

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW070918\  
 Data File : VW003816.D  
 Acq On : 10 Jul 2018 09:46  
 Operator : SY/AP  
 Sample : J3880-20  
 Misc : 4.68G/5ML/MSVOA W/SOIL  
 ALS Vial : 54 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Jul 10 10:47:44 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W070718S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 07 05:07:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 97120    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 166433   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 132503   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 39957    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 70657    | 55.63 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.26% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 59642    | 51.20 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.40% |      |
| 50) Toluene-d8            | 10.33  | 98  | 165819   | 37.21 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 74.42%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 42476    | 26.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 52.70%  |      |

## Target Compounds

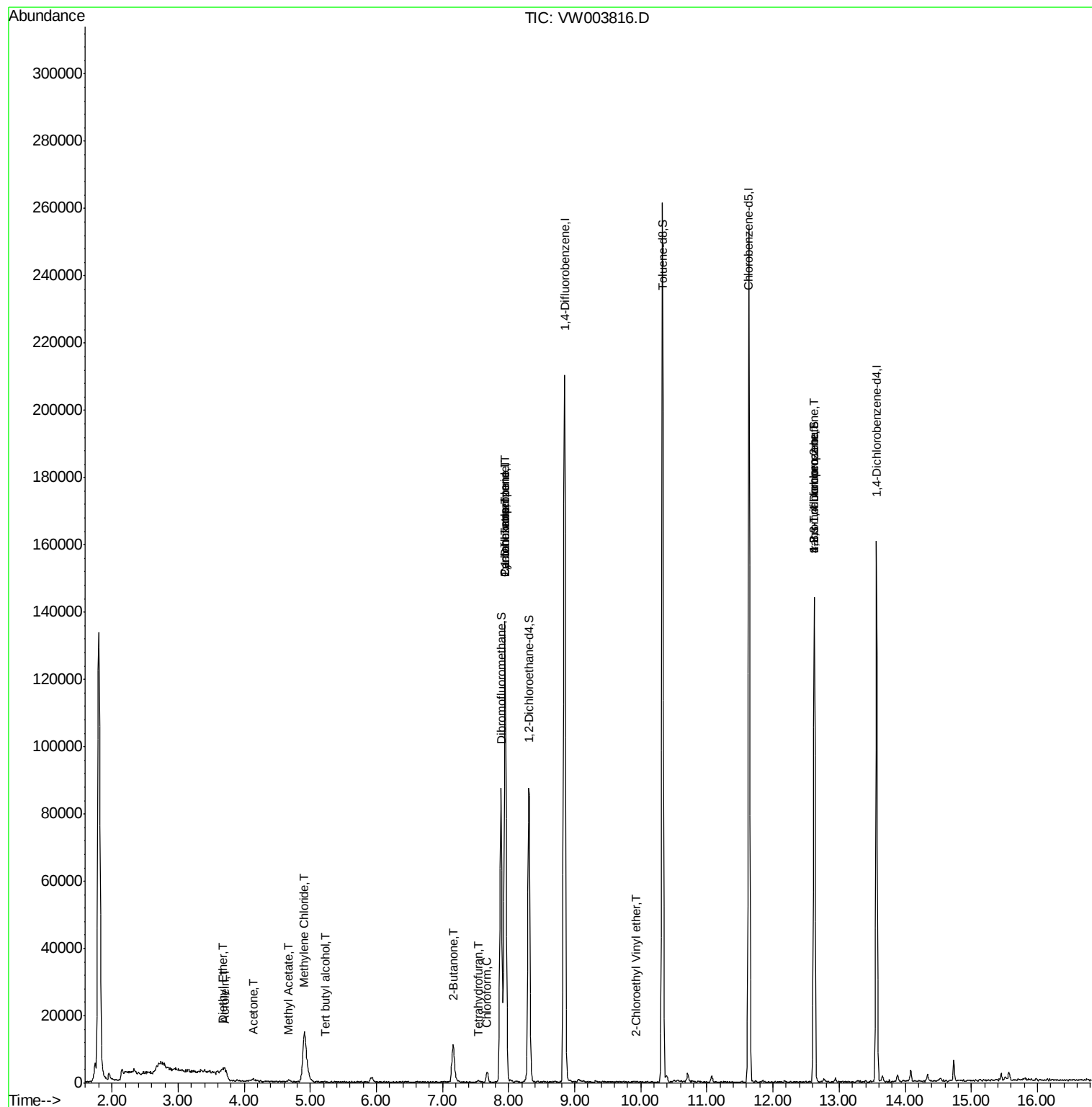
|                                |       |     |       |         | Qvalue |     |
|--------------------------------|-------|-----|-------|---------|--------|-----|
| 8) Diethyl Ether               | 3.68  | 74  | 663   | 1.354   | ug/l # | 7   |
| 11) Tert butyl alcohol         | 5.21  | 59  | 100   | 1.453   | ug/l # | 70  |
| 13) Acrolein                   | 3.70  | 56  | 63    | 5.282   | ug/l # | 47  |
| 16) Acetone                    | 4.14  | 43  | 1431  | 6.494   | ug/l # | 77  |
| 18) Methyl Acetate             | 4.68  | 43  | 782   | 1.259   | ug/l   | 99  |
| 20) Methylene Chloride         | 4.91  | 84  | 14300 | 9.790   | ug/l   | 90  |
| 25) 2-Butanone                 | 7.17  | 43  | 868   | 2.515   | ug/l # | 51  |
| 29) Tetrahydrofuran            | 7.54  | 42  | 485   | 2.186   | ug/l # | 40  |
| 30) Chloroform                 | 7.67  | 83  | 2839  | 1.320   | ug/l # | 83  |
| 31) Cyclohexane                | 7.95  | 56  | 2680  | 1.446   | ug/l # | 35  |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 8621  | 4.882   | ug/l # | 50  |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 9983  | 5.946   | ug/l # | 16  |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63  | 86    | 13.300  | ug/l # | 49  |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 23136 | 58.965  | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 23136 | 144.241 | ug/l # | 8   |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW070918\  
Data File : VW003816.D  
Acq On : 10 Jul 2018 09:46  
Operator : SY/AP  
Sample : J3880-20  
Misc : 4.68G/5ML/MSVOA W/SOIL  
ALS Vial : 54 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Jul 10 10:47:44 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W070718S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jul 07 05:07:25 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 1044

Delta R.T. -0.00 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

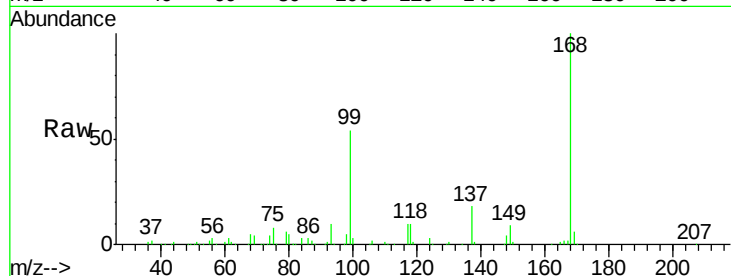
Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:168 Resp: 97120

Ion Ratio Lower Upper

168 100

99 53.9 45.0 67.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

40000

30000

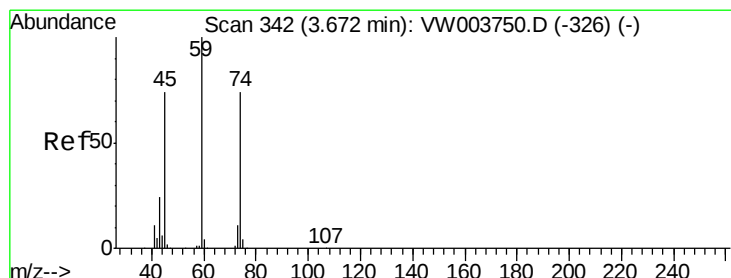
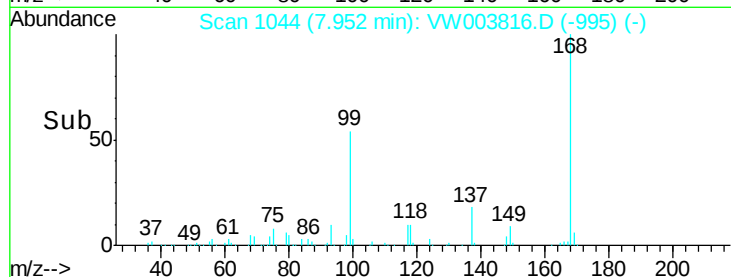
20000

