

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF051319\  
 Data File : VF062562.D  
 Acq On : 14 May 2019 2:11  
 Operator : FY/SY  
 Sample : VF0513SBL02  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0513SBL02

Quant Time: May 14 07:06:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 04:34:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.07  | 168  | 326803   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 5.79  | 114  | 426783   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 9.93  | 117  | 375957   | 50.00 | ug/l  | 0.03     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 253442   | 50.00 | ug/l  | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.05  | 65   | 156546   | 50.69 | ug/l    | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.38% |          |
| 35) Dibromofluoromethane    | 4.32  | 113  | 172263   | 50.66 | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.32% |          |
| 50) Toluene-d8              | 7.73  | 98   | 395350   | 48.03 | ug/l    | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 96.06%  |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 190886   | 51.41 | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 102.82% |          |

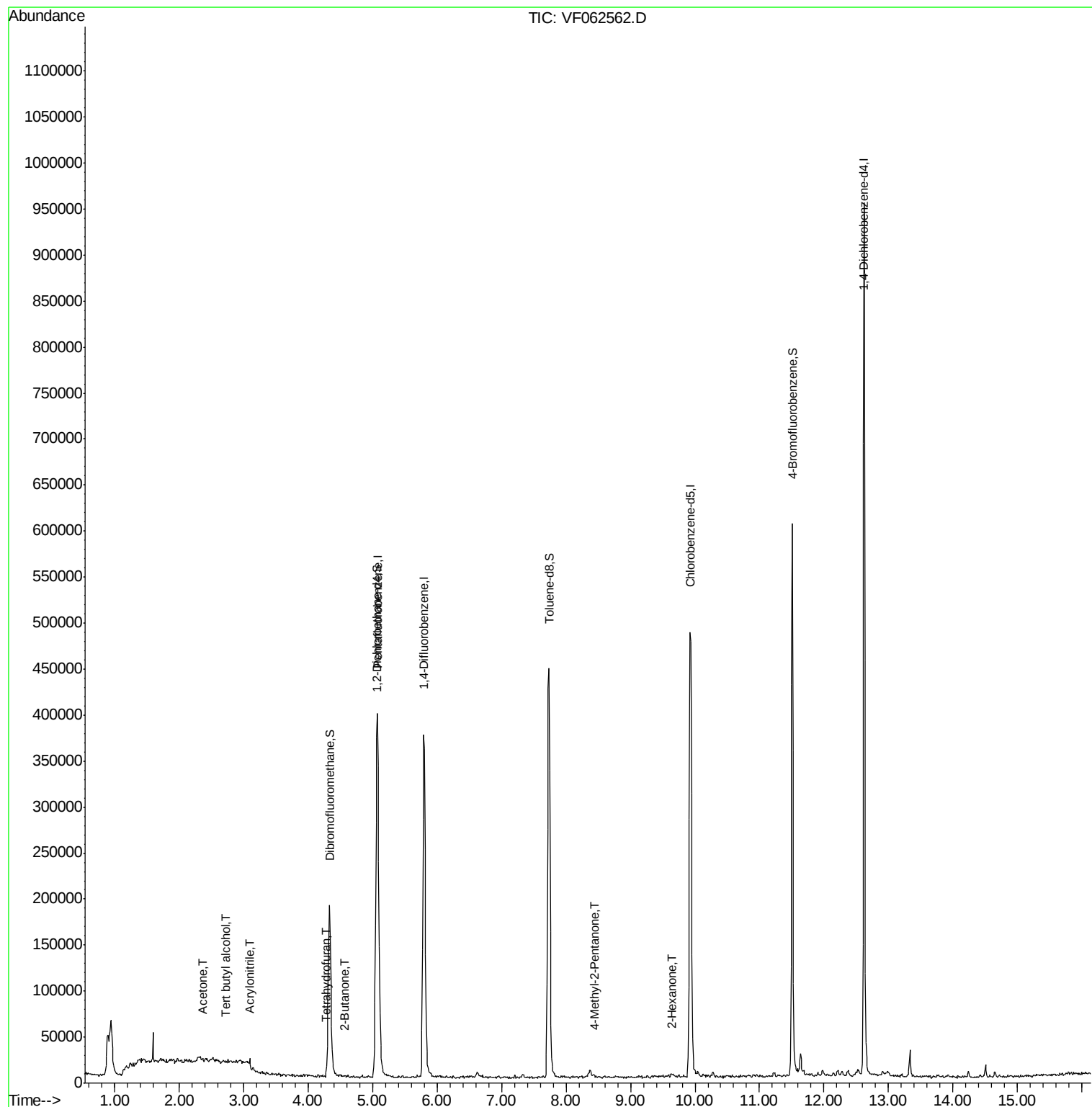
| Target Compounds         | R.T. | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------|------|------|----------|-----------|--------|--------|
| 5) Bromomethane          | 1.43 | 94   | 442      | Below Cal | #      | 18     |
| 11) Tert butyl alcohol   | 2.71 | 59   | 790      | 4.526     | ug/l # | 1      |
| 13) Acrolein             | 2.08 | 56   | 180      | Below Cal | #      | 1      |
| 15) Acrylonitrile        | 3.10 | 53   | 481      | 1.455     | ug/l # | 1      |
| 16) Acetone              | 2.36 | 43   | 3194     | 5.112     | ug/l # | 72     |
| 18) Methyl Acetate       | 2.48 | 43   | 2068     | Below Cal |        | 96     |
| 25) 2-Butanone           | 4.56 | 43   | 1987     | 2.532     | ug/l # | 60     |
| 29) Tetrahydrofuran      | 4.28 | 42   | 675      | 1.871     | ug/l # | 36     |
| 37) Ethyl Acetate        | 4.30 | 43   | 311      | Below Cal | #      | 73     |
| 38) Carbon Tetrachloride | 4.21 | 117  | 110      | Below Cal | #      | 83     |
| 49) 1,4-Dioxane          | 6.86 | 88   | 76       | Below Cal | #      | 1      |
| 51) 4-Methyl-2-Pentanone | 8.44 | 43   | 2439     | 1.930     | ug/l   | 91     |
| 59) 2-Hexanone           | 9.65 | 43   | 2998     | 3.431     | ug/l   | 75     |

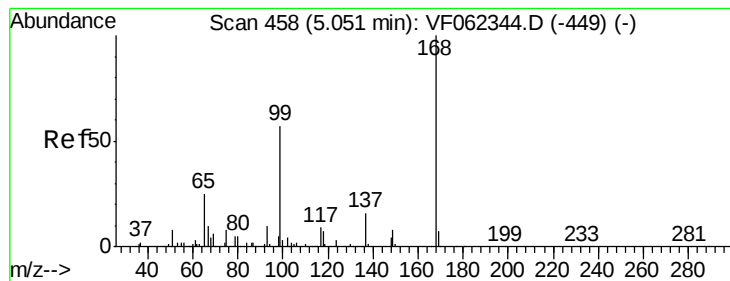
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF051319\  
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Sample : VF0513SBL02  
Misc : 5.00µ/5mL/MSVOA F/SOIL  
ALS Vial : 29 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0513SBL02

Quant Time: May 14 02:35:25 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 07 04:34:57 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.07 min Scan# 461

