

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF102618\  
 Data File : VF060519.D  
 Acq On : 26 Oct 2018 16:32  
 Operator : VA/AP  
 Sample : J5515-03  
 Misc : 5.78/5mL/MSVOA F/SOIL  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 AOC1-03A

Quant Time: Oct 29 09:54:07 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  | 175558   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 296465   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 229608   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.64 | 152  | 106335   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.03  | 65   | 205938   | 59.02 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 118.04% |          |
| 35) Dibromofluoromethane    | 4.30  | 113  | 170368   | 47.94 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.88%  |          |
| 50) Toluene-d8              | 7.72  | 98   | 312776   | 43.86 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.72%  |          |
| 62) 4-Bromofluorobenzene    | 11.51 | 95   | 140689   | 35.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 70.84%  |          |

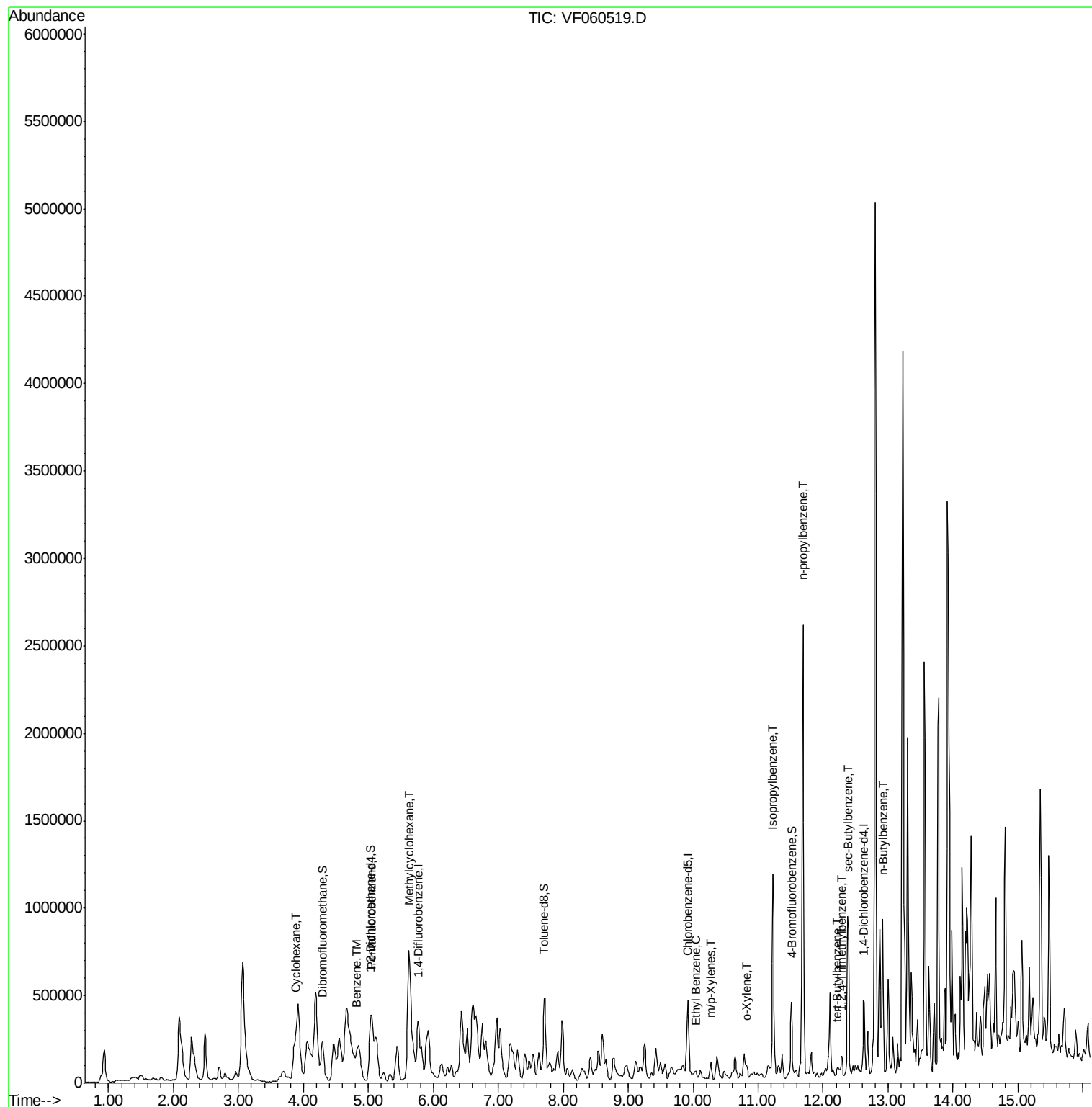
| Target Compounds           | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|----------------------------|-------|------|----------|---------|--------|--------|
| 31) Cyclohexane            | 3.87  | 56   | 114407   | 42.819  | ug/l   | 93     |
| 39) Methylcyclohexane      | 5.63  | 83   | 462539   | 129.169 | ug/l   | 95     |
| 40) Benzene                | 4.81  | 78   | 57690    | 7.991   | ug/l   | 96     |
| 67) Ethyl Benzene          | 10.04 | 91   | 40172    | 4.075   | ug/l   | 92     |
| 68) m/p-Xylenes            | 10.27 | 106  | 27735    | 8.962   | ug/l   | 100    |
| 69) o-Xylene               | 10.83 | 106  | 8077     | 2.327   | ug/l   | 76     |
| 73) Isopropylbenzene       | 11.23 | 105  | 741336   | 87.762  | ug/l   | 99     |
| 78) n-propylbenzene        | 11.69 | 91   | 1887092  | 191.089 | ug/l   | 96     |
| 83) tert-Butylbenzene      | 12.21 | 119  | 10986    | 1.466   | ug/l   | 97     |
| 84) 1,2,4-Trimethylbenzene | 12.29 | 105  | 17770    | 2.417   | ug/l   | 90     |
| 85) sec-Butylbenzene       | 12.39 | 105  | 342355   | 34.043  | ug/l # | 73     |
| 89) n-Butylbenzene         | 12.92 | 91   | 394713   | 43.431  | ug/l   | 96     |

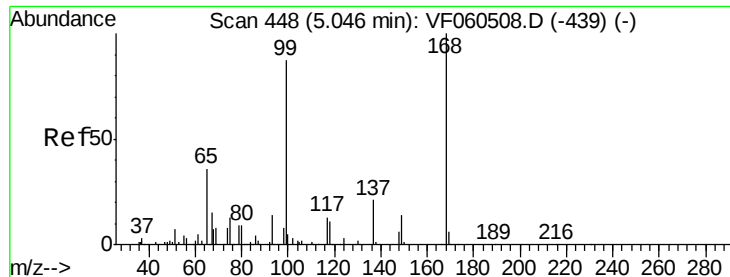
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF102618\  
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Sample : J5515-03  
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Quant Time: Oct 29 09:54:07 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: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

