

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF122618\  
 Data File : VF061181.D  
 Acq On : 26 Dec 2018 11:40  
 Operator : VA/AP  
 Sample : VF1226SBL01  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF1226SBL01

Quant Time: Dec 26 23:50:13 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 00:56:59 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.85  | 168  | 193107   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.57  | 114  | 347822   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 9.76  | 117  | 324604   | 50.00 | ug/l  | -0.02    |
| 72) 1,4-Dichlorobenzene-d4 | 12.54 | 152  | 186265   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.82  | 65   | 128833   | 51.87 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 103.74% |          |
| 35) Dibromofluoromethane    | 4.09  | 113  | 143859   | 51.63 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 103.26% |          |
| 50) Toluene-d8              | 7.54  | 98   | 362229   | 45.88 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 91.76%  |          |
| 62) 4-Bromofluorobenzene    | 11.39 | 95   | 183109   | 50.30 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 100.60% |          |

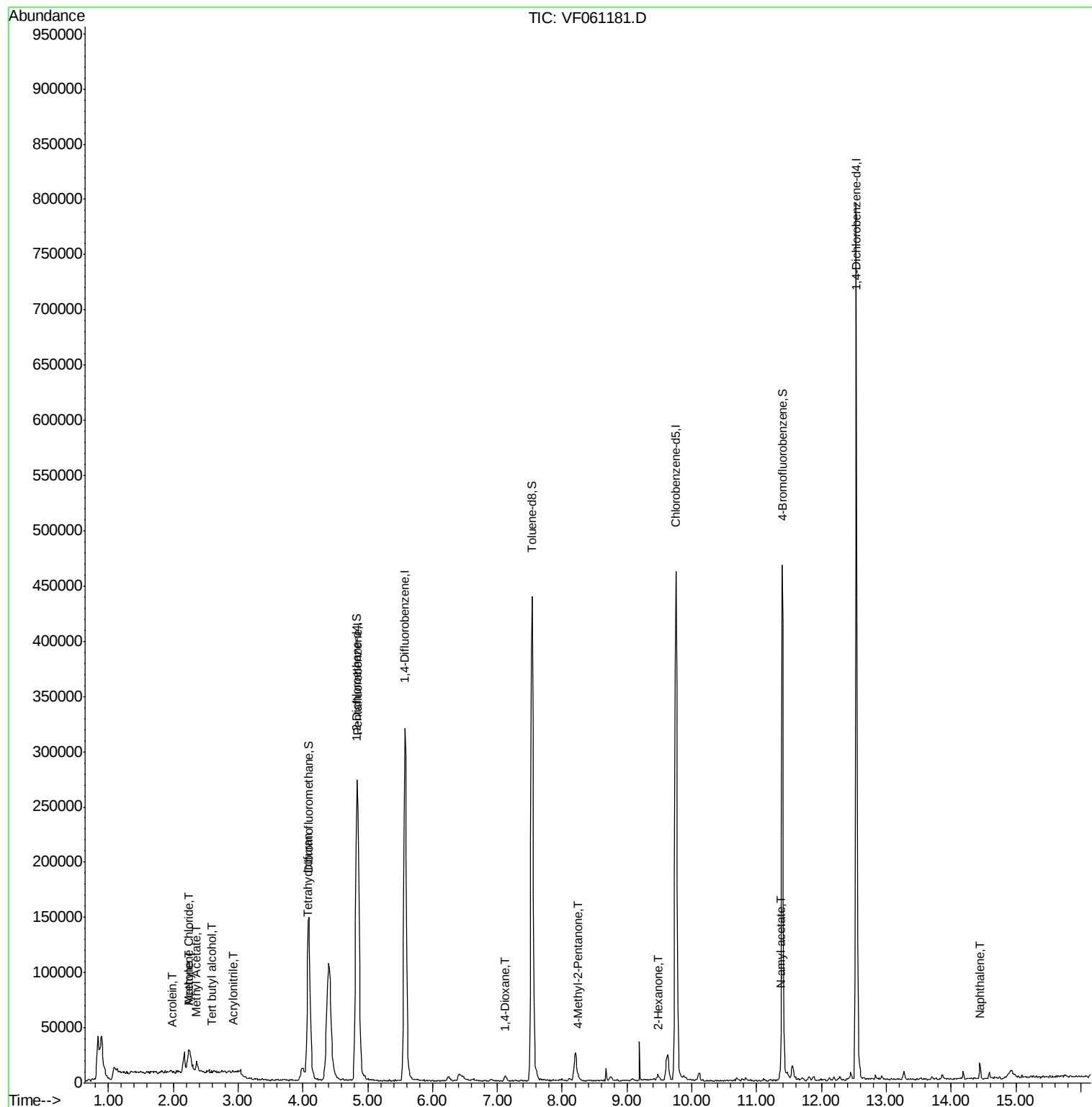
| Target Compounds         | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol   | 2.58  | 59   | 342      | 3.412     | ug/l # | 65     |
| 13) Acrolein             | 1.99  | 56   | 134      | 1.850     | ug/l   | 91     |
| 15) Acrylonitrile        | 2.92  | 53   | 894      | 3.857     | ug/l # | 66     |
| 16) Acetone              | 2.23  | 43   | 2057     | 4.143     | ug/l   | 97     |
| 18) Methyl Acetate       | 2.37  | 43   | 4196     | 4.085     | ug/l # | 66     |
| 20) Methylene Chloride   | 2.24  | 84   | 17754    | 7.359     | ug/l # | 78     |
| 29) Tetrahydrofuran      | 4.06  | 42   | 793      | 2.420     | ug/l # | 66     |
| 37) Ethyl Acetate        | 4.13  | 43   | 181      | Below Cal | #      | 21     |
| 49) 1,4-Dioxane          | 7.13  | 88   | 72       | 7.012     | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone | 8.25  | 43   | 3897     | 2.803     | ug/l   | 93     |
| 59) 2-Hexanone           | 9.48  | 43   | 4446     | 4.422     | ug/l   | 97     |
| 70) Styrene              | 10.77 | 104  | 847      | Below Cal | #      | 86     |
| 74) N-amyl acetate       | 11.36 | 43   | 4950     | 1.389     | ug/l # | 84     |
| 78) n-propylbenzene      | 11.58 | 91   | 2027     | Below Cal |        | 96     |
| 87) 1,3-Dichlorobenzene  | 12.47 | 146  | 861      | Below Cal |        | 72     |
| 95) Naphthalene          | 14.44 | 128  | 9233     | 1.154     | ug/l # | 96     |

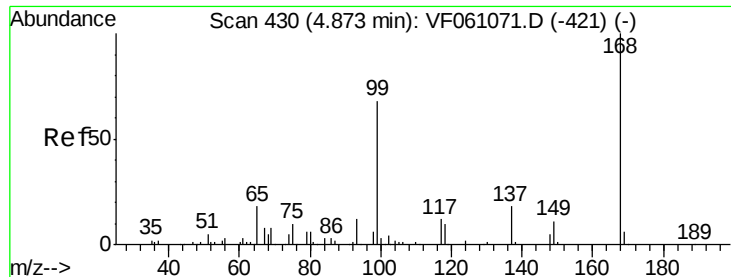
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_F\DATA\VF122618\  
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Sample : VF1226SBL01  
Misc : 5.00g/5mL/MSVOA-F/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

Quant Time: Dec 26 23:50:13 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 00:56:59 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.85 min Scan# 428

Delta R.T. -0.02 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

Instrument :

MSVOA\_F

ClientSampleId :

