

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012025\  
 Data File : VL041929.D  
 Acq On : 20 Jan 2025 20:26  
 Operator : SY/MD  
 Sample : Q1138-02  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA2

Quant Time: Jan 21 03:08:08 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL011425AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Tue Jan 14 23:15:42 2025  
 Response via : Initial Calibration

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 01/21/2025  
 Supervised By : Mahesh Dadoda 01/21/2025

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 2.781  | 49    | 140403   | 10.000   | ppbv   | -0.02    |
| 33) 1,4-Difluorobenzene     | 3.949  | 114   | 383832   | 10.000   | ppbv   | -0.03    |
| 55) Chlorobenzene-d5        | 8.875  | 117   | 331576   | 10.000   | ppbv   | -0.02    |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.371 | 95    | 256977   | 9.840    | ppbv   | -0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 98.400%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 1.496  | 85    | 8462     | 0.442    | ppbv   | 92       |
| 3) Chlorodifluoromethane    | 1.473  | 51    | 5354m    | 0.267    | ppbv   |          |
| 4) Chloromethane            | 1.528  | 50    | 3664     | 0.509    | ppbv   | 92       |
| 9) Propene                  | 1.483  | 41    | 3172     | 0.384    | ppbv   | 88       |
| 11) Trichlorofluoromethane  | 1.874  | 101   | 4275     | 0.215    | ppbv   | 92       |
| 13) Ethanol                 | 1.719  | 45    | 8228     | 13.611   | ppbv # | 31       |
| 15) Acetone                 | 1.832  | 43    | 123835   | 7.343    | ppbv   | 98       |
| 19) Isopropyl Alcohol       | 1.884  | 45    | 4447     | 0.445    | ppbv # | 1        |
| 20) Methylene Chloride      | 2.056  | 84    | 5944     | 0.892    | ppbv   | 95       |
| 26) Hexane                  | 2.819  | 57    | 7434     | 0.413    | ppbv # | 47       |
| 34) 2-Butanone              | 2.561  | 43    | 3017     | 0.124    | ppbv   | 97       |
| 35) Carbon Tetrachloride    | 3.758  | 117   | 1978m    | 0.082    | ppbv   |          |
| 36) Benzene                 | 3.651  | 78    | 4670     | 0.133    | ppbv # | 76       |
| 52) Tetrachloroethene       | 8.212  | 164   | 6811     | 0.558    | ppbv # | 84       |
| 53) Toluene                 | 6.923  | 91    | 3567m    | 0.093    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

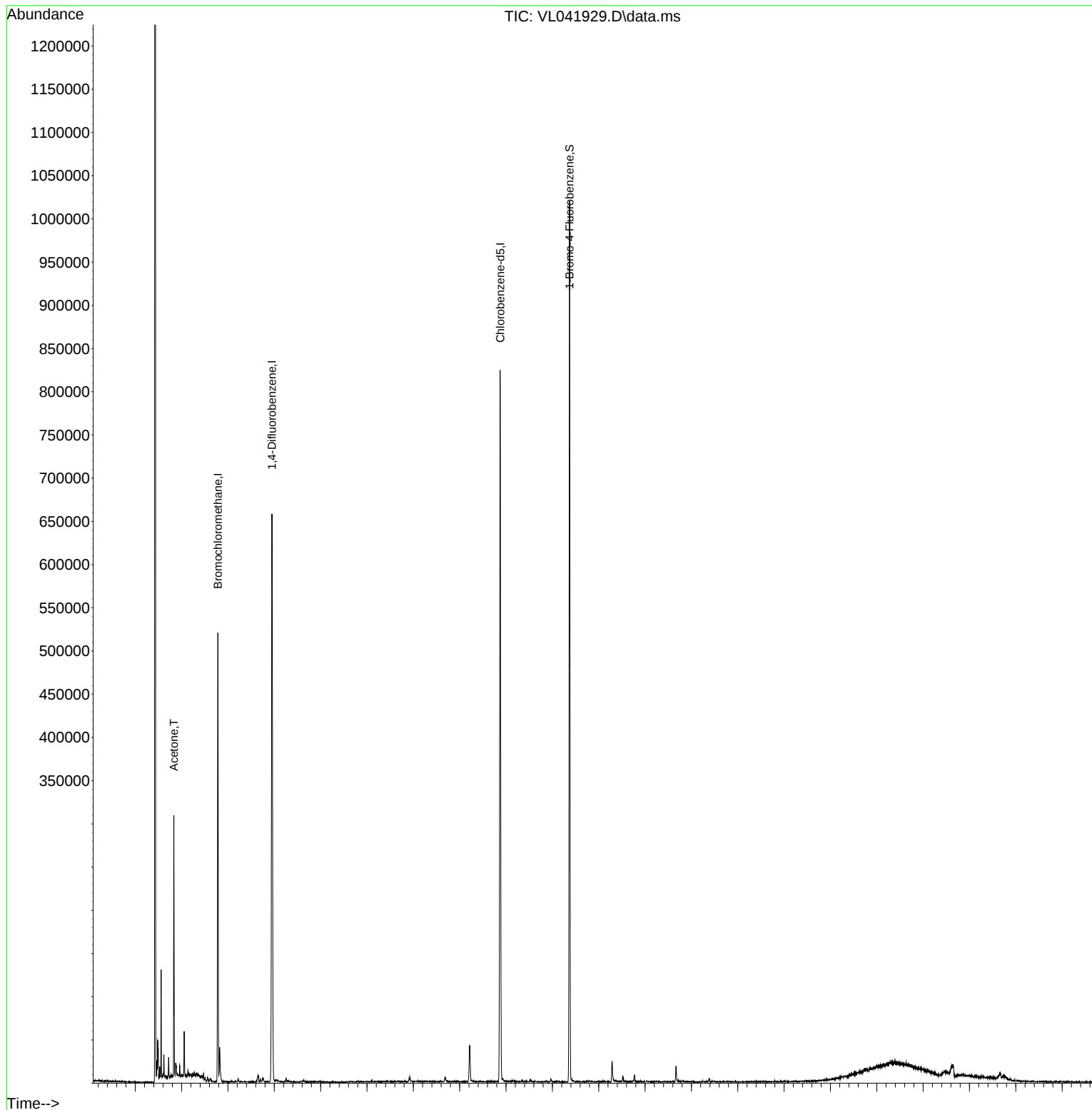
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012025\  
Data File : VL041929.D  
Acq On : 20 Jan 2025 20:26  
Operator : SY/MD  
Sample : Q1138-02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 13 Sample Multiplier: 1

