

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN110424\  
 Data File : VN084669.D  
 Acq On : 04 Nov 2024 19:54  
 Operator : JC\MD  
 Sample : P4680-08  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 05 00:34:38 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc      | Units  | Dev(Min) |
|-------------------------------|----------------|------|------------|-----------|--------|----------|
| -----                         |                |      |            |           |        |          |
| Internal Standards            |                |      |            |           |        |          |
| 1) Pentafluorobenzene         | 8.218          | 168  | 171918     | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 307600     | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 285701     | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 122782     | 50.000    | ug/l   | 0.00     |
|                               |                |      |            |           |        |          |
| System Monitoring Compounds   |                |      |            |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 122079     | 49.164    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = | 98.320%   |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 97298      | 46.731    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = | 93.460%   |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 366831     | 47.829    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = | 95.660%   |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 141357     | 49.315    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = | 98.620%   |        |          |
|                               |                |      |            |           |        |          |
| Target Compounds              |                |      |            |           |        |          |
|                               |                |      |            |           | Qvalue |          |
| 3) Chloromethane              | 2.365          | 50   | 627        | Below Cal | #      | 41       |
| 6) Chloroethane               | 3.118          | 64   | 374        | Below Cal | #      | 45       |
| 11) Tert butyl alcohol        | 5.500          | 59   | 1717       | 5.239     | ug/l # | 73       |
| 16) Acetone                   | 4.430          | 43   | 37569      | 50.097    | ug/l   | 95       |
| 18) Methyl Acetate            | 5.042          | 43   | 6374       | Below Cal | #      | 79       |
| 20) Methylene Chloride        | 5.283          | 84   | 1582       | 0.724     | ug/l # | 65       |
| 25) 2-Butanone                | 7.489          | 43   | 2911       | 2.513     | ug/l # | 48       |
| 29) Tetrahydrofuran           | 7.859          | 42   | 632        | 0.822     | ug/l # | 49       |
| 31) Cyclohexane               | 8.218          | 56   | 4240       | 1.237     | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 8.224          | 75   | 14120      | 4.890     | ug/l # | 49       |
| 37) Ethyl Acetate             | 7.565          | 43   | 2740       | 1.046     | ug/l # | 75       |
| 38) Carbon Tetrachloride      | 8.224          | 117  | 18385      | 5.696     | ug/l # | 14       |
| 43) Isopropyl Acetate         | 8.688          | 43   | 146800     | 29.943    | ug/l # | 83       |
| 45) 1,2-Dichloropropane       | 9.741          | 63   | 1275       | 0.586     | ug/l # | 44       |
| 48) Methyl methacrylate       | 9.659          | 41   | 2813       | 1.380     | ug/l # | 45       |
| 51) 4-Methyl-2-Pentanone      | 10.447         | 43   | 4528       | 1.813     | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.359         | 75   | 35857      | 10.115    | ug/l # | 59       |
| 56) Ethyl methacrylate        | 10.977         | 69   | 1052       | 0.356     | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.200         | 76   | 4847       | 1.382     | ug/l # | 42       |
| 59) 2-Hexanone                | 11.171         | 43   | 90128      | 49.578    | ug/l # | 24       |
| 71) Bromoform                 | 12.847         | 173  | 657        | 0.393     | ug/l # | 1        |
| 74) N-amyl acetate            | 12.482         | 43   | 893        | 0.244     | ug/l # | 42       |
| 76) 1,2,3-Trichloropropane    | 12.847         | 75   | 73070      | 29.772    | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847         | 75   | 73070      | 70.630    | ug/l # | 11       |
| 95) Naphthalene               | 15.635         | 128  | 10568      | 1.487     | ug/l   | 99       |
| -----                         |                |      |            |           |        |          |

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

Quant Time: Nov 05 00:34:38 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

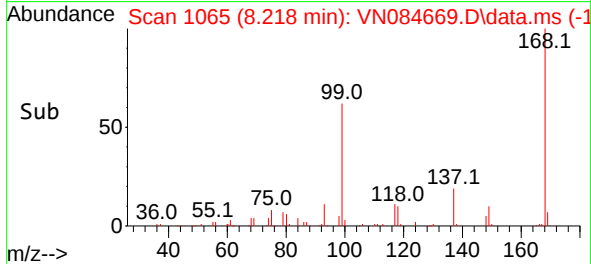
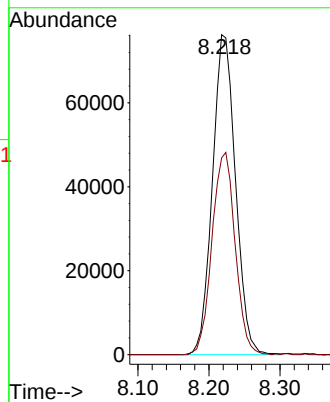
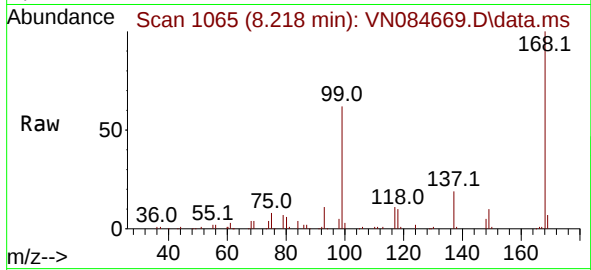




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

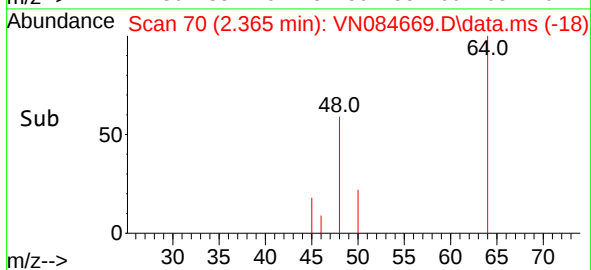
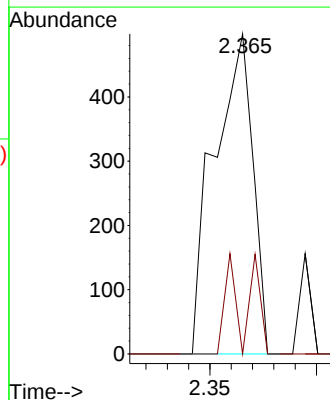
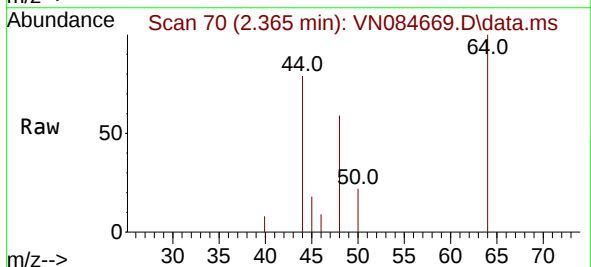
Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion:168 Resp: 171918  
Ion Ratio Lower Upper  
168 100  
99 61.5 54.2 81.2



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.365 min Scan# 70  
Delta R.T. 0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 50 Resp: 627  
Ion Ratio Lower Upper  
50 100  
52 0.0 26.8 40.2#

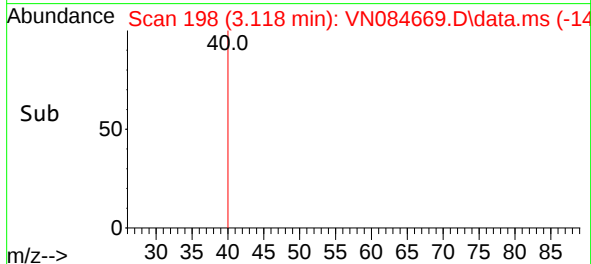
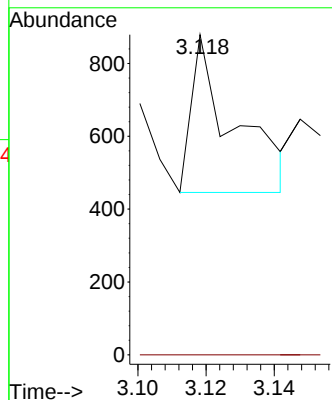
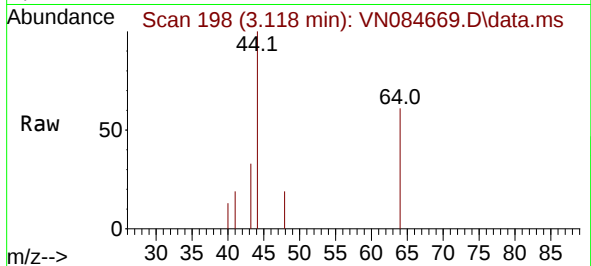




#6  
Chloroethane  
Concen: Below Cal  
RT: 3.118 min Scan# 190  
Delta R.T. 0.000 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

