

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN031925\  
 Data File : VN086014.D  
 Acq On : 19 Mar 2025 17:14  
 Operator : JC\MD  
 Sample : PB167194ZHE#04  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167194ZHE#04

Quant Time: Mar 20 01:34:38 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N031825W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 19 03:20:56 2025  
 Response via : Initial Calibration

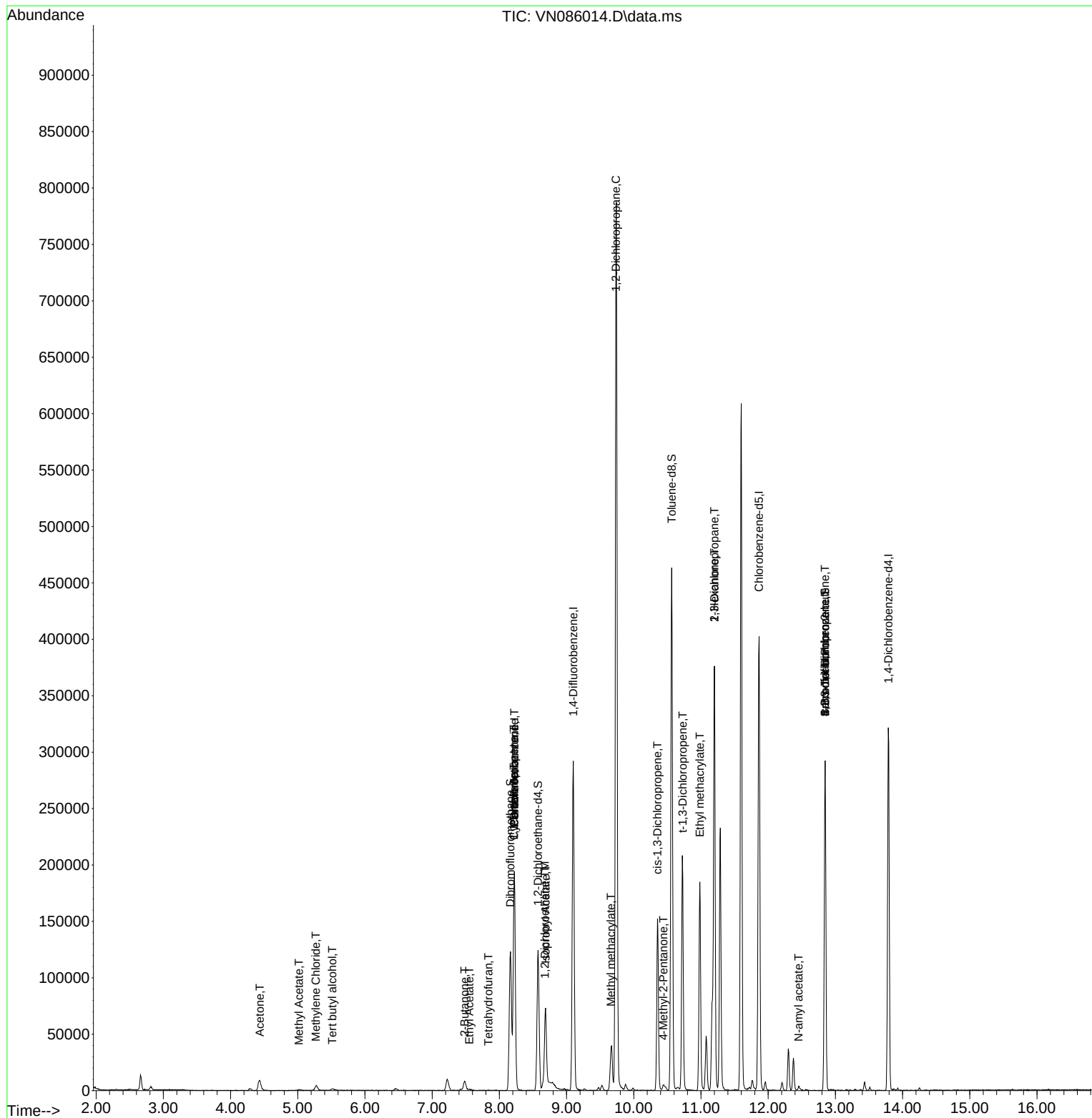
| Compound                      | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|------------|----------|
| Internal Standards            |        |       |          |          |            |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 139880   | 50.000   | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 251910   | 50.000   | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 243462   | 50.000   | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788 | 152   | 92960    | 50.000   | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |          |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.577  | 65    | 105080   | 54.860   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery | = 109.720% |          |
| 35) Dibromofluoromethane      | 8.165  | 113   | 88435    | 50.296   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | = 100.600% |          |
| 50) Toluene-d8                | 10.565 | 98    | 325939   | 51.076   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery | = 102.160% |          |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 100322   | 44.082   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery | = 88.160%  |          |
| Target Compounds              |        |       |          |          |            | Qvalue   |
| 11) Tert butyl alcohol        | 5.512  | 59    | 3086     | 11.379   | ug/l #     | 73       |
| 16) Acetone                   | 4.436  | 43    | 17639    | 30.143   | ug/l       | 95       |
| 18) Methyl Acetate            | 5.018  | 43    | 1202     | 0.830    | ug/l #     | 54       |
| 20) Methylene Chloride        | 5.271  | 84    | 3616     | 2.112    | ug/l #     | 78       |
| 25) 2-Butanone                | 7.483  | 43    | 13854    | 16.407   | ug/l       | 91       |
| 29) Tetrahydrofuran           | 7.835  | 42    | 105      | 0.201    | ug/l #     | 24       |
| 31) Cyclohexane               | 8.218  | 56    | 3113     | 1.304    | ug/l #     | 21       |
| 36) 1,1-Dichloropropene       | 8.218  | 75    | 11561    | 4.993    | ug/l #     | 49       |
| 37) Ethyl Acetate             | 7.553  | 43    | 2282     | 1.168    | ug/l #     | 72       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 15130    | 4.970    | ug/l #     | 16       |
| 42) 1,2-Dichloroethane        | 8.677  | 62    | 553      | 0.218    | ug/l #     | 74       |
| 43) Isopropyl Acetate         | 8.688  | 43    | 81448    | 19.243   | ug/l #     | 85       |
| 45) 1,2-Dichloropropane       | 9.735  | 63    | 1083     | 0.655    | ug/l #     | 44       |
| 48) Methyl methacrylate       | 9.659  | 41    | 3196     | 2.288    | ug/l #     | 32       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43    | 2886     | 1.546    | ug/l       | 99       |
| 53) t-1,3-Dichloropropene     | 10.729 | 75    | 591      | 0.224    | ug/l #     | 43       |
| 54) cis-1,3-Dichloropropene   | 10.353 | 75    | 30182    | 10.841   | ug/l #     | 67       |
| 56) Ethyl methacrylate        | 10.982 | 69    | 1391     | 0.835    | ug/l #     | 1        |
| 57) 1,3-Dichloropropane       | 11.200 | 76    | 4050     | 1.401    | ug/l #     | 42       |
| 59) 2-Hexanone                | 11.200 | 43    | 50637    | 37.237   | ug/l #     | 56       |
| 71) Bromoform                 | 12.847 | 173   | 889      | 0.514    | ug/l #     | 1        |
| 74) N-amyl acetate            | 12.453 | 43    | 3020     | 1.422    | ug/l #     | 39       |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 51530    | 24.760   | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 51530    | 65.461   | ug/l #     | 16       |

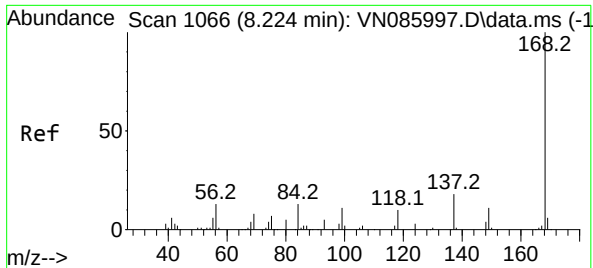
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Mar 19 03:20:56 2025  
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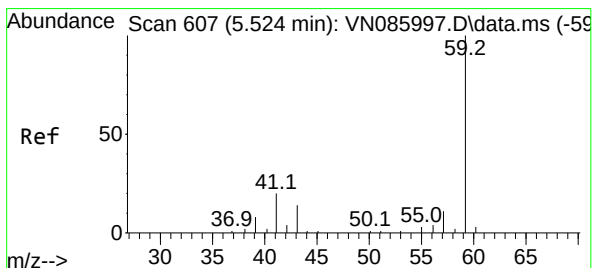
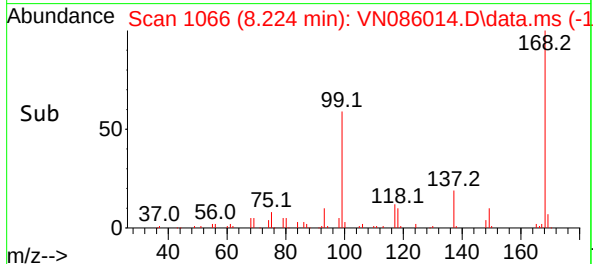
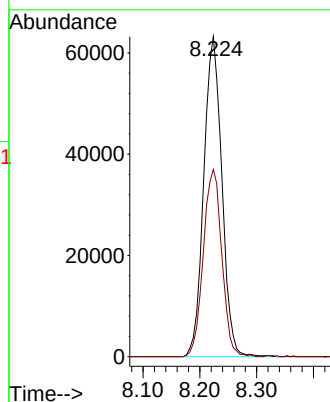
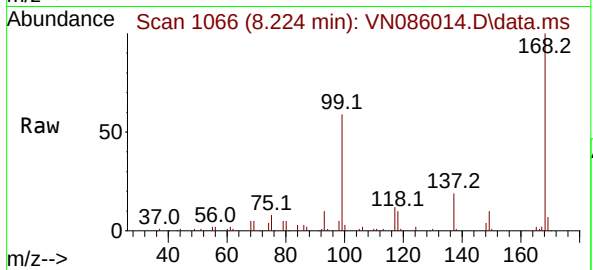




