

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF061818\  
 Data File : VF059169.D  
 Acq On : 18 Jun 2018 12:06  
 Operator : VA/AP  
 Sample : VF0618SBL01  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0618SBL01

Quant Time: Jun 19 02:53:36 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F060618S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 07 10:52:00 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.03  | 168  | 290409   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.75  | 114  | 454194   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.90  | 117  | 444267   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 293669   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.01  | 65   | 196919   | 55.91 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 111.82% |          |
| 35) Dibromofluoromethane    | 4.28  | 113  | 174694   | 54.82 | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 109.64% |          |
| 50) Toluene-d8              | 7.70  | 98   | 468904   | 50.08 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 100.16% |          |
| 62) 4-Bromofluorobenzene    | 11.50 | 95   | 246025   | 51.23 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 102.46% |          |

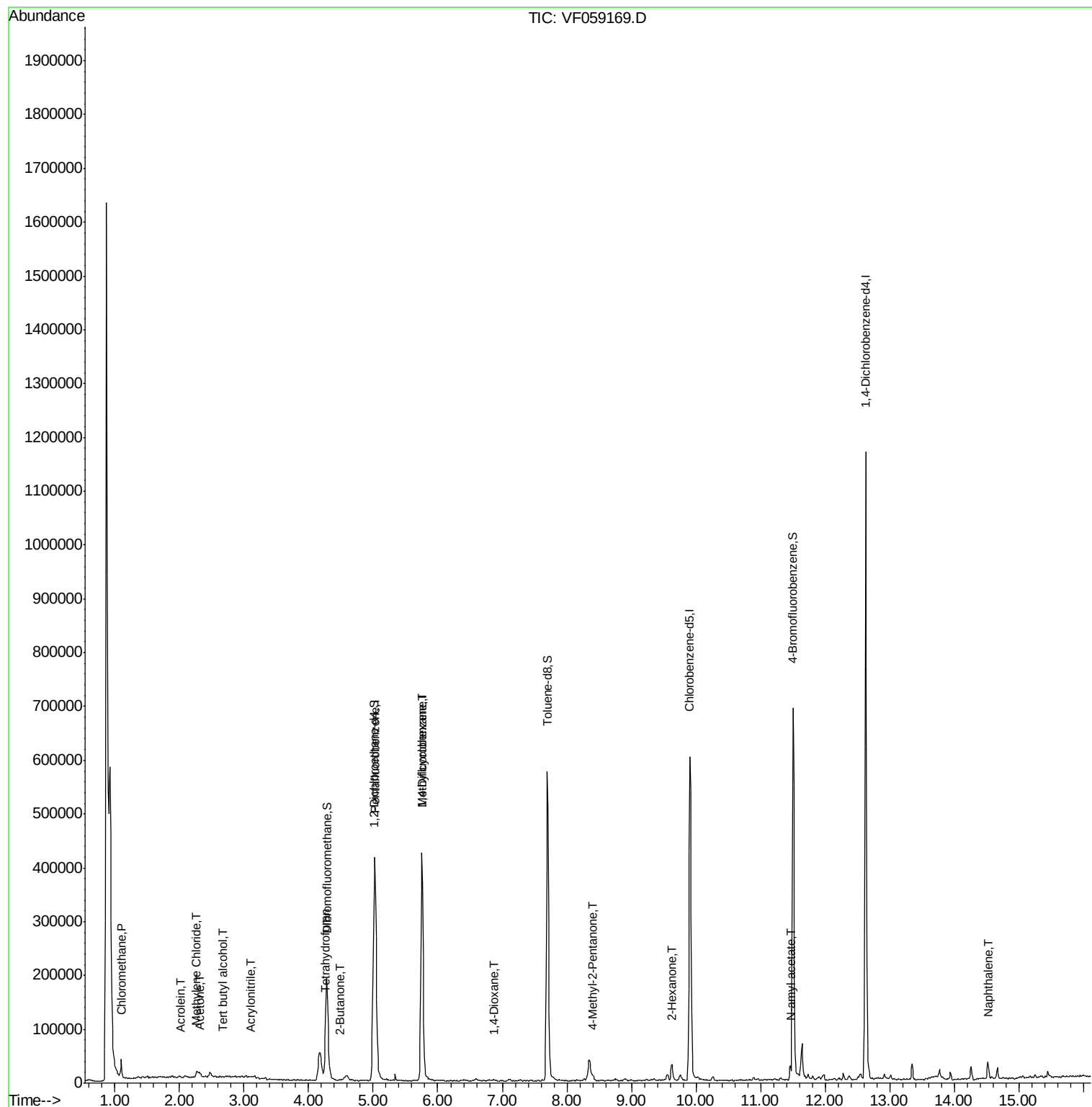
| Target Compounds         | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane         | 1.10  | 50   | 2606     | 1.024     | ug/l   | 95     |
| 11) Tert butyl alcohol   | 2.69  | 59   | 823      | 3.647     | ug/l # | 1      |
| 13) Acrolein             | 2.03  | 56   | 286      | 1.464     | ug/l   | 98     |
| 15) Acrylonitrile        | 3.09  | 53   | 635      | 1.417     | ug/l # | 60     |
| 16) Acetone              | 2.33  | 43   | 3592     | 4.271     | ug/l # | 75     |
| 20) Methylene Chloride   | 2.27  | 84   | 6510     | 3.233     | ug/l # | 90     |
| 25) 2-Butanone           | 4.50  | 43   | 2757     | 2.115     | ug/l # | 73     |
| 29) Tetrahydrofuran      | 4.25  | 42   | 2095     | 3.647     | ug/l # | 53     |
| 39) Methylcyclohexane    | 5.75  | 83   | 4920     | 1.096     | ug/l # | 40     |
| 49) 1,4-Dioxane          | 6.86  | 88   | 79       | 17.390    | ug/l # | 71     |
| 51) 4-Methyl-2-Pentanone | 8.40  | 43   | 8376     | 3.354     | ug/l   | 94     |
| 59) 2-Hexanone           | 9.63  | 43   | 27407    | 13.876    | ug/l   | 82     |
| 74) N-amyI acetate       | 11.46 | 43   | 17812    | 2.452     | ug/l   | 98     |
| 89) n-Butylbenzene       | 12.91 | 91   | 5639     | Below Cal |        | 87     |
| 95) Naphthalene          | 14.52 | 128  | 20385    | 1.499     | ug/l   | 98     |

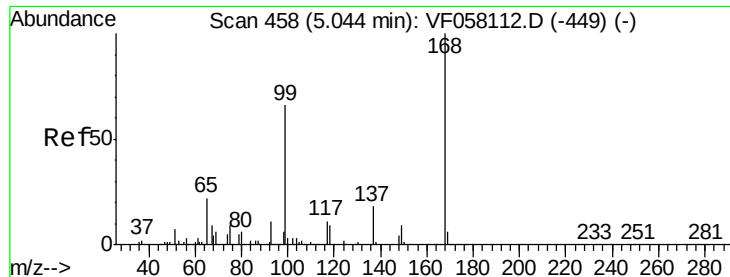
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_F\DATA\VF061818\  
Data File : VF059169.D  
Acq On : 18 Jun 2018 12:06  
Operator : VA/AP  
Sample : VF0618SBL01  
Misc : 5.00g/5mL/MSVOA-F/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

Quant Time: Jun 19 02:53:36 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F060618S.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 07 10:52:00 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.03 min Scan# 457

Delta R.T. -0.01 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

Instrument :

MSVOA\_F

ClientSampleId :

