

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN102424\  
 Data File : VN084497.D  
 Acq On : 24 Oct 2024 18:45  
 Operator : JC\MD  
 Sample : P4468-06  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 21 Sample Multiplier: 1

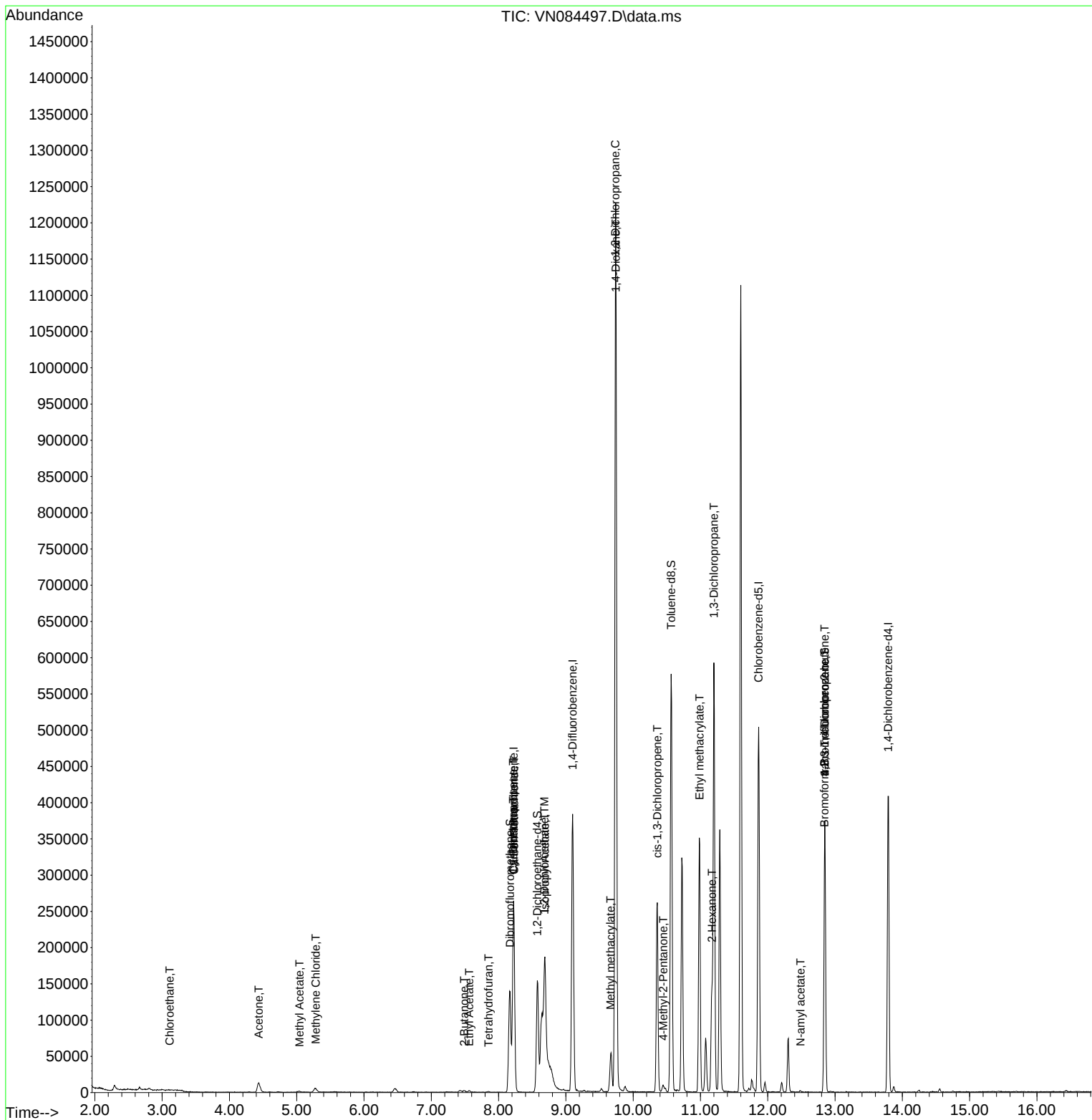
Instrument :  
 MSVOA\_N  
 ClientSampleId :

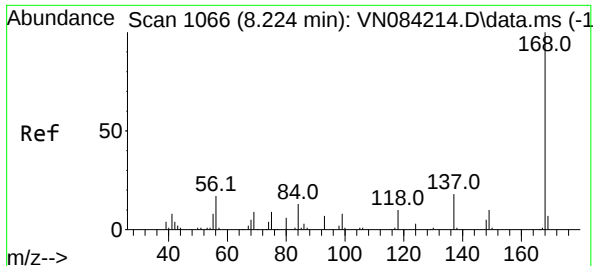
Quant Time: Oct 25 02:05:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N093024W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 01 07:11:01 2024  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc    | Units  | Dev(Min) |
|-------------------------------|----------------|------|------------|---------|--------|----------|
| Internal Standards            |                |      |            |         |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 182228     | 50.000  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 332892     | 50.000  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 290809     | 50.000  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 111115     | 50.000  | ug/l   | 0.00     |
| System Monitoring Compounds   |                |      |            |         |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 128444     | 47.539  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = | 95.080% |        |          |
| 35) Dibromofluoromethane      | 8.171          | 113  | 102681     | 46.787  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = | 93.580% |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 401136     | 49.681  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = | 99.360% |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 132535     | 45.056  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = | 90.120% |        |          |
| Target Compounds              |                |      |            |         |        |          |
|                               |                |      |            |         | Qvalue |          |
| 6) Chloroethane               | 3.112          | 64   | 344        | 0.201   | ug/l # | 45       |
| 16) Acetone                   | 4.436          | 43   | 26217      | 22.588  | ug/l   | 99       |
| 18) Methyl Acetate            | 5.042          | 43   | 2706       | 1.070   | ug/l # | 68       |
| 20) Methylene Chloride        | 5.283          | 84   | 4640       | 1.967   | ug/l   | 89       |
| 25) 2-Butanone                | 7.488          | 43   | 4227       | 2.674   | ug/l # | 81       |
| 29) Tetrahydrofuran           | 7.853          | 42   | 901        | 0.924   | ug/l # | 52       |
| 31) Cyclohexane               | 8.218          | 56   | 4642       | 1.160   | ug/l # | 42       |
| 36) 1,1-Dichloropropene       | 8.218          | 75   | 16428      | 5.153   | ug/l # | 51       |
| 37) Ethyl Acetate             | 7.565          | 43   | 3644       | 1.114   | ug/l # | 78       |
| 38) Carbon Tetrachloride      | 8.230          | 117  | 20020      | 5.725   | ug/l # | 15       |
| 42) 1,2-Dichloroethane        | 8.683          | 62   | 1167       | 0.347   | ug/l # | 75       |
| 43) Isopropyl Acetate         | 8.688          | 43   | 384790     | 60.070  | ug/l # | 70       |
| 45) 1,2-Dichloropropane       | 9.735          | 63   | 1475       | 0.628   | ug/l # | 44       |
| 48) Methyl methacrylate       | 9.665          | 41   | 3554       | 1.394   | ug/l # | 43       |
| 49) 1,4-Dioxane               | 9.741          | 88   | 62         | 1.321   | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.447         | 43   | 6564       | 2.108   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.359         | 75   | 48276      | 12.499  | ug/l # | 60       |
| 56) Ethyl methacrylate        | 10.988         | 69   | 1388       | 0.389   | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.200         | 76   | 6609       | 1.703   | ug/l # | 42       |
| 59) 2-Hexanone                | 11.171         | 43   | 120458     | 51.768  | ug/l # | 24       |
| 71) Bromoform                 | 12.841         | 173  | 563        | 0.344   | ug/l # | 30       |
| 74) N-amyl acetate            | 12.488         | 43   | 1069       | 0.278   | ug/l # | 42       |
| 76) 1,2,3-Trichloropropane    | 12.847         | 75   | 69537      | 30.654  | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847         | 75   | 69537      | 73.492  | ug/l # | 11       |

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

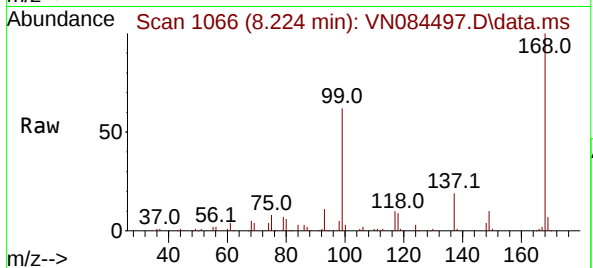
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N093024W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 01 07:11:01 2024  
Response via : Initial Calibration



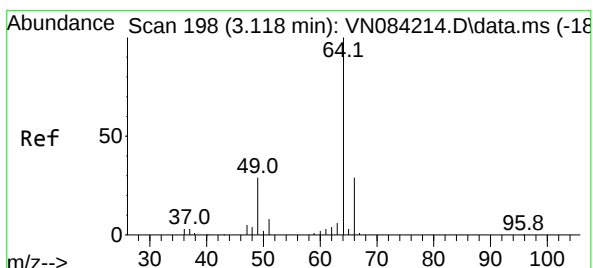
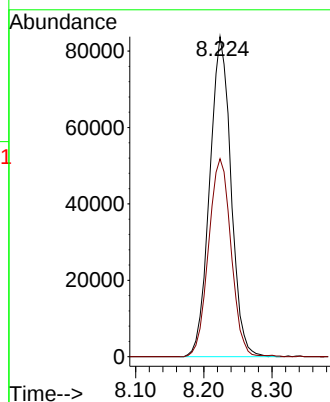
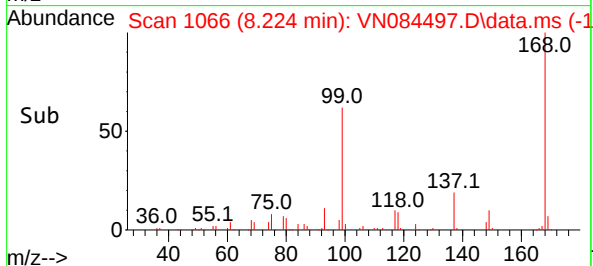


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Instrument :  
MSVOA\_N  
ClientSampleId :

