

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF021119\  
 Data File : VF061585.D  
 Acq On : 11 Feb 2019 14:49  
 Operator : VA/AP  
 Sample : K1356-05  
 Misc : 6.62g/5mL/MSVOA-F/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Feb 12 03:26:17 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 16 04:51:59 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T. | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 0.00 | 168  | 0        | 0.00  | ug/l  | -4.86    |
| 34) 1,4-Difluorobenzene    | 5.84 | 114  | 66       | 50.00 | ug/l  | 0.24     |
| 63) Chlorobenzene-d5       | 0.00 | 117  | 0        | 0.00  | ug/l  | -9.77    |
| 72) 1,4-Dichlorobenzene-d4 | 0.00 | 152  | 0        | 0.00  | ug/l  | -12.55   |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 0.00  | 65   | 0        | 0.00  | ug/l    |          |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 0.00%   |          |
| 35) Dibromofluoromethane    | 0.00  | 113  | 0        | 0.00  | ug/l    |          |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 0.00%   |          |
| 50) Toluene-d8              | 0.00  | 98   | 0        | 0.00  | ug/l    |          |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 0.00%   |          |
| 62) 4-Bromofluorobenzene    | 11.81 | 95   | 64       | 96.00 | ug/l    | 0.41     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 192.00% |          |

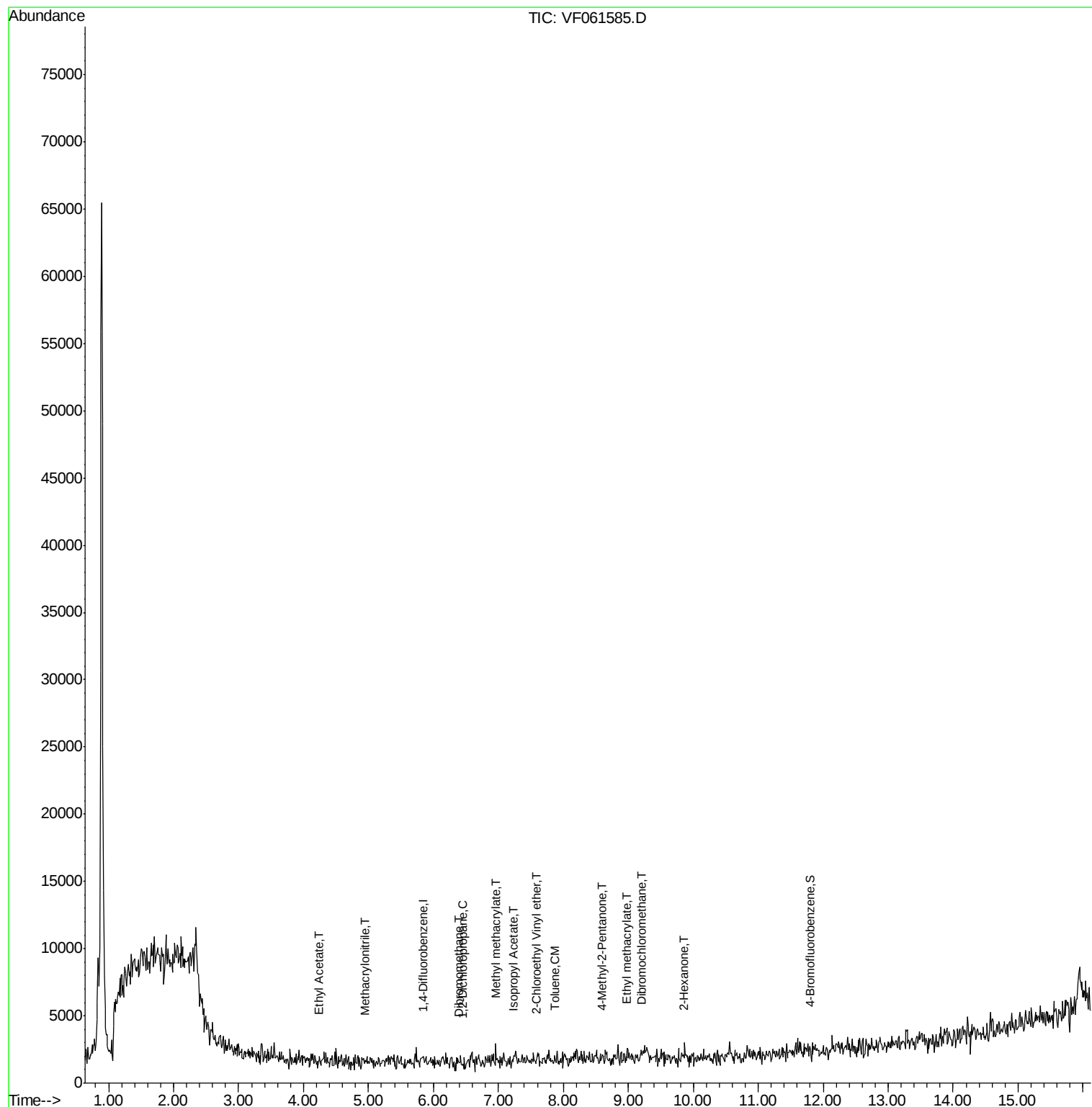
| Target Compounds              | R.T. | QIon | Response | Conc     | Units  | Qvalue |
|-------------------------------|------|------|----------|----------|--------|--------|
| 37) Ethyl Acetate             | 4.23 | 43   | 163      | 532.871  | ug/l # | 5      |
| 41) Methacrylonitrile         | 4.95 | 41   | 111      | 681.963  | ug/l # | 29     |
| 43) Isopropyl Acetate         | 7.25 | 43   | 71       | 184.937  | ug/l # | 51     |
| 45) 1,2-Dichloropropane       | 6.45 | 63   | 72       | 161.109  | ug/l # | 44     |
| 46) Dibromomethane            | 6.40 | 93   | 66       | 222.101  | ug/l # | 6      |
| 48) Methyl methacrylate       | 6.97 | 41   | 295      | 1144.301 | ug/l # | 29     |
| 51) 4-Methyl-2-Pentanone      | 8.61 | 43   | 95       | 336.596  | ug/l # | 39     |
| 52) Toluene                   | 7.88 | 92   | 84       | 74.910   | ug/l # | 1      |
| 56) Ethyl methacrylate        | 8.99 | 69   | 66       | 178.152  | ug/l # | 63     |
| 58) 2-Chloroethyl Vinyl ether | 7.58 | 63   | 70       | 1631.064 | ug/l # | 47     |
| 59) 2-Hexanone                | 9.85 | 43   | 78       | 396.322  | ug/l # | 26     |
| 60) Dibromochloromethane      | 9.19 | 129  | 72       | 154.663  | ug/l # | 10     |

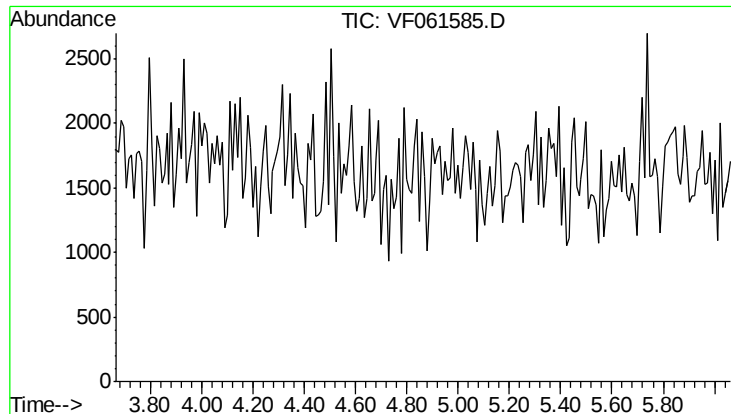
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
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QLast Update : Wed Jan 16 04:51:59 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 0.000 ug/l