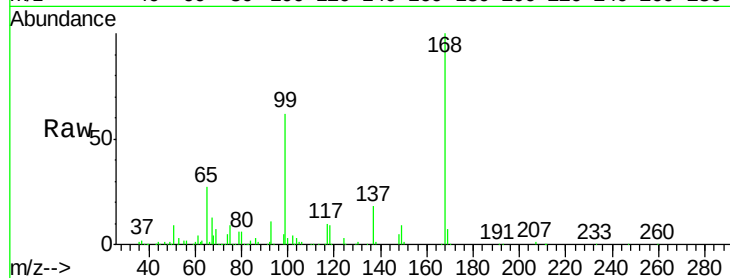
VF0618SBL01

Tgt Ion:168 Resp: 290409

Ion Ratio Lower Upper

168 100

99 62.3 52.9 79.3



Abundance Ion 168.00 (167.70 to 168.70): V

Ion 99.00 (98.70 to 99.70): VF0

5.03

100000

80000

60000

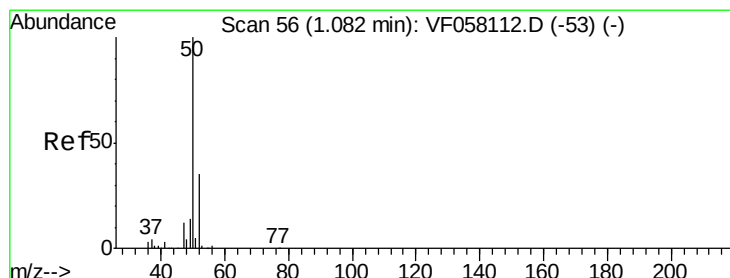
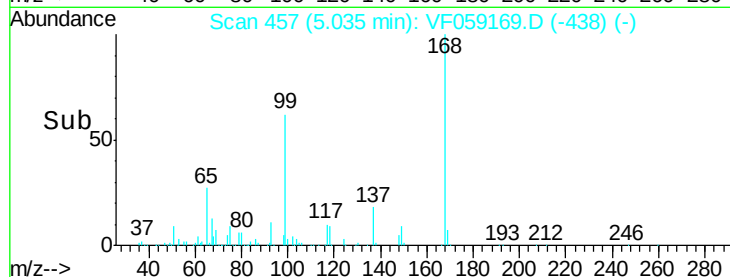
40000

20000

0

Time-->

4.90 5.00 5.10 5.20



#3

Chloromethane

Concen: 1.024 ug/l

RT: 1.10 min Scan# 58

Delta R.T. 0.02 min

Lab File: VF059169.D

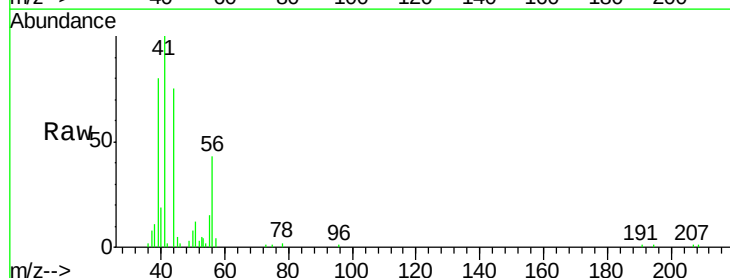
Acq: 18 Jun 2018 12:06

Tgt Ion: 50 Resp: 2606

Ion Ratio Lower Upper

50 100

52 37.0 27.3 40.9



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

1.10

1000

800

600

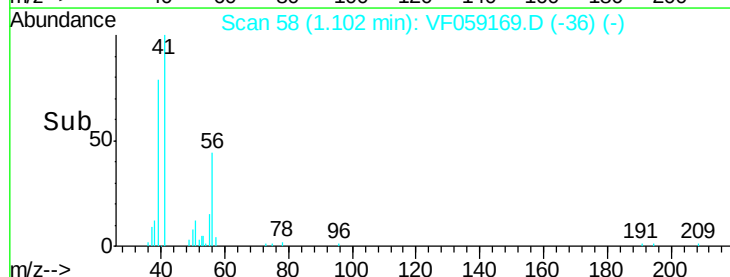
400

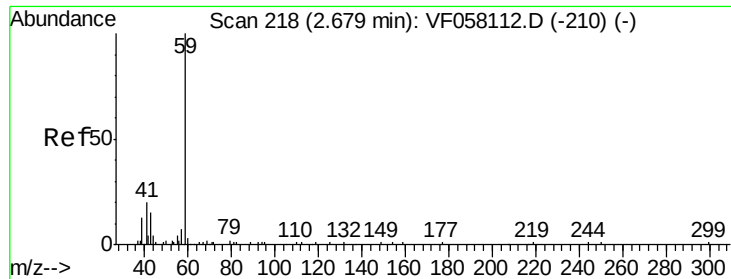
200

0

Time-->

1.00 1.10 1.20

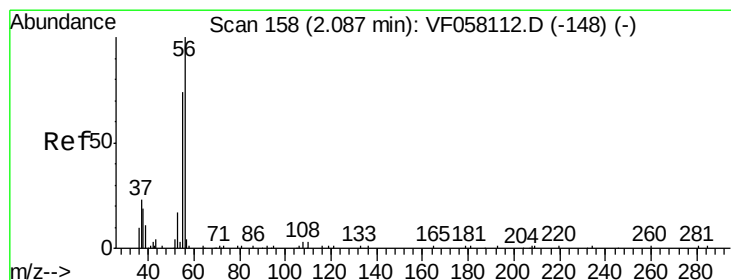
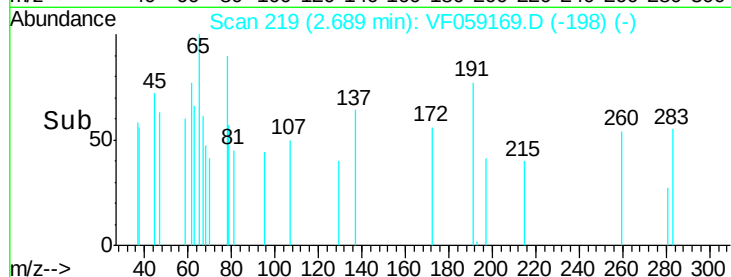
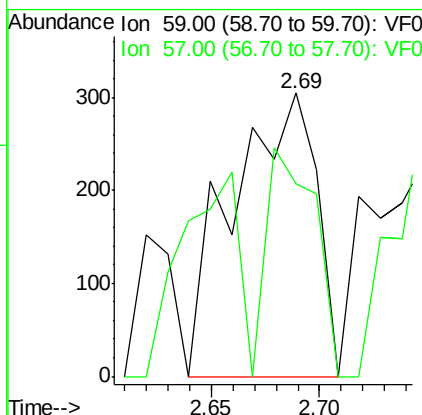
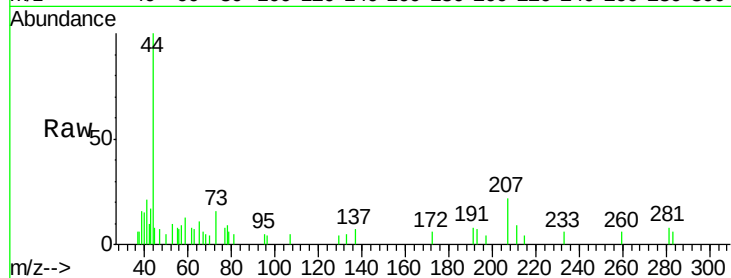




#11  
Tert butyl alcohol  
Concen: 3.647 ug/l  
RT: 2.69 min Scan# 219  
Delta R.T. 0.01 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

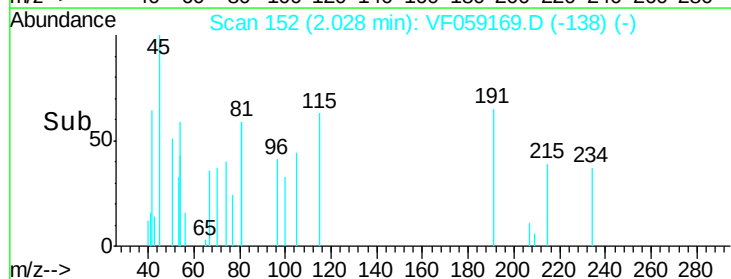
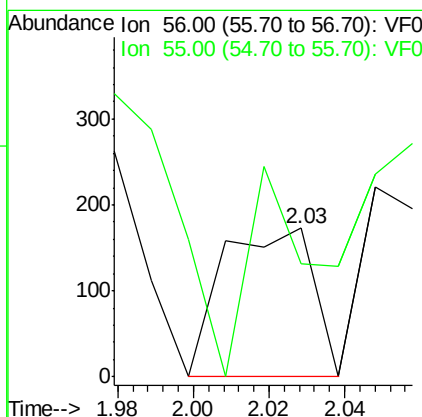
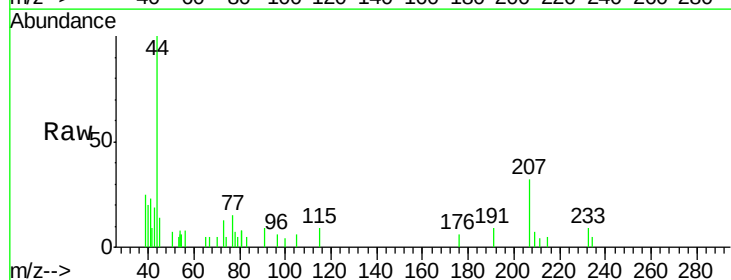
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

