

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN043025\  
 Data File : VN086447.D  
 Acq On : 30 Apr 2025 19:31  
 Operator : JC\MD  
 Sample : PB167775ZHE#17  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167775ZHE#17

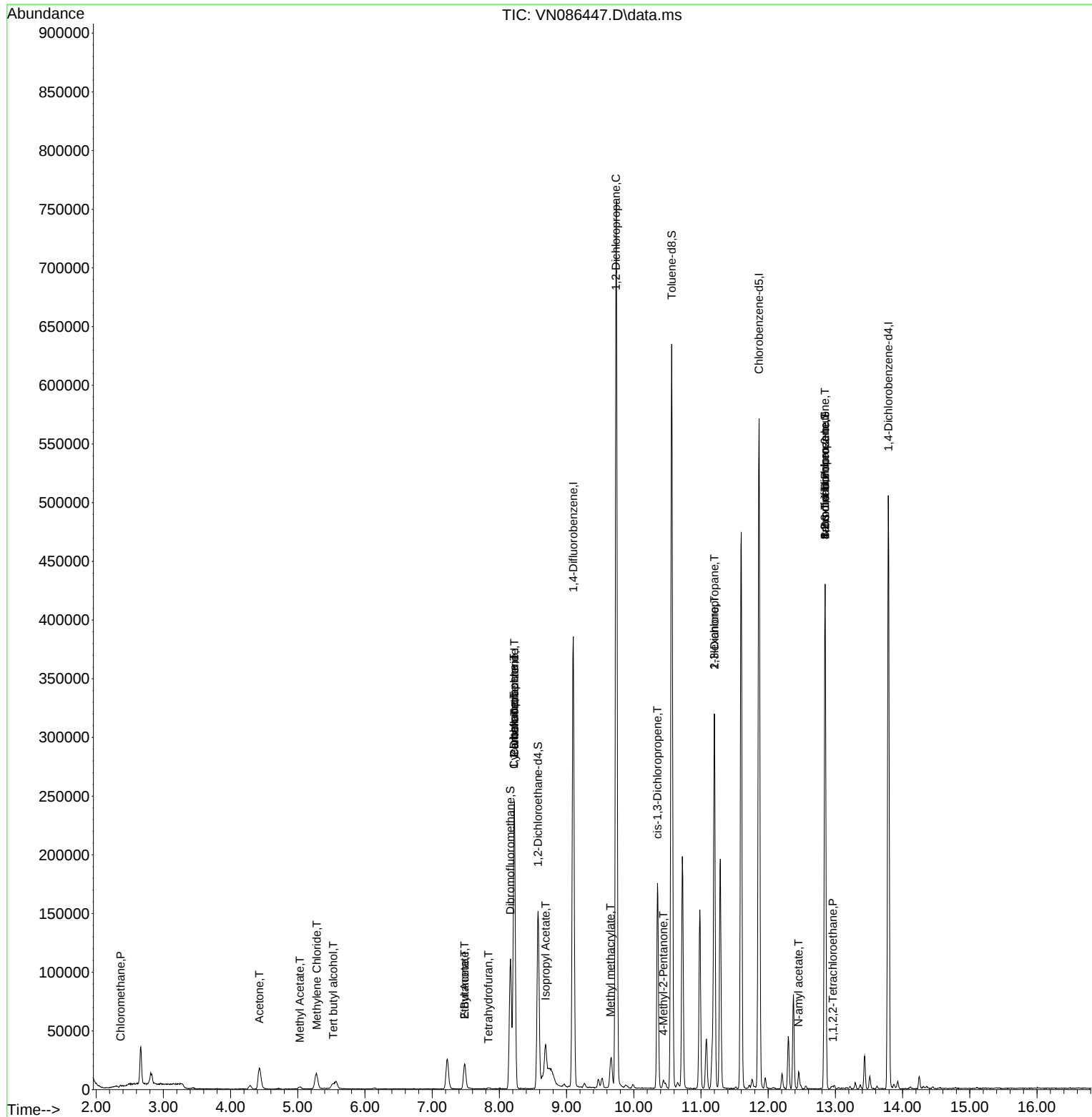
Quant Time: May 01 01:37:13 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N041525W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 16 04:19:23 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 178054   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 336829   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 329081   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788 | 152   | 134503   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577  | 65    | 125466   | 48.594   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery | =      | 97.180%  |
| 35) Dibromofluoromethane      | 8.165  | 113   | 82311    | 52.653   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =      | 105.300% |
| 50) Toluene-d8                | 10.565 | 98    | 434966   | 52.061   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery | =      | 104.120% |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 153894   | 50.501   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery | =      | 101.000% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 3) Chloromethane              | 2.365  | 50    | 692      | 0.226    | ug/l # | 77       |
| 11) Tert butyl alcohol        | 5.530  | 59    | 7768     | 16.489   | ug/l # | 80       |
| 16) Acetone                   | 4.430  | 43    | 36090    | 35.533   | ug/l   | 97       |
| 18) Methyl Acetate            | 5.030  | 43    | 4233     | 1.366    | ug/l # | 85       |
| 20) Methylene Chloride        | 5.283  | 84    | 10775    | 4.514    | ug/l   | 88       |
| 25) 2-Butanone                | 7.483  | 43    | 35894    | 22.334   | ug/l   | 94       |
| 29) Tetrahydrofuran           | 7.835  | 42    | 1022     | 0.951    | ug/l # | 41       |
| 31) Cyclohexane               | 8.218  | 56    | 3992     | 0.954    | ug/l # | 4        |
| 36) 1,1-Dichloropropene       | 8.218  | 75    | 14833    | 4.751    | ug/l # | 49       |
| 37) Ethyl Acetate             | 7.483  | 43    | 35894    | 10.919   | ug/l # | 68       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 18393    | 6.186    | ug/l # | 16       |
| 43) Isopropyl Acetate         | 8.688  | 43    | 55187    | 7.629    | ug/l # | 74       |
| 45) 1,2-Dichloropropane       | 9.735  | 63    | 936      | 0.382    | ug/l # | 43       |
| 48) Methyl methacrylate       | 9.653  | 41    | 4951     | 1.715    | ug/l # | 42       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43    | 4343     | 1.290    | ug/l   | 93       |
| 54) cis-1,3-Dichloropropene   | 10.353 | 75    | 33344    | 8.070    | ug/l # | 60       |
| 57) 1,3-Dichloropropane       | 11.200 | 76    | 3066     | 0.769    | ug/l # | 43       |
| 59) 2-Hexanone                | 11.200 | 43    | 85583    | 34.278   | ug/l # | 51       |
| 71) Bromoform                 | 12.847 | 173   | 837      | 0.459    | ug/l # | 1        |
| 74) N-amyl acetate            | 12.453 | 43    | 10317    | 1.884    | ug/l # | 45       |
| 75) 1,1,2,2-Tetrachloroethane | 12.965 | 83    | 1220     | 0.386    | ug/l # | 25       |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 80041    | 25.217   | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 80041    | 60.562   | ug/l # | 10       |
| -----                         |        |       |          |          |        |          |

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

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
PB167775ZHE#17

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
PB167775ZHE#17

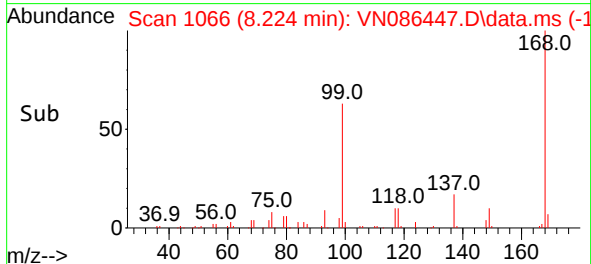
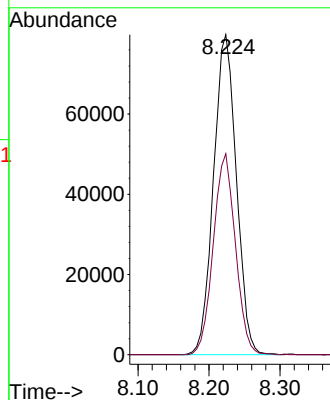
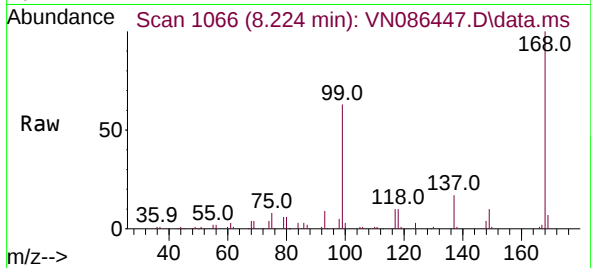




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

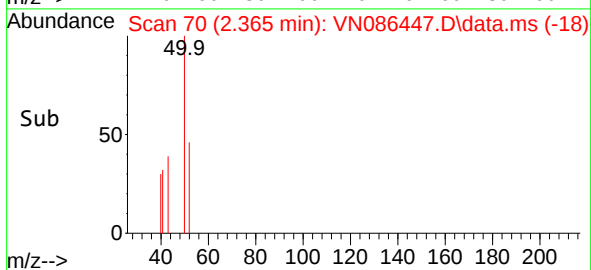
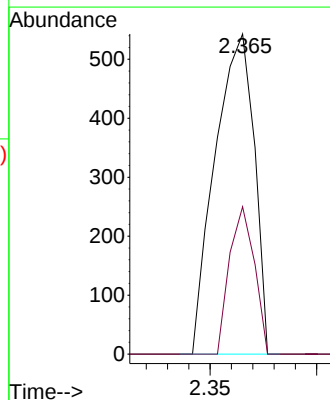
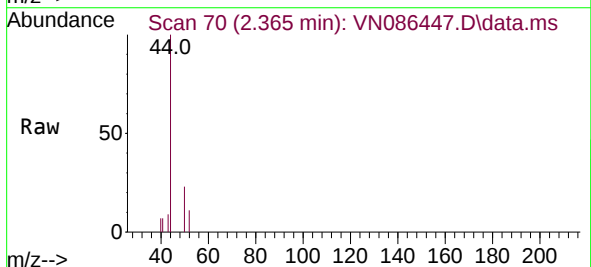
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

