

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\DATA\VV092925\  
 Data File : VV039233.D  
 Acq On : 29 Sep 2025 15:45  
 Operator : SY/MD  
 Sample : Q3231-04  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Sep 30 01:27:31 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\82V092225W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 24 08:08:08 2025  
 Response via : Initial Calibration

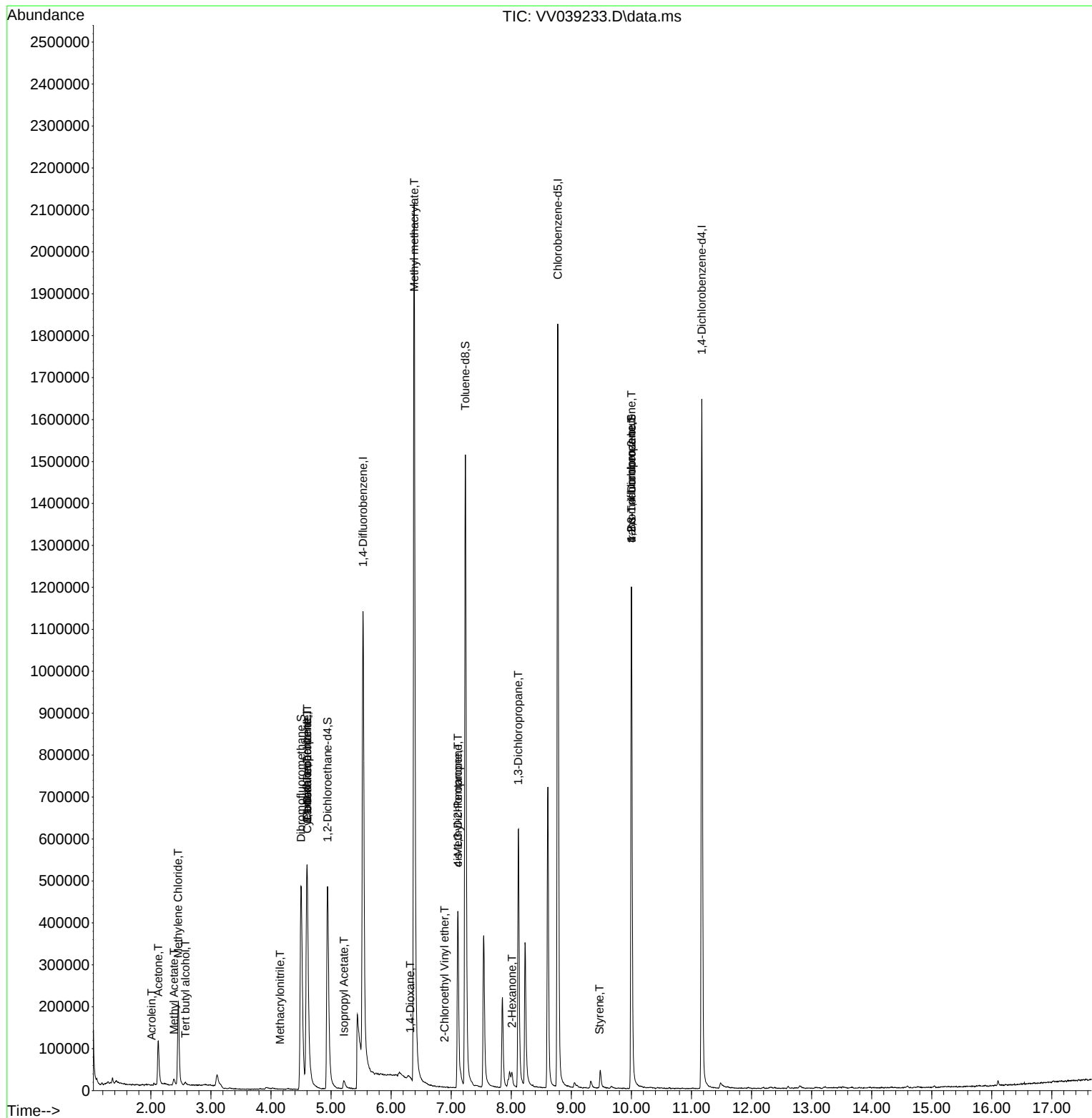
| Compound                      | R.T.   | QIon  | Response | Conc      | Units       | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|-------------|----------|
| Internal Standards            |        |       |          |           |             |          |
| 1) Pentafluorobenzene         | 4.600  | 168   | 471099   | 50.000    | ug/l        | 0.00     |
| 34) 1,4-Difluorobenzene       | 5.532  | 114   | 988131   | 50.000    | ug/l        | 0.00     |
| 63) Chlorobenzene-d5          | 8.773  | 117   | 1019460  | 50.000    | ug/l        | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 11.172 | 152   | 436334   | 50.000    | ug/l        | 0.00     |
| System Monitoring Compounds   |        |       |          |           |             |          |
| 33) 1,2-Dichloroethane-d4     | 4.941  | 65    | 430296   | 63.110    | ug/l        | 0.00     |
| Spiked Amount                 | 50.000 | Range | 81 - 118 | Recovery  | = 126.220%# |          |
| 35) Dibromofluoromethane      | 4.503  | 113   | 405629   | 51.062    | ug/l        | 0.00     |
| Spiked Amount                 | 50.000 | Range | 80 - 119 | Recovery  | = 102.120%  |          |
| 50) Toluene-d8                | 7.236  | 98    | 1082968  | 46.418    | ug/l        | 0.00     |
| Spiked Amount                 | 50.000 | Range | 89 - 112 | Recovery  | = 92.840%   |          |
| 62) 4-Bromofluorobenzene      | 10.001 | 95    | 402759   | 41.933    | ug/l        | 0.00     |
| Spiked Amount                 | 50.000 | Range | 85 - 114 | Recovery  | = 83.860%#  |          |
| Target Compounds              |        |       |          |           |             | Qvalue   |
| 6) Chloroethane               | 1.610  | 64    | 362      | Below Cal | #           | 44       |
| 11) Tert butyl alcohol        | 2.574  | 59    | 1973     | 1.369     | ug/l #      | 83       |
| 13) Acrolein                  | 2.011  | 56    | 383      | 1.532     | ug/l #      | 65       |
| 16) Acetone                   | 2.124  | 43    | 134192   | 26.239    | ug/l        | 97       |
| 18) Methyl Acetate            | 2.384  | 43    | 19393    | 1.920     | ug/l        | 98       |
| 20) Methylene Chloride        | 2.455  | 84    | 97584    | 11.481    | ug/l        | 90       |
| 31) Cyclohexane               | 4.606  | 56    | 10075    | 0.828     | ug/l #      | 6        |
| 36) 1,1-Dichloropropene       | 4.603  | 75    | 39679    | 3.304     | ug/l #      | 50       |
| 38) Carbon Tetrachloride      | 4.603  | 117   | 50052    | 3.410     | ug/l #      | 16       |
| 41) Methacrylonitrile         | 4.150  | 41    | 116      | 1.927     | ug/l #      | 1        |
| 43) Isopropyl Acetate         | 5.214  | 43    | 28389    | 1.429     | ug/l #      | 77       |
| 48) Methyl methacrylate       | 6.384  | 41    | 195944   | 21.754    | ug/l #      | 39       |
| 49) 1,4-Dioxane               | 6.317  | 88    | 57       | 0.392     | ug/l #      | 25       |
| 51) 4-Methyl-2-Pentanone      | 7.111  | 43    | 148092   | 11.329    | ug/l #      | 49       |
| 54) cis-1,3-Dichloropropene   | 7.111  | 75    | 78485    | 5.304     | ug/l #      | 67       |
| 57) 1,3-Dichloropropane       | 8.117  | 76    | 6136     | 0.382     | ug/l #      | 42       |
| 58) 2-Chloroethyl Vinyl ether | 6.889  | 63    | 41       | 9.629     | ug/l #      | 47       |
| 59) 2-Hexanone                | 8.011  | 43    | 22501    | 4.438     | ug/l #      | 23       |
| 70) Styrene                   | 9.471  | 104   | 79       | 1.564     | ug/l #      | 1        |
| 76) 1,2,3-Trichloropropane    | 10.001 | 75    | 198125   | 19.943    | ug/l #      | 56       |
| 81) trans-1,4-Dichloro-2-b... | 10.001 | 75    | 198125   | 47.877    | ug/l #      | 13       |
| 92) 1,2-Dibromo-3-Chloropr... | 12.320 | 75    | 19       | Below Cal | #           | 5        |

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

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Quant Title : SW846 8260  
QLast Update : Wed Sep 24 08:08:08 2025  
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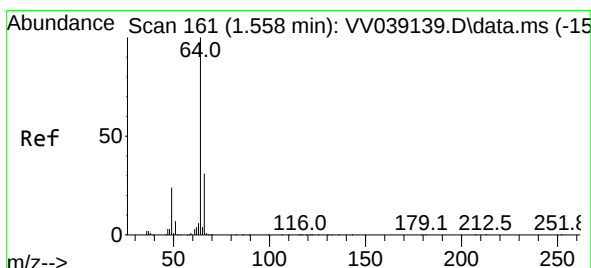
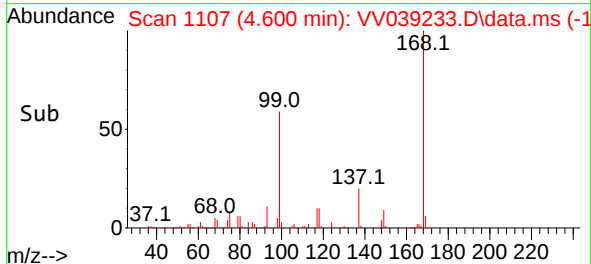
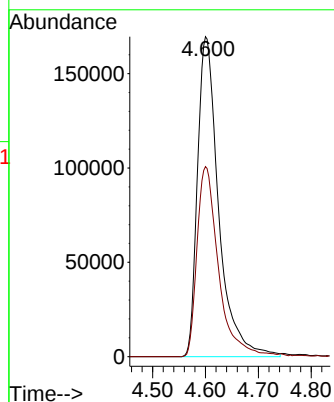
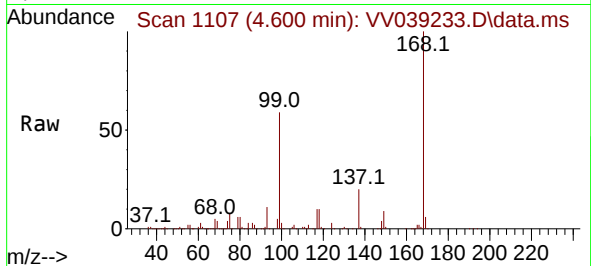




