

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN051525\  
 Data File : VN086649.D  
 Acq On : 15 May 2025 16:48  
 Operator : JC\MD  
 Sample : PB167995ZHE#11  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB167995ZHE#11

Quant Time: May 16 05:30:19 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

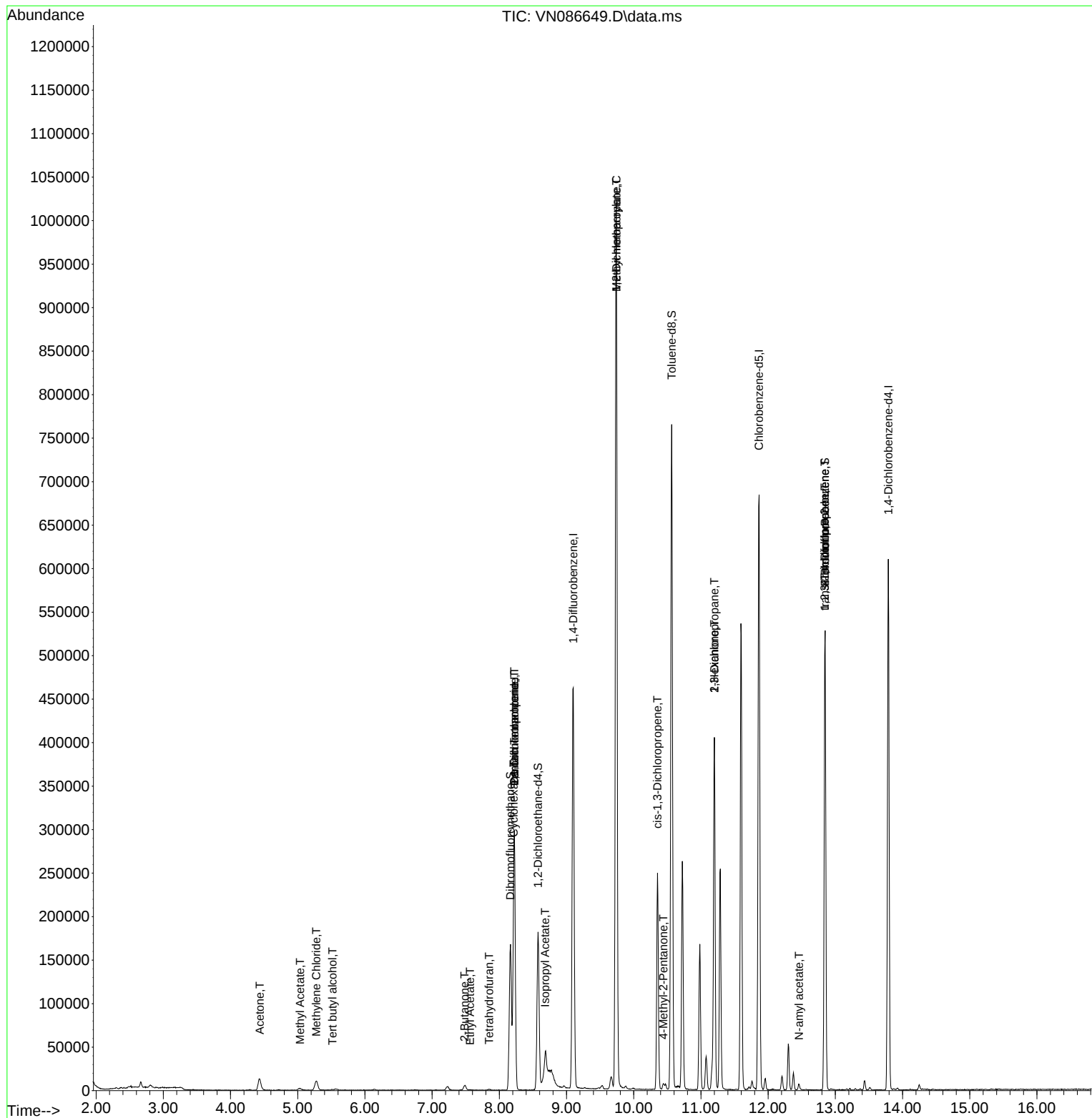
| Compound                      | R.T.           | QIon | Response             | Conc   | Units  | Dev(Min) |
|-------------------------------|----------------|------|----------------------|--------|--------|----------|
| -----                         |                |      |                      |        |        |          |
| Internal Standards            |                |      |                      |        |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 224983               | 50.000 | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 425683               | 50.000 | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 415487               | 50.000 | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 172262               | 50.000 | ug/l   | 0.00     |
| System Monitoring Compounds   |                |      |                      |        |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 150514               | 46.135 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = 92.280%   |        |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 125235               | 63.389 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = 126.780%# |        |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 549665               | 52.057 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = 104.120%  |        |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 197243               | 51.215 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = 102.440%  |        |        |          |
| Target Compounds              |                |      |                      |        |        |          |
|                               |                |      |                      |        | Qvalue |          |
| 11) Tert butyl alcohol        | 5.518          | 59   | 993                  | 1.668  | ug/l # | 72       |
| 16) Acetone                   | 4.436          | 43   | 26699                | 18.383 | ug/l   | 94       |
| 18) Methyl Acetate            | 5.036          | 43   | 4820                 | 1.231  | ug/l   | 92       |
| 20) Methylene Chloride        | 5.277          | 84   | 9191                 | 3.047  | ug/l   | 99       |
| 25) 2-Butanone                | 7.483          | 43   | 10076                | 4.962  | ug/l # | 88       |
| 29) Tetrahydrofuran           | 7.847          | 42   | 833                  | 0.613  | ug/l # | 43       |
| 31) Cyclohexane               | 8.212          | 56   | 4730                 | 0.895  | ug/l # | 23       |
| 36) 1,1-Dichloropropene       | 8.224          | 75   | 17964                | 4.552  | ug/l # | 51       |
| 37) Ethyl Acetate             | 7.565          | 43   | 1003                 | 0.241  | ug/l # | 68       |
| 38) Carbon Tetrachloride      | 8.224          | 117  | 22045                | 5.866  | ug/l # | 16       |
| 43) Isopropyl Acetate         | 8.683          | 43   | 79433                | 8.957  | ug/l # | 71       |
| 45) 1,2-Dichloropropane       | 9.741          | 63   | 1317                 | 0.426  | ug/l # | 43       |
| 48) Methyl methacrylate       | 9.741          | 41   | 90509                | 24.809 | ug/l # | 41       |
| 51) 4-Methyl-2-Pentanone      | 10.441         | 43   | 4800                 | 1.128  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 10.353         | 75   | 47425                | 9.083  | ug/l # | 58       |
| 57) 1,3-Dichloropropane       | 11.200         | 76   | 4679                 | 0.929  | ug/l # | 43       |
| 59) 2-Hexanone                | 11.200         | 43   | 79387                | 25.159 | ug/l # | 45       |
| 71) Bromoform                 | 12.847         | 173  | 1007                 | 0.437  | ug/l # | 1        |
| 74) N-amyl acetate            | 12.459         | 43   | 4814                 | 0.686  | ug/l # | 43       |
| 76) 1,2,3-Trichloropropane    | 12.841         | 75   | 97427                | 23.967 | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.841         | 75   | 97427                | 57.559 | ug/l # | 10       |
| -----                         |                |      |                      |        |        |          |

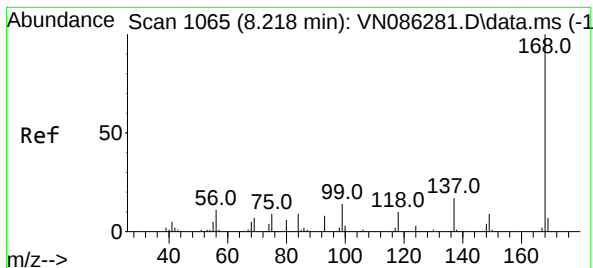
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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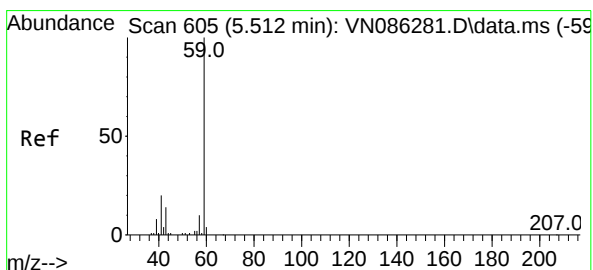
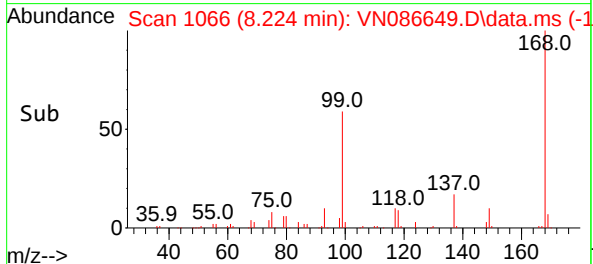
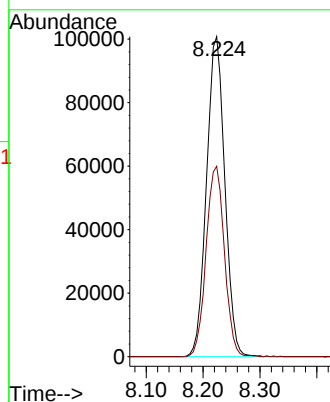
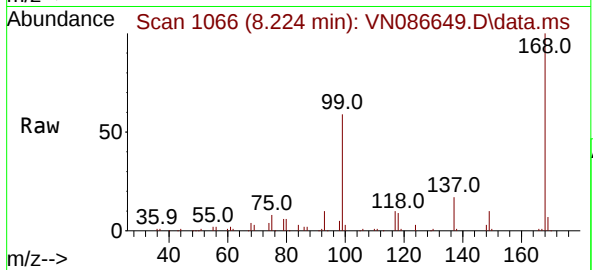