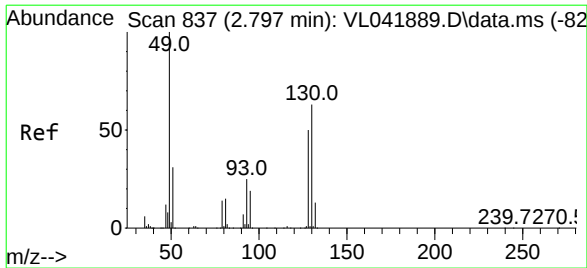
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2

Quant Time: Jan 21 03:08:08 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL011425AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Jan 14 23:15:42 2025  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 01/21/2025  
Supervised By : Mahesh Dadoda 01/21/2025





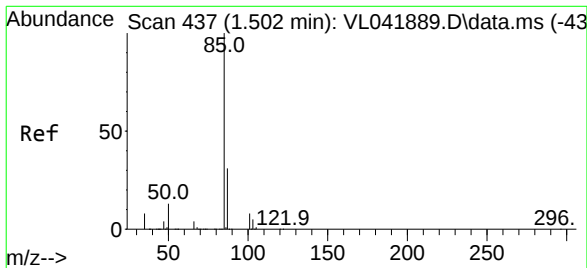
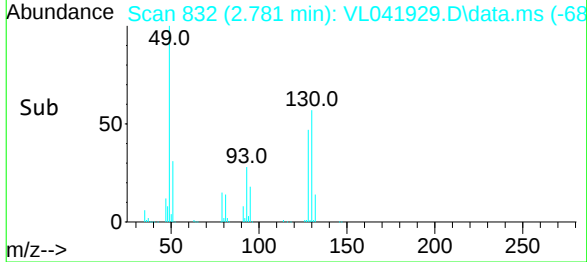
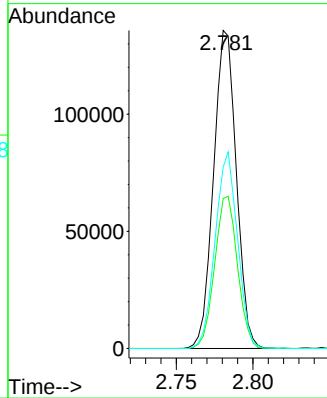
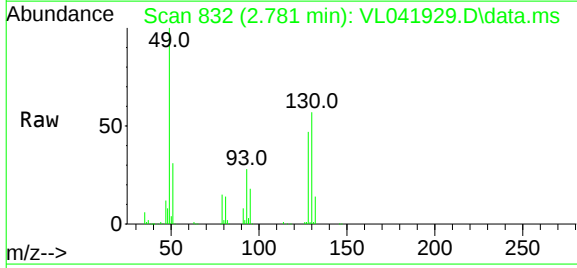
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Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.781 min Scan# 837  
Delta R.T. -0.016 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2

Tgt Ion: 49 Resp: 140403  
Ion Ratio Lower Upper  
49 100  
128 47.9 24.3 73.0  
130 60.6 31.1 93.2

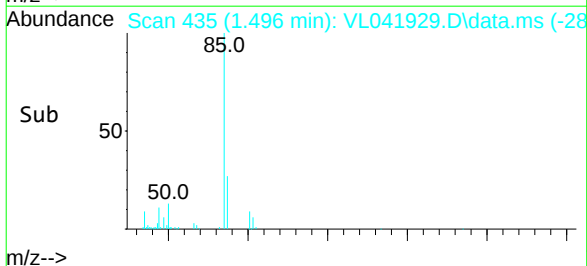
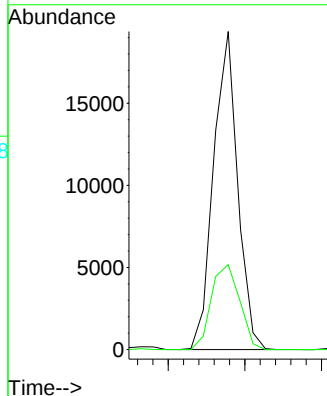
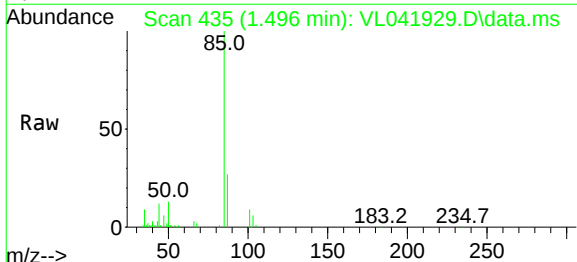
Manual Integrations  
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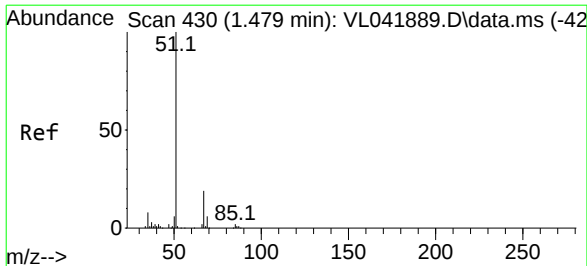
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025



#2  
Dichlorodifluoromethane  
Concen: 0.442 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.006 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

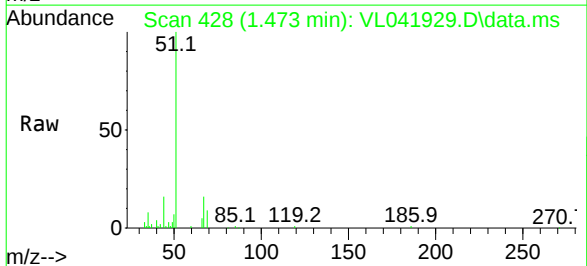
Tgt Ion: 85 Resp: 8462  
Ion Ratio Lower Upper  
85 100  
87 26.7 24.9 37.3





#3  
Chlorodifluoromethane  
Concen: 0.267 ppbv m  
RT: 1.473 min Scan# 42  
Delta R.T. -0.006 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

