

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW071118\  
 Data File : VW003892.D  
 Acq On : 12 Jul 2018 03:53  
 Operator : SY/AP  
 Sample : J3927-01  
 Misc : 6.04G/5ML/MSVOA W/SOIL  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Jul 12 04:16:25 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  | 136904   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 232586   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 172600   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 44702    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |       |     |          |       |         |      |
|---------------------------|-------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31  | 65  | 106366   | 59.41 | ug/l    | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 118.82% |      |
| 35) Dibromofluoromethane  | 7.88  | 113 | 88726    | 54.51 | ug/l    | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 109.02% |      |
| 50) Toluene-d8            | 10.33 | 98  | 265654   | 42.66 | ug/l    | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 85.32%  |      |
| 62) 4-Bromofluorobenzene  | 12.62 | 95  | 59303    | 26.32 | ug/l    | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 52.64%  |      |

## Target Compounds

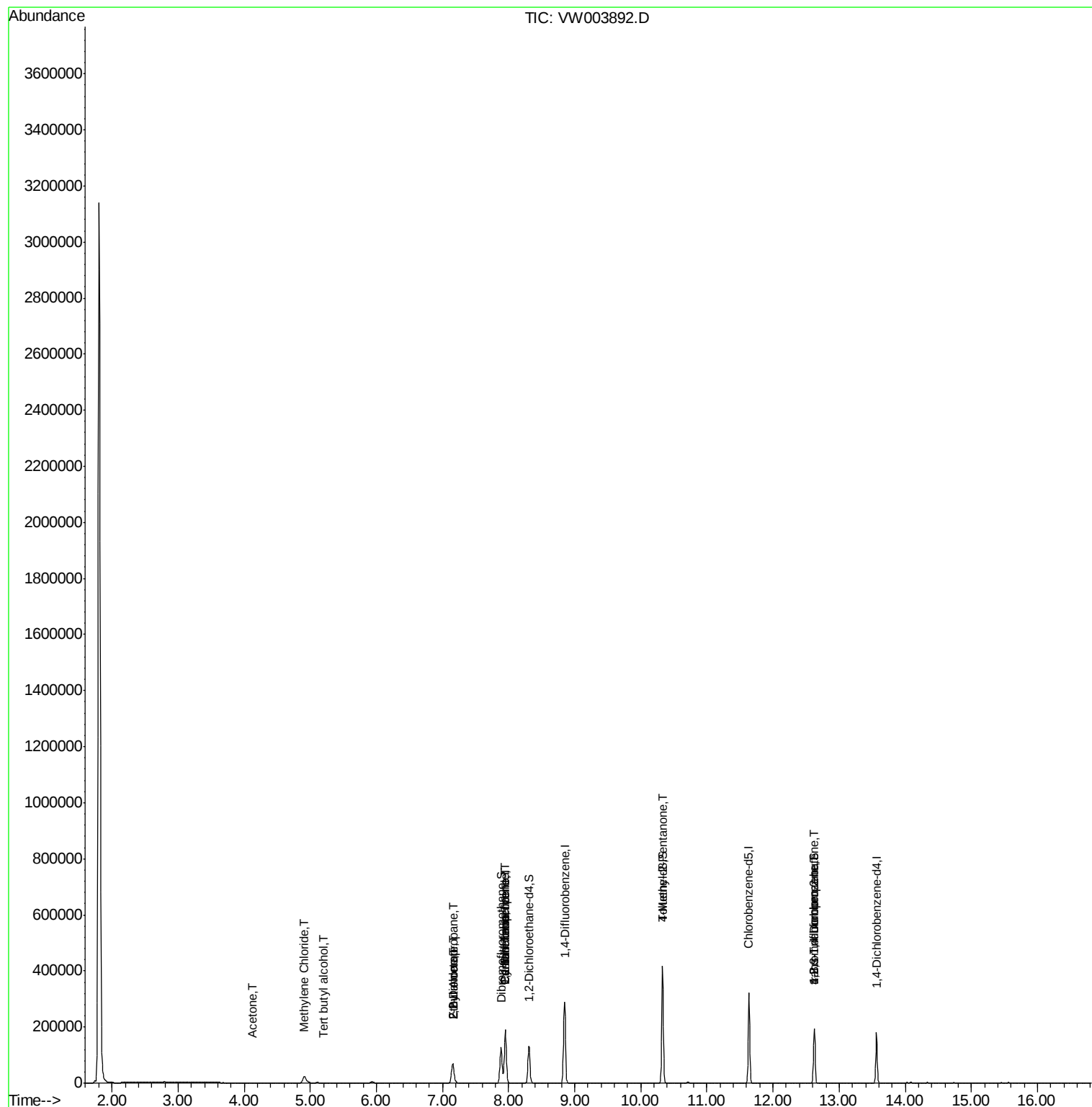
|                                |       |     |       |         | Qvalue |     |
|--------------------------------|-------|-----|-------|---------|--------|-----|
| 11) Tert butyl alcohol         | 5.20  | 59  | 559   | 5.762   | ug/l # | 81  |
| 16) Acetone                    | 4.13  | 43  | 611   | 1.967   | ug/l # | 46  |
| 20) Methylene Chloride         | 4.91  | 84  | 18307 | 8.450   | ug/l   | 98  |
| 25) 2-Butanone                 | 7.16  | 43  | 3983  | 8.187   | ug/l # | 90  |
| 26) 2,2-Dichloropropane        | 7.15  | 77  | 4521  | 2.804   | ug/l # | 53  |
| 31) Cyclohexane                | 7.95  | 56  | 3426  | 1.311   | ug/l # | 3   |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 11857 | 4.805   | ug/l # | 50  |
| 37) Ethyl Acetate              | 7.16  | 43  | 3983  | 3.317   | ug/l # | 1   |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 14103 | 6.010   | ug/l # | 16  |
| 51) 4-Methyl-2-Pentanone       | 10.33 | 43  | 1522  | 1.292   | ug/l # | 1   |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 31915 | 72.705  | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 31915 | 177.853 | ug/l # | 8   |

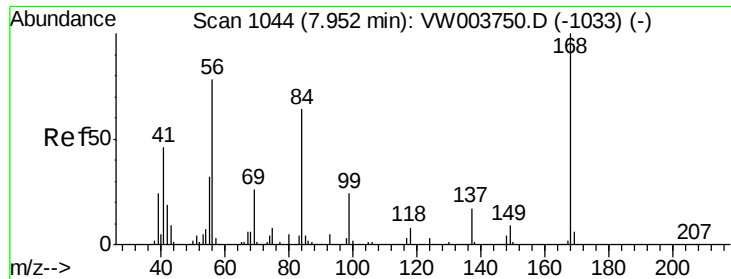
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW071118\  
Data File : VW003892.D  
Acq On : 12 Jul 2018 03:53  
Operator : SY/AP  
Sample : J3927-01  
Misc : 6.04G/5ML/MSVOA W/SOIL  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Jul 12 04:16:25 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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 1044

Delta R.T. -0.00 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

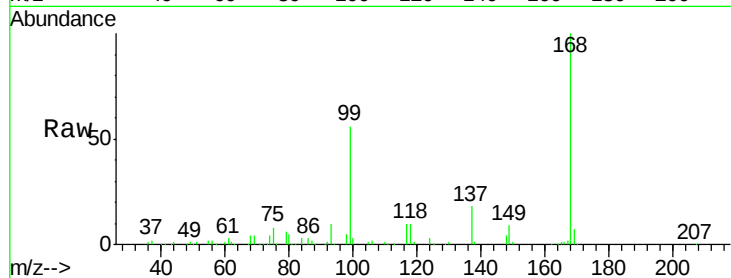
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:168 Resp: 136904

