8 74.3

148 67.1 31.8 95.4



#78

Hexachloro-1,3-Butadiene

Concen: 0.106 ppbv

RT: 13.889 min Scan# 4264

Delta R.T. 0.006 min

Lab File: VL041756.D

Acq: 16 Dec 2024 15:37

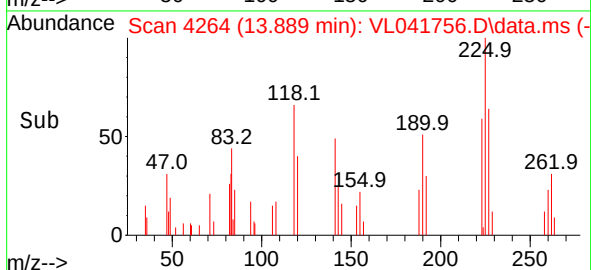
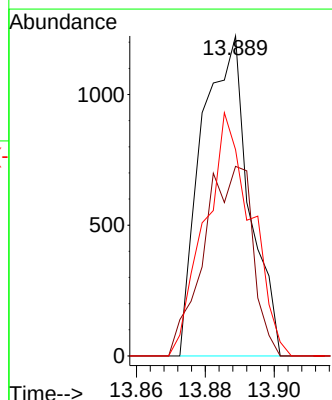
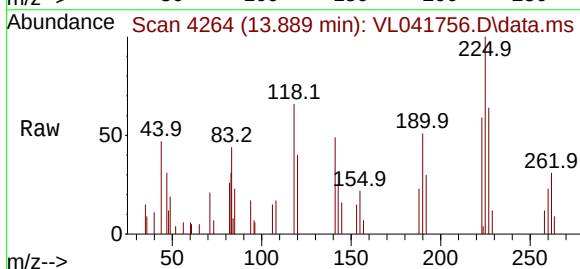
Tgt Ion:225 Resp: 1172

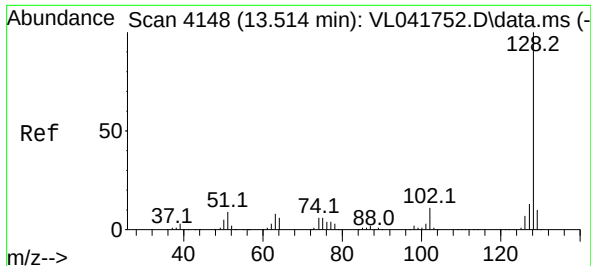
Ion Ratio Lower Upper

225 100

223 61.4 50.5 75.7

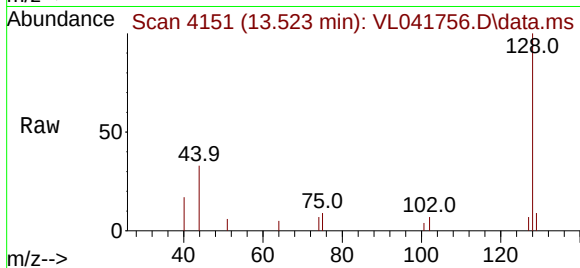
227 74.2 50.3 75.5



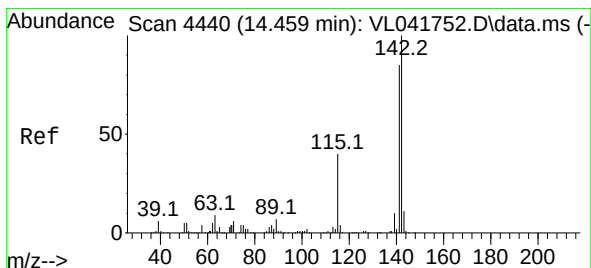
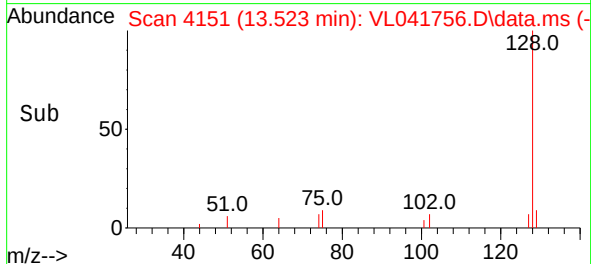
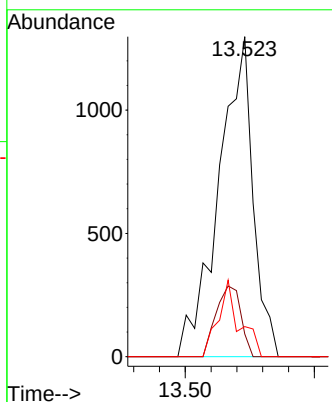


#79  
Naphthalene  
Concen: 0.071 ppbv  
RT: 13.523 min Scan# 4151  
Delta R.T. 0.010 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.1

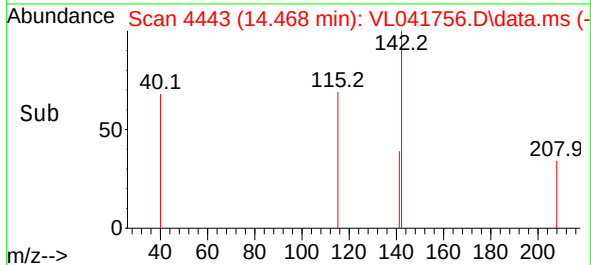
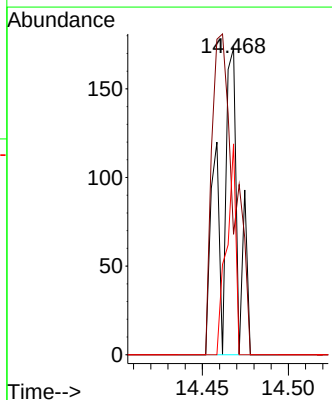
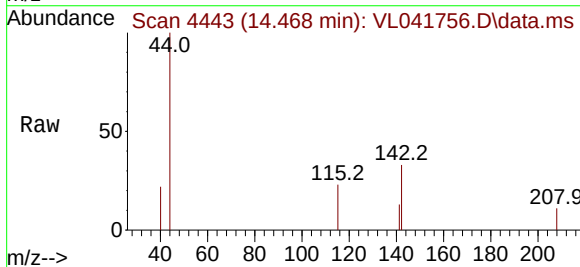


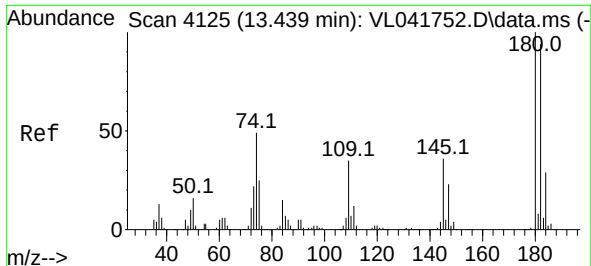
Tgt Ion:128 Resp: 1196  
Ion Ratio Lower Upper  
128 100  
127 7.1 10.7 16.1#  
129 9.4 8.2 12.4



#80  
Naphthalene,2-methyl-  
Concen: 0.024 ppbv  
RT: 14.468 min Scan# 4443  
Delta R.T. 0.010 min  
Lab File: VL041756.D  
Acq: 16 Dec 2024 15:37

Tgt Ion:142 Resp: 124  
Ion Ratio Lower Upper  
142 100  
141 131.5 68.4 102.6#  
115 36.3 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 0.101 ppbv

RT: 13.439 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041756.D

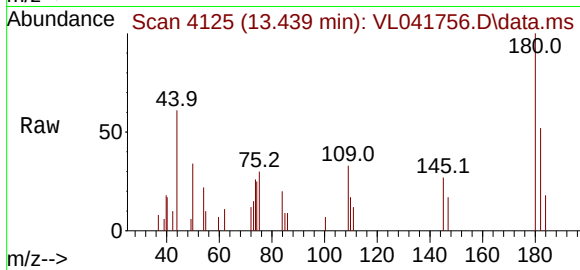
Acq: 16 Dec 2024 15:37

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.1



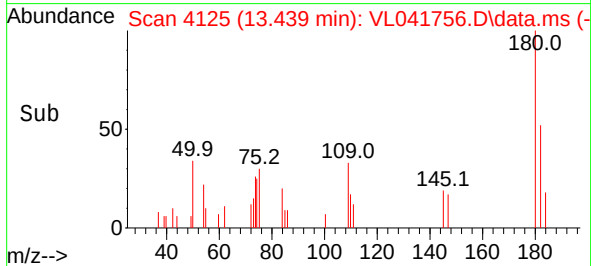
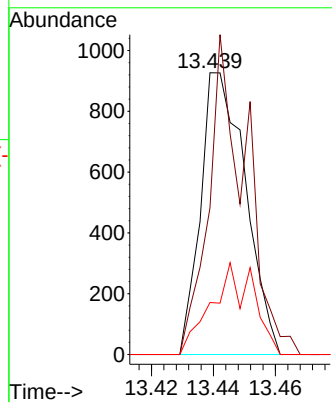
Tgt Ion:180 Resp: 931

Ion Ratio Lower Upper

180 100

182 94.5 77.0 115.6

184 30.2 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041757.D  
 Acq On : 16 Dec 2024 16:08  
 Operator : SY/MD  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Quant Time: Dec 19 06:15:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 06:09:59 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 64158    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.958 | 114  | 174825   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.885 | 117  | 154998   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 10.377 | 95    | 128167   | 9.923    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.200% |

#### Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.554 | 85  | 406   | 0.036 | ppbv   | 94     |
| 3) Chlorodifluoromethane      | 1.612 | 51  | 255   | 0.024 | ppbv   | 95     |
| 4) Chloromethane              | 1.534 | 50  | 285   | 0.064 | ppbv   | 99     |
| 5) Vinyl Chloride             | 1.580 | 62  | 175   | 0.039 | ppbv # | 84     |
| 6) Bromomethane               | 1.667 | 94  | 155   | 0.073 | ppbv # | 64     |
| 7) Chloroethane               | 1.706 | 64  | 62    | 0.035 | ppbv # | 1      |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 406   | 0.040 | ppbv # | 74     |
| 9) Propene                    | 1.482 | 41  | 413   | 0.091 | ppbv # | 78     |
| 10) Heptane                   | 4.991 | 43  | 172   | 0.015 | ppbv # | 80     |
| 11) Trichlorofluoromethane    | 1.877 | 101 | 560   | 0.046 | ppbv   | 90     |
| 12) 1,1,2-Trichlorotrifluo... | 2.143 | 101 | 293   | 0.032 | ppbv   | 95     |
| 13) Ethanol                   | 1.722 | 45  | 279   | 0.740 | ppbv # | 34     |
| 14) Bromoethene               | 1.787 | 108 | 66    | 0.021 | ppbv # | 1      |
| 15) Acetone                   | 1.839 | 43  | 2113  | 0.169 | ppbv   | 95     |
| 16) 1,3-Butadiene             | 1.609 | 39  | 252   | 0.051 | ppbv # | 36     |
| 17) tert-Butyl alcohol        | 2.046 | 59  | 509   | 0.041 | ppbv # | 76     |
| 18) 1,1-Dichloroethene        | 2.039 | 96  | 103   | 0.027 | ppbv # | 52     |
| 19) Isopropyl Alcohol         | 1.890 | 45  | 2921  | 0.390 | ppbv # | 34     |
| 20) Methylene Chloride        | 2.065 | 84  | 613   | 0.172 | ppbv # | 61     |
| 21) Allyl Chloride            | 2.097 | 41  | 566   | 0.084 | ppbv # | 60     |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 170   | 0.038 | ppbv # | 23     |
| 23) Vinyl Acetate             | 2.460 | 43  | 202   | 0.037 | ppbv # | 1      |
| 24) 1,1-Dichloroethane        | 2.411 | 63  | 378   | 0.042 | ppbv # | 88     |
| 25) Ethyl Acetate             | 2.839 | 43  | 677   | 0.029 | ppbv # | 83     |
| 26) Hexane                    | 2.829 | 57  | 141   | 0.016 | ppbv # | 1      |
| 27) Carbon Disulfide          | 2.152 | 76  | 210   | 0.026 | ppbv # | 1      |
| 28) Methyl tert-Butyl Ether   | 2.450 | 73  | 114   | 0.016 | ppbv   | 98     |
| 29) Chloroform                | 2.852 | 83  | 444   | 0.033 | ppbv   | 99     |
| 30) Cyclohexane               | 3.861 | 84  | 161   | 0.021 | ppbv # | 1      |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 330   | 0.036 | ppbv # | 71     |
| 32) 1,1,1-Trichloroethane     | 3.369 | 97  | 332   | 0.025 | ppbv # | 74     |
| 34) 2-Butanone                | 2.560 | 43  | 686   | 0.049 | ppbv   | 96     |
| 35) Carbon Tetrachloride      | 3.768 | 117 | 209   | 0.017 | ppbv   | 97     |
| 36) Benzene                   | 3.657 | 78  | 211   | 0.012 | ppbv # | 84     |
| 37) 1,2-Dichloroethane        | 3.217 | 62  | 357   | 0.032 | ppbv # | 82     |
| 38) Trichloroethene           | 4.551 | 130 | 204   | 0.027 | ppbv # | 47     |
| 39) 1,2-Dichloropropane       | 3.955 | 63  | 48113 | 7.356 | ppbv # | 17     |
| 40) 1,4-Dioxane               | 4.635 | 88  | 26    | 0.008 | ppbv # | 1      |
| 41) Tetrahydrofuran           | 3.049 | 42  | 55    | 0.007 | ppbv # | 39     |
| 42) Bromodichloromethane      | 4.480 | 83  | 168   | 0.013 | ppbv # | 44     |
| 43) Methyl Methacrylate       | 4.907 | 69  | 39    | 0.006 | ppbv # | 1      |
| 44) 2,2,4-Trimethylpentane    | 4.638 | 57  | 425   | 0.014 | ppbv # | 2      |
| 45) t-1,3-Dichloropropene     | 6.418 | 75  | 74    | 0.010 | ppbv # | 42     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041757.D  
 Acq On : 16 Dec 2024 16:08  
 Operator : SY/MD  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Quant Time: Dec 19 06:15:54 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

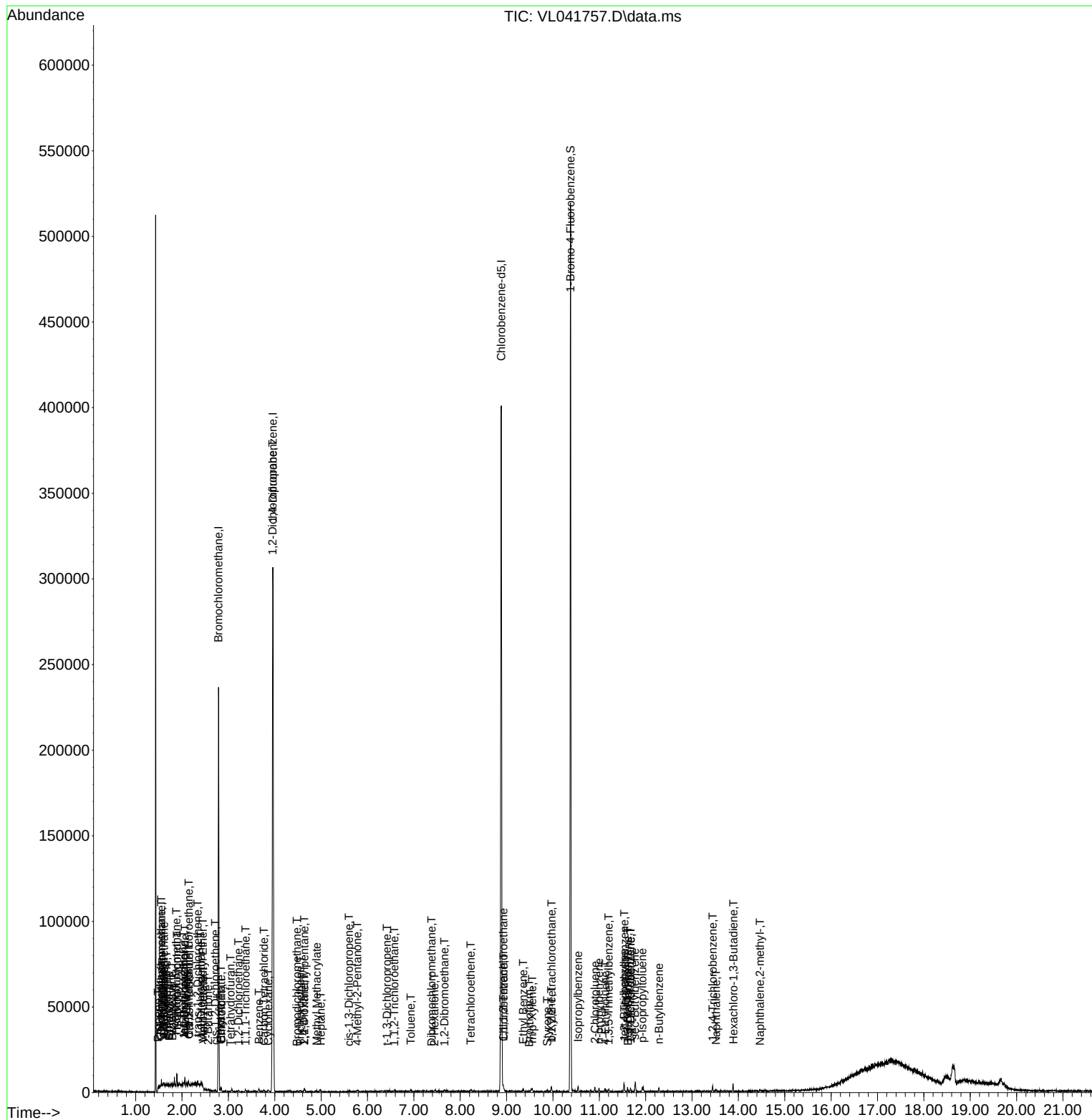
| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.599  | 75   | 67       | 0.007 | ppbv # | 67       |
| 47) 1,1,2-Trichloroethane     | 6.580  | 97   | 59       | 0.009 | ppbv # | 50       |
| 48) Dibromochloromethane      | 7.383  | 129  | 117      | 0.013 | ppbv   | 85       |
| 49) Bromoform                 | 9.487  | 173  | 118      | 0.015 | ppbv   | 92       |
| 50) 4-Methyl-2-Pentanone      | 5.777  | 43   | 350      | 0.018 | ppbv # | 41       |
| 51) 2-Hexanone                | 7.441  | 43   | 97       | 0.006 | ppbv # | 31       |
| 52) Tetrachloroethene         | 8.224  | 164  | 135      | 0.020 | ppbv # | 76       |
| 53) Toluene                   | 6.933  | 91   | 304      | 0.015 | ppbv # | 21       |
| 54) 1,2-Dibromoethane         | 7.661  | 107  | 213      | 0.023 | ppbv # | 42       |
| 56) 1,1,1,2-Tetrachloroethane | 8.930  | 131  | 86       | 0.010 | ppbv # | 1        |
| 57) Chlorobenzene             | 8.933  | 112  | 114      | 0.007 | ppbv # | 70       |
| 58) Ethyl Benzene             | 9.357  | 91   | 516      | 0.018 | ppbv   | 91       |
| 59) m/p-Xylene                | 9.551  | 91   | 500      | 0.022 | ppbv # | 100      |
| 60) o-Xylene                  | 9.966  | 91   | 796      | 0.035 | ppbv   | 83       |
| 61) Styrene                   | 9.875  | 104  | 267      | 0.027 | ppbv # | 74       |
| 62) Isopropylbenzene          | 10.542 | 105  | 1186     | 0.035 | ppbv   | 92       |
| 63) 1,1,2,2-Tetrachloroethane | 9.969  | 83   | 455      | 0.032 | ppbv # | 96       |
| 64) n-propylbenzene           | 10.998 | 120  | 126      | 0.015 | ppbv # | 1        |
| 65) tert-Butylbenzene         | 11.535 | 119  | 444      | 0.015 | ppbv # | 1        |
| 66) Benzyl Chloride           | 11.620 | 91   | 43       | 0.016 | ppbv # | 66       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 1194     | 0.028 | ppbv # | 86       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 781      | 0.022 | ppbv # | 87       |
| 70) n-Butylbenzene            | 12.290 | 91   | 344      | 0.010 | ppbv # | 1        |
| 71) 2-Chlorotoluene           | 10.908 | 91   | 428      | 0.017 | ppbv # | 57       |
| 72) 4-Ethyltoluene            | 11.131 | 105  | 424      | 0.016 | ppbv # | 75       |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 540      | 0.025 | ppbv   | 87       |
| 74) 1,2,4-Trimethylbenzene    | 11.542 | 105  | 724      | 0.031 | ppbv   | 91       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 613      | 0.041 | ppbv   | 78       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 547      | 0.037 | ppbv   | 86       |
| 77) 1,2-Dichlorobenzene       | 11.675 | 146  | 547      | 0.038 | ppbv   | 83       |
| 78) Hexachloro-1,3-Butadiene  | 13.892 | 225  | 112      | 0.010 | ppbv # | 19       |
| 79) Naphthalene               | 13.516 | 128  | 540      | 0.033 | ppbv # | 69       |
| 80) Naphthalene,2-methyl-     | 14.465 | 142  | 206      | 0.040 | ppbv # | 77       |
| 81) 1,2,4-Trichlorobenzene    | 13.445 | 180  | 586      | 0.065 | ppbv # | 87       |

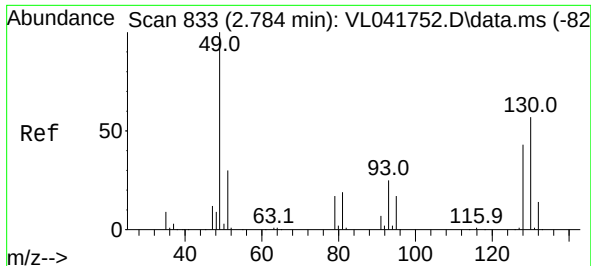
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041757.D  
 Acq On : 16 Dec 2024 16:08  
 Operator : SY/MD  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Quant Time: Dec 19 06:15:54 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

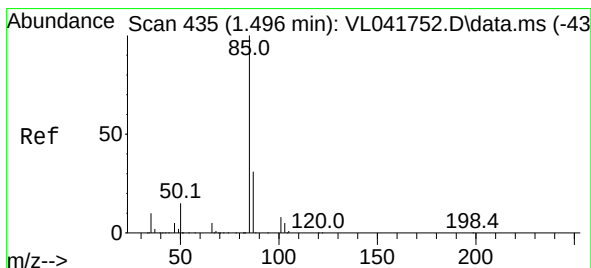
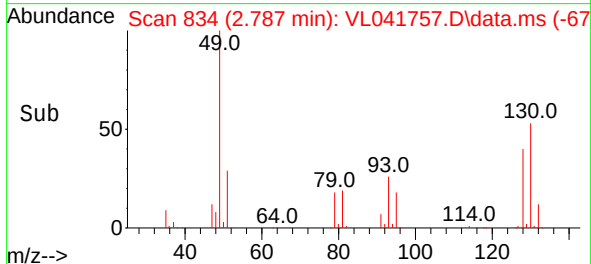
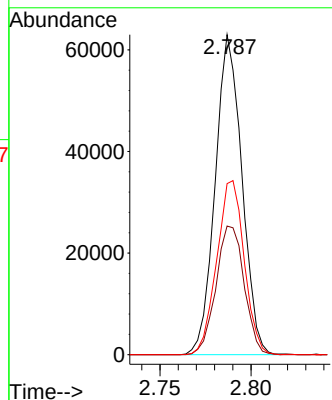
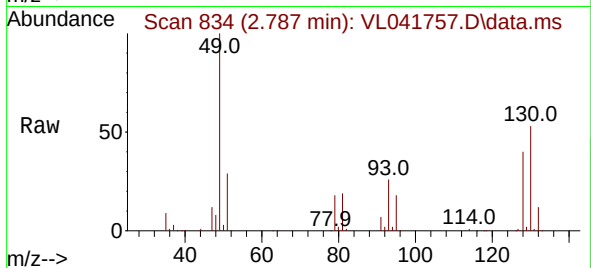




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 833  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

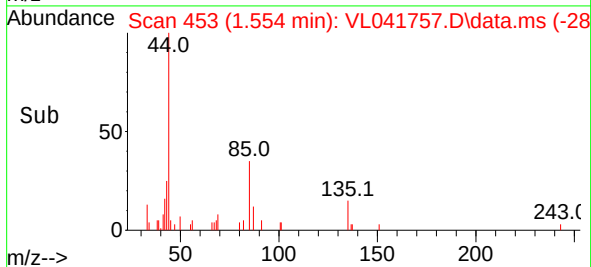
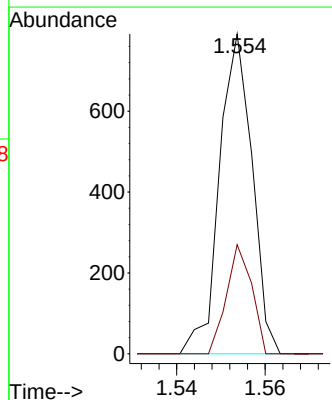
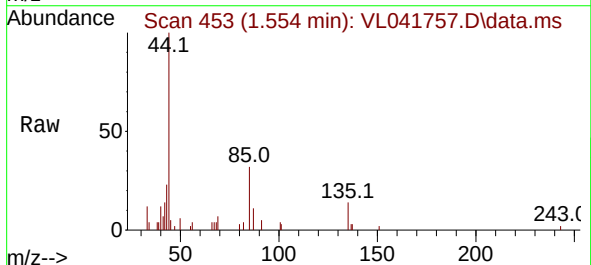
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

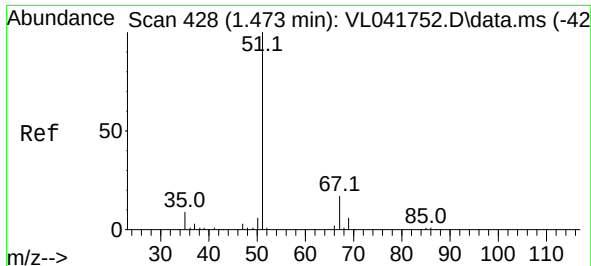
Tgt Ion: 49 Resp: 64158  
Ion Ratio Lower Upper  
49 100  
128 42.4 21.6 64.6  
130 56.0 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.036 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. 0.058 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 85 Resp: 406  
Ion Ratio Lower Upper  
85 100  
87 34.1 24.5 36.7

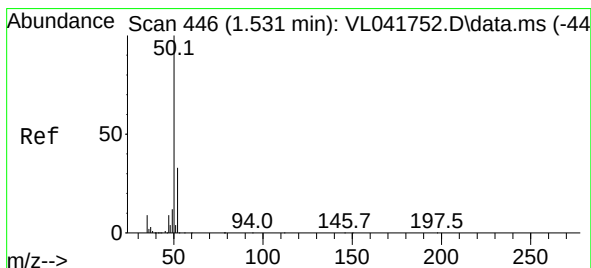
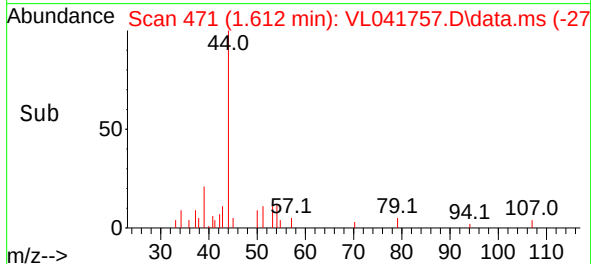
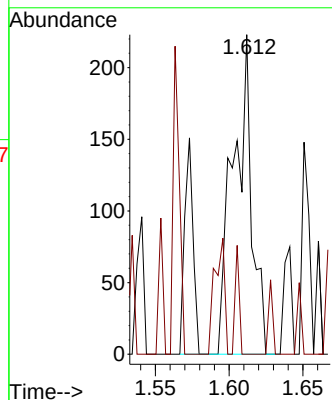
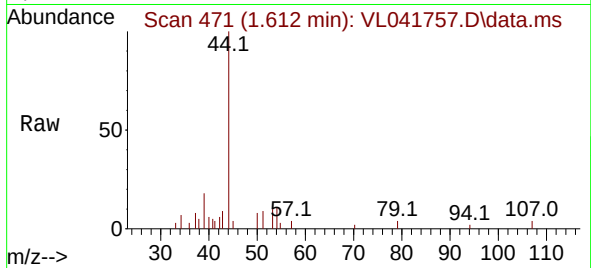




#3  
Chlorodifluoromethane  
Concen: 0.024 ppbv  
RT: 1.612 min Scan# 41  
Delta R.T. 0.139 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

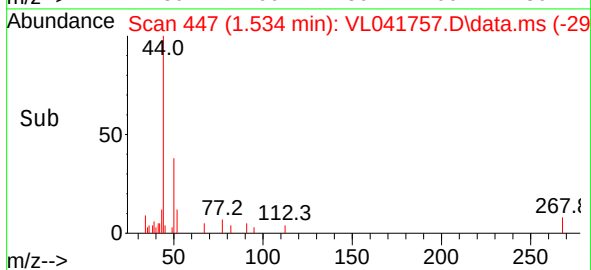
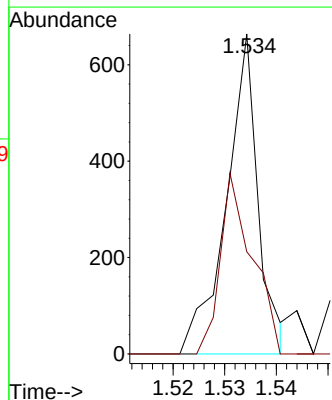
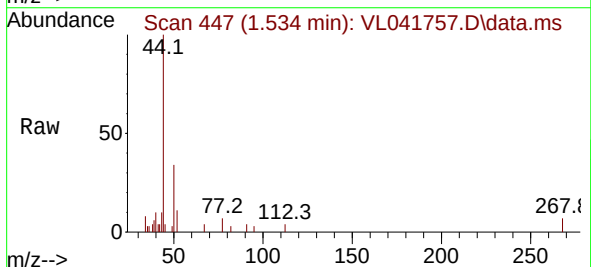
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

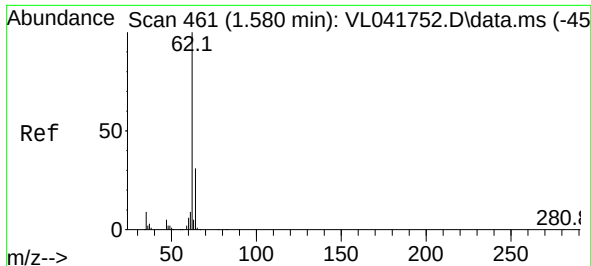
Tgt Ion: 51 Resp: 255  
Ion Ratio Lower Upper  
51 100  
67 20.8 15.0 22.4



#4  
Chloromethane  
Concen: 0.064 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 50 Resp: 285  
Ion Ratio Lower Upper  
50 100  
52 31.9 26.2 39.2

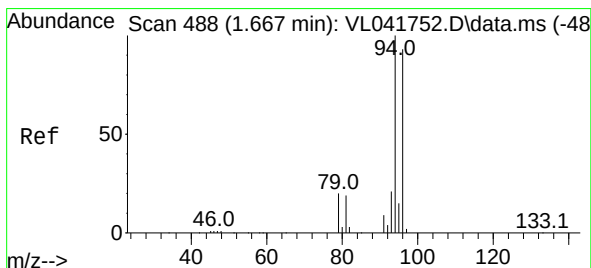
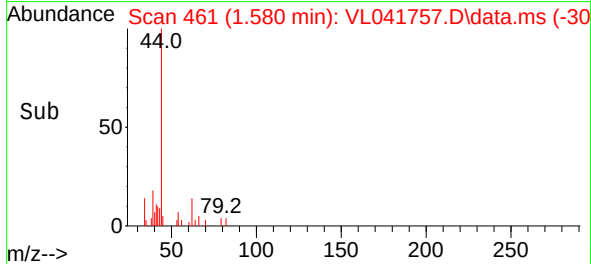
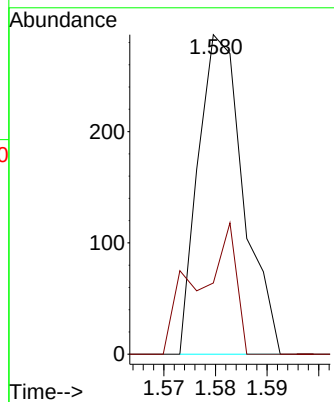
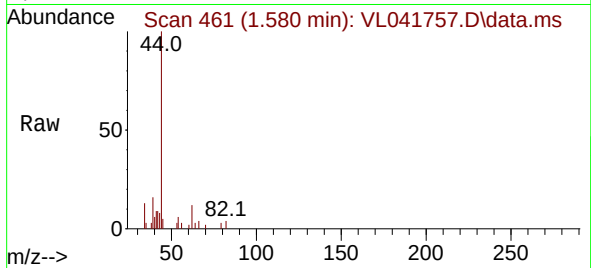




#5  
Vinyl Chloride  
Concen: 0.039 ppbv  
RT: 1.580 min Scan# 461  
Delta R.T. -0.000 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

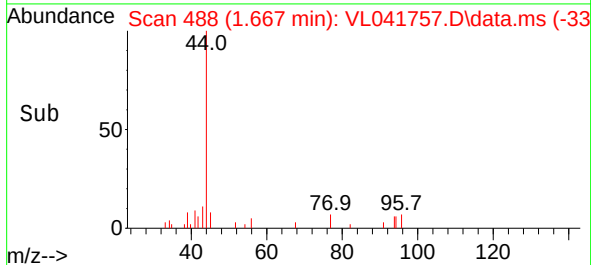
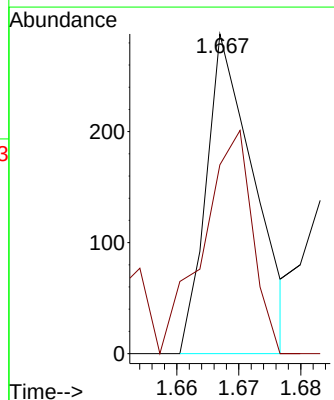
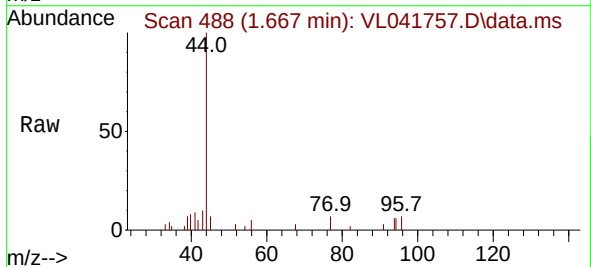
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

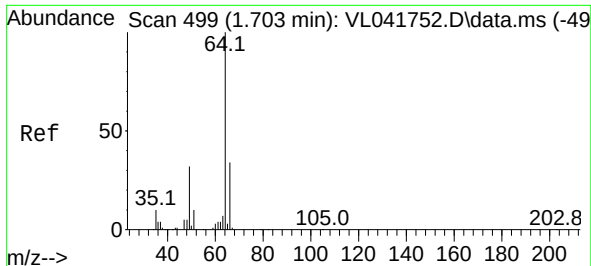
Tgt Ion: 62 Resp: 175  
Ion Ratio Lower Upper  
62 100  
64 22.3 25.1 37.7#



#6  
Bromomethane  
Concen: 0.073 ppbv  
RT: 1.667 min Scan# 488  
Delta R.T. -0.000 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 94 Resp: 155  
Ion Ratio Lower Upper  
94 100  
96 59.0 74.7 112.1#

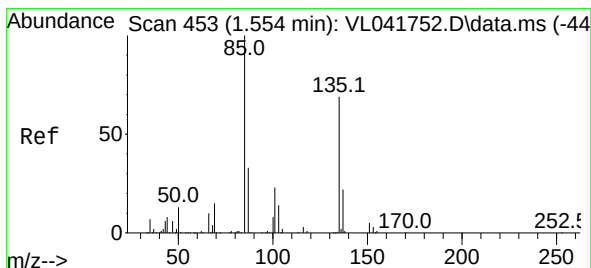
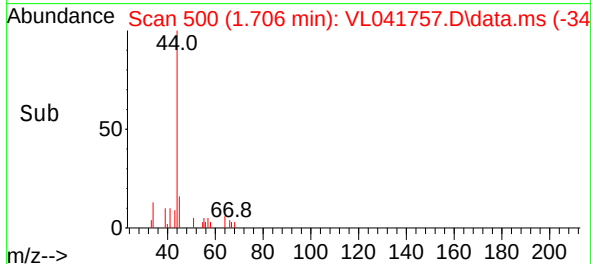
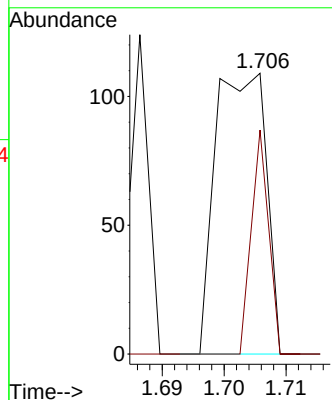
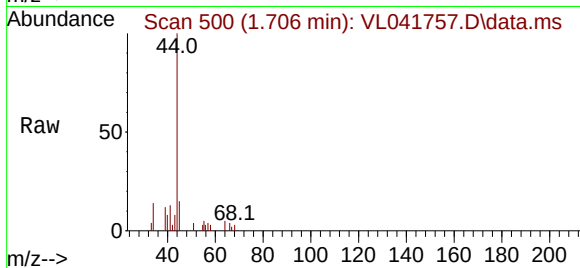




#7  
Chloroethane  
Concen: 0.035 ppbv  
RT: 1.706 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

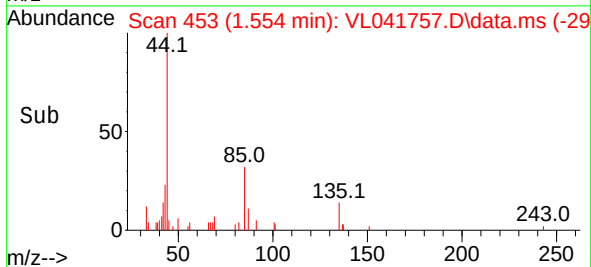
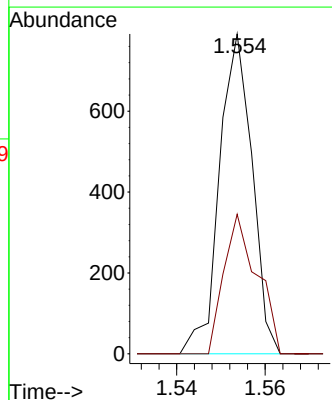
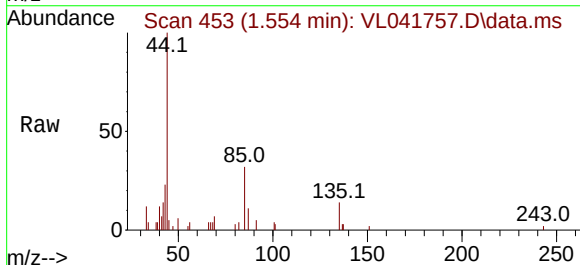
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.03

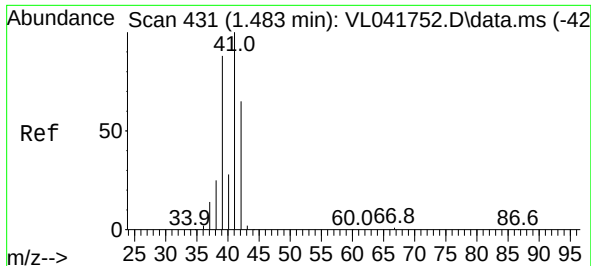
Tgt Ion: 64 Resp: 62  
Ion Ratio Lower Upper  
64 100  
66 127.5 27.5 41.3#



#8  
Dichlorotetrafluoroethane  
Concen: 0.040 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 85 Resp: 406  
Ion Ratio Lower Upper  
85 100  
135 44.3 51.9 77.9#





#9

Propene

Concen: 0.091 ppbv

RT: 1.482 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

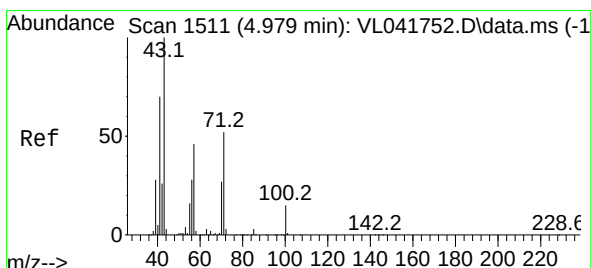
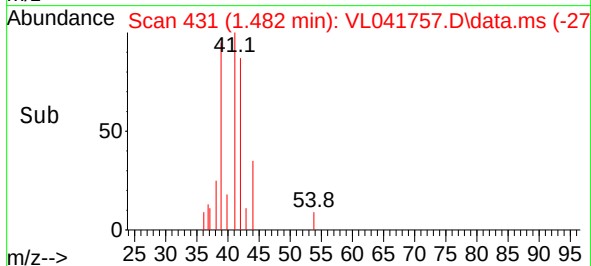
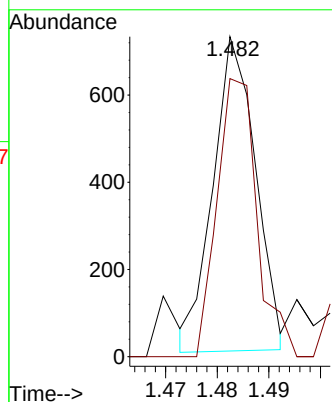
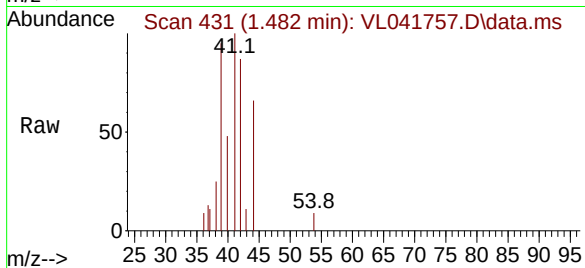
VSTDICC0.03

Tgt Ion: 41 Resp: 413

Ion Ratio Lower Upper

41 100

42 83.3 52.4 78.6#



#10

Heptane

Concen: 0.015 ppbv

RT: 4.991 min Scan# 1515

Delta R.T. 0.012 min

Lab File: VL041757.D

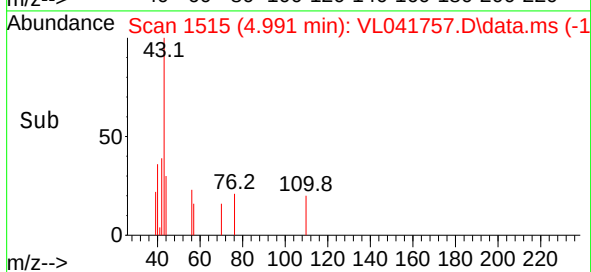
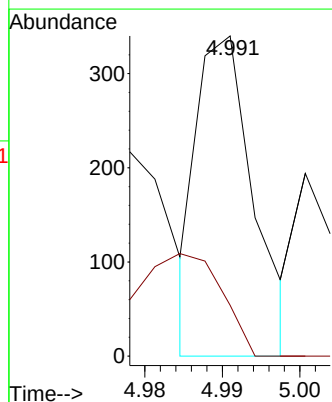
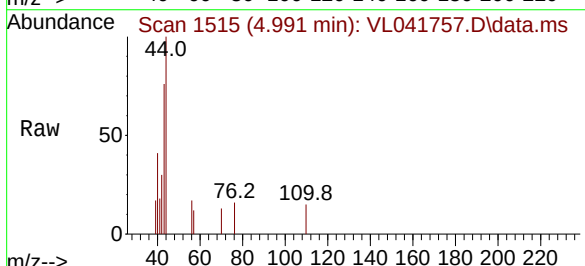
Acq: 16 Dec 2024 16:08

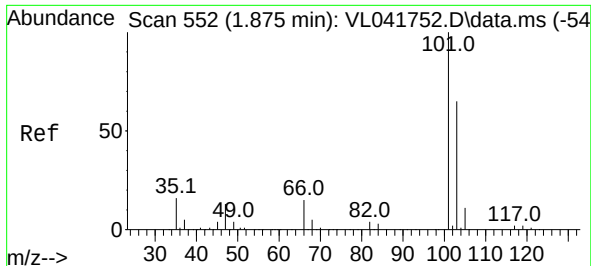
Tgt Ion: 43 Resp: 172

Ion Ratio Lower Upper

43 100

57 61.6 38.5 57.7#





#11

Trichlorofluoromethane

Concen: 0.046 ppbv

RT: 1.877 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

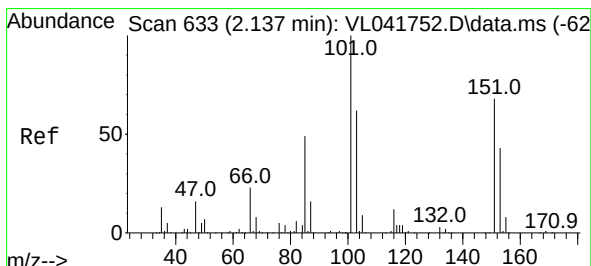
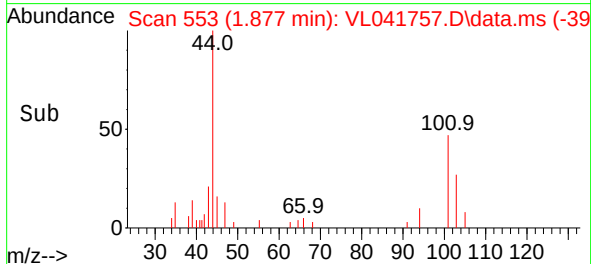
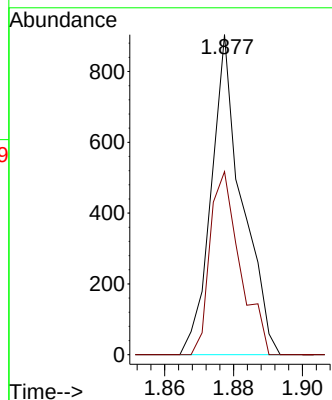
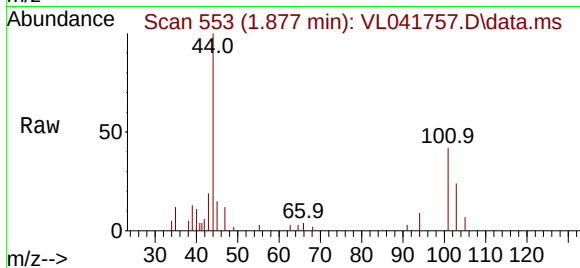
VSTDICC0.03

Tgt Ion:101 Resp: 560

Ion Ratio Lower Upper

101 100

103 57.2 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.032 ppbv

RT: 2.143 min Scan# 635

Delta R.T. 0.006 min

Lab File: VL041757.D

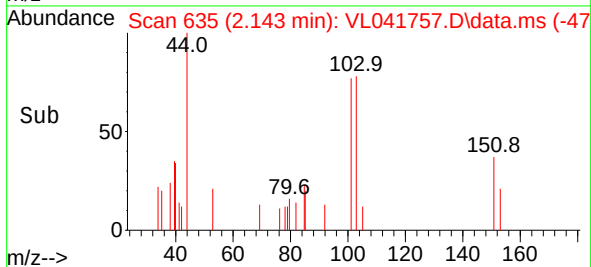
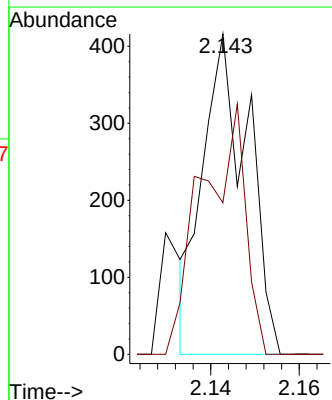
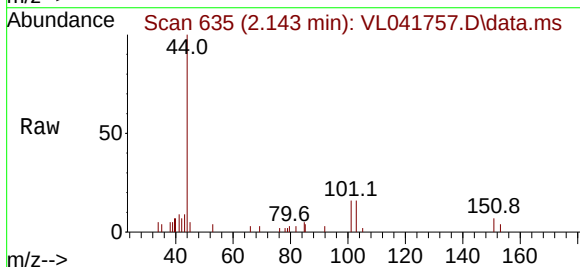
Acq: 16 Dec 2024 16:08

Tgt Ion:101 Resp: 293

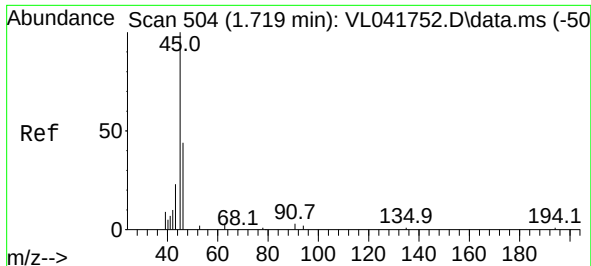
Ion Ratio Lower Upper

101 100

151 75.4 56.8 85.2







#13

Ethanol

Concen: 0.740 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

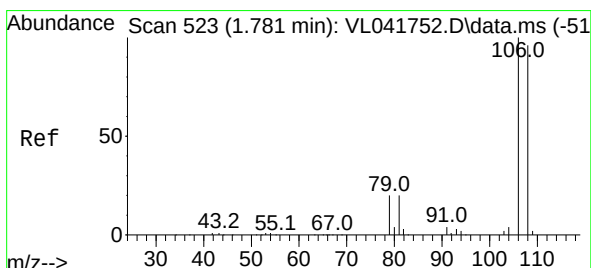
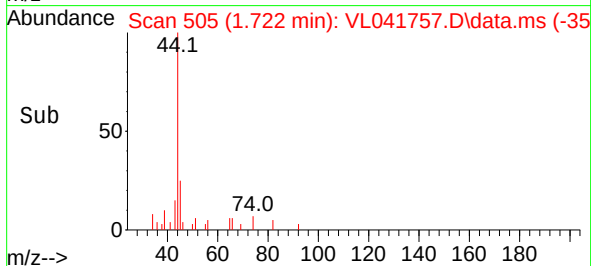
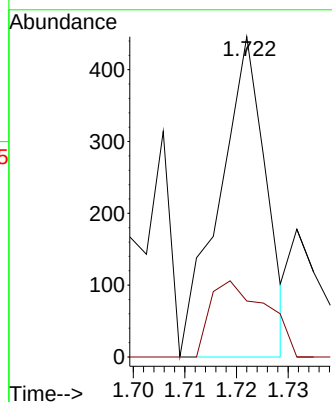
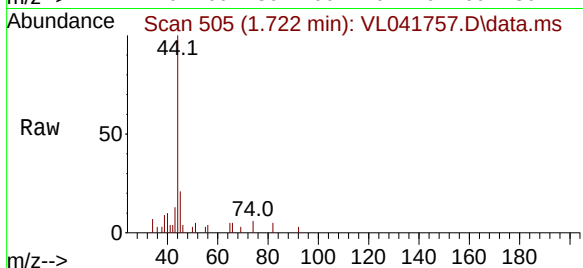
VSTDIC0.03

Tgt Ion: 45 Resp: 279

Ion Ratio Lower Upper

45 100

46 0.0 16.4 65.8#



#14

Bromoethene

Concen: 0.021 ppbv

RT: 1.787 min Scan# 525

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

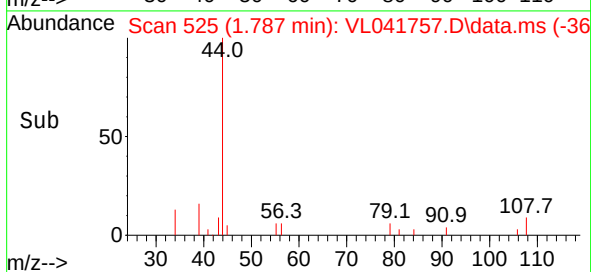
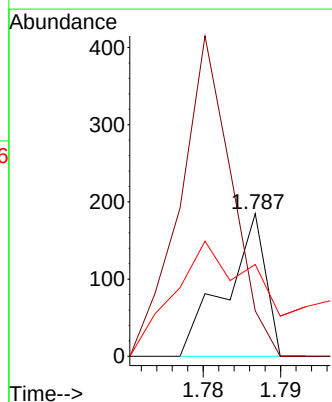
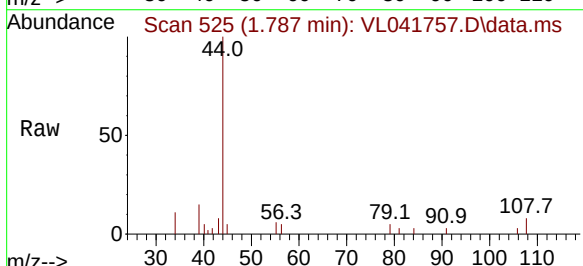
Tgt Ion: 108 Resp: 66

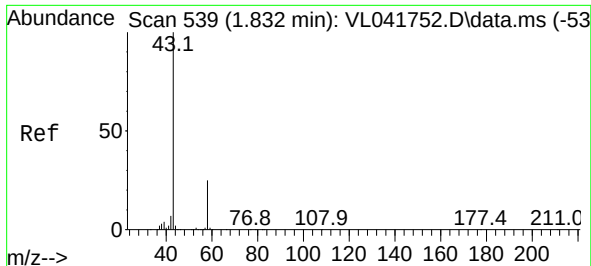
Ion Ratio Lower Upper

108 100

106 290.9 84.1 126.1#

79 374.2 17.4 26.0#

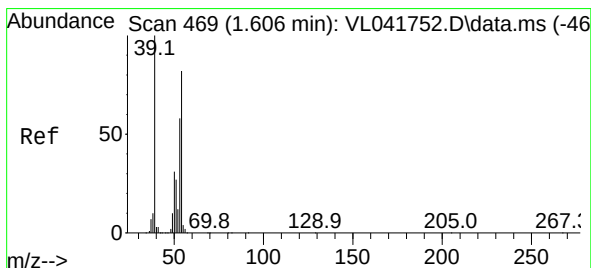
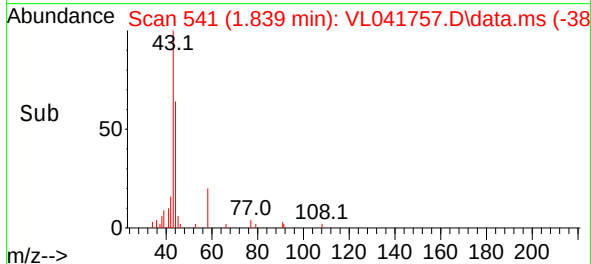
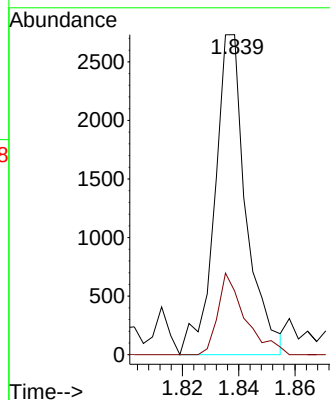
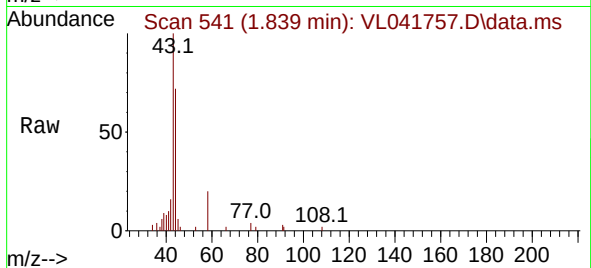




#15  
Acetone  
Concen: 0.169 ppbv  
RT: 1.839 min Scan# 54  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

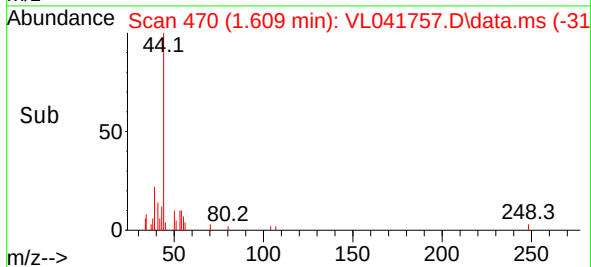
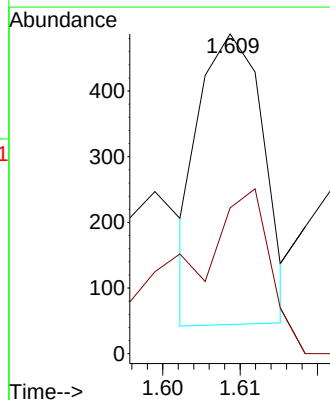
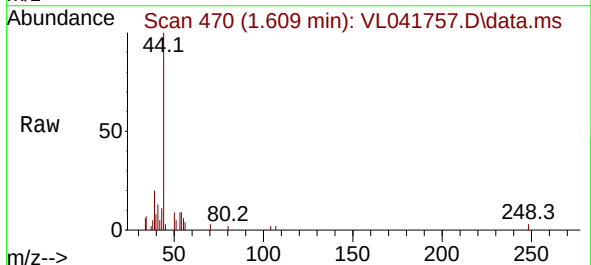
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.03

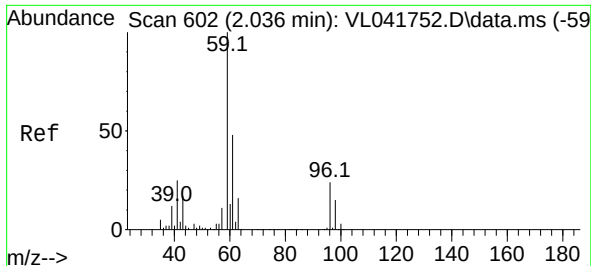
Tgt Ion: 43 Resp: 2113  
Ion Ratio Lower Upper  
43 100  
58 22.1 19.7 29.5



#16  
1,3-Butadiene  
Concen: 0.051 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 39 Resp: 252  
Ion Ratio Lower Upper  
39 100  
54 127.0 58.4 87.6#

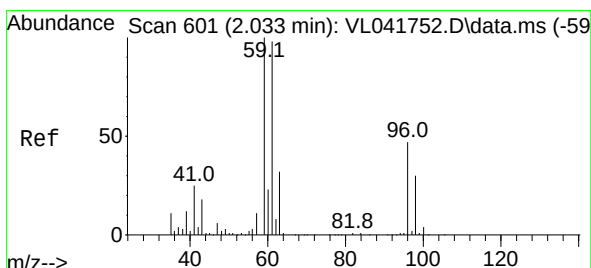
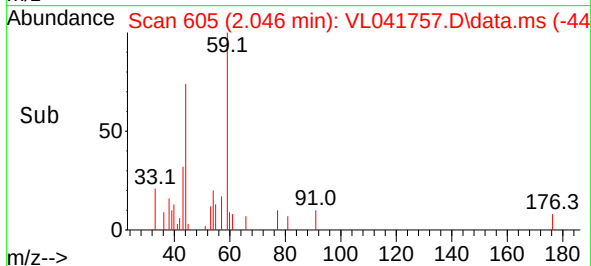
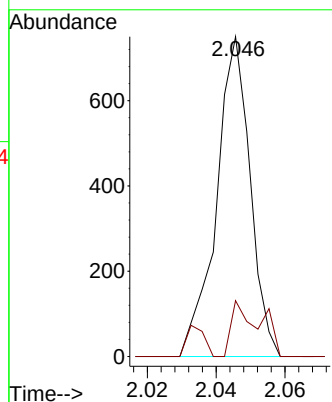
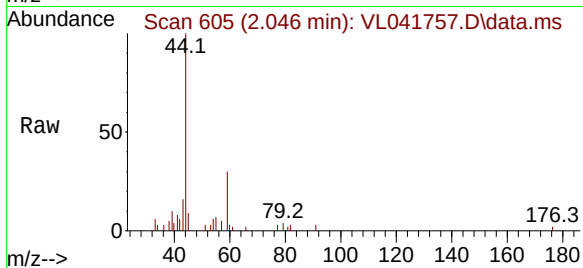




#17  
tert-Butyl alcohol  
Concen: 0.041 ppbv  
RT: 2.046 min Scan# 605  
Delta R.T. 0.009 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

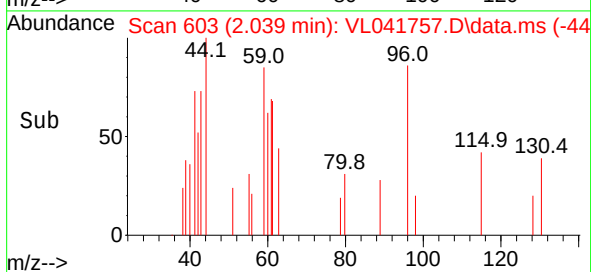
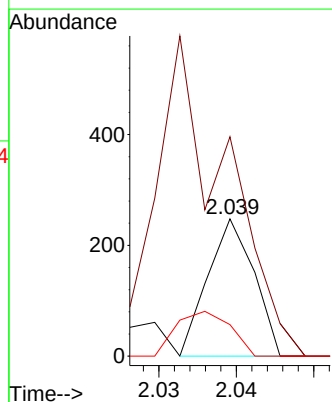
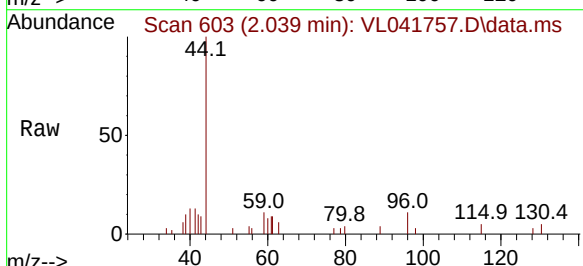
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC0.03

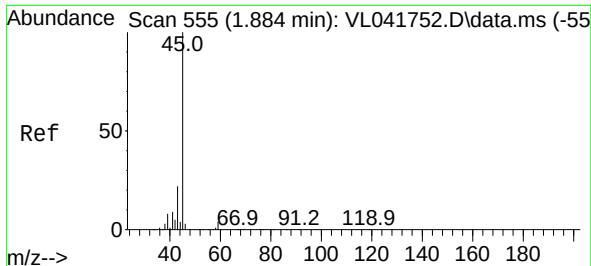
Tgt Ion: 59 Resp: 509  
Ion Ratio Lower Upper  
59 100  
57 19.8 8.6 13.0#



#18  
1,1-Dichloroethene  
Concen: 0.027 ppbv  
RT: 2.039 min Scan# 603  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 96 Resp: 103  
Ion Ratio Lower Upper  
96 100  
61 135.9 167.7 251.5#  
98 23.0 51.1 76.7#





#19

Isopropyl Alcohol

Concen: 0.390 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

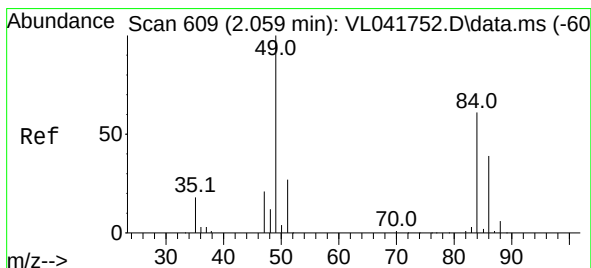
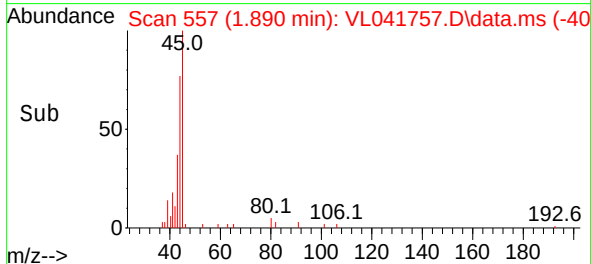
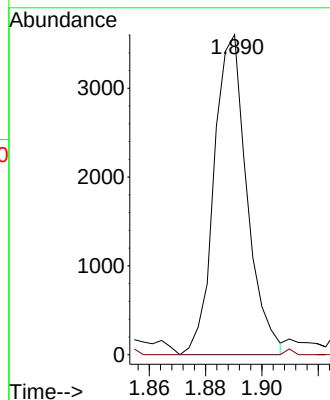
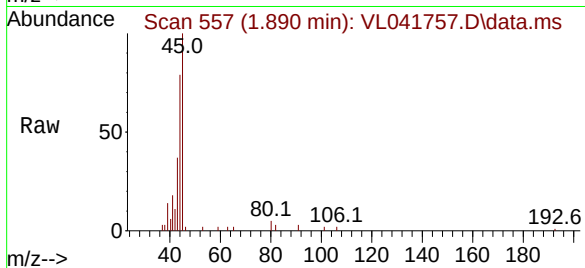
VSTDICC0.03

Tgt Ion: 45 Resp: 2921

Ion Ratio Lower Upper

45 100

58 0.0 33.3 49.9#



#20

Methylene Chloride

Concen: 0.172 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Tgt Ion: 84 Resp: 613

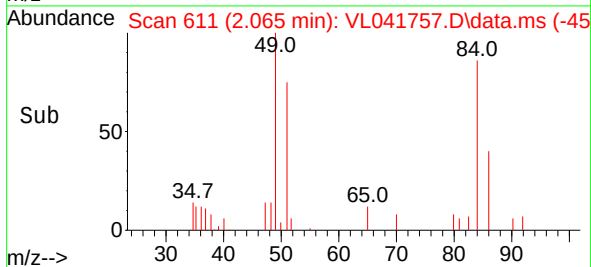
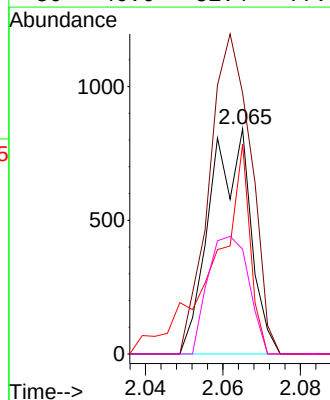
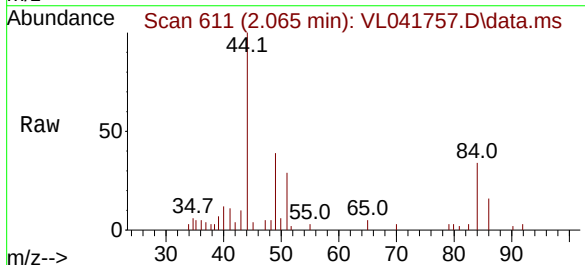
Ion Ratio Lower Upper

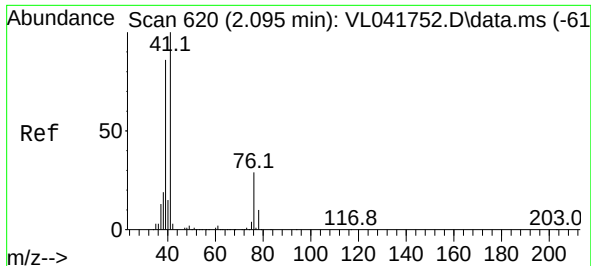
84 100

49 115.9 132.6 198.8#

51 93.2 37.6 56.4#

86 46.6 51.4 77.0#





#21

Allyl Chloride

Concen: 0.084 ppbv

RT: 2.097 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

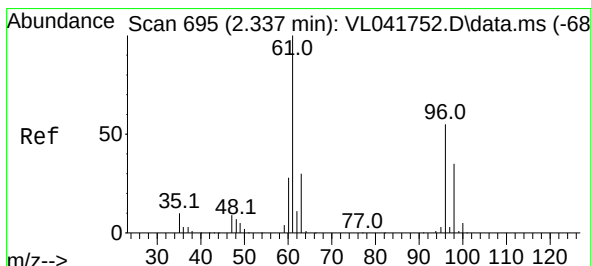
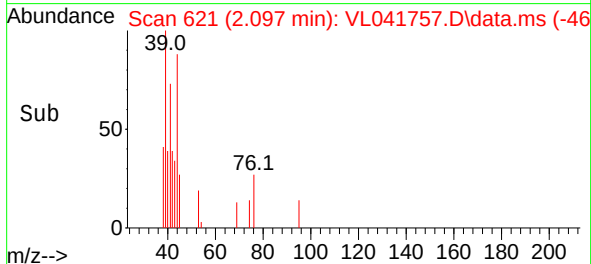
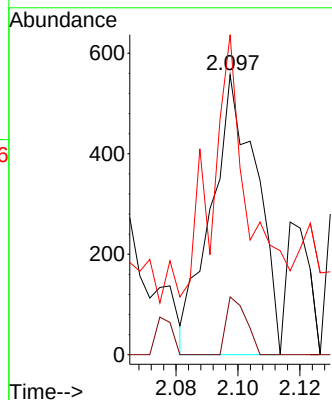
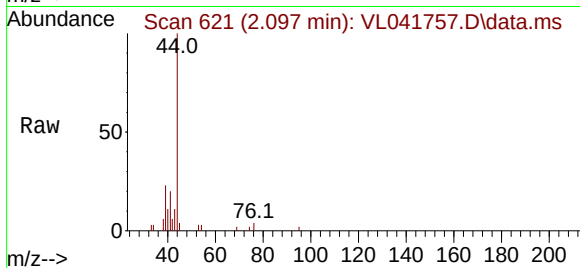
Tgt Ion: 41 Resp: 566

Ion Ratio Lower Upper

41 100

76 9.2 22.3 33.5#

39 125.1 69.2 103.8#



#22

trans-1,2-Dichloroethene

Concen: 0.038 ppbv

RT: 2.337 min Scan# 695

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

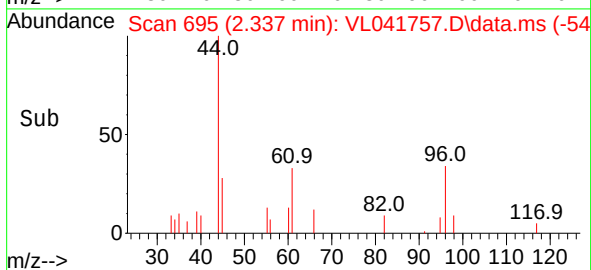
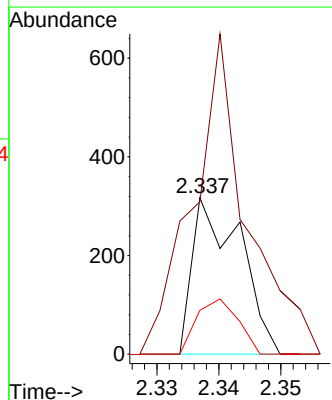
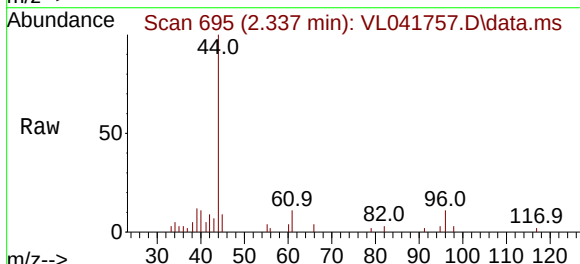
Tgt Ion: 96 Resp: 170

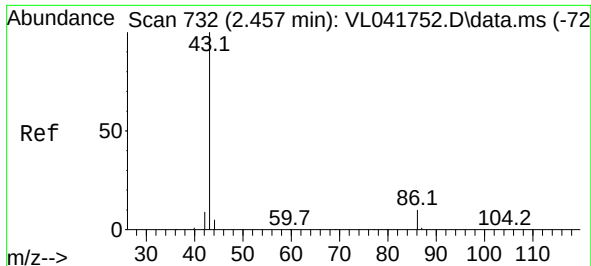
Ion Ratio Lower Upper

96 100

61 56.8 146.3 219.5#

98 28.1 50.8 76.2#

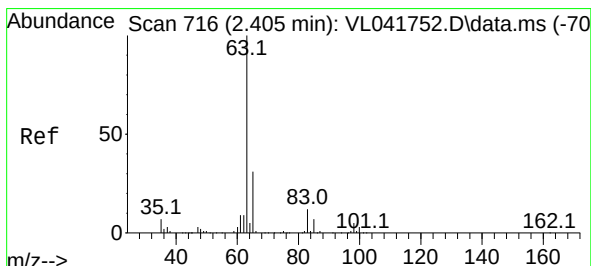
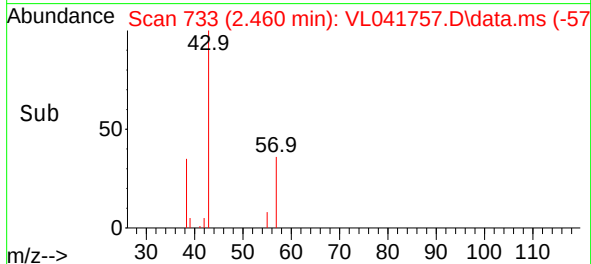
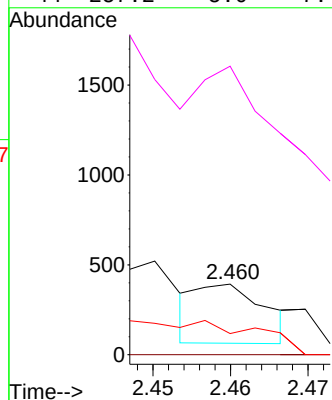
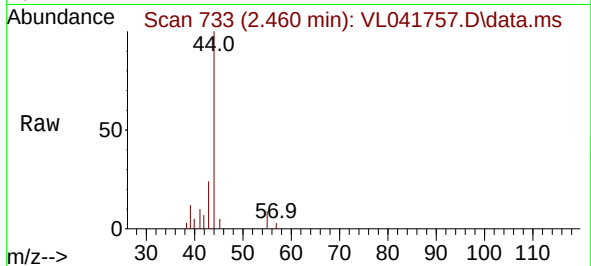




#23  
 Vinyl Acetate  
 Concen: 0.037 ppbv  
 RT: 2.460 min Scan# 718  
 Delta R.T. 0.003 min  
 Lab File: VL041757.D  
 Acq: 16 Dec 2024 16:08

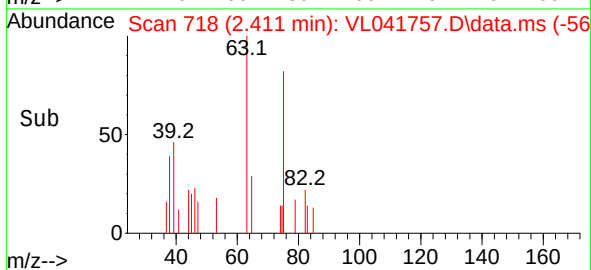
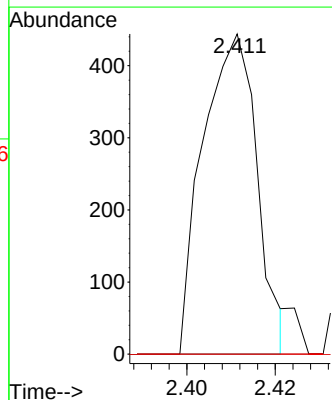
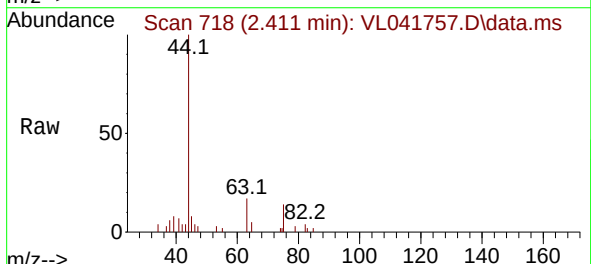
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.03

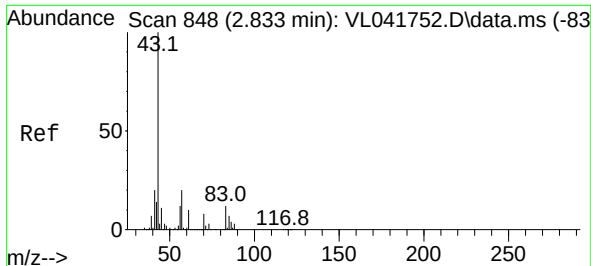
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 202   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 0.0   | 6.6   | 10.0# |
| 42       | 0.0   | 8.2   | 12.2# |
| 44       | 257.2 | 5.0   | 7.4#  |



#24  
 1,1-Dichloroethane  
 Concen: 0.042 ppbv  
 RT: 2.411 min Scan# 718  
 Delta R.T. 0.006 min  
 Lab File: VL041757.D  
 Acq: 16 Dec 2024 16:08

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 378   |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 0.0   | 2.3   | 6.8#  |
| 100      | 0.0   | 1.4   | 4.2#  |





#25

Ethyl Acetate

Concen: 0.029 ppbv

RT: 2.839 min Scan# 848

Delta R.T. 0.006 min

Lab File: VL041757.D

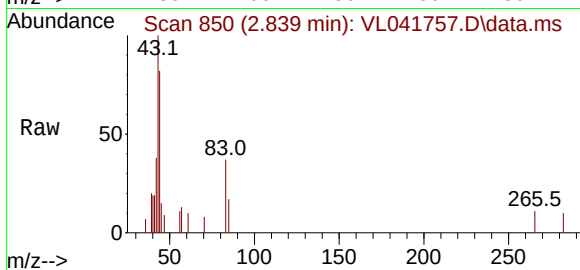
Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.03



Tgt Ion: 43 Resp: 677

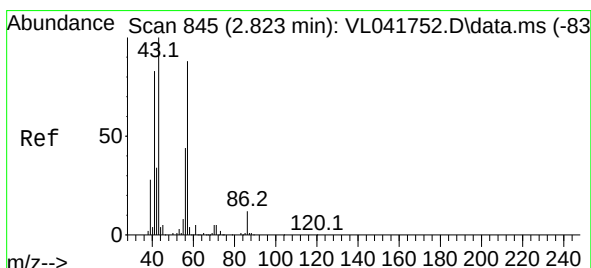
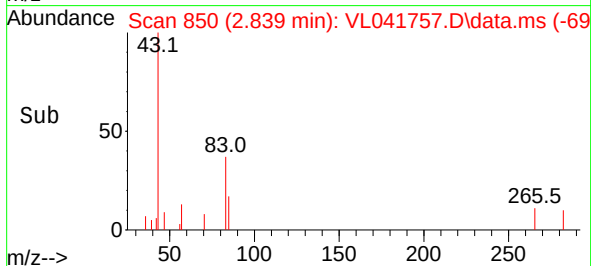
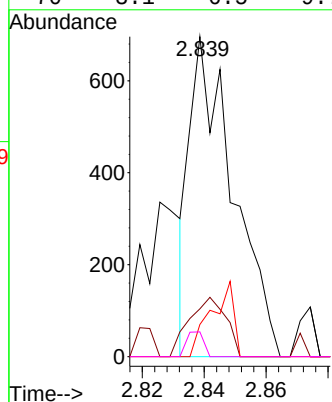
Ion Ratio Lower Upper

43 100

45 19.2 8.1 12.1#

61 12.3 7.0 10.6#

70 3.1 6.5 9.7#



#26

Hexane

Concen: 0.016 ppbv

RT: 2.829 min Scan# 847

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Tgt Ion: 57 Resp: 141

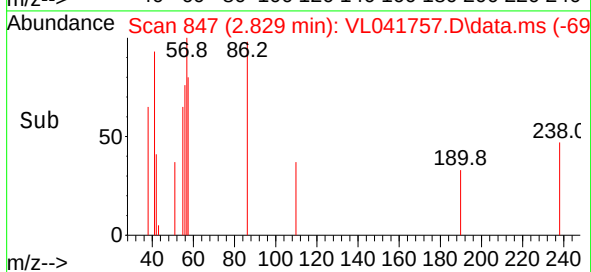
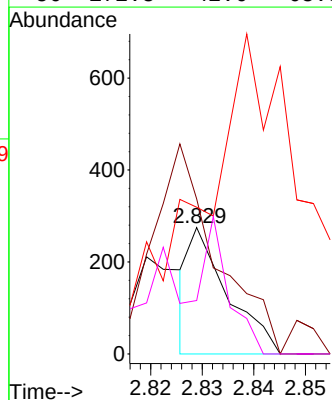
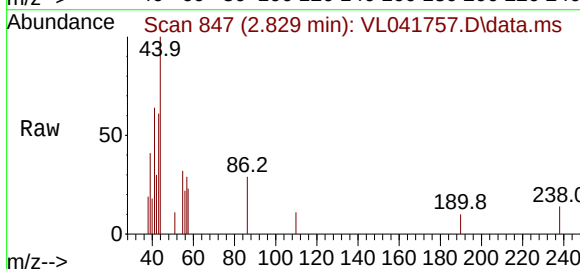
Ion Ratio Lower Upper

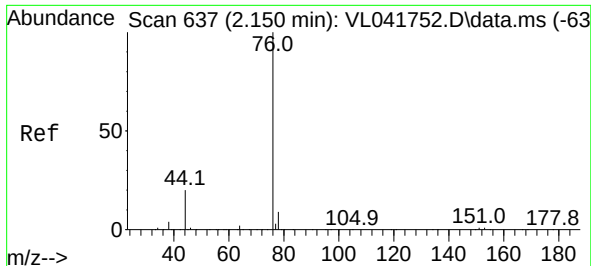
57 100

41 306.4 79.6 119.4#

43 771.6 211.0 316.6#

56 172.3 42.6 63.8#





#27

Carbon Disulfide

Concen: 0.026 ppbv

RT: 2.152 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

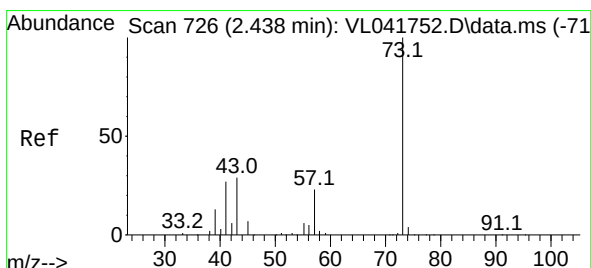
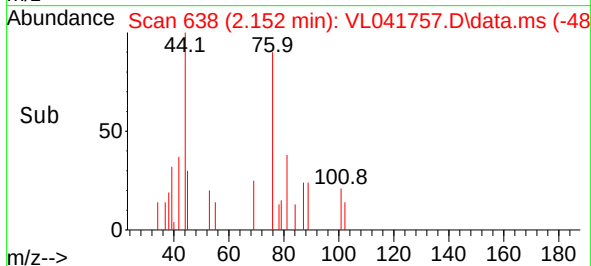
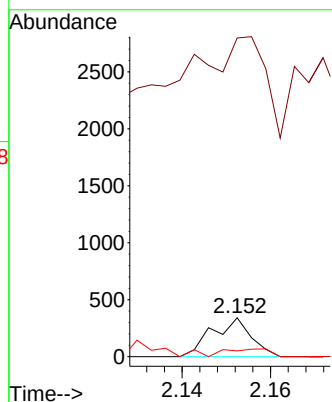
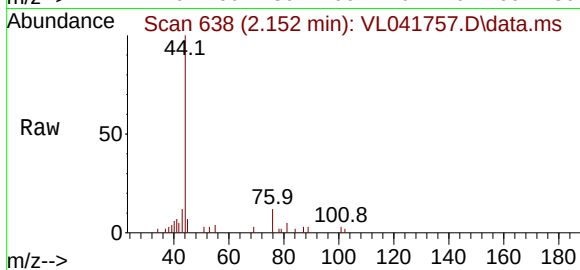
Tgt Ion: 76 Resp: 210

Ion Ratio Lower Upper

76 100

44 1391.9 17.6 26.4#

78 54.3 10.2 15.4#



#28

Methyl tert-Butyl Ether

Concen: 0.016 ppbv

RT: 2.450 min Scan# 730

Delta R.T. 0.012 min

Lab File: VL041757.D

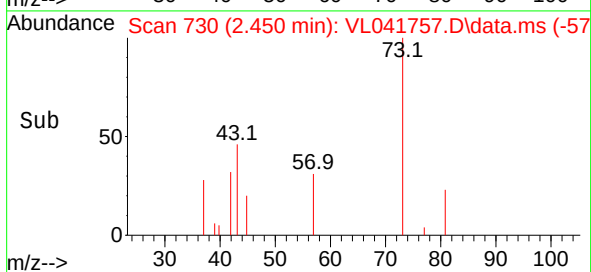
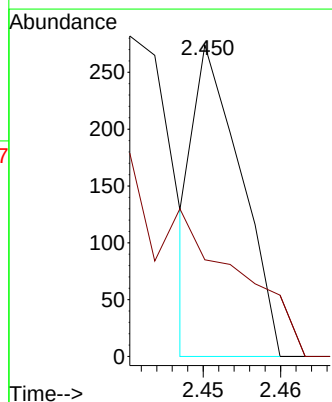
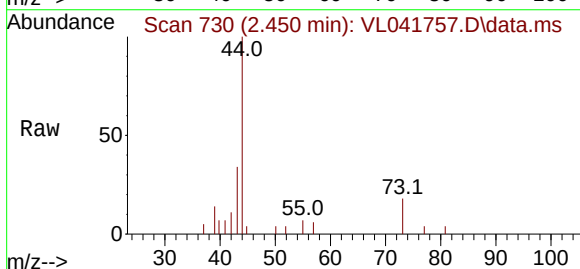
Acq: 16 Dec 2024 16:08

Tgt Ion: 73 Resp: 114

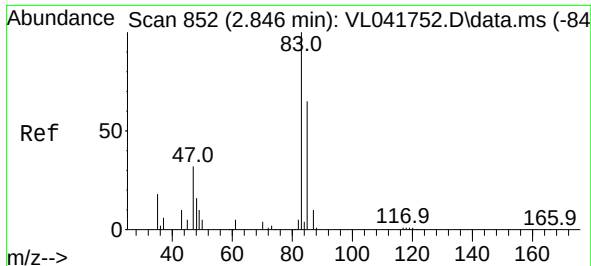
Ion Ratio Lower Upper

73 100

57 21.1 17.6 26.4







#29

Chloroform

Concen: 0.033 ppbv

RT: 2.852 min Scan# 854

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

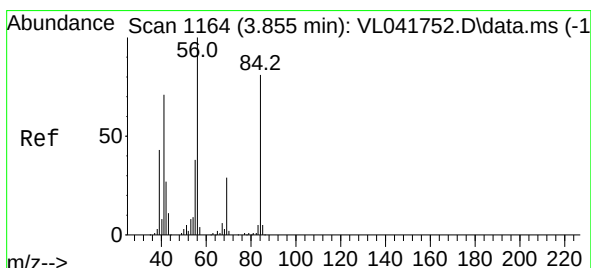
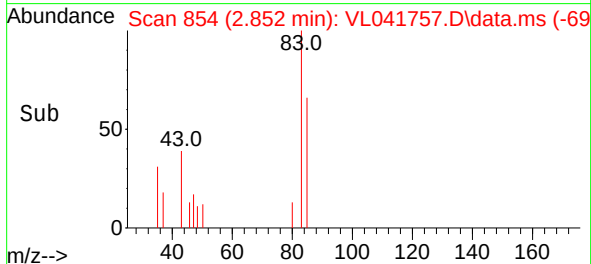
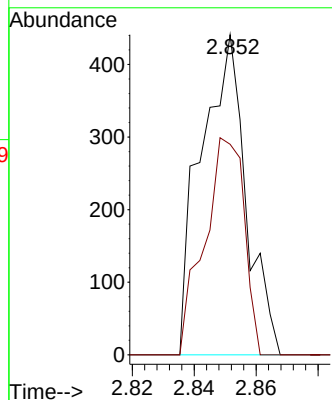
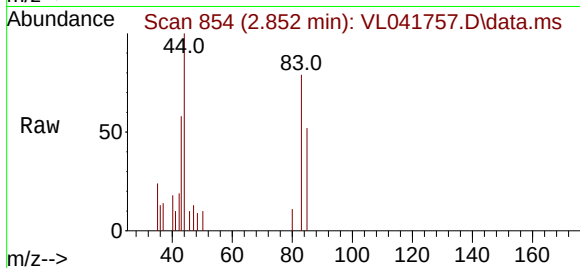
VSTDIC0.03

Tgt Ion: 83 Resp: 444

Ion Ratio Lower Upper

83 100

85 65.8 51.8 77.6



#30

Cyclohexane

Concen: 0.021 ppbv

RT: 3.861 min Scan# 1166

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

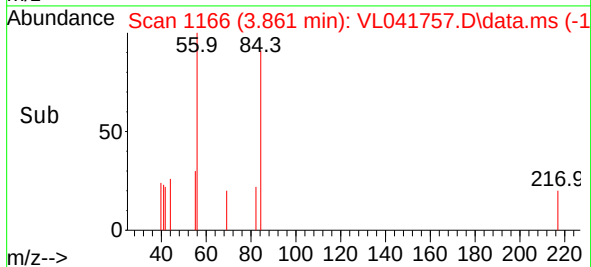
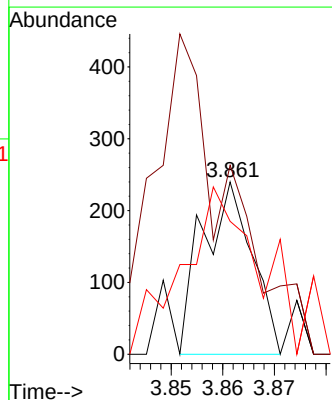
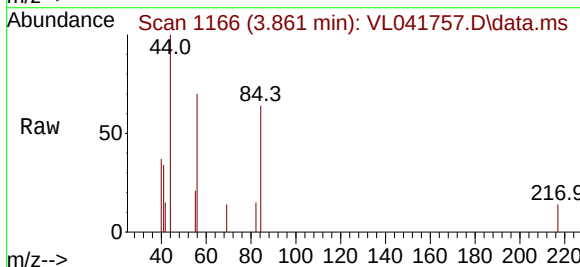
Tgt Ion: 84 Resp: 161

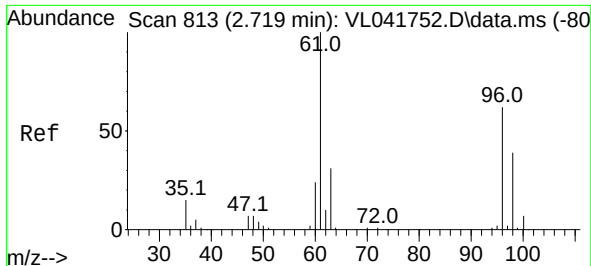
Ion Ratio Lower Upper

84 100

56 0.0 102.3 153.5#

41 170.8 74.0 111.0#





#31

cis-1,2-Dichloroethene

Concen: 0.036 ppbv

RT: 2.719 min Scan# 81

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

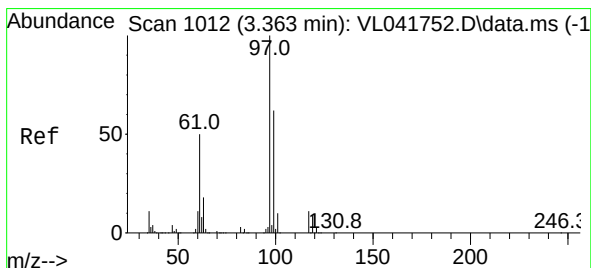
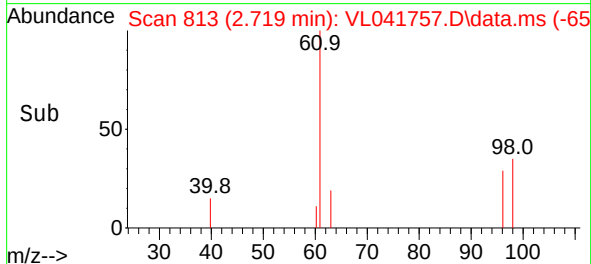
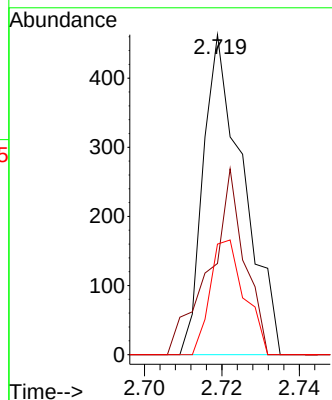
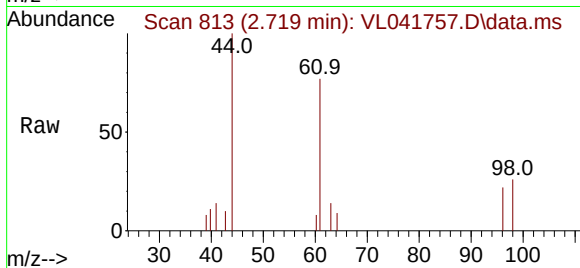
Tgt Ion: 61 Resp: 330

Ion Ratio Lower Upper

61 100

96 28.5 49.7 74.5#

98 34.6 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 0.025 ppbv

RT: 3.369 min Scan# 1014

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

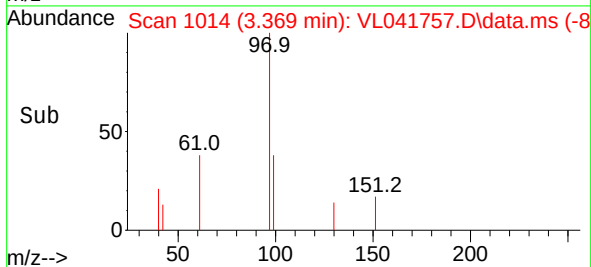
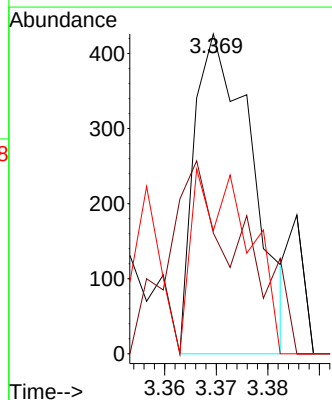
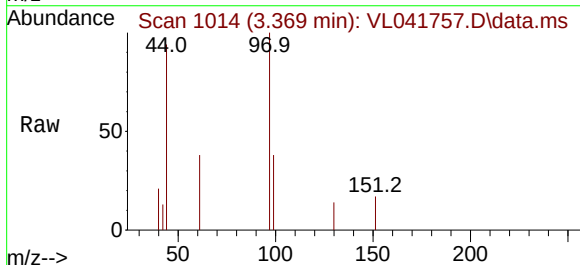
Tgt Ion: 97 Resp: 332

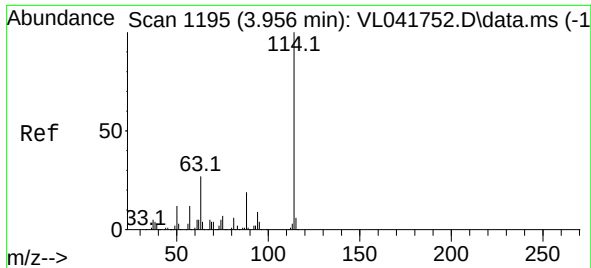
Ion Ratio Lower Upper

97 100

99 76.5 51.0 76.4#

61 79.8 42.2 63.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.958 min Scan# 1196

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC0.03

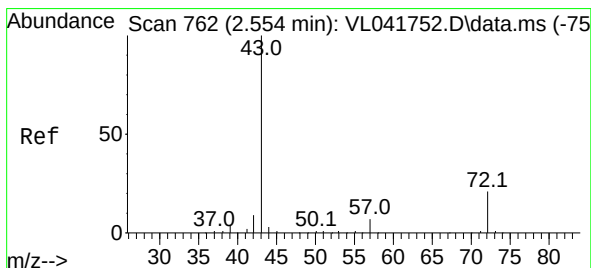
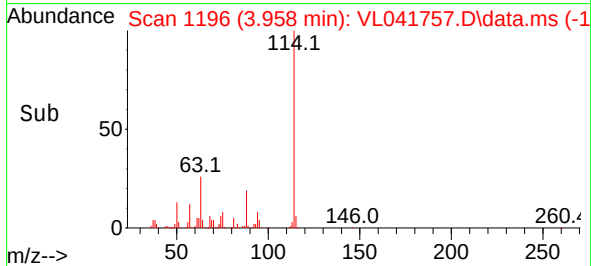
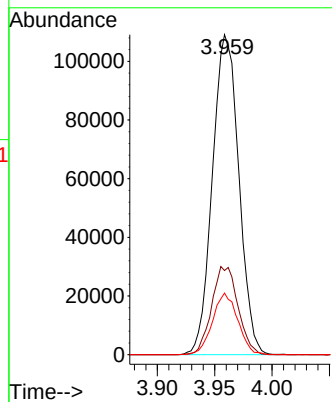
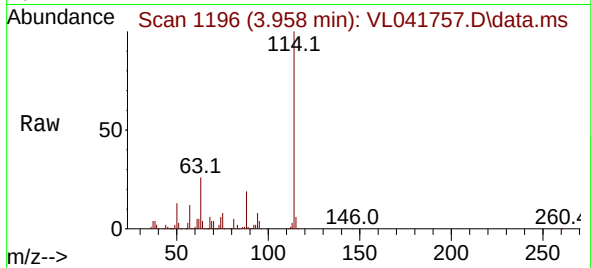
Tgt Ion:114 Resp: 174825

Ion Ratio Lower Upper

114 100

63 27.5 21.8 32.8

88 18.4 14.8 22.2



#34

2-Butanone

Concen: 0.049 ppbv

RT: 2.560 min Scan# 764

Delta R.T. 0.006 min

Lab File: VL041757.D

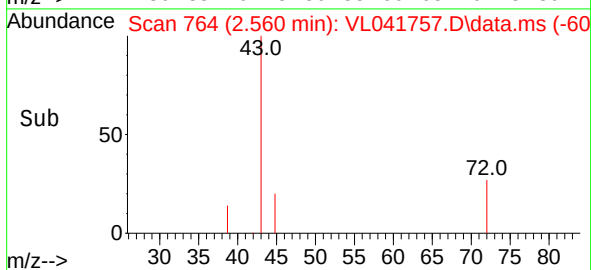
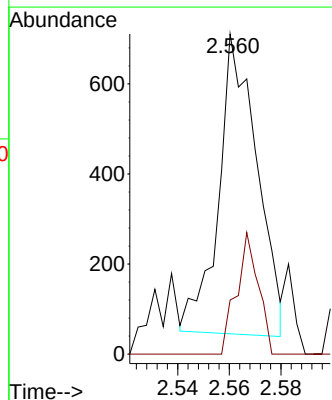
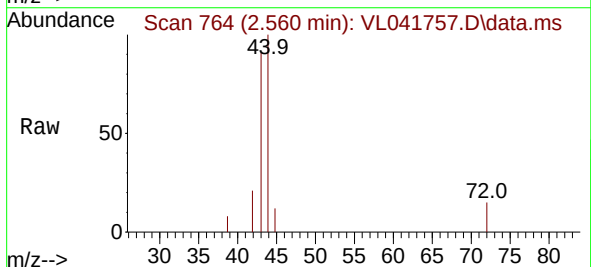
Acq: 16 Dec 2024 16:08

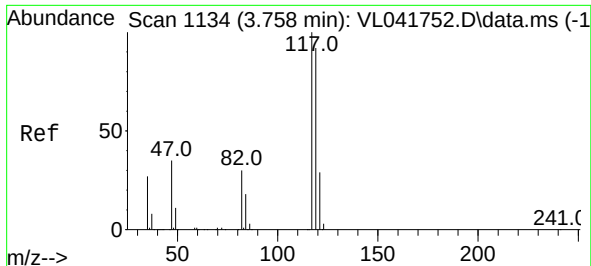
Tgt Ion: 43 Resp: 686

Ion Ratio Lower Upper

43 100

72 23.0 16.8 25.2





#35

Carbon Tetrachloride

Concen: 0.017 ppbv

RT: 3.768 min Scan# 1134

Delta R.T. 0.009 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

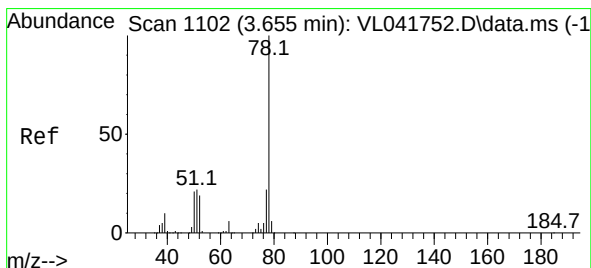
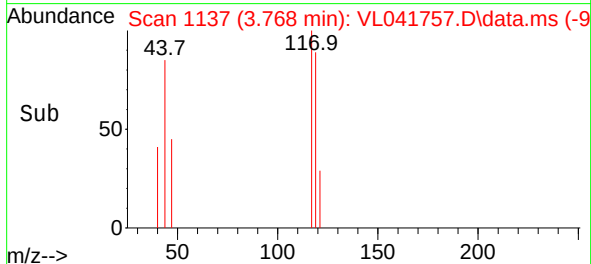
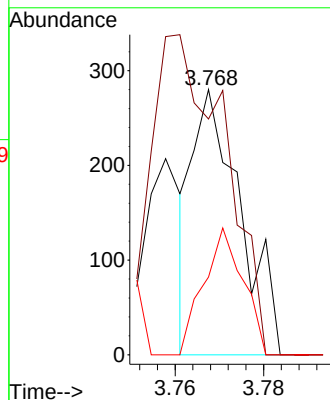
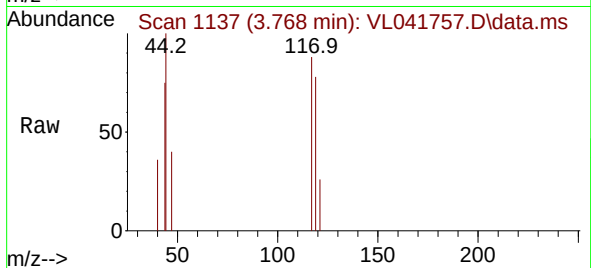
Tgt Ion:117 Resp: 209

Ion Ratio Lower Upper

117 100

119 88.9 73.7 110.5

121 29.3 23.0 34.4



#36

Benzene

Concen: 0.012 ppbv

RT: 3.657 min Scan# 1103

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

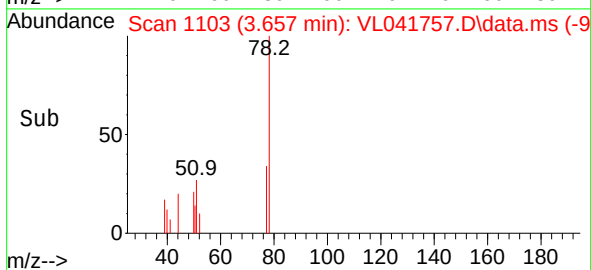
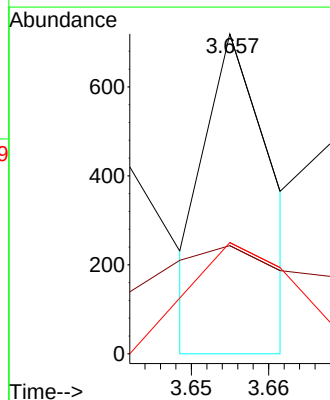
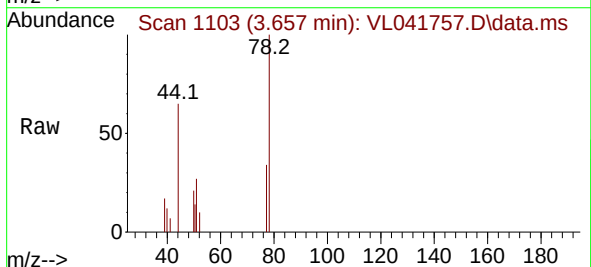
Tgt Ion: 78 Resp: 211

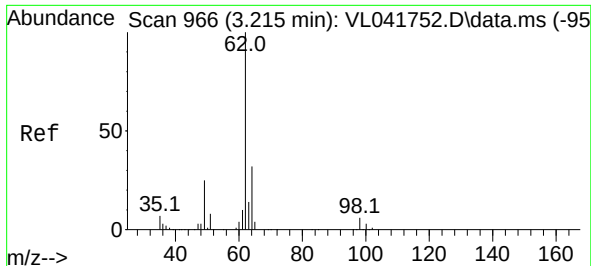
Ion Ratio Lower Upper

78 100

77 11.5 17.8 26.6#

50 25.6 17.2 25.8

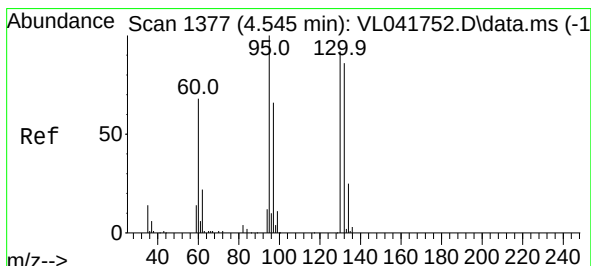
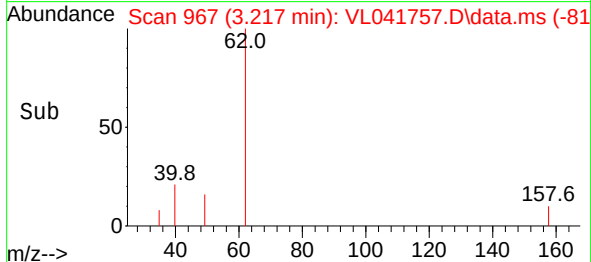
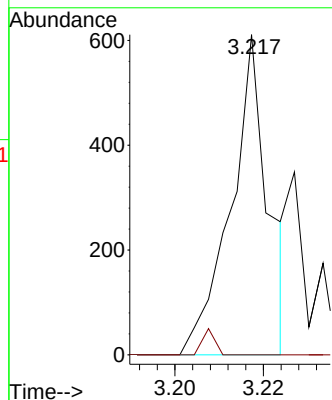
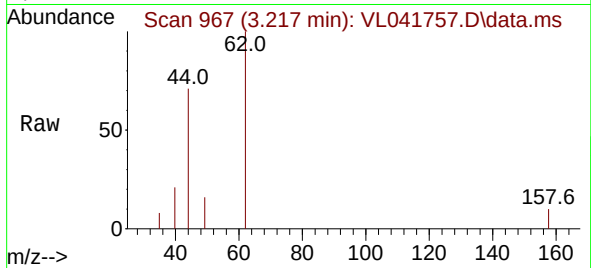




#37  
1,2-Dichloroethane  
Concen: 0.032 ppbv  
RT: 3.217 min Scan# 91  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

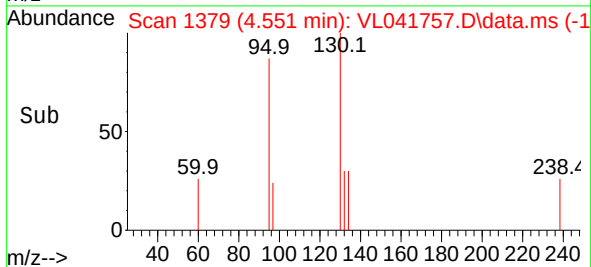
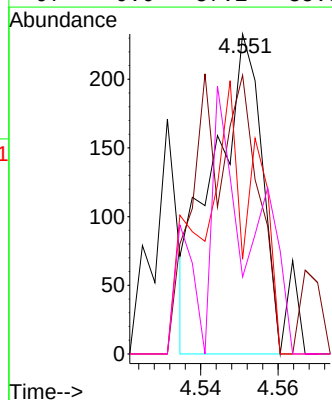
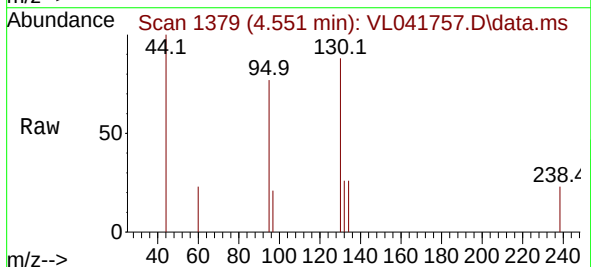
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

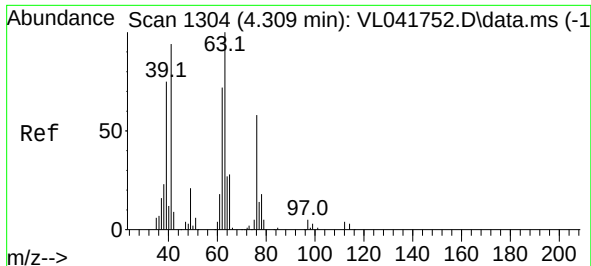
Tgt Ion: 62 Resp: 357  
Ion Ratio Lower Upper  
62 100  
98 0.0 4.7 7.1#



#38  
Trichloroethene  
Concen: 0.027 ppbv  
RT: 4.551 min Scan# 1379  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 130 Resp: 204  
Ion Ratio Lower Upper  
130 100  
95 87.1 87.0 130.6  
132 29.6 75.0 112.6#  
97 0.0 57.2 85.8#





#39

1,2-Dichloropropane

Concen: 7.356 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.353 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.03

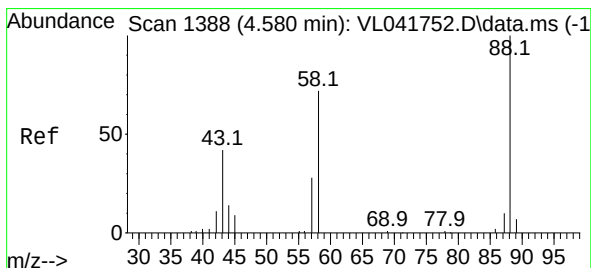
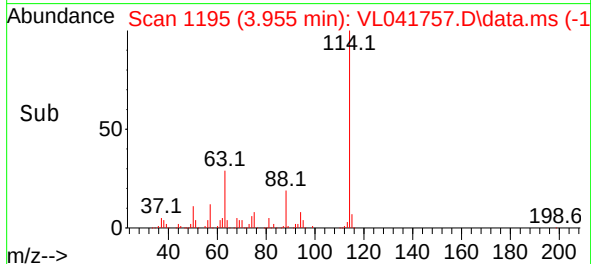
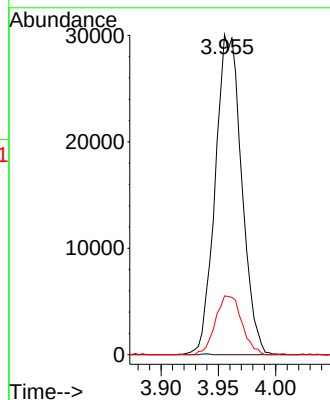
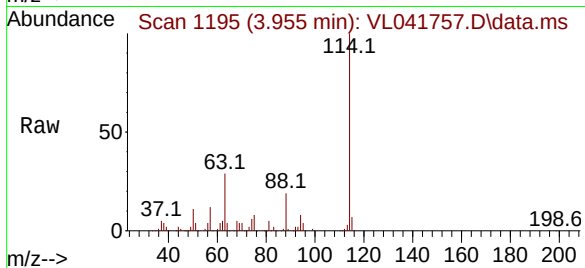
Tgt Ion: 63 Resp: 48113

Ion Ratio Lower Upper

63 100

41 0.0 75.3 112.9#

62 18.3 57.3 85.9#



#40

1,4-Dioxane

Concen: 0.008 ppbv

RT: 4.635 min Scan# 1405

Delta R.T. 0.055 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Tgt Ion: 88 Resp: 26

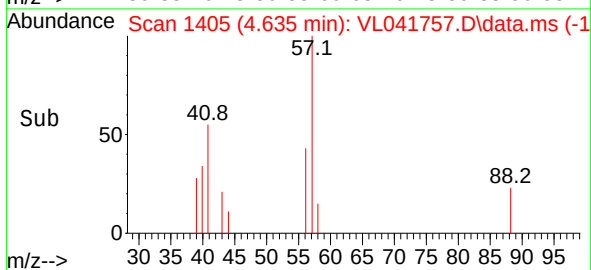
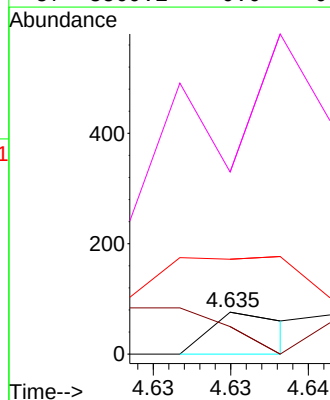
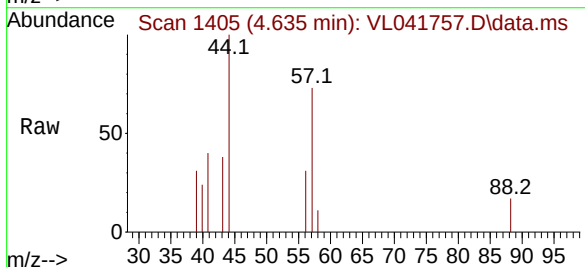
Ion Ratio Lower Upper

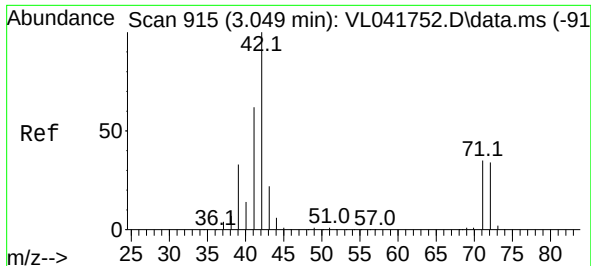
88 100

58 250.0 61.0 91.6#

43 1157.7 29.4 44.0#

57 3569.2 0.0 0.0#





#41

Tetrahydrofuran

Concen: 0.007 ppbv

RT: 3.049 min Scan# 915

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

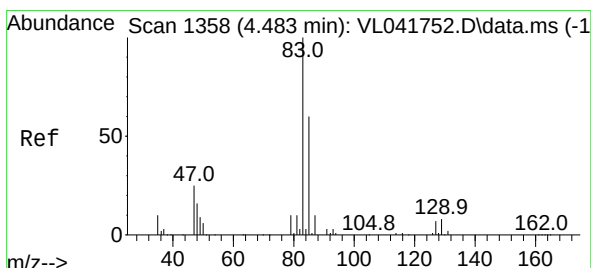
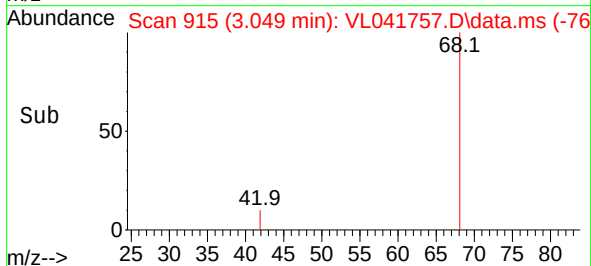
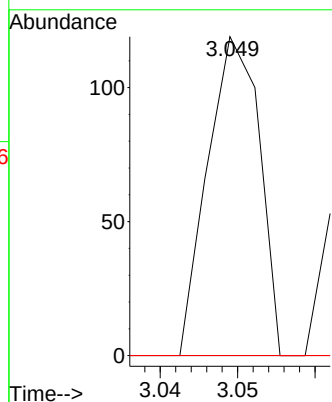
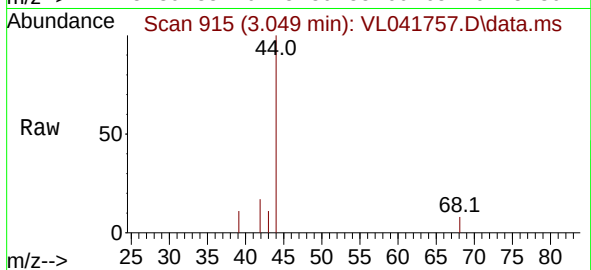
Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 55    |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 29.1  | 43.7# |
| 71       | 0.0   | 28.4  | 42.6# |



#42

Bromodichloromethane

Concen: 0.013 ppbv

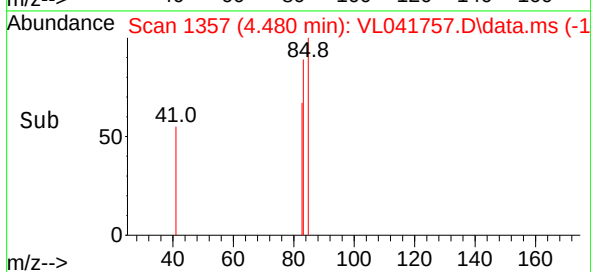
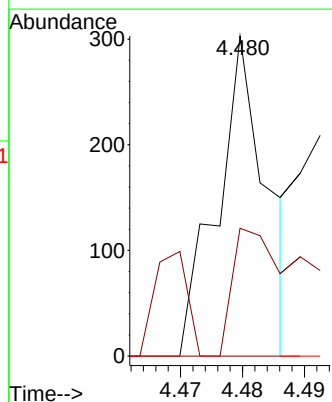
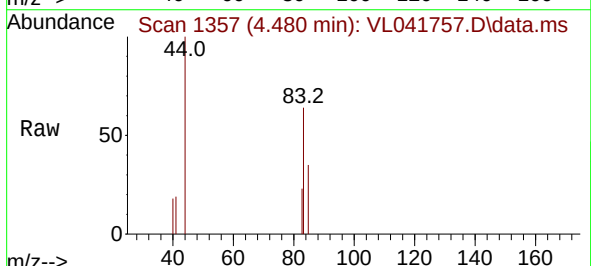
RT: 4.480 min Scan# 1357

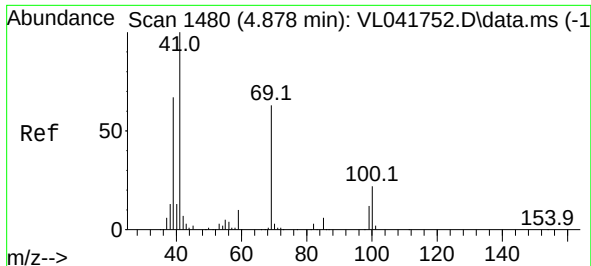
Delta R.T. -0.004 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 168   |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 14.2  | 48.0  | 72.0# |
| 127      | 0.0   | 5.8   | 8.8#  |





#43

Methyl Methacrylate

Concen: 0.006 ppbv

RT: 4.907 min Scan# 1489

Delta R.T. 0.029 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

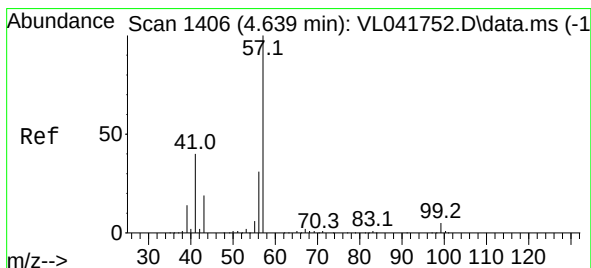
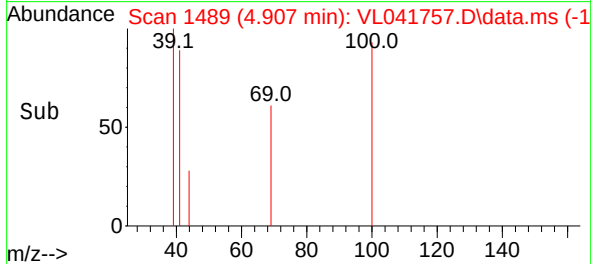
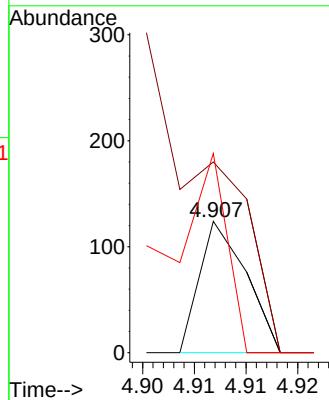
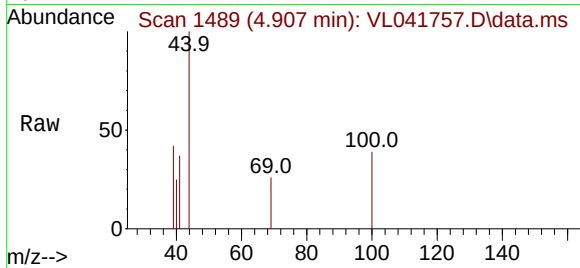
Tgt Ion: 69 Resp: 39

Ion Ratio Lower Upper

69 100

41 1259.0 130.3 195.5#

100 248.7 28.3 42.5#



#44

2,2,4-Trimethylpentane

Concen: 0.014 ppbv

RT: 4.638 min Scan# 1406

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

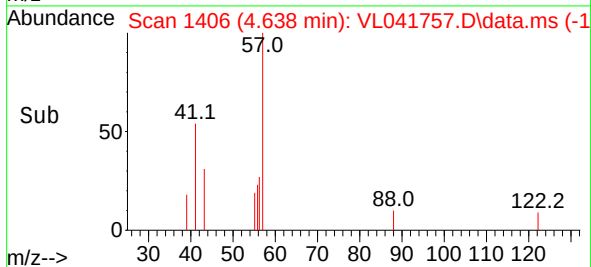
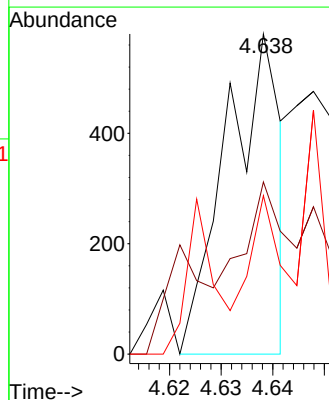
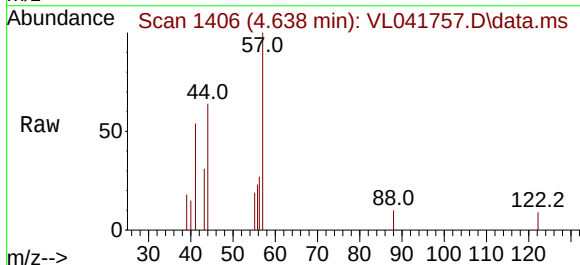
Tgt Ion: 57 Resp: 425

Ion Ratio Lower Upper

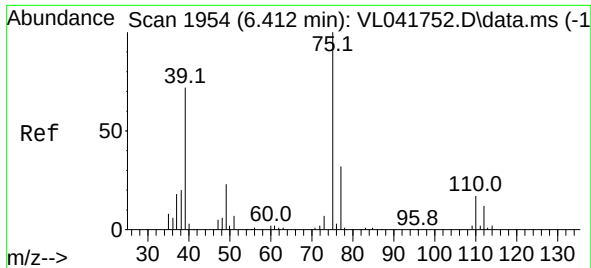
57 100

41 117.9 30.7 46.1#

56 0.0 25.4 38.0#







#45

t-1,3-Dichloropropene

Concen: 0.010 ppbv

RT: 6.418 min Scan# 11

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

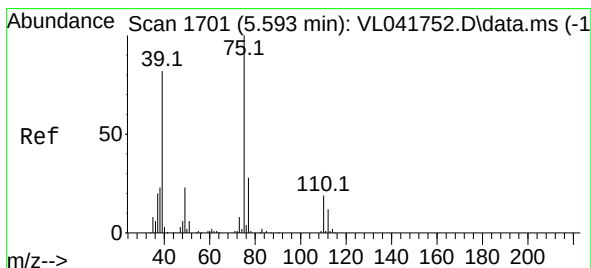
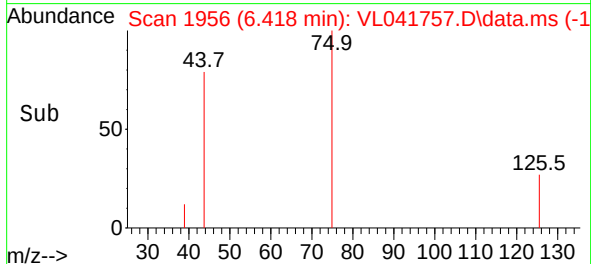
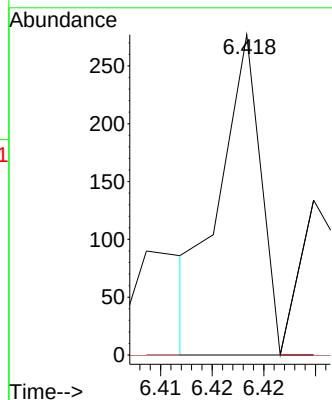
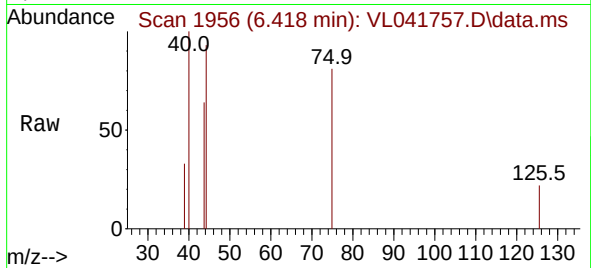
VSTDIC0.03

Tgt Ion: 75 Resp: 74

Ion Ratio Lower Upper

75 100

77 0.0 25.9 38.9#



#46

cis-1,3-Dichloropropene

Concen: 0.007 ppbv

RT: 5.599 min Scan# 1703

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

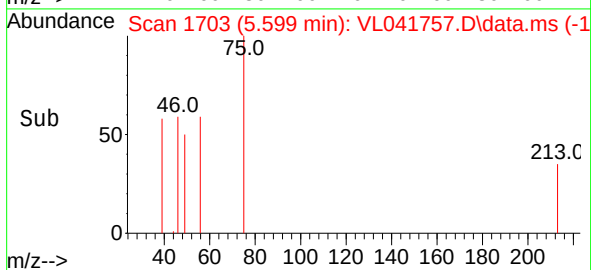
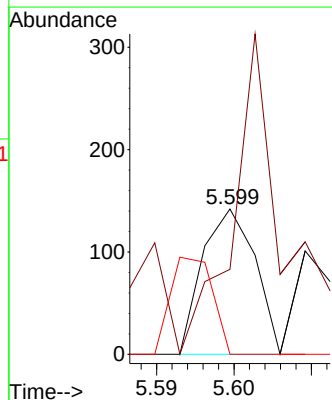
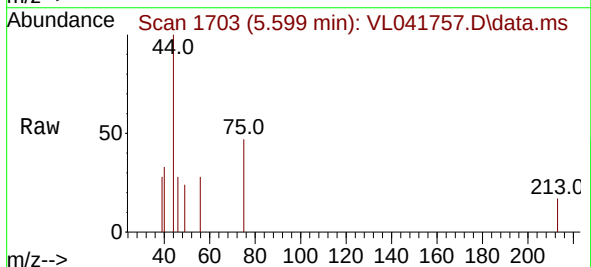
Tgt Ion: 75 Resp: 67

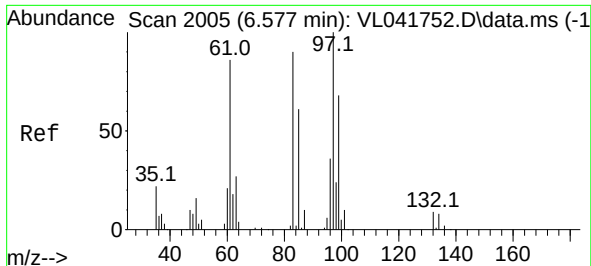
Ion Ratio Lower Upper

75 100

39 58.5 65.2 97.8#

77 0.0 22.0 33.0#





#47

1,1,2-Trichloroethane

Concen: 0.009 ppbv

RT: 6.580 min Scan# 2005

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion: 97 Resp: 59

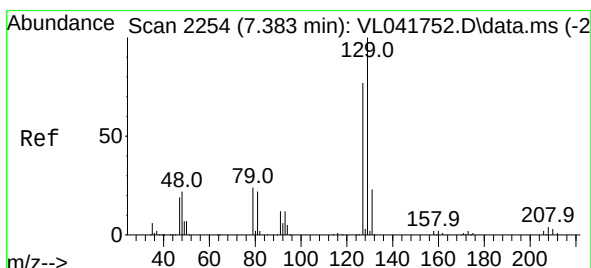
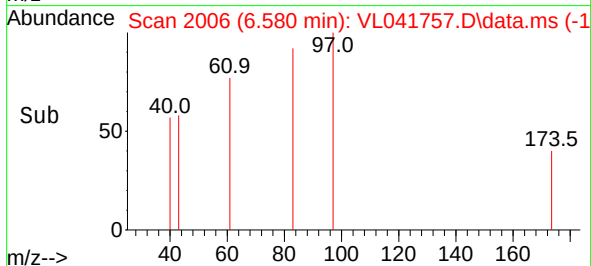
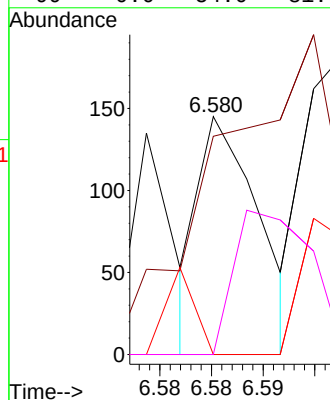
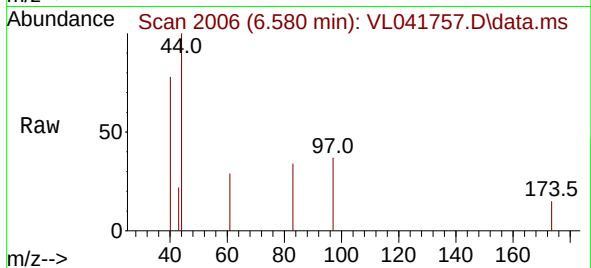
Ion Ratio Lower Upper

97 100

83 86.3 72.3 108.5

85 0.0 48.5 72.7#

99 0.0 54.0 81.0#



#48

Dibromochloromethane

Concen: 0.013 ppbv

RT: 7.383 min Scan# 2254

Delta R.T. -0.000 min

Lab File: VL041757.D

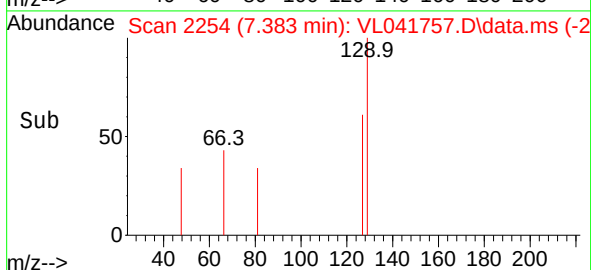
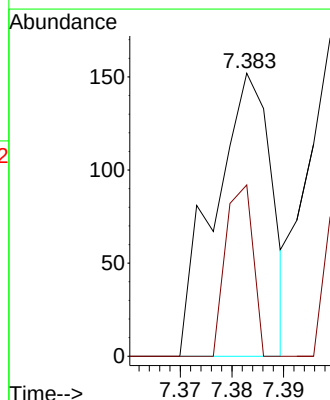
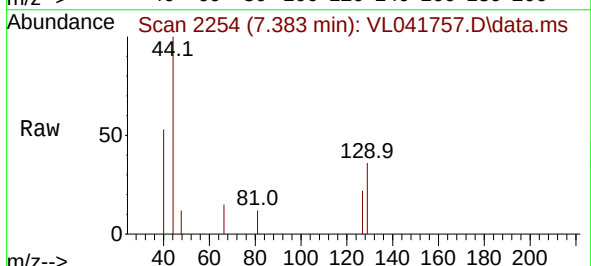
Acq: 16 Dec 2024 16:08

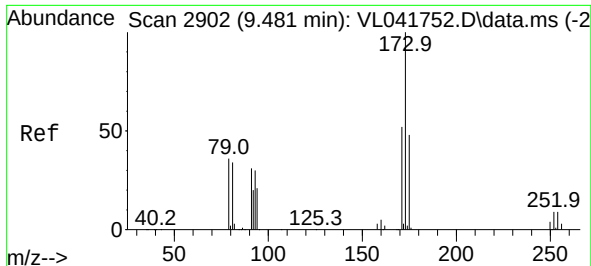
Tgt Ion: 129 Resp: 117

Ion Ratio Lower Upper

129 100

127 64.1 38.8 116.3





#49

Bromoform

Concen: 0.015 ppbv

RT: 9.487 min Scan# 20

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

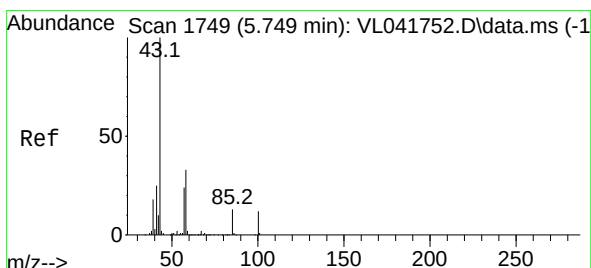
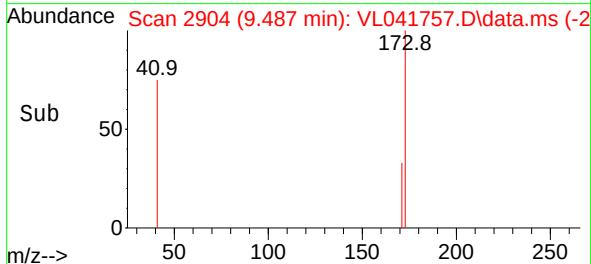
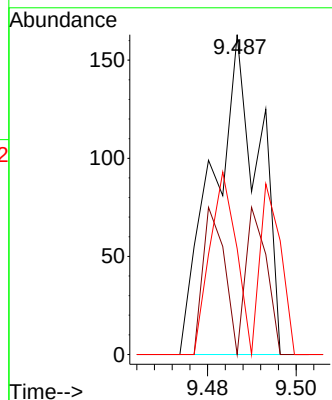
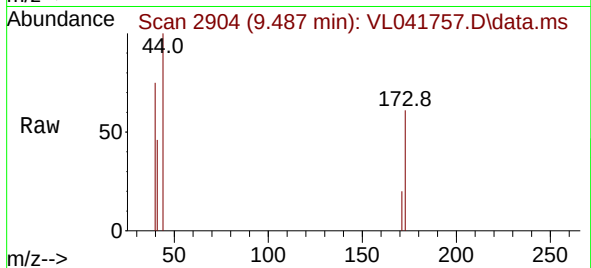
Tgt Ion:173 Resp: 118

Ion Ratio Lower Upper

173 100

175 42.4 38.2 57.2

171 56.8 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 0.018 ppbv

RT: 5.777 min Scan# 1758

Delta R.T. 0.029 min

Lab File: VL041757.D

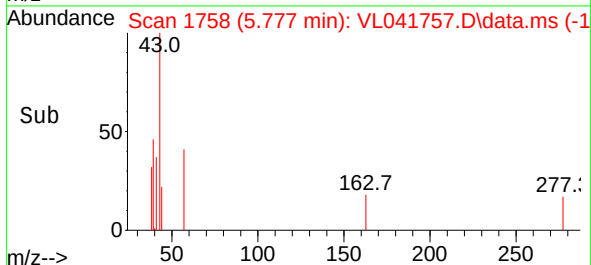
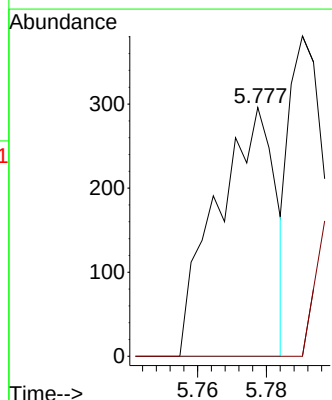
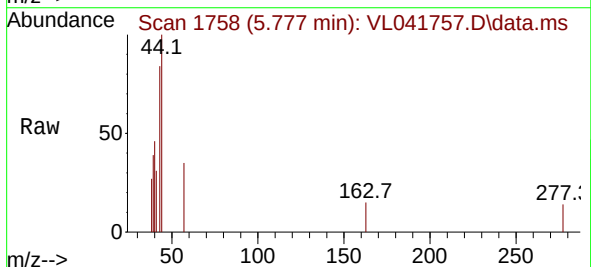
Acq: 16 Dec 2024 16:08

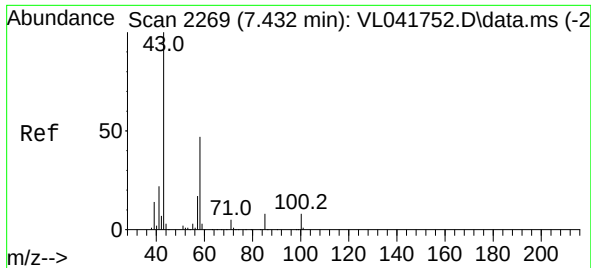
Tgt Ion: 43 Resp: 350

Ion Ratio Lower Upper

43 100

58 0.0 26.8 40.2#



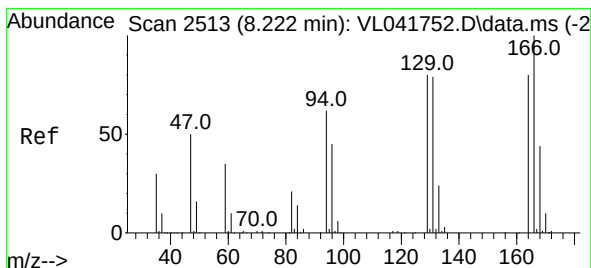
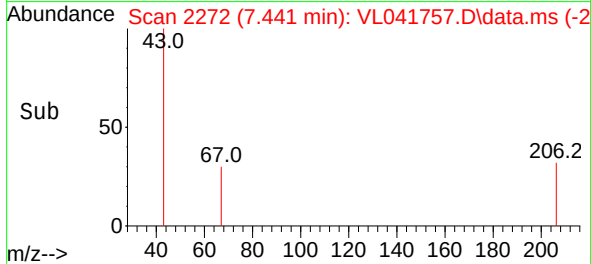
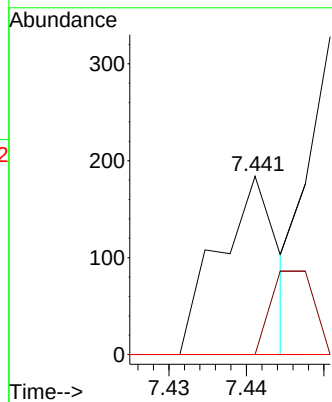
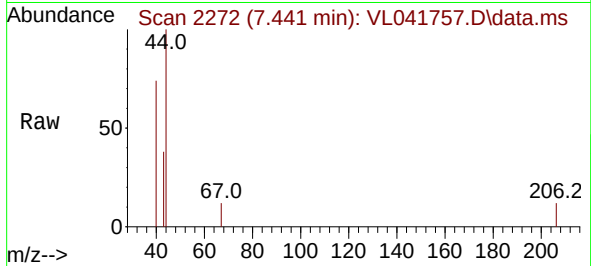


#51  
2-Hexanone  
Concen: 0.006 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Tgt Ion: 43 Resp: 97

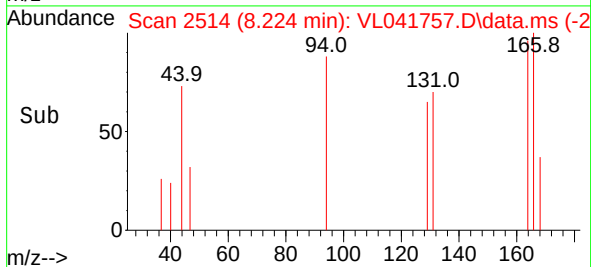
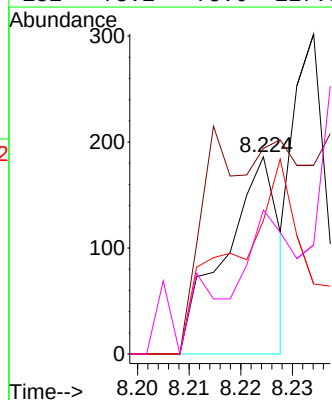
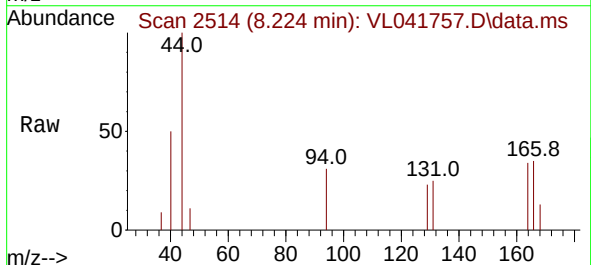
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 0.0   | 36.6  | 55.0# |
| 98  | 0.0   | 0.1   | 0.1#  |

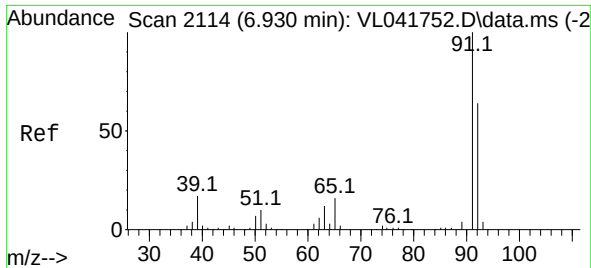


#52  
Tetrachloroethene  
Concen: 0.020 ppbv  
RT: 8.224 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 164 Resp: 135

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 164 | 100   |       |        |
| 166 | 104.3 | 99.8  | 149.6  |
| 129 | 67.7  | 79.6  | 119.4# |
| 131 | 73.1  | 78.6  | 117.8# |





#53

Toluene

Concen: 0.015 ppbv

RT: 6.933 min Scan# 2114

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

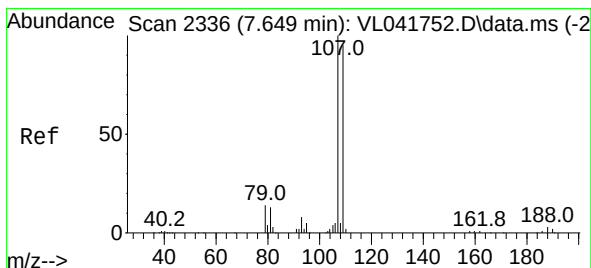
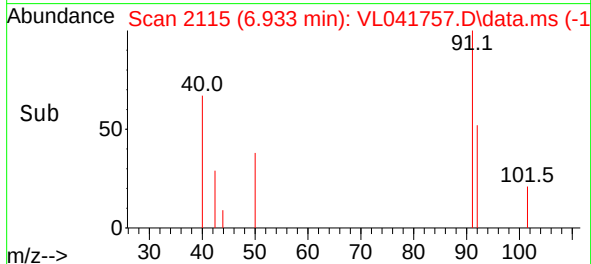
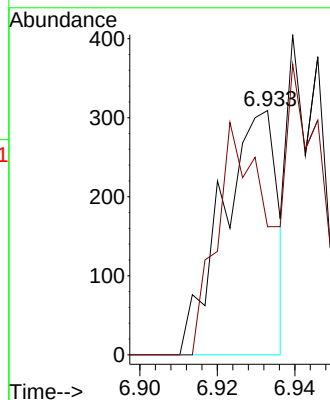
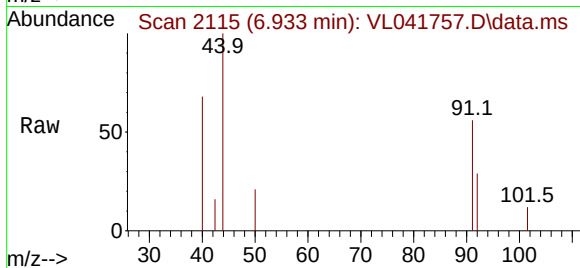
VSTDIC0.03

Tgt Ion: 91 Resp: 304

Ion Ratio Lower Upper

91 100

92 0.0 47.9 71.9#



#54

1,2-Dibromoethane

Concen: 0.023 ppbv

RT: 7.661 min Scan# 2340

Delta R.T. 0.012 min

Lab File: VL041757.D

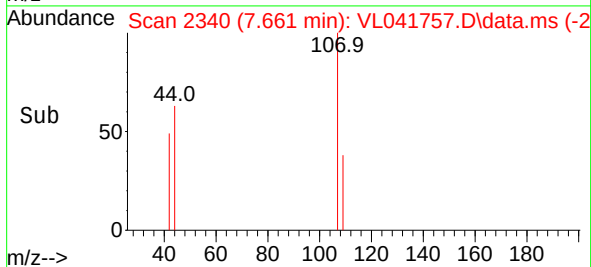
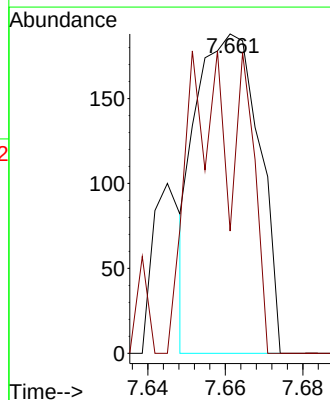
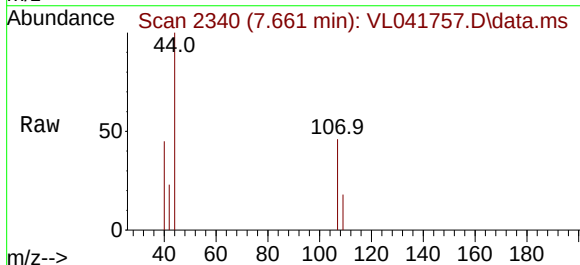
Acq: 16 Dec 2024 16:08

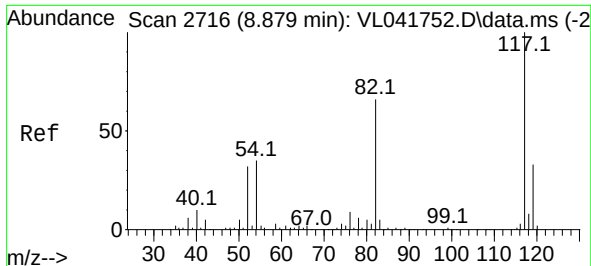
Tgt Ion: 107 Resp: 213

Ion Ratio Lower Upper

107 100

109 38.3 75.9 113.9#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

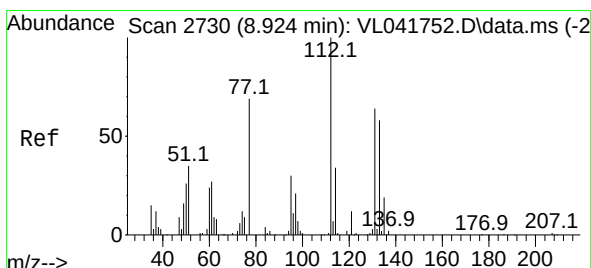
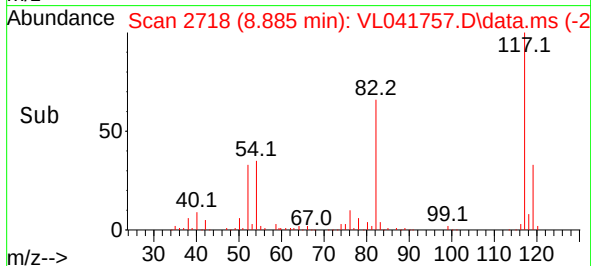
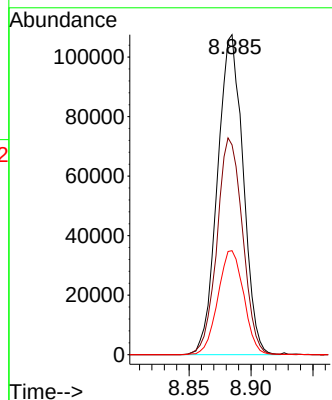
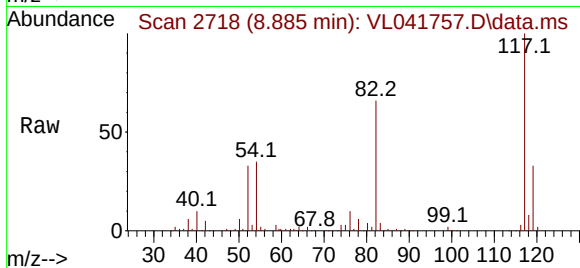
Tgt Ion:117 Resp: 154998

Ion Ratio Lower Upper

117 100

82 67.6 53.8 80.8

119 32.9 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 0.010 ppbv

RT: 8.930 min Scan# 2732

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

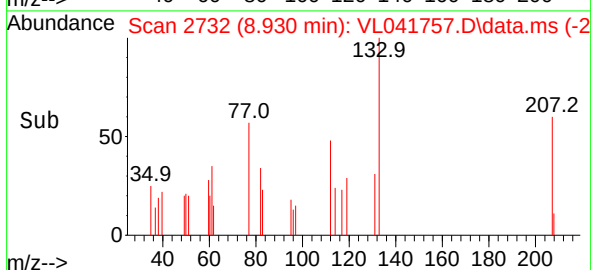
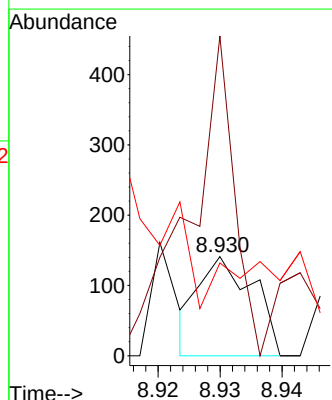
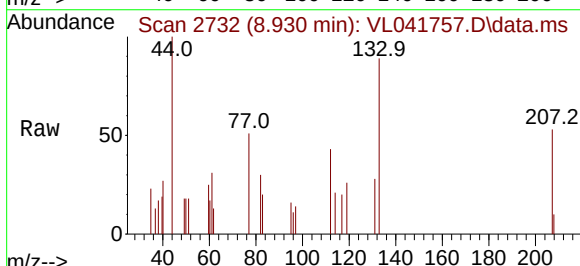
Tgt Ion:131 Resp: 86

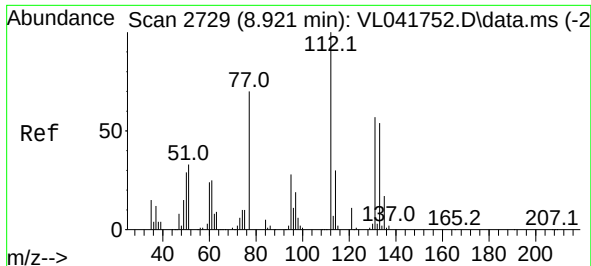
Ion Ratio Lower Upper

131 100

133 350.0 76.8 115.2#

119 0.0 49.0 73.6#





#57

Chlorobenzene

Concen: 0.007 ppbv

RT: 8.933 min Scan# 21

Delta R.T. 0.012 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

VSTDICC0.03

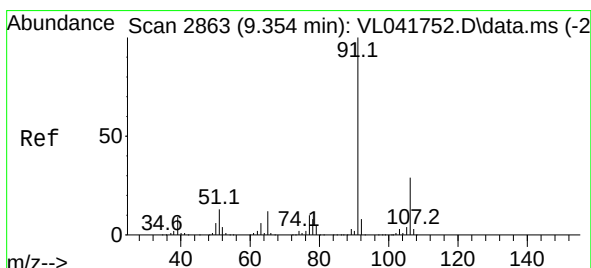
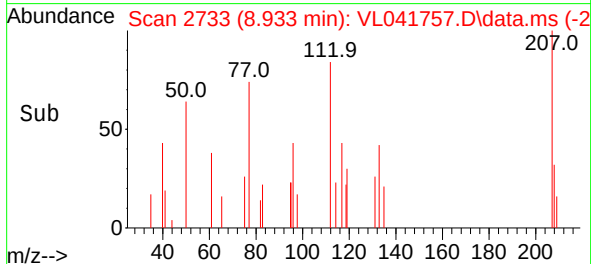
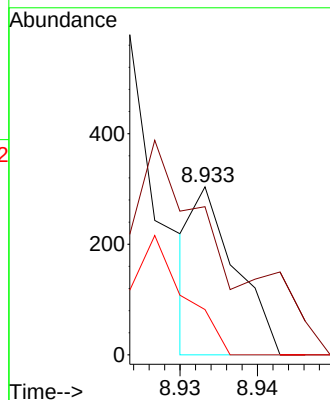
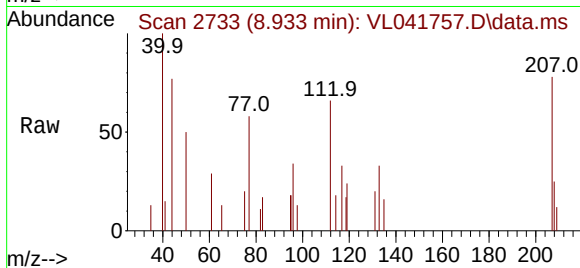
Tgt Ion:112 Resp: 114

Ion Ratio Lower Upper

112 100

77 38.8 57.4 86.0#

114 27.0 27.4 33.4#



#58

Ethyl Benzene

Concen: 0.018 ppbv

RT: 9.357 min Scan# 2864

Delta R.T. 0.003 min

Lab File: VL041757.D

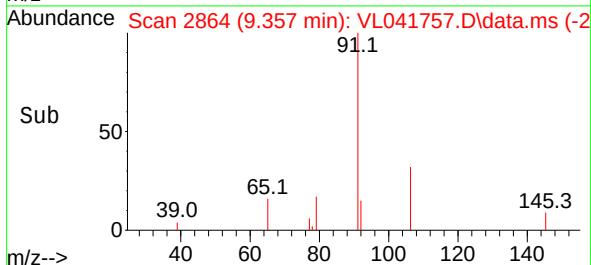
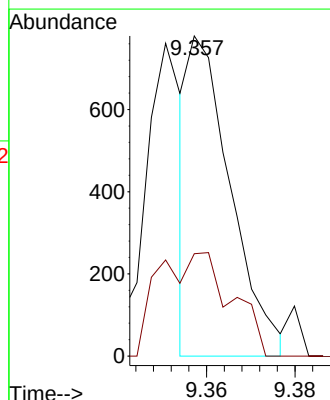
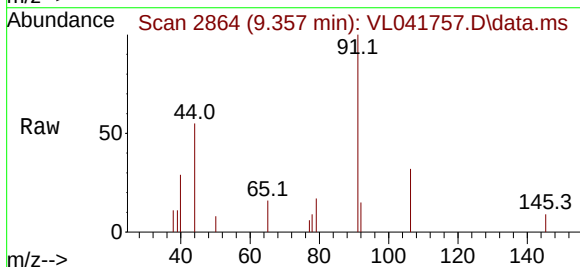
Acq: 16 Dec 2024 16:08

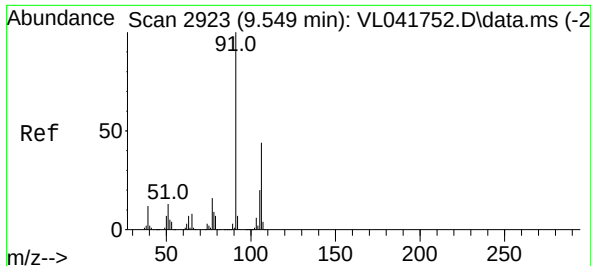
Tgt Ion: 91 Resp: 516

Ion Ratio Lower Upper

91 100

106 34.3 23.5 35.3





#59

m/p-Xylene

Concen: 0.022 ppbv

RT: 9.551 min Scan# 2924

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

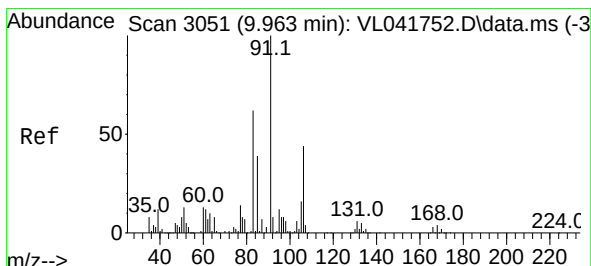
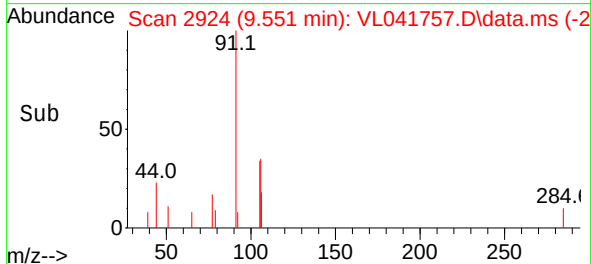
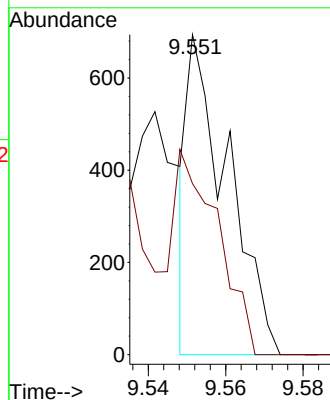
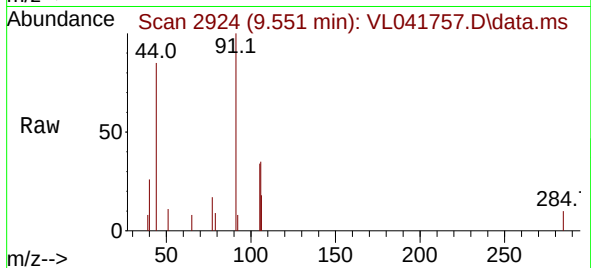
VSTDIC0.03

Tgt Ion: 91 Resp: 500

Ion Ratio Lower Upper

91 100

106 135.6 0.0 0.0#



#60

o-Xylene

Concen: 0.035 ppbv

RT: 9.966 min Scan# 3052

Delta R.T. 0.003 min

Lab File: VL041757.D

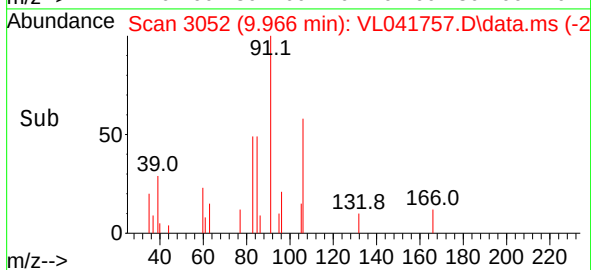
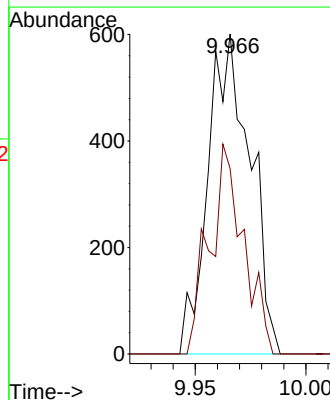
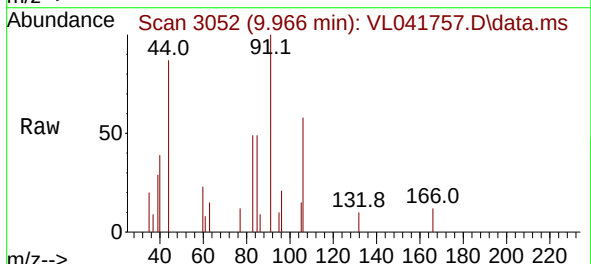
Acq: 16 Dec 2024 16:08

