

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF081018\  
 Data File : VF059947.D  
 Acq On : 10 Aug 2018 16:24  
 Operator : VA/AP  
 Sample : J4388-07RE  
 Misc : 4.67g/5mL/MSVOA\_F/SOIL  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 CHA-1

Quant Time: Aug 10 23:04:40 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F080418S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Aug 04 07:08:36 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.05  | 168  | 113186   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 161152   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 152760   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.64 | 152  | 102206   | 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   | 104405   | 51.16 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 102.32% |          |
| 35) Dibromofluoromethane    | 4.30  | 113  | 81115    | 50.59 | ug/l    | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.18% |          |
| 50) Toluene-d8              | 7.72  | 98   | 152413   | 44.68 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 89.36%  |          |
| 62) 4-Bromofluorobenzene    | 11.52 | 95   | 87123    | 45.45 | ug/l    | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 90.90%  |          |

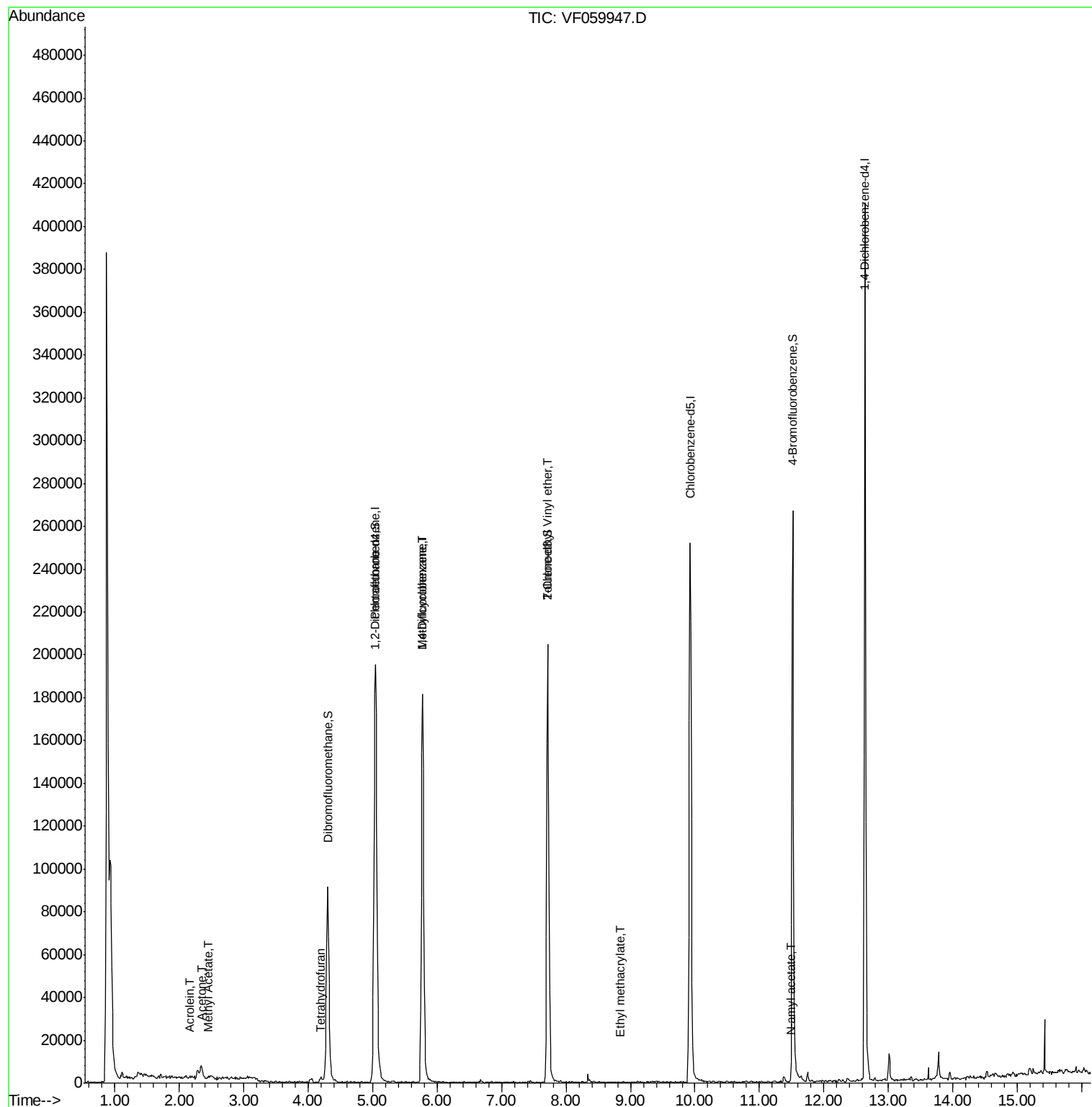
| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 13) Acrolein                  | 2.15  | 56   | 64       | 1.297     | ug/l   | 82     |
| 16) Acetone                   | 2.34  | 43   | 2187     | 5.806     | ug/l # | 70     |
| 18) Methyl Acetate            | 2.44  | 43   | 680      | 1.070     | ug/l # | 56     |
| 20) Methylene Chloride        | 2.34  | 84   | 2843     | Below Cal |        | 88     |
| 29) Tetrahydrofuran           | 4.20  | 42   | 166      | 1.101     | ug/l # | 38     |
| 39) Methylcyclohexane         | 5.77  | 83   | 3173     | 2.270     | ug/l # | 49     |
| 40) Benzene                   | 4.81  | 78   | 93       | Below Cal | #      | 49     |
| 56) Ethyl methacrylate        | 8.84  | 69   | 89       | 3.446     | ug/l # | 7      |
| 58) 2-Chloroethyl Vinyl ether | 7.73  | 63   | 323      | 2.881     | ug/l   | 100    |
| 74) N-amyl acetate            | 11.47 | 43   | 72       | 3.002     | ug/l # | 48     |

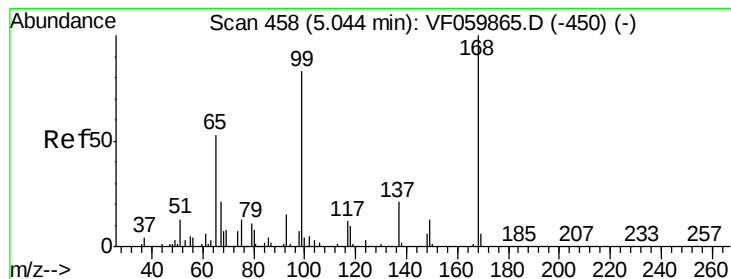
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Sat Aug 04 07:08:36 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.05 min Scan# 459