Delta R.T. 0.02 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

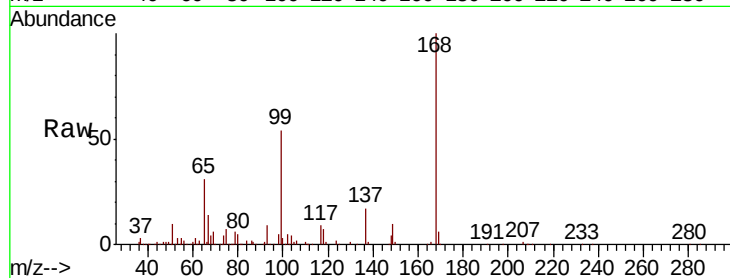
VF0513SBL02

Tot Ion:168 Resp: 326803

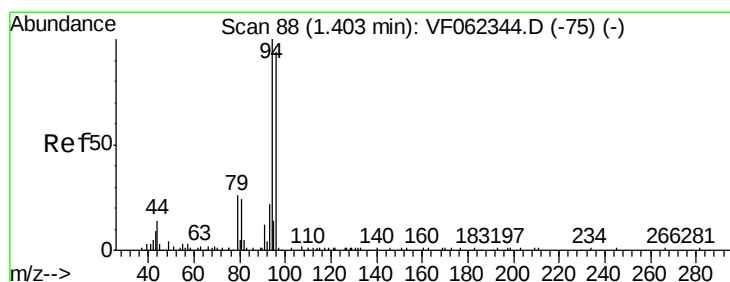
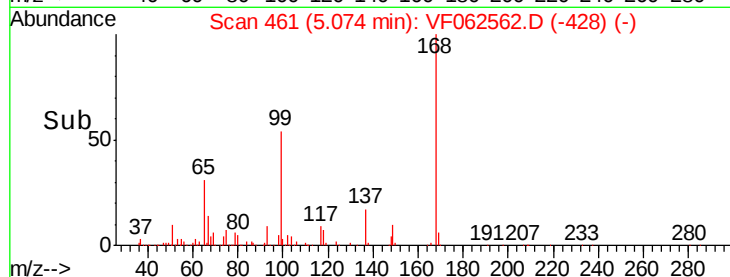
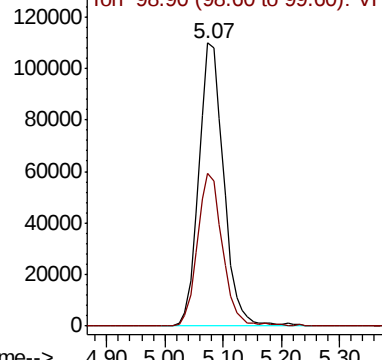
Ion Ratio Lower Upper

168 100

99 54.1 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): VF0



#5

Bromomethane

Concen: Below Cal

RT: 1.43 min Scan# 91

Delta R.T. 0.02 min

Lab File: VF062562.D

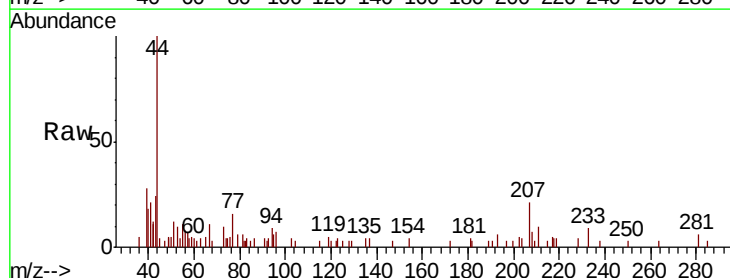
Acq: 14 May 2019 2:11

Tgt Ion: 94 Resp: 442

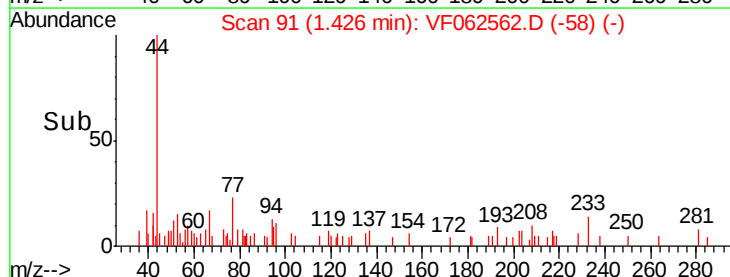
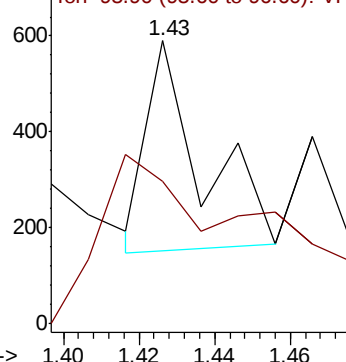
Ion Ratio Lower Upper

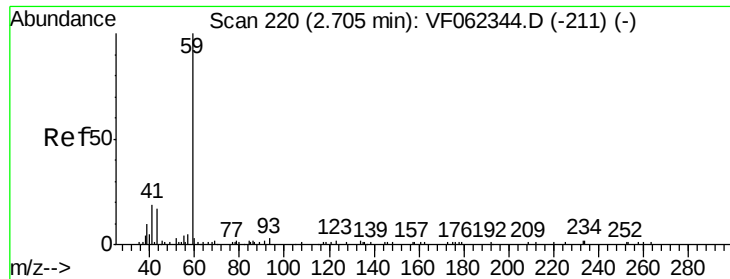
94 100

96 14.9 75.4 113.2#



Abundance Ion 93.90 (93.60 to 94.60): VF0



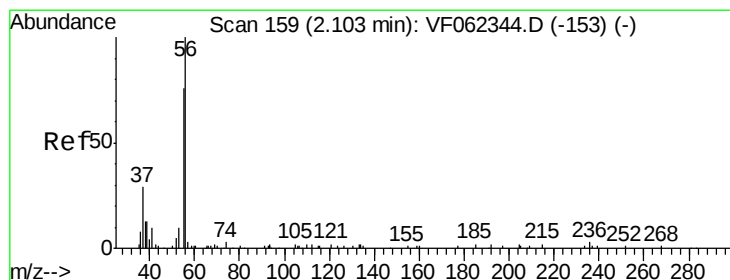
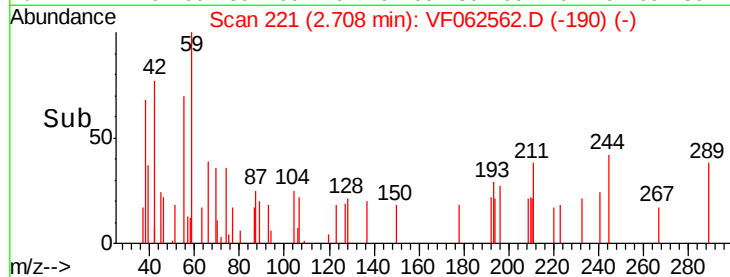
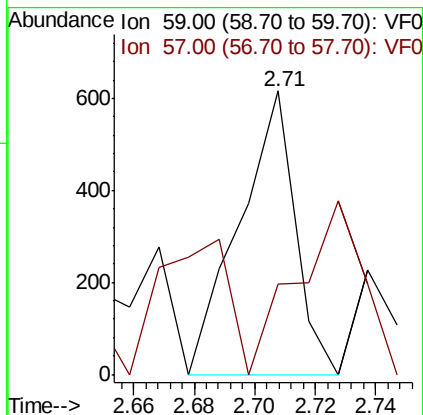
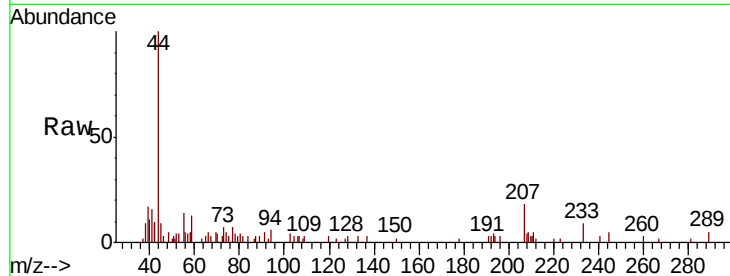


#11

Tert butyl alcohol  
 Concen: 4.526 ug/l  
 RT: 2.71 min Scan# 221  
 Delta R.T. 0.00 min  
 Lab File: VF062562.D  
 Acq: 14 May 2019 2:11