Tgt Ion: 91 Resp: 796

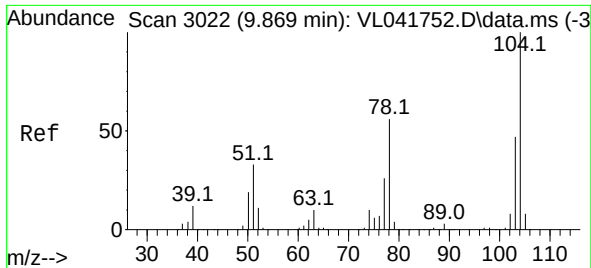
Ion Ratio Lower Upper

91 100

106 52.9 21.1 63.4



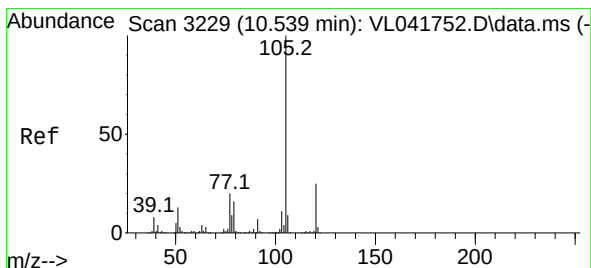
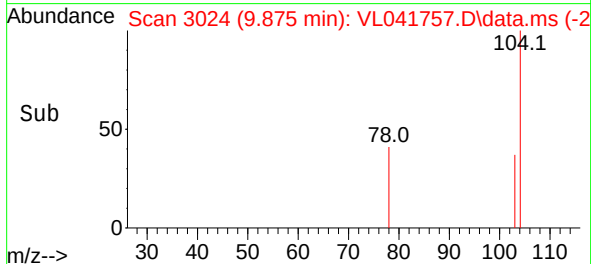
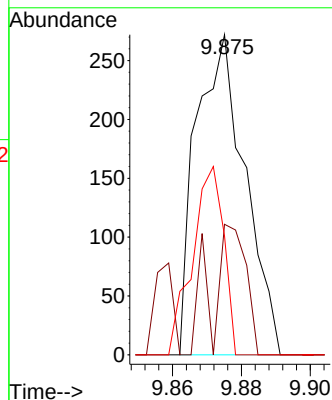
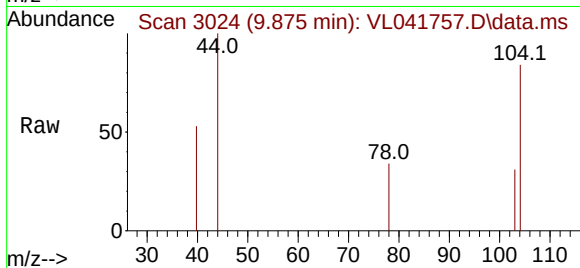




#61  
Styrene  
Concen: 0.027 ppbv  
RT: 9.875 min Scan# 3022  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

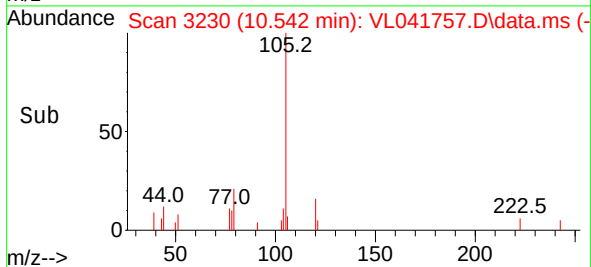
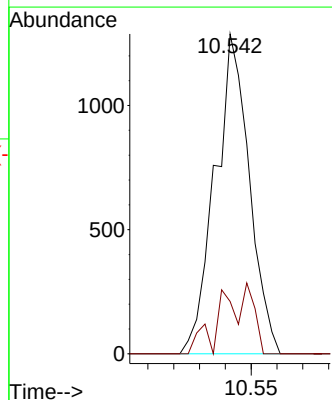
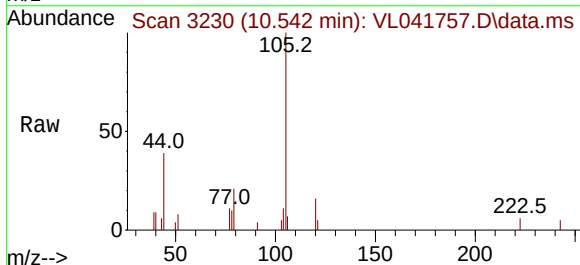
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

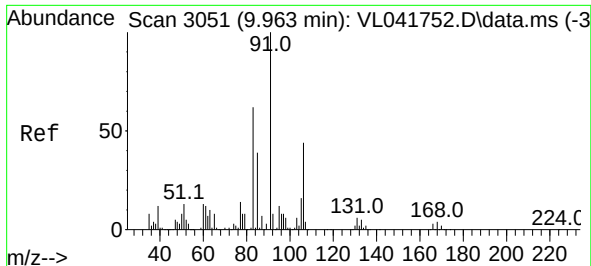
Tgt Ion:104 Resp: 267  
Ion Ratio Lower Upper  
104 100  
78 28.8 43.8 65.6#  
103 37.8 37.8 56.6



#62  
Isopropylbenzene  
Concen: 0.035 ppbv  
RT: 10.542 min Scan# 3230  
Delta R.T. 0.003 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion:105 Resp: 1186  
Ion Ratio Lower Upper  
105 100  
120 20.7 19.8 29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 0.032 ppbv

RT: 9.969 min Scan# 3051

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC0.03

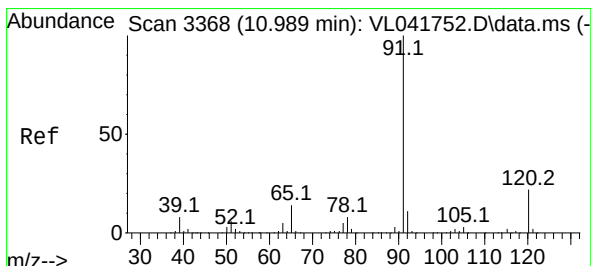
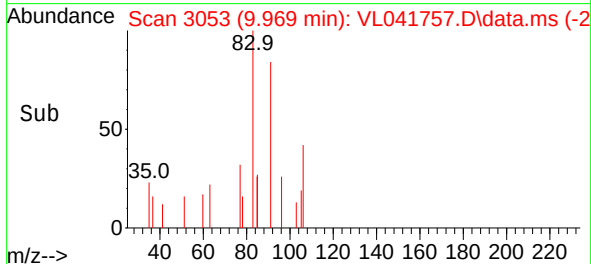
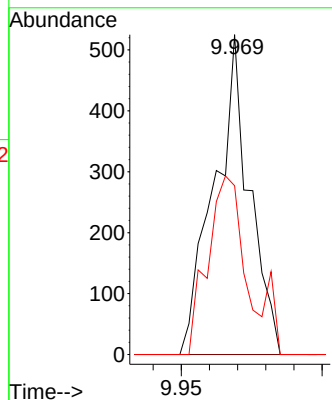
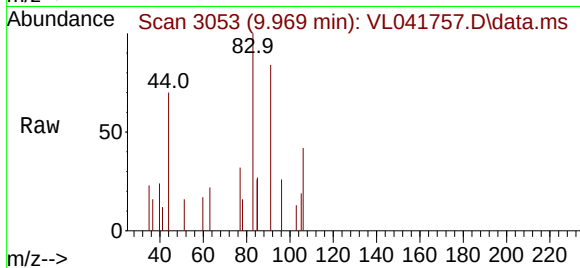
Tgt Ion: 83 Resp: 455

Ion Ratio Lower Upper

83 100

131 0.0 4.9 14.7#

85 63.5 32.0 96.2



#64

n-propylbenzene

Concen: 0.015 ppbv

RT: 10.998 min Scan# 3371

Delta R.T. 0.009 min

Lab File: VL041757.D

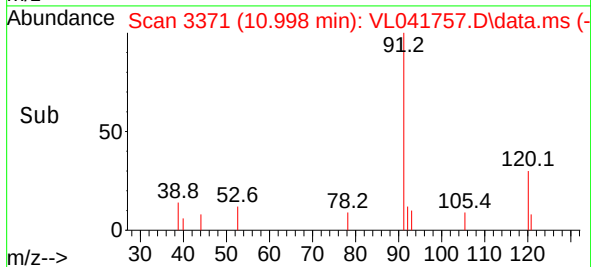
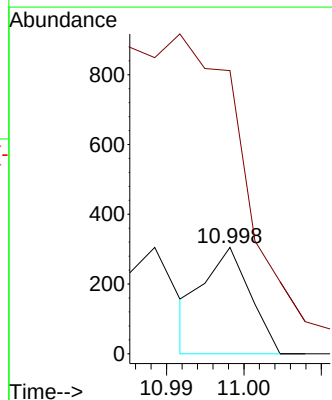
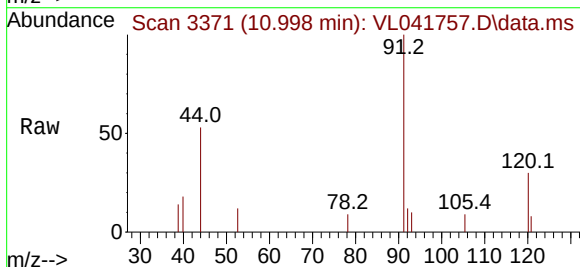
Acq: 16 Dec 2024 16:08

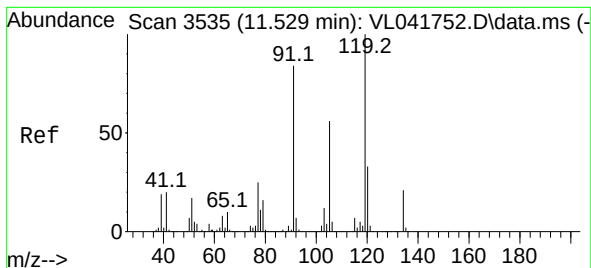
Tgt Ion: 120 Resp: 126

Ion Ratio Lower Upper

120 100

91 0.0 387.3 580.9#





#65

tert-Butylbenzene

Concen: 0.015 ppbv

RT: 11.535 min Scan# 3535

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

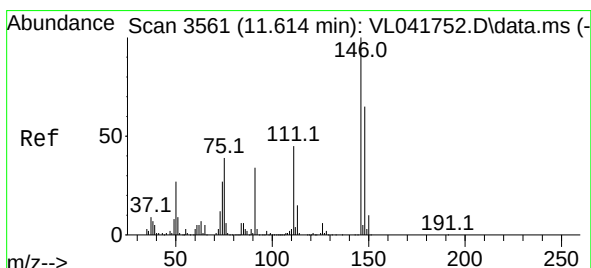
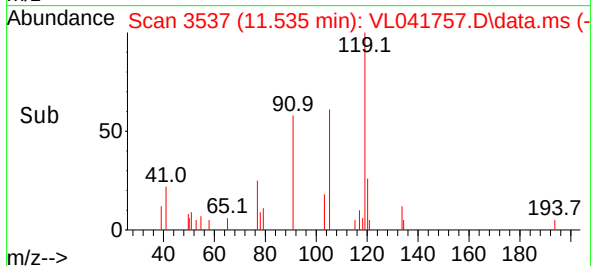
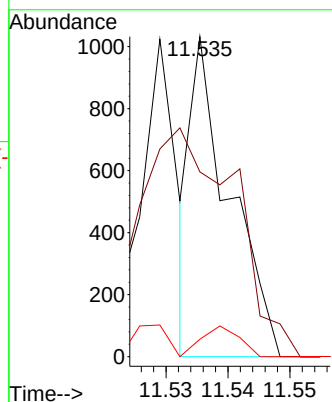
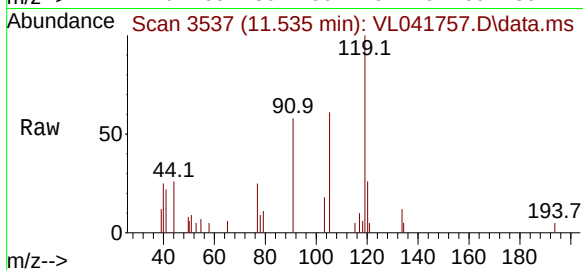
Tgt Ion:119 Resp: 444

Ion Ratio Lower Upper

119 100

91 188.3 67.0 100.4#

134 0.0 16.5 24.7#



#66

Benzyl Chloride

Concen: 0.016 ppbv

RT: 11.620 min Scan# 3563

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

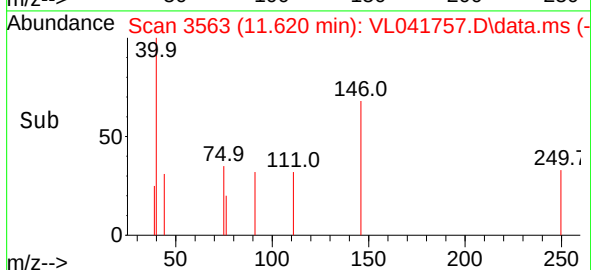
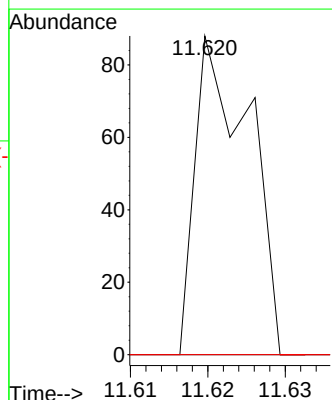
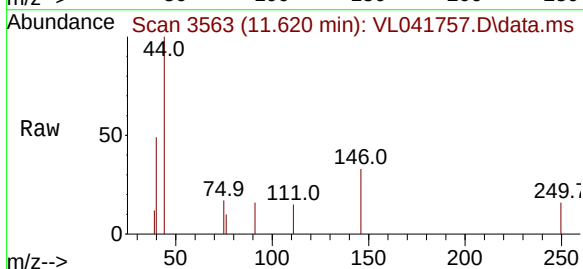
Tgt Ion: 91 Resp: 43

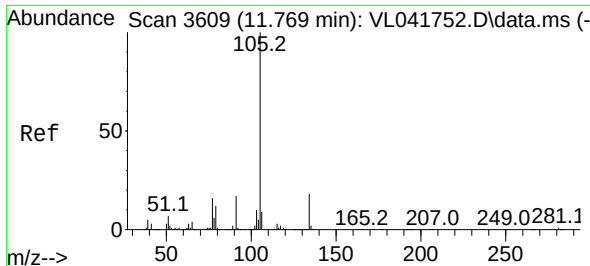
Ion Ratio Lower Upper

91 100

126 0.0 13.9 20.9#

128 0.0 4.4 6.6#





#67

sec-Butylbenzene

Concen: 0.028 ppbv

RT: 11.769 min Scan# 3609

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

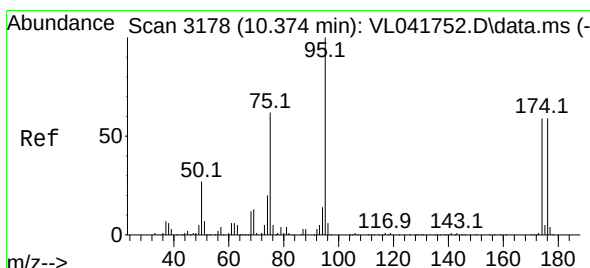
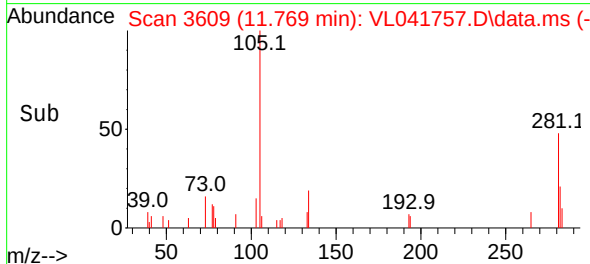
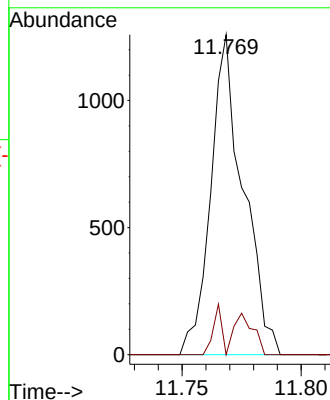
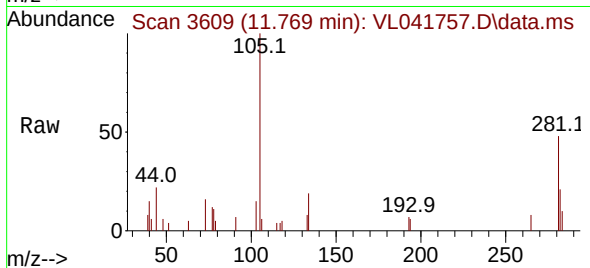
VSTDIC0.03

Tgt Ion:105 Resp: 1194

Ion Ratio Lower Upper

105 100

134 11.9 14.5 21.7#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.923 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

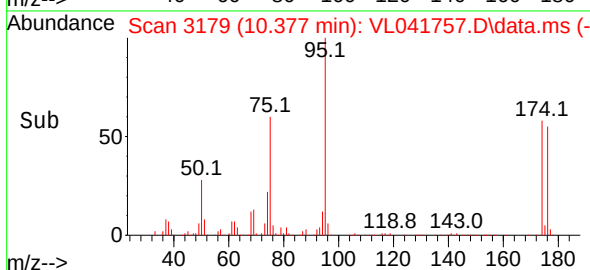
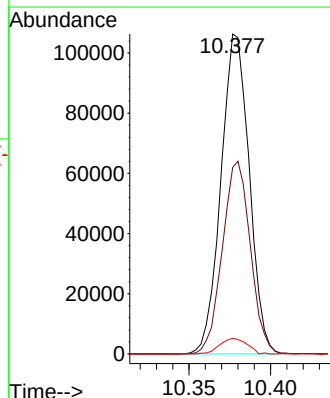
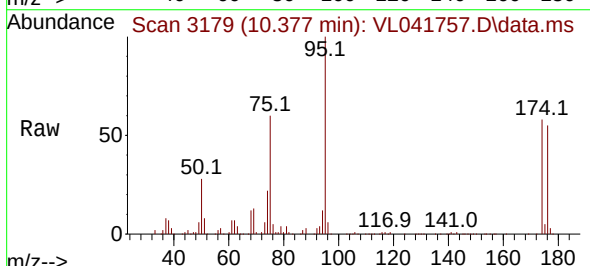
Tgt Ion: 95 Resp: 128167

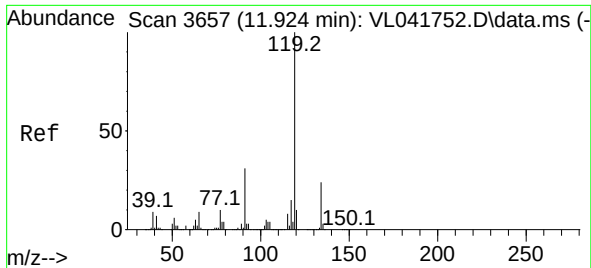
Ion Ratio Lower Upper

95 100

174 59.8 47.6 71.4

175 4.7 3.7 5.5





#69

p-Isopropyltoluene

Concen: 0.022 ppbv

RT: 11.927 min Scan# 3

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

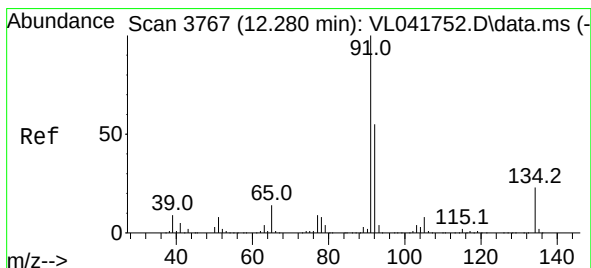
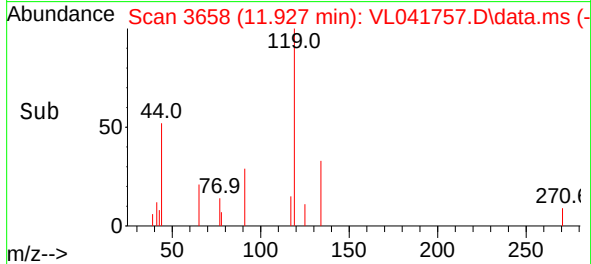
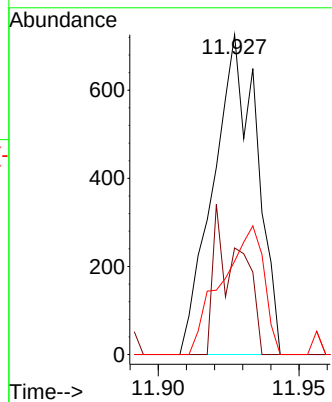
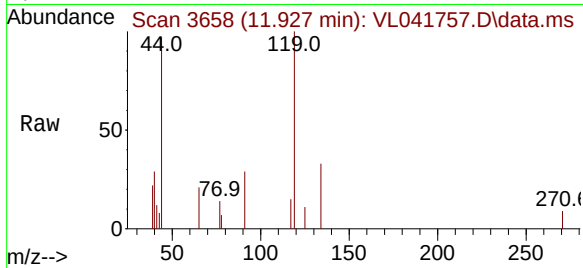
Tgt Ion:119 Resp: 781

Ion Ratio Lower Upper

119 100

134 28.0 19.6 29.4

91 40.3 24.4 36.6#



#70

n-Butylbenzene

Concen: 0.010 ppbv

RT: 12.290 min Scan# 3770

Delta R.T. 0.009 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

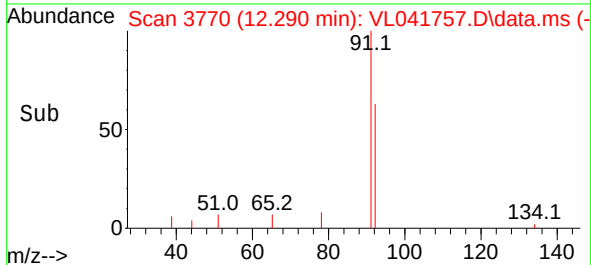
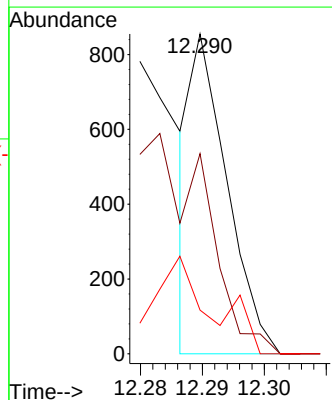
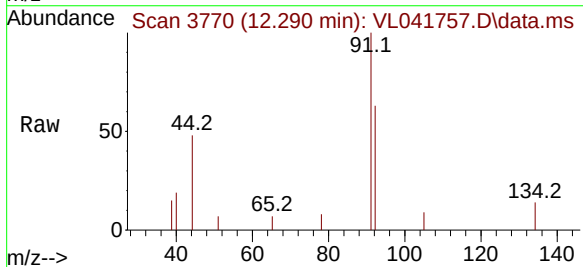
Tgt Ion: 91 Resp: 344

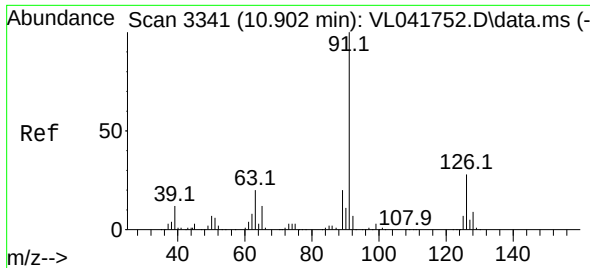
Ion Ratio Lower Upper

91 100

92 159.0 43.2 64.8#

134 61.0 18.2 27.4#

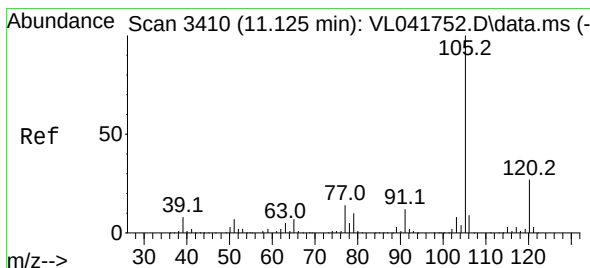
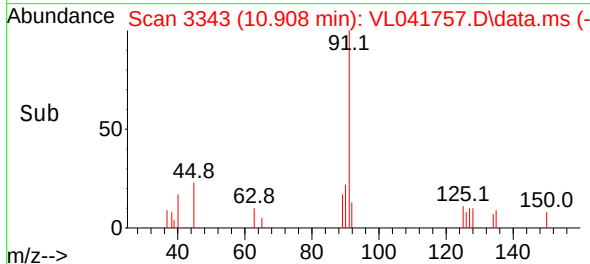
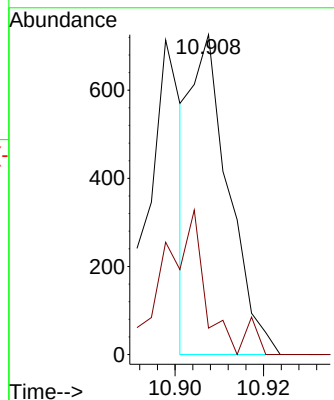
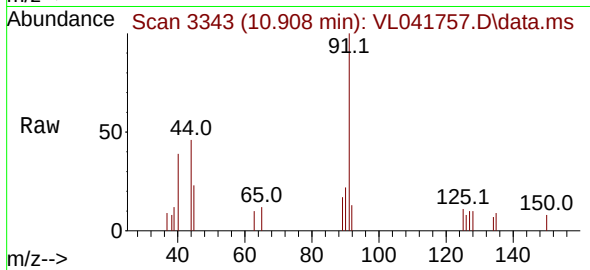




#71  
2-Chlorotoluene  
Concen: 0.017 ppbv  
RT: 10.908 min Scan# 3412  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

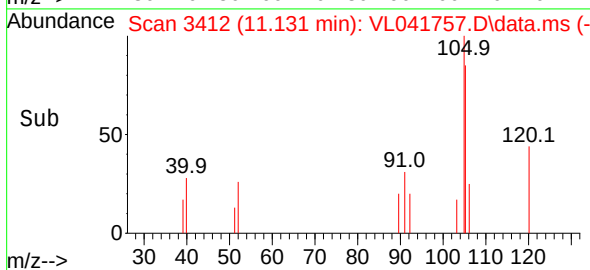
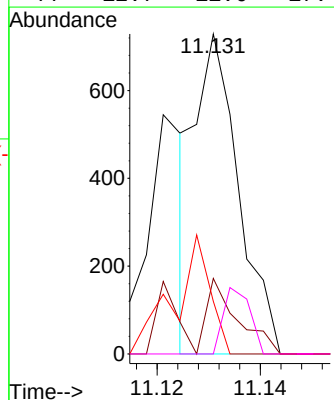
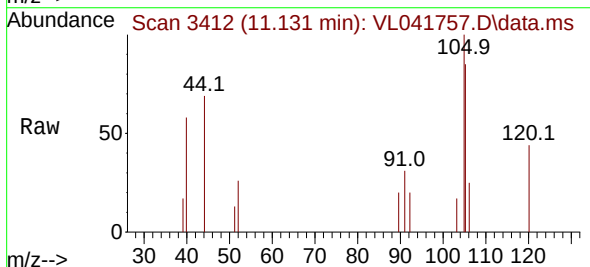
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.03

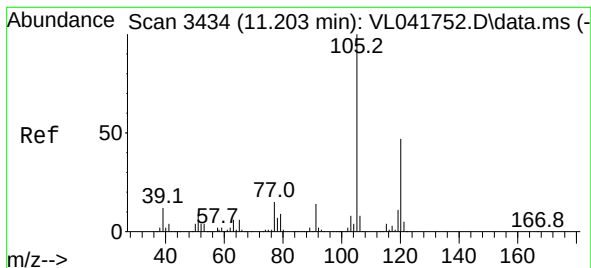
Tgt Ion: 91 Resp: 428  
Ion Ratio Lower Upper  
91 100  
126 51.9 11.6 46.4#



#72  
4-Ethyltoluene  
Concen: 0.016 ppbv  
RT: 11.131 min Scan# 3412  
Delta R.T. 0.006 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion: 105 Resp: 424  
Ion Ratio Lower Upper  
105 100  
120 17.0 23.3 34.9#  
91 34.7 10.9 16.3#  
77 12.7 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 0.025 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

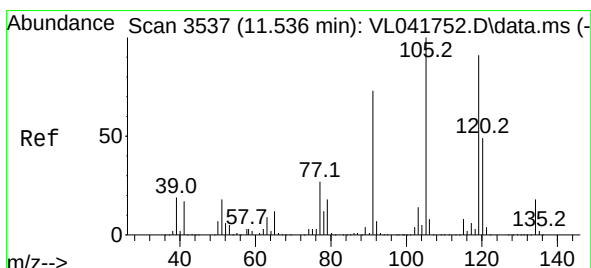
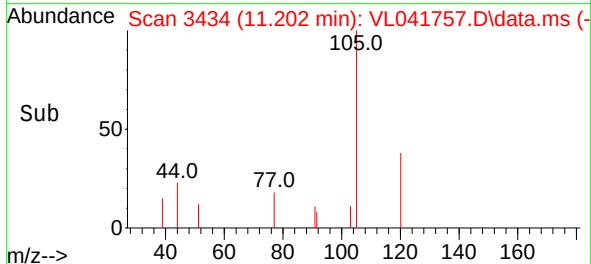
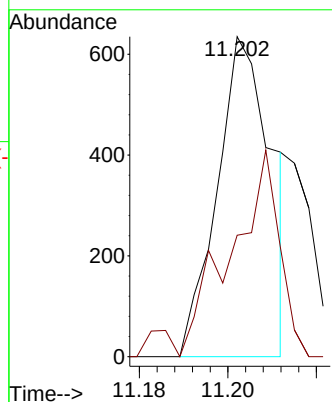
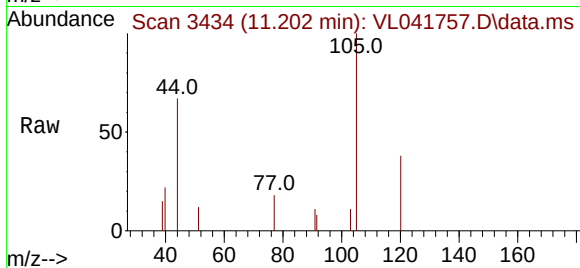
VSTDIC0.03

Tgt Ion:105 Resp: 540

Ion Ratio Lower Upper

105 100

120 38.0 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 0.031 ppbv

RT: 11.542 min Scan# 3539

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Tgt Ion:105 Resp: 724

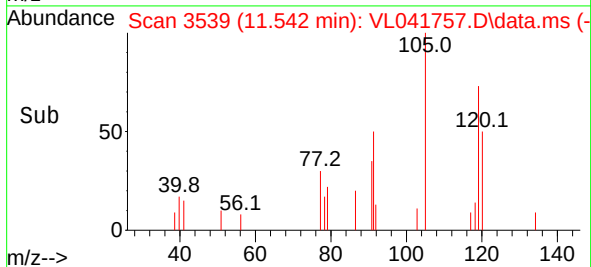
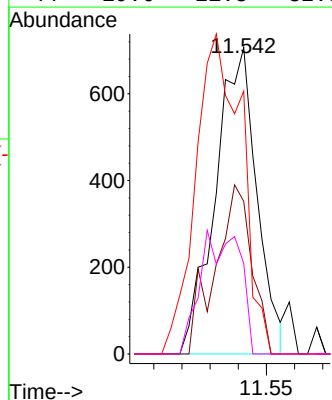
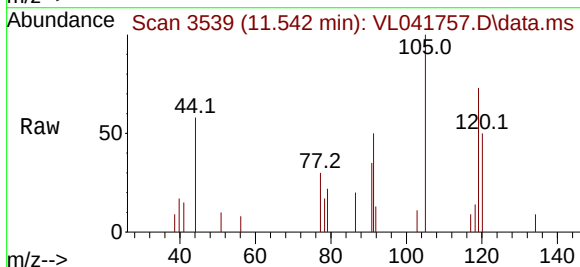
Ion Ratio Lower Upper

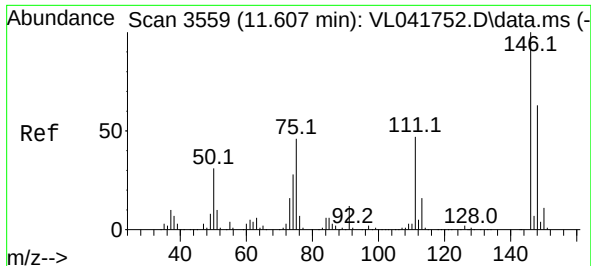
105 100

120 49.8 39.0 58.4

91 85.7 58.1 87.1

77 29.6 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 0.041 ppbv

RT: 11.610 min Scan# 3560

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

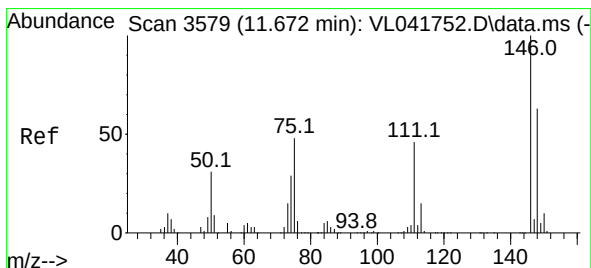
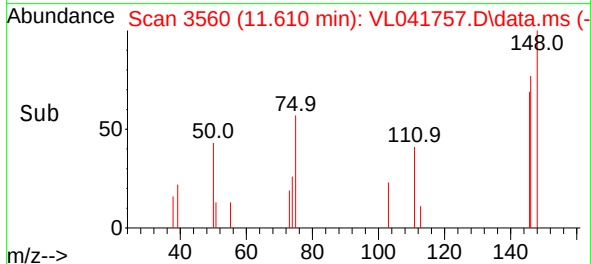
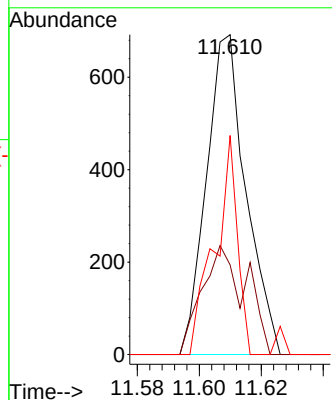
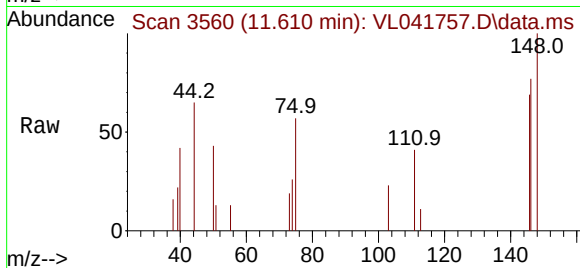
Tgt Ion:146 Resp: 613

Ion Ratio Lower Upper

146 100

111 37.8 23.4 70.3

148 41.4 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 0.037 ppbv

RT: 11.675 min Scan# 3580

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

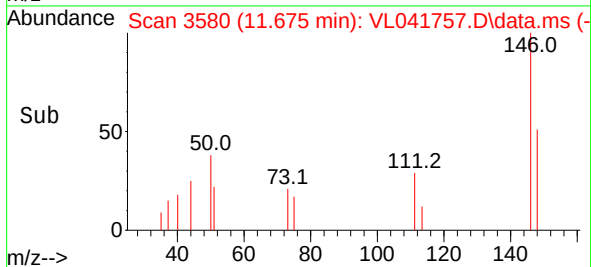
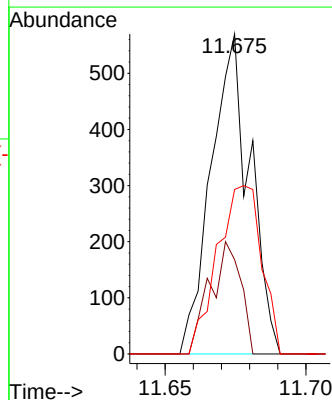
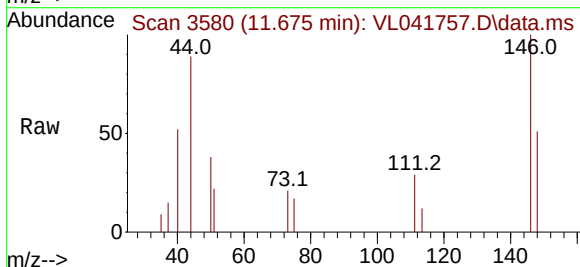
Tgt Ion:146 Resp: 547

Ion Ratio Lower Upper

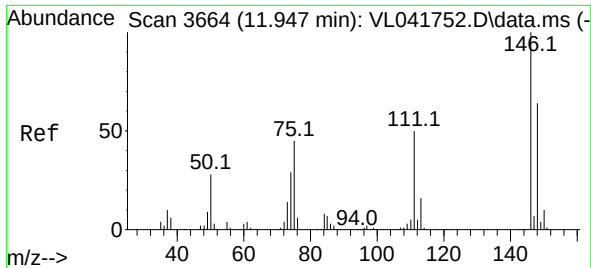
146 100

111 27.6 22.7 68.1

148 59.8 31.4 94.0

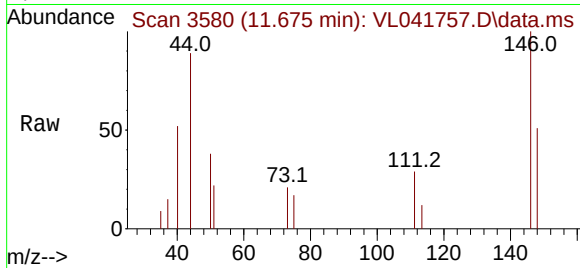






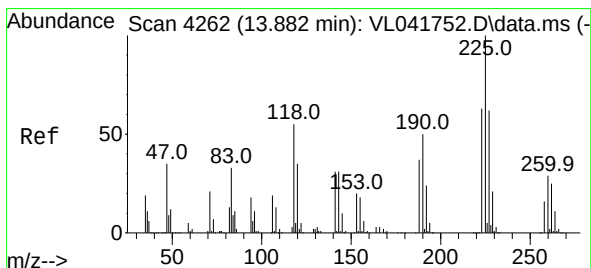
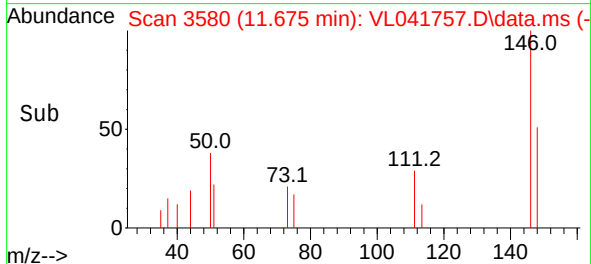
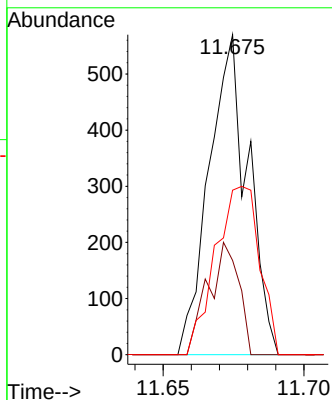
#77  
1,2-Dichlorobenzene  
Concen: 0.038 ppbv  
RT: 11.675 min Scan# 3580  
Delta R.T. -0.272 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03



Tgt Ion:146 Resp: 547

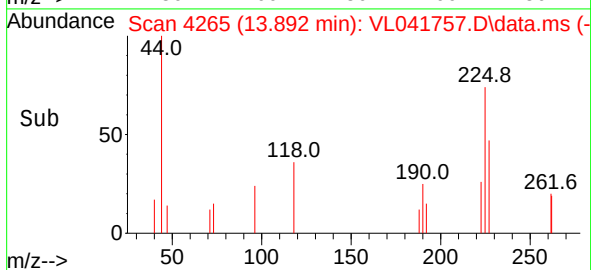
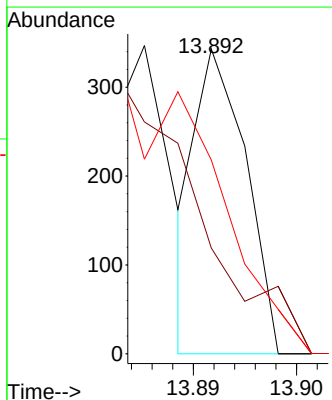
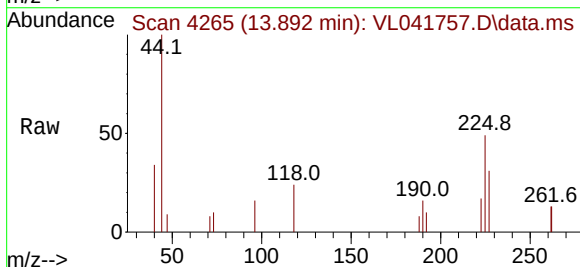
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 27.6  | 24.8  | 74.3  |
| 148 | 59.8  | 31.8  | 95.4  |

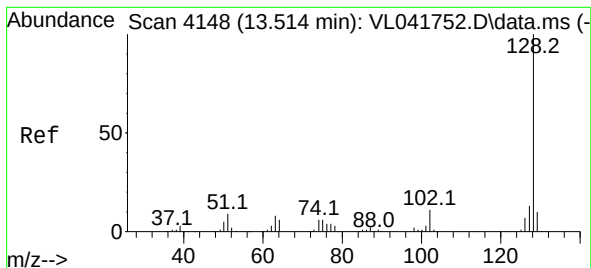


#78  
Hexachloro-1,3-Butadiene  
Concen: 0.010 ppbv  
RT: 13.892 min Scan# 4265  
Delta R.T. 0.009 min  
Lab File: VL041757.D  
Acq: 16 Dec 2024 16:08

Tgt Ion:225 Resp: 112

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 225 | 100   |       |       |
| 223 | 0.0   | 50.5  | 75.7# |
| 227 | 0.0   | 50.3  | 75.5# |





#79

Naphthalene

Concen: 0.033 ppbv

RT: 13.516 min Scan# 4148

Delta R.T. 0.003 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

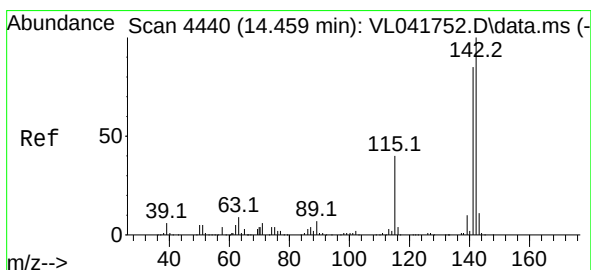
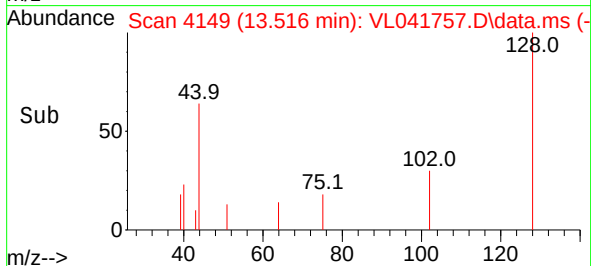
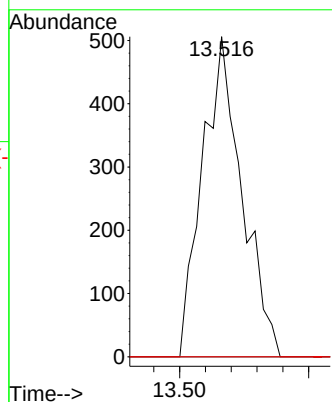
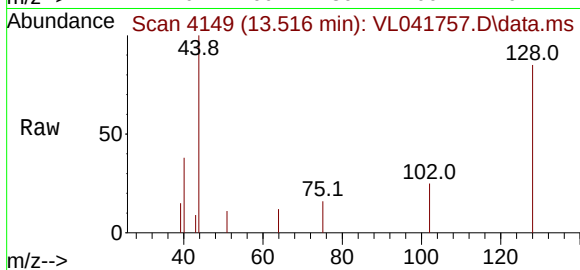
Tgt Ion:128 Resp: 540

Ion Ratio Lower Upper

128 100

127 0.0 10.7 16.1#

129 0.0 8.2 12.4#



#80

Naphthalene,2-methyl-

Concen: 0.040 ppbv

RT: 14.465 min Scan# 4442

Delta R.T. 0.006 min

Lab File: VL041757.D

Acq: 16 Dec 2024 16:08

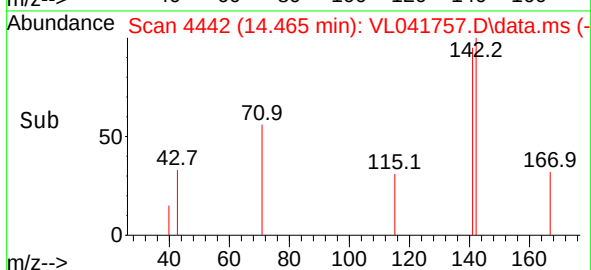
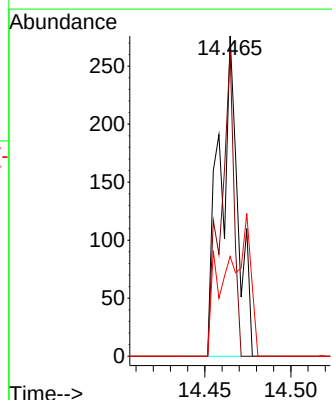
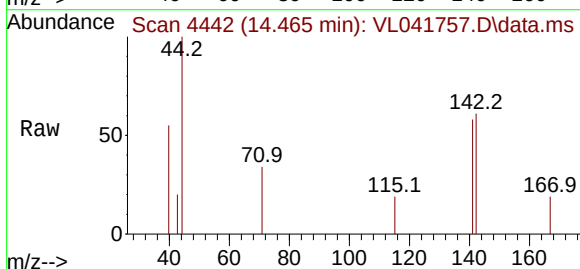
Tgt Ion:142 Resp: 206

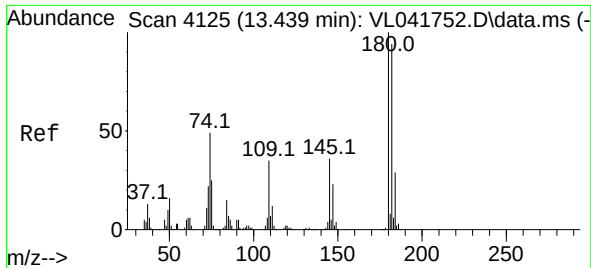
Ion Ratio Lower Upper

142 100

141 68.0 68.4 102.6#

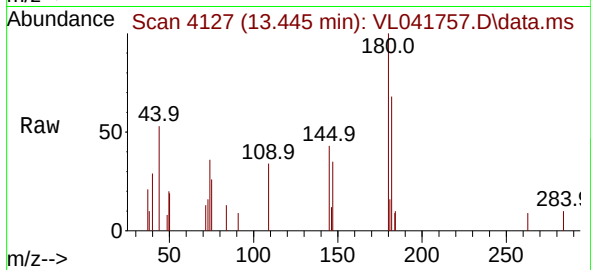
115 59.2 32.5 48.7#



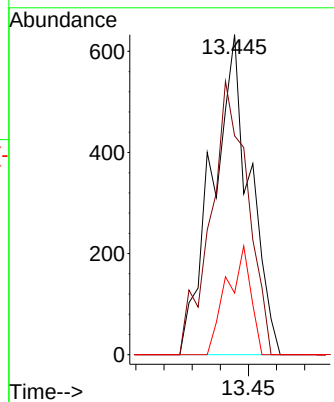
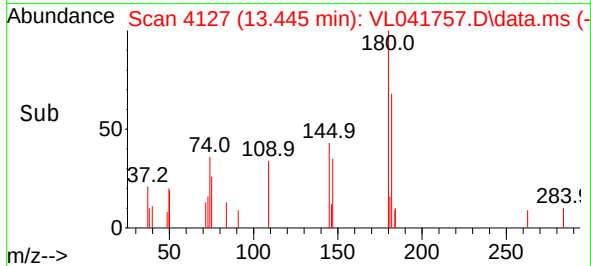


#81  
 1,2,4-Trichlorobenzene  
 Concen: 0.065 ppbv  
 RT: 13.445 min Scan# 41  
 Delta R.T. 0.006 min  
 Lab File: VL041757.D  
 Acq: 16 Dec 2024 16:08

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03



Tgt Ion:180 Resp: 586  
 Ion Ratio Lower Upper  
 180 100  
 182 84.0 77.0 115.6  
 184 21.7 23.8 35.8#



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041758.D  
 Acq On : 16 Dec 2024 16:41  
 Operator : SY/MD  
 Sample : VSTDICC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC015

Quant Time: Dec 19 06:16:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 65186    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.955 | 114  | 176856   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.878 | 117  | 160457   | 10.000 | ppbv  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.374 | 95    | 133687   | 9.998    | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.000% |

|                               |       |     |        |        |        |        |
|-------------------------------|-------|-----|--------|--------|--------|--------|
| Target Compounds              |       |     |        |        |        | Qvalue |
| 2) Dichlorodifluoromethane    | 1.496 | 85  | 152683 | 13.163 | ppbv   | 95     |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 152455 | 14.341 | ppbv   | 98     |
| 4) Chloromethane              | 1.531 | 50  | 63517  | 13.996 | ppbv   | 98     |
| 5) Vinyl Chloride             | 1.577 | 62  | 62250  | 13.615 | ppbv   | 99     |
| 6) Bromomethane               | 1.667 | 94  | 30345  | 14.064 | ppbv   | 96     |
| 7) Chloroethane               | 1.703 | 64  | 25650  | 14.442 | ppbv   | 95     |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 148190 | 14.274 | ppbv   | 99     |
| 9) Propene                    | 1.483 | 41  | 61515  | 13.351 | ppbv   | 99     |
| 10) Heptane                   | 4.978 | 43  | 168804 | 14.263 | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 177984 | 14.446 | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 135538 | 14.464 | ppbv   | 98     |
| 13) Ethanol                   | 1.719 | 45  | 3643   | 9.509  | ppbv   | 100    |
| 14) Bromoethene               | 1.780 | 108 | 47132  | 14.898 | ppbv   | 99     |
| 15) Acetone                   | 1.832 | 43  | 142980 | 11.273 | ppbv   | 100    |
| 16) 1,3-Butadiene             | 1.606 | 39  | 68311  | 13.678 | ppbv   | 98     |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 177908 | 14.140 | ppbv   | 99     |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 57770  | 14.705 | ppbv   | 99     |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 82211  | 10.802 | ppbv   | 99     |
| 20) Methylene Chloride        | 2.059 | 84  | 48356  | 13.371 | ppbv   | 99     |
| 21) Allyl Chloride            | 2.094 | 41  | 101528 | 14.760 | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 65029  | 14.461 | ppbv   | 97     |
| 23) Vinyl Acetate             | 2.460 | 43  | 80795  | 14.661 | ppbv   | 98     |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 131030 | 14.394 | ppbv   | 100    |
| 25) Ethyl Acetate             | 2.832 | 43  | 341429 | 14.402 | ppbv   | 100    |
| 26) Hexane                    | 2.823 | 57  | 128657 | 14.369 | ppbv   | 99     |
| 27) Carbon Disulfide          | 2.149 | 76  | 134963 | 16.726 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether   | 2.438 | 73  | 100758 | 13.871 | ppbv   | 100    |
| 29) Chloroform                | 2.845 | 83  | 197713 | 14.489 | ppbv   | 99     |
| 30) Cyclohexane               | 3.855 | 84  | 110448 | 14.497 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 132821 | 14.355 | ppbv   | 99     |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 204468 | 15.055 | ppbv   | 100    |
| 34) 2-Butanone                | 2.554 | 43  | 195439 | 13.736 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 206252 | 16.428 | ppbv   | 94     |
| 36) Benzene                   | 3.654 | 78  | 259630 | 14.192 | ppbv   | 99     |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 166576 | 14.633 | ppbv   | 100    |
| 38) Trichloroethene           | 4.548 | 130 | 104184 | 13.525 | ppbv   | 95     |
| 39) 1,2-Dichloropropane       | 4.312 | 63  | 93624  | 14.150 | ppbv   | 97     |
| 40) 1,4-Dioxane               | 4.577 | 88  | 44377  | 13.730 | ppbv # | 96     |
| 41) Tetrahydrofuran           | 3.052 | 42  | 113618 | 14.254 | ppbv   | 100    |
| 42) Bromodichloromethane      | 4.486 | 83  | 211145 | 16.123 | ppbv   | 96     |
| 43) Methyl Methacrylate       | 4.878 | 69  | 107165 | 15.374 | ppbv   | 100    |
| 44) 2,2,4-Trimethylpentane    | 4.638 | 57  | 445947 | 14.274 | ppbv   | 99     |
| 45) t-1,3-Dichloropropene     | 6.409 | 75  | 115159 | 15.973 | ppbv   | 97     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041758.D  
 Acq On : 16 Dec 2024 16:41  
 Operator : SY/MD  
 Sample : VSTDICC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC015

Quant Time: Dec 19 06:16:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
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 QLast Update : Thu Dec 19 06:09:59 2024  
 Response via : Initial Calibration

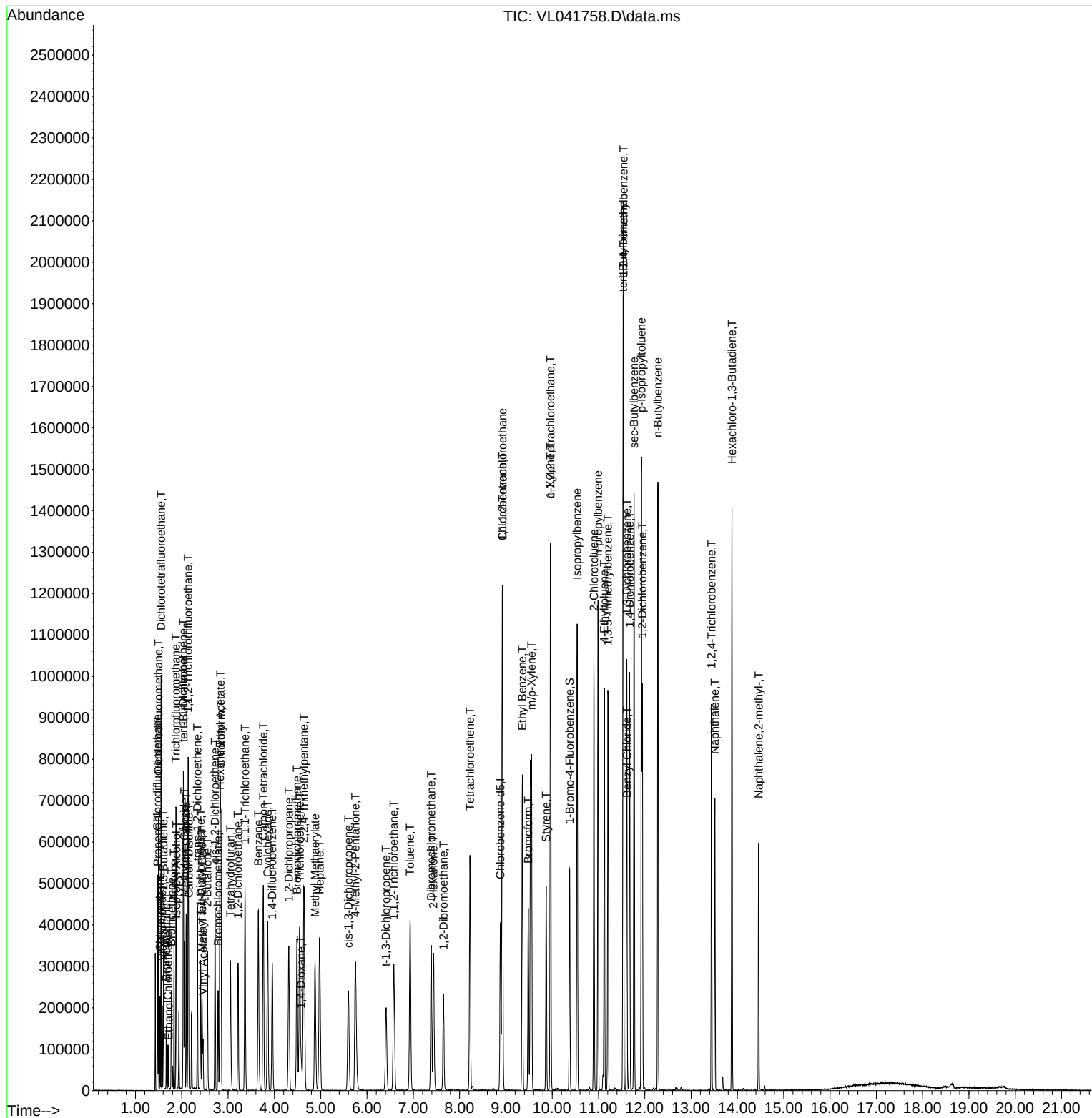
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|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.600  | 75   | 143172   | 15.643 | ppbv   | 95       |
| 47) 1,1,2-Trichloroethane     | 6.580  | 97   | 98426    | 14.242 | ppbv   | 94       |
| 48) Dibromochloromethane      | 7.386  | 129  | 161661   | 17.131 | ppbv   | 100      |
| 49) Bromoform                 | 9.484  | 173  | 137786   | 17.838 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.749  | 43   | 285467   | 14.735 | ppbv   | 99       |
| 51) 2-Hexanone                | 7.435  | 43   | 232363   | 14.798 | ppbv # | 100      |
| 52) Tetrachloroethene         | 8.225  | 164  | 93120    | 13.675 | ppbv   | 98       |
| 53) Toluene                   | 6.930  | 91   | 301428   | 14.533 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 7.652  | 107  | 139889   | 14.690 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 128108   | 15.059 | ppbv   | 99       |
| 57) Chlorobenzene             | 8.924  | 112  | 227716   | 13.869 | ppbv   | 100      |
| 58) Ethyl Benzene             | 9.354  | 91   | 425852   | 14.742 | ppbv   | 99       |
| 59) m/p-Xylene                | 9.552  | 91   | 363863   | 15.660 | ppbv # | 100      |
| 60) o-Xylene                  | 9.963  | 91   | 337891   | 14.506 | ppbv   | 100      |
| 61) Styrene                   | 9.869  | 104  | 165328   | 16.415 | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.539 | 105  | 506570   | 14.475 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 201057   | 13.790 | ppbv   | 100      |
| 64) n-propylbenzene           | 10.989 | 120  | 129200   | 14.602 | ppbv   | 97       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 446690   | 14.148 | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.617 | 91   | 45189    | 16.234 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.769 | 105  | 624565   | 14.295 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 528265   | 14.671 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.283 | 91   | 525377   | 15.101 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 387300   | 14.498 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 11.125 | 105  | 409822   | 14.934 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 350895   | 15.383 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.539 | 105  | 371476   | 15.144 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 219506   | 14.036 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.672 | 146  | 222290   | 14.388 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 205737   | 13.672 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 138481   | 12.412 | ppbv   | 100      |
| 79) Naphthalene               | 13.513 | 128  | 301006   | 17.611 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 161927   | 30.630 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 146340   | 15.669 | ppbv   | 99       |

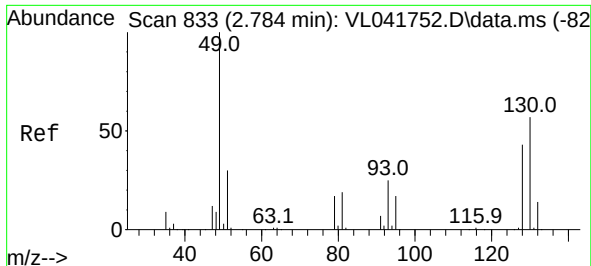
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Acq On : 16 Dec 2024 16:41  
Operator : SY/MD  
Sample : VSTDIC015  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Quant Time: Dec 19 06:16:40 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
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Response via : Initial Calibration

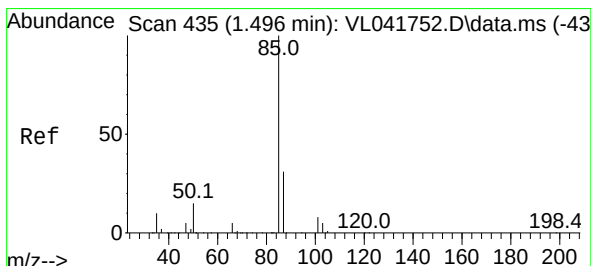
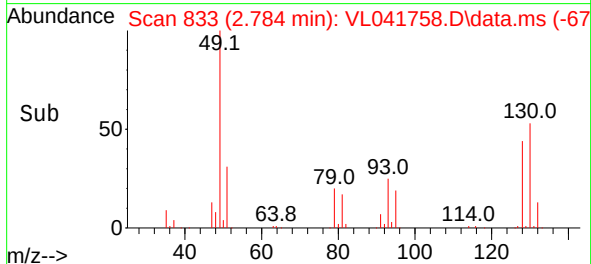
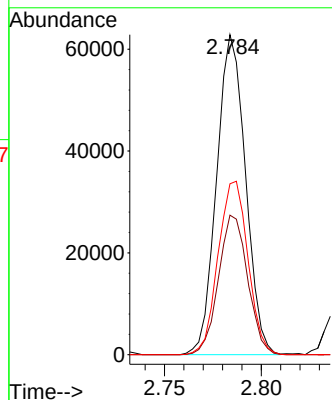
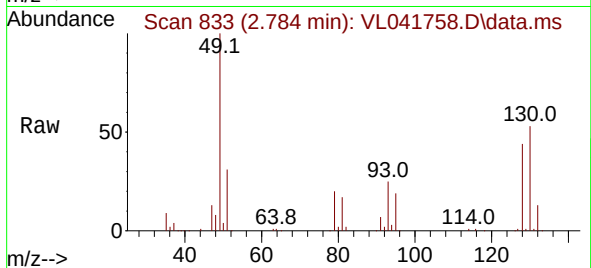




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Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

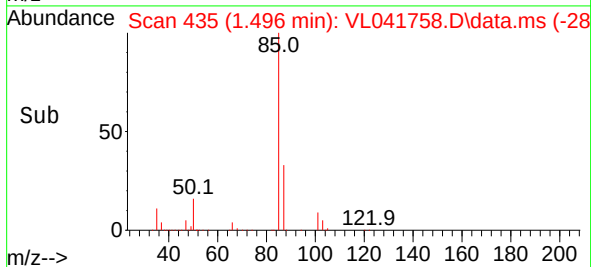
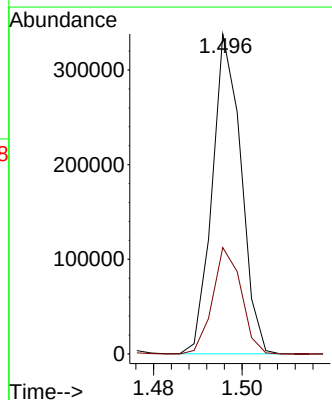
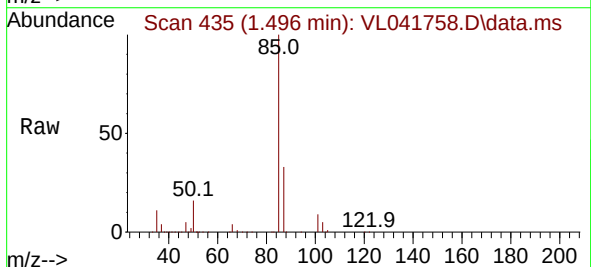
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC015

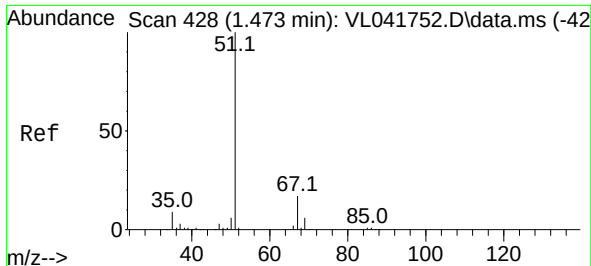
Tgt Ion: 49 Resp: 65186  
Ion Ratio Lower Upper  
49 100  
128 44.0 21.6 64.6  
130 56.0 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 13.163 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 85 Resp: 152683  
Ion Ratio Lower Upper  
85 100  
87 33.3 24.5 36.7

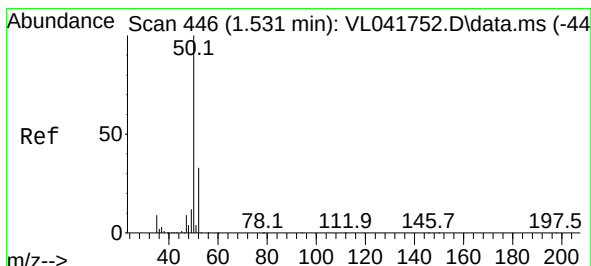
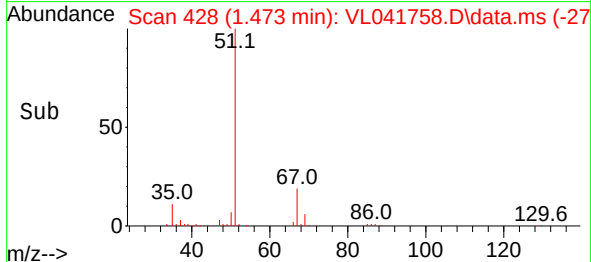
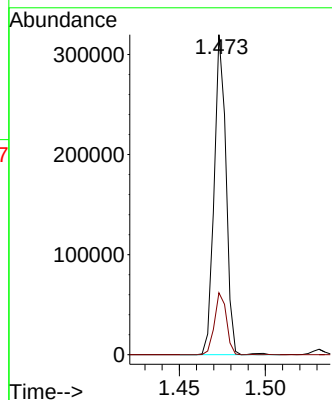
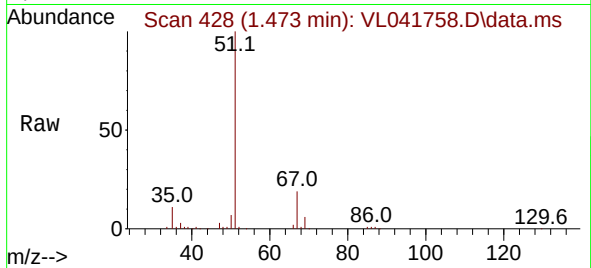




#3  
Chlorodifluoromethane  
Concen: 14.341 ppbv  
RT: 1.473 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

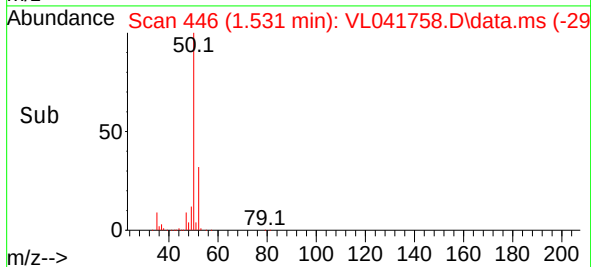
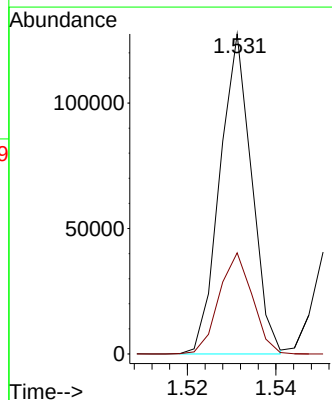
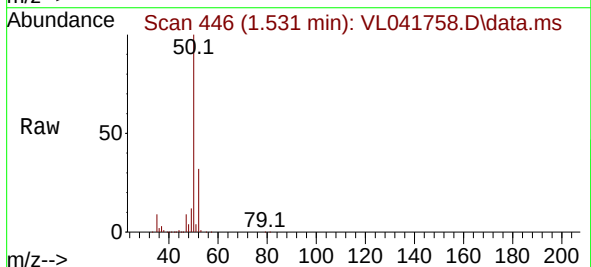
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC015

Tgt Ion: 51 Resp: 152455  
Ion Ratio Lower Upper  
51 100  
67 19.6 15.0 22.4

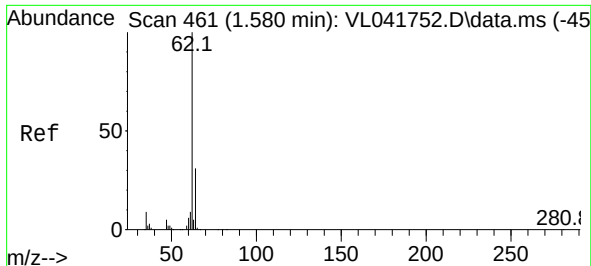


#4  
Chloromethane  
Concen: 13.996 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 50 Resp: 63517  
Ion Ratio Lower Upper  
50 100  
52 31.5 26.2 39.2



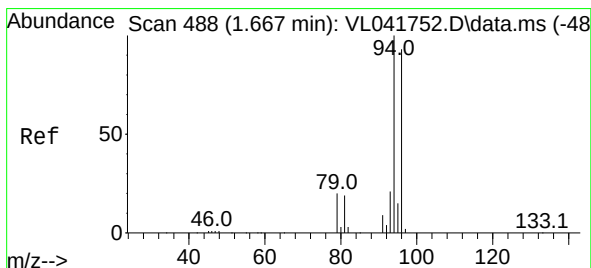
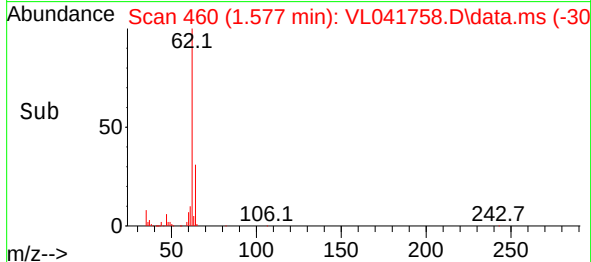
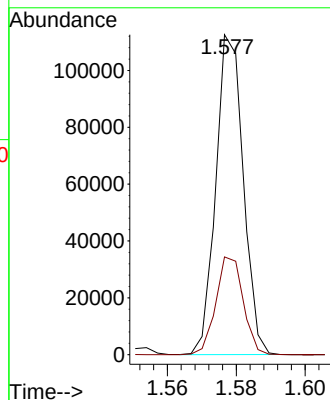
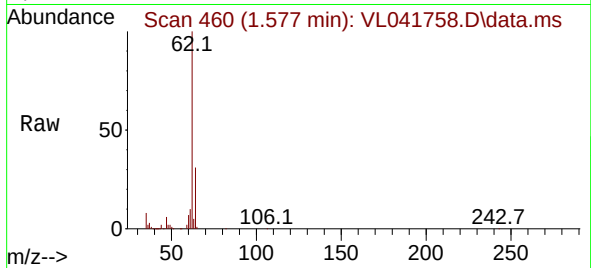




#5  
 Vinyl Chloride  
 Concen: 13.615 ppbv  
 RT: 1.577 min Scan# 461  
 Delta R.T. -0.003 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41

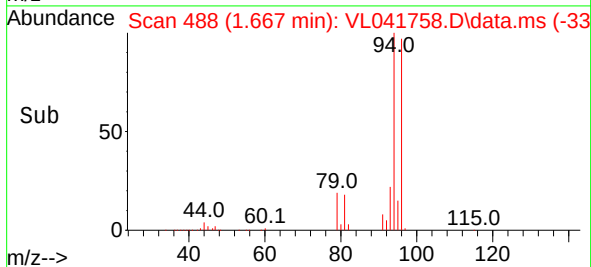
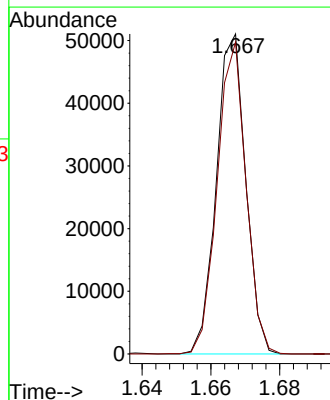
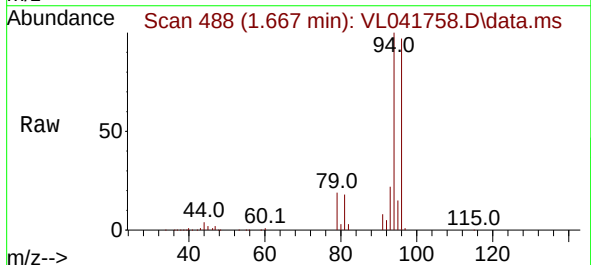
Instrument :  
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 ClientSampleId :  
 VSTDIC015

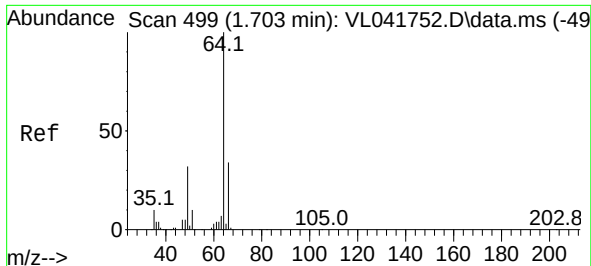
Tgt Ion: 62 Resp: 62250  
 Ion Ratio Lower Upper  
 62 100  
 64 30.6 25.1 37.7



#6  
 Bromomethane  
 Concen: 14.064 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041758.D  
 Acq: 16 Dec 2024 16:41

Tgt Ion: 94 Resp: 30345  
 Ion Ratio Lower Upper  
 94 100  
 96 97.3 74.7 112.1

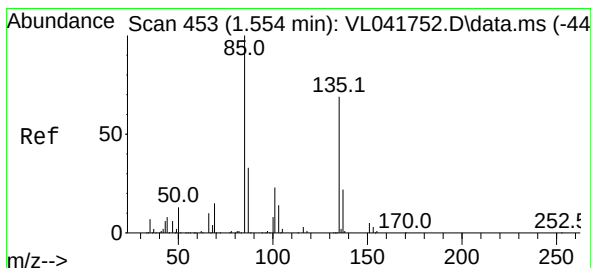
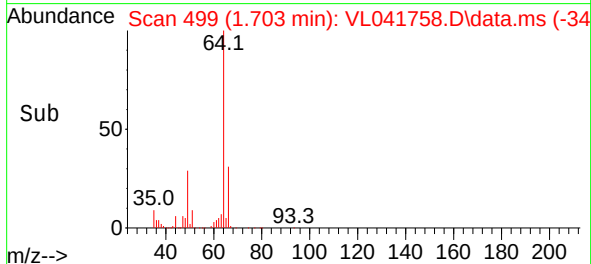
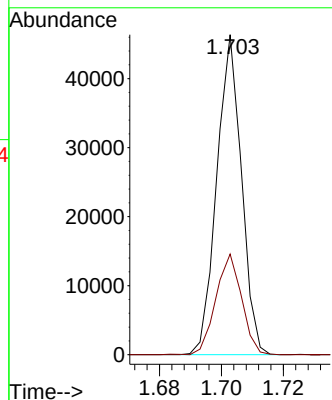
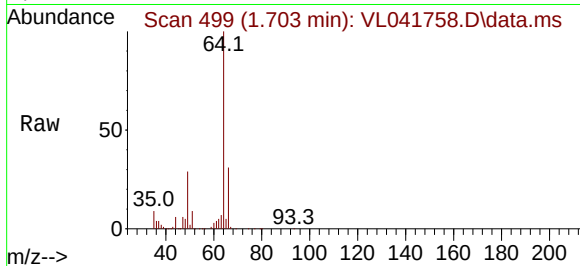




#7  
Chloroethane  
Concen: 14.442 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

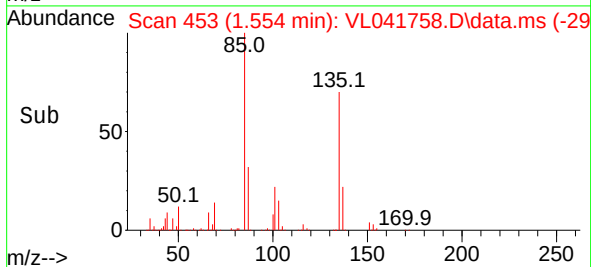
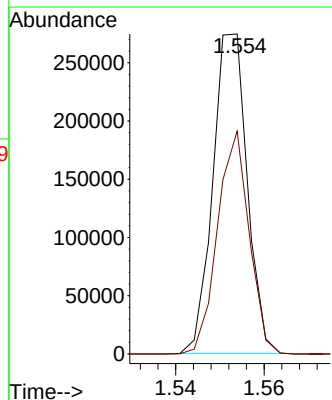
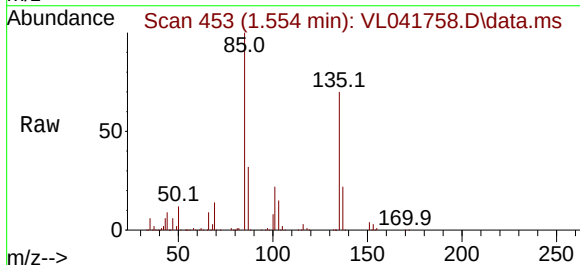
Instrument :  
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ClientSampleId :  
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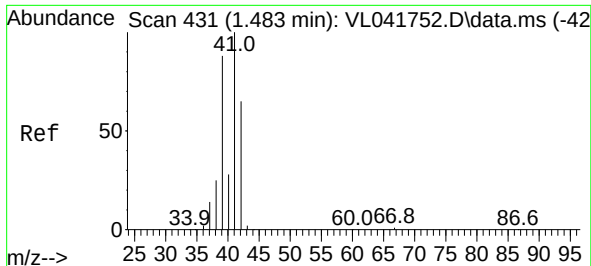
Tgt Ion: 64 Resp: 25650  
Ion Ratio Lower Upper  
64 100  
66 31.5 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 14.274 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 85 Resp: 148190  
Ion Ratio Lower Upper  
85 100  
135 64.1 51.9 77.9





#9

Propene

Concen: 13.351 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

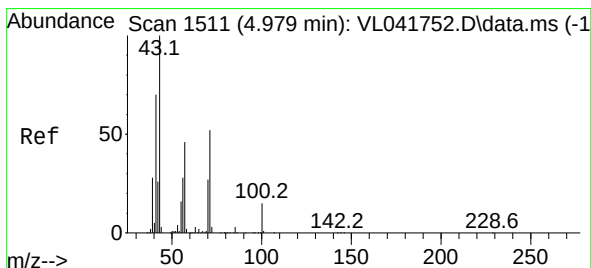
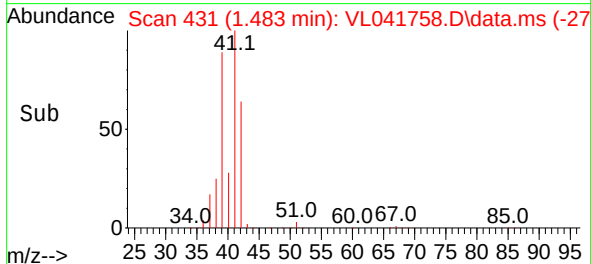
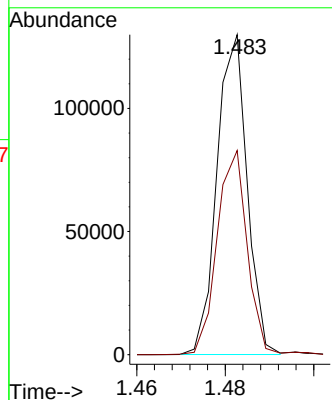
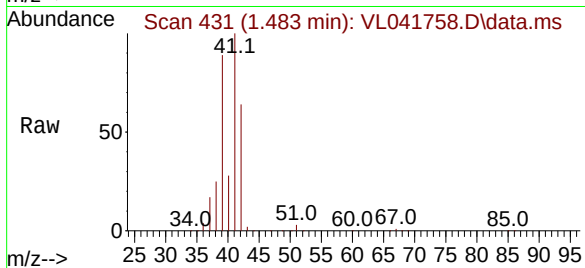
VSTDIC015

Tgt Ion: 41 Resp: 61515

Ion Ratio Lower Upper

41 100

42 64.4 52.4 78.6



#10

Heptane

Concen: 14.263 ppbv

RT: 4.978 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VL041758.D

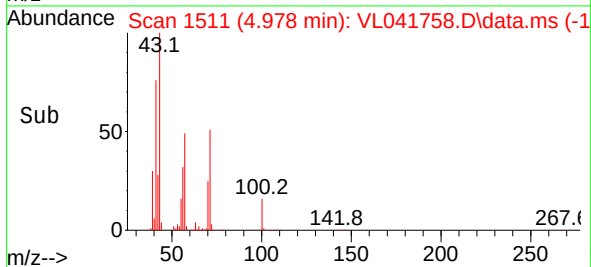
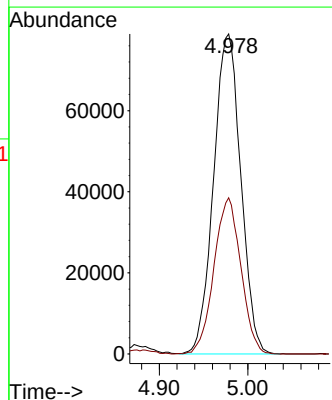
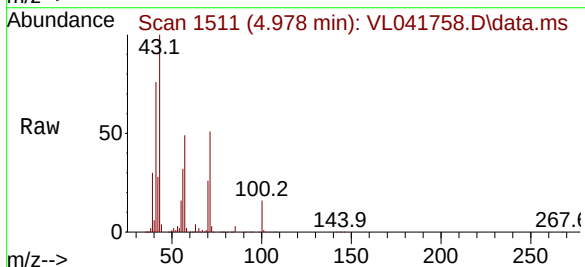
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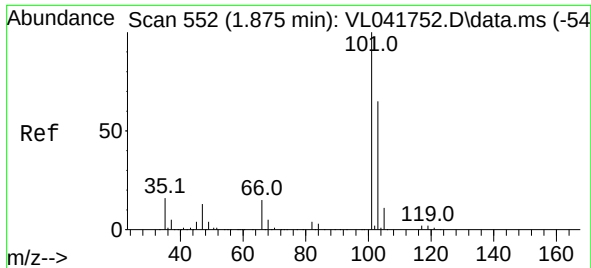
Tgt Ion: 43 Resp: 168804

Ion Ratio Lower Upper

43 100

57 48.2 38.5 57.7





#11

Trichlorofluoromethane

Concen: 14.446 ppbv

RT: 1.874 min Scan# 552

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

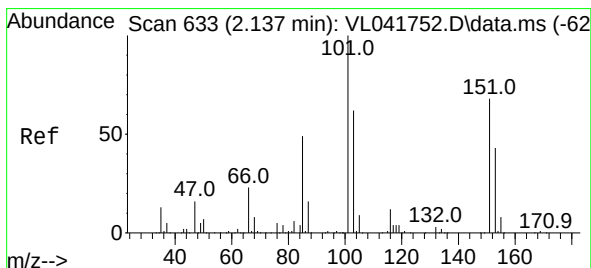
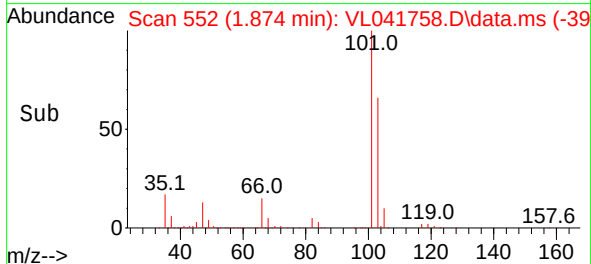
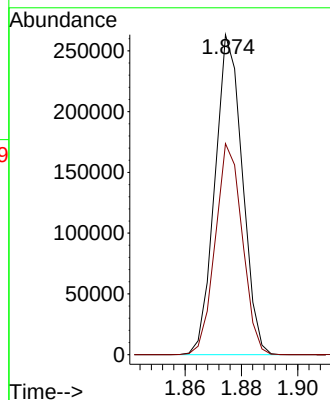
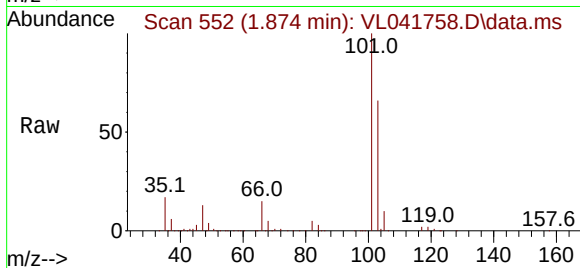
VSTDIC015

Tgt Ion:101 Resp: 177984

Ion Ratio Lower Upper

101 100

103 65.9 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 14.464 ppbv

RT: 2.136 min Scan# 633

Delta R.T. -0.000 min

Lab File: VL041758.D

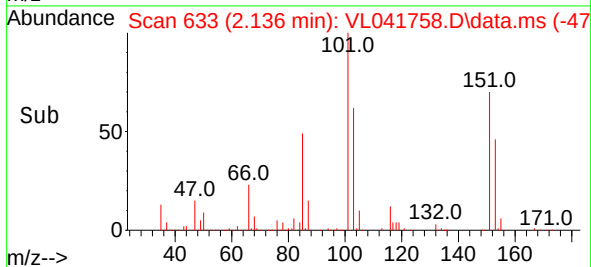
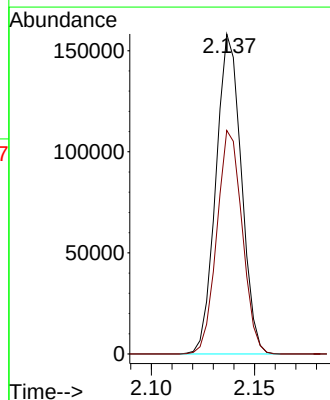
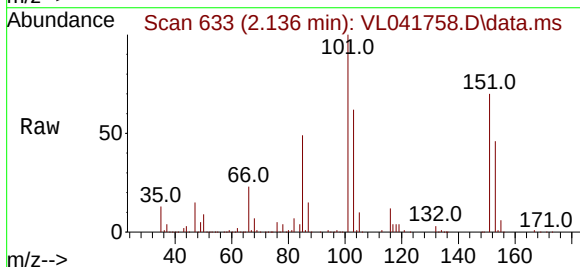
Acq: 16 Dec 2024 16:41

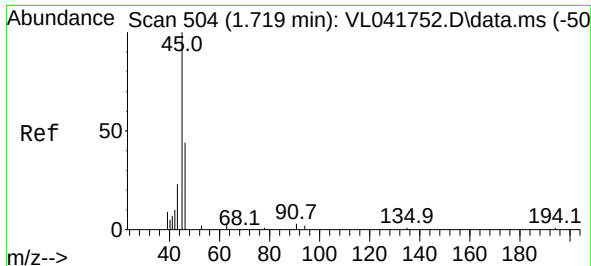
Tgt Ion:101 Resp: 135538

Ion Ratio Lower Upper

101 100

151 69.6 56.8 85.2





#13

Ethanol

Concen: 9.509 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

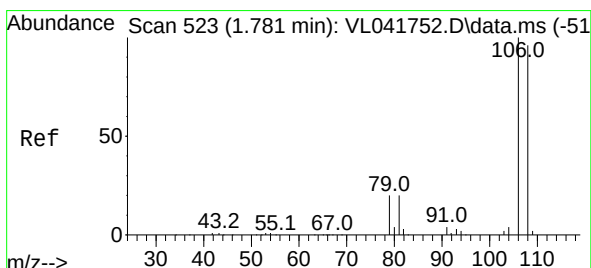
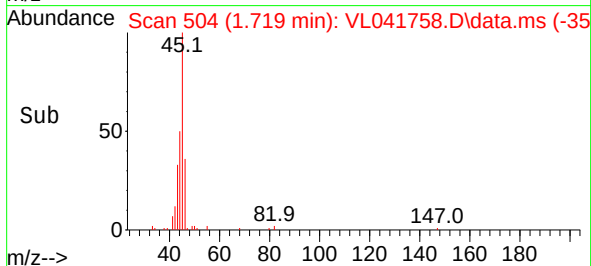
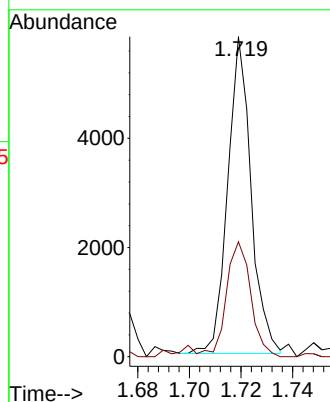
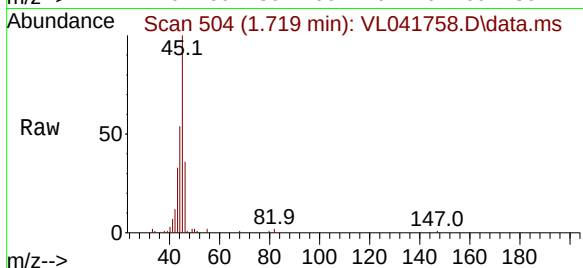
VSTDIC015

Tgt Ion: 45 Resp: 3643

Ion Ratio Lower Upper

45 100

46 41.2 16.4 65.8



#14

Bromoethene

Concen: 14.898 ppbv

RT: 1.780 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

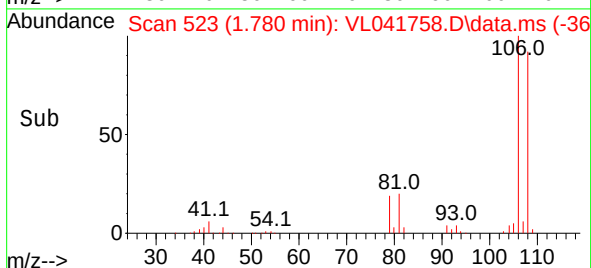
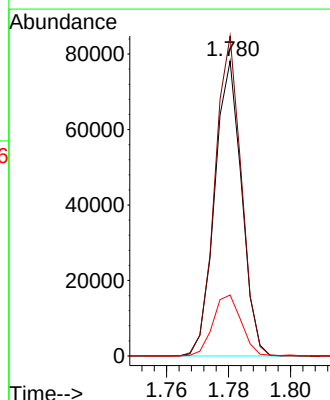
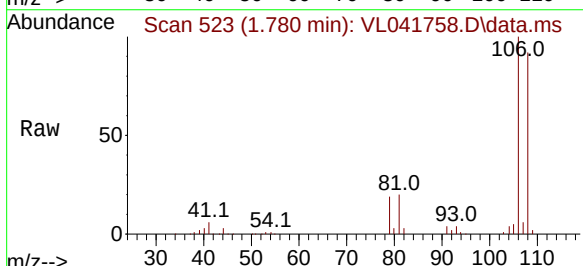
Tgt Ion: 108 Resp: 47132

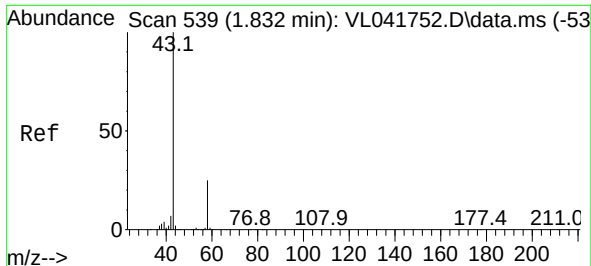
Ion Ratio Lower Upper

108 100

106 105.9 84.1 126.1

79 22.1 17.4 26.0





#15

Acetone

Concen: 11.273 ppbv

RT: 1.832 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

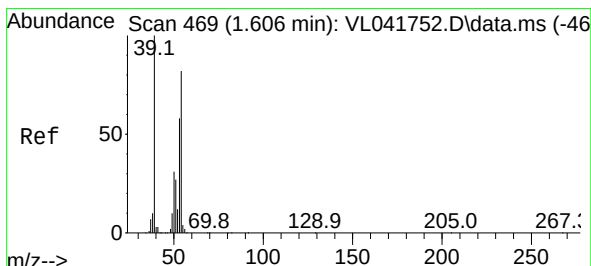
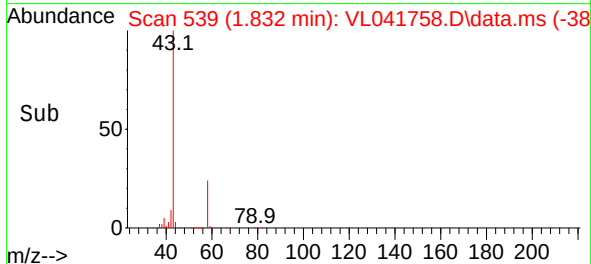
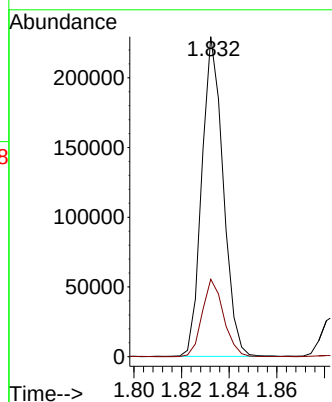
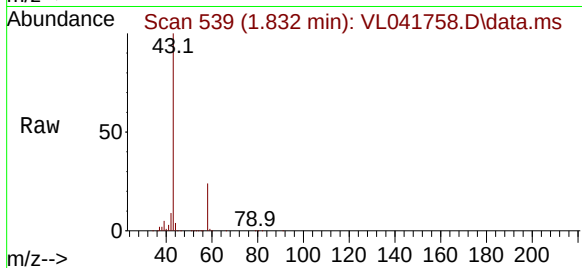
VSTDIC015

Tgt Ion: 43 Resp: 142980

Ion Ratio Lower Upper

43 100

58 24.4 19.7 29.5



#16

1,3-Butadiene

Concen: 13.678 ppbv

RT: 1.606 min Scan# 469

Delta R.T. -0.000 min

Lab File: VL041758.D

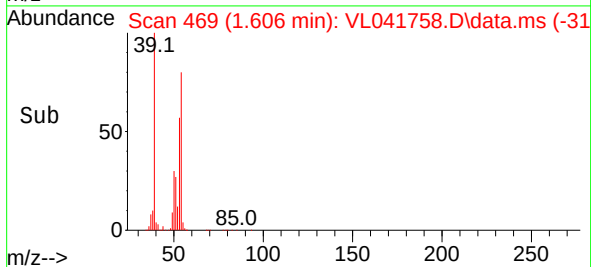
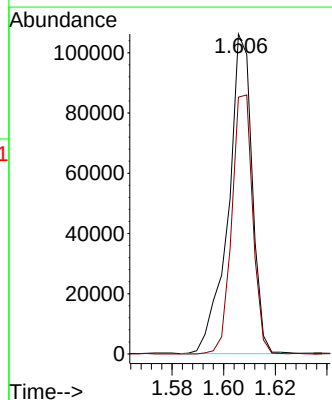
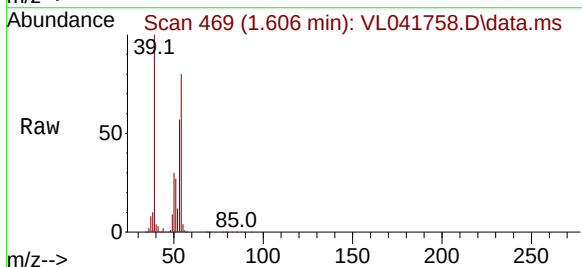
Acq: 16 Dec 2024 16:41

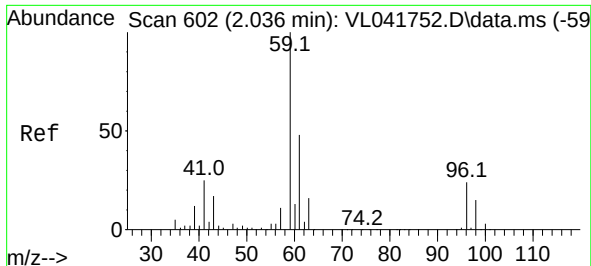
Tgt Ion: 39 Resp: 68311

Ion Ratio Lower Upper

39 100

54 71.3 58.4 87.6

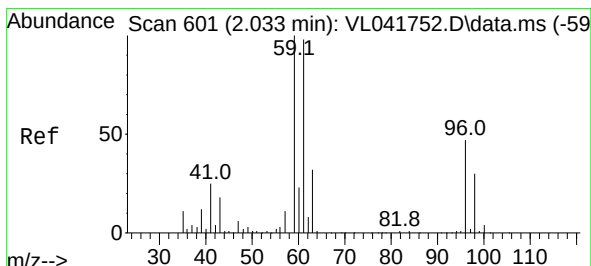
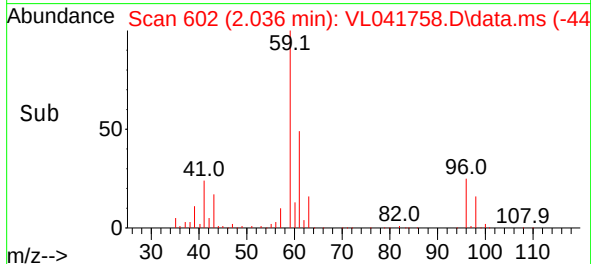
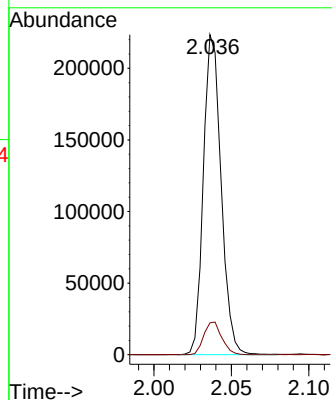
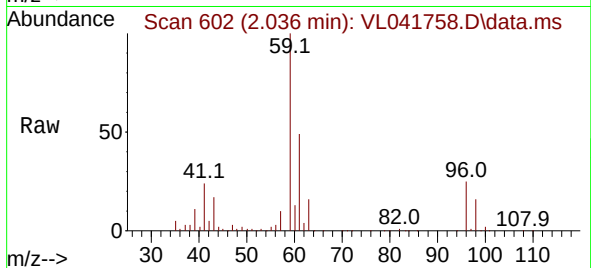




#17  
tert-Butyl alcohol  
Concen: 14.140 ppbv  
RT: 2.036 min Scan# 602  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

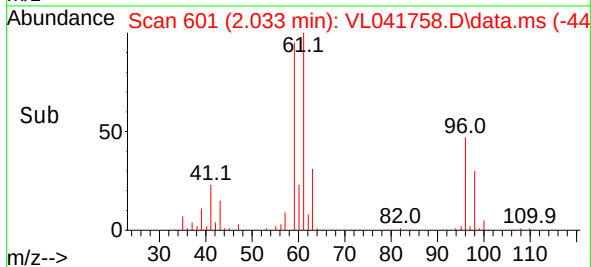
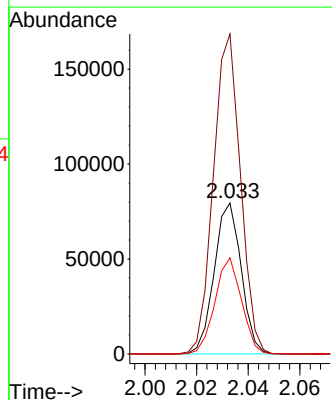
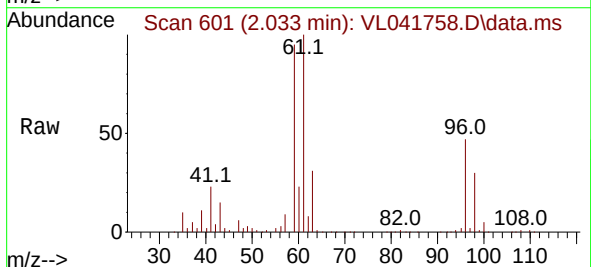
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC015

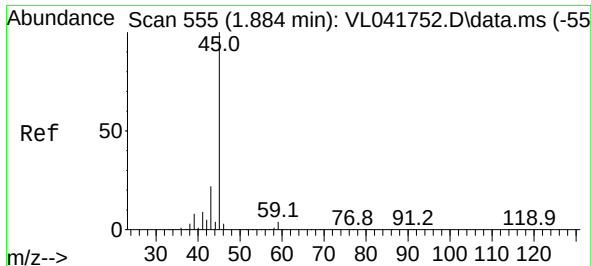
Tgt Ion: 59 Resp: 177908  
Ion Ratio Lower Upper  
59 100  
57 10.4 8.6 13.0



#18  
1,1-Dichloroethene  
Concen: 14.705 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 96 Resp: 57770  
Ion Ratio Lower Upper  
96 100  
61 211.8 167.7 251.5  
98 63.6 51.1 76.7





#19

Isopropyl Alcohol

Concen: 10.802 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

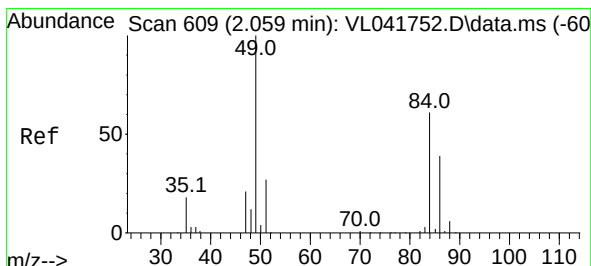
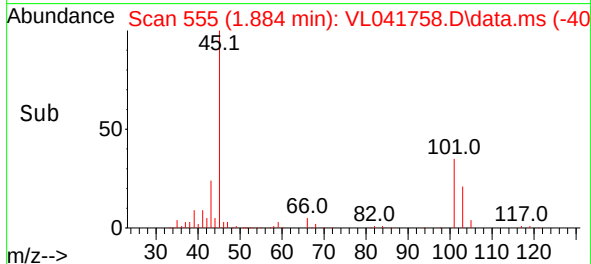
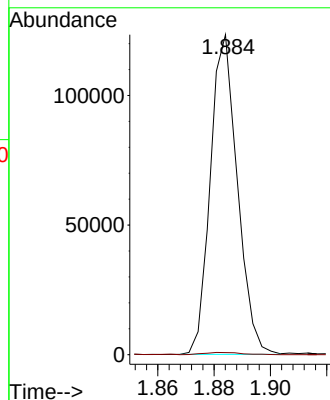
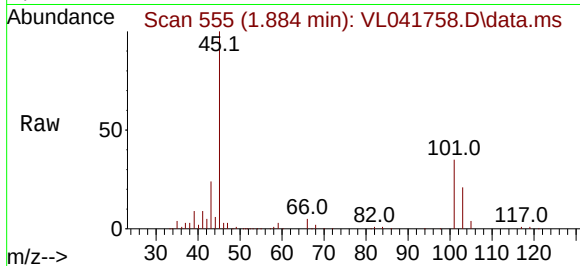
VSTDIC015

Tgt Ion: 45 Resp: 82211

Ion Ratio Lower Upper

45 100

58 42.5 33.3 49.9



#20

Methylene Chloride

Concen: 13.371 ppbv

RT: 2.059 min Scan# 609

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion: 84 Resp: 48356

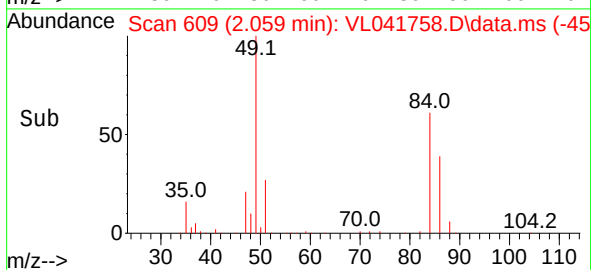
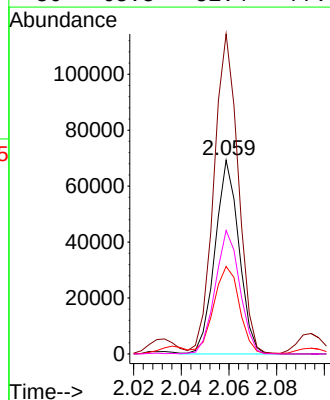
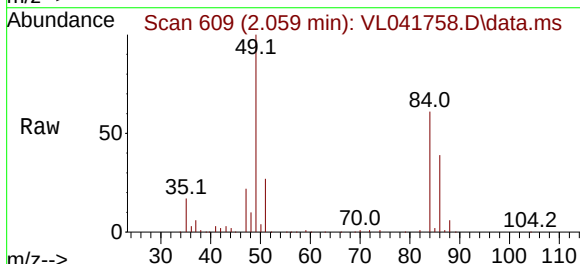
Ion Ratio Lower Upper

84 100

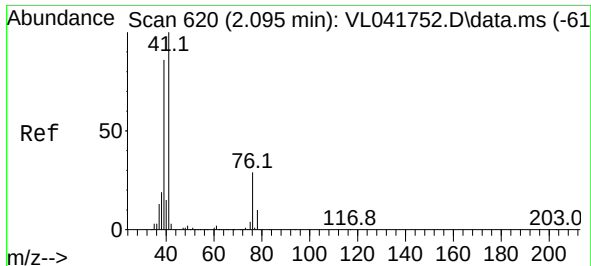
49 164.9 132.6 198.8

51 44.9 37.6 56.4

86 63.8 51.4 77.0







#21

Allyl Chloride

Concen: 14.760 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

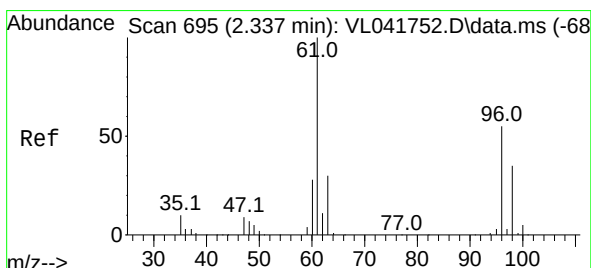
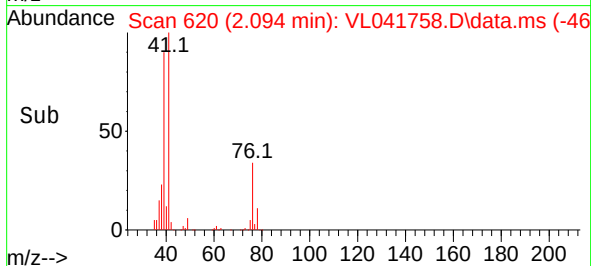
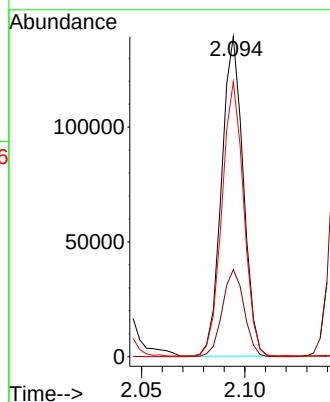
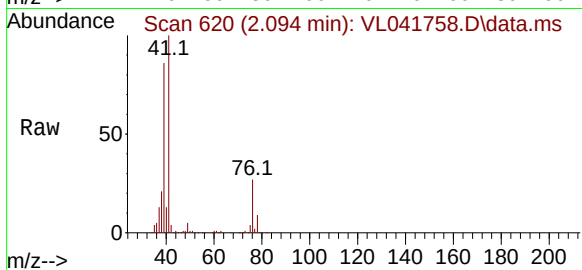
Tgt Ion: 41 Resp: 101528

Ion Ratio Lower Upper

41 100

76 27.3 22.3 33.5

39 86.2 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 14.461 ppbv

RT: 2.337 min Scan# 695

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

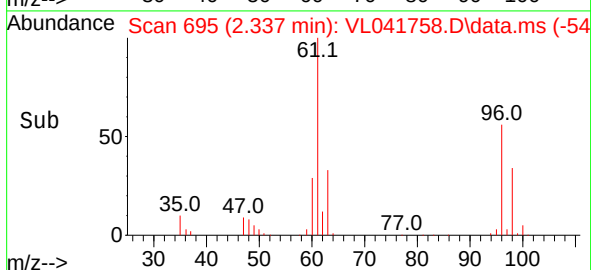
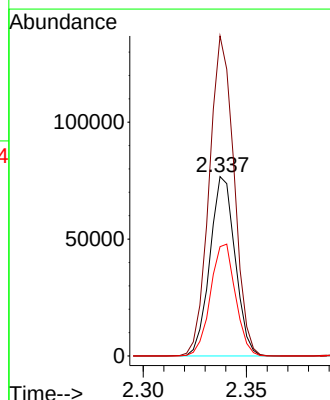
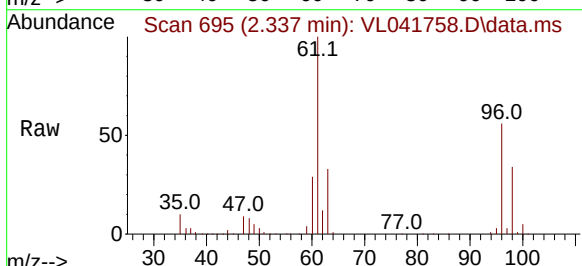
Tgt Ion: 96 Resp: 65029

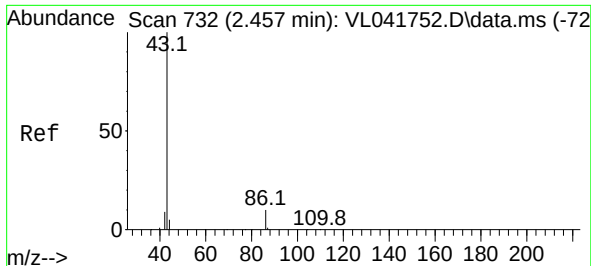
Ion Ratio Lower Upper

96 100

61 178.4 146.3 219.5

98 60.9 50.8 76.2



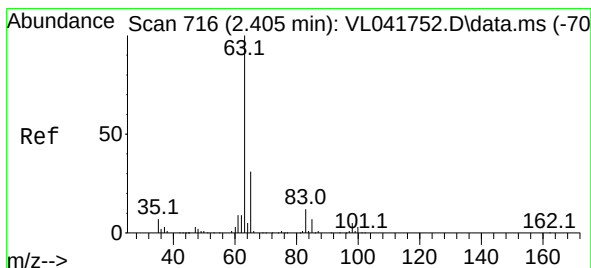
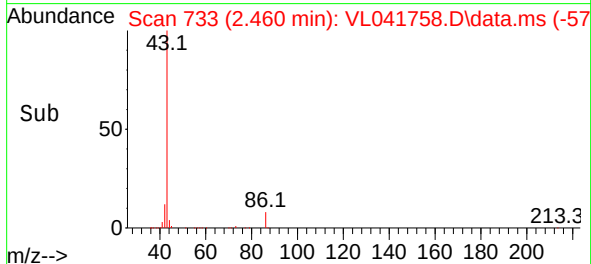
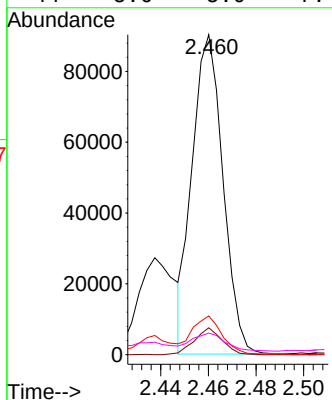
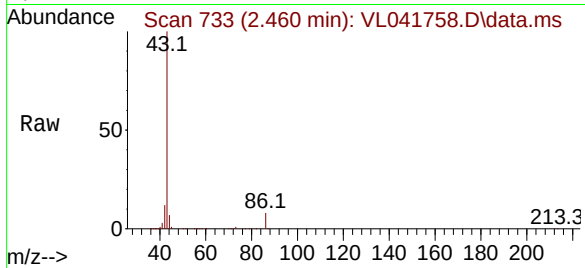


#23  
Vinyl Acetate  
Concen: 14.661 ppbv  
RT: 2.460 min Scan# 716  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC015

Tgt Ion: 43 Resp: 80795

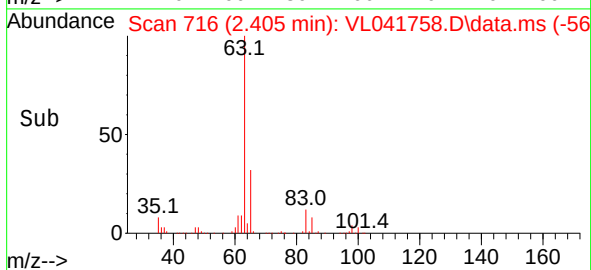
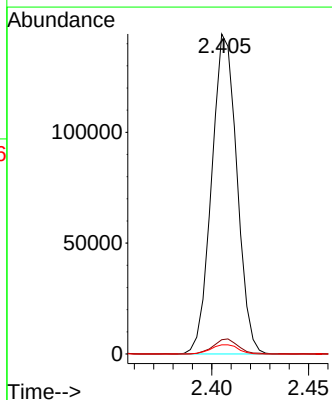
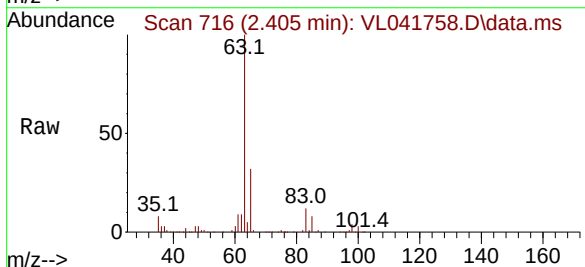
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 8.4   | 6.6   | 10.0  |
| 42  | 11.8  | 8.2   | 12.2  |
| 44  | 5.6   | 5.0   | 7.4   |

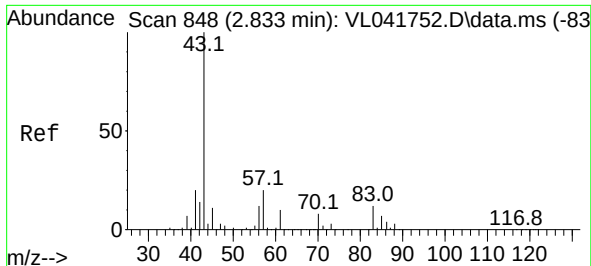


#24  
1,1-Dichloroethane  
Concen: 14.394 ppbv  
RT: 2.405 min Scan# 716  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 63 Resp: 131030

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 98  | 4.5   | 2.3   | 6.8   |
| 100 | 2.8   | 1.4   | 4.2   |

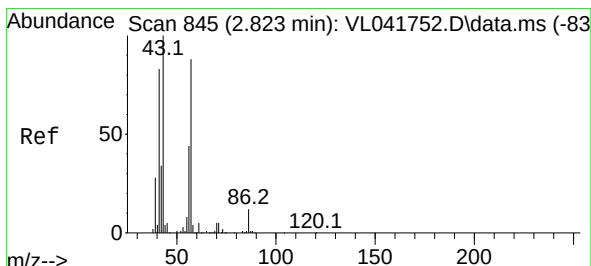
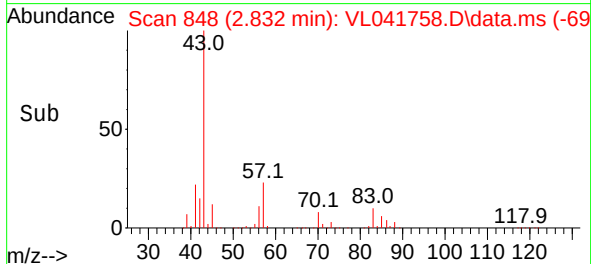
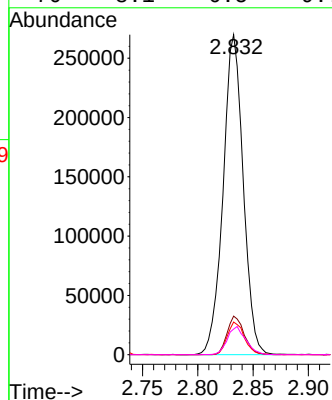
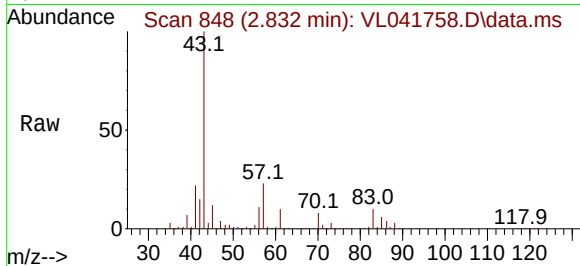




#25  
Ethyl Acetate  
Concen: 14.402 ppbv  
RT: 2.832 min Scan# 848  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

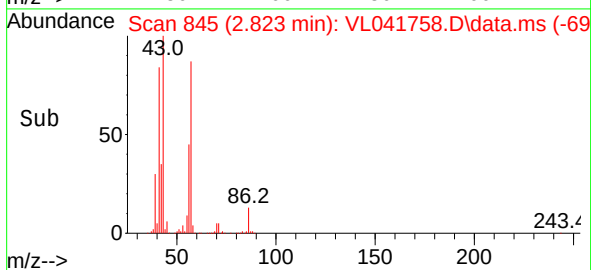
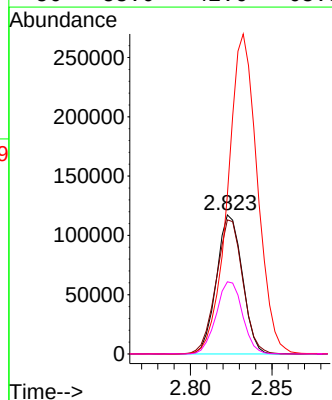
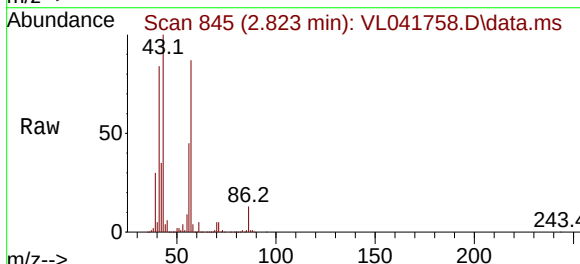
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC015

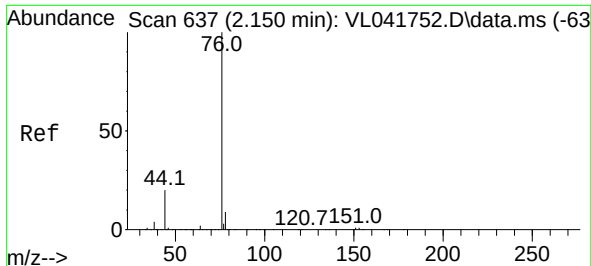
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 341429 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 10.3  | 8.1   | 12.1   |
| 61       | 8.7   | 7.0   | 10.6   |
| 70       | 8.1   | 6.5   | 9.7    |



#26  
Hexane  
Concen: 14.369 ppbv  
RT: 2.823 min Scan# 845  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 128657 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 100.1 | 79.6  | 119.4  |
| 43       | 265.4 | 211.0 | 316.6  |
| 56       | 53.0  | 42.6  | 63.8   |





#27

Carbon Disulfide

Concen: 16.726 ppbv

RT: 2.149 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

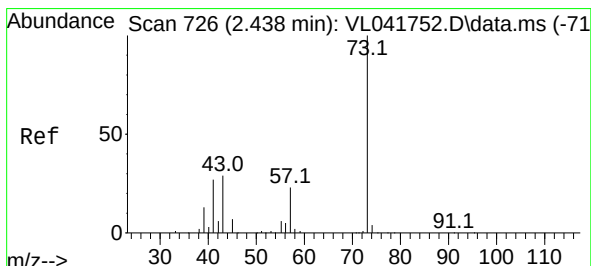
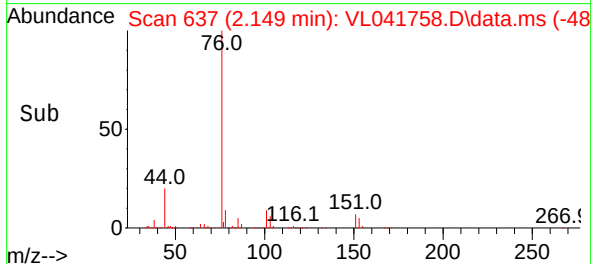
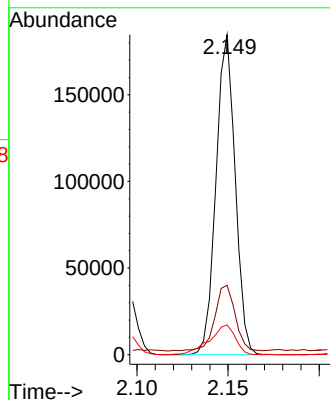
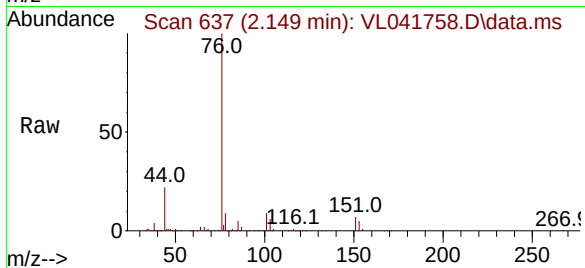
Tgt Ion: 76 Resp: 134963

Ion Ratio Lower Upper

76 100

44 22.4 17.6 26.4

78 12.5 10.2 15.4



#28

Methyl tert-Butyl Ether

Concen: 13.871 ppbv

RT: 2.438 min Scan# 726

Delta R.T. -0.000 min

Lab File: VL041758.D

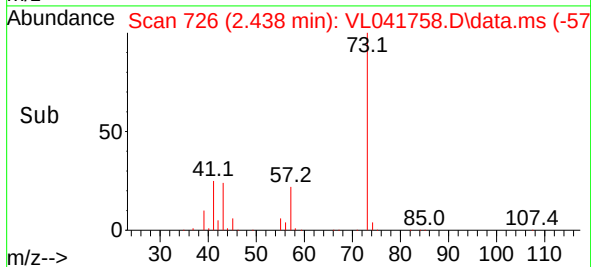
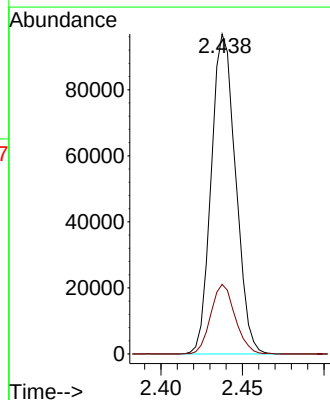
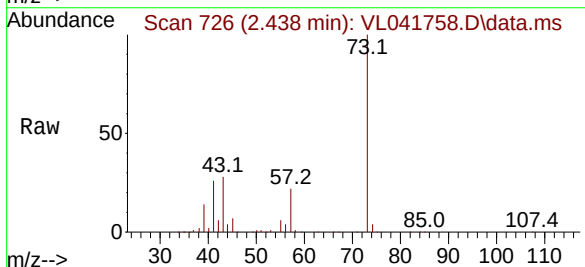
Acq: 16 Dec 2024 16:41

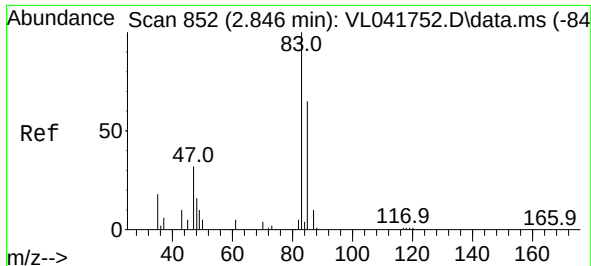
Tgt Ion: 73 Resp: 100758

Ion Ratio Lower Upper

73 100

57 21.8 17.6 26.4





#29

Chloroform

Concen: 14.489 ppbv

RT: 2.845 min Scan# 852

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

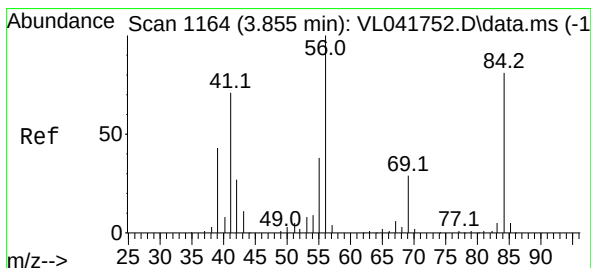
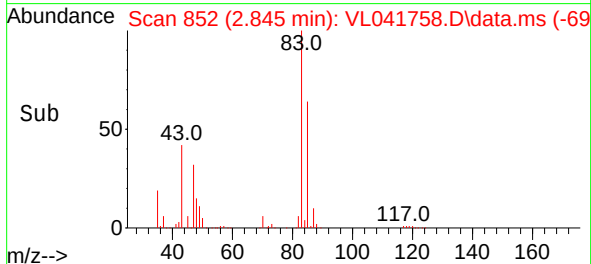
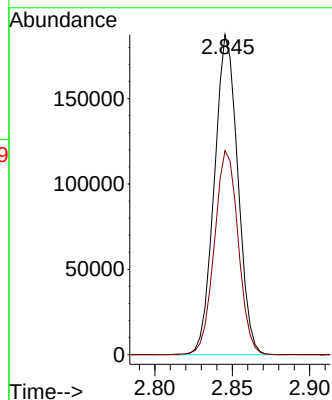
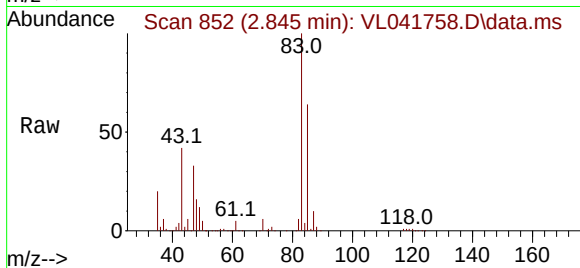
VSTDICC015

Tgt Ion: 83 Resp: 197713

Ion Ratio Lower Upper

83 100

85 63.7 51.8 77.6



#30

Cyclohexane

Concen: 14.497 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

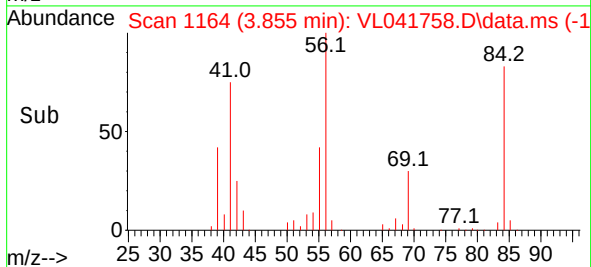
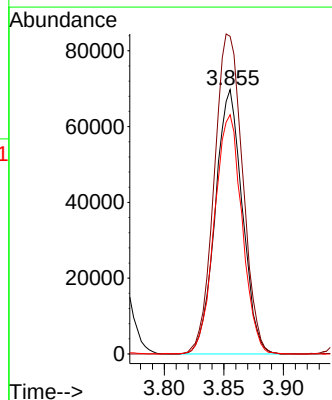
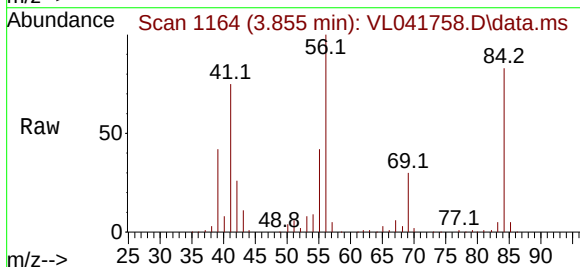
Tgt Ion: 84 Resp: 110448

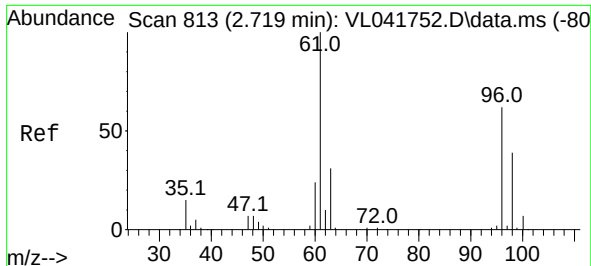
Ion Ratio Lower Upper

84 100

56 126.9 102.3 153.5

41 92.2 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 14.355 ppbv

RT: 2.719 min Scan# 81

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

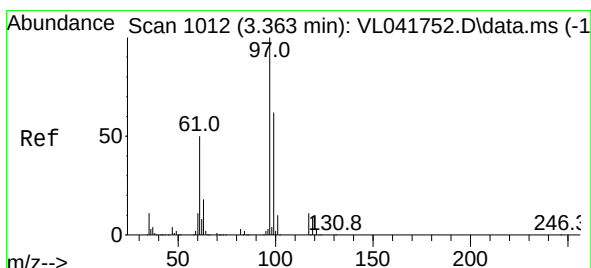
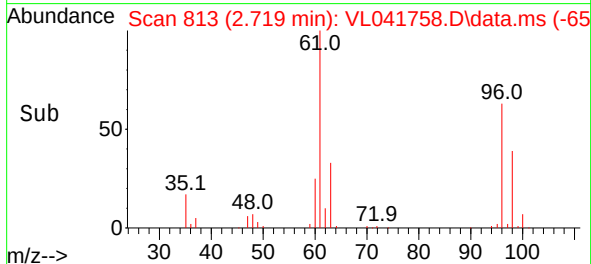
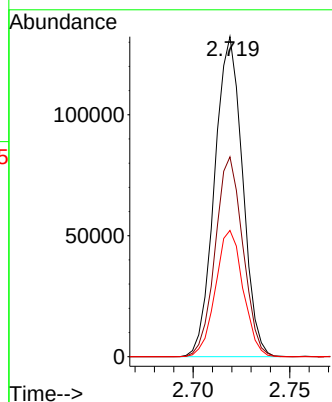
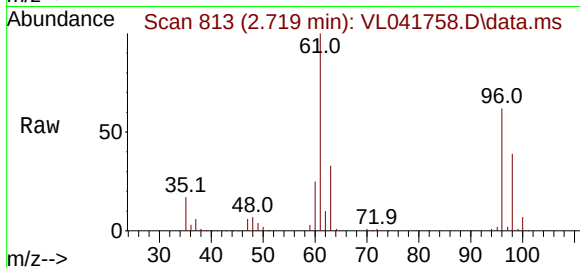
Tgt Ion: 61 Resp: 132821

Ion Ratio Lower Upper

61 100

96 62.4 49.7 74.5

98 39.4 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 15.055 ppbv

RT: 3.366 min Scan# 1013

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

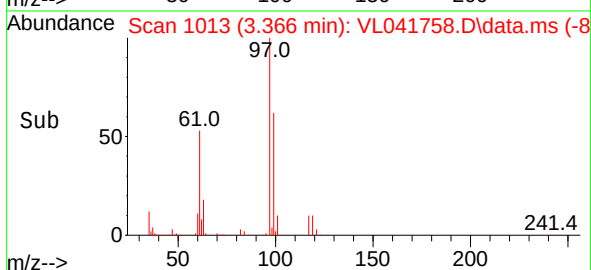
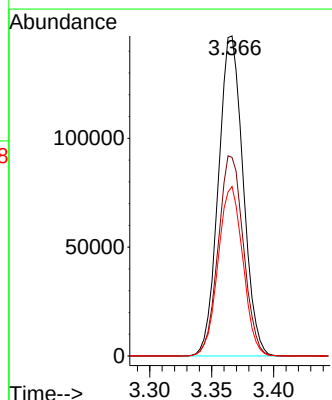
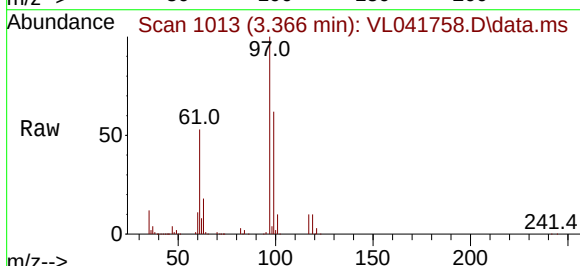
Tgt Ion: 97 Resp: 204468

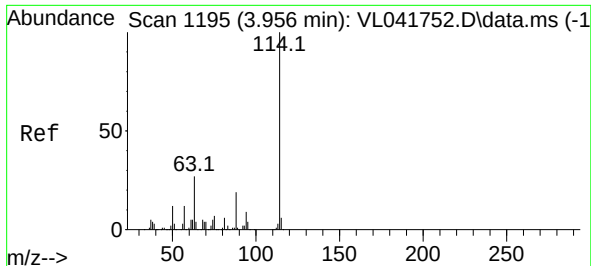
Ion Ratio Lower Upper

97 100

99 63.6 51.0 76.4

61 53.1 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

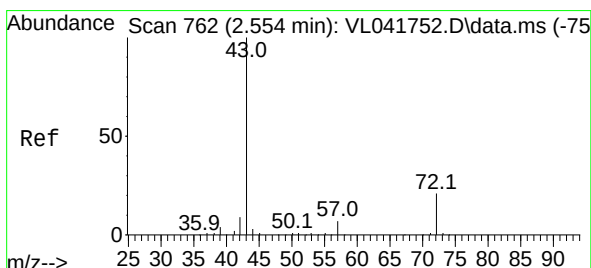
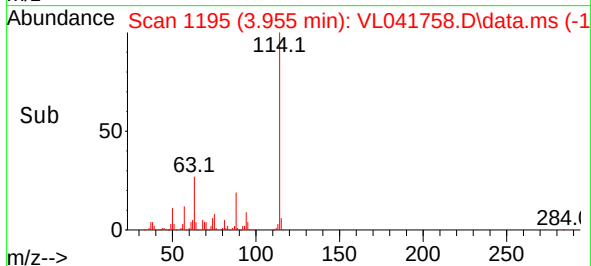
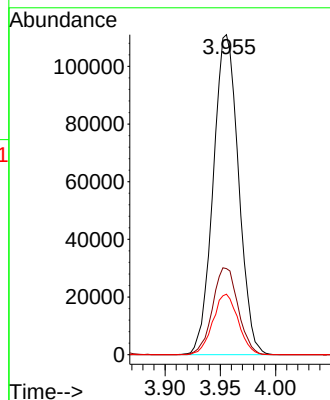
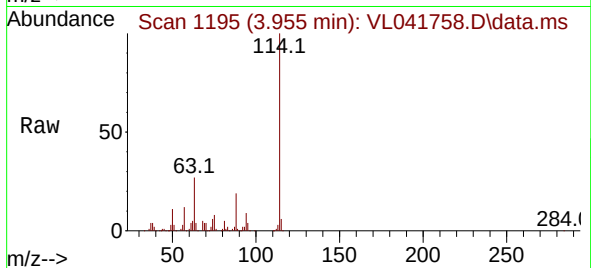
Tgt Ion:114 Resp: 176856

Ion Ratio Lower Upper

114 100

63 27.5 21.8 32.8

88 18.9 14.8 22.2



#34

2-Butanone

Concen: 13.736 ppbv

RT: 2.554 min Scan# 762

Delta R.T. -0.000 min

Lab File: VL041758.D

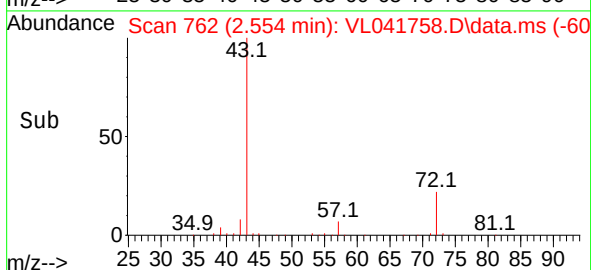
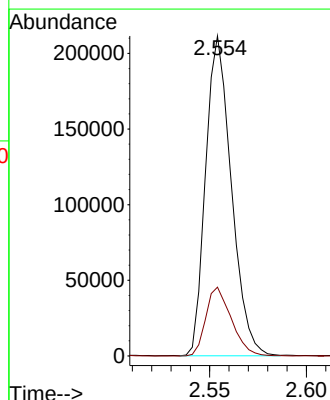
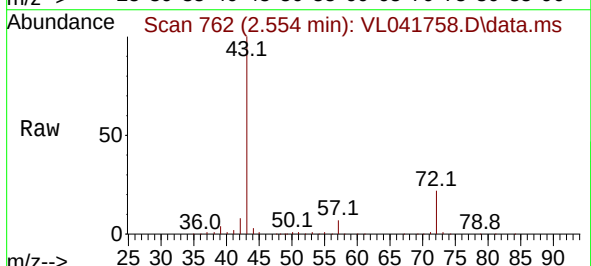
Acq: 16 Dec 2024 16:41

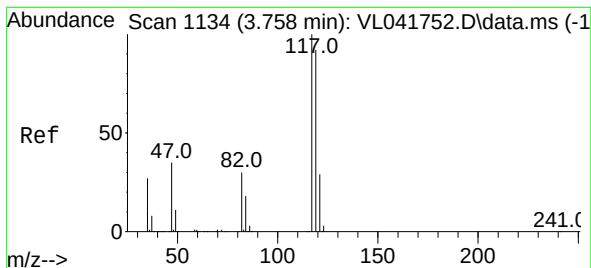
Tgt Ion: 43 Resp: 195439

Ion Ratio Lower Upper

43 100

72 21.4 16.8 25.2





#35

Carbon Tetrachloride

Concen: 16.428 ppbv

RT: 3.761 min Scan# 1135

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

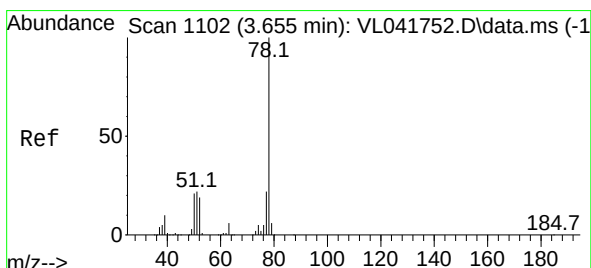
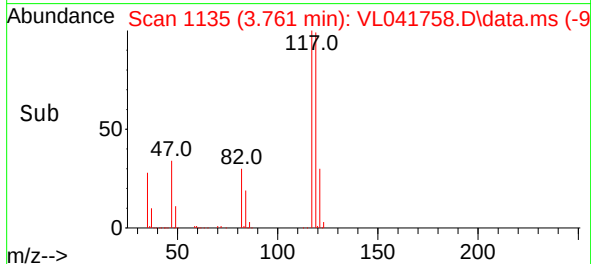
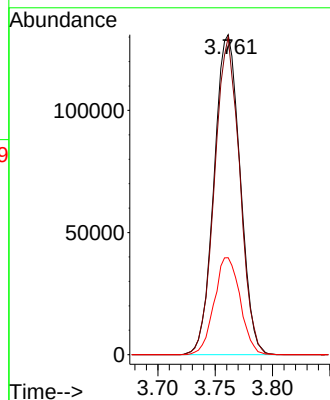
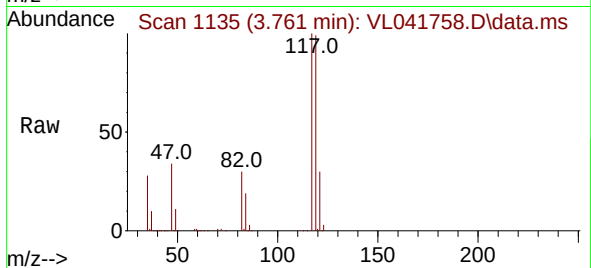
Tgt Ion:117 Resp: 206252

Ion Ratio Lower Upper

117 100

119 99.2 73.7 110.5

121 30.3 23.0 34.4



#36

Benzene

Concen: 14.192 ppbv

RT: 3.654 min Scan# 1102

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

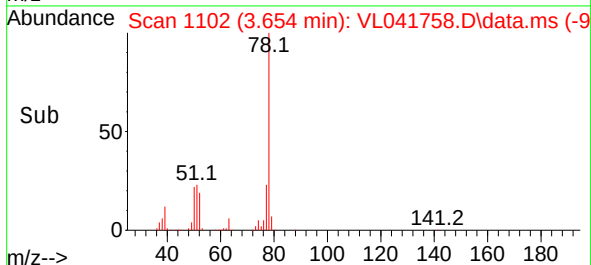
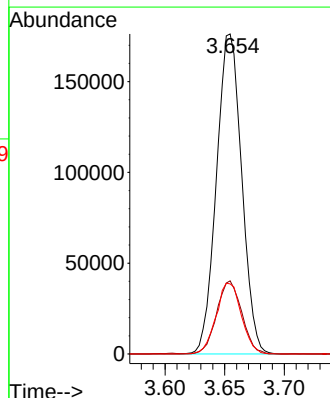
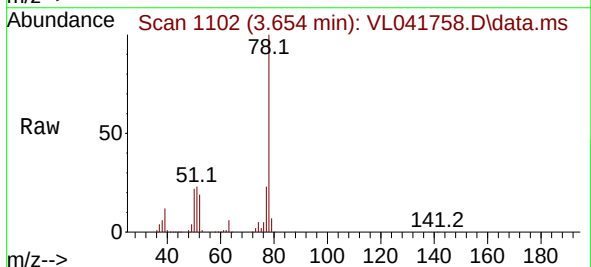
Tgt Ion: 78 Resp: 259630

Ion Ratio Lower Upper

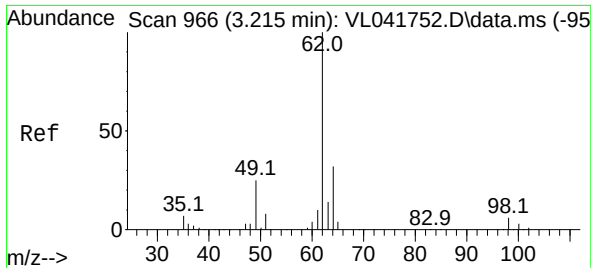
78 100

77 22.8 17.8 26.6

50 21.9 17.2 25.8



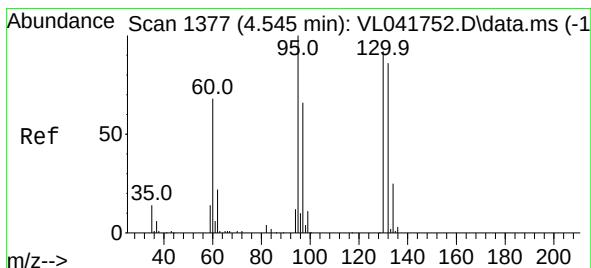
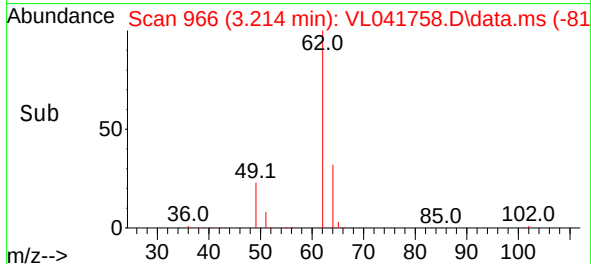
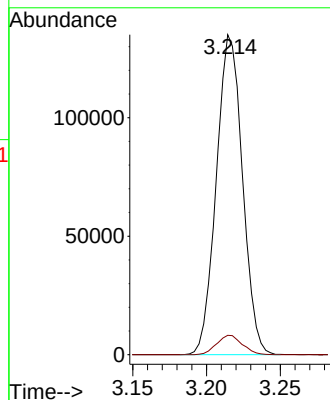
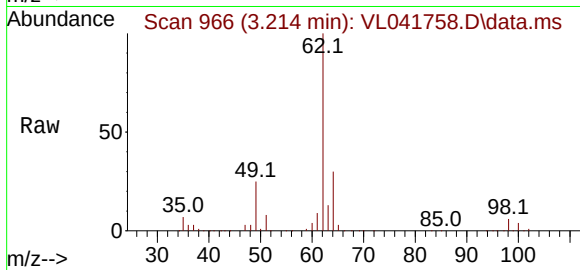




#37  
1,2-Dichloroethane  
Concen: 14.633 ppbv  
RT: 3.214 min Scan# 9  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

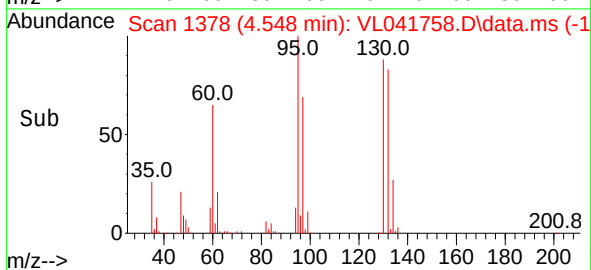
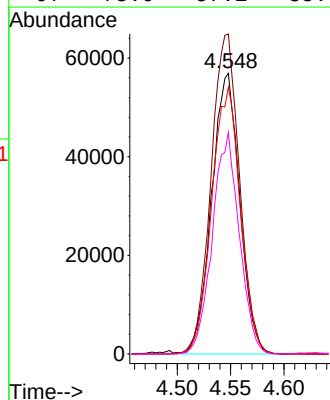
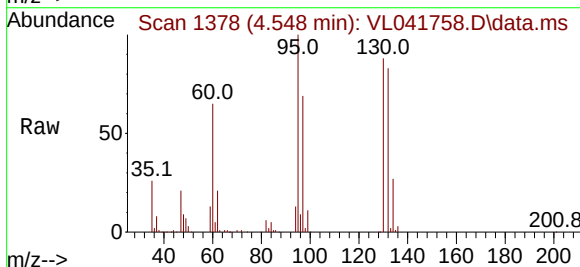
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

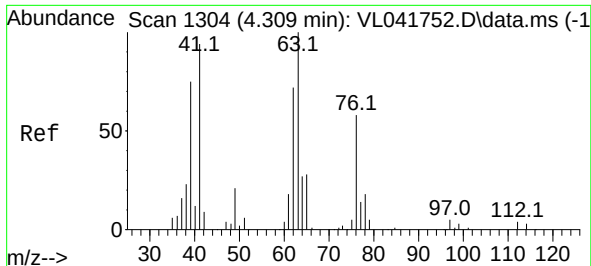
Tgt Ion: 62 Resp: 166576  
Ion Ratio Lower Upper  
62 100  
98 5.9 4.7 7.1



#38  
Trichloroethene  
Concen: 13.525 ppbv  
RT: 4.548 min Scan# 1378  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion:130 Resp: 104184  
Ion Ratio Lower Upper  
130 100  
95 114.0 87.0 130.6  
132 95.0 75.0 112.6  
97 78.9 57.2 85.8





#39

1,2-Dichloropropane

Concen: 14.150 ppbv

RT: 4.312 min Scan# 1305

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

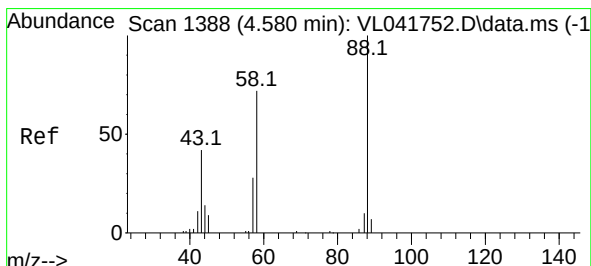
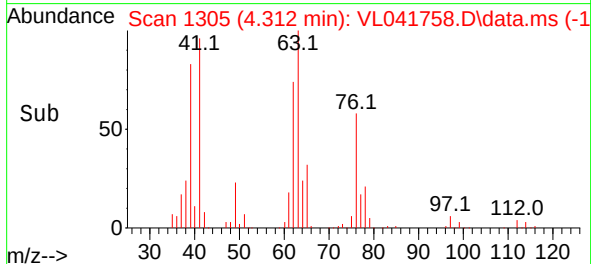
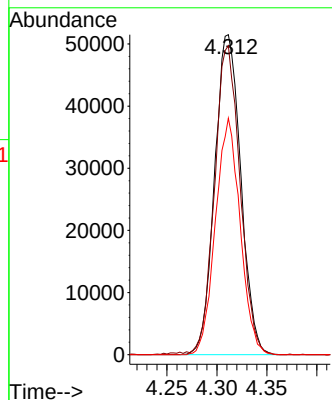
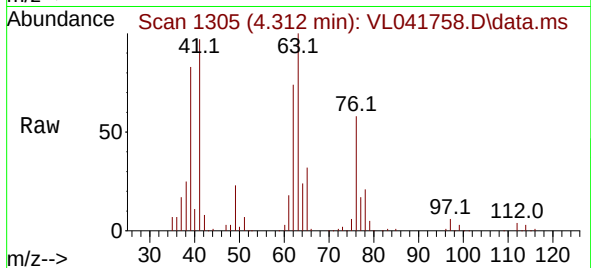
Tgt Ion: 63 Resp: 93624

Ion Ratio Lower Upper

63 100

41 96.6 75.3 112.9

62 73.9 57.3 85.9



#40

1,4-Dioxane

Concen: 13.730 ppbv

RT: 4.577 min Scan# 1387

Delta R.T. -0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion: 88 Resp: 44377

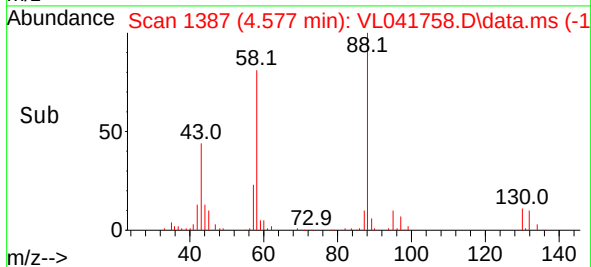
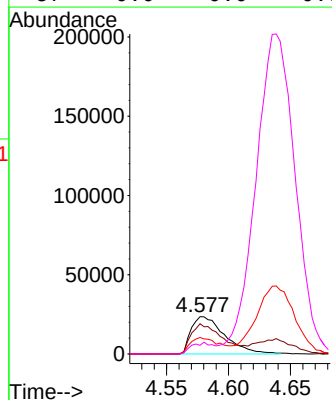
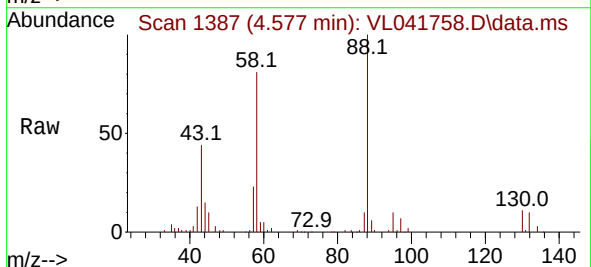
Ion Ratio Lower Upper

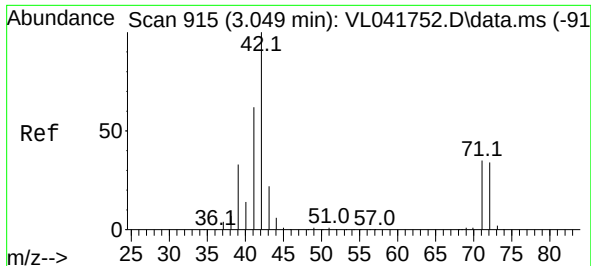
88 100

58 77.8 61.0 91.6

43 42.4 29.4 44.0

57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 14.254 ppbv

RT: 3.052 min Scan# 915

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

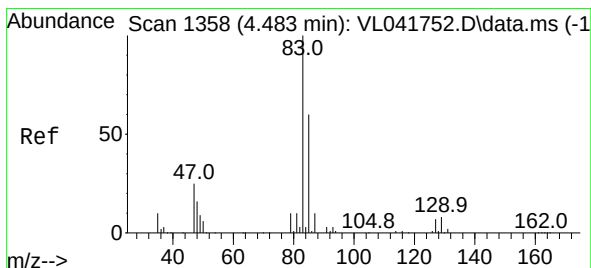
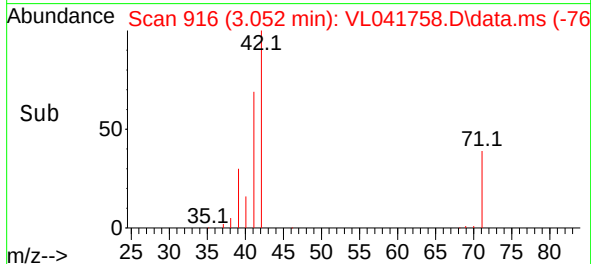
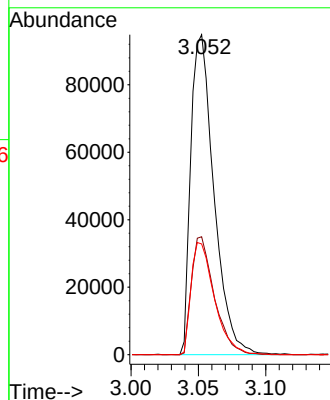
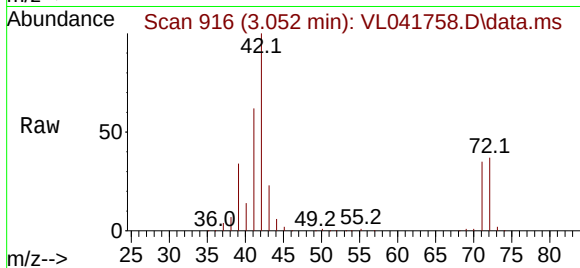
Tgt Ion: 42 Resp: 113618

Ion Ratio Lower Upper

42 100

72 36.4 29.1 43.7

71 35.3 28.4 42.6



#42

Bromodichloromethane

Concen: 16.123 ppbv

RT: 4.486 min Scan# 1359

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

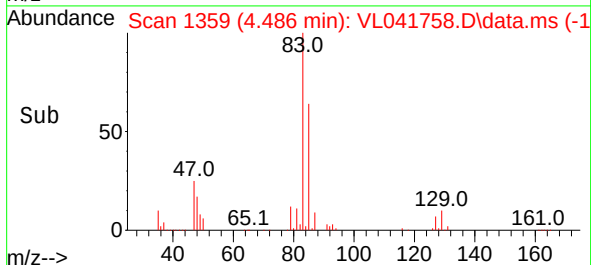
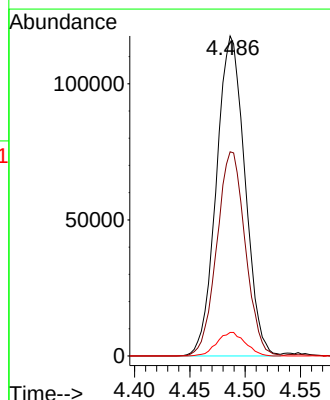
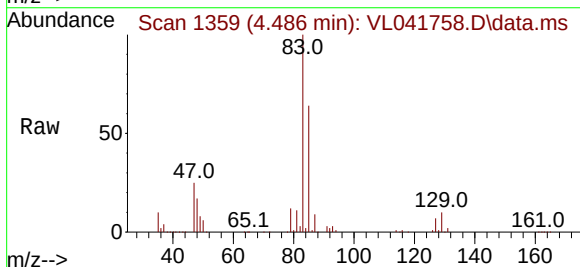
Tgt Ion: 83 Resp: 211145

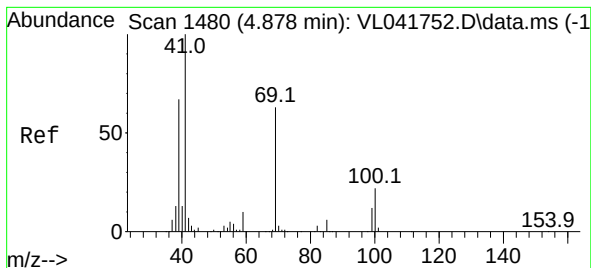
Ion Ratio Lower Upper

83 100

85 63.7 48.0 72.0

127 7.3 5.8 8.8





#43

Methyl Methacrylate

Concen: 15.374 ppbv

RT: 4.878 min Scan# 1480

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

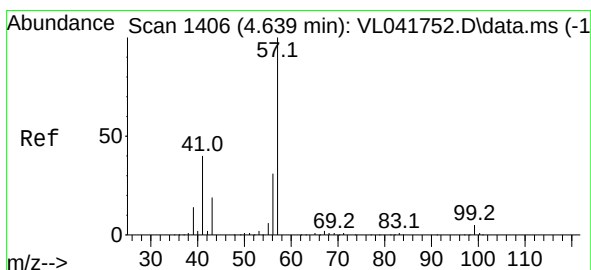
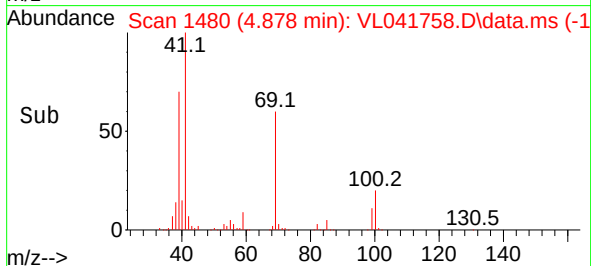
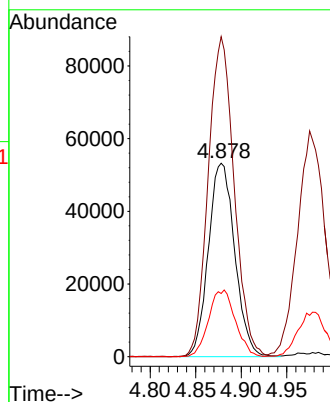
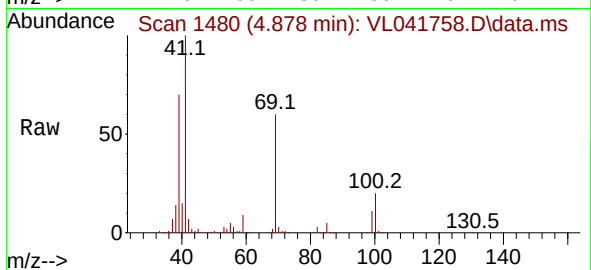
Tgt Ion: 69 Resp: 107165

Ion Ratio Lower Upper

69 100

41 162.6 130.3 195.5

100 35.0 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 14.274 ppbv

RT: 4.638 min Scan# 1406

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

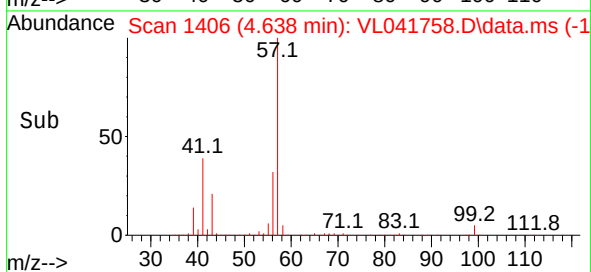
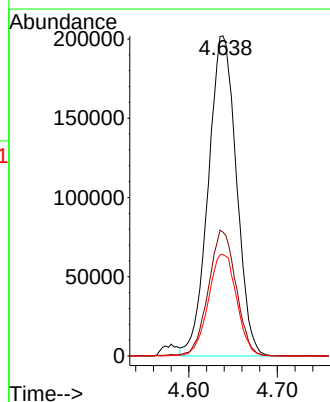
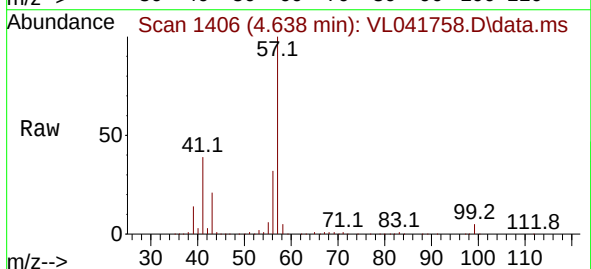
Tgt Ion: 57 Resp: 445947