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

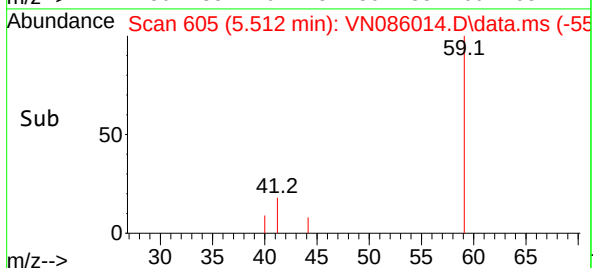
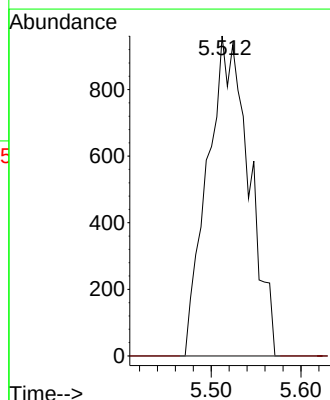
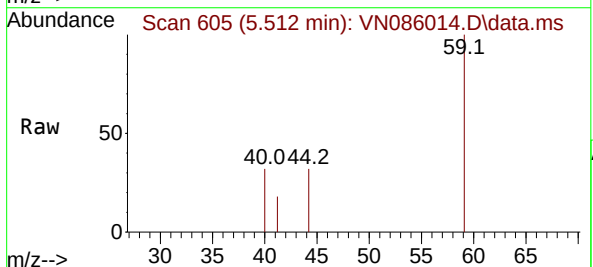
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

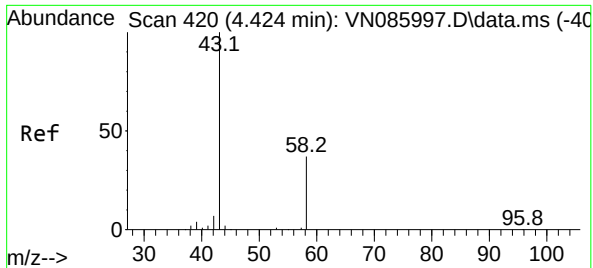
Tgt Ion:168 Resp: 139880  
Ion Ratio Lower Upper  
168 100  
99 58.6 49.4 74.2



#11  
Tert butyl alcohol  
Concen: 11.379 ug/l  
RT: 5.512 min Scan# 605  
Delta R.T. -0.012 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 59 Resp: 3086  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.9 11.9#





#16

Acetone

Concen: 30.143 ug/l

RT: 4.436 min Scan# 41

Delta R.T. 0.012 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

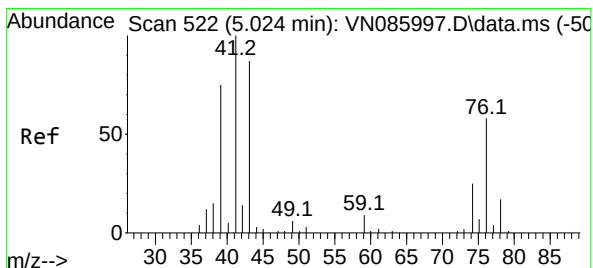
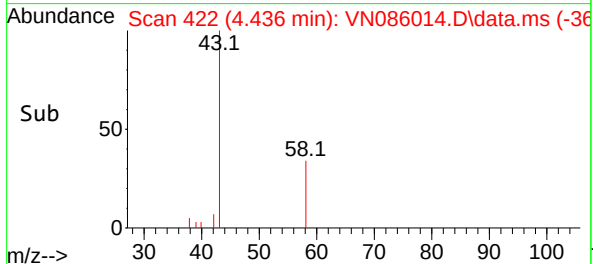
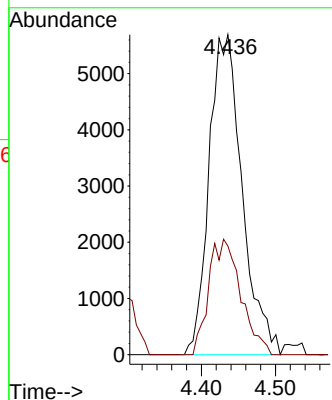
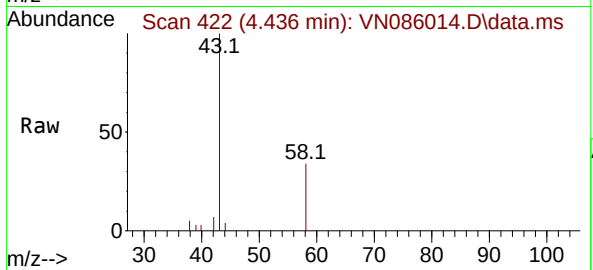
PB167194ZHE#04

Tgt Ion: 43 Resp: 17639

Ion Ratio Lower Upper

43 100

58 33.9 29.4 44.2



#18

Methyl Acetate

Concen: 0.830 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.006 min

Lab File: VN086014.D

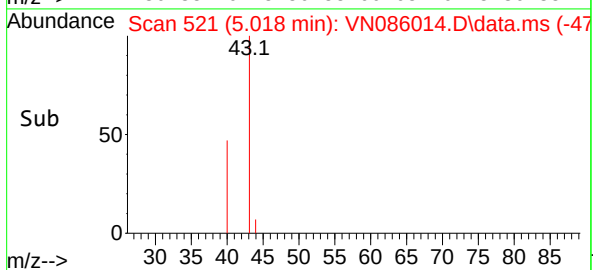
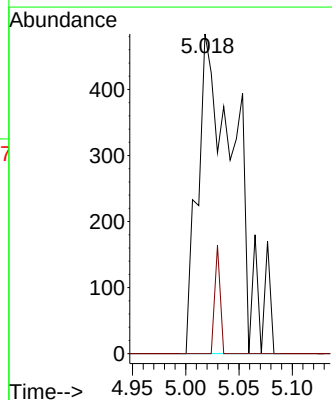
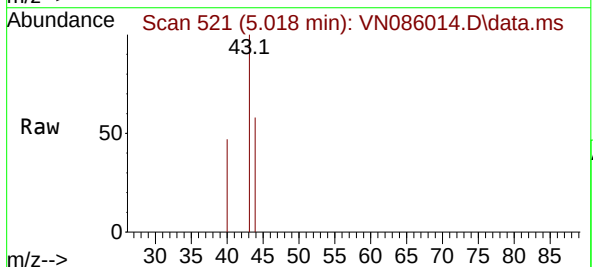
Acq: 19 Mar 2025 17:14

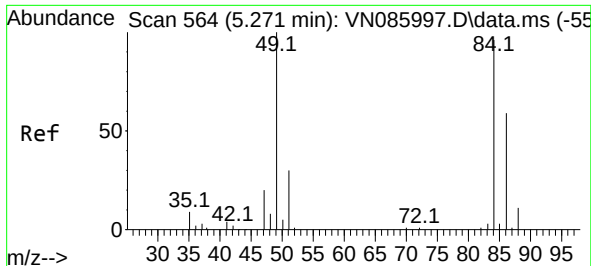
Tgt Ion: 43 Resp: 1202

Ion Ratio Lower Upper

43 100

74 4.8 23.9 35.9#

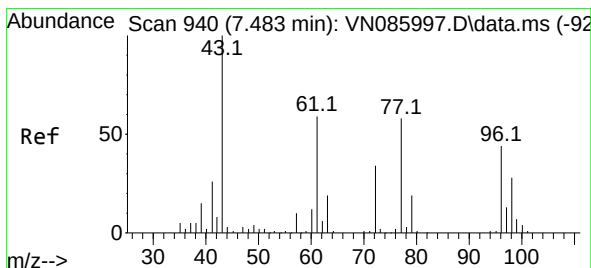
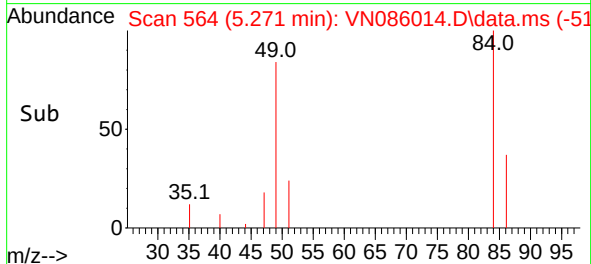
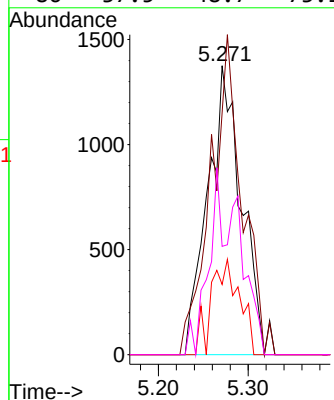
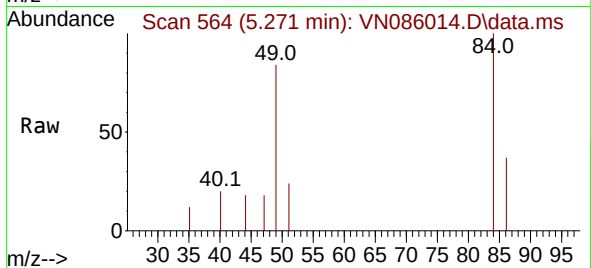




#20  
Methylene Chloride  
Concen: 2.112 ug/l  
RT: 5.271 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