10000

0

7.85 7.90 7.95 8.00 8.05

Time-->



#8

Diethyl Ether

Concen: 1.354 ug/l

RT: 3.68 min Scan# 343

Delta R.T. 0.01 min

Lab File: VW003816.D

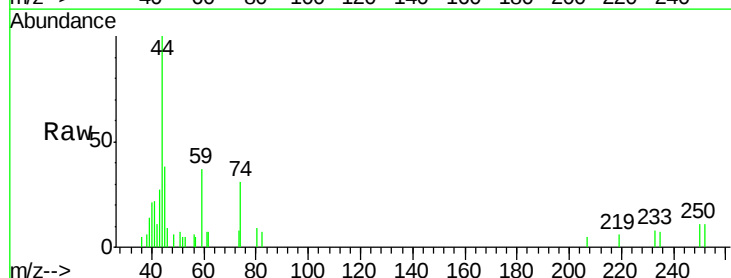
Acq: 10 Jul 2018 09:46

Tgt Ion: 74 Resp: 663

Ion Ratio Lower Upper

74 100

45 199.8 52.4 157.2#



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

3.68

400

300

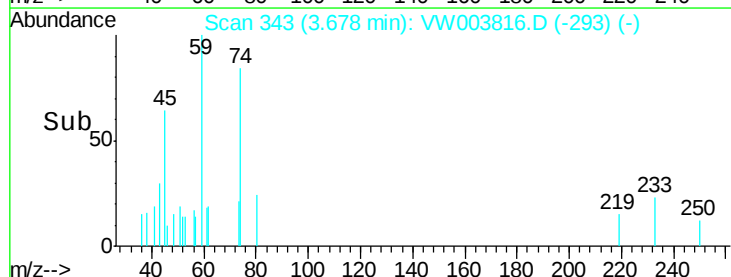
200

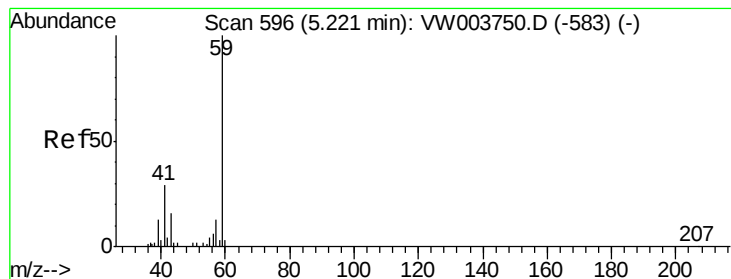
100

0

3.60 3.65 3.70

Time-->





#11

Tert butyl alcohol

Concen: 1.453 ug/l

RT: 5.21 min Scan# 595

Delta R.T. -0.01 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

Instrument :

MSVOA\_W

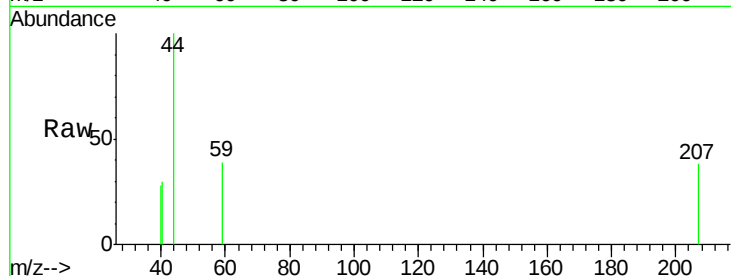
ClientSampled :

Tot Ion: 59 Resp: 100

Ion Ratio Lower Upper

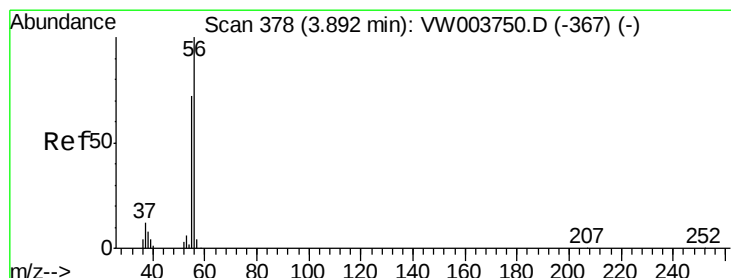
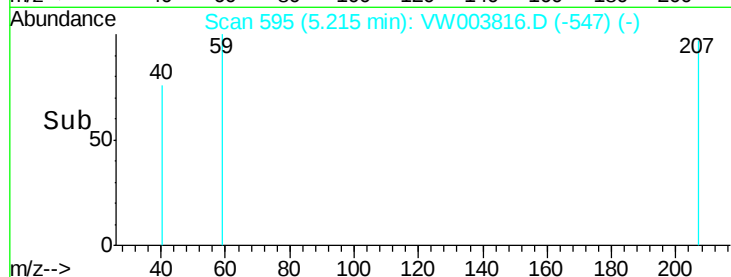
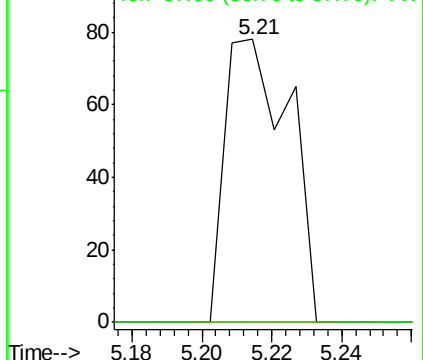
59 100

57 0.0 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW



#13

Acrolein

Concen: 5.282 ug/l

RT: 3.70 min Scan# 347

Delta R.T. -0.19 min

Lab File: VW003816.D

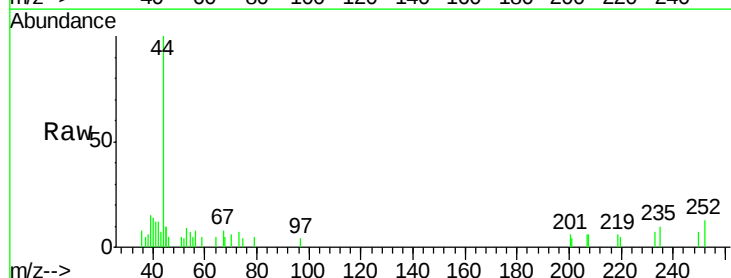
Acq: 10 Jul 2018 09:46

Tgt Ion: 56 Resp: 63

Ion Ratio Lower Upper

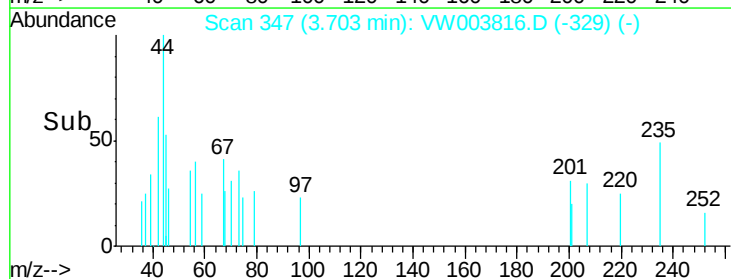
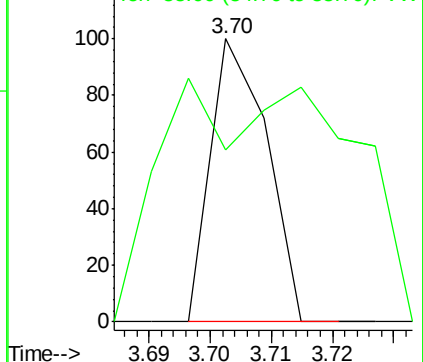
56 100

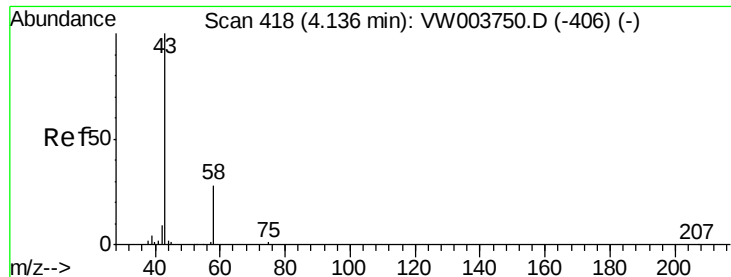
55 115.9 57.5 86.3#



Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 55.00 (54.70 to 55.70): VW





#16

Acetone

Concen: 6.494 ug/l

RT: 4.14 min Scan# 419

Delta R.T. 0.01 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

Instrument :

MSVOA\_W

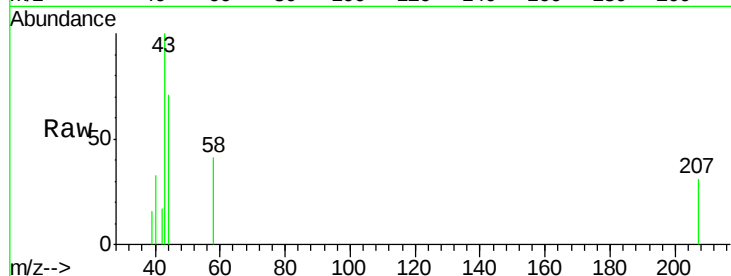
ClientSampled :

