

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF111518\  
 Data File : VF060752.D  
 Acq On : 15 Nov 2018 17:48  
 Operator : VA/AP  
 Sample : J5942-01  
 Misc : 6.38g/5mL/MSVOA-F/SOIL  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Nov 16 04:37:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F111318S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 14 03:11:14 2018  
 Response via : Initial Calibration

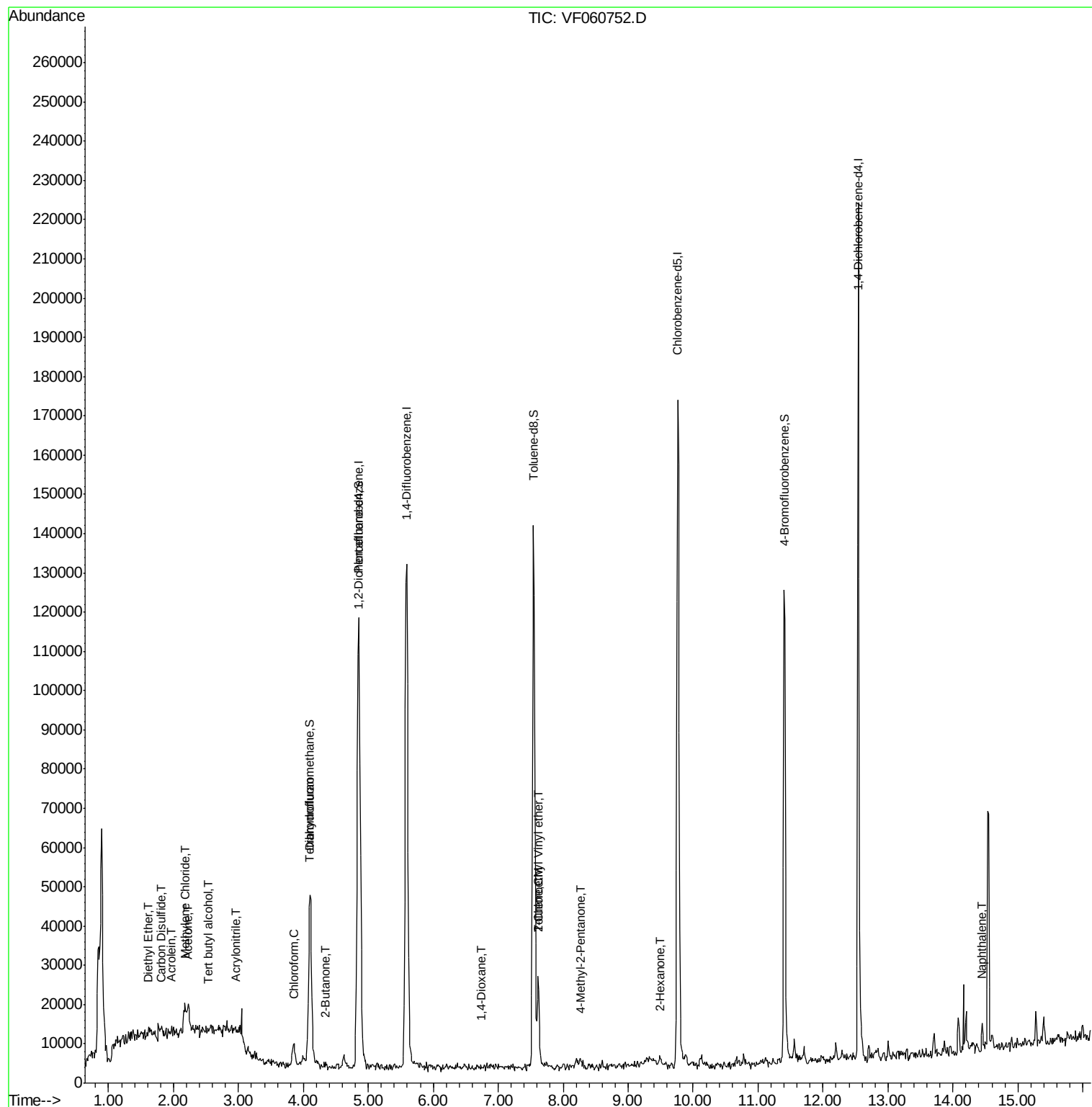
| Internal Standards            | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-----------|--------|----------|
| 1) Pentafluorobenzene         | 4.85  | 168  | 94046    | 50.00     | ug/l   | -0.04    |
| 34) 1,4-Difluorobenzene       | 5.59  | 114  | 152705   | 50.00     | ug/l   | -0.03    |
| 63) Chlorobenzene-d5          | 9.76  | 117  | 125505   | 50.00     | ug/l   | -0.03    |
| 72) 1,4-Dichlorobenzene-d4    | 12.55 | 152  | 52216    | 50.00     | ug/l   | -0.02    |
| System Monitoring Compounds   |       |      |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 4.83  | 65   | 37982    | 35.41     | ug/l   | -0.03    |
| Spiked Amount 50.000          |       |      | Recovery | =         | 70.82% |          |
| 35) Dibromofluoromethane      | 4.11  | 113  | 45594    | 39.72     | ug/l   | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =         | 79.44% |          |
| 50) Toluene-d8                | 7.54  | 98   | 121604   | 40.59     | ug/l   | -0.03    |
| Spiked Amount 50.000          |       |      | Recovery | =         | 81.18% |          |
| 62) 4-Bromofluorobenzene      | 11.40 | 95   | 48997    | 34.84     | ug/l   | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =         | 69.68% |          |
| Target Compounds              |       |      |          |           |        |          |
|                               |       |      |          |           | Qvalue |          |
| 8) Diethyl Ether              | 1.63  | 74   | 542      | 2.049     | ug/l   | 56       |
| 11) Tert butyl alcohol        | 2.54  | 59   | 178      | 3.646     | ug/l # | 1        |
| 13) Acrolein                  | 1.97  | 56   | 639      | 14.315    | ug/l # | 39       |
| 15) Acrylonitrile             | 2.95  | 53   | 470      | 4.518     | ug/l # | 36       |
| 16) Acetone                   | 2.23  | 43   | 5244     | 22.871    | ug/l # | 92       |
| 17) Carbon Disulfide          | 1.80  | 76   | 2598     | 1.120     | ug/l # | 78       |
| 20) Methylene Chloride        | 2.17  | 84   | 5911     | 5.193     | ug/l # | 74       |
| 25) 2-Butanone                | 4.34  | 43   | 1877     | 4.977     | ug/l # | 56       |
| 29) Tetrahydrofuran           | 4.08  | 42   | 909      | 5.843     | ug/l # | 54       |
| 30) Chloroform                | 3.86  | 83   | 5932     | 2.353     | ug/l # | 81       |
| 41) Methacrylonitrile         | 4.74  | 41   | 133      | Below Cal | #      | 54       |
| 49) 1,4-Dioxane               | 6.74  | 88   | 60       | 11.104    | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone      | 8.25  | 43   | 3175     | 5.029     | ug/l   | 99       |
| 52) Toluene                   | 7.61  | 92   | 11374    | 4.299     | ug/l   | 94       |
| 58) 2-Chloroethyl Vinyl ether | 7.61  | 63   | 1827     | 23.298    | ug/l   | 100      |
| 59) 2-Hexanone                | 9.49  | 43   | 2152     | 4.850     | ug/l   | 66       |
| 95) Naphthalene               | 14.45 | 128  | 3472     | 1.615     | ug/l # | 86       |

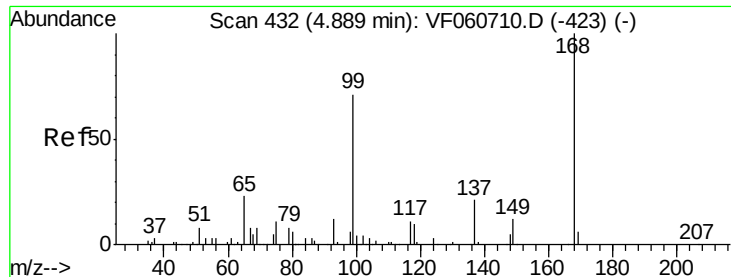
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF111518\  
Data File : VF060752.D  
Acq On : 15 Nov 2018 17:48  
Operator : VA/AP  
Sample : J5942-01  
Misc : 6.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :

Quant Time: Nov 16 04:37:49 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F111318S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 14 03:11:14 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.85 min Scan# 428

Delta R.T. -0.04 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

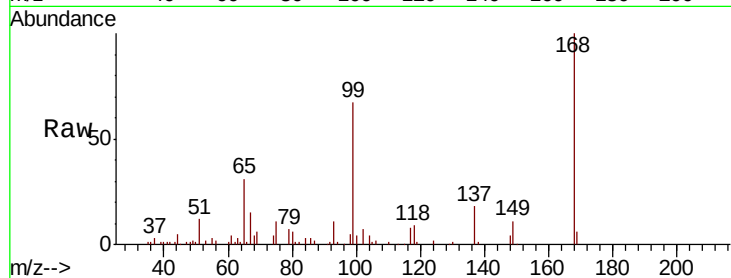
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:168 Resp: 94046

