

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW021319\  
 Data File : VW008658.D  
 Acq On : 14 Feb 2019 00:12  
 Operator : SY/VA  
 Sample : K1462-19  
 Misc : 6.62G/5ML/MSVOA W/SOIL  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 BFB

Quant Time: Feb 14 04:47:27 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W021319S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 14 04:06:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 36100    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 54706    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 46395    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 18614    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 23035    | 61.38 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 122.76% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 17699    | 52.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.20% |          |
| 50) Toluene-d8              | 10.32 | 98   | 63433    | 48.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.88%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 21514    | 43.62 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.24%  |          |

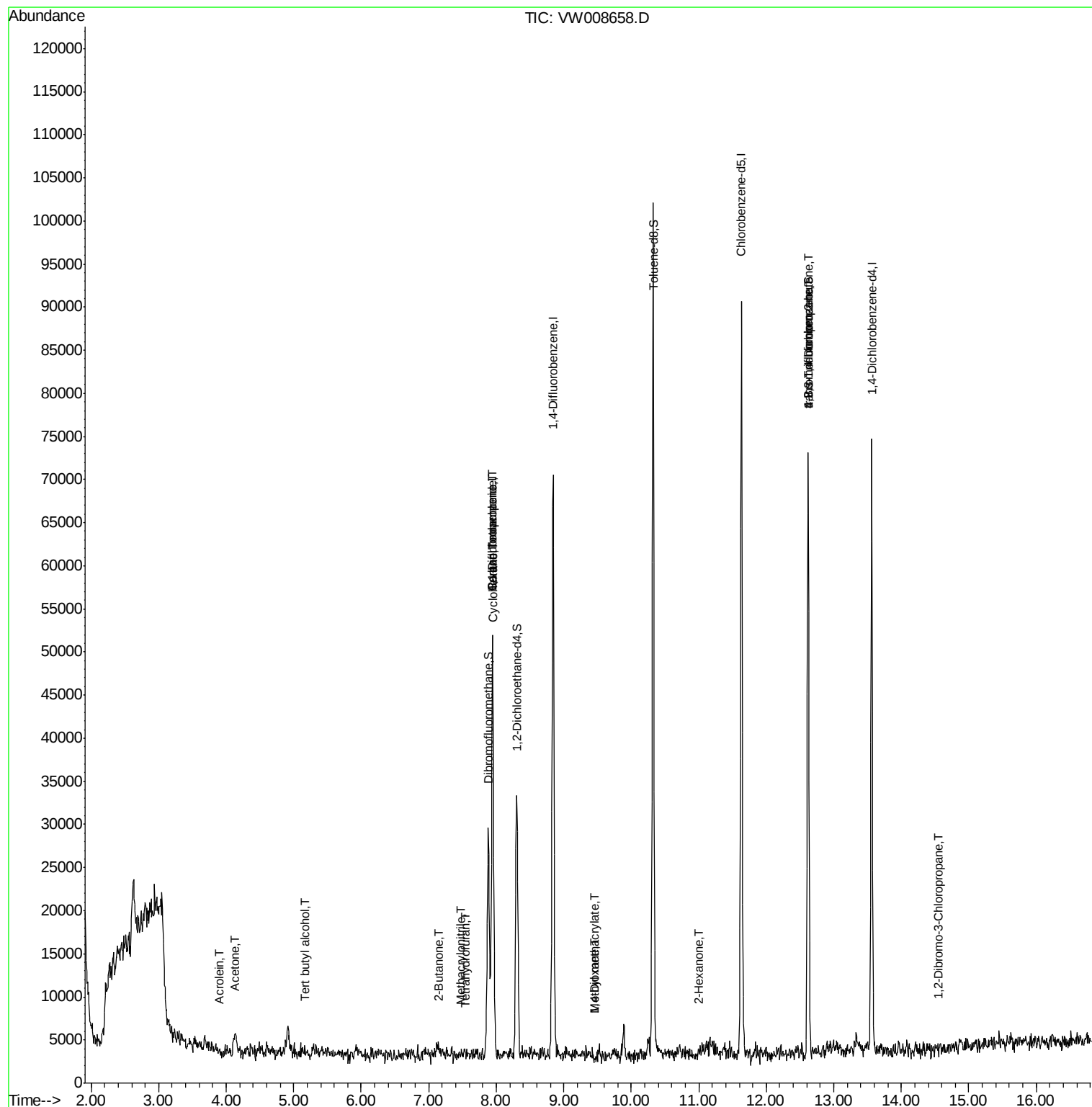
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.16  | 59   | 186      | 6.194     | ug/l # | 1      |
| 13) Acrolein                   | 3.90  | 56   | 83       | 2.683     | ug/l # | 1      |
| 16) Acetone                    | 4.12  | 43   | 4282     | 50.138    | ug/l # | 89     |
| 20) Methylene Chloride         | 4.90  | 84   | 794      | Below Cal | #      | 77     |
| 25) 2-Butanone                 | 7.15  | 43   | 199      | 1.650     | ug/l # | 51     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 433      | 5.448     | ug/l # | 71     |
| 31) Cyclohexane                | 7.96  | 56   | 1096     | 1.597     | ug/l # | 15     |
| 36) 1,1-Dichloropropene        | 7.94  | 75   | 2930     | 5.331     | ug/l # | 44     |
| 38) Carbon Tetrachloride       | 7.94  | 117  | 3849     | 7.043     | ug/l # | 17     |
| 41) Methacrylonitrile          | 7.49  | 41   | 292      | 1.957     | ug/l # | 42     |
| 48) Methyl methacrylate        | 9.45  | 41   | 368      | 1.502     | ug/l # | 34     |
| 49) 1,4-Dioxane                | 9.45  | 88   | 31       | 9.490     | ug/l # | 29     |
| 59) 2-Hexanone                 | 11.00 | 43   | 280      | 1.468     | ug/l   | 70     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 10386    | 56.506    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 10386    | 120.826   | ug/l # | 7      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.55 | 75   | 72       | 1.718     | ug/l # | 16     |

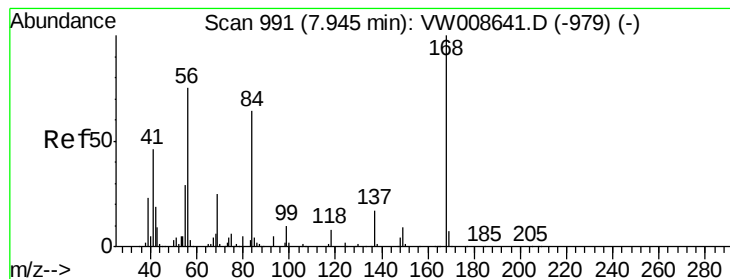
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_W  
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BFB

Quant Time: Feb 14 04:47:27 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W021319S.M  
Quant Title : SW846 8260  
QLast Update : Thu Feb 14 04:06:50 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. 0.00 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampleId :

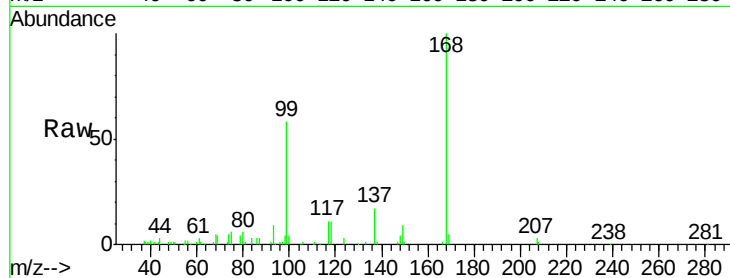
BFB

Tot Ion:168 Resp: 36100

Ion Ratio Lower Upper

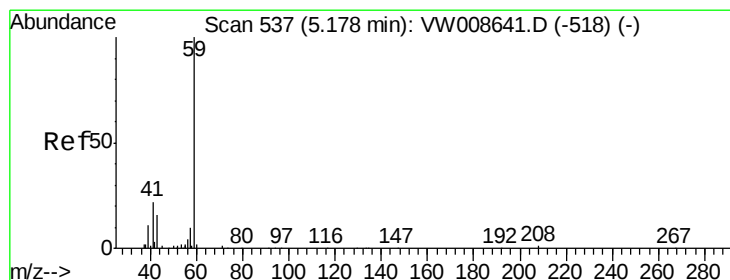
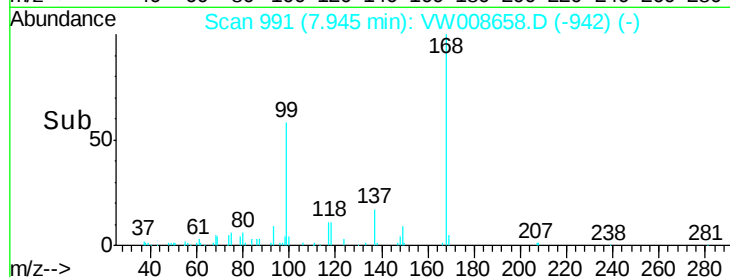
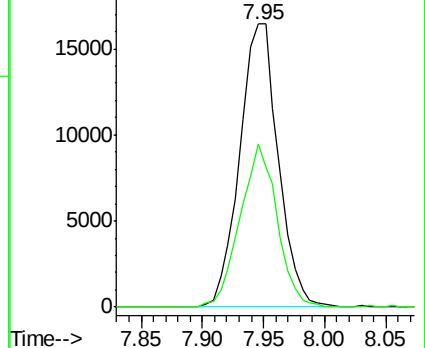
168 100