Tot Ion: 43 Resp: 1431

Ion Ratio Lower Upper

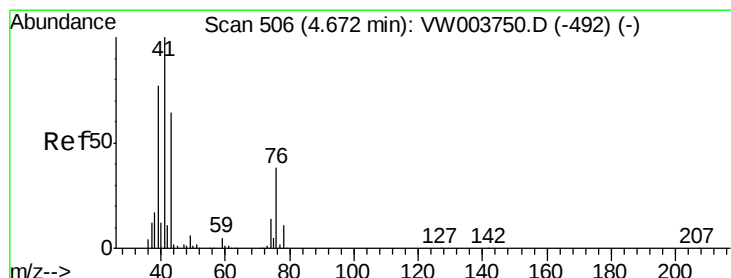
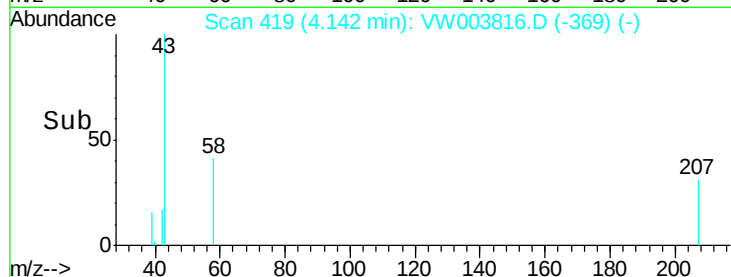
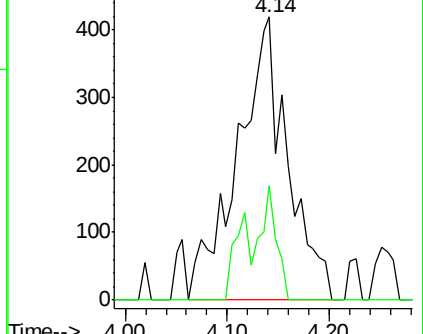
43 100

58 40.6 22.6 34.0#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#18

Methyl Acetate

Concen: 1.259 ug/l

RT: 4.68 min Scan# 507

Delta R.T. 0.01 min

Lab File: VW003816.D

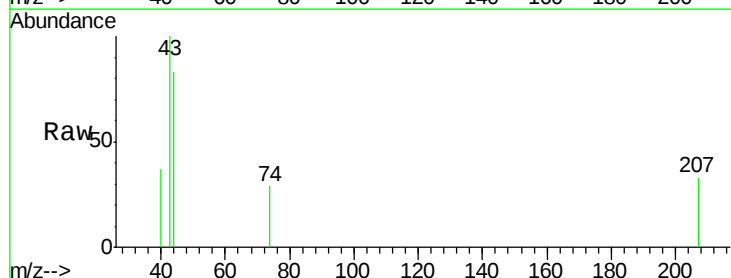
Acq: 10 Jul 2018 09:46

Tgt Ion: 43 Resp: 782

Ion Ratio Lower Upper

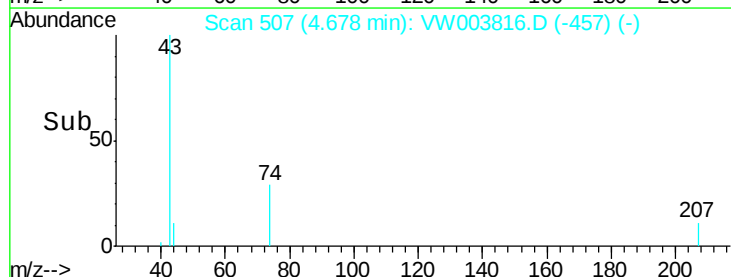
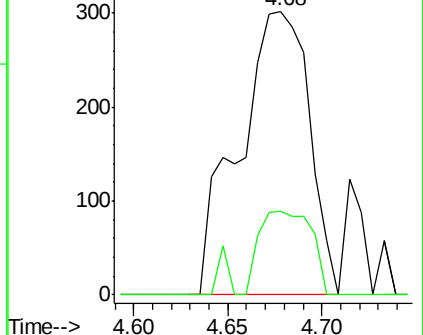
43 100

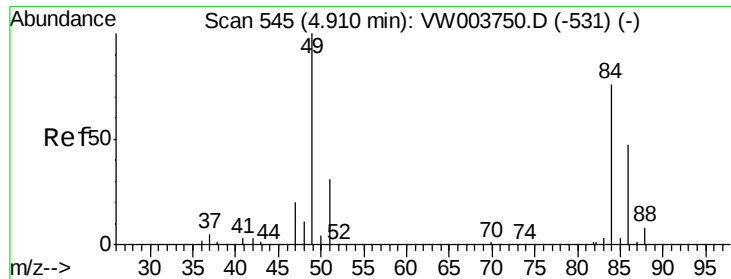
74 22.1 17.3 25.9



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 74.00 (73.70 to 74.70): VW

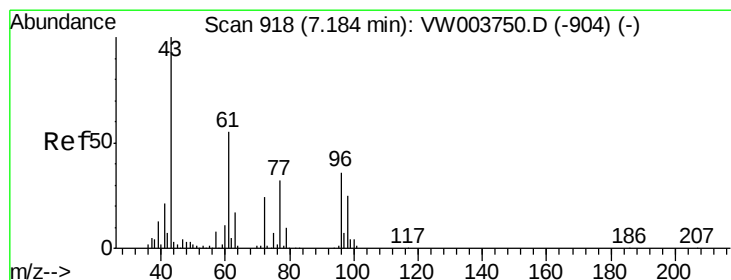
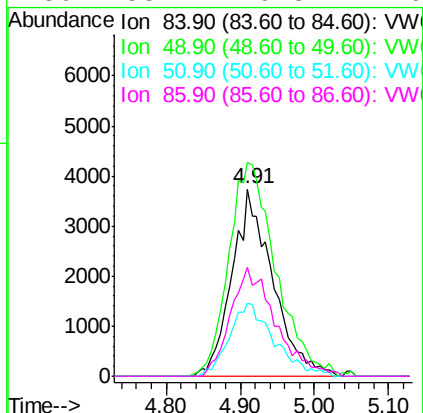
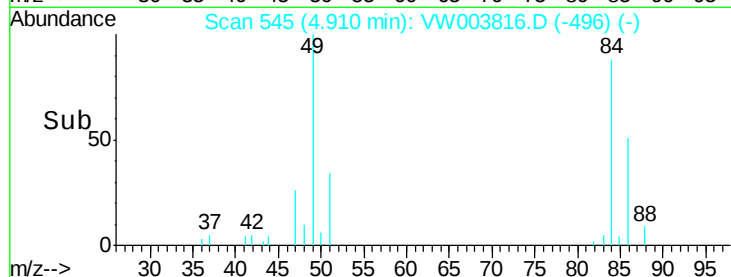
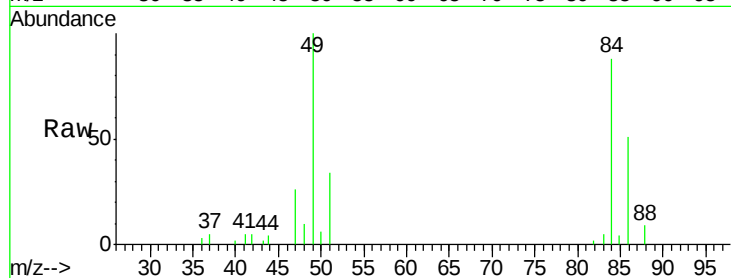




#20  
Methvlene Chloride  
Concen: 9.790 ug/l  
RT: 4.91 min Scan# 545  
Delta R.T. 0.00 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