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

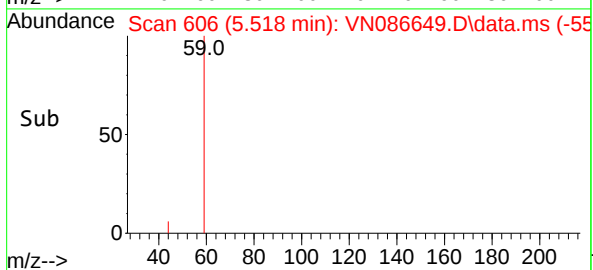
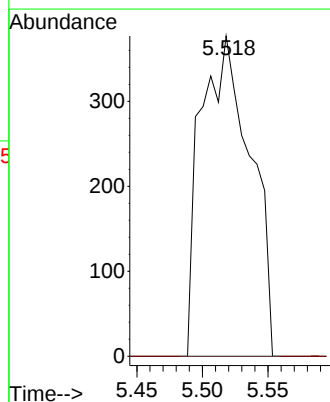
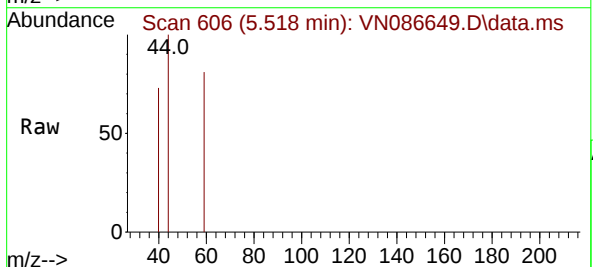
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

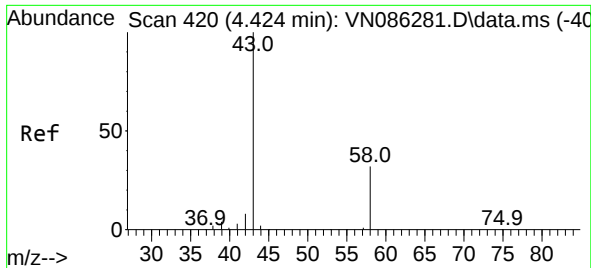
Tgt Ion:168 Resp: 224983  
Ion Ratio Lower Upper  
168 100  
99 59.5 52.5 78.7



#11  
Tert butyl alcohol  
Concen: 1.668 ug/l  
RT: 5.518 min Scan# 606  
Delta R.T. 0.006 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion: 59 Resp: 993  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.3 12.5#

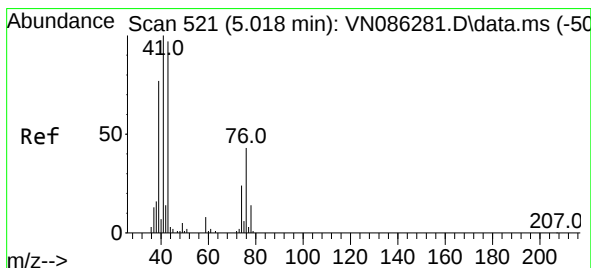
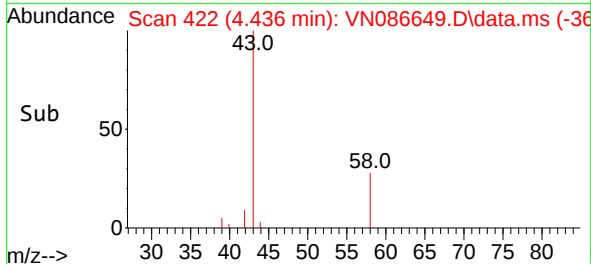
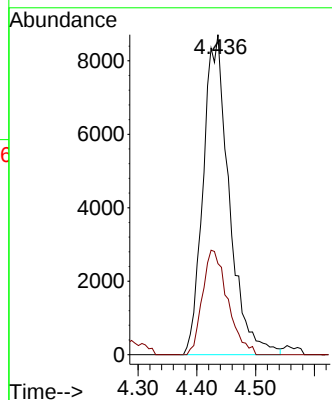
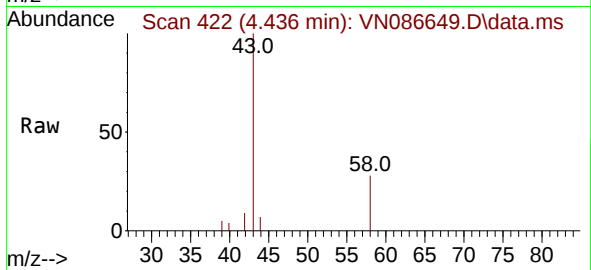




#16  
Acetone  
Concen: 18.383 ug/l  
RT: 4.436 min Scan# 41  
Delta R.T. 0.012 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

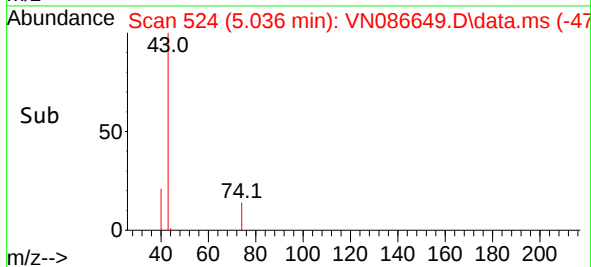
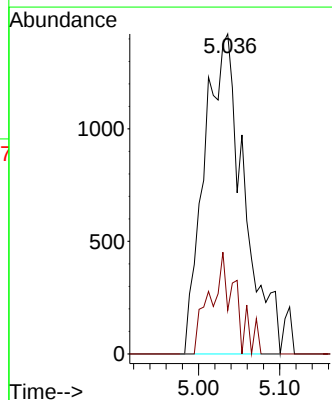
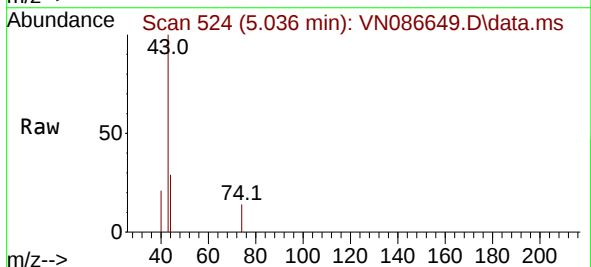
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

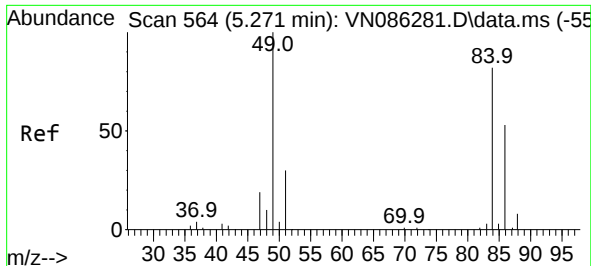
Tgt Ion: 43 Resp: 26699  
Ion Ratio Lower Upper  
43 100  
58 28.5 25.3 37.9



#18  
Methyl Acetate  
Concen: 1.231 ug/l  
RT: 5.036 min Scan# 524  
Delta R.T. 0.018 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

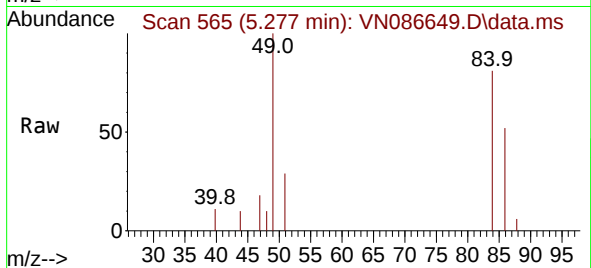
Tgt Ion: 43 Resp: 4820  
Ion Ratio Lower Upper  
43 100  
74 20.7 19.8 29.6



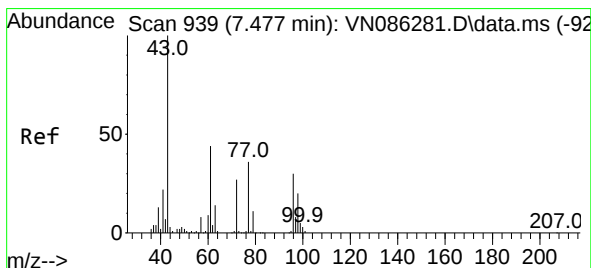
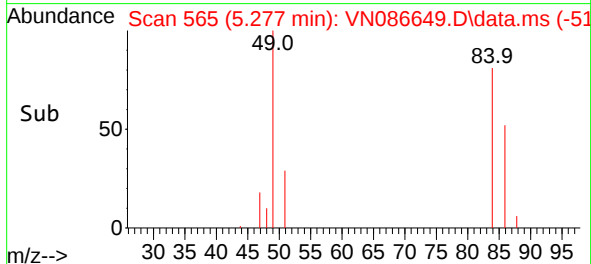
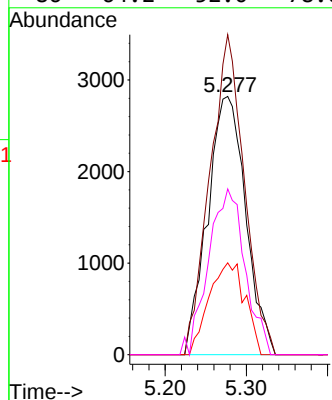


