

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091025\  
 Data File : VN087789.D  
 Acq On : 10 Sep 2025 18:14  
 Operator : JC\MD  
 Sample : PB169609TB  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB169609TB

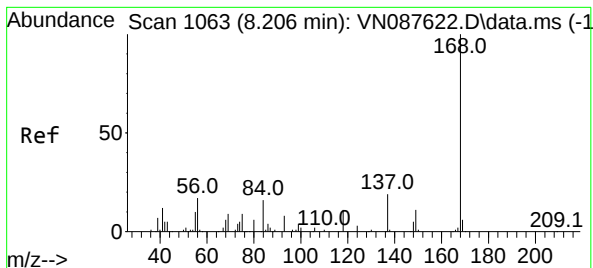
Quant Time: Sep 11 02:09:13 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082125W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 22 02:55:42 2025  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response            | Conc   | Units  | Dev(Min) |
|-------------------------------|----------------|------|---------------------|--------|--------|----------|
| -----                         |                |      |                     |        |        |          |
| Internal Standards            |                |      |                     |        |        |          |
| 1) Pentafluorobenzene         | 8.206          | 168  | 185798              | 50.000 | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.082          | 114  | 417973              | 50.000 | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.847         | 117  | 425217              | 50.000 | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.770         | 152  | 197180              | 50.000 | ug/l   | 0.00     |
| System Monitoring Compounds   |                |      |                     |        |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.559          | 65   | 199726              | 52.466 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = 104.940% |        |        |          |
| 35) Dibromofluoromethane      | 8.153          | 113  | 155416              | 51.501 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = 103.000% |        |        |          |
| 50) Toluene-d8                | 10.547         | 98   | 559806              | 49.563 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = 99.120%  |        |        |          |
| 62) 4-Bromofluorobenzene      | 12.823         | 95   | 194584              | 48.442 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = 96.880%  |        |        |          |
| Target Compounds              |                |      |                     |        |        |          |
|                               |                |      |                     |        | Qvalue |          |
| 5) Bromomethane               | 3.006          | 94   | 332                 | 0.205  | ug/l   | 99       |
| 11) Tert butyl alcohol        | 5.530          | 59   | 1849                | 2.798  | ug/l # | 71       |
| 16) Acetone                   | 4.424          | 43   | 74892               | 36.140 | ug/l   | 99       |
| 18) Methyl Acetate            | 5.018          | 43   | 37381               | 8.615  | ug/l   | 99       |
| 20) Methylene Chloride        | 5.271          | 84   | 22844               | 6.542  | ug/l # | 85       |
| 25) 2-Butanone                | 7.477          | 43   | 20783               | 7.623  | ug/l   | 92       |
| 29) Tetrahydrofuran           | 7.841          | 42   | 1466                | 0.836  | ug/l # | 75       |
| 36) 1,1-Dichloropropene       | 8.212          | 75   | 17787               | 3.842  | ug/l # | 52       |
| 37) Ethyl Acetate             | 7.553          | 43   | 24061               | 3.803  | ug/l # | 95       |
| 38) Carbon Tetrachloride      | 8.206          | 117  | 19908               | 4.355  | ug/l # | 14       |
| 43) Isopropyl Acetate         | 8.671          | 43   | 16250               | 1.645  | ug/l   | 94       |
| 45) 1,2-Dichloropropane       | 9.729          | 63   | 2254                | 0.602  | ug/l # | 43       |
| 48) Methyl methacrylate       | 9.724          | 41   | 144703              | 30.973 | ug/l # | 47       |
| 49) 1,4-Dioxane               | 9.700          | 88   | 60                  | 0.991  | ug/l # | 13       |
| 51) 4-Methyl-2-Pentanone      | 10.424         | 43   | 8587                | 1.441  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.341         | 75   | 70226               | 11.970 | ug/l # | 70       |
| 57) 1,3-Dichloropropane       | 11.188         | 76   | 4366                | 0.724  | ug/l # | 42       |
| 59) 2-Hexanone                | 11.182         | 43   | 86330               | 22.922 | ug/l # | 52       |
| 71) Bromoform                 | 12.829         | 173  | 2179                | 0.809  | ug/l # | 1        |
| 76) 1,2,3-Trichloropropane    | 12.823         | 75   | 110710              | 23.943 | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.823         | 75   | 110710              | 63.385 | ug/l # | 1        |
| 95) Naphthalene               | 15.617         | 128  | 8877                | 0.595  | ug/l # | 94       |
| -----                         |                |      |                     |        |        |          |

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

Quant Time: Sep 11 02:09:13 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082125W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 22 02:55:42 2025  
Response via : Initial Calibration

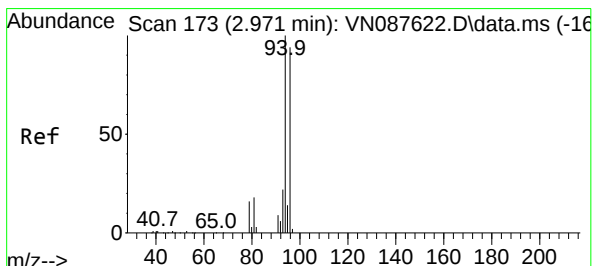
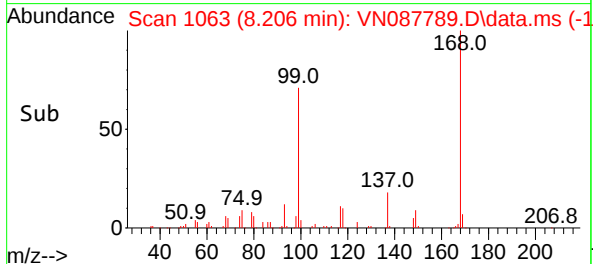
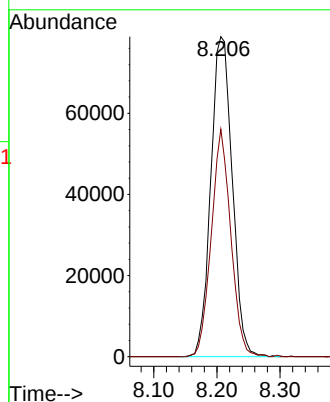
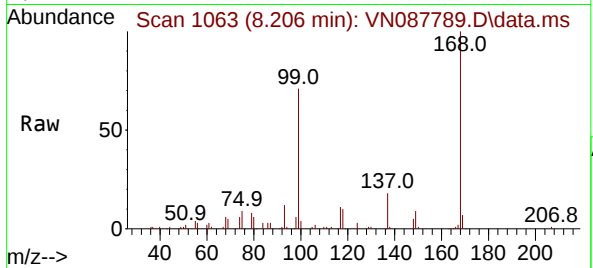




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.206 min Scan# 1063  
Delta R.T. 0.000 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

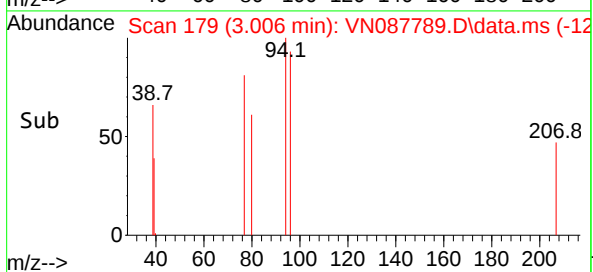
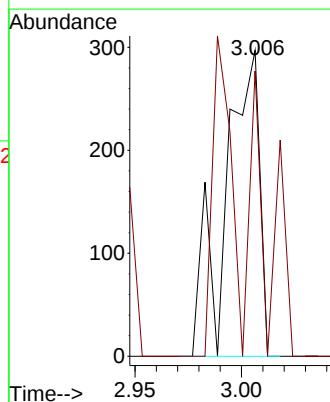
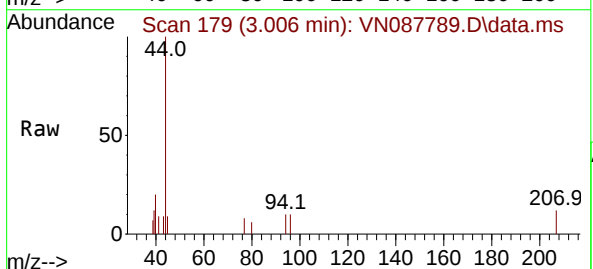
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

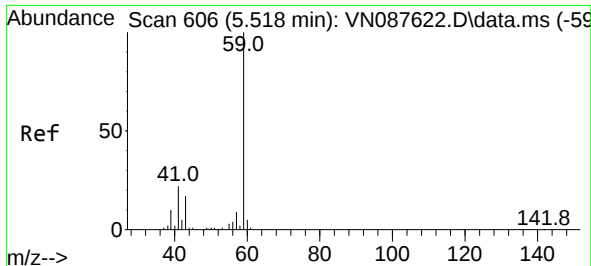
Tgt Ion:168 Resp: 185798  
Ion Ratio Lower Upper  
168 100  
99 71.0 57.2 85.8



#5  
Bromomethane  
Concen: 0.205 ug/l  
RT: 3.006 min Scan# 179  
Delta R.T. 0.035 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 94 Resp: 332  
Ion Ratio Lower Upper  
94 100  
96 93.3 75.4 113.2