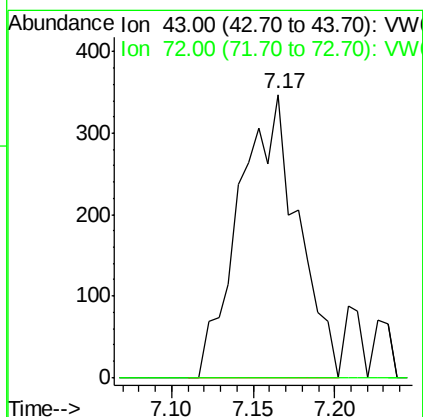
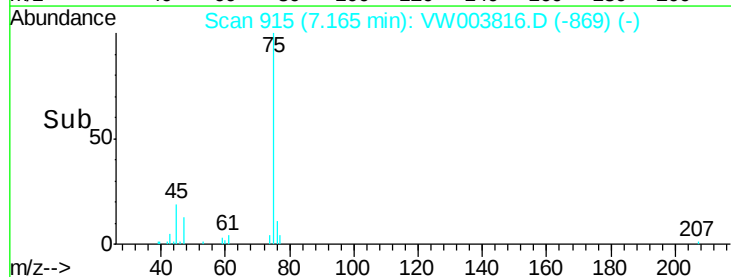
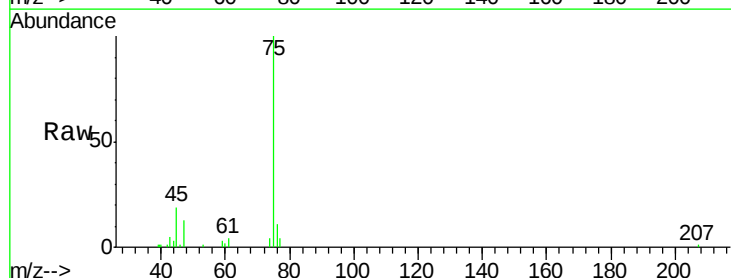
Instrument :  
MSVOA\_W  
ClientSampled :

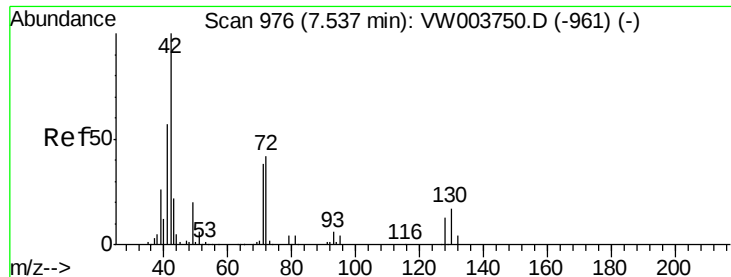
Tot Ion: 84 Resp: 14300  
Ion Ratio Lower Upper  
84 100  
49 113.9 105.1 157.7  
51 39.1 32.5 48.7  
86 58.2 49.8 74.6



#25  
2-Butanone  
Concen: 2.515 ug/l  
RT: 7.17 min Scan# 915  
Delta R.T. -0.02 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

Tgt Ion: 43 Resp: 868  
Ion Ratio Lower Upper  
43 100  
72 0.0 19.4 29.2#

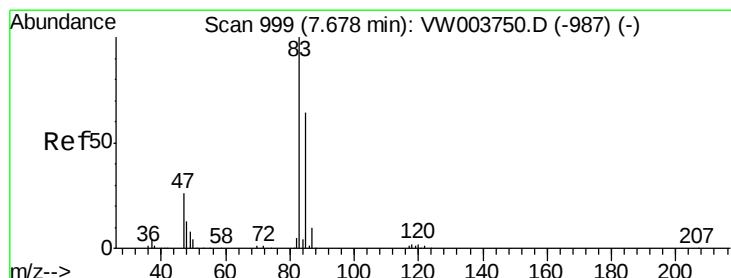
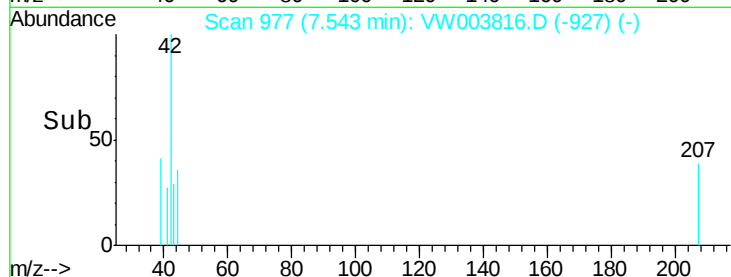
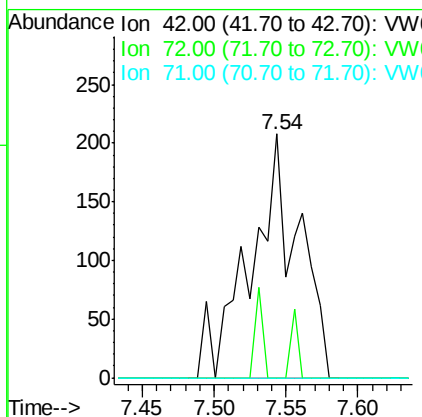
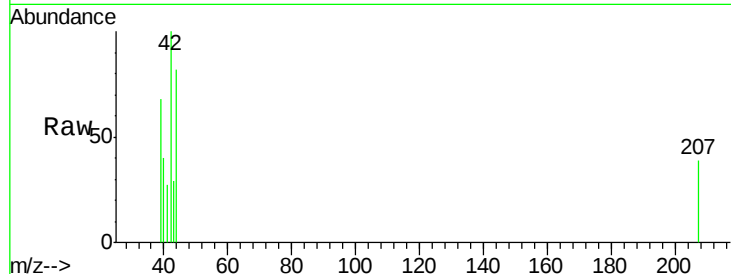




#29  
Tetrahydrofuran  
Concen: 2.186 ug/l  
RT: 7.54 min Scan# 977  
Delta R.T. 0.01 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

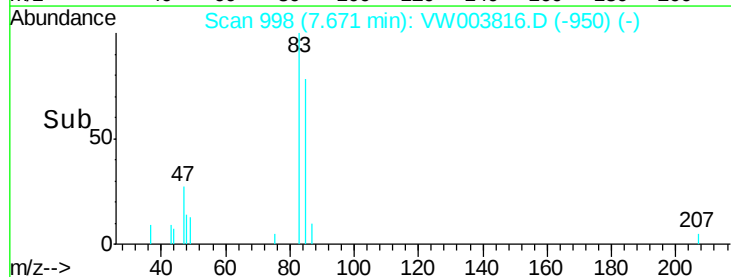
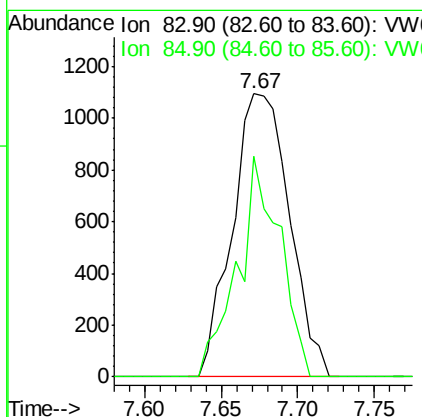
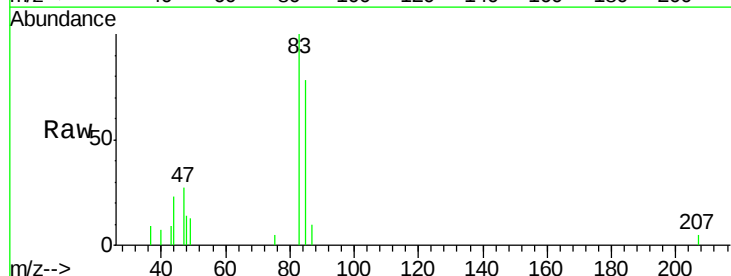
Instrument :  
MSVOA\_W  
ClientSampled :

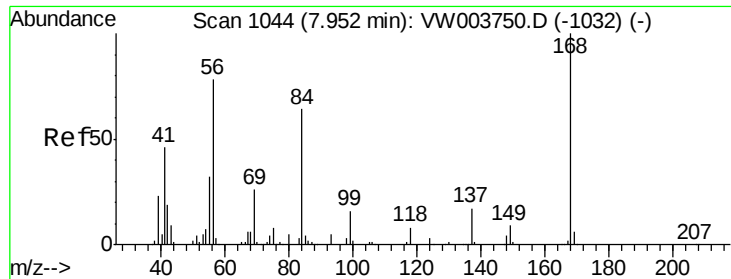
Tot Ion: 42 Resp: 485  
Ion Ratio Lower Upper  
42 100  
72 4.3 31.8 47.8#  
71 0.0 30.3 45.5#



#30  
Chloroform  
Concen: 1.320 ug/l  
RT: 7.67 min Scan# 998  
Delta R.T. -0.01 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

