

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF111618\  
 Data File : VF060771.D  
 Acq On : 16 Nov 2018 18:24  
 Operator : VA/AP  
 Sample : J5964-04RE  
 Misc : 6.89g/5mL/MSVOA-F/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 LR-RBR-200029

Quant Time: Nov 17 04:23:57 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F111318S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 14 03:11:14 2018  
 Response via : Initial Calibration

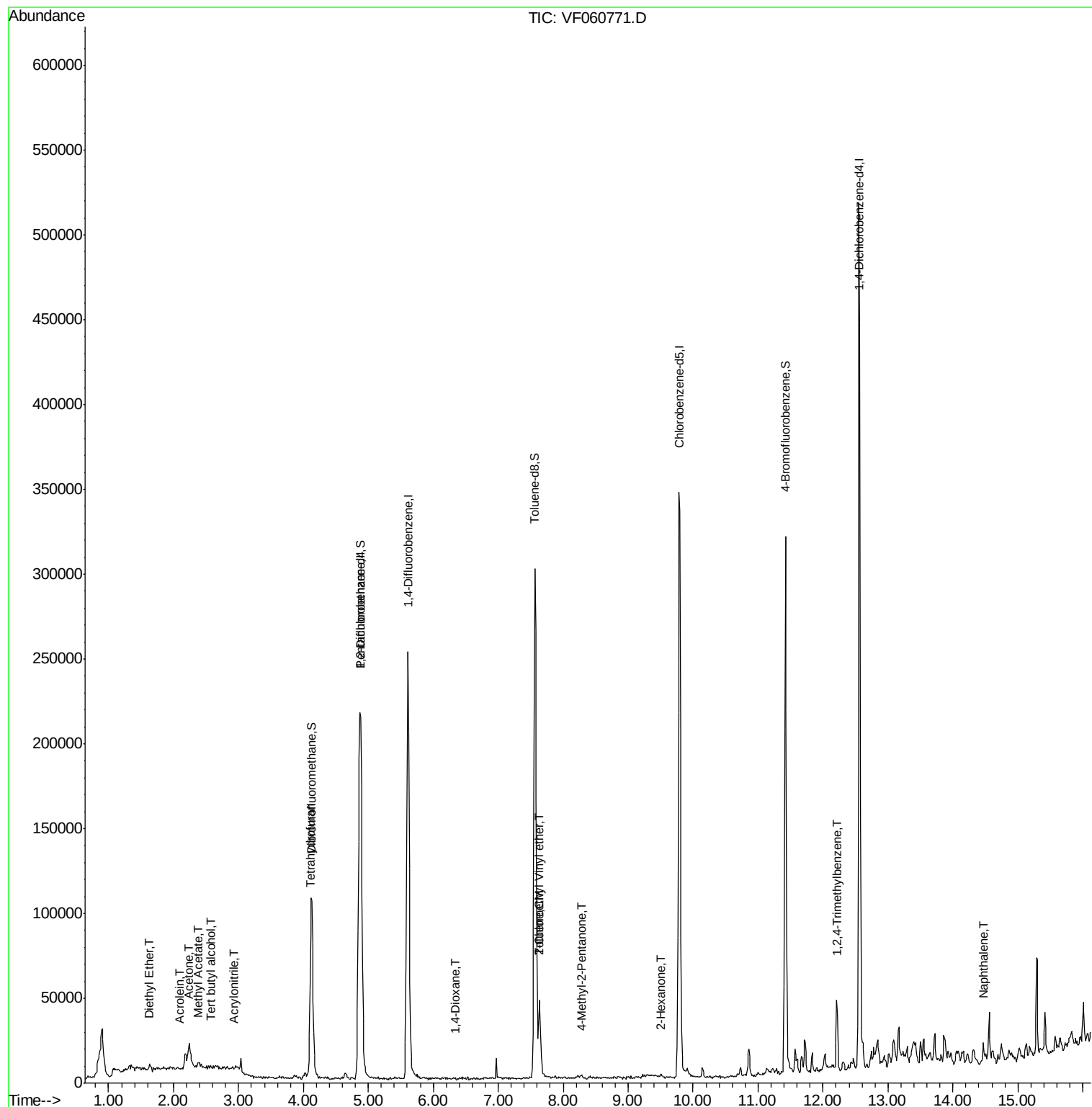
| Internal Standards            | R.T.  | QIon | Response | Conc      | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|-----------|---------|----------|
| 1) Pentafluorobenzene         | 4.88  | 168  | 166489   | 50.00     | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 5.61  | 114  | 285904   | 50.00     | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 9.78  | 117  | 256976   | 50.00     | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.57 | 152  | 134188   | 50.00     | ug/l    | 0.00     |
| System Monitoring Compounds   |       |      |          |           |         |          |
| 33) 1,2-Dichloroethane-d4     | 4.86  | 65   | 97097    | 51.13     | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 102.26% |          |
| 35) Dibromofluoromethane      | 4.12  | 113  | 101963   | 47.44     | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 94.88%  |          |
| 50) Toluene-d8                | 7.56  | 98   | 252541   | 45.46     | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 90.92%  |          |
| 62) 4-Bromofluorobenzene      | 11.42 | 95   | 120623   | 47.20     | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 94.40%  |          |
| Target Compounds              |       |      |          |           |         |          |
|                               |       |      |          |           | Qvalue  |          |
| 8) Diethyl Ether              | 1.64  | 74   | 1298     | 2.771     | ug/l    | 92       |
| 11) Tert butyl alcohol        | 2.58  | 59   | 526      | 6.086     | ug/l #  | 8        |
| 13) Acrolein                  | 2.09  | 56   | 817      | 10.339    | ug/l    | 91       |
| 15) Acrylonitrile             | 2.93  | 53   | 307      | 1.667     | ug/l #  | 26       |
| 16) Acetone                   | 2.24  | 43   | 15196    | 37.438    | ug/l    | 97       |
| 18) Methyl Acetate            | 2.40  | 43   | 1399     | 2.099     | ug/l #  | 64       |
| 29) Tetrahydrofuran           | 4.10  | 42   | 1090     | 3.958     | ug/l #  | 48       |
| 41) Methacrylonitrile         | 4.74  | 41   | 584      | Below Cal | #       | 60       |
| 49) 1,4-Dioxane               | 6.35  | 88   | 92       | 9.094     | ug/l #  | 2        |
| 51) 4-Methyl-2-Pentanone      | 8.28  | 43   | 2231     | 1.887     | ug/l #  | 38       |
| 52) Toluene                   | 7.63  | 92   | 23840    | 4.813     | ug/l    | 81       |
| 58) 2-Chloroethyl Vinyl ether | 7.63  | 63   | 3502     | 23.852    | ug/l    | 100      |
| 59) 2-Hexanone                | 9.51  | 43   | 2127     | 2.560     | ug/l    | 73       |
| 84) 1,2,4-Trimethylbenzene    | 12.21 | 105  | 21160    | 2.386     | ug/l    | 87       |
| 95) Naphthalene               | 14.47 | 128  | 5842     | 1.057     | ug/l #  | 89       |

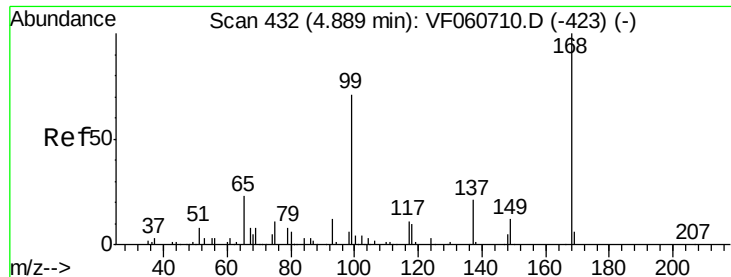
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF111618\  
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Quant Time: Nov 17 04:23:57 2018  
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Quant Title : SW846 8260  
QLast Update : Wed Nov 14 03:11:14 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.88 min Scan# 431

Delta R.T. -0.01 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

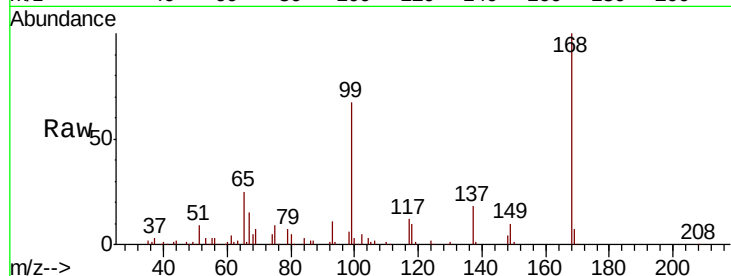
LR-RBR-200029

Tot Ion:168 Resp: 166489

Ion Ratio Lower Upper

168 100

99 67.1 57.2 85.8



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.88

60000

50000

40000

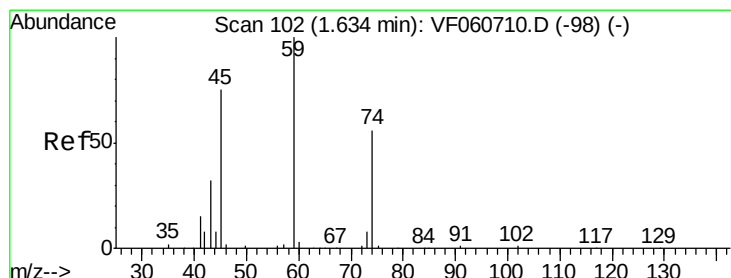
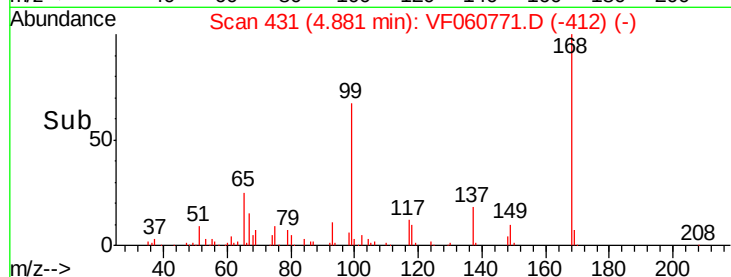
30000

