

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN032520\  
 Data File : VN060699.D  
 Acq On : 25 Mar 2020 15:59  
 Operator : JC/MD  
 Sample : L2019-02  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WATER

Quant Time: Mar 26 02:50:40 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 18 08:49:09 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 192277   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 315793   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 296039   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 140518   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 125590   | 47.58 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.16%  |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 93447    | 48.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.88%  |      |
| 50) Toluene-d8            | 10.08  | 98  | 387699   | 49.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.42%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 146176   | 51.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.28% |      |

## Target Compounds

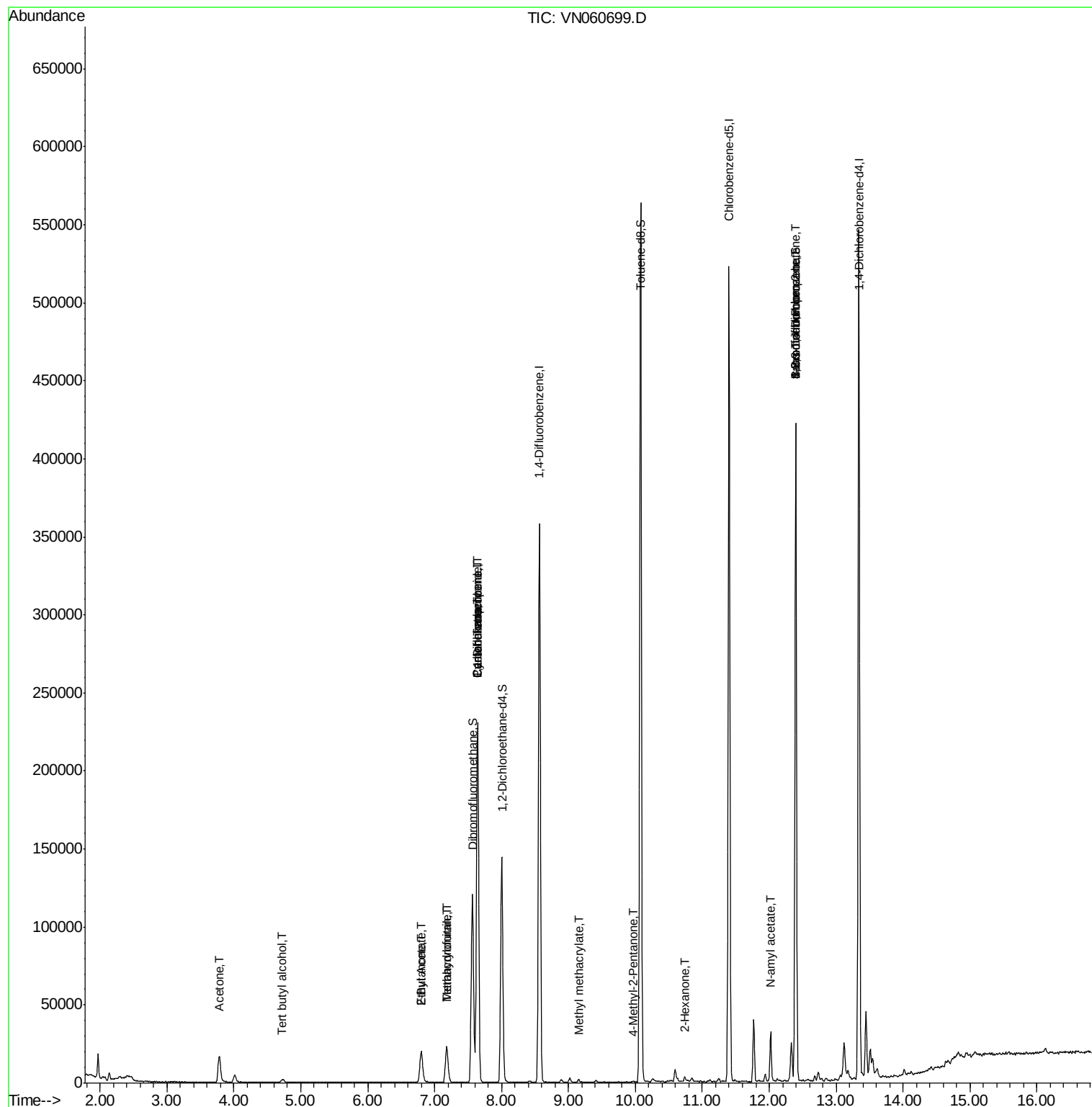
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.73  | 59  | 3698  | 9.526  | ug/l # | 72     |
| 16) Acetone                    | 3.78  | 43  | 30511 | 32.633 | ug/l   | 99     |
| 25) 2-Butanone                 | 6.80  | 43  | 39791 | 26.300 | ug/l   | 99     |
| 29) Tetrahydrofuran            | 7.18  | 42  | 21146 | 19.754 | ug/l   | 96     |
| 31) Cyclohexane                | 7.64  | 56  | 4117  | 0.968  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75  | 14764 | 4.828  | ug/l # | 50     |
| 37) Ethyl Acetate              | 6.80  | 43  | 39791 | 12.043 | ug/l # | 70     |
| 38) Carbon Tetrachloride       | 7.64  | 117 | 17969 | 6.557  | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.18  | 41  | 12144 | 8.612  | ug/l # | 100    |
| 48) Methyl methacrylate        | 9.15  | 41  | 633   | 0.261  | ug/l # | 34     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43  | 1043  | 0.336  | ug/l # | 37     |
| 59) 2-Hexanone                 | 10.74 | 43  | 1852  | 0.829  | ug/l   | 95     |
| 71) Bromoform                  | 12.39 | 173 | 480   | 1.943  | ug/l # | 1      |
| 74) N-amyl acetate             | 12.02 | 43  | 20125 | 4.130  | ug/l # | 48     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75  | 73164 | 24.130 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75  | 73164 | 61.973 | ug/l # | 13     |

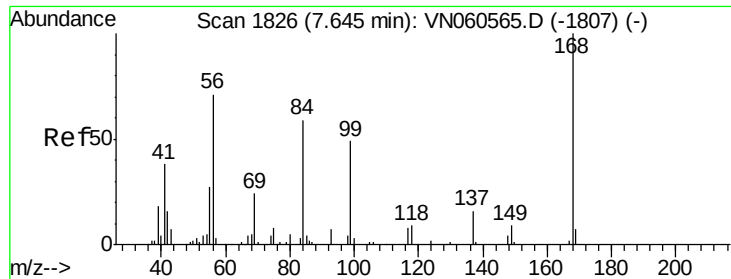
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_N\DATA\VN032520\  
Data File : VN060699.D  
Acq On : 25 Mar 2020 15:59  
Operator : JC/MD  
Sample : L2019-02  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WATER

Quant Time: Mar 26 02:50:40 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 18 08:49:09 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: VN060699.D

Acq: 25 Mar 2020 15:59

Instrument :

MSVOA\_N

ClientSampled :

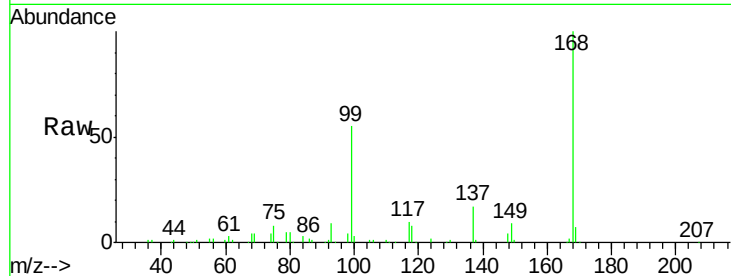
WATER

Tgt Ion:168 Resp: 192277

Ion Ratio Lower Upper

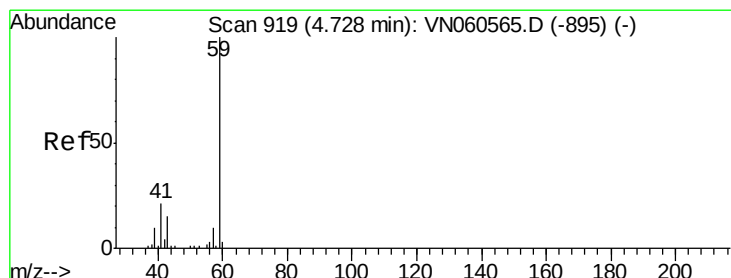
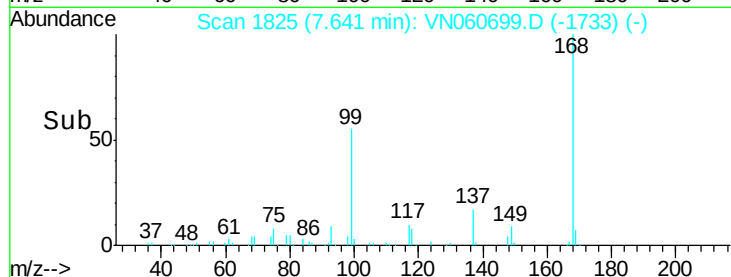
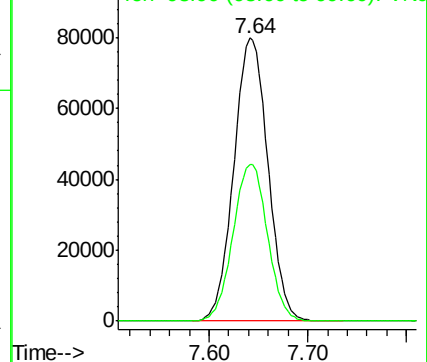
168 100

