

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072425\  
 Data File : VL042763.D  
 Acq On : 24 Jul 2025 13:52  
 Operator : SY/MD  
 Sample : Q2671-05 2X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 118-SG1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2025  
 Supervised By :Mahesh Dadoda 07/26/2025

Quant Time: Jul 25 01:26:39 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072325AIR.M

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

QLast Update : Thu Jul 24 05:24:41 2025

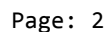
Response via : Initial Calibration

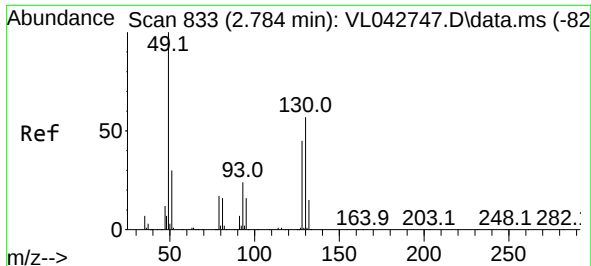
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 2.787  | 49    | 152545   | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 3.959  | 114   | 423795   | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 8.885  | 117   | 382302   | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.377 | 95    | 301001   | 9.942    | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 99.400%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 1.499  | 85    | 4755     | 0.236    | ppbv   | 97       |
| 4) Chloromethane            | 1.535  | 50    | 9639     | 1.181    | ppbv # | 82       |
| 9) Propene                  | 1.486  | 41    | 13877    | 1.453    | ppbv   | 93       |
| 10) Heptane                 | 4.985  | 43    | 2740m    | 0.106    | ppbv   |          |
| 11) Trichlorofluoromethane  | 1.881  | 101   | 2383     | 0.115    | ppbv   | 85       |
| 13) Ethanol                 | 1.722  | 45    | 38097    | 53.641   | ppbv   | 90       |
| 15) Acetone                 | 1.836  | 43    | 469831   | 22.305   | ppbv   | 97       |
| 17) tert-Butyl alcohol      | 2.046  | 59    | 4732     | 0.249    | ppbv # | 77       |
| 19) Isopropyl Alcohol       | 1.887  | 45    | 23494m   | 2.099    | ppbv   |          |
| 26) Hexane                  | 2.826  | 57    | 6609     | 0.323    | ppbv # | 2        |
| 32) 1,1,1-Trichloroethane   | 3.373  | 97    | 1580m    | 0.048    | ppbv   |          |
| 34) 2-Butanone              | 2.557  | 43    | 235290   | 7.838    | ppbv   | 99       |
| 35) Carbon Tetrachloride    | 3.765  | 117   | 1556m    | 0.049    | ppbv   |          |
| 36) Benzene                 | 3.658  | 78    | 5821     | 0.145    | ppbv # | 92       |
| 38) Trichloroethene         | 4.548  | 130   | 3421m    | 0.177    | ppbv   |          |
| 41) Tetrahydrofuran         | 3.056  | 42    | 25066m   | 1.641    | ppbv   |          |
| 51) 2-Hexanone              | 7.445  | 43    | 15306    | 0.524    | ppbv # | 98       |
| 52) Tetrachloroethene       | 8.225  | 164   | 5241     | 0.315    | ppbv # | 77       |
| 53) Toluene                 | 6.940  | 91    | 7531m    | 0.175    | ppbv   |          |
| 59) m/p-Xylene              | 9.536  | 91    | 5874m    | 0.122    | ppbv   |          |
| 79) Naphthalene             | 13.513 | 128   | 1249m    | 0.456    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

## Manual Integrations

Quant Time: Jul 25 01:26:39 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072325AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug  
QLast Update : Thu Jul 24 05:24:41 2025  
Response via : Initial Calibration





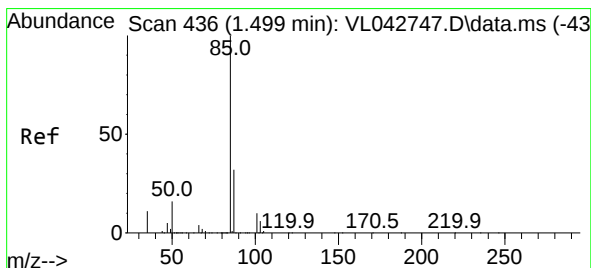
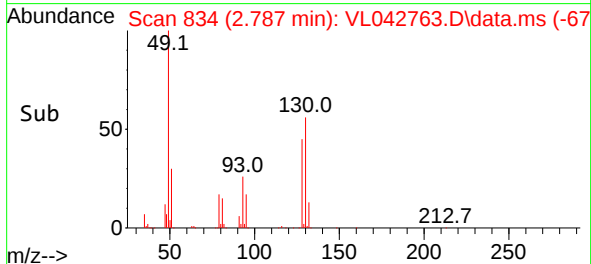
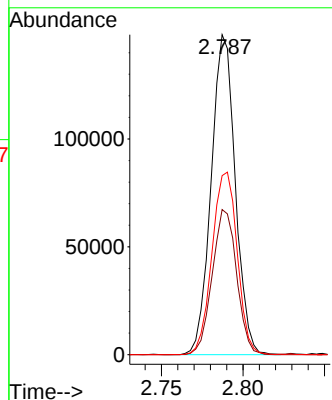
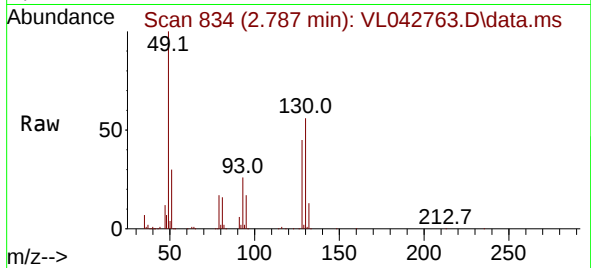
#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 833  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1

Tgt Ion: 49 Resp: 152549  
Ion Ratio Lower Upper  
49 100  
128 45.9 23.6 71.0  
130 59.7 30.3 90.8

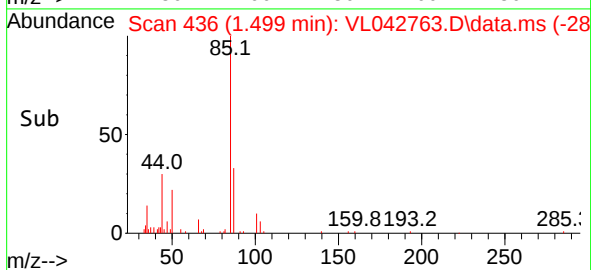
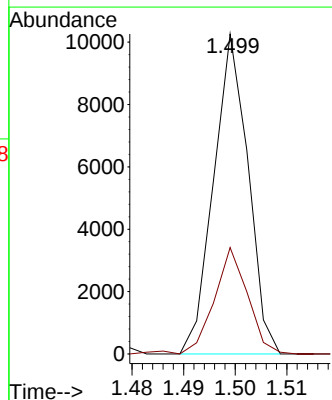
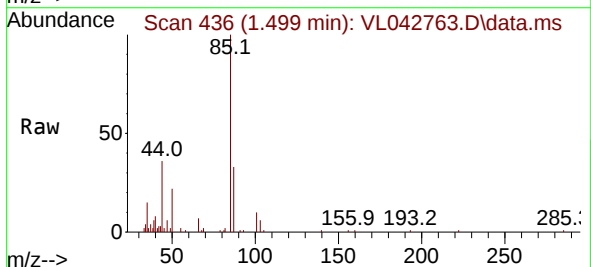
Manual Integrations  
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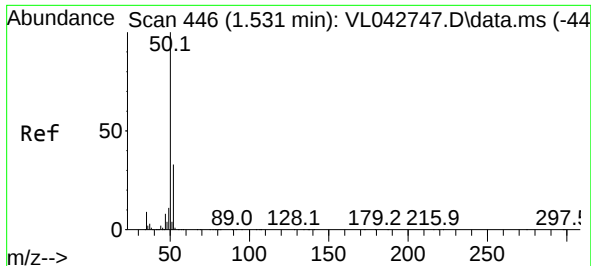
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#2  
Dichlorodifluoromethane  
Concen: 0.236 ppbv  
RT: 1.499 min Scan# 436  
Delta R.T. 0.000 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

