

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF062818\  
 Data File : VF059355.D  
 Acq On : 28 Jun 2018 12:36  
 Operator : VA/AP  
 Sample : VF0628SBL01  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0628SBL01

Quant Time: Jun 29 03:09:03 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F062518S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 26 08:45:17 2018  
 Response via : Initial Calibration

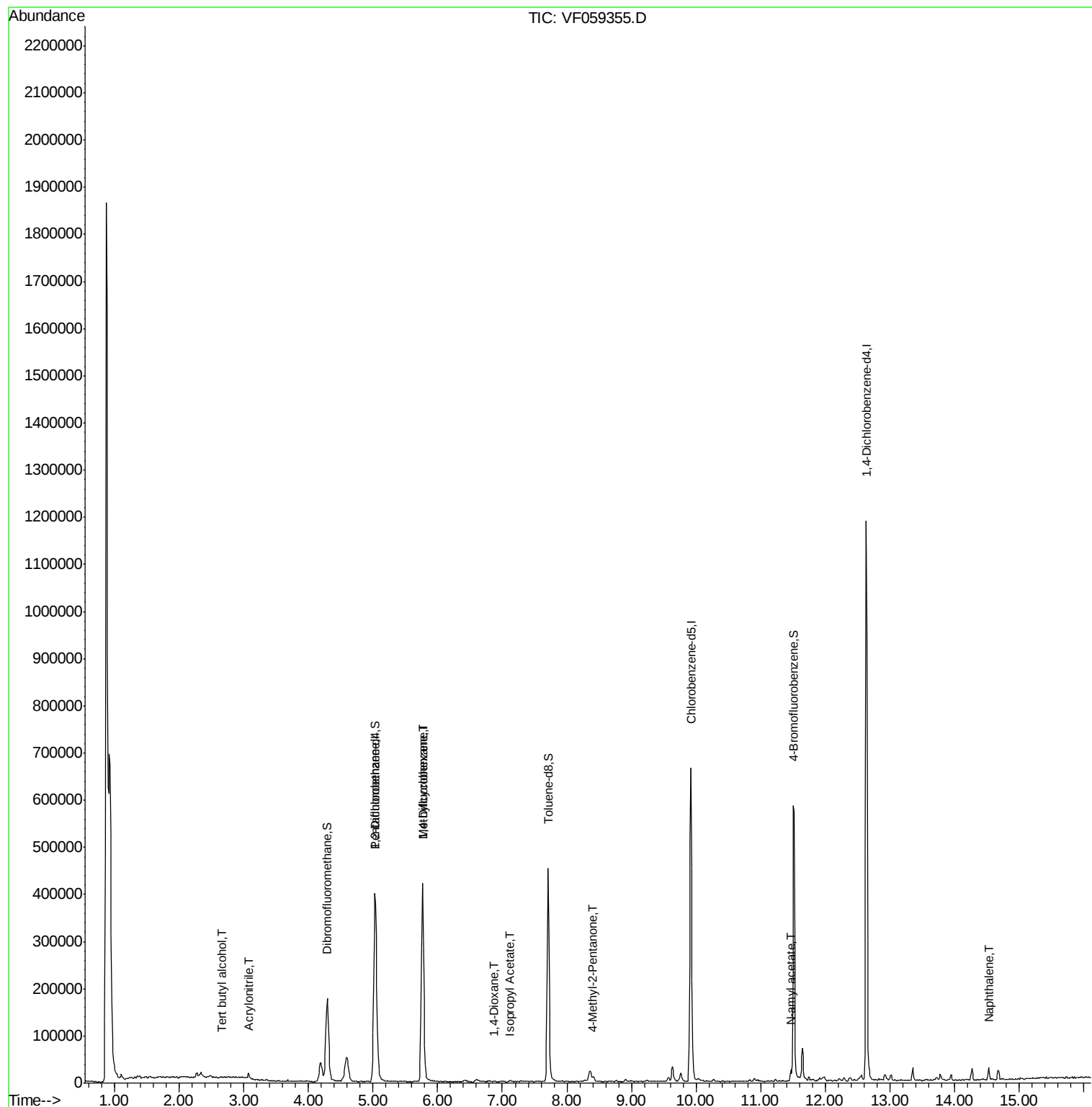
| Internal Standards          | R.T.  | QIon | Response | Conc         | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------------|--------|----------|
| 1) Pentafluorobenzene       | 5.04  | 168  | 277065   | 50.00        | ug/l   | 0.01     |
| 34) 1,4-Difluorobenzene     | 5.77  | 114  | 448959   | 50.00        | ug/l   | 0.01     |
| 63) Chlorobenzene-d5        | 9.92  | 117  | 435968   | 50.00        | ug/l   | 0.01     |
| 72) 1,4-Dichlorobenzene-d4  | 12.63 | 152  | 297950   | 50.00        | ug/l   | 0.00     |
| System Monitoring Compounds |       |      |          |              |        |          |
| 33) 1,2-Dichloroethane-d4   | 5.02  | 65   | 174936   | 48.87        | ug/l   | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =            | 97.74% |          |
| 35) Dibromofluoromethane    | 4.29  | 113  | 162191   | 49.44        | ug/l   | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =            | 98.88% |          |
| 50) Toluene-d8              | 7.71  | 98   | 369386   | 45.48        | ug/l   | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =            | 90.96% |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 219147   | 47.83        | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =            | 95.66% |          |
| Target Compounds            |       |      |          |              |        |          |
|                             |       |      |          |              | Qvalue |          |
| 5) Bromomethane             | 1.25  | 94   | 82       | Below Cal    |        | 99       |
| 11) Tert butyl alcohol      | 2.67  | 59   | 1323     | 5.552 ug/l # |        | 66       |
| 13) Acrolein                | 2.04  | 56   | 228      | Below Cal    |        | 95       |
| 15) Acrylonitrile           | 3.09  | 53   | 1143     | 2.724 ug/l # |        | 30       |
| 16) Acetone                 | 2.46  | 43   | 2111     | Below Cal    |        | 97       |
| 20) Methylene Chloride      | 2.27  | 84   | 2810     | Below Cal #  |        | 79       |
| 25) 2-Butanone              | 4.51  | 43   | 2913     | Below Cal    |        | 96       |
| 28) Bromochloromethane      | 3.83  | 49   | 65       | Below Cal #  |        | 6        |
| 29) Tetrahydrofuran         | 4.25  | 42   | 523      | Below Cal #  |        | 61       |
| 37) Ethyl Acetate           | 4.18  | 43   | 3645     | Below Cal    |        | 94       |
| 39) Methylcyclohexane       | 5.77  | 83   | 5293     | 1.523 ug/l # |        | 44       |
| 43) Isopropyl Acetate       | 7.12  | 43   | 3460     | 1.059 ug/l # |        | 98       |
| 49) 1,4-Dioxane             | 6.88  | 88   | 538      | 3.662 ug/l # |        | 80       |
| 51) 4-Methyl-2-Pentanone    | 8.41  | 43   | 8291     | 3.426 ug/l   |        | 96       |
| 59) 2-Hexanone              | 9.63  | 43   | 26865    | Below Cal    |        | 91       |
| 74) N-amyl acetate          | 11.47 | 43   | 13168    | 2.091 ug/l   |        | 98       |
| 87) 1,3-Dichlorobenzene     | 12.56 | 146  | 4281     | Below Cal    |        | 85       |
| 95) Naphthalene             | 14.53 | 128  | 18441    | 1.363 ug/l # |        | 94       |

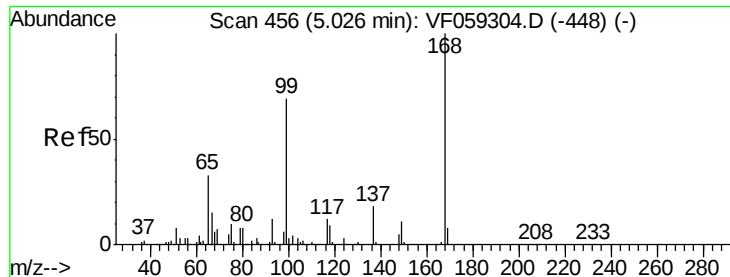
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF062818\  
Data File : VF059355.D  
Acq On : 28 Jun 2018 12:36  
Operator : VA/AP  
Sample : VF0628SBL01  
Misc : 5.00µg/5mL/MSVOA-F/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

Quant Time: Jun 28 14:59:10 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F062518S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 26 08:45:17 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.04 min Scan# 457