#20  
Methylene Chloride  
Concen: 3.047 ug/l  
RT: 5.277 min Scan# 51  
Delta R.T. 0.006 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

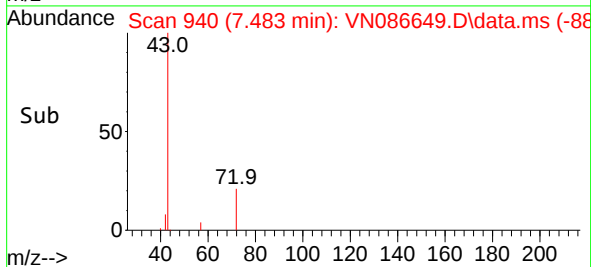
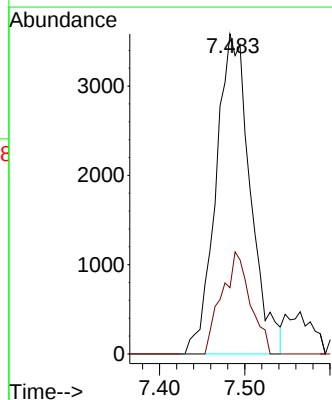
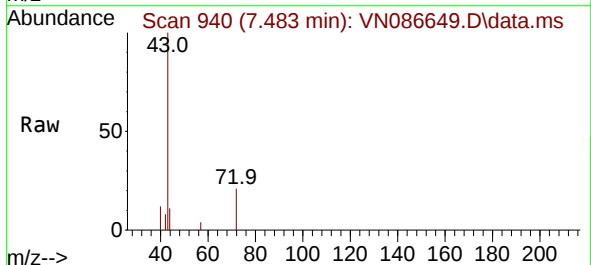


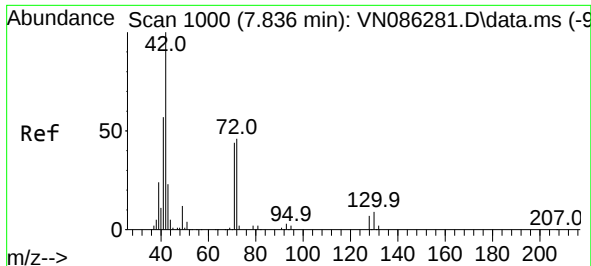
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 9191  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 123.9 | 98.2  | 147.2 |
| 51       | 35.6  | 29.8  | 44.6  |
| 86       | 64.2  | 52.0  | 78.0  |



#25  
2-Butanone  
Concen: 4.962 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 10076 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 20.7  | 21.7  | 32.5# |





#29

Tetrahydrofuran

Concen: 0.613 ug/l

RT: 7.847 min Scan# 1

Delta R.T. 0.012 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

Instrument :

MSVOA\_N

ClientSampleId :

PB167995ZHE#11

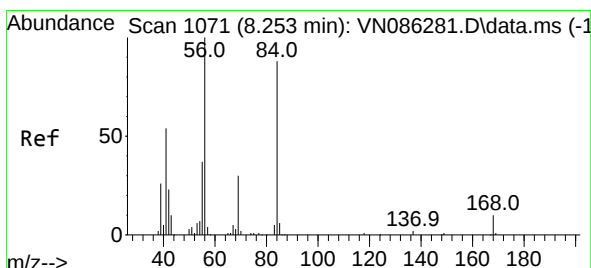
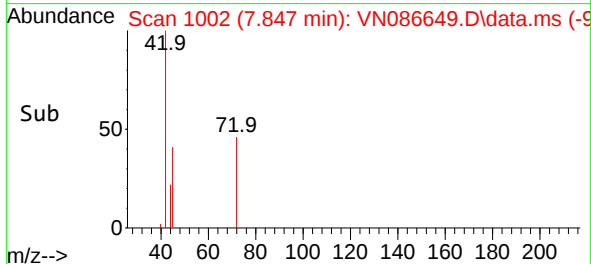
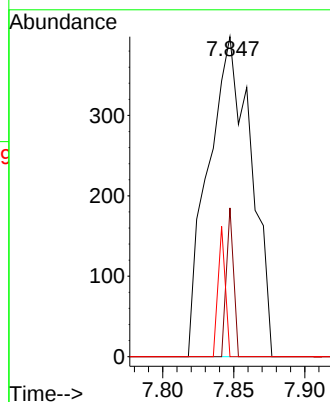
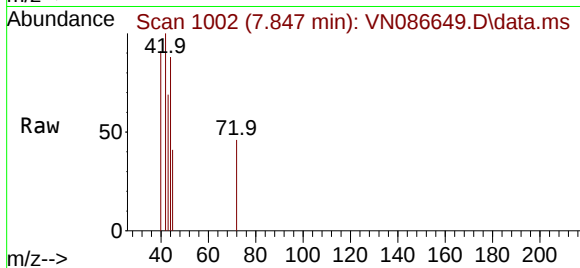
Tgt Ion: 42 Resp: 833

Ion Ratio Lower Upper

42 100

72 7.8 36.2 54.4#

71 6.8 34.0 51.0#



#31

Cyclohexane

Concen: 0.895 ug/l

RT: 8.212 min Scan# 1064

Delta R.T. -0.041 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

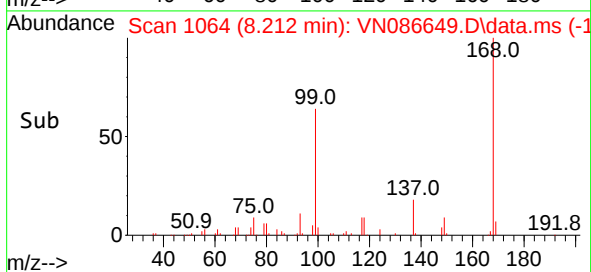
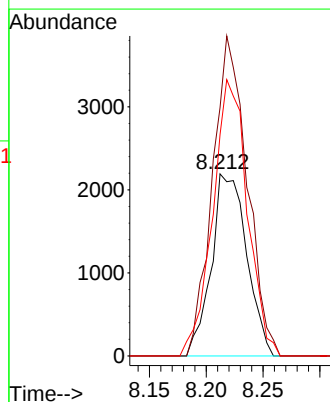
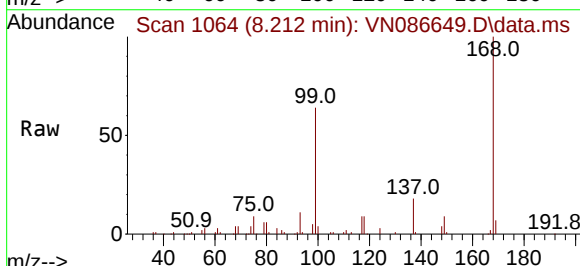
Tgt Ion: 56 Resp: 4730

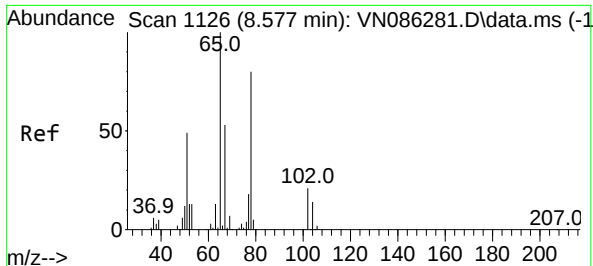
Ion Ratio Lower Upper

56 100

69 136.4 24.2 36.2#

84 121.6 70.3 105.5#





#33

1,2-Dichloroethane-d4

Concen: 46.135 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

Instrument :

MSVOA\_N

ClientSampleId :

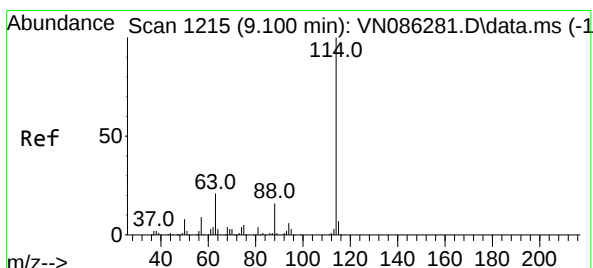
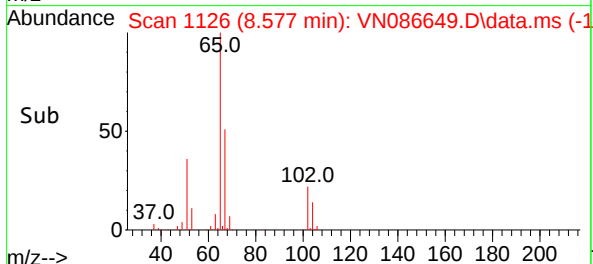
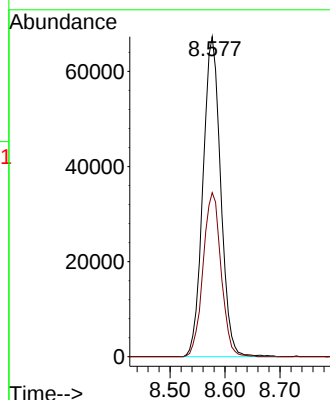
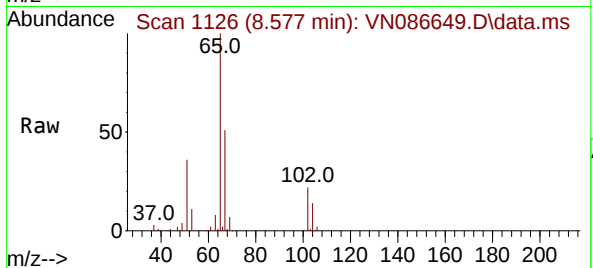
PB167995ZHE#11