Ion Ratio Lower Upper

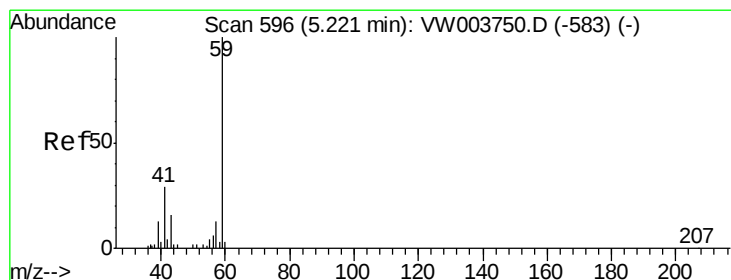
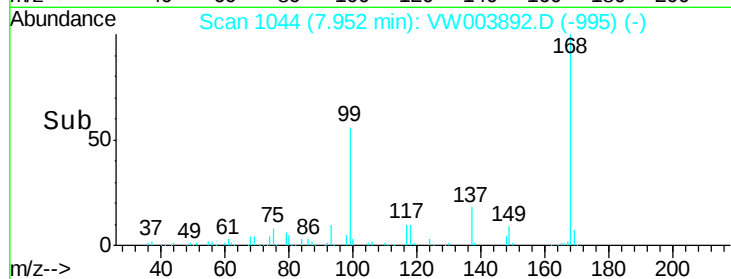
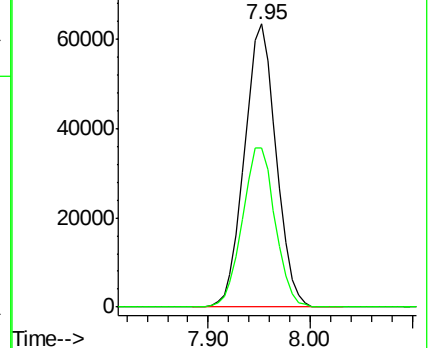
168 100

99 56.1 45.0 67.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: 5.762 ug/l

RT: 5.20 min Scan# 592

Delta R.T. -0.02 min

Lab File: VW003892.D

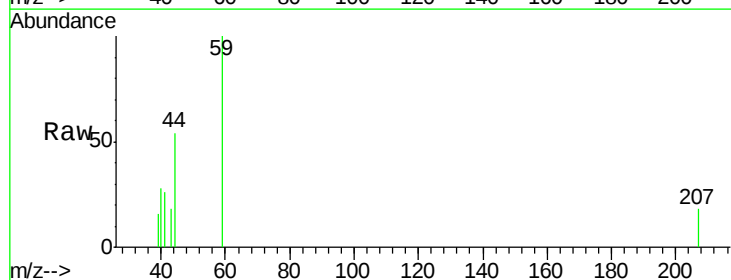
Acq: 12 Jul 2018 03:53

Tgt Ion: 59 Resp: 559

Ion Ratio Lower Upper

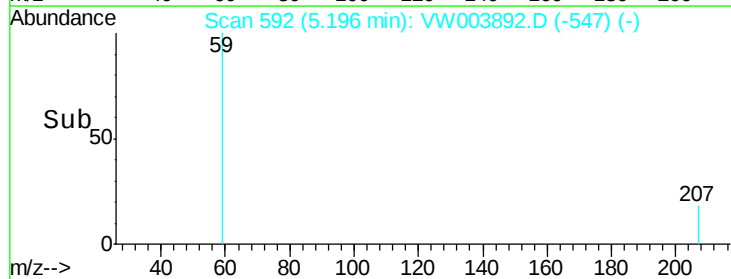
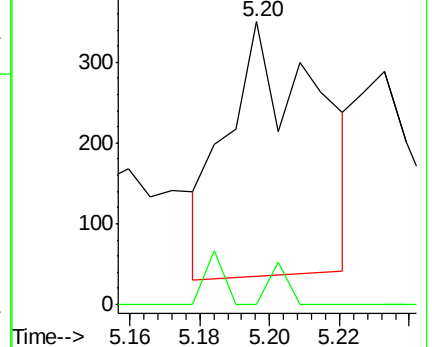
59 100

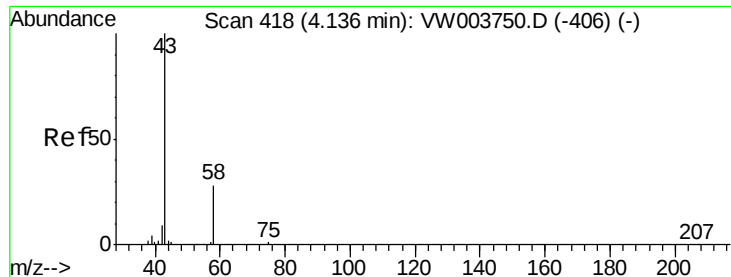
57 4.3 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 1.967 ug/l

RT: 4.13 min Scan# 417

Delta R.T. -0.01 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

Instrument :

MSVOA\_W

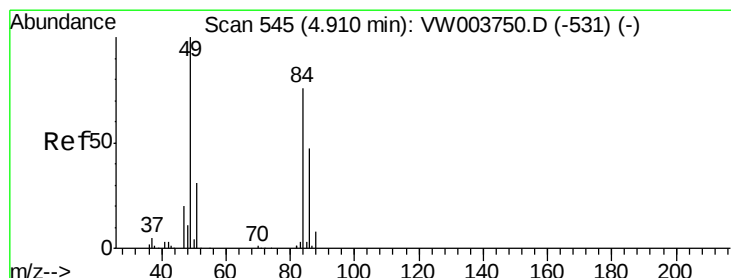
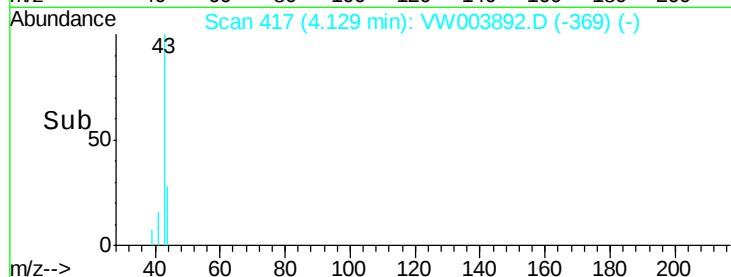
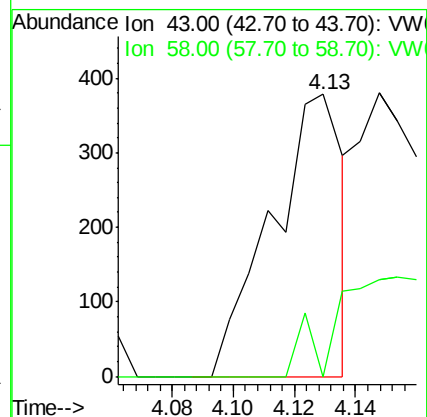
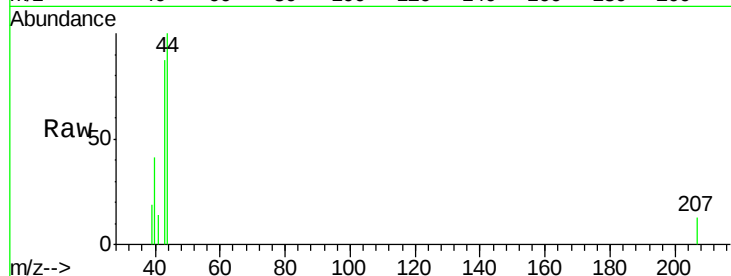
ClientSampleId :

