

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF062218\  
 Data File : VF059283.D  
 Acq On : 22 Jun 2018 19:37  
 Operator : VA/AP  
 Sample : J3602-02RE  
 Misc : 4.62g/5mL/MSVOA-F/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EPE-F-8(5-10)

Quant Time: Jun 23 04:37:03 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F062118S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 22 05:22:31 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.03  | 168  | 198353   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.76  | 114  | 299127   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 301984   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 201083   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.01  | 65   | 153567   | 53.94 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 107.88% |          |
| 35) Dibromofluoromethane    | 4.28  | 113  | 140081   | 55.66 | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 111.32% |          |
| 50) Toluene-d8              | 7.70  | 98   | 327743   | 51.20 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 102.40% |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 189617   | 53.42 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 106.84% |          |

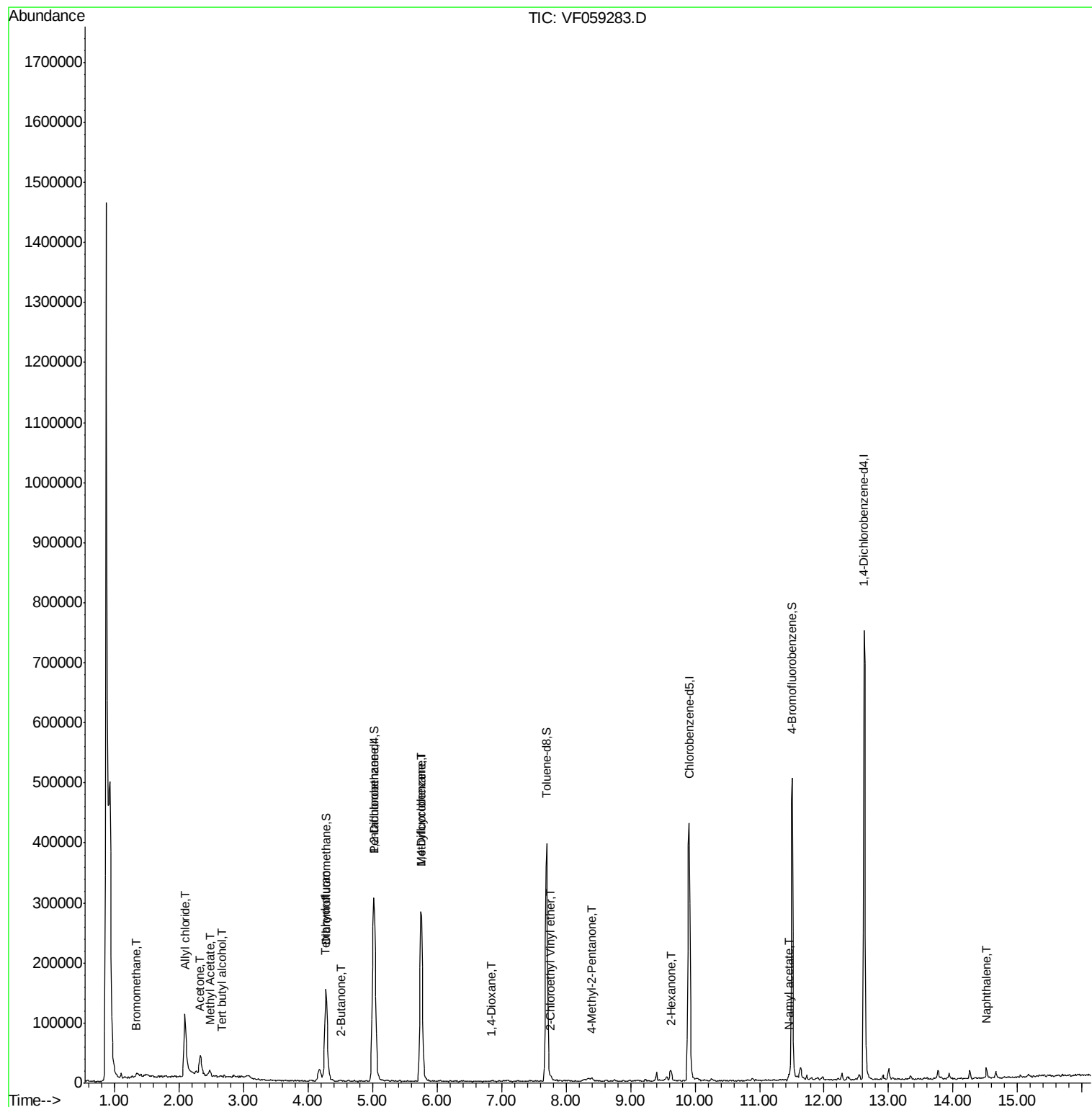
| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane               | 1.32  | 94   | 900      | 2.549     | ug/l # | 1      |
| 11) Tert butyl alcohol        | 2.66  | 59   | 1072     | 6.461     | ug/l # | 56     |
| 13) Acrolein                  | 2.01  | 56   | 474      | Below Cal |        | 94     |
| 14) Allyl chloride            | 2.09  | 41   | 47563    | 18.329    | ug/l # | 77     |
| 15) Acrylonitrile             | 3.06  | 53   | 549      | Below Cal | #      | 19     |
| 16) Acetone                   | 2.33  | 43   | 56968    | 84.657    | ug/l   | 93     |
| 18) Methyl Acetate            | 2.47  | 43   | 4826     | 3.804     | ug/l # | 66     |
| 20) Methylene Chloride        | 2.32  | 84   | 1787     | Below Cal | #      | 81     |
| 25) 2-Butanone                | 4.53  | 43   | 3125     | 3.481     | ug/l # | 58     |
| 28) Bromochloromethane        | 3.78  | 49   | 60       | Below Cal | #      | 8      |
| 29) Tetrahydrofuran           | 4.26  | 42   | 1565     | 3.883     | ug/l # | 66     |
| 39) Methylcyclohexane         | 5.75  | 83   | 4774     | 1.697     | ug/l # | 43     |
| 49) 1,4-Dioxane               | 6.84  | 88   | 72       | 7.968     | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone      | 8.40  | 43   | 6003     | 3.420     | ug/l   | 92     |
| 58) 2-Chloroethyl Vinyl ether | 7.76  | 63   | 256      | 1.409     | ug/l   | 100    |
| 59) 2-Hexanone                | 9.62  | 43   | 15034    | 10.803    | ug/l   | 87     |
| 74) N-amyl acetate            | 11.46 | 43   | 6983     | 1.544     | ug/l # | 90     |
| 95) Naphthalene               | 14.51 | 128  | 12244    | 1.227     | ug/l # | 95     |

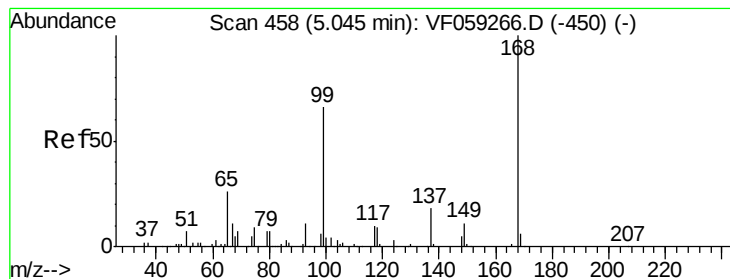
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_F\DATA\VF062218\  
Data File : VF059283.D  
Acq On : 22 Jun 2018 19:37  
Operator : VA/AP  
Sample : J3602-02RE  
Misc : 4.62g/5mL/MSVOA-F/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
EPE-F-8(5-10)

Quant Time: Jun 23 04:37:03 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F062118S.M  
Quant Title : SW846 8260  
QLast Update : Fri Jun 22 05:22:31 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.03 min Scan# 456

Delta R.T. -0.02 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Instrument :

MSVOA\_F

ClientSampleId :

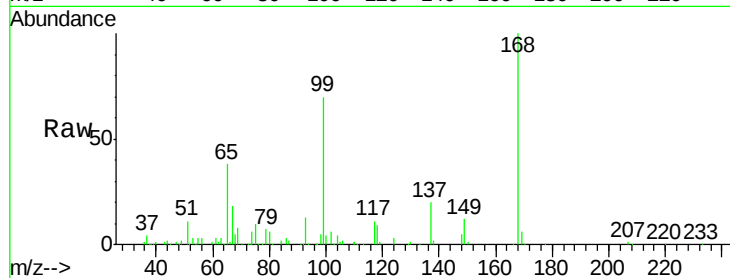
EPE-F-8(5-10)

Tgt Ion:168 Resp: 198353

Ion Ratio Lower Upper

168 100

99 70.4 52.6 78.8



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.03

60000

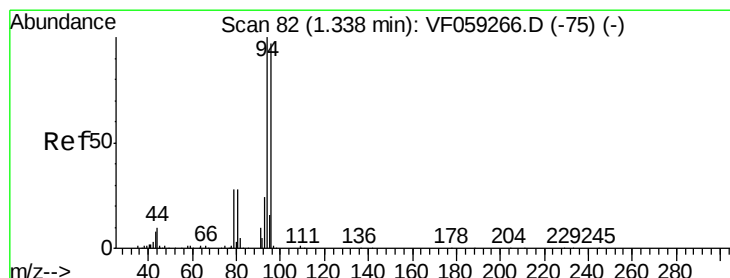
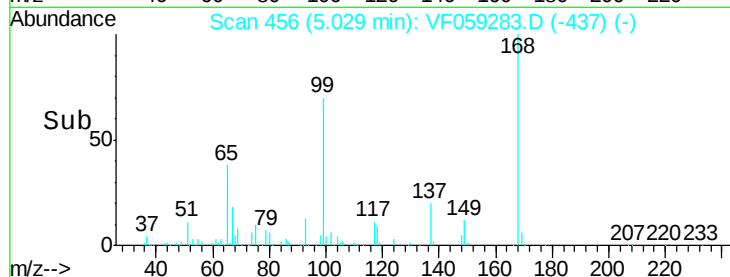
40000

