

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF041819\  
 Data File : VF062207.D  
 Acq On : 18 Apr 2019 16:13  
 Operator : FY/SY  
 Sample : K2386-01  
 Misc : 4.98g/5mL/MSVOA F/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 RBR-200048-49

Quant Time: Apr 19 01:17:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 18 07:43:02 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.06  | 168  | 44111    | 50.00 | ug/l  | 0.03     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 37660    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 16796    | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 4222     | 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   | 5589     | 13.82 | ug/l   | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 27.64% |          |
| 35) Dibromofluoromethane    | 4.30  | 113  | 8652     | 26.26 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 52.52% |          |
| 50) Toluene-d8              | 7.71  | 98   | 34797    | 41.73 | ug/l   | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 83.46% |          |
| 62) 4-Bromofluorobenzene    | 11.49 | 95   | 6915     | 21.56 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 43.12% |          |

| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane               | 1.44  | 94   | 454      | 1.313     | ug/l # | 6      |
| 8) Diethyl Ether              | 1.70  | 74   | 503      | 3.196     | ug/l   | 51     |
| 11) Tert butyl alcohol        | 2.70  | 59   | 73       | 2.596     | ug/l # | 1      |
| 13) Acrolein                  | 2.11  | 56   | 370      | Below Cal | #      | 1      |
| 14) Allyl chloride            | 2.21  | 41   | 589      | 1.044     | ug/l # | 38     |
| 15) Acrylonitrile             | 3.09  | 53   | 135      | 1.576     | ug/l # | 1      |
| 16) Acetone                   | 2.34  | 43   | 1250     | 12.929    | ug/l   | 96     |
| 18) Methyl Acetate            | 2.51  | 43   | 1677     | 2.509     | ug/l # | 59     |
| 20) Methylene Chloride        | 2.37  | 84   | 262      | Below Cal | #      | 31     |
| 25) 2-Butanone                | 4.53  | 43   | 518      | 2.680     | ug/l # | 56     |
| 29) Tetrahydrofuran           | 4.25  | 42   | 287      | 3.280     | ug/l # | 1      |
| 37) Ethyl Acetate             | 4.29  | 43   | 843      | 3.957     | ug/l # | 1      |
| 41) Methacrylonitrile         | 4.94  | 41   | 413      | 3.360     | ug/l # | 9      |
| 43) Isopropyl Acetate         | 7.11  | 43   | 544      | 2.428     | ug/l # | 1      |
| 45) 1,2-Dichloropropane       | 6.41  | 63   | 464      | 1.779     | ug/l # | 65     |
| 46) Dibromomethane            | 6.26  | 93   | 198      | 1.141     | ug/l # | 3      |
| 47) Bromodichloromethane      | 6.55  | 83   | 496      | 1.266     | ug/l # | 24     |
| 48) Methyl methacrylate       | 6.88  | 41   | 429      | 2.913     | ug/l # | 1      |
| 49) 1,4-Dioxane               | 6.87  | 88   | 300      | 177.625   | ug/l # | 38     |
| 51) 4-Methyl-2-Pentanone      | 8.40  | 43   | 1569     | 9.413     | ug/l # | 78     |
| 54) cis-1,3-Dichloropropene   | 7.44  | 75   | 569      | 1.430     | ug/l # | 41     |
| 56) Ethyl methacrylate        | 8.75  | 69   | 746      | 3.752     | ug/l # | 1      |
| 58) 2-Chloroethyl Vinyl ether | 7.42  | 63   | 148      | 2.564     | ug/l # | 48     |
| 59) 2-Hexanone                | 9.63  | 43   | 1344     | 13.061    | ug/l # | 28     |
| 65) Chlorobenzene             | 9.93  | 112  | 892      | 2.491     | ug/l   | 90     |
| 67) Ethyl Benzene             | 10.02 | 91   | 1785     | 2.741     | ug/l # | 74     |
| 68) m/p-Xylenes               | 10.26 | 106  | 1150     | 4.797     | ug/l # | 35     |
| 69) o-Xylene                  | 10.83 | 106  | 527      | 1.980     | ug/l # | 1      |
| 70) Styrene                   | 10.89 | 104  | 1142     | 3.040     | ug/l # | 52     |
| 73) Isopropylbenzene          | 11.22 | 105  | 1919     | 5.291     | ug/l   | 86     |
| 74) N-amyl acetate            | 11.51 | 43   | 399      | 2.552     | ug/l # | 1      |
| 75) 1,1,2,2-Tetrachloroethane | 11.98 | 83   | 546      | 8.754     | ug/l   | 84     |
| 76) 1,2,3-Trichloropropane    | 11.84 | 75   | 144      | 3.356     | ug/l # | 1      |
| 77) Bromobenzene              | 11.59 | 156  | 215      | 2.767     | ug/l # | 1      |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF041819\  
 Data File : VF062207.D  
 Acq On : 18 Apr 2019 16:13  
 Operator : FY/SY  
 Sample : K2386-01  
 Misc : 4.98g/5mL/MSVOA F/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 RBR-200048-49

Quant Time: Apr 19 01:17:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 18 07:43:02 2019  
 Response via : Initial Calibration

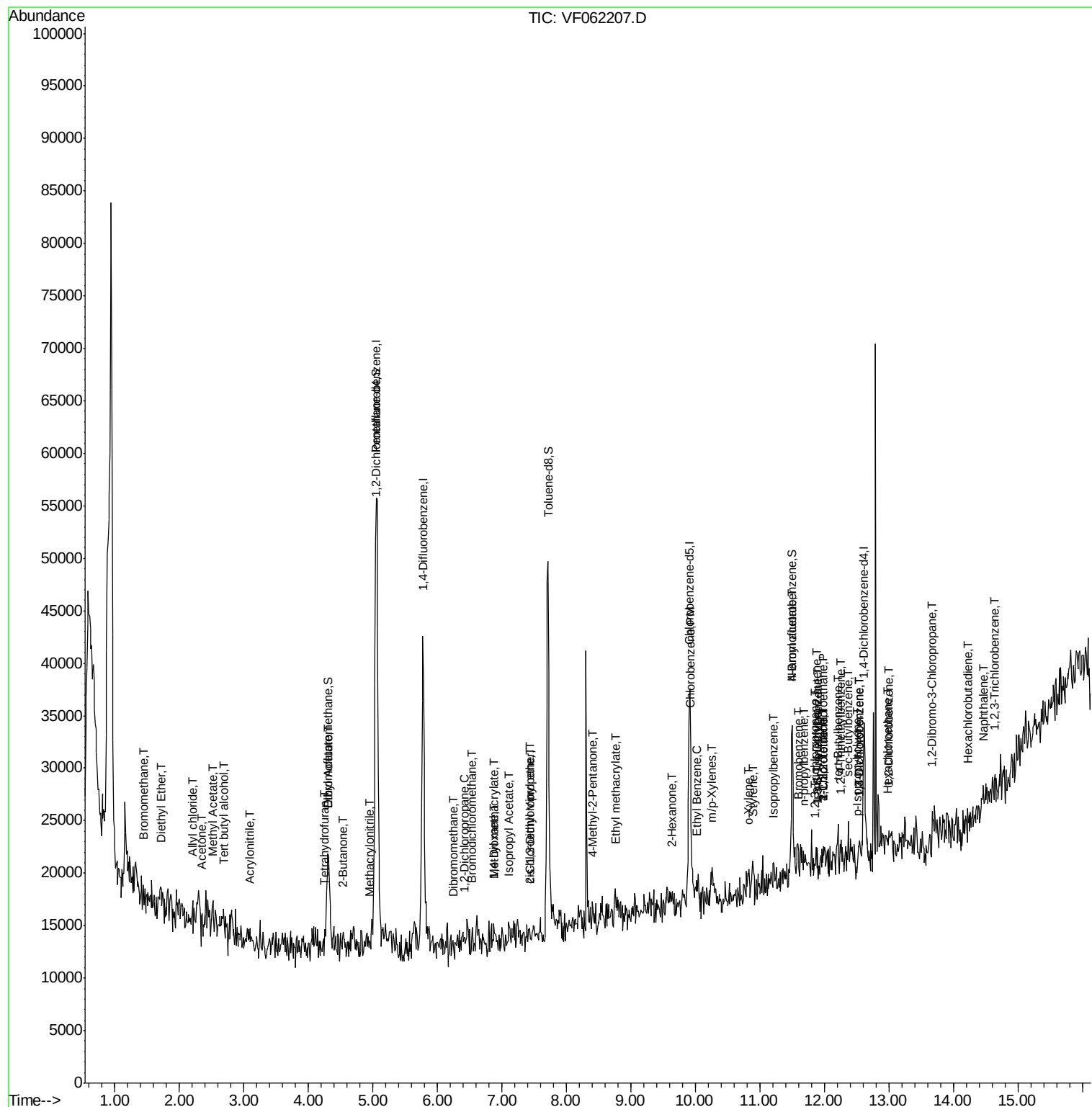
| Internal Standards             | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|--------|----------|
| -----                          |       |      |          |           |        |          |
| 78) n-propylbenzene            | 11.67 | 91   | 2504     | 6.545     | ug/l   | 82       |
| 79) 2-Chlorotoluene            | 11.98 | 91   | 920      | 3.964     | ug/l   | 92       |
| 80) 1,3,5-Trimethylbenzene     | 11.89 | 105  | 999      | 3.307     | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.87 | 75   | 275      | 12.566    | ug/l # | 18       |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 954      | 4.254     | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.20 | 119  | 1135     | 3.634     | ug/l   | 90       |
| 84) 1,2,4-Trimethylbenzene     | 12.27 | 105  | 943      | 3.226     | ug/l   | 90       |
| 85) sec-Butylbenzene           | 12.37 | 105  | 1741     | 4.293     | ug/l   | 86       |
| 86) p-Isopropyltoluene         | 12.51 | 119  | 1253     | 3.642     | ug/l # | 69       |
| 87) 1,3-Dichlorobenzene        | 12.54 | 146  | 501      | 3.475     | ug/l   | 90       |
| 88) 1,4-Dichlorobenzene        | 12.54 | 146  | 501      | 3.603     | ug/l   | 88       |
| 89) n-Butylbenzene             | 12.92 | 91   | 1051     | Below Cal |        | 88       |
| 90) Hexachloroethane           | 12.98 | 117  | 372      | 4.211     | ug/l # | 35       |
| 91) 1,2-Dichlorobenzene        | 13.00 | 146  | 419      | 3.010     | ug/l # | 26       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.67 | 75   | 136      | 11.098    | ug/l # | 18       |
| 94) Hexachlorobutadiene        | 14.23 | 225  | 137      | 1.715     | ug/l # | 19       |
| 95) Naphthalene                | 14.47 | 128  | 274      | 1.345     | ug/l # | 1        |
| 96) 1,2,3-Trichlorobenzene     | 14.65 | 180  | 207      | 1.851     | ug/l # | 12       |
| -----                          |       |      |          |           |        |          |

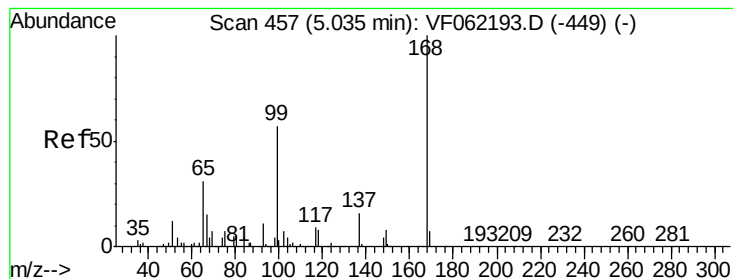
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF041819\  
Data File : VF062207.D  
Acq On : 18 Apr 2019 16:13  
Operator : FY/SY  
Sample : K2386-01  
Misc : 4.98g/5mL/MSVOA F/SOIL  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
RBR-200048-49

Quant Time: Apr 19 01:17:55 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
Quant Title : SW846 8260  
QLast Update : Thu Apr 18 07:43:02 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.06 min Scan# 460

Delta R.T. 0.03 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

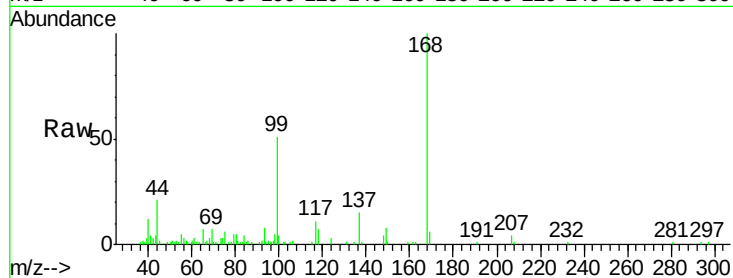
RBR-200048-49

Tot Ion:168 Resp: 44111

Ion Ratio Lower Upper

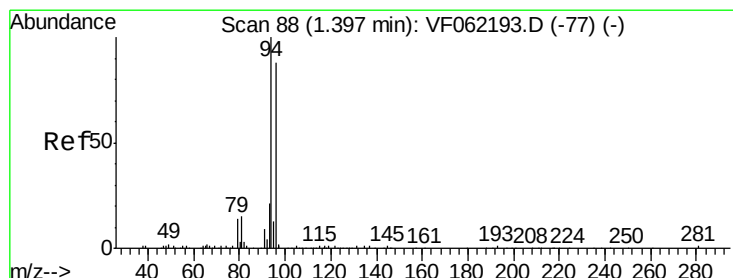
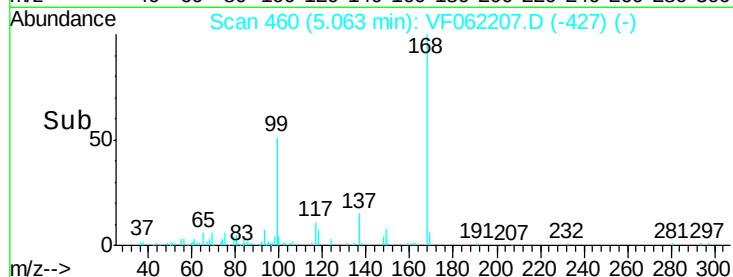
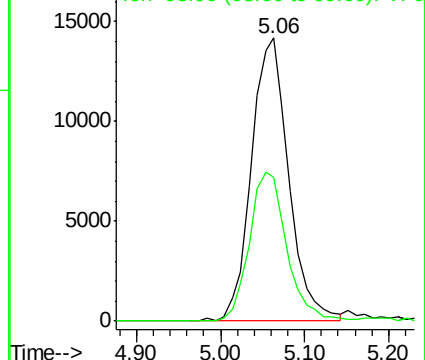
168 100

99 50.8 45.5 68.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VF0



#5

Bromomethane

Concen: 1.313 ug/l

RT: 1.44 min Scan# 92

Delta R.T. 0.04 min

Lab File: VF062207.D

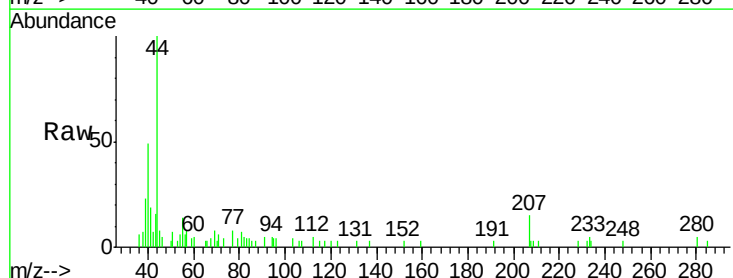
Acq: 18 Apr 2019 16:13

Tgt Ion: 94 Resp: 454

Ion Ratio Lower Upper

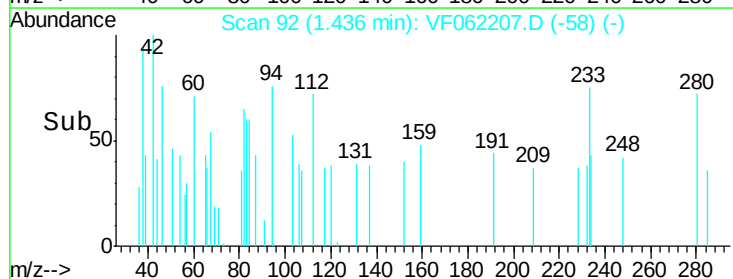
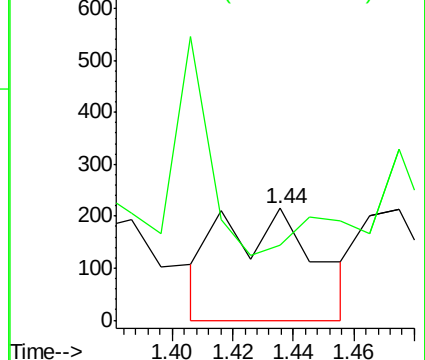
94 100