99 57.5 42.8 64.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: 6.194 ug/l

RT: 5.16 min Scan# 534

Delta R.T. -0.02 min

Lab File: VW008658.D

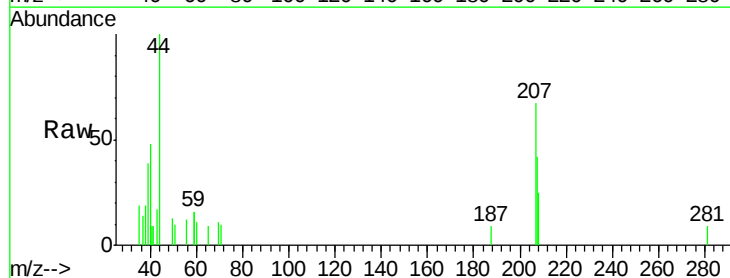
Acq: 14 Feb 2019 00:12

Tgt Ion: 59 Resp: 186

Ion Ratio Lower Upper

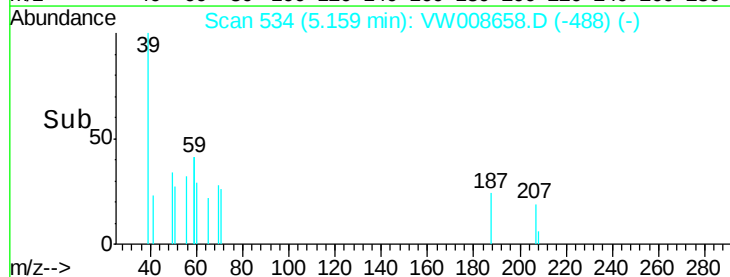
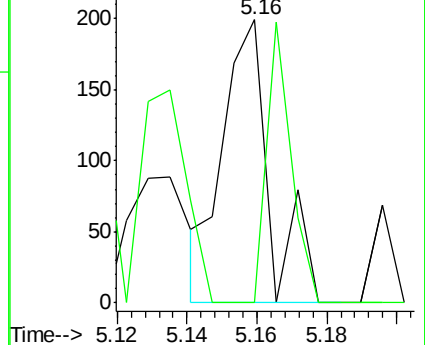
59 100

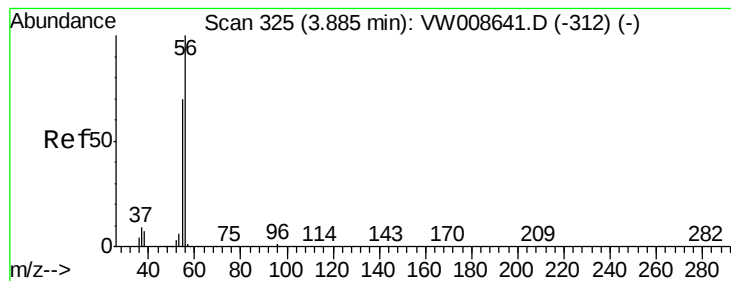
57 50.5 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#13

Acrolein

Concen: 2.683 ug/l

RT: 3.90 min Scan# 327

Delta R.T. 0.01 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampled :

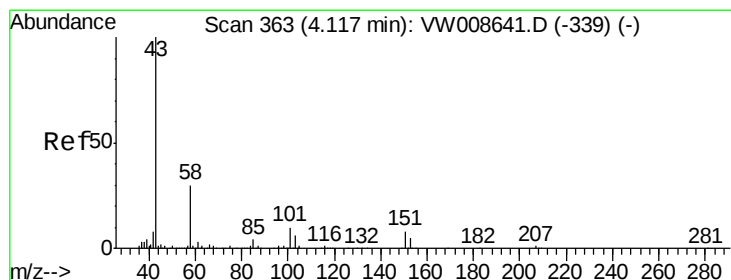
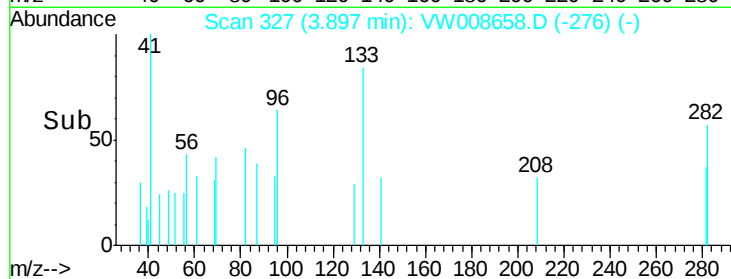
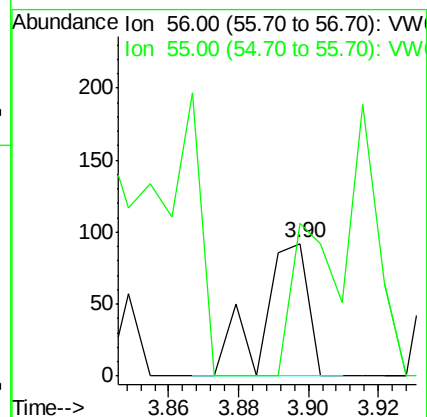
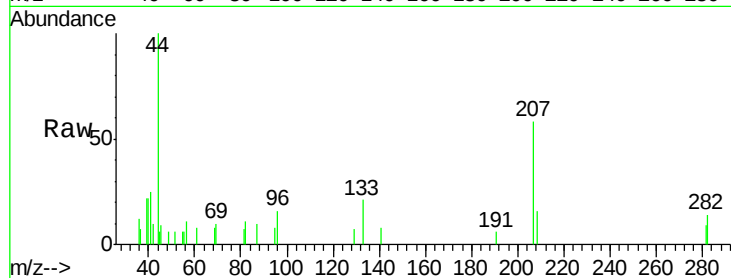
BFB

Tot Ion: 56 Resp: 83

Ion Ratio Lower Upper

56 100

55 221.7 57.4 86.2#



#16

Acetone

Concen: 50.138 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.01 min

Lab File: VW008658.D

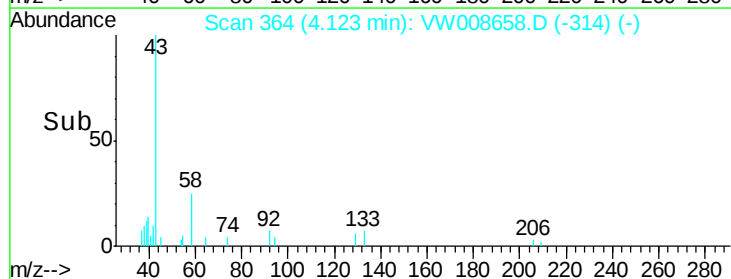
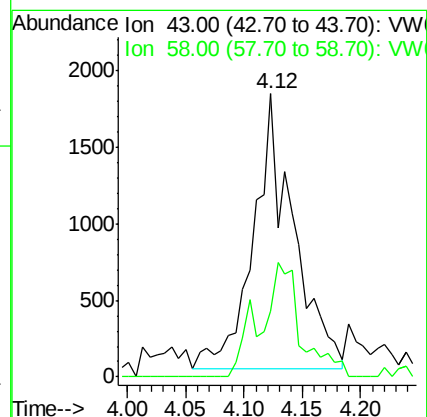
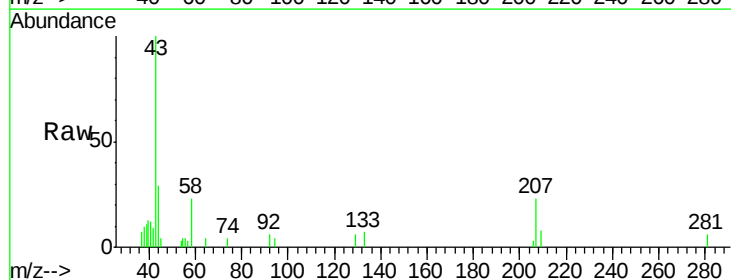
Acq: 14 Feb 2019 00:12

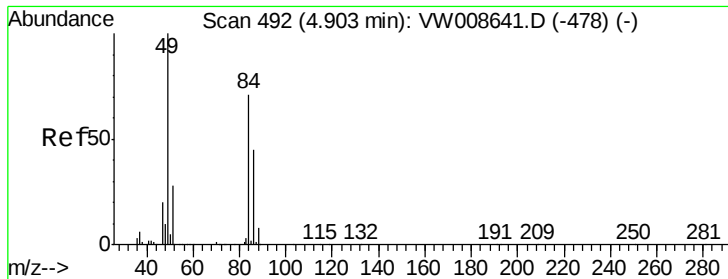
Tgt Ion: 43 Resp: 4282

Ion Ratio Lower Upper

43 100

58 23.9 24.1 36.1#





#20

Methylene Chloride

Concen: Below Cal

RT: 4.90 min Scan# 491

Delta R.T. -0.01 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampled :

BFB

Tot Ion: 84 Resp: 794

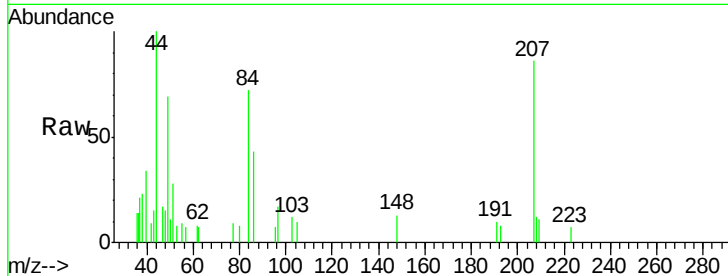
Ion Ratio Lower Upper

84 100

49 95.4 113.3 169.9#

51 38.8 32.1 48.1

86 60.1 50.9 76.3

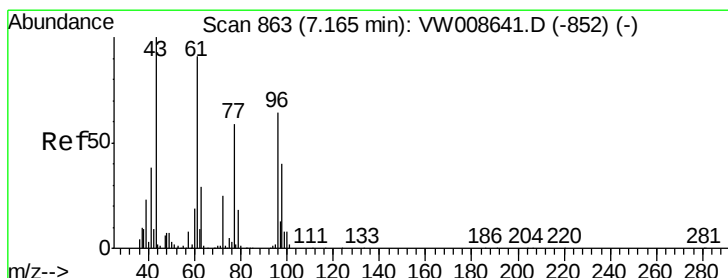
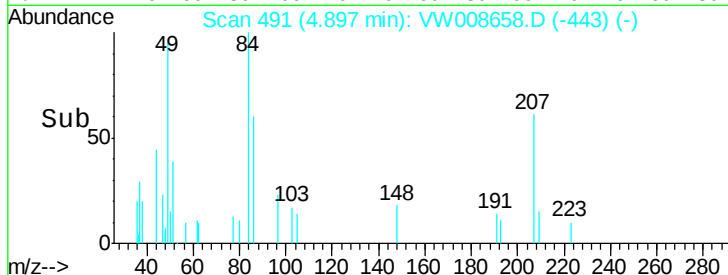
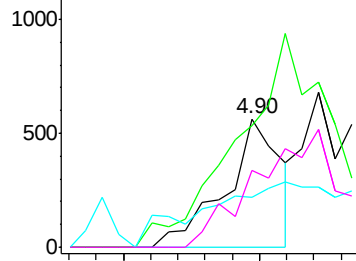


Abundance Ion 83.90 (83.60 to 84.60): VW

Ion 48.90 (48.60 to 49.60): VW

Ion 50.90 (50.60 to 51.60): VW

Ion 85.90 (85.60 to 86.60): VW



#25

2-Butanone

Concen: 1.650 ug/l

RT: 7.15 min Scan# 861

Delta R.T. -0.01 min

Lab File: VW008658.D

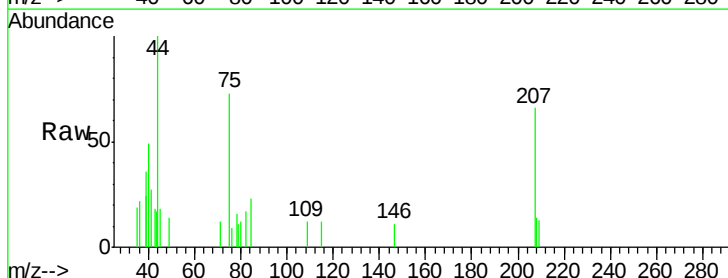
Acq: 14 Feb 2019 00:12

Tgt Ion: 43 Resp: 199

Ion Ratio Lower Upper

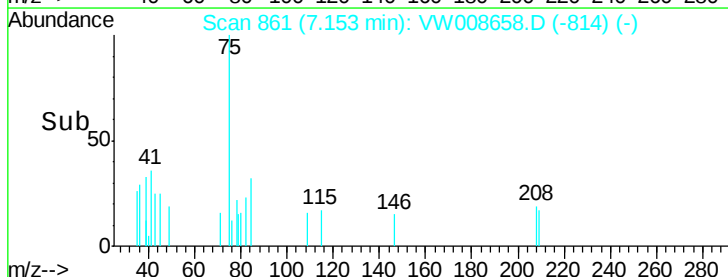
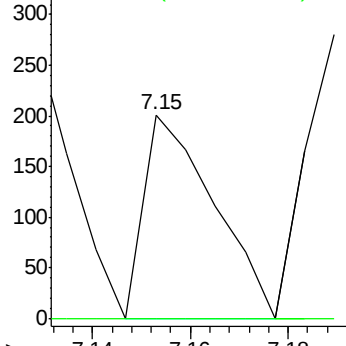
43 100

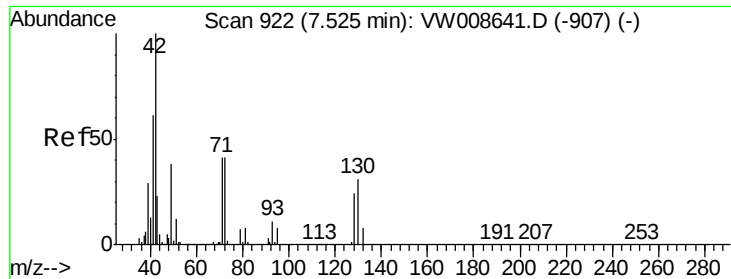
72 0.0 19.7 29.5#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW





#29

Tetrahydrofuran

Concen: 5.448 ug/l

RT: 7.54 min Scan# 925

Delta R.T. 0.02 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

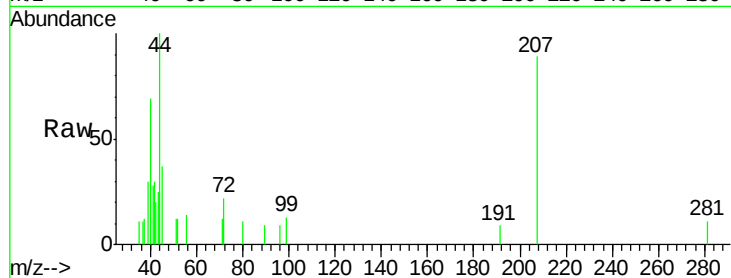
Instrument :

MSVOA\_W

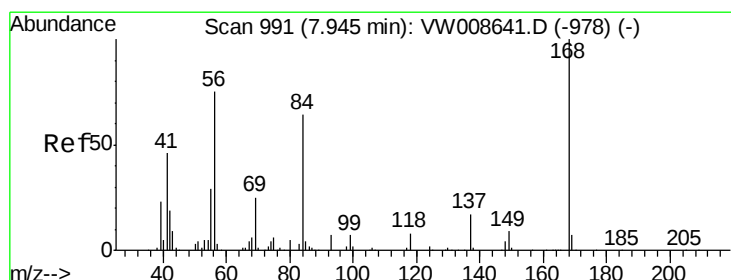
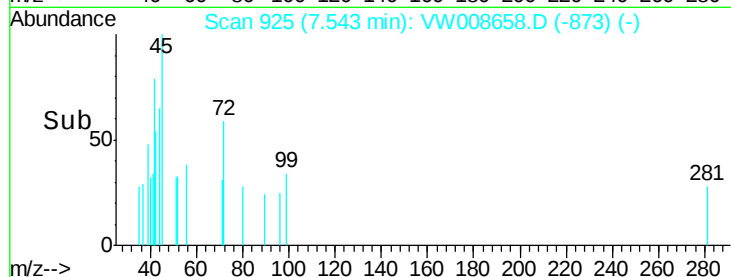
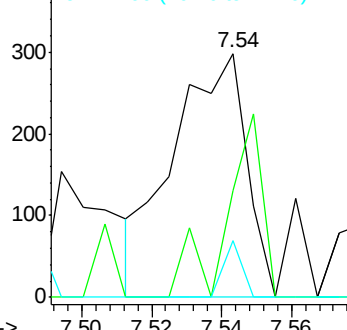
ClientSampleId :

BFB

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 42    | Resp: | 433   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 37.2  | 32.2  | 48.2  |
| 71       | 6.0   | 31.0  | 46.6# |



Abundance Ion 42.00 (41.70 to 42.70): VW  
Ion 72.00 (71.70 to 72.70): VW  
Ion 71.00 (70.70 to 71.70): VW