Tgt Ion: 83 Resp: 2839  
Ion Ratio Lower Upper  
83 100  
85 78.1 51.5 77.3#

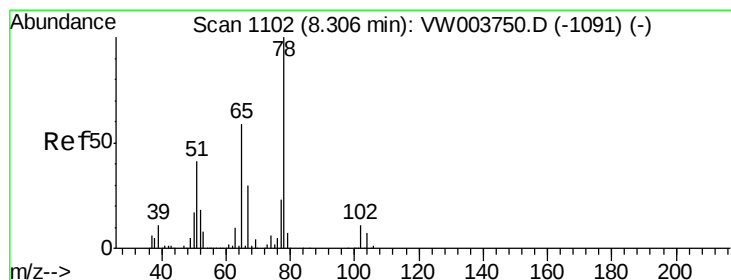
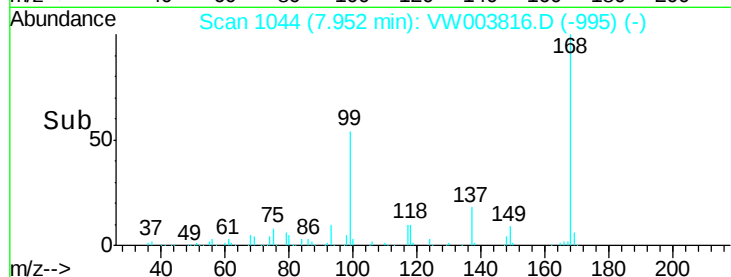
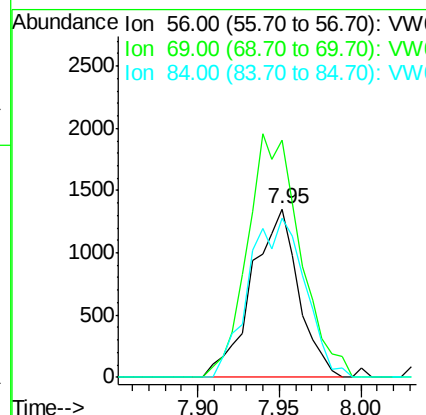
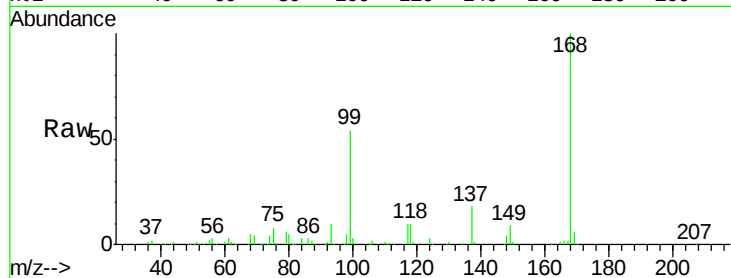




#31  
Cyclohexane  
Concen: 1.446 ug/l  
RT: 7.95 min Scan# 1044  
Delta R.T. -0.00 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

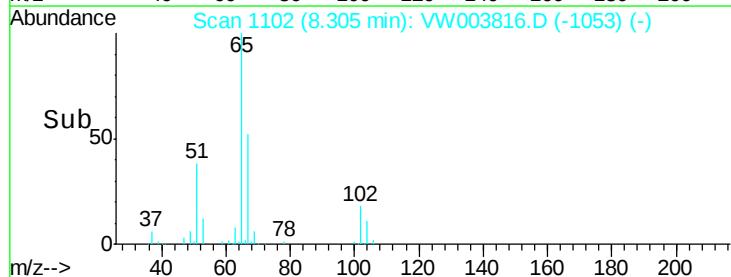
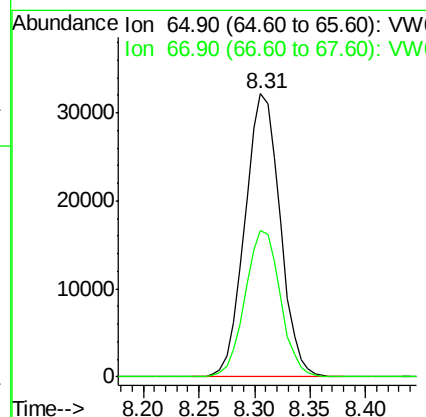
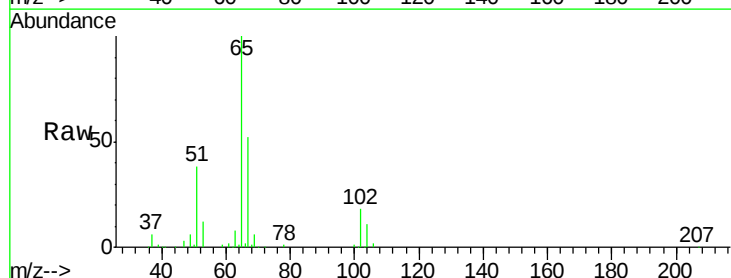
Instrument :  
MSVOA\_W  
ClientSampled :

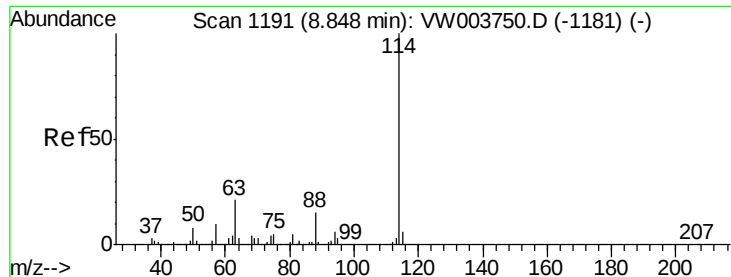
Tot Ion: 56 Resp: 2680  
Ion Ratio Lower Upper  
56 100  
69 140.4 26.2 39.4#  
84 94.5 65.5 98.3



#33  
1,2-Dichloroethane-d4  
Concen: 55.633 ug/l  
RT: 8.31 min Scan# 1102  
Delta R.T. -0.00 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

Tgt Ion: 65 Resp: 70657  
Ion Ratio Lower Upper  
65 100  
67 51.7 0.0 103.8

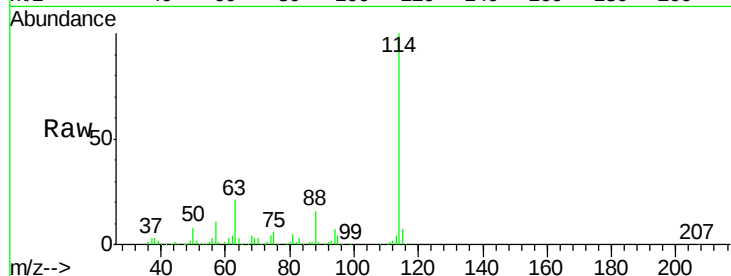




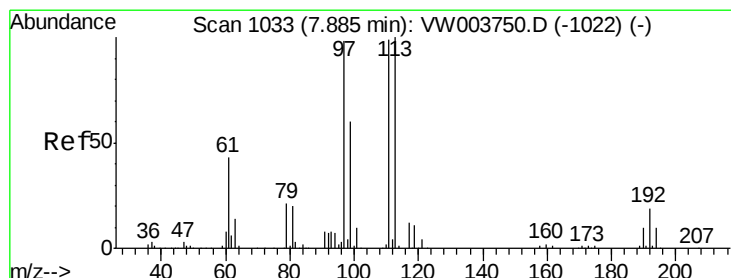
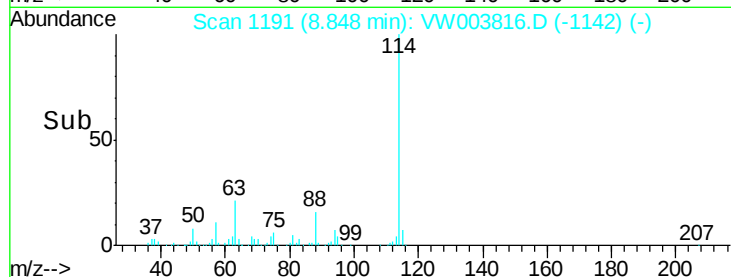
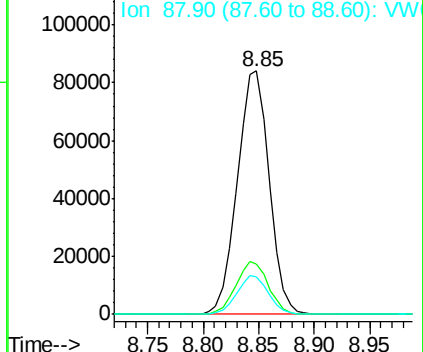
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.85 min Scan# 1191  
 Delta R.T. -0.00 min  
 Lab File: VW003816.D  
 Acq: 10 Jul 2018 09:46

Instrument :  
 MSVOA\_W  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.8  | 0.0   | 41.8  |
| 88      | 15.5  | 0.0   | 30.2  |

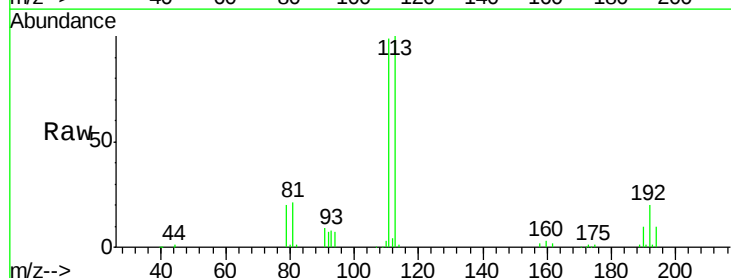


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VW  
 Ion 87.90 (87.60 to 88.60): VW