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 4.600 min Scan# 11  
Delta R.T. 0.003 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

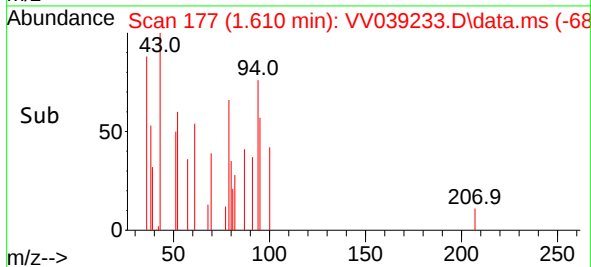
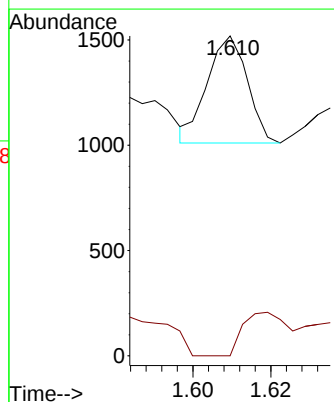
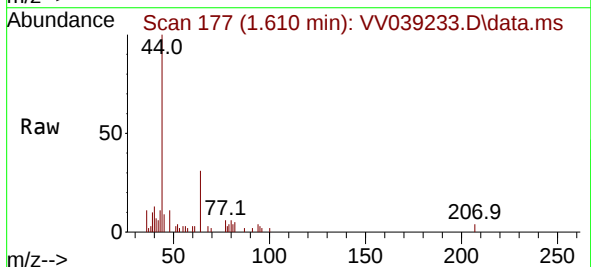
Instrument :  
MSVOA\_V  
ClientSampleId :

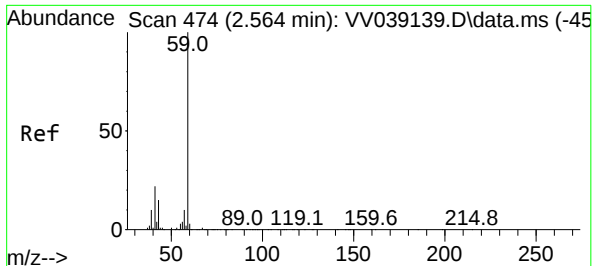
Tgt Ion:168 Resp: 471099  
Ion Ratio Lower Upper  
168 100  
99 59.4 49.6 74.4



#6  
Chloroethane  
Concen: Below Cal  
RT: 1.610 min Scan# 177  
Delta R.T. 0.052 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Tgt Ion: 64 Resp: 362  
Ion Ratio Lower Upper  
64 100  
66 0.0 24.6 36.8#

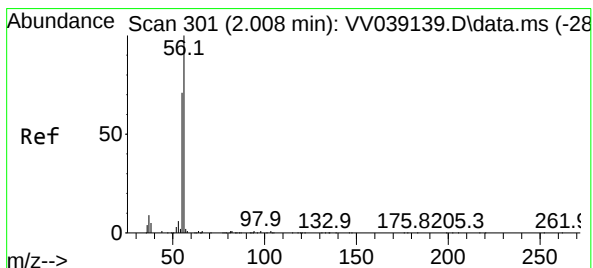
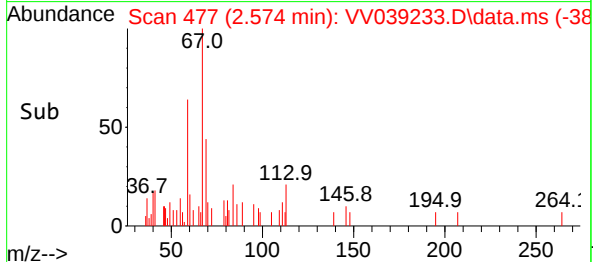
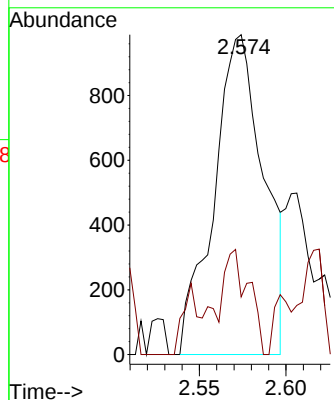
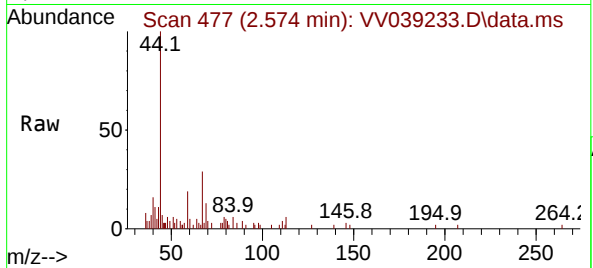




#11  
Tert butyl alcohol  
Concen: 1.369 ug/l  
RT: 2.574 min Scan# 41  
Delta R.T. 0.010 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

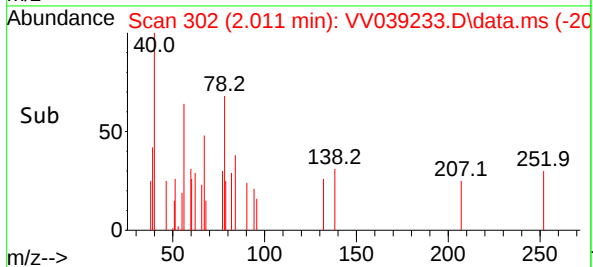
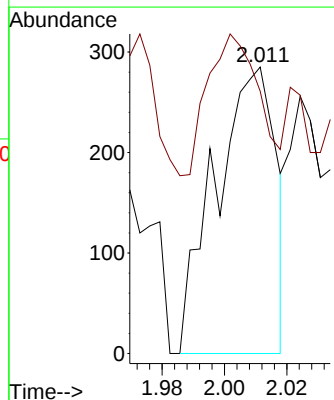
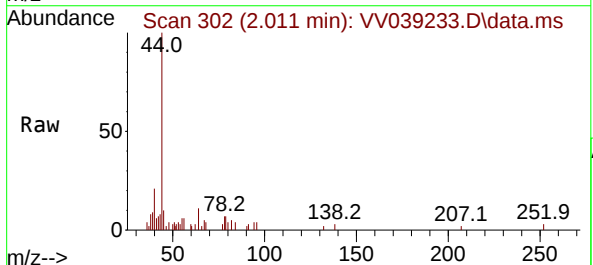
Instrument :  
MSVOA\_V  
ClientSampleId :

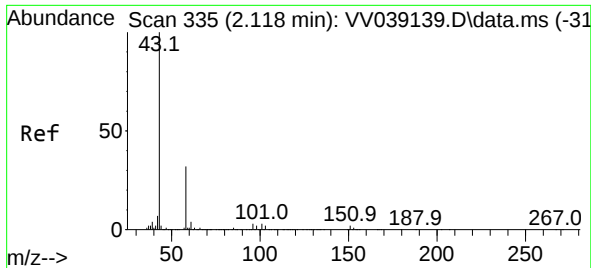
Tgt Ion: 59 Resp: 1973  
Ion Ratio Lower Upper  
59 100  
57 16.1 7.8 11.8#



#13  
Acrolein  
Concen: 1.532 ug/l  
RT: 2.011 min Scan# 302  
Delta R.T. 0.003 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Tgt Ion: 56 Resp: 383  
Ion Ratio Lower Upper  
56 100  
55 41.3 56.2 84.4#

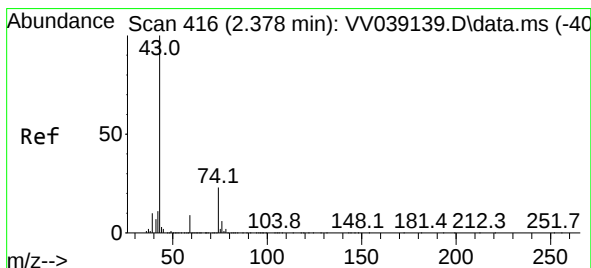
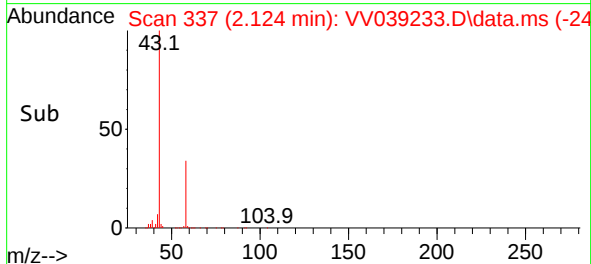
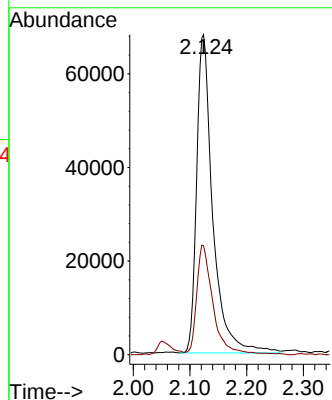
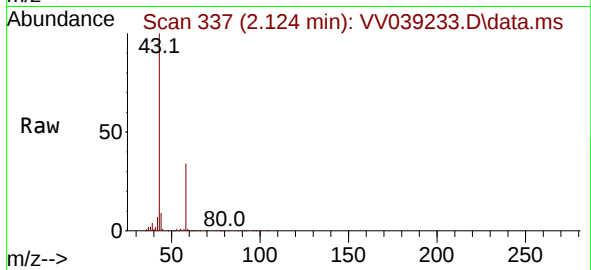