Tgt Ion: 65 Resp: 150514

Ion Ratio Lower Upper

65 100

67 52.1 0.0 106.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

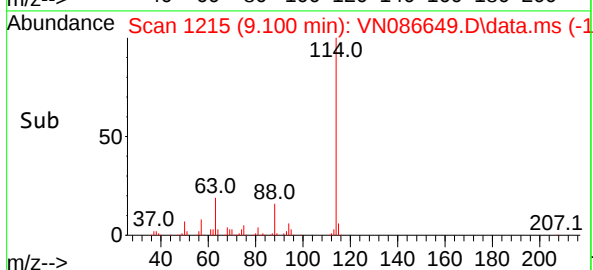
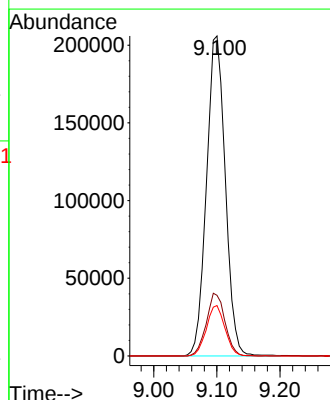
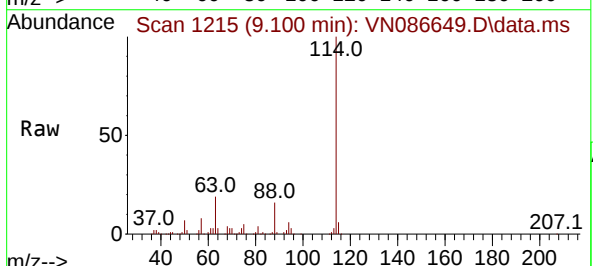
Tgt Ion: 114 Resp: 425683

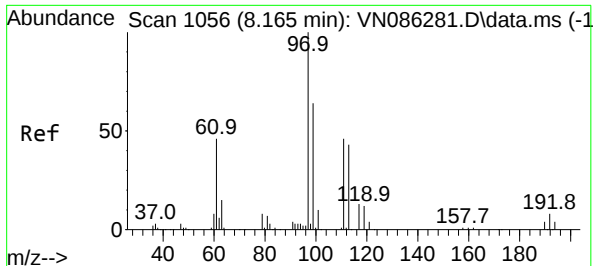
Ion Ratio Lower Upper

114 100

63 18.9 0.0 42.6

88 15.8 0.0 31.8





#35

Dibromofluoromethane

Concen: 63.389 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN086649.D

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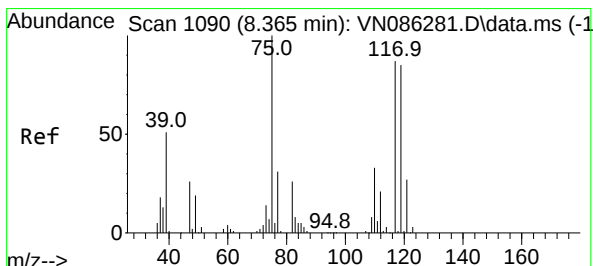
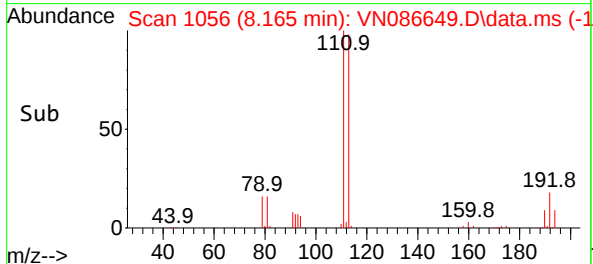
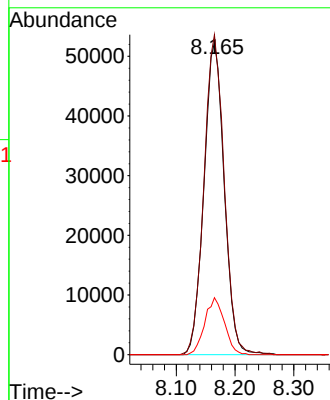
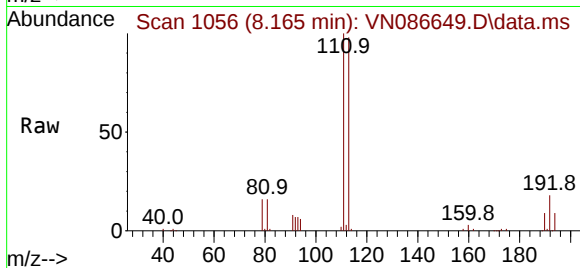
Tgt Ion:113 Resp: 125235

Ion Ratio Lower Upper

113 100

111 102.3 83.4 125.0

192 17.7 13.7 20.5



#36

1,1-Dichloropropene

Concen: 4.552 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.141 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

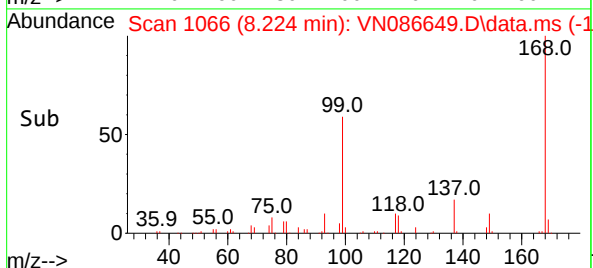
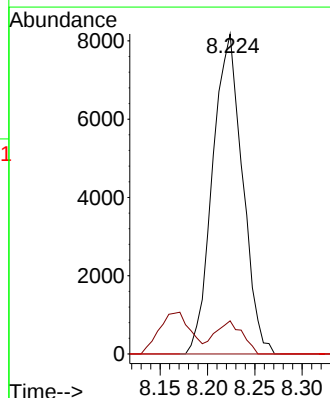
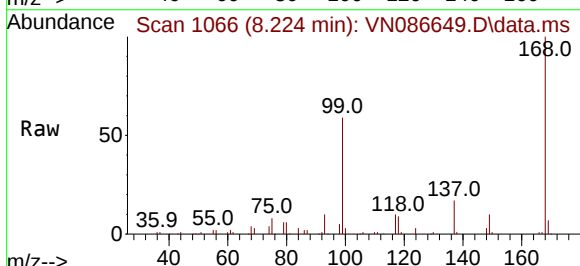
Tgt Ion: 75 Resp: 17964

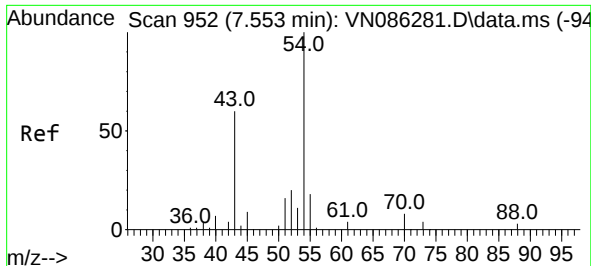
Ion Ratio Lower Upper

75 100

110 9.5 16.8 50.4#

77 0.0 24.9 37.3#





#37

Ethyl Acetate

Concen: 0.241 ug/l

RT: 7.565 min Scan# 91

Delta R.T. 0.012 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

Instrument :

MSVOA\_N

ClientSampleId :

PB167995ZHE#11

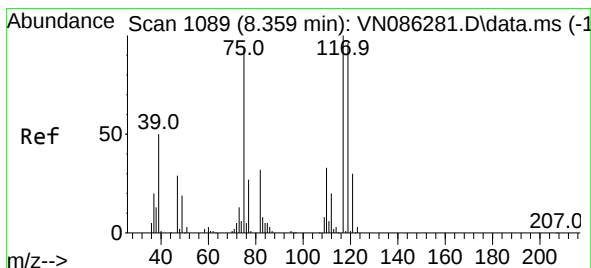
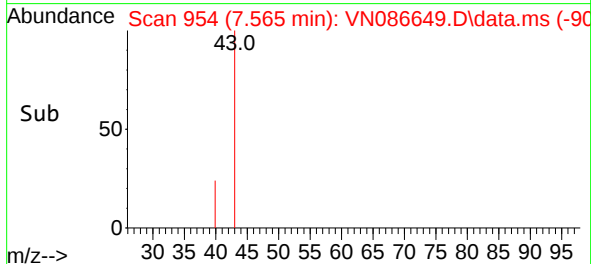
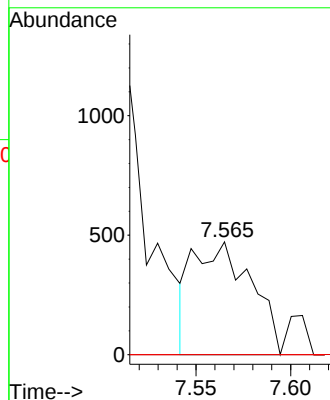
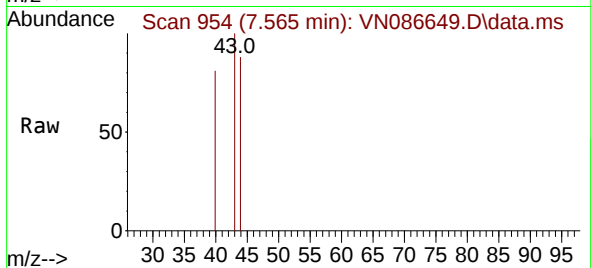
Tgt Ion: 43 Resp: 1003