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0513SBL02

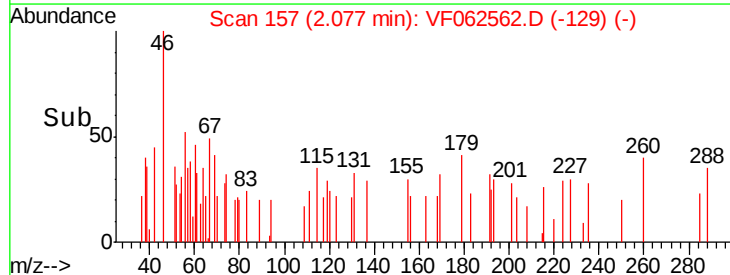
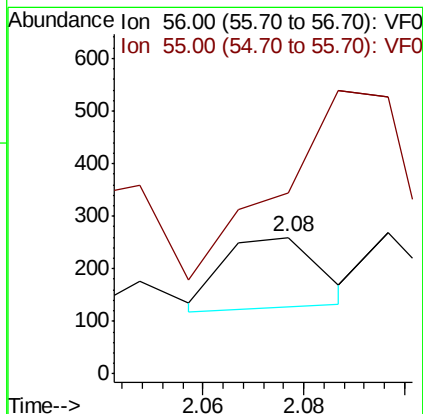
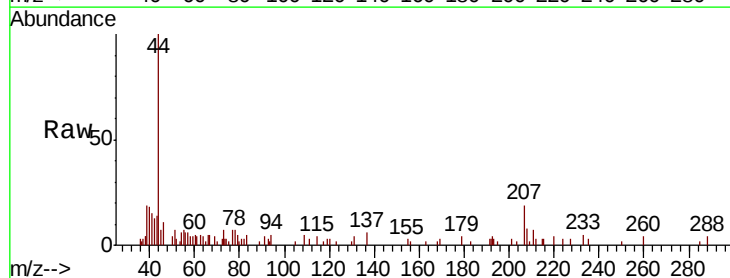
Tot Ion: 59 Resp: 790  
 Ion Ratio Lower Upper  
 59 100  
 57 58.5 9.3 13.9#

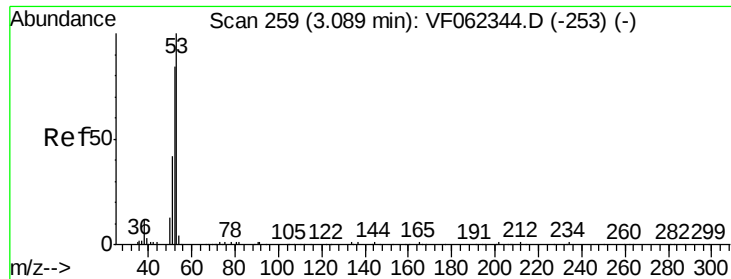


#13

Acrolein  
 Concen: Below Cal  
 RT: 2.08 min Scan# 157  
 Delta R.T. -0.03 min  
 Lab File: VF062562.D  
 Acq: 14 May 2019 2:11

Tgt Ion: 56 Resp: 180  
 Ion Ratio Lower Upper  
 56 100  
 55 377.2 58.4 87.6#





#15

Acrylonitrile

Concen: 1.455 ug/l

RT: 3.10 min Scan# 261

Delta R.T. 0.01 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

VF0513SBL02

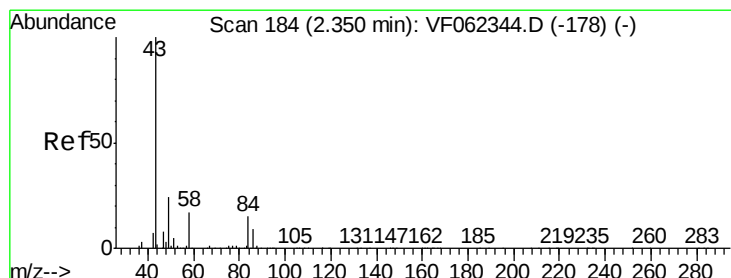
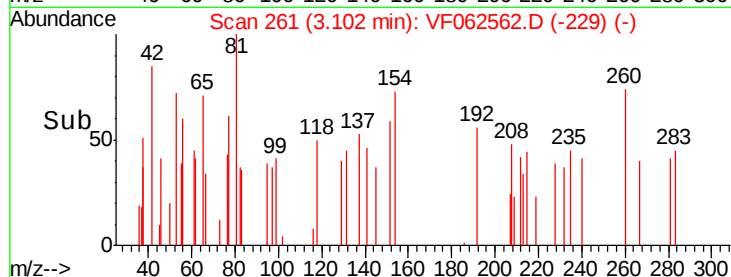
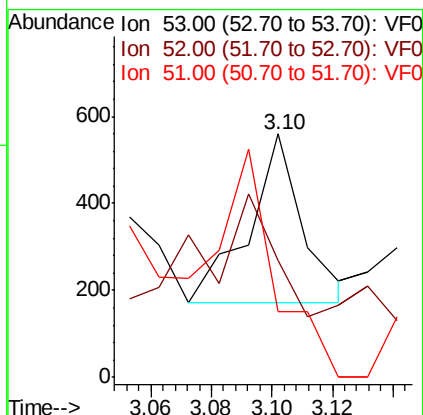
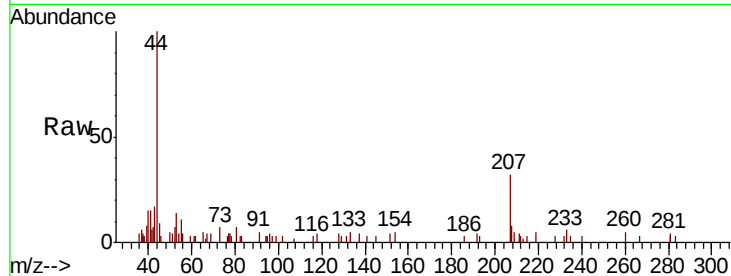
Tot Ion: 53 Resp: 481

Ion Ratio Lower Upper

53 100

52 271.7 77.2 115.8#

51 137.6 40.6 61.0#



#16

Acetone

Concen: 5.112 ug/l

RT: 2.36 min Scan# 186

Delta R.T. 0.01 min

Lab File: VF062562.D

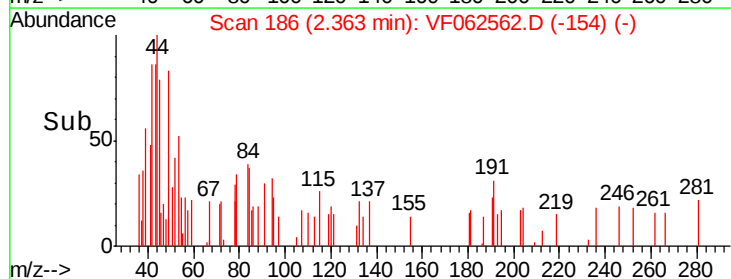
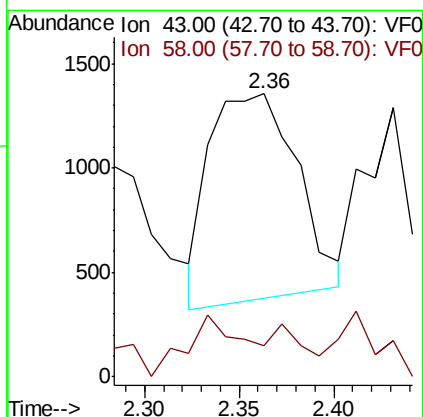
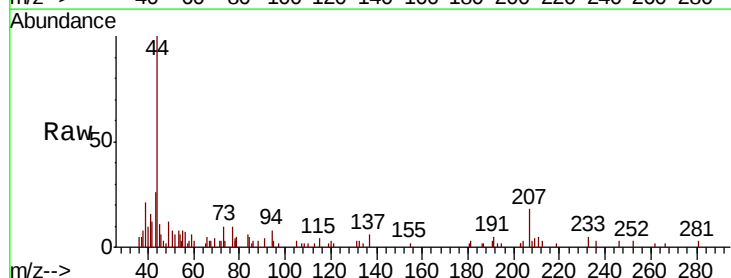
Acq: 14 May 2019 2:11