Delta R.T. 0.01 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

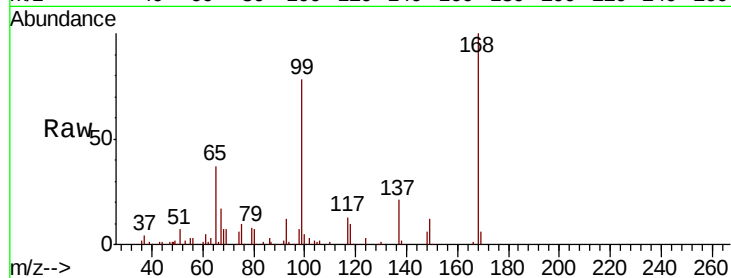
CHA-1

Tgt Ion:168 Resp: 113186

Ion Ratio Lower Upper

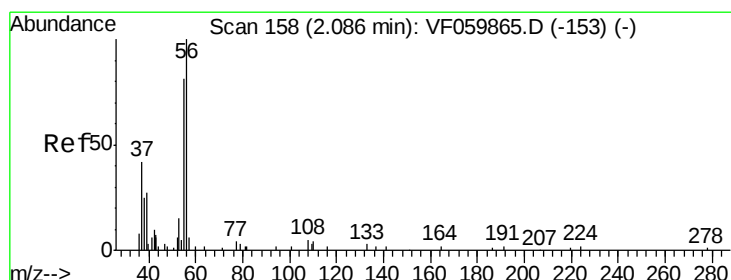
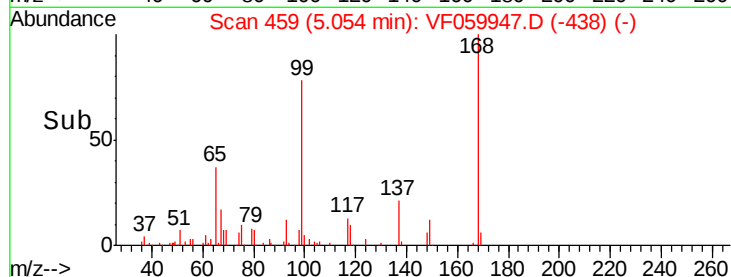
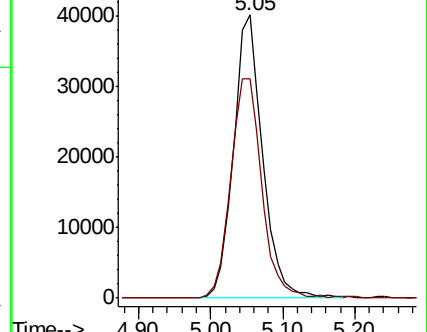
168 100

99 77.5 66.3 99.5



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0



#13

Acrolein

Concen: 1.297 ug/l

RT: 2.15 min Scan# 164

Delta R.T. 0.06 min

Lab File: VF059947.D

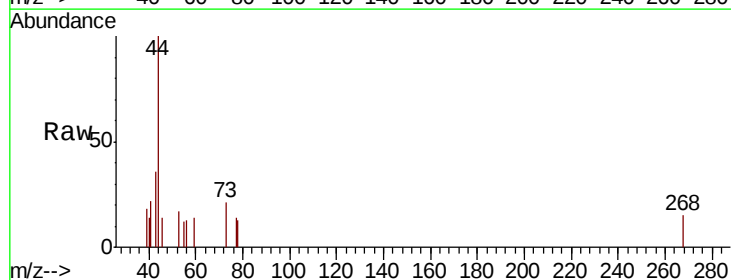
Acq: 10 Aug 2018 16:24

Tgt Ion: 56 Resp: 64

Ion Ratio Lower Upper

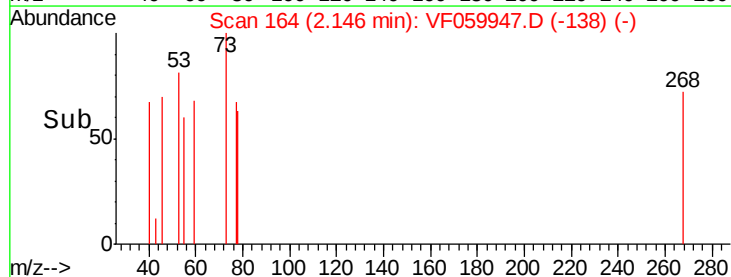
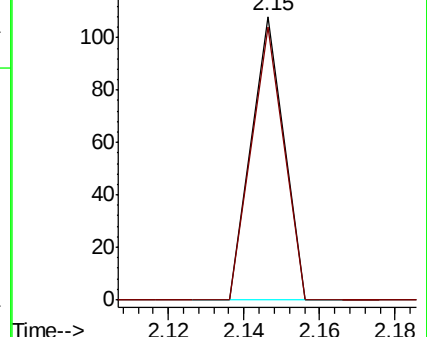
56 100

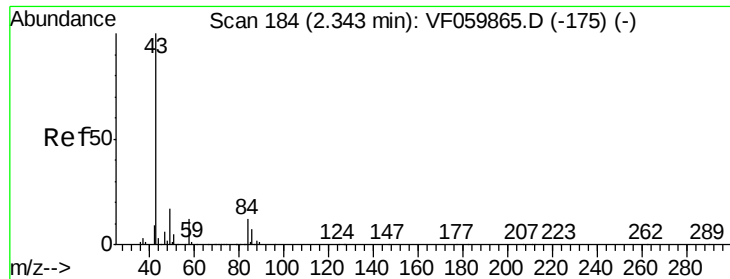
55 96.3 64.6 96.8



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0





#16

Acetone

Concen: 5.806 ug/l

RT: 2.34 min Scan# 184

Delta R.T. 0.00 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

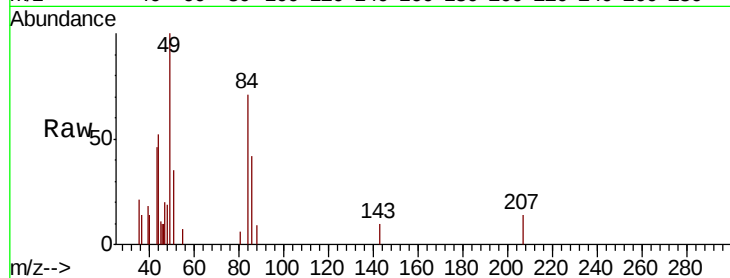
CHA-1

Tgt Ion: 43 Resp: 2187

Ion Ratio Lower Upper

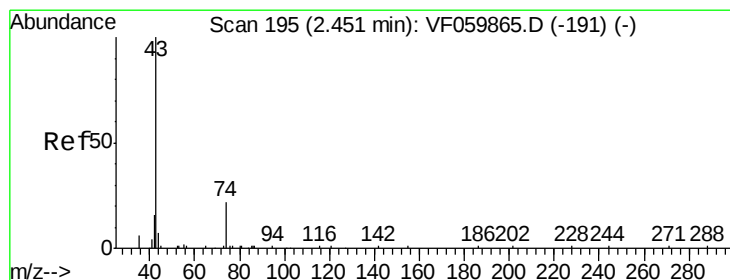
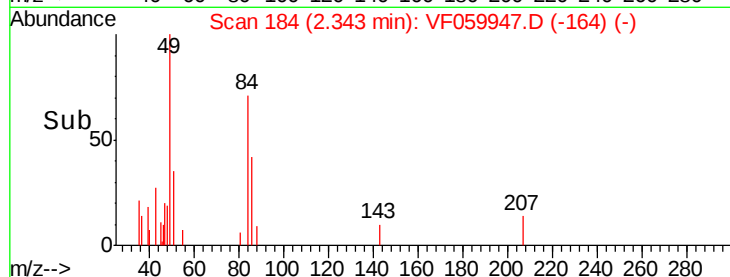
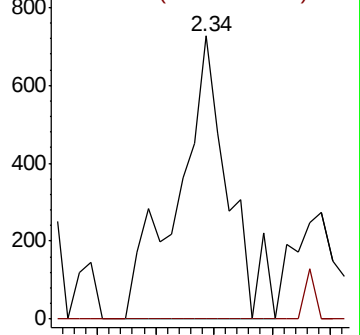
43 100