Expected RT: 4.86 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

Tot Ion: 168

Sig Exp Ratio

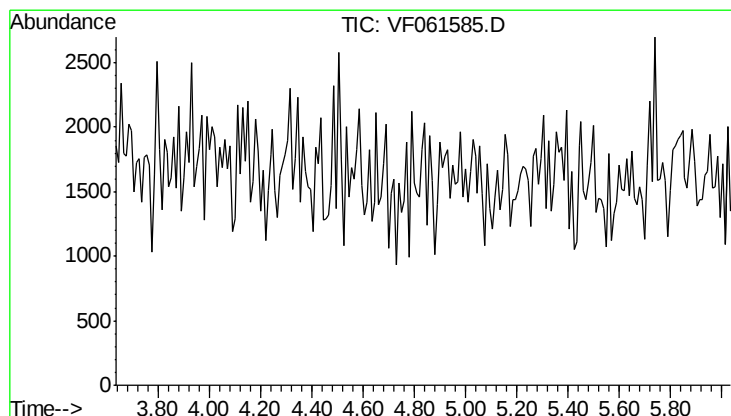
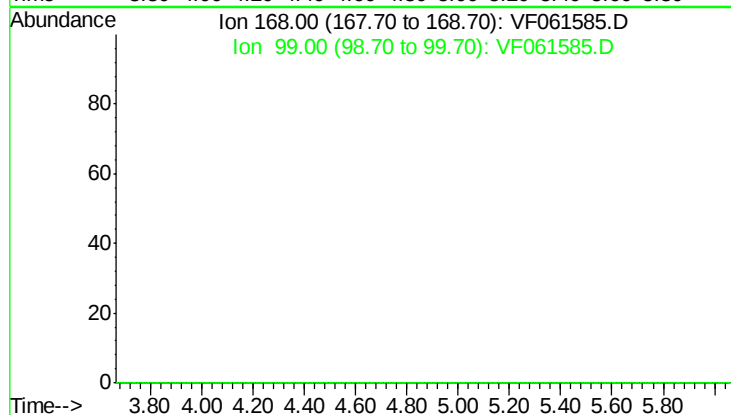
168 100

99 66.9

Instrument :

MSVOA\_F

ClientSampleId :



#33

1,2-Dichloroethane-d4

Concen: 0.000 ug/l

Expected RT: 4.83 min

Lab File: VF061585.D

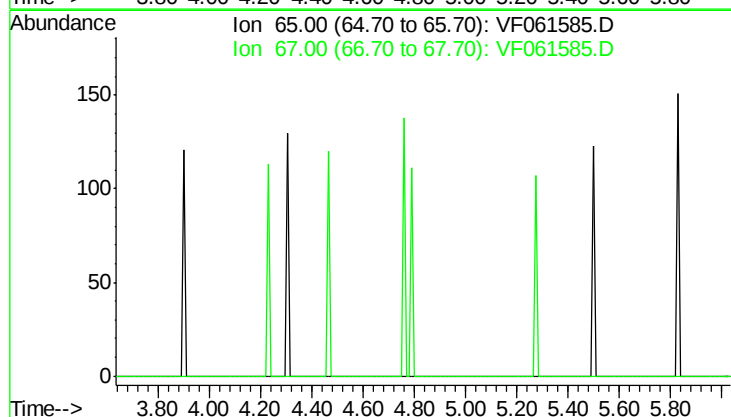
Acq: 11 Feb 2019 14:49

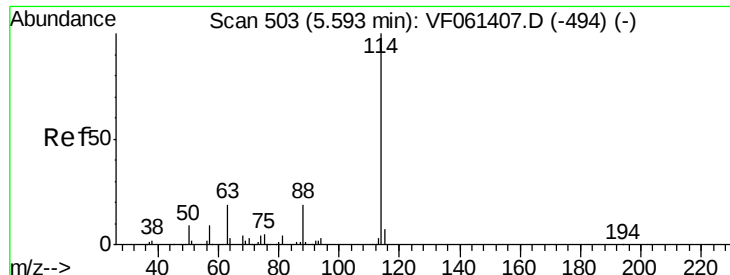
Tgt Ion: 65

Sig Exp Ratio

65 100

67 49.9





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.84 min Scan# 528

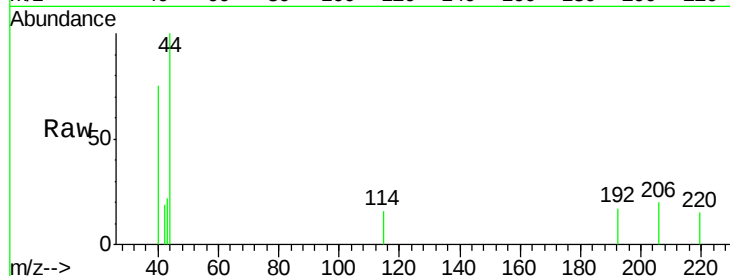
Delta R.T. 0.24 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

Instrument :  
MSVOA\_F  
ClientSampleId :

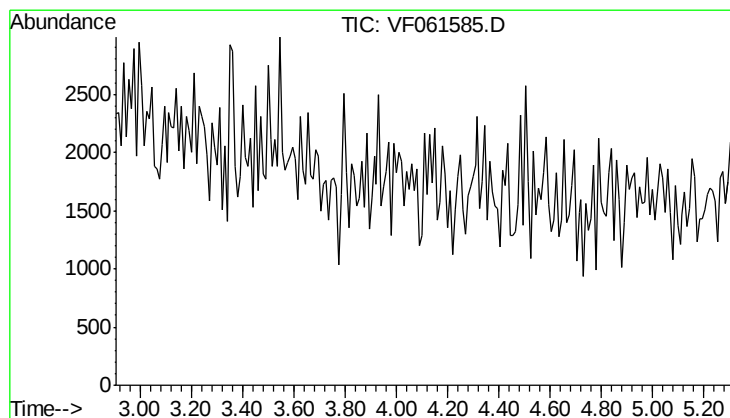
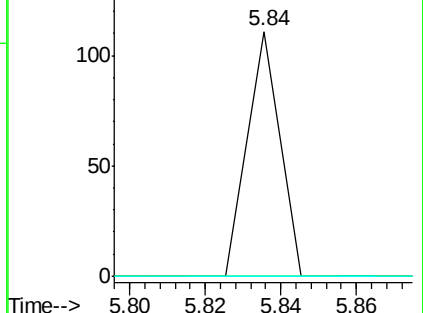
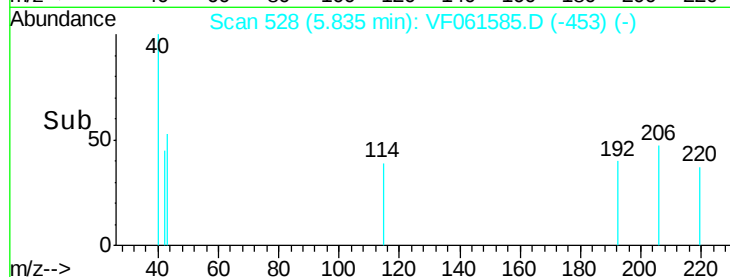
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 114   | Resp: | 66    |
| Ion      | Ratio | Lower | Upper |
| 114      | 100   |       |       |
| 63       | 0.0   | 0.0   | 39.0  |
| 88       | 0.0   | 0.0   | 37.4  |



