

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN041620\  
 Data File : VN061033.D  
 Acq On : 16 Apr 2020 23:29  
 Operator : JC/MD  
 Sample : L2307-03  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Apr 17 04:03:33 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N041620W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Apr 17 03:49:39 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 152658   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 261535   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 245372   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 110518   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 103019   | 52.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.48% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 78302    | 51.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.54% |      |
| 50) Toluene-d8            | 10.08  | 98  | 327574   | 56.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.52% |      |
| 62) 4-Bromofluorobenzene  | 12.39  | 95  | 122794   | 54.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.58% |      |

## Target Compounds

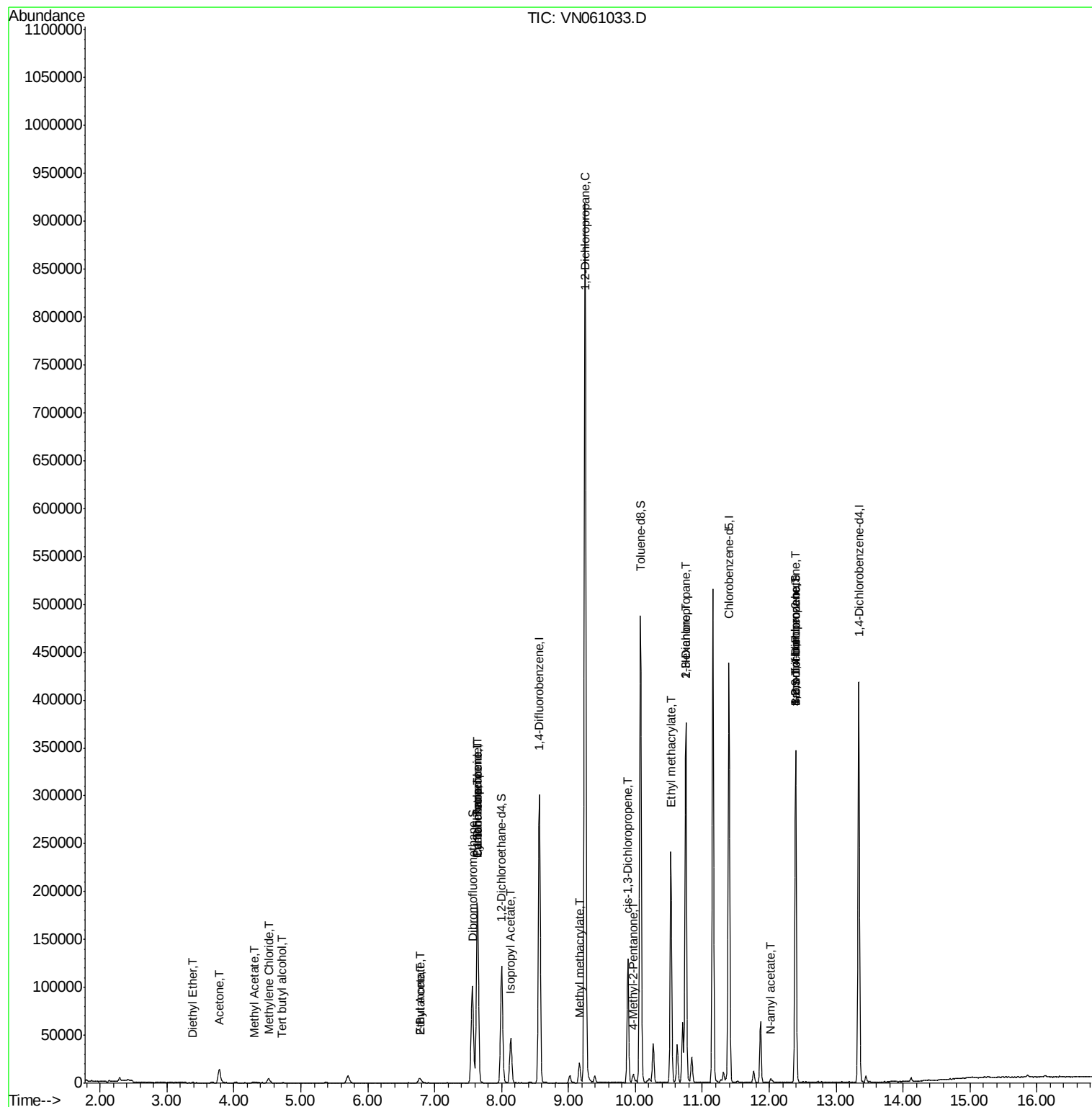
|                                |       |     |       |        | Qvalue |     |
|--------------------------------|-------|-----|-------|--------|--------|-----|
| 8) Diethyl Ether               | 3.38  | 74  | 279   | 0.251  | ug/l   | 89  |
| 11) Tert butyl alcohol         | 4.71  | 59  | 228   | 0.658  | ug/l # | 73  |
| 16) Acetone                    | 3.78  | 43  | 25064 | 29.155 | ug/l   | 99  |
| 18) Methyl Acetate             | 4.30  | 43  | 1885  | 0.699  | ug/l # | 54  |
| 20) Methylene Chloride         | 4.52  | 84  | 3401  | 1.812  | ug/l   | 92  |
| 25) 2-Butanone                 | 6.80  | 43  | 3800  | 2.885  | ug/l   | 99  |
| 31) Cyclohexane                | 7.63  | 56  | 3395  | 0.933  | ug/l # | 1   |
| 36) 1,1-Dichloropropene        | 7.64  | 75  | 12852 | 4.762  | ug/l # | 48  |
| 37) Ethyl Acetate              | 6.80  | 43  | 3800  | 1.297  | ug/l # | 69  |
| 38) Carbon Tetrachloride       | 7.63  | 117 | 14929 | 6.646  | ug/l # | 15  |
| 43) Isopropyl Acetate          | 8.14  | 43  | 56380 | 11.830 | ug/l # | 92  |
| 45) 1,2-Dichloropropane        | 9.25  | 63  | 1041  | 0.481  | ug/l # | 43  |
| 48) Methyl methacrylate        | 9.16  | 41  | 3226  | 1.532  | ug/l # | 14  |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43  | 6951  | 2.530  | ug/l   | 98  |
| 54) cis-1,3-Dichloropropene    | 9.89  | 75  | 22649 | 6.785  | ug/l # | 61  |
| 56) Ethyl methacrylate         | 10.53 | 69  | 577   | 0.202  | ug/l # | 1   |
| 57) 1,3-Dichloropropane        | 10.75 | 76  | 3584  | 1.105  | ug/l # | 43  |
| 59) 2-Hexanone                 | 10.75 | 43  | 57249 | 28.893 | ug/l # | 52  |
| 71) Bromoform                  | 12.40 | 173 | 480   | 0.355  | ug/l # | 1   |
| 74) N-amyl acetate             | 12.02 | 43  | 3240  | 0.787  | ug/l # | 46  |
| 76) 1,2,3-Trichloropropane     | 12.39 | 75  | 62063 | 25.530 | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.39 | 75  | 62063 | 62.973 | ug/l # | 12  |

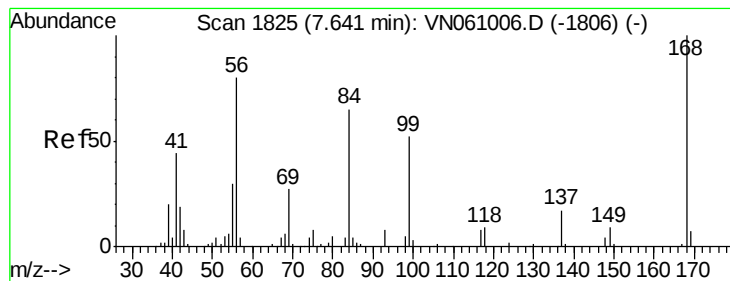
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN041620\  
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Sample : L2307-03  
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Quant Time: Apr 17 04:03:33 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N041620W.M  
Quant Title : SW846 8260  
QLast Update : Fri Apr 17 03:49:39 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. 0.00 min

Lab File: VN061033.D

Acq: 16 Apr 2020 23:29

Instrument :

MSVOA\_N

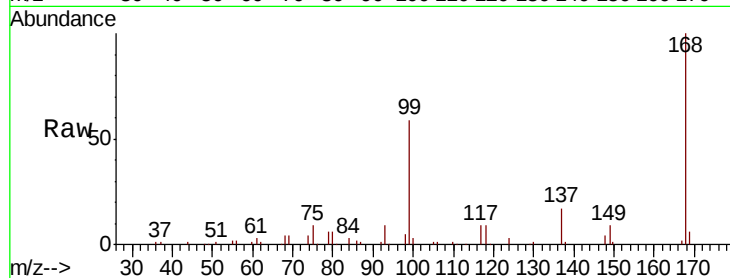
ClientSampleId :

Tot Ion:168 Resp: 152658

Ion Ratio Lower Upper

168 100

99 58.8 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): VN061006.D (-1806) (-)

Ion 98.90 (98.60 to 99.60): VN061006.D (-1806) (-)

7.64

60000

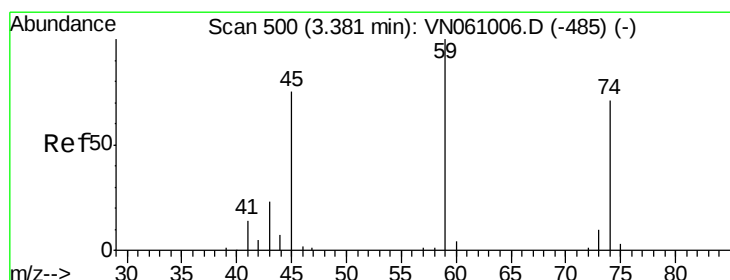
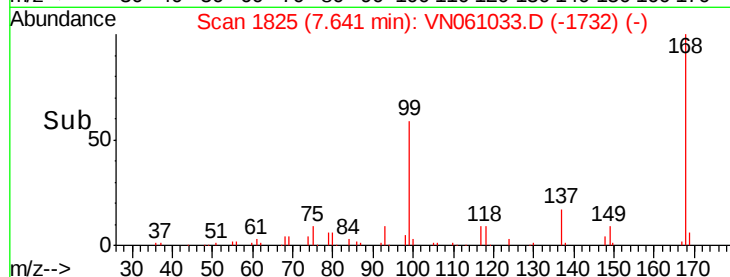
40000

20000

0

7.60 7.70

Time-->



#8

Diethyl Ether

Concen: 0.251 ug/l

RT: 3.38 min Scan# 501

Delta R.T. 0.00 min

Lab File: VN061033.D

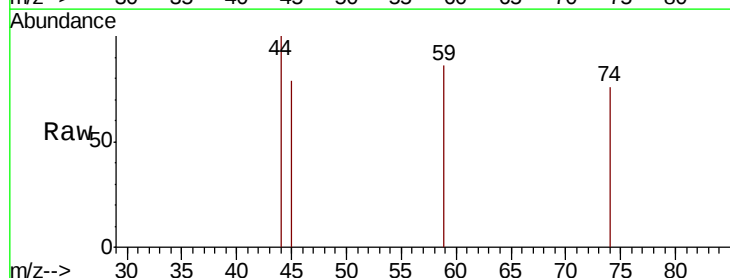
Acq: 16 Apr 2020 23:29

Tgt Ion: 74 Resp: 279

Ion Ratio Lower Upper

74 100

45 117.2 52.9 158.8



Abundance Ion 74.00 (73.70 to 74.70): VN061006.D (-485) (-)

Ion 45.00 (44.70 to 45.70): VN061006.D (-485) (-)