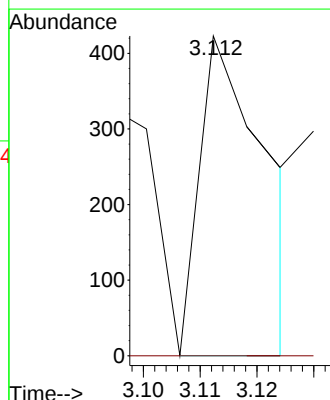
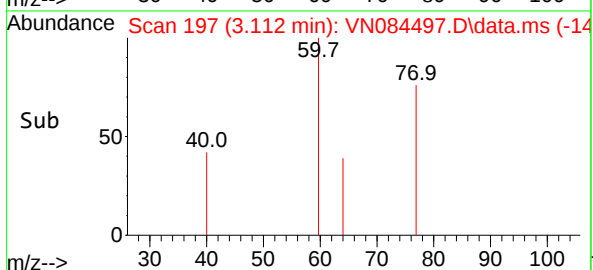
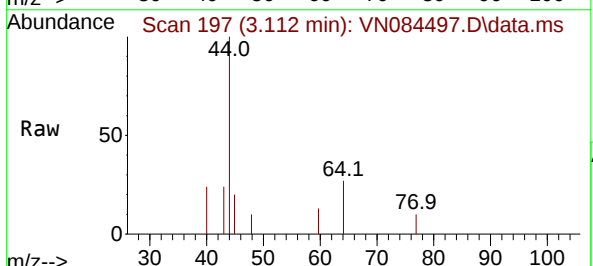


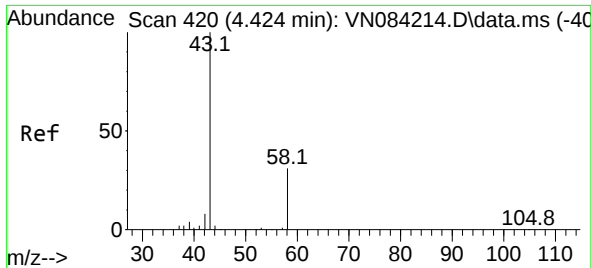
Tgt Ion:168 Resp: 182228  
Ion Ratio Lower Upper  
168 100  
99 61.9 54.2 81.2



#6  
Chloroethane  
Concen: 0.201 ug/l  
RT: 3.112 min Scan# 197  
Delta R.T. -0.006 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 64 Resp: 344  
Ion Ratio Lower Upper  
64 100  
66 0.0 23.5 35.3#





#16

Acetone

Concen: 22.588 ug/l

RT: 4.436 min Scan# 431

Delta R.T. 0.012 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

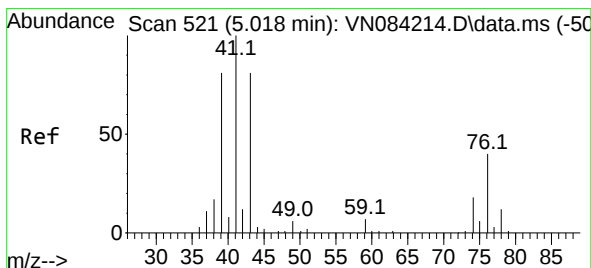
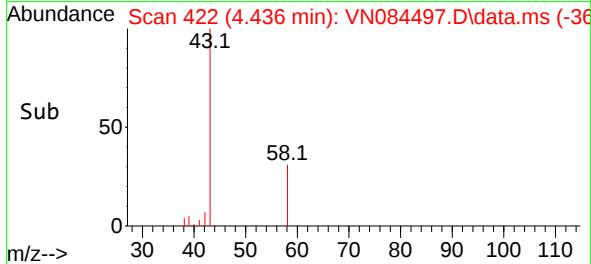
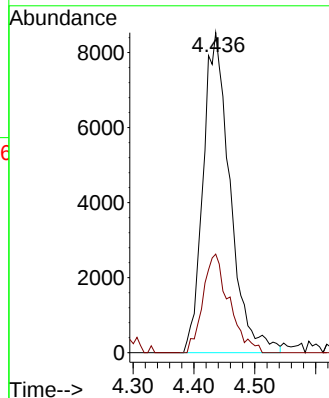
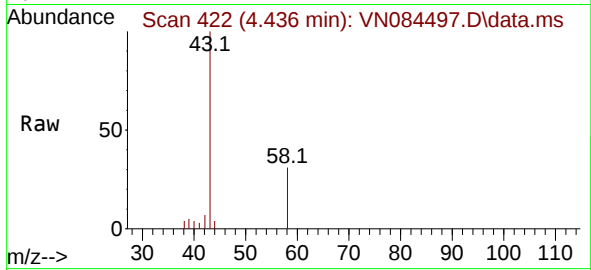
ClientSampleId :

Tgt Ion: 43 Resp: 26217

Ion Ratio Lower Upper

43 100

58 30.8 24.4 36.6



#18

Methyl Acetate

Concen: 1.070 ug/l

RT: 5.042 min Scan# 525

Delta R.T. 0.024 min

Lab File: VN084497.D

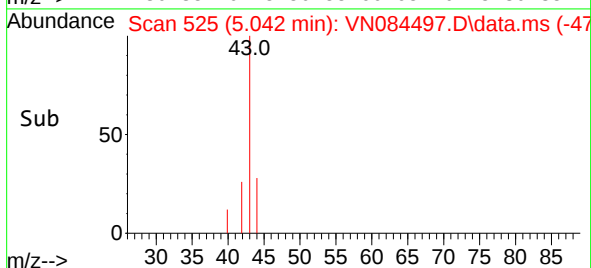
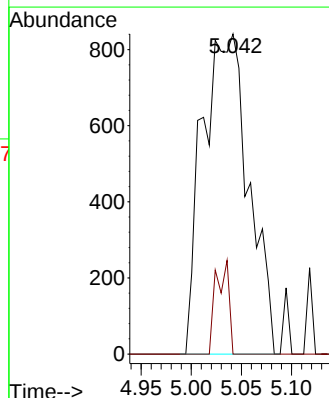
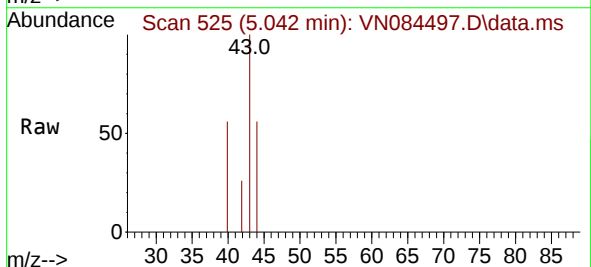
Acq: 24 Oct 2024 18:45

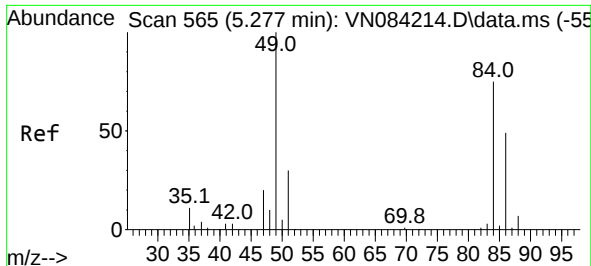
Tgt Ion: 43 Resp: 2706

Ion Ratio Lower Upper

43 100

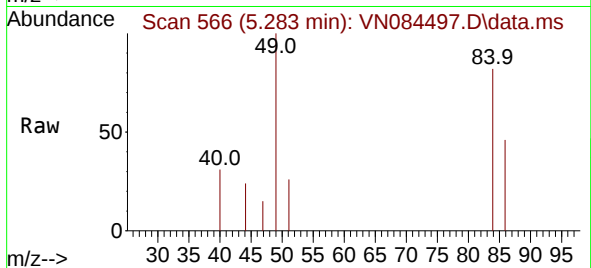
74 8.2 19.2 28.8#



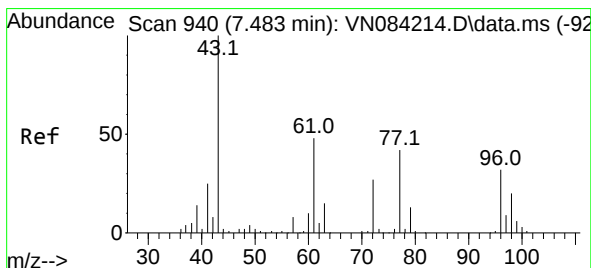
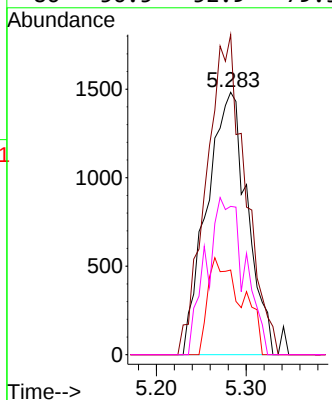


#20  
Methylene Chloride  
Concen: 1.967 ug/l  
RT: 5.283 min Scan# 501  
Delta R.T. 0.006 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Instrument :  
MSVOA\_N  
ClientSampleId :

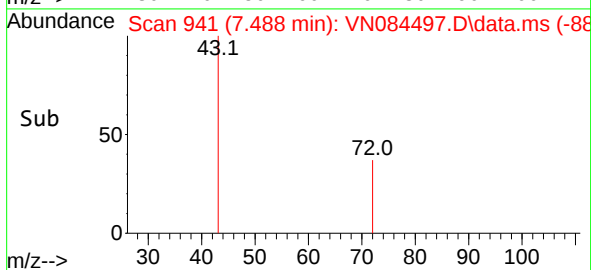
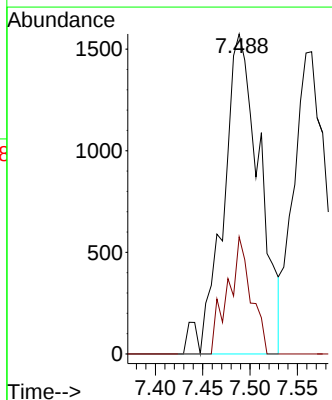
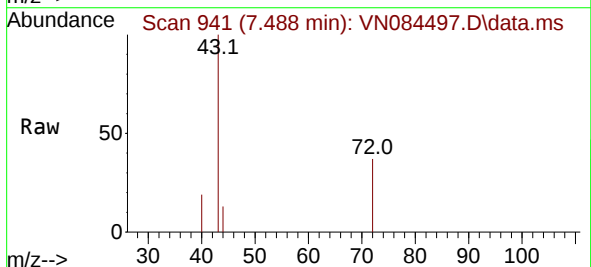