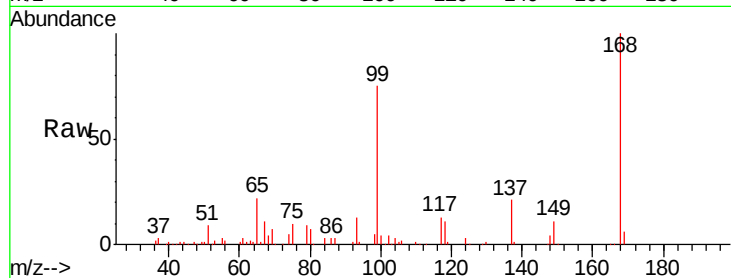
VF1226SBL01

Tgt Ion:168 Resp: 193107

Ion Ratio Lower Upper

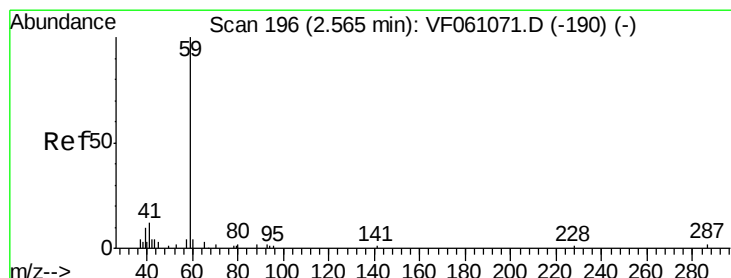
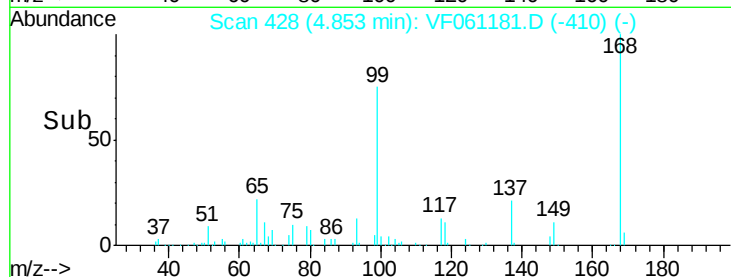
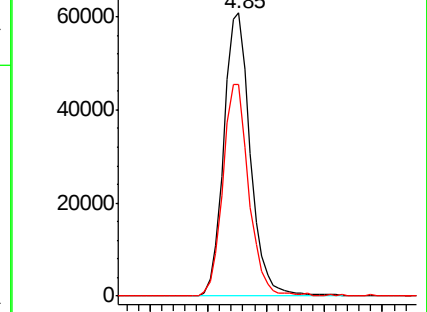
168 100

99 74.8 54.4 81.6



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0



#11

Tert butyl alcohol

Concen: 3.412 ug/l

RT: 2.58 min Scan# 198

Delta R.T. 0.02 min

Lab File: VF061181.D

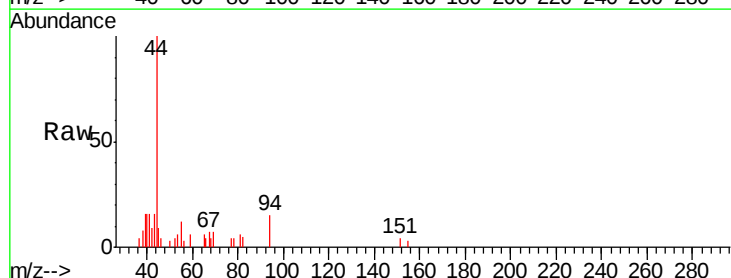
Acq: 26 Dec 2018 11:40

Tgt Ion: 59 Resp: 342

Ion Ratio Lower Upper

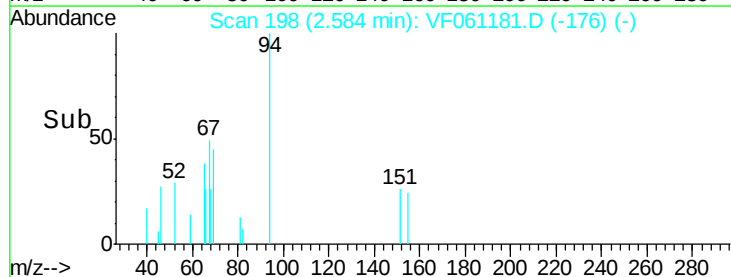
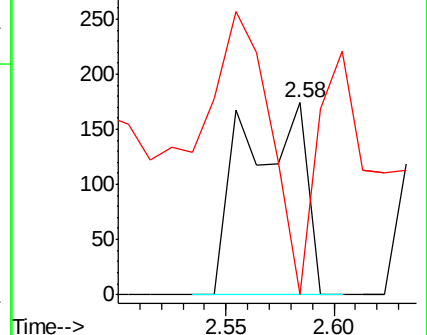
59 100

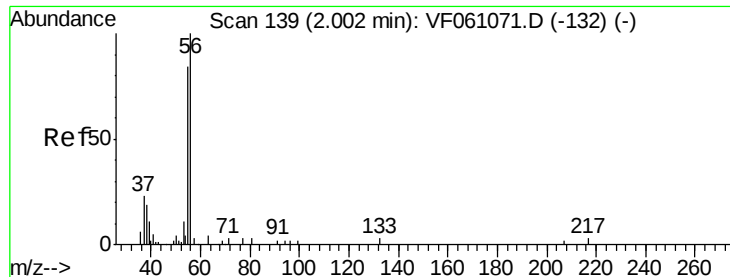
57 0.0 11.5 17.3#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#13

Acrolein

Concen: 1.850 ug/l

RT: 1.99 min Scan# 138

Delta R.T. -0.01 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

Instrument :

MSVOA\_F

ClientSampleId :

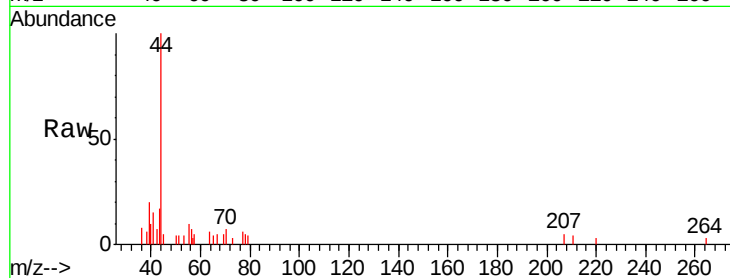
VF1226SBL01

Tgt Ion: 56 Resp: 134

Ion Ratio Lower Upper

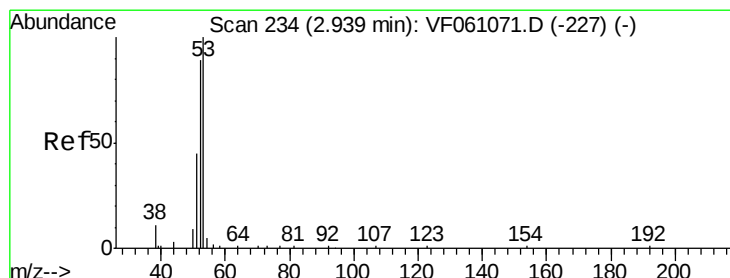
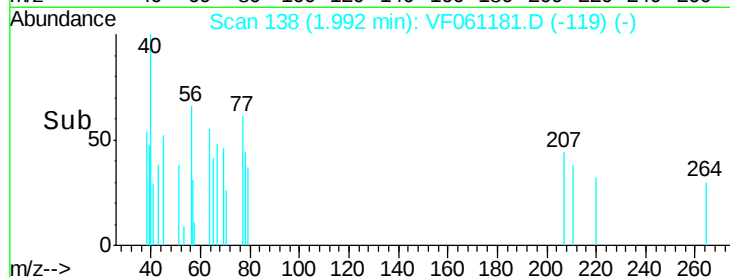
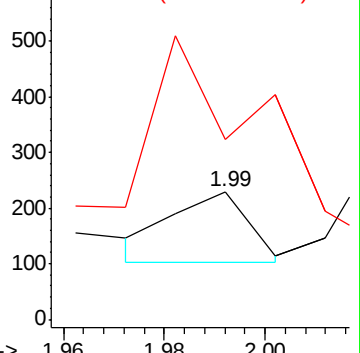
56 100

55 96.1 70.2 105.2



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0



#15

Acrylonitrile

Concen: 3.857 ug/l

RT: 2.92 min Scan# 232

Delta R.T. -0.02 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

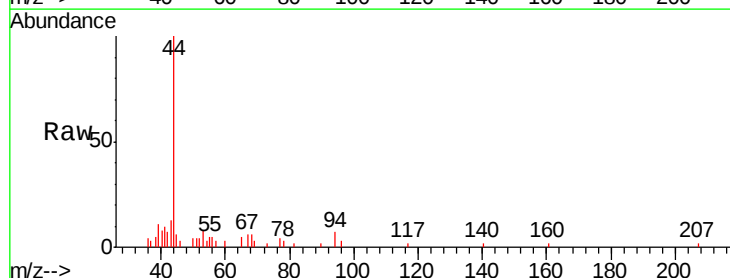
Tgt Ion: 53 Resp: 894

Ion Ratio Lower Upper

53 100

52 44.5 71.3 106.9#

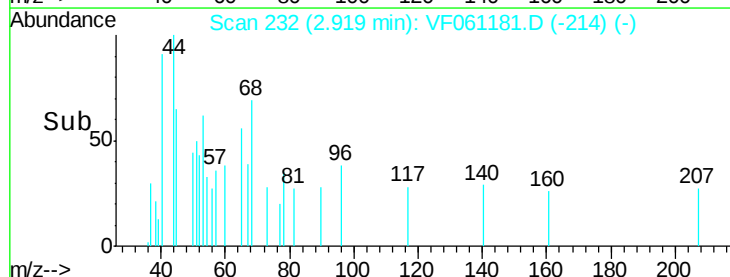
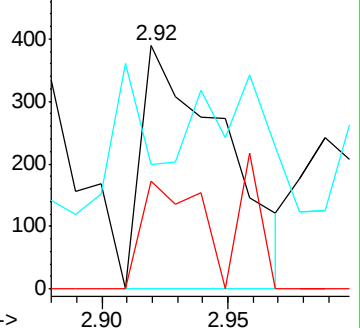
51 51.2 36.8 55.2