58 0.0 9.4 14.0#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#18

Methyl Acetate

Concen: 1.070 ug/l

RT: 2.44 min Scan# 194

Delta R.T. -0.01 min

Lab File: VF059947.D

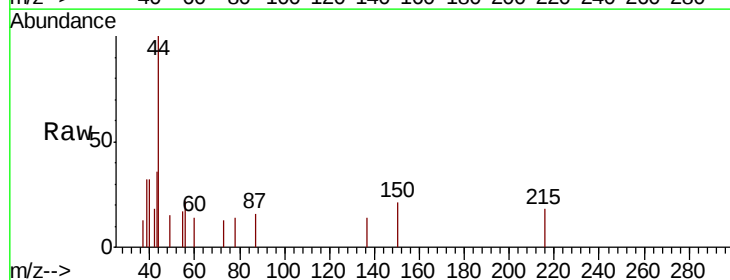
Acq: 10 Aug 2018 16:24

Tgt Ion: 43 Resp: 680

Ion Ratio Lower Upper

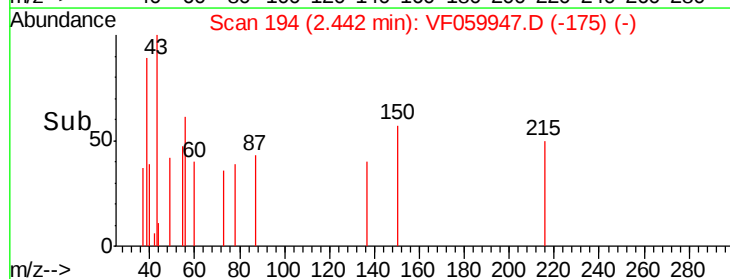
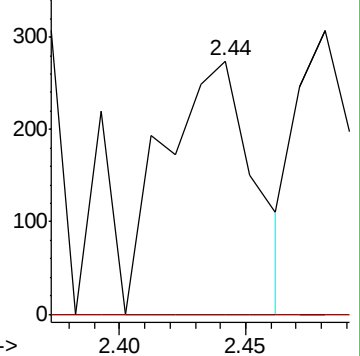
43 100

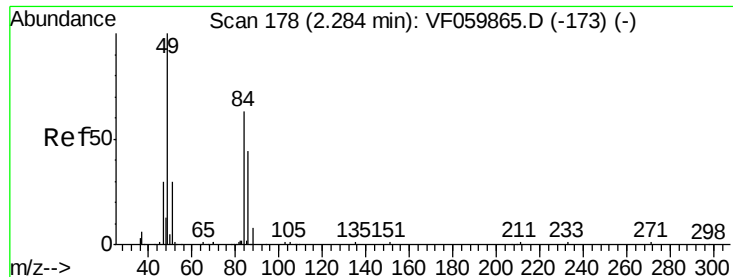
74 0.0 16.3 24.5#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 74.00 (73.70 to 74.70): VF0

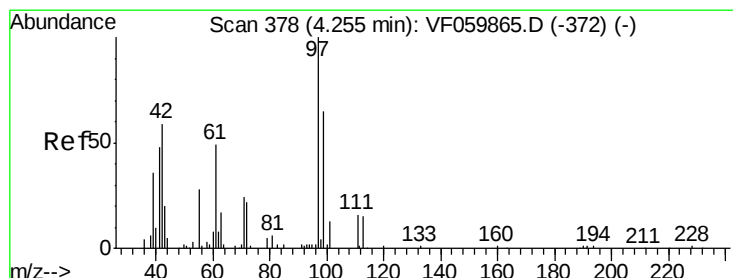
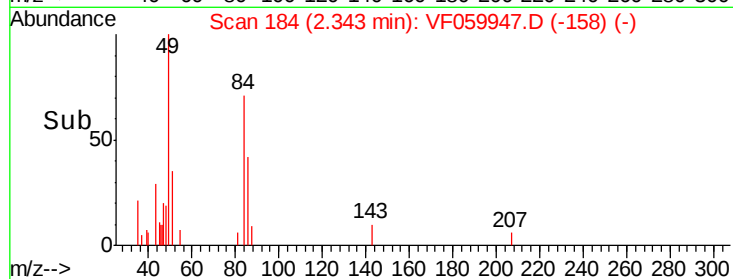
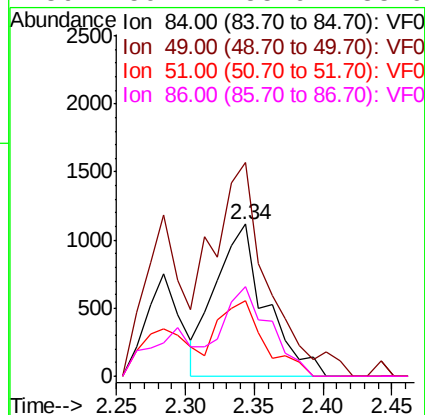
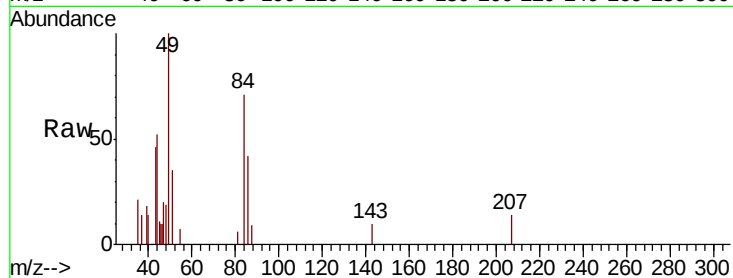




#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.34 min Scan# 184  
Delta R.T. 0.06 min  
Lab File: VF059947.D  
Acq: 10 Aug 2018 16:24