99 55.5 44.0 66.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0



#11

Tert butyl alcohol

Concen: 9.526 ug/l

RT: 4.73 min Scan# 918

Delta R.T. -0.00 min

Lab File: VN060699.D

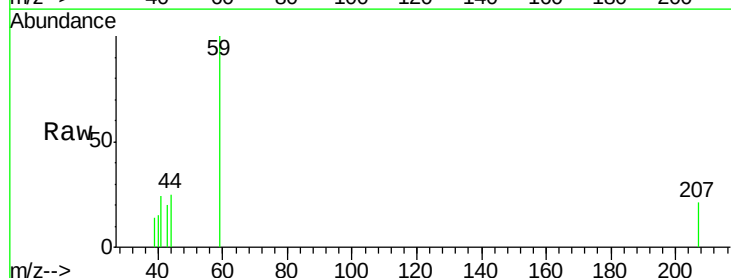
Acq: 25 Mar 2020 15:59

Tgt Ion: 59 Resp: 3698

Ion Ratio Lower Upper

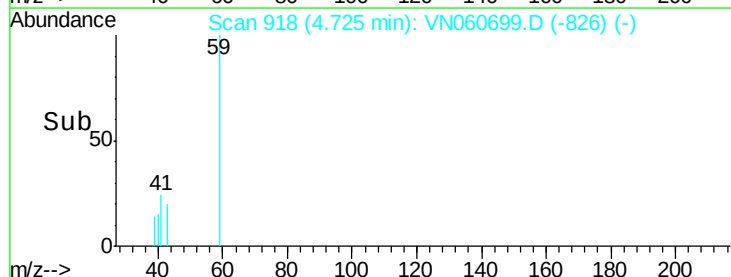
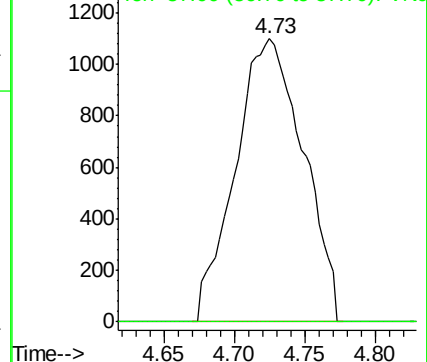
59 100

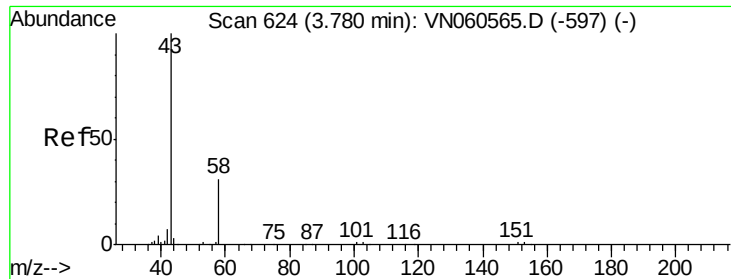
57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 57.00 (56.70 to 57.70): VN0





#16

Acetone

Concen: 32.633 ug/l

RT: 3.78 min Scan# 625

Delta R.T. 0.00 min

Lab File: VN060699.D

Acq: 25 Mar 2020 15:59

Instrument :

MSVOA\_N

ClientSampled :

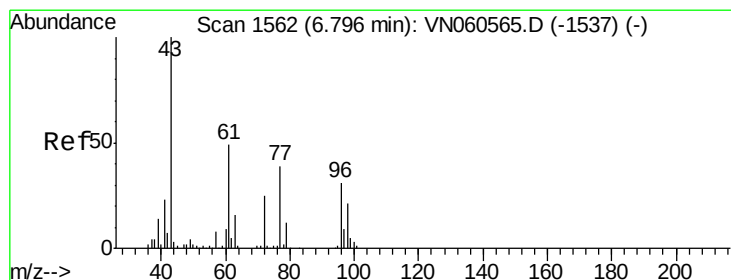
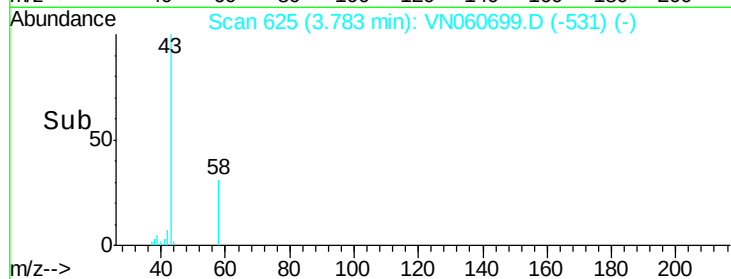
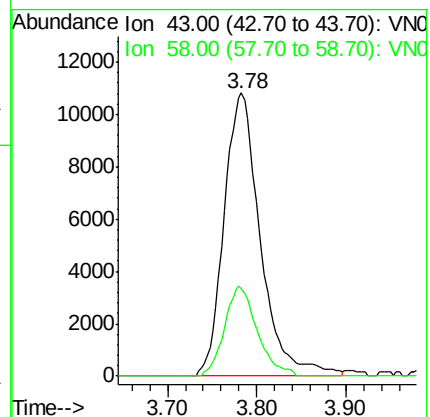
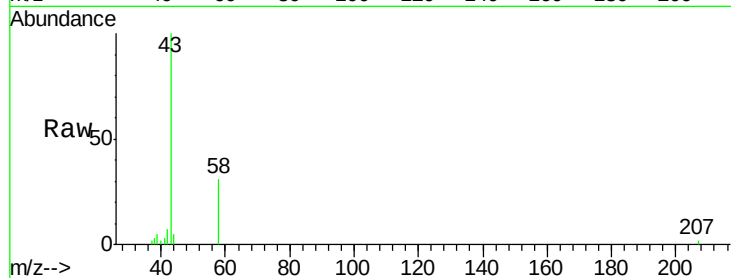
WATER

Tgt Ion: 43 Resp: 30511

Ion Ratio Lower Upper

43 100

58 31.1 25.1 37.7



#25

2-Butanone

Concen: 26.300 ug/l

RT: 6.80 min Scan# 1563

Delta R.T. 0.00 min

Lab File: VN060699.D

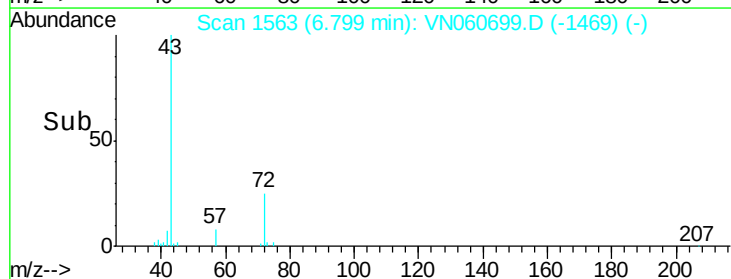
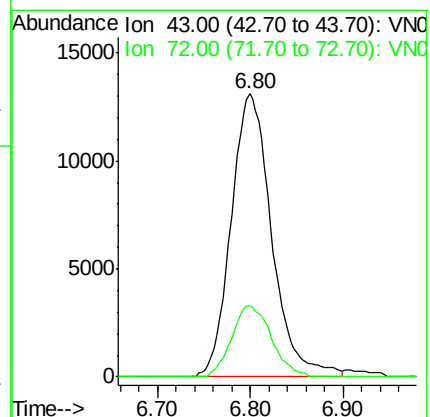
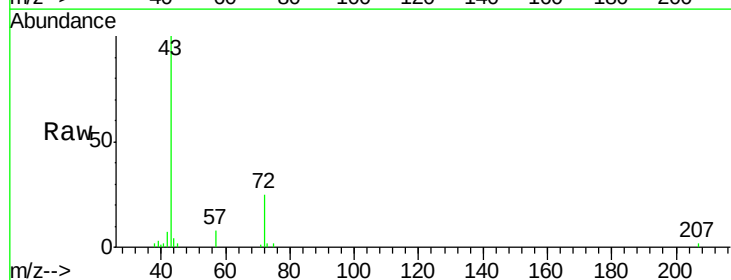
Acq: 25 Mar 2020 15:59