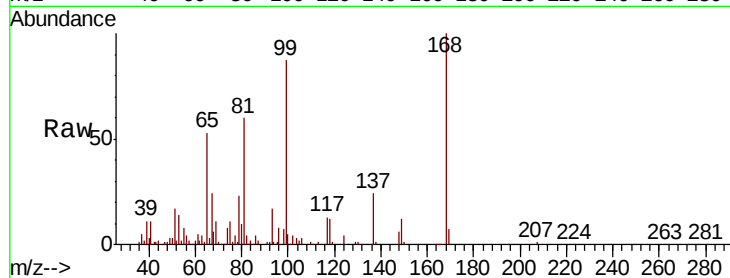
AOC1-03A

Tot Ion:168 Resp: 175558

Ion Ratio Lower Upper

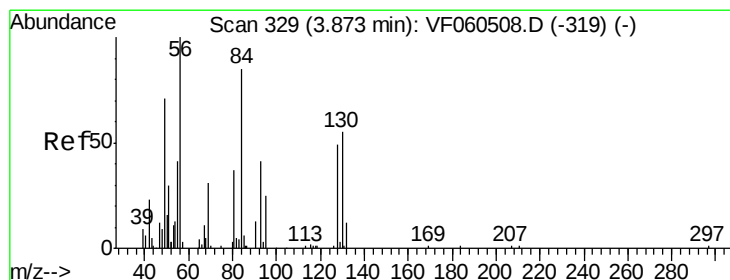
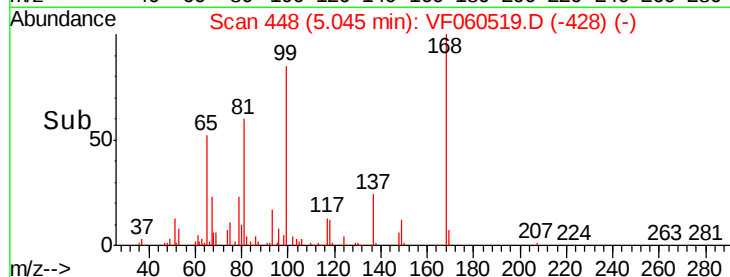
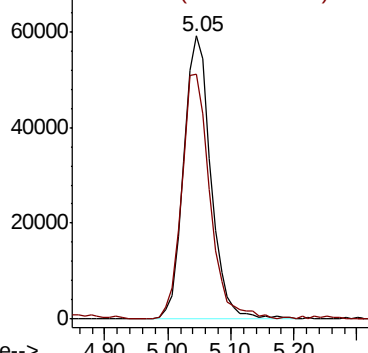
168 100

99 86.5 69.9 104.9



Abundance Ion 168.00 (167.70 to 168.70): V

Ion 99.00 (98.70 to 99.70): VF0



#31

Cyclohexane

Concen: 42.819 ug/l

RT: 3.87 min Scan# 329

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

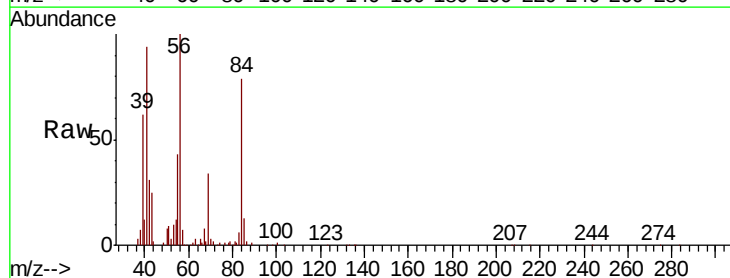
Tgt Ion: 56 Resp: 114407

Ion Ratio Lower Upper

56 100

69 34.2 24.6 37.0

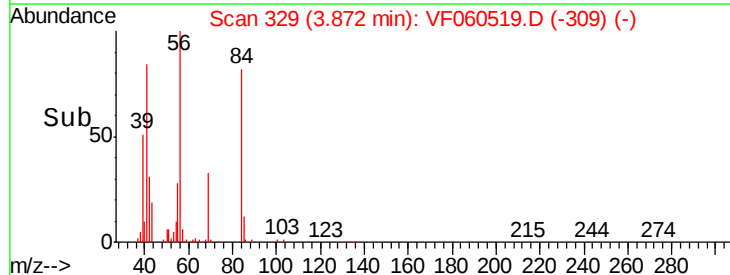
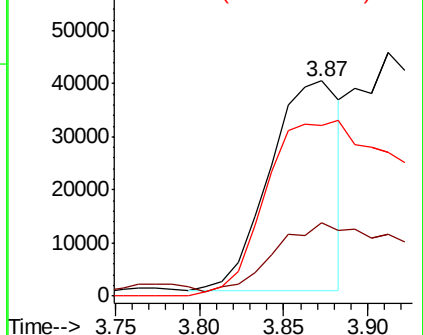
84 79.1 68.2 102.2

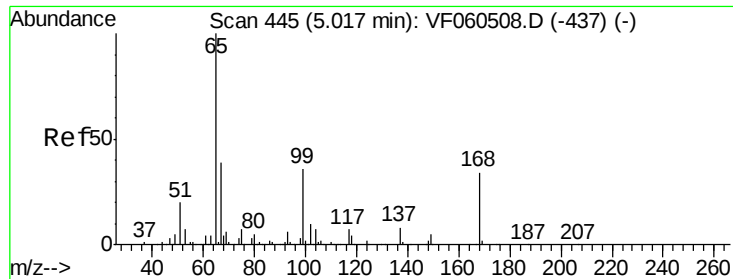


Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 69.00 (68.70 to 69.70): VF0

Ion 84.00 (83.70 to 84.70): VF0





#33

1,2-Dichloroethane-d4

Concen: 59.020 ug/l

RT: 5.03 min Scan# 446

Delta R.T. 0.01 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

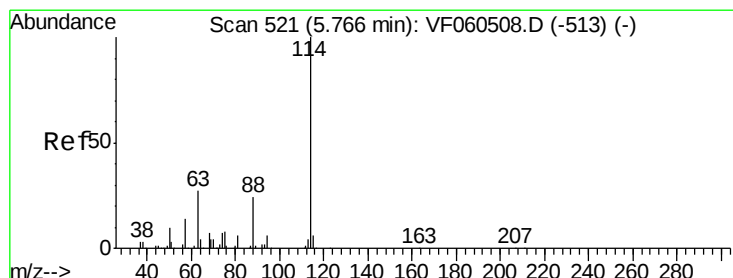
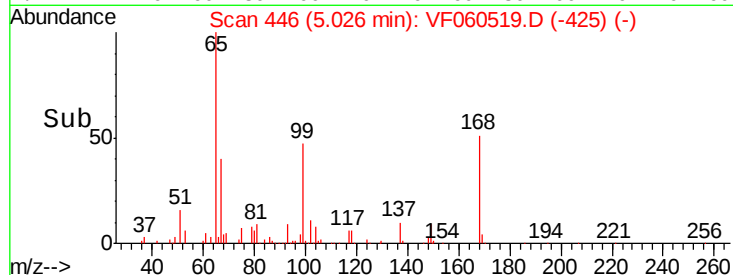
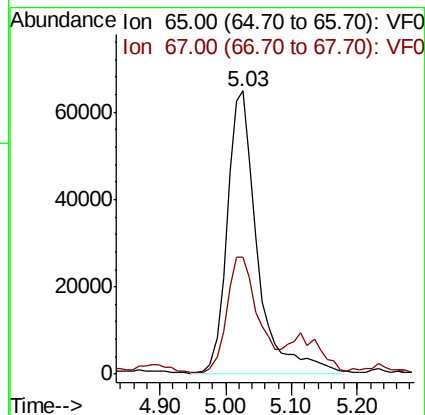
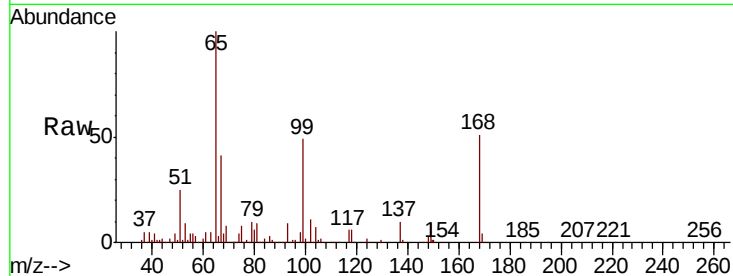
AOC1-03A

