

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF071918\  
 Data File : VF059561.D  
 Acq On : 19 Jul 2018 16:57  
 Operator : VA/AP  
 Sample : J4016-10  
 Misc : 5.76g/5mL/MSVOA F/SOIL  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Jul 19 17:20:38 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F071718S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 18 04:09:10 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.03  | 168  | 189248   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.76  | 114  | 263387   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 274152   | 50.00 | ug/l  | -0.02    |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 167946   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.02  | 65   | 167228   | 56.82 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 113.64% |          |
| 35) Dibromofluoromethane    | 4.29  | 113  | 139328   | 61.08 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 122.16% |          |
| 50) Toluene-d8              | 7.71  | 98   | 278535   | 48.47 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 96.94%  |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 158698   | 52.65 | ug/l    | -0.01    |
| Spiked Amount               |       |      | Recovery | =     | 105.30% |          |

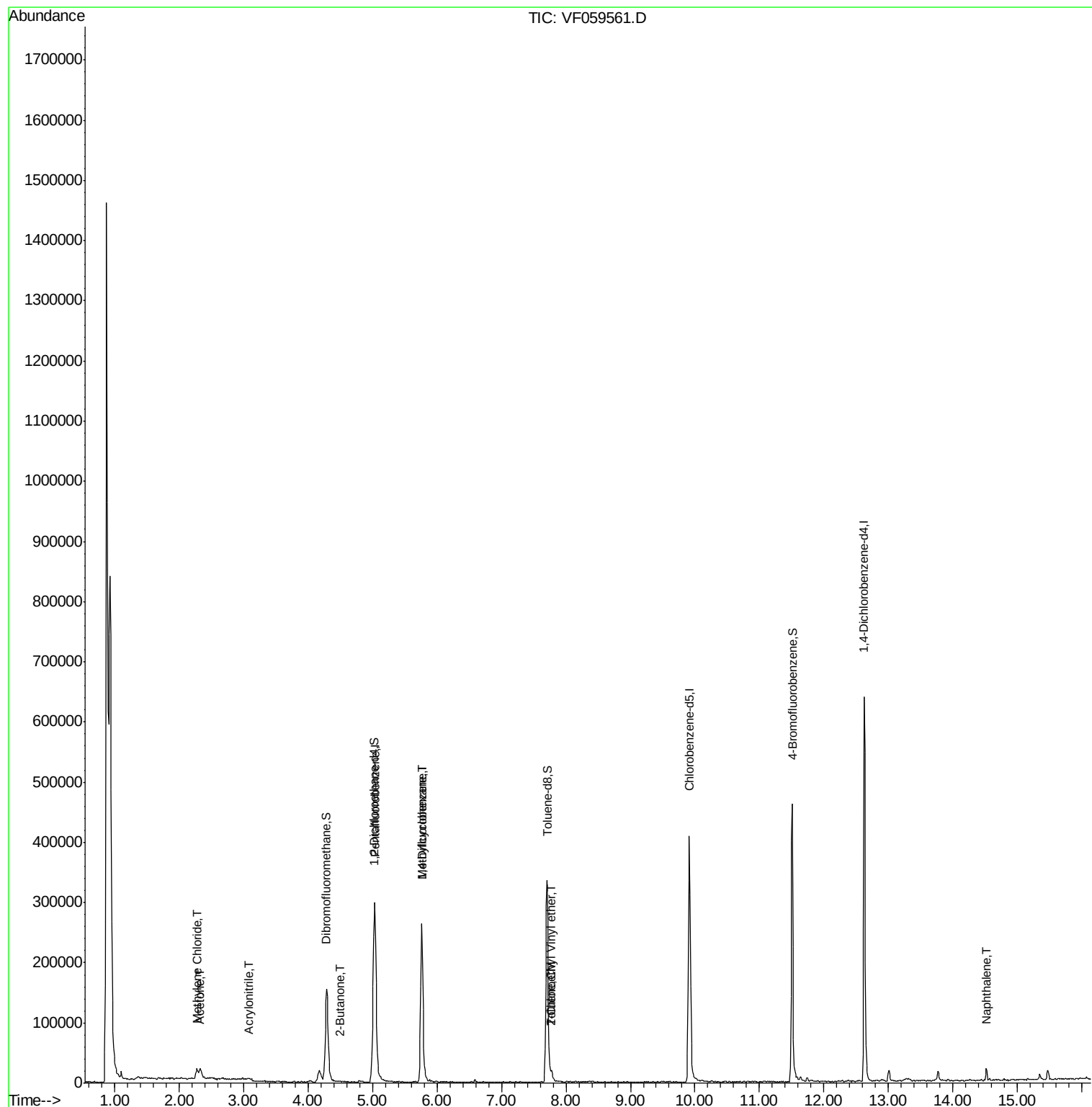
| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol        | 2.70  | 59   | 1151     | Below Cal | #      | 74     |
| 13) Acrolein                  | 2.04  | 56   | 199      | Below Cal |        | 92     |
| 15) Acrylonitrile             | 3.09  | 53   | 610      | 2.47      | ug/l # | 62     |
| 16) Acetone                   | 2.32  | 43   | 20818    | 22.25     | ug/l # | 92     |
| 18) Methyl Acetate            | 2.43  | 43   | 1709     | Below Cal | #      | 67     |
| 20) Methylene Chloride        | 2.27  | 84   | 10316    | 3.51      | ug/l # | 85     |
| 25) 2-Butanone                | 4.50  | 43   | 1262     | 1.85      | ug/l # | 60     |
| 29) Tetrahydrofuran           | 4.30  | 42   | 296      | Below Cal | #      | 38     |
| 37) Ethyl Acetate             | 4.31  | 43   | 719      | Below Cal | #      | 41     |
| 39) Methylcyclohexane         | 5.75  | 83   | 4389     | 2.19      | ug/l # | 50     |
| 49) 1,4-Dioxane               | 6.76  | 88   | 74       | Below Cal | #      | 15     |
| 52) Toluene                   | 7.78  | 92   | 5386     | 1.45      | ug/l   | 98     |
| 58) 2-Chloroethyl Vinyl ether | 7.77  | 63   | 1030     | 6.55      | ug/l   | 100    |
| 95) Naphthalene               | 14.52 | 128  | 13380    | 2.17      | ug/l # | 93     |

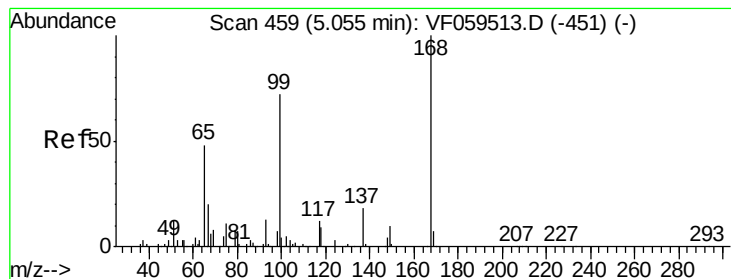
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : J4016-10  
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ALS Vial : 51 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :

Quant Time: Jul 19 17:20:38 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F071718S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 18 04:09:10 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ua/l

RT: 5.03 min Scan# 457

Delta R.T. -0.02 min

Lab File: VF059561.D

Acq: 19 Jul 2018 16:57

Instrument :

MSVOA\_F

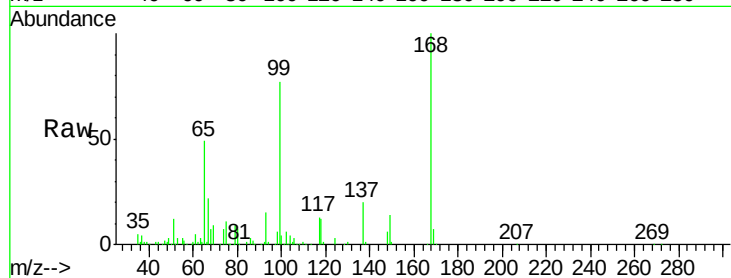
ClientSampleId :

