

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF011719\  
 Data File : VF061441.D  
 Acq On : 17 Jan 2019 13:32  
 Operator : VA/AP  
 Sample : K1157-02RE  
 Misc : 5.06g/5mL/MSVOA-F/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WC-01-011519RE

Quant Time: Jan 18 03:18:13 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      | 4.84  | 168  | 194247   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.57  | 114  | 337009   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 9.76  | 117  | 252929   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.54 | 152  | 95847    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.81  | 65   | 114678   | 47.82 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 95.64%  |          |
| 35) Dibromofluoromethane    | 4.08  | 113  | 140159   | 52.71 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 105.42% |          |
| 50) Toluene-d8              | 7.54  | 98   | 327816   | 44.99 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.98%  |          |
| 62) 4-Bromofluorobenzene    | 11.39 | 95   | 127120   | 37.34 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 74.68%  |          |

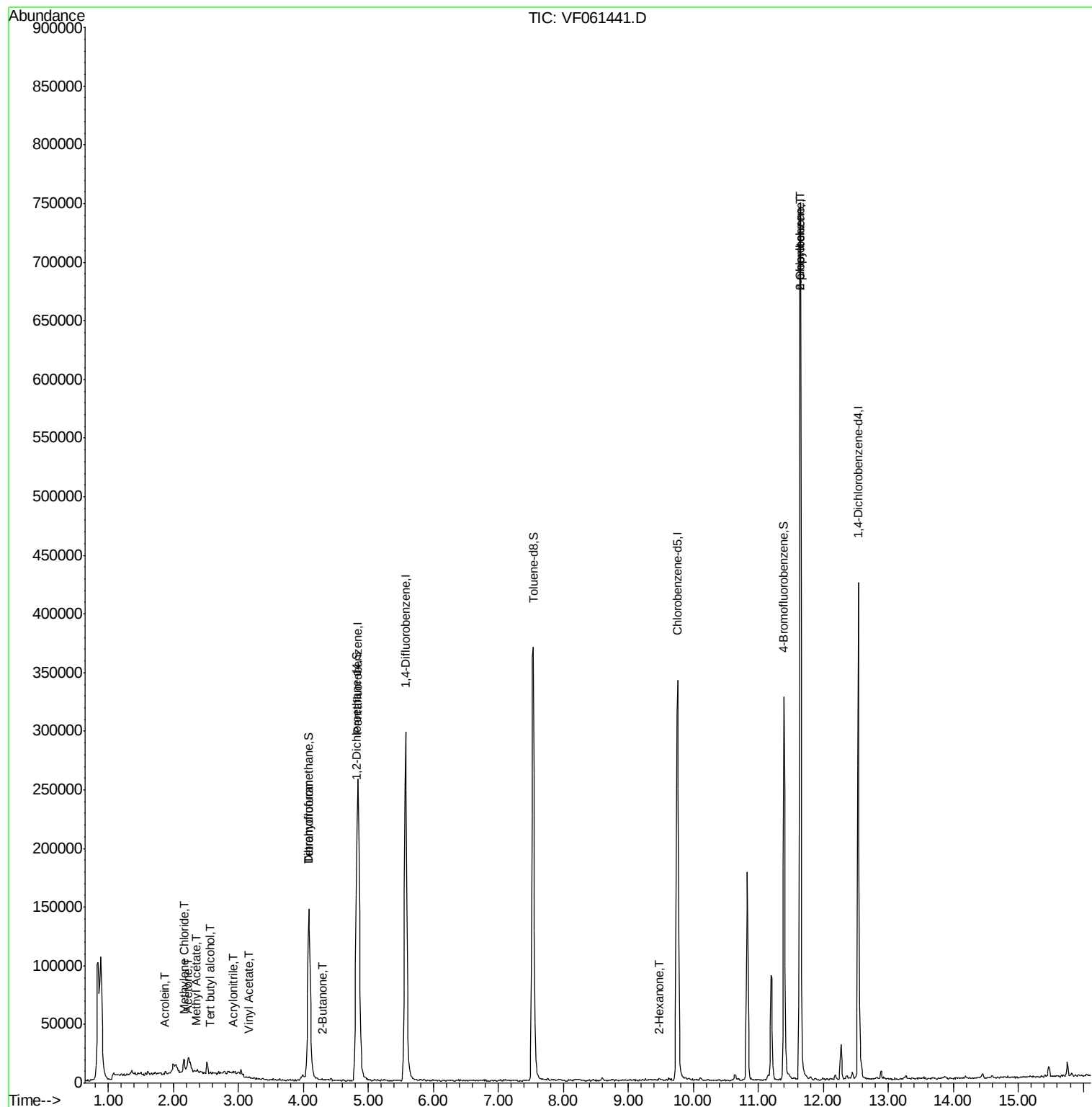
| Target Compounds       | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol | 2.56  | 59   | 141      | 1.389     | ug/l # | 64     |
| 13) Acrolein           | 1.86  | 56   | 223      | 12.782    | ug/l   | 88     |
| 14) Allyl chloride     | 2.13  | 41   | 633      | Below Cal | #      | 55     |
| 15) Acrylonitrile      | 2.91  | 53   | 382      | 1.469     | ug/l # | 44     |
| 16) Acetone            | 2.22  | 43   | 4394     | 9.133     | ug/l # | 91     |
| 18) Methyl Acetate     | 2.35  | 43   | 1389     | 1.456     | ug/l # | 61     |
| 20) Methylene Chloride | 2.17  | 84   | 4797     | 1.223     | ug/l # | 75     |
| 23) Vinyl Acetate      | 3.15  | 43   | 544      | 3.392     | ug/l # | 78     |
| 25) 2-Butanone         | 4.29  | 43   | 1083     | 1.354     | ug/l # | 57     |
| 29) Tetrahydrofuran    | 4.08  | 42   | 933      | 2.708     | ug/l # | 66     |
| 49) 1,4-Dioxane        | 7.05  | 88   | 76       | Below Cal | #      | 13     |
| 59) 2-Hexanone         | 9.48  | 43   | 1387     | 1.380     | ug/l   | 83     |
| 78) n-propylbenzene    | 11.65 | 91   | 85011    | 8.276     | ug/l # | 58     |
| 79) 2-Chlorotoluene    | 11.65 | 91   | 87443    | 16.167    | ug/l # | 45     |

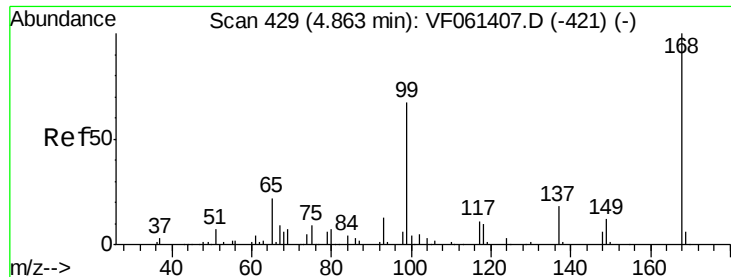
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF011719\  
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Sample : K1157-02RE  
Misc : 5.06g/5mL/MSVOA-F/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
WC-01-011519RE

Quant Time: Jan 18 03:18:13 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 16 04:51:59 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.84 min Scan# 427

Delta R.T. -0.02 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

Instrument :

MSVOA\_F

ClientSampleId :