Tot Ion: 65 Resp: 205938

Ion Ratio Lower Upper

65 100

67 41.2 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: VF060519.D

Acq: 26 Oct 2018 16:32

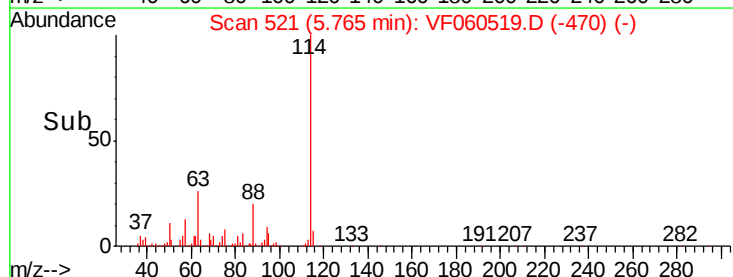
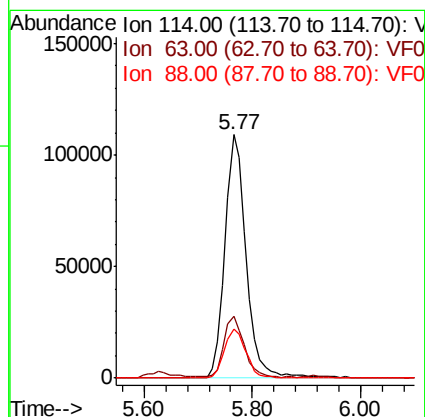
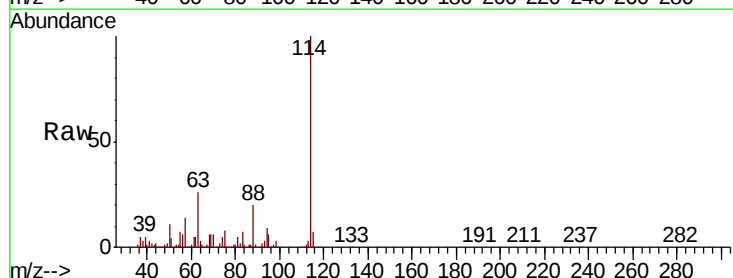
Tgt Ion: 114 Resp: 296465

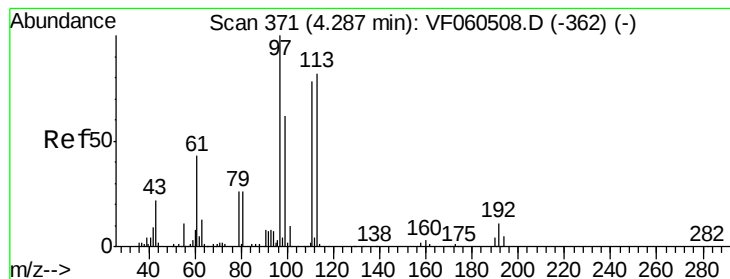
Ion Ratio Lower Upper

114 100

63 25.6 0.0 54.4

88 20.1 0.0 47.2





#35

Dibromofluoromethane

Concen: 47.942 ug/l

RT: 4.30 min Scan# 372

Delta R.T. 0.01 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

AOC1-03A

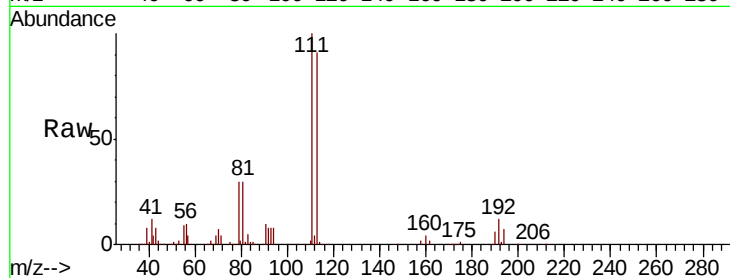
Tot Ion:113 Resp: 170368

Ion Ratio Lower Upper

113 100

111 109.8 75.9 113.9

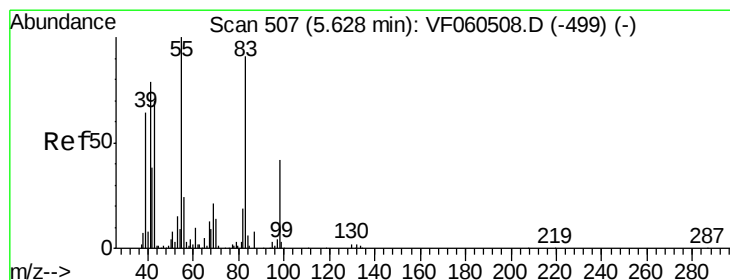
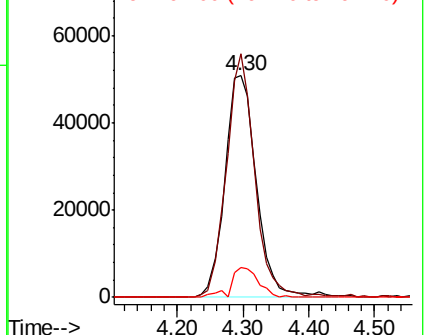
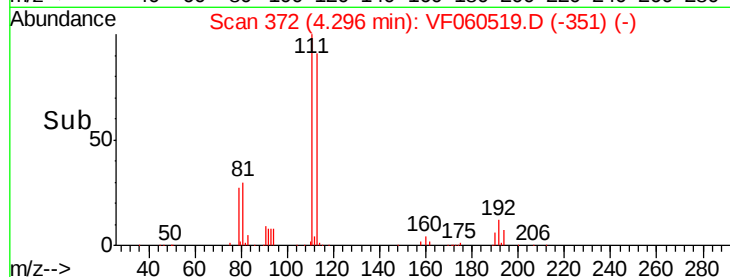
192 13.2 10.6 15.8



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



#39

Methylcyclohexane

Concen: 129.169 ug/l

RT: 5.63 min Scan# 507

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

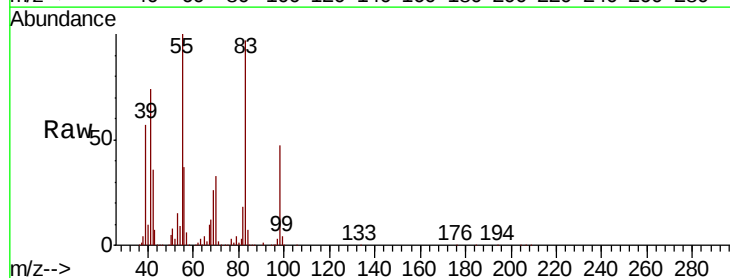
Tgt Ion: 83 Resp: 462539

Ion Ratio Lower Upper

83 100

55 102.8 87.9 131.9

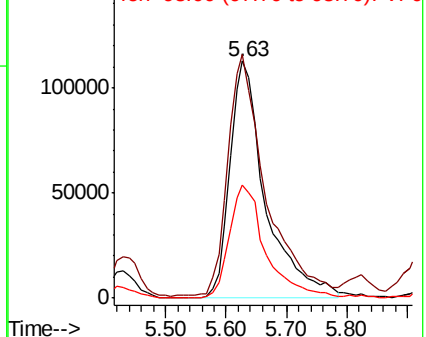
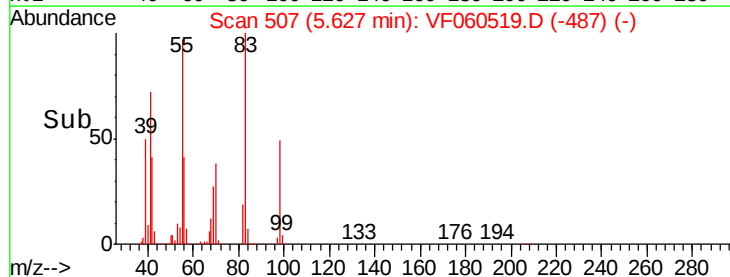
98 48.0 37.0 55.6