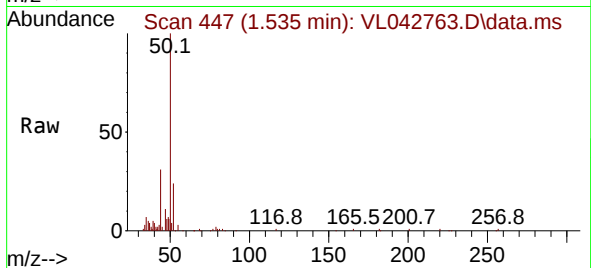
Tgt Ion: 85 Resp: 4755  
Ion Ratio Lower Upper  
85 100  
87 33.2 25.4 38.2





#4  
Chloromethane  
Concen: 1.181 ppbv  
RT: 1.535 min Scan# 446  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

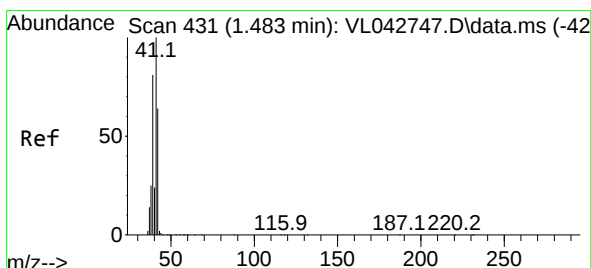
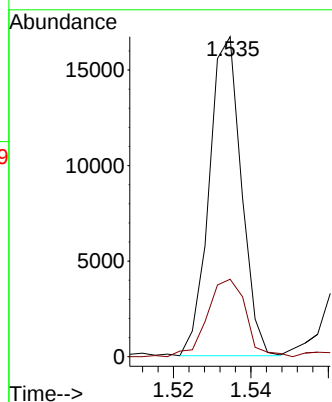
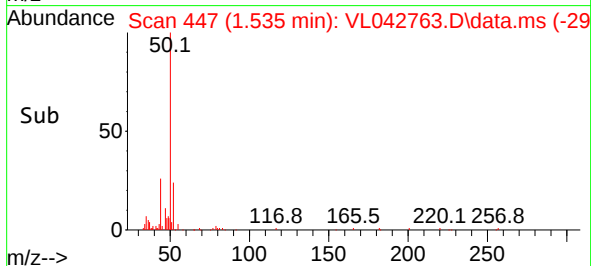
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



Tgt Ion: 50 Resp: 9639  
Ion Ratio Lower Upper  
50 100  
52 23.3 26.6 40.0

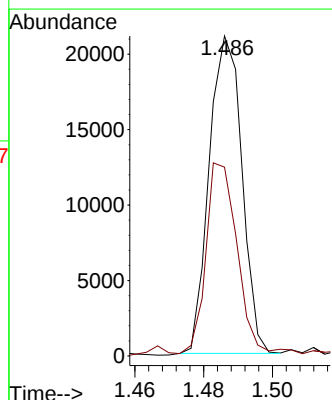
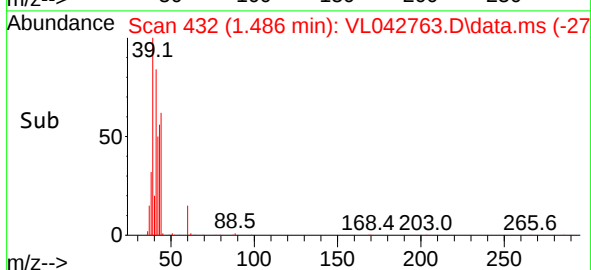
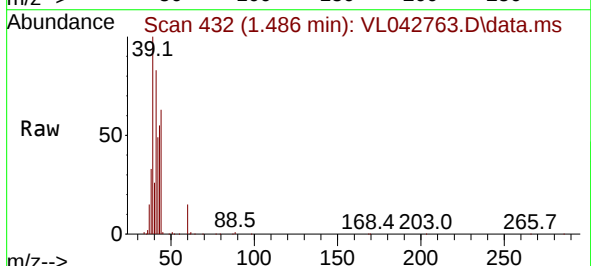
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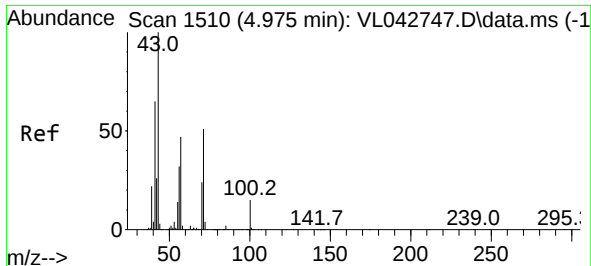
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#9  
Propene  
Concen: 1.453 ppbv  
RT: 1.486 min Scan# 432  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

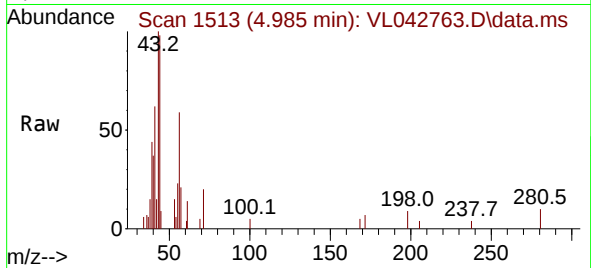
Tgt Ion: 41 Resp: 13877  
Ion Ratio Lower Upper  
41 100  
42 60.8 53.2 79.8





#10  
Heptane  
Concen: 0.106 ppbv m  
RT: 4.985 min Scan# 11  
Delta R.T. 0.010 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

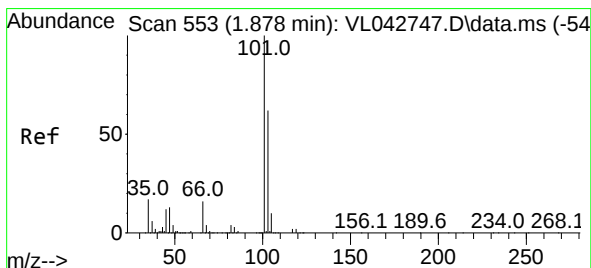
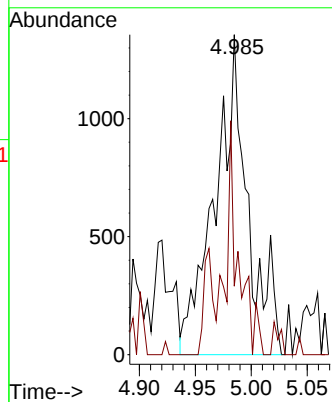
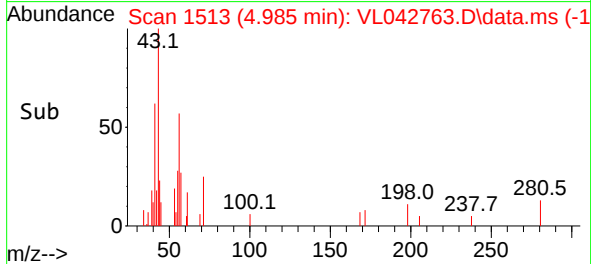
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