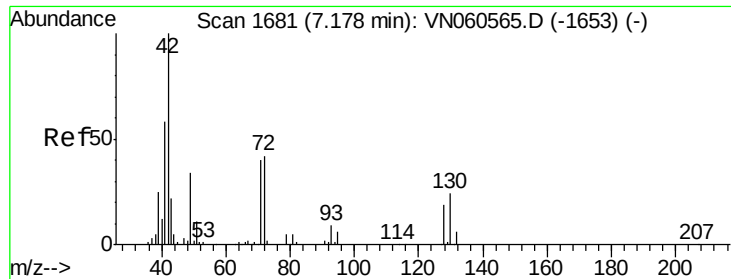
Tgt Ion: 43 Resp: 39791

Ion Ratio Lower Upper

43 100

72 25.1 20.4 30.6

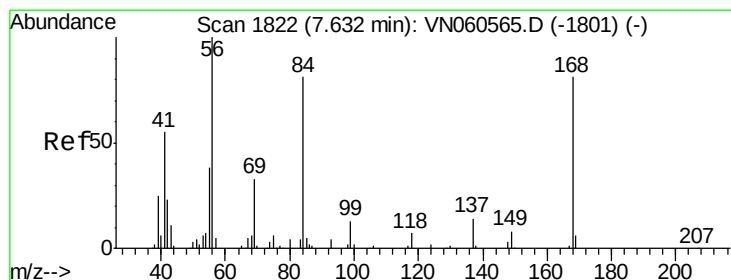
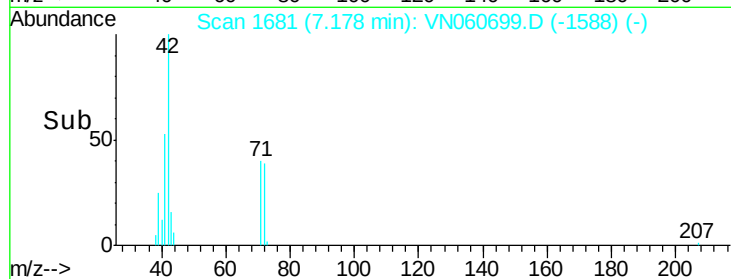
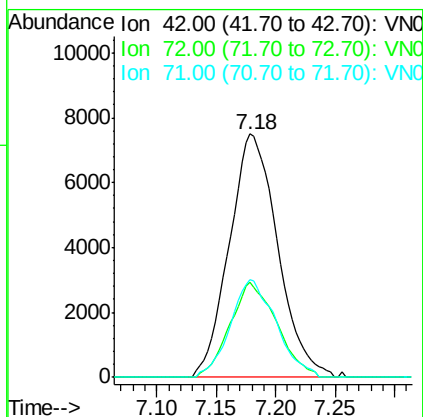
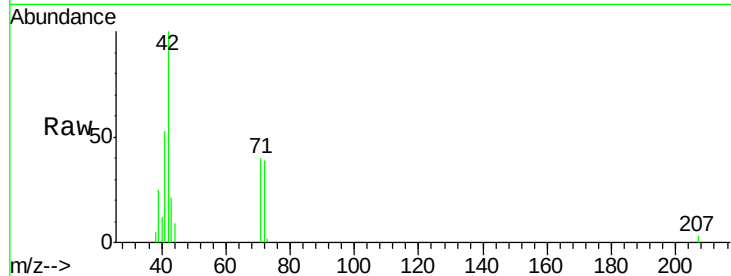




#29  
Tetrahydrofuran  
Concen: 19.754 ug/l  
RT: 7.18 min Scan# 1681  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

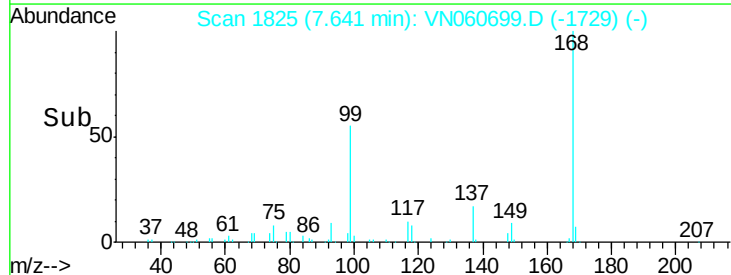
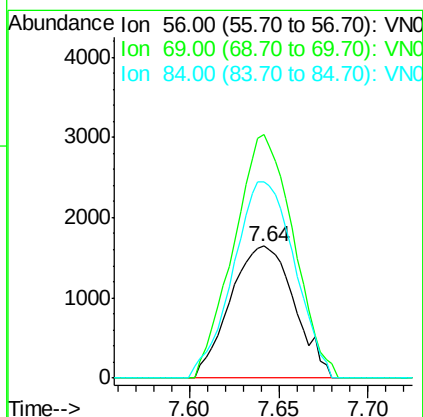
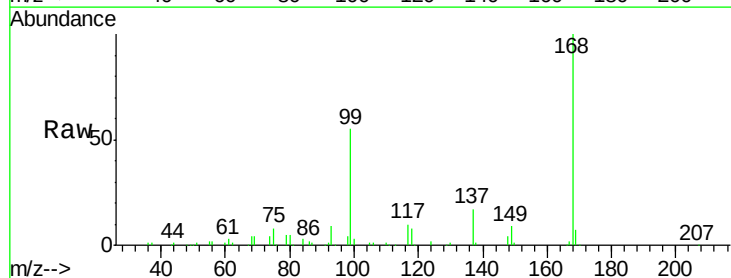
Instrument :  
MSVOA\_N  
ClientSampleId :  
WATER

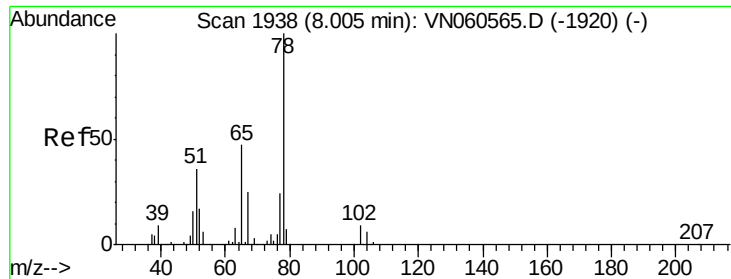
Tgt Ion: 42 Resp: 21146  
Ion Ratio Lower Upper  
42 100  
72 37.7 33.2 49.8  
71 37.9 31.1 46.7



#31  
Cyclohexane  
Concen: 0.968 ug/l  
RT: 7.64 min Scan# 1825  
Delta R.T. 0.01 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

Tgt Ion: 56 Resp: 4117  
Ion Ratio Lower Upper  
56 100  
69 184.9 26.6 40.0#  
84 149.4 64.3 96.5#

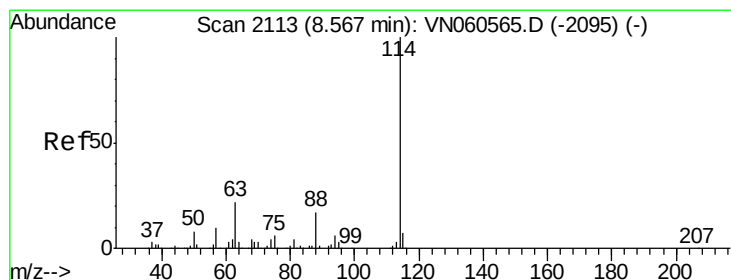
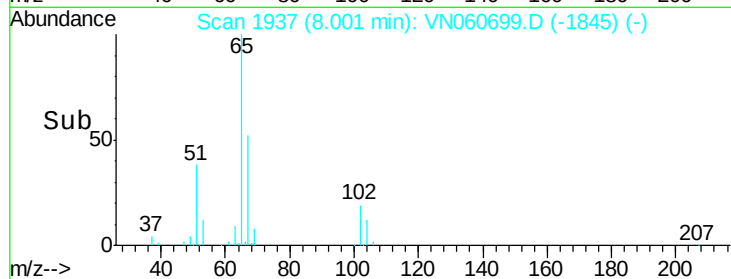
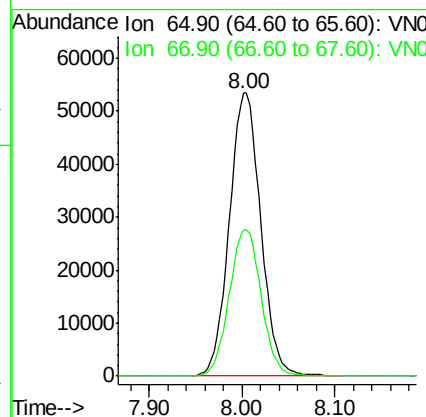
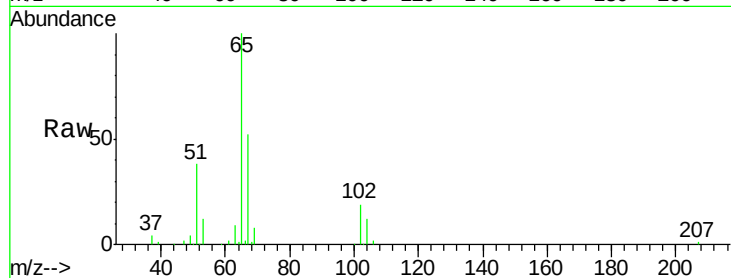




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.581 ug/l  
 RT: 8.00 min Scan# 1937  
 Delta R.T. -0.00 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