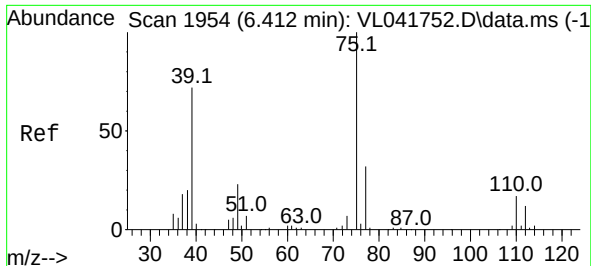
Ion Ratio Lower Upper

57 100

41 38.8 30.7 46.1

56 32.1 25.4 38.0





#45

t-1,3-Dichloropropene

Concen: 15.973 ppbv

RT: 6.409 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

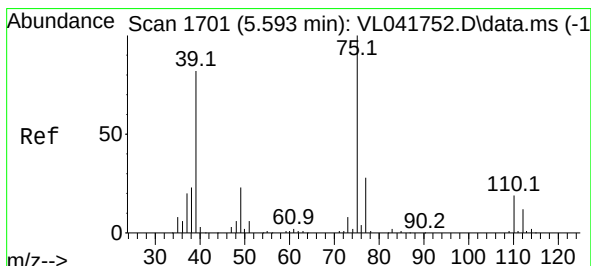
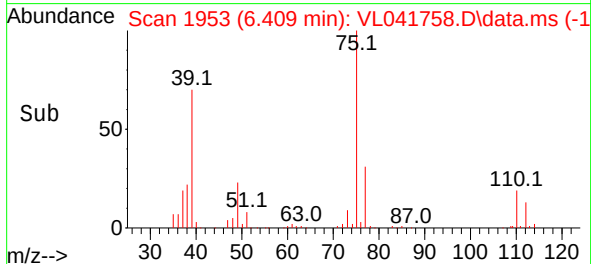
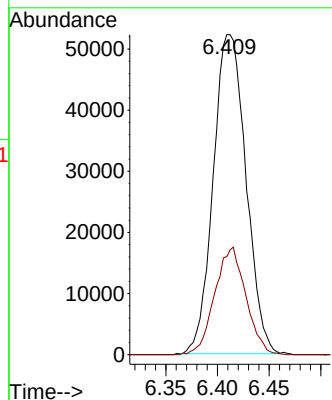
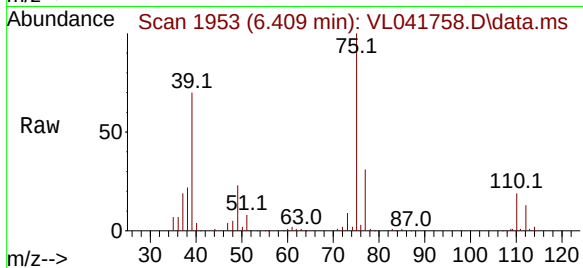
VSTDIC015

Tgt Ion: 75 Resp: 115159

Ion Ratio Lower Upper

75 100

77 30.6 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 15.643 ppbv

RT: 5.600 min Scan# 1703

Delta R.T. 0.006 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

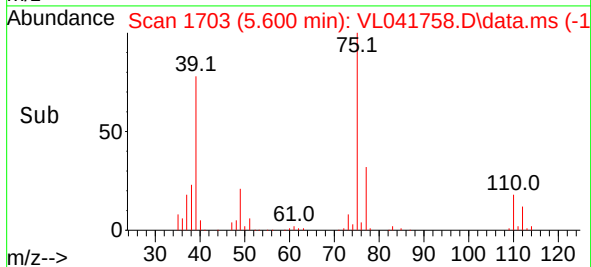
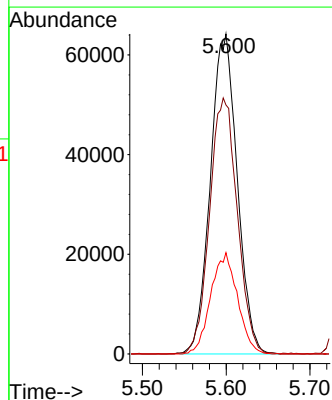
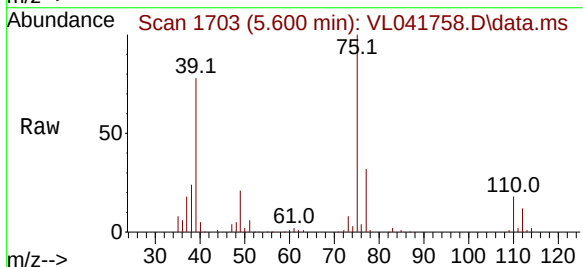
Tgt Ion: 75 Resp: 143172

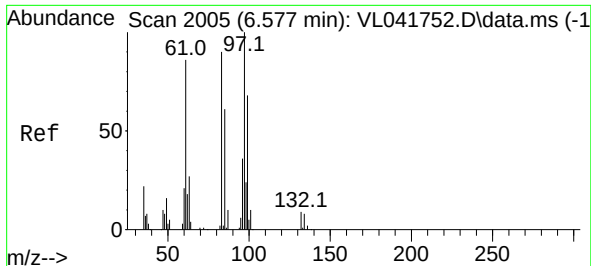
Ion Ratio Lower Upper

75 100

39 77.8 65.2 97.8

77 31.6 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 14.242 ppbv

RT: 6.580 min Scan# 2006

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 97 Resp: 98426

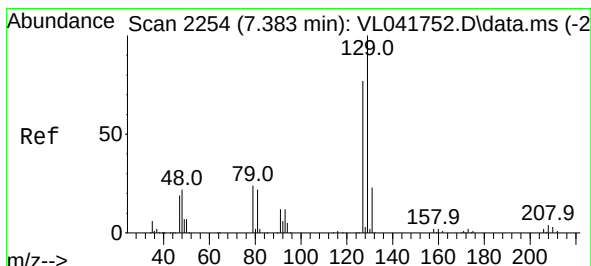
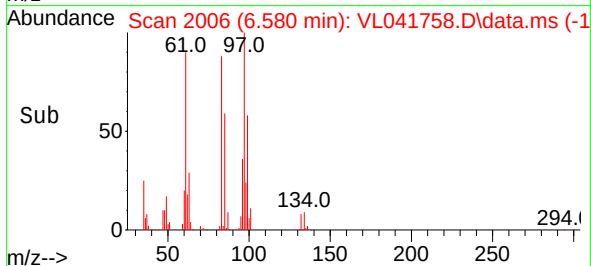
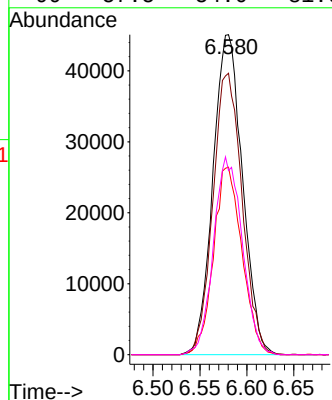
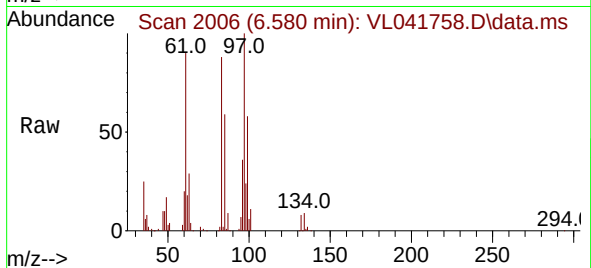
Ion Ratio Lower Upper

97 100

83 88.0 72.3 108.5

85 58.6 48.5 72.7

99 57.5 54.0 81.0



#48

Dibromochloromethane

Concen: 17.131 ppbv

RT: 7.386 min Scan# 2255

Delta R.T. 0.003 min

Lab File: VL041758.D

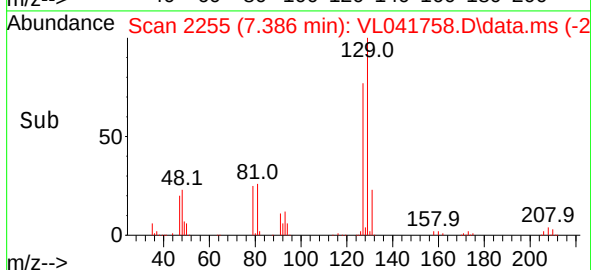
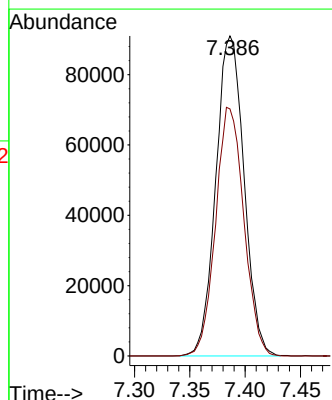
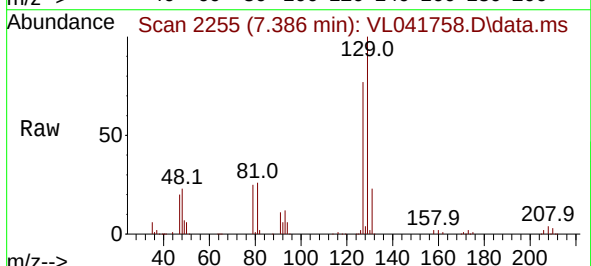
Acq: 16 Dec 2024 16:41

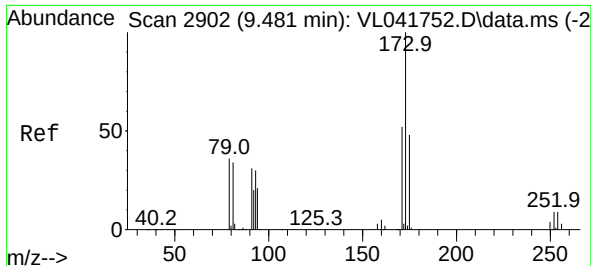
Tgt Ion: 129 Resp: 161661

Ion Ratio Lower Upper

129 100

127 77.6 38.8 116.3





#49

Bromoform

Concen: 17.838 ppbv

RT: 9.484 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

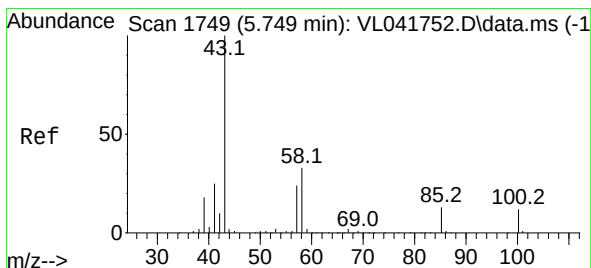
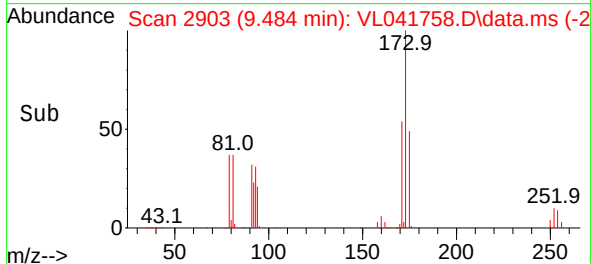
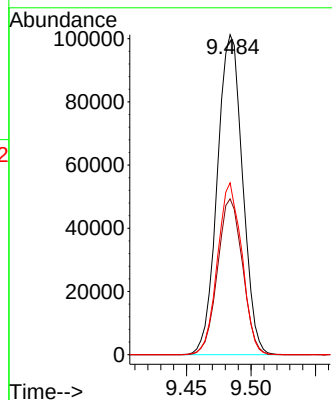
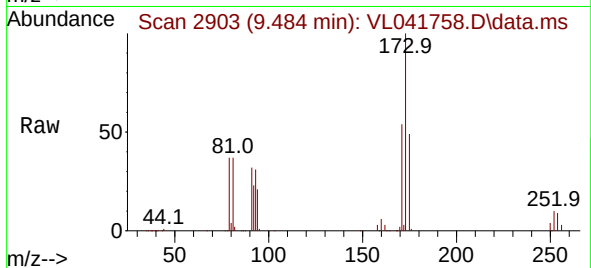
Tgt Ion:173 Resp: 137786

Ion Ratio Lower Upper

173 100

175 48.2 38.2 57.2

171 51.8 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 14.735 ppbv

RT: 5.749 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VL041758.D

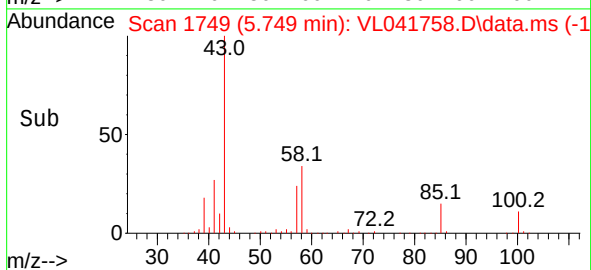
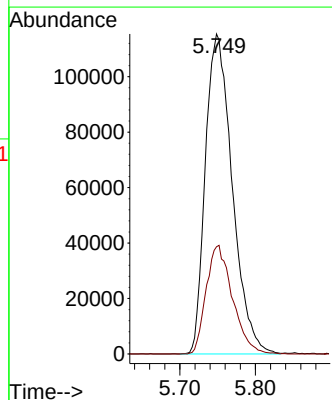
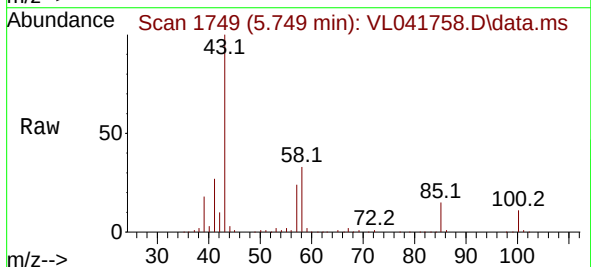
Acq: 16 Dec 2024 16:41

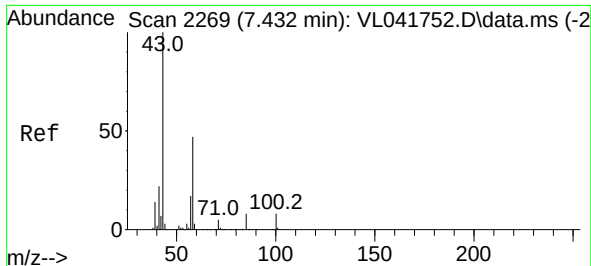
Tgt Ion: 43 Resp: 285467

Ion Ratio Lower Upper

43 100

58 33.2 26.8 40.2

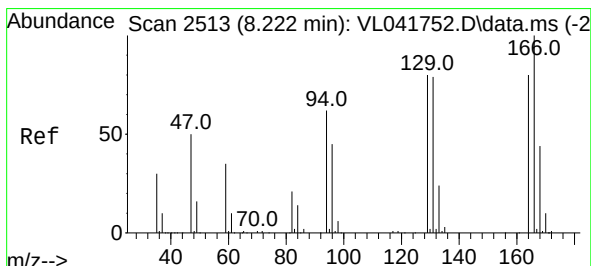
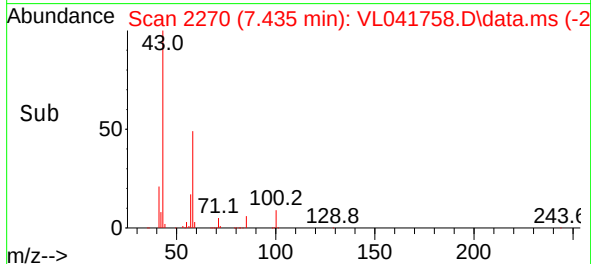
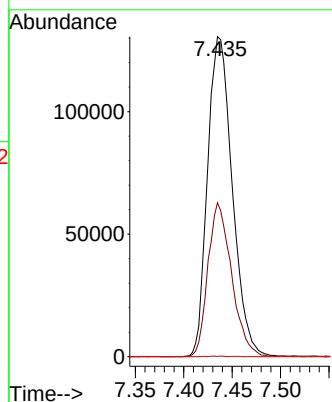
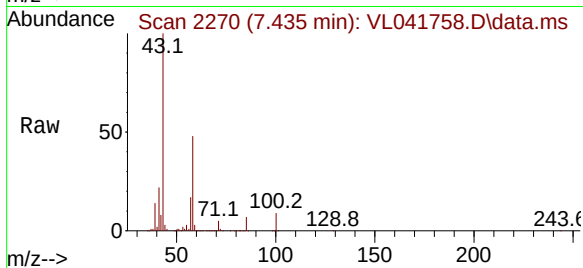




#51  
2-Hexanone  
Concen: 14.798 ppbv  
RT: 7.435 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

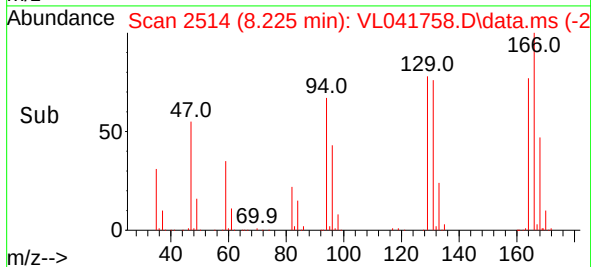
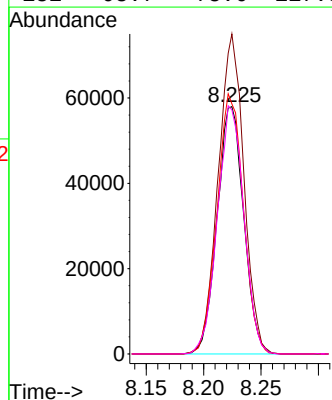
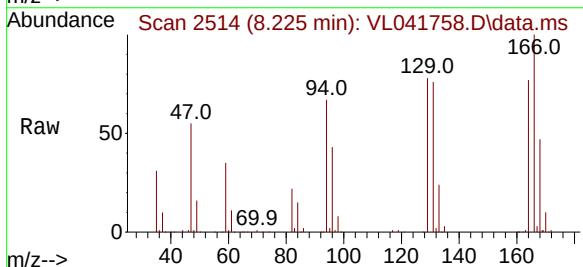
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 43 Resp: 232363  
Ion Ratio Lower Upper  
43 100  
58 46.0 36.6 55.0  
98 0.2 0.1 0.1#

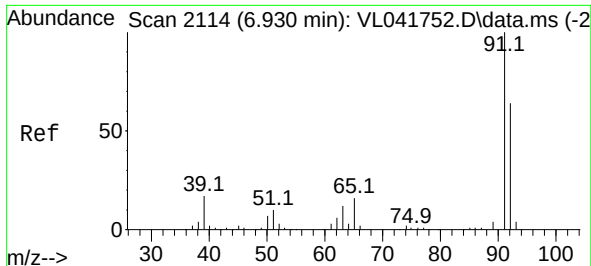


#52  
Tetrachloroethene  
Concen: 13.675 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 164 Resp: 93120  
Ion Ratio Lower Upper  
164 100  
166 129.3 99.8 149.6  
129 101.1 79.6 119.4  
131 98.7 78.6 117.8







#53

Toluene

Concen: 14.533 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

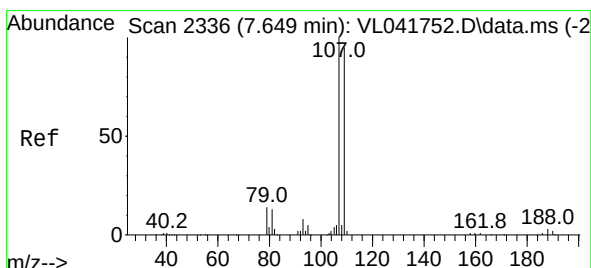
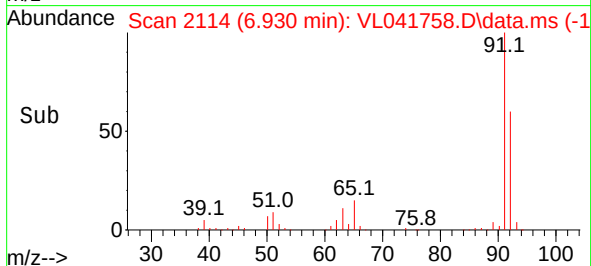
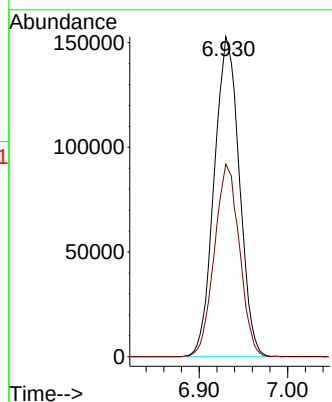
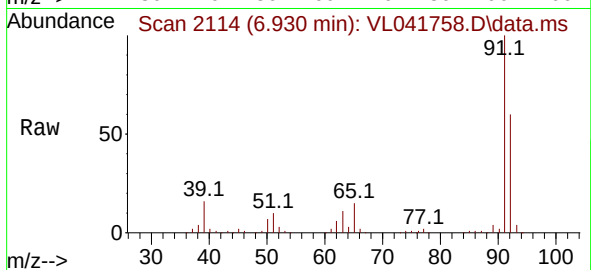
VSTDIC015

Tgt Ion: 91 Resp: 301428

Ion Ratio Lower Upper

91 100

92 59.9 47.9 71.9



#54

1,2-Dibromoethane

Concen: 14.690 ppbv

RT: 7.652 min Scan# 2337

Delta R.T. 0.003 min

Lab File: VL041758.D

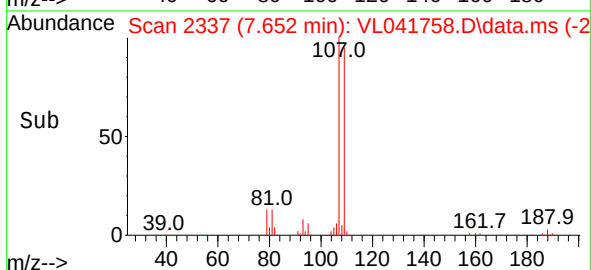
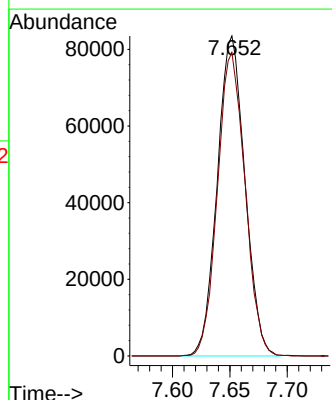
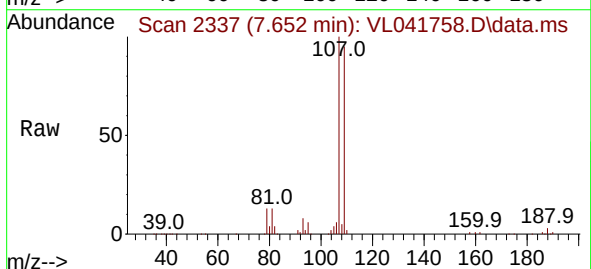
Acq: 16 Dec 2024 16:41

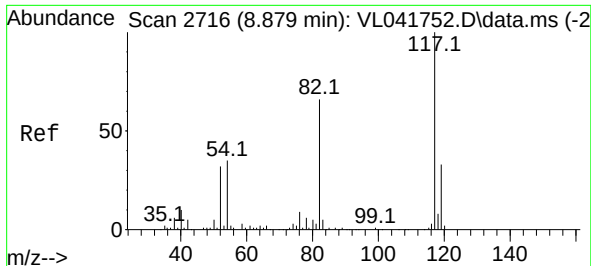
Tgt Ion: 107 Resp: 139889

Ion Ratio Lower Upper

107 100

109 94.9 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 2716

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

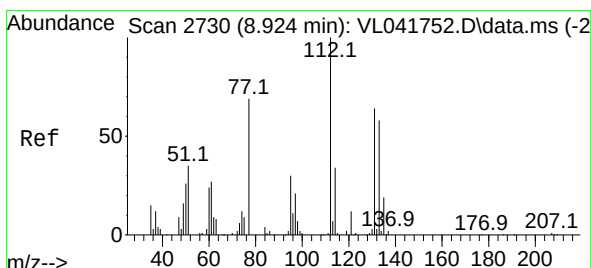
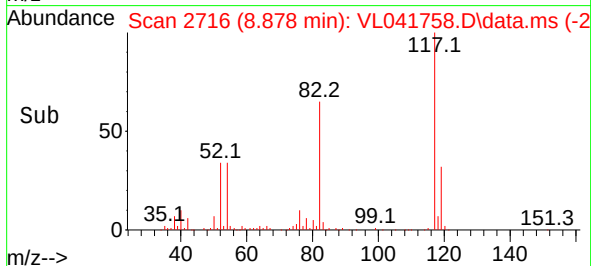
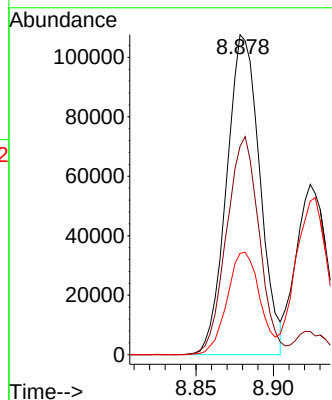
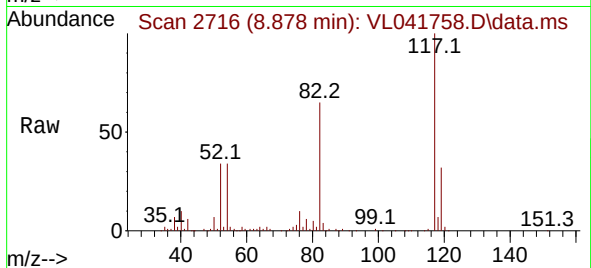
Tgt Ion:117 Resp: 160457

Ion Ratio Lower Upper

117 100

82 67.5 53.8 80.8

119 31.6 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 15.059 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

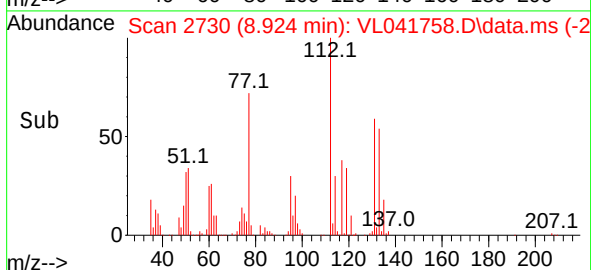
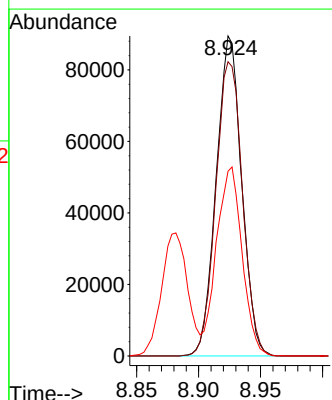
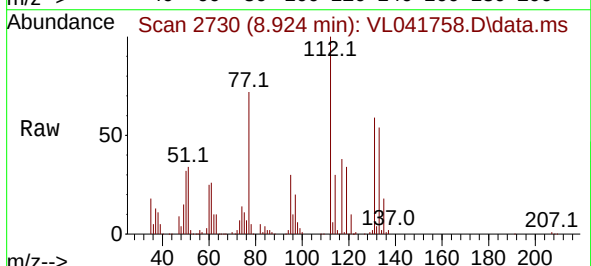
Tgt Ion:131 Resp: 128108

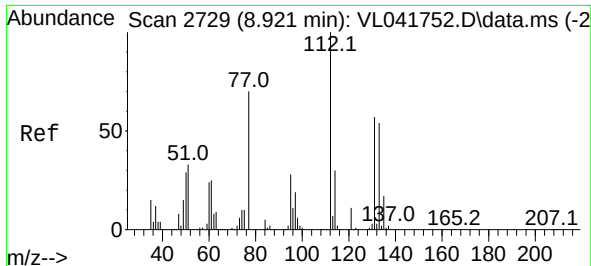
Ion Ratio Lower Upper

131 100

133 96.7 76.8 115.2

119 59.9 49.0 73.6





#57

Chlorobenzene

Concen: 13.869 ppbv

RT: 8.924 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

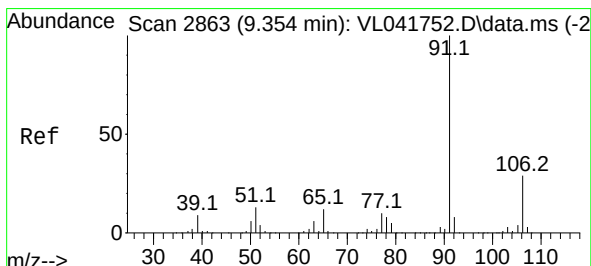
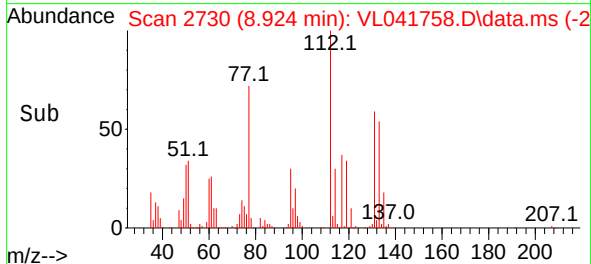
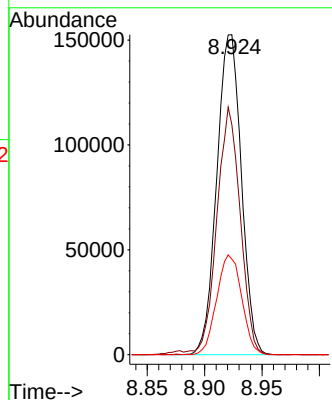
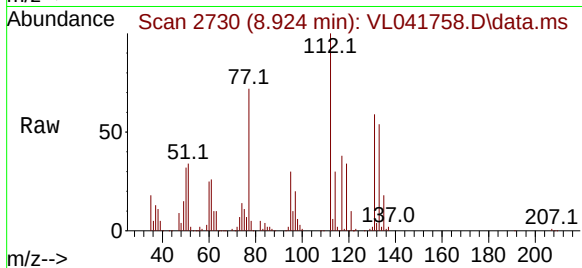
Tgt Ion:112 Resp: 227716

Ion Ratio Lower Upper

112 100

77 71.8 57.4 86.0

114 29.8 27.4 33.4



#58

Ethyl Benzene

Concen: 14.742 ppbv

RT: 9.354 min Scan# 2863

Delta R.T. -0.000 min

Lab File: VL041758.D

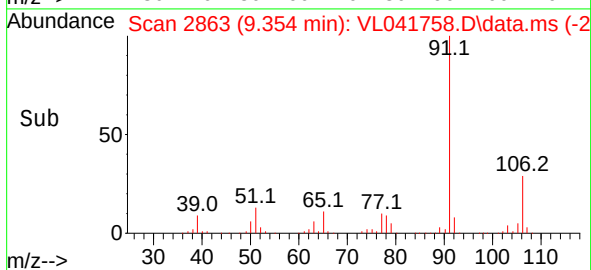
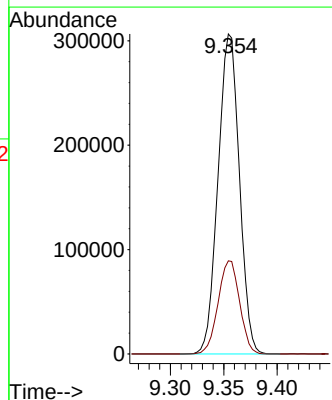
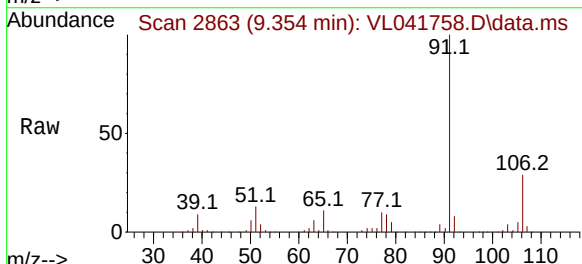
Acq: 16 Dec 2024 16:41

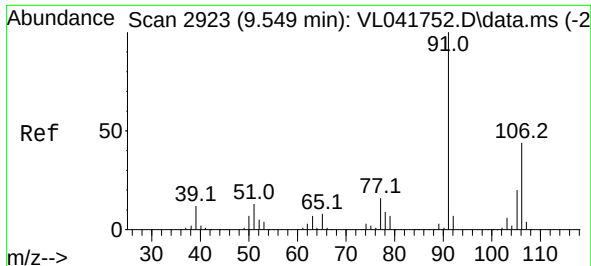
Tgt Ion: 91 Resp: 425852

Ion Ratio Lower Upper

91 100

106 29.1 23.5 35.3





#59

m/p-Xylene

Concen: 15.660 ppbv

RT: 9.552 min Scan# 2923

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

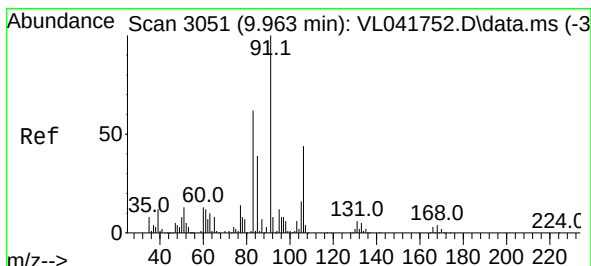
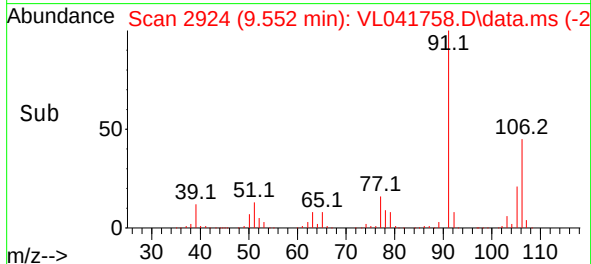
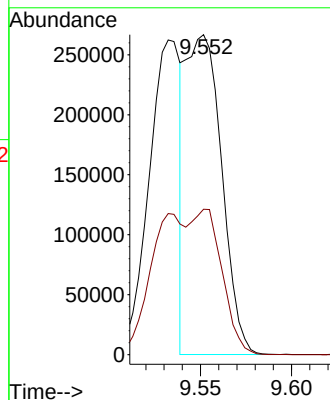
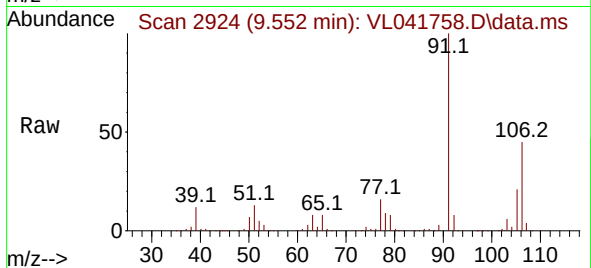
VSTDIC015

Tgt Ion: 91 Resp: 363863

Ion Ratio Lower Upper

91 100

106 83.6 0.0 0.0#



#60

o-Xylene

Concen: 14.506 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041758.D

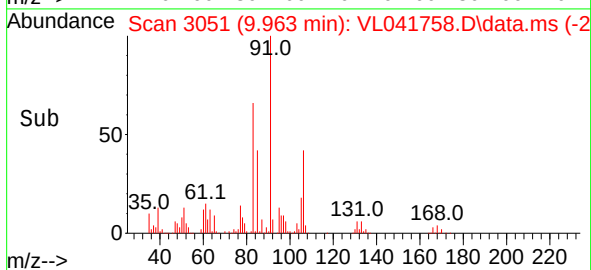
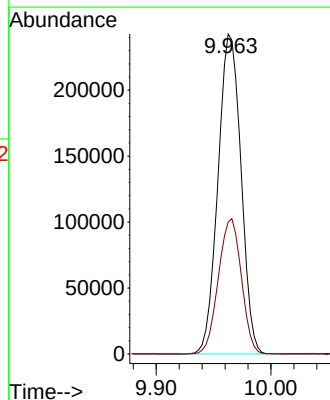
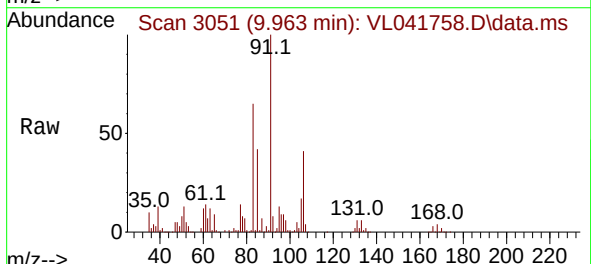
Acq: 16 Dec 2024 16:41

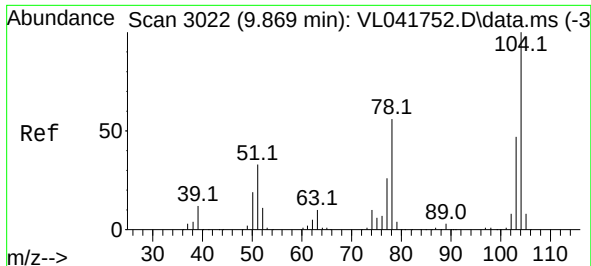
Tgt Ion: 91 Resp: 337891

Ion Ratio Lower Upper

91 100

106 42.2 21.1 63.4





#61

Styrene

Concen: 16.415 ppbv

RT: 9.869 min Scan# 3022

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

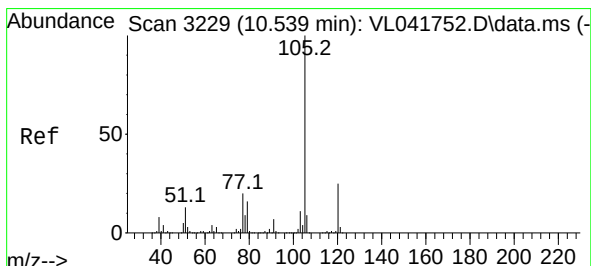
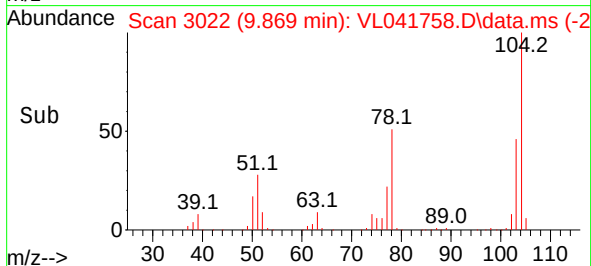
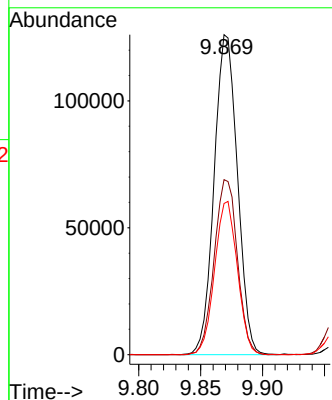
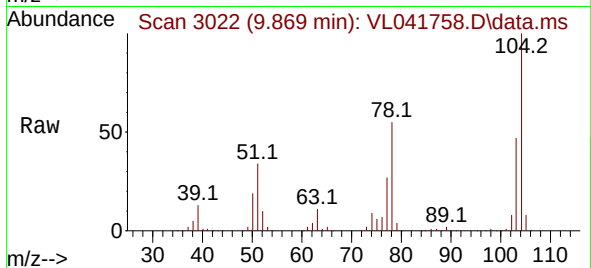
Tgt Ion:104 Resp: 165328

Ion Ratio Lower Upper

104 100

78 54.5 43.8 65.6

103 46.9 37.8 56.6



#62

Isopropylbenzene

Concen: 14.475 ppbv

RT: 10.539 min Scan# 3229

Delta R.T. -0.000 min

Lab File: VL041758.D

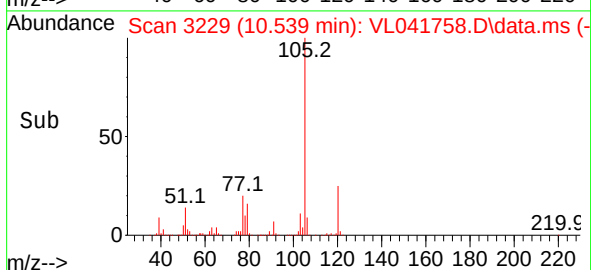
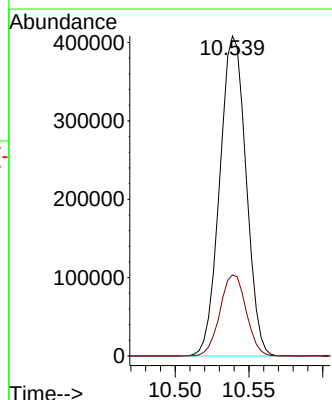
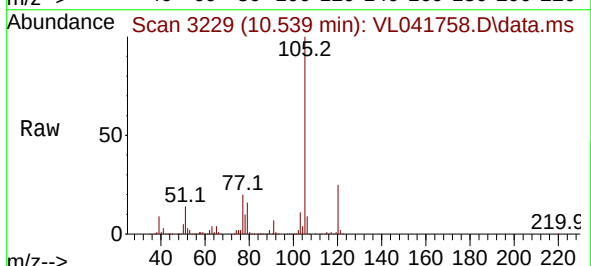
Acq: 16 Dec 2024 16:41

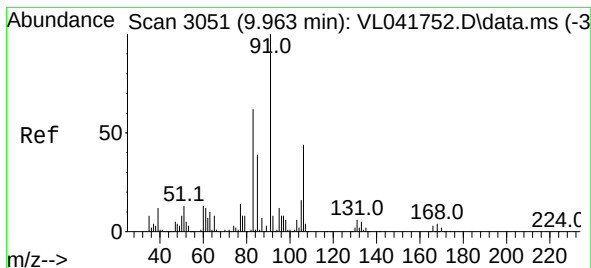
Tgt Ion:105 Resp: 506570

Ion Ratio Lower Upper

105 100

120 25.2 19.8 29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 13.790 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

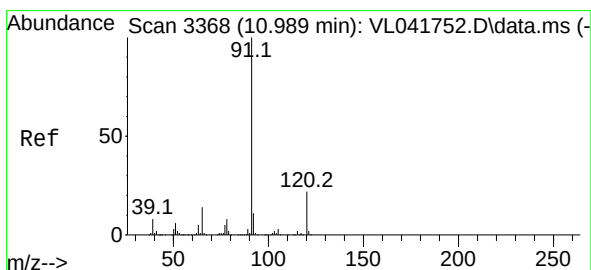
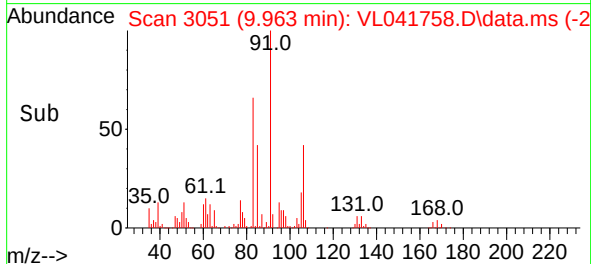
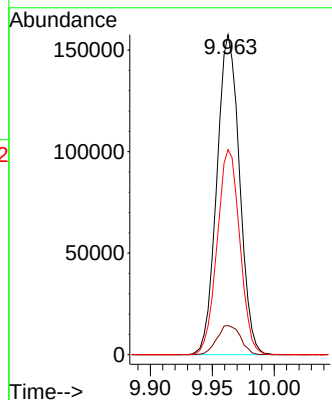
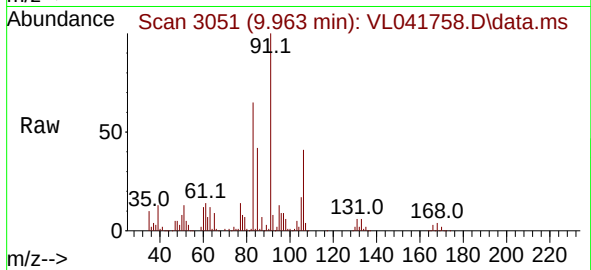
Tgt Ion: 83 Resp: 201057

Ion Ratio Lower Upper

83 100

131 9.5 4.9 14.7

85 64.0 32.0 96.2



#64

n-propylbenzene

Concen: 14.602 ppbv

RT: 10.989 min Scan# 3368

Delta R.T. -0.000 min

Lab File: VL041758.D

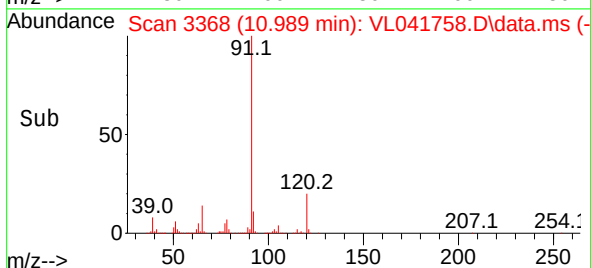
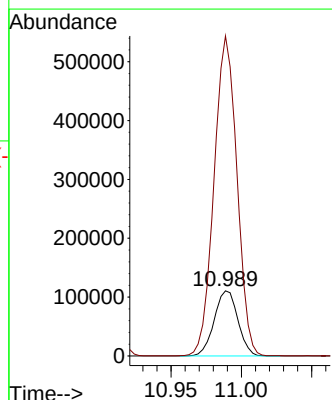
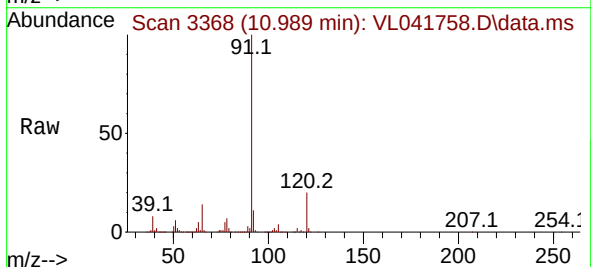
Acq: 16 Dec 2024 16:41

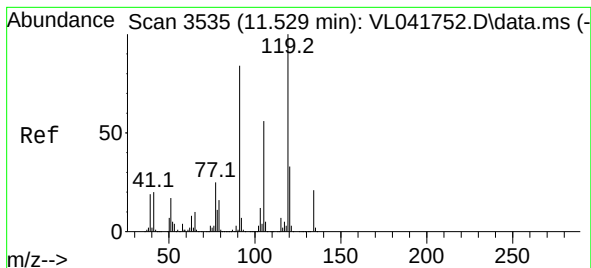
Tgt Ion:120 Resp: 129200

Ion Ratio Lower Upper

120 100

91 475.8 387.3 580.9





#65

tert-Butylbenzene

Concen: 14.148 ppbv

RT: 11.532 min Scan# 3536

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

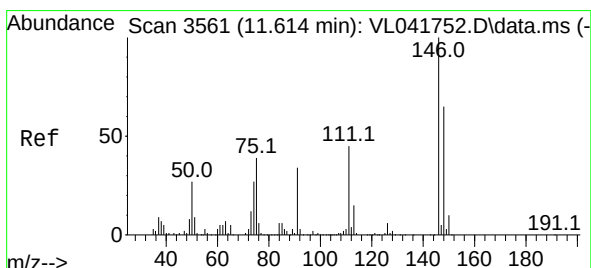
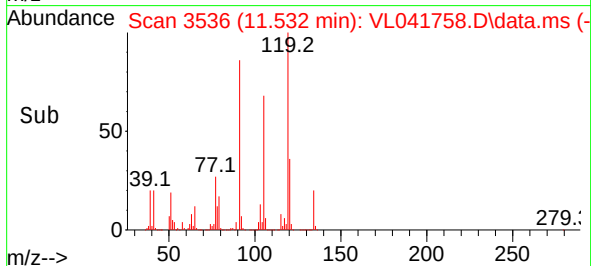
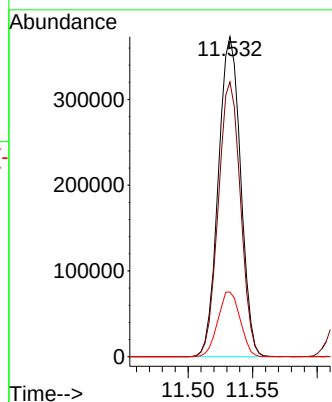
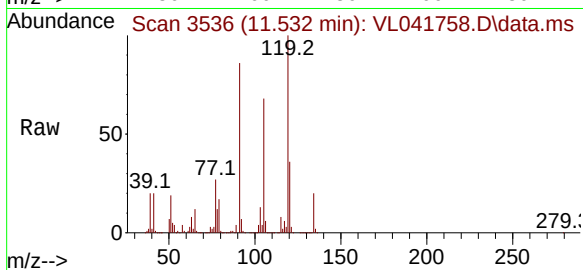
Tgt Ion:119 Resp: 446690

Ion Ratio Lower Upper

119 100

91 85.7 67.0 100.4

134 20.3 16.5 24.7



#66

Benzyl Chloride

Concen: 16.234 ppbv

RT: 11.617 min Scan# 3562

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

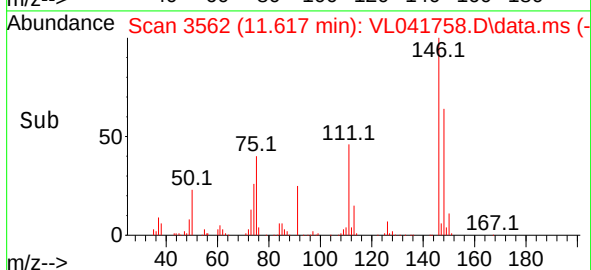
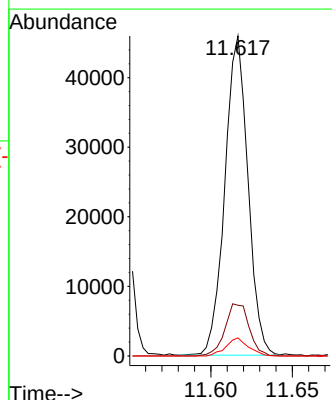
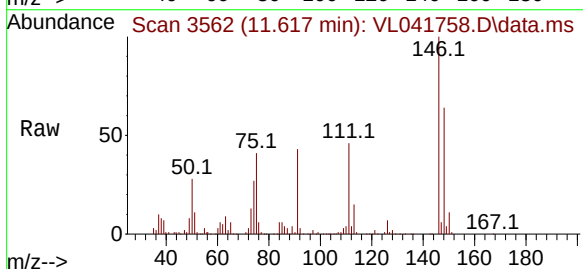
Tgt Ion: 91 Resp: 45189

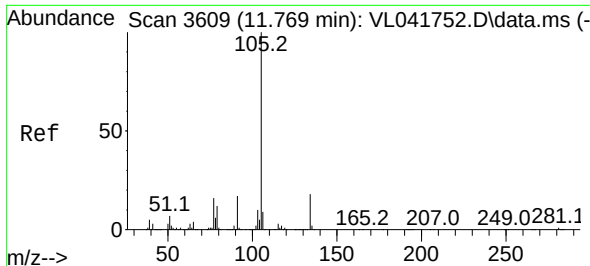
Ion Ratio Lower Upper

91 100

126 17.1 13.9 20.9

128 5.5 4.4 6.6





#67

sec-Butylbenzene

Concen: 14.295 ppbv

RT: 11.769 min Scan# 3609

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

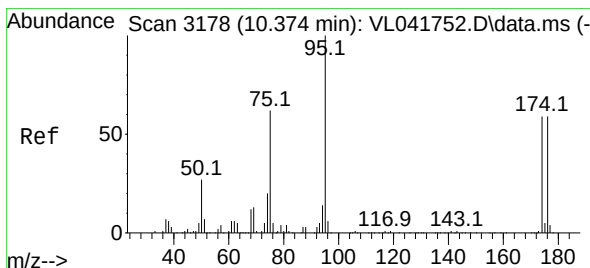
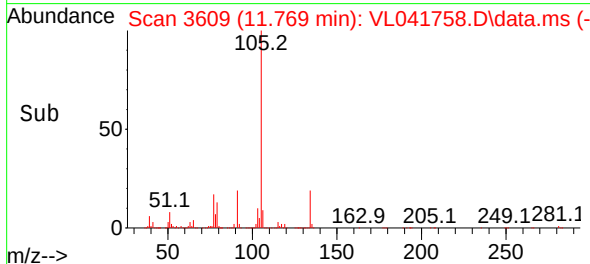
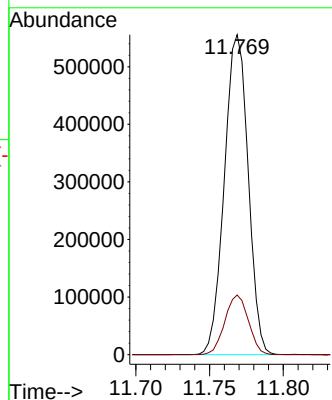
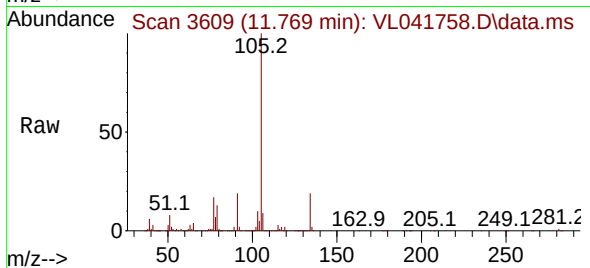
VSTDIC015

Tgt Ion:105 Resp: 624565

Ion Ratio Lower Upper

105 100

134 18.5 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 9.998 ppbv

RT: 10.374 min Scan# 3178

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

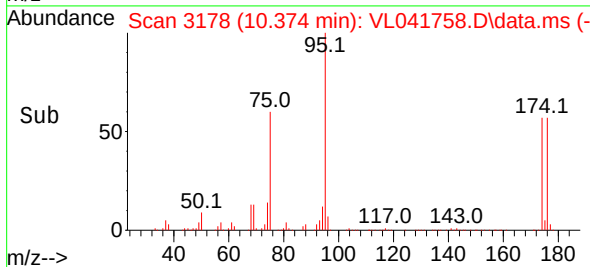
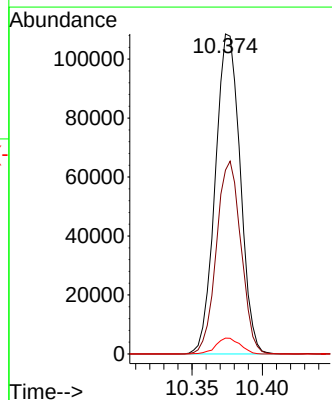
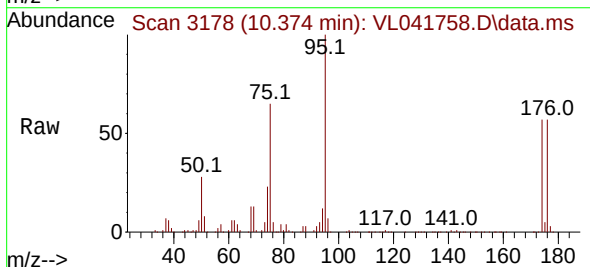
Tgt Ion: 95 Resp: 133687

Ion Ratio Lower Upper

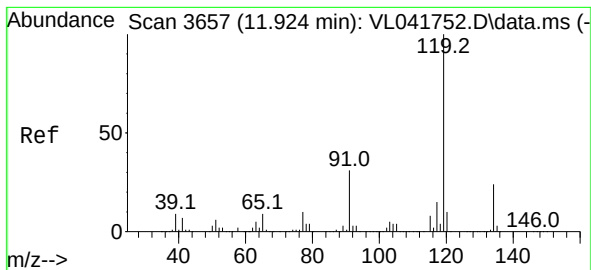
95 100

174 59.4 47.6 71.4

175 4.8 3.7 5.5



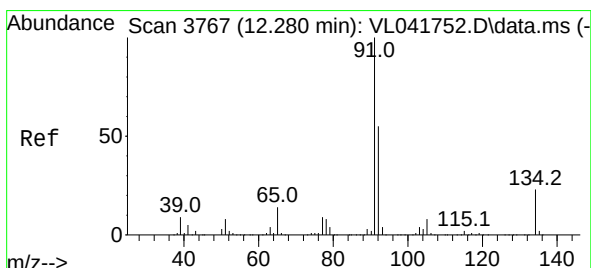
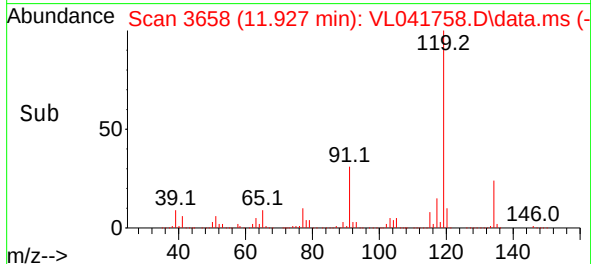
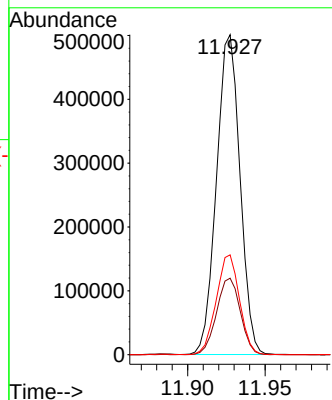
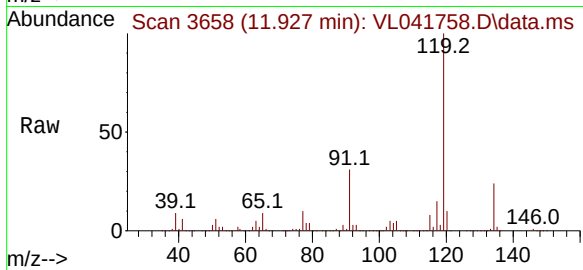




#69  
p-Isopropyltoluene  
Concen: 14.671 ppbv  
RT: 11.927 min Scan# 3658  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

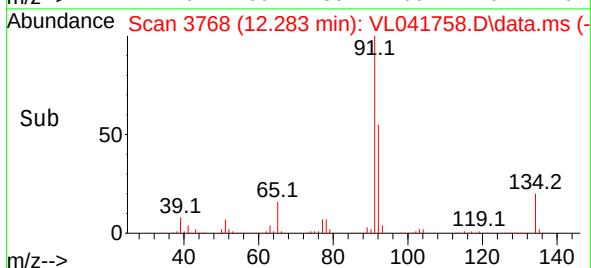
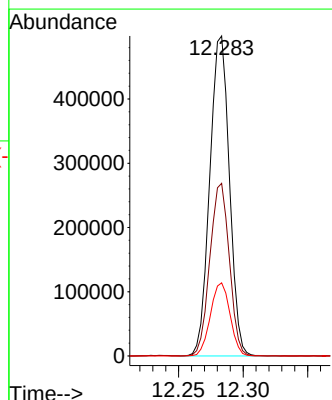
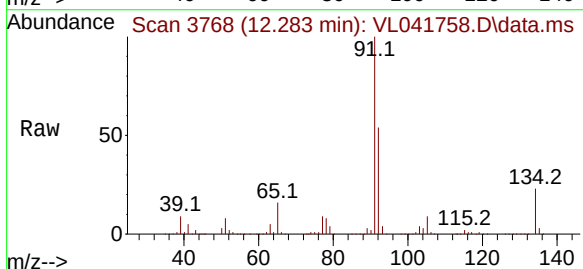
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

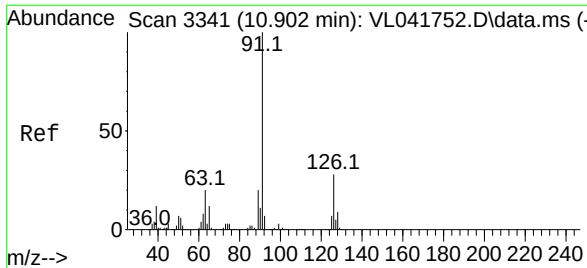
Tgt Ion:119 Resp: 528265  
Ion Ratio Lower Upper  
119 100  
134 24.3 19.6 29.4  
91 31.0 24.4 36.6



#70  
n-Butylbenzene  
Concen: 15.101 ppbv  
RT: 12.283 min Scan# 3768  
Delta R.T. 0.003 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion: 91 Resp: 525377  
Ion Ratio Lower Upper  
91 100  
92 53.8 43.2 64.8  
134 22.8 18.2 27.4

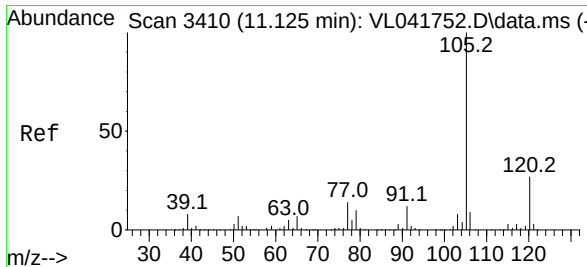
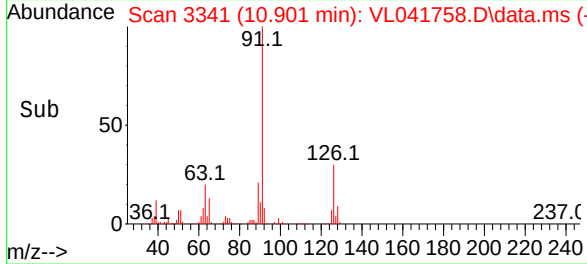
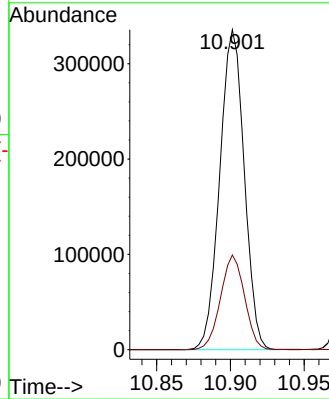
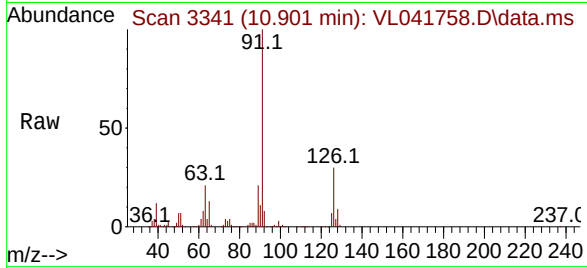




#71  
2-Chlorotoluene  
Concen: 14.498 ppbv  
RT: 10.901 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

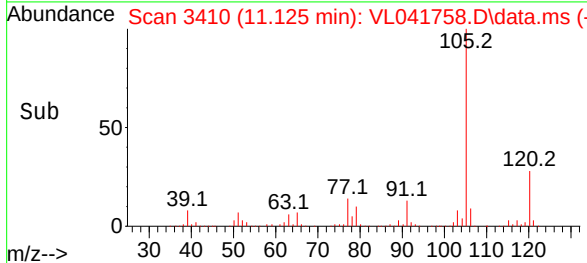
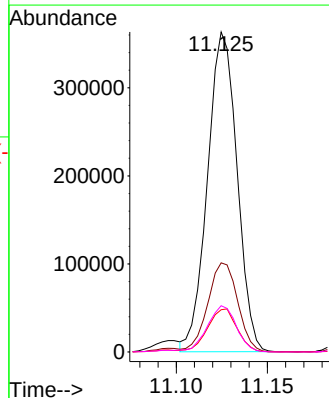
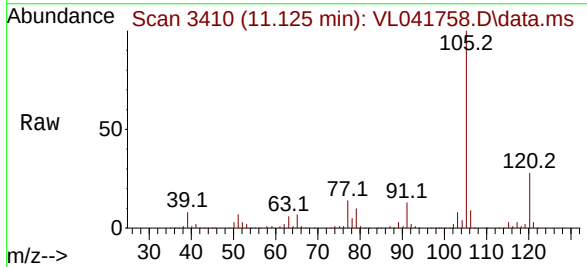
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC015

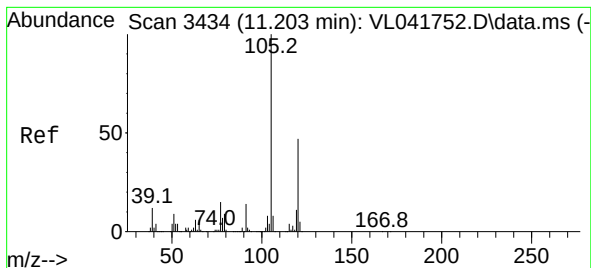
Tgt Ion: 91 Resp: 387300  
Ion Ratio Lower Upper  
91 100  
126 29.0 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 14.934 ppbv  
RT: 11.125 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion:105 Resp: 409822  
Ion Ratio Lower Upper  
105 100  
120 29.2 23.3 34.9  
91 13.9 10.9 16.3  
77 14.7 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 15.383 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

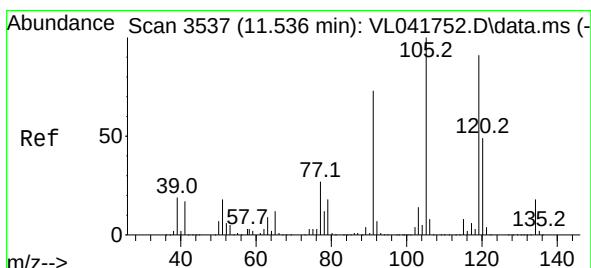
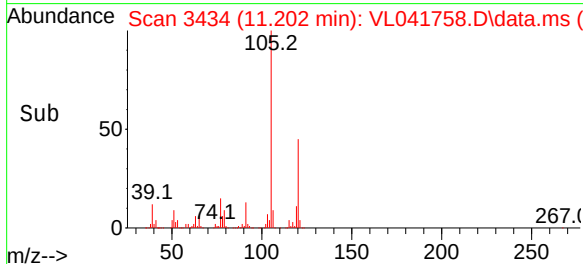
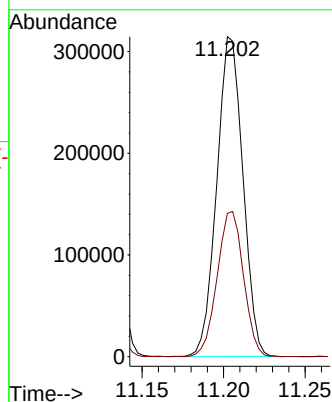
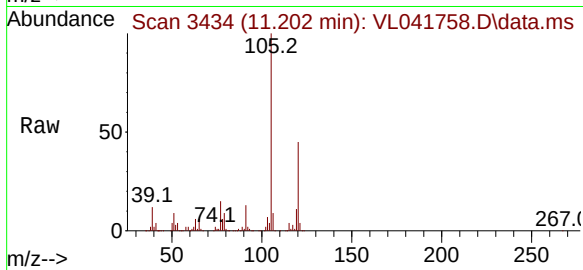
VSTDIC015

Tgt Ion:105 Resp: 350895

Ion Ratio Lower Upper

105 100

120 44.8 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 15.144 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Tgt Ion:105 Resp: 371476

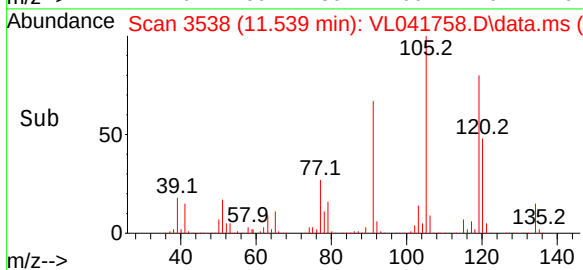
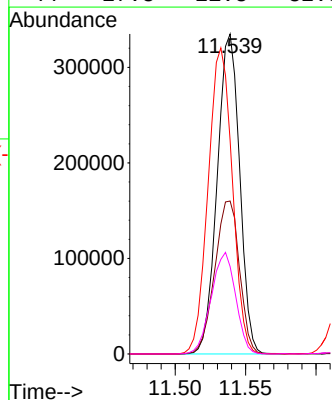
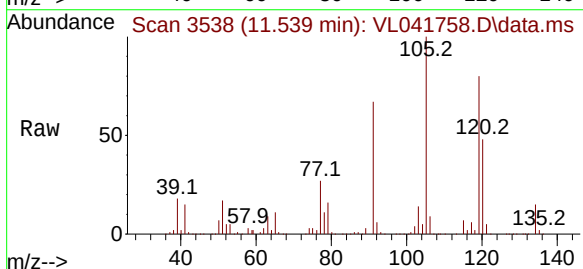
Ion Ratio Lower Upper

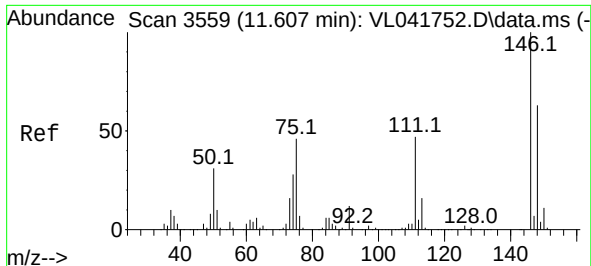
105 100

120 47.8 39.0 58.4

91 66.6 58.1 87.1

77 27.3 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 14.036 ppbv

RT: 11.610 min Scan# 3560

Delta R.T. 0.003 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_1

ClientSampleId :

VSTDIC015

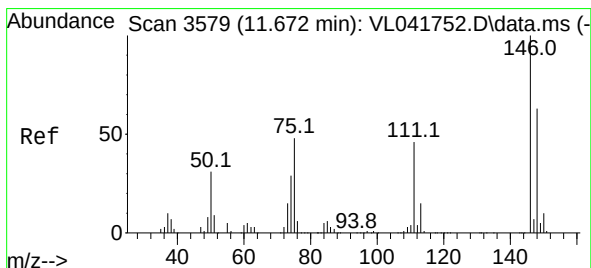
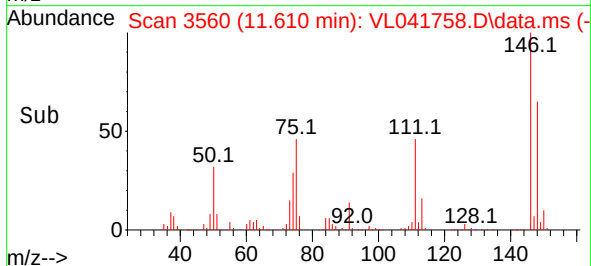
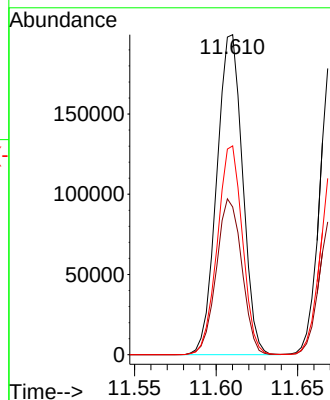
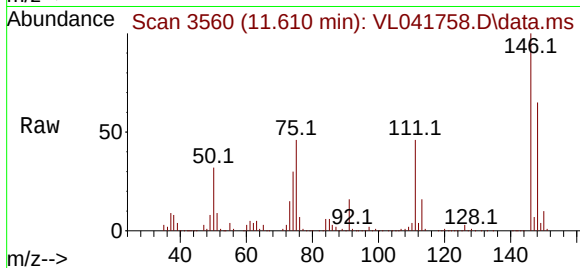
Tgt Ion:146 Resp: 219506

Ion Ratio Lower Upper

146 100

111 48.2 23.4 70.3

148 63.5 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 14.388 ppbv

RT: 11.672 min Scan# 3579

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

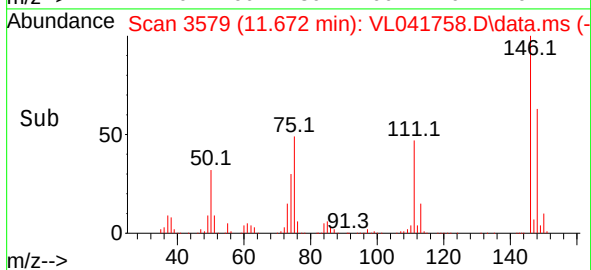
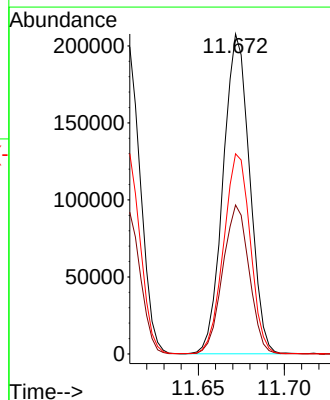
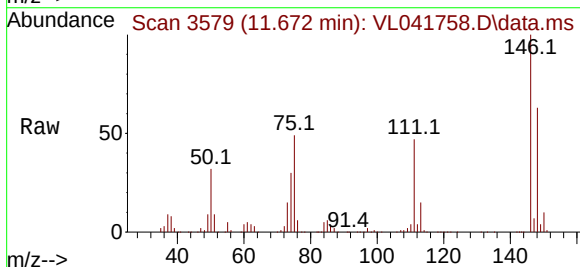
Tgt Ion:146 Resp: 222290

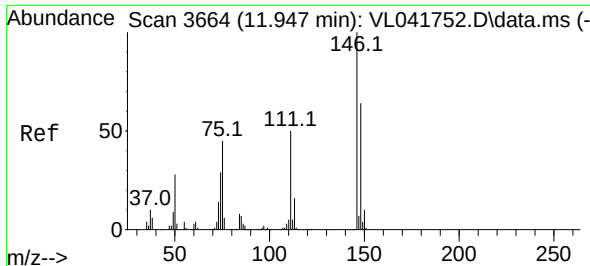
Ion Ratio Lower Upper

146 100

111 46.6 22.7 68.1

148 63.2 31.4 94.0

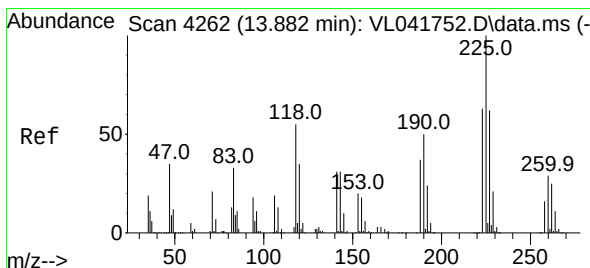
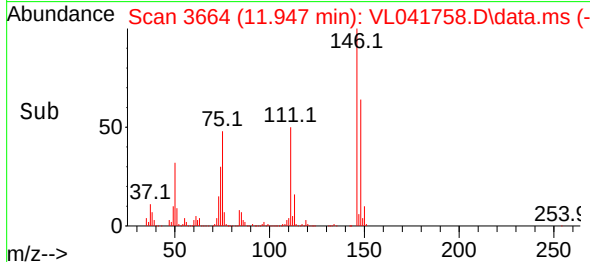
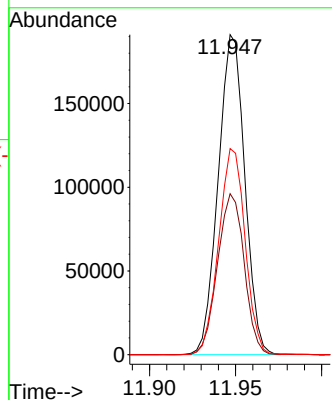
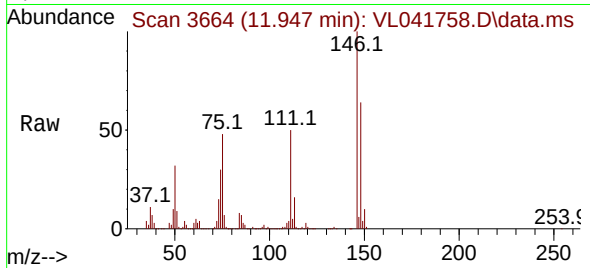




#77  
1,2-Dichlorobenzene  
Concen: 13.672 ppbv  
RT: 11.947 min Scan# 3664  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

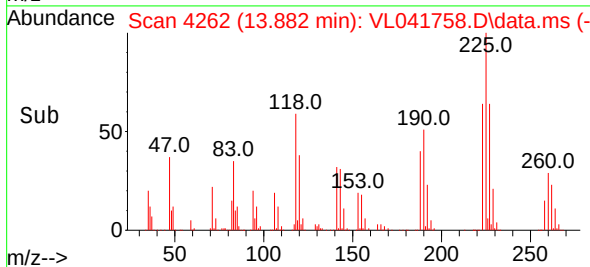
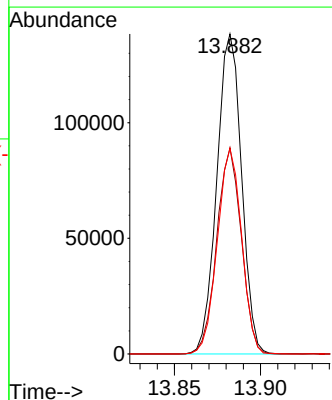
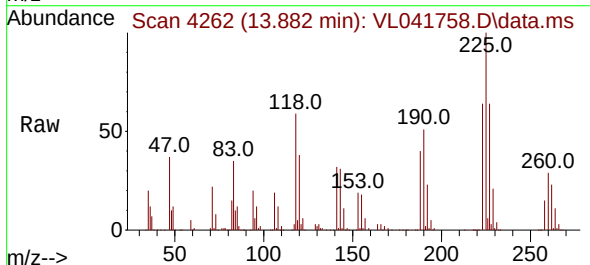
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC015

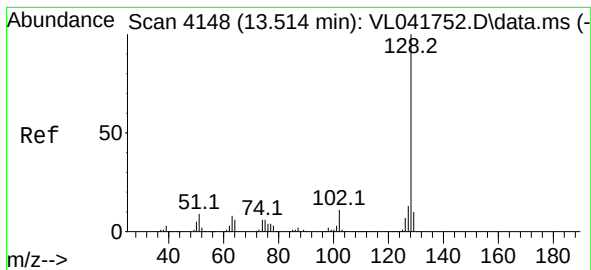
Tgt Ion:146 Resp: 205737  
Ion Ratio Lower Upper  
146 100  
111 50.4 24.8 74.3  
148 63.9 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 12.412 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041758.D  
Acq: 16 Dec 2024 16:41

Tgt Ion:225 Resp: 138481  
Ion Ratio Lower Upper  
225 100  
223 63.7 50.5 75.7  
227 63.1 50.3 75.5





#79

Naphthalene

Concen: 17.611 ppbv

RT: 13.513 min Scan# 4148

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

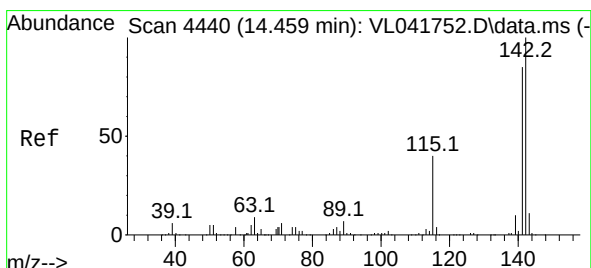
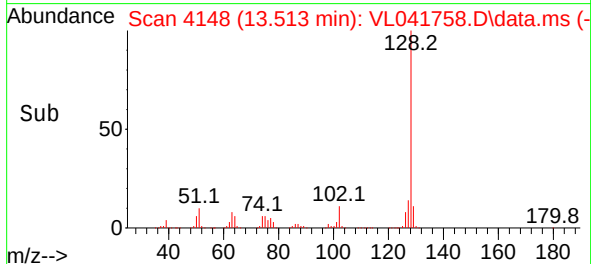
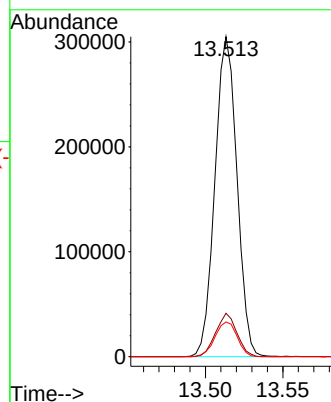
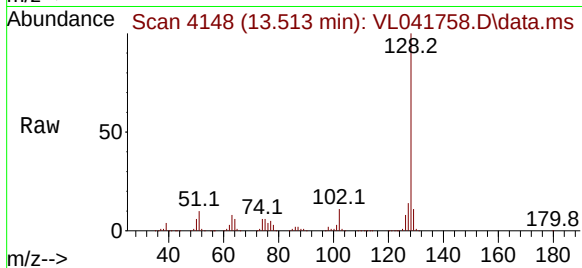
Tgt Ion:128 Resp: 301006

Ion Ratio Lower Upper

128 100

127 13.6 10.7 16.1

129 10.9 8.2 12.4



#80

Naphthalene,2-methyl-

Concen: 30.630 ppbv

RT: 14.458 min Scan# 4440

Delta R.T. -0.000 min

Lab File: VL041758.D

Acq: 16 Dec 2024 16:41

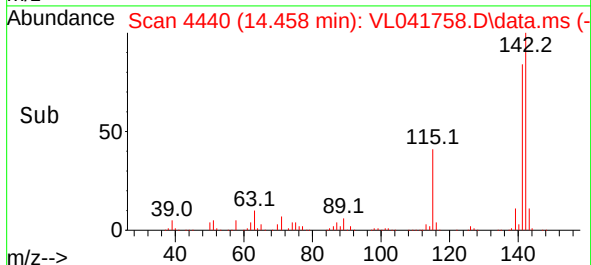
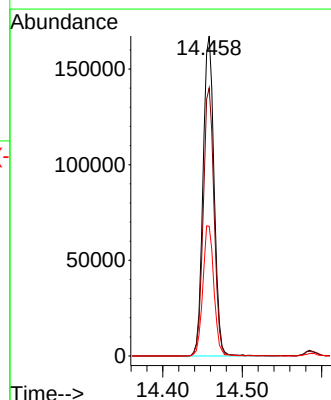
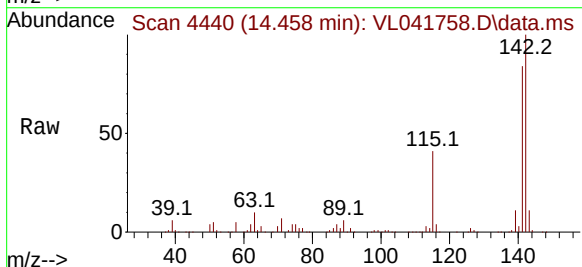
Tgt Ion:142 Resp: 161927

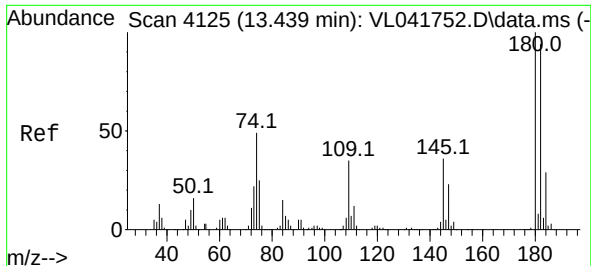
Ion Ratio Lower Upper

142 100

141 82.6 68.4 102.6

115 40.9 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 15.669 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041758.D

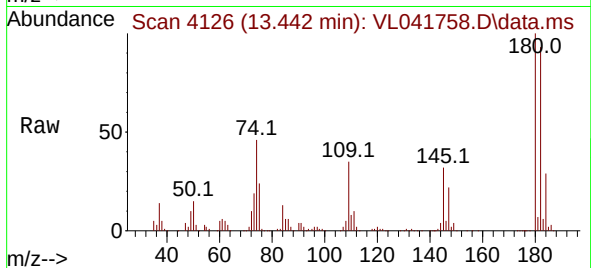
Acq: 16 Dec 2024 16:41

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015



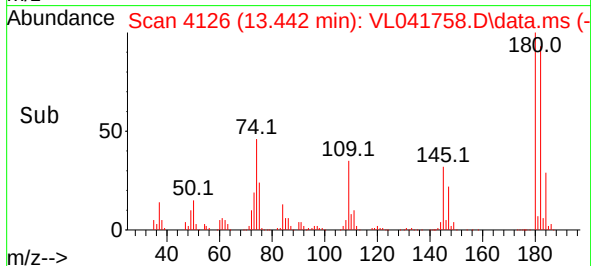
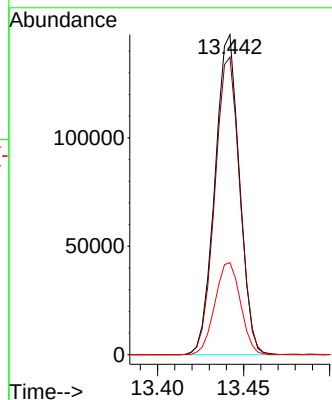
Tgt Ion:180 Resp: 146340

Ion Ratio Lower Upper

180 100

182 94.8 77.0 115.6

184 30.0 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041759.D  
 Acq On : 16 Dec 2024 18:59  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICSV121624

Quant Time: Dec 19 07:36:00 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 64976    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.959 | 114  | 174378   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.885 | 117  | 153443   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.380 95 129985 10.166 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.700%

#### Target Compounds

|                               |       |     |        |        | Qvalue |     |
|-------------------------------|-------|-----|--------|--------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.499 | 85  | 106780 | 9.236  | ppbv   | 95  |
| 3) Chlorodifluoromethane      | 1.476 | 51  | 105141 | 9.922  | ppbv   | 99  |
| 4) Chloromethane              | 1.531 | 50  | 43409  | 9.596  | ppbv   | 96  |
| 5) Vinyl Chloride             | 1.580 | 62  | 40956  | 8.986  | ppbv   | 97  |
| 6) Bromomethane               | 1.667 | 94  | 19590  | 9.109  | ppbv   | 94  |
| 7) Chloroethane               | 1.703 | 64  | 17356  | 9.803  | ppbv   | 92  |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 99858  | 9.650  | ppbv   | 98  |
| 9) Propene                    | 1.483 | 41  | 41721  | 9.084  | ppbv   | 98  |
| 10) Heptane                   | 4.981 | 43  | 115804 | 9.816  | ppbv   | 99  |
| 11) Trichlorofluoromethane    | 1.877 | 101 | 115785 | 9.428  | ppbv   | 100 |
| 12) 1,1,2-Trichlorotrifluo... | 2.140 | 101 | 88265  | 9.450  | ppbv   | 100 |
| 13) Ethanol                   | 1.722 | 45  | 2534   | 6.663  | ppbv   | 95  |
| 14) Bromoethene               | 1.780 | 108 | 31492  | 9.987  | ppbv   | 98  |
| 15) Acetone                   | 1.835 | 43  | 94879  | 7.505  | ppbv   | 99  |
| 16) 1,3-Butadiene             | 1.609 | 39  | 45119  | 9.063  | ppbv   | 98  |
| 17) tert-Butyl alcohol        | 2.039 | 59  | 122035 | 9.730  | ppbv   | 100 |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 37466  | 9.568  | ppbv   | 98  |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 57577  | 7.590  | ppbv   | 98  |
| 20) Methylene Chloride        | 2.062 | 84  | 32325  | 8.967  | ppbv   | 96  |
| 21) Allyl Chloride            | 2.094 | 41  | 67596  | 9.859  | ppbv   | 97  |
| 22) trans-1,2-Dichloroethene  | 2.340 | 96  | 42651  | 9.515  | ppbv   | 97  |
| 23) Vinyl Acetate             | 2.463 | 43  | 51812  | 8.826  | ppbv # | 98  |
| 24) 1,1-Dichloroethane        | 2.408 | 63  | 87006  | 9.589  | ppbv   | 100 |
| 25) Ethyl Acetate             | 2.835 | 43  | 234370 | 9.965  | ppbv   | 100 |
| 26) Hexane                    | 2.826 | 57  | 87034  | 9.752  | ppbv   | 97  |
| 27) Carbon Disulfide          | 2.149 | 76  | 85650  | 10.649 | ppbv   | 100 |
| 28) Methyl tert-Butyl Ether   | 2.441 | 73  | 62189  | 8.589  | ppbv   | 99  |
| 29) Chloroform                | 2.848 | 83  | 134541 | 9.892  | ppbv   | 98  |
| 30) Cyclohexane               | 3.858 | 84  | 75274  | 9.912  | ppbv   | 98  |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 91628  | 9.935  | ppbv   | 97  |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 137978 | 9.979  | ppbv   | 99  |
| 34) 2-Butanone                | 2.557 | 43  | 133939 | 9.547  | ppbv   | 99  |
| 35) Carbon Tetrachloride      | 3.764 | 117 | 138537 | 11.191 | ppbv   | 97  |
| 36) Benzene                   | 3.658 | 78  | 176537 | 9.787  | ppbv   | 99  |
| 37) 1,2-Dichloroethane        | 3.221 | 62  | 112037 | 9.982  | ppbv   | 99  |
| 38) Trichloroethene           | 4.551 | 130 | 70108  | 9.156  | ppbv   | 96  |
| 39) 1,2-Dichloropropane       | 4.318 | 63  | 63675  | 9.761  | ppbv   | 95  |
| 40) 1,4-Dioxane               | 4.583 | 88  | 30891  | 9.693  | ppbv # | 98  |
| 41) Tetrahydrofuran           | 3.056 | 42  | 77472  | 9.857  | ppbv   | 99  |
| 42) Bromodichloromethane      | 4.493 | 83  | 139717 | 10.821 | ppbv   | 95  |
| 43) Methyl Methacrylate       | 4.881 | 69  | 70299  | 10.229 | ppbv   | 100 |
| 44) 2,2,4-Trimethylpentane    | 4.641 | 57  | 301772 | 9.796  | ppbv   | 100 |
| 45) t-1,3-Dichloropropene     | 6.415 | 75  | 77534  | 10.907 | ppbv   | 94  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121624\  
 Data File : VL041759.D  
 Acq On : 16 Dec 2024 18:59  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL121624

Quant Time: Dec 19 07:36:00 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

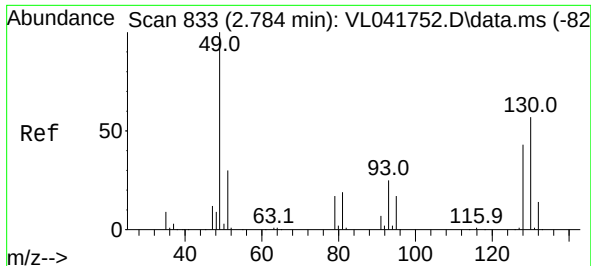
| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.603  | 75   | 95812    | 10.617 | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 6.587  | 97   | 37758    | 5.541  | ppbv   | 94       |
| 48) Dibromochloromethane      | 7.389  | 129  | 105378   | 11.326 | ppbv   | 100      |
| 49) Bromoform                 | 9.487  | 173  | 88971    | 11.682 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 5.758  | 43   | 190637   | 9.980  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.441  | 43   | 155646   | 10.053 | ppbv # | 100      |
| 52) Tetrachloroethene         | 8.228  | 164  | 62782    | 9.351  | ppbv   | 96       |
| 53) Toluene                   | 6.933  | 91   | 199754   | 9.768  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.655  | 107  | 93439    | 9.952  | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 8.927  | 131  | 85883    | 10.558 | ppbv   | 99       |
| 57) Chlorobenzene             | 8.924  | 112  | 155257   | 9.888  | ppbv   | 98       |
| 58) Ethyl Benzene             | 9.357  | 91   | 284770   | 10.308 | ppbv   | 98       |
| 59) m/p-Xylene                | 9.555  | 91   | 238458   | 10.735 | ppbv # | 100      |
| 60) o-Xylene                  | 9.966  | 91   | 229517   | 10.304 | ppbv   | 98       |
| 61) Styrene                   | 9.875  | 104  | 106841   | 11.093 | ppbv   | 99       |
| 62) Isopropylbenzene          | 10.542 | 105  | 348887   | 10.425 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.966  | 83   | 137547   | 9.865  | ppbv   | 99       |
| 64) n-propylbenzene           | 10.992 | 120  | 87865    | 10.384 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 11.536 | 119  | 307790   | 10.194 | ppbv   | 100      |
| 66) Benzyl Chloride           | 11.620 | 91   | 29398    | 11.054 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 11.772 | 105  | 430521   | 10.304 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 365667   | 10.620 | ppbv   | 100      |
| 70) n-Butylbenzene            | 12.283 | 91   | 356880   | 10.727 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.904 | 91   | 264123   | 10.340 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.128 | 105  | 280580   | 10.672 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.205 | 105  | 237804   | 10.902 | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 11.542 | 105  | 256141   | 10.919 | ppbv # | 88       |
| 75) 1,3-Dichlorobenzene       | 11.610 | 146  | 149927   | 10.025 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.675 | 146  | 152212   | 10.302 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.950 | 146  | 142734   | 9.919  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 13.885 | 225  | 94671    | 8.873  | ppbv   | 99       |
| 79) Naphthalene               | 13.516 | 128  | 202413   | 12.384 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 14.461 | 142  | 102431   | 20.261 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 98468    | 11.025 | ppbv   | 99       |

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

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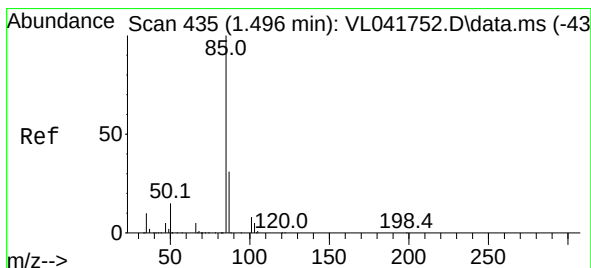
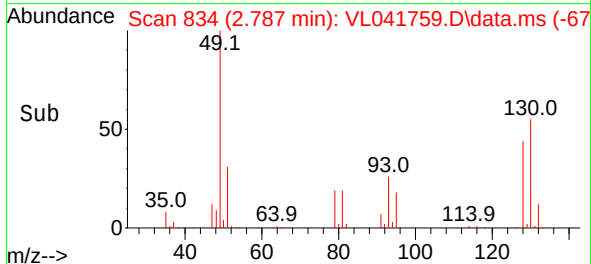
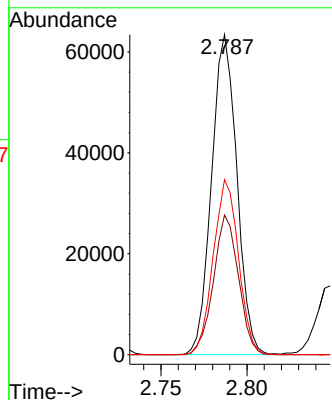
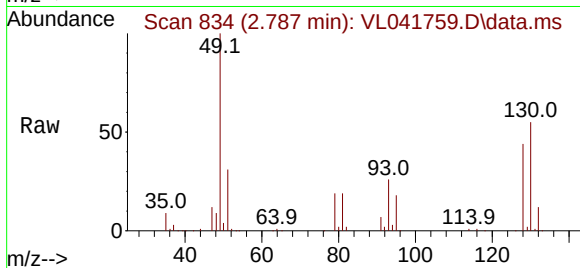




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 834  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

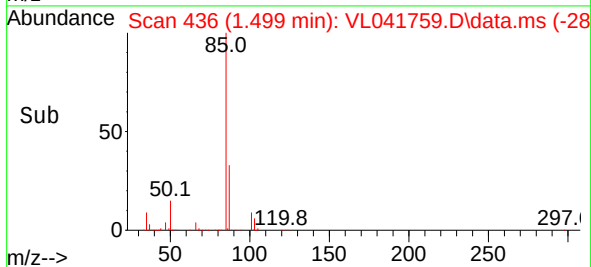
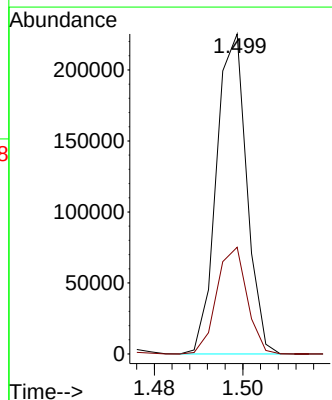
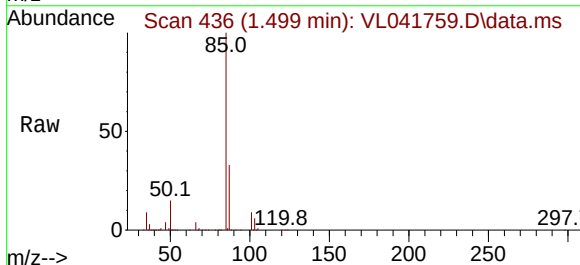
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

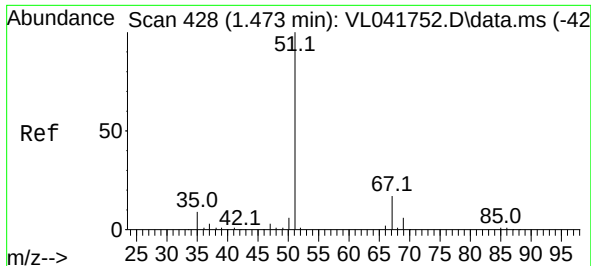
Tgt Ion: 49 Resp: 64976  
Ion Ratio Lower Upper  
49 100  
128 43.2 21.6 64.6  
130 54.5 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 9.236 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 85 Resp: 106780  
Ion Ratio Lower Upper  
85 100  
87 33.4 24.5 36.7

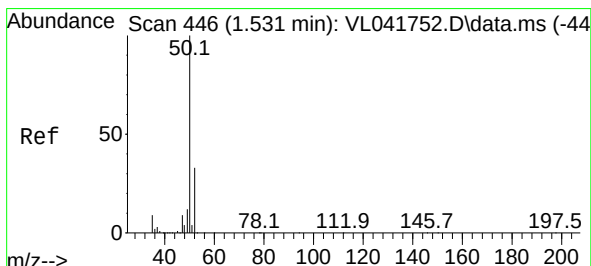
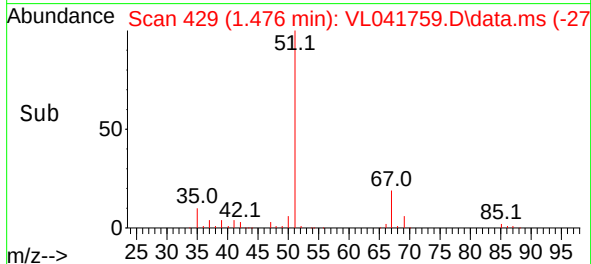
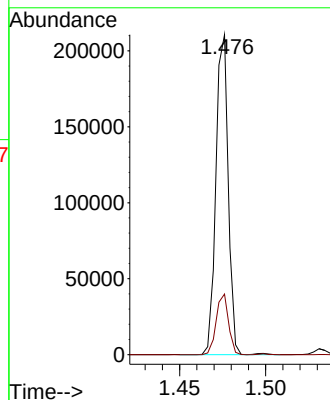
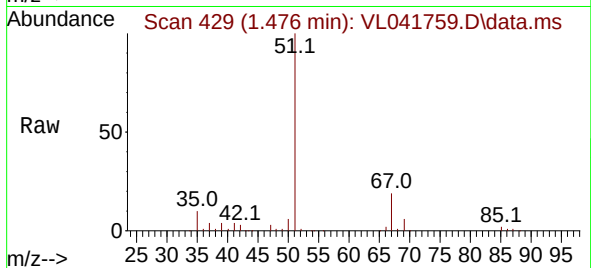




#3  
Chlorodifluoromethane  
Concen: 9.922 ppbv  
RT: 1.476 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

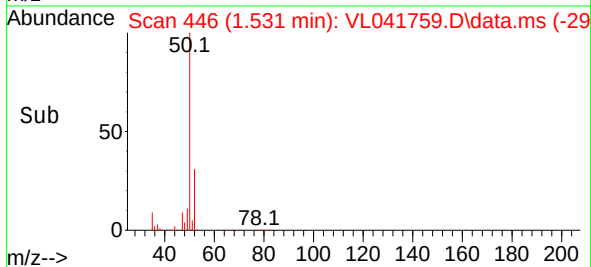
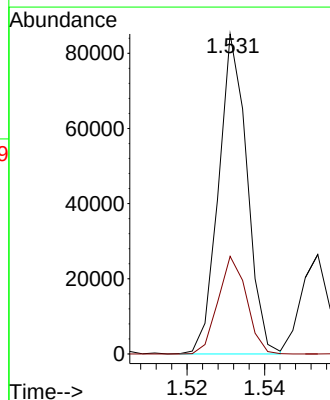
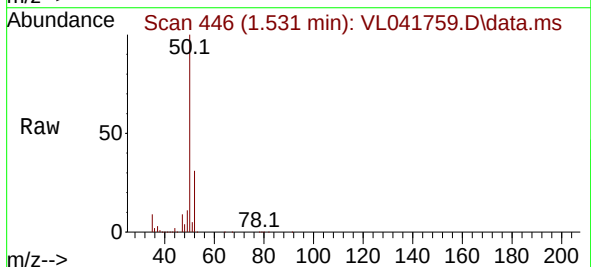
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

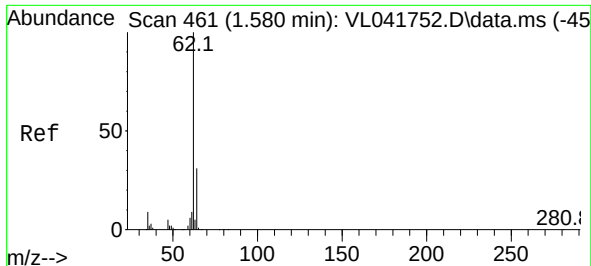
Tgt Ion: 51 Resp: 105141  
Ion Ratio Lower Upper  
51 100  
67 19.1 15.0 22.4



#4  
Chloromethane  
Concen: 9.596 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 50 Resp: 43409  
Ion Ratio Lower Upper  
50 100  
52 30.6 26.2 39.2

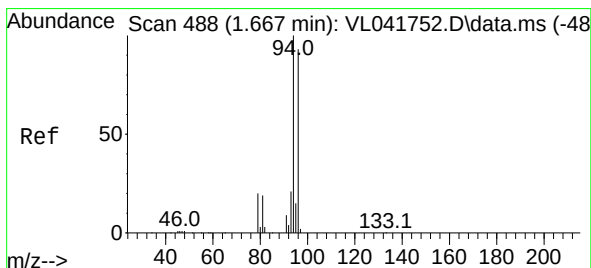
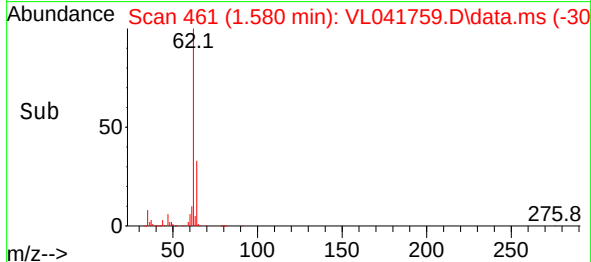
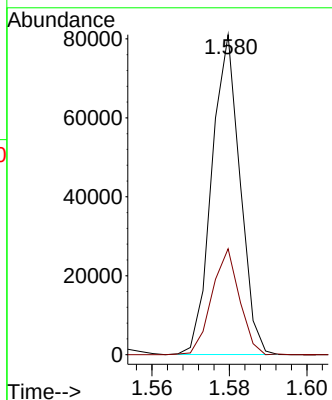
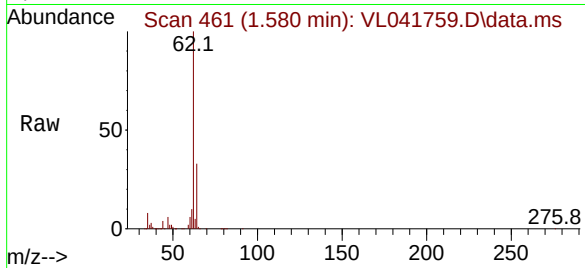




#5  
 Vinyl Chloride  
 Concen: 8.986 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

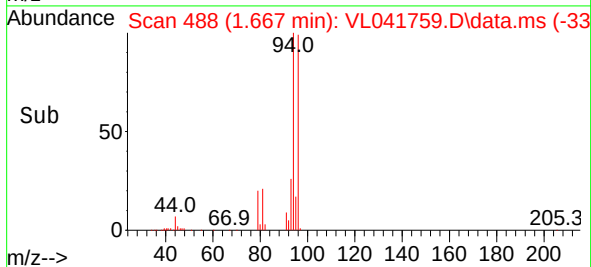
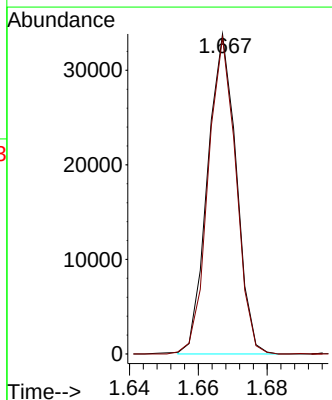
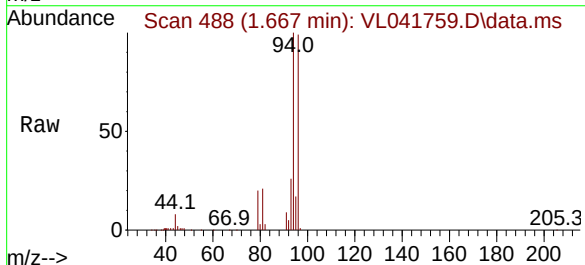
Instrument :  
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 ClientSampleId :  
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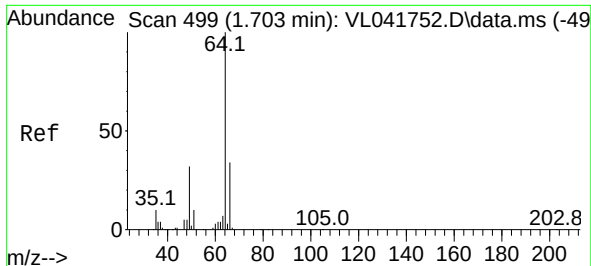
Tgt Ion: 62 Resp: 40956  
 Ion Ratio Lower Upper  
 62 100  
 64 33.0 25.1 37.7



#6  
 Bromomethane  
 Concen: 9.109 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

Tgt Ion: 94 Resp: 19590  
 Ion Ratio Lower Upper  
 94 100  
 96 98.9 74.7 112.1

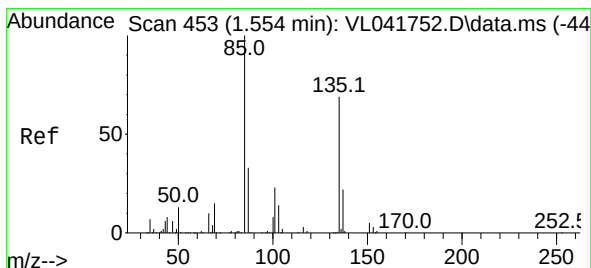
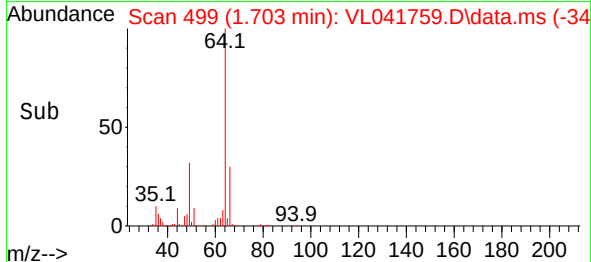
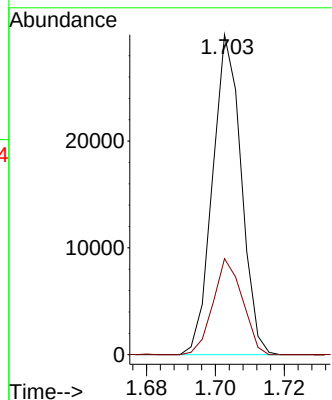
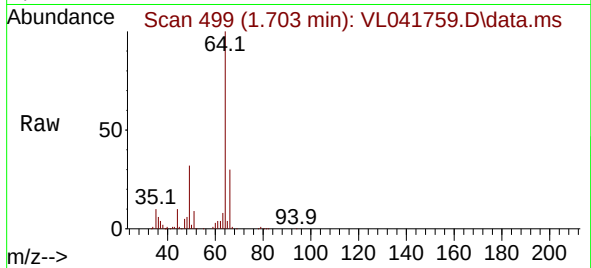




#7  
Chloroethane  
Concen: 9.803 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

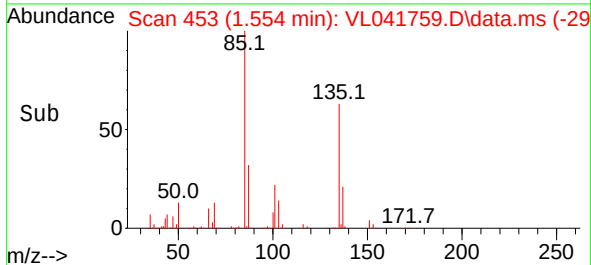
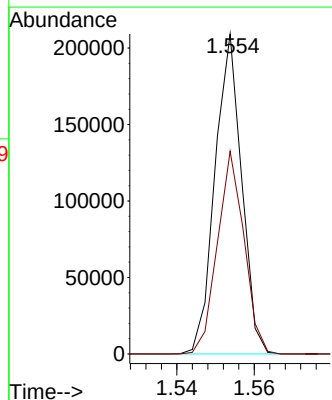
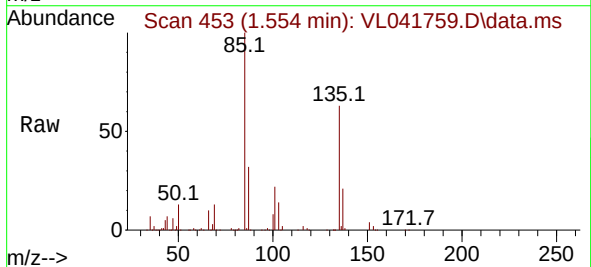
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MSVOA\_1  
ClientSampleId :  
ICVVL121624

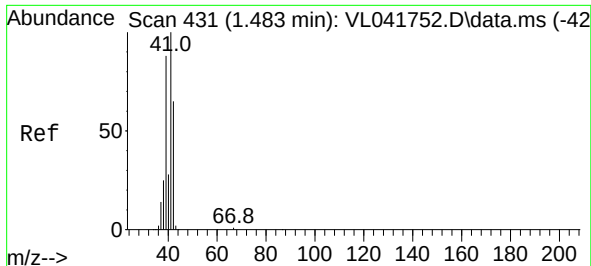
Tgt Ion: 64 Resp: 17356  
Ion Ratio Lower Upper  
64 100  
66 30.0 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 9.650 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 85 Resp: 99858  
Ion Ratio Lower Upper  
85 100  
135 63.6 51.9 77.9





#9

Propene

Concen: 9.084 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

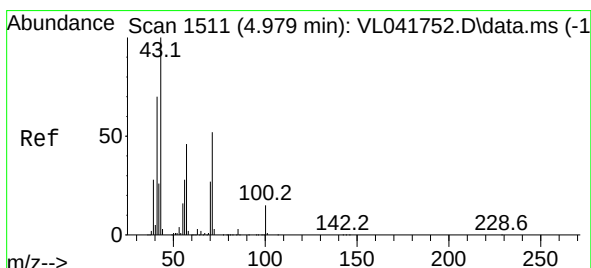
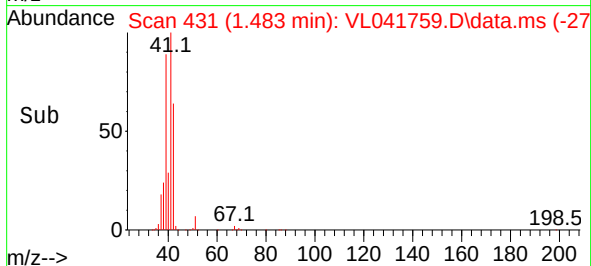
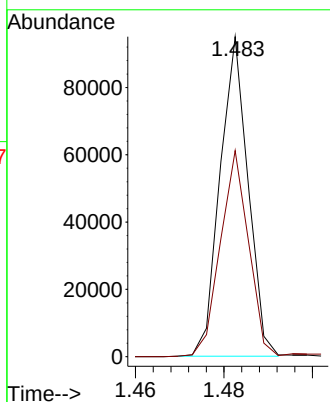
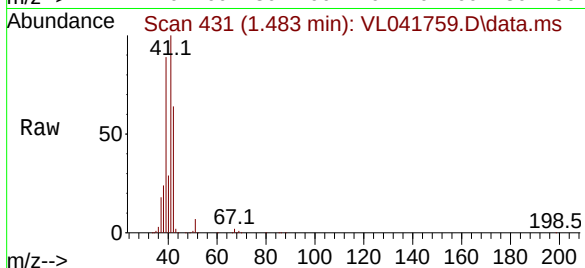
ICVVL121624

Tgt Ion: 41 Resp: 41721

Ion Ratio Lower Upper

41 100

42 66.7 52.4 78.6



#10

Heptane

Concen: 9.816 ppbv

RT: 4.981 min Scan# 1512

Delta R.T. 0.003 min

Lab File: VL041759.D

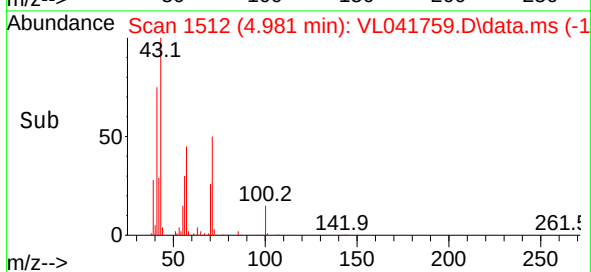
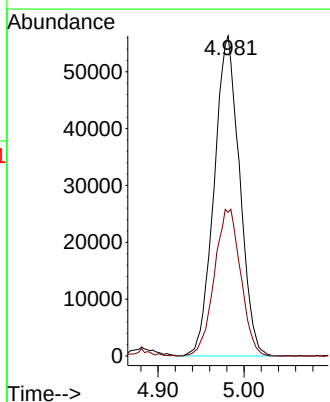
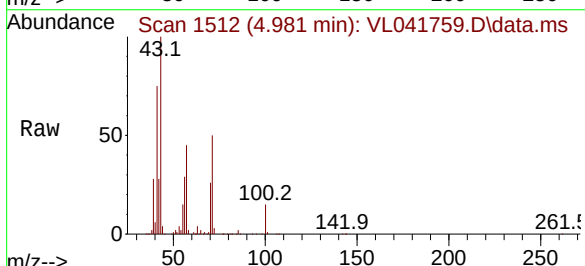
Acq: 16 Dec 2024 18:59

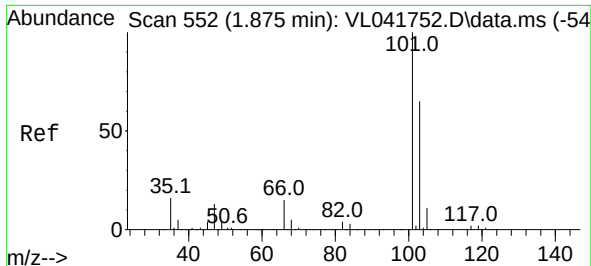
Tgt Ion: 43 Resp: 115804

Ion Ratio Lower Upper

43 100

57 47.4 38.5 57.7

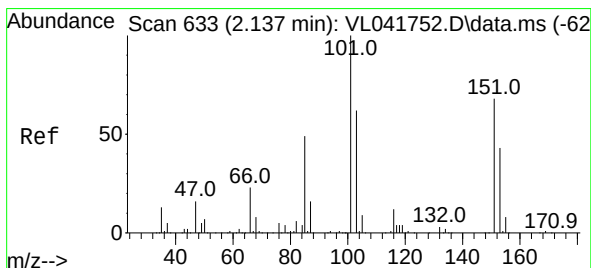
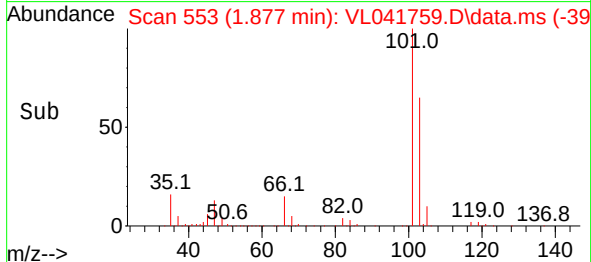
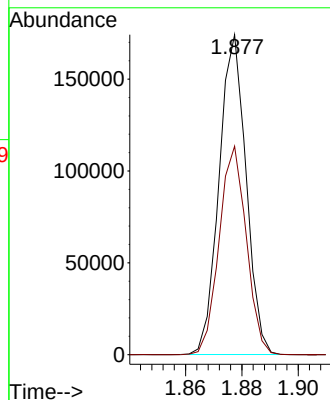
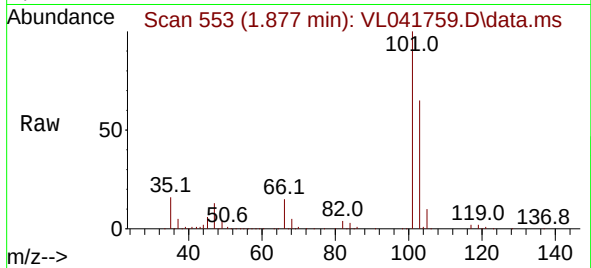




#11  
Trichlorofluoromethane  
Concen: 9.428 ppbv  
RT: 1.877 min Scan# 511  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

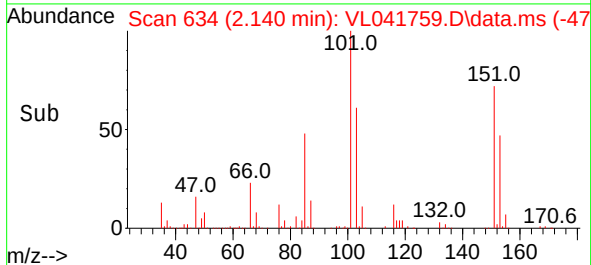
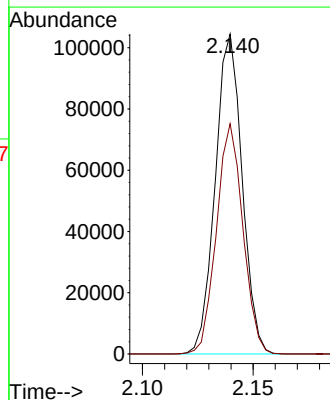
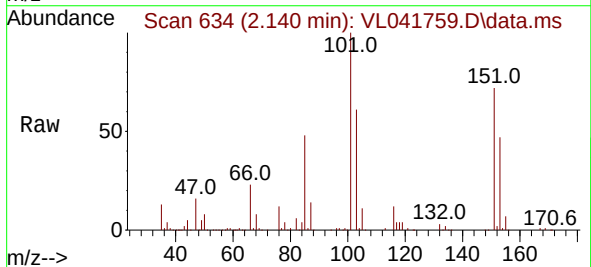
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

Tgt Ion:101 Resp: 115785  
Ion Ratio Lower Upper  
101 100  
103 65.2 51.8 77.8

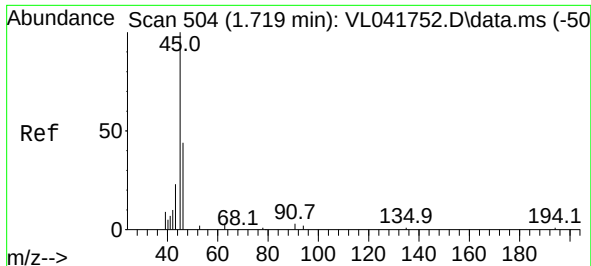


#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 9.450 ppbv  
RT: 2.140 min Scan# 634  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:101 Resp: 88265  
Ion Ratio Lower Upper  
101 100  
151 70.8 56.8 85.2







#13

Ethanol

Concen: 6.663 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

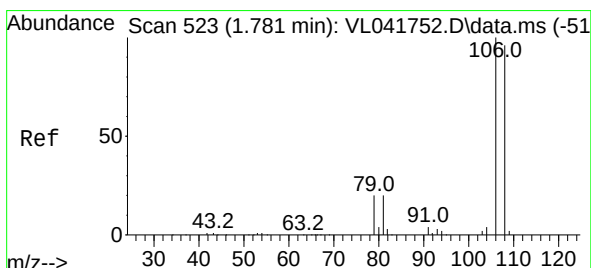
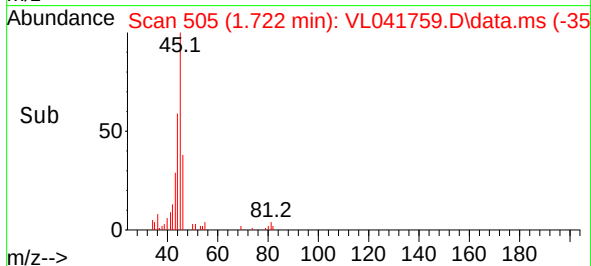
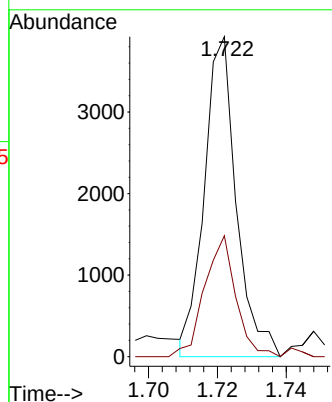
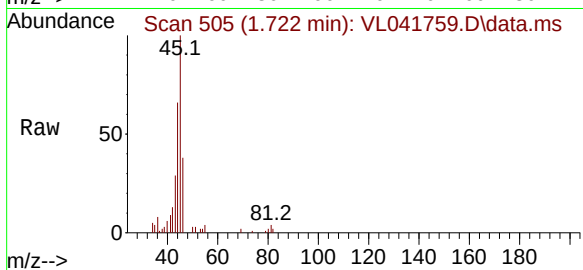
ICVVL121624

Tgt Ion: 45 Resp: 2534

Ion Ratio Lower Upper

45 100

46 38.2 16.4 65.8



#14

Bromoethene

Concen: 9.987 ppbv

RT: 1.780 min Scan# 523

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

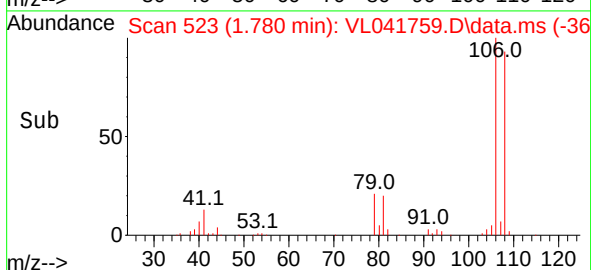
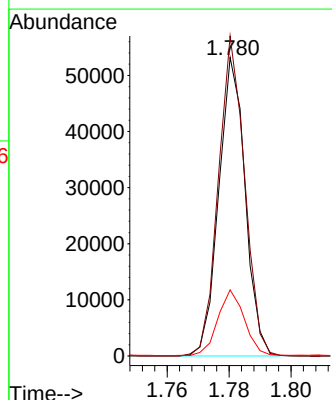
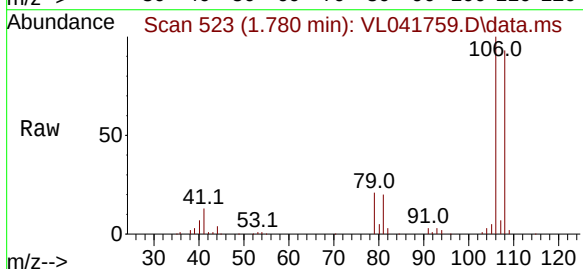
Tgt Ion: 108 Resp: 31492

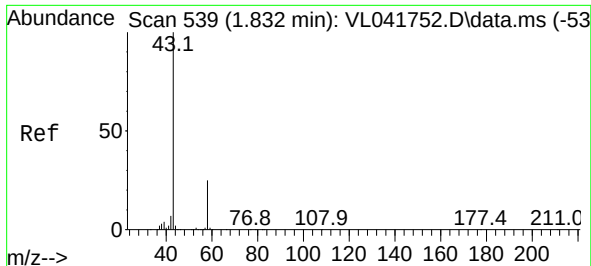
Ion Ratio Lower Upper

108 100

106 106.4 84.1 126.1

79 23.4 17.4 26.0

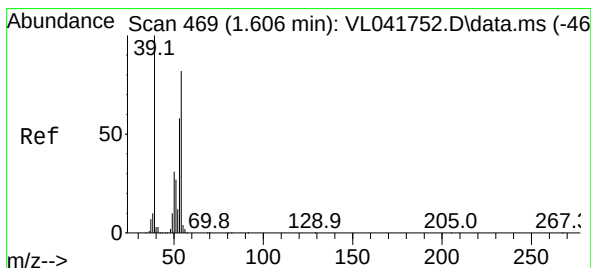
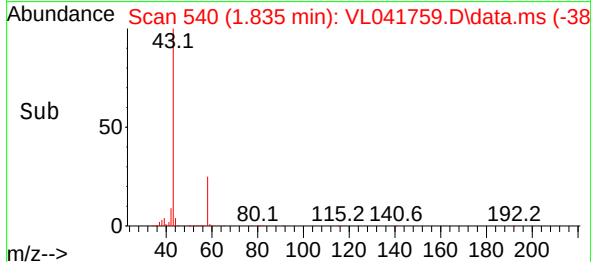
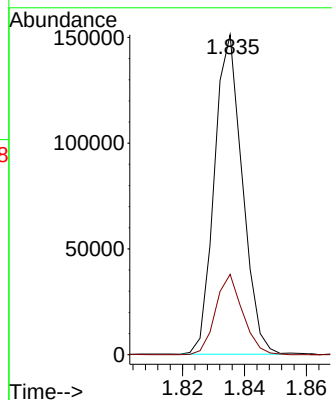
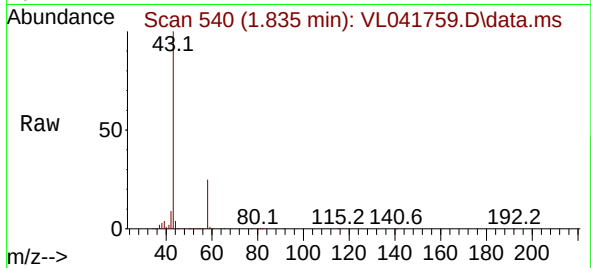




#15  
Acetone  
Concen: 7.505 ppbv  
RT: 1.835 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

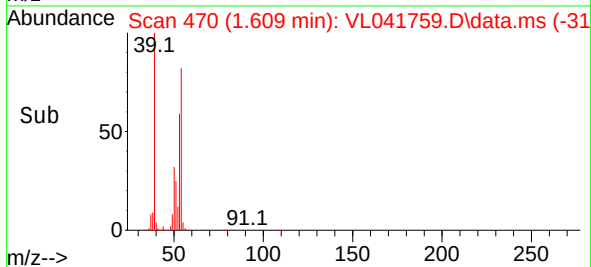
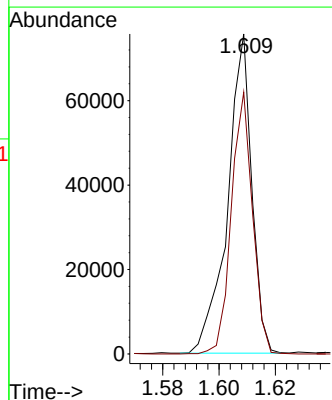
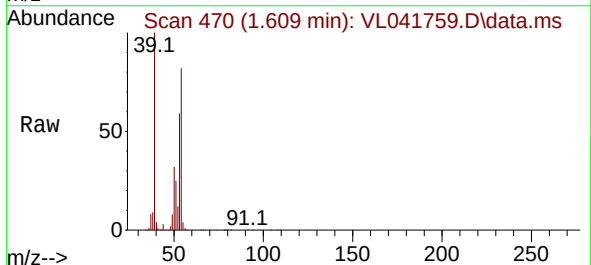
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

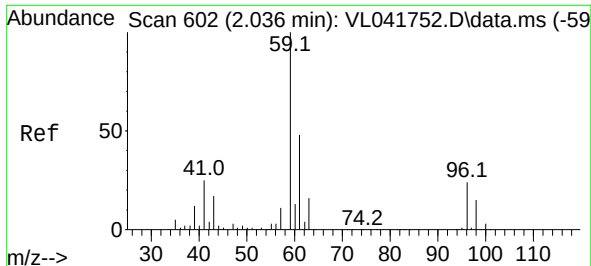
Tgt Ion: 43 Resp: 94879  
Ion Ratio Lower Upper  
43 100  
58 24.3 19.7 29.5



#16  
1,3-Butadiene  
Concen: 9.063 ppbv  
RT: 1.609 min Scan# 470  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 39 Resp: 45119  
Ion Ratio Lower Upper  
39 100  
54 71.7 58.4 87.6

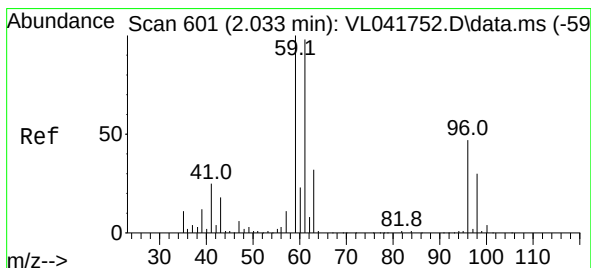
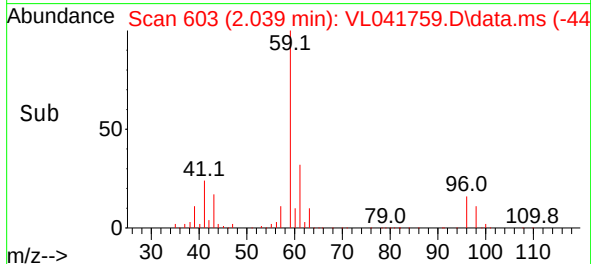
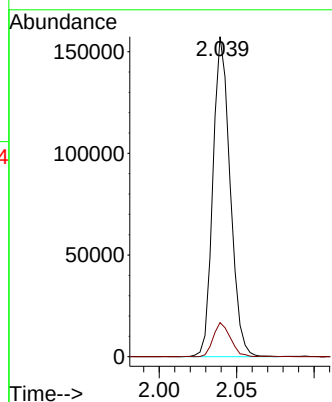
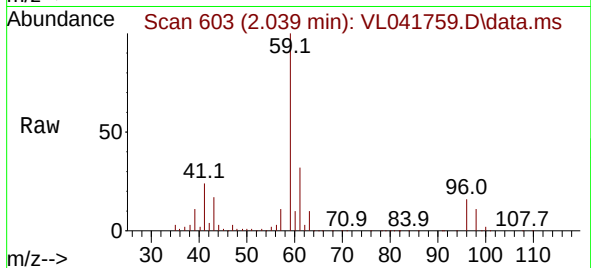




#17  
tert-Butyl alcohol  
Concen: 9.730 ppbv  
RT: 2.039 min Scan# 603  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

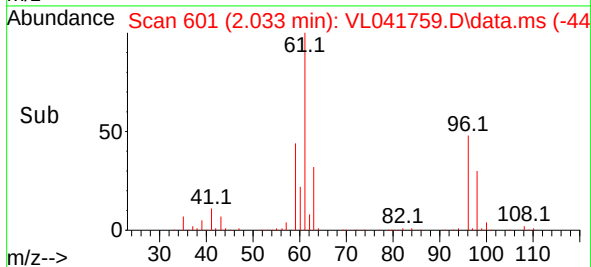
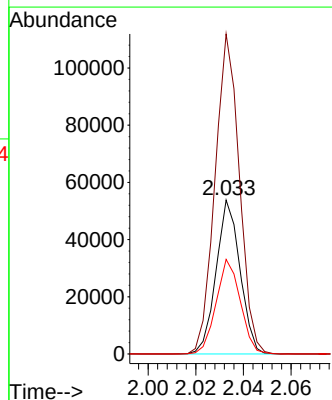
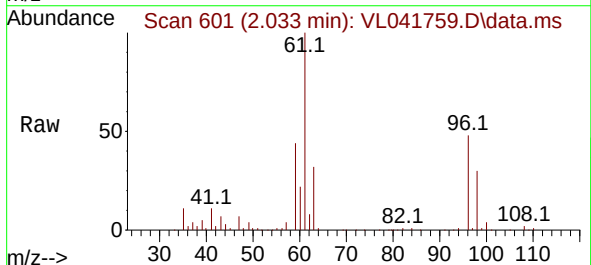
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

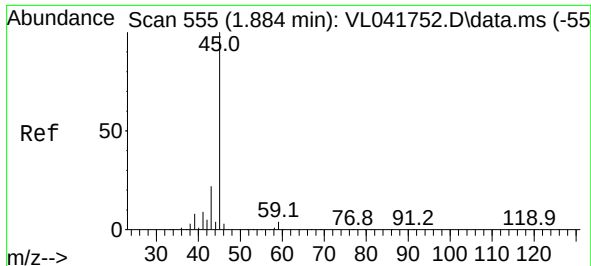
Tgt Ion: 59 Resp: 122035  
Ion Ratio Lower Upper  
59 100  
57 10.6 8.6 13.0



#18  
1,1-Dichloroethene  
Concen: 9.568 ppbv  
RT: 2.033 min Scan# 601  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 96 Resp: 37466  
Ion Ratio Lower Upper  
96 100  
61 207.9 167.7 251.5  
98 61.5 51.1 76.7





#19

Isopropyl Alcohol

Concen: 7.590 ppbv

RT: 1.884 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

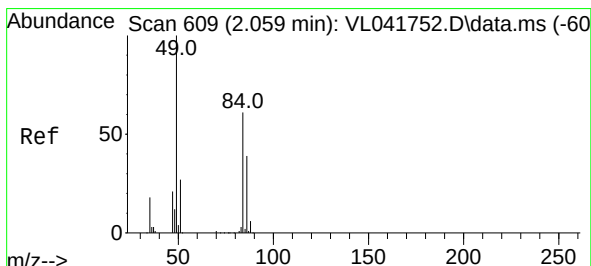
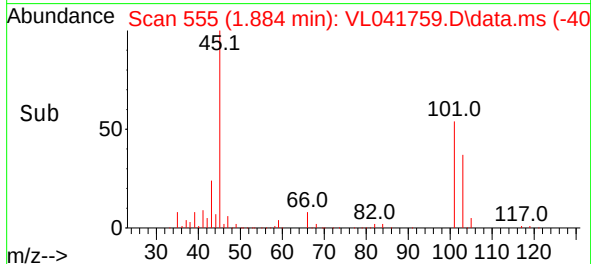
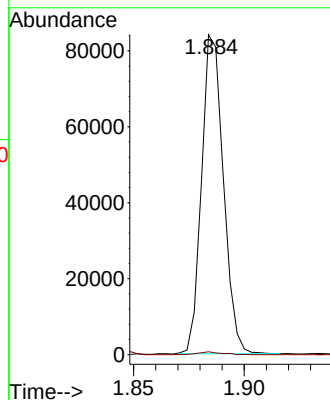
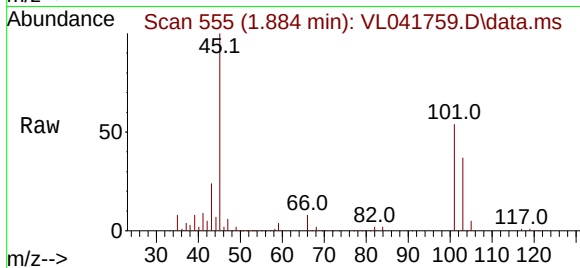
ICVVL121624

Tgt Ion: 45 Resp: 57577

Ion Ratio Lower Upper

45 100

58 40.1 33.3 49.9



#20

Methylene Chloride

Concen: 8.967 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 84 Resp: 32325

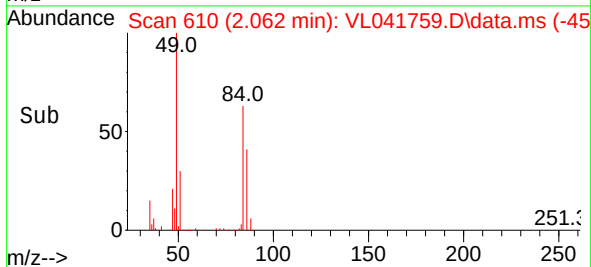
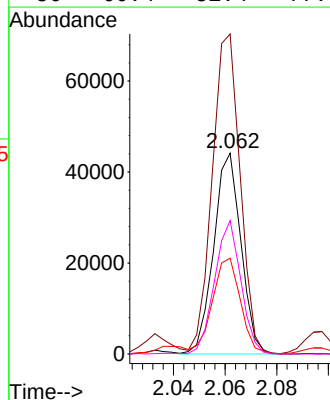
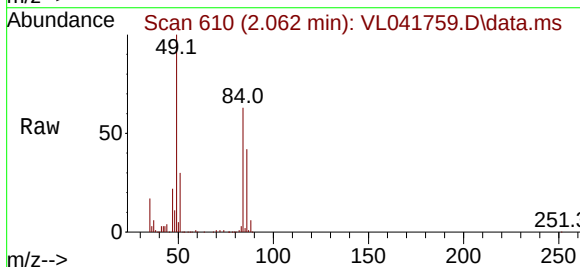
Ion Ratio Lower Upper

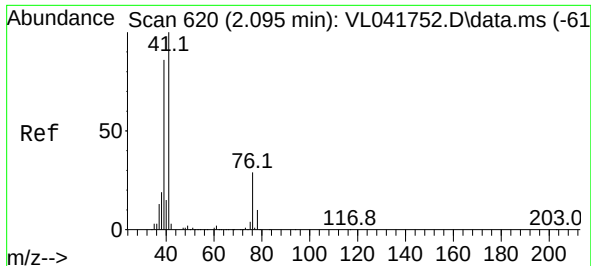
84 100

49 159.1 132.6 198.8

51 47.7 37.6 56.4

86 66.4 51.4 77.0





#21

Allyl Chloride

Concen: 9.859 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041759.D

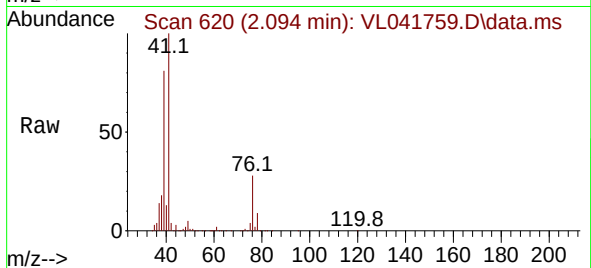
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624



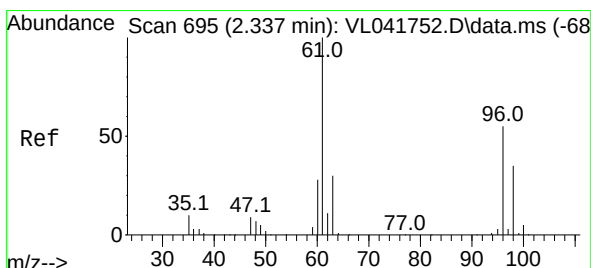
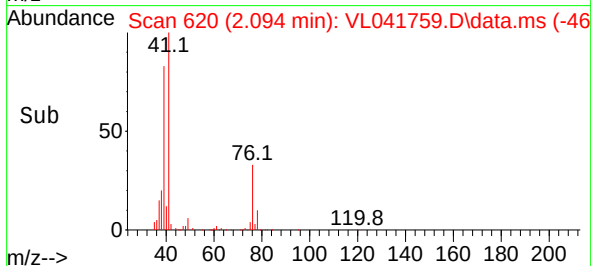
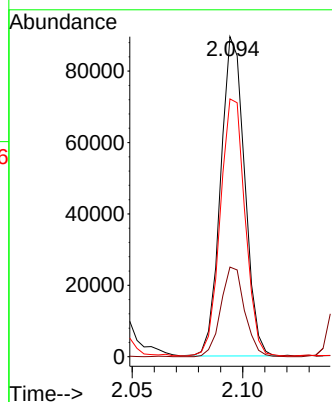
Tgt Ion: 41 Resp: 67596

Ion Ratio Lower Upper

41 100

76 27.9 22.3 33.5

39 82.6 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 9.515 ppbv

RT: 2.340 min Scan# 696

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

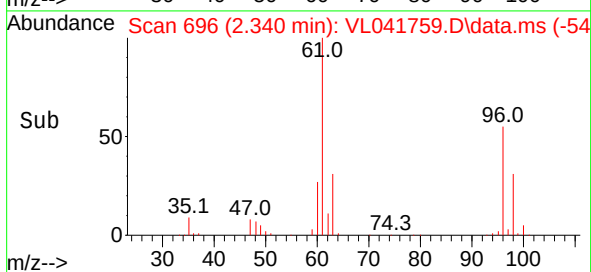
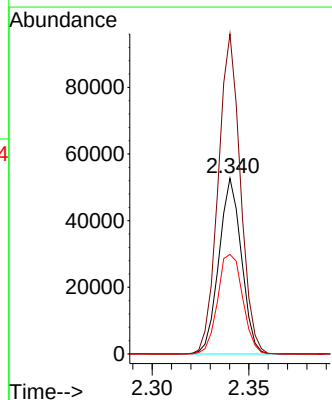
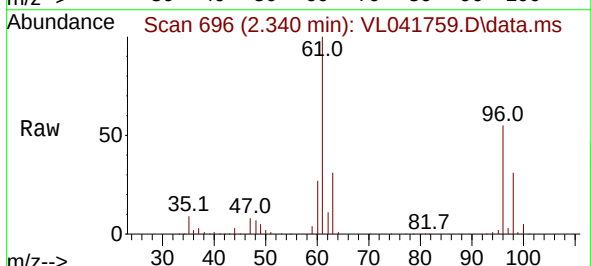
Tgt Ion: 96 Resp: 42651

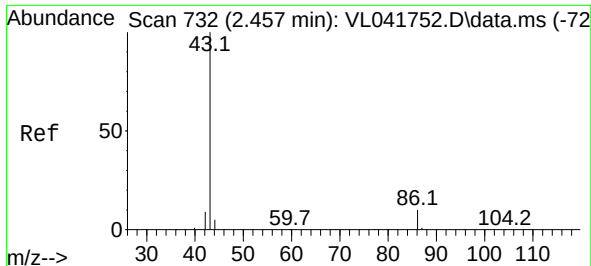
Ion Ratio Lower Upper

96 100

61 182.2 146.3 219.5

98 56.7 50.8 76.2

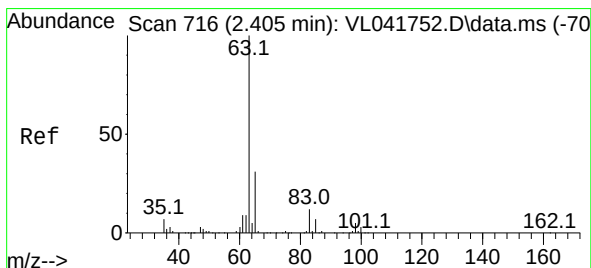
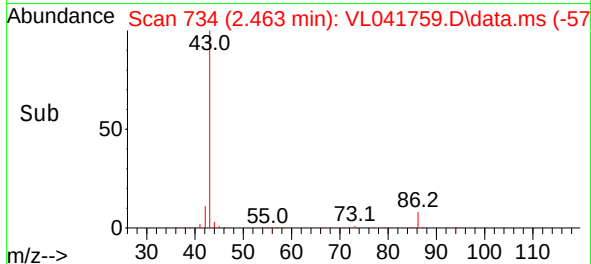
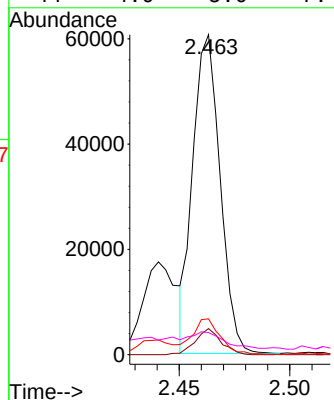
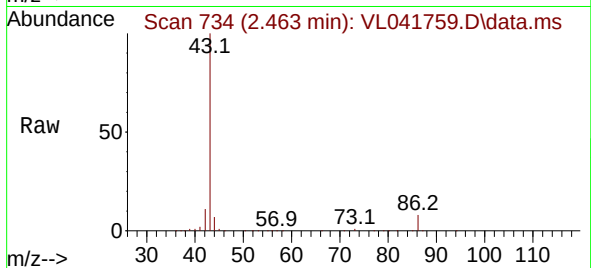




#23  
 Vinyl Acetate  
 Concen: 8.826 ppbv  
 RT: 2.463 min Scan# 716  
 Delta R.T. 0.006 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

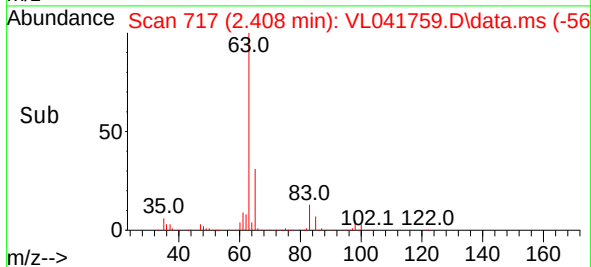
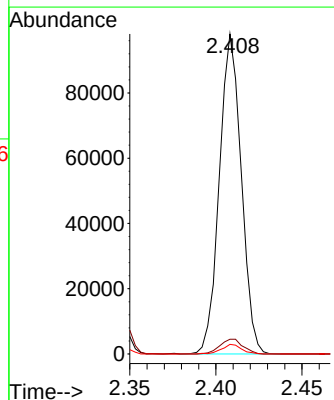
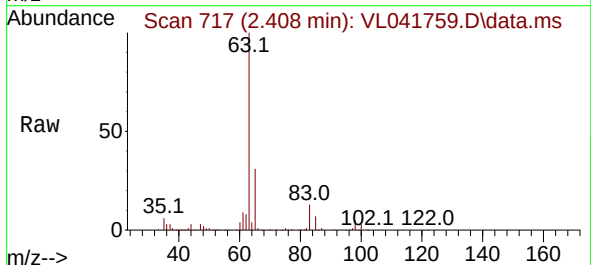
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 ICVVL121624

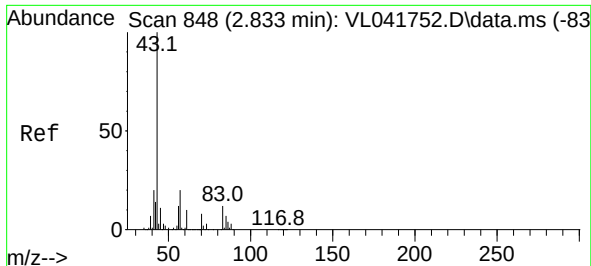
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 51812 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 86        | 8.1   | 6.6   | 10.0  |
| 42        | 11.2  | 8.2   | 12.2  |
| 44        | 4.9   | 5.0   | 7.4   |



#24  
 1,1-Dichloroethane  
 Concen: 9.589 ppbv  
 RT: 2.408 min Scan# 717  
 Delta R.T. 0.003 min  
 Lab File: VL041759.D  
 Acq: 16 Dec 2024 18:59

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 63    | Resp: | 87006 |
| Ion Ratio | Lower | Upper |       |
| 63        | 100   |       |       |
| 98        | 4.6   | 2.3   | 6.8   |
| 100       | 3.0   | 1.4   | 4.2   |





#25

Ethyl Acetate

Concen: 9.965 ppbv

RT: 2.835 min Scan# 84

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

Tgt Ion: 43 Resp: 234370

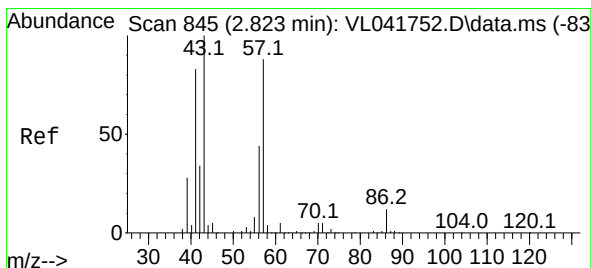
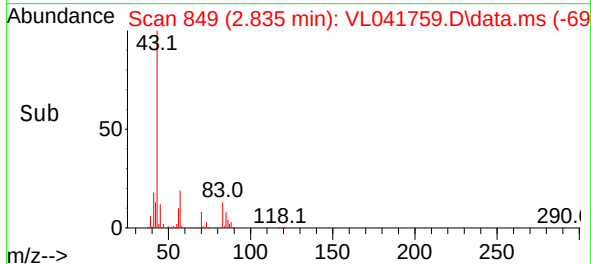
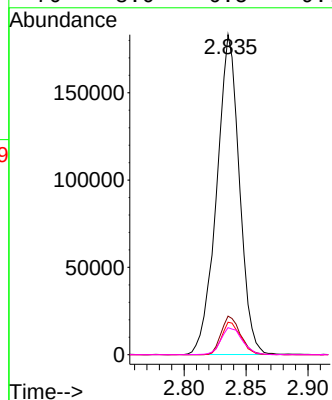
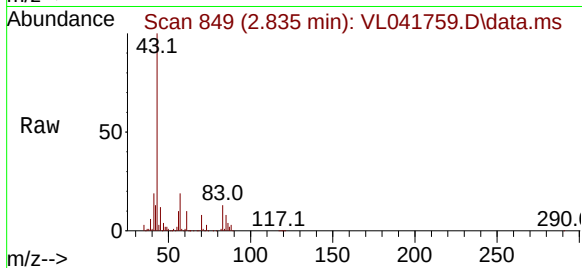
Ion Ratio Lower Upper

43 100

45 10.2 8.1 12.1

61 8.6 7.0 10.6

70 8.0 6.5 9.7



#26

Hexane

Concen: 9.752 ppbv

RT: 2.826 min Scan# 846

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 57 Resp: 87034

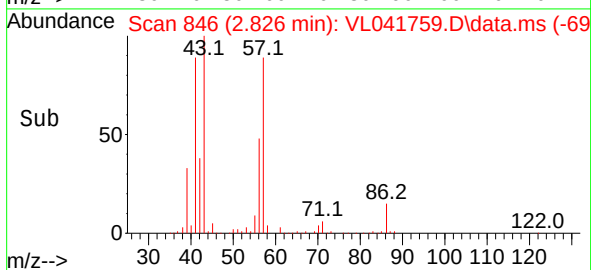
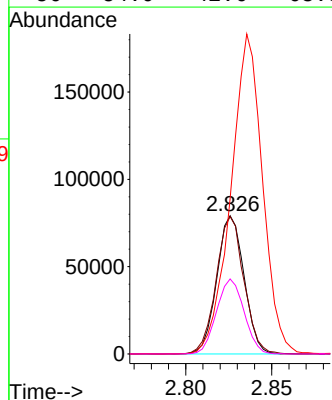
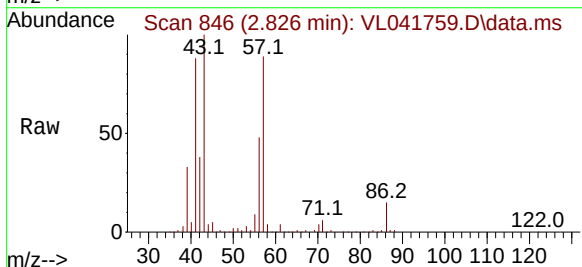
Ion Ratio Lower Upper

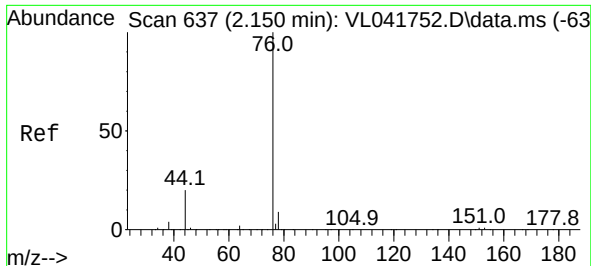
57 100

41 101.5 79.6 119.4

43 270.5 211.0 316.6

56 54.9 42.6 63.8

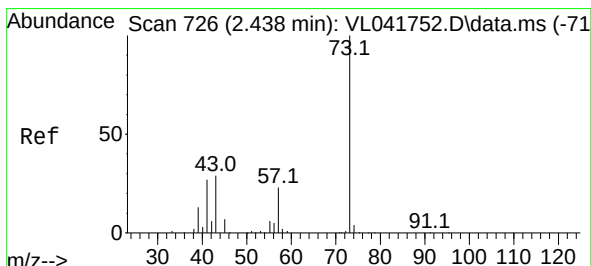
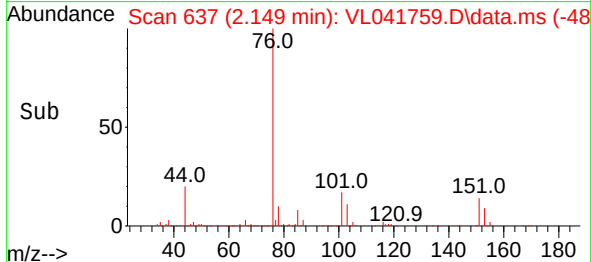
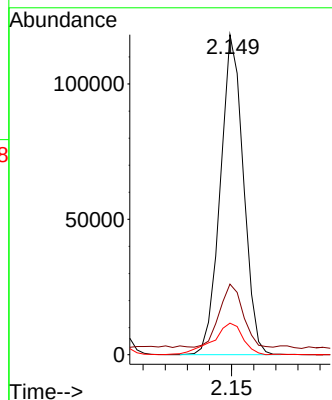
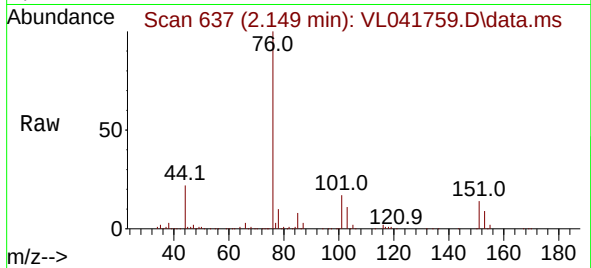




#27  
Carbon Disulfide  
Concen: 10.649 ppbv  
RT: 2.149 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

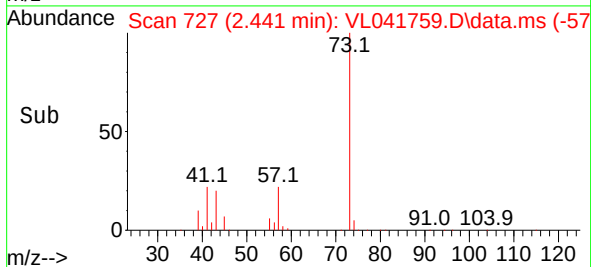
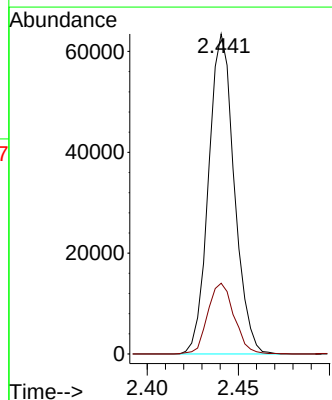
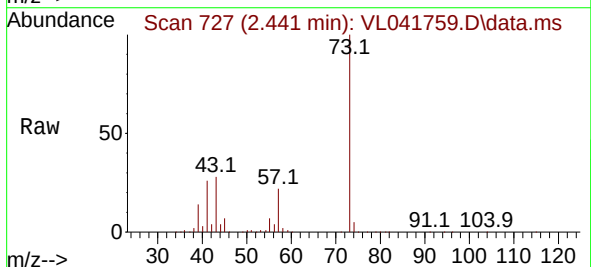
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

Tgt Ion: 76 Resp: 85650  
Ion Ratio Lower Upper  
76 100  
44 22.3 17.6 26.4  
78 12.9 10.2 15.4

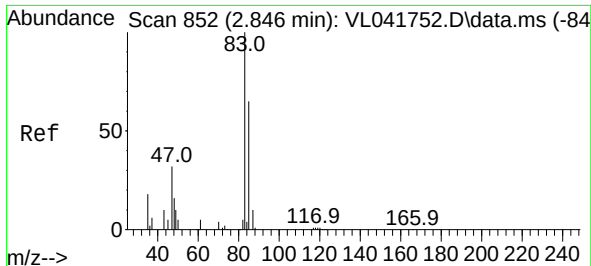


#28  
Methyl tert-Butyl Ether  
Concen: 8.589 ppbv  
RT: 2.441 min Scan# 727  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 73 Resp: 62189  
Ion Ratio Lower Upper  
73 100  
57 22.7 17.6 26.4







#29

Chloroform

Concen: 9.892 ppbv

RT: 2.848 min Scan# 84

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

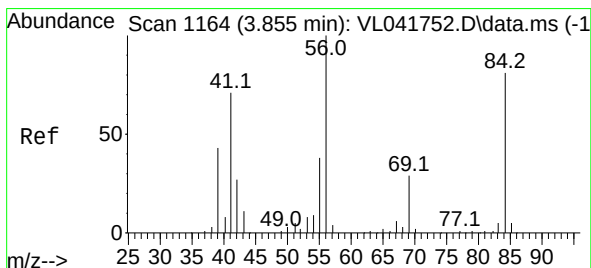
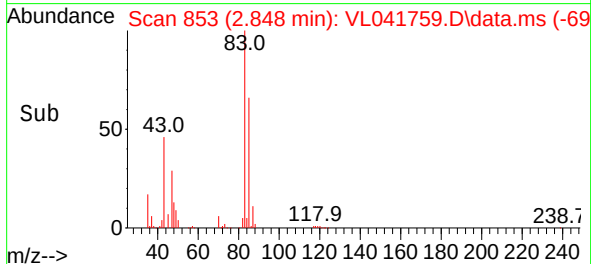
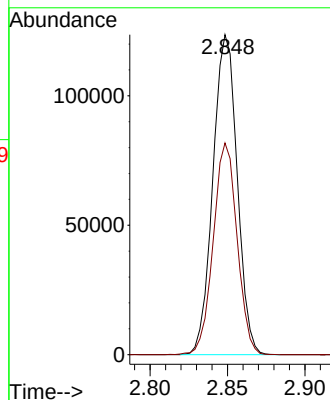
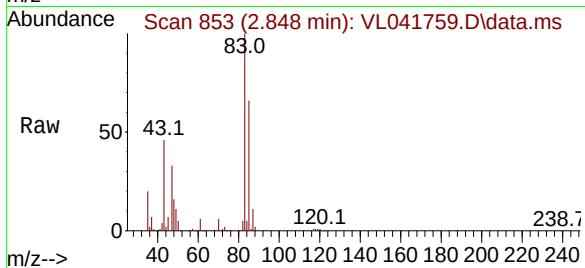
ICVVL121624

Tgt Ion: 83 Resp: 134541

Ion Ratio Lower Upper

83 100

85 66.2 51.8 77.6



#30

Cyclohexane

Concen: 9.912 ppbv

RT: 3.858 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

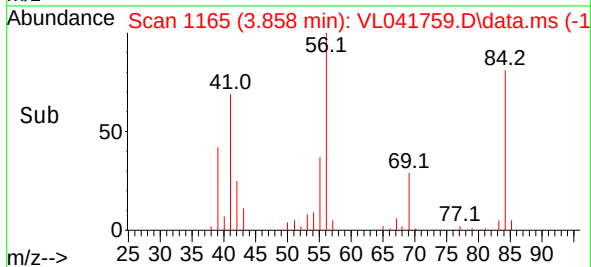
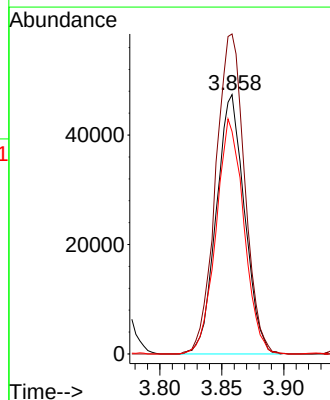
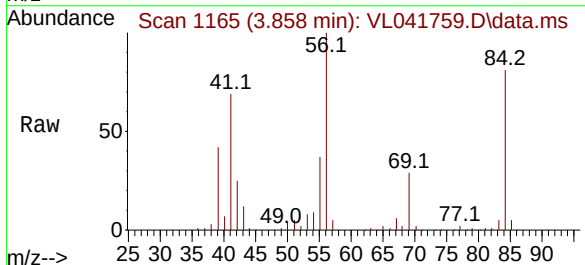
Tgt Ion: 84 Resp: 75274