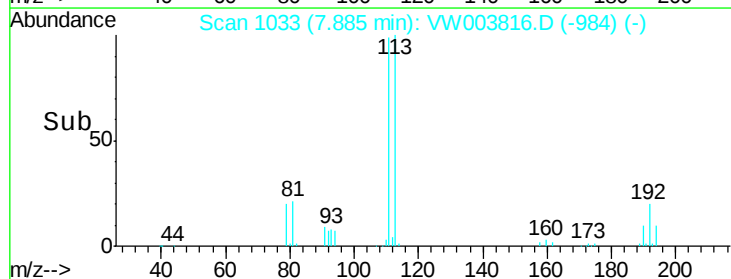
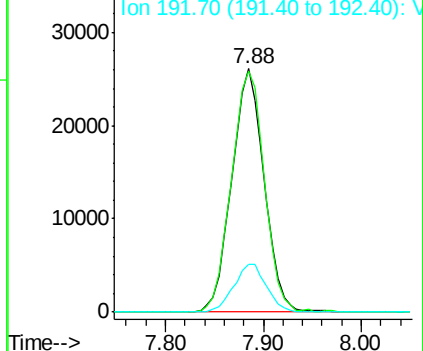


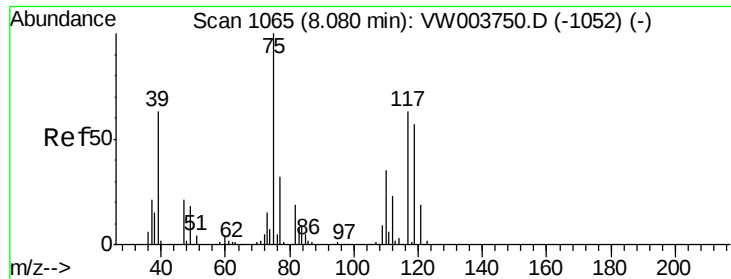
#35  
 Dibromofluoromethane  
 Concen: 51.202 ug/l  
 RT: 7.88 min Scan# 1033  
 Delta R.T. -0.00 min  
 Lab File: VW003816.D  
 Acq: 10 Jul 2018 09:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.1 | 81.7  | 122.5 |
| 192     | 20.0  | 15.8  | 23.8  |



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

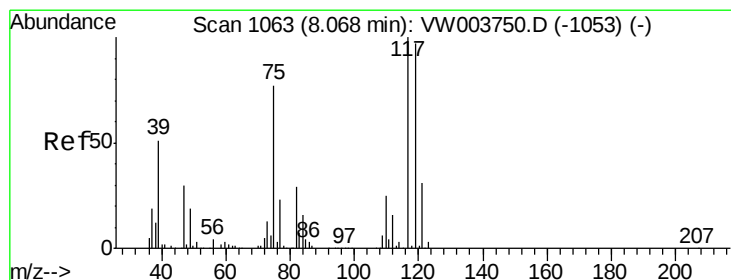
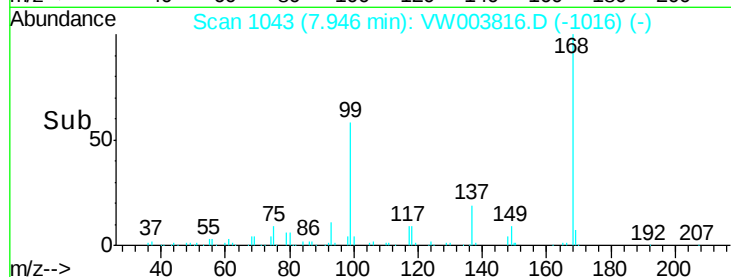
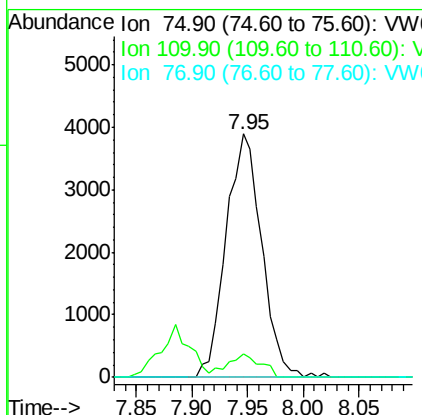
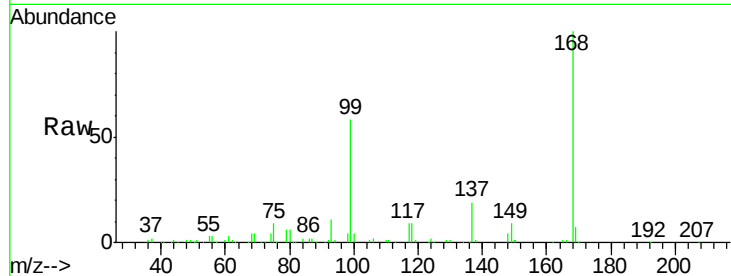




#36  
 1,1-Dichloropropene  
 Concen: 4.882 ug/l  
 RT: 7.95 min Scan# 1043  
 Delta R.T. -0.13 min  
 Lab File: VW003816.D  
 Acq: 10 Jul 2018 09:46

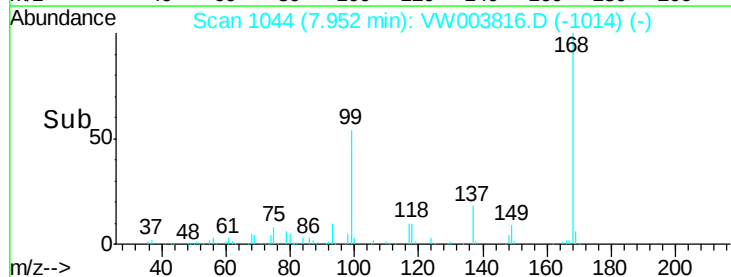
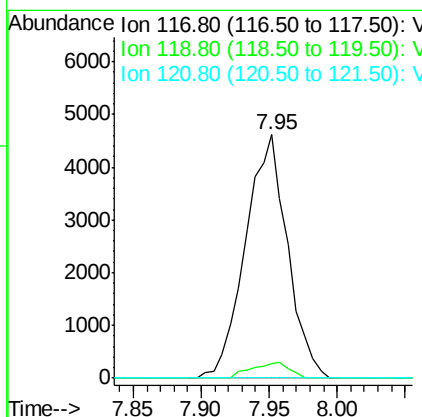
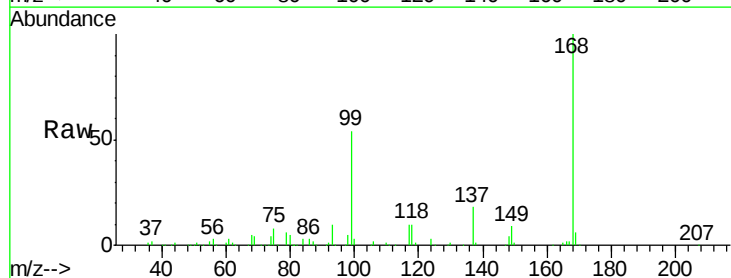
Instrument :  
 MSVOA\_W  
 ClientSampleId :

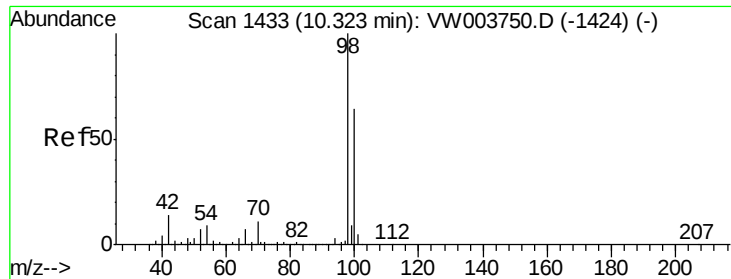
Tot Ion: 75 Resp: 8621  
 Ion Ratio Lower Upper  
 75 100  
 110 9.0 16.9 50.6#  
 77 0.0 24.8 37.2#



#38  
 Carbon Tetrachloride  
 Concen: 5.946 ug/l  
 RT: 7.95 min Scan# 1044  
 Delta R.T. -0.12 min  
 Lab File: VW003816.D  
 Acq: 10 Jul 2018 09:46

Tgt Ion: 117 Resp: 9983  
 Ion Ratio Lower Upper  
 117 100  
 119 5.7 77.4 116.2#  
 121 0.0 24.6 37.0#





#50

Toluene-d8

Concen: 37.214 ug/l

RT: 10.33 min Scan# 1434

Delta R.T. 0.01 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

Instrument :