Tgt Ion: 43 Resp: 2740  
Ion Ratio Lower Upper  
43 100  
57 38.3 39.9 59.9

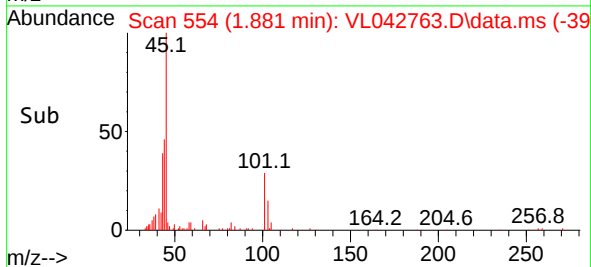
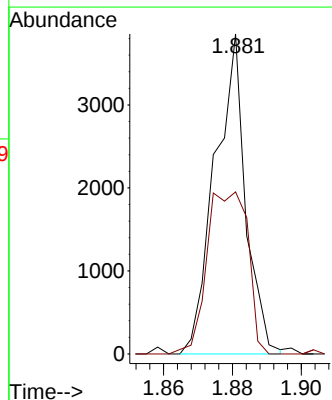
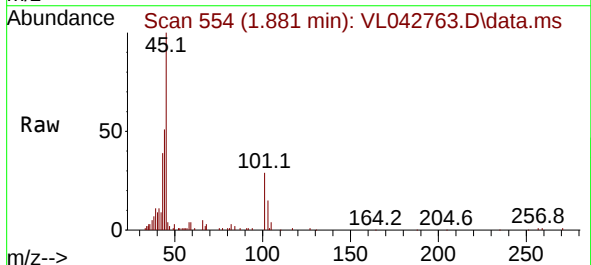
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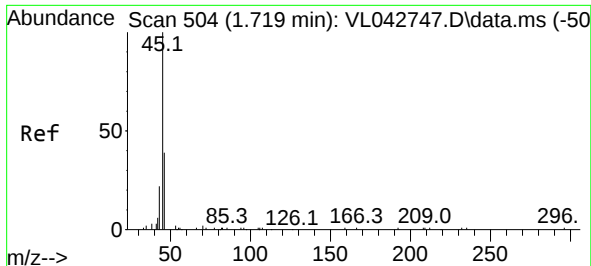
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#11  
Trichlorofluoromethane  
Concen: 0.115 ppbv  
RT: 1.881 min Scan# 554  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

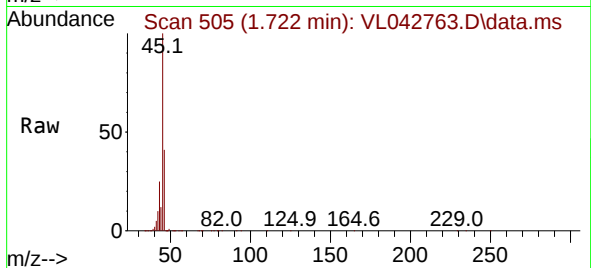
Tgt Ion:101 Resp: 2383  
Ion Ratio Lower Upper  
101 100  
103 50.6 49.6 74.4





#13  
Ethanol  
Concen: 53.641 ppbv  
RT: 1.722 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

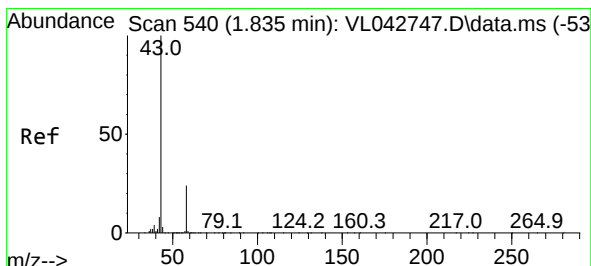
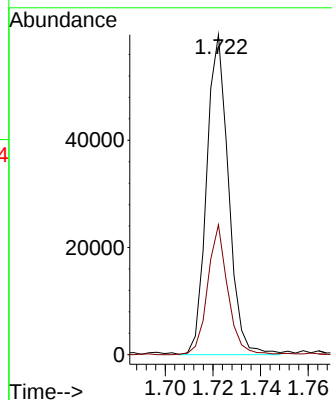
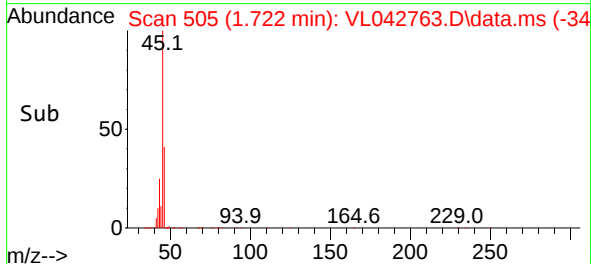
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



Tgt Ion: 45 Resp: 3809  
Ion Ratio Lower Upper  
45 100  
46 38.1 17.8 71.4

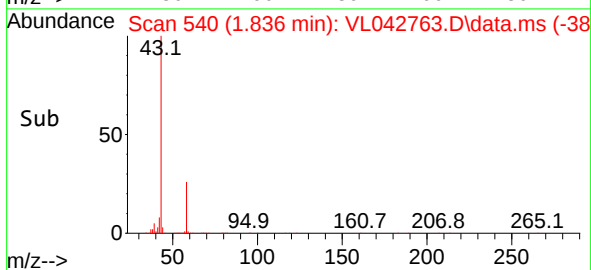
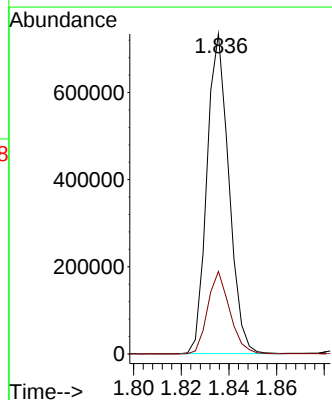
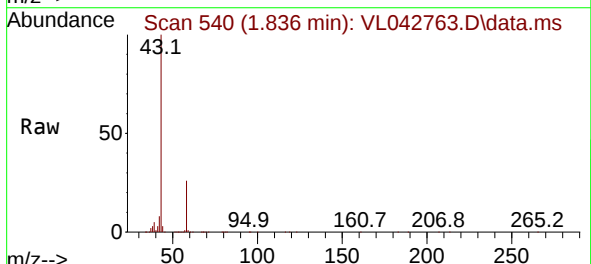
Manual Integrations  
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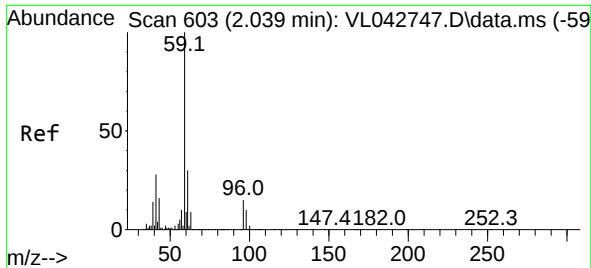
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#15  
Acetone  
Concen: 22.305 ppbv  
RT: 1.836 min Scan# 540  
Delta R.T. 0.000 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Tgt Ion: 43 Resp: 469831  
Ion Ratio Lower Upper  
43 100  
58 26.3 19.8 29.8