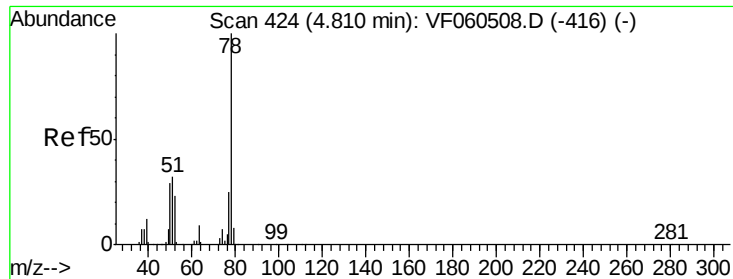


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 98.00 (97.70 to 98.70): VF0





#40

Benzene

Concen: 7.991 ug/l

RT: 4.81 min Scan# 424

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

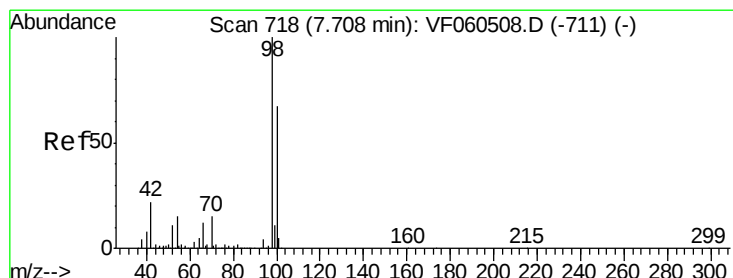
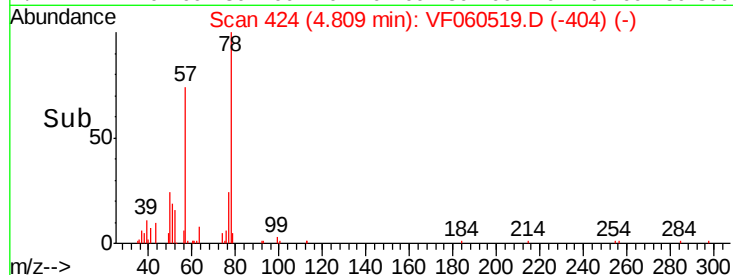
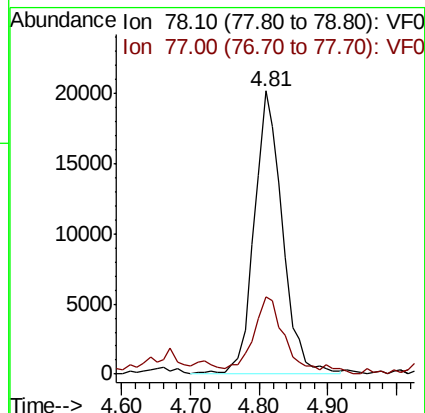
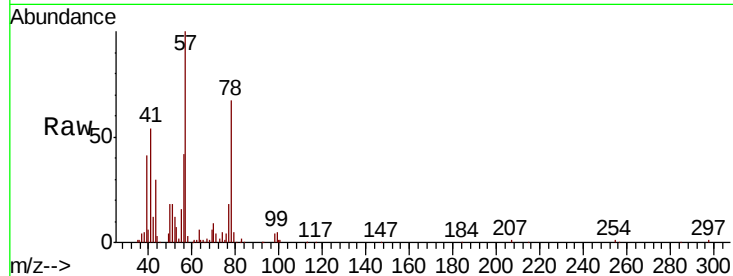
AOC1-03A

Tot Ion: 78 Resp: 57690

Ion Ratio Lower Upper

78 100

77 27.2 20.2 30.4



#50

Toluene-d8

Concen: 43.858 ug/l

RT: 7.72 min Scan# 719

Delta R.T. 0.01 min

Lab File: VF060519.D

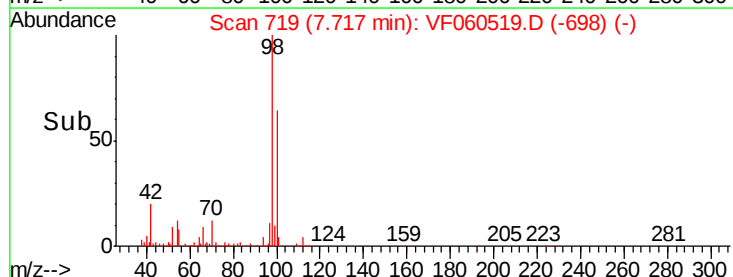
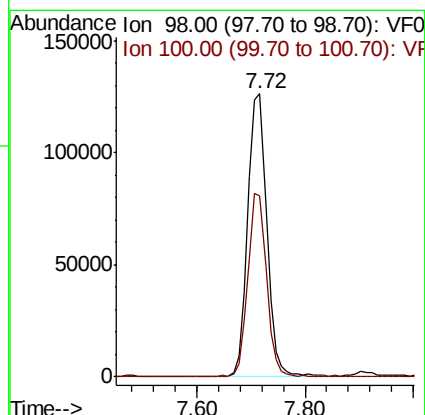
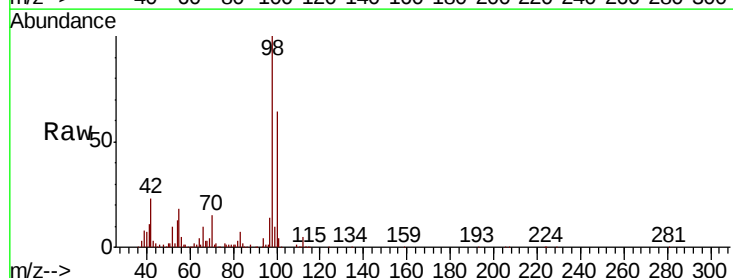
Acq: 26 Oct 2018 16:32