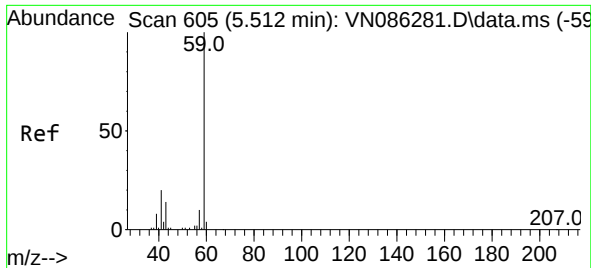
Tgt Ion:168 Resp: 178054  
Ion Ratio Lower Upper  
168 100  
99 62.8 52.5 78.7



#3  
Chloromethane  
Concen: 0.226 ug/l  
RT: 2.365 min Scan# 70  
Delta R.T. 0.006 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 50 Resp: 692  
Ion Ratio Lower Upper  
50 100  
52 46.0 26.5 39.7#

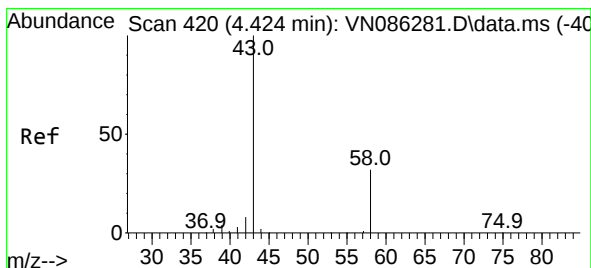
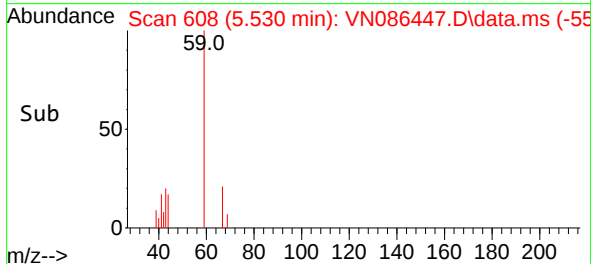
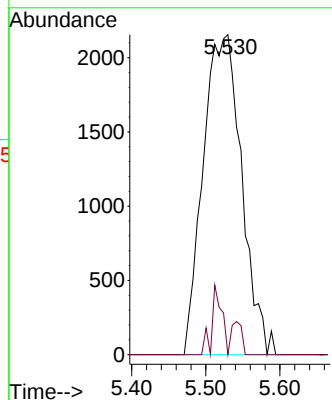
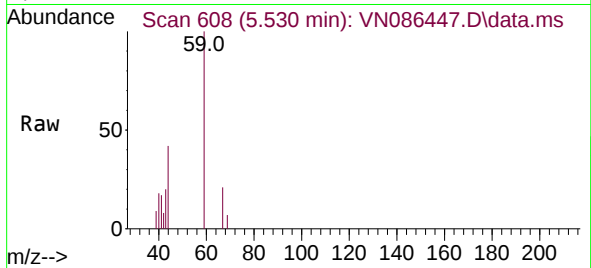




#11  
Tert butyl alcohol  
Concen: 16.489 ug/l  
RT: 5.530 min Scan# 605  
Delta R.T. 0.018 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

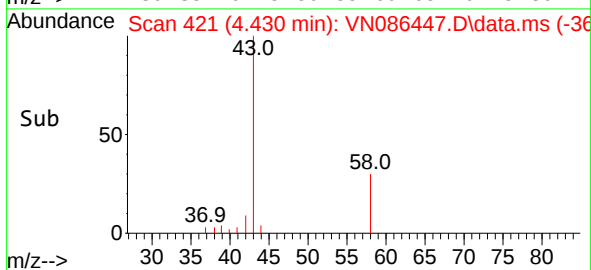
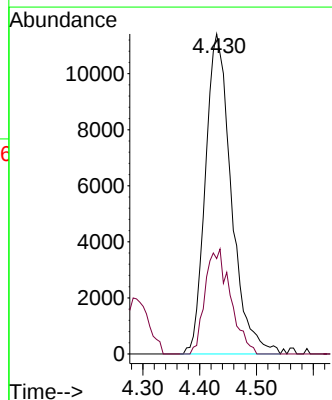
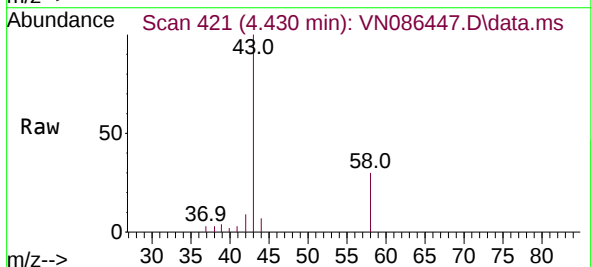
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

Tgt Ion: 59 Resp: 7768  
Ion Ratio Lower Upper  
59 100  
57 2.8 8.3 12.5#



#16  
Acetone  
Concen: 35.533 ug/l  
RT: 4.430 min Scan# 421  
Delta R.T. 0.006 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 43 Resp: 36090  
Ion Ratio Lower Upper  
43 100  
58 29.8 25.3 37.9

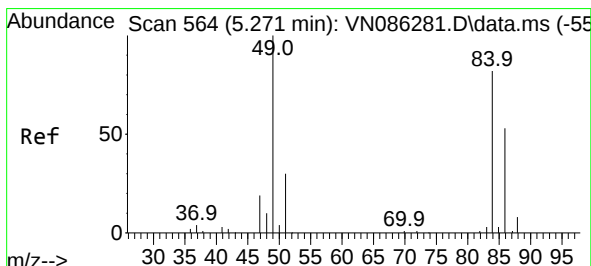
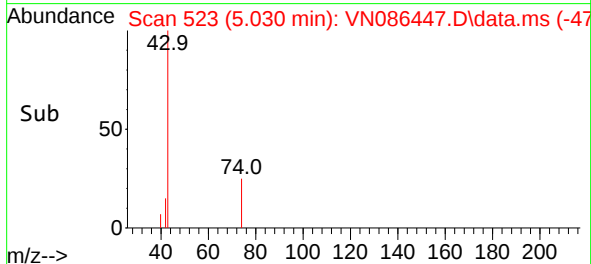
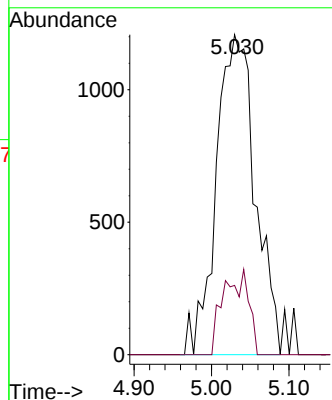
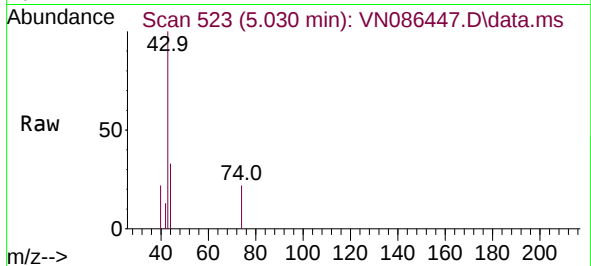




#18  
Methyl Acetate  
Concen: 1.366 ug/l  
RT: 5.030 min Scan# 51  
Delta R.T. 0.012 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

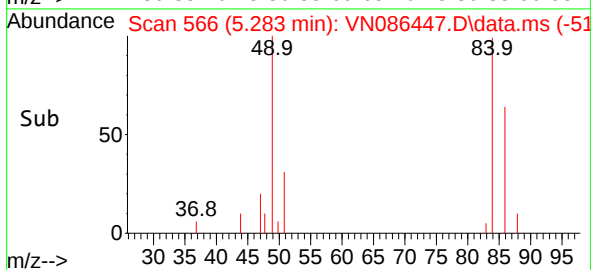
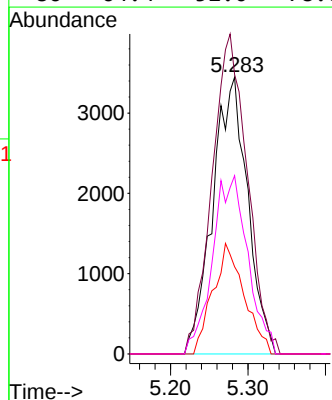
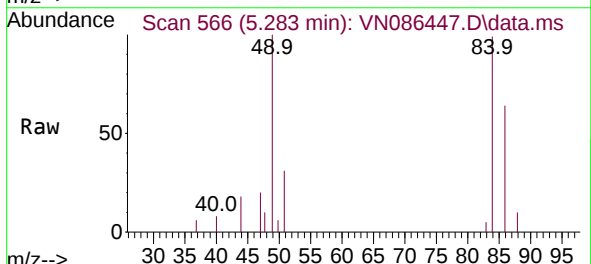
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