Tot Ion:168 Resp: 189248

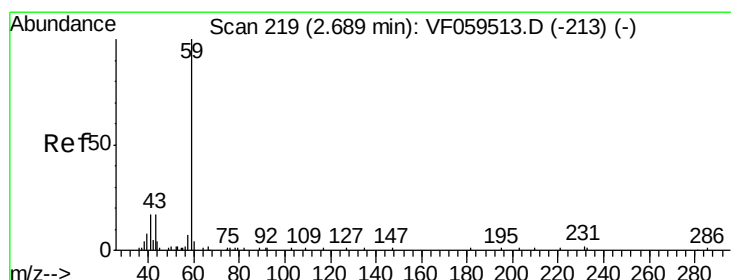
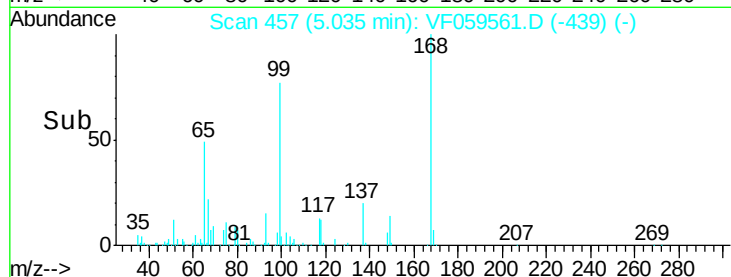
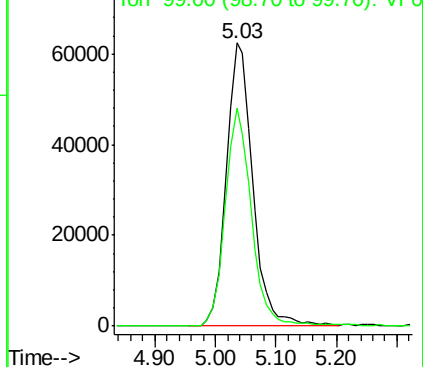
Ion Ratio Lower Upper

168 100

99 77.0 57.6 86.4



Abundance Ion 168.00 (167.70 to 168.70): VF0



#11

Tert butyl alcohol

Concen: Below Cal

RT: 2.70 min Scan# 220

Delta R.T. 0.01 min

Lab File: VF059561.D

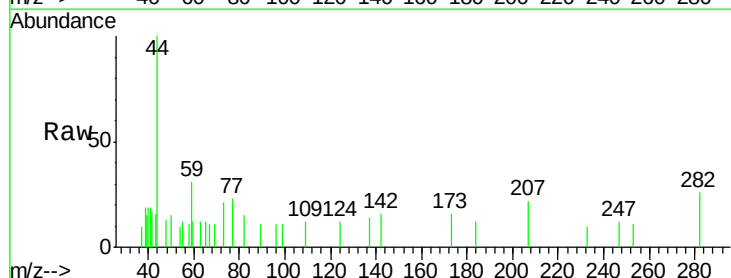
Acq: 19 Jul 2018 16:57

Tgt Ion: 59 Resp: 1151

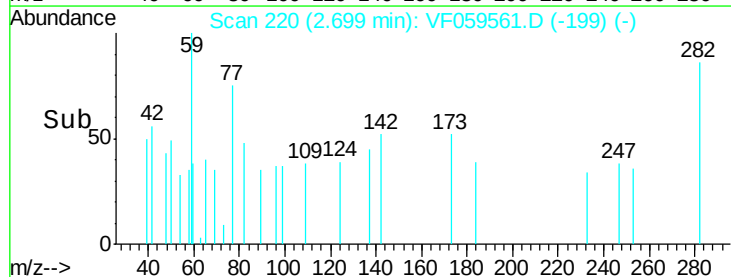
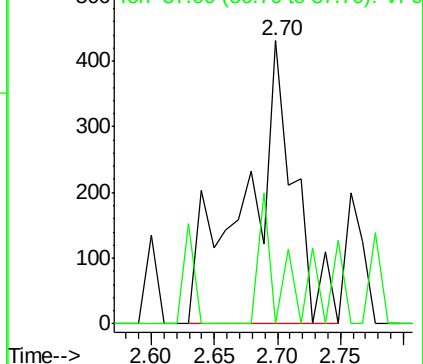
Ion Ratio Lower Upper

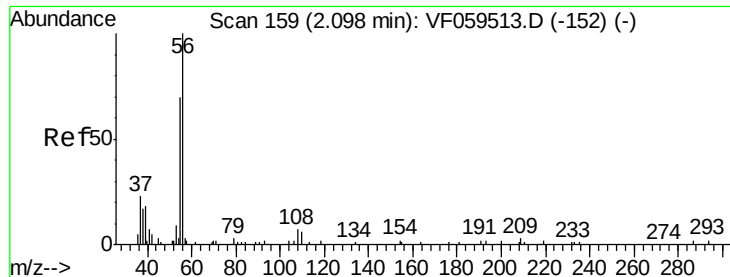
59 100

57 0.0 7.7 11.5#



Abundance Ion 59.00 (58.70 to 59.70): VF0





#13

Acrolein

Concen: Below Cal

RT: 2.04 min Scan# 153

Delta R.T. -0.06 min

Lab File: VF059561.D

Acq: 19 Jul 2018 16:57

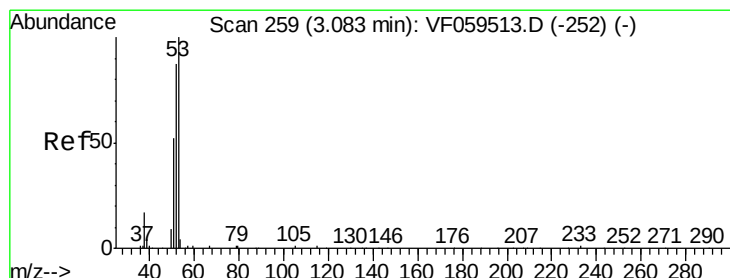
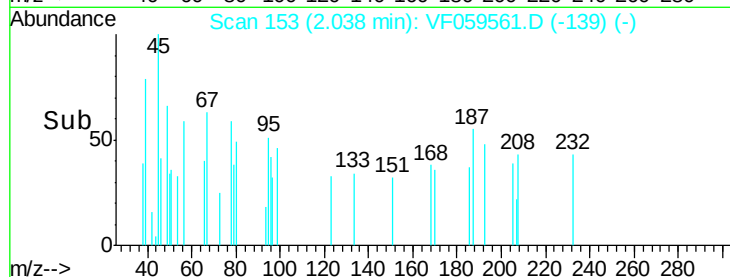
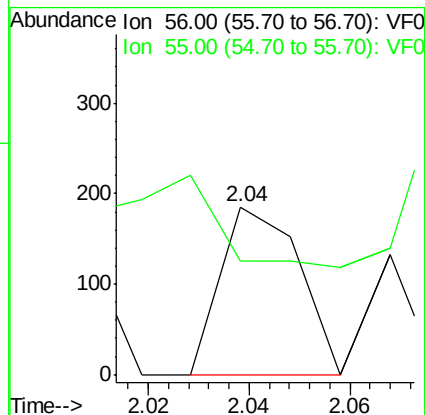
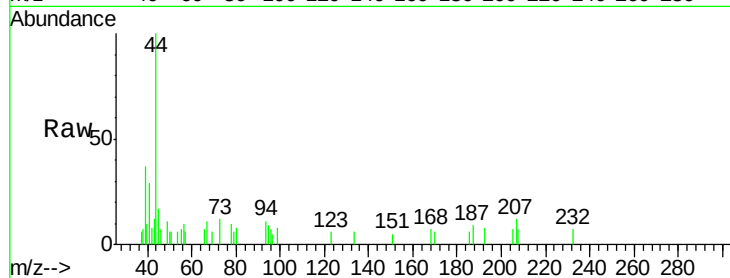
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 56 Resp: 199