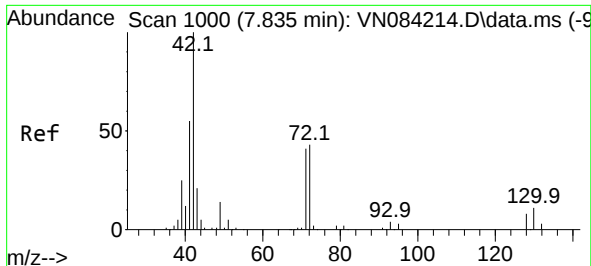
|             |             |
|-------------|-------------|
| Tgt Ion: 84 | Resp: 4640  |
| Ion Ratio   | Lower Upper |
| 84 100      |             |
| 49 121.9    | 107.2 160.8 |
| 51 32.2     | 31.8 47.8   |
| 86 56.5     | 52.9 79.3   |



#25  
2-Butanone  
Concen: 2.674 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 4227  |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 72 36.6     | 21.4 32.2#  |





#29

Tetrahydrofuran

Concen: 0.924 ug/l

RT: 7.853 min Scan# 1003

Delta R.T. 0.018 min

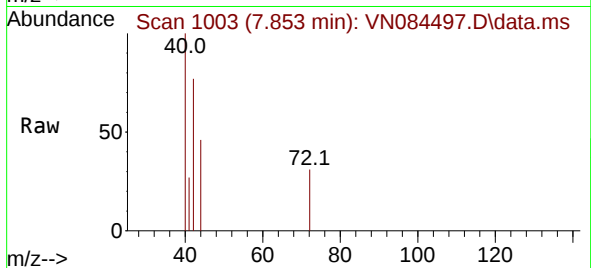
Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

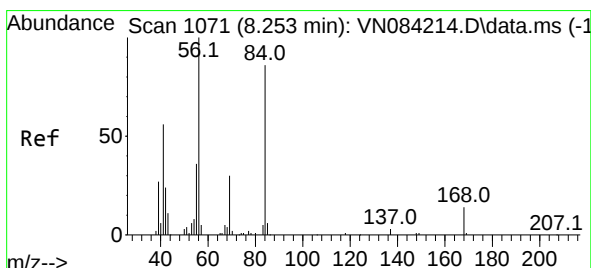
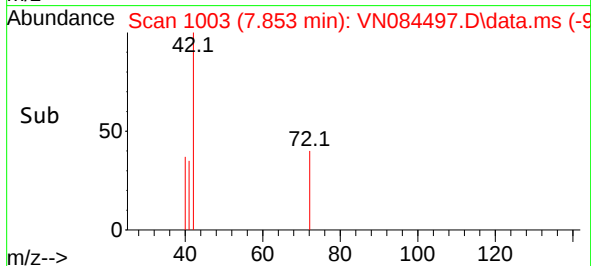
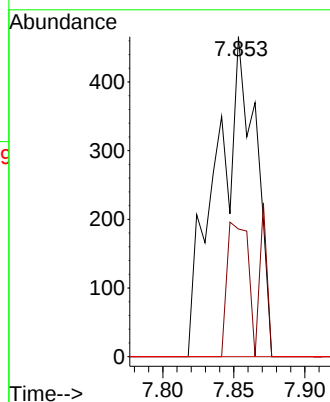
Instrument :

MSVOA\_N

ClientSampleId :



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 42    | Resp: | 901   |
| Ion Ratio | Lower | Upper |       |
| 42        | 100   |       |       |
| 72        | 22.1  | 34.6  | 51.8# |
| 71        | 0.0   | 32.2  | 48.4# |



#31

Cyclohexane

Concen: 1.160 ug/l

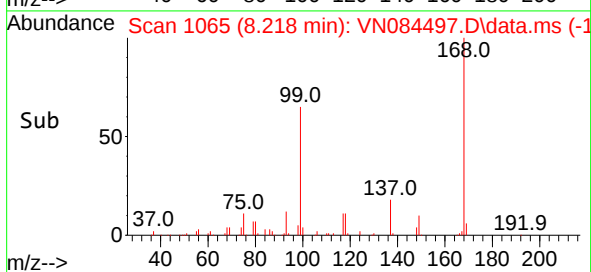
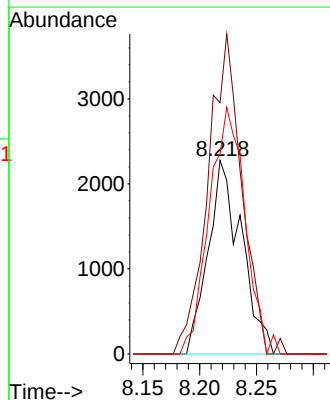
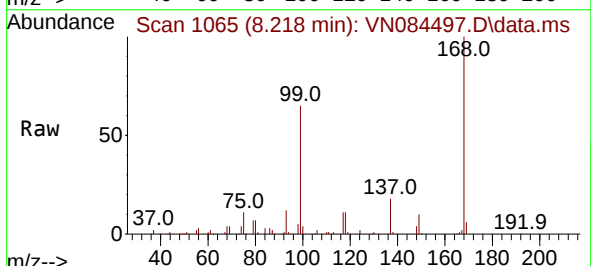
RT: 8.218 min Scan# 1065

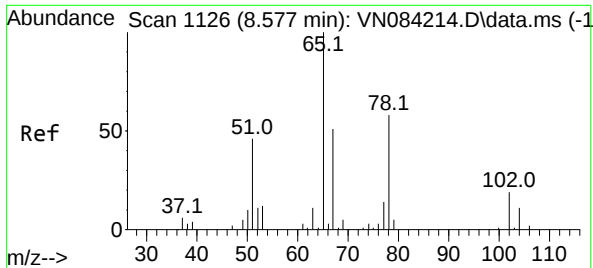
Delta R.T. -0.035 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 56    | Resp: | 4642   |
| Ion Ratio | Lower | Upper |        |
| 56        | 100   |       |        |
| 69        | 121.7 | 23.8  | 35.6#  |
| 84        | 103.5 | 68.8  | 103.2# |

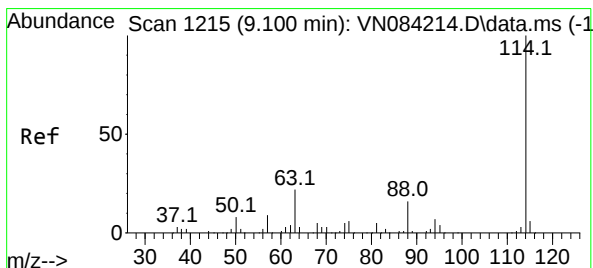
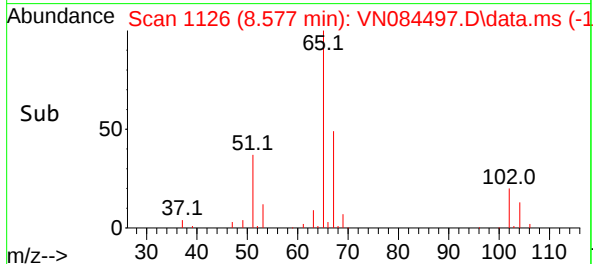
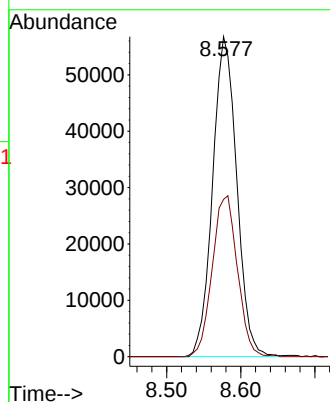
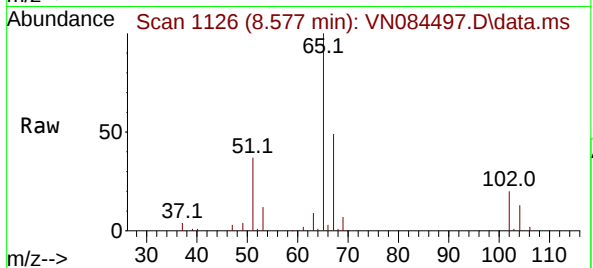




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.539 ug/l  
 RT: 8.577 min Scan# 1126  
 Delta R.T. 0.000 min  
 Lab File: VN084497.D  
 Acq: 24 Oct 2024 18:45

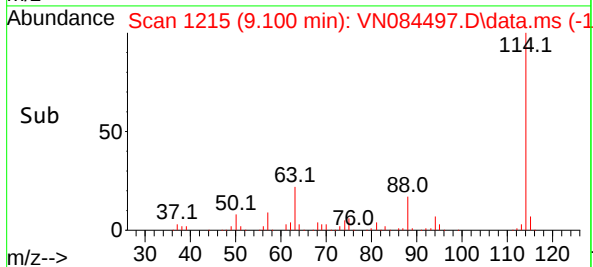
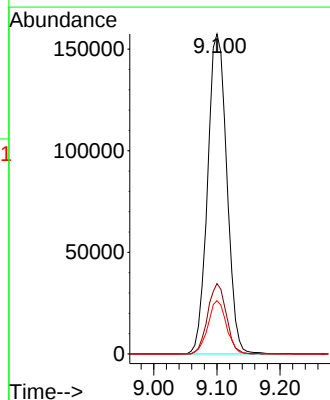
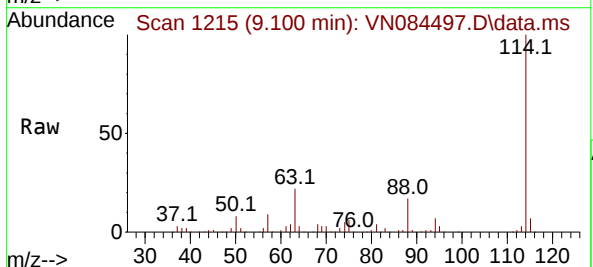
Instrument :  
 MSVOA\_N  
 ClientSampleId :