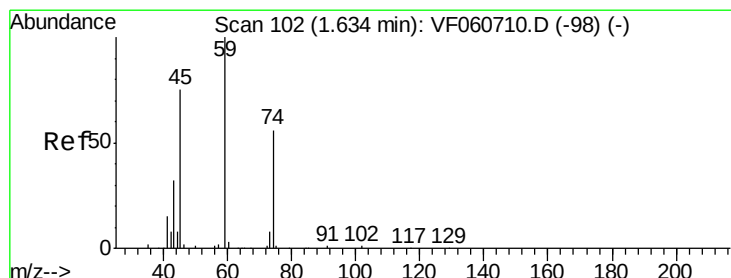
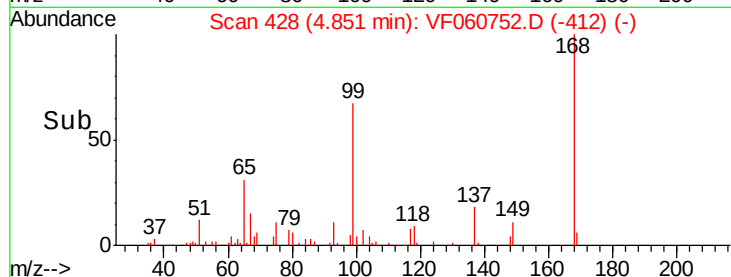
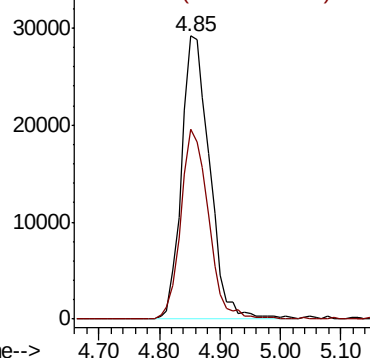
Ion Ratio Lower Upper

168 100

99 67.3 57.2 85.8



Abundance Ion 168.00 (167.70 to 168.70): VF0  
Ion 99.00 (98.70 to 99.70): VF0



#8

Diethyl Ether

Concen: 2.049 ug/l

RT: 1.63 min Scan# 101

Delta R.T. -0.01 min

Lab File: VF060752.D

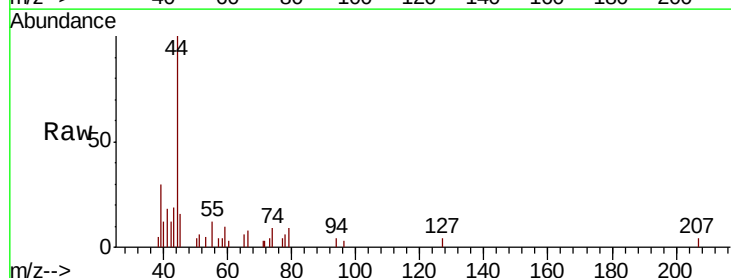
Acq: 15 Nov 2018 17:48

Tgt Ion: 74 Resp: 542

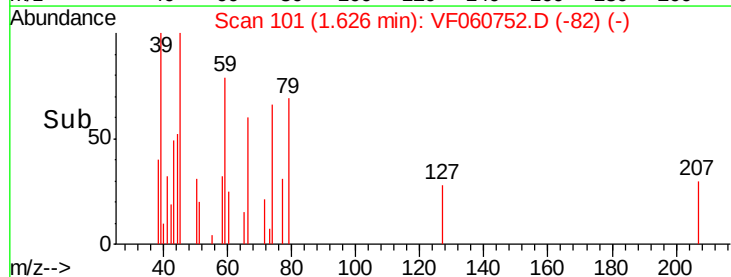
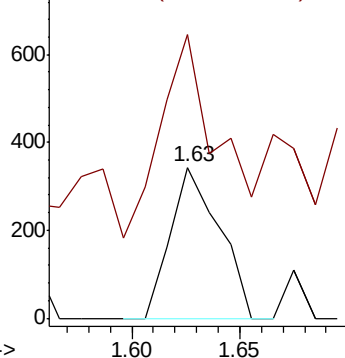
Ion Ratio Lower Upper

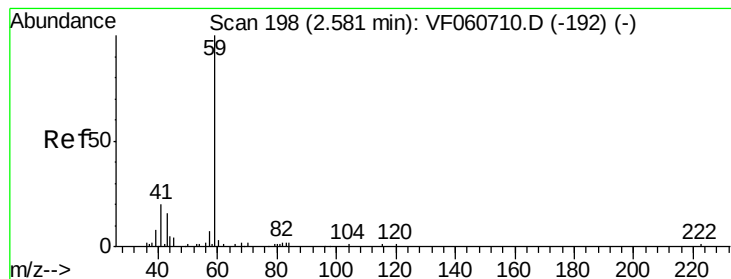
74 100

45 187.5 67.7 203.1



Abundance Ion 74.00 (73.70 to 74.70): VF0  
Ion 45.00 (44.70 to 45.70): VF0



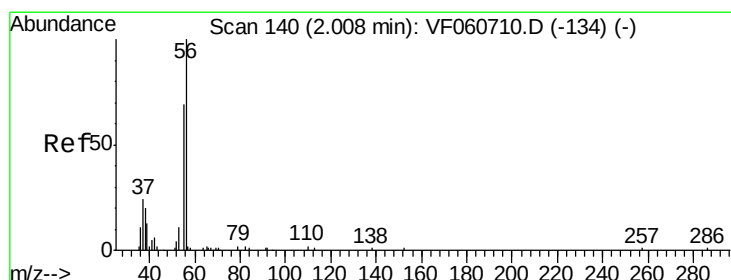
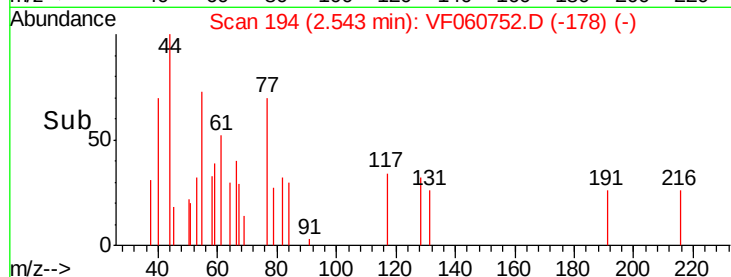
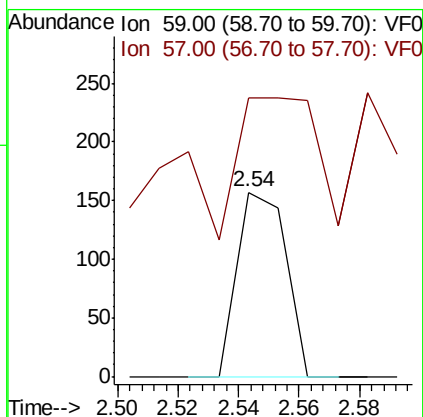
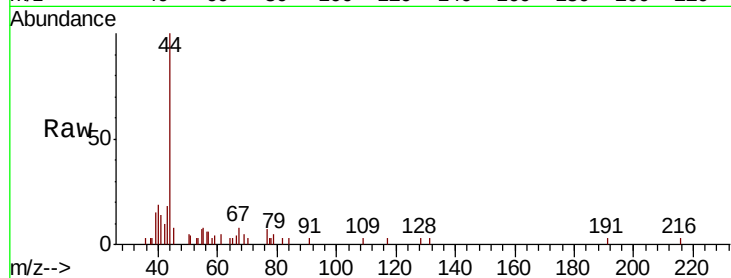


#11

Tert butyl alcohol  
Concen: 3.646 ug/l  
RT: 2.54 min Scan# 194  
Delta R.T. -0.04 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Instrument :  
MSVOA\_F  
ClientSampled :

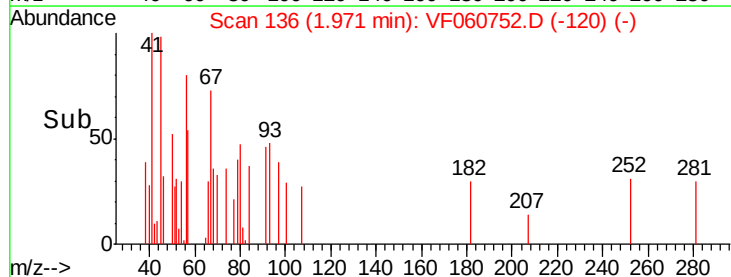
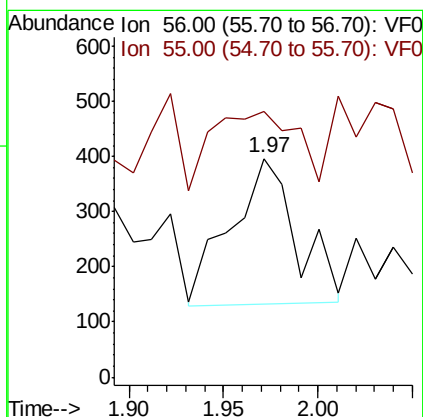
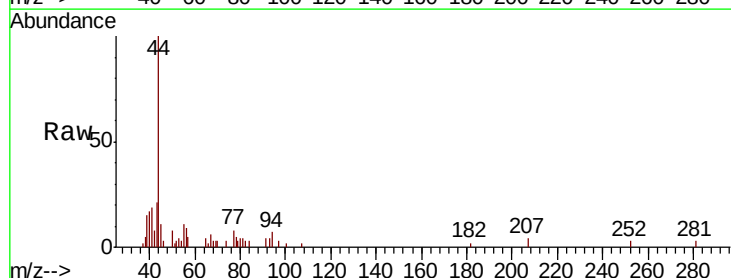
Tot Ion: 59 Resp: 178  
Ion Ratio Lower Upper  
59 100  
57 151.6 10.5 15.7#

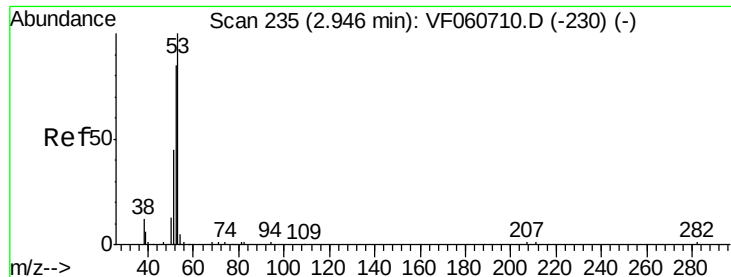


#13

Acrolein  
Concen: 14.315 ug/l  
RT: 1.97 min Scan# 136  
Delta R.T. -0.04 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Tgt Ion: 56 Resp: 639  
Ion Ratio Lower Upper  
56 100  
55 121.5 56.6 85.0#