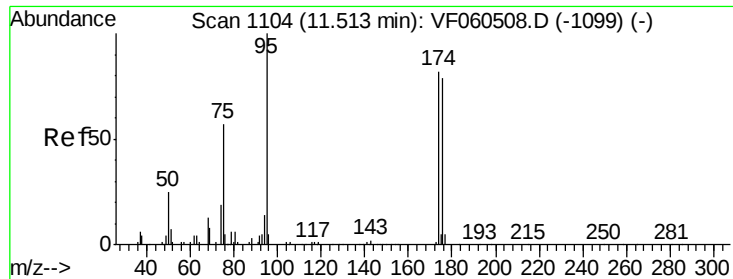
Tgt Ion: 98 Resp: 312776

Ion Ratio Lower Upper

98 100

100 63.9 53.4 80.0





#62

4-Bromofluorobenzene

Concen: 35.420 ug/l

RT: 11.51 min Scan# 1104

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

AOC1-03A

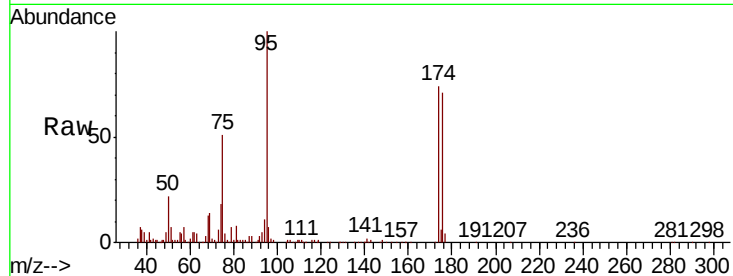
Tot Ion: 95 Resp: 140689

Ion Ratio Lower Upper

95 100

174 73.9 0.0 164.2

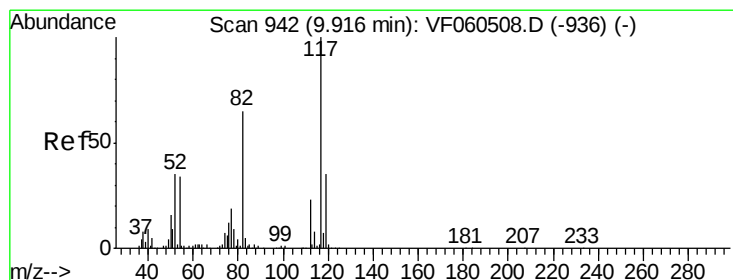
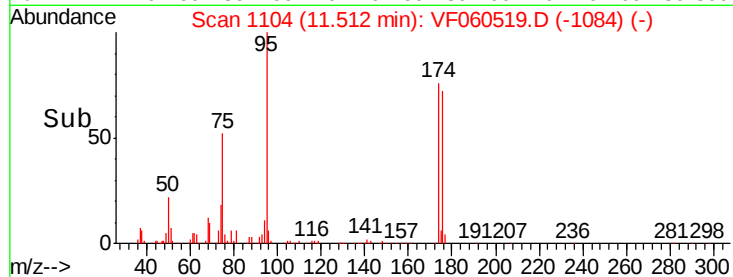
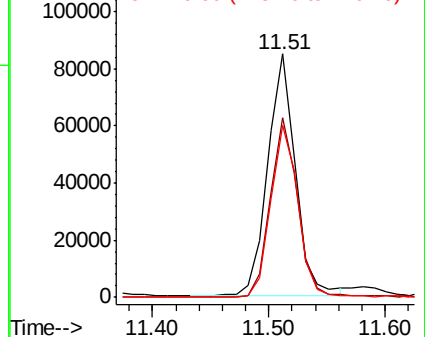
176 70.8 0.0 158.4



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: 9.91 min Scan# 942

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

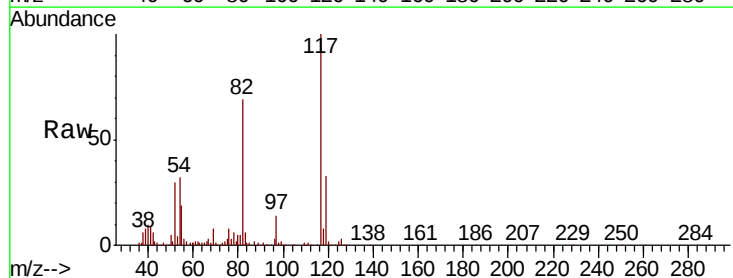
Tgt Ion: 117 Resp: 229608

Ion Ratio Lower Upper

117 100

82 69.2 51.7 77.5

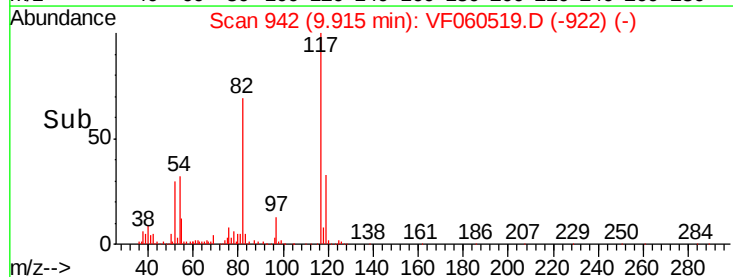
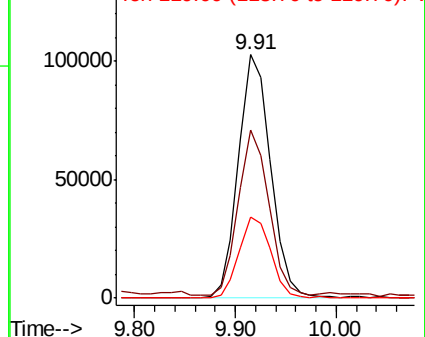
119 33.2 28.3 42.5

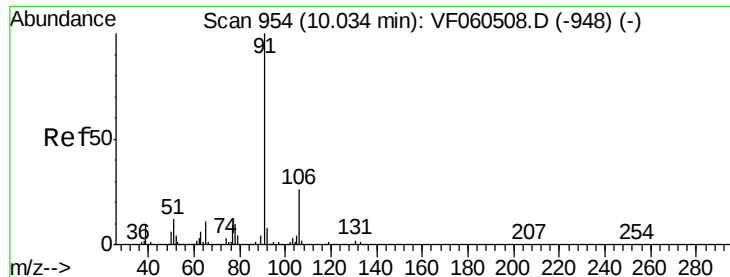


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): V





#67

Ethyl Benzene

Concen: 4.075 ug/l

RT: 10.04 min Scan# 955

Delta R.T. 0.01 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

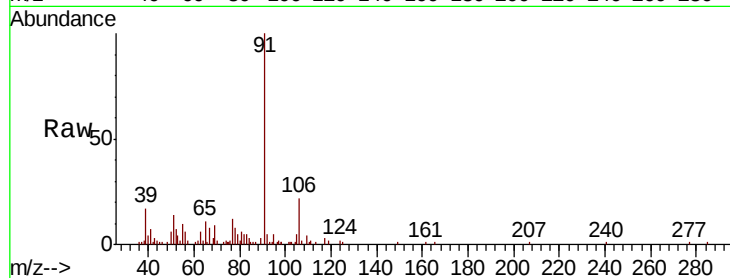
AOC1-03A

Tot Ion: 91 Resp: 40172

Ion Ratio Lower Upper

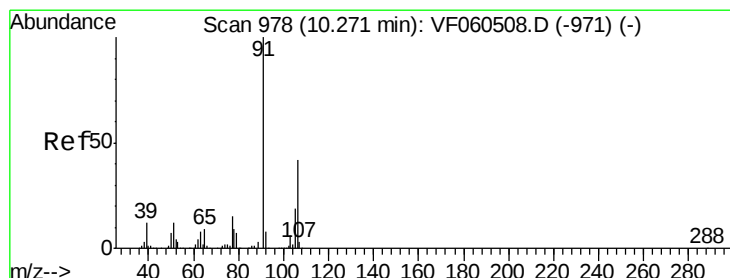
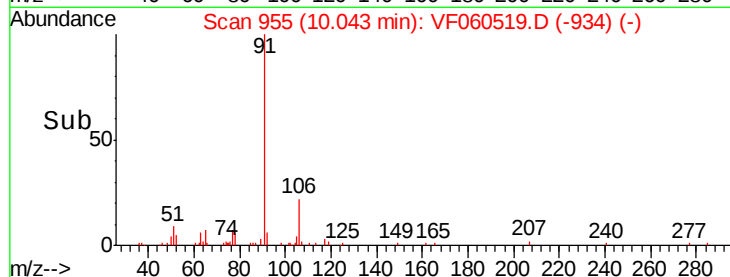
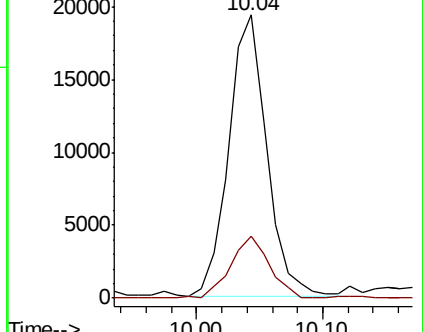
91 100

106 22.0 20.7 31.1



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 106.00 (105.70 to 106.70): V