20000

10000

0

Time--> 4.70 4.80 4.90 5.00 5.10



#8

Diethyl Ether

Concen: 2.771 ug/l

RT: 1.64 min Scan# 102

Delta R.T. 0.00 min

Lab File: VF060771.D

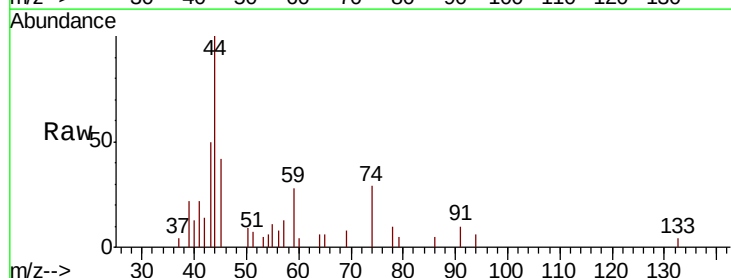
Acq: 16 Nov 2018 18:24

Tgt Ion: 74 Resp: 1298

Ion Ratio Lower Upper

74 100

45 145.3 67.7 203.1



Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0

1200

1000

800

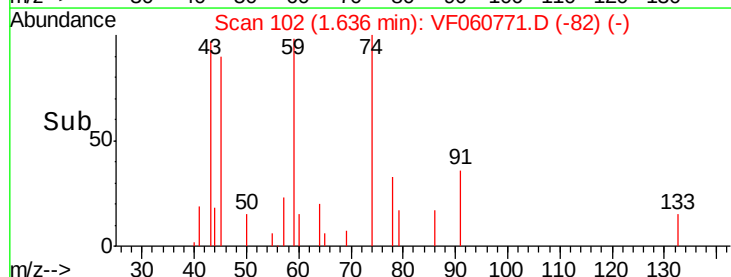
600

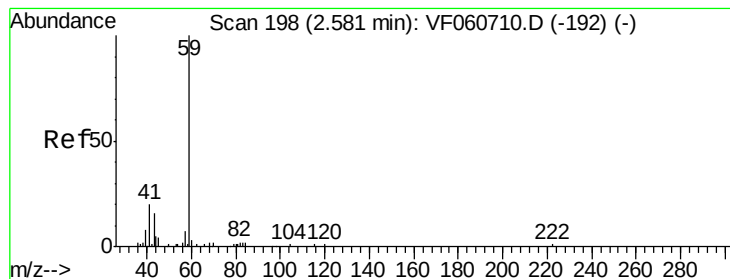
400

200

0

Time--> 1.55 1.60 1.65 1.70



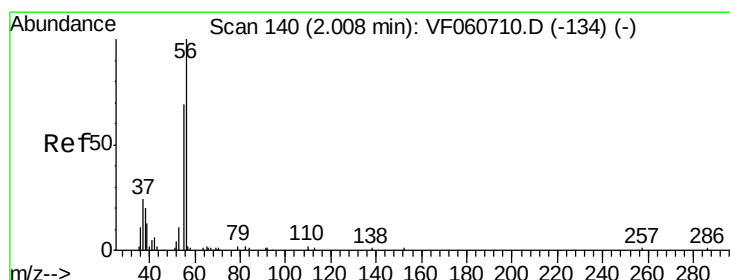
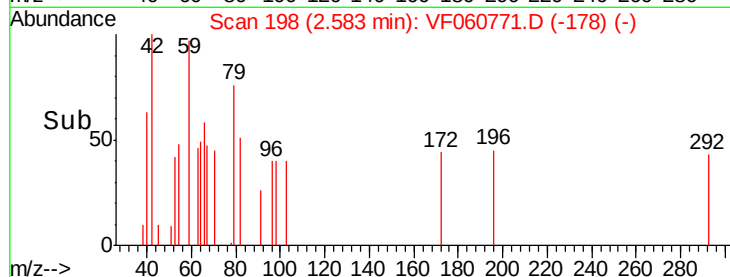
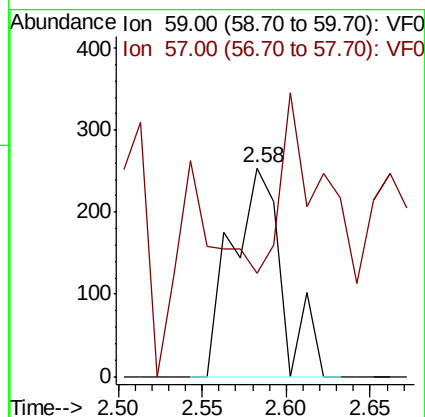
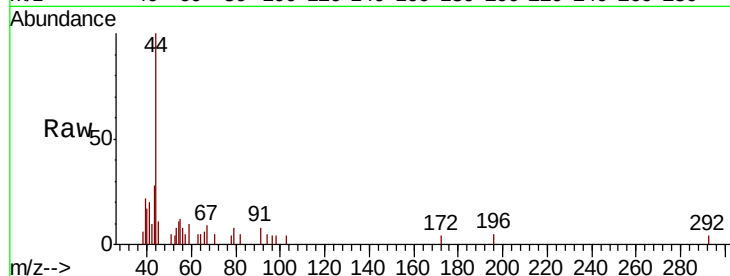


#11

Tert butyl alcohol  
 Concen: 6.086 ug/l  
 RT: 2.58 min Scan# 198  
 Delta R.T. 0.00 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

Instrument :  
 MSVOA\_F  
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 LR-RBR-200029

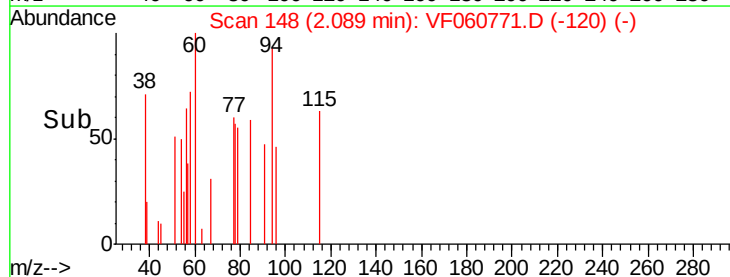
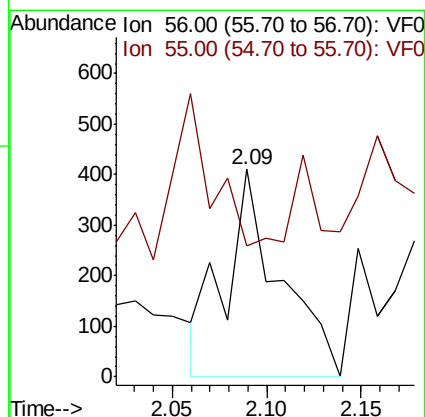
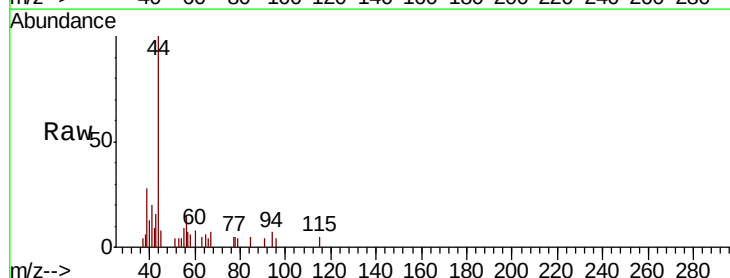
Tot Ion: 59 Resp: 526  
 Ion Ratio Lower Upper  
 59 100  
 57 49.6 10.5 15.7#

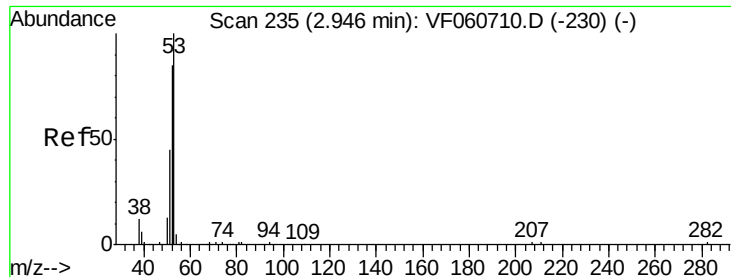


#13

Acrolein  
 Concen: 10.339 ug/l  
 RT: 2.09 min Scan# 148  
 Delta R.T. 0.08 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