#31

Cyclohexane

Concen: 1.597 ug/l

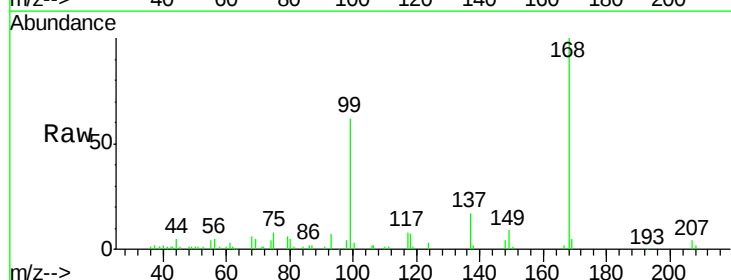
RT: 7.96 min Scan# 993

Delta R.T. 0.01 min

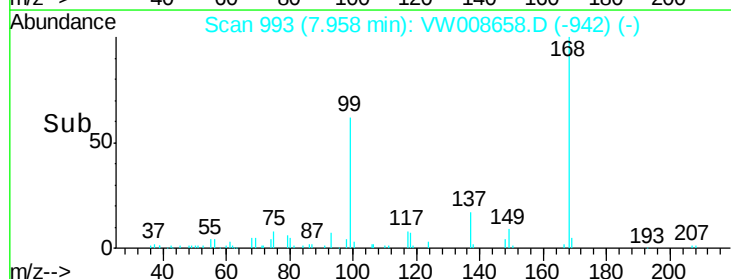
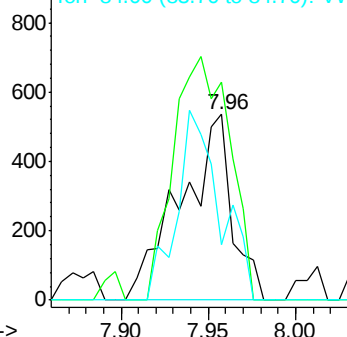
Lab File: VW008658.D

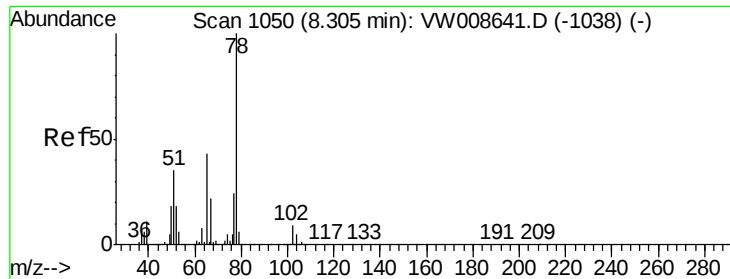
Acq: 14 Feb 2019 00:12

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 1096   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 117.0 | 26.4  | 39.6#  |
| 84       | 30.0  | 67.4  | 101.2# |



Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW

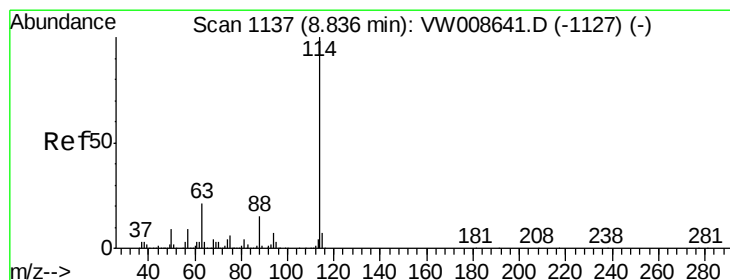
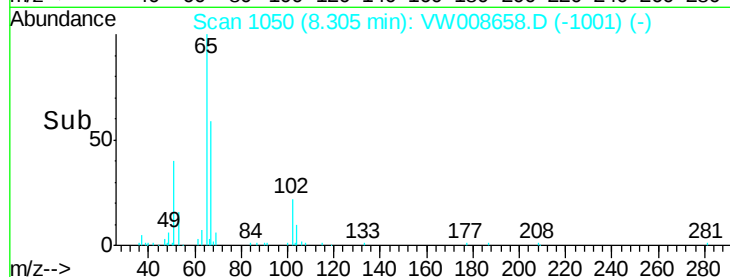
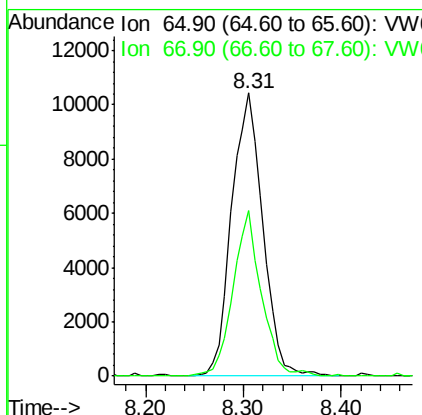
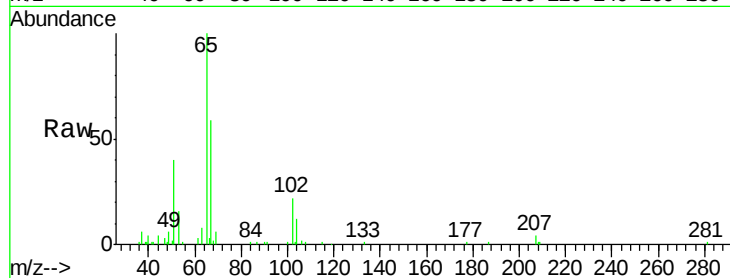




#33  
 1,2-Dichloroethane-d4  
 Concen: 61.376 ug/l  
 RT: 8.31 min Scan# 1050  
 Delta R.T. 0.00 min  
 Lab File: VW008658.D  
 Acq: 14 Feb 2019 00:12

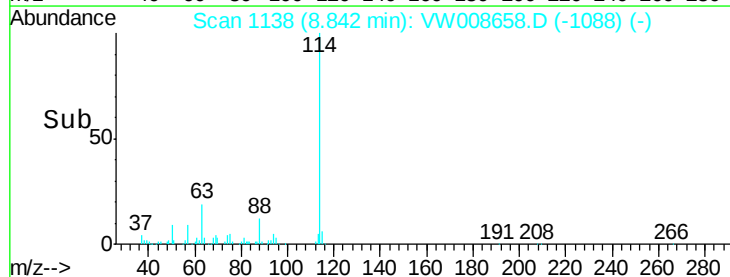
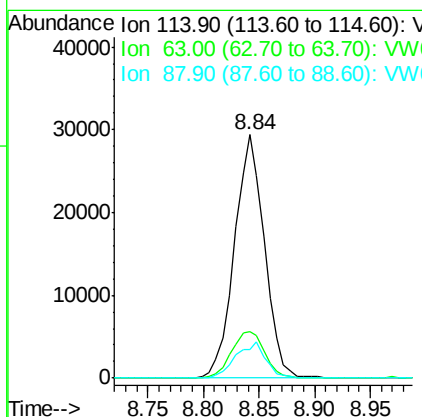
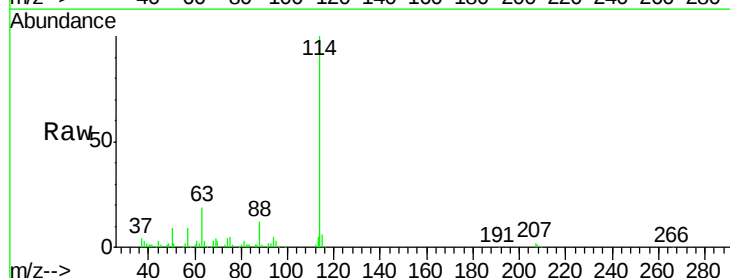
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 BFB

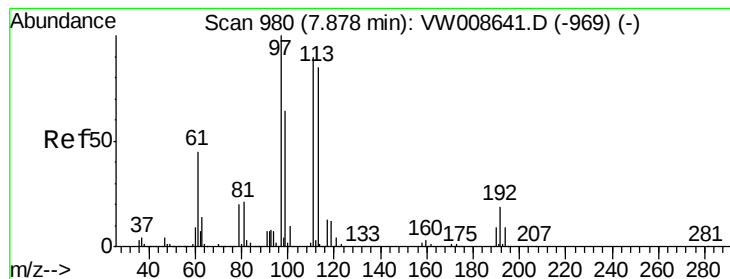
Tot Ion: 65 Resp: 23035  
 Ion Ratio Lower Upper  
 65 100  
 67 53.4 0.0 102.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. 0.01 min  
 Lab File: VW008658.D  
 Acq: 14 Feb 2019 00:12

Tgt Ion: 114 Resp: 54706  
 Ion Ratio Lower Upper  
 114 100  
 63 19.0 0.0 41.2  
 88 11.9 0.0 29.6





#35

Dibromofluoromethane

Concen: 52.103 ug/l

RT: 7.88 min Scan# 981

Delta R.T. 0.01 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampled :

BFB

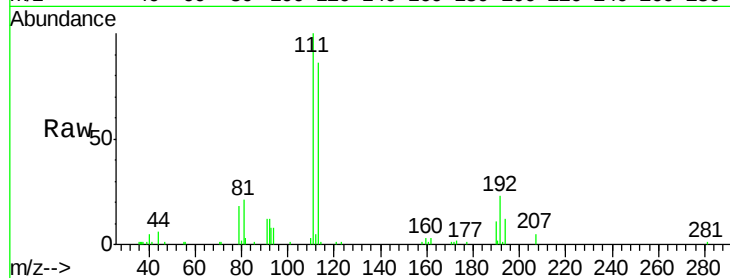
Tot Ion:113 Resp: 17699

Ion Ratio Lower Upper

113 100

111 105.1 84.0 126.0

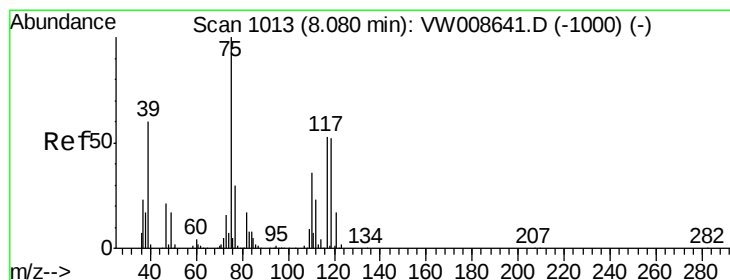
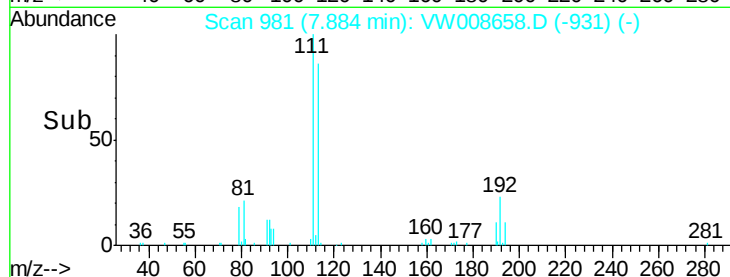
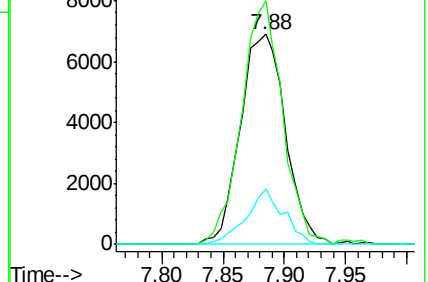
192 21.8 17.4 26.2



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: 5.331 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.14 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

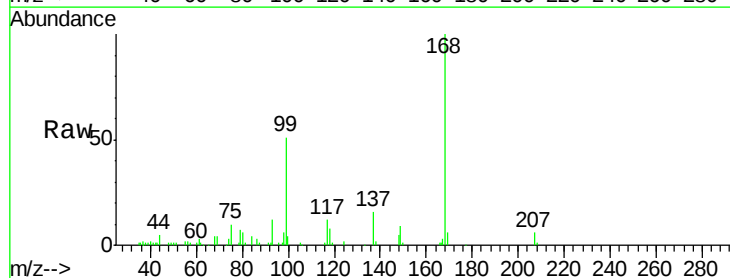
Tgt Ion: 75 Resp: 2930

Ion Ratio Lower Upper

75 100

110 2.6 17.8 53.3#

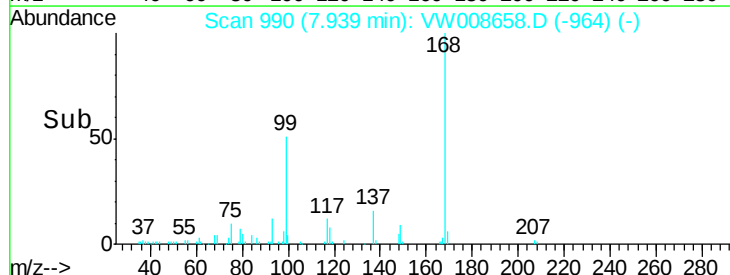
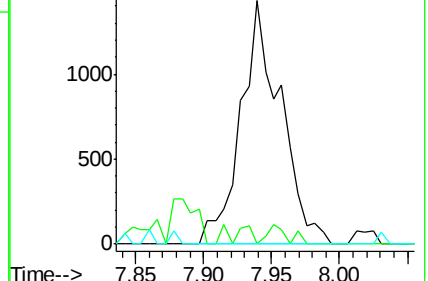
77 0.0 24.7 37.1#

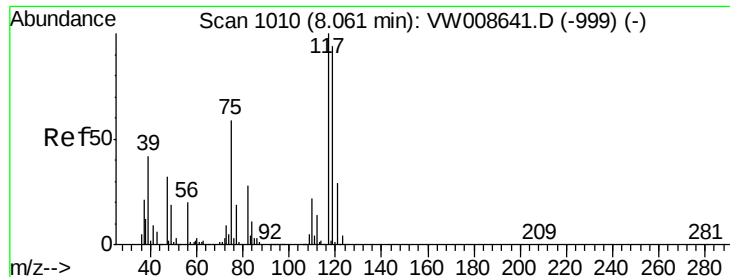


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW





#38

Carbon Tetrachloride

Concen: 7.043 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.12 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampleId :

BFB

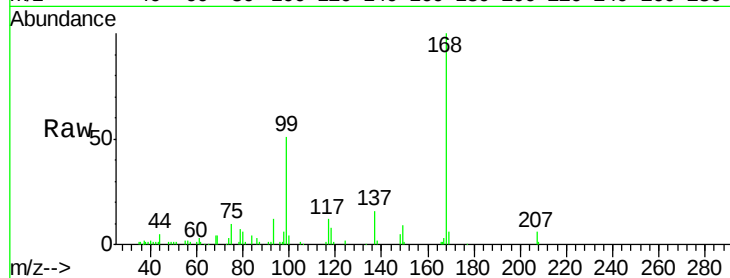
Tot Ion:117 Resp: 3849

Ion Ratio Lower Upper

117 100

119 4.8 75.1 112.7#

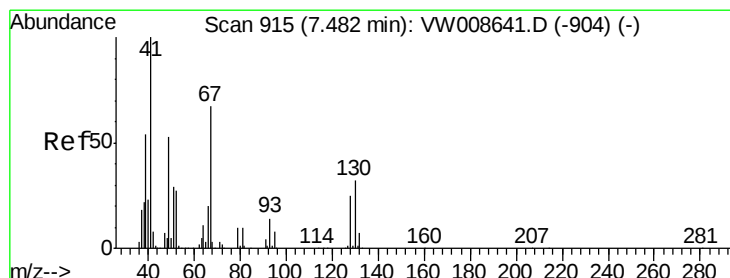
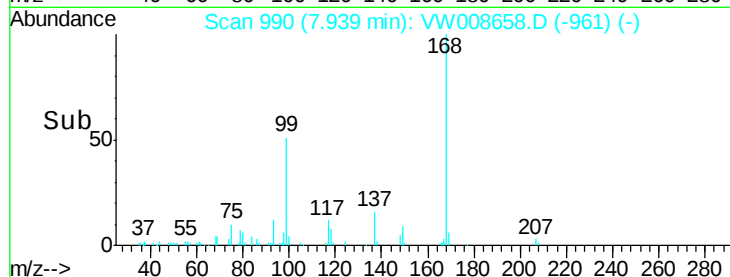
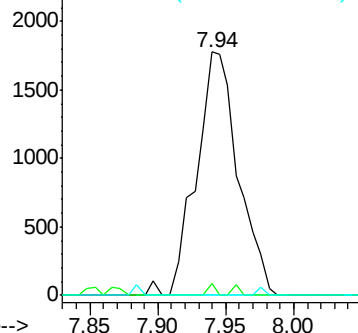
121 0.0 23.5 35.3#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 1.957 ug/l

RT: 7.49 min Scan# 916

Delta R.T. 0.01 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Tgt Ion: 41 Resp: 292

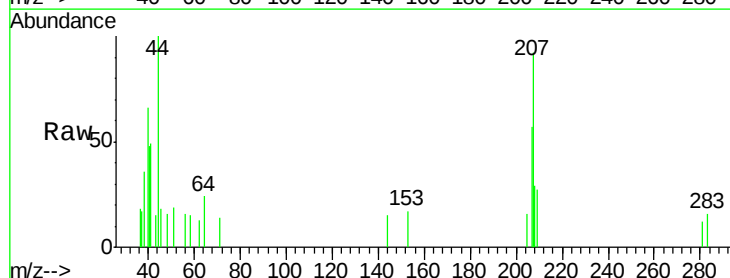
Ion Ratio Lower Upper

41 100

39 8.9 39.7 59.5#

67 19.9 52.5 78.7#

52 0.0 23.1 34.7#

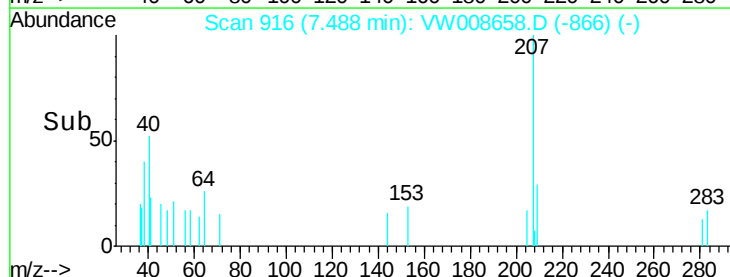
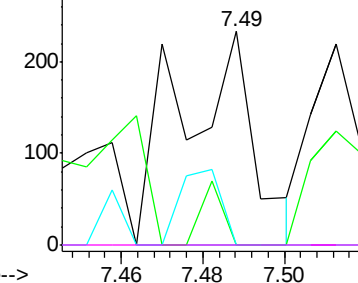