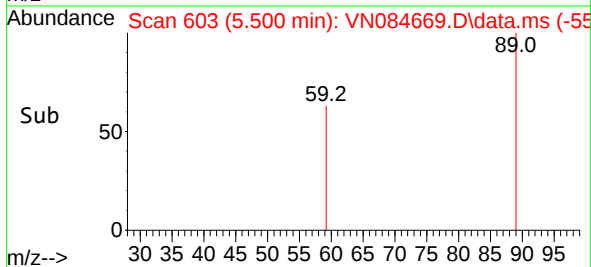
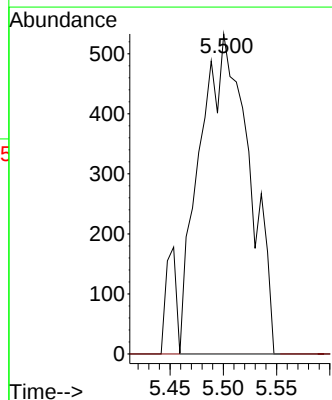
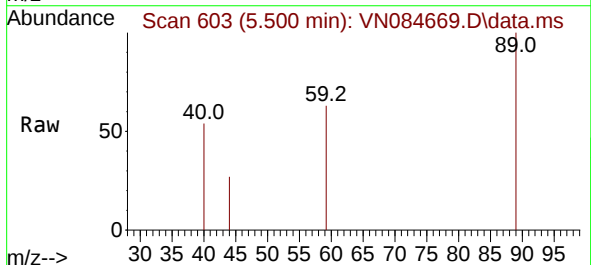
Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 64 Resp: 374  
Ion Ratio Lower Upper  
64 100  
66 0.0 23.5 35.3#



#11  
Tert butyl alcohol  
Concen: 5.239 ug/l  
RT: 5.500 min Scan# 603  
Delta R.T. -0.023 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 59 Resp: 1717  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.2#

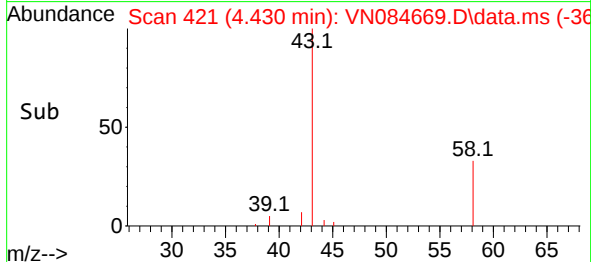
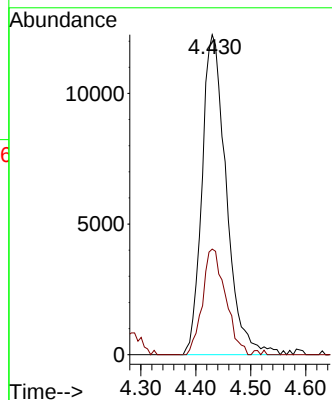
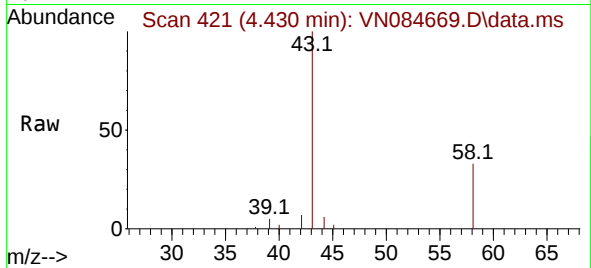




#16  
Acetone  
Concen: 50.097 ug/l  
RT: 4.430 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

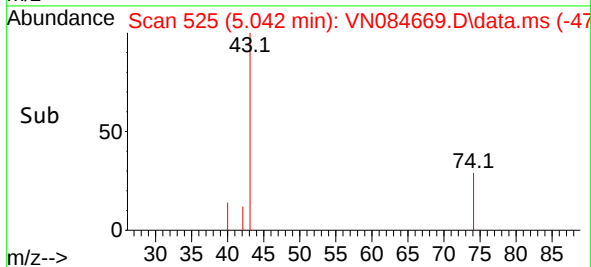
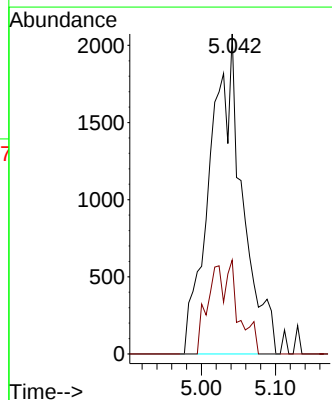
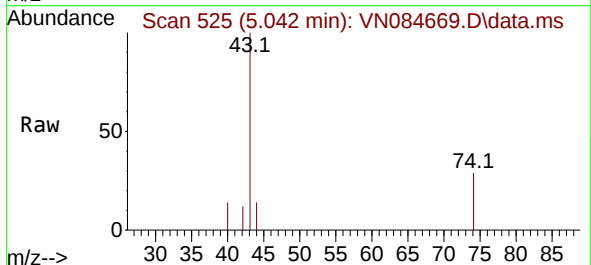
Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 43 Resp: 37569  
Ion Ratio Lower Upper  
43 100  
58 33.0 24.4 36.6



#18  
Methyl Acetate  
Concen: Below Cal  
RT: 5.042 min Scan# 525  
Delta R.T. 0.024 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

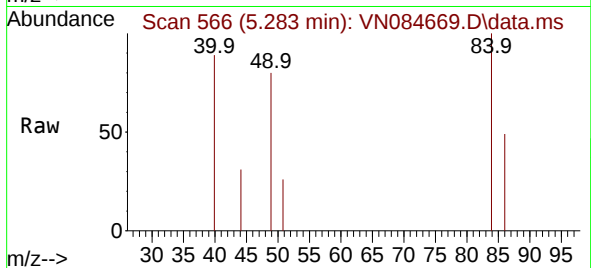
Tgt Ion: 43 Resp: 6374  
Ion Ratio Lower Upper  
43 100  
74 13.5 19.2 28.8#





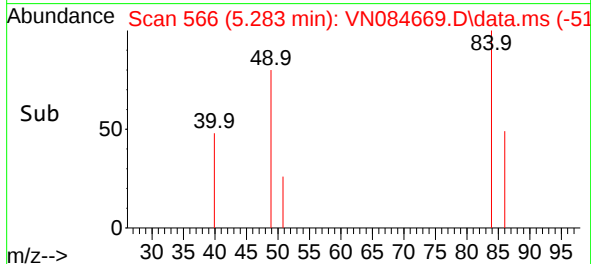
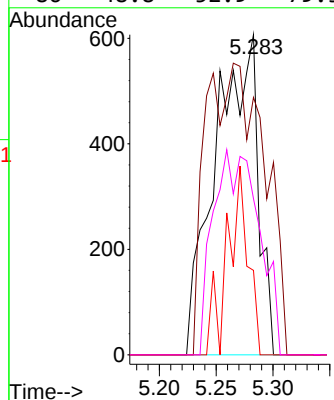
#20  
Methylene Chloride  
Concen: 0.724 ug/l  
RT: 5.283 min Scan# 51  
Delta R.T. 0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Instrument :  
MSVOA\_N  
ClientSampleId :



Tgt Ion: 84 Resp: 1582

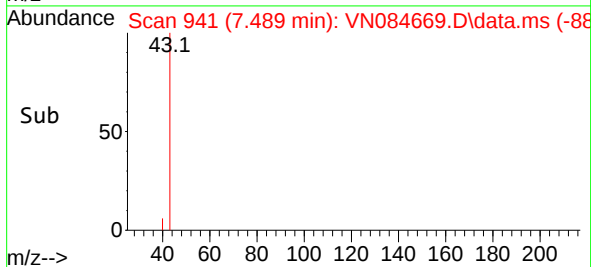
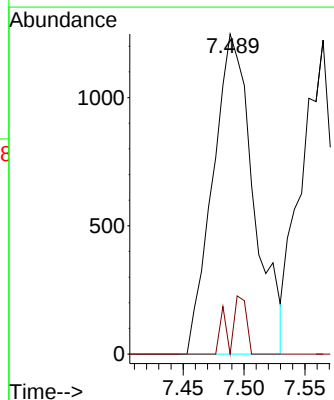
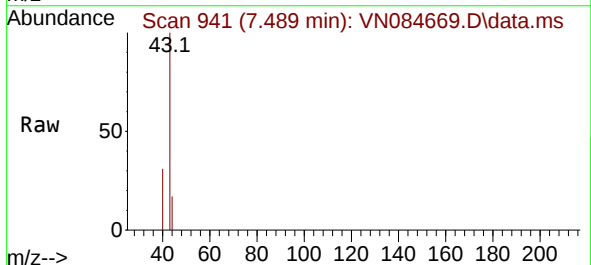
| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 84  | 100   |       |        |
| 49  | 80.4  | 107.2 | 160.8# |
| 51  | 26.4  | 31.8  | 47.8#  |
| 86  | 48.8  | 52.9  | 79.3#  |

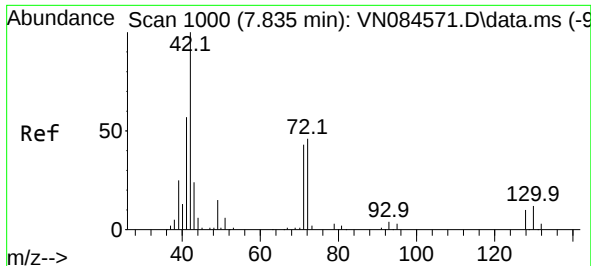


#25  
2-Butanone  
Concen: 2.513 ug/l  
RT: 7.489 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 43 Resp: 2911