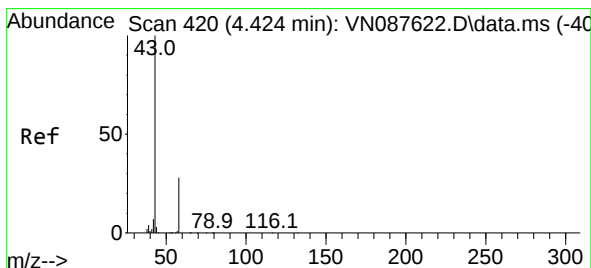
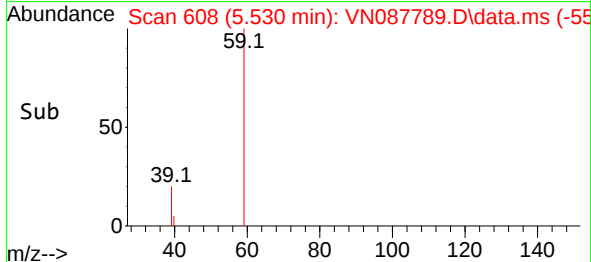
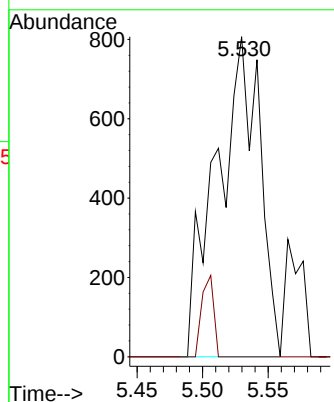
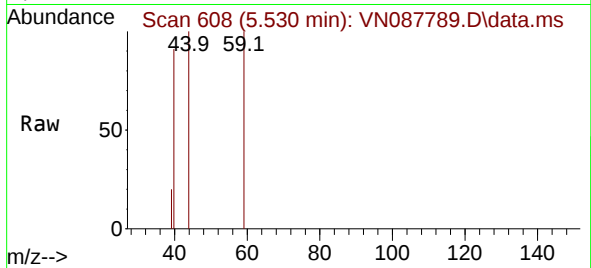




#11  
Tert butyl alcohol  
Concen: 2.798 ug/l  
RT: 5.530 min Scan# 606  
Delta R.T. 0.012 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

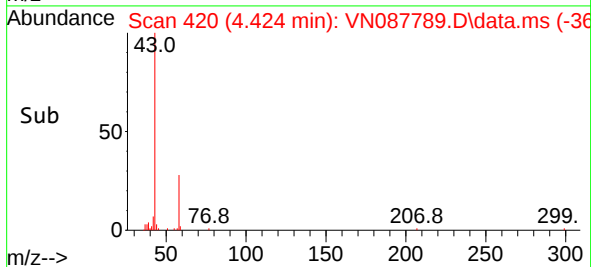
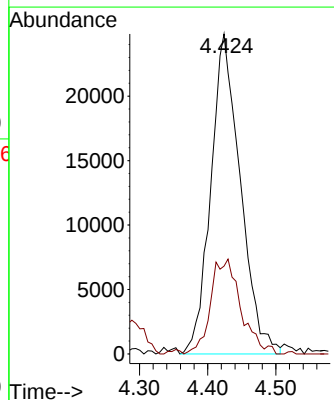
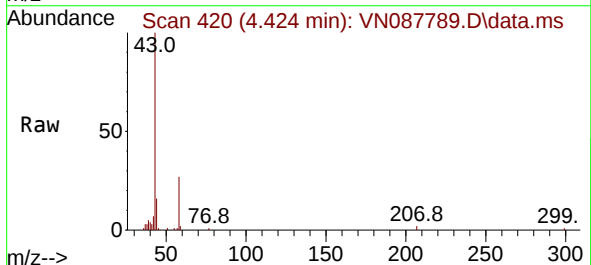
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

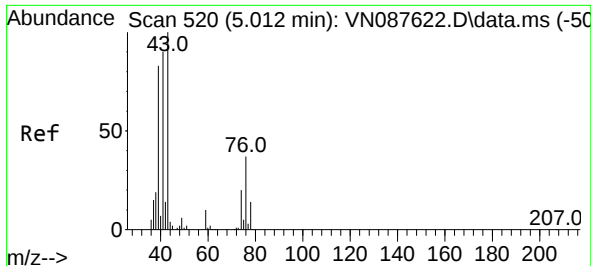
Tgt Ion: 59 Resp: 1849  
Ion Ratio Lower Upper  
59 100  
57 0.0 9.0 13.4#



#16  
Acetone  
Concen: 36.140 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. -0.000 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 43 Resp: 74892  
Ion Ratio Lower Upper  
43 100  
58 27.4 22.6 33.8

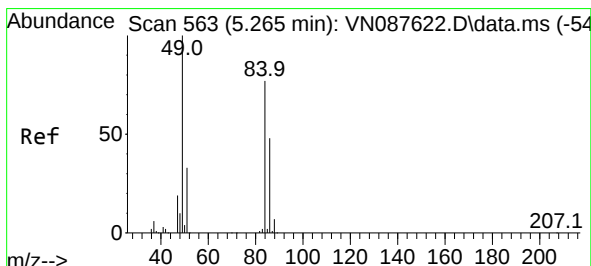
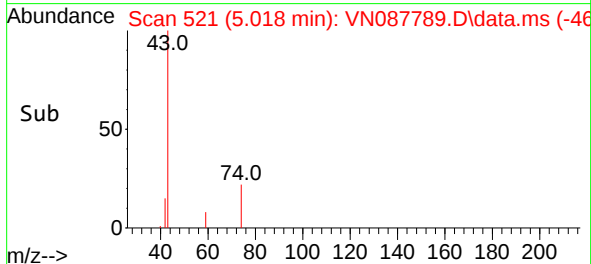
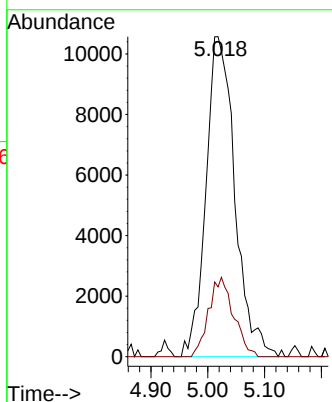
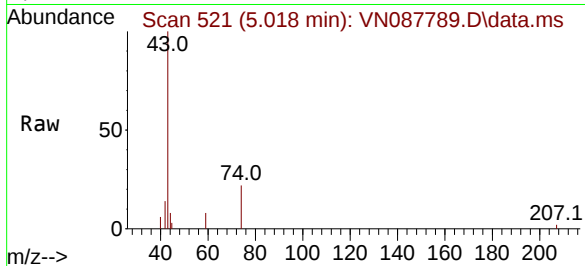




#18  
Methyl Acetate  
Concen: 8.615 ug/l  
RT: 5.018 min Scan# 51  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

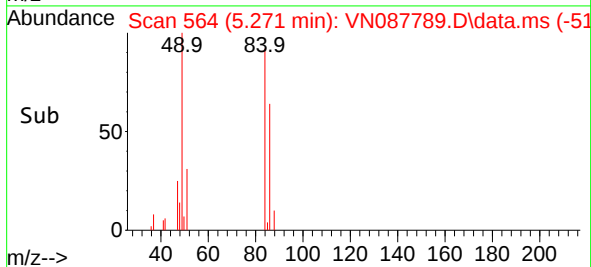
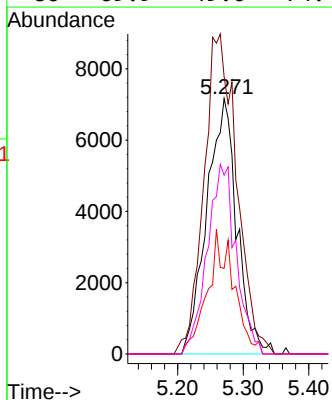
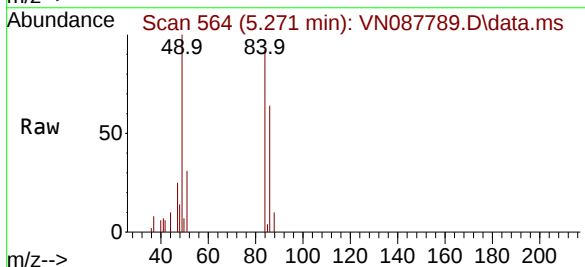
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

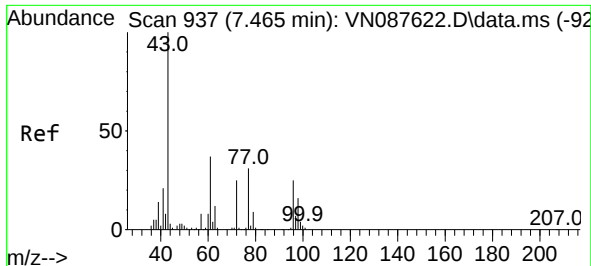
Tgt Ion: 43 Resp: 37381  
Ion Ratio Lower Upper  
43 100  
74 21.3 17.6 26.4



#20  
Methylene Chloride  
Concen: 6.542 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 84 Resp: 22844  
Ion Ratio Lower Upper  
84 100  
49 108.6 103.4 155.2  
51 33.5 33.8 50.8#  
86 69.9 49.6 74.4