3.38

250

200

150

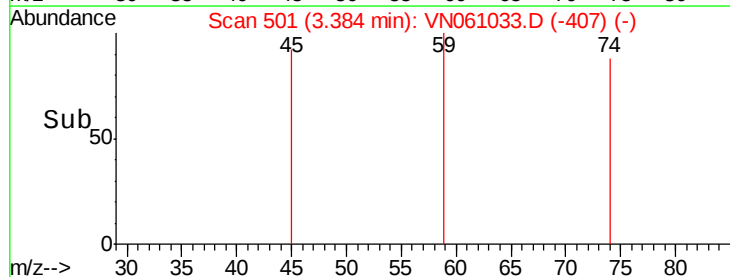
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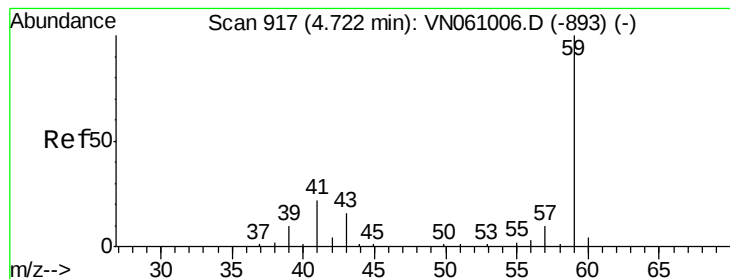
50

0

3.36 3.38 3.40

Time-->



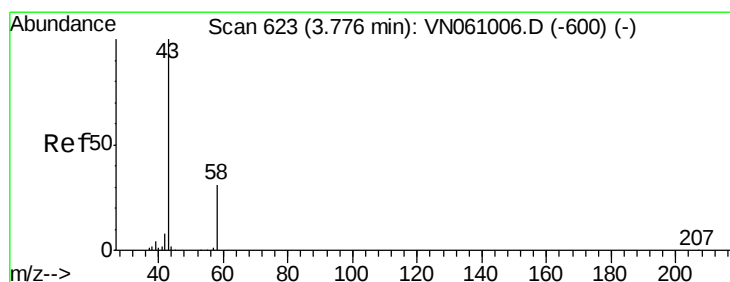
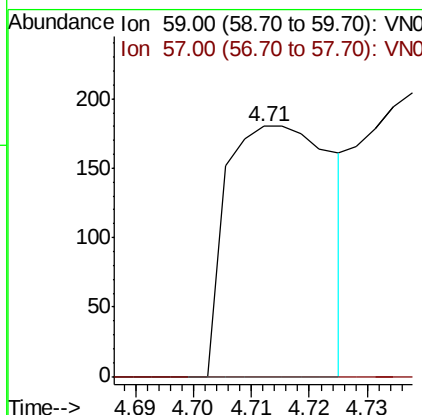
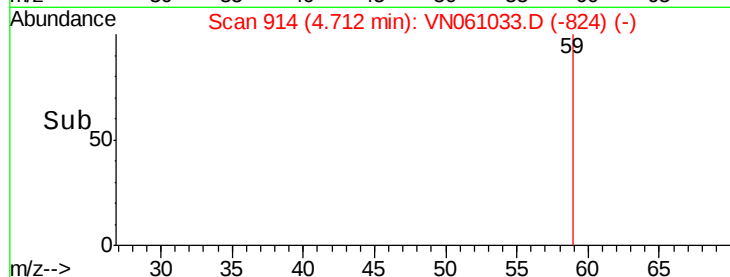
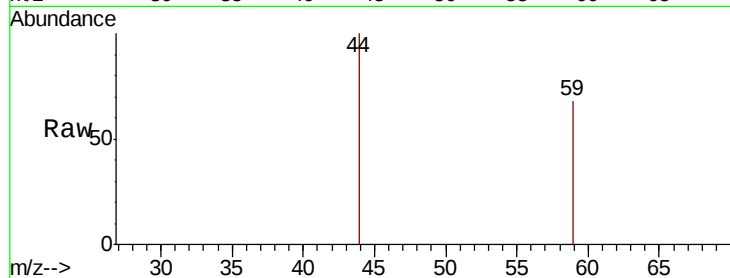


#11

Tert butyl alcohol  
 Concen: 0.658 ug/l  
 RT: 4.71 min Scan# 914  
 Delta R.T. -0.01 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

Instrument :  
 MSVOA\_N  
 ClientSampled :

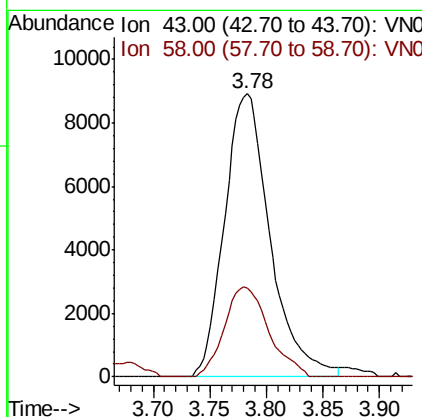
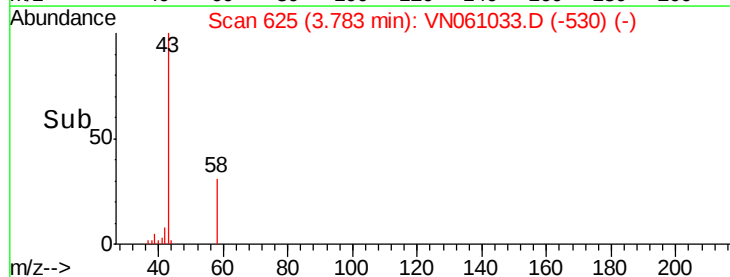
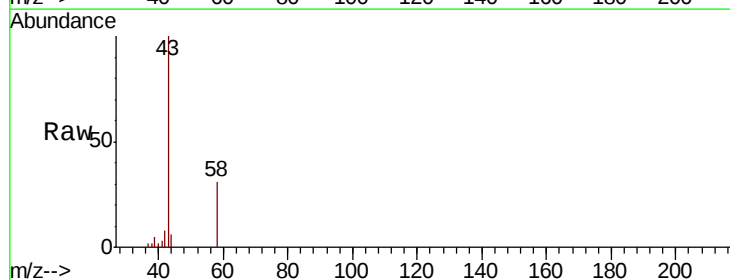
Tot Ion: 59 Resp: 228  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.1 12.1#

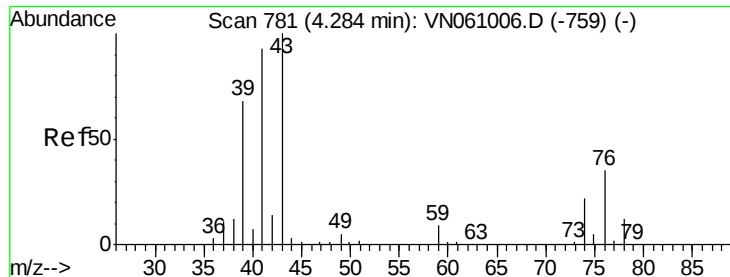


#16

Acetone  
 Concen: 29.155 ug/l  
 RT: 3.78 min Scan# 625  
 Delta R.T. 0.01 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

Tgt Ion: 43 Resp: 25064  
 Ion Ratio Lower Upper  
 43 100  
 58 31.2 24.6 37.0

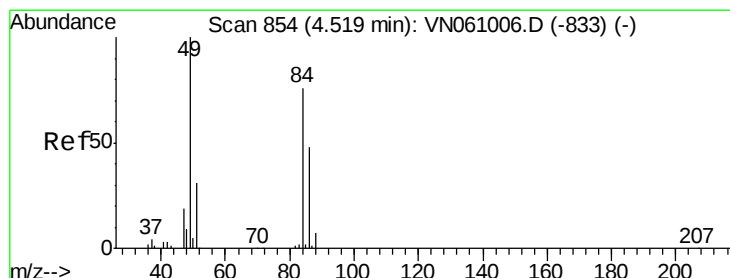
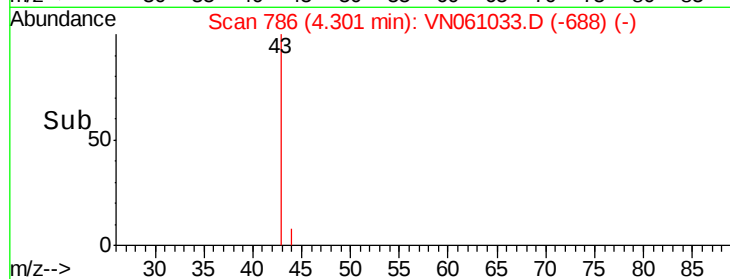
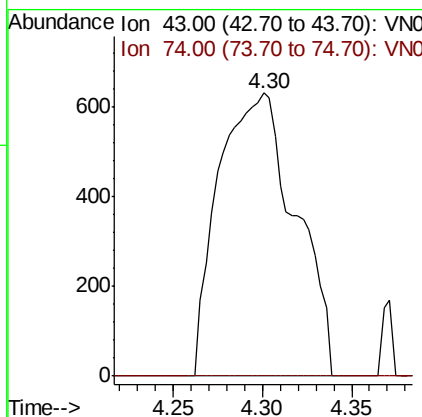
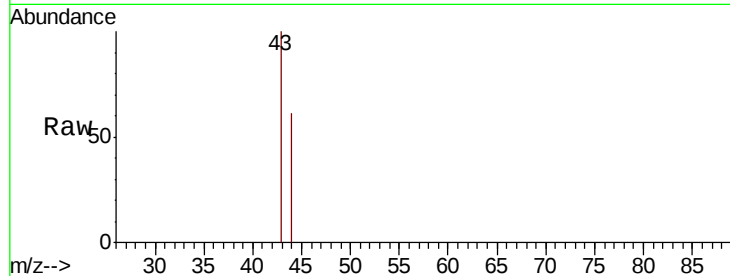




#18  
Methyl Acetate  
Concen: 0.699 ug/l  
RT: 4.30 min Scan# 786  
Delta R.T. 0.02 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

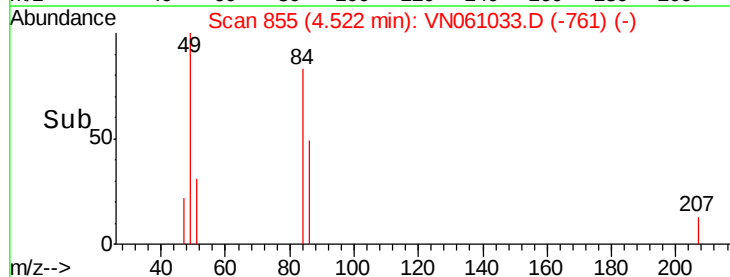
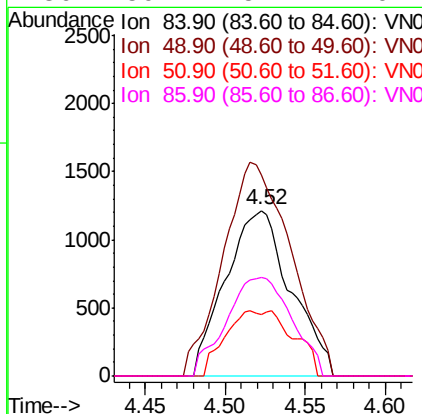
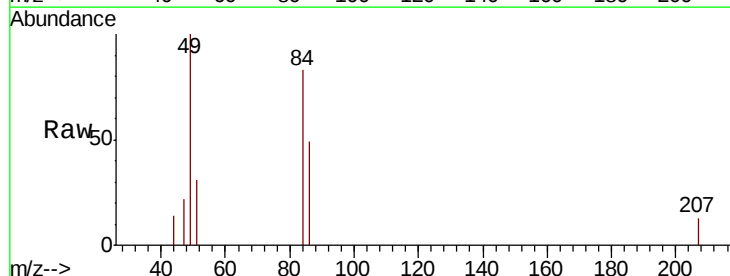
Instrument :  
MSVOA\_N  
ClientSampled :