Ion Ratio Lower Upper

56 100

55 67.6 59.4 89.2



#15

Acrylonitrile

Concen: 2.47 ug/l

RT: 3.09 min Scan# 260

Delta R.T. 0.01 min

Lab File: VF059561.D

Acq: 19 Jul 2018 16:57

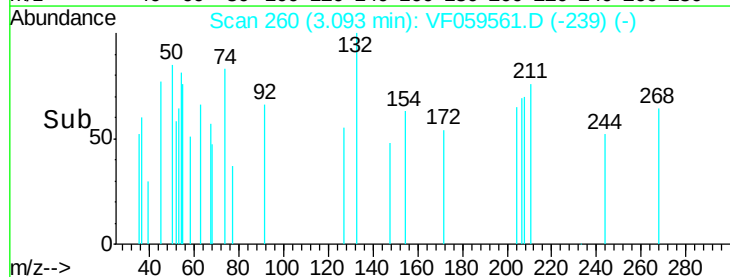
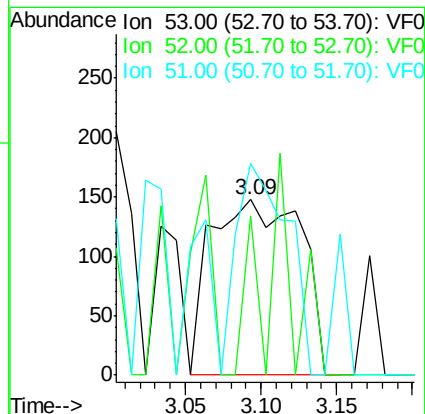
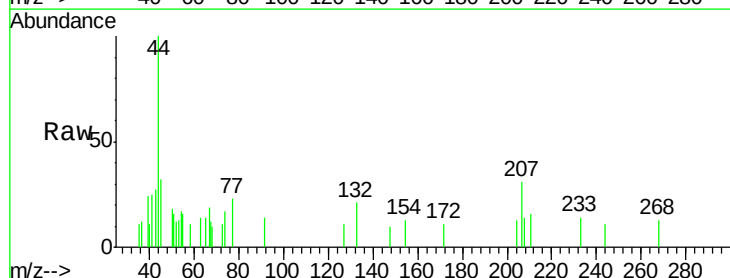
Tgt Ion: 53 Resp: 610

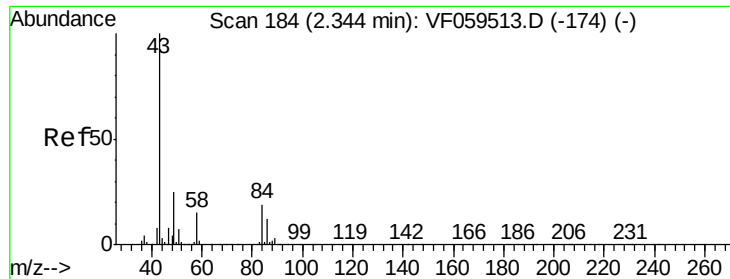
Ion Ratio Lower Upper

53 100

52 90.5 70.1 105.1

51 120.3 42.5 63.7#





#16

Acetone

Concen: 22.25 ug/l

RT: 2.32 min Scan# 182

Delta R.T. -0.02 min

Lab File: VF059561.D

Acq: 19 Jul 2018 16:57

Instrument :

MSVOA\_F

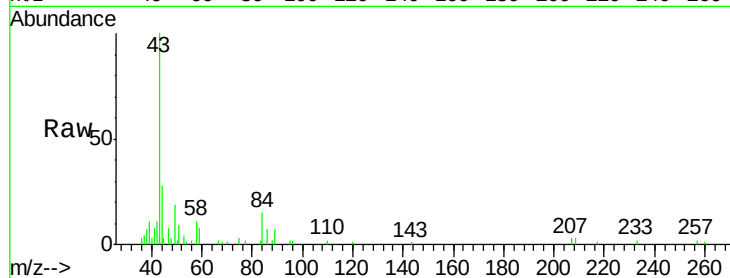
ClientSampleId :

Tot Ion: 43 Resp: 20818

Ion Ratio Lower Upper

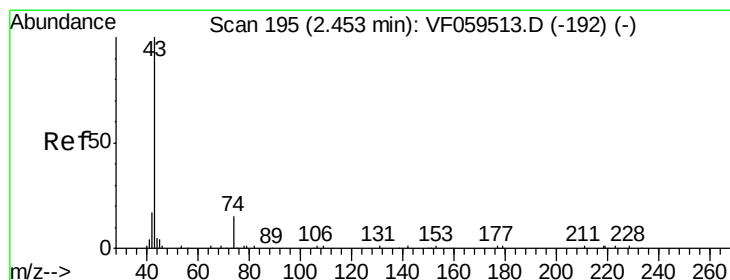
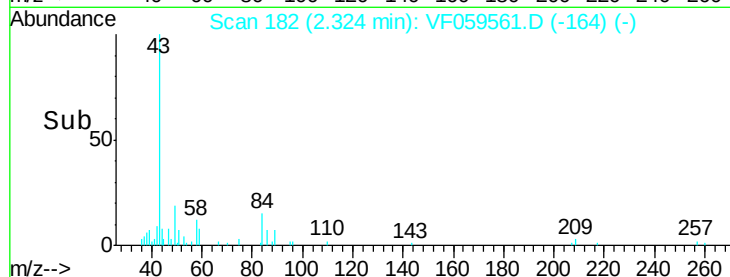
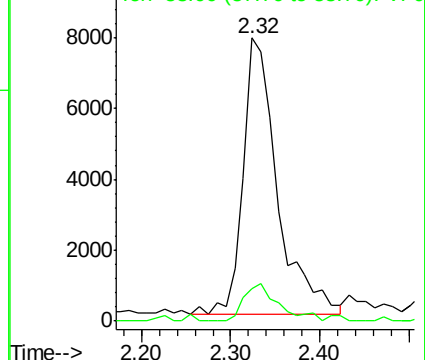
43 100

58 11.4 11.8 17.6#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#18

Methyl Acetate

Concen: Below Cal

RT: 2.43 min Scan# 193

Delta R.T. -0.02 min

Lab File: VF059561.D

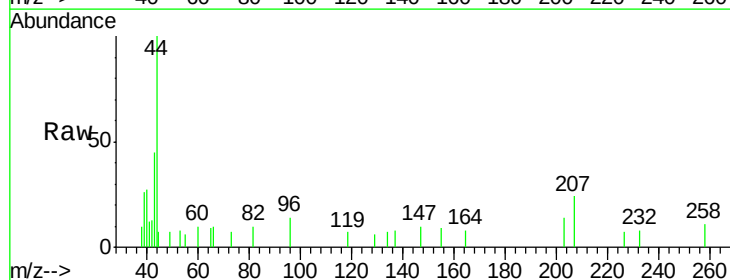
Acq: 19 Jul 2018 16:57

Tgt Ion: 43 Resp: 1709

Ion Ratio Lower Upper

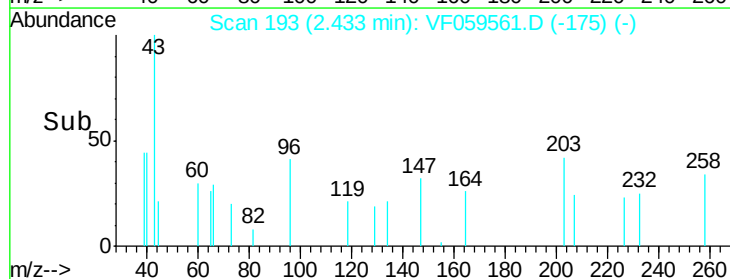
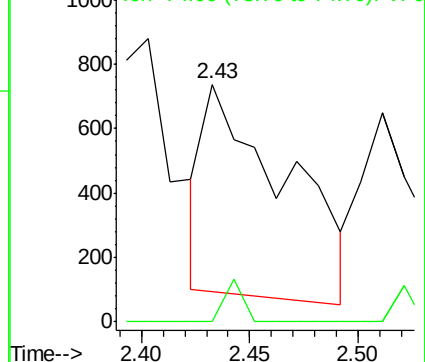
43 100

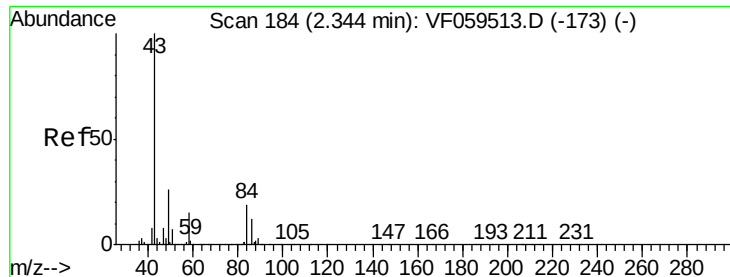
74 0.0 10.6 15.8#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 74.00 (73.70 to 74.70): VF0