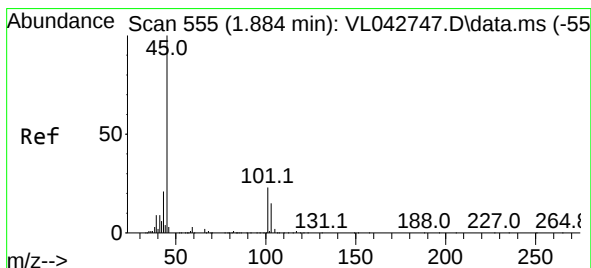
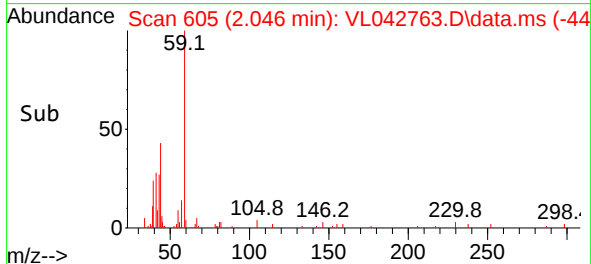
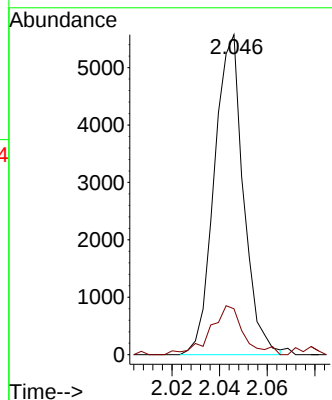
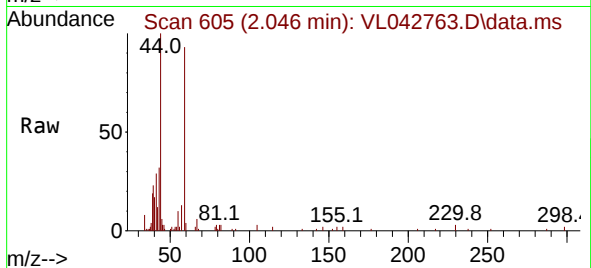
#17  
tert-Butyl alcohol  
Concen: 0.249 ppbv  
RT: 2.046 min Scan# 603  
Delta R.T. 0.007 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1

Tgt Ion: 59 Resp: 4732  
Ion Ratio Lower Upper  
59 100  
57 18.9 8.3 12.5

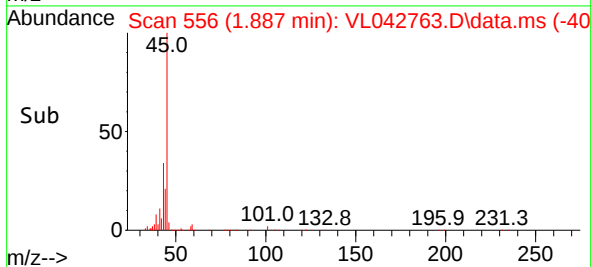
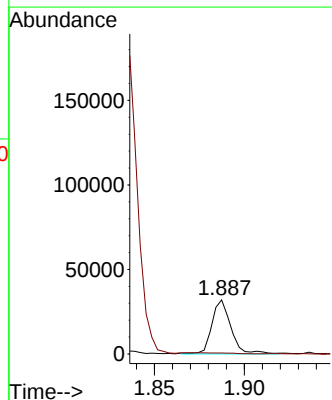
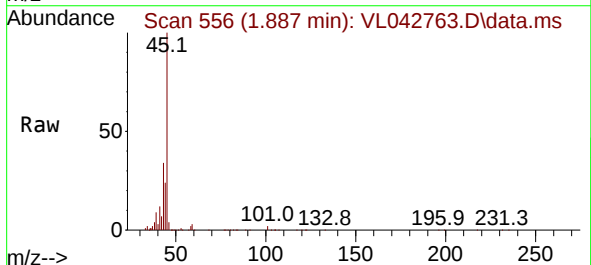
Manual Integrations  
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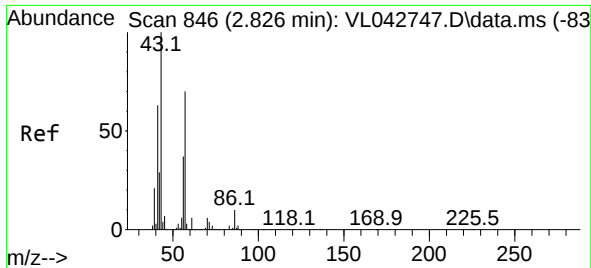
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#19  
Isopropyl Alcohol  
Concen: 2.099 ppbv m  
RT: 1.887 min Scan# 556  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

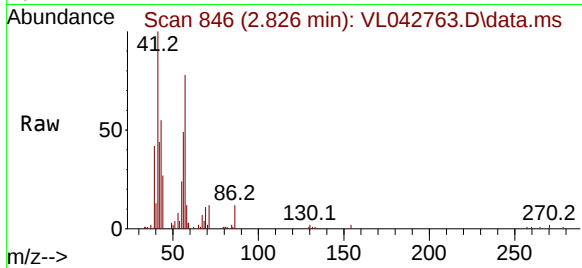
Tgt Ion: 45 Resp: 23494  
Ion Ratio Lower Upper  
45 100  
58 0.0 30.0 45.0#





#26  
Hexane  
Concen: 0.323 ppbv  
RT: 2.826 min Scan# 846  
Delta R.T. 0.000 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

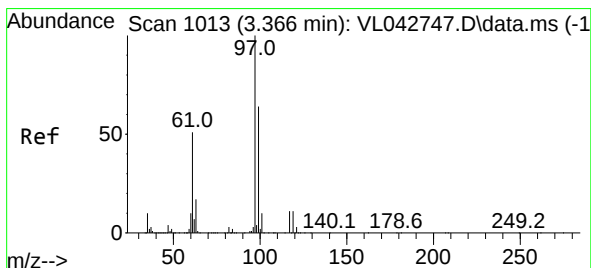
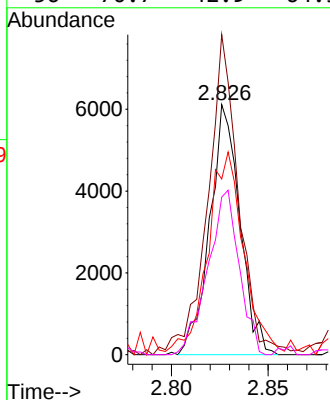
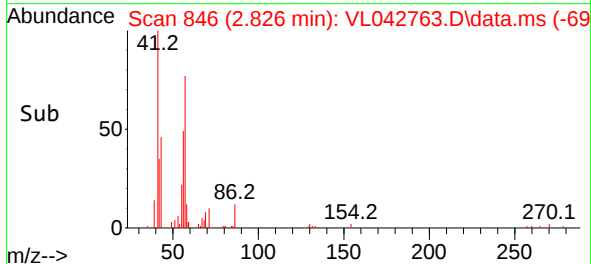
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



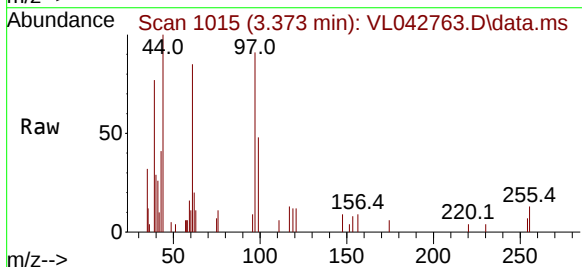
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Ion Ratio Lower Upper  
57 100  
41 131.2 75.4 113.2  
43 0.0 185.0 277.6  
56 70.7 42.9 64.3

Manual Integrations  
APPROVED

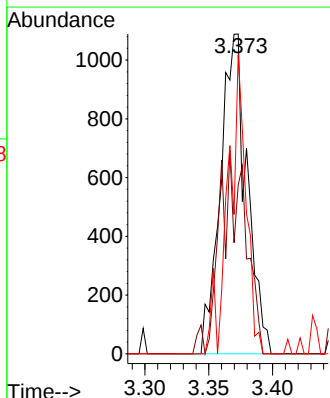
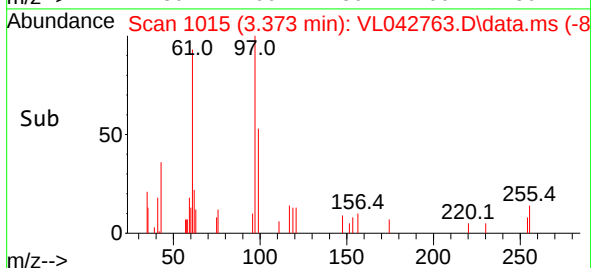
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025