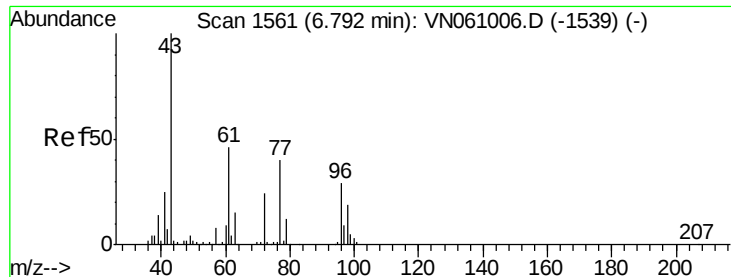
Tot Ion: 43 Resp: 1885  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.4 26.0#



#20  
Methylene Chloride  
Concen: 1.812 ug/l  
RT: 4.52 min Scan# 855  
Delta R.T. 0.00 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 84 Resp: 3401  
Ion Ratio Lower Upper  
84 100  
49 121.2 105.8 158.6  
51 37.4 32.4 48.6  
86 59.2 51.1 76.7

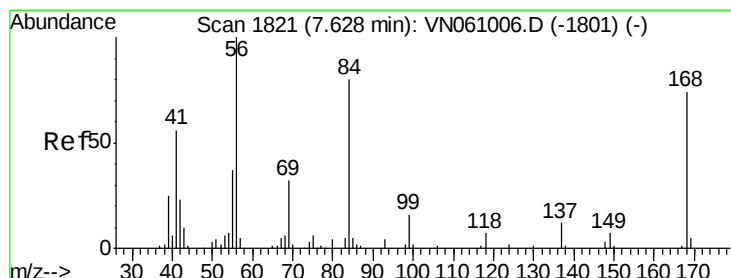
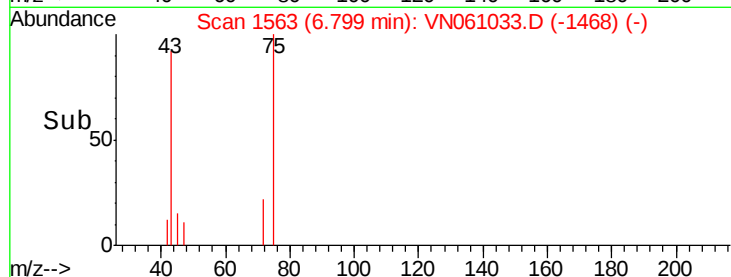
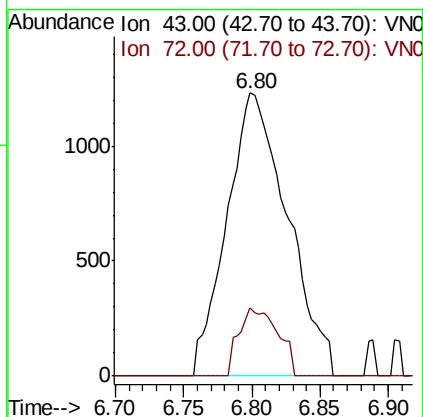
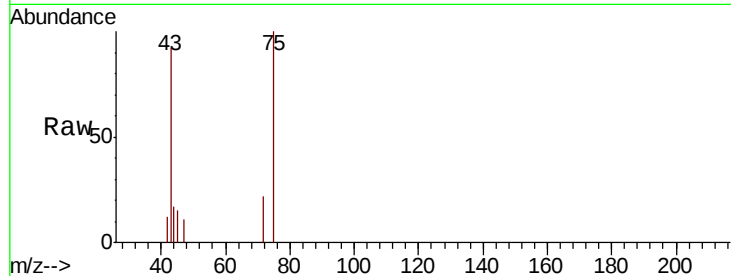




#25  
2-Butanone  
Concen: 2.885 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. 0.01 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

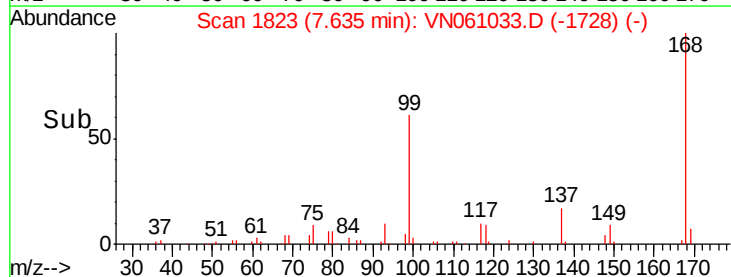
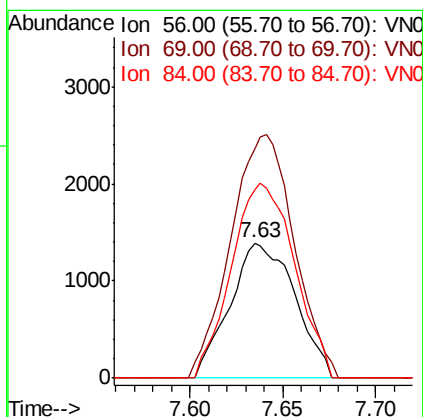
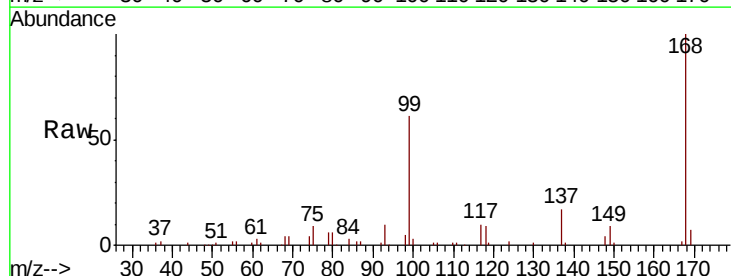
Instrument :  
MSVOA\_N  
ClientSampled :

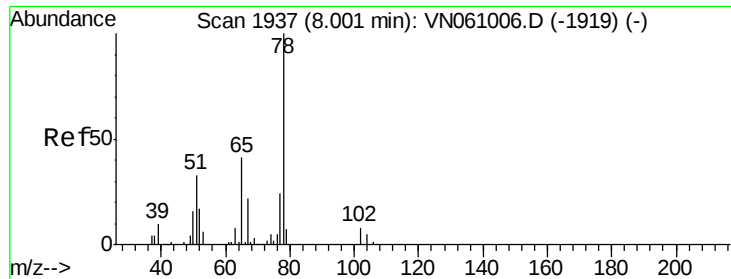
Tot Ion: 43 Resp: 3800  
Ion Ratio Lower Upper  
43 100  
72 24.1 19.6 29.4



#31  
Cyclohexane  
Concen: 0.933 ug/l  
RT: 7.63 min Scan# 1823  
Delta R.T. 0.01 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 56 Resp: 3395  
Ion Ratio Lower Upper  
56 100  
69 170.6 25.6 38.4#  
84 139.4 63.4 95.2#

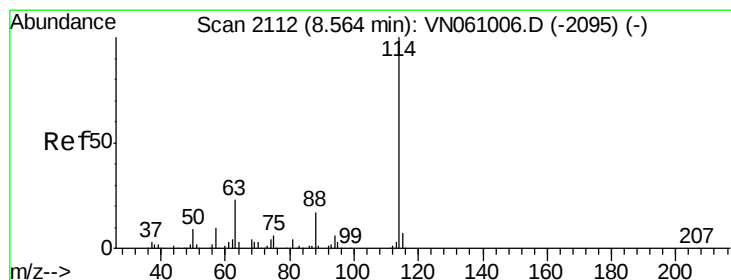
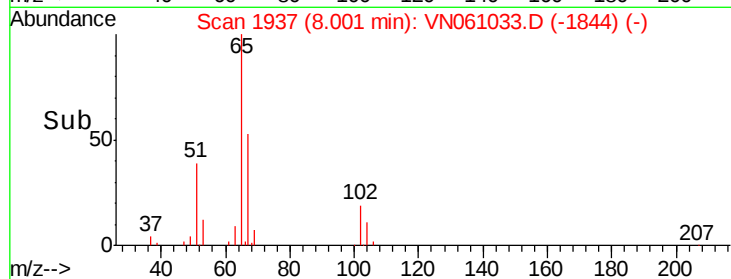
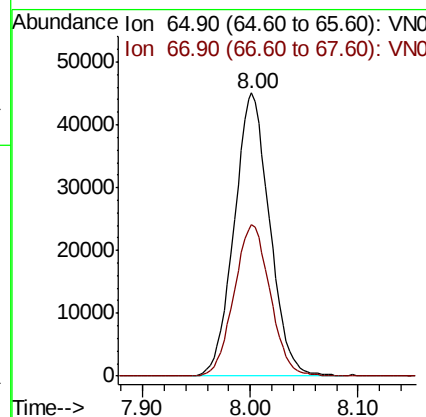
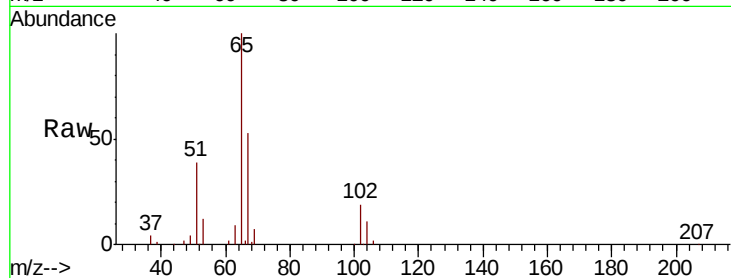




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.745 ug/l  
 RT: 8.00 min Scan# 1937  
 Delta R.T. -0.00 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

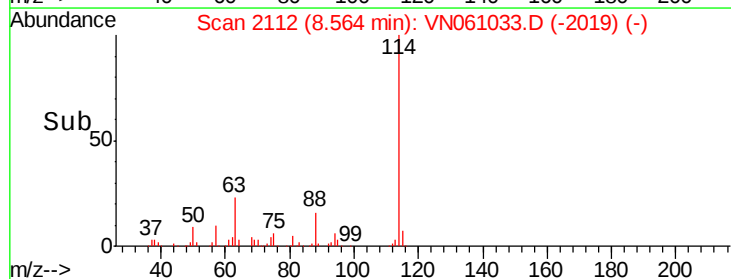
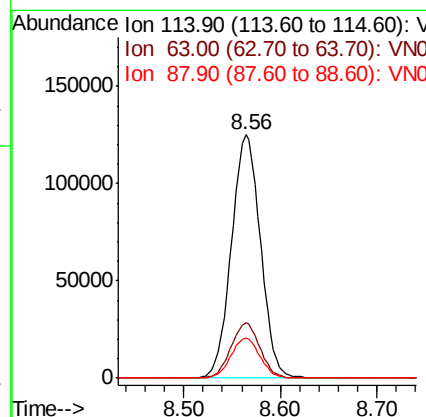
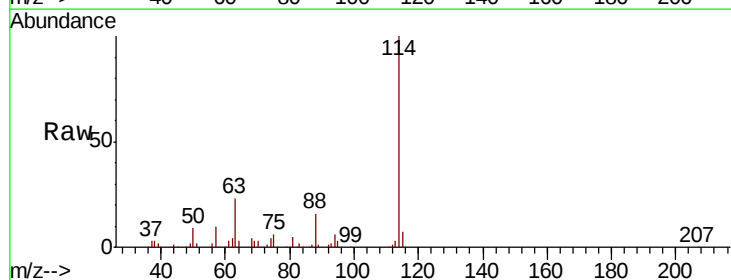
Instrument :  
 MSVOA\_N  
 ClientSampled :