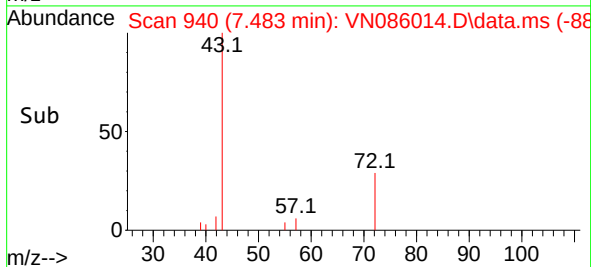
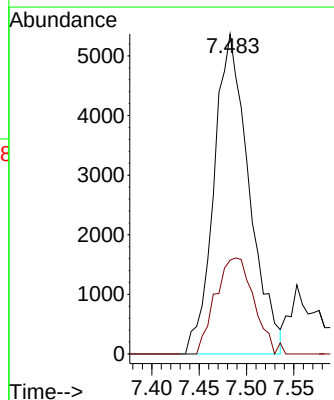
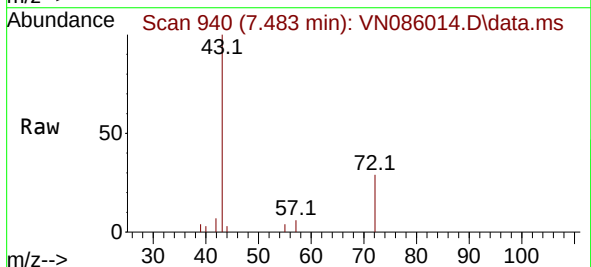
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

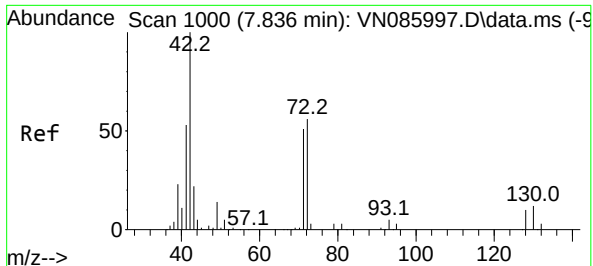
|             |             |
|-------------|-------------|
| Tgt Ion: 84 | Resp: 3616  |
| Ion Ratio   | Lower Upper |
| 84 100      |             |
| 49 83.7     | 83.3 124.9  |
| 51 24.3     | 24.8 37.2#  |
| 86 37.5     | 48.7 73.1#  |



#25  
2-Butanone  
Concen: 16.407 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 13854 |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 72 29.3     | 27.4 41.0   |





#29

Tetrahydrofuran

Concen: 0.201 ug/l

RT: 7.835 min Scan# 10

Delta R.T. -0.000 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

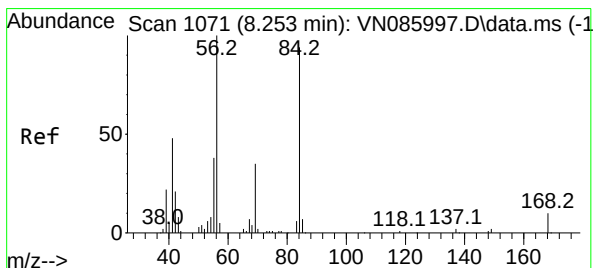
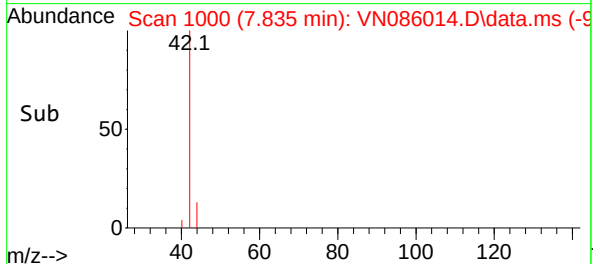
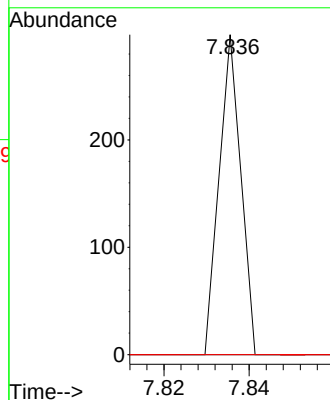
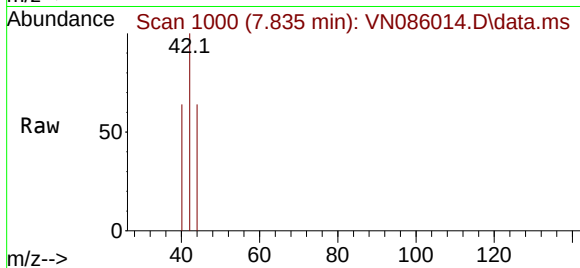
Instrument :

MSVOA\_N

ClientSampleId :

PB167194ZHE#04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 105   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 45.0  | 67.4# |
| 71       | 0.0   | 41.9  | 62.9# |



#31

Cyclohexane

Concen: 1.304 ug/l

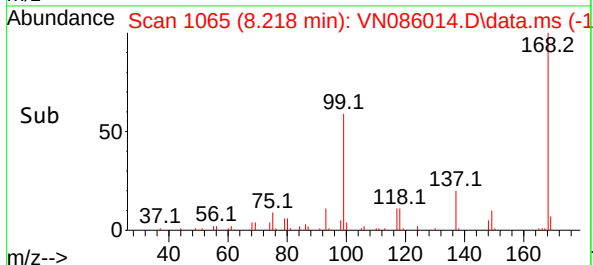
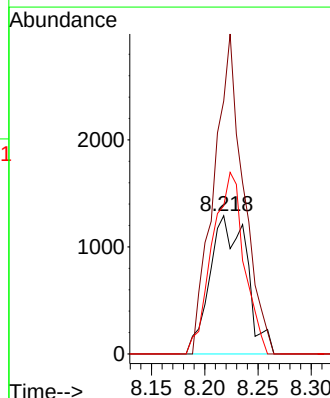
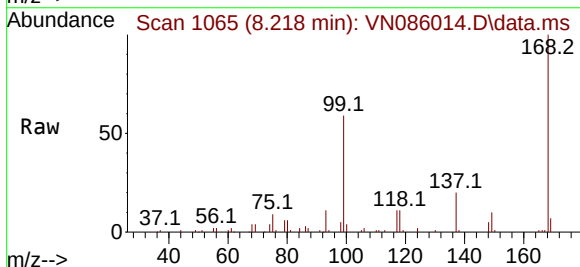
RT: 8.218 min Scan# 1065

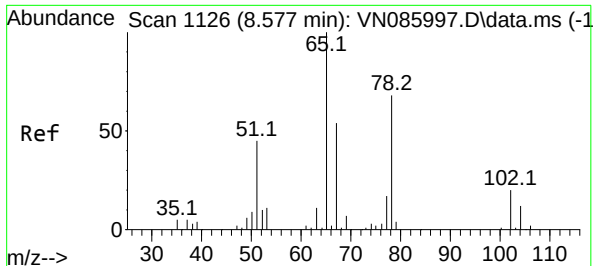
Delta R.T. -0.035 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 3113  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 183.0 | 28.0  | 42.0# |
| 84       | 107.2 | 75.0  | 112.6 |





#33

1,2-Dichloroethane-d4

Concen: 54.860 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

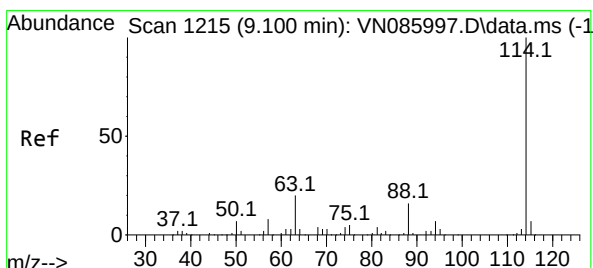
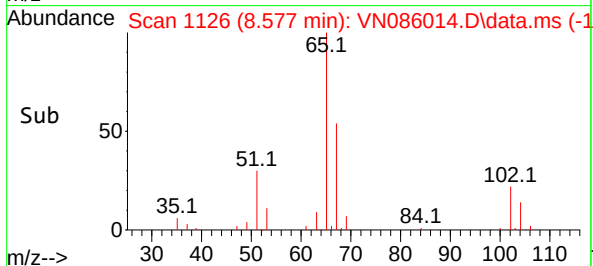
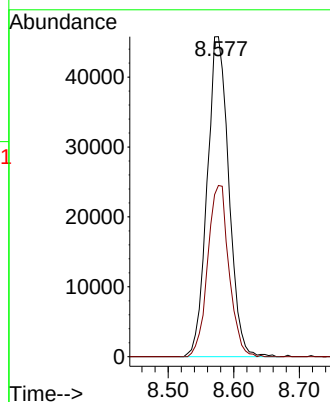
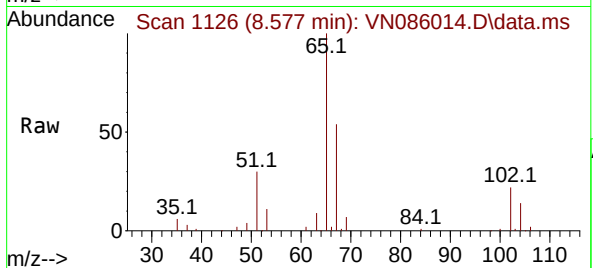
PB167194ZHE#04

Tgt Ion: 65 Resp: 105080

Ion Ratio Lower Upper

65 100

67 52.6 0.0 102.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

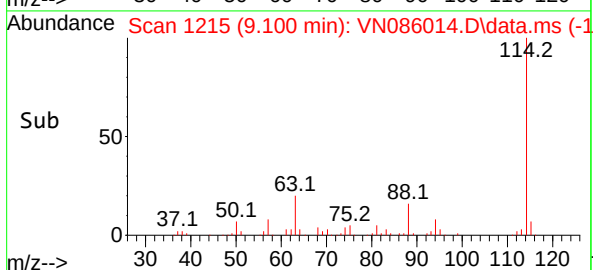
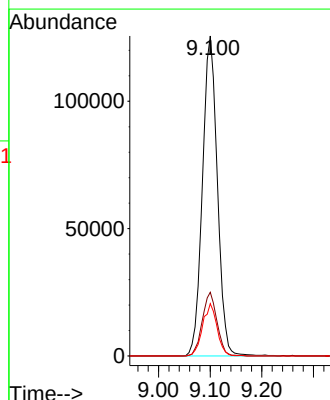
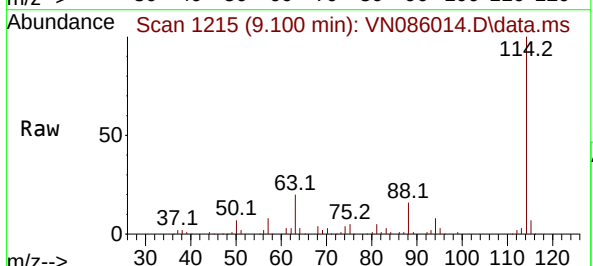
Tgt Ion: 114 Resp: 251910

