

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF102618\  
 Data File : VF060521.D  
 Acq On : 26 Oct 2018 17:29  
 Operator : VA/AP  
 Sample : J5515-05  
 Misc : 5.91/5mL/MSVOA F/SOIL  
 ALS Vial : 37 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 AOC1-07A

Quant Time: Oct 27 01:50:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F102518S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 26 02:17:41 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.05  | 168  | 283607   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 477445   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 447371   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 261779   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.02  | 65   | 229503   | 40.71 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 81.42% |          |
| 35) Dibromofluoromethane    | 4.30  | 113  | 228673   | 39.96 | ug/l   | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 79.92% |          |
| 50) Toluene-d8              | 7.71  | 98   | 555443   | 48.36 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.72% |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 264872   | 41.41 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 82.82% |          |

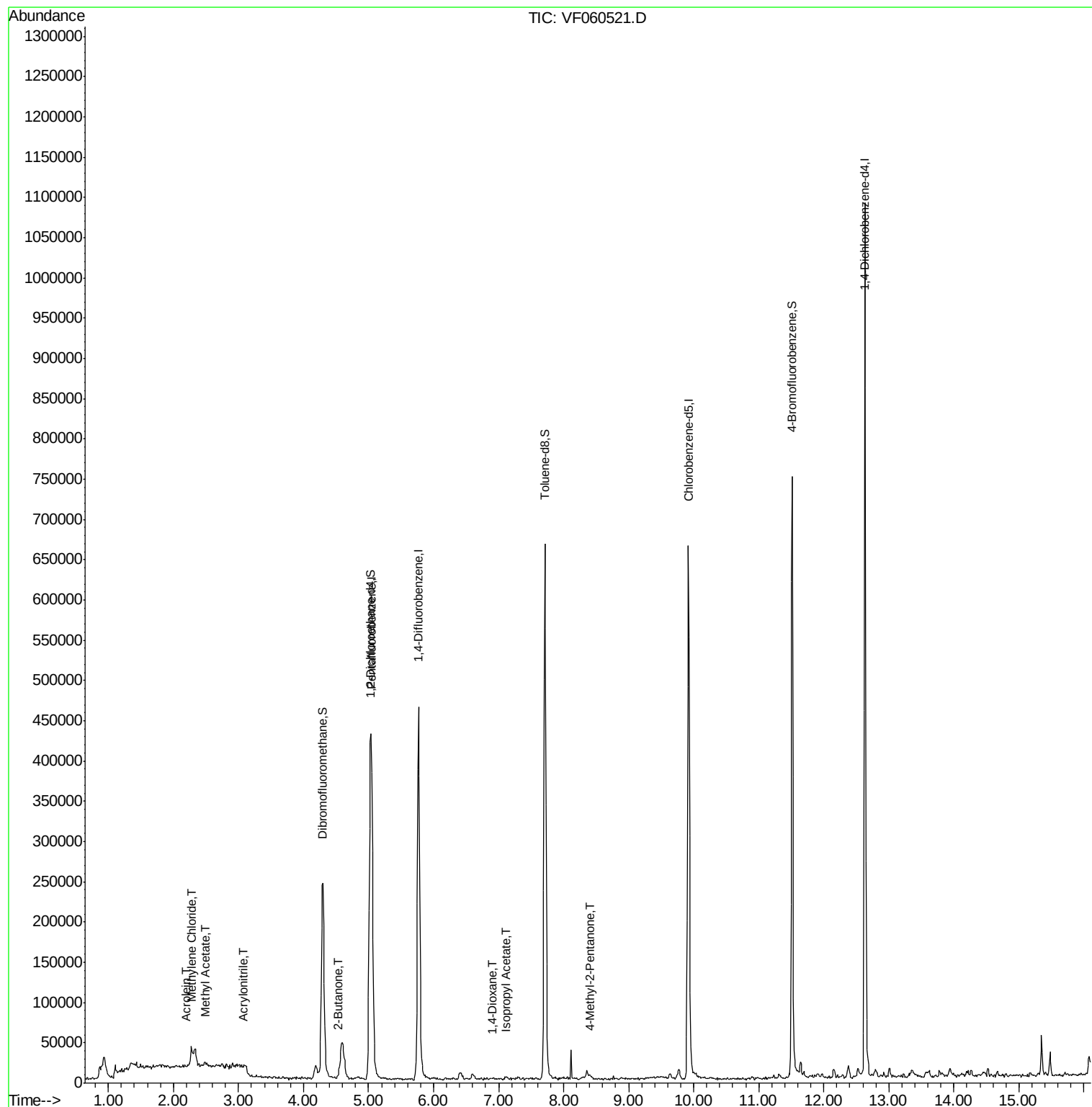
| Target Compounds           | R.T. | QIon | Response | Conc      | Units  | Qvalue |
|----------------------------|------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane | 1.00 | 85   | 952      | Below Cal |        | 80     |
| 11) Tert butyl alcohol     | 2.70 | 59   | 1425     | Below Cal | #      | 28     |
| 13) Acrolein               | 2.20 | 56   | 1349     | 5.381     | ug/l   | 98     |
| 15) Acrylonitrile          | 3.07 | 53   | 507      | 1.117     | ug/l # | 55     |
| 16) Acetone                | 2.34 | 43   | 16005    | Below Cal |        | 98     |
| 18) Methyl Acetate         | 2.48 | 43   | 3780     | 2.042     | ug/l # | 87     |
| 20) Methylene Chloride     | 2.28 | 84   | 21136    | 2.490     | ug/l # | 78     |
| 25) 2-Butanone             | 4.53 | 43   | 1675     | 1.673     | ug/l   | 98     |
| 29) Tetrahydrofuran        | 4.14 | 42   | 212      | Below Cal |        | 92     |
| 37) Ethyl Acetate          | 4.32 | 43   | 536      | Below Cal | #      | 1      |
| 43) Isopropyl Acetate      | 7.12 | 43   | 4196     | 1.723     | ug/l # | 77     |
| 49) 1,4-Dioxane            | 6.90 | 88   | 397      | 25.100    | ug/l # | 2      |
| 51) 4-Methyl-2-Pentanone   | 8.41 | 43   | 5537     | 2.911     | ug/l   | 95     |
| 59) 2-Hexanone             | 9.64 | 43   | 5003     | Below Cal |        | 100    |

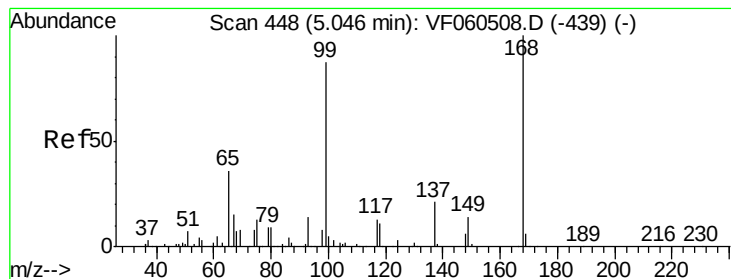
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF102618\  
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Operator : VA/AP  
Sample : J5515-05  
Misc : 5.91/5mL/MSVOA F/SOIL  
ALS Vial : 37 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
AOC1-07A

Quant Time: Oct 27 01:50:56 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F102518S.M  
Quant Title : SW846 8260  
QLast Update : Fri Oct 26 02:17:41 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.05 min Scan# 448

Delta R.T. 0.00 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

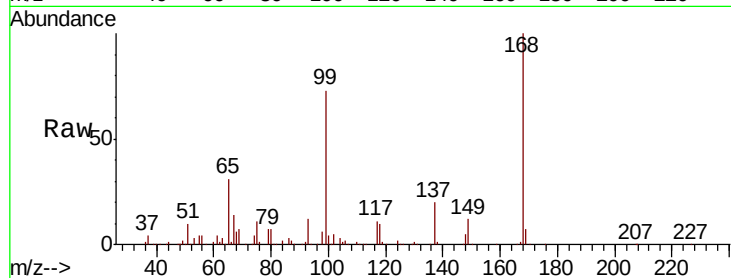
AOC1-07A

Tot Ion:168 Resp: 283607

Ion Ratio Lower Upper

168 100

99 72.9 69.9 104.9



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.05

100000

80000

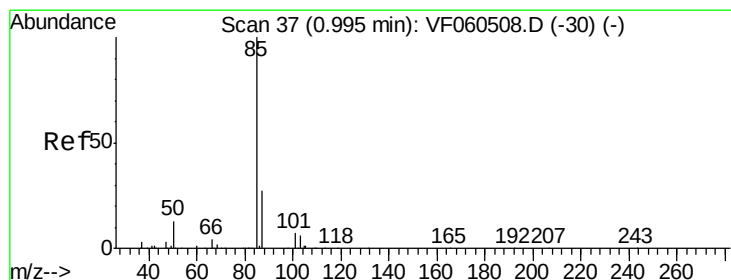
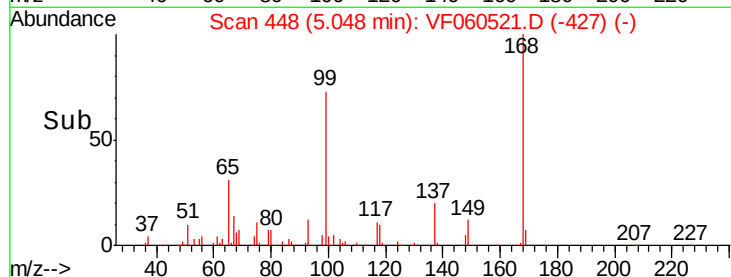
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.00 min Scan# 37