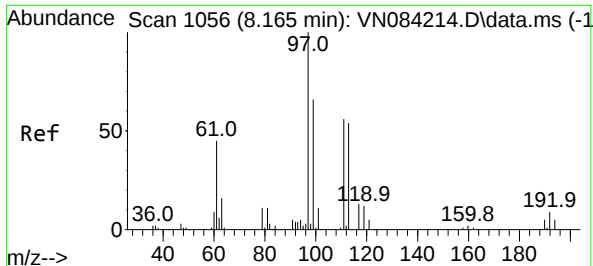
Tgt Ion: 65 Resp: 128444  
 Ion Ratio Lower Upper  
 65 100  
 67 52.3 0.0 102.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.000 min  
 Lab File: VN084497.D  
 Acq: 24 Oct 2024 18:45

Tgt Ion: 114 Resp: 332892  
 Ion Ratio Lower Upper  
 114 100  
 63 22.0 0.0 43.8  
 88 16.7 0.0 31.6





#35

Dibromofluoromethane

Concen: 46.787 ug/l

RT: 8.171 min Scan# 1057

Delta R.T. 0.006 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

ClientSampleId :

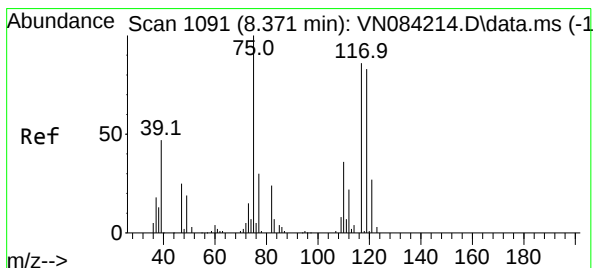
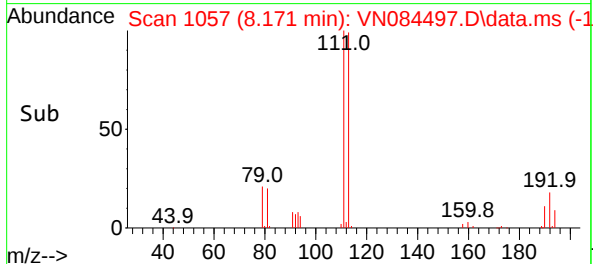
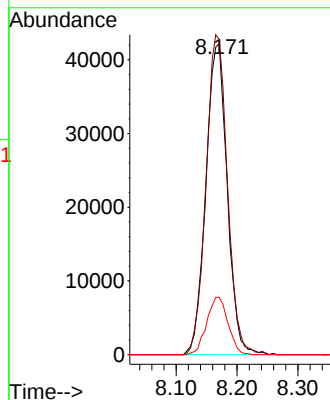
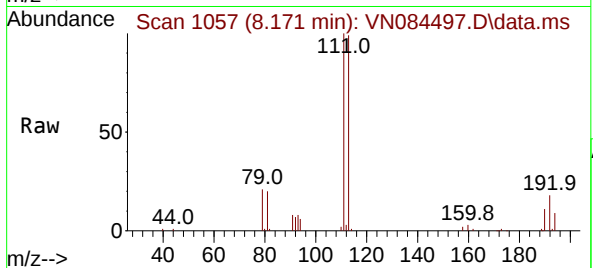
Tgt Ion:113 Resp: 102681

Ion Ratio Lower Upper

113 100

111 103.3 83.3 124.9

192 18.4 13.5 20.3



#36

1,1-Dichloropropene

Concen: 5.153 ug/l

RT: 8.218 min Scan# 1065

Delta R.T. -0.153 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

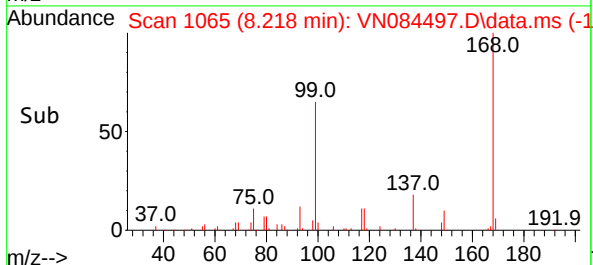
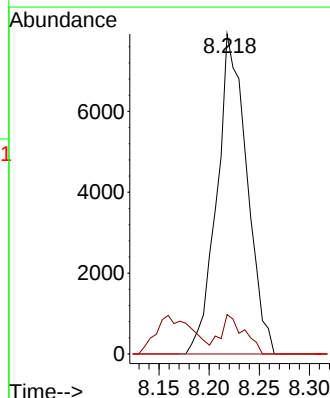
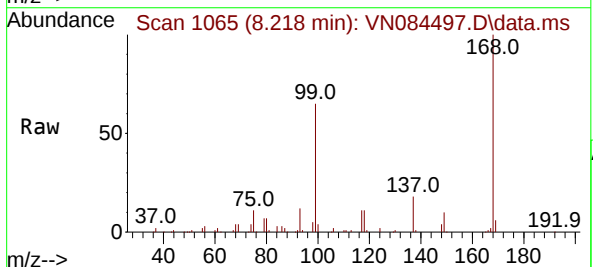
Tgt Ion: 75 Resp: 16428

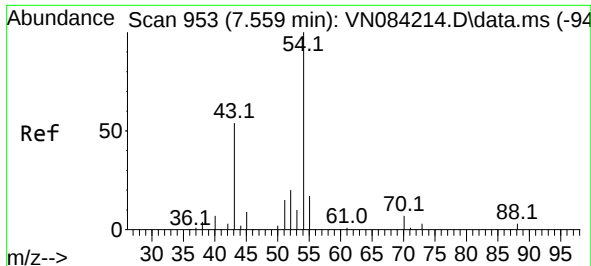
Ion Ratio Lower Upper

75 100

110 9.6 16.9 50.7#

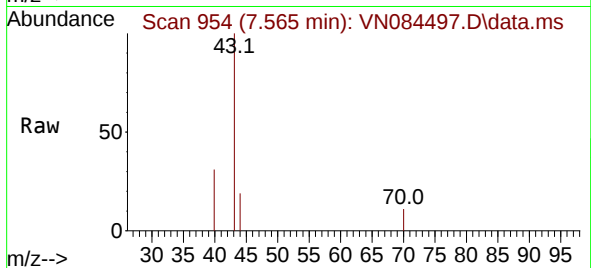
77 0.0 24.7 37.1#



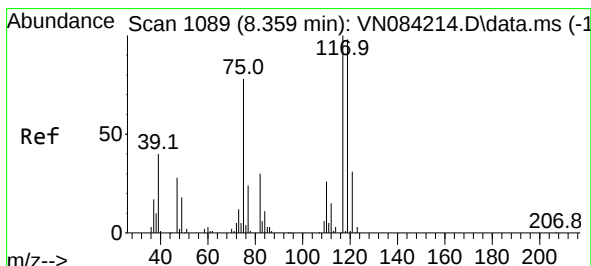
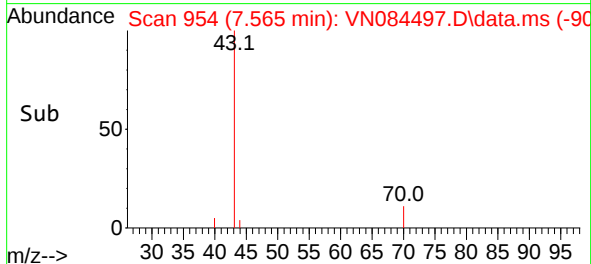
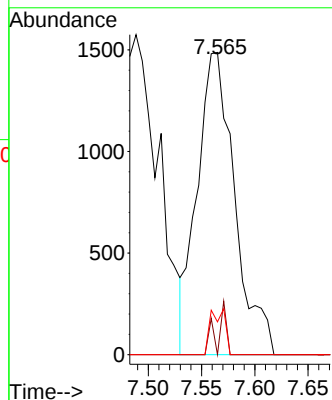


#37  
Ethyl Acetate  
Concen: 1.114 ug/l  
RT: 7.565 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Instrument :  
MSVOA\_N  
ClientSampleId :

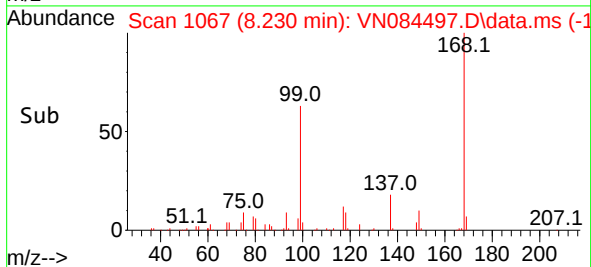
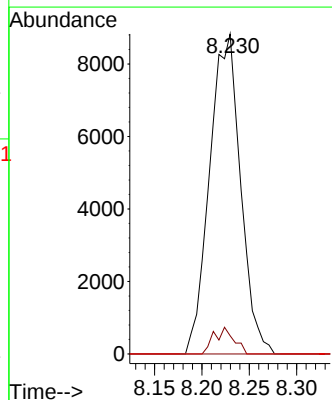
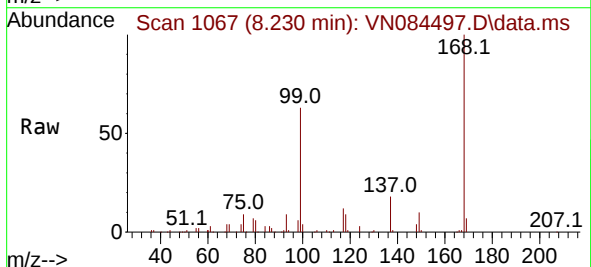


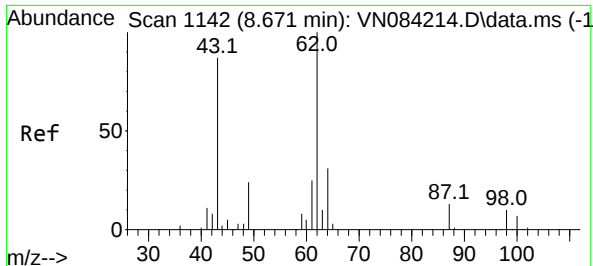
Tgt Ion: 43 Resp: 3644  
Ion Ratio Lower Upper  
43 100  
61 1.7 10.7 16.1#  
70 5.9 8.8 13.2#