Tgt Ion: 43 Resp: 4233  
Ion Ratio Lower Upper  
43 100  
74 17.2 19.8 29.6#



#20  
Methylene Chloride  
Concen: 4.514 ug/l  
RT: 5.283 min Scan# 566  
Delta R.T. 0.012 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 84 Resp: 10775  
Ion Ratio Lower Upper  
84 100  
49 101.0 98.2 147.2  
51 31.5 29.8 44.6  
86 64.4 52.0 78.0

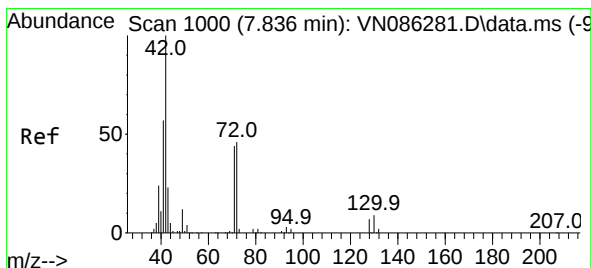
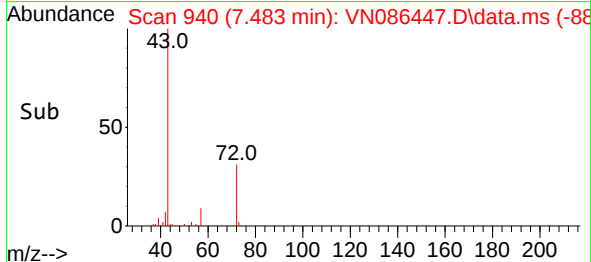
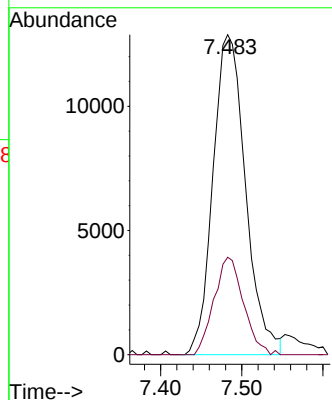
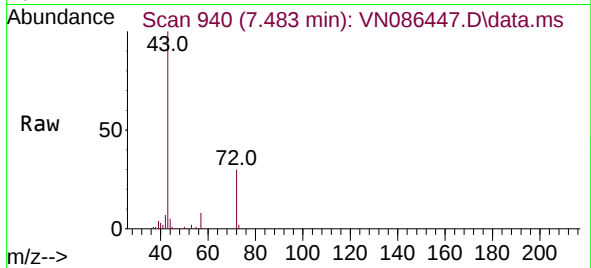




#25  
2-Butanone  
Concen: 22.334 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

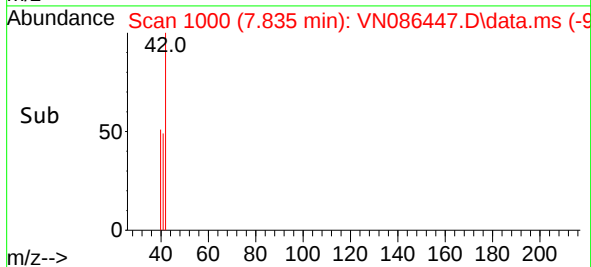
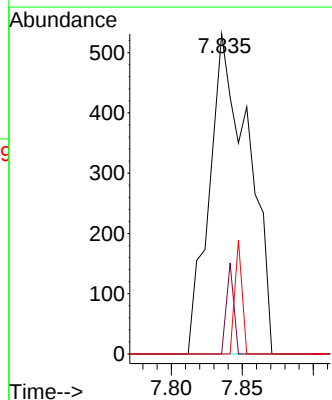
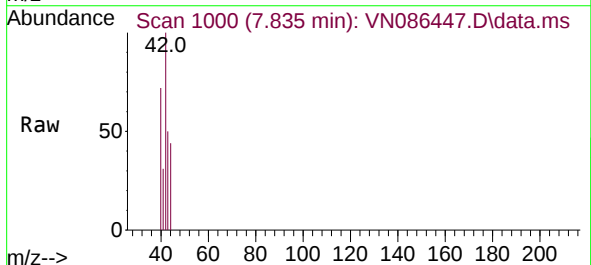
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

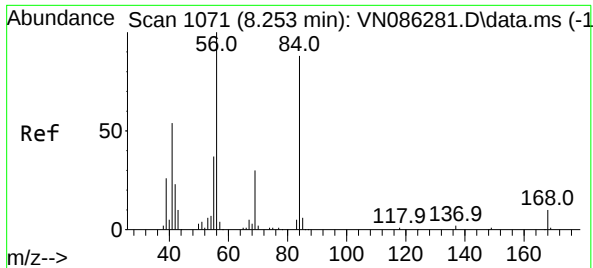
Tgt Ion: 43 Resp: 35894  
Ion Ratio Lower Upper  
43 100  
72 30.4 21.7 32.5



#29  
Tetrahydrofuran  
Concen: 0.951 ug/l  
RT: 7.835 min Scan# 1000  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 42 Resp: 1022  
Ion Ratio Lower Upper  
42 100  
72 5.2 36.2 54.4#  
71 6.6 34.0 51.0#

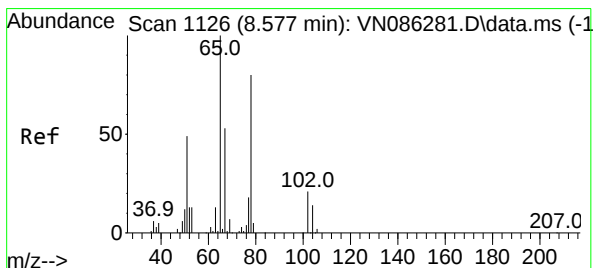
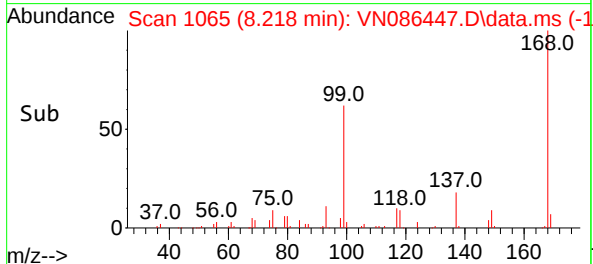
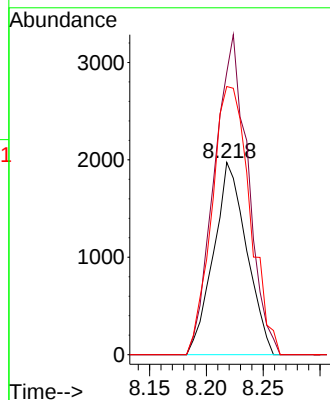
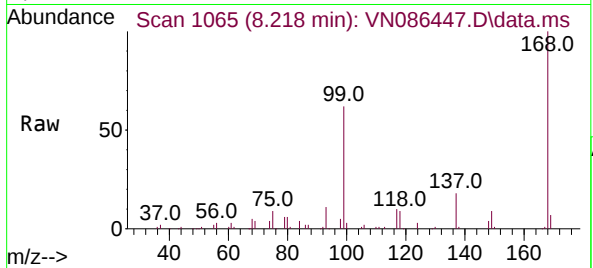




#31  
Cyclohexane  
Concen: 0.954 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.035 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

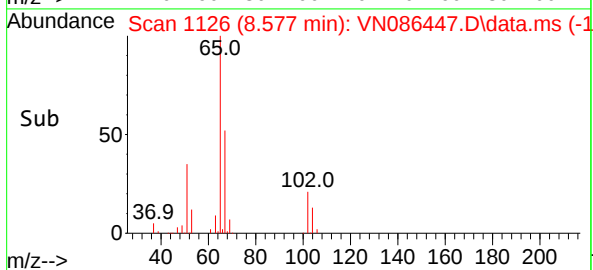
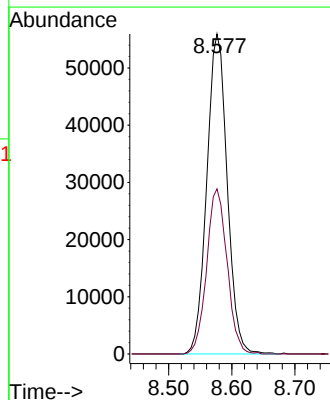
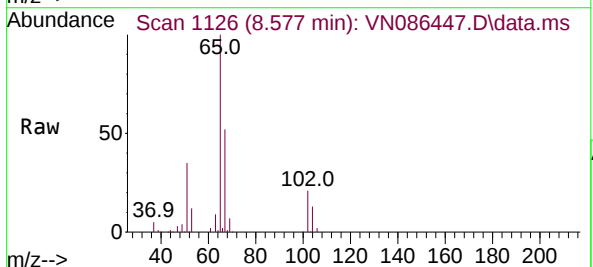
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

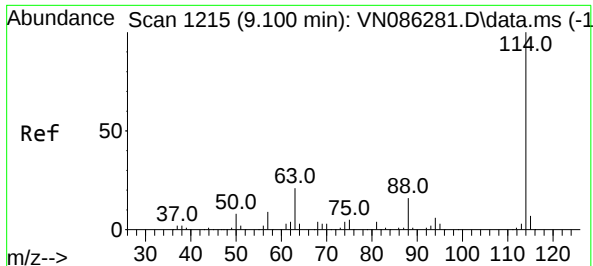
Tgt Ion: 56 Resp: 3992  
Ion Ratio Lower Upper  
56 100  
69 146.8 24.2 36.2#  
84 139.5 70.3 105.5#