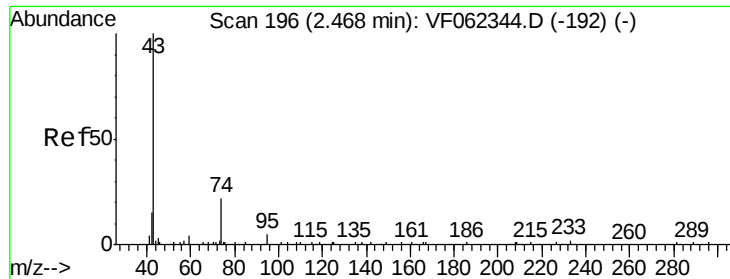
Tgt Ion: 43 Resp: 3194

Ion Ratio Lower Upper

43 100

58 4.6 13.1 19.7#

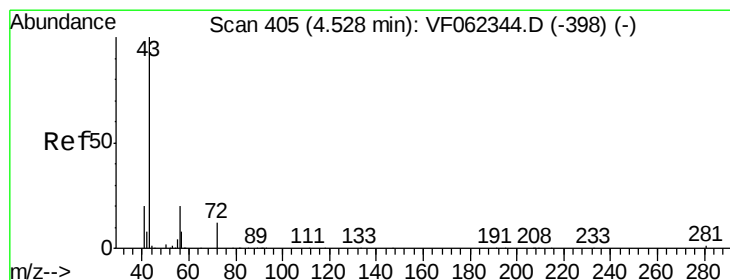
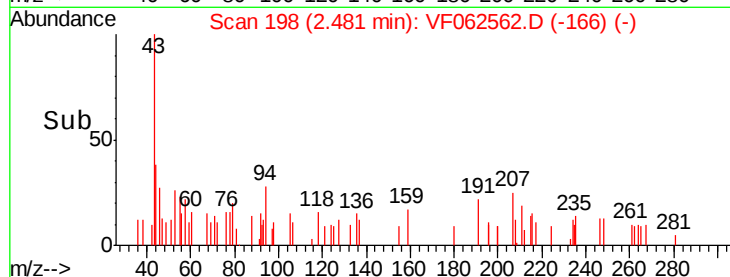
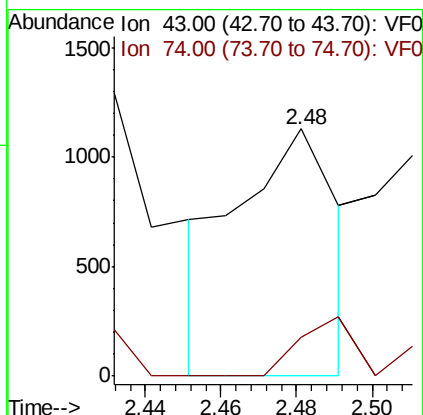
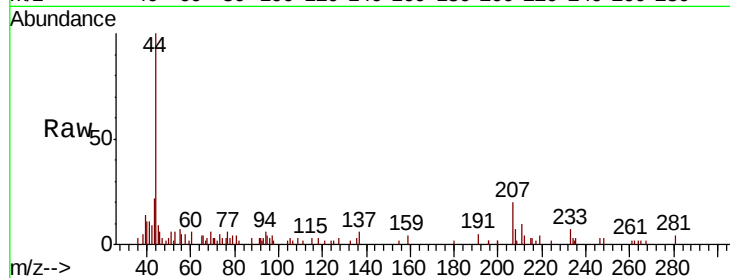




#18  
Methvl Acetate  
Concen: Below Cal  
RT: 2.48 min Scan# 198  
Delta R.T. 0.01 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

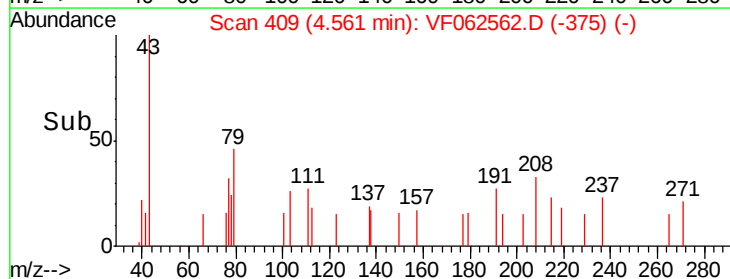
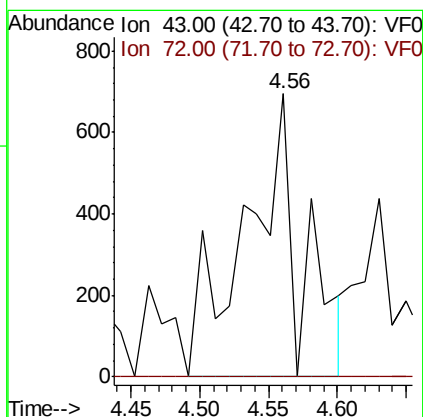
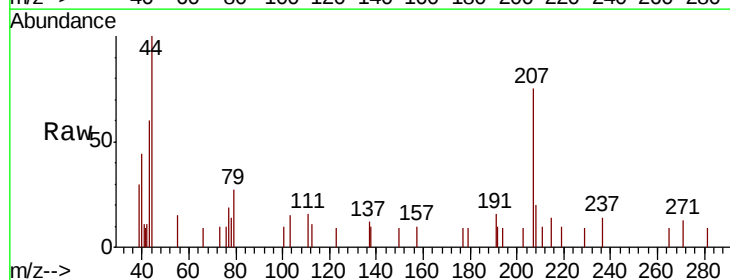
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0513SBL02

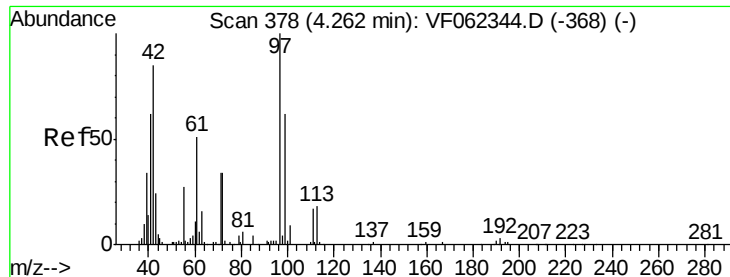
Tot Ion: 43 Resp: 2068  
Ion Ratio Lower Upper  
43 100  
74 16.7 15.0 22.4



#25  
2-Butanone  
Concen: 2.532 ug/l  
RT: 4.56 min Scan# 409  
Delta R.T. 0.03 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

Tgt Ion: 43 Resp: 1987  
Ion Ratio Lower Upper  
43 100  
72 0.0 14.2 21.4#

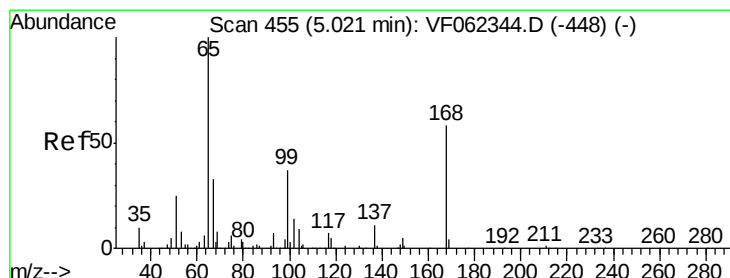
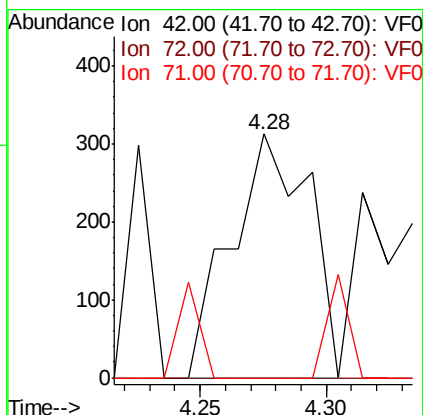
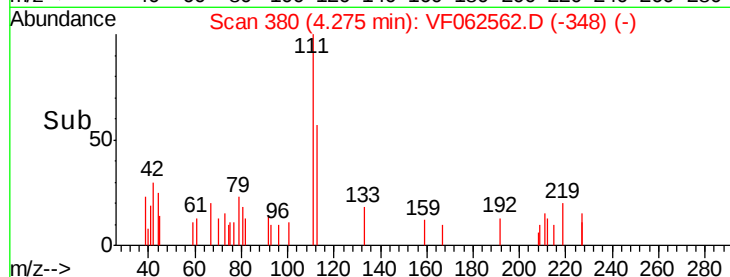
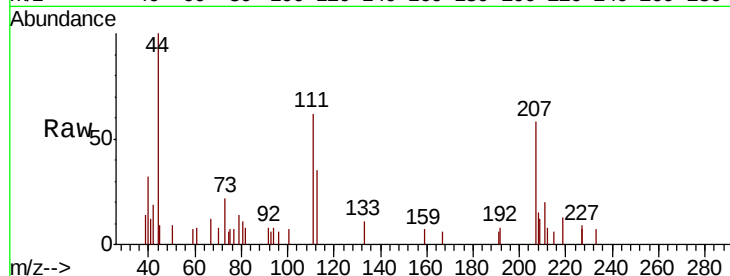