#38  
Carbon Tetrachloride  
Concen: 5.725 ug/l  
RT: 8.230 min Scan# 1067  
Delta R.T. -0.129 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 117 Resp: 20020  
Ion Ratio Lower Upper  
117 100  
119 5.7 78.7 118.1#  
121 0.0 24.4 36.6#

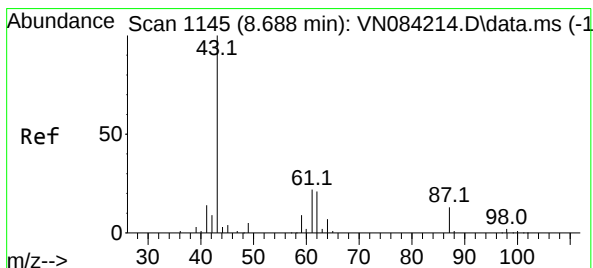
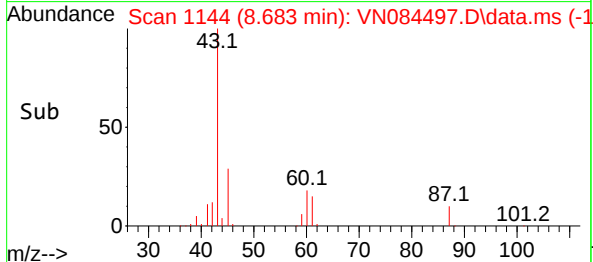
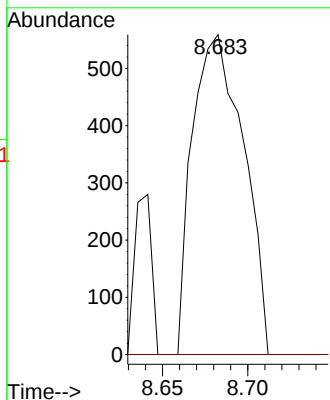
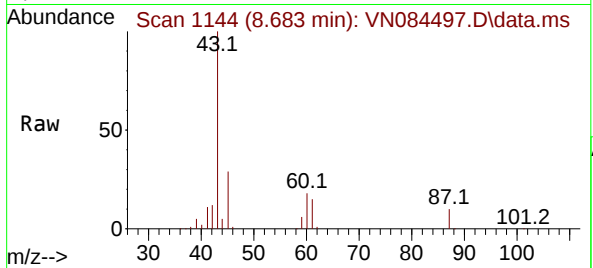




#42  
1,2-Dichloroethane  
Concen: 0.347 ug/l  
RT: 8.683 min Scan# 1144  
Delta R.T. 0.012 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

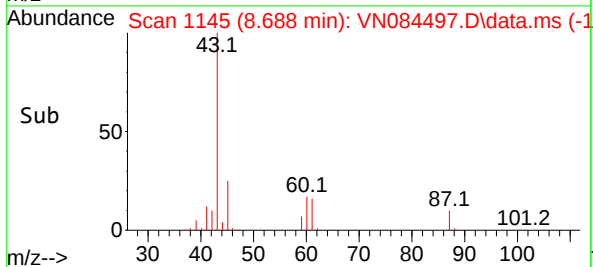
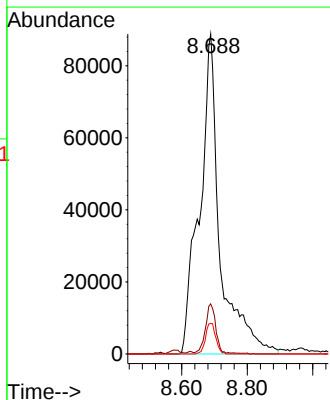
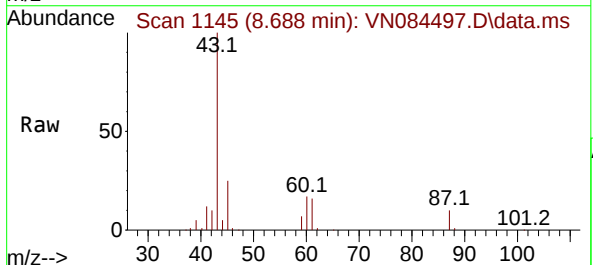
Instrument :  
MSVOA\_N  
ClientSampleId :

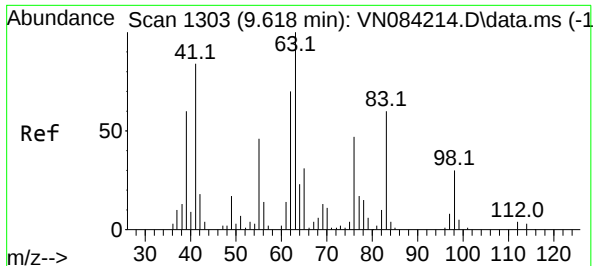
Tgt Ion: 62 Resp: 1167  
Ion Ratio Lower Upper  
62 100  
98 0.0 0.0 18.2



#43  
Isopropyl Acetate  
Concen: 60.070 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 43 Resp: 384790  
Ion Ratio Lower Upper  
43 100  
61 7.8 20.4 30.6#  
87 4.8 10.3 15.5#





#45

1,2-Dichloropropane

Concen: 0.628 ug/l

RT: 9.735 min Scan# 11

Delta R.T. 0.118 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

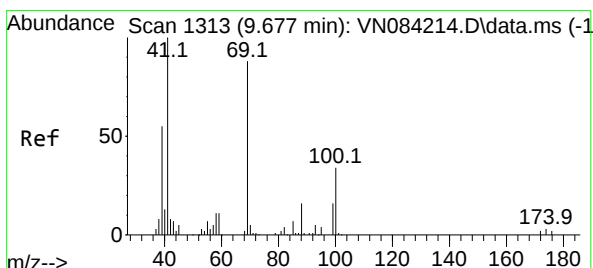
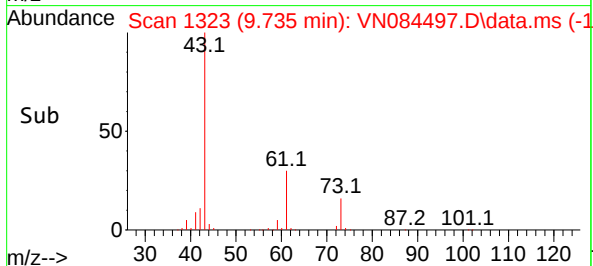
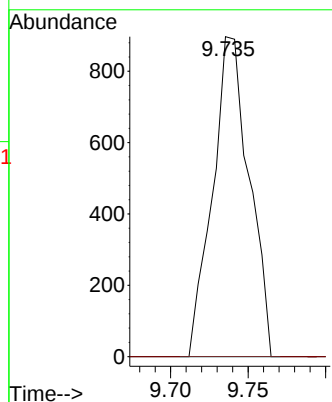
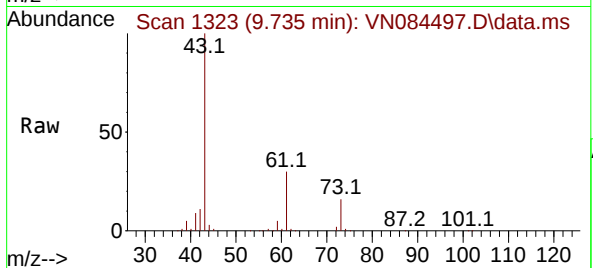
ClientSampleId :

Tgt Ion: 63 Resp: 1475

Ion Ratio Lower Upper

63 100

65 0.0 24.6 37.0#



#48

Methyl methacrylate

Concen: 1.394 ug/l

RT: 9.665 min Scan# 1311

Delta R.T. -0.012 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

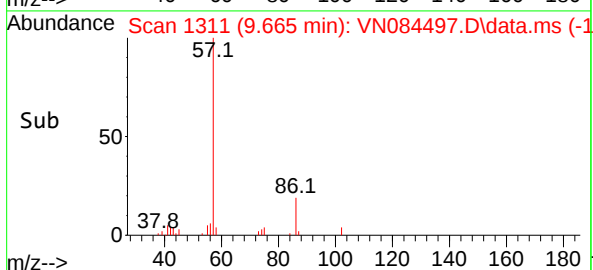
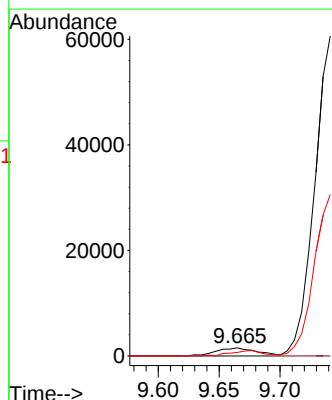
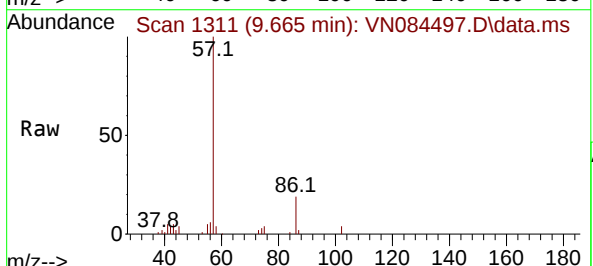
Tgt Ion: 41 Resp: 3554

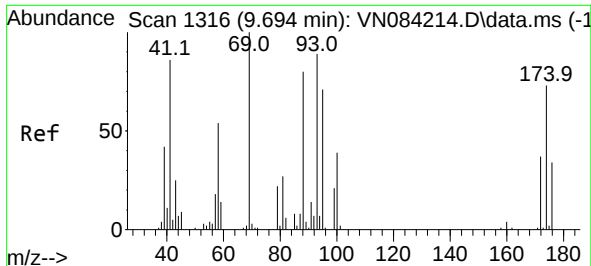
Ion Ratio Lower Upper

41 100

69 0.0 67.1 100.7#

39 53.7 45.8 68.6





#49

1,4-Dioxane

Concen: 1.321 ug/l

RT: 9.741 min Scan# 1

Delta R.T. 0.047 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

ClientSampleId :