20000

0

Time-->

4.90 5.00 5.10 5.20 5.30



#5

Bromomethane

Concen: 2.549 ug/l

RT: 1.32 min Scan# 80

Delta R.T. -0.01 min

Lab File: VF059283.D

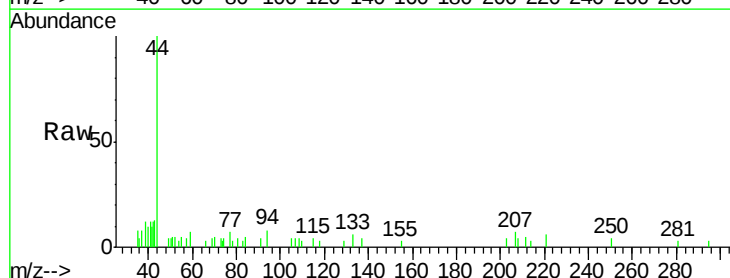
Acq: 22 Jun 2018 19:37

Tgt Ion: 94 Resp: 900

Ion Ratio Lower Upper

94 100

96 0.0 77.7 116.5#



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0

1.32

300

250

200

150

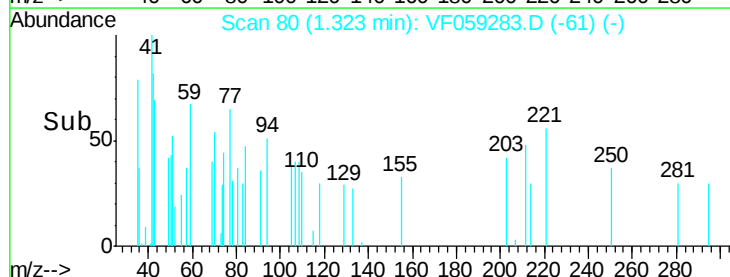
100

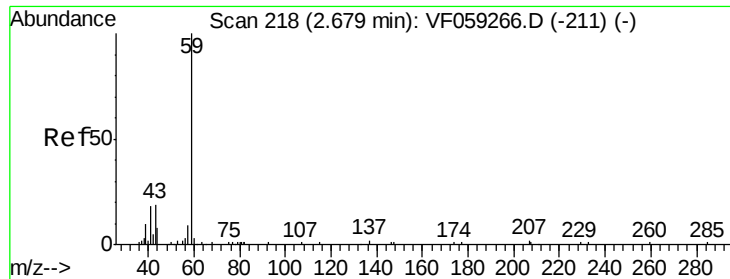
50

0

Time-->

1.25 1.30 1.35 1.40



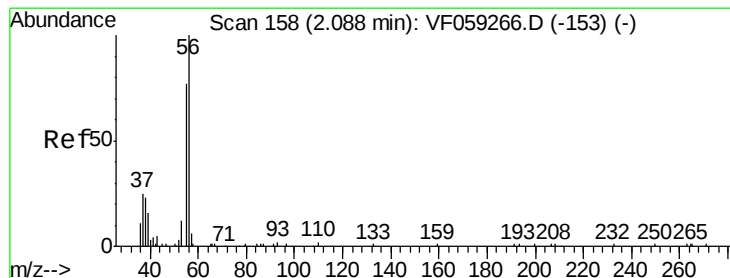
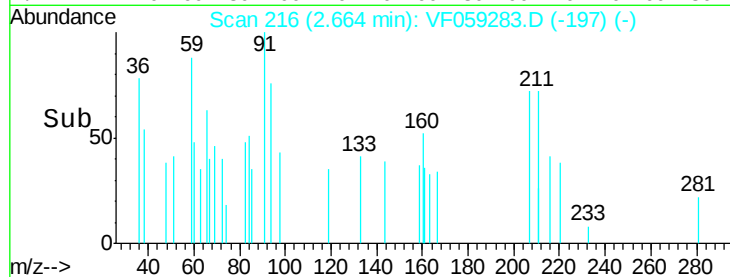
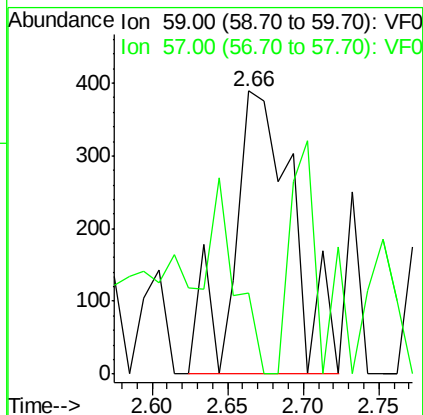
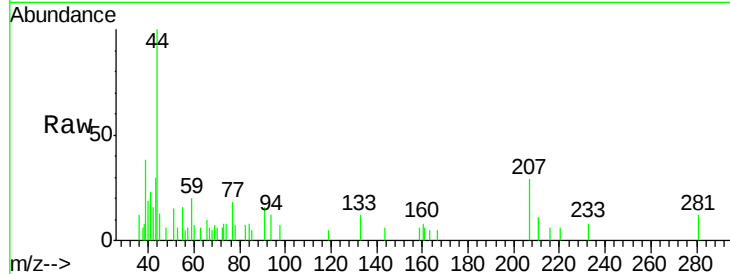


#11

Tert butyl alcohol  
 Concen: 6.461 ug/l  
 RT: 2.66 min Scan# 216  
 Delta R.T. -0.02 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EPE-F-8(5-10)

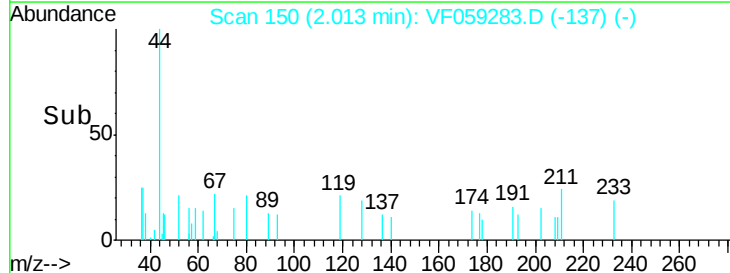
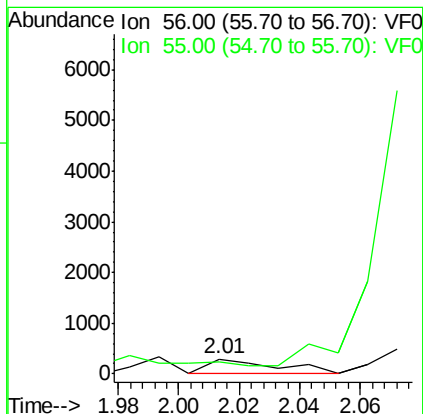
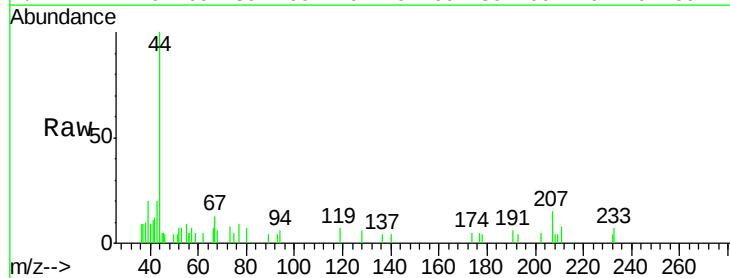
Tgt Ion: 59 Resp: 1072  
 Ion Ratio Lower Upper  
 59 100  
 57 28.5 9.2 13.8#

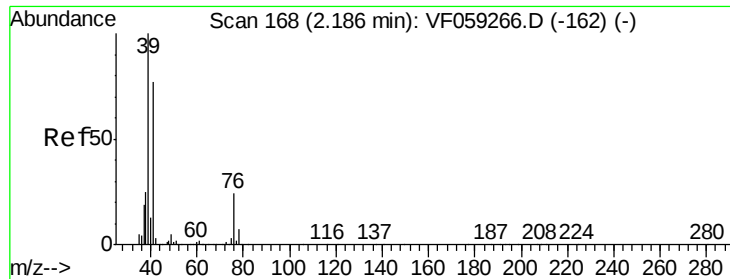


#13

Acrolein  
 Concen: Below Cal  
 RT: 2.01 min Scan# 150  
 Delta R.T. -0.07 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

