

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN020525\  
 Data File : VN085679.D  
 Acq On : 05 Feb 2025 15:59  
 Operator : JC\MD  
 Sample : PB166529ZHE#08  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

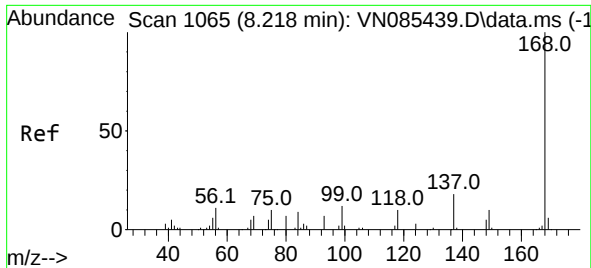
Quant Time: Feb 06 00:42:47 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N011425W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 15 02:16:08 2025  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response            | Conc   | Units  | Dev(Min) |
|-------------------------------|----------------|------|---------------------|--------|--------|----------|
| -----                         |                |      |                     |        |        |          |
| Internal Standards            |                |      |                     |        |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 180011              | 50.000 | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 366556              | 50.000 | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 335715              | 50.000 | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 117256              | 50.000 | ug/l   | 0.00     |
|                               |                |      |                     |        |        |          |
| System Monitoring Compounds   |                |      |                     |        |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 146653              | 50.470 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = 100.940% |        |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 123825              | 48.693 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = 97.380%  |        |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 464195              | 51.376 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = 102.760% |        |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 130252              | 42.143 | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = 84.280%  |        |        |          |
|                               |                |      |                     |        |        |          |
| Target Compounds              |                |      |                     |        | Qvalue |          |
| 16) Acetone                   | 4.424          | 43   | 25772               | 27.450 | ug/l   | 97       |
| 18) Methyl Acetate            | 5.030          | 43   | 2898                | 1.015  | ug/l # | 79       |
| 20) Methylene Chloride        | 5.277          | 84   | 2764                | 1.189  | ug/l # | 72       |
| 25) 2-Butanone                | 7.494          | 43   | 2485                | 1.799  | ug/l   | 100      |
| 30) Chloroform                | 7.971          | 83   | 1610                | 0.367  | ug/l   | 100      |
| 31) Cyclohexane               | 8.218          | 56   | 4605                | 1.249  | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 8.224          | 75   | 15786               | 4.423  | ug/l # | 51       |
| 37) Ethyl Acetate             | 7.559          | 43   | 3587                | 0.996  | ug/l # | 87       |
| 38) Carbon Tetrachloride      | 8.224          | 117  | 19106               | 4.676  | ug/l # | 16       |
| 42) 1,2-Dichloroethane        | 8.688          | 62   | 1296                | 0.321  | ug/l # | 76       |
| 43) Isopropyl Acetate         | 8.688          | 43   | 183573              | 31.802 | ug/l # | 86       |
| 45) 1,2-Dichloropropane       | 9.741          | 63   | 1905                | 0.695  | ug/l # | 43       |
| 48) Methyl methacrylate       | 9.735          | 41   | 134918              | 51.938 | ug/l # | 46       |
| 49) 1,4-Dioxane               | 9.735          | 88   | 73                  | 1.669  | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.441         | 43   | 10432               | 3.114  | ug/l # | 72       |
| 53) t-1,3-Dichloropropene     | 10.724         | 75   | 973                 | 0.256  | ug/l # | 88       |
| 54) cis-1,3-Dichloropropene   | 10.353         | 75   | 52551               | 12.929 | ug/l # | 65       |
| 56) Ethyl methacrylate        | 10.977         | 69   | 2059                | 2.409  | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.200         | 76   | 7947                | 1.859  | ug/l # | 43       |
| 59) 2-Hexanone                | 11.200         | 43   | 78959               | 33.501 | ug/l # | 62       |
| 71) Bromoform                 | 12.841         | 173  | 1207                | 0.625  | ug/l # | 1        |
| 74) N-amyl acetate            | 12.482         | 43   | 1347                | 0.379  | ug/l # | 44       |
| 76) 1,2,3-Trichloropropane    | 12.847         | 75   | 70335               | 29.512 | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847         | 75   | 70335               | 79.847 | ug/l # | 3        |
| 95) Naphthalene               | 15.641         | 128  | 1298                | 0.246  | ug/l # | 69       |
| -----                         |                |      |                     |        |        |          |

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

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Quant Title : SW846 8260  
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Response via : Initial Calibration

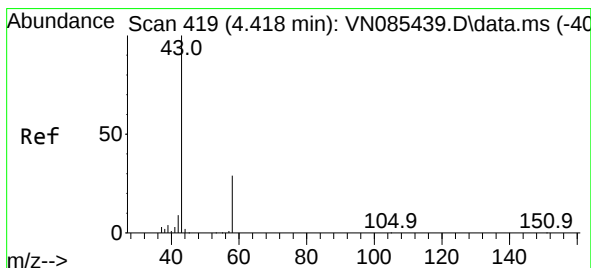
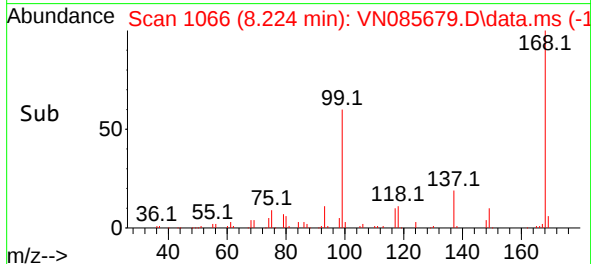
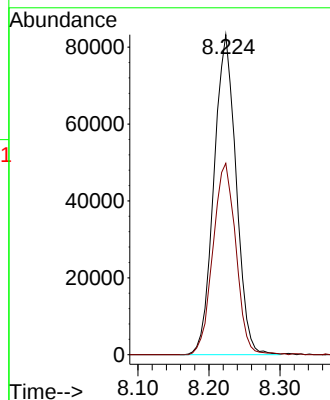
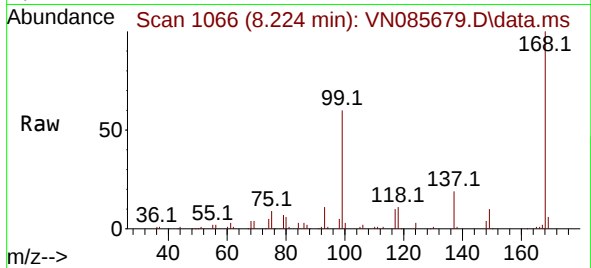




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

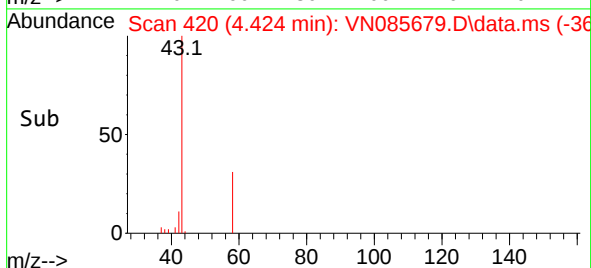
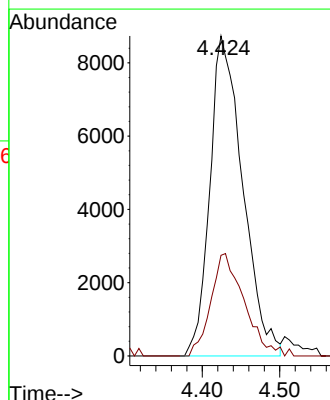
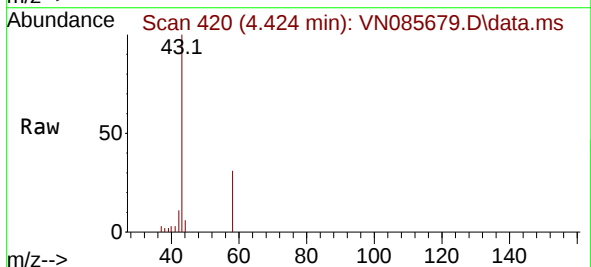
Instrument :  
MSVOA\_N  
ClientSampleId :

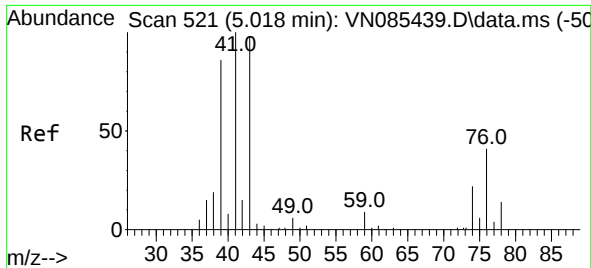
Tgt Ion:168 Resp: 180011  
Ion Ratio Lower Upper  
168 100  
99 59.8 53.6 80.4



#16  
Acetone  
Concen: 27.450 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 43 Resp: 25772  
Ion Ratio Lower Upper  
43 100  
58 31.4 23.8 35.6

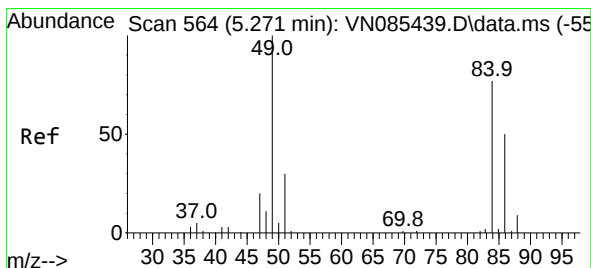
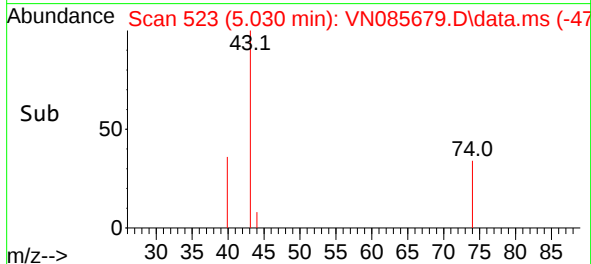
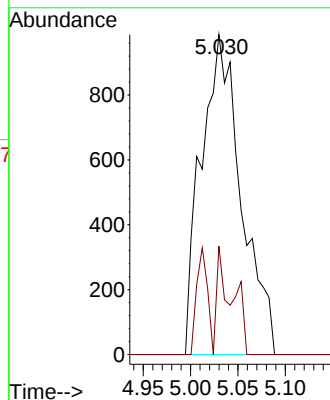
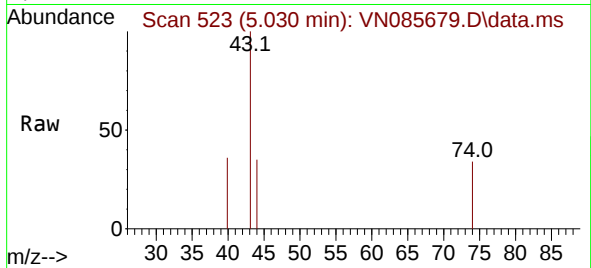