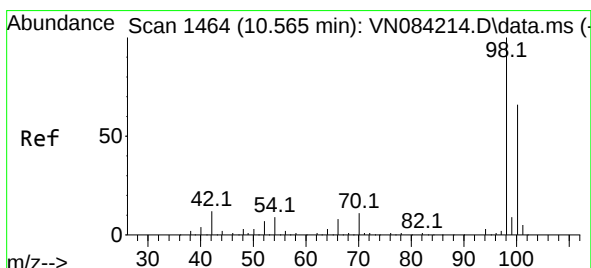
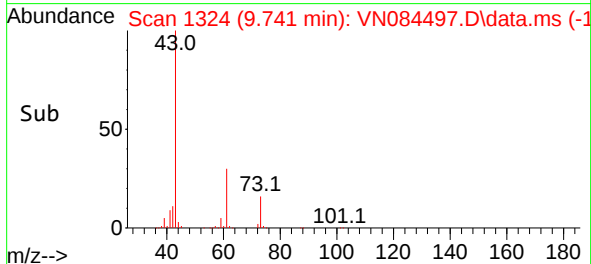
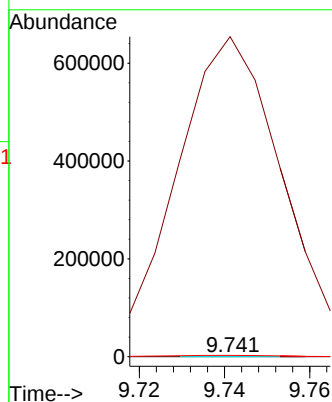
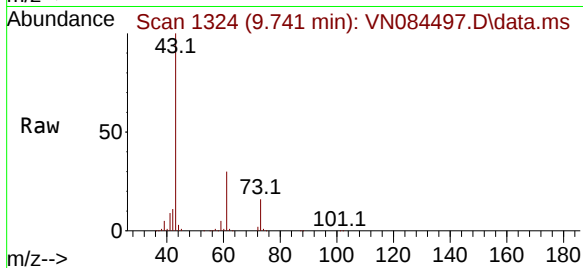
Tgt Ion: 88 Resp: 62

Ion Ratio Lower Upper

88 100

43 1876595.2 25.3 37.9#

58 8737.1 56.4 84.6#



#50

Toluene-d8

Concen: 49.681 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN084497.D

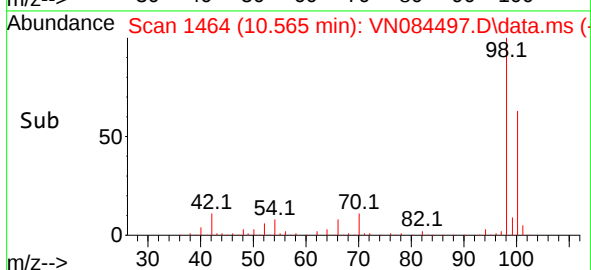
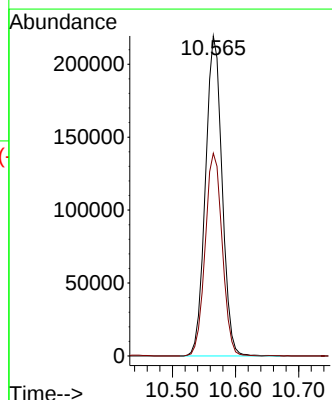
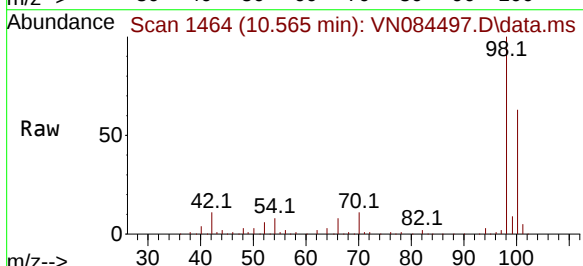
Acq: 24 Oct 2024 18:45

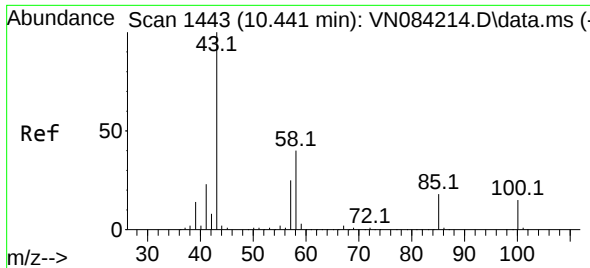
Tgt Ion: 98 Resp: 401136

Ion Ratio Lower Upper

98 100

100 64.9 52.7 79.1

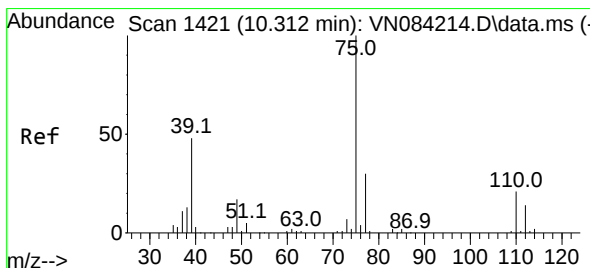
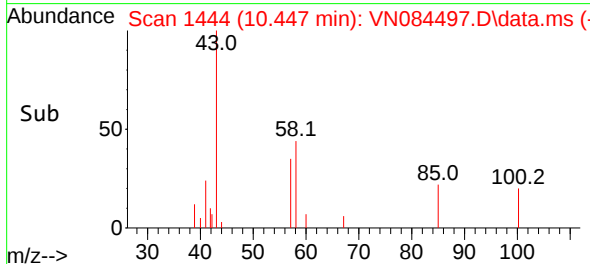
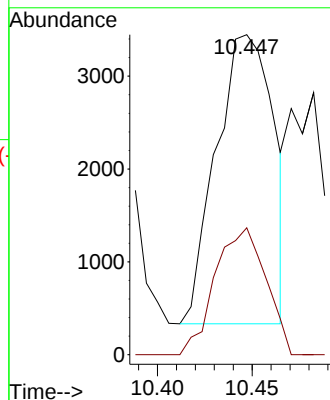
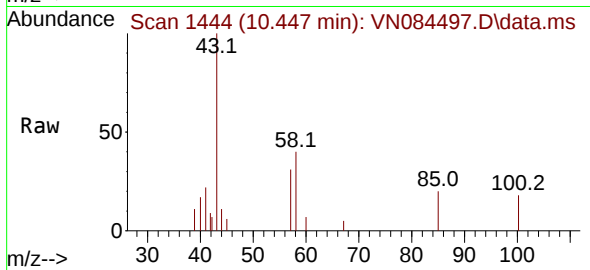




#51  
4-Methyl-2-Pentanone  
Concen: 2.108 ug/l  
RT: 10.447 min Scan# 1443  
Delta R.T. 0.006 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

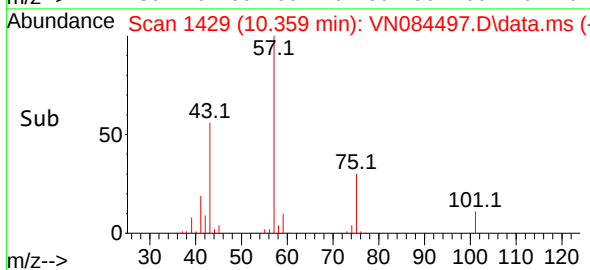
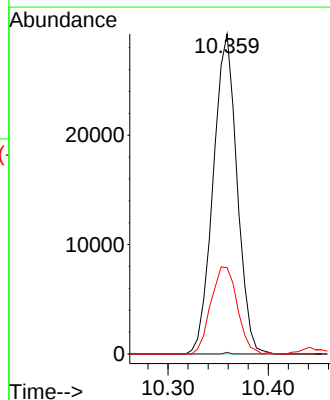
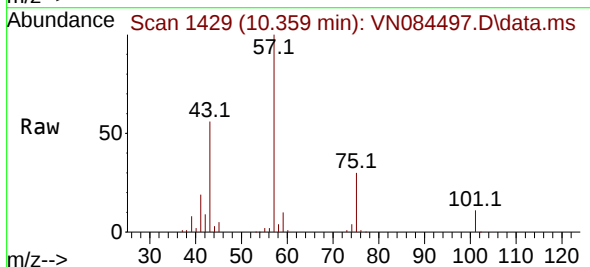
Instrument :  
MSVOA\_N  
ClientSampleId :

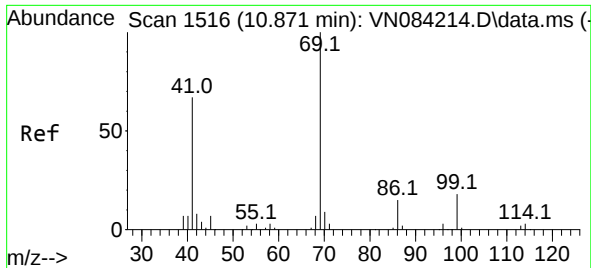
Tgt Ion: 43 Resp: 6564  
Ion Ratio Lower Upper  
43 100  
58 38.8 31.6 47.4



#54  
cis-1,3-Dichloropropene  
Concen: 12.499 ug/l  
RT: 10.359 min Scan# 1429  
Delta R.T. 0.047 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 75 Resp: 48276  
Ion Ratio Lower Upper  
75 100  
77 0.5 24.2 36.2#  
39 27.0 38.7 58.1#