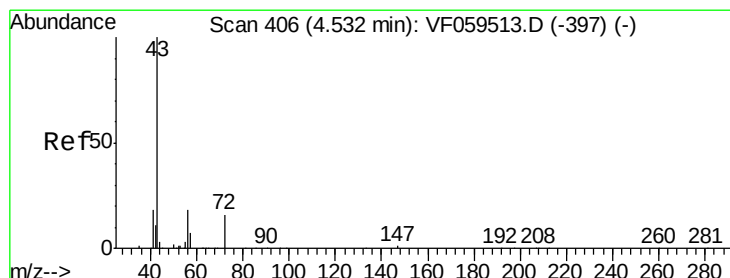
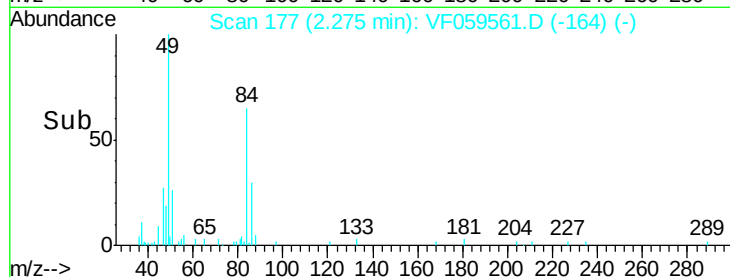
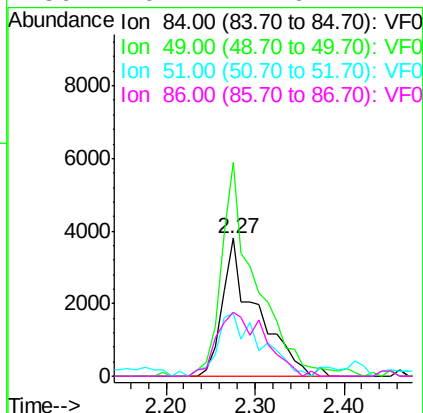
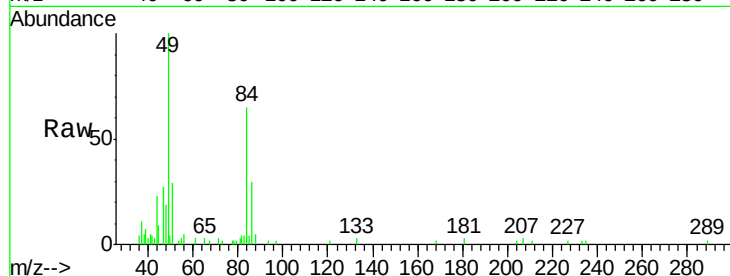




#20  
Methylene Chloride  
Concen: 3.51 ug/l  
RT: 2.27 min Scan# 177  
Delta R.T. -0.07 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

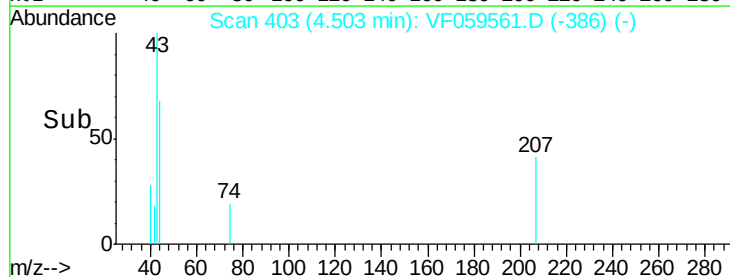
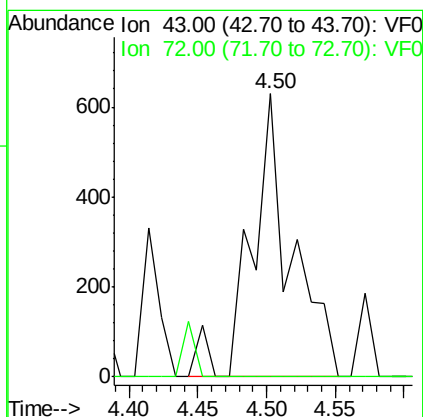
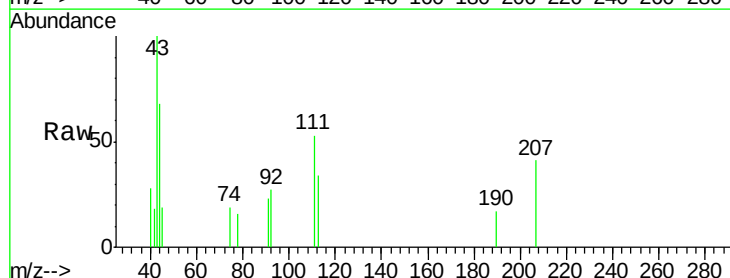
Instrument :  
MSVOA\_F  
ClientSampleId :

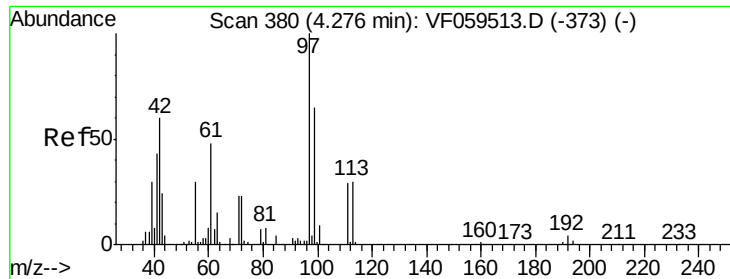
Tot Ion: 84 Resp: 10316  
Ion Ratio Lower Upper  
84 100  
49 154.6 109.4 164.2  
51 45.3 30.5 45.7  
86 46.4 47.6 71.4#



#25  
2-Butanone  
Concen: 1.85 ug/l  
RT: 4.50 min Scan# 403  
Delta R.T. -0.03 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

Tgt Ion: 43 Resp: 1262  
Ion Ratio Lower Upper  
43 100  
72 0.0 14.2 21.4#

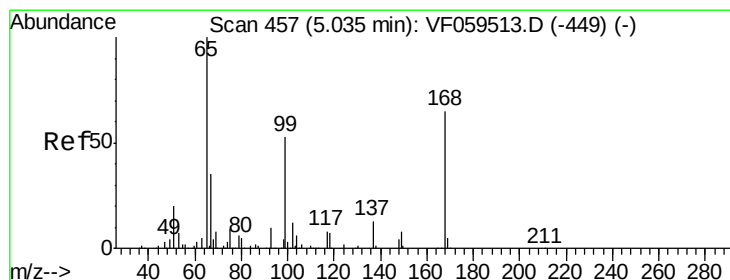
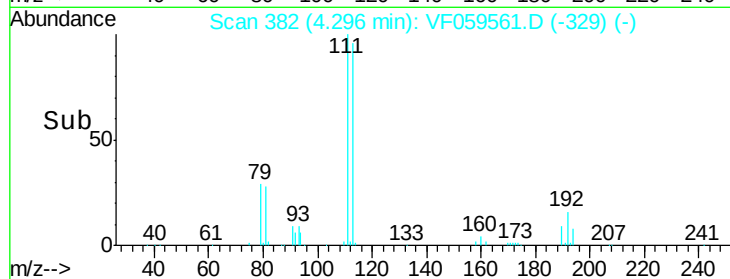
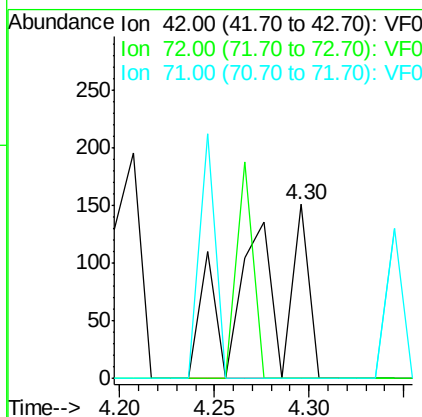
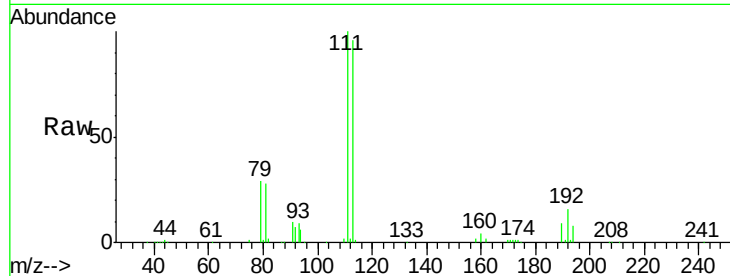




#29  
Tetrahydrofuran  
Concen: Below Cal  
RT: 4.30 min Scan# 382  
Delta R.T. 0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