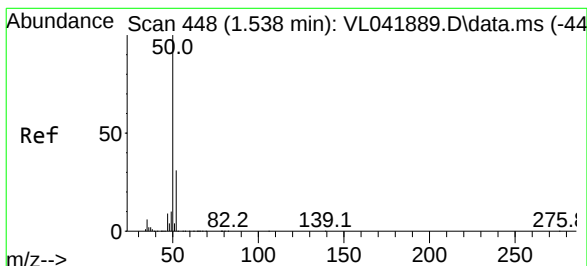
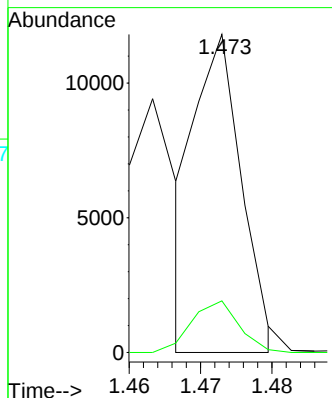
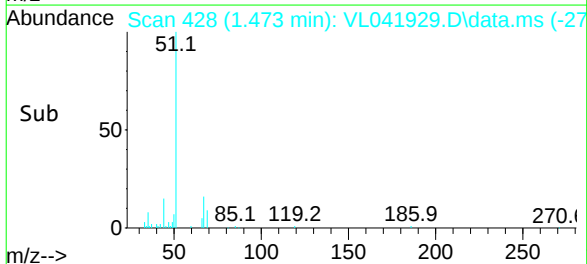
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



Tgt Ion: 51 Resp: 5354  
Ion Ratio Lower Upper  
51 100  
67 16.6 15.0 22.4

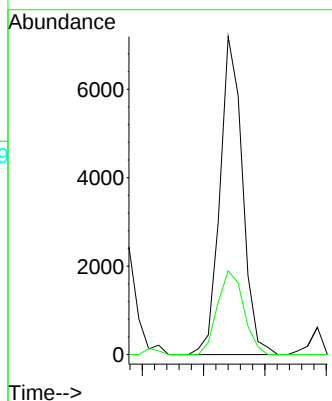
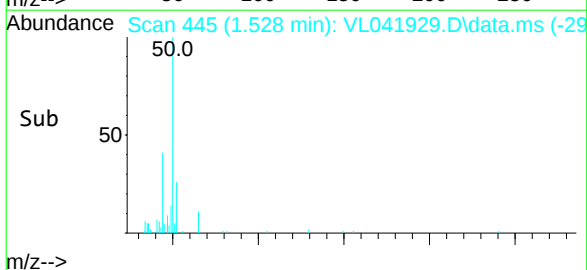
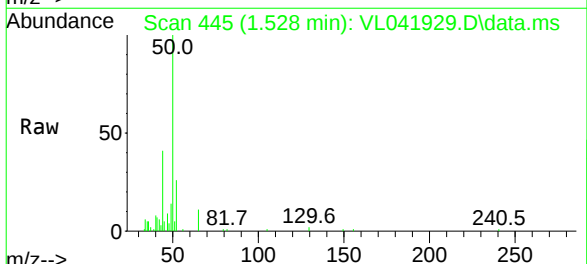
Manual Integrations  
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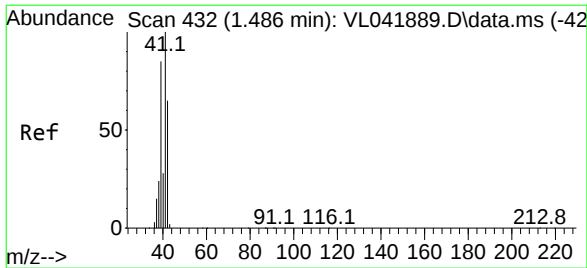
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025



#4  
Chloromethane  
Concen: 0.509 ppbv  
RT: 1.528 min Scan# 445  
Delta R.T. -0.010 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

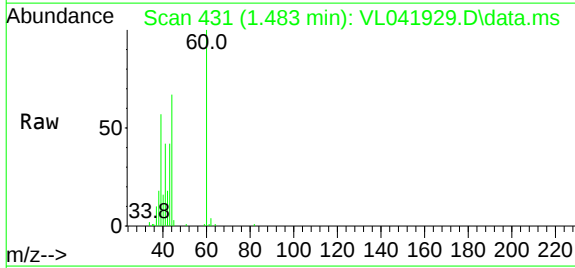
Tgt Ion: 50 Resp: 3664  
Ion Ratio Lower Upper  
50 100  
52 26.3 24.6 36.8





#9  
 Propene  
 Concen: 0.384 ppbv  
 RT: 1.483 min Scan# 43  
 Delta R.T. -0.003 min  
 Lab File: VL041929.D  
 Acq: 20 Jan 2025 20:26

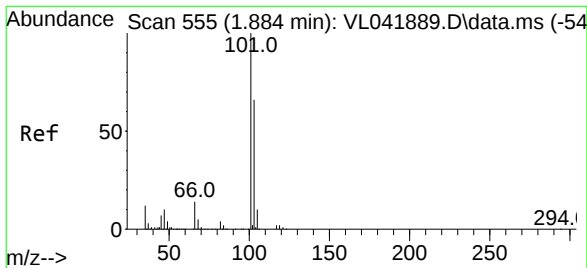
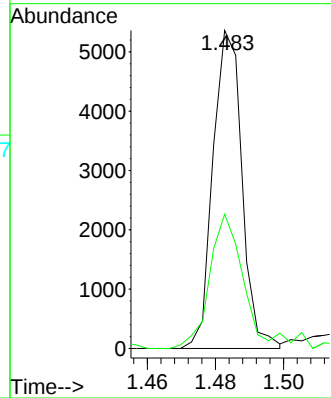
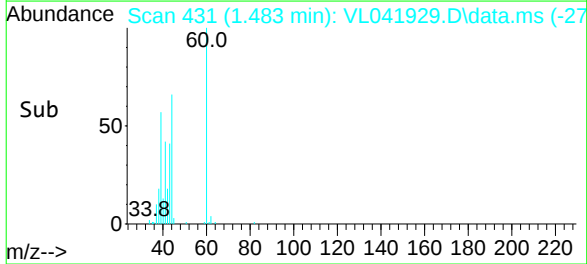
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA2