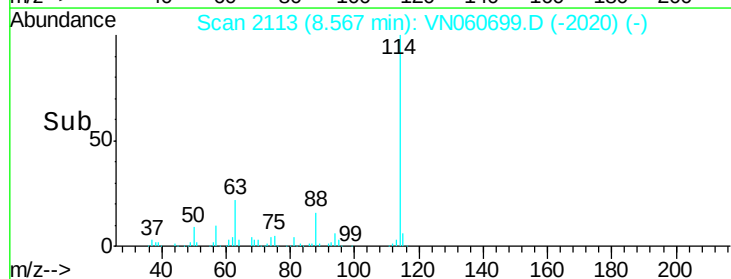
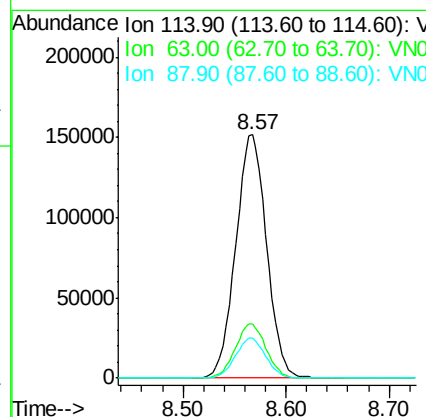
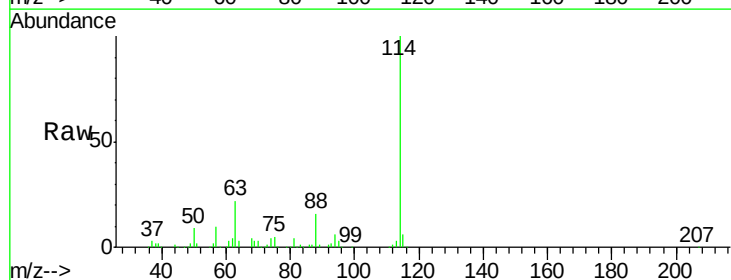
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 WATER

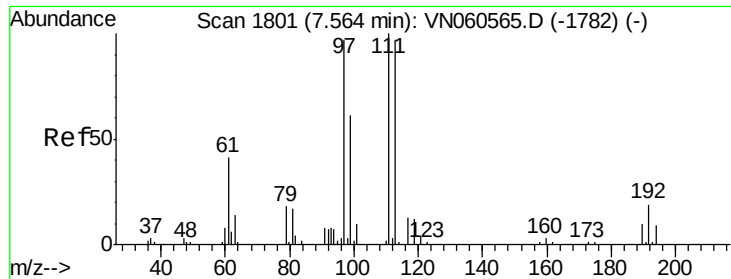
Tgt Ion: 65 Resp: 125590  
 Ion Ratio Lower Upper  
 65 100  
 67 52.6 0.0 107.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. -0.00 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

Tgt Ion: 114 Resp: 315793  
 Ion Ratio Lower Upper  
 114 100  
 63 22.0 0.0 43.8  
 88 16.3 0.0 33.0

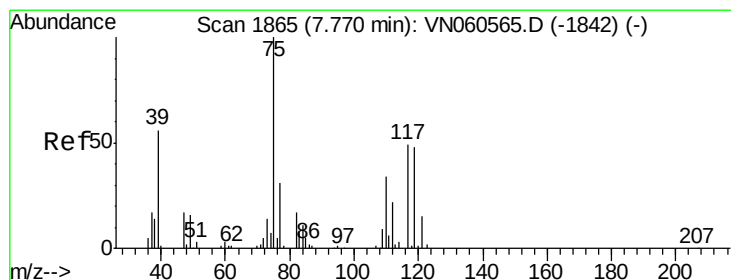
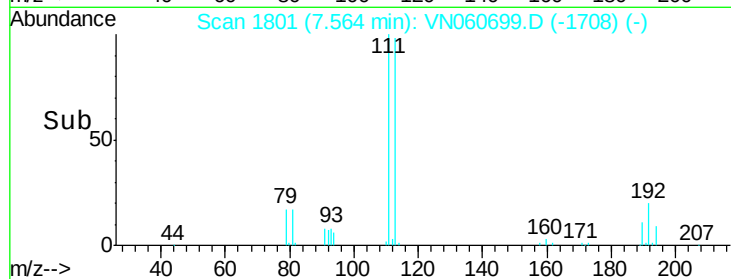
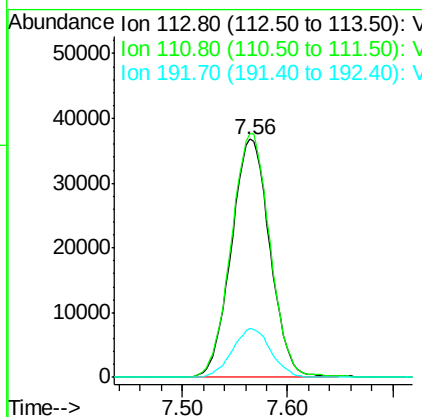
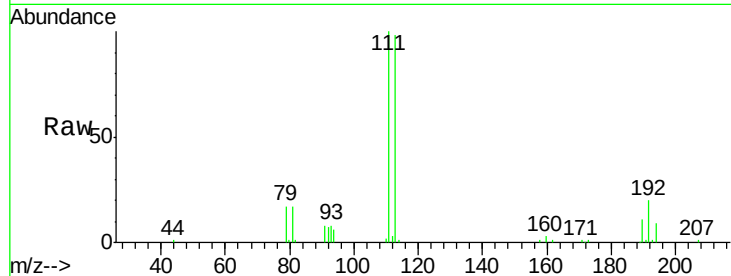




#35  
 Dibromofluoromethane  
 Concen: 48.938 ug/l  
 RT: 7.56 min Scan# 1801  
 Delta R.T. -0.00 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

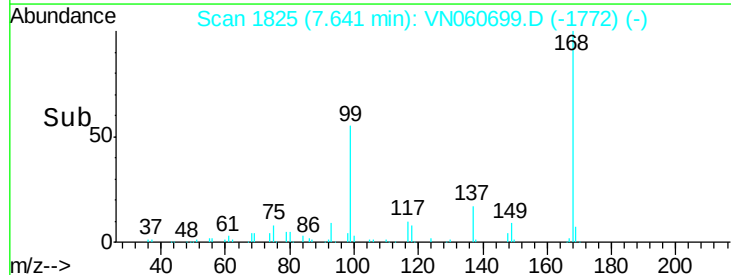
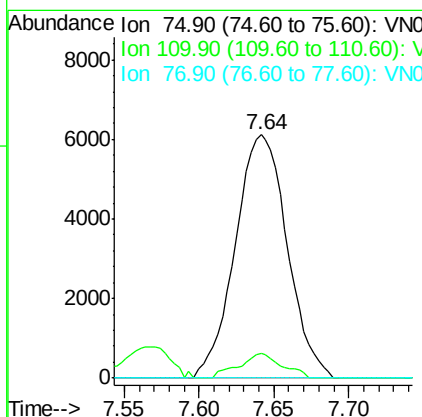
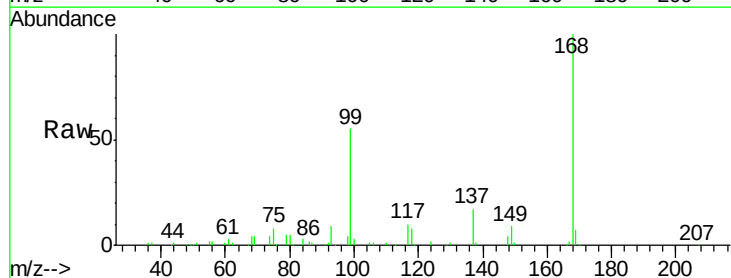
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WATER

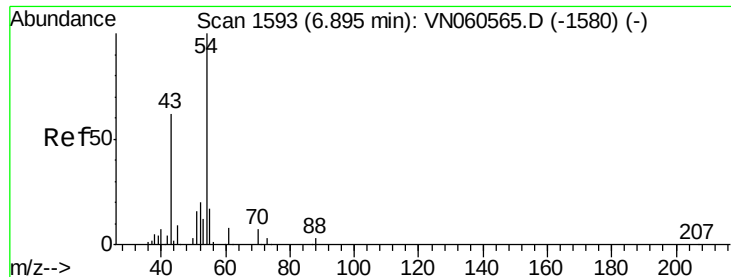
Tgt Ion:113 Resp: 93447  
 Ion Ratio Lower Upper  
 113 100  
 111 102.7 82.9 124.3  
 192 20.3 15.8 23.8



#36  
 1,1-Dichloropropene  
 Concen: 4.828 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.13 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

Tgt Ion: 75 Resp: 14764  
 Ion Ratio Lower Upper  
 75 100  
 110 8.3 16.9 50.6#  
 77 0.0 24.6 36.8#