Delta R.T. 0.00 min

Lab File: VF060521.D

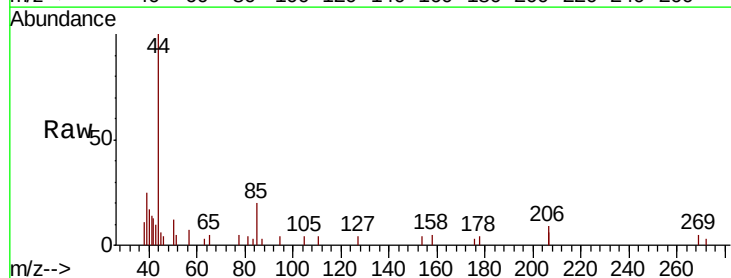
Acq: 26 Oct 2018 17:29

Tgt Ion: 85 Resp: 952

Ion Ratio Lower Upper

85 100

87 16.3 13.5 40.4



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

1.00

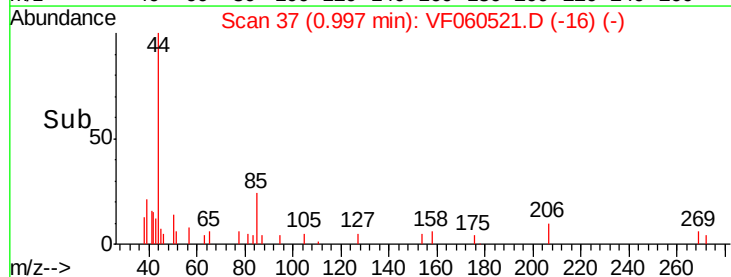
600

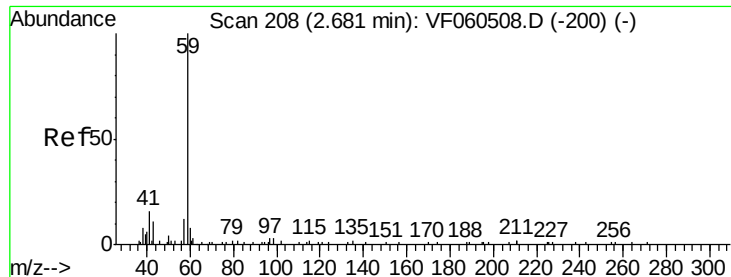
400

200

0

Time-->



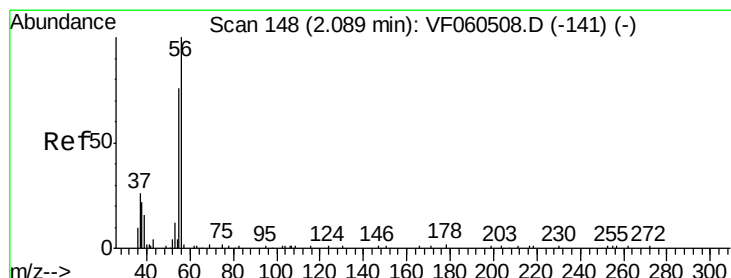
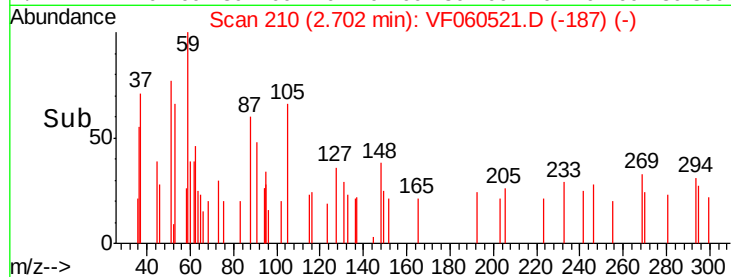
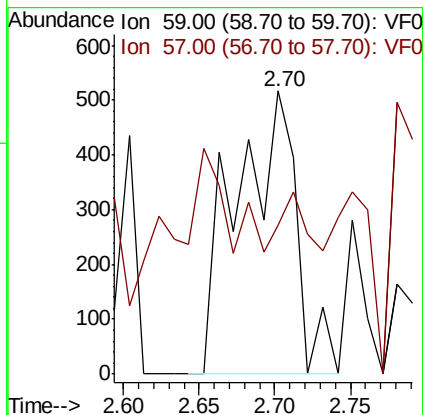
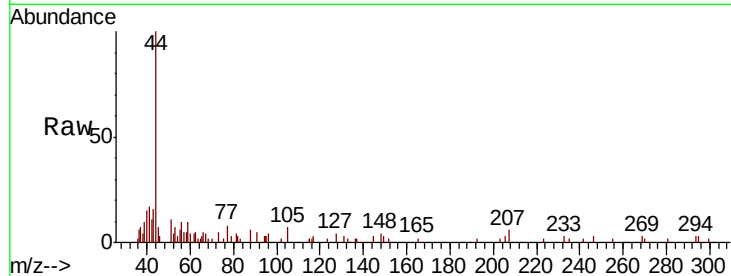


#11

Tert butyl alcohol  
Concen: Below Cal  
RT: 2.70 min Scan# 210  
Delta R.T. 0.02 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

Instrument :  
MSVOA\_F  
ClientSampled :  
AOC1-07A

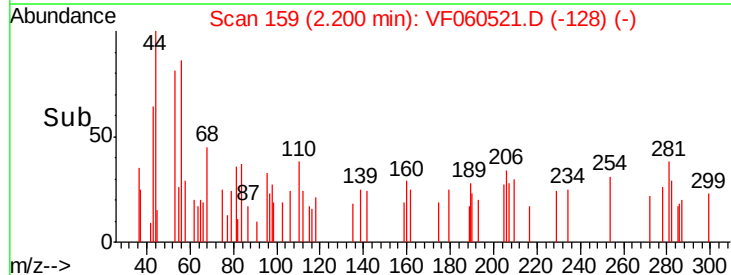
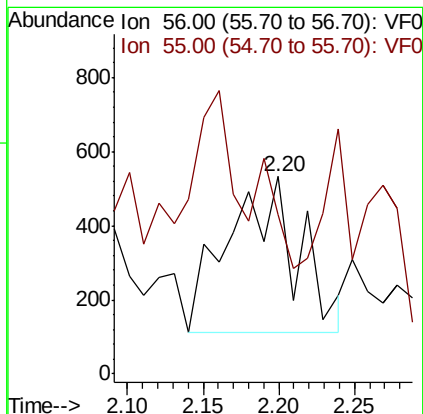
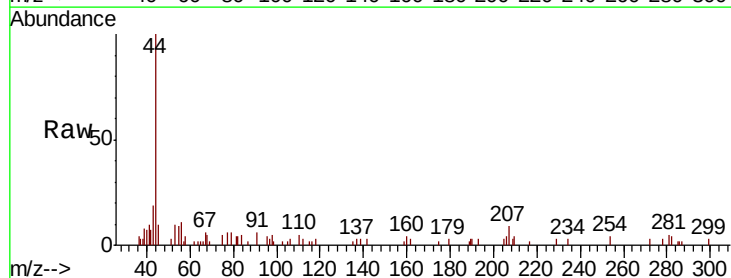
Tot Ion: 59 Resp: 1425  
Ion Ratio Lower Upper  
59 100  
57 52.6 15.8 23.8#