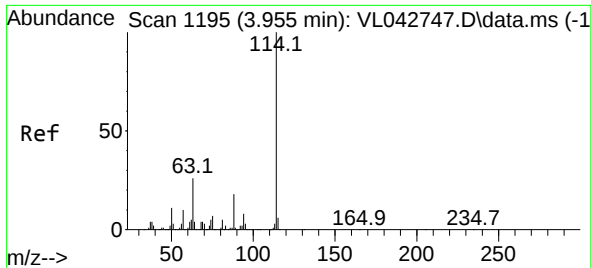


#32  
1,1,1-Trichloroethane  
Concen: 0.048 ppbv m  
RT: 3.373 min Scan# 1015  
Delta R.T. 0.007 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52



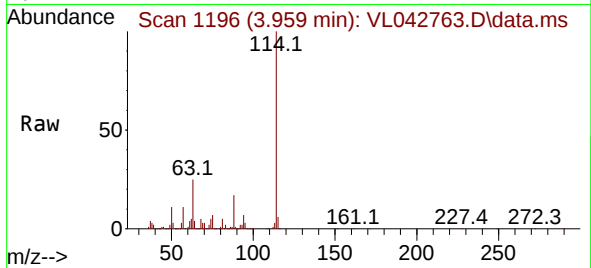
Tgt Ion: 97 Resp: 1580  
Ion Ratio Lower Upper  
97 100  
99 62.8 51.0 76.6  
61 62.7 40.9 61.3





#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.959 min Scan# 1196  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

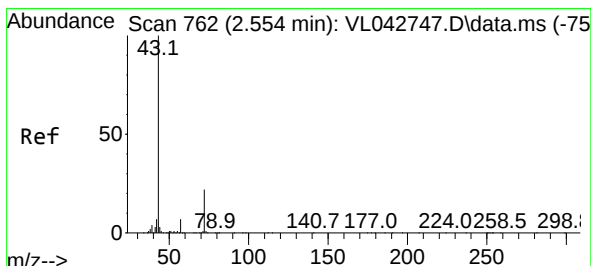
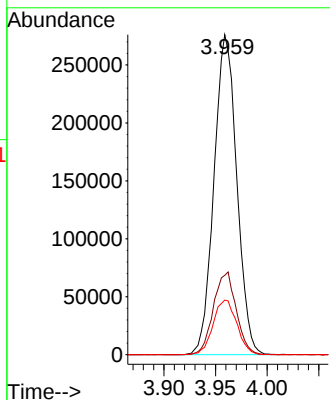
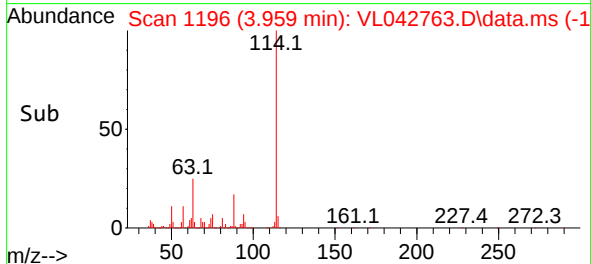
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



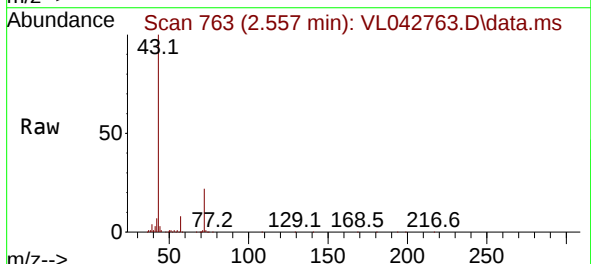
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Ion Ratio Lower Upper  
114 100  
63 25.9 20.5 30.7  
88 17.8 14.0 21.0

Manual Integrations  
APPROVED

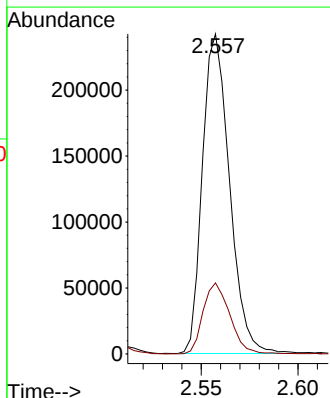
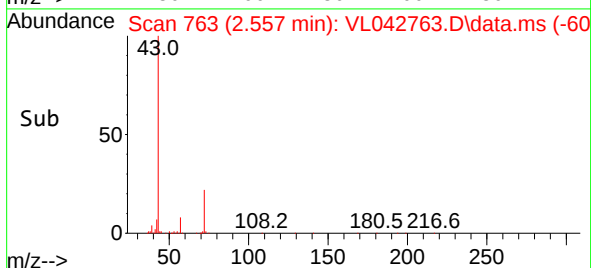
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025

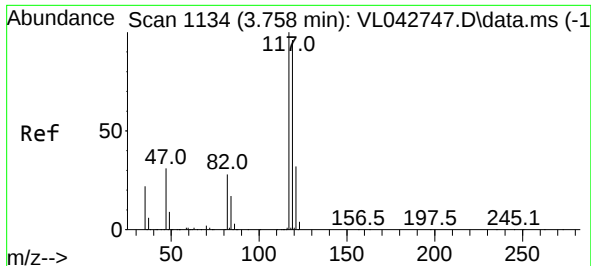


#34  
2-Butanone  
Concen: 7.838 ppbv  
RT: 2.557 min Scan# 763  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52



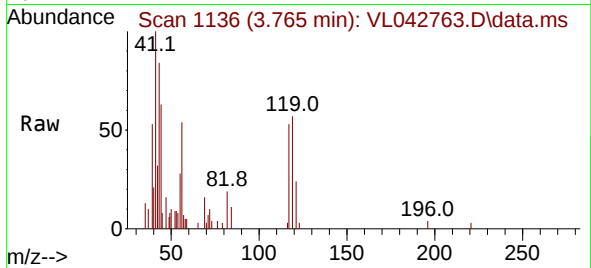
Tgt Ion: 43 Resp: 235290  
Ion Ratio Lower Upper  
43 100  
72 22.2 17.4 26.0





#35  
Carbon Tetrachloride  
Concen: 0.049 ppbv m  
RT: 3.765 min Scan# 1134  
Delta R.T. 0.007 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

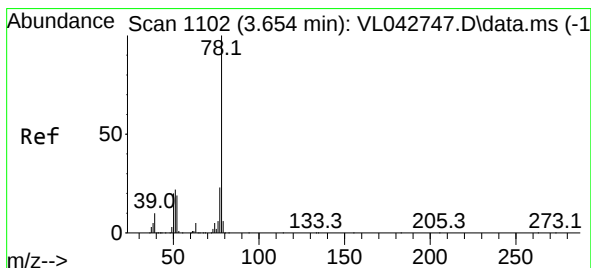
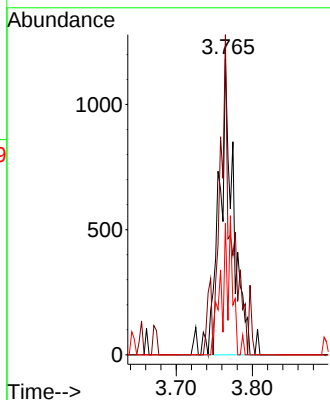
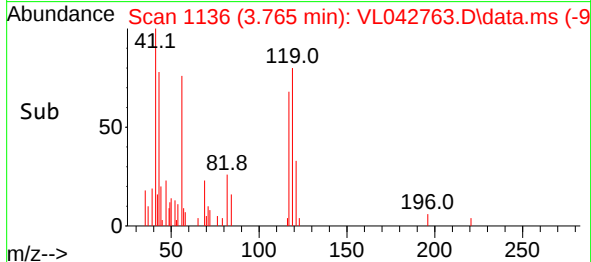
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