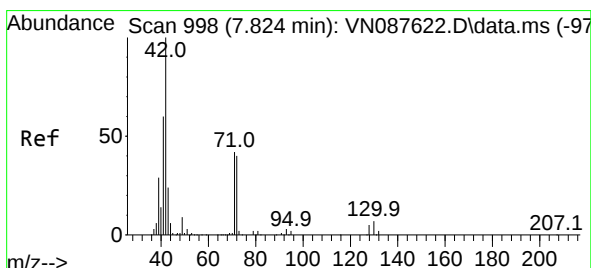
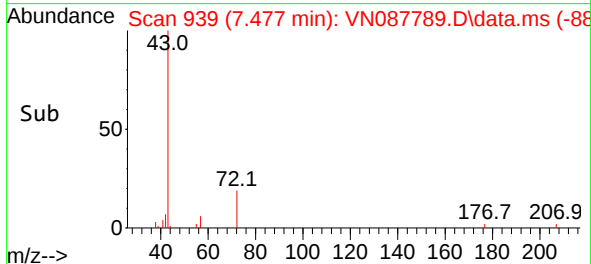
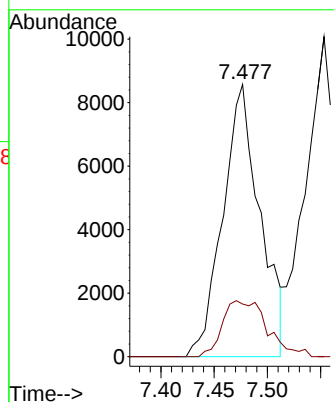
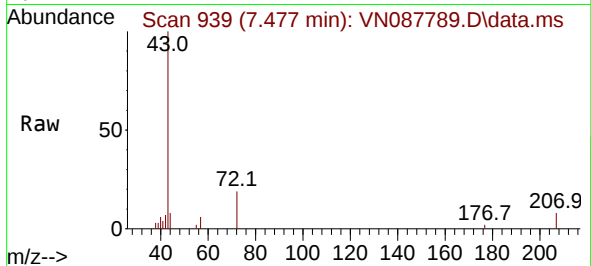




#25  
2-Butanone  
Concen: 7.623 ug/l  
RT: 7.477 min Scan# 91  
Delta R.T. 0.012 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

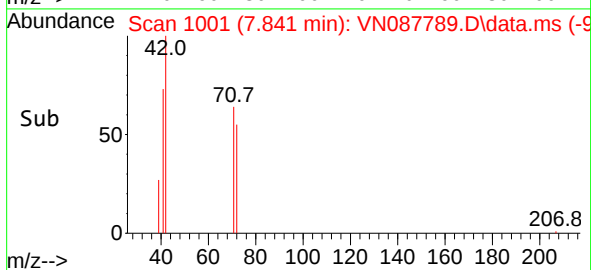
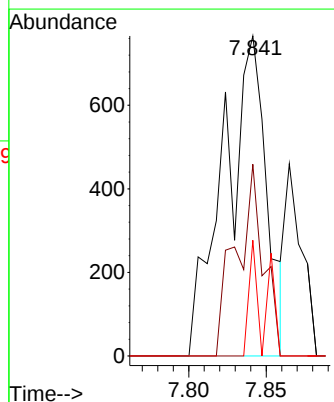
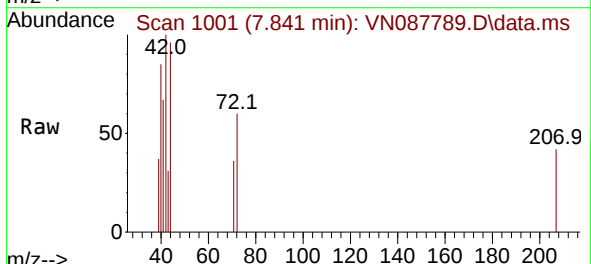
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

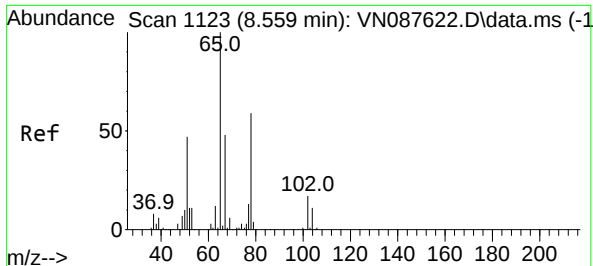
Tgt Ion: 43 Resp: 20783  
Ion Ratio Lower Upper  
43 100  
72 21.0 19.9 29.9



#29  
Tetrahydrofuran  
Concen: 0.836 ug/l  
RT: 7.841 min Scan# 1001  
Delta R.T. 0.018 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 42 Resp: 1466  
Ion Ratio Lower Upper  
42 100  
72 38.2 33.7 50.5  
71 12.6 31.9 47.9#





#33

1,2-Dichloroethane-d4

Concen: 52.466 ug/l

RT: 8.559 min Scan# 1123

Delta R.T. -0.000 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

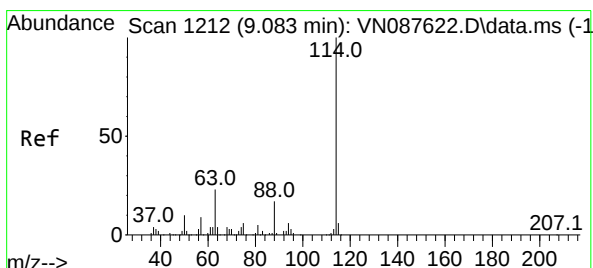
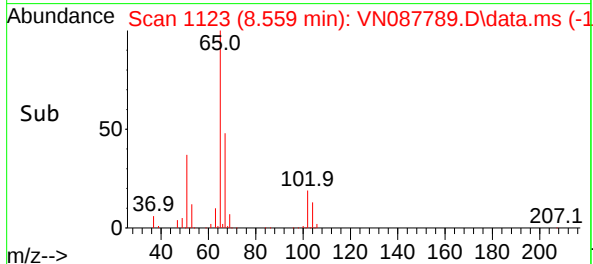
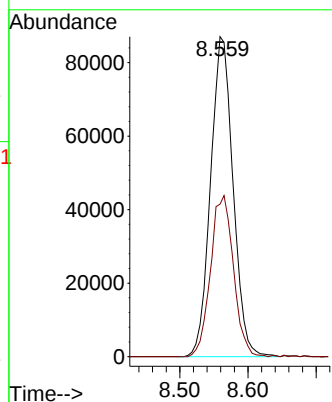
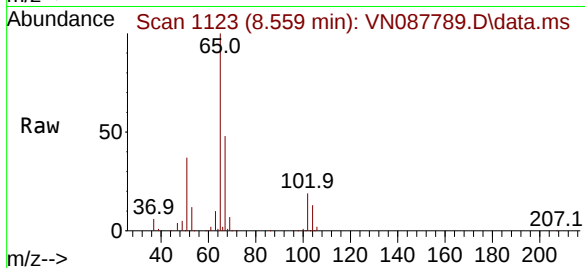
PB169609TB

Tgt Ion: 65 Resp: 199726

Ion Ratio Lower Upper

65 100

67 51.3 0.0 100.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.082 min Scan# 1212

Delta R.T. -0.000 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

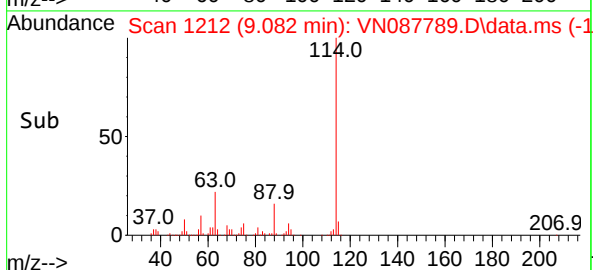
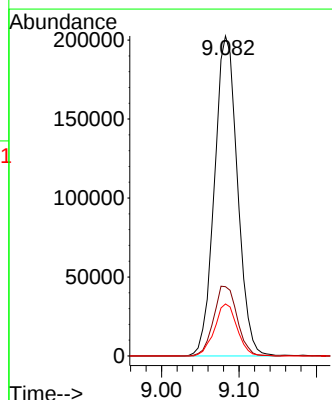
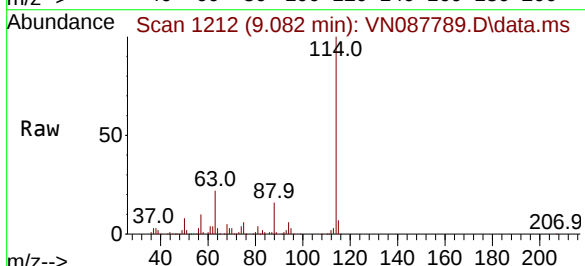
Tgt Ion: 114 Resp: 417973