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0



#35

Dibromofluoromethane

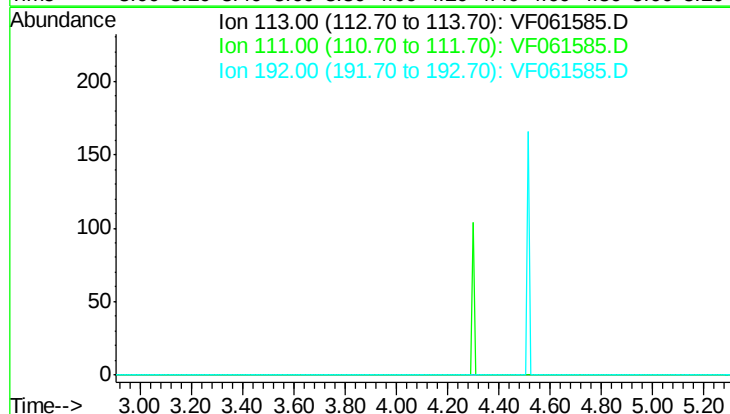
Concen: 0.000 ug/l

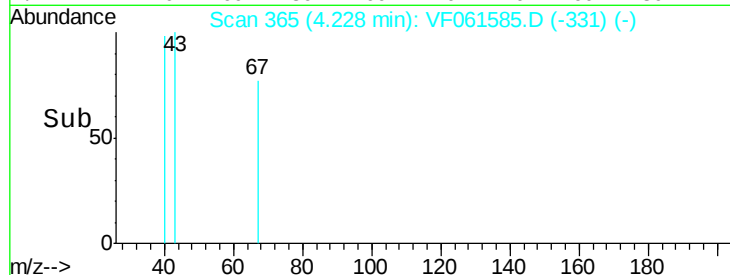
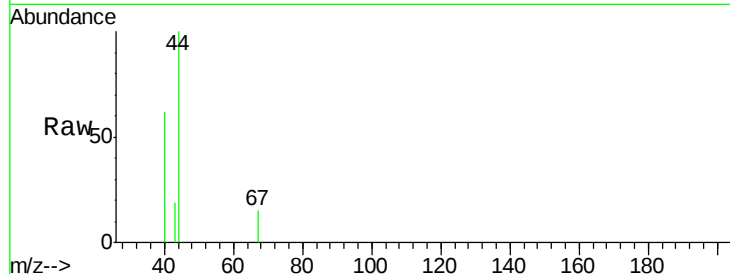
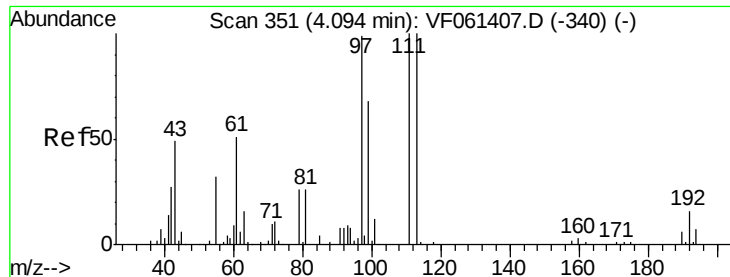
Expected RT: 4.10 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

|          |           |
|----------|-----------|
| Tgt Ion: | 113       |
| Sig      | Exp Ratio |
| 113      | 100       |
| 111      | 99.2      |
| 192      | 15.5      |

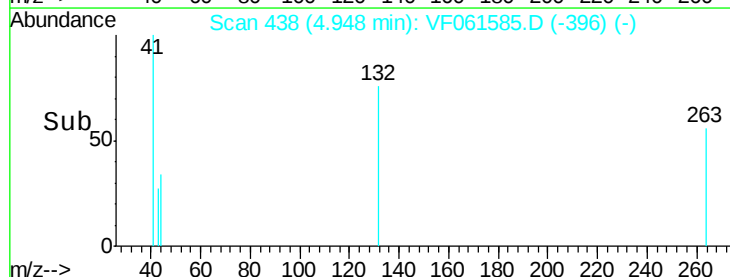
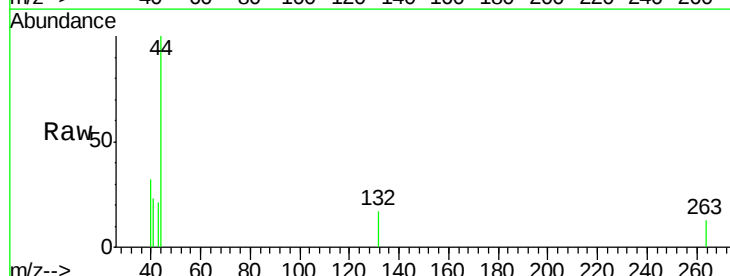
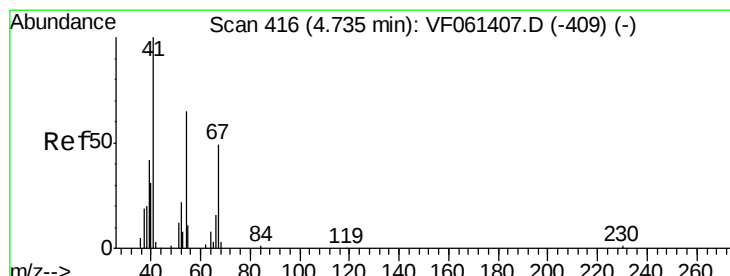
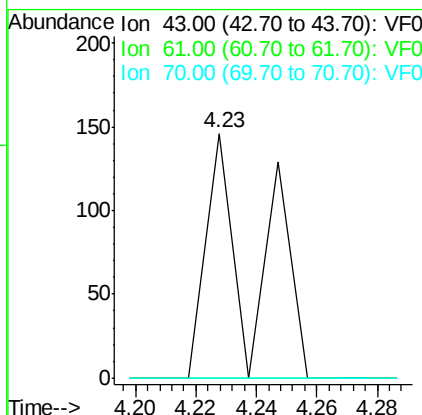




#37  
Ethyl Acetate  
Concen: 532.871 ug/l  
RT: 4.23 min Scan# 365  
Delta R.T. 0.13 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

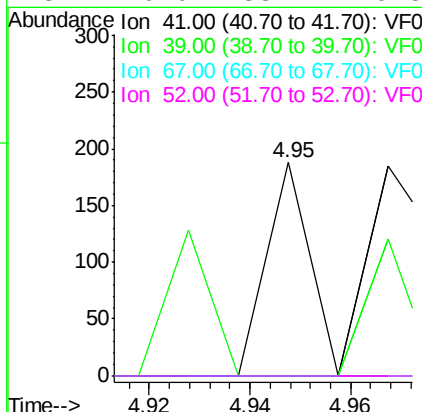
Instrument :  
MSVOA\_F  
ClientSampleId :

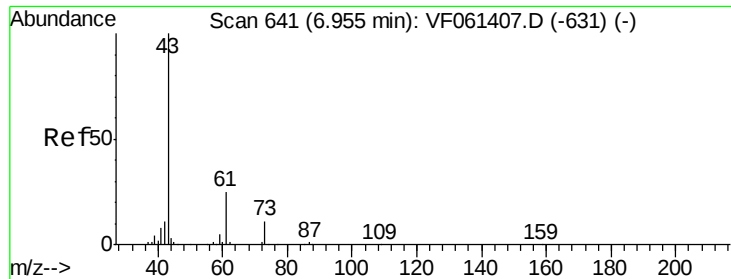
Tot Ion: 43 Resp: 163  
Ion Ratio Lower Upper  
43 100  
61 0.0 81.7 122.5#  
70 0.0 6.2 9.2#