Tgt Ion:117 Resp: 1550  
Ion Ratio Lower Upper  
117 100  
119 108.2 77.1 115.7  
121 44.5 25.5 38.3

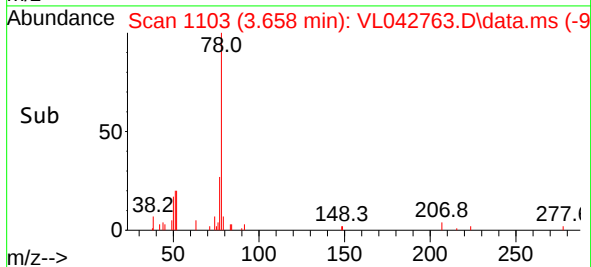
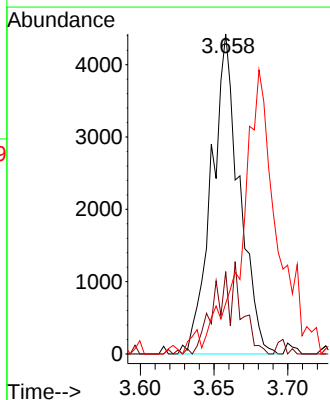
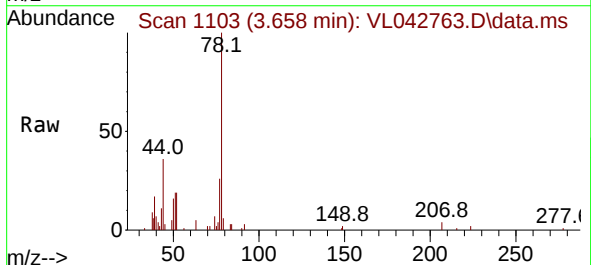
Manual Integrations  
APPROVED

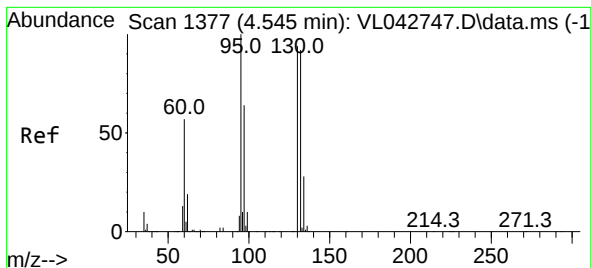
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#36  
Benzene  
Concen: 0.145 ppbv  
RT: 3.658 min Scan# 1103  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Tgt Ion: 78 Resp: 5821  
Ion Ratio Lower Upper  
78 100  
77 24.6 18.5 27.7  
50 14.4 16.2 24.2





#38

Trichloroethene

Concen: 0.177 ppbv m

RT: 4.548 min Scan# 1

Delta R.T. 0.003 min

Lab File: VL042763.D

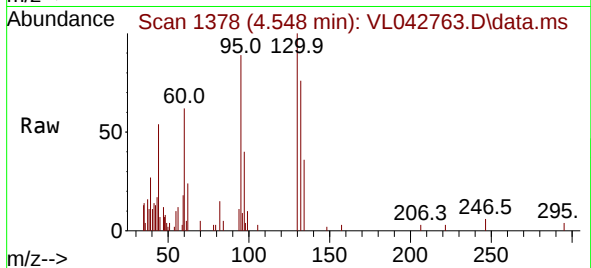
Acq: 24 Jul 2025 13:52

Instrument :

MSVOA\_L

ClientSampleId :

118-SG1



Tgt Ion:130 Resp: 342

Ion Ratio Lower Upper

130 100

95 88.8 85.4 128.2

132 76.2 78.2 117.2

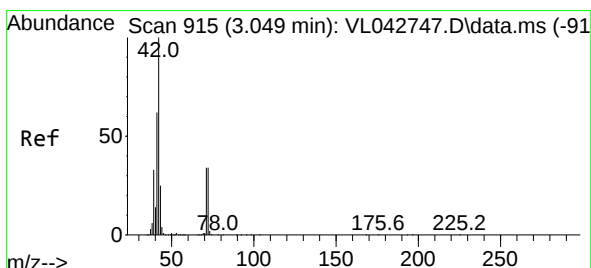
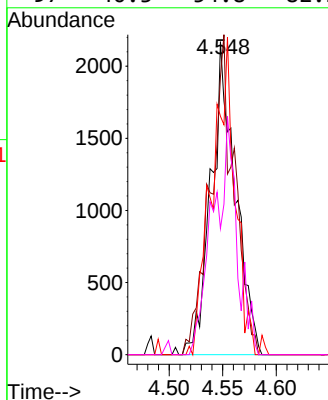
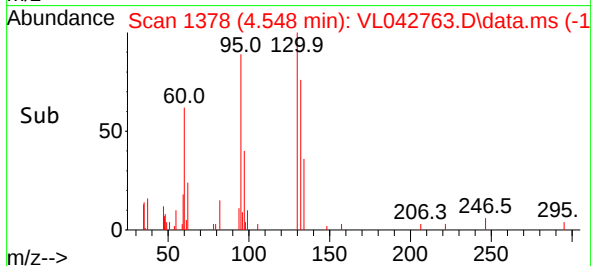
97 40.3 54.8 82.2#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2025

Supervised By :Mahesh Dadoda 07/26/2025



#41

Tetrahydrofuran

Concen: 1.641 ppbv m

RT: 3.056 min Scan# 917

Delta R.T. 0.007 min

Lab File: VL042763.D

Acq: 24 Jul 2025 13:52

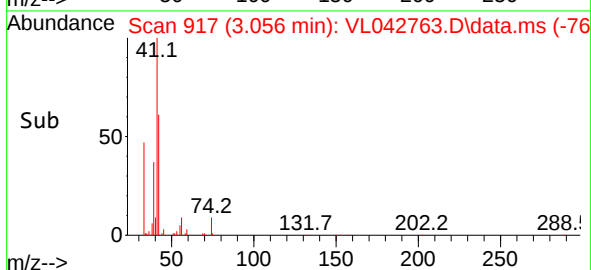
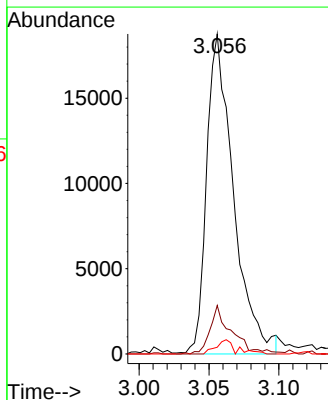
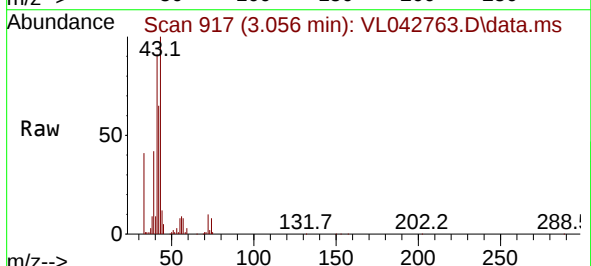
Tgt Ion: 42 Resp: 25066