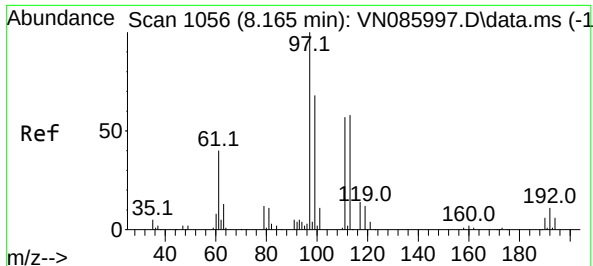
Ion Ratio Lower Upper

114 100

63 19.9 0.0 39.6

88 16.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 50.296 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

PB167194ZHE#04

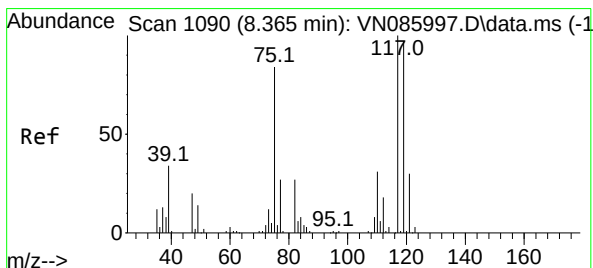
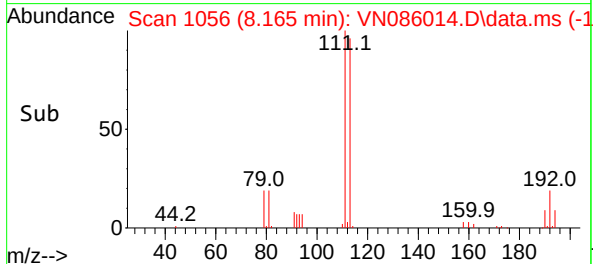
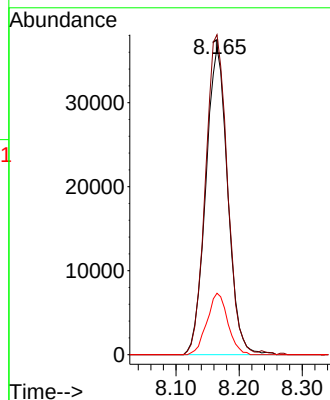
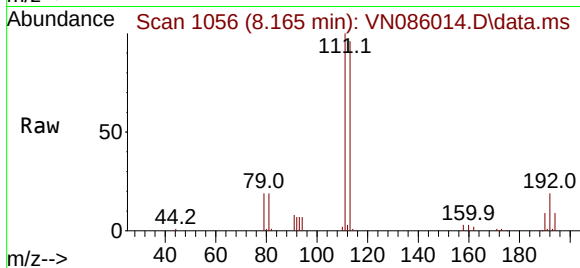
Tgt Ion:113 Resp: 88435

Ion Ratio Lower Upper

113 100

111 104.0 81.8 122.8

192 18.9 15.9 23.9



#36

1,1-Dichloropropene

Concen: 4.993 ug/l

RT: 8.218 min Scan# 1065

Delta R.T. -0.147 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

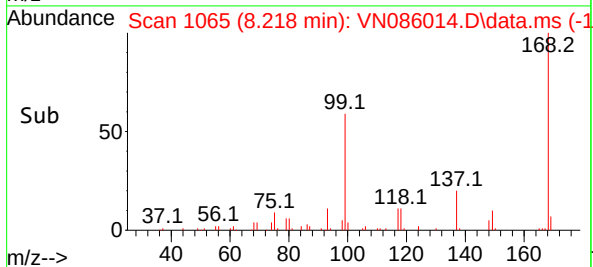
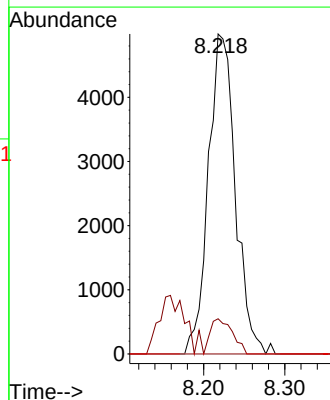
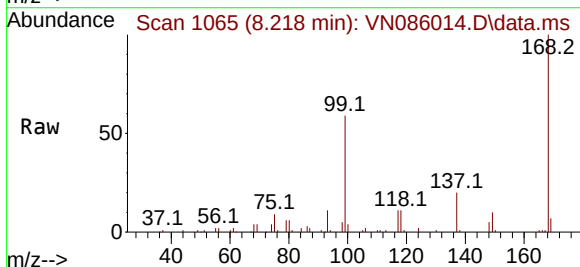
Tgt Ion: 75 Resp: 11561

Ion Ratio Lower Upper

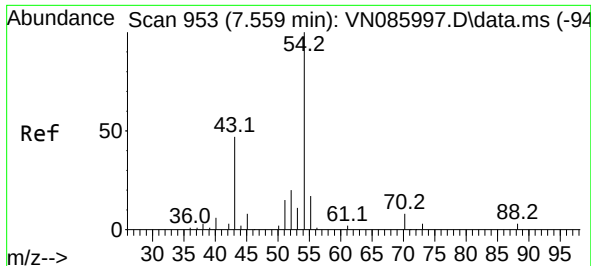
75 100

110 9.0 17.8 53.3#

77 0.0 25.0 37.4#



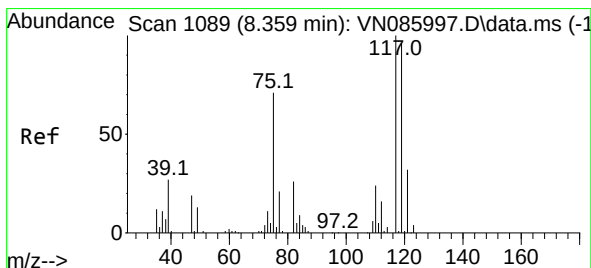
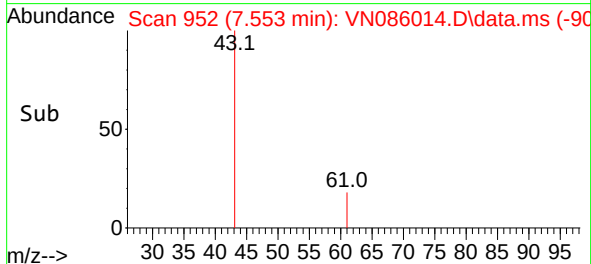
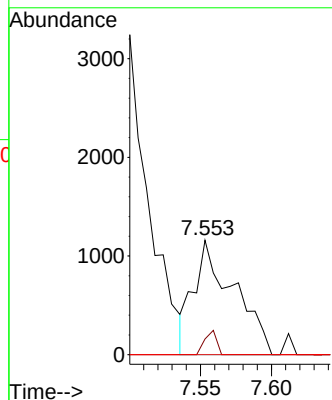
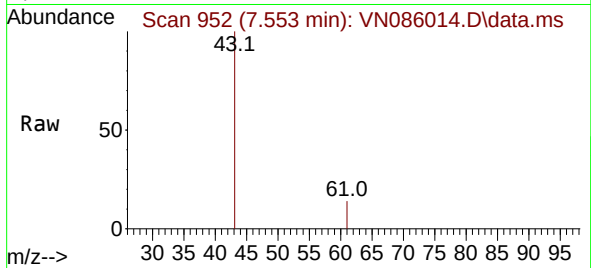




#37  
Ethyl Acetate  
Concen: 1.168 ug/l  
RT: 7.553 min Scan# 91  
Delta R.T. -0.006 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

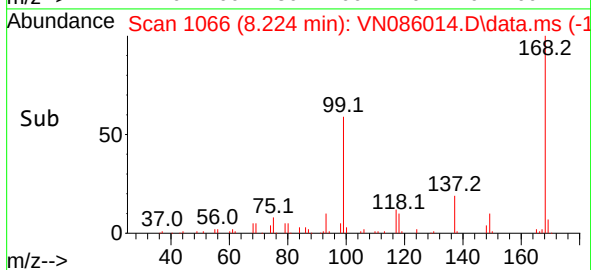
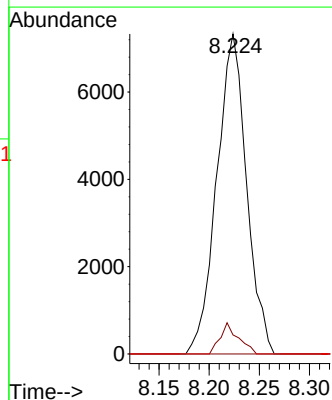
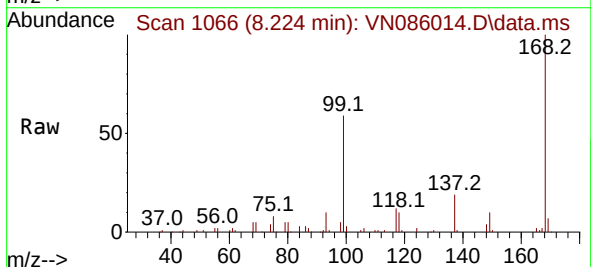
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

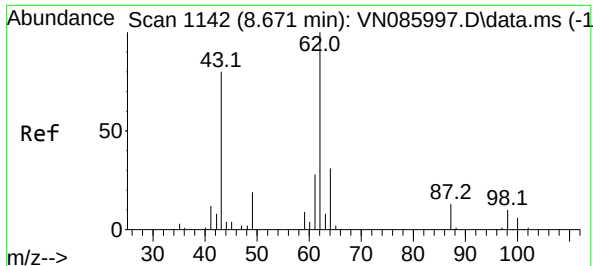
Tgt Ion: 43 Resp: 2282  
Ion Ratio Lower Upper  
43 100  
61 6.3 13.0 19.4#  
70 0.0 11.0 16.6#