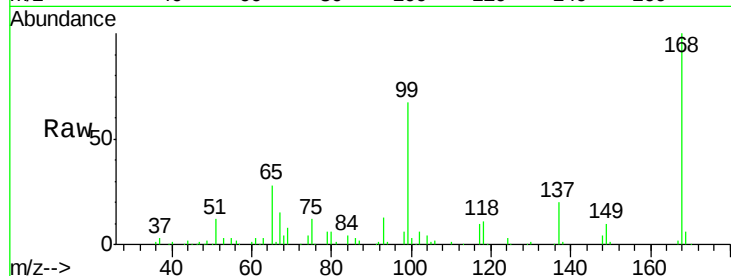
WC-01-011519RE

Tot Ion:168 Resp: 194247

Ion Ratio Lower Upper

168 100

99 67.0 53.5 80.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.84

60000

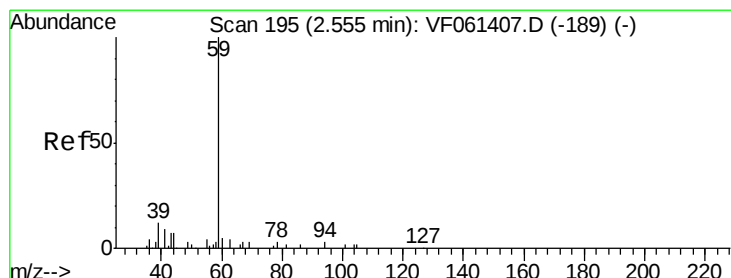
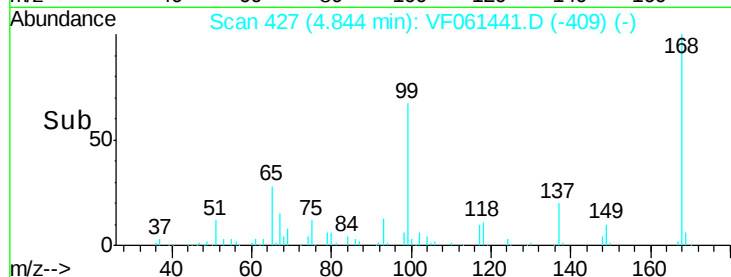
40000

20000

0

Time-->

4.70 4.80 4.90 5.00



#11

Tert butyl alcohol

Concen: 1.389 ug/l

RT: 2.56 min Scan# 195

Delta R.T. -0.00 min

Lab File: VF061441.D

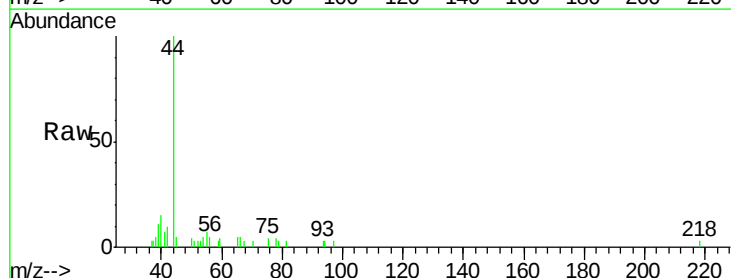
Acq: 17 Jan 2019 13:32

Tgt Ion: 59 Resp: 141

Ion Ratio Lower Upper

59 100

57 0.0 11.9 17.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.56

250

200

150

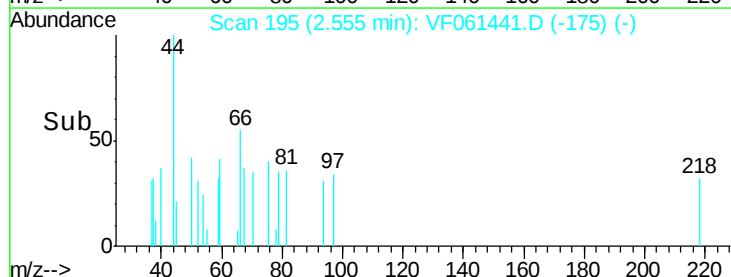
100

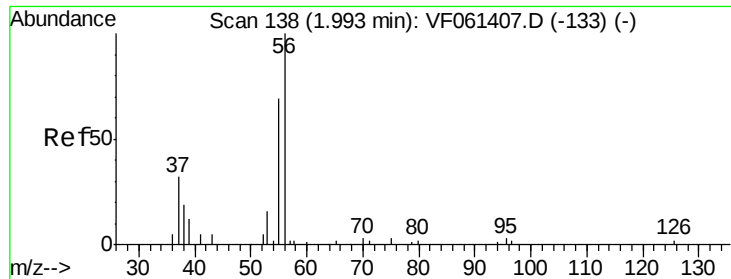
50

0

Time-->

2.52 2.54 2.56 2.58





#13

Acrolein

Concen: 12.782 ug/l

RT: 1.86 min Scan# 125

Delta R.T. -0.13 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

Instrument :

MSVOA\_F

ClientSampleId :

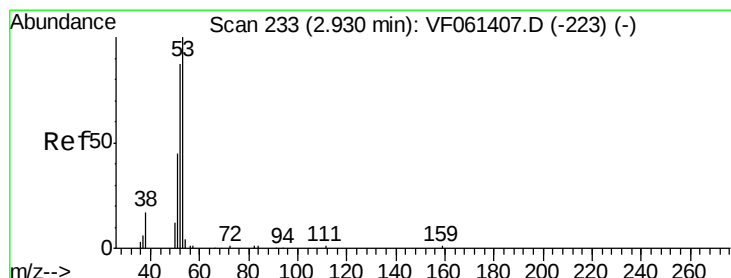
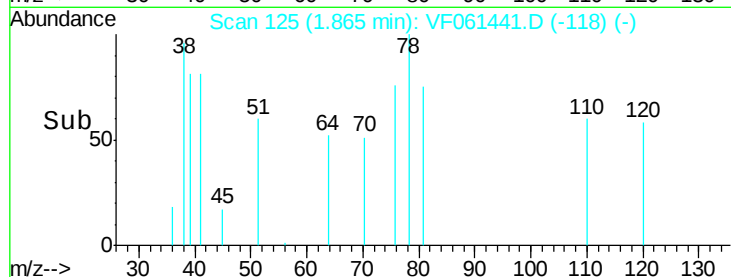
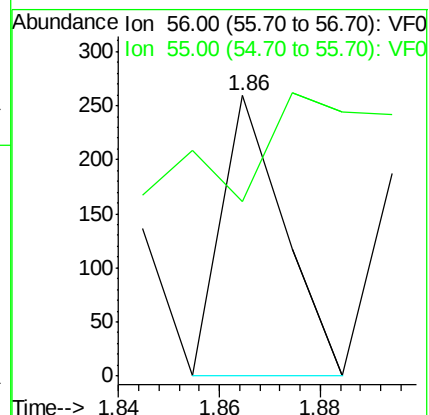
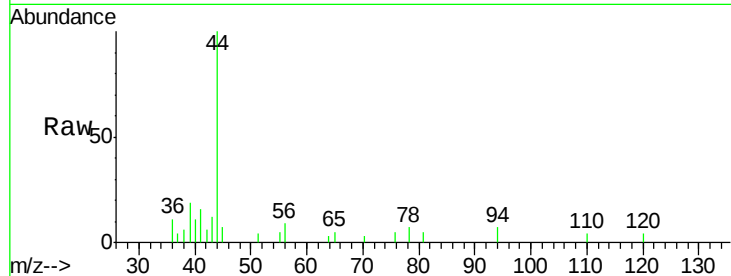
WC-01-011519RE

Tot Ion: 56 Resp: 223

Ion Ratio Lower Upper

56 100

55 62.2 57.5 86.3



#15

Acrylonitrile

Concen: 1.469 ug/l

RT: 2.91 min Scan# 231

Delta R.T. -0.02 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

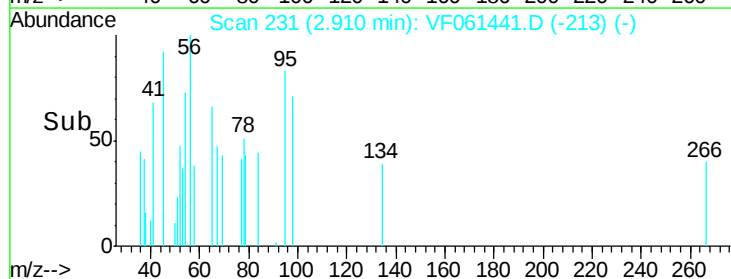
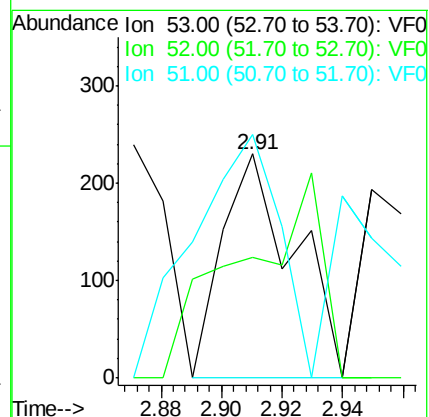
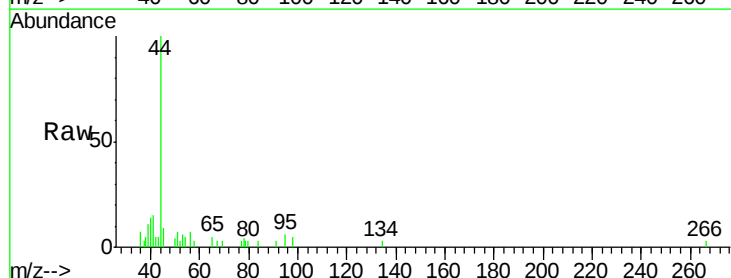
Tgt Ion: 53 Resp: 382