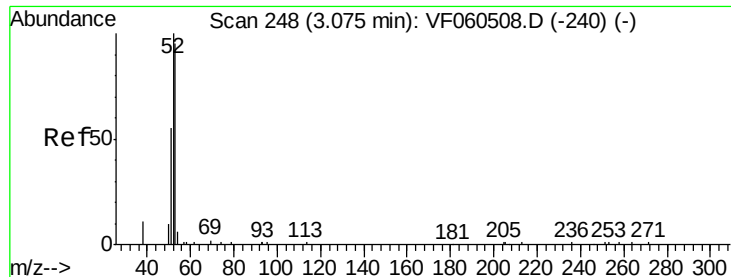


#13

Acrolein  
Concen: 5.381 ug/l  
RT: 2.20 min Scan# 159  
Delta R.T. 0.11 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

Tgt Ion: 56 Resp: 1349  
Ion Ratio Lower Upper  
56 100  
55 80.7 63.0 94.4





#15

Acrylonitrile

Concen: 1.117 ug/l

RT: 3.07 min Scan# 247

Delta R.T. -0.01 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

AOC1-07A

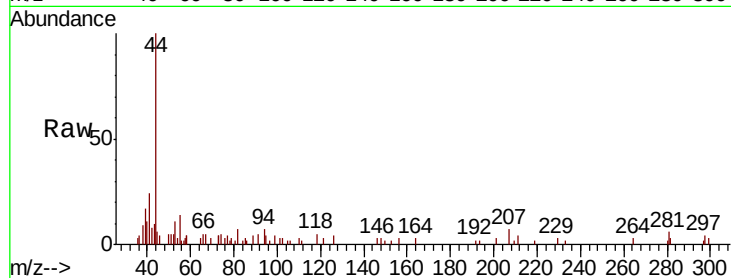
Tot Ion: 53 Resp: 507

Ion Ratio Lower Upper

53 100

52 46.1 84.0 126.0#

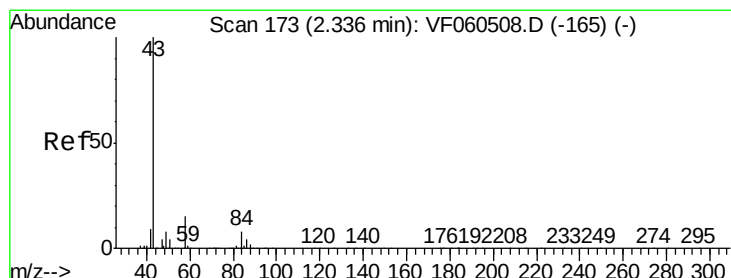
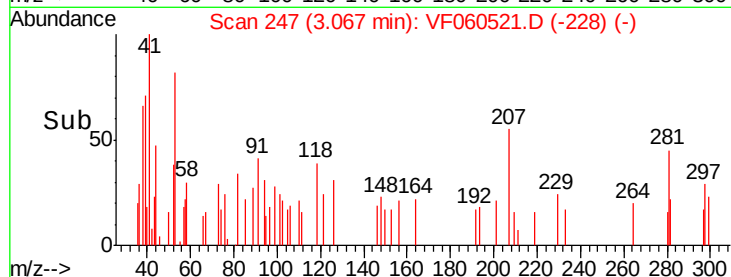
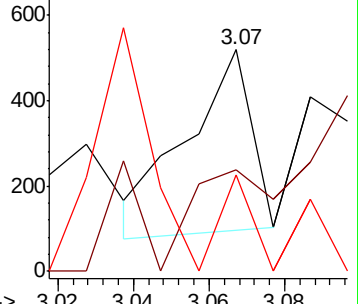
51 43.5 48.6 73.0#



Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0



#16

Acetone

Concen: Below Cal

RT: 2.34 min Scan# 173

Delta R.T. 0.00 min

Lab File: VF060521.D

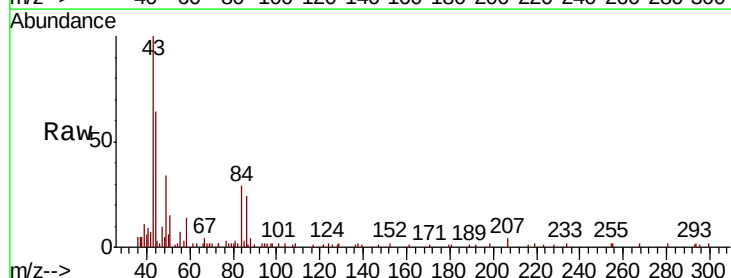
Acq: 26 Oct 2018 17:29

Tgt Ion: 43 Resp: 16005

Ion Ratio Lower Upper

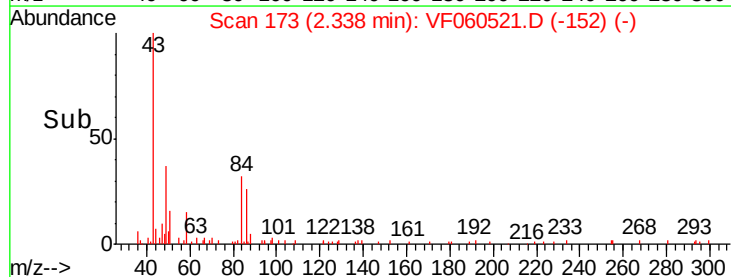
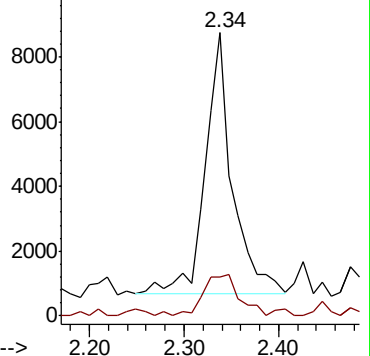
43 100

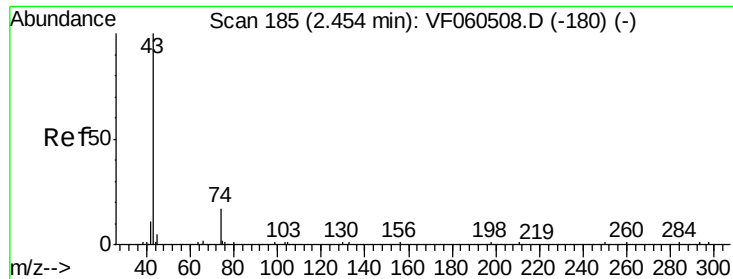
58 13.8 11.7 17.5



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

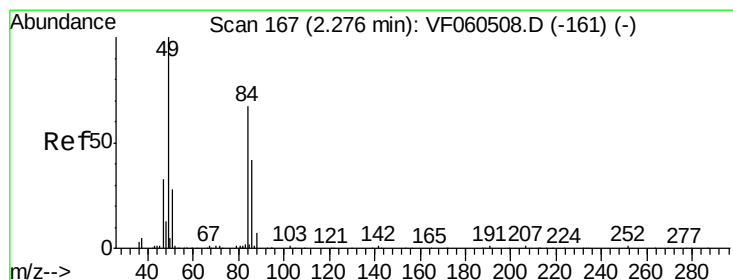
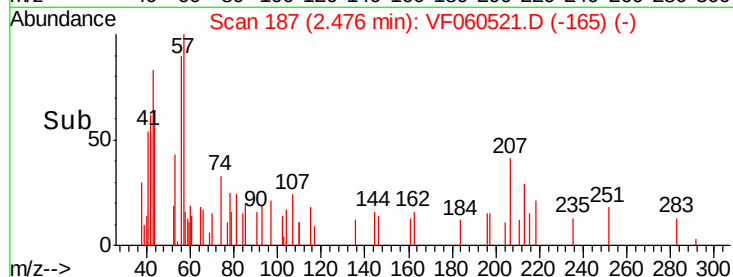
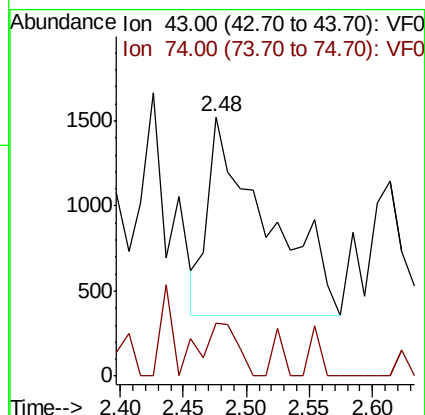
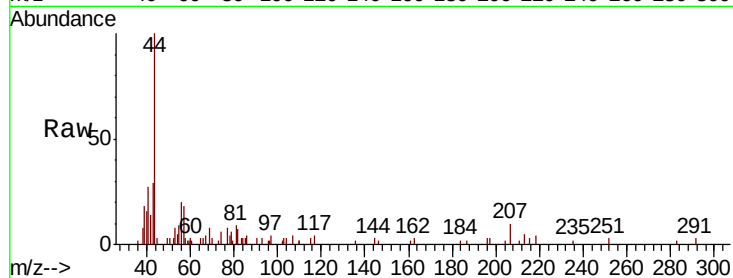