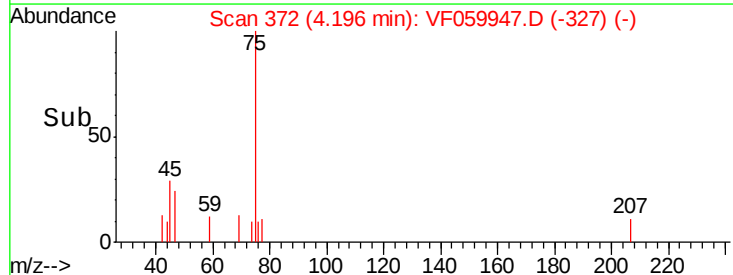
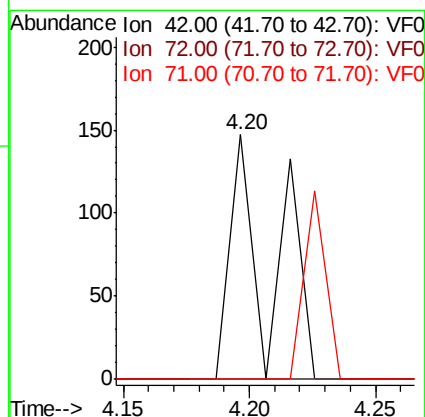
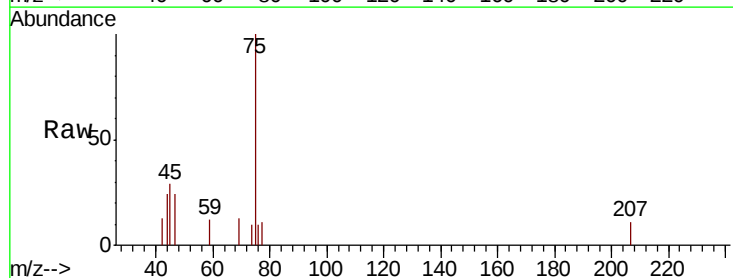
Instrument :  
MSVOA\_F  
ClientSampleId :  
CHA-1

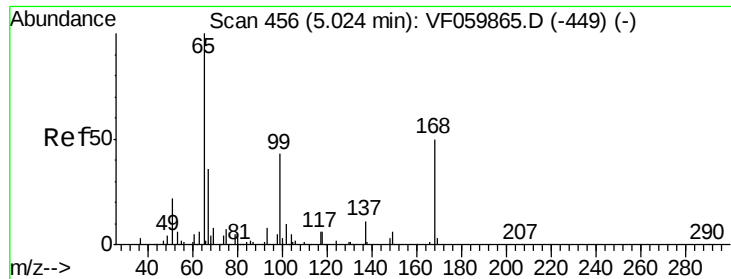
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 2843  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 140.7 | 128.7 | 193.1 |
| 51       | 49.9  | 39.3  | 58.9  |
| 86       | 59.4  | 55.9  | 83.9  |



#29  
Tetrahydrofuran  
Concen: 1.101 ug/l  
RT: 4.20 min Scan# 372  
Delta R.T. -0.06 min  
Lab File: VF059947.D  
Acq: 10 Aug 2018 16:24

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 166   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 29.3  | 43.9# |
| 71       | 0.0   | 30.0  | 45.0# |





#33

1,2-Dichloroethane-d4

Concen: 51.165 ug/l

RT: 5.02 min Scan# 456

Delta R.T. 0.00 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

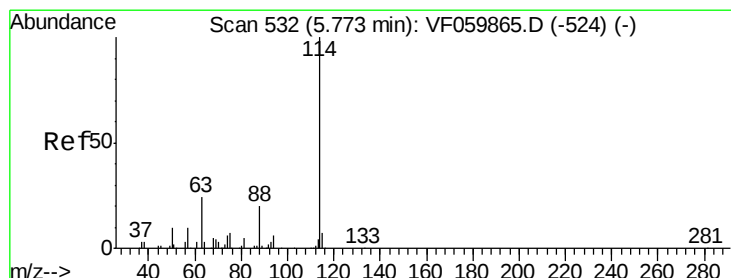
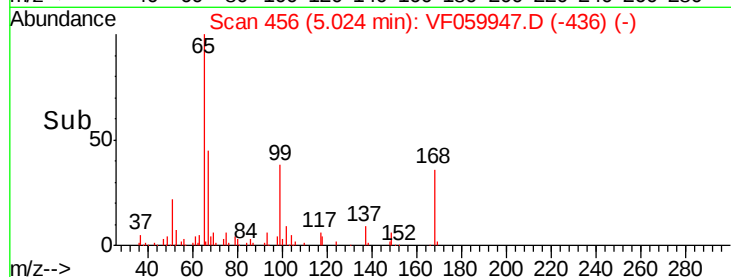
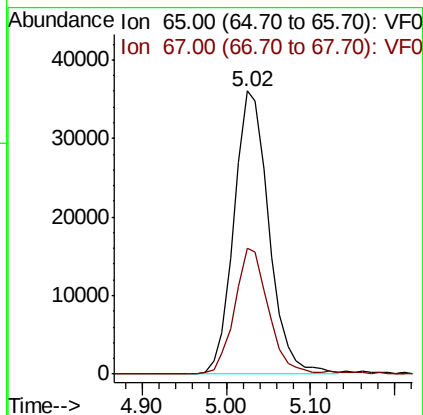
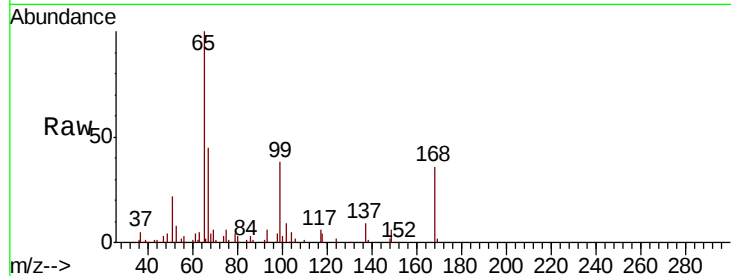
CHA-1

Tgt Ion: 65 Resp: 104405

Ion Ratio Lower Upper

65 100

67 44.5 0.0 77.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.77 min Scan# 532

Delta R.T. 0.00 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

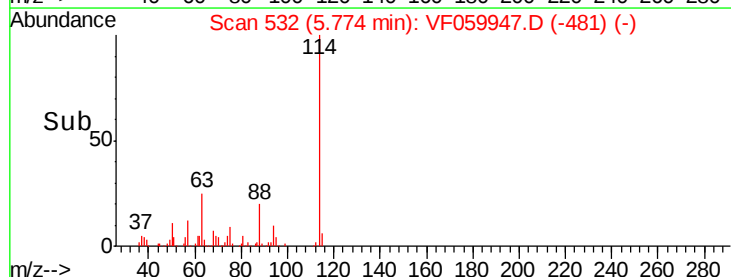
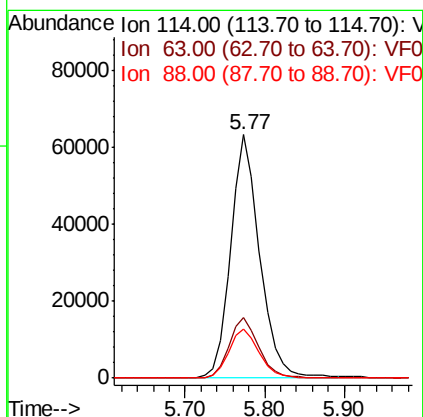
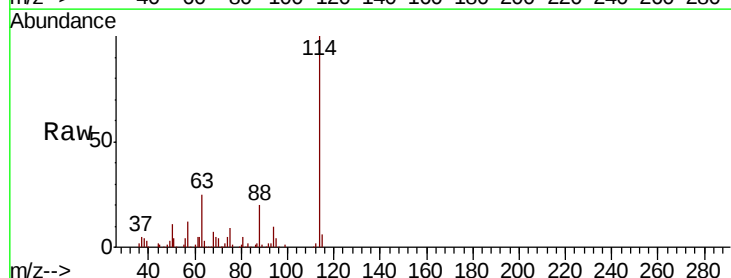
Tgt Ion: 114 Resp: 161152