#41  
Methacrylonitrile  
Concen: 681.963 ug/l  
RT: 4.95 min Scan# 438  
Delta R.T. 0.21 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

Tgt Ion: 41 Resp: 111  
Ion Ratio Lower Upper  
41 100  
39 0.0 43.1 64.7#  
67 0.0 38.8 58.2#  
52 0.0 33.2 49.8#



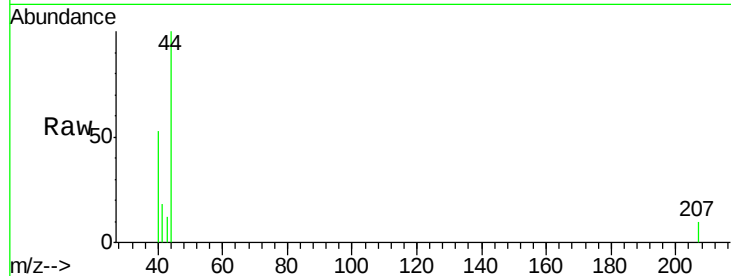


#43

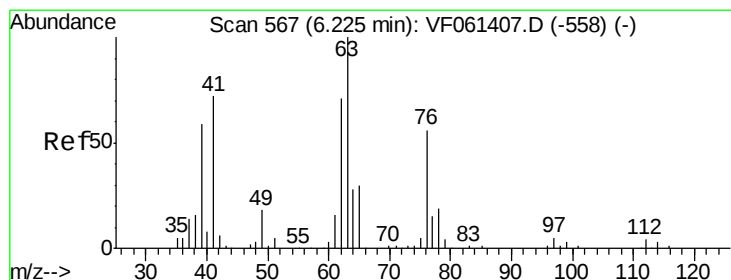
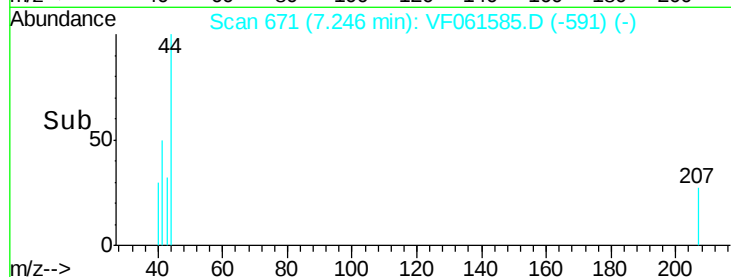
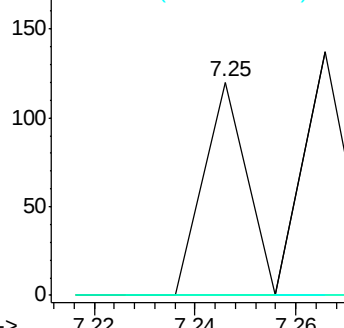
Isopropyl Acetate  
 Concen: 184.937 ug/l  
 RT: 7.25 min Scan# 671  
 Delta R.T. 0.29 min  
 Lab File: VF061585.D  
 Acq: 11 Feb 2019 14:49

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Tot Ion: 43 Resp: 71  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 20.3 30.5#  
 87 0.0 0.5 0.7#



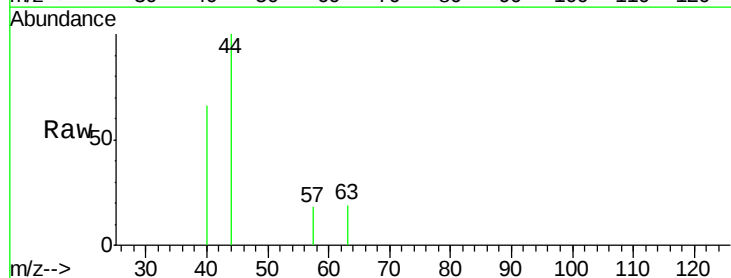
Abundance Ion 43.00 (42.70 to 43.70): VF0  
 Ion 61.00 (60.70 to 61.70): VF0  
 Ion 87.00 (86.70 to 87.70): VF0



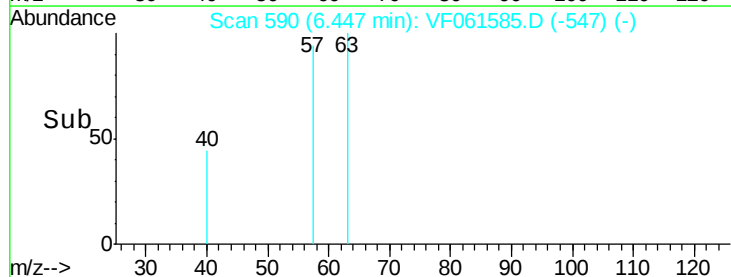
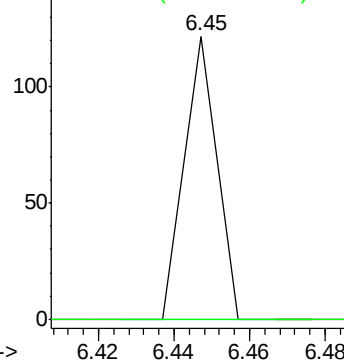
#45

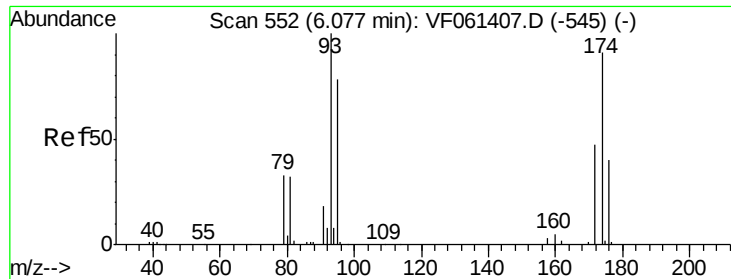
1,2-Dichloropropane  
 Concen: 161.109 ug/l  
 RT: 6.45 min Scan# 590  
 Delta R.T. 0.22 min  
 Lab File: VF061585.D  
 Acq: 11 Feb 2019 14:49