Tgt Ion: 41 Resp: 3172  
 Ion Ratio Lower Upper  
 41 100  
 42 55.5 52.0 78.0

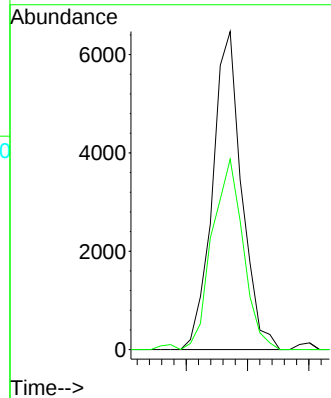
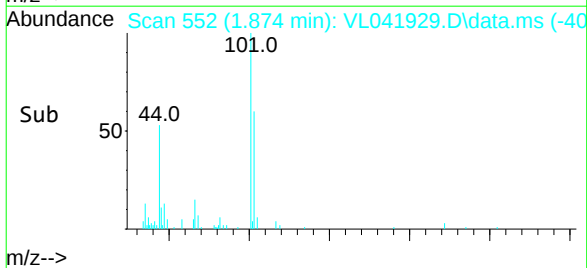
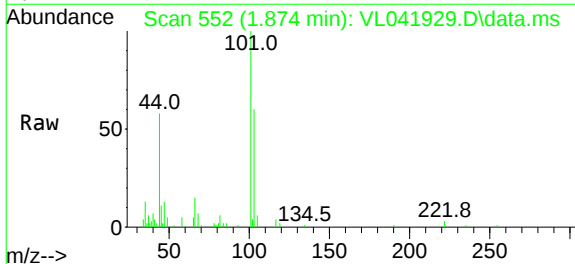
Manual Integrations  
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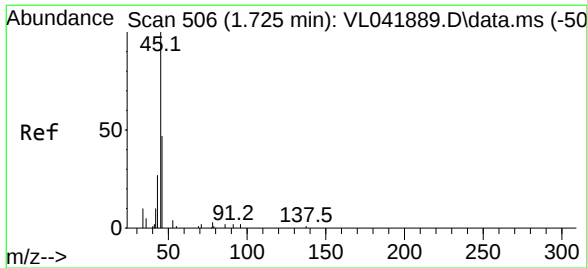
Reviewed By :Semsettin Yesilyurt 01/21/2025  
 Supervised By :Mahesh Dadoda 01/21/2025



#11  
 Trichlorofluoromethane  
 Concen: 0.215 ppbv  
 RT: 1.874 min Scan# 552  
 Delta R.T. -0.010 min  
 Lab File: VL041929.D  
 Acq: 20 Jan 2025 20:26

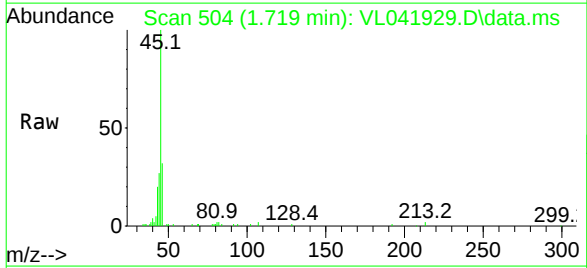
Tgt Ion:101 Resp: 4275  
 Ion Ratio Lower Upper  
 101 100  
 103 59.9 53.1 79.7





#13  
Ethanol  
Concen: 13.611 ppbv  
RT: 1.719 min Scan# 506  
Delta R.T. -0.006 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

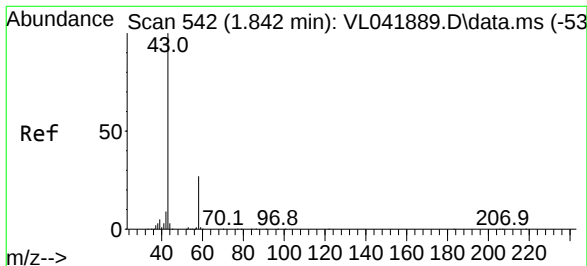
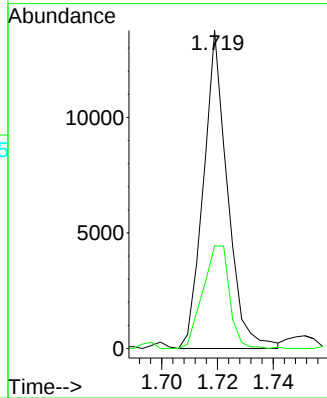
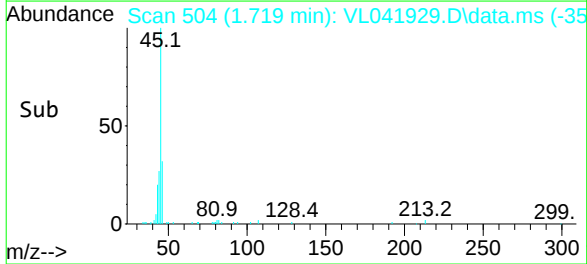
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



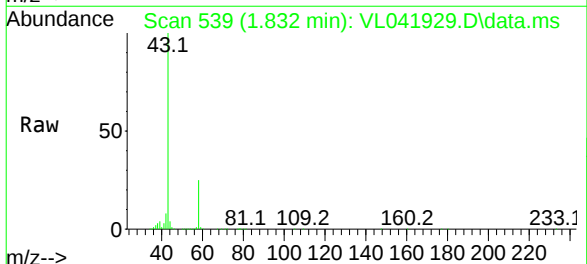
Tgt Ion: 45 Resp: 8228  
Ion Ratio Lower Upper  
45 100  
46 0.0 18.1 72.5

Manual Integrations  
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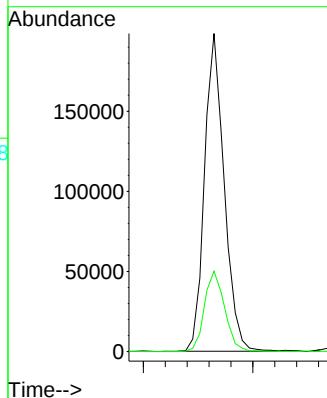
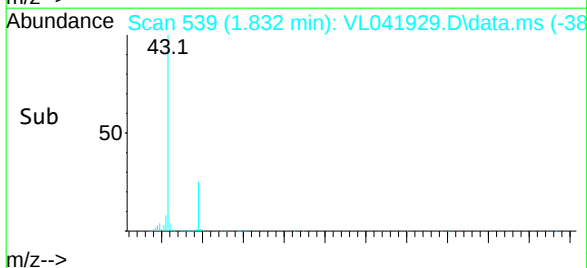
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025

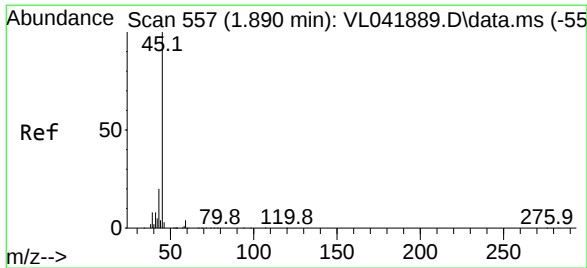


#15  
Acetone  
Concen: 7.343 ppbv  
RT: 1.832 min Scan# 539  
Delta R.T. -0.010 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26