#33  
1,2-Dichloroethane-d4  
Concen: 48.594 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 65 Resp: 125466  
Ion Ratio Lower Upper  
65 100  
67 51.6 0.0 106.0

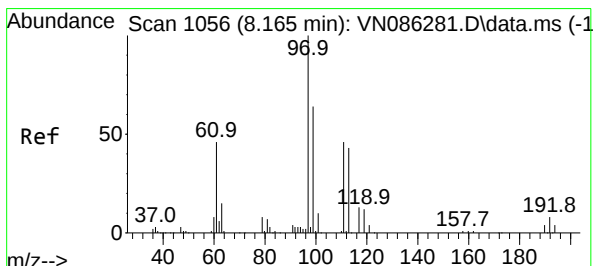
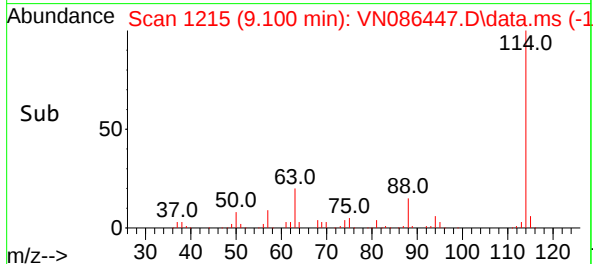
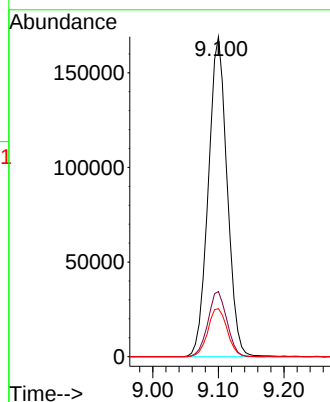
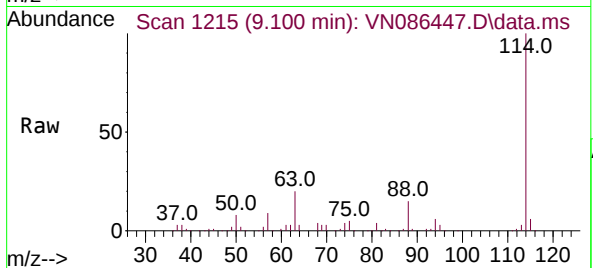




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

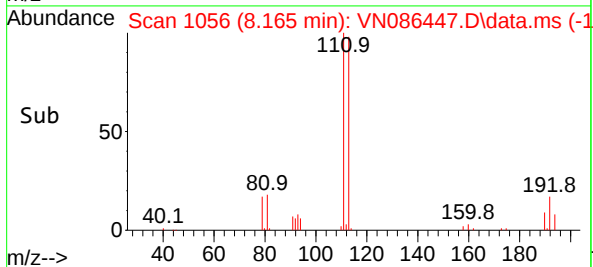
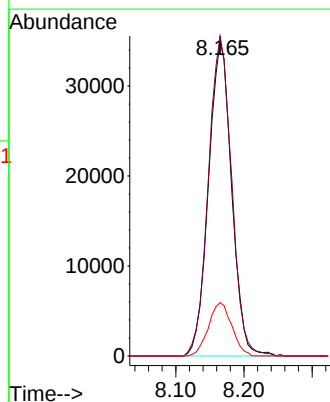
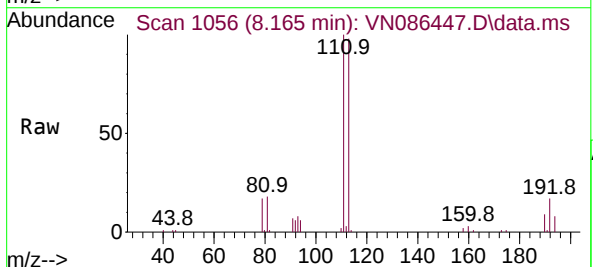
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

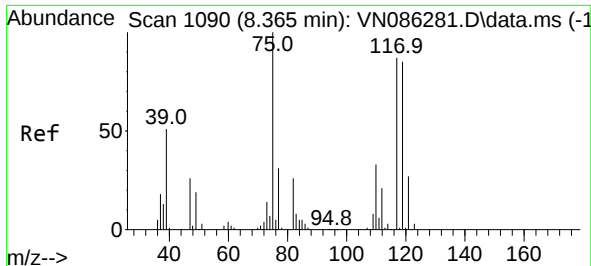
Tgt Ion:114 Resp: 336829  
Ion Ratio Lower Upper  
114 100  
63 20.4 0.0 42.6  
88 15.0 0.0 31.8



#35  
Dibromofluoromethane  
Concen: 52.653 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion:113 Resp: 82311  
Ion Ratio Lower Upper  
113 100  
111 102.3 83.4 125.0  
192 17.2 13.7 20.5





#36

1,1-Dichloropropene

Concen: 4.751 ug/l

RT: 8.218 min Scan# 1

Delta R.T. -0.147 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

Instrument :

MSVOA\_N

ClientSampleId :

PB167775ZHE#17

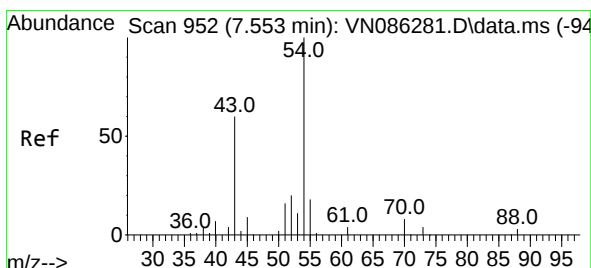
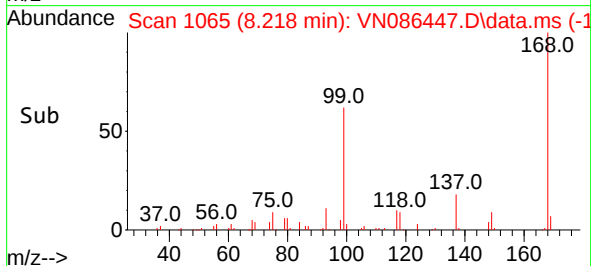
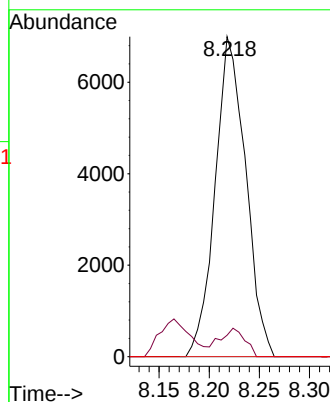
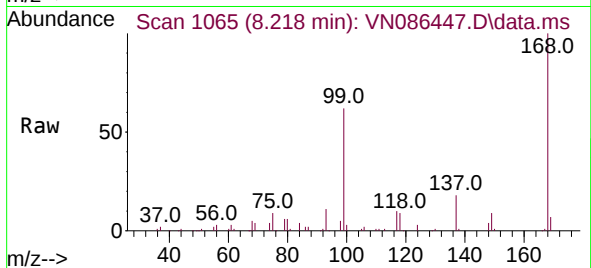
Tgt Ion: 75 Resp: 14833

Ion Ratio Lower Upper

75 100

110 7.1 16.8 50.4#

77 0.0 24.9 37.3#



#37

Ethyl Acetate

Concen: 10.919 ug/l

RT: 7.483 min Scan# 940

Delta R.T. -0.071 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

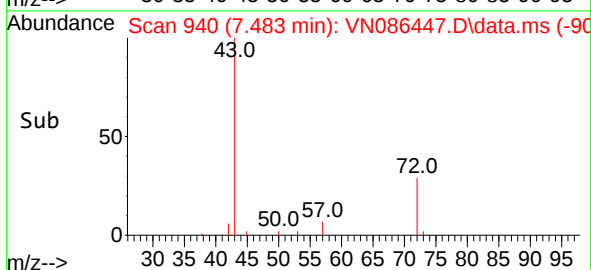
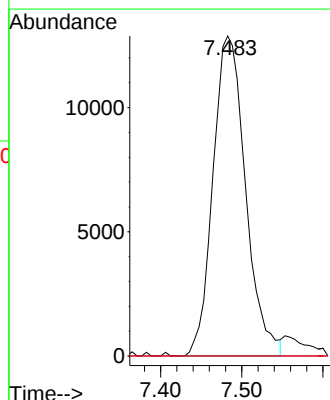
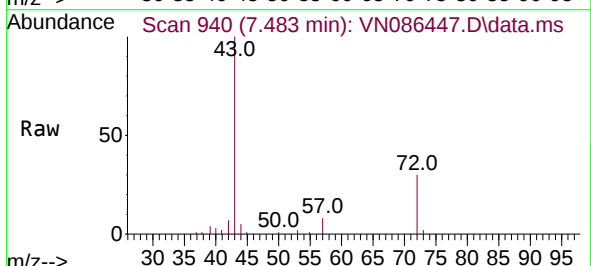
Tgt Ion: 43 Resp: 35894