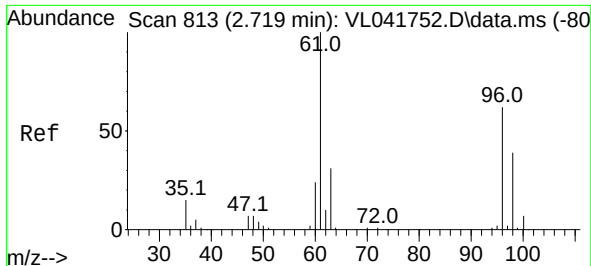
Ion Ratio Lower Upper

84 100

56 126.5 102.3 153.5

41 89.3 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 9.935 ppbv

RT: 2.719 min Scan# 81

Delta R.T. -0.000 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

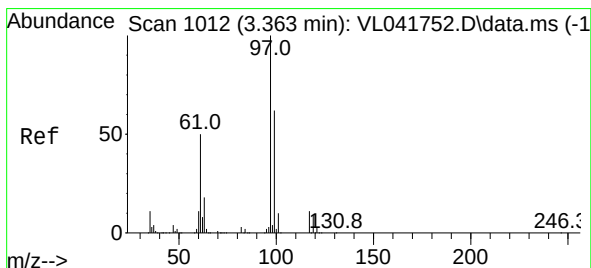
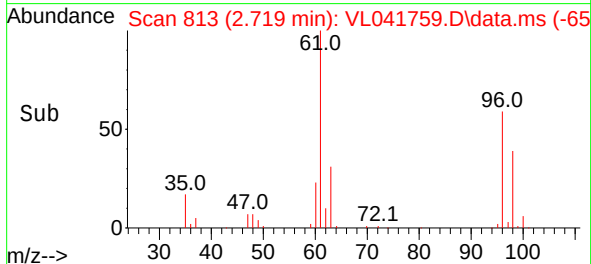
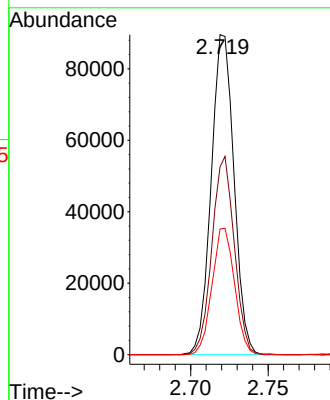
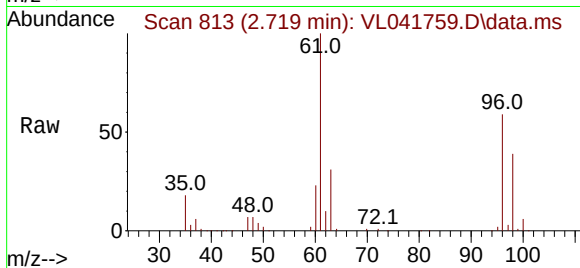
Tgt Ion: 61 Resp: 91628

Ion Ratio Lower Upper

61 100

96 58.7 49.7 74.5

98 39.3 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 9.979 ppbv

RT: 3.366 min Scan# 1013

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

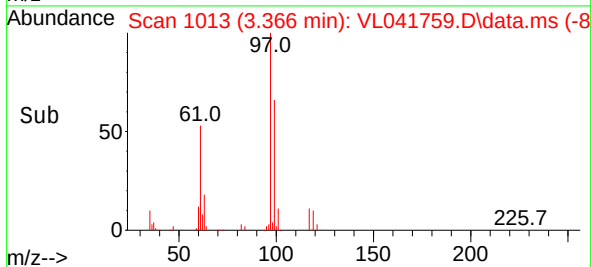
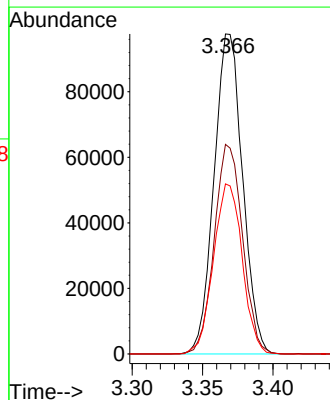
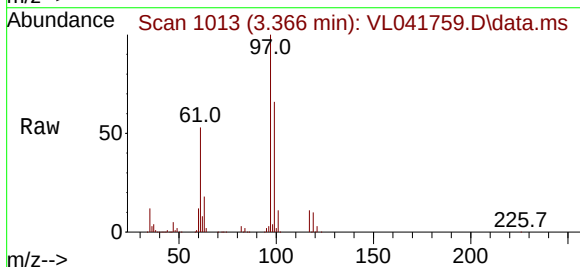
Tgt Ion: 97 Resp: 137978

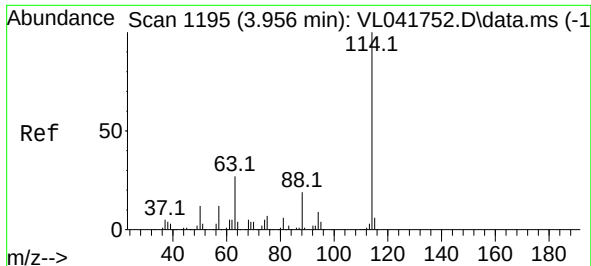
Ion Ratio Lower Upper

97 100

99 64.8 51.0 76.4

61 53.5 42.2 63.2

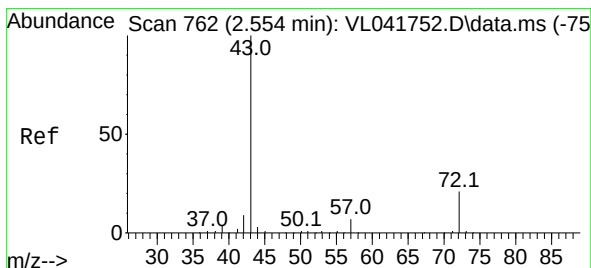
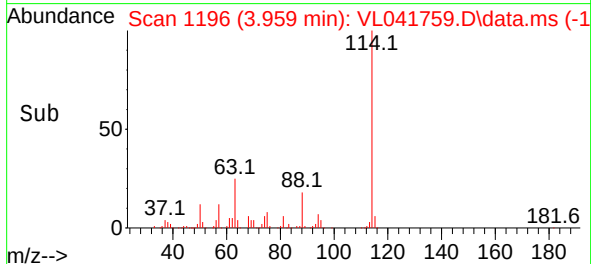
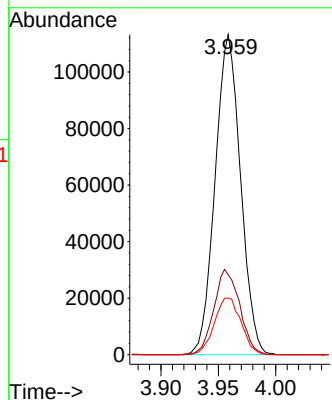
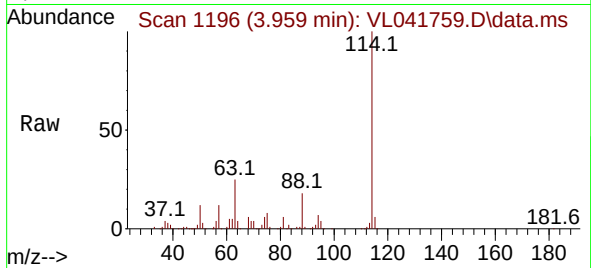




#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.959 min Scan# 1196  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

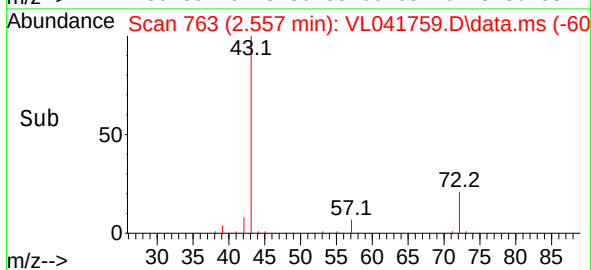
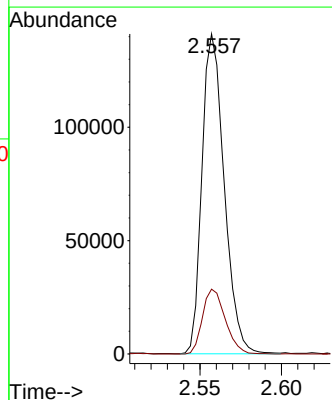
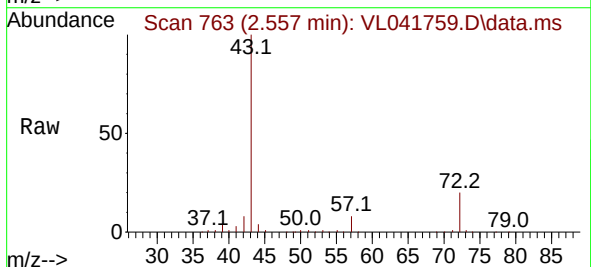
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

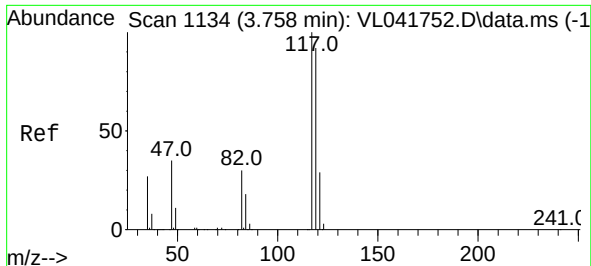
Tgt Ion:114 Resp: 174378  
Ion Ratio Lower Upper  
114 100  
63 27.0 21.8 32.8  
88 18.6 14.8 22.2



#34  
2-Butanone  
Concen: 9.547 ppbv  
RT: 2.557 min Scan# 763  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 43 Resp: 133939  
Ion Ratio Lower Upper  
43 100  
72 20.7 16.8 25.2

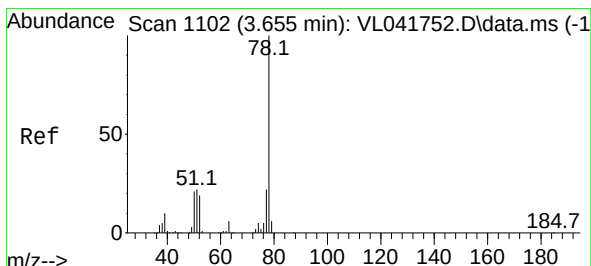
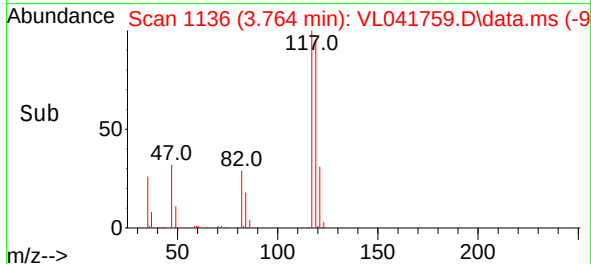
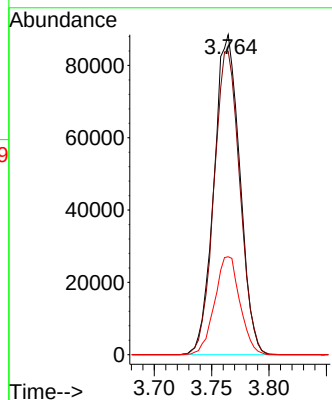
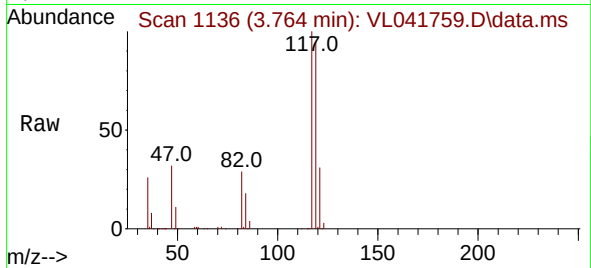




#35  
Carbon Tetrachloride  
Concen: 11.191 ppbv  
RT: 3.764 min Scan# 1136  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

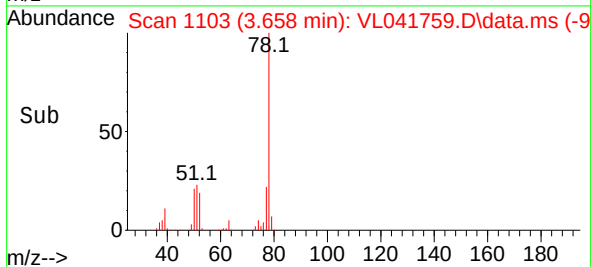
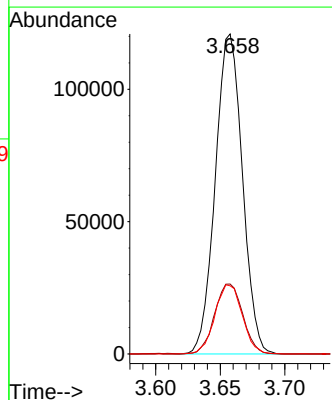
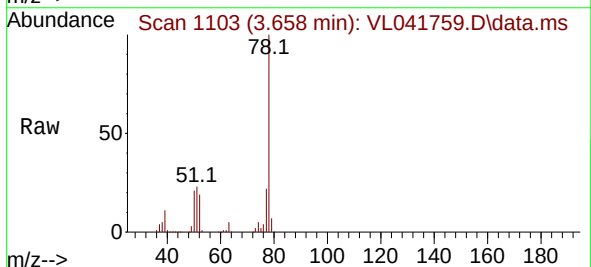
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

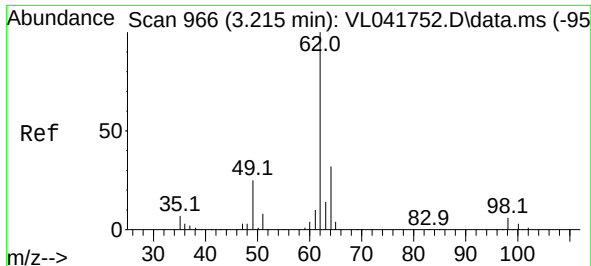
Tgt Ion:117 Resp: 138537  
Ion Ratio Lower Upper  
117 100  
119 94.8 73.7 110.5  
121 30.6 23.0 34.4



#36  
Benzene  
Concen: 9.787 ppbv  
RT: 3.658 min Scan# 1103  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 78 Resp: 176537  
Ion Ratio Lower Upper  
78 100  
77 21.8 17.8 26.6  
50 21.3 17.2 25.8

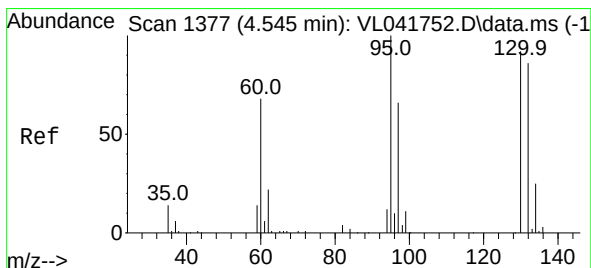
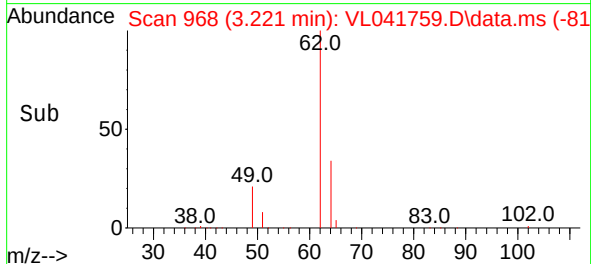
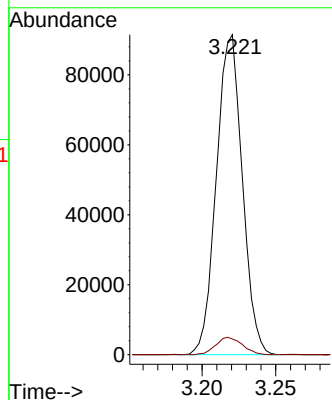
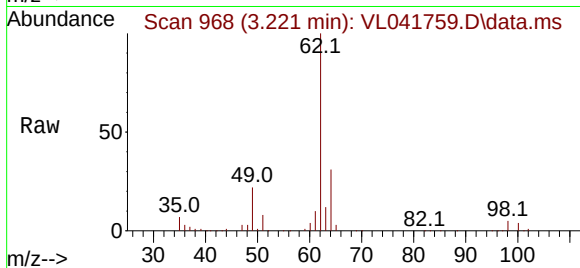




#37  
1,2-Dichloroethane  
Concen: 9.982 ppbv  
RT: 3.221 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

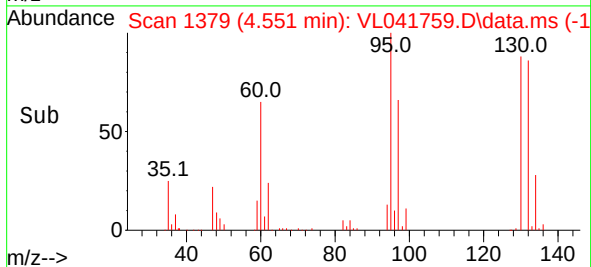
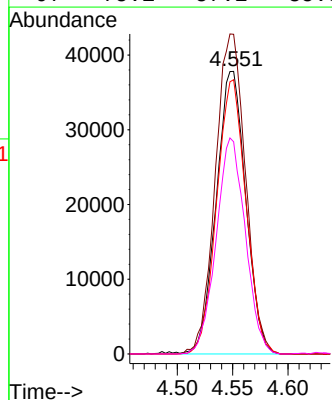
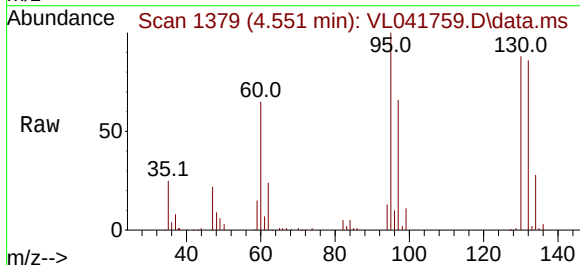
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

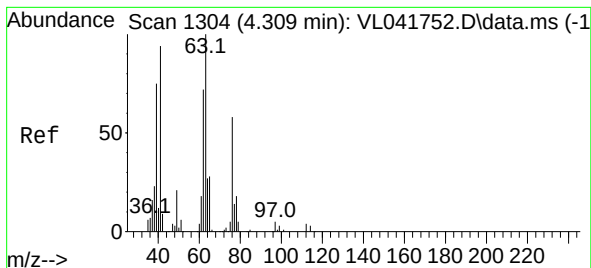
Tgt Ion: 62 Resp: 112037  
Ion Ratio Lower Upper  
62 100  
98 5.5 4.7 7.1



#38  
Trichloroethene  
Concen: 9.156 ppbv  
RT: 4.551 min Scan# 1379  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:130 Resp: 70108  
Ion Ratio Lower Upper  
130 100  
95 113.2 87.0 130.6  
132 97.0 75.0 112.6  
97 75.1 57.2 85.8





#39

1,2-Dichloropropane

Concen: 9.761 ppbv

RT: 4.318 min Scan# 1

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

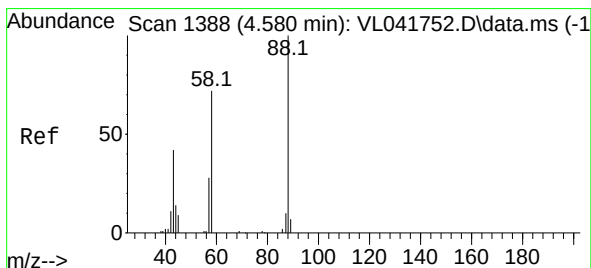
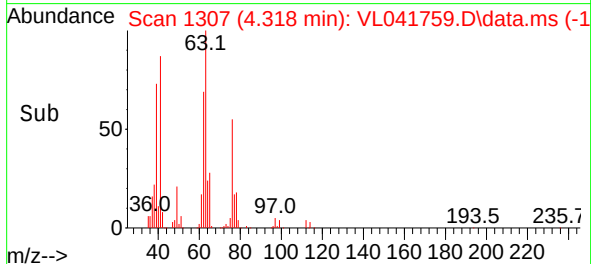
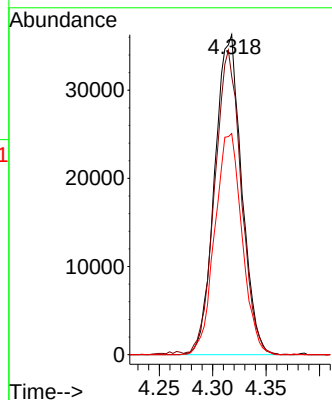
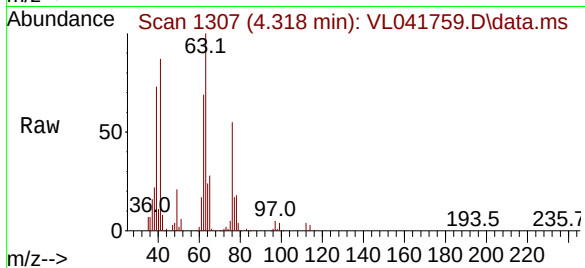
Tgt Ion: 63 Resp: 63675

Ion Ratio Lower Upper

63 100

41 87.0 75.3 112.9

62 69.1 57.3 85.9



#40

1,4-Dioxane

Concen: 9.693 ppbv

RT: 4.583 min Scan# 1389

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion: 88 Resp: 30891

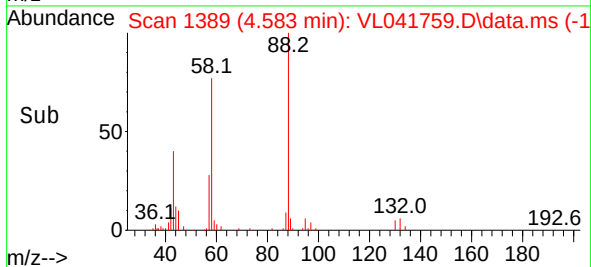
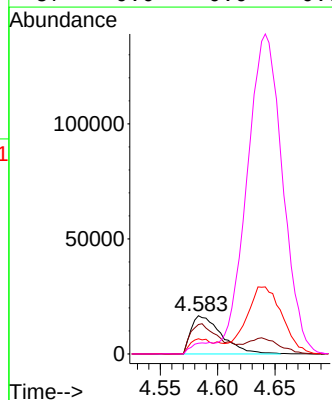
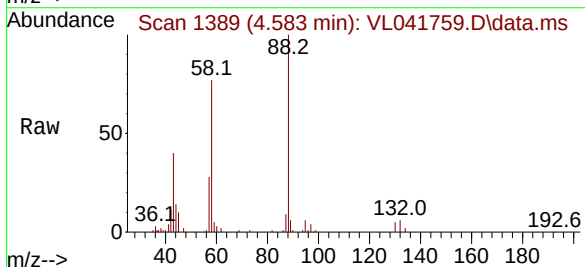
Ion Ratio Lower Upper

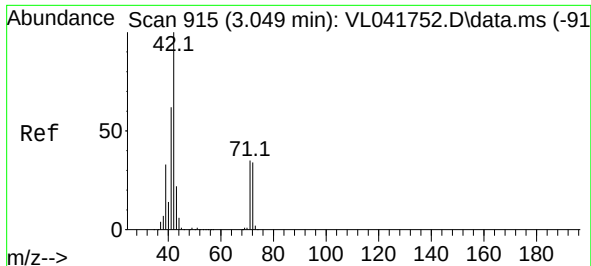
88 100

58 76.6 61.0 91.6

43 39.2 29.4 44.0

57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 9.857 ppbv

RT: 3.056 min Scan# 915

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

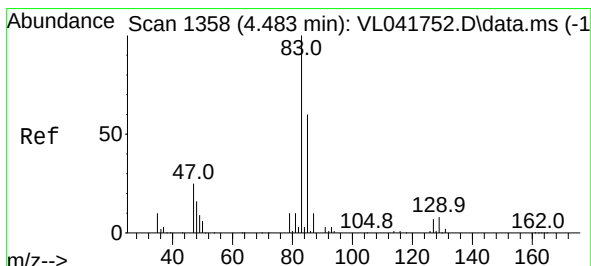
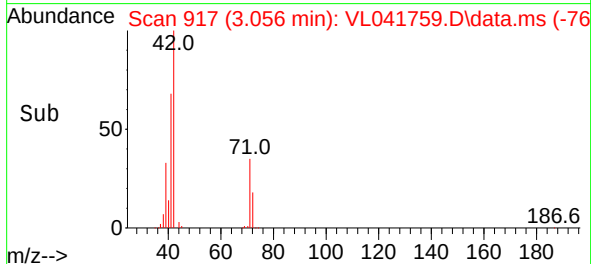
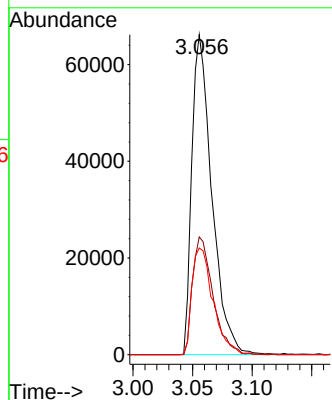
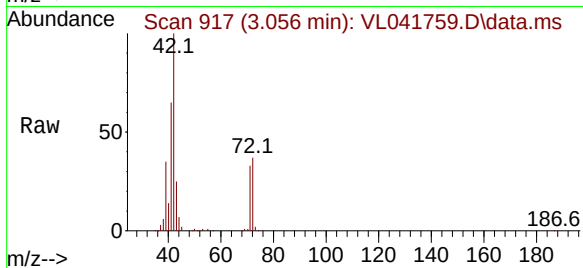
Tgt Ion: 42 Resp: 77472

Ion Ratio Lower Upper

42 100

72 37.5 29.1 43.7

71 35.4 28.4 42.6



#42

Bromodichloromethane

Concen: 10.821 ppbv

RT: 4.493 min Scan# 1361

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

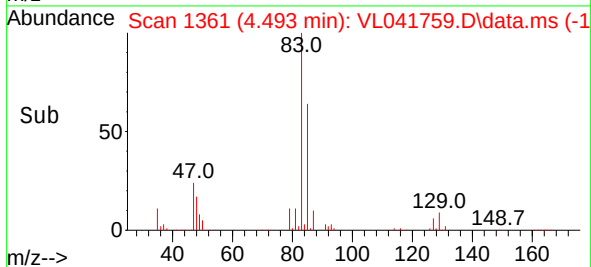
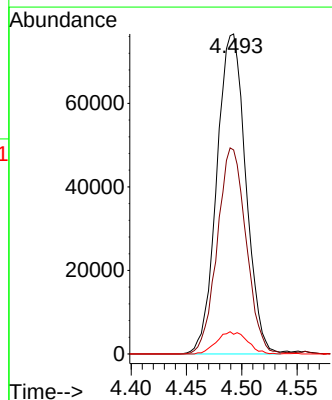
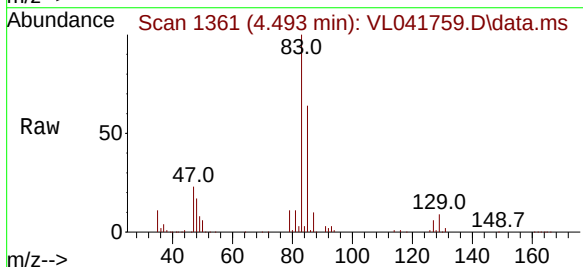
Tgt Ion: 83 Resp: 139717

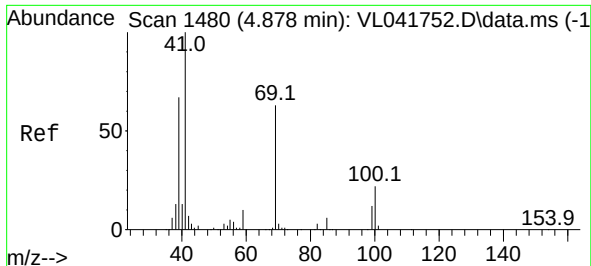
Ion Ratio Lower Upper

83 100

85 63.7 48.0 72.0

127 6.2 5.8 8.8





#43

Methyl Methacrylate

Concen: 10.229 ppbv

RT: 4.881 min Scan# 1481

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

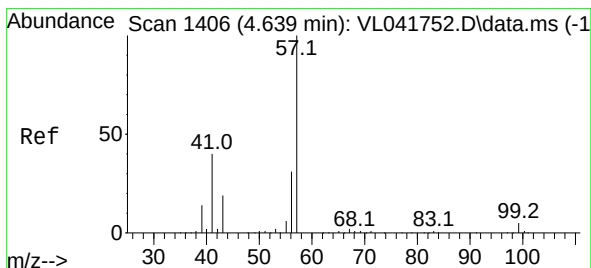
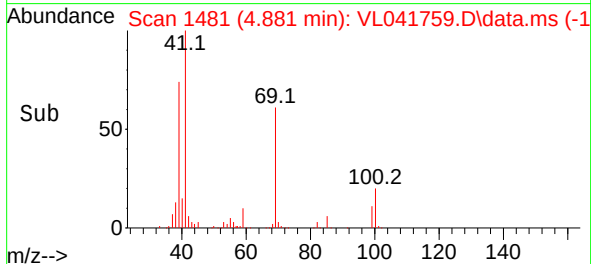
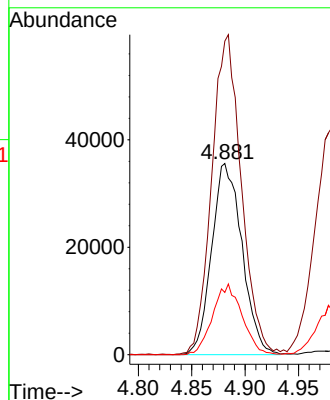
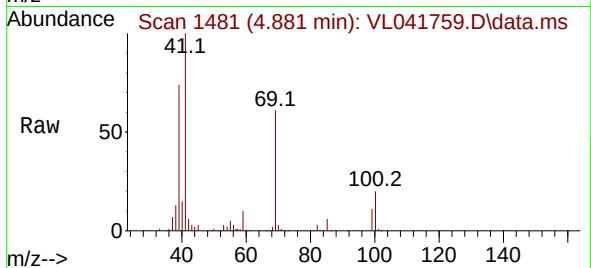
Tgt Ion: 69 Resp: 70299

Ion Ratio Lower Upper

69 100

41 162.5 130.3 195.5

100 35.8 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 9.796 ppbv

RT: 4.641 min Scan# 1407

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

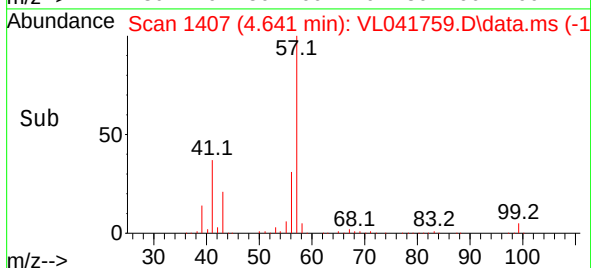
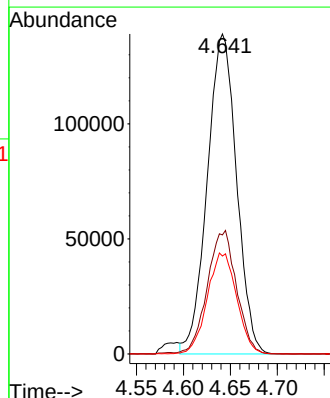
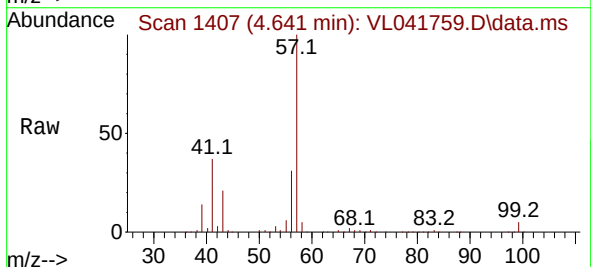
Tgt Ion: 57 Resp: 301772

Ion Ratio Lower Upper

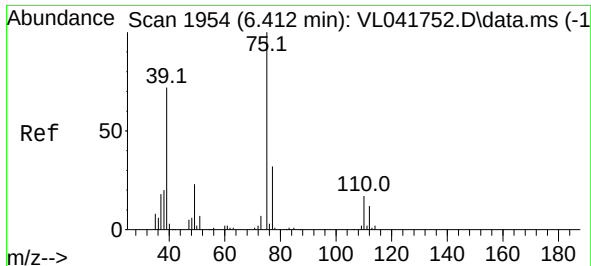
57 100

41 38.8 30.7 46.1

56 31.7 25.4 38.0







#45

t-1,3-Dichloropropene

Concen: 10.907 ppbv

RT: 6.415 min Scan# 1

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

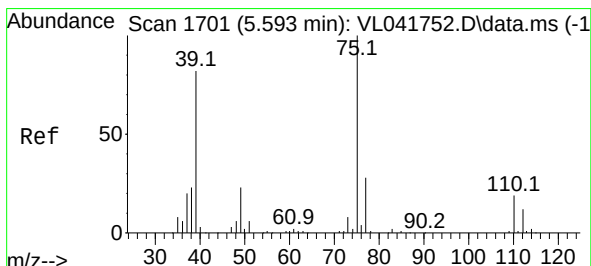
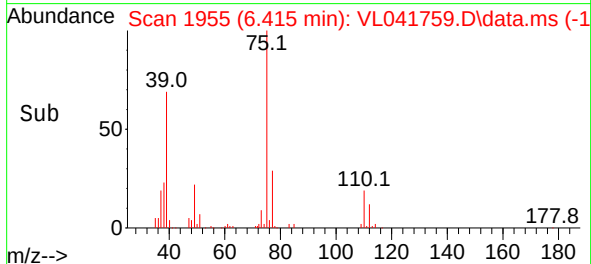
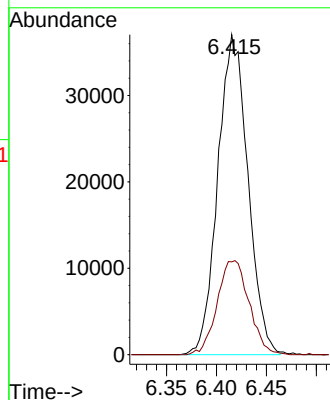
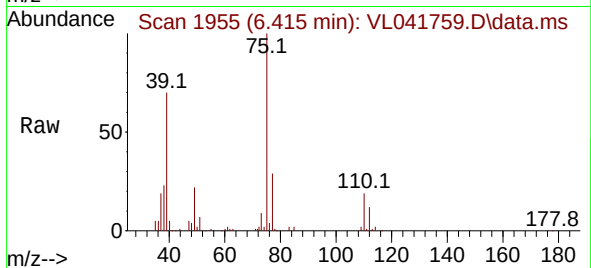
ICVVL121624

Tgt Ion: 75 Resp: 77534

Ion Ratio Lower Upper

75 100

77 29.0 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 10.617 ppbv

RT: 5.603 min Scan# 1704

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

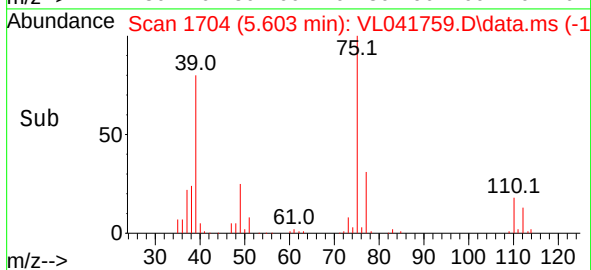
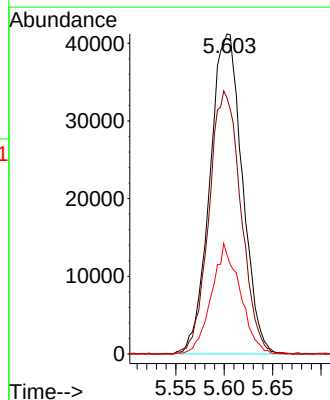
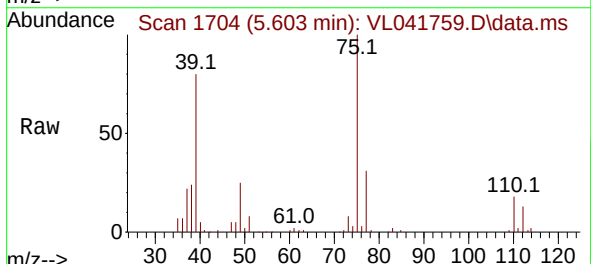
Tgt Ion: 75 Resp: 95812

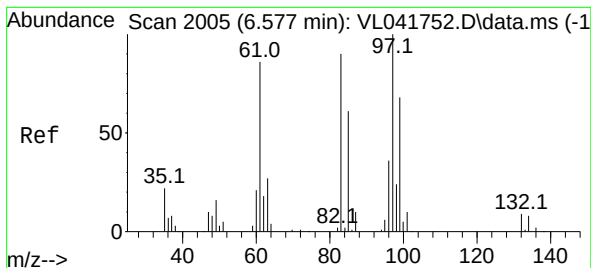
Ion Ratio Lower Upper

75 100

39 79.5 65.2 97.8

77 30.9 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 5.541 ppbv

RT: 6.587 min Scan# 2005

Delta R.T. 0.009 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

Tgt Ion: 97 Resp: 37758

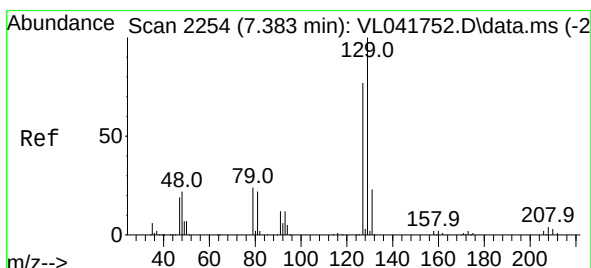
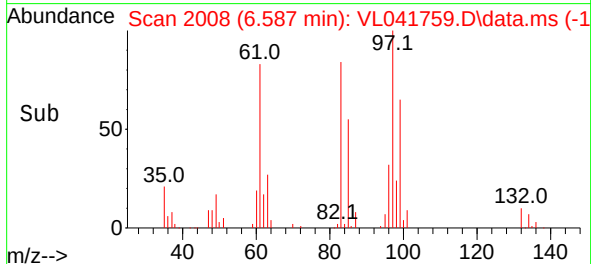
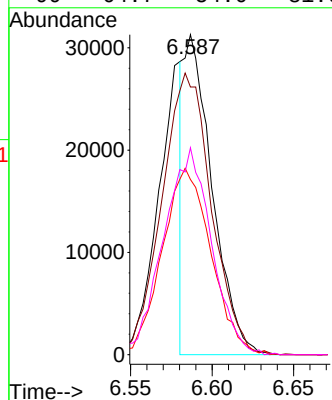
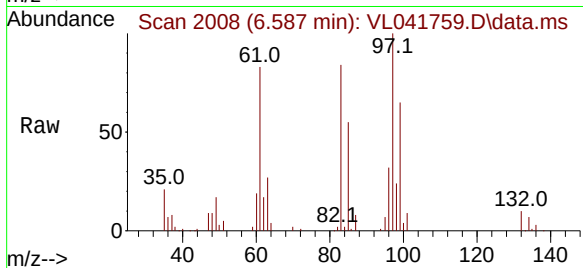
Ion Ratio Lower Upper

97 100

83 83.7 72.3 108.5

85 54.8 48.5 72.7

99 64.7 54.0 81.0



#48

Dibromochloromethane

Concen: 11.326 ppbv

RT: 7.389 min Scan# 2256

Delta R.T. 0.006 min

Lab File: VL041759.D

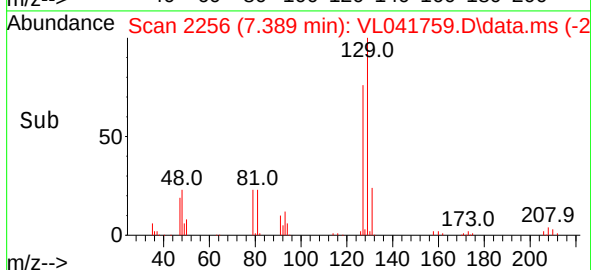
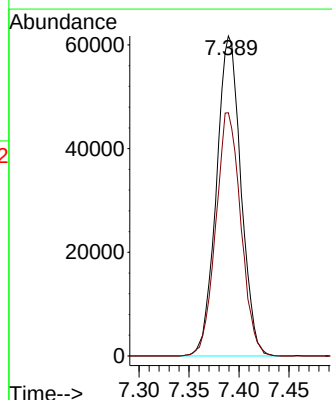
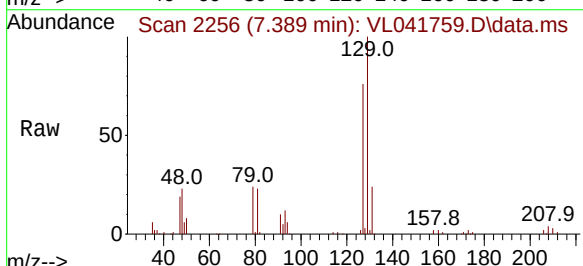
Acq: 16 Dec 2024 18:59

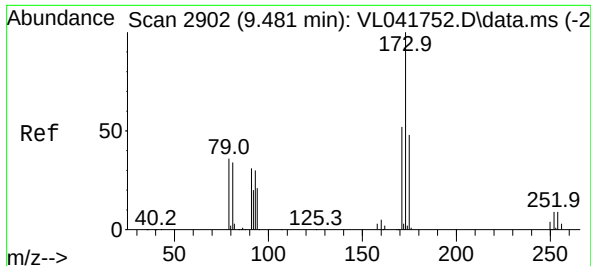
Tgt Ion: 129 Resp: 105378

Ion Ratio Lower Upper

129 100

127 77.8 38.8 116.3

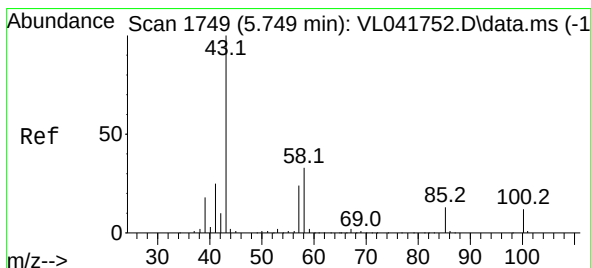
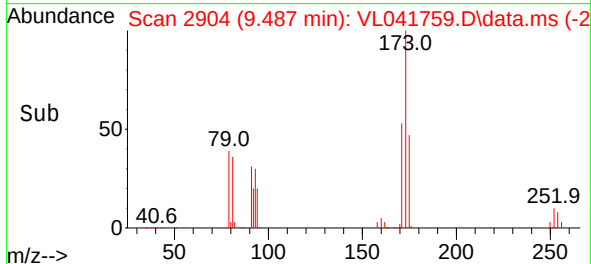
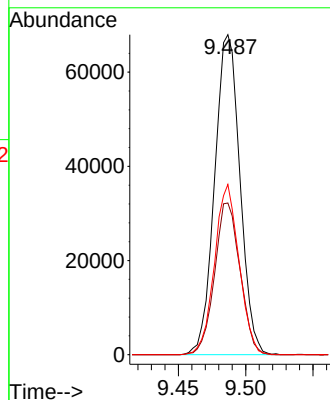
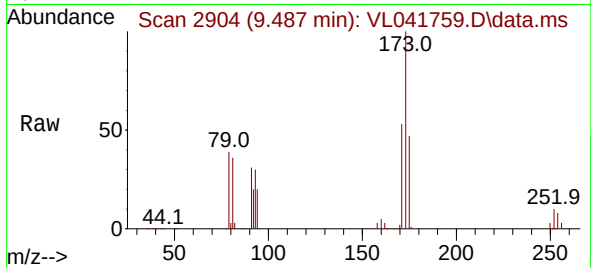




#49  
Bromoform  
Concen: 11.682 ppbv  
RT: 9.487 min Scan# 2902  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

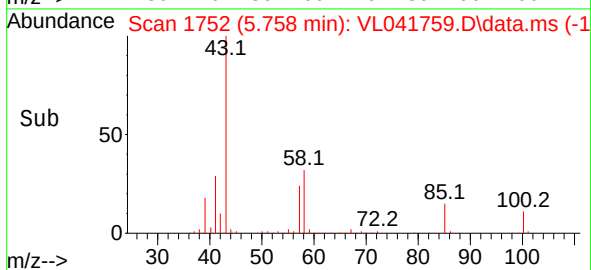
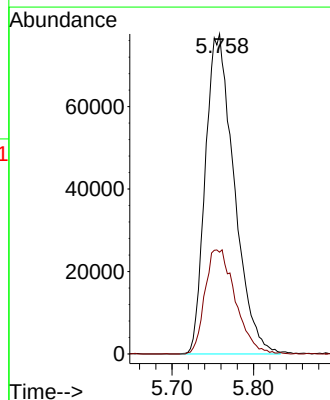
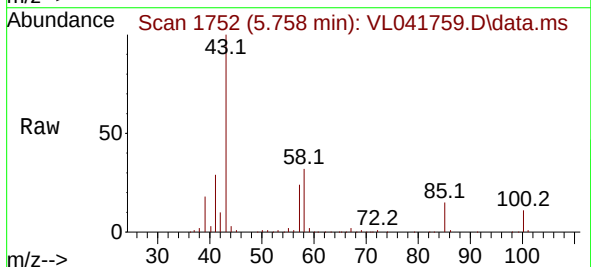
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

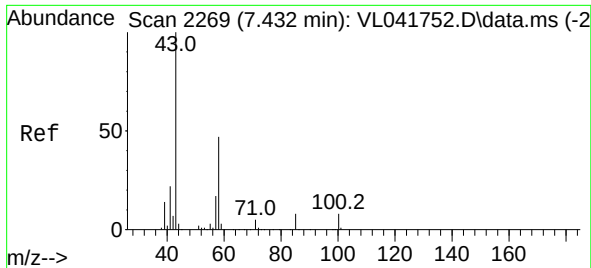
Tgt Ion:173 Resp: 88971  
Ion Ratio Lower Upper  
173 100  
175 47.6 38.2 57.2  
171 51.4 41.1 61.7



#50  
4-Methyl-2-Pentanone  
Concen: 9.980 ppbv  
RT: 5.758 min Scan# 1752  
Delta R.T. 0.009 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 43 Resp: 190637  
Ion Ratio Lower Upper  
43 100  
58 34.3 26.8 40.2

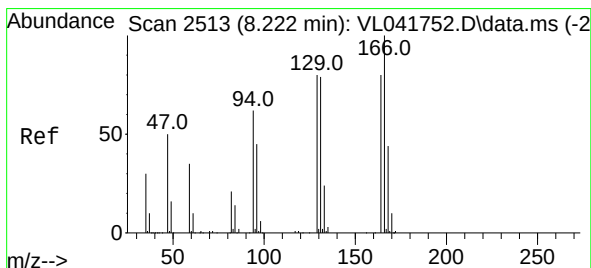
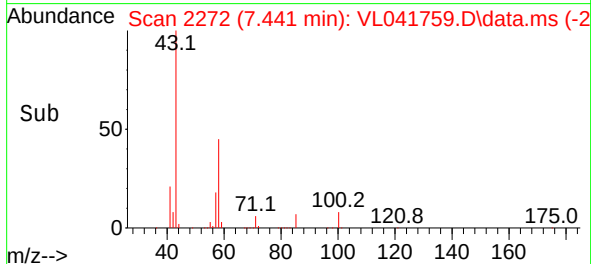
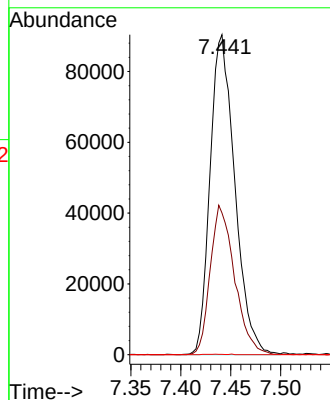
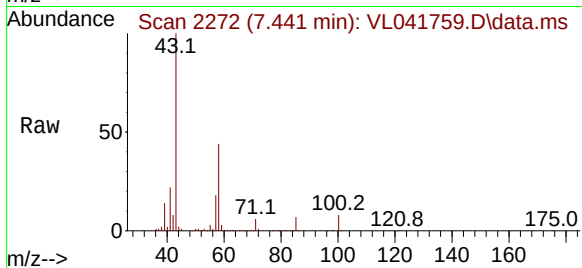




#51  
2-Hexanone  
Concen: 10.053 ppbv  
RT: 7.441 min Scan# 21  
Delta R.T. 0.009 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

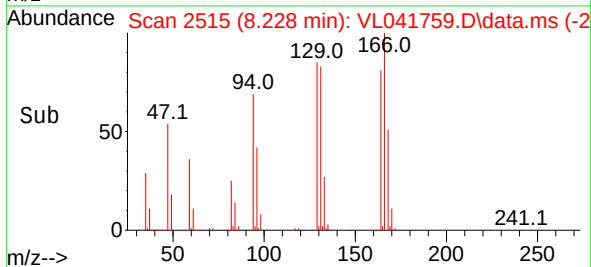
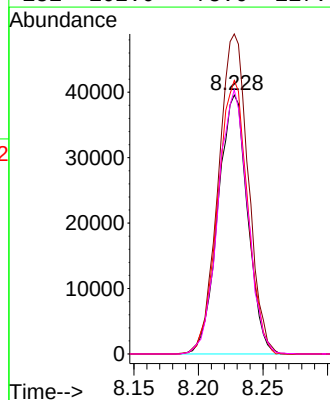
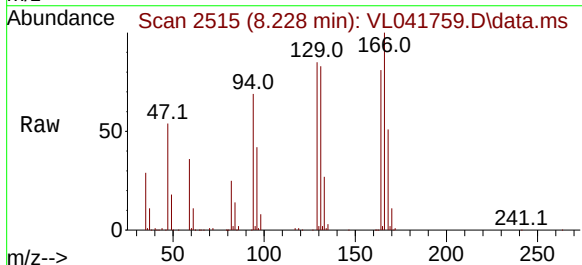
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL121624

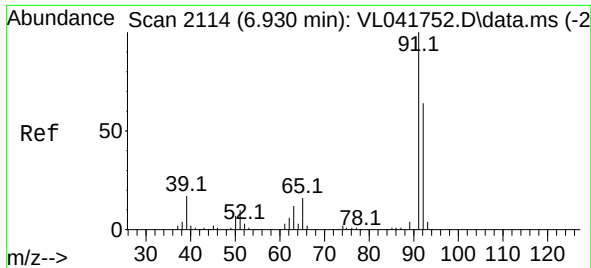
Tgt Ion: 43 Resp: 155646  
Ion Ratio Lower Upper  
43 100  
58 46.0 36.6 55.0  
98 0.1 0.1 0.1#



#52  
Tetrachloroethene  
Concen: 9.351 ppbv  
RT: 8.228 min Scan# 2515  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:164 Resp: 62782  
Ion Ratio Lower Upper  
164 100  
166 123.4 99.8 149.6  
129 105.6 79.6 119.4  
131 102.0 78.6 117.8





#53

Toluene

Concen: 9.768 ppbv

RT: 6.933 min Scan# 2114

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

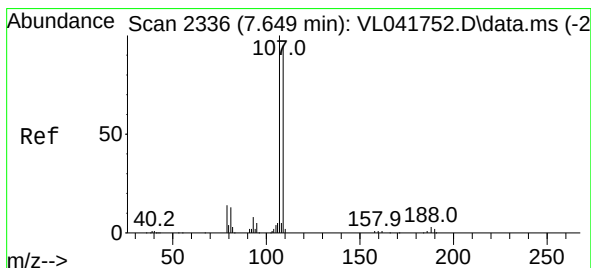
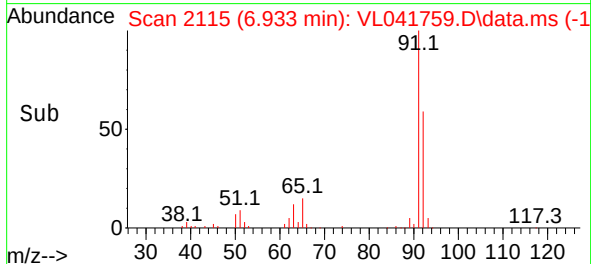
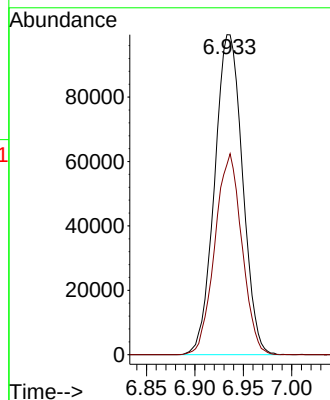
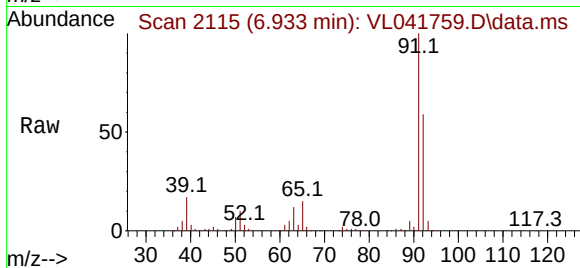
ICVVL121624

Tgt Ion: 91 Resp: 199754

Ion Ratio Lower Upper

91 100

92 60.8 47.9 71.9



#54

1,2-Dibromoethane

Concen: 9.952 ppbv

RT: 7.655 min Scan# 2338

Delta R.T. 0.006 min

Lab File: VL041759.D

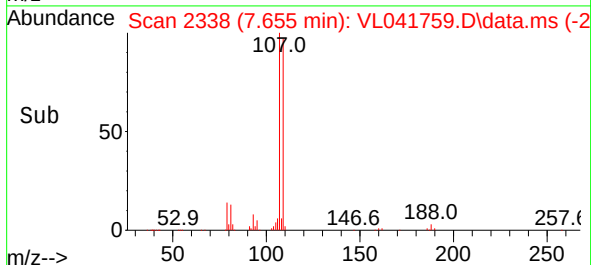
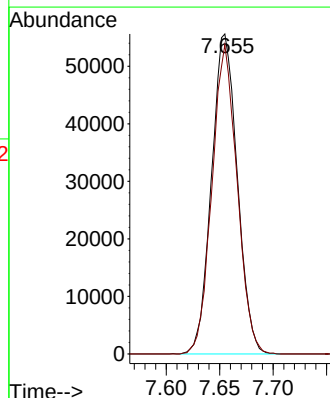
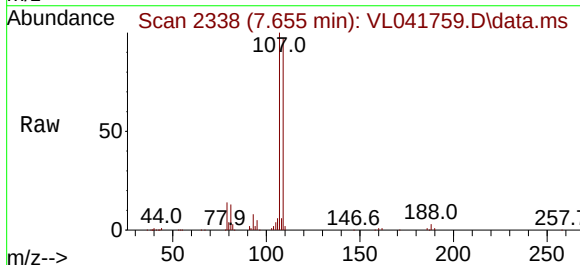
Acq: 16 Dec 2024 18:59

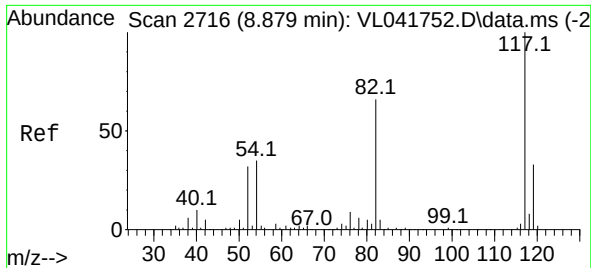
Tgt Ion: 107 Resp: 93439

Ion Ratio Lower Upper

107 100

109 96.6 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 2718

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

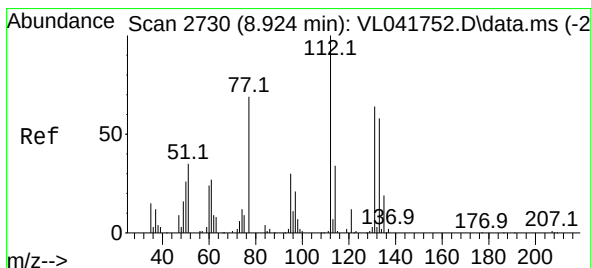
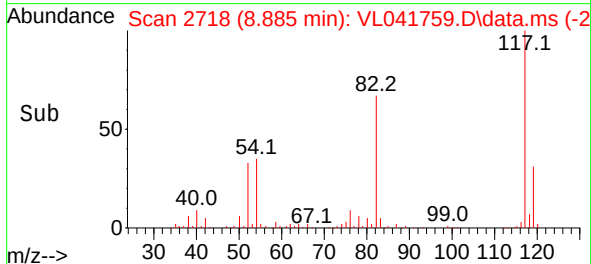
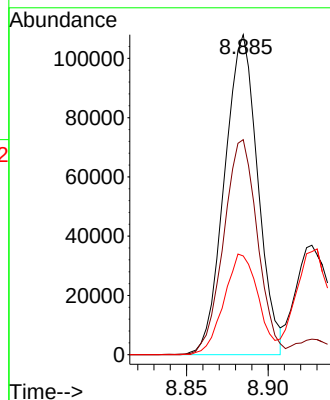
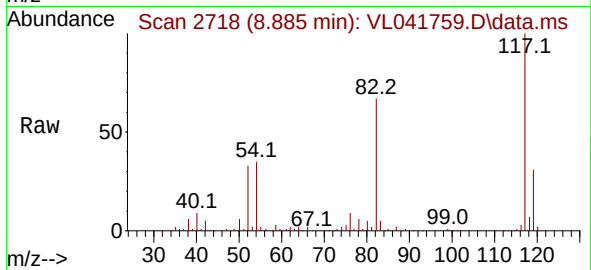
Tgt Ion:117 Resp: 153443

Ion Ratio Lower Upper

117 100

82 73.4 53.8 80.8

119 32.8 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 10.558 ppbv

RT: 8.927 min Scan# 2731

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

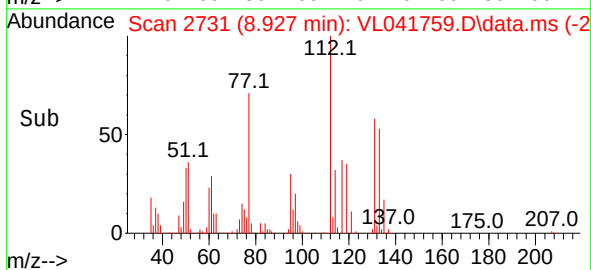
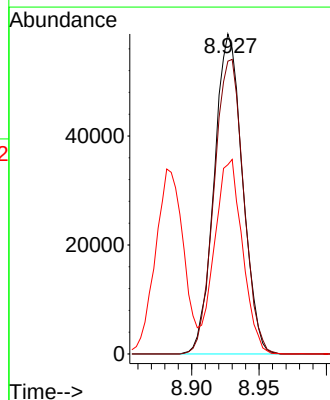
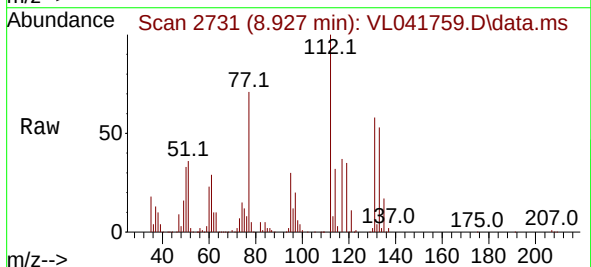
Tgt Ion:131 Resp: 85883

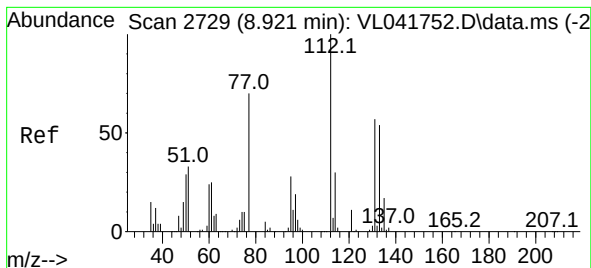
Ion Ratio Lower Upper

131 100

133 95.7 76.8 115.2

119 60.2 49.0 73.6





#57

Chlorobenzene

Concen: 9.888 ppbv

RT: 8.924 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

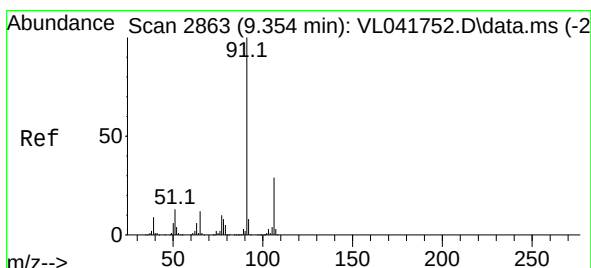
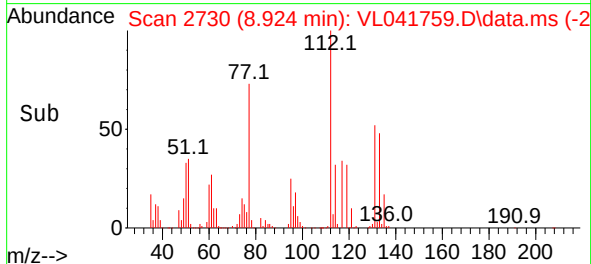
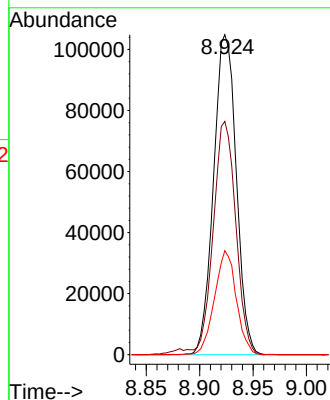
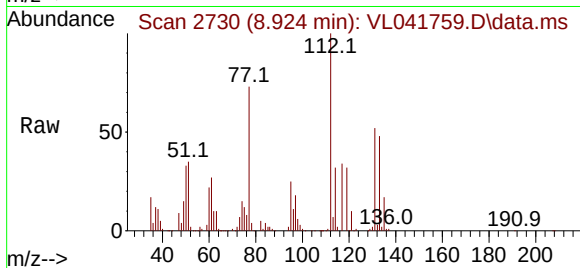
Tgt Ion:112 Resp: 155257

Ion Ratio Lower Upper

112 100

77 72.9 57.4 86.0

114 32.5 27.4 33.4



#58

Ethyl Benzene

Concen: 10.308 ppbv

RT: 9.357 min Scan# 2864

Delta R.T. 0.003 min

Lab File: VL041759.D

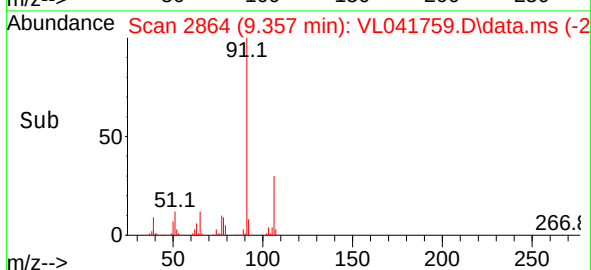
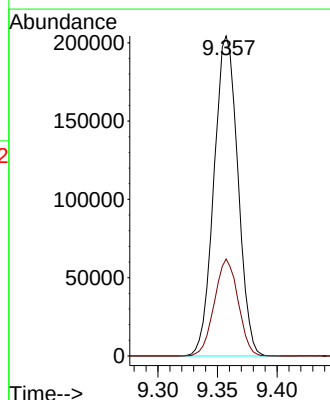
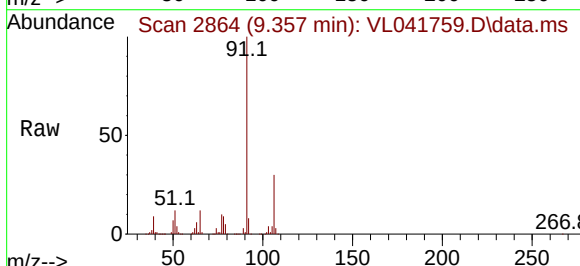
Acq: 16 Dec 2024 18:59

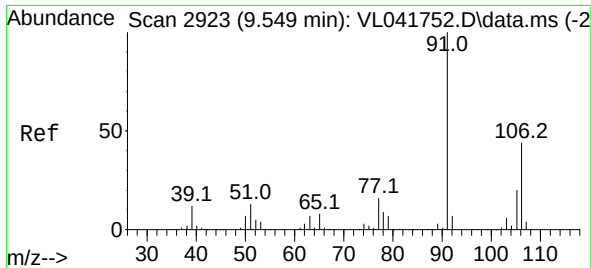
Tgt Ion: 91 Resp: 284770

Ion Ratio Lower Upper

91 100

106 30.3 23.5 35.3





#59

m/p-Xylene

Concen: 10.735 ppbv

RT: 9.555 min Scan# 2923

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

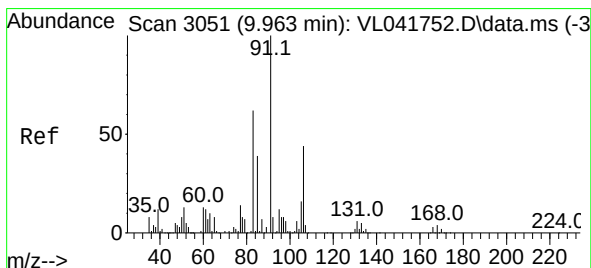
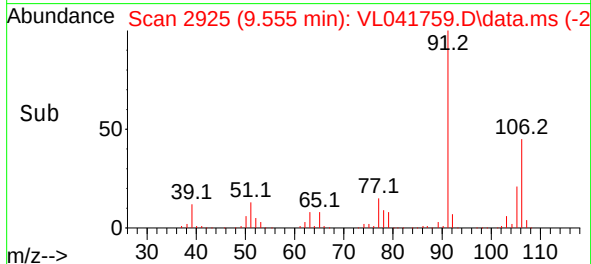
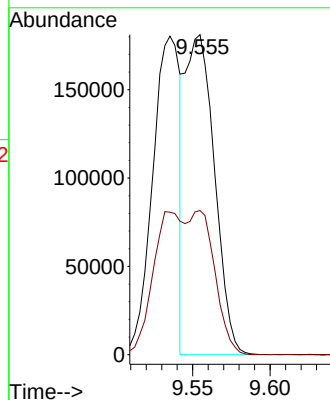
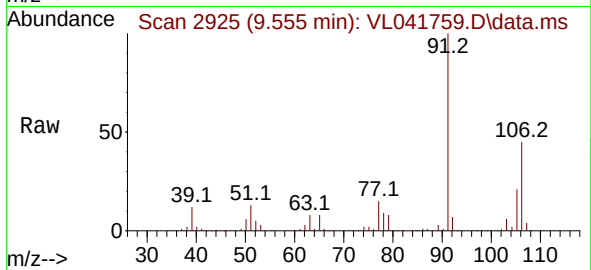
ICVVL121624

Tgt Ion: 91 Resp: 238458

Ion Ratio Lower Upper

91 100

106 87.6 0.0 0.0#



#60

o-Xylene

Concen: 10.304 ppbv

RT: 9.966 min Scan# 3052

Delta R.T. 0.003 min

Lab File: VL041759.D

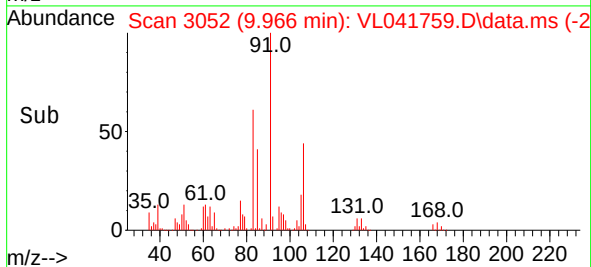
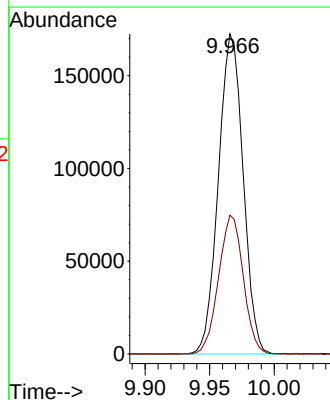
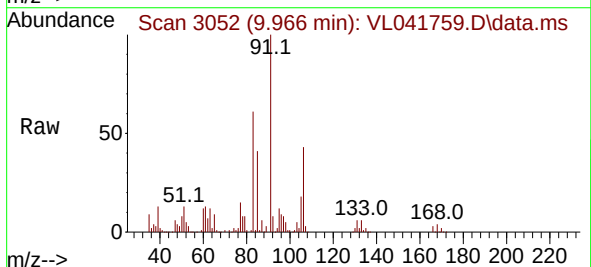
Acq: 16 Dec 2024 18:59

Tgt Ion: 91 Resp: 229517

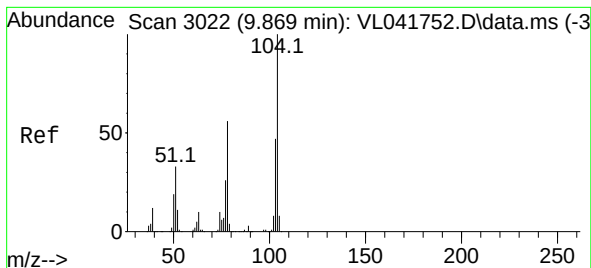
Ion Ratio Lower Upper

91 100

106 43.3 21.1 63.4







#61

Styrene

Concen: 11.093 ppbv

RT: 9.875 min Scan# 3022

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

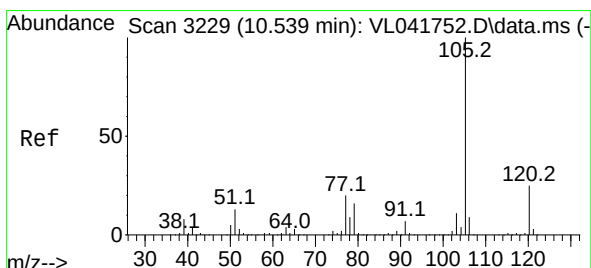
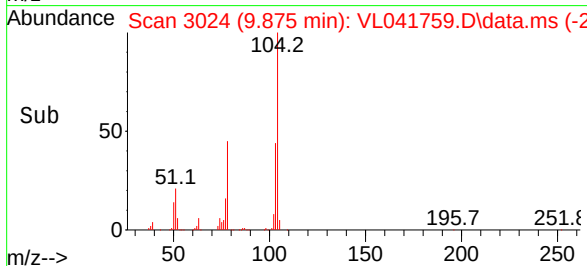
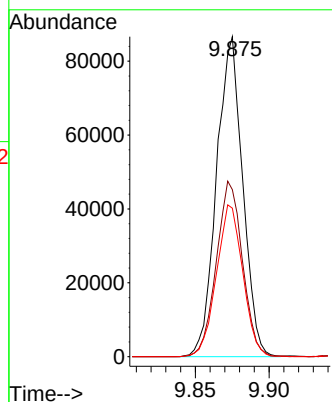
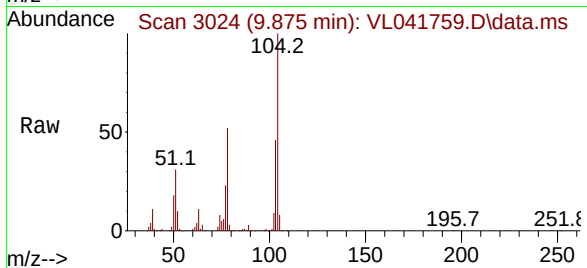
Tgt Ion:104 Resp: 106841

Ion Ratio Lower Upper

104 100

78 54.8 43.8 65.6

103 47.9 37.8 56.6



#62

Isopropylbenzene

Concen: 10.425 ppbv

RT: 10.542 min Scan# 3230

Delta R.T. 0.003 min

Lab File: VL041759.D

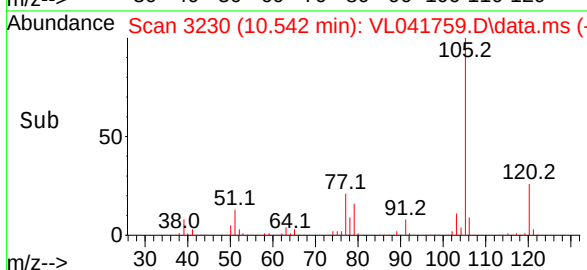
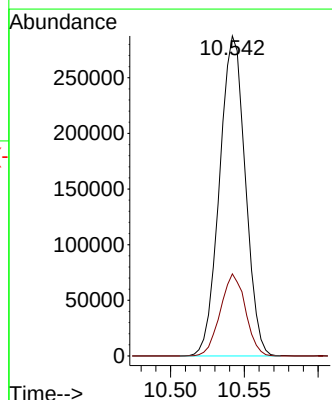
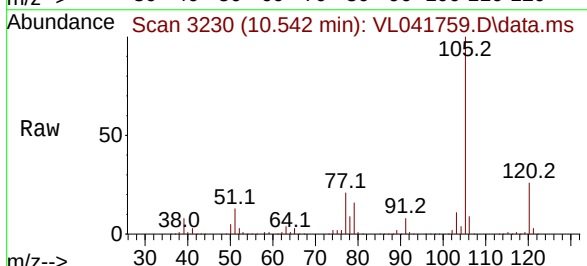
Acq: 16 Dec 2024 18:59

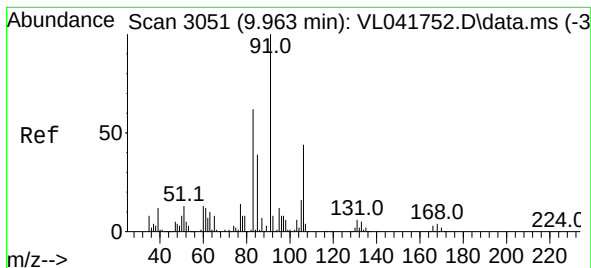
Tgt Ion:105 Resp: 348887

Ion Ratio Lower Upper

105 100

120 25.0 19.8 29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 9.865 ppbv

RT: 9.966 min Scan# 3051

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

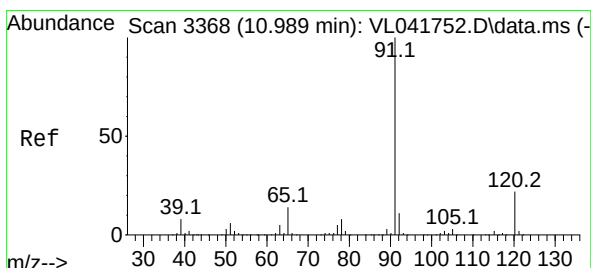
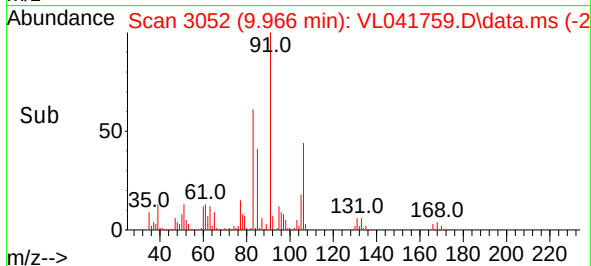
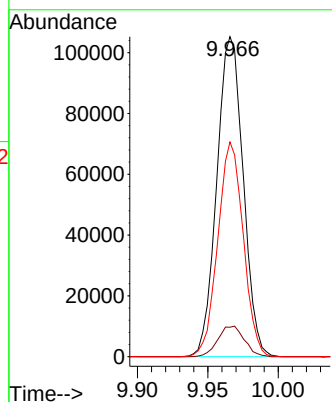
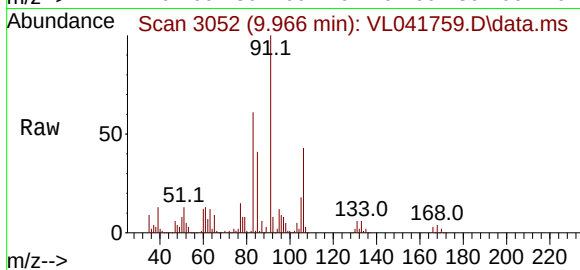
Tgt Ion: 83 Resp: 137547

Ion Ratio Lower Upper

83 100

131 9.6 4.9 14.7

85 64.6 32.0 96.2



#64

n-propylbenzene

Concen: 10.384 ppbv

RT: 10.992 min Scan# 3369

Delta R.T. 0.003 min

Lab File: VL041759.D

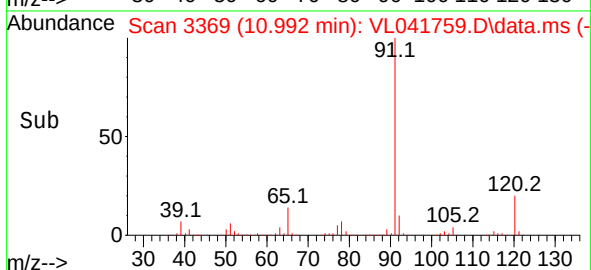
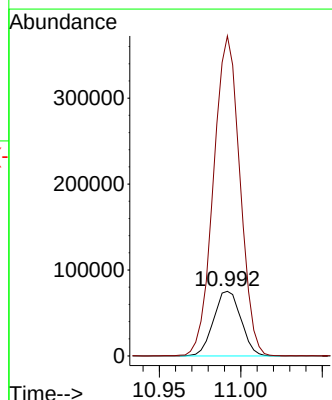
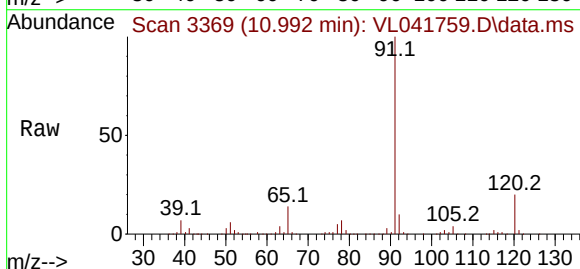
Acq: 16 Dec 2024 18:59

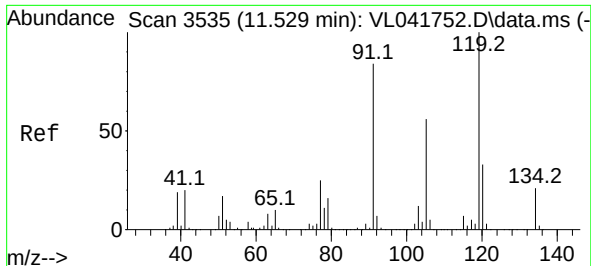
Tgt Ion:120 Resp: 87865

Ion Ratio Lower Upper

120 100

91 479.0 387.3 580.9





#65

tert-Butylbenzene

Concen: 10.194 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

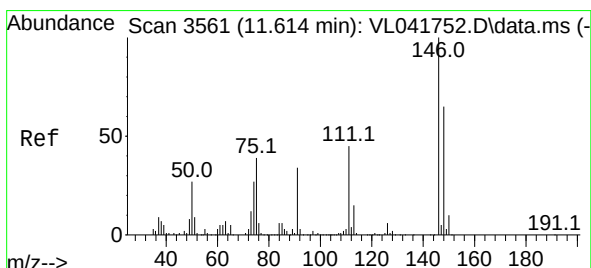
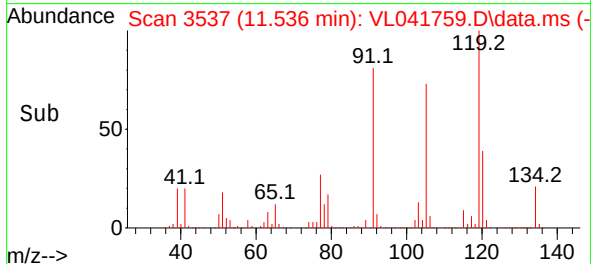
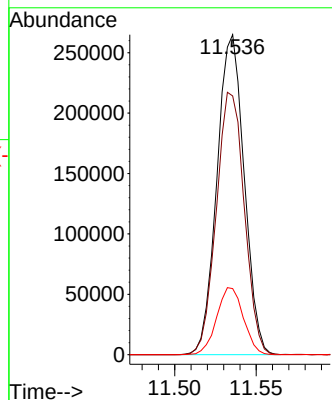
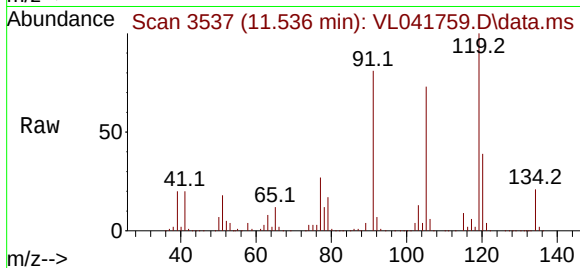
Tgt Ion:119 Resp: 307790

Ion Ratio Lower Upper

119 100

91 84.2 67.0 100.4

134 20.5 16.5 24.7



#66

Benzyl Chloride

Concen: 11.054 ppbv

RT: 11.620 min Scan# 3563

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

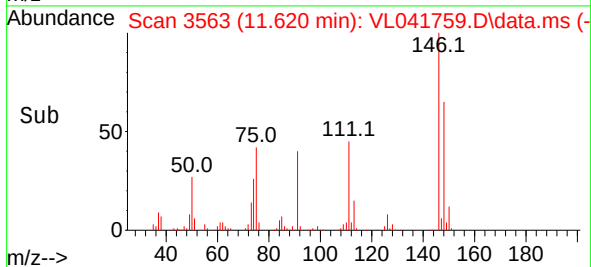
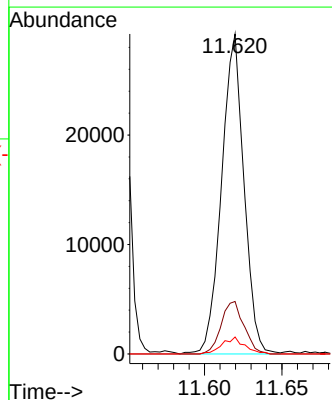
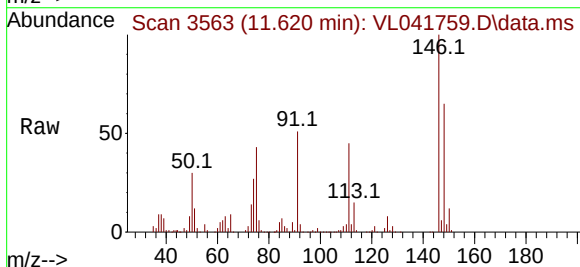
Tgt Ion: 91 Resp: 29398

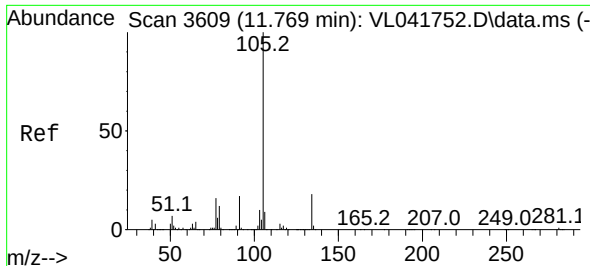
Ion Ratio Lower Upper

91 100

126 16.7 13.9 20.9

128 5.2 4.4 6.6

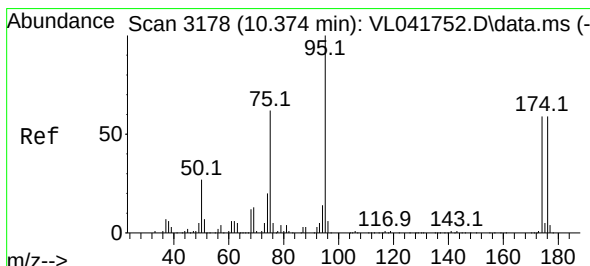
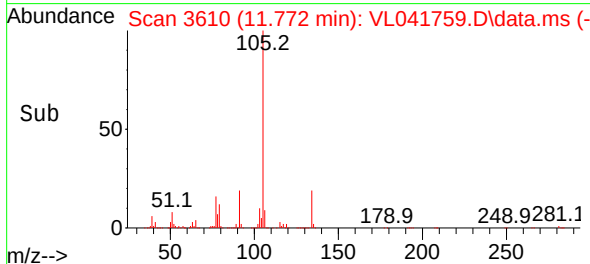
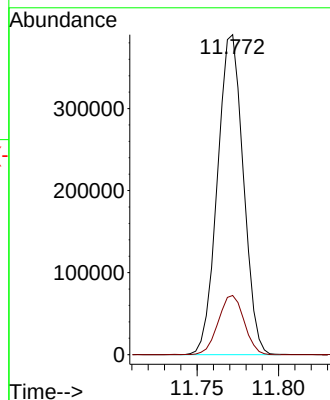
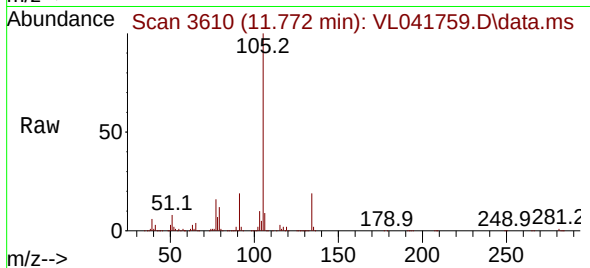




#67  
sec-Butylbenzene  
Concen: 10.304 ppbv  
RT: 11.772 min Scan# 3610  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

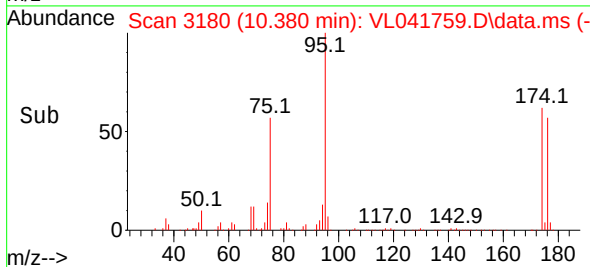
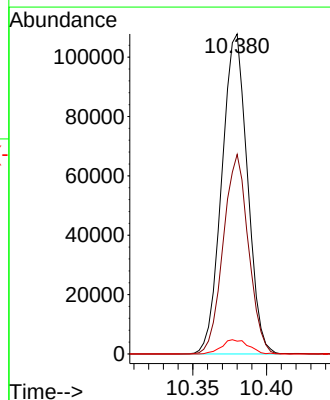
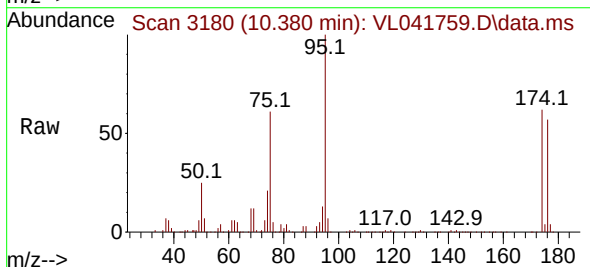
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

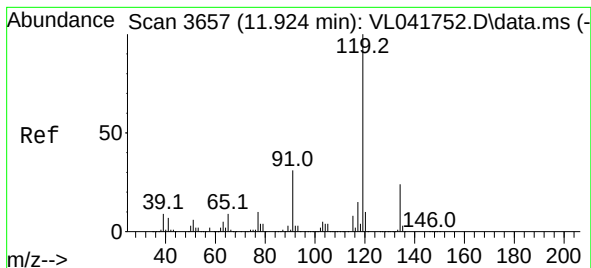
Tgt Ion:105 Resp: 430521  
Ion Ratio Lower Upper  
105 100  
134 18.5 14.5 21.7



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.166 ppbv  
RT: 10.380 min Scan# 3180  
Delta R.T. 0.006 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion: 95 Resp: 129985  
Ion Ratio Lower Upper  
95 100  
174 61.3 47.6 71.4  
175 4.7 3.7 5.5





#69

p-Isopropyltoluene

Concen: 10.620 ppbv

RT: 11.927 min Scan# 3657

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

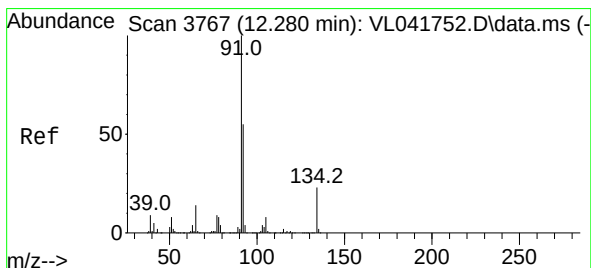
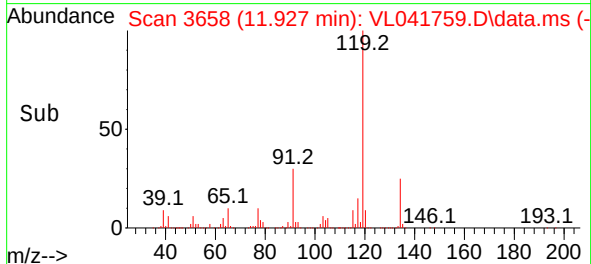
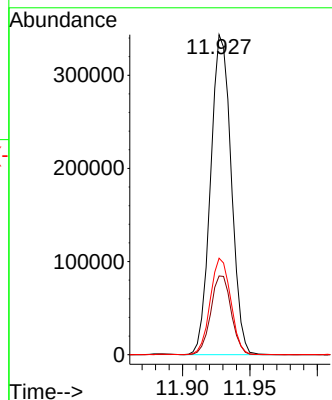
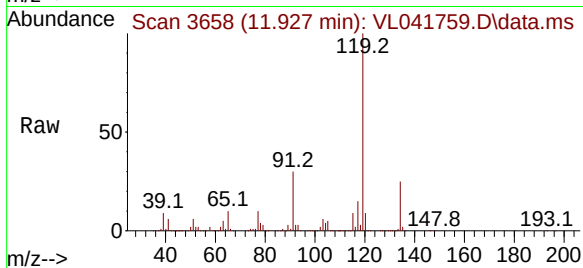
Tgt Ion:119 Resp: 365667

Ion Ratio Lower Upper

119 100

134 24.5 19.6 29.4

91 30.1 24.4 36.6



#70

n-Butylbenzene

Concen: 10.727 ppbv

RT: 12.283 min Scan# 3768

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

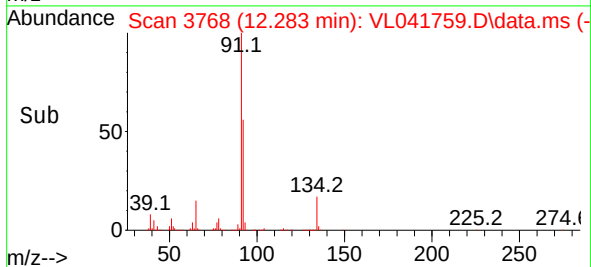
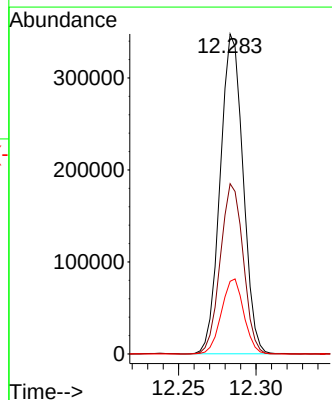
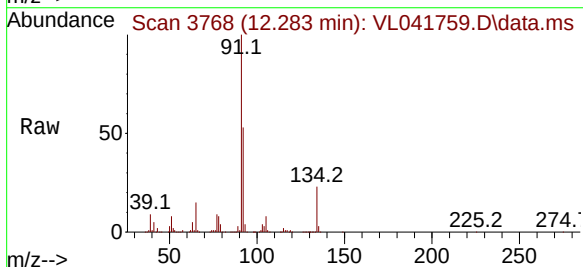
Tgt Ion: 91 Resp: 356880

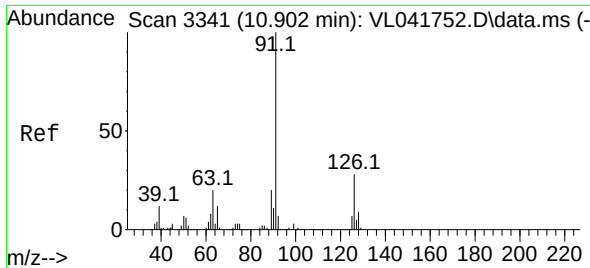
Ion Ratio Lower Upper

91 100

92 53.6 43.2 64.8

134 23.0 18.2 27.4

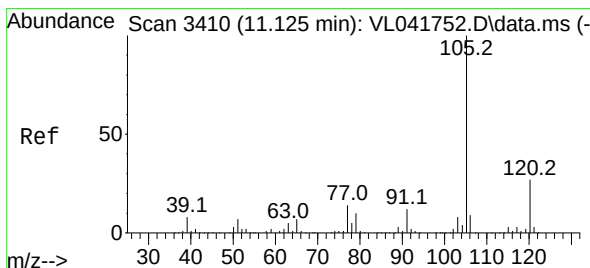
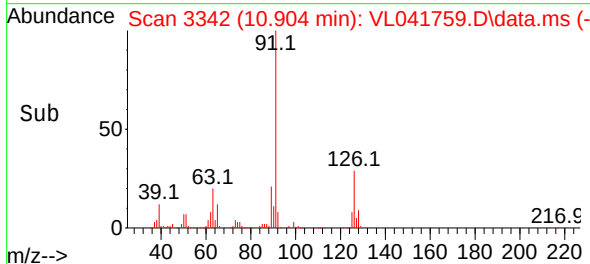
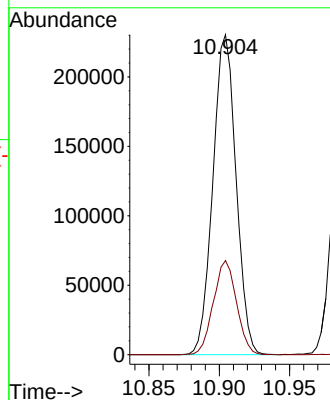
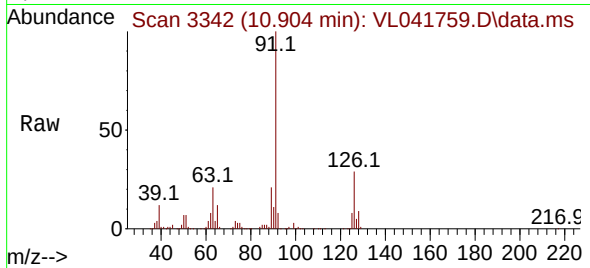




#71  
2-Chlorotoluene  
Concen: 10.340 ppbv  
RT: 10.904 min Scan# 3411  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

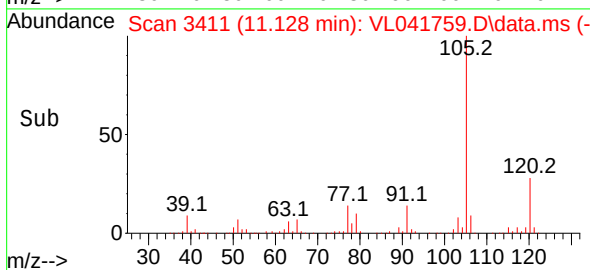
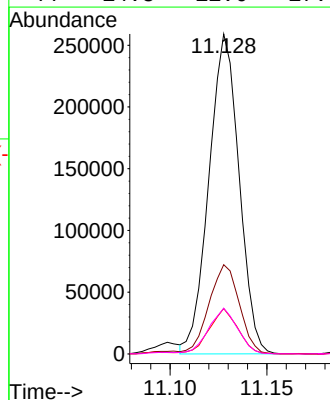
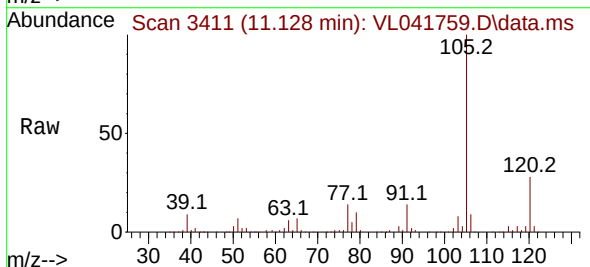
Instrument :  
MSVOA\_1  
ClientSampleId :  
ICVVL121624

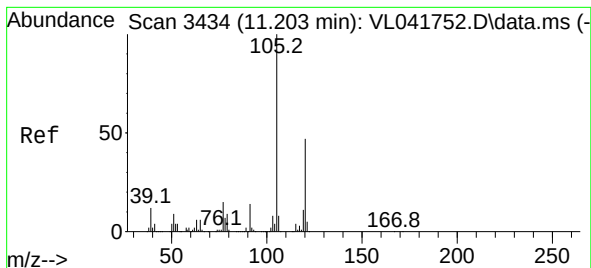
Tgt Ion: 91 Resp: 264123  
Ion Ratio Lower Upper  
91 100  
126 29.4 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 10.672 ppbv  
RT: 11.128 min Scan# 3411  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:105 Resp: 280580  
Ion Ratio Lower Upper  
105 100  
120 29.0 23.3 34.9  
91 14.1 10.9 16.3  
77 14.3 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 10.902 ppbv

RT: 11.205 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

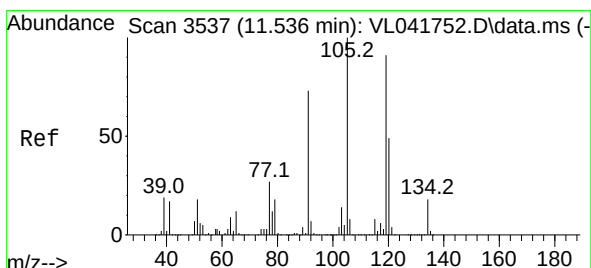
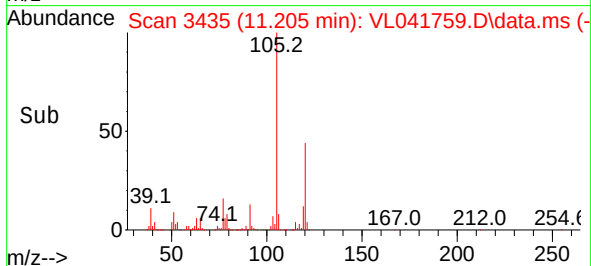
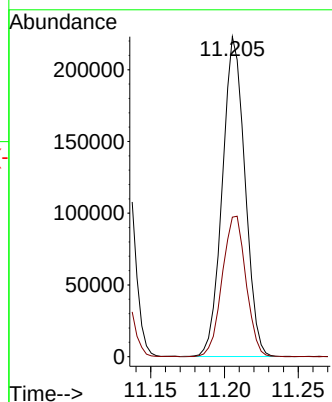
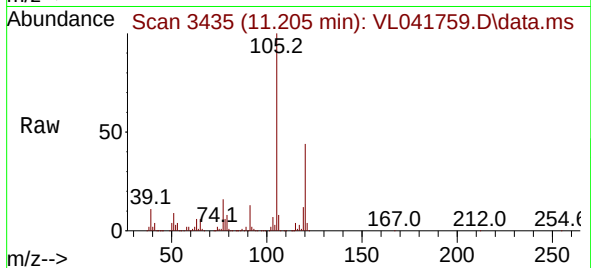
ICVVL121624

Tgt Ion:105 Resp: 237804

Ion Ratio Lower Upper

105 100

120 43.6 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 10.919 ppbv

RT: 11.542 min Scan# 3539

Delta R.T. 0.006 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Tgt Ion:105 Resp: 256141

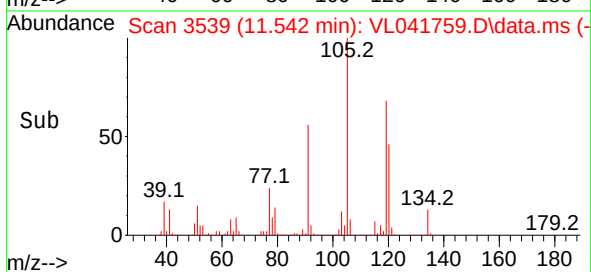
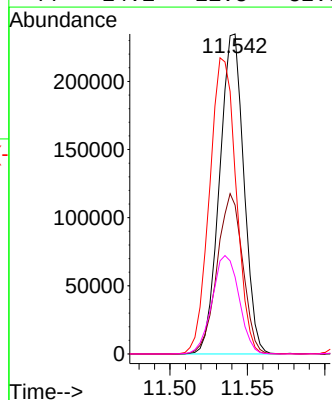
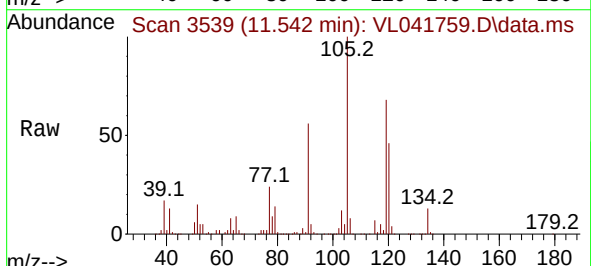
Ion Ratio Lower Upper

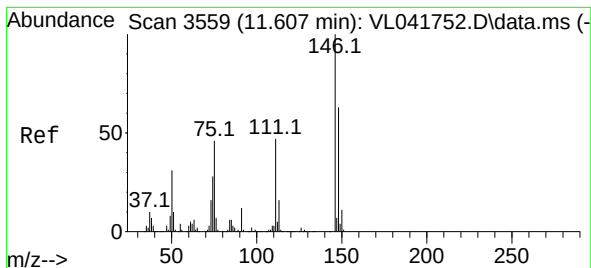
105 100

120 46.5 39.0 58.4

91 56.2 58.1 87.1#

77 24.1 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 10.025 ppbv

RT: 11.610 min Scan# 3559

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_1

ClientSampleId :

ICVVL121624

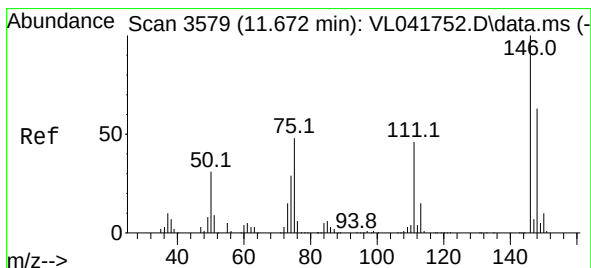
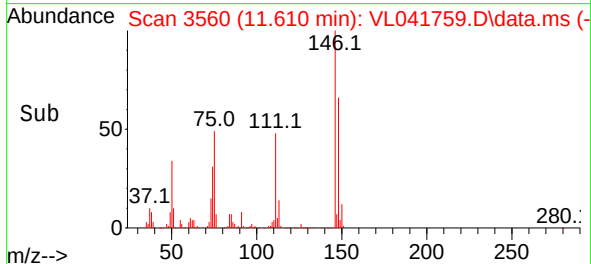
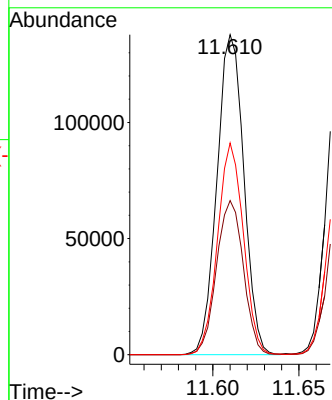
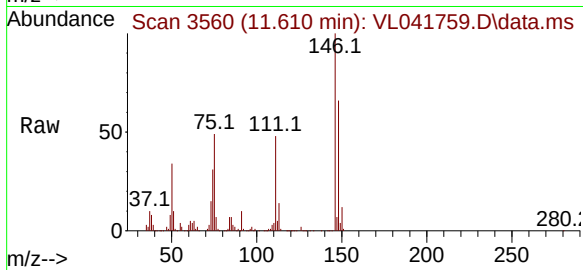
Tgt Ion:146 Resp: 149927

Ion Ratio Lower Upper

146 100

111 48.2 23.4 70.3

148 63.5 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 10.302 ppbv

RT: 11.675 min Scan# 3580

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

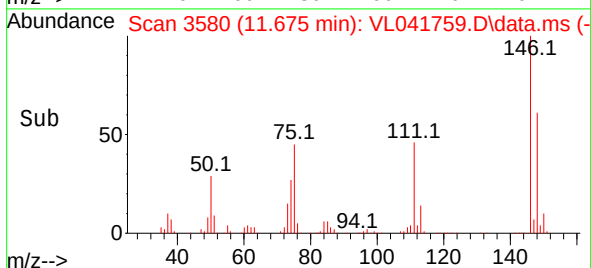
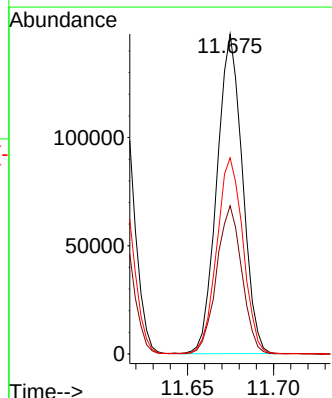
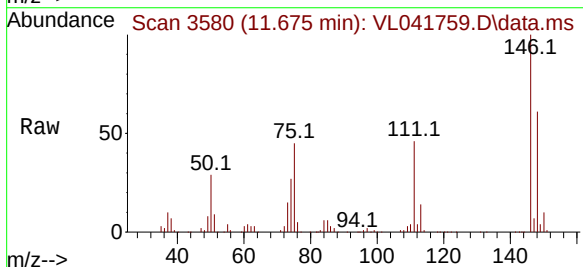
Tgt Ion:146 Resp: 152212

Ion Ratio Lower Upper

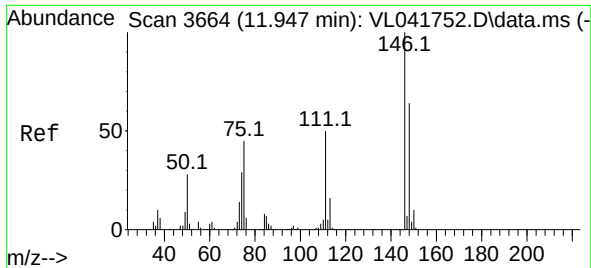
146 100

111 46.1 22.7 68.1

148 63.4 31.4 94.0



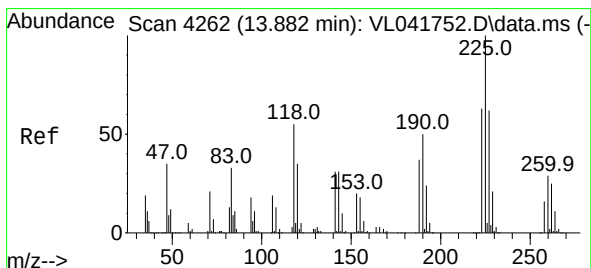
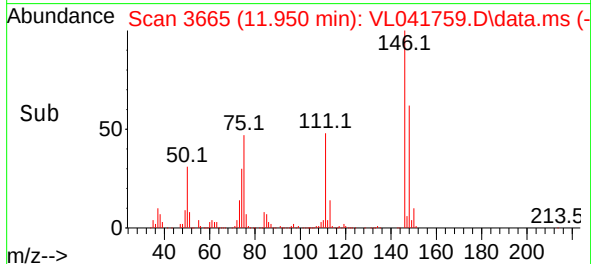
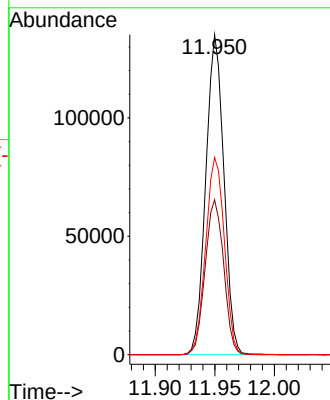
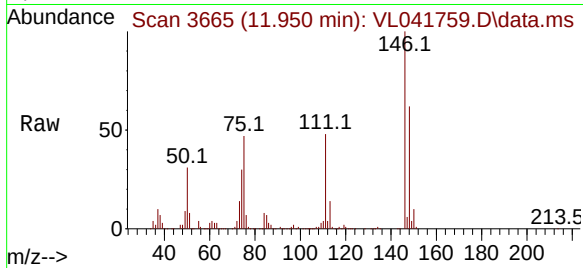




#77  
1,2-Dichlorobenzene  
Concen: 9.919 ppbv  
RT: 11.950 min Scan# 3665  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

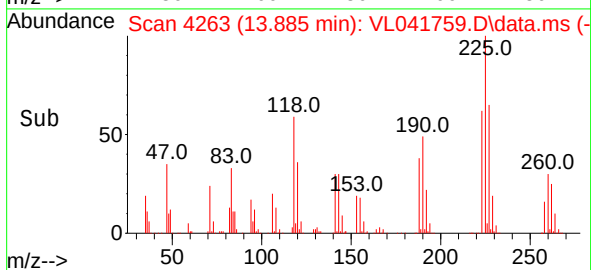
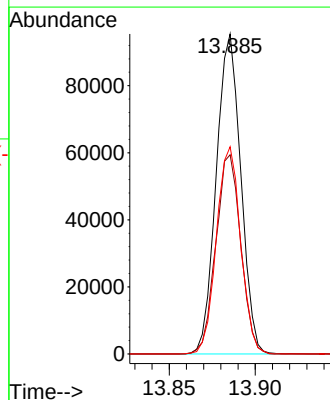
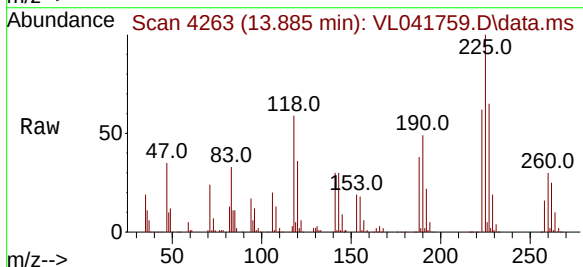
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MSVOA\_L  
ClientSampleId :  
ICVVL121624

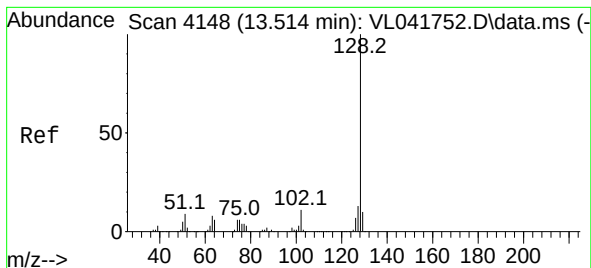
Tgt Ion:146 Resp: 142734  
Ion Ratio Lower Upper  
146 100  
111 49.7 24.8 74.3  
148 63.7 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 8.873 ppbv  
RT: 13.885 min Scan# 4263  
Delta R.T. 0.003 min  
Lab File: VL041759.D  
Acq: 16 Dec 2024 18:59

Tgt Ion:225 Resp: 94671  
Ion Ratio Lower Upper  
225 100  
223 63.2 50.5 75.7  
227 63.8 50.3 75.5





#79

Naphthalene

Concen: 12.384 ppbv

RT: 13.516 min Scan# 4148

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624

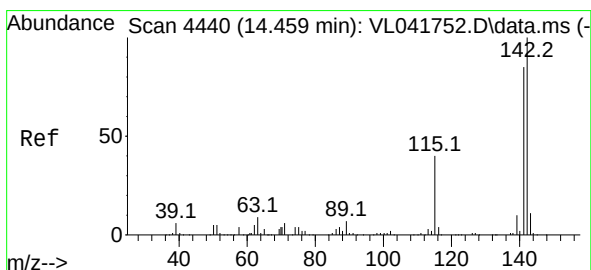
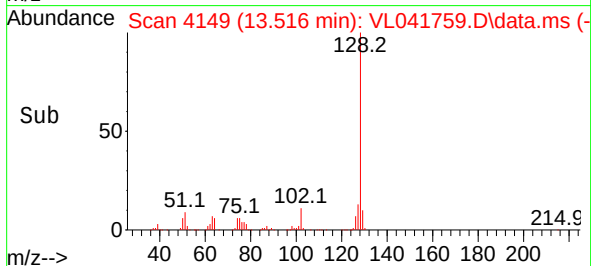
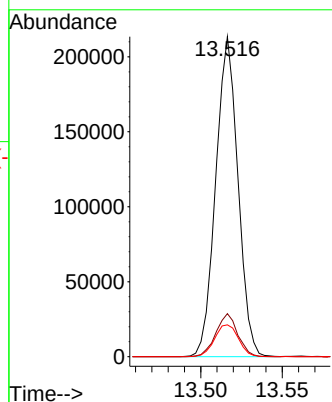
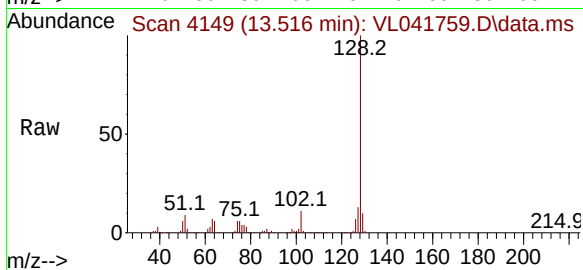
Tgt Ion:128 Resp: 202413

Ion Ratio Lower Upper

128 100

127 13.4 10.7 16.1

129 10.0 8.2 12.4



#80

Naphthalene,2-methyl-

Concen: 20.261 ppbv

RT: 14.461 min Scan# 4441

Delta R.T. 0.003 min

Lab File: VL041759.D

Acq: 16 Dec 2024 18:59

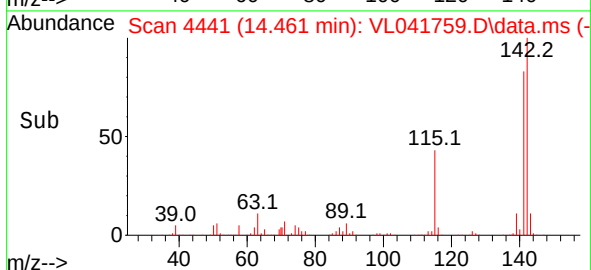
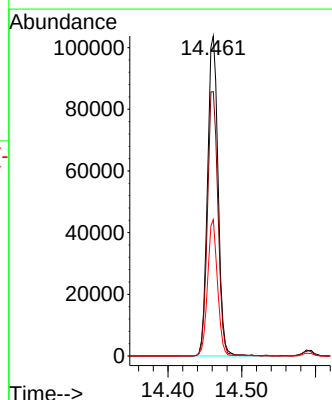
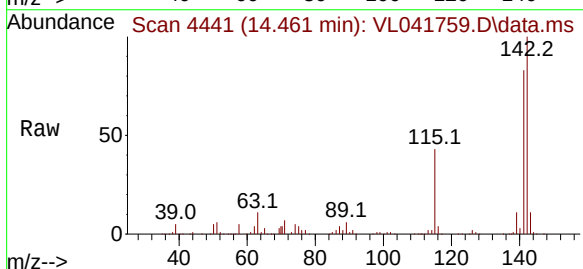
Tgt Ion:142 Resp: 102431

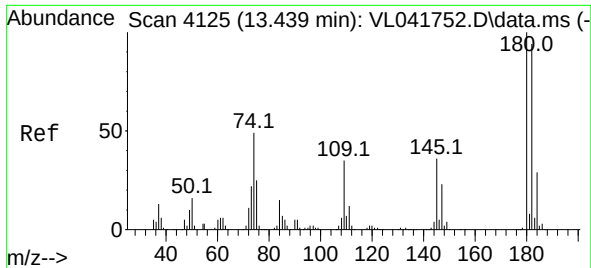
Ion Ratio Lower Upper

142 100

141 83.2 68.4 102.6

115 40.4 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 11.025 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041759.D

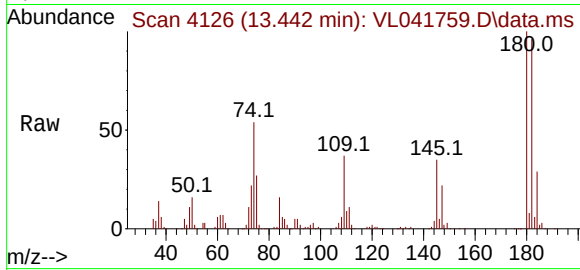
Acq: 16 Dec 2024 18:59

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL121624



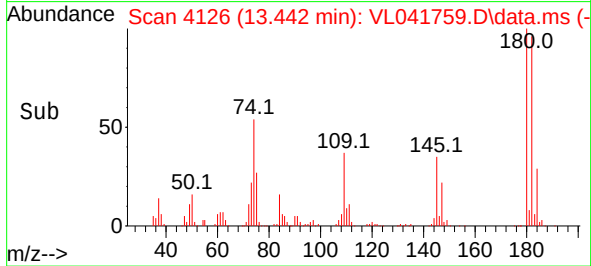
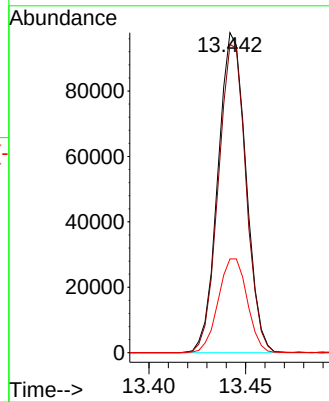
Tgt Ion:180 Resp: 98468

Ion Ratio Lower Upper

180 100

182 95.3 77.0 115.6

184 30.2 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041788.D  
 Acq On : 18 Dec 2024 10:29  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Dec 19 07:49:00 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.784 | 49   | 76040    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.952 | 114  | 198370   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.881 | 117  | 172190   | 10.000 | ppbv  | 0.00     |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 150705 10.503 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 105.000%

#### Target Compounds

|                               |       |     |        |        | Qvalue |     |
|-------------------------------|-------|-----|--------|--------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.495 | 85  | 112841 | 8.340  | ppbv   | 96  |
| 3) Chlorodifluoromethane      | 1.473 | 51  | 112096 | 9.040  | ppbv   | 98  |
| 4) Chloromethane              | 1.531 | 50  | 48418  | 9.146  | ppbv   | 99  |
| 5) Vinyl Chloride             | 1.580 | 62  | 46631  | 8.743  | ppbv   | 99  |
| 6) Bromomethane               | 1.667 | 94  | 22202  | 8.821  | ppbv   | 98  |
| 7) Chloroethane               | 1.703 | 64  | 19203  | 9.269  | ppbv   | 99  |
| 8) Dichlorotetrafluoroethane  | 1.554 | 85  | 111653 | 9.220  | ppbv   | 96  |
| 9) Propene                    | 1.483 | 41  | 41427  | 7.708  | ppbv   | 96  |
| 10) Heptane                   | 4.975 | 43  | 111650 | 8.087  | ppbv   | 96  |
| 11) Trichlorofluoromethane    | 1.874 | 101 | 134331 | 9.347  | ppbv   | 99  |
| 12) 1,1,2-Trichlorotrifluo... | 2.136 | 101 | 96469  | 8.825  | ppbv   | 98  |
| 13) Ethanol                   | 1.719 | 45  | 2954   | 6.637  | ppbv   | 100 |
| 14) Bromoethene               | 1.780 | 108 | 33118  | 8.974  | ppbv   | 97  |
| 15) Acetone                   | 1.832 | 43  | 111294 | 7.522  | ppbv   | 99  |
| 16) 1,3-Butadiene             | 1.606 | 39  | 53299  | 9.149  | ppbv   | 97  |
| 17) tert-Butyl alcohol        | 2.036 | 59  | 135516 | 9.233  | ppbv   | 100 |
| 18) 1,1-Dichloroethene        | 2.033 | 96  | 41224  | 8.996  | ppbv   | 93  |
| 19) Isopropyl Alcohol         | 1.884 | 45  | 64831  | 7.303  | ppbv   | 99  |
| 20) Methylene Chloride        | 2.059 | 84  | 35699  | 8.462  | ppbv   | 96  |
| 21) Allyl Chloride            | 2.094 | 41  | 74468  | 9.281  | ppbv   | 99  |
| 22) trans-1,2-Dichloroethene  | 2.337 | 96  | 45331  | 8.641  | ppbv   | 94  |
| 23) Vinyl Acetate             | 2.460 | 43  | 52709  | 7.673  | ppbv # | 95  |
| 24) 1,1-Dichloroethane        | 2.405 | 63  | 95779  | 9.020  | ppbv   | 99  |
| 25) Ethyl Acetate             | 2.832 | 43  | 238771 | 8.675  | ppbv   | 100 |
| 26) Hexane                    | 2.822 | 57  | 87593  | 8.386  | ppbv   | 95  |
| 27) Carbon Disulfide          | 2.149 | 76  | 85318  | 9.064  | ppbv   | 98  |
| 28) Methyl tert-Butyl Ether   | 2.437 | 73  | 67965  | 8.021  | ppbv   | 97  |
| 29) Chloroform                | 2.845 | 83  | 145536 | 9.143  | ppbv   | 97  |
| 30) Cyclohexane               | 3.855 | 84  | 74346  | 8.366  | ppbv   | 97  |
| 31) cis-1,2-Dichloroethene    | 2.719 | 61  | 92460  | 8.567  | ppbv   | 98  |
| 32) 1,1,1-Trichloroethane     | 3.366 | 97  | 144038 | 8.902  | ppbv   | 99  |
| 34) 2-Butanone                | 2.554 | 43  | 139509 | 8.742  | ppbv   | 99  |
| 35) Carbon Tetrachloride      | 3.761 | 117 | 147726 | 10.490 | ppbv   | 99  |
| 36) Benzene                   | 3.654 | 78  | 178114 | 8.680  | ppbv   | 98  |
| 37) 1,2-Dichloroethane        | 3.214 | 62  | 121412 | 9.509  | ppbv   | 100 |
| 38) Trichloroethene           | 4.548 | 130 | 70175  | 8.057  | ppbv   | 98  |
| 39) 1,2-Dichloropropane       | 4.308 | 63  | 64154  | 8.645  | ppbv   | 97  |
| 40) 1,4-Dioxane               | 4.583 | 88  | 30262  | 8.347  | ppbv # | 96  |
| 41) Tetrahydrofuran           | 3.052 | 42  | 74734  | 8.359  | ppbv   | 98  |
| 42) Bromodichloromethane      | 4.486 | 83  | 140832 | 9.588  | ppbv   | 95  |
| 43) Methyl Methacrylate       | 4.878 | 69  | 69545  | 8.895  | ppbv   | 99  |
| 44) 2,2,4-Trimethylpentane    | 4.635 | 57  | 302332 | 8.627  | ppbv   | 97  |
| 45) t-1,3-Dichloropropene     | 6.412 | 75  | 69601  | 8.607  | ppbv   | 96  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041788.D  
 Acq On : 18 Dec 2024 10:29  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Quant Time: Dec 19 07:49:00 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

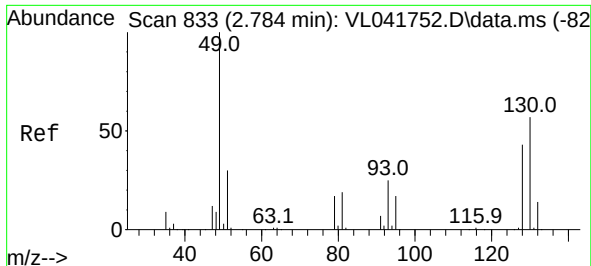
Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.593  | 75   | 52196    | 5.084  | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 6.580  | 97   | 67717    | 8.736  | ppbv   | 93       |
| 48) Dibromochloromethane      | 7.386  | 129  | 101875   | 9.625  | ppbv   | 97       |
| 49) Bromoform                 | 9.483  | 173  | 83649    | 9.655  | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.752  | 43   | 186865   | 8.600  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.438  | 43   | 149217   | 8.472  | ppbv # | 98       |
| 52) Tetrachloroethene         | 8.224  | 164  | 59756    | 7.824  | ppbv   | 93       |
| 53) Toluene                   | 6.930  | 91   | 195158   | 8.389  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.648  | 107  | 94138    | 8.814  | ppbv   | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 8.924  | 131  | 87869    | 9.626  | ppbv   | 99       |
| 57) Chlorobenzene             | 8.920  | 112  | 157039   | 8.912  | ppbv   | 97       |
| 58) Ethyl Benzene             | 9.354  | 91   | 281290   | 9.074  | ppbv   | 97       |
| 59) m/p-Xylene                | 9.548  | 91   | 242021   | 9.710  | ppbv # | 100      |
| 60) o-Xylene                  | 9.963  | 91   | 232028   | 9.283  | ppbv   | 100      |
| 61) Styrene                   | 9.869  | 104  | 103216   | 9.550  | ppbv   | 99       |
| 62) Isopropylbenzene          | 10.539 | 105  | 352903   | 9.397  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.963  | 83   | 144197   | 9.216  | ppbv   | 99       |
| 64) n-propylbenzene           | 10.989 | 120  | 90043    | 9.483  | ppbv   | 99       |
| 65) tert-Butylbenzene         | 11.532 | 119  | 314940   | 9.295  | ppbv   | 98       |
| 66) Benzyl Chloride           | 11.616 | 91   | 22164    | 7.426  | ppbv   | 100      |
| 67) sec-Butylbenzene          | 11.769 | 105  | 442201   | 9.431  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 11.927 | 119  | 369746   | 9.569  | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.283 | 91   | 373294   | 9.999  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 10.901 | 91   | 264866   | 9.240  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 11.124 | 105  | 285469   | 9.676  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.202 | 105  | 242783   | 9.918  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 11.536 | 105  | 263301   | 10.003 | ppbv   | 90       |
| 75) 1,3-Dichlorobenzene       | 11.607 | 146  | 154857   | 9.227  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 11.671 | 146  | 154115   | 9.296  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 11.947 | 146  | 145375   | 9.002  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.882 | 225  | 93437    | 7.804  | ppbv   | 100      |
| 79) Naphthalene               | 13.513 | 128  | 200311   | 10.921 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 14.458 | 142  | 94903    | 16.728 | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 13.442 | 180  | 93675    | 9.346  | ppbv   | 99       |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDCCC010

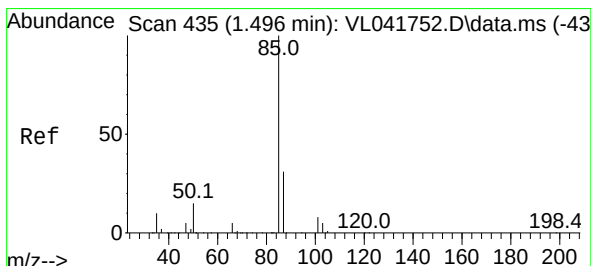
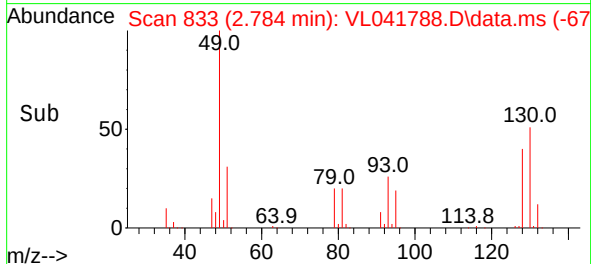
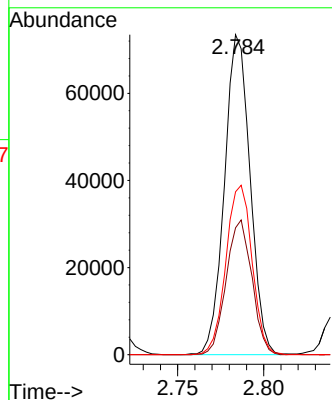
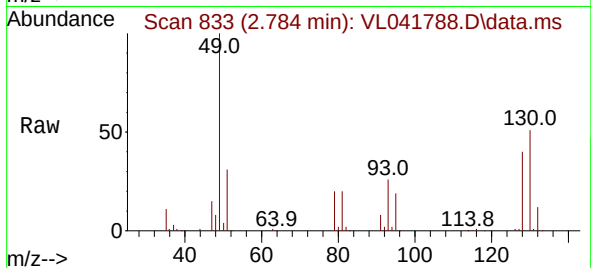
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- 2
- 3
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- 14
- 15
- 16
- 17
- 18
- 19



#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.784 min Scan# 833  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

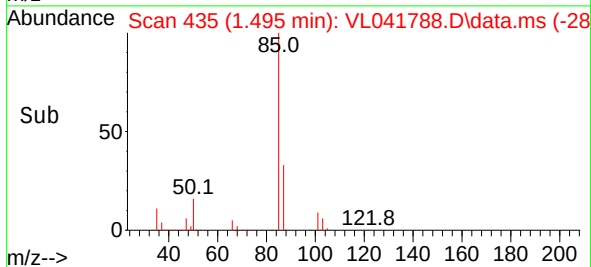
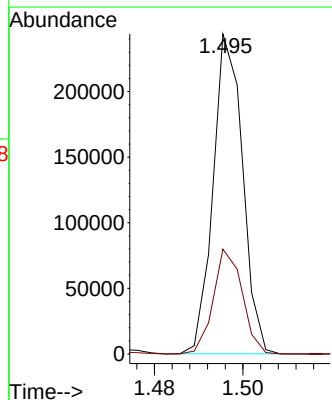
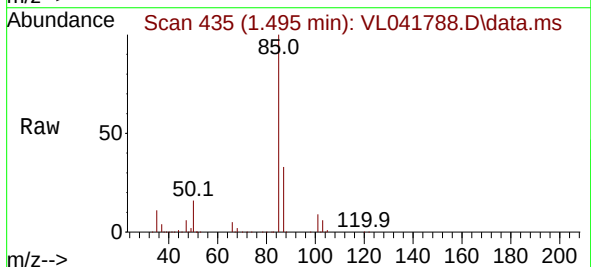
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

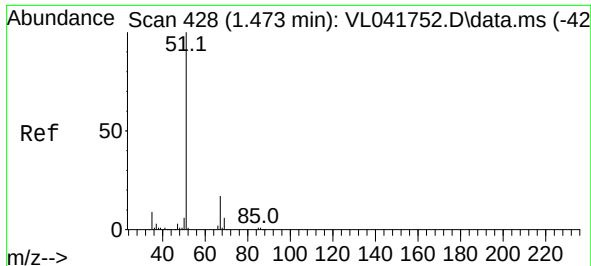
Tgt Ion: 49 Resp: 76040  
Ion Ratio Lower Upper  
49 100  
128 42.2 21.6 64.6  
130 54.2 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 8.340 ppbv  
RT: 1.495 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 85 Resp: 112841  
Ion Ratio Lower Upper  
85 100  
87 32.7 24.5 36.7

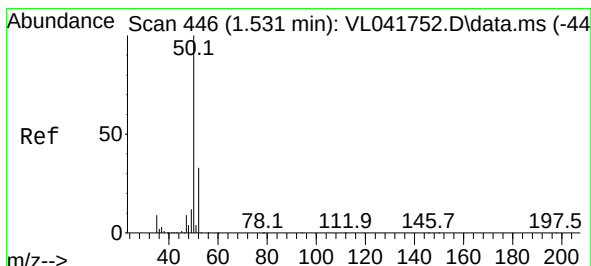
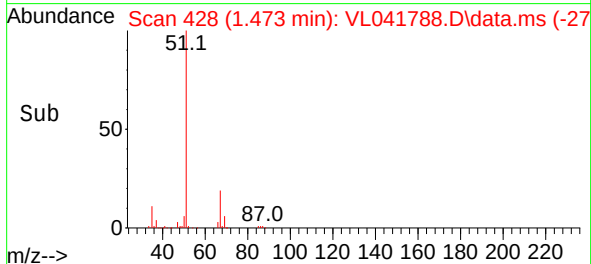
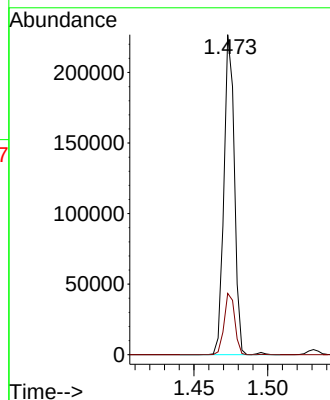
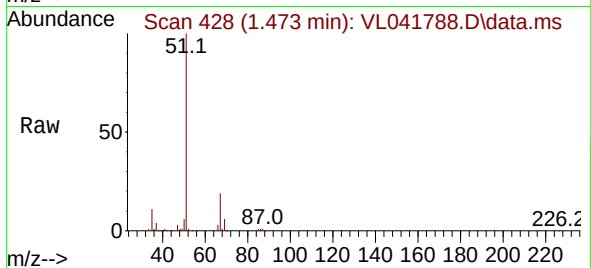




#3  
Chlorodifluoromethane  
Concen: 9.040 ppbv  
RT: 1.473 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

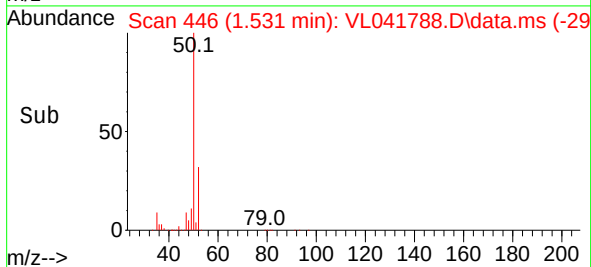
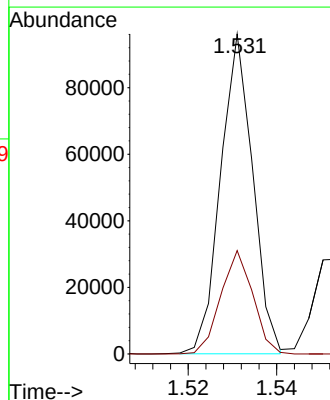
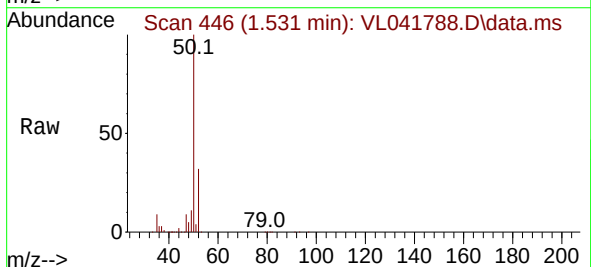
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 51 Resp: 112096  
Ion Ratio Lower Upper  
51 100  
67 19.5 15.0 22.4

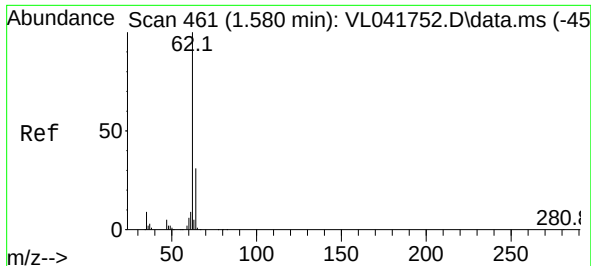


#4  
Chloromethane  
Concen: 9.146 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 50 Resp: 48418  
Ion Ratio Lower Upper  
50 100  
52 32.3 26.2 39.2



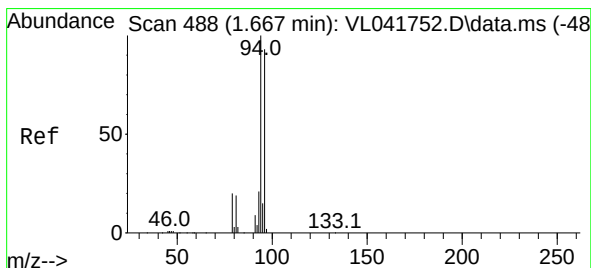
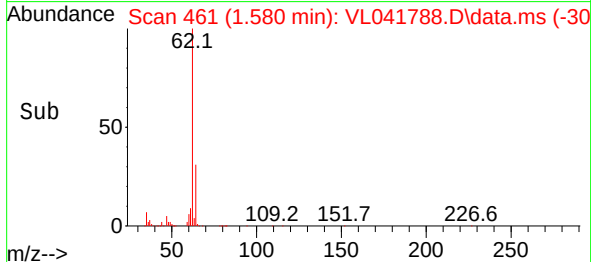
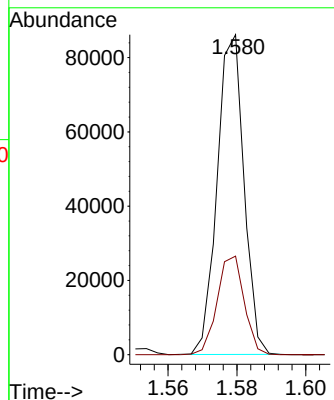
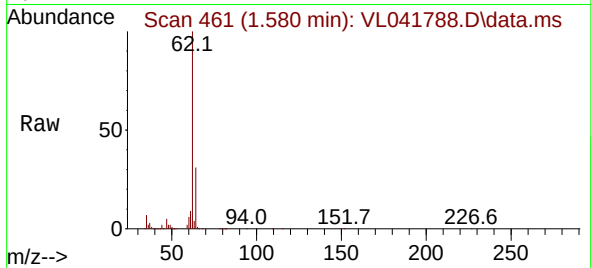




#5  
 Vinyl Chloride  
 Concen: 8.743 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

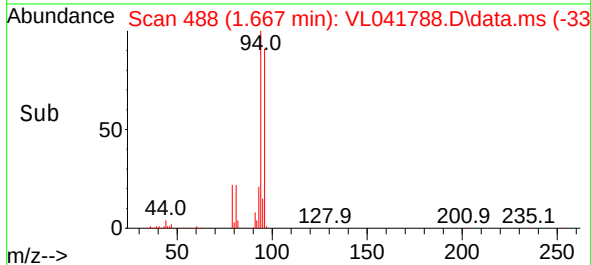
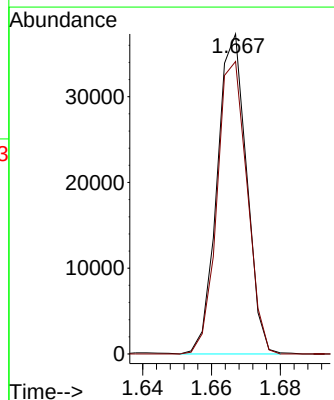
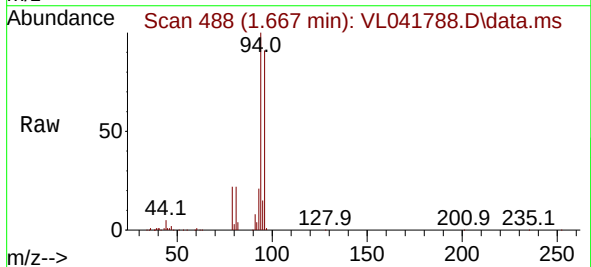
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDCCC010

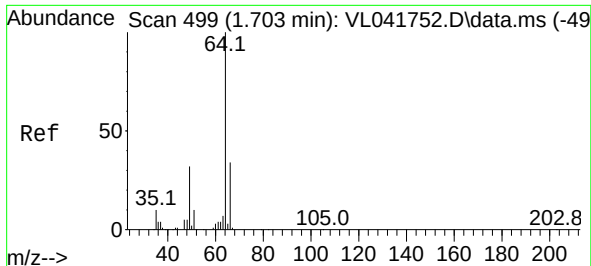
Tgt Ion: 62 Resp: 46631  
 Ion Ratio Lower Upper  
 62 100  
 64 30.8 25.1 37.7



#6  
 Bromomethane  
 Concen: 8.821 ppbv  
 RT: 1.667 min Scan# 488  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

Tgt Ion: 94 Resp: 22202  
 Ion Ratio Lower Upper  
 94 100  
 96 91.4 74.7 112.1

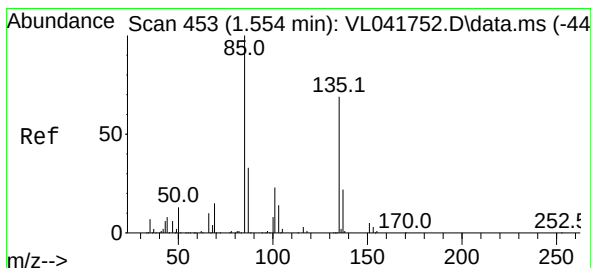
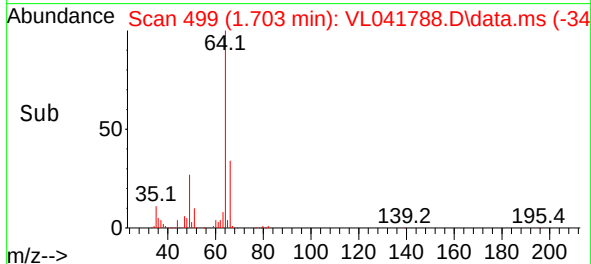
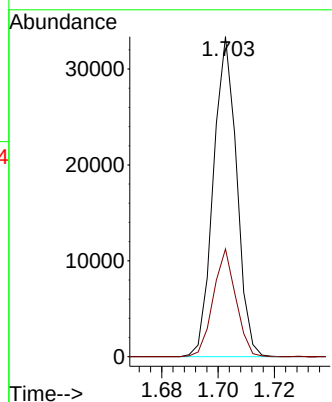
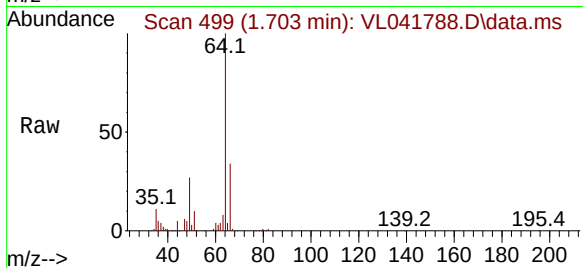




#7  
Chloroethane  
Concen: 9.269 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

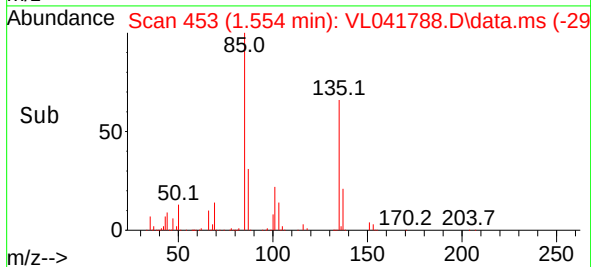
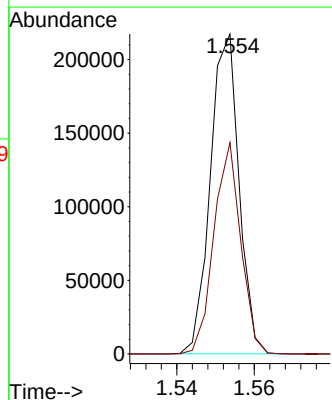
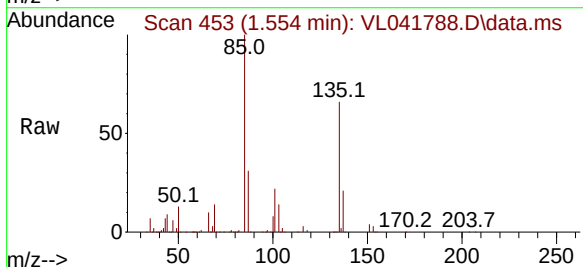
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

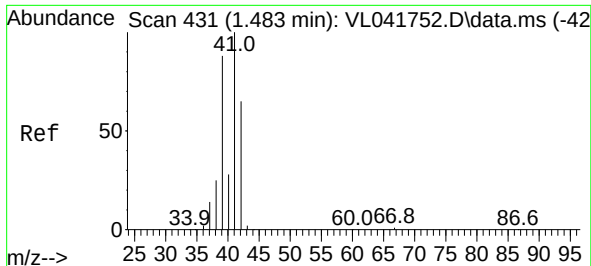
Tgt Ion: 64 Resp: 19203  
Ion Ratio Lower Upper  
64 100  
66 33.6 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 9.220 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 85 Resp: 111653  
Ion Ratio Lower Upper  
85 100  
135 62.0 51.9 77.9

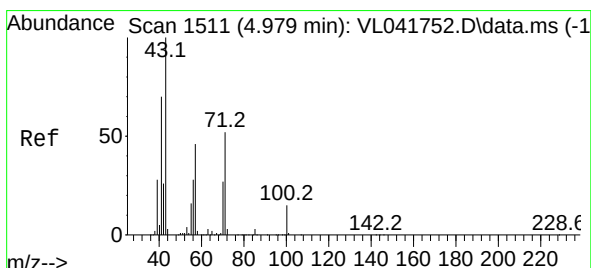
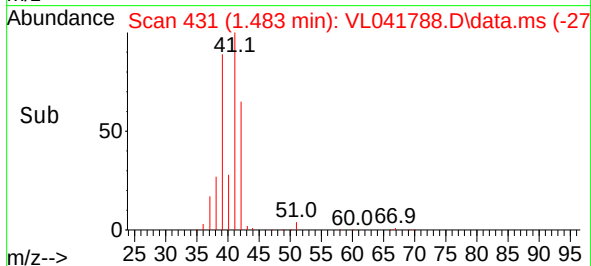
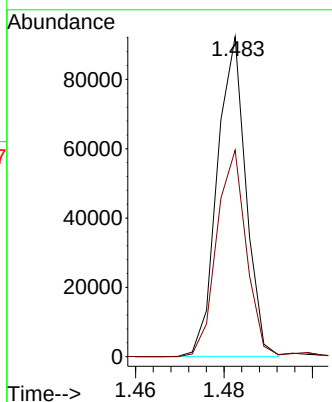
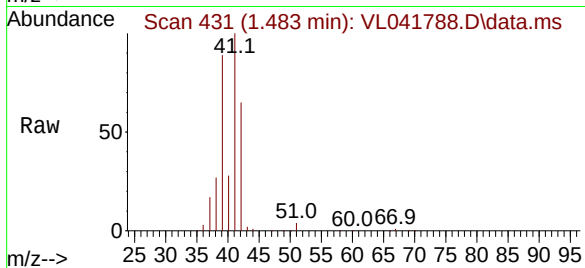




#9  
Propene  
Concen: 7.708 ppbv  
RT: 1.483 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

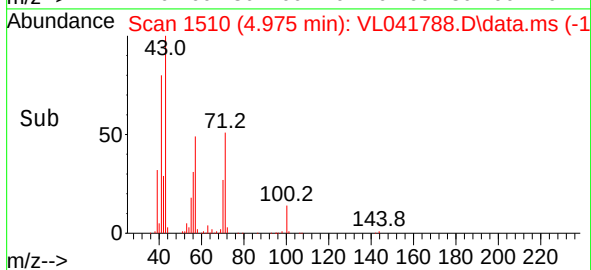
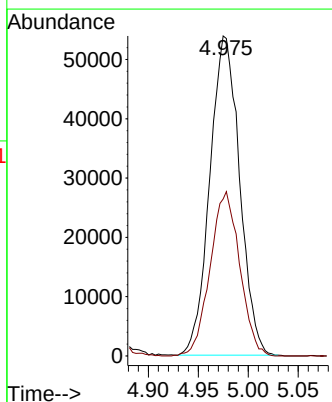
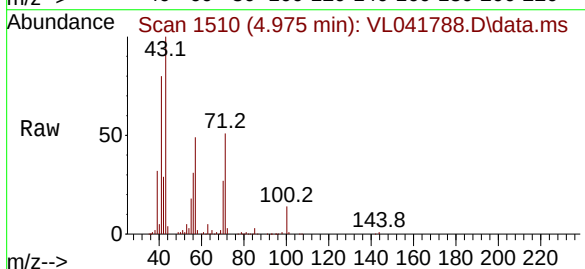
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

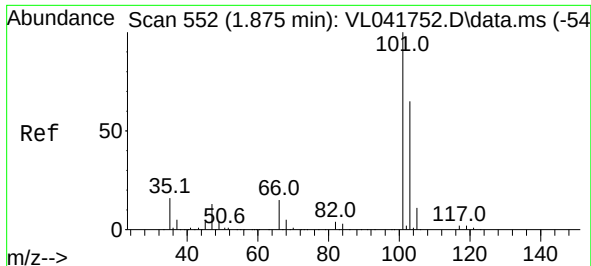
Tgt Ion: 41 Resp: 41427  
Ion Ratio Lower Upper  
41 100  
42 68.5 52.4 78.6



#10  
Heptane  
Concen: 8.087 ppbv  
RT: 4.975 min Scan# 1510  
Delta R.T. -0.004 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 43 Resp: 111650  
Ion Ratio Lower Upper  
43 100  
57 51.1 38.5 57.7





#11

Trichlorofluoromethane

Concen: 9.347 ppbv

RT: 1.874 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

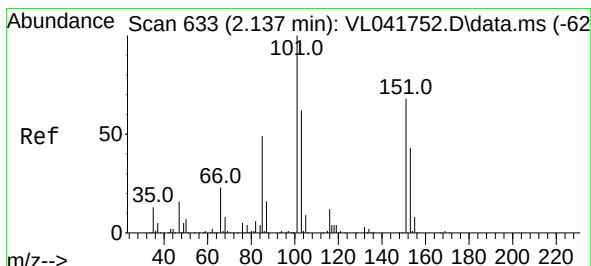
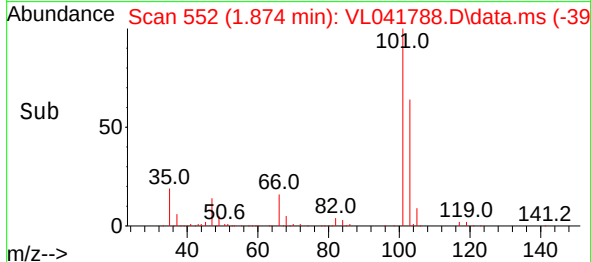
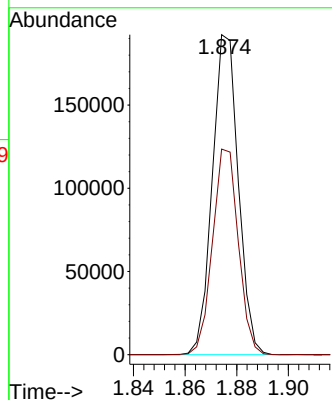
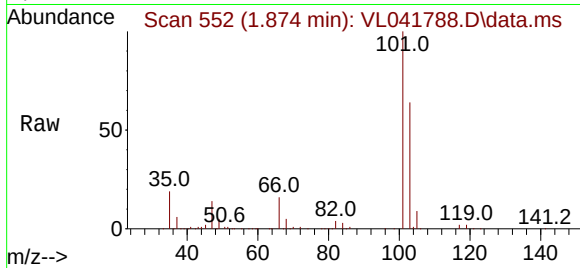
VSTDCCC010

Tgt Ion:101 Resp: 134331

Ion Ratio Lower Upper

101 100

103 64.3 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 8.825 ppbv

RT: 2.136 min Scan# 633

Delta R.T. -0.000 min

Lab File: VL041788.D

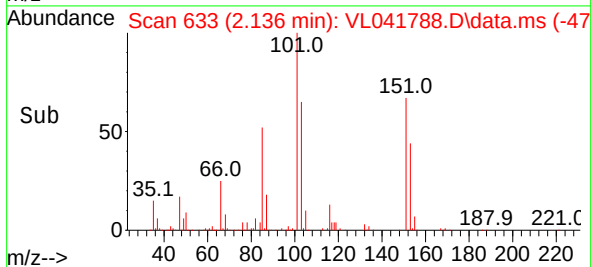
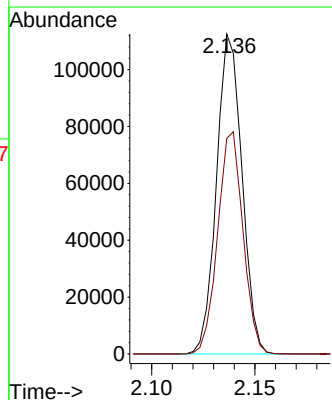
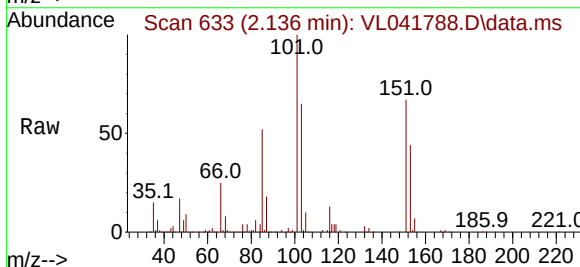
Acq: 18 Dec 2024 10:29

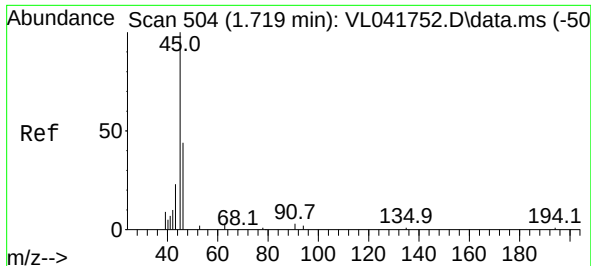
Tgt Ion:101 Resp: 96469

Ion Ratio Lower Upper

101 100

151 69.2 56.8 85.2

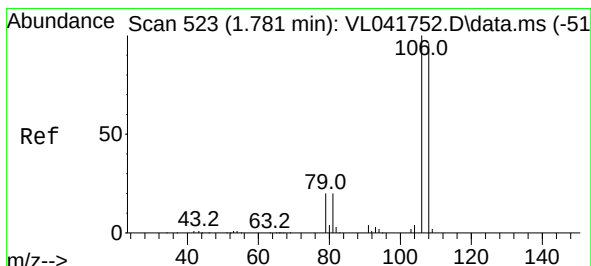
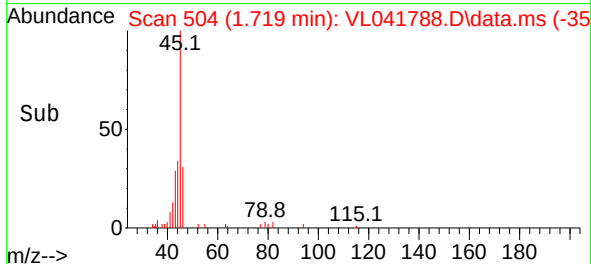
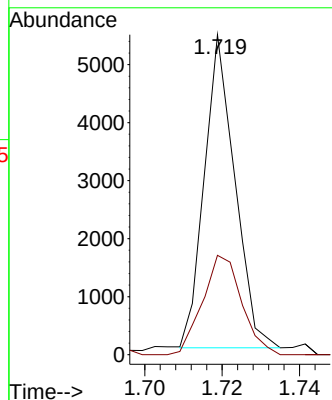
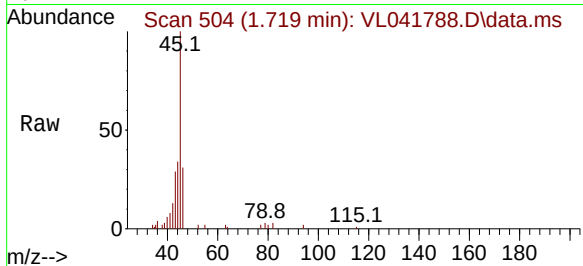




#13  
Ethanol  
Concen: 6.637 ppbv  
RT: 1.719 min Scan# 504  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

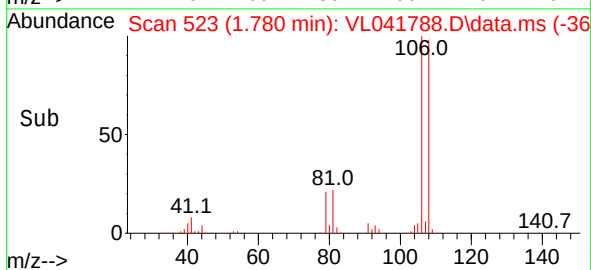
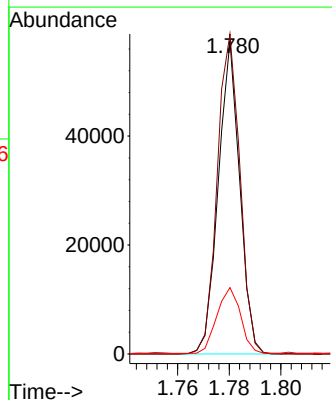
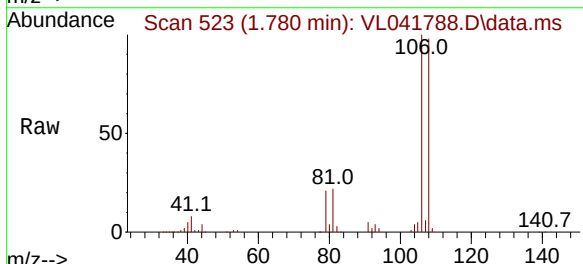
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

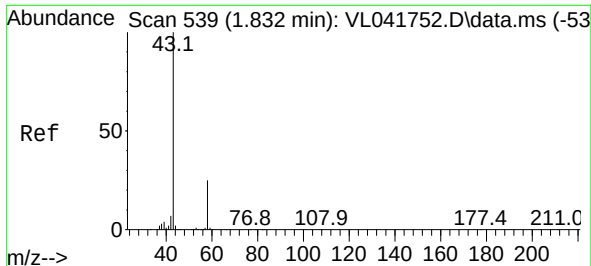
Tgt Ion: 45 Resp: 2954  
Ion Ratio Lower Upper  
45 100  
46 41.2 16.4 65.8



#14  
Bromoethene  
Concen: 8.974 ppbv  
RT: 1.780 min Scan# 523  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 108 Resp: 33118  
Ion Ratio Lower Upper  
108 100  
106 107.8 84.1 126.1  
79 24.4 17.4 26.0





#15

Acetone

Concen: 7.522 ppbv

RT: 1.832 min Scan# 51

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

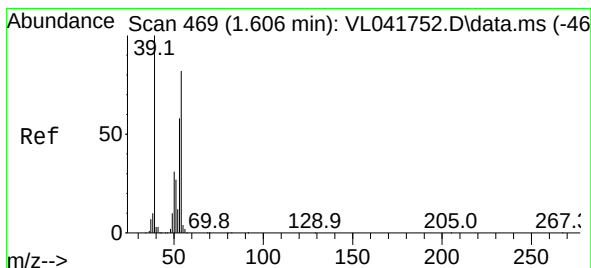
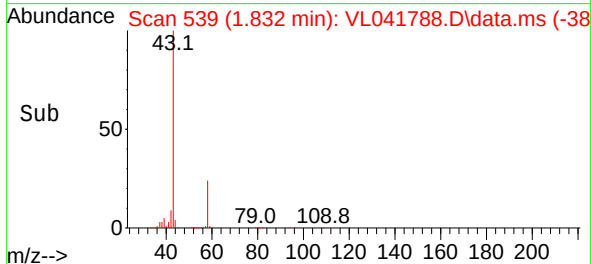
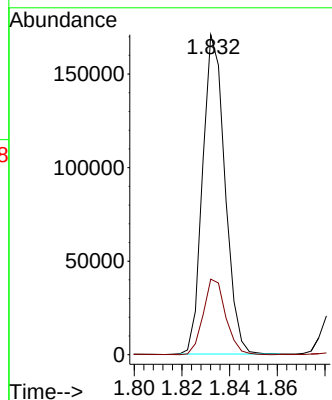
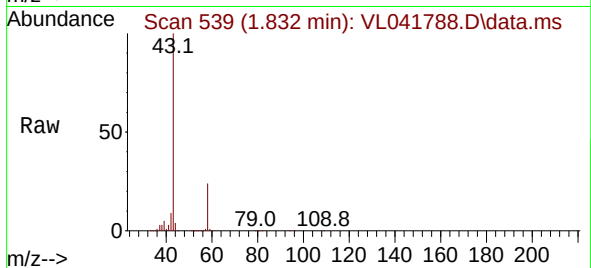
VSTDCCC010

Tgt Ion: 43 Resp: 111294

Ion Ratio Lower Upper

43 100

58 24.0 19.7 29.5



#16

1,3-Butadiene

Concen: 9.149 ppbv

RT: 1.606 min Scan# 469

Delta R.T. -0.000 min

Lab File: VL041788.D

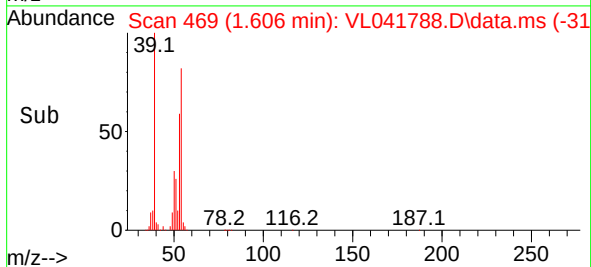
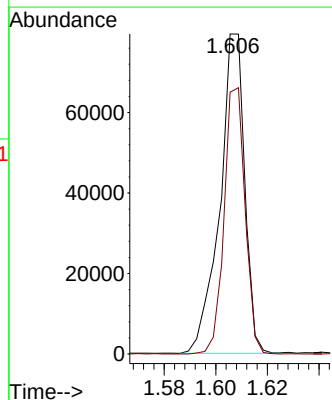
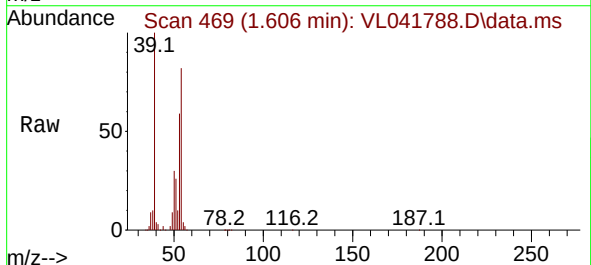
Acq: 18 Dec 2024 10:29