Tgt Ion: 63 Resp: 72  
 Ion Ratio Lower Upper  
 63 100  
 65 0.0 24.4 36.6#



Abundance Ion 63.00 (62.70 to 63.70): VF0  
 Ion 65.00 (64.70 to 65.70): VF0

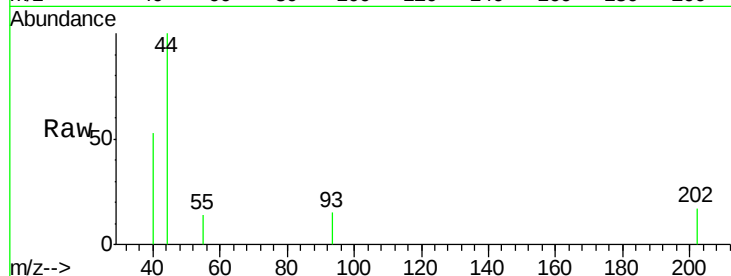




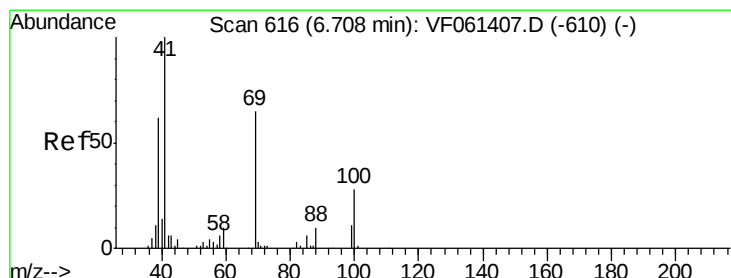
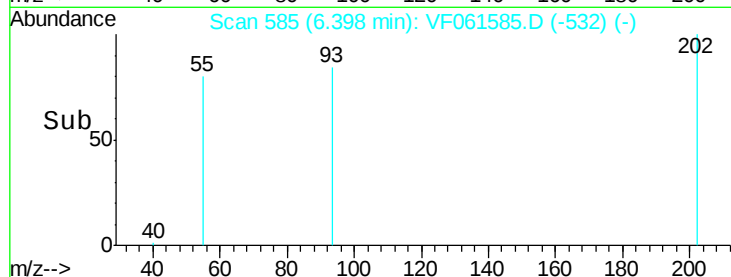
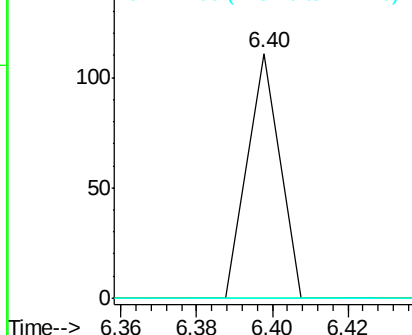
#46  
Dibromomethane  
Concen: 222.101 ug/l  
RT: 6.40 min Scan# 585  
Delta R.T. 0.32 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 93 Resp: 66  
Ion Ratio Lower Upper  
93 100  
95 0.0 62.1 93.1#  
174 0.0 74.6 111.8#

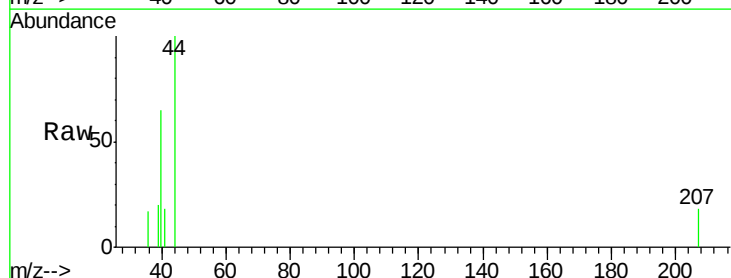


Abundance Ion 93.00 (92.70 to 93.70): VF0  
Ion 95.00 (94.70 to 95.70): VF0  
Ion 174.00 (173.70 to 174.70): V

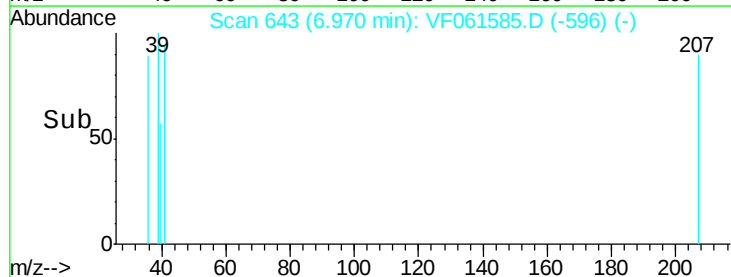
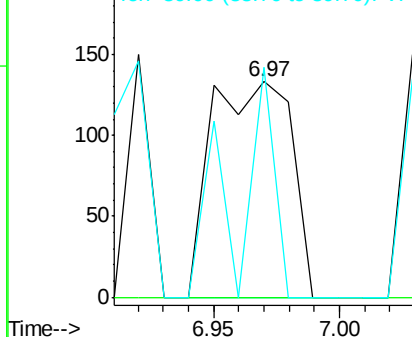


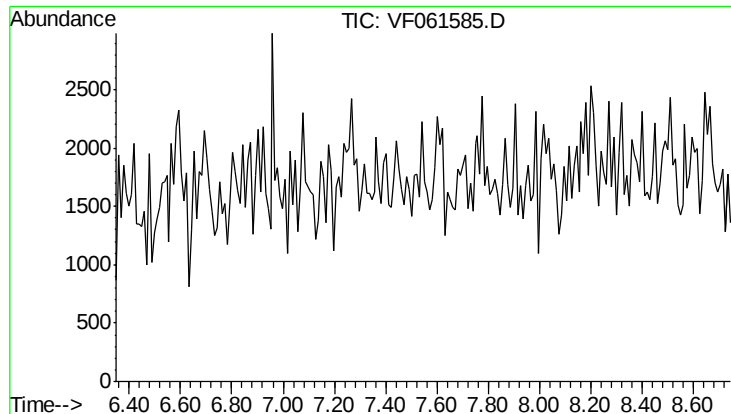
#48  
Methyl methacrylate  
Concen: 1144.301 ug/l  
RT: 6.97 min Scan# 643  
Delta R.T. 0.26 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

Tgt Ion: 41 Resp: 295  
Ion Ratio Lower Upper  
41 100  
69 0.0 51.7 77.5#  
39 106.8 49.2 73.8#



Abundance Ion 41.00 (40.70 to 41.70): VF0  
Ion 69.00 (68.70 to 69.70): VF0  
Ion 39.00 (38.70 to 39.70): VF0

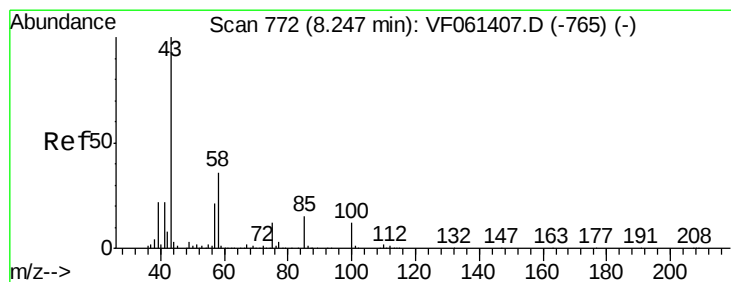
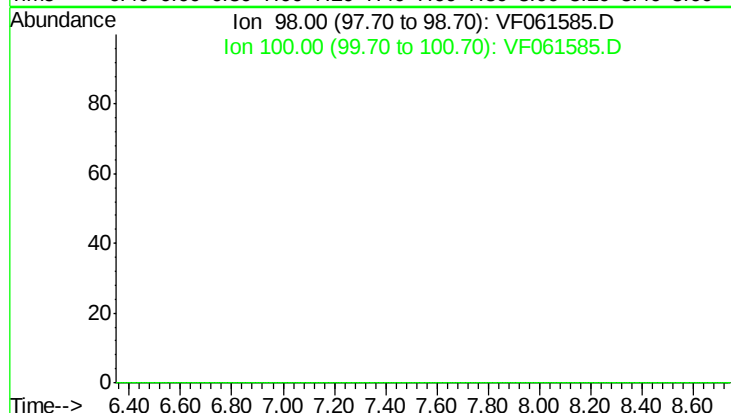




#50  
Toluene-d8  
Concen: 0.000 ug/l  
Expected RT: 7.55 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