Tot Ion: 43 Resp: 611

Ion Ratio Lower Upper

43 100

58 0.0 22.6 34.0#



#20

Methylene Chloride

Concen: 8.450 ug/l

RT: 4.91 min Scan# 545

Delta R.T. 0.00 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

Tgt Ion: 84 Resp: 18307

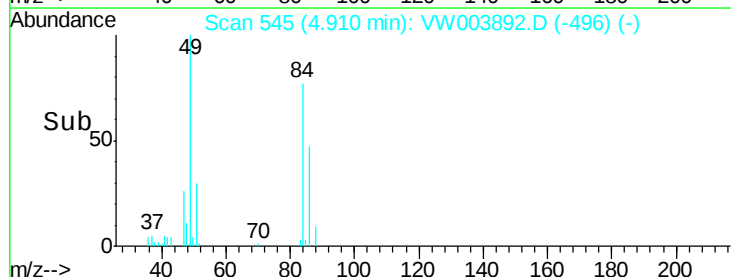
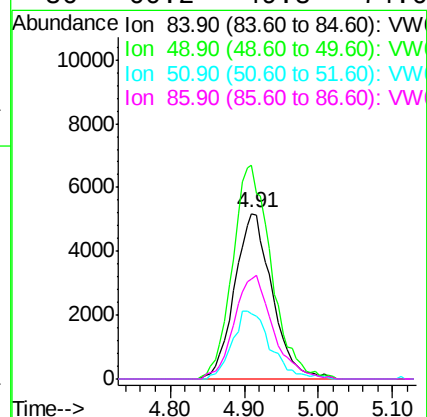
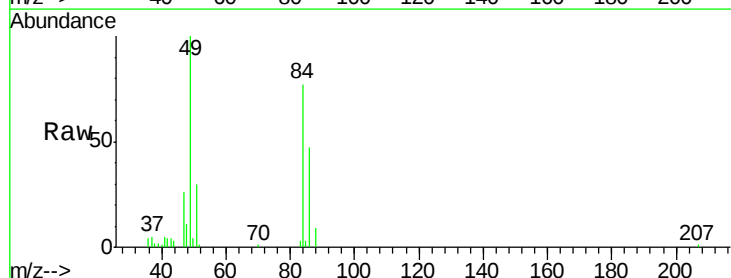
Ion Ratio Lower Upper

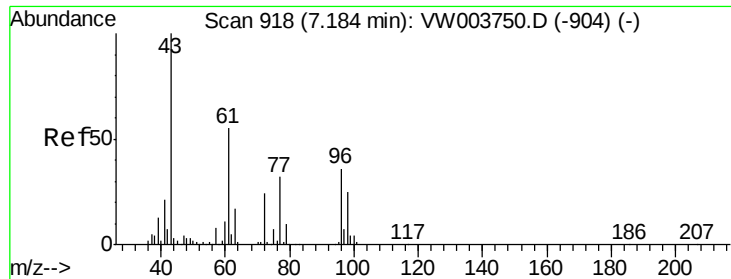
84 100

49 129.1 105.1 157.7

51 39.1 32.5 48.7

86 60.2 49.8 74.6





#25

2-Butanone

Concen: 8.187 ug/l

RT: 7.16 min Scan# 914

Delta R.T. -0.02 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

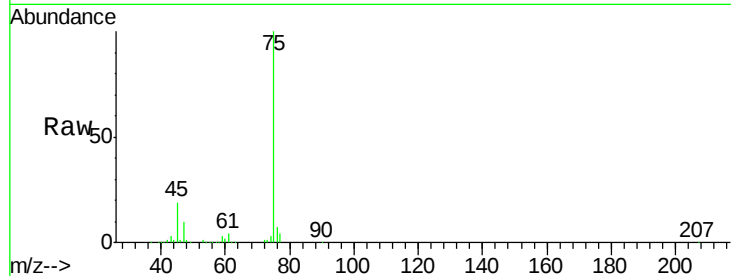
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 43 Resp: 3983

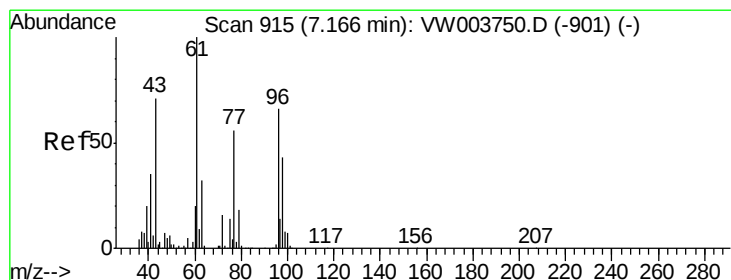
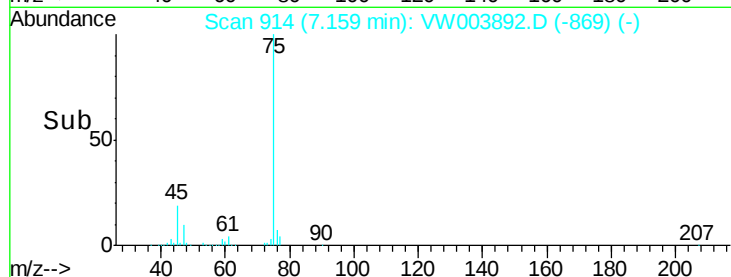
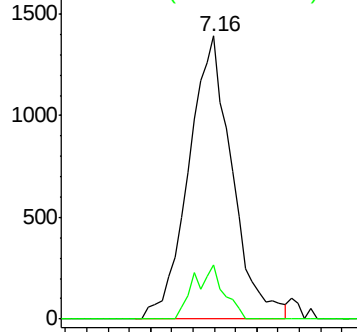
Ion Ratio Lower Upper

43 100

72 19.2 19.4 29.2#



Abundance Ion 43.00 (42.70 to 43.70): VW  
Ion 72.00 (71.70 to 72.70): VW



#26

2,2-Dichloropropane

Concen: 2.804 ug/l

RT: 7.15 min Scan# 913

Delta R.T. -0.01 min

Lab File: VW003892.D

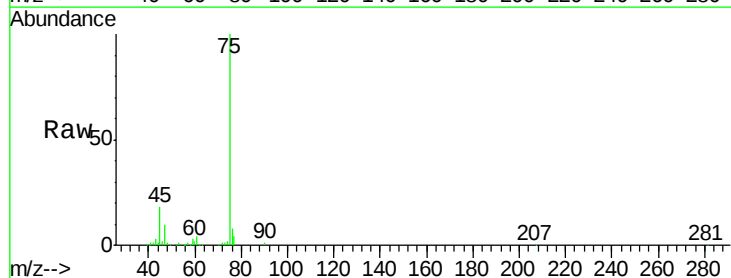
Acq: 12 Jul 2018 03:53

Tgt Ion: 77 Resp: 4521

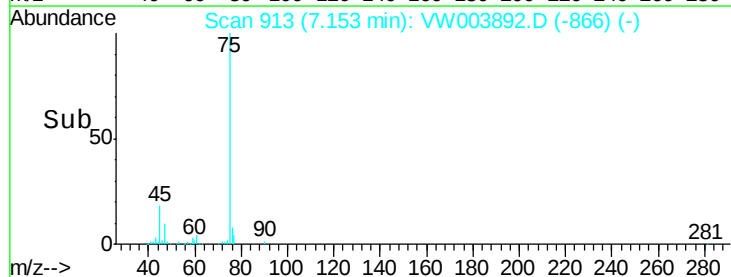
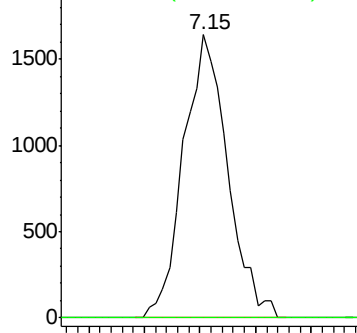
Ion Ratio Lower Upper