#16  
Acetone  
Concen: 26.239 ug/l  
RT: 2.124 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

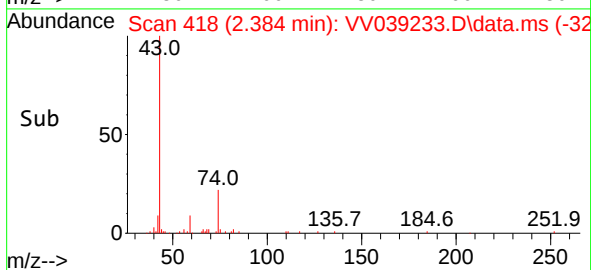
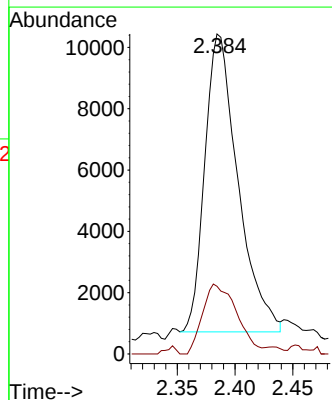
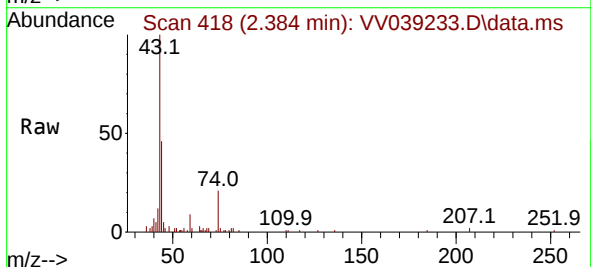
Instrument :  
MSVOA\_V  
ClientSampleId :

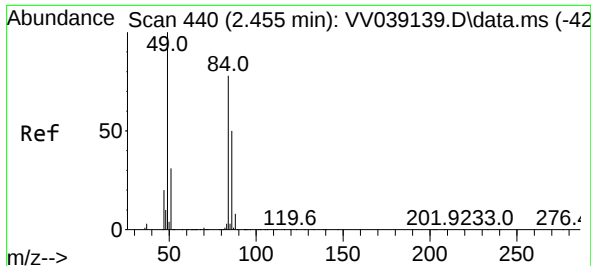
Tgt Ion: 43 Resp: 134192  
Ion Ratio Lower Upper  
43 100  
58 33.9 25.8 38.6



#18  
Methyl Acetate  
Concen: 1.920 ug/l  
RT: 2.384 min Scan# 418  
Delta R.T. 0.006 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Tgt Ion: 43 Resp: 19393  
Ion Ratio Lower Upper  
43 100  
74 24.2 18.6 27.8

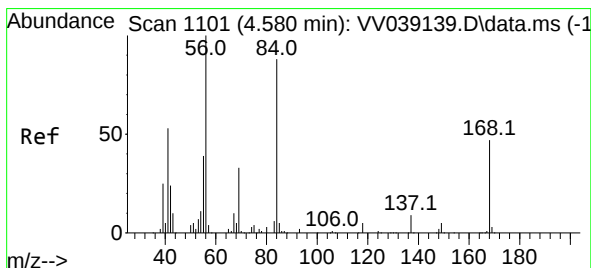
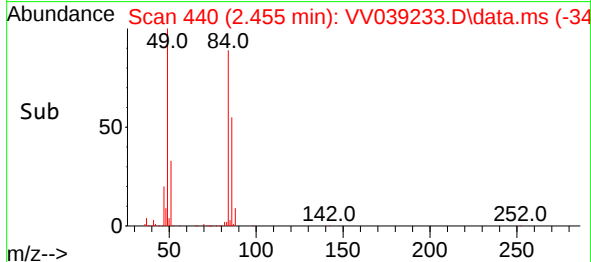
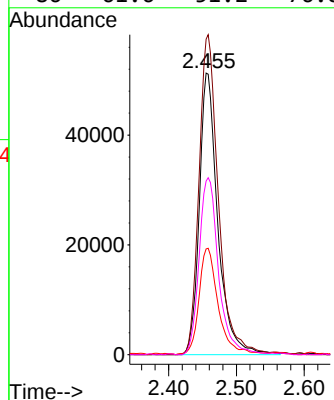
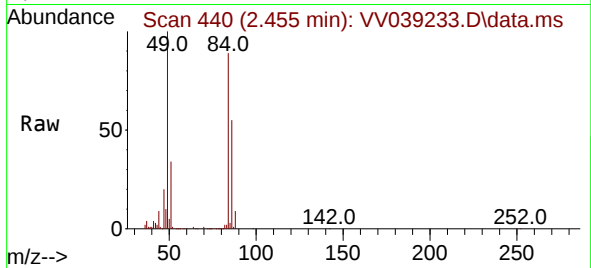




#20  
Methylene Chloride  
Concen: 11.481 ug/l  
RT: 2.455 min Scan# 440  
Delta R.T. 0.000 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

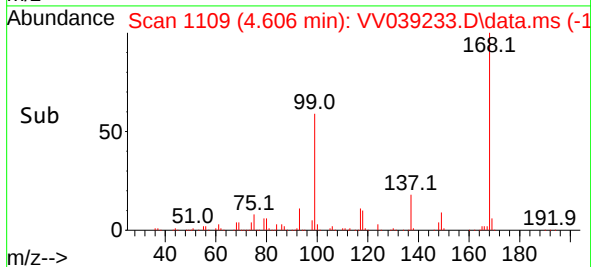
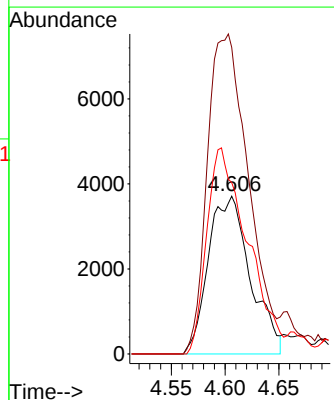
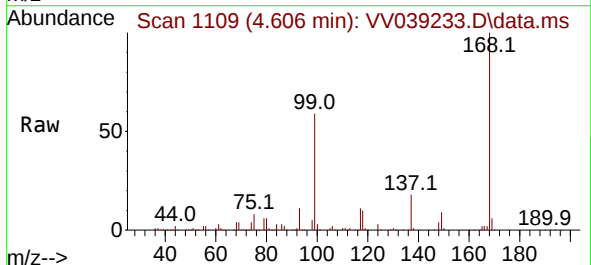
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MSVOA\_V  
ClientSampleId :

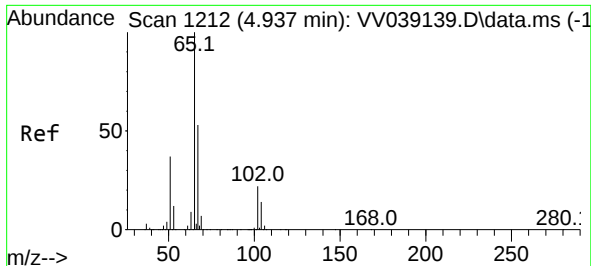
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 97584 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 111.8 | 102.8 | 154.2 |
| 51       | 37.2  | 31.9  | 47.9  |
| 86       | 61.6  | 51.2  | 76.8  |



#31  
Cyclohexane  
Concen: 0.828 ug/l  
RT: 4.606 min Scan# 1109  
Delta R.T. 0.026 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 10075  |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 194.4 | 26.2  | 39.2#  |
| 84       | 108.7 | 70.3  | 105.5# |





#33

1,2-Dichloroethane-d4

Concen: 63.110 ug/l

RT: 4.941 min Scan# 11

Delta R.T. 0.003 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

Instrument :

MSVOA\_V

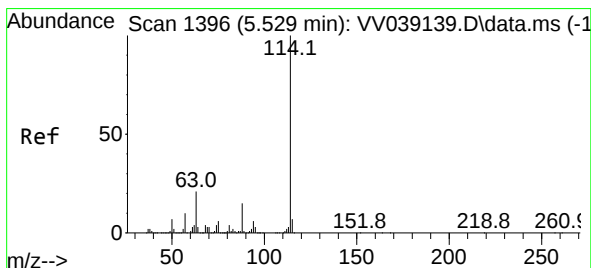
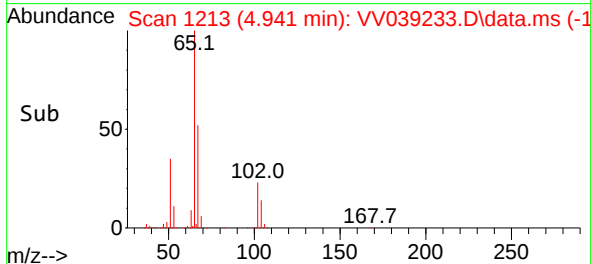
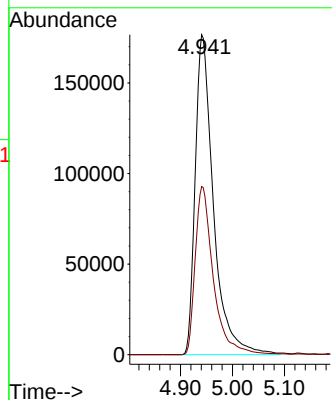
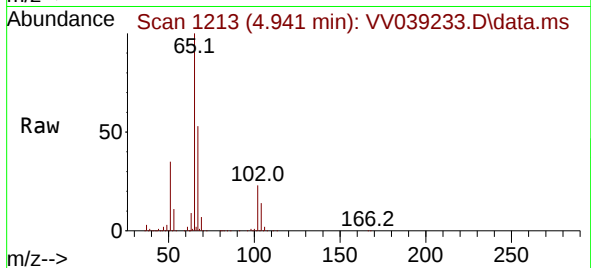
ClientSampleId :