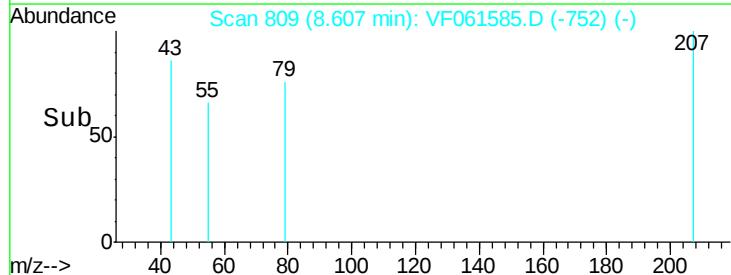
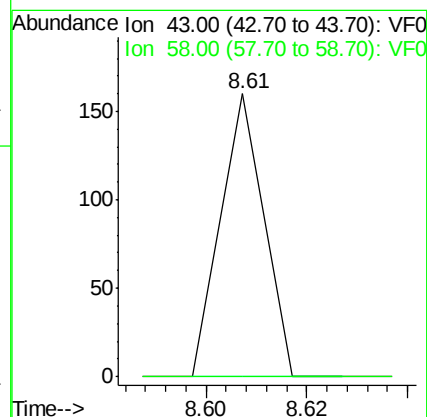
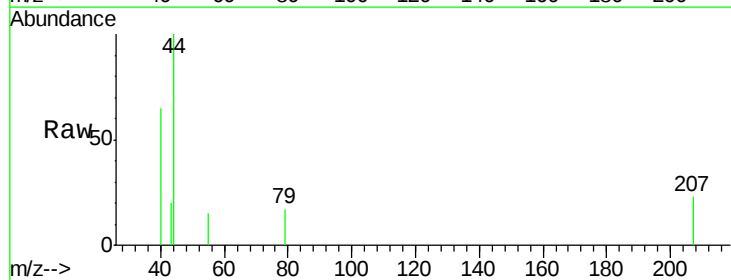
Instrument :  
MSVOA\_F  
ClientSampleId :

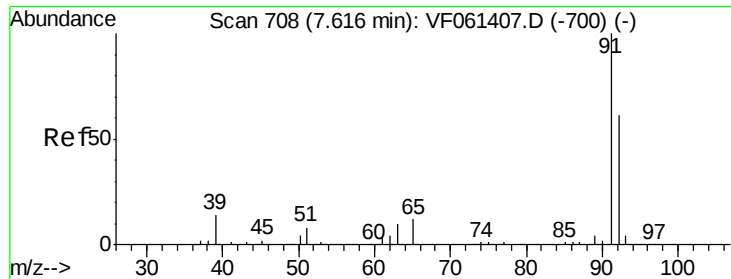
Tot Ion: 98  
Sig Exp Ratio  
98 100  
100 69.5



#51  
4-Methyl-2-Pentanone  
Concen: 336.596 ug/l  
RT: 8.61 min Scan# 809  
Delta R.T. 0.36 min  
Lab File: VF061585.D  
Acq: 11 Feb 2019 14:49

Tgt Ion: 43 Resp: 95  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.8 43.2#





#52

Toluene

Concen: 74.910 ug/l

RT: 7.88 min Scan# 735

Delta R.T. 0.26 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

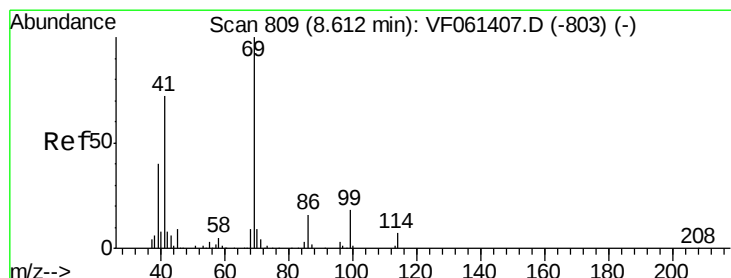
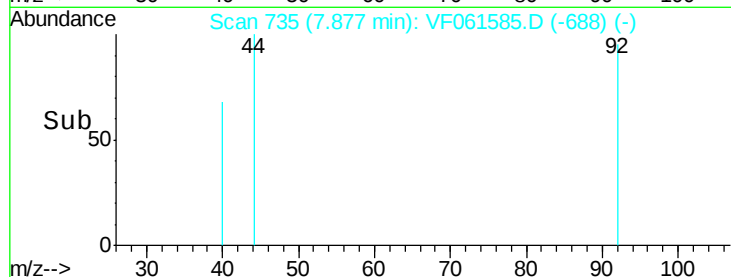
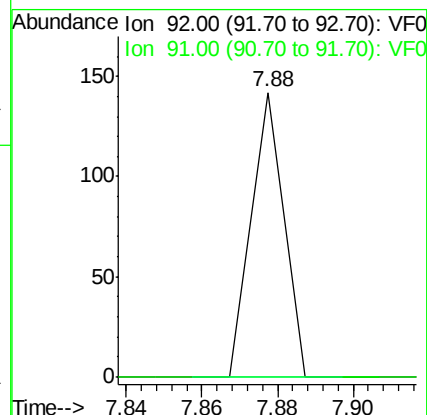
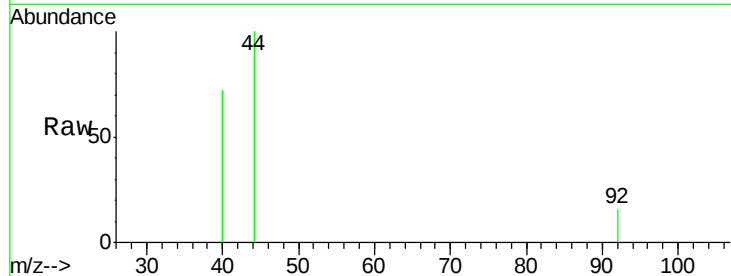
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 92 Resp: 84

Ion Ratio Lower Upper

92 100

91 0.0 131.2 196.8#



#56

Ethyl methacrylate

Concen: 178.152 ug/l

RT: 8.99 min Scan# 848

Delta R.T. 0.38 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

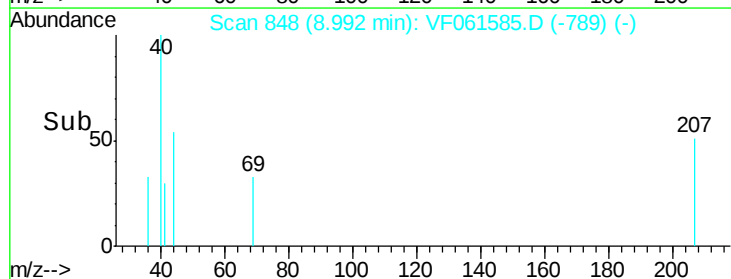
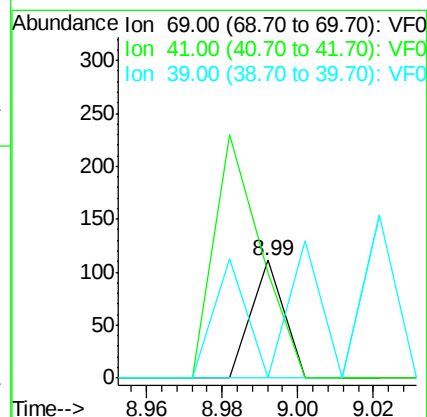
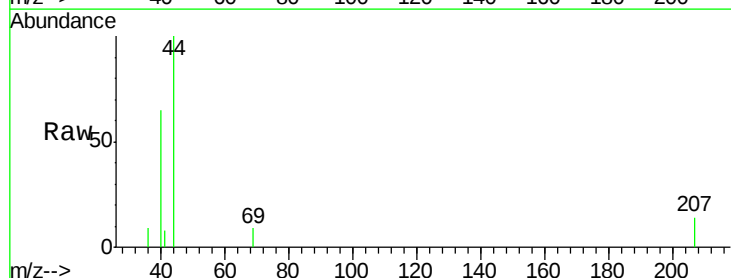
Tgt Ion: 69 Resp: 66