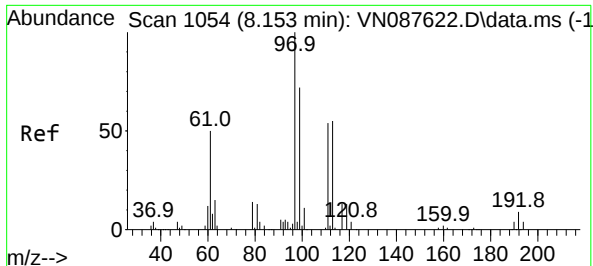
Ion Ratio Lower Upper

114 100

63 21.7 0.0 45.2

88 16.3 0.0 33.4





#35

Dibromofluoromethane

Concen: 51.501 ug/l

RT: 8.153 min Scan# 1054

Delta R.T. -0.000 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

PB169609TB

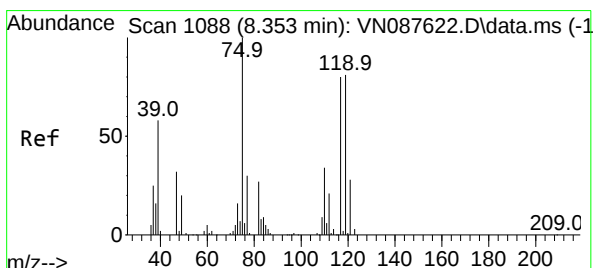
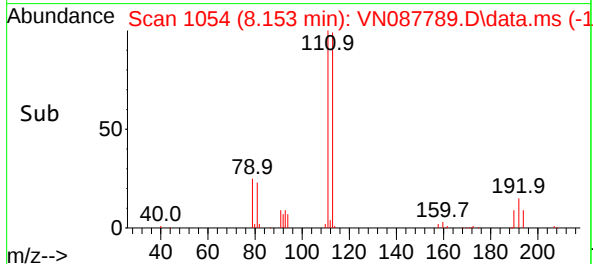
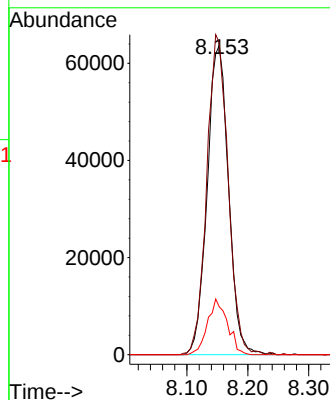
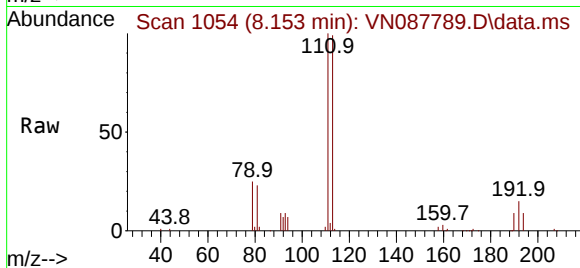
Tgt Ion:113 Resp: 155416

Ion Ratio Lower Upper

113 100

111 103.0 82.8 124.2

192 16.9 12.8 19.2



#36

1,1-Dichloropropene

Concen: 3.842 ug/l

RT: 8.212 min Scan# 1064

Delta R.T. -0.141 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

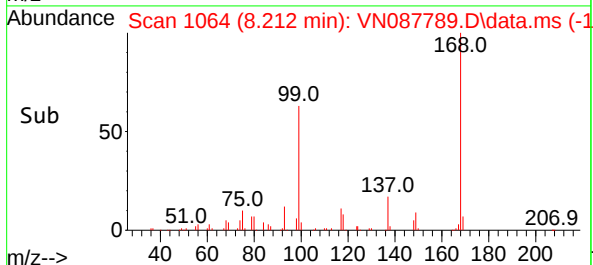
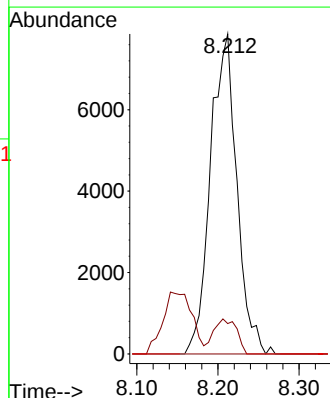
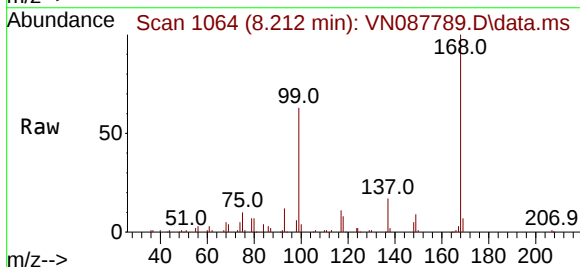
Tgt Ion: 75 Resp: 17787

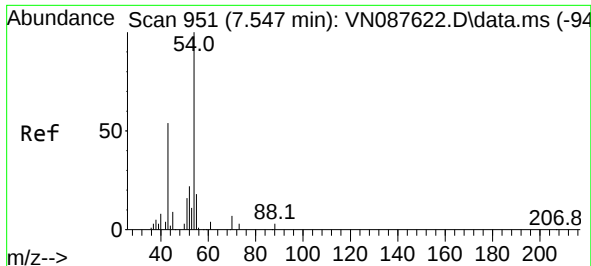
Ion Ratio Lower Upper

75 100

110 9.6 15.9 47.6#

77 0.0 24.4 36.6#

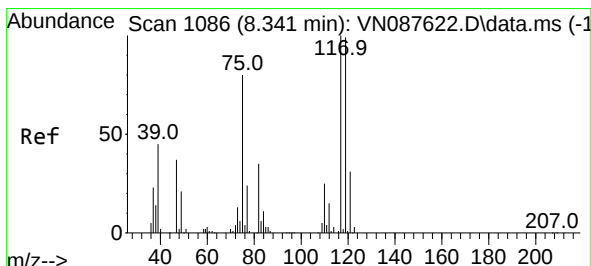
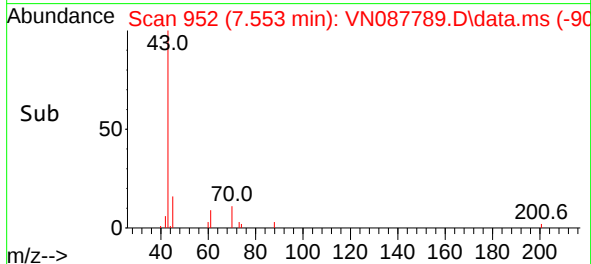
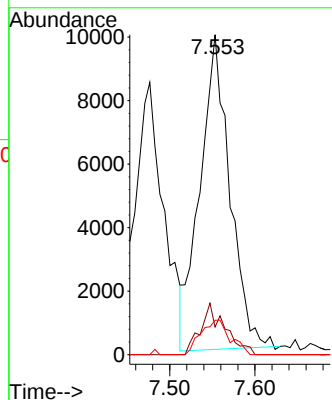
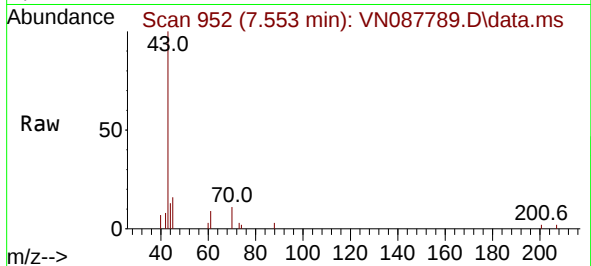




#37  
Ethyl Acetate  
Concen: 3.803 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

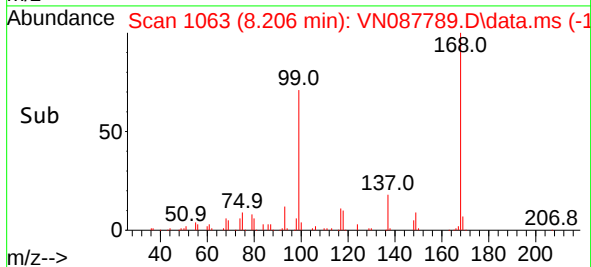
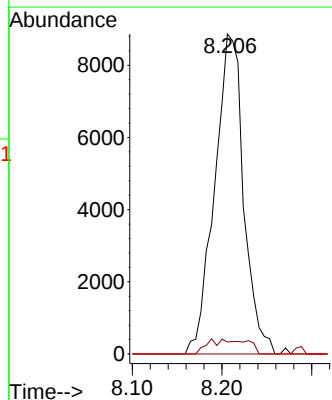
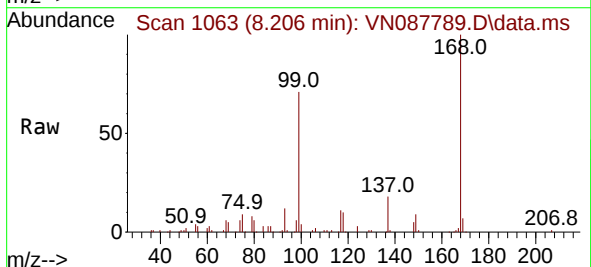
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

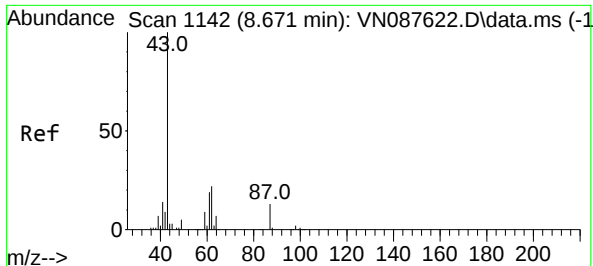
Tgt Ion: 43 Resp: 24061  
Ion Ratio Lower Upper  
43 100  
61 13.6 9.3 13.9  
70 10.9 7.0 10.6#