Tgt Ion: 65 Resp: 430296

Ion Ratio Lower Upper

65 100

67 52.5 0.0 107.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.532 min Scan# 1397

Delta R.T. 0.003 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

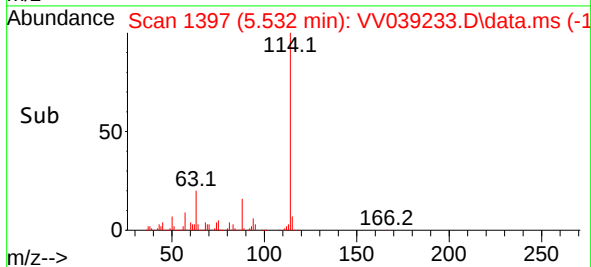
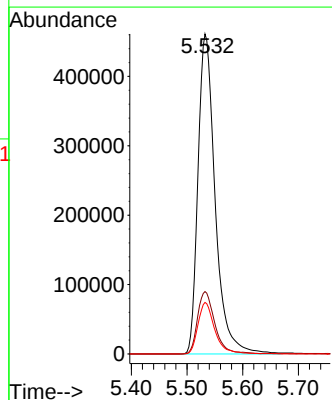
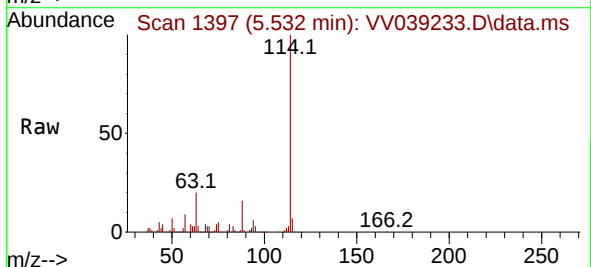
Tgt Ion: 114 Resp: 988131

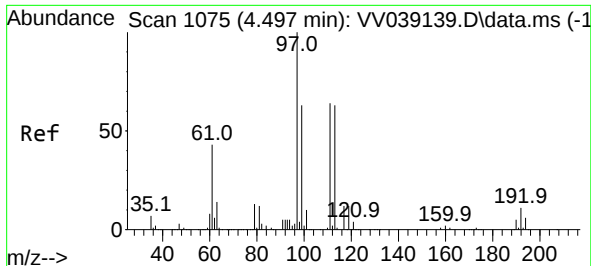
Ion Ratio Lower Upper

114 100

63 19.5 0.0 42.6

88 16.1 0.0 30.8

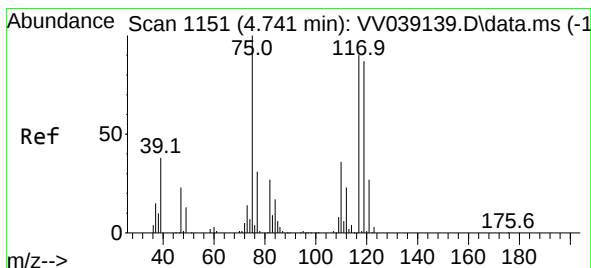
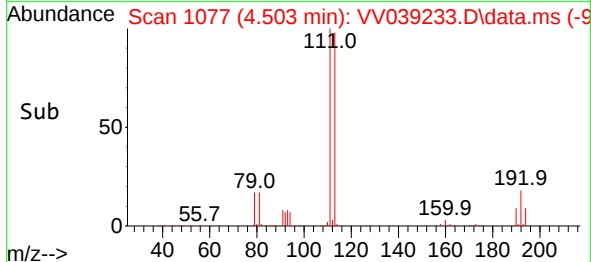
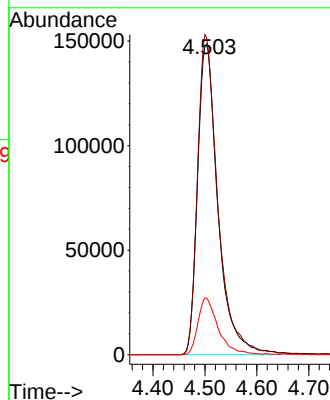
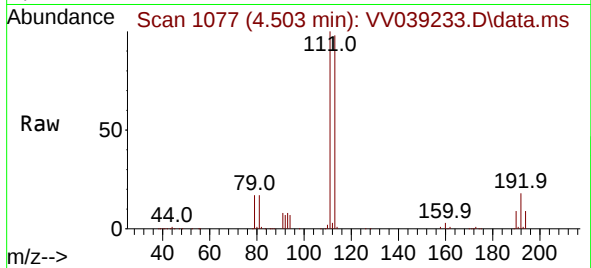




#35  
 Dibromofluoromethane  
 Concen: 51.062 ug/l  
 RT: 4.503 min Scan# 1108  
 Delta R.T. 0.006 min  
 Lab File: VV039233.D  
 Acq: 29 Sep 2025 15:45

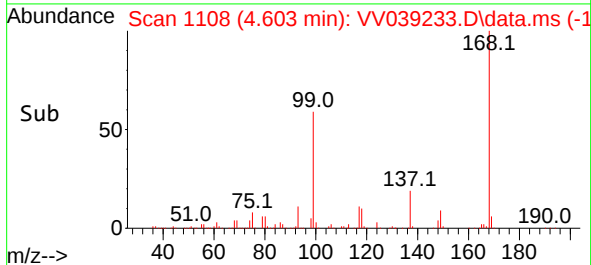
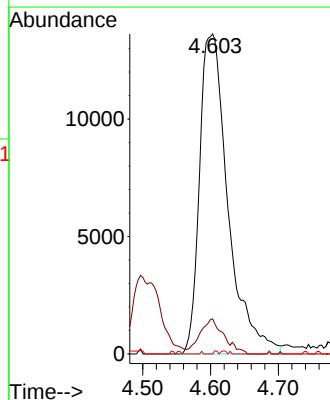
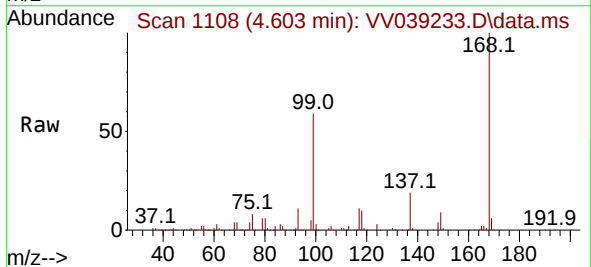
Instrument :  
 MSVOA\_V  
 ClientSampleId :

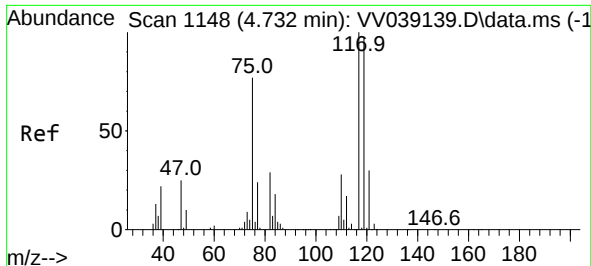
Tgt Ion:113 Resp: 405629  
 Ion Ratio Lower Upper  
 113 100  
 111 101.9 82.4 123.6  
 192 18.1 13.8 20.8



#36  
 1,1-Dichloropropene  
 Concen: 3.304 ug/l  
 RT: 4.603 min Scan# 1108  
 Delta R.T. -0.138 min  
 Lab File: VV039233.D  
 Acq: 29 Sep 2025 15:45

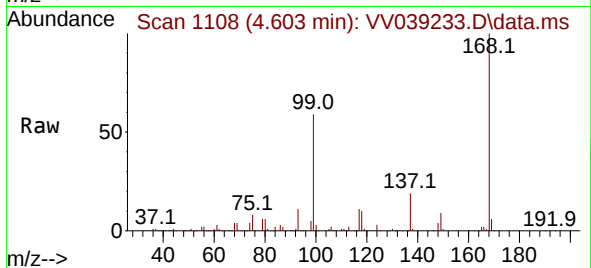
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 77 0.1 24.8 37.2#



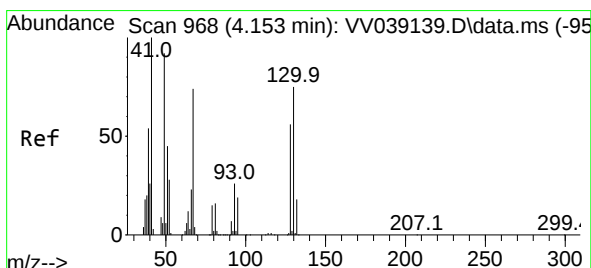
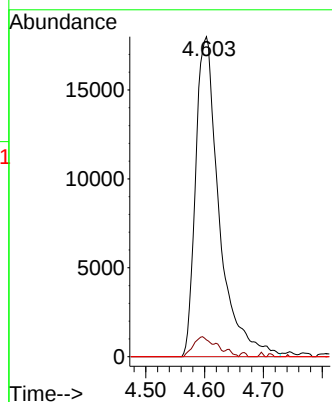
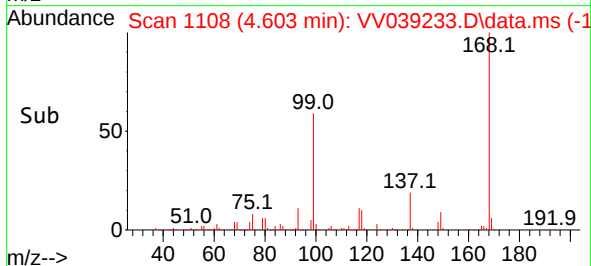