Ion Ratio Lower Upper

43 100

61 0.0 11.1 16.7#

70 0.0 9.2 13.8#



#38

Carbon Tetrachloride

Concen: 5.866 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.135 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

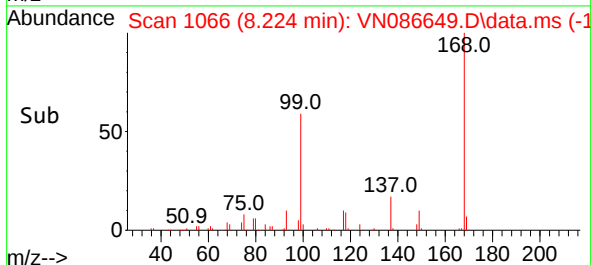
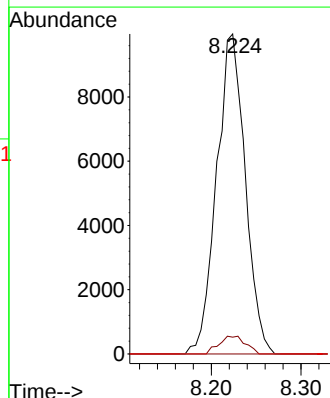
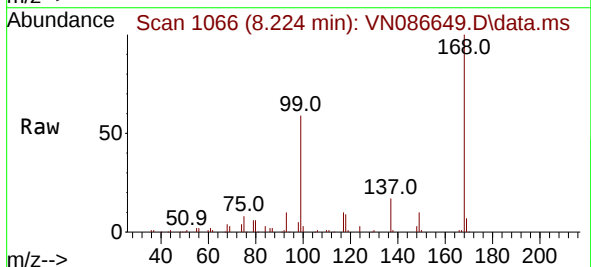
Tgt Ion: 117 Resp: 22045

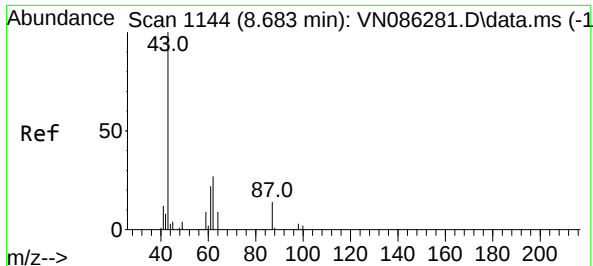
Ion Ratio Lower Upper

117 100

119 5.2 76.8 115.2#

121 0.0 23.8 35.8#





#43

Isopropyl Acetate

Concen: 8.957 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN086649.D

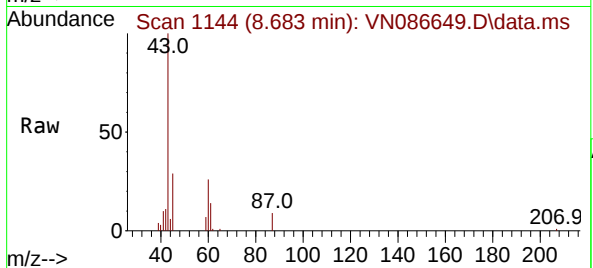
Acq: 15 May 2025 16:48

Instrument :

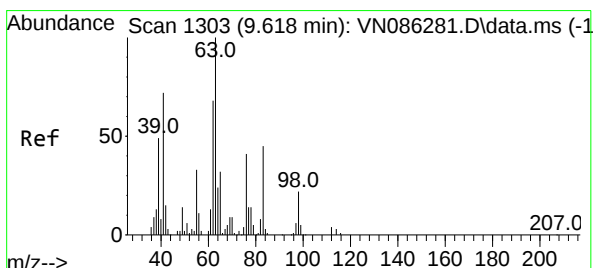
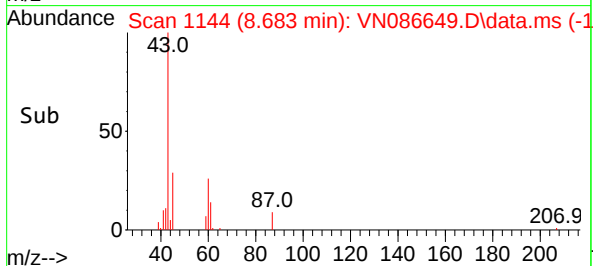
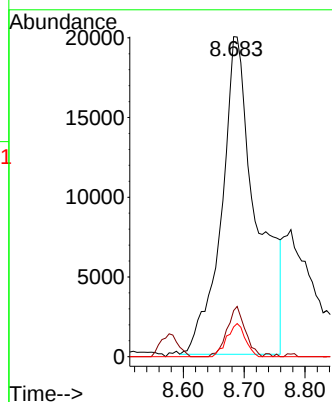
MSVOA\_N

ClientSampleId :

PB167995ZHE#11



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 79433 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 8.2   | 20.5  | 30.7# |
| 87       | 5.5   | 10.5  | 15.7# |



#45

1,2-Dichloropropane

Concen: 0.426 ug/l

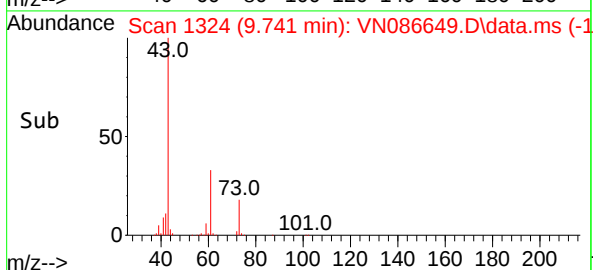
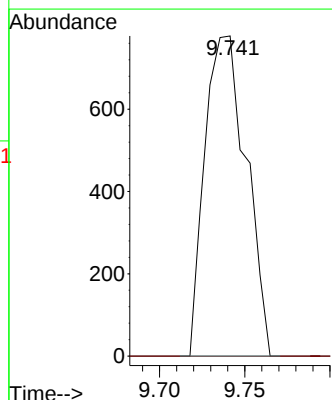
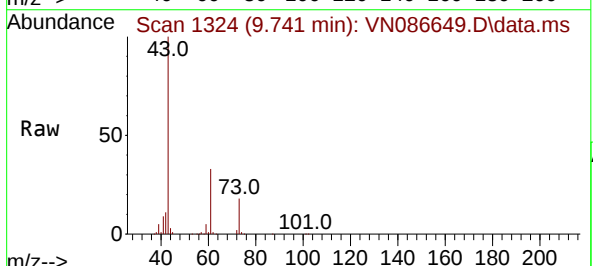
RT: 9.741 min Scan# 1324

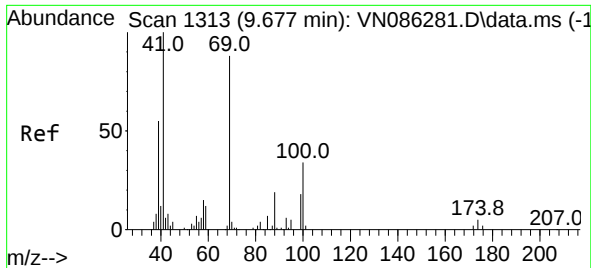
Delta R.T. 0.124 min

Lab File: VN086649.D

Acq: 15 May 2025 16:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 1317  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 65       | 0.0   | 25.4  | 38.2# |

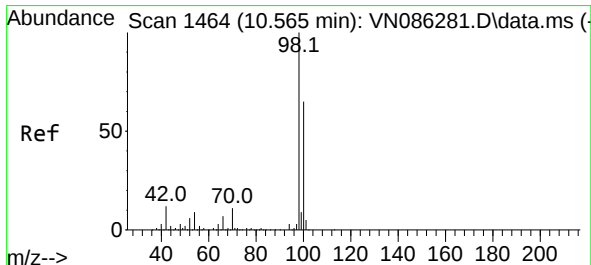
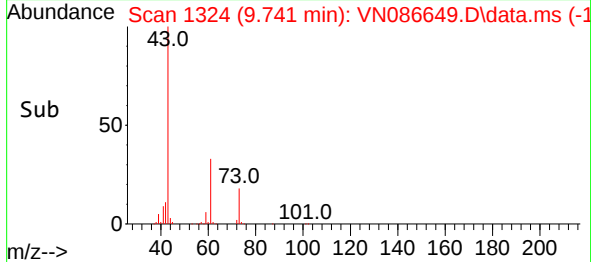
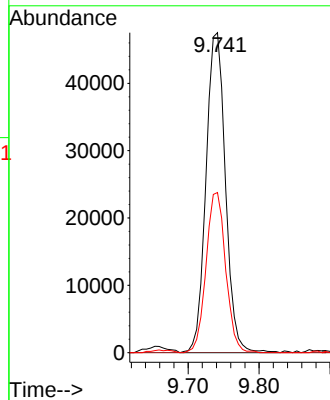
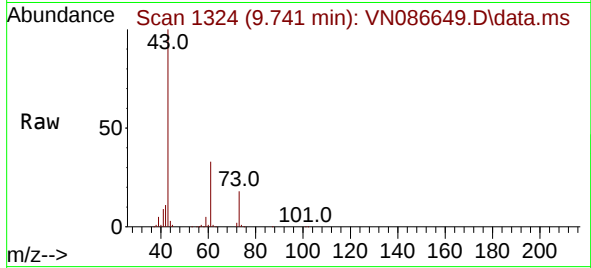