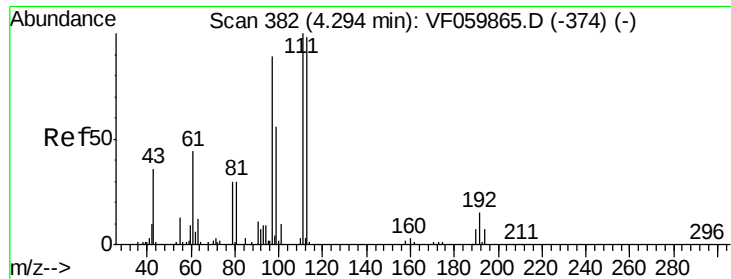
Ion Ratio Lower Upper

114 100

63 25.1 0.0 48.0

88 20.3 0.0 39.4

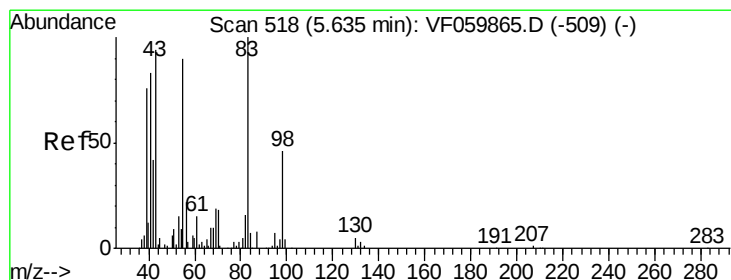
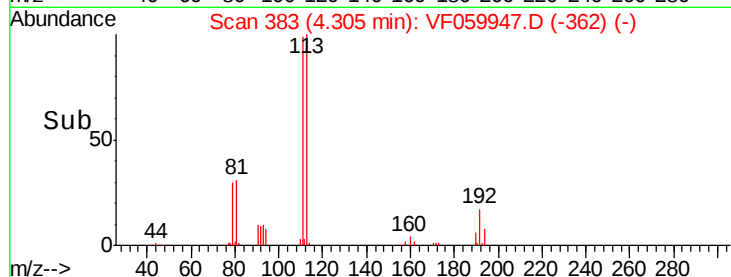
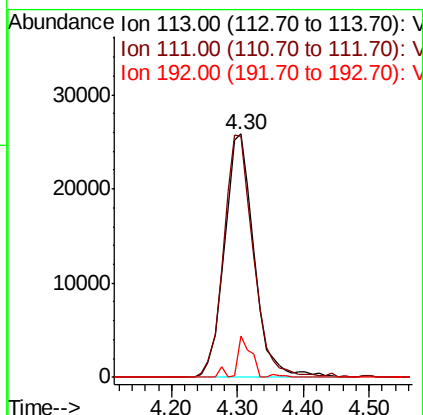
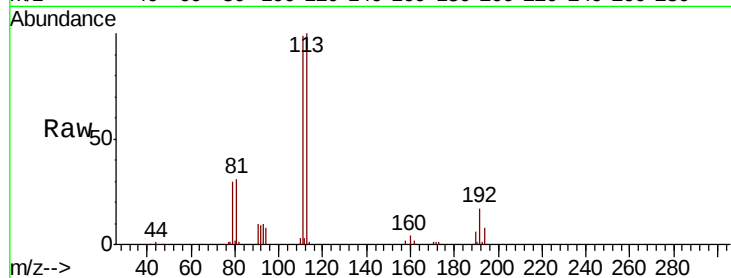




#35  
Dibromofluoromethane  
Concen: 50.590 ug/l  
RT: 4.30 min Scan# 383  
Delta R.T. 0.01 min  
Lab File: VF059947.D  
Acq: 10 Aug 2018 16:24

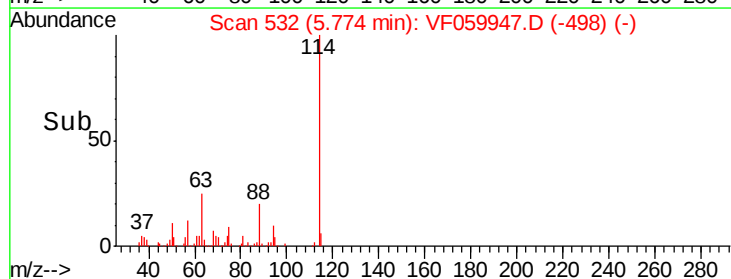
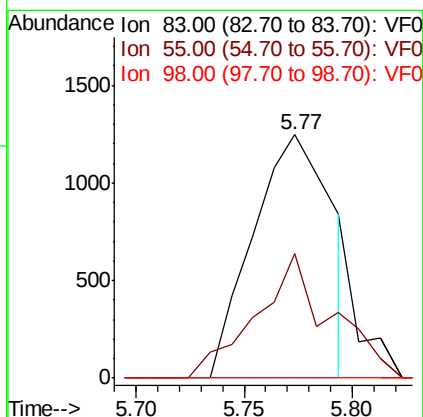
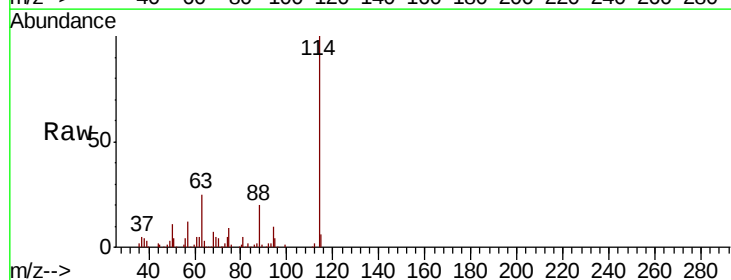
Instrument :  
MSVOA\_F  
ClientSampleId :  
CHA-1

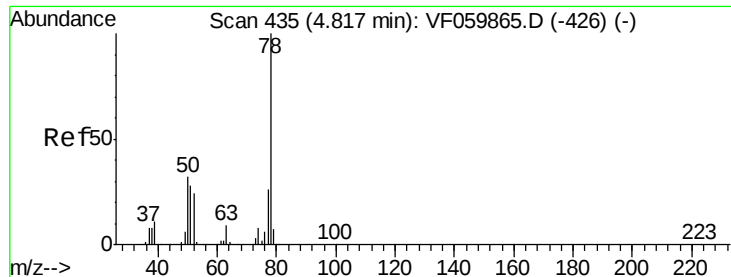
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 99.2  | 81.8  | 122.8 |
| 192     | 17.1  | 12.4  | 18.6  |



#39  
Methylcyclohexane  
Concen: 2.270 ug/l  
RT: 5.77 min Scan# 532  
Delta R.T. 0.14 min  
Lab File: VF059947.D  
Acq: 10 Aug 2018 16:24

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 83      | 100   |       |        |
| 55      | 51.4  | 72.0  | 108.0# |
| 98      | 0.0   | 36.6  | 54.8#  |