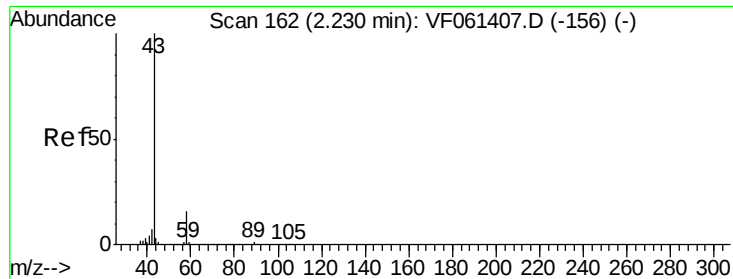
Ion Ratio Lower Upper

53 100

52 53.9 69.6 104.4#

51 108.7 36.8 55.2#

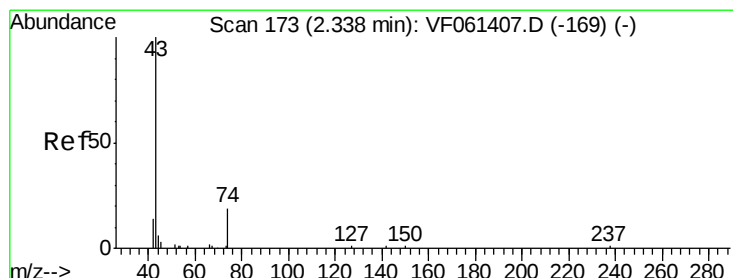
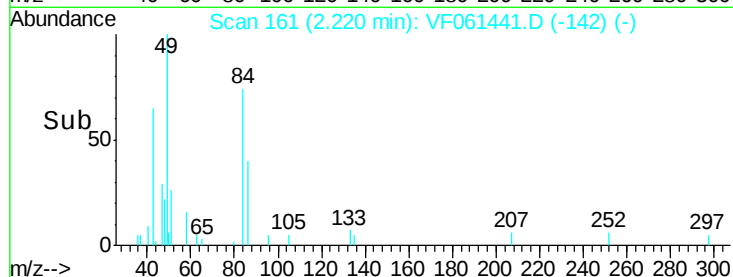
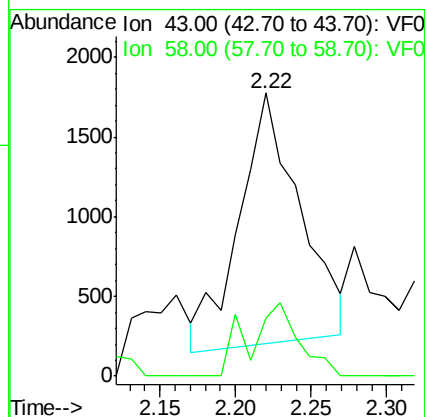
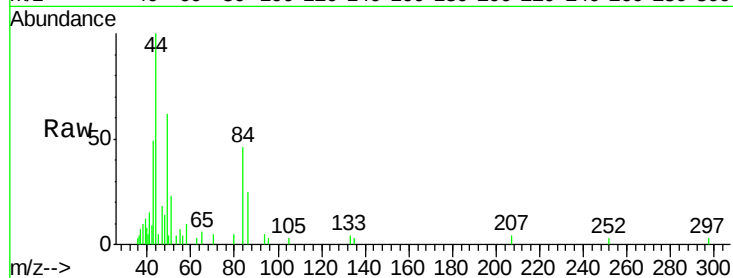




#16  
Acetone  
Concen: 9.133 ug/l  
RT: 2.22 min Scan# 161  
Delta R.T. -0.01 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

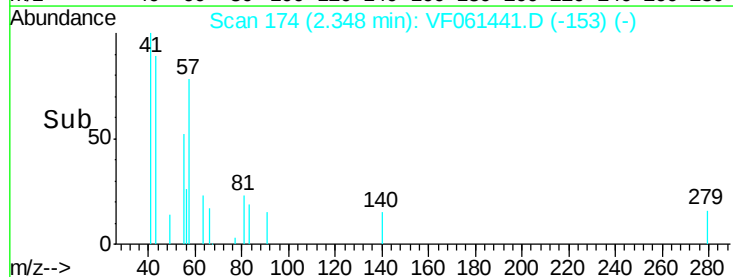
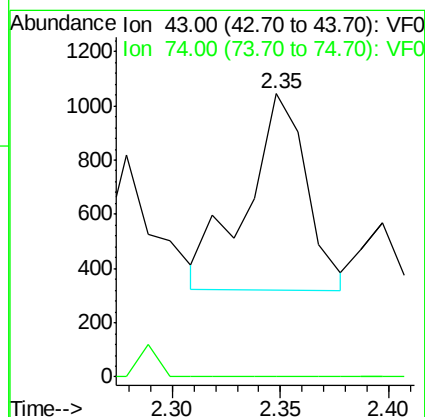
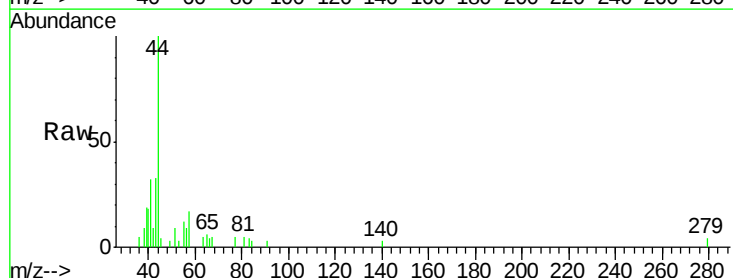
Instrument :  
MSVOA\_F  
ClientSampleId :  
WC-01-011519RE

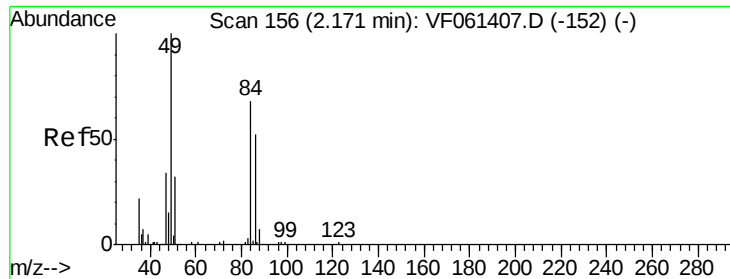
Tot Ion: 43 Resp: 4394  
Ion Ratio Lower Upper  
43 100  
58 20.5 13.3 19.9#



#18  
Methyl Acetate  
Concen: 1.456 ug/l  
RT: 2.35 min Scan# 174  
Delta R.T. 0.01 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