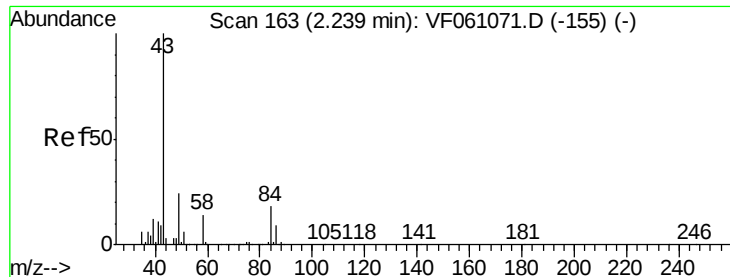


Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0





#16

Acetone

Concen: 4.143 ug/l

RT: 2.23 min Scan# 162

Delta R.T. -0.01 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

Instrument :

MSVOA\_F

ClientSampleId :

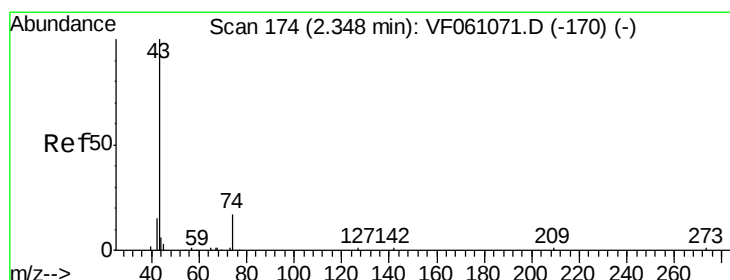
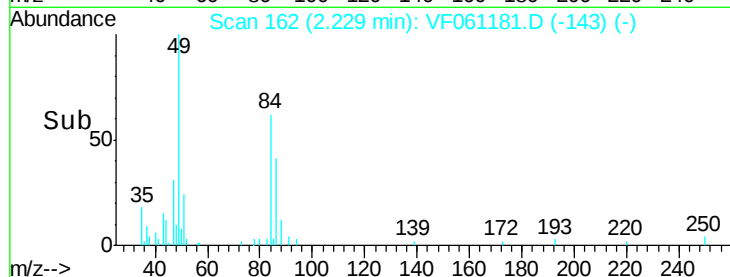
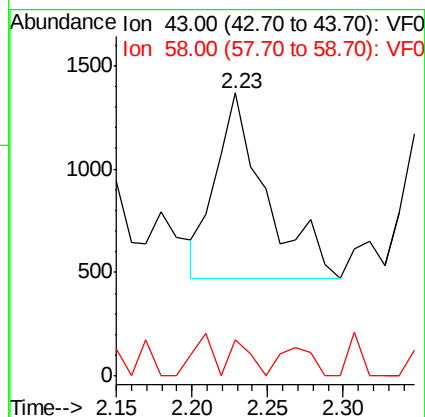
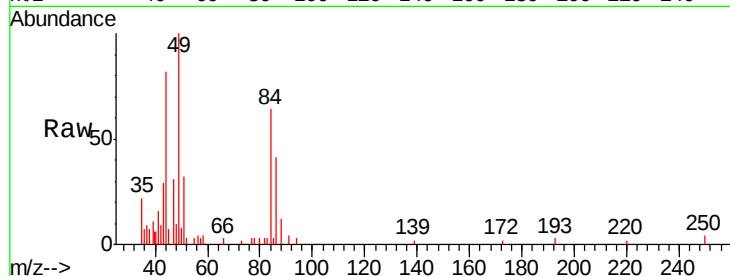
VF1226SBL01

Tgt Ion: 43 Resp: 2057

Ion Ratio Lower Upper

43 100

58 12.9 11.1 16.7



#18

Methyl Acetate

Concen: 4.085 ug/l

RT: 2.37 min Scan# 176

Delta R.T. 0.02 min

Lab File: VF061181.D

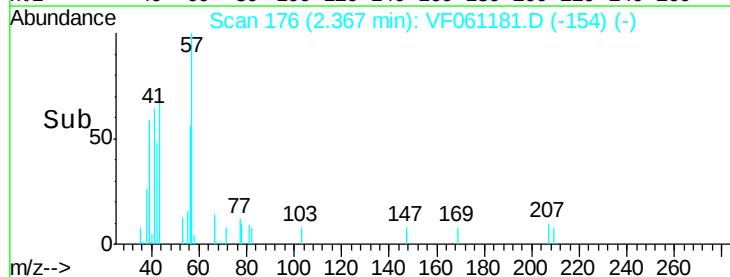
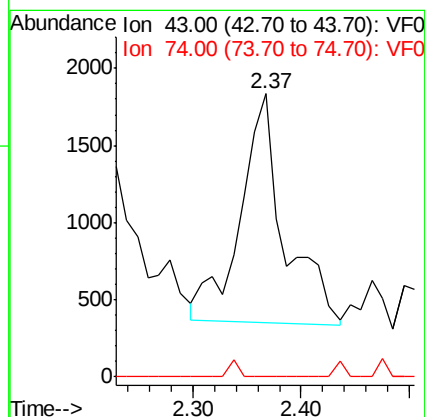
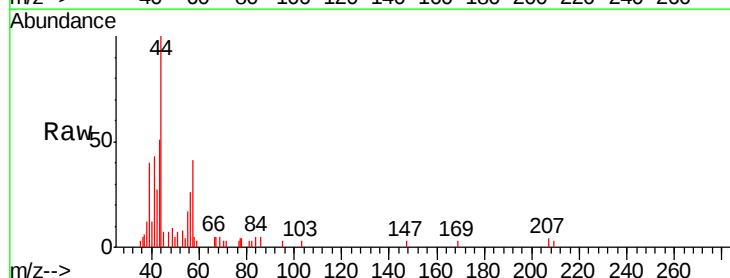
Acq: 26 Dec 2018 11:40

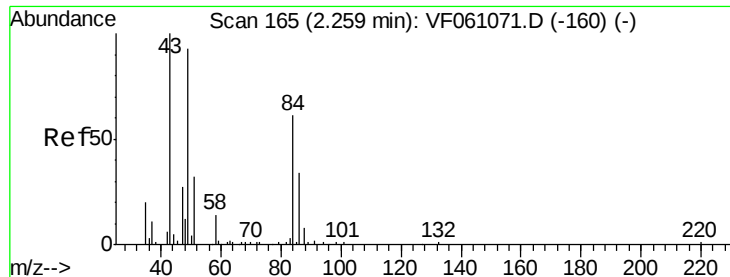
Tgt Ion: 43 Resp: 4196

Ion Ratio Lower Upper

43 100

74 0.0 11.0 16.6#

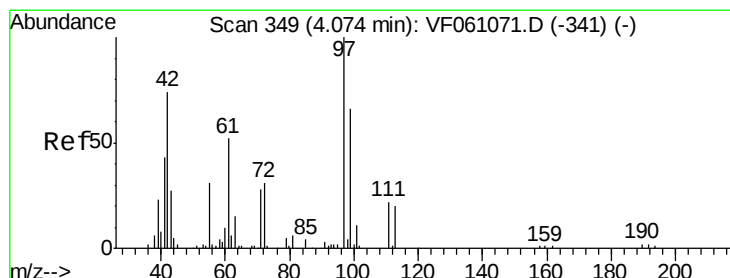
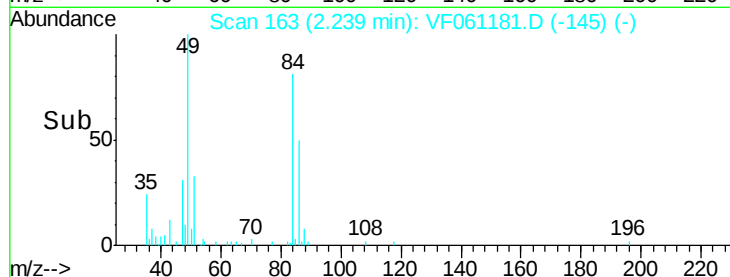
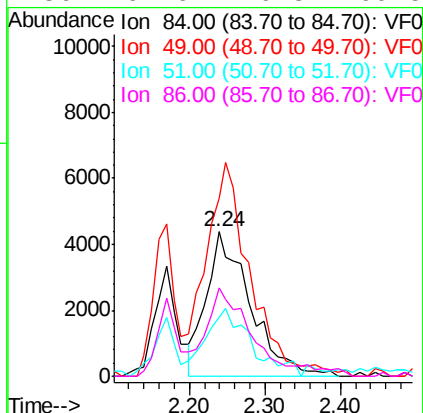
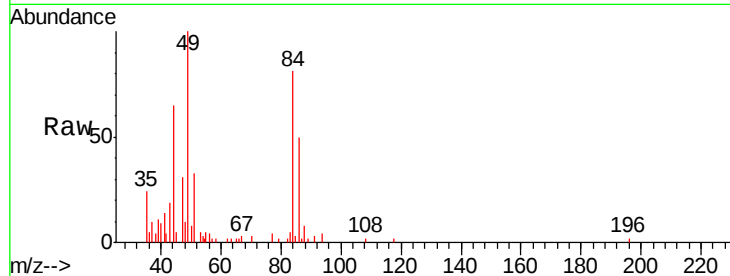