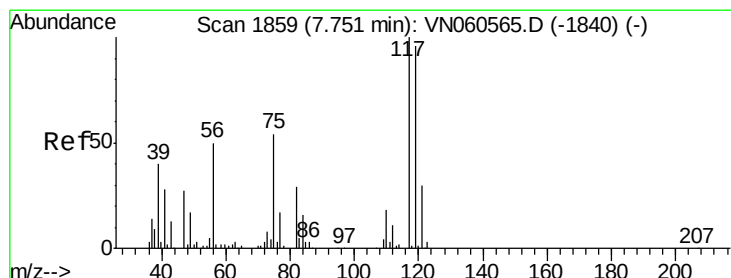
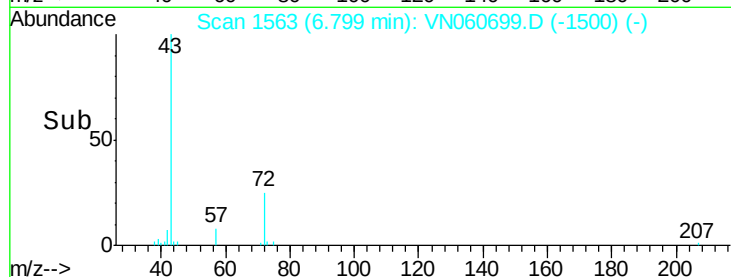
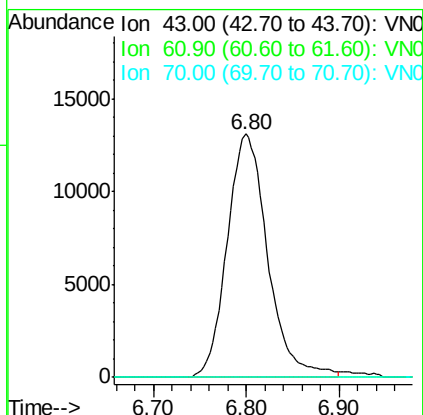
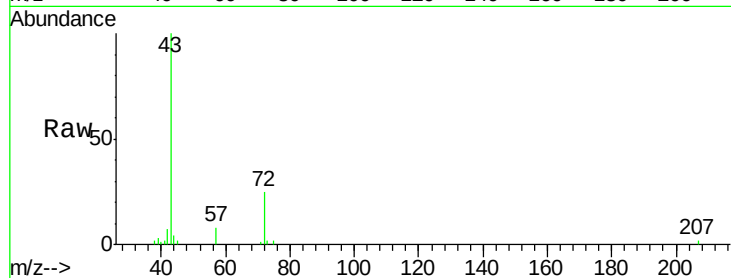




#37  
**Ethyl Acetate**  
 Concen: 12.043 ug/l  
 RT: 6.80 min Scan# 1563  
 Delta R.T. -0.10 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

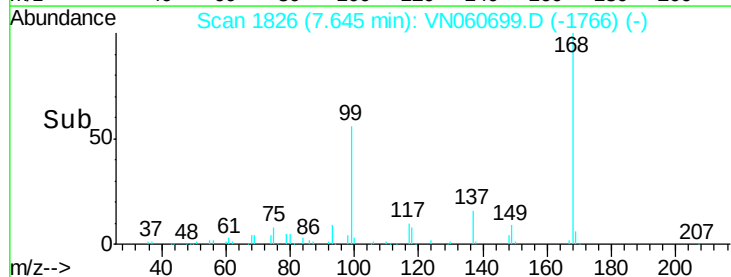
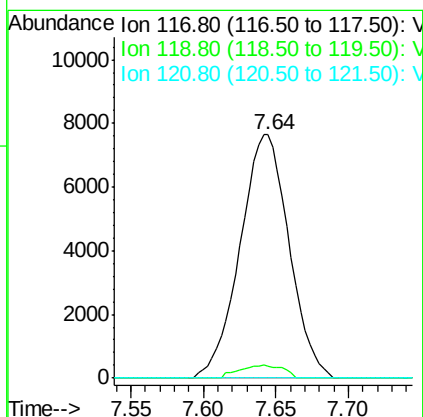
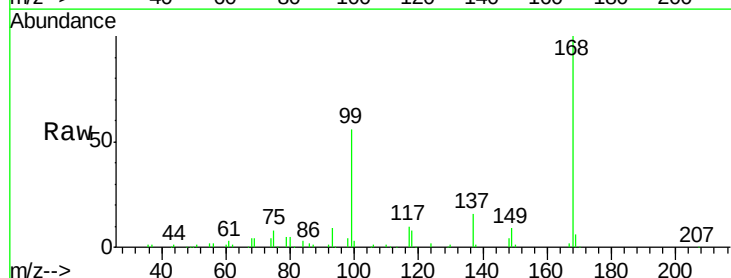
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 WATER

Tgt Ion: 43 Resp: 39791  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 10.6 15.8#  
 70 0.0 7.9 11.9#

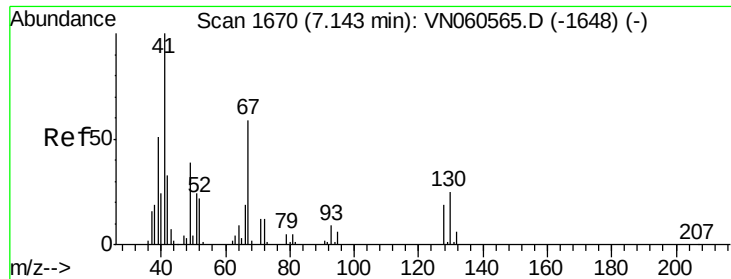


#38  
**Carbon Tetrachloride**  
 Concen: 6.557 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.11 min  
 Lab File: VN060699.D  
 Acq: 25 Mar 2020 15:59

Tgt Ion: 117 Resp: 17969  
 Ion Ratio Lower Upper  
 117 100  
 119 4.8 76.2 114.2#  
 121 0.0 23.7 35.5#



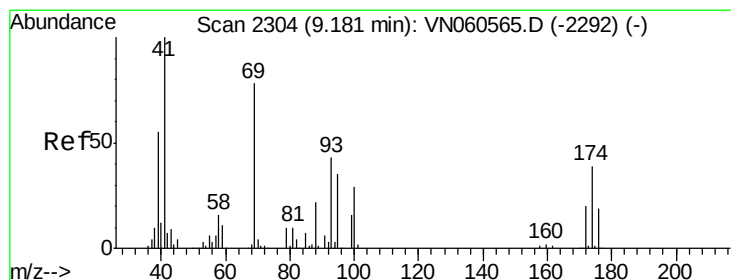
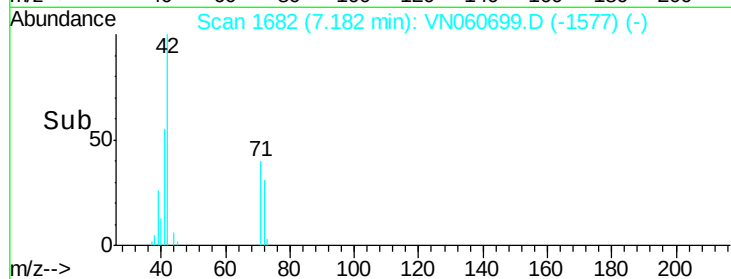
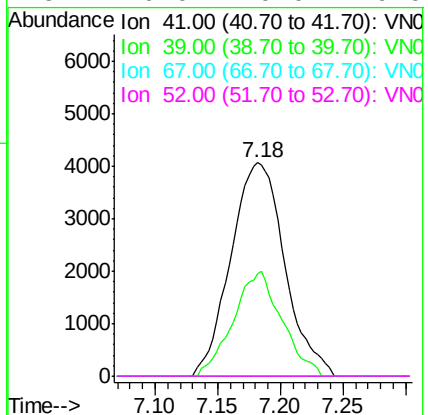
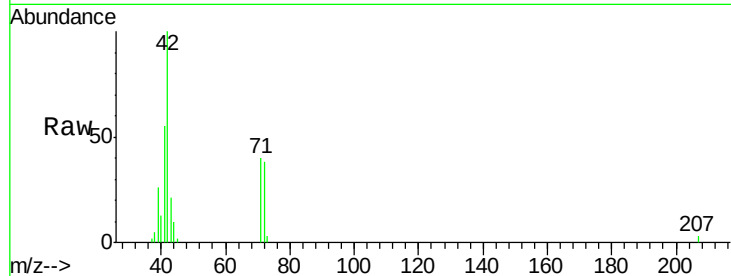




#41  
Methacrylonitrile  
Concen: 8.612 ug/l  
RT: 7.18 min Scan# 1682  
Delta R.T. 0.04 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

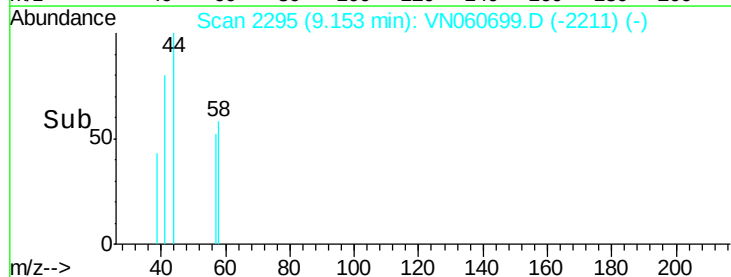
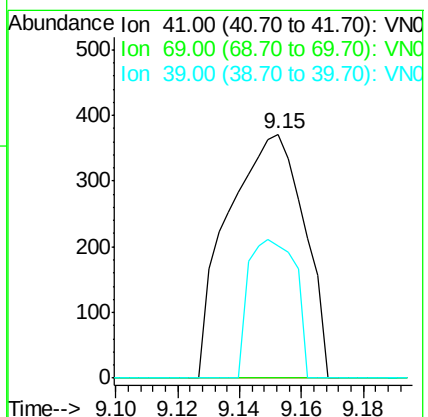
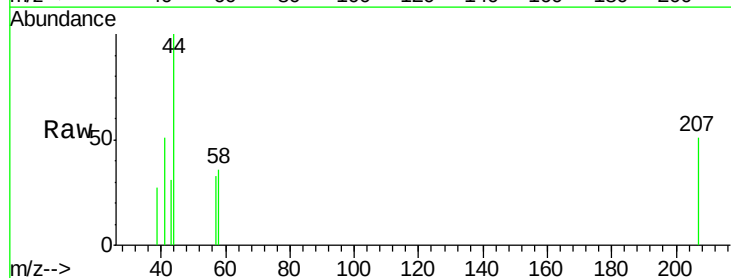
Instrument :  
MSVOA\_N  
ClientSampled :  
WATER