Tgt Ion: 43 Resp: 1389  
Ion Ratio Lower Upper  
43 100  
74 0.0 13.4 20.0#

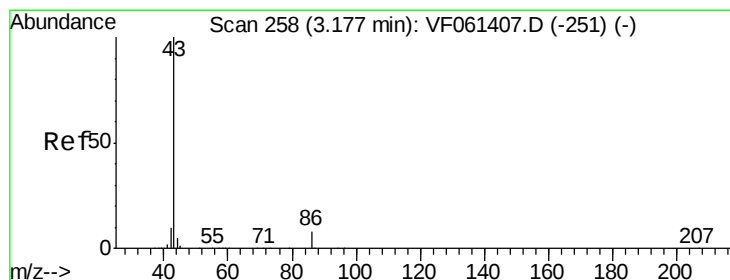
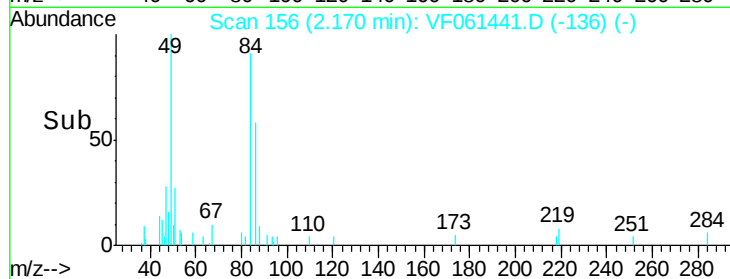
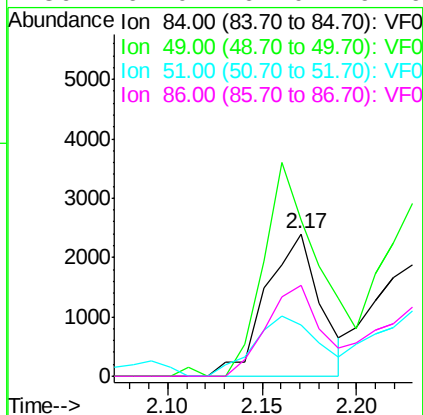
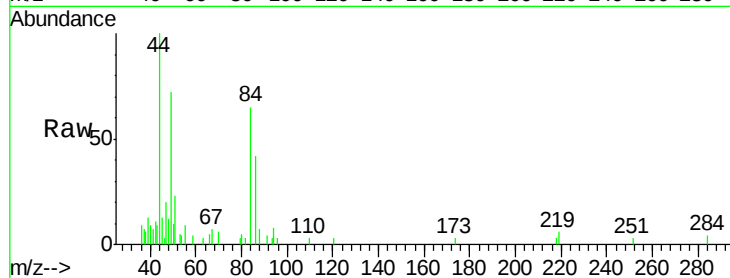




#20  
Methvlene Chloride  
Concen: 1.223 ug/l  
RT: 2.17 min Scan# 156  
Delta R.T. 0.00 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

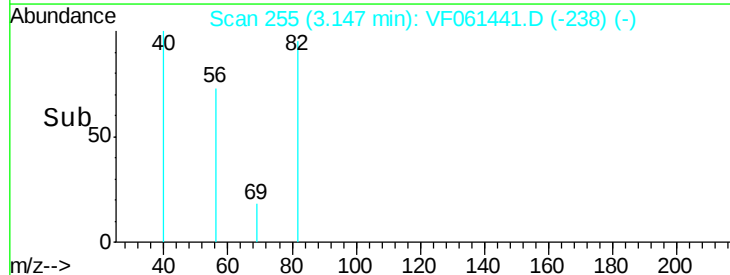
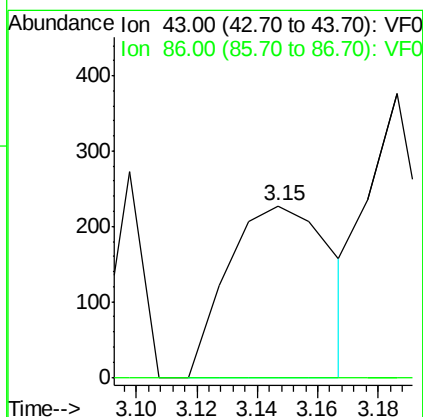
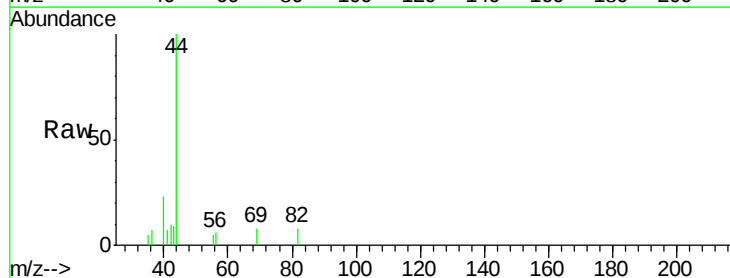
Instrument :  
MSVOA\_F  
ClientSampleId :  
WC-01-011519RE

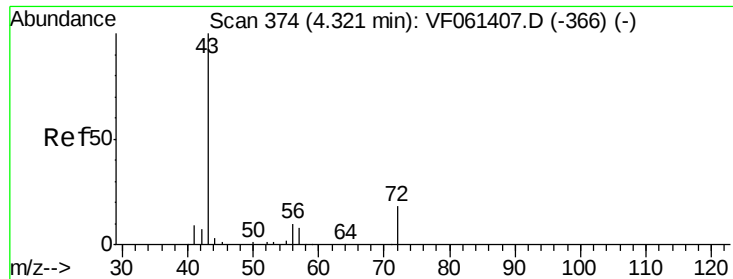
Tot Ion: 84 Resp: 4797  
Ion Ratio Lower Upper  
84 100  
49 110.0 120.0 180.0#  
51 35.5 38.6 58.0#  
86 64.0 61.0 91.6



#23  
Vinyl Acetate  
Concen: 3.392 ug/l  
RT: 3.15 min Scan# 255  
Delta R.T. -0.03 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

Tgt Ion: 43 Resp: 544  
Ion Ratio Lower Upper  
43 100  
86 0.0 6.2 9.4#





#25

2-Butanone

Concen: 1.354 ug/l

RT: 4.29 min Scan# 371

Delta R.T. -0.03 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

Instrument :

MSVOA\_F

ClientSampleId :

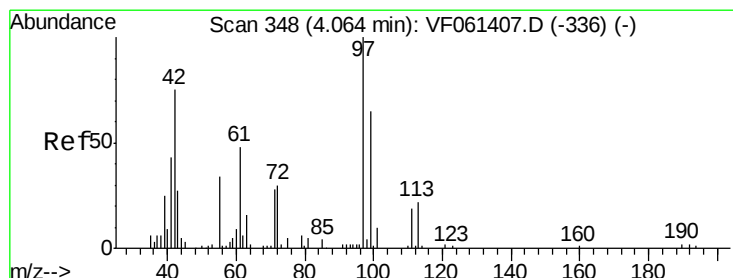
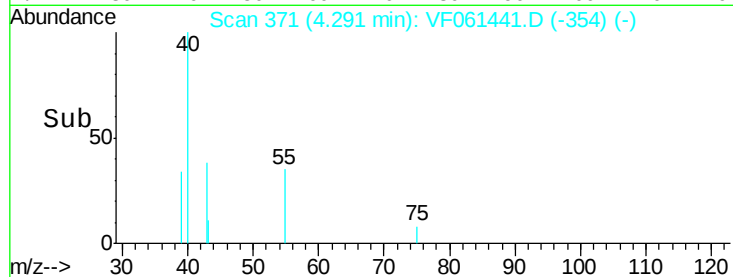
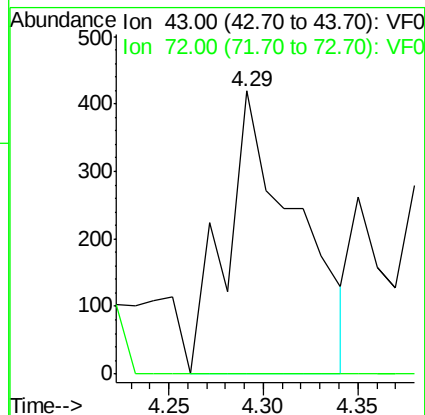
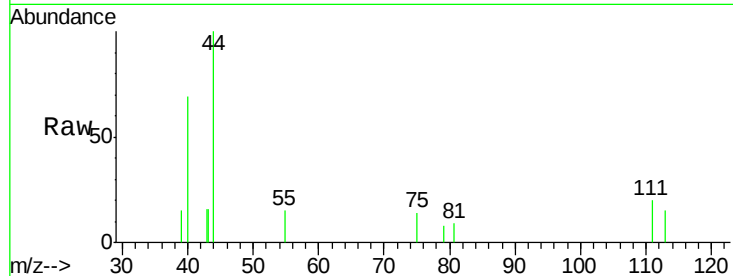
WC-01-011519RE