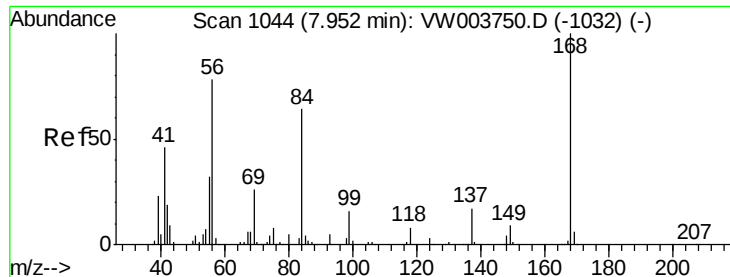
77 100

97 0.0 11.5 34.5#



Abundance Ion 76.90 (76.60 to 77.60): VW  
Ion 96.90 (96.60 to 97.60): VW

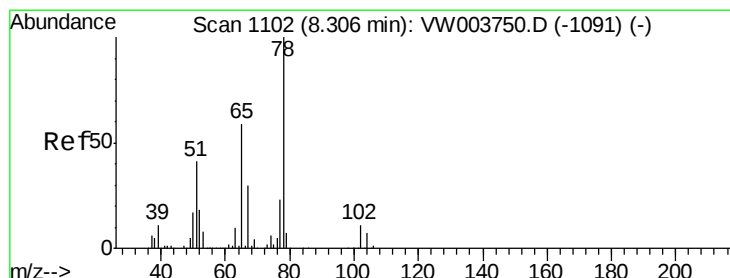
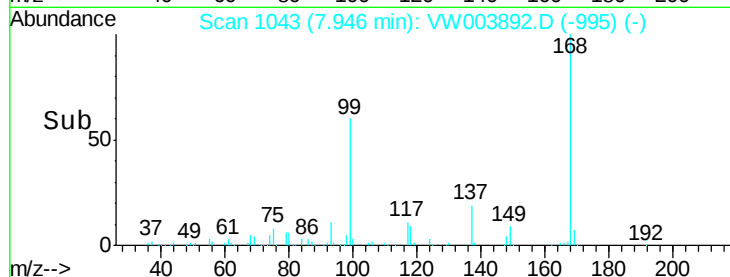
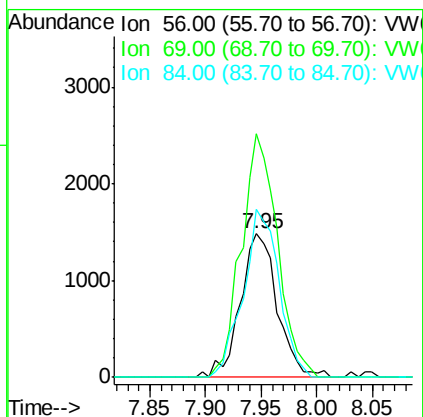
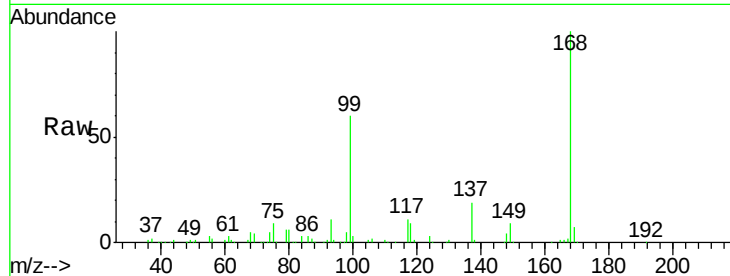




#31  
Cyclohexane  
Concen: 1.311 ug/l  
RT: 7.95 min Scan# 1043  
Delta R.T. -0.01 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

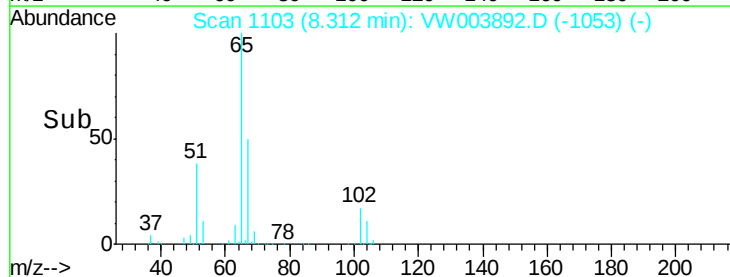
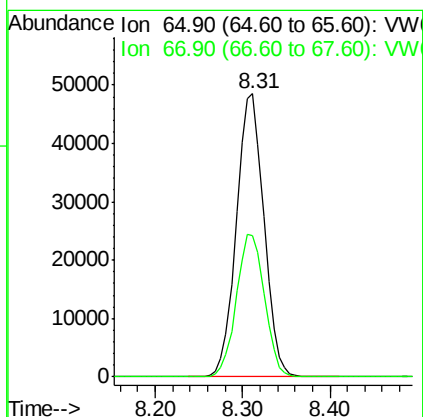
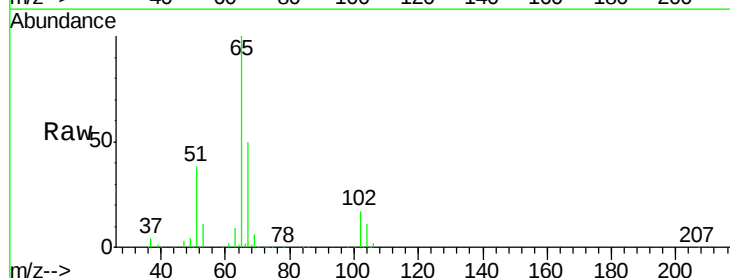
Instrument :  
MSVOA\_W  
ClientSampled :

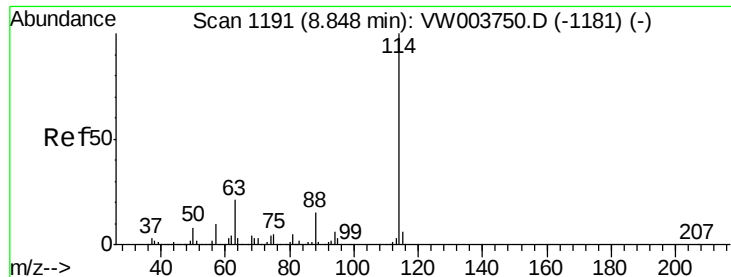
Tot Ion: 56 Resp: 3426  
Ion Ratio Lower Upper  
56 100  
69 169.4 26.2 39.4#  
84 116.8 65.5 98.3#



#33  
1,2-Dichloroethane-d4  
Concen: 59.412 ug/l  
RT: 8.31 min Scan# 1103  
Delta R.T. 0.01 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

Tgt Ion: 65 Resp: 106366  
Ion Ratio Lower Upper  
65 100  
67 51.3 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: VW003892.D

Acq: 12 Jul 2018 03:53

Instrument :

MSVOA\_W

ClientSampleId :