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 0.0   | 21.4  | 32.2# |





#29

Tetrahydrofuran

Concen: 0.822 ug/l

RT: 7.859 min Scan# 1065

Delta R.T. 0.024 min

Lab File: VN084669.D

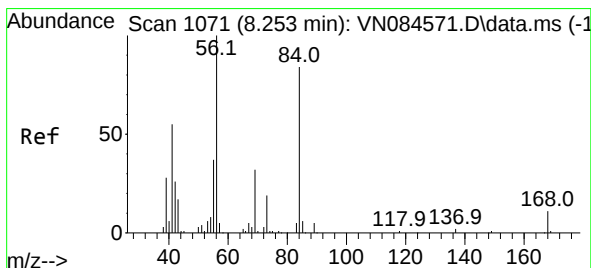
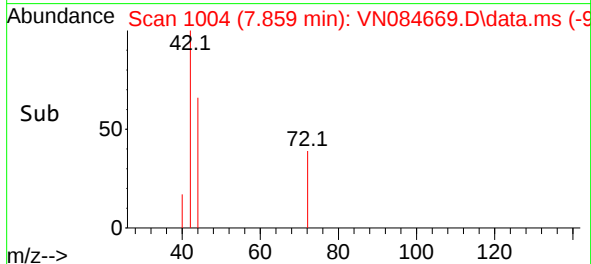
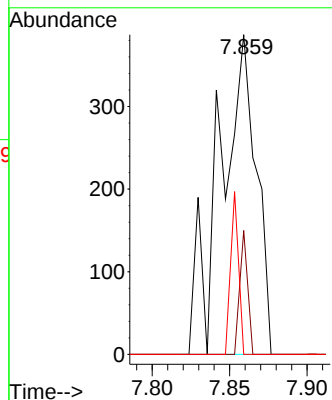
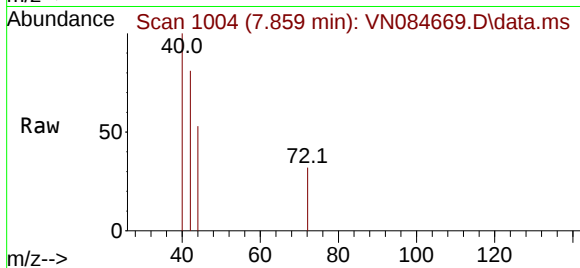
Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 632   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 8.4   | 34.6  | 51.8# |
| 71       | 11.1  | 32.2  | 48.4# |



#31

Cyclohexane

Concen: 1.237 ug/l

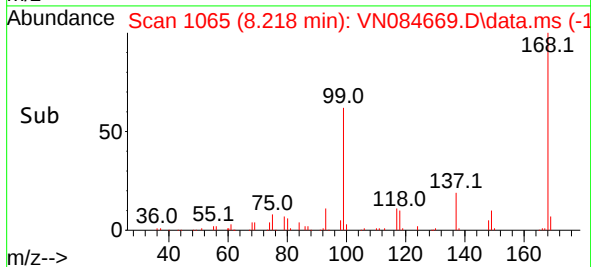
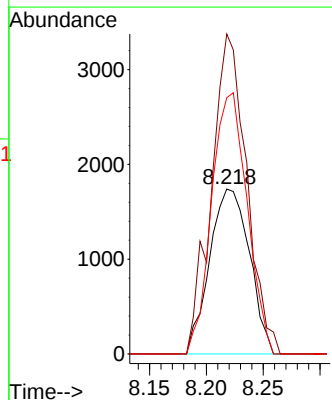
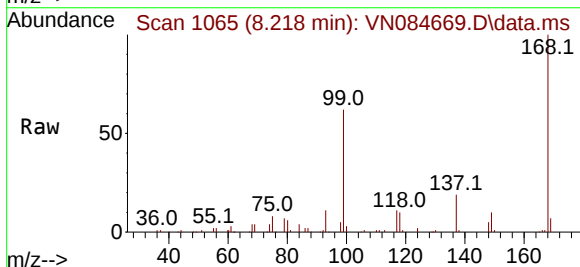
RT: 8.218 min Scan# 1065

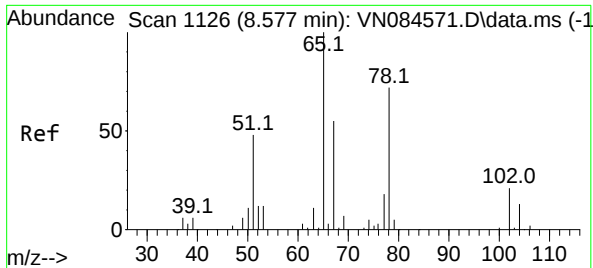
Delta R.T. -0.035 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 4240   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 194.0 | 23.8  | 35.6#  |
| 84       | 155.3 | 68.8  | 103.2# |





#33

1,2-Dichloroethane-d4

Concen: 49.164 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

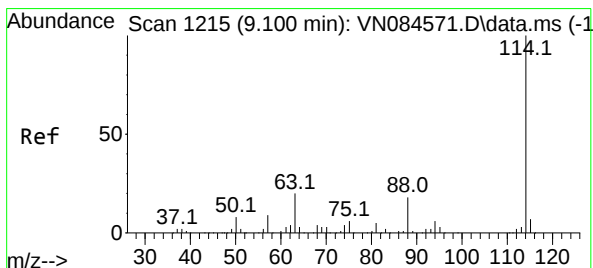
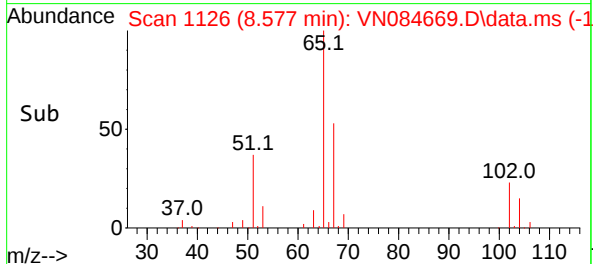
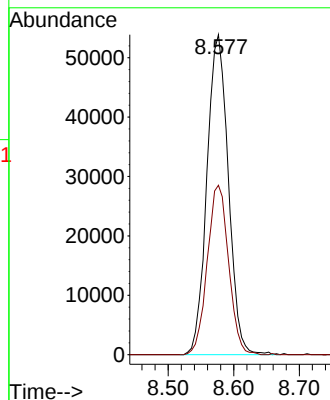
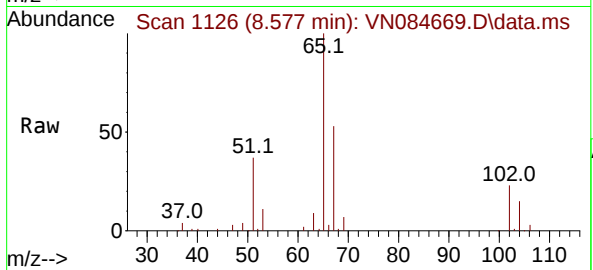
ClientSampleId :

Tgt Ion: 65 Resp: 122079

Ion Ratio Lower Upper

65 100

67 52.7 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: VN084669.D

Acq: 04 Nov 2024 19:54

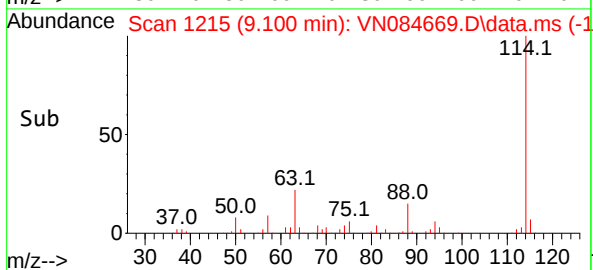
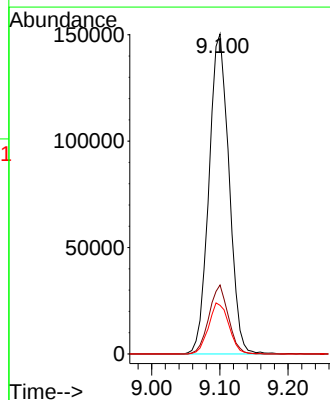
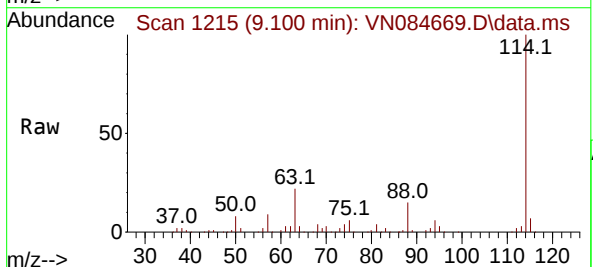
Tgt Ion: 114 Resp: 307600

Ion Ratio Lower Upper

114 100

63 21.5 0.0 43.8

88 15.2 0.0 31.6





#35

Dibromofluoromethane

Concen: 46.731 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

ClientSampleId :