Delta R.T. 0.01 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

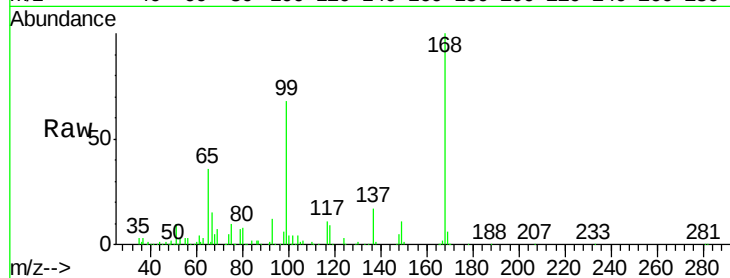
VF0628SBL01

Tot Ion:168 Resp: 277065

Ion Ratio Lower Upper

168 100

99 68.5 54.9 82.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.04

100000

80000

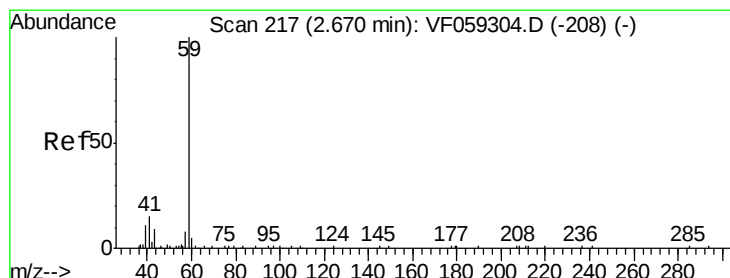
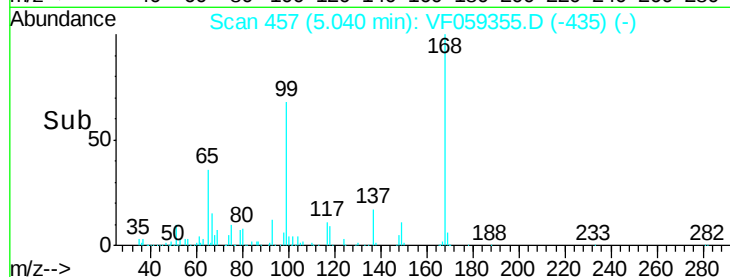
60000

40000

20000

0

Time-->



#11

Tert butyl alcohol

Concen: 5.552 ug/l

RT: 2.67 min Scan# 217

Delta R.T. 0.00 min

Lab File: VF059355.D

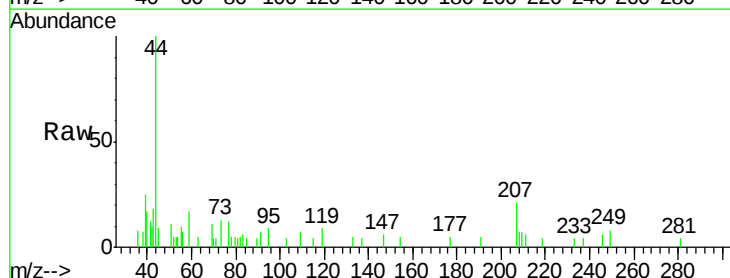
Acq: 28 Jun 2018 12:36

Tgt Ion: 59 Resp: 1323

Ion Ratio Lower Upper

59 100

57 0.0 11.0 16.4#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.67

500

400

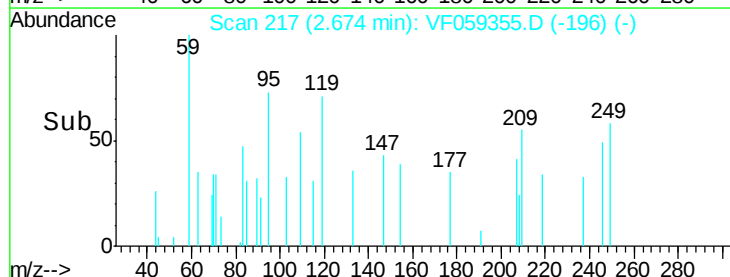
300

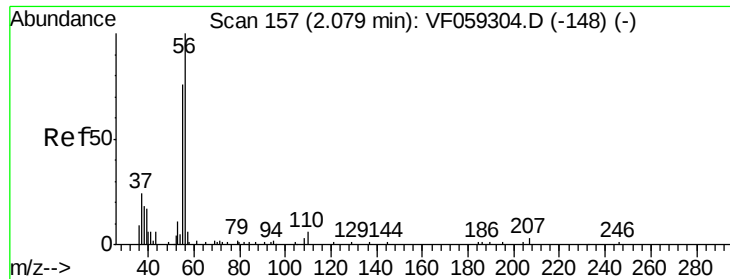
200

100

0

Time-->





#13

Acrolein

Concen: Below Cal

RT: 2.04 min Scan# 153

Delta R.T. -0.04 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

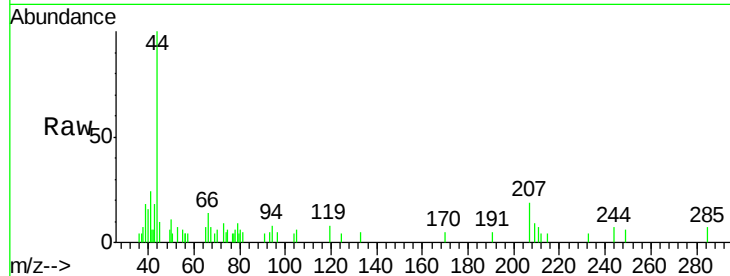
Instrument :  
MSVOA\_F  
ClientSampled :  
VF0628SBL01

Tot Ion: 56 Resp: 228

Ion Ratio Lower Upper

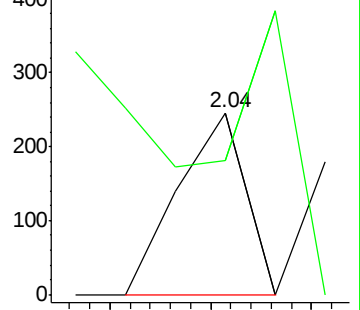
56 100

55 74.0 62.4 93.6

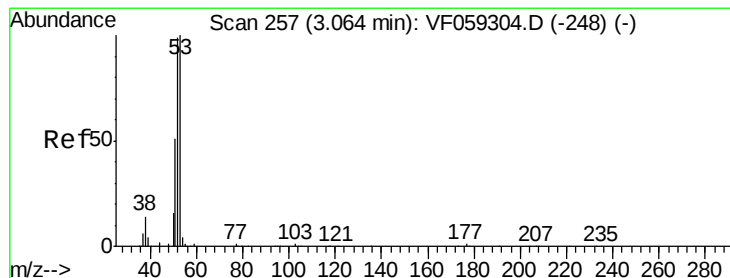
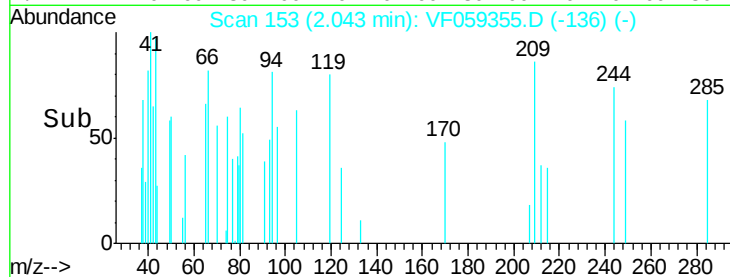


Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0



Time-->



#15

Acrylonitrile

Concen: 2.724 ug/l

RT: 3.09 min Scan# 259

Delta R.T. 0.02 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

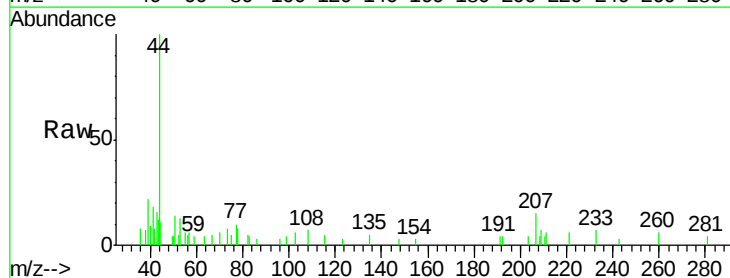
Tgt Ion: 53 Resp: 1143

Ion Ratio Lower Upper

53 100

52 35.9 79.2 118.8#

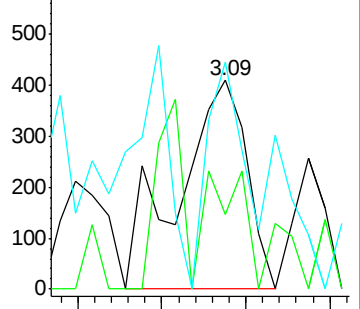
51 108.6 40.9 61.3#



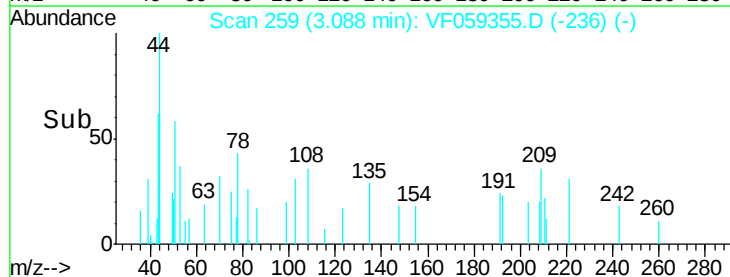
Abundance Ion 53.00 (52.70 to 53.70): VF0