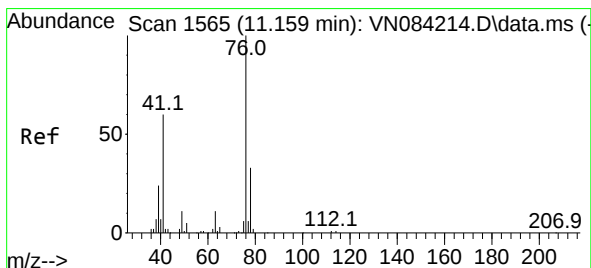
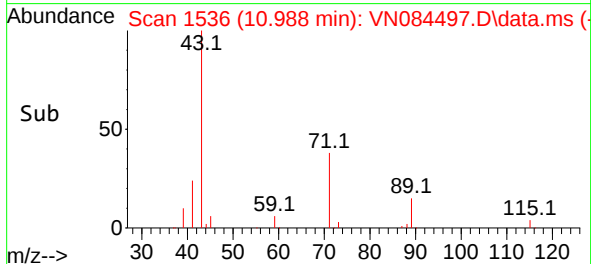
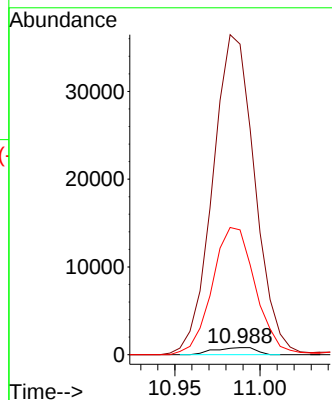
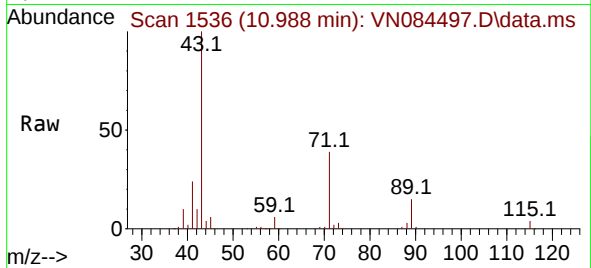




#56  
Ethyl methacrylate  
Concen: 0.389 ug/l  
RT: 10.988 min Scan# 1536  
Delta R.T. 0.118 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

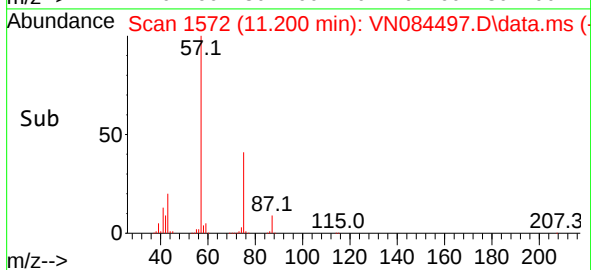
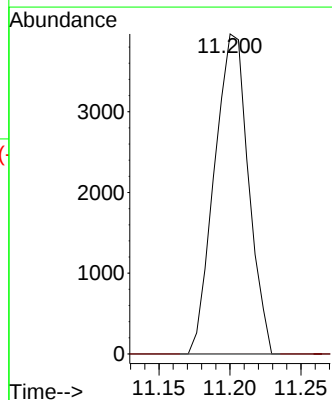
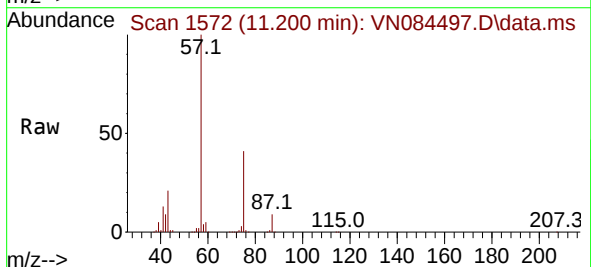
Instrument :  
MSVOA\_N  
ClientSampleId :

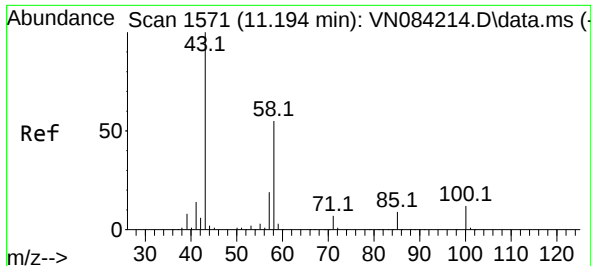
Tgt Ion: 69 Resp: 1388  
Ion Ratio Lower Upper  
69 100  
41 4527.9 53.3 79.9#  
39 1851.9 28.8 43.2#



#57  
1,3-Dichloropropane  
Concen: 1.703 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 76 Resp: 6609  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.8 38.6#

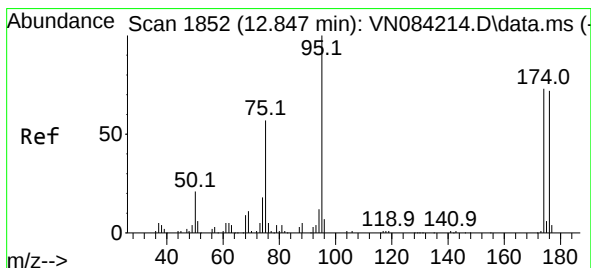
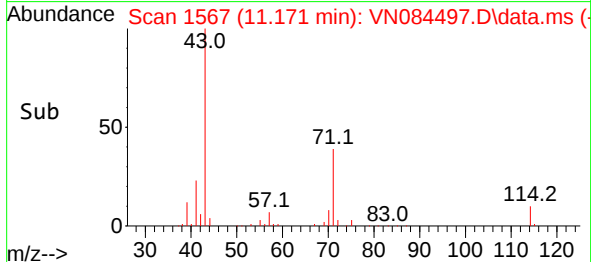
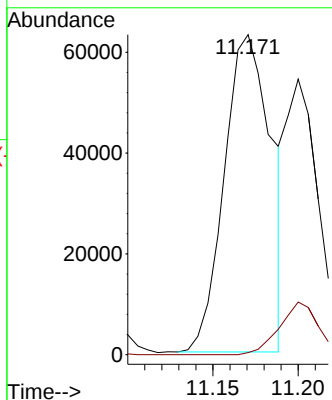
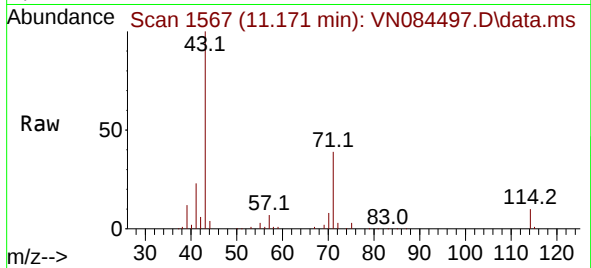




#59  
2-Hexanone  
Concen: 51.768 ug/l  
RT: 11.171 min Scan# 1567  
Delta R.T. -0.024 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

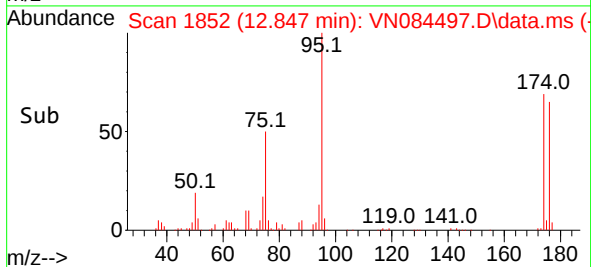
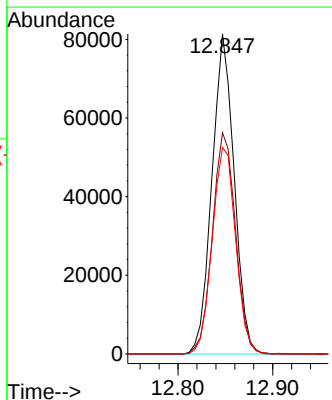
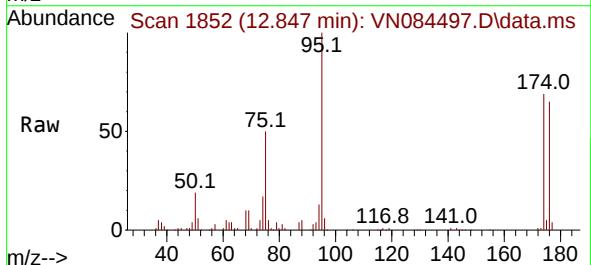
Instrument :  
MSVOA\_N  
ClientSampleId :

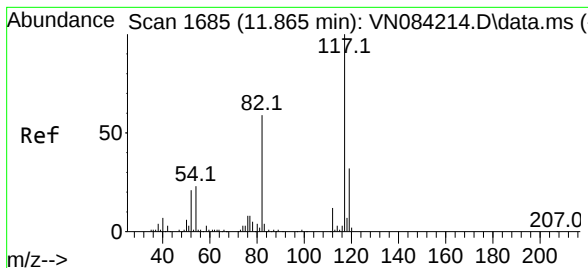
Tgt Ion: 43 Resp: 120458  
Ion Ratio Lower Upper  
43 100  
58 0.0 27.3 81.8#



#62  
4-Bromofluorobenzene  
Concen: 45.056 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 95 Resp: 132535  
Ion Ratio Lower Upper  
95 100  
174 71.9 0.0 145.2  
176 68.2 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

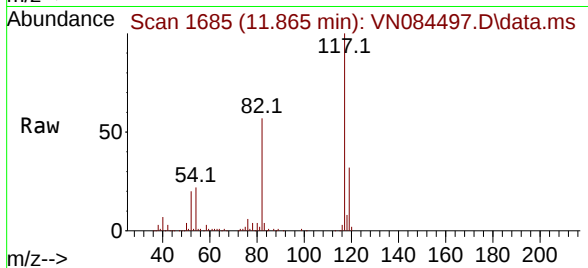
Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

ClientSampleId :



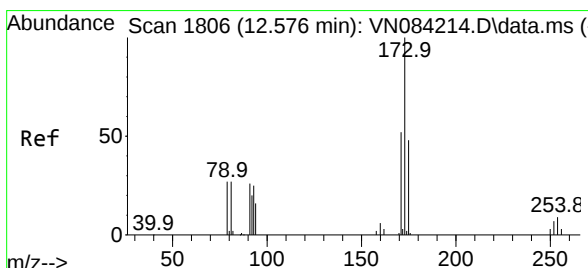
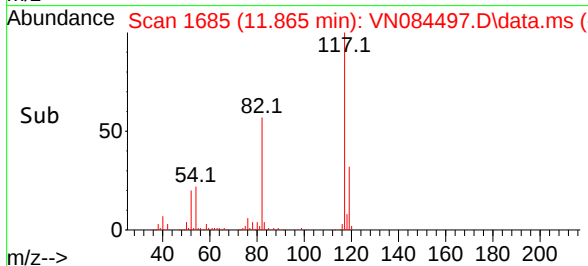
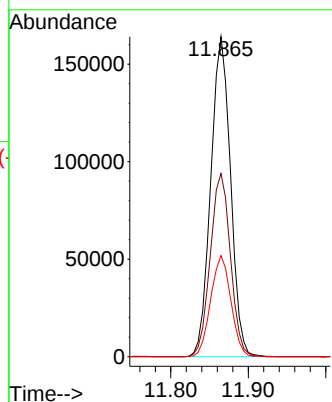
Tgt Ion:117 Resp: 290809