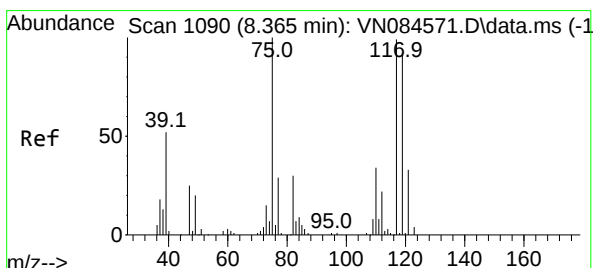
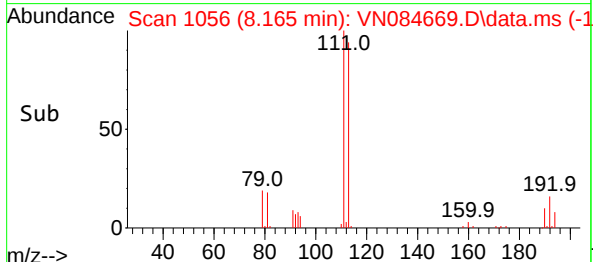
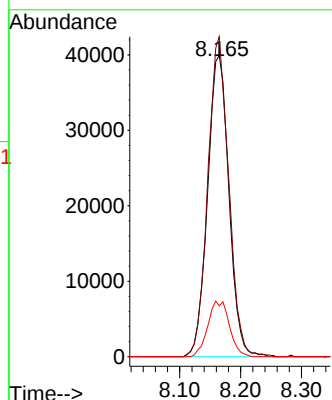
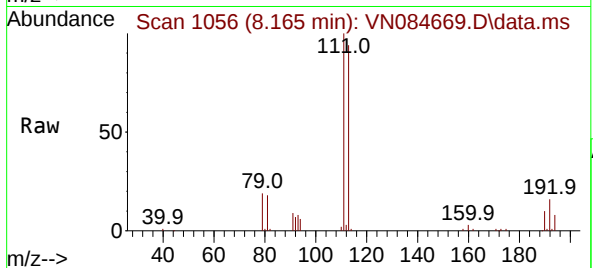
Tgt Ion:113 Resp: 97298

Ion Ratio Lower Upper

113 100

111 103.9 83.3 124.9

192 18.7 13.5 20.3



#36

1,1-Dichloropropene

Concen: 4.890 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.147 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

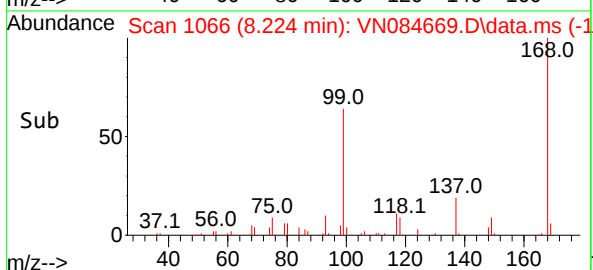
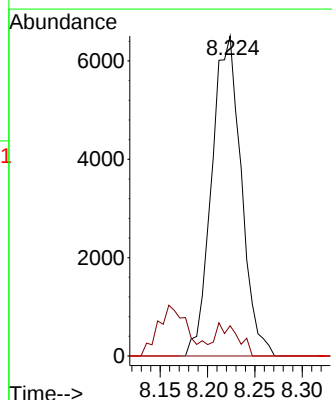
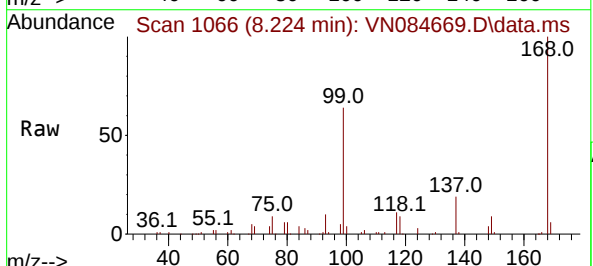
Tgt Ion: 75 Resp: 14120

Ion Ratio Lower Upper

75 100

110 7.7 16.9 50.7#

77 0.0 24.7 37.1#





#37

Ethyl Acetate

Concen: 1.046 ug/l

RT: 7.565 min Scan# 91

Delta R.T. 0.006 min

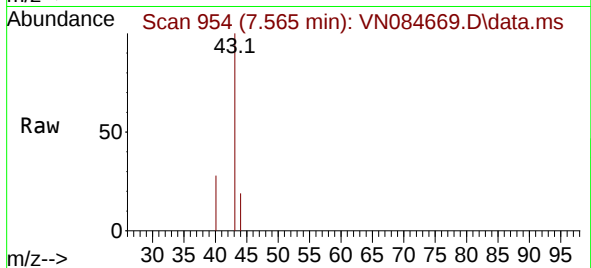
Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

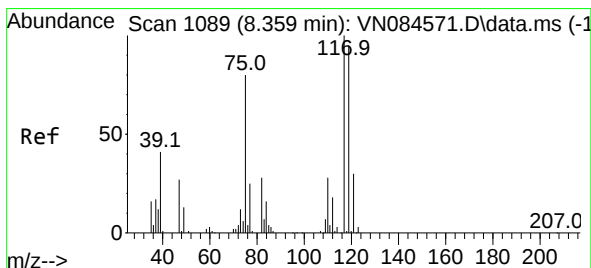
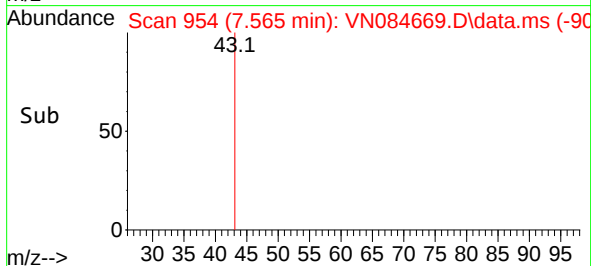
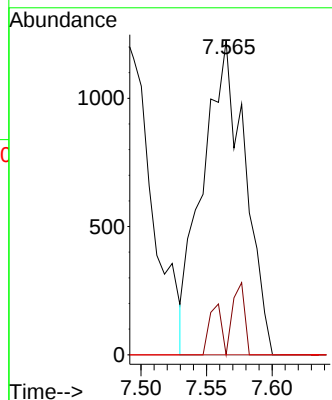
Instrument :

MSVOA\_N

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 2740  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 4.7   | 10.7  | 16.1# |
| 70       | 0.0   | 8.8   | 13.2# |



#38

Carbon Tetrachloride

Concen: 5.696 ug/l

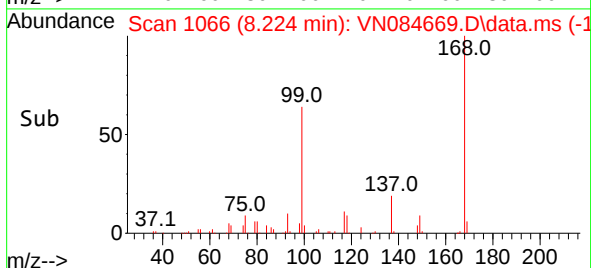
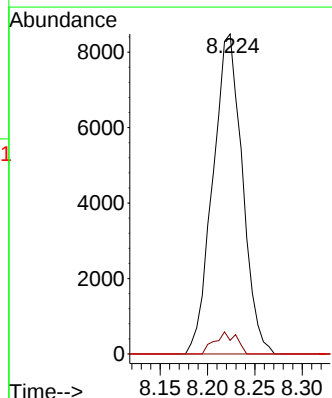
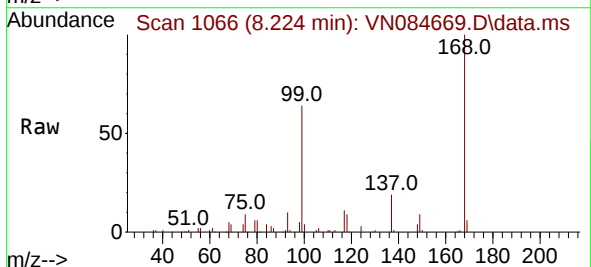
RT: 8.224 min Scan# 1066

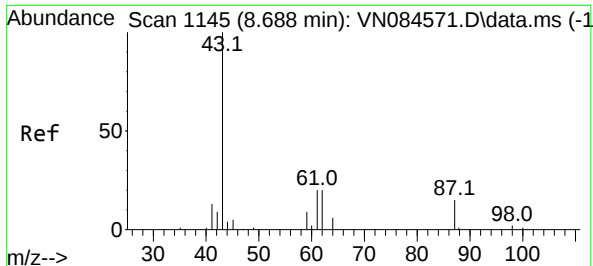
Delta R.T. -0.135 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 18385  |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 119      | 4.3   | 78.7  | 118.1# |
| 121      | 0.0   | 24.4  | 36.6#  |





#43

Isopropyl Acetate

Concen: 29.943 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

ClientSampleId :

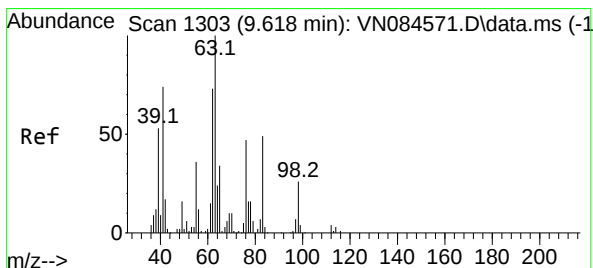
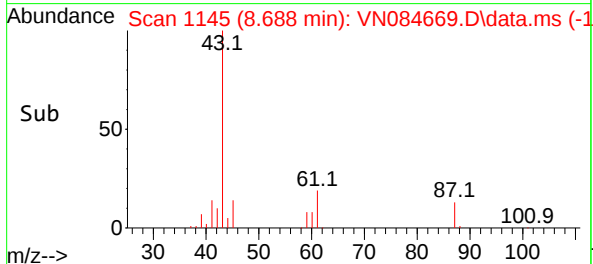
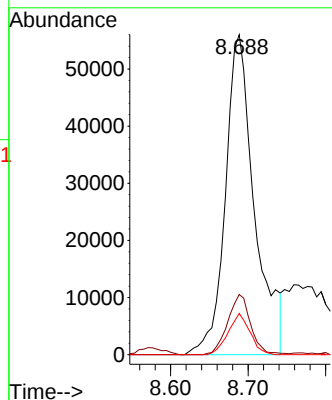
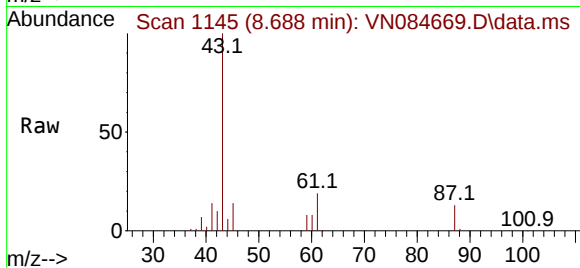
Tgt Ion: 43 Resp: 146800