Tgt Ion: 56 Resp: 474  
 Ion Ratio Lower Upper  
 56 100  
 55 84.5 63.0 94.6

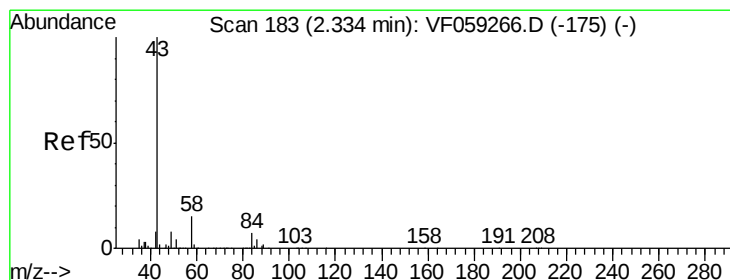
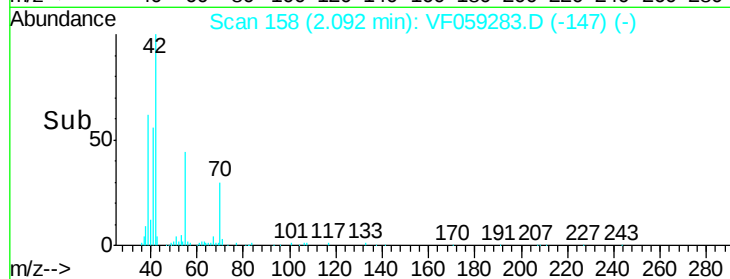
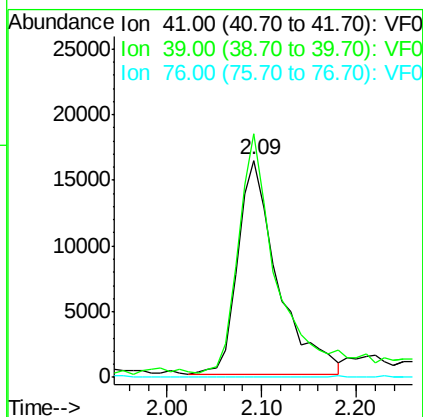
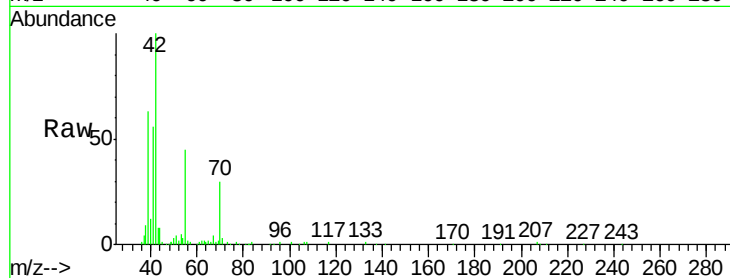




#14  
 Allyl chloride  
 Concen: 18.329 ug/l  
 RT: 2.09 min Scan# 158  
 Delta R.T. -0.09 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

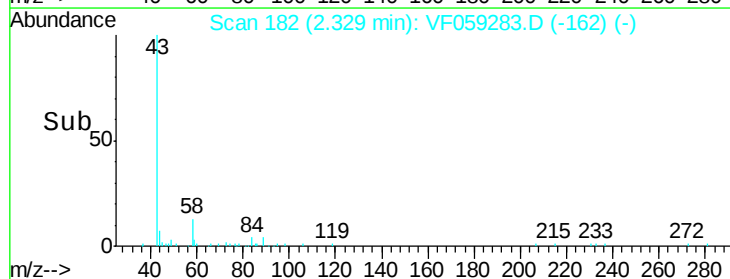
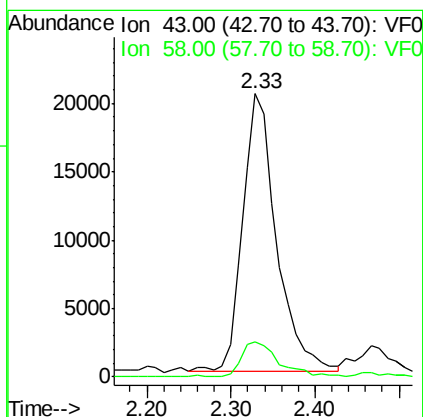
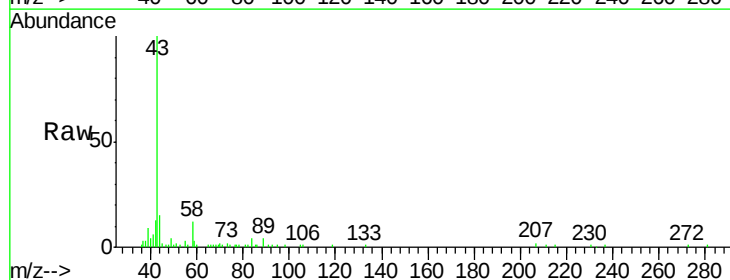
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EPE-F-8(5-10)

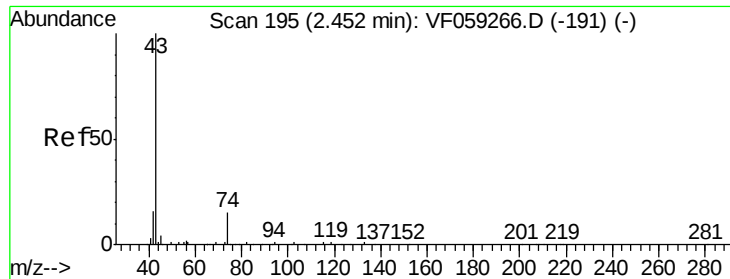
Tgt Ion: 41 Resp: 47563  
 Ion Ratio Lower Upper  
 41 100  
 39 112.1 103.8 155.6  
 76 0.0 25.0 37.6#



#16  
 Acetone  
 Concen: 84.657 ug/l  
 RT: 2.33 min Scan# 182  
 Delta R.T. -0.01 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

Tgt Ion: 43 Resp: 56968  
 Ion Ratio Lower Upper  
 43 100  
 58 12.2 12.1 18.1

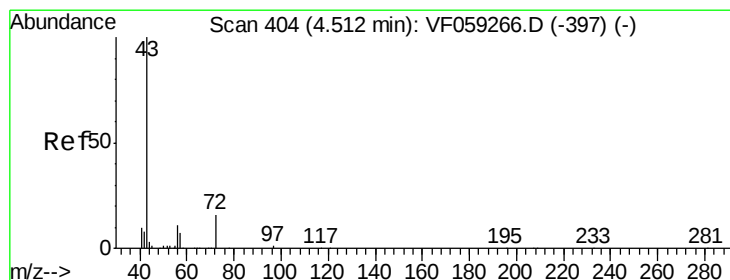
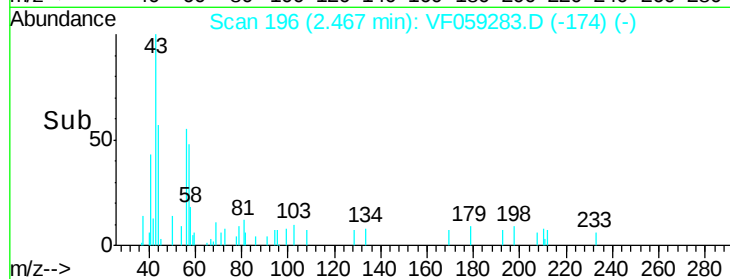
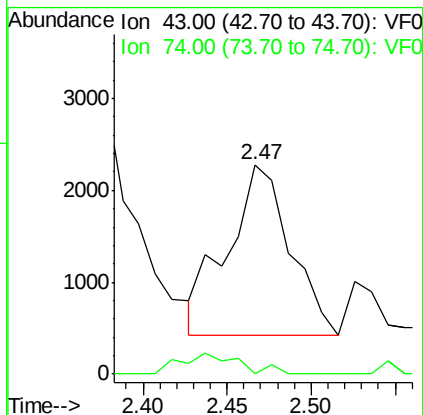
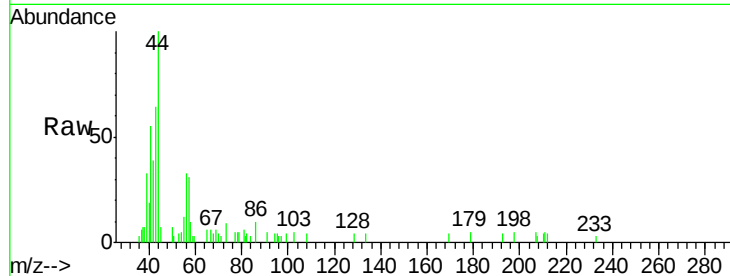




#18  
Methyl Acetate  
Concen: 3.804 ug/l  
RT: 2.47 min Scan# 196  
Delta R.T. 0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

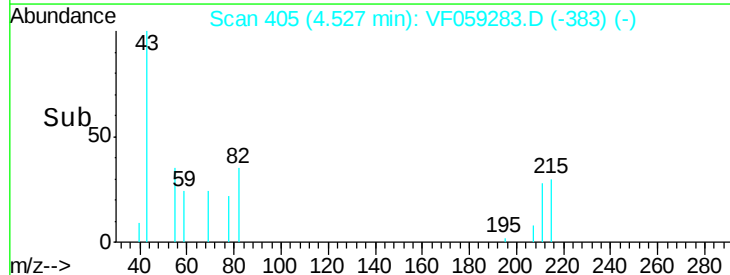
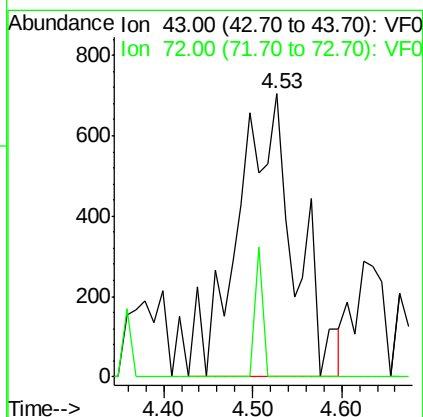
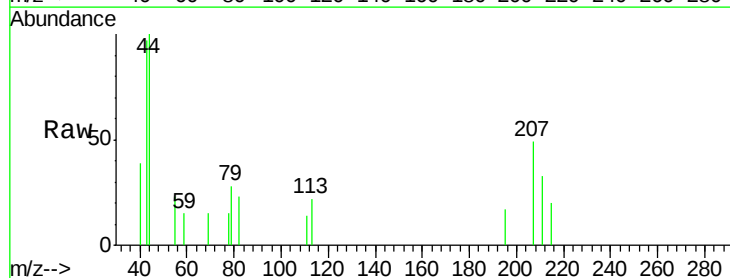
Instrument :  
MSVOA\_F  
ClientSampleId :  
EPE-F-8(5-10)