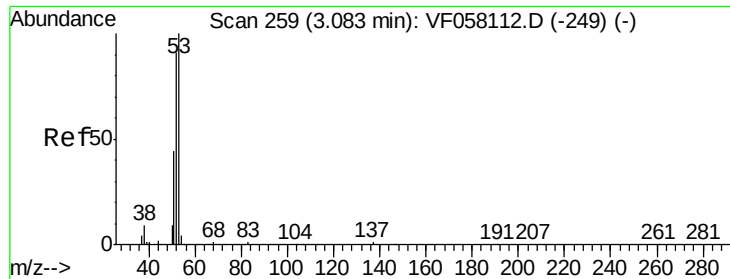
Tgt Ion: 59 Resp: 823  
Ion Ratio Lower Upper  
59 100  
57 68.2 8.7 13.1#



#13  
Acrolein  
Concen: 1.464 ug/l  
RT: 2.03 min Scan# 152  
Delta R.T. -0.06 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

Tgt Ion: 56 Resp: 286  
Ion Ratio Lower Upper  
56 100  
55 76.3 60.0 90.0





#15

Acrylonitrile

Concen: 1.417 ug/l

RT: 3.09 min Scan# 260

Delta R.T. 0.01 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

Instrument :

MSVOA\_F

ClientSampleId :

VF0618SBL01

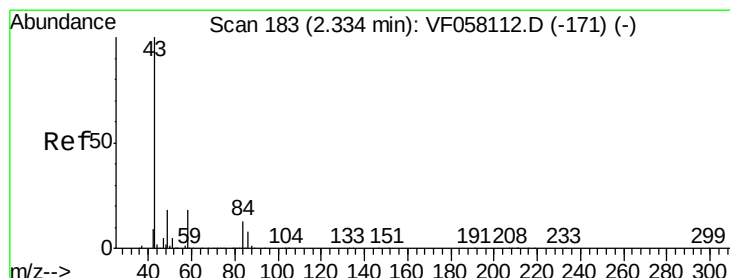
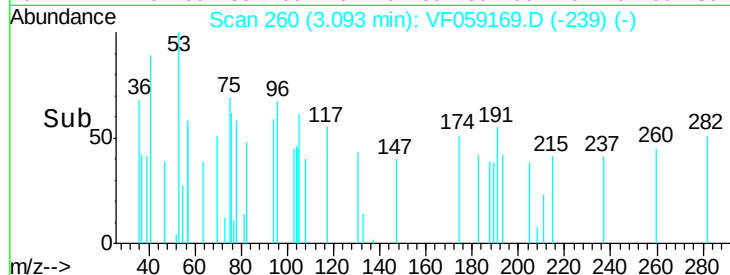
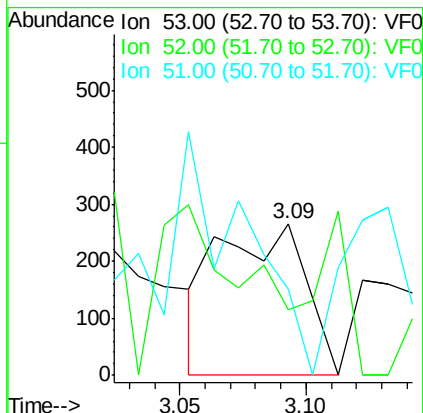
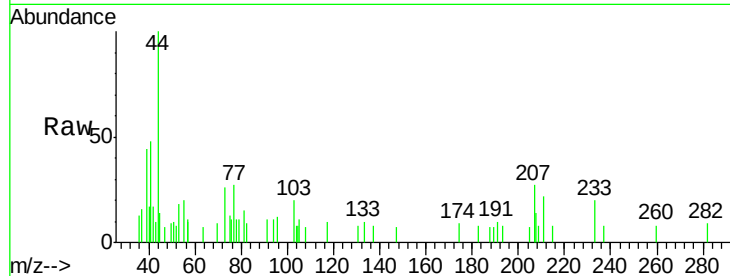
Tgt Ion: 53 Resp: 635

Ion Ratio Lower Upper

53 100

52 43.2 73.2 109.8#

51 56.8 35.6 53.4#



#16

Acetone

Concen: 4.271 ug/l

RT: 2.33 min Scan# 183

Delta R.T. 0.00 min

Lab File: VF059169.D

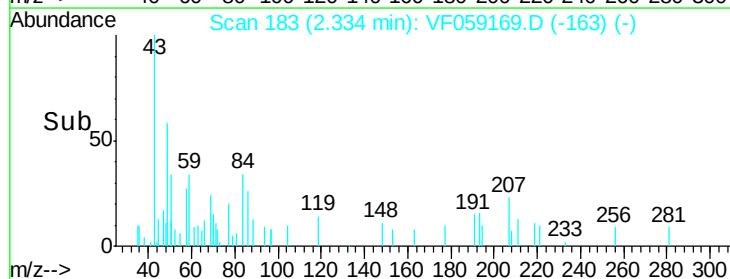
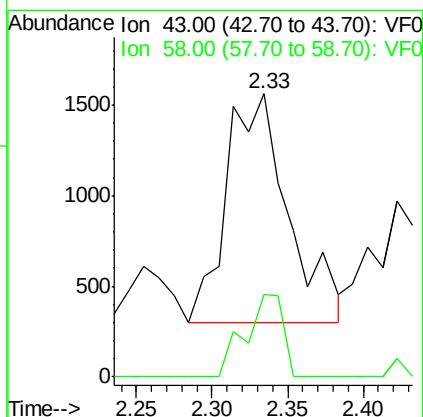
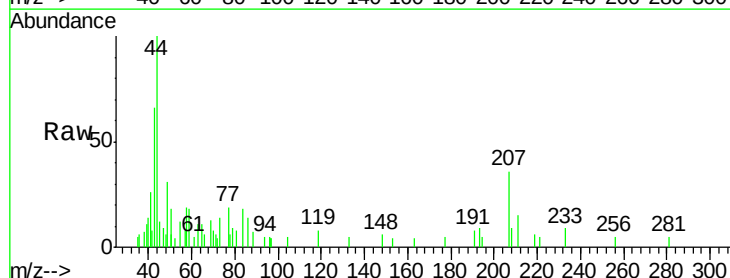
Acq: 18 Jun 2018 12:06

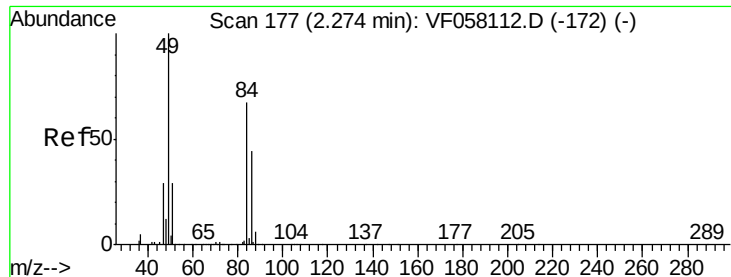
Tgt Ion: 43 Resp: 3592

Ion Ratio Lower Upper

43 100

58 29.0 14.4 21.6#

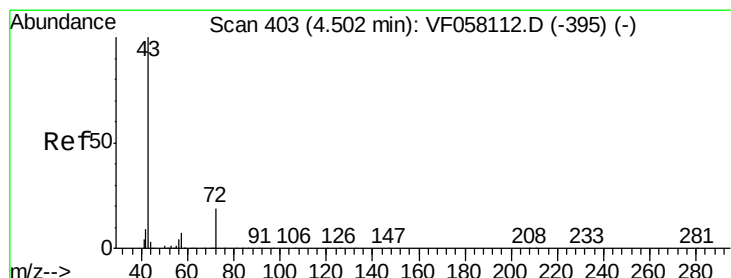
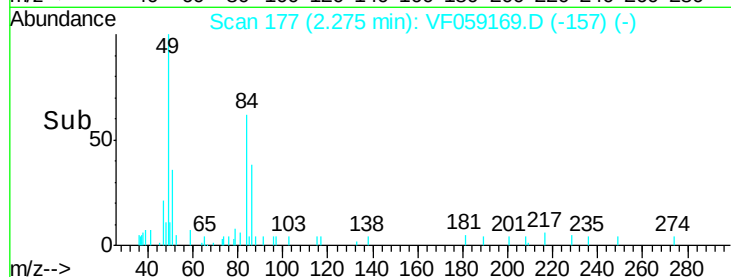
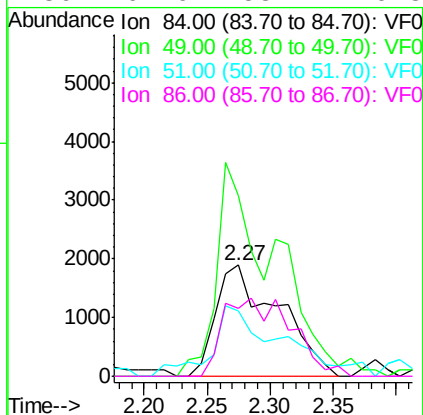
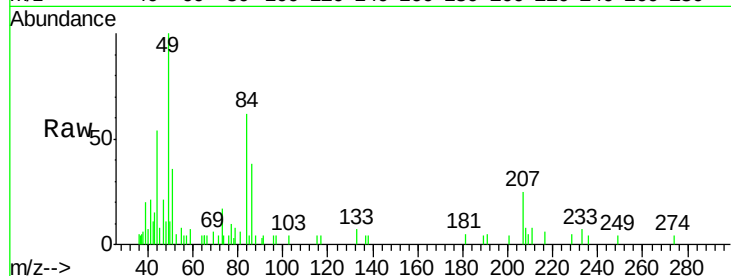