#38  
Carbon Tetrachloride  
Concen: 4.355 ug/l  
RT: 8.206 min Scan# 1063  
Delta R.T. -0.135 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 117 Resp: 19908  
Ion Ratio Lower Upper  
117 100  
119 3.7 79.0 118.6#  
121 0.0 25.0 37.6#





#43

Isopropyl Acetate

Concen: 1.645 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. -0.000 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

PB169609TB

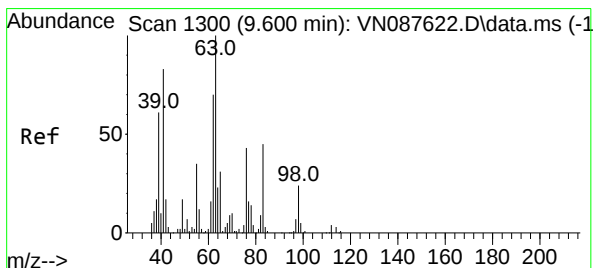
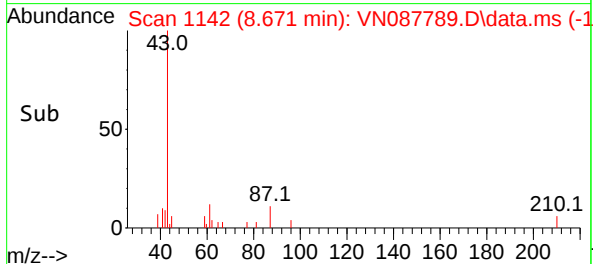
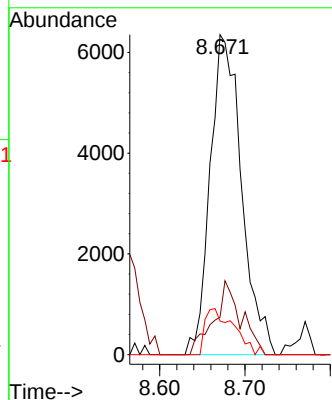
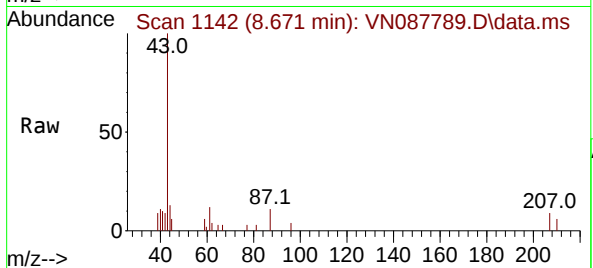
Tgt Ion: 43 Resp: 16250

Ion Ratio Lower Upper

43 100

61 20.1 18.8 28.2

87 13.3 9.6 14.4



#45

1,2-Dichloropropane

Concen: 0.602 ug/l

RT: 9.729 min Scan# 1322

Delta R.T. 0.129 min

Lab File: VN087789.D

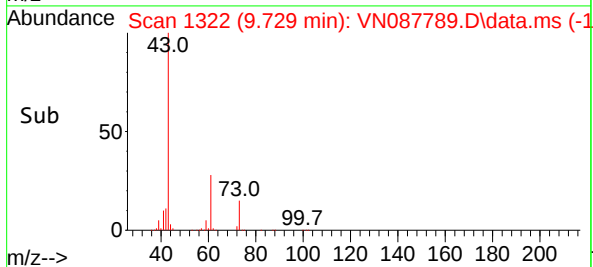
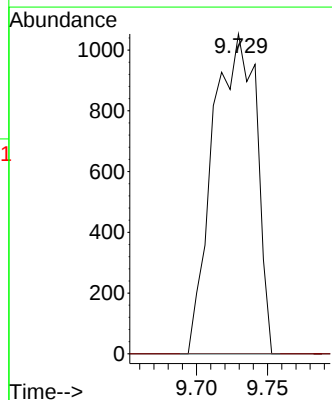
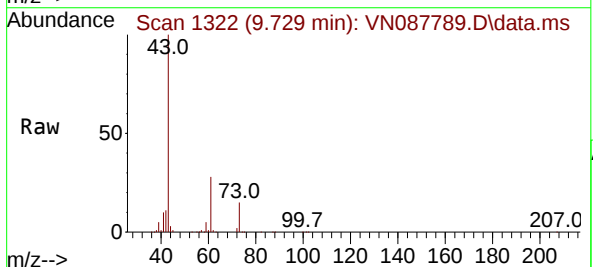
Acq: 10 Sep 2025 18:14

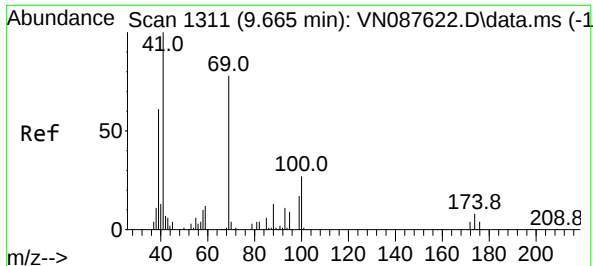
Tgt Ion: 63 Resp: 2254

Ion Ratio Lower Upper

63 100

65 0.0 25.0 37.4#





#48

Methyl methacrylate

Concen: 30.973 ug/l

RT: 9.724 min Scan# 11

Delta R.T. 0.059 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

PB169609TB

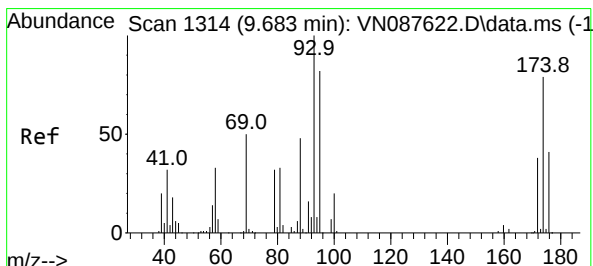
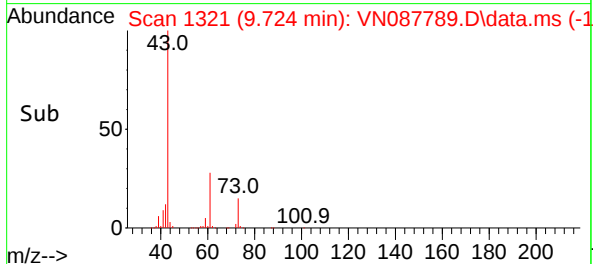
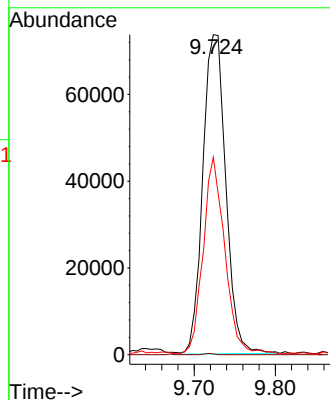
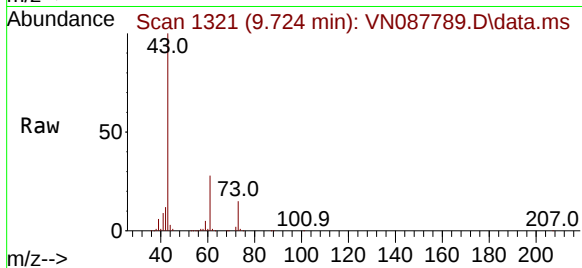
Tgt Ion: 41 Resp: 144703

Ion Ratio Lower Upper

41 100

69 0.2 62.7 94.1#

39 58.0 52.9 79.3



#49

1,4-Dioxane

Concen: 0.991 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. 0.018 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

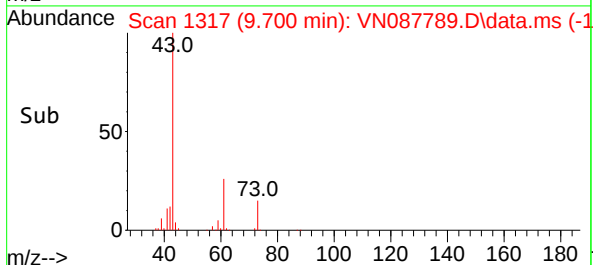
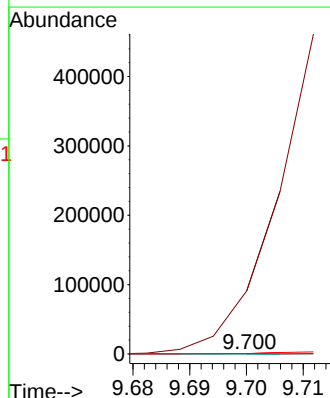
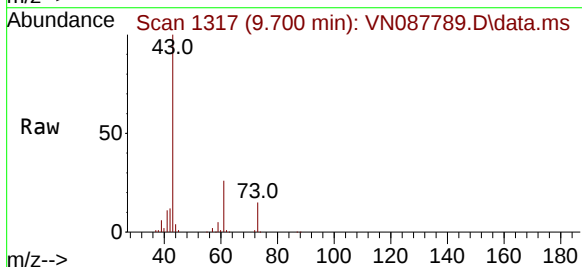
Tgt Ion: 88 Resp: 60