Tgt Ion: 56 Resp: 817  
 Ion Ratio Lower Upper  
 56 100  
 55 63.0 56.6 85.0





#15

Acrylonitrile

Concen: 1.667 ug/l

RT: 2.93 min Scan# 233

Delta R.T. -0.02 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

LR-RBR-200029

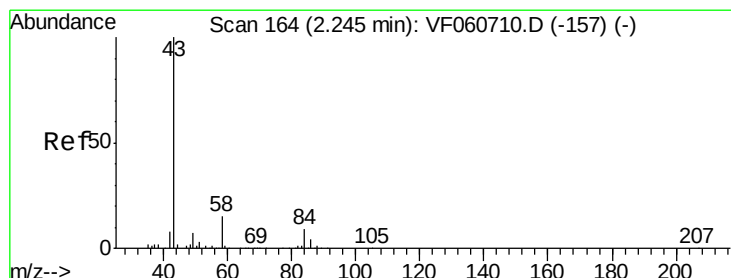
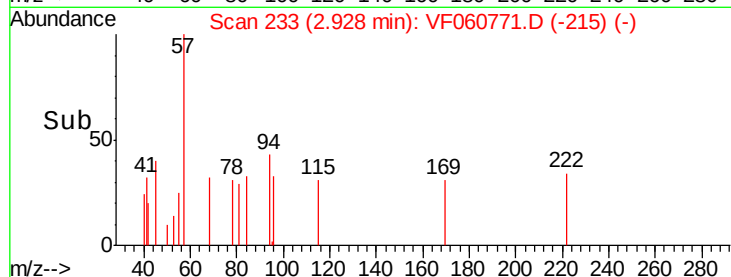
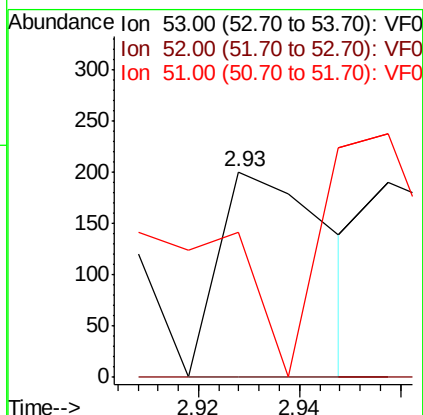
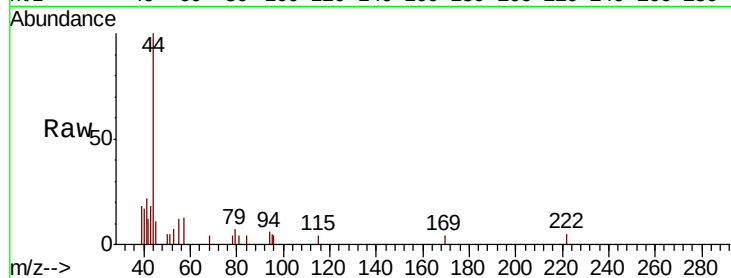
Tot Ion: 53 Resp: 307

Ion Ratio Lower Upper

53 100

52 0.0 68.8 103.2#

51 70.6 36.7 55.1#



#16

Acetone

Concen: 37.438 ug/l

RT: 2.24 min Scan# 163

Delta R.T. -0.01 min

Lab File: VF060771.D

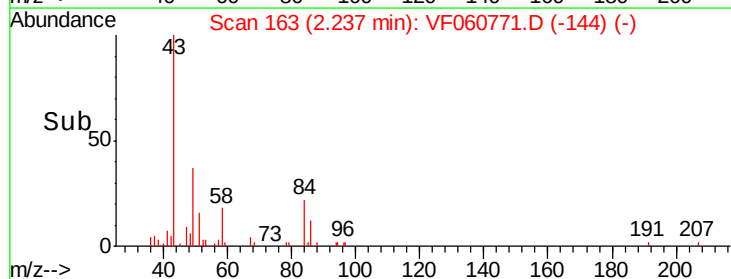
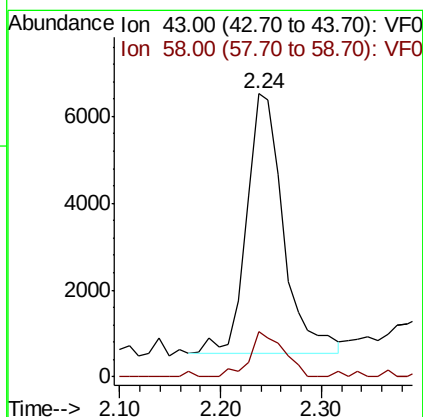
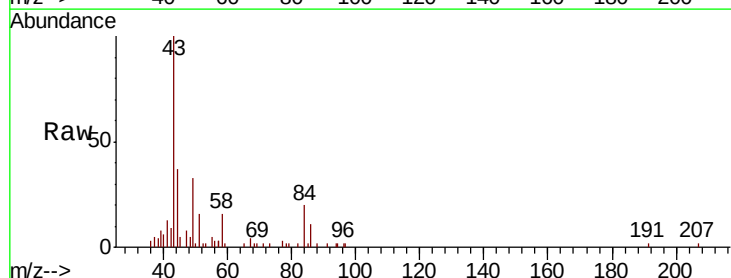
Acq: 16 Nov 2018 18:24

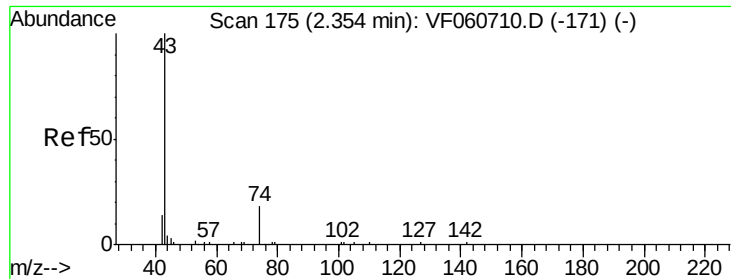
Tgt Ion: 43 Resp: 15196

Ion Ratio Lower Upper

43 100

58 15.8 11.6 17.4

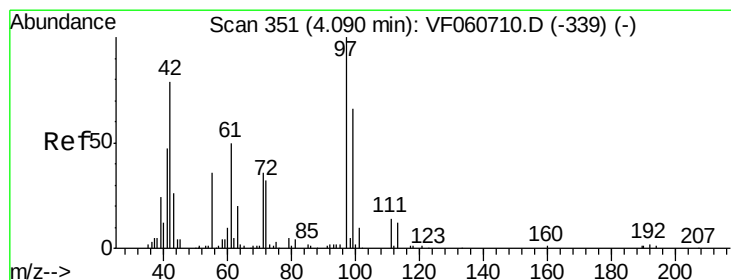
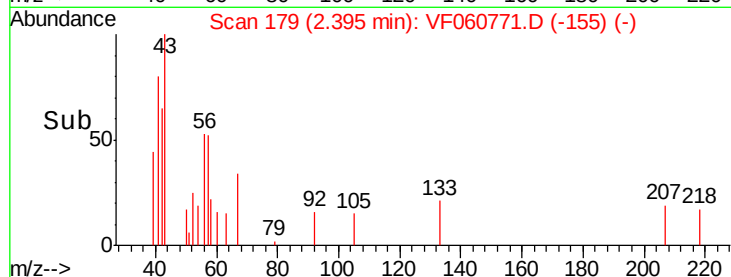
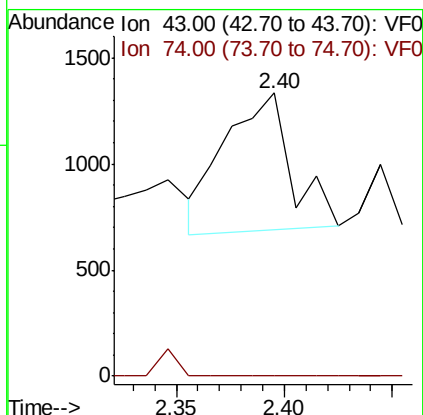
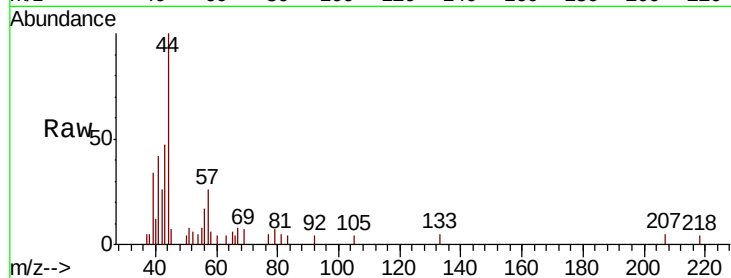