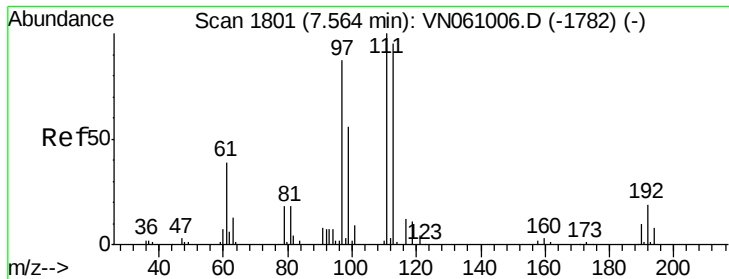
Tot Ion: 65 Resp: 103019  
 Ion Ratio Lower Upper  
 65 100  
 67 54.5 0.0 107.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.56 min Scan# 2112  
 Delta R.T. -0.00 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

Tgt Ion: 114 Resp: 261535  
 Ion Ratio Lower Upper  
 114 100  
 63 22.6 0.0 46.2  
 88 16.3 0.0 33.4

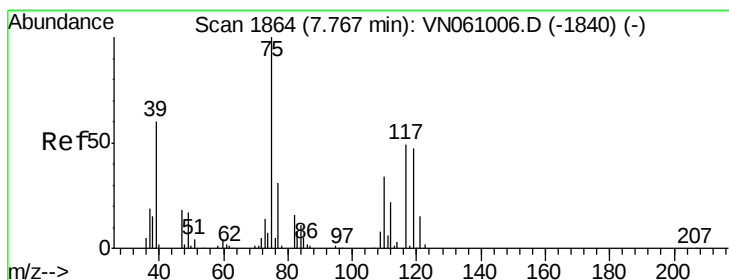
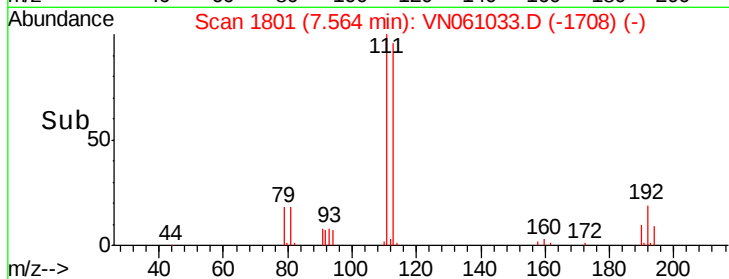
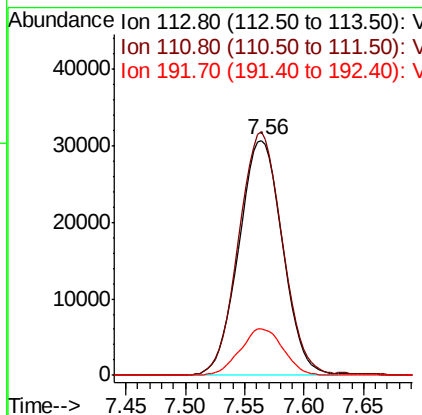
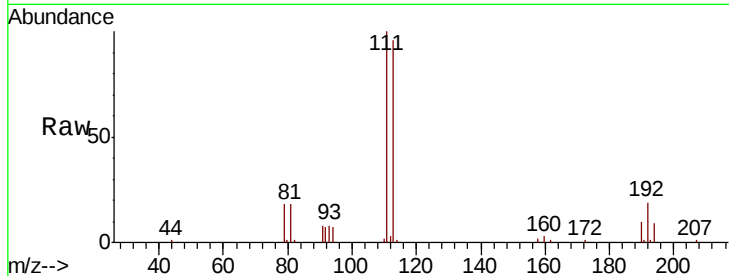




#35  
 Dibromofluoromethane  
 Concen: 51.267 ug/l  
 RT: 7.56 min Scan# 1801  
 Delta R.T. -0.00 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

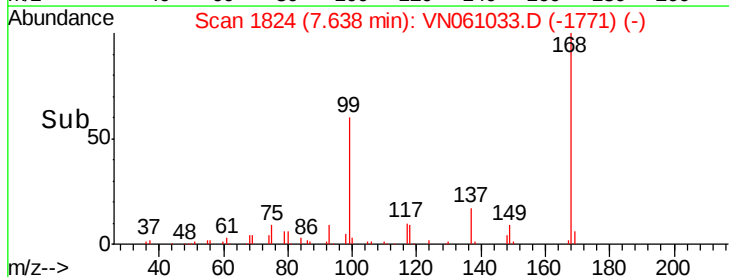
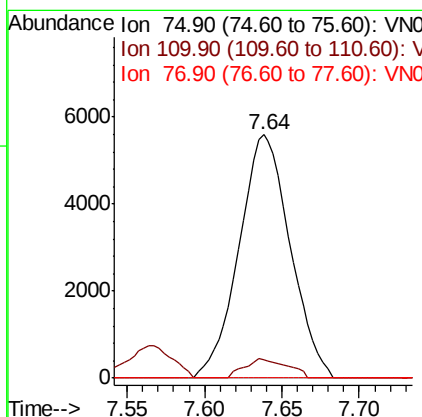
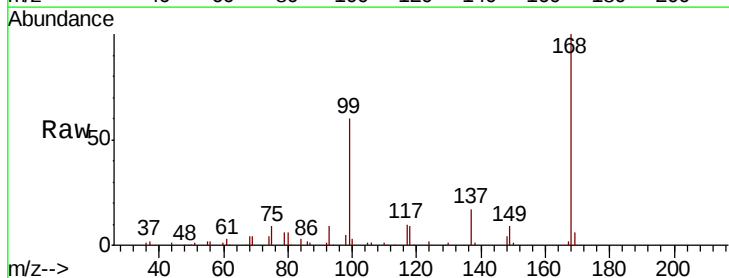
Instrument :  
 MSVOA\_N  
 ClientSampleId :

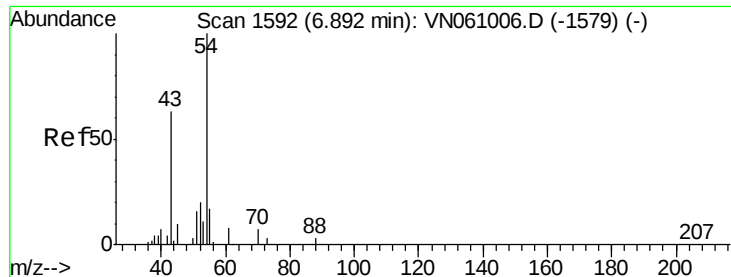
Tot Ion:113 Resp: 78302  
 Ion Ratio Lower Upper  
 113 100  
 111 103.1 83.4 125.2  
 192 19.4 15.5 23.3



#36  
 1,1-Dichloropropene  
 Concen: 4.762 ug/l  
 RT: 7.64 min Scan# 1824  
 Delta R.T. -0.13 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

Tgt Ion: 75 Resp: 12852  
 Ion Ratio Lower Upper  
 75 100  
 110 6.7 16.8 50.3#  
 77 0.0 24.7 37.1#

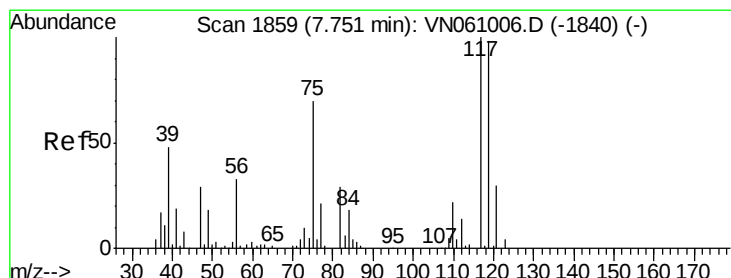
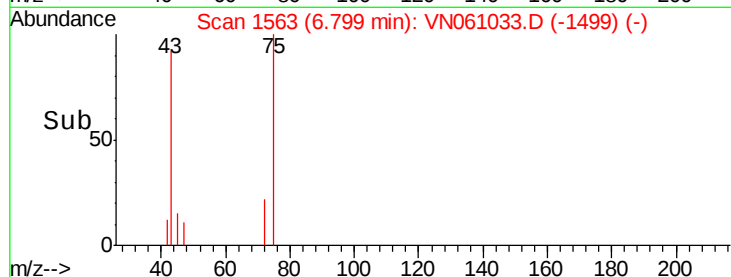
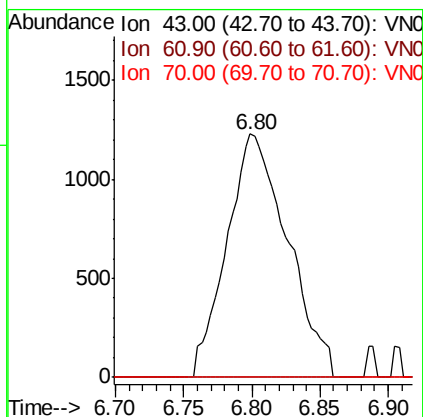
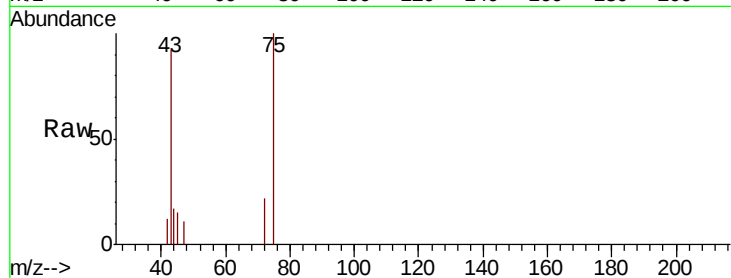




#37  
Ethyl Acetate  
Concen: 1.297 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. -0.09 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

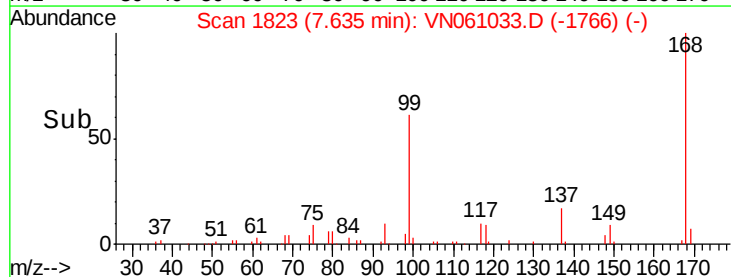
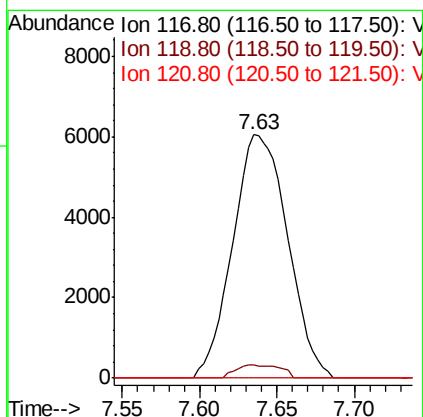
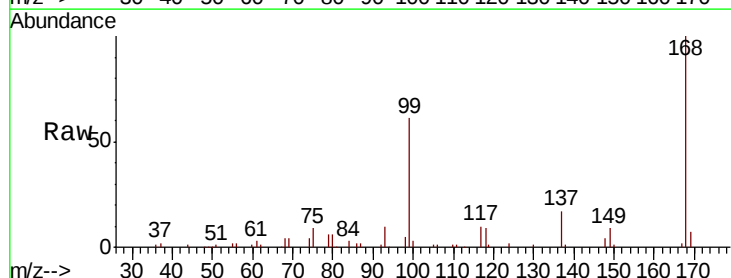
Instrument :  
MSVOA\_N  
ClientSampleId :