Ion Ratio Lower Upper

43 100

61 14.9 20.4 30.6#

87 9.6 10.3 15.5#



#45

1,2-Dichloropropane

Concen: 0.586 ug/l

RT: 9.741 min Scan# 1324

Delta R.T. 0.123 min

Lab File: VN084669.D

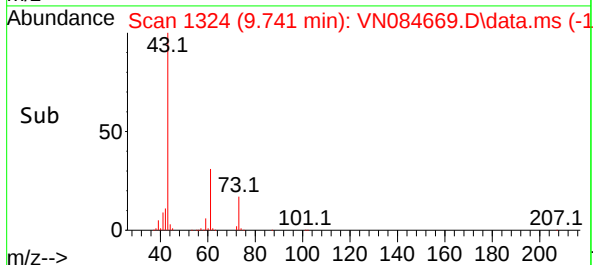
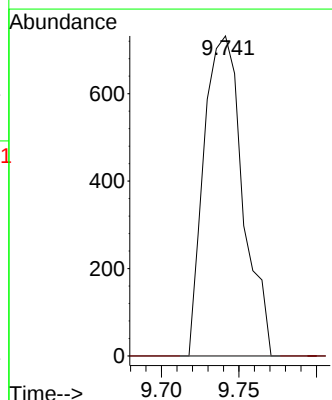
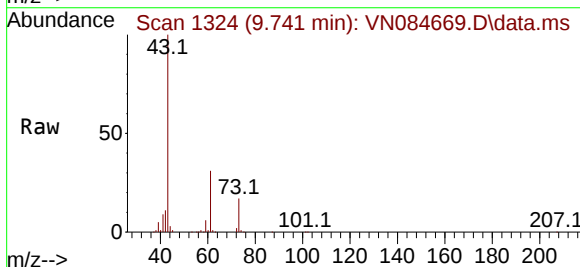
Acq: 04 Nov 2024 19:54

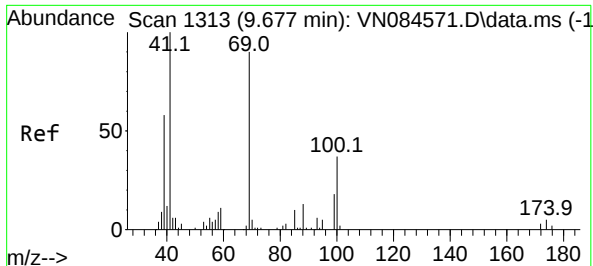
Tgt Ion: 63 Resp: 1275

Ion Ratio Lower Upper

63 100

65 0.0 24.6 37.0#





#48

Methyl methacrylate

Concen: 1.380 ug/l

RT: 9.659 min Scan# 1310

Delta R.T. -0.018 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

ClientSampleId :

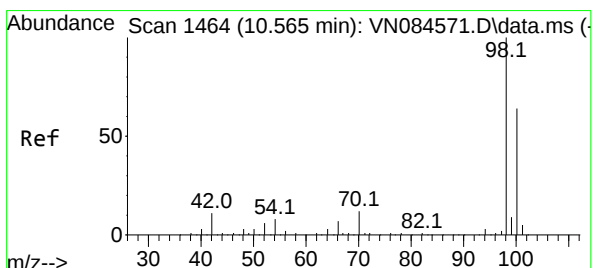
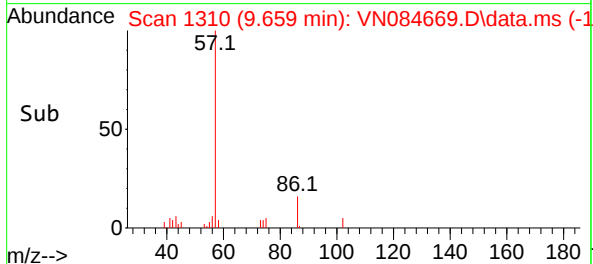
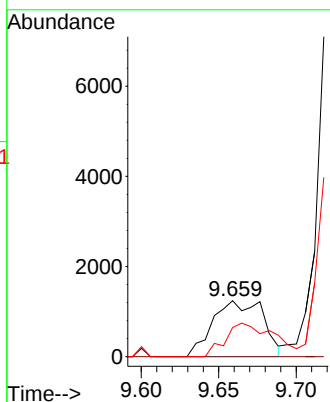
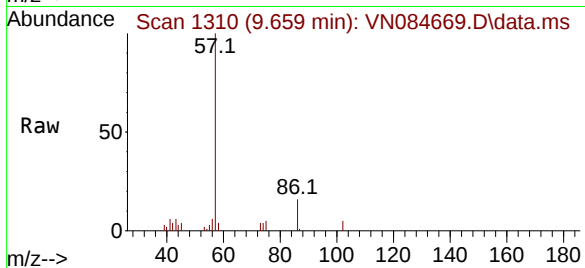
Tgt Ion: 41 Resp: 2813

Ion Ratio Lower Upper

41 100

69 0.0 67.1 100.7#

39 57.8 45.8 68.6



#50

Toluene-d8

Concen: 47.829 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084669.D

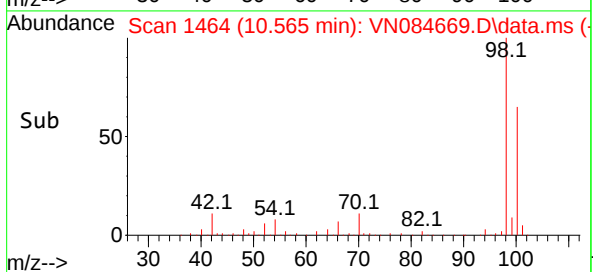
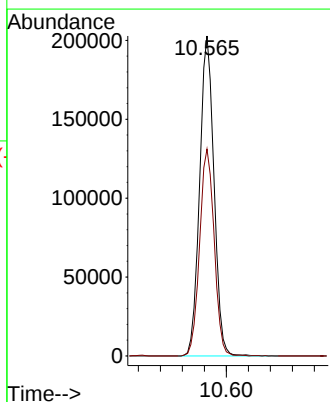
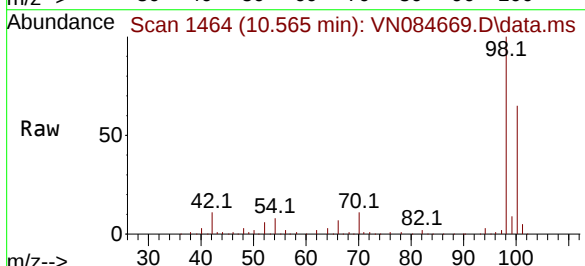
Acq: 04 Nov 2024 19:54

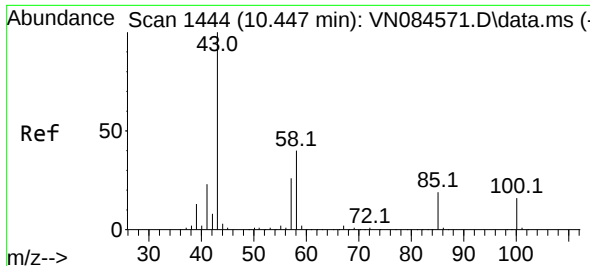
Tgt Ion: 98 Resp: 366831

Ion Ratio Lower Upper

98 100

100 65.7 52.7 79.1

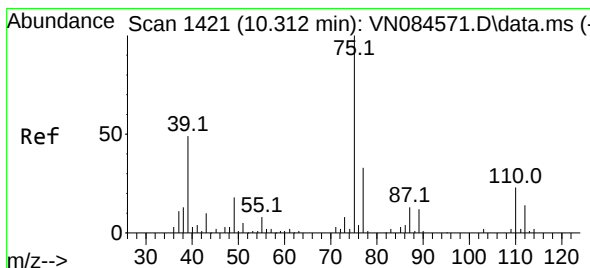
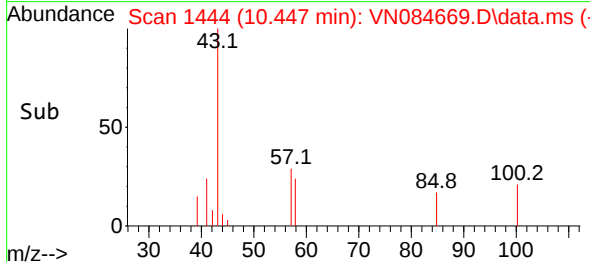
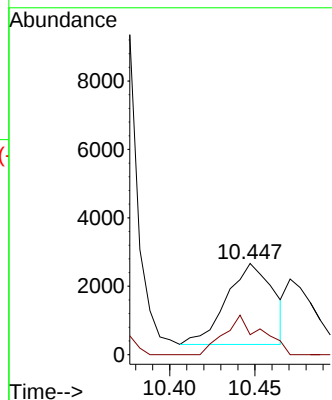
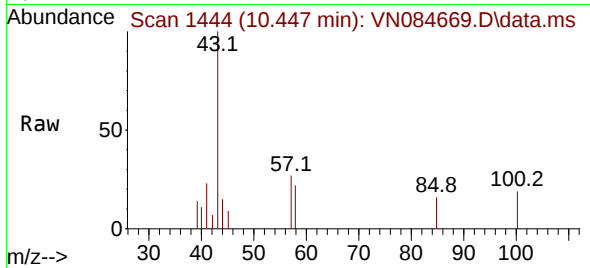