#18  
Methyl Acetate  
Concen: 2.099 ug/l  
RT: 2.40 min Scan# 179  
Delta R.T. 0.04 min  
Lab File: VF060771.D  
Acq: 16 Nov 2018 18:24

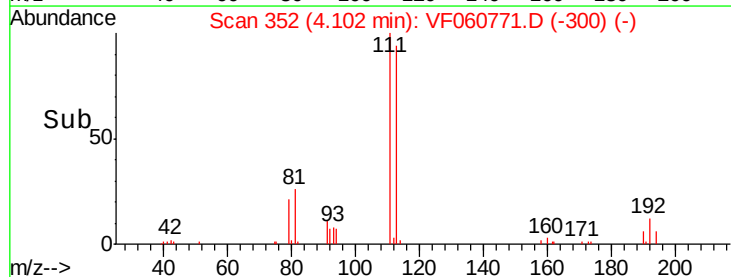
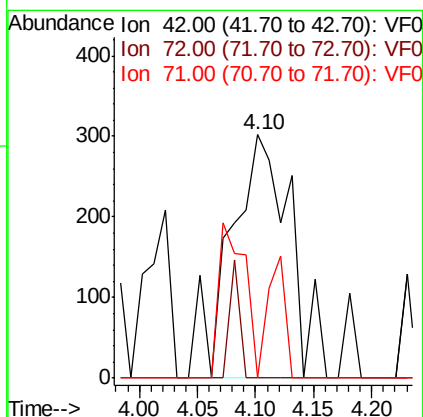
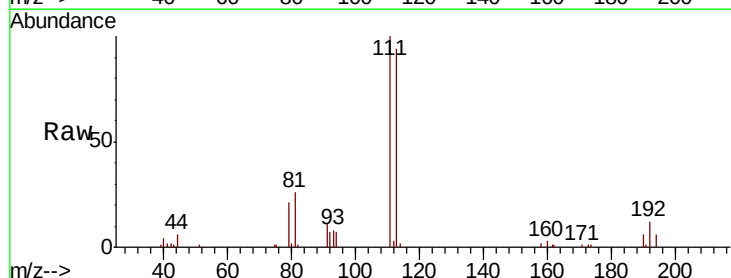
Instrument :  
MSVOA\_F  
ClientSampleId :  
LR-RBR-200029

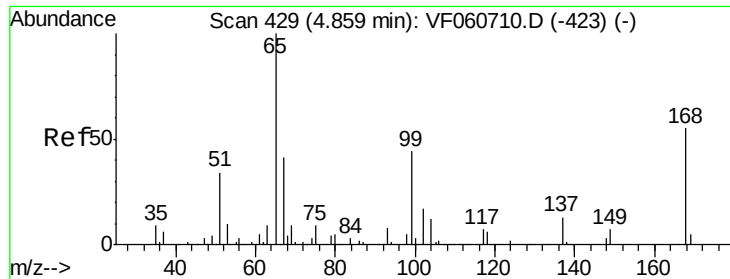
Tot Ion: 43 Resp: 1399  
Ion Ratio Lower Upper  
43 100  
74 0.0 11.8 17.8#



#29  
Tetrahydrofuran  
Concen: 3.958 ug/l  
RT: 4.10 min Scan# 352  
Delta R.T. 0.01 min  
Lab File: VF060771.D  
Acq: 16 Nov 2018 18:24

Tgt Ion: 42 Resp: 1090  
Ion Ratio Lower Upper  
42 100  
72 0.0 30.3 45.5#  
71 14.3 32.2 48.2#

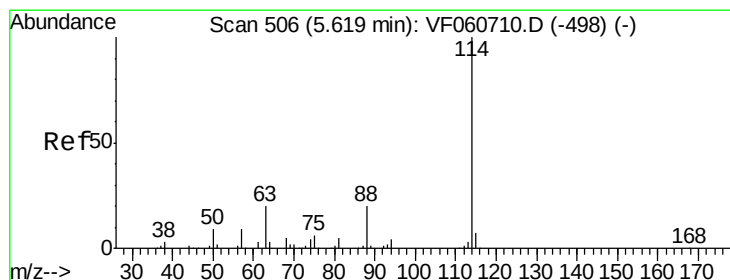
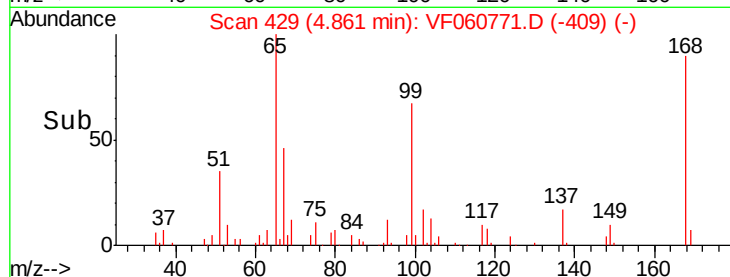
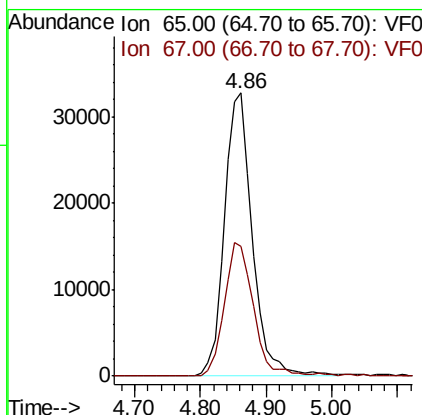
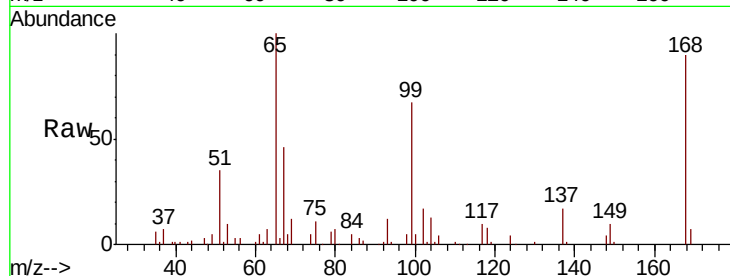




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.131 ug/l  
 RT: 4.86 min Scan# 429  
 Delta R.T. 0.00 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

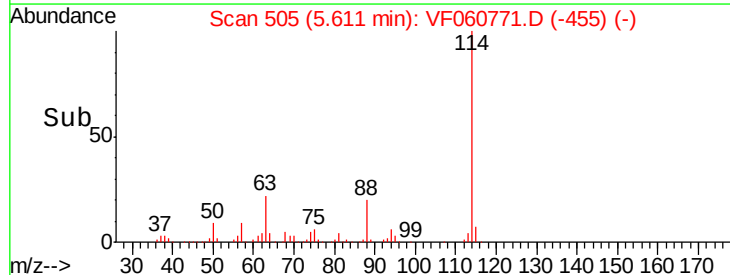
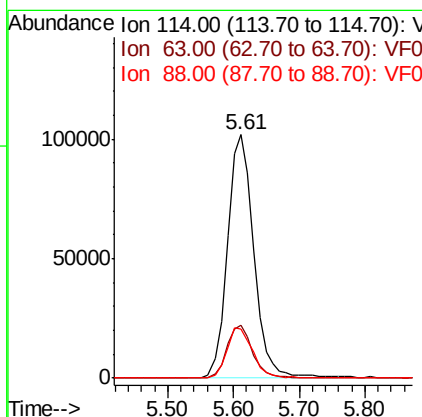
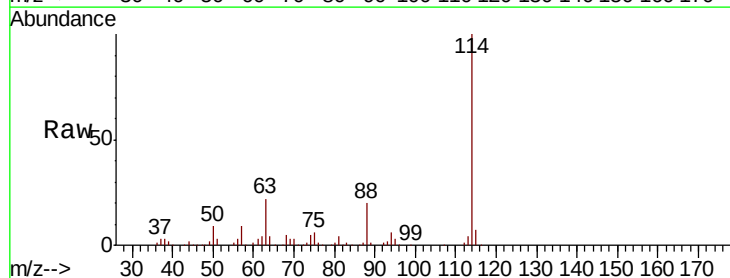
Instrument :  
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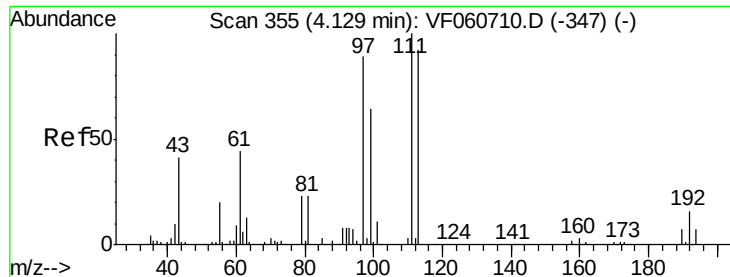
Tot Ion: 65 Resp: 97097  
 Ion Ratio Lower Upper  
 65 100  
 67 45.8 0.0 90.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.61 min Scan# 505  
 Delta R.T. -0.01 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

Tgt Ion: 114 Resp: 285904  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 40.8  
 88 20.1 0.0 39.6