#40

Benzene

Concen: Below Cal

RT: 4.81 min Scan# 434

Delta R.T. -0.01 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

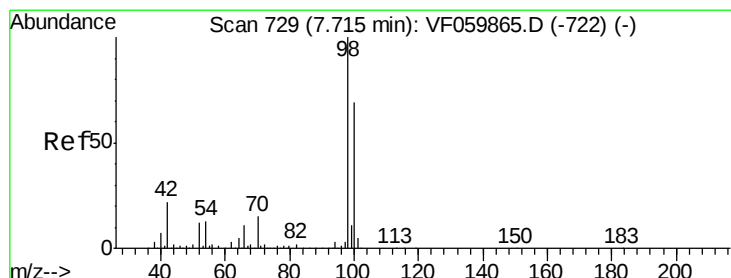
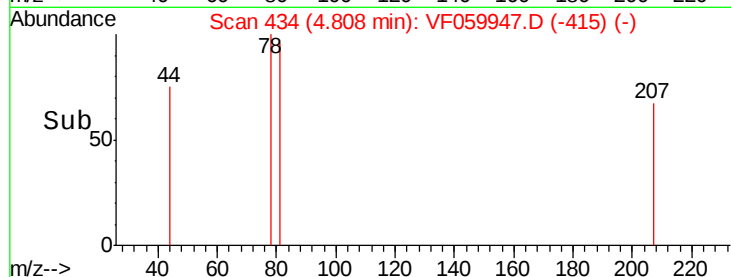
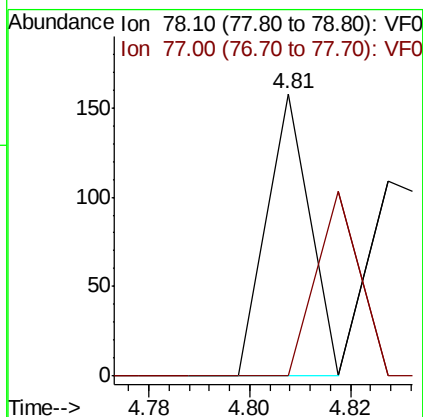
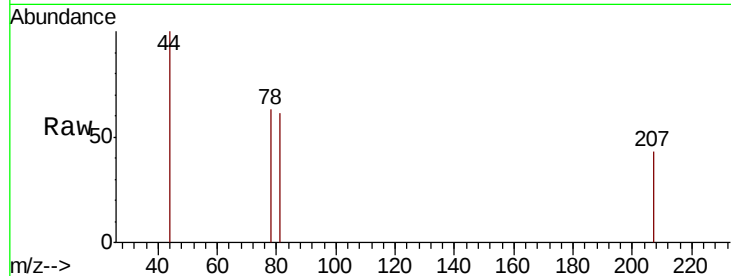
Instrument :  
MSVOA\_F  
ClientSampleId :  
CHA-1

Tgt Ion: 78 Resp: 93

Ion Ratio Lower Upper

78 100

77 0.0 20.7 31.1#



#50

Toluene-d8

Concen: 44.676 ug/l

RT: 7.72 min Scan# 729

Delta R.T. 0.00 min

Lab File: VF059947.D

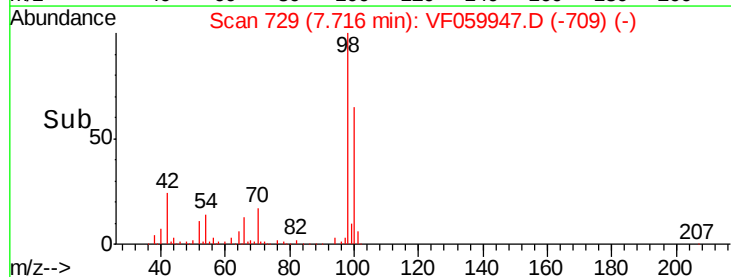
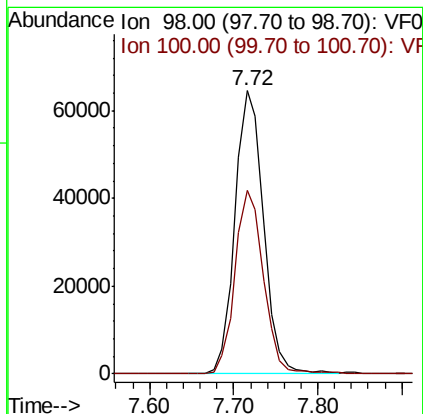
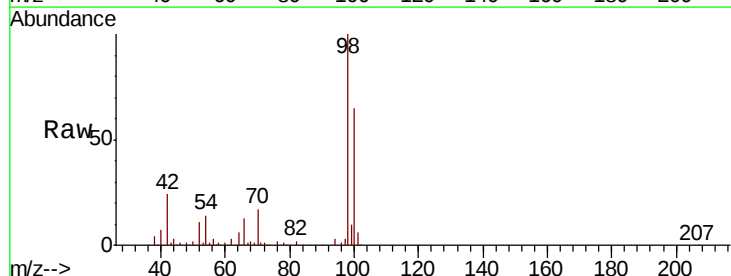
Acq: 10 Aug 2018 16:24