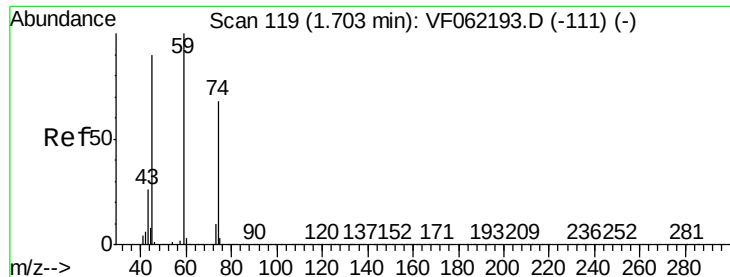
96 0.0 70.2 105.4#



Abundance Ion 93.90 (93.60 to 94.60): VF0

Ion 95.90 (95.60 to 96.60): VF0





#8

Diethyl Ether

Concen: 3.196 ug/l

RT: 1.70 min Scan# 119

Delta R.T. -0.00 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

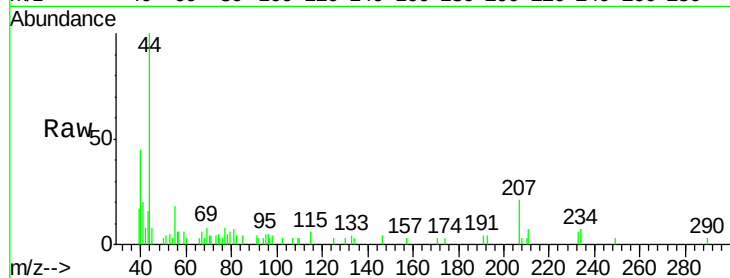
RBR-200048-49

Tot Ion: 74 Resp: 503

Ion Ratio Lower Upper

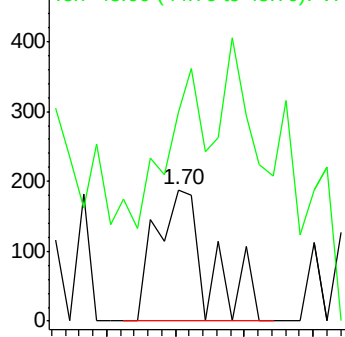
74 100

45 80.1 70.0 210.2

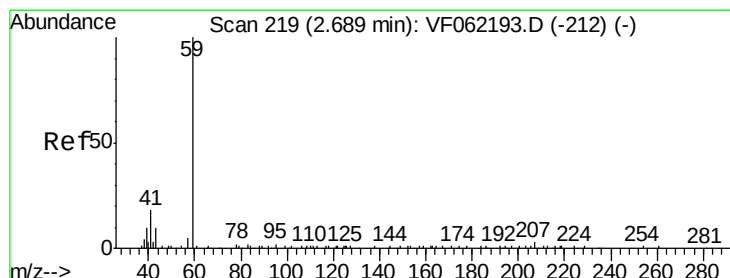
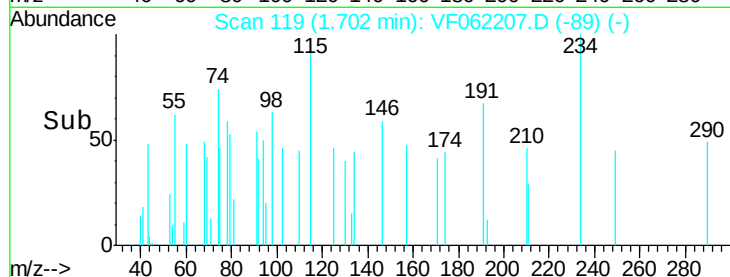


Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0



Time-->



#11

Tert butyl alcohol

Concen: 2.596 ug/l

RT: 2.70 min Scan# 220

Delta R.T. 0.01 min

Lab File: VF062207.D

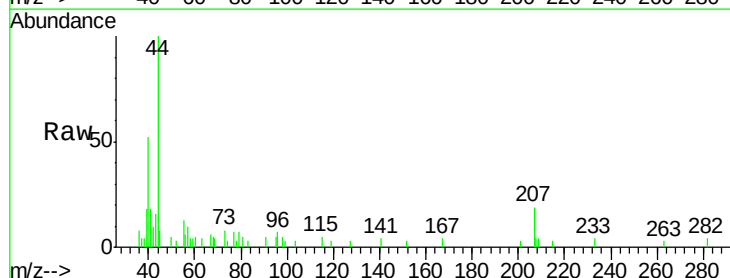
Acq: 18 Apr 2019 16:13

Tgt Ion: 59 Resp: 73

Ion Ratio Lower Upper

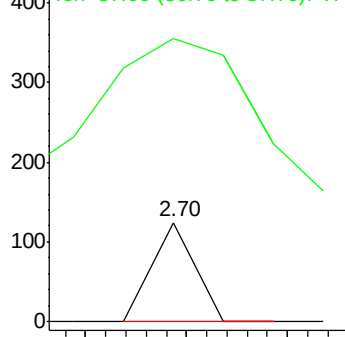
59 100

57 580.8 9.3 13.9#

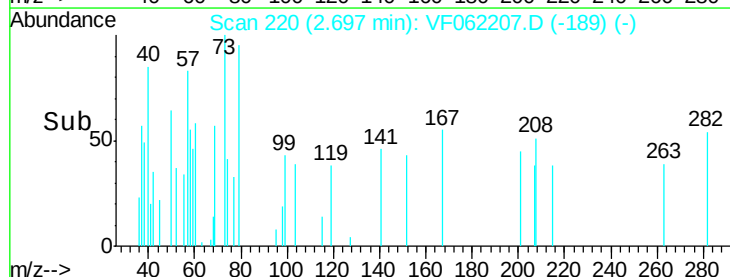


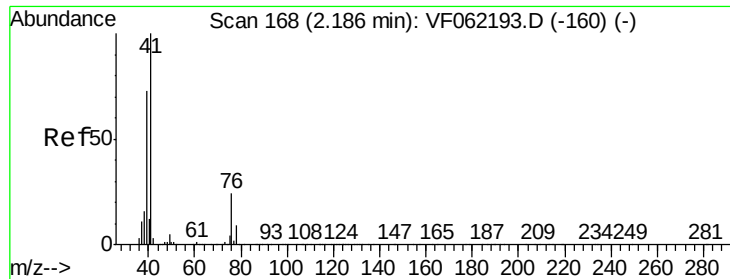
Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0



Time-->

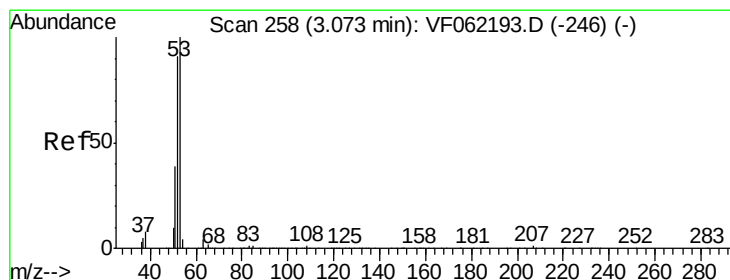
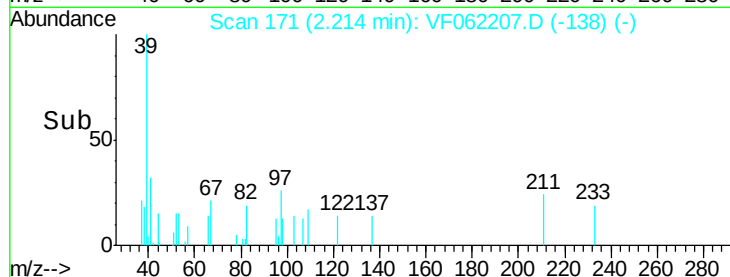
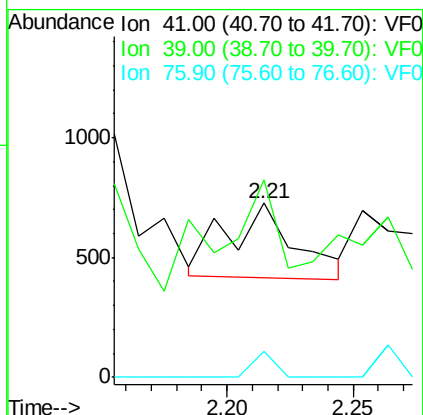
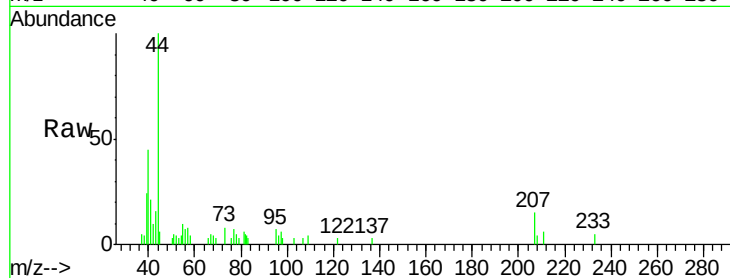




#14  
Allvl chloride  
Concen: 1.044 ug/l  
RT: 2.21 min Scan# 171  
Delta R.T. 0.03 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

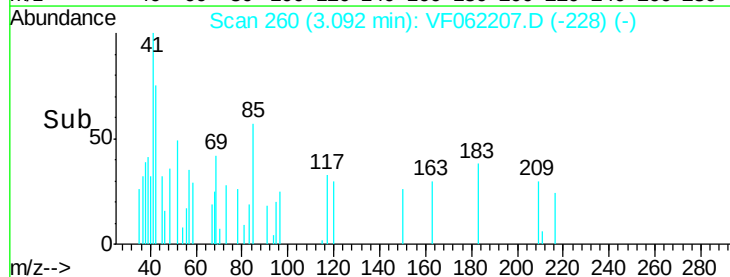
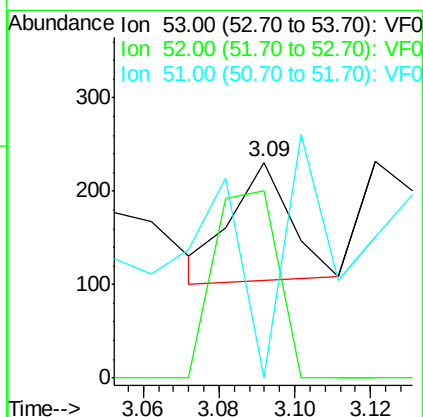
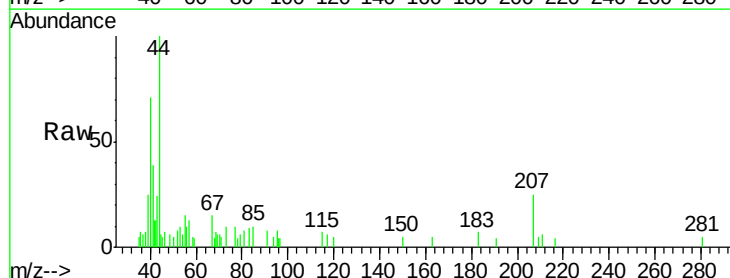
Instrument :  
MSVOA\_F  
ClientSampled :  
RBR-200048-49

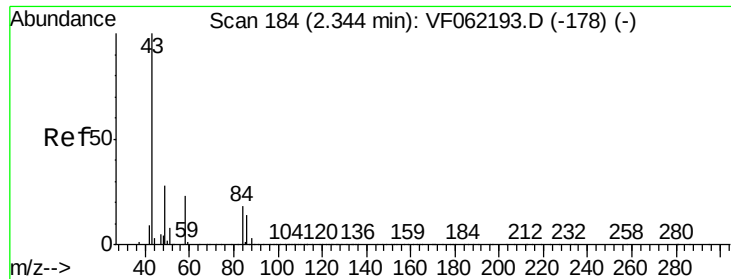
Tot Ion: 41 Resp: 589  
Ion Ratio Lower Upper  
41 100  
39 137.2 60.0 90.0#  
76 10.7 20.6 30.8#



#15  
Acrylonitrile  
Concen: 1.576 ug/l  
RT: 3.09 min Scan# 260  
Delta R.T. 0.02 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

Tgt Ion: 53 Resp: 135  
Ion Ratio Lower Upper  
53 100  
52 171.9 69.5 104.3#  
51 160.0 31.8 47.8#

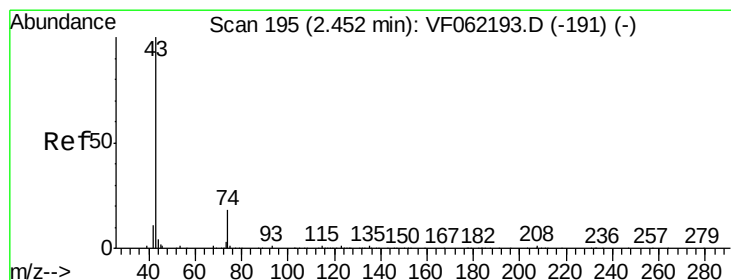
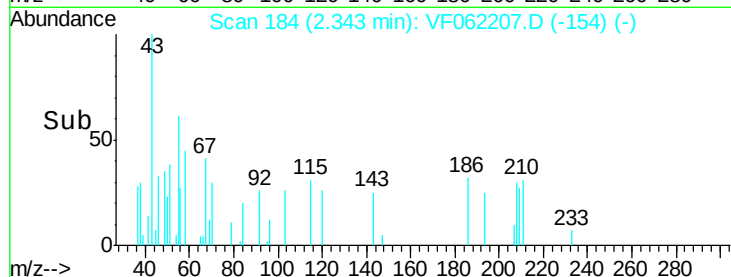
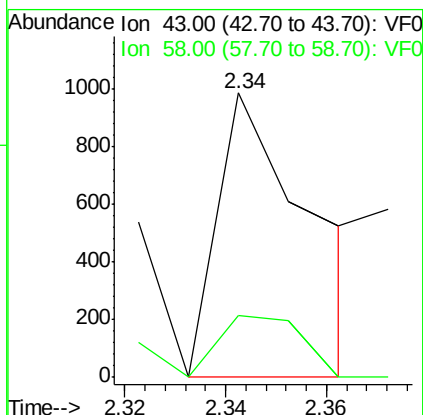
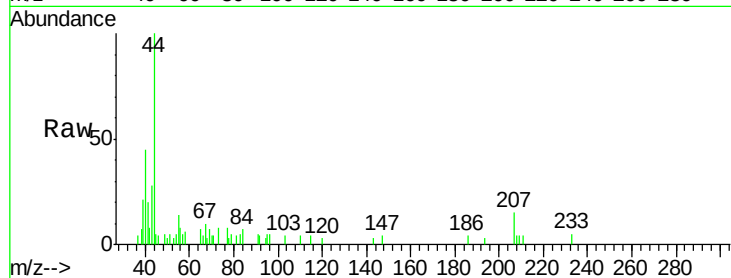