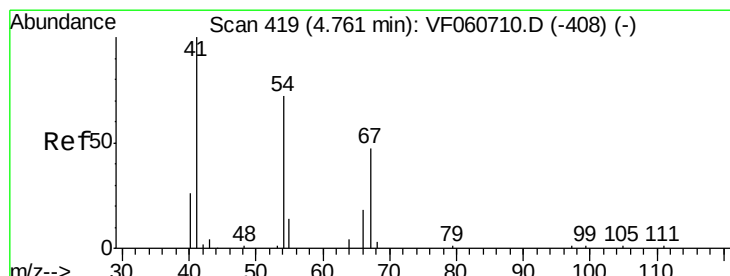
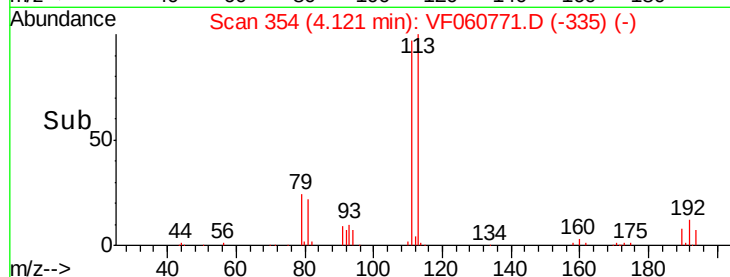
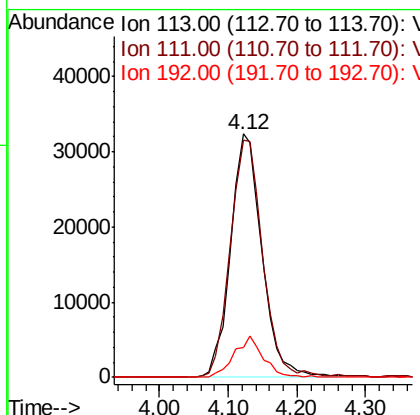
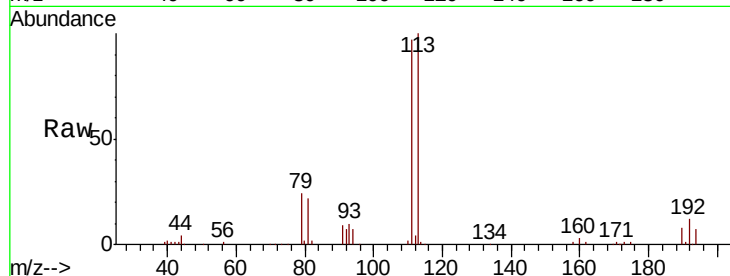




#35  
 Dibromofluoromethane  
 Concen: 47.444 ug/l  
 RT: 4.12 min Scan# 354  
 Delta R.T. -0.01 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

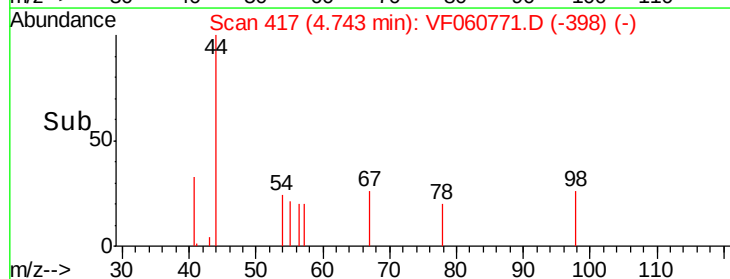
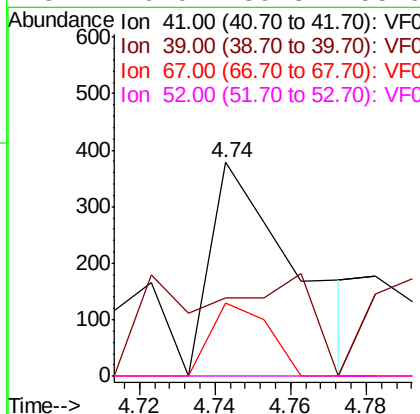
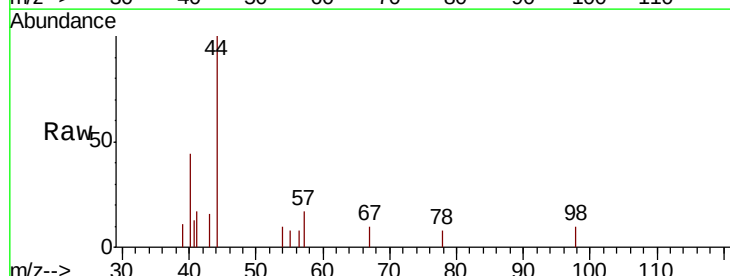
Instrument :  
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 LR-RBR-200029

Tot Ion:113 Resp: 101963  
 Ion Ratio Lower Upper  
 113 100  
 111 97.4 87.1 130.7  
 192 12.3 13.8 20.6#

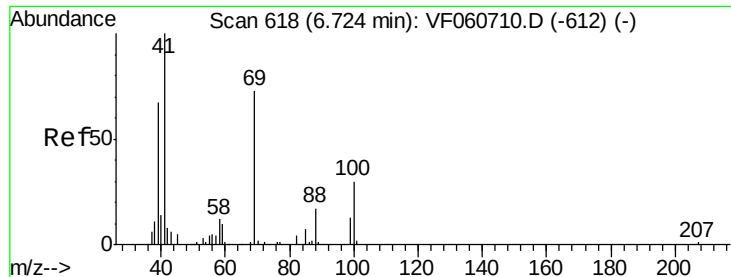


#41  
 Methacrylonitrile  
 Concen: Below Cal  
 RT: 4.74 min Scan# 417  
 Delta R.T. -0.02 min  
 Lab File: VF060771.D  
 Acq: 16 Nov 2018 18:24

Tgt Ion: 41 Resp: 584  
 Ion Ratio Lower Upper  
 41 100  
 39 36.5 47.1 70.7#  
 67 34.4 37.1 55.7#  
 52 0.0 39.3 58.9#



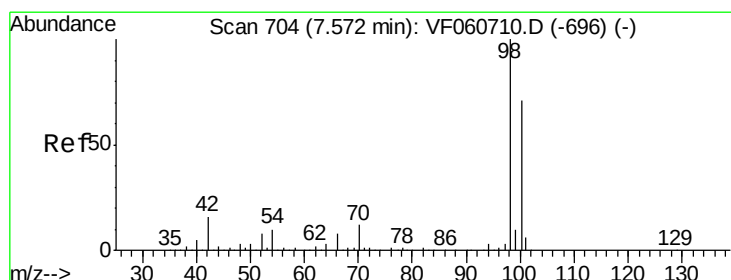
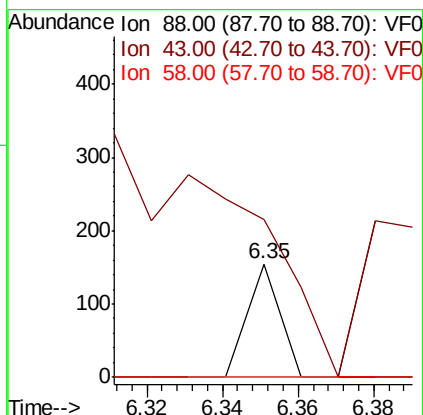
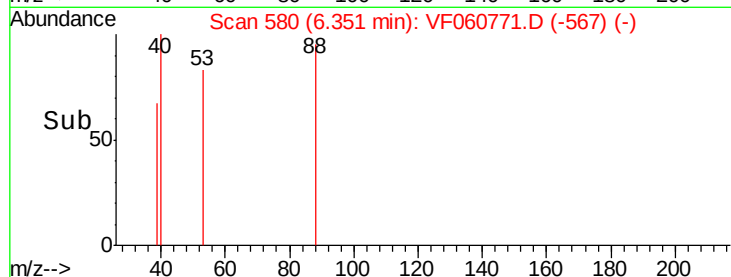
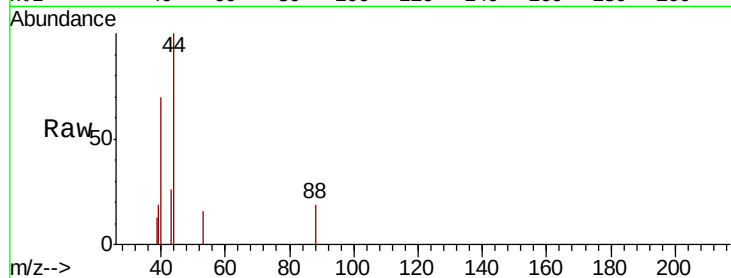




#49  
1,4-Dioxane  
Concen: 9.094 ug/l  
RT: 6.35 min Scan# 580  
Delta R.T. -0.37 min  
Lab File: VF060771.D  
Acq: 16 Nov 2018 18:24