#38  
Carbon Tetrachloride  
Concen: 3.410 ug/l  
RT: 4.603 min Scan# 1148  
Delta R.T. -0.129 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Instrument :  
MSVOA\_V  
ClientSampleId :

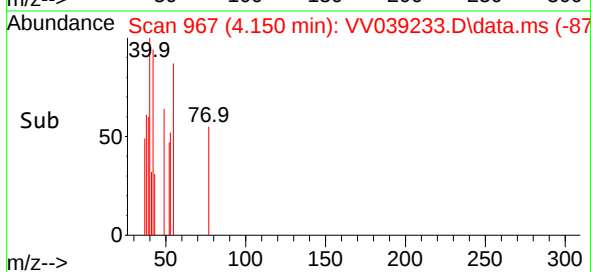
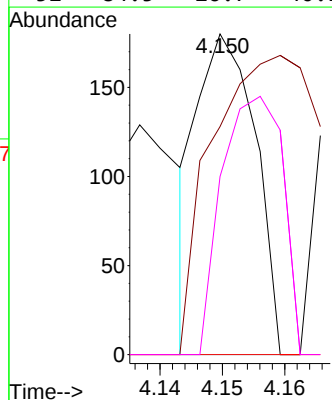
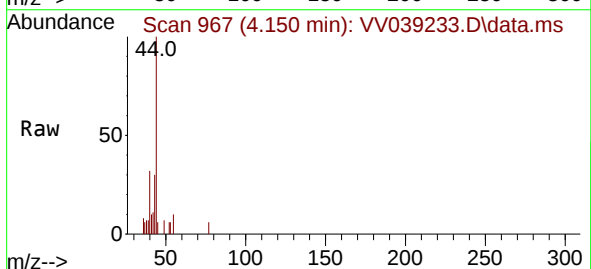


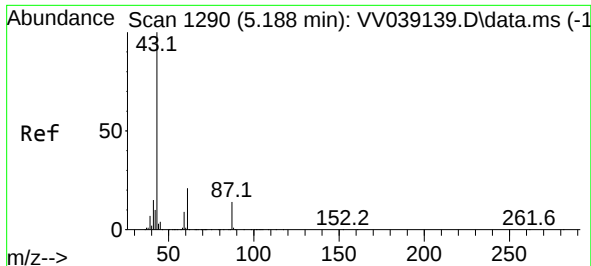
Tgt Ion:117 Resp: 50052  
Ion Ratio Lower Upper  
117 100  
119 5.3 77.2 115.8#  
121 0.0 24.2 36.2#



#41  
Methacrylonitrile  
Concen: 1.927 ug/l  
RT: 4.150 min Scan# 967  
Delta R.T. -0.003 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Tgt Ion: 41 Resp: 116  
Ion Ratio Lower Upper  
41 100  
39 168.1 42.2 63.2#  
67 0.0 67.9 101.9#  
52 84.5 26.7 40.1#





#43

Isopropyl Acetate

Concen: 1.429 ug/l

RT: 5.214 min Scan# 1

Delta R.T. 0.026 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

Instrument :

MSVOA\_V

ClientSampleId :

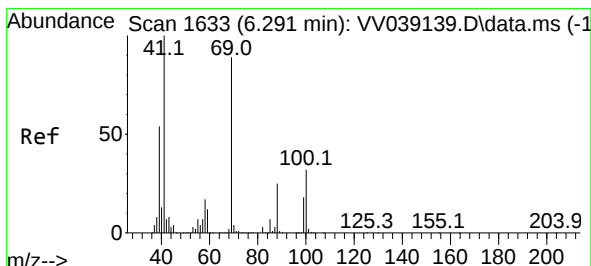
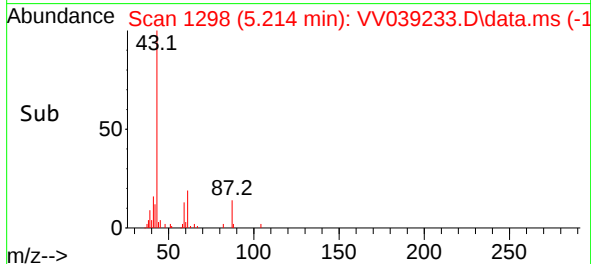
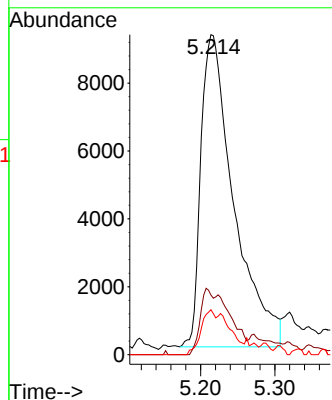
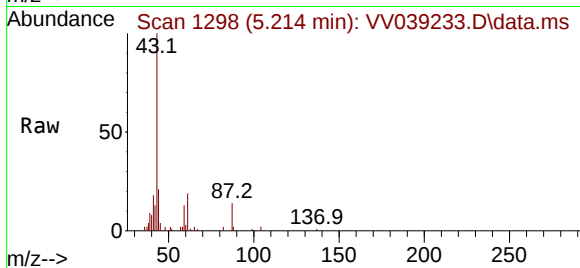
Tgt Ion: 43 Resp: 28389

Ion Ratio Lower Upper

43 100

61 8.2 15.9 23.9#

87 6.2 11.0 16.6#



#48

Methyl methacrylate

Concen: 21.754 ug/l

RT: 6.384 min Scan# 1662

Delta R.T. 0.093 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

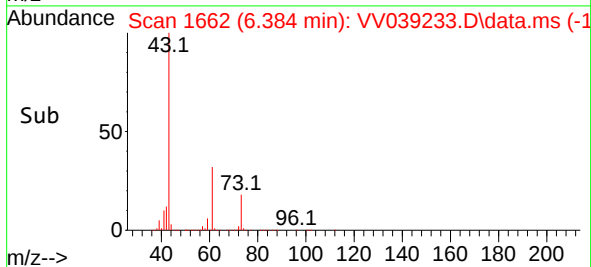
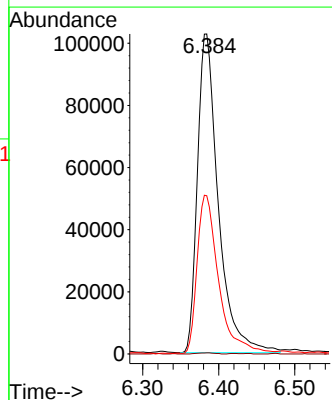
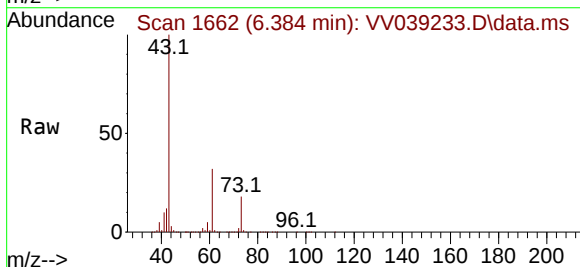
Tgt Ion: 41 Resp: 195944

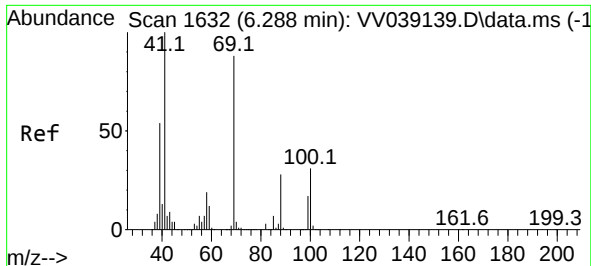
Ion Ratio Lower Upper

41 100

69 0.3 72.4 108.6#

39 51.0 42.5 63.7





#49

1,4-Dioxane

Concen: 0.392 ug/l

RT: 6.317 min Scan# 1

Delta R.T. 0.029 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

Instrument :

MSVOA\_V

ClientSampleId :

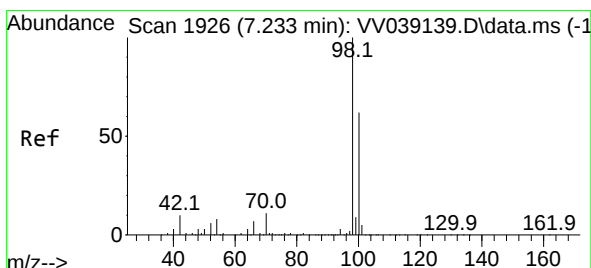
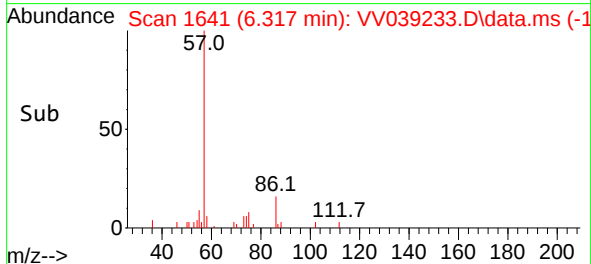
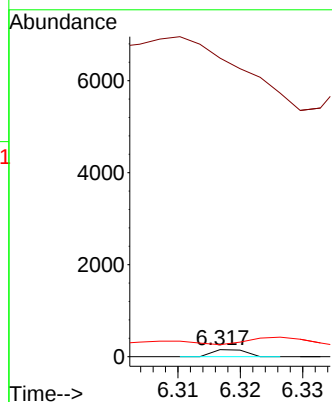
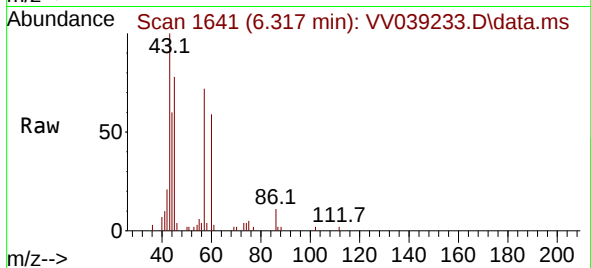
Tgt Ion: 88 Resp: 57