#15

Acrylonitrile

Concen: 4.518 ug/l

RT: 2.95 min Scan# 235

Delta R.T. 0.00 min

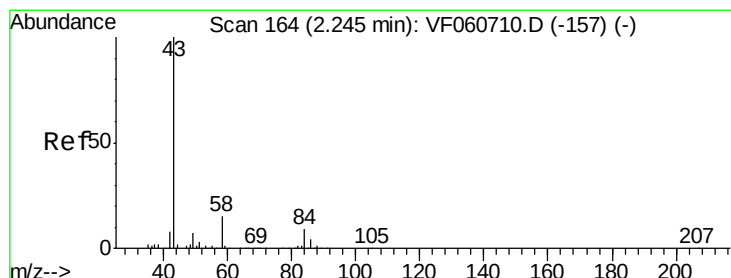
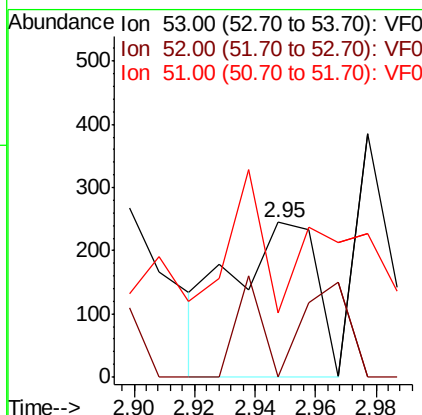
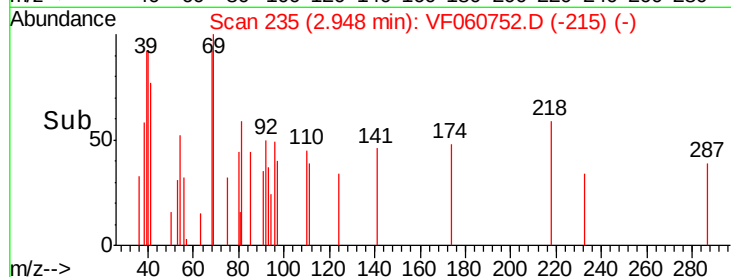
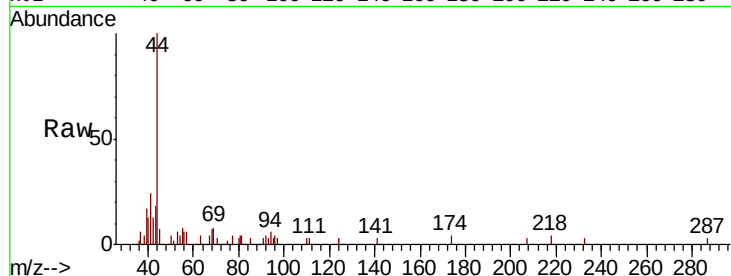
Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 53 Resp: 470

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 53  | 100   |       |        |
| 52  | 0.0   | 68.8  | 103.2# |
| 51  | 41.2  | 36.7  | 55.1   |



#16

Acetone

Concen: 22.871 ug/l

RT: 2.23 min Scan# 162

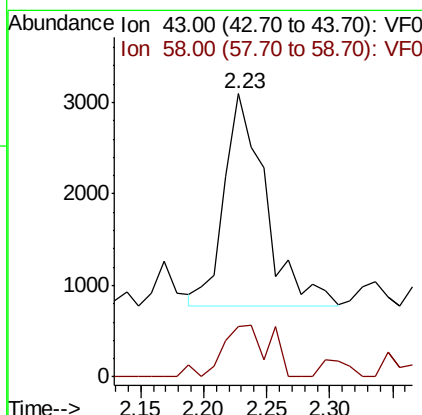
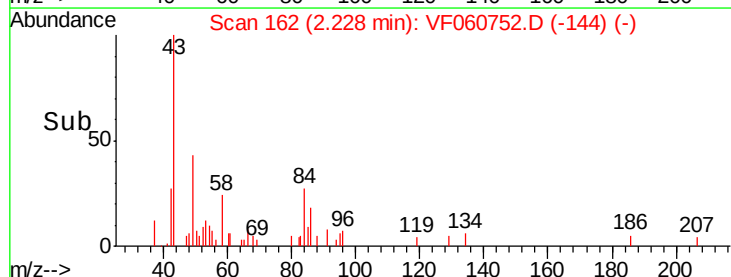
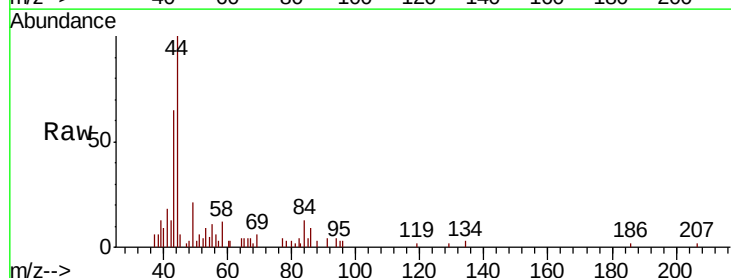
Delta R.T. -0.02 min

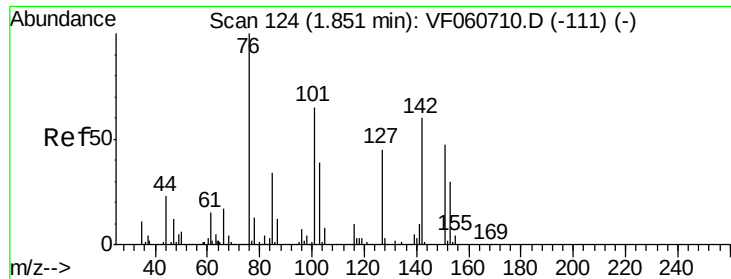
Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Tgt Ion: 43 Resp: 5244

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 17.9  | 11.6  | 17.4# |





#17

Carbon Disulfide

Concen: 1.120 ug/l

RT: 1.80 min Scan# 119

Delta R.T. -0.05 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

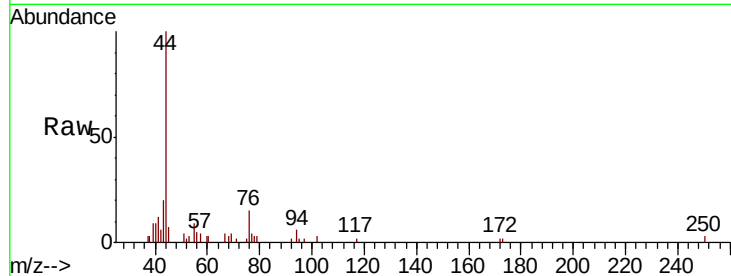
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 76 Resp: 2598

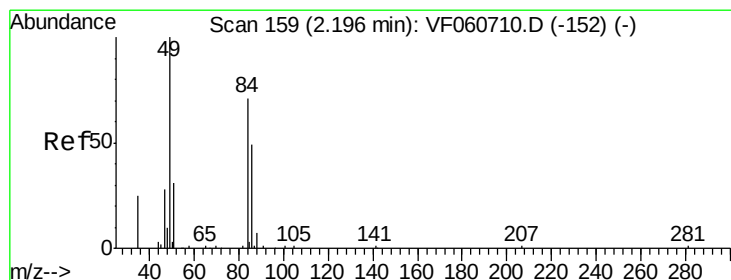
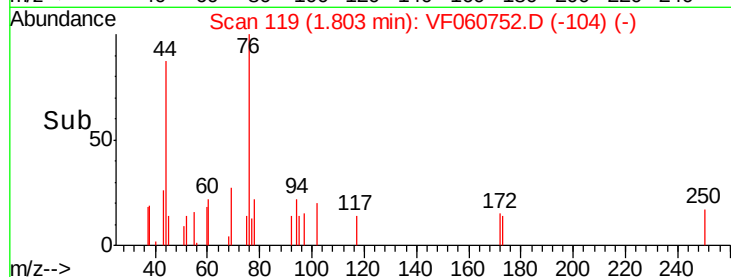
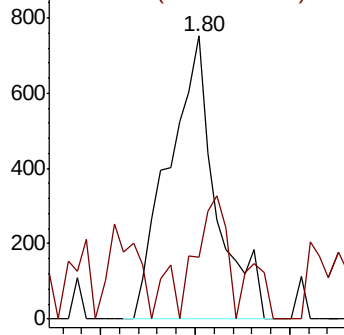
Ion Ratio Lower Upper

76 100

78 21.8 10.5 15.7#



Abundance Ion 76.00 (75.70 to 76.70): VF0  
Ion 78.00 (77.70 to 78.70): VF0



#20

Methylene Chloride

Concen: 5.193 ug/l

RT: 2.17 min Scan# 156

Delta R.T. -0.03 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Tgt Ion: 84 Resp: 5911