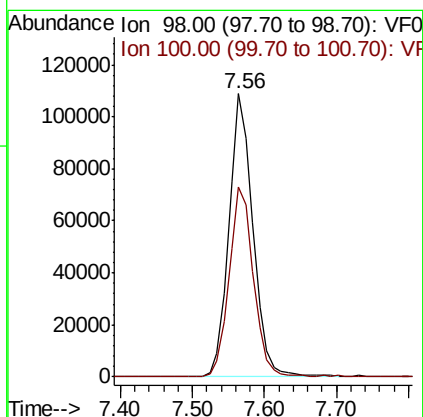
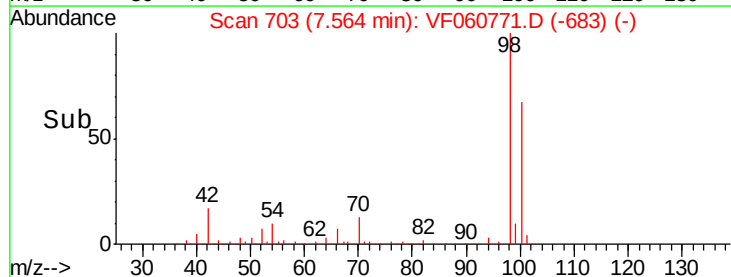
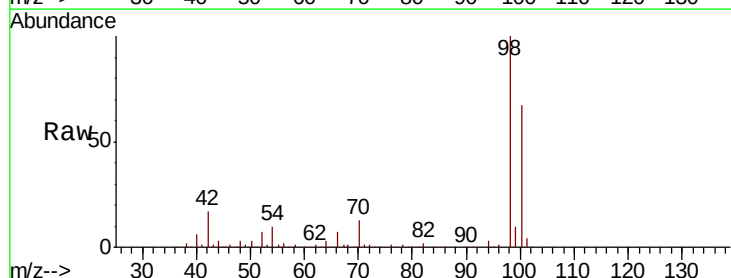
Instrument :  
MSVOA\_F  
ClientSampleId :  
LR-RBR-200029

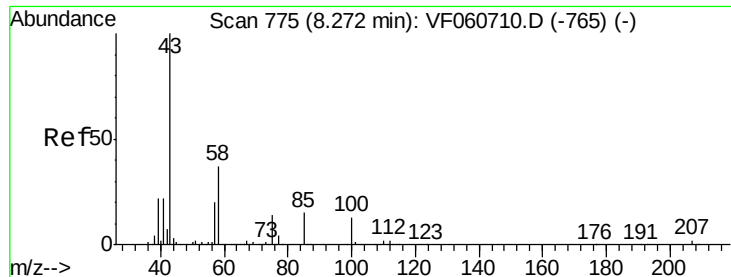
Tot Ion: 88 Resp: 92  
Ion Ratio Lower Upper  
88 100  
43 139.4 44.6 66.8#  
58 0.0 54.5 81.7#



#50  
Toluene-d8  
Concen: 45.459 ug/l  
RT: 7.56 min Scan# 703  
Delta R.T. -0.01 min  
Lab File: VF060771.D  
Acq: 16 Nov 2018 18:24

Tgt Ion: 98 Resp: 252541  
Ion Ratio Lower Upper  
98 100  
100 67.0 56.5 84.7





#51

4-Methyl-2-Pentanone

Concen: 1.887 ug/l

RT: 8.28 min Scan# 776

Delta R.T. 0.01 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

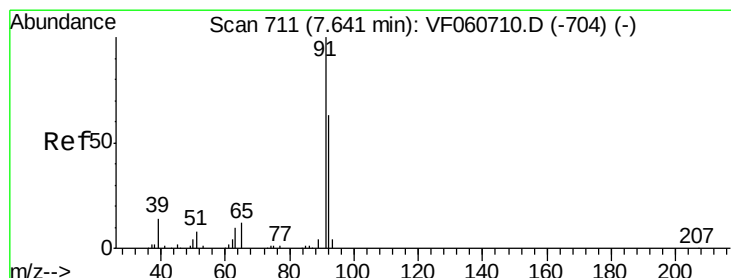
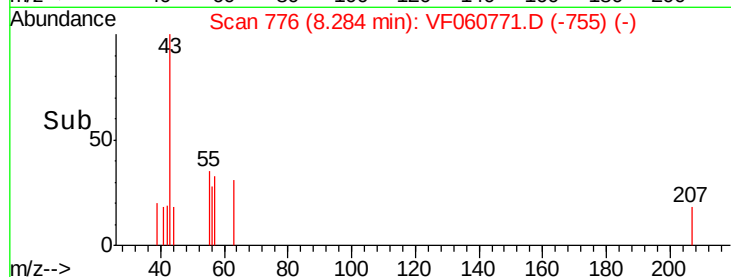
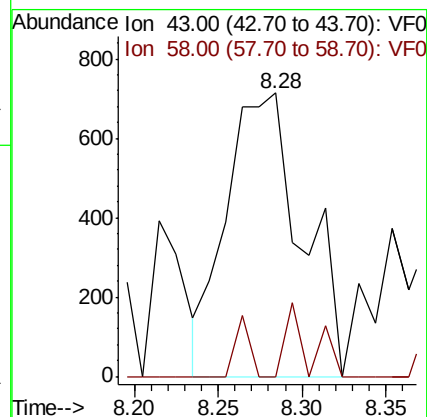
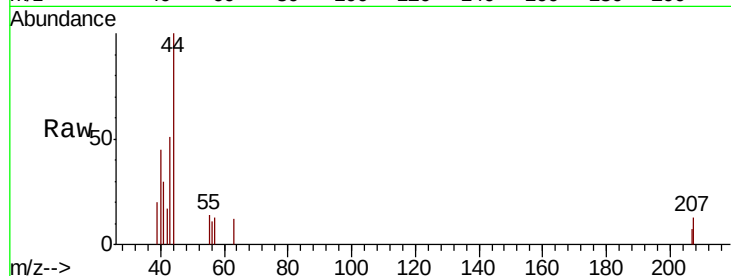
LR-RBR-200029

Tot Ion: 43 Resp: 2231

Ion Ratio Lower Upper

43 100

58 0.0 29.2 43.8#



#52

Toluene

Concen: 4.813 ug/l

RT: 7.63 min Scan# 710

Delta R.T. -0.01 min

Lab File: VF060771.D

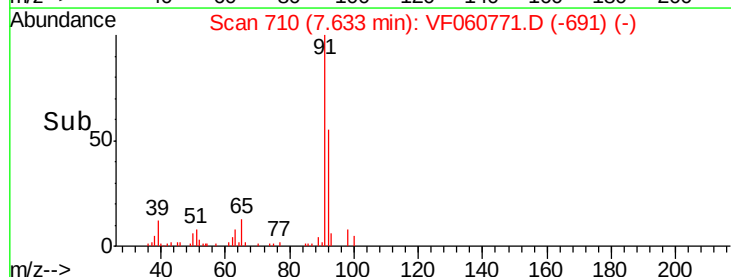
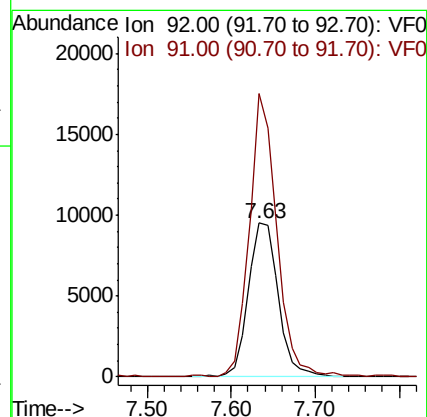
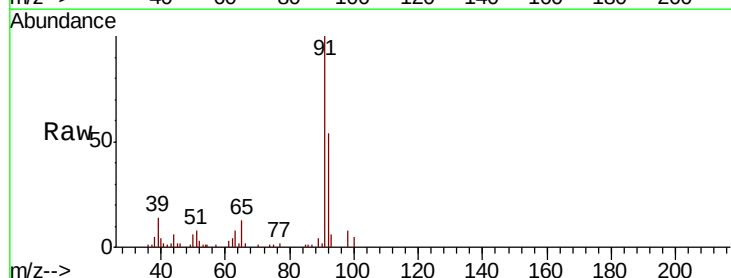
Acq: 16 Nov 2018 18:24