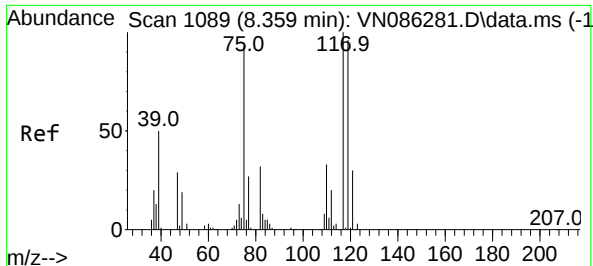
Ion Ratio Lower Upper

43 100

61 0.0 11.1 16.7#

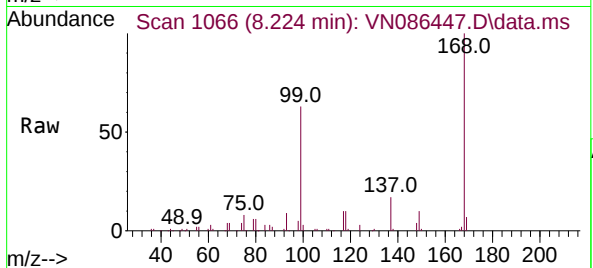
70 0.0 9.2 13.8#



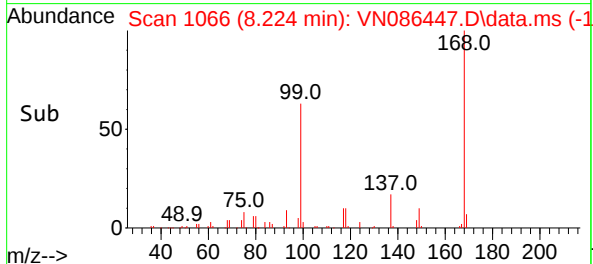
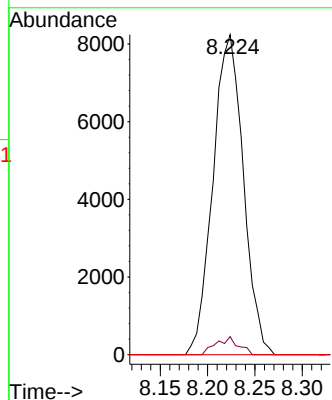


#38  
Carbon Tetrachloride  
Concen: 6.186 ug/l  
RT: 8.224 min Scan# 1106  
Delta R.T. -0.135 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

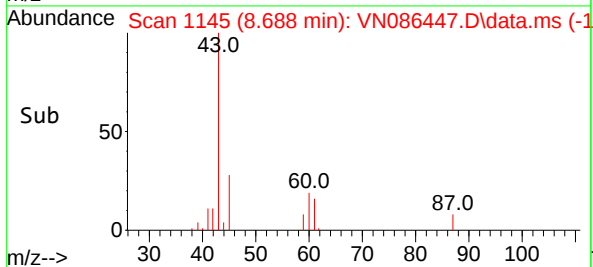
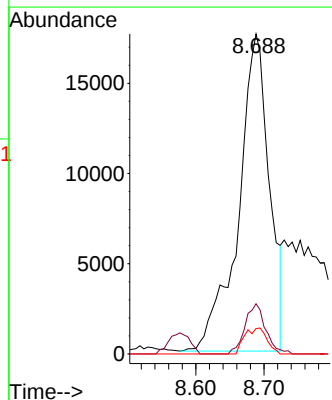
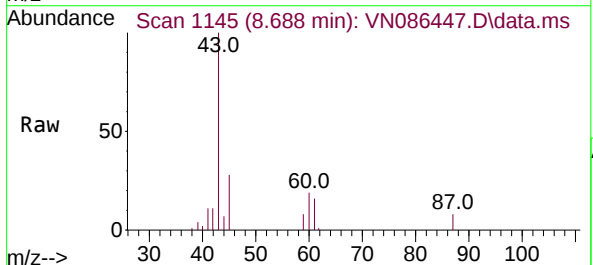


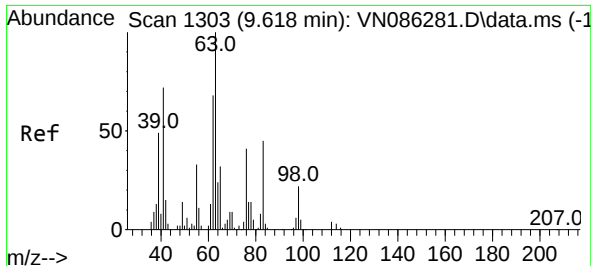
Tgt Ion:117 Resp: 18393  
Ion Ratio Lower Upper  
117 100  
119 5.7 76.8 115.2#  
121 0.0 23.8 35.8#



#43  
Isopropyl Acetate  
Concen: 7.629 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.005 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 43 Resp: 55187  
Ion Ratio Lower Upper  
43 100  
61 10.6 20.5 30.7#  
87 5.9 10.5 15.7#





#45

1,2-Dichloropropane

Concen: 0.382 ug/l

RT: 9.735 min Scan# 11

Delta R.T. 0.118 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

Instrument :

MSVOA\_N

ClientSampleId :

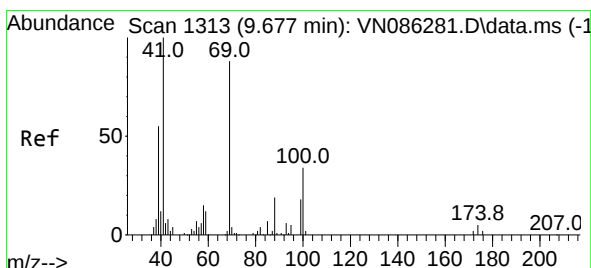
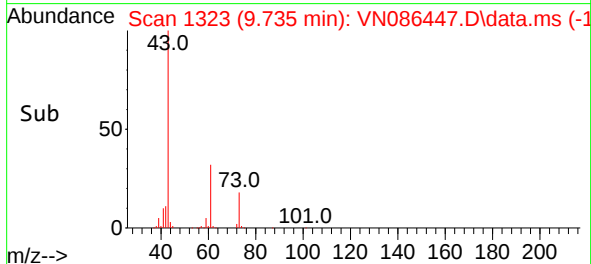
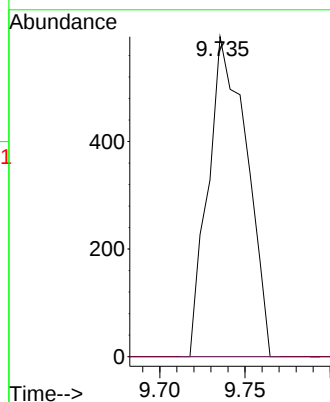
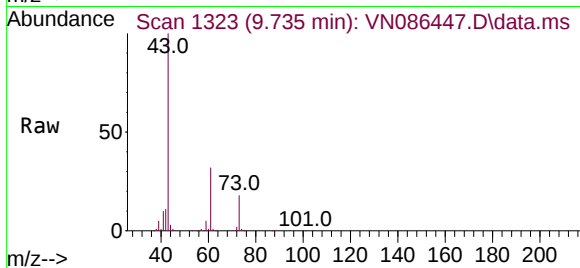
PB167775ZHE#17

Tgt Ion: 63 Resp: 936

Ion Ratio Lower Upper

63 100

65 0.0 25.4 38.2#



#48

Methyl methacrylate

Concen: 1.715 ug/l

RT: 9.653 min Scan# 1309

Delta R.T. -0.024 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

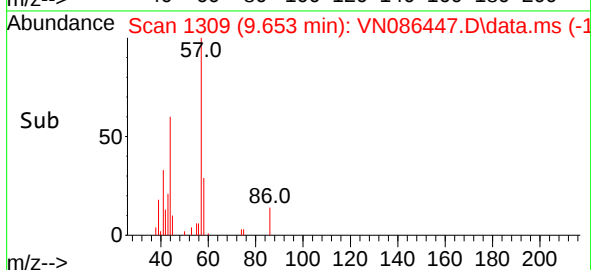
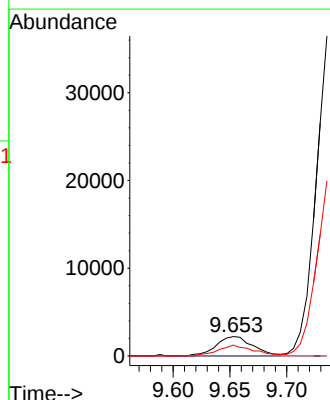
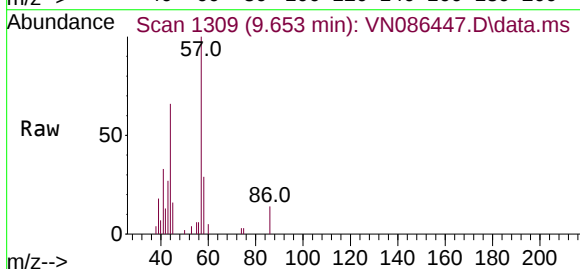
Tgt Ion: 41 Resp: 4951