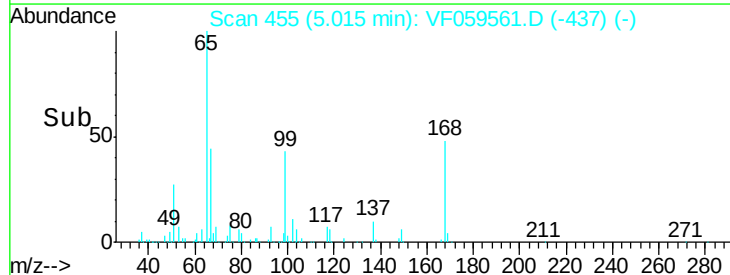
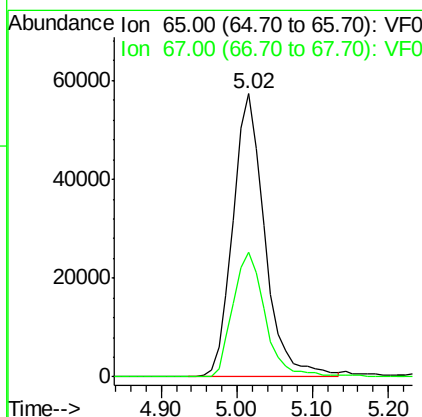
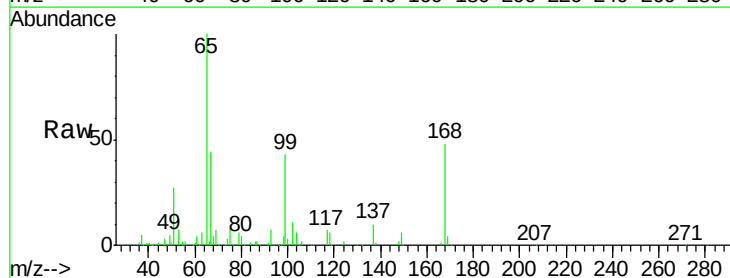
Instrument :  
MSVOA\_F  
ClientSampled :

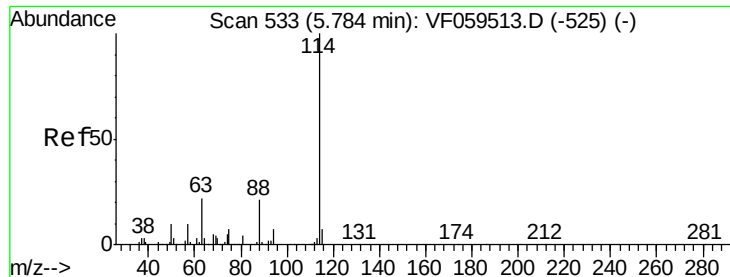
Tot Ion: 42 Resp: 296  
Ion Ratio Lower Upper  
42 100  
72 0.0 28.7 43.1#  
71 0.0 30.8 46.2#



#33  
1,2-Dichloroethane-d4  
Concen: 56.82 ug/l  
RT: 5.02 min Scan# 455  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

Tgt Ion: 65 Resp: 167228  
Ion Ratio Lower Upper  
65 100  
67 44.0 0.0 91.2

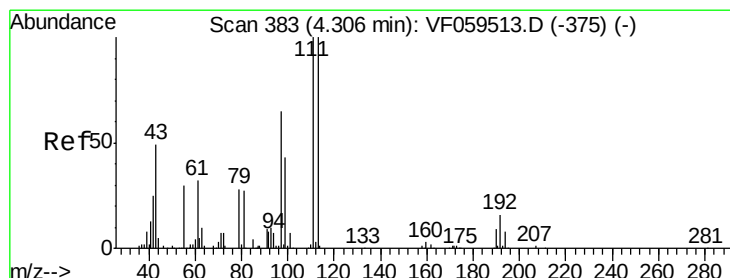
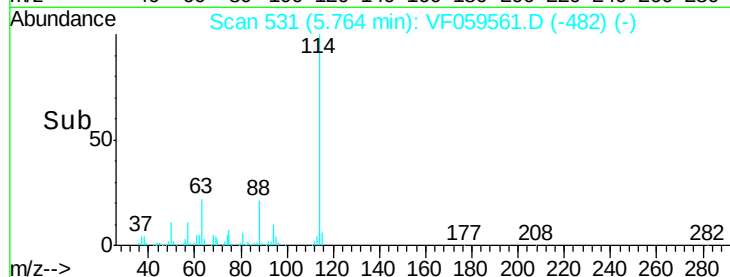
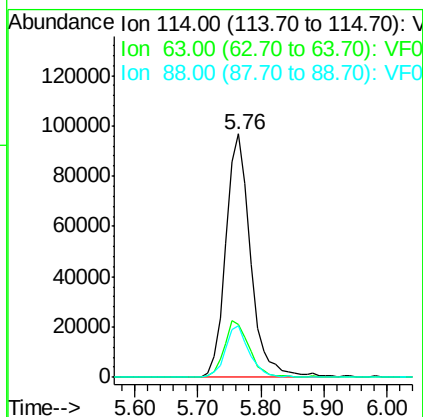
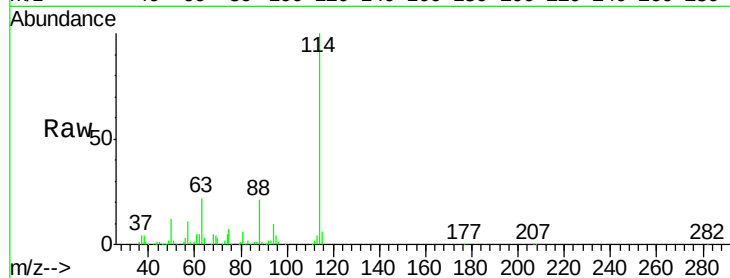




#34  
1,4-Difluorobenzene  
Concen: 50.00 ug/l  
RT: 5.76 min Scan# 531  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

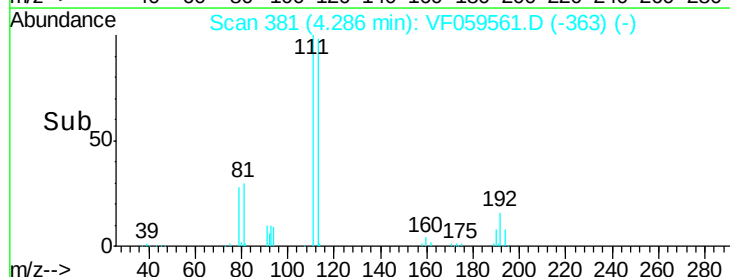
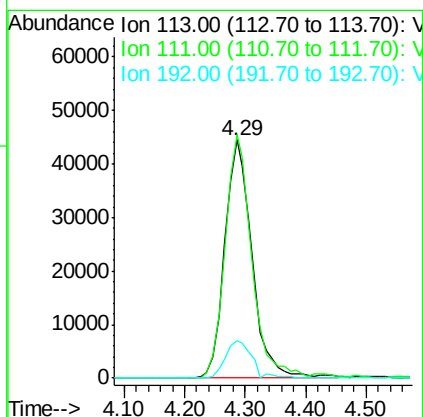
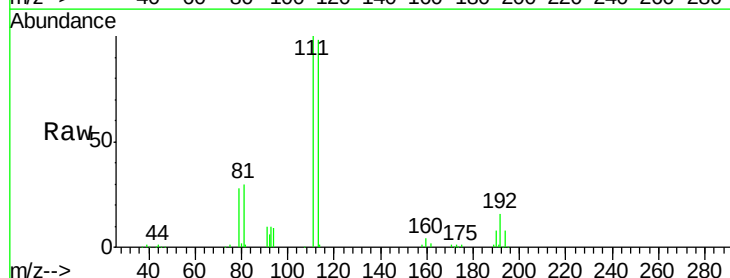
Instrument :  
MSVOA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.8  | 0.0   | 44.8  |
| 88      | 21.2  | 0.0   | 42.6  |

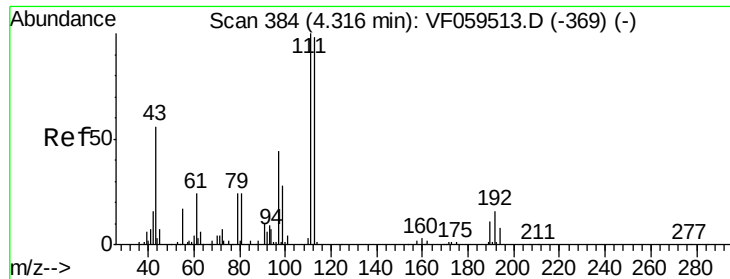


#35  
Dibromofluoromethane  
Concen: 61.08 ug/l  
RT: 4.29 min Scan# 381  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.3 | 80.3  | 120.5 |
| 192     | 16.0  | 13.1  | 19.7  |