#68

m/p-Xylenes

Concen: 8.962 ug/l

RT: 10.27 min Scan# 978

Delta R.T. -0.00 min

Lab File: VF060519.D

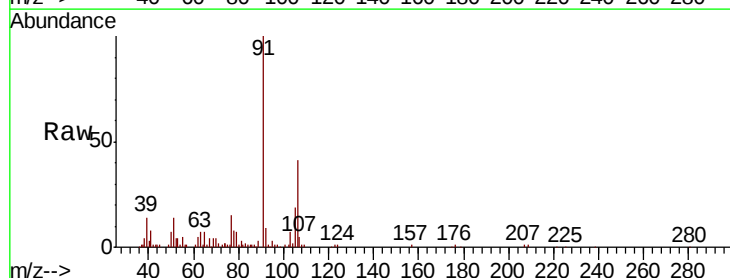
Acq: 26 Oct 2018 16:32

Tgt Ion: 106 Resp: 27735

Ion Ratio Lower Upper

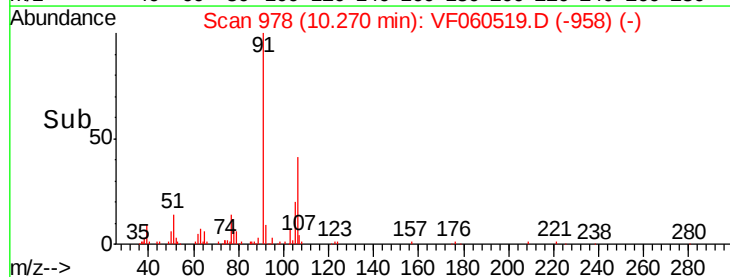
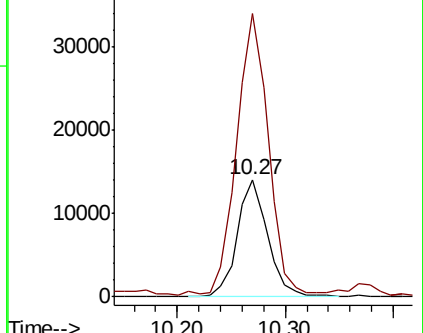
106 100

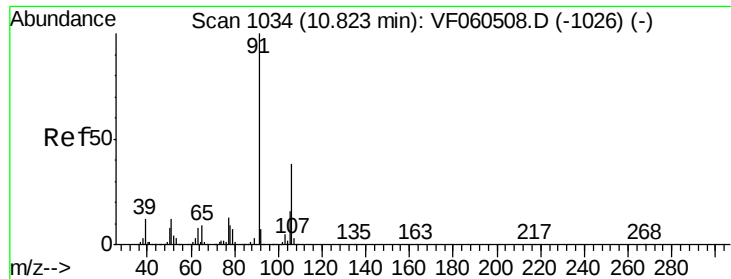
91 241.3 192.5 288.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0

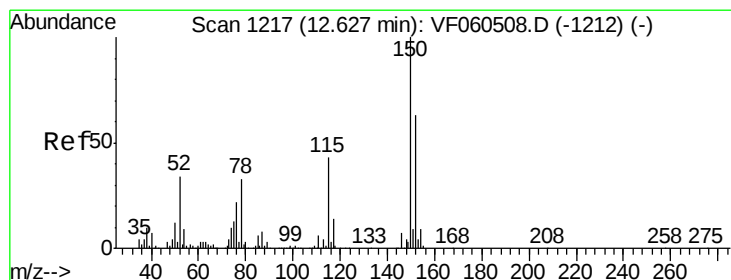
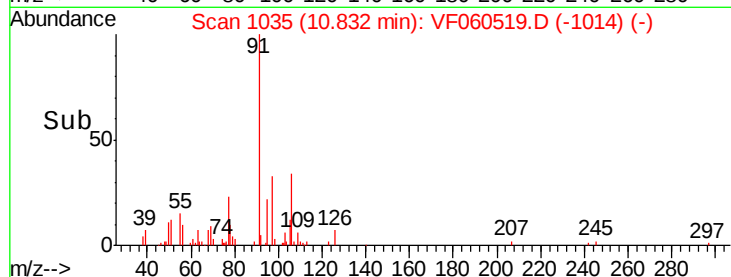
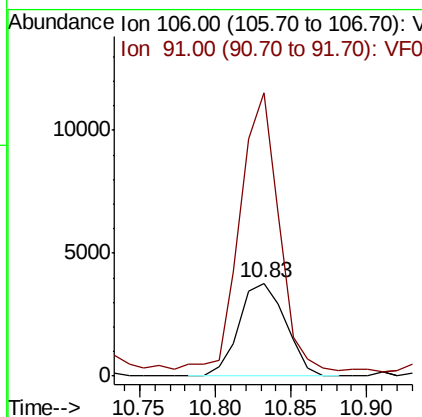
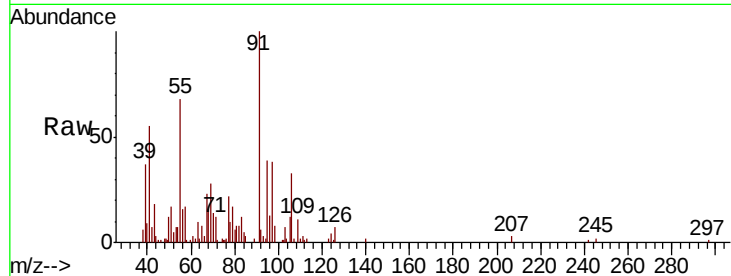




#69  
o-Xylene  
Concen: 2.327 ug/l  
RT: 10.83 min Scan# 1035  
Delta R.T. 0.01 min  
Lab File: VF060519.D  
Acq: 26 Oct 2018 16:32

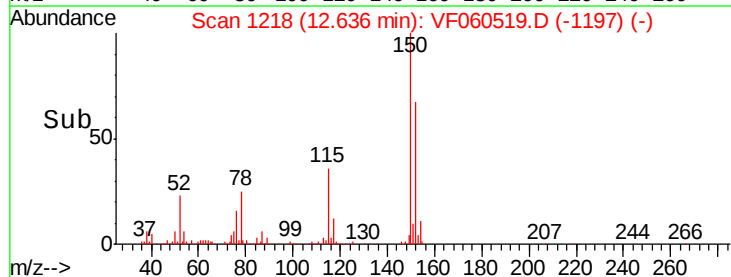
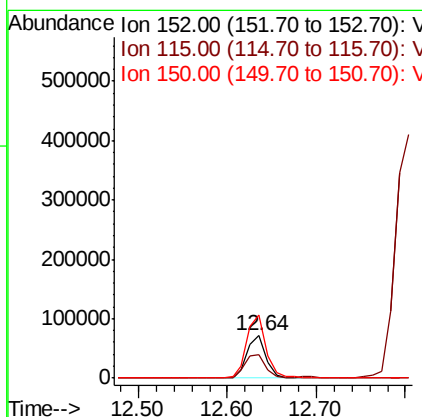
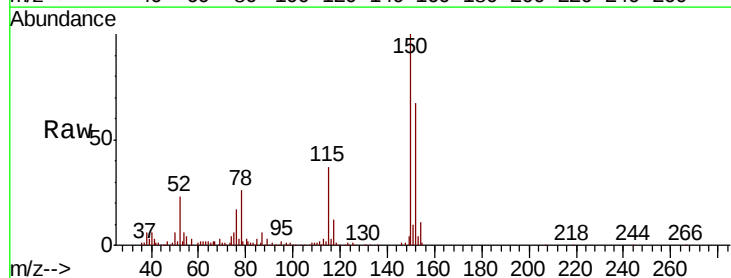
Instrument :  
MSVOA\_F  
ClientSampleId :  
AOC1-03A

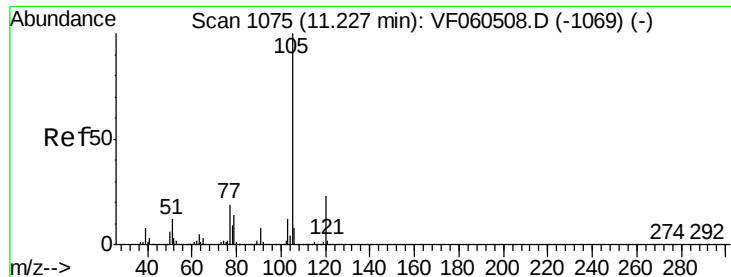
Tot Ion:106 Resp: 8077  
Ion Ratio Lower Upper  
106 100  
91 304.8 130.9 392.7



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.64 min Scan# 1218  
Delta R.T. 0.01 min  
Lab File: VF060519.D  
Acq: 26 Oct 2018 16:32

Tgt Ion:152 Resp: 106335  
Ion Ratio Lower Upper  
152 100  
115 54.6 34.6 103.9  
150 148.7 0.0 319.8