#29  
Tetrahydrofuran  
Concen: 1.871 ug/l  
RT: 4.28 min Scan# 380  
Delta R.T. 0.01 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

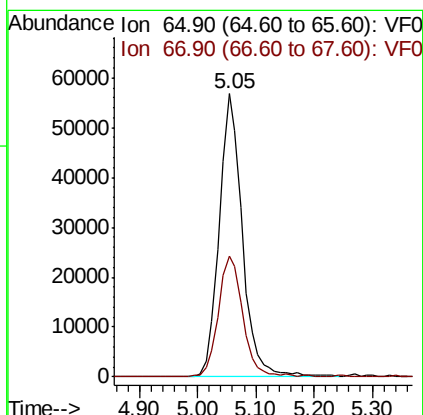
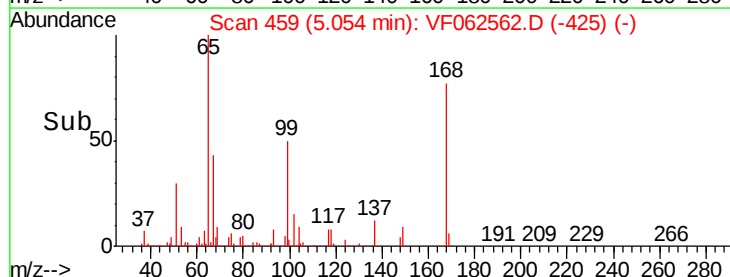
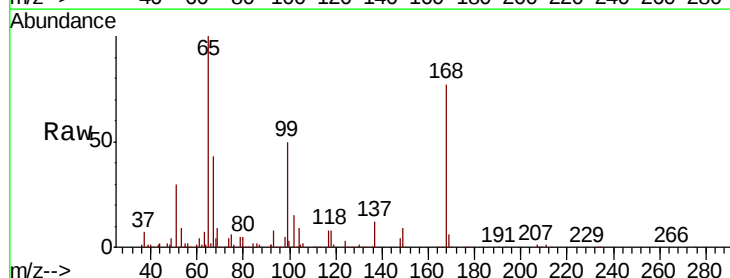
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0513SBL02

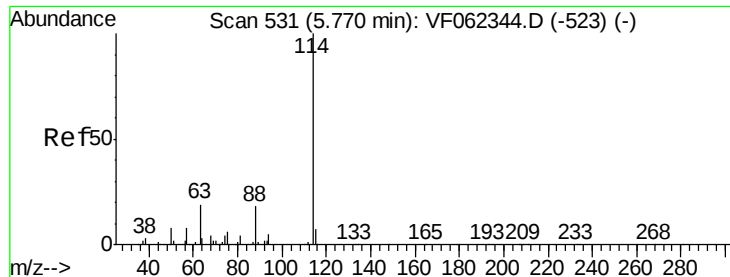
Tot Ion: 42 Resp: 675  
Ion Ratio Lower Upper  
42 100  
72 0.0 31.4 47.0#  
71 0.0 31.7 47.5#



#33  
1,2-Dichloroethane-d4  
Concen: 50.688 ug/l  
RT: 5.05 min Scan# 459  
Delta R.T. 0.03 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

Tgt Ion: 65 Resp: 156546  
Ion Ratio Lower Upper  
65 100  
67 45.0 0.0 85.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.79 min Scan# 534

Delta R.T. 0.02 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

VF0513SBL02

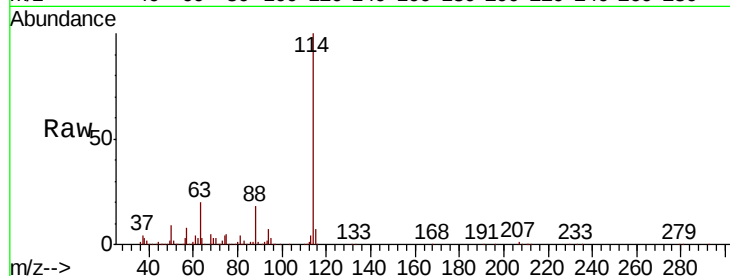
Tot Ion:114 Resp: 426783

Ion Ratio Lower Upper

114 100

63 20.3 0.0 37.4

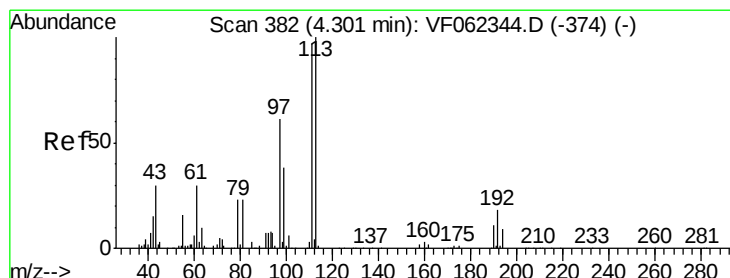
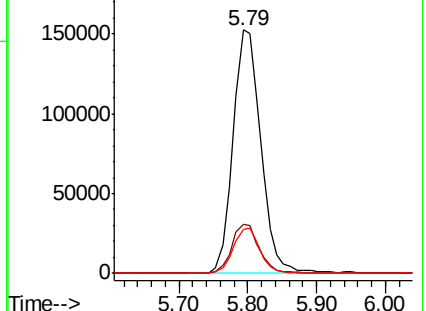
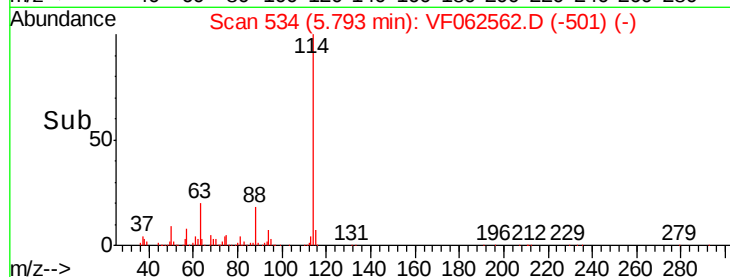
88 18.2 0.0 36.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 87.90 (87.60 to 88.60): VF0



#35

Dibromofluoromethane

Concen: 50.664 ug/l

RT: 4.32 min Scan# 385

Delta R.T. 0.02 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

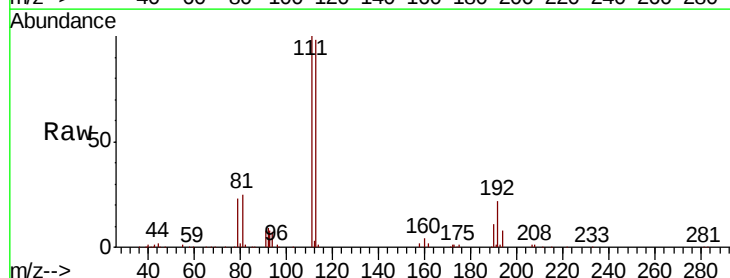
Tgt Ion:113 Resp: 172263

Ion Ratio Lower Upper

113 100

111 102.7 79.4 119.0

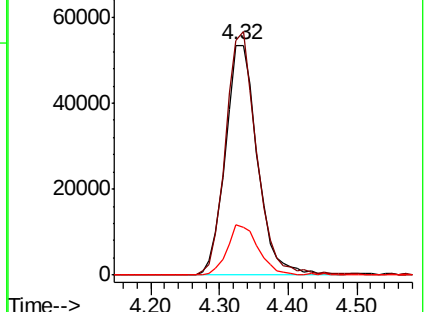
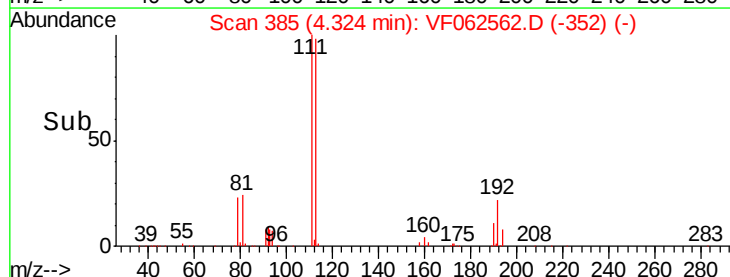
192 21.3 16.0 24.0