#20  
Methylene Chloride  
Concen: 3.233 ug/l  
RT: 2.27 min Scan# 177  
Delta R.T. 0.00 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

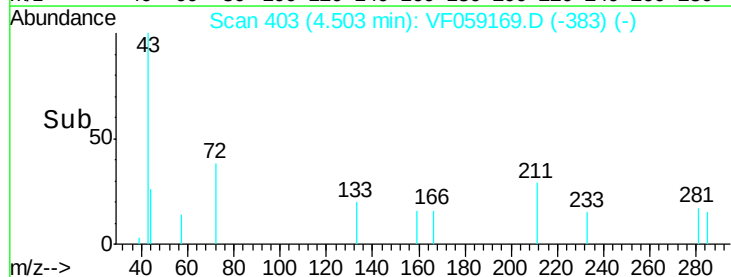
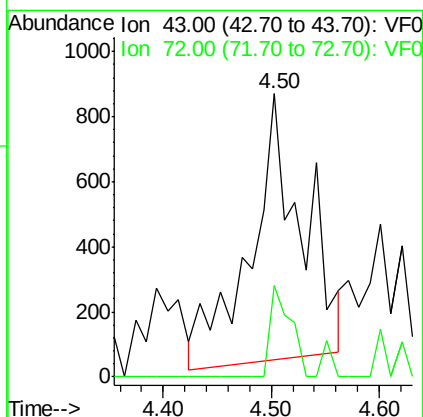
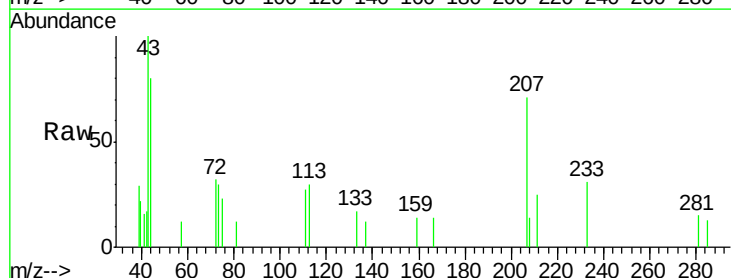
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

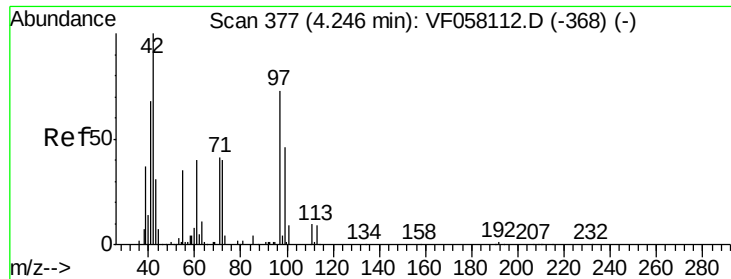
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 6510  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 162.5 | 121.0 | 181.4 |
| 51       | 58.3  | 35.8  | 53.6# |
| 86       | 61.6  | 53.2  | 79.8  |



#25  
2-Butanone  
Concen: 2.115 ug/l  
RT: 4.50 min Scan# 403  
Delta R.T. 0.00 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 2757  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 32.4  | 16.1  | 24.1# |





#29

Tetrahydrofuran

Concen: 3.647 ug/l

RT: 4.25 min Scan# 377

Delta R.T. 0.00 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

Instrument :

MSVOA\_F

ClientSampleId :

VF0618SBL01

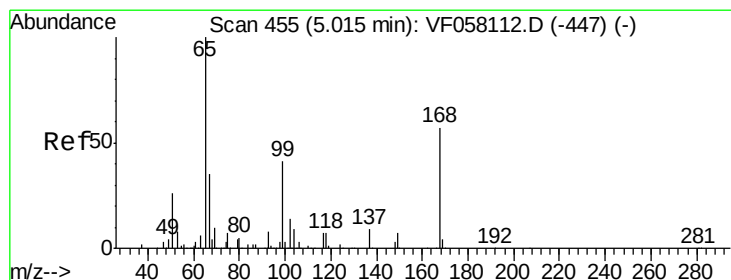
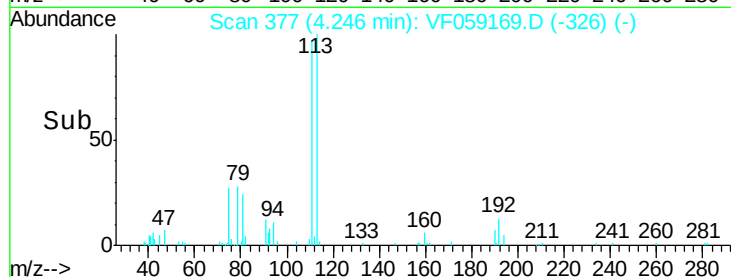
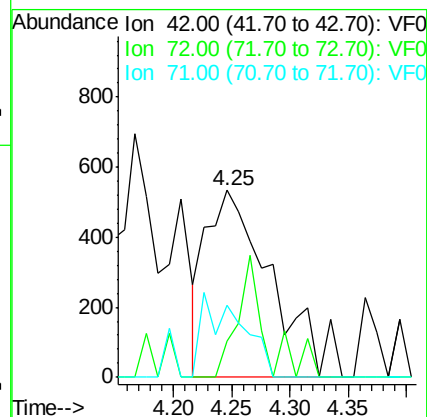
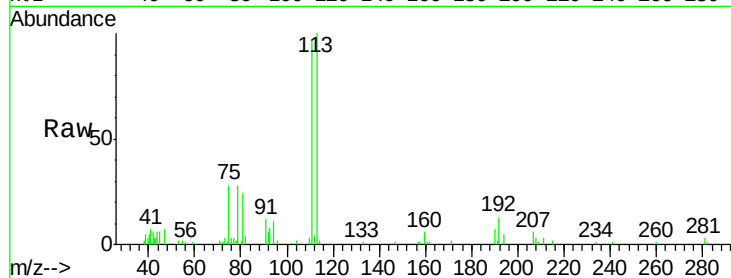
Tgt Ion: 42 Resp: 2095

Ion Ratio Lower Upper

42 100

72 21.0 30.5 45.7#

71 0.0 31.5 47.3#



#33

1,2-Dichloroethane-d4

Concen: 55.910 ug/l

RT: 5.01 min Scan# 454

Delta R.T. -0.01 min

Lab File: VF059169.D

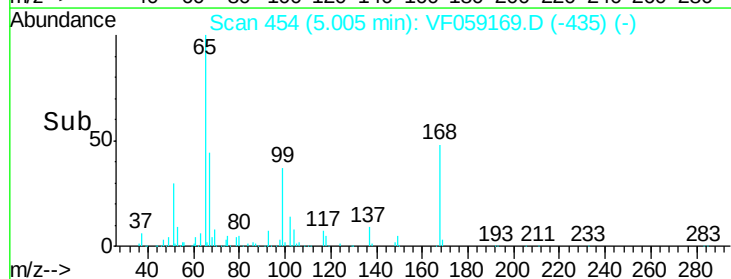
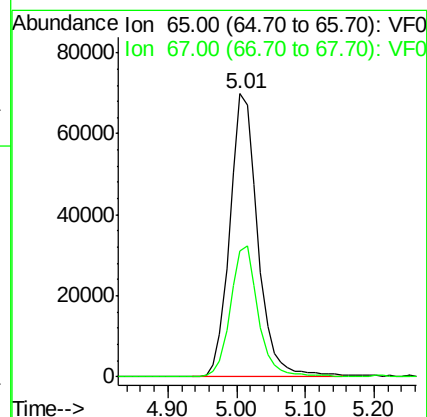
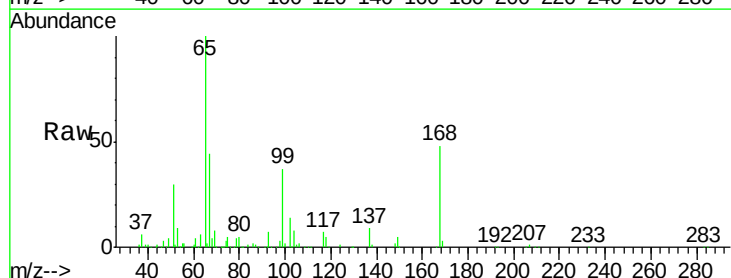
Acq: 18 Jun 2018 12:06