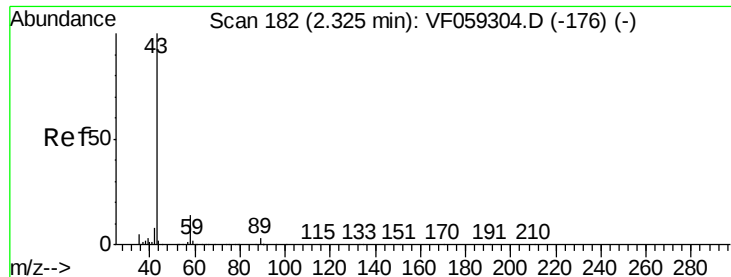
Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0



Time-->

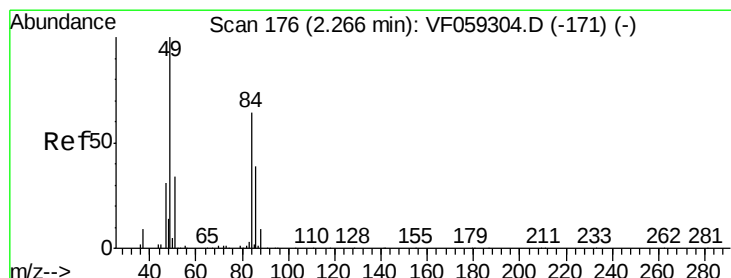
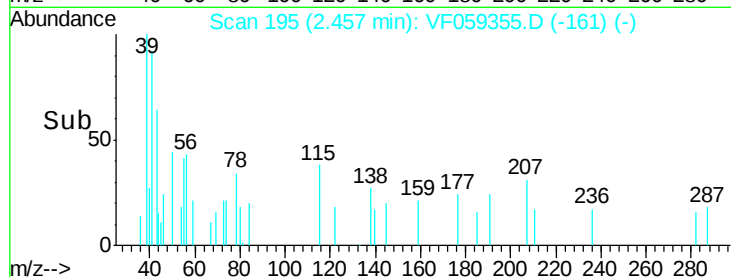
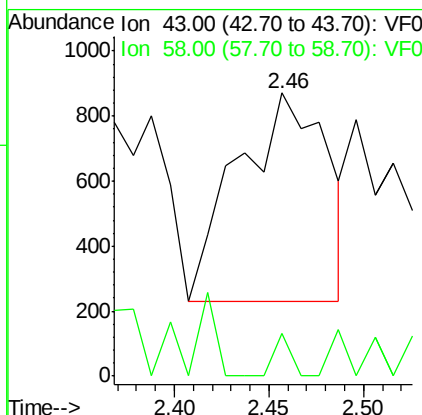
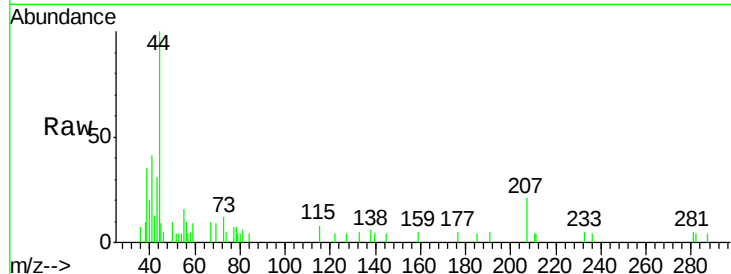




#16  
Acetone  
Concen: Below Cal  
RT: 2.46 min Scan# 195  
Delta R.T. 0.13 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

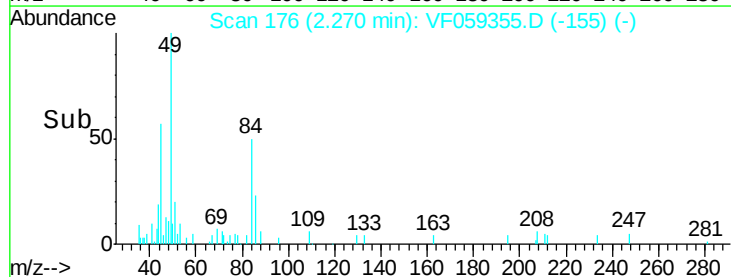
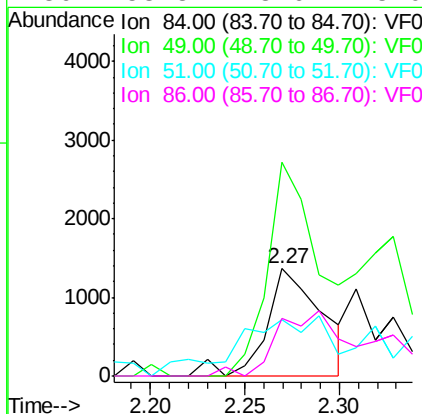
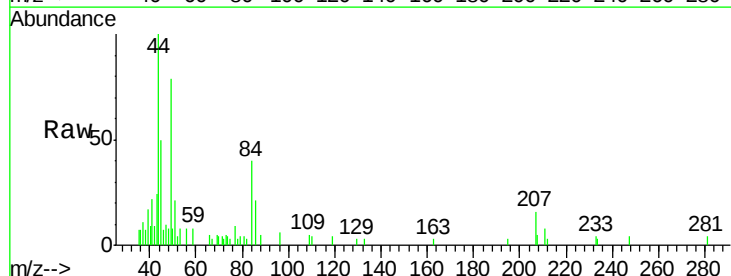
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

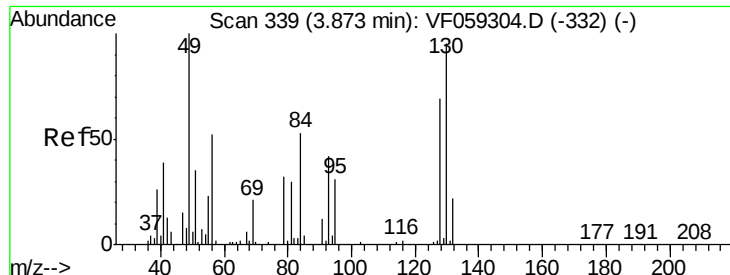
Tot Ion: 43 Resp: 2111  
Ion Ratio Lower Upper  
43 100  
58 15.3 11.4 17.0



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.27 min Scan# 176  
Delta R.T. 0.00 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

Tgt Ion: 84 Resp: 2810  
Ion Ratio Lower Upper  
84 100  
49 199.7 126.5 189.7#  
51 53.3 42.9 64.3  
86 53.8 48.6 73.0





#28

Bromochloromethane

Concen: Below Cal

RT: 3.83 min Scan# 334

Delta R.T. -0.04 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

VF0628SBL01

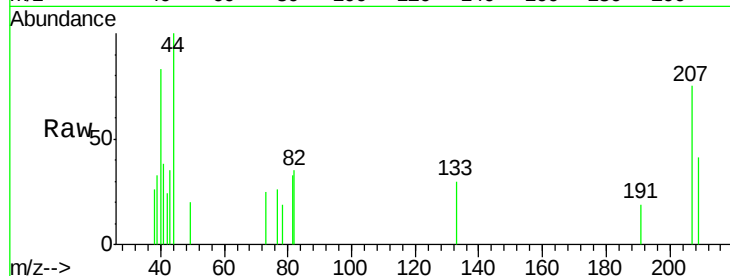
Tot Ion: 49 Resp: 65

Ion Ratio Lower Upper

49 100

129 0.0 0.0 6.4

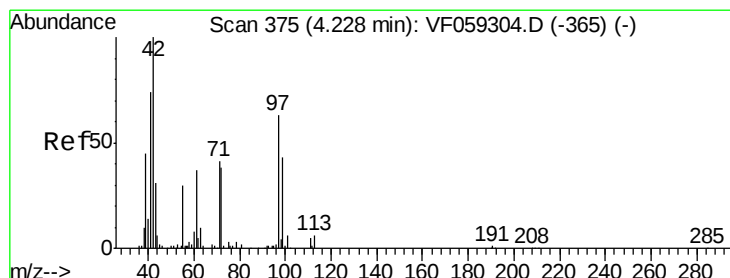
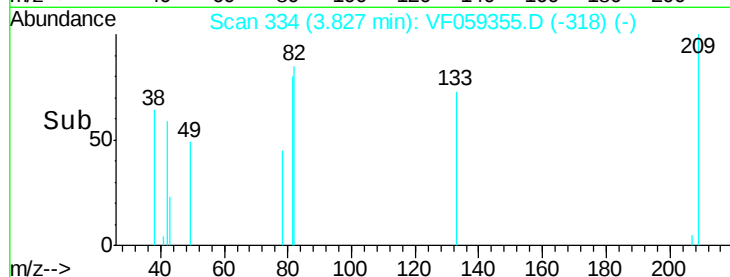
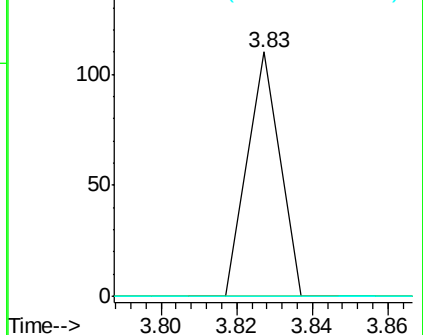
130 0.0 75.1 112.7#