#73

Isopropylbenzene

Concen: 87.762 ug/l

RT: 11.23 min Scan# 1075

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampleId :

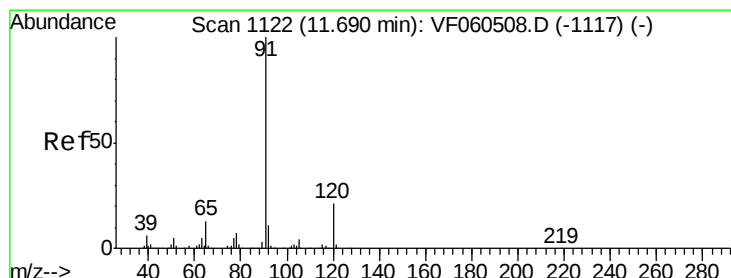
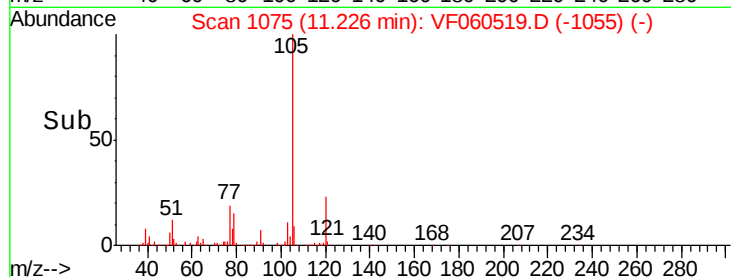
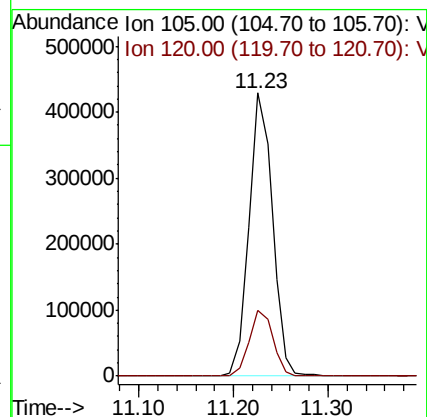
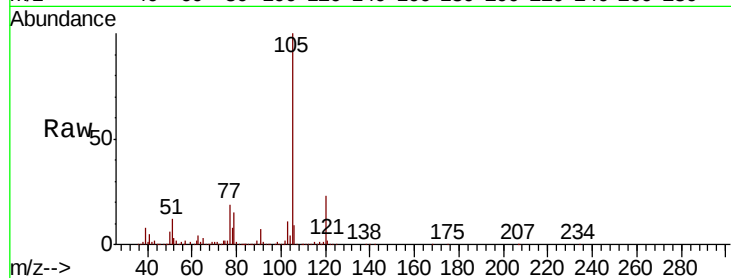
AOC1-03A

Tot Ion:105 Resp: 741336

Ion Ratio Lower Upper

105 100

120 23.4 11.6 34.7



#78

n-propylbenzene

Concen: 191.089 ug/l

RT: 11.69 min Scan# 1122

Delta R.T. -0.00 min

Lab File: VF060519.D

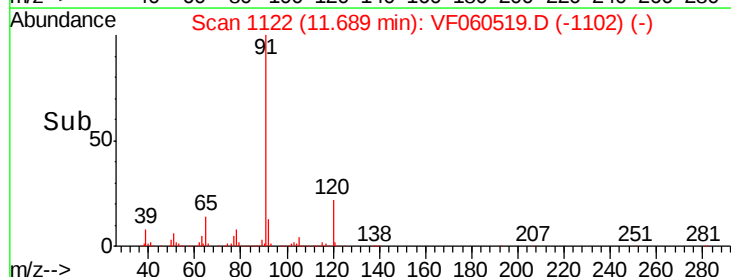
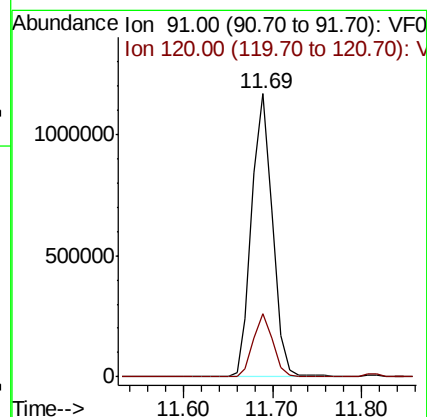
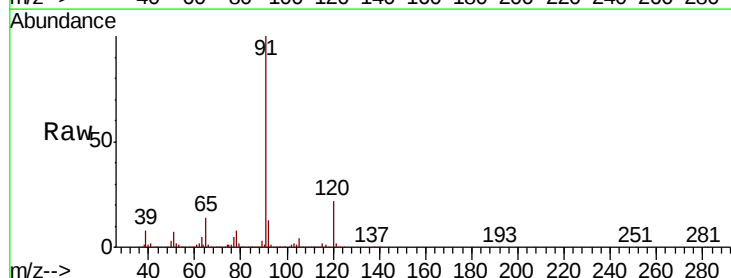
Acq: 26 Oct 2018 16:32

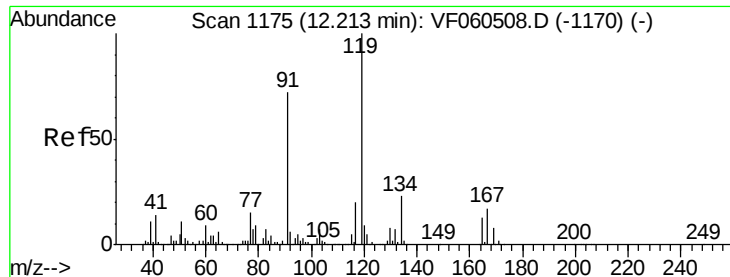
Tgt Ion: 91 Resp: 1887092

Ion Ratio Lower Upper

91 100

120 22.3 10.3 30.9

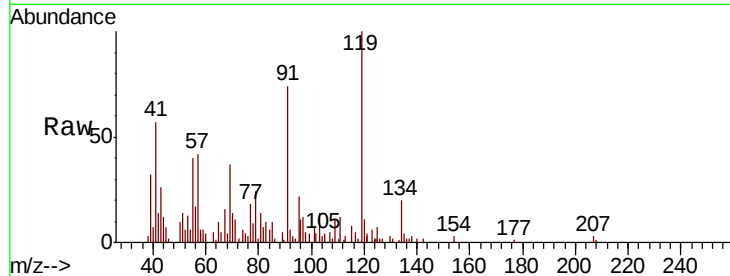




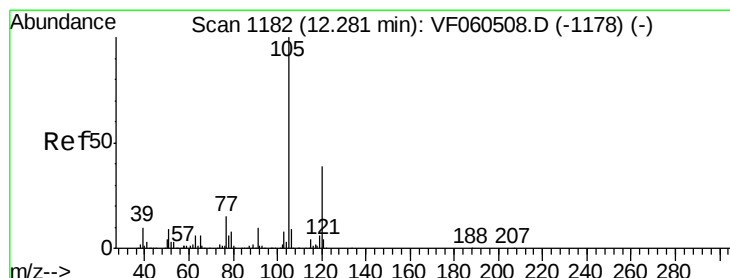
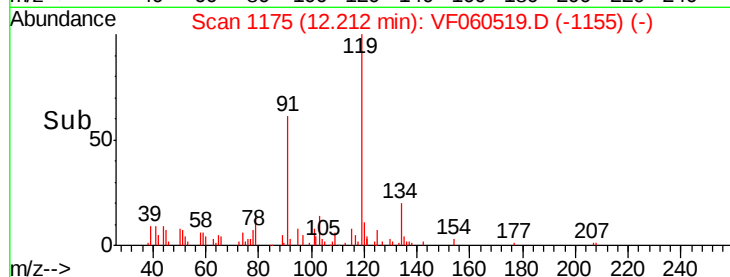
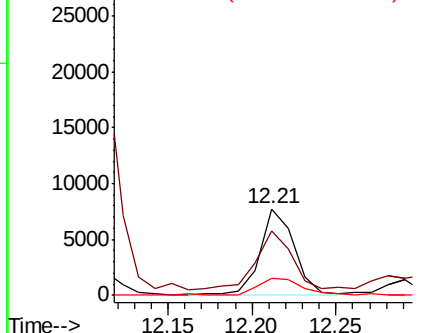
#83  
 tert-Butylbenzene  
 Concen: 1.466 ug/l  
 RT: 12.21 min Scan# 1175  
 Delta R.T. -0.00 min  
 Lab File: VF060519.D  
 Acq: 26 Oct 2018 16:32