Tot Ion: 43 Resp: 1083

Ion Ratio Lower Upper

43 100

72 0.0 15.8 23.6#



#29

Tetrahydrofuran

Concen: 2.708 ug/l

RT: 4.08 min Scan# 350

Delta R.T. 0.02 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

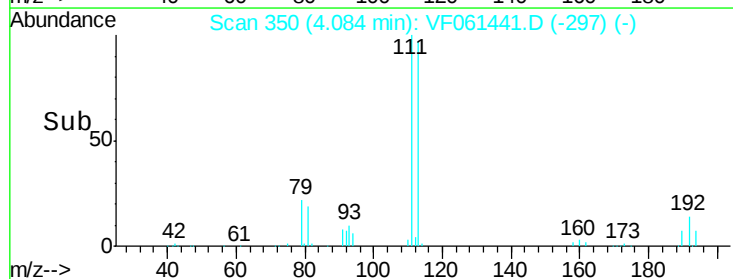
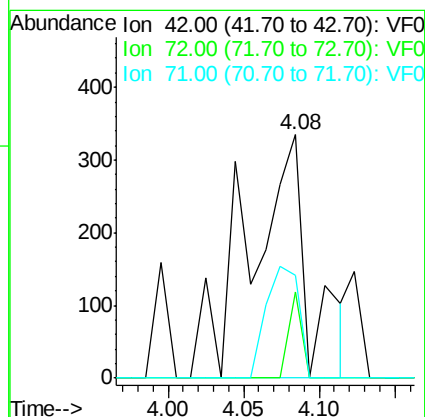
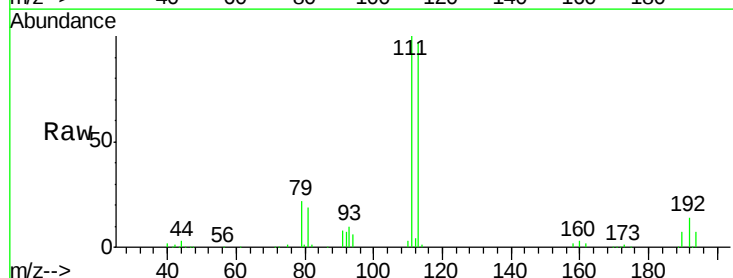
Tgt Ion: 42 Resp: 933

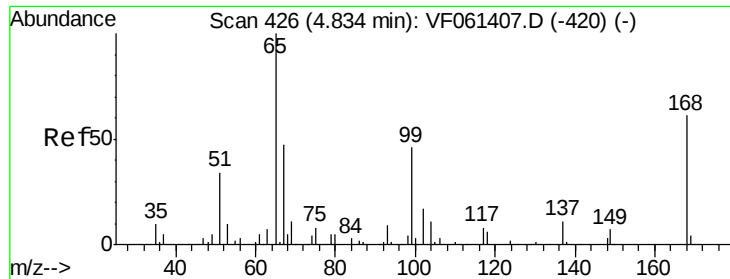
Ion Ratio Lower Upper

42 100

72 7.5 28.9 43.3#

71 25.1 29.6 44.4#





#33

1,2-Dichloroethane-d4

Concen: 47.818 ug/l

RT: 4.81 min Scan# 424

Delta R.T. -0.02 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

Instrument :

MSVOA\_F

ClientSampleId :

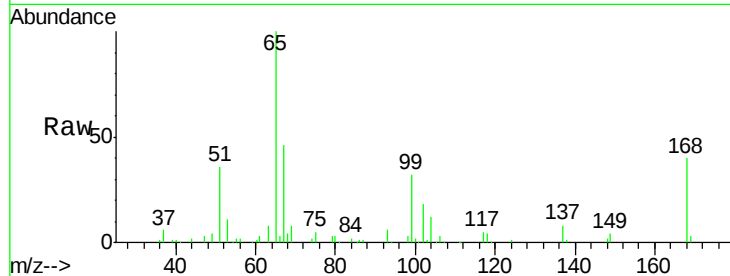
WC-01-011519RE

Tot Ion: 65 Resp: 114678

Ion Ratio Lower Upper

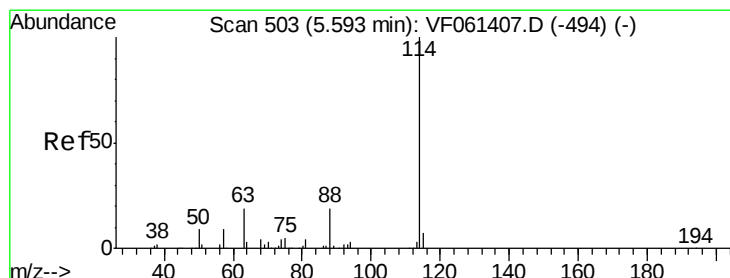
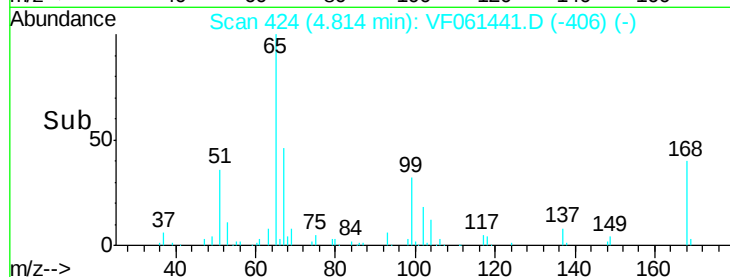
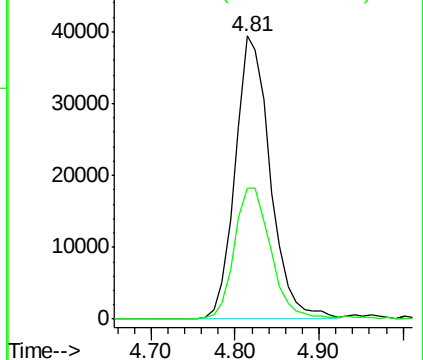
65 100

67 46.3 0.0 99.8



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.57 min Scan# 501

Delta R.T. -0.02 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

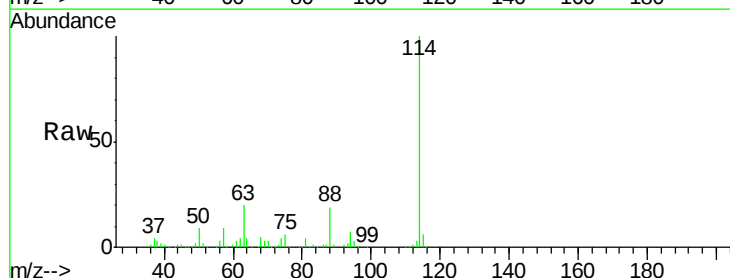
Tgt Ion: 114 Resp: 337009

Ion Ratio Lower Upper

114 100

63 20.1 0.0 39.0

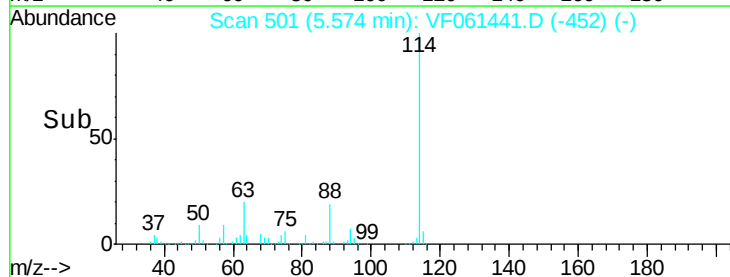
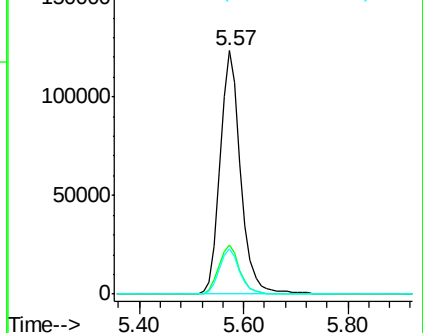
88 18.8 0.0 37.4