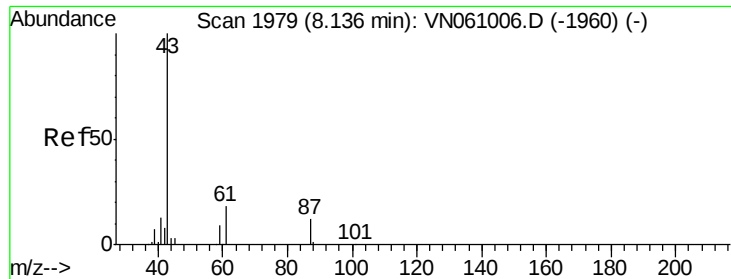
Tot Ion: 43 Resp: 3800  
Ion Ratio Lower Upper  
43 100  
61 0.0 10.9 16.3#  
70 0.0 7.7 11.5#



#38  
Carbon Tetrachloride  
Concen: 6.646 ug/l  
RT: 7.63 min Scan# 1823  
Delta R.T. -0.12 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 117 Resp: 14929  
Ion Ratio Lower Upper  
117 100  
119 5.4 78.1 117.1#  
121 0.0 24.0 36.0#

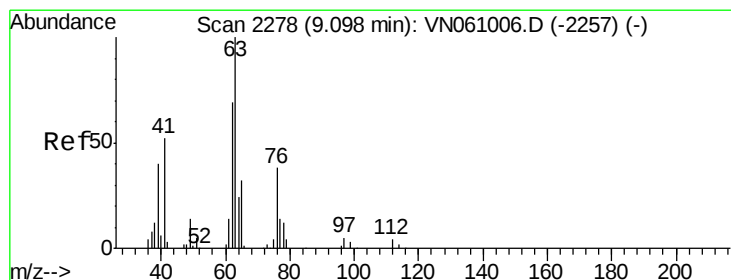
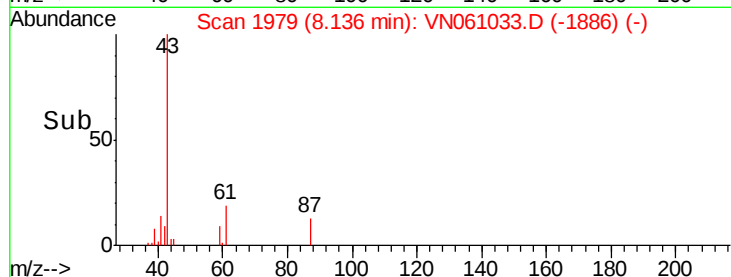
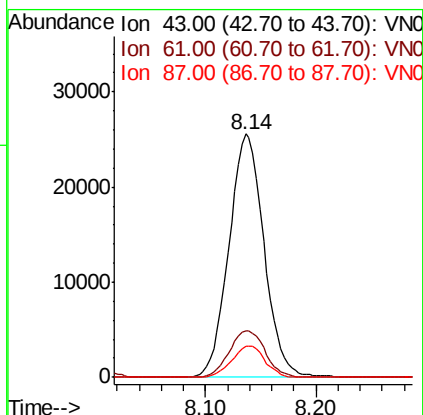
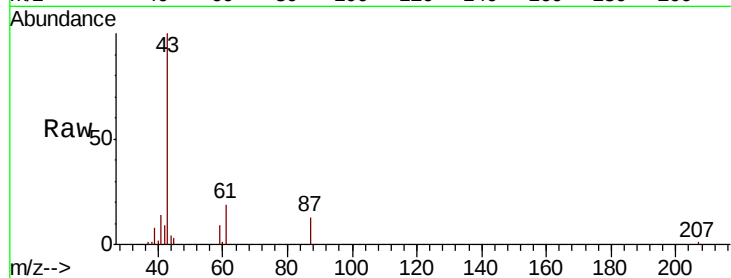




#43  
Isopropyl Acetate  
Concen: 11.830 ug/l  
RT: 8.14 min Scan# 1979  
Delta R.T. -0.00 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

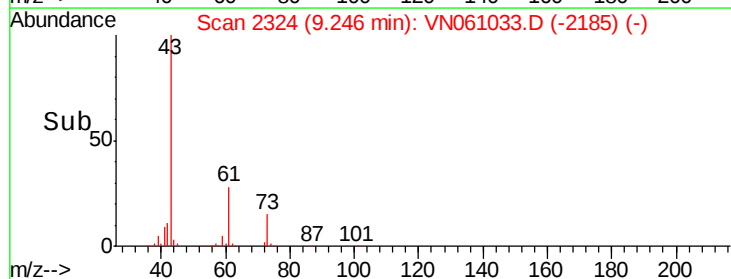
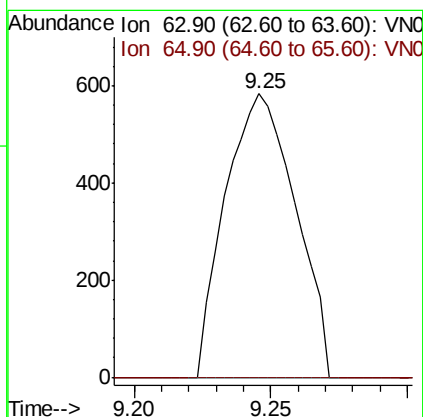
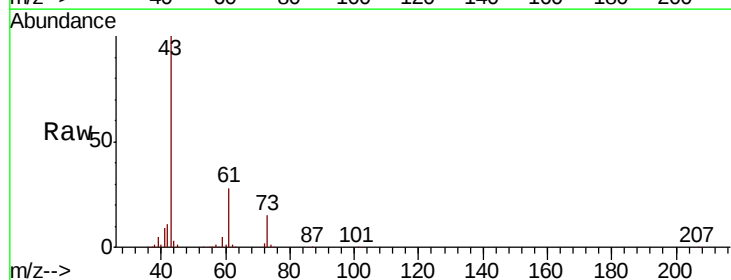
Instrument :  
MSVOA\_N  
ClientSampleId :

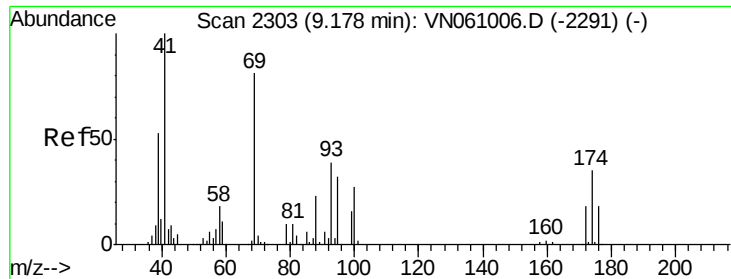
Tot Ion: 43 Resp: 56380  
Ion Ratio Lower Upper  
43 100  
61 19.5 20.3 30.5#  
87 12.1 9.4 14.2



#45  
1,2-Dichloropropane  
Concen: 0.481 ug/l  
RT: 9.25 min Scan# 2324  
Delta R.T. 0.15 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 63 Resp: 1041  
Ion Ratio Lower Upper  
63 100  
65 0.0 25.2 37.8#

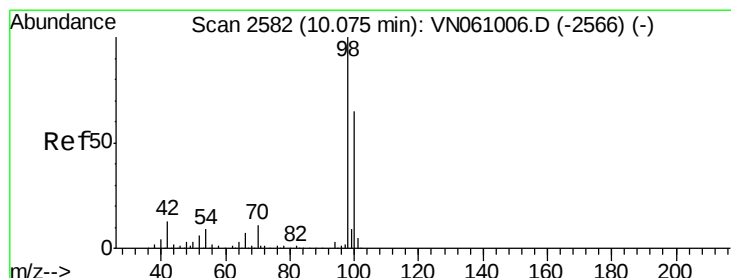
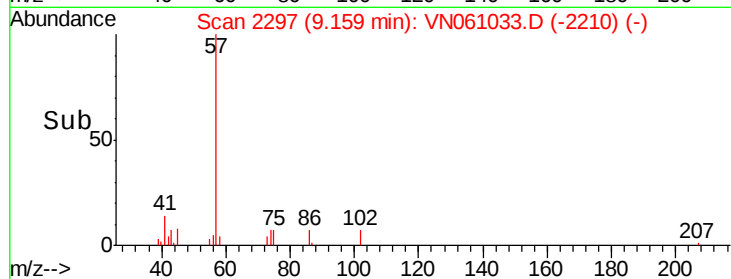
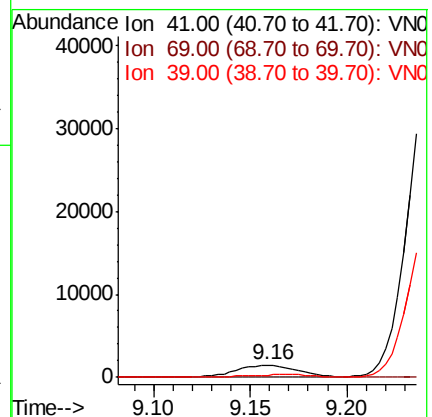
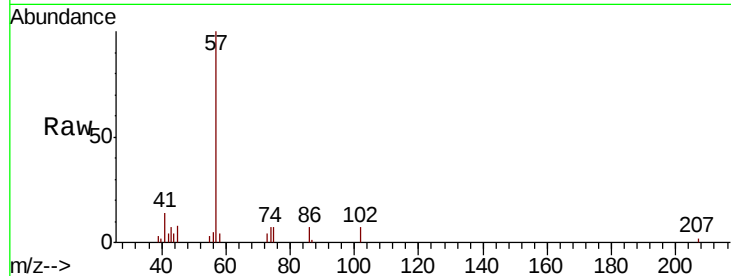




#48  
Methvl methacrylate  
Concen: 1.532 ug/l  
RT: 9.16 min Scan# 2297  
Delta R.T. -0.02 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

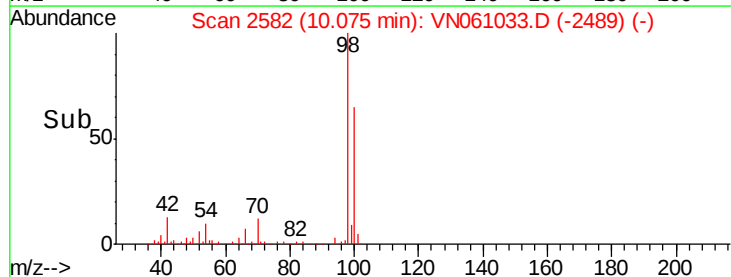
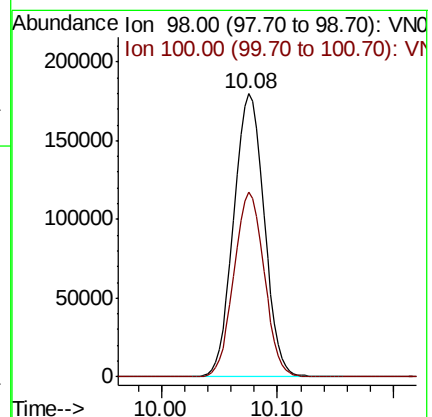
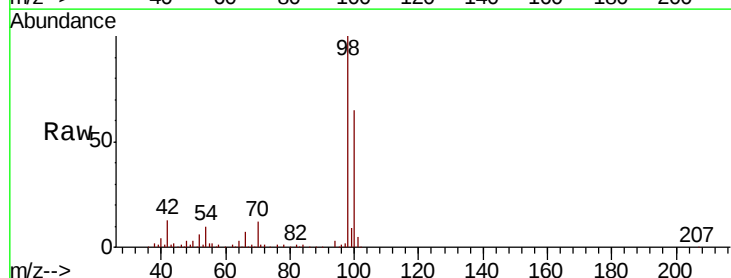
Instrument :  
MSVOA\_N  
ClientSampleId :