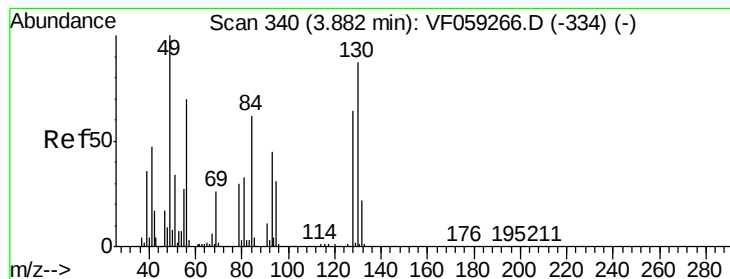
Tgt Ion: 43 Resp: 4826  
Ion Ratio Lower Upper  
43 100  
74 0.0 11.0 16.4#



#25  
2-Butanone  
Concen: 3.481 ug/l  
RT: 4.53 min Scan# 405  
Delta R.T. 0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

Tgt Ion: 43 Resp: 3125  
Ion Ratio Lower Upper  
43 100  
72 0.0 15.2 22.8#





#28

Bromochloromethane

Concen: Below Cal

RT: 3.78 min Scan# 329

Delta R.T. -0.10 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Instrument :

MSVOA\_F

ClientSampleId :

EPE-F-8(5-10)

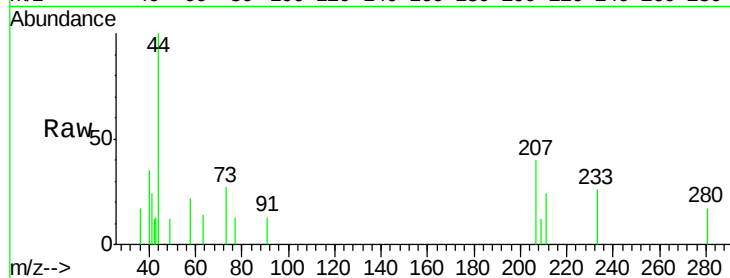
Tgt Ion: 49 Resp: 60

Ion Ratio Lower Upper

49 100

129 0.0 0.0 3.8

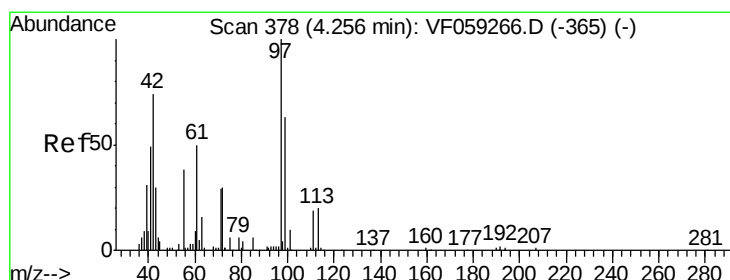
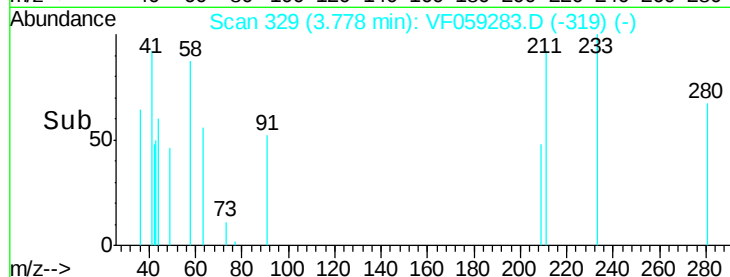
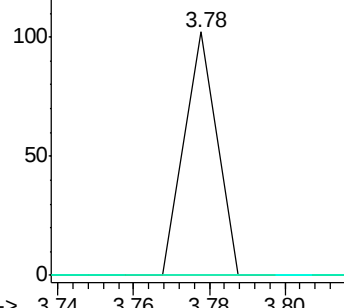
130 0.0 69.4 104.2#



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: 3.883 ug/l

RT: 4.26 min Scan# 378

Delta R.T. 0.00 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

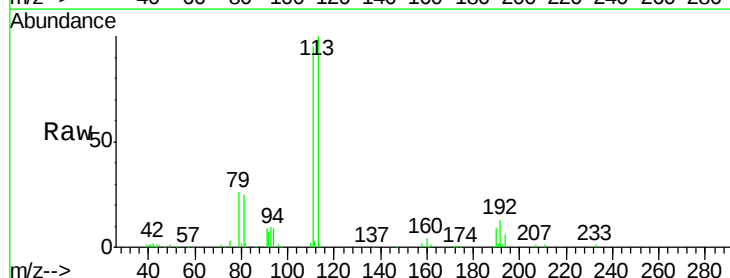
Tgt Ion: 42 Resp: 1565

Ion Ratio Lower Upper

42 100

72 10.7 31.2 46.8#

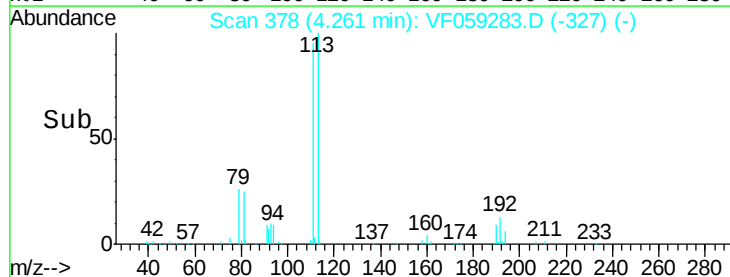
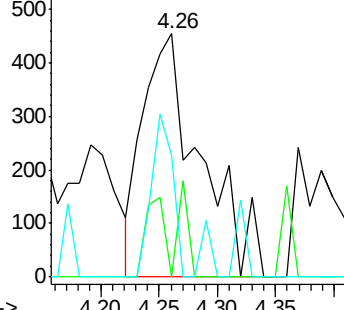
71 24.9 30.2 45.2#

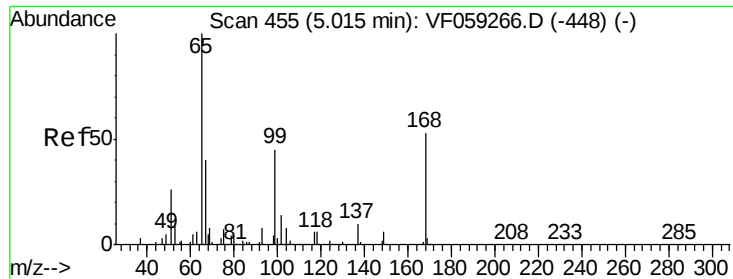


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0





#33

1,2-Dichloroethane-d4

Concen: 53.936 ug/l

RT: 5.01 min Scan# 454

Delta R.T. -0.01 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Instrument :

MSVOA\_F

ClientSampleId :

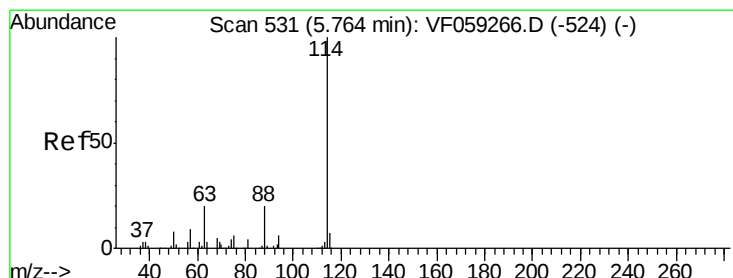
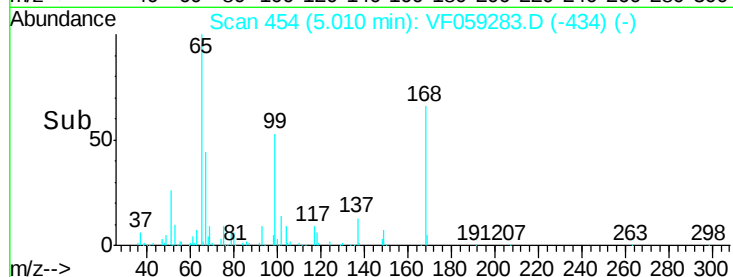
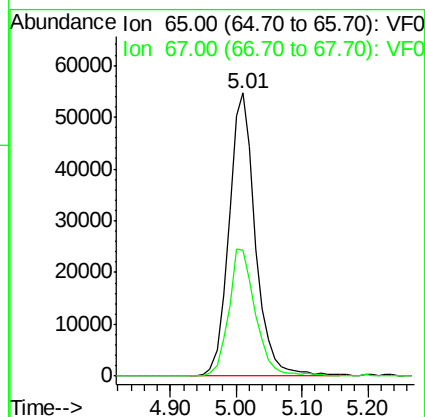
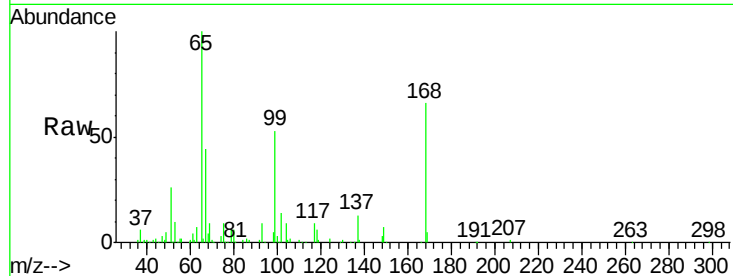
EPE-F-8(5-10)