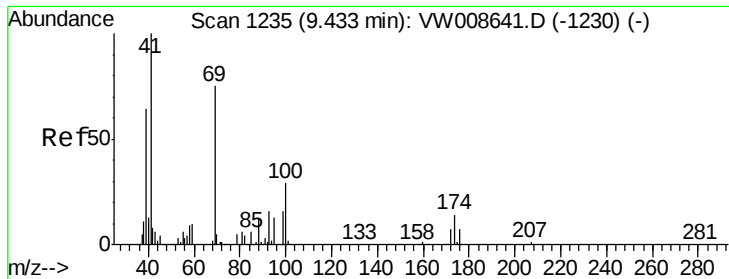
Abundance Ion 41.00 (40.70 to 41.70): VW

Ion 39.00 (38.70 to 39.70): VW

Ion 67.00 (66.70 to 67.70): VW

Ion 52.00 (51.70 to 52.70): VW

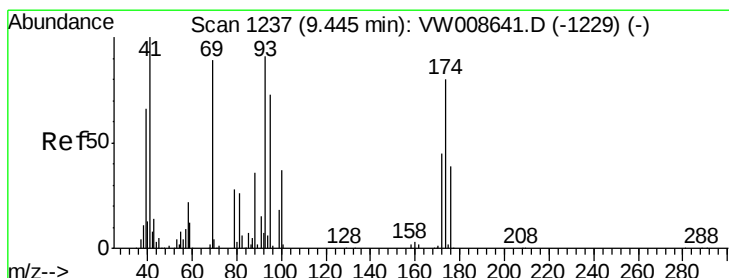
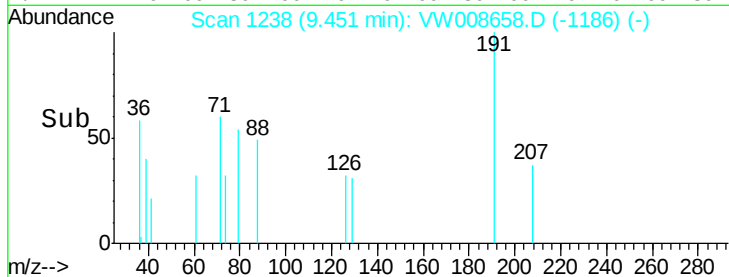
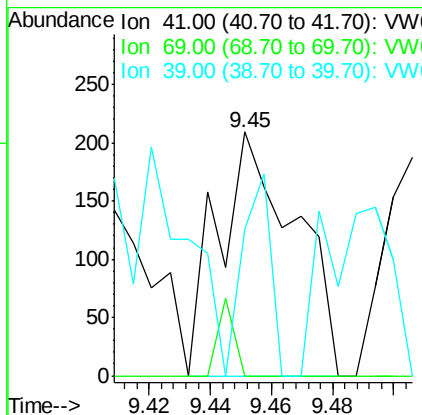
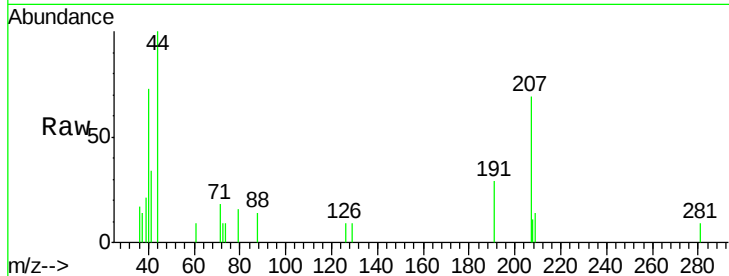




#48  
Methvl methacrylate  
Concen: 1.502 ug/l  
RT: 9.45 min Scan# 1238  
Delta R.T. 0.02 min  
Lab File: VW008658.D  
Acq: 14 Feb 2019 00:12

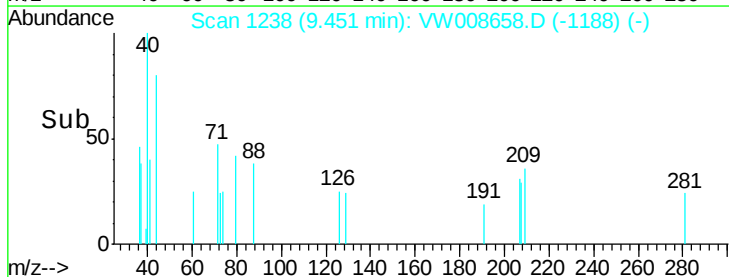
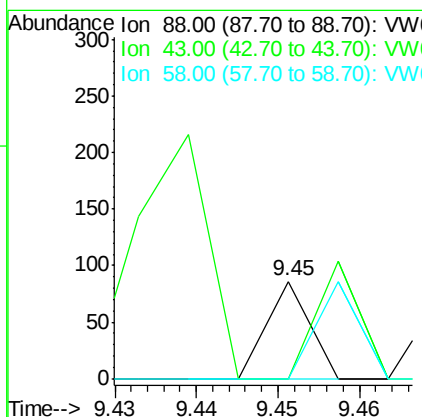
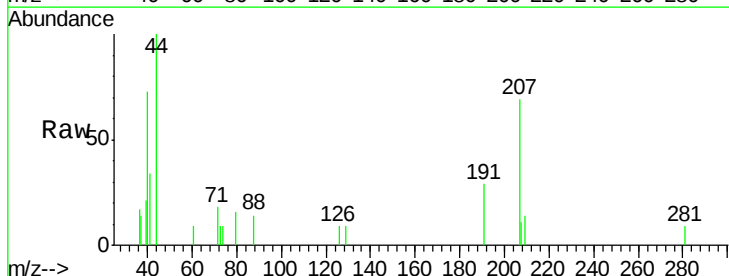
Instrument :  
MSVOA\_W  
ClientSampled :  
BFB

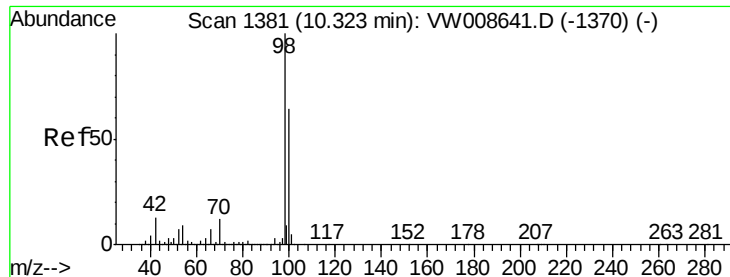
Tot Ion: 41 Resp: 368  
Ion Ratio Lower Upper  
41 100  
69 6.8 64.1 96.1#  
39 29.6 52.3 78.5#



#49  
1,4-Dioxane  
Concen: 9.490 ug/l  
RT: 9.45 min Scan# 1238  
Delta R.T. 0.01 min  
Lab File: VW008658.D  
Acq: 14 Feb 2019 00:12

Tgt Ion: 88 Resp: 31  
Ion Ratio Lower Upper  
88 100  
43 122.6 31.0 46.6#  
58 100.0 57.0 85.6#





#50

Toluene-d8

Concen: 48.442 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampleId :

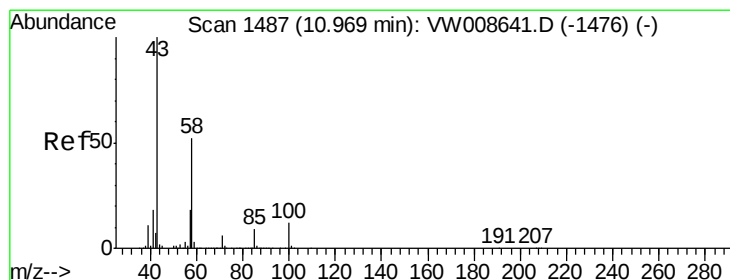
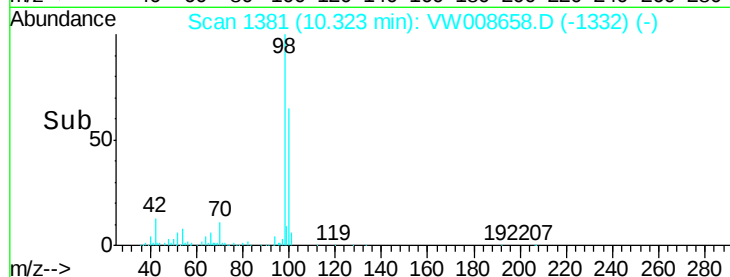
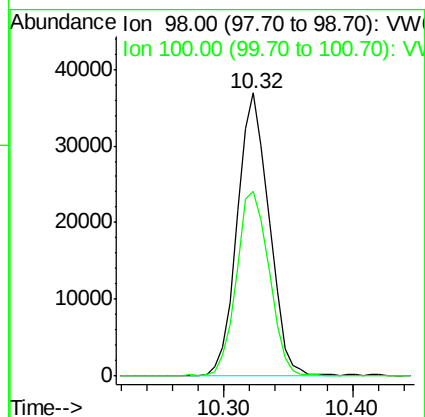
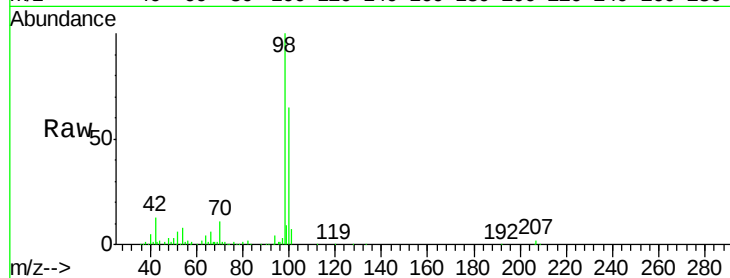
BFB