#38  
Carbon Tetrachloride  
Concen: 4.970 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.135 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 117 Resp: 15130  
Ion Ratio Lower Upper  
117 100  
119 5.9 77.0 115.4#  
121 0.0 25.6 38.4#





#42

1,2-Dichloroethane

Concen: 0.218 ug/l

RT: 8.677 min Scan# 1143

Delta R.T. 0.006 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

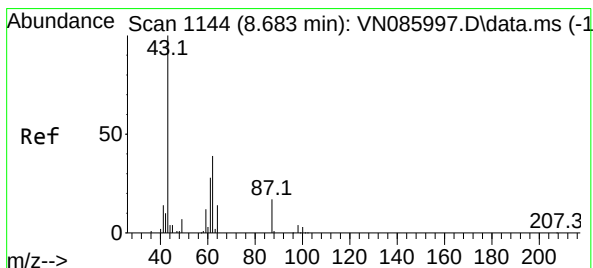
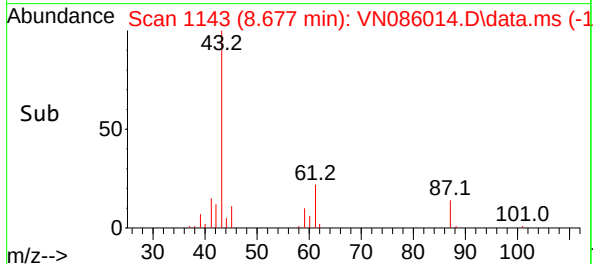
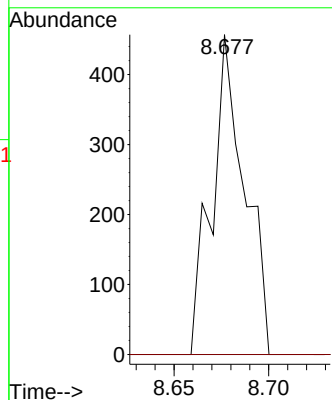
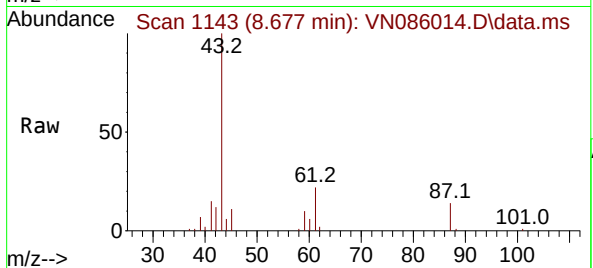
PB167194ZHE#04

Tgt Ion: 62 Resp: 553

Ion Ratio Lower Upper

62 100

98 0.0 0.0 18.6



#43

Isopropyl Acetate

Concen: 19.243 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.006 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

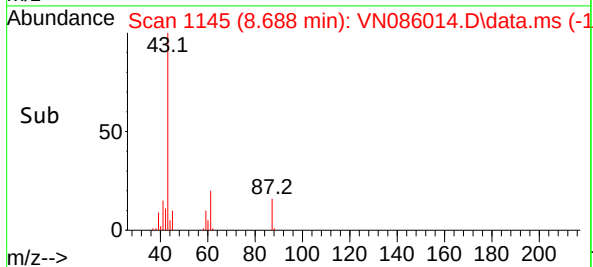
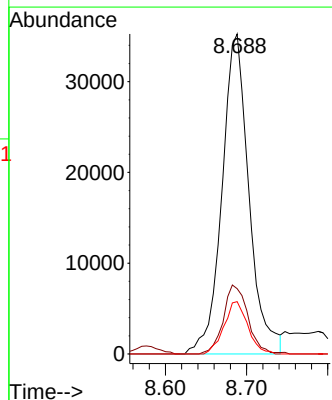
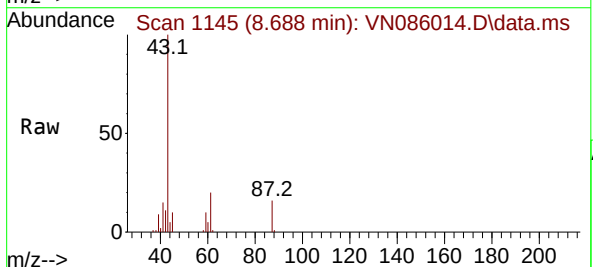
Tgt Ion: 43 Resp: 81448

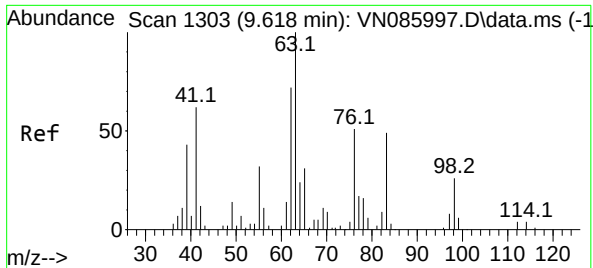
Ion Ratio Lower Upper

43 100

61 19.7 25.0 37.6#

87 14.4 13.0 19.4





#45

1,2-Dichloropropane

Concen: 0.655 ug/l

RT: 9.735 min Scan# 11

Delta R.T. 0.117 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

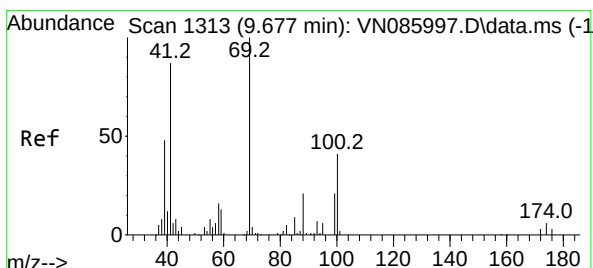
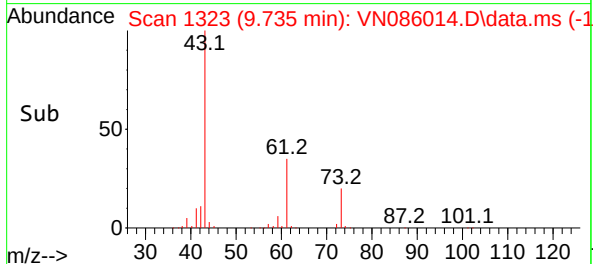
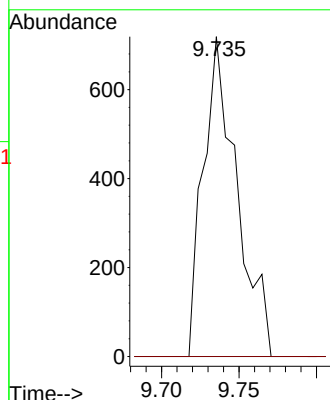
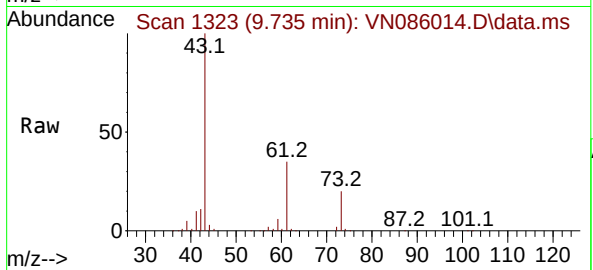
PB167194ZHE#04

Tgt Ion: 63 Resp: 1083

Ion Ratio Lower Upper

63 100

65 0.0 24.7 37.1#



#48

Methyl methacrylate

Concen: 2.288 ug/l

RT: 9.659 min Scan# 1310

Delta R.T. -0.018 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

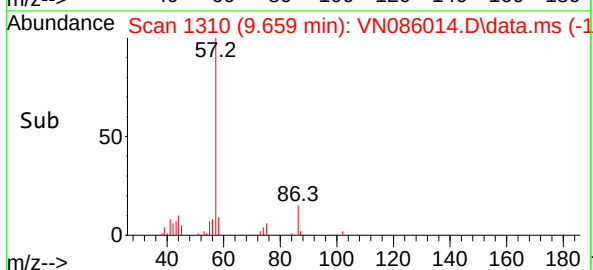
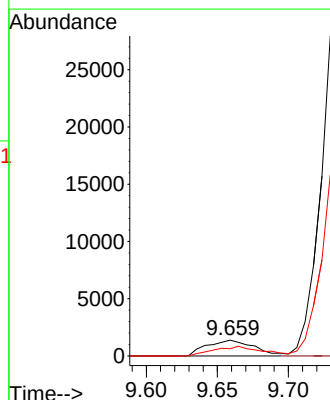
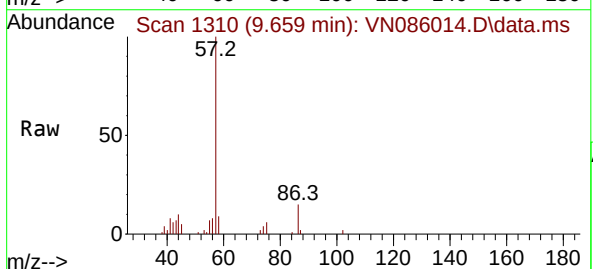
Tgt Ion: 41 Resp: 3196

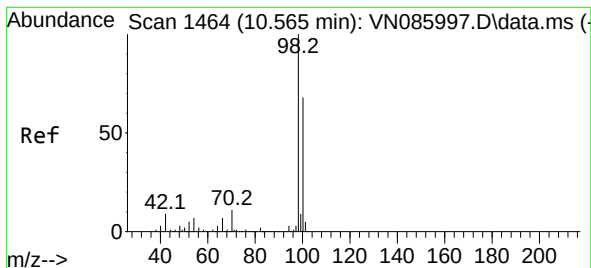
Ion Ratio Lower Upper

41 100

69 0.0 83.1 124.7#

39 62.5 45.6 68.4





#50

Toluene-d8

Concen: 51.076 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN086014.D

Acq: 19 Mar 2025 17:14

Instrument :

MSVOA\_N

ClientSampleId :