#18  
Methyl Acetate  
Concen: 1.015 ug/l  
RT: 5.030 min Scan# 51  
Delta R.T. 0.012 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

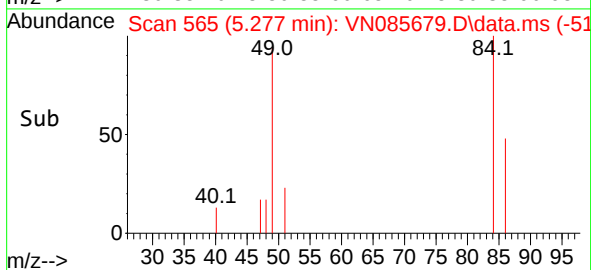
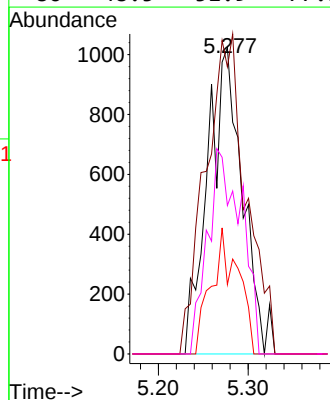
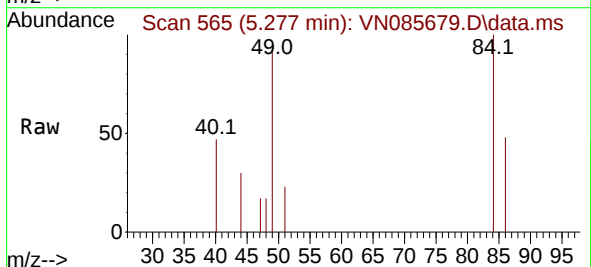
Instrument :  
MSVOA\_N  
ClientSampleId :

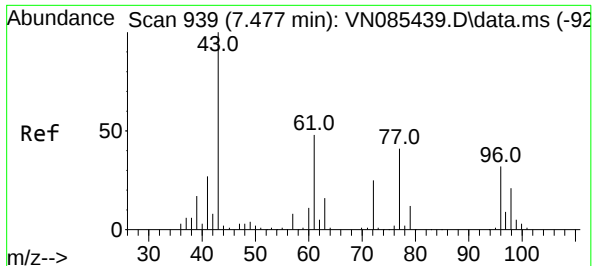
Tgt Ion: 43 Resp: 2898  
Ion Ratio Lower Upper  
43 100  
74 12.9 18.6 28.0#



#20  
Methylene Chloride  
Concen: 1.189 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 84 Resp: 2764  
Ion Ratio Lower Upper  
84 100  
49 93.7 104.1 156.1#  
51 22.7 31.0 46.4#  
86 48.5 51.9 77.9#





#25

2-Butanone

Concen: 1.799 ug/l

RT: 7.494 min Scan# 942

Delta R.T. 0.018 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

Instrument :

MSVOA\_N

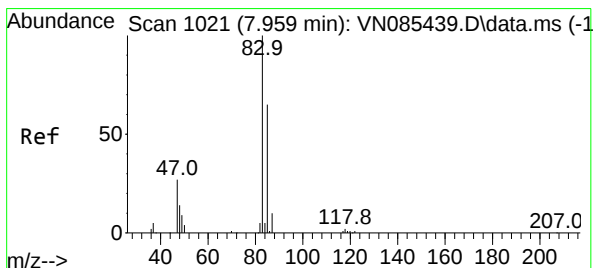
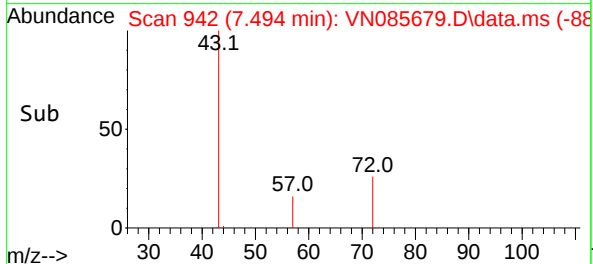
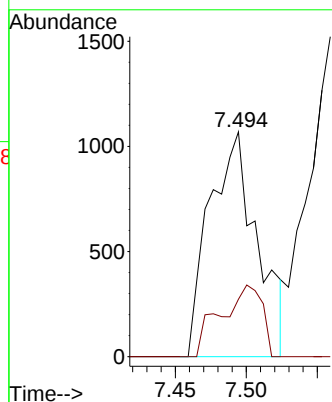
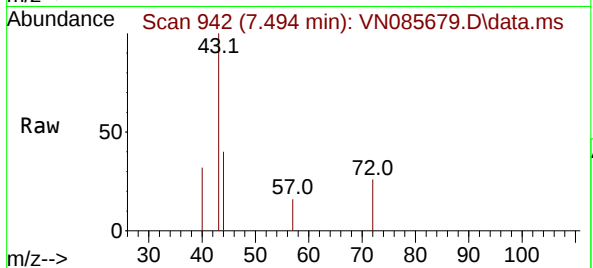
ClientSampleId :

Tgt Ion: 43 Resp: 2485

Ion Ratio Lower Upper

43 100

72 25.5 20.2 30.4



#30

Chloroform

Concen: 0.367 ug/l

RT: 7.971 min Scan# 1023

Delta R.T. 0.012 min

Lab File: VN085679.D

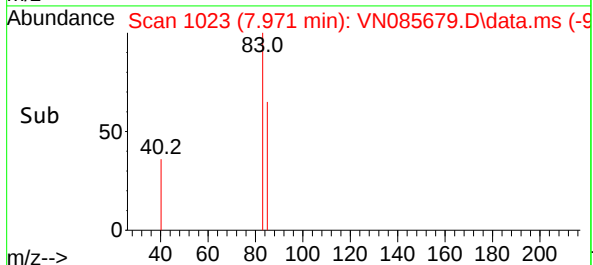
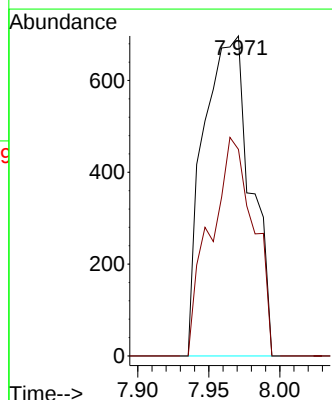
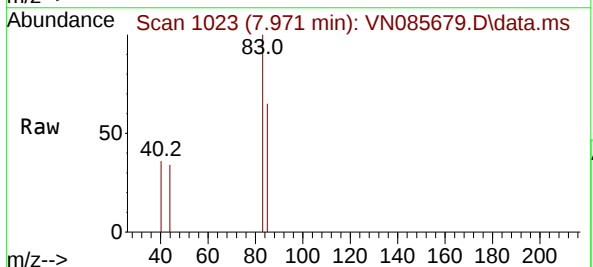
Acq: 05 Feb 2025 15:59

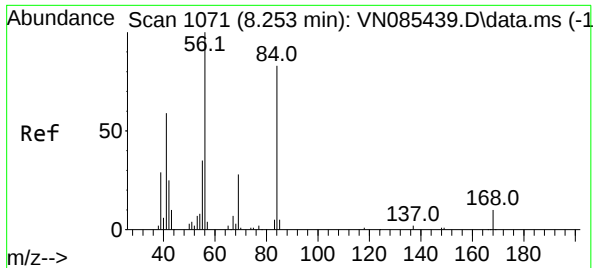
Tgt Ion: 83 Resp: 1610

Ion Ratio Lower Upper

83 100

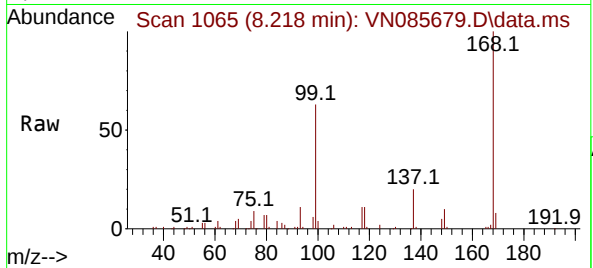
85 64.6 51.8 77.6



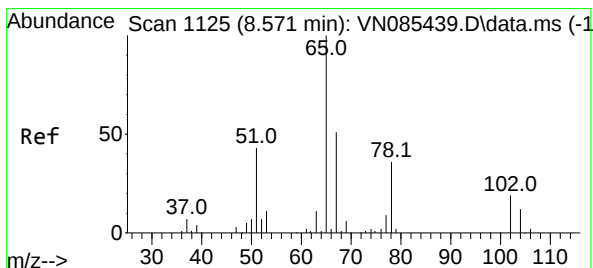
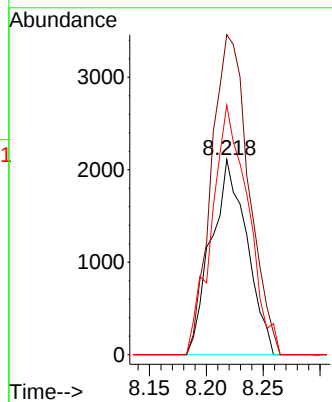
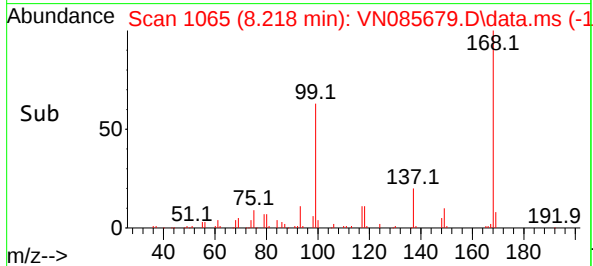