#20  
Methylene Chloride  
Concen: 7.359 ug/l  
RT: 2.24 min Scan# 163  
Delta R.T. -0.02 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

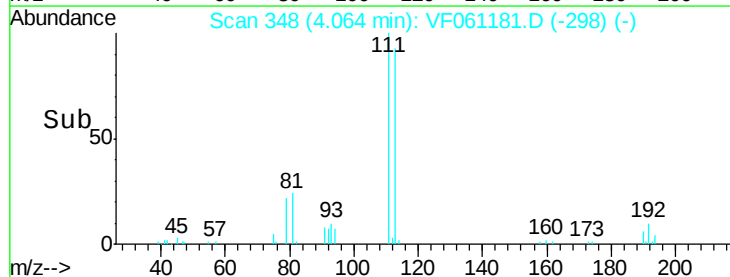
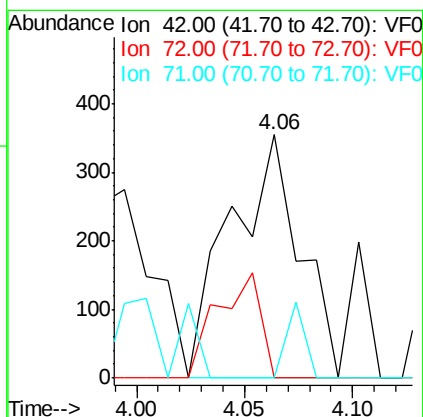
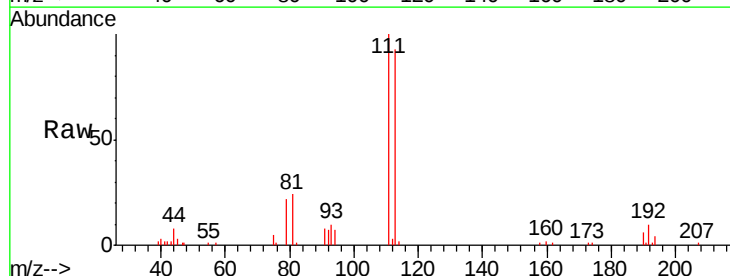
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

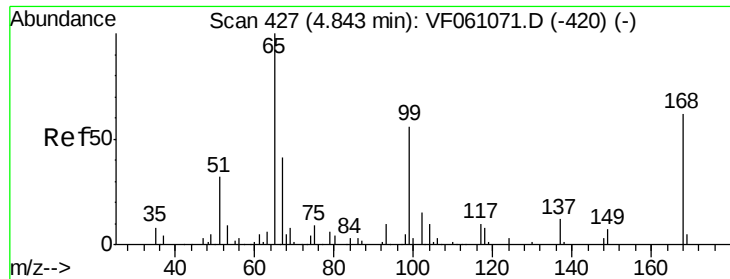
Tgt Ion: 84 Resp: 17754  
Ion Ratio Lower Upper  
84 100  
49 123.8 129.4 194.2#  
51 40.6 44.0 66.0#  
86 61.6 46.3 69.5



#29  
Tetrahydrofuran  
Concen: 2.420 ug/l  
RT: 4.06 min Scan# 348  
Delta R.T. -0.01 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

Tgt Ion: 42 Resp: 793  
Ion Ratio Lower Upper  
42 100  
72 27.0 31.8 47.8#  
71 8.3 29.7 44.5#

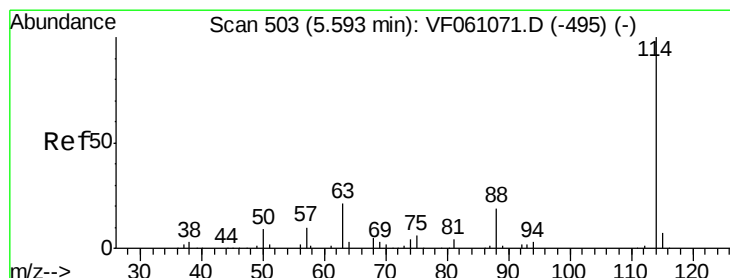
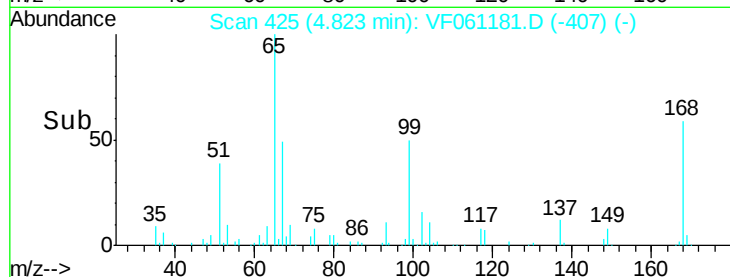
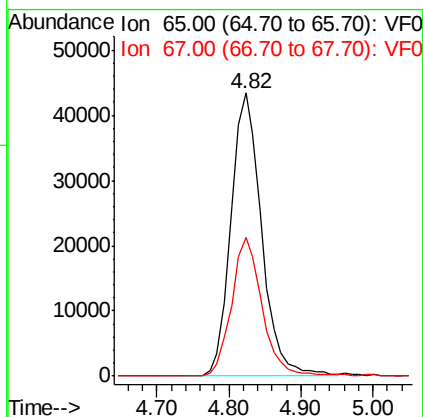
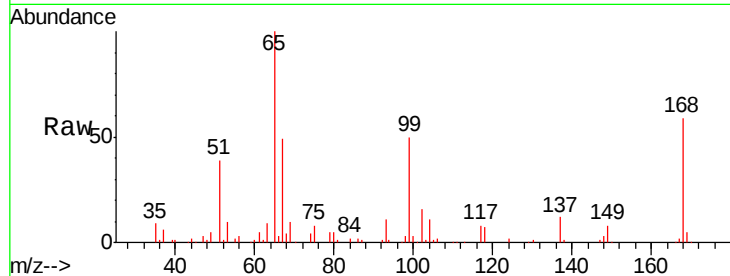




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.872 ug/l  
 RT: 4.82 min Scan# 425  
 Delta R.T. -0.02 min  
 Lab File: VF061181.D  
 Acq: 26 Dec 2018 11:40

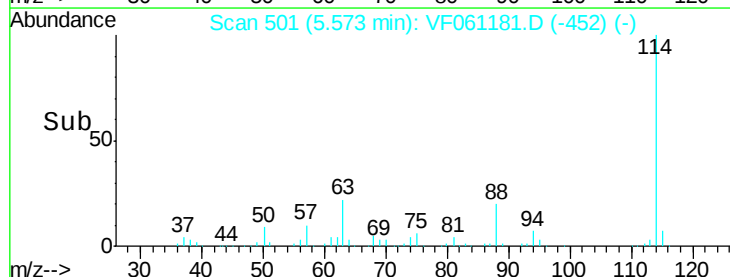
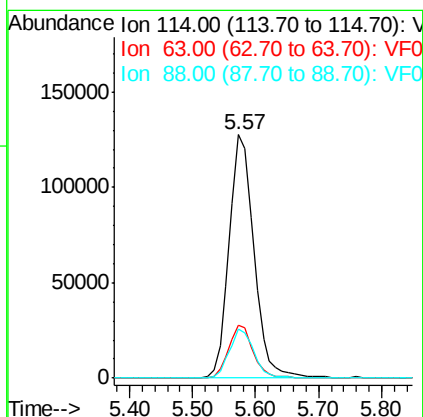
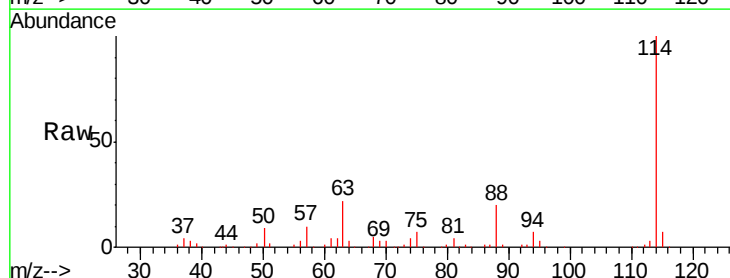
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF1226SBL01