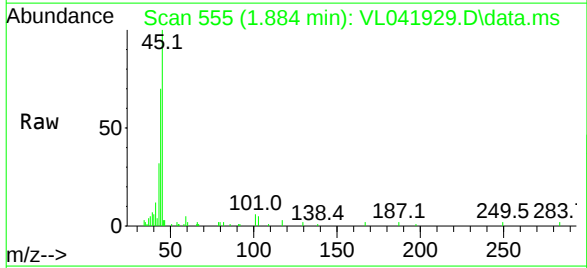
Tgt Ion: 43 Resp: 123835  
Ion Ratio Lower Upper  
43 100  
58 26.1 21.9 32.9





#19  
Isopropyl Alcohol  
Concen: 0.445 ppbv  
RT: 1.884 min Scan# 557  
Delta R.T. -0.006 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

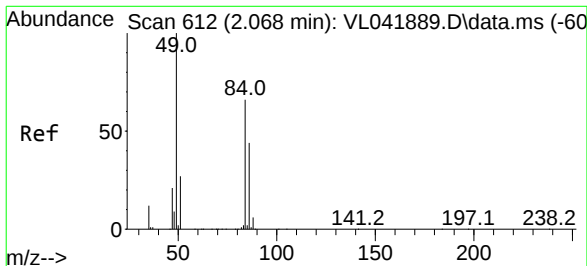
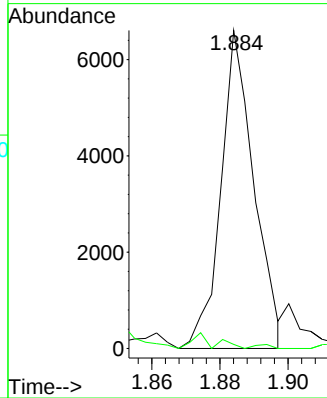
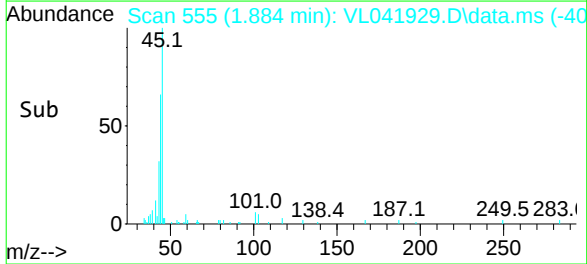
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



Tgt Ion: 45 Resp: 4447  
Ion Ratio Lower Upper  
45 100  
58 726.8 35.0 52.6#

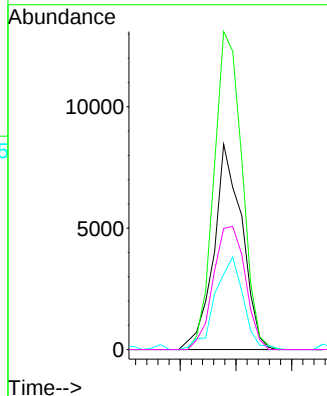
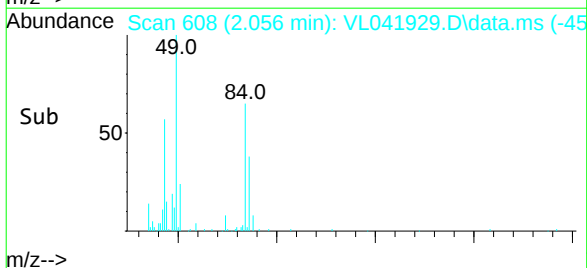
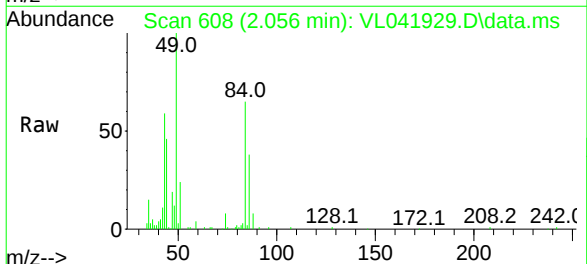
Manual Integrations  
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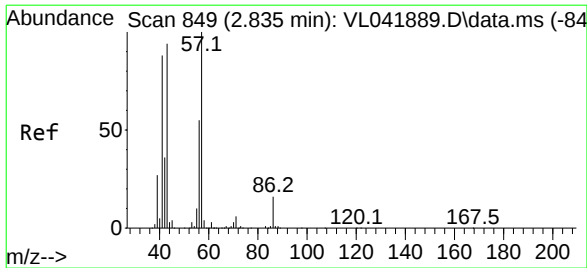
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025



#20  
Methylene Chloride  
Concen: 0.892 ppbv  
RT: 2.056 min Scan# 608  
Delta R.T. -0.013 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

Tgt Ion: 84 Resp: 5944  
Ion Ratio Lower Upper  
84 100  
49 154.9 123.1 184.7  
51 36.6 35.8 53.8  
86 59.0 53.7 80.5





#26

Hexane

Concen: 0.413 ppbv

RT: 2.819 min Scan# 84

Delta R.T. -0.016 min

Lab File: VL041929.D

Acq: 20 Jan 2025 20:26

Instrument :

MSVOA\_L

ClientSampleId :