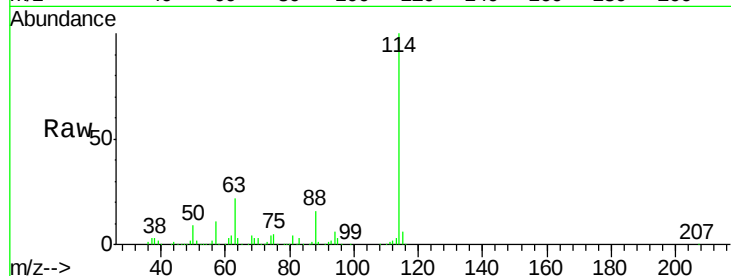
Tot Ion:114 Resp: 232586

Ion Ratio Lower Upper

114 100

63 21.6 0.0 41.8

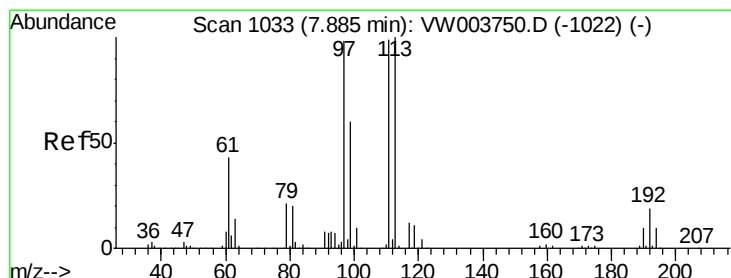
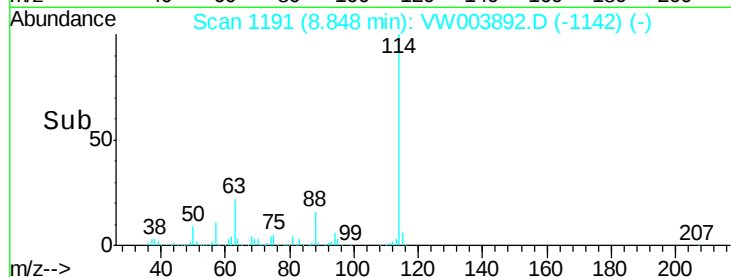
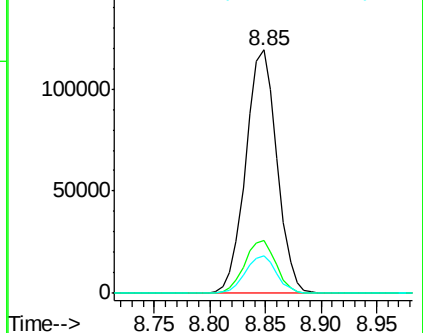
88 15.6 0.0 30.2



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: 54.506 ug/l

RT: 7.88 min Scan# 1033

Delta R.T. -0.00 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

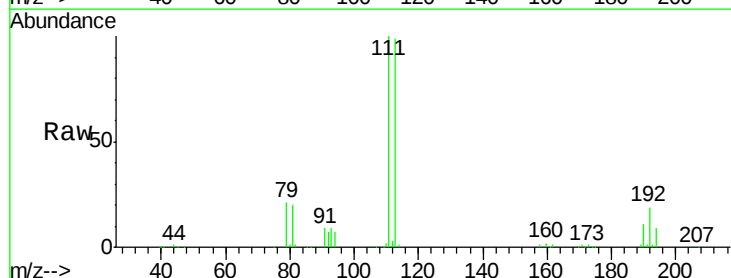
Tgt Ion:113 Resp: 88726

Ion Ratio Lower Upper

113 100

111 101.5 81.7 122.5

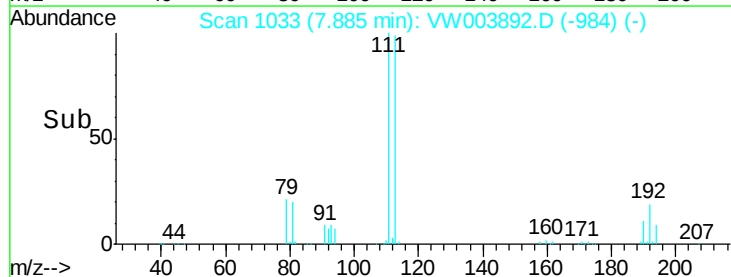
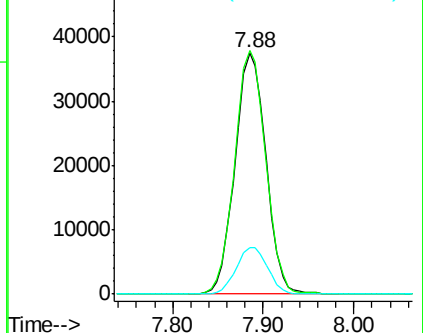
192 19.5 15.8 23.8

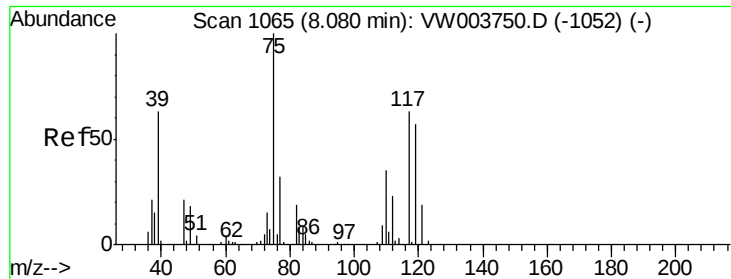


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

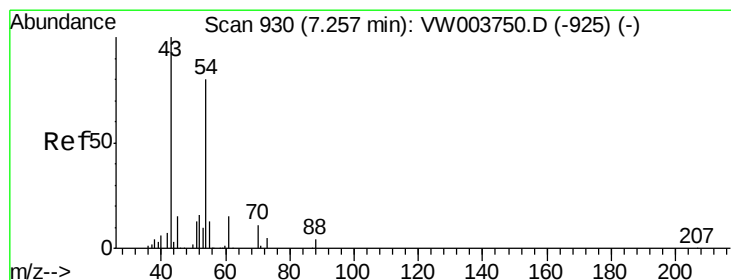
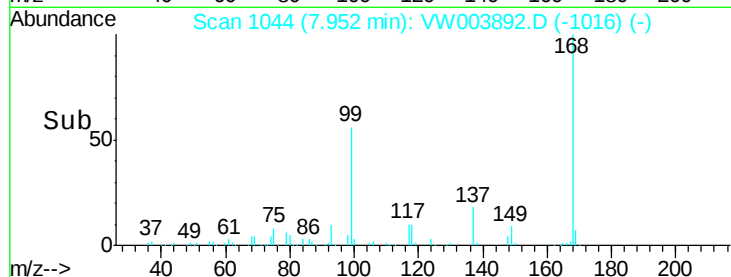
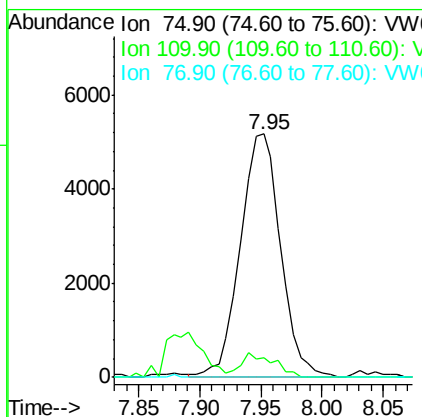
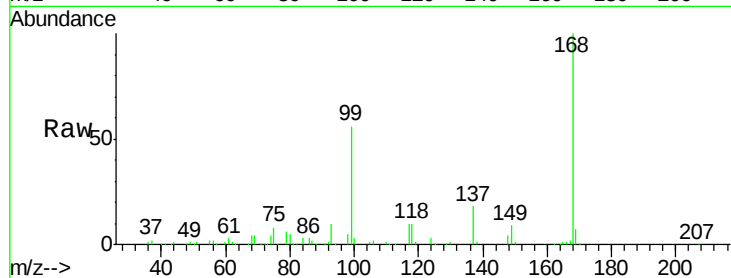




#36  
 1,1-Dichloropropene  
 Concen: 4.805 ug/l  
 RT: 7.95 min Scan# 1044  
 Delta R.T. -0.13 min  
 Lab File: VW003892.D  
 Acq: 12 Jul 2018 03:53