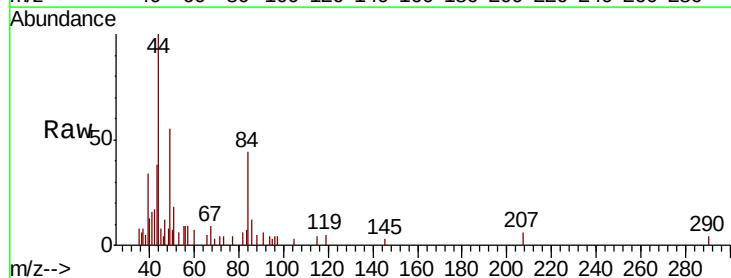
Ion Ratio Lower Upper

84 100

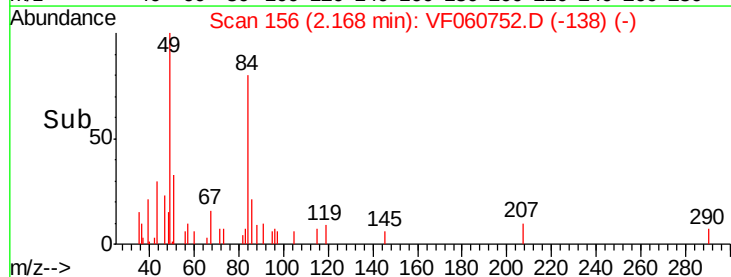
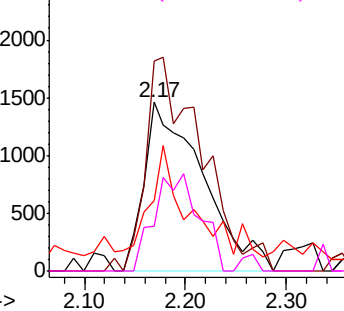
49 124.6 120.2 180.4

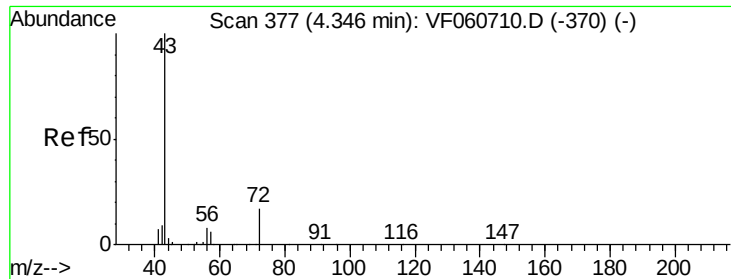
51 41.4 37.2 55.8

86 26.4 55.1 82.7#



Abundance Ion 84.00 (83.70 to 84.70): VF0  
Ion 49.00 (48.70 to 49.70): VF0  
Ion 51.00 (50.70 to 51.70): VF0  
Ion 86.00 (85.70 to 86.70): VF0





#25

2-Butanone

Concen: 4.977 ug/l

RT: 4.34 min Scan# 376

Delta R.T. -0.01 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Instrument :

MSVOA\_F

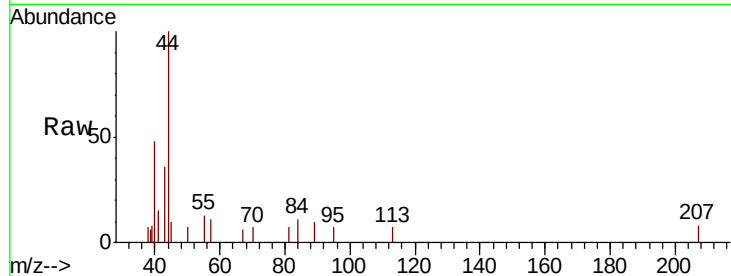
ClientSampled :

Tot Ion: 43 Resp: 1877

Ion Ratio Lower Upper

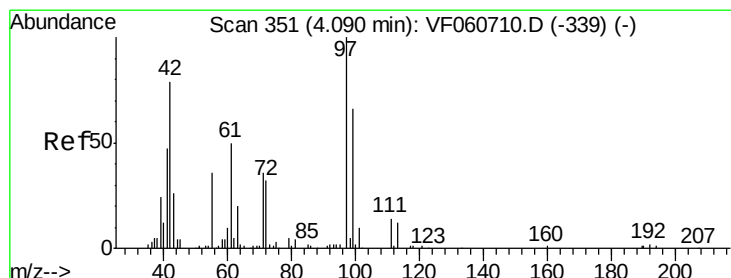
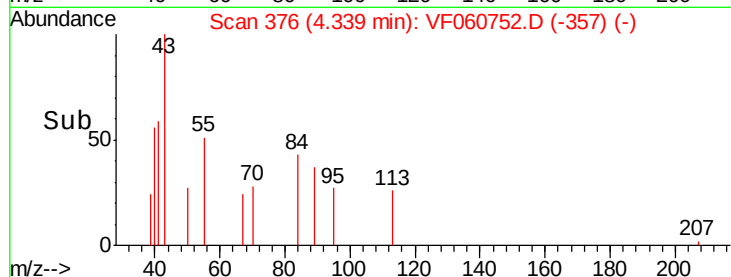
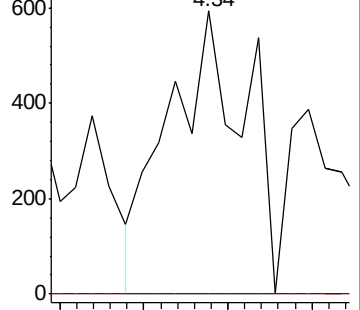
43 100

72 0.0 16.1 24.1#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#29

Tetrahydrofuran

Concen: 5.843 ug/l

RT: 4.08 min Scan# 350

Delta R.T. -0.01 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

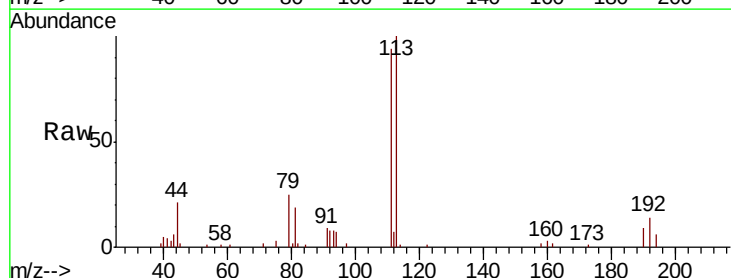
Tgt Ion: 42 Resp: 909

Ion Ratio Lower Upper

42 100

72 0.0 30.3 45.5#

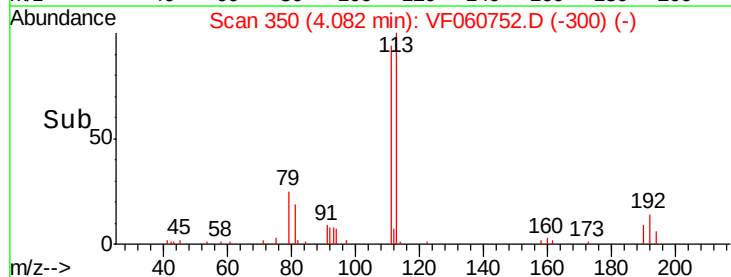
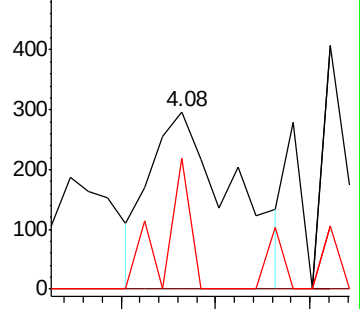
71 21.7 32.2 48.2#

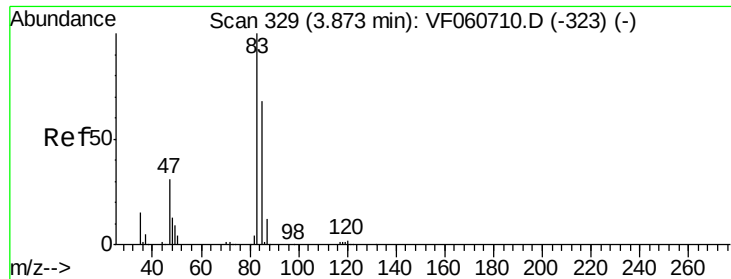


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0

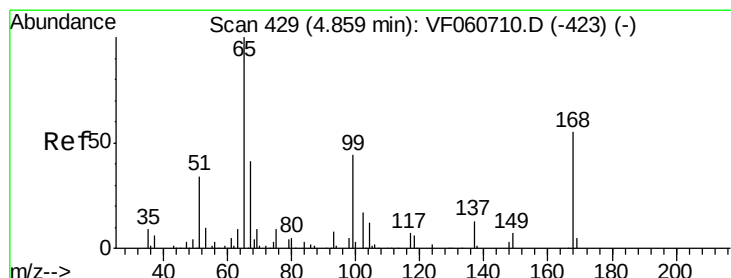
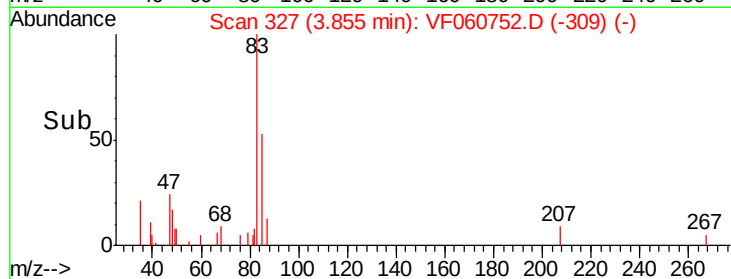
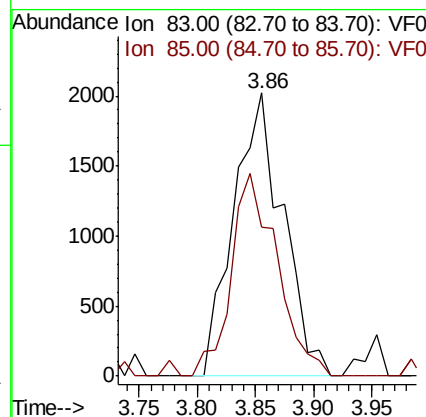
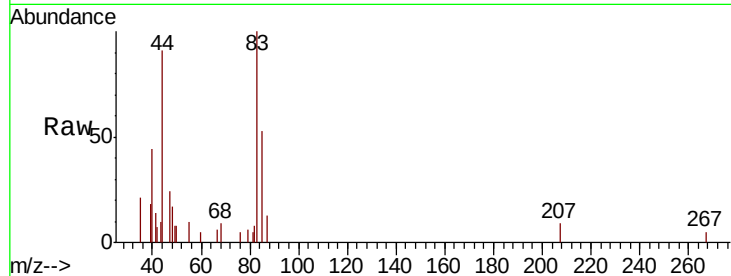