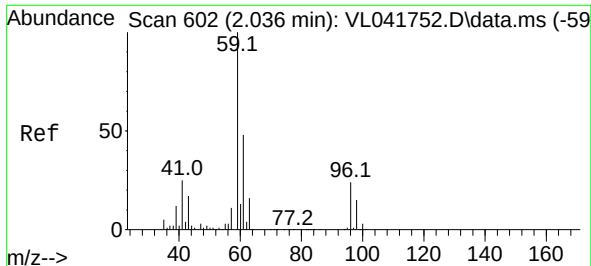
Tgt Ion: 39 Resp: 53299

Ion Ratio Lower Upper

39 100

54 70.3 58.4 87.6





#17

tert-Butyl alcohol

Concen: 9.233 ppbv

RT: 2.036 min Scan# 602

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

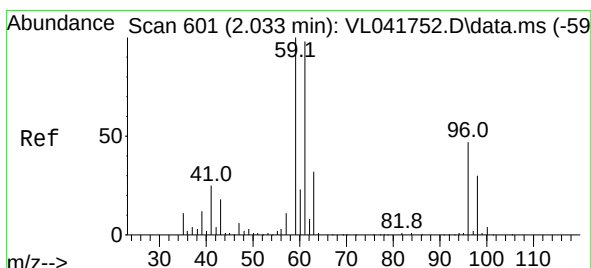
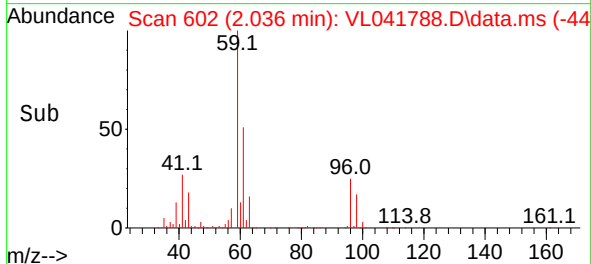
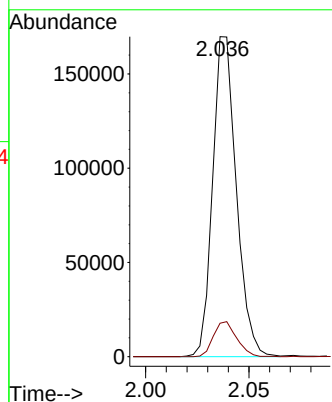
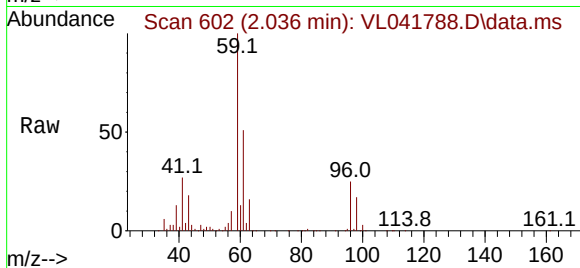
VSTDCCC010

Tgt Ion: 59 Resp: 135516

Ion Ratio Lower Upper

59 100

57 10.8 8.6 13.0



#18

1,1-Dichloroethene

Concen: 8.996 ppbv

RT: 2.033 min Scan# 601

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

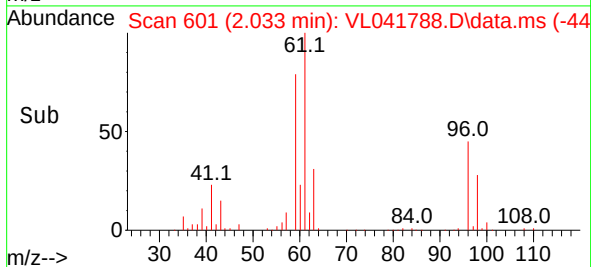
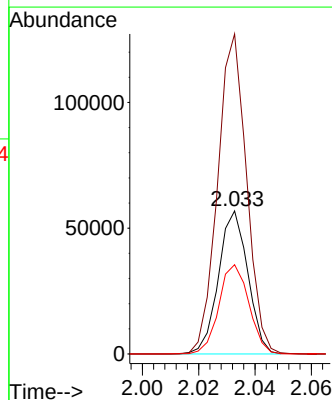
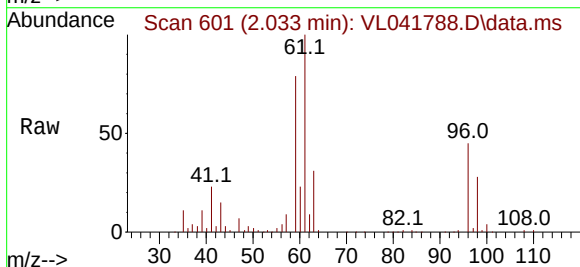
Tgt Ion: 96 Resp: 41224

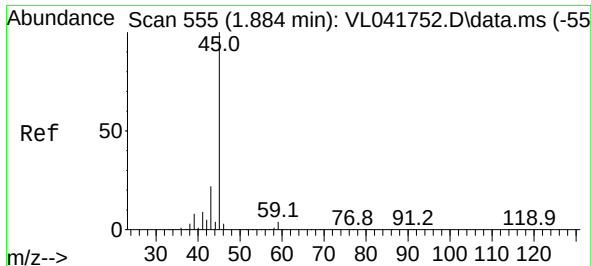
Ion Ratio Lower Upper

96 100

61 223.2 167.7 251.5

98 62.3 51.1 76.7





#19

Isopropyl Alcohol

Concen: 7.303 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

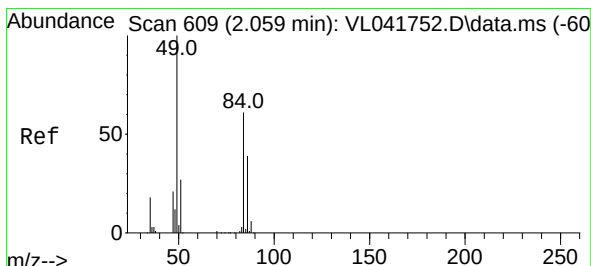
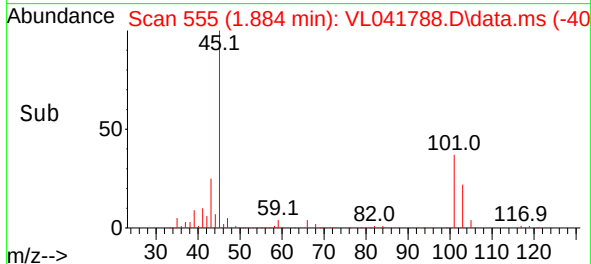
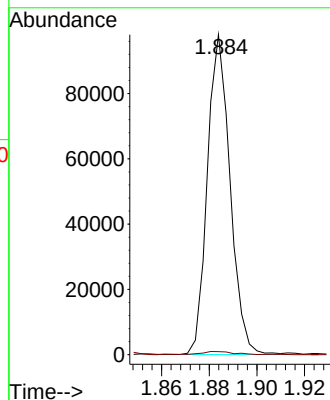
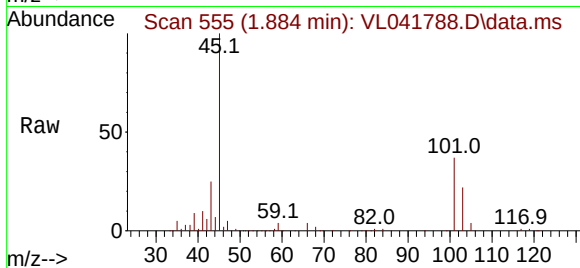
VSTDCCC010

Tgt Ion: 45 Resp: 64831

Ion Ratio Lower Upper

45 100

58 41.3 33.3 49.9



#20

Methylene Chloride

Concen: 8.462 ppbv

RT: 2.059 min Scan# 609

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion: 84 Resp: 35699

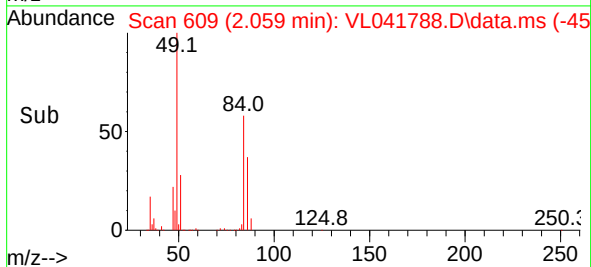
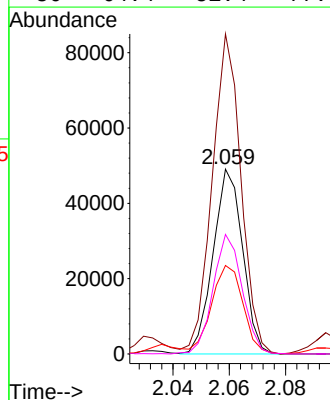
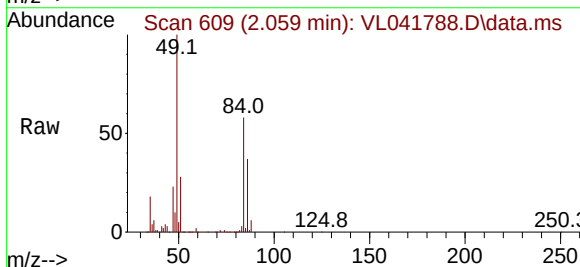
Ion Ratio Lower Upper

84 100

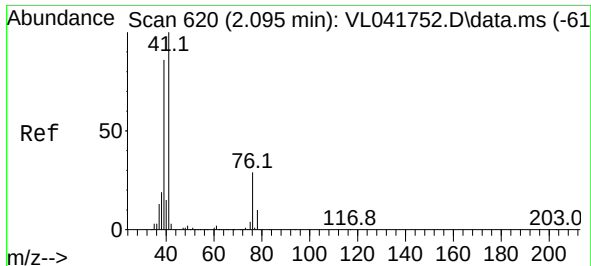
49 173.2 132.6 198.8

51 47.7 37.6 56.4

86 64.4 51.4 77.0







#21

Allyl Chloride

Concen: 9.281 ppbv

RT: 2.094 min Scan# 61

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

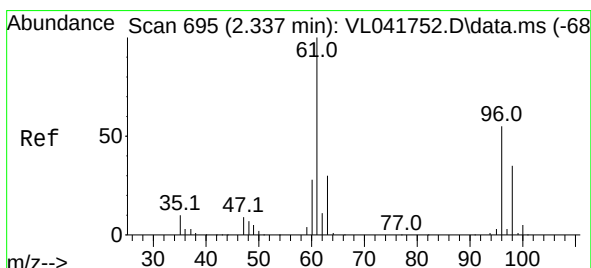
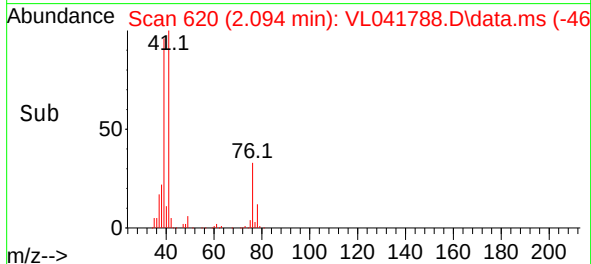
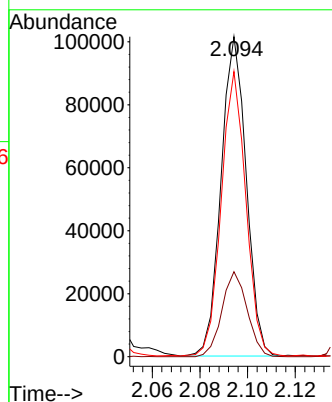
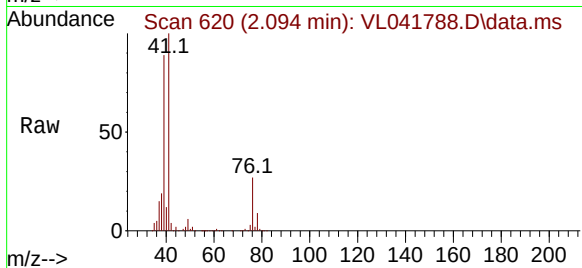
Tgt Ion: 41 Resp: 74468

Ion Ratio Lower Upper

41 100

76 26.7 22.3 33.5

39 86.9 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 8.641 ppbv

RT: 2.337 min Scan# 695

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

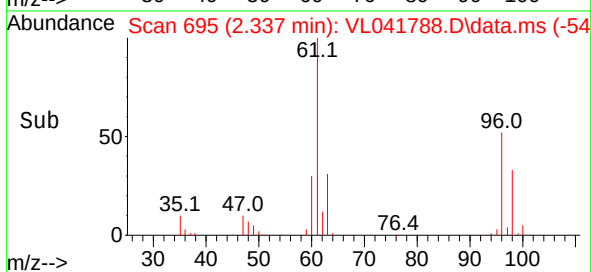
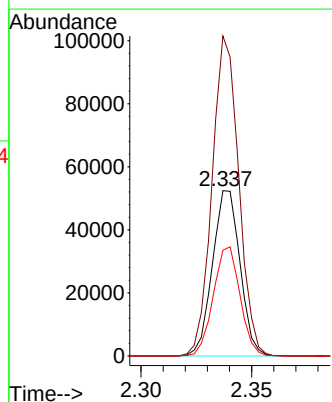
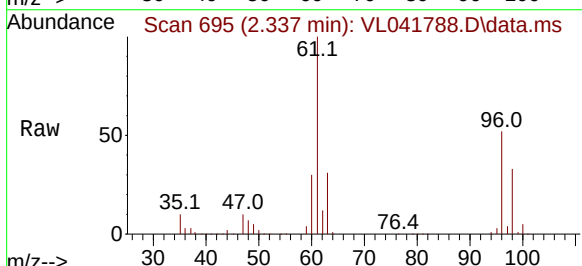
Tgt Ion: 96 Resp: 45331

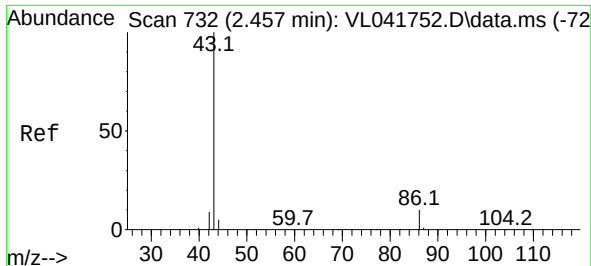
Ion Ratio Lower Upper

96 100

61 193.5 146.3 219.5

98 64.1 50.8 76.2

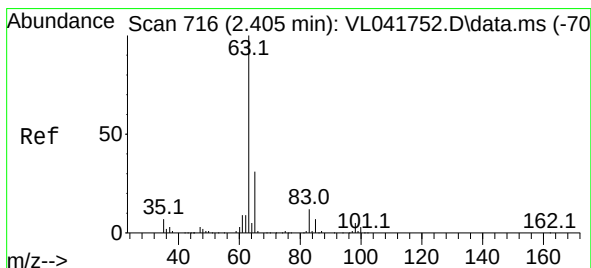
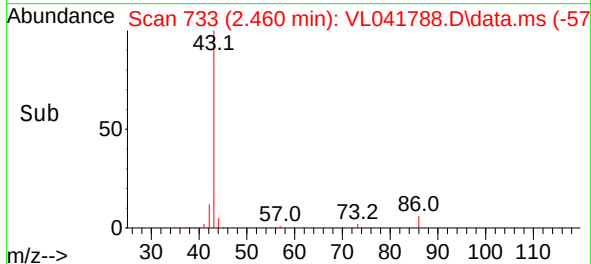
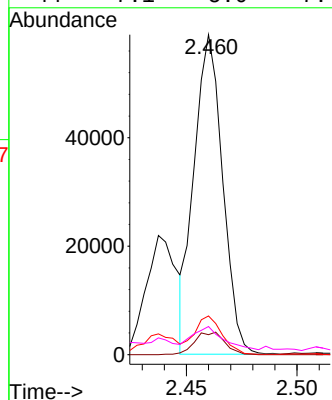
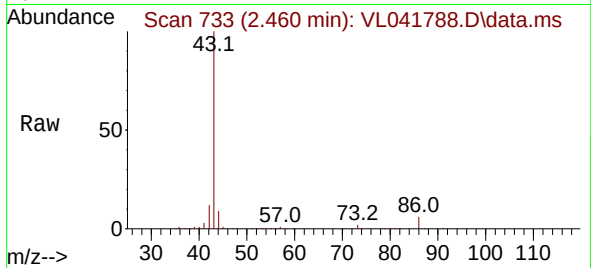




#23  
 Vinyl Acetate  
 Concen: 7.673 ppbv  
 RT: 2.460 min Scan# 716  
 Delta R.T. 0.003 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

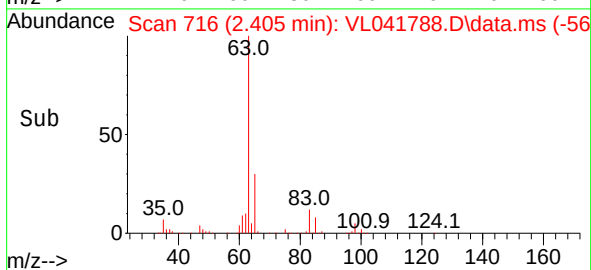
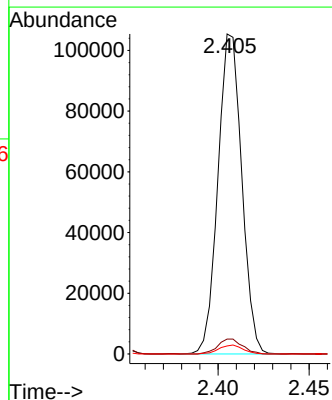
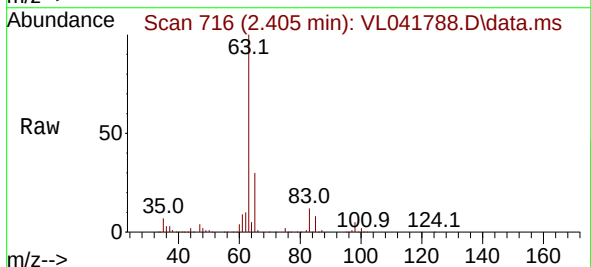
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDCCC010

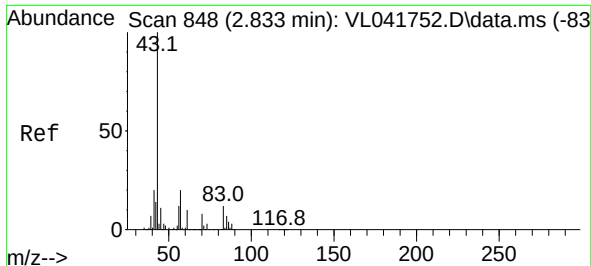
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 52709 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 86 6.3      | 6.6 10.0#   |
| 42 12.0     | 8.2 12.2    |
| 44 7.1      | 5.0 7.4     |



#24  
 1,1-Dichloroethane  
 Concen: 9.020 ppbv  
 RT: 2.405 min Scan# 716  
 Delta R.T. -0.000 min  
 Lab File: VL041788.D  
 Acq: 18 Dec 2024 10:29

|             |             |
|-------------|-------------|
| Tgt Ion: 63 | Resp: 95779 |
| Ion Ratio   | Lower Upper |
| 63 100      |             |
| 98 4.7      | 2.3 6.8     |
| 100 2.5     | 1.4 4.2     |





#25

Ethyl Acetate

Concen: 8.675 ppbv

RT: 2.832 min Scan# 84

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

Tgt Ion: 43 Resp: 238771

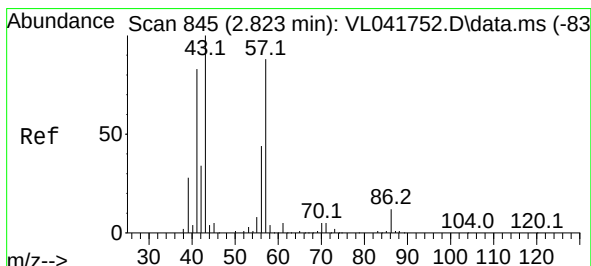
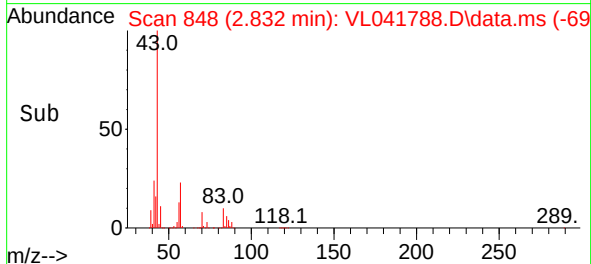
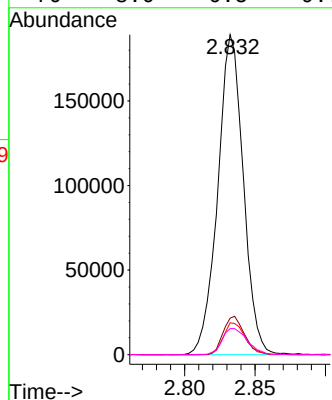
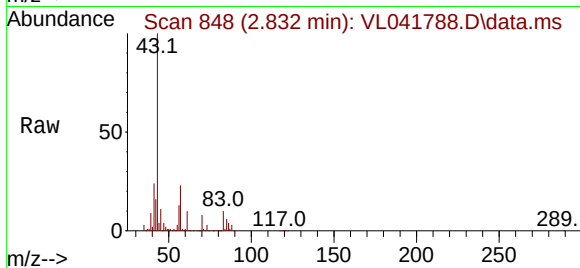
Ion Ratio Lower Upper

43 100

45 10.1 8.1 12.1

61 8.6 7.0 10.6

70 8.0 6.5 9.7



#26

Hexane

Concen: 8.386 ppbv

RT: 2.822 min Scan# 845

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion: 57 Resp: 87593

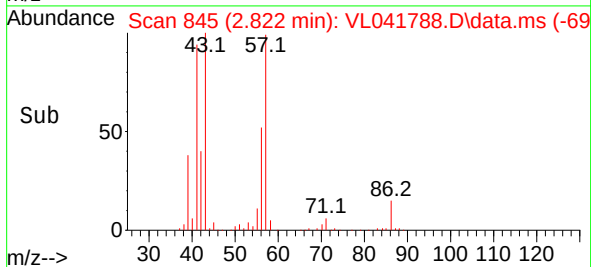
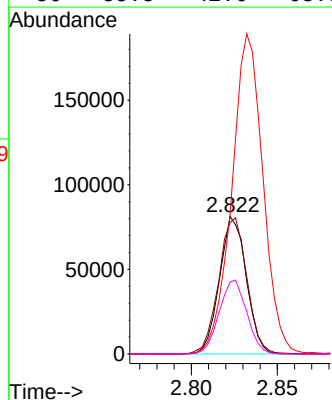
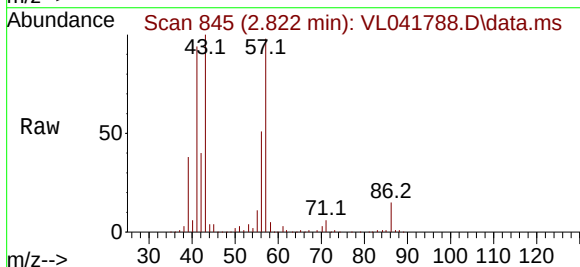
Ion Ratio Lower Upper

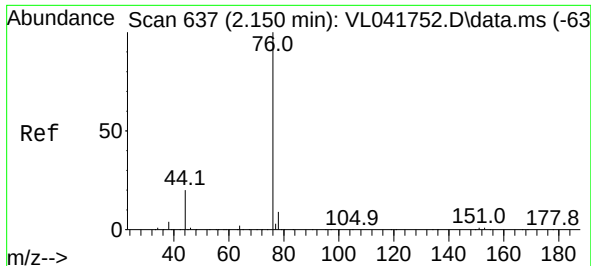
57 100

41 104.9 79.6 119.4

43 273.5 211.0 316.6

56 55.5 42.6 63.8

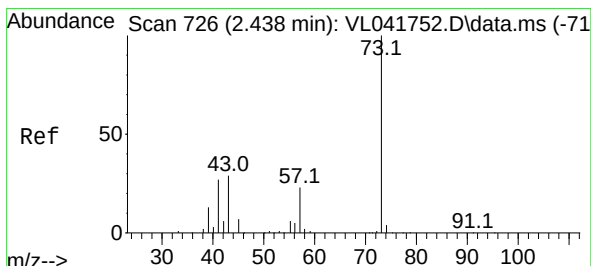
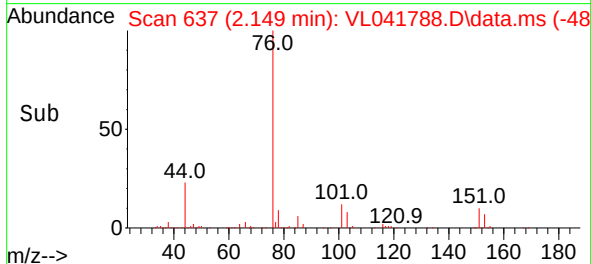
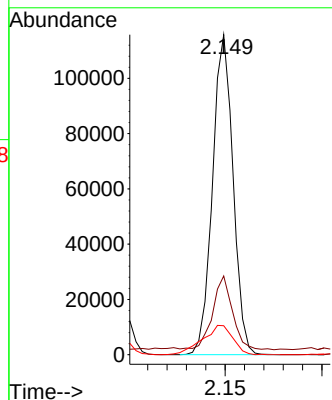
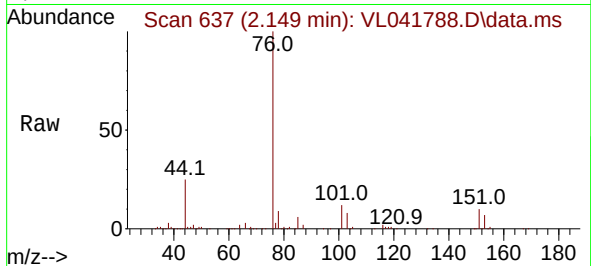




#27  
Carbon Disulfide  
Concen: 9.064 ppbv  
RT: 2.149 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

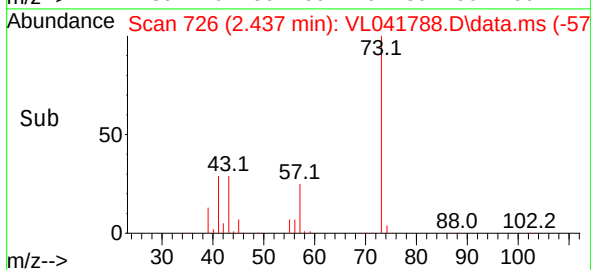
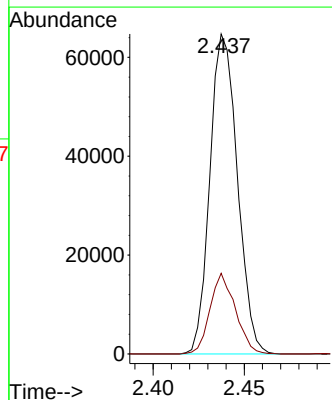
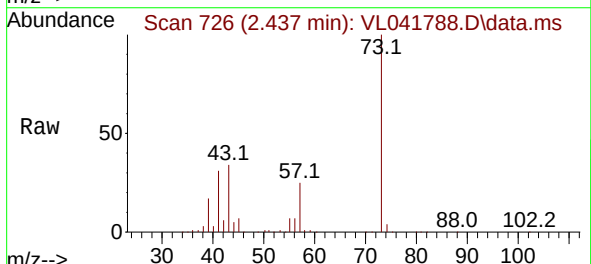
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

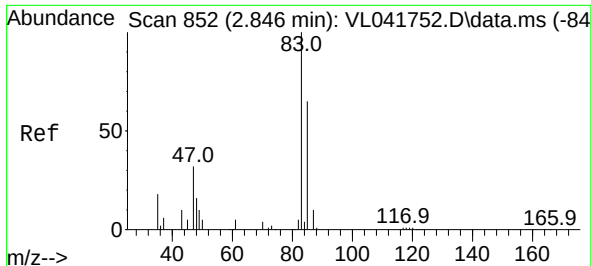
Tgt Ion: 76 Resp: 85318  
Ion Ratio Lower Upper  
76 100  
44 22.8 17.6 26.4  
78 13.5 10.2 15.4



#28  
Methyl tert-Butyl Ether  
Concen: 8.021 ppbv  
RT: 2.437 min Scan# 726  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 73 Resp: 67965  
Ion Ratio Lower Upper  
73 100  
57 23.3 17.6 26.4





#29

Chloroform

Concen: 9.143 ppbv

RT: 2.845 min Scan# 84

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

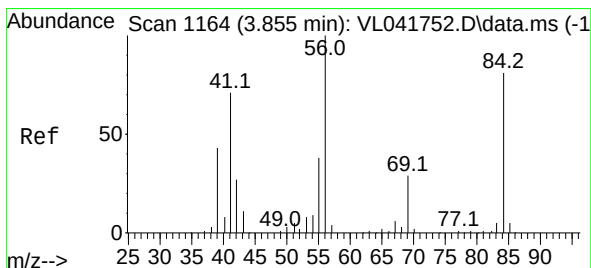
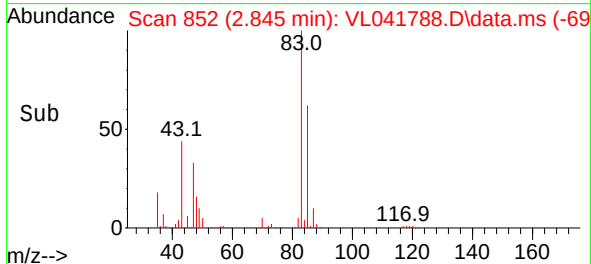
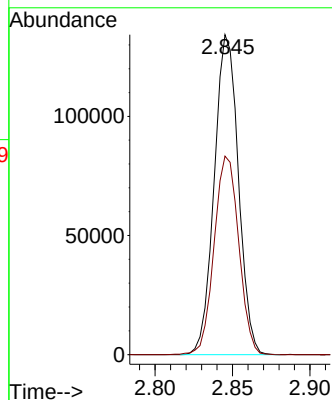
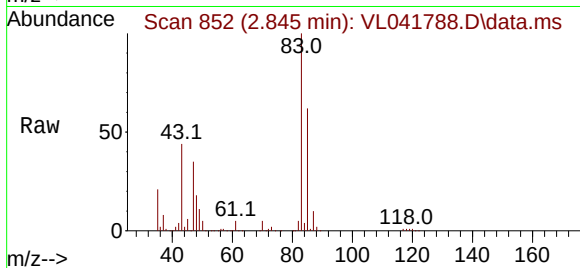
VSTDCCC010

Tgt Ion: 83 Resp: 145536

Ion Ratio Lower Upper

83 100

85 62.0 51.8 77.6



#30

Cyclohexane

Concen: 8.366 ppbv

RT: 3.855 min Scan# 1164

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

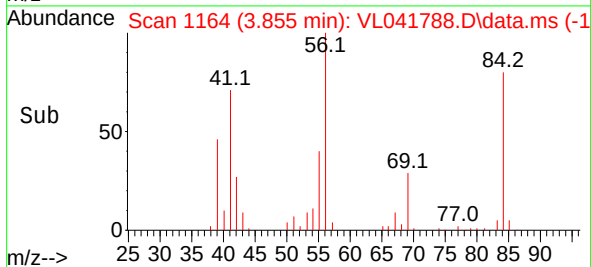
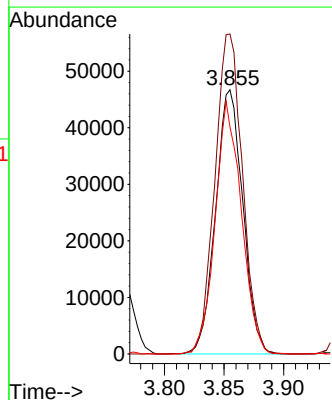
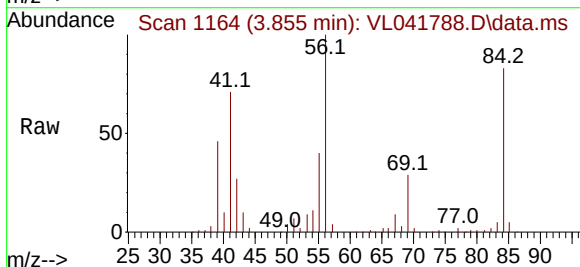
Tgt Ion: 84 Resp: 74346

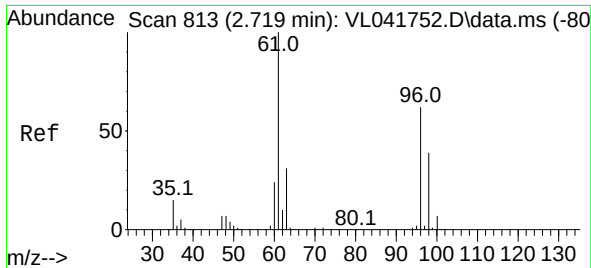
Ion Ratio Lower Upper

84 100

56 122.7 102.3 153.5

41 91.8 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 8.567 ppbv

RT: 2.719 min Scan# 81

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

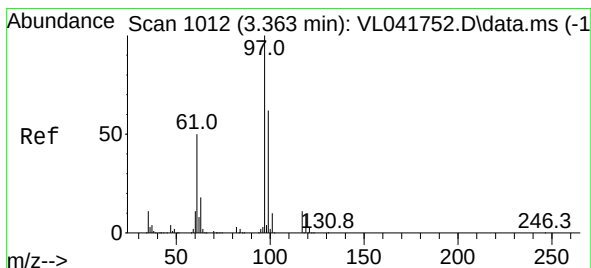
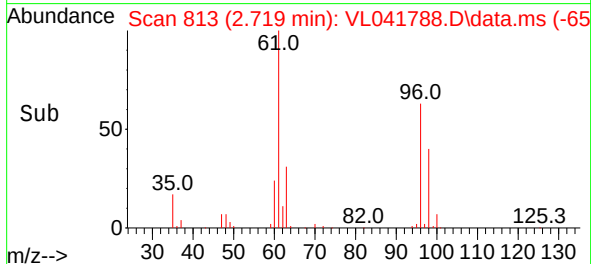
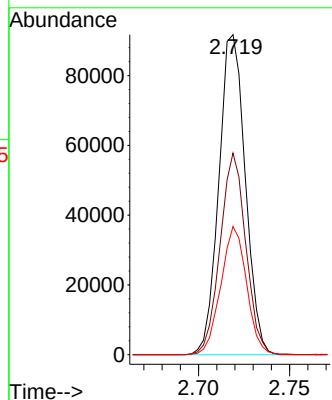
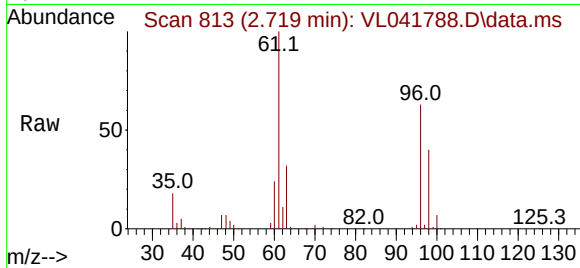
Tgt Ion: 61 Resp: 92460

Ion Ratio Lower Upper

61 100

96 63.0 49.7 74.5

98 40.0 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 8.902 ppbv

RT: 3.366 min Scan# 1013

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

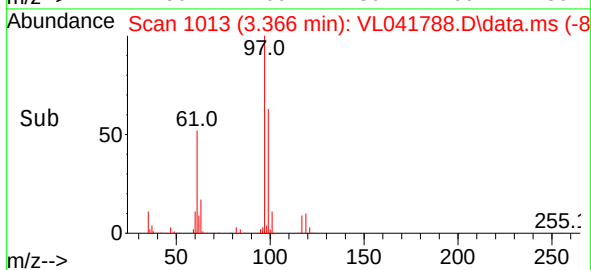
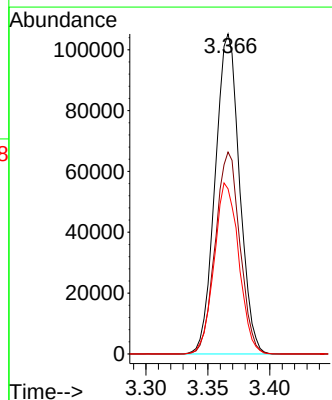
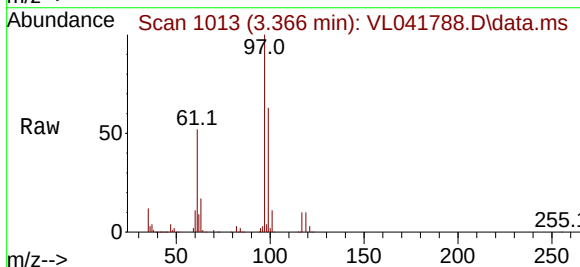
Tgt Ion: 97 Resp: 144038

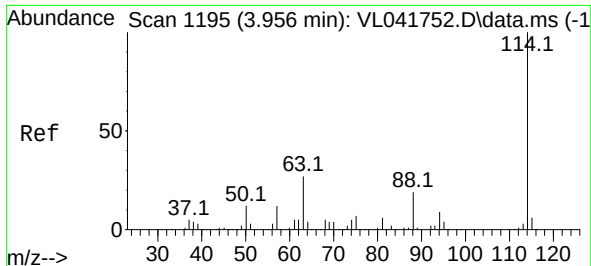
Ion Ratio Lower Upper

97 100

99 63.8 51.0 76.4

61 54.0 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.952 min Scan# 1194

Delta R.T. -0.004 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

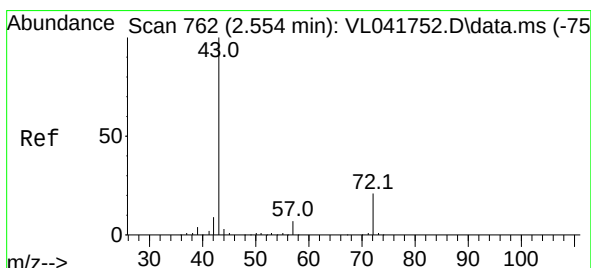
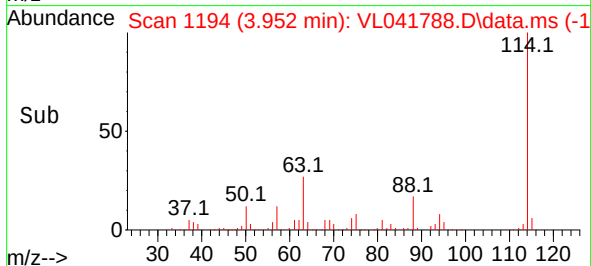
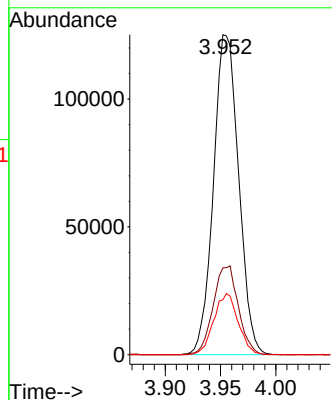
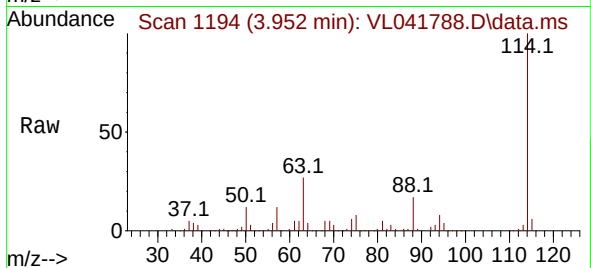
Tgt Ion:114 Resp: 198370

Ion Ratio Lower Upper

114 100

63 27.6 21.8 32.8

88 18.4 14.8 22.2



#34

2-Butanone

Concen: 8.742 ppbv

RT: 2.554 min Scan# 762

Delta R.T. -0.000 min

Lab File: VL041788.D

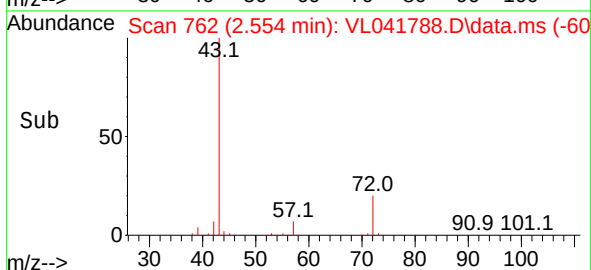
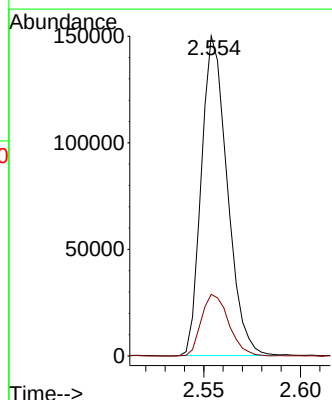
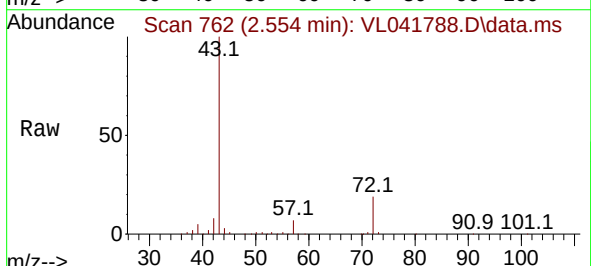
Acq: 18 Dec 2024 10:29

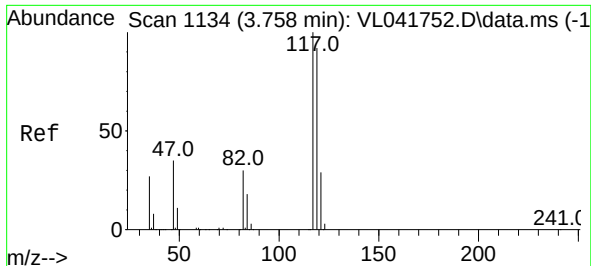
Tgt Ion: 43 Resp: 139509

Ion Ratio Lower Upper

43 100

72 20.5 16.8 25.2

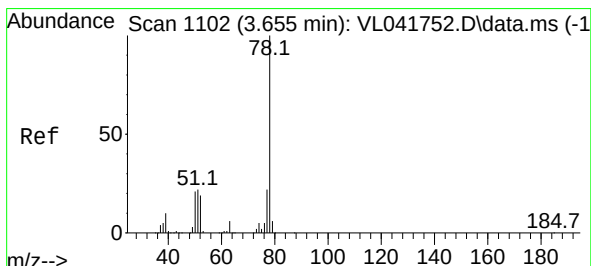
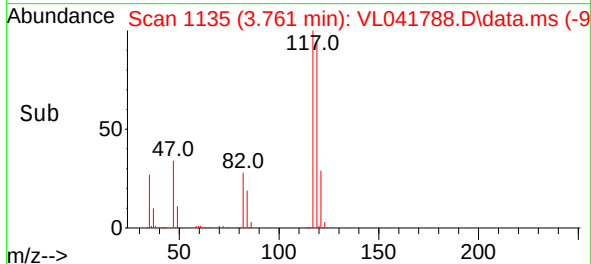
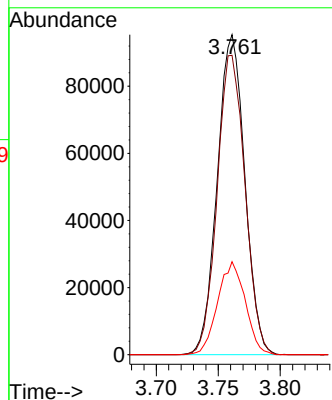
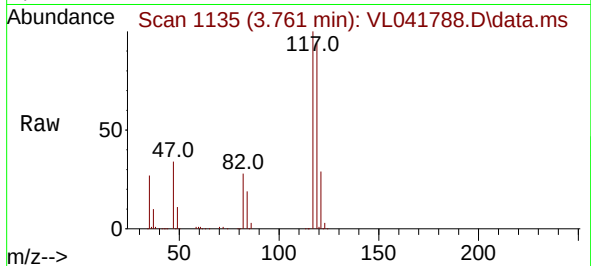




#35  
Carbon Tetrachloride  
Concen: 10.490 ppbv  
RT: 3.761 min Scan# 1135  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

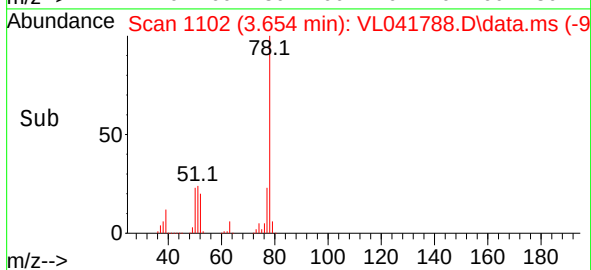
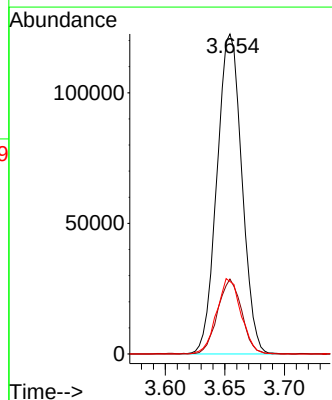
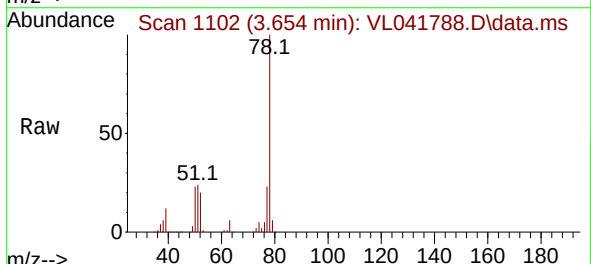
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion:117 Resp: 147726  
Ion Ratio Lower Upper  
117 100  
119 93.5 73.7 110.5  
121 29.1 23.0 34.4

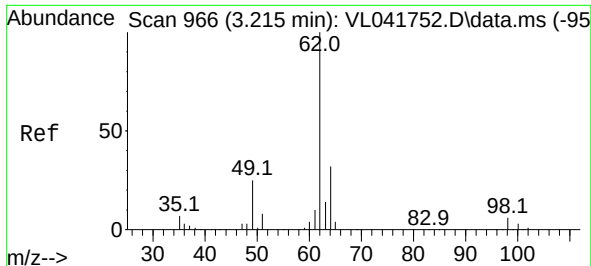


#36  
Benzene  
Concen: 8.680 ppbv  
RT: 3.654 min Scan# 1102  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 78 Resp: 178114  
Ion Ratio Lower Upper  
78 100  
77 23.3 17.8 26.6  
50 22.6 17.2 25.8







#37

1,2-Dichloroethane

Concen: 9.509 ppbv

RT: 3.214 min Scan# 9

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

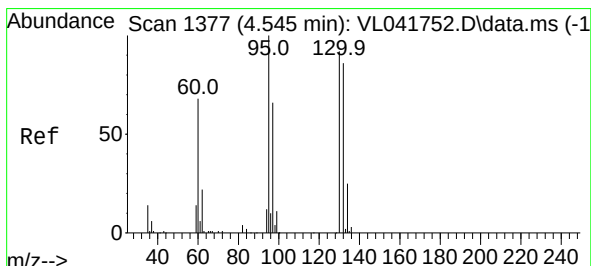
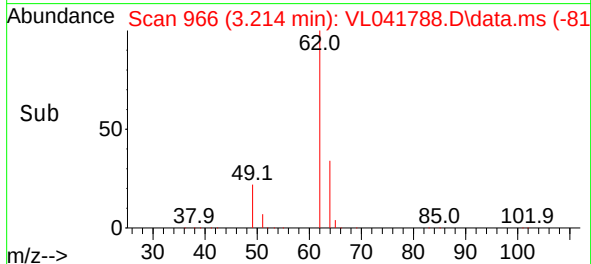
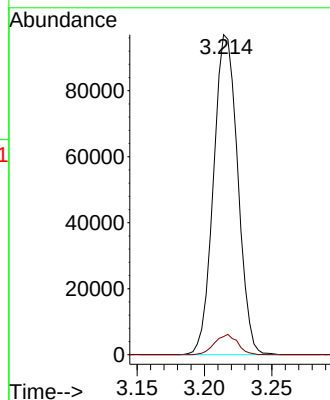
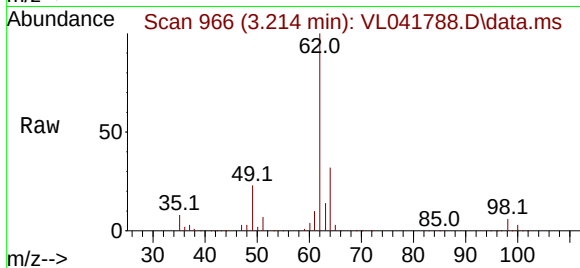
VSTDCCC010

Tgt Ion: 62 Resp: 121412

Ion Ratio Lower Upper

62 100

98 6.0 4.7 7.1



#38

Trichloroethene

Concen: 8.057 ppbv

RT: 4.548 min Scan# 1378

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion:130 Resp: 70175

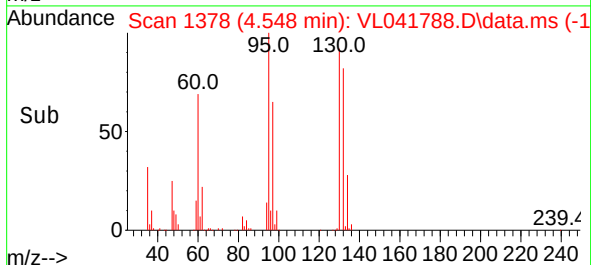
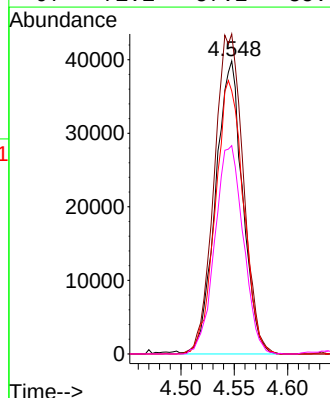
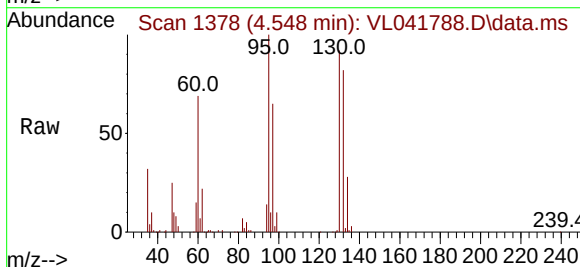
Ion Ratio Lower Upper

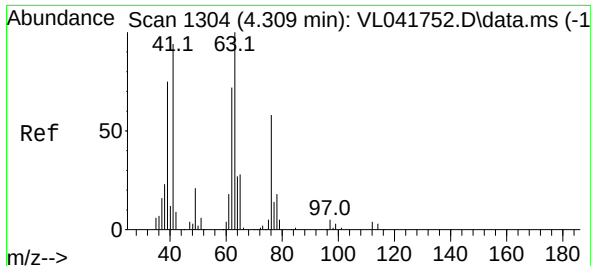
130 100

95 109.2 87.0 130.6

132 89.8 75.0 112.6

97 71.1 57.2 85.8





#39

1,2-Dichloropropane

Concen: 8.645 ppbv

RT: 4.308 min Scan# 1304

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

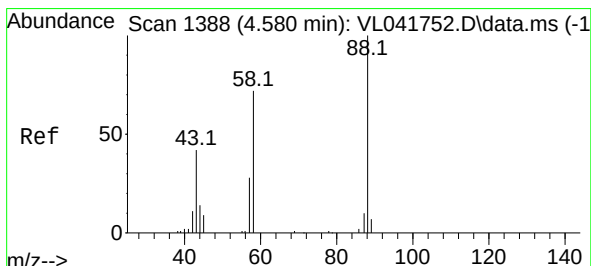
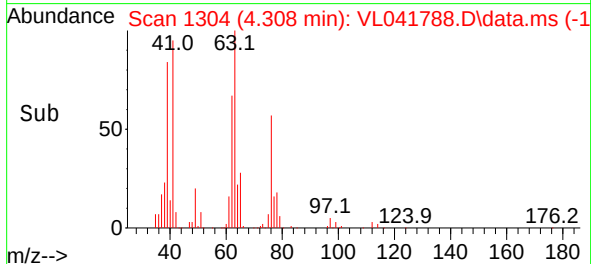
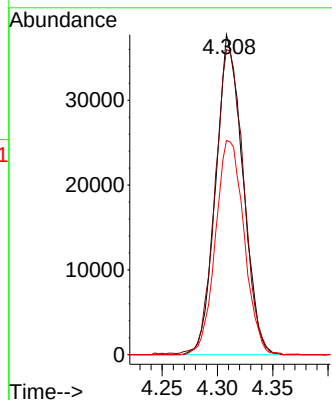
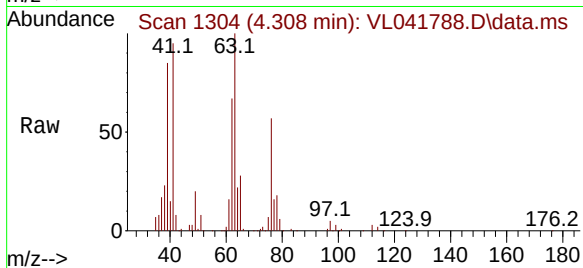
Tgt Ion: 63 Resp: 64154

Ion Ratio Lower Upper

63 100

41 94.8 75.3 112.9

62 66.9 57.3 85.9



#40

1,4-Dioxane

Concen: 8.347 ppbv

RT: 4.583 min Scan# 1389

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion: 88 Resp: 30262

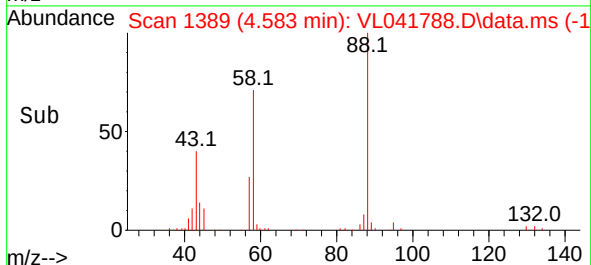
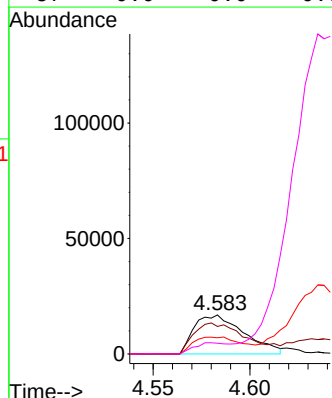
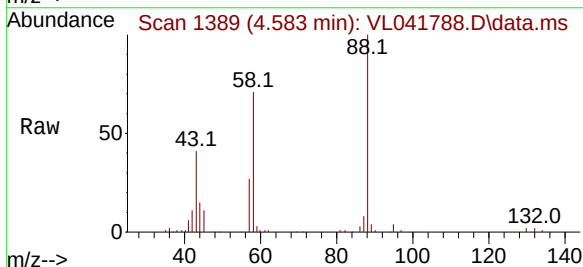
Ion Ratio Lower Upper

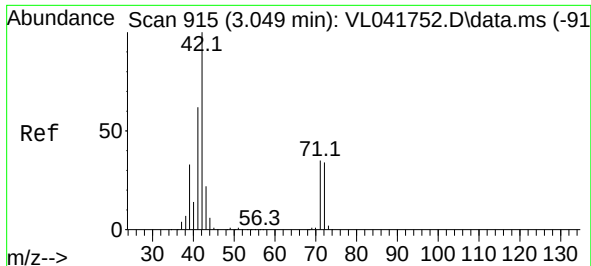
88 100

58 79.3 61.0 91.6

43 40.5 29.4 44.0

57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 8.359 ppbv

RT: 3.052 min Scan# 915

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

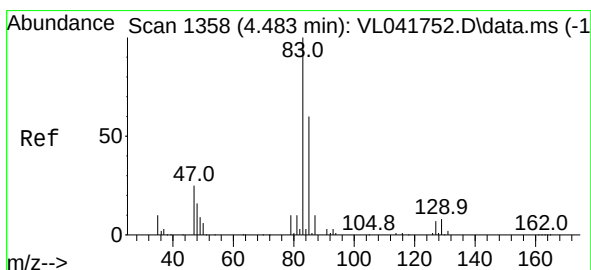
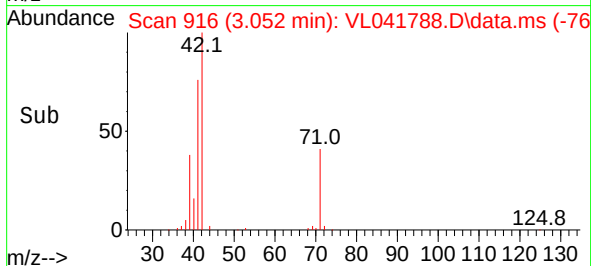
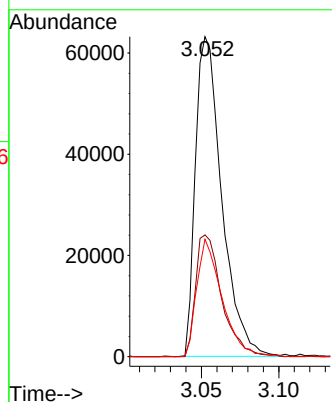
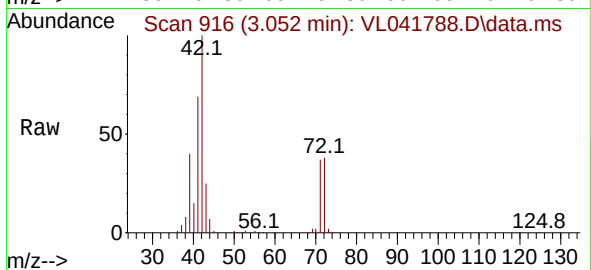
Tgt Ion: 42 Resp: 74734

Ion Ratio Lower Upper

42 100

72 38.0 29.1 43.7

71 35.3 28.4 42.6



#42

Bromodichloromethane

Concen: 9.588 ppbv

RT: 4.486 min Scan# 1359

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

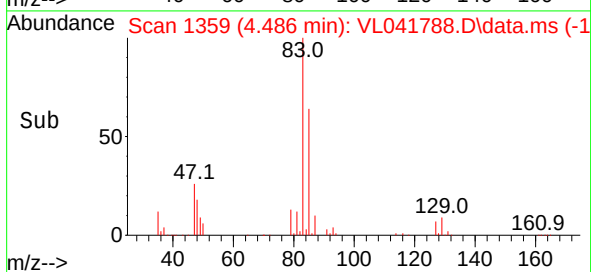
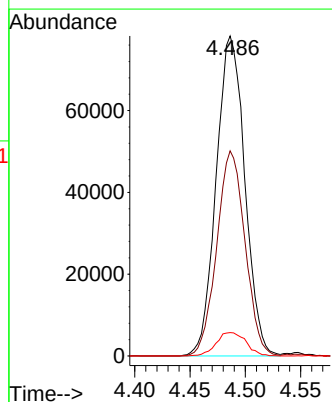
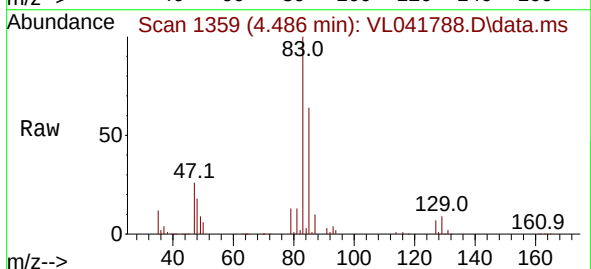
Tgt Ion: 83 Resp: 140832

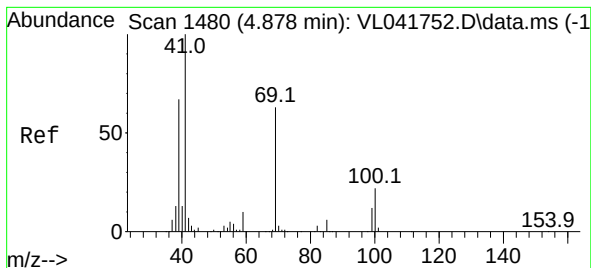
Ion Ratio Lower Upper

83 100

85 64.1 48.0 72.0

127 7.3 5.8 8.8





#43

Methyl Methacrylate

Concen: 8.895 ppbv

RT: 4.878 min Scan# 1480

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

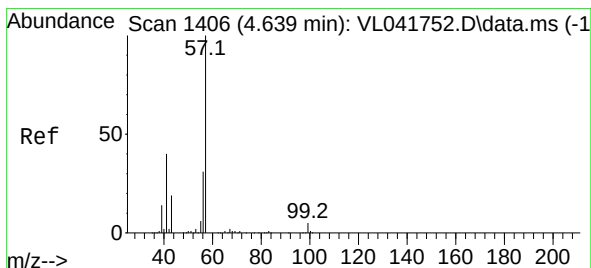
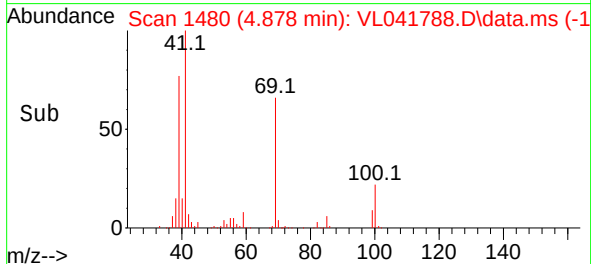
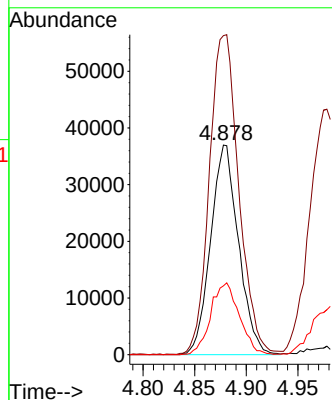
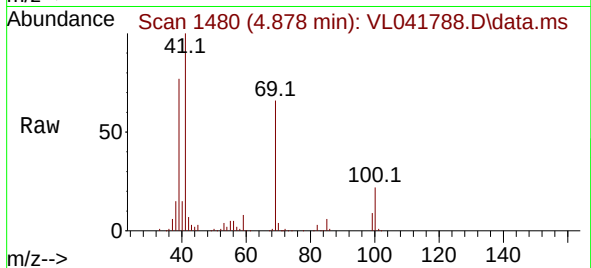
Tgt Ion: 69 Resp: 69545

Ion Ratio Lower Upper

69 100

41 161.4 130.3 195.5

100 35.2 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 8.627 ppbv

RT: 4.635 min Scan# 1405

Delta R.T. -0.004 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

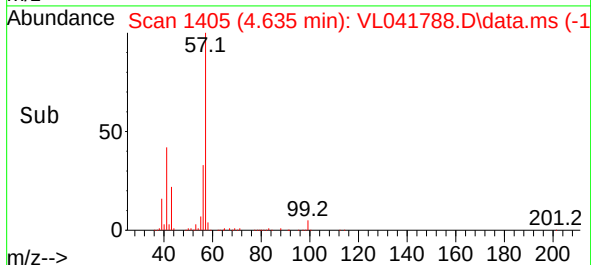
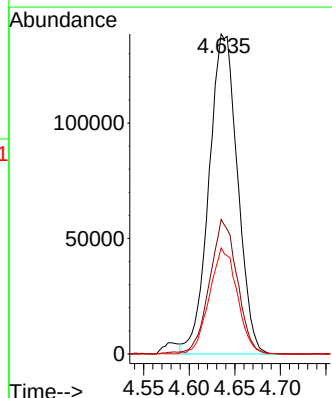
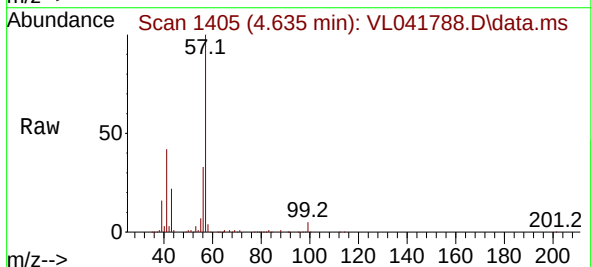
Tgt Ion: 57 Resp: 302332

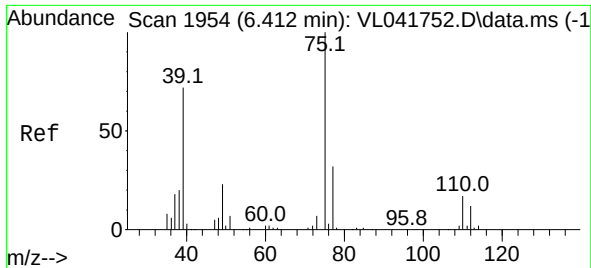
Ion Ratio Lower Upper

57 100

41 40.7 30.7 46.1

56 32.3 25.4 38.0





#45

t-1,3-Dichloropropene

Concen: 8.607 ppbv

RT: 6.412 min Scan# 1954

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

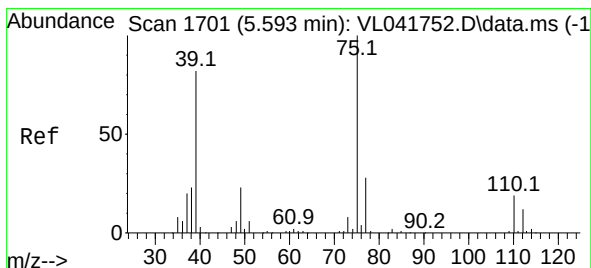
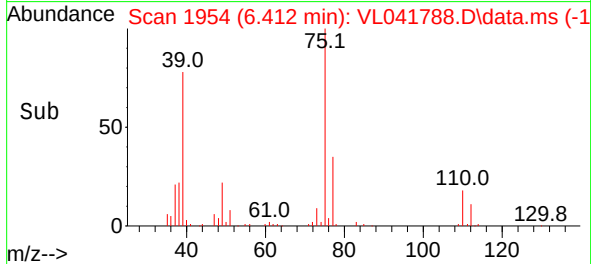
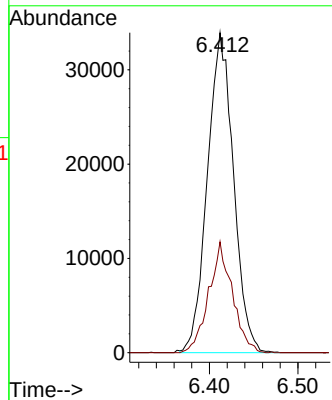
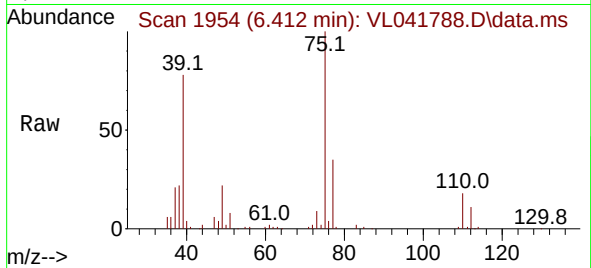
VSTDCCC010

Tgt Ion: 75 Resp: 69601

Ion Ratio Lower Upper

75 100

77 34.6 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 5.084 ppbv

RT: 5.593 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

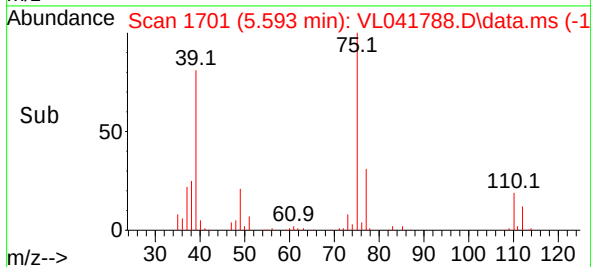
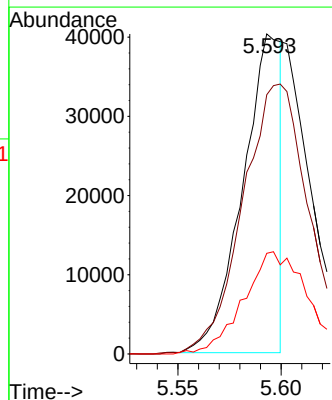
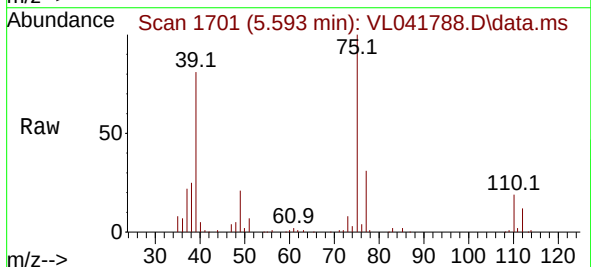
Tgt Ion: 75 Resp: 52196

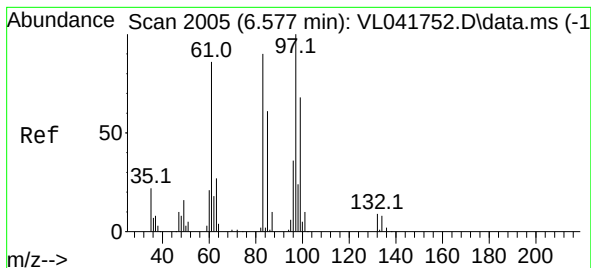
Ion Ratio Lower Upper

75 100

39 80.8 65.2 97.8

77 31.1 22.0 33.0





#47

1,1,2-Trichloroethane

Concen: 8.736 ppbv

RT: 6.580 min Scan# 2006

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

Tgt Ion: 97 Resp: 67717

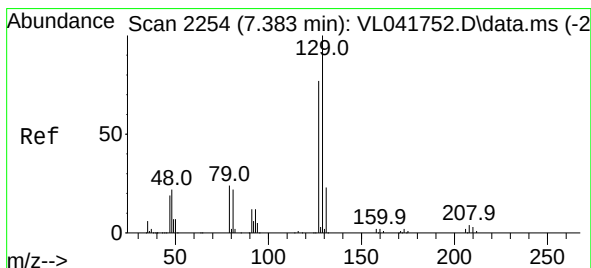
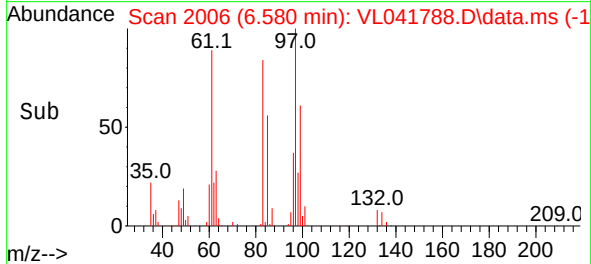
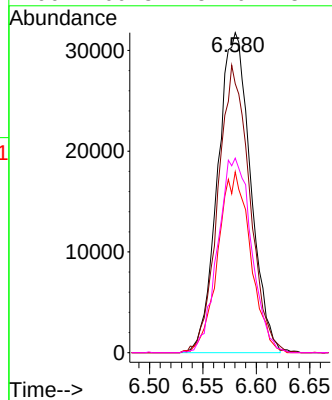
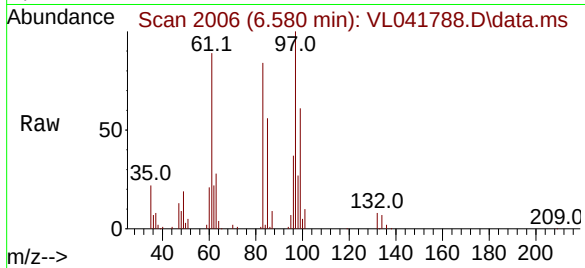
Ion Ratio Lower Upper

97 100

83 84.1 72.3 108.5

85 56.5 48.5 72.7

99 60.8 54.0 81.0



#48

Dibromochloromethane

Concen: 9.625 ppbv

RT: 7.386 min Scan# 2255

Delta R.T. 0.003 min

Lab File: VL041788.D

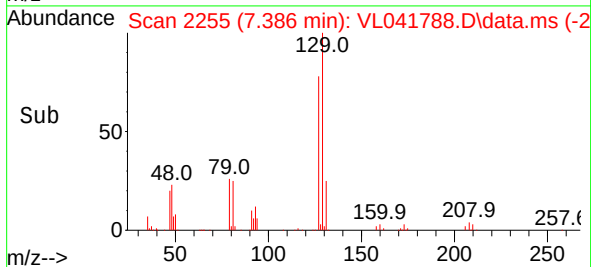
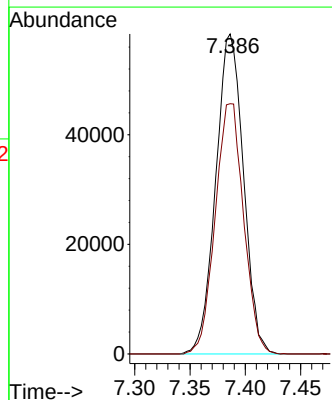
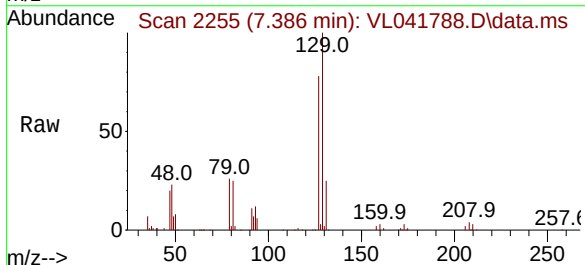
Acq: 18 Dec 2024 10:29

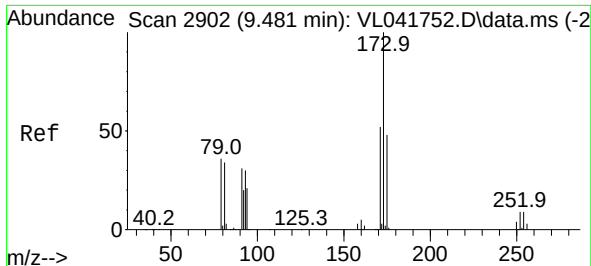
Tgt Ion: 129 Resp: 101875

Ion Ratio Lower Upper

129 100

127 80.0 38.8 116.3





#49

Bromoform

Concen: 9.655 ppbv

RT: 9.483 min Scan# 2902

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

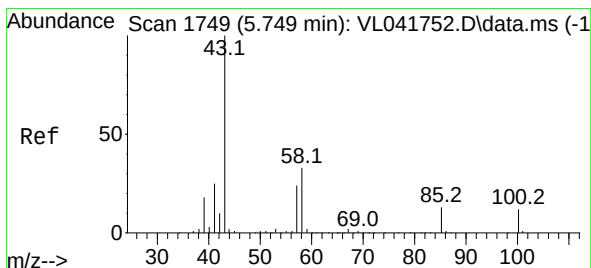
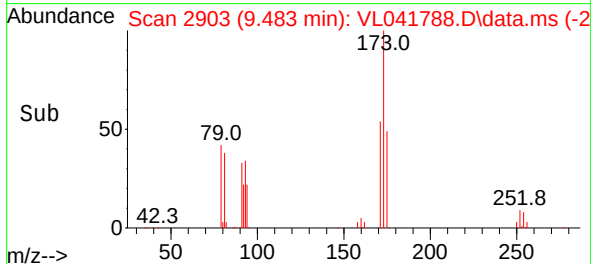
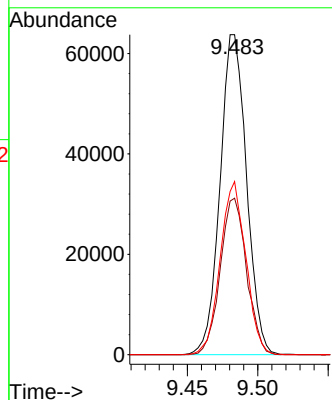
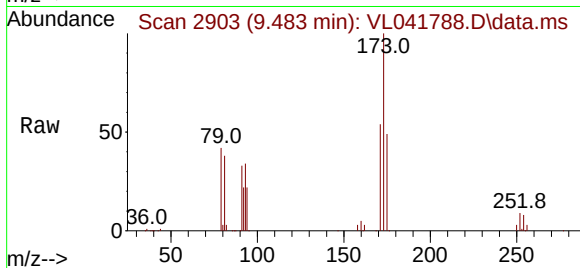
Tgt Ion:173 Resp: 83649

Ion Ratio Lower Upper

173 100

175 48.6 38.2 57.2

171 52.2 41.1 61.7



#50

4-Methyl-2-Pentanone

Concen: 8.600 ppbv

RT: 5.752 min Scan# 1750

Delta R.T. 0.003 min

Lab File: VL041788.D

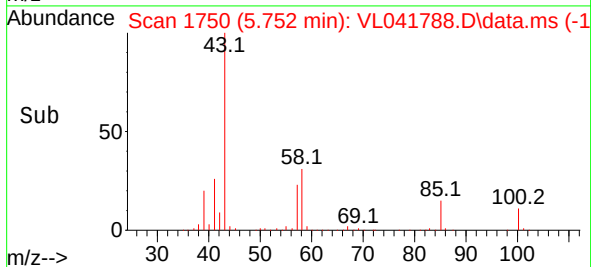
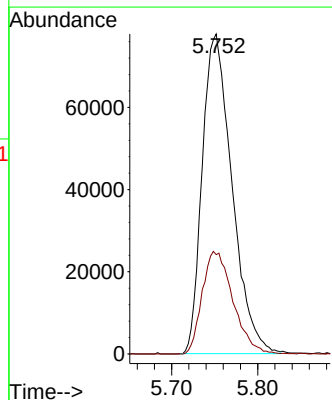
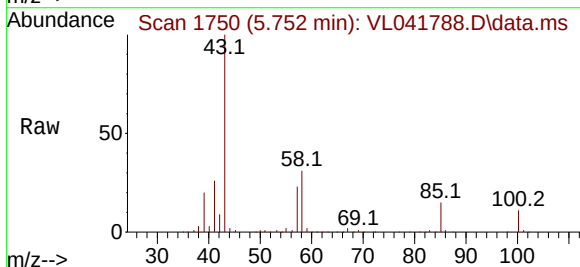
Acq: 18 Dec 2024 10:29

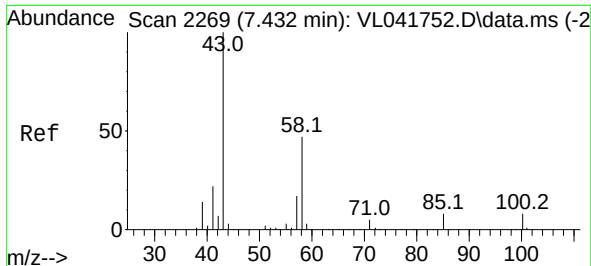
Tgt Ion: 43 Resp: 186865

Ion Ratio Lower Upper

43 100

58 33.2 26.8 40.2

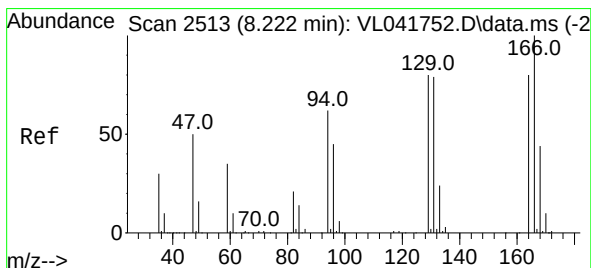
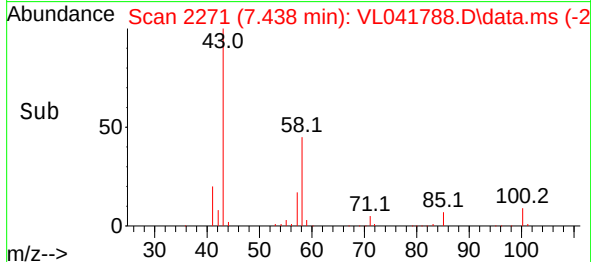
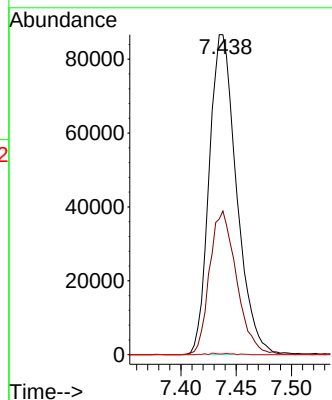
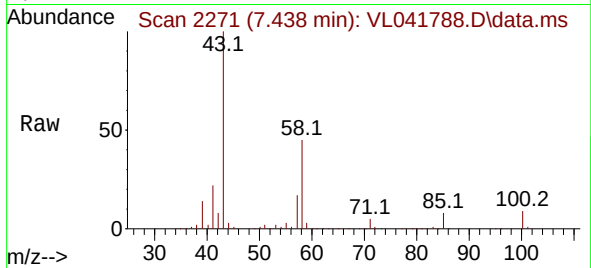




#51  
2-Hexanone  
Concen: 8.472 ppbv  
RT: 7.438 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

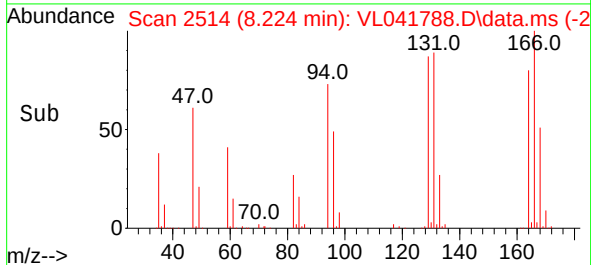
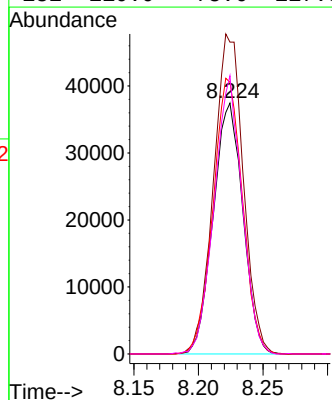
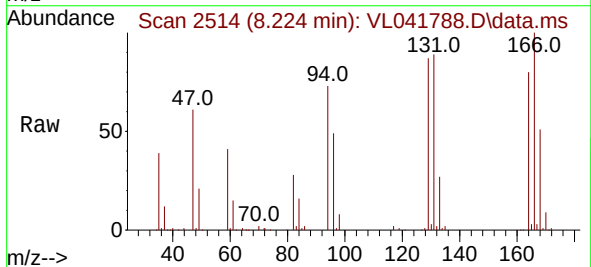
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 43 Resp: 149217  
Ion Ratio Lower Upper  
43 100  
58 44.3 36.6 55.0  
98 0.4 0.1 0.1#

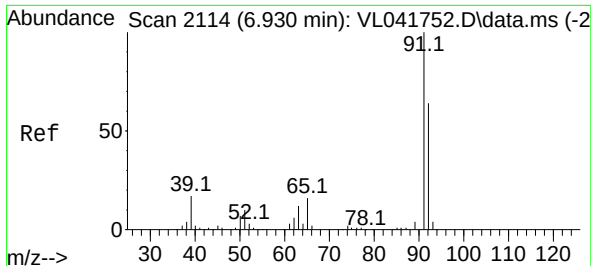


#52  
Tetrachloroethene  
Concen: 7.824 ppbv  
RT: 8.224 min Scan# 2514  
Delta R.T. 0.003 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 164 Resp: 59756  
Ion Ratio Lower Upper  
164 100  
166 124.1 99.8 149.6  
129 108.3 79.6 119.4  
131 110.9 78.6 117.8







#53

Toluene

Concen: 8.389 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

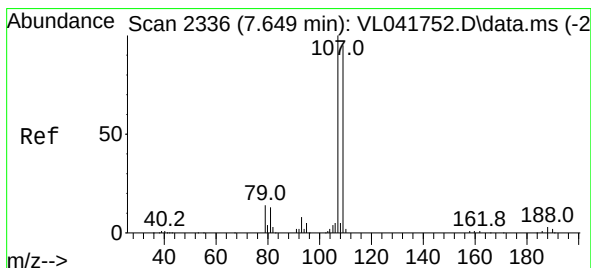
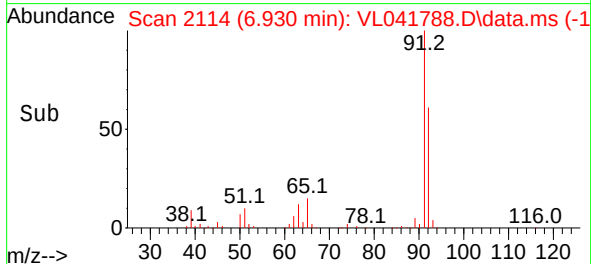
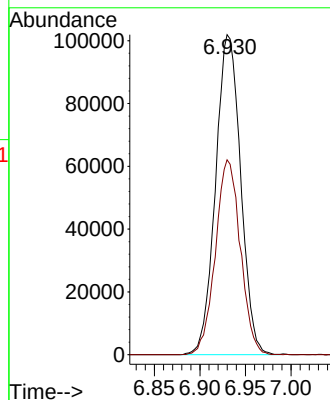
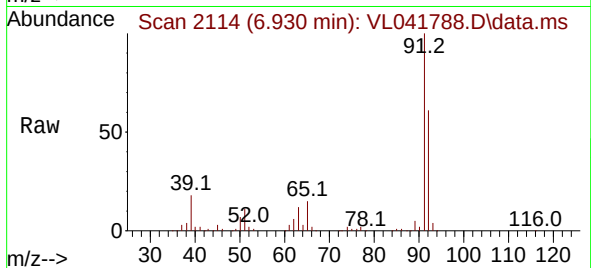
VSTDCCC010

Tgt Ion: 91 Resp: 195158

Ion Ratio Lower Upper

91 100

92 60.5 47.9 71.9



#54

1,2-Dibromoethane

Concen: 8.814 ppbv

RT: 7.648 min Scan# 2336

Delta R.T. -0.000 min

Lab File: VL041788.D

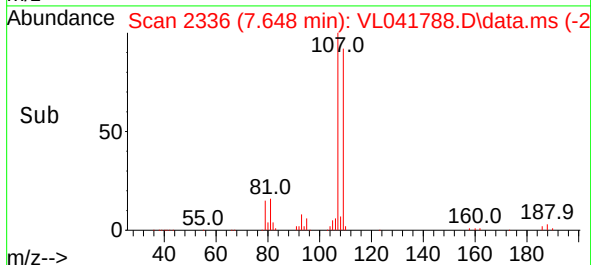
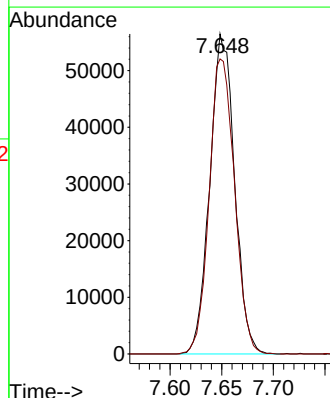
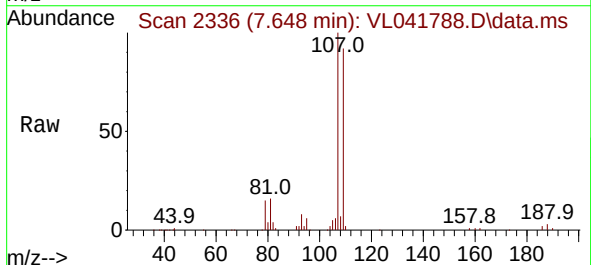
Acq: 18 Dec 2024 10:29

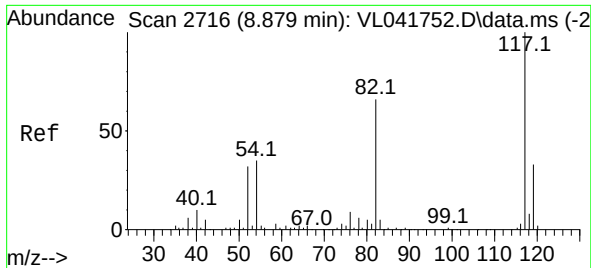
Tgt Ion: 107 Resp: 94138

Ion Ratio Lower Upper

107 100

109 92.2 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.881 min Scan# 2717

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

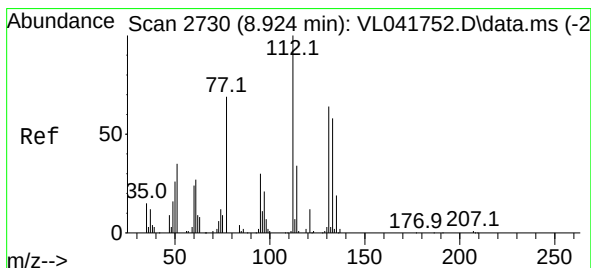
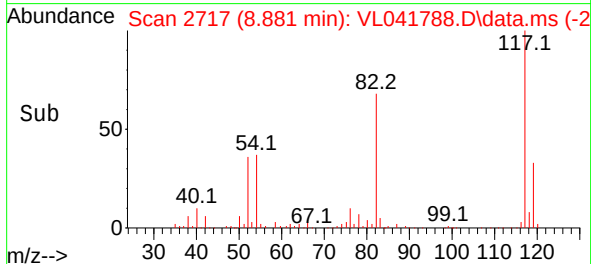
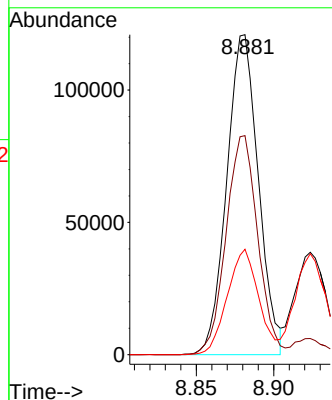
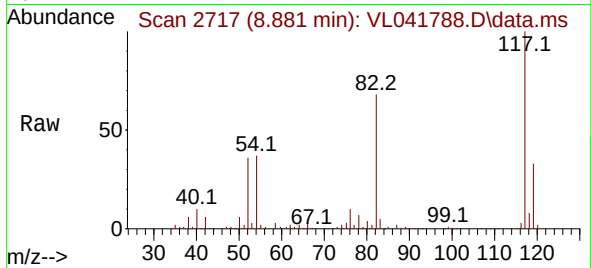
Tgt Ion:117 Resp: 172190

Ion Ratio Lower Upper

117 100

82 73.5 53.8 80.8

119 33.1 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 9.626 ppbv

RT: 8.924 min Scan# 2730

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

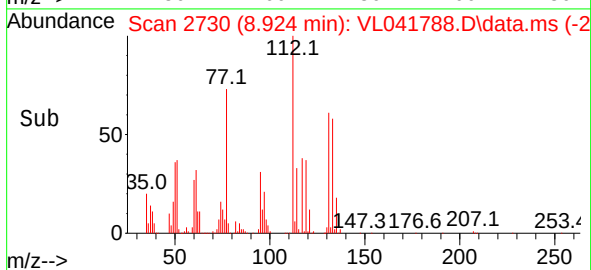
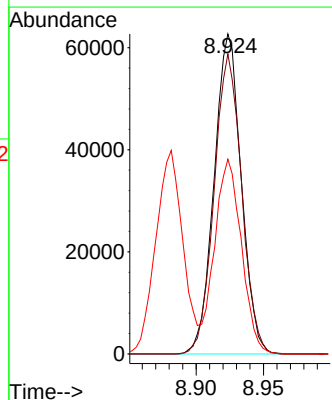
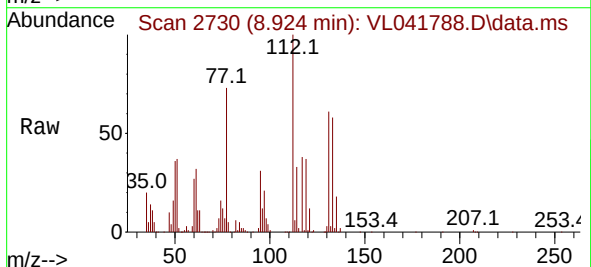
Tgt Ion:131 Resp: 87869

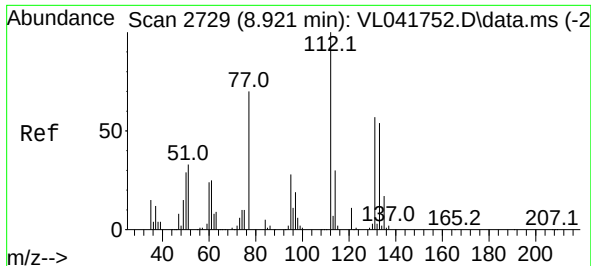
Ion Ratio Lower Upper

131 100

133 94.8 76.8 115.2

119 60.8 49.0 73.6





#57

Chlorobenzene

Concen: 8.912 ppbv

RT: 8.920 min Scan# 21

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

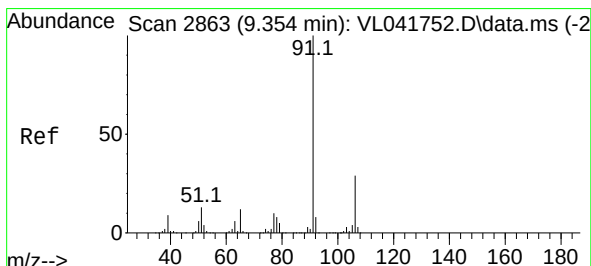
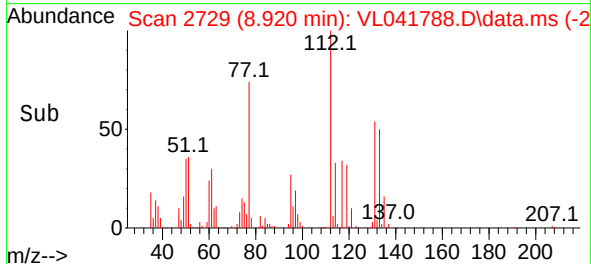
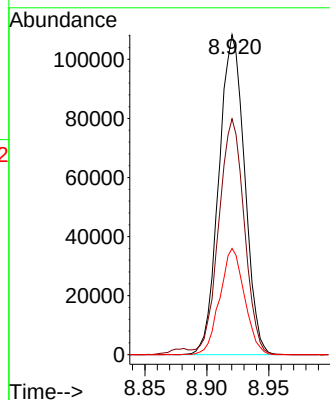
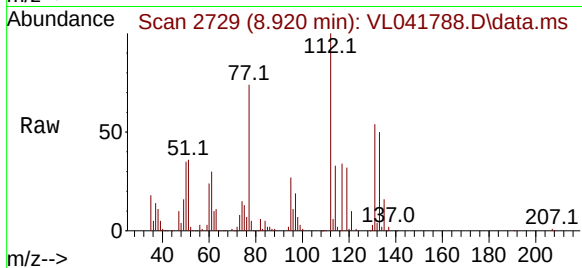
Tgt Ion:112 Resp: 157039

Ion Ratio Lower Upper

112 100

77 73.6 57.4 86.0

114 33.2 27.4 33.4



#58

Ethyl Benzene

Concen: 9.074 ppbv

RT: 9.354 min Scan# 2863

Delta R.T. -0.000 min

Lab File: VL041788.D

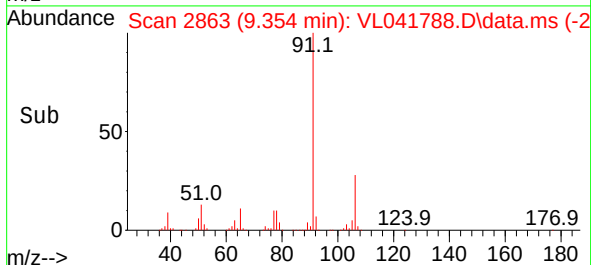
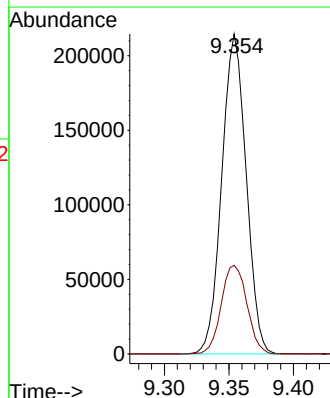
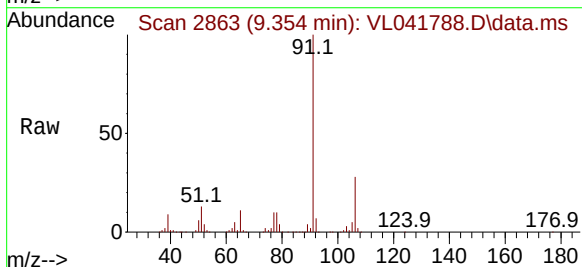
Acq: 18 Dec 2024 10:29

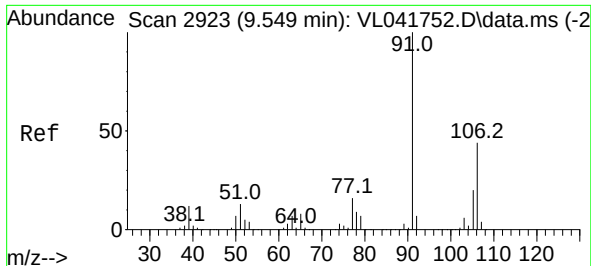
Tgt Ion: 91 Resp: 281290

Ion Ratio Lower Upper

91 100

106 27.7 23.5 35.3





#59

m/p-Xylene

Concen: 9.710 ppbv

RT: 9.548 min Scan# 242021

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

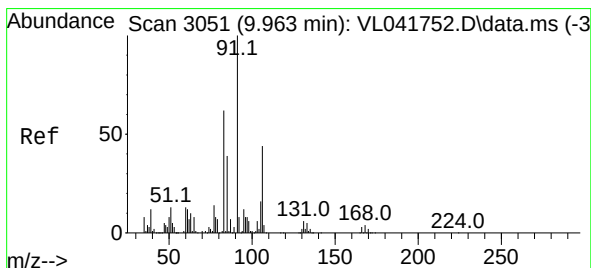
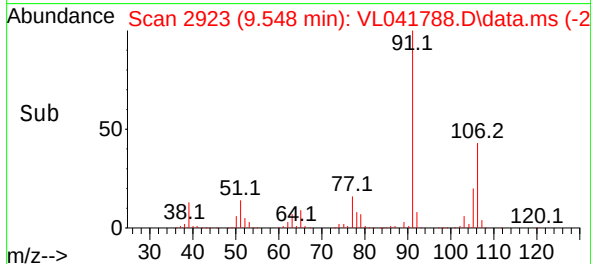
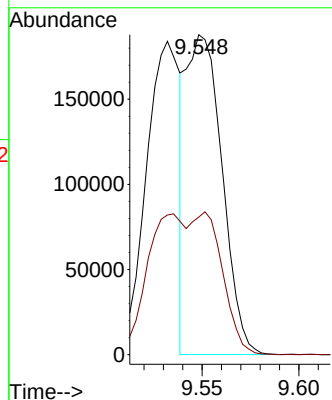
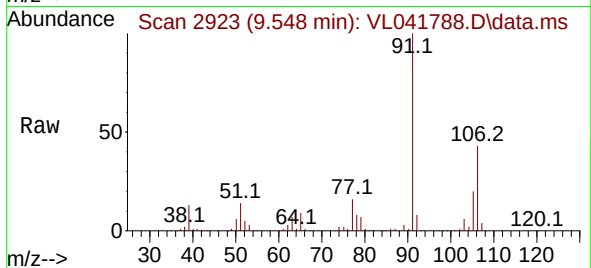
VSTDCCC010

Tgt Ion: 91 Resp: 242021

Ion Ratio Lower Upper

91 100

106 87.1 0.0 0.0#



#60

o-Xylene

Concen: 9.283 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. -0.000 min

Lab File: VL041788.D

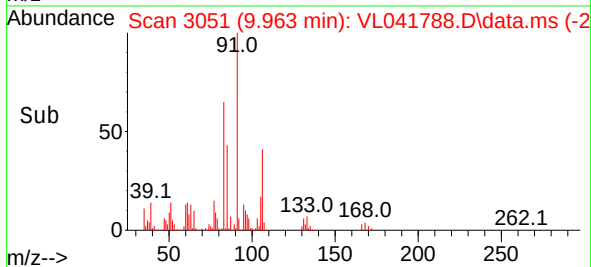
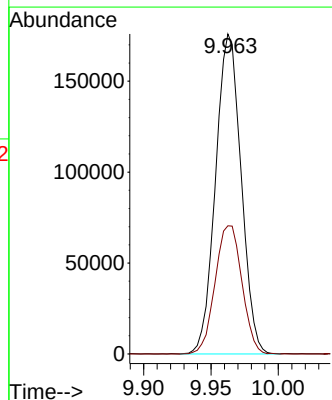
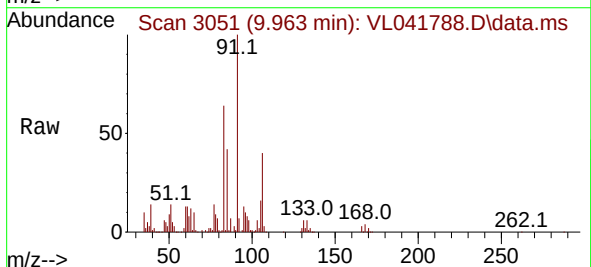
Acq: 18 Dec 2024 10:29

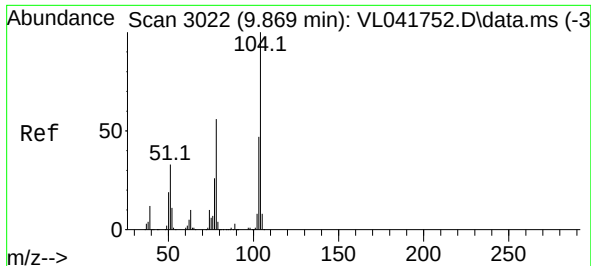
Tgt Ion: 91 Resp: 232028

Ion Ratio Lower Upper

91 100

106 42.1 21.1 63.4

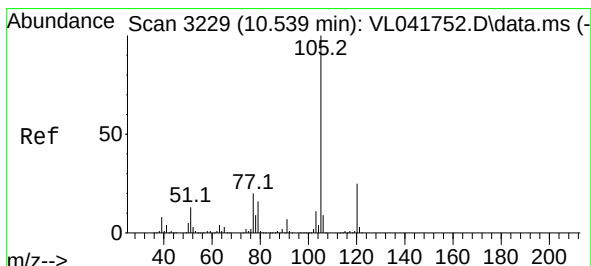
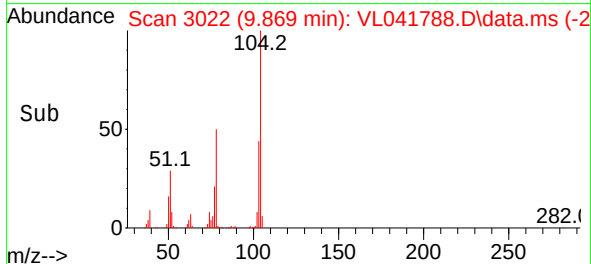
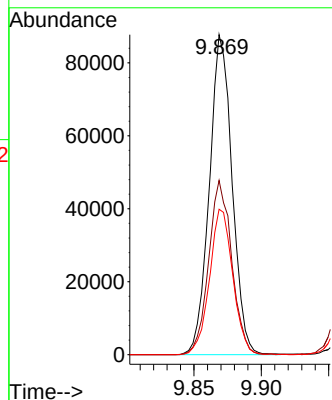
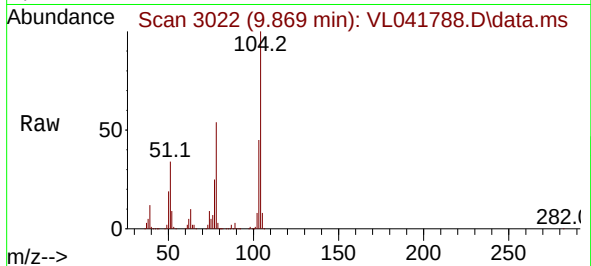




#61  
Styrene  
Concen: 9.550 ppbv  
RT: 9.869 min Scan# 3022  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

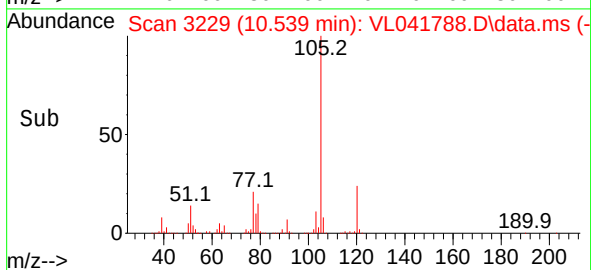
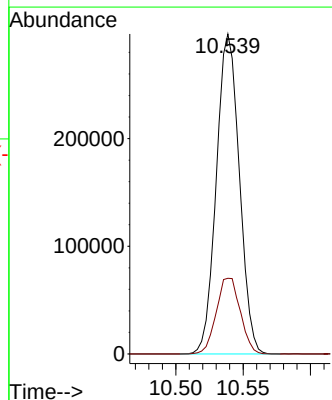
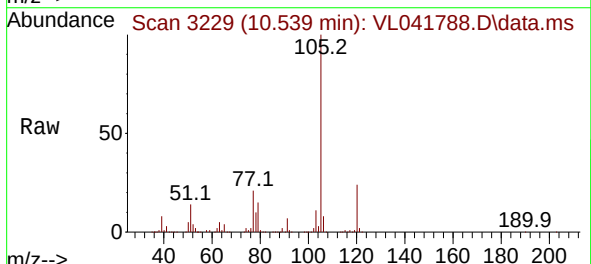
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

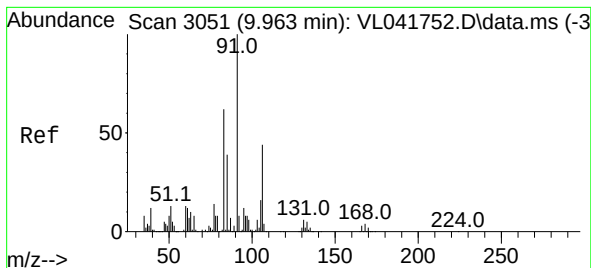
Tgt Ion:104 Resp: 103216  
Ion Ratio Lower Upper  
104 100  
78 55.1 43.8 65.6  
103 46.5 37.8 56.6



#62  
Isopropylbenzene  
Concen: 9.397 ppbv  
RT: 10.539 min Scan# 3229  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 352903  
Ion Ratio Lower Upper  
105 100  
120 24.7 19.8 29.8

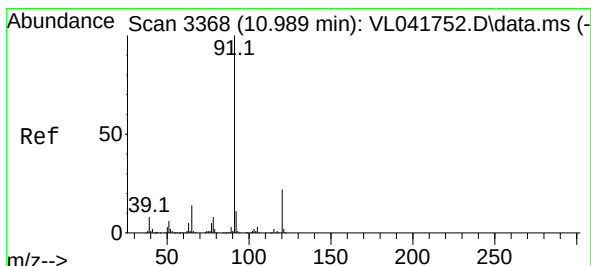
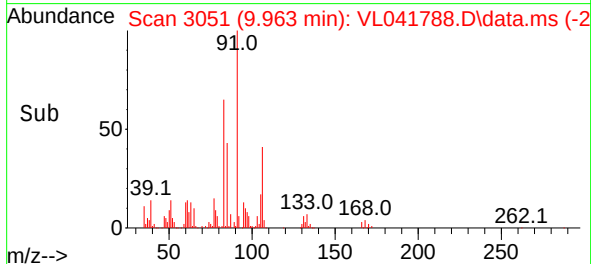
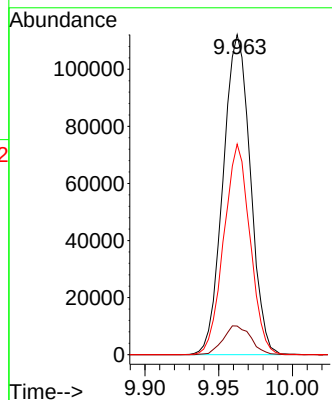
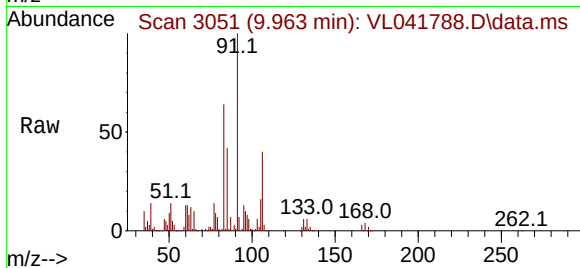




#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.216 ppbv  
RT: 9.963 min Scan# 3051  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

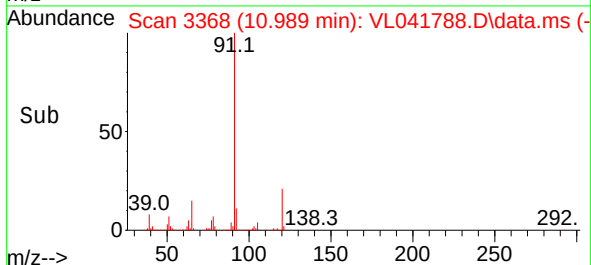
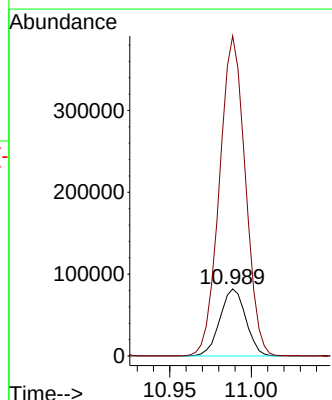
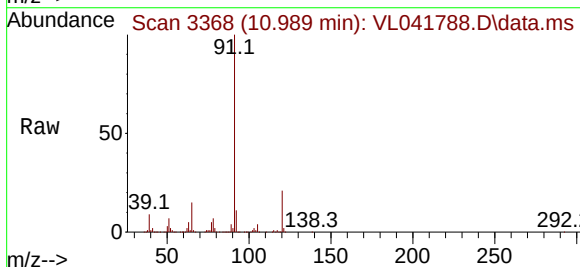
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

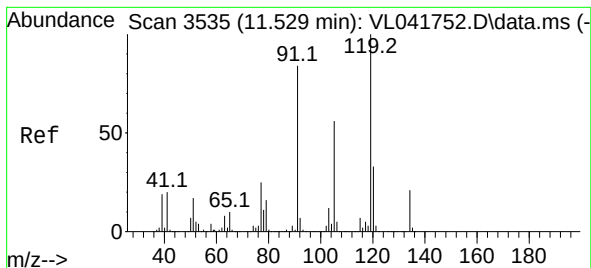
Tgt Ion: 83 Resp: 144197  
Ion Ratio Lower Upper  
83 100  
131 9.2 4.9 14.7  
85 63.4 32.0 96.2



#64  
n-propylbenzene  
Concen: 9.483 ppbv  
RT: 10.989 min Scan# 3368  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion: 120 Resp: 90043  
Ion Ratio Lower Upper  
120 100  
91 480.1 387.3 580.9





#65

tert-Butylbenzene

Concen: 9.295 ppbv

RT: 11.532 min Scan# 3536

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

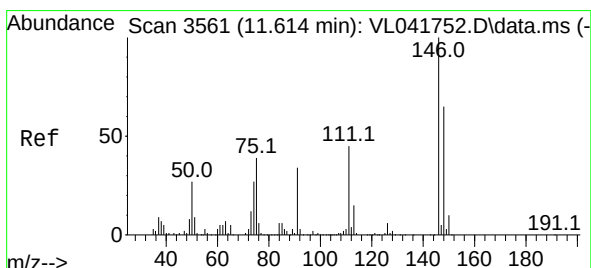
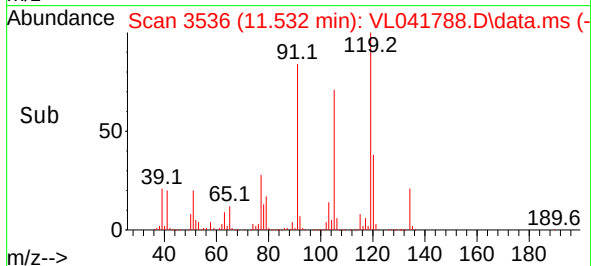
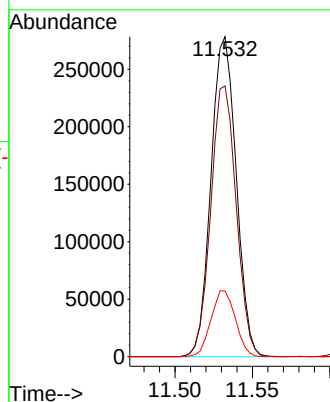
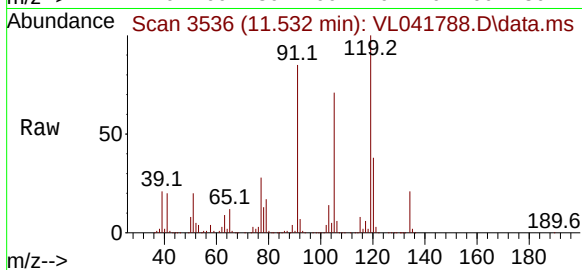
Tgt Ion:119 Resp: 314940

Ion Ratio Lower Upper

119 100

91 85.5 67.0 100.4

134 19.9 16.5 24.7



#66

Benzyl Chloride

Concen: 7.426 ppbv

RT: 11.616 min Scan# 3562

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

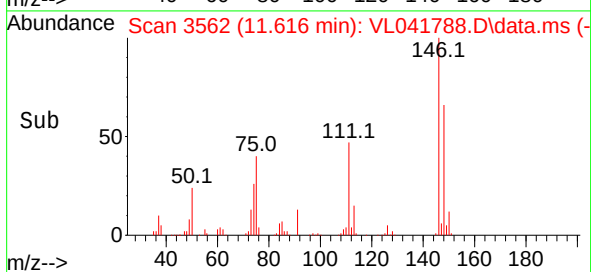
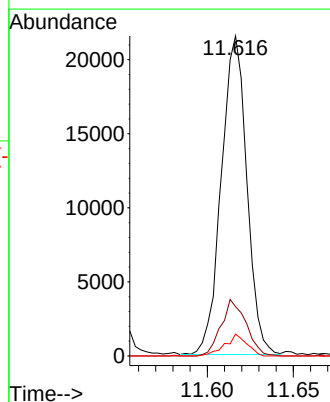
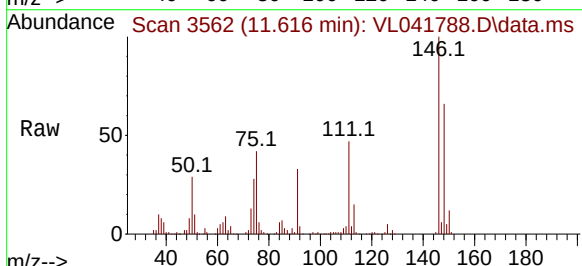
Tgt Ion: 91 Resp: 22164

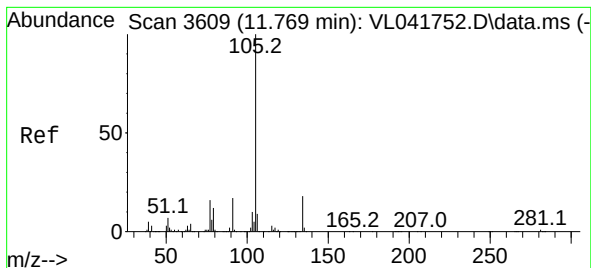
Ion Ratio Lower Upper

91 100

126 17.3 13.9 20.9

128 5.8 4.4 6.6





#67

sec-Butylbenzene

Concen: 9.431 ppbv

RT: 11.769 min Scan# 3609

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

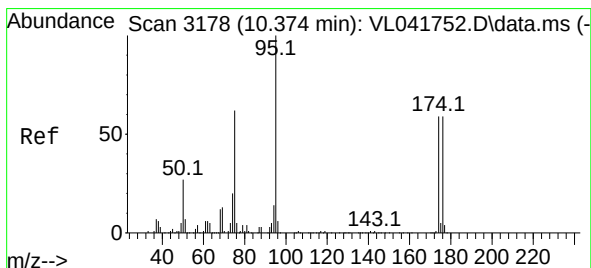
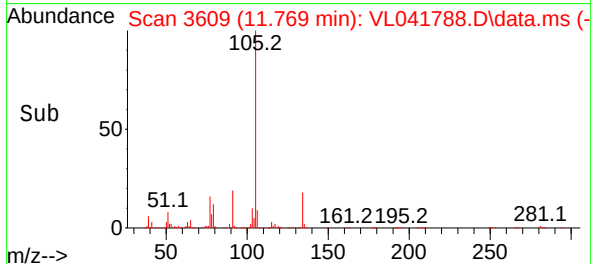
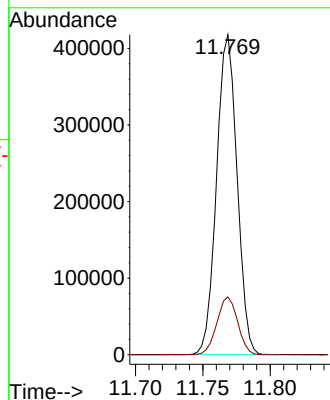
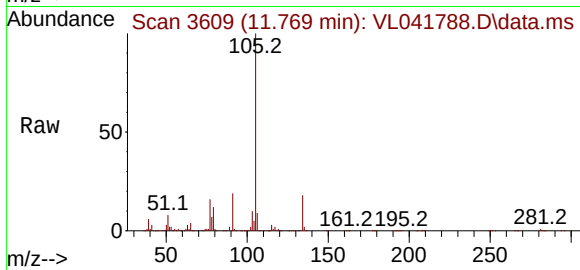
VSTDCCC010

Tgt Ion:105 Resp: 442201

Ion Ratio Lower Upper

105 100

134 18.3 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.503 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

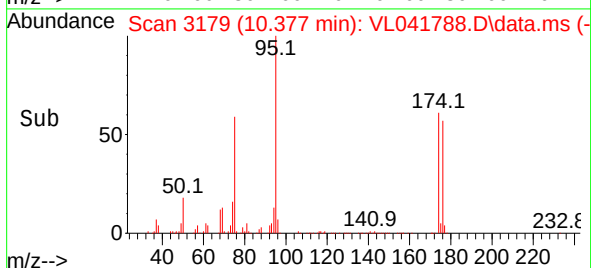
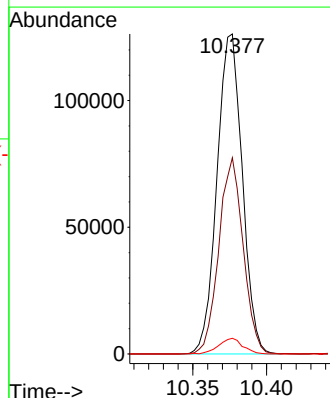
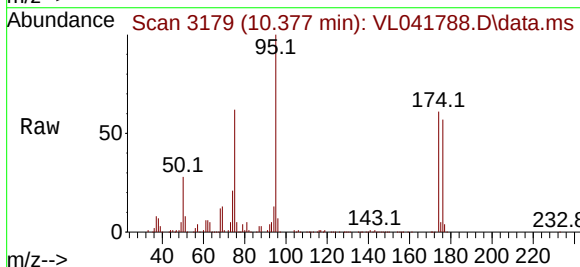
Tgt Ion: 95 Resp: 150705

Ion Ratio Lower Upper

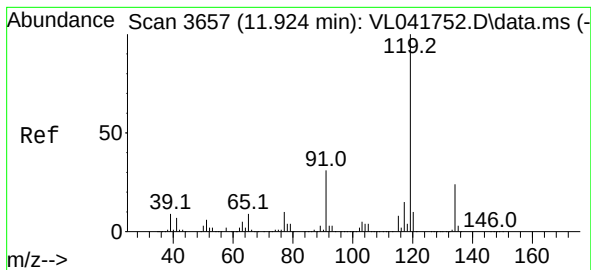
95 100

174 59.0 47.6 71.4

175 4.7 3.7 5.5







#69

p-Isopropyltoluene

Concen: 9.569 ppbv

RT: 11.927 min Scan# 3657

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

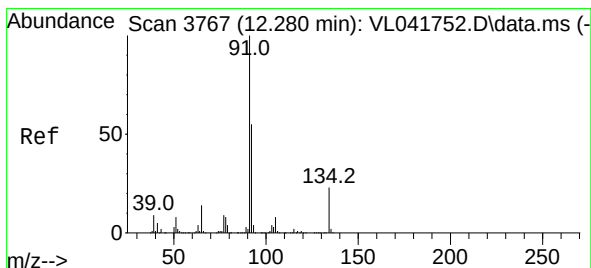
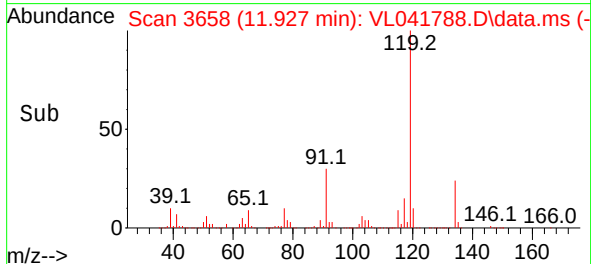
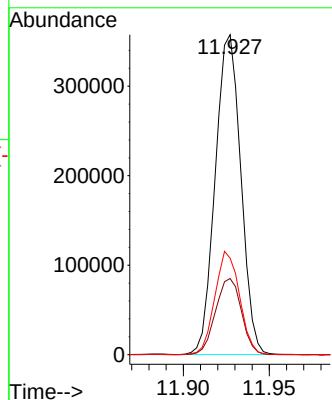
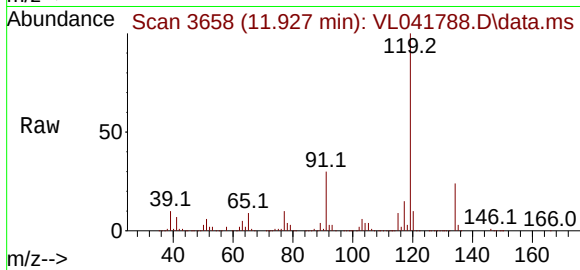
Tgt Ion:119 Resp: 369746

Ion Ratio Lower Upper

119 100

134 24.2 19.6 29.4

91 31.4 24.4 36.6



#70

n-Butylbenzene

Concen: 9.999 ppbv

RT: 12.283 min Scan# 3768

Delta R.T. 0.003 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

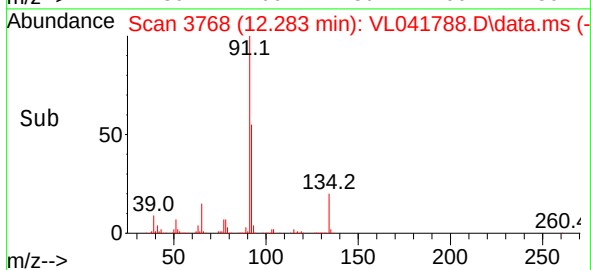
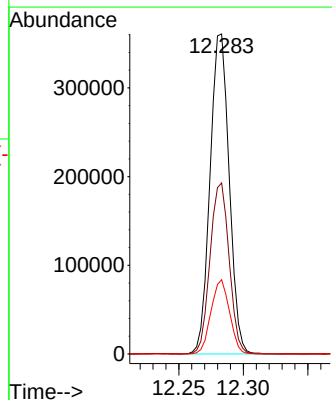
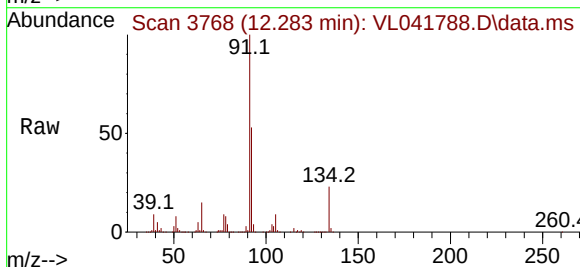
Tgt Ion: 91 Resp: 373294

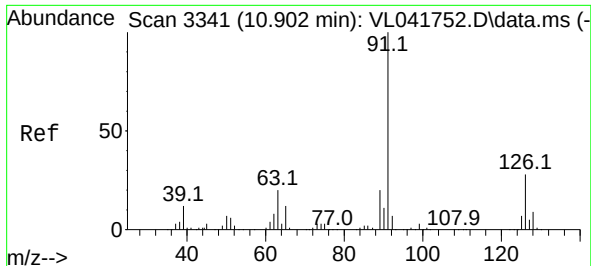
Ion Ratio Lower Upper

91 100

92 53.4 43.2 64.8

134 22.5 18.2 27.4

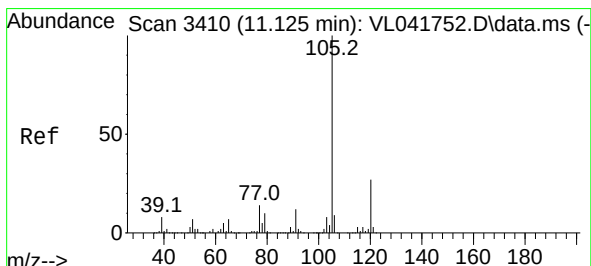
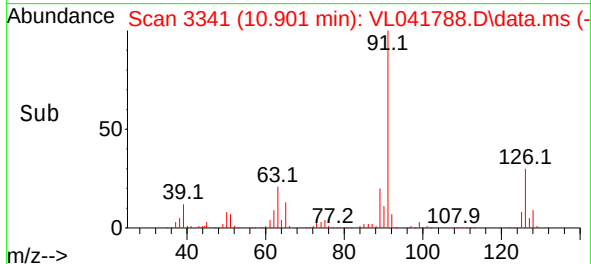
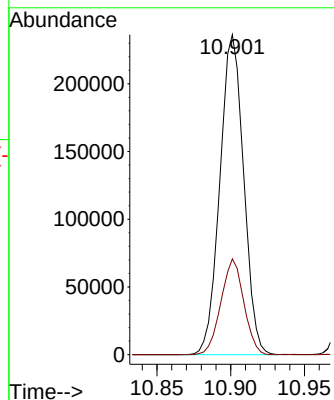
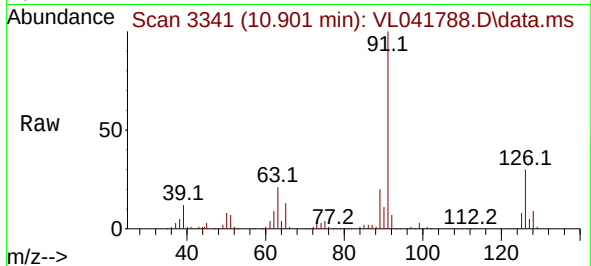




#71  
2-Chlorotoluene  
Concen: 9.240 ppbv  
RT: 10.901 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

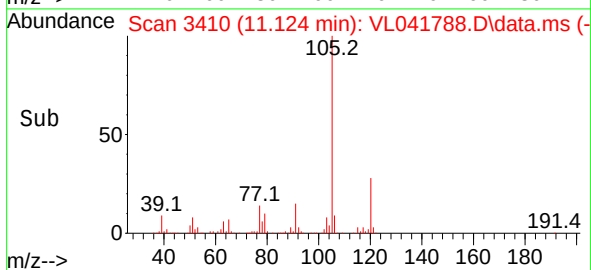
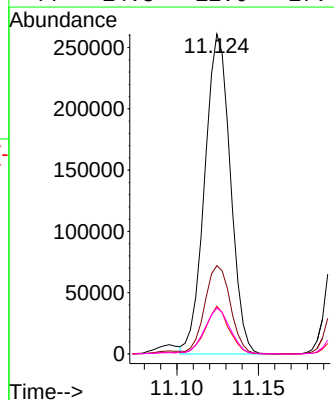
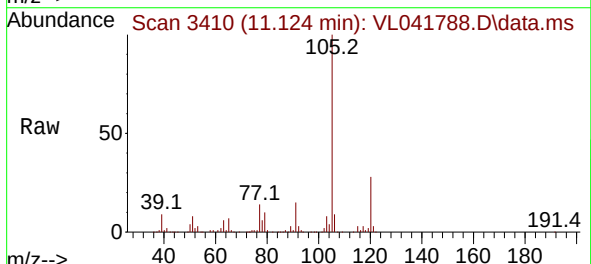
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

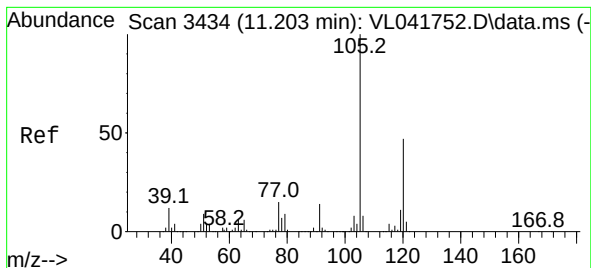
Tgt Ion: 91 Resp: 264866  
Ion Ratio Lower Upper  
91 100  
126 28.7 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 9.676 ppbv  
RT: 11.124 min Scan# 3410  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 285469  
Ion Ratio Lower Upper  
105 100  
120 28.7 23.3 34.9  
91 14.4 10.9 16.3  
77 14.8 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 9.918 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

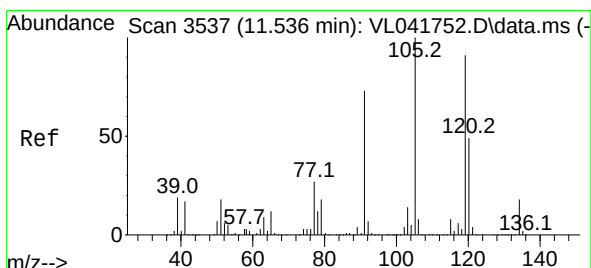
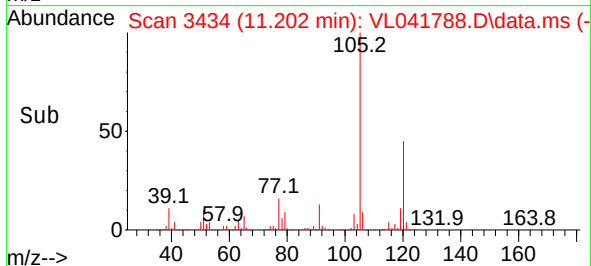
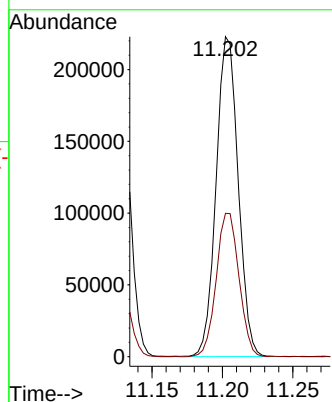
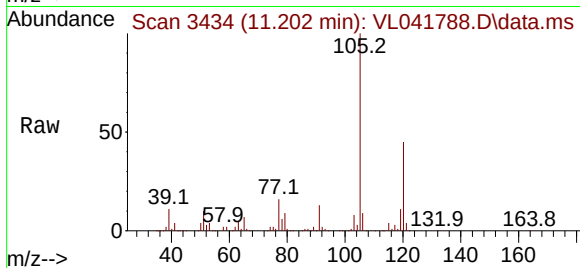
VSTDCCC010

Tgt Ion:105 Resp: 242783

Ion Ratio Lower Upper

105 100

120 44.8 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 10.003 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Tgt Ion:105 Resp: 263301

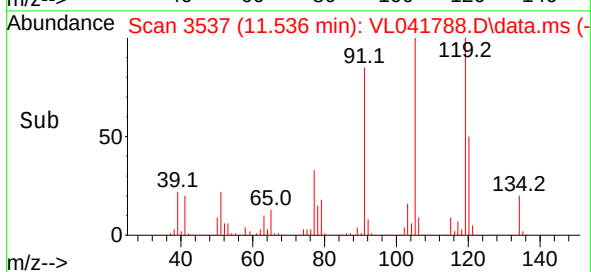
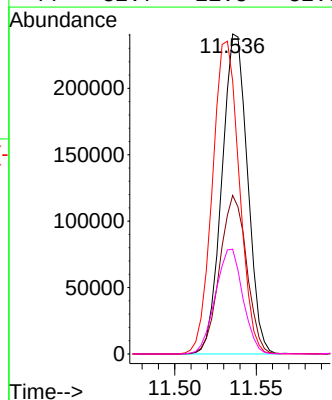
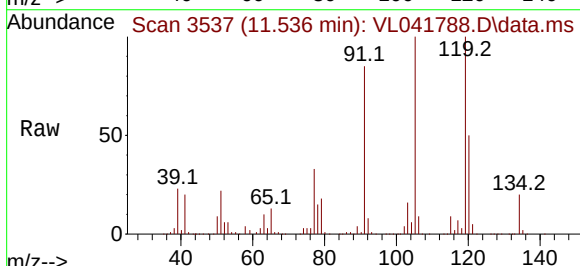
Ion Ratio Lower Upper

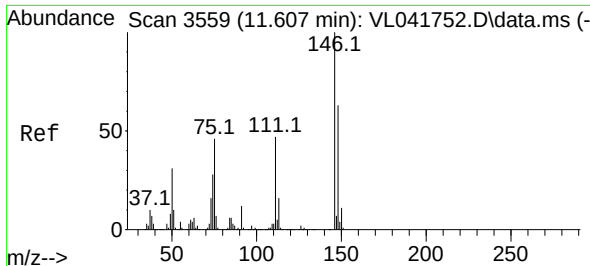
105 100

120 49.6 39.0 58.4

91 85.2 58.1 87.1

77 32.7 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 9.227 ppbv

RT: 11.607 min Scan# 3559

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_1

ClientSampleId :

VSTDCCC010

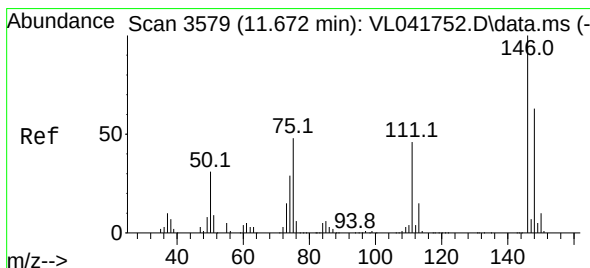
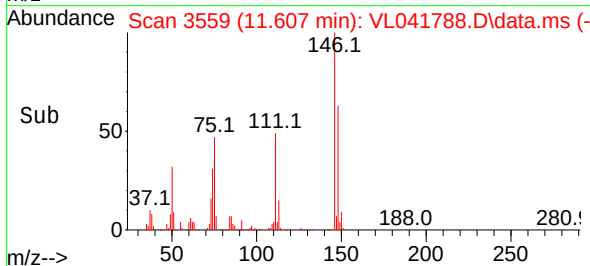
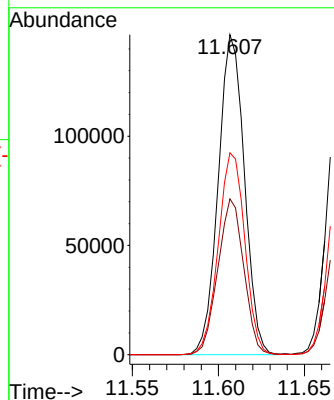
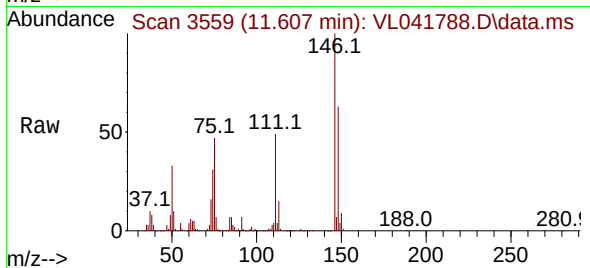
Tgt Ion:146 Resp: 154857

Ion Ratio Lower Upper

146 100

111 48.3 23.4 70.3

148 64.0 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 9.296 ppbv

RT: 11.671 min Scan# 3579

Delta R.T. -0.000 min

Lab File: VL041788.D

Acq: 18 Dec 2024 10:29

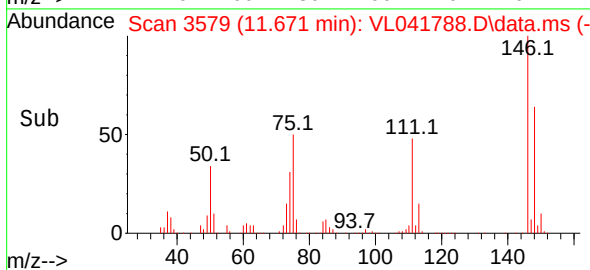
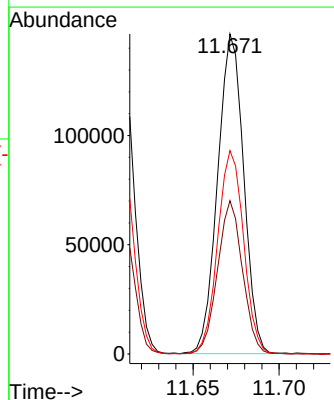
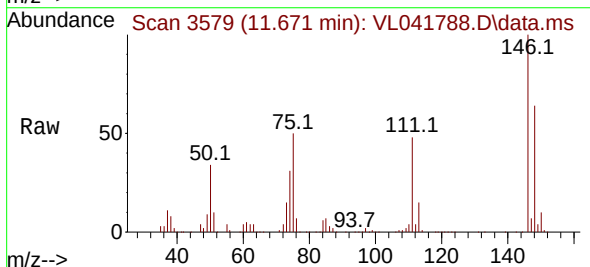
Tgt Ion:146 Resp: 154115

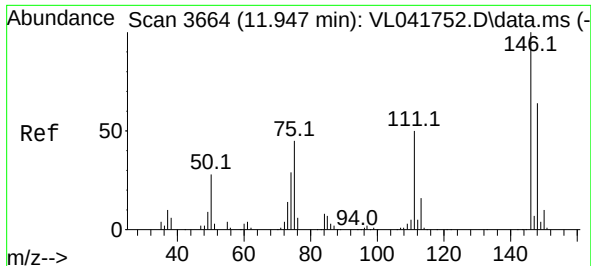
Ion Ratio Lower Upper

146 100

111 46.1 22.7 68.1

148 63.5 31.4 94.0

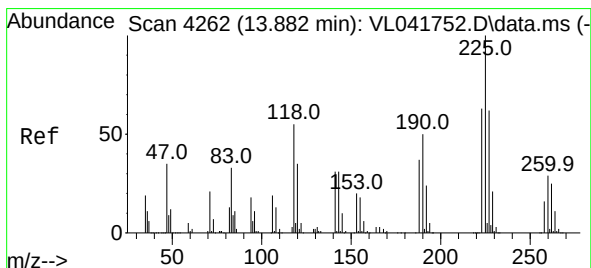
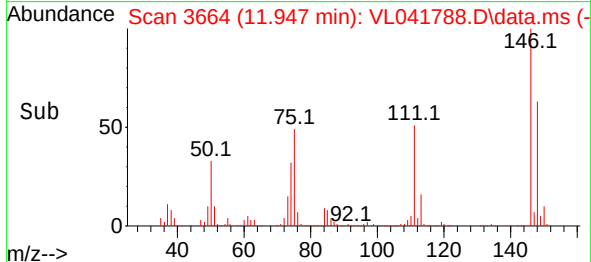
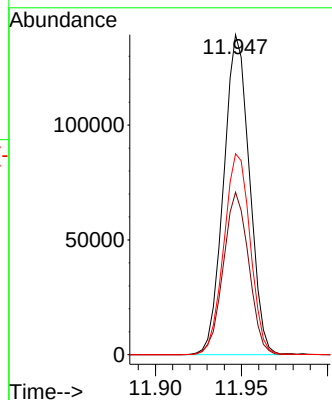
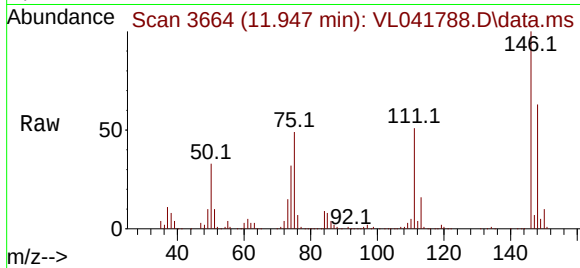




#77  
1,2-Dichlorobenzene  
Concen: 9.002 ppbv  
RT: 11.947 min Scan# 30  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

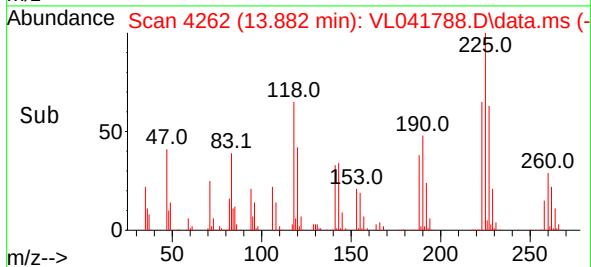
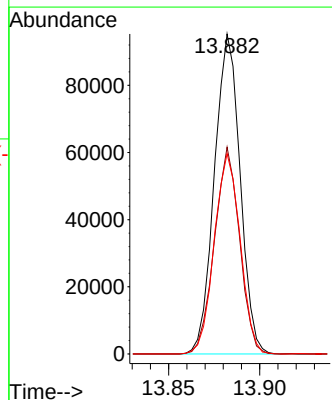
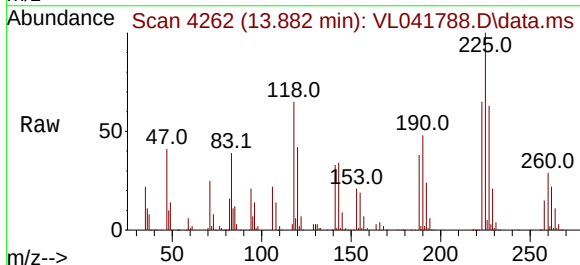
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDCCC010

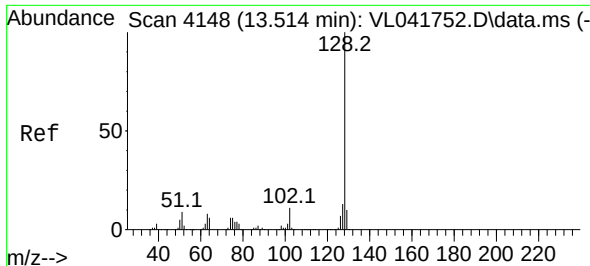
Tgt Ion:146 Resp: 145375  
Ion Ratio Lower Upper  
146 100  
111 50.2 24.8 74.3  
148 64.4 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 7.804 ppbv  
RT: 13.882 min Scan# 4262  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:225 Resp: 93437  
Ion Ratio Lower Upper  
225 100  
223 62.8 50.5 75.7  
227 63.0 50.3 75.5

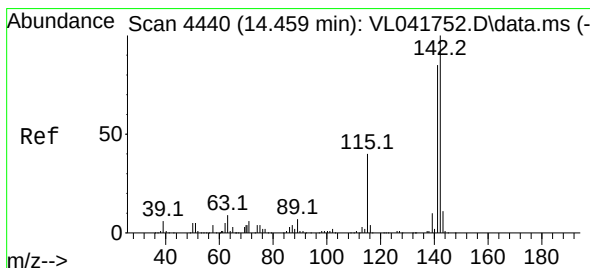
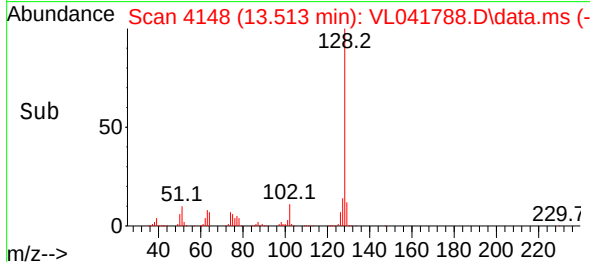
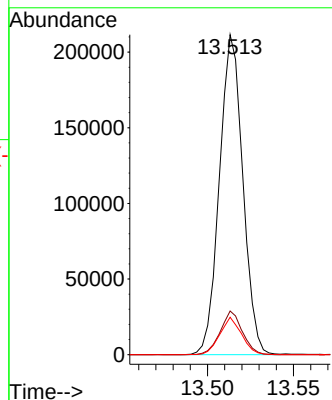
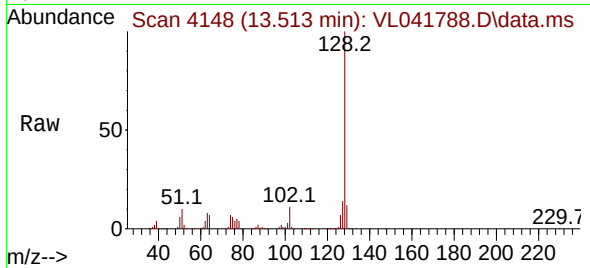




#79  
Naphthalene  
Concen: 10.921 ppbv  
RT: 13.513 min Scan# 4148  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

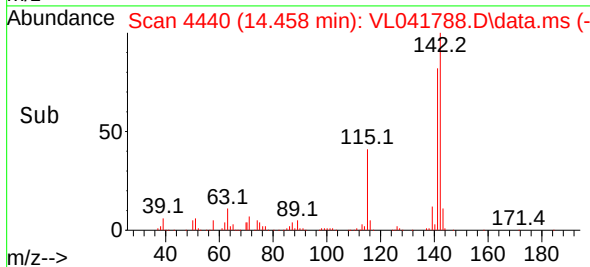
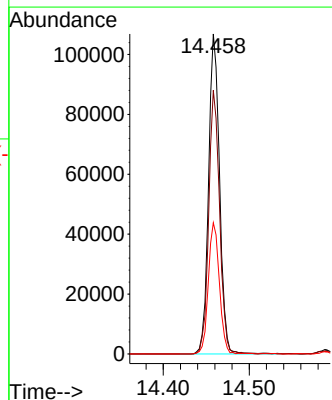
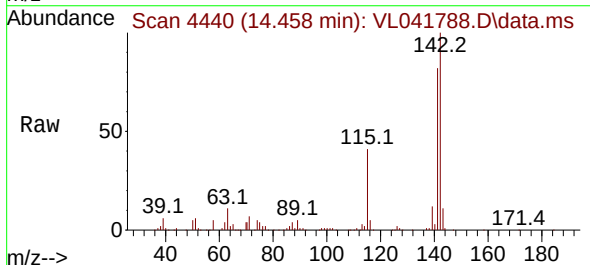
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

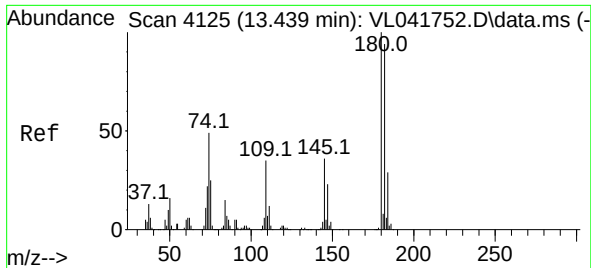
Tgt Ion:128 Resp: 200311  
Ion Ratio Lower Upper  
128 100  
127 13.7 10.7 16.1  
129 11.7 8.2 12.4



#80  
Naphthalene,2-methyl-  
Concen: 16.728 ppbv  
RT: 14.458 min Scan# 4440  
Delta R.T. -0.000 min  
Lab File: VL041788.D  
Acq: 18 Dec 2024 10:29

Tgt Ion:142 Resp: 94903  
Ion Ratio Lower Upper  
142 100  
141 81.8 68.4 102.6  
115 41.3 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 9.346 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041788.D

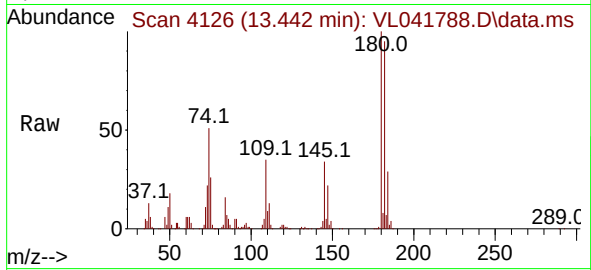
Acq: 18 Dec 2024 10:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010



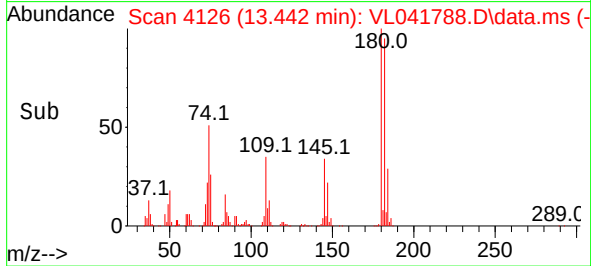
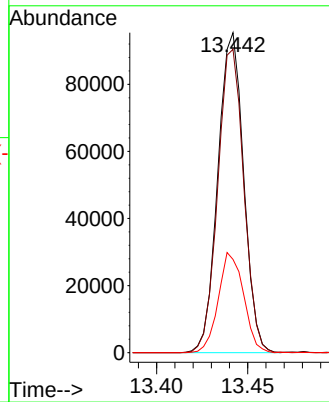
Tgt Ion:180 Resp: 93675

Ion Ratio Lower Upper

180 100

182 96.0 77.0 115.6

184 30.8 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041795.D  
 Acq On : 18 Dec 2024 16:06  
 Operator : SY/MD  
 Sample : VL1218ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1218ABS01

Quant Time: Dec 19 07:55:13 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.797 | 49   | 72600    | 10.000 | ppbv  | 0.01     |
| 33) 1,4-Difluorobenzene | 3.972 | 114  | 183255   | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 8.898 | 117  | 159496   | 10.000 | ppbv  | 0.02     |

#### System Monitoring Compounds

|                             |        |       |          |          |            |      |
|-----------------------------|--------|-------|----------|----------|------------|------|
| 68) 1-Bromo-4-Fluorobenzene | 10.390 | 95    | 143879   | 10.825   | ppbv       | 0.02 |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | = 108.300% |      |

#### Target Compounds

|                               |       |     |        |        |        | Qvalue |
|-------------------------------|-------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.502 | 85  | 112657 | 8.721  | ppbv   | 99     |
| 3) Chlorodifluoromethane      | 1.479 | 51  | 102210 | 8.633  | ppbv   | 97     |
| 4) Chloromethane              | 1.538 | 50  | 46901  | 9.279  | ppbv   | 100    |
| 5) Vinyl Chloride             | 1.583 | 62  | 44104  | 8.661  | ppbv   | 98     |
| 6) Bromomethane               | 1.674 | 94  | 21119  | 8.788  | ppbv   | 99     |
| 7) Chloroethane               | 1.709 | 64  | 18047  | 9.123  | ppbv   | 98     |
| 8) Dichlorotetrafluoroethane  | 1.557 | 85  | 110410 | 9.549  | ppbv   | 93     |
| 9) Propene                    | 1.486 | 41  | 35133  | 6.846  | ppbv   | 98     |
| 10) Heptane                   | 5.001 | 43  | 106572 | 8.085  | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 1.884 | 101 | 132171 | 9.632  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluo... | 2.146 | 101 | 96243  | 9.222  | ppbv   | 95     |
| 13) Ethanol                   | 1.725 | 45  | 2865   | 6.742  | ppbv   | 98     |
| 14) Bromoethene               | 1.787 | 108 | 30065  | 8.533  | ppbv   | 96     |
| 15) Acetone                   | 1.842 | 43  | 110277 | 7.807  | ppbv   | 97     |
| 16) 1,3-Butadiene             | 1.612 | 39  | 52562  | 9.450  | ppbv   | 92     |
| 17) tert-Butyl alcohol        | 2.046 | 59  | 122872 | 8.768  | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 2.039 | 96  | 38415  | 8.780  | ppbv   | 80     |
| 19) Isopropyl Alcohol         | 1.890 | 45  | 59665  | 7.039  | ppbv # | 37     |
| 20) Methylene Chloride        | 2.068 | 84  | 35310  | 8.766  | ppbv   | 94     |
| 21) Allyl Chloride            | 2.104 | 41  | 68525  | 8.945  | ppbv   | 95     |
| 22) trans-1,2-Dichloroethene  | 2.350 | 96  | 42821  | 8.550  | ppbv   | 98     |
| 23) Vinyl Acetate             | 2.470 | 43  | 43463  | 6.627  | ppbv   | 97     |
| 24) 1,1-Dichloroethane        | 2.418 | 63  | 92680  | 9.142  | ppbv   | 99     |
| 25) Ethyl Acetate             | 2.845 | 43  | 223419 | 8.502  | ppbv   | 99     |
| 26) Hexane                    | 2.835 | 57  | 81413  | 8.164  | ppbv   | 93     |
| 27) Carbon Disulfide          | 2.159 | 76  | 76433  | 8.505  | ppbv   | 94     |
| 28) Methyl tert-Butyl Ether   | 2.447 | 73  | 64037  | 7.915  | ppbv   | 99     |
| 29) Chloroform                | 2.858 | 83  | 139818 | 9.200  | ppbv   | 99     |
| 30) Cyclohexane               | 3.871 | 84  | 66237  | 7.806  | ppbv   | 98     |
| 31) cis-1,2-Dichloroethene    | 2.732 | 61  | 82779  | 8.033  | ppbv   | 99     |
| 32) 1,1,1-Trichloroethane     | 3.379 | 97  | 136055 | 8.807  | ppbv   | 98     |
| 34) 2-Butanone                | 2.564 | 43  | 125687 | 8.525  | ppbv   | 100    |
| 35) Carbon Tetrachloride      | 3.777 | 117 | 141202 | 10.854 | ppbv   | 97     |
| 36) Benzene                   | 3.667 | 78  | 164423 | 8.674  | ppbv   | 98     |
| 37) 1,2-Dichloroethane        | 3.230 | 62  | 113600 | 9.631  | ppbv   | 99     |
| 38) Trichloroethene           | 4.564 | 130 | 63280  | 7.864  | ppbv   | 93     |
| 39) 1,2-Dichloropropane       | 4.331 | 63  | 58553  | 8.541  | ppbv   | 92     |
| 40) 1,4-Dioxane               | 4.599 | 88  | 28884  | 8.624  | ppbv # | 92     |
| 41) Tetrahydrofuran           | 3.065 | 42  | 67017  | 8.114  | ppbv   | 99     |
| 42) Bromodichloromethane      | 4.509 | 83  | 133513 | 9.839  | ppbv   | 95     |
| 43) Methyl Methacrylate       | 4.897 | 69  | 61014  | 8.448  | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 4.658 | 57  | 284140 | 8.777  | ppbv   | 96     |
| 45) t-1,3-Dichloropropene     | 6.438 | 75  | 58865  | 7.879  | ppbv   | 99     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041795.D  
 Acq On : 18 Dec 2024 16:06  
 Operator : SY/MD  
 Sample : VL1218ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1218ABS01

Quant Time: Dec 19 07:55:13 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

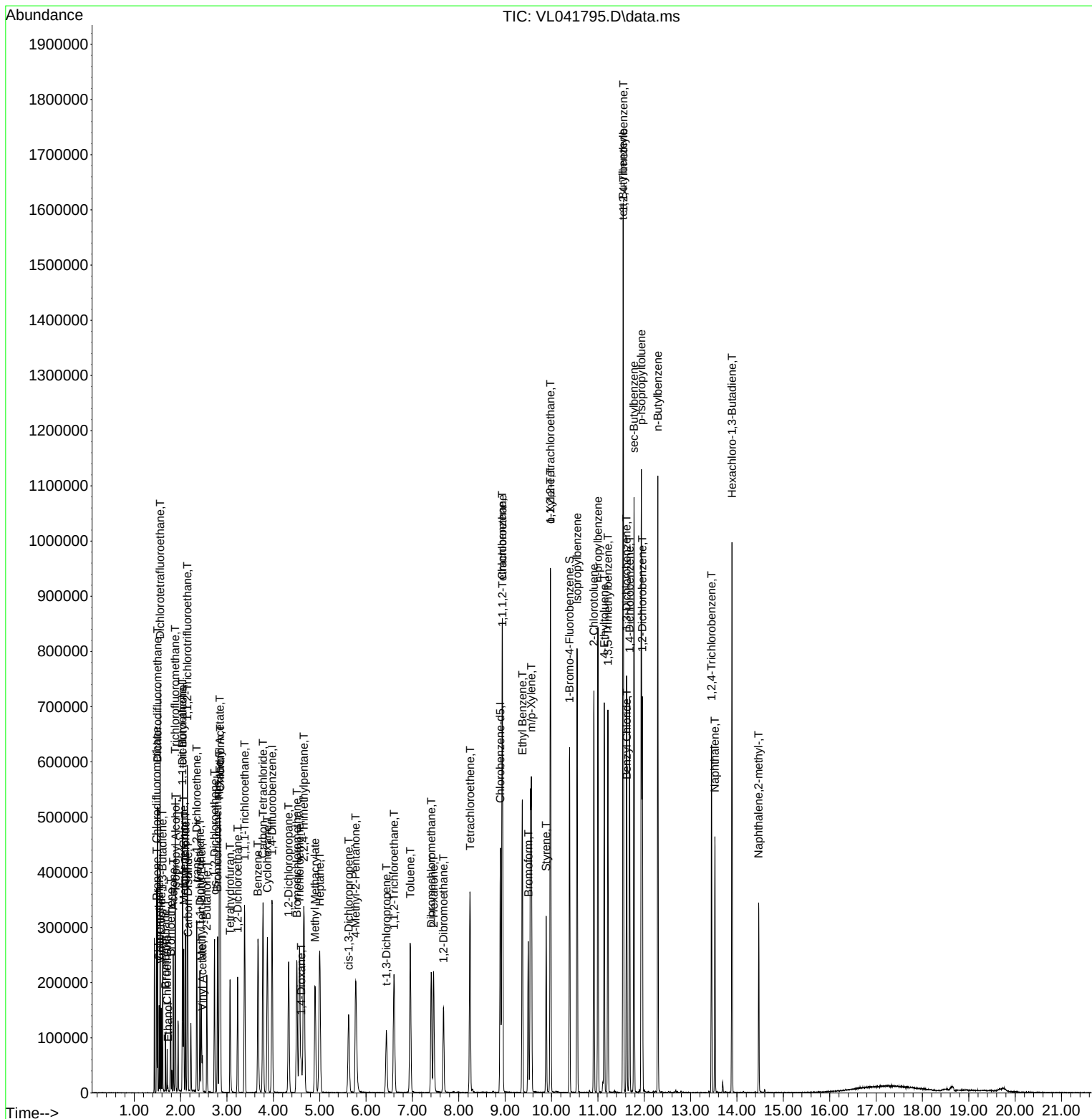
Response via : Initial Calibration

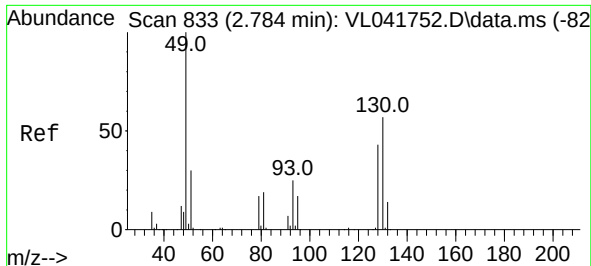
| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 5.625  | 75   | 74198    | 7.824  | ppbv   | 89       |
| 47) 1,1,2-Trichloroethane     | 6.603  | 97   | 64954    | 9.071  | ppbv   | 93       |
| 48) Dibromochloromethane      | 7.406  | 129  | 96996    | 9.920  | ppbv   | 99       |
| 49) Bromoform                 | 9.500  | 173  | 80840    | 10.100 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 5.774  | 43   | 175817   | 8.759  | ppbv   | 99       |
| 51) 2-Hexanone                | 7.457  | 43   | 142403   | 8.752  | ppbv # | 96       |
| 52) Tetrachloroethene         | 8.244  | 164  | 54531    | 7.729  | ppbv   | 93       |
| 53) Toluene                   | 6.952  | 91   | 177625   | 8.265  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 7.671  | 107  | 90389    | 9.161  | ppbv   | 92       |
| 56) 1,1,1,2-Tetrachloroethane | 8.943  | 131  | 86262    | 10.202 | ppbv   | 100      |
| 57) Chlorobenzene             | 8.937  | 112  | 153659   | 9.415  | ppbv   | 99       |
| 58) Ethyl Benzene             | 9.370  | 91   | 267795   | 9.326  | ppbv   | 98       |
| 59) m/p-Xylene                | 9.564  | 91   | 197933   | 8.573  | ppbv # | 100      |
| 60) o-Xylene                  | 9.975  | 91   | 229919   | 9.930  | ppbv   | 100      |
| 61) Styrene                   | 9.885  | 104  | 95536    | 9.543  | ppbv   | 100      |
| 62) Isopropylbenzene          | 10.552 | 105  | 339599   | 9.762  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 9.975  | 83   | 142272   | 9.817  | ppbv   | 100      |
| 64) n-propylbenzene           | 11.002 | 120  | 86896    | 9.880  | ppbv   | 97       |
| 65) tert-Butylbenzene         | 11.542 | 119  | 307835   | 9.808  | ppbv   | 97       |
| 66) Benzyl Chloride           | 11.626 | 91   | 21939    | 7.936  | ppbv   | 97       |
| 67) sec-Butylbenzene          | 11.778 | 105  | 441578   | 10.167 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 11.937 | 119  | 366111   | 10.229 | ppbv   | 99       |
| 70) n-Butylbenzene            | 12.293 | 91   | 366451   | 10.597 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 10.914 | 91   | 255490   | 9.622  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 11.137 | 105  | 277025   | 10.137 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 11.215 | 105  | 240648   | 10.613 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 11.548 | 105  | 260378   | 10.679 | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 11.620 | 146  | 152493   | 9.809  | ppbv   | 98       |
| 76) 1,4-Dichlorobenzene       | 11.684 | 146  | 152432   | 9.926  | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 11.960 | 146  | 148412   | 9.922  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 13.892 | 225  | 88582    | 7.987  | ppbv   | 100      |
| 79) Naphthalene               | 13.523 | 128  | 189506   | 11.154 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 14.468 | 142  | 82155    | 15.634 | ppbv   | 96       |
| 81) 1,2,4-Trichlorobenzene    | 13.452 | 180  | 89052    | 9.592  | ppbv   | 99       |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VL1218ABS01