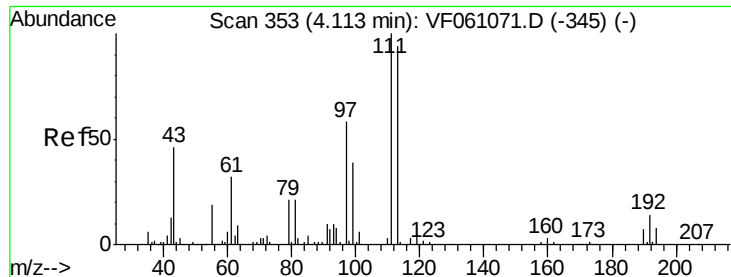
Tgt Ion: 65 Resp: 128833  
 Ion Ratio Lower Upper  
 65 100  
 67 49.2 0.0 94.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.57 min Scan# 501  
 Delta R.T. -0.02 min  
 Lab File: VF061181.D  
 Acq: 26 Dec 2018 11:40

Tgt Ion: 114 Resp: 347822  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 41.6  
 88 19.9 0.0 38.0





#35

Dibromofluoromethane

Concen: 51.632 ug/l

RT: 4.09 min Scan# 351

Delta R.T. -0.02 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

Instrument :

MSVOA\_F

ClientSampleId :

VF1226SBL01

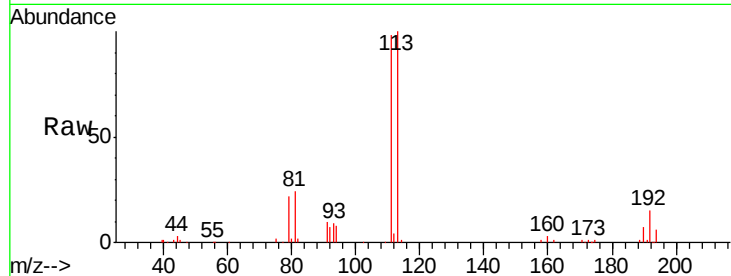
Tgt Ion: 113 Resp: 143859

Ion Ratio Lower Upper

113 100

111 97.8 85.2 127.8

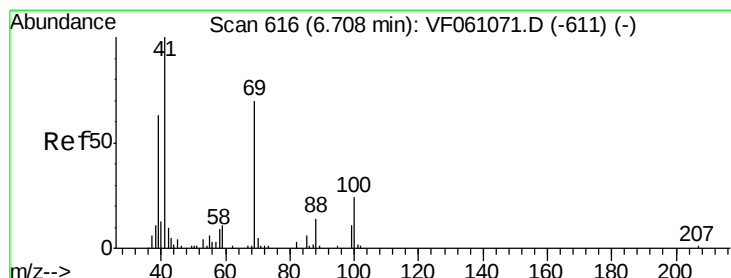
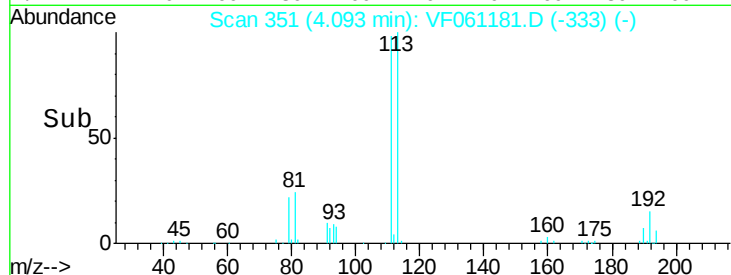
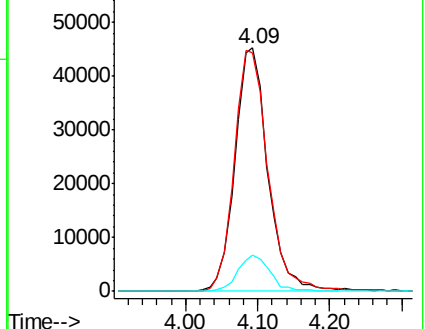
192 15.1 12.8 19.2



Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V



#49

1,4-Dioxane

Concen: 7.012 ug/l

RT: 7.13 min Scan# 659

Delta R.T. 0.42 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

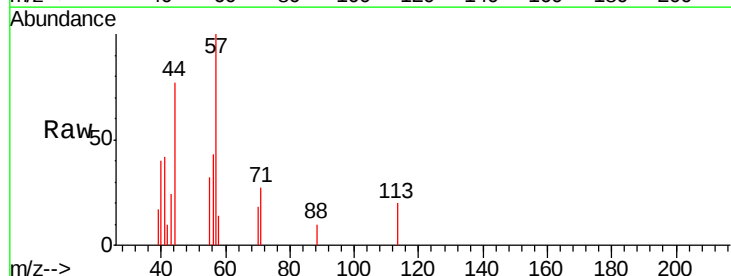
Tgt Ion: 88 Resp: 72

Ion Ratio Lower Upper

88 100

43 254.9 33.3 49.9#

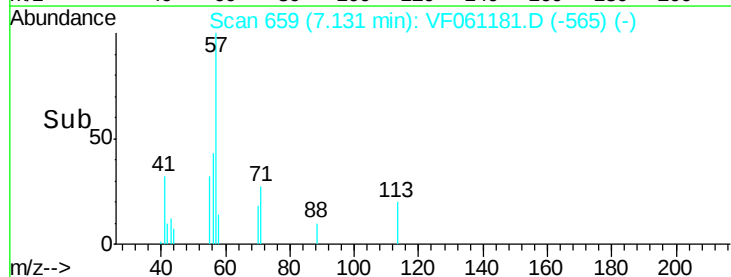
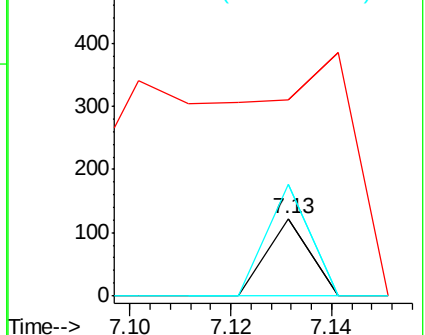
58 144.3 53.2 79.8#