Abundance Ion 49.00 (48.70 to 49.70): VF0

Ion 129.00 (128.70 to 129.70): VF0

Ion 130.00 (129.70 to 130.70): VF0



#29

Tetrahydrofuran

Concen: Below Cal

RT: 4.25 min Scan# 377

Delta R.T. 0.02 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

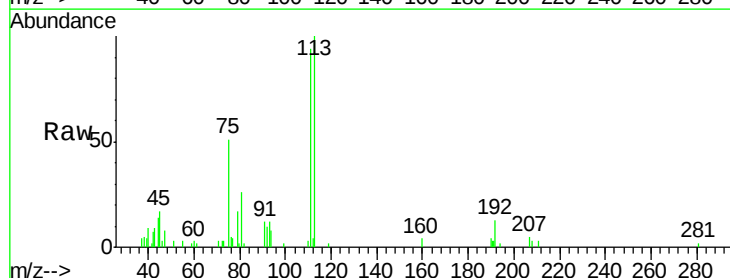
Tgt Ion: 42 Resp: 523

Ion Ratio Lower Upper

42 100

72 0.0 30.5 45.7#

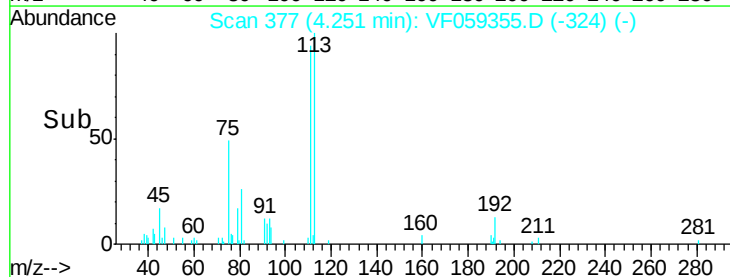
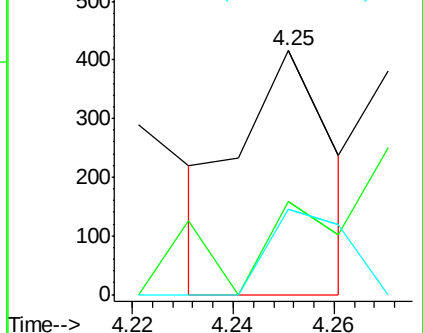
71 30.0 32.5 48.7#

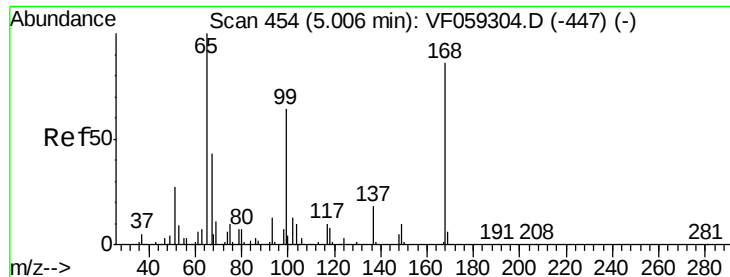


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0





#33

1,2-Dichloroethane-d4

Concen: 48.870 ug/l

RT: 5.02 min Scan# 455

Delta R.T. 0.01 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

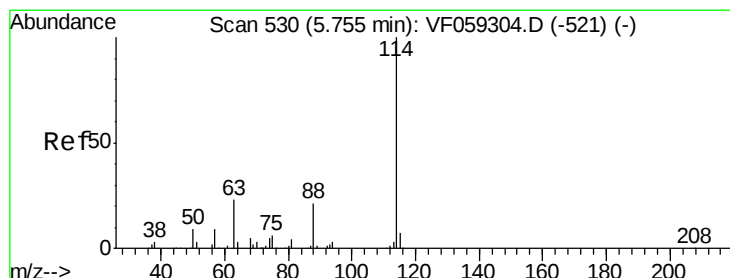
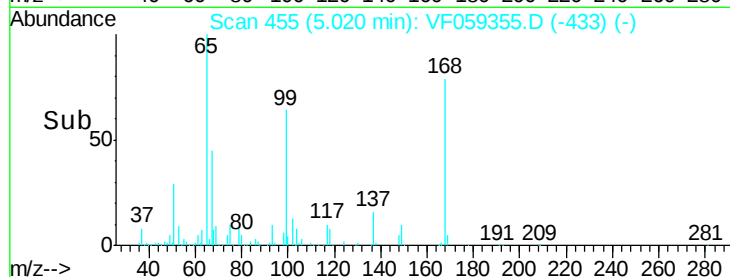
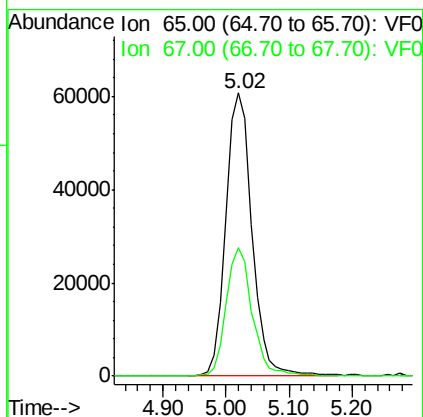
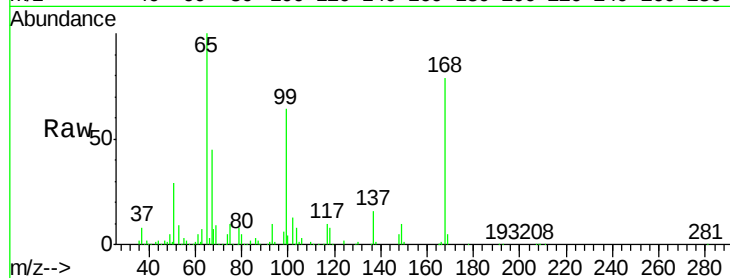
VF0628SBL01

Tot Ion: 65 Resp: 174936

Ion Ratio Lower Upper

65 100

67 45.4 0.0 96.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.77 min Scan# 531

Delta R.T. 0.01 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

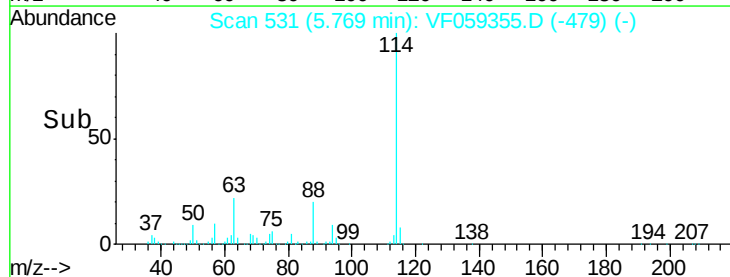
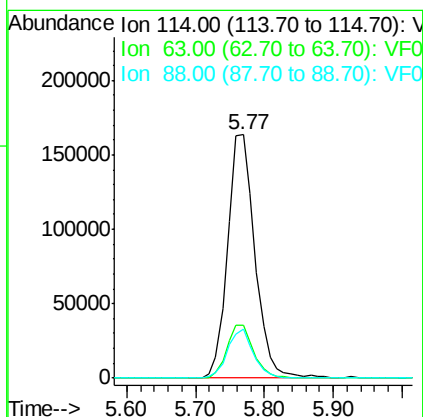
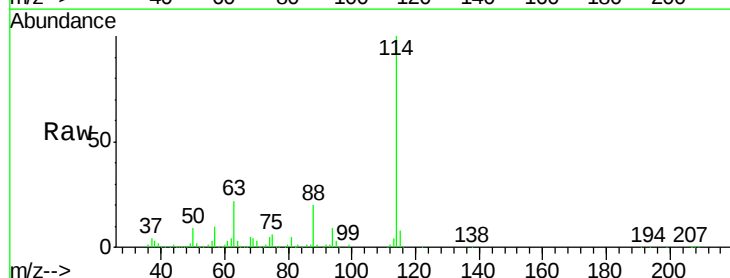
Tgt Ion: 114 Resp: 448959