Tot Ion: 98 Resp: 63433

Ion Ratio Lower Upper

98 100

100 67.1 52.2 78.4



#59

2-Hexanone

Concen: 1.468 ug/l

RT: 11.00 min Scan# 1492

Delta R.T. 0.03 min

Lab File: VW008658.D

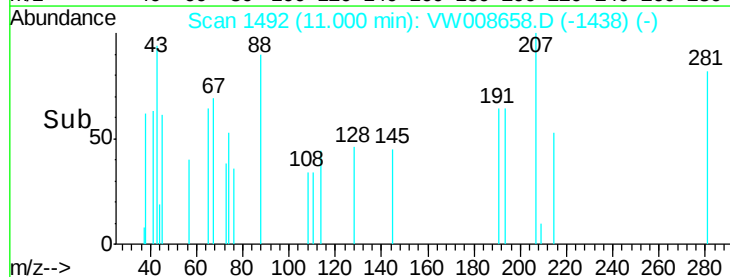
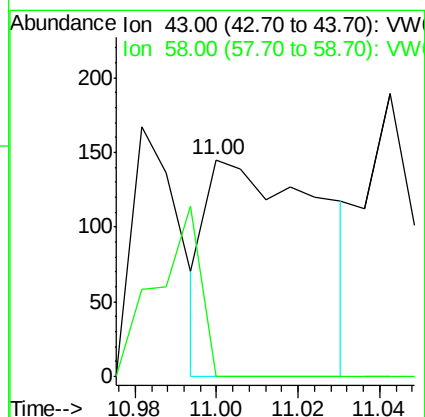
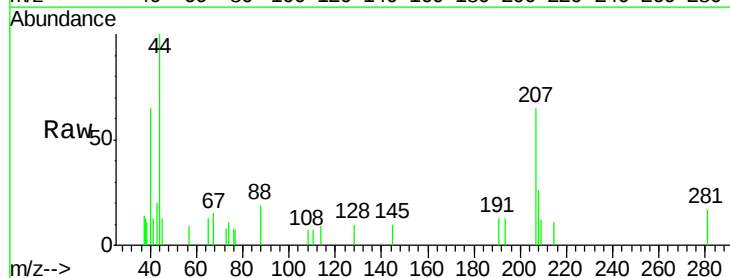
Acq: 14 Feb 2019 00:12

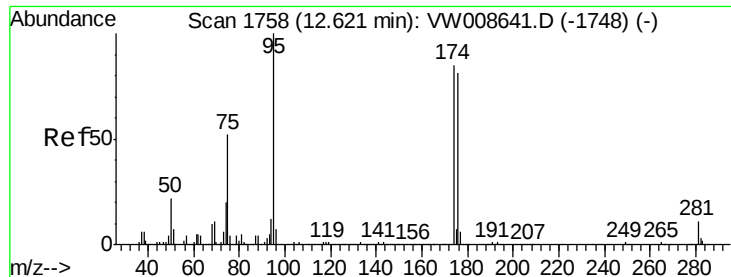
Tgt Ion: 43 Resp: 280

Ion Ratio Lower Upper

43 100

58 30.4 25.6 76.6





#62

4-Bromofluorobenzene

Concen: 43.619 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.00 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampleId :

BFB

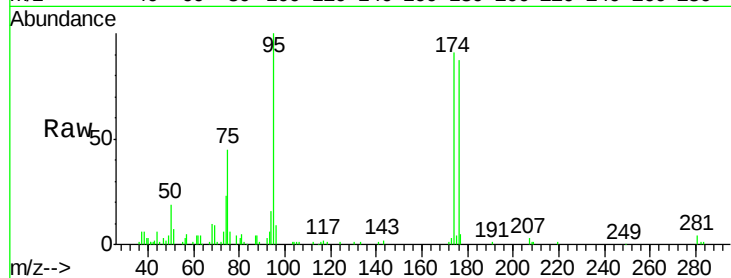
Tot Ion: 95 Resp: 21514

Ion Ratio Lower Upper

95 100

174 83.3 0.0 163.2

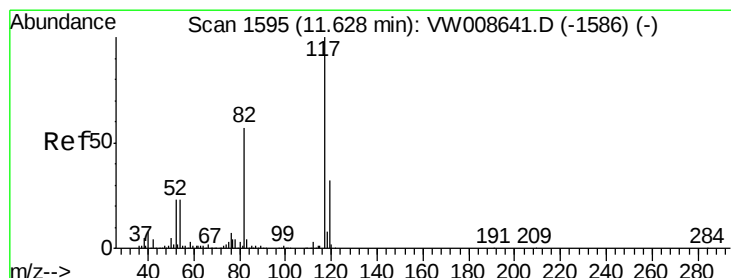
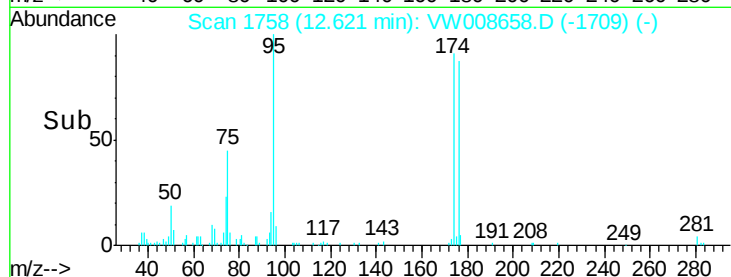
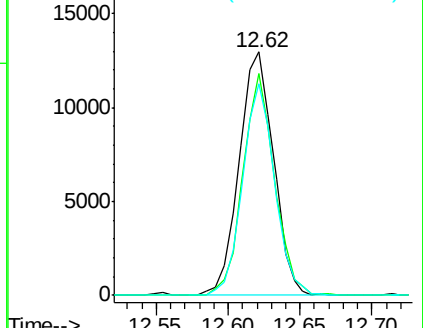
176 80.5 0.0 158.0



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1596

Delta R.T. 0.01 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

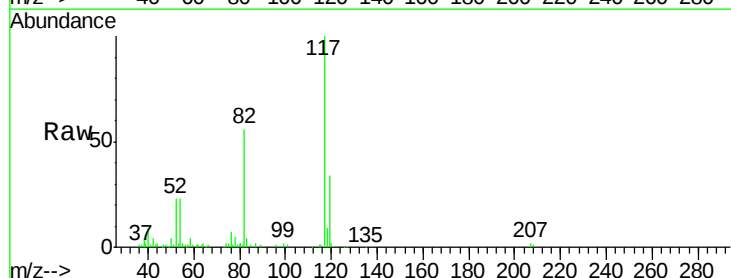
Tgt Ion: 117 Resp: 46395

Ion Ratio Lower Upper

117 100

82 56.5 45.6 68.4

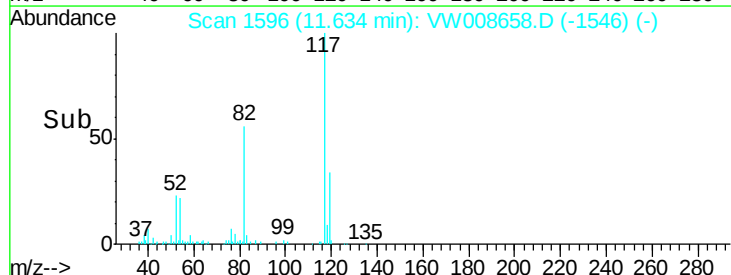
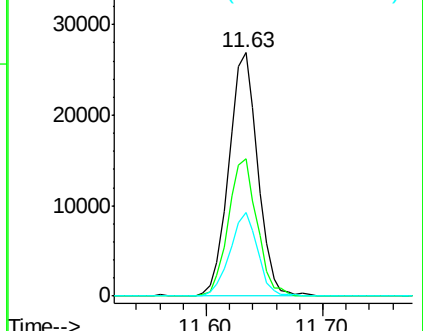
119 34.5 25.7 38.5