Ion Ratio Lower Upper

88 100

43 0.0 25.1 37.7#

58 0.0 53.6 80.4#



#50

Toluene-d8

Concen: 46.418 ug/l

RT: 7.236 min Scan# 1927

Delta R.T. 0.003 min

Lab File: VV039233.D

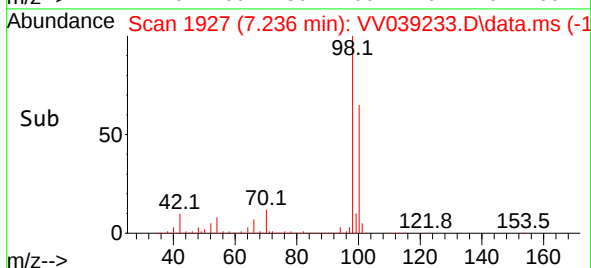
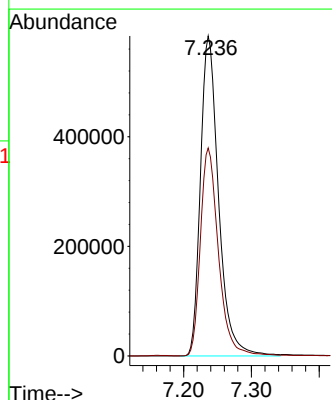
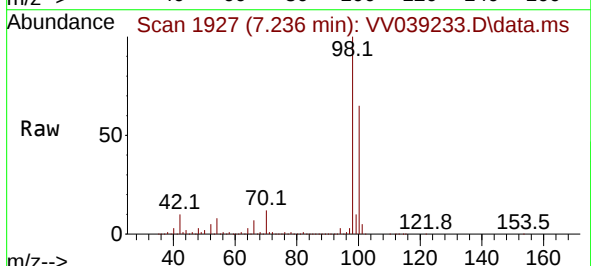
Acq: 29 Sep 2025 15:45

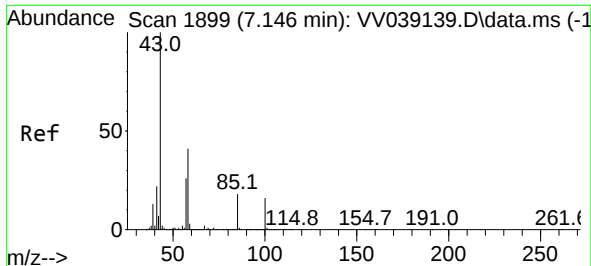
Tgt Ion: 98 Resp: 1082968

Ion Ratio Lower Upper

98 100

100 64.9 52.2 78.2





#51

4-Methyl-2-Pentanone

Concen: 11.329 ug/l

RT: 7.111 min Scan# 1888

Delta R.T. -0.035 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

Instrument :

MSVOA\_V

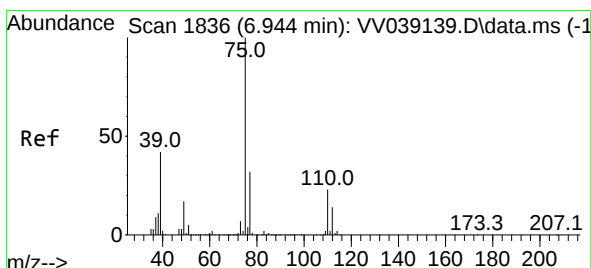
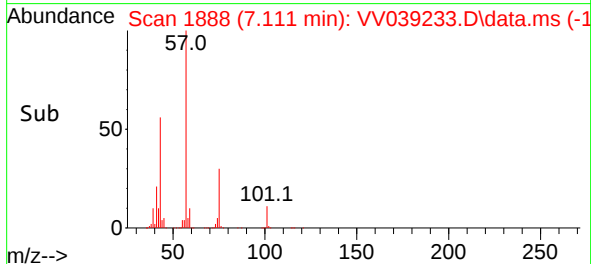
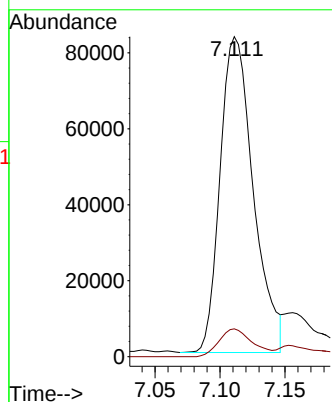
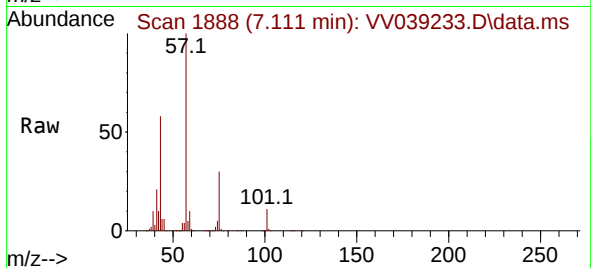
ClientSampleId :

Tgt Ion: 43 Resp: 148092

Ion Ratio Lower Upper

43 100

58 8.8 32.3 48.5#



#54

cis-1,3-Dichloropropene

Concen: 5.304 ug/l

RT: 7.111 min Scan# 1888

Delta R.T. 0.167 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

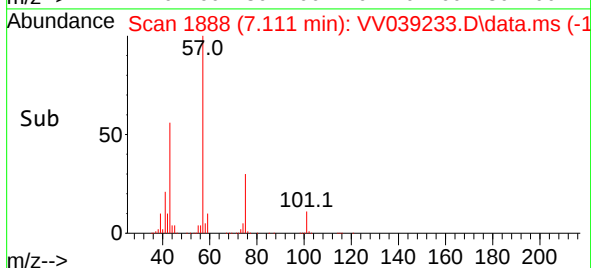
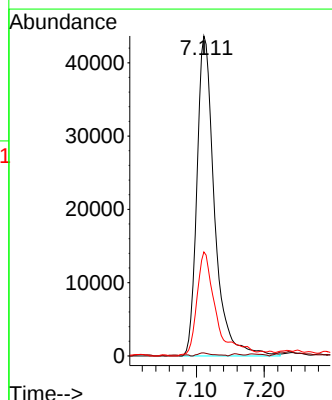
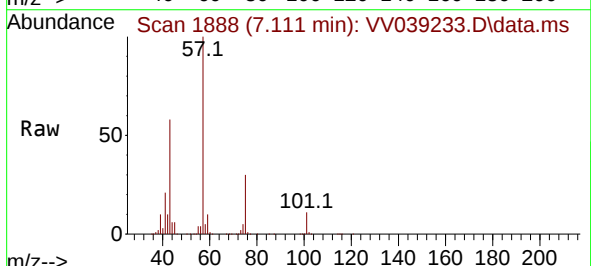
Tgt Ion: 75 Resp: 78485

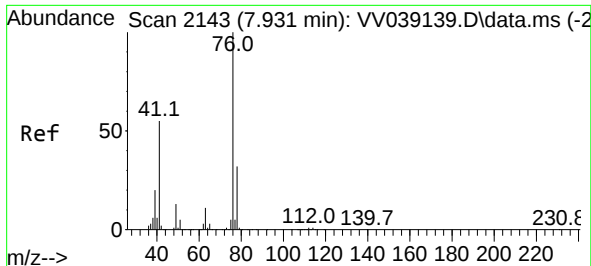
Ion Ratio Lower Upper

75 100

77 1.0 25.5 38.3#

39 32.1 33.8 50.6#





#57

1,3-Dichloropropane

Concen: 0.382 ug/l

RT: 8.117 min Scan# 21

Delta R.T. 0.186 min

Lab File: VV039233.D

Acq: 29 Sep 2025 15:45

Instrument :

MSVOA\_V

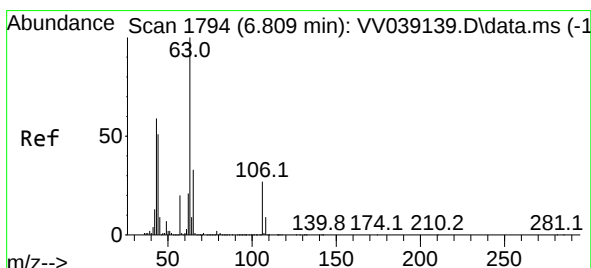
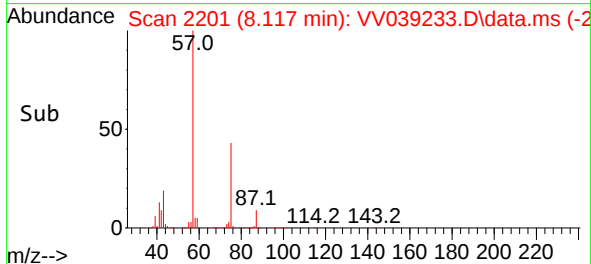
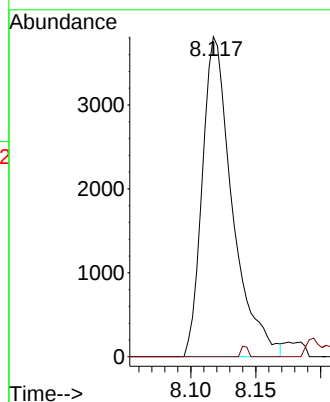
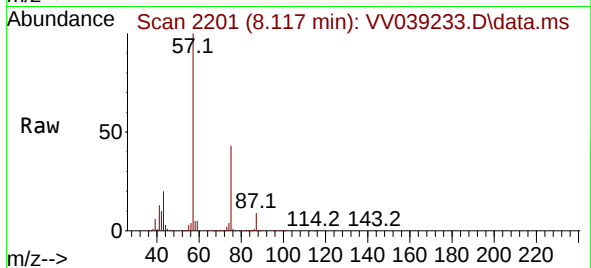
ClientSampleId :