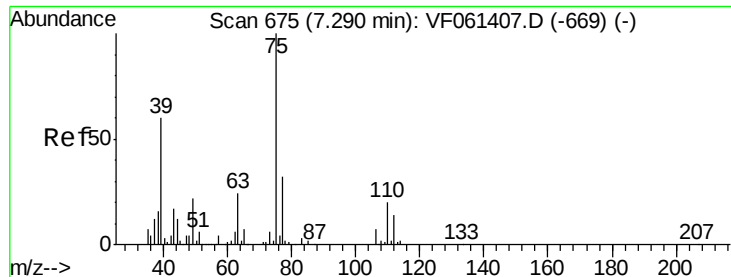
Ion Ratio Lower Upper

69 100

41 90.1 57.5 86.3#

39 0.0 32.0 48.0#





#58

2-Chloroethyl Vinyl ether

Concen: 1631.064 ug/l

RT: 7.58 min Scan# 705

Delta R.T. 0.29 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

Instrument :

MSVOA\_F

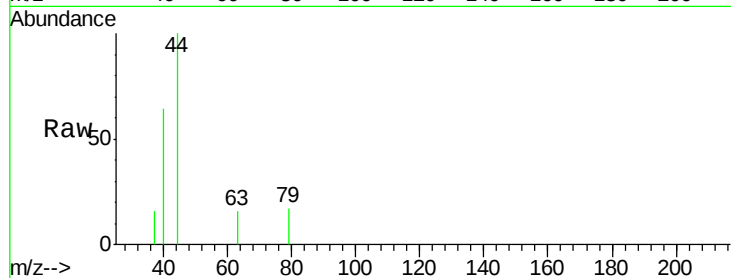
ClientSampleId :

Tot Ion: 63 Resp: 70

Ion Ratio Lower Upper

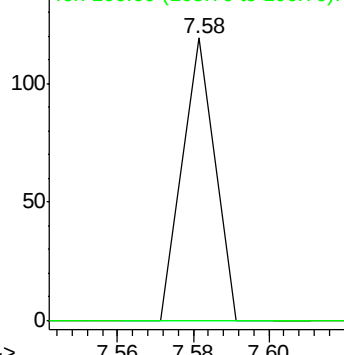
63 100

106 0.0 21.9 32.9#

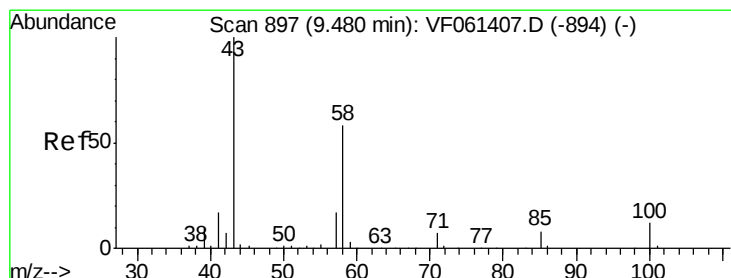
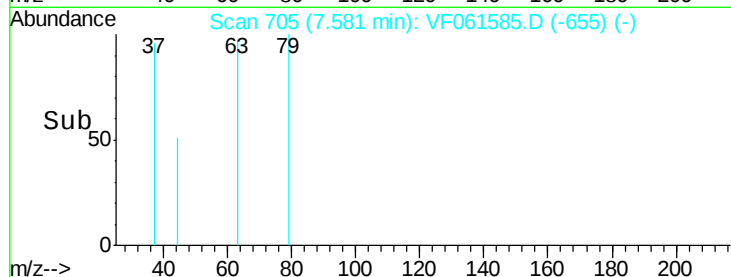


Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): VF0



Time-->



#59

2-Hexanone

Concen: 396.322 ug/l

RT: 9.85 min Scan# 935

Delta R.T. 0.37 min

Lab File: VF061585.D

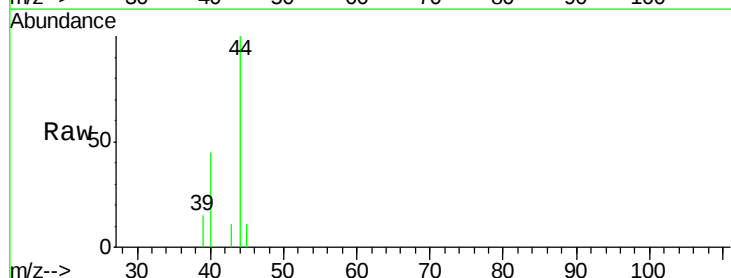
Acq: 11 Feb 2019 14:49

Tgt Ion: 43 Resp: 78

Ion Ratio Lower Upper

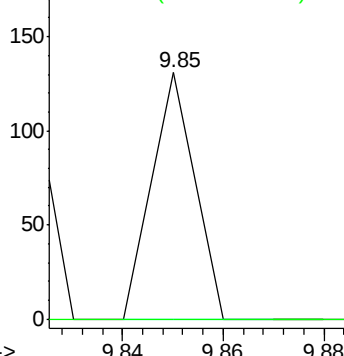
43 100

58 0.0 25.9 77.6#

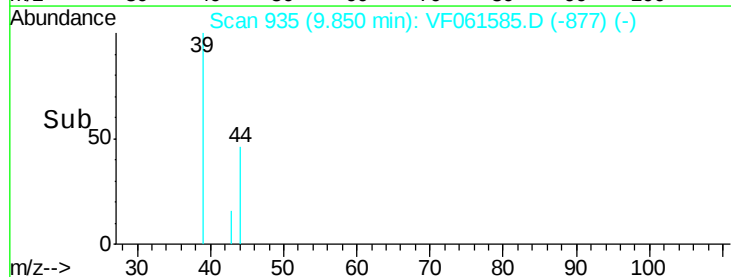


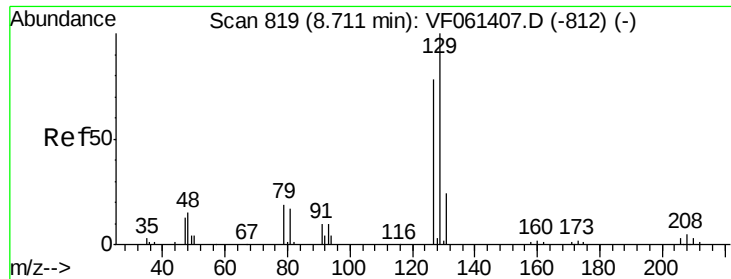
Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



Time-->





#60

Dibromochloromethane

Concen: 154.663 ug/l

RT: 9.19 min Scan# 868

Delta R.T. 0.48 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

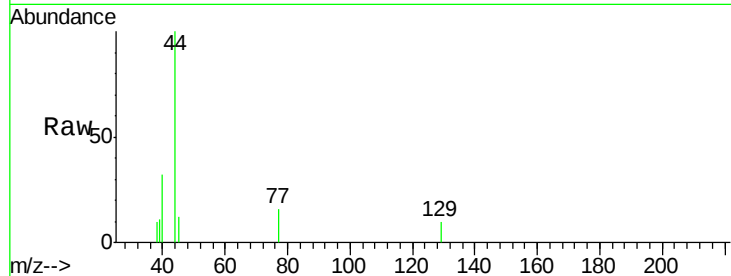
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:129 Resp: 72