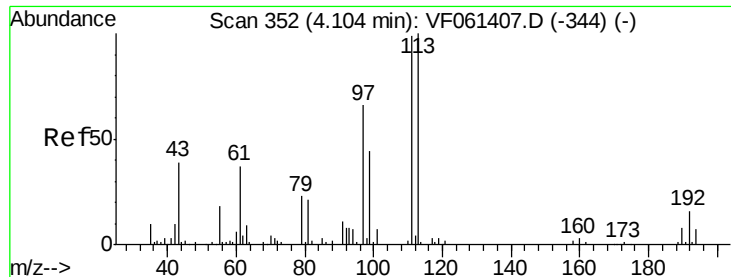


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0

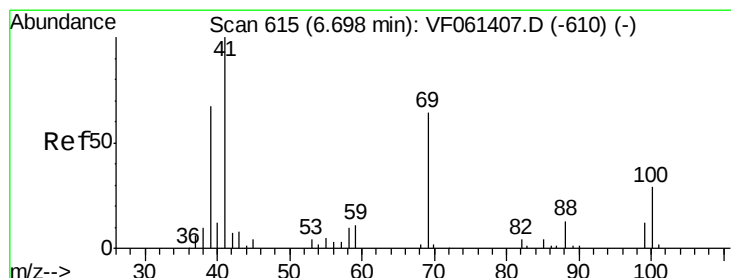
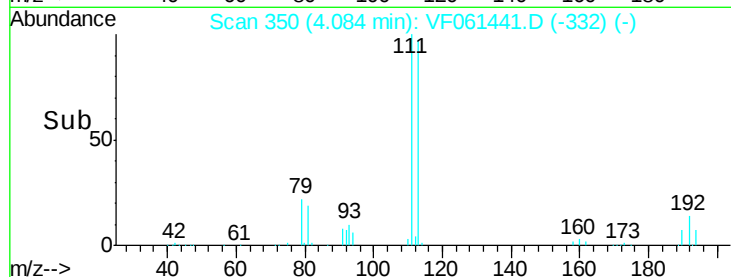
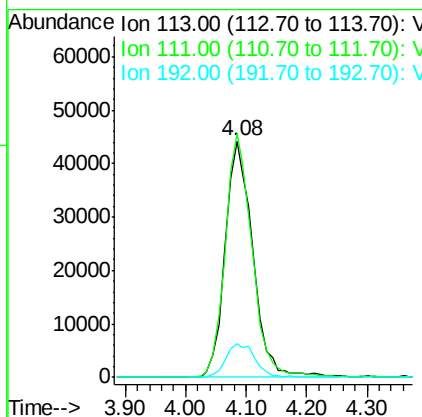
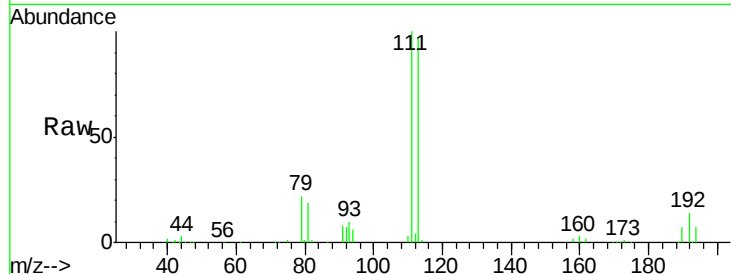




#35  
 Dibromofluoromethane  
 Concen: 52.705 ug/l  
 RT: 4.08 min Scan# 350  
 Delta R.T. -0.02 min  
 Lab File: VF061441.D  
 Acq: 17 Jan 2019 13:32

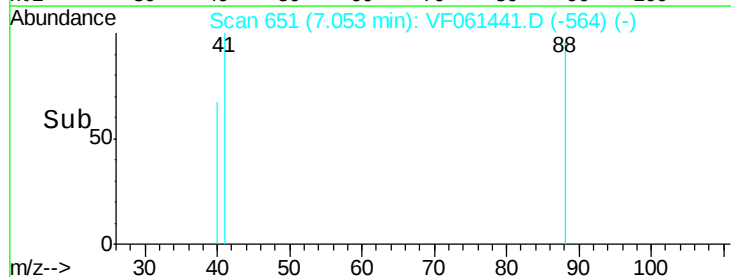
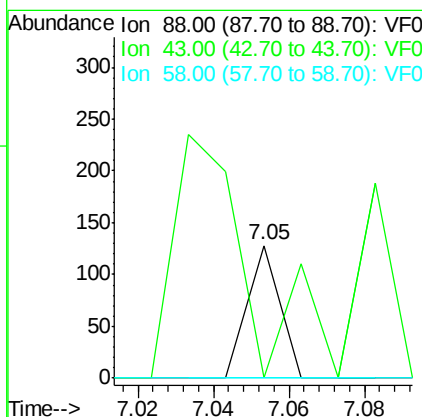
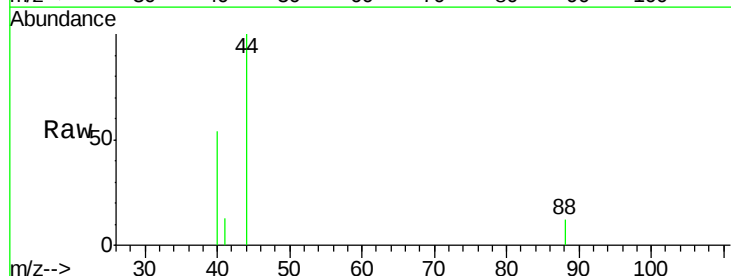
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WC-01-011519RE

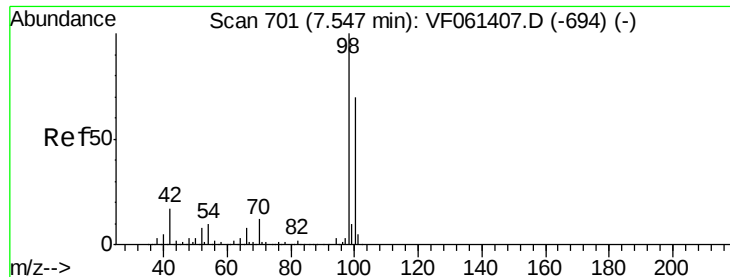
Tot Ion:113 Resp: 140159  
 Ion Ratio Lower Upper  
 113 100  
 111 103.1 79.4 119.0  
 192 14.4 12.4 18.6



#49  
 1,4-Dioxane  
 Concen: Below Cal  
 RT: 7.05 min Scan# 651  
 Delta R.T. 0.36 min  
 Lab File: VF061441.D  
 Acq: 17 Jan 2019 13:32

Tgt Ion: 88 Resp: 76  
 Ion Ratio Lower Upper  
 88 100  
 43 0.0 55.5 83.3#  
 58 0.0 59.9 89.9#





#50

Toluene-d8

Concen: 44.993 ug/l

RT: 7.54 min Scan# 700

Delta R.T. -0.01 min

Lab File: VF061441.D

Acq: 17 Jan 2019 13:32

Instrument :

MSVOA\_F

ClientSampleId :