Tgt Ion: 65 Resp: 153567

Ion Ratio Lower Upper

65 100

67 44.4 0.0 95.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.76 min Scan# 530

Delta R.T. -0.01 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

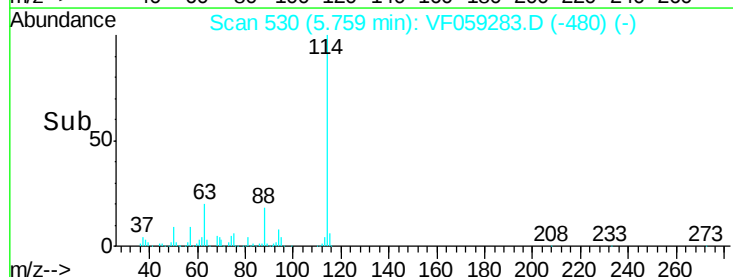
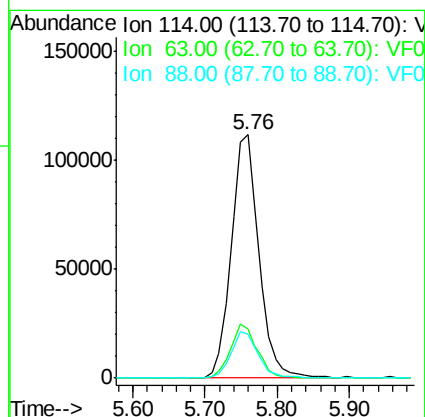
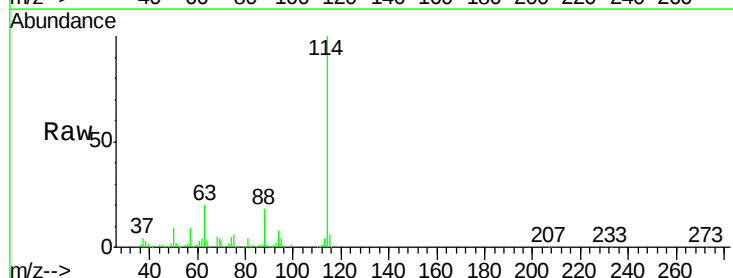
Tgt Ion: 114 Resp: 299127

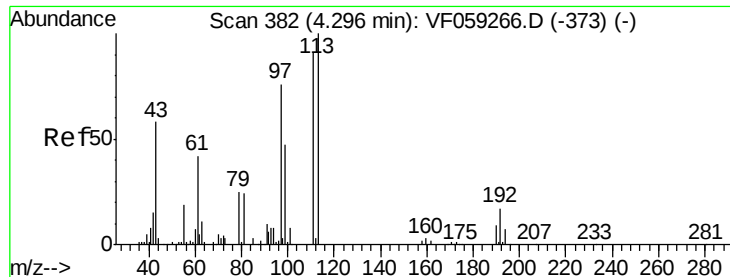
Ion Ratio Lower Upper

114 100

63 20.3 0.0 41.0

88 18.3 0.0 39.6

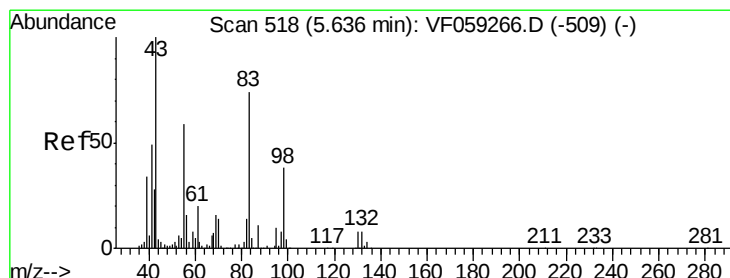
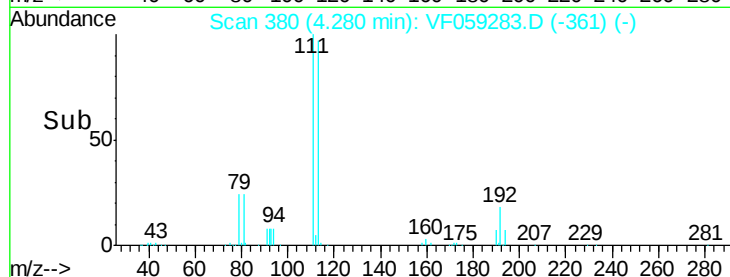
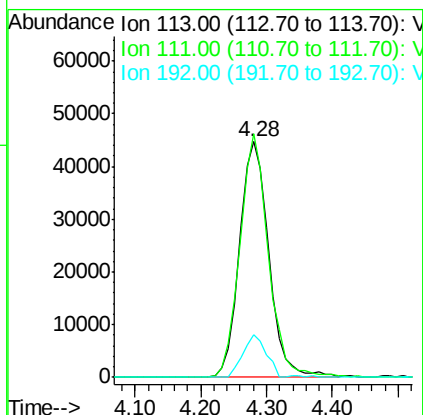
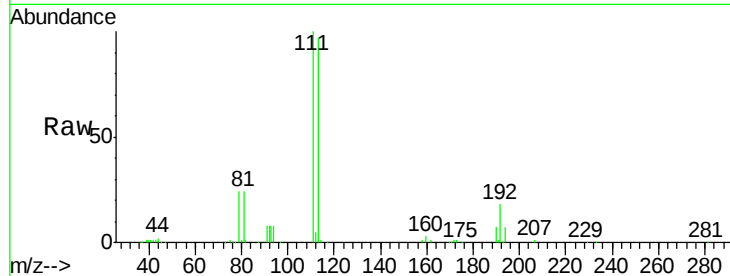




#35  
Dibromofluoromethane  
Concen: 55.661 ug/l  
RT: 4.28 min Scan# 380  
Delta R.T. -0.02 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

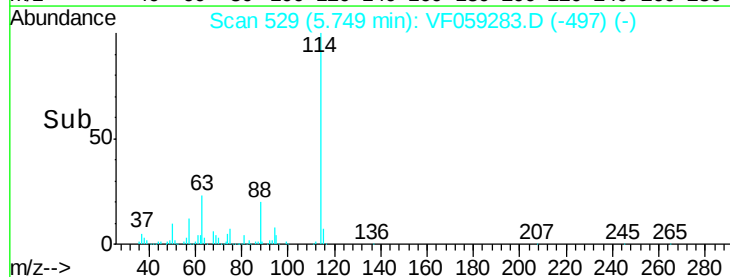
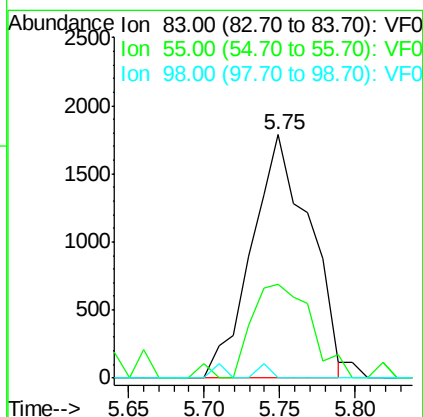
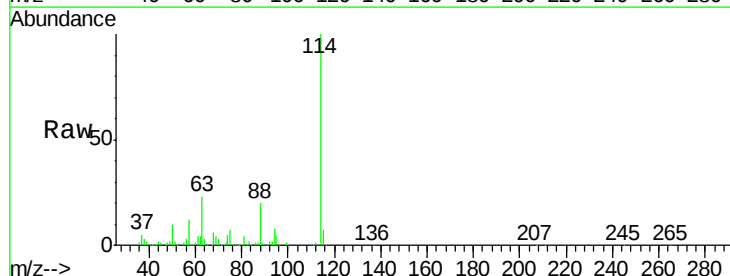
Instrument :  
MSVOA\_F  
ClientSampleId :  
EPE-F-8(5-10)

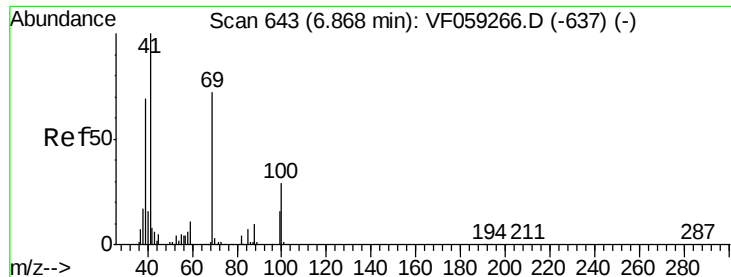
Tgt Ion:113 Resp: 140081  
Ion Ratio Lower Upper  
113 100  
111 103.2 73.1 109.7  
192 18.3 13.9 20.9