#31  
Cyclohexane  
Concen: 1.249 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.035 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Instrument :  
MSVOA\_N  
ClientSampleId :

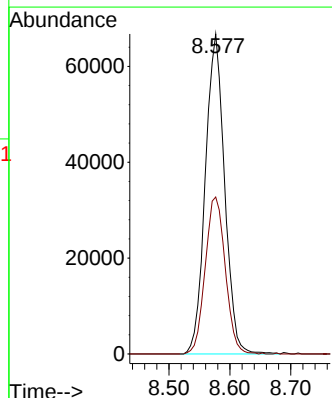
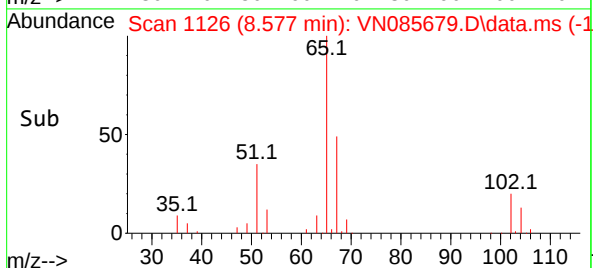
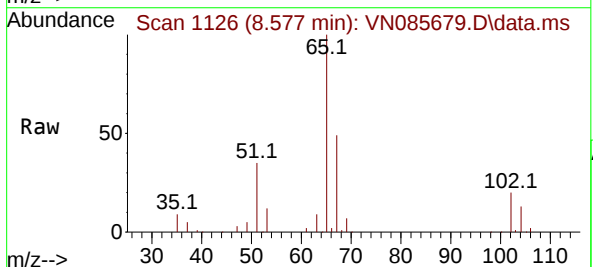


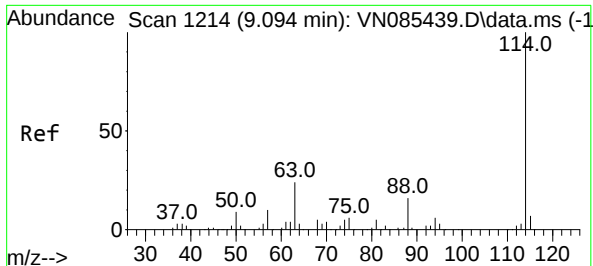
Tgt Ion: 56 Resp: 4605  
Ion Ratio Lower Upper  
56 100  
69 164.0 22.2 33.4#  
84 127.9 66.4 99.6#



#33  
1,2-Dichloroethane-d4  
Concen: 50.470 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 65 Resp: 146653  
Ion Ratio Lower Upper  
65 100  
67 51.1 0.0 101.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

Instrument :

MSVOA\_N

ClientSampleId :

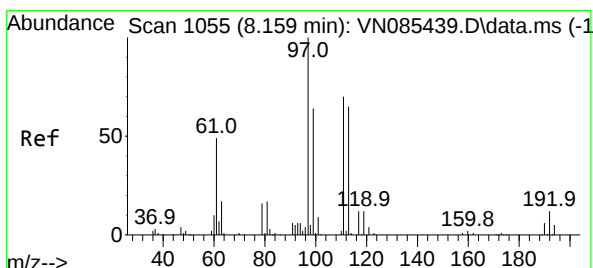
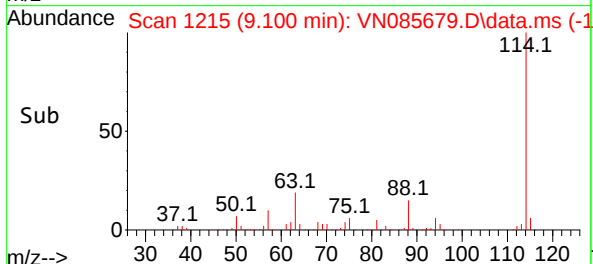
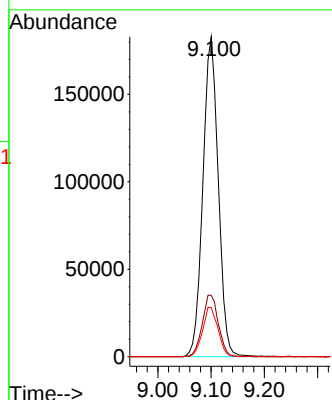
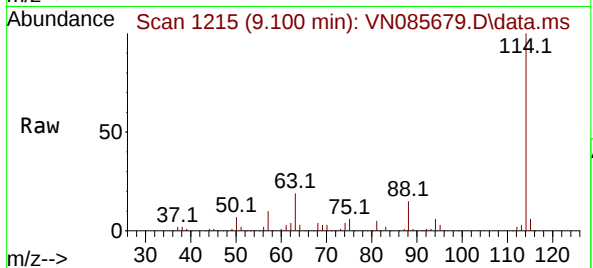
Tgt Ion:114 Resp: 366556

Ion Ratio Lower Upper

114 100

63 19.2 0.0 47.6

88 15.4 0.0 32.6



#35

Dibromofluoromethane

Concen: 48.693 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

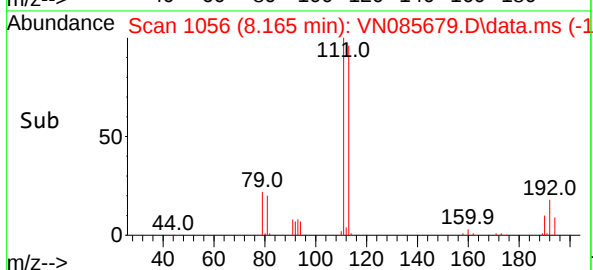
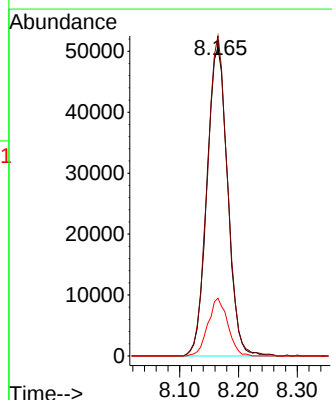
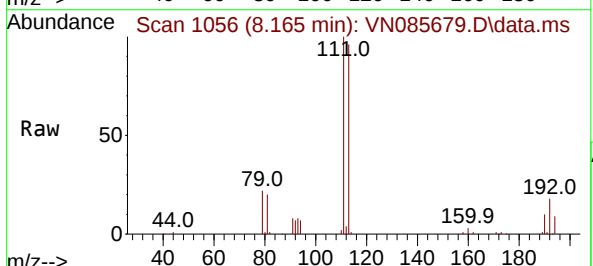
Tgt Ion:113 Resp: 123825

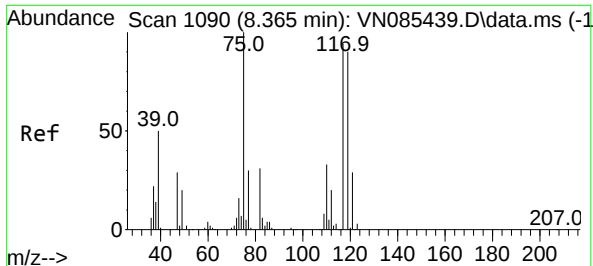
Ion Ratio Lower Upper

113 100

111 101.6 82.7 124.1

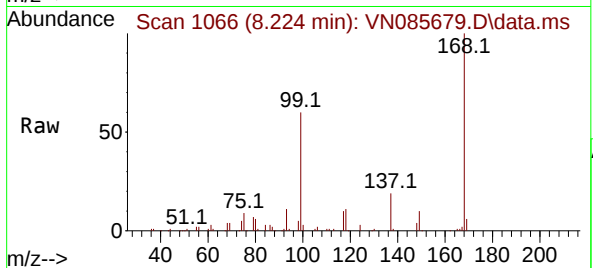
192 17.8 14.3 21.5



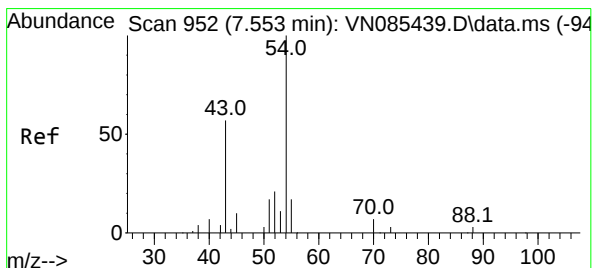
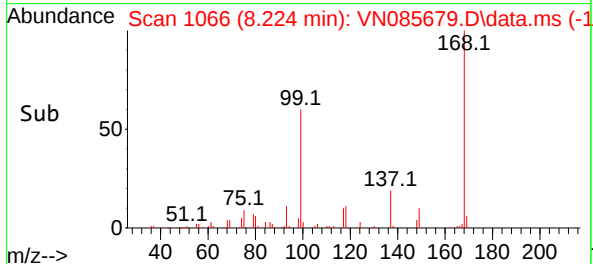
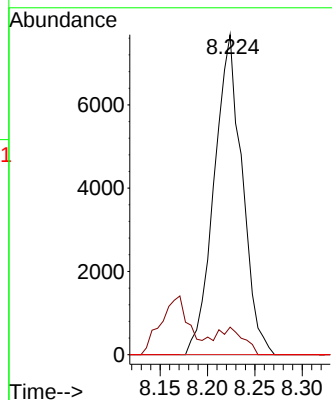


#36  
1,1-Dichloropropene  
Concen: 4.423 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.141 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Instrument :  
MSVOA\_N  
ClientSampleId :