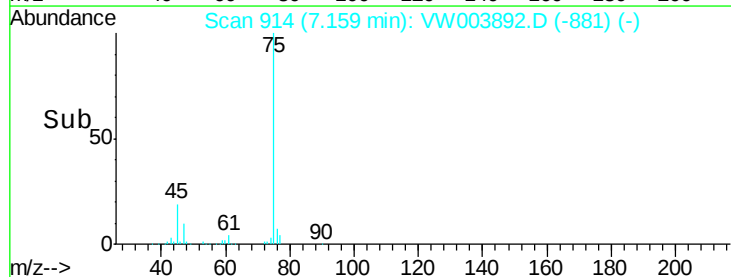
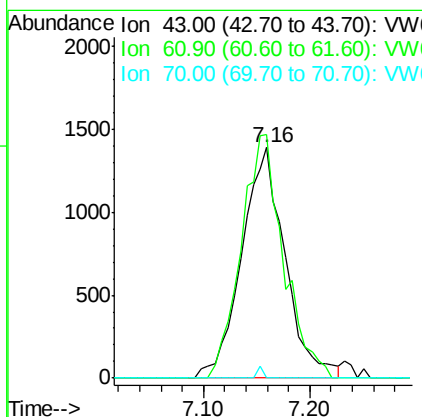
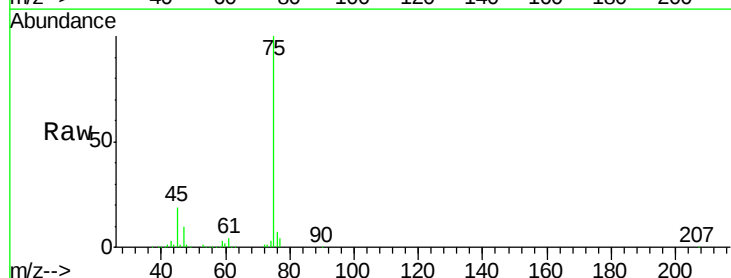
Instrument :  
 MSVOA\_W  
 ClientSampleId :

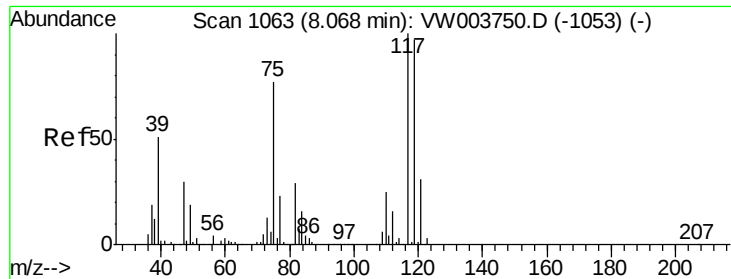
Tot Ion: 75 Resp: 11857  
 Ion Ratio Lower Upper  
 75 100  
 110 8.2 16.9 50.6#  
 77 0.0 24.8 37.2#



#37  
 Ethyl Acetate  
 Concen: 3.317 ug/l  
 RT: 7.16 min Scan# 914  
 Delta R.T. -0.10 min  
 Lab File: VW003892.D  
 Acq: 12 Jul 2018 03:53

Tgt Ion: 43 Resp: 3983  
 Ion Ratio Lower Upper  
 43 100  
 61 102.5 10.6 15.8#  
 70 0.7 7.5 11.3#

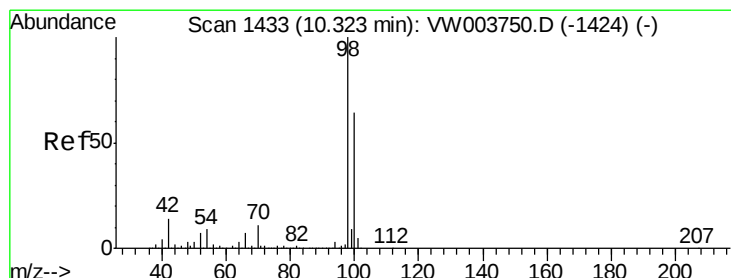
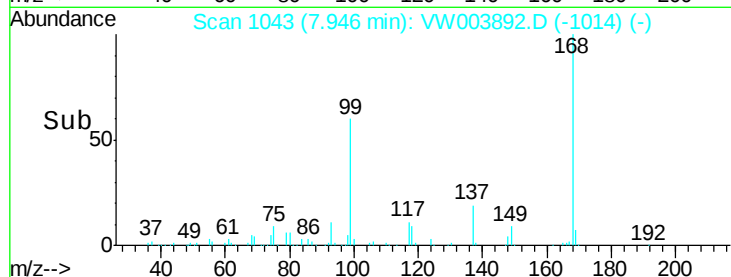
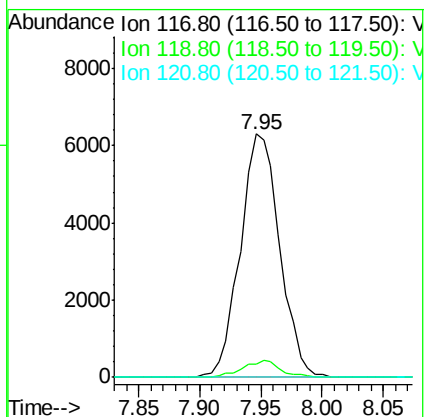
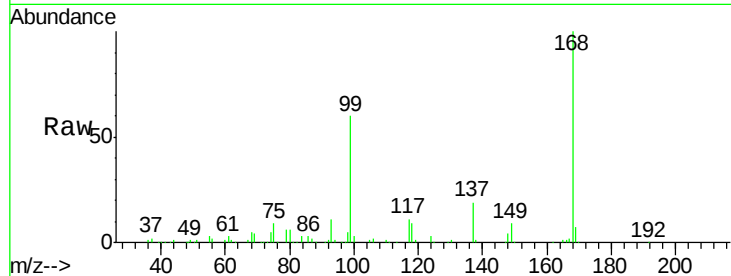




#38  
Carbon Tetrachloride  
Concen: 6.010 ug/l  
RT: 7.95 min Scan# 1043  
Delta R.T. -0.12 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

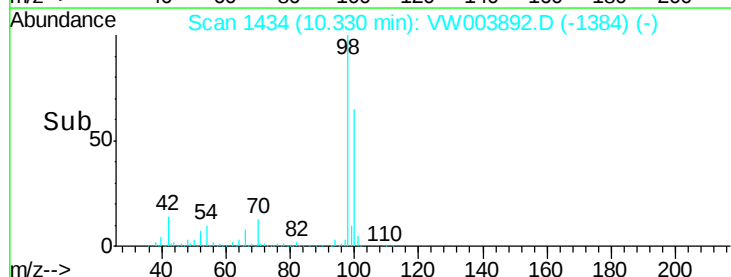
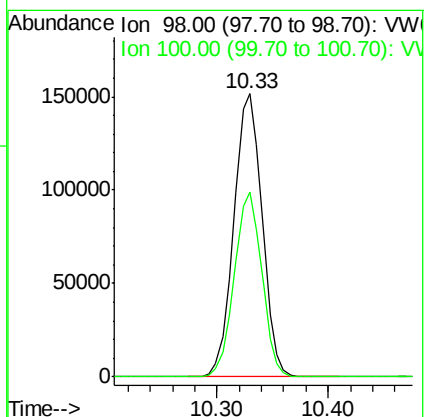
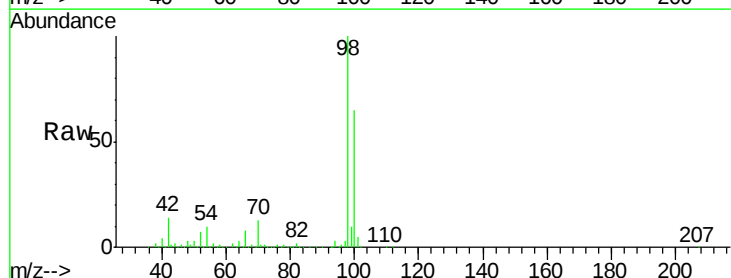
Instrument :  
MSVOA\_W  
ClientSampled :