Quant Time: Dec 19 07:55:13 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

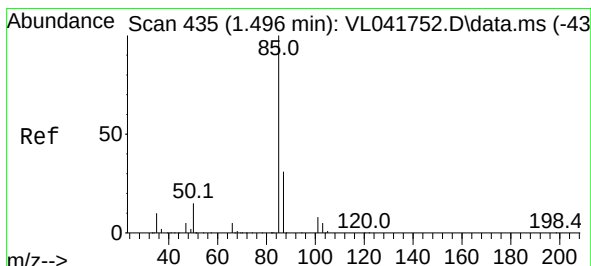
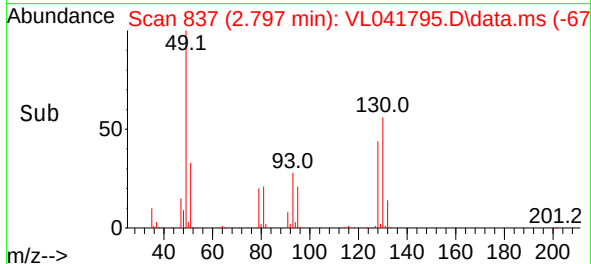
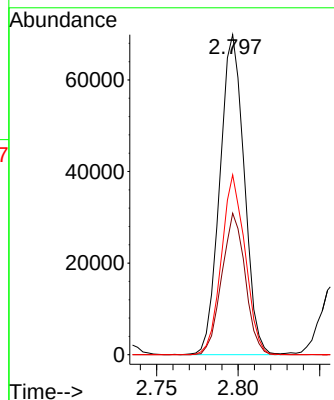
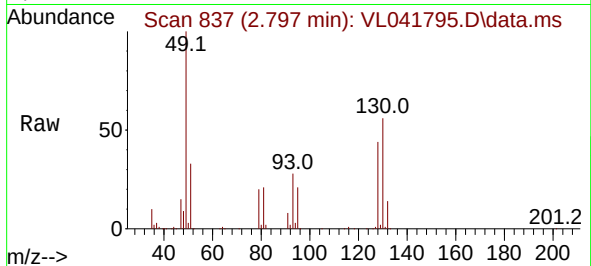




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.797 min Scan# 833  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

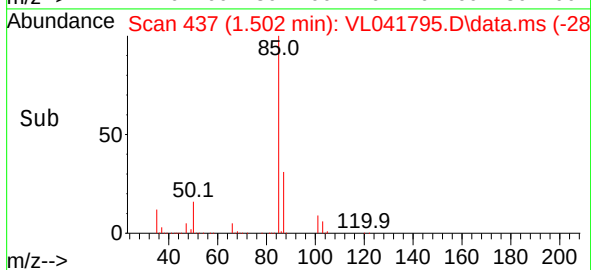
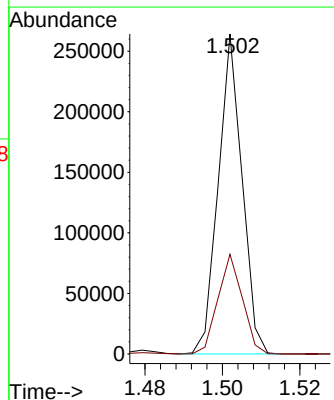
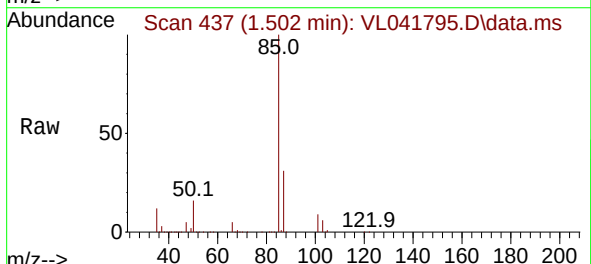
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

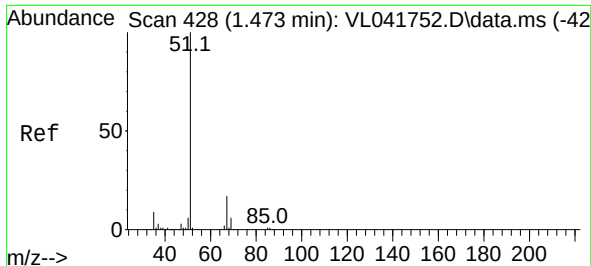
Tgt Ion: 49 Resp: 72600  
Ion Ratio Lower Upper  
49 100  
128 42.5 21.6 64.6  
130 54.6 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 8.721 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 85 Resp: 112657  
Ion Ratio Lower Upper  
85 100  
87 31.1 24.5 36.7

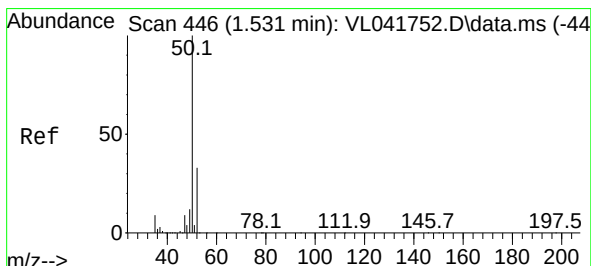
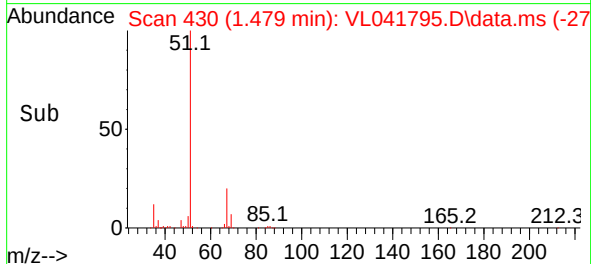
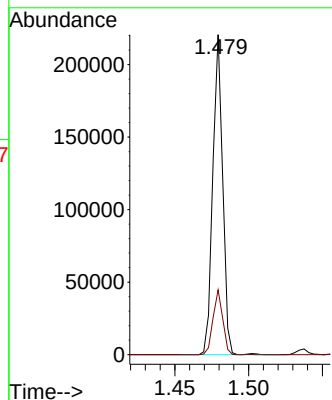
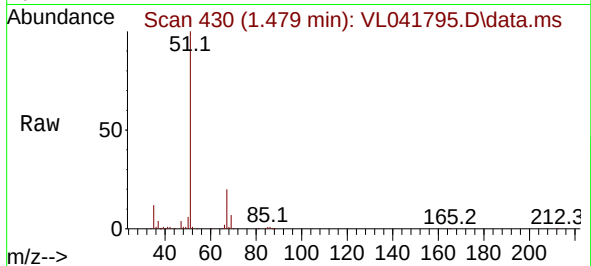




#3  
Chlorodifluoromethane  
Concen: 8.633 ppbv  
RT: 1.479 min Scan# 441  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

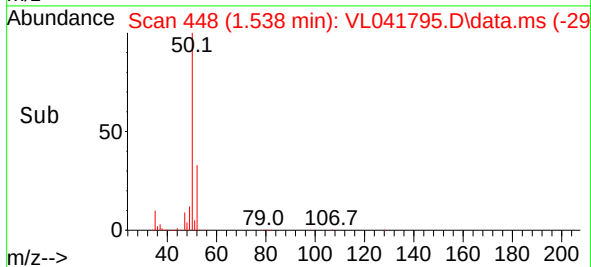
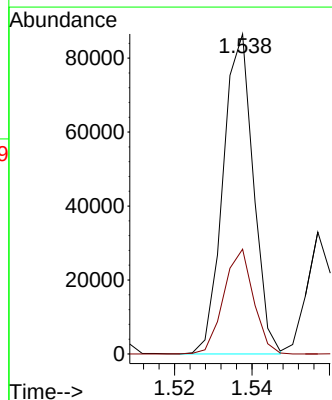
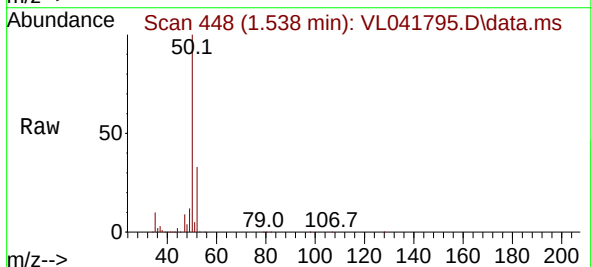
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

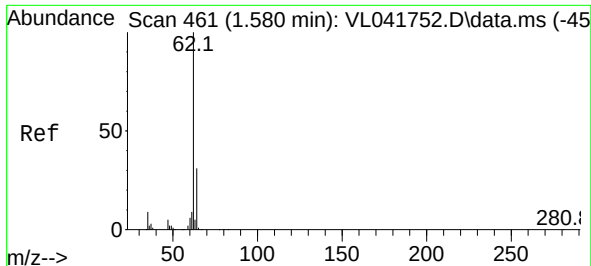
Tgt Ion: 51 Resp: 102210  
Ion Ratio Lower Upper  
51 100  
67 19.9 15.0 22.4



#4  
Chloromethane  
Concen: 9.279 ppbv  
RT: 1.538 min Scan# 448  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 50 Resp: 46901  
Ion Ratio Lower Upper  
50 100  
52 32.7 26.2 39.2

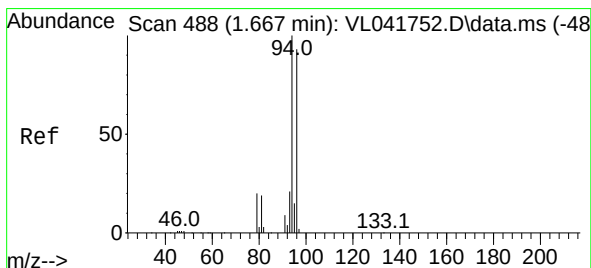
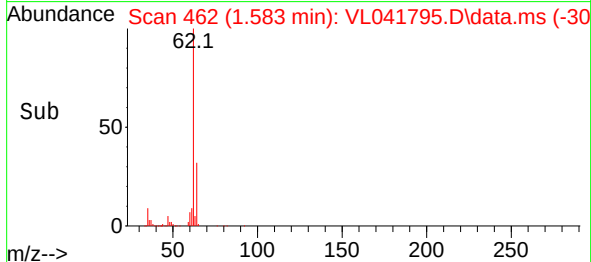
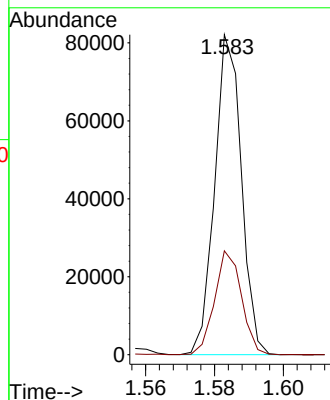
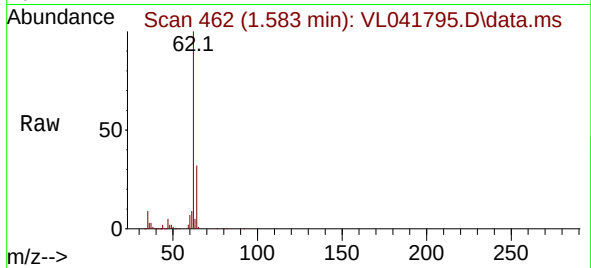




#5  
 Vinyl Chloride  
 Concen: 8.661 ppbv  
 RT: 1.583 min Scan# 410  
 Delta R.T. 0.003 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

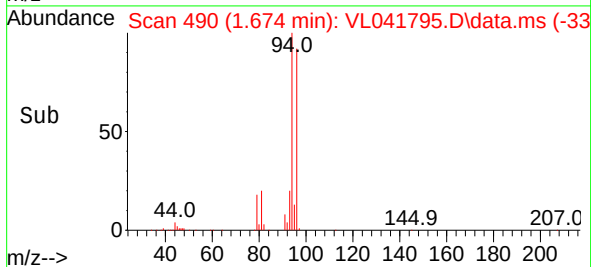
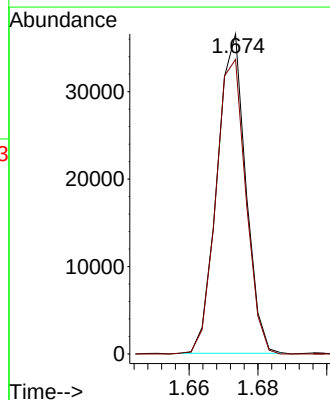
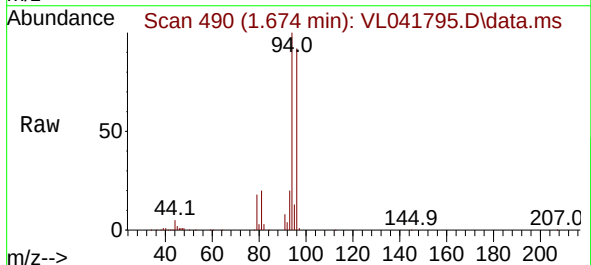
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VL1218ABS01

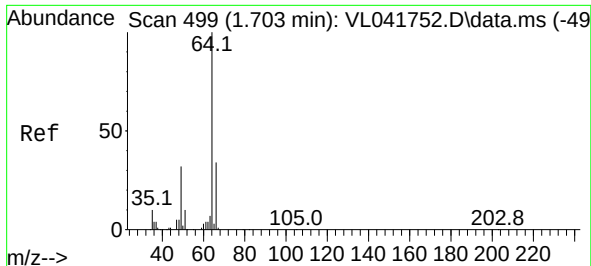
Tgt Ion: 62 Resp: 44104  
 Ion Ratio Lower Upper  
 62 100  
 64 32.5 25.1 37.7



#6  
 Bromomethane  
 Concen: 8.788 ppbv  
 RT: 1.674 min Scan# 490  
 Delta R.T. 0.006 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

Tgt Ion: 94 Resp: 21119  
 Ion Ratio Lower Upper  
 94 100  
 96 92.2 74.7 112.1

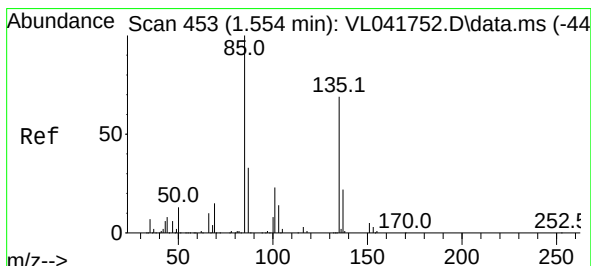
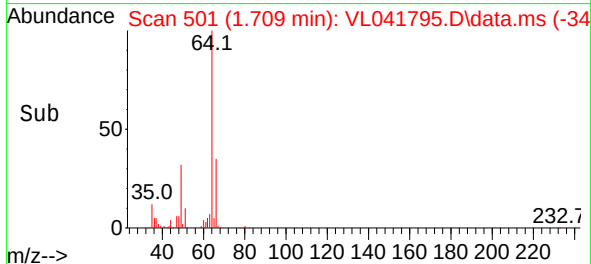
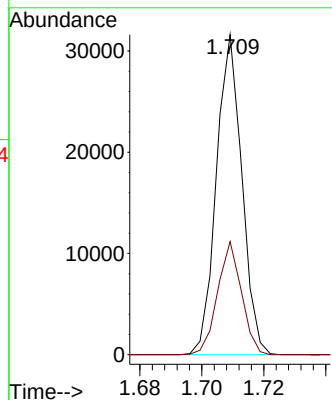
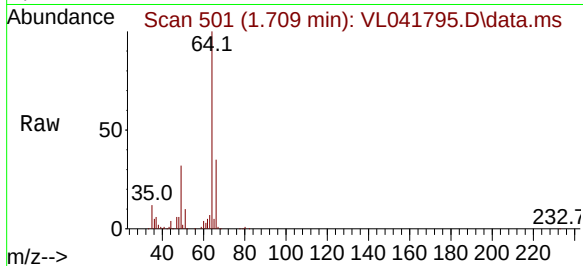




#7  
Chloroethane  
Concen: 9.123 ppbv  
RT: 1.709 min Scan# 501  
Delta R.T. 0.006 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

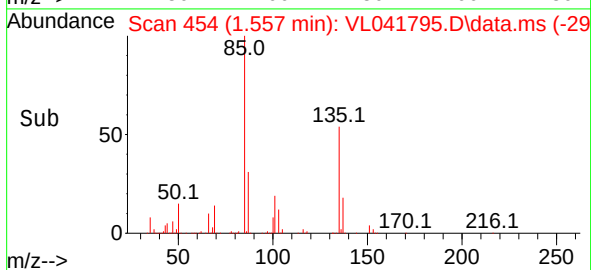
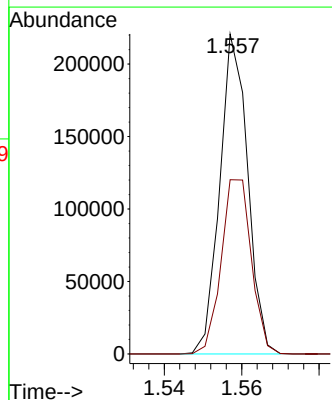
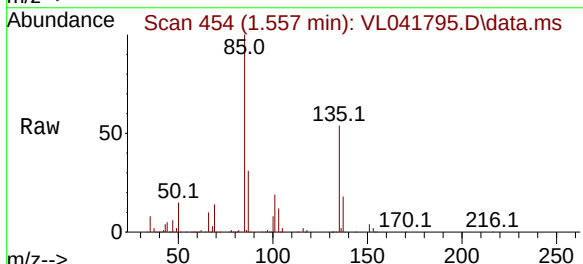
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

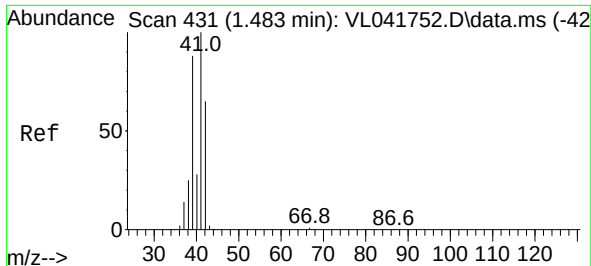
Tgt Ion: 64 Resp: 18047  
Ion Ratio Lower Upper  
64 100  
66 35.4 27.5 41.3



#8  
Dichlorotetrafluoroethane  
Concen: 9.549 ppbv  
RT: 1.557 min Scan# 454  
Delta R.T. 0.003 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 85 Resp: 110410  
Ion Ratio Lower Upper  
85 100  
135 59.3 51.9 77.9





#9

Propene

Concen: 6.846 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

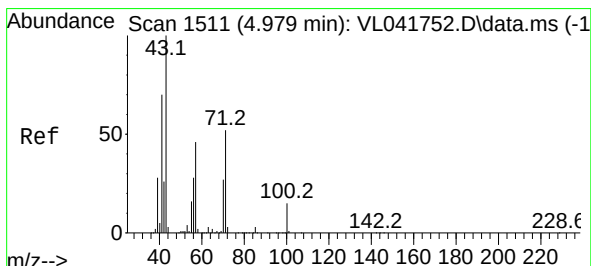
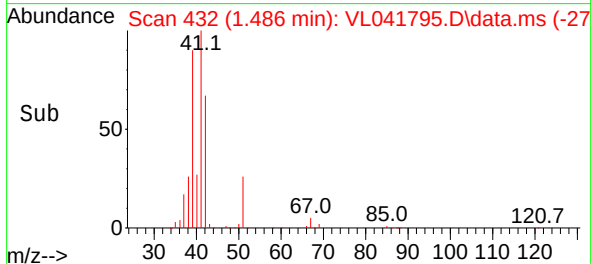
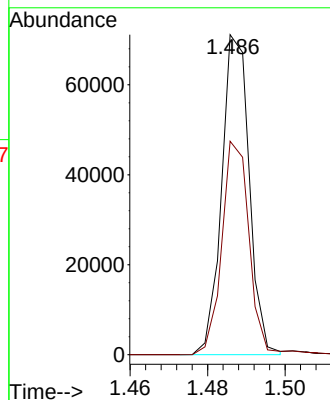
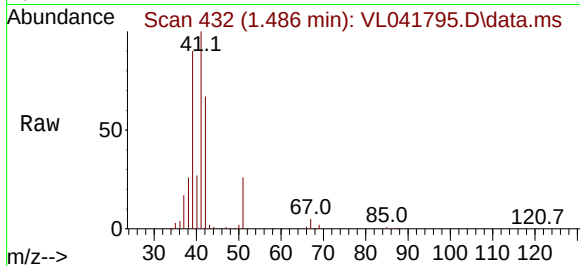
VL1218ABS01

Tgt Ion: 41 Resp: 35133

Ion Ratio Lower Upper

41 100

42 67.4 52.4 78.6



#10

Heptane

Concen: 8.085 ppbv

RT: 5.001 min Scan# 1518

Delta R.T. 0.022 min

Lab File: VL041795.D

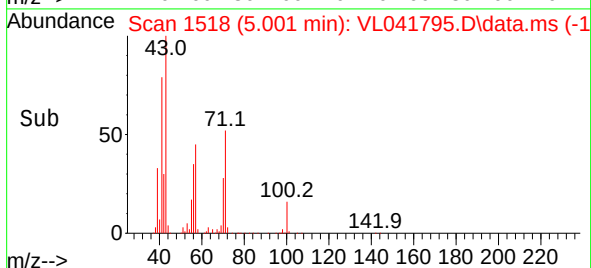
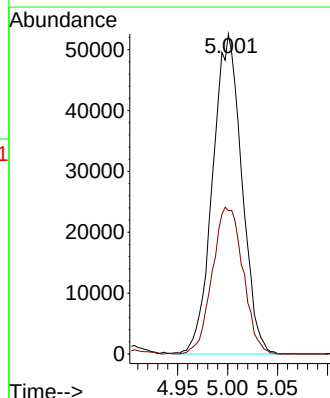
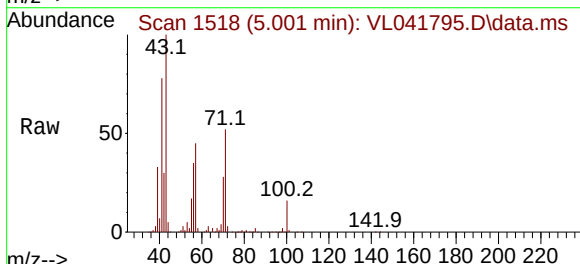
Acq: 18 Dec 2024 16:06

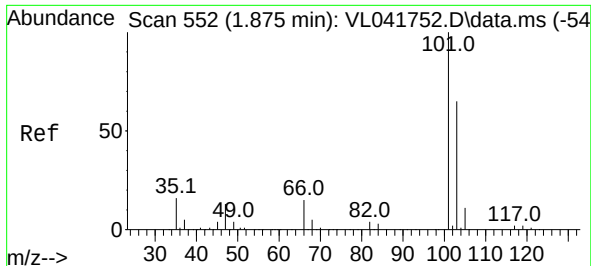
Tgt Ion: 43 Resp: 106572

Ion Ratio Lower Upper

43 100

57 48.3 38.5 57.7





#11

Trichlorofluoromethane

Concen: 9.632 ppbv

RT: 1.884 min Scan# 51

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

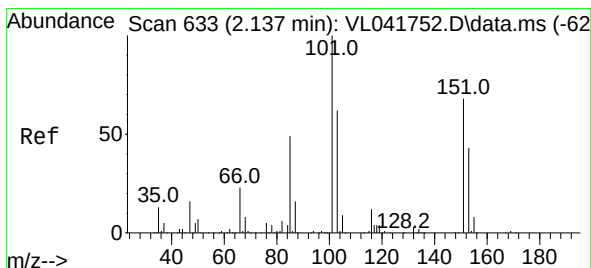
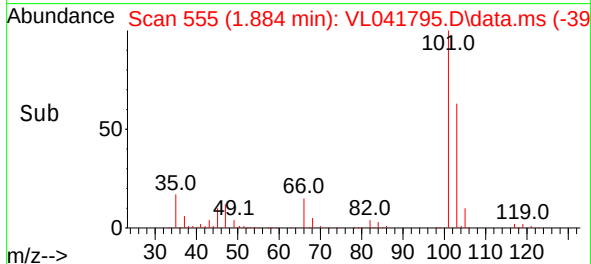
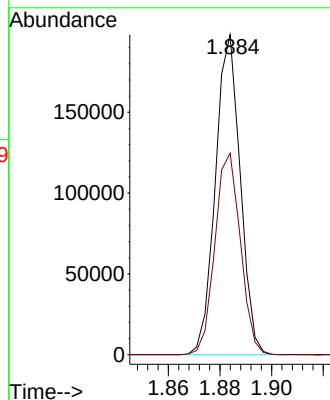
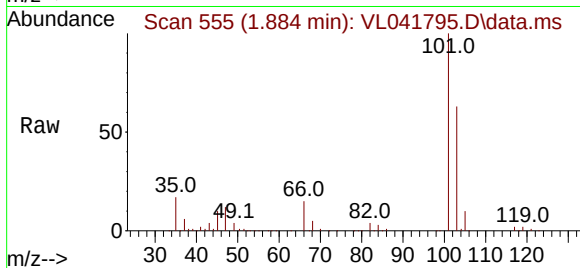
VL1218ABS01

Tgt Ion:101 Resp: 132171

Ion Ratio Lower Upper

101 100

103 62.9 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.222 ppbv

RT: 2.146 min Scan# 636

Delta R.T. 0.009 min

Lab File: VL041795.D

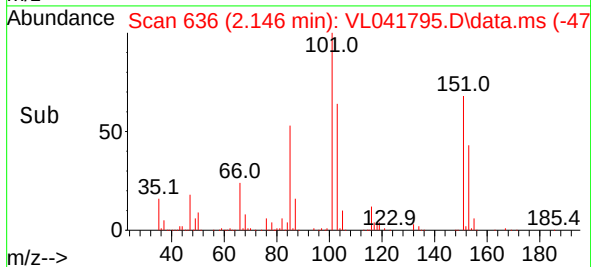
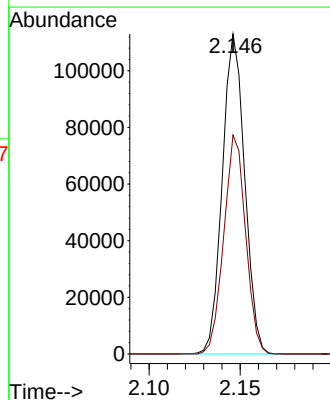
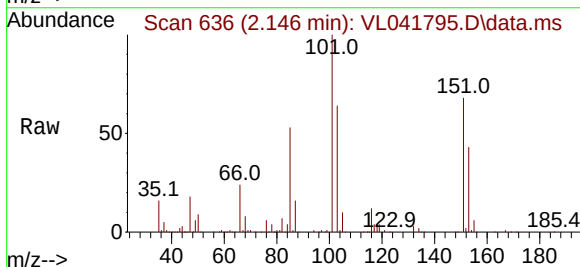
Acq: 18 Dec 2024 16:06

Tgt Ion:101 Resp: 96243

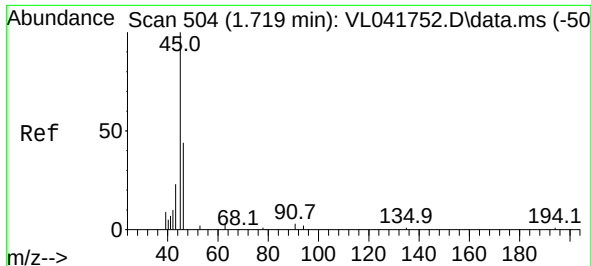
Ion Ratio Lower Upper

101 100

151 66.8 56.8 85.2







#13

Ethanol

Concen: 6.742 ppbv

RT: 1.725 min Scan# 504

Delta R.T. 0.006 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

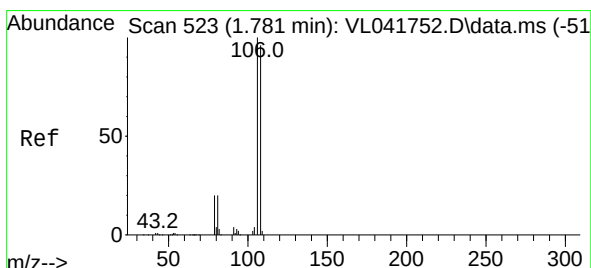
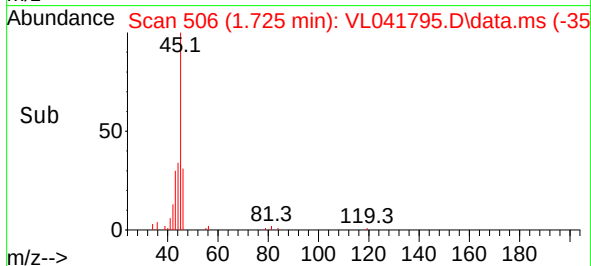
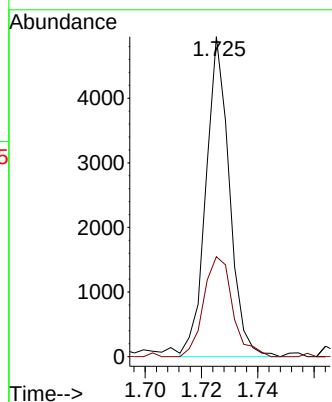
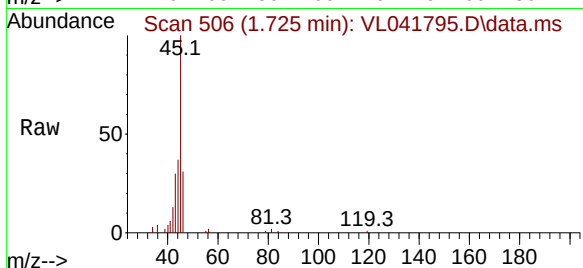
VL1218ABS01

Tgt Ion: 45 Resp: 2865

Ion Ratio Lower Upper

45 100

46 39.7 16.4 65.8



#14

Bromoethene

Concen: 8.533 ppbv

RT: 1.787 min Scan# 525

Delta R.T. 0.006 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

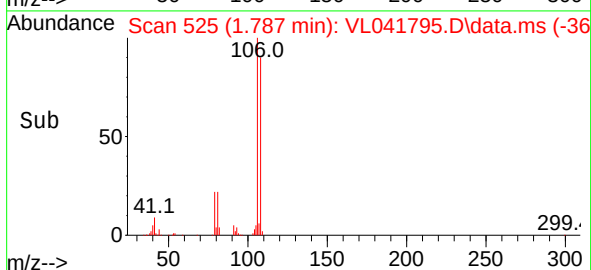
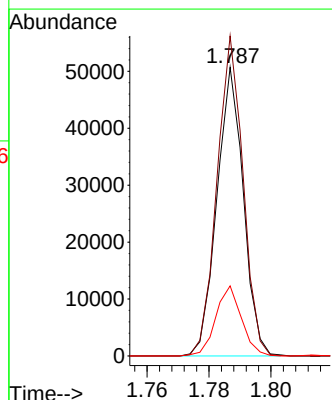
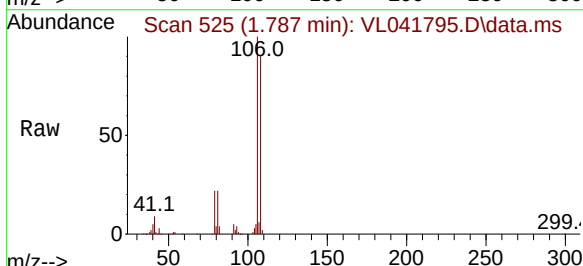
Tgt Ion: 108 Resp: 30065

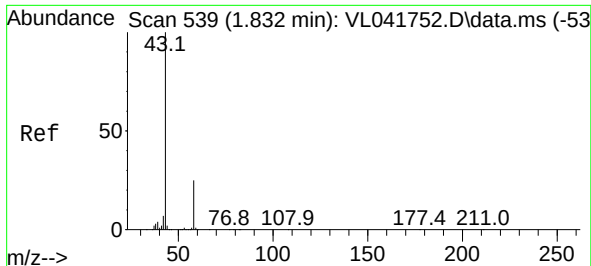
Ion Ratio Lower Upper

108 100

106 108.9 84.1 126.1

79 23.9 17.4 26.0





#15

Acetone

Concen: 7.807 ppbv

RT: 1.842 min Scan# 54

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

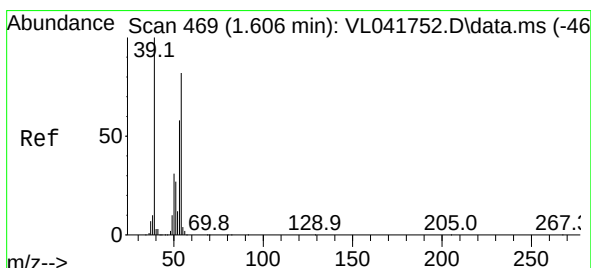
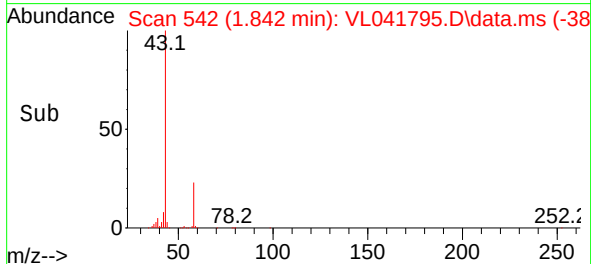
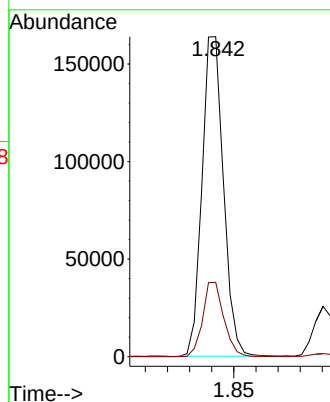
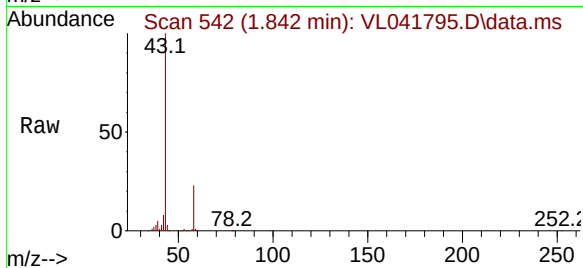
VL1218ABS01

Tgt Ion: 43 Resp: 110277

Ion Ratio Lower Upper

43 100

58 23.0 19.7 29.5



#16

1,3-Butadiene

Concen: 9.450 ppbv

RT: 1.612 min Scan# 471

Delta R.T. 0.006 min

Lab File: VL041795.D

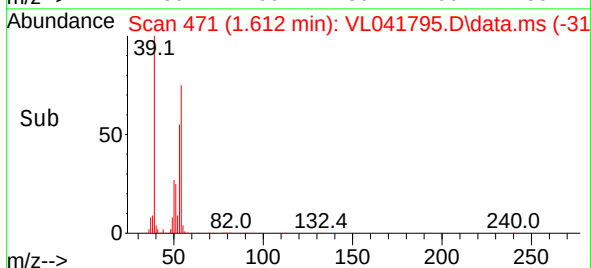
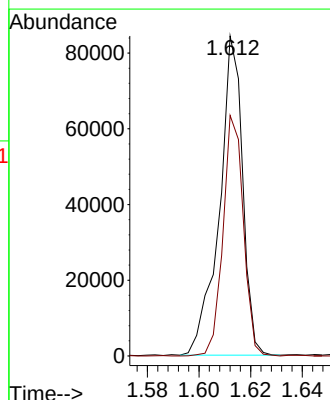
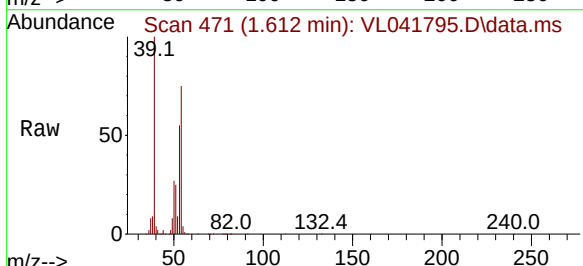
Acq: 18 Dec 2024 16:06

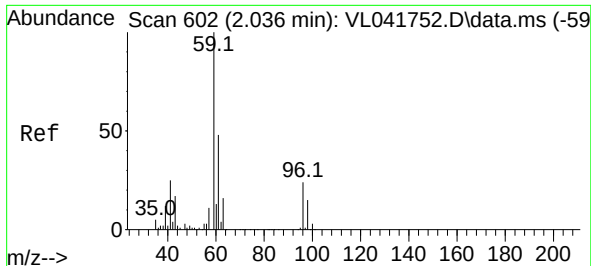
Tgt Ion: 39 Resp: 52562

Ion Ratio Lower Upper

39 100

54 66.3 58.4 87.6





#17

tert-Butyl alcohol

Concen: 8.768 ppbv

RT: 2.046 min Scan# 602

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

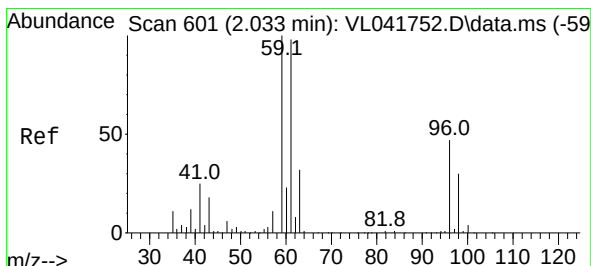
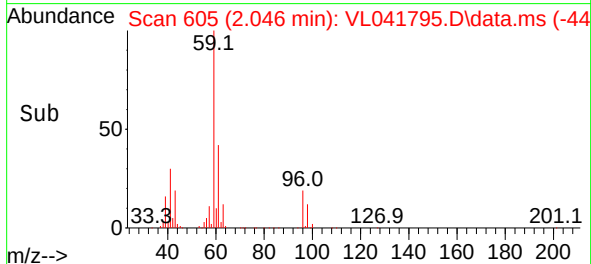
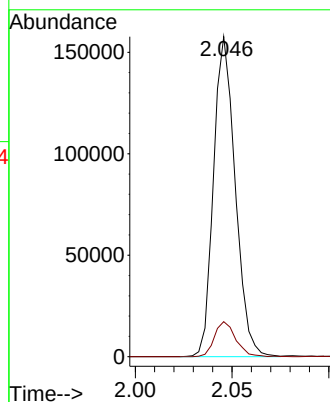
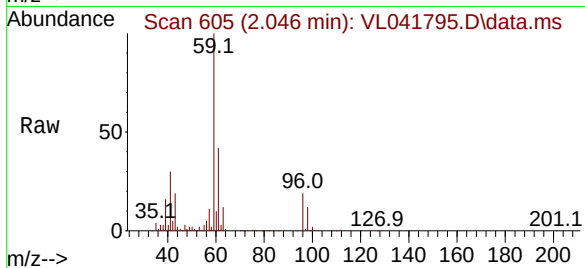
VL1218ABS01

Tgt Ion: 59 Resp: 122872

Ion Ratio Lower Upper

59 100

57 10.8 8.6 13.0



#18

1,1-Dichloroethene

Concen: 8.780 ppbv

RT: 2.039 min Scan# 603

Delta R.T. 0.006 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

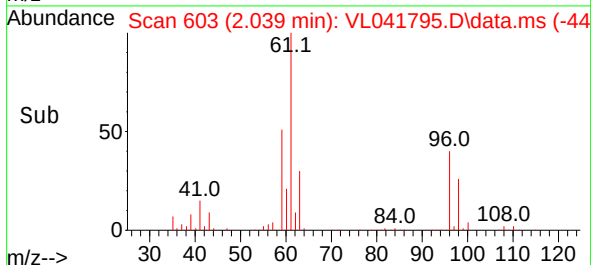
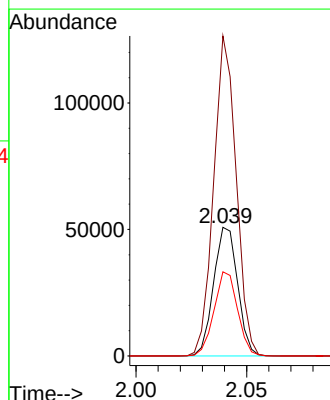
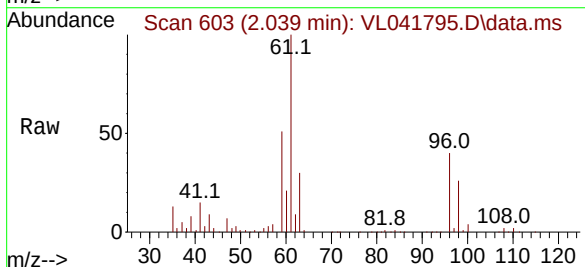
Tgt Ion: 96 Resp: 38415

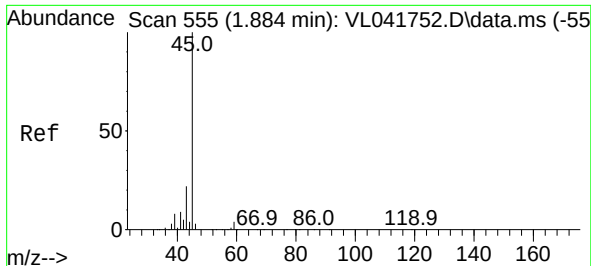
Ion Ratio Lower Upper

96 100

61 248.9 167.7 251.5

98 65.4 51.1 76.7





#19

Isopropyl Alcohol

Concen: 7.039 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

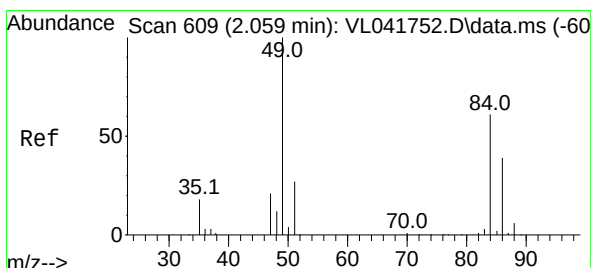
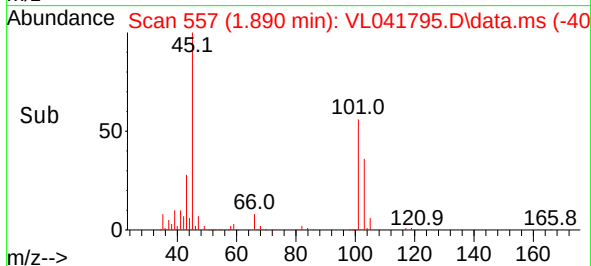
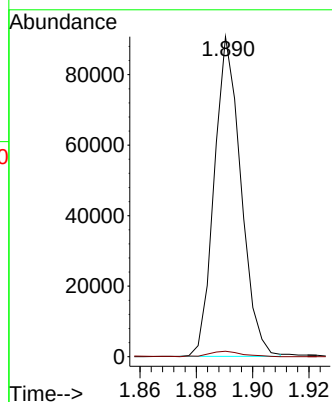
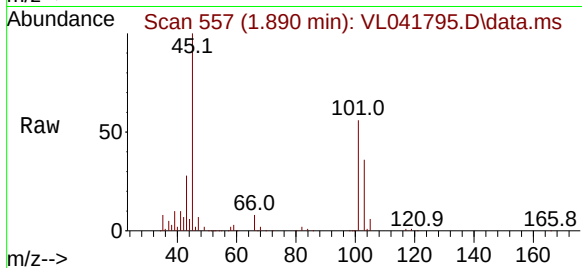
VL1218ABS01

Tgt Ion: 45 Resp: 59665

Ion Ratio Lower Upper

45 100

58 2.1 33.3 49.9#



#20

Methylene Chloride

Concen: 8.766 ppbv

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Tgt Ion: 84 Resp: 35310

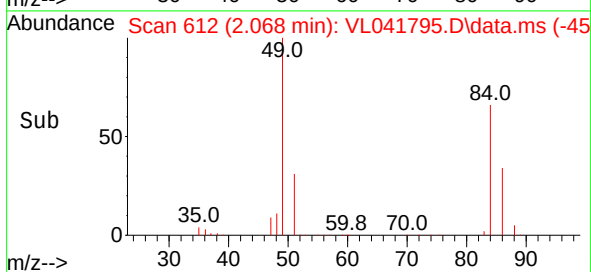
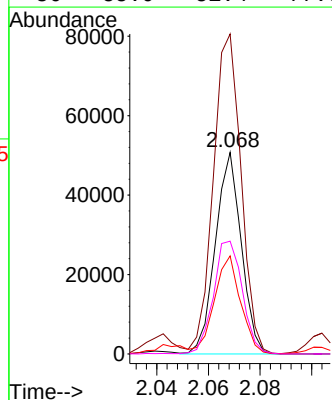
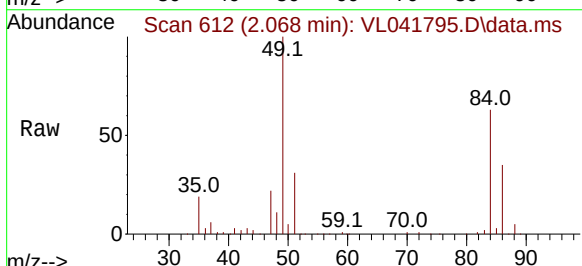
Ion Ratio Lower Upper

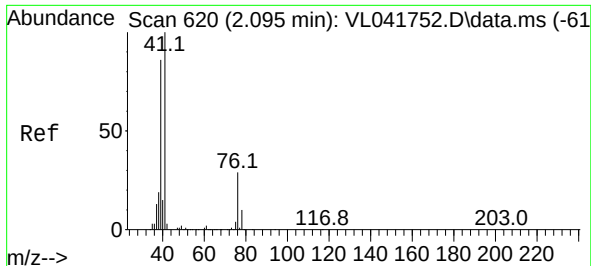
84 100

49 158.5 132.6 198.8

51 48.4 37.6 56.4

86 55.9 51.4 77.0





#21

Allyl Chloride

Concen: 8.945 ppbv

RT: 2.104 min Scan# 61

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

VL1218ABS01

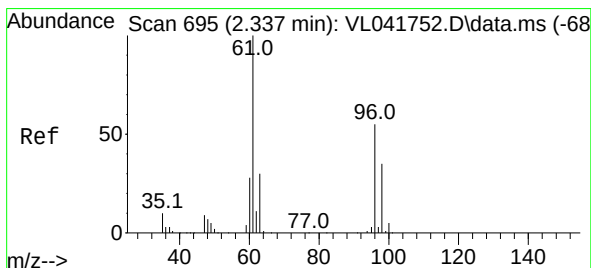
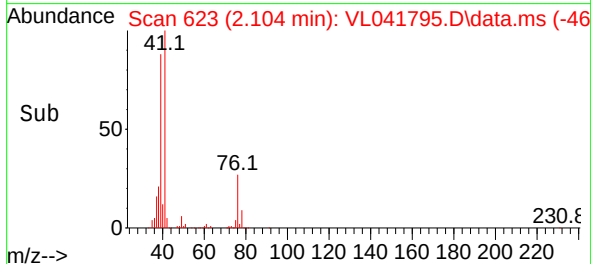
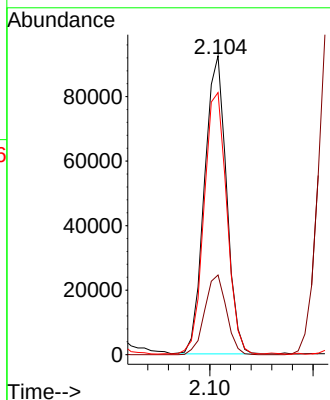
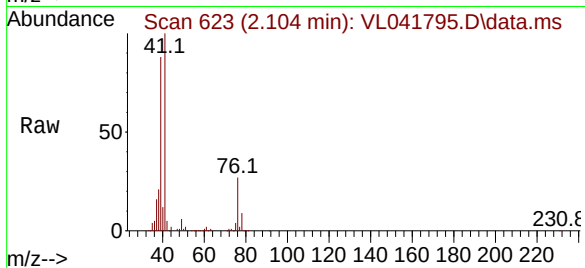
Tgt Ion: 41 Resp: 68525

Ion Ratio Lower Upper

41 100

76 26.2 22.3 33.5

39 91.2 69.2 103.8



#22

trans-1,2-Dichloroethene

Concen: 8.550 ppbv

RT: 2.350 min Scan# 699

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

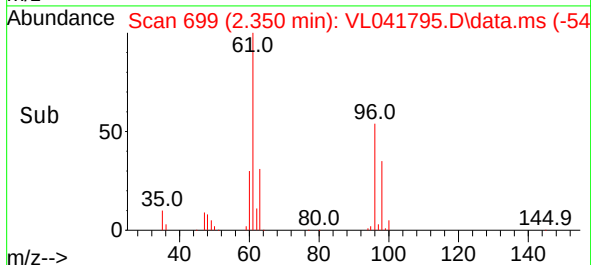
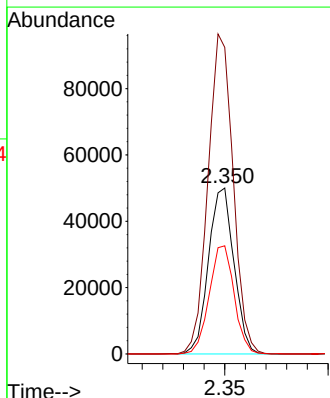
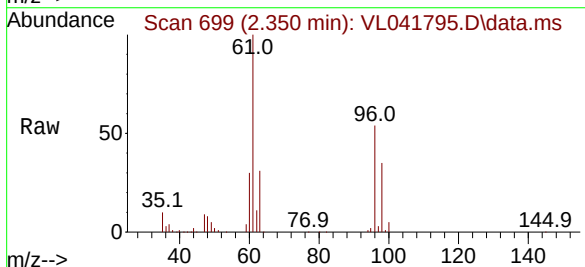
Tgt Ion: 96 Resp: 42821

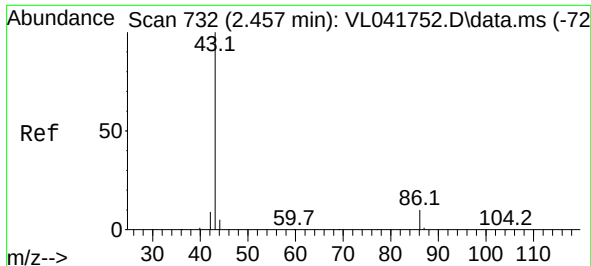
Ion Ratio Lower Upper

96 100

61 184.8 146.3 219.5

98 65.2 50.8 76.2





#23

Vinyl Acetate

Concen: 6.627 ppbv

RT: 2.470 min Scan# 741

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

Tgt Ion: 43 Resp: 43463

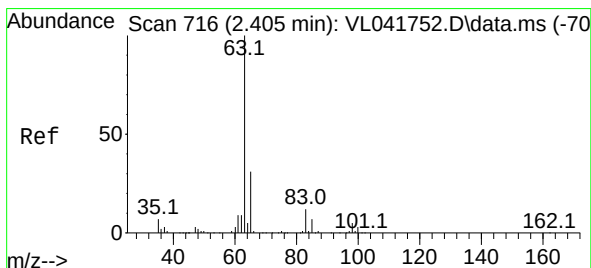
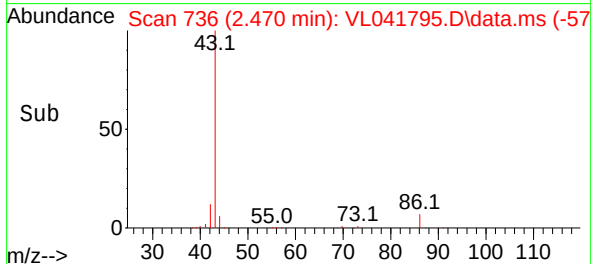
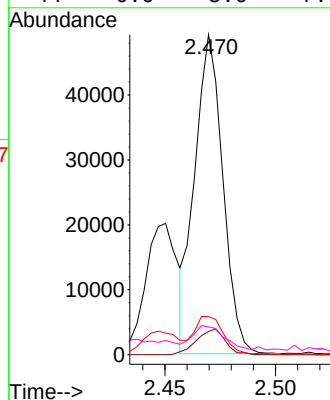
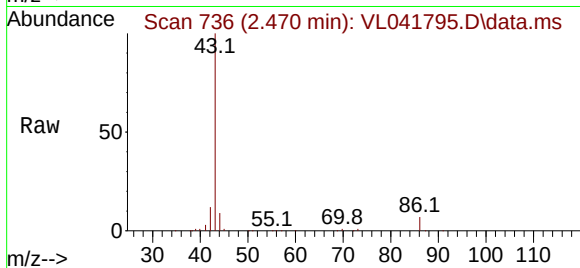
Ion Ratio Lower Upper

43 100

86 7.3 6.6 10.0

42 11.5 8.2 12.2

44 6.9 5.0 7.4



#24

1,1-Dichloroethane

Concen: 9.142 ppbv

RT: 2.418 min Scan# 720

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

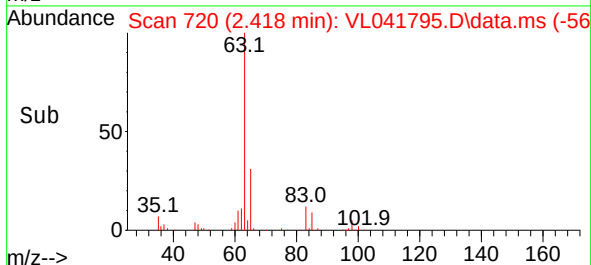
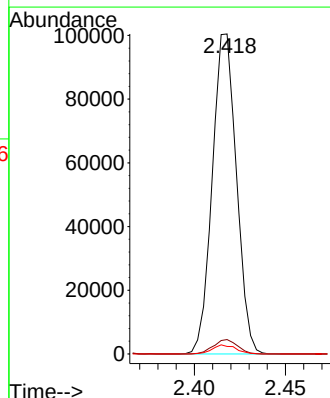
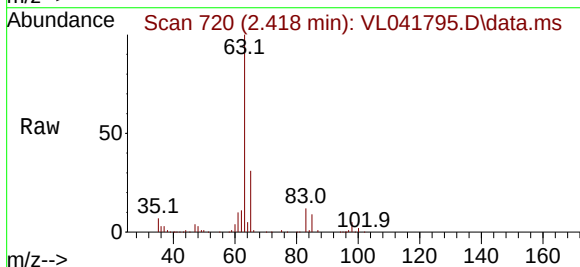
Tgt Ion: 63 Resp: 92680

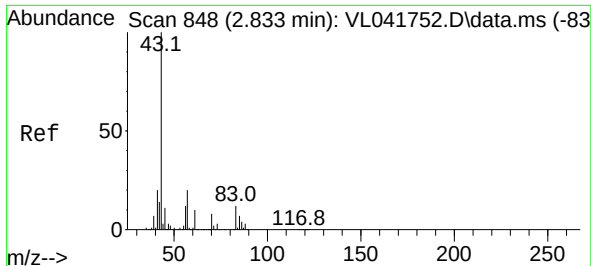
Ion Ratio Lower Upper

63 100

98 4.5 2.3 6.8

100 2.4 1.4 4.2





#25

Ethyl Acetate

Concen: 8.502 ppbv

RT: 2.845 min Scan# 848

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

Tgt Ion: 43 Resp: 223419

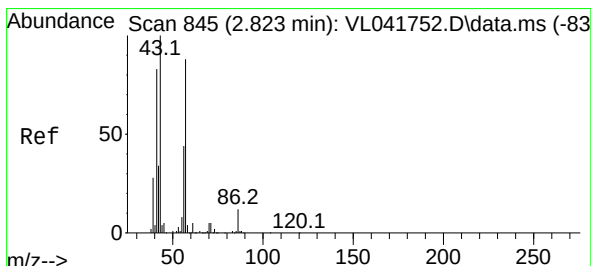
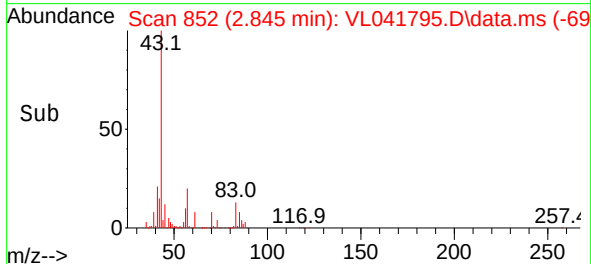
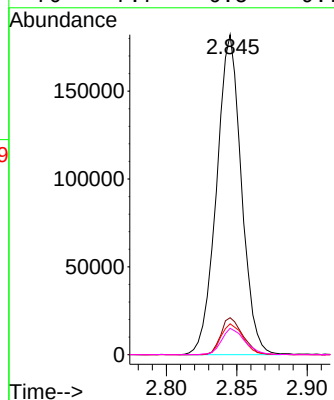
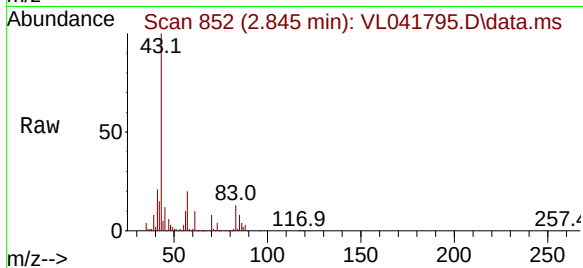
Ion Ratio Lower Upper

43 100

45 10.2 8.1 12.1

61 8.7 7.0 10.6

70 7.7 6.5 9.7



#26

Hexane

Concen: 8.164 ppbv

RT: 2.835 min Scan# 849

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Tgt Ion: 57 Resp: 81413

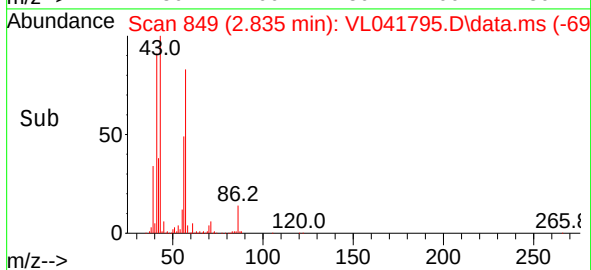
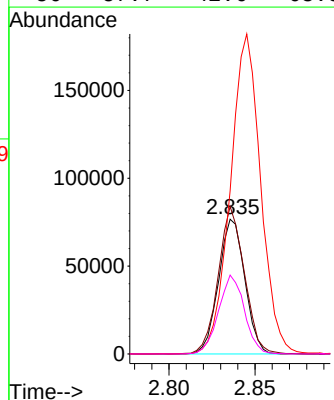
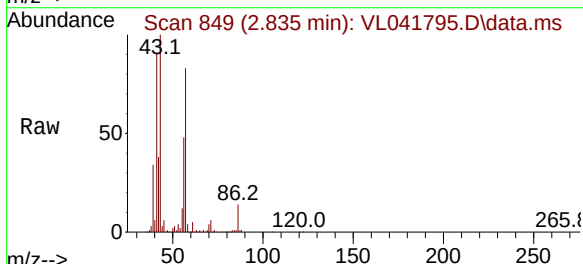
Ion Ratio Lower Upper

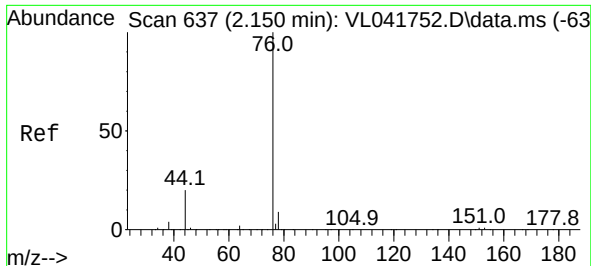
57 100

41 109.0 79.6 119.4

43 275.9 211.0 316.6

56 57.7 42.6 63.8

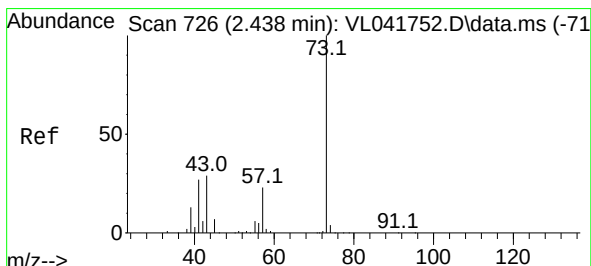
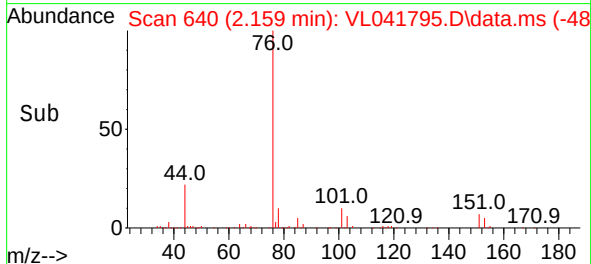
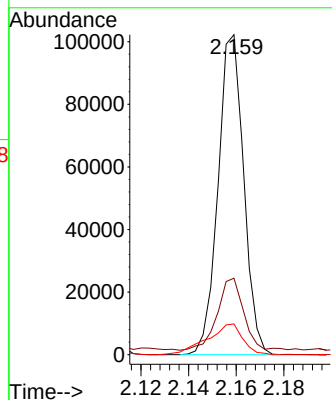
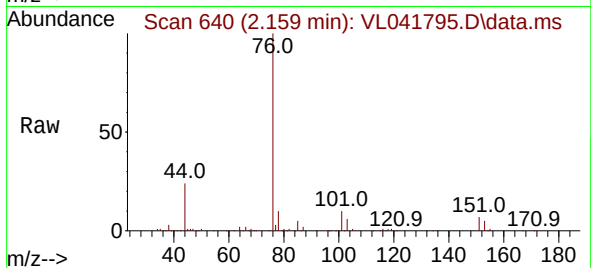




#27  
Carbon Disulfide  
Concen: 8.505 ppbv  
RT: 2.159 min Scan# 641  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

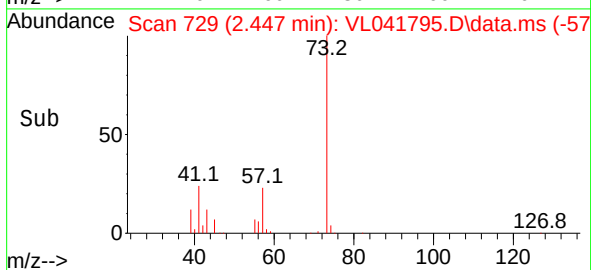
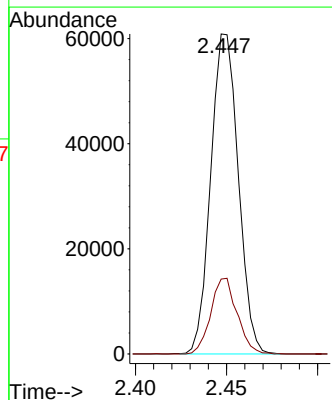
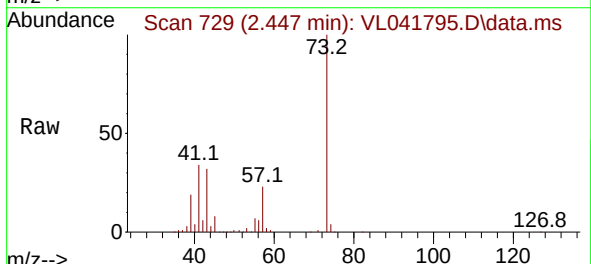
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 76 Resp: 76433  
Ion Ratio Lower Upper  
76 100  
44 25.9 17.6 26.4  
78 13.3 10.2 15.4

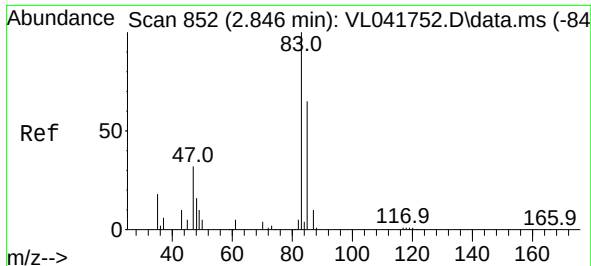


#28  
Methyl tert-Butyl Ether  
Concen: 7.915 ppbv  
RT: 2.447 min Scan# 729  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 73 Resp: 64037  
Ion Ratio Lower Upper  
73 100  
57 22.6 17.6 26.4







#29

Chloroform

Concen: 9.200 ppbv

RT: 2.858 min Scan# 84

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

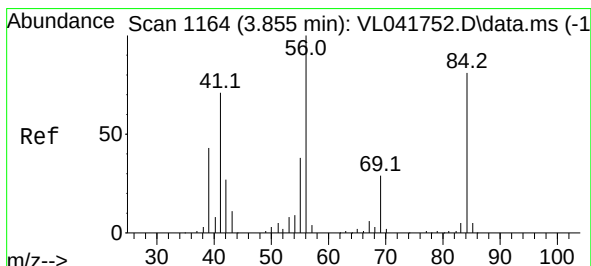
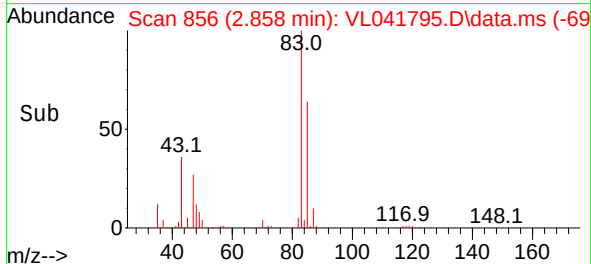
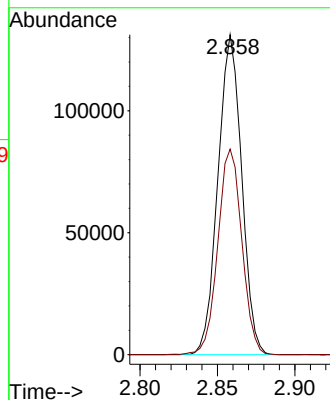
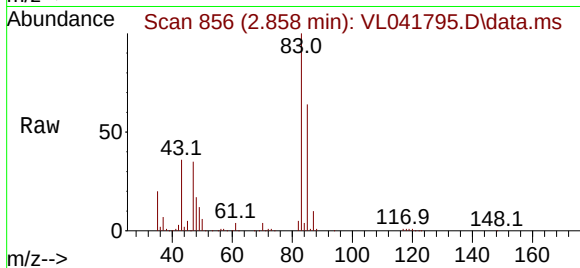
VL1218ABS01

Tgt Ion: 83 Resp: 139818

Ion Ratio Lower Upper

83 100

85 64.2 51.8 77.6



#30

Cyclohexane

Concen: 7.806 ppbv

RT: 3.871 min Scan# 1169

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

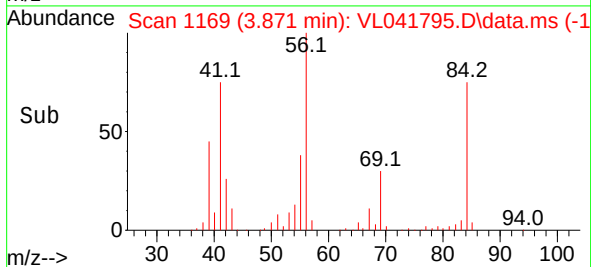
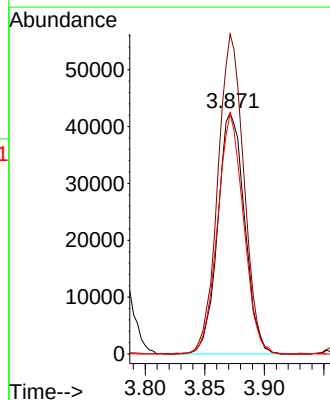
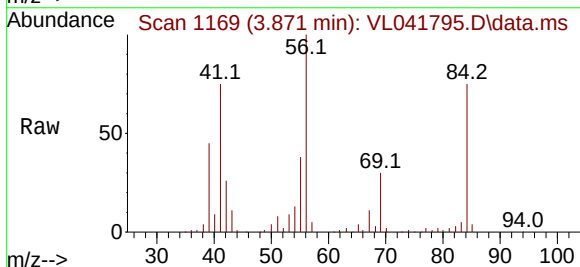
Tgt Ion: 84 Resp: 66237

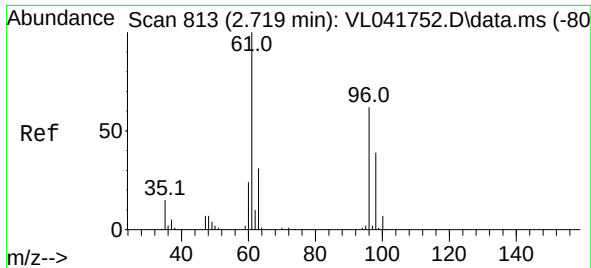
Ion Ratio Lower Upper

84 100

56 128.6 102.3 153.5

41 97.1 74.0 111.0





#31

cis-1,2-Dichloroethene

Concen: 8.033 ppbv

RT: 2.732 min Scan# 81

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

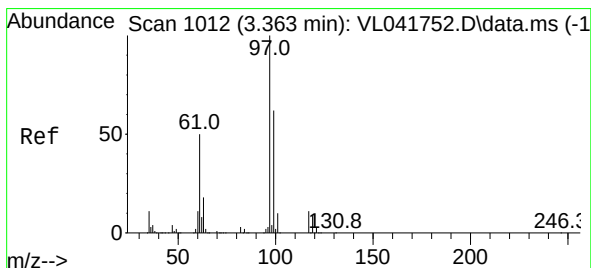
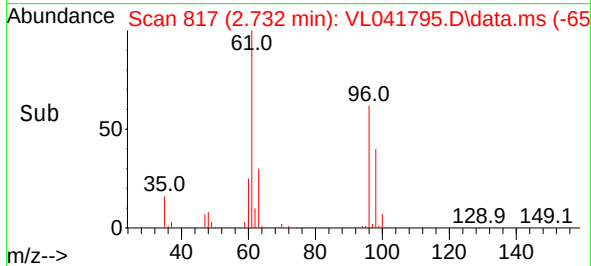
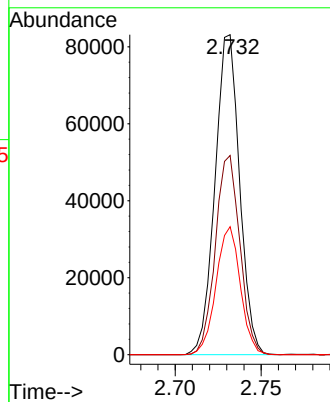
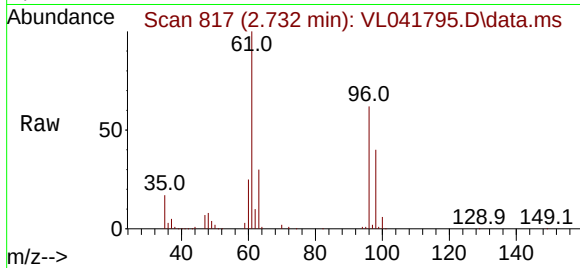
Tgt Ion: 61 Resp: 82779

Ion Ratio Lower Upper

61 100

96 62.2 49.7 74.5

98 40.0 30.8 46.2



#32

1,1,1-Trichloroethane

Concen: 8.807 ppbv

RT: 3.379 min Scan# 1017

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

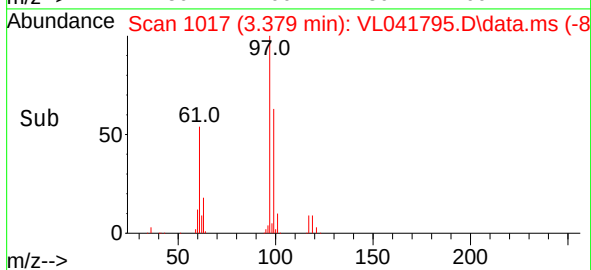
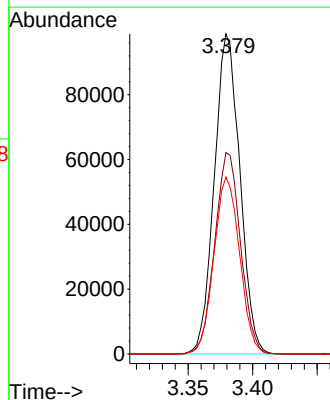
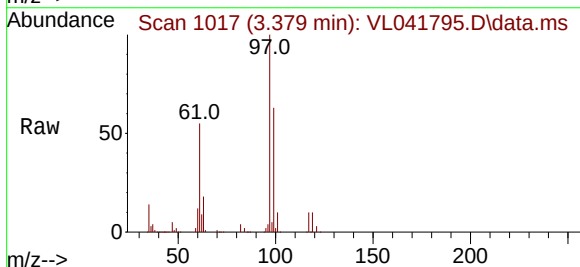
Tgt Ion: 97 Resp: 136055

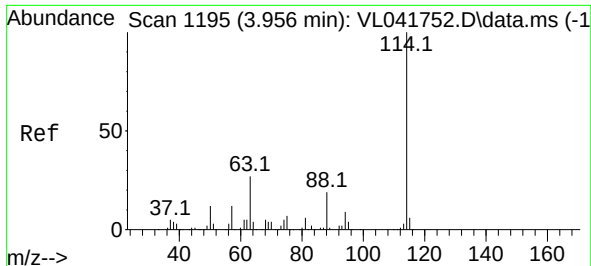
Ion Ratio Lower Upper

97 100

99 63.4 51.0 76.4

61 55.6 42.2 63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.972 min Scan# 11

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

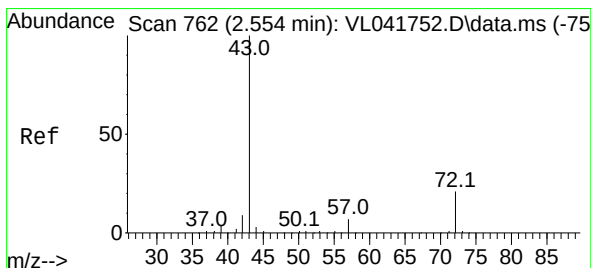
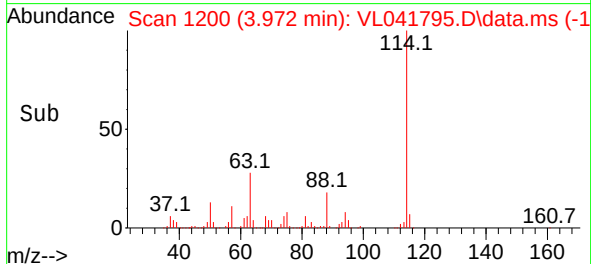
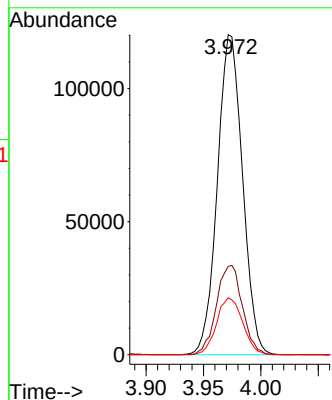
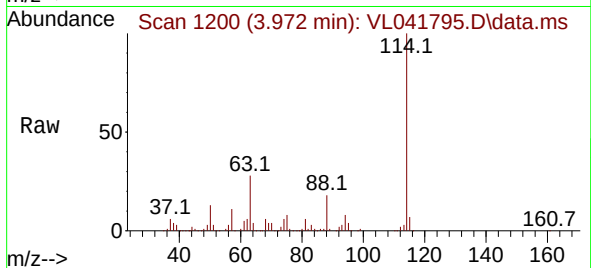
Tgt Ion:114 Resp: 183255

Ion Ratio Lower Upper

114 100

63 28.8 21.8 32.8

88 18.4 14.8 22.2



#34

2-Butanone

Concen: 8.525 ppbv

RT: 2.564 min Scan# 765

Delta R.T. 0.009 min

Lab File: VL041795.D

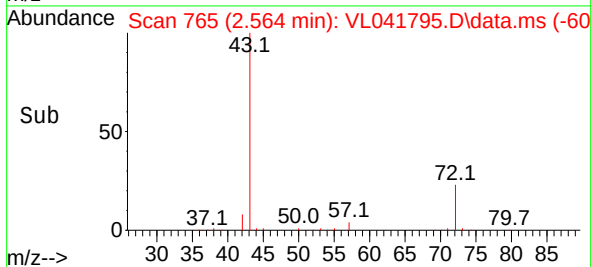
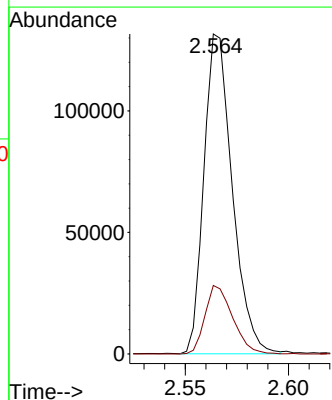
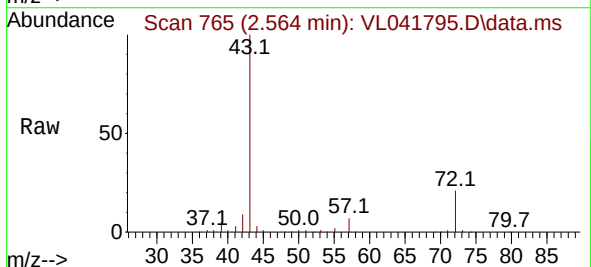
Acq: 18 Dec 2024 16:06

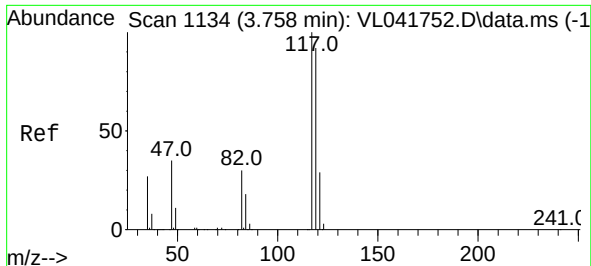
Tgt Ion: 43 Resp: 125687

Ion Ratio Lower Upper

43 100

72 20.9 16.8 25.2

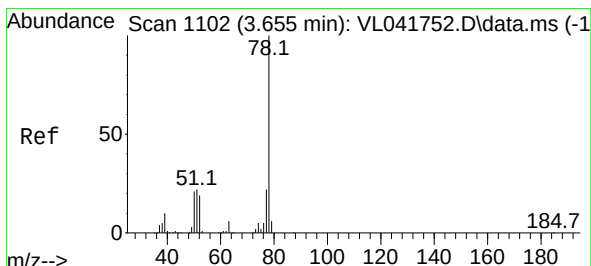
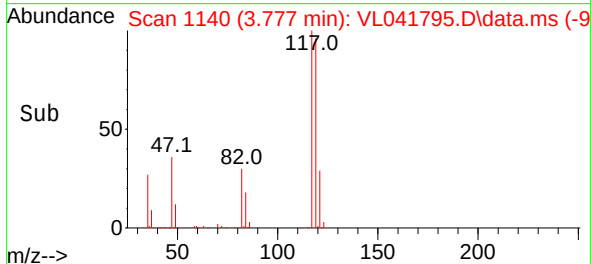
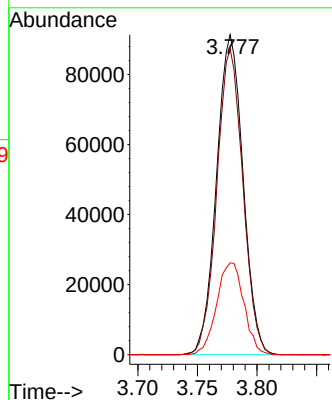
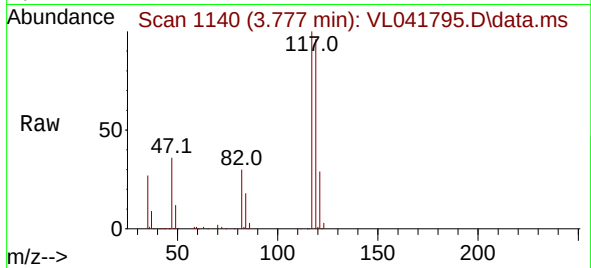




#35  
Carbon Tetrachloride  
Concen: 10.854 ppbv  
RT: 3.777 min Scan# 1114  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

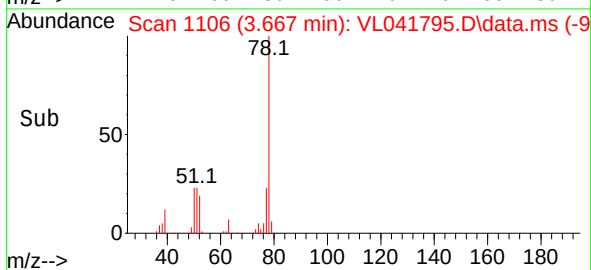
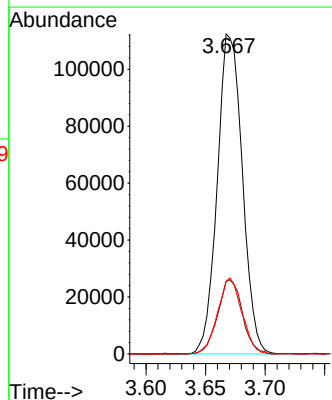
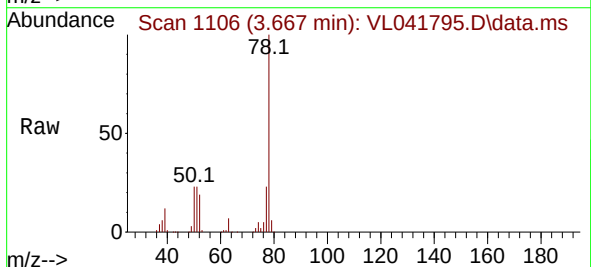
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

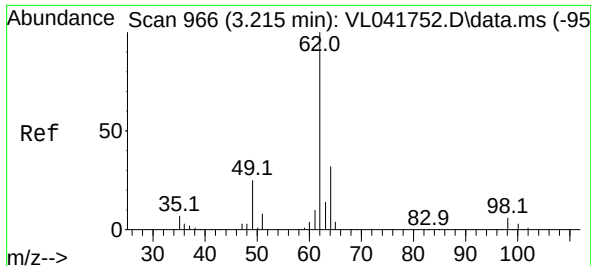
Tgt Ion:117 Resp: 141202  
Ion Ratio Lower Upper  
117 100  
119 95.6 73.7 110.5  
121 28.7 23.0 34.4



#36  
Benzene  
Concen: 8.674 ppbv  
RT: 3.667 min Scan# 1106  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 78 Resp: 164423  
Ion Ratio Lower Upper  
78 100  
77 22.6 17.8 26.6  
50 22.8 17.2 25.8





#37

1,2-Dichloroethane

Concen: 9.631 ppbv

RT: 3.230 min Scan# 91

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

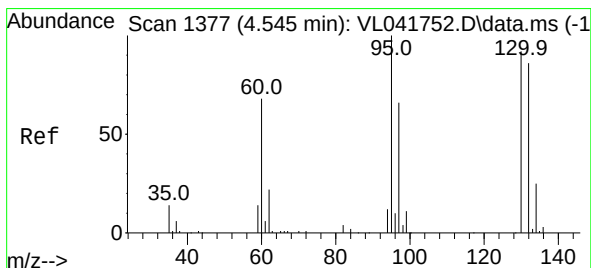
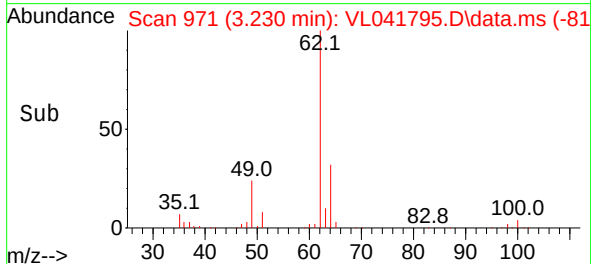
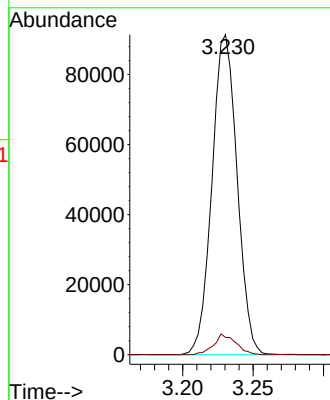
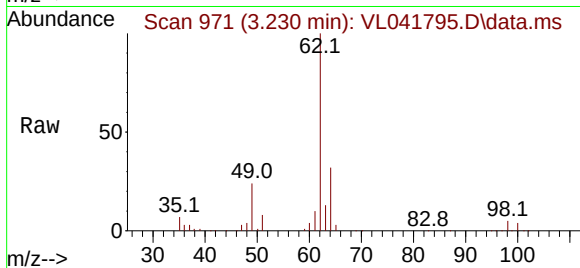
VL1218ABS01

Tgt Ion: 62 Resp: 113600

Ion Ratio Lower Upper

62 100

98 5.7 4.7 7.1



#38

Trichloroethene

Concen: 7.864 ppbv

RT: 4.564 min Scan# 1383

Delta R.T. 0.019 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Tgt Ion:130 Resp: 63280

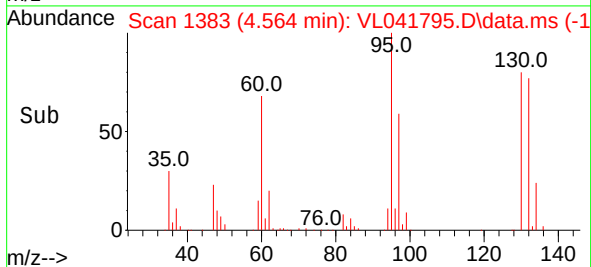
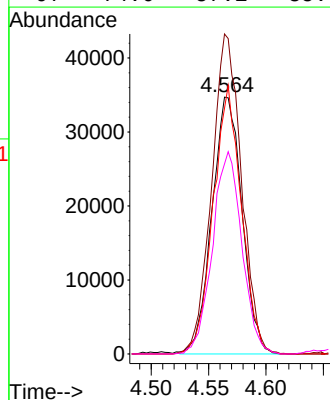
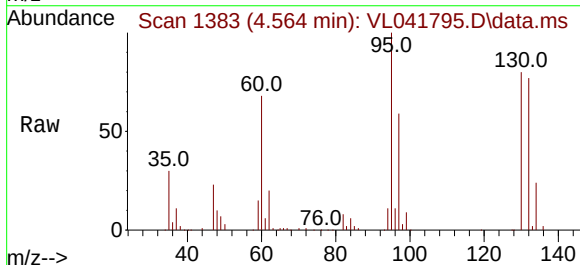
Ion Ratio Lower Upper

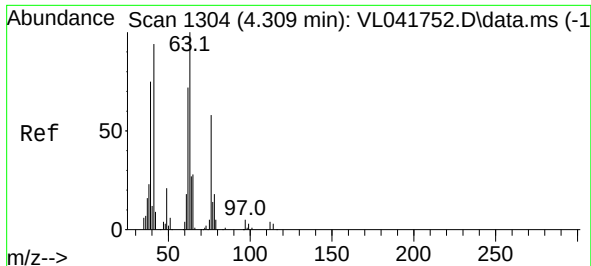
130 100

95 124.4 87.0 130.6

132 95.7 75.0 112.6

97 74.0 57.2 85.8

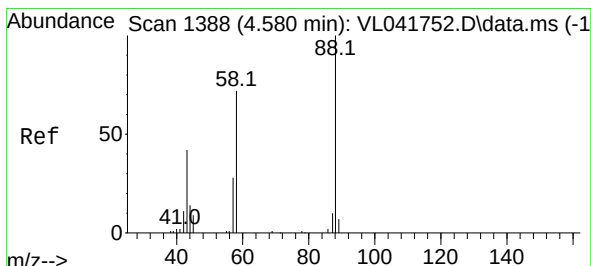
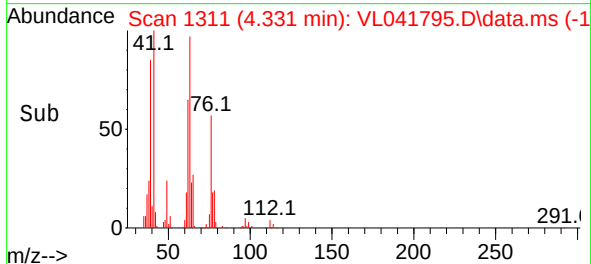
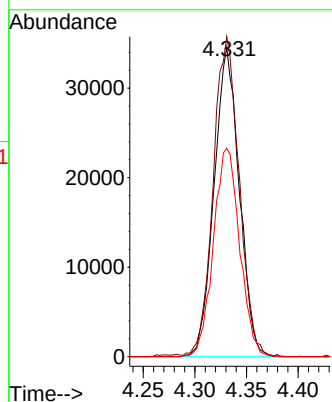
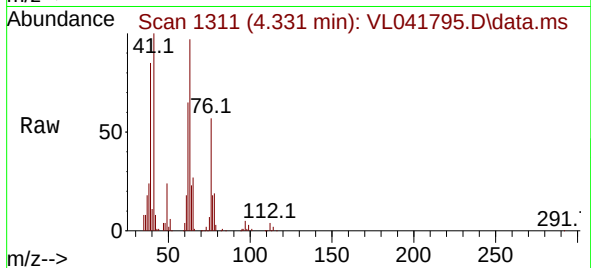




#39  
1,2-Dichloropropane  
Concen: 8.541 ppbv  
RT: 4.331 min Scan# 1311  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

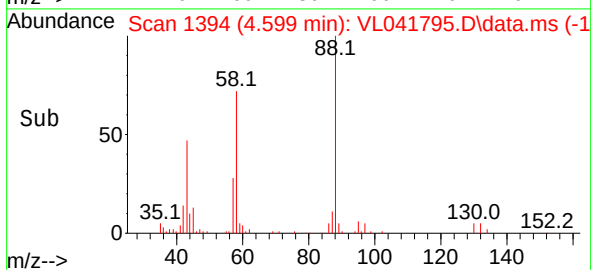
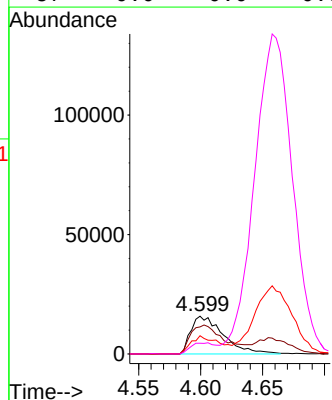
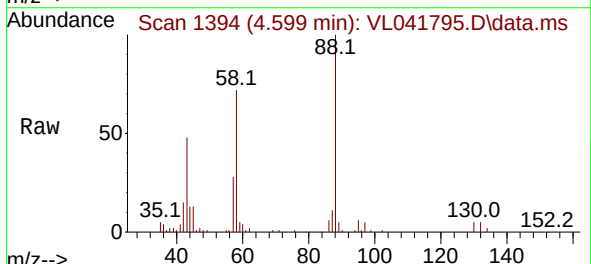
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

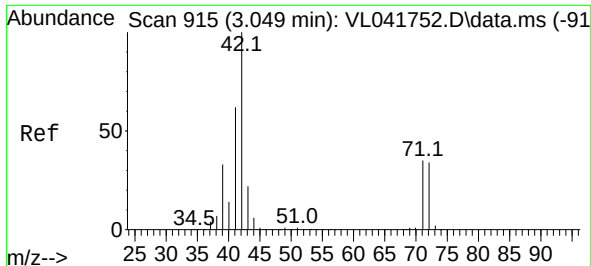
Tgt Ion: 63 Resp: 58553  
Ion Ratio Lower Upper  
63 100  
41 103.2 75.3 112.9  
62 67.3 57.3 85.9



#40  
1,4-Dioxane  
Concen: 8.624 ppbv  
RT: 4.599 min Scan# 1394  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 88 Resp: 28884  
Ion Ratio Lower Upper  
88 100  
58 83.5 61.0 91.6  
43 40.2 29.4 44.0  
57 0.0 0.0 0.0



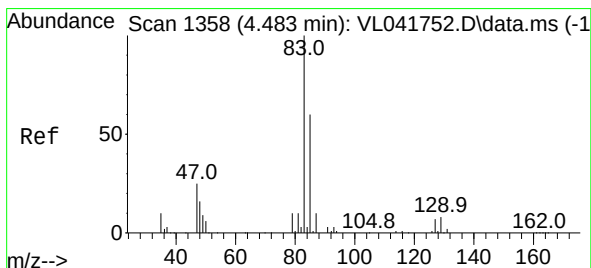
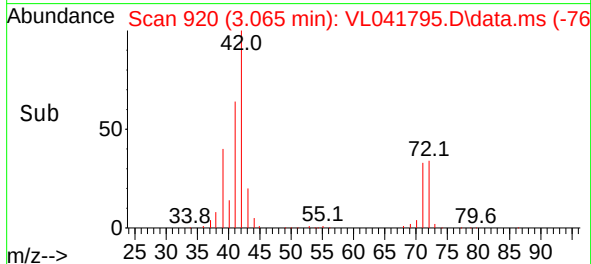
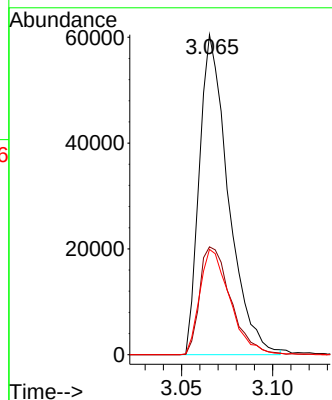
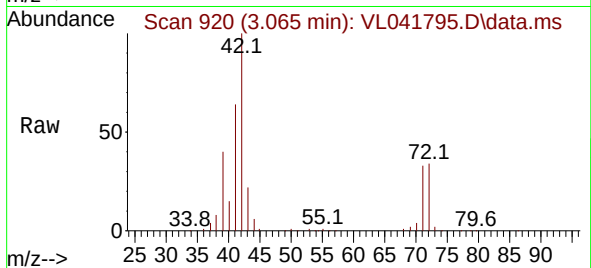


#41  
Tetrahydrofuran  
Concen: 8.114 ppbv  
RT: 3.065 min Scan# 91  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 42 Resp: 67017

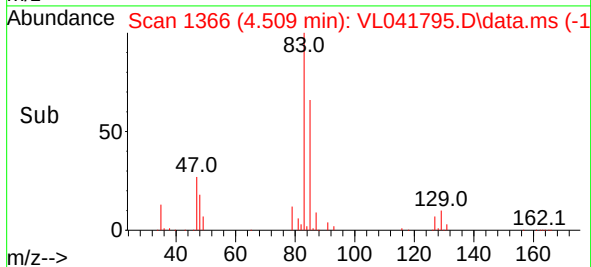
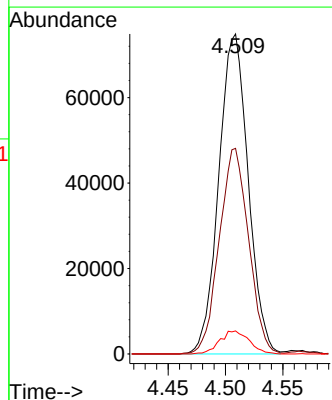
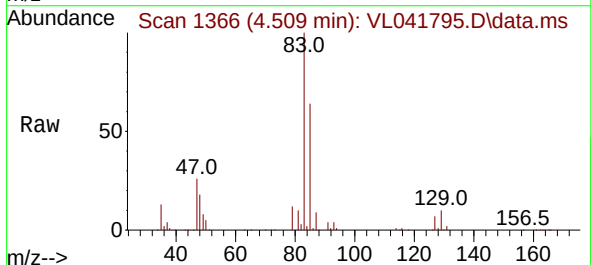
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 42  | 100   |       |       |
| 72  | 36.3  | 29.1  | 43.7  |
| 71  | 34.4  | 28.4  | 42.6  |

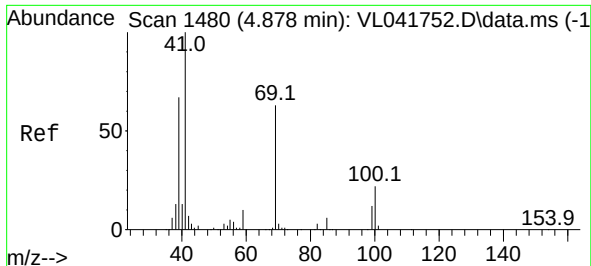


#42  
Bromodichloromethane  
Concen: 9.839 ppbv  
RT: 4.509 min Scan# 1366  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 83 Resp: 133513

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 85  | 64.2  | 48.0  | 72.0  |
| 127 | 7.2   | 5.8   | 8.8   |





#43

Methyl Methacrylate

Concen: 8.448 ppbv

RT: 4.897 min Scan# 1486

Delta R.T. 0.019 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

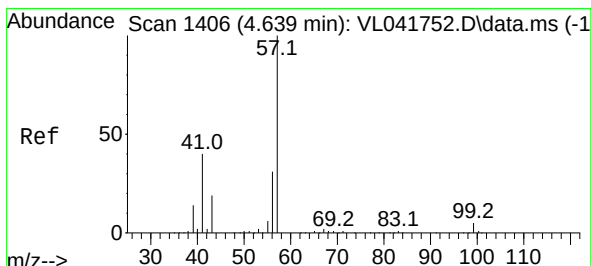
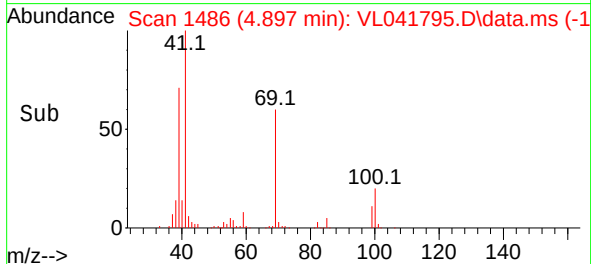
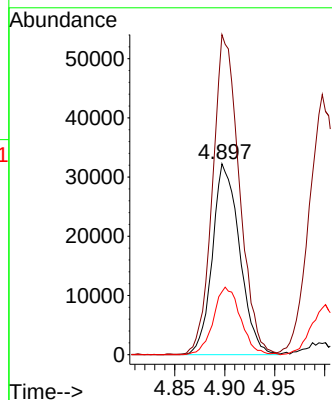
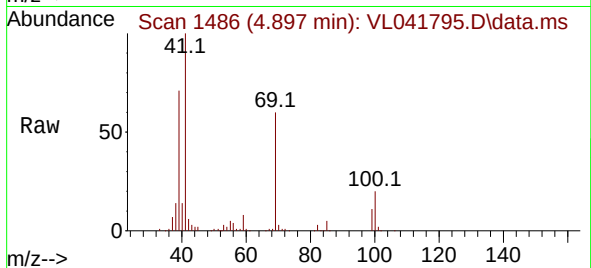
Tgt Ion: 69 Resp: 61014

Ion Ratio Lower Upper

69 100

41 165.0 130.3 195.5

100 35.3 28.3 42.5



#44

2,2,4-Trimethylpentane

Concen: 8.777 ppbv

RT: 4.658 min Scan# 1412

Delta R.T. 0.019 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

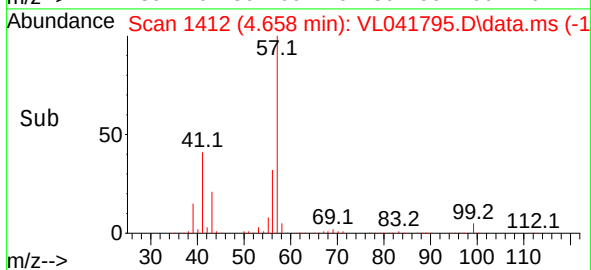
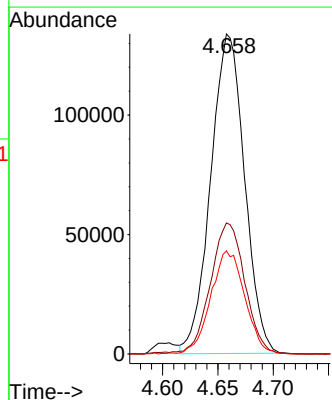
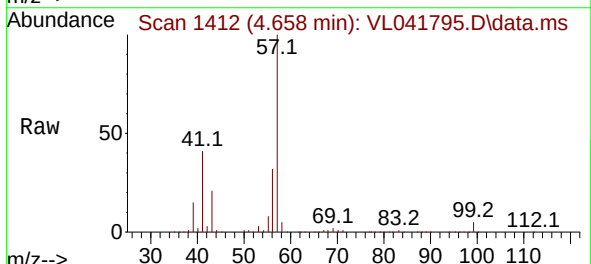
Tgt Ion: 57 Resp: 284140

Ion Ratio Lower Upper

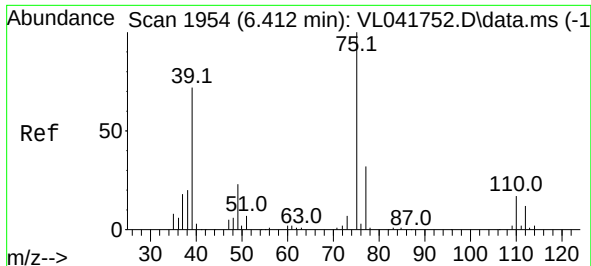
57 100

41 42.1 30.7 46.1

56 32.6 25.4 38.0







#45

t-1,3-Dichloropropene

Concen: 7.879 ppbv

RT: 6.438 min Scan# 11

Delta R.T. 0.026 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

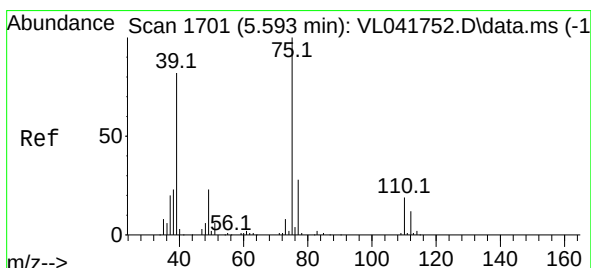
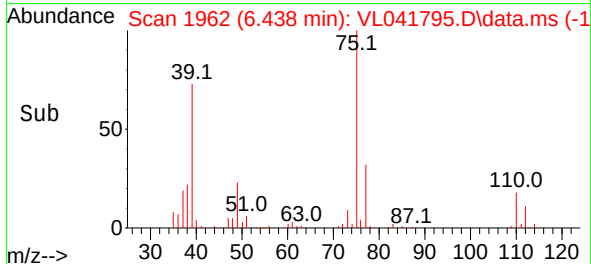
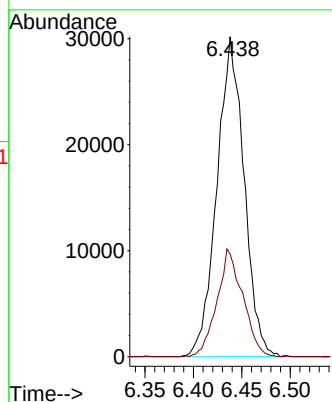
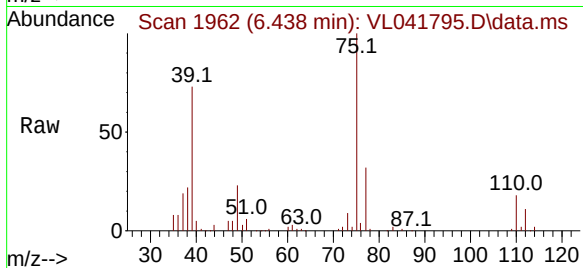
VL1218ABS01

Tgt Ion: 75 Resp: 58865

Ion Ratio Lower Upper

75 100

77 32.1 25.9 38.9



#46

cis-1,3-Dichloropropene

Concen: 7.824 ppbv

RT: 5.625 min Scan# 1711

Delta R.T. 0.032 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

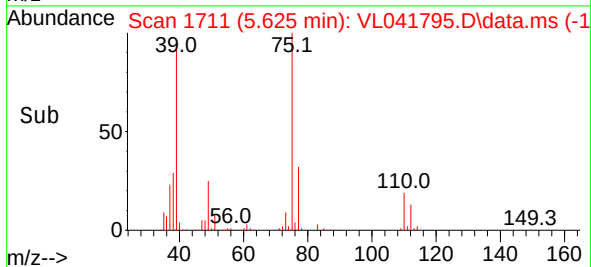
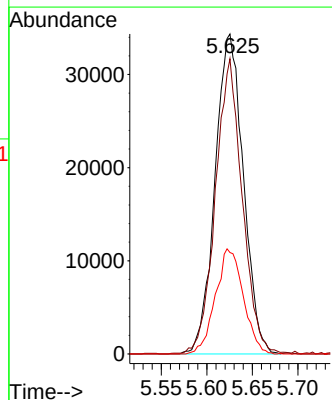
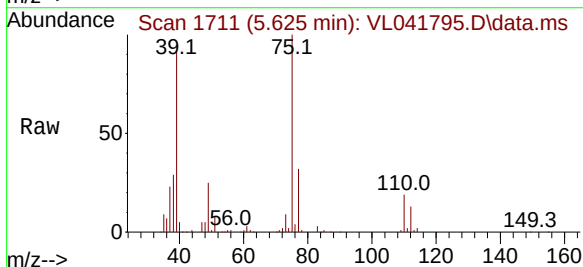
Tgt Ion: 75 Resp: 74198

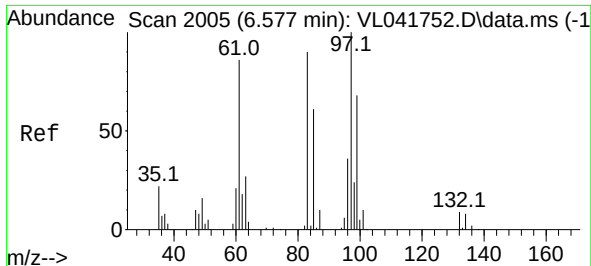
Ion Ratio Lower Upper

75 100

39 92.0 65.2 97.8

77 31.7 22.0 33.0

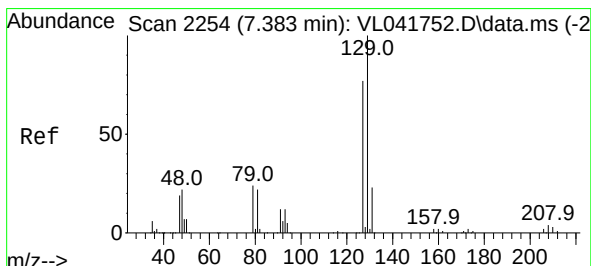
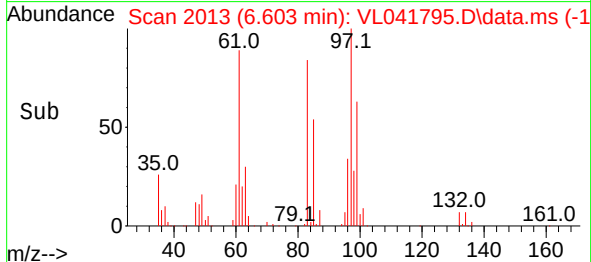
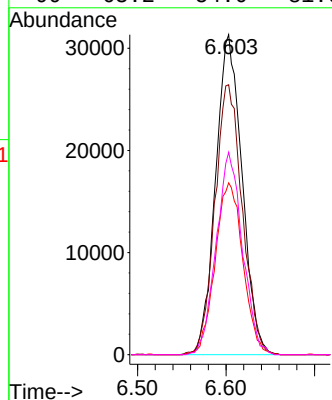
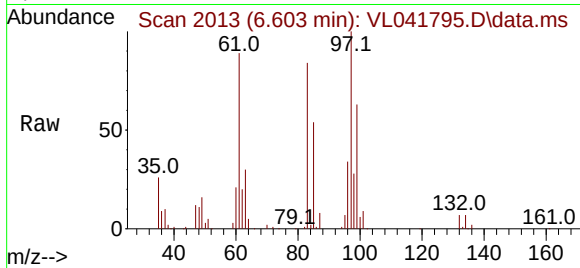




#47  
1,1,2-Trichloroethane  
Concen: 9.071 ppbv  
RT: 6.603 min Scan# 2013  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

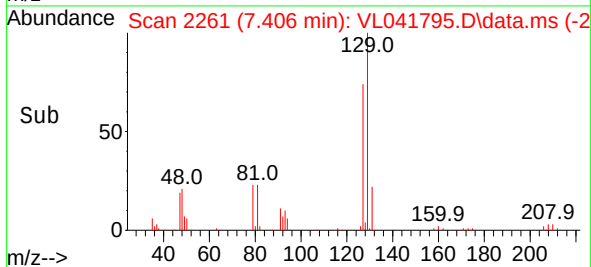
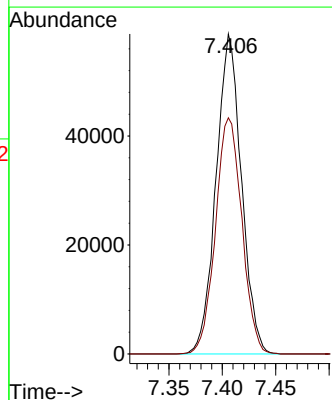
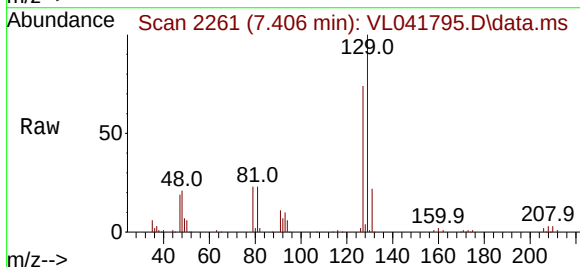
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

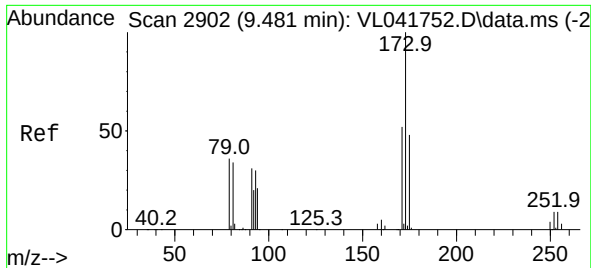
|             |                 |
|-------------|-----------------|
| Tgt Ion: 97 | Resp: 64954     |
| Ion Ratio   | Lower Upper     |
| 97          | 100             |
| 83          | 84.4 72.3 108.5 |
| 85          | 53.7 48.5 72.7  |
| 99          | 63.2 54.0 81.0  |



#48  
Dibromochloromethane  
Concen: 9.920 ppbv  
RT: 7.406 min Scan# 2261  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

|              |                 |
|--------------|-----------------|
| Tgt Ion: 129 | Resp: 96996     |
| Ion Ratio    | Lower Upper     |
| 129          | 100             |
| 127          | 76.8 38.8 116.3 |

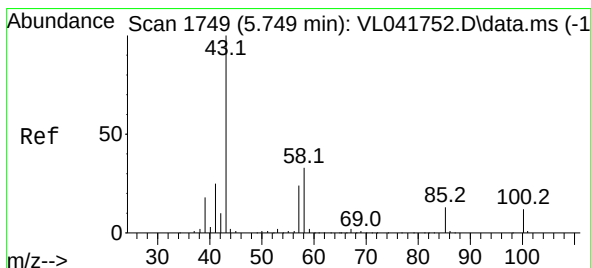
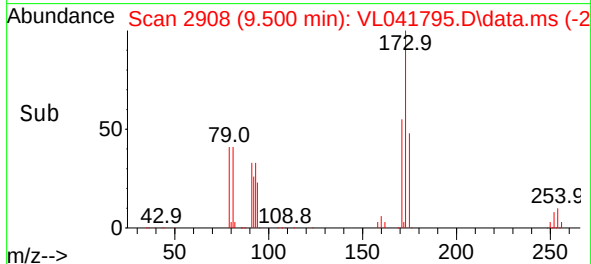
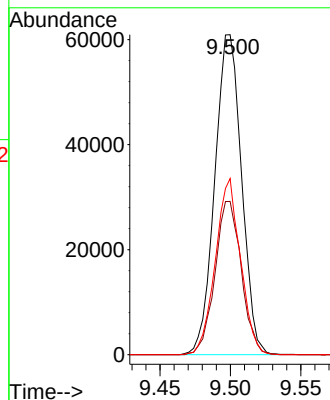
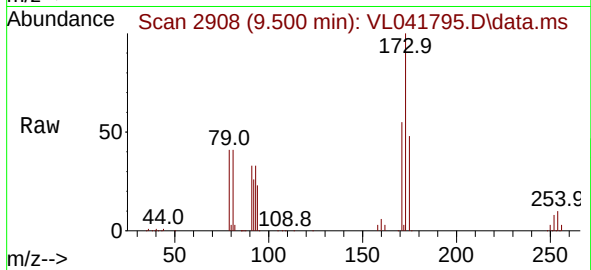




#49  
Bromoform  
Concen: 10.100 ppbv  
RT: 9.500 min Scan# 20  
Delta R.T. 0.019 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

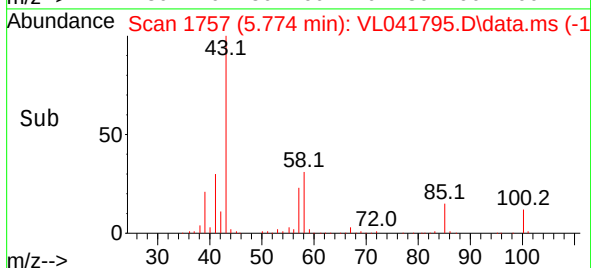
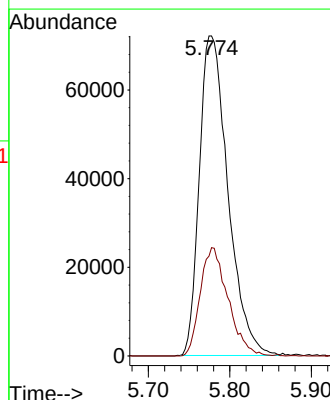
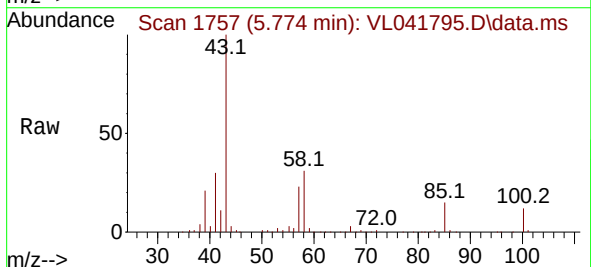
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

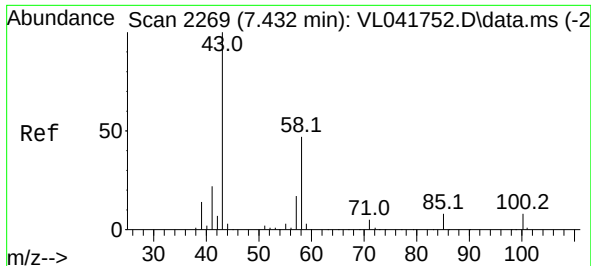
Tgt Ion:173 Resp: 80840  
Ion Ratio Lower Upper  
173 100  
175 47.1 38.2 57.2  
171 51.5 41.1 61.7



#50  
4-Methyl-2-Pentanone  
Concen: 8.759 ppbv  
RT: 5.774 min Scan# 1757  
Delta R.T. 0.026 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 43 Resp: 175817  
Ion Ratio Lower Upper  
43 100  
58 32.9 26.8 40.2

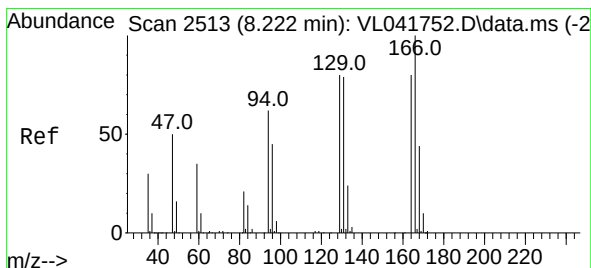
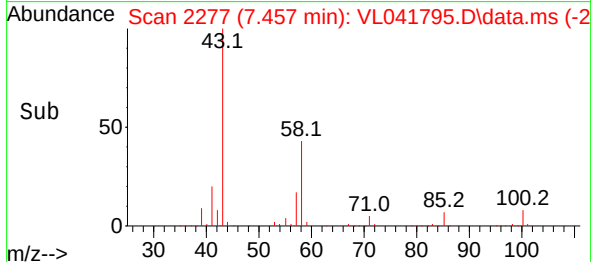
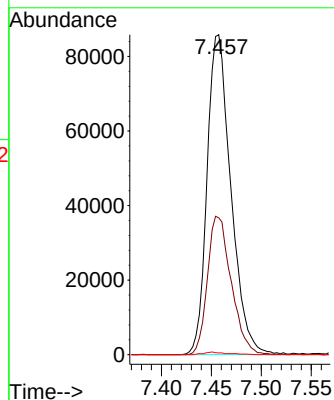
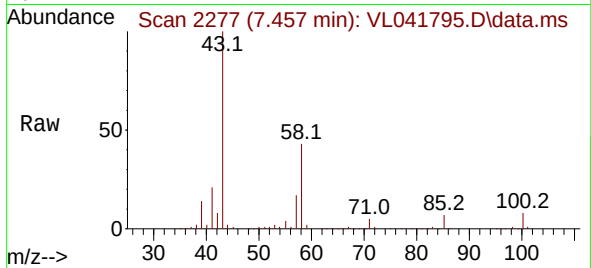




#51  
2-Hexanone  
Concen: 8.752 ppbv  
RT: 7.457 min Scan# 21  
Delta R.T. 0.025 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

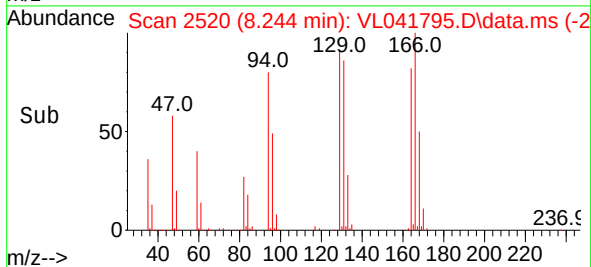
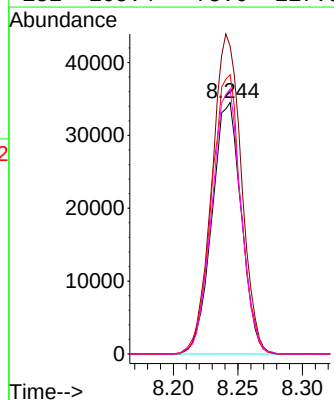
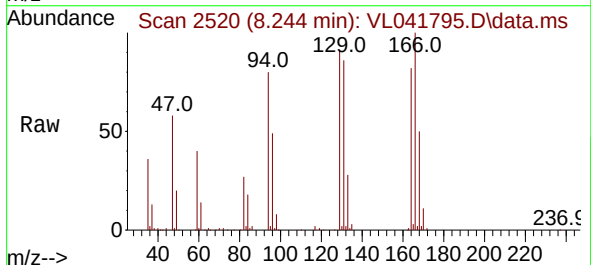
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

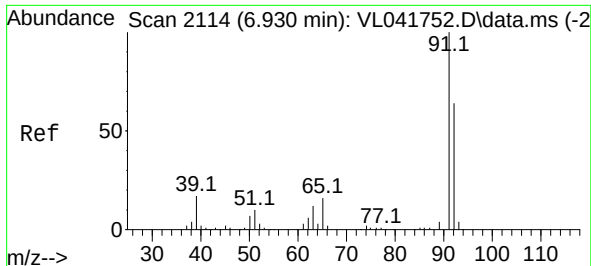
Tgt Ion: 43 Resp: 142403  
Ion Ratio Lower Upper  
43 100  
58 43.1 36.6 55.0  
98 0.8 0.1 0.1#



#52  
Tetrachloroethene  
Concen: 7.729 ppbv  
RT: 8.244 min Scan# 2520  
Delta R.T. 0.022 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 164 Resp: 54531  
Ion Ratio Lower Upper  
164 100  
166 122.5 99.8 149.6  
129 111.1 79.6 119.4  
131 105.4 78.6 117.8





#53

Toluene

Concen: 8.265 ppbv

RT: 6.952 min Scan# 2114

Delta R.T. 0.022 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

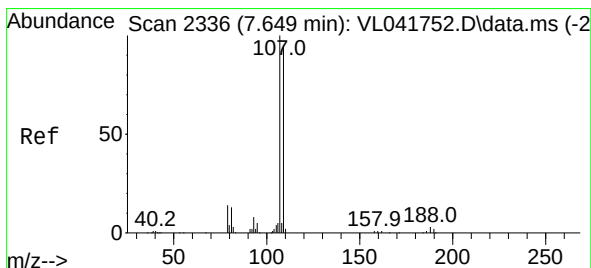
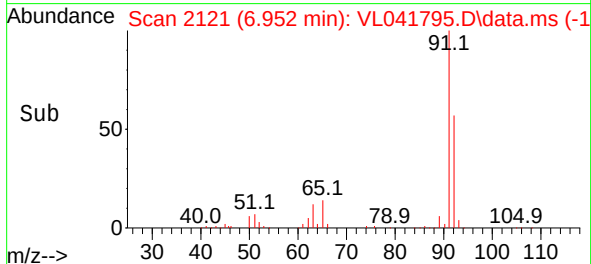
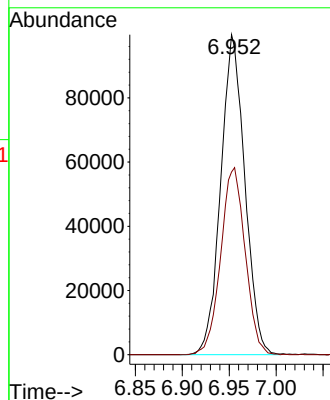
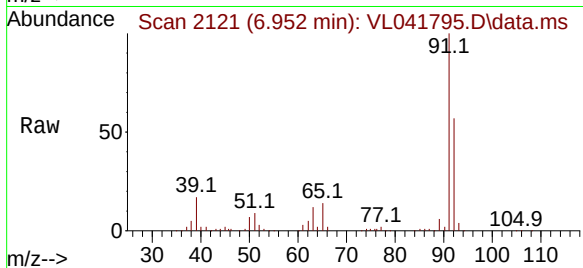
VL1218ABS01

Tgt Ion: 91 Resp: 177625

Ion Ratio Lower Upper

91 100

92 59.4 47.9 71.9



#54

1,2-Dibromoethane

Concen: 9.161 ppbv

RT: 7.671 min Scan# 2343

Delta R.T. 0.022 min

Lab File: VL041795.D

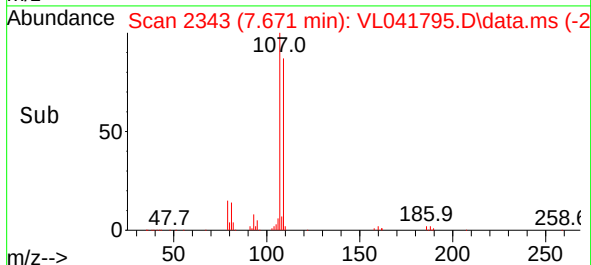
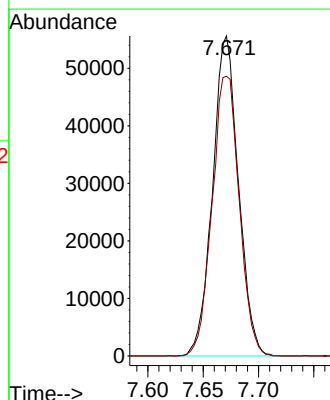
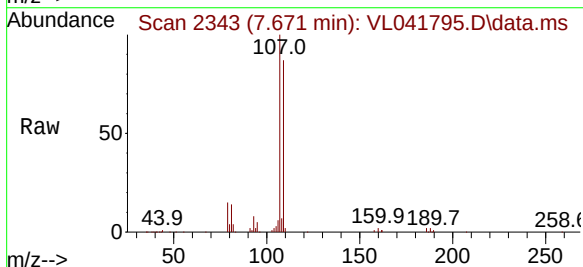
Acq: 18 Dec 2024 16:06

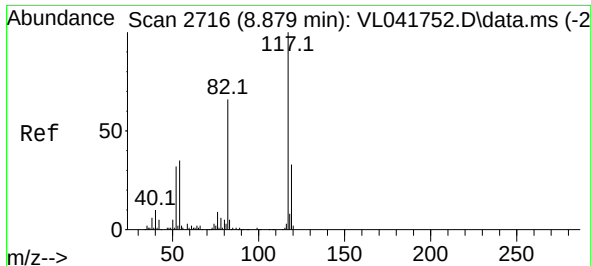
Tgt Ion: 107 Resp: 90389

Ion Ratio Lower Upper

107 100

109 87.4 75.9 113.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.898 min Scan# 2716

Delta R.T. 0.019 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

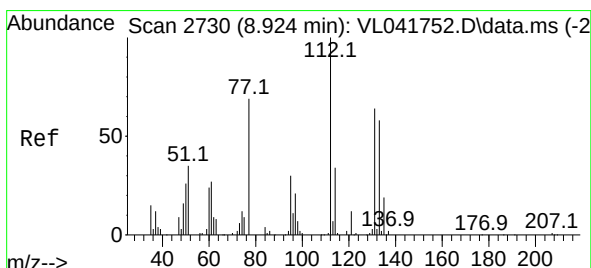
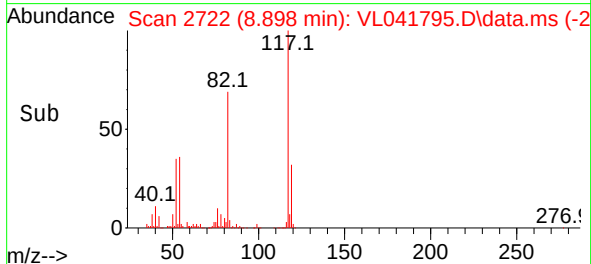
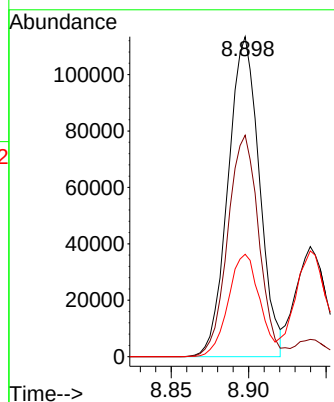
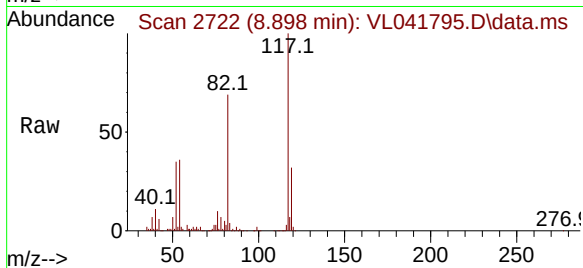
Tgt Ion:117 Resp: 159496

Ion Ratio Lower Upper

117 100

82 74.0 53.8 80.8

119 32.0 26.7 40.1



#56

1,1,1,2-Tetrachloroethane

Concen: 10.202 ppbv

RT: 8.943 min Scan# 2736

Delta R.T. 0.019 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

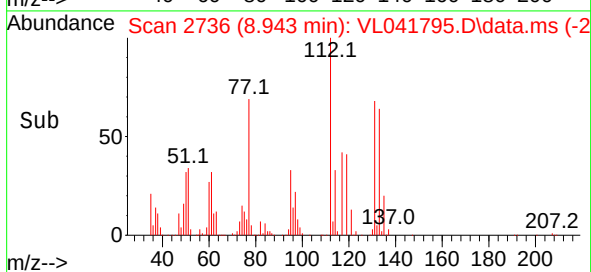
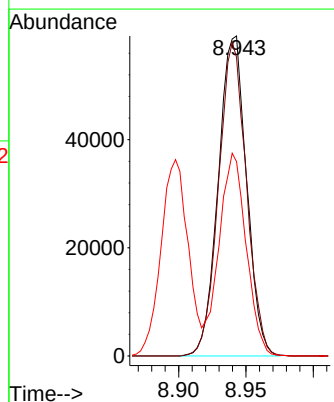
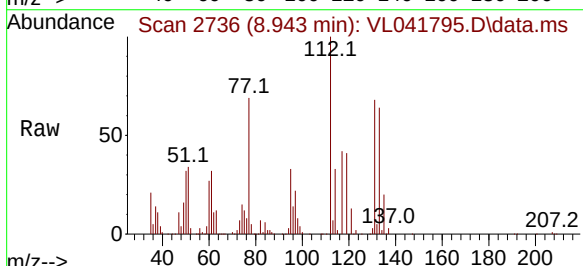
Tgt Ion:131 Resp: 86262

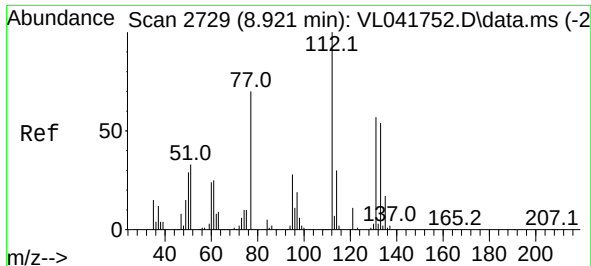
Ion Ratio Lower Upper

131 100

133 96.4 76.8 115.2

119 61.2 49.0 73.6





#57

Chlorobenzene

Concen: 9.415 ppbv

RT: 8.937 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01

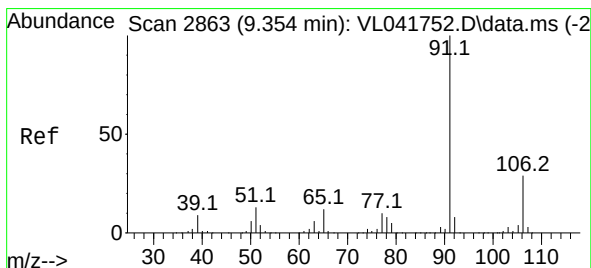
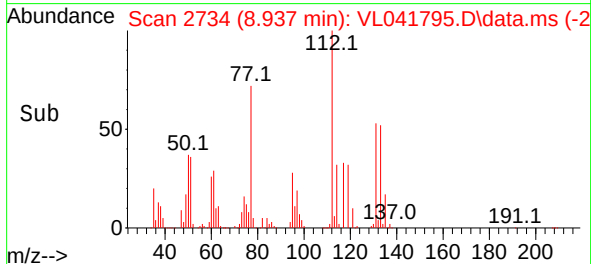
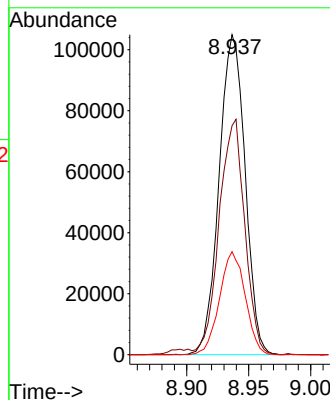
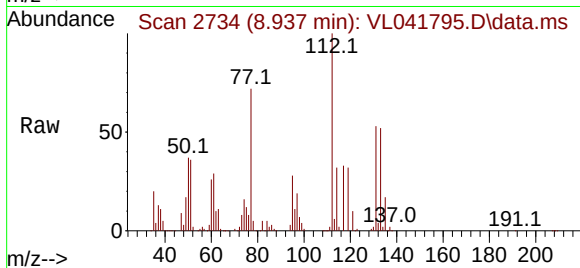
Tgt Ion:112 Resp: 153659

Ion Ratio Lower Upper

112 100

77 71.6 57.4 86.0

114 32.2 27.4 33.4



#58

Ethyl Benzene

Concen: 9.326 ppbv

RT: 9.370 min Scan# 2868

Delta R.T. 0.016 min

Lab File: VL041795.D

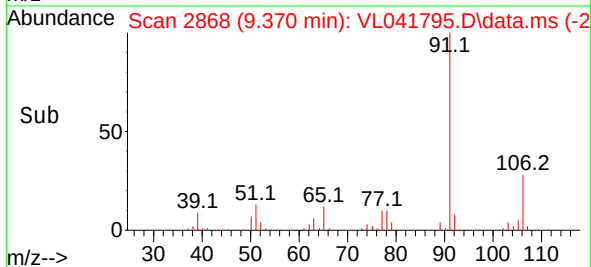
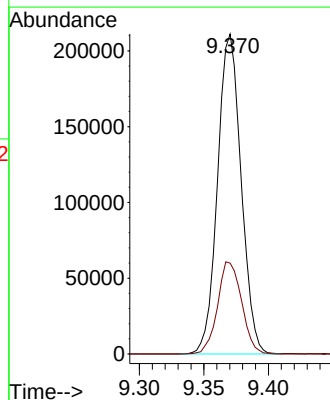
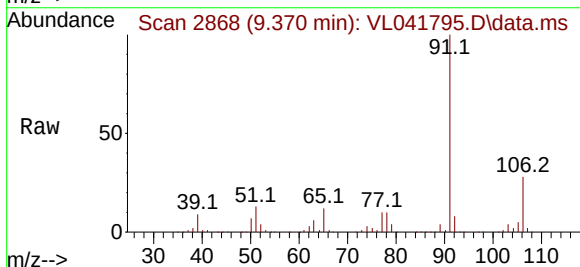
Acq: 18 Dec 2024 16:06

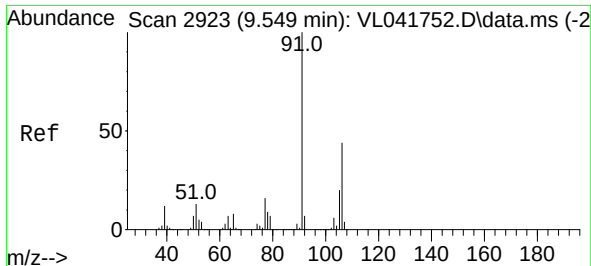
Tgt Ion: 91 Resp: 267795

Ion Ratio Lower Upper

91 100

106 28.4 23.5 35.3

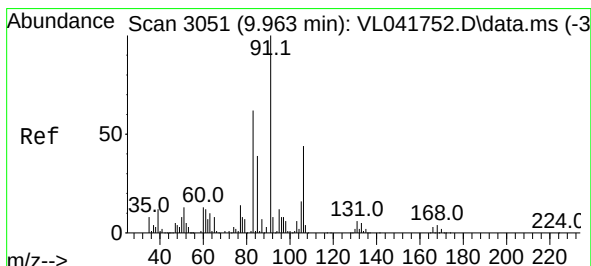
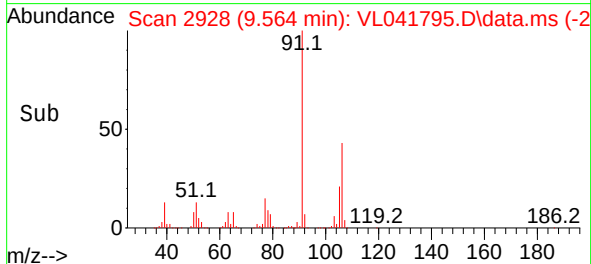
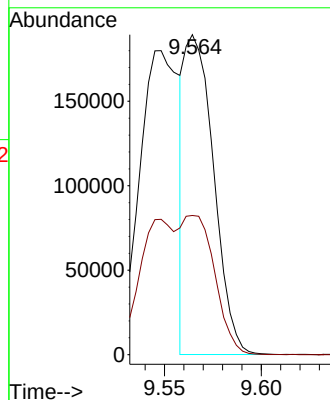
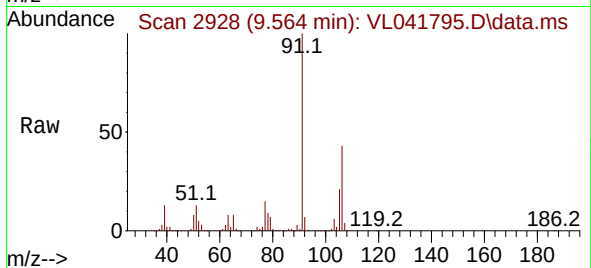




#59  
m/p-Xylene  
Concen: 8.573 ppbv  
RT: 9.564 min Scan# 2923  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

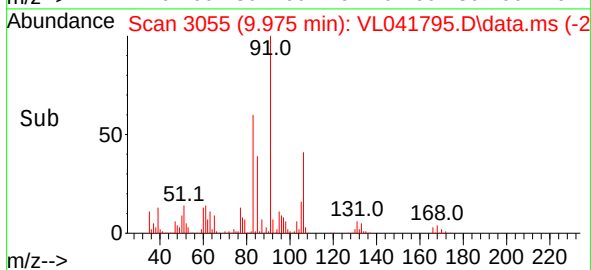
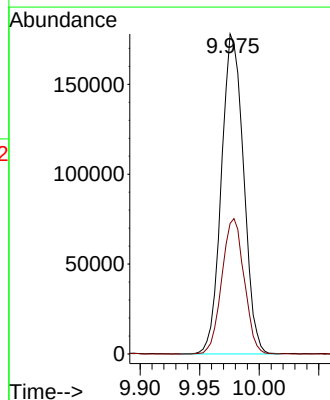
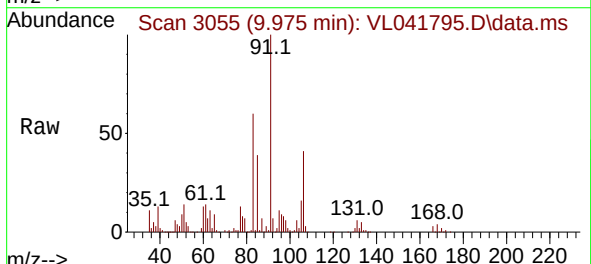
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

Tgt Ion: 91 Resp: 197933  
Ion Ratio Lower Upper  
91 100  
106 103.7 0.0 0.0#

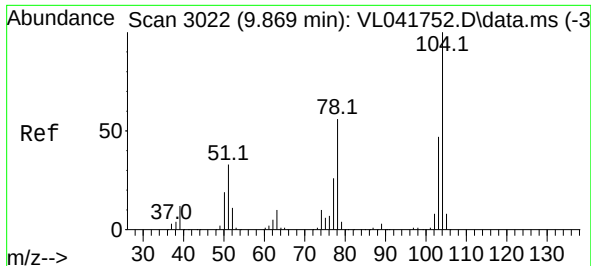


#60  
o-Xylene  
Concen: 9.930 ppbv  
RT: 9.975 min Scan# 3055  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 91 Resp: 229919  
Ion Ratio Lower Upper  
91 100  
106 42.5 21.1 63.4



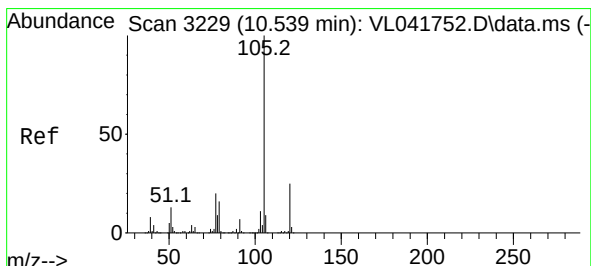
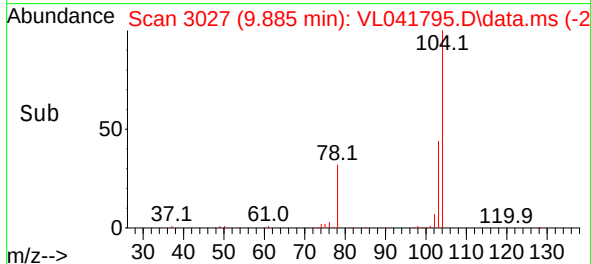
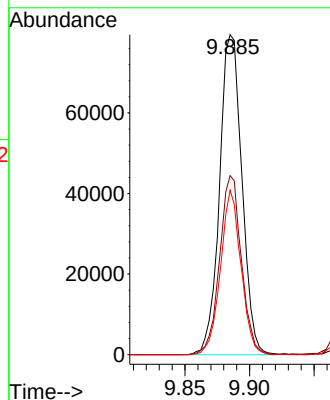
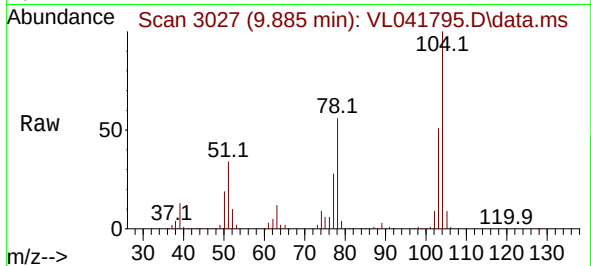




#61  
Styrene  
Concen: 9.543 ppbv  
RT: 9.885 min Scan# 3022  
Delta R.T. 0.016 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

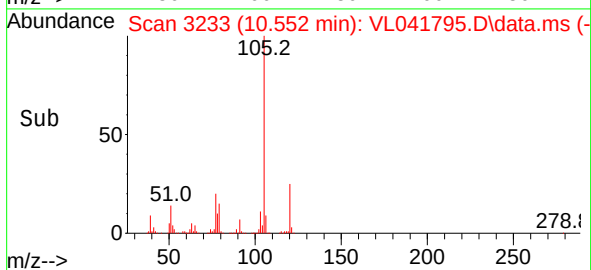
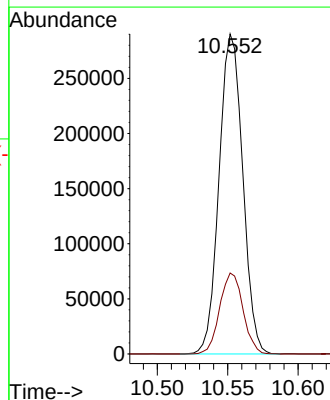
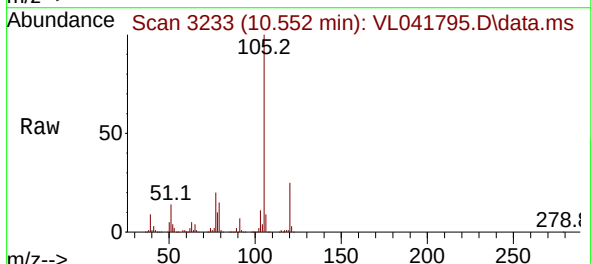
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

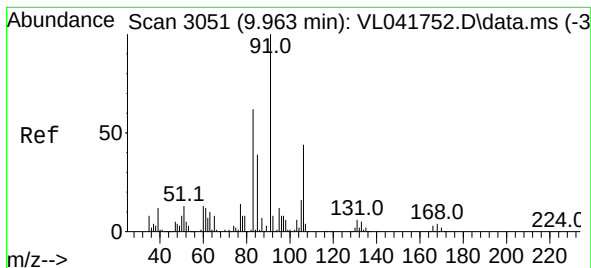
Tgt Ion:104 Resp: 95536  
Ion Ratio Lower Upper  
104 100  
78 54.4 43.8 65.6  
103 47.1 37.8 56.6



#62  
Isopropylbenzene  
Concen: 9.762 ppbv  
RT: 10.552 min Scan# 3233  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:105 Resp: 339599  
Ion Ratio Lower Upper  
105 100  
120 24.9 19.8 29.8

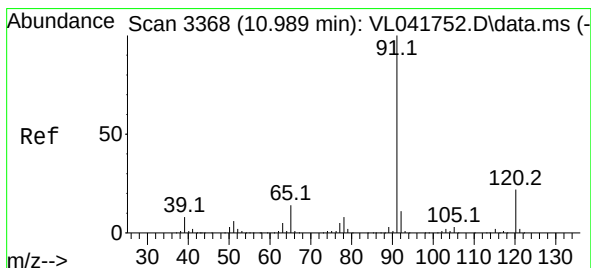
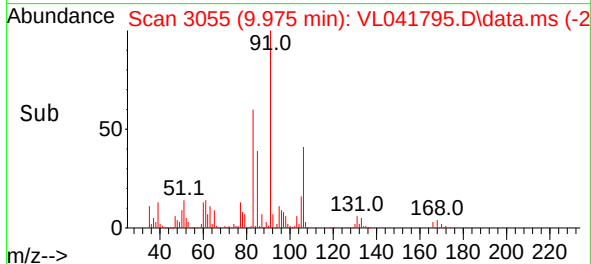
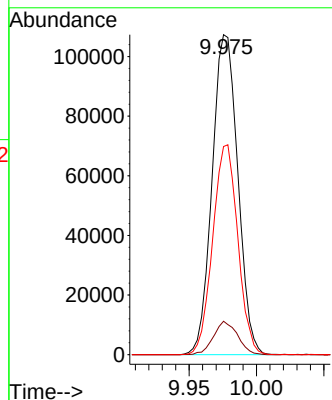
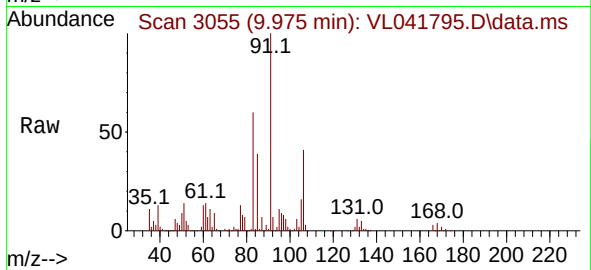




#63  
1,1,2,2-Tetrachloroethane  
Concen: 9.817 ppbv  
RT: 9.975 min Scan# 3051  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

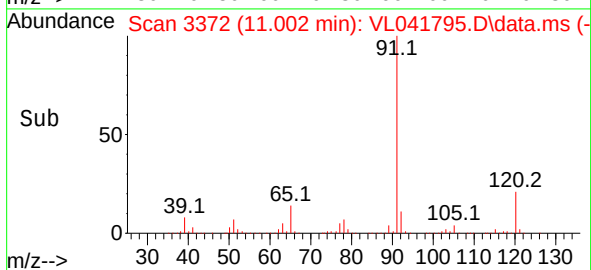
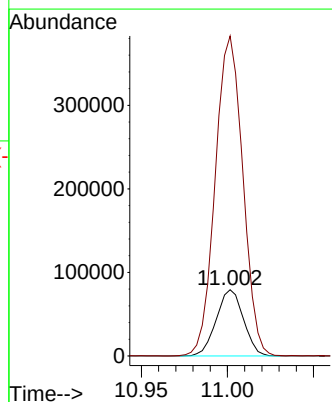
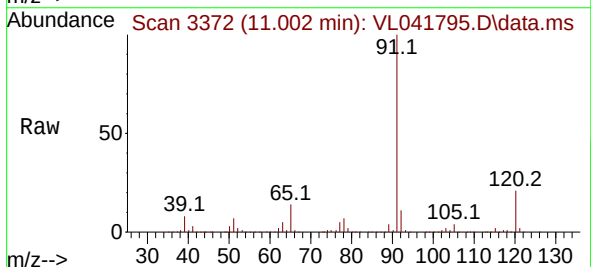
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

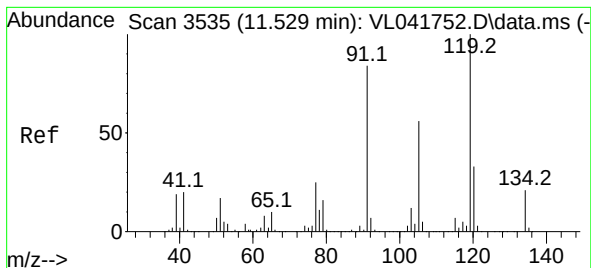
Tgt Ion: 83 Resp: 142272  
Ion Ratio Lower Upper  
83 100  
131 9.8 4.9 14.7  
85 64.1 32.0 96.2



#64  
n-propylbenzene  
Concen: 9.880 ppbv  
RT: 11.002 min Scan# 3372  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:120 Resp: 86896  
Ion Ratio Lower Upper  
120 100  
91 493.0 387.3 580.9

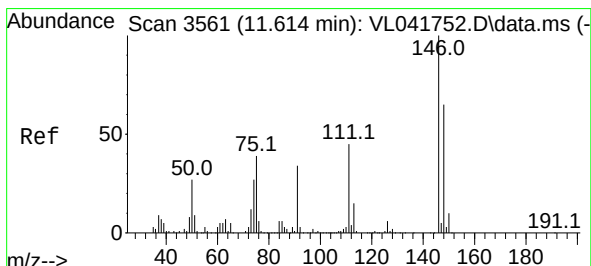
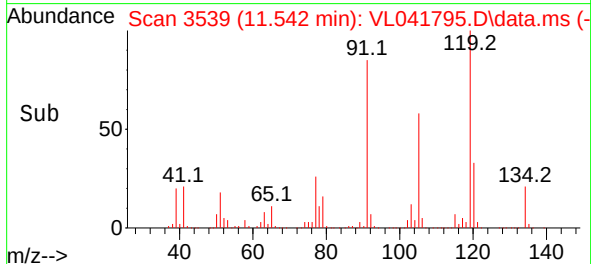
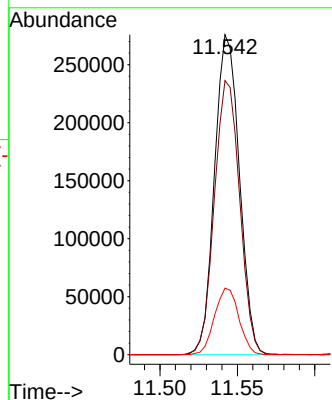
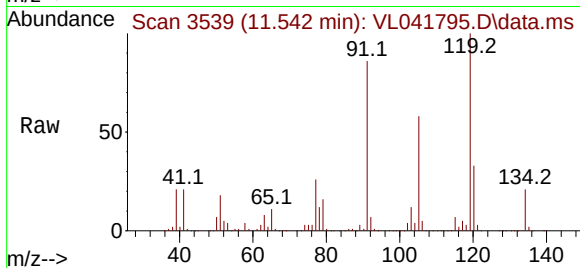




#65  
tert-Butylbenzene  
Concen: 9.808 ppbv  
RT: 11.542 min Scan# 3539  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

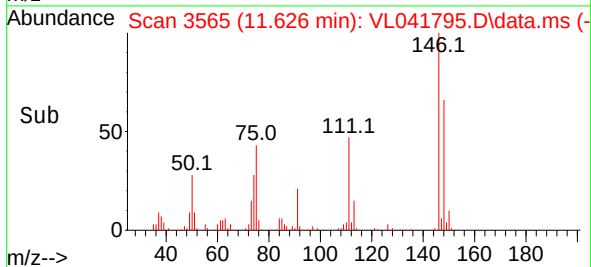
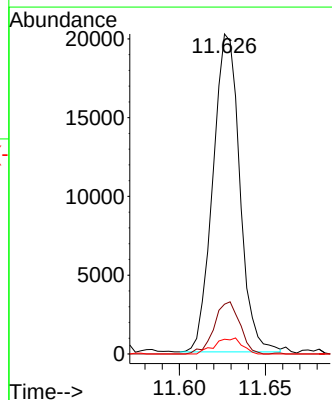
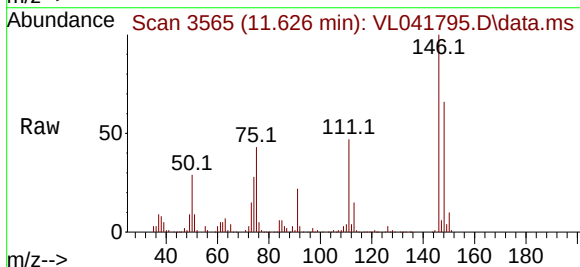
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

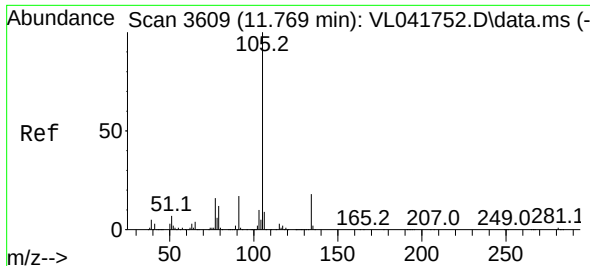
Tgt Ion:119 Resp: 307835  
Ion Ratio Lower Upper  
119 100  
91 87.3 67.0 100.4  
134 20.4 16.5 24.7



#66  
Benzyl Chloride  
Concen: 7.936 ppbv  
RT: 11.626 min Scan# 3565  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 91 Resp: 21939  
Ion Ratio Lower Upper  
91 100  
126 15.7 13.9 20.9  
128 5.1 4.4 6.6





#67

sec-Butylbenzene

Concen: 10.167 ppbv

RT: 11.778 min Scan# 3612

Delta R.T. 0.009 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

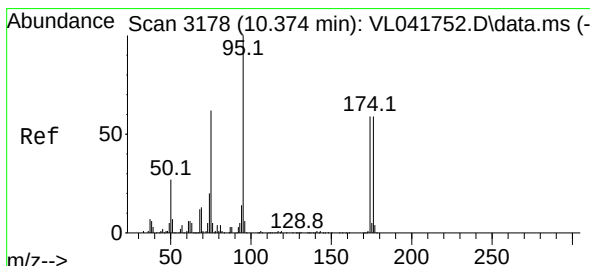
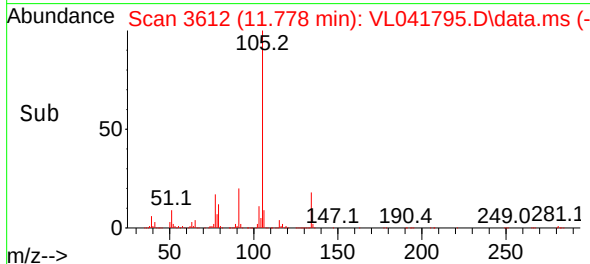
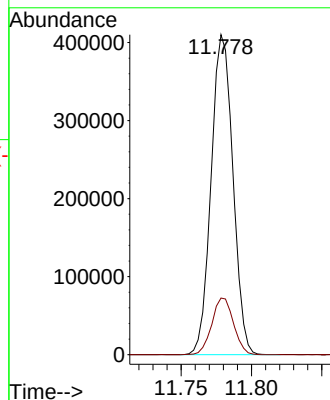
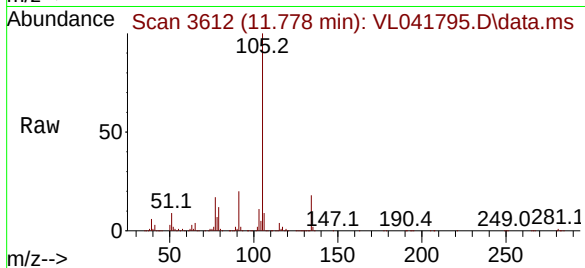
VL1218ABS01

Tgt Ion:105 Resp: 441578

Ion Ratio Lower Upper

105 100

134 17.6 14.5 21.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.825 ppbv

RT: 10.390 min Scan# 3183

Delta R.T. 0.016 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

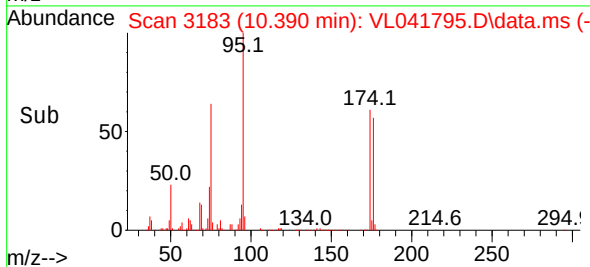
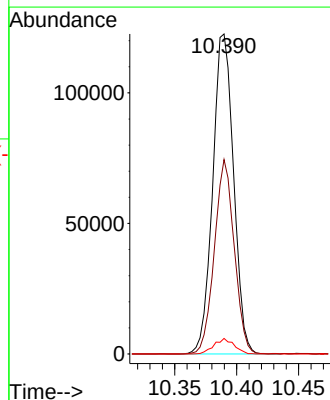
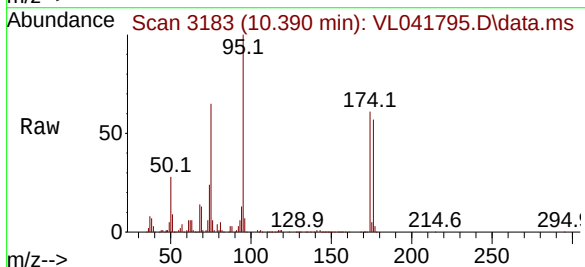
Tgt Ion: 95 Resp: 143879