#51  
4-Methyl-2-Pentanone  
Concen: 1.813 ug/l  
RT: 10.447 min Scan# 1444  
Delta R.T. 0.006 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

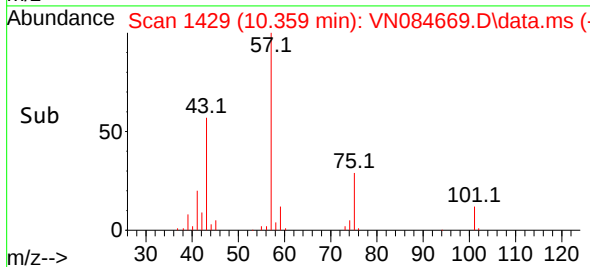
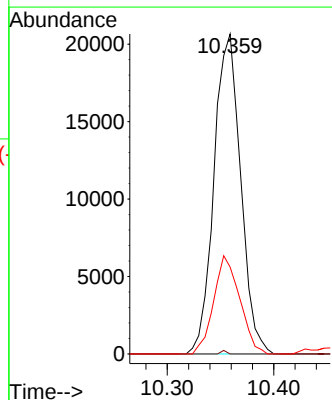
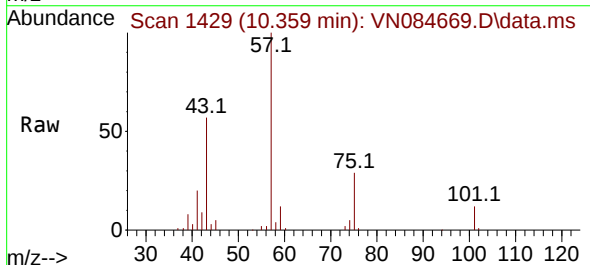
Instrument :  
MSVOA\_N  
ClientSampleId :

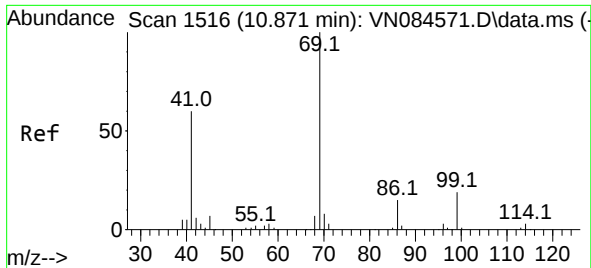
Tgt Ion: 43 Resp: 4528  
Ion Ratio Lower Upper  
43 100  
58 39.0 31.6 47.4



#54  
cis-1,3-Dichloropropene  
Concen: 10.115 ug/l  
RT: 10.359 min Scan# 1429  
Delta R.T. 0.047 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 75 Resp: 35857  
Ion Ratio Lower Upper  
75 100  
77 0.0 24.2 36.2#  
39 27.1 38.7 58.1#

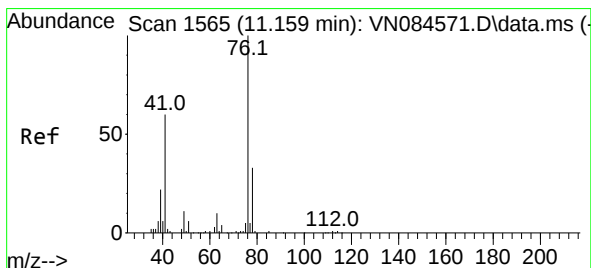
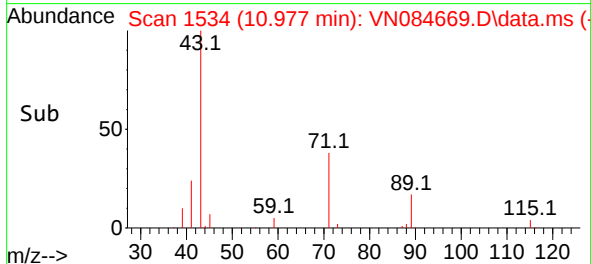
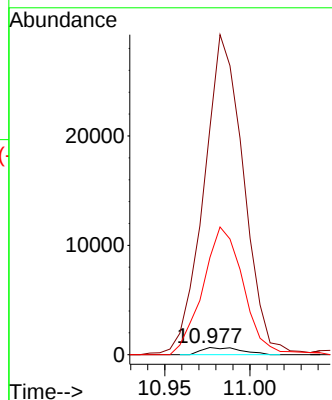
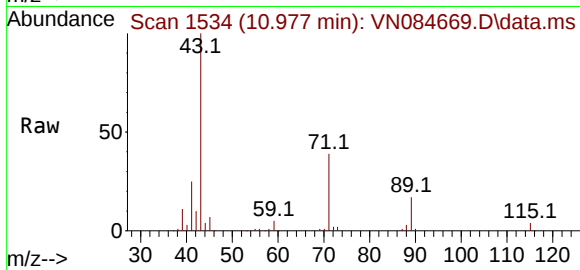




#56  
Ethyl methacrylate  
Concen: 0.356 ug/l  
RT: 10.977 min Scan# 11  
Delta R.T. 0.106 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

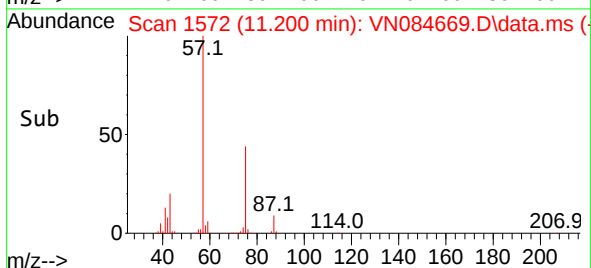
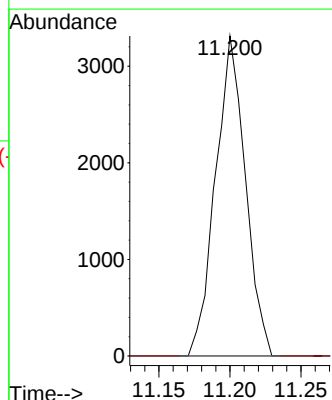
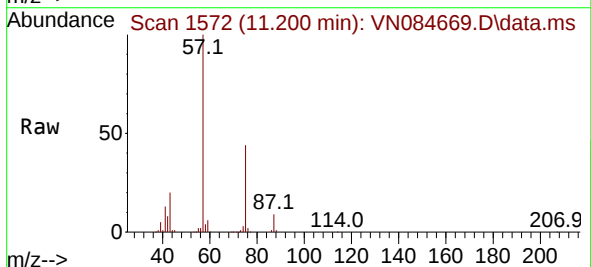
Instrument :  
MSVOA\_N  
ClientSampleId :

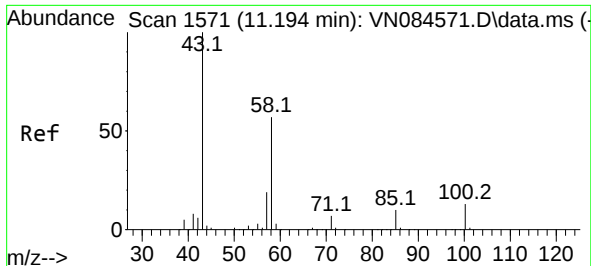
Tgt Ion: 69 Resp: 1052  
Ion Ratio Lower Upper  
69 100  
41 4526.4 53.3 79.9#  
39 1844.7 28.8 43.2#



#57  
1,3-Dichloropropane  
Concen: 1.382 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 76 Resp: 4847  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.8 38.6#