#16  
Acetone  
Concen: 12.929 ug/l  
RT: 2.34 min Scan# 184  
Delta R.T. -0.00 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

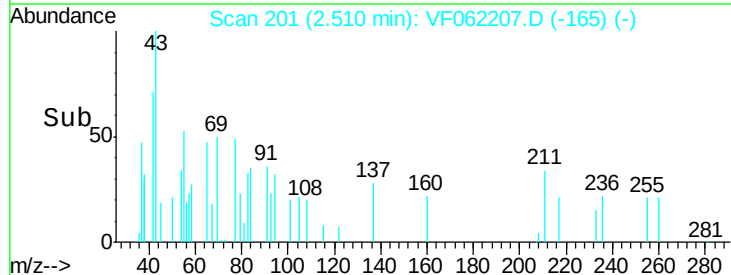
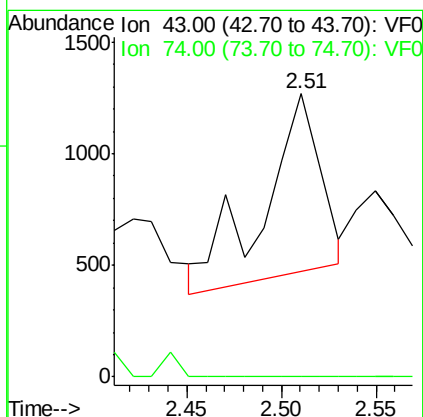
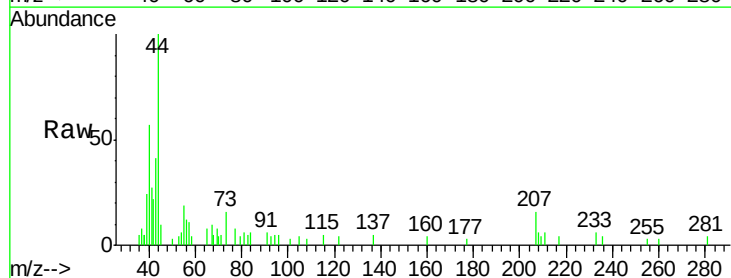
Instrument :  
MSVOA\_F  
ClientSampleId :  
RBR-200048-49

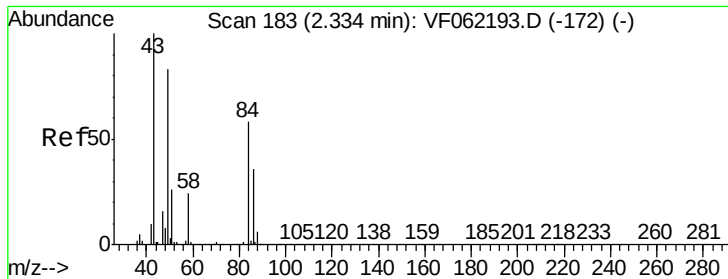
Tot Ion: 43 Resp: 1250  
Ion Ratio Lower Upper  
43 100  
58 21.4 18.8 28.2



#18  
Methyl Acetate  
Concen: 2.509 ug/l  
RT: 2.51 min Scan# 201  
Delta R.T. 0.06 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

Tgt Ion: 43 Resp: 1677  
Ion Ratio Lower Upper  
43 100  
74 0.0 14.5 21.7#



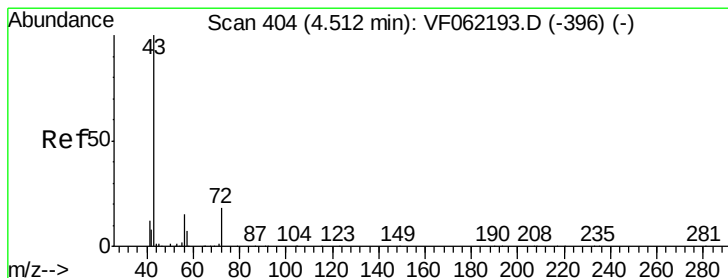
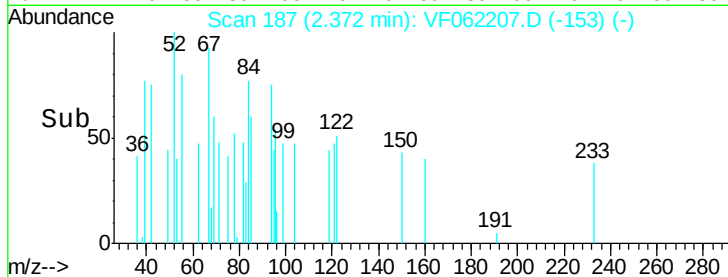
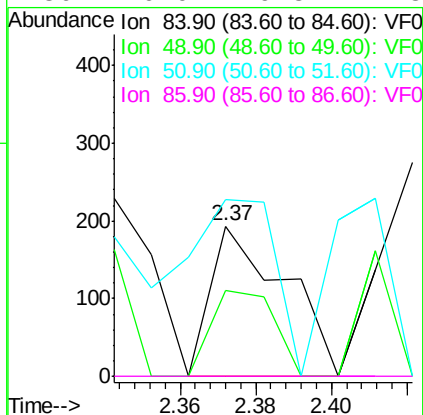
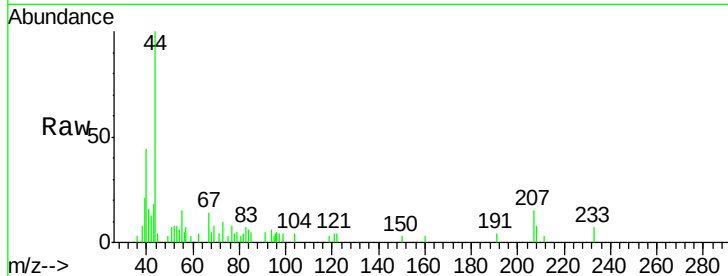


#20

Methylene Chloride  
 Concen: Below Cal  
 RT: 2.37 min Scan# 187  
 Delta R.T. 0.04 min  
 Lab File: VF062207.D  
 Acq: 18 Apr 2019 16:13

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 RBR-200048-49

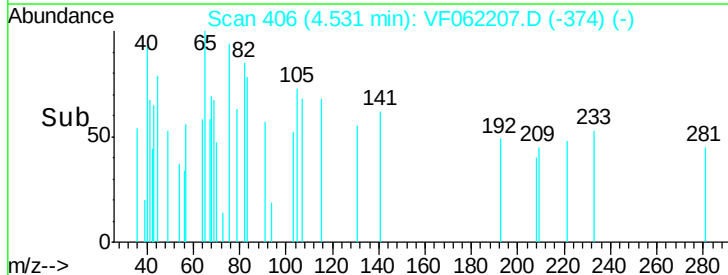
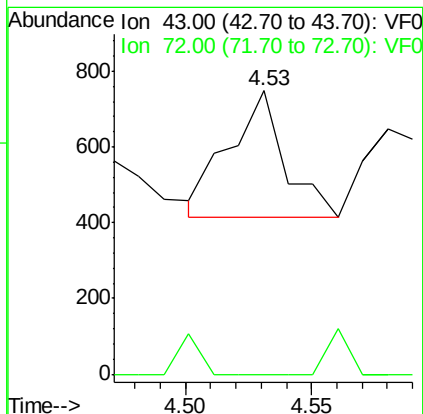
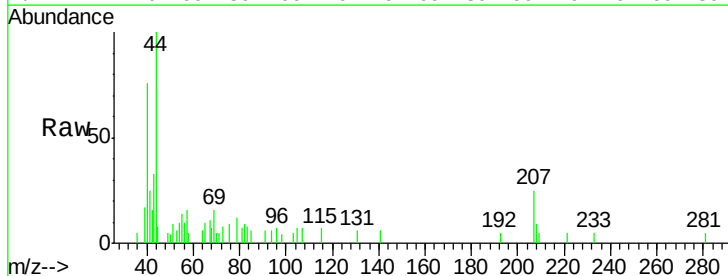
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 84      | 100   |       |        |
| 49      | 57.0  | 114.0 | 171.0# |
| 51      | 13.5  | 37.0  | 55.4#  |
| 86      | 0.0   | 49.8  | 74.8#  |



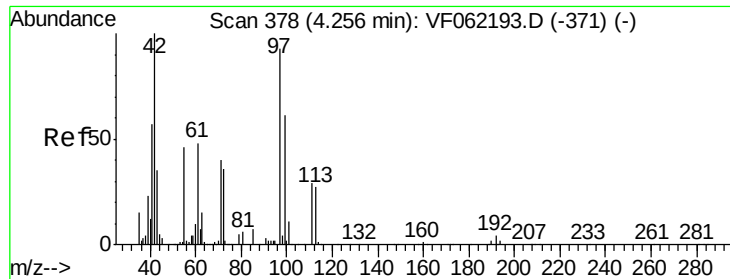
#25

2-Butanone  
 Concen: 2.680 ug/l  
 RT: 4.53 min Scan# 406  
 Delta R.T. 0.02 min  
 Lab File: VF062207.D  
 Acq: 18 Apr 2019 16:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 0.0   | 16.1  | 24.1# |







#29

Tetrahydrofuran

Concen: 3.280 ug/l

RT: 4.25 min Scan# 378

Delta R.T. -0.00 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampled :

RBR-200048-49

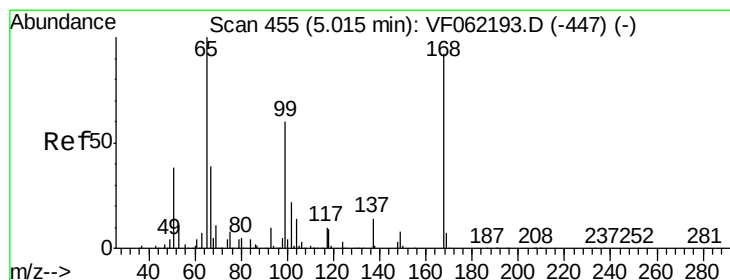
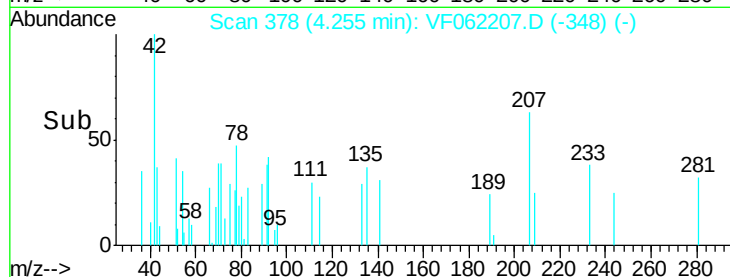
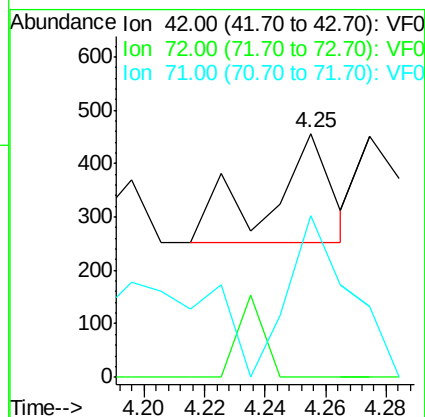
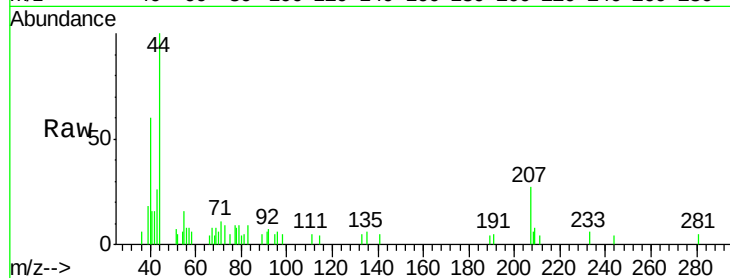
Tot Ion: 42 Resp: 287

Ion Ratio Lower Upper

42 100

72 32.1 28.6 43.0

71 148.8 29.2 43.8#



#33

1,2-Dichloroethane-d4

Concen: 13.818 ug/l

RT: 5.03 min Scan# 457

Delta R.T. 0.02 min

Lab File: VF062207.D

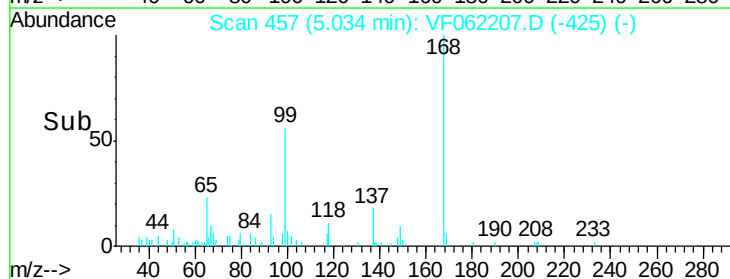
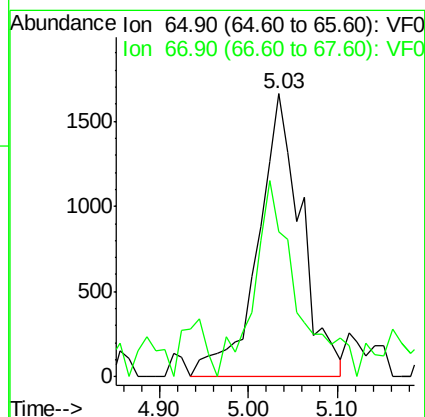
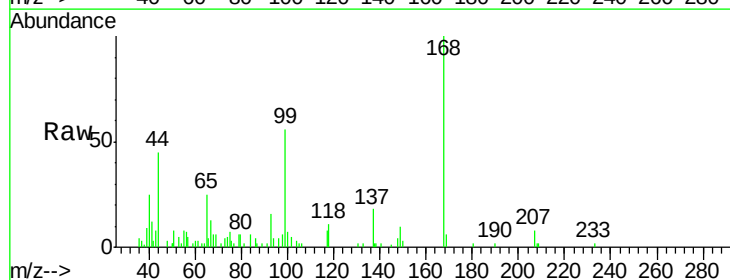
Acq: 18 Apr 2019 16:13

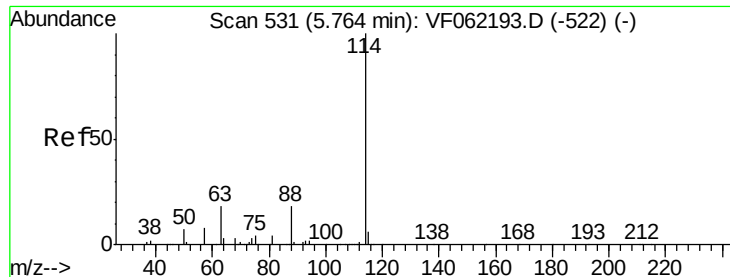
Tgt Ion: 65 Resp: 5589

Ion Ratio Lower Upper

65 100

67 68.2 0.0 109.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.77 min Scan# 532