MSVOA\_W

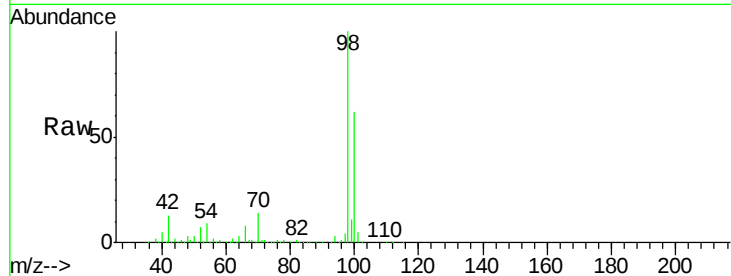
ClientSampleId :

Tot Ion: 98 Resp: 165819

Ion Ratio Lower Upper

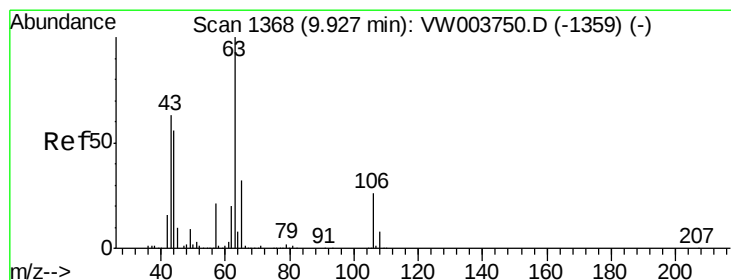
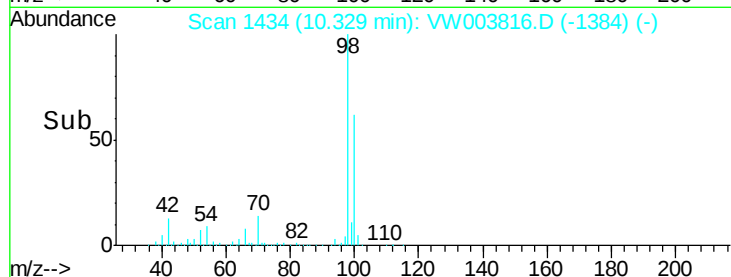
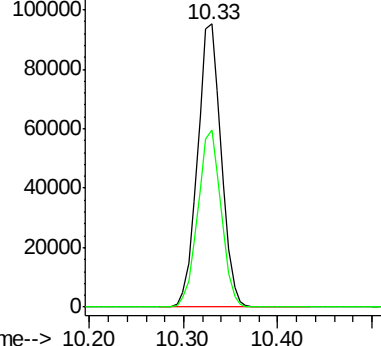
98 100

100 61.4 50.8 76.2



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW



#58

2-Chloroethyl Vinyl ether

Concen: 13.300 ug/l

RT: 9.93 min Scan# 1368

Delta R.T. 0.00 min

Lab File: VW003816.D

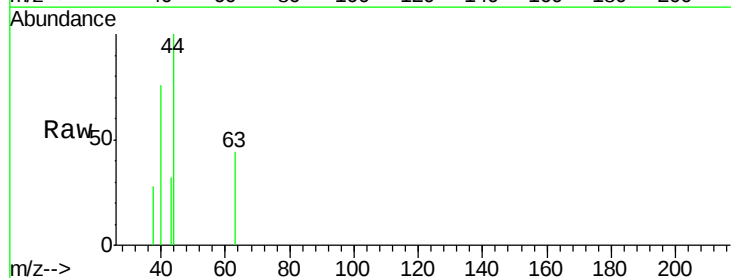
Acq: 10 Jul 2018 09:46

Tgt Ion: 63 Resp: 86

Ion Ratio Lower Upper

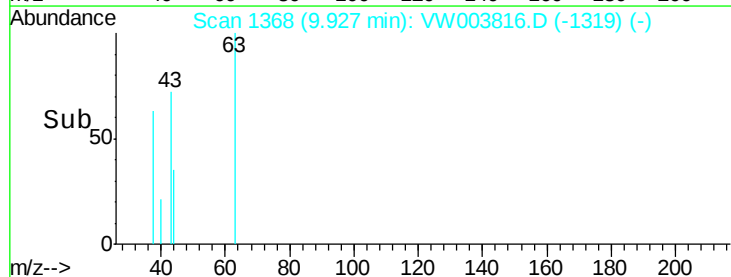
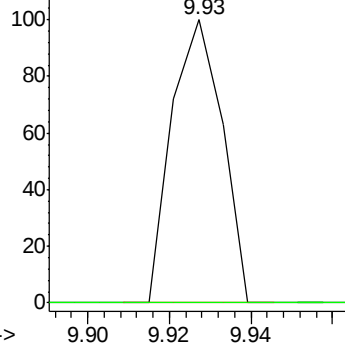
63 100

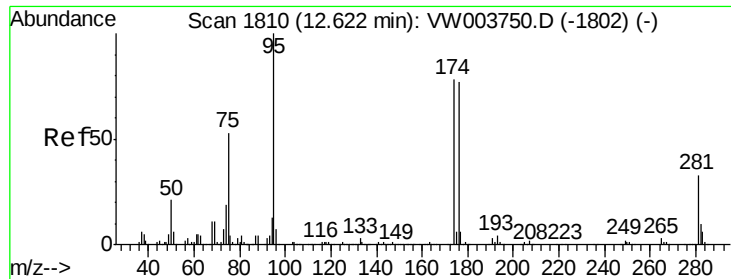
106 0.0 20.9 31.3#



Abundance Ion 62.90 (62.60 to 63.60): VW

Ion 105.90 (105.60 to 106.60): VW

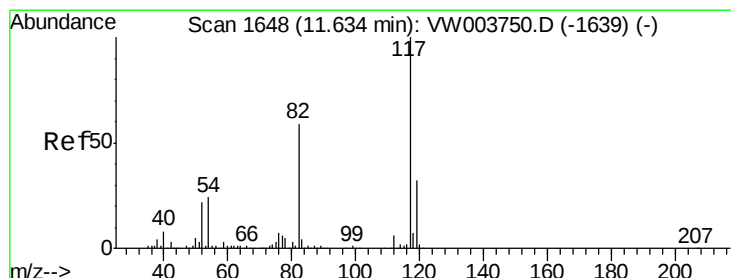
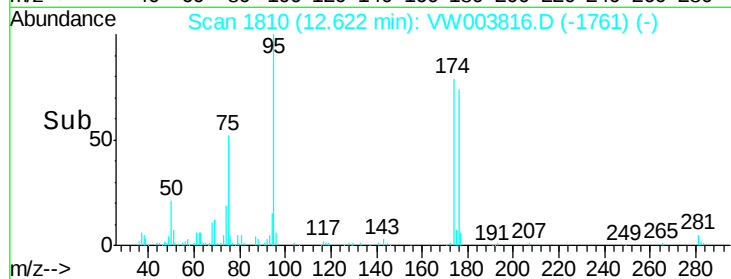
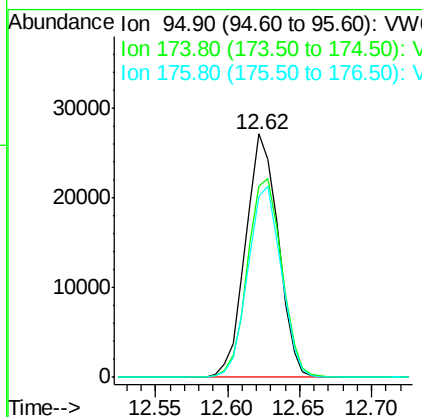
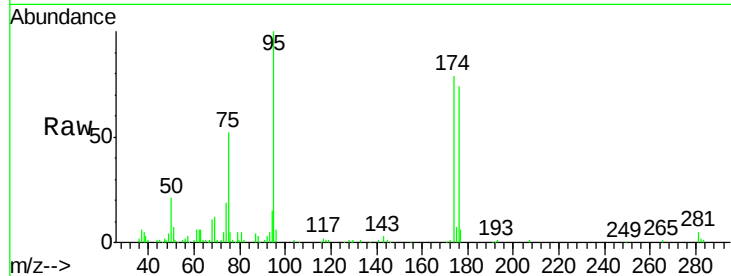




#62  
4-Bromofluorobenzene  
Concen: 26.347 ug/l  
RT: 12.62 min Scan# 1810  
Delta R.T. -0.00 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