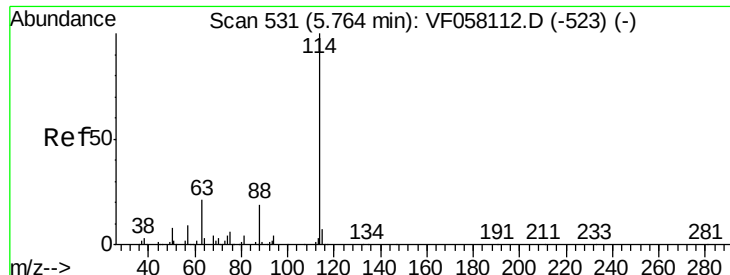
Tgt Ion: 65 Resp: 196919

Ion Ratio Lower Upper

65 100

67 44.4 0.0 97.0

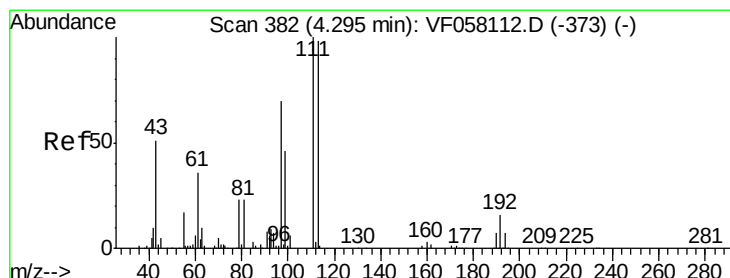
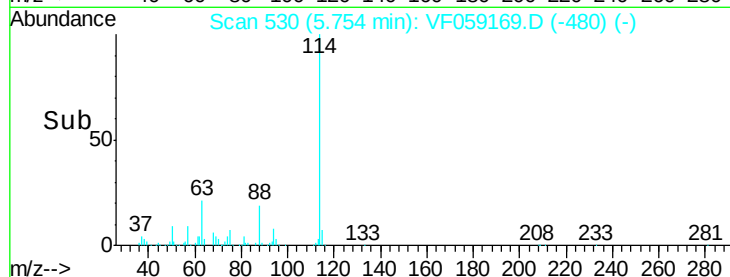
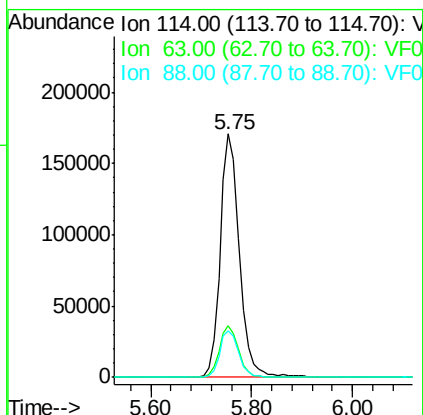
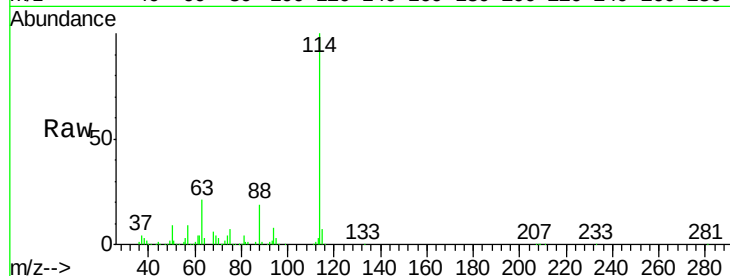




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.75 min Scan# 530  
 Delta R.T. -0.01 min  
 Lab File: VF059169.D  
 Acq: 18 Jun 2018 12:06

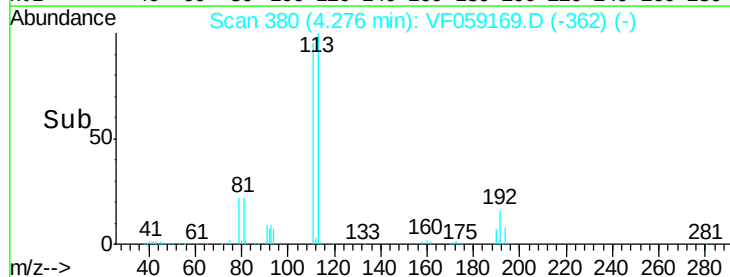
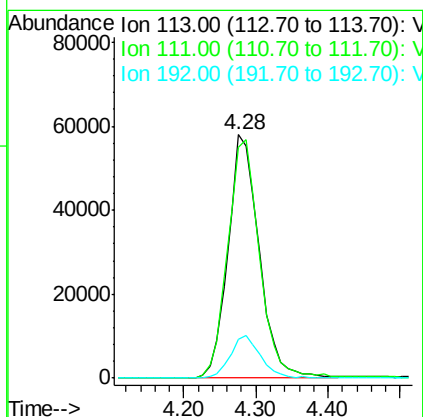
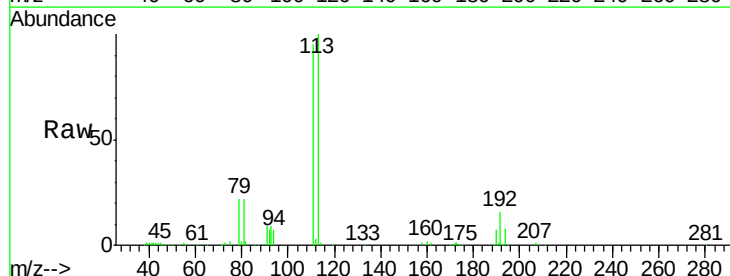
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0618SBL01

Tgt Ion:114 Resp: 454194  
 Ion Ratio Lower Upper  
 114 100  
 63 21.4 0.0 41.6  
 88 18.9 0.0 38.8

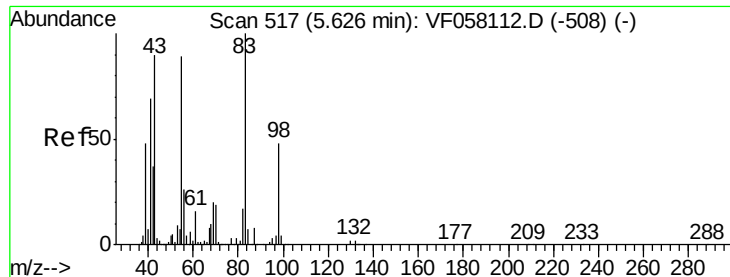


#35  
 Dibromofluoromethane  
 Concen: 54.815 ug/l  
 RT: 4.28 min Scan# 380  
 Delta R.T. -0.02 min  
 Lab File: VF059169.D  
 Acq: 18 Jun 2018 12:06

Tgt Ion:113 Resp: 174694  
 Ion Ratio Lower Upper  
 113 100  
 111 94.7 81.3 121.9  
 192 15.8 12.7 19.1