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

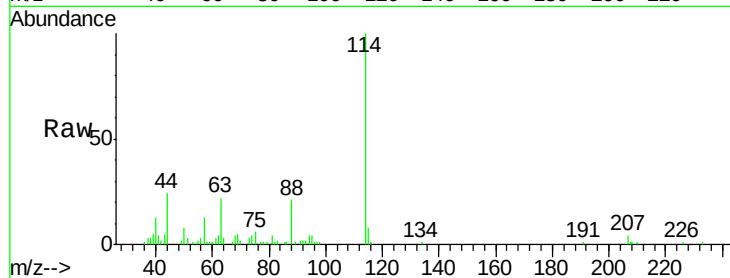
Tot Ion:114 Resp: 37660

Ion Ratio Lower Upper

114 100

63 21.8 0.0 36.6

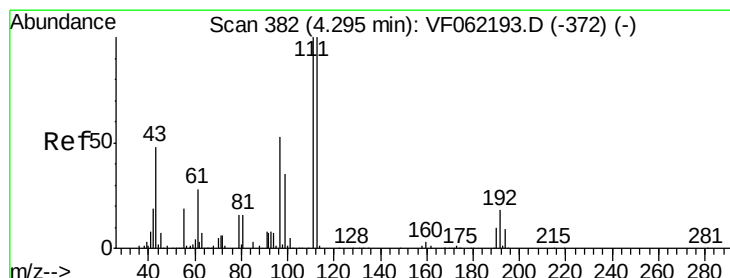
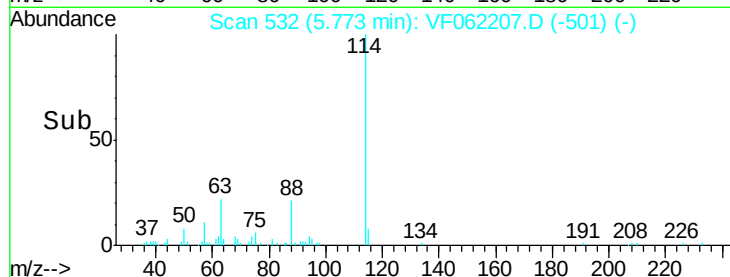
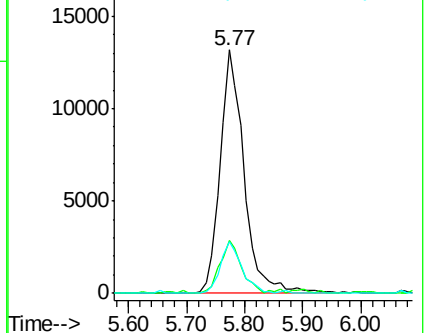
88 21.1 0.0 35.8



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 87.90 (87.60 to 88.60): VF0



#35

Dibromofluoromethane

Concen: 26.264 ug/l

RT: 4.30 min Scan# 383

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

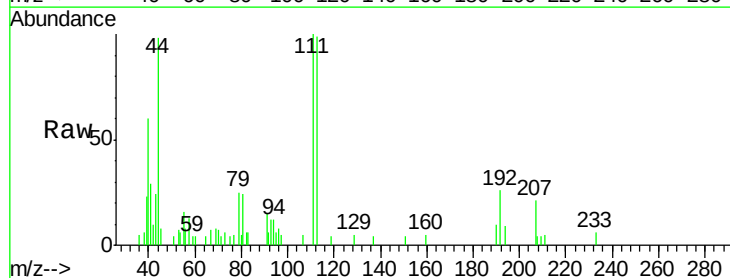
Tgt Ion:113 Resp: 8652

Ion Ratio Lower Upper

113 100

111 110.9 81.1 121.7

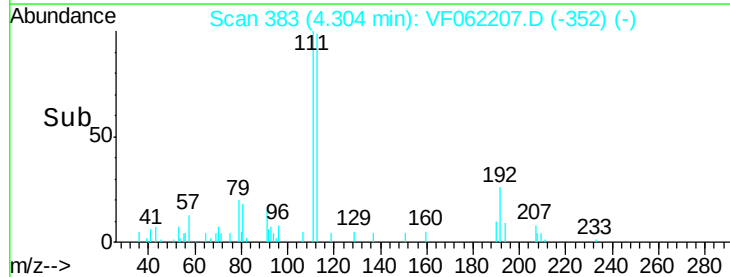
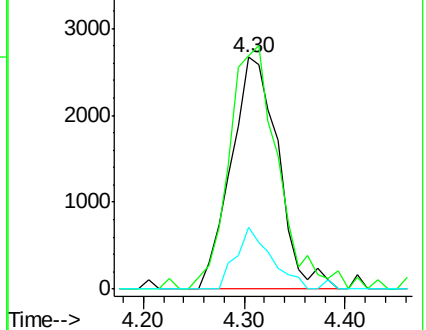
192 19.7 14.7 22.1

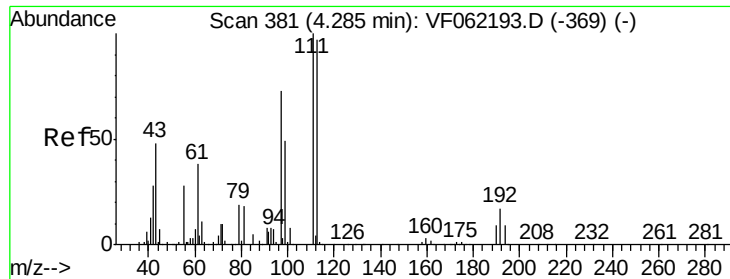


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

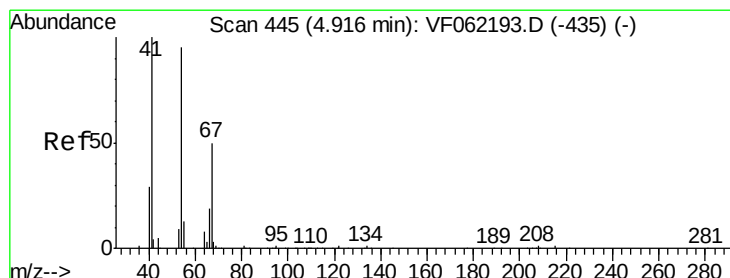
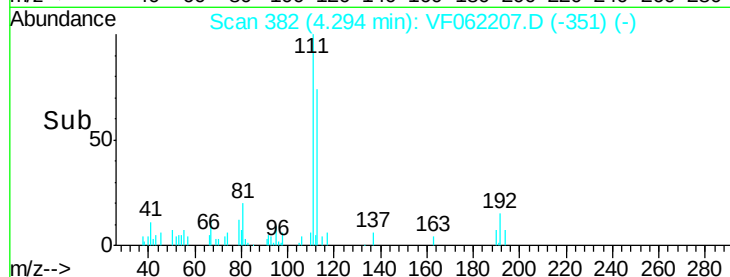
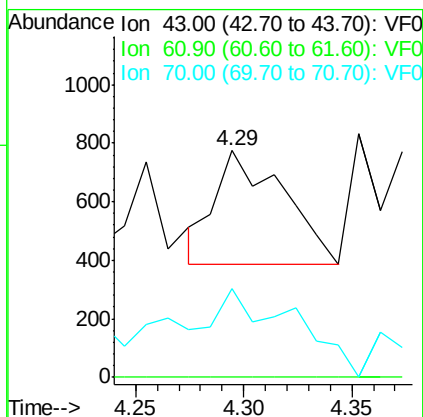
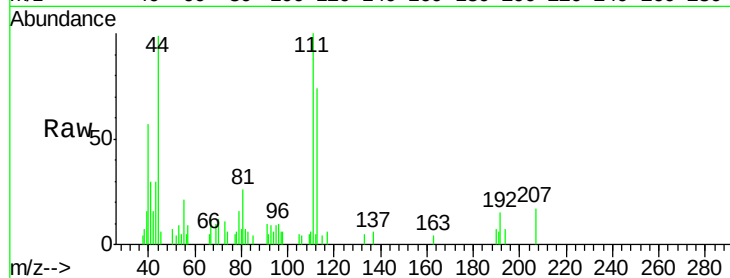




#37  
Ethyl Acetate  
Concen: 3.957 ug/l  
RT: 4.29 min Scan# 382  
Delta R.T. 0.01 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

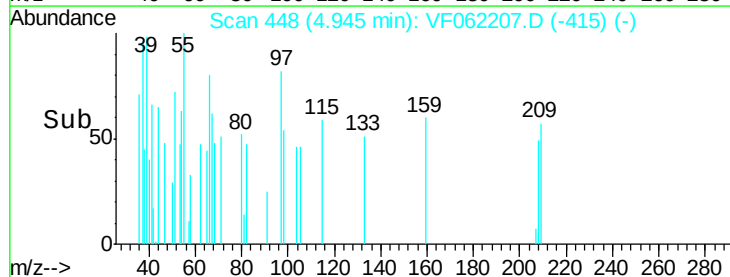
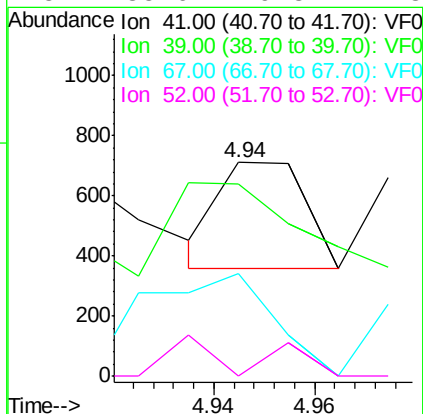
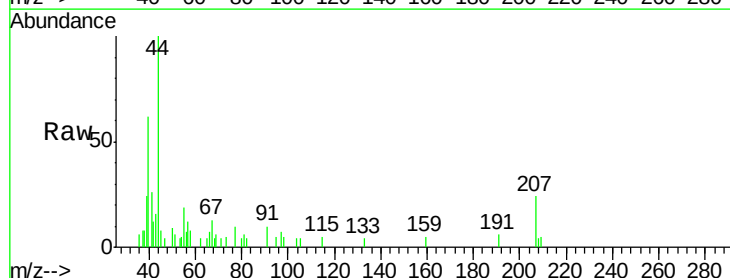
Instrument :  
MSVOA\_F  
ClientSampleId :  
RBR-200048-49

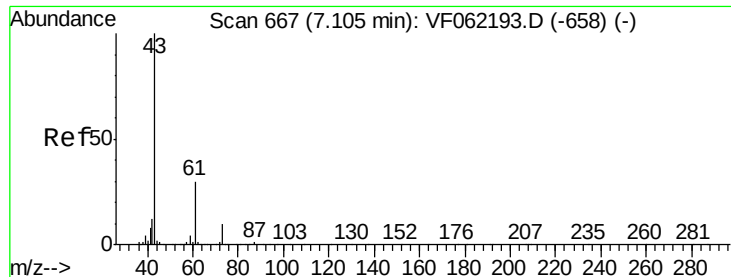
Tot Ion: 43 Resp: 843  
Ion Ratio Lower Upper  
43 100  
61 0.0 0.0 0.0  
70 132.4 7.8 11.6#



#41  
Methacrylonitrile  
Concen: 3.360 ug/l  
RT: 4.94 min Scan# 448  
Delta R.T. 0.03 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

Tgt Ion: 41 Resp: 413  
Ion Ratio Lower Upper  
41 100  
39 133.4 44.7 67.1#  
67 147.5 39.1 58.7#  
52 35.6 49.8 74.8#





#43

Isopropyl Acetate

Concen: 2.428 ug/l

RT: 7.11 min Scan# 668

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

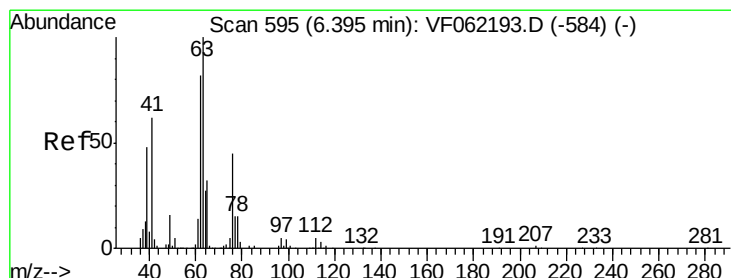
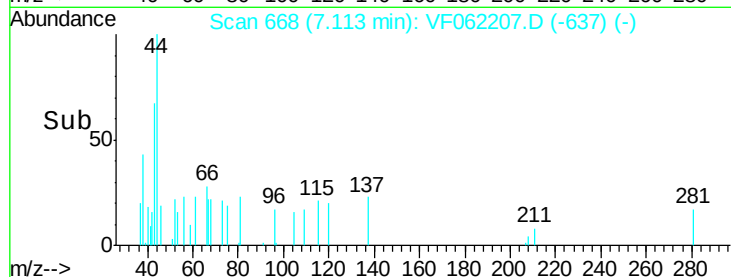
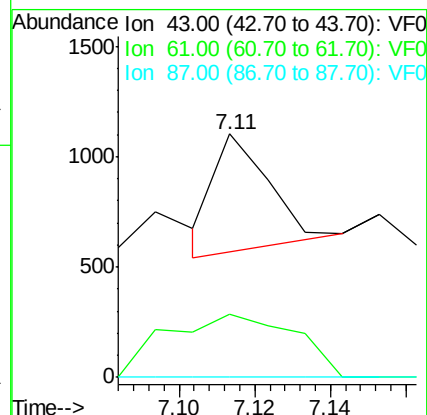
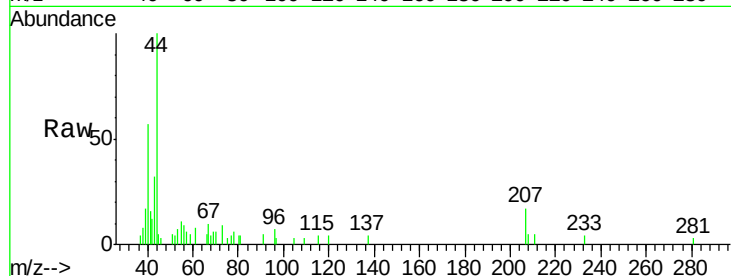
Tot Ion: 43 Resp: 544

Ion Ratio Lower Upper

43 100

61 123.3 24.4 36.6#

87 0.0 0.4 0.6#



#45

1,2-Dichloropropane

Concen: 1.779 ug/l

RT: 6.41 min Scan# 597

Delta R.T. 0.02 min

Lab File: VF062207.D

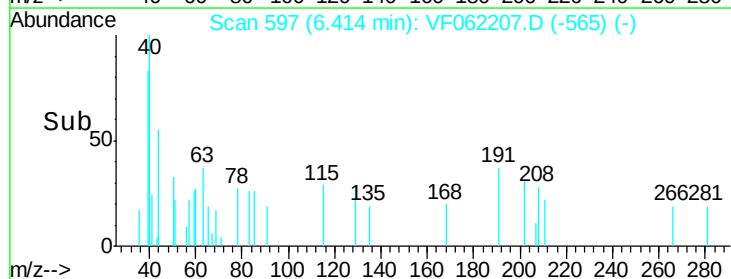
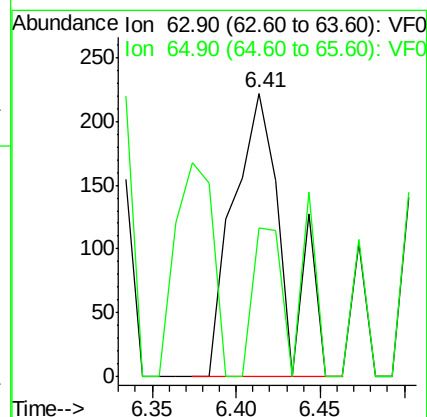
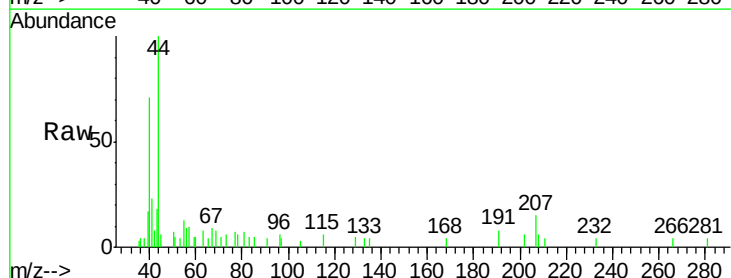
Acq: 18 Apr 2019 16:13