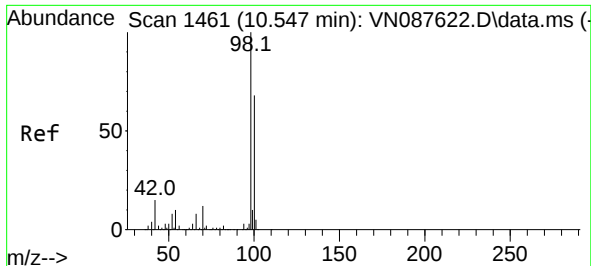
Ion Ratio Lower Upper

88 100

43 0.0 0.0 0.0

58 0.0 57.9 86.9#

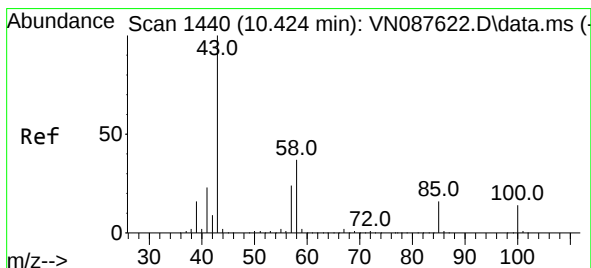
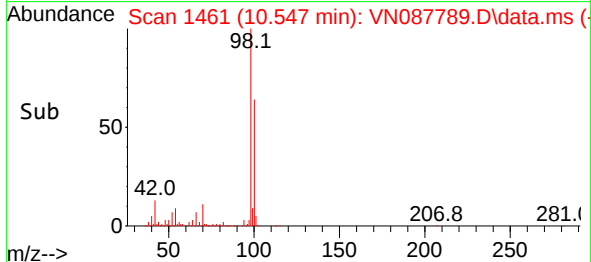
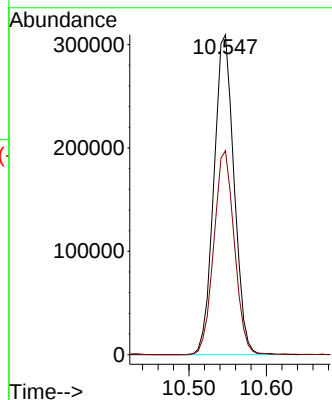
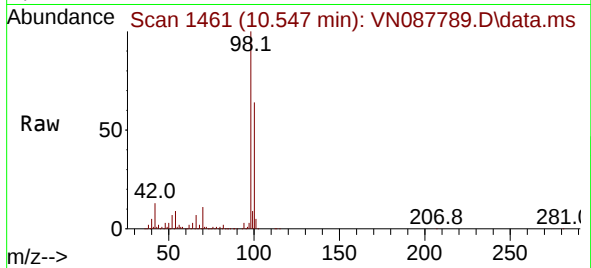




#50  
Toluene-d8  
Concen: 49.563 ug/l  
RT: 10.547 min Scan# 1461  
Delta R.T. -0.000 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

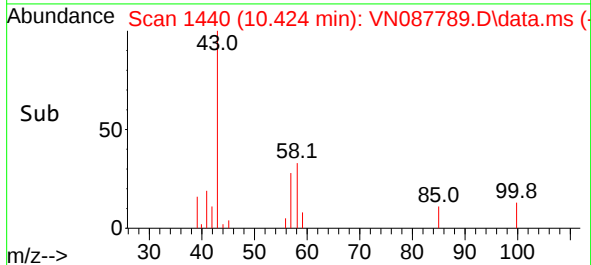
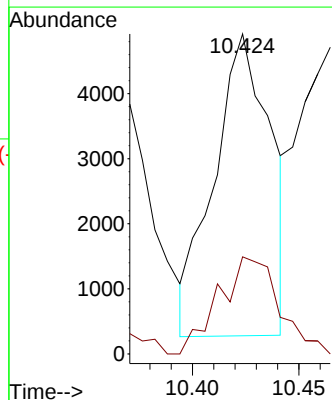
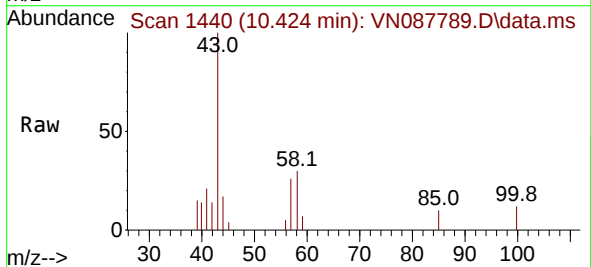
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

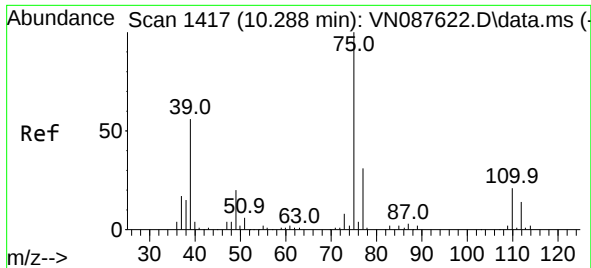
Tgt Ion: 98 Resp: 559806  
Ion Ratio Lower Upper  
98 100  
100 65.0 52.8 79.2



#51  
4-Methyl-2-Pentanone  
Concen: 1.441 ug/l  
RT: 10.424 min Scan# 1440  
Delta R.T. -0.000 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 43 Resp: 8587  
Ion Ratio Lower Upper  
43 100  
58 34.2 29.6 44.4

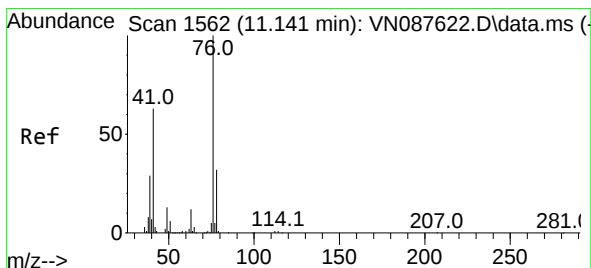
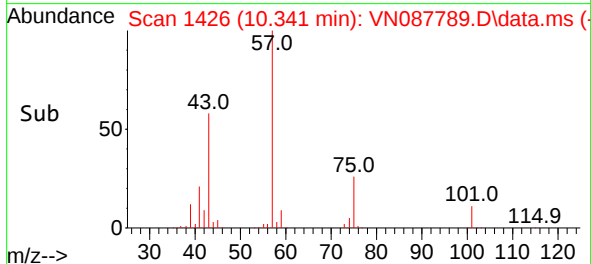
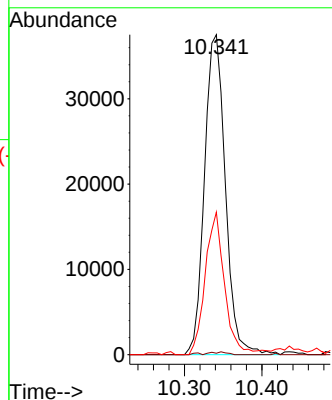
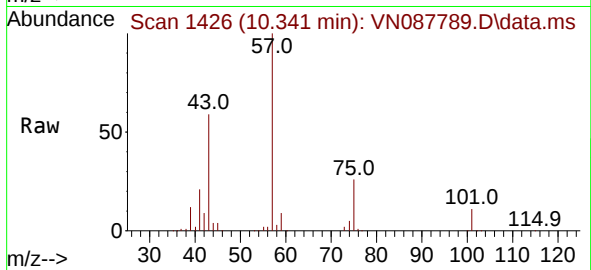




#54  
 cis-1,3-Dichloropropene  
 Concen: 11.970 ug/l  
 RT: 10.341 min Scan# 1417  
 Delta R.T. 0.053 min  
 Lab File: VN087789.D  
 Acq: 10 Sep 2025 18:14

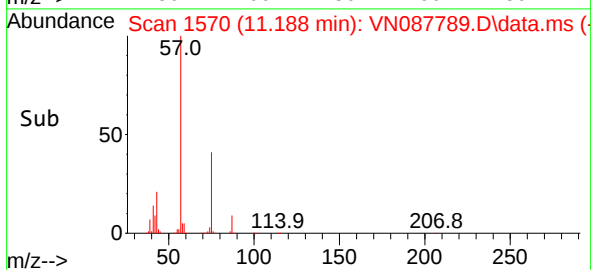
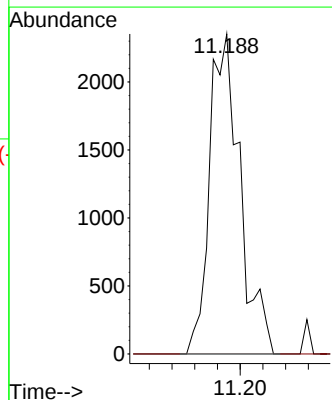
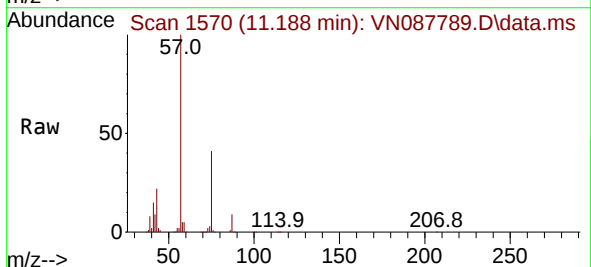
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB169609TB