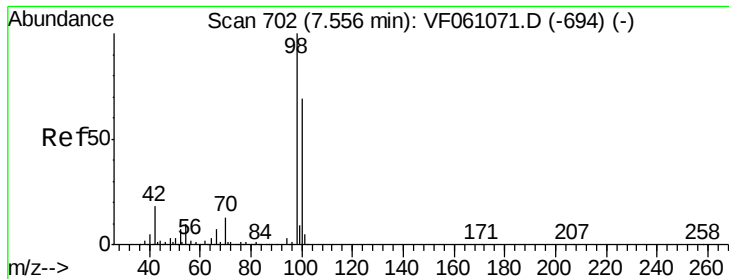


Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

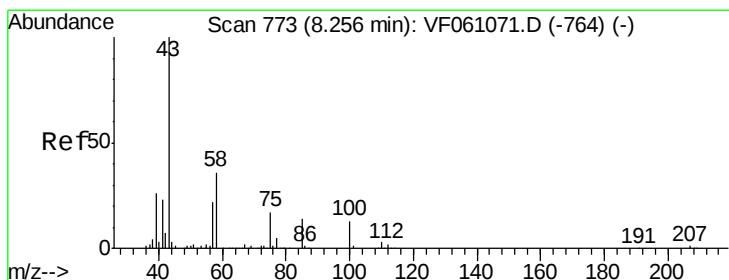
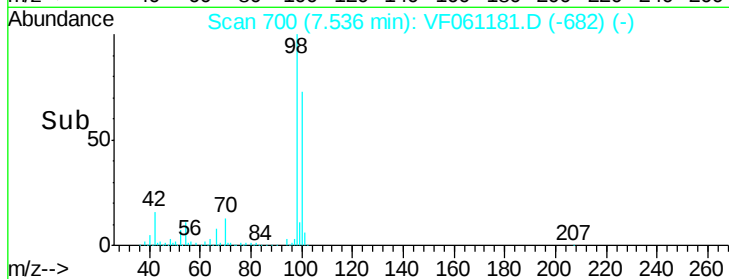
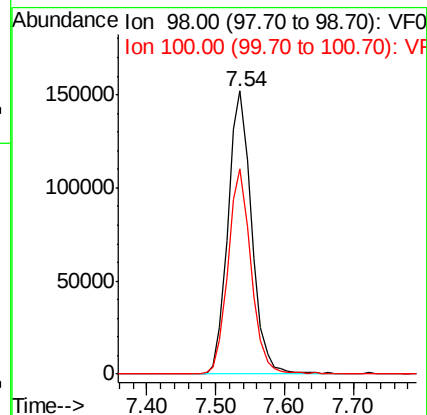
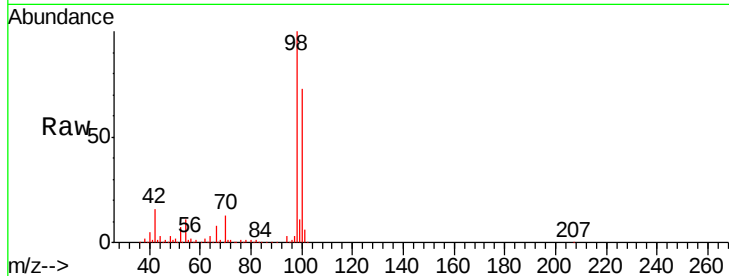




#50  
Toluene-d8  
Concen: 45.876 ug/l  
RT: 7.54 min Scan# 700  
Delta R.T. -0.02 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

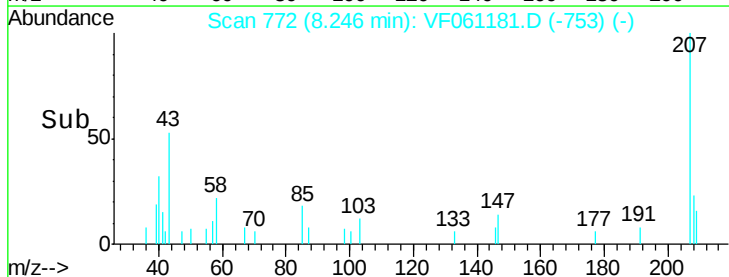
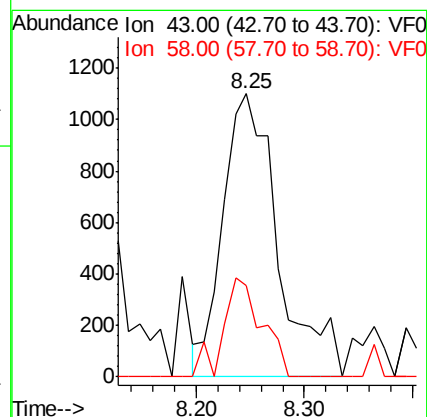
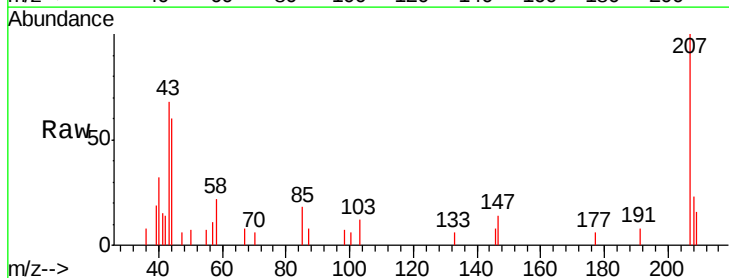
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

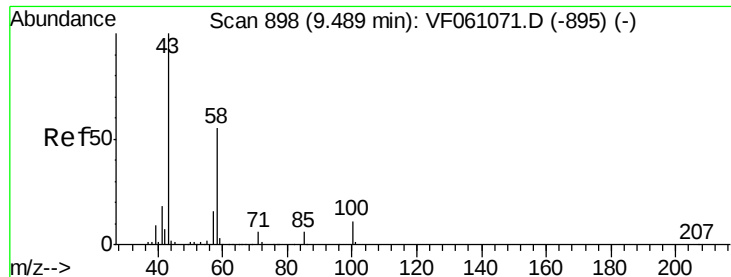
Tgt Ion: 98 Resp: 362229  
Ion Ratio Lower Upper  
98 100  
100 72.6 55.3 82.9



#51  
4-Methyl-2-Pentanone  
Concen: 2.803 ug/l  
RT: 8.25 min Scan# 772  
Delta R.T. -0.01 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

Tgt Ion: 43 Resp: 3897  
Ion Ratio Lower Upper  
43 100  
58 32.3 29.1 43.7

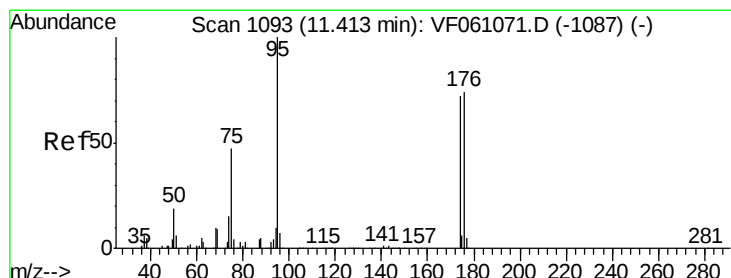
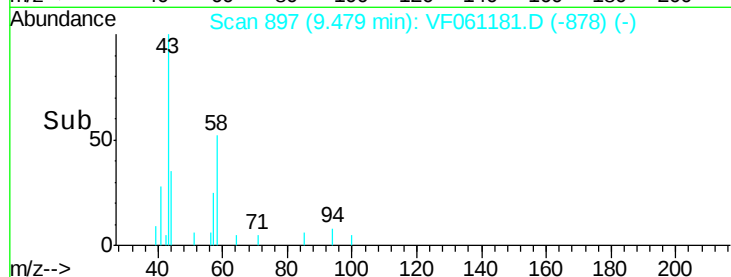
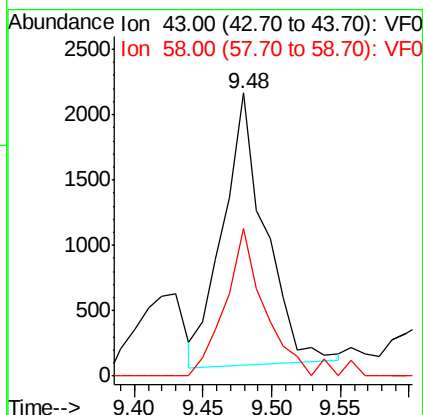
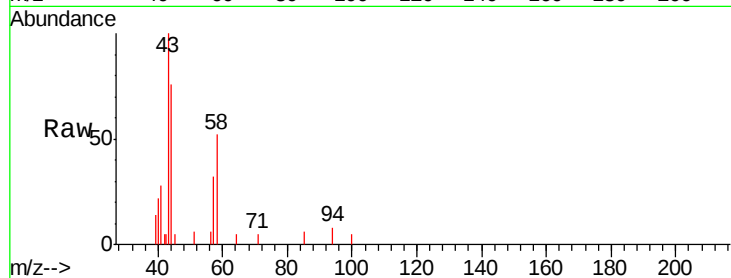




#59  
2-Hexanone  
Concen: 4.422 ug/l  
RT: 9.48 min Scan# 897  
Delta R.T. -0.01 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

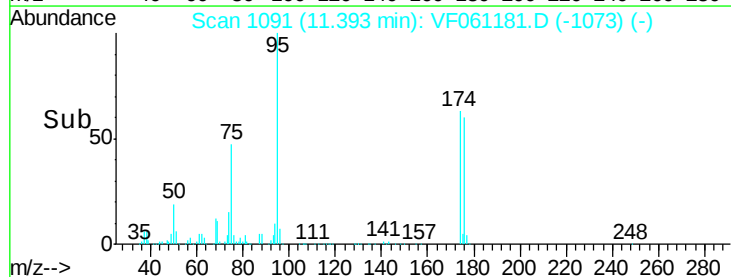
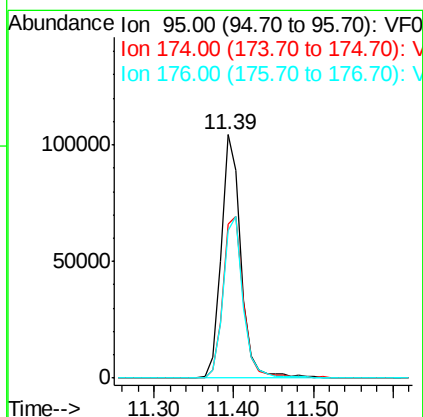
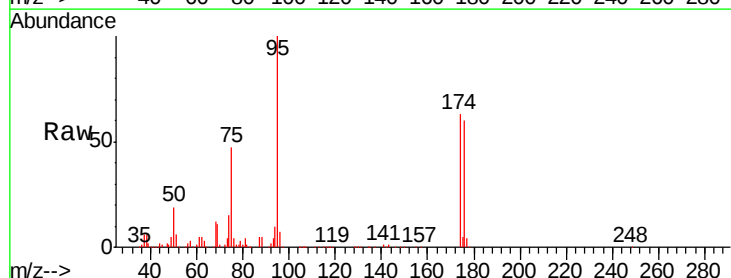
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