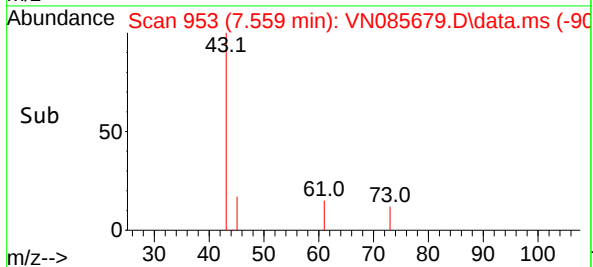
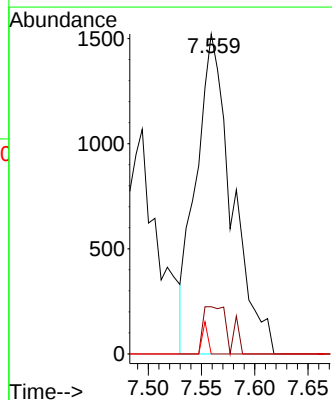
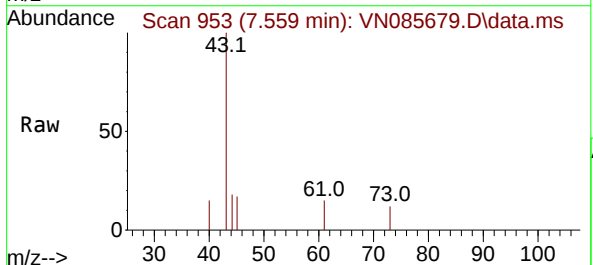


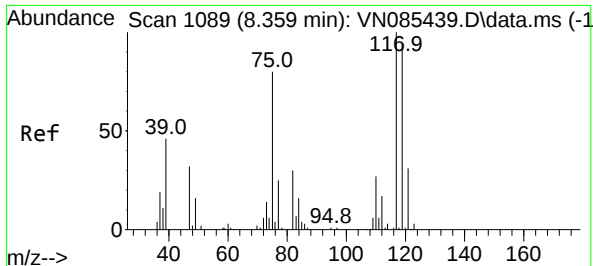
Tgt Ion: 75 Resp: 15786  
Ion Ratio Lower Upper  
75 100  
110 9.0 16.5 49.5#  
77 0.0 24.4 36.6#



#37  
Ethyl Acetate  
Concen: 0.996 ug/l  
RT: 7.559 min Scan# 953  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

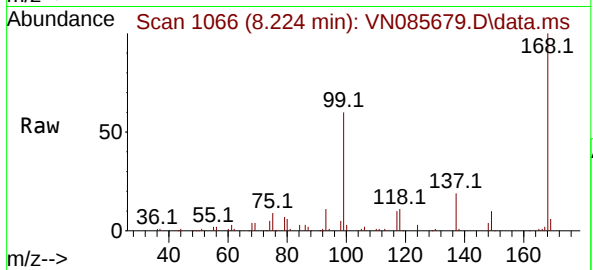
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Ion Ratio Lower Upper  
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70 1.5 7.5 11.3#



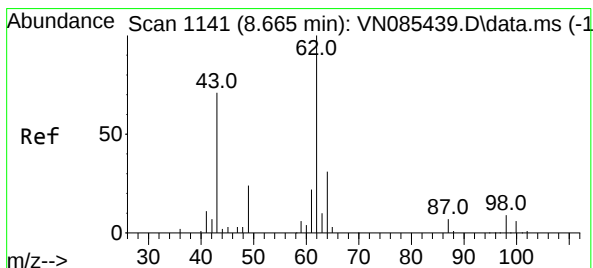
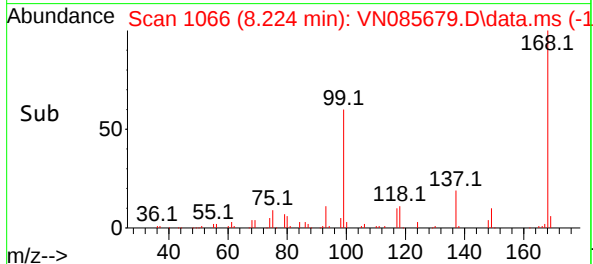
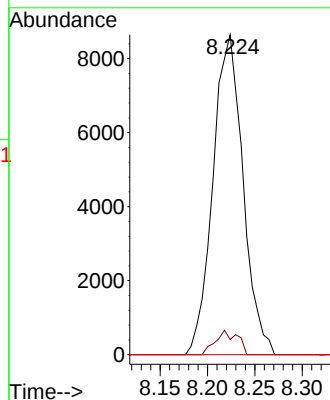


#38  
Carbon Tetrachloride  
Concen: 4.676 ug/l  
RT: 8.224 min Scan# 1106  
Delta R.T. -0.135 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Instrument :  
MSVOA\_N  
ClientSampleId :

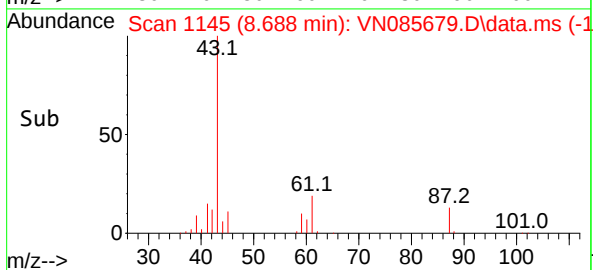
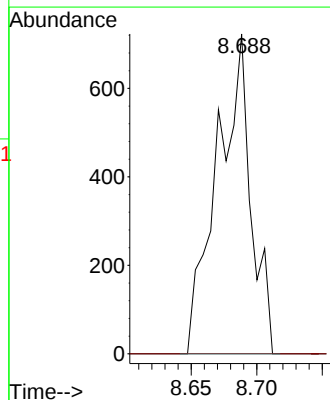
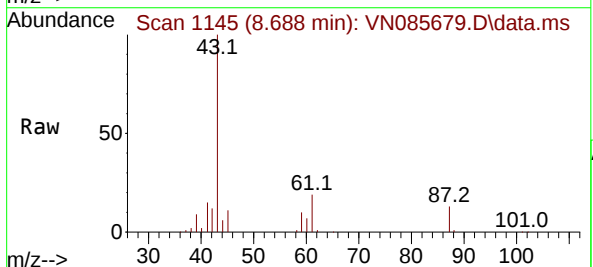


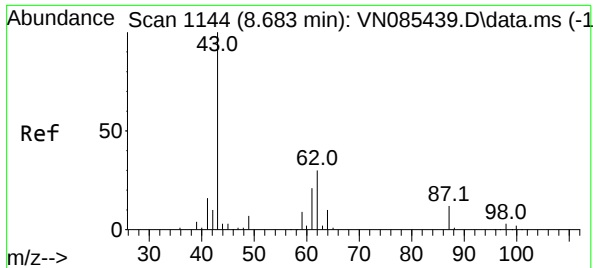
Tgt Ion:117 Resp: 19106  
Ion Ratio Lower Upper  
117 100  
119 4.8 75.4 113.2#  
121 0.0 24.6 37.0#



#42  
1,2-Dichloroethane  
Concen: 0.321 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.024 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 62 Resp: 1296  
Ion Ratio Lower Upper  
62 100  
98 0.0 0.0 17.0

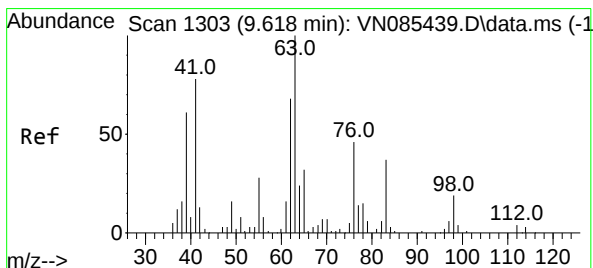
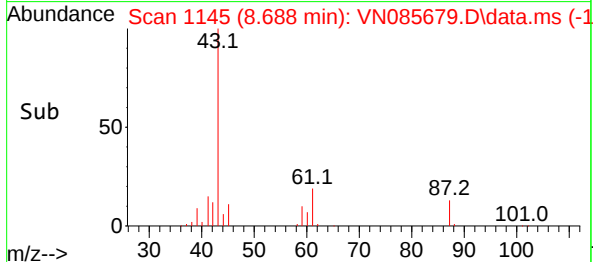
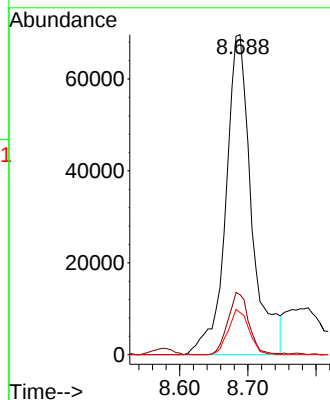
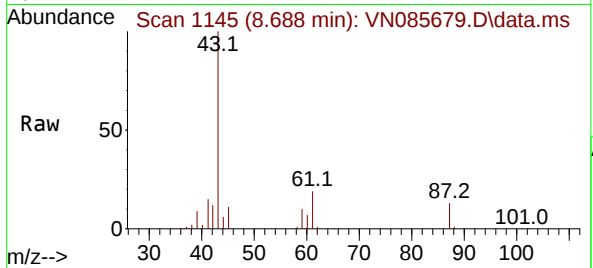




#43  
Isopropyl Acetate  
Concen: 31.802 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.006 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

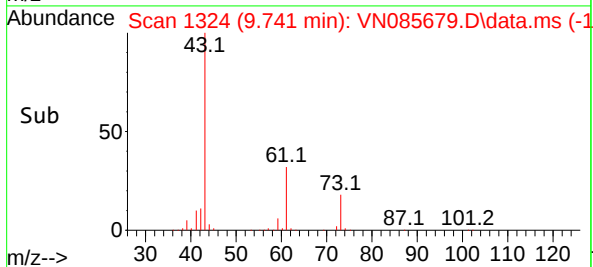
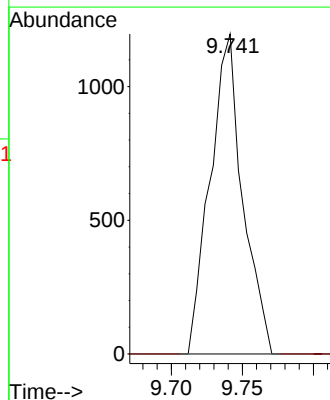
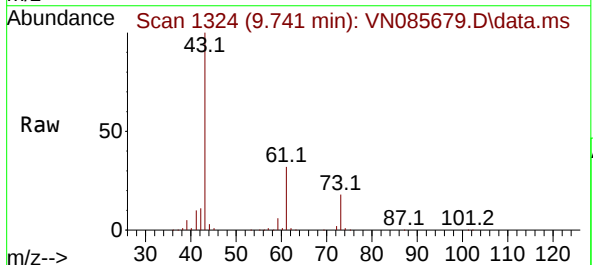
Instrument :  
MSVOA\_N  
ClientSampleId :