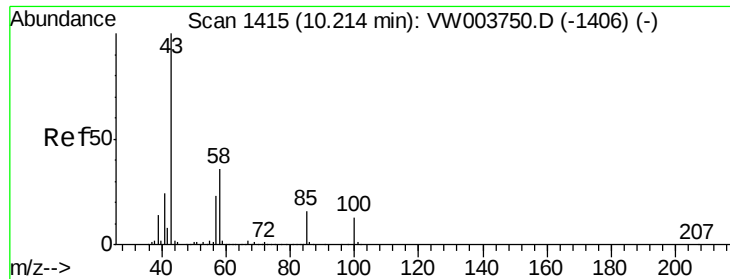
Tot Ion:117 Resp: 14103  
Ion Ratio Lower Upper  
117 100  
119 5.6 77.4 116.2#  
121 0.0 24.6 37.0#



#50  
Toluene-d8  
Concen: 42.663 ug/l  
RT: 10.33 min Scan# 1434  
Delta R.T. 0.01 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

Tgt Ion: 98 Resp: 265654  
Ion Ratio Lower Upper  
98 100  
100 63.6 50.8 76.2





#51

4-Methyl-2-Pentanone

Concen: 1.292 ug/l

RT: 10.33 min Scan# 1434

Delta R.T. 0.12 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

Instrument :

MSVOA\_W

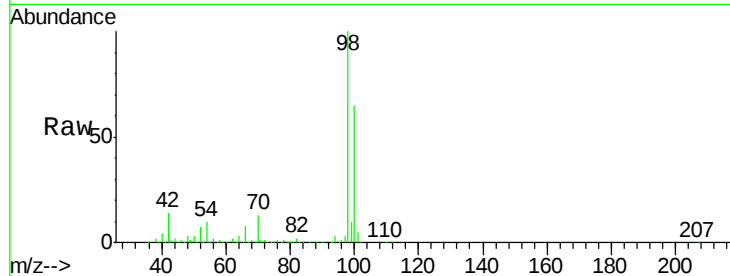
ClientSampleId :

Tot Ion: 43 Resp: 1522

Ion Ratio Lower Upper

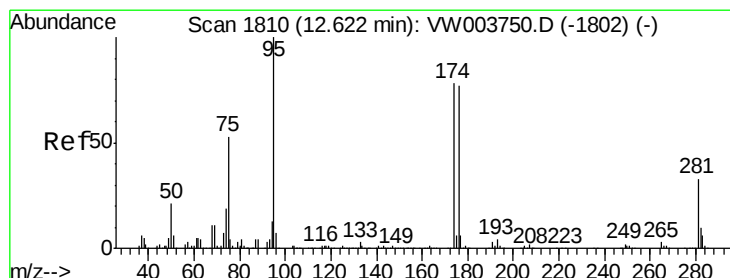
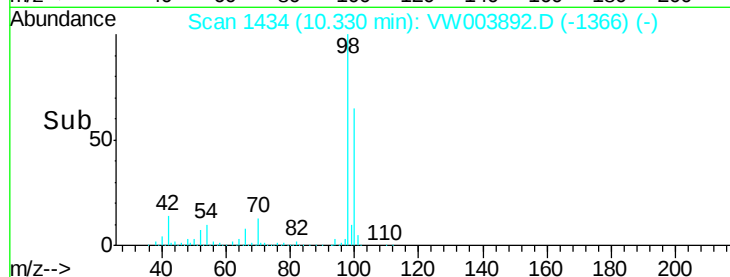
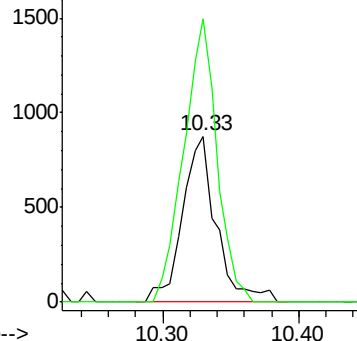
43 100

58 167.5 29.3 43.9#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#62

4-Bromofluorobenzene

Concen: 26.322 ug/l

RT: 12.62 min Scan# 1810

Delta R.T. -0.00 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

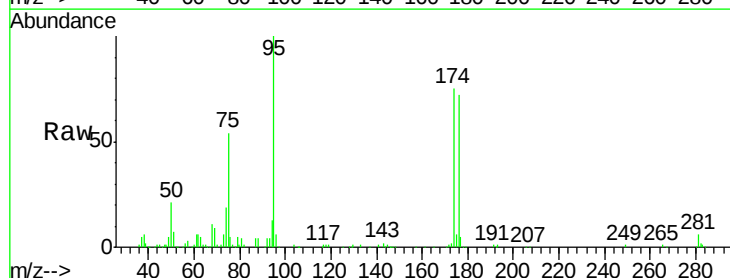
Tgt Ion: 95 Resp: 59303

Ion Ratio Lower Upper

95 100

174 81.6 0.0 163.4

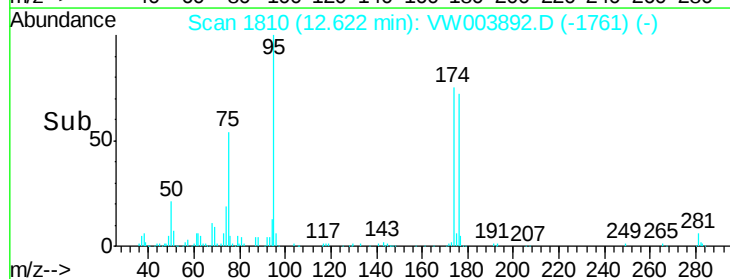
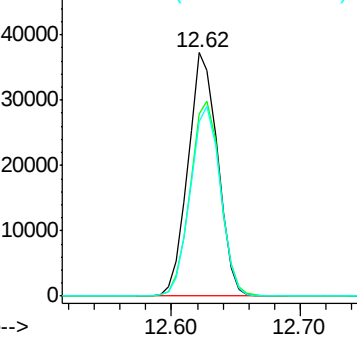
176 79.1 0.0 156.8