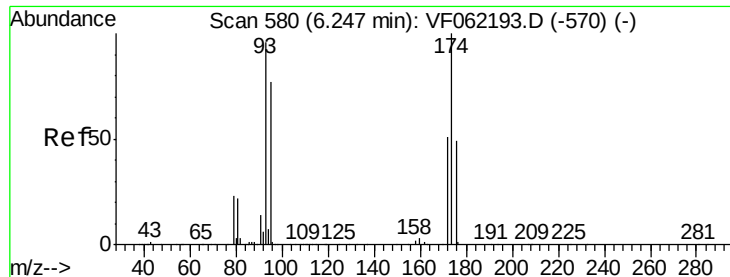
Tgt Ion: 63 Resp: 464

Ion Ratio Lower Upper

63 100

65 52.3 25.9 38.9#





#46

Dibromomethane

Concen: 1.141 ug/l

RT: 6.26 min Scan# 581

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

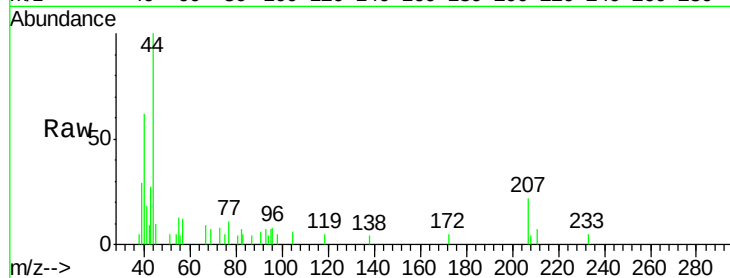
Tot Ion: 93 Resp: 198

Ion Ratio Lower Upper

93 100

95 0.0 65.1 97.7#

174 0.0 81.8 122.6#



Abundance Ion 92.80 (92.50 to 93.50): VF0

Ion 94.80 (94.50 to 95.50): VF0

Ion 173.70 (173.40 to 174.40): V

300

250

200

150

100

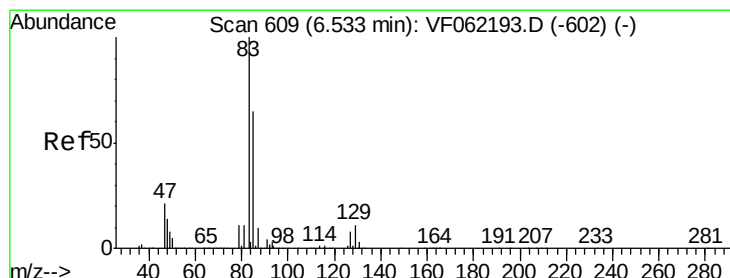
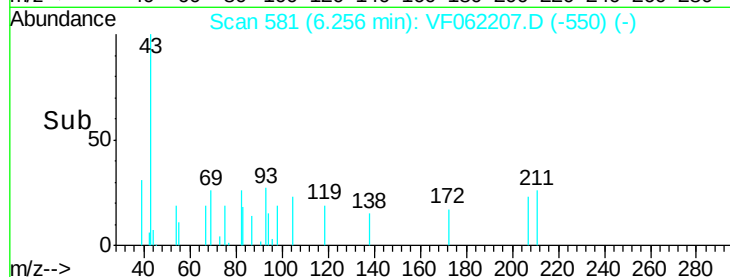
50

0

6.25

6.30

Time-->



#47

Bromodichloromethane

Concen: 1.266 ug/l

RT: 6.55 min Scan# 611

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

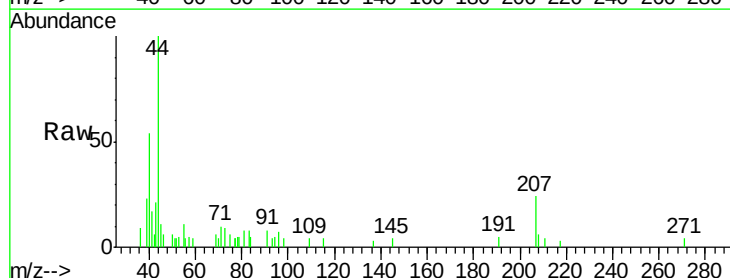
Tgt Ion: 83 Resp: 496

Ion Ratio Lower Upper

83 100

85 0.0 52.2 78.4#

127 0.0 6.7 10.1#



Abundance Ion 82.90 (82.60 to 83.60): VF0

Ion 84.90 (84.60 to 85.60): VF0

Ion 126.80 (126.50 to 127.50): V

300

250

200

150

100

50

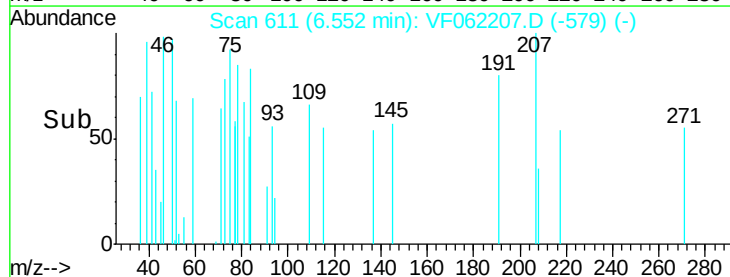
0

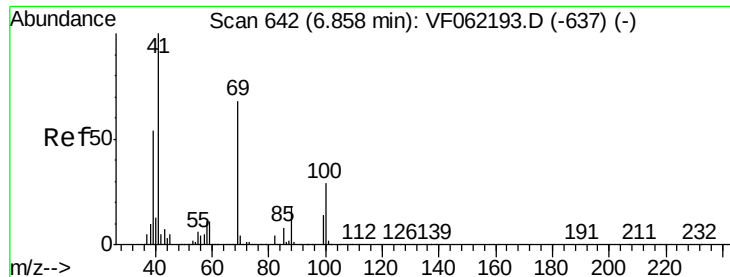
6.50

6.55

6.60

Time-->

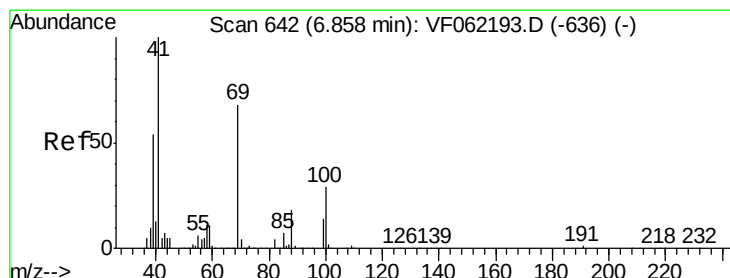
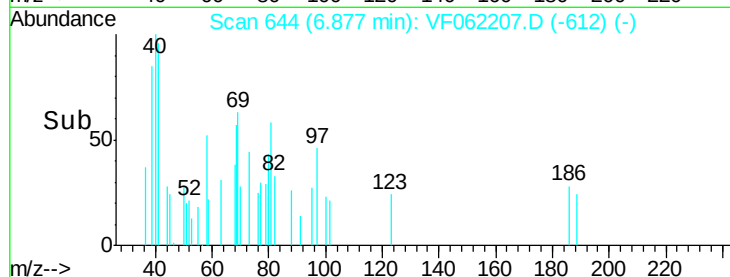
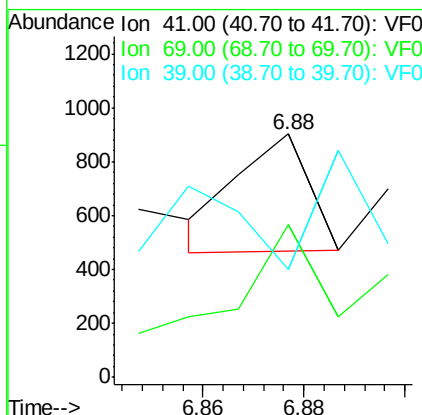
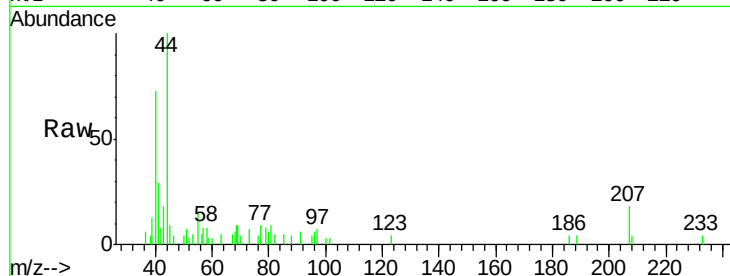




#48  
Methvl methacrylate  
Concen: 2.913 ug/l  
RT: 6.88 min Scan# 644  
Delta R.T. 0.02 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

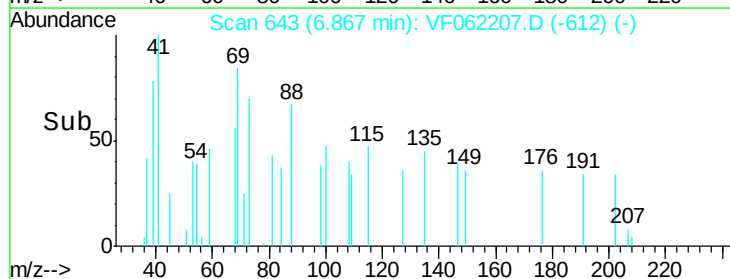
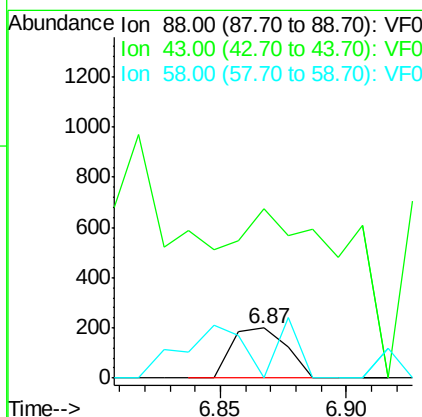
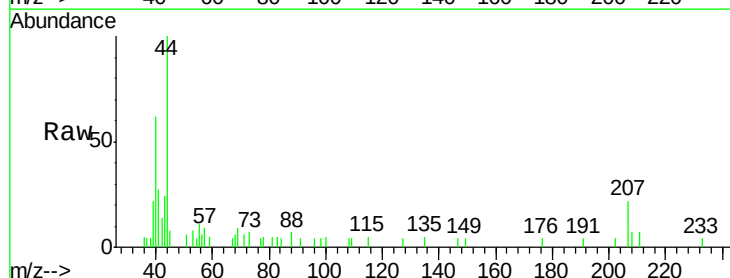
Instrument :  
MSVOA\_F  
ClientSampleId :  
RBR-200048-49

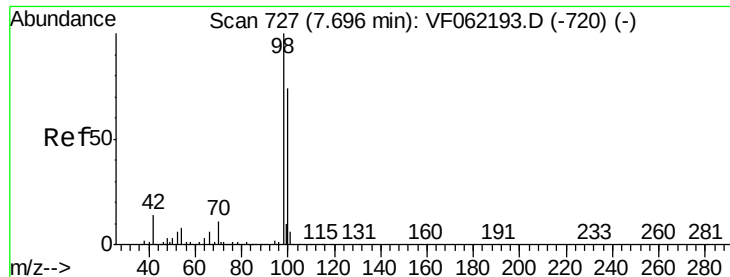
Tot Ion: 41 Resp: 429  
Ion Ratio Lower Upper  
41 100  
69 268.3 54.9 82.3#  
39 213.3 43.6 65.4#



#49  
1,4-Dioxane  
Concen: 177.625 ug/l  
RT: 6.87 min Scan# 643  
Delta R.T. 0.01 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

Tgt Ion: 88 Resp: 300  
Ion Ratio Lower Upper  
88 100  
43 0.0 36.9 55.3#  
58 118.0 56.8 85.2#





#50

Toluene-d8

Concen: 41.728 ug/l

RT: 7.71 min Scan# 729

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

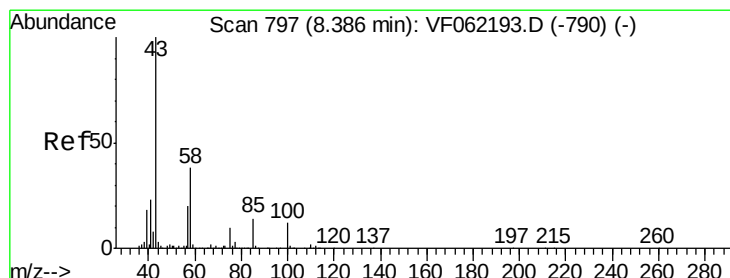
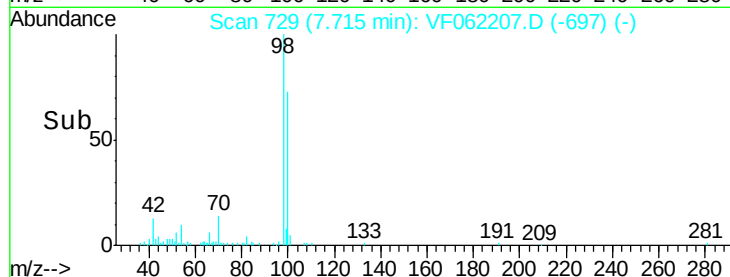
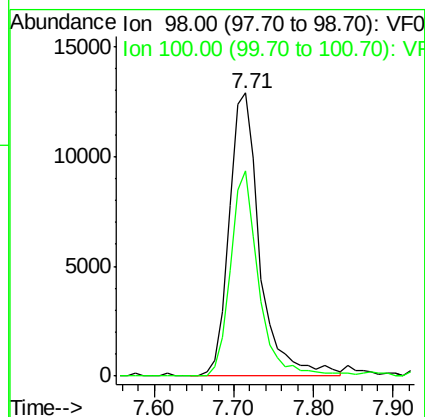
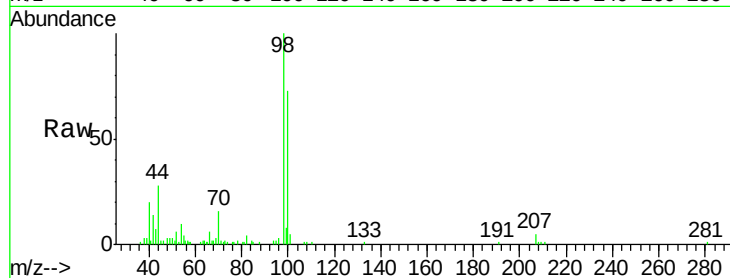
RBR-200048-49

Tot Ion: 98 Resp: 34797

Ion Ratio Lower Upper

98 100

100 65.9 56.2 84.2



#51

4-Methyl-2-Pentanone

Concen: 9.413 ug/l

RT: 8.40 min Scan# 799

Delta R.T. 0.02 min

Lab File: VF062207.D

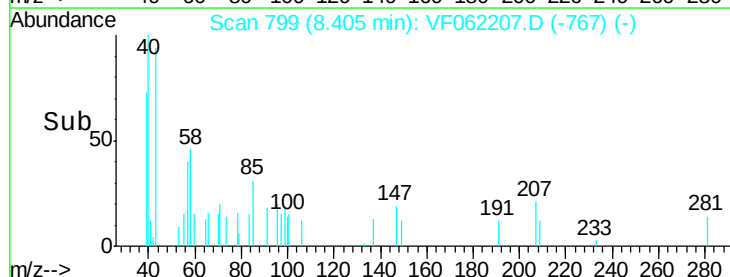
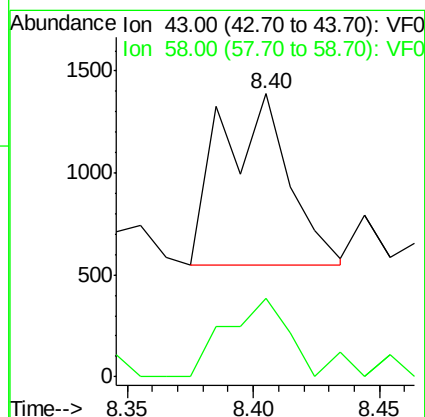
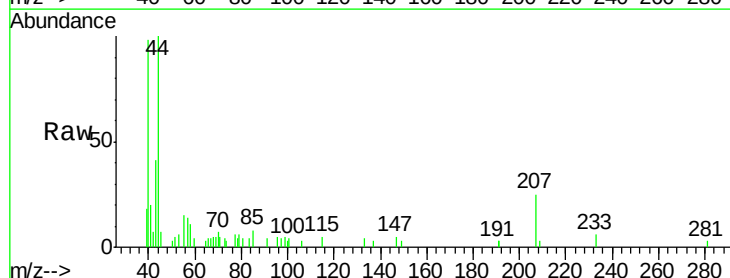
Acq: 18 Apr 2019 16:13