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 AOC1-03A

Tot Ion:119 Resp: 10986  
 Ion Ratio Lower Upper  
 119 100  
 91 74.2 36.3 108.9  
 134 19.6 11.4 34.2

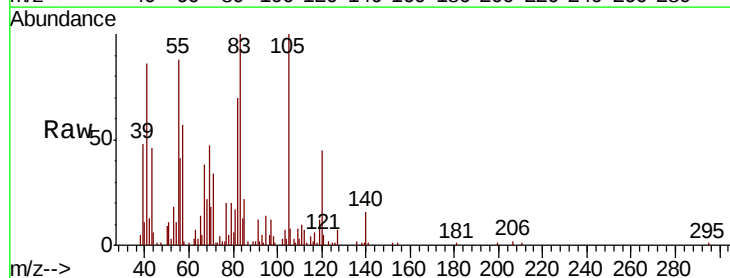


Abundance Ion 119.00 (118.70 to 119.70): V  
 Ion 91.00 (90.70 to 91.70): VF0  
 Ion 134.00 (133.70 to 134.70): V

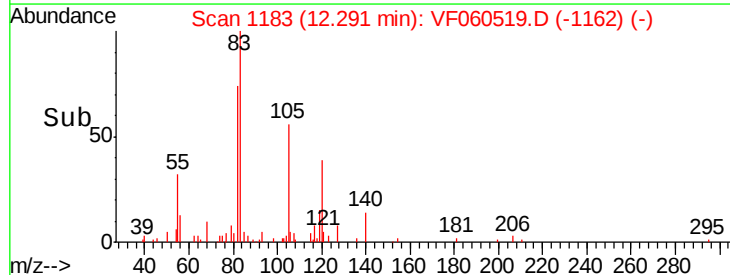
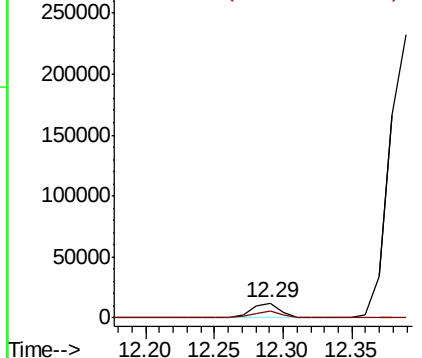


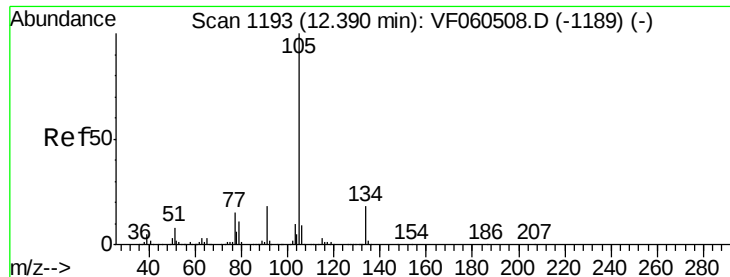
#84  
 1,2,4-Trimethylbenzene  
 Concen: 2.417 ug/l  
 RT: 12.29 min Scan# 1183  
 Delta R.T. 0.01 min  
 Lab File: VF060519.D  
 Acq: 26 Oct 2018 16:32

Tgt Ion:105 Resp: 17770  
 Ion Ratio Lower Upper  
 105 100  
 120 44.8 19.4 58.1



Abundance Ion 105.00 (104.70 to 105.70): V  
 Ion 120.00 (119.70 to 120.70): V





#85

sec-Butylbenzene

Concen: 34.043 ug/l

RT: 12.39 min Scan# 1193

Delta R.T. -0.00 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

Instrument :

MSVOA\_F

ClientSampled :

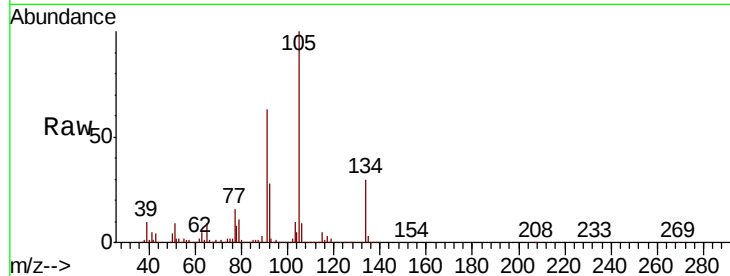
AOC1-03A

Tot Ion:105 Resp: 342355

Ion Ratio Lower Upper

105 100

134 30.2 9.2 27.4#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

250000

200000

150000

100000

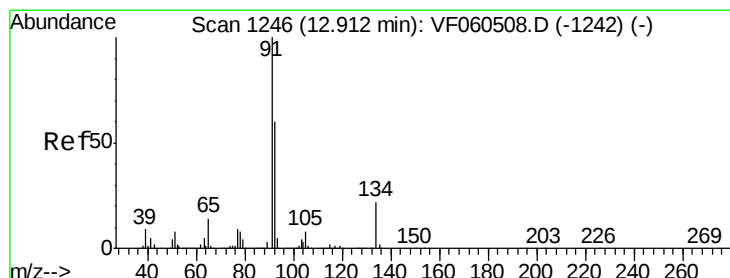
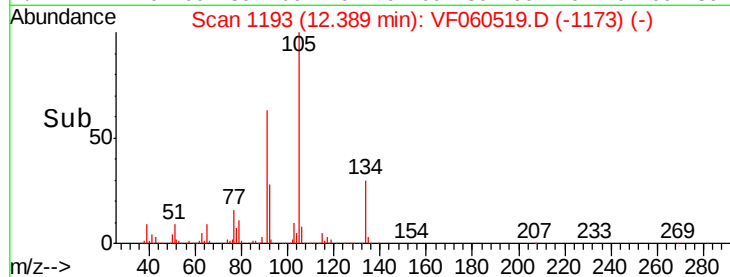
50000

0

12.39

12.30 12.40 12.50

Time-->



#89

n-Butylbenzene

Concen: 43.431 ug/l

RT: 12.92 min Scan# 1247

Delta R.T. 0.01 min

Lab File: VF060519.D

Acq: 26 Oct 2018 16:32

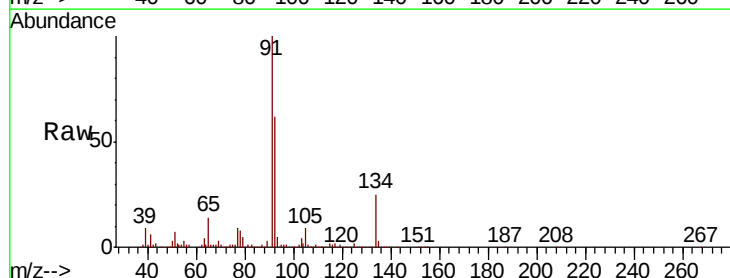
Tgt Ion: 91 Resp: 394713

Ion Ratio Lower Upper

91 100

92 61.5 29.8 89.3

134 24.7 10.9 32.7



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 92.00 (91.70 to 92.70): VF0

Ion 134.00 (133.70 to 134.70): V

300000

200000

100000

0

12.92

12.90 12.95

Time-->