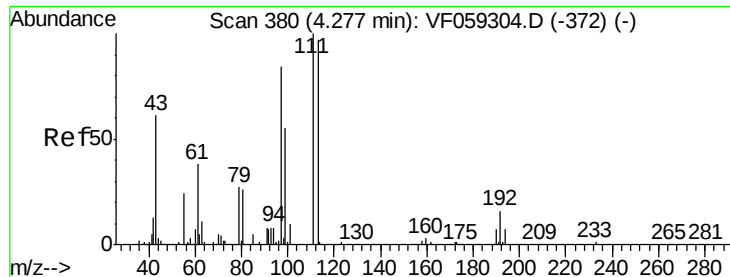
Ion Ratio Lower Upper

114 100

63 21.8 0.0 45.8

88 20.3 0.0 41.2





#35

Dibromofluoromethane

Concen: 49.442 ug/l

RT: 4.29 min Scan# 381

Delta R.T. 0.01 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

VF0628SBL01

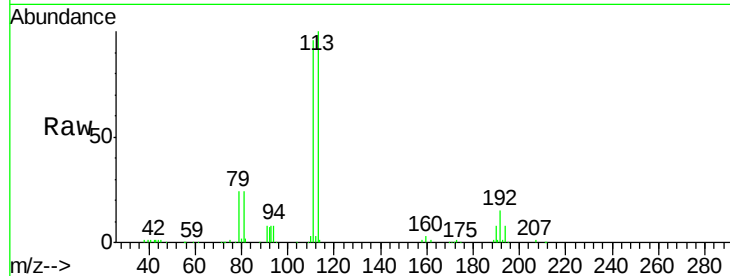
Tot Ion:113 Resp: 162191

Ion Ratio Lower Upper

113 100

111 95.5 82.1 123.1

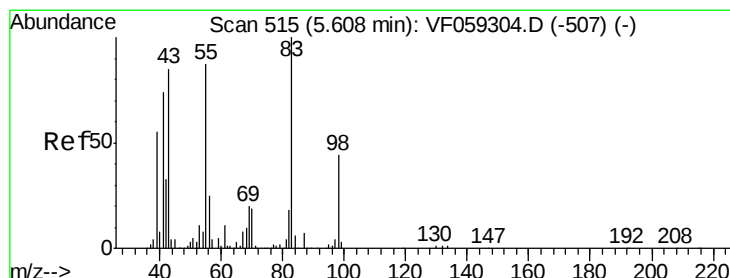
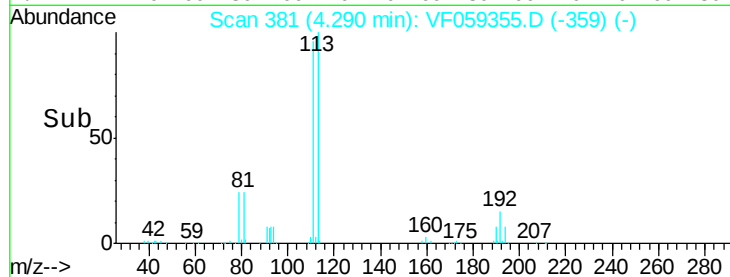
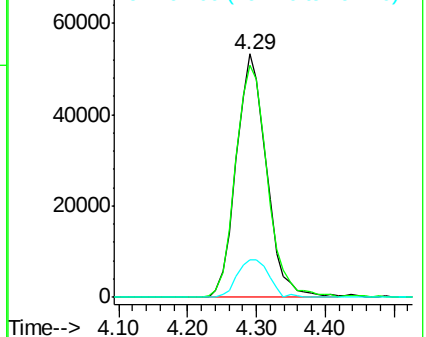
192 15.2 13.0 19.6



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



#39

Methylcyclohexane

Concen: 1.523 ug/l

RT: 5.77 min Scan# 531

Delta R.T. 0.16 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

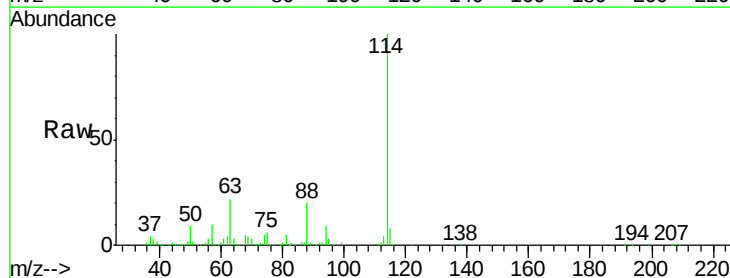
Tgt Ion: 83 Resp: 5293

Ion Ratio Lower Upper

83 100

55 40.6 69.2 103.8#

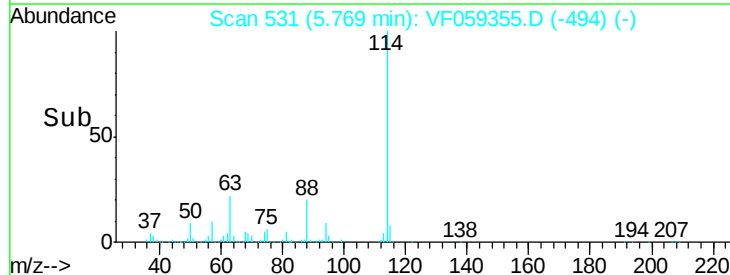
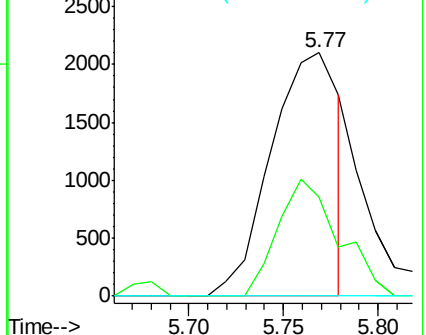
98 0.0 35.0 52.6#

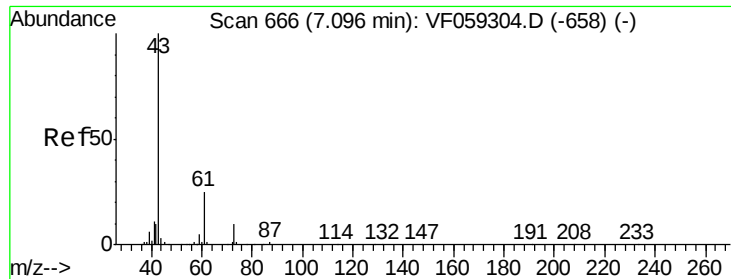


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 98.00 (97.70 to 98.70): VF0





#43

Isopropyl Acetate

Concen: 1.059 ug/l

RT: 7.12 min Scan# 668

Delta R.T. 0.02 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

VF0628SBL01

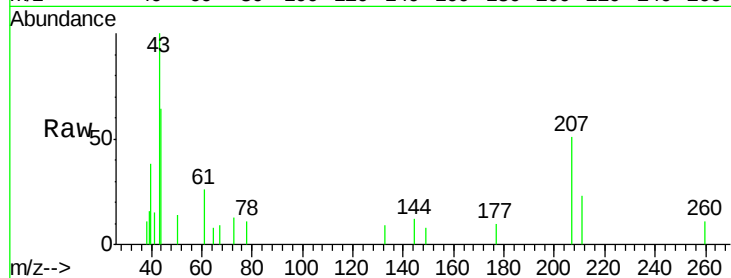
Tot Ion: 43 Resp: 3460

Ion Ratio Lower Upper

43 100

61 25.7 19.7 29.5

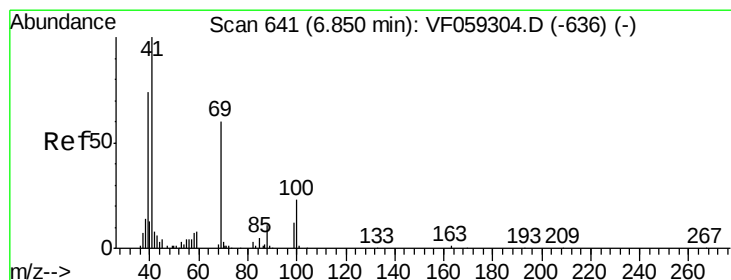
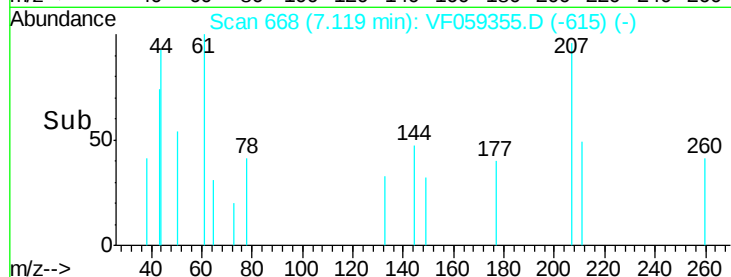
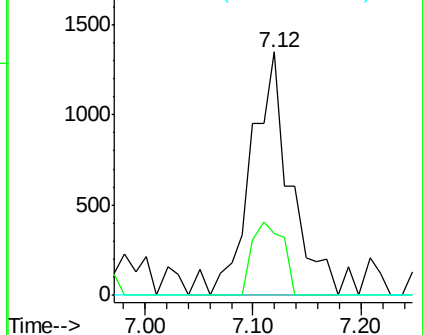
87 0.0 0.5 0.7#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 87.00 (86.70 to 87.70): VF0