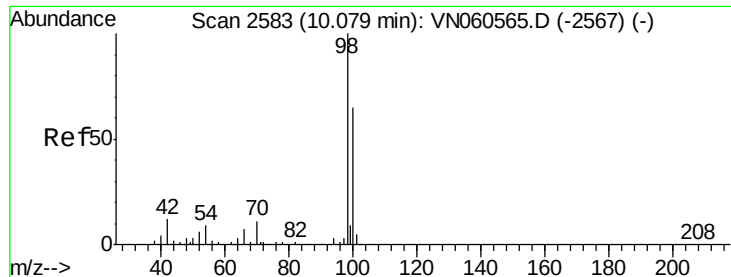
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 12144 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 44.2  | 0.0   | 0.0#  |
| 67       | 0.0   | 0.0   | 0.0   |
| 52       | 0.0   | 0.0   | 0.0   |



#48  
Methyl methacrylate  
Concen: 0.261 ug/l  
RT: 9.15 min Scan# 2295  
Delta R.T. -0.03 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 633   |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 69       | 0.0   | 65.4  | 98.0# |
| 39       | 35.1  | 44.0  | 66.0# |

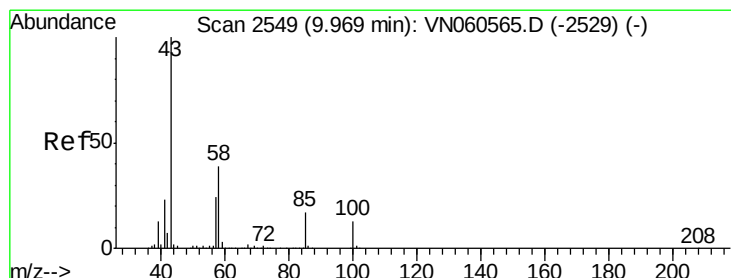
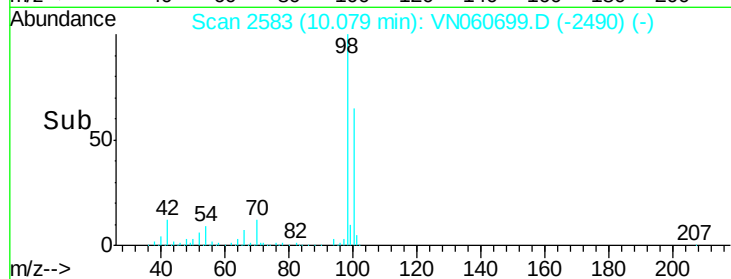
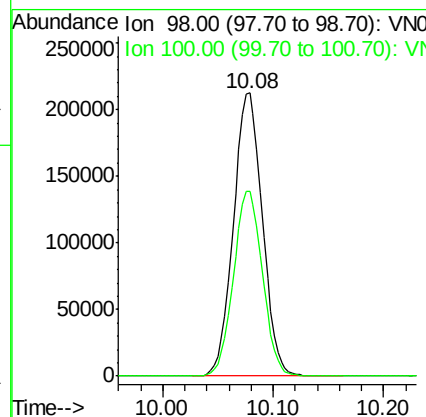
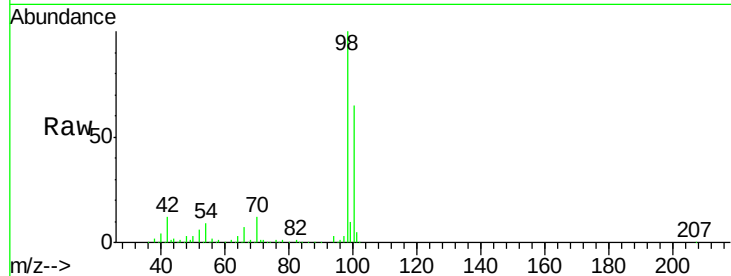




#50  
Toluene-d8  
Concen: 49.708 ug/l  
RT: 10.08 min Scan# 2583  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

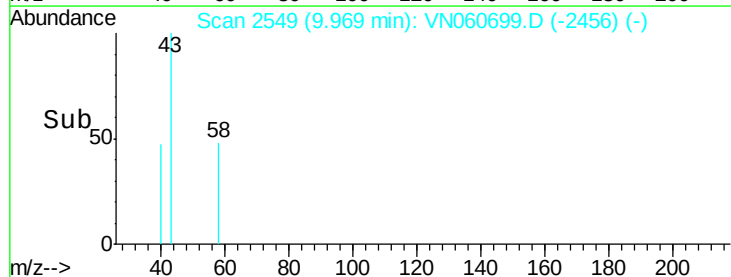
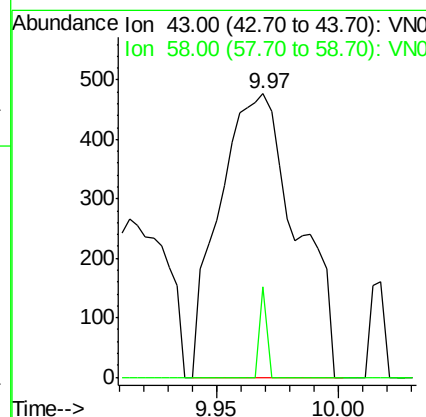
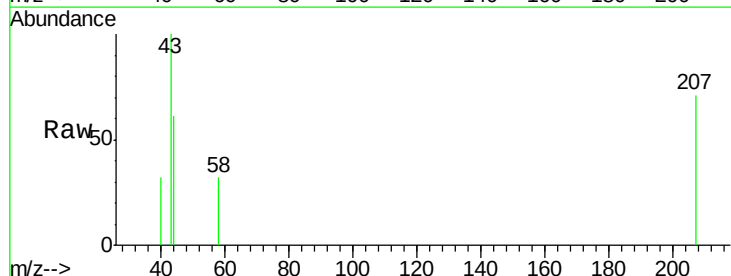
Instrument :  
MSVOA\_N  
ClientSampleId :  
WATER

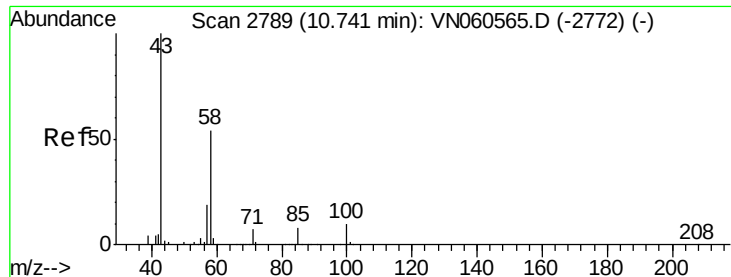
Tgt Ion: 98 Resp: 387699  
Ion Ratio Lower Upper  
98 100  
100 65.2 51.8 77.8



#51  
4-Methyl-2-Pentanone  
Concen: 0.336 ug/l  
RT: 9.97 min Scan# 2549  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

Tgt Ion: 43 Resp: 1043  
Ion Ratio Lower Upper  
43 100  
58 0.0 30.8 46.2#

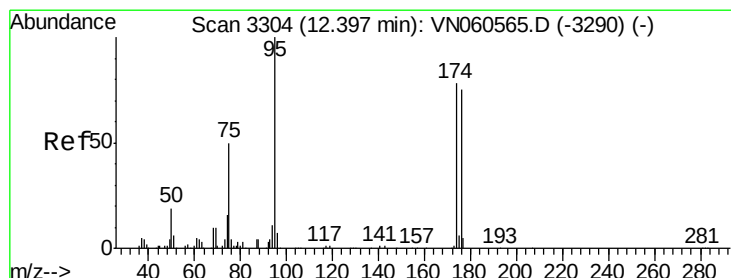
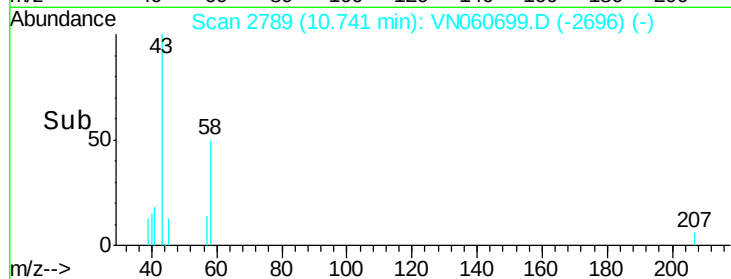
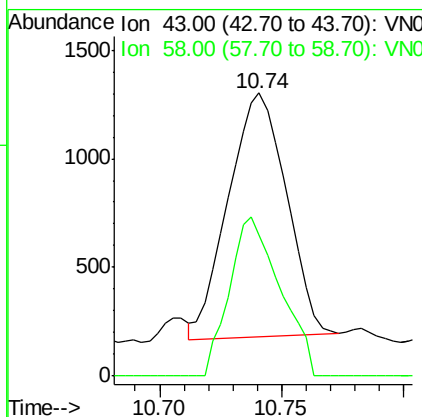
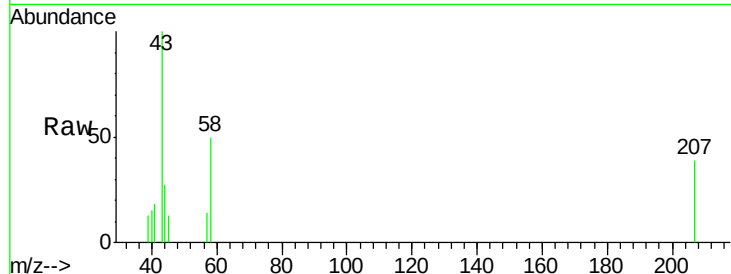