#39  
Methylcyclohexane  
Concen: 1.697 ug/l  
RT: 5.75 min Scan# 529  
Delta R.T. 0.11 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

Tgt Ion: 83 Resp: 4774  
Ion Ratio Lower Upper  
83 100  
55 38.7 63.7 95.5#  
98 0.0 41.6 62.4#

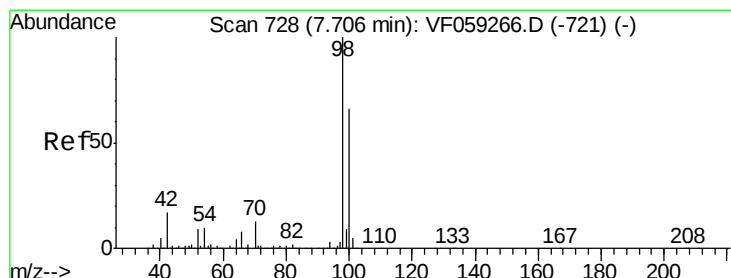
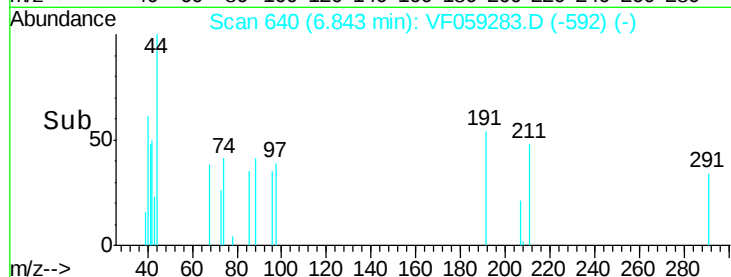
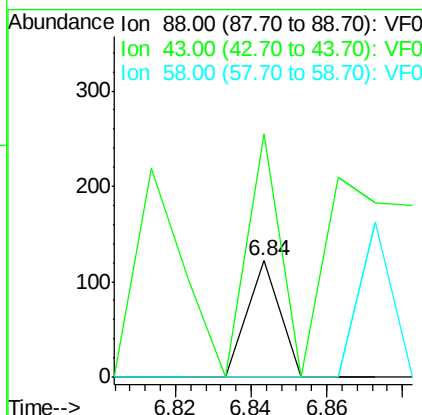
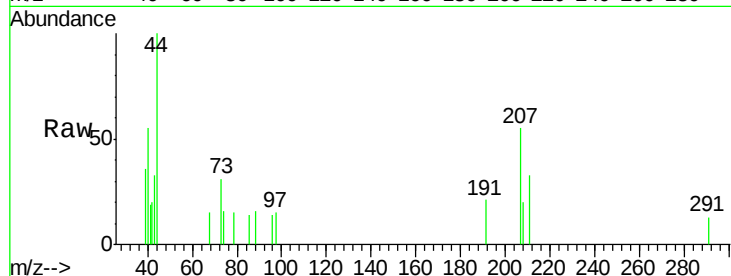




#49  
 1,4-Dioxane  
 Concen: 7.968 ug/l  
 RT: 6.84 min Scan# 640  
 Delta R.T. -0.03 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

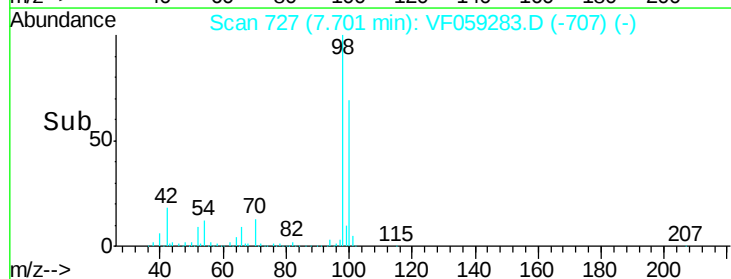
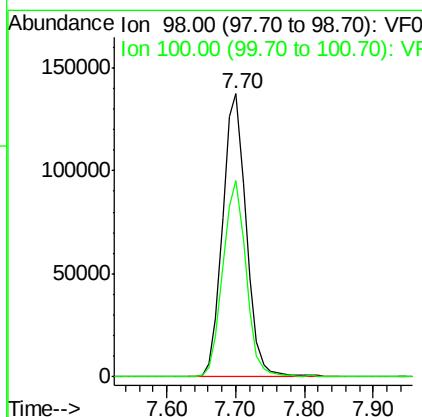
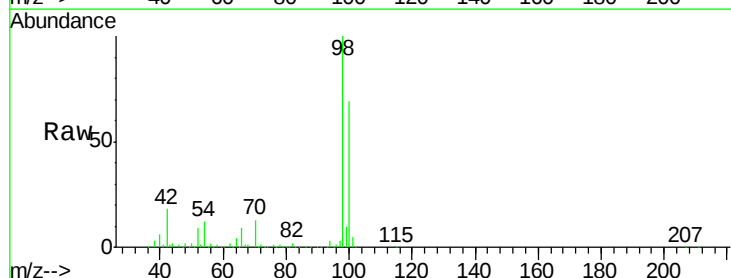
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EPE-F-8(5-10)

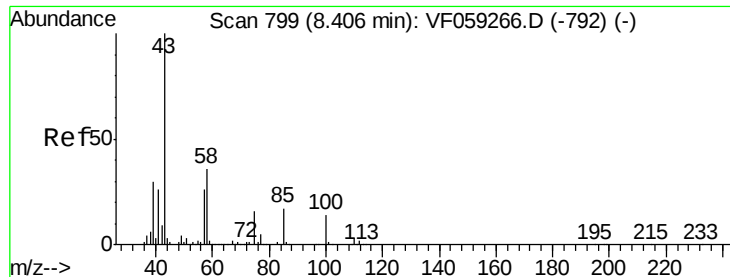
Tgt Ion: 88 Resp: 72  
 Ion Ratio Lower Upper  
 88 100  
 43 209.0 55.5 83.3#  
 58 0.0 50.1 75.1#



#50  
 Toluene-d8  
 Concen: 51.198 ug/l  
 RT: 7.70 min Scan# 727  
 Delta R.T. -0.01 min  
 Lab File: VF059283.D  
 Acq: 22 Jun 2018 19:37

Tgt Ion: 98 Resp: 327743  
 Ion Ratio Lower Upper  
 98 100  
 100 69.2 52.8 79.2





#51

4-Methyl-2-Pentanone

Concen: 3.420 ug/l

RT: 8.40 min Scan# 798

Delta R.T. -0.01 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Instrument :

MSVOA\_F

ClientSampleId :

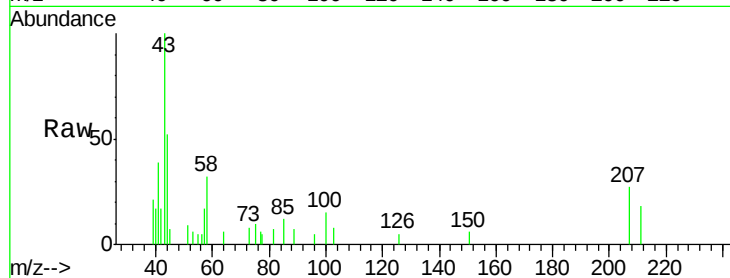
EPE-F-8(5-10)

Tgt Ion: 43 Resp: 6003

Ion Ratio Lower Upper

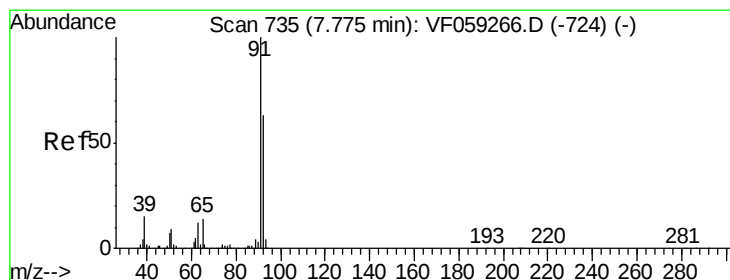
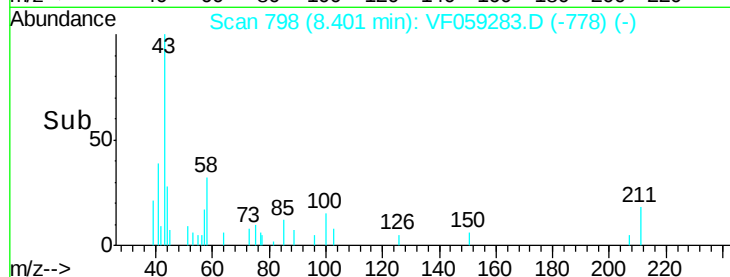
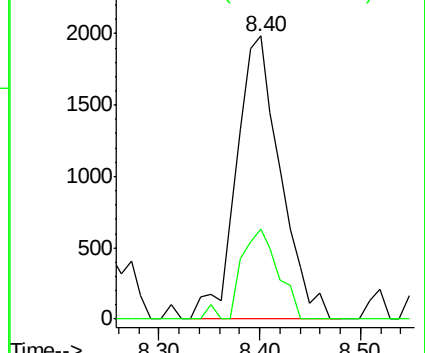
43 100