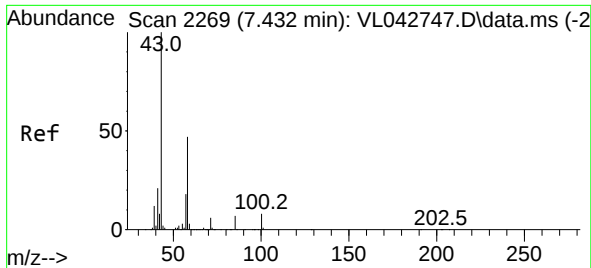
Ion Ratio Lower Upper

42 100

72 0.0 30.9 46.3#

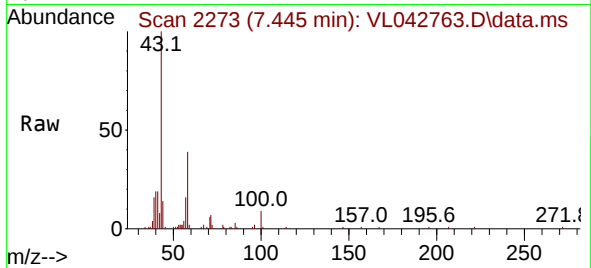
71 0.0 28.6 43.0#





#51  
2-Hexanone  
Concen: 0.524 ppbv  
RT: 7.445 min Scan# 2118  
Delta R.T. 0.013 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

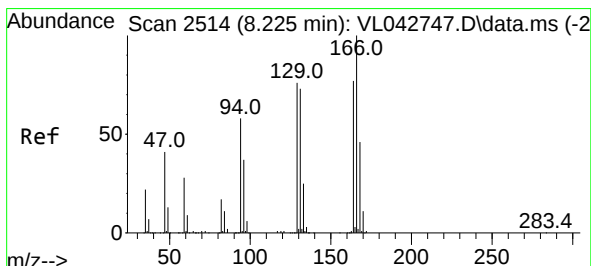
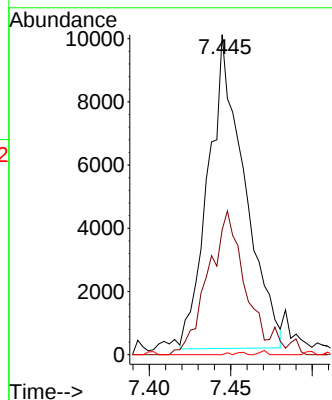
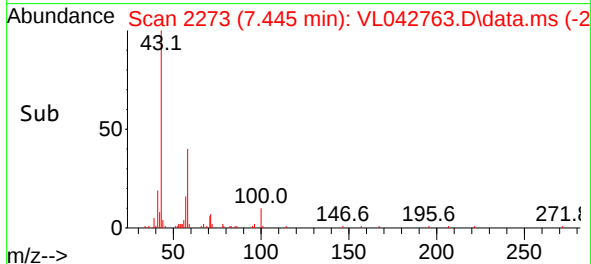
Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



Tgt Ion: 43 Resp: 15300  
Ion Ratio Lower Upper  
43 100  
58 48.9 38.0 57.0  
98 0.0 0.2 0.4

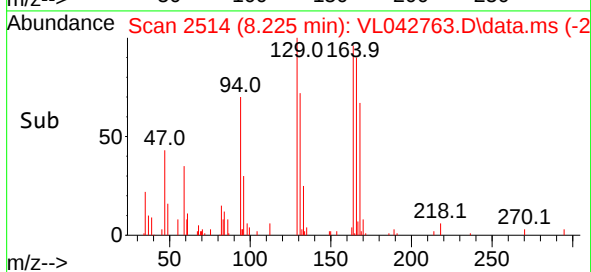
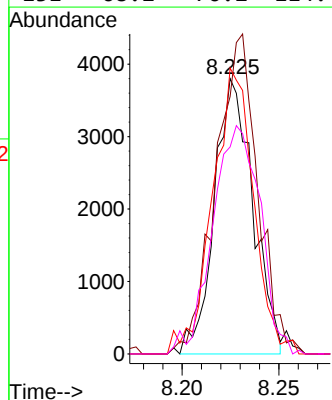
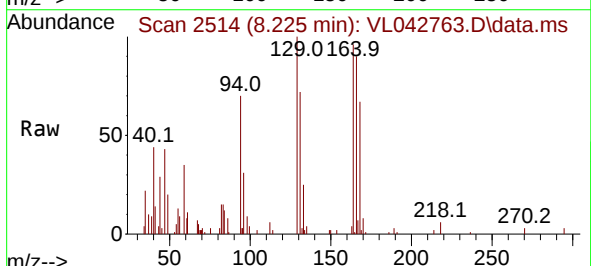
Manual Integrations  
APPROVED

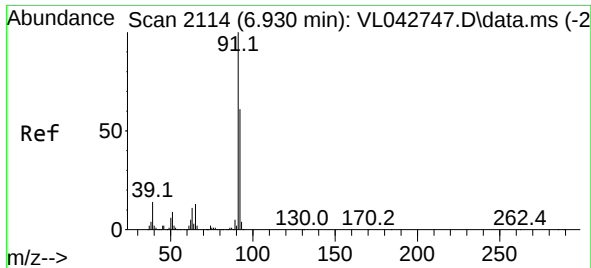
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#52  
Tetrachloroethene  
Concen: 0.315 ppbv  
RT: 8.225 min Scan# 2514  
Delta R.T. 0.000 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Tgt Ion:164 Resp: 5241  
Ion Ratio Lower Upper  
164 100  
166 89.0 104.0 156.0#  
129 100.3 79.2 118.8  
131 68.2 76.2 114.4#





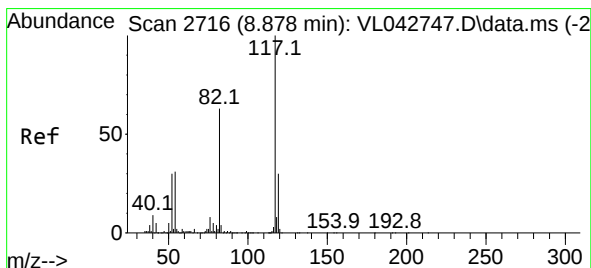
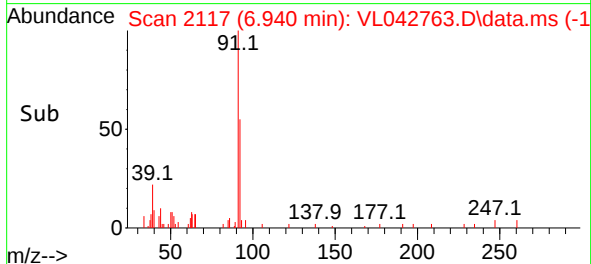
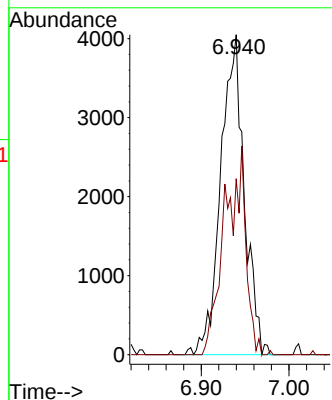
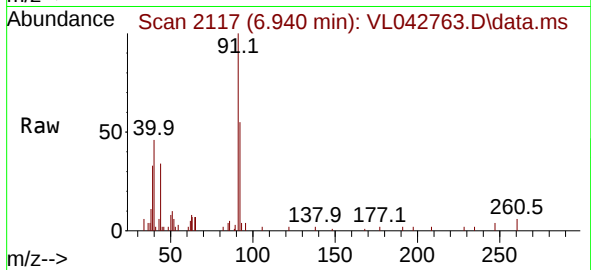
#53  
Toluene  
Concen: 0.175 ppbv m  
RT: 6.940 min Scan# 2114  
Delta R.T. 0.010 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1