#49

1,4-Dioxane

Concen: 3.662 ug/l

RT: 6.88 min Scan# 644

Delta R.T. 0.03 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

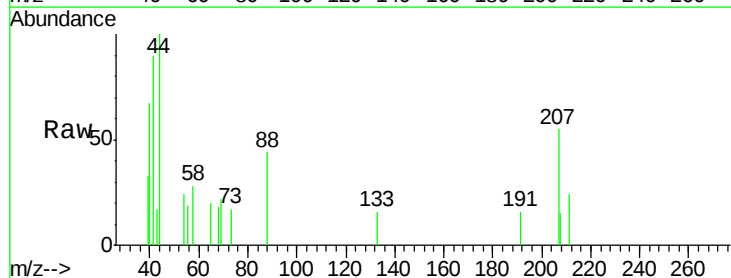
Tgt Ion: 88 Resp: 538

Ion Ratio Lower Upper

88 100

43 38.2 50.6 75.8#

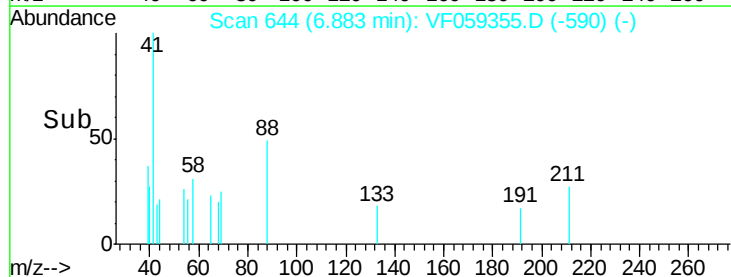
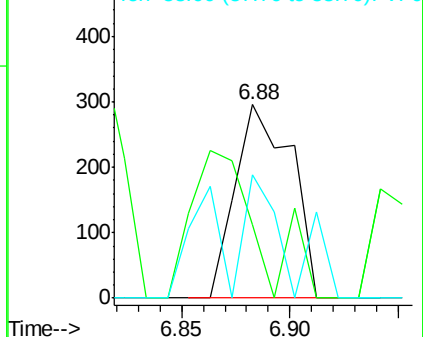
58 63.5 46.6 69.8

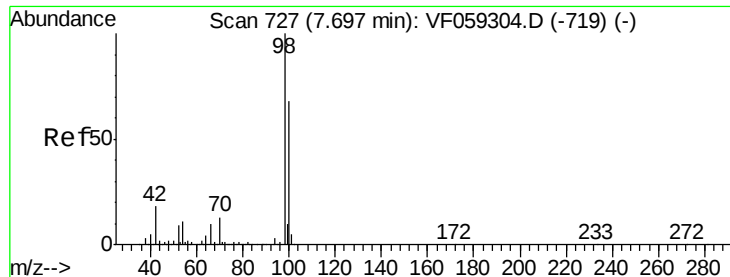


Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

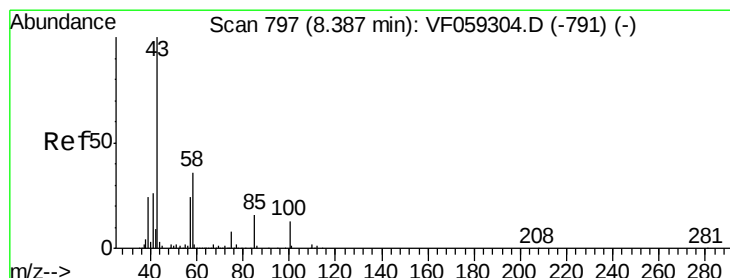
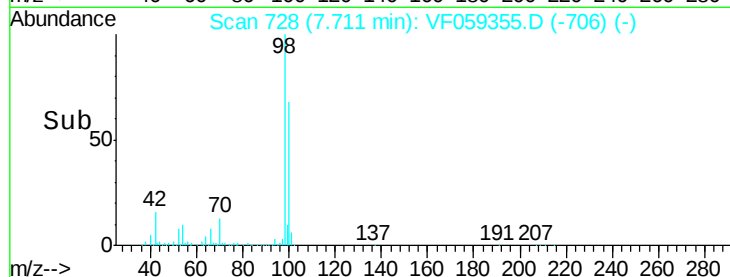
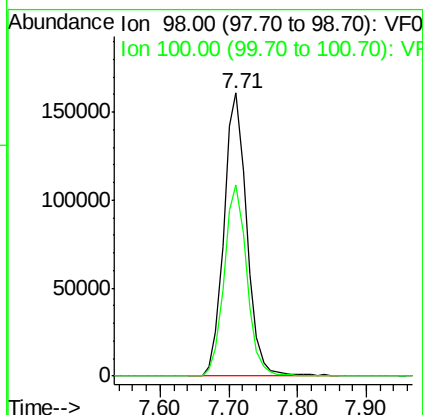
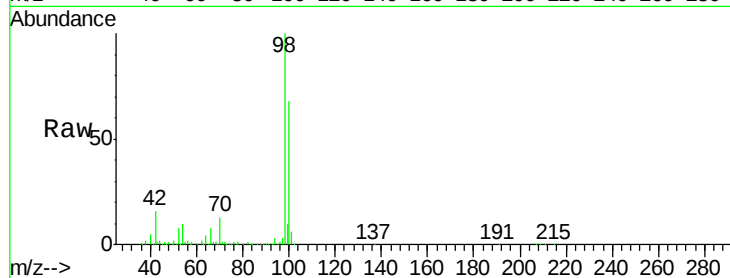




#50  
Toluene-d8  
Concen: 45.480 ug/l  
RT: 7.71 min Scan# 728  
Delta R.T. 0.01 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

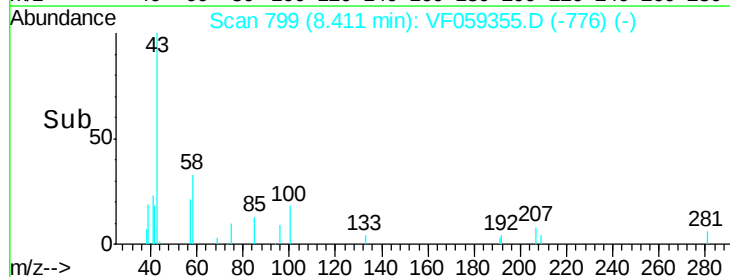
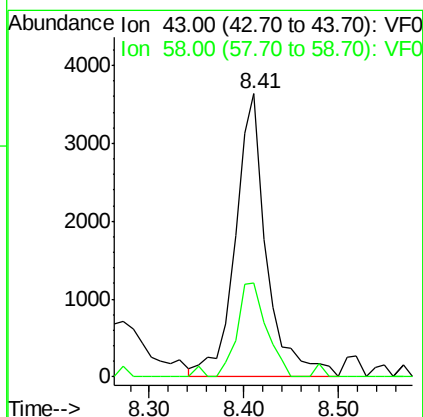
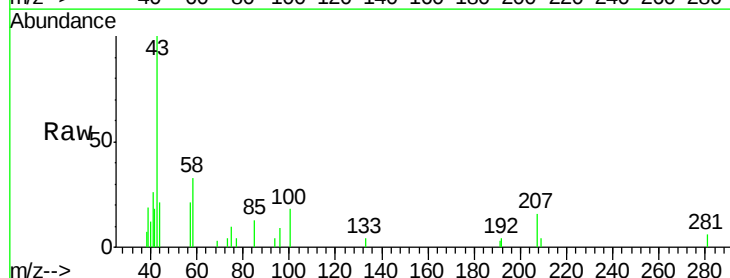
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

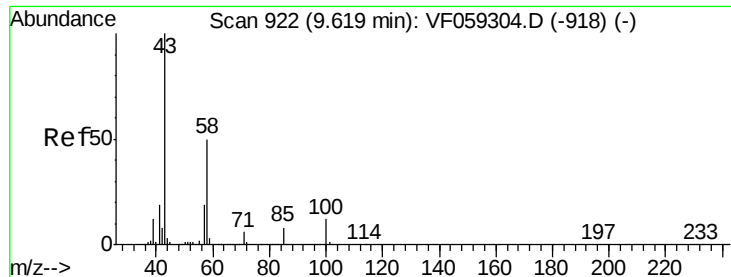
Tot Ion: 98 Resp: 369386  
Ion Ratio Lower Upper  
98 100  
100 67.6 54.6 82.0



#51  
4-Methyl-2-Pentanone  
Concen: 3.426 ug/l  
RT: 8.41 min Scan# 799  
Delta R.T. 0.02 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