#18  
Methyl Acetate  
Concen: 2.042 ug/l  
RT: 2.48 min Scan# 187  
Delta R.T. 0.02 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

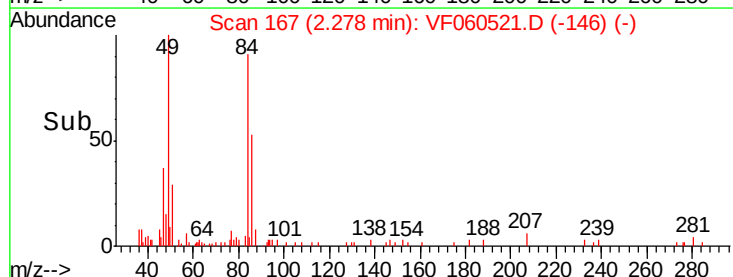
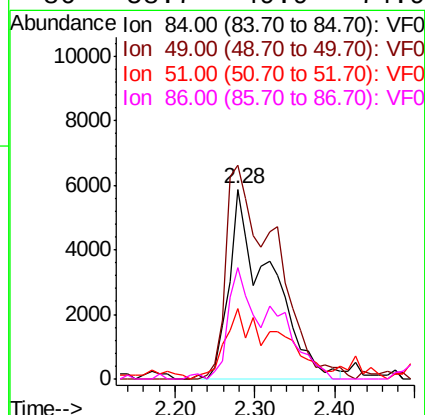
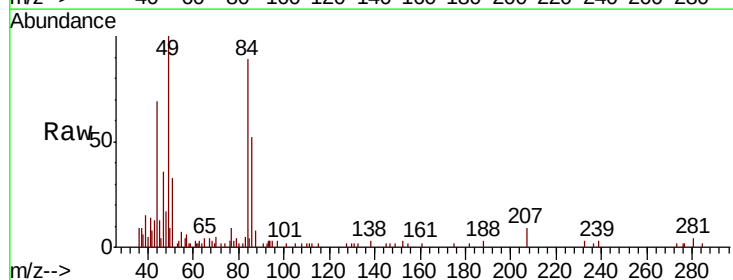
Instrument :  
MSVOA\_F  
ClientSampleId :  
AOC1-07A

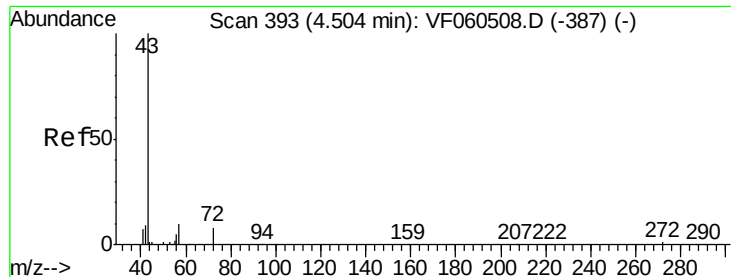
Tot Ion: 43 Resp: 3780  
Ion Ratio Lower Upper  
43 100  
74 20.4 12.1 18.1#



#20  
Methylene Chloride  
Concen: 2.490 ug/l  
RT: 2.28 min Scan# 167  
Delta R.T. 0.00 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

Tgt Ion: 84 Resp: 21136  
Ion Ratio Lower Upper  
84 100  
49 112.6 123.1 184.7#  
51 37.3 35.3 52.9  
86 58.7 49.9 74.9





#25

2-Butanone

Concen: 1.673 ug/l

RT: 4.53 min Scan# 395

Delta R.T. 0.02 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

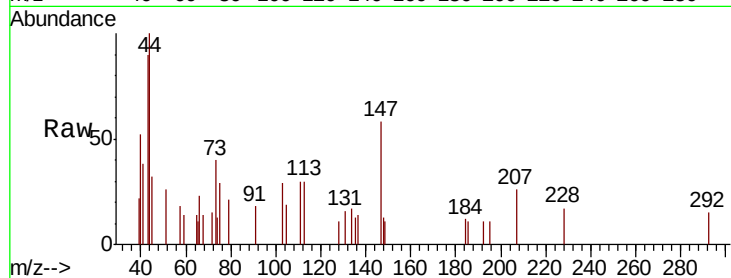
AOC1-07A

Tot Ion: 43 Resp: 1675

Ion Ratio Lower Upper

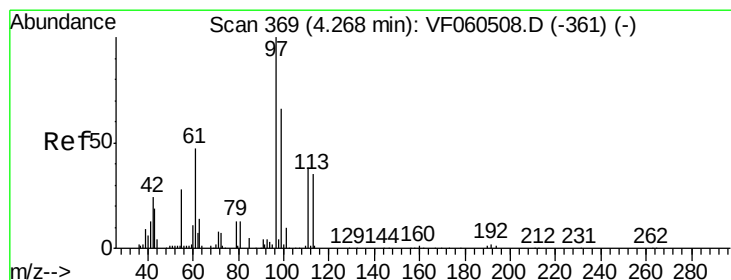
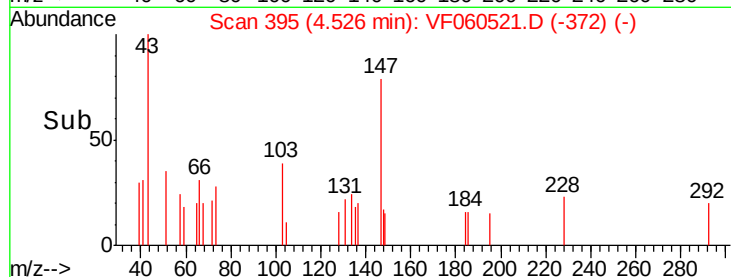
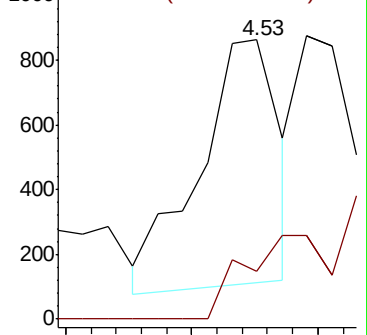
43 100

72 17.1 13.0 19.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#29

Tetrahydrofuran

Concen: Below Cal

RT: 4.14 min Scan# 356

Delta R.T. -0.13 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

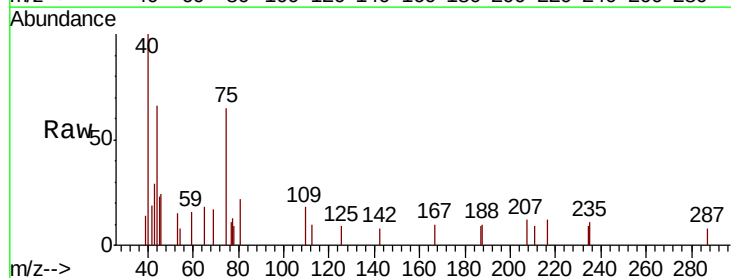
Tgt Ion: 42 Resp: 212

Ion Ratio Lower Upper

42 100

72 42.5 32.1 48.1

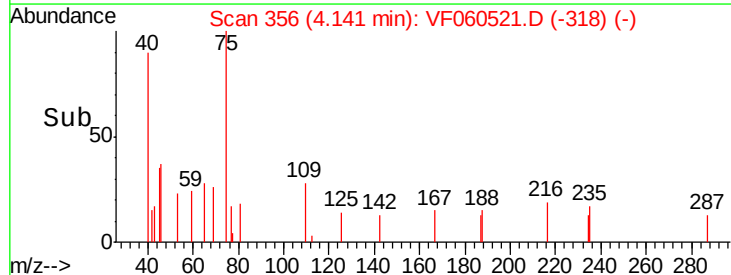
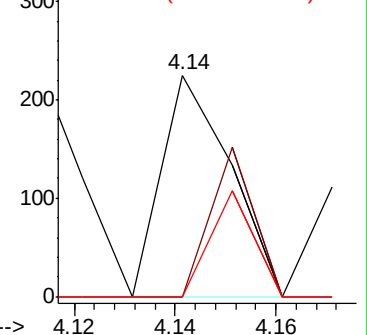
71 29.7 29.7 44.5