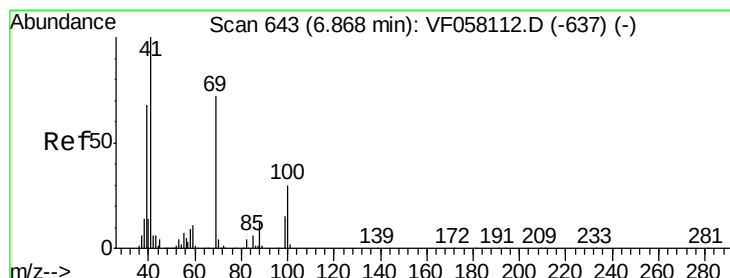
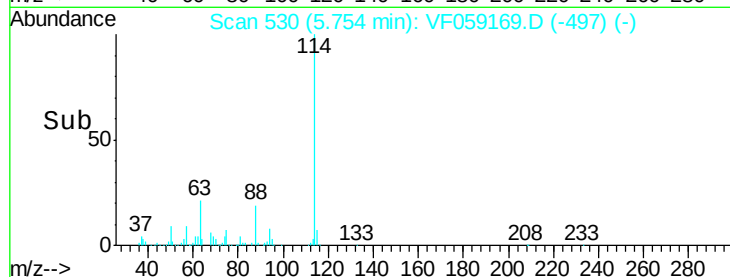
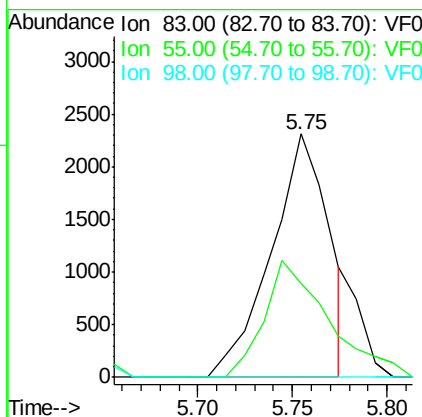
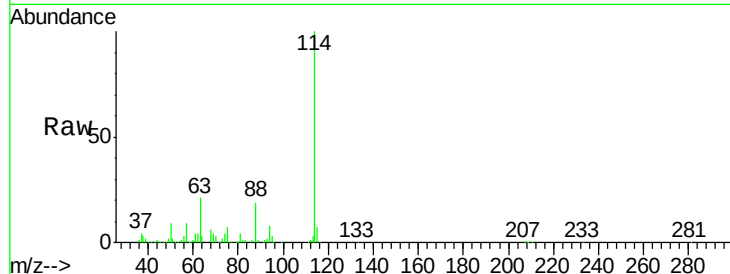




#39  
Methylcyclohexane  
Concen: 1.096 ug/l  
RT: 5.75 min Scan# 530  
Delta R.T. 0.13 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

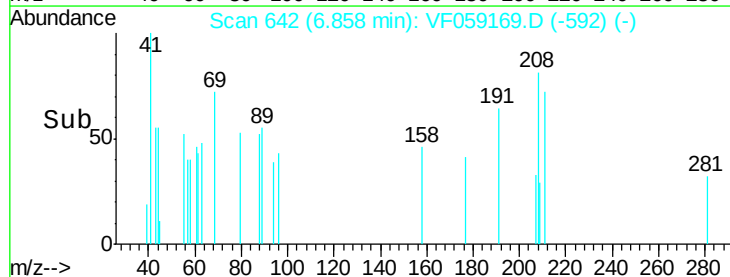
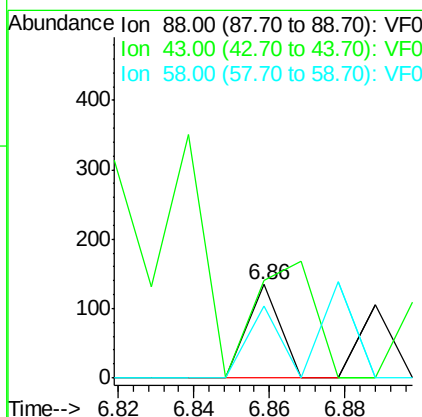
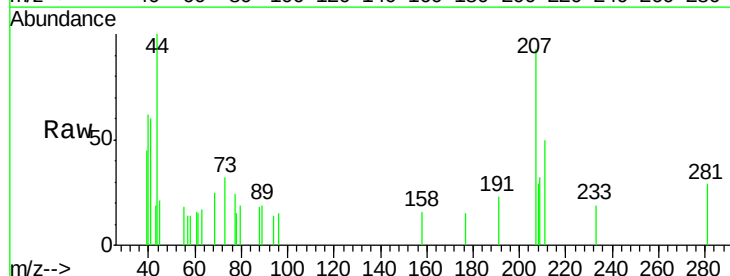
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

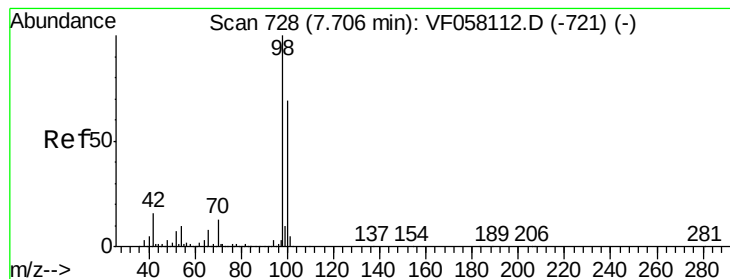
Tgt Ion: 83 Resp: 4920  
Ion Ratio Lower Upper  
83 100  
55 38.8 71.0 106.4#  
98 0.0 38.1 57.1#



#49  
1,4-Dioxane  
Concen: 17.390 ug/l  
RT: 6.86 min Scan# 642  
Delta R.T. -0.01 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

Tgt Ion: 88 Resp: 79  
Ion Ratio Lower Upper  
88 100  
43 105.2 47.8 71.8#  
58 76.9 59.4 89.0





#50

Toluene-d8

Concen: 50.082 ug/l

RT: 7.70 min Scan# 727

Delta R.T. -0.01 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

Instrument :

MSVOA\_F

ClientSampleId :

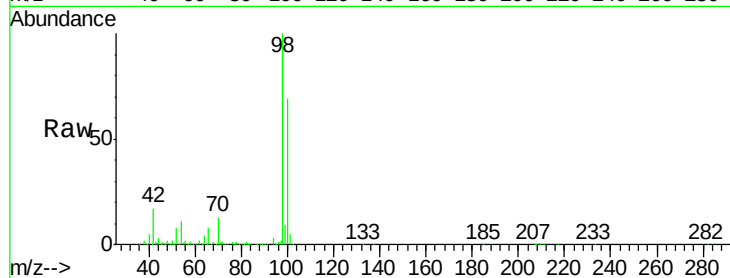
VF0618SBL01

Tgt Ion: 98 Resp: 468904

Ion Ratio Lower Upper

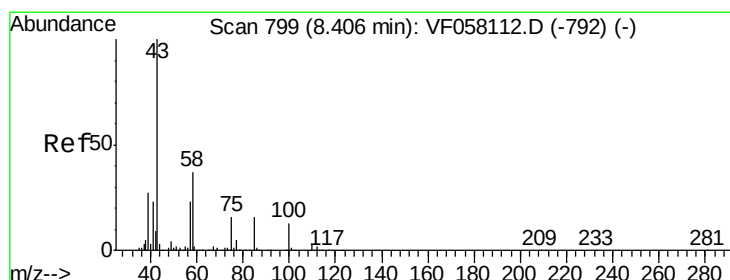
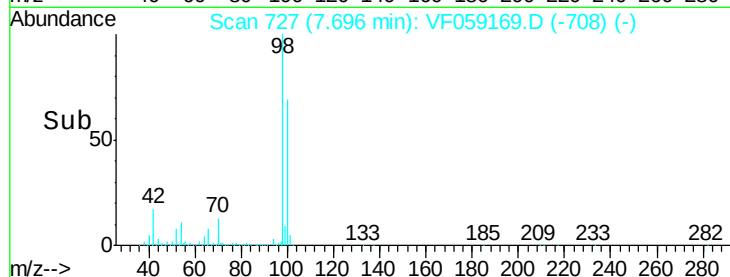
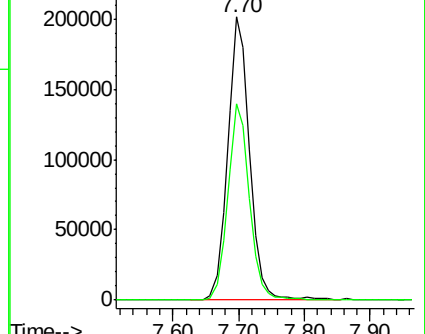
98 100

100 69.4 55.6 83.4



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0



#51

4-Methyl-2-Pentanone

Concen: 3.354 ug/l

RT: 8.40 min Scan# 798

Delta R.T. -0.01 min

Lab File: VF059169.D

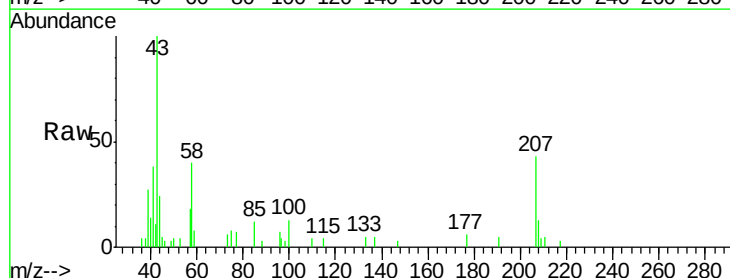
Acq: 18 Jun 2018 12:06

Tgt Ion: 43 Resp: 8376

Ion Ratio Lower Upper

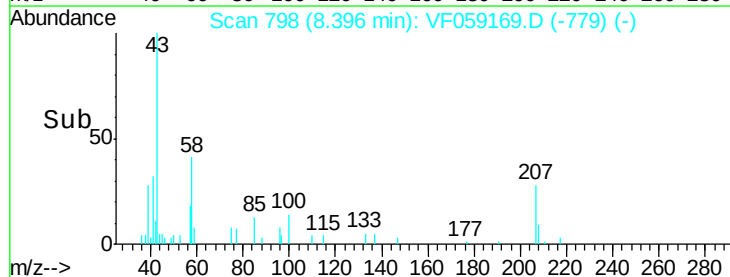
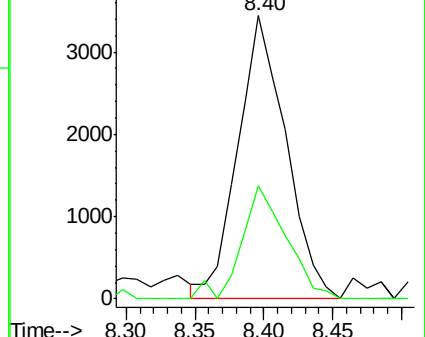
43 100