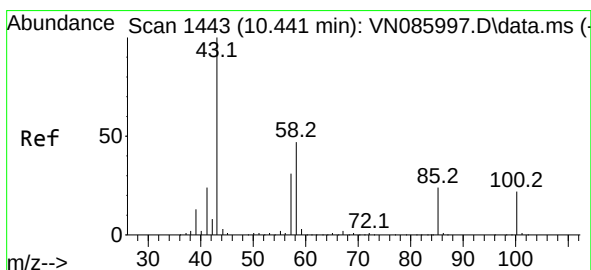
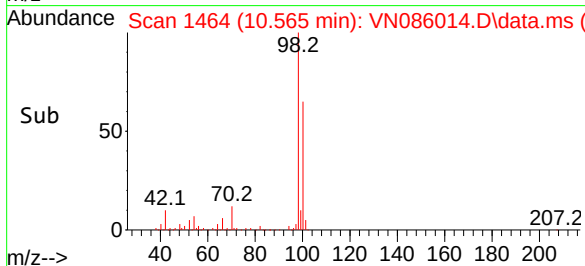
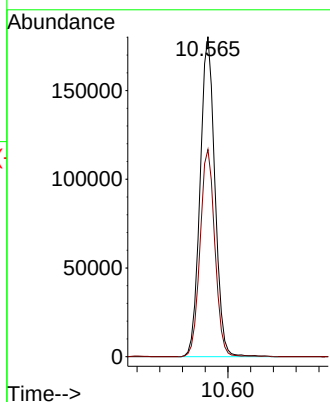
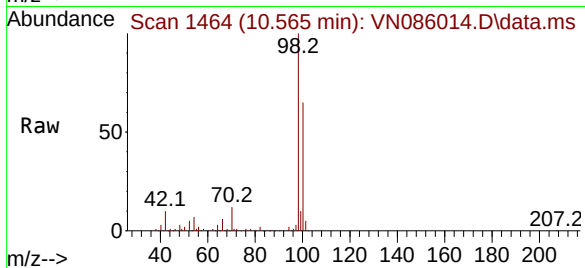
PB167194ZHE#04

Tgt Ion: 98 Resp: 325939

Ion Ratio Lower Upper

98 100

100 64.6 53.1 79.7



#51

4-Methyl-2-Pentanone

Concen: 1.546 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.000 min

Lab File: VN086014.D

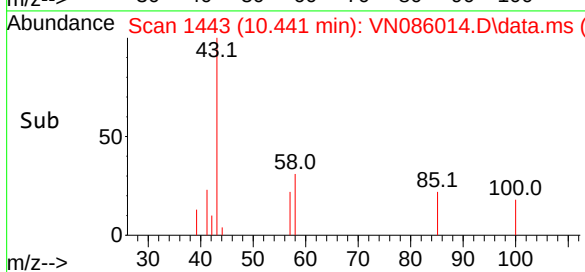
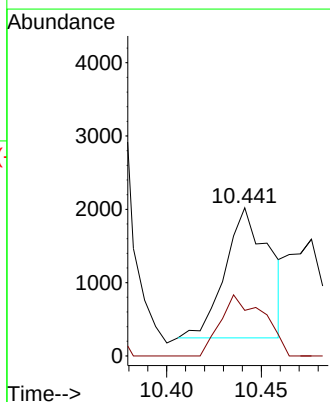
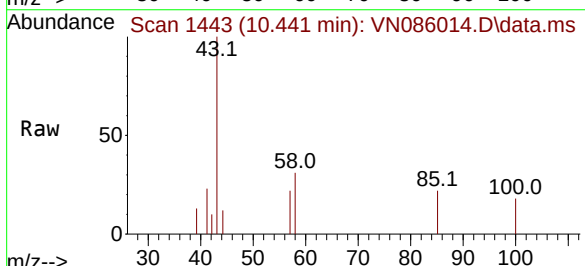
Acq: 19 Mar 2025 17:14

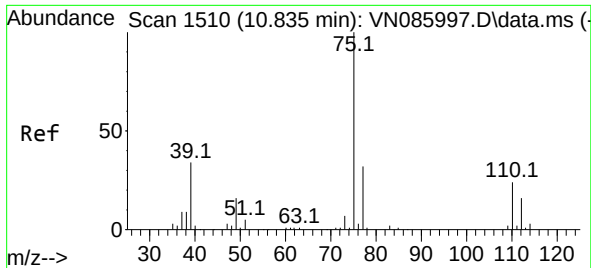
Tgt Ion: 43 Resp: 2886

Ion Ratio Lower Upper

43 100

58 45.8 37.4 56.0

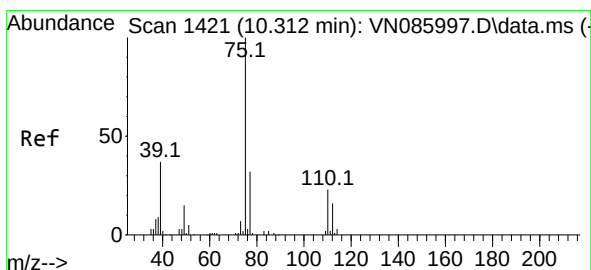
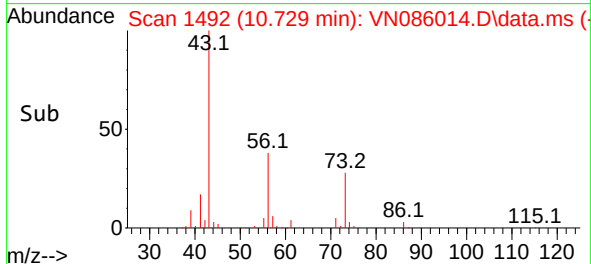
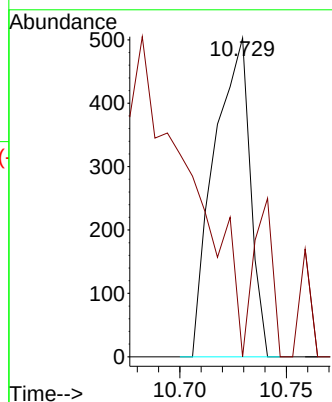
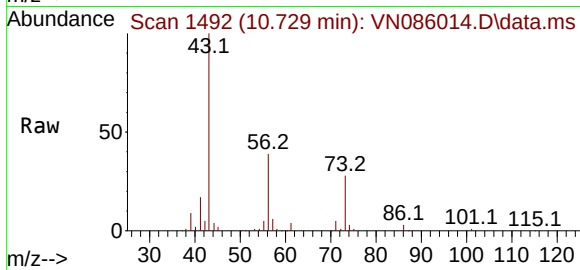




#53  
 t-1,3-Dichloropropene  
 Concen: 0.224 ug/l  
 RT: 10.729 min Scan# 1492  
 Delta R.T. -0.106 min  
 Lab File: VN086014.D  
 Acq: 19 Mar 2025 17:14

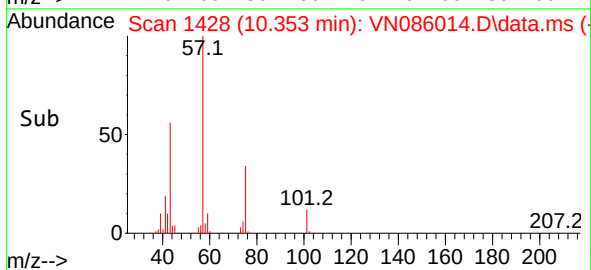
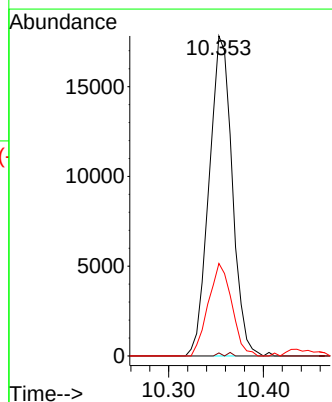
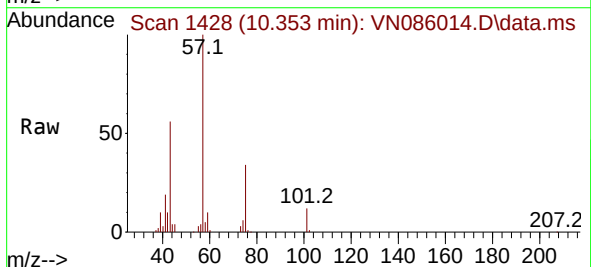
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167194ZHE#04

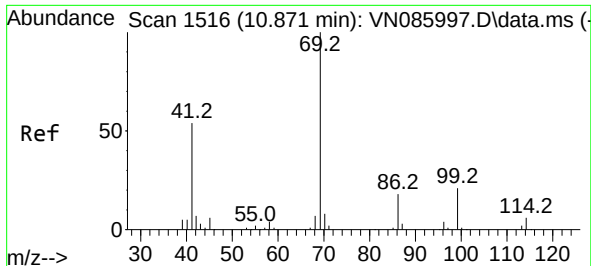
Tgt Ion: 75 Resp: 591  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.3 37.9#



#54  
 cis-1,3-Dichloropropene  
 Concen: 10.841 ug/l  
 RT: 10.353 min Scan# 1428  
 Delta R.T. 0.041 min  
 Lab File: VN086014.D  
 Acq: 19 Mar 2025 17:14

Tgt Ion: 75 Resp: 30182  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 25.3 37.9#  
 39 28.9 29.6 44.4#