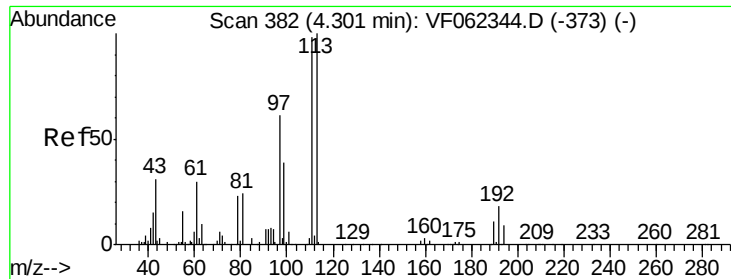


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

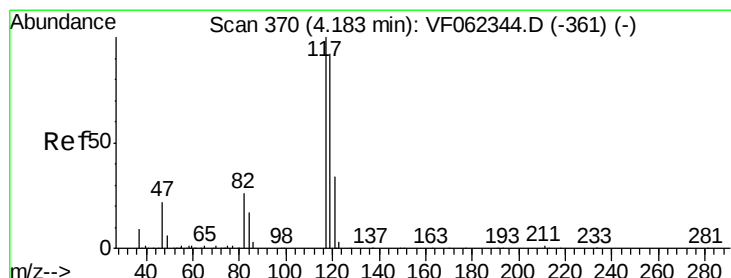
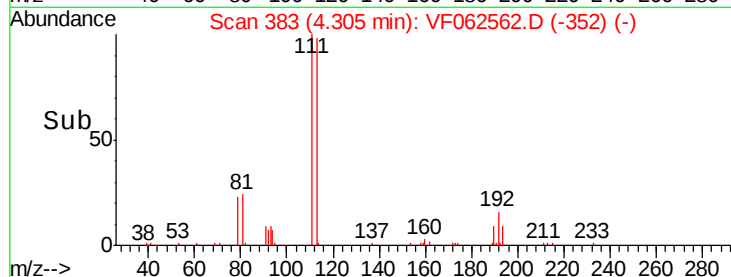
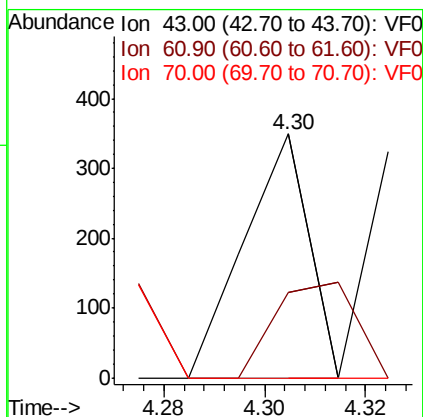
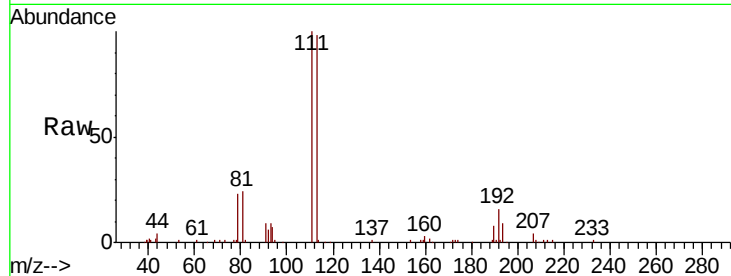




#37  
Ethyl Acetate  
Concen: Below Cal  
RT: 4.30 min Scan# 383  
Delta R.T. 0.00 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

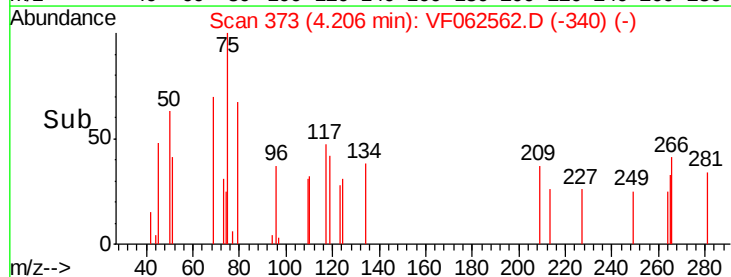
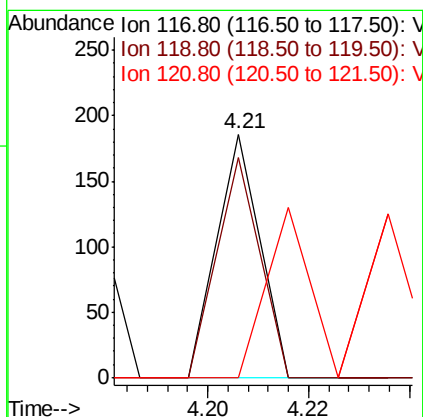
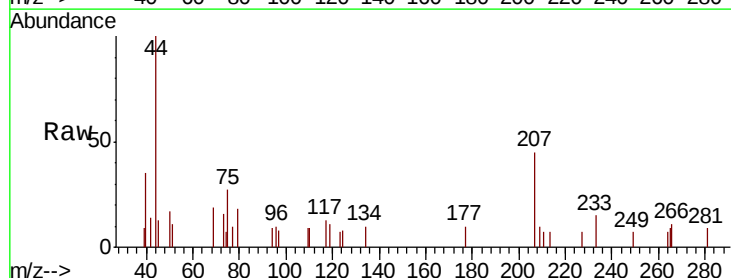
Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0513SBL02

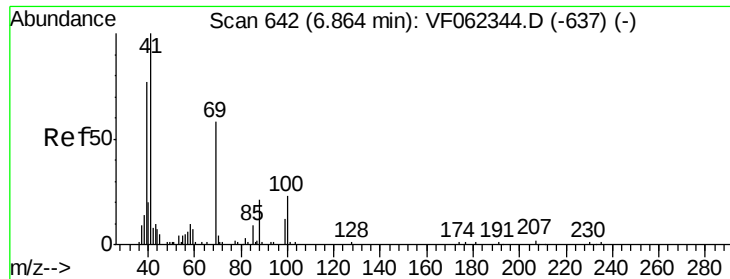
Tot Ion: 43 Resp: 311  
Ion Ratio Lower Upper  
43 100  
61 49.2 0.0 0.0#  
70 0.0 8.2 12.2#



#38  
Carbon Tetrachloride  
Concen: Below Cal  
RT: 4.21 min Scan# 373  
Delta R.T. 0.02 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

Tgt Ion: 117 Resp: 110  
Ion Ratio Lower Upper  
117 100  
119 90.3 73.4 110.2  
121 0.0 27.4 41.0#