#30  
Chloroform  
Concen: 2.353 ug/l  
RT: 3.86 min Scan# 327  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

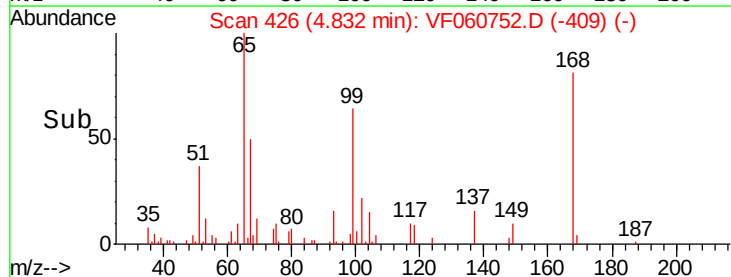
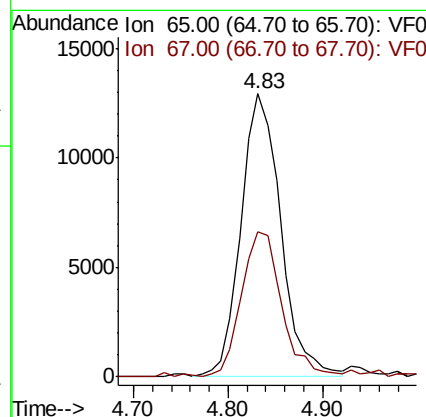
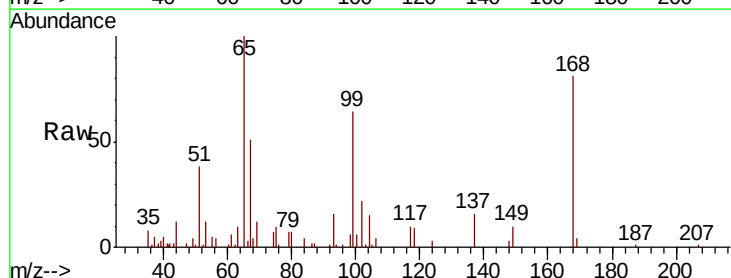
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 83 Resp: 5932  
Ion Ratio Lower Upper  
83 100  
85 52.7 54.6 82.0#

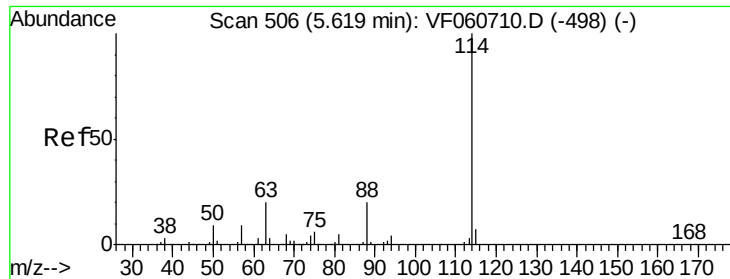


#33  
1,2-Dichloroethane-d4  
Concen: 35.408 ug/l  
RT: 4.83 min Scan# 426  
Delta R.T. -0.03 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Tgt Ion: 65 Resp: 37982  
Ion Ratio Lower Upper  
65 100  
67 51.4 0.0 90.2



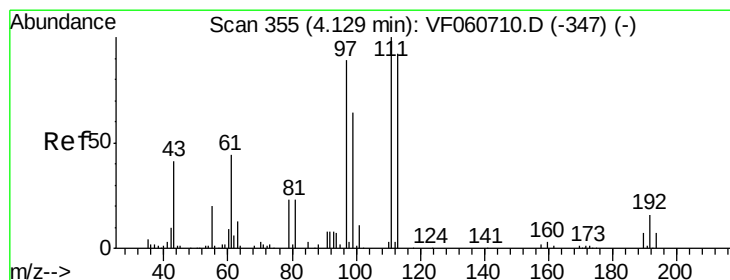
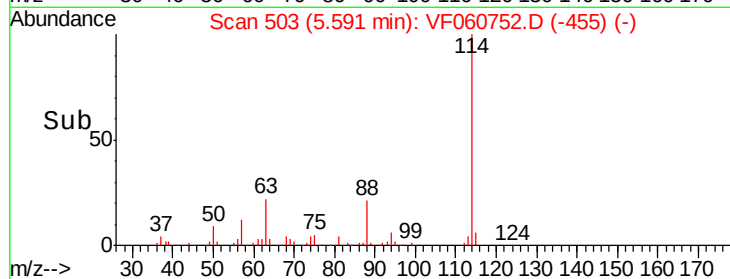
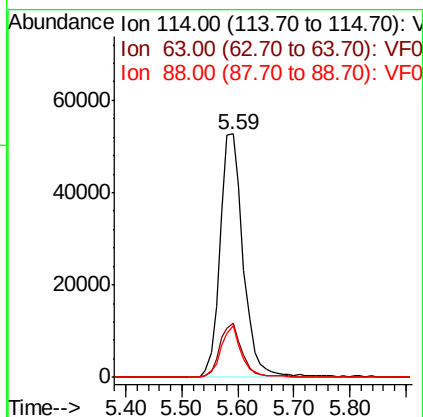
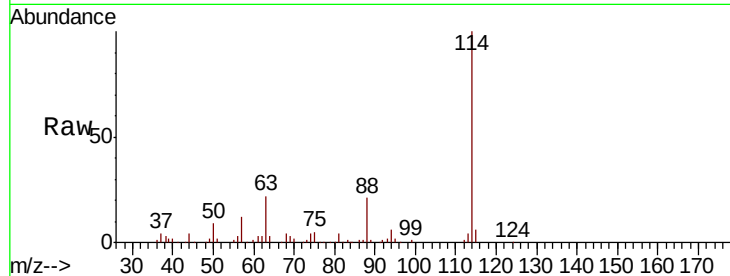




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.59 min Scan# 503  
 Delta R.T. -0.03 min  
 Lab File: VF060752.D  
 Acq: 15 Nov 2018 17:48

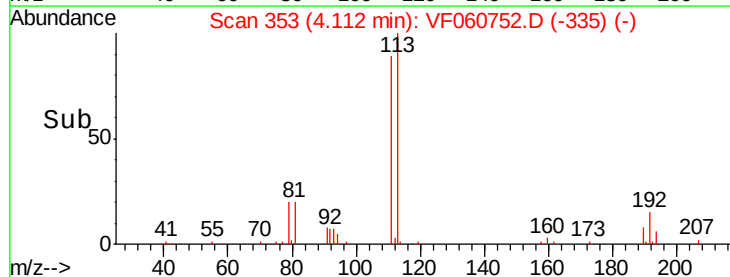
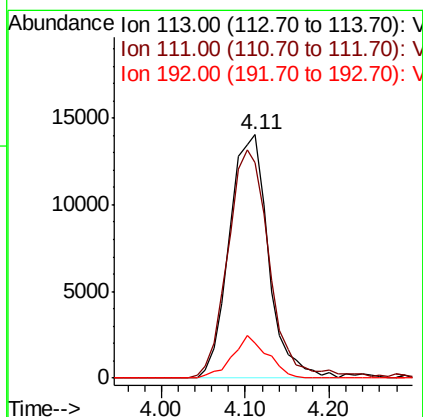
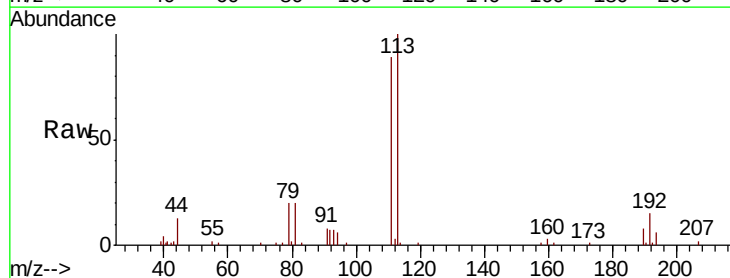
Instrument :  
 MSVOA\_F  
 ClientSampleId :

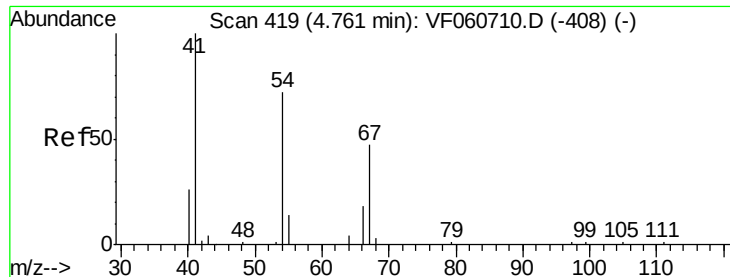
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.1  | 0.0   | 40.8  |
| 88      | 21.2  | 0.0   | 39.6  |



#35  
 Dibromofluoromethane  
 Concen: 39.720 ug/l  
 RT: 4.11 min Scan# 353  
 Delta R.T. -0.02 min  
 Lab File: VF060752.D  
 Acq: 15 Nov 2018 17:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 88.7  | 87.1  | 130.7 |
| 192     | 15.4  | 13.8  | 20.6  |





#41

Methacrylonitrile

Concen: Below Cal

RT: 4.74 min Scan# 417

Delta R.T. -0.02 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Instrument :

MSVOA\_F

ClientSampled :