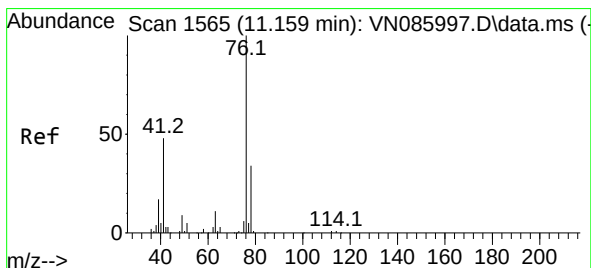
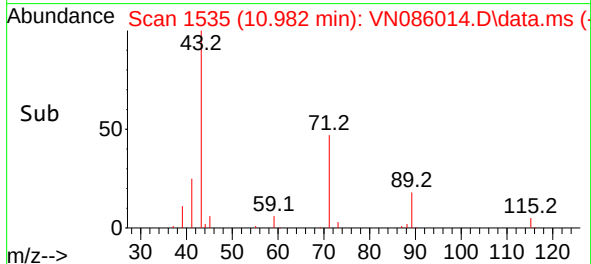
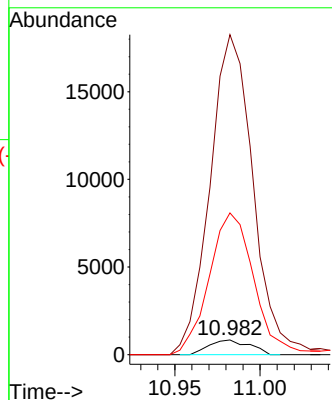
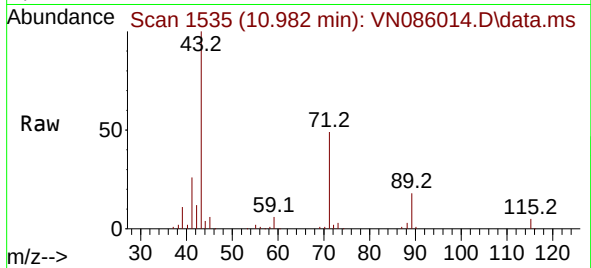




#56  
Ethyl methacrylate  
Concen: 0.835 ug/l  
RT: 10.982 min Scan# 1535  
Delta R.T. 0.111 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

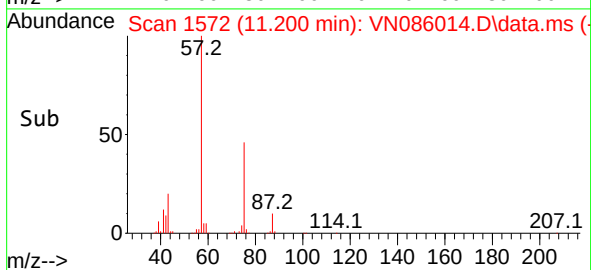
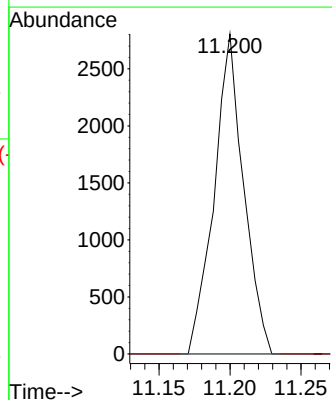
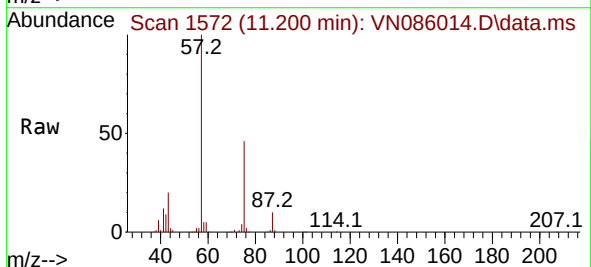
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

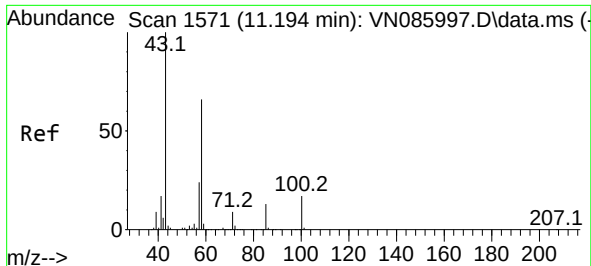
Tgt Ion: 69 Resp: 1391  
Ion Ratio Lower Upper  
69 100  
41 2325.4 41.6 62.4#  
39 1063.6 21.8 32.8#



#57  
1,3-Dichloropropane  
Concen: 1.401 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 76 Resp: 4050  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.8 38.6#

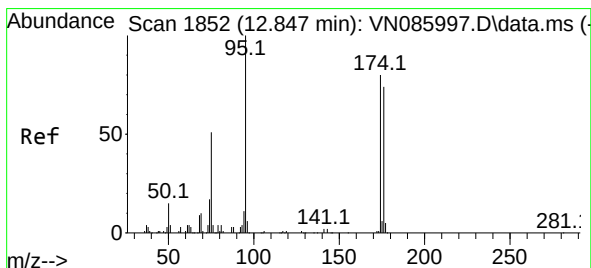
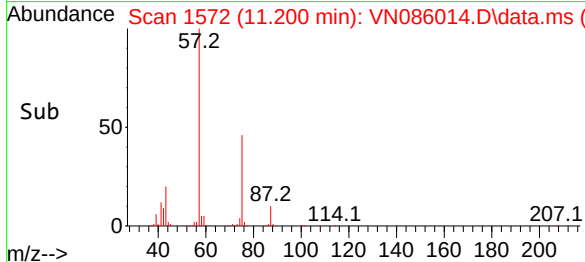
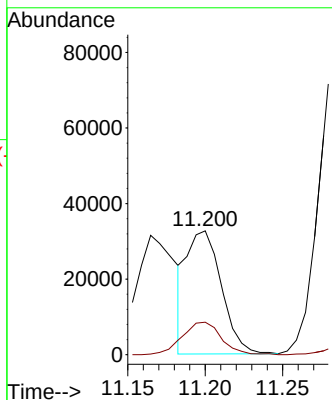
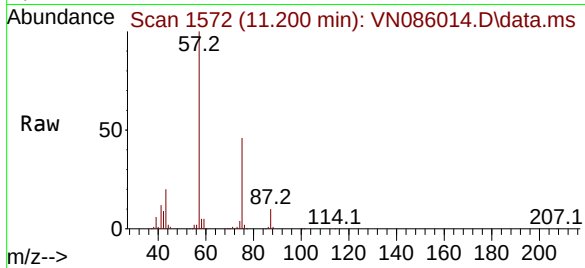




#59  
2-Hexanone  
Concen: 37.237 ug/l  
RT: 11.200 min Scan# 11572  
Delta R.T. 0.006 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

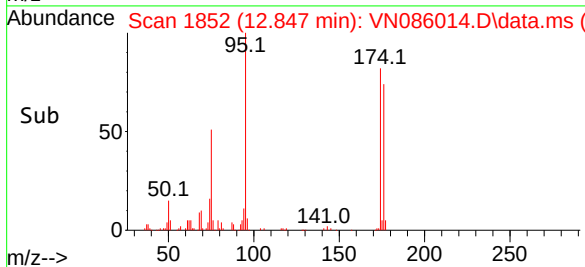
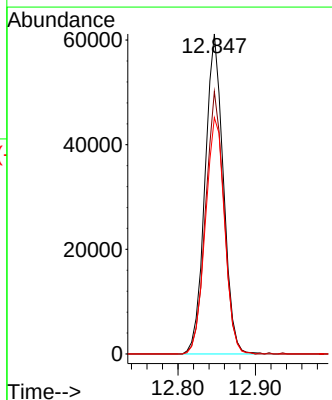
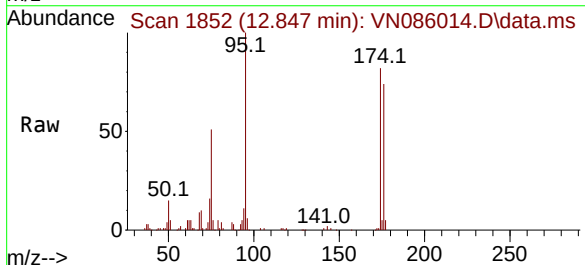
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

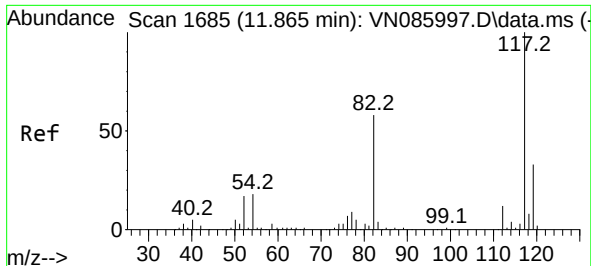
Tgt Ion: 43 Resp: 50637  
Ion Ratio Lower Upper  
43 100  
58 30.0 32.4 97.2#



#62  
4-Bromofluorobenzene  
Concen: 44.082 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 95 Resp: 100322  
Ion Ratio Lower Upper  
95 100  
174 82.2 0.0 156.8  
176 77.5 0.0 152.2

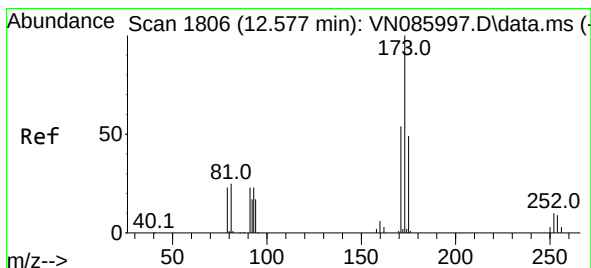
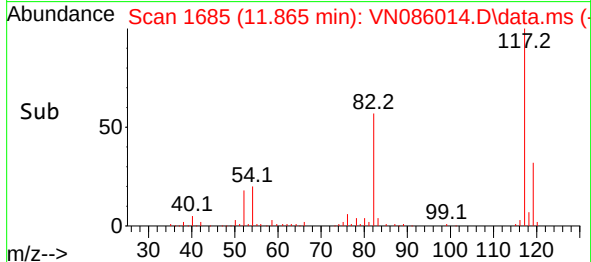
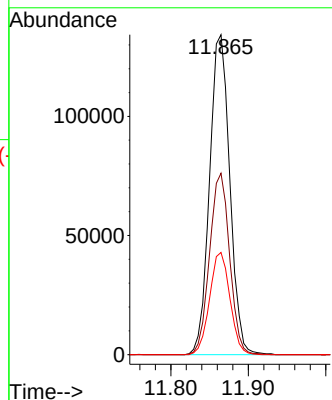
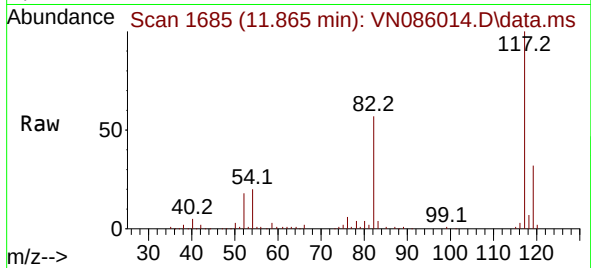