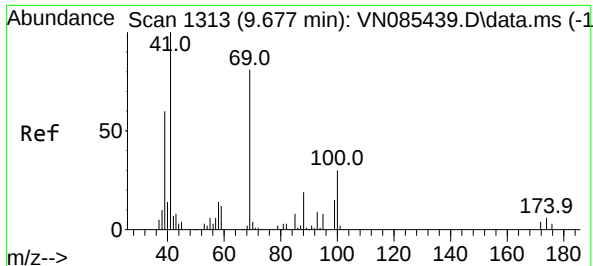
Tgt Ion: 43 Resp: 183573  
Ion Ratio Lower Upper  
43 100  
61 15.7 20.7 31.1#  
87 11.3 9.8 14.8



#45  
1,2-Dichloropropane  
Concen: 0.695 ug/l  
RT: 9.741 min Scan# 1324  
Delta R.T. 0.124 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 63 Resp: 1905  
Ion Ratio Lower Upper  
63 100  
65 0.0 25.6 38.4#





#48

Methyl methacrylate

Concen: 51.938 ug/l

RT: 9.735 min Scan# 1323

Delta R.T. 0.058 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

Instrument :

MSVOA\_N

ClientSampleId :

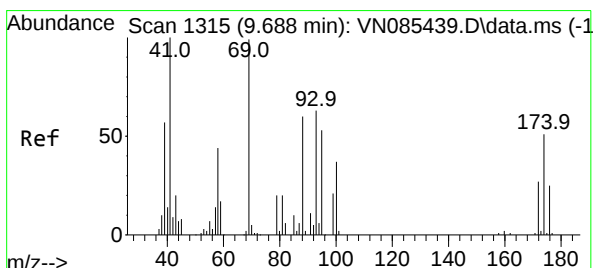
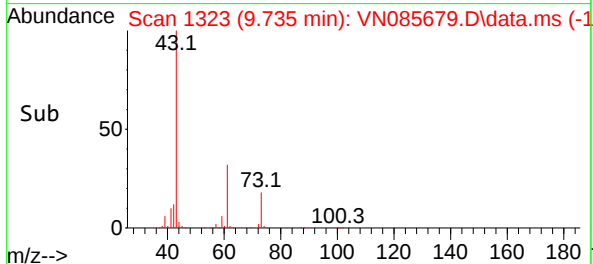
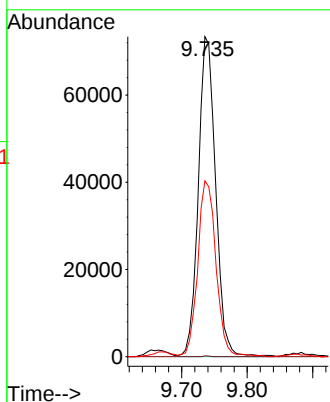
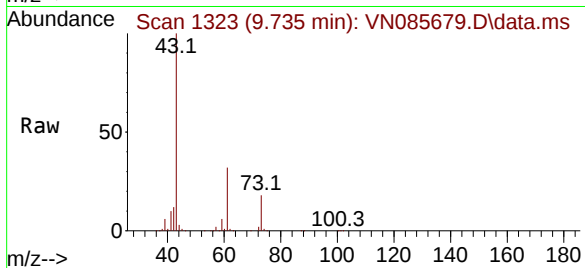
Tgt Ion: 41 Resp: 134918

Ion Ratio Lower Upper

41 100

69 0.1 64.7 97.1#

39 58.0 49.0 73.6



#49

1,4-Dioxane

Concen: 1.669 ug/l

RT: 9.735 min Scan# 1323

Delta R.T. 0.047 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

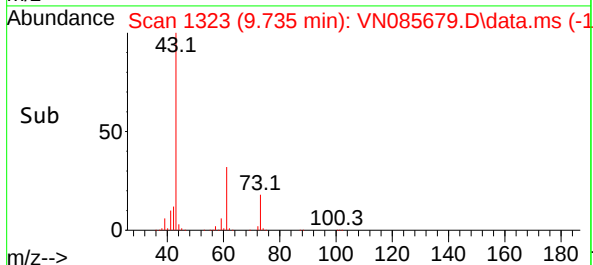
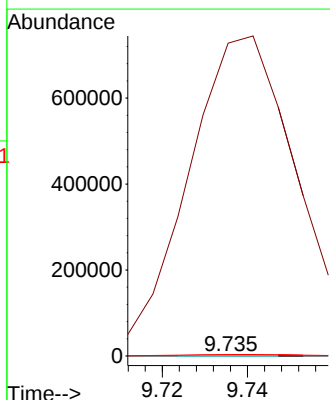
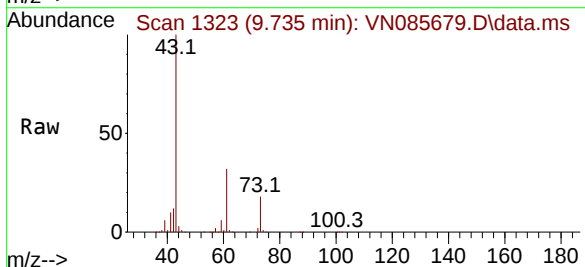
Tgt Ion: 88 Resp: 73

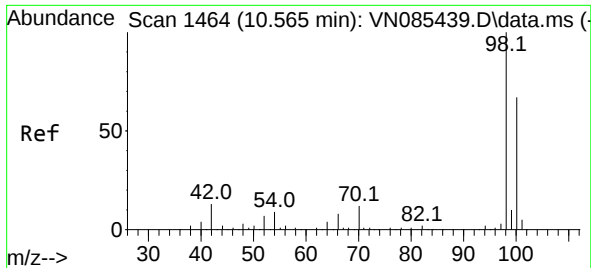
Ion Ratio Lower Upper

88 100

43 1862713.7 26.6 39.8#

58 9906.8 59.5 89.3#

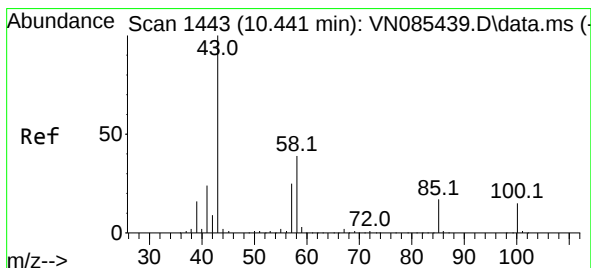
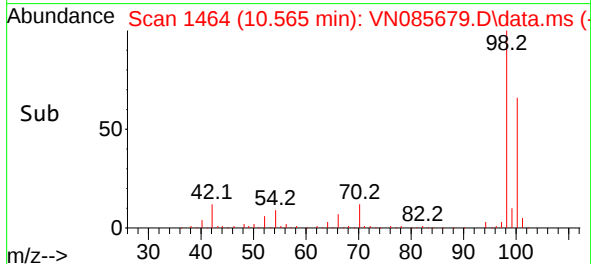
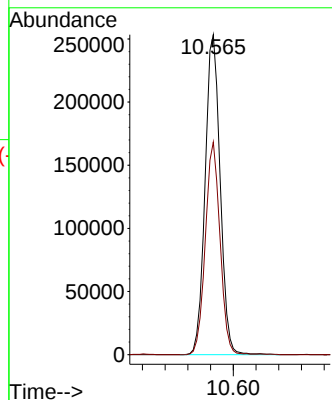
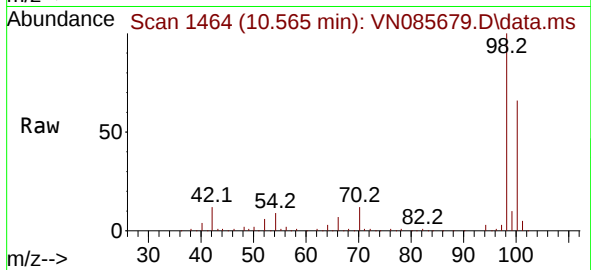




#50  
Toluene-d8  
Concen: 51.376 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.000 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

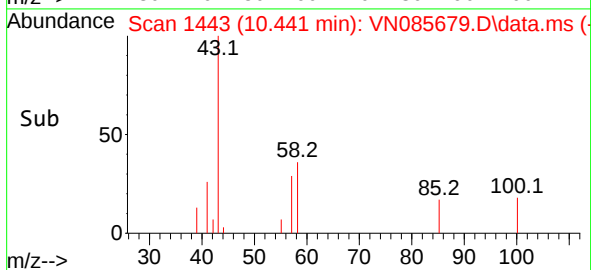
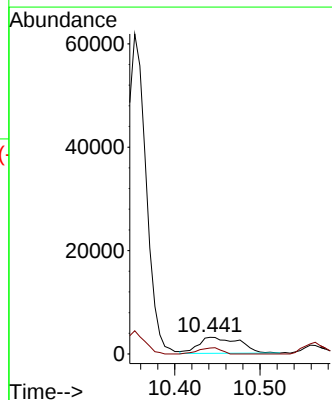
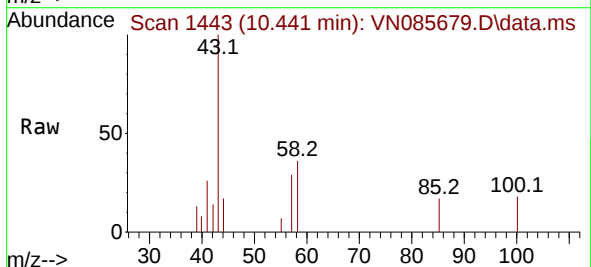
Instrument :  
MSVOA\_N  
ClientSampleId :