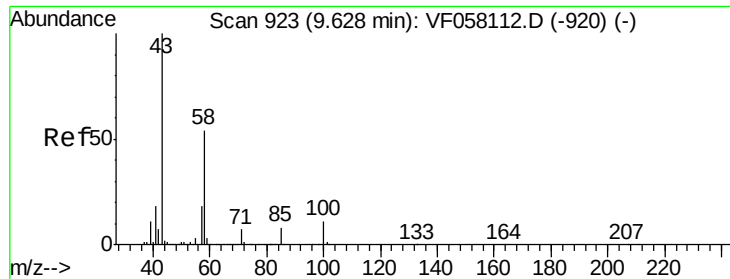
58 40.1 29.4 44.0



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

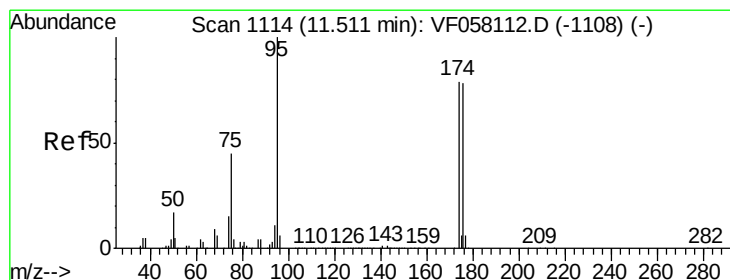
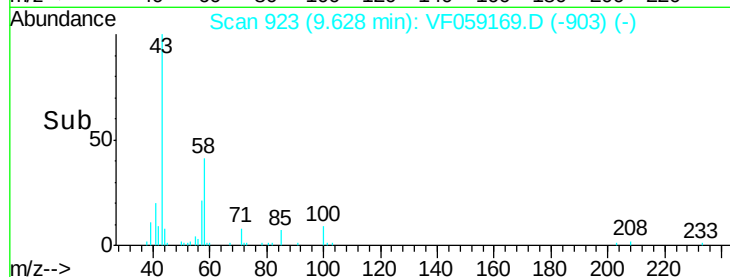
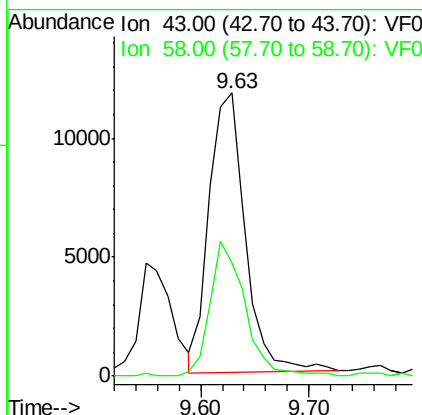
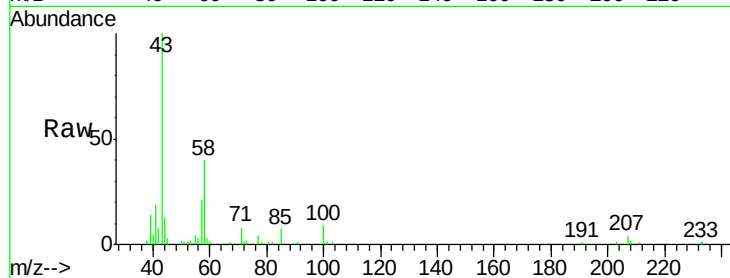




#59  
2-Hexanone  
Concen: 13.876 ug/l  
RT: 9.63 min Scan# 923  
Delta R.T. 0.00 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

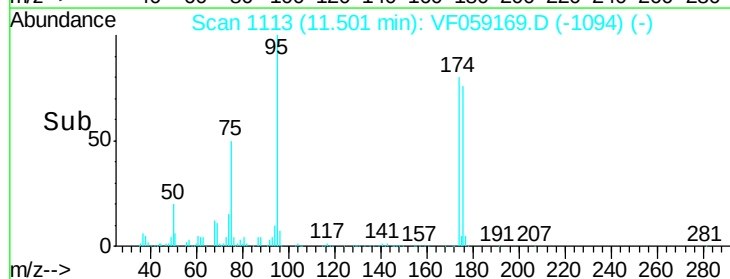
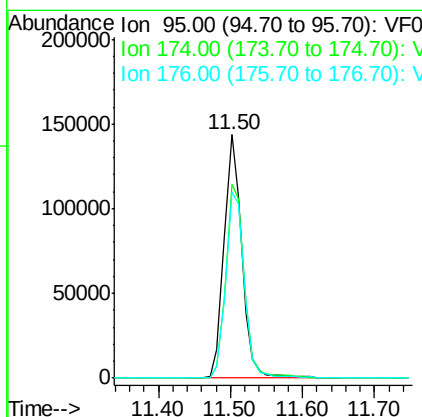
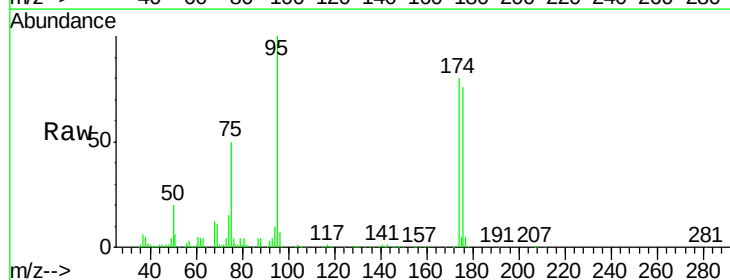
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

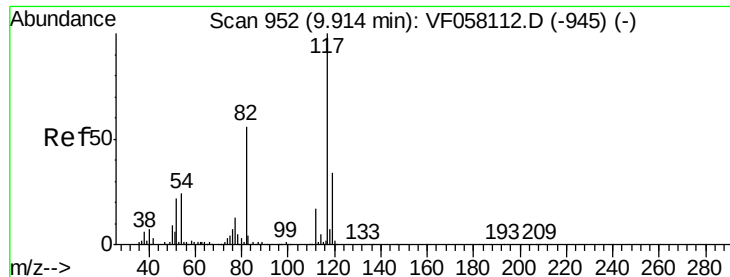
Tgt Ion: 43 Resp: 27407  
Ion Ratio Lower Upper  
43 100  
58 40.1 26.3 78.8



#62  
4-Bromofluorobenzene  
Concen: 51.232 ug/l  
RT: 11.50 min Scan# 1113  
Delta R.T. -0.01 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

Tgt Ion: 95 Resp: 246025  
Ion Ratio Lower Upper  
95 100  
174 79.5 0.0 157.8  
176 76.3 0.0 155.8