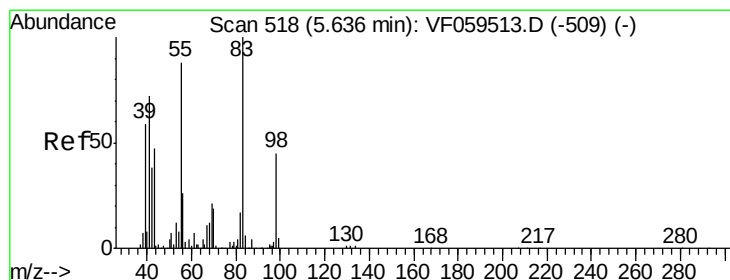
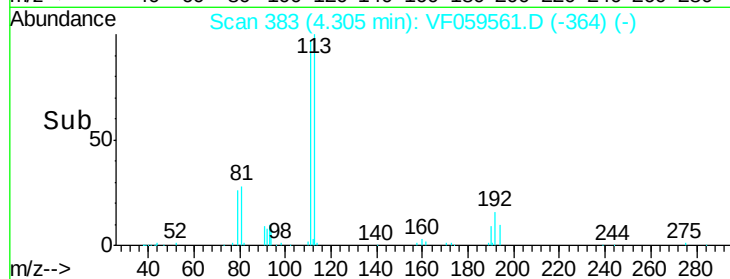
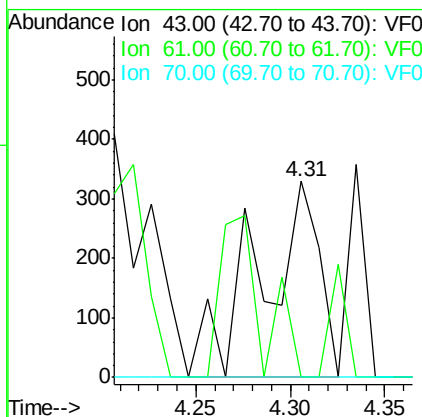
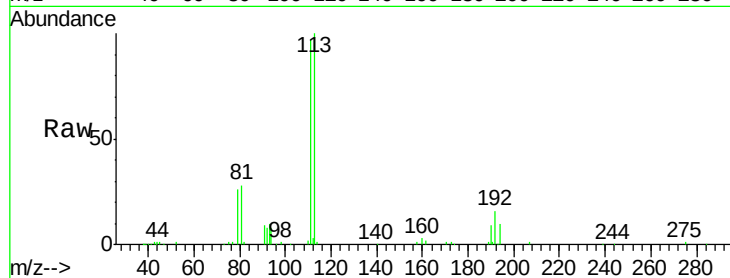




#37  
Ethyl Acetate  
Concen: Below Cal  
RT: 4.31 min Scan# 383  
Delta R.T. -0.01 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

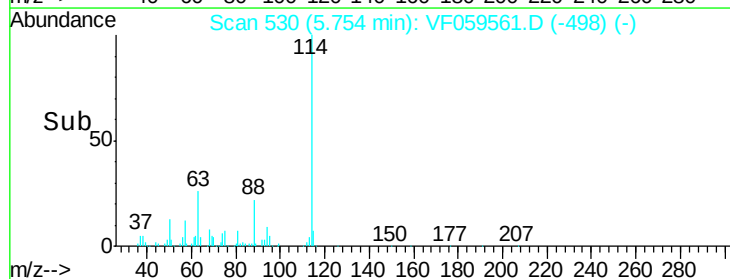
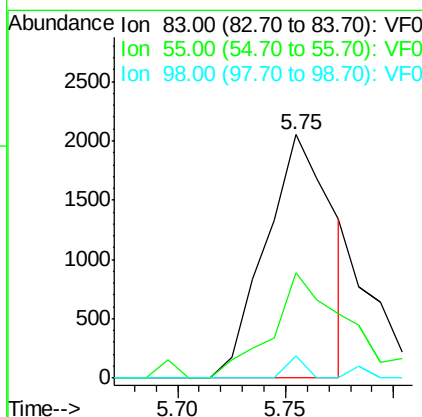
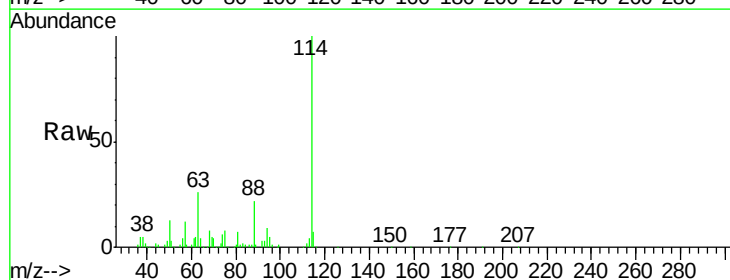
Instrument :  
MSVOA\_F  
ClientSampleId :

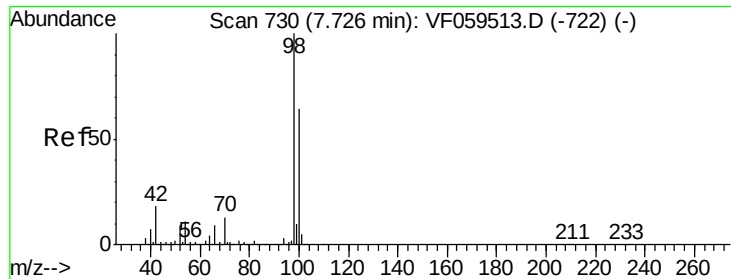
Tot Ion: 43 Resp: 719  
Ion Ratio Lower Upper  
43 100  
61 0.0 33.7 50.5#  
70 0.0 7.4 11.0#



#39  
Methylcyclohexane  
Concen: 2.19 ug/l  
RT: 5.75 min Scan# 530  
Delta R.T. 0.12 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

Tgt Ion: 83 Resp: 4389  
Ion Ratio Lower Upper  
83 100  
55 43.4 70.2 105.4#  
98 9.2 36.2 54.2#

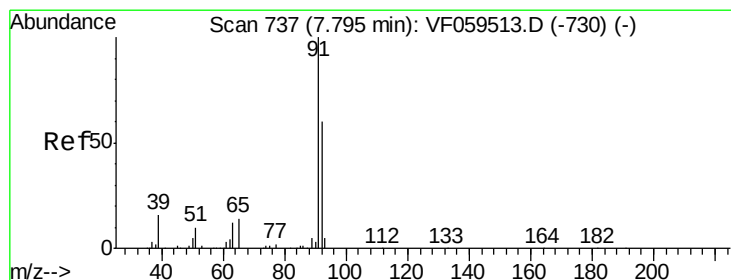
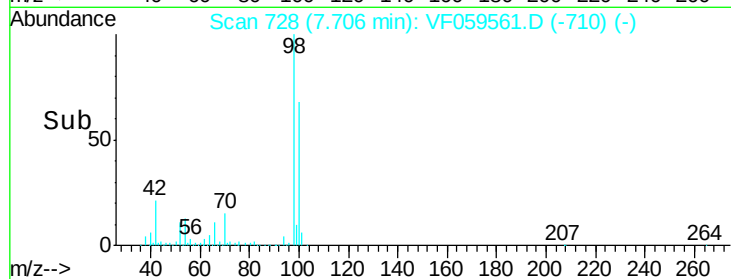
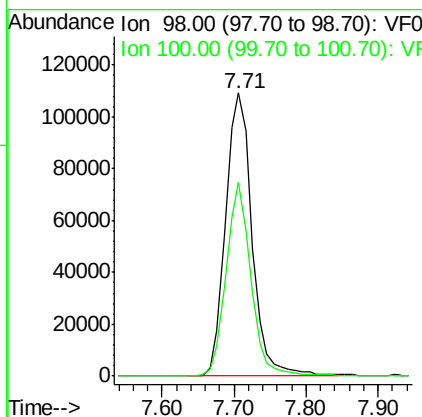
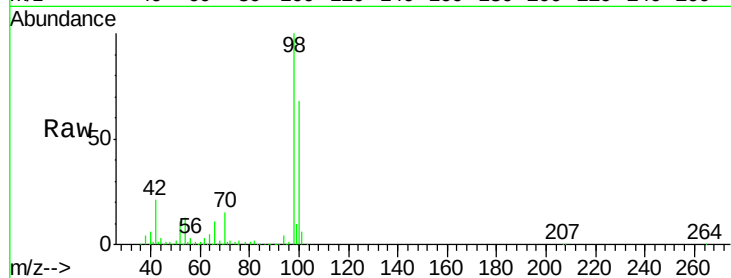