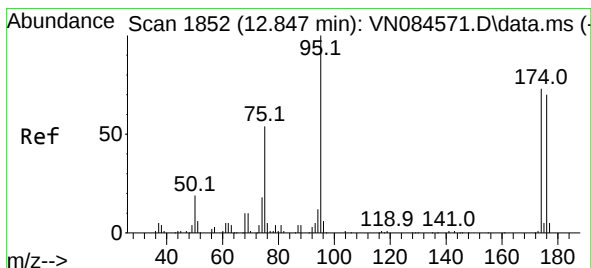
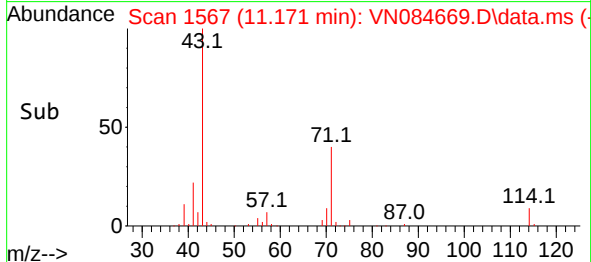
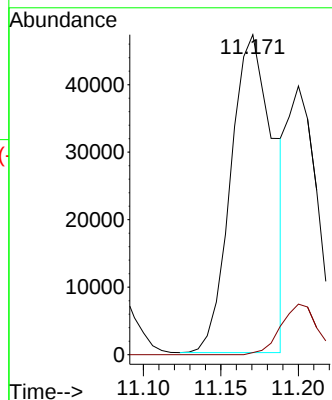
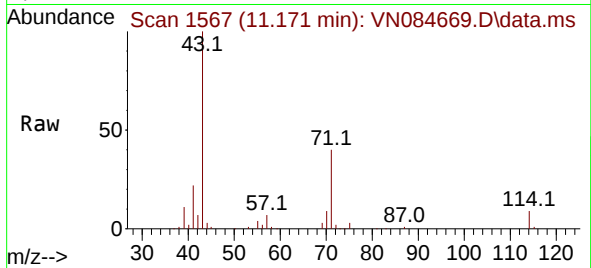




#59  
2-Hexanone  
Concen: 49.578 ug/l  
RT: 11.171 min Scan# 1157  
Delta R.T. -0.023 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

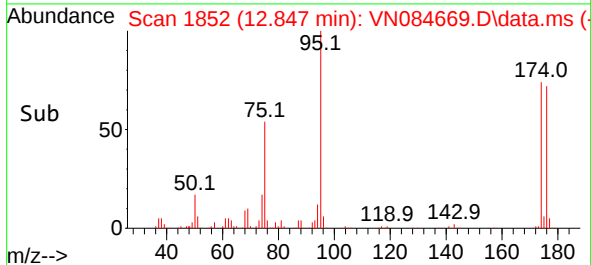
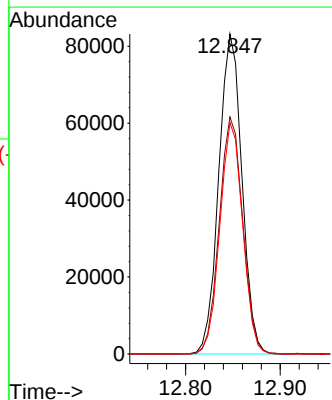
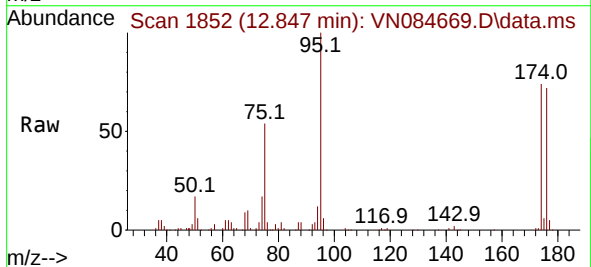
Instrument :  
MSVOA\_N  
ClientSampleId :

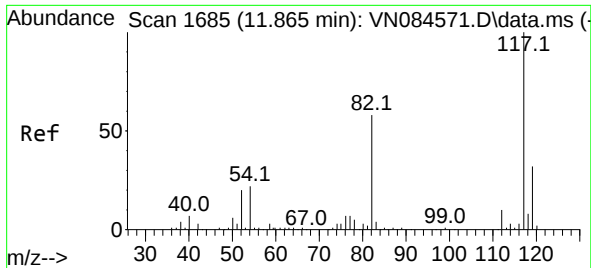
Tgt Ion: 43 Resp: 90128  
Ion Ratio Lower Upper  
43 100  
58 0.0 27.3 81.8#



#62  
4-Bromofluorobenzene  
Concen: 49.315 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion: 95 Resp: 141357  
Ion Ratio Lower Upper  
95 100  
174 74.9 0.0 145.2  
176 71.2 0.0 140.0

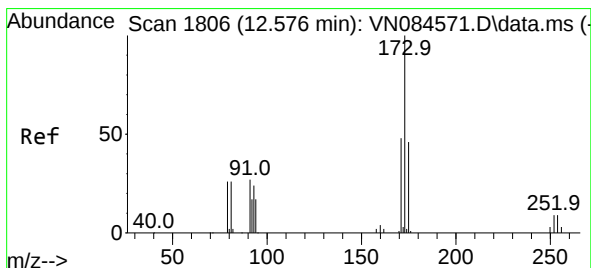
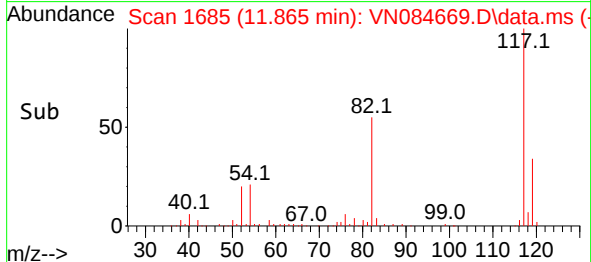
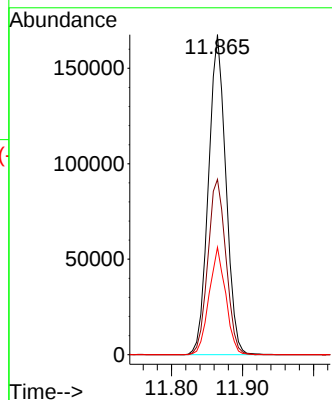
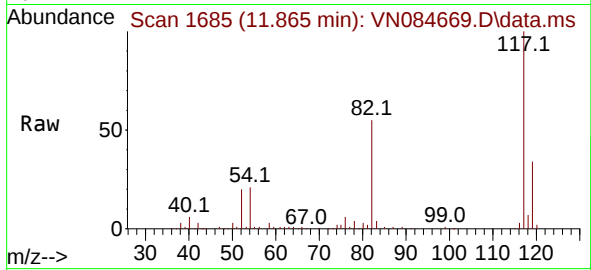




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

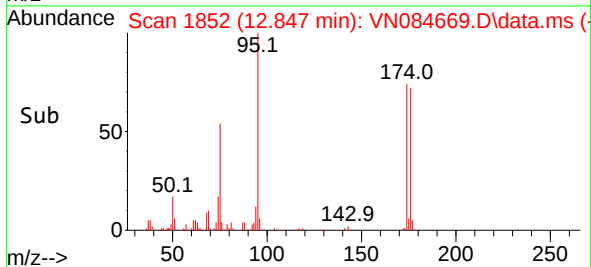
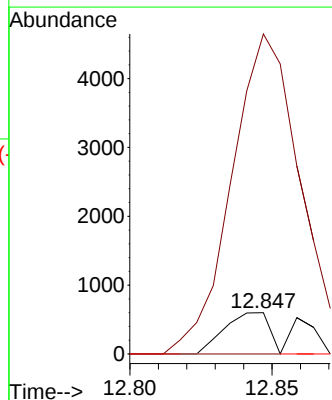
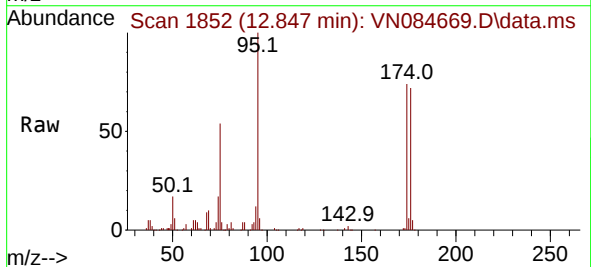
Instrument :  
MSVOA\_N  
ClientSampleId :

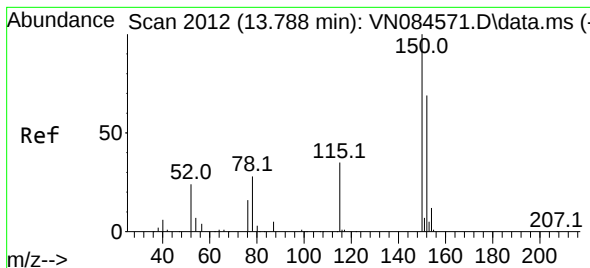
Tgt Ion:117 Resp: 285701  
Ion Ratio Lower Upper  
117 100  
82 54.8 47.2 70.8  
119 33.6 25.4 38.0



#71  
Bromoform  
Concen: 0.393 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.271 min  
Lab File: VN084669.D  
Acq: 04 Nov 2024 19:54

Tgt Ion:173 Resp: 657  
Ion Ratio Lower Upper  
173 100  
175 902.0 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# 2012

Delta R.T. 0.000 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

ClientSampleId :