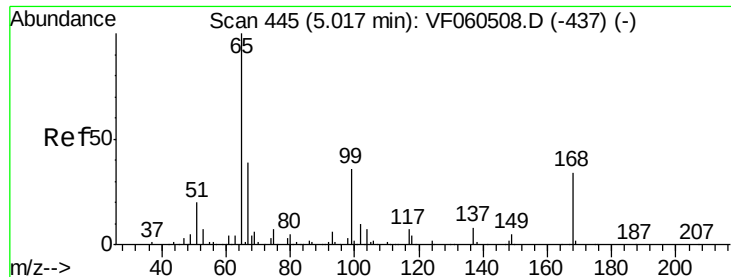


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0

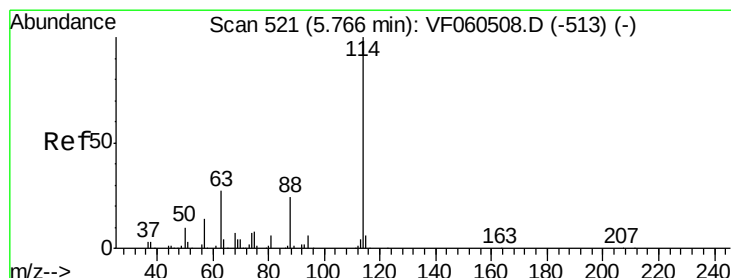
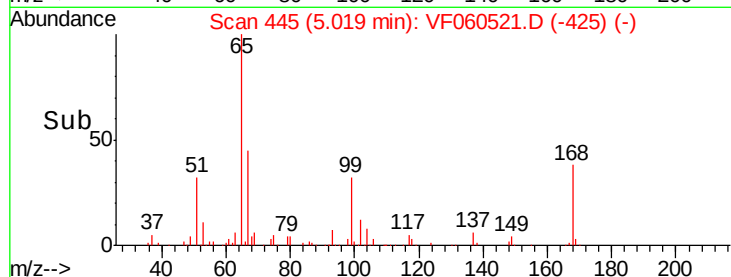
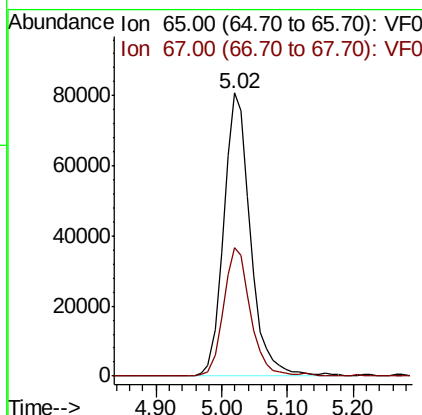
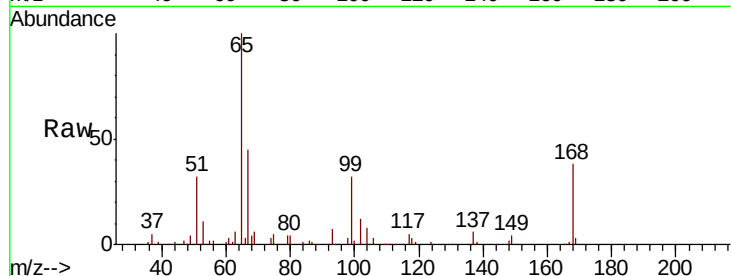




#33  
 1,2-Dichloroethane-d4  
 Concen: 40.715 ug/l  
 RT: 5.02 min Scan# 445  
 Delta R.T. 0.00 min  
 Lab File: VF060521.D  
 Acq: 26 Oct 2018 17:29

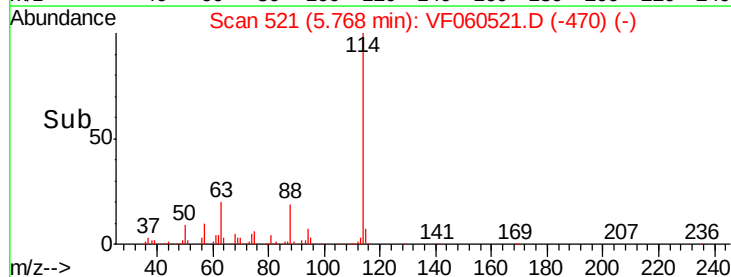
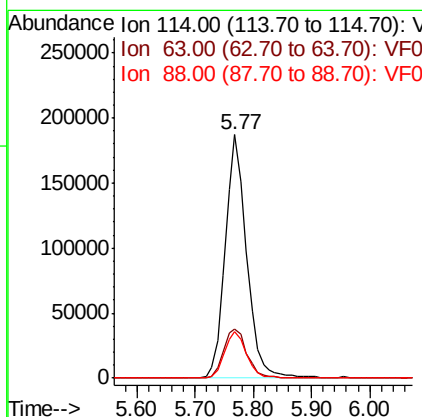
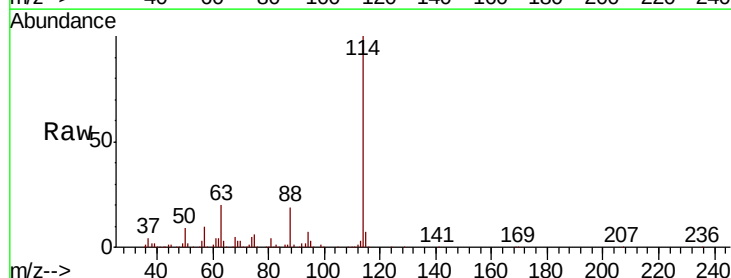
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 AOC1-07A

Tot Ion: 65 Resp: 229503  
 Ion Ratio Lower Upper  
 65 100  
 67 45.3 0.0 85.8

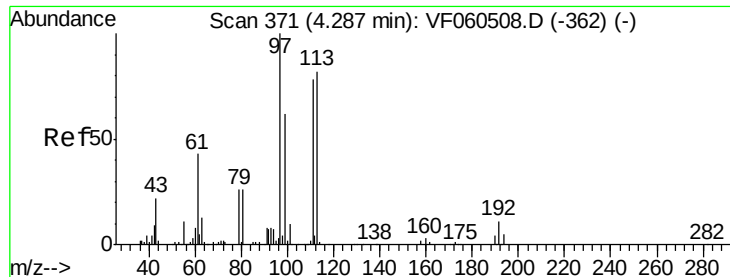


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.77 min Scan# 521  
 Delta R.T. 0.00 min  
 Lab File: VF060521.D  
 Acq: 26 Oct 2018 17:29

Tgt Ion: 114 Resp: 477445  
 Ion Ratio Lower Upper  
 114 100  
 63 20.2 0.0 54.4  
 88 19.1 0.0 47.2



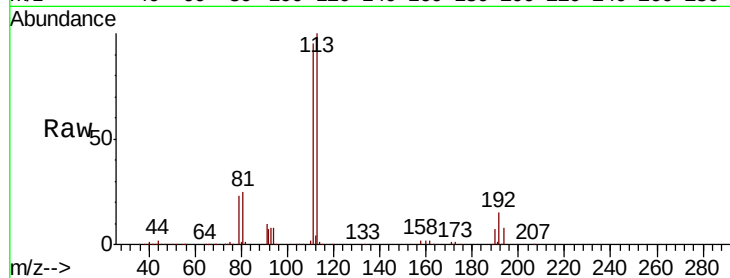




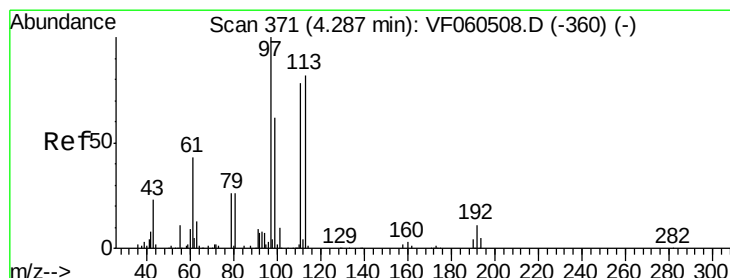
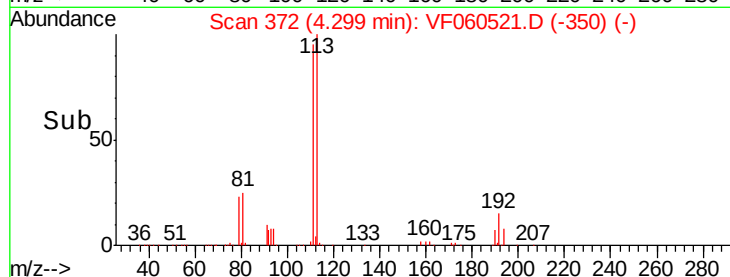
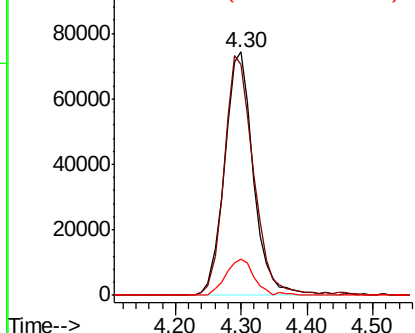
#35  
 Dibromofluoromethane  
 Concen: 39.957 ug/l  
 RT: 4.30 min Scan# 372  
 Delta R.T. 0.01 min  
 Lab File: VF060521.D  
 Acq: 26 Oct 2018 17:29