Tgt Ion: 43 Resp: 8291  
Ion Ratio Lower Upper  
43 100  
58 33.2 28.4 42.6

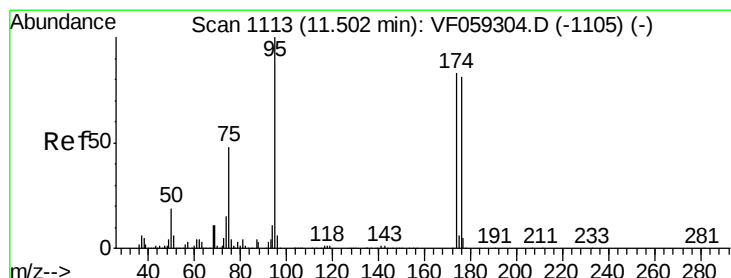
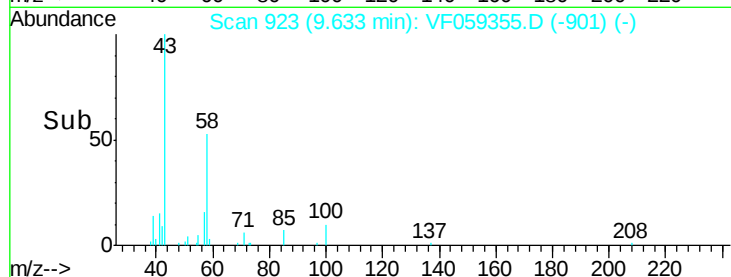
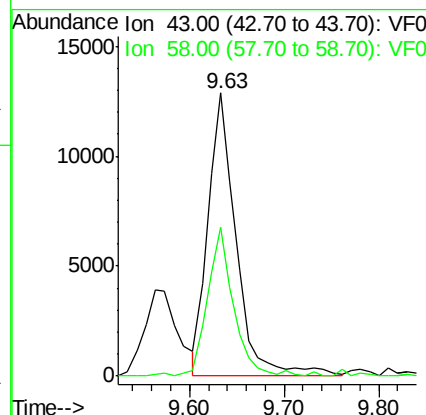
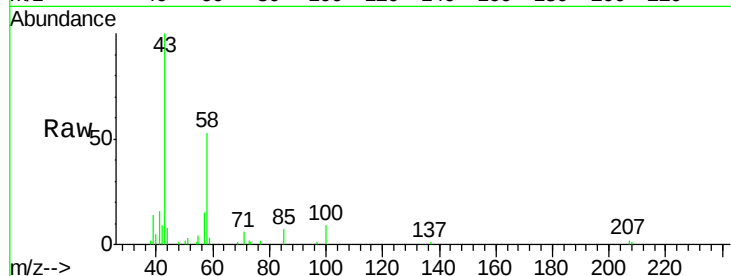




#59  
2-Hexanone  
Concen: Below Cal  
RT: 9.63 min Scan# 923  
Delta R.T. 0.01 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

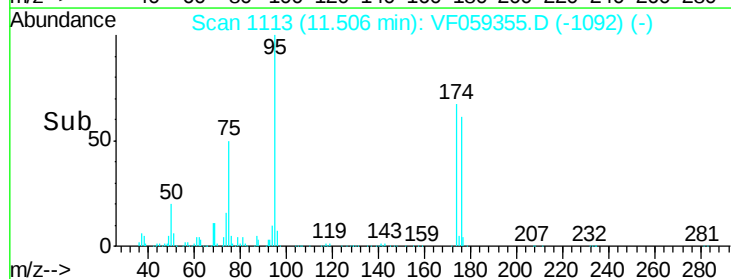
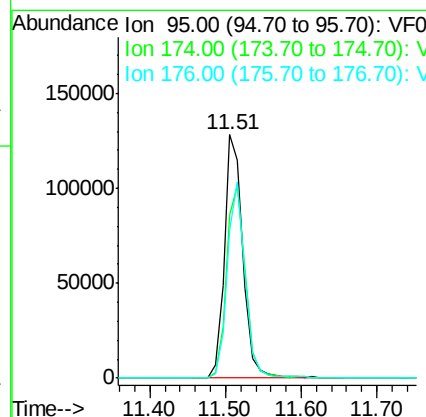
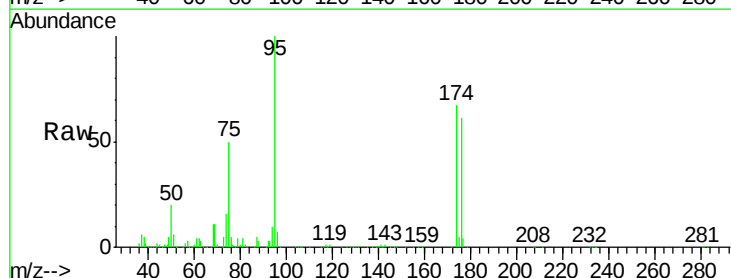
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

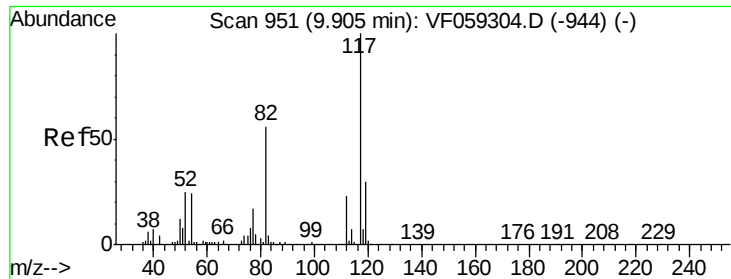
Tot Ion: 43 Resp: 26865  
Ion Ratio Lower Upper  
43 100  
58 52.6 23.3 69.9



#62  
4-Bromofluorobenzene  
Concen: 47.833 ug/l  
RT: 11.51 min Scan# 1113  
Delta R.T. 0.00 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

Tgt Ion: 95 Resp: 219147  
Ion Ratio Lower Upper  
95 100  
174 67.1 0.0 165.2  
176 60.8 0.0 161.0

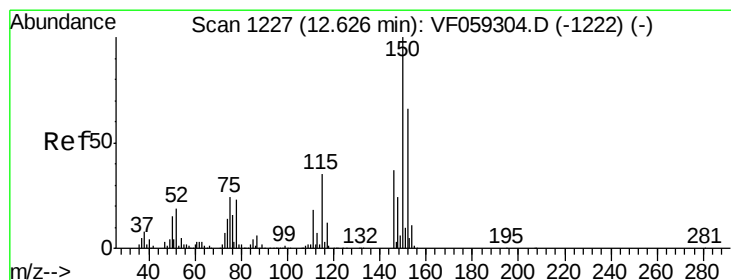
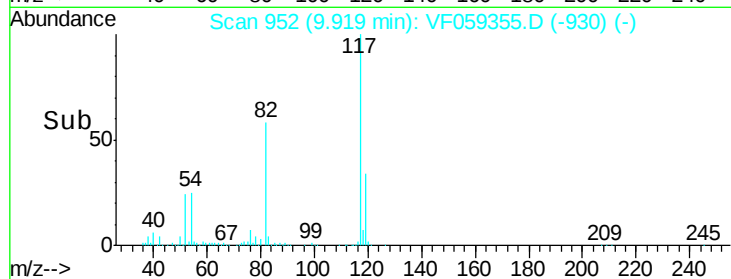
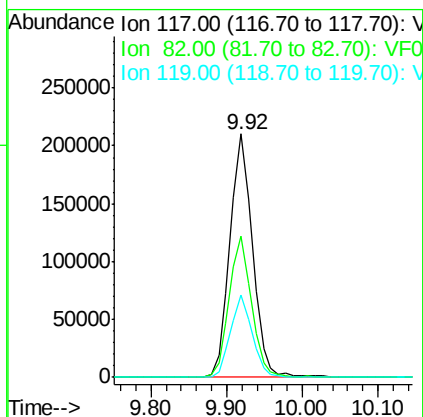
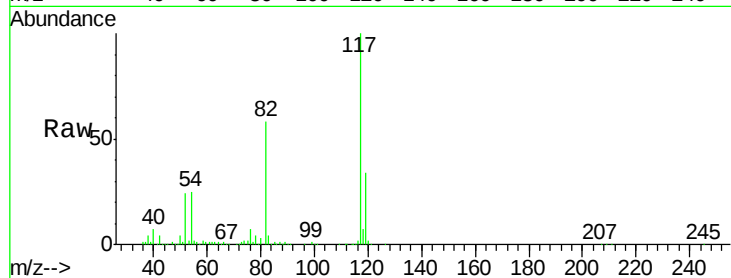




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.92 min Scan# 952  
Delta R.T. 0.01 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

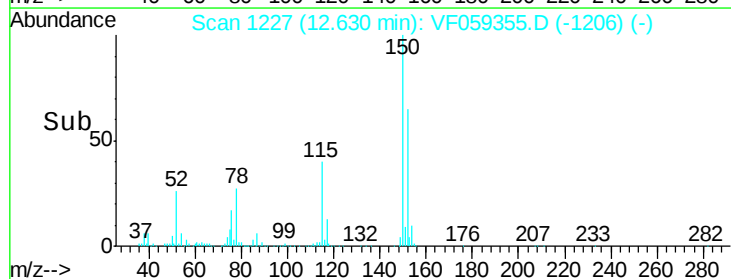
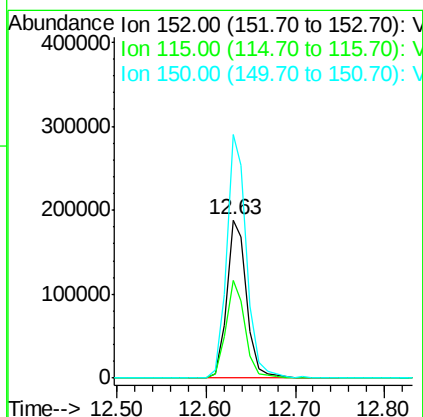
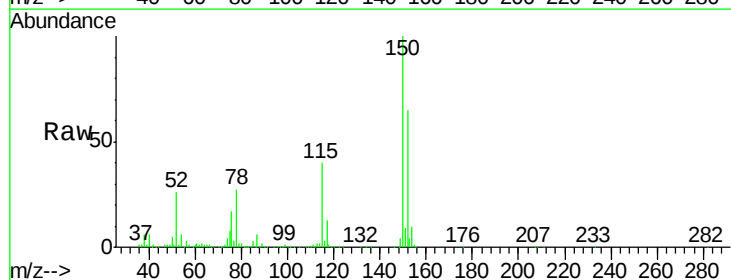
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