58 31.9 29.0 43.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#58

2-Chloroethyl Vinyl ether

Concen: 1.409 ug/l

RT: 7.76 min Scan# 733

Delta R.T. -0.02 min

Lab File: VF059283.D

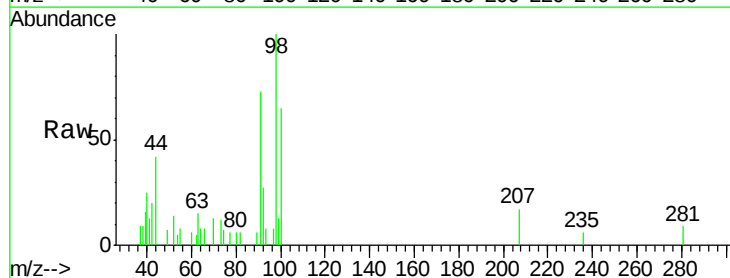
Acq: 22 Jun 2018 19:37

Tgt Ion: 63 Resp: 256

Ion Ratio Lower Upper

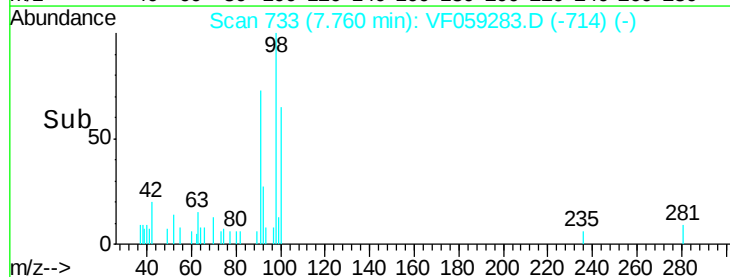
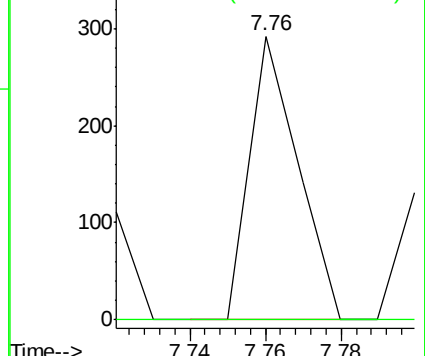
63 100

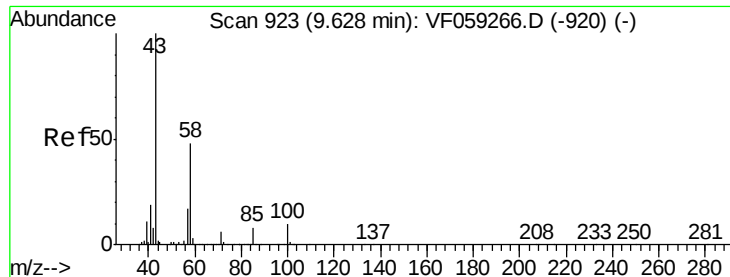
106 0.0 0.0 0.0



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): V

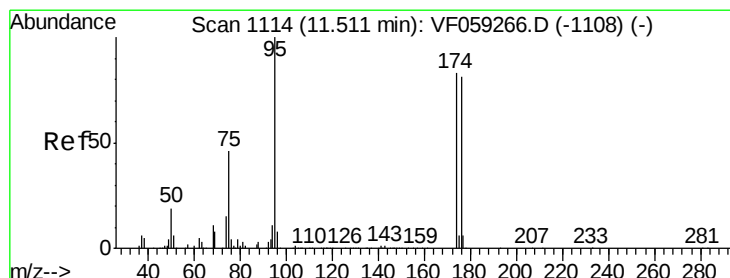
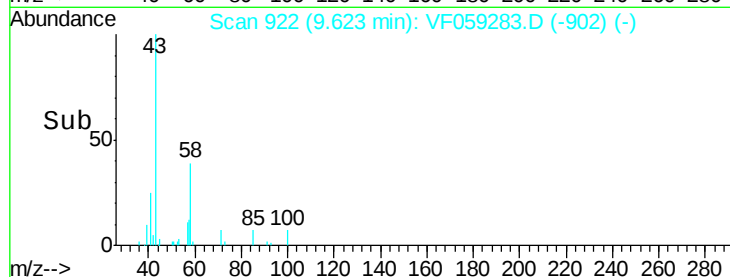
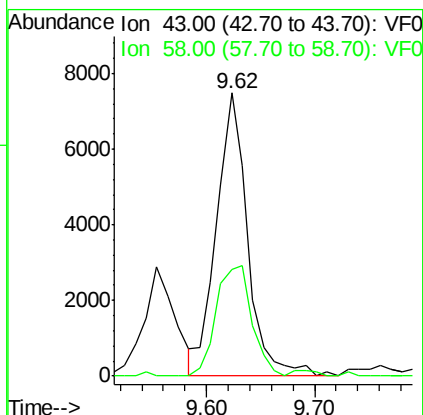
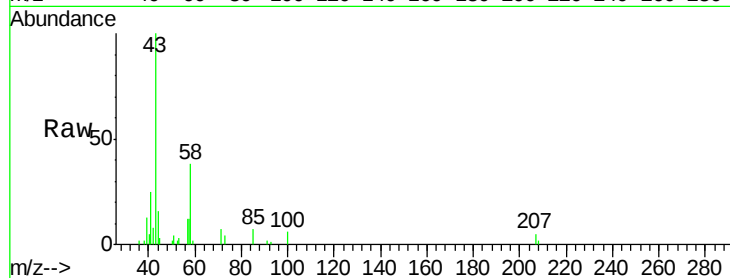




#59  
2-Hexanone  
Concen: 10.803 ug/l  
RT: 9.62 min Scan# 922  
Delta R.T. -0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

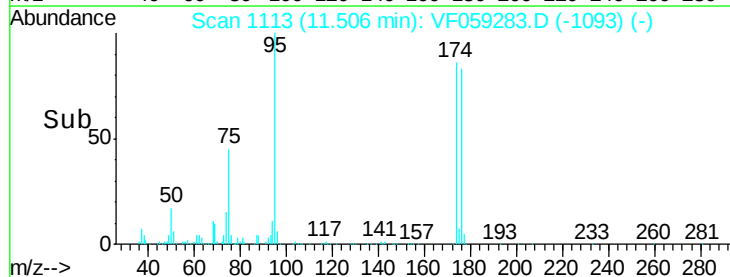
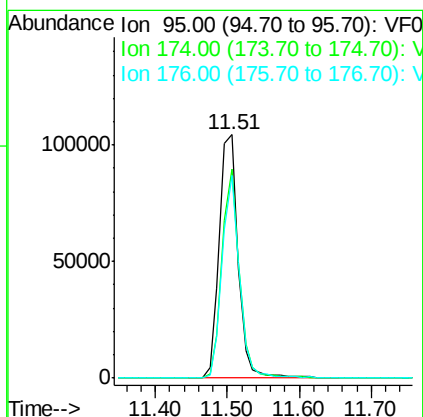
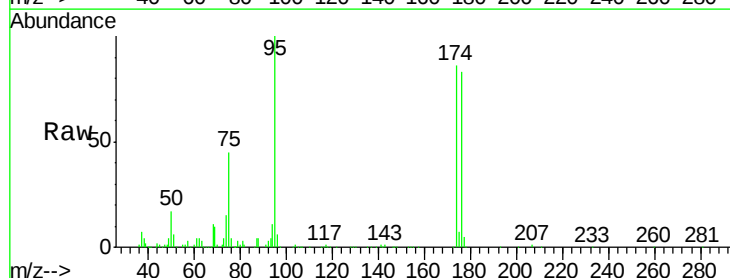
Instrument :  
MSVOA\_F  
ClientSampleId :  
EPE-F-8(5-10)

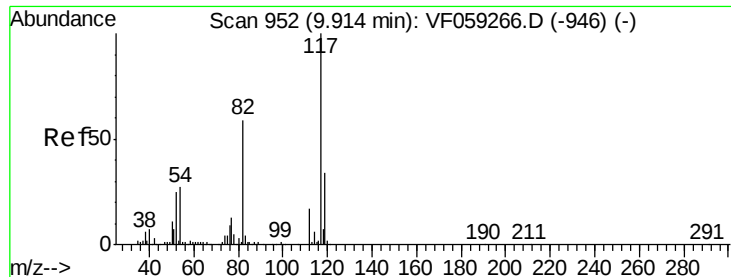
Tgt Ion: 43 Resp: 15034  
Ion Ratio Lower Upper  
43 100  
58 37.6 23.3 69.9



#62  
4-Bromofluorobenzene  
Concen: 53.416 ug/l  
RT: 11.51 min Scan# 1113  
Delta R.T. -0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

Tgt Ion: 95 Resp: 189617  
Ion Ratio Lower Upper  
95 100  
174 85.7 0.0 166.2  
176 83.1 0.0 162.8