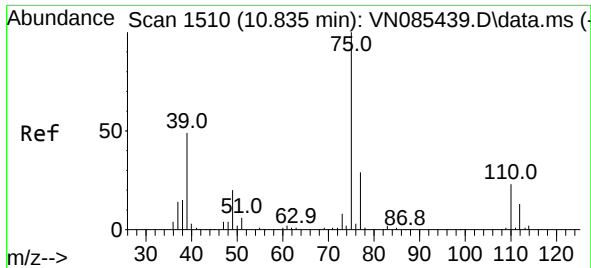
Tgt Ion: 98 Resp: 464195  
Ion Ratio Lower Upper  
98 100  
100 64.8 52.2 78.4



#51  
4-Methyl-2-Pentanone  
Concen: 3.114 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 43 Resp: 10432  
Ion Ratio Lower Upper  
43 100  
58 21.1 30.5 45.7#

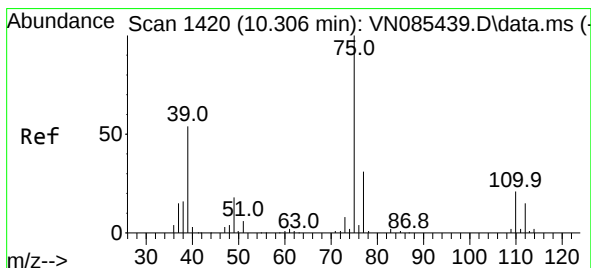
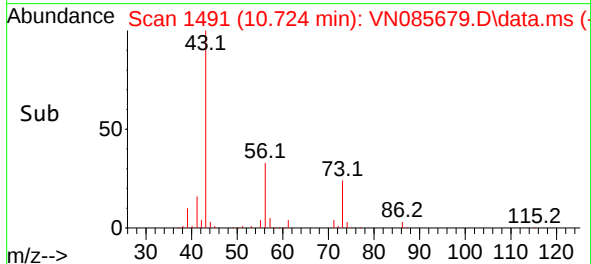
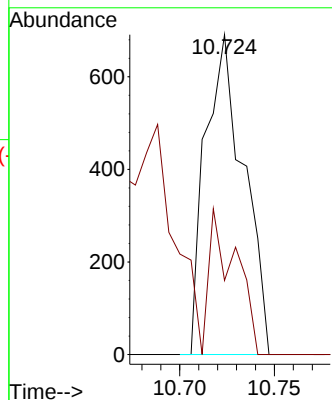
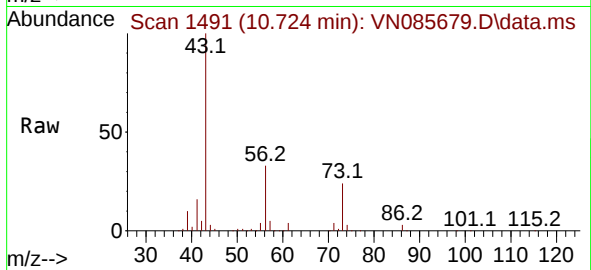




#53  
 t-1,3-Dichloropropene  
 Concen: 0.256 ug/l  
 RT: 10.724 min Scan# 1491  
 Delta R.T. -0.112 min  
 Lab File: VN085679.D  
 Acq: 05 Feb 2025 15:59

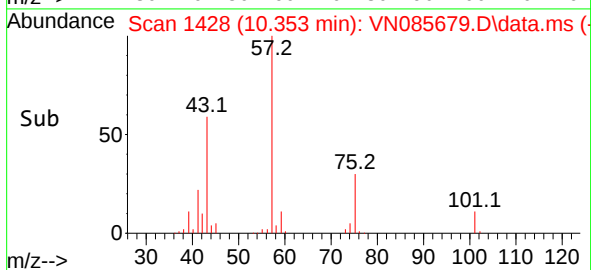
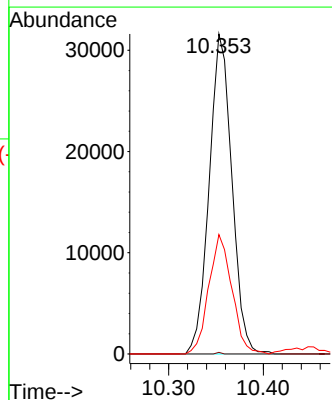
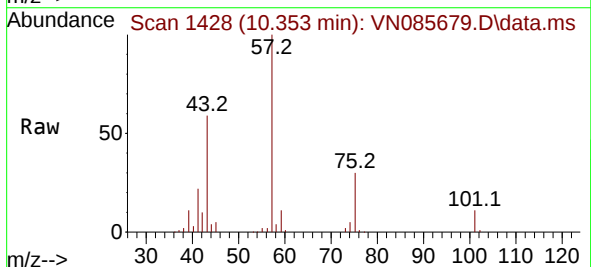
Instrument :  
 MSVOA\_N  
 ClientSampleId :

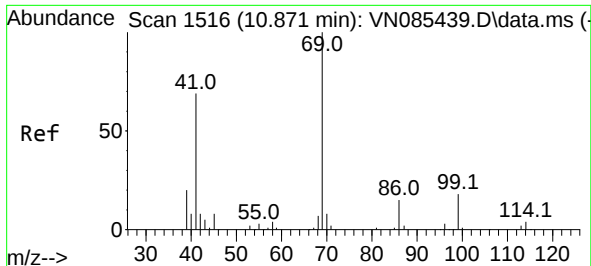
Tgt Ion: 75 Resp: 973  
 Ion Ratio Lower Upper  
 75 100  
 77 23.2 23.5 35.3#



#54  
 cis-1,3-Dichloropropene  
 Concen: 12.929 ug/l  
 RT: 10.353 min Scan# 1428  
 Delta R.T. 0.047 min  
 Lab File: VN085679.D  
 Acq: 05 Feb 2025 15:59

Tgt Ion: 75 Resp: 52551  
 Ion Ratio Lower Upper  
 75 100  
 77 0.5 25.0 37.4#  
 39 37.3 43.1 64.7#

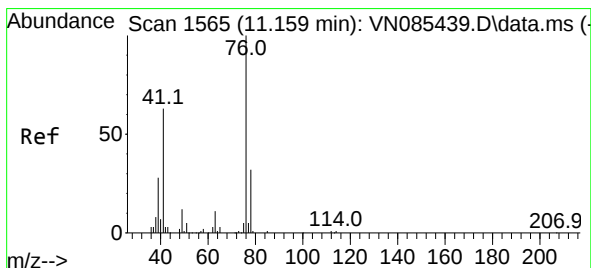
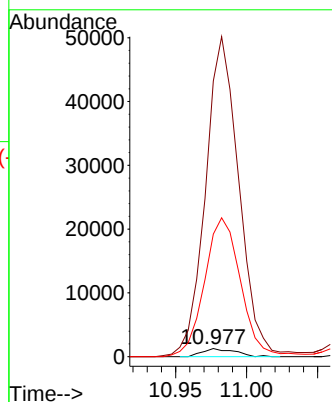
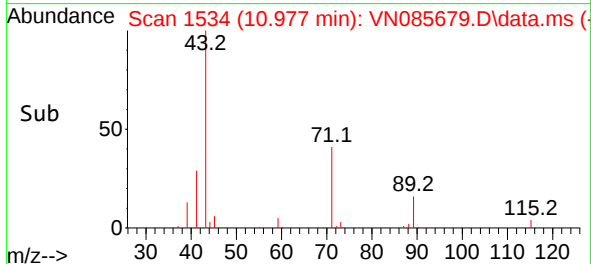
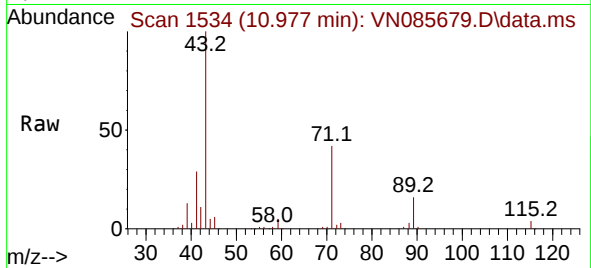




#56  
Ethyl methacrylate  
Concen: 2.409 ug/l  
RT: 10.977 min Scan# 11  
Delta R.T. 0.106 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

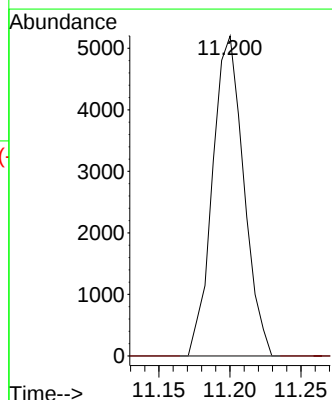
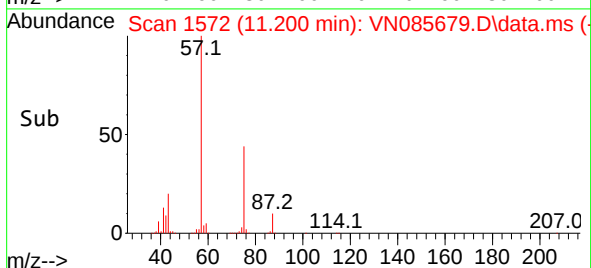
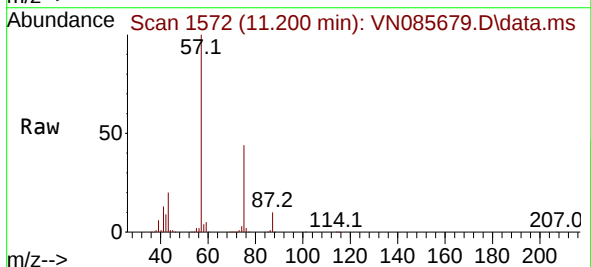
Instrument :  
MSVOA\_N  
ClientSampleId :

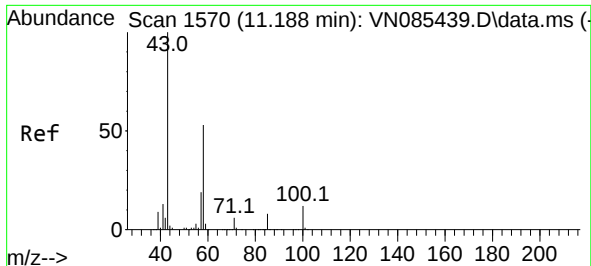
Tgt Ion: 69 Resp: 2059  
Ion Ratio Lower Upper  
69 100  
41 4003.0 54.6 82.0#  
39 1877.3 32.4 48.6#