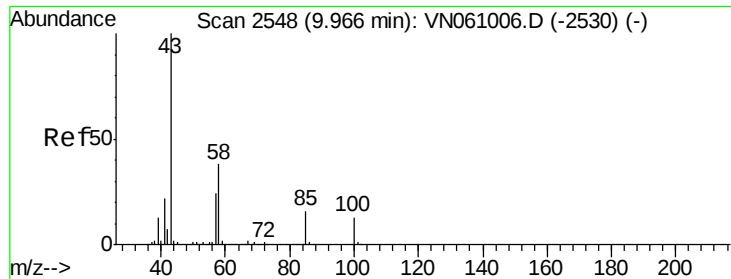
Tot Ion: 41 Resp: 3226  
Ion Ratio Lower Upper  
41 100  
69 0.0 65.3 97.9#  
39 0.0 45.2 67.8#



#50  
Toluene-d8  
Concen: 56.757 ug/l  
RT: 10.08 min Scan# 2582  
Delta R.T. 0.00 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 98 Resp: 327574  
Ion Ratio Lower Upper  
98 100  
100 64.7 51.9 77.9

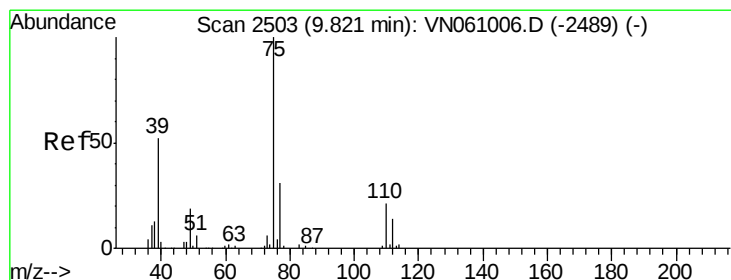
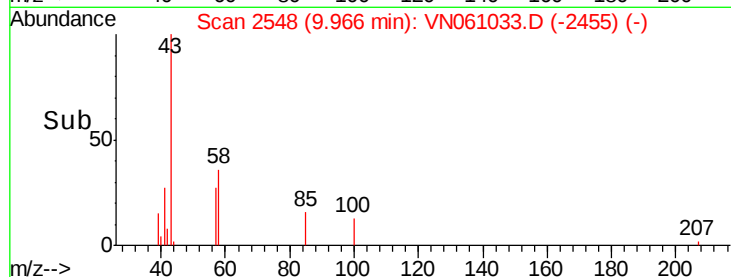
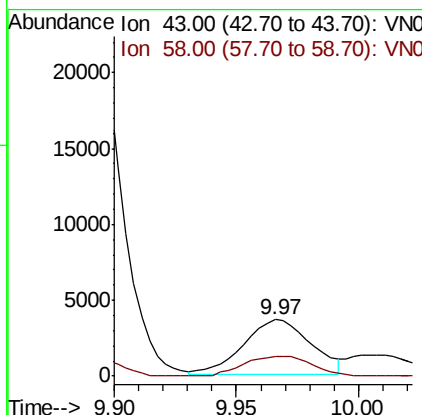
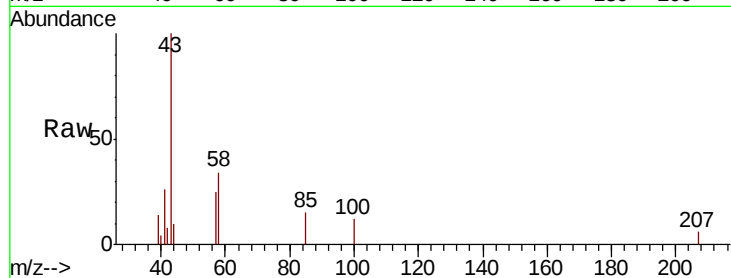




#51  
 4-Methyl-2-Pentanone  
 Concen: 2.530 ug/l  
 RT: 9.97 min Scan# 2548  
 Delta R.T. -0.00 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

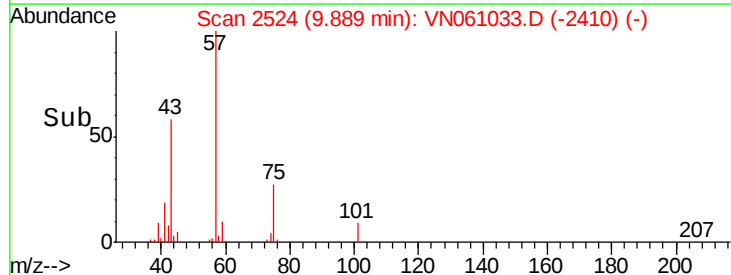
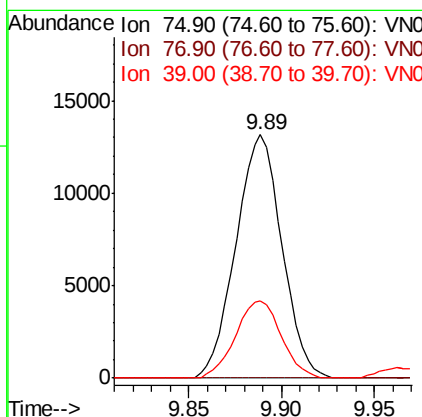
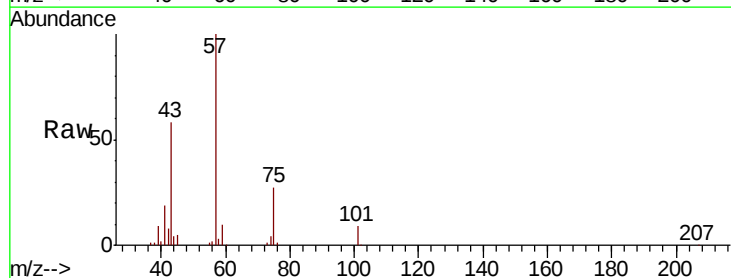
Instrument :  
 MSVOA\_N  
 ClientSampled :

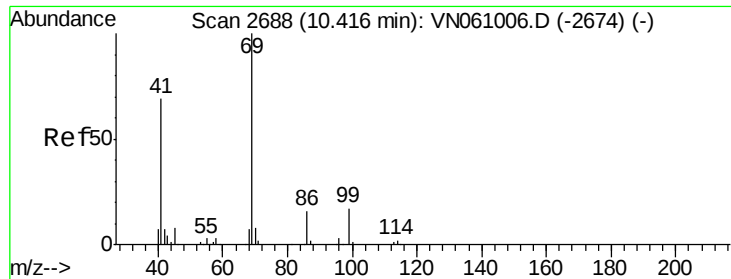
Tot Ion: 43 Resp: 6951  
 Ion Ratio Lower Upper  
 43 100  
 58 36.6 30.3 45.5



#54  
 cis-1,3-Dichloropropene  
 Concen: 6.785 ug/l  
 RT: 9.89 min Scan# 2524  
 Delta R.T. 0.07 min  
 Lab File: VN061033.D  
 Acq: 16 Apr 2020 23:29

Tgt Ion: 75 Resp: 22649  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.0 37.6#  
 39 31.9 41.4 62.2#

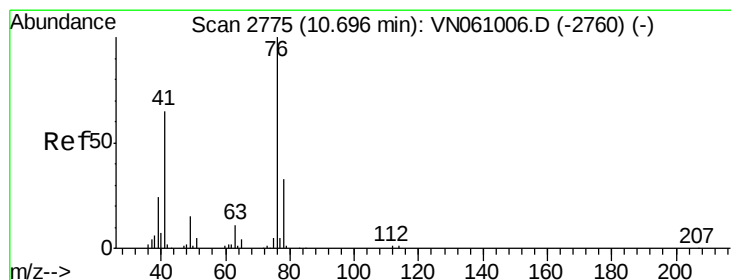
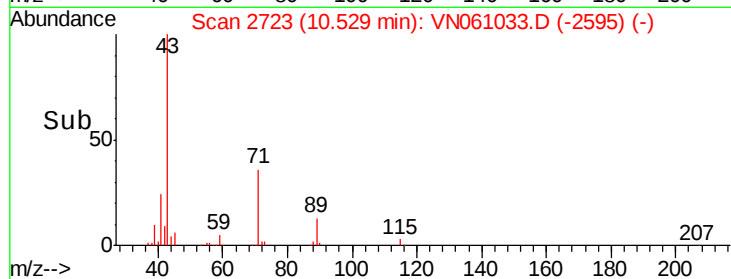
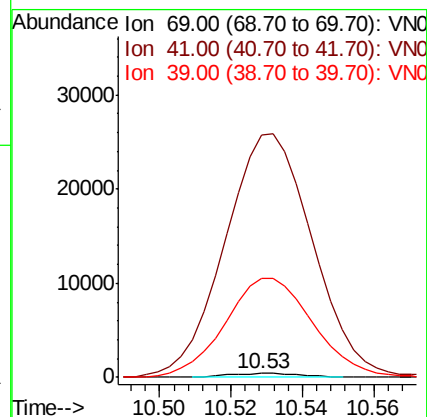
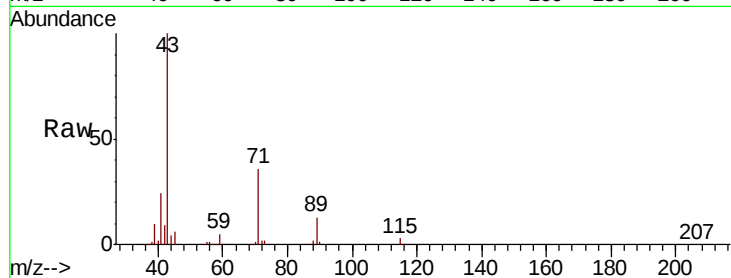




#56  
Ethyl methacrylate  
Concen: 0.202 ug/l  
RT: 10.53 min Scan# 2723  
Delta R.T. 0.11 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