#48  
Methyl methacrylate  
Concen: 24.809 ug/l  
RT: 9.741 min Scan# 1313  
Delta R.T. 0.065 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

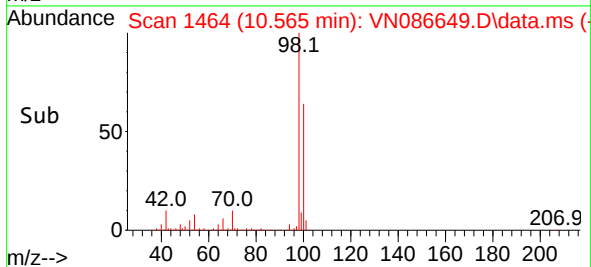
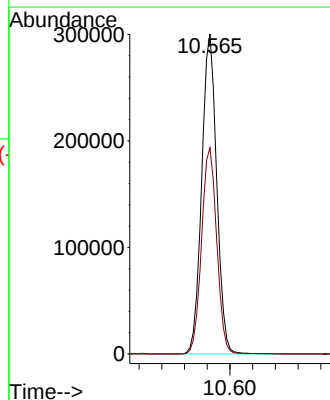
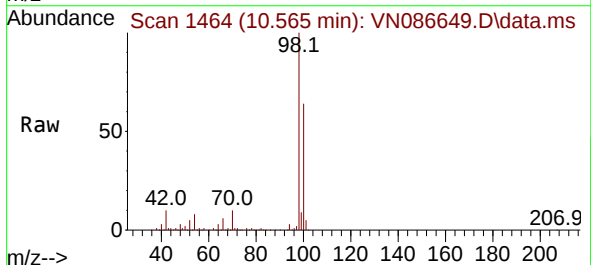
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

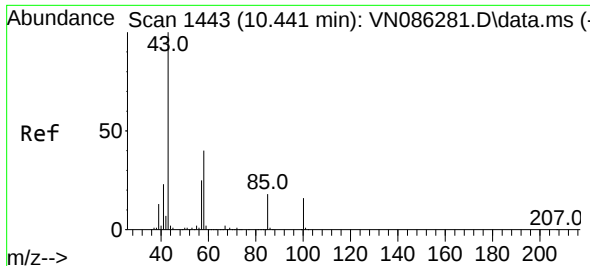
Tgt Ion: 41 Resp: 90509  
Ion Ratio Lower Upper  
41 100  
69 0.0 68.2 102.2#  
39 50.5 45.2 67.8



#50  
Toluene-d8  
Concen: 52.057 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.000 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion: 98 Resp: 549665  
Ion Ratio Lower Upper  
98 100  
100 65.1 52.5 78.7

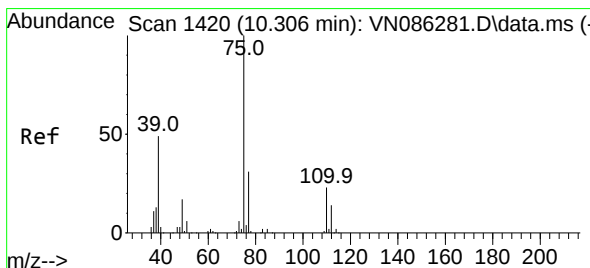
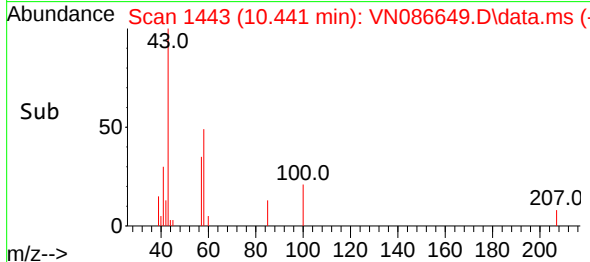
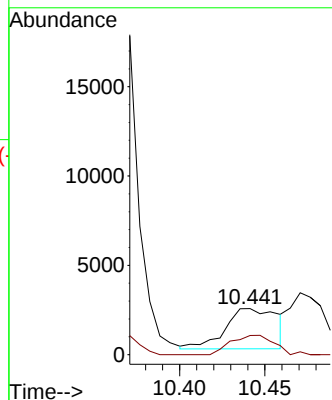
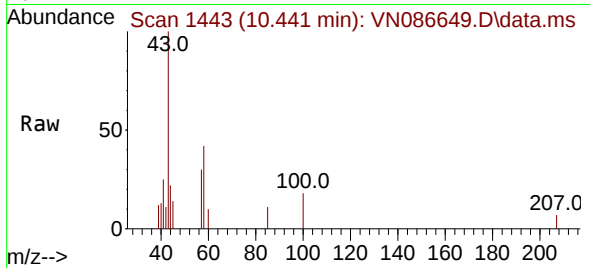




#51  
4-Methyl-2-Pentanone  
Concen: 1.128 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

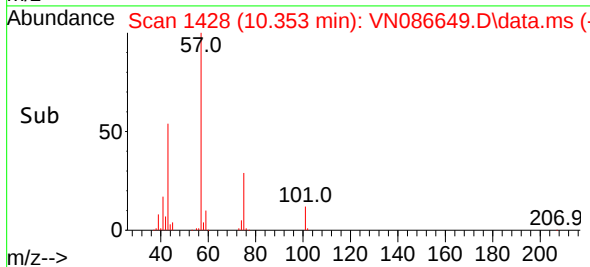
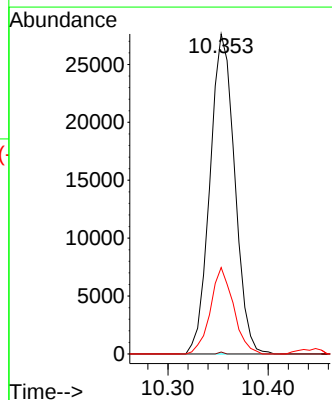
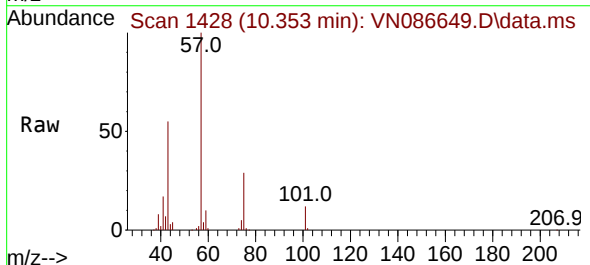
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

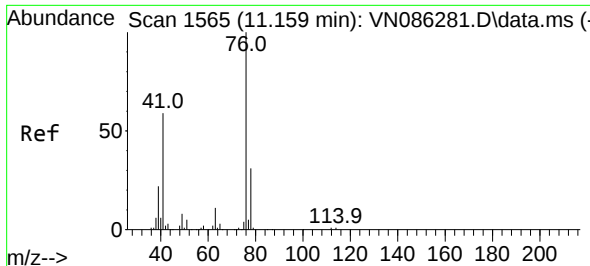
Tgt Ion: 43 Resp: 4800  
Ion Ratio Lower Upper  
43 100  
58 40.3 32.2 48.4



#54  
cis-1,3-Dichloropropene  
Concen: 9.083 ug/l  
RT: 10.353 min Scan# 1428  
Delta R.T. 0.047 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion: 75 Resp: 47425  
Ion Ratio Lower Upper  
75 100  
77 0.6 25.2 37.8#  
39 27.0 39.3 58.9#

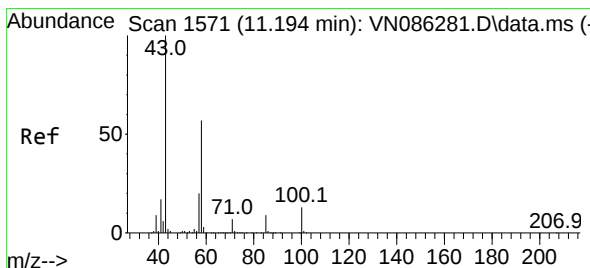
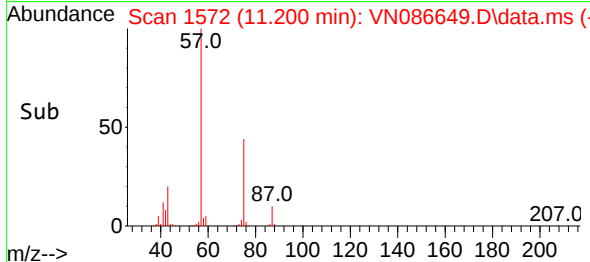
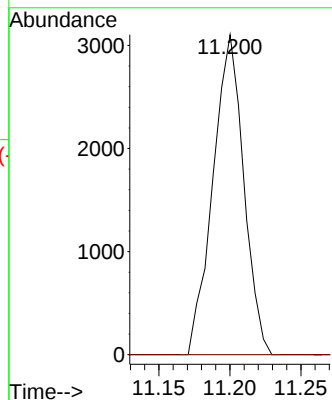
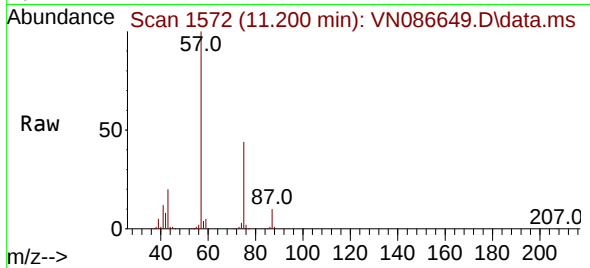