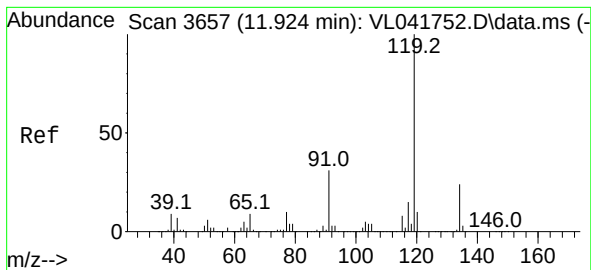
Ion Ratio Lower Upper

95 100

174 57.9 47.6 71.4

175 4.6 3.7 5.5

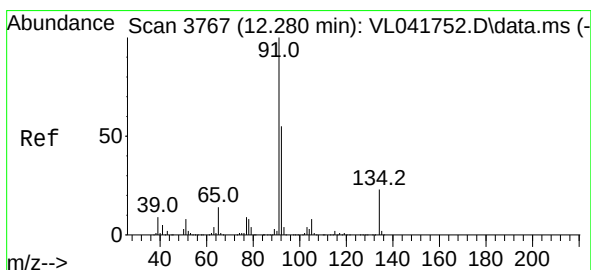
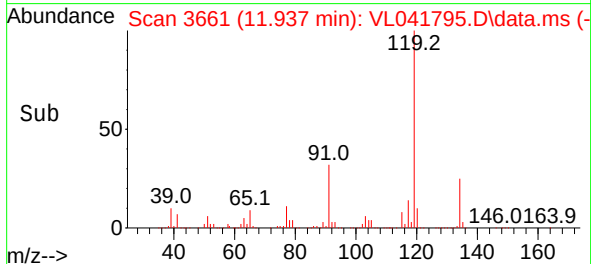
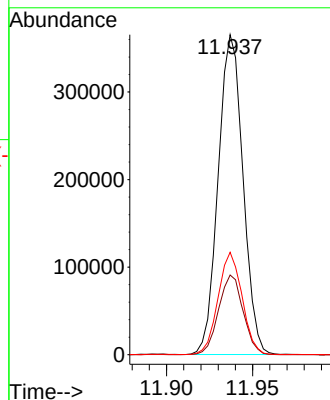
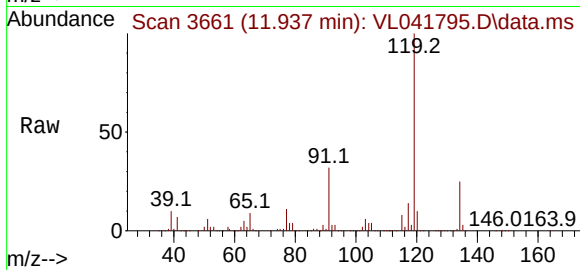




#69  
 p-Isopropyltoluene  
 Concen: 10.229 ppbv  
 RT: 11.937 min Scan# 3661  
 Delta R.T. 0.013 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

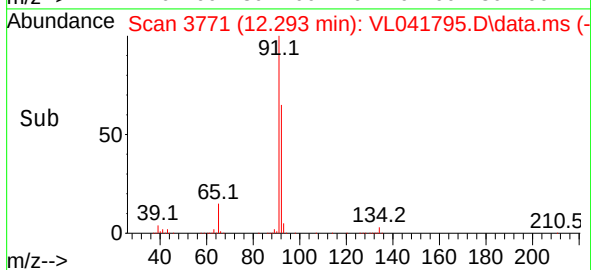
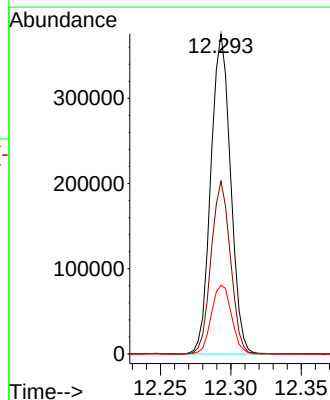
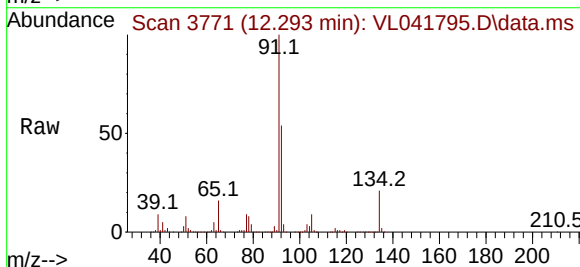
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VL1218ABS01

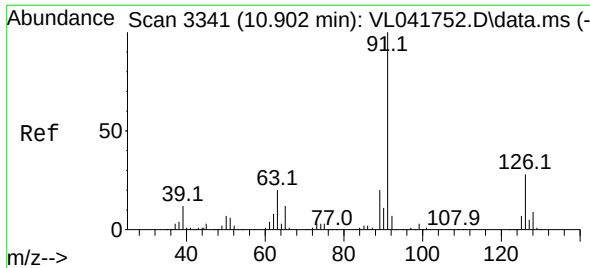
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 119   | Resp: | 366111 |
| Ion      | Ratio | Lower | Upper  |
| 119      | 100   |       |        |
| 134      | 24.7  | 19.6  | 29.4   |
| 91       | 31.3  | 24.4  | 36.6   |



#70  
 n-Butylbenzene  
 Concen: 10.597 ppbv  
 RT: 12.293 min Scan# 3771  
 Delta R.T. 0.013 min  
 Lab File: VL041795.D  
 Acq: 18 Dec 2024 16:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 366451 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 52.8  | 43.2  | 64.8   |
| 134      | 22.0  | 18.2  | 27.4   |

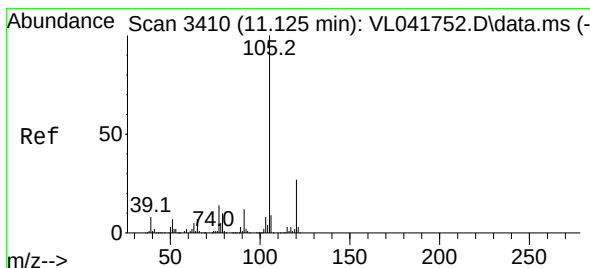
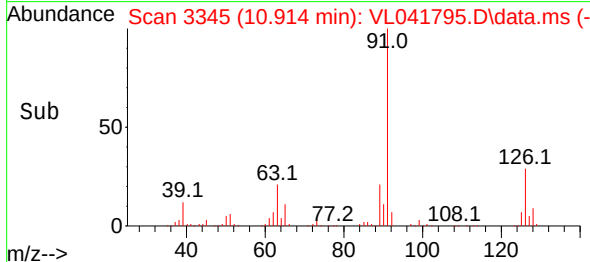
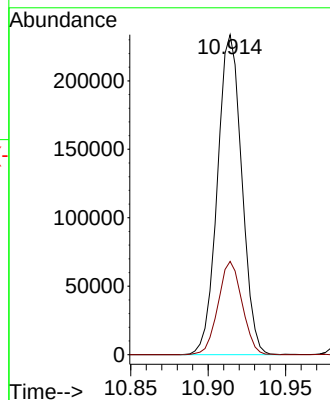
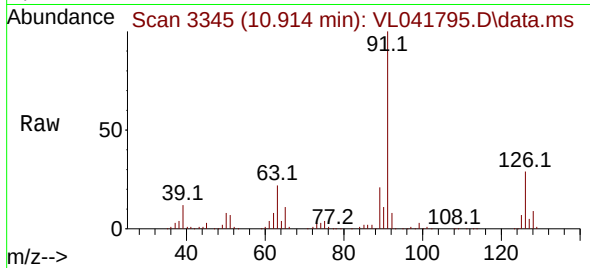




#71  
2-Chlorotoluene  
Concen: 9.622 ppbv  
RT: 10.914 min Scan# 3414  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

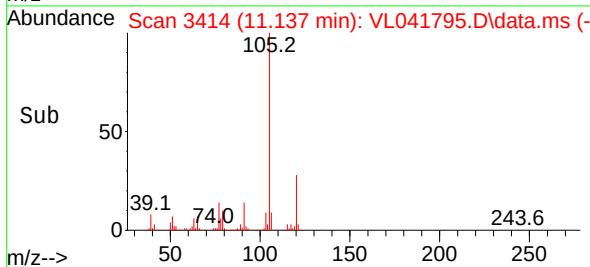
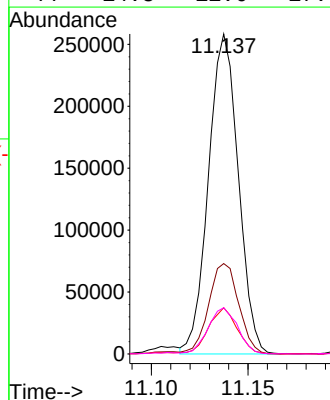
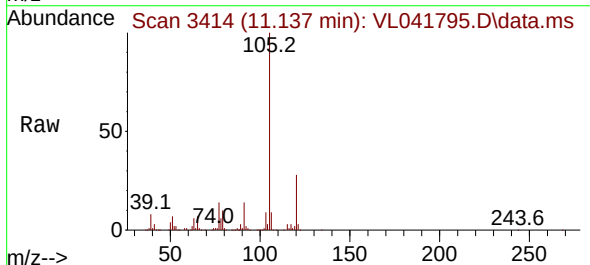
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

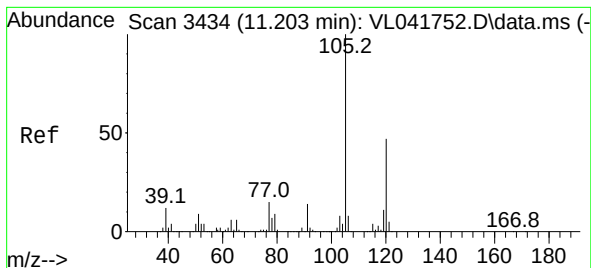
Tgt Ion: 91 Resp: 255490  
Ion Ratio Lower Upper  
91 100  
126 28.7 11.6 46.4



#72  
4-Ethyltoluene  
Concen: 10.137 ppbv  
RT: 11.137 min Scan# 3414  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion: 105 Resp: 277025  
Ion Ratio Lower Upper  
105 100  
120 29.1 23.3 34.9  
91 14.4 10.9 16.3  
77 14.8 11.6 17.4





#73

1,3,5-Trimethylbenzene

Concen: 10.613 ppbv

RT: 11.215 min Scan# 3438

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

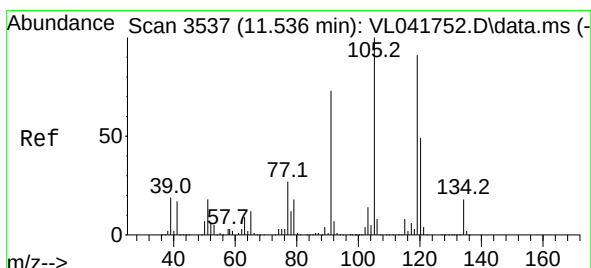
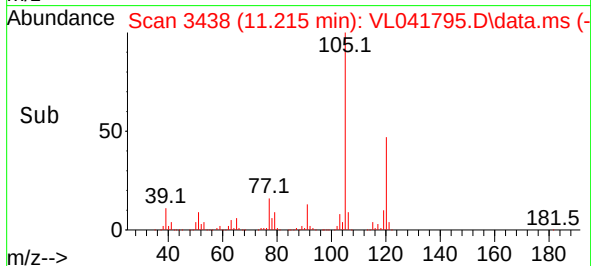
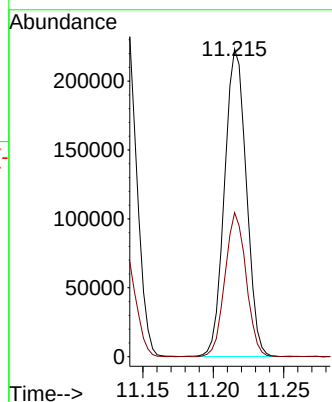
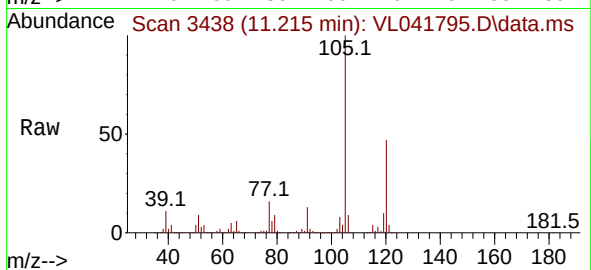
VL1218ABS01

Tgt Ion:105 Resp: 240648

Ion Ratio Lower Upper

105 100

120 46.8 37.4 56.2



#74

1,2,4-Trimethylbenzene

Concen: 10.679 ppbv

RT: 11.548 min Scan# 3541

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

Tgt Ion:105 Resp: 260378

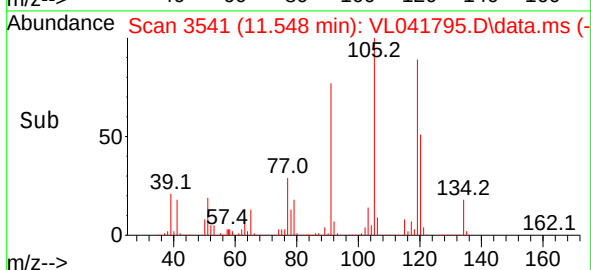
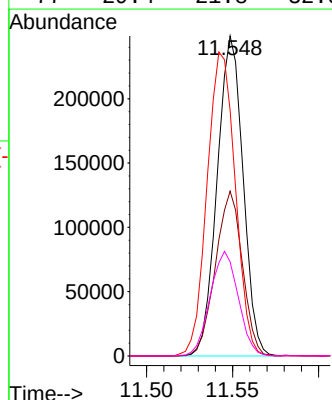
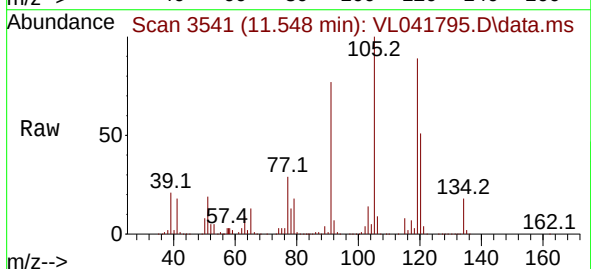
Ion Ratio Lower Upper

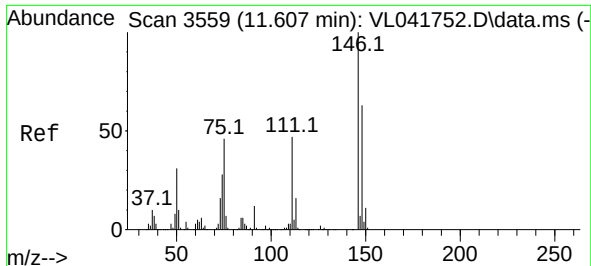
105 100

120 51.5 39.0 58.4

91 76.7 58.1 87.1

77 29.4 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 9.809 ppbv

RT: 11.620 min Scan# 3563

Delta R.T. 0.013 min

Lab File: VL041795.D

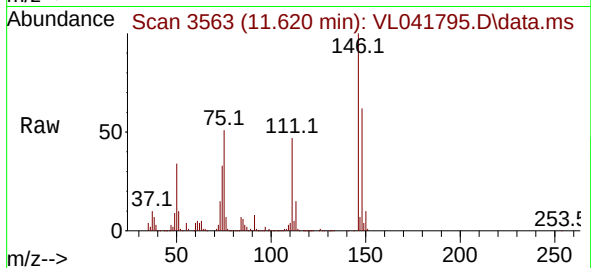
Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_1

ClientSampleId :

VL1218ABS01



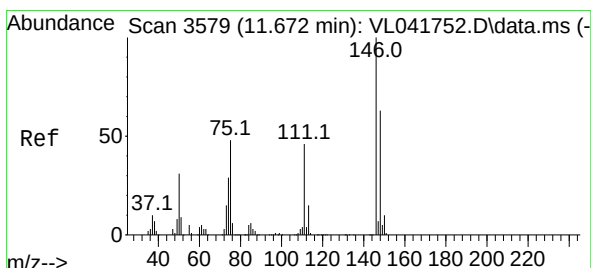
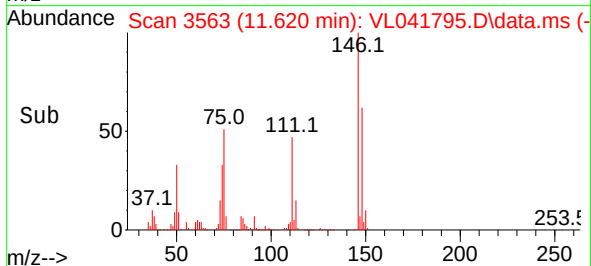
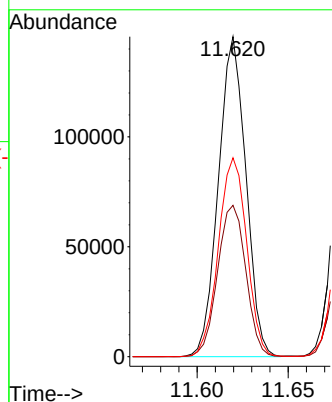
Tgt Ion:146 Resp: 152493

Ion Ratio Lower Upper

146 100

111 48.7 23.4 70.3

148 64.1 31.6 95.0



#76

1,4-Dichlorobenzene

Concen: 9.926 ppbv

RT: 11.684 min Scan# 3583

Delta R.T. 0.013 min

Lab File: VL041795.D

Acq: 18 Dec 2024 16:06

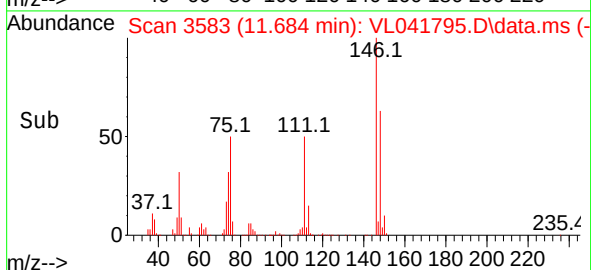
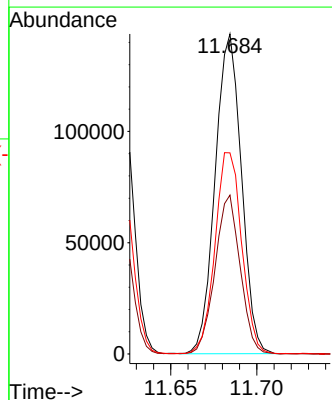
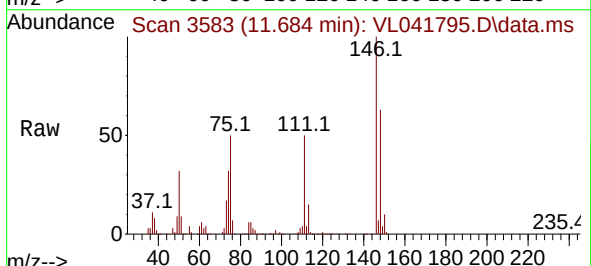
Tgt Ion:146 Resp: 152432

Ion Ratio Lower Upper

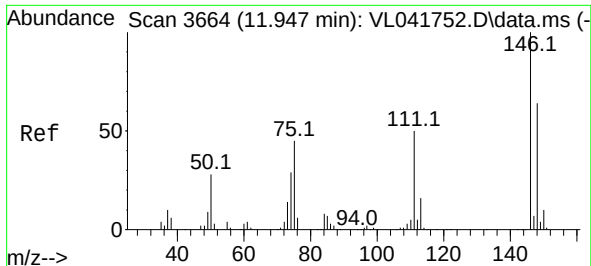
146 100

111 47.8 22.7 68.1

148 64.5 31.4 94.0



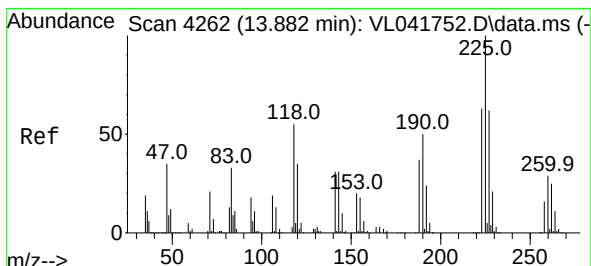
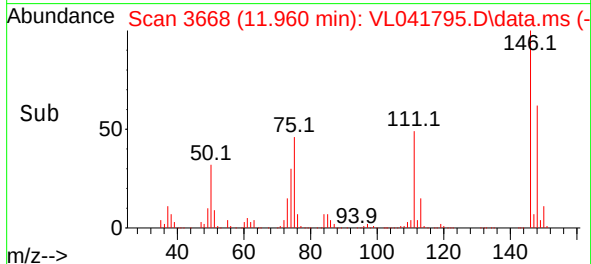
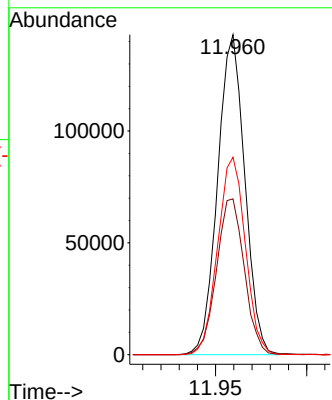
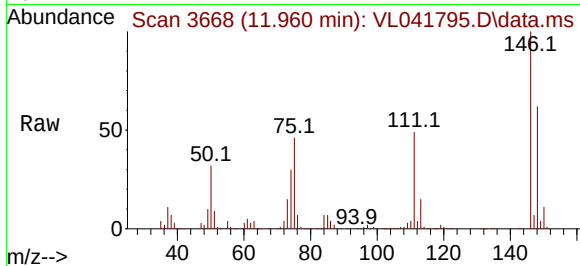




#77  
1,2-Dichlorobenzene  
Concen: 9.922 ppbv  
RT: 11.960 min Scan# 3668  
Delta R.T. 0.013 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

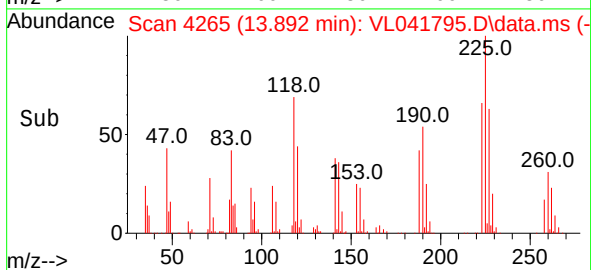
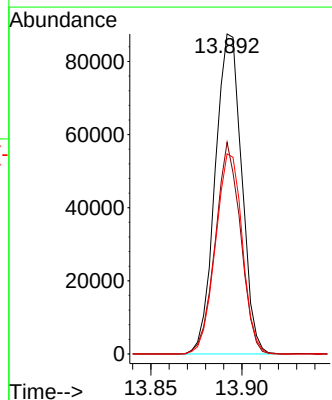
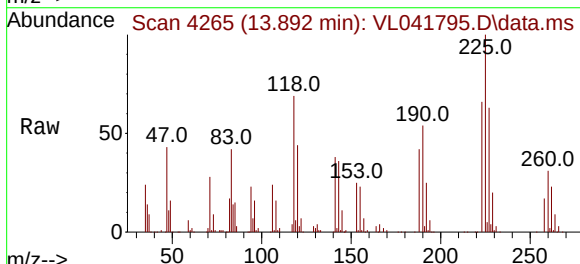
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

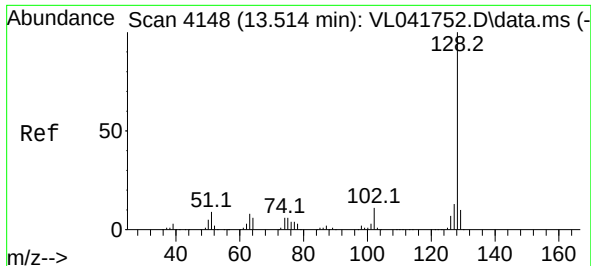
Tgt Ion:146 Resp: 148412  
Ion Ratio Lower Upper  
146 100  
111 50.0 24.8 74.3  
148 62.8 31.8 95.4



#78  
Hexachloro-1,3-Butadiene  
Concen: 7.987 ppbv  
RT: 13.892 min Scan# 4265  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:225 Resp: 88582  
Ion Ratio Lower Upper  
225 100  
223 62.9 50.5 75.7  
227 63.3 50.3 75.5

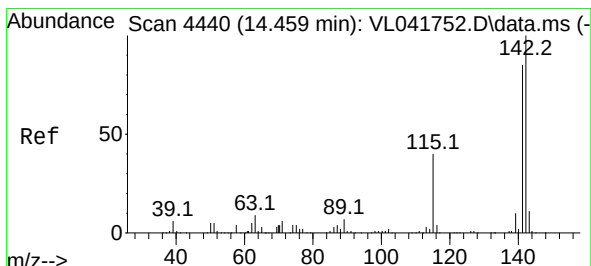
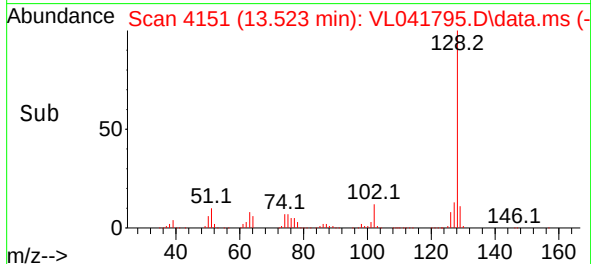
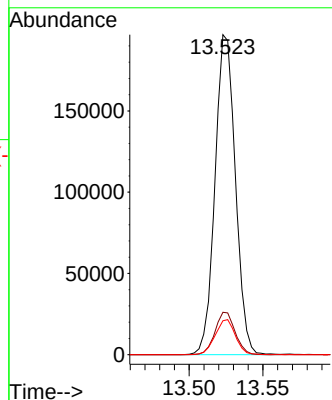
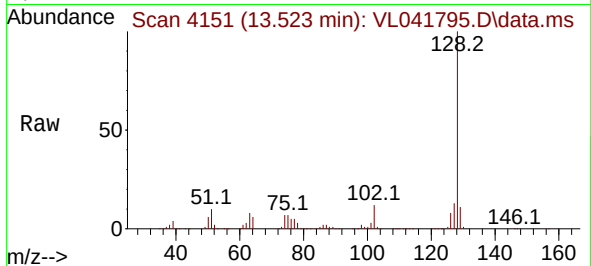




#79  
Naphthalene  
Concen: 11.154 ppbv  
RT: 13.523 min Scan# 4148  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

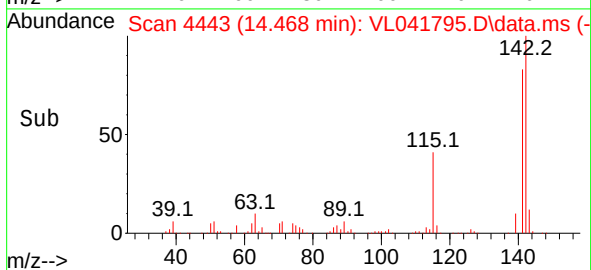
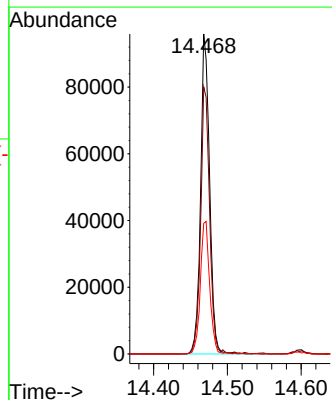
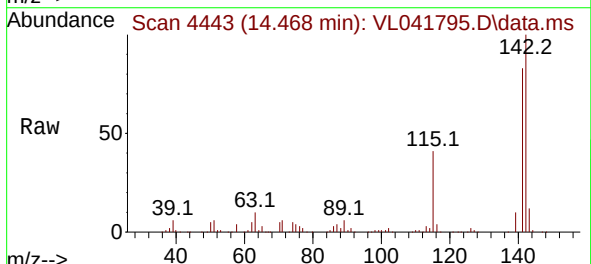
Instrument :  
MSVOA\_1  
ClientSampleId :  
VL1218ABS01

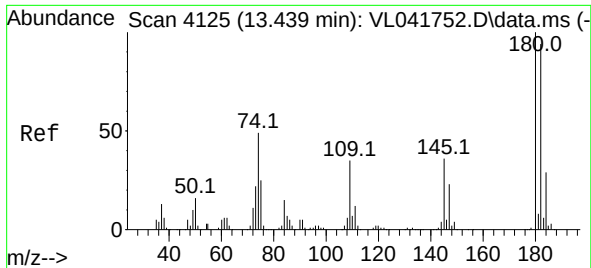
Tgt Ion:128 Resp: 189506  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.7 16.1  
129 10.6 8.2 12.4



#80  
Naphthalene,2-methyl-  
Concen: 15.634 ppbv  
RT: 14.468 min Scan# 4443  
Delta R.T. 0.009 min  
Lab File: VL041795.D  
Acq: 18 Dec 2024 16:06

Tgt Ion:142 Resp: 82155  
Ion Ratio Lower Upper  
142 100  
141 82.5 68.4 102.6  
115 43.2 32.5 48.7





#81

1,2,4-Trichlorobenzene

Concen: 9.592 ppbv

RT: 13.452 min Scan# 41

Delta R.T. 0.013 min

Lab File: VL041795.D

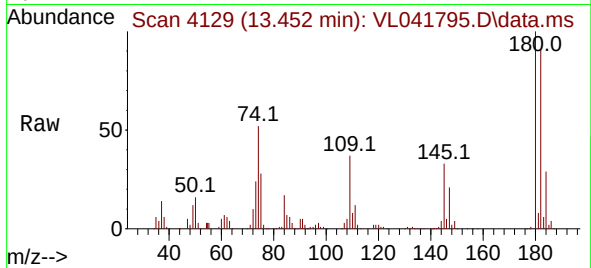
Acq: 18 Dec 2024 16:06

Instrument :

MSVOA\_L

ClientSampleId :

VL1218ABS01



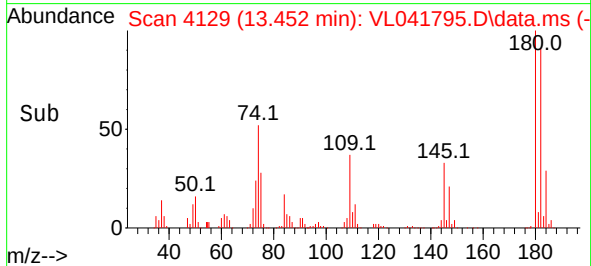
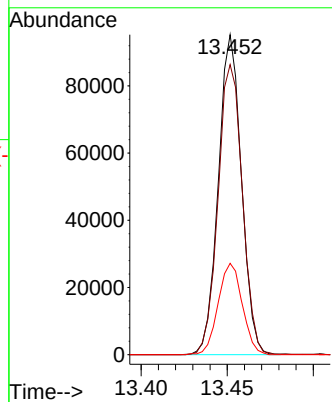
Tgt Ion:180 Resp: 89052

Ion Ratio Lower Upper

180 100

182 95.5 77.0 115.6

184 29.8 23.8 35.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041802.D  
 Acq On : 18 Dec 2024 19:58  
 Operator : SY/MD  
 Sample : P5294-01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB6

Quant Time: Dec 19 07:58:37 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

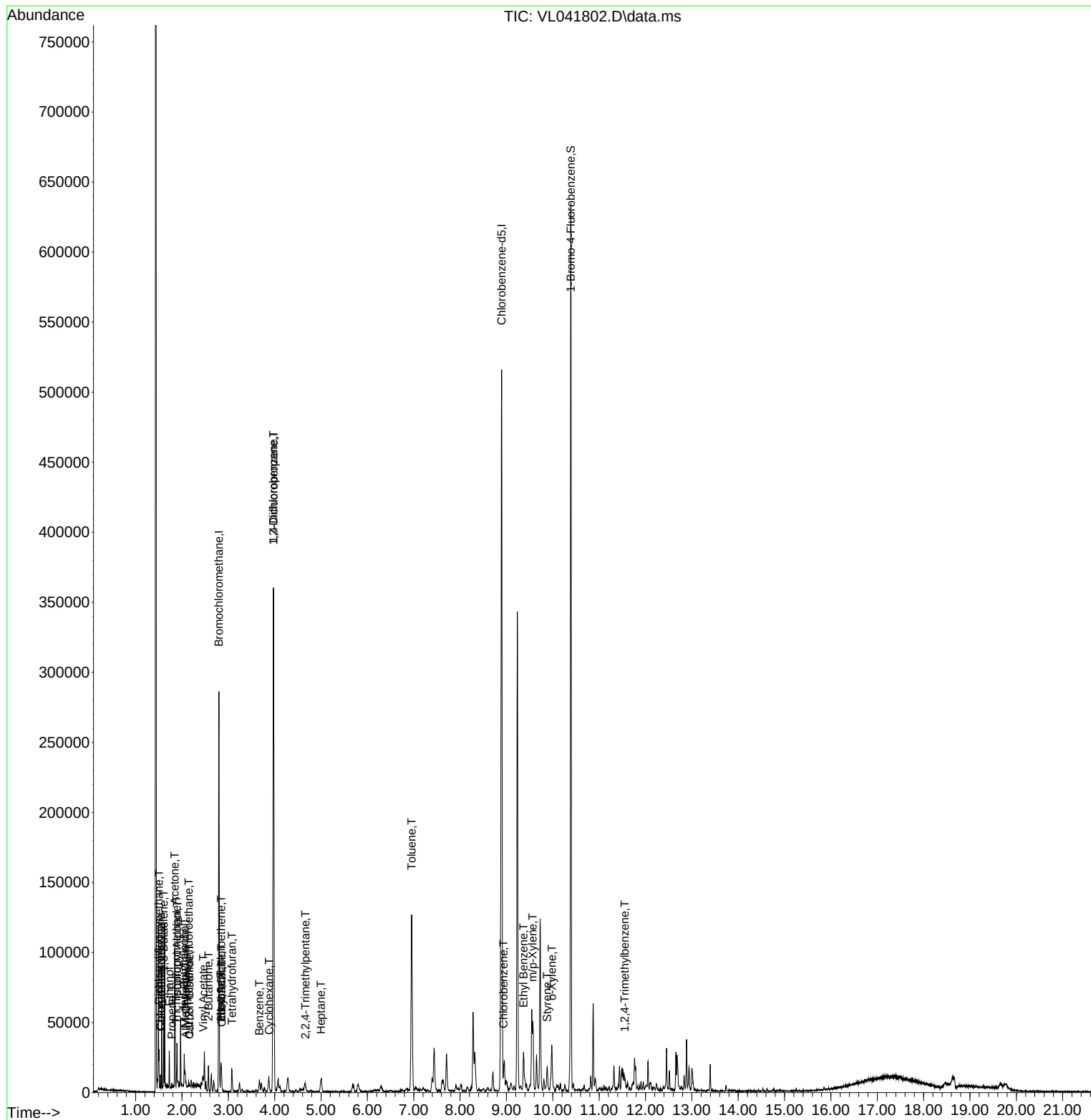
Response via : Initial Calibration

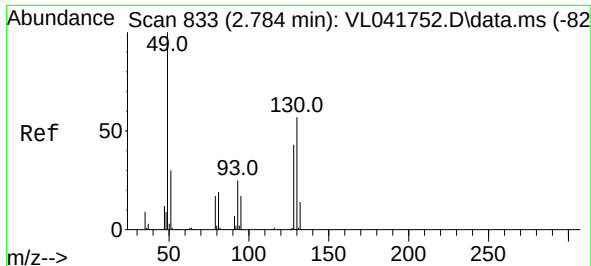
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 2.797  | 49    | 77034    | 10.000   | ppbv   | 0.01     |
| 33) 1,4-Difluorobenzene       | 3.971  | 114   | 192884   | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5          | 8.894  | 117   | 185181   | 10.000   | ppbv   | 0.02     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 10.390 | 95    | 150031   | 9.722    | ppbv   | 0.02     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 97.200%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 1.502  | 85    | 4687     | 0.342    | ppbv   | 96       |
| 3) Chlorodifluoromethane      | 1.538  | 51    | 571      | 0.045    | ppbv   | 99       |
| 4) Chloromethane              | 1.534  | 50    | 2543     | 0.474    | ppbv   | 96       |
| 9) Propene                    | 1.777  | 41    | 841      | 0.154    | ppbv   | 92       |
| 10) Heptane                   | 5.001  | 43    | 1896     | 0.136    | ppbv # | 39       |
| 11) Trichlorofluoromethane    | 1.884  | 101   | 2709     | 0.186    | ppbv   | 96       |
| 12) 1,1,2-Trichlorotrifluo... | 2.146  | 101   | 598      | 0.054    | ppbv   | 94       |
| 13) Ethanol                   | 1.725  | 45    | 8754     | 19.416   | ppbv   | 94       |
| 15) Acetone                   | 1.842  | 43    | 46647    | 3.112    | ppbv   | 93       |
| 16) 1,3-Butadiene             | 1.606  | 39    | 5842     | 0.990    | ppbv # | 29       |
| 17) tert-Butyl alcohol        | 2.049  | 59    | 7709     | 0.518    | ppbv   | 96       |
| 19) Isopropyl Alcohol         | 1.890  | 45    | 11560    | 1.285    | ppbv # | 30       |
| 20) Methylene Chloride        | 2.068  | 84    | 1379     | 0.323    | ppbv # | 76       |
| 21) Allyl Chloride            | 2.085  | 41    | 413      | 0.051    | ppbv # | 25       |
| 23) Vinyl Acetate             | 2.457  | 43    | 6394     | 0.919    | ppbv # | 88       |
| 25) Ethyl Acetate             | 2.852  | 43    | 11451    | 0.411    | ppbv # | 92       |
| 26) Hexane                    | 2.839  | 57    | 2712     | 0.256    | ppbv # | 29       |
| 27) Carbon Disulfide          | 2.159  | 76    | 616      | 0.065    | ppbv # | 1        |
| 29) Chloroform                | 2.855  | 83    | 796      | 0.049    | ppbv # | 73       |
| 30) Cyclohexane               | 3.878  | 84    | 1001     | 0.111    | ppbv # | 1        |
| 31) cis-1,2-Dichloroethene    | 2.848  | 61    | 1221     | 0.112    | ppbv # | 28       |
| 34) 2-Butanone                | 2.570  | 43    | 10728    | 0.691    | ppbv   | 96       |
| 36) Benzene                   | 3.670  | 78    | 4321     | 0.217    | ppbv   | 93       |
| 39) 1,2-Dichloropropane       | 3.975  | 63    | 53145    | 7.365    | ppbv # | 18       |
| 41) Tetrahydrofuran           | 3.075  | 42    | 5402     | 0.621    | ppbv   | 97       |
| 44) 2,2,4-Trimethylpentane    | 4.661  | 57    | 1670     | 0.049    | ppbv # | 1        |
| 53) Toluene                   | 6.956  | 91    | 82132    | 3.631    | ppbv   | 99       |
| 57) Chlorobenzene             | 8.937  | 112   | 1507     | 0.080    | ppbv   | 88       |
| 58) Ethyl Benzene             | 9.367  | 91    | 11534    | 0.346    | ppbv   | 95       |
| 59) m/p-Xylene                | 9.564  | 91    | 8373     | 0.312    | ppbv # | 100      |
| 60) o-Xylene                  | 9.979  | 91    | 13407    | 0.499    | ppbv   | 96       |
| 61) Styrene                   | 9.882  | 104   | 3334     | 0.287    | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 11.548 | 105   | 1962     | 0.069    | ppbv # | 70       |

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

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
C0AB6

- 1
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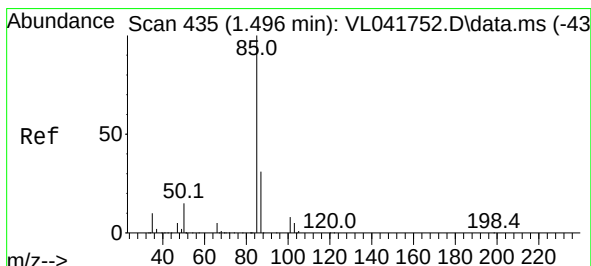
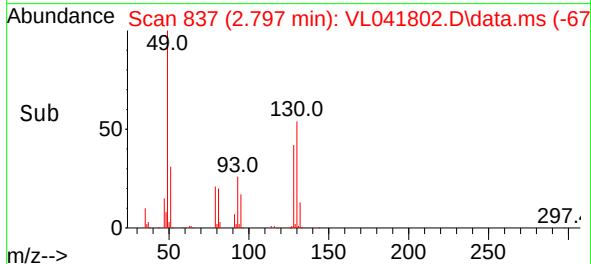
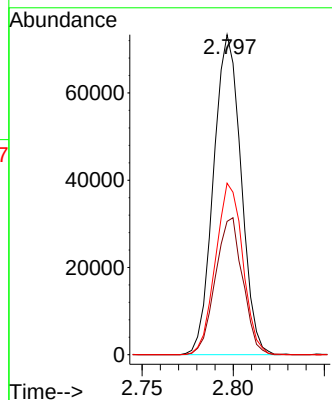
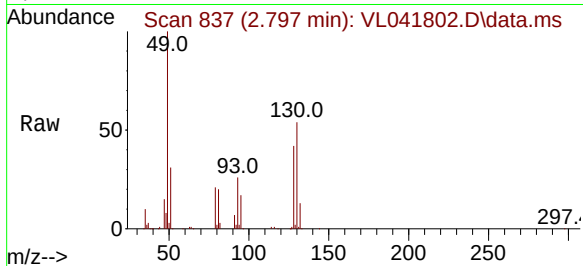




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.797 min Scan# 841  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

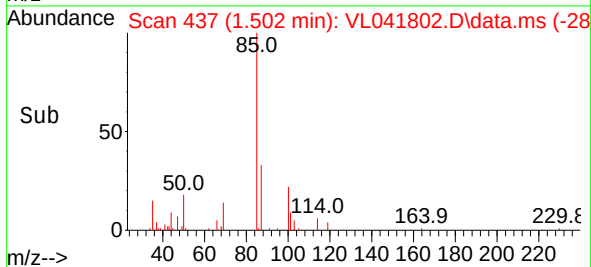
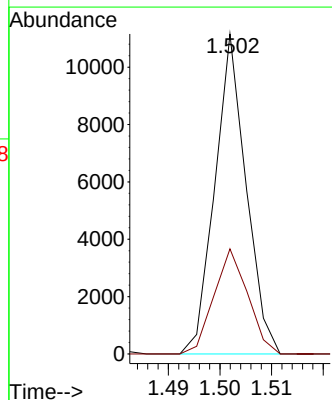
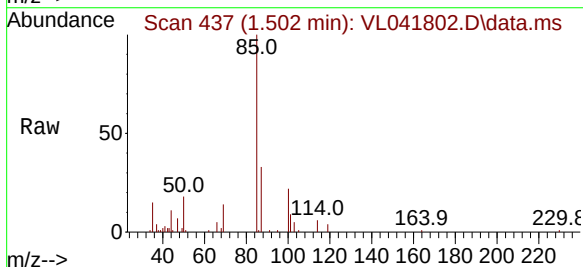
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

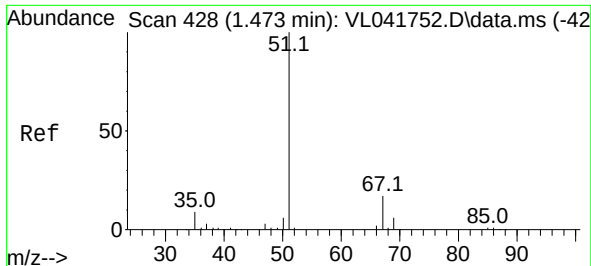
Tgt Ion: 49 Resp: 77034  
Ion Ratio Lower Upper  
49 100  
128 42.5 21.6 64.6  
130 53.1 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.342 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 85 Resp: 4687  
Ion Ratio Lower Upper  
85 100  
87 32.8 24.5 36.7

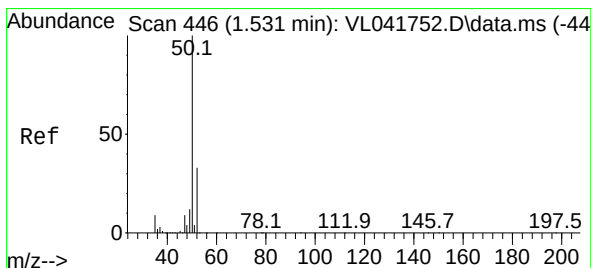
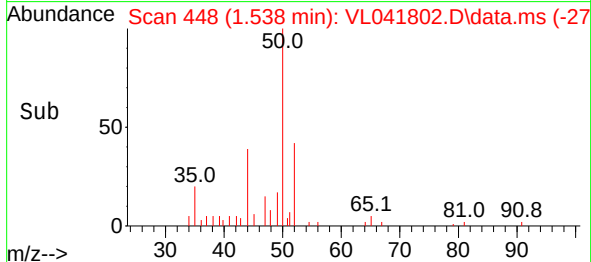
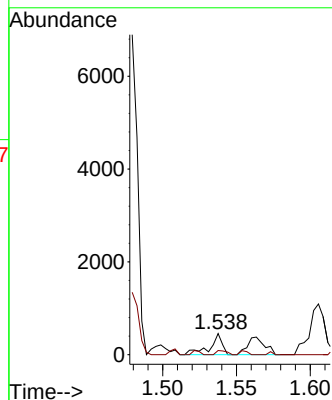
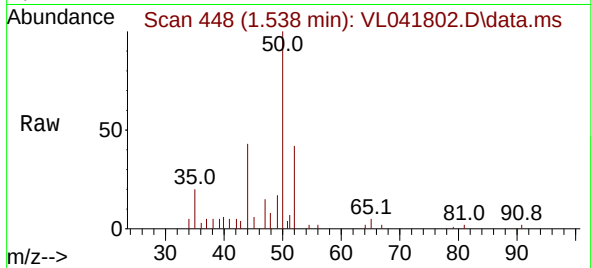




#3  
Chlorodifluoromethane  
Concen: 0.045 ppbv  
RT: 1.538 min Scan# 446  
Delta R.T. 0.064 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

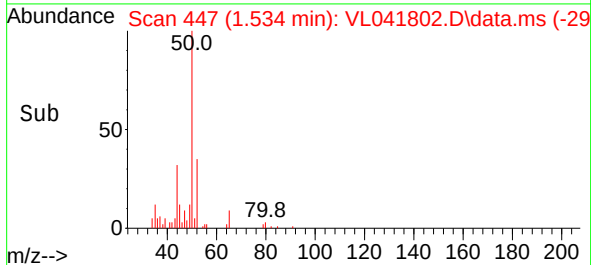
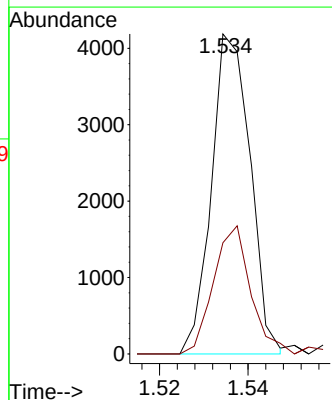
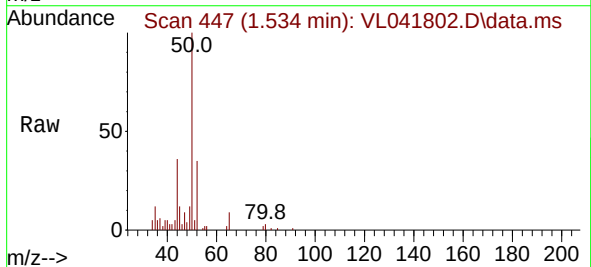
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

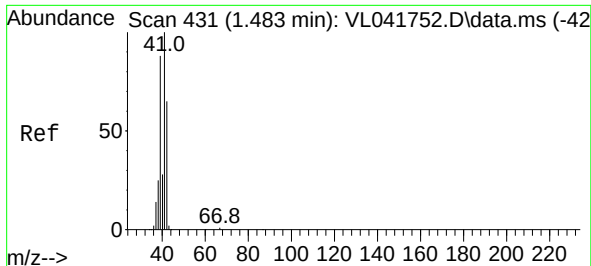
Tgt Ion: 51 Resp: 571  
Ion Ratio Lower Upper  
51 100  
67 18.2 15.0 22.4



#4  
Chloromethane  
Concen: 0.474 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 50 Resp: 2543  
Ion Ratio Lower Upper  
50 100  
52 34.8 26.2 39.2

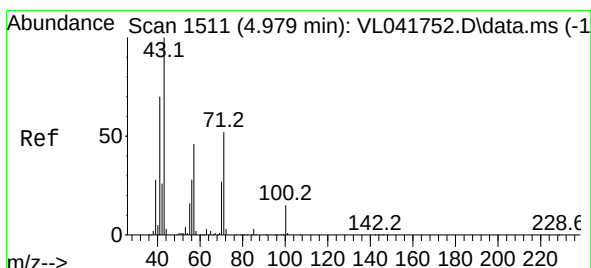
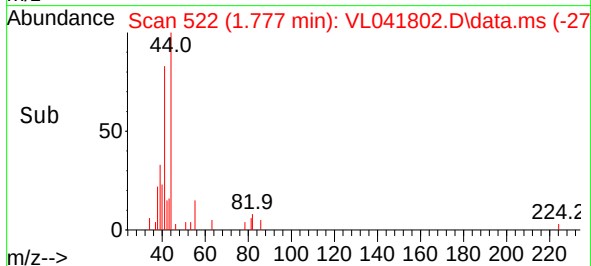
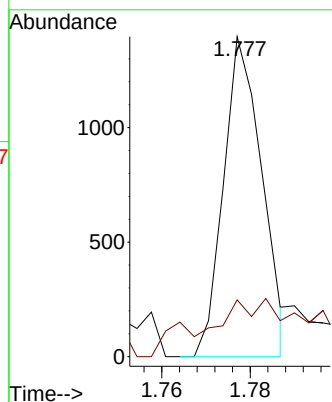
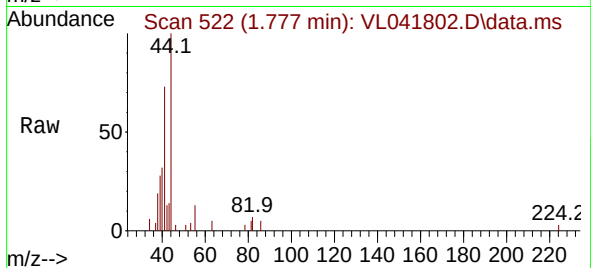




#9  
Propene  
Concen: 0.154 ppbv  
RT: 1.777 min Scan# 51  
Delta R.T. 0.294 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

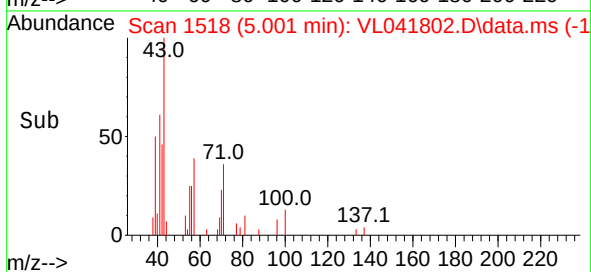
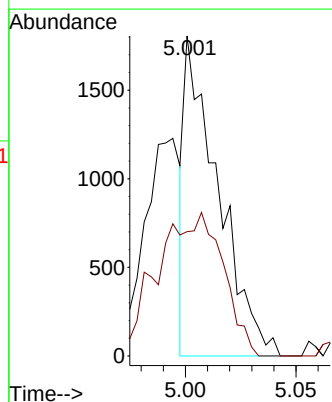
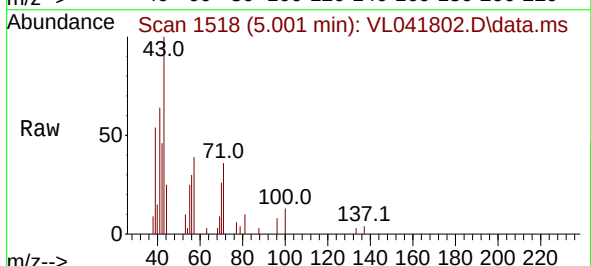
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

Tgt Ion: 41 Resp: 841  
Ion Ratio Lower Upper  
41 100  
42 59.3 52.4 78.6

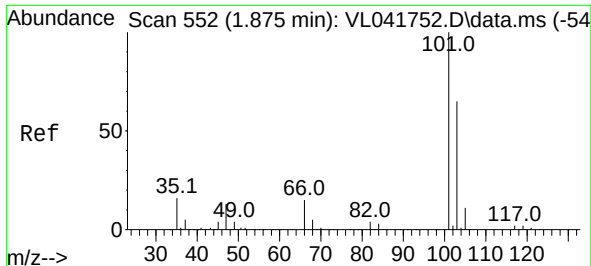


#10  
Heptane  
Concen: 0.136 ppbv  
RT: 5.001 min Scan# 1518  
Delta R.T. 0.022 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 43 Resp: 1896  
Ion Ratio Lower Upper  
43 100  
57 89.5 38.5 57.7#



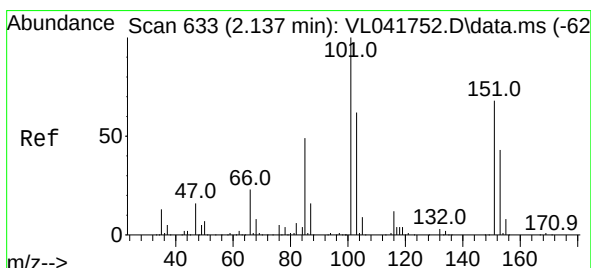
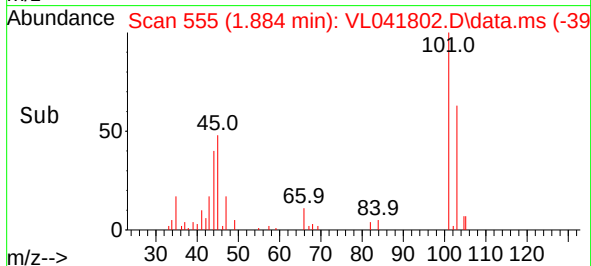
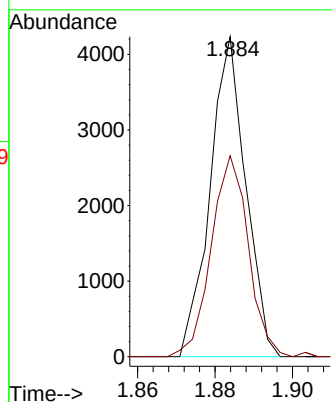
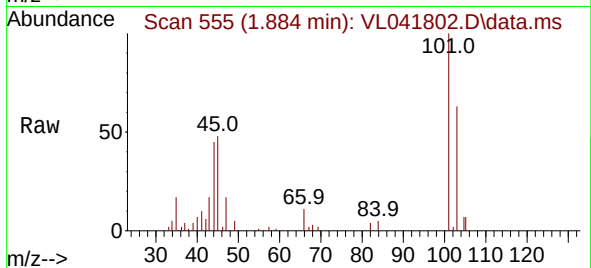




#11  
Trichlorofluoromethane  
Concen: 0.186 ppbv  
RT: 1.884 min Scan# 51  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

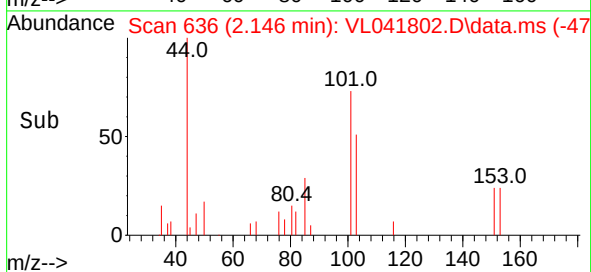
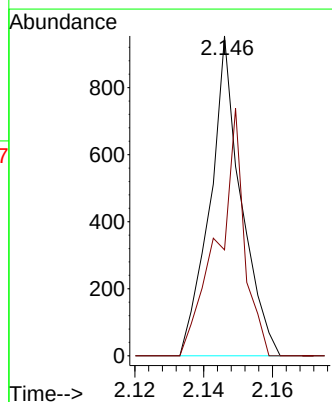
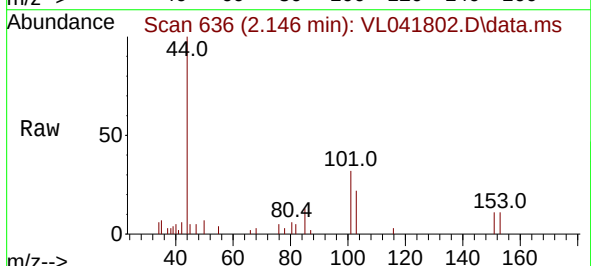
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

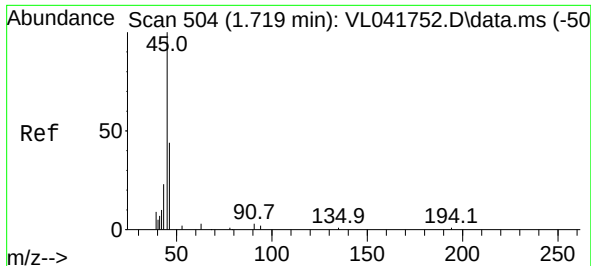
Tgt Ion:101 Resp: 2709  
Ion Ratio Lower Upper  
101 100  
103 61.5 51.8 77.8



#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.054 ppbv  
RT: 2.146 min Scan# 636  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion:101 Resp: 598  
Ion Ratio Lower Upper  
101 100  
151 66.4 56.8 85.2





#13

Ethanol

Concen: 19.416 ppbv

RT: 1.725 min Scan# 504

Delta R.T. 0.006 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

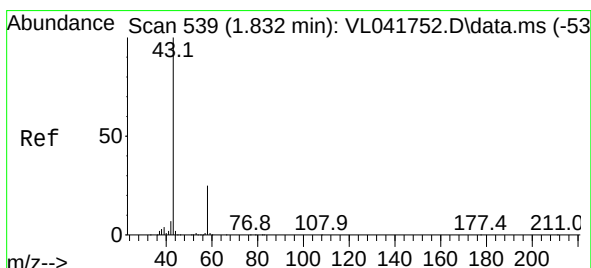
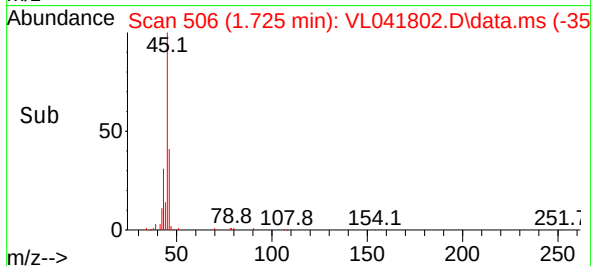
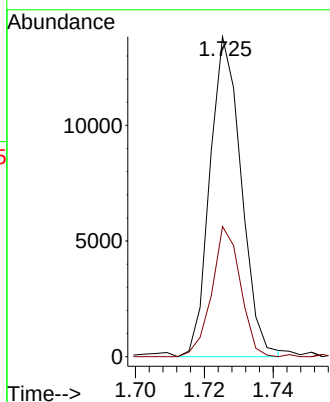
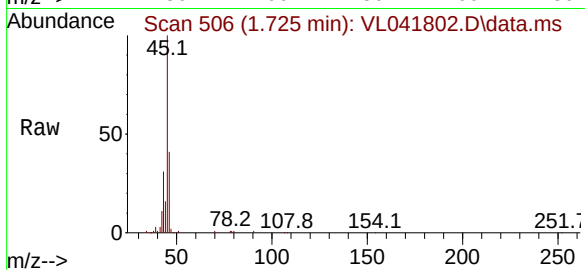
C0AB6

Tgt Ion: 45 Resp: 8754

Ion Ratio Lower Upper

45 100

46 37.5 16.4 65.8



#15

Acetone

Concen: 3.112 ppbv

RT: 1.842 min Scan# 542

Delta R.T. 0.009 min

Lab File: VL041802.D

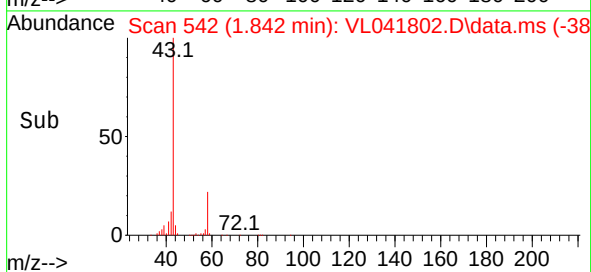
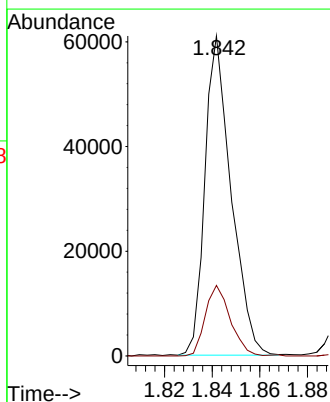
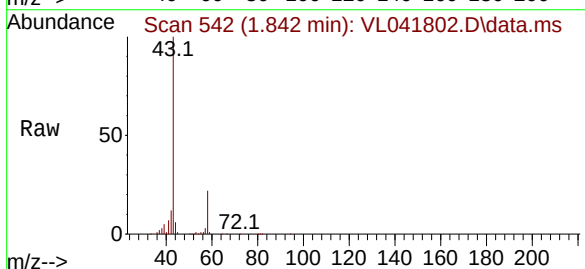
Acq: 18 Dec 2024 19:58

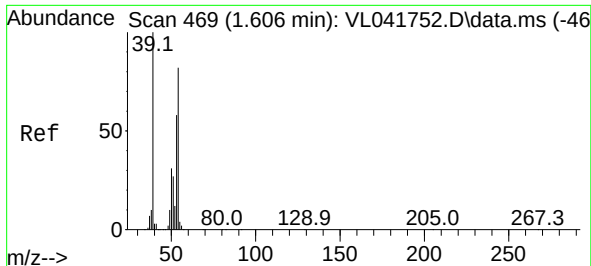
Tgt Ion: 43 Resp: 46647

Ion Ratio Lower Upper

43 100

58 21.2 19.7 29.5

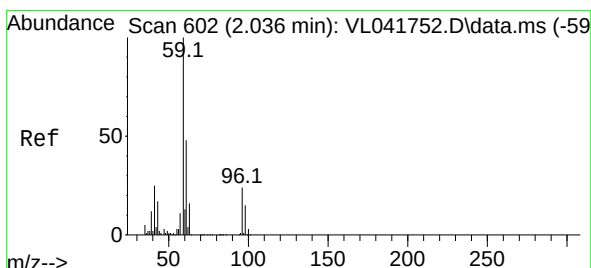
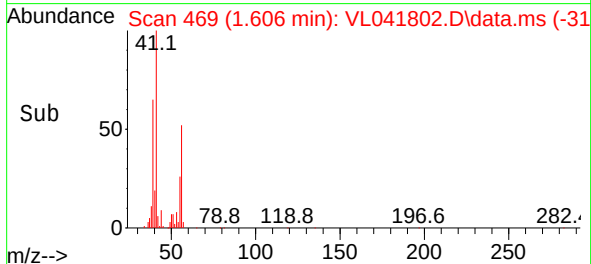
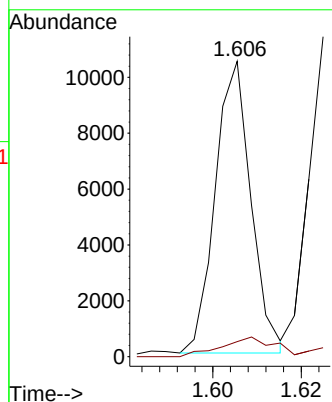
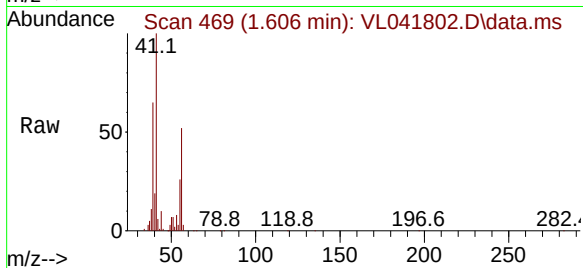




#16  
1,3-Butadiene  
Concen: 0.990 ppbv  
RT: 1.606 min Scan# 40  
Delta R.T. -0.000 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

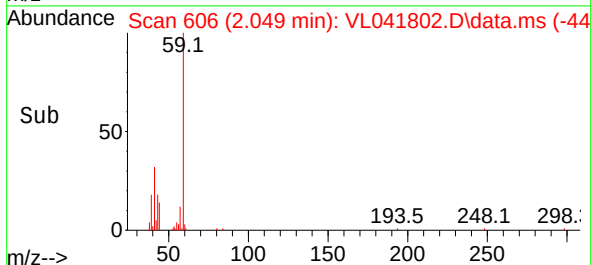
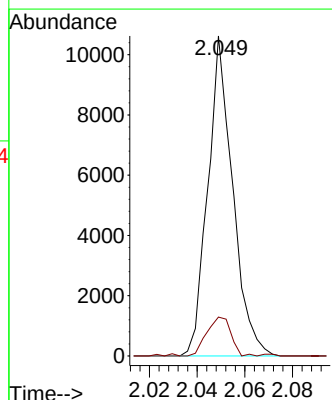
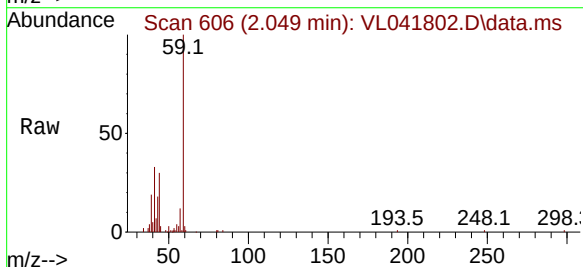
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

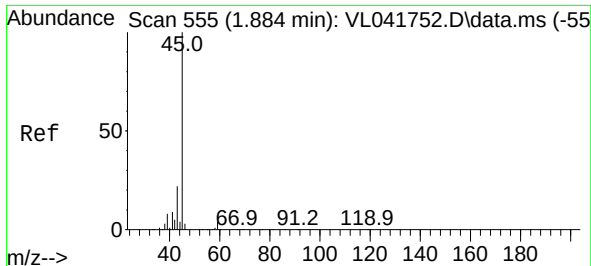
Tgt Ion: 39 Resp: 5842  
Ion Ratio Lower Upper  
39 100  
54 13.5 58.4 87.6#



#17  
tert-Butyl alcohol  
Concen: 0.518 ppbv  
RT: 2.049 min Scan# 606  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 59 Resp: 7709  
Ion Ratio Lower Upper  
59 100  
57 12.4 8.6 13.0





#19

Isopropyl Alcohol

Concen: 1.285 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

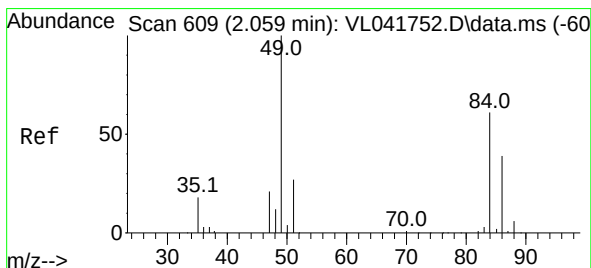
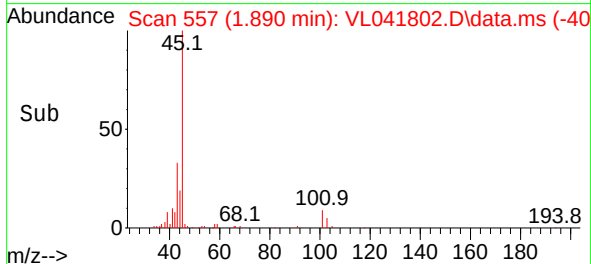
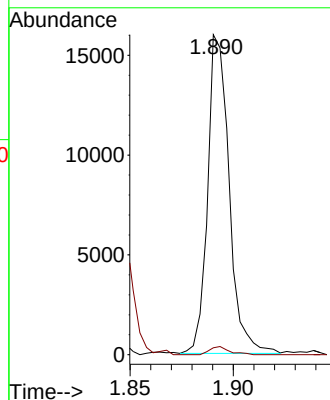
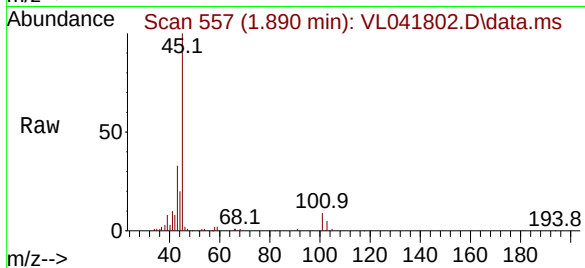
C0AB6

Tgt Ion: 45 Resp: 11560

Ion Ratio Lower Upper

45 100

58 85.6 33.3 49.9#



#20

Methylene Chloride

Concen: 0.323 ppbv

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Tgt Ion: 84 Resp: 1379

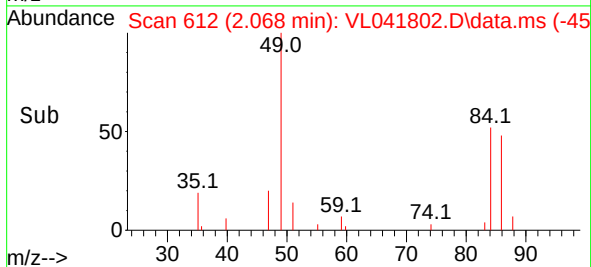
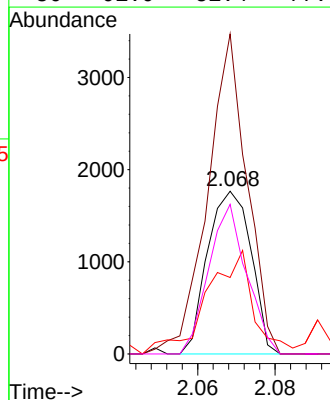
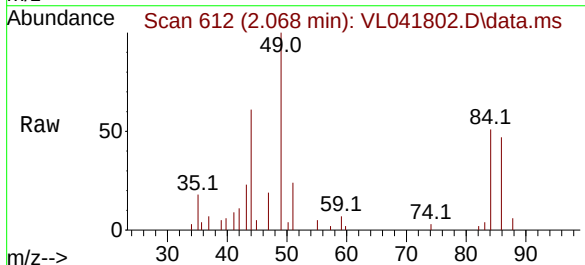
Ion Ratio Lower Upper

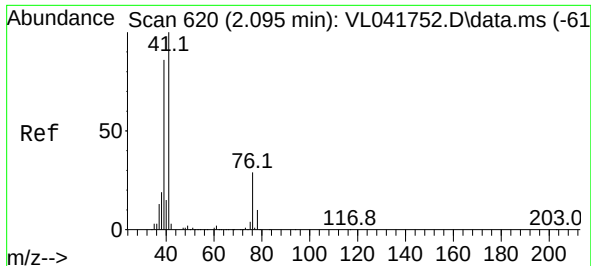
84 100

49 196.6 132.6 198.8

51 38.9 37.6 56.4

86 91.9 51.4 77.0#





#21

Allyl Chloride

Concen: 0.051 ppbv

RT: 2.085 min Scan# 617

Delta R.T. -0.010 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

C0AB6

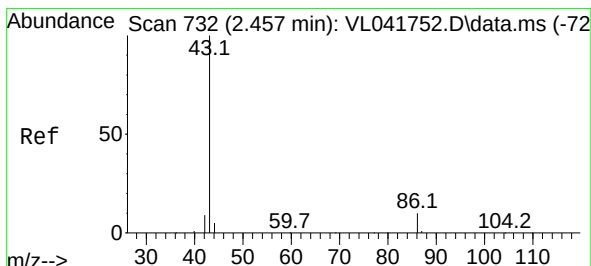
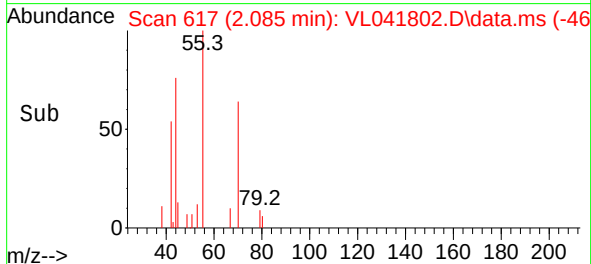
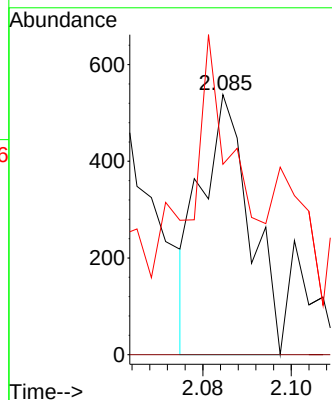
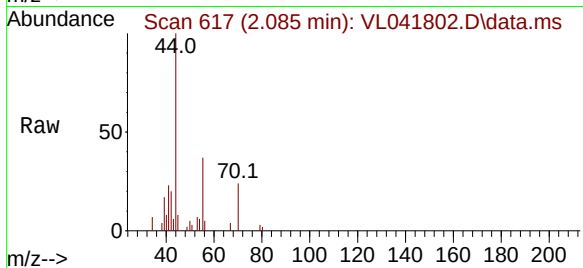
Tgt Ion: 41 Resp: 413

Ion Ratio Lower Upper

41 100

76 0.0 22.3 33.5#

39 162.7 69.2 103.8#



#23

Vinyl Acetate

Concen: 0.919 ppbv

RT: 2.457 min Scan# 732

Delta R.T. -0.000 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Tgt Ion: 43 Resp: 6394

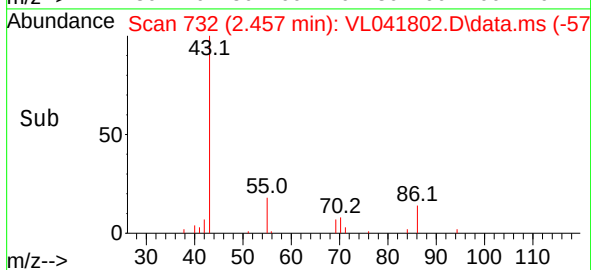
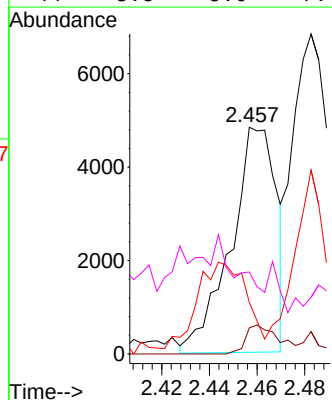
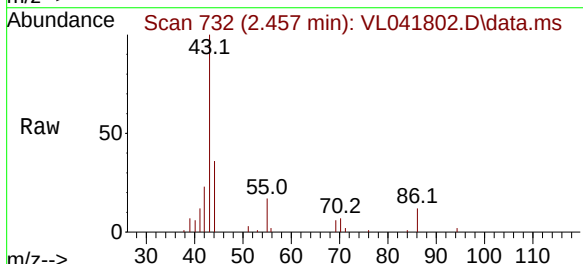
Ion Ratio Lower Upper

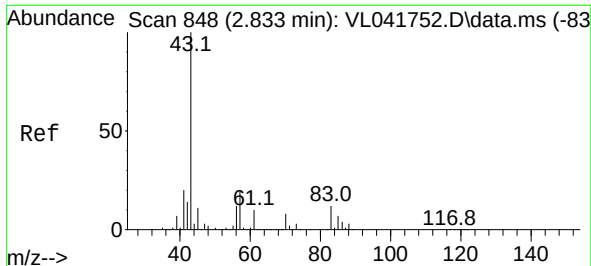
43 100

86 11.9 6.6 10.0#

42 16.0 8.2 12.2#

44 8.5 5.0 7.4#

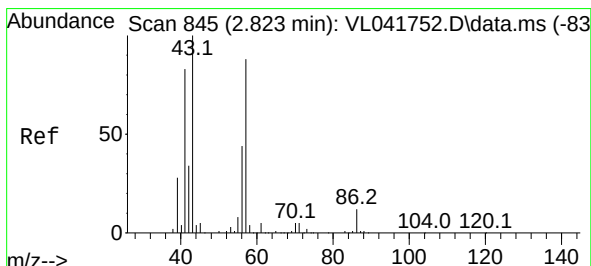
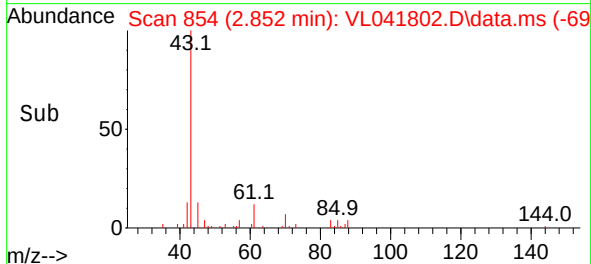
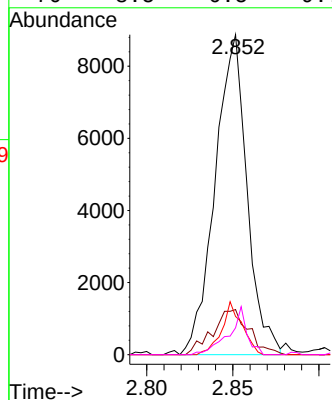
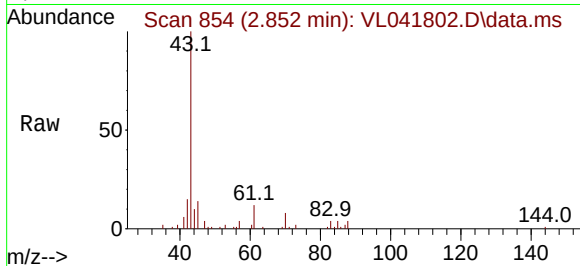




#25  
Ethyl Acetate  
Concen: 0.411 ppbv  
RT: 2.852 min Scan# 848  
Delta R.T. 0.019 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

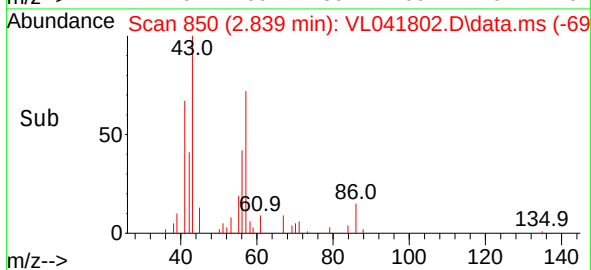
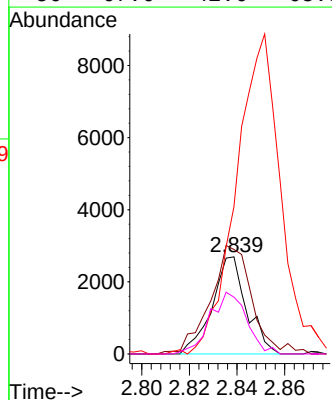
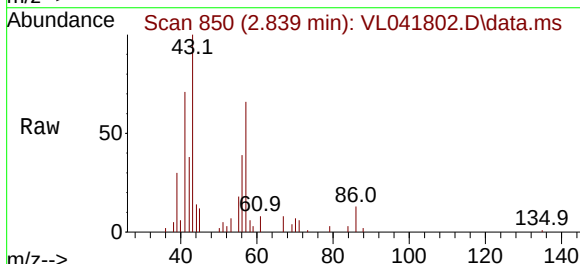
Instrument :  
MSVOA\_1  
ClientSampleId :  
C0AB6

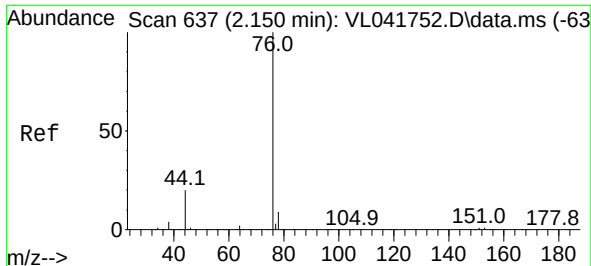
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 11451 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 45 16.1     | 8.1 12.1#   |
| 61 10.7     | 7.0 10.6#   |
| 70 8.5      | 6.5 9.7     |



#26  
Hexane  
Concen: 0.256 ppbv  
RT: 2.839 min Scan# 850  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

|             |              |
|-------------|--------------|
| Tgt Ion: 57 | Resp: 2712   |
| Ion Ratio   | Lower Upper  |
| 57 100      |              |
| 41 135.1    | 79.6 119.4#  |
| 43 435.5    | 211.0 316.6# |
| 56 67.6     | 42.6 63.8#   |

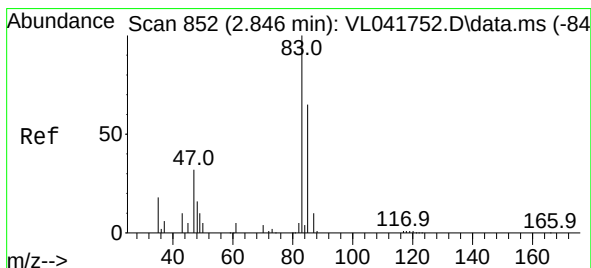
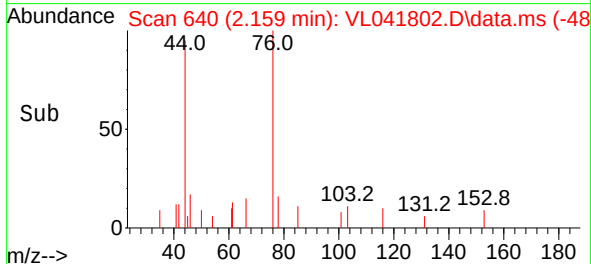
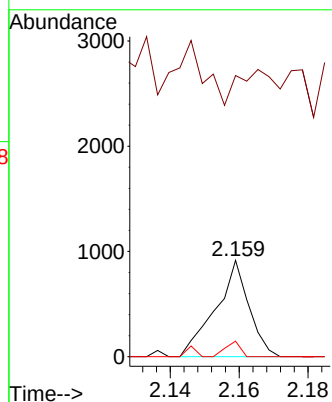
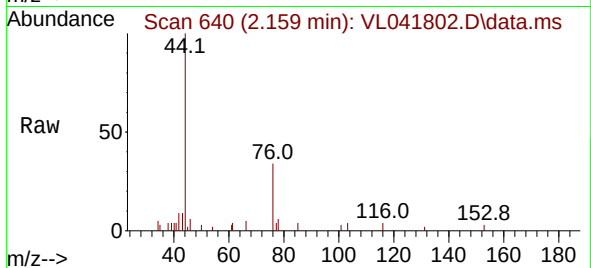




#27  
Carbon Disulfide  
Concen: 0.065 ppbv  
RT: 2.159 min Scan# 640  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

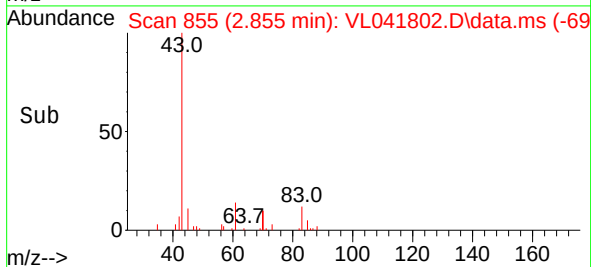
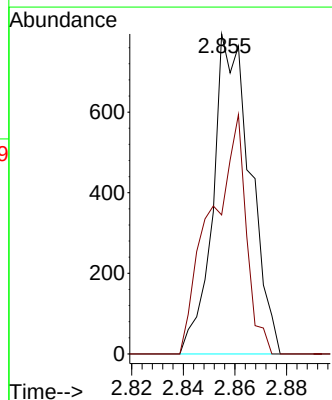
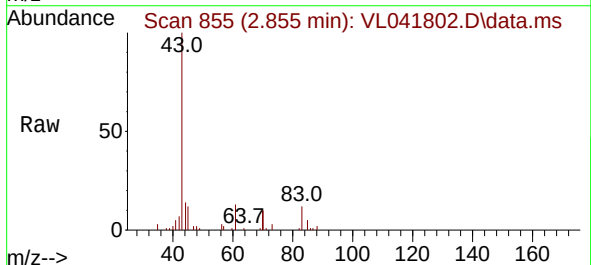
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

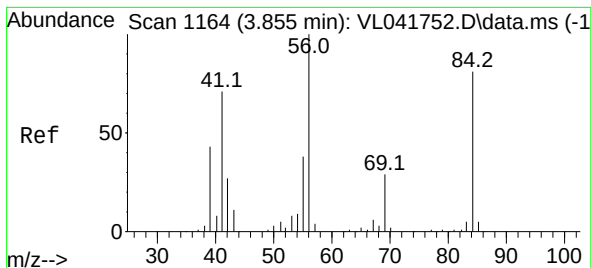
Tgt Ion: 76 Resp: 616  
Ion Ratio Lower Upper  
76 100  
44 936.0 17.6 26.4#  
78 26.1 10.2 15.4#



#29  
Chloroform  
Concen: 0.049 ppbv  
RT: 2.855 min Scan# 855  
Delta R.T. 0.009 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 83 Resp: 796  
Ion Ratio Lower Upper  
83 100  
85 43.5 51.8 77.6#





#30

Cyclohexane

Concen: 0.111 ppbv

RT: 3.878 min Scan# 1164

Delta R.T. 0.022 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

C0AB6

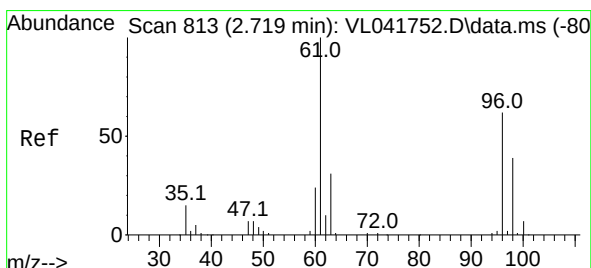
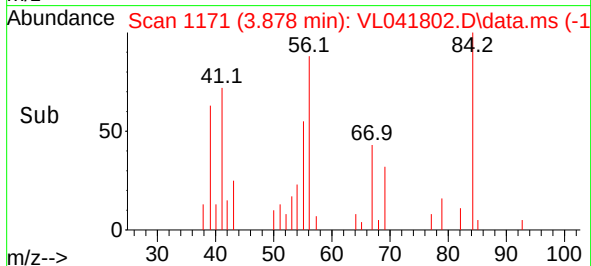
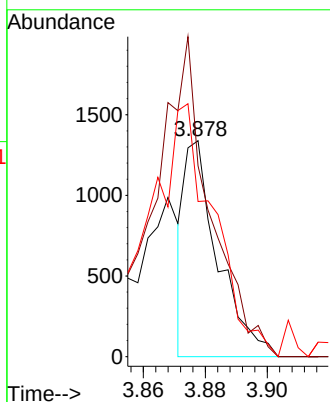
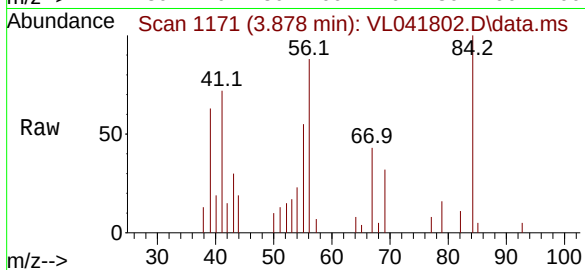
Tgt Ion: 84 Resp: 1001

Ion Ratio Lower Upper

84 100

56 254.3 102.3 153.5#

41 246.5 74.0 111.0#



#31

cis-1,2-Dichloroethene

Concen: 0.112 ppbv

RT: 2.848 min Scan# 853

Delta R.T. 0.129 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

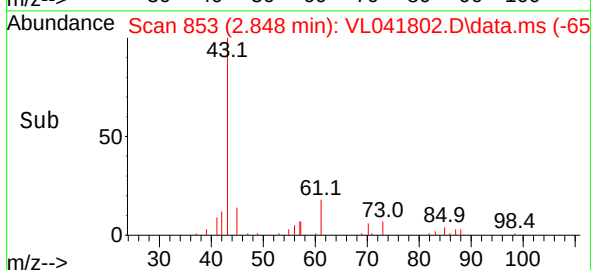
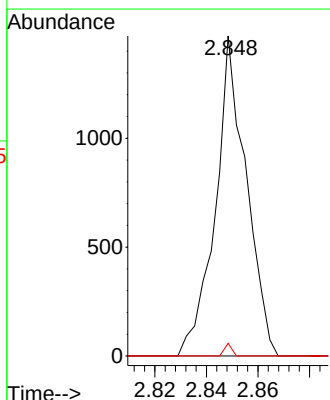
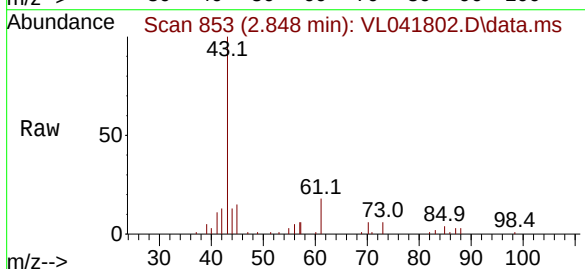
Tgt Ion: 61 Resp: 1221

Ion Ratio Lower Upper

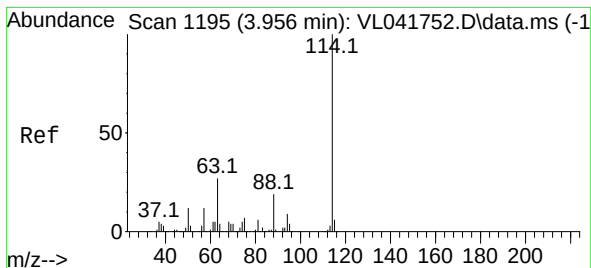
61 100

96 0.0 49.7 74.5#

98 3.9 30.8 46.2#







#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.971 min Scan# 11

Delta R.T. 0.016 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

C0AB6

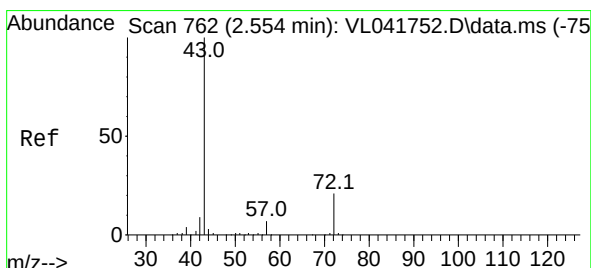
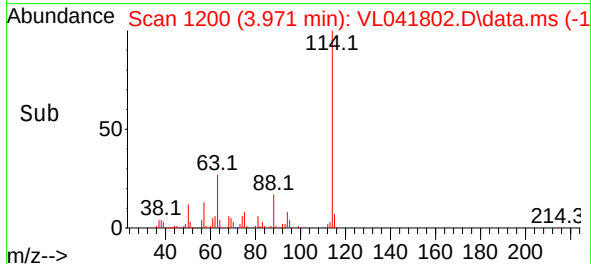
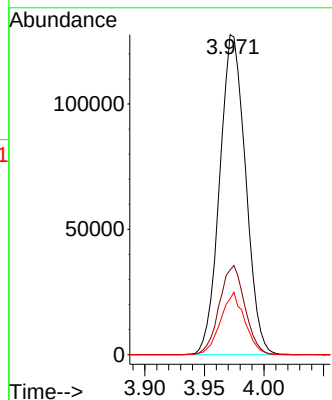
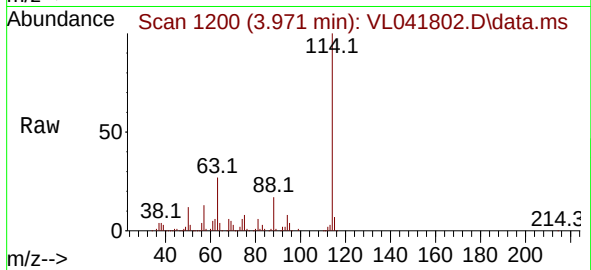
Tgt Ion:114 Resp: 192884

Ion Ratio Lower Upper

114 100

63 27.6 21.8 32.8

88 18.2 14.8 22.2



#34

2-Butanone

Concen: 0.691 ppbv

RT: 2.570 min Scan# 767

Delta R.T. 0.016 min

Lab File: VL041802.D

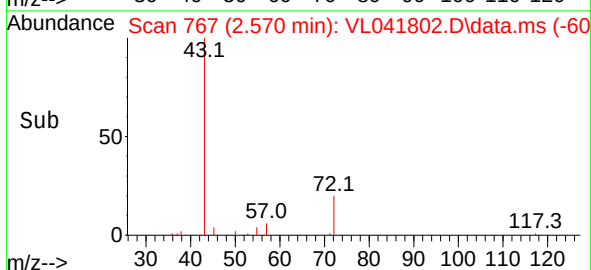
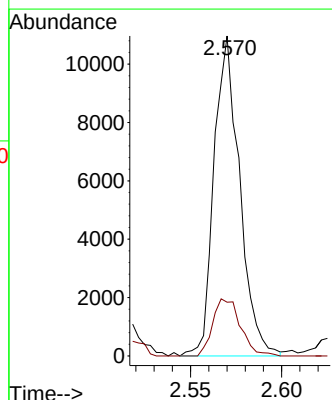
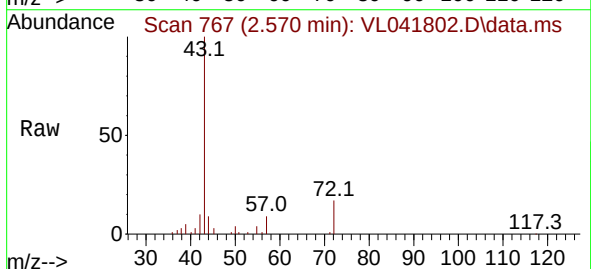
Acq: 18 Dec 2024 19:58

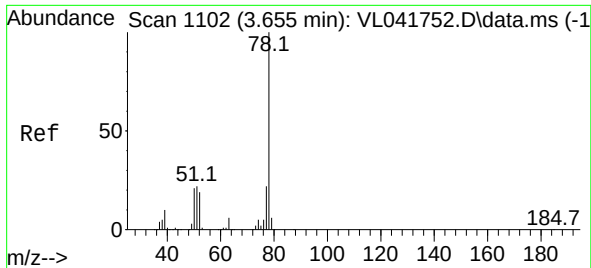
Tgt Ion: 43 Resp: 10728

Ion Ratio Lower Upper

43 100

72 19.2 16.8 25.2

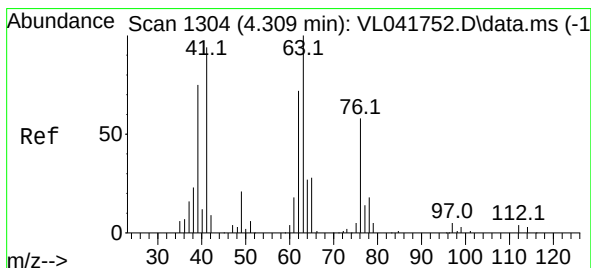
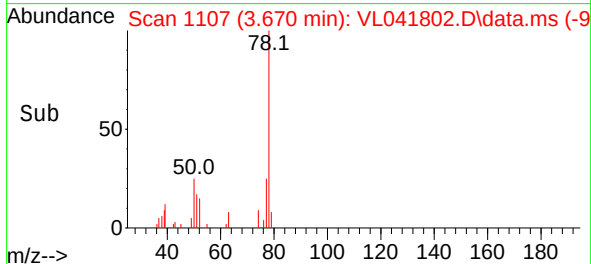
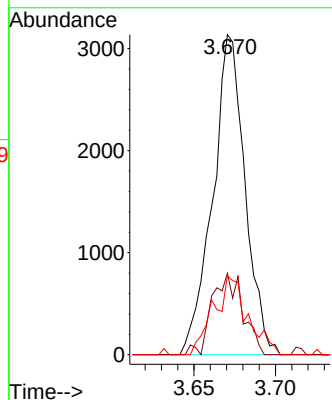
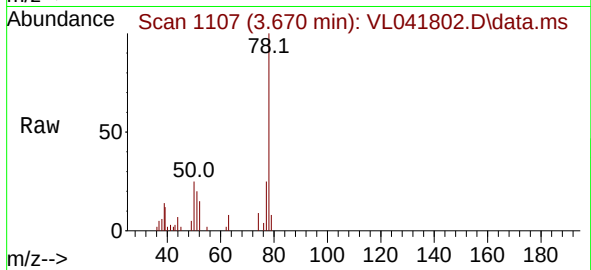




#36  
Benzene  
Concen: 0.217 ppbv  
RT: 3.670 min Scan# 1107  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

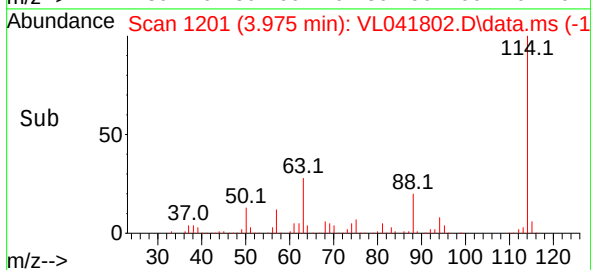
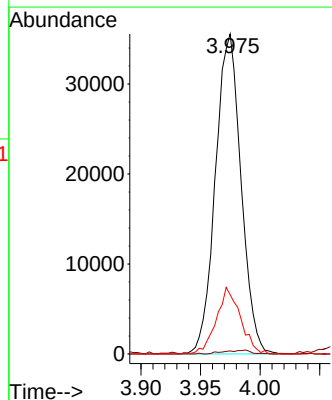
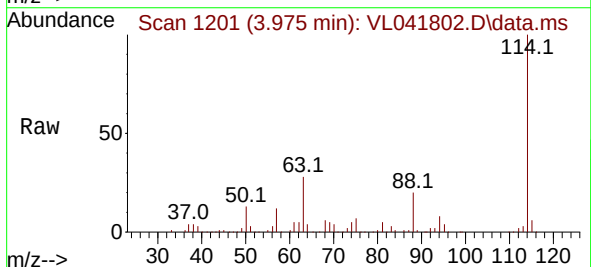
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

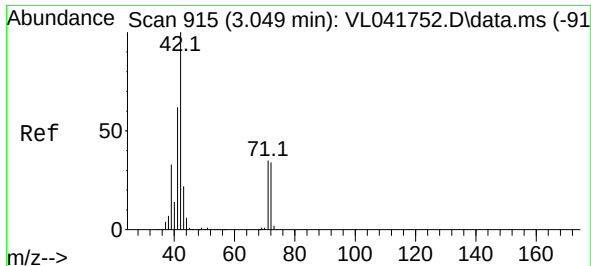
Tgt Ion: 78 Resp: 4321  
Ion Ratio Lower Upper  
78 100  
77 25.4 17.8 26.6  
50 24.7 17.2 25.8



#39  
1,2-Dichloropropane  
Concen: 7.365 ppbv  
RT: 3.975 min Scan# 1201  
Delta R.T. -0.334 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

Tgt Ion: 63 Resp: 53145  
Ion Ratio Lower Upper  
63 100  
41 0.8 75.3 112.9#  
62 18.6 57.3 85.9#





#41

Tetrahydrofuran

Concen: 0.621 ppbv

RT: 3.075 min Scan# 91

Delta R.T. 0.025 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

C0AB6

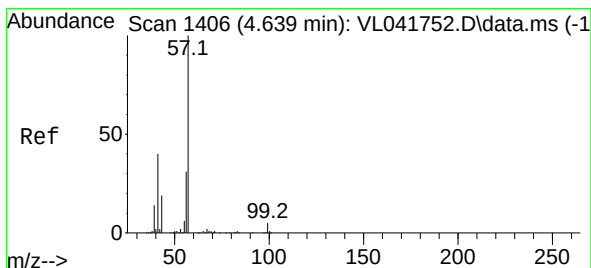
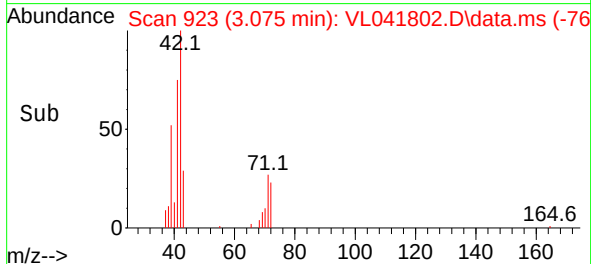
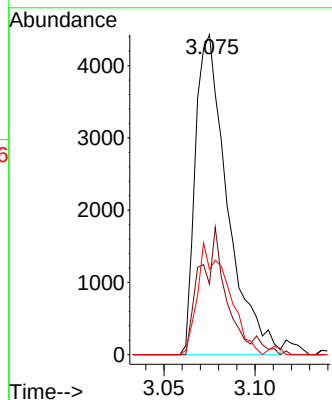
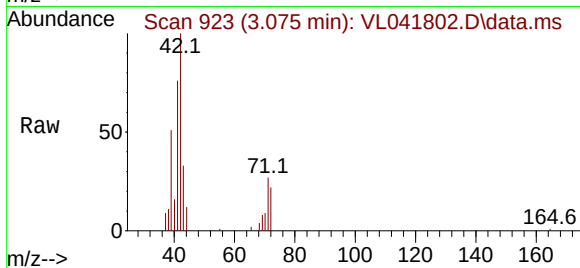
Tgt Ion: 42 Resp: 5402

Ion Ratio Lower Upper

42 100

72 33.8 29.1 43.7

71 34.3 28.4 42.6



#44

2,2,4-Trimethylpentane

Concen: 0.049 ppbv

RT: 4.661 min Scan# 1413

Delta R.T. 0.022 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

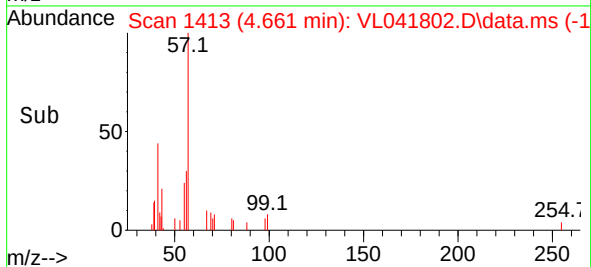
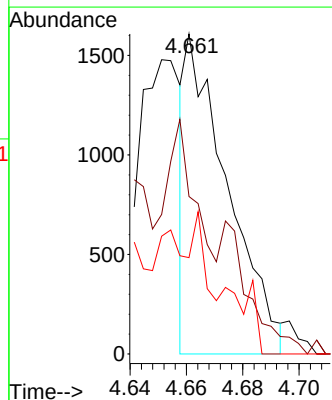
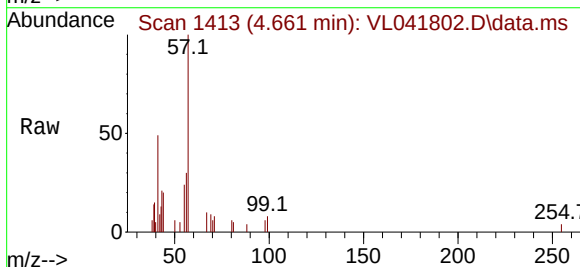
Tgt Ion: 57 Resp: 1670

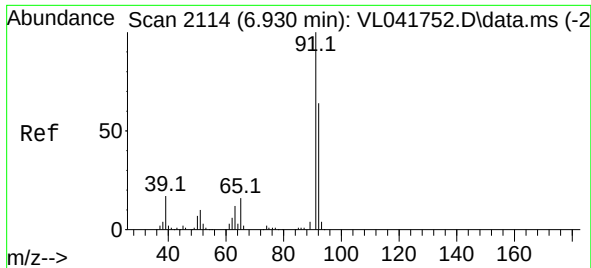
Ion Ratio Lower Upper

57 100

41 172.5 30.7 46.1#

56 119.9 25.4 38.0#





#53

Toluene

Concen: 3.631 ppbv

RT: 6.956 min Scan# 2114

Delta R.T. 0.025 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_L

ClientSampleId :

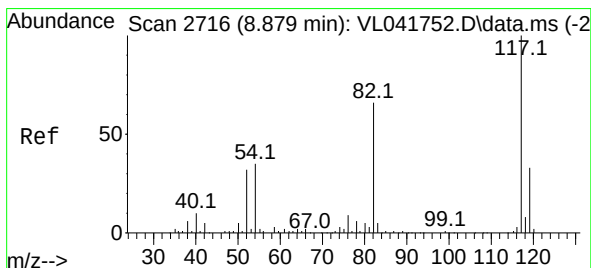
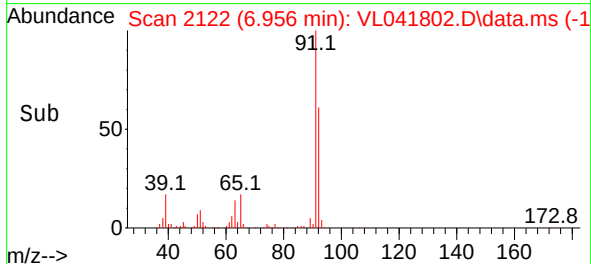
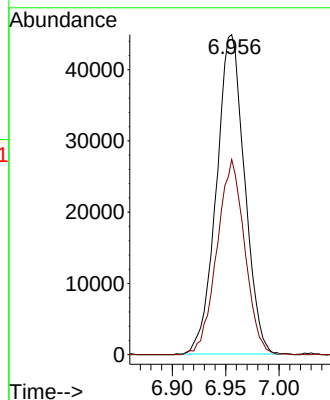
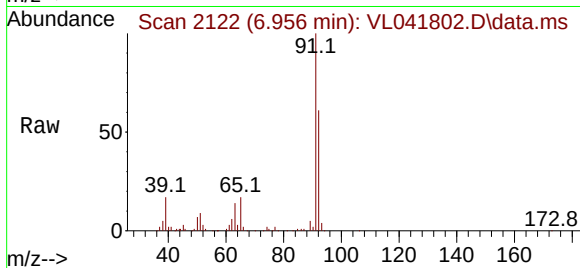
C0AB6

Tgt Ion: 91 Resp: 82132

Ion Ratio Lower Upper

91 100

92 60.6 47.9 71.9



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.894 min Scan# 2721

Delta R.T. 0.016 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

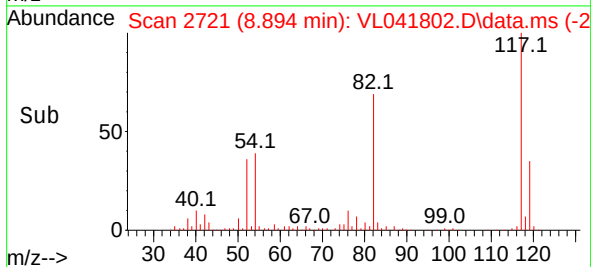
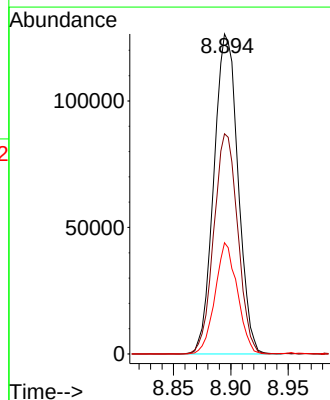
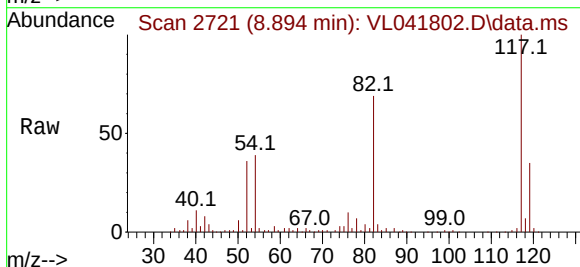
Tgt Ion: 117 Resp: 185181

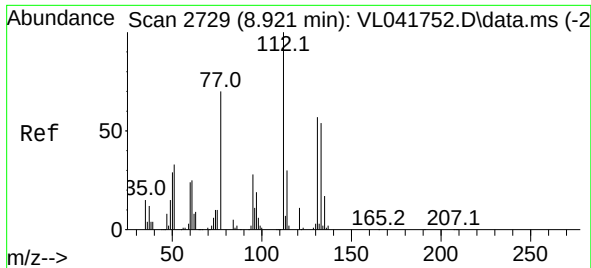
Ion Ratio Lower Upper

117 100

82 68.5 53.8 80.8

119 32.1 26.7 40.1

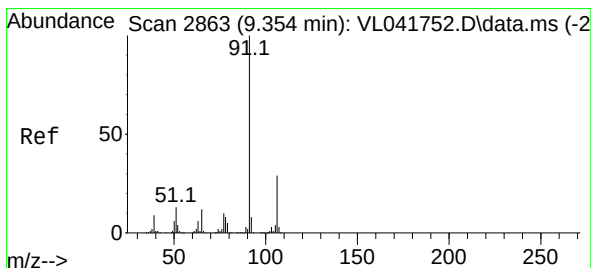
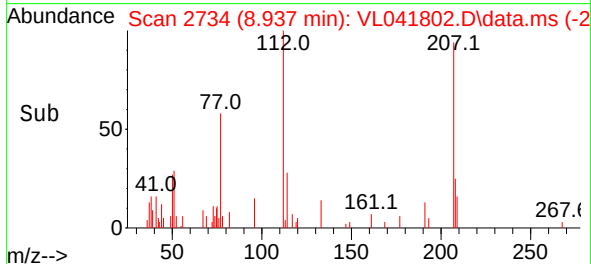
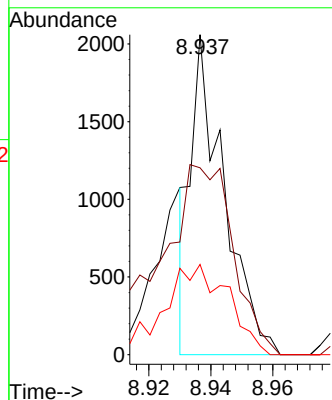
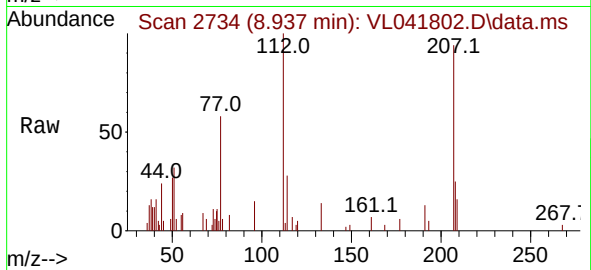




#57  
Chlorobenzene  
Concen: 0.080 ppbv  
RT: 8.937 min Scan# 21  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

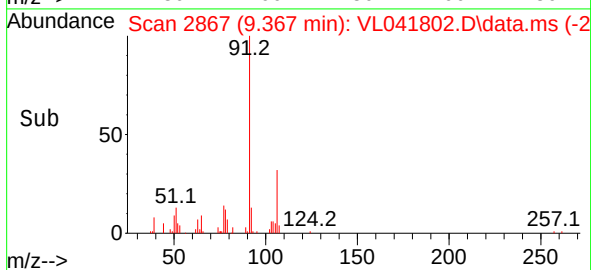
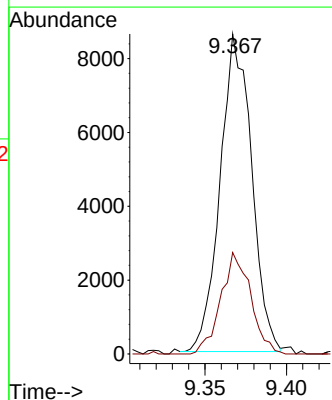
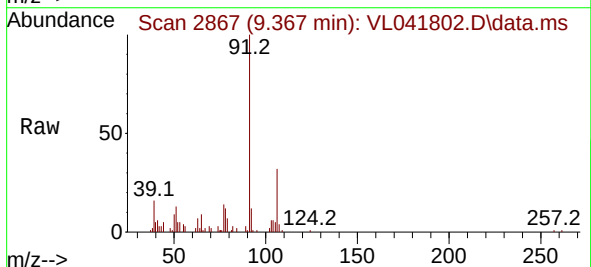
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

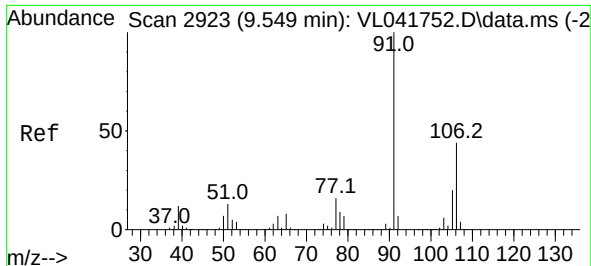
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 112   | Resp: | 1507  |
| Ion      | Ratio | Lower | Upper |
| 112      | 100   |       |       |
| 77       | 58.4  | 57.4  | 86.0  |
| 114      | 28.2  | 27.4  | 33.4  |



#58  
Ethyl Benzene  
Concen: 0.346 ppbv  
RT: 9.367 min Scan# 2867  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 11534 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 106      | 31.9  | 23.5  | 35.3  |





#59

m/p-Xylene

Concen: 0.312 ppbv

RT: 9.564 min Scan# 2923

Delta R.T. 0.016 min

Lab File: VL041802.D

Acq: 18 Dec 2024 19:58

Instrument :

MSVOA\_1

ClientSampleId :

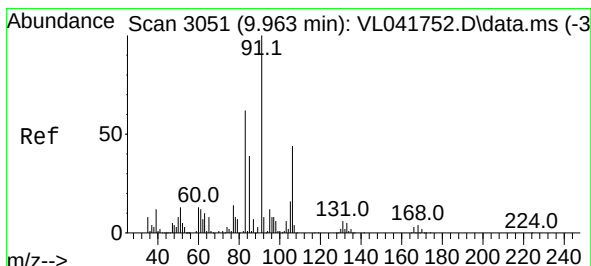
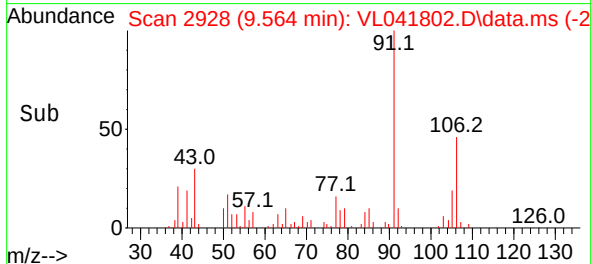
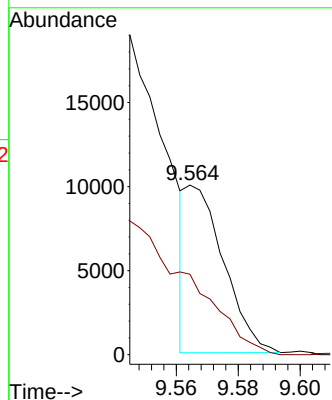
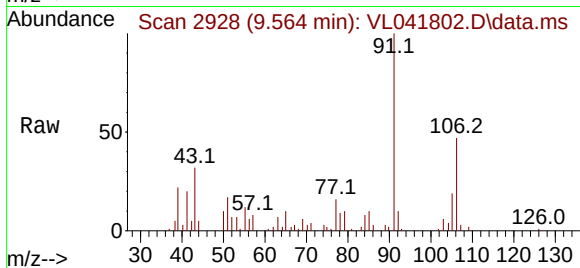
C0AB6

Tgt Ion: 91 Resp: 8373

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0



#60

o-Xylene

Concen: 0.499 ppbv

RT: 9.979 min Scan# 3056

Delta R.T. 0.016 min

Lab File: VL041802.D

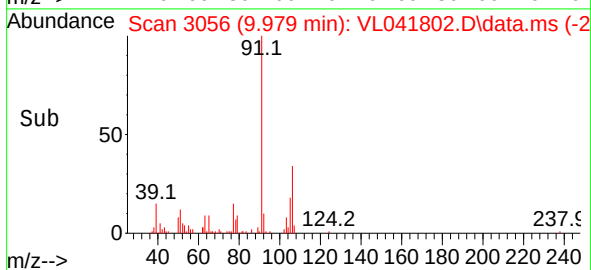
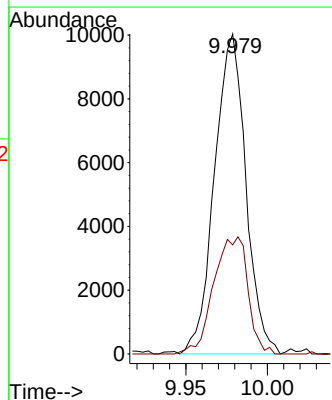
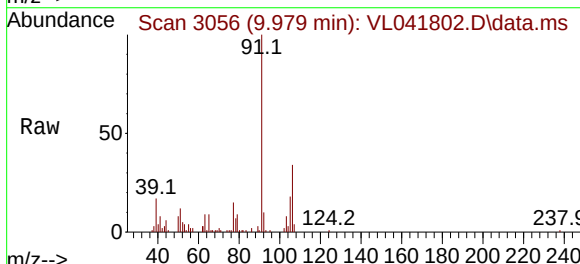
Acq: 18 Dec 2024 19:58

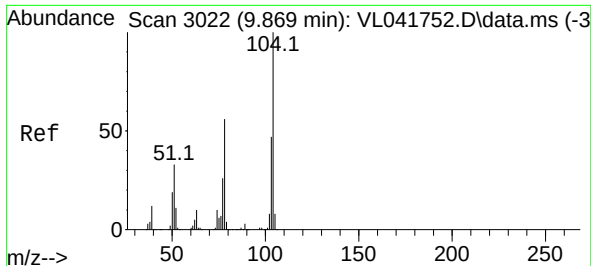
Tgt Ion: 91 Resp: 13407

Ion Ratio Lower Upper

91 100

106 39.9 21.1 63.4

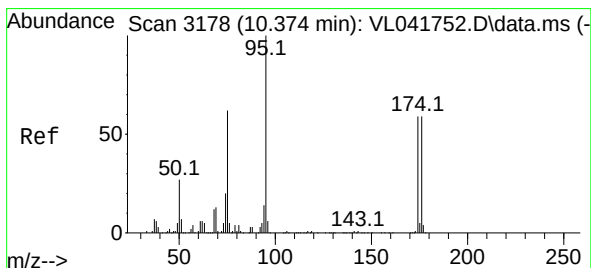
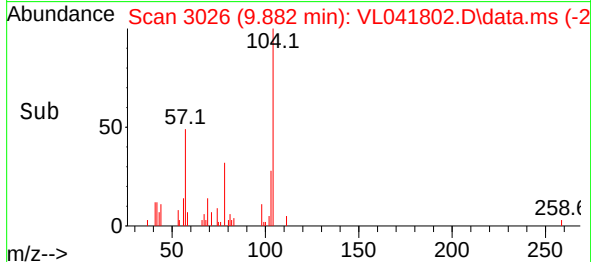
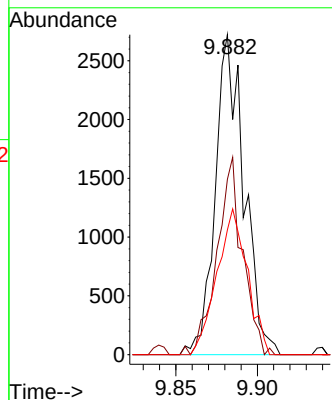
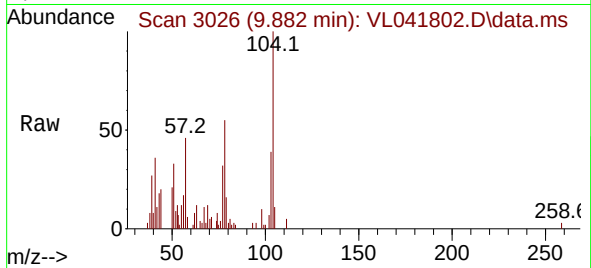




#61  
Styrene  
Concen: 0.287 ppbv  
RT: 9.882 min Scan# 3022  
Delta R.T. 0.013 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

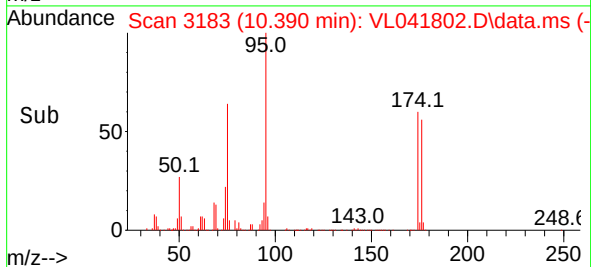
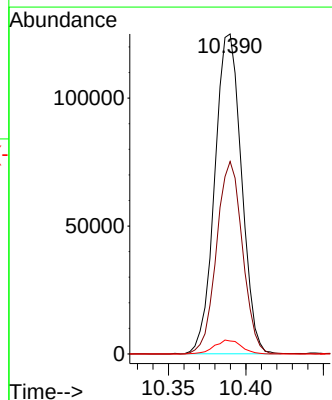
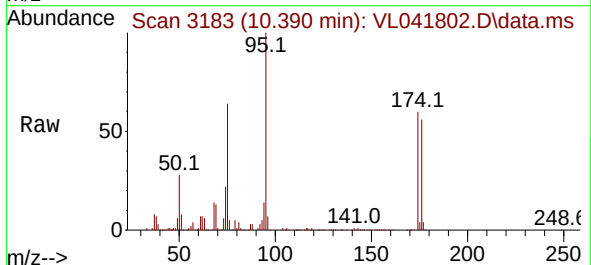
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB6

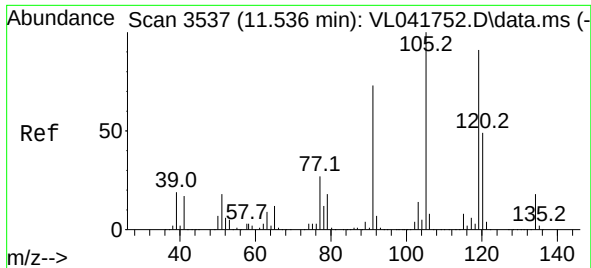
Tgt Ion:104 Resp: 3334  
Ion Ratio Lower Upper  
104 100  
78 55.8 43.8 65.6  
103 48.0 37.8 56.6



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.722 ppbv  
RT: 10.390 min Scan# 3183  
Delta R.T. 0.016 min  
Lab File: VL041802.D  
Acq: 18 Dec 2024 19:58

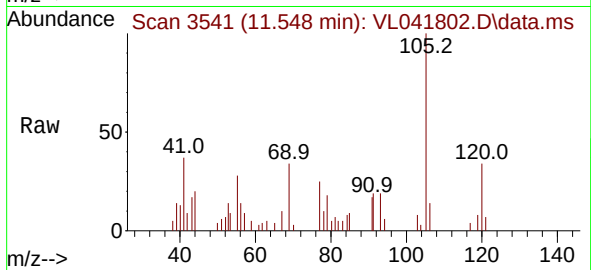
Tgt Ion: 95 Resp: 150031  
Ion Ratio Lower Upper  
95 100  
174 58.6 47.6 71.4  
175 4.4 3.7 5.5



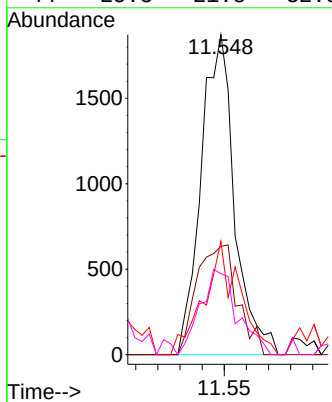
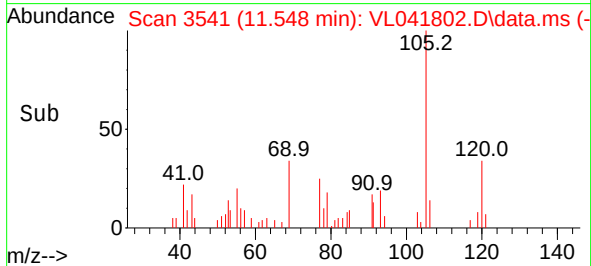


#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.069 ppbv  
 RT: 11.548 min Scan# 3541  
 Delta R.T. 0.013 min  
 Lab File: VL041802.D  
 Acq: 18 Dec 2024 19:58

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB6



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 1962  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 33.9  | 39.0  | 58.4# |
| 91       | 35.4  | 58.1  | 87.1# |
| 77       | 25.3  | 21.8  | 32.8  |





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041803.D  
 Acq On : 18 Dec 2024 20:32  
 Operator : SY/MD  
 Sample : P5294-02  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB7

Quant Time: Dec 19 07:59:07 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Thu Dec 19 07:32:09 2024

Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.793 | 49   | 76658    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.972 | 114  | 187828   | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 8.894 | 117  | 164998   | 10.000 | ppbv  | 0.02     |

#### System Monitoring Compounds

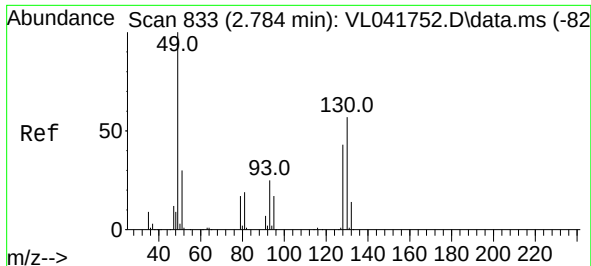
68) 1-Bromo-4-Fluorobenzene 10.387 95 139994 10.182 ppbv 0.01  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.800%

#### Target Compounds

|                               |        |     |         |          | Qvalue |     |
|-------------------------------|--------|-----|---------|----------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.502  | 85  | 4836    | 0.355    | ppbv   | 99  |
| 3) Chlorodifluoromethane      | 1.470  | 51  | 9706    | 0.776    | ppbv # | 77  |
| 4) Chloromethane              | 1.534  | 50  | 3556    | 0.666    | ppbv # | 78  |
| 9) Propene                    | 1.563  | 41  | 26125   | 4.821    | ppbv   | 94  |
| 10) Heptane                   | 4.994  | 43  | 625     | 0.045    | ppbv # | 29  |
| 11) Trichlorofluoromethane    | 1.884  | 101 | 2898    | 0.200    | ppbv # | 80  |
| 12) 1,1,2-Trichlorotrifluo... | 2.146  | 101 | 718     | 0.065    | ppbv   | 95  |
| 13) Ethanol                   | 1.732  | 45  | 1977904 | 4408.380 | ppbv   | 99  |
| 15) Acetone                   | 1.839  | 43  | 128822  | 8.637    | ppbv # | 89  |
| 16) 1,3-Butadiene             | 1.625  | 39  | 163629  | 27.860   | ppbv # | 15  |
| 17) tert-Butyl alcohol        | 2.049  | 59  | 9710    | 0.656    | ppbv # | 71  |
| 19) Isopropyl Alcohol         | 1.890  | 45  | 155744  | 17.402   | ppbv # | 59  |
| 20) Methylene Chloride        | 2.065  | 84  | 1921    | 0.452    | ppbv # | 81  |
| 21) Allyl Chloride            | 1.968  | 41  | 36262   | 4.483    | ppbv # | 53  |
| 23) Vinyl Acetate             | 2.460  | 43  | 8413    | 1.215    | ppbv # | 89  |
| 25) Ethyl Acetate             | 2.845  | 43  | 4200    | 0.151    | ppbv # | 77  |
| 26) Hexane                    | 2.835  | 57  | 3564    | 0.338    | ppbv # | 70  |
| 29) Chloroform                | 2.855  | 83  | 4772    | 0.297    | ppbv # | 82  |
| 30) Cyclohexane               | 3.865  | 84  | 652     | 0.073    | ppbv # | 44  |
| 31) cis-1,2-Dichloroethene    | 2.845  | 61  | 390     | 0.036    | ppbv # | 26  |
| 34) 2-Butanone                | 2.570  | 43  | 6833    | 0.452    | ppbv   | 99  |
| 35) Carbon Tetrachloride      | 3.774  | 117 | 585     | 0.044    | ppbv # | 72  |
| 36) Benzene                   | 3.674  | 78  | 2492    | 0.128    | ppbv   | 95  |
| 39) 1,2-Dichloropropane       | 3.968  | 63  | 52198   | 7.428    | ppbv # | 18  |
| 41) Tetrahydrofuran           | 3.075  | 42  | 575     | 0.068    | ppbv # | 56  |
| 44) 2,2,4-Trimethylpentane    | 4.654  | 57  | 3319    | 0.100    | ppbv # | 39  |
| 53) Toluene                   | 6.949  | 91  | 13160   | 0.597    | ppbv   | 99  |
| 58) Ethyl Benzene             | 9.367  | 91  | 2474    | 0.083    | ppbv # | 82  |
| 59) m/p-Xylene                | 9.564  | 91  | 1382    | 0.058    | ppbv # | 100 |
| 60) o-Xylene                  | 9.976  | 91  | 2612    | 0.109    | ppbv   | 97  |
| 61) Styrene                   | 9.875  | 104 | 373     | 0.036    | ppbv # | 47  |
| 71) 2-Chlorotoluene           | 10.872 | 91  | 14981   | 0.545    | ppbv # | 46  |
| 73) 1,3,5-Trimethylbenzene    | 11.218 | 105 | 768     | 0.033    | ppbv # | 63  |
| 74) 1,2,4-Trimethylbenzene    | 11.545 | 105 | 2331    | 0.092    | ppbv # | 54  |
| 75) 1,3-Dichlorobenzene       | 11.678 | 146 | 981     | 0.061    | ppbv # | 58  |
| 76) 1,4-Dichlorobenzene       | 11.678 | 146 | 981     | 0.062    | ppbv # | 57  |
| 79) Naphthalene               | 13.516 | 128 | 894     | 0.051    | ppbv # | 86  |

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

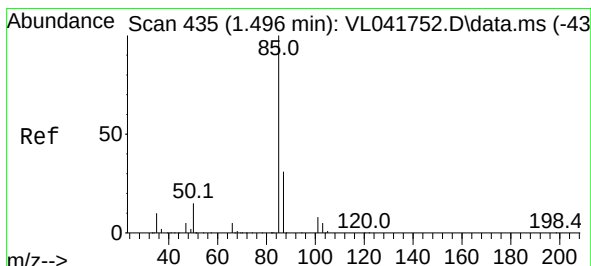
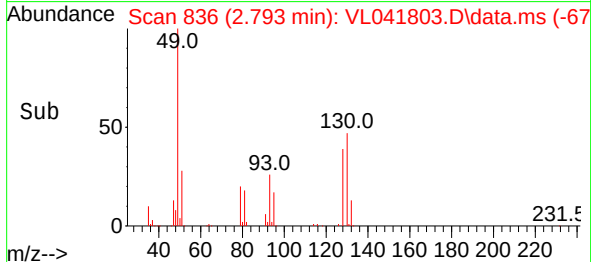
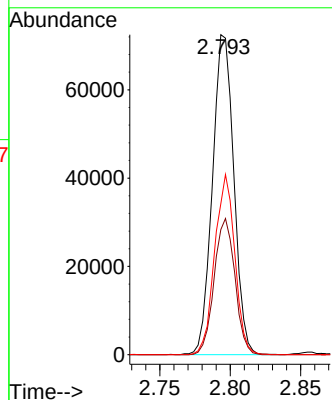
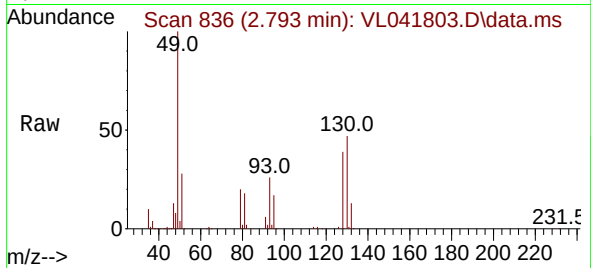




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.793 min Scan# 833  
Delta R.T. 0.009 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

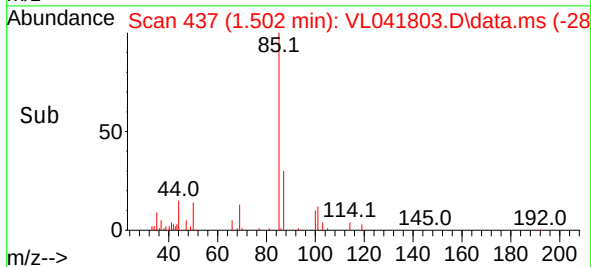
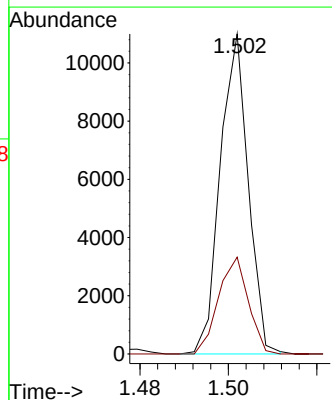
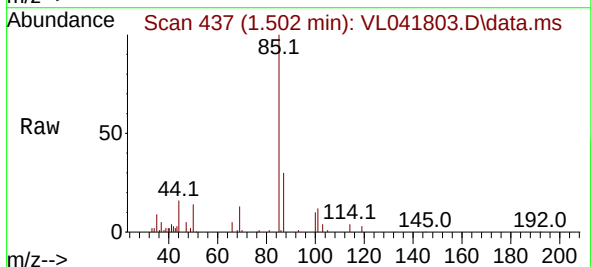
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

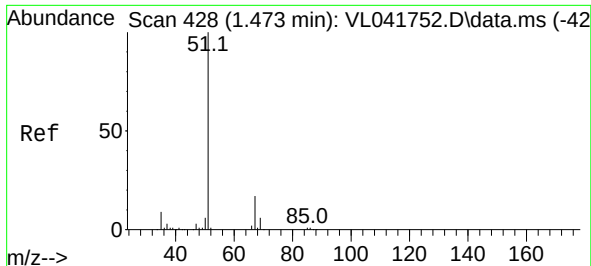
Tgt Ion: 49 Resp: 76658  
Ion Ratio Lower Upper  
49 100  
128 41.2 21.6 64.6  
130 52.9 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.355 ppbv  
RT: 1.502 min Scan# 437  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 85 Resp: 4836  
Ion Ratio Lower Upper  
85 100  
87 30.2 24.5 36.7

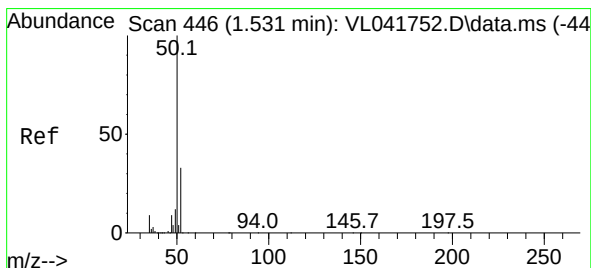
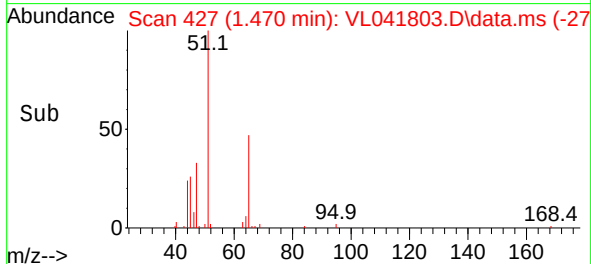
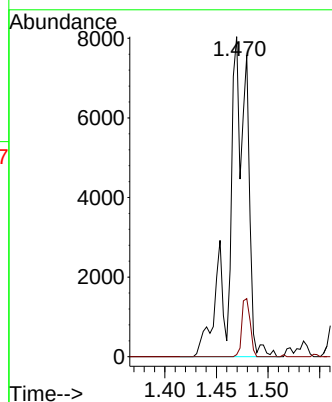
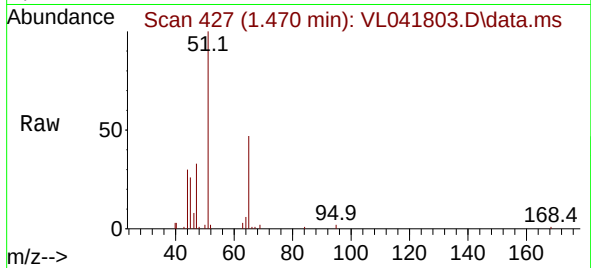




#3  
Chlorodifluoromethane  
Concen: 0.776 ppbv  
RT: 1.470 min Scan# 41  
Delta R.T. -0.004 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

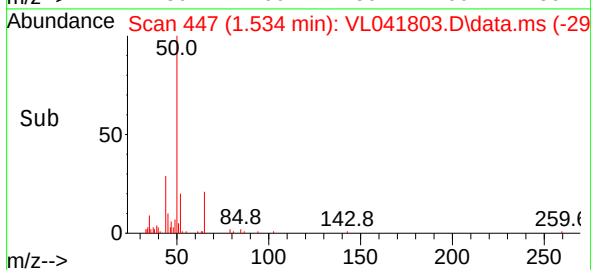
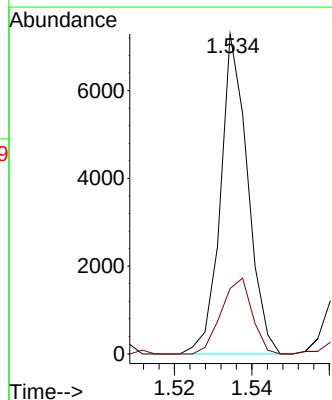
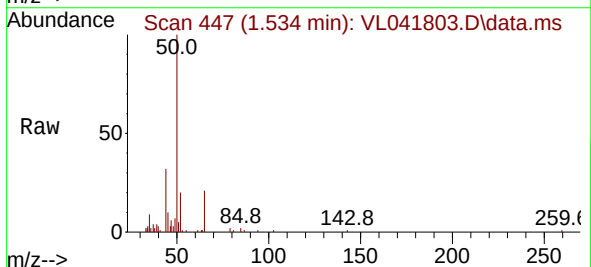
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

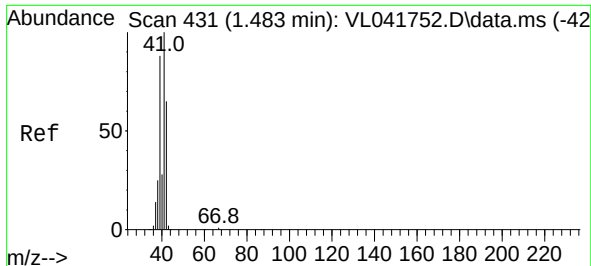
Tgt Ion: 51 Resp: 9706  
Ion Ratio Lower Upper  
51 100  
67 8.4 15.0 22.4#



#4  
Chloromethane  
Concen: 0.666 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 50 Resp: 3556  
Ion Ratio Lower Upper  
50 100  
52 20.5 26.2 39.2#





#9

Propene

Concen: 4.821 ppbv

RT: 1.563 min Scan# 41

Delta R.T. 0.081 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

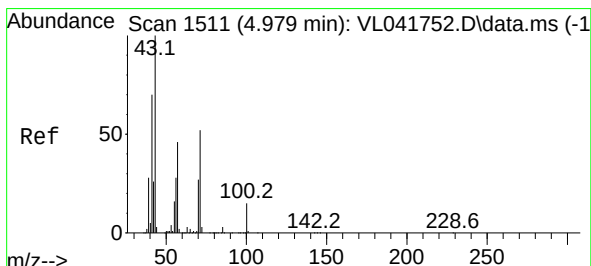
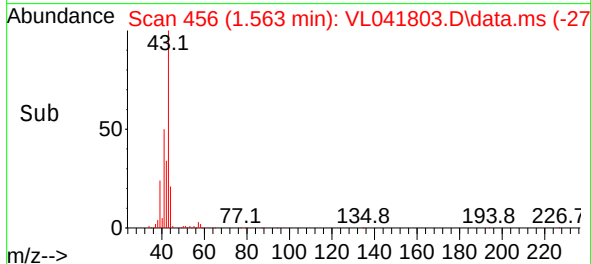
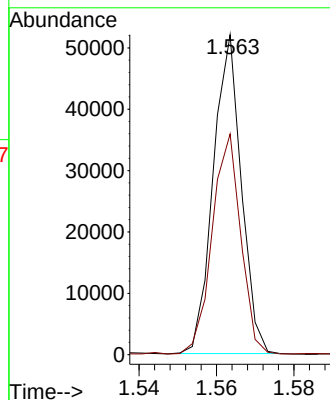
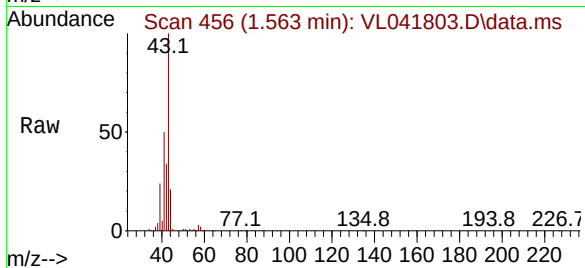
C0AB7

Tgt Ion: 41 Resp: 26125

Ion Ratio Lower Upper

41 100

42 70.6 52.4 78.6



#10

Heptane

Concen: 0.045 ppbv

RT: 4.994 min Scan# 1516

Delta R.T. 0.016 min

Lab File: VL041803.D

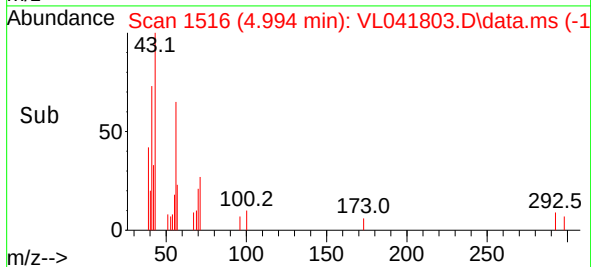
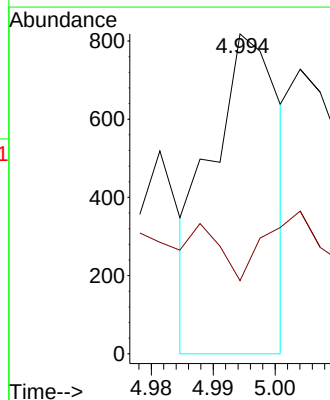
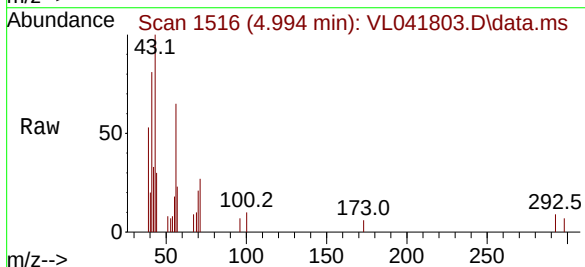
Acq: 18 Dec 2024 20:32

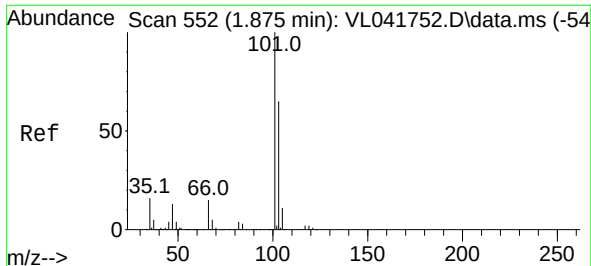
Tgt Ion: 43 Resp: 625

Ion Ratio Lower Upper

43 100

57 0.0 38.5 57.7#





#11

Trichlorofluoromethane

Concen: 0.200 ppbv

RT: 1.884 min Scan# 51

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

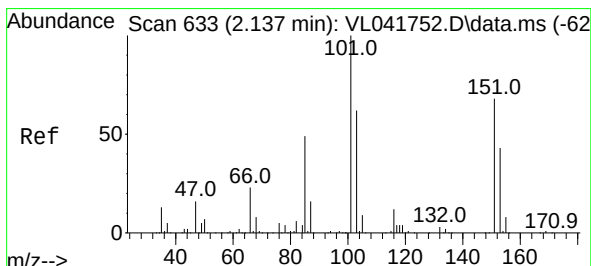
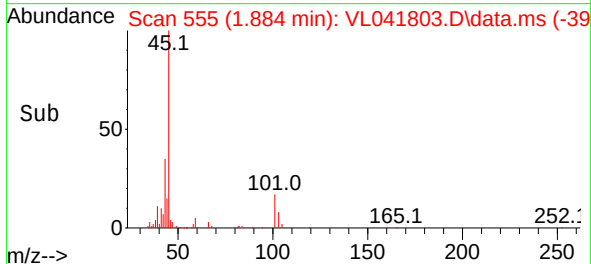
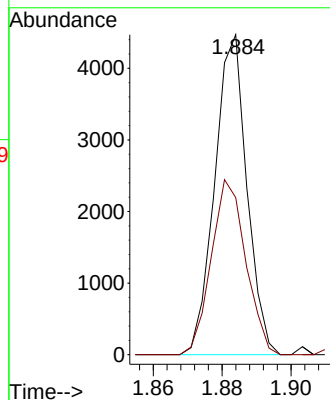
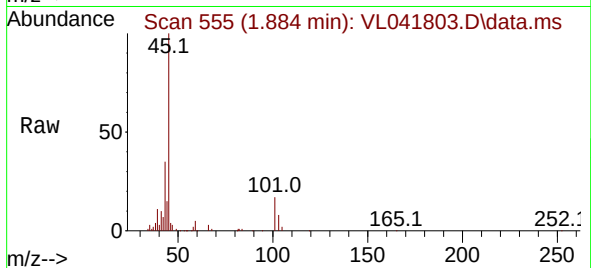
C0AB7

Tgt Ion:101 Resp: 2898

Ion Ratio Lower Upper

101 100

103 49.1 51.8 77.8#



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.065 ppbv

RT: 2.146 min Scan# 636

Delta R.T. 0.009 min

Lab File: VL041803.D

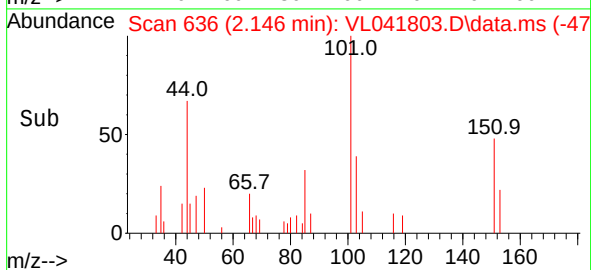
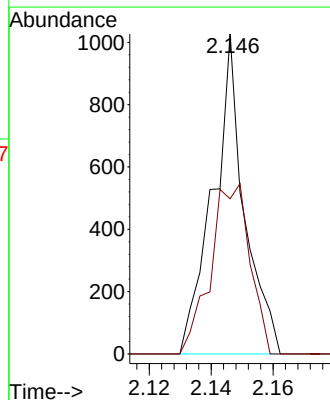
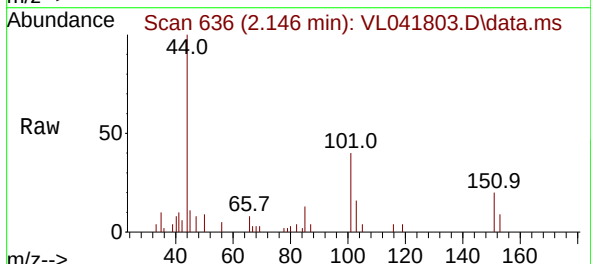
Acq: 18 Dec 2024 20:32

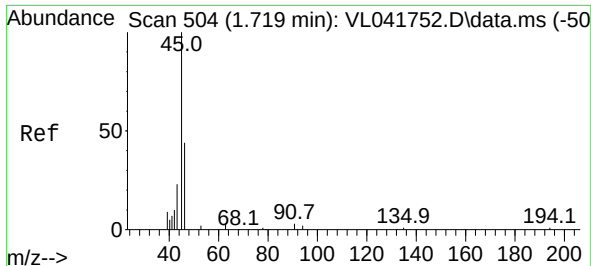
Tgt Ion:101 Resp: 718

Ion Ratio Lower Upper

101 100

151 67.0 56.8 85.2





#13

Ethanol

Concen: 4408.380 ppbv

RT: 1.732 min Scan# 504

Delta R.T. 0.013 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

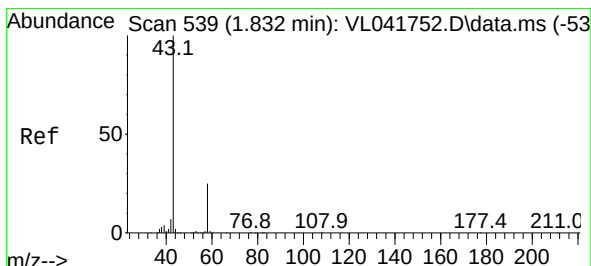
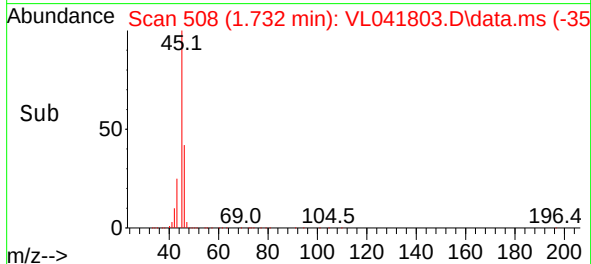
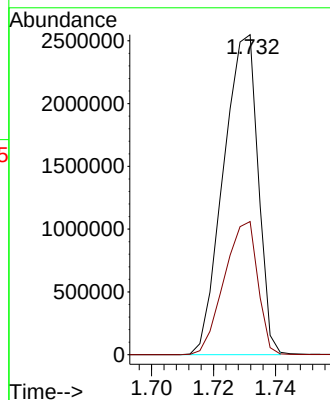
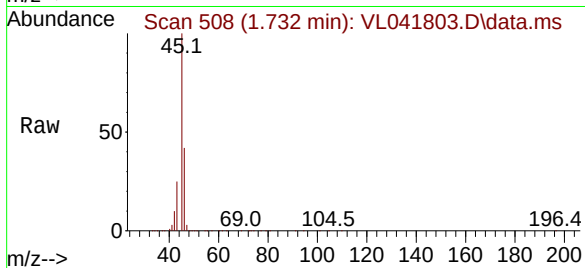
C0AB7

Tgt Ion: 45 Resp: 1977904

Ion Ratio Lower Upper

45 100

46 40.3 16.4 65.8



#15

Acetone

Concen: 8.637 ppbv

RT: 1.839 min Scan# 541

Delta R.T. 0.006 min

Lab File: VL041803.D

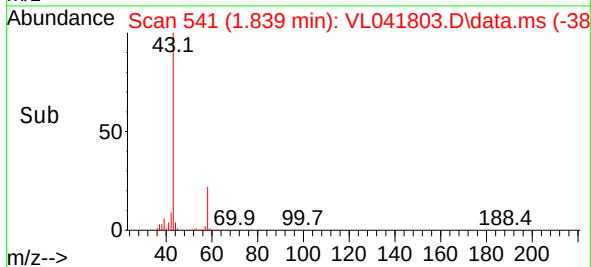
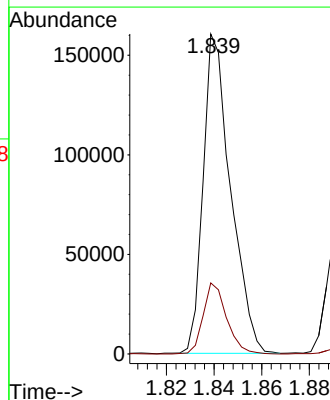
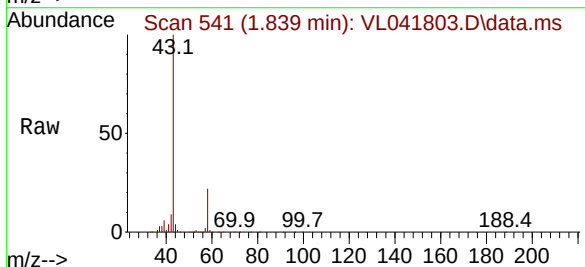
Acq: 18 Dec 2024 20:32

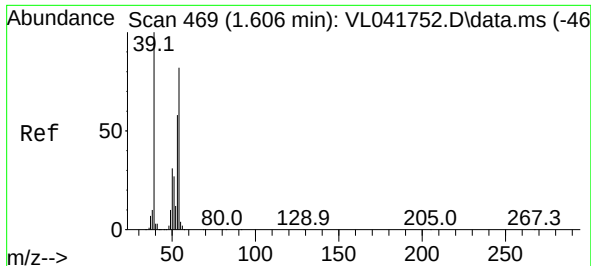
Tgt Ion: 43 Resp: 128822

Ion Ratio Lower Upper

43 100

58 19.0 19.7 29.5#





#16

1,3-Butadiene

Concen: 27.860 ppbv

RT: 1.625 min Scan# 41

Delta R.T. 0.019 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

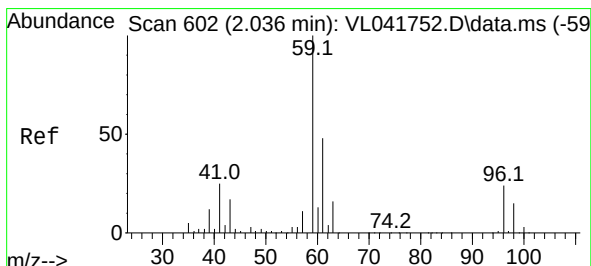
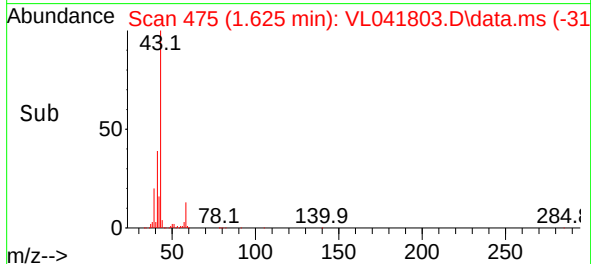
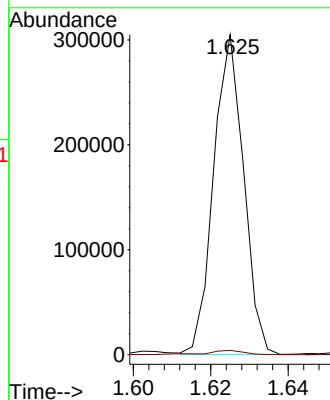
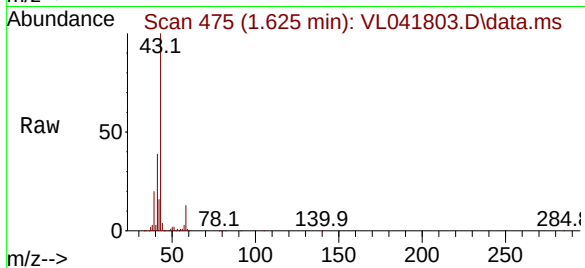
C0AB7

Tgt Ion: 39 Resp: 163629

Ion Ratio Lower Upper

39 100

54 1.8 58.4 87.6#



#17

tert-Butyl alcohol

Concen: 0.656 ppbv

RT: 2.049 min Scan# 606

Delta R.T. 0.013 min

Lab File: VL041803.D

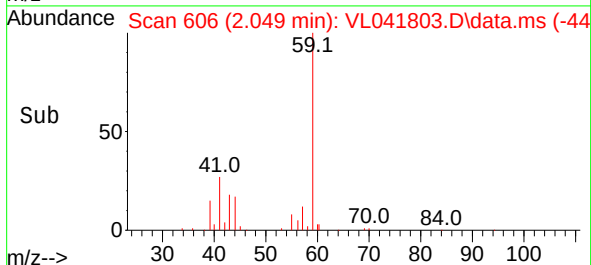
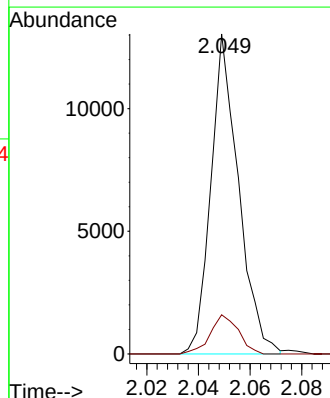
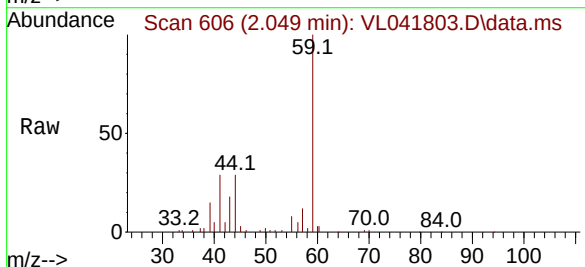
Acq: 18 Dec 2024 20:32

Tgt Ion: 59 Resp: 9710

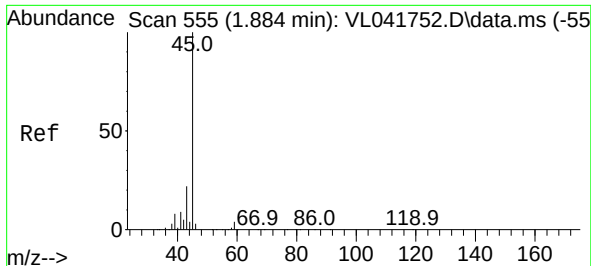
Ion Ratio Lower Upper

59 100

57 0.0 8.6 13.0#







#19

Isopropyl Alcohol

Concen: 17.402 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

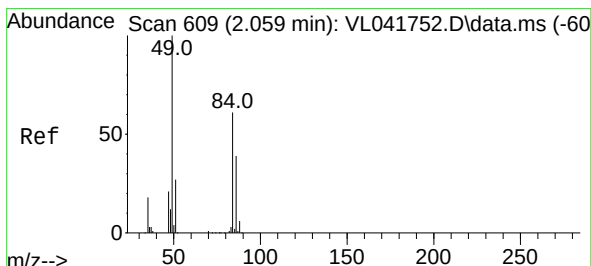
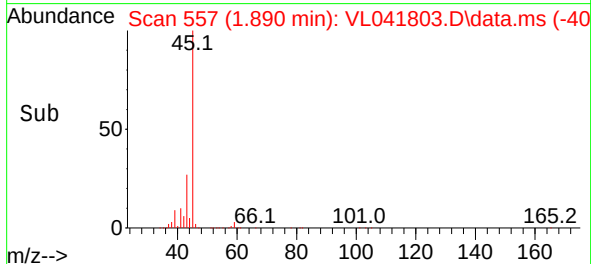
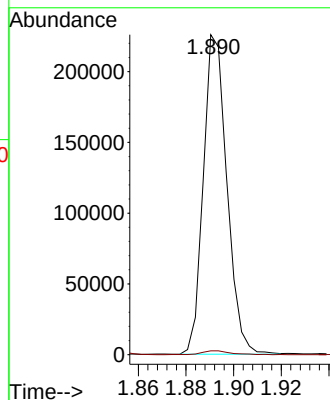
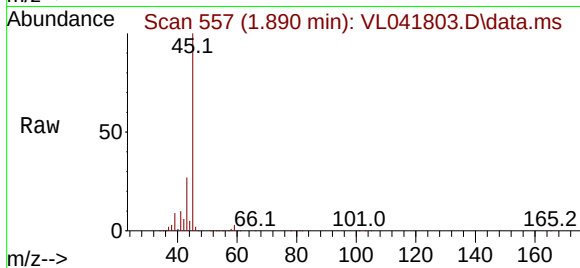
C0AB7

Tgt Ion: 45 Resp: 155744

Ion Ratio Lower Upper

45 100

58 15.7 33.3 49.9#



#20

Methylene Chloride

Concen: 0.452 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Tgt Ion: 84 Resp: 1921