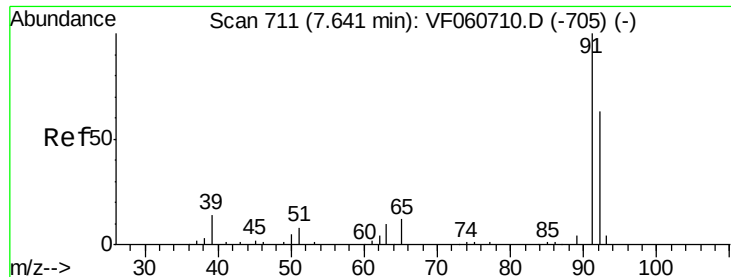
Tgt Ion: 92 Resp: 23840

Ion Ratio Lower Upper

92 100

91 183.8 126.7 190.1





#58

2-Chloroethyl Vinyl ether

Concen: 23.852 ug/l

RT: 7.63 min Scan# 710

Delta R.T. -0.01 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

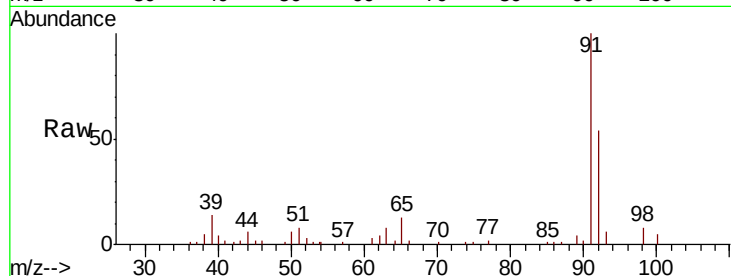
LR-RBR-200029

Tot Ion: 63 Resp: 3502

Ion Ratio Lower Upper

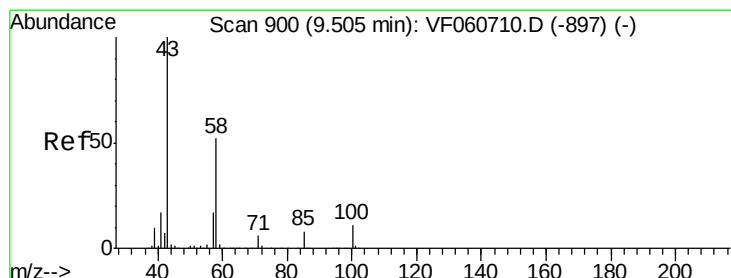
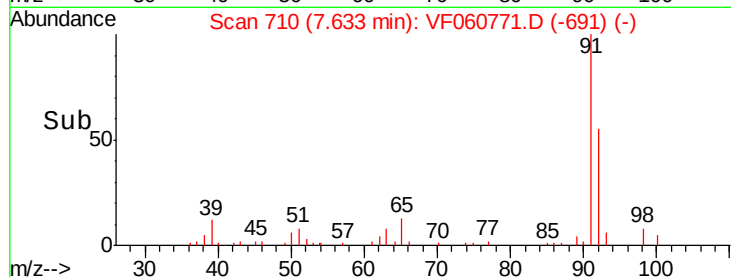
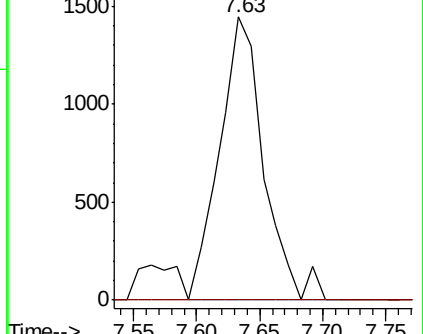
63 100

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: 2.560 ug/l

RT: 9.51 min Scan# 900

Delta R.T. 0.00 min

Lab File: VF060771.D

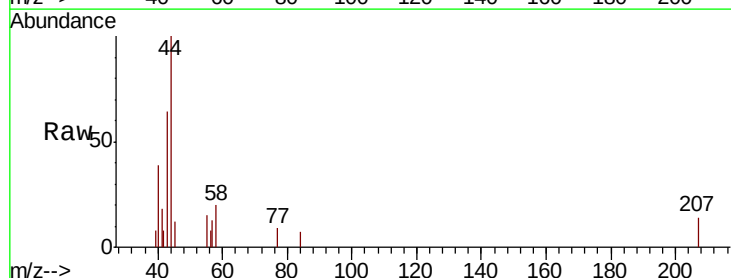
Acq: 16 Nov 2018 18:24

Tgt Ion: 43 Resp: 2127

Ion Ratio Lower Upper

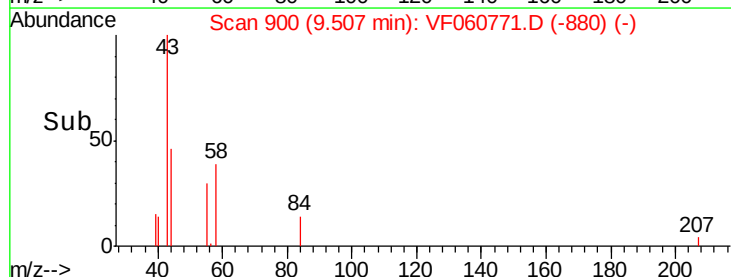
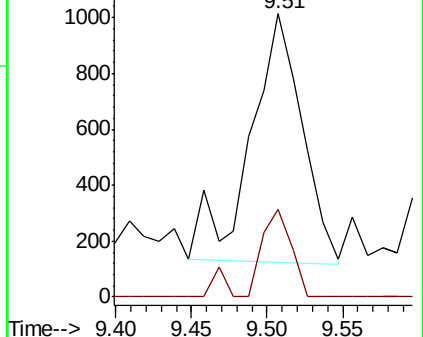
43 100

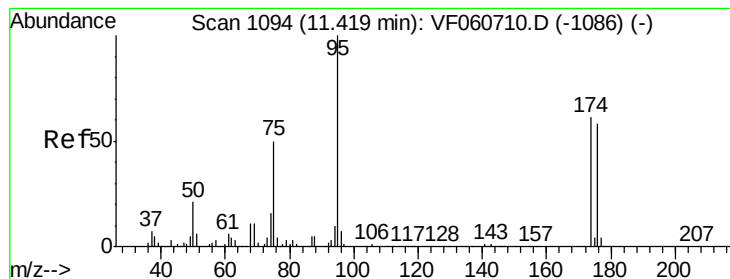
58 31.1 24.9 74.7



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#62

4-Bromofluorobenzene

Concen: 47.203 ug/l

RT: 11.42 min Scan# 1094

Delta R.T. 0.00 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

LR-RBR-200029

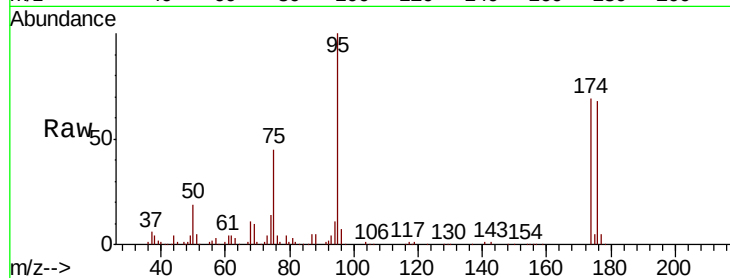
Tot Ion: 95 Resp: 120623

Ion Ratio Lower Upper

95 100

174 69.1 0.0 121.6

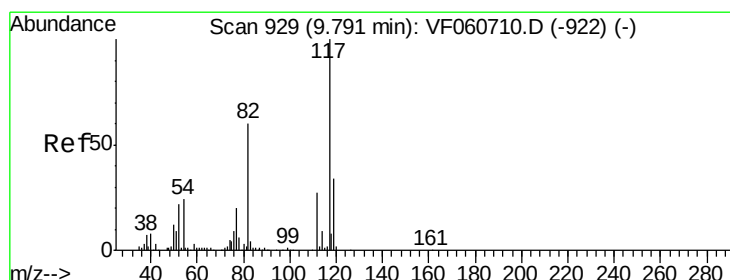
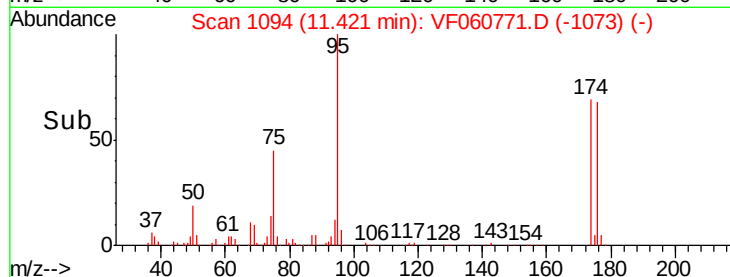
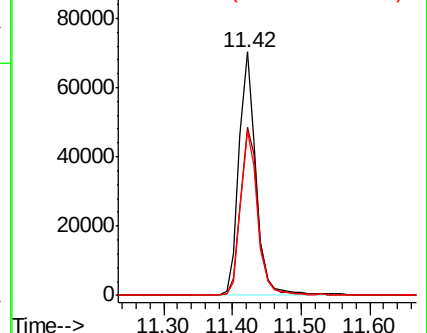
176 67.6 0.0 115.2