#57  
1,3-Dichloropropane  
Concen: 0.929 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

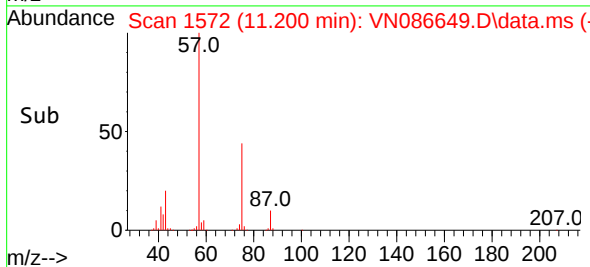
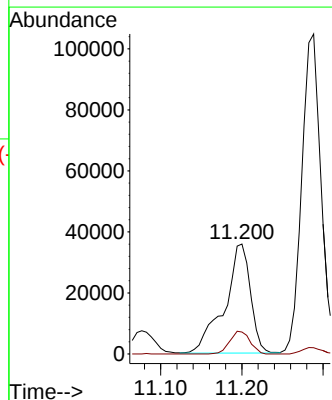
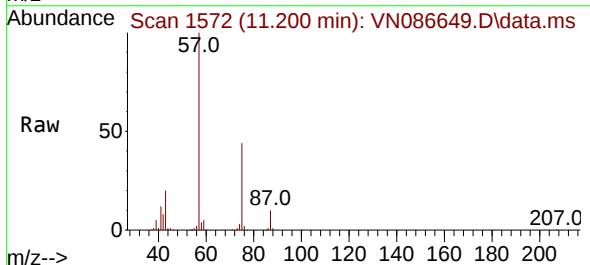
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

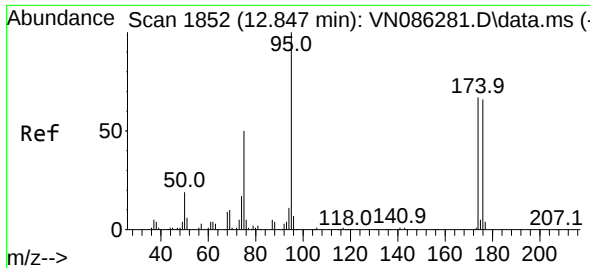
Tgt Ion: 76 Resp: 4679  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.6 38.4#



#59  
2-Hexanone  
Concen: 25.159 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.006 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion: 43 Resp: 79387  
Ion Ratio Lower Upper  
43 100  
58 16.2 28.3 85.0#

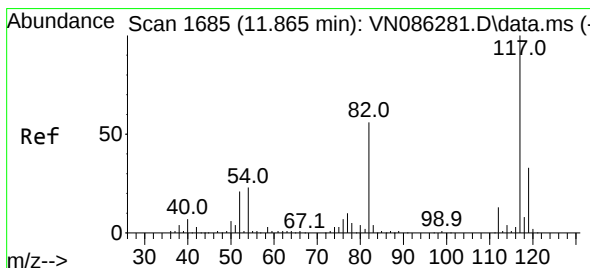
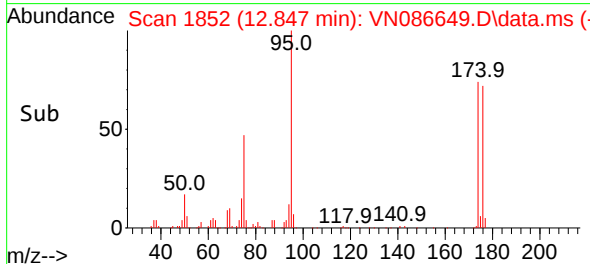
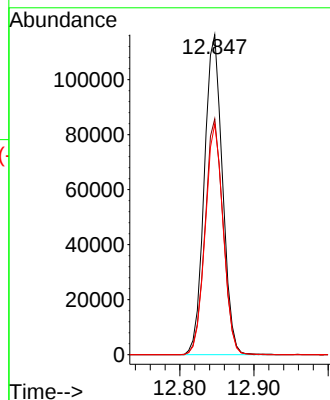
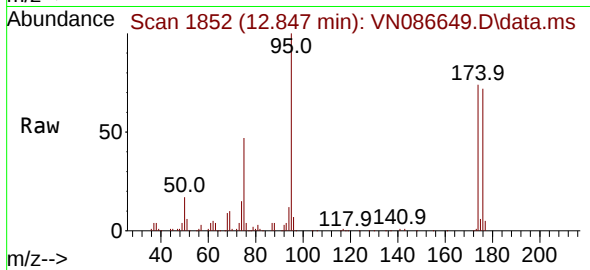




#62  
4-Bromofluorobenzene  
Concen: 51.215 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

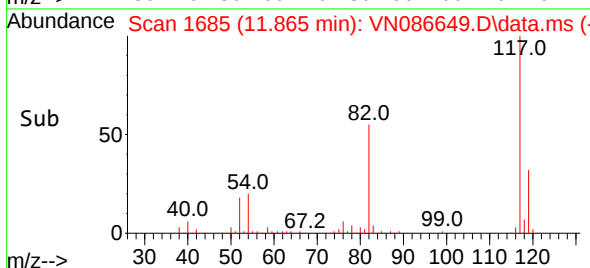
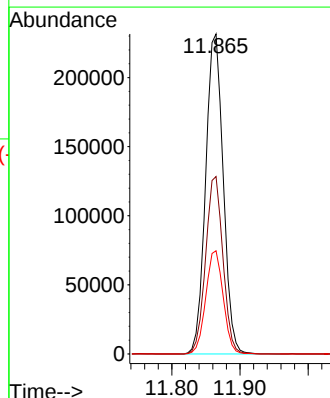
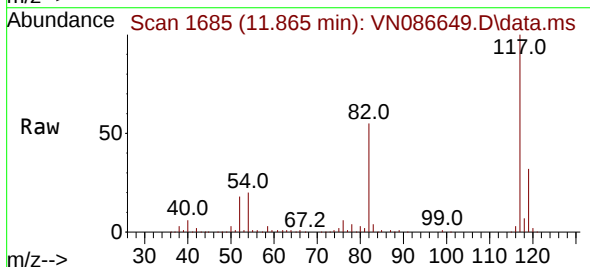
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

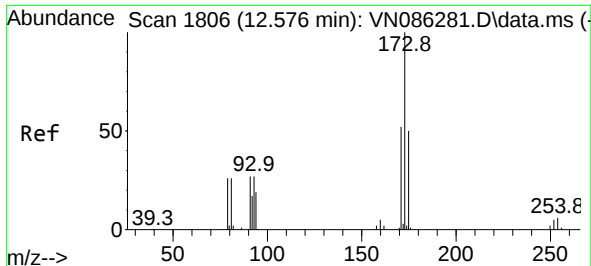
Tgt Ion: 95 Resp: 197243  
Ion Ratio Lower Upper  
95 100  
174 73.2 0.0 133.4  
176 71.5 0.0 129.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion: 117 Resp: 415487  
Ion Ratio Lower Upper  
117 100  
82 55.5 44.7 67.1  
119 32.3 26.4 39.6

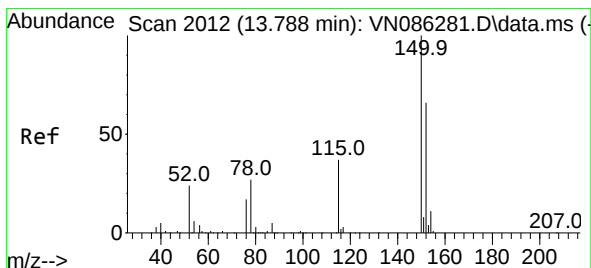
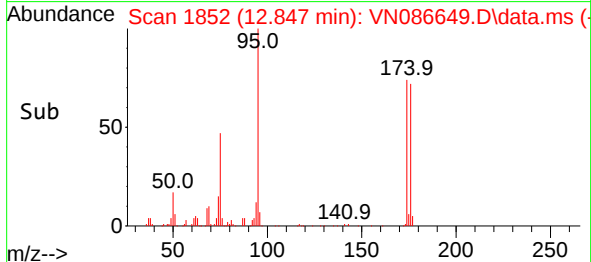
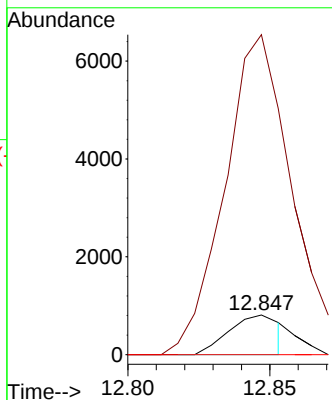
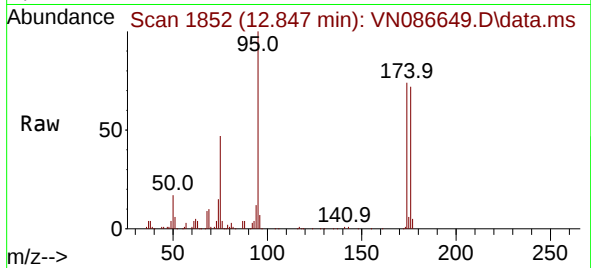