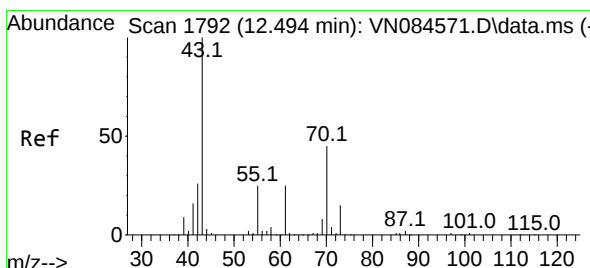
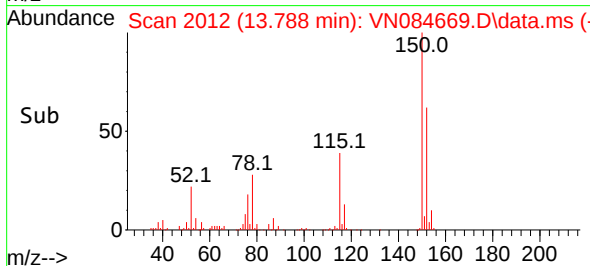
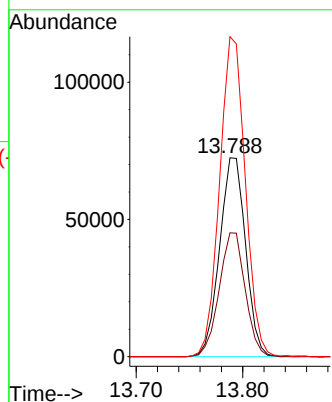
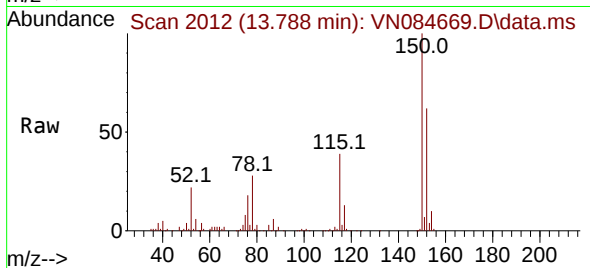
Tgt Ion:152 Resp: 122782

Ion Ratio Lower Upper

152 100

115 62.3 31.3 93.9

150 158.7 0.0 349.8



#74

N-ethyl acetate

Concen: 0.244 ug/l

RT: 12.482 min Scan# 1790

Delta R.T. -0.012 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Tgt Ion: 43 Resp: 893

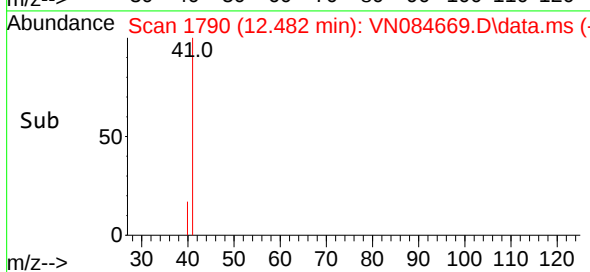
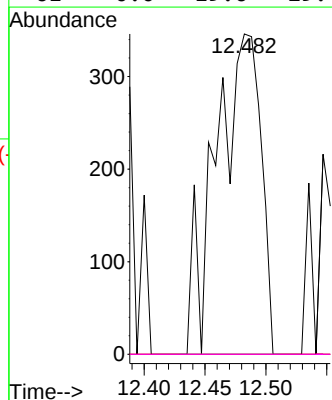
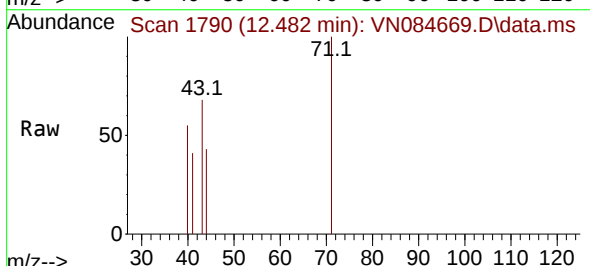
Ion Ratio Lower Upper

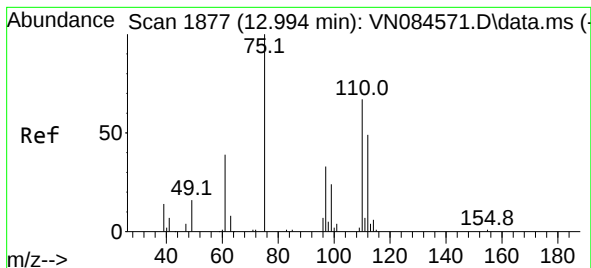
43 100

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: 29.772 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.141 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

Instrument :

MSVOA\_N

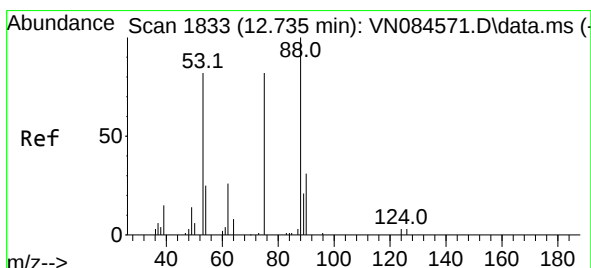
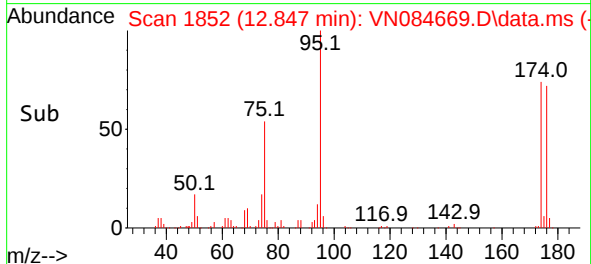
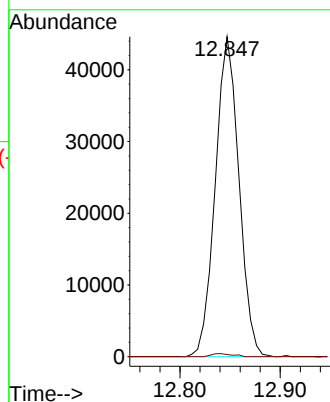
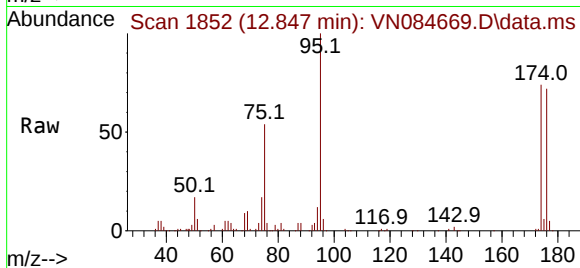
ClientSampleId :

Tgt Ion: 75 Resp: 73070

Ion Ratio Lower Upper

75 100

77 0.8 96.9 290.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 70.630 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.112 min

Lab File: VN084669.D

Acq: 04 Nov 2024 19:54

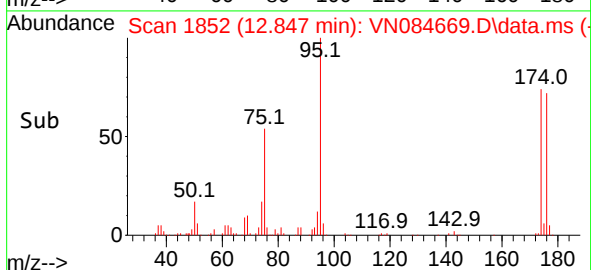
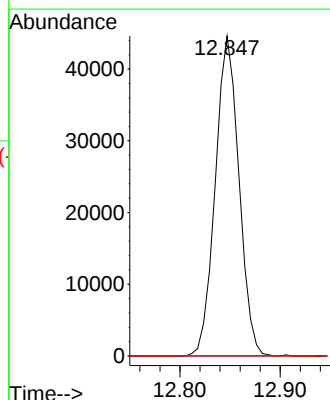
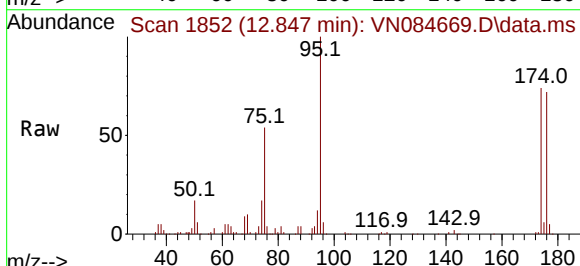
Tgt Ion: 75 Resp: 73070

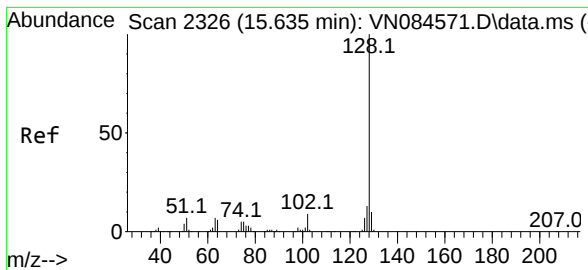
Ion Ratio Lower Upper

75 100

53 0.0 78.0 117.0#

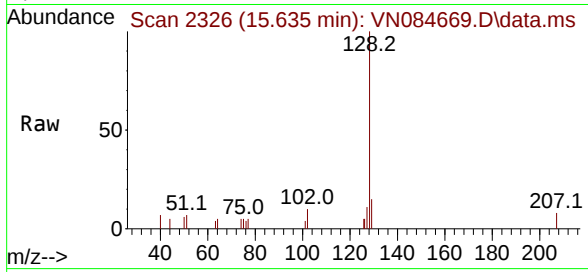
89 0.0 35.5 53.3#





#95  
 Naphthalene  
 Concen: 1.487 ug/l  
 RT: 15.635 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN084669.D  
 Acq: 04 Nov 2024 19:54

Instrument :  
 MSVOA\_N  
 ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 10568 |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 12.7  | 10.5  | 15.7  |
| 129      | 11.5  | 8.7   | 13.1  |