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: 9.78 min Scan# 928

Delta R.T. -0.01 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

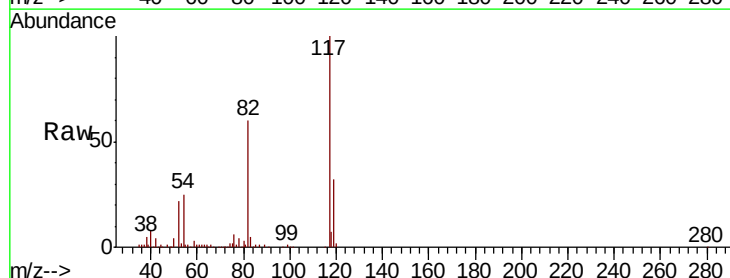
Tgt Ion: 117 Resp: 256976

Ion Ratio Lower Upper

117 100

82 60.0 47.9 71.9

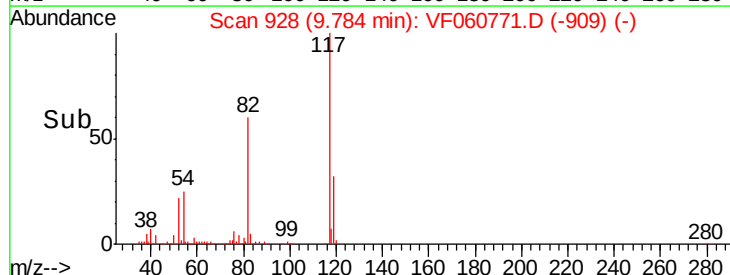
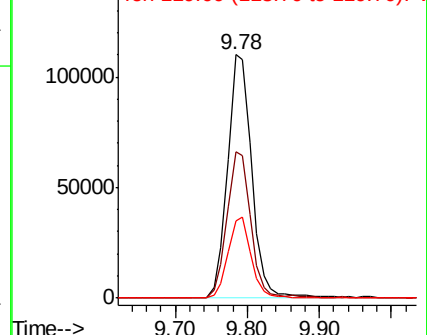
119 31.7 26.8 40.2

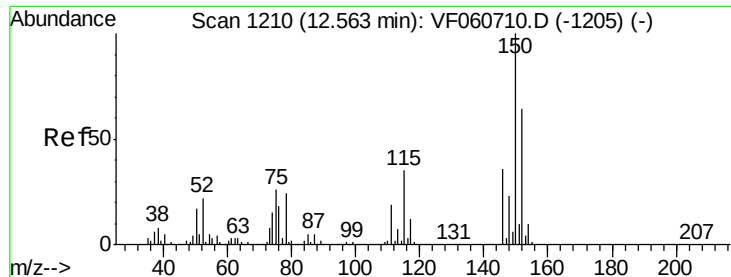


Abundance Ion 117.00 (116.70 to 117.70): V

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: 12.57 min Scan# 1210

Delta R.T. 0.00 min

Lab File: VF060771.D

Acq: 16 Nov 2018 18:24

Instrument :

MSVOA\_F

ClientSampleId :

LR-RBR-200029

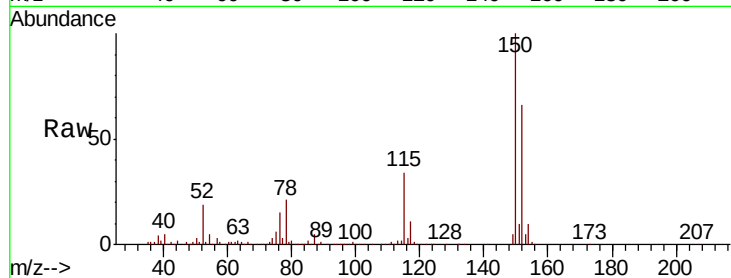
Tot Ion:152 Resp: 134188

Ion Ratio Lower Upper

152 100

115 51.7 27.9 83.7

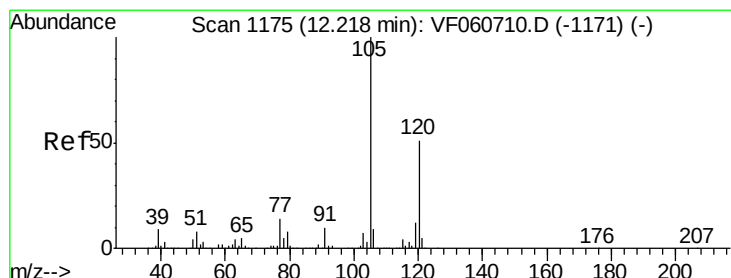
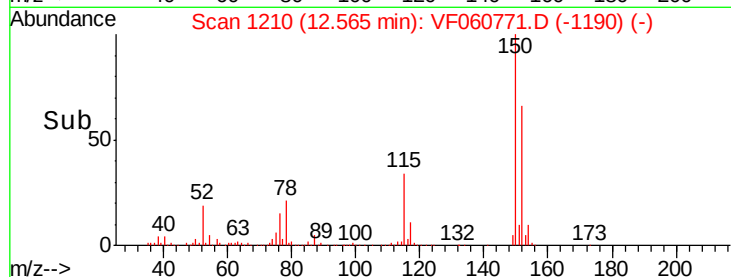
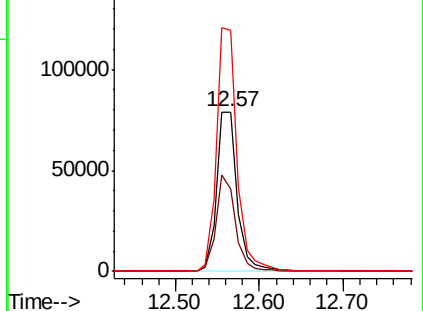
150 151.3 0.0 316.4



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



#84

1,2,4-Trimethylbenzene

Concen: 2.386 ug/l

RT: 12.21 min Scan# 1174

Delta R.T. -0.01 min

Lab File: VF060771.D

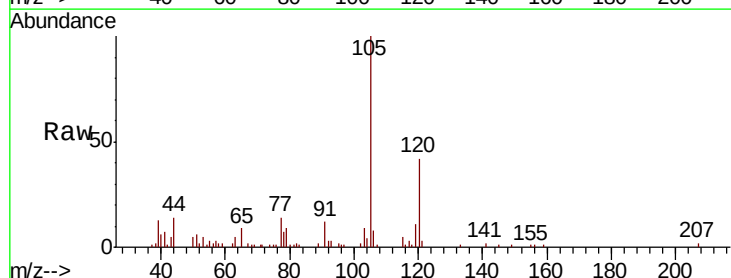
Acq: 16 Nov 2018 18:24

Tgt Ion:105 Resp: 21160

Ion Ratio Lower Upper

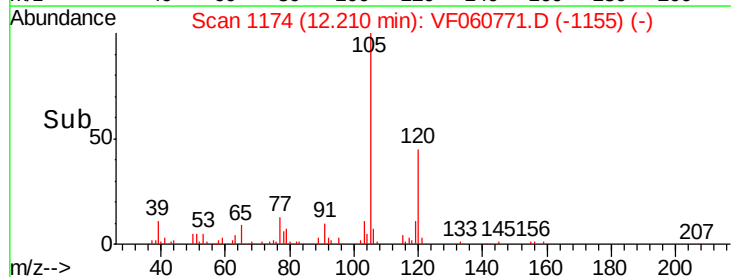
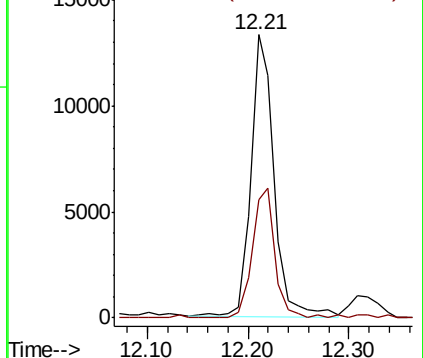
105 100

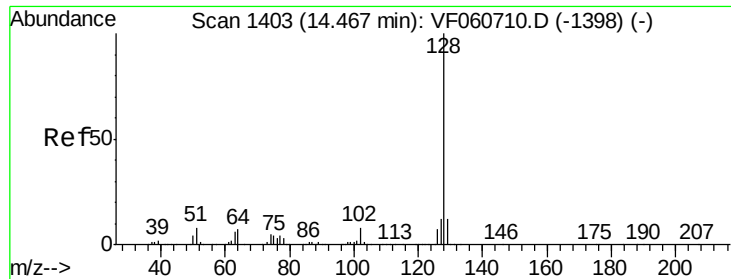
120 41.9 25.5 76.5



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

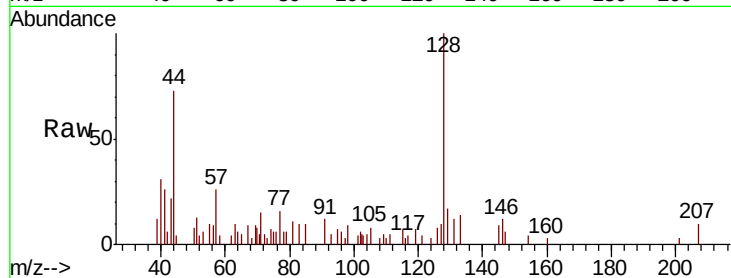




#95  
Naphthalene  
Concen: 1.057 ug/l  
RT: 14.47 min Scan# 1403  
Delta R.T. 0.00 min  
Lab File: VF060771.D  
Acq: 16 Nov 2018 18:24

Instrument :  
MSVOA\_F  
ClientSampleId :  
LR-RBR-200029

Tot Ion:128 Resp: 5842  
Ion Ratio Lower Upper  
128 100  
127 9.8 9.8 14.6  
129 17.4 9.3 13.9#



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