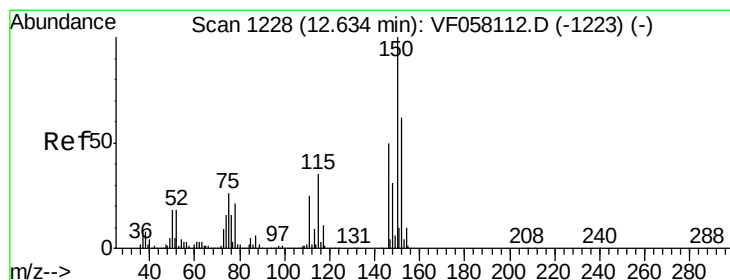
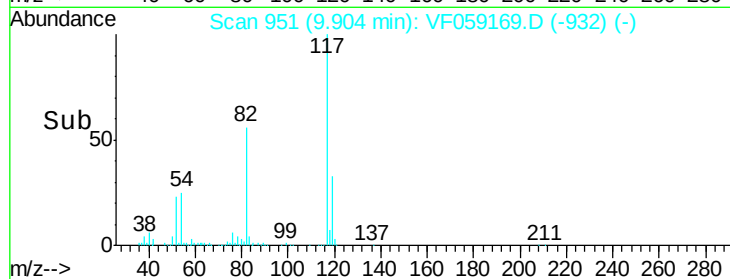
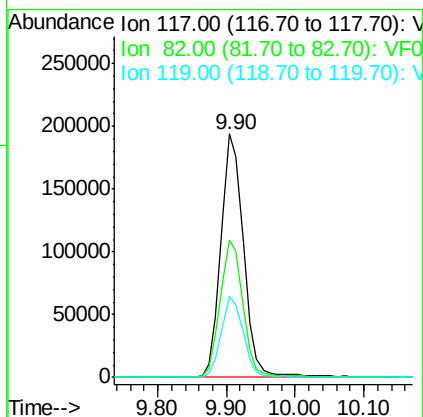
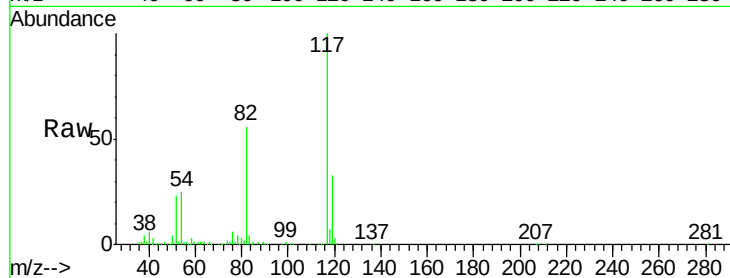




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.90 min Scan# 951  
Delta R.T. -0.01 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

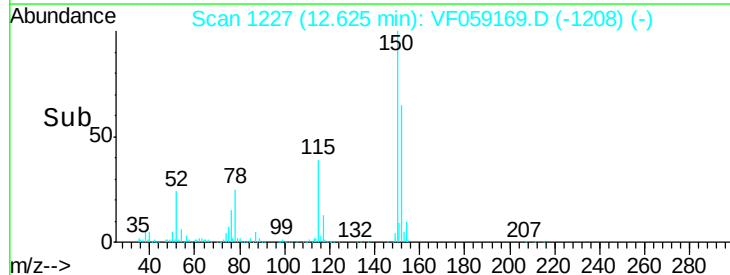
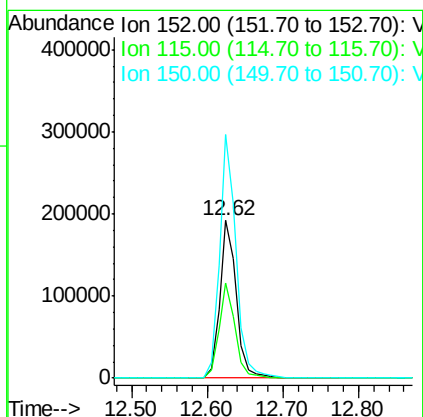
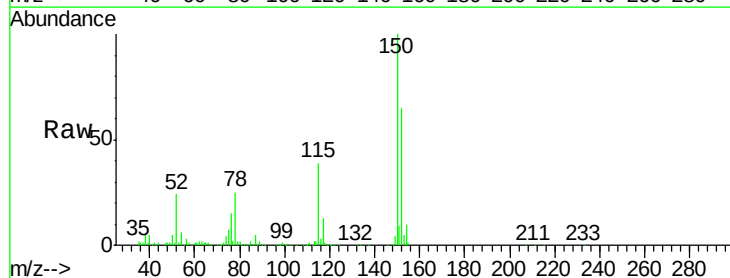
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0618SBL01

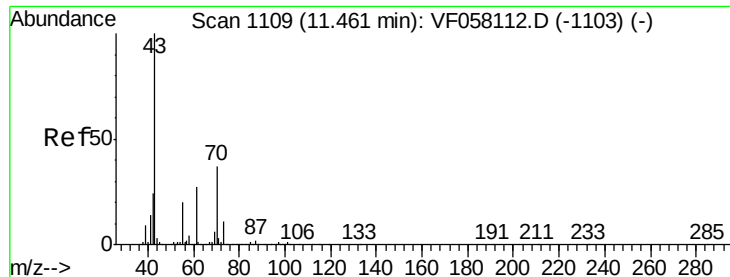
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 56.5  | 45.2  | 67.8  |
| 119     | 33.0  | 27.5  | 41.3  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.62 min Scan# 1227  
Delta R.T. -0.01 min  
Lab File: VF059169.D  
Acq: 18 Jun 2018 12:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.4  | 28.5  | 85.5  |
| 150     | 154.7 | 0.0   | 323.8 |





#74

N-ethyl acetate

Concen: 2.452 ug/l

RT: 11.46 min Scan# 1109

Delta R.T. 0.00 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

Instrument :

MSVOA\_F

ClientSampleId :

VF0618SBL01

Tgt Ion: 43 Resp: 17812

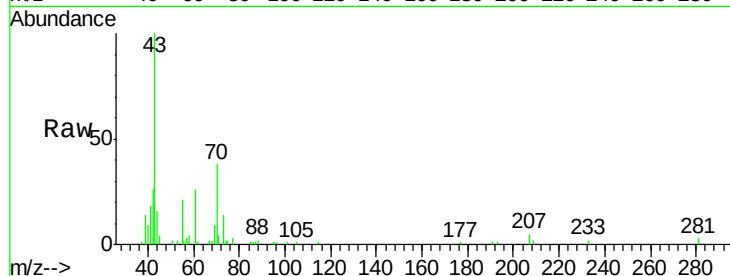
Ion Ratio Lower Upper

43 100

70 38.1 29.2 43.8

55 20.7 15.8 23.6

61 26.4 21.3 31.9

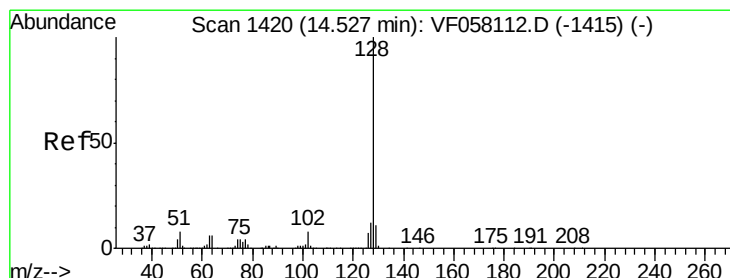
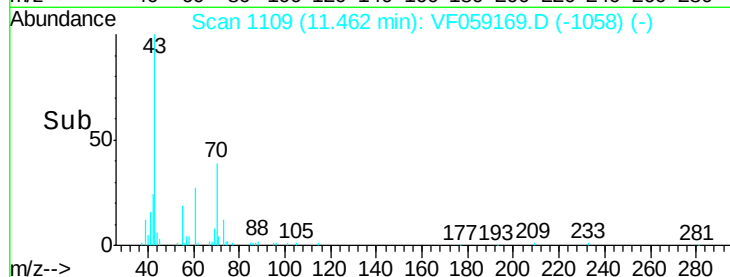
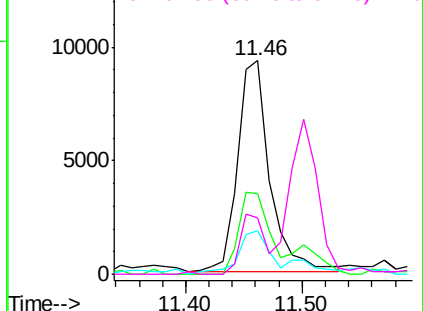


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0



#95

Naphthalene

Concen: 1.499 ug/l

RT: 14.52 min Scan# 1419

Delta R.T. -0.01 min

Lab File: VF059169.D

Acq: 18 Jun 2018 12:06

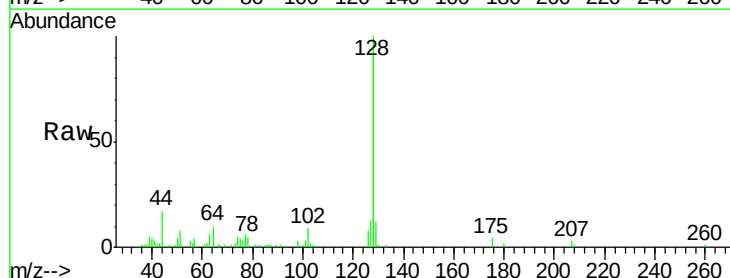
Tgt Ion: 128 Resp: 20385

Ion Ratio Lower Upper

128 100

127 12.8 9.9 14.9

129 12.0 8.7 13.1



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