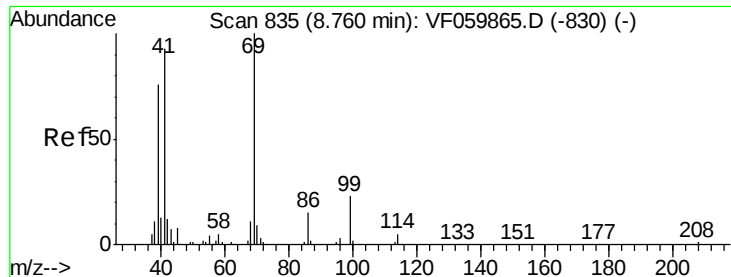
Tgt Ion: 98 Resp: 152413

Ion Ratio Lower Upper

98 100

100 65.0 55.0 82.6





#56

Ethyl methacrylate

Concen: 3.446 ug/l

RT: 8.84 min Scan# 843

Delta R.T. 0.08 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

CHA-1

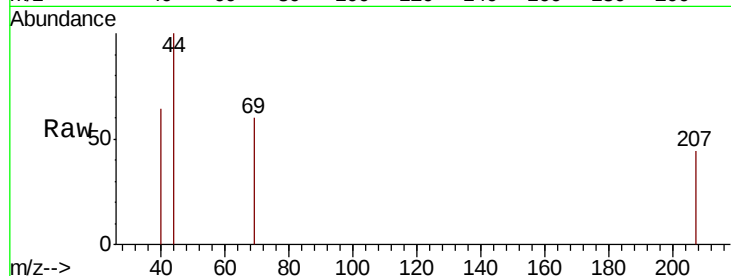
Tgt Ion: 69 Resp: 89

Ion Ratio Lower Upper

69 100

41 0.0 74.7 112.1#

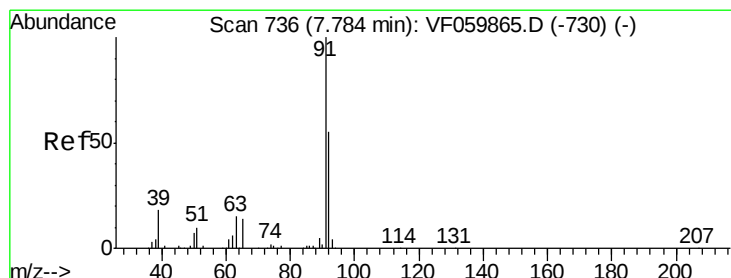
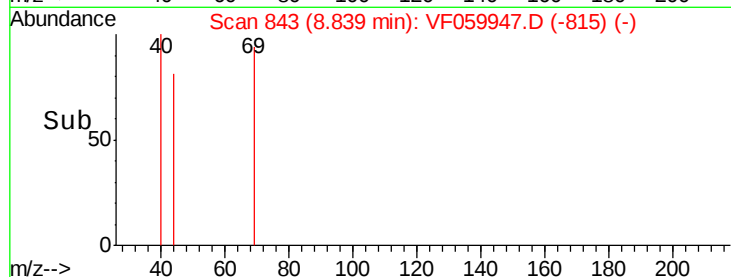
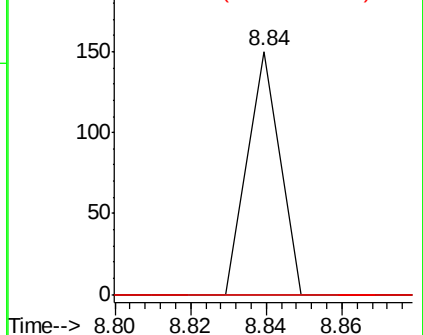
39 0.0 61.1 91.7#



Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0



#58

2-Chloroethyl Vinyl ether

Concen: 2.881 ug/l

RT: 7.73 min Scan# 730

Delta R.T. -0.06 min

Lab File: VF059947.D

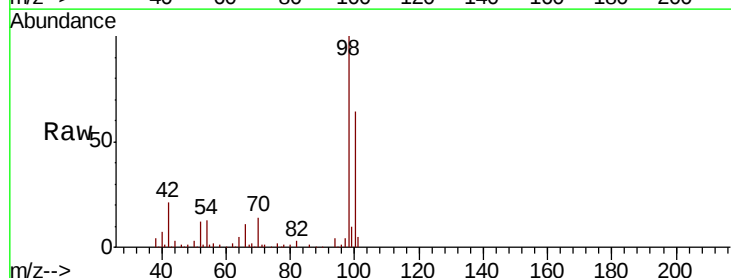
Acq: 10 Aug 2018 16:24

Tgt Ion: 63 Resp: 323

Ion Ratio Lower Upper

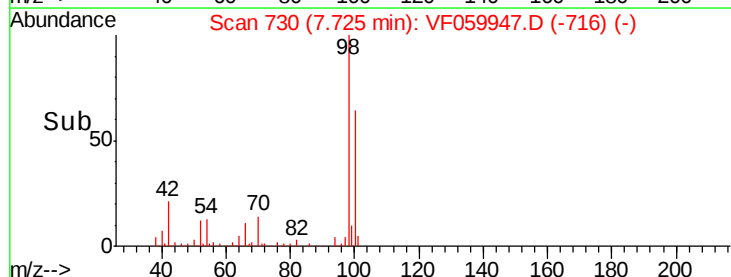
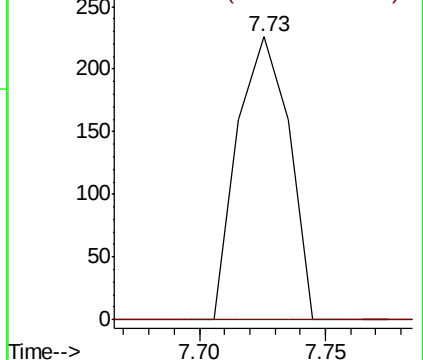
63 100

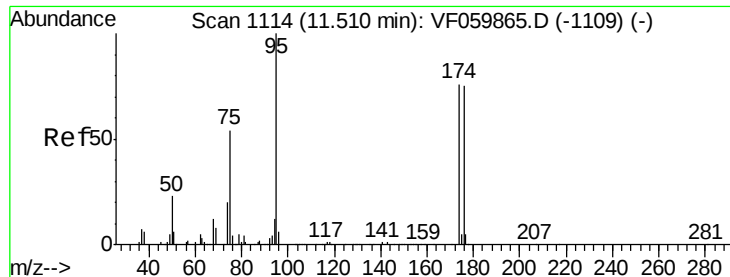
106 0.0 0.0 0.0



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): V





#62

4-Bromofluorobenzene

Concen: 45.446 ug/l

RT: 11.52 min Scan# 1115

Delta R.T. 0.01 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

CHA-1

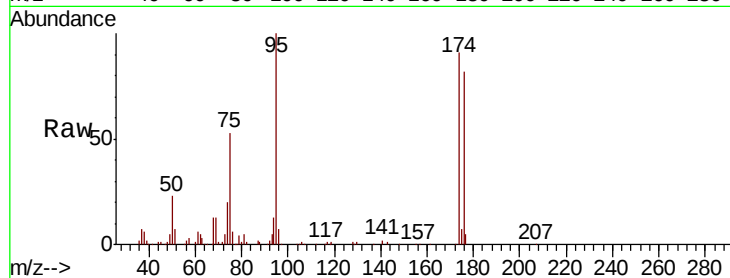
Tgt Ion: 95 Resp: 87123

Ion Ratio Lower Upper

95 100

174 90.8 0.0 151.6

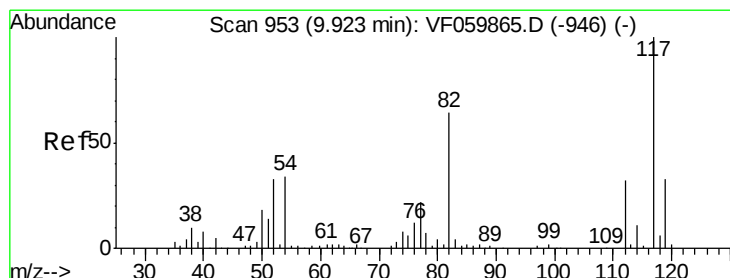
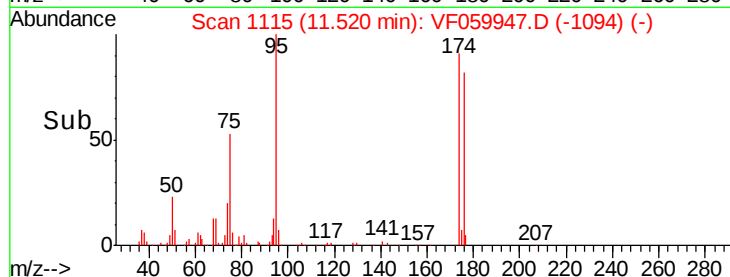
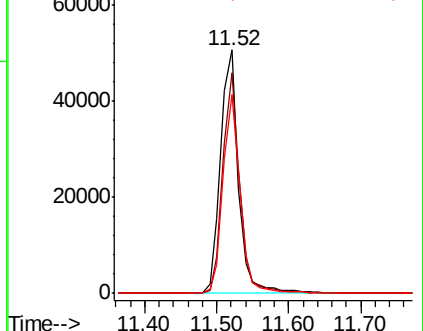
176 81.8 0.0 149.8