Ion Ratio Lower Upper

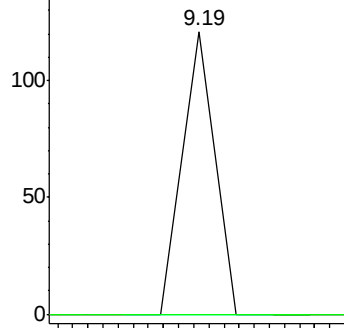
129 100

127 0.0 39.1 117.2#

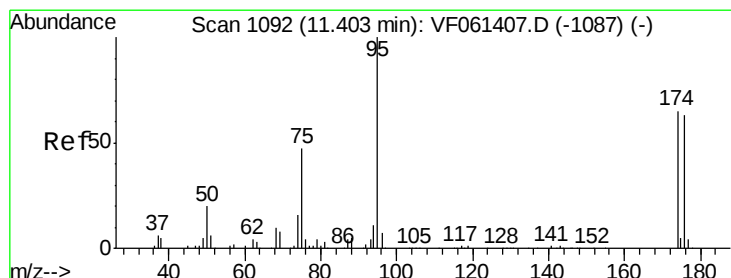
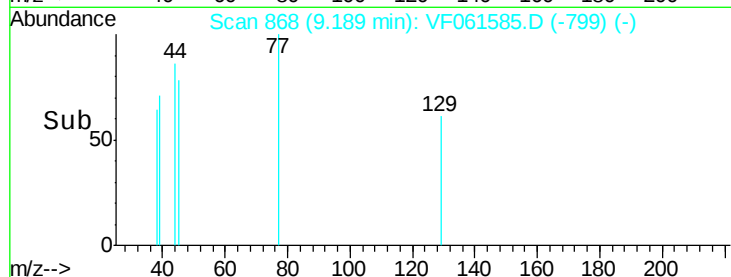


Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



Time-->



#62

4-Bromofluorobenzene

Concen: 95.998 ug/l

RT: 11.81 min Scan# 1134

Delta R.T. 0.41 min

Lab File: VF061585.D

Acq: 11 Feb 2019 14:49

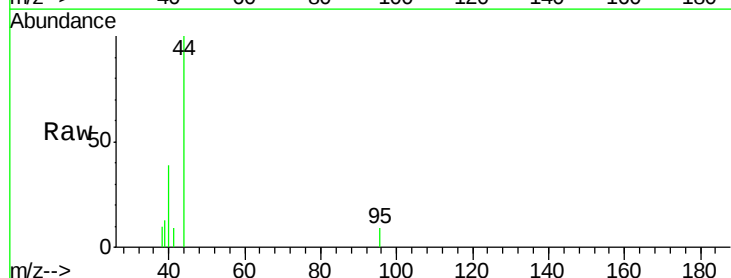
Tgt Ion: 95 Resp: 64

Ion Ratio Lower Upper

95 100

174 0.0 0.0 130.4

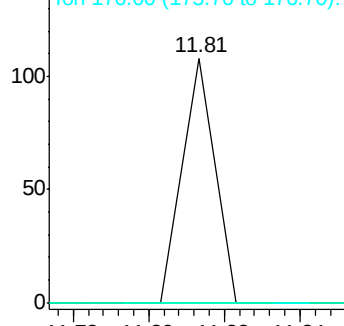
176 0.0 0.0 126.2



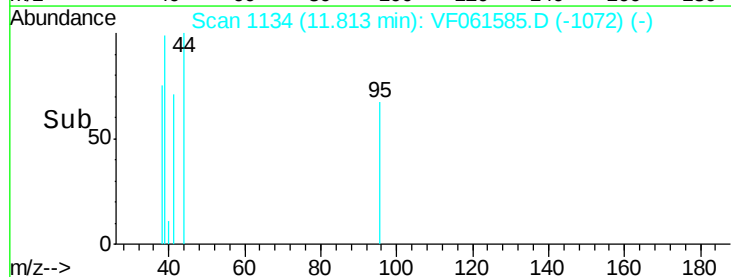
Abundance Ion 95.00 (94.70 to 95.70): VF0

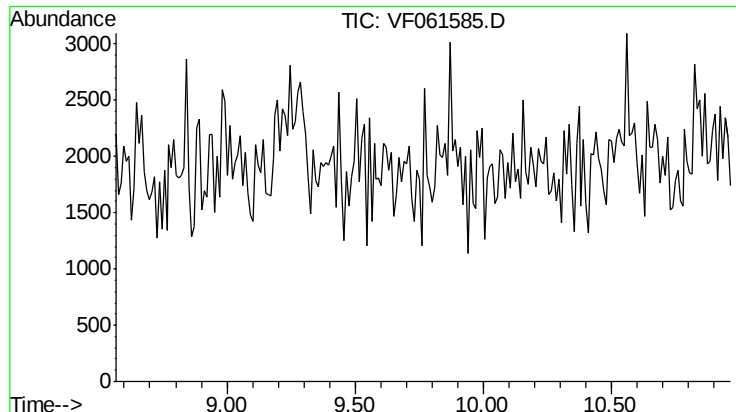
Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V



Time-->

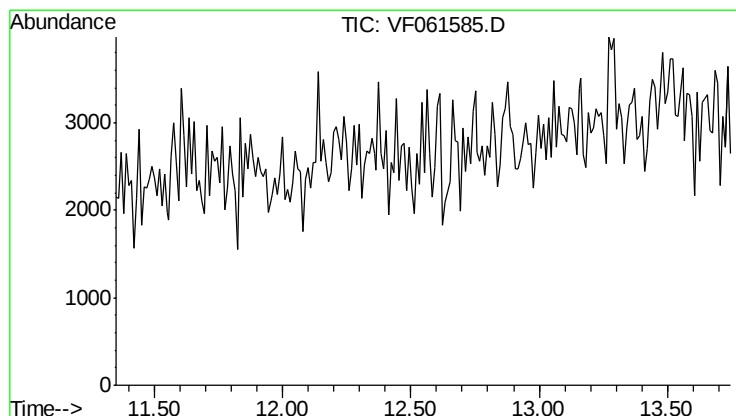
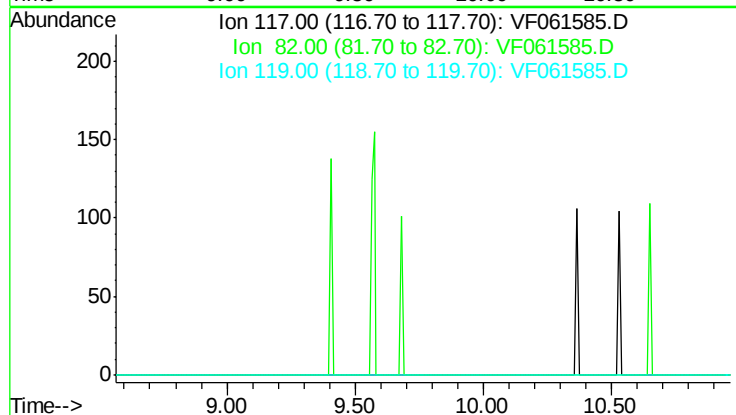




#63  
 Chlorobenzene-d5  
 Concen: 0.000 ug/l  
 Expected RT: 9.77 min  
 Lab File: VF061585.D  
 Acq: 11 Feb 2019 14:49

Instrument :  
 MSVOA\_F  
 ClientSampleId :

| Tot Ion | 117       |
|---------|-----------|
| Sig     | Exp Ratio |
| 117     | 100       |
| 82      | 58.0      |
| 119     | 34.0      |



#72  
 1,4-Dichlorobenzene-d4  
 Concen: 0.000 ug/l  
 Expected RT: 12.55 min  
 Lab File: VF061585.D  
 Acq: 11 Feb 2019 14:49

| Tgt Ion | 152       |
|---------|-----------|
| Sig     | Exp Ratio |
| 152     | 100       |
| 115     | 60.0      |
| 150     | 160.7     |