Ion Ratio Lower Upper

117 100

82 57.3 47.2 70.8

119 31.6 25.4 38.0



#71

Bromoform

Concen: 0.344 ug/l

RT: 12.841 min Scan# 1851

Delta R.T. 0.265 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

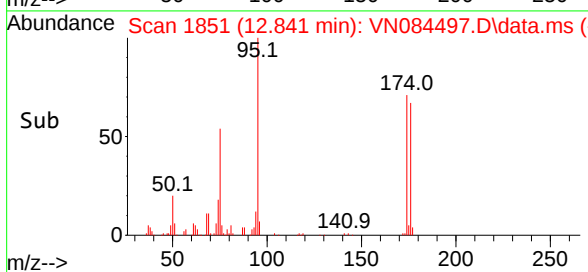
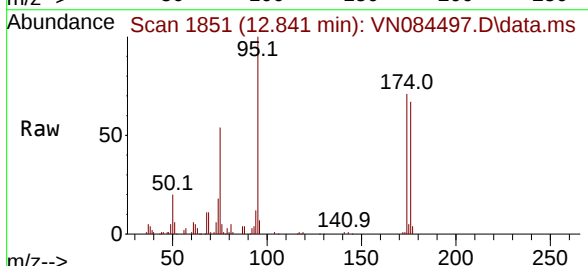
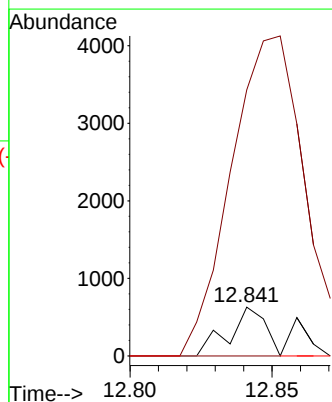
Tgt Ion:173 Resp: 563

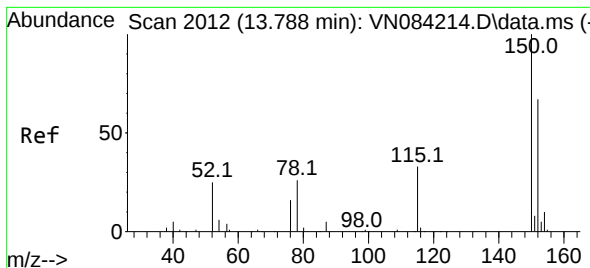
Ion Ratio Lower Upper

173 100

175 0.0 23.5 70.6#

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: VN084497.D

Acq: 24 Oct 2024 18:45

Instrument :

MSVOA\_N

ClientSampleId :

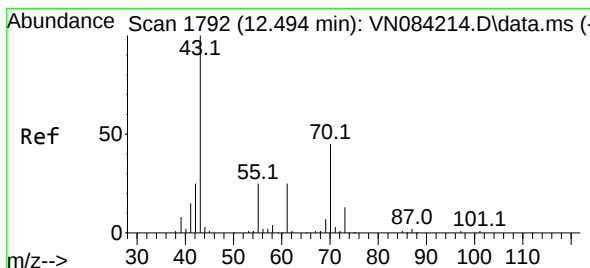
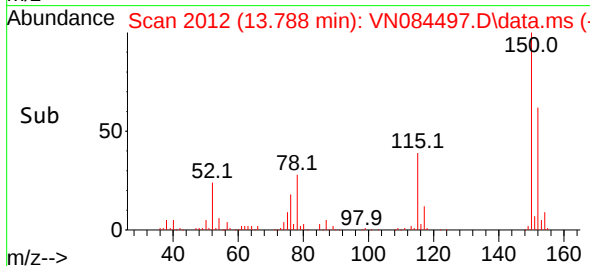
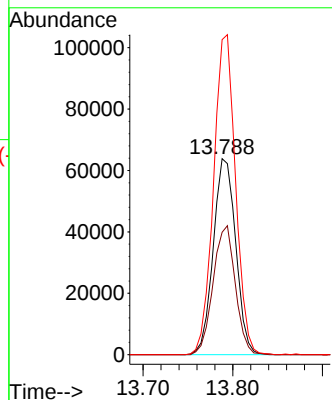
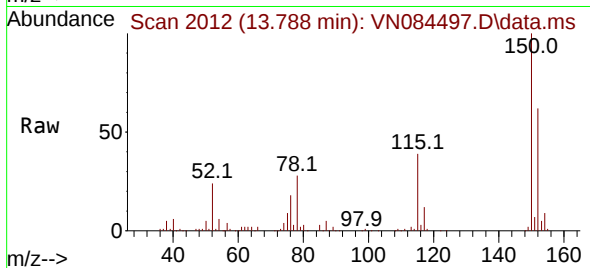
Tgt Ion:152 Resp: 111115

Ion Ratio Lower Upper

152 100

115 65.0 31.3 93.9

150 159.5 0.0 349.8



#74

N-ethyl acetate

Concen: 0.278 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.006 min

Lab File: VN084497.D

Acq: 24 Oct 2024 18:45

Tgt Ion: 43 Resp: 1069

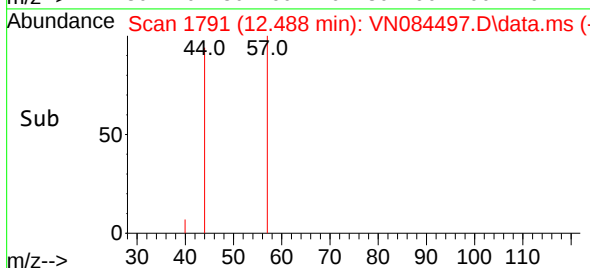
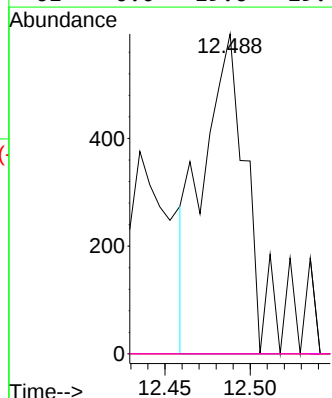
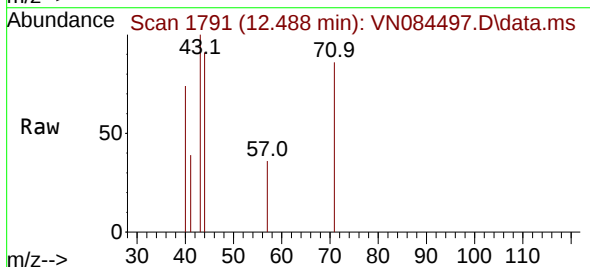
Ion Ratio Lower Upper

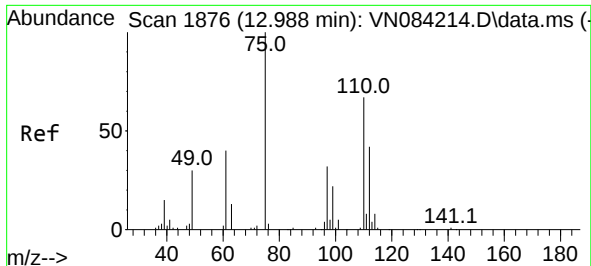
43 100

70 0.0 34.4 51.6#

55 0.0 19.6 29.4#

61 0.0 19.6 29.4#

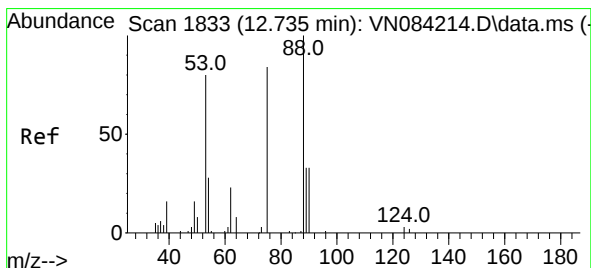
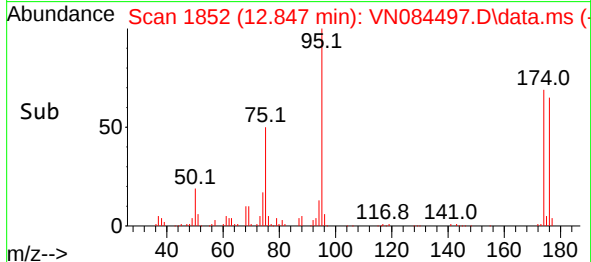
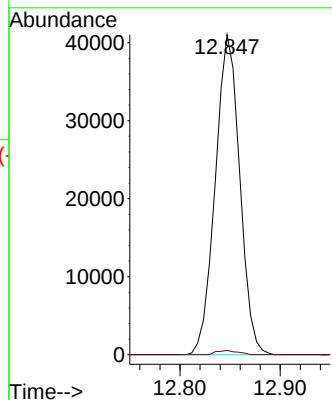
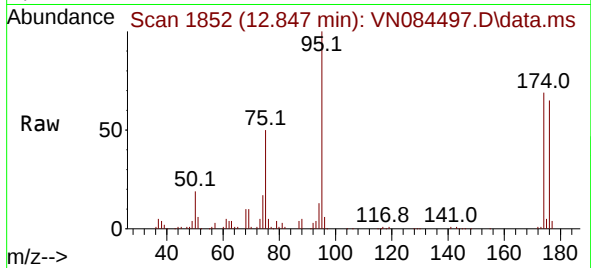




#76  
1,2,3-Trichloropropane  
Concen: 30.654 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.141 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 75 Resp: 69537  
Ion Ratio Lower Upper  
75 100  
77 1.2 96.9 290.7#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 73.492 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.112 min  
Lab File: VN084497.D  
Acq: 24 Oct 2024 18:45

Tgt Ion: 75 Resp: 69537  
Ion Ratio Lower Upper  
75 100  
53 0.0 78.0 117.0#  
89 0.0 35.5 53.3#