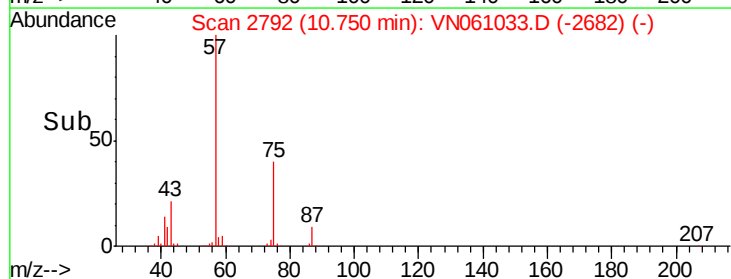
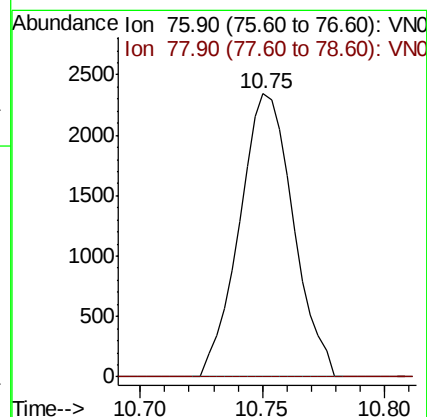
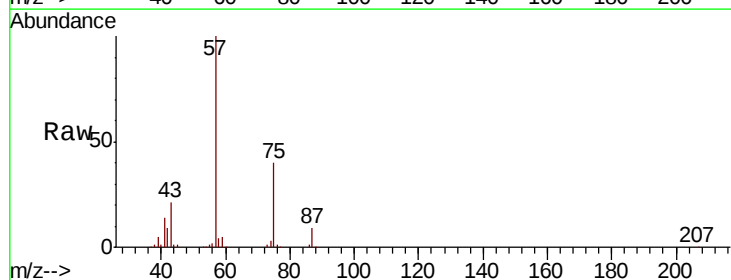
Instrument :  
MSVOA\_N  
ClientSampleId :

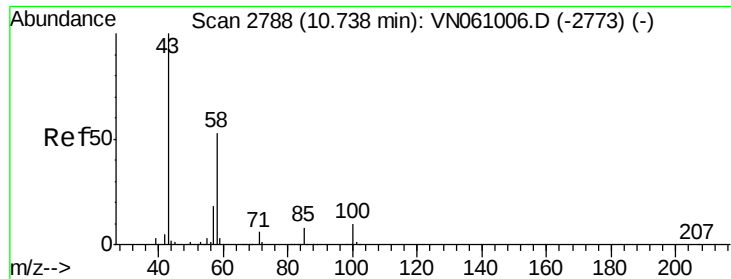
Tot Ion: 69 Resp: 577  
Ion Ratio Lower Upper  
69 100  
41 7666.9 56.7 85.1#  
39 3117.2 29.4 44.0#



#57  
1,3-Dichloropropane  
Concen: 1.105 ug/l  
RT: 10.75 min Scan# 2792  
Delta R.T. 0.05 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 76 Resp: 3584  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.4 38.0#

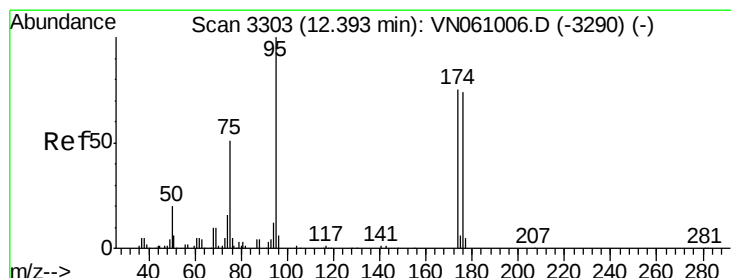
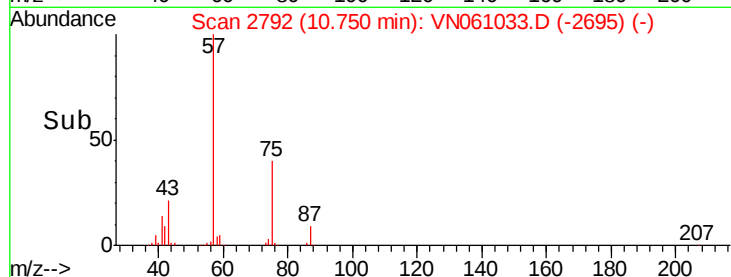
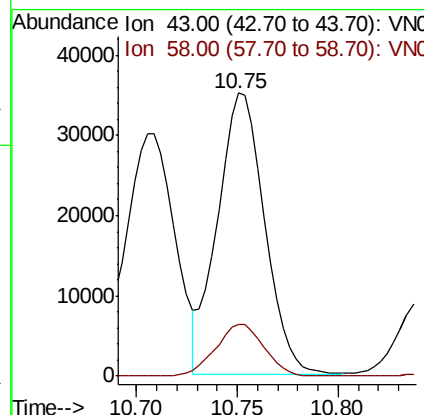
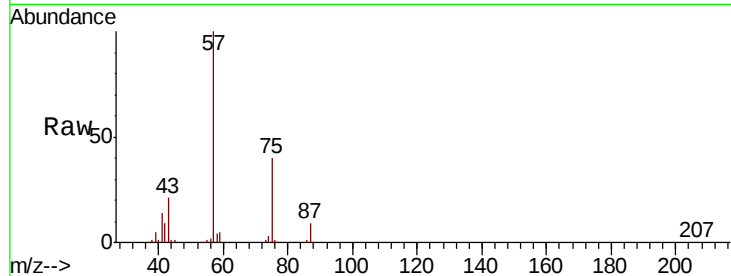




#59  
2-Hexanone  
Concen: 28.893 ug/l  
RT: 10.75 min Scan# 2792  
Delta R.T. 0.01 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

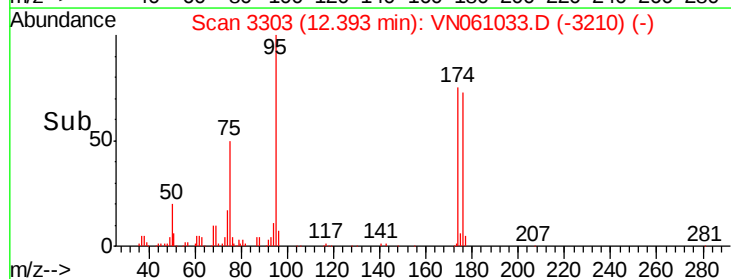
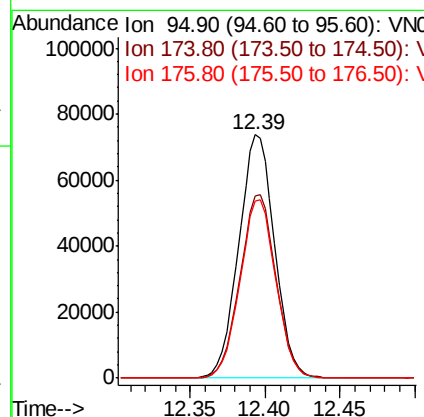
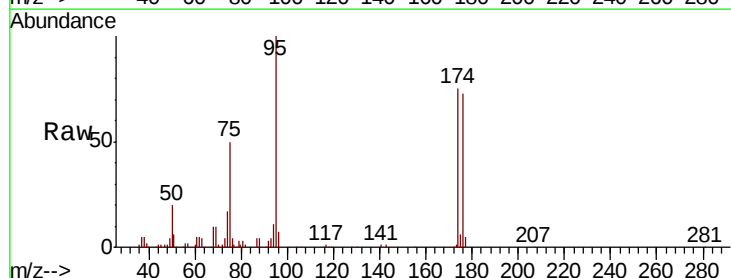
Instrument :  
MSVOA\_N  
ClientSampleId :

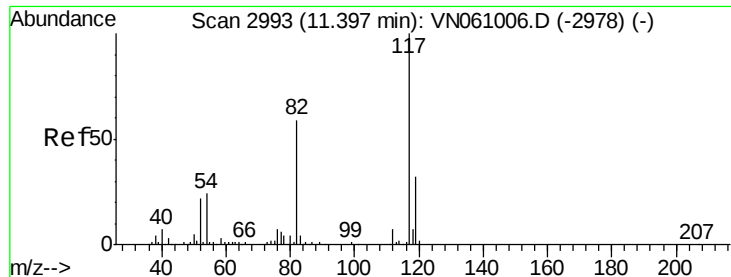
Tot Ion: 43 Resp: 57249  
Ion Ratio Lower Upper  
43 100  
58 18.7 26.4 79.0#



#62  
4-Bromofluorobenzene  
Concen: 54.285 ug/l  
RT: 12.39 min Scan# 3303  
Delta R.T. 0.00 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion: 95 Resp: 122794  
Ion Ratio Lower Upper  
95 100  
174 75.8 0.0 151.2  
176 73.3 0.0 148.2

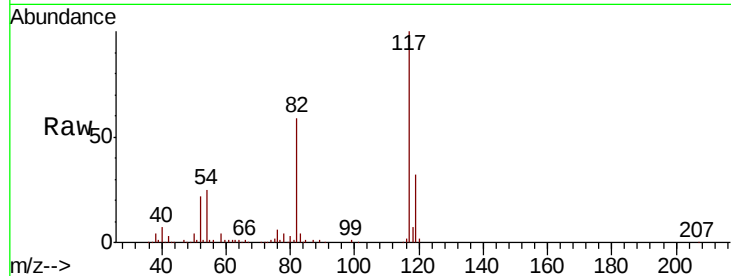




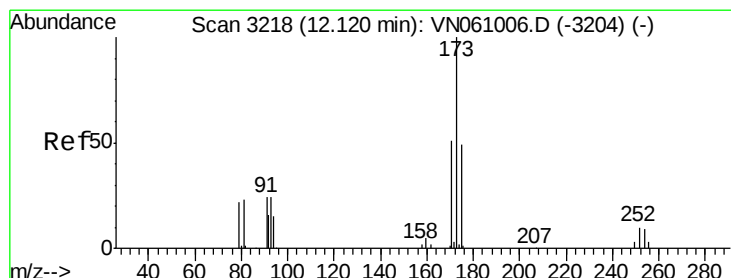
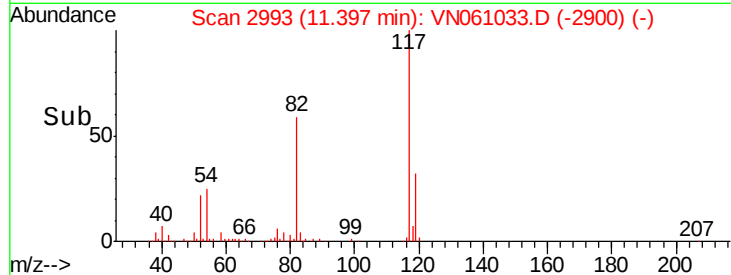
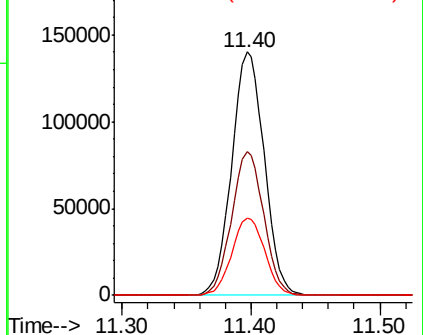
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2993  
Delta R.T. -0.00 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Instrument :  
MSVOA\_N  
ClientSampleId :

Tot Ion:117 Resp: 245372  
Ion Ratio Lower Upper  
117 100  
82 59.1 47.1 70.7  
119 31.7 25.7 38.5