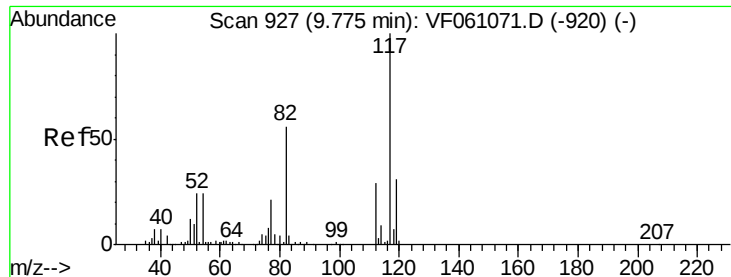
Tgt Ion: 43 Resp: 4446  
Ion Ratio Lower Upper  
43 100  
58 52.2 25.1 75.2



#62  
4-Bromofluorobenzene  
Concen: 50.303 ug/l  
RT: 11.39 min Scan# 1091  
Delta R.T. -0.02 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

Tgt Ion: 95 Resp: 183109  
Ion Ratio Lower Upper  
95 100  
174 63.0 0.0 143.8  
176 60.4 0.0 147.6

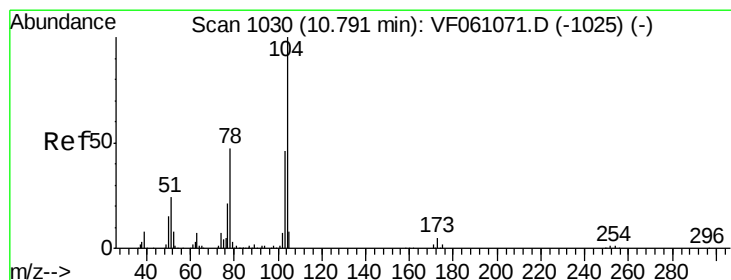
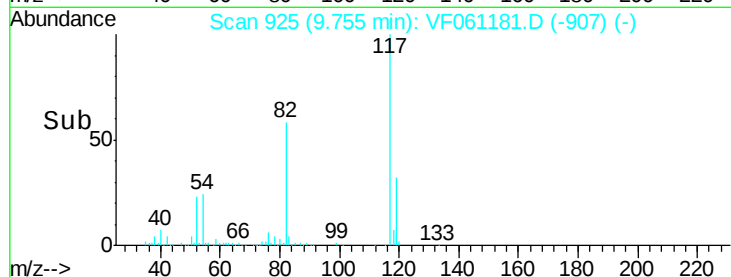
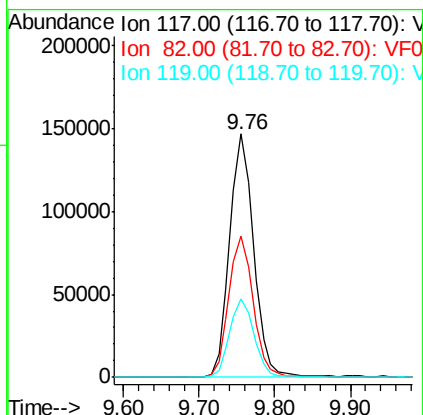
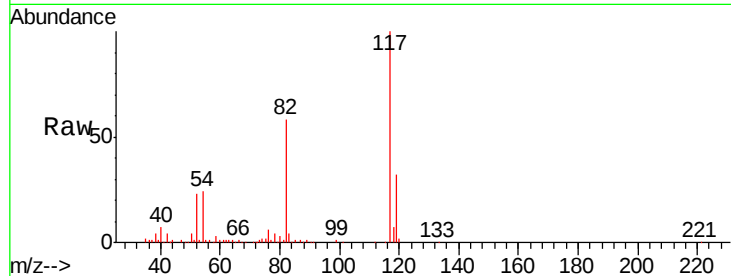




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.76 min Scan# 925  
Delta R.T. -0.02 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

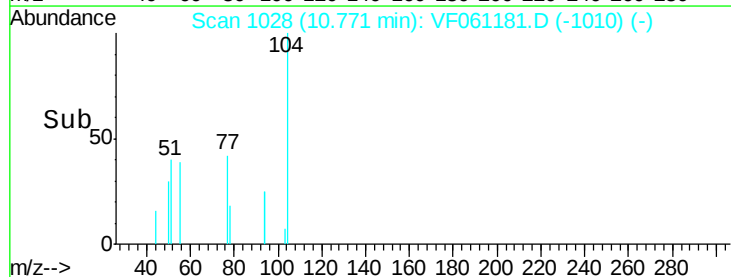
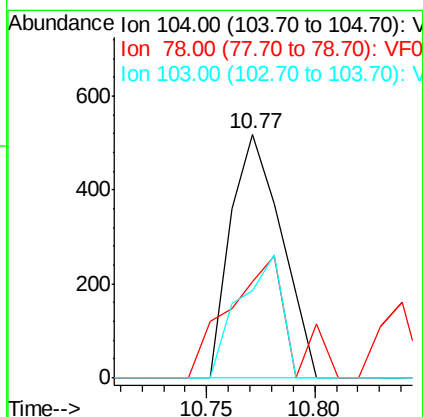
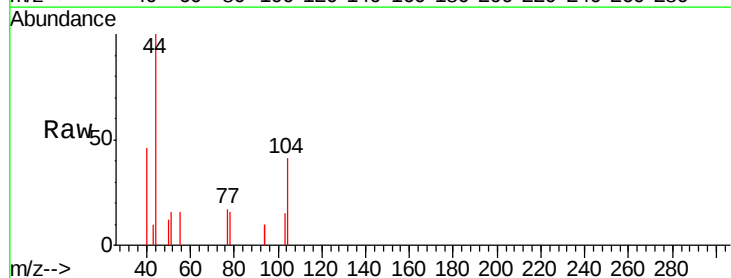
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

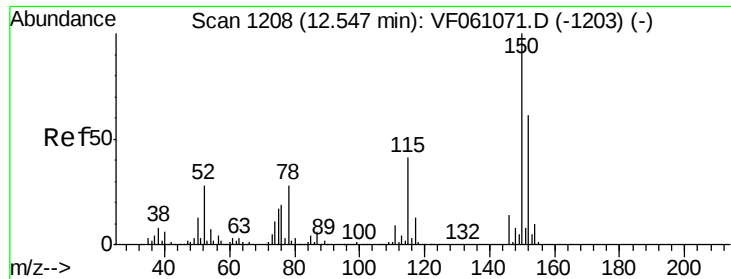
Tgt Ion:117 Resp: 324604  
Ion Ratio Lower Upper  
117 100  
82 58.2 45.0 67.4  
119 32.1 24.8 37.2



#70  
Styrene  
Concen: Below Cal  
RT: 10.77 min Scan# 1028  
Delta R.T. -0.02 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

Tgt Ion:104 Resp: 847  
Ion Ratio Lower Upper  
104 100  
78 39.8 38.4 57.6  
103 36.1 37.0 55.6#



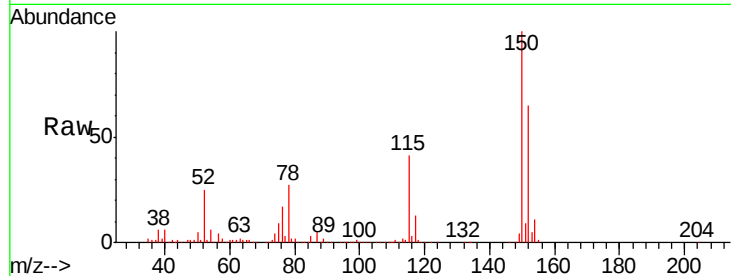


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.54 min Scan# 1207  
Delta R.T. -0.01 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF1226SBL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 62.8  | 33.3  | 99.9  |
| 150     | 153.1 | 0.0   | 328.2 |