IA2

Tgt Ion: 57 Resp: 7434

Ion Ratio Lower Upper

57 100

41 112.6 73.8 110.8#

43 121.1 197.3 295.9#

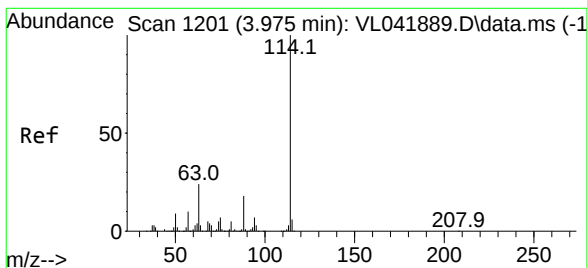
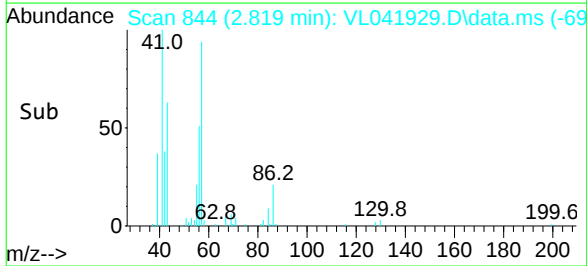
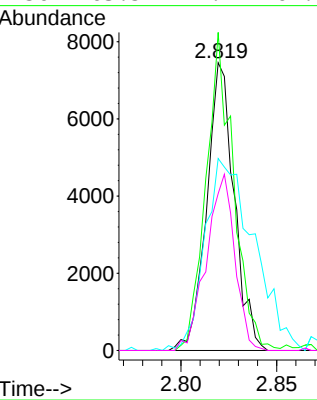
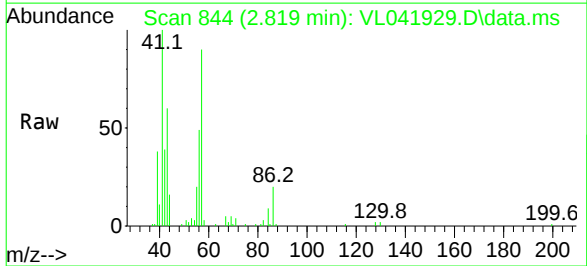
56 63.5 42.7 64.1

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 01/21/2025

Supervised By :Mahesh Dadoda 01/21/2025



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.026 min

Lab File: VL041929.D

Acq: 20 Jan 2025 20:26

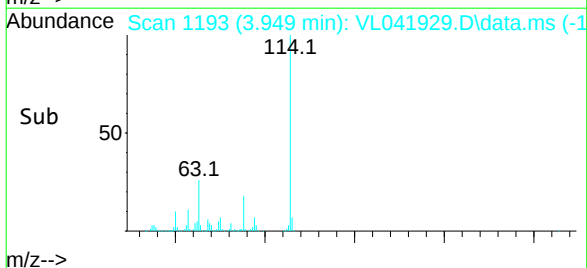
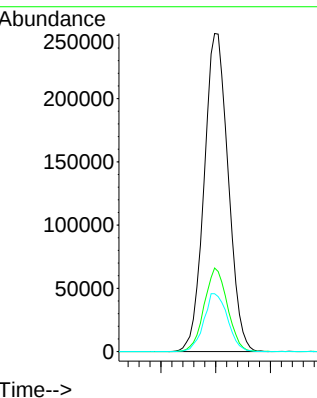
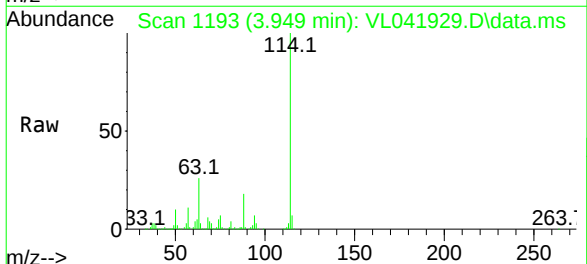
Tgt Ion:114 Resp: 383832

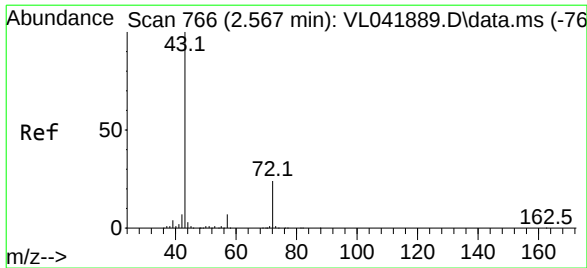
Ion Ratio Lower Upper

114 100

63 25.4 19.8 29.6

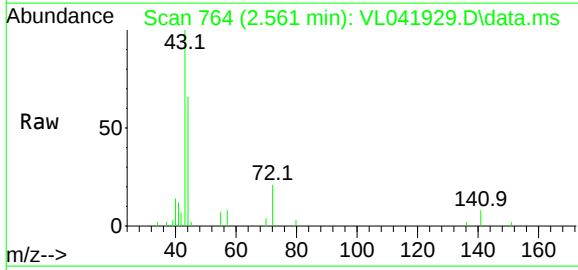
88 18.0 14.4 21.6





#34  
2-Butanone  
Concen: 0.124 ppbv  
RT: 2.561 min Scan# 766  
Delta R.T. -0.006 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

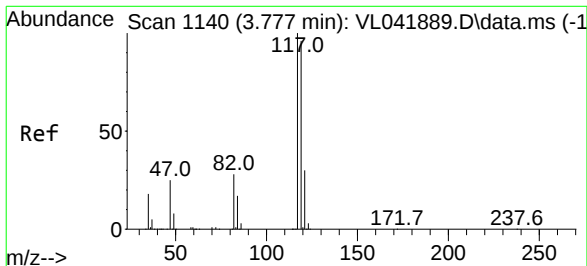
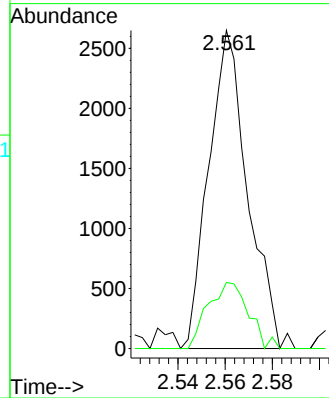
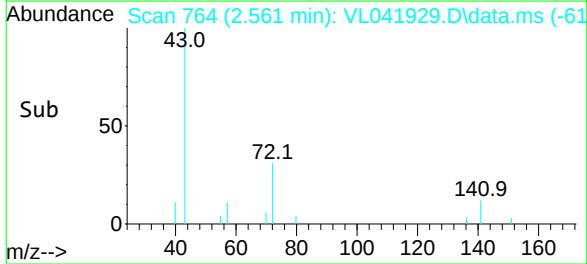
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