#57  
1,3-Dichloropropane  
Concen: 1.859 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 76 Resp: 7947  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.6 38.4#

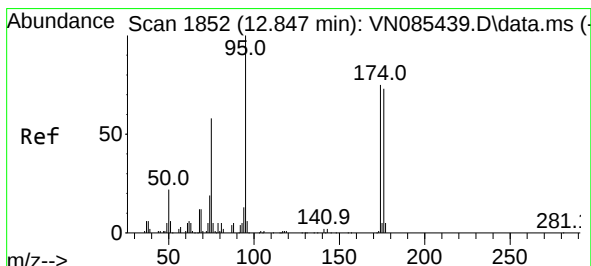
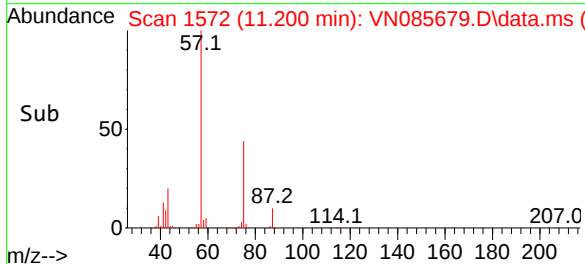
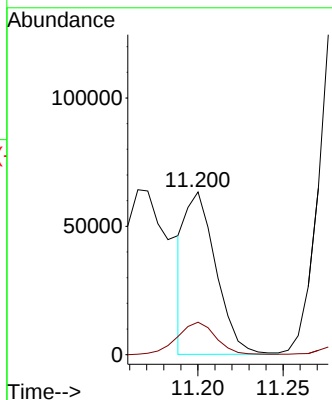
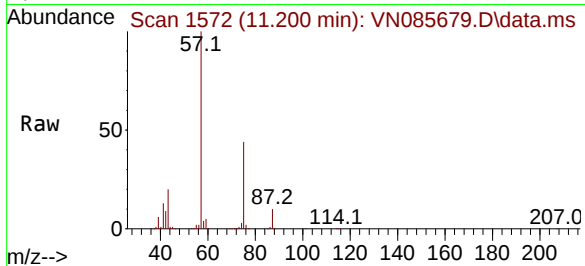




#59  
2-Hexanone  
Concen: 33.501 ug/l  
RT: 11.200 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

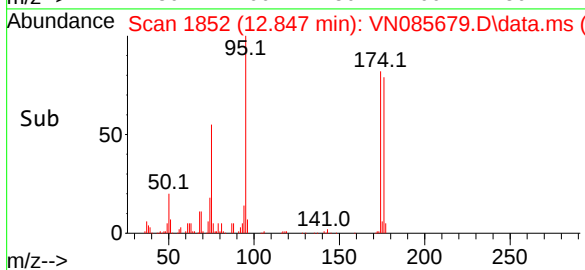
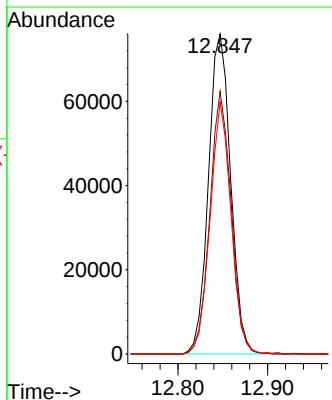
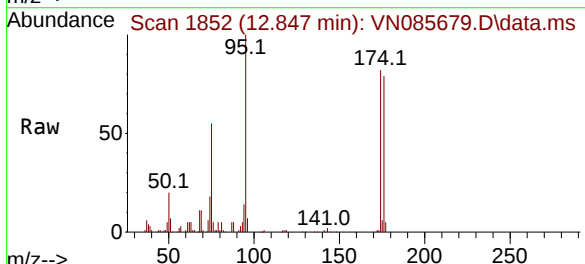
Instrument :  
MSVOA\_N  
ClientSampleId :

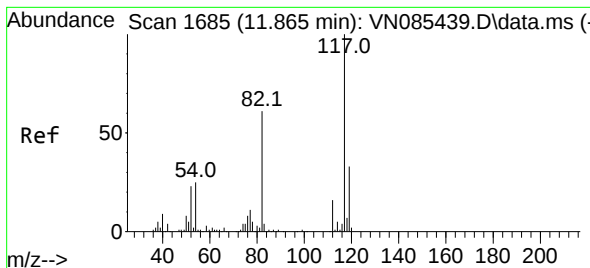
Tgt Ion: 43 Resp: 78959  
Ion Ratio Lower Upper  
43 100  
58 25.5 26.2 78.6#



#62  
4-Bromofluorobenzene  
Concen: 42.143 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 95 Resp: 130252  
Ion Ratio Lower Upper  
95 100  
174 78.8 0.0 145.0  
176 74.4 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

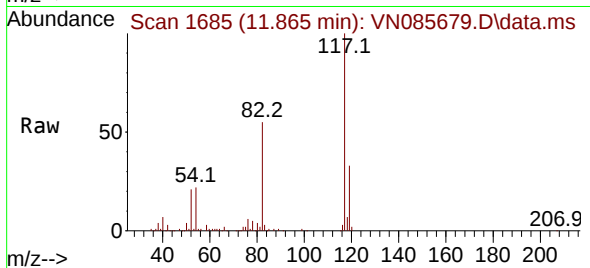
Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

Instrument :

MSVOA\_N

ClientSampleId :



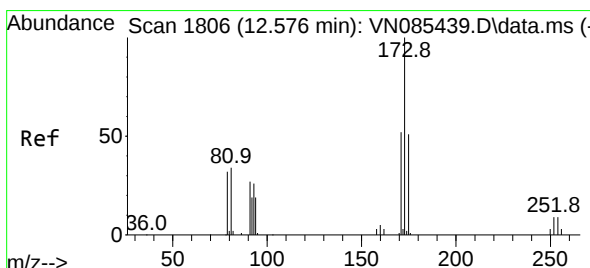
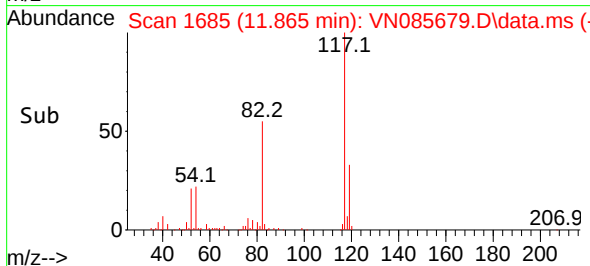
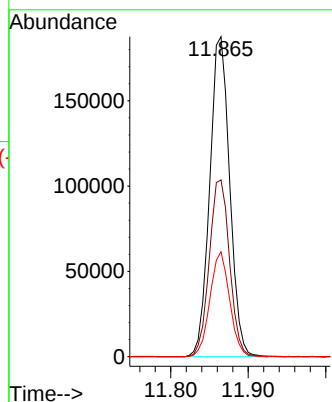
Tgt Ion:117 Resp: 335715

Ion Ratio Lower Upper

117 100

82 55.2 48.6 72.8

119 32.8 26.6 39.8



#71

Bromoform

Concen: 0.625 ug/l

RT: 12.841 min Scan# 1851

Delta R.T. 0.265 min

Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

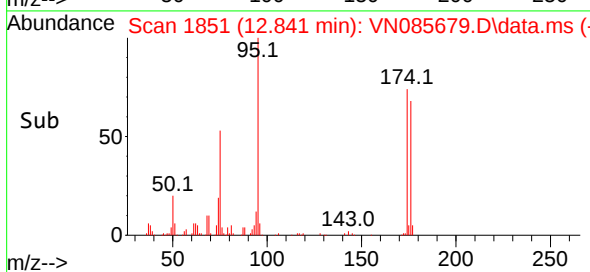
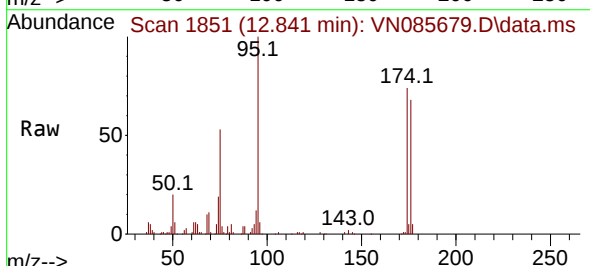
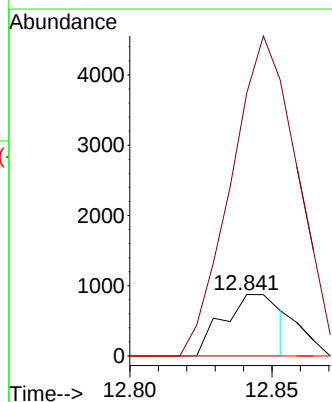
Tgt Ion:173 Resp: 1207