#71  
Bromoform  
Concen: 0.437 ug/l  
RT: 12.847 min Scan# 1806  
Delta R.T. 0.271 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

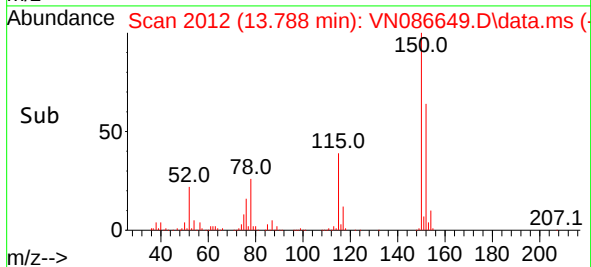
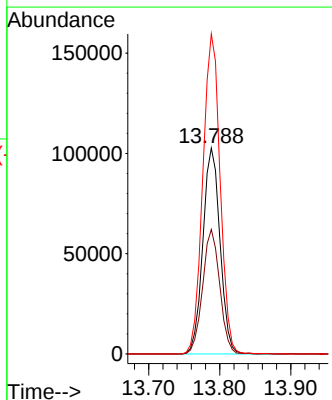
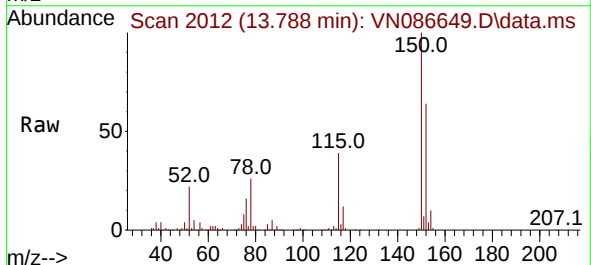
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

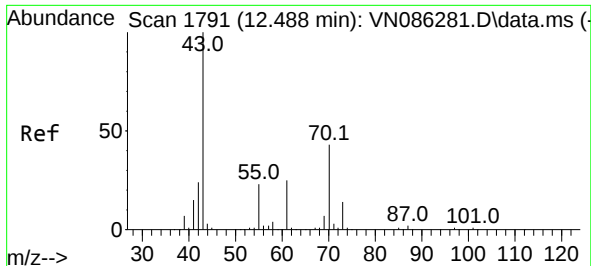
Tgt Ion:173 Resp: 1007  
Ion Ratio Lower Upper  
173 100  
175 860.1 24.6 73.6#  
254 0.0 0.0 0.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 1212  
Delta R.T. 0.000 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Tgt Ion:152 Resp: 172262  
Ion Ratio Lower Upper  
152 100  
115 60.4 31.9 95.9  
150 157.2 0.0 352.0

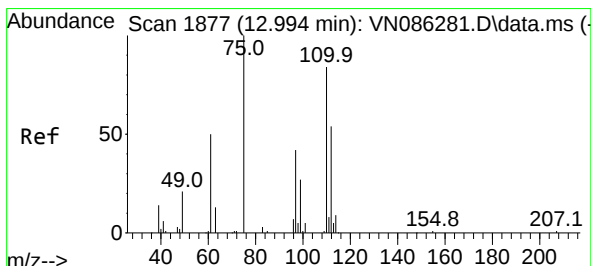
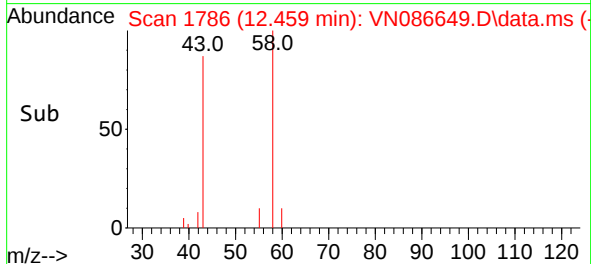
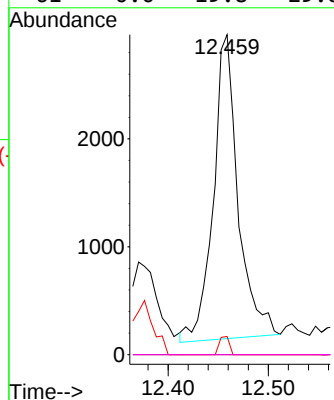
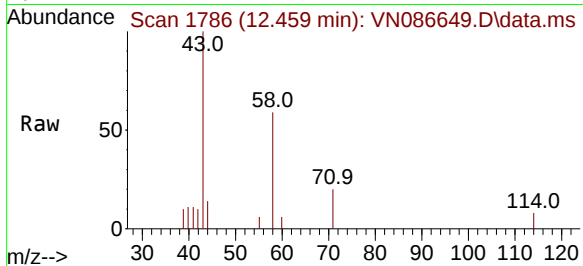




#74  
N-amy1 acetate  
Concen: 0.686 ug/l  
RT: 12.459 min Scan# 11  
Delta R.T. -0.029 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

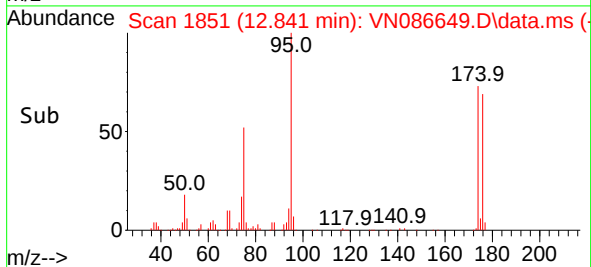
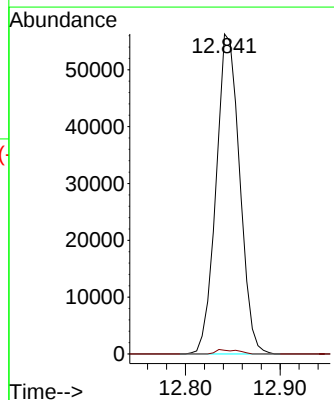
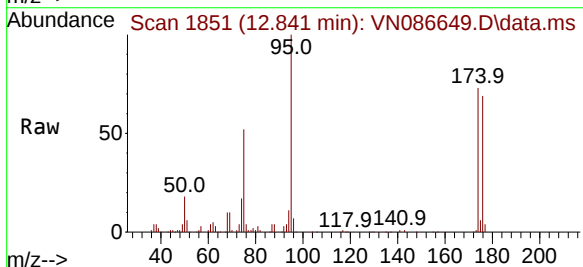
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11

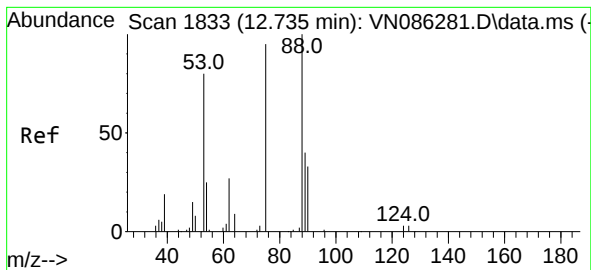
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 4814  |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 70 0.0      | 35.0 52.4#  |
| 55 2.4      | 19.0 28.4#  |
| 61 0.0      | 19.8 29.8#  |



#76  
1,2,3-Trichloropropane  
Concen: 23.967 ug/l  
RT: 12.841 min Scan# 1851  
Delta R.T. -0.153 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

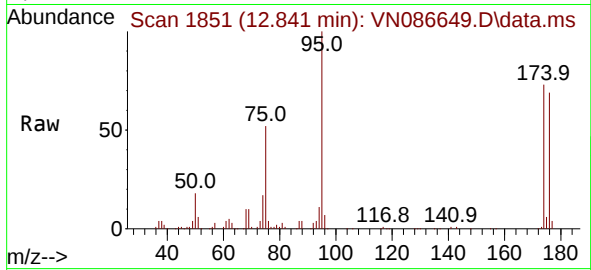
|             |       |        |  |
|-------------|-------|--------|--|
| Tgt Ion: 75 | Resp: | 97427  |  |
| Ion Ratio   | Lower | Upper  |  |
| 75 100      |       |        |  |
| 77 1.3      | 98.8  | 296.4# |  |





#81  
trans-1,4-Dichloro-2-butene  
Concen: 57.559 ug/l  
RT: 12.841 min Scan# 11  
Delta R.T. 0.106 min  
Lab File: VN086649.D  
Acq: 15 May 2025 16:48

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB167995ZHE#11



Tgt Ion: 75 Resp: 97427  
Ion Ratio Lower Upper  
75 100  
53 0.0 79.2 118.8#  
89 0.0 35.7 53.5#