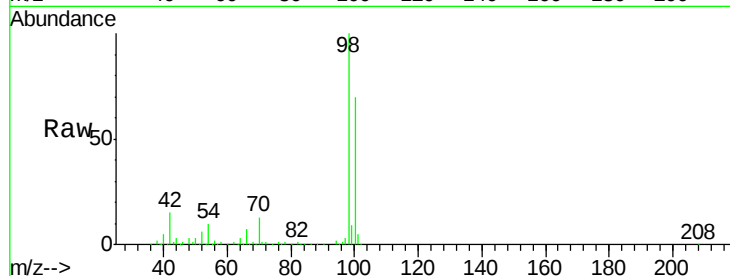
WC-01-011519RE

Tot Ion: 98 Resp: 327816

Ion Ratio Lower Upper

98 100

100 69.8 55.6 83.4



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0

7.54

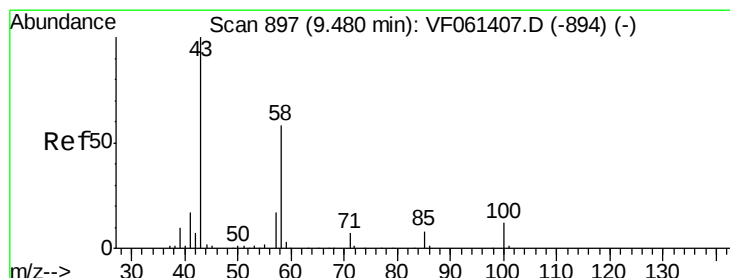
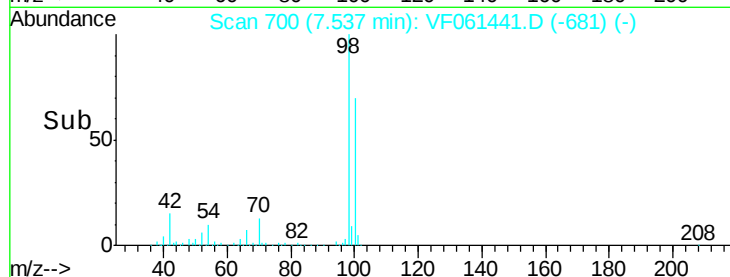
150000

100000

50000

0

Time-->



#59

2-Hexanone

Concen: 1.380 ug/l

RT: 9.48 min Scan# 897

Delta R.T. -0.00 min

Lab File: VF061441.D

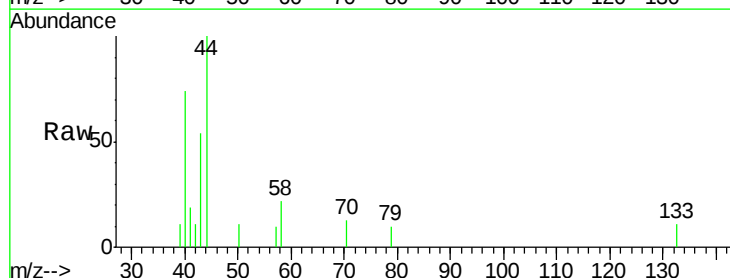
Acq: 17 Jan 2019 13:32

Tgt Ion: 43 Resp: 1387

Ion Ratio Lower Upper

43 100

58 39.6 25.9 77.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

9.48

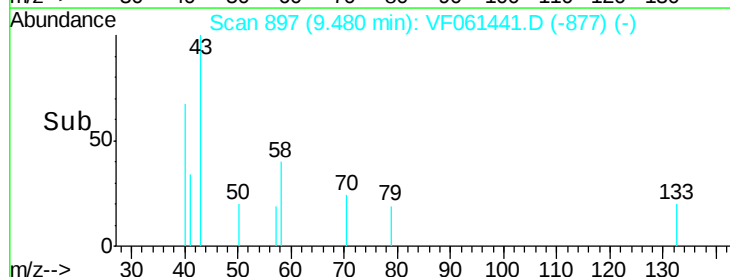
600

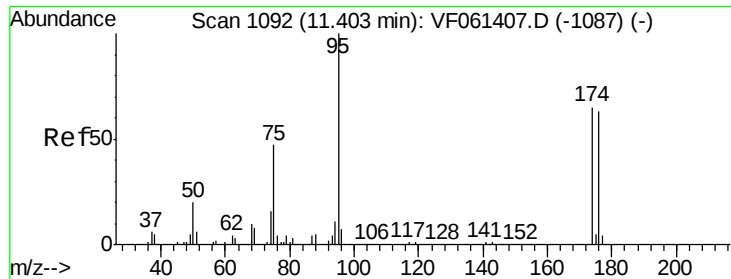
400

200

0

Time-->

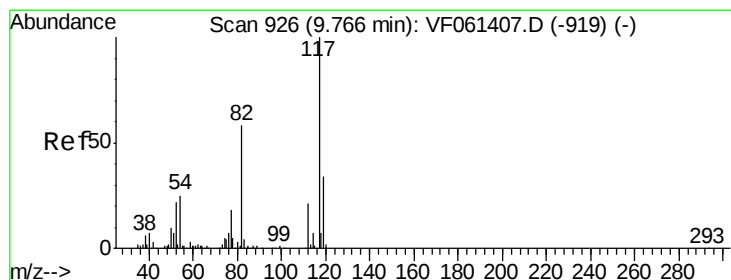
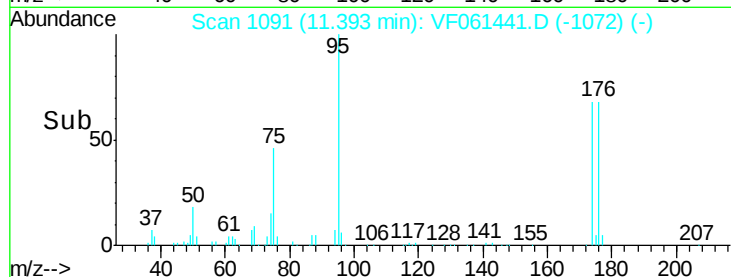
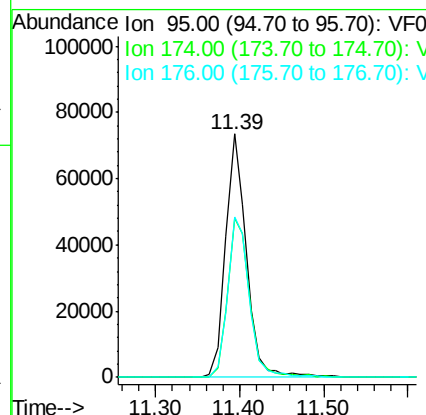
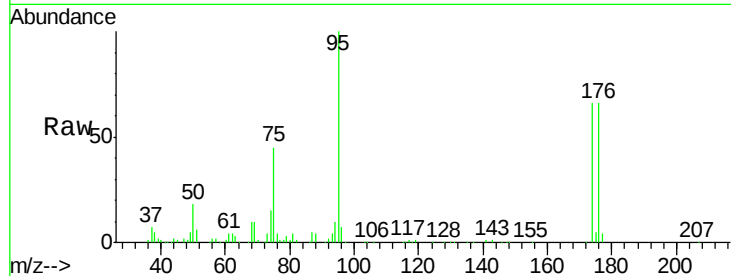




#62  
4-Bromofluorobenzene  
Concen: 37.342 ug/l  
RT: 11.39 min Scan# 1091  
Delta R.T. -0.01 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

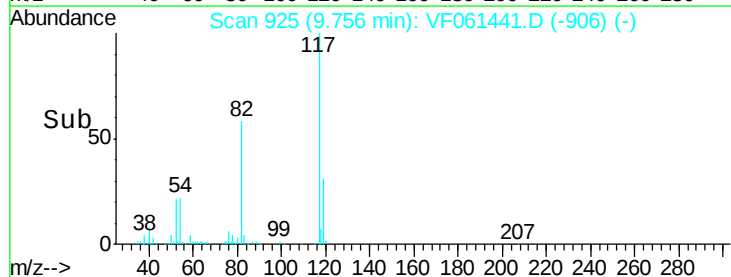
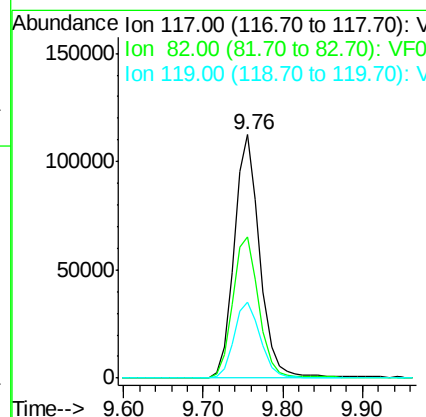
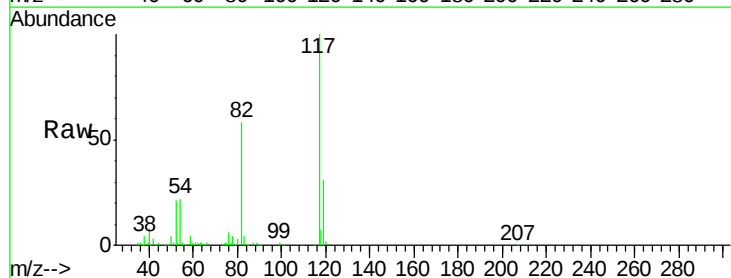
Instrument :  
MSVOA\_F  
ClientSampleId :  
WC-01-011519RE