#59  
2-Hexanone  
Concen: 0.829 ug/l  
RT: 10.74 min Scan# 2789  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

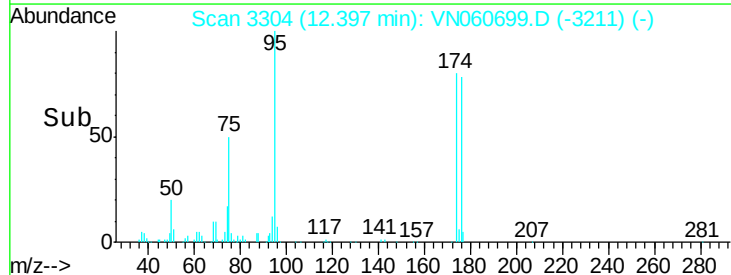
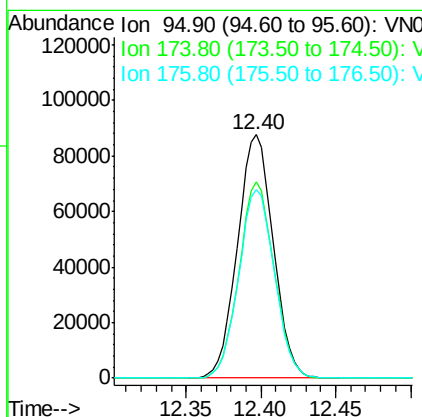
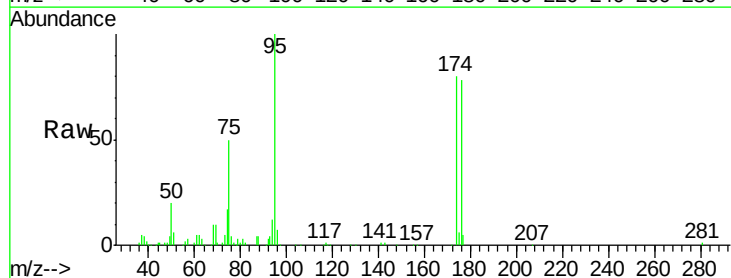
Instrument :  
MSVOA\_N  
ClientSampled :  
WATER

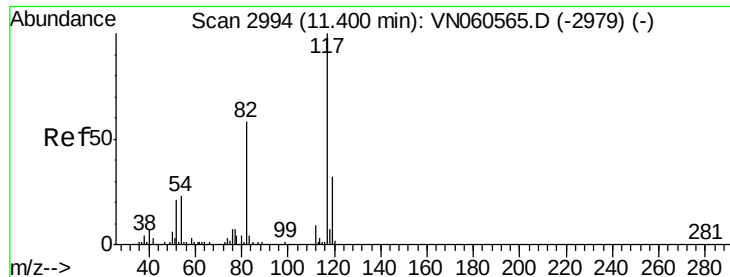
Tgt Ion: 43 Resp: 1852  
Ion Ratio Lower Upper  
43 100  
58 57.2 26.7 80.1



#62  
4-Bromofluorobenzene  
Concen: 51.139 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

Tgt Ion: 95 Resp: 146176  
Ion Ratio Lower Upper  
95 100  
174 79.2 0.0 157.6  
176 77.1 0.0 150.6

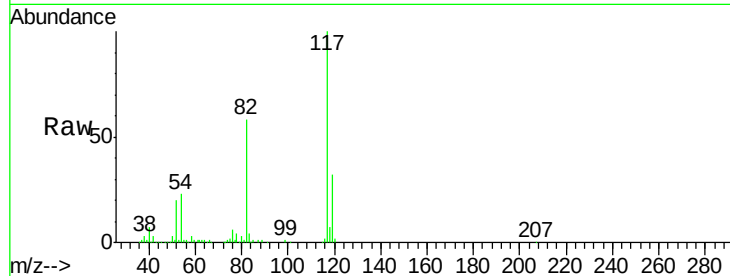




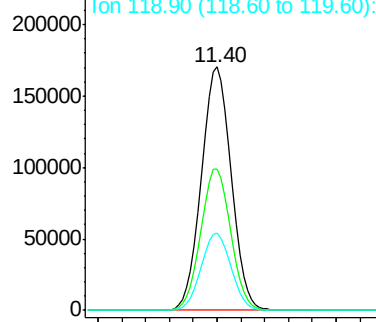
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2994  
Delta R.T. -0.00 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

Instrument :  
MSVOA\_N  
ClientSampled :  
WATER

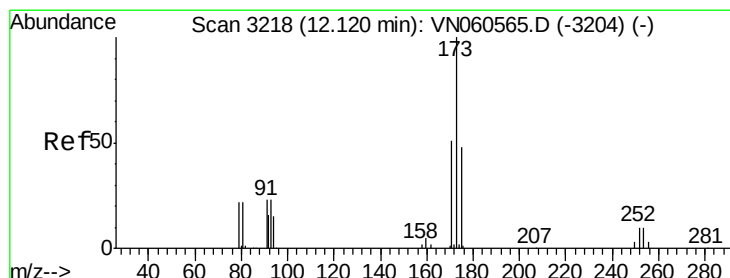
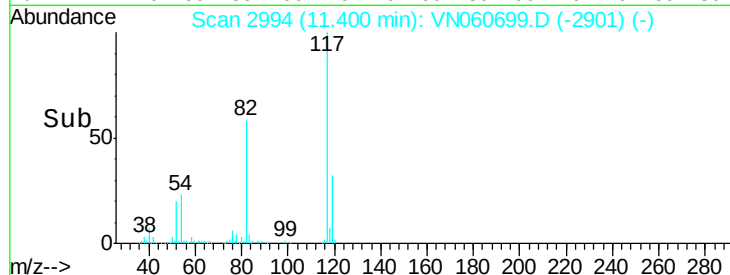
Tgt Ion:117 Resp: 296039  
Ion Ratio Lower Upper  
117 100  
82 58.3 46.7 70.1  
119 31.8 25.5 38.3



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

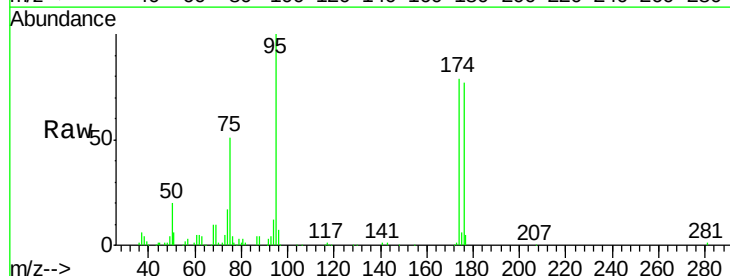


Time--> 11.30 11.40 11.50

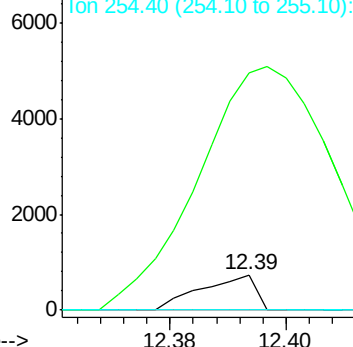


#71  
Bromoform  
Concen: 1.943 ug/l  
RT: 12.39 min Scan# 3303  
Delta R.T. 0.27 min  
Lab File: VN060699.D  
Acq: 25 Mar 2020 15:59

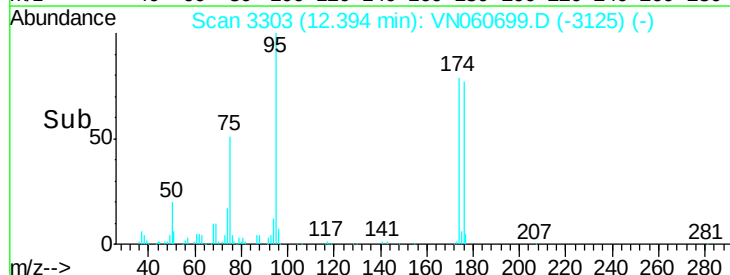
Tgt Ion:173 Resp: 480  
Ion Ratio Lower Upper  
173 100  
175 1477.1 24.1 72.4#  
254 0.0 0.0 0.0