Tgt Ion: 43 Resp: 3017  
Ion Ratio Lower Upper  
43 100  
72 21.7 18.6 28.0

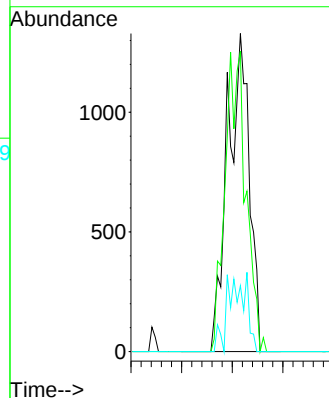
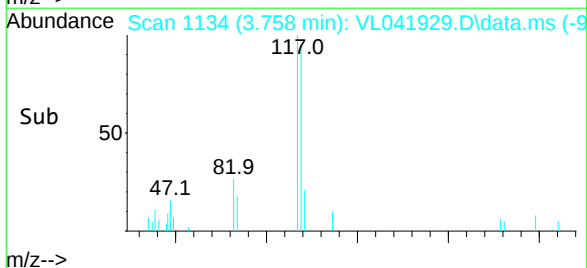
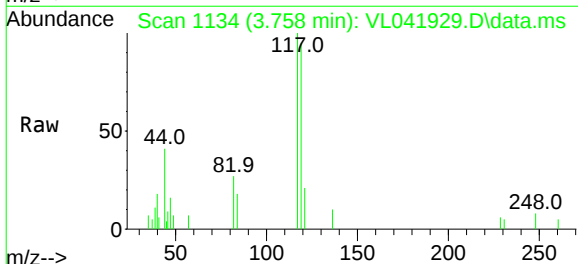
Manual Integrations  
APPROVED

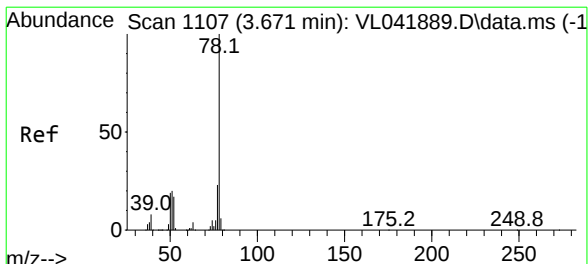
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025



#35  
Carbon Tetrachloride  
Concen: 0.082 ppbv m  
RT: 3.758 min Scan# 1134  
Delta R.T. -0.019 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

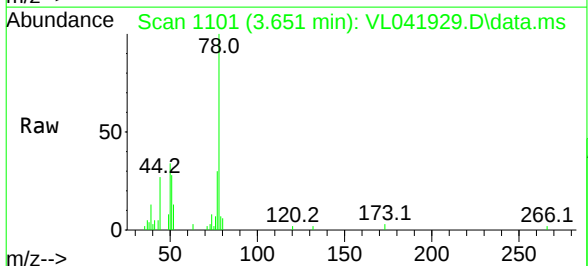
Tgt Ion:117 Resp: 1978  
Ion Ratio Lower Upper  
117 100  
119 94.5 76.9 115.3  
121 20.7 23.8 35.6#





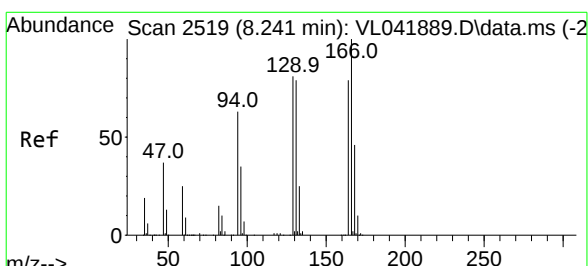
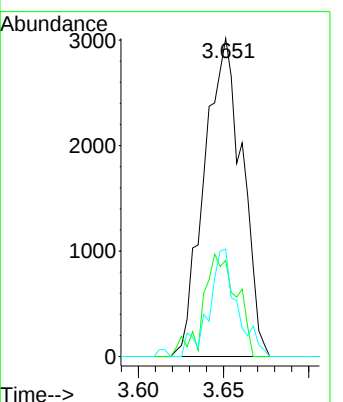
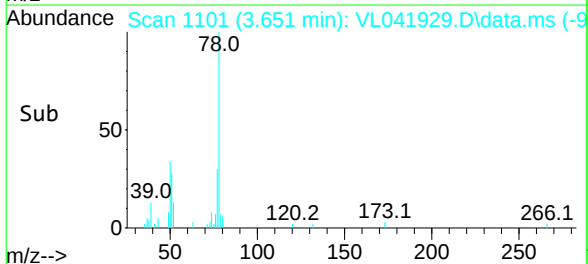
#36  
Benzene  
Concen: 0.133 ppbv  
RT: 3.651 min Scan# 1107  
Delta R.T. -0.019 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

Instrument : MSVOA\_L  
ClientSampleId : IA2

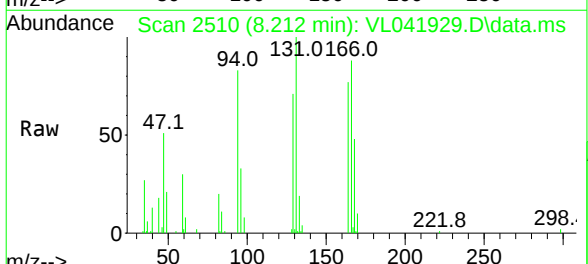


|             |                |
|-------------|----------------|
| Tgt Ion: 78 | Resp: 4670     |
| Ion Ratio   | Lower Upper    |
| 78          | 100            |
| 77          | 30.2 18.1 27.1 |
| 50          | 33.8 15.2 22.8 |

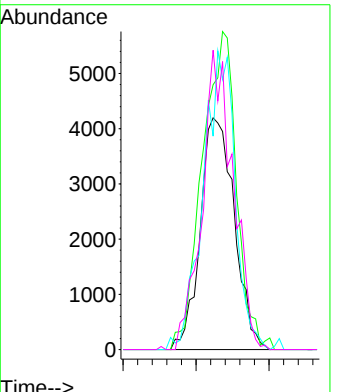
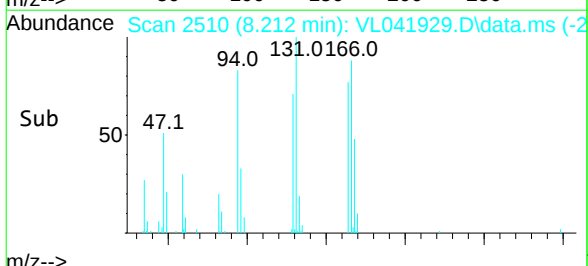
Manual Integrations  
**APPROVED**  
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025

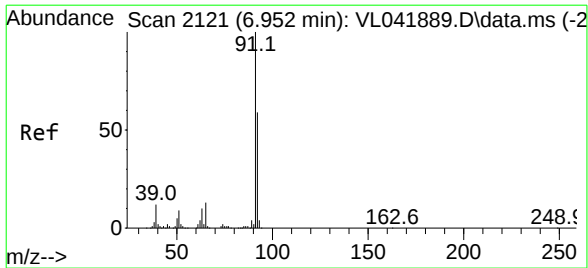


#52  
Tetrachloroethene  
Concen: 0.558 ppbv  
RT: 8.212 min Scan# 2510  
Delta R.T. -0.029 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26