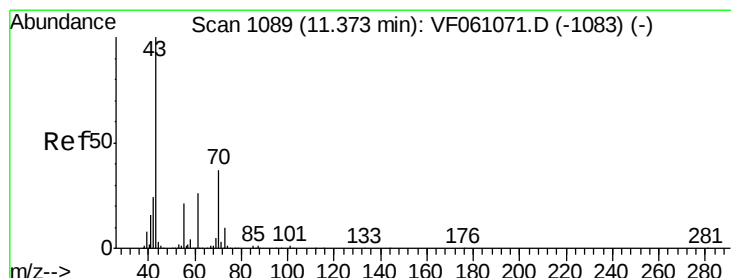
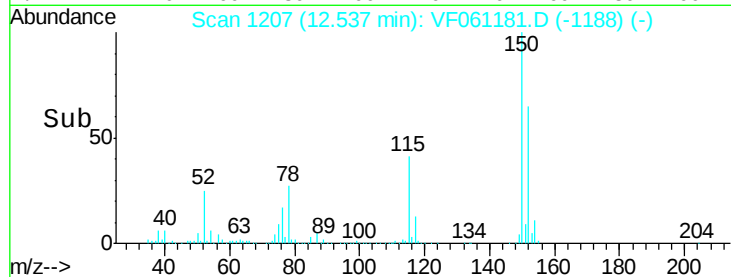
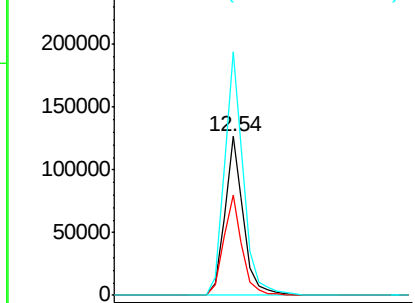


Abundance

Ion 152.00 (151.70 to 152.70): V

Ion 115.00 (114.70 to 115.70): V

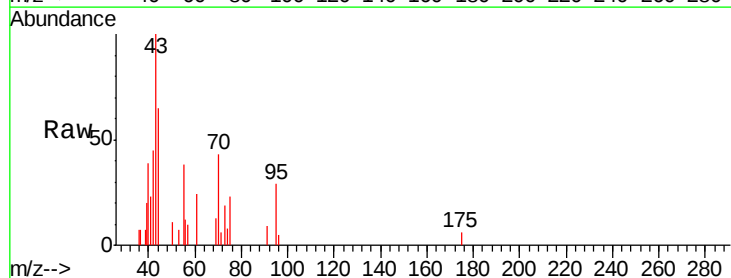
Ion 150.00 (149.70 to 150.70): V



#74

N-ethyl acetate  
Concen: 1.389 ug/l  
RT: 11.36 min Scan# 1088  
Delta R.T. -0.01 min  
Lab File: VF061181.D  
Acq: 26 Dec 2018 11:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 70      | 43.5  | 29.2  | 43.8  |
| 55      | 37.8  | 16.5  | 24.7  |
| 61      | 23.6  | 20.7  | 31.1  |



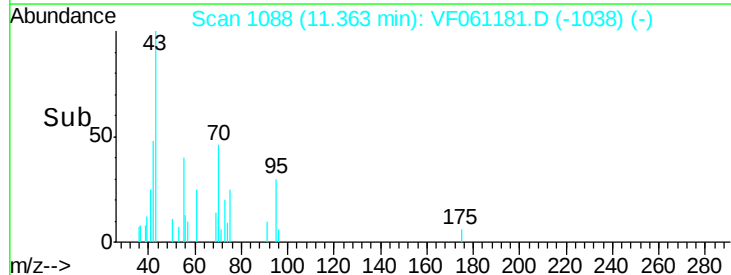
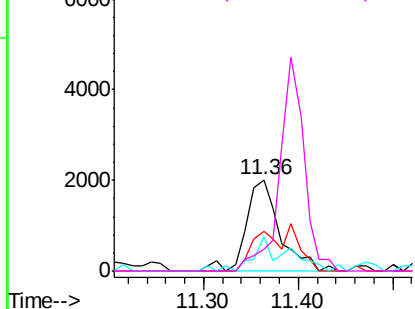
Abundance

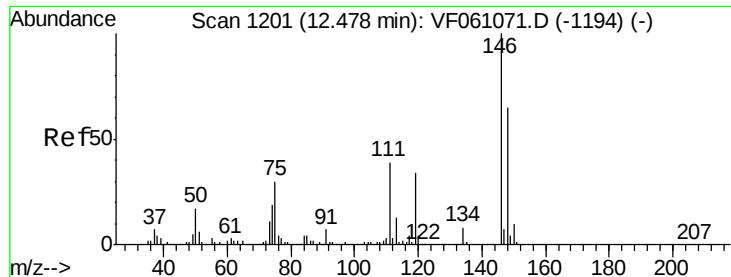
Ion 43.00 (42.70 to 43.70): VF0

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





#87

1,3-Dichlorobenzene

Concen: Below Cal

RT: 12.47 min Scan# 1200

Delta R.T. -0.01 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

Instrument :

MSVOA\_F

ClientSampleId :

VF1226SBL01

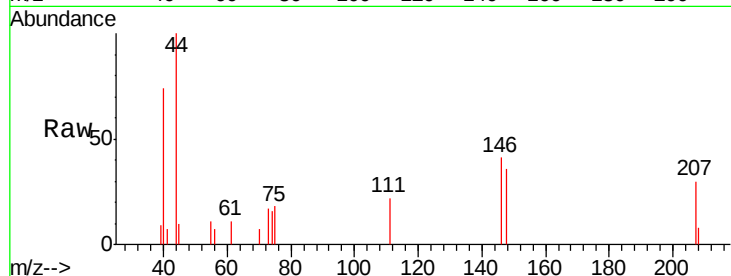
Tgt Ion:146 Resp: 861

Ion Ratio Lower Upper

146 100

111 54.2 19.3 57.9

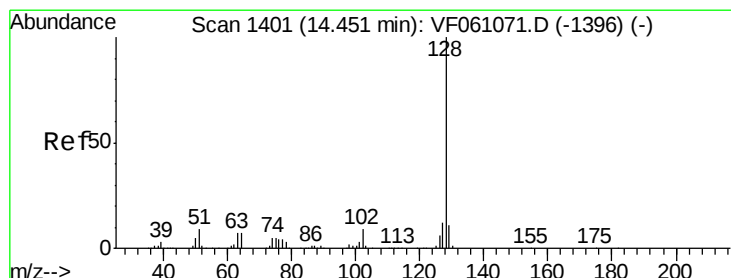
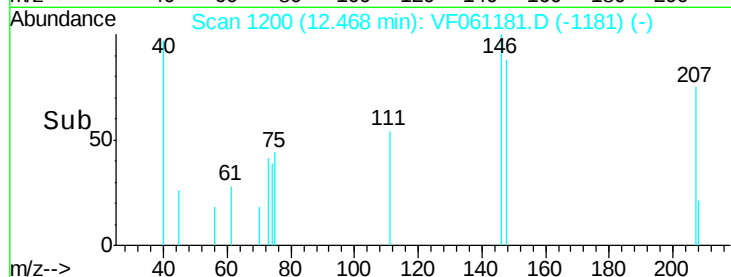
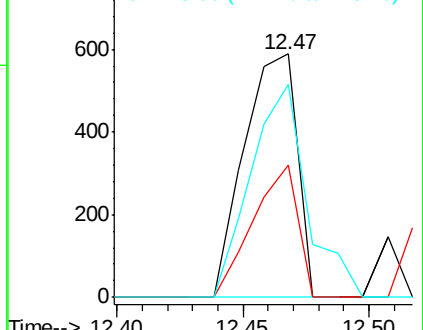
148 87.6 32.4 97.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#95

Naphthalene

Concen: 1.154 ug/l

RT: 14.44 min Scan# 1400

Delta R.T. -0.01 min

Lab File: VF061181.D

Acq: 26 Dec 2018 11:40

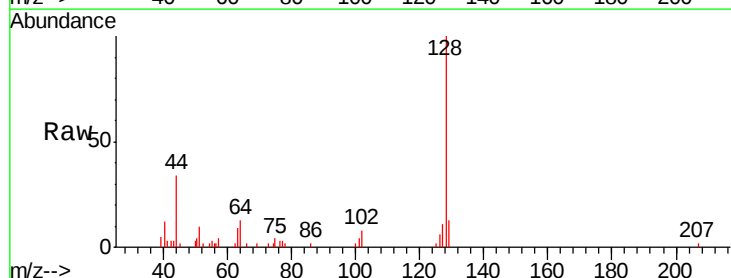
Tgt Ion:128 Resp: 9233

Ion Ratio Lower Upper

128 100

127 11.1 9.4 14.2

129 13.3 8.8 13.2#



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