Tot Ion: 41 Resp: 133

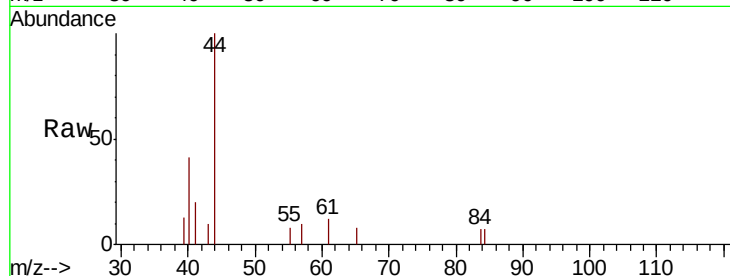
Ion Ratio Lower Upper

41 100

39 62.8 47.1 70.7

67 0.0 37.1 55.7#

52 0.0 39.3 58.9#

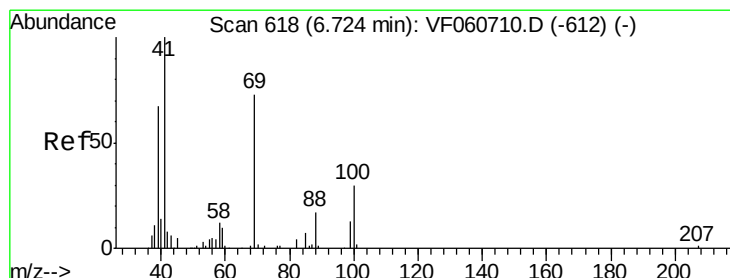
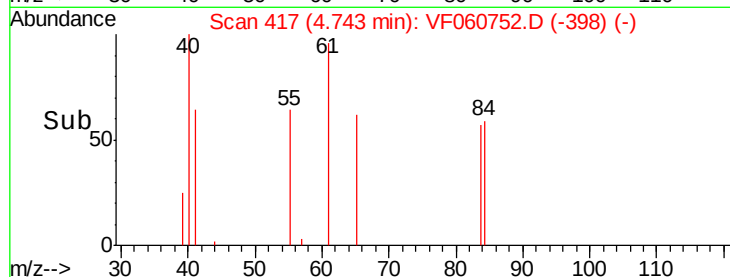
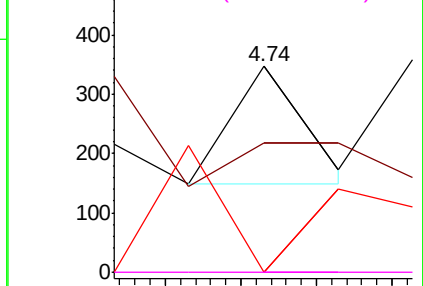


Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

Ion 67.00 (66.70 to 67.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#49

1,4-Dioxane

Concen: 11.104 ug/l

RT: 6.74 min Scan# 619

Delta R.T. 0.01 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

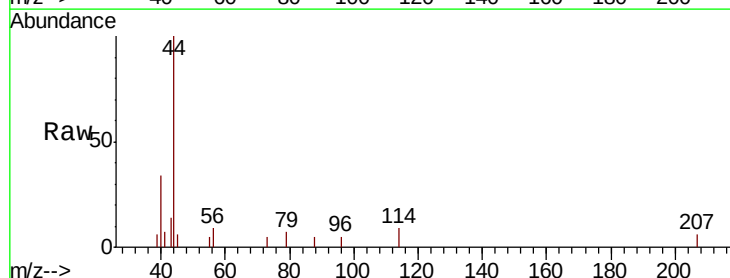
Tgt Ion: 88 Resp: 60

Ion Ratio Lower Upper

88 100

43 286.3 44.6 66.8#

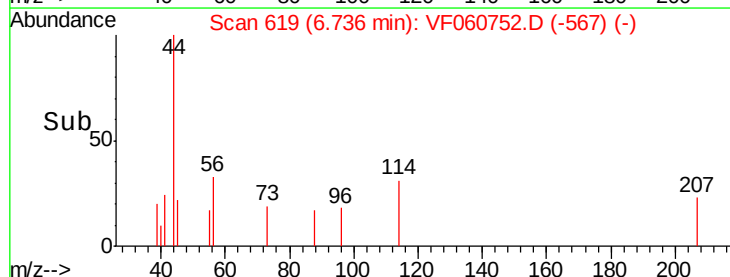
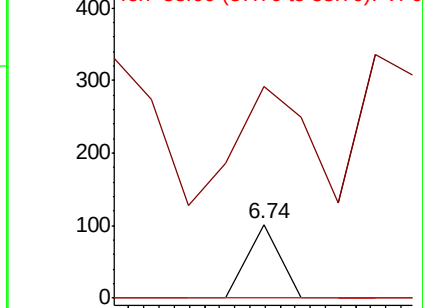
58 0.0 54.5 81.7#

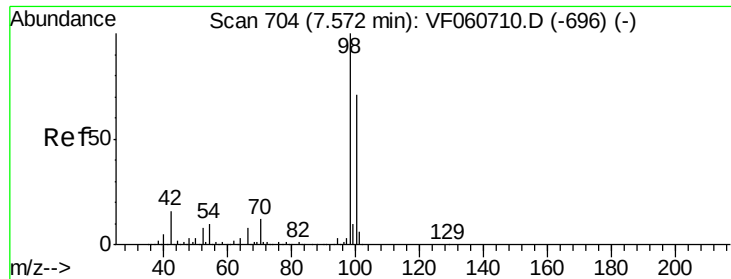


Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

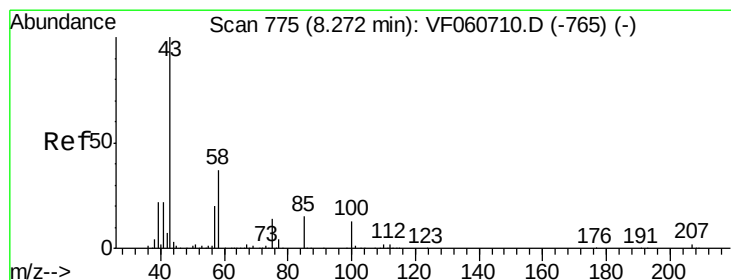
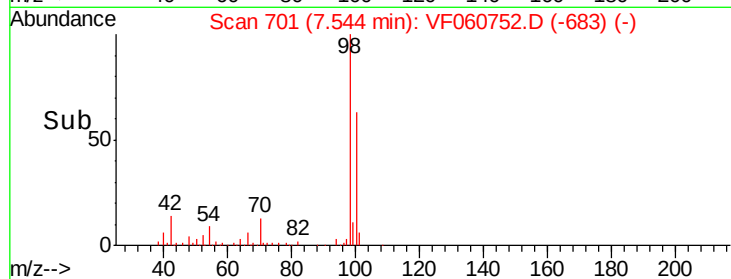
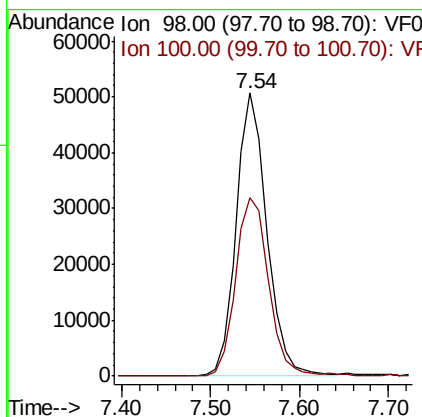
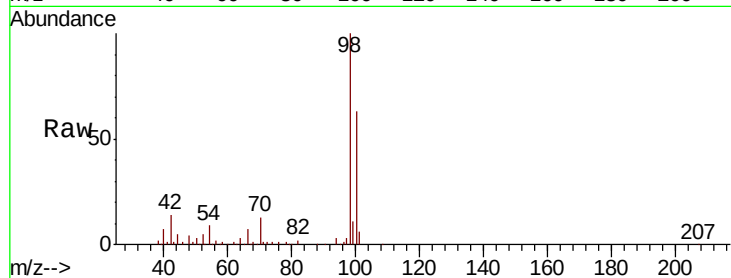




#50  
Toluene-d8  
Concen: 40.592 ug/l  
RT: 7.54 min Scan# 701  
Delta R.T. -0.03 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

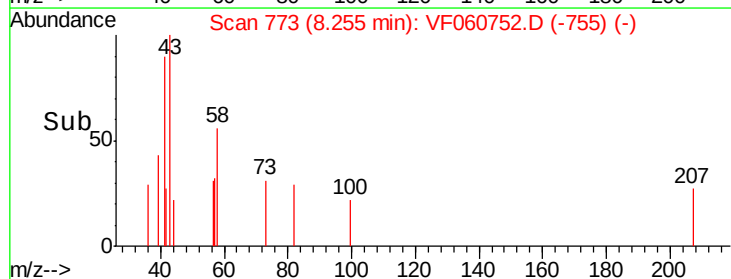
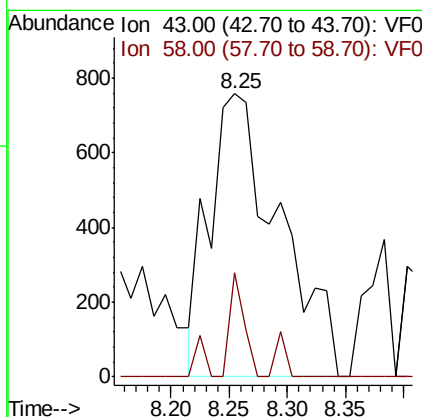
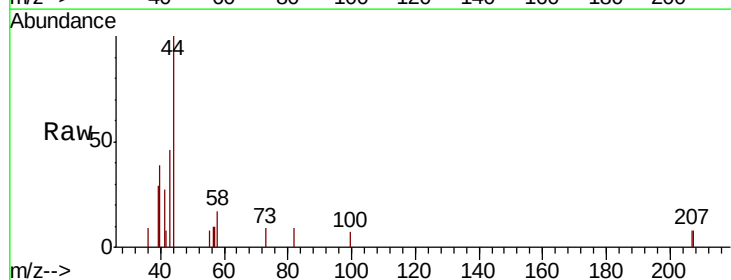
Instrument :  
MSVOA\_F  
ClientSampled :