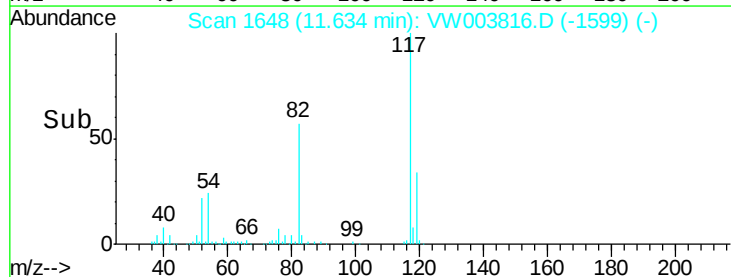
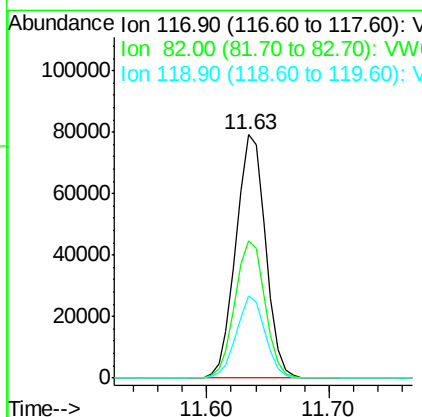
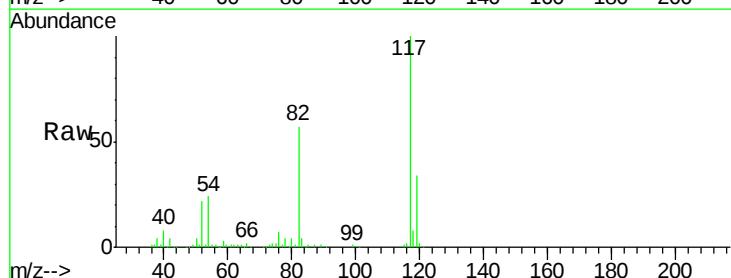
Instrument :  
MSVOA\_W  
ClientSampleId :

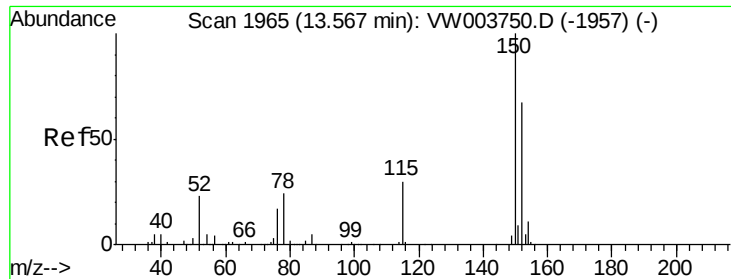
Tot Ion: 95 Resp: 42476  
Ion Ratio Lower Upper  
95 100  
174 85.4 0.0 163.4  
176 80.3 0.0 156.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1648  
Delta R.T. -0.00 min  
Lab File: VW003816.D  
Acq: 10 Jul 2018 09:46

Tgt Ion: 117 Resp: 132503  
Ion Ratio Lower Upper  
117 100  
82 56.7 46.9 70.3  
119 33.6 25.5 38.3





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.57 min Scan# 1965

Delta R.T. -0.00 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

Instrument :

MSVOA\_W

ClientSampleId :

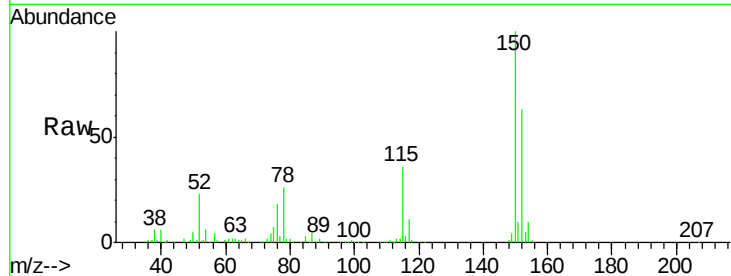
Tot Ion:152 Resp: 39957

Ion Ratio Lower Upper

152 100

115 57.4 28.9 86.8

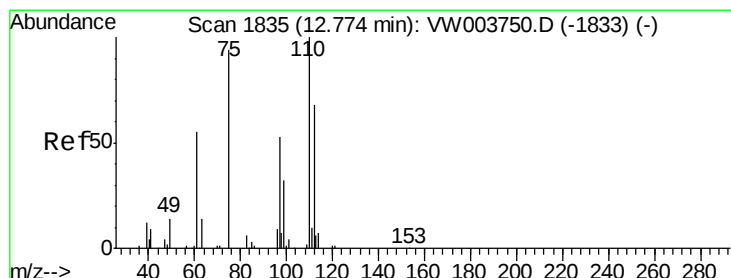
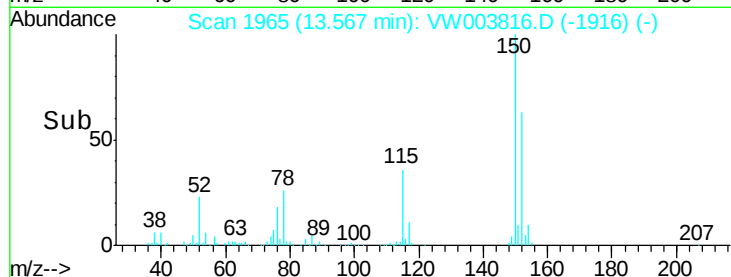
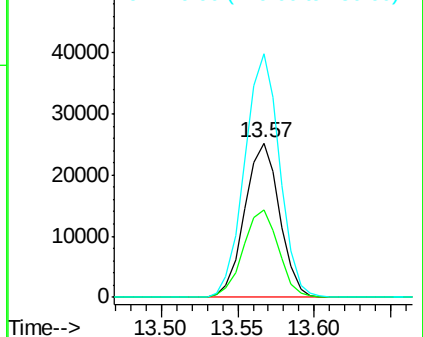
150 158.0 0.0 342.4



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



#76

1,2,3-Trichloropropane

Concen: 58.965 ug/l

RT: 12.62 min Scan# 1810

Delta R.T. -0.15 min

Lab File: VW003816.D

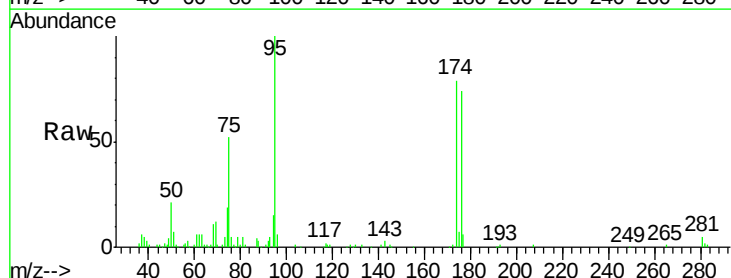
Acq: 10 Jul 2018 09:46

Tgt Ion: 75 Resp: 23136

Ion Ratio Lower Upper

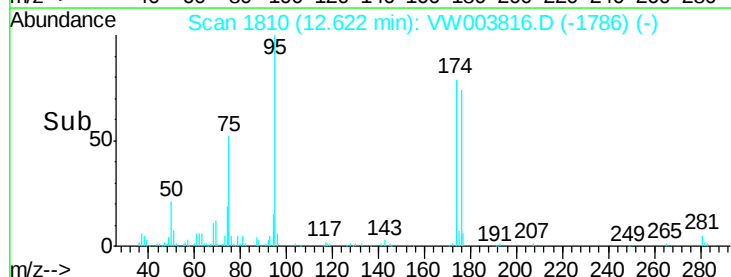
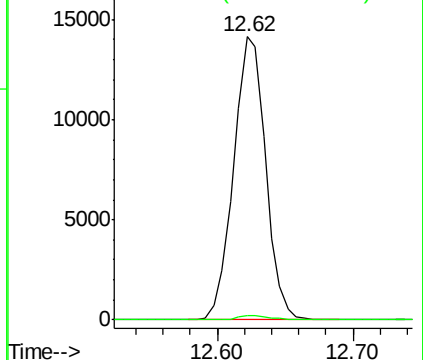
75 100

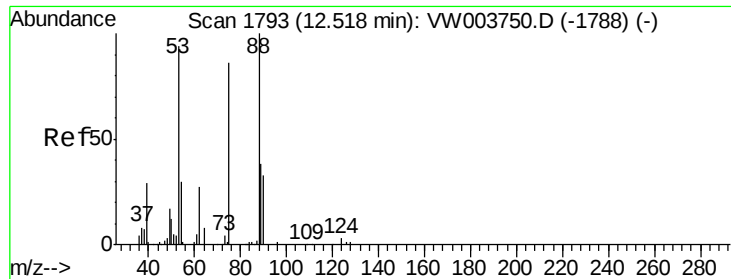
77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 144.241 ug/l

RT: 12.62 min Scan# 1810

Delta R.T. 0.10 min

Lab File: VW003816.D

Acq: 10 Jul 2018 09:46

Instrument :

MSVOA\_W

ClientSampleId :

Tot Ion: 75 Resp: 23136

Ion Ratio Lower Upper

75 100

53 0.3 85.0 127.6#

89 0.2 36.3 54.5#