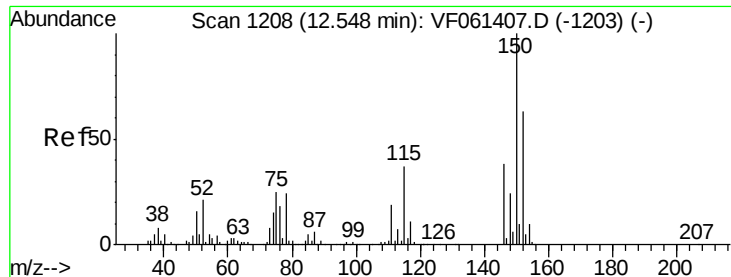
Tot Ion: 95 Resp: 127120  
Ion Ratio Lower Upper  
95 100  
174 65.5 0.0 130.4  
176 65.7 0.0 126.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.76 min Scan# 925  
Delta R.T. -0.01 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

Tgt Ion: 117 Resp: 252929  
Ion Ratio Lower Upper  
117 100  
82 57.8 46.4 69.6  
119 31.2 27.2 40.8



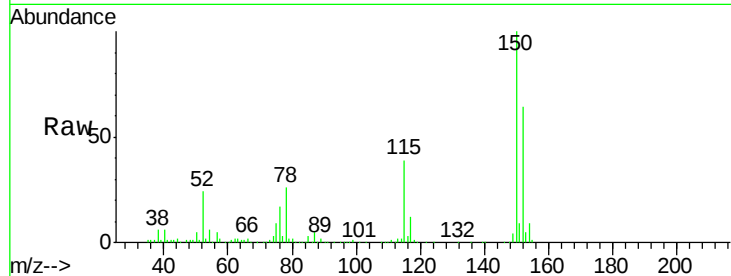


#72

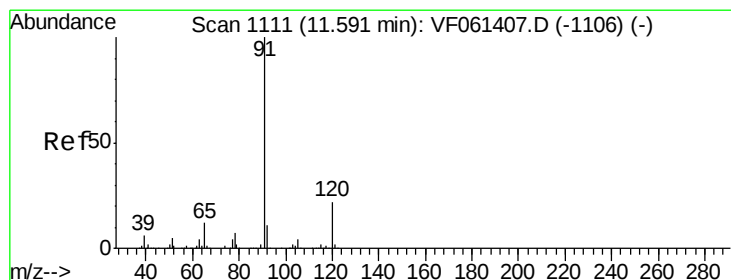
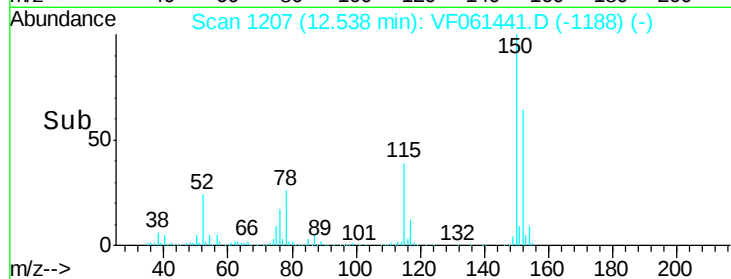
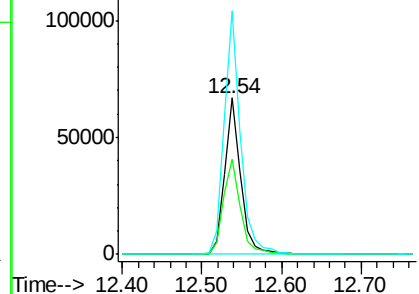
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.54 min Scan# 1207  
Delta R.T. -0.01 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

Instrument :  
MSVOA\_F  
ClientSampleId :  
WC-01-011519RE

Tot Ion:152 Resp: 95847  
Ion Ratio Lower Upper  
152 100  
115 60.8 30.0 90.0  
150 156.1 0.0 321.4



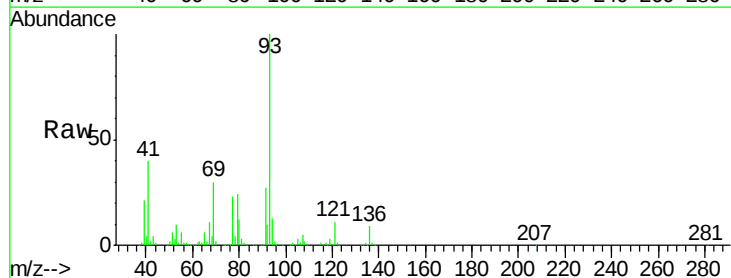
Abundance Ion 152.00 (151.70 to 152.70): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 150.00 (149.70 to 150.70): V



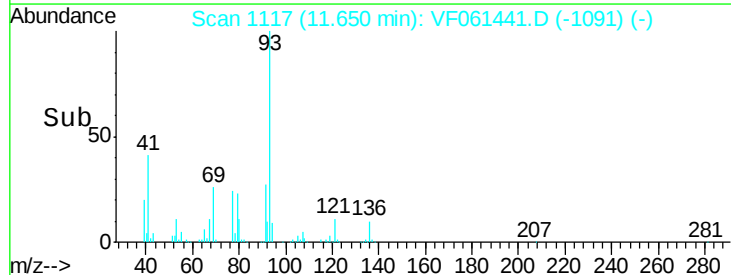
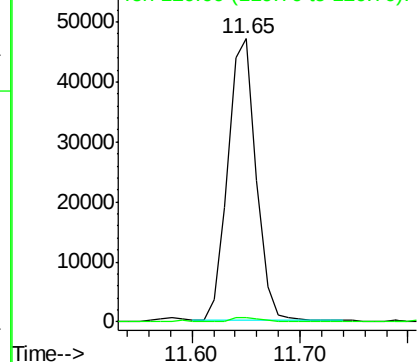
#78

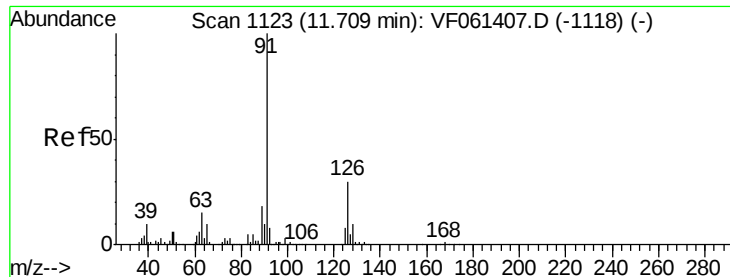
n-propylbenzene  
Concen: 8.276 ug/l  
RT: 11.65 min Scan# 1117  
Delta R.T. 0.06 min  
Lab File: VF061441.D  
Acq: 17 Jan 2019 13:32

Tgt Ion: 91 Resp: 85011  
Ion Ratio Lower Upper  
91 100  
120 1.7 10.9 32.6#



Abundance Ion 91.00 (90.70 to 91.70): VF0  
Ion 120.00 (119.70 to 120.70): V





#79  
 2-Chlorotoluene  
 Concen: 16.167 ug/l  
 RT: 11.65 min Scan# 1117  
 Delta R.T. -0.06 min  
 Lab File: VF061441.D  
 Acq: 17 Jan 2019 13:32

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WC-01-011519RE

Tot Ion: 91 Resp: 87443  
 Ion Ratio Lower Upper  
 91 100  
 126 0.0 15.0 45.1#