#50  
Toluene-d8  
Concen: 48.47 ug/l  
RT: 7.71 min Scan# 728  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

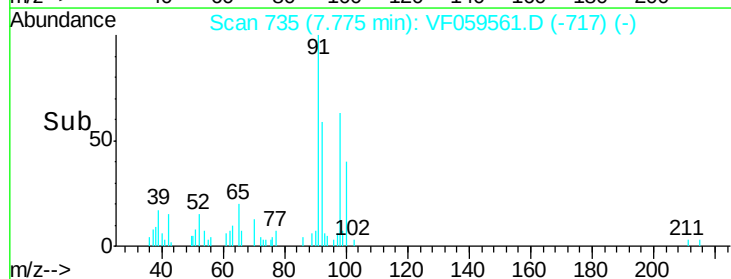
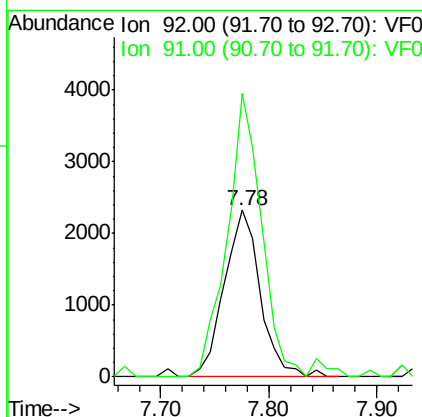
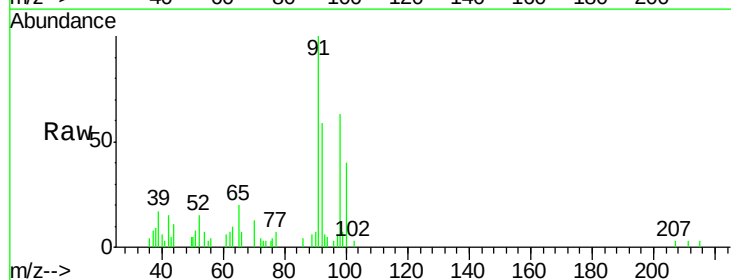
Instrument :  
MSVOA\_F  
ClientSampleId :

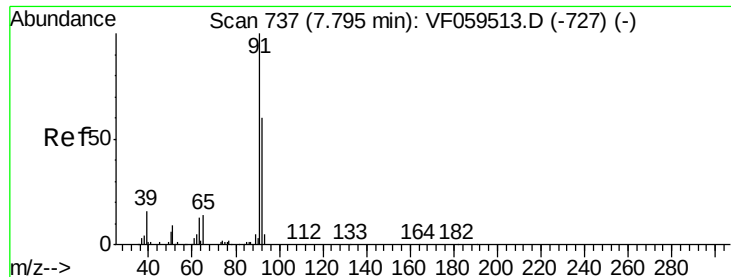
Tot Ion: 98 Resp: 278535  
Ion Ratio Lower Upper  
98 100  
100 68.3 50.9 76.3



#52  
Toluene  
Concen: 1.45 ug/l  
RT: 7.78 min Scan# 735  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

Tgt Ion: 92 Resp: 5386  
Ion Ratio Lower Upper  
92 100  
91 170.0 134.2 201.4

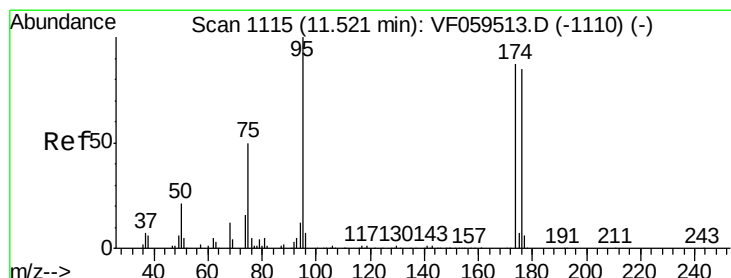
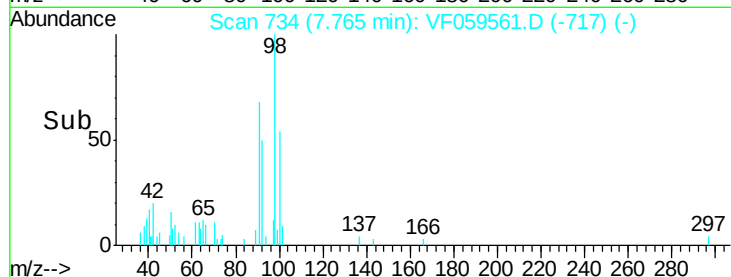
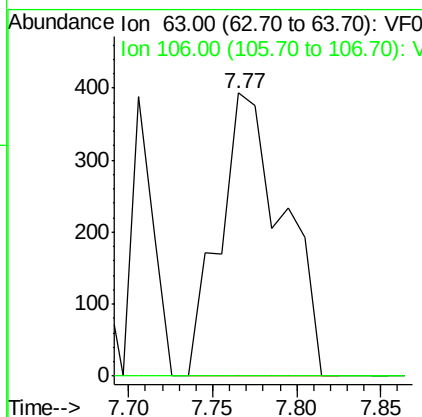
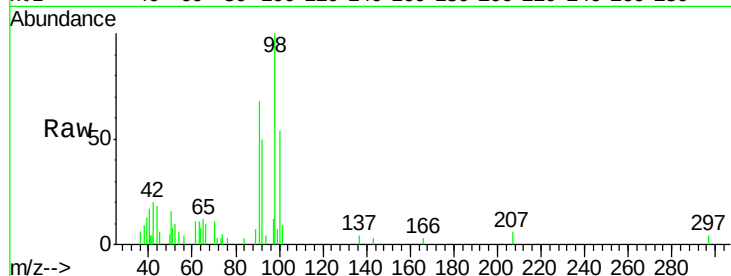




#58  
 2-Chloroethyl Vinyl ether  
 Concen: 6.55 ug/l  
 RT: 7.77 min Scan# 734  
 Delta R.T. -0.03 min  
 Lab File: VF059561.D  
 Acq: 19 Jul 2018 16:57

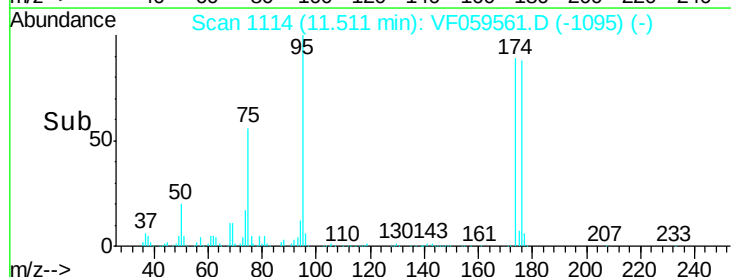
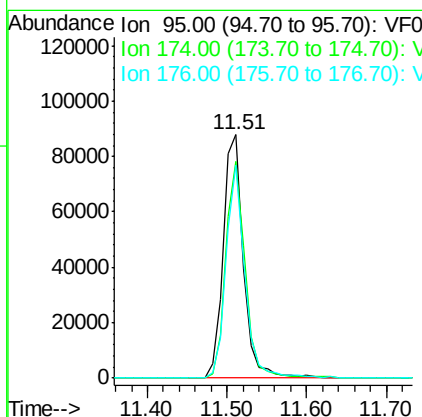
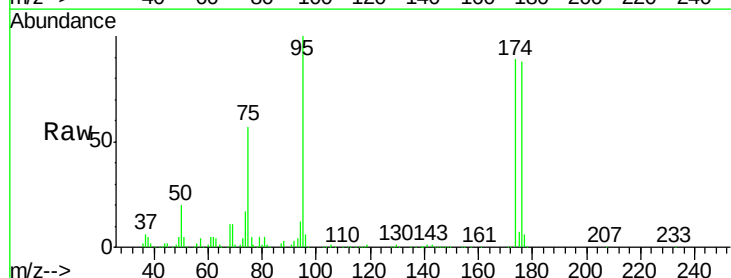
Instrument :  
 MSVOA\_F  
 ClientSampleId :

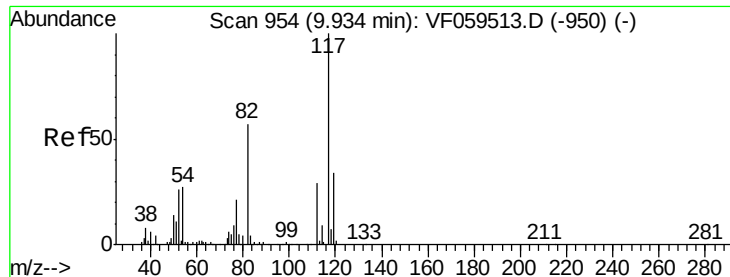
Tot Ion: 63 Resp: 1030  
 Ion Ratio Lower Upper  
 63 100  
 106 0.0 0.0 0.0