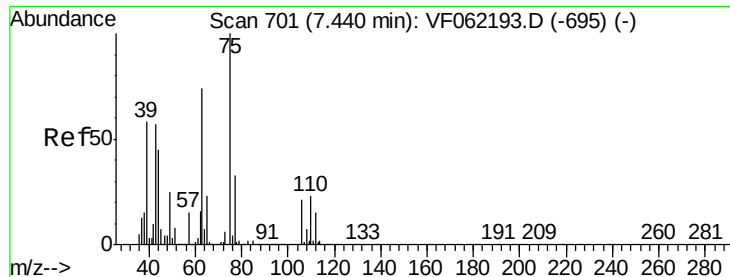
Tgt Ion: 43 Resp: 1569

Ion Ratio Lower Upper

43 100

58 49.8 29.3 43.9#





#54

cis-1,3-Dichloropropene

Concen: 1.430 ug/l

RT: 7.44 min Scan# 701

Delta R.T. -0.00 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

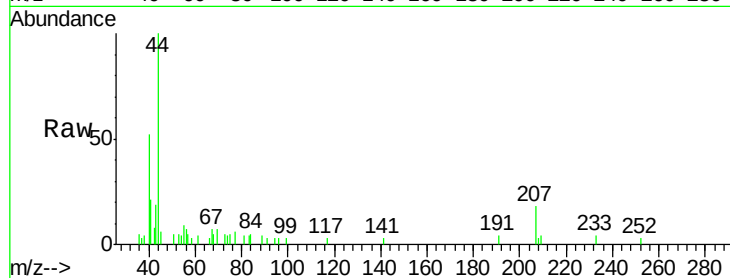
Tot Ion: 75 Resp: 569

Ion Ratio Lower Upper

75 100

77 46.6 26.4 39.6#

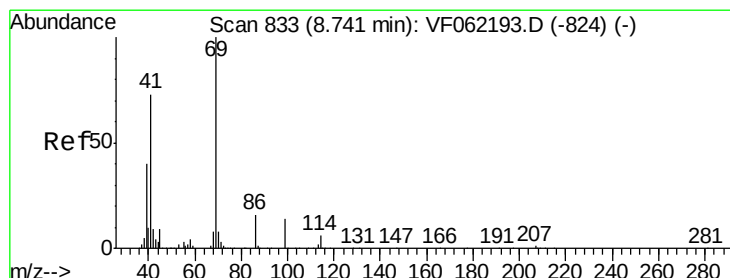
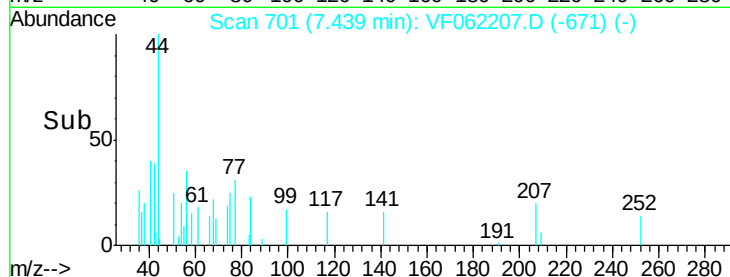
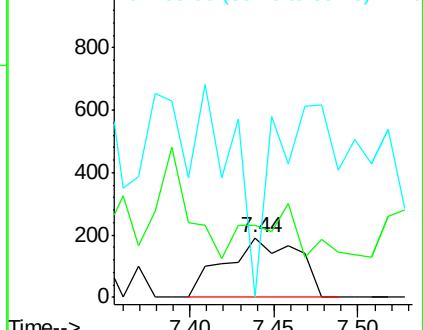
39 0.0 46.7 70.1#



Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 76.90 (76.60 to 77.60): VF0

Ion 39.00 (38.70 to 39.70): VF0



#56

Ethyl methacrylate

Concen: 3.752 ug/l

RT: 8.75 min Scan# 834

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

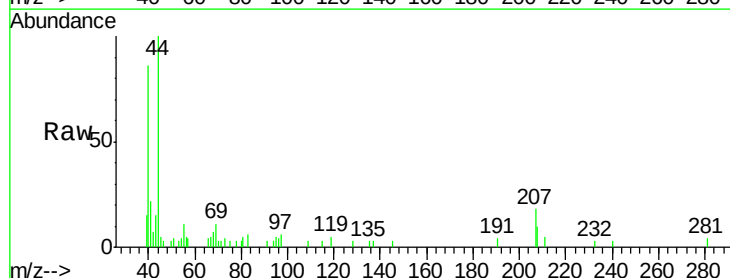
Tgt Ion: 69 Resp: 746

Ion Ratio Lower Upper

69 100

41 301.2 61.5 92.3#

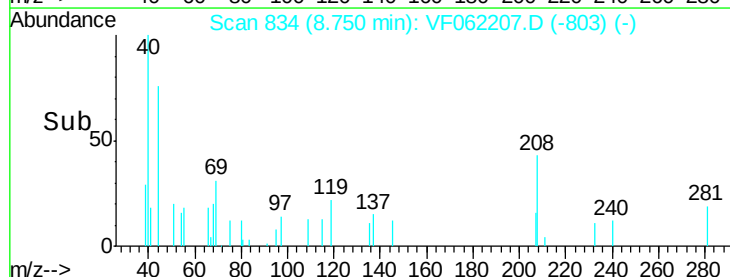
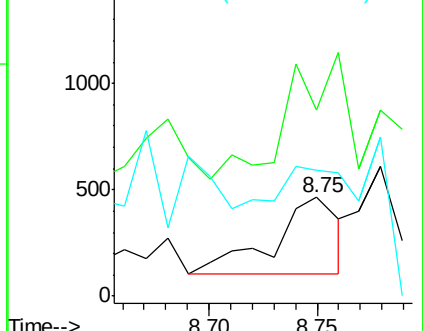
39 0.0 33.3 49.9#



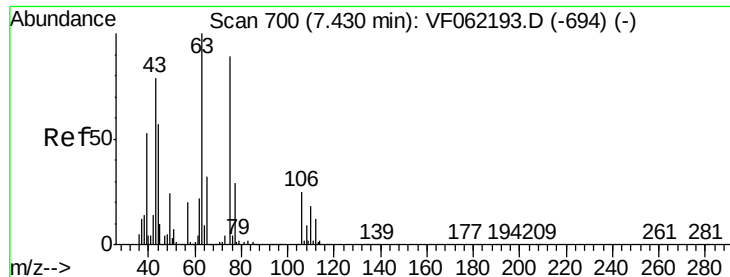
Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0







#58

2-Chloroethyl Vinyl ether

Concen: 2.564 ug/l

RT: 7.42 min Scan# 699

Delta R.T. -0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

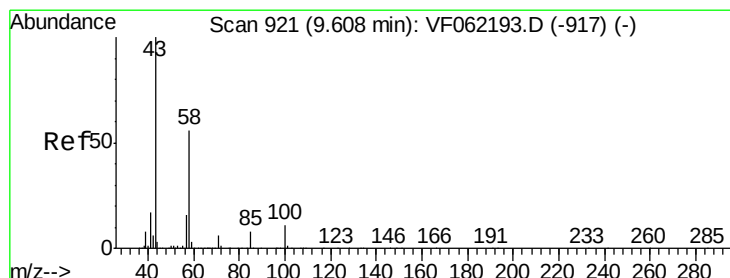
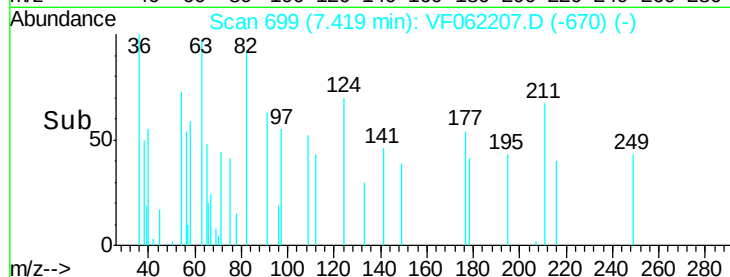
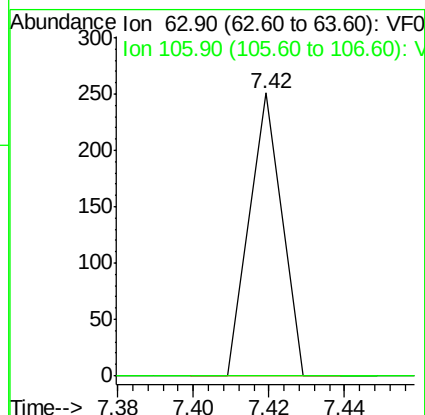
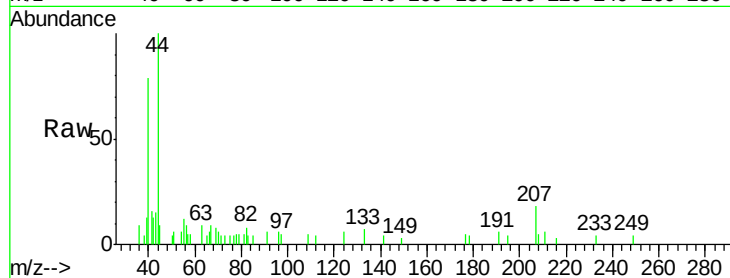
RBR-200048-49

Tot Ion: 63 Resp: 148

Ion Ratio Lower Upper

63 100

106 0.0 21.4 32.0#



#59

2-Hexanone

Concen: 13.061 ug/l

RT: 9.63 min Scan# 923

Delta R.T. 0.02 min

Lab File: VF062207.D

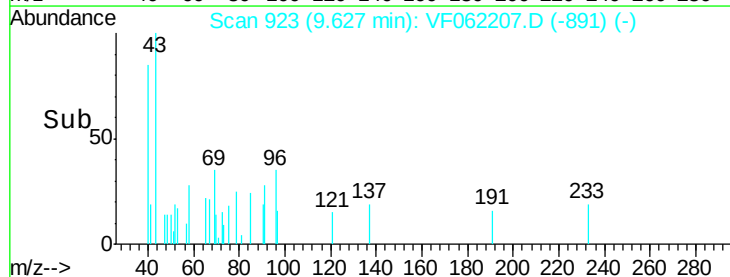
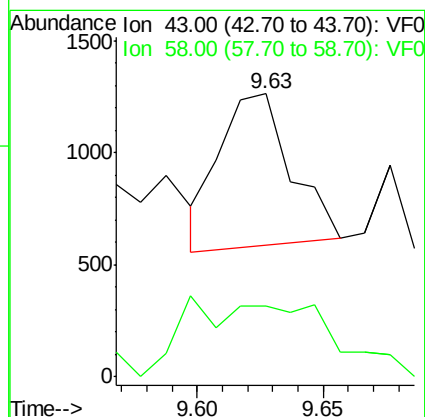
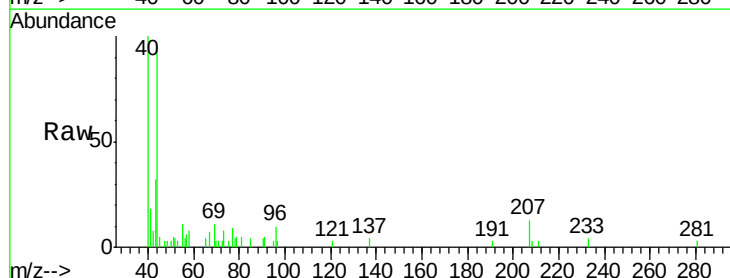
Acq: 18 Apr 2019 16:13

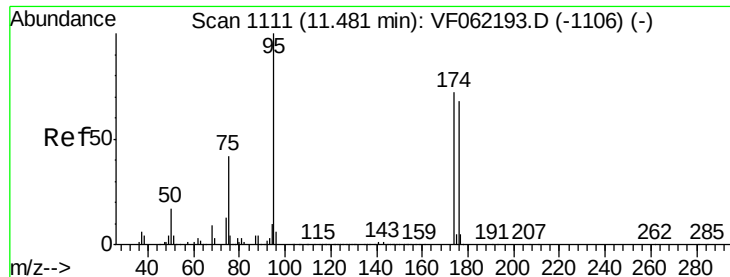
Tgt Ion: 43 Resp: 1344

Ion Ratio Lower Upper

43 100

58 0.0 24.6 74.0#





#62

4-Bromofluorobenzene

Concen: 21.556 ug/l

RT: 11.49 min Scan# 1112

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

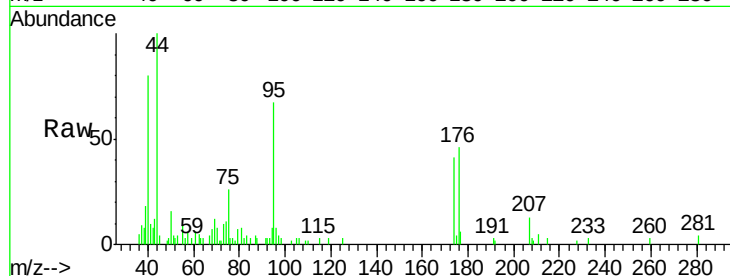
Tot Ion: 95 Resp: 6915

Ion Ratio Lower Upper

95 100

174 73.8 0.0 159.4

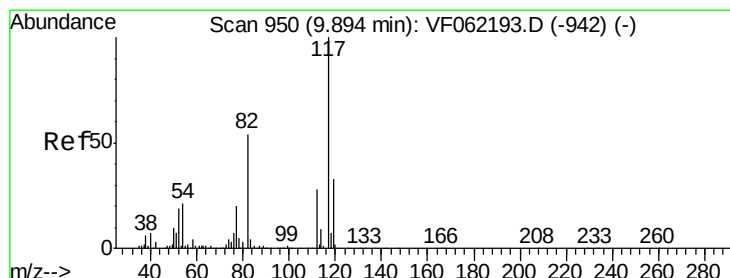
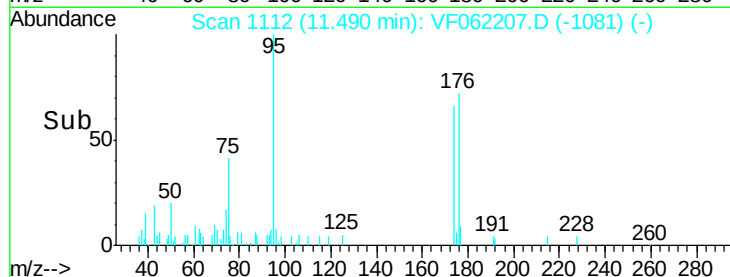
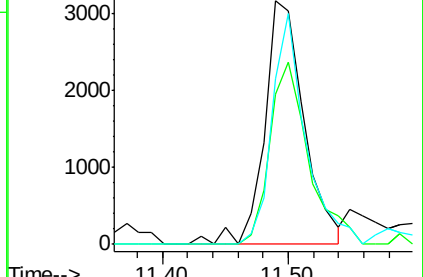
176 80.4 0.0 155.4



Abundance Ion 94.90 (94.60 to 95.60): VF0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.91 min Scan# 952