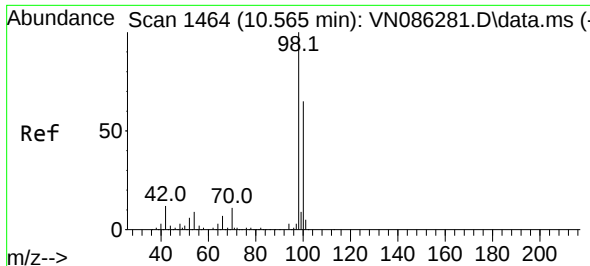
Ion Ratio Lower Upper

41 100

69 0.0 68.2 102.2#

39 53.8 45.2 67.8

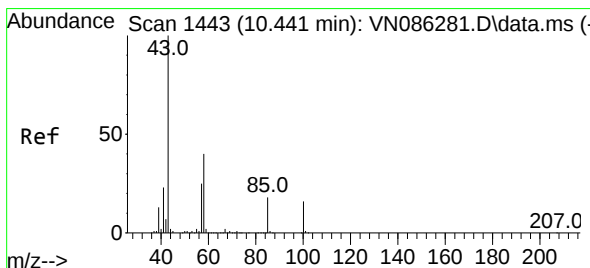
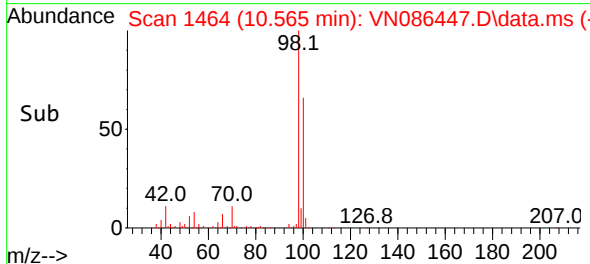
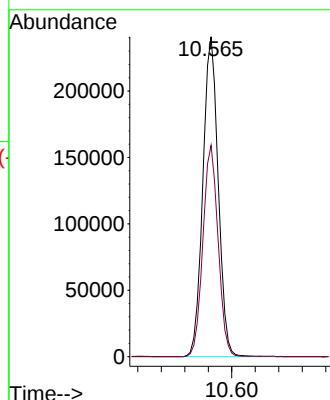
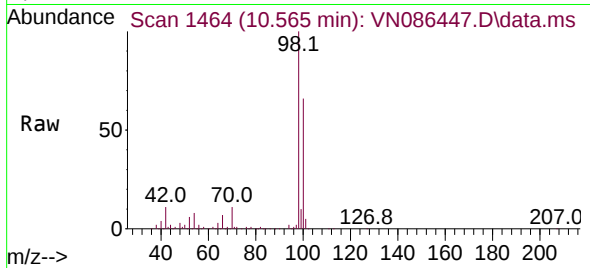




#50  
Toluene-d8  
Concen: 52.061 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

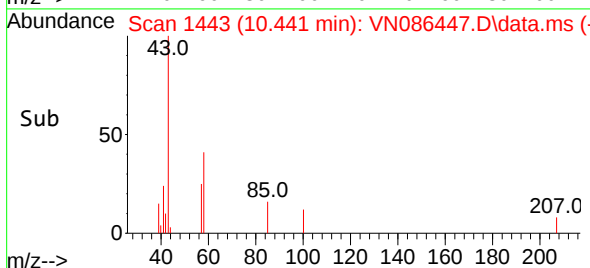
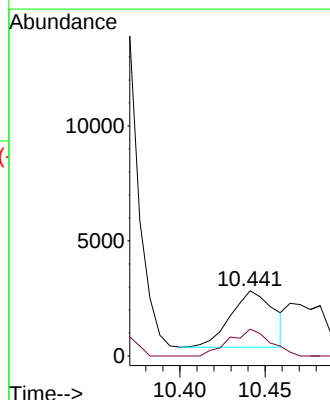
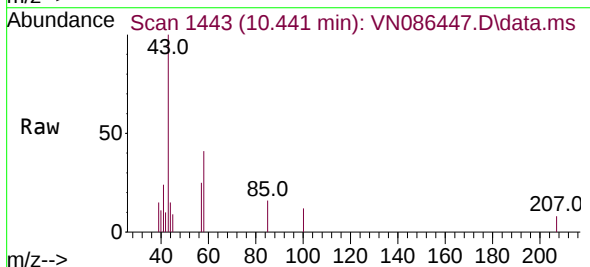
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

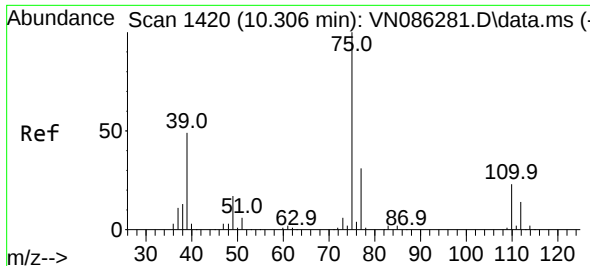
Tgt Ion: 98 Resp: 434966  
Ion Ratio Lower Upper  
98 100  
100 65.6 52.5 78.7



#51  
4-Methyl-2-Pentanone  
Concen: 1.290 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 43 Resp: 4343  
Ion Ratio Lower Upper  
43 100  
58 44.6 32.2 48.4

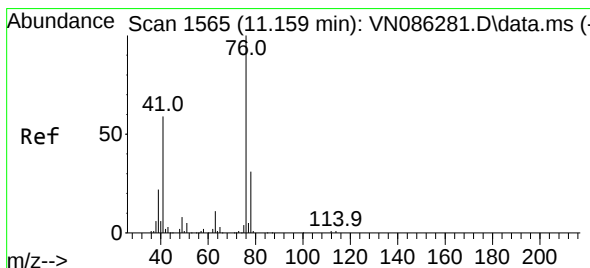
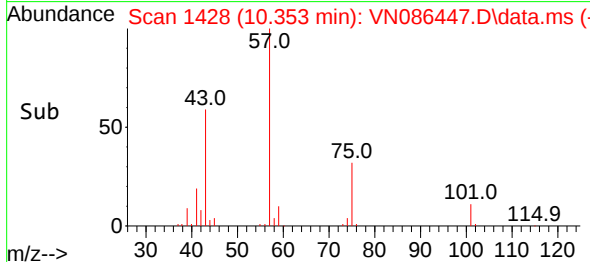
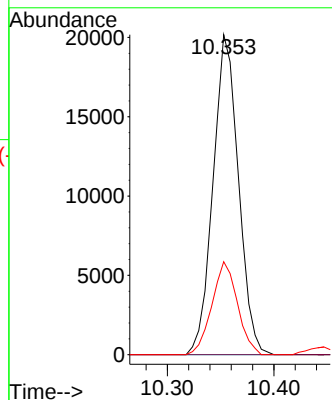
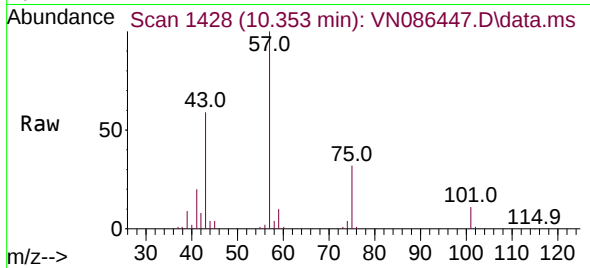




#54  
 cis-1,3-Dichloropropene  
 Concen: 8.070 ug/l  
 RT: 10.353 min Scan# 1428  
 Delta R.T. 0.047 min  
 Lab File: VN086447.D  
 Acq: 30 Apr 2025 19:31

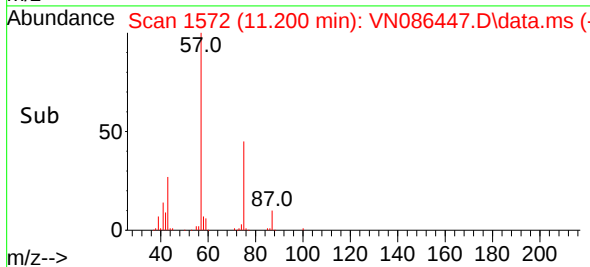
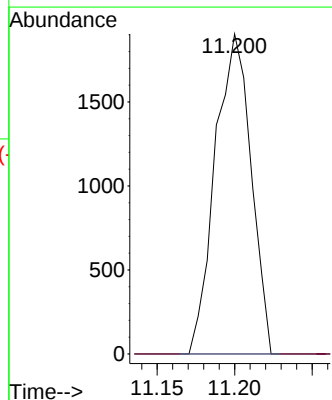
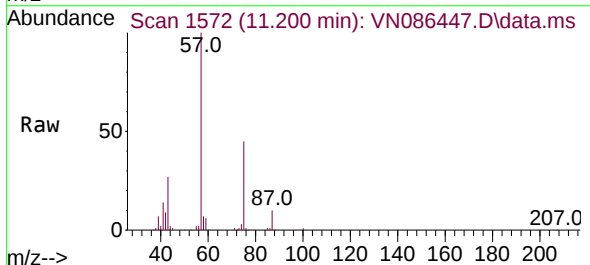
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167775ZHE#17

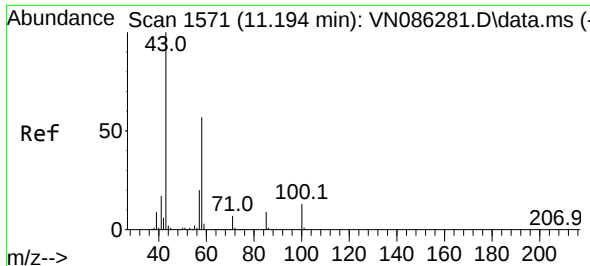
Tgt Ion: 75 Resp: 33344  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.2 37.8#  
 39 29.1 39.3 58.9#



#57  
 1,3-Dichloropropane  
 Concen: 0.769 ug/l  
 RT: 11.200 min Scan# 1572  
 Delta R.T. 0.041 min  
 Lab File: VN086447.D  
 Acq: 30 Apr 2025 19:31