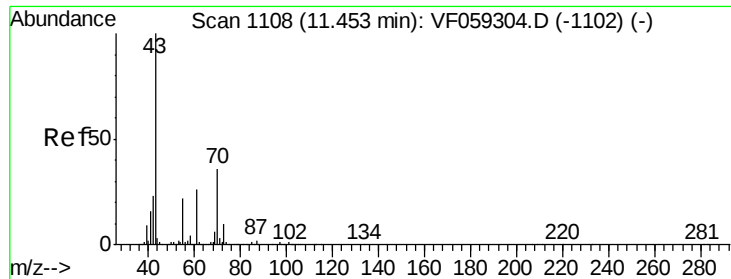
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 57.8  | 44.6  | 66.8  |
| 119     | 34.0  | 24.1  | 36.1  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.63 min Scan# 1227  
Delta R.T. 0.00 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 61.4  | 27.1  | 81.3  |
| 150     | 153.9 | 0.0   | 305.2 |

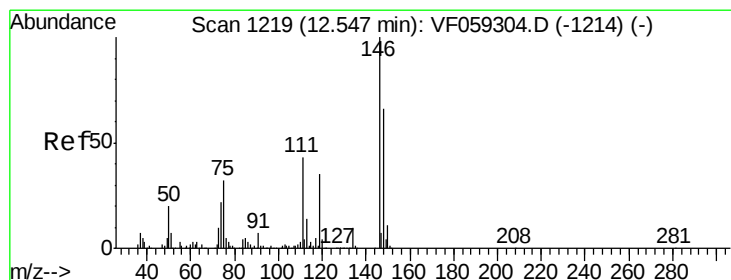
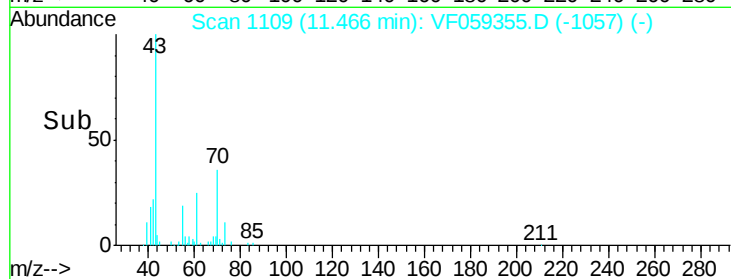
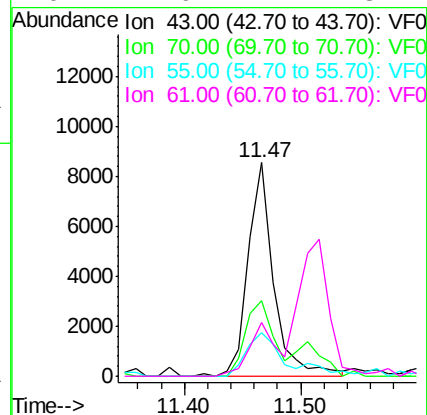
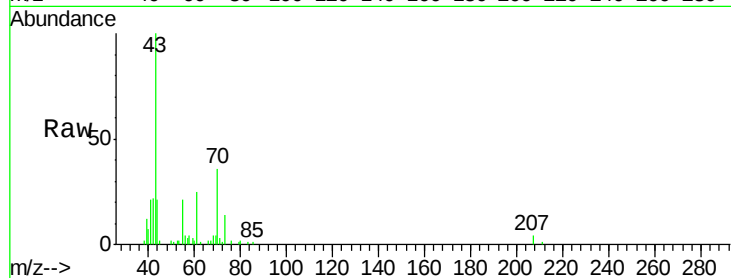




#74  
N-amvl acetate  
Concen: 2.091 ug/l  
RT: 11.47 min Scan# 1109  
Delta R.T. 0.01 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

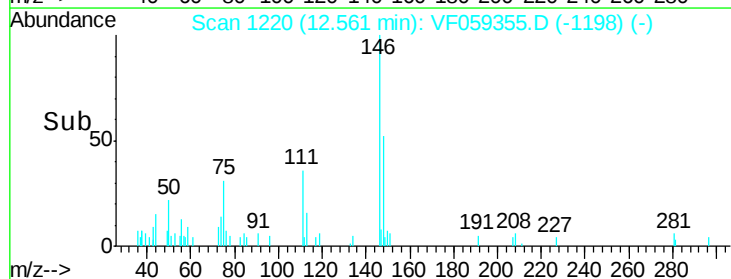
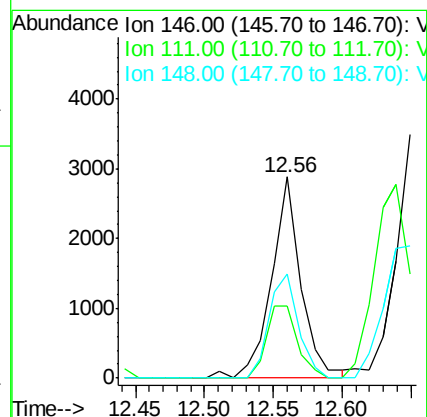
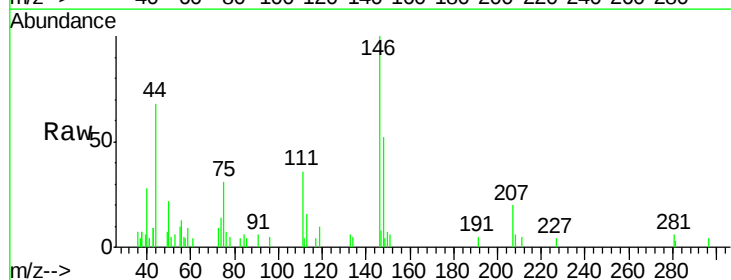
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0628SBL01

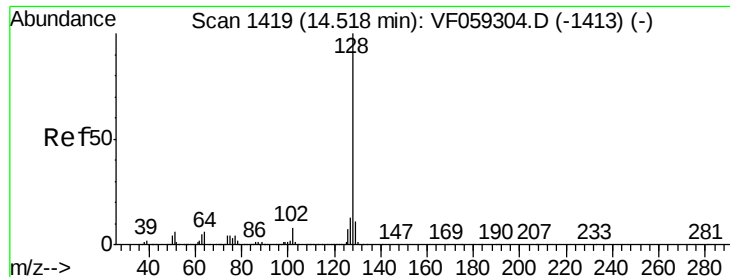
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 13168 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 35.6  | 28.8  | 43.2  |
| 55       | 20.5  | 17.4  | 26.0  |
| 61       | 24.9  | 21.1  | 31.7  |



#87  
1,3-Dichlorobenzene  
Concen: Below Cal  
RT: 12.56 min Scan# 1220  
Delta R.T. 0.01 min  
Lab File: VF059355.D  
Acq: 28 Jun 2018 12:36

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 4281  |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 35.8  | 21.4  | 64.2  |
| 148      | 51.9  | 32.8  | 98.4  |





#95

Naphthalene

Concen: 1.363 ug/l

RT: 14.53 min Scan# 1420

Delta R.T. 0.01 min

Lab File: VF059355.D

Acq: 28 Jun 2018 12:36

Instrument :

MSVOA\_F

ClientSampleId :

VF0628SBL01

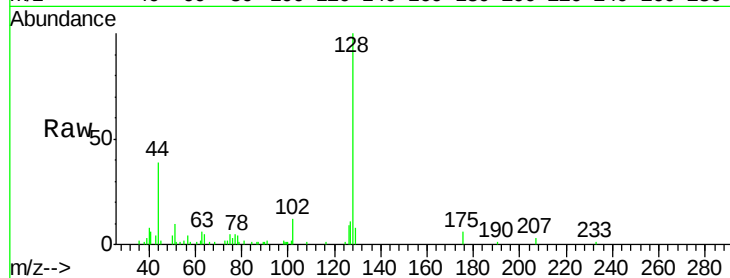
Tot Ion:128 Resp: 18441

Ion Ratio Lower Upper

128 100

127 10.8 10.1 15.1

129 8.0 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