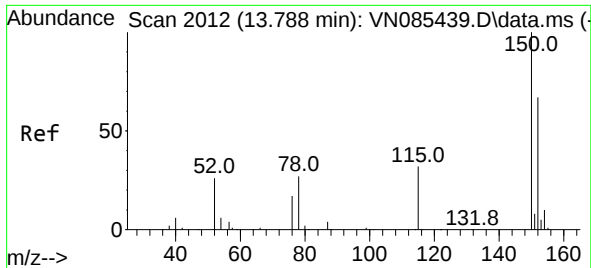
Ion Ratio Lower Upper

173 100

175 479.2 24.4 73.2#

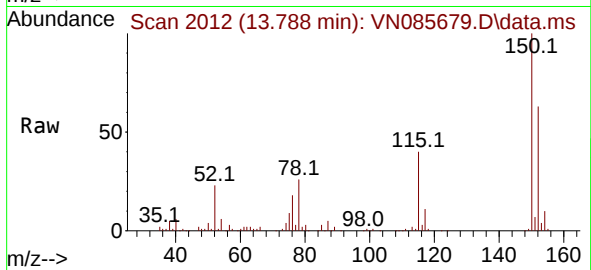
254 0.0 0.0 0.0



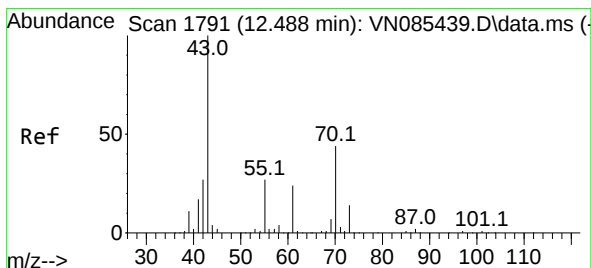
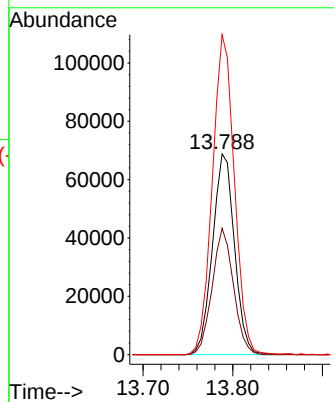
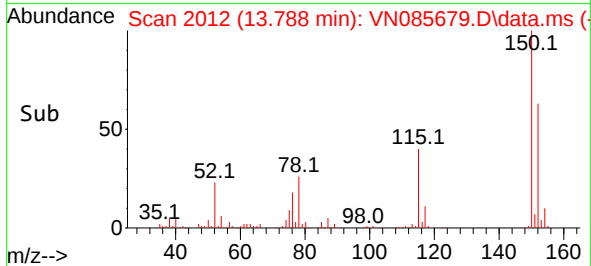


#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.788 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: VN085679.D  
 Acq: 05 Feb 2025 15:59

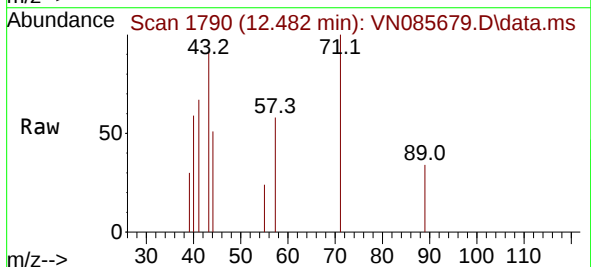
Instrument :  
 MSVOA\_N  
 ClientSampleId :



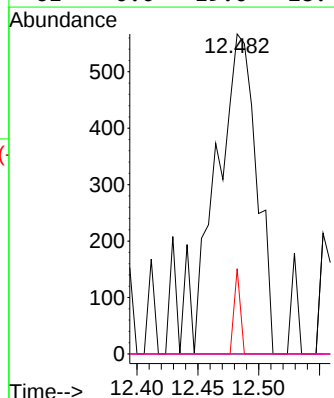
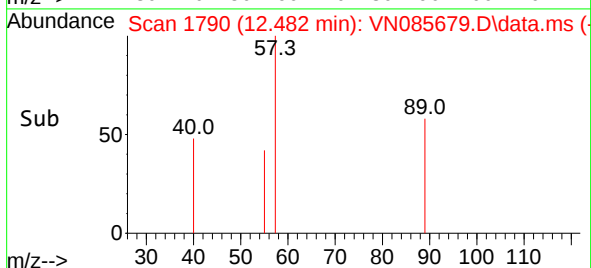
Tgt Ion:152 Resp: 117256  
 Ion Ratio Lower Upper  
 152 100  
 115 60.9 31.1 93.3  
 150 159.5 0.0 343.6

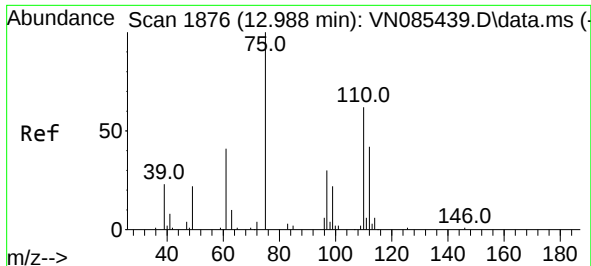


#74  
 N-ethyl acetate  
 Concen: 0.379 ug/l  
 RT: 12.482 min Scan# 1790  
 Delta R.T. -0.006 min  
 Lab File: VN085679.D  
 Acq: 05 Feb 2025 15:59



Tgt Ion: 43 Resp: 1347  
 Ion Ratio Lower Upper  
 43 100  
 70 0.0 34.0 51.0#  
 55 3.9 21.4 32.2#  
 61 0.0 19.0 28.4#

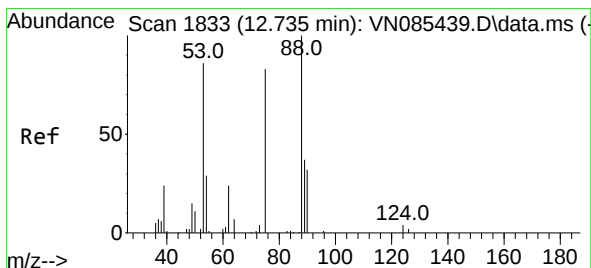
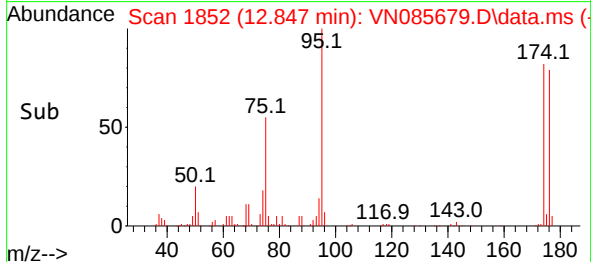
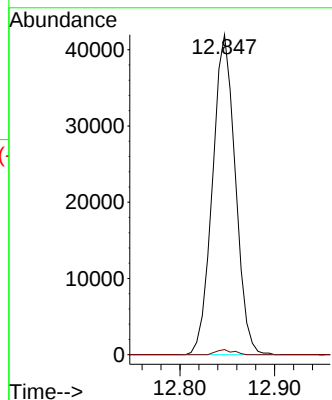
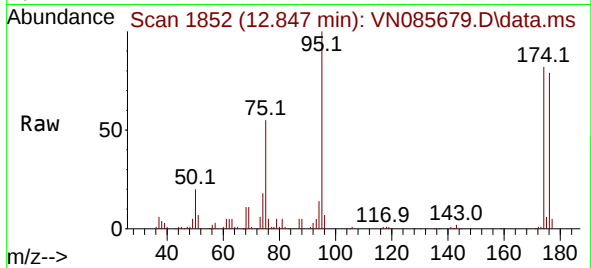




#76  
1,2,3-Trichloropropane  
Concen: 29.512 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.141 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

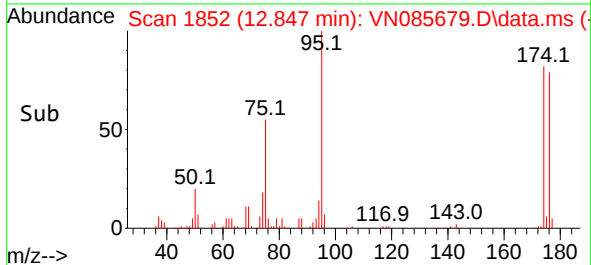
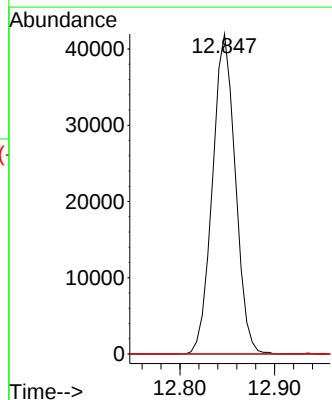
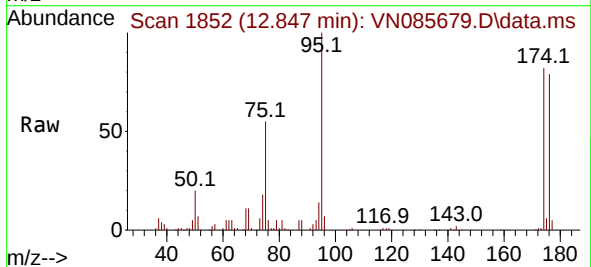
Instrument :  
MSVOA\_N  
ClientSampleId :

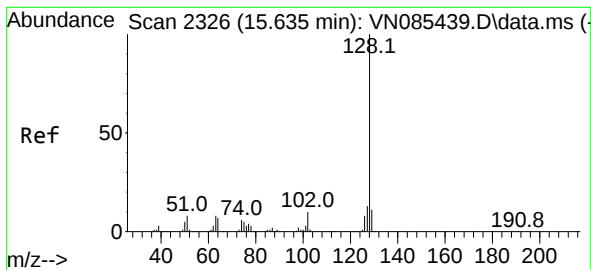
Tgt Ion: 75 Resp: 70335  
Ion Ratio Lower Upper  
75 100  
77 1.2 109.7 329.2#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 79.847 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.112 min  
Lab File: VN085679.D  
Acq: 05 Feb 2025 15:59

Tgt Ion: 75 Resp: 70335  
Ion Ratio Lower Upper  
75 100  
53 0.0 95.6 143.4#  
89 0.0 37.0 55.6#





#95

Naphthalene

Concen: 0.246 ug/l

RT: 15.641 min Scan# 21

Delta R.T. 0.006 min

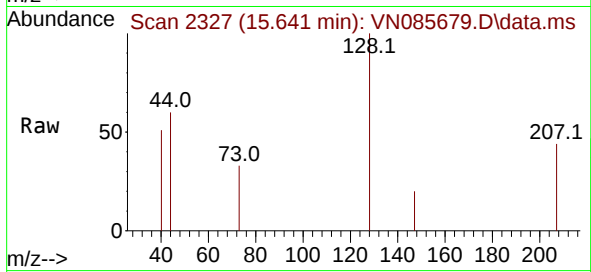
Lab File: VN085679.D

Acq: 05 Feb 2025 15:59

Instrument :

MSVOA\_N

ClientSampleId :



Tgt Ion:128 Resp: 1298

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 127 | 0.0   | 10.6  | 16.0# |
| 129 | 0.0   | 8.8   | 13.2# |