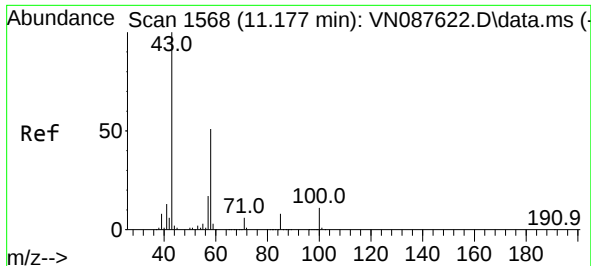
Tgt Ion: 75 Resp: 70226  
 Ion Ratio Lower Upper  
 75 100  
 77 0.4 24.6 37.0#  
 39 44.6 45.2 67.8#



#57  
 1,3-Dichloropropane  
 Concen: 0.724 ug/l  
 RT: 11.188 min Scan# 1570  
 Delta R.T. 0.047 min  
 Lab File: VN087789.D  
 Acq: 10 Sep 2025 18:14

Tgt Ion: 76 Resp: 4366  
 Ion Ratio Lower Upper  
 76 100  
 78 0.0 26.2 39.4#

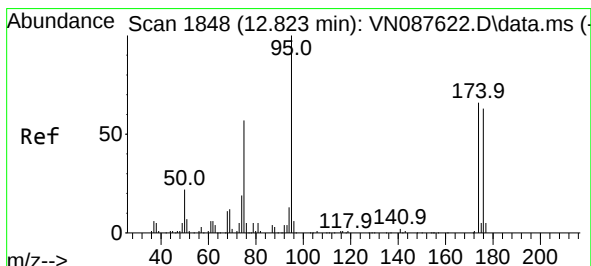
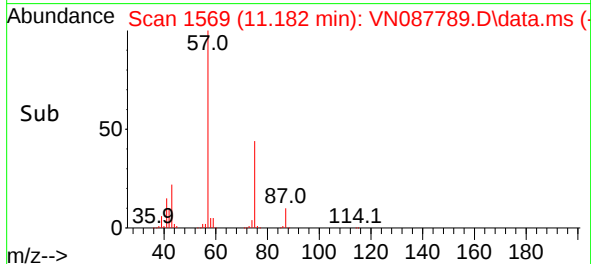
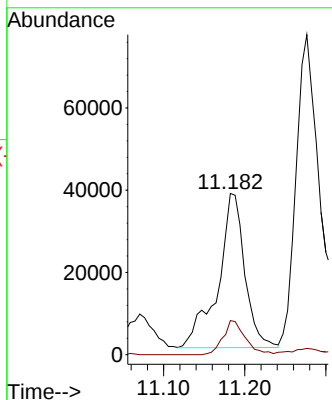
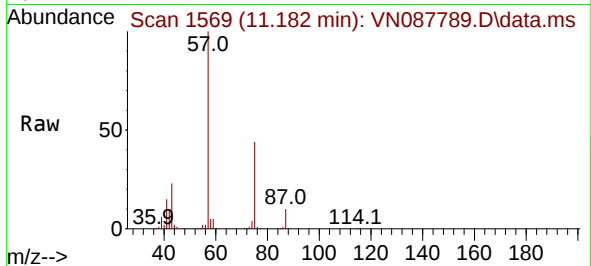




#59  
2-Hexanone  
Concen: 22.922 ug/l  
RT: 11.182 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

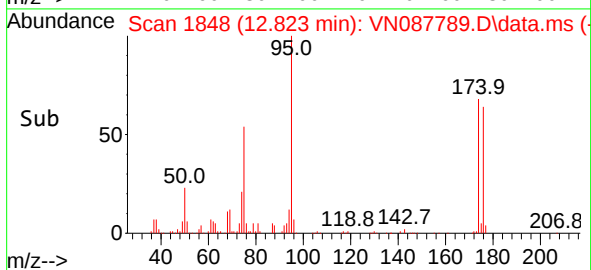
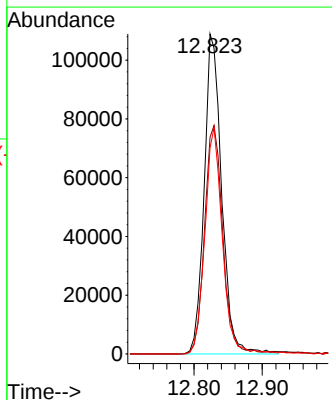
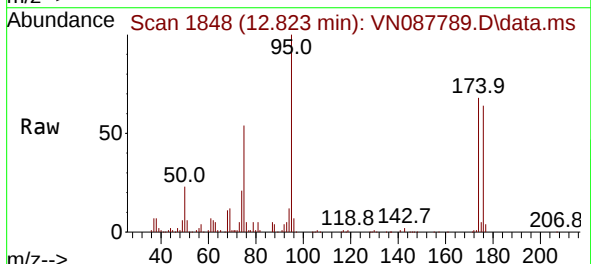
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

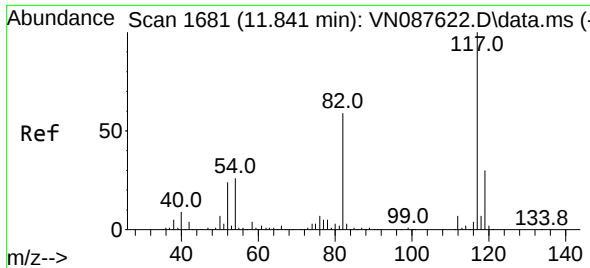
Tgt Ion: 43 Resp: 86330  
Ion Ratio Lower Upper  
43 100  
58 18.2 25.9 77.8#



#62  
4-Bromofluorobenzene  
Concen: 48.442 ug/l  
RT: 12.823 min Scan# 1848  
Delta R.T. -0.000 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 95 Resp: 194584  
Ion Ratio Lower Upper  
95 100  
174 74.2 0.0 138.4  
176 70.6 0.0 132.6

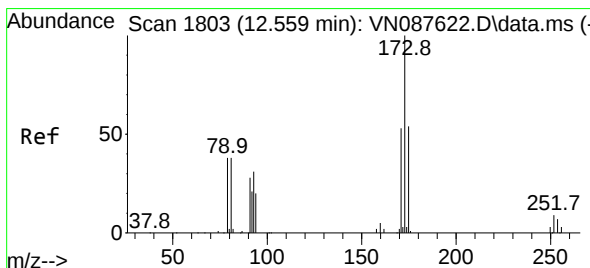
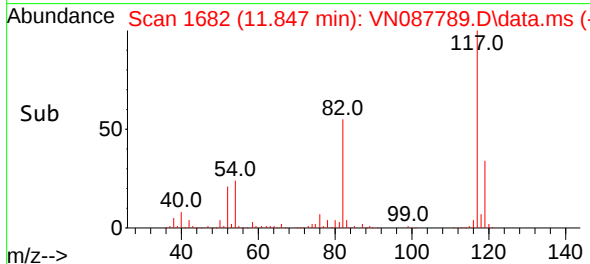
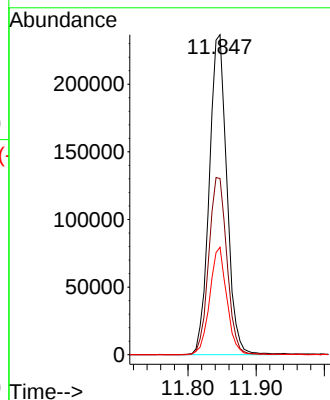
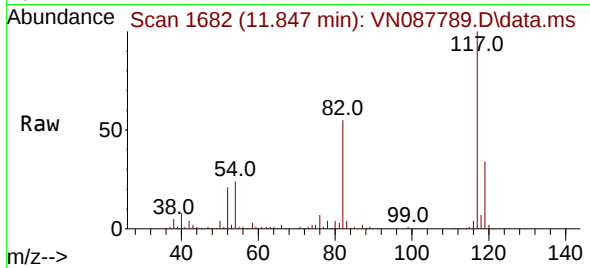




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.847 min Scan# 1184  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

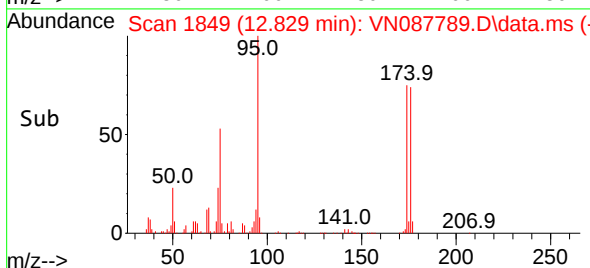
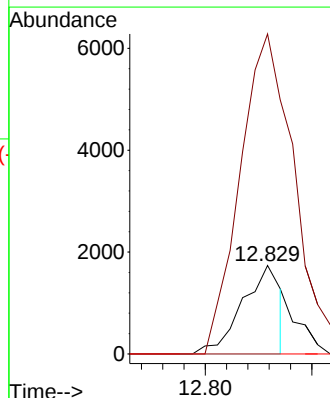
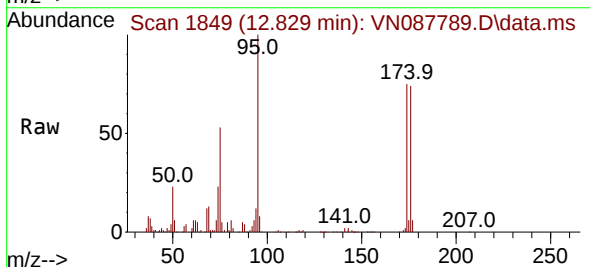
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