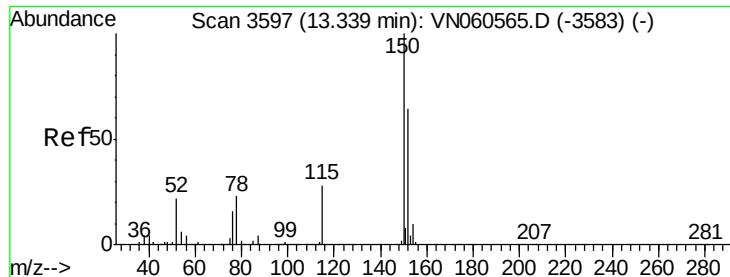


Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V



Time--> 12.38 12.40





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3597

Delta R.T. -0.00 min

Lab File: VN060699.D

Acq: 25 Mar 2020 15:59

Instrument :

MSVOA\_N

ClientSampleId :

WATER

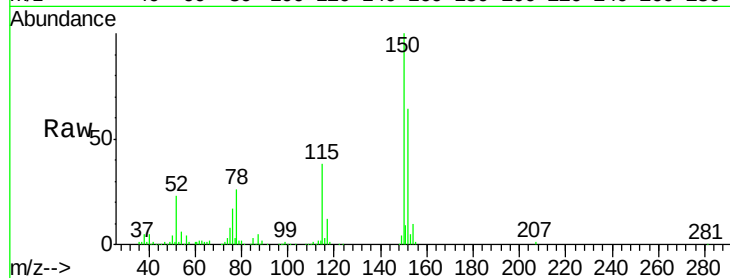
Tgt Ion:152 Resp: 140518

Ion Ratio Lower Upper

152 100

115 59.6 30.2 90.6

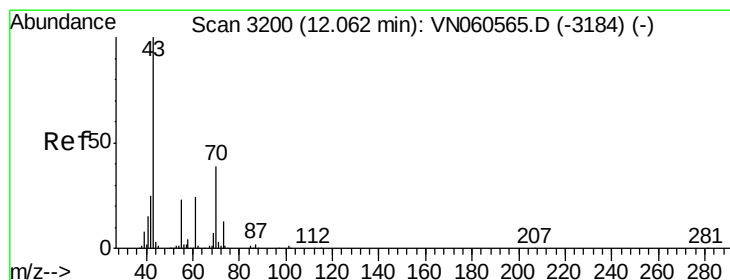
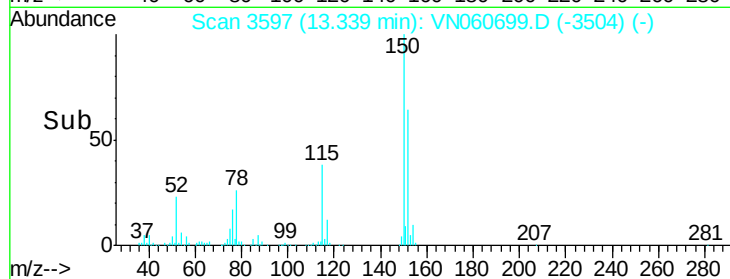
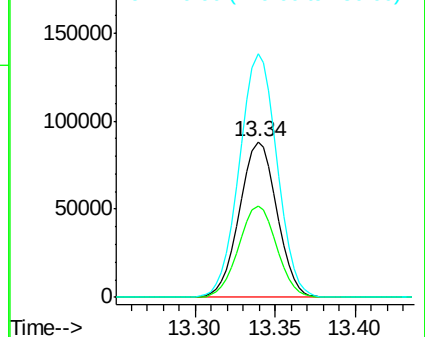
150 157.2 0.0 350.2



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: 4.130 ug/l

RT: 12.02 min Scan# 3187

Delta R.T. -0.04 min

Lab File: VN060699.D

Acq: 25 Mar 2020 15:59

Tgt Ion: 43 Resp: 20125

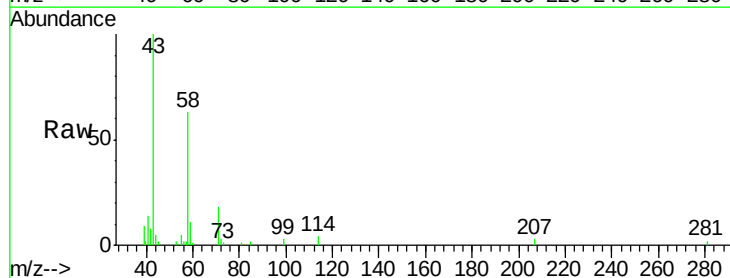
Ion Ratio Lower Upper

43 100

70 0.0 31.1 46.7#

55 5.3 18.6 27.8#

61 0.0 18.9 28.3#

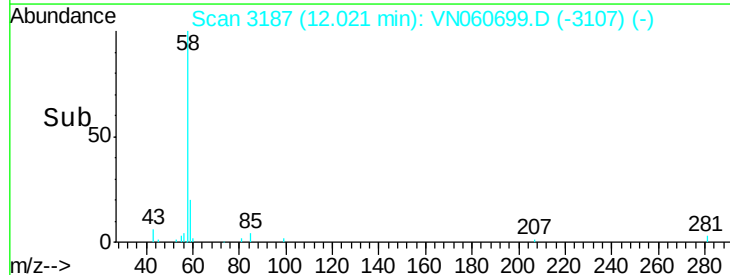
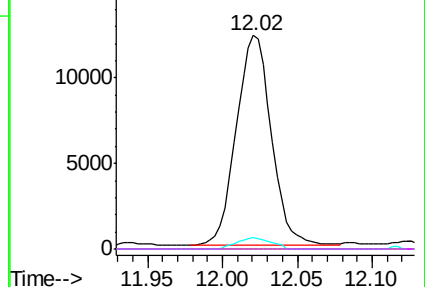


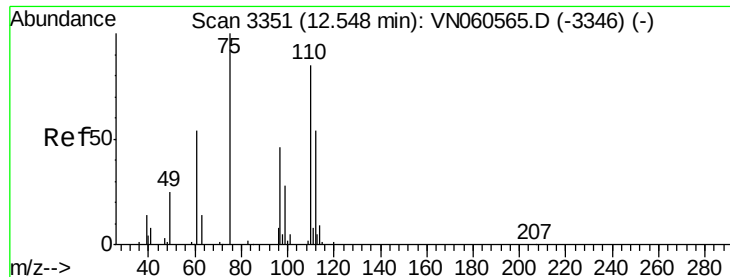
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 61.00 (60.70 to 61.70): V





#76

1,2,3-Trichloropropane

Concen: 24.130 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. -0.15 min

Lab File: VN060699.D

Acq: 25 Mar 2020 15:59

Instrument :

MSVOA\_N

ClientSampleId :

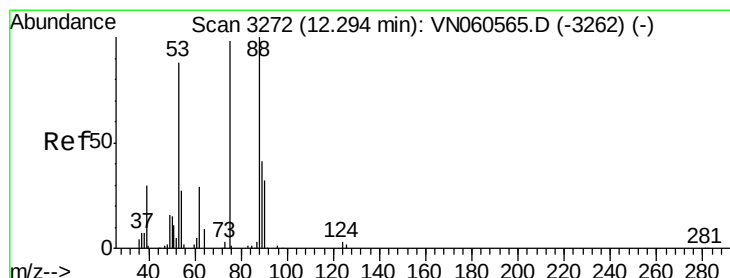
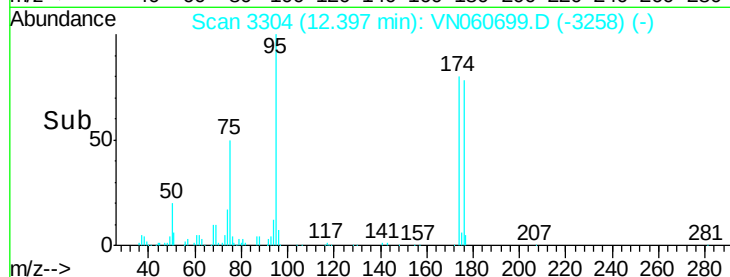
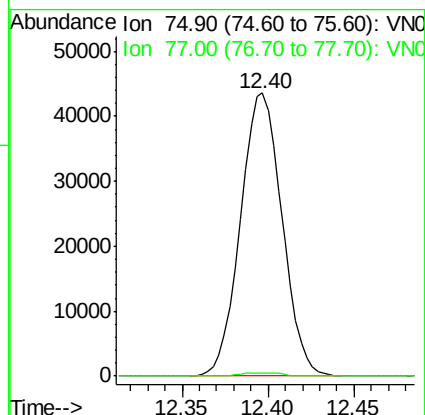
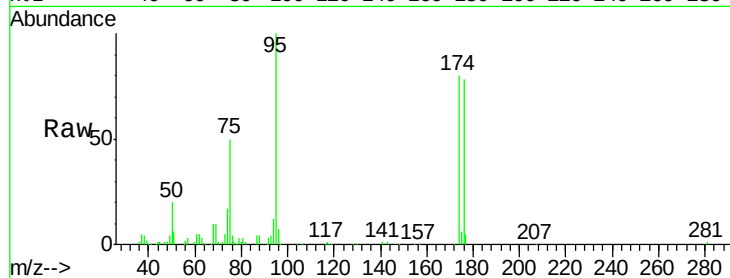
WATER

Tgt Ion: 75 Resp: 73164

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 61.973 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.10 min

Lab File: VN060699.D

Acq: 25 Mar 2020 15:59

Tgt Ion: 75 Resp: 73164

Ion Ratio Lower Upper

75 100

53 0.0 73.0 109.4#

89 0.0 34.8 52.2#