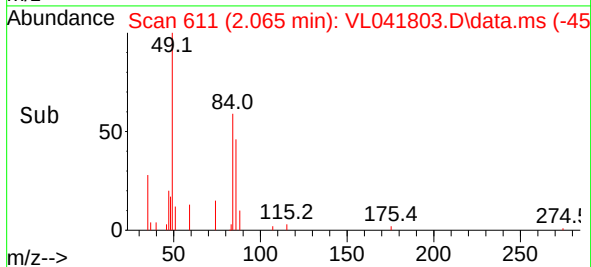
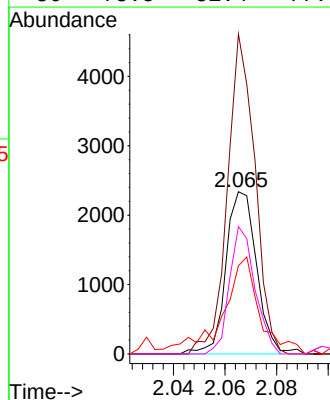
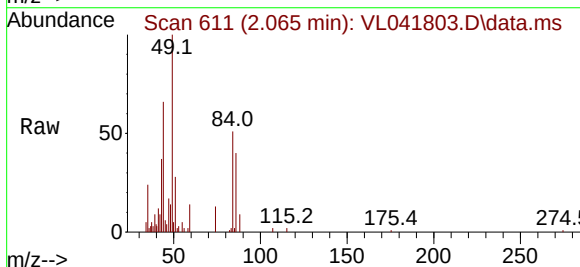
Ion Ratio Lower Upper

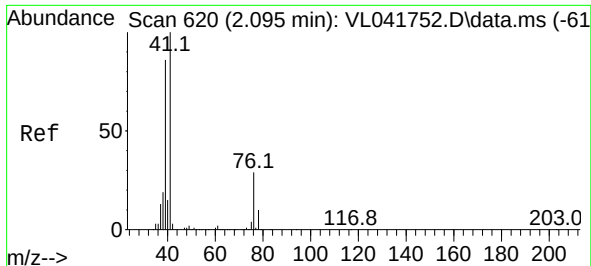
84 100

49 197.2 132.6 198.8

51 48.5 37.6 56.4

86 78.5 51.4 77.0#





#21

Allyl Chloride

Concen: 4.483 ppbv

RT: 1.968 min Scan# 51

Delta R.T. -0.127 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

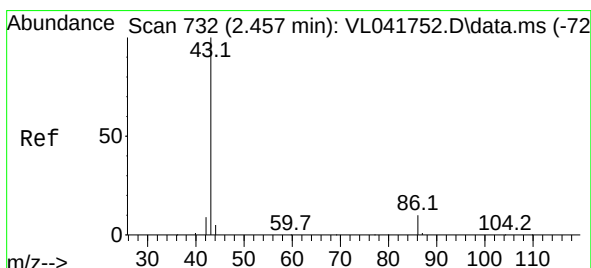
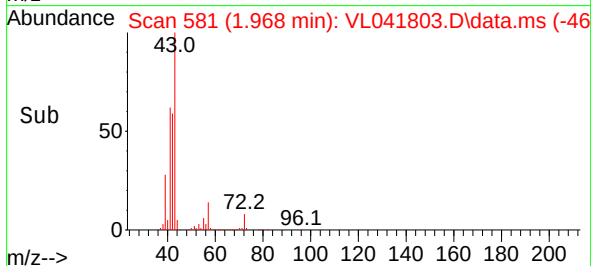
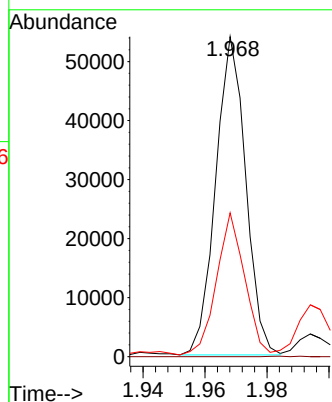
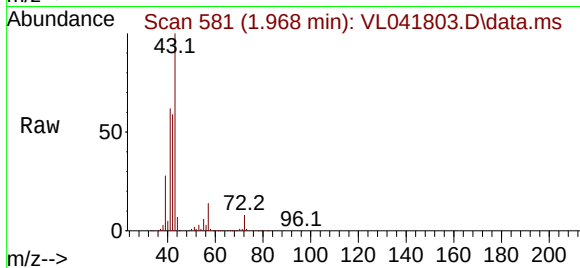
Tgt Ion: 41 Resp: 36262

Ion Ratio Lower Upper

41 100

76 0.6 22.3 33.5#

39 44.9 69.2 103.8#



#23

Vinyl Acetate

Concen: 1.215 ppbv

RT: 2.460 min Scan# 733

Delta R.T. 0.003 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Tgt Ion: 43 Resp: 8413

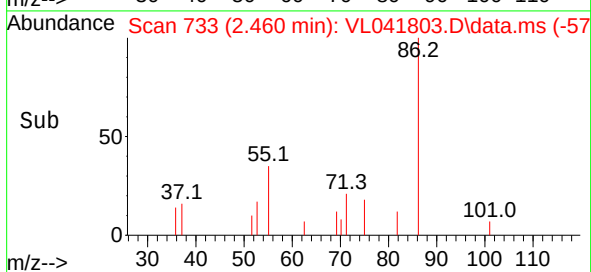
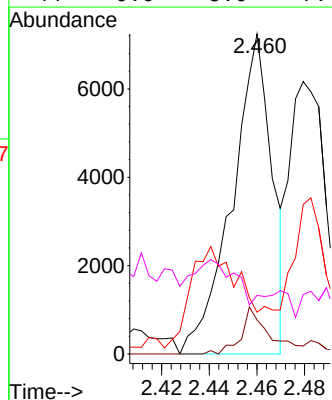
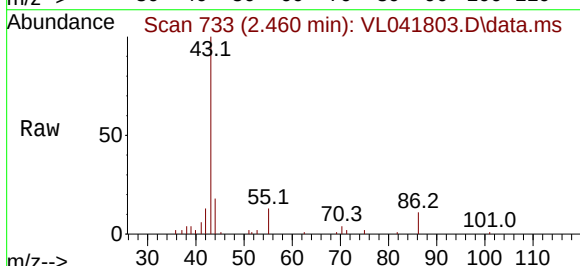
Ion Ratio Lower Upper

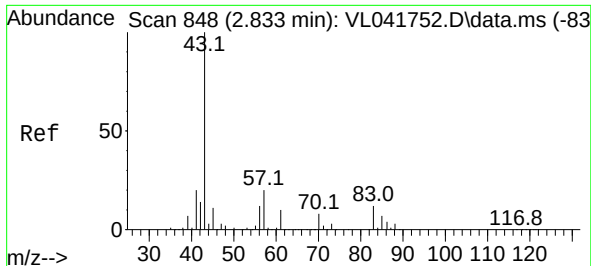
43 100

86 10.7 6.6 10.0#

42 6.0 8.2 12.2#

44 0.0 5.0 7.4#





#25

Ethyl Acetate

Concen: 0.151 ppbv

RT: 2.845 min Scan# 848

Delta R.T. 0.013 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

Tgt Ion: 43 Resp: 4200

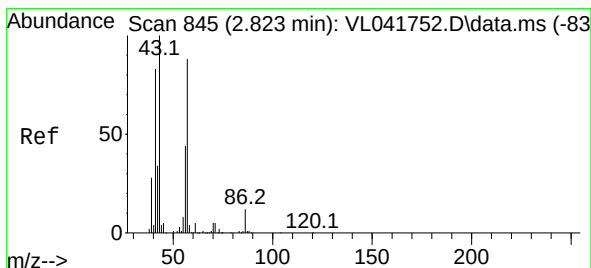
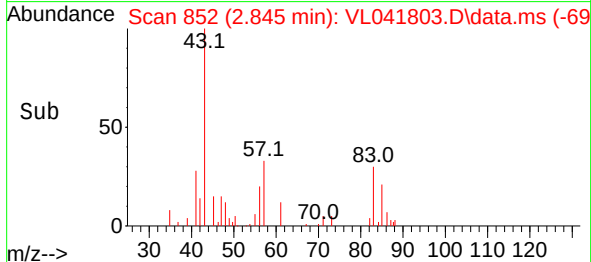
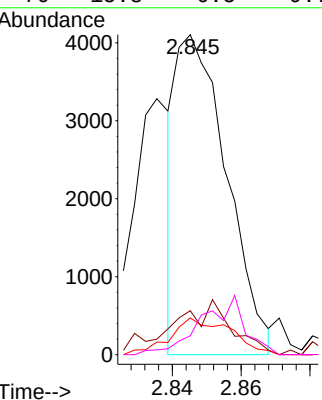
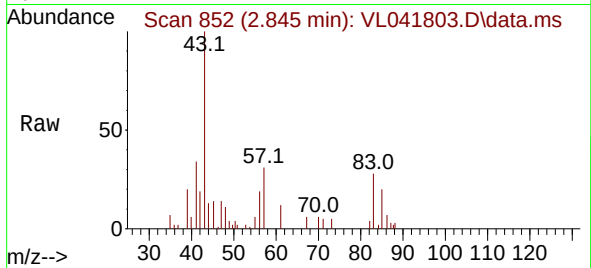
Ion Ratio Lower Upper

43 100

45 22.0 8.1 12.1#

61 13.8 7.0 10.6#

70 15.8 6.5 9.7#



#26

Hexane

Concen: 0.338 ppbv

RT: 2.835 min Scan# 849

Delta R.T. 0.013 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Tgt Ion: 57 Resp: 3564

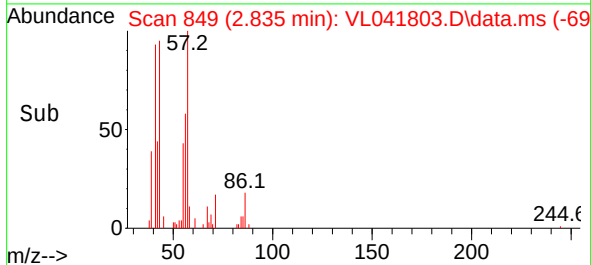
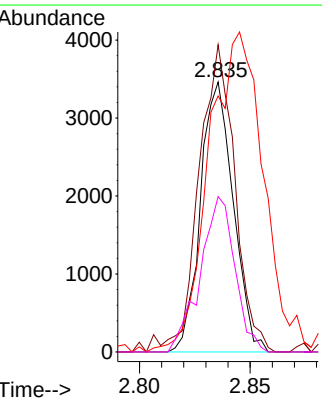
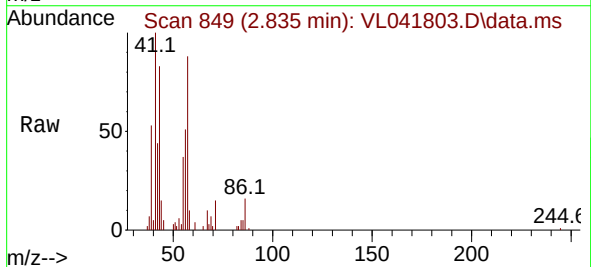
Ion Ratio Lower Upper

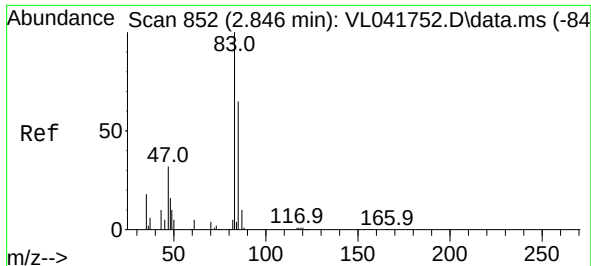
57 100

41 126.2 79.6 119.4#

43 200.4 211.0 316.6#

56 60.8 42.6 63.8





#29

Chloroform

Concen: 0.297 ppbv

RT: 2.855 min Scan# 81

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

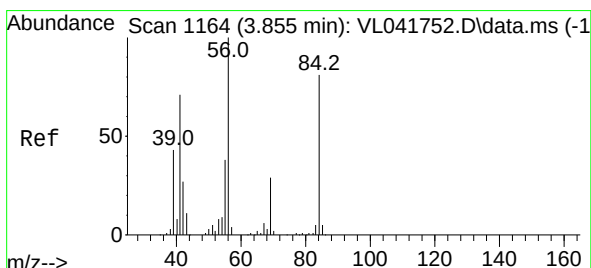
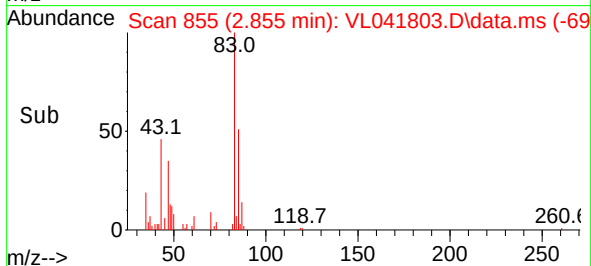
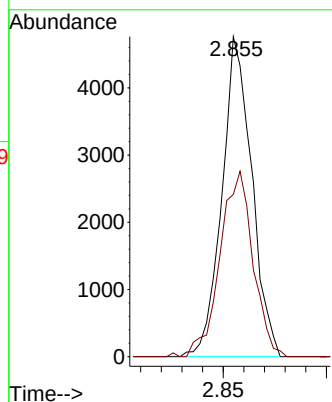
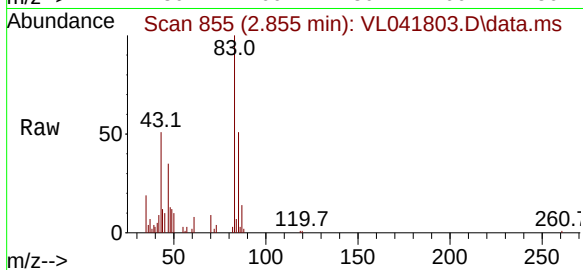
C0AB7

Tgt Ion: 83 Resp: 4772

Ion Ratio Lower Upper

83 100

85 50.7 51.8 77.6#



#30

Cyclohexane

Concen: 0.073 ppbv

RT: 3.865 min Scan# 1167

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

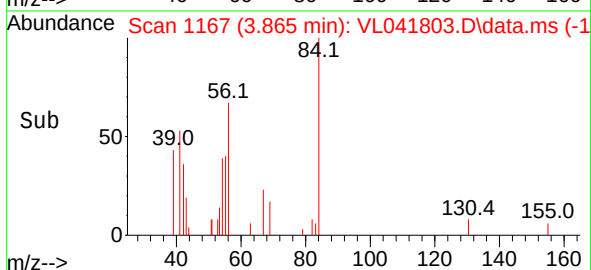
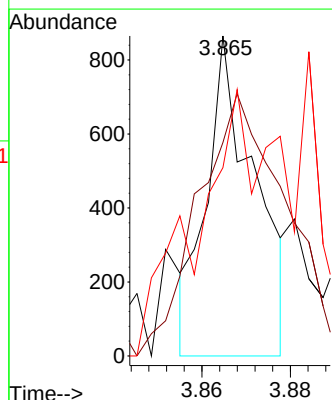
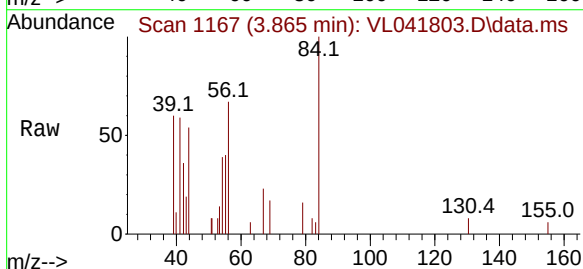
Tgt Ion: 84 Resp: 652

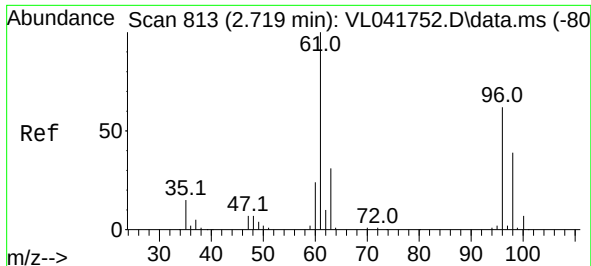
Ion Ratio Lower Upper

84 100

56 158.3 102.3 153.5#

41 0.0 74.0 111.0#





#31

cis-1,2-Dichloroethene

Concen: 0.036 ppbv

RT: 2.845 min Scan# 81

Delta R.T. 0.126 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

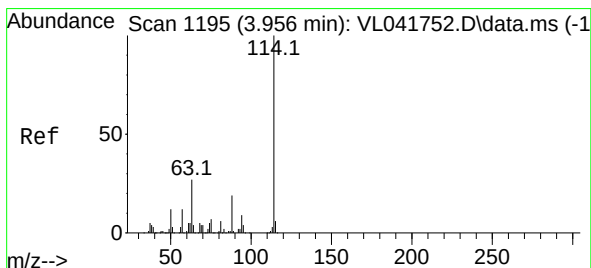
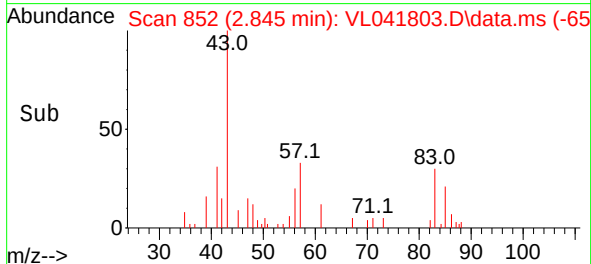
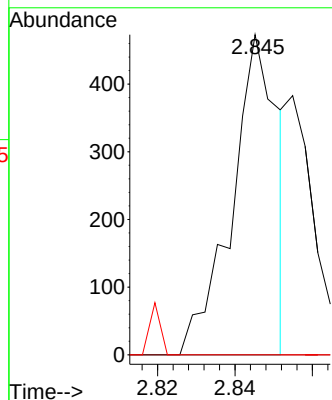
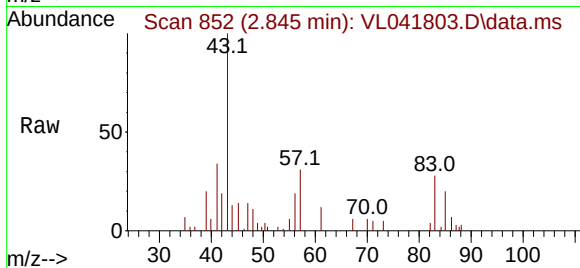
Tgt Ion: 61 Resp: 390

Ion Ratio Lower Upper

61 100

96 0.0 49.7 74.5#

98 0.0 30.8 46.2#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.972 min Scan# 1200

Delta R.T. 0.016 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

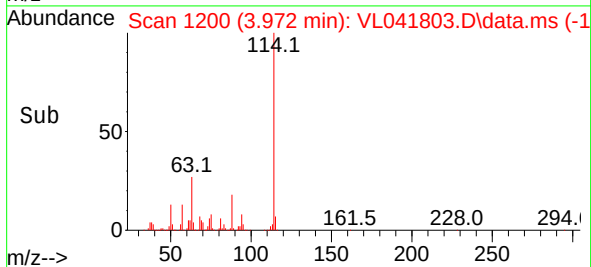
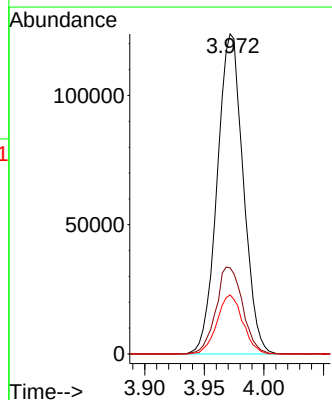
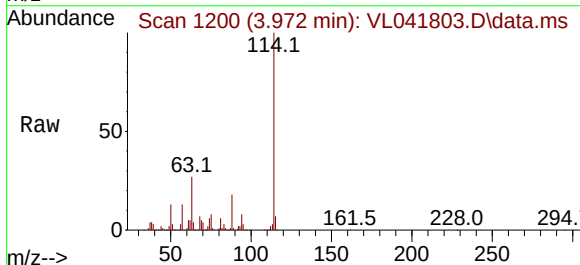
Tgt Ion: 114 Resp: 187828

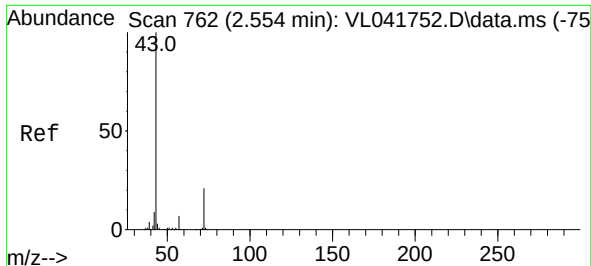
Ion Ratio Lower Upper

114 100

63 27.8 21.8 32.8

88 18.2 14.8 22.2





#34

2-Butanone

Concen: 0.452 ppbv

RT: 2.570 min Scan# 7

Delta R.T. 0.016 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

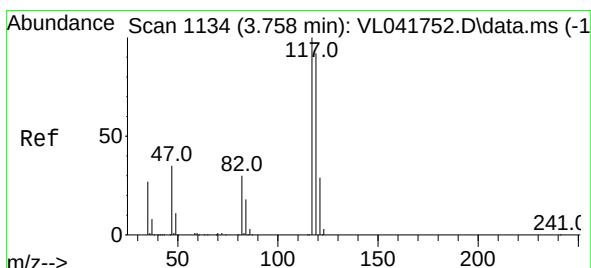
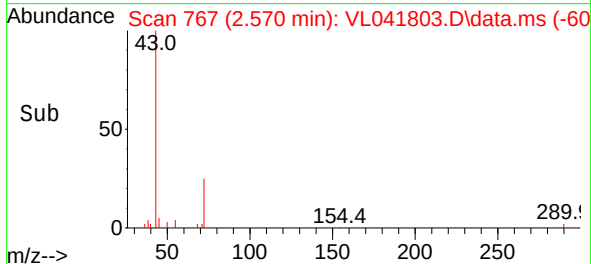
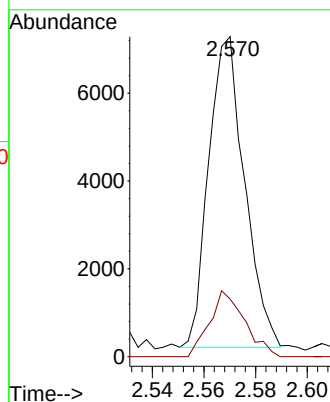
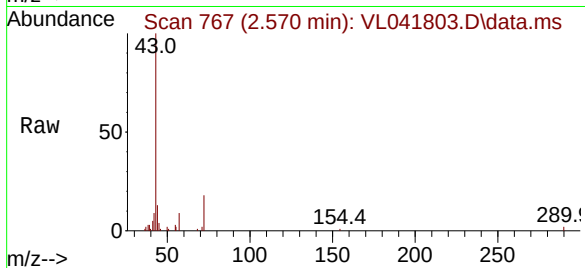
C0AB7

Tgt Ion: 43 Resp: 6833

Ion Ratio Lower Upper

43 100

72 20.6 16.8 25.2



#35

Carbon Tetrachloride

Concen: 0.044 ppbv

RT: 3.774 min Scan# 1139

Delta R.T. 0.016 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

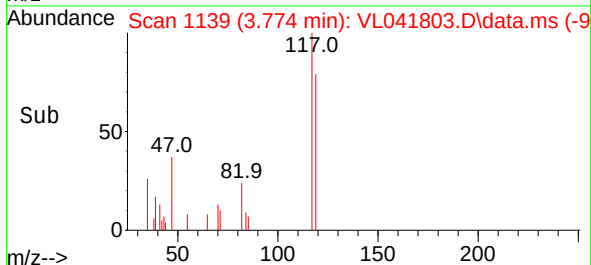
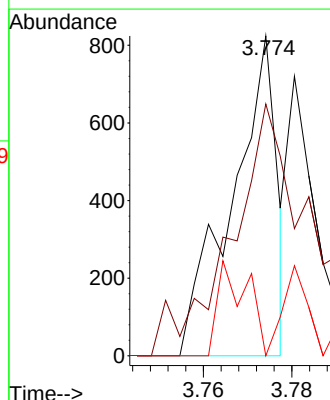
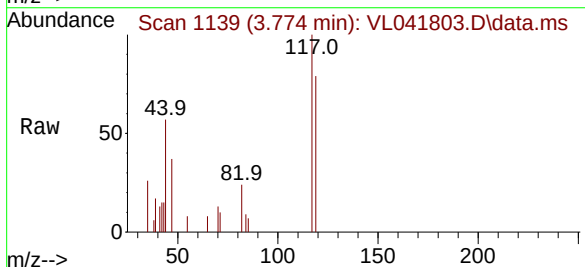
Tgt Ion: 117 Resp: 585

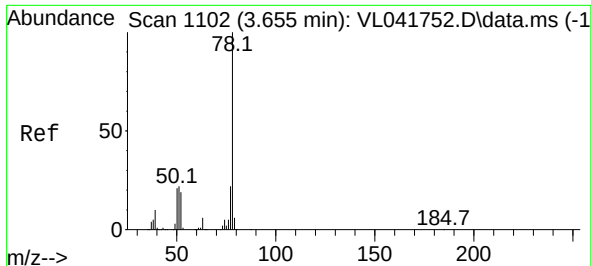
Ion Ratio Lower Upper

117 100

119 72.7 73.7 110.5#

121 0.0 23.0 34.4#

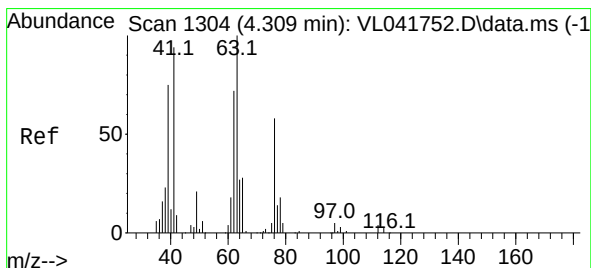
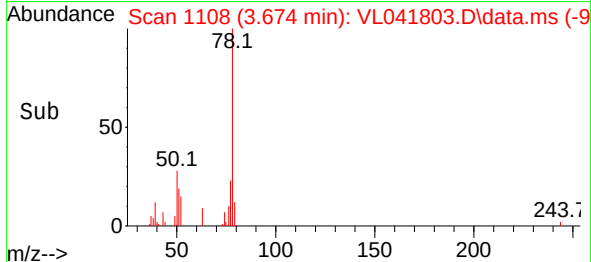
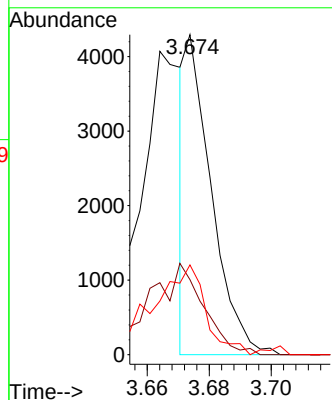
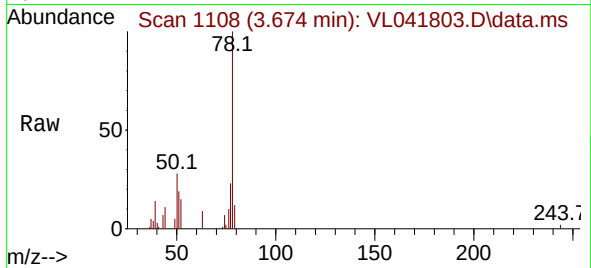




#36  
Benzene  
Concen: 0.128 ppbv  
RT: 3.674 min Scan# 1108  
Delta R.T. 0.019 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

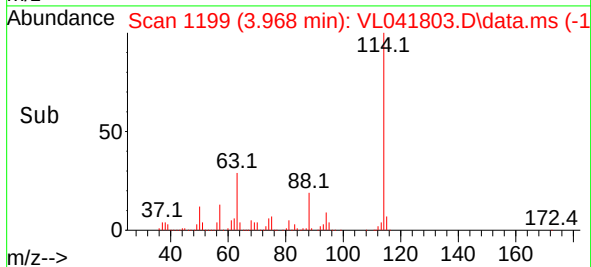
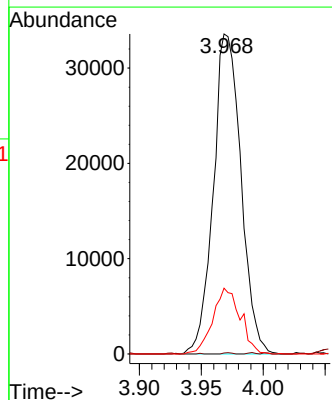
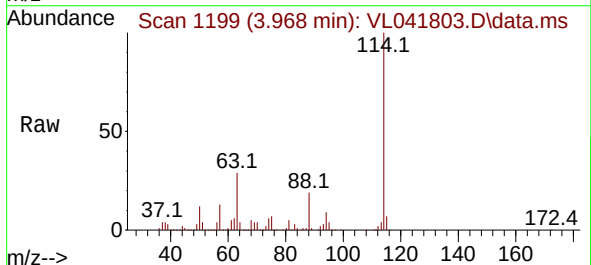
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

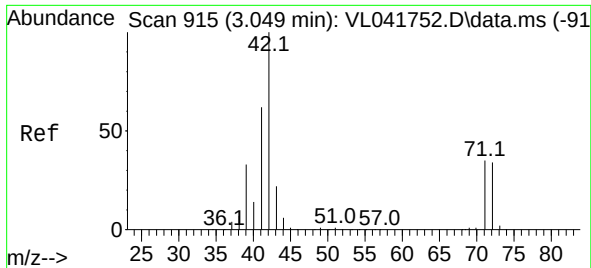
Tgt Ion: 78 Resp: 2492  
Ion Ratio Lower Upper  
78 100  
77 23.5 17.8 26.6  
50 25.3 17.2 25.8



#39  
1,2-Dichloropropane  
Concen: 7.428 ppbv  
RT: 3.968 min Scan# 1199  
Delta R.T. -0.340 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 63 Resp: 52198  
Ion Ratio Lower Upper  
63 100  
41 0.3 75.3 112.9#  
62 20.6 57.3 85.9#

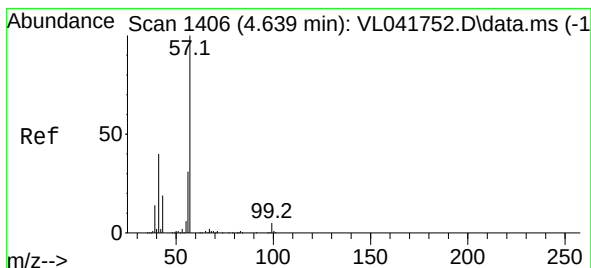
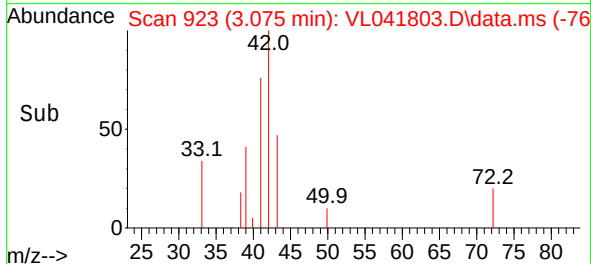
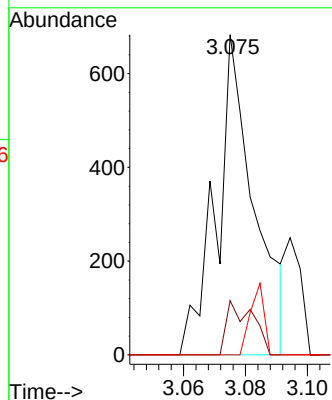
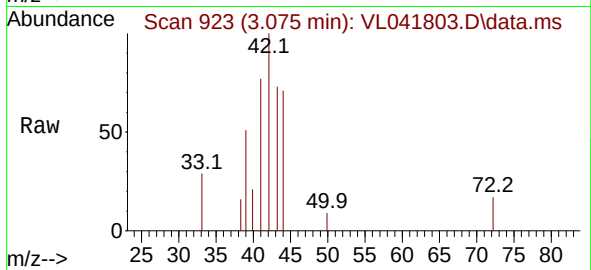




#41  
Tetrahydrofuran  
Concen: 0.068 ppbv  
RT: 3.075 min Scan# 911  
Delta R.T. 0.026 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

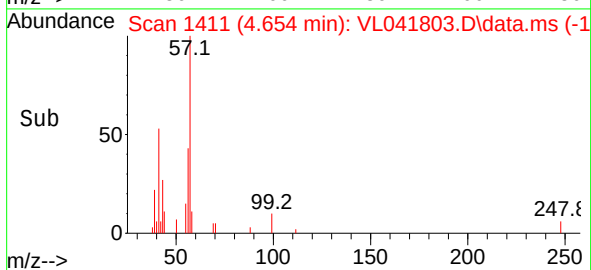
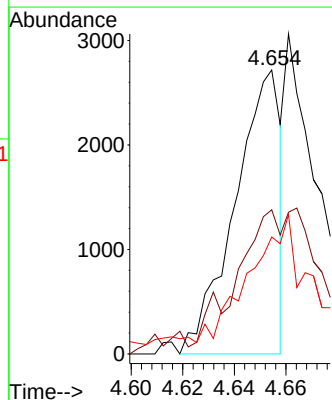
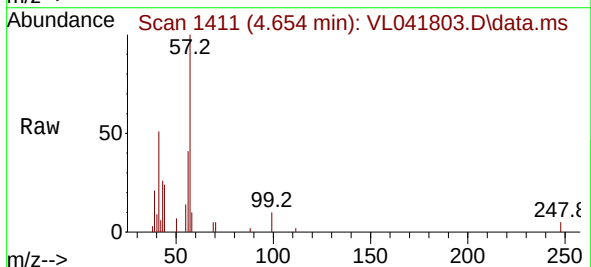
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB7

Tgt Ion: 42 Resp: 575  
Ion Ratio Lower Upper  
42 100  
72 11.7 29.1 43.7#  
71 8.2 28.4 42.6#

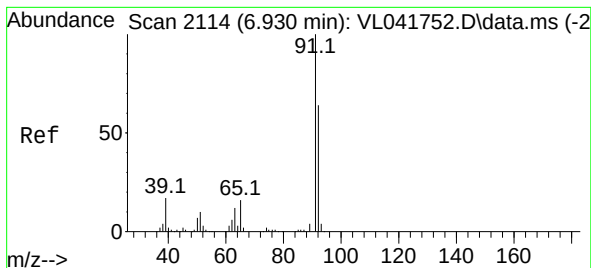


#44  
2,2,4-Trimethylpentane  
Concen: 0.100 ppbv  
RT: 4.654 min Scan# 1411  
Delta R.T. 0.016 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 57 Resp: 3319  
Ion Ratio Lower Upper  
57 100  
41 0.0 30.7 46.1#  
56 0.0 25.4 38.0#







#53

Toluene

Concen: 0.597 ppbv

RT: 6.949 min Scan# 2114

Delta R.T. 0.019 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

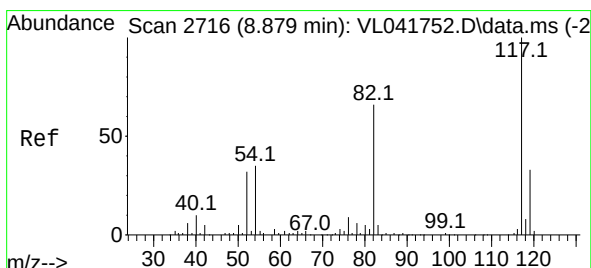
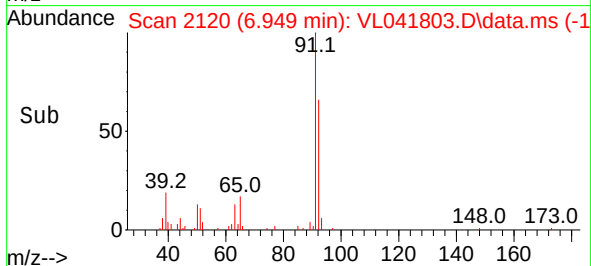
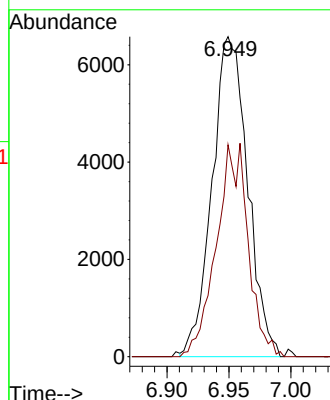
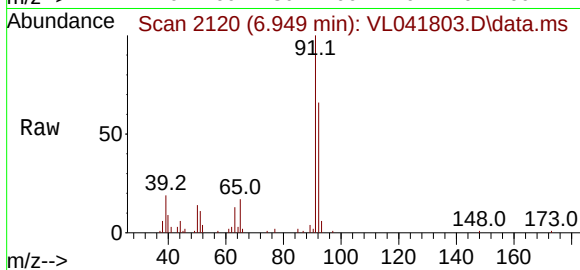
C0AB7

Tgt Ion: 91 Resp: 13160

Ion Ratio Lower Upper

91 100

92 59.3 47.9 71.9



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.894 min Scan# 2721

Delta R.T. 0.016 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

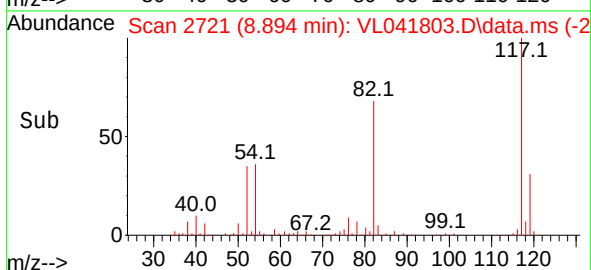
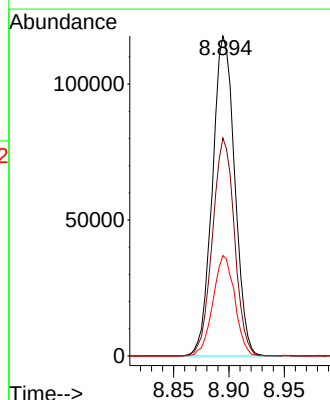
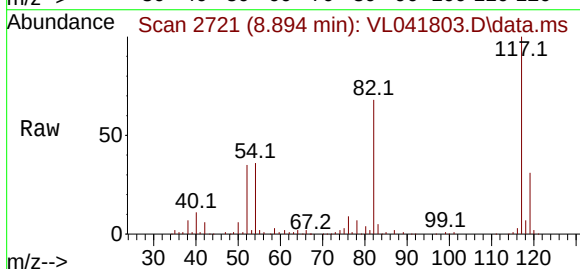
Tgt Ion: 117 Resp: 164998

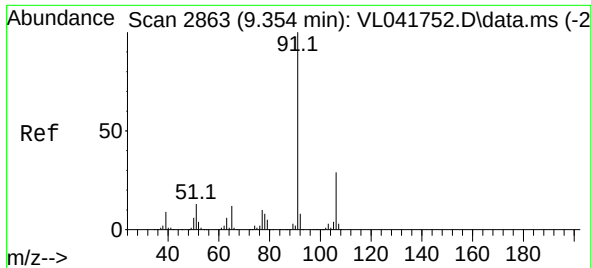
Ion Ratio Lower Upper

117 100

82 67.3 53.8 80.8

119 30.9 26.7 40.1





#58

Ethyl Benzene

Concen: 0.083 ppbv

RT: 9.367 min Scan# 21

Delta R.T. 0.013 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

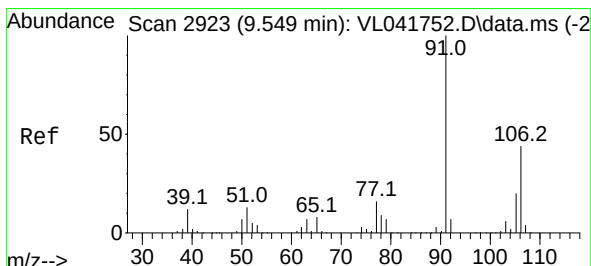
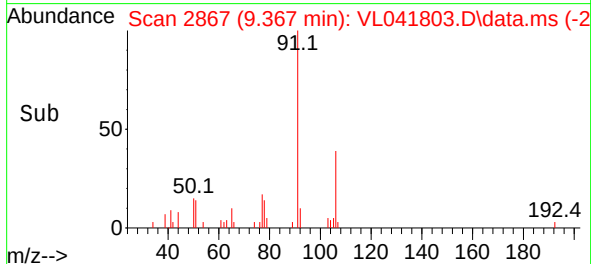
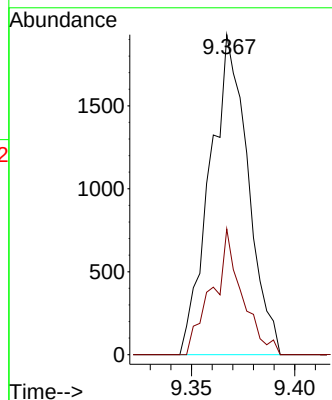
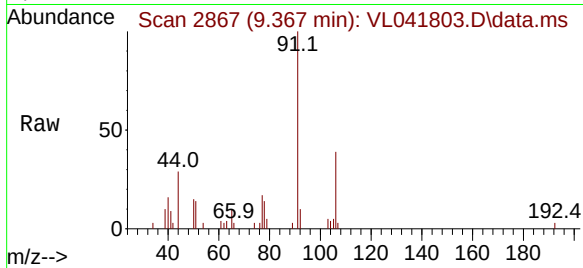
C0AB7

Tgt Ion: 91 Resp: 2474

Ion Ratio Lower Upper

91 100

106 39.3 23.5 35.3#



#59

m/p-Xylene

Concen: 0.058 ppbv

RT: 9.564 min Scan# 2928

Delta R.T. 0.016 min

Lab File: VL041803.D

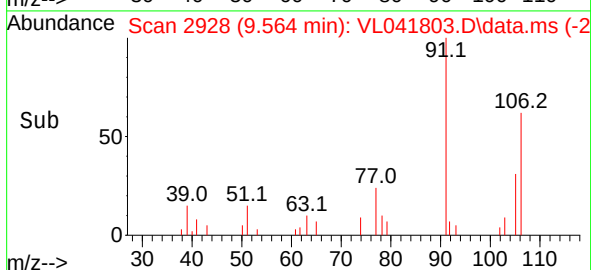
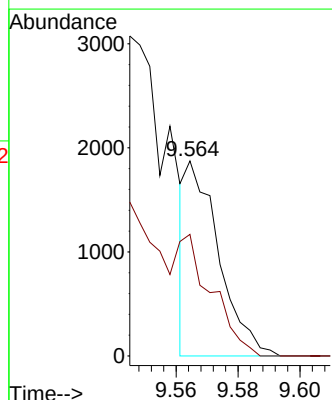
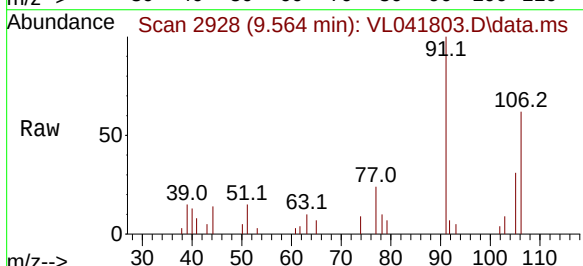
Acq: 18 Dec 2024 20:32

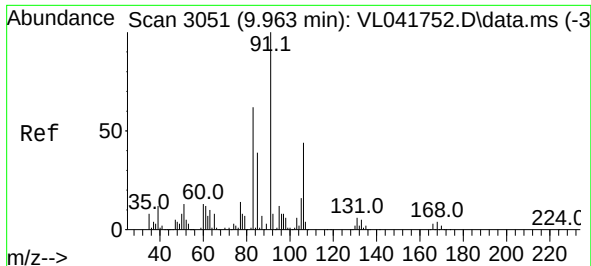
Tgt Ion: 91 Resp: 1382

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0

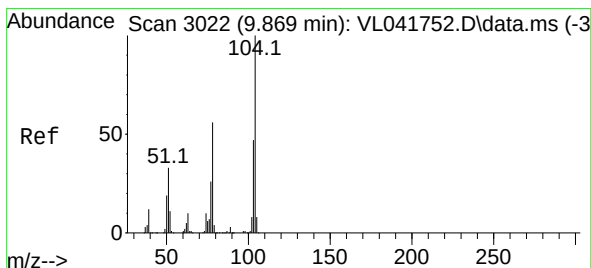
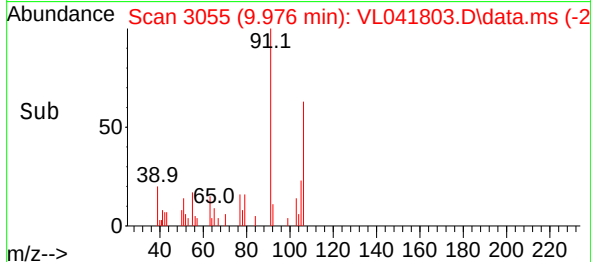
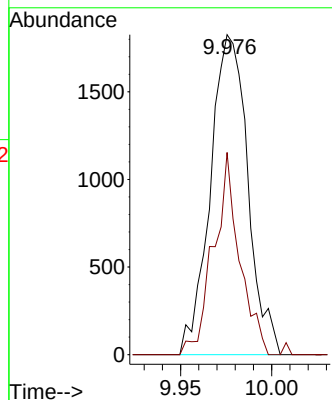
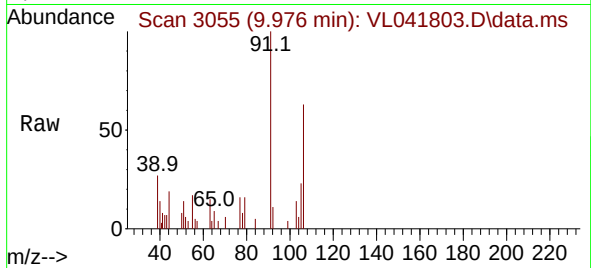




#60  
o-Xylene  
Concen: 0.109 ppbv  
RT: 9.976 min Scan# 3051  
Delta R.T. 0.013 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

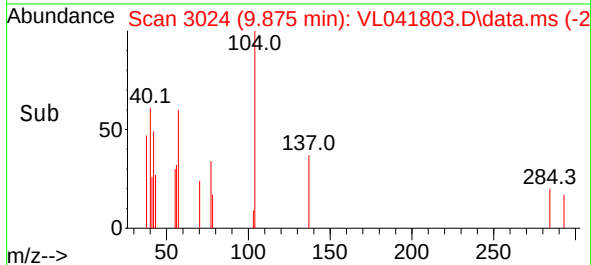
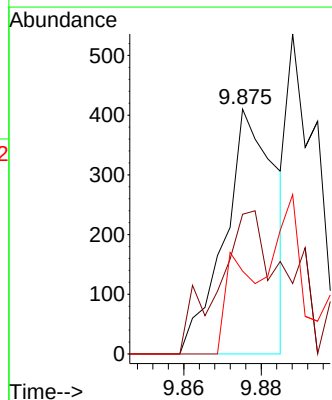
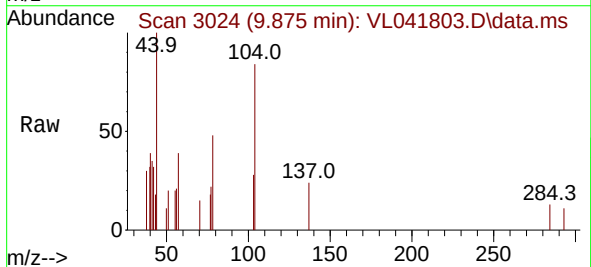
Instrument :  
MSVOA\_1  
ClientSampleId :  
C0AB7

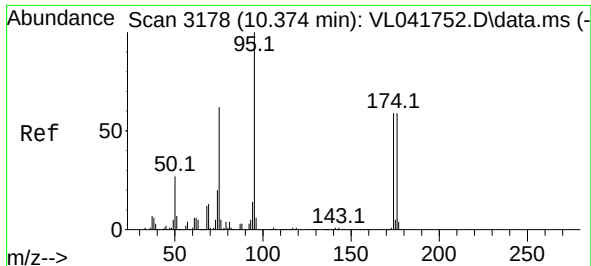
Tgt Ion: 91 Resp: 2612  
Ion Ratio Lower Upper  
91 100  
106 44.4 21.1 63.4



#61  
Styrene  
Concen: 0.036 ppbv  
RT: 9.875 min Scan# 3024  
Delta R.T. 0.006 min  
Lab File: VL041803.D  
Acq: 18 Dec 2024 20:32

Tgt Ion: 104 Resp: 373  
Ion Ratio Lower Upper  
104 100  
78 82.3 43.8 65.6#  
103 0.0 37.8 56.6#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.182 ppbv

RT: 10.387 min Scan# 3178

Delta R.T. 0.013 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

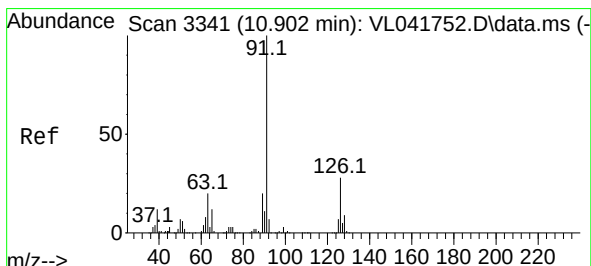
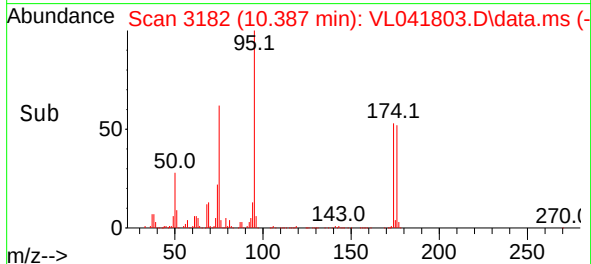
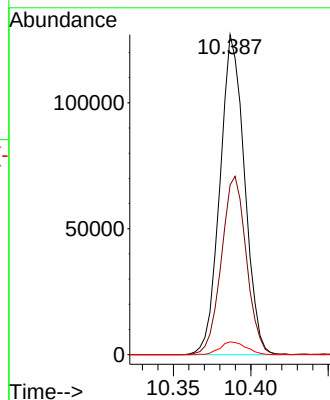
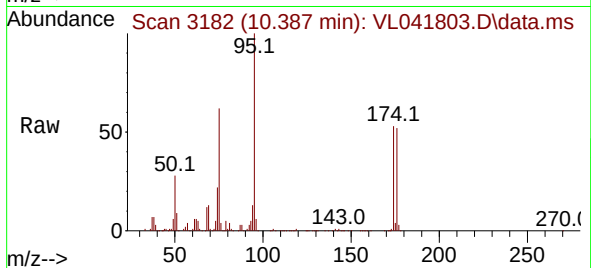
Tgt Ion: 95 Resp: 139994

Ion Ratio Lower Upper

95 100

174 56.8 47.6 71.4

175 4.3 3.7 5.5



#71

2-Chlorotoluene

Concen: 0.545 ppbv

RT: 10.872 min Scan# 3332

Delta R.T. -0.030 min

Lab File: VL041803.D

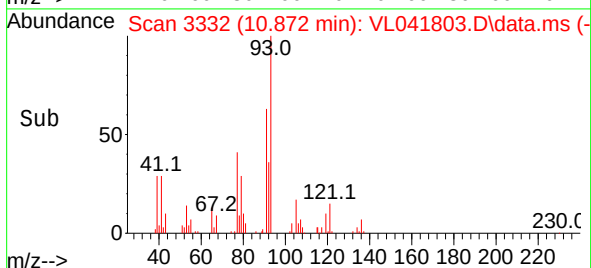
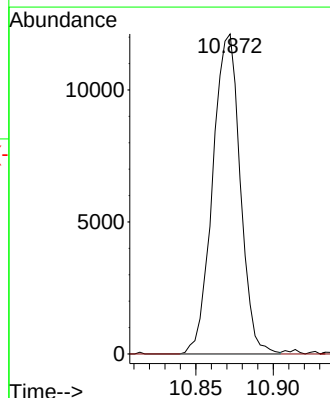
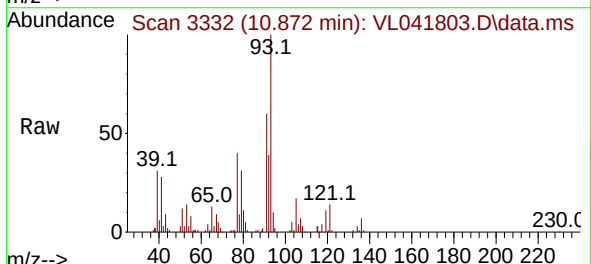
Acq: 18 Dec 2024 20:32

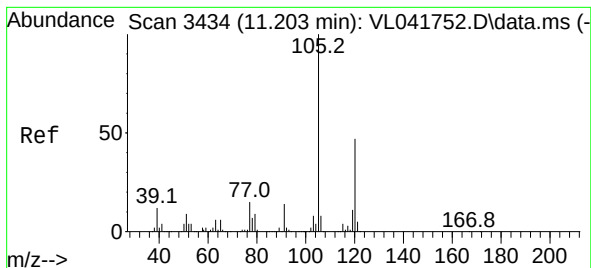
Tgt Ion: 91 Resp: 14981

Ion Ratio Lower Upper

91 100

126 0.0 11.6 46.4#





#73

1,3,5-Trimethylbenzene

Concen: 0.033 ppbv

RT: 11.218 min Scan# 3434

Delta R.T. 0.016 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

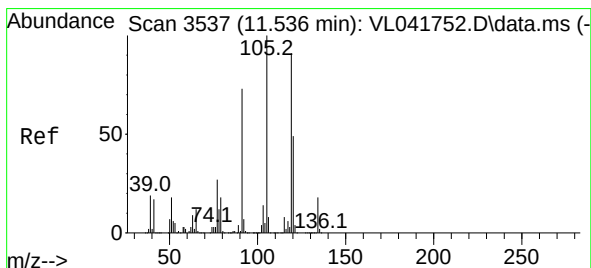
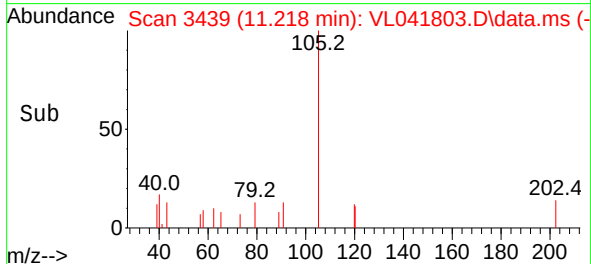
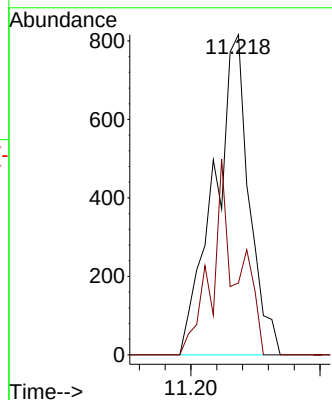
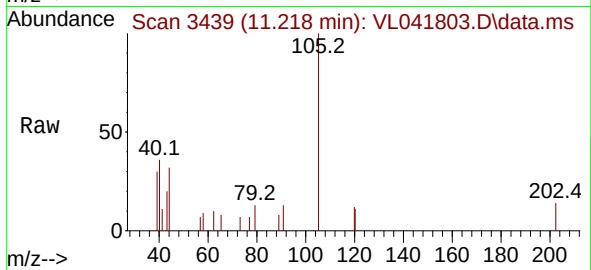
C0AB7

Tgt Ion:105 Resp: 768

Ion Ratio Lower Upper

105 100

120 22.4 37.4 56.2#



#74

1,2,4-Trimethylbenzene

Concen: 0.092 ppbv

RT: 11.545 min Scan# 3540

Delta R.T. 0.009 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Tgt Ion:105 Resp: 2331

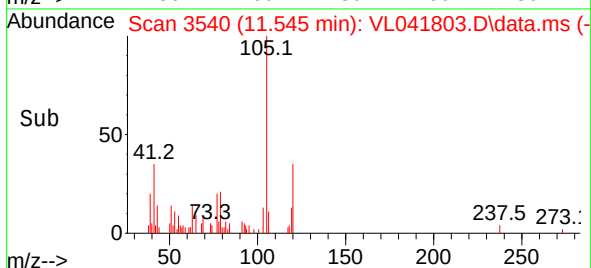
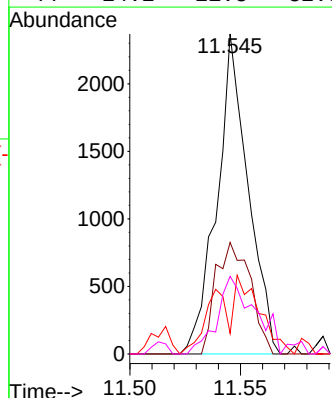
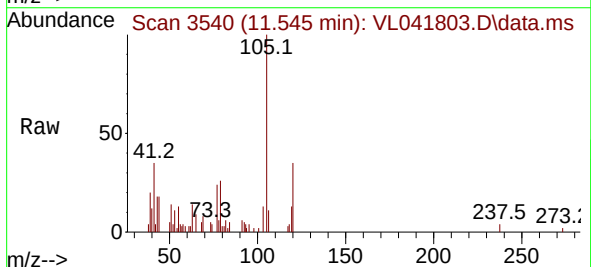
Ion Ratio Lower Upper

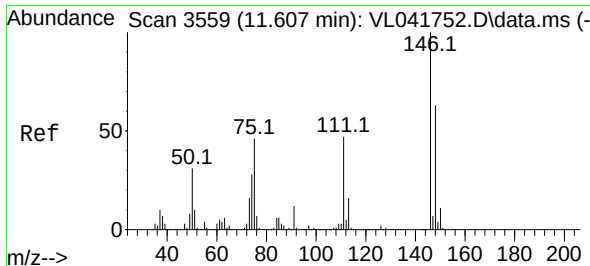
105 100

120 34.9 39.0 58.4#

91 6.4 58.1 87.1#

77 24.2 21.8 32.8





#75

1,3-Dichlorobenzene

Concen: 0.061 ppbv

RT: 11.678 min Scan# 3581

Delta R.T. 0.071 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7

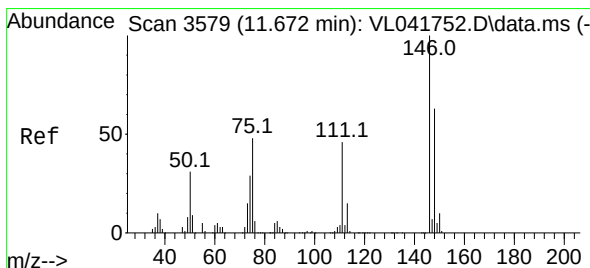
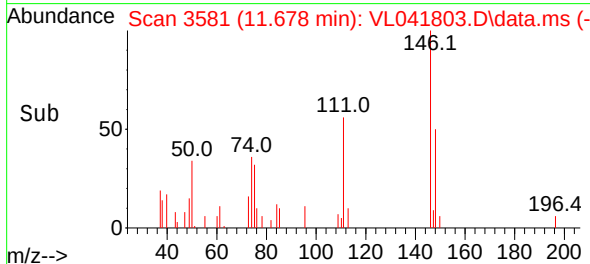
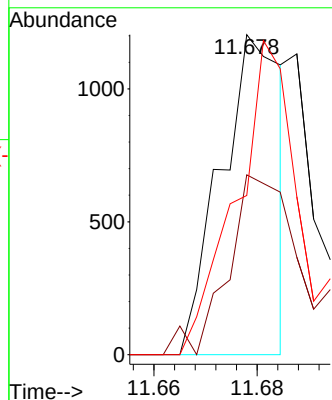
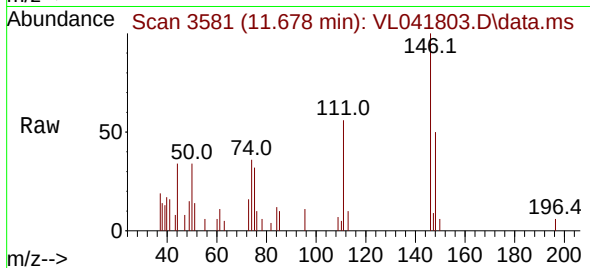
Tgt Ion:146 Resp: 981

Ion Ratio Lower Upper

146 100

111 68.7 23.4 70.3

148 100.8 31.6 95.0#



#76

1,4-Dichlorobenzene

Concen: 0.062 ppbv

RT: 11.678 min Scan# 3581

Delta R.T. 0.006 min

Lab File: VL041803.D

Acq: 18 Dec 2024 20:32

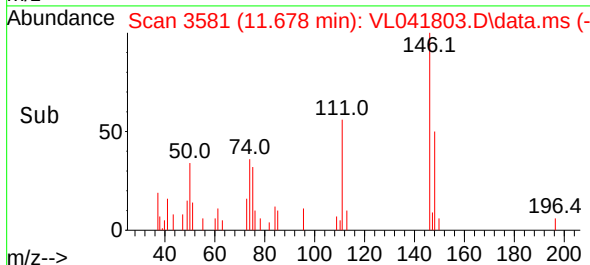
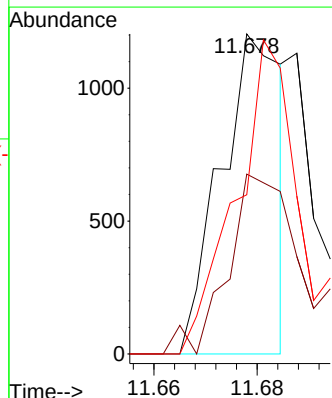
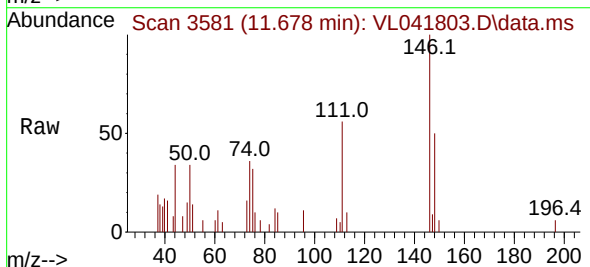
Tgt Ion:146 Resp: 981

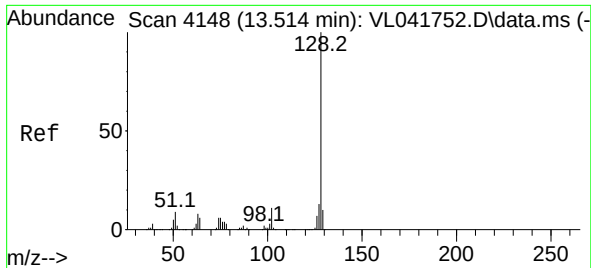
Ion Ratio Lower Upper

146 100

111 68.7 22.7 68.1#

148 100.8 31.4 94.0#





#79

Naphthalene

Concen: 0.051 ppbv

RT: 13.516 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041803.D

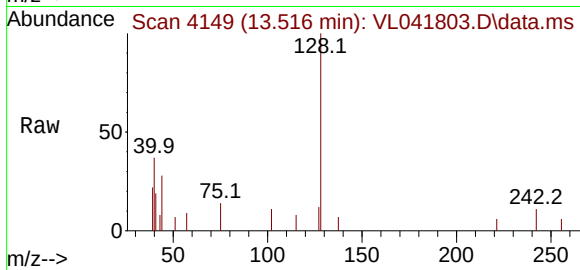
Acq: 18 Dec 2024 20:32

Instrument :

MSVOA\_L

ClientSampleId :

C0AB7



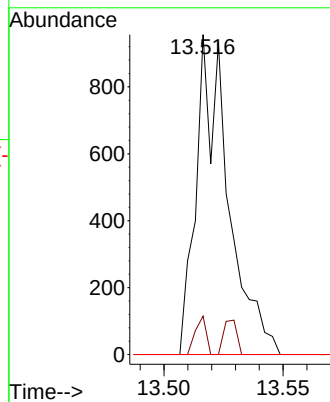
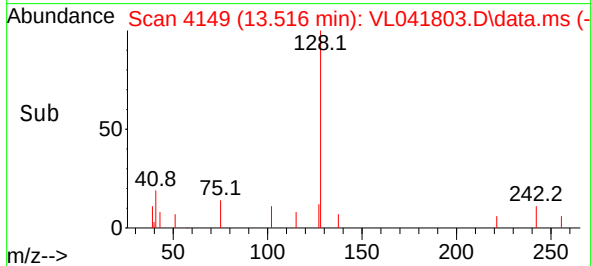
Tgt Ion:128 Resp: 894

Ion Ratio Lower Upper

128 100

127 12.0 10.7 16.1

129 0.0 8.2 12.4#



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
 Data File : VL041811.D  
 Acq On : 19 Dec 2024 00:44  
 Operator : SY/MD  
 Sample : P5294-03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0AB8

Quant Time: Dec 19 08:02:26 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Dec 19 07:32:09 2024  
 Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.793 | 49   | 77490    | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.968 | 114  | 186355   | 10.000 | ppbv  | 0.01     |
| 55) Chlorobenzene-d5    | 8.891 | 117  | 163591   | 10.000 | ppbv  | 0.01     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.383 | 95    | 137750   | 10.105   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.000% |

|                                |        |     |        |          |        |     |
|--------------------------------|--------|-----|--------|----------|--------|-----|
| Target Compounds               |        |     |        | Qvalue   |        |     |
| 2) Dichlorodifluoromethane     | 1.499  | 85  | 5098   | 0.370    | ppbv   | 91  |
| 3) Chlorodifluoromethane       | 1.466  | 51  | 11261  | 0.891    | ppbv # | 77  |
| 4) Chloromethane               | 1.534  | 50  | 3262   | 0.605    | ppbv # | 79  |
| 6) Bromomethane                | 1.670  | 94  | 133    | 0.052    | ppbv # | 70  |
| 7) Chloroethane                | 1.706  | 64  | 106    | 0.050    | ppbv # | 40  |
| 9) Propene                     | 1.560  | 41  | 13953  | 2.547    | ppbv   | 88  |
| 10) Heptane                    | 4.998  | 43  | 1116   | 0.079    | ppbv # | 36  |
| 11) Trichlorofluoromethane     | 1.881  | 101 | 2991   | 0.204    | ppbv   | 99  |
| 12) 1,1,2-Trichlorotri fluo... | 2.143  | 101 | 715    | 0.064    | ppbv   | 95  |
| 13) Ethanol                    | 1.722  | 45  | 711075 | 1567.837 | ppbv   | 95  |
| 15) Acetone                    | 1.839  | 43  | 119725 | 7.941    | ppbv # | 87  |
| 16) 1,3-Butadiene              | 1.602  | 39  | 3399   | 0.573    | ppbv # | 58  |
| 17) tert-Butyl alcohol         | 2.046  | 59  | 4030   | 0.269    | ppbv # | 1   |
| 19) Isopropyl Alcohol          | 1.890  | 45  | 46673  | 5.159    | ppbv # | 38  |
| 20) Methylene Chloride         | 2.065  | 84  | 1430   | 0.333    | ppbv   | 92  |
| 21) Allyl Chloride             | 2.085  | 41  | 770    | 0.094    | ppbv # | 33  |
| 23) Vinyl Acetate              | 2.460  | 43  | 9928   | 1.418    | ppbv # | 93  |
| 25) Ethyl Acetate              | 2.848  | 43  | 2243   | 0.080    | ppbv # | 50  |
| 26) Hexane                     | 2.832  | 57  | 3902   | 0.367    | ppbv # | 63  |
| 29) Chloroform                 | 2.855  | 83  | 3971   | 0.245    | ppbv   | 91  |
| 30) Cyclohexane                | 3.862  | 84  | 475    | 0.052    | ppbv # | 46  |
| 31) cis-1,2-Dichloroethene     | 2.845  | 61  | 594    | 0.054    | ppbv # | 26  |
| 34) 2-Butanone                 | 2.564  | 43  | 14105  | 0.941    | ppbv   | 96  |
| 35) Carbon Tetrachloride       | 3.768  | 117 | 417    | 0.032    | ppbv # | 67  |
| 36) Benzene                    | 3.664  | 78  | 7992   | 0.415    | ppbv   | 98  |
| 39) 1,2-Dichloropropane        | 3.965  | 63  | 52285  | 7.500    | ppbv # | 17  |
| 44) 2,2,4-Trimethylpentane     | 4.655  | 57  | 6997   | 0.213    | ppbv # | 41  |
| 53) Toluene                    | 6.949  | 91  | 16221  | 0.742    | ppbv   | 99  |
| 58) Ethyl Benzene              | 9.361  | 91  | 3309   | 0.112    | ppbv   | 90  |
| 59) m/p-Xylene                 | 9.561  | 91  | 1793   | 0.076    | ppbv # | 100 |
| 60) o-Xylene                   | 9.972  | 91  | 3000   | 0.126    | ppbv   | 98  |
| 61) Styrene                    | 9.882  | 104 | 483    | 0.047    | ppbv # | 66  |
| 71) 2-Chlorotoluene            | 10.866 | 91  | 11185  | 0.411    | ppbv # | 46  |
| 74) 1,2,4-Trimethylbenzene     | 11.542 | 105 | 3276   | 0.131    | ppbv # | 50  |

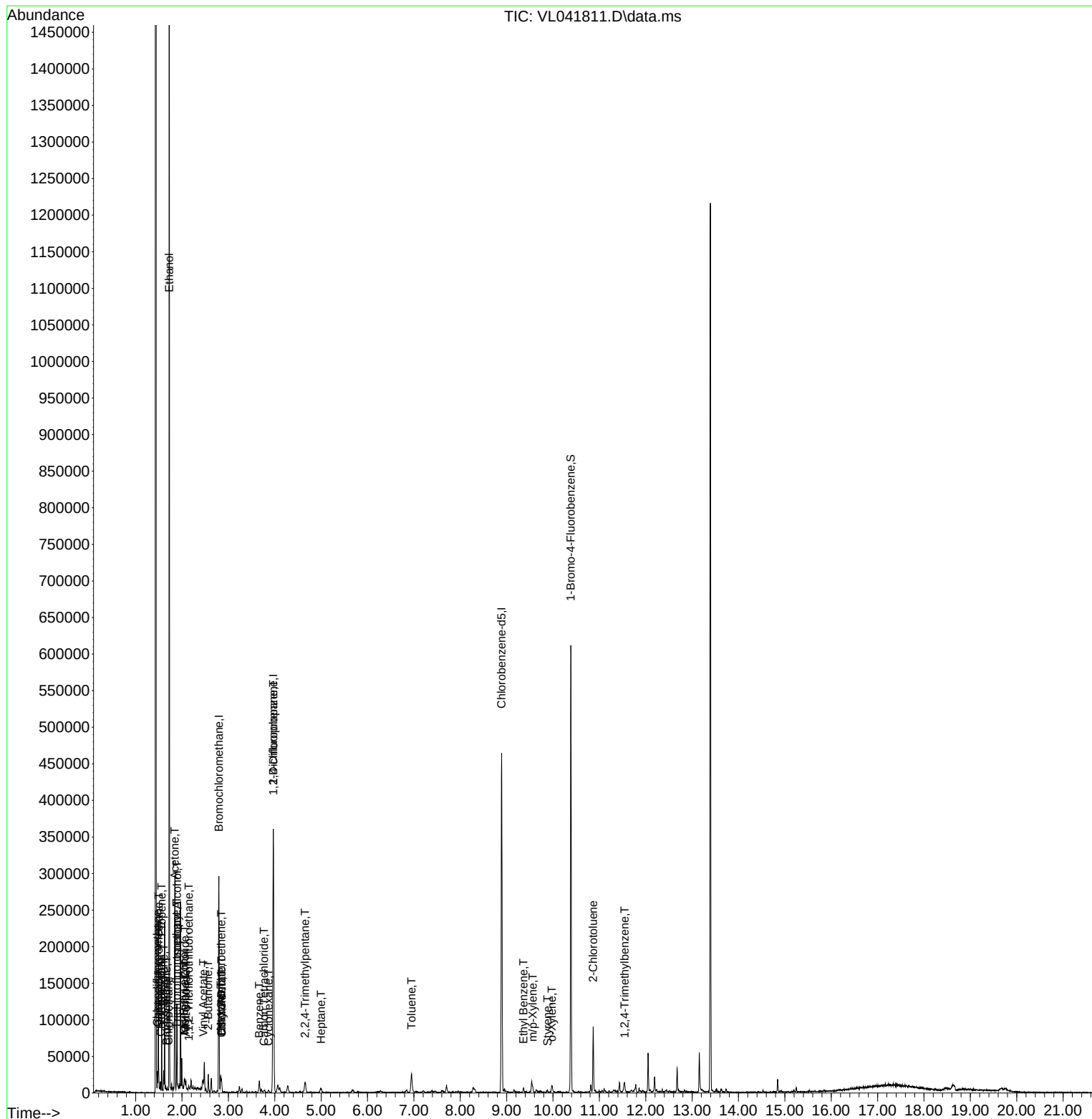
(#) = qualifier out of range (m) = manual integration (+) = signals summed

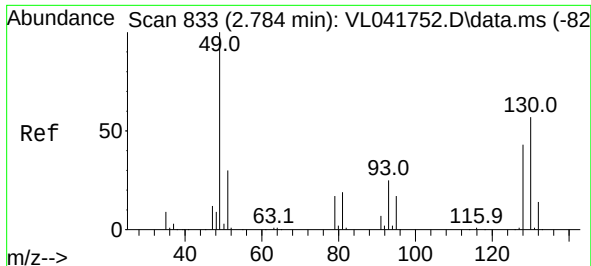


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121824\  
Data File : VL041811.D  
Acq On : 19 Dec 2024 00:44  
Operator : SY/MD  
Sample : P5294-03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

Quant Time: Dec 19 08:02:26 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL121624AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Dec 19 07:32:09 2024  
Response via : Initial Calibration

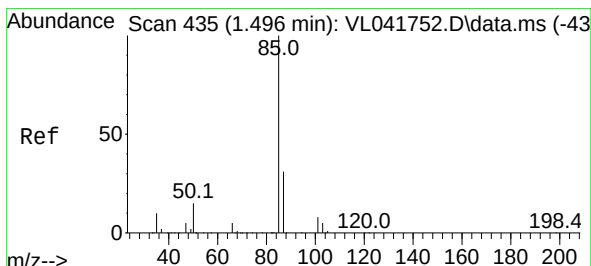
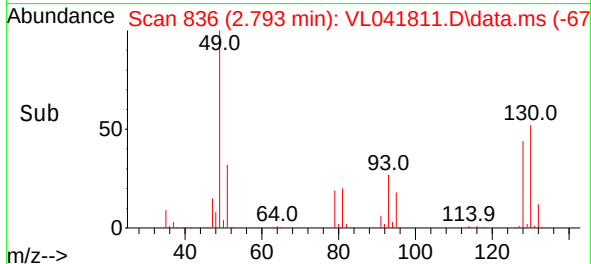
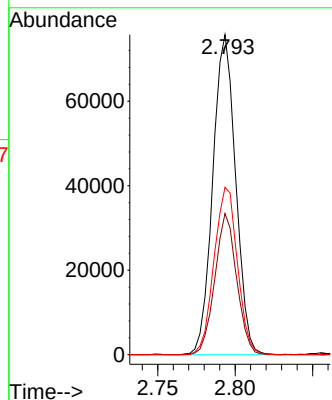
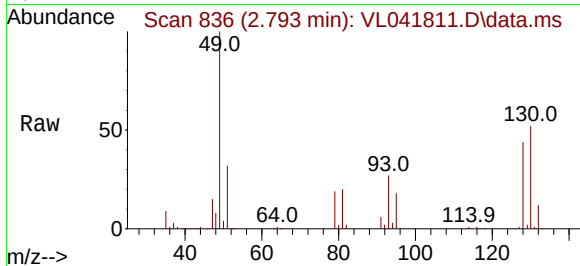




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.793 min Scan# 833  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

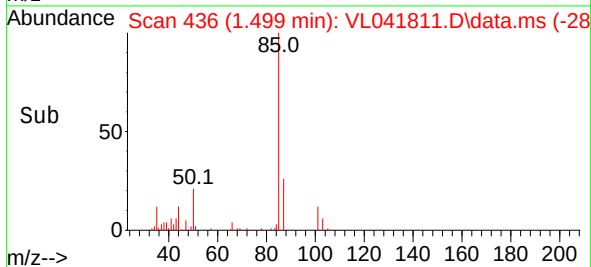
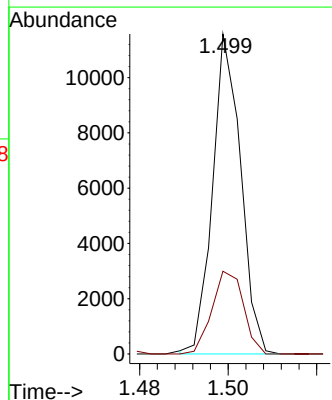
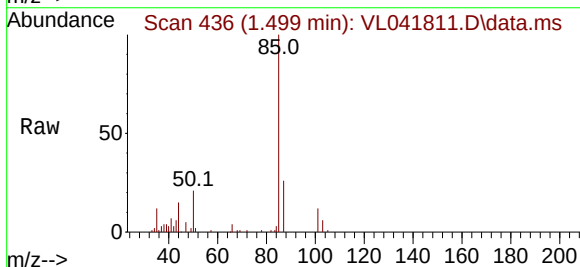
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

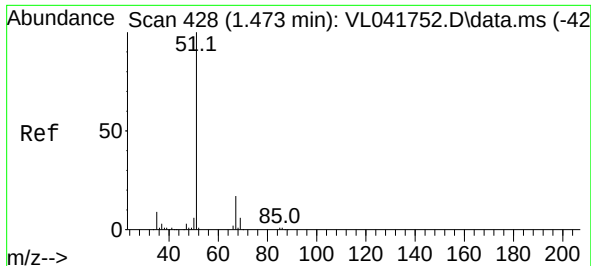
Tgt Ion: 49 Resp: 77490  
Ion Ratio Lower Upper  
49 100  
128 42.1 21.6 64.6  
130 53.5 28.3 85.0



#2  
Dichlorodifluoromethane  
Concen: 0.370 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 85 Resp: 5098  
Ion Ratio Lower Upper  
85 100  
87 25.9 24.5 36.7

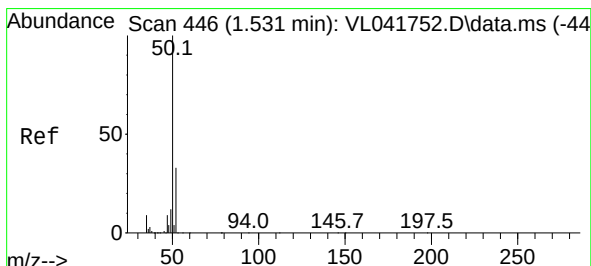
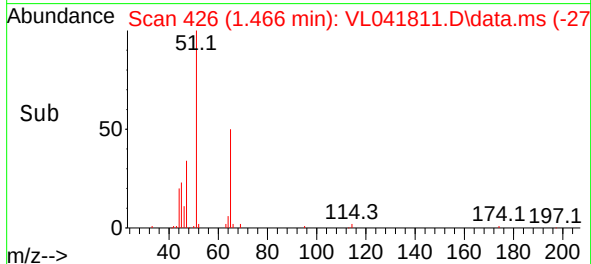
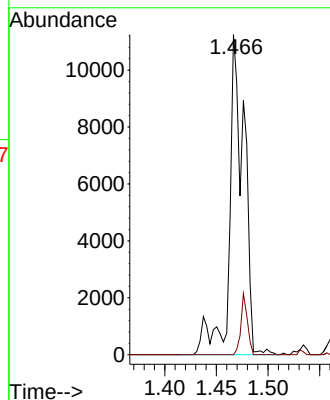
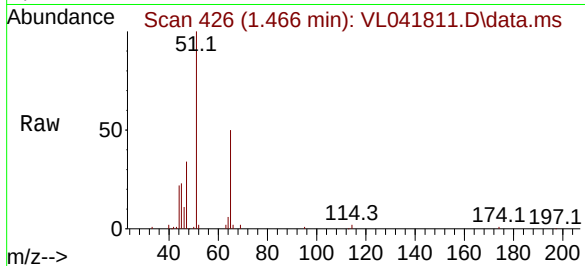




#3  
Chlorodifluoromethane  
Concen: 0.891 ppbv  
RT: 1.466 min Scan# 41  
Delta R.T. -0.007 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

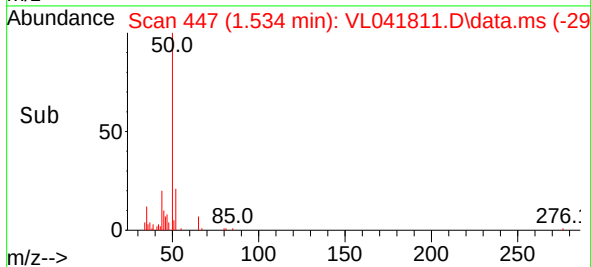
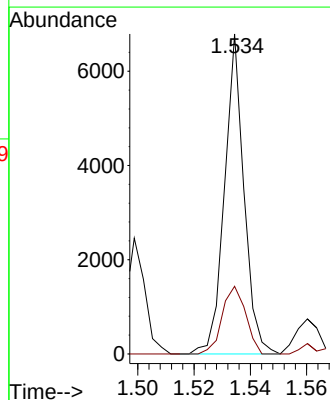
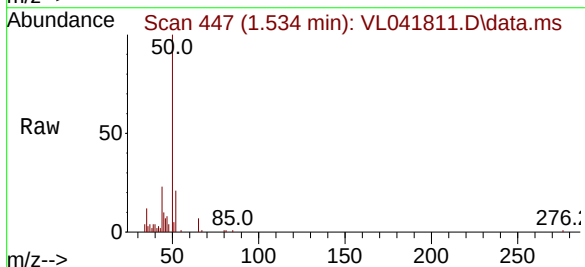
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

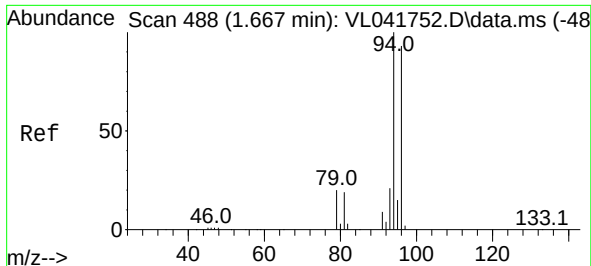
Tgt Ion: 51 Resp: 11261  
Ion Ratio Lower Upper  
51 100  
67 8.3 15.0 22.4#



#4  
Chloromethane  
Concen: 0.605 ppbv  
RT: 1.534 min Scan# 447  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 50 Resp: 3262  
Ion Ratio Lower Upper  
50 100  
52 21.1 26.2 39.2#

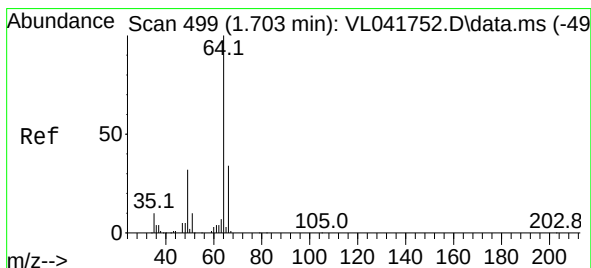
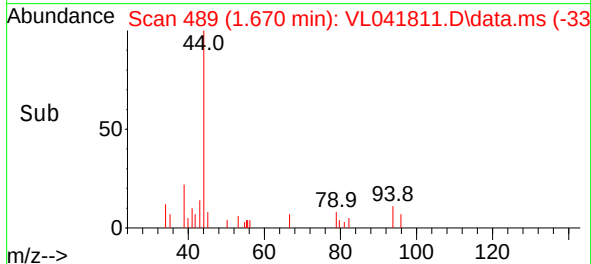
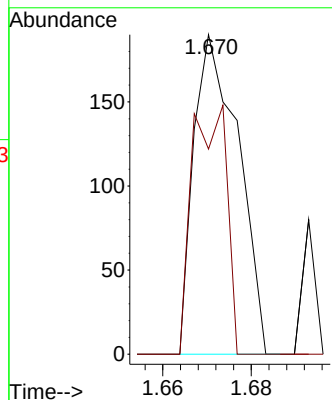
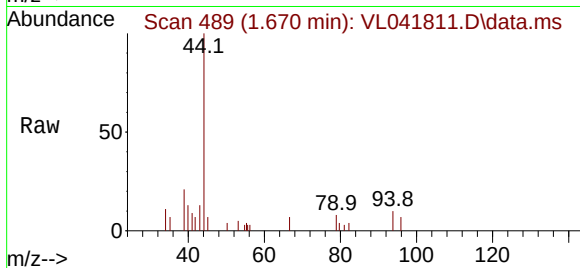




#6  
Bromomethane  
Concen: 0.052 ppbv  
RT: 1.670 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

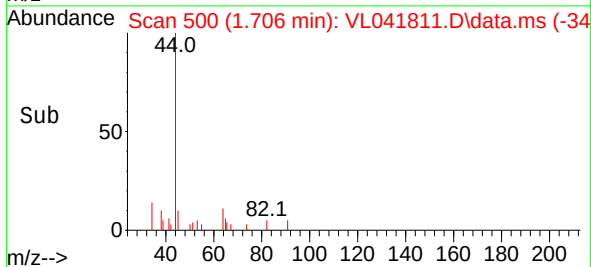
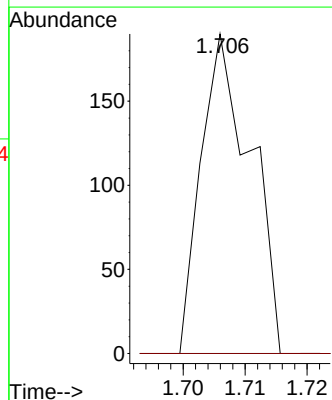
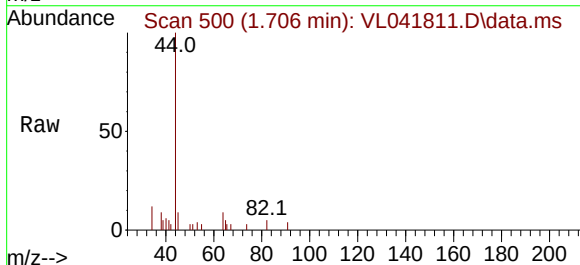
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

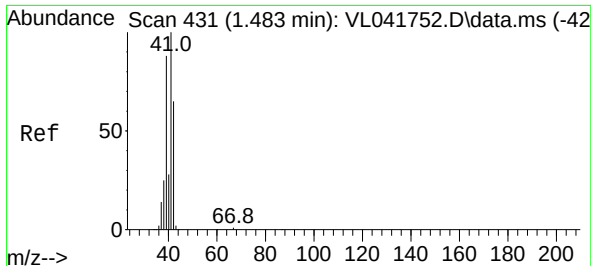
Tgt Ion: 94 Resp: 133  
Ion Ratio Lower Upper  
94 100  
96 64.2 74.7 112.1#



#7  
Chloroethane  
Concen: 0.050 ppbv  
RT: 1.706 min Scan# 500  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 64 Resp: 106  
Ion Ratio Lower Upper  
64 100  
66 0.0 27.5 41.3#





#9

Propene

Concen: 2.547 ppbv

RT: 1.560 min Scan# 41

Delta R.T. 0.077 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

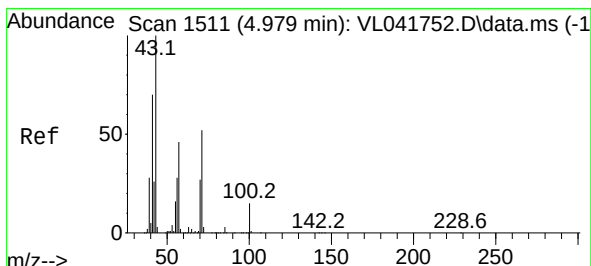
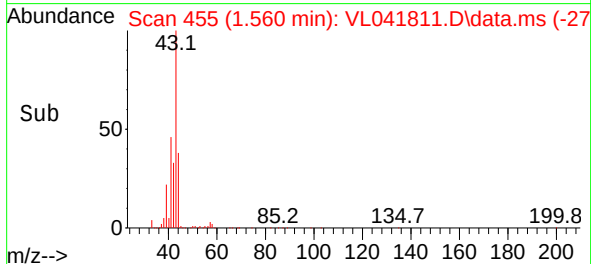
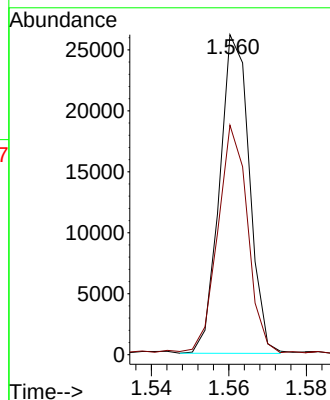
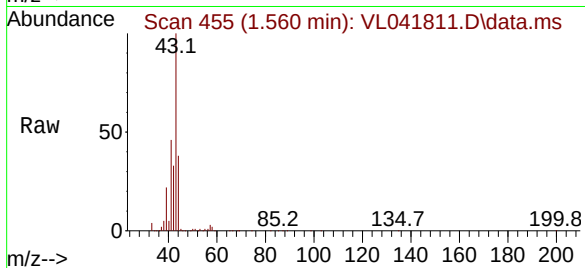
C0AB8

Tgt Ion: 41 Resp: 13953

Ion Ratio Lower Upper

41 100

42 74.7 52.4 78.6



#10

Heptane

Concen: 0.079 ppbv

RT: 4.998 min Scan# 1517

Delta R.T. 0.019 min

Lab File: VL041811.D

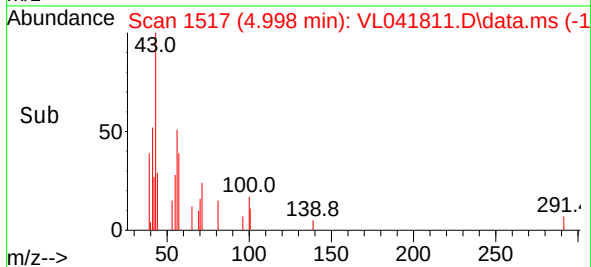
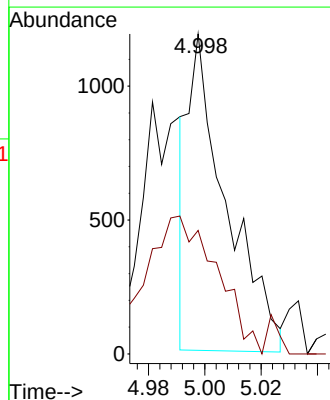
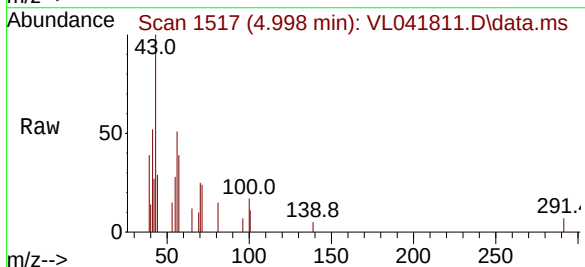
Acq: 19 Dec 2024 00:44

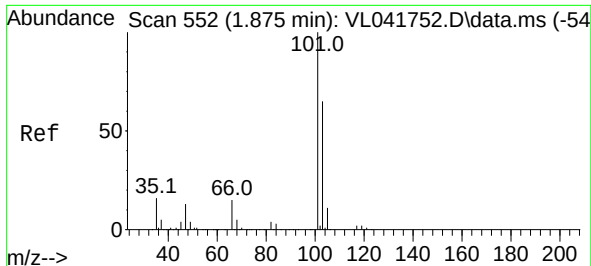
Tgt Ion: 43 Resp: 1116

Ion Ratio Lower Upper

43 100

57 91.5 38.5 57.7#





#11

Trichlorofluoromethane

Concen: 0.204 ppbv

RT: 1.881 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

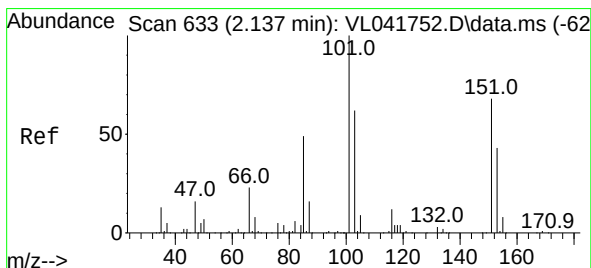
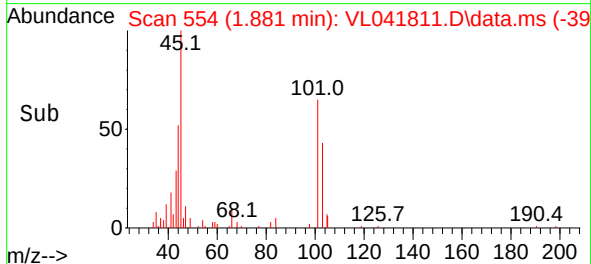
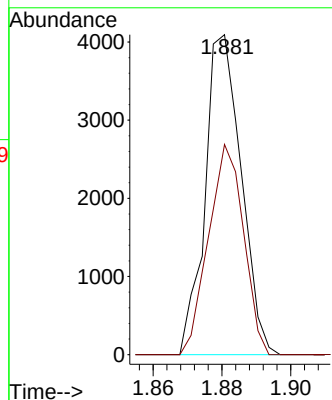
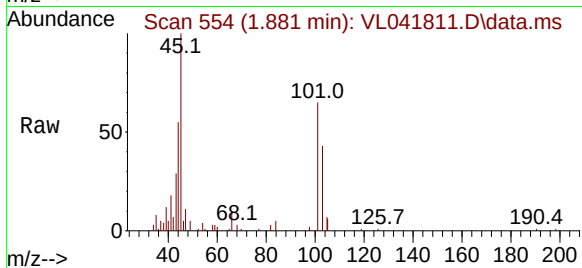
C0AB8

Tgt Ion:101 Resp: 2991

Ion Ratio Lower Upper

101 100

103 65.7 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.064 ppbv

RT: 2.143 min Scan# 635

Delta R.T. 0.006 min

Lab File: VL041811.D

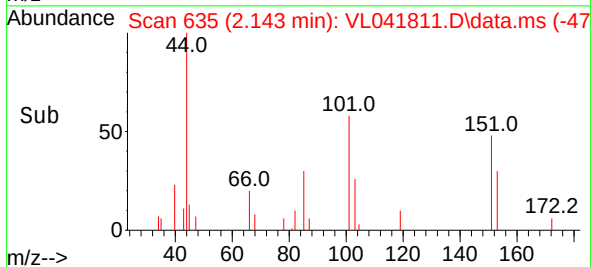
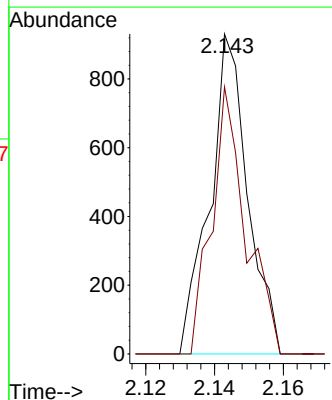
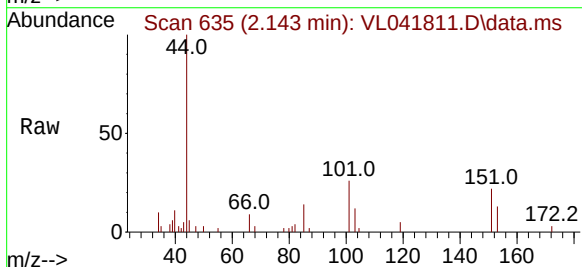
Acq: 19 Dec 2024 00:44

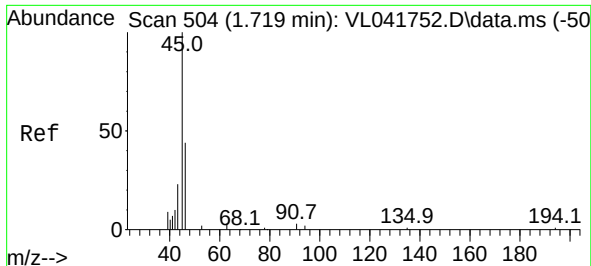
Tgt Ion:101 Resp: 715

Ion Ratio Lower Upper

101 100

151 74.8 56.8 85.2





#13

Ethanol

Concen: 1567.837 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

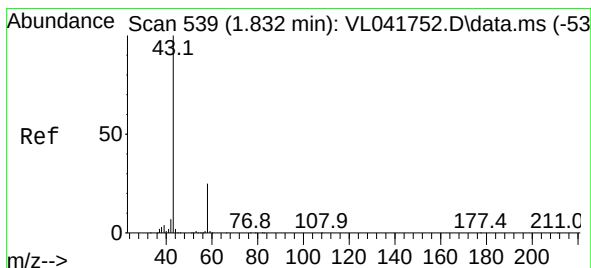
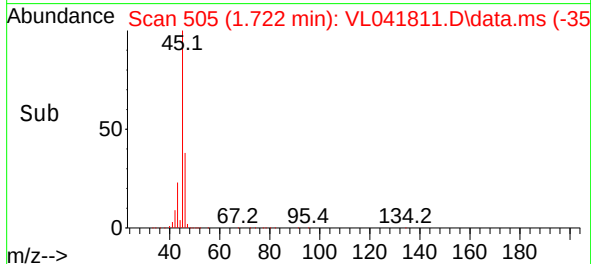
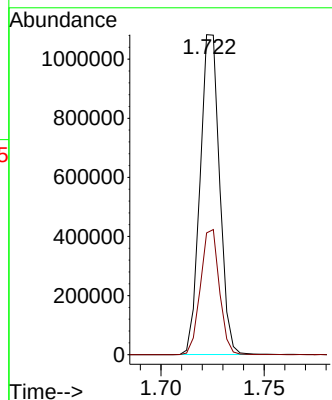
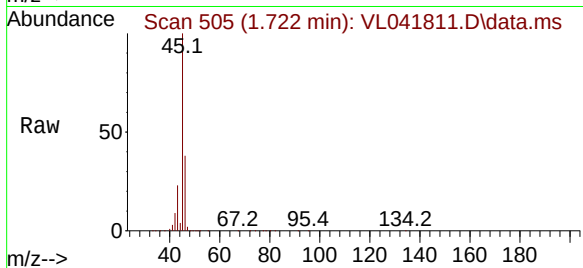
C0AB8

Tgt Ion: 45 Resp: 711075

Ion Ratio Lower Upper

45 100

46 38.1 16.4 65.8



#15

Acetone

Concen: 7.941 ppbv

RT: 1.839 min Scan# 541

Delta R.T. 0.006 min

Lab File: VL041811.D

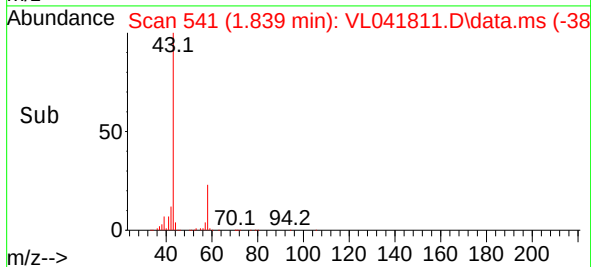
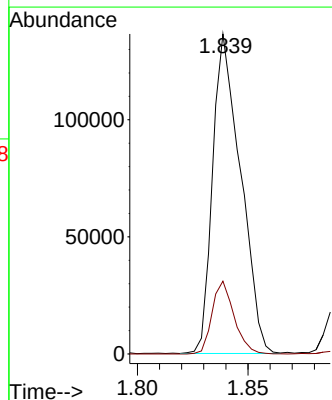
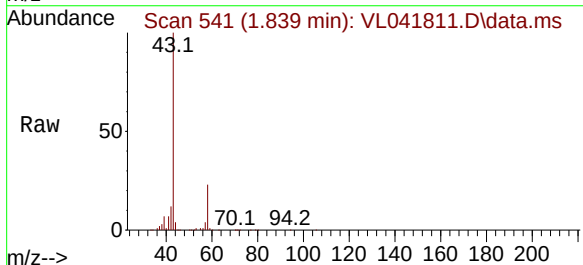
Acq: 19 Dec 2024 00:44

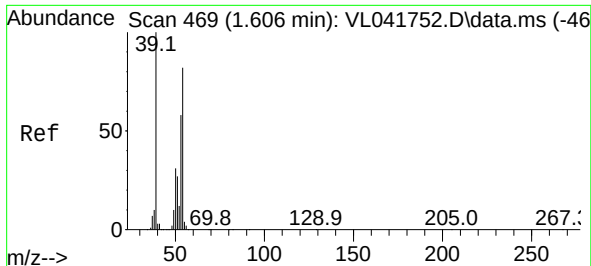
Tgt Ion: 43 Resp: 119725

Ion Ratio Lower Upper

43 100

58 18.0 19.7 29.5#





#16

1,3-Butadiene

Concen: 0.573 ppbv

RT: 1.602 min Scan# 4

Delta R.T. -0.004 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

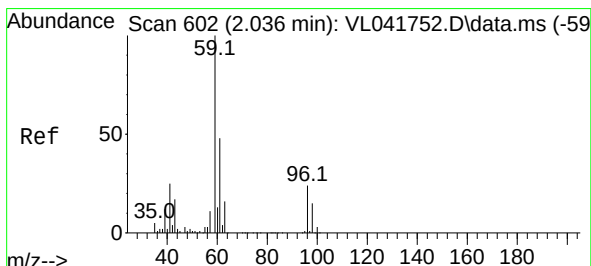
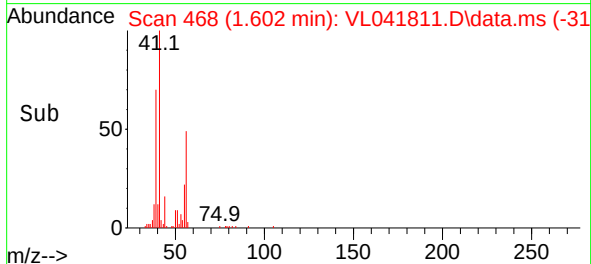
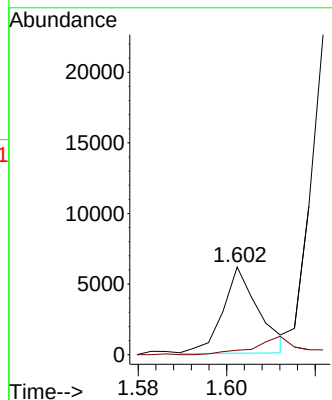
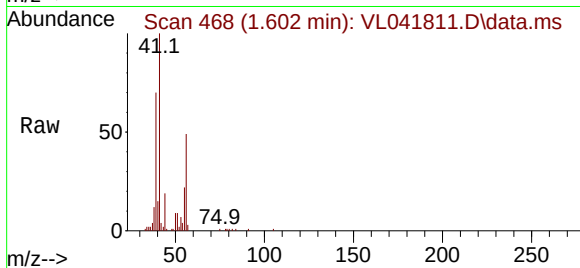
C0AB8

Tgt Ion: 39 Resp: 3399

Ion Ratio Lower Upper

39 100

54 37.4 58.4 87.6#



#17

tert-Butyl alcohol

Concen: 0.269 ppbv

RT: 2.046 min Scan# 605

Delta R.T. 0.009 min

Lab File: VL041811.D

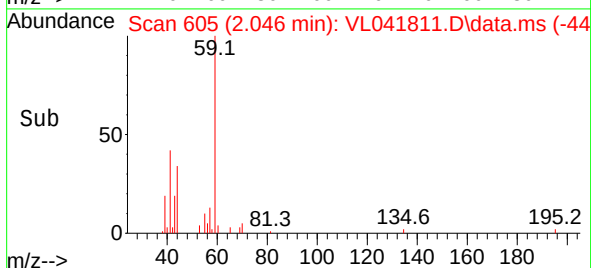
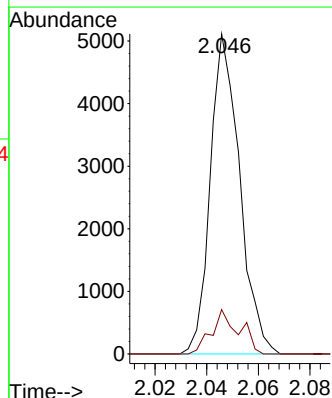
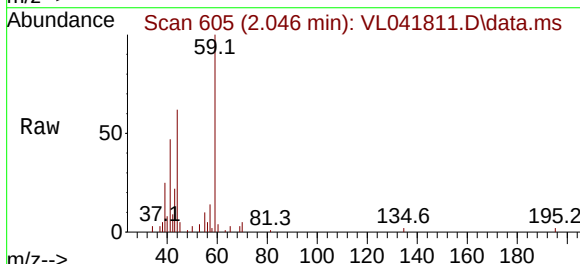
Acq: 19 Dec 2024 00:44

Tgt Ion: 59 Resp: 4030

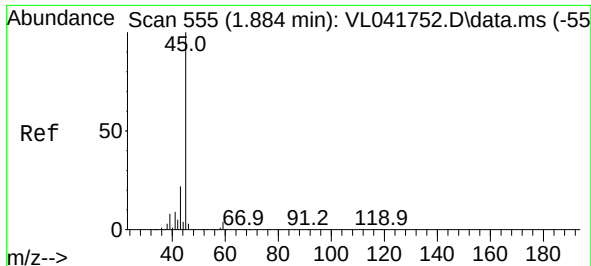
Ion Ratio Lower Upper

59 100

57 207.8 8.6 13.0#







#19

Isopropyl Alcohol

Concen: 5.159 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

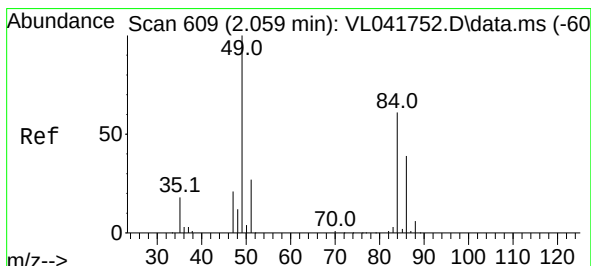
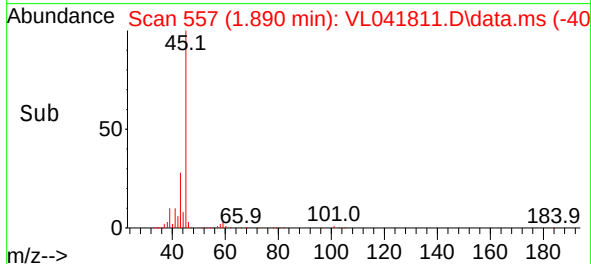
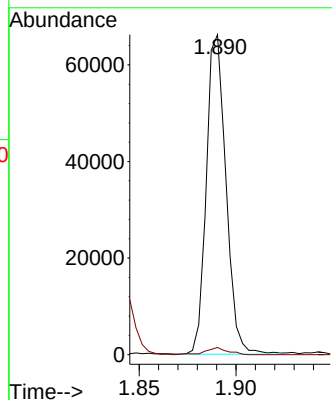
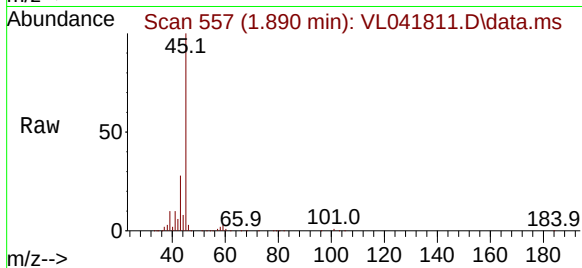
C0AB8

Tgt Ion: 45 Resp: 46673

Ion Ratio Lower Upper

45 100

58 2.5 33.3 49.9#



#20

Methylene Chloride

Concen: 0.333 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 84 Resp: 1430

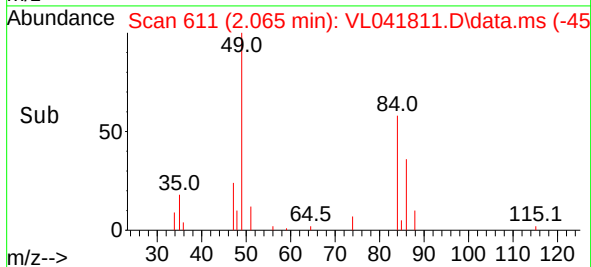
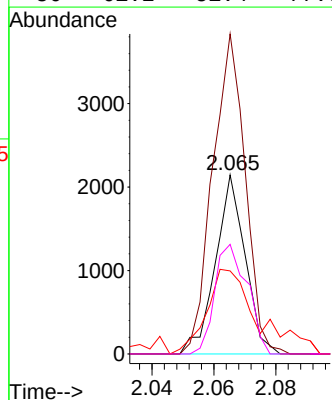
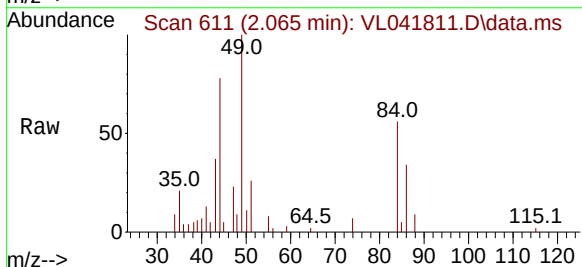
Ion Ratio Lower Upper

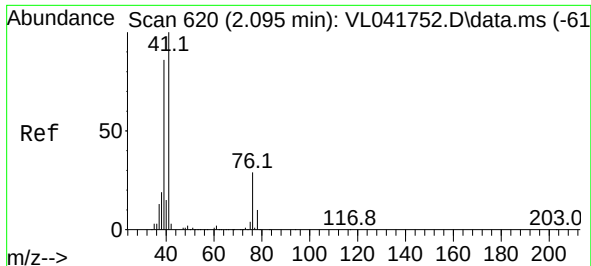
84 100

49 178.8 132.6 198.8

51 43.8 37.6 56.4

86 61.2 51.4 77.0

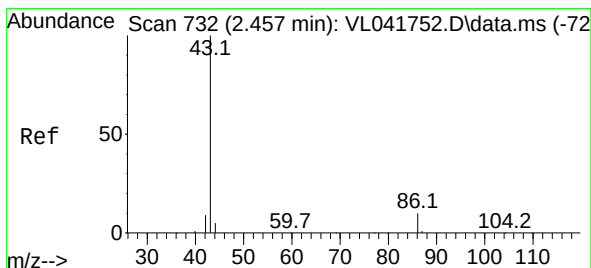
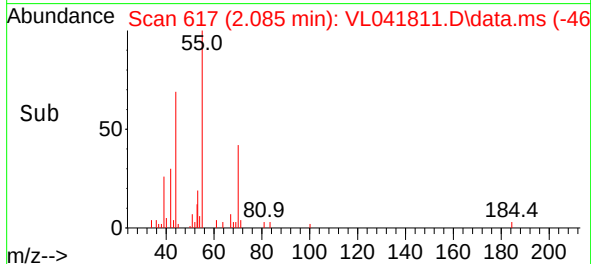
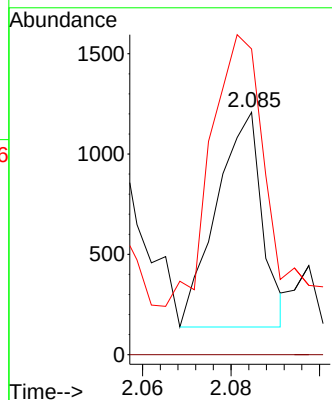
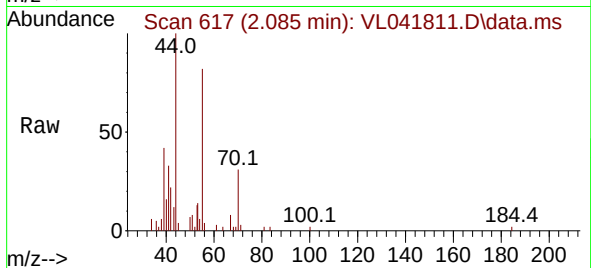




#21  
Allyl Chloride  
Concen: 0.094 ppbv  
RT: 2.085 min Scan# 617  
Delta R.T. -0.010 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

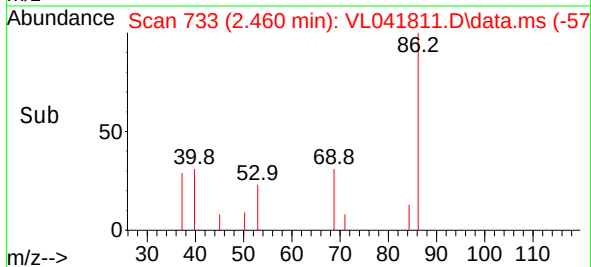
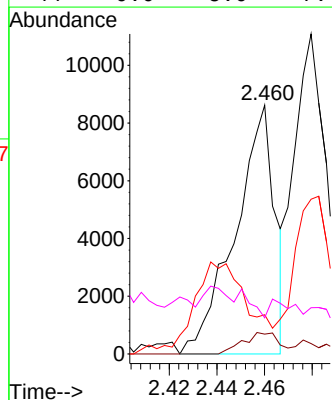
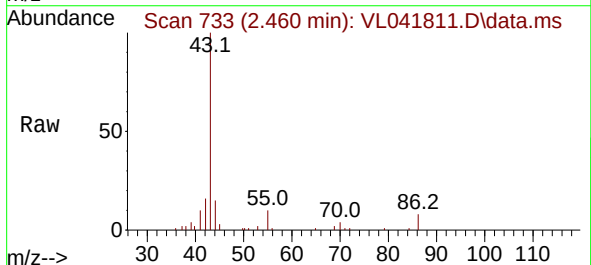
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

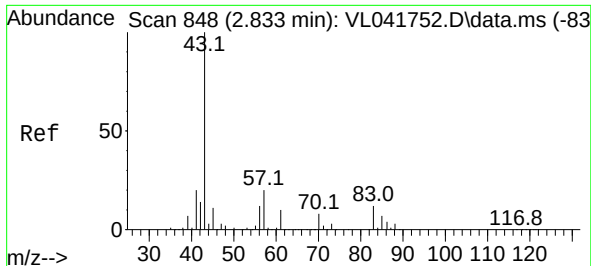
Tgt Ion: 41 Resp: 770  
Ion Ratio Lower Upper  
41 100  
76 0.0 22.3 33.5#  
39 152.1 69.2 103.8#



#23  
Vinyl Acetate  
Concen: 1.418 ppbv  
RT: 2.460 min Scan# 733  
Delta R.T. 0.003 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 43 Resp: 9928  
Ion Ratio Lower Upper  
43 100  
86 7.9 6.6 10.0  
42 8.2 8.2 12.2  
44 0.0 5.0 7.4#





#25

Ethyl Acetate

Concen: 0.080 ppbv

RT: 2.848 min Scan# 848

Delta R.T. 0.016 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

C0AB8

Tgt Ion: 43 Resp: 2243

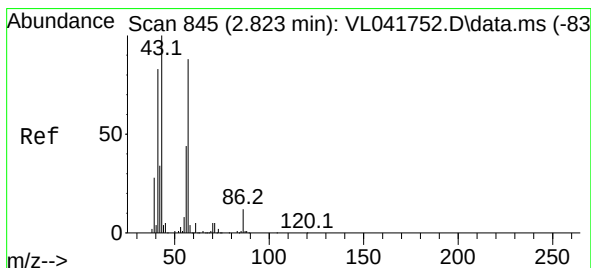
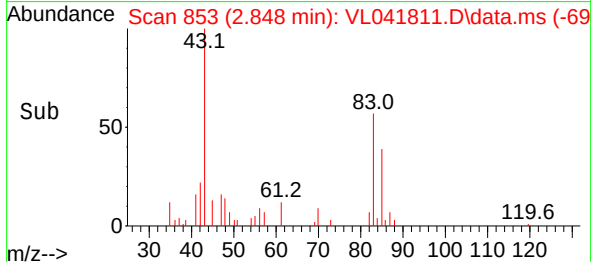
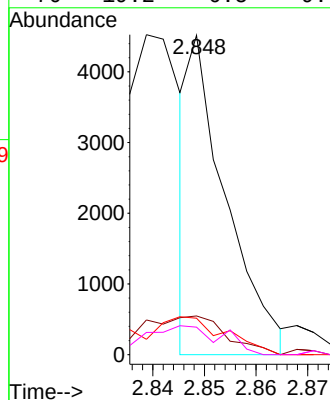
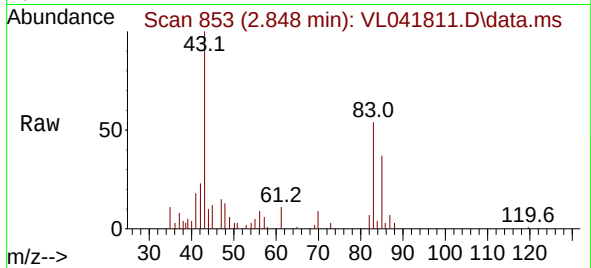
Ion Ratio Lower Upper

43 100

45 34.3 8.1 12.1#

61 26.5 7.0 10.6#

70 19.2 6.5 9.7#



#26

Hexane

Concen: 0.367 ppbv

RT: 2.832 min Scan# 848

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 57 Resp: 3902

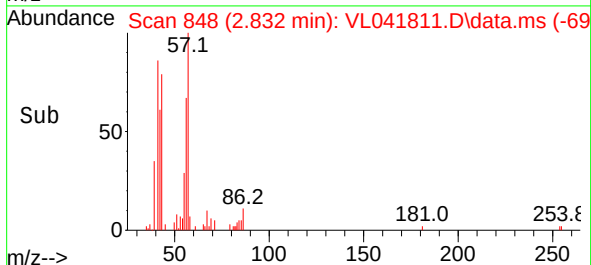
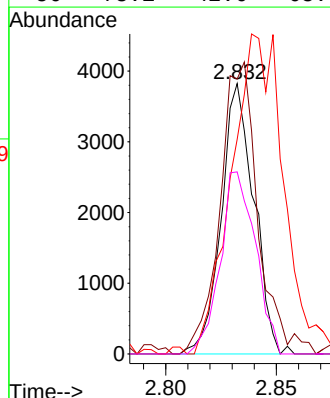
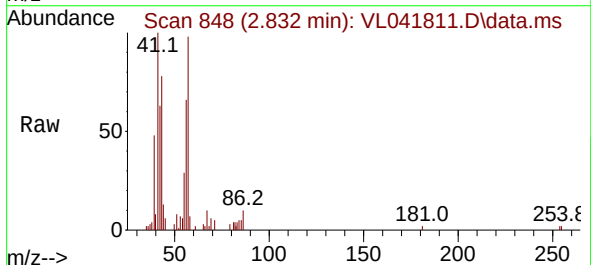
Ion Ratio Lower Upper

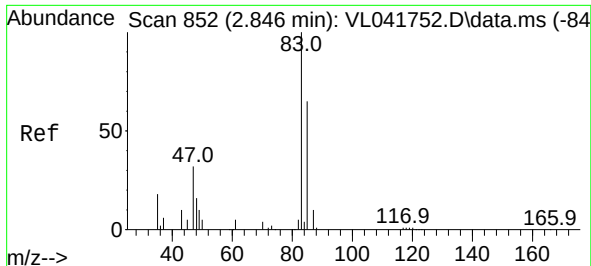
57 100

41 131.0 79.6 119.4#

43 191.5 211.0 316.6#

56 73.1 42.6 63.8#

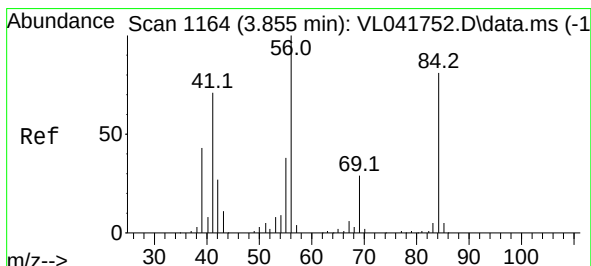
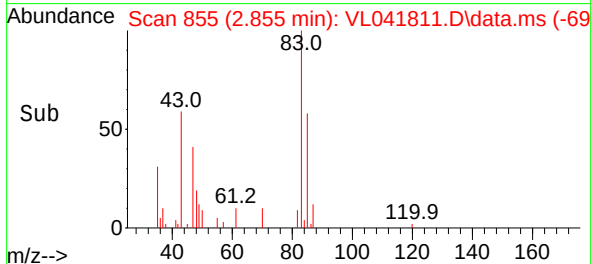
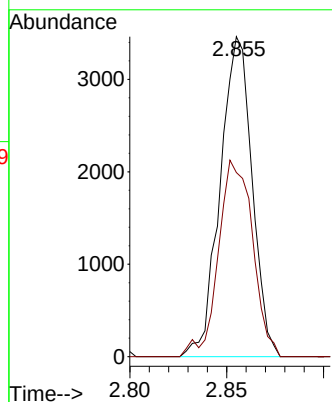
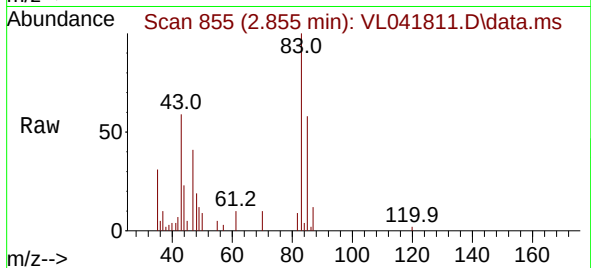




#29  
Chloroform  
Concen: 0.245 ppbv  
RT: 2.855 min Scan# 85  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

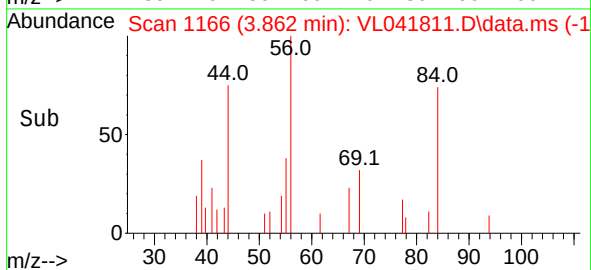
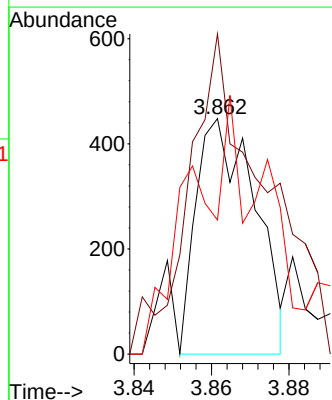
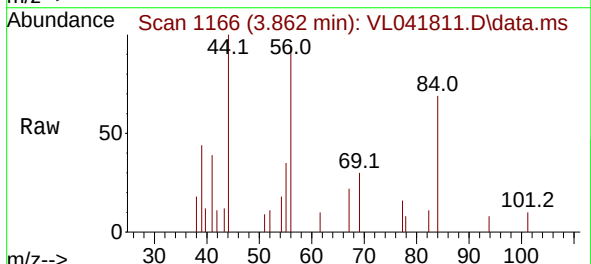
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

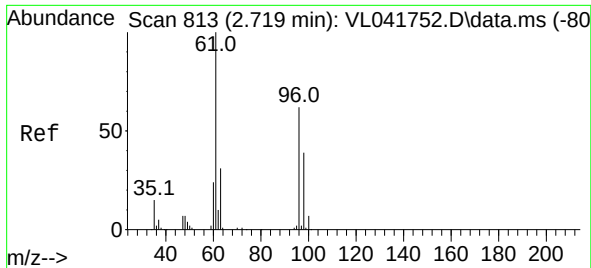
Tgt Ion: 83 Resp: 3971  
Ion Ratio Lower Upper  
83 100  
85 57.6 51.8 77.6



#30  
Cyclohexane  
Concen: 0.052 ppbv  
RT: 3.862 min Scan# 1166  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 84 Resp: 475  
Ion Ratio Lower Upper  
84 100  
56 174.5 102.3 153.5#  
41 161.1 74.0 111.0#

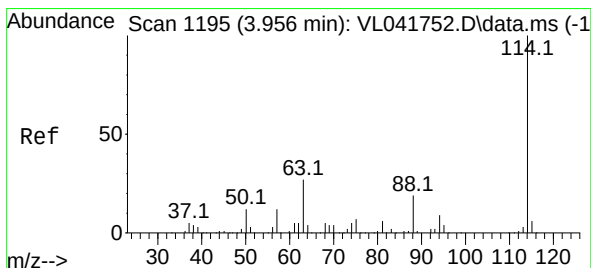
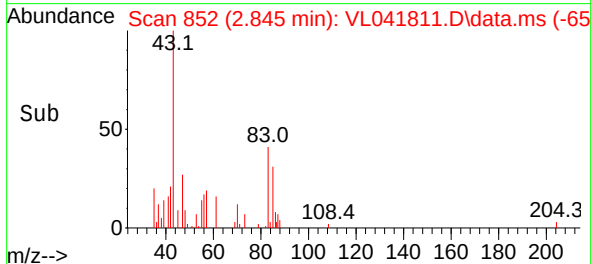
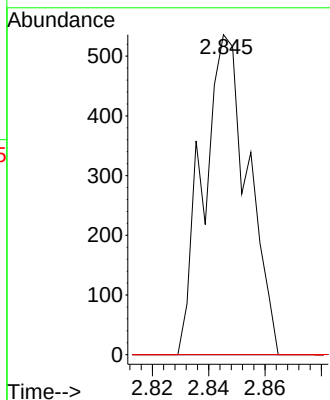
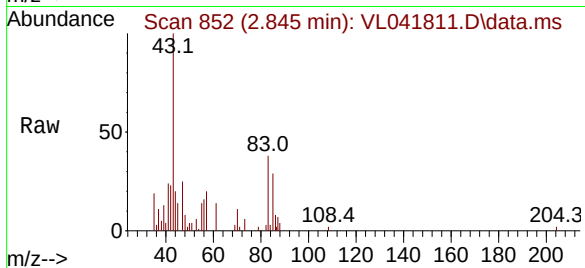




#31  
cis-1,2-Dichloroethene  
Concen: 0.054 ppbv  
RT: 2.845 min Scan# 813  
Delta R.T. 0.126 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

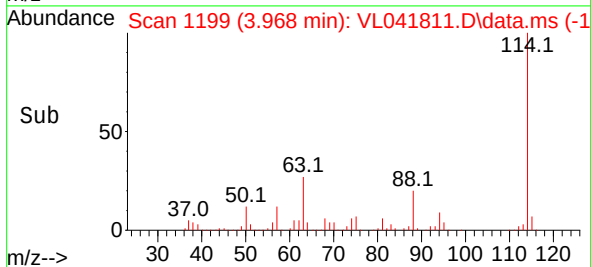
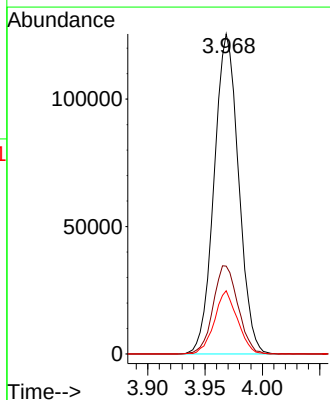
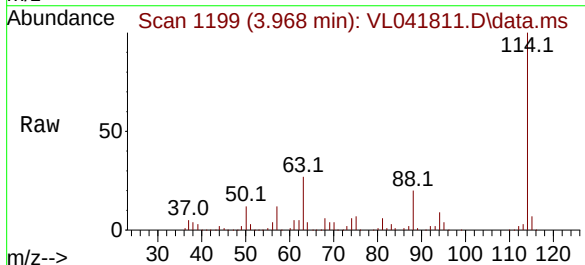
Instrument :  
MSVOA\_1  
ClientSampleId :  
C0AB8

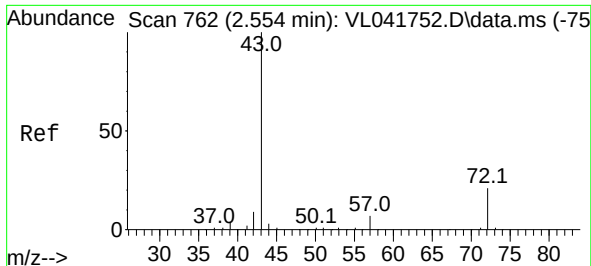
Tgt Ion: 61 Resp: 594  
Ion Ratio Lower Upper  
61 100  
96 0.0 49.7 74.5#  
98 0.0 30.8 46.2#



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.968 min Scan# 1199  
Delta R.T. 0.013 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 114 Resp: 186355  
Ion Ratio Lower Upper  
114 100  
63 28.1 21.8 32.8  
88 18.6 14.8 22.2

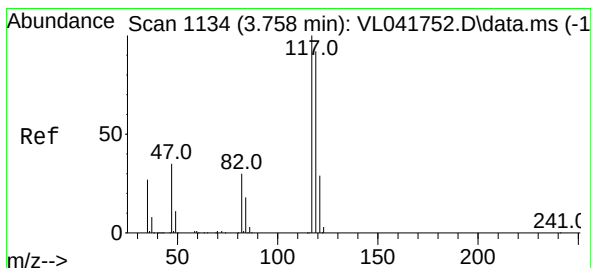
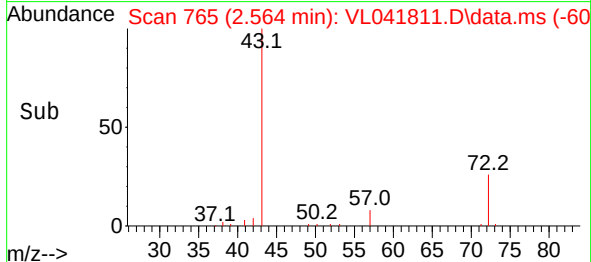
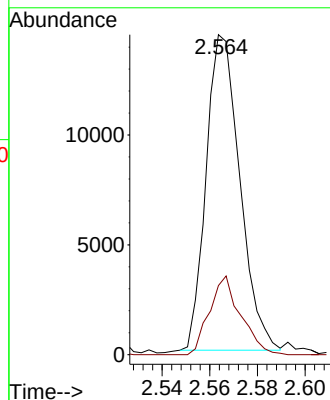
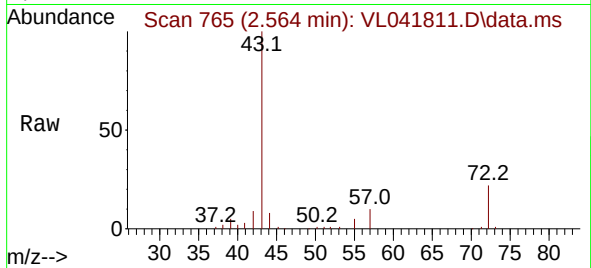




#34  
2-Butanone  
Concen: 0.941 ppbv  
RT: 2.564 min Scan# 71  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

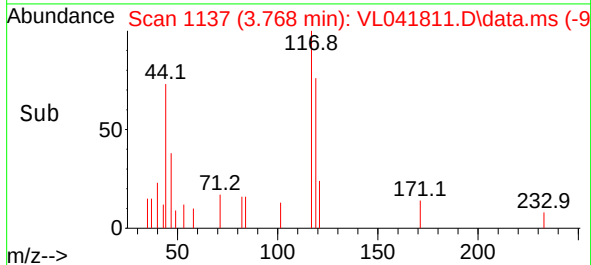
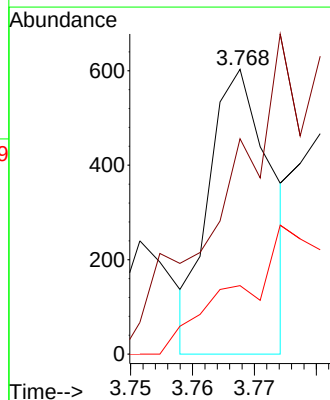
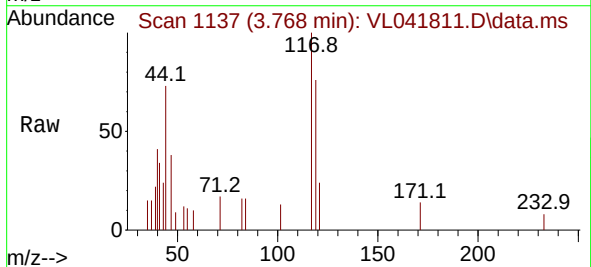
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

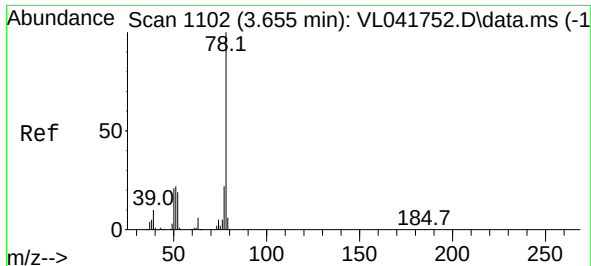
Tgt Ion: 43 Resp: 14105  
Ion Ratio Lower Upper  
43 100  
72 23.0 16.8 25.2



#35  
Carbon Tetrachloride  
Concen: 0.032 ppbv  
RT: 3.768 min Scan# 1137  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 117 Resp: 417  
Ion Ratio Lower Upper  
117 100  
119 56.7 73.7 110.5#  
121 18.5 23.0 34.4#

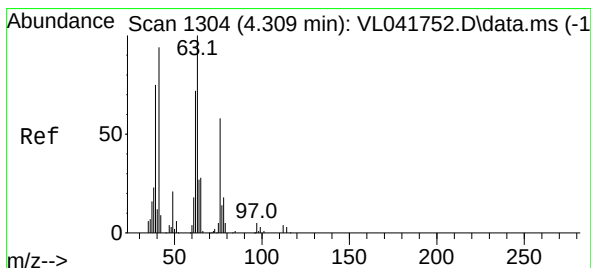
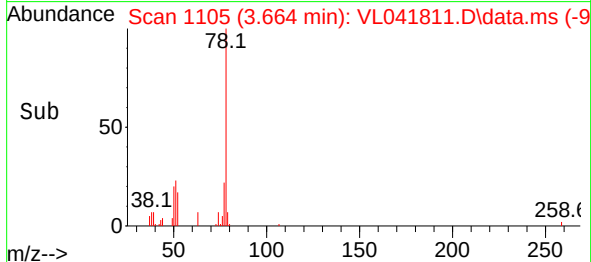
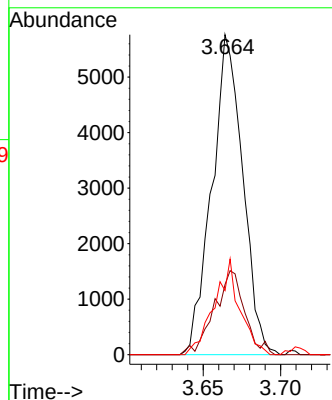
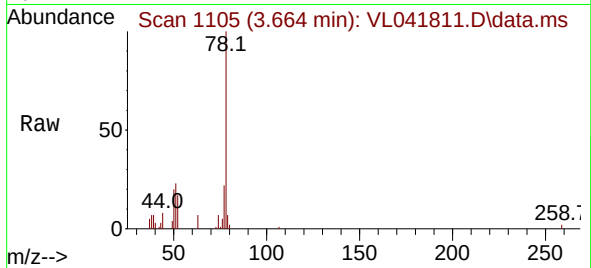




#36  
Benzene  
Concen: 0.415 ppbv  
RT: 3.664 min Scan# 1105  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

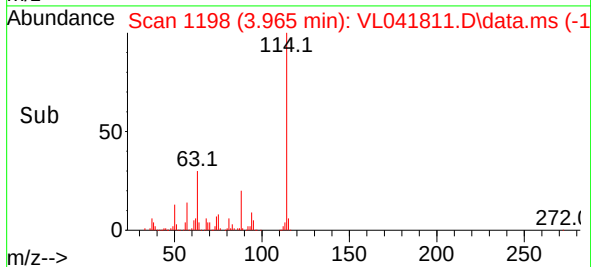
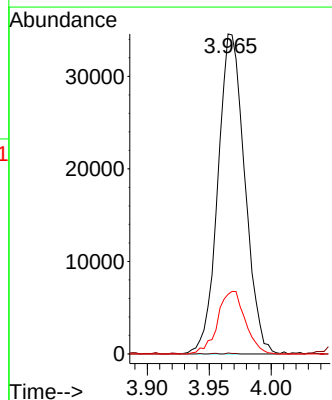
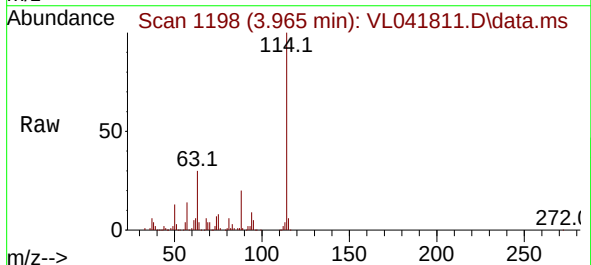
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

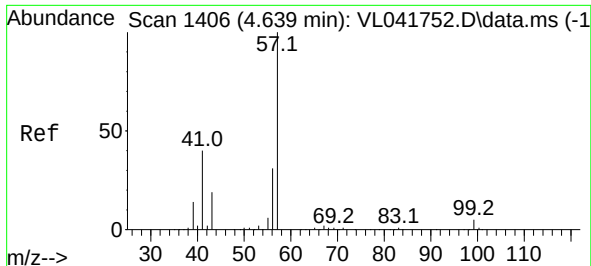
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 21.9  | 17.8  | 26.6  |
| 50      | 20.0  | 17.2  | 25.8  |



#39  
1,2-Dichloropropane  
Concen: 7.500 ppbv  
RT: 3.965 min Scan# 1198  
Delta R.T. -0.343 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 63      | 100   |       |        |
| 41      | 0.3   | 75.3  | 112.9# |
| 62      | 18.6  | 57.3  | 85.9#  |





#44

2,2,4-Trimethylpentane

Concen: 0.213 ppbv

RT: 4.655 min Scan# 1411

Delta R.T. 0.016 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_1

ClientSampleId :

C0AB8

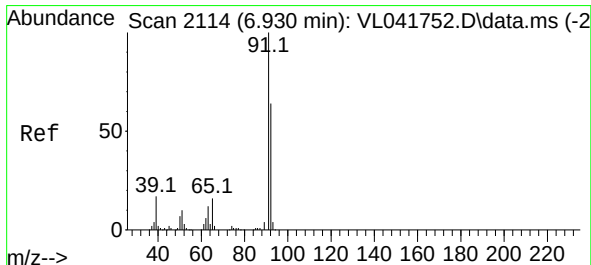
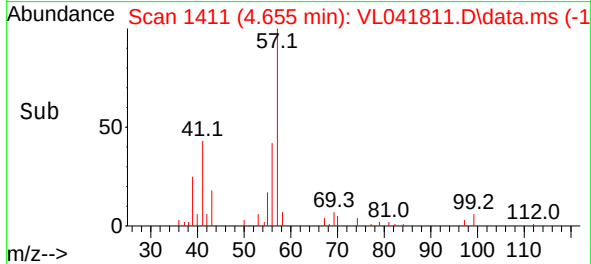
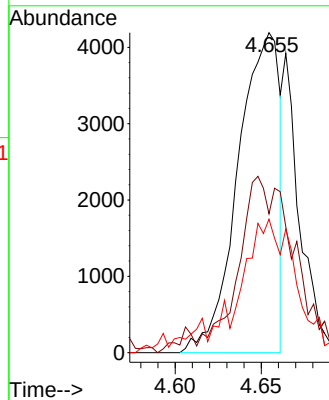
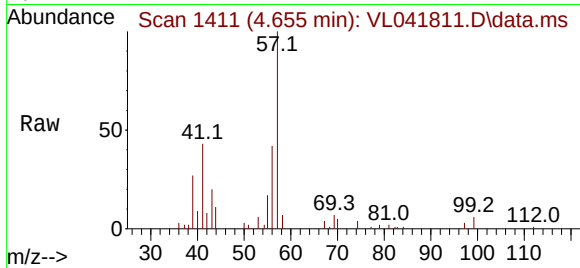
Tgt Ion: 57 Resp: 6997

Ion Ratio Lower Upper

57 100

41 77.1 30.7 46.1#

56 60.9 25.4 38.0#



#53

Toluene

Concen: 0.742 ppbv

RT: 6.949 min Scan# 2120

Delta R.T. 0.019 min

Lab File: VL041811.D

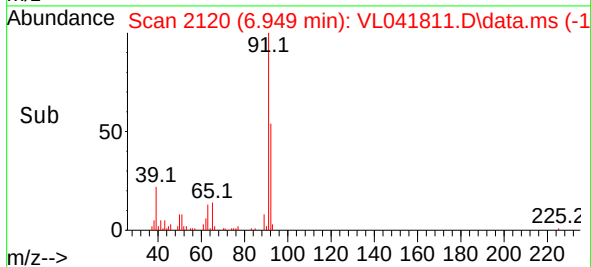
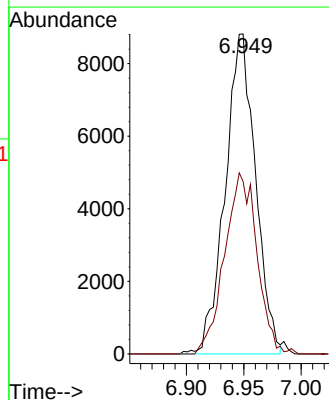
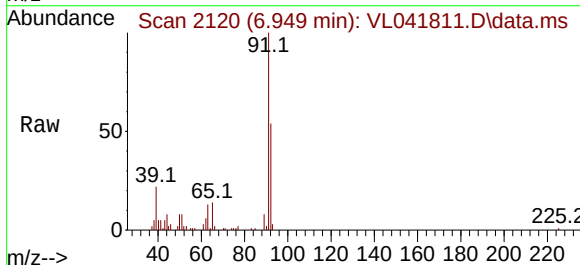
Acq: 19 Dec 2024 00:44

Tgt Ion: 91 Resp: 16221

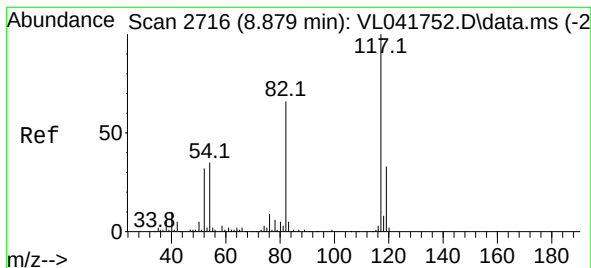
Ion Ratio Lower Upper

91 100

92 60.5 47.9 71.9







#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.891 min Scan# 21

Delta R.T. 0.013 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA\_L

ClientSampleId :

C0AB8

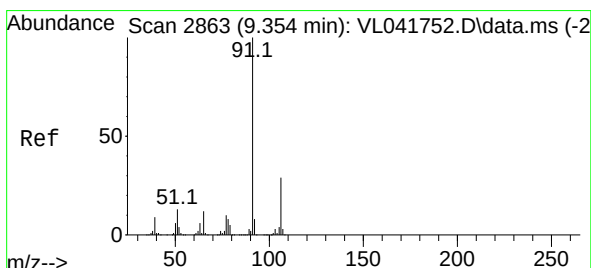
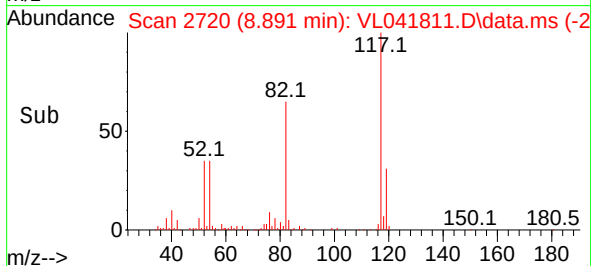
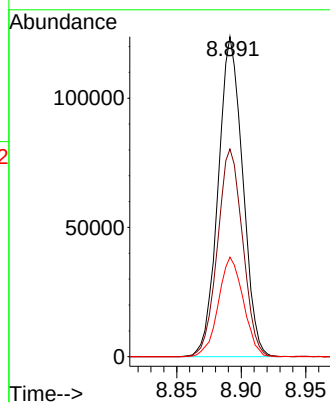
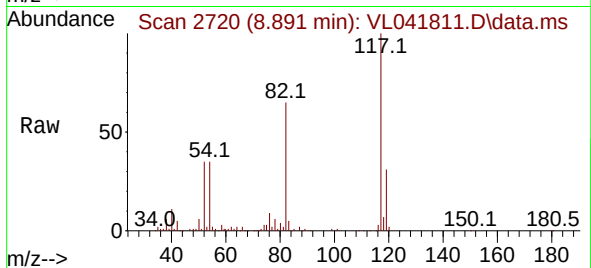
Tgt Ion:117 Resp: 163591

Ion Ratio Lower Upper

117 100

82 66.6 53.8 80.8

119 31.7 26.7 40.1



#58

Ethyl Benzene

Concen: 0.112 ppbv

RT: 9.361 min Scan# 2865

Delta R.T. 0.006 min

Lab File: VL041811.D

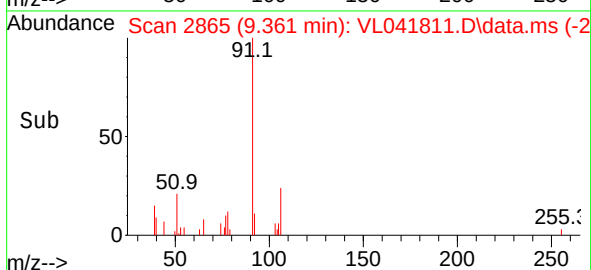
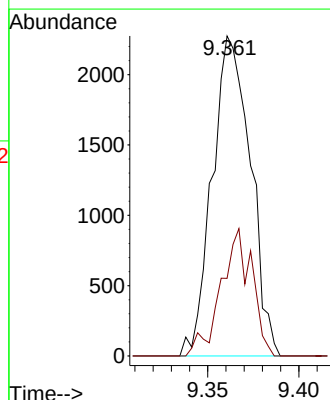
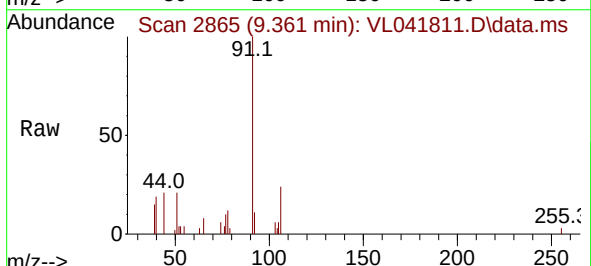
Acq: 19 Dec 2024 00:44

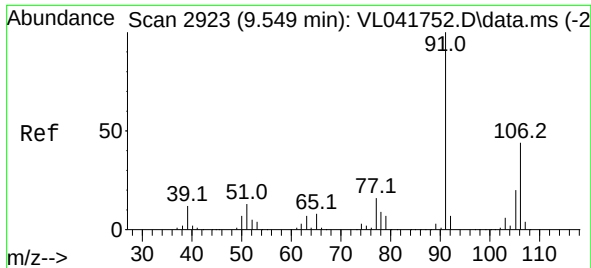
Tgt Ion: 91 Resp: 3309

Ion Ratio Lower Upper

91 100

106 24.3 23.5 35.3

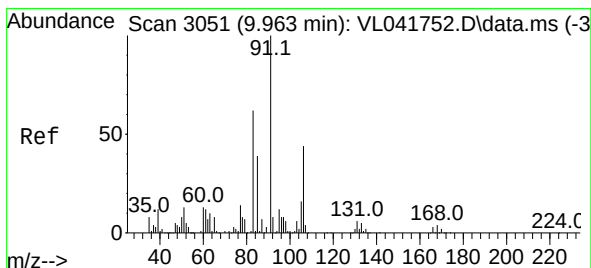
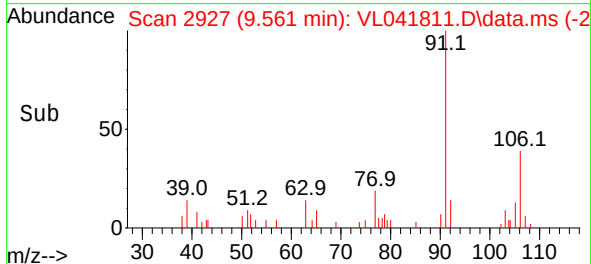
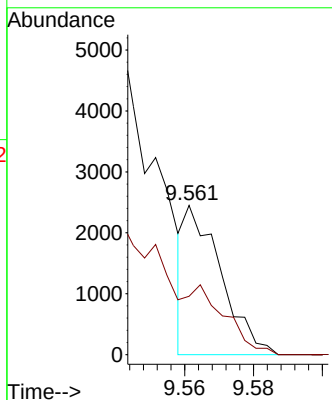
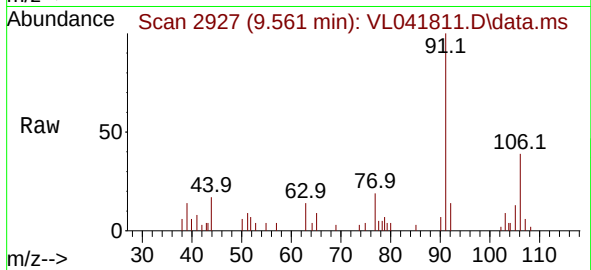




#59  
m/p-Xylene  
Concen: 0.076 ppbv  
RT: 9.561 min Scan# 2923  
Delta R.T. 0.013 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

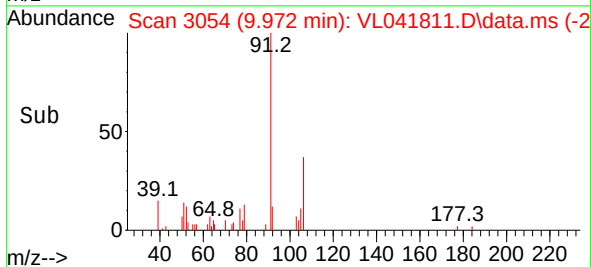
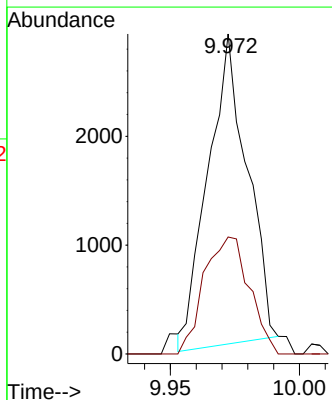
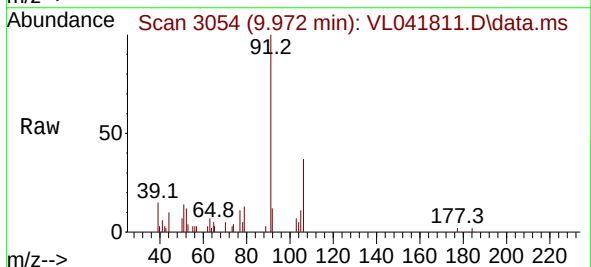
Instrument :  
MSVOA\_1  
ClientSampleId :  
C0AB8

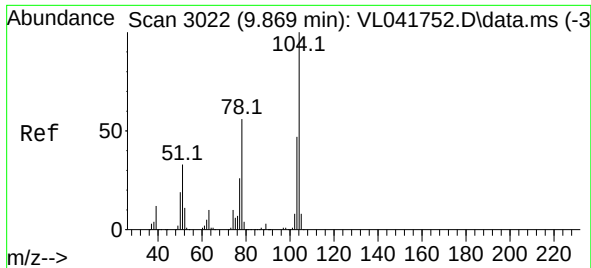
Tgt Ion: 91 Resp: 1793  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0



#60  
o-Xylene  
Concen: 0.126 ppbv  
RT: 9.972 min Scan# 3054  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 91 Resp: 3000  
Ion Ratio Lower Upper  
91 100  
106 43.6 21.1 63.4

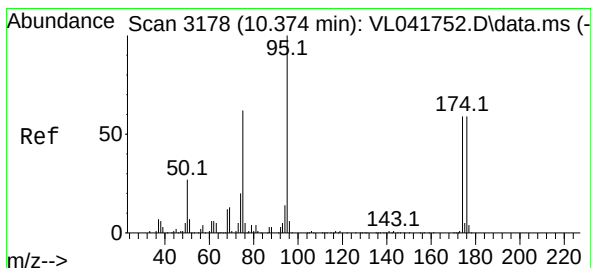
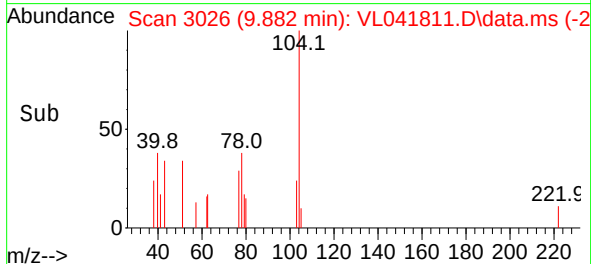
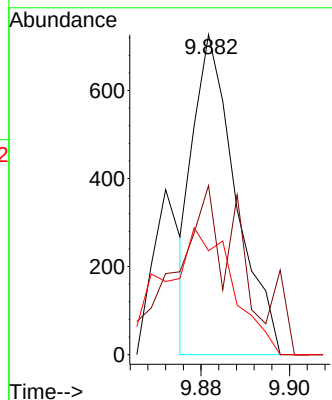
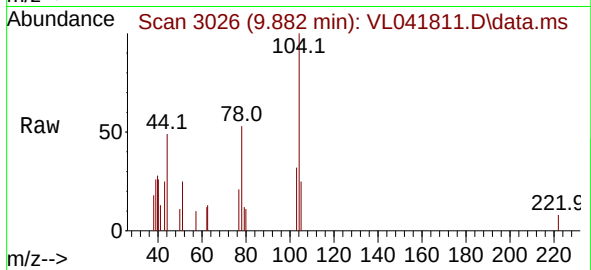




#61  
Styrene  
Concen: 0.047 ppbv  
RT: 9.882 min Scan# 3022  
Delta R.T. 0.013 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

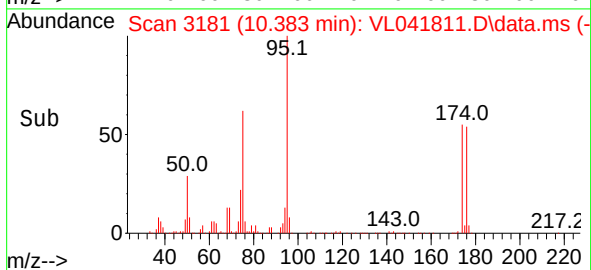
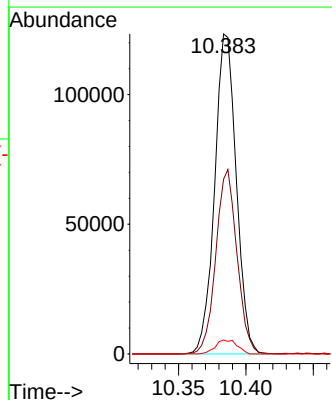
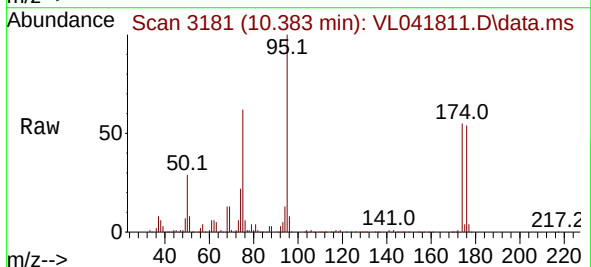
Instrument :  
MSVOA\_1  
ClientSampleId :  
C0AB8

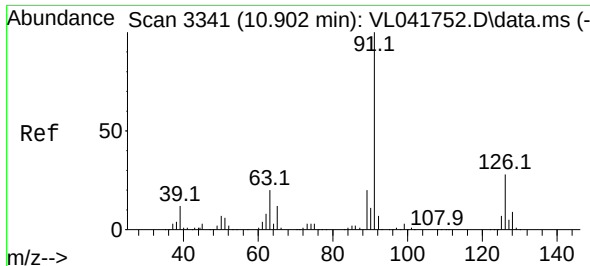
Tgt Ion:104 Resp: 483  
Ion Ratio Lower Upper  
104 100  
78 83.9 43.8 65.6#  
103 65.2 37.8 56.6#



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.105 ppbv  
RT: 10.383 min Scan# 3181  
Delta R.T. 0.009 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion: 95 Resp: 137750  
Ion Ratio Lower Upper  
95 100  
174 56.6 47.6 71.4  
175 4.4 3.7 5.5

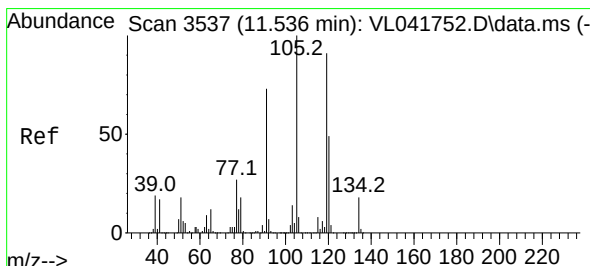
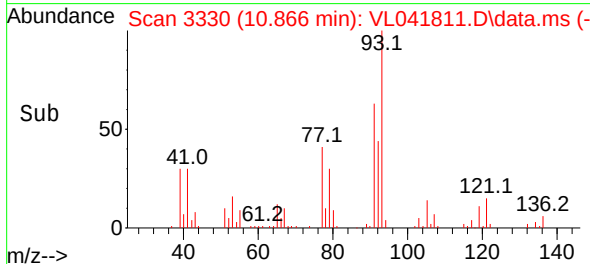
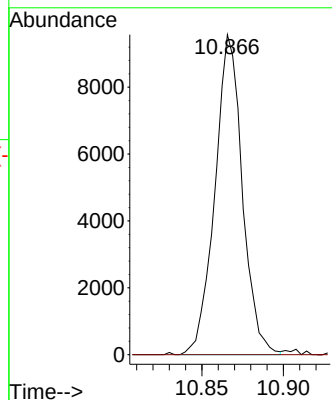
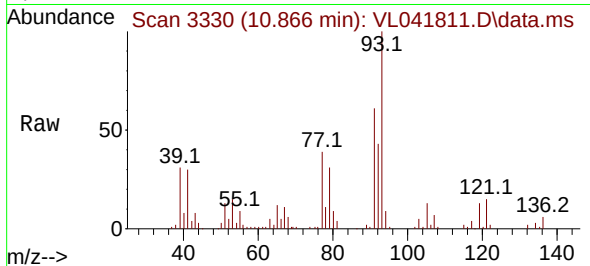




#71  
2-Chlorotoluene  
Concen: 0.411 ppbv  
RT: 10.866 min Scan# 311  
Delta R.T. -0.036 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0AB8

Tgt Ion: 91 Resp: 11185  
Ion Ratio Lower Upper  
91 100  
126 0.0 11.6 46.4#



#74  
1,2,4-Trimethylbenzene  
Concen: 0.131 ppbv  
RT: 11.542 min Scan# 3539  
Delta R.T. 0.006 min  
Lab File: VL041811.D  
Acq: 19 Dec 2024 00:44

Tgt Ion:105 Resp: 3276  
Ion Ratio Lower Upper  
105 100  
120 27.1 39.0 58.4#  
91 13.0 58.1 87.1#  
77 13.2 21.8 32.8#