Tgt Ion: 76 Resp: 3066  
 Ion Ratio Lower Upper  
 76 100  
 78 0.0 25.6 38.4#

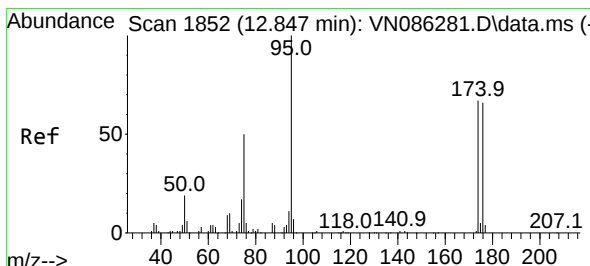
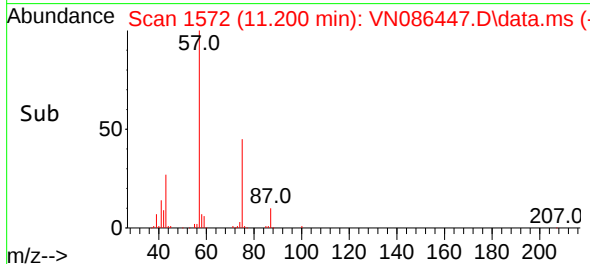
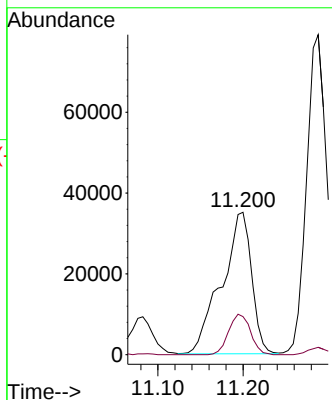
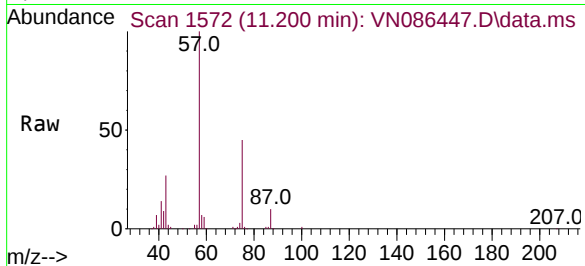




#59  
2-Hexanone  
Concen: 34.278 ug/l  
RT: 11.200 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

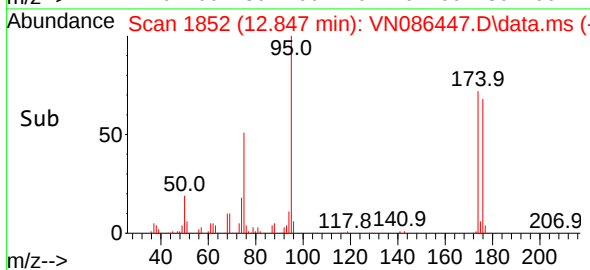
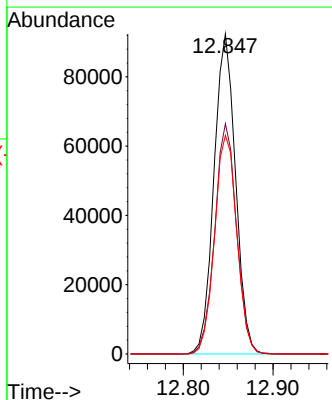
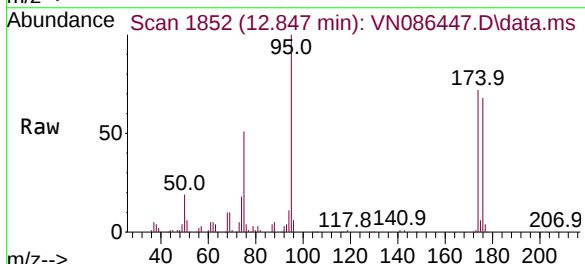
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

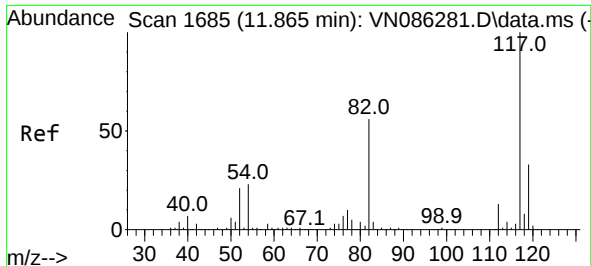
Tgt Ion: 43 Resp: 85583  
Ion Ratio Lower Upper  
43 100  
58 20.9 28.3 85.0#



#62  
4-Bromofluorobenzene  
Concen: 50.501 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 95 Resp: 153894  
Ion Ratio Lower Upper  
95 100  
174 72.7 0.0 133.4  
176 70.3 0.0 129.2

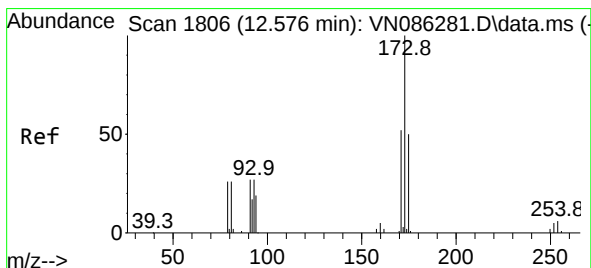
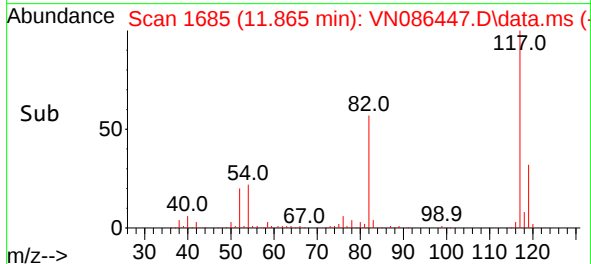
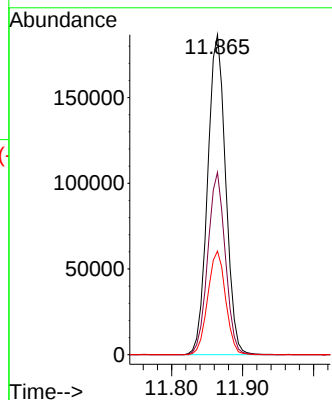
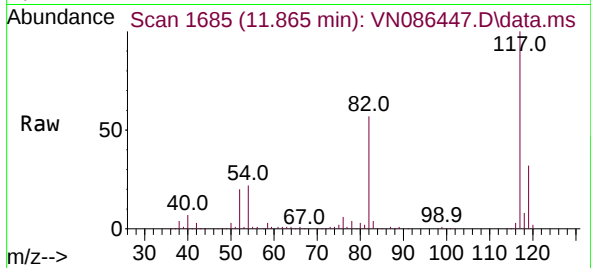




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

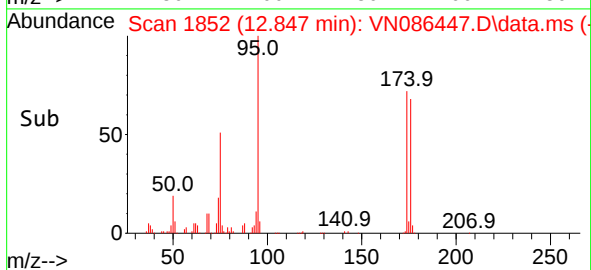
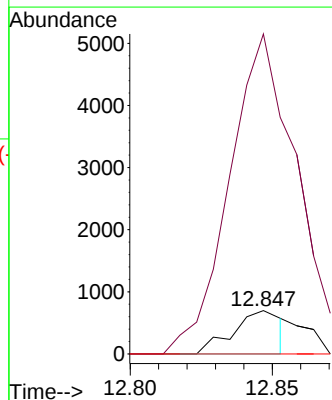
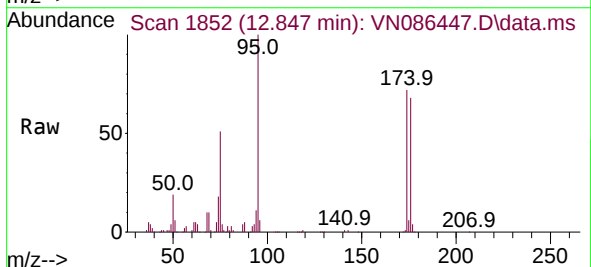
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

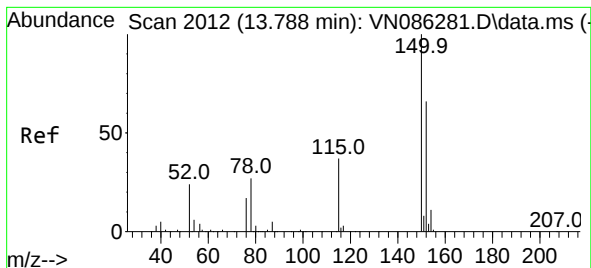
Tgt Ion:117 Resp: 329081  
Ion Ratio Lower Upper  
117 100  
82 57.0 44.7 67.1  
119 32.4 26.4 39.6



#71  
Bromoform  
Concen: 0.459 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.270 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion:173 Resp: 837  
Ion Ratio Lower Upper  
173 100  
175 773.7 24.6 73.6#  
254 0.0 0.0 0.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. -0.000 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

Instrument :

MSVOA\_N

ClientSampleId :