Tgt Ion: 91 Resp: 753  
Ion Ratio Lower Upper  
91 100  
92 58.5 48.0 72.0

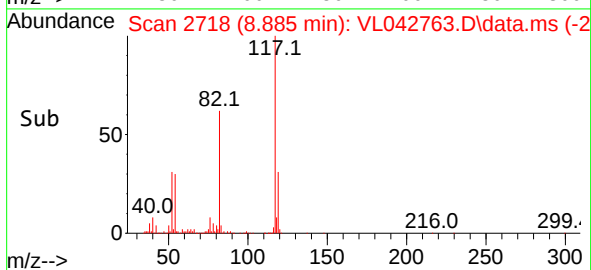
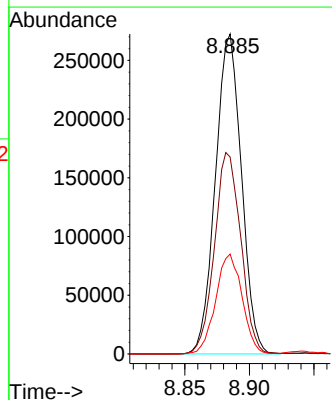
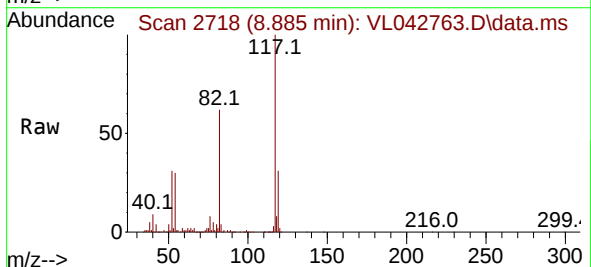
Manual Integrations  
APPROVED

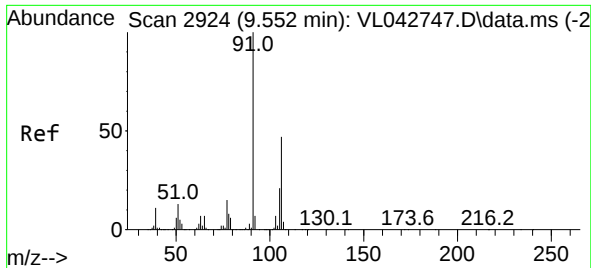
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.885 min Scan# 2718  
Delta R.T. 0.007 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Tgt Ion:117 Resp: 382302  
Ion Ratio Lower Upper  
117 100  
82 63.9 53.3 79.9  
119 31.7 25.8 38.6





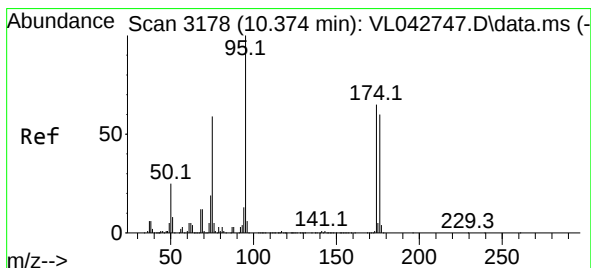
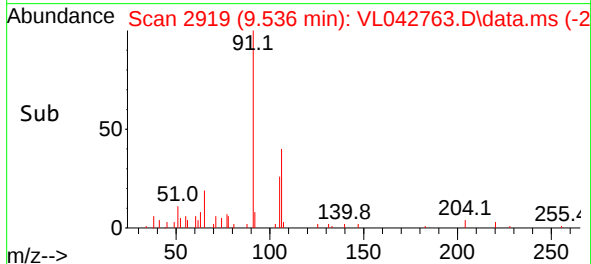
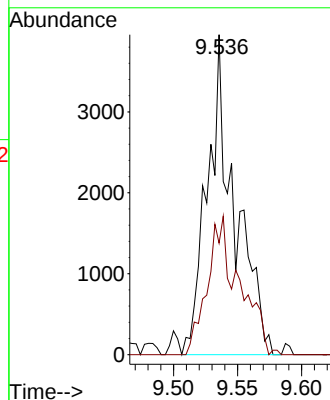
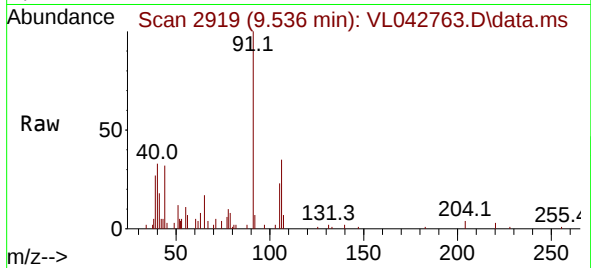
#59  
m/p-Xylene  
Concen: 0.122 ppbv m  
RT: 9.536 min Scan# 2919  
Delta R.T. -0.016 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1

Tgt Ion: 91 Resp: 5874  
Ion Ratio Lower Upper  
91 100  
106 0.0 37.4 56.2

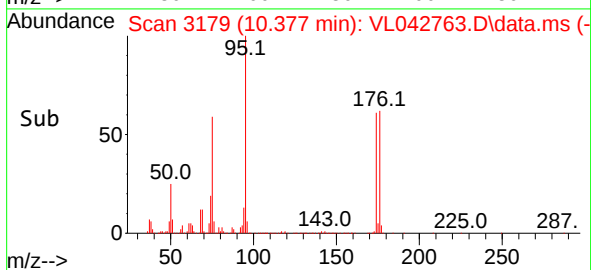
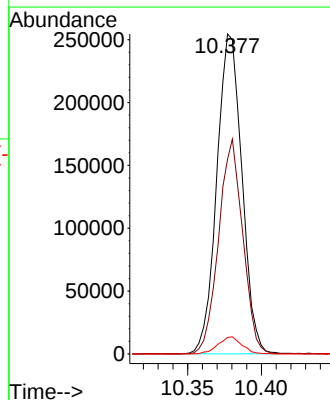
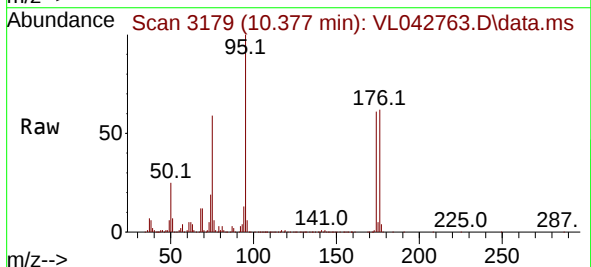
Manual Integrations  
APPROVED

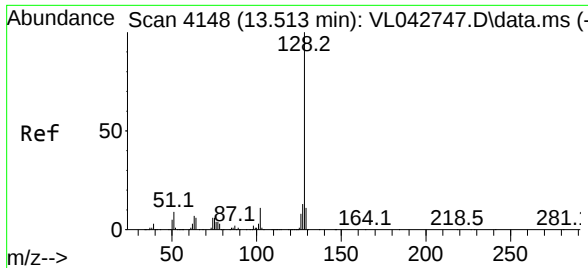
Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.942 ppbv  
RT: 10.377 min Scan# 3179  
Delta R.T. 0.003 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

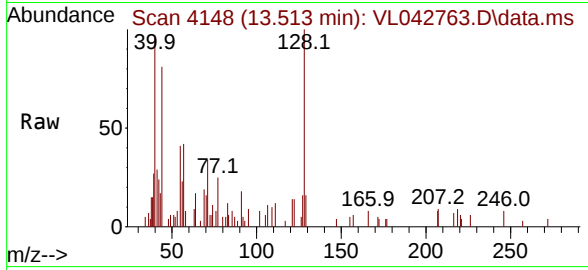
Tgt Ion: 95 Resp: 301001  
Ion Ratio Lower Upper  
95 100  
174 64.6 53.8 80.6  
175 5.1 4.0 6.0





#79  
Naphthalene  
Concen: 0.456 ppbv m  
RT: 13.513 min Scan# 4148  
Delta R.T. 0.000 min  
Lab File: VL042763.D  
Acq: 24 Jul 2025 13:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
118-SG1



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 1249  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 15.5  | 10.5  | 15.7  |
| 129      | 15.7  | 8.6   | 13.0  |

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2025  
Supervised By :Mahesh Dadoda 07/26/2025