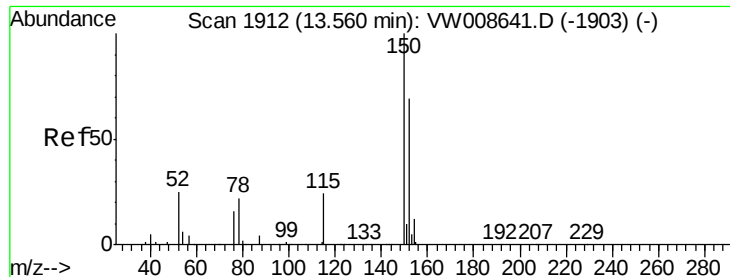


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW



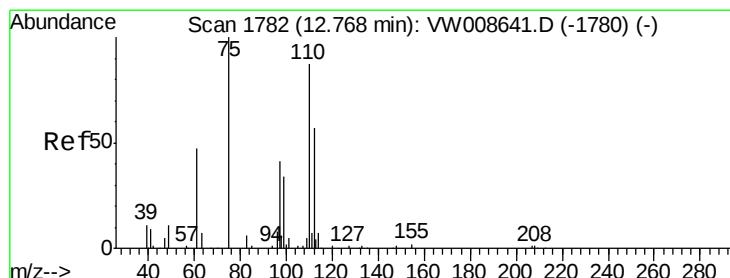
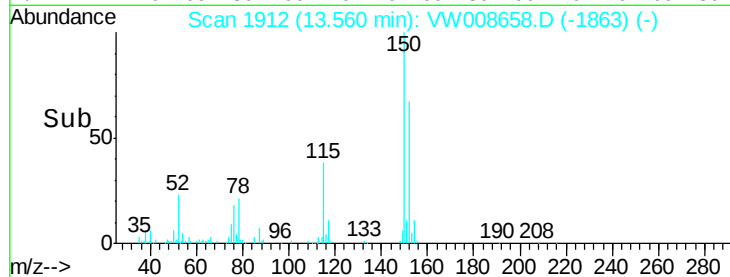
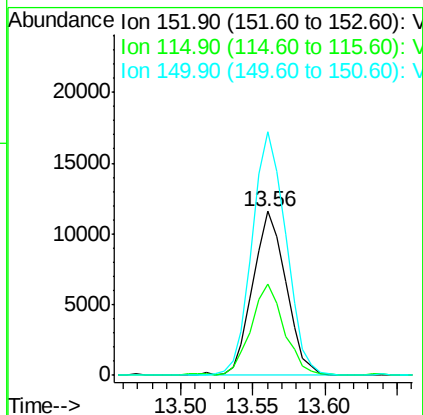
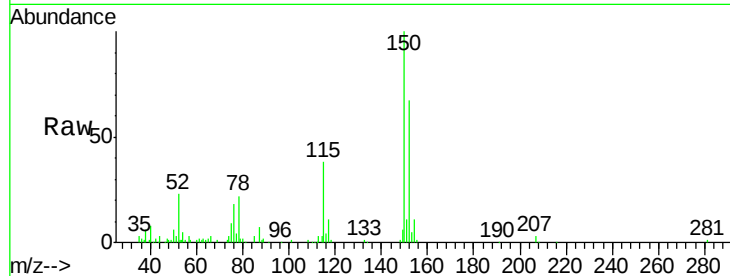


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. 0.00 min  
Lab File: VW008658.D  
Acq: 14 Feb 2019 00:12

Instrument :  
MSVOA\_W  
ClientSampleId :  
BFB

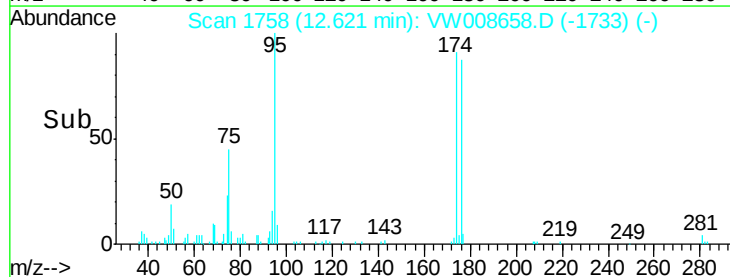
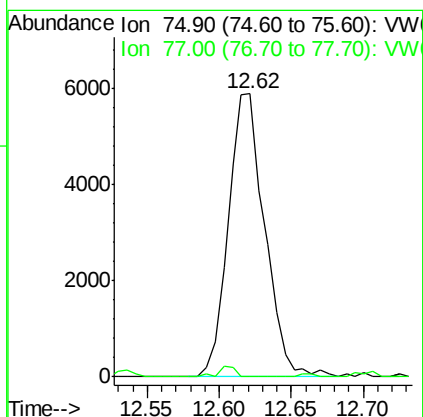
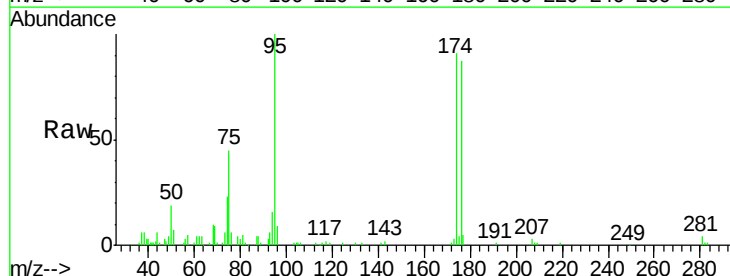
Tot Ion:152 Resp: 18614  
Ion Ratio Lower Upper  
152 100  
115 55.2 29.3 87.8  
150 150.1 0.0 352.8

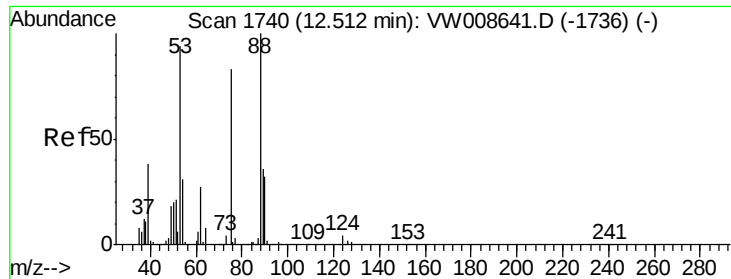


#76

1,2,3-Trichloropropane  
Concen: 56.506 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.15 min  
Lab File: VW008658.D  
Acq: 14 Feb 2019 00:12

Tgt Ion: 75 Resp: 10386  
Ion Ratio Lower Upper  
75 100  
77 1.7 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 120.826 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.11 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Instrument :

MSVOA\_W

ClientSampleId :

BFB

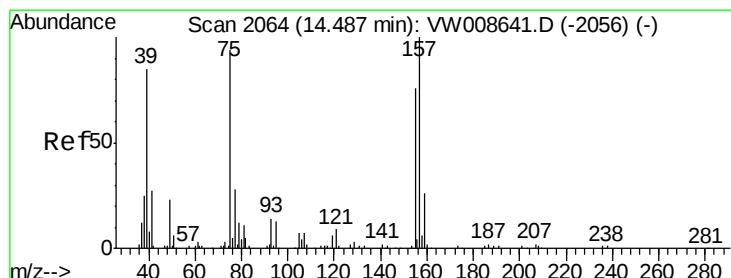
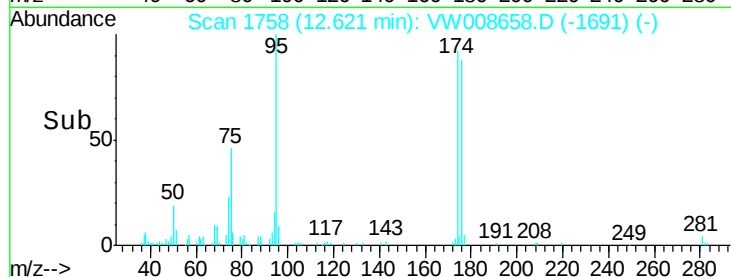
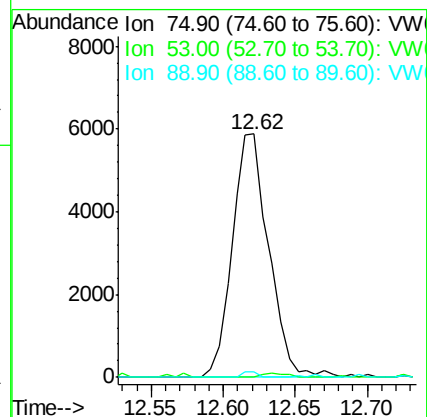
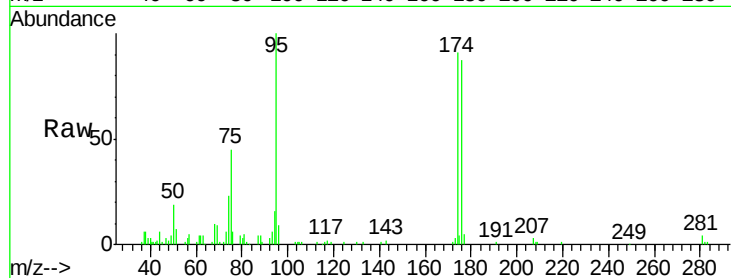
Tot Ion: 75 Resp: 10386

Ion Ratio Lower Upper

75 100

53 1.1 87.4 131.0#

89 1.0 37.0 55.4#



#92

1,2-Dibromo-3-Chloropropane

Concen: 1.718 ug/l

RT: 14.55 min Scan# 2074

Delta R.T. 0.06 min

Lab File: VW008658.D

Acq: 14 Feb 2019 00:12

Tgt Ion: 75 Resp: 72

Ion Ratio Lower Upper

75 100

155 30.6 41.8 125.4#

157 0.0 53.8 161.4#