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1172  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

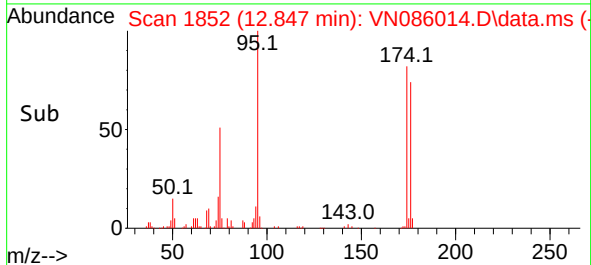
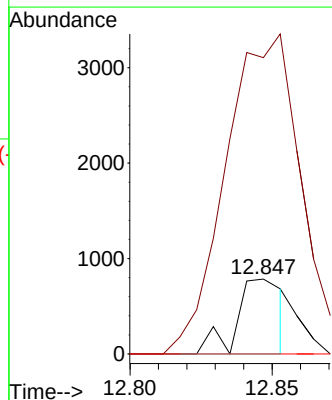
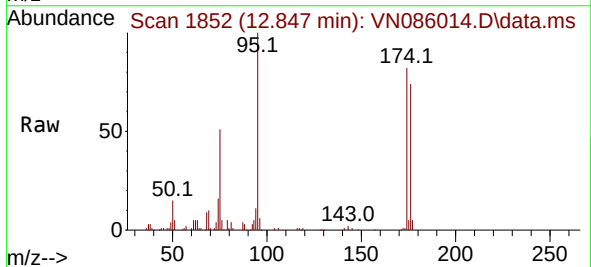
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

Tgt Ion:117 Resp: 243462  
Ion Ratio Lower Upper  
117 100  
82 56.7 46.7 70.1  
119 32.0 26.5 39.7

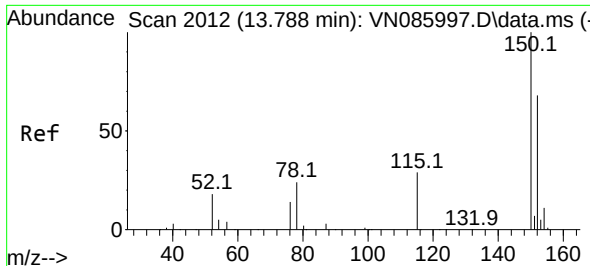


#71  
Bromoform  
Concen: 0.514 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.270 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion:173 Resp: 889  
Ion Ratio Lower Upper  
173 100  
175 411.7 24.3 73.0#  
254 0.0 0.0 0.0



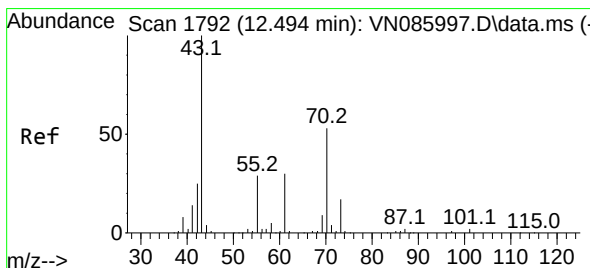
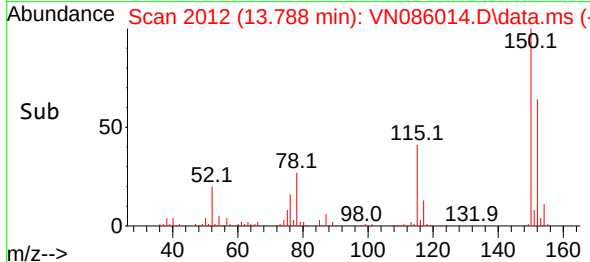
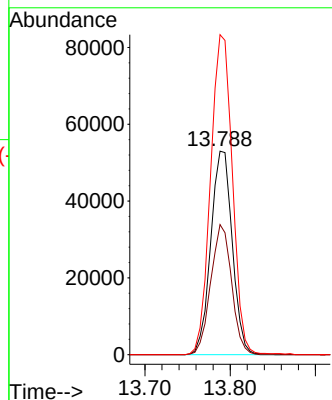
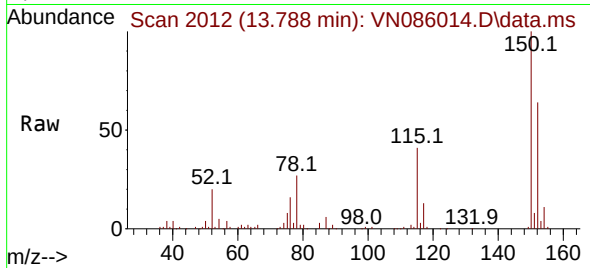




#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

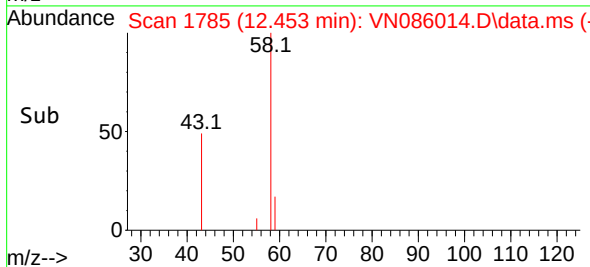
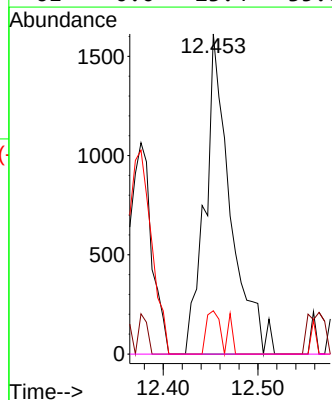
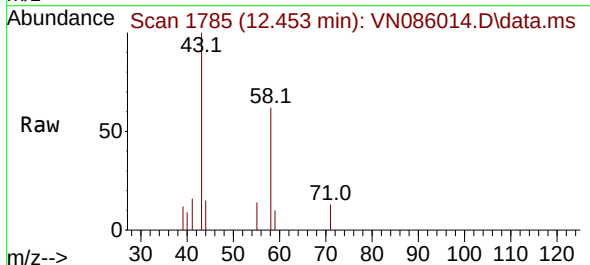
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

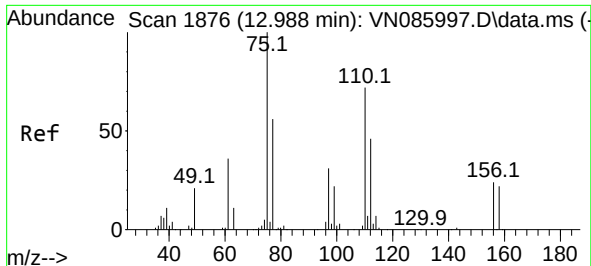
Tgt Ion:152 Resp: 92960  
Ion Ratio Lower Upper  
152 100  
115 62.0 31.1 93.2  
150 159.4 0.0 359.6



#74  
N-ethyl acetate  
Concen: 1.422 ug/l  
RT: 12.453 min Scan# 1785  
Delta R.T. -0.041 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 43 Resp: 3020  
Ion Ratio Lower Upper  
43 100  
70 0.0 43.0 64.4#  
55 6.9 23.8 35.8#  
61 0.0 23.4 35.0#

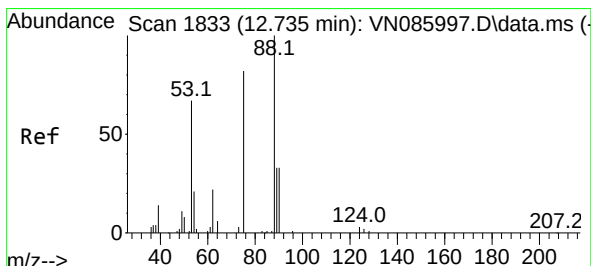
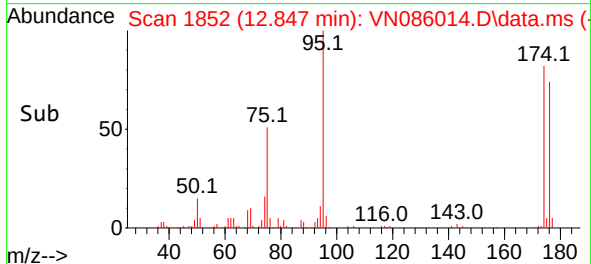
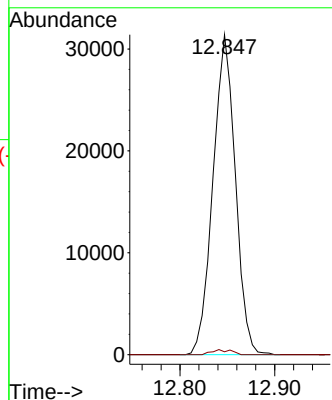
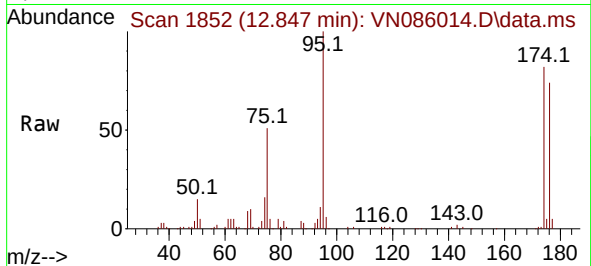




#76  
1,2,3-Trichloropropane  
Concen: 24.760 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.141 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167194ZHE#04

Tgt Ion: 75 Resp: 51530  
Ion Ratio Lower Upper  
75 100  
77 1.4 83.7 251.0#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 65.461 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.112 min  
Lab File: VN086014.D  
Acq: 19 Mar 2025 17:14

Tgt Ion: 75 Resp: 51530  
Ion Ratio Lower Upper  
75 100  
53 0.0 66.0 99.0#  
89 0.1 36.9 55.3#