Tgt Ion: 76 Resp: 6136

Ion Ratio Lower Upper

76 100

78 0.0 26.1 39.1#



#58

2-Chloroethyl Vinyl ether

Concen: 9.629 ug/l

RT: 6.889 min Scan# 1819

Delta R.T. 0.080 min

Lab File: VV039233.D

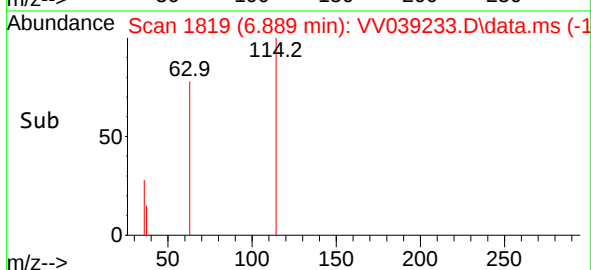
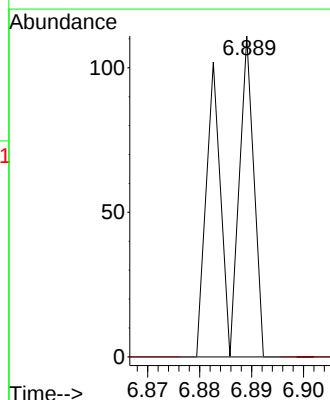
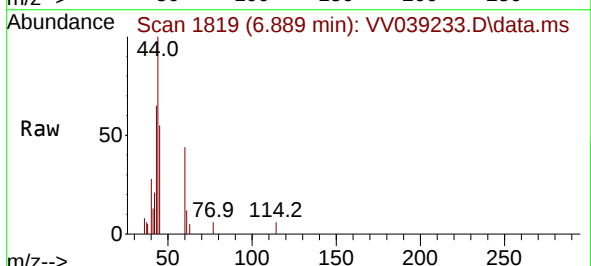
Acq: 29 Sep 2025 15:45

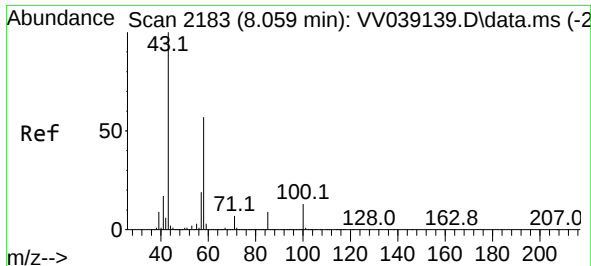
Tgt Ion: 63 Resp: 41

Ion Ratio Lower Upper

63 100

106 0.0 22.1 33.1#

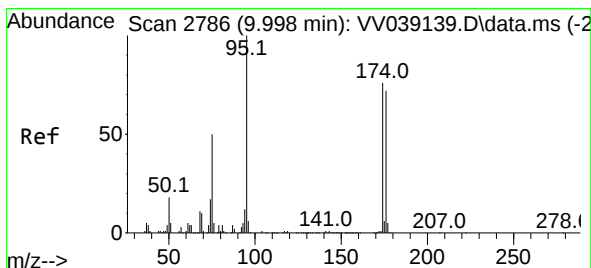
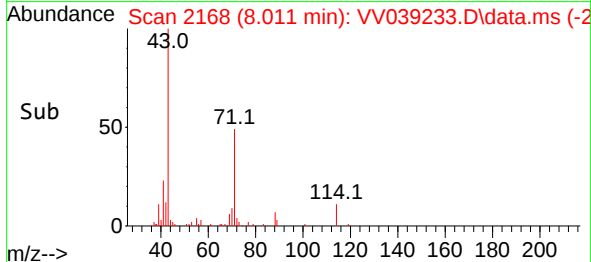
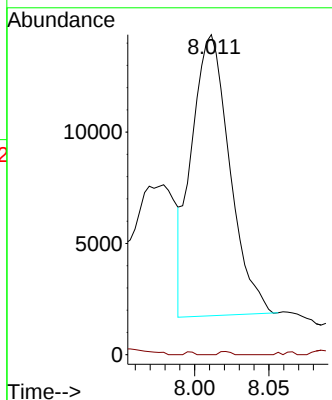
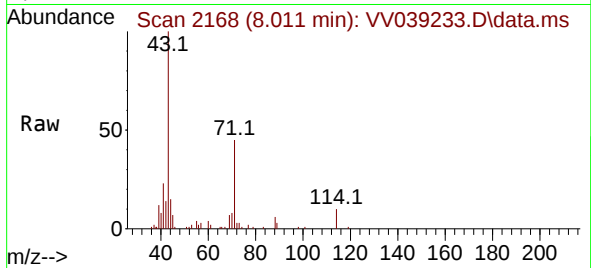




#59  
2-Hexanone  
Concen: 4.438 ug/l  
RT: 8.011 min Scan# 2183  
Delta R.T. -0.048 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

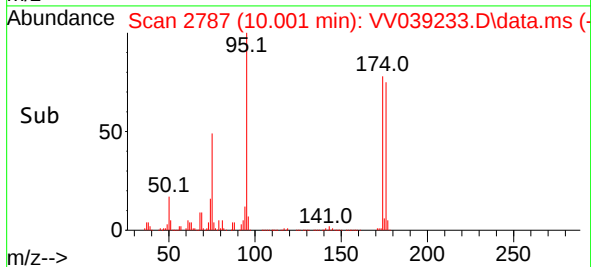
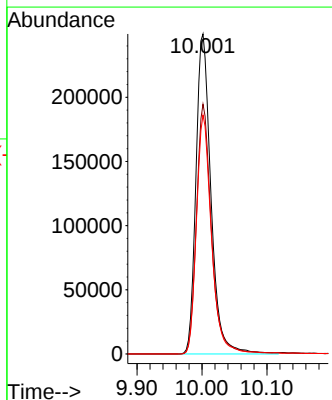
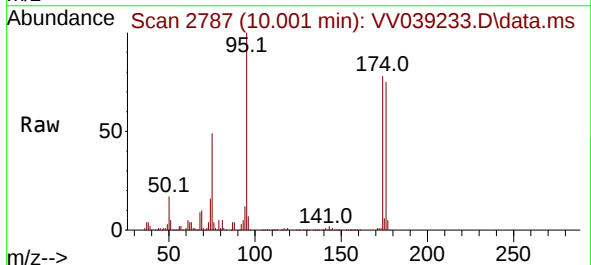
Instrument :  
MSVOA\_V  
ClientSampleId :

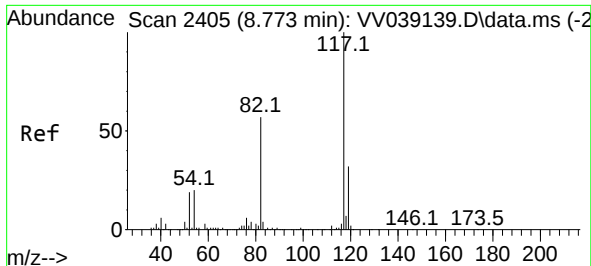
Tgt Ion: 43 Resp: 22501  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.3 85.0#



#62  
4-Bromofluorobenzene  
Concen: 41.933 ug/l  
RT: 10.001 min Scan# 2787  
Delta R.T. 0.003 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

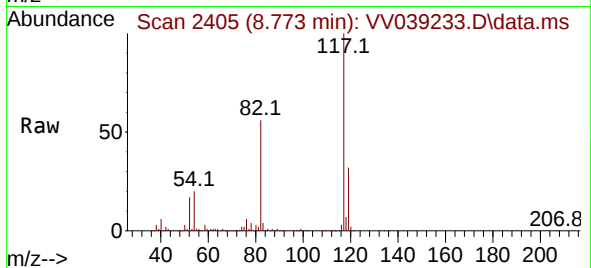
Tgt Ion: 95 Resp: 402759  
Ion Ratio Lower Upper  
95 100  
174 77.3 0.0 150.4  
176 74.6 0.0 144.2



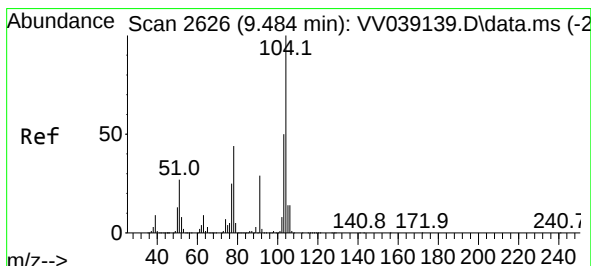
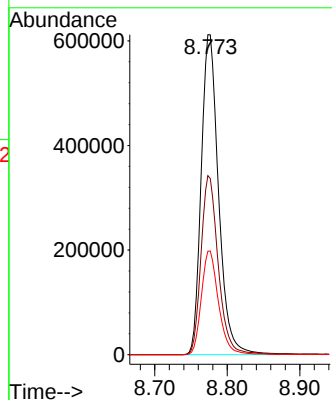
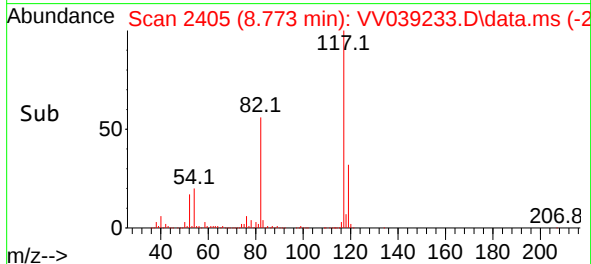


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 8.773 min Scan# 24  
Delta R.T. 0.000 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

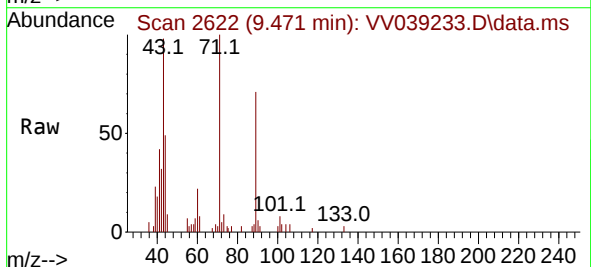
Instrument :  
MSVOA\_V  
ClientSampleId :