#49

1,4-Dioxane

Concen: Below Cal

RT: 6.86 min Scan# 642

Delta R.T. -0.01 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

VF0513SBL02

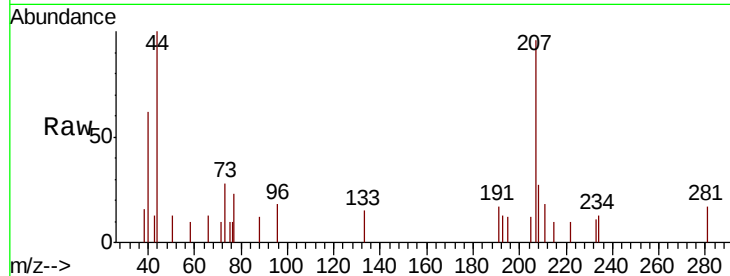
Tot Ion: 88 Resp: 76

Ion Ratio Lower Upper

88 100

43 451.3 55.6 83.4#

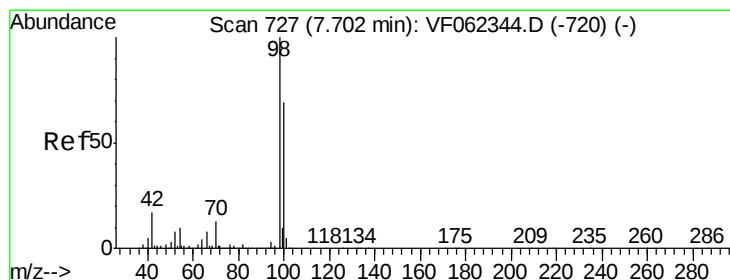
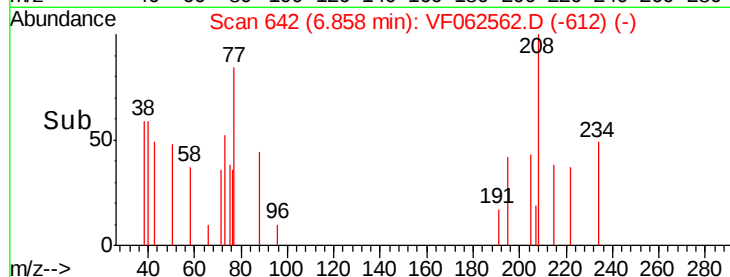
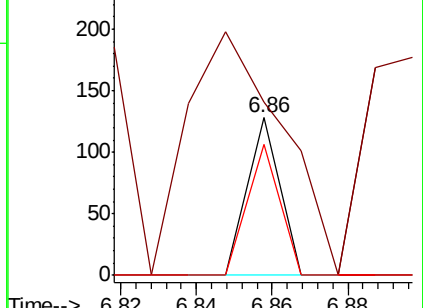
58 82.9 52.8 79.2#



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: 48.035 ug/l

RT: 7.73 min Scan# 731

Delta R.T. 0.03 min

Lab File: VF062562.D

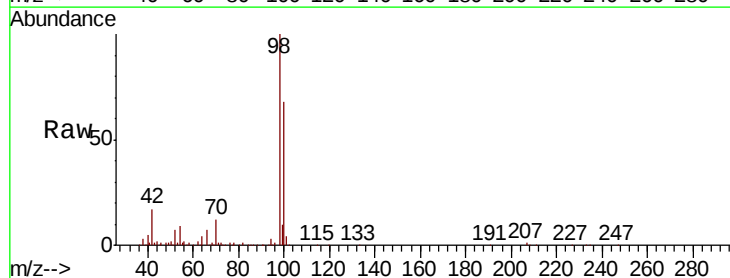
Acq: 14 May 2019 2:11

Tgt Ion: 98 Resp: 395350

Ion Ratio Lower Upper

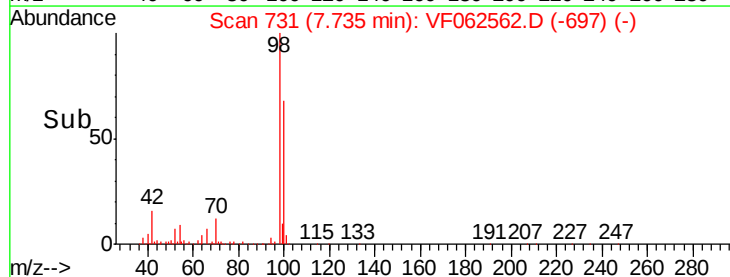
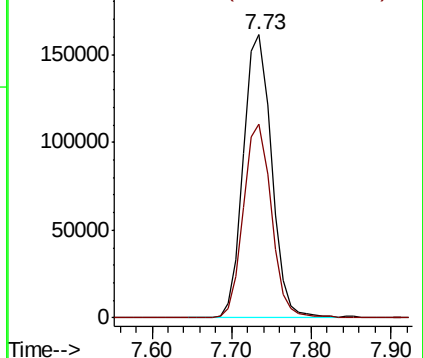
98 100

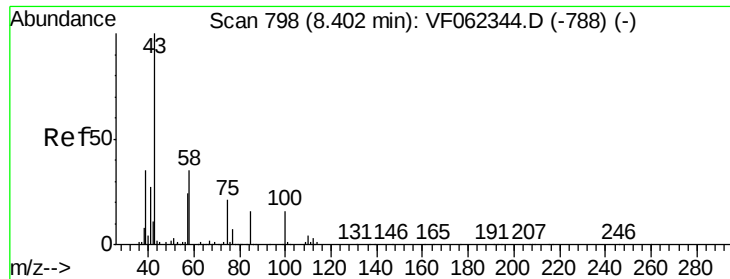
100 68.1 53.3 79.9



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: 1.930 ug/l

RT: 8.44 min Scan# 803

Delta R.T. 0.04 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

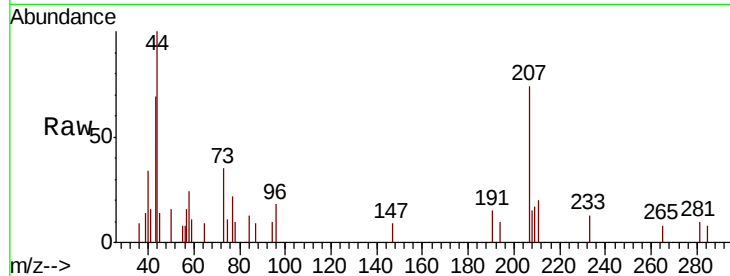
VF0513SBL02

Tot Ion: 43 Resp: 2439

Ion Ratio Lower Upper

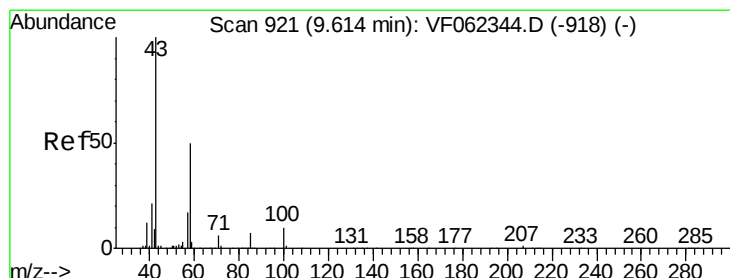
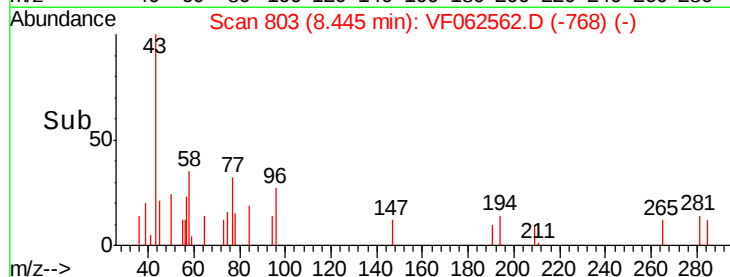
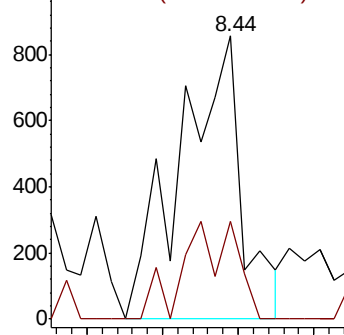
43 100

58 29.3 27.8 41.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#59

2-Hexanone

Concen: 3.431 ug/l

RT: 9.65 min Scan# 925

Delta R.T. 0.03 min

Lab File: VF062562.D

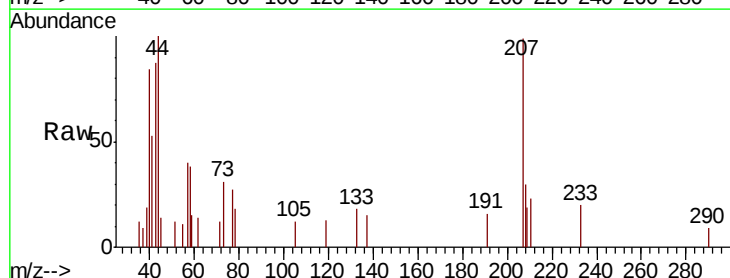
Acq: 14 May 2019 2:11

Tgt Ion: 43 Resp: 2998

Ion Ratio Lower Upper

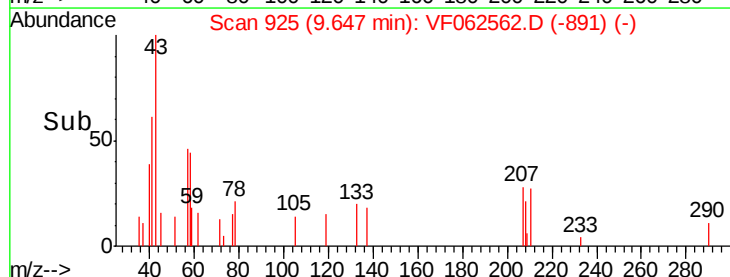
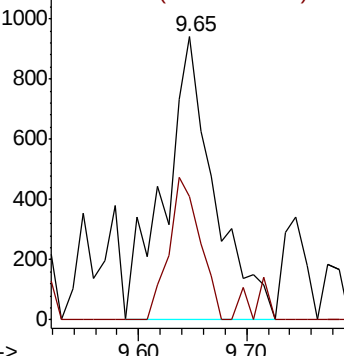
43 100