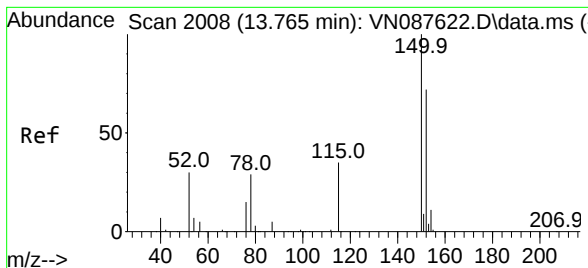
Tgt Ion:117 Resp: 425217  
Ion Ratio Lower Upper  
117 100  
82 55.0 47.4 71.2  
119 33.6 24.3 36.5



#71  
Bromoform  
Concen: 0.809 ug/l  
RT: 12.829 min Scan# 1849  
Delta R.T. 0.270 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion:173 Resp: 2179  
Ion Ratio Lower Upper  
173 100  
175 386.4 24.9 74.6#  
254 0.0 0.1 0.1#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 20

Delta R.T. 0.006 min

Lab File: VN087789.D

Acq: 10 Sep 2025 18:14

Instrument :

MSVOA\_N

ClientSampleId :

PB169609TB

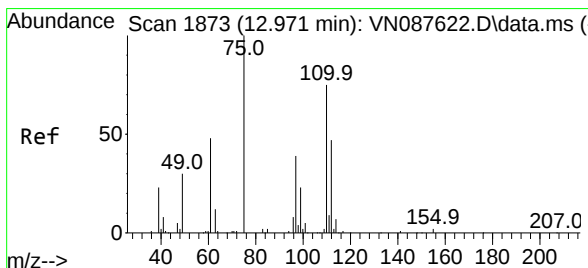
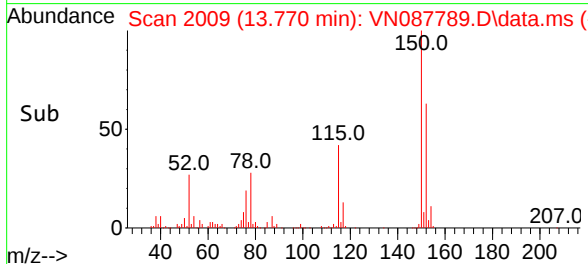
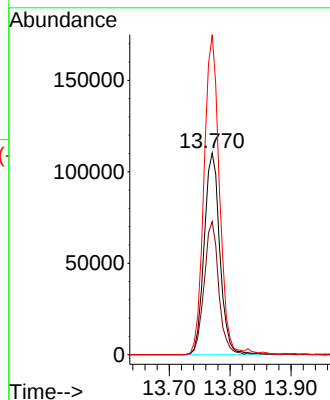
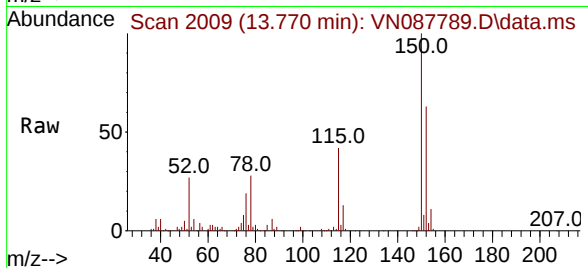
Tgt Ion:152 Resp: 197180

Ion Ratio Lower Upper

152 100

115 61.6 32.3 96.8

150 155.1 0.0 351.0



#76

1,2,3-Trichloropropane

Concen: 23.943 ug/l

RT: 12.823 min Scan# 1848

Delta R.T. -0.147 min

Lab File: VN087789.D

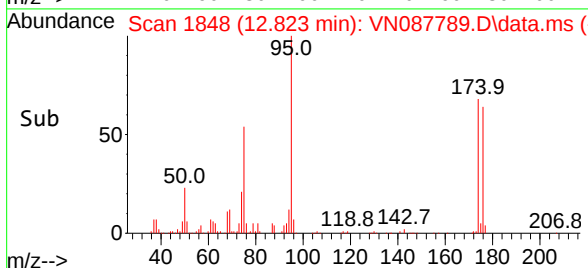
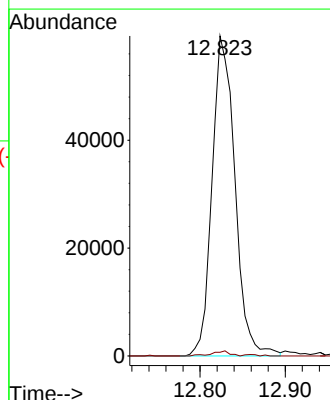
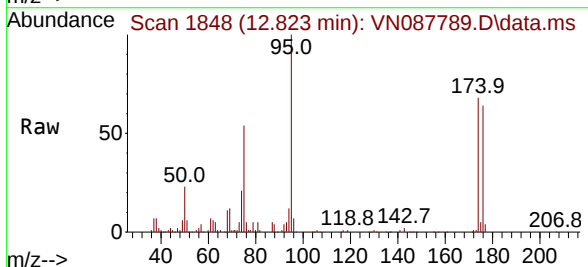
Acq: 10 Sep 2025 18:14

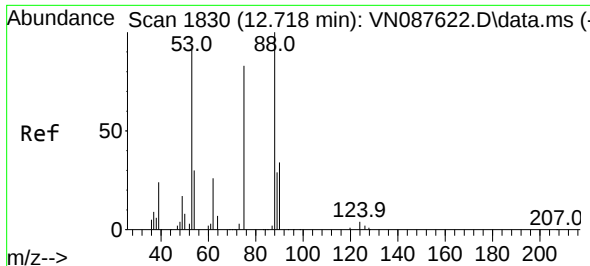
Tgt Ion: 75 Resp: 110710

Ion Ratio Lower Upper

75 100

77 1.2 89.1 267.4#

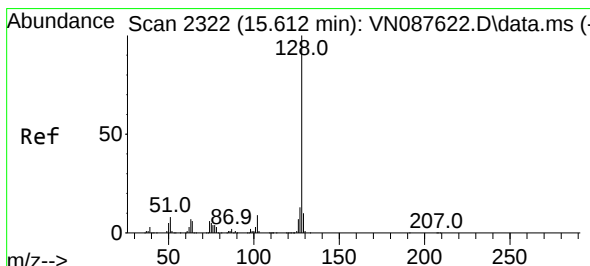
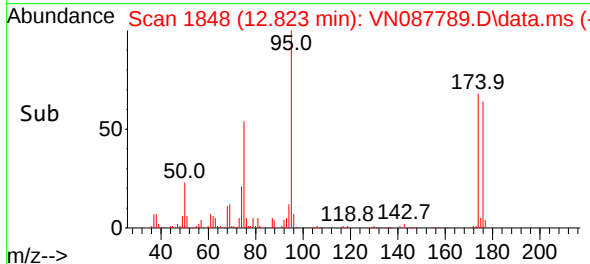
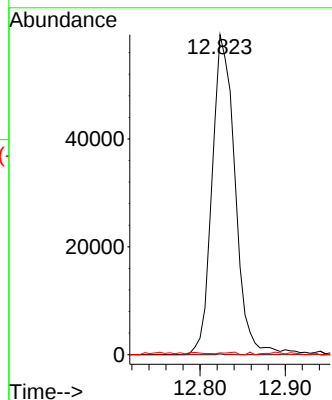
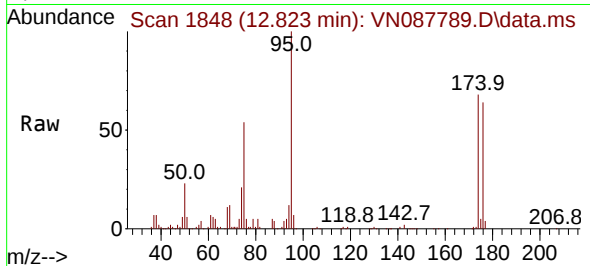




#81  
trans-1,4-Dichloro-2-butene  
Concen: 63.385 ug/l  
RT: 12.823 min Scan# 11  
Delta R.T. 0.106 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB169609TB

Tgt Ion: 75 Resp: 110710  
Ion Ratio Lower Upper  
75 100  
53 0.1 101.8 152.6#  
89 0.5 35.6 53.4#



#95  
Naphthalene  
Concen: 0.595 ug/l  
RT: 15.617 min Scan# 2323  
Delta R.T. 0.006 min  
Lab File: VN087789.D  
Acq: 10 Sep 2025 18:14

Tgt Ion: 128 Resp: 8877  
Ion Ratio Lower Upper  
128 100  
127 13.5 10.6 15.8  
129 6.3 8.6 12.8#