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 AOC1-07A

Tot Ion:113 Resp: 228673  
 Ion Ratio Lower Upper  
 113 100  
 111 94.7 75.9 113.9  
 192 14.7 10.6 15.8

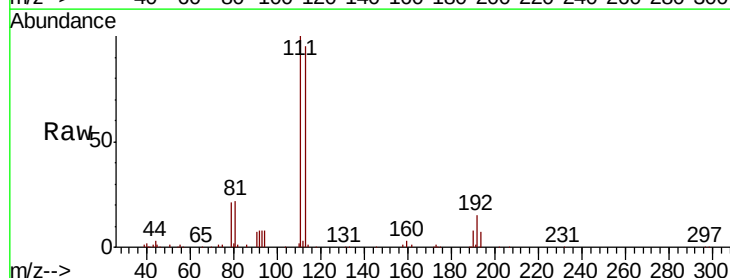


Abundance Ion 113.00 (112.70 to 113.70): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 192.00 (191.70 to 192.70): V

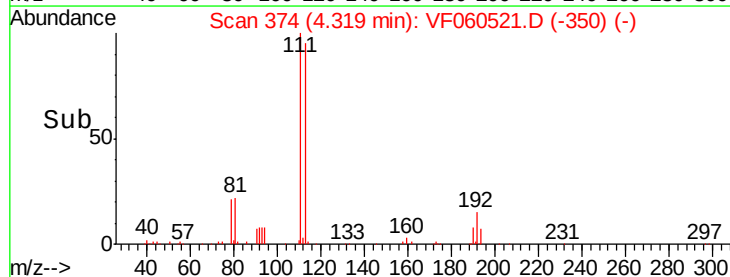
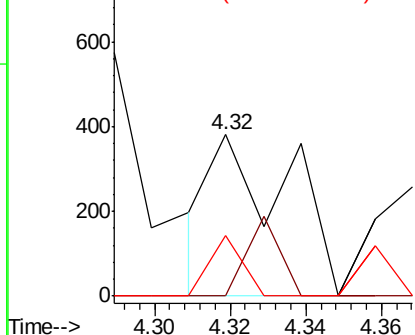


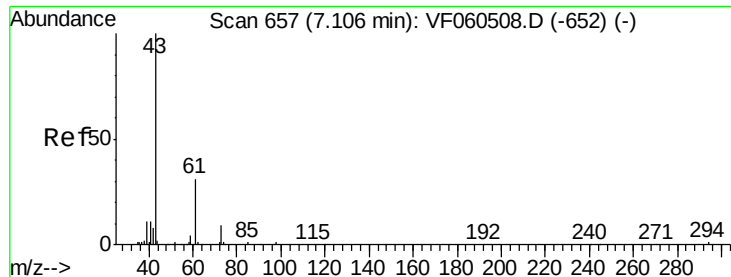
#37  
 Ethyl Acetate  
 Concen: Below Cal  
 RT: 4.32 min Scan# 374  
 Delta R.T. 0.03 min  
 Lab File: VF060521.D  
 Acq: 26 Oct 2018 17:29

Tgt Ion: 43 Resp: 536  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 148.5 222.7#  
 70 37.3 4.7 7.1#



Abundance Ion 43.00 (42.70 to 43.70): VF0  
 Ion 61.00 (60.70 to 61.70): VF0  
 Ion 70.00 (69.70 to 70.70): VF0





#43

Isopropyl Acetate

Concen: 1.723 ug/l

RT: 7.12 min Scan# 658

Delta R.T. 0.01 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

AOC1-07A

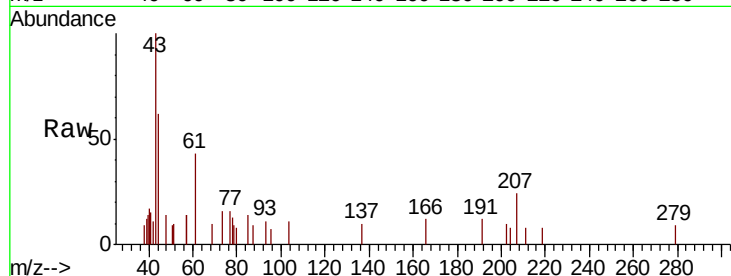
Tot Ion: 43 Resp: 4196

Ion Ratio Lower Upper

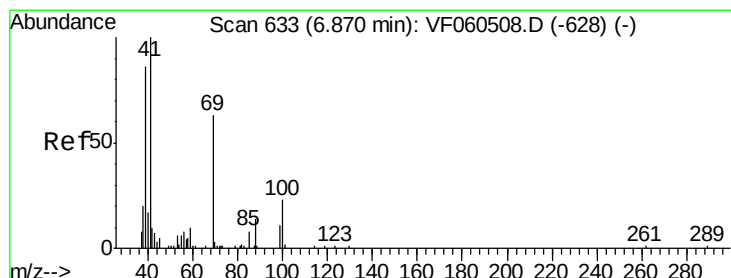
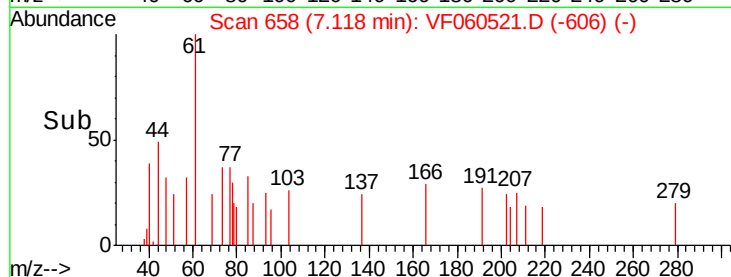
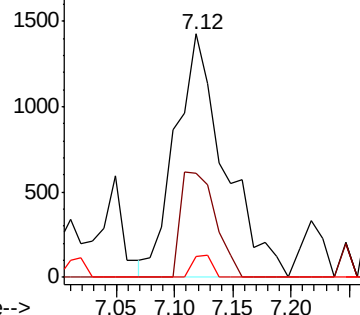
43 100

61 42.8 24.4 36.6#

87 8.5 0.0 0.0#



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



#49

1,4-Dioxane

Concen: 25.100 ug/l

RT: 6.90 min Scan# 636

Delta R.T. 0.03 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

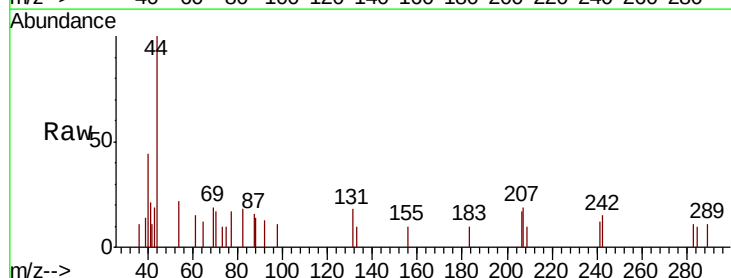
Tgt Ion: 88 Resp: 397

Ion Ratio Lower Upper

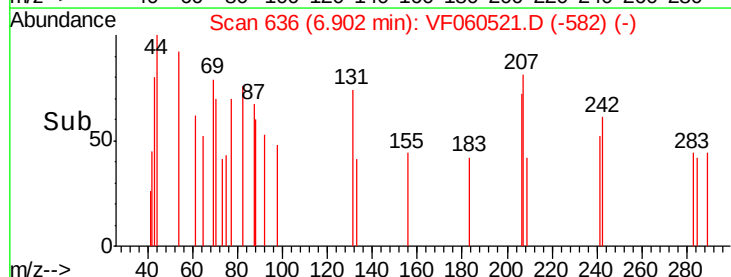
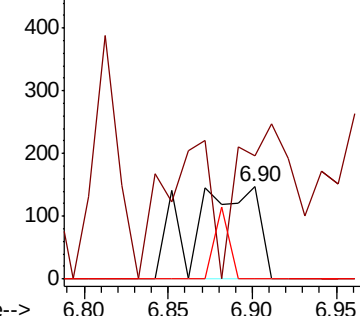
88 100