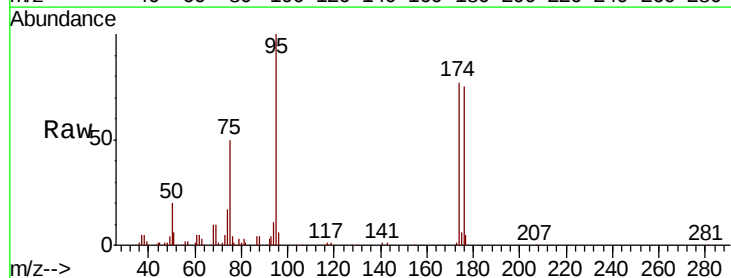


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

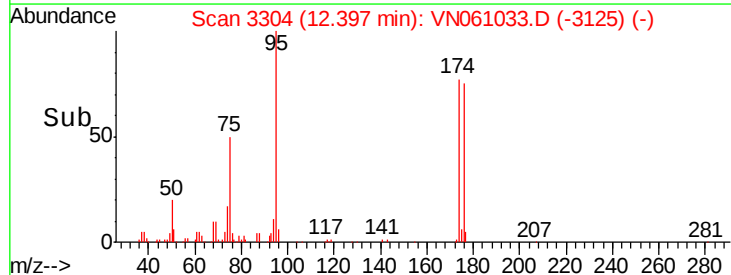
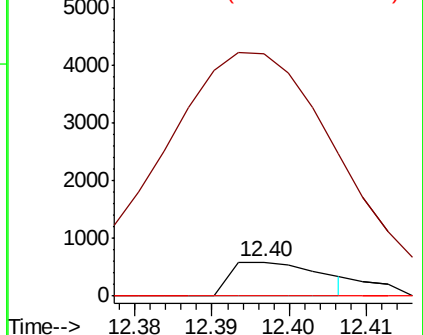


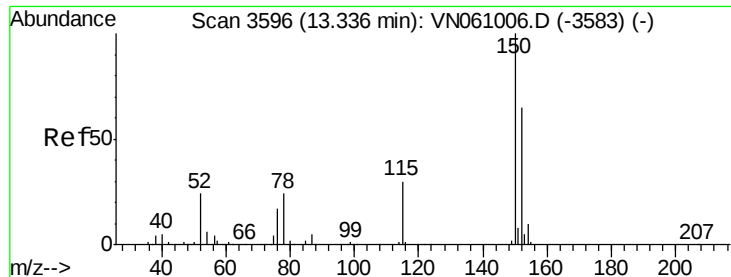
#71  
Bromoform  
Concen: 0.355 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.28 min  
Lab File: VN061033.D  
Acq: 16 Apr 2020 23:29

Tgt Ion:173 Resp: 480  
Ion Ratio Lower Upper  
173 100  
175 1293.1 24.5 73.5#  
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3597

Delta R.T. 0.00 min

Lab File: VN061033.D

Acq: 16 Apr 2020 23:29

Instrument :

MSVOA\_N

ClientSampled :

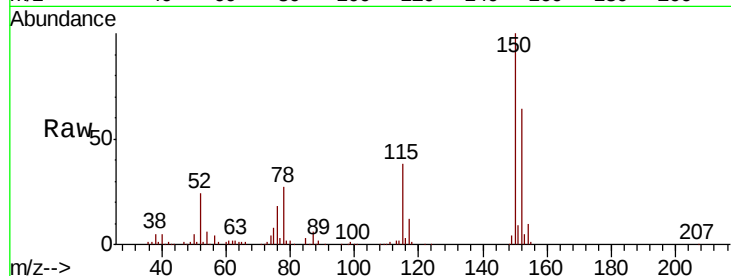
Tot Ion:152 Resp: 110518

Ion Ratio Lower Upper

152 100

115 60.3 30.8 92.4

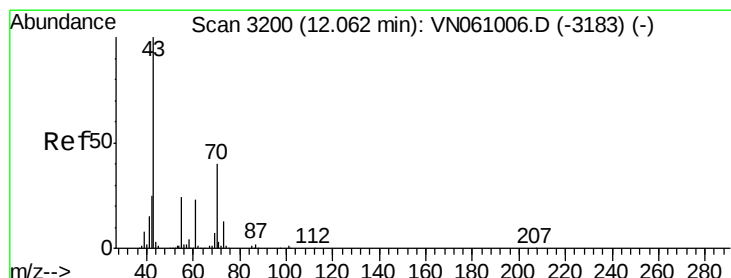
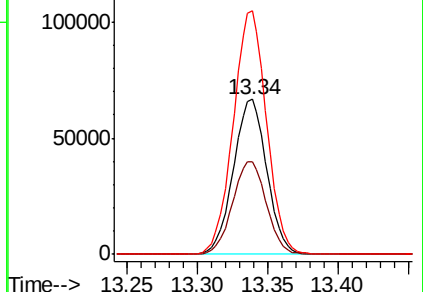
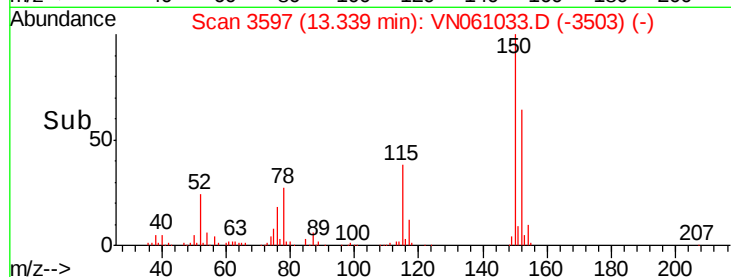
150 156.9 0.0 349.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 0.787 ug/l

RT: 12.02 min Scan# 3187

Delta R.T. -0.04 min

Lab File: VN061033.D

Acq: 16 Apr 2020 23:29

Tgt Ion: 43 Resp: 3240

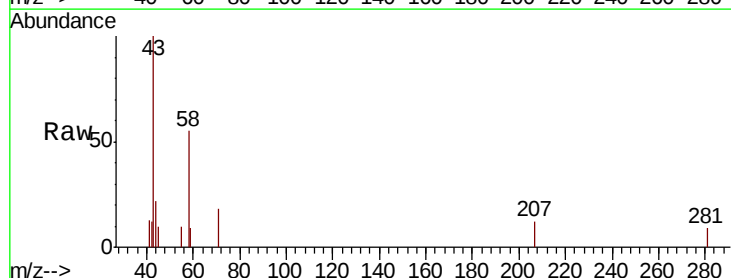
Ion Ratio Lower Upper

43 100

70 0.0 31.0 46.6#

55 1.9 18.6 27.8#

61 0.0 18.2 27.4#

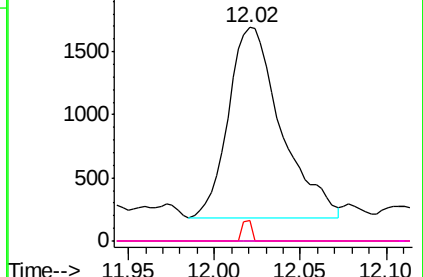
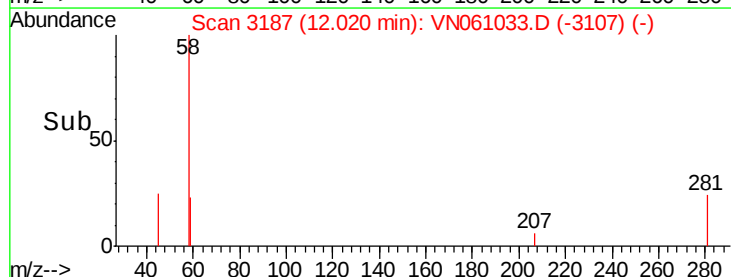


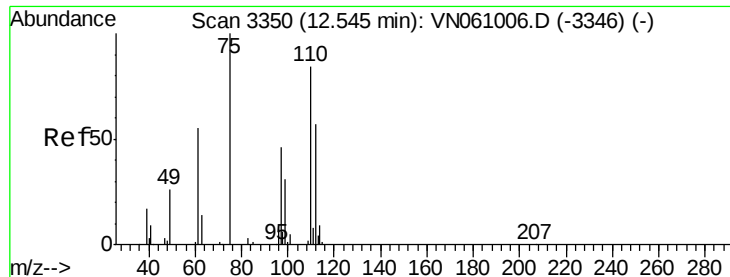
Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0





#76

1,2,3-Trichloropropane

Concen: 25.530 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. -0.15 min

Lab File: VN061033.D

Acq: 16 Apr 2020 23:29

Instrument :

MSVOA\_N

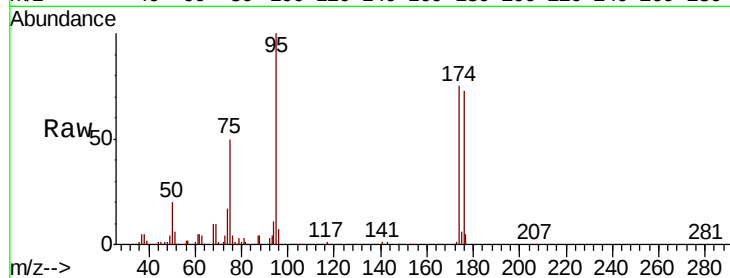
ClientSampleId :

Tot Ion: 75 Resp: 62063

Ion Ratio Lower Upper

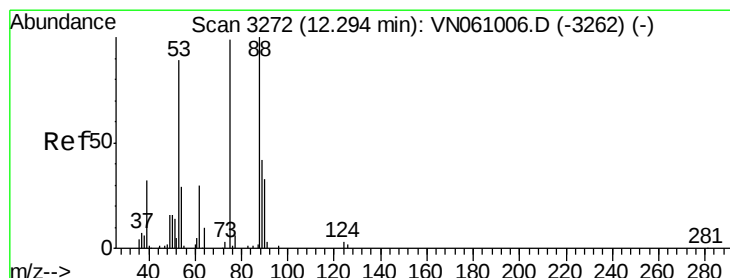
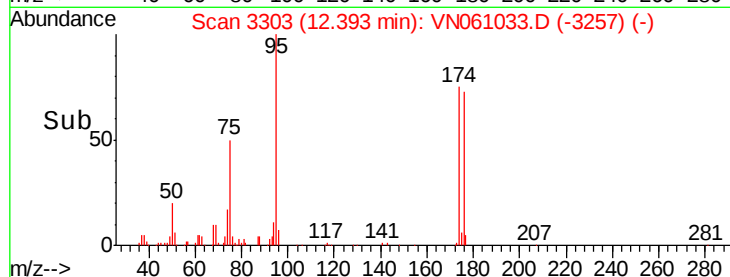
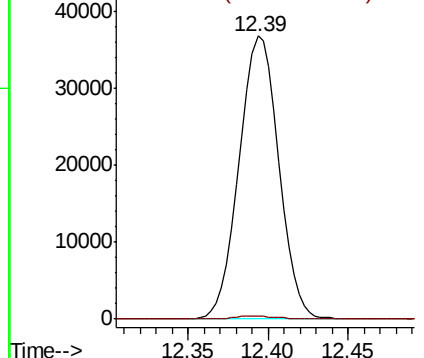
75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#81

trans-1,4-Dichloro-2-butene

Concen: 62.973 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.10 min

Lab File: VN061033.D

Acq: 16 Apr 2020 23:29

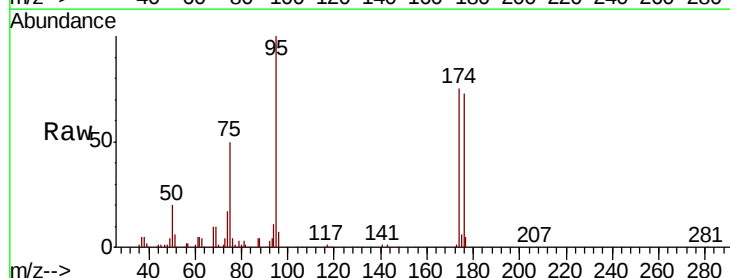
Tgt Ion: 75 Resp: 62063

Ion Ratio Lower Upper

75 100

53 0.0 74.7 112.1#

89 0.0 34.6 52.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