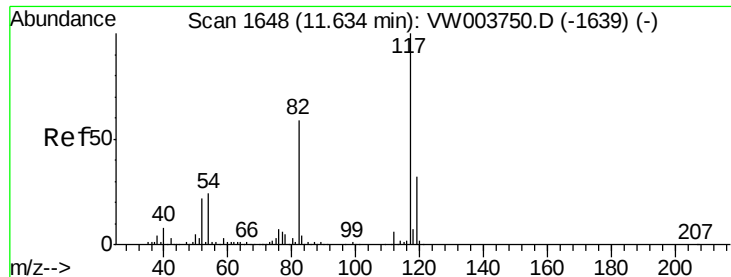


Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

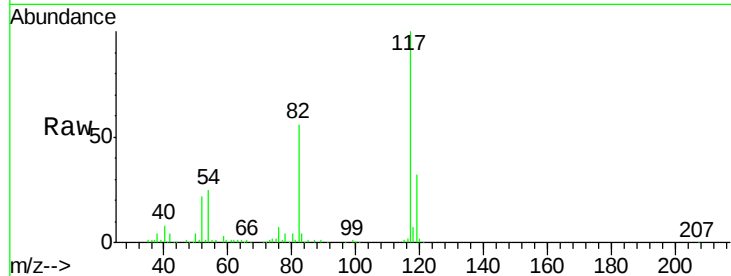




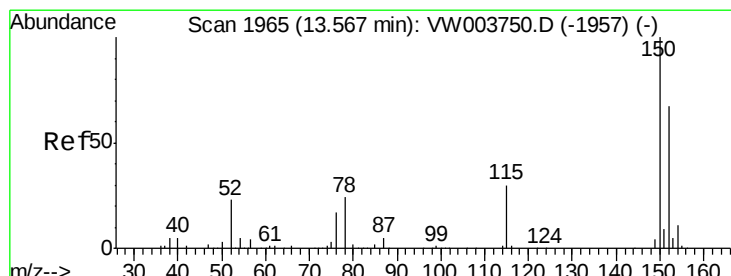
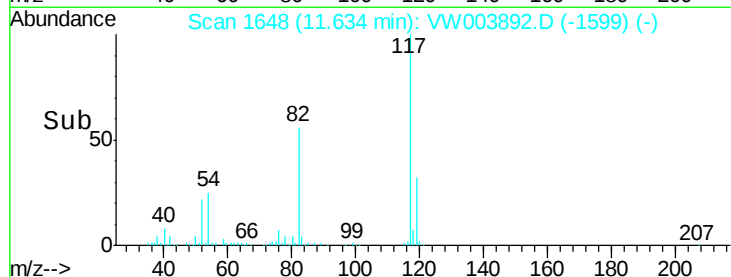
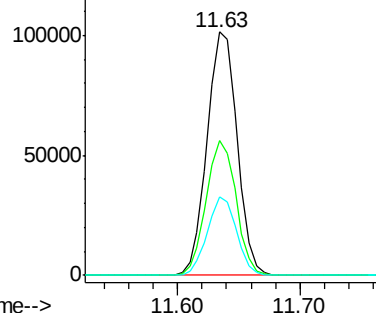
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1648  
Delta R.T. -0.00 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:117 Resp: 172600  
Ion Ratio Lower Upper  
117 100  
82 55.5 46.9 70.3  
119 32.3 25.5 38.3

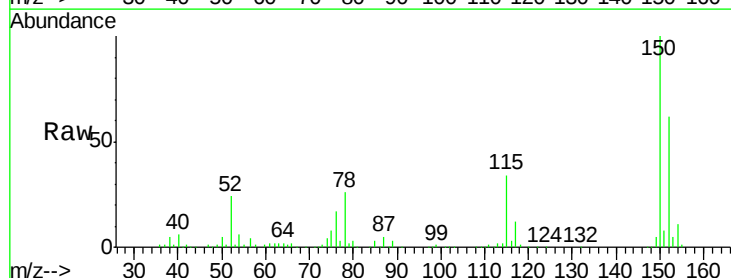


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

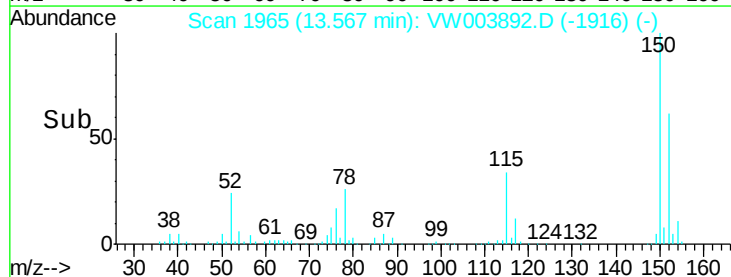
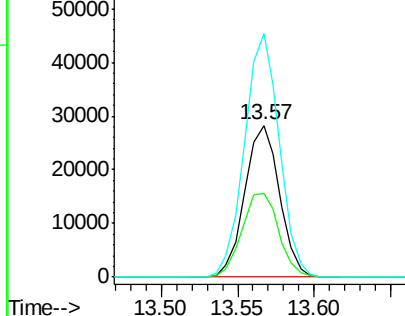


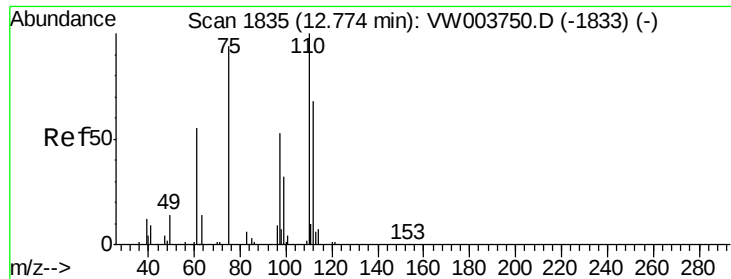
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.57 min Scan# 1965  
Delta R.T. -0.00 min  
Lab File: VW003892.D  
Acq: 12 Jul 2018 03:53

Tgt Ion:152 Resp: 44702  
Ion Ratio Lower Upper  
152 100  
115 58.5 28.9 86.8  
150 160.0 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: 72.705 ug/l

RT: 12.62 min Scan# 1810

Delta R.T. -0.15 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

Instrument :

MSVOA\_W

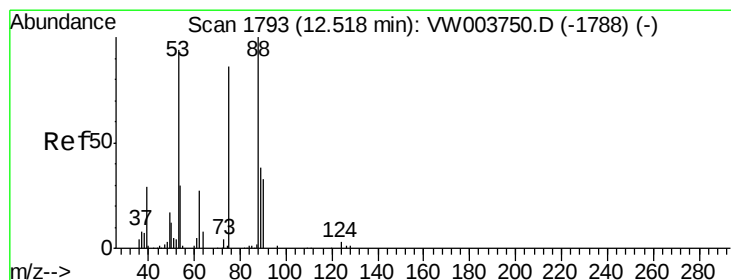
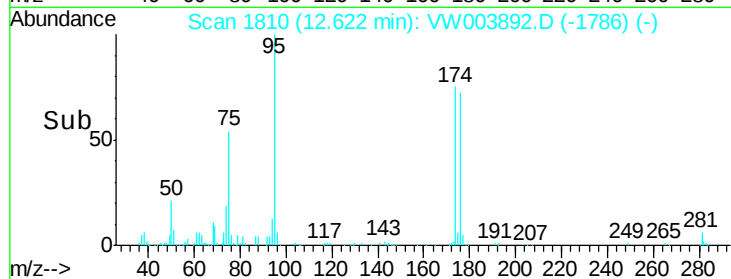
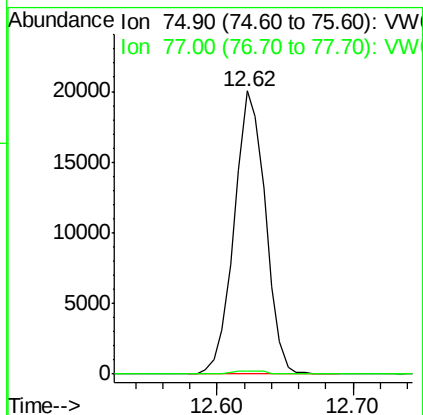
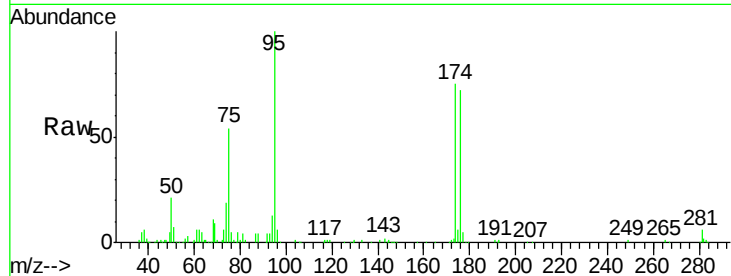
ClientSampleId :

Tot Ion: 75 Resp: 31915

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 177.853 ug/l

RT: 12.62 min Scan# 1810

Delta R.T. 0.10 min

Lab File: VW003892.D

Acq: 12 Jul 2018 03:53

Tgt Ion: 75 Resp: 31915

Ion Ratio Lower Upper

75 100

53 0.3 85.0 127.6#

89 0.0 36.3 54.5#