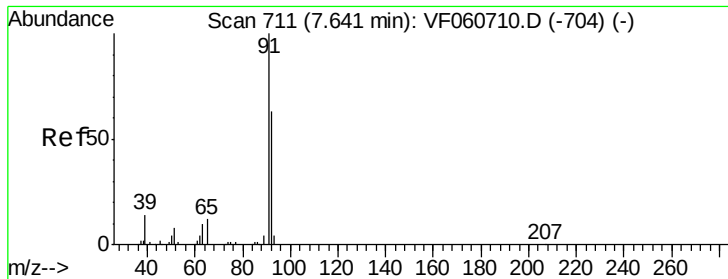
Tot Ion: 98 Resp: 121604  
Ion Ratio Lower Upper  
98 100  
100 63.1 56.5 84.7



#51  
4-Methyl-2-Pentanone  
Concen: 5.029 ug/l  
RT: 8.25 min Scan# 773  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Tgt Ion: 43 Resp: 3175  
Ion Ratio Lower Upper  
43 100  
58 36.8 29.2 43.8





#52

Toluene

Concen: 4.299 ug/l

RT: 7.61 min Scan# 708

Delta R.T. -0.03 min

Lab File: VF060752.D

Acq: 15 Nov 2018 17:48

Instrument :

MSVOA\_F

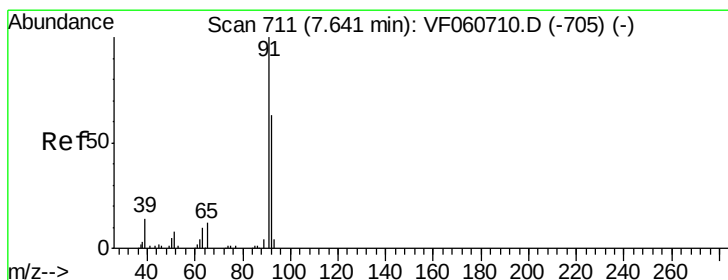
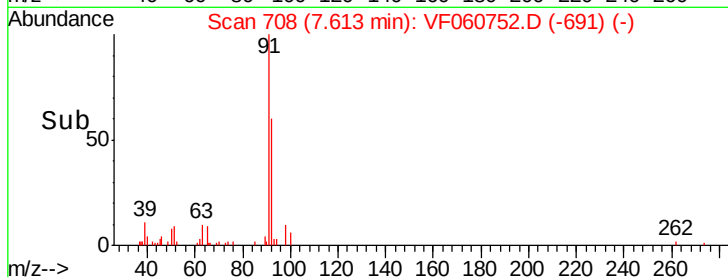
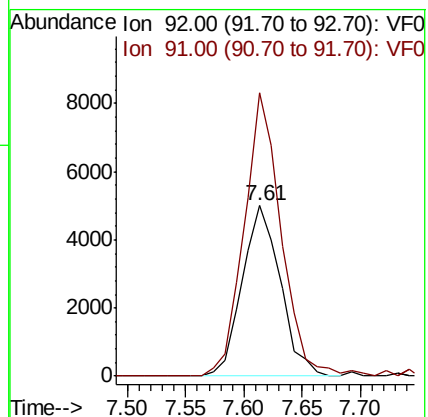
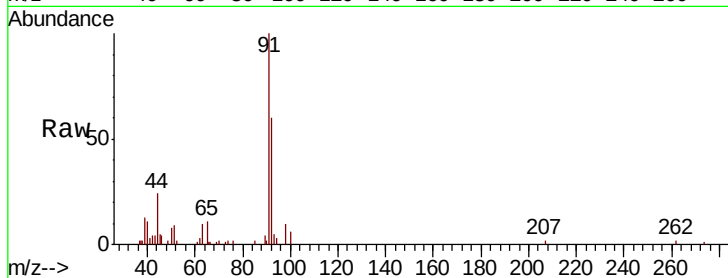
ClientSampleId :

Tot Ion: 92 Resp: 11374

Ion Ratio Lower Upper

92 100

91 165.9 126.7 190.1



#58

2-Chloroethyl Vinyl ether

Concen: 23.298 ug/l

RT: 7.61 min Scan# 708

Delta R.T. -0.03 min

Lab File: VF060752.D

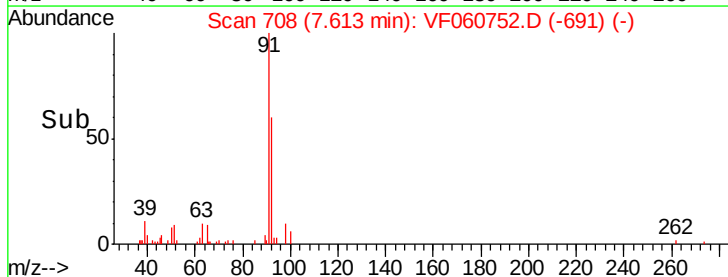
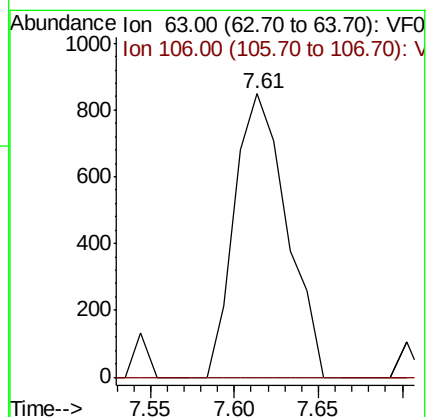
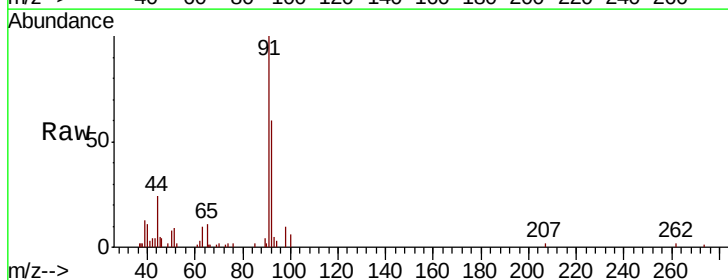
Acq: 15 Nov 2018 17:48

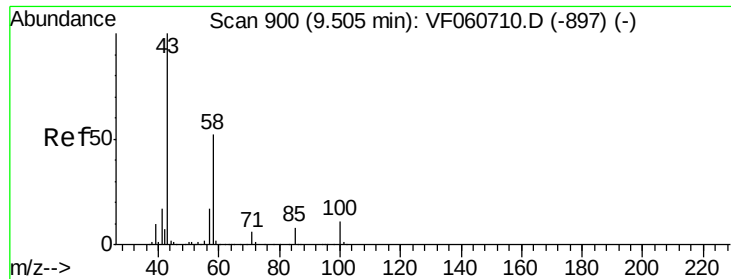
Tgt Ion: 63 Resp: 1827

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0

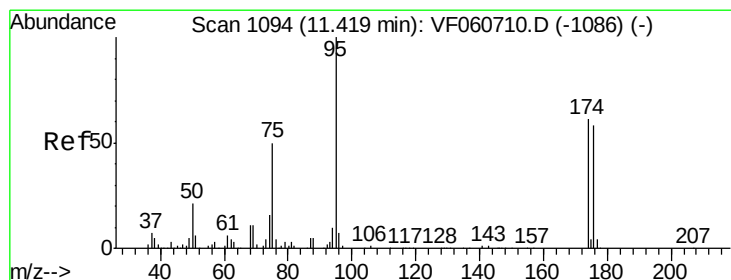
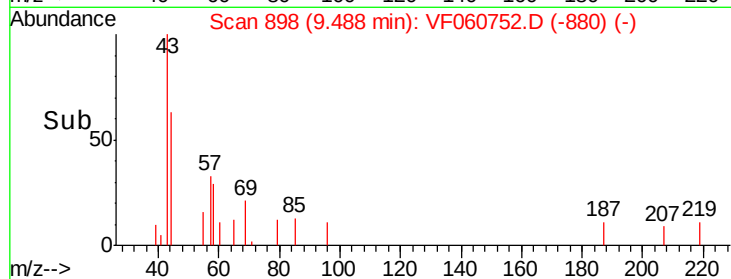
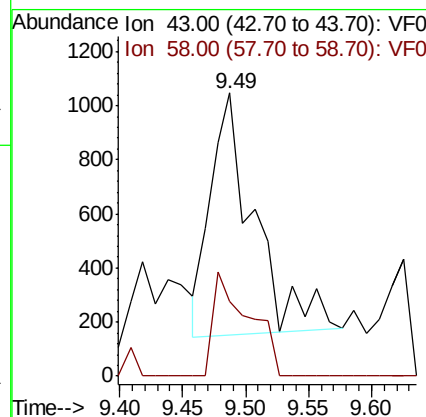
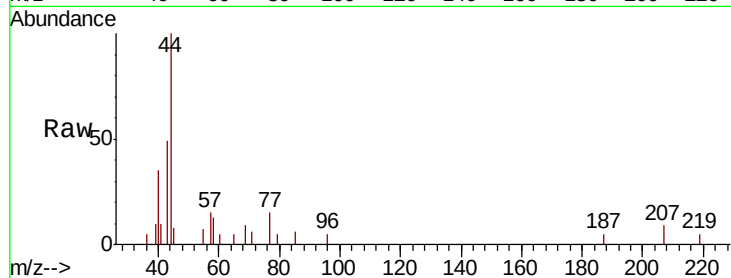




#59  
2-Hexanone  
Concen: 4.850 ug/l  
RT: 9.49 min Scan# 898  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