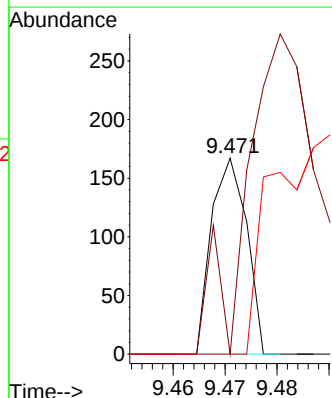
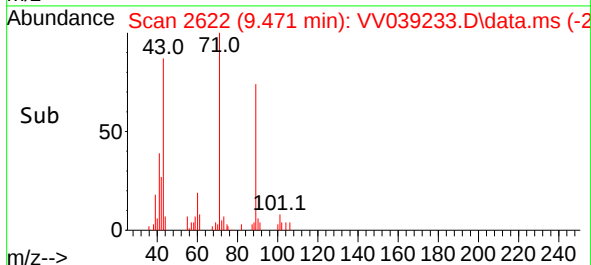
Tgt Ion:117 Resp: 1019460  
Ion Ratio Lower Upper  
117 100  
82 55.9 45.4 68.2  
119 32.4 25.6 38.4

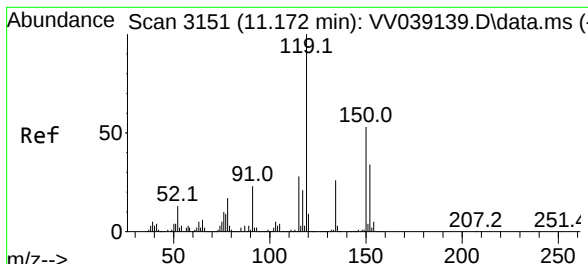


#70  
Styrene  
Concen: 1.564 ug/l  
RT: 9.471 min Scan# 2622  
Delta R.T. -0.013 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45



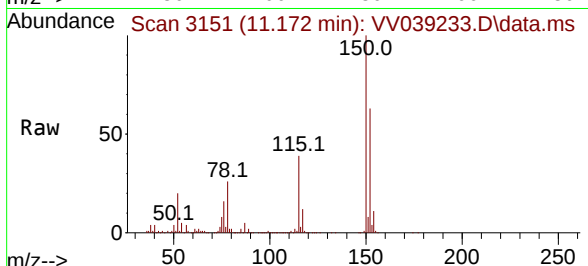
Tgt Ion:104 Resp: 79  
Ion Ratio Lower Upper  
104 100  
78 312.7 39.8 59.6#  
103 0.0 43.4 65.2#



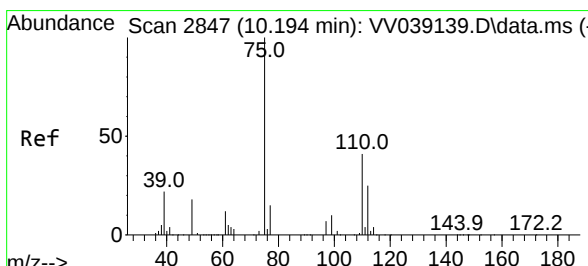
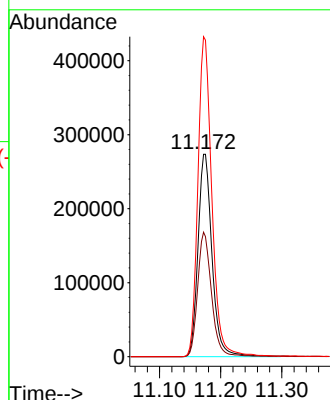
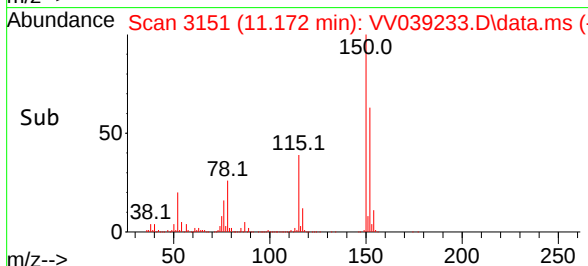


#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 11.172 min Scan# 3151  
 Delta R.T. -0.000 min  
 Lab File: VV039233.D  
 Acq: 29 Sep 2025 15:45

Instrument :  
 MSVOA\_V  
 ClientSampleId :

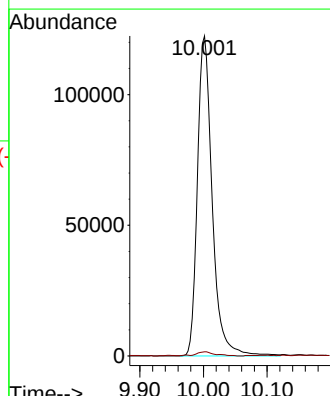
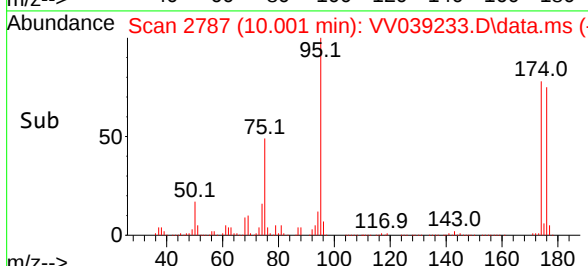
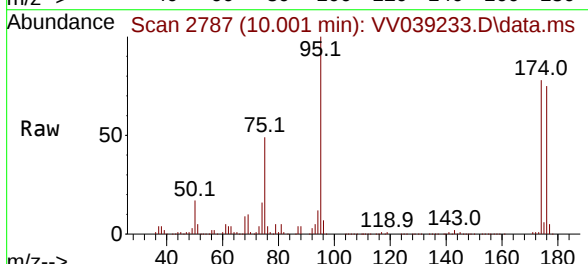


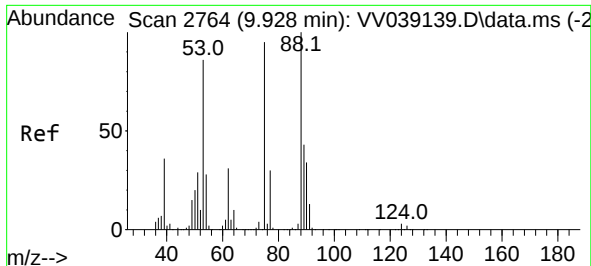
Tgt Ion:152 Resp: 436334  
 Ion Ratio Lower Upper  
 152 100  
 115 60.9 44.8 134.4  
 150 156.9 0.0 353.8



#76  
 1,2,3-Trichloropropane  
 Concen: 19.943 ug/l  
 RT: 10.001 min Scan# 2787  
 Delta R.T. -0.193 min  
 Lab File: VV039233.D  
 Acq: 29 Sep 2025 15:45

Tgt Ion: 75 Resp: 198125  
 Ion Ratio Lower Upper  
 75 100  
 77 1.6 11.3 33.8#

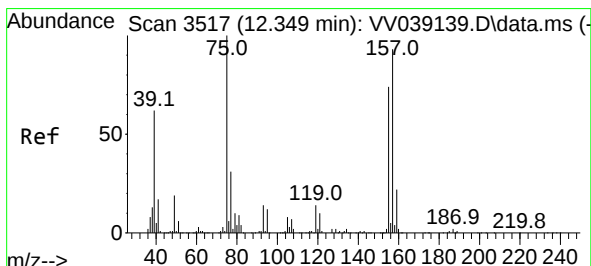
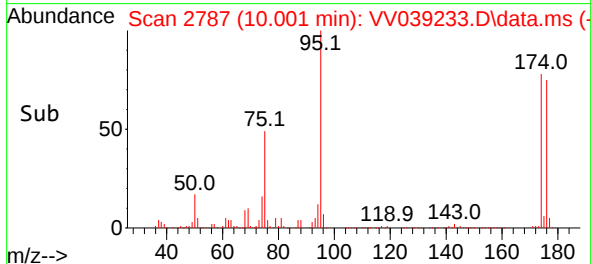
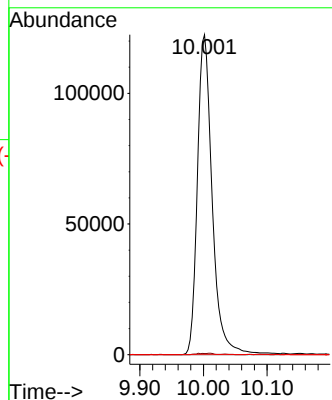
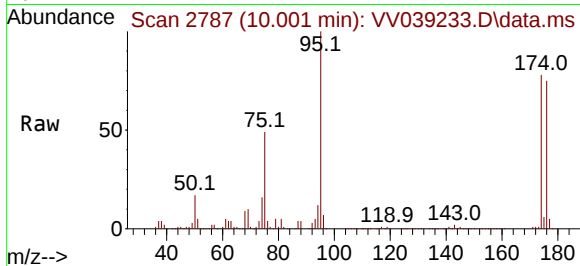




#81  
trans-1,4-Dichloro-2-butene  
Concen: 47.877 ug/l  
RT: 10.001 min Scan# 21  
Delta R.T. 0.074 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Instrument :  
MSVOA\_V  
ClientSampleId :

Tgt Ion: 75 Resp: 198125  
Ion Ratio Lower Upper  
75 100  
53 0.2 72.5 108.7#  
89 0.0 37.2 55.8#



#92  
1,2-Dibromo-3-Chloropropane  
Concen: Below Cal  
RT: 12.320 min Scan# 3508  
Delta R.T. -0.029 min  
Lab File: VV039233.D  
Acq: 29 Sep 2025 15:45

Tgt Ion: 75 Resp: 19  
Ion Ratio Lower Upper  
75 100  
155 0.0 38.6 115.8#  
157 0.0 49.5 148.3#