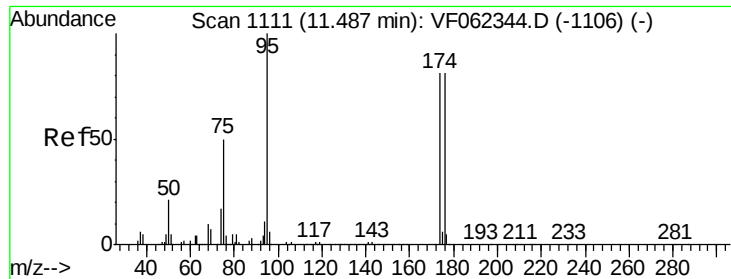
58 31.9 24.3 73.0



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#62

4-Bromofluorobenzene

Concen: 51.406 ug/l

RT: 11.51 min Scan# 1114

Delta R.T. 0.02 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

Instrument :

MSVOA\_F

ClientSampleId :

VF0513SBL02

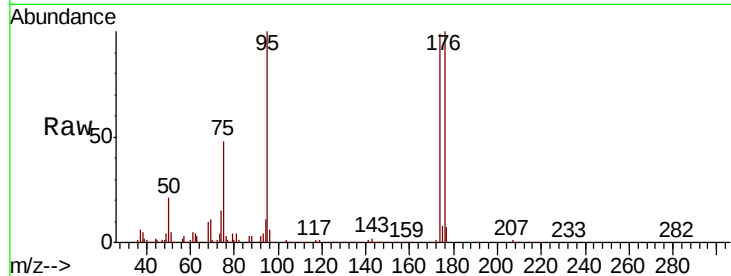
Tot Ion: 95 Resp: 190886

Ion Ratio Lower Upper

95 100

174 98.1 0.0 191.8

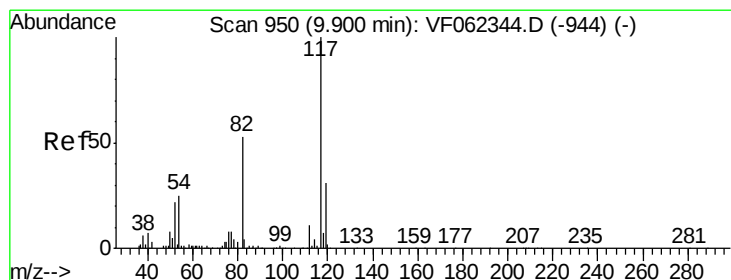
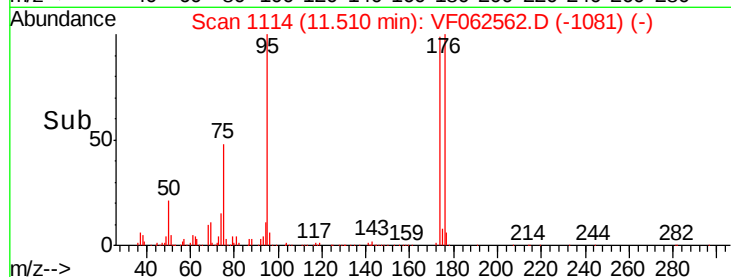
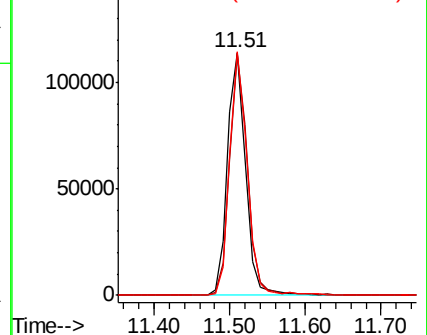
176 96.4 0.0 193.2



Abundance Ion 94.90 (94.60 to 95.60): VF0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.93 min Scan# 954

Delta R.T. 0.03 min

Lab File: VF062562.D

Acq: 14 May 2019 2:11

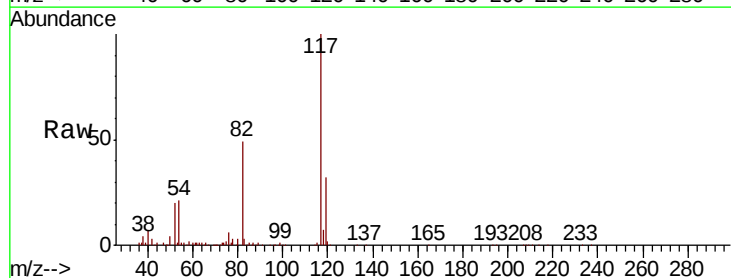
Tgt Ion: 117 Resp: 375957

Ion Ratio Lower Upper

117 100

82 48.9 42.2 63.2

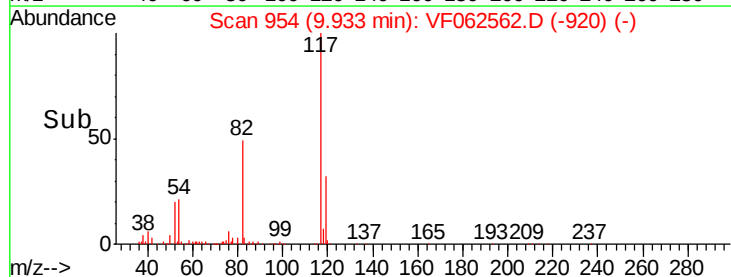
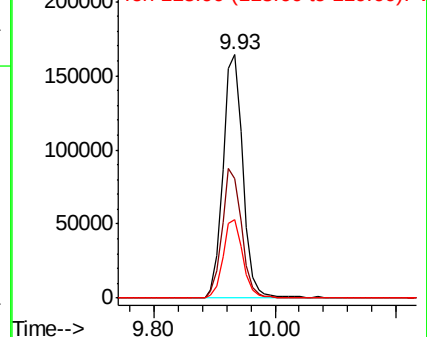
119 32.2 25.0 37.4

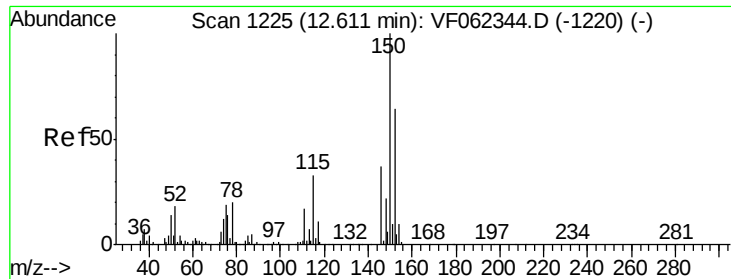


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 118.90 (118.60 to 119.60): V



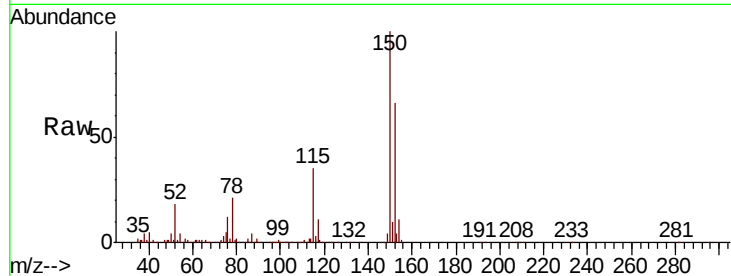


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.62 min Scan# 1227  
Delta R.T. 0.01 min  
Lab File: VF062562.D  
Acq: 14 May 2019 2:11

Instrument :  
MSVOA\_F  
ClientSampleId :  
VF0513SBL02

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 52.7  | 26.4  | 79.2  |
| 150     | 150.3 | 0.0   | 335.0 |



Abundance

Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