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

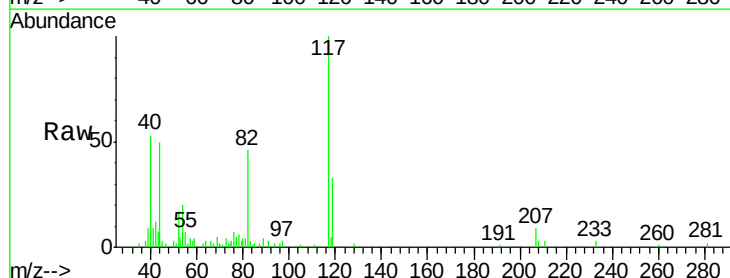
Tgt Ion: 117 Resp: 16796

Ion Ratio Lower Upper

117 100

82 45.7 43.2 64.8

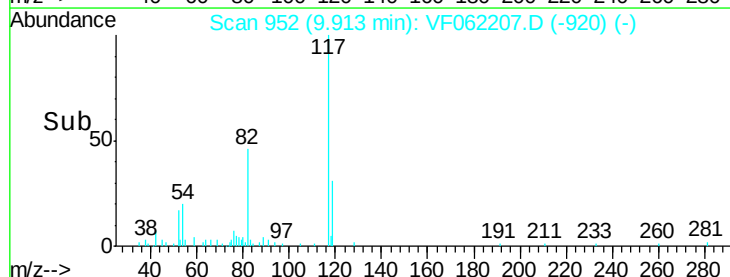
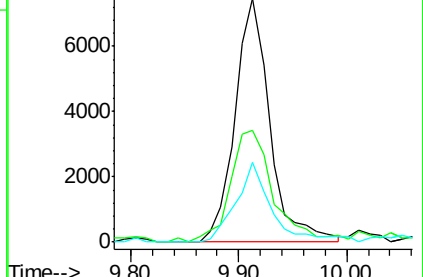
119 32.5 26.2 39.4

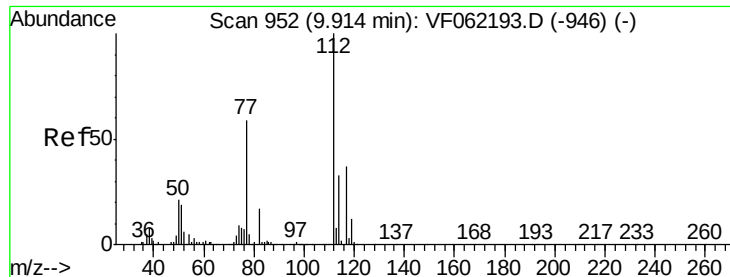


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 118.90 (118.60 to 119.60): V





#65

Chlorobenzene

Concen: 2.491 ug/l

RT: 9.93 min Scan# 954

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

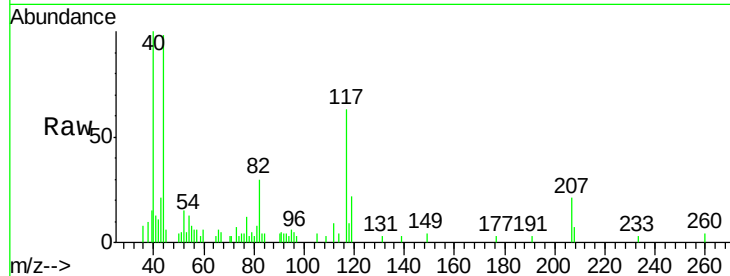
RBR-200048-49

Tot Ion:112 Resp: 892

Ion Ratio Lower Upper

112 100

114 38.4 26.1 39.1



Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V

9.93

300

200

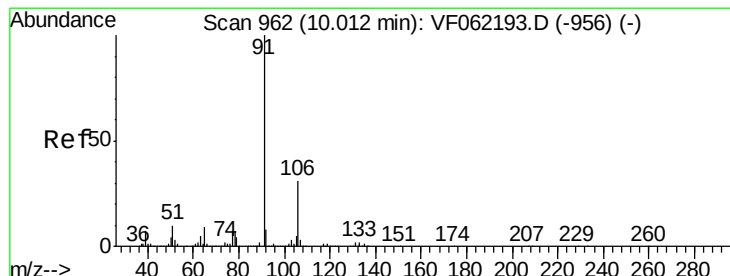
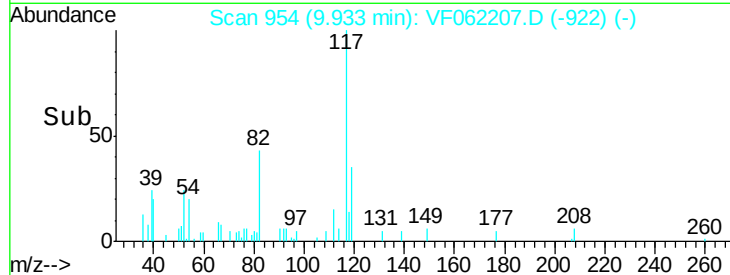
100

0

9.90

10.00

Time-->



#67

Ethyl Benzene

Concen: 2.741 ug/l

RT: 10.02 min Scan# 963

Delta R.T. 0.01 min

Lab File: VF062207.D

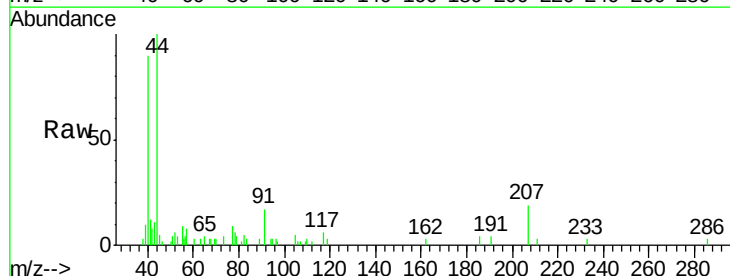
Acq: 18 Apr 2019 16:13

Tgt Ion: 91 Resp: 1785

Ion Ratio Lower Upper

91 100

106 16.6 24.9 37.3#



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 106.00 (105.70 to 106.70): V

10.02

800

600

400

200

0

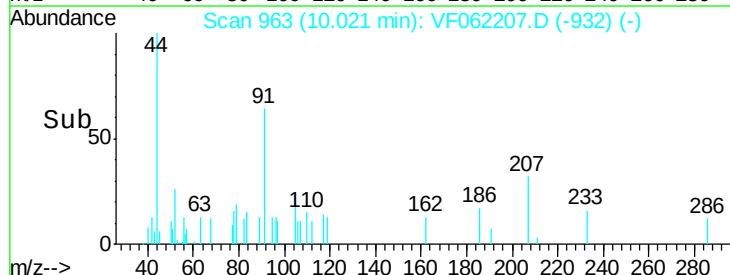
9.95

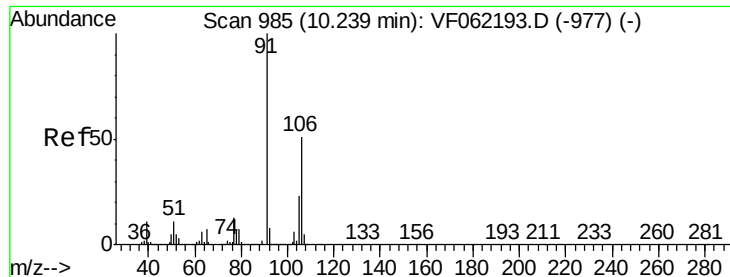
10.00

10.05

10.10

Time-->

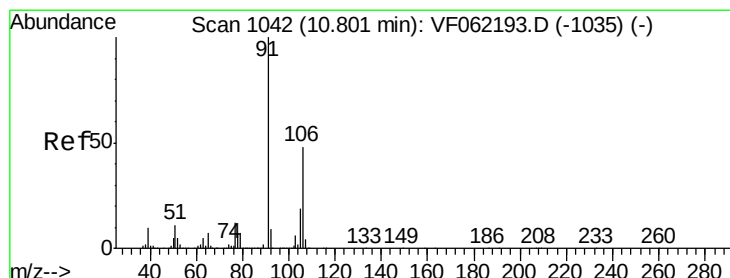
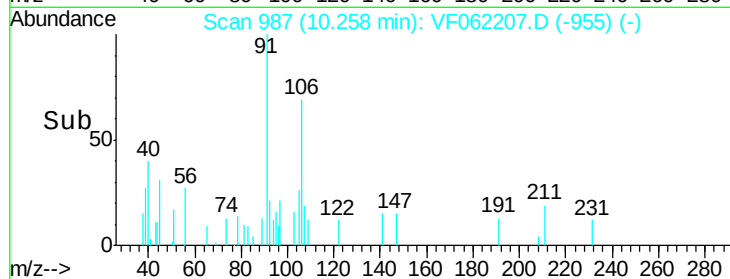
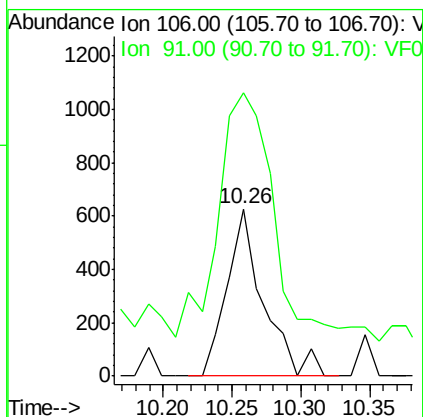
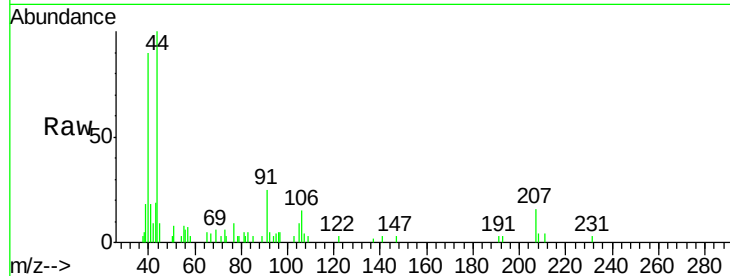




#68  
m/p-Xylenes  
Concen: 4.797 ug/l  
RT: 10.26 min Scan# 987  
Delta R.T. 0.02 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

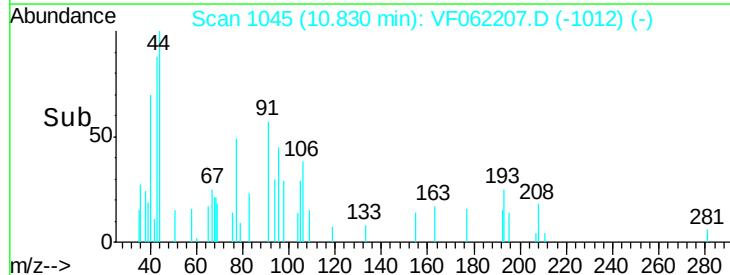
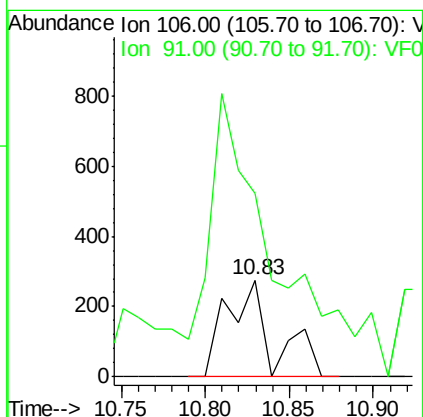
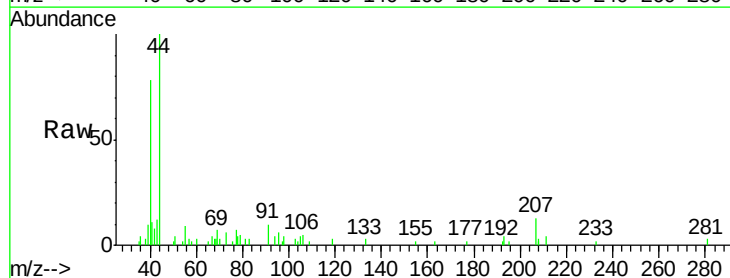
Instrument :  
MSVOA\_F  
ClientSampleId :  
RBR-200048-49

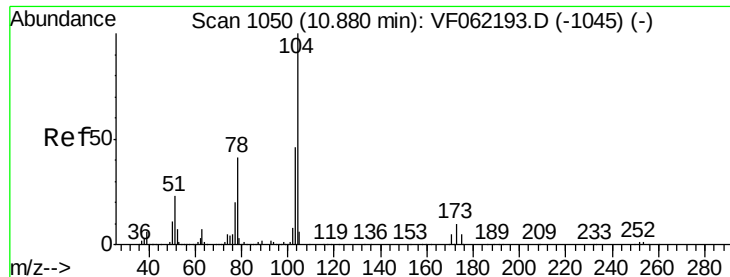
Tot Ion:106 Resp: 1150  
Ion Ratio Lower Upper  
106 100  
91 297.5 159.1 238.7#



#69  
o-Xylene  
Concen: 1.980 ug/l  
RT: 10.83 min Scan# 1045  
Delta R.T. 0.03 min  
Lab File: VF062207.D  
Acq: 18 Apr 2019 16:13

Tgt Ion:106 Resp: 527  
Ion Ratio Lower Upper  
106 100  
91 412.7 107.5 322.4#





#70

Stvrene

Concen: 3.040 ug/l

RT: 10.89 min Scan# 1051

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

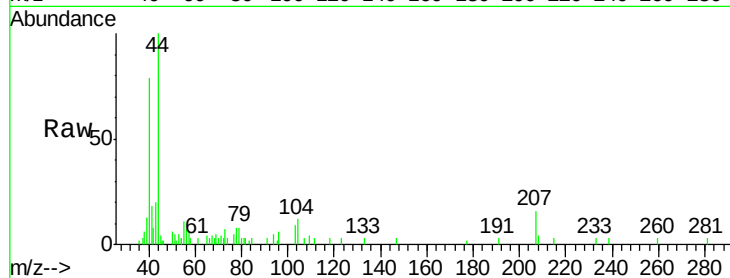
Tot Ion:104 Resp: 1142

Ion Ratio Lower Upper

104 100

78 97.4 34.5 51.7#

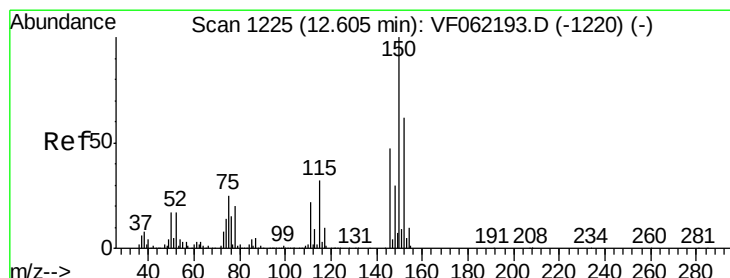
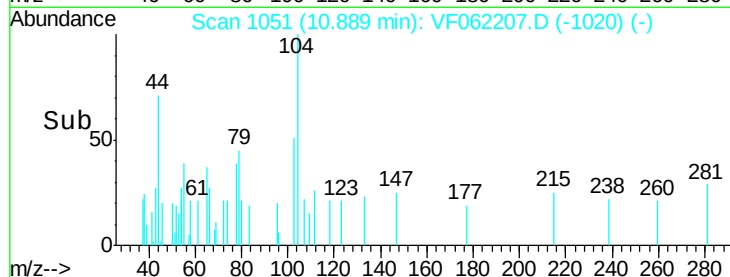
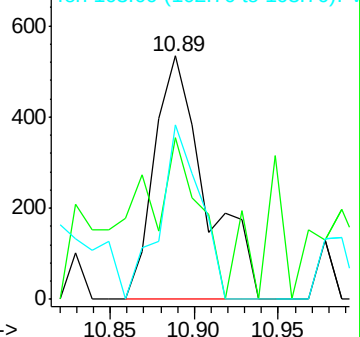
103 55.6 37.2 55.8