PB167775ZHE#17

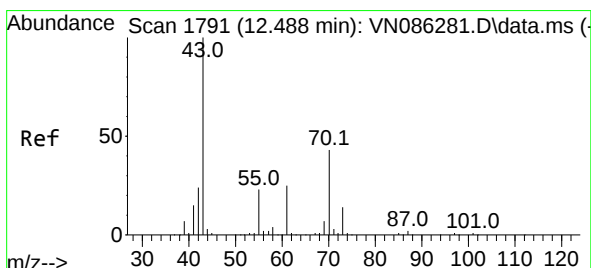
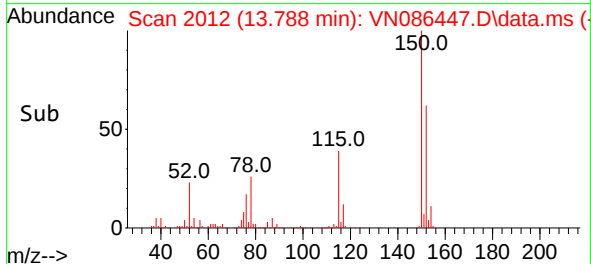
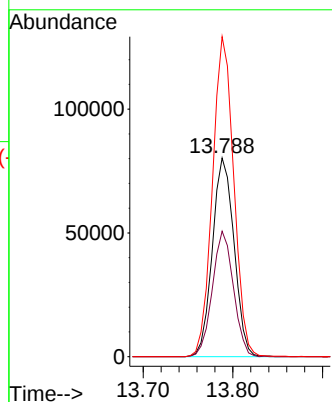
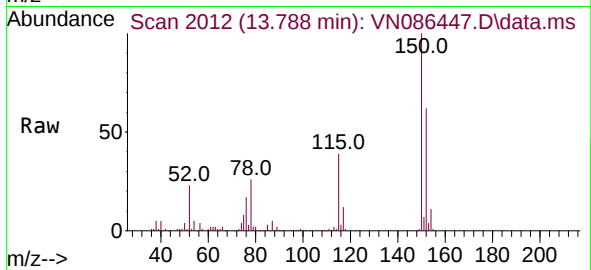
Tgt Ion:152 Resp: 134503

Ion Ratio Lower Upper

152 100

115 61.4 31.9 95.9

150 158.3 0.0 352.0



#74

N-ethyl acetate

Concen: 1.884 ug/l

RT: 12.453 min Scan# 1785

Delta R.T. -0.035 min

Lab File: VN086447.D

Acq: 30 Apr 2025 19:31

Tgt Ion: 43 Resp: 10317

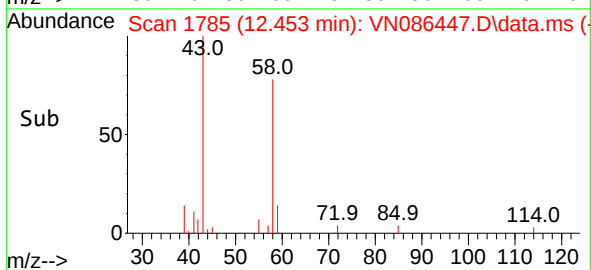
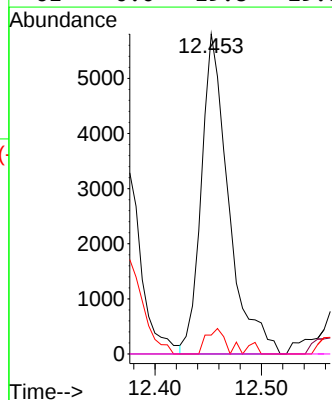
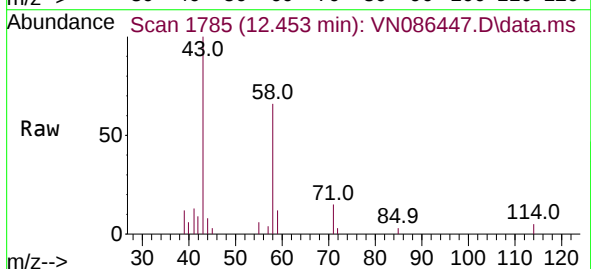
Ion Ratio Lower Upper

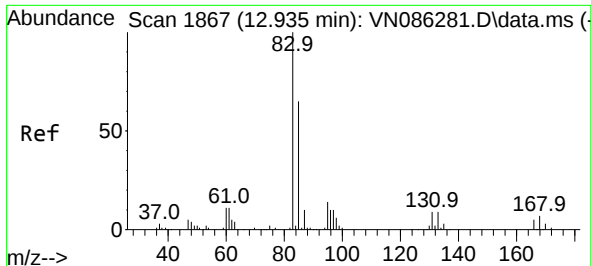
43 100

70 0.0 35.0 52.4#

55 5.7 19.0 28.4#

61 0.0 19.8 29.8#

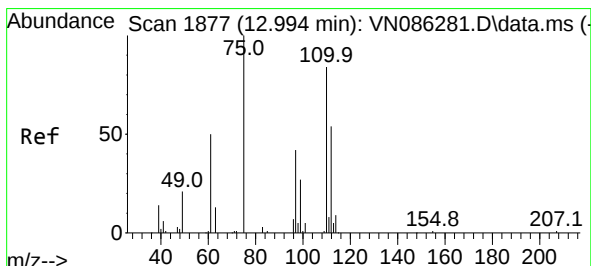
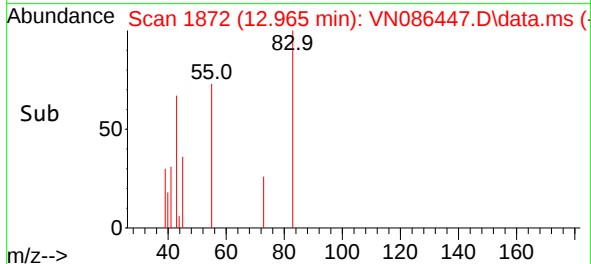
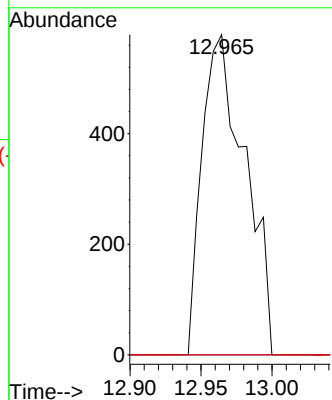
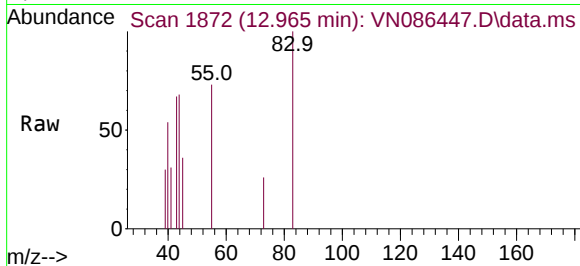




#75  
1,1,2,2-Tetrachloroethane  
Concen: 0.386 ug/l  
RT: 12.965 min Scan# 1872  
Delta R.T. 0.029 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

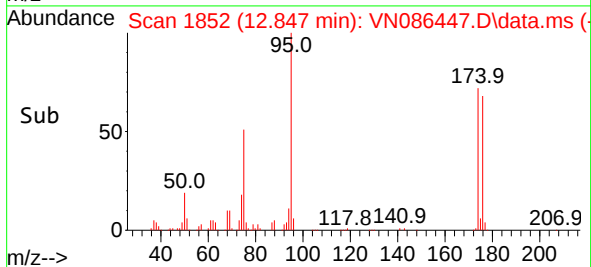
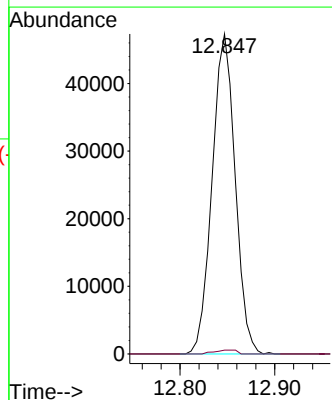
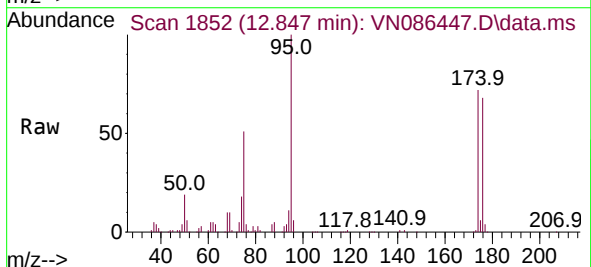
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167775ZHE#17

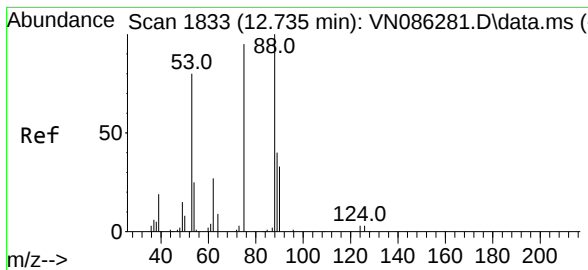
Tgt Ion: 83 Resp: 1220  
Ion Ratio Lower Upper  
83 100  
131 0.0 4.7 14.1#  
85 0.0 32.7 98.1#



#76  
1,2,3-Trichloropropane  
Concen: 25.217 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.147 min  
Lab File: VN086447.D  
Acq: 30 Apr 2025 19:31

Tgt Ion: 75 Resp: 80041  
Ion Ratio Lower Upper  
75 100  
77 1.2 98.8 296.4#





#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 60.562 ug/l  
 RT: 12.847 min Scan# 11  
 Delta R.T. 0.112 min  
 Lab File: VN086447.D  
 Acq: 30 Apr 2025 19:31

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167775ZHE#17

Tgt Ion: 75 Resp: 80041  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 79.2 118.8#  
 89 0.0 35.7 53.5#