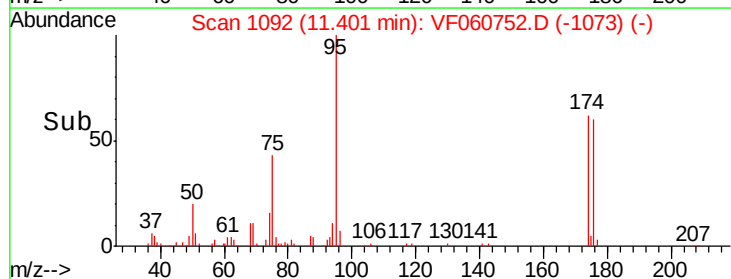
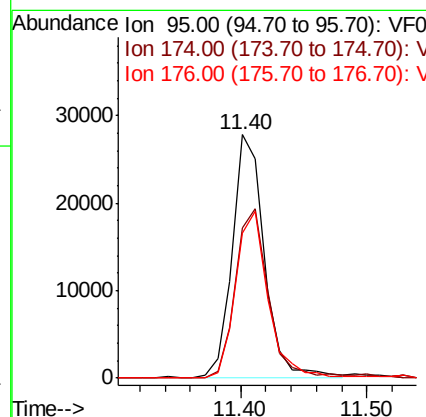
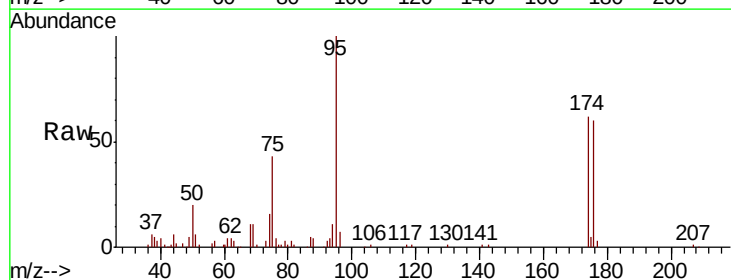
Instrument :  
MSVOA\_F  
ClientSampled :

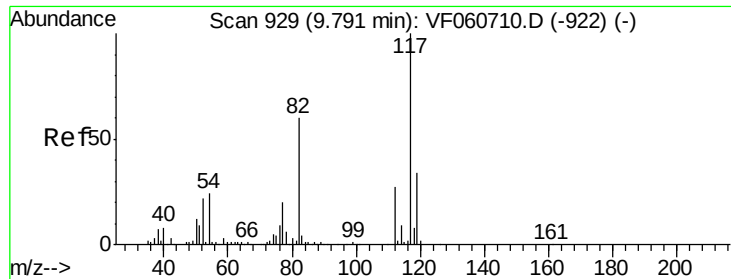
Tot Ion: 43 Resp: 2152  
Ion Ratio Lower Upper  
43 100  
58 26.6 24.9 74.7



#62  
4-Bromofluorobenzene  
Concen: 34.844 ug/l  
RT: 11.40 min Scan# 1092  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Tgt Ion: 95 Resp: 48997  
Ion Ratio Lower Upper  
95 100  
174 61.5 0.0 121.6  
176 59.7 0.0 115.2

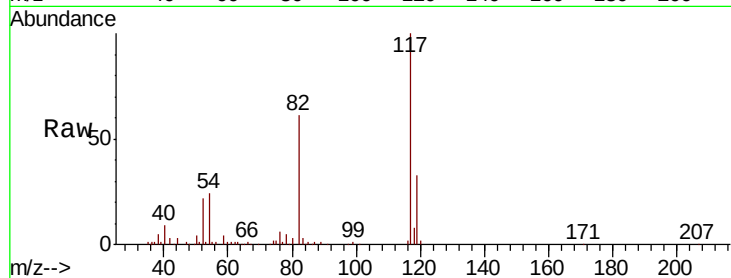




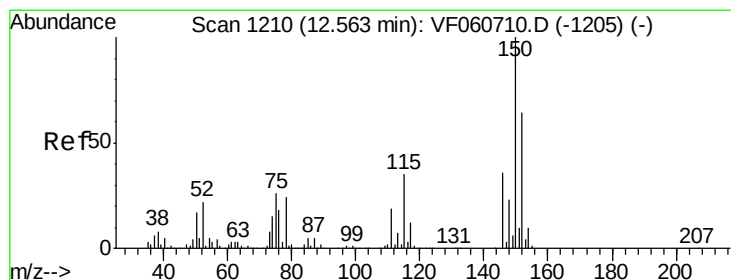
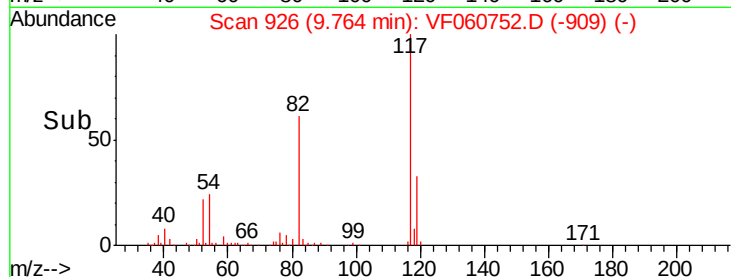
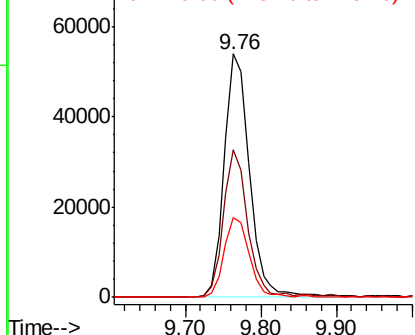
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.76 min Scan# 926  
Delta R.T. -0.03 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:117 Resp: 125505  
Ion Ratio Lower Upper  
117 100  
82 60.8 47.9 71.9  
119 32.7 26.8 40.2

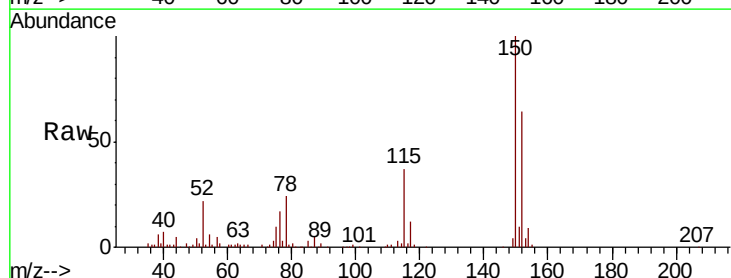


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 82.00 (81.70 to 82.70): VF0  
Ion 119.00 (118.70 to 119.70): V

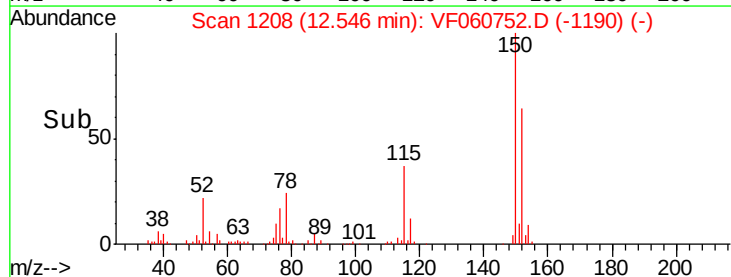
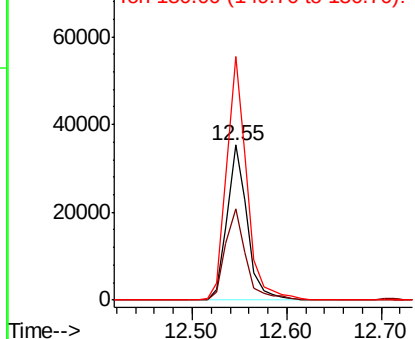


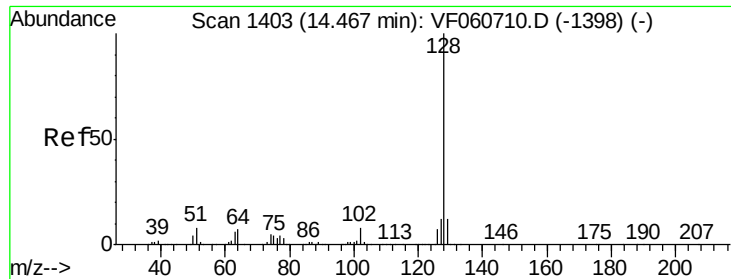
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.55 min Scan# 1208  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Tgt Ion:152 Resp: 52216  
Ion Ratio Lower Upper  
152 100  
115 58.9 27.9 83.7  
150 157.2 0.0 316.4



Abundance Ion 152.00 (151.70 to 152.70): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 150.00 (149.70 to 150.70): V

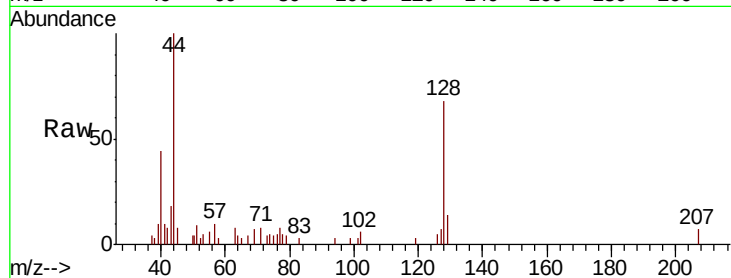




#95  
Naphthalene  
Concen: 1.615 ug/l  
RT: 14.45 min Scan# 1401  
Delta R.T. -0.02 min  
Lab File: VF060752.D  
Acq: 15 Nov 2018 17:48

Instrument :  
MSVOA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 10.7  | 9.8   | 14.6  |
| 129     | 21.1  | 9.3   | 13.9  |



Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