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



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.92 min Scan# 953

Delta R.T. 0.00 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

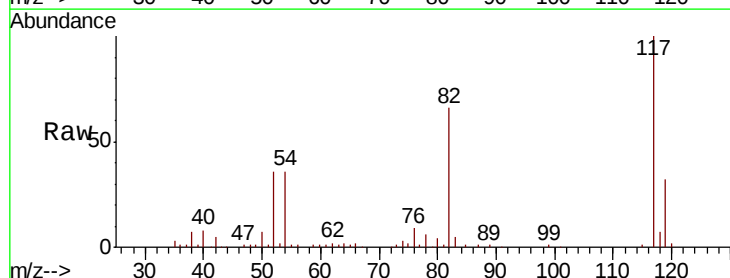
Tgt Ion: 117 Resp: 152760

Ion Ratio Lower Upper

117 100

82 65.9 51.3 76.9

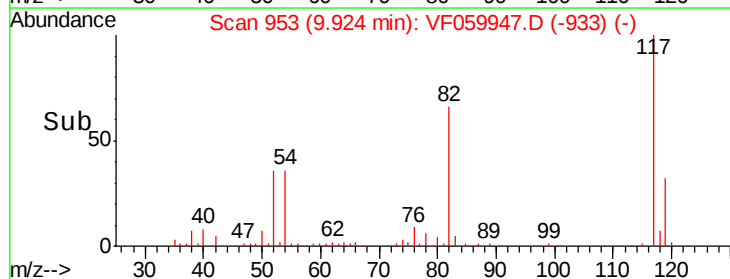
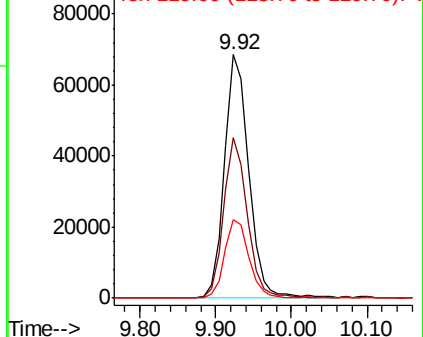
119 32.2 26.4 39.6

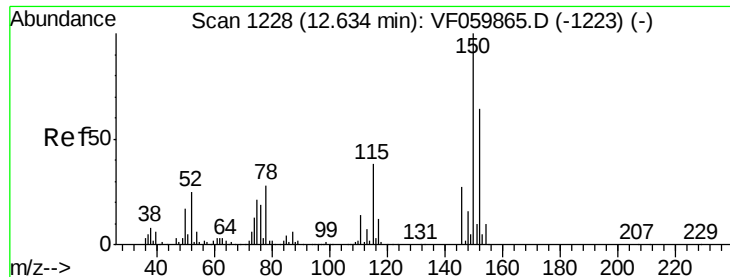


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.64 min Scan# 1229

Delta R.T. 0.01 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Instrument :

MSVOA\_F

ClientSampleId :

CHA-1

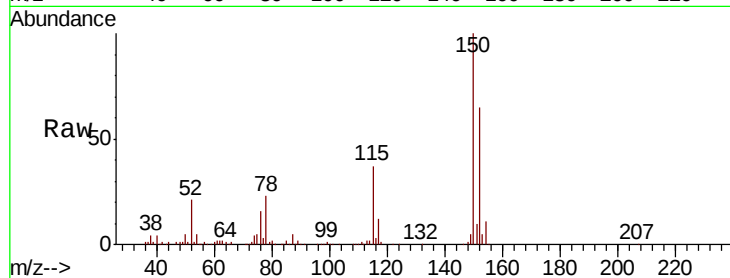
Tgt Ion: 152 Resp: 102206

Ion Ratio Lower Upper

152 100

115 56.3 29.8 89.4

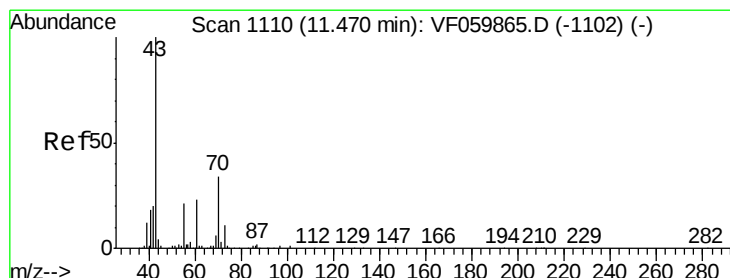
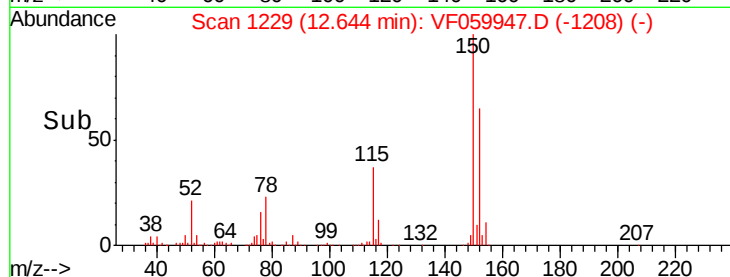
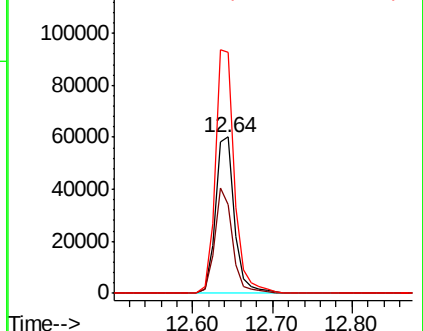
150 153.9 0.0 315.6



Abundance Ion 152.00 (151.70 to 152.70): V

Ion 115.00 (114.70 to 115.70): V

Ion 150.00 (149.70 to 150.70): V



#74

N-ethyl acetate

Concen: 3.002 ug/l

RT: 11.47 min Scan# 1110

Delta R.T. 0.00 min

Lab File: VF059947.D

Acq: 10 Aug 2018 16:24

Tgt Ion: 43 Resp: 72

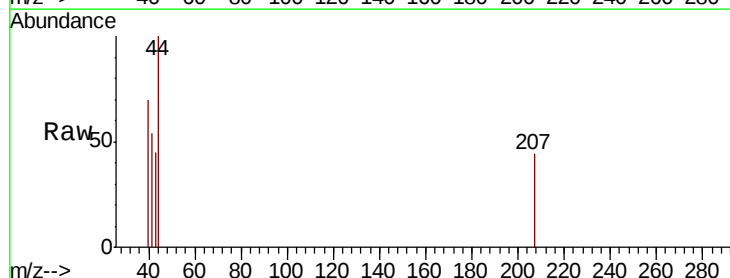
Ion Ratio Lower Upper

43 100

70 0.0 27.5 41.3#

55 0.0 16.6 25.0#

61 0.0 18.2 27.4#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