#62  
 4-Bromofluorobenzene  
 Concen: 52.65 ug/l  
 RT: 11.51 min Scan# 1114  
 Delta R.T. -0.01 min  
 Lab File: VF059561.D  
 Acq: 19 Jul 2018 16:57

Tgt Ion: 95 Resp: 158698  
 Ion Ratio Lower Upper  
 95 100  
 174 89.3 0.0 174.4  
 176 87.6 0.0 169.4

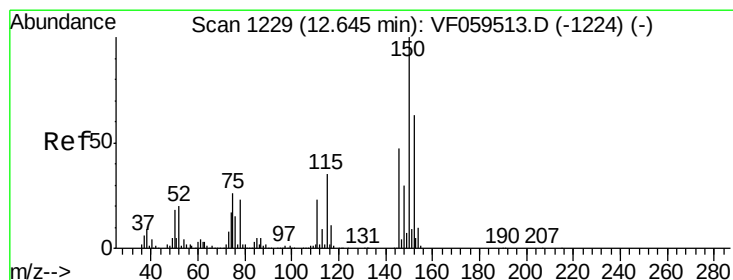
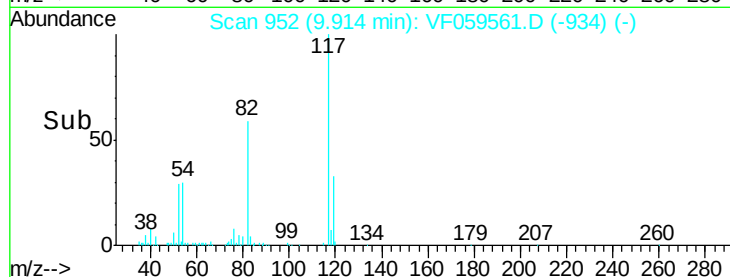
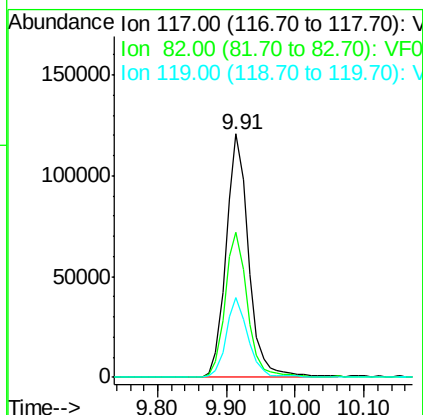
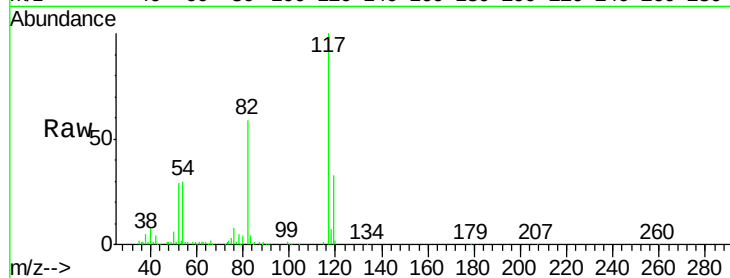




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 9.91 min Scan# 952  
Delta R.T. -0.02 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

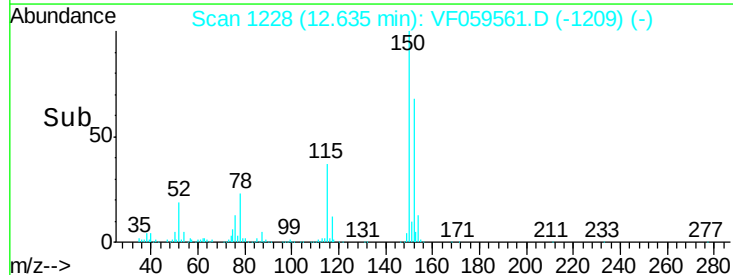
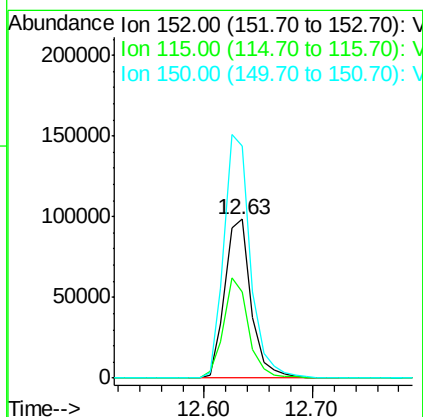
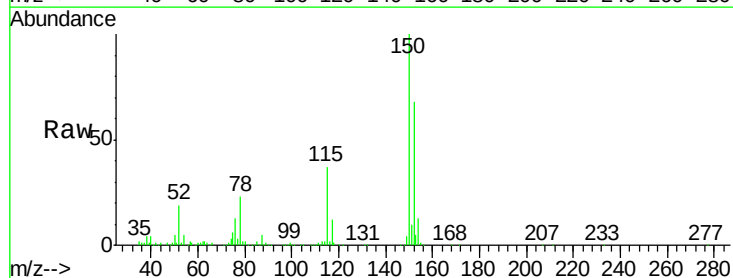
Instrument :  
MSVOA\_F  
ClientSampleId :

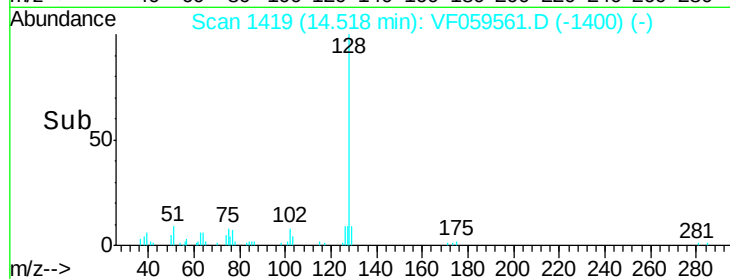
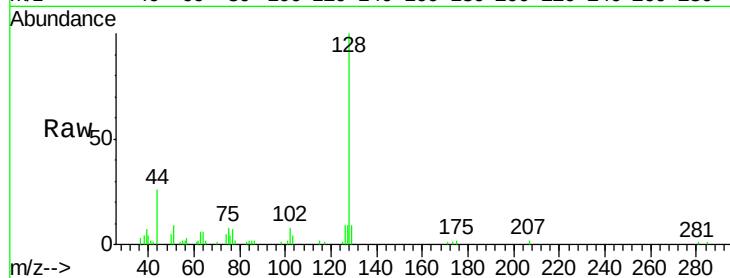
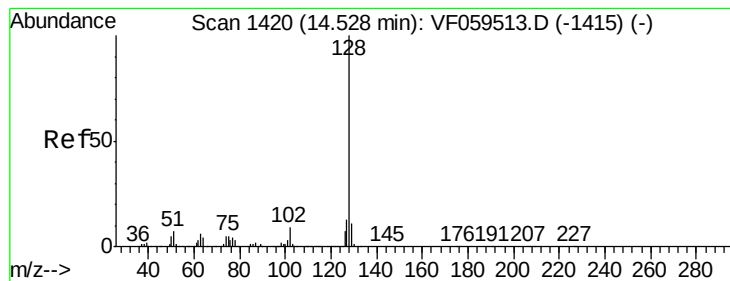
Tot Ion:117 Resp: 274152  
Ion Ratio Lower Upper  
117 100  
82 59.4 46.1 69.1  
119 32.7 27.2 40.8



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.63 min Scan# 1228  
Delta R.T. -0.01 min  
Lab File: VF059561.D  
Acq: 19 Jul 2018 16:57

Tgt Ion:152 Resp: 167946  
Ion Ratio Lower Upper  
152 100  
115 54.1 27.8 83.3  
150 146.2 0.0 318.4





#95

Naphthalene

Concen: 2.17 ug/l

RT: 14.52 min Scan# 1419

Delta R.T. -0.01 min

Lab File: VF059561.D

Acq: 19 Jul 2018 16:57

Instrument :

MSVOA\_F

ClientSampleId :

Tot Ion:128 Resp: 13380

Ion Ratio Lower Upper

128 100

127 9.2 10.2 15.2#

129 9.0 9.0 13.4