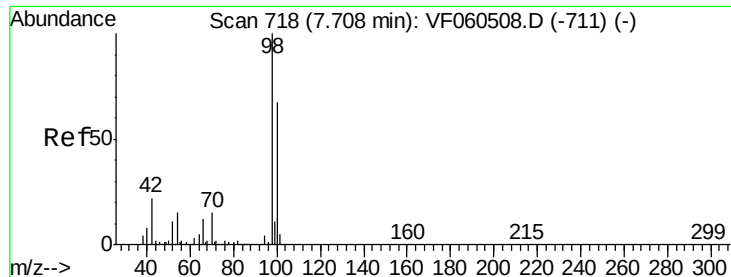
43 134.0 39.3 58.9#

58 0.0 35.0 52.6#



Abundance Ion 88.00 (87.70 to 88.70): VF0  
Ion 43.00 (42.70 to 43.70): VF0  
Ion 58.00 (57.70 to 58.70): VF0





#50

Toluene-d8

Concen: 48.362 ug/l

RT: 7.71 min Scan# 718

Delta R.T. 0.00 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

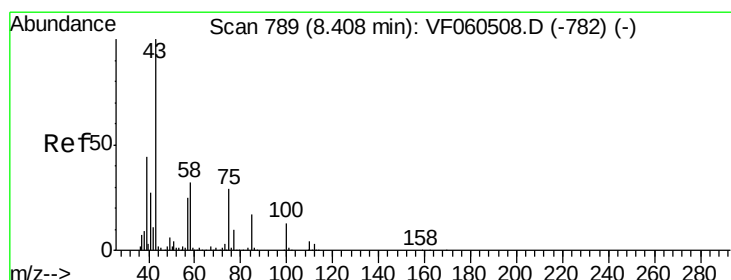
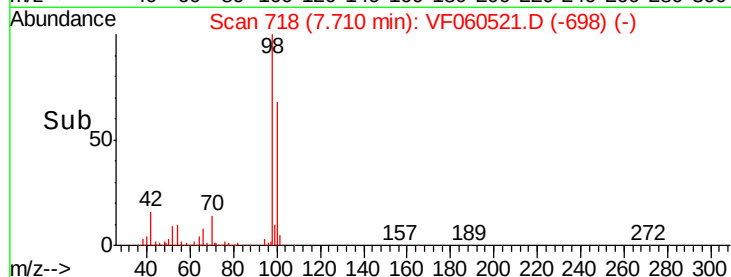
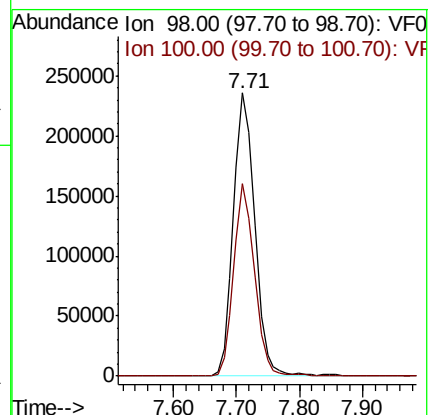
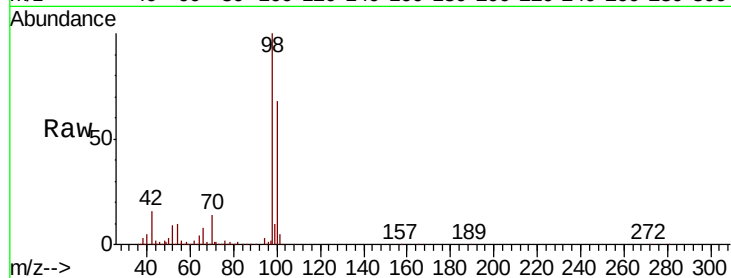
AOC1-07A

Tot Ion: 98 Resp: 555443

Ion Ratio Lower Upper

98 100

100 68.2 53.4 80.0



#51

4-Methyl-2-Pentanone

Concen: 2.911 ug/l

RT: 8.41 min Scan# 789

Delta R.T. 0.00 min

Lab File: VF060521.D

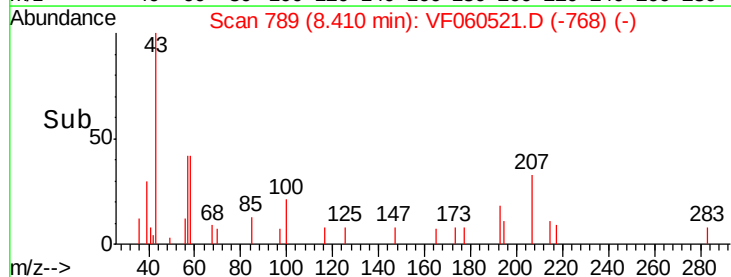
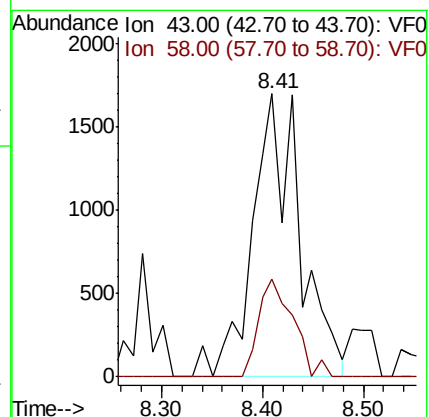
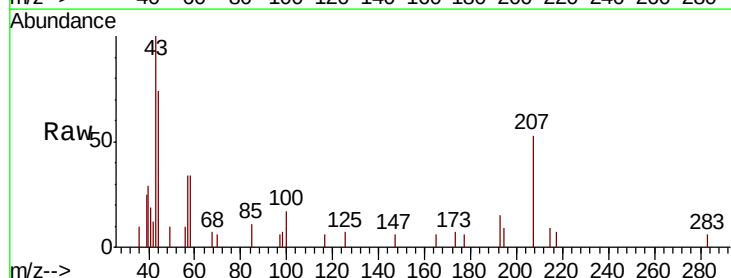
Acq: 26 Oct 2018 17:29

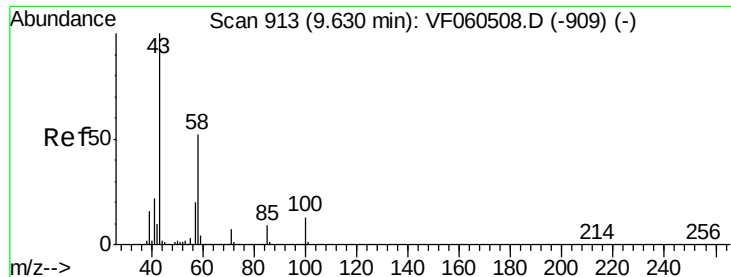
Tgt Ion: 43 Resp: 5537

Ion Ratio Lower Upper

43 100

58 34.3 25.4 38.2

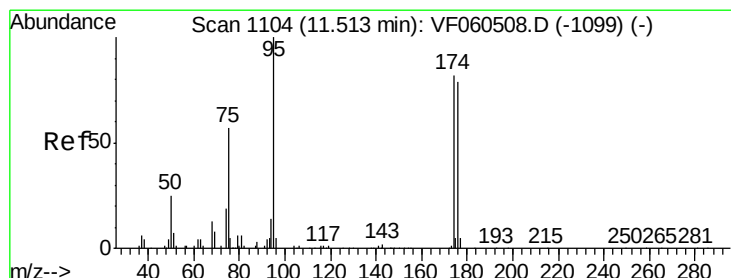
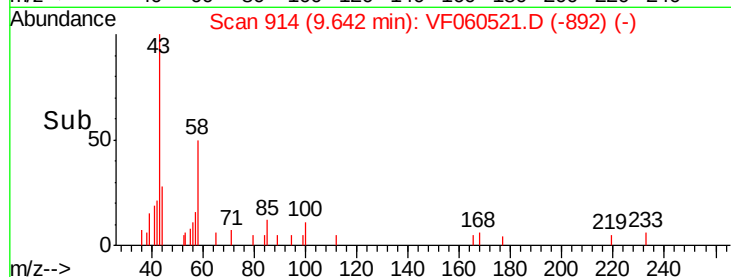
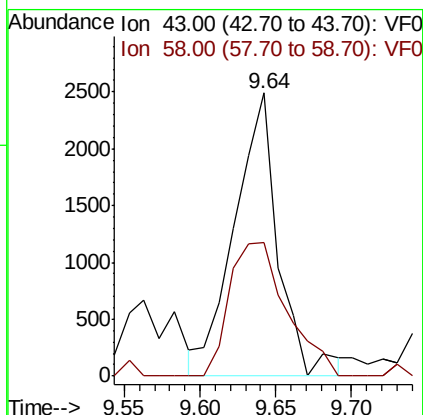
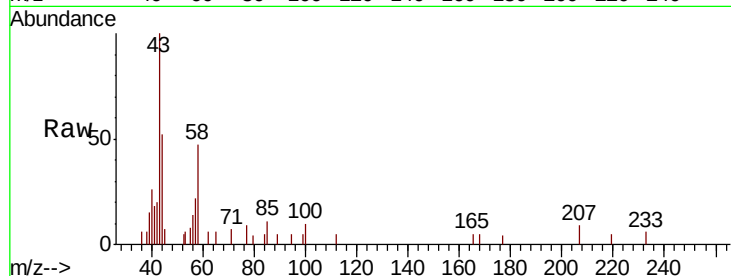