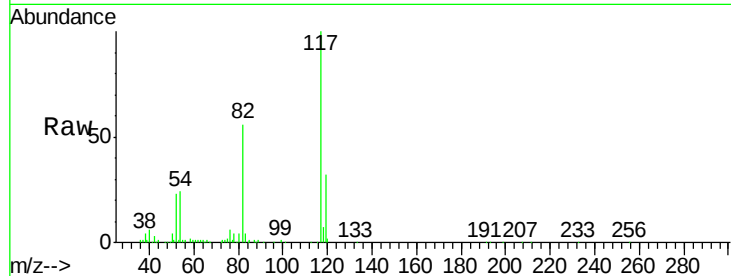




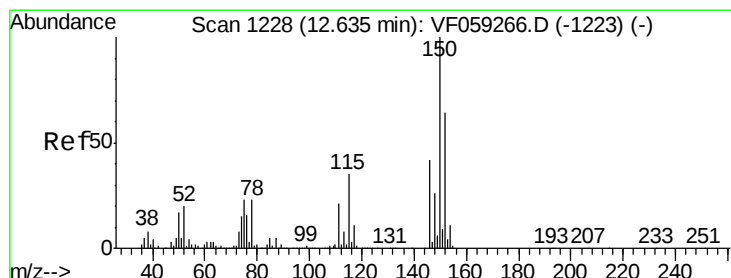
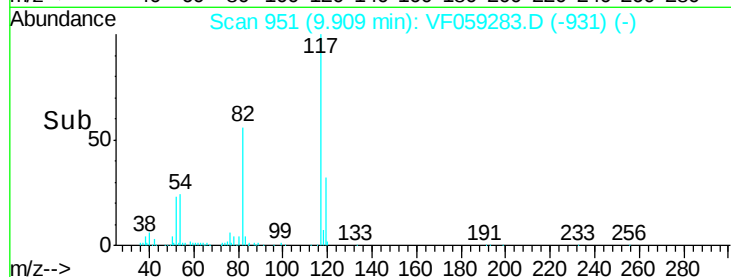
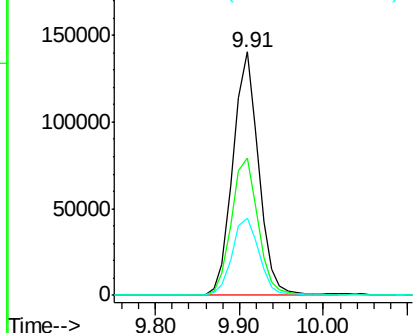
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.91 min Scan# 951  
Delta R.T. -0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

Instrument :  
MSVOA\_F  
ClientSampleId :  
EPE-F-8(5-10)

Tgt Ion:117 Resp: 301984  
Ion Ratio Lower Upper  
117 100  
82 56.2 47.1 70.7  
119 32.0 26.9 40.3

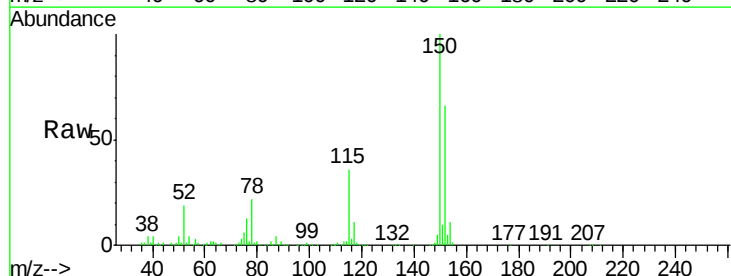


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 119.00 (118.70 to 119.70): V

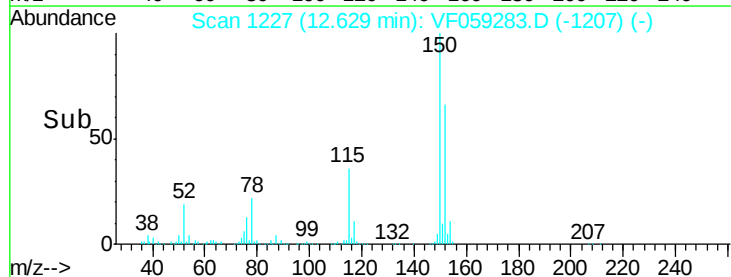
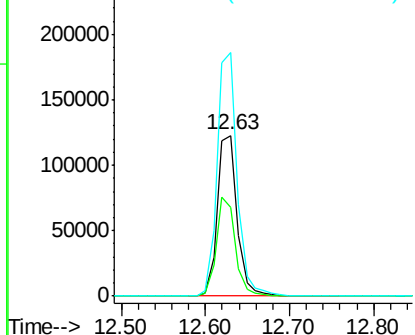


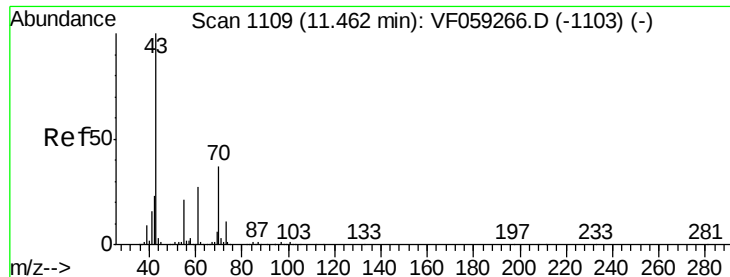
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.63 min Scan# 1227  
Delta R.T. -0.01 min  
Lab File: VF059283.D  
Acq: 22 Jun 2018 19:37

Tgt Ion:152 Resp: 201083  
Ion Ratio Lower Upper  
152 100  
115 54.9 27.8 83.3  
150 151.3 0.0 313.8



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-amyI acetate

Concen: 1.544 ug/l

RT: 11.46 min Scan# 1108

Delta R.T. -0.01 min

Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Instrument :

MSVOA\_F

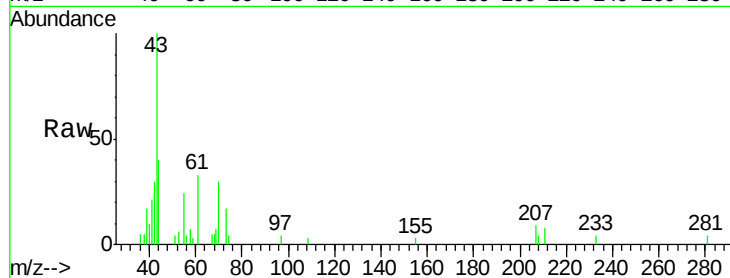
ClientSampleId :

EPE-F-8(5-10)

Tgt Ion: 43 Resp: 6983

Ion Ratio Lower Upper

|    |      |      |       |
|----|------|------|-------|
| 43 | 100  |      |       |
| 70 | 30.4 | 29.6 | 44.4  |
| 55 | 23.8 | 17.0 | 25.4  |
| 61 | 32.5 | 21.4 | 32.2# |

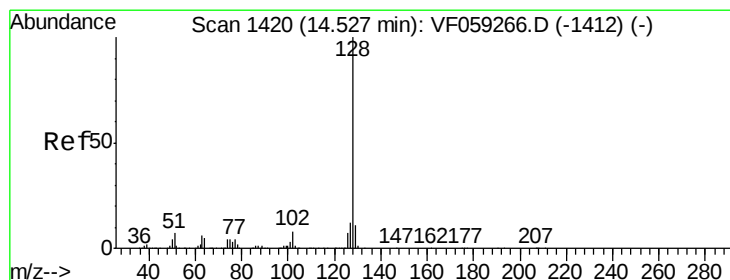
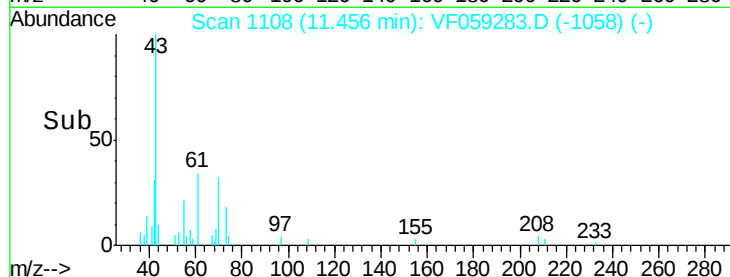
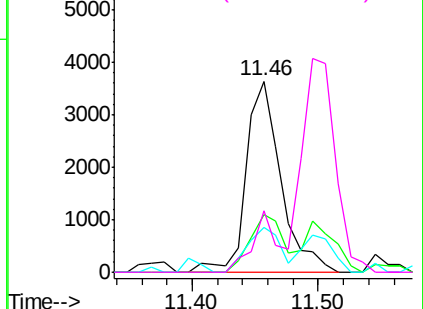


Abundance Ion 43.00 (42.70 to 43.70): VF0

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



#95

Naphthalene

Concen: 1.227 ug/l

RT: 14.51 min Scan# 1418

Delta R.T. -0.02 min

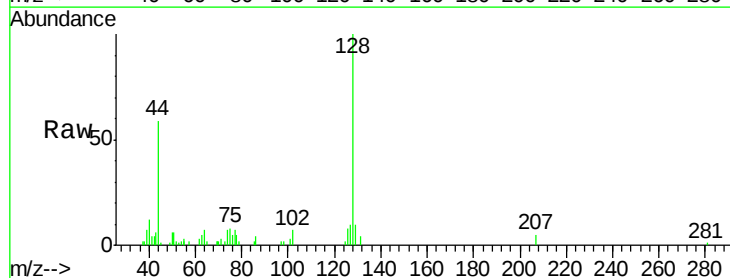
Lab File: VF059283.D

Acq: 22 Jun 2018 19:37

Tgt Ion: 128 Resp: 12244

Ion Ratio Lower Upper

|     |      |     |       |
|-----|------|-----|-------|
| 128 | 100  |     |       |
| 127 | 9.6  | 9.6 | 14.4# |
| 129 | 10.1 | 9.0 | 13.4  |



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