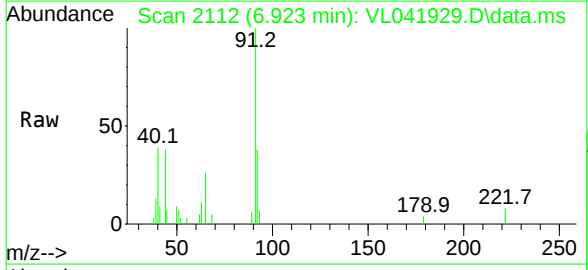
|              |                   |
|--------------|-------------------|
| Tgt Ion: 164 | Resp: 6811        |
| Ion Ratio    | Lower Upper       |
| 164          | 100               |
| 166          | 114.3 100.8 151.2 |
| 129          | 92.1 82.0 123.0   |
| 131          | 129.2 80.2 120.2  |





#53  
Toluene  
Concen: 0.093 ppbv m  
RT: 6.923 min Scan# 211  
Delta R.T. -0.029 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

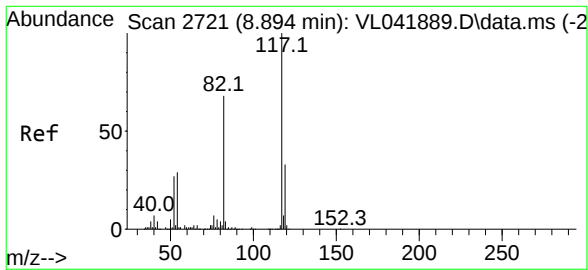
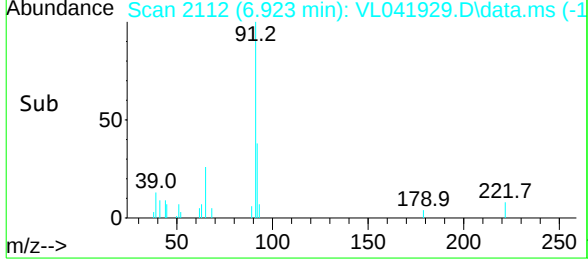
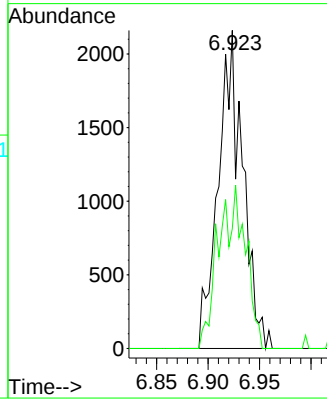
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



Tgt Ion: 91 Resp: 3567  
Ion Ratio Lower Upper  
91 100  
92 0.0 47.4 71.0#

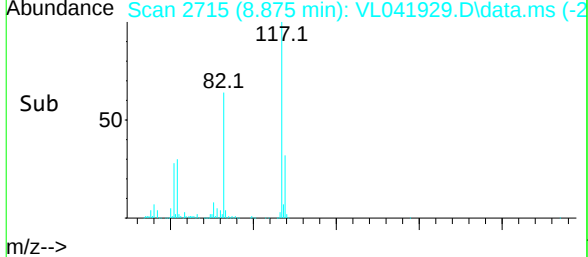
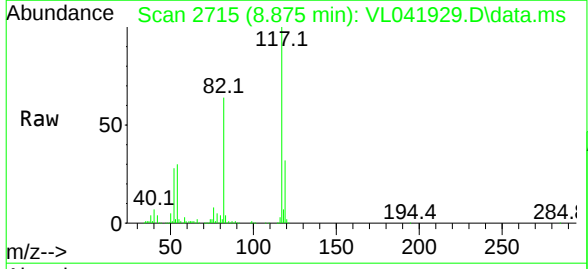
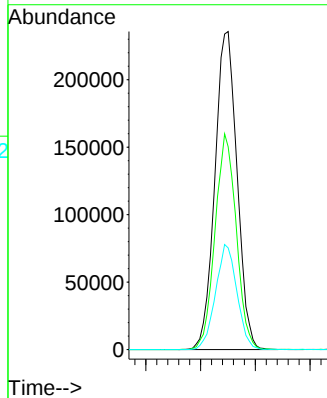
Manual Integrations  
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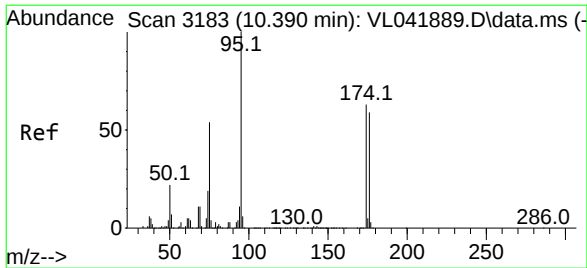
Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.875 min Scan# 2715  
Delta R.T. -0.019 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

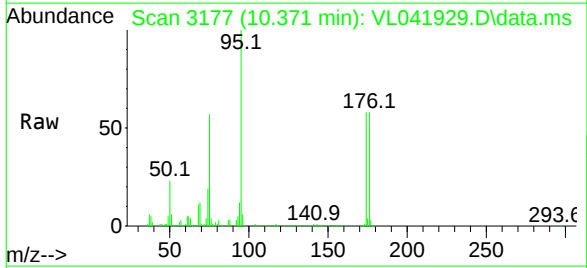
Tgt Ion:117 Resp: 331576  
Ion Ratio Lower Upper  
117 100  
82 64.9 54.2 81.4  
119 31.9 25.0 37.6





#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.840 ppbv  
RT: 10.371 min Scan# 31  
Delta R.T. -0.019 min  
Lab File: VL041929.D  
Acq: 20 Jan 2025 20:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA2



|     |       |       |       |        |
|-----|-------|-------|-------|--------|
| Tgt | Ion   | 95    | Resp  | 256977 |
| Ion | Ratio | Lower | Upper |        |
| 95  | 100   |       |       |        |
| 174 | 59.2  | 49.0  | 73.4  |        |
| 175 | 4.4   | 3.8   | 5.8   |        |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 01/21/2025  
Supervised By :Mahesh Dadoda 01/21/2025