#59  
2-Hexanone  
Concen: Below Cal  
RT: 9.64 min Scan# 914  
Delta R.T. 0.01 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

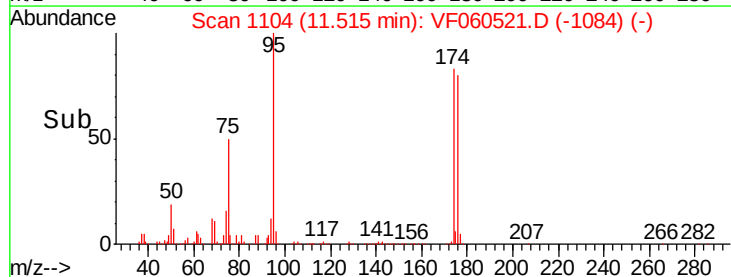
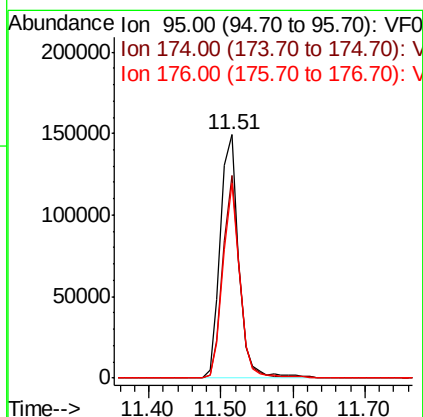
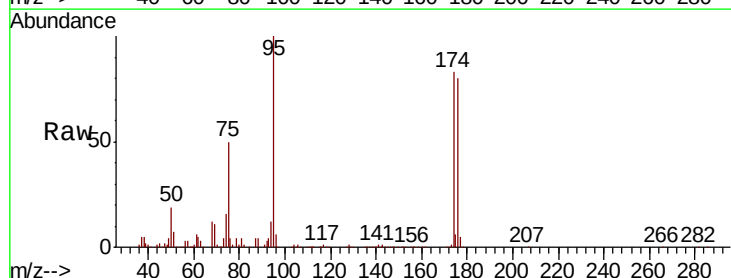
Instrument :  
MSVOA\_F  
ClientSampled :  
AOC1-07A

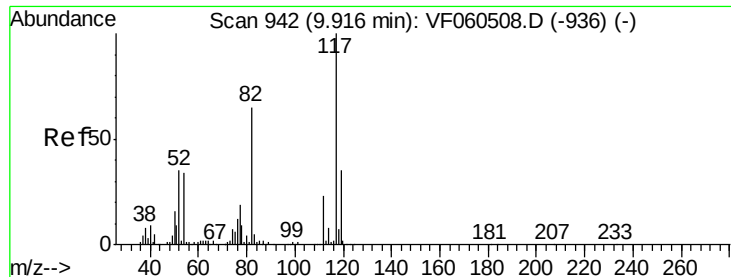
Tot Ion: 43 Resp: 5003  
Ion Ratio Lower Upper  
43 100  
58 47.1 23.5 70.5



#62  
4-Bromofluorobenzene  
Concen: 41.407 ug/l  
RT: 11.51 min Scan# 1104  
Delta R.T. 0.00 min  
Lab File: VF060521.D  
Acq: 26 Oct 2018 17:29

Tgt Ion: 95 Resp: 264872  
Ion Ratio Lower Upper  
95 100  
174 83.4 0.0 164.2  
176 80.3 0.0 158.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.92 min Scan# 942

Delta R.T. 0.00 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

Instrument :

MSVOA\_F

ClientSampleId :

AOC1-07A

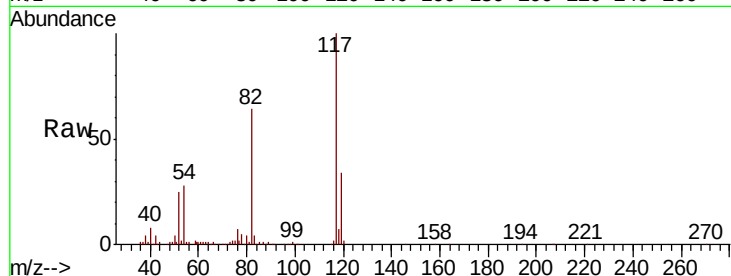
Tot Ion:117 Resp: 447371

Ion Ratio Lower Upper

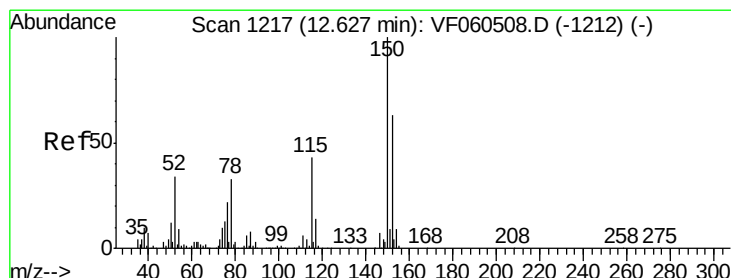
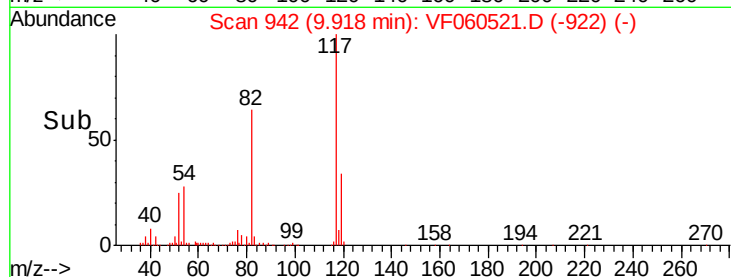
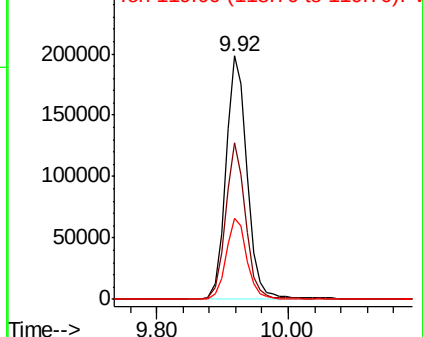
117 100

82 64.3 51.7 77.5

119 33.5 28.3 42.5



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: 12.63 min Scan# 1217

Delta R.T. 0.00 min

Lab File: VF060521.D

Acq: 26 Oct 2018 17:29

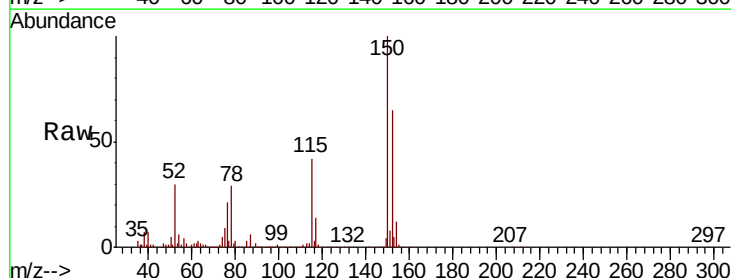
Tgt Ion:152 Resp: 261779

Ion Ratio Lower Upper

152 100

115 65.4 34.6 103.9

150 154.8 0.0 319.8



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