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VF0

Ion 103.00 (102.70 to 103.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.61 min Scan# 1226

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

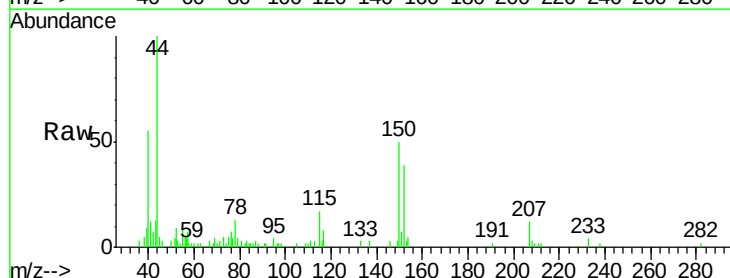
Tgt Ion:152 Resp: 4222

Ion Ratio Lower Upper

152 100

115 62.1 27.8 83.3

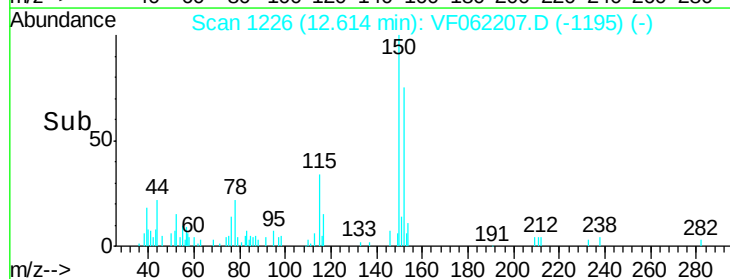
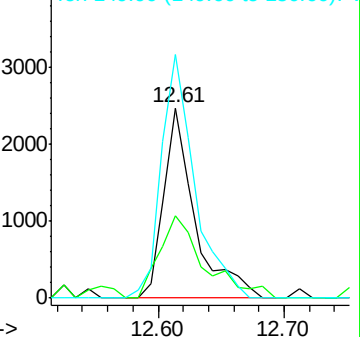
150 136.9 0.0 341.8

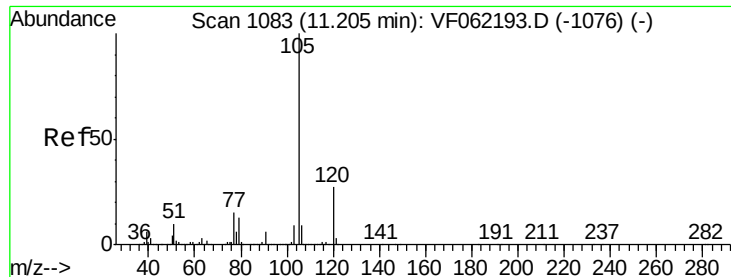


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#73

Isopropylbenzene

Concen: 5.291 ug/l

RT: 11.22 min Scan# 1085

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

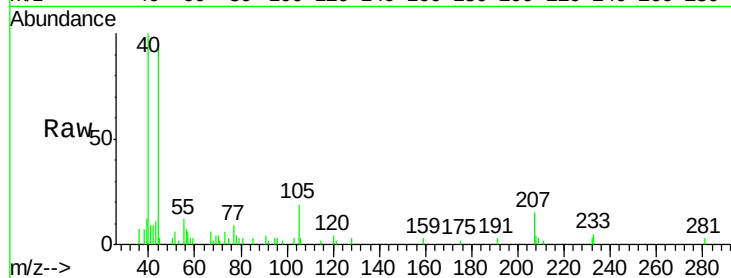
RBR-200048-49

Tot Ion:105 Resp: 1919

Ion Ratio Lower Upper

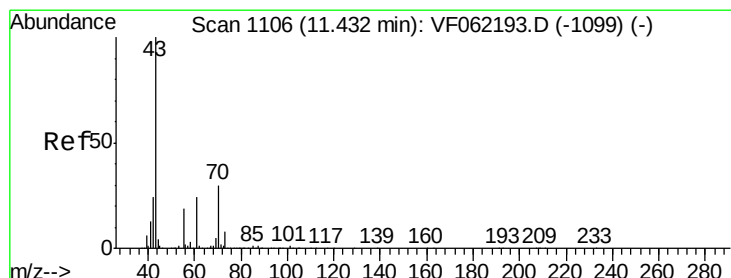
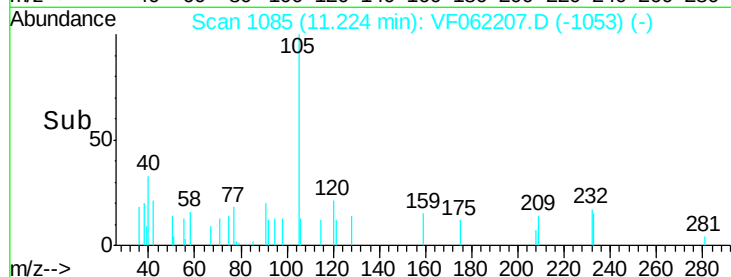
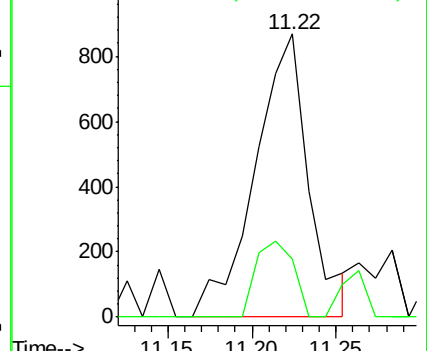
105 100

120 18.7 13.0 38.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

N-ethyl acetate

Concen: 2.552 ug/l

RT: 11.51 min Scan# 1114

Delta R.T. 0.08 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Tgt Ion: 43 Resp: 399

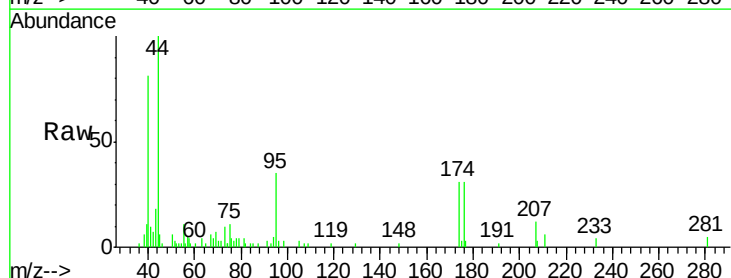
Ion Ratio Lower Upper

43 100

70 0.0 27.0 40.4#

55 109.3 15.7 23.5#

61 82.5 20.8 31.2#

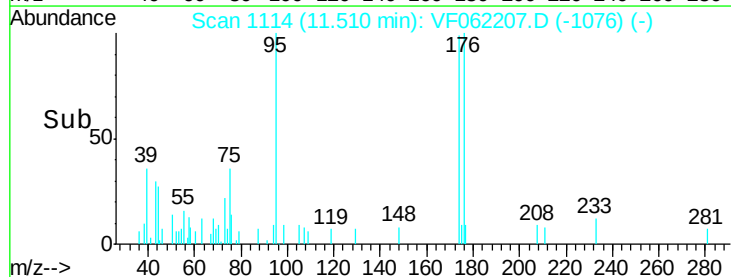
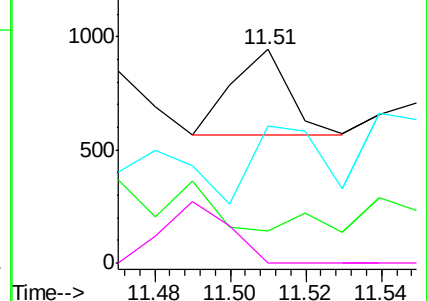


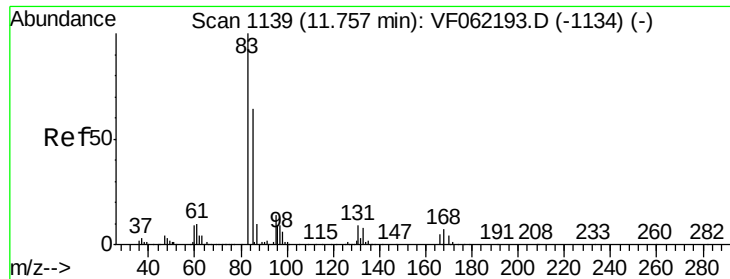
Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0





#75

1,1,2,2-Tetrachloroethane

Concen: 8.754 ug/l

RT: 11.98 min Scan# 1162

Delta R.T. 0.23 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

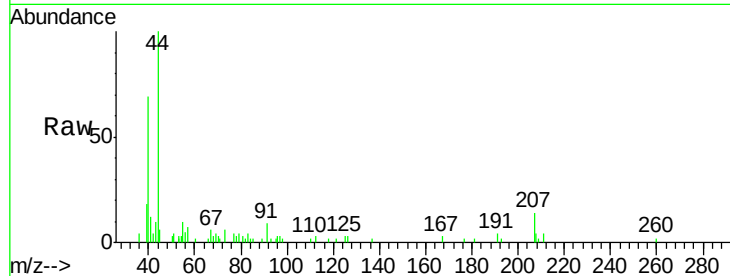
MSVOA\_F

ClientSampleId :

RBR-200048-49

Tot Ion: 83 Resp: 546

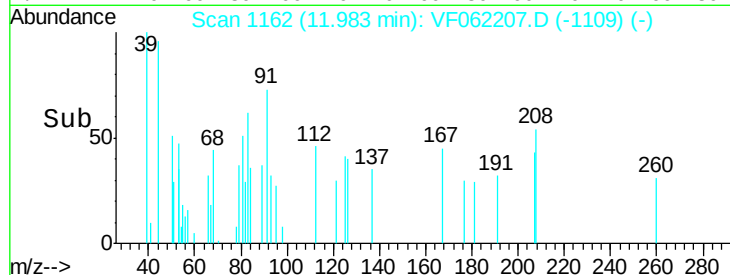
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 131 | 11.0  | 4.5   | 13.5  |
| 85  | 83.7  | 34.7  | 104.1 |



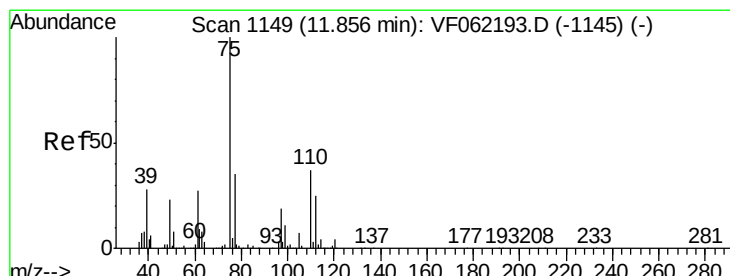
Abundance Ion 82.90 (82.60 to 83.60): VF0

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VF0



Time-->



#76

1,2,3-Trichloropropane

Concen: 3.356 ug/l

RT: 11.84 min Scan# 1148

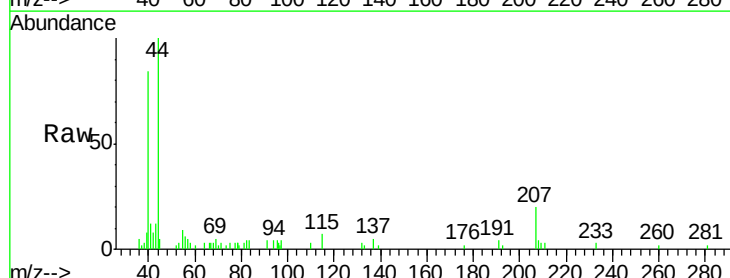
Delta R.T. -0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

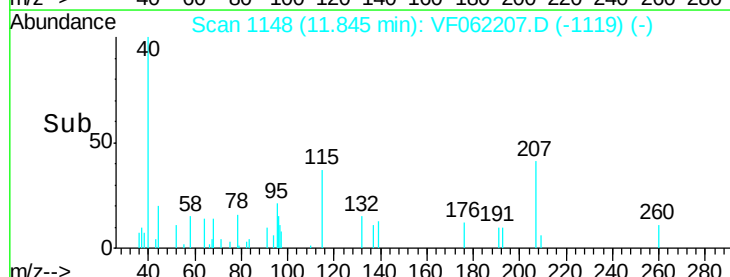
Tgt Ion: 75 Resp: 144

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 77  | 227.1 | 7.4   | 22.2  |

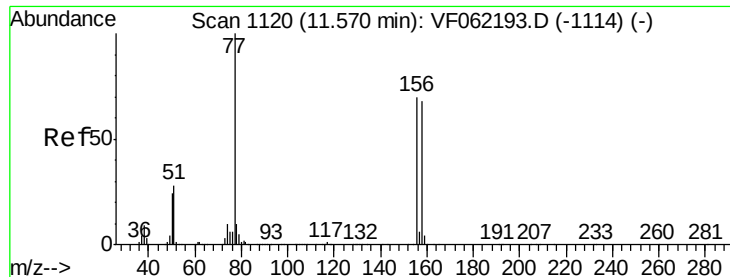


Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 77.00 (76.70 to 77.70): VF0



Time-->



#77

Bromobenzene

Concen: 2.767 ug/l

RT: 11.59 min Scan# 1122

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

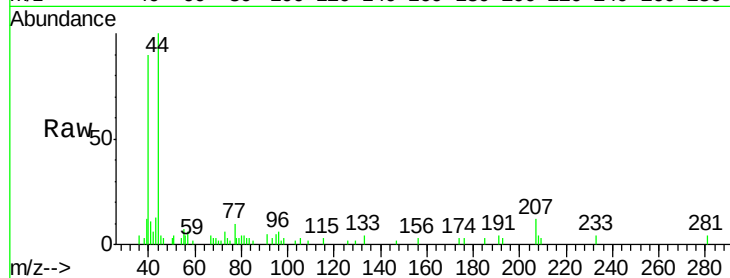
Tot Ion:156 Resp: 215

Ion Ratio Lower Upper

156 100

77 510.7 80.9 242.7#

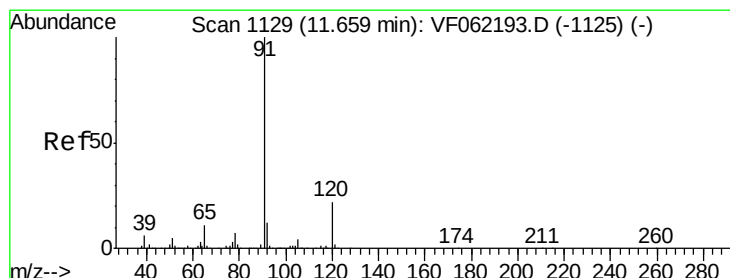
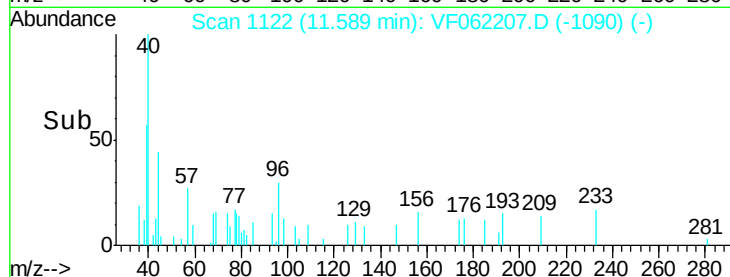
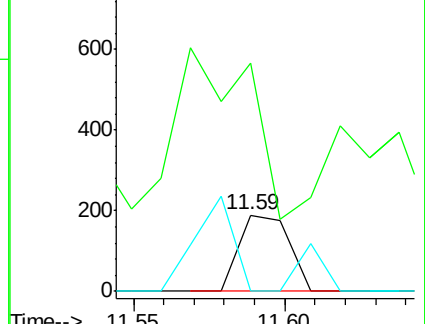
158 96.7 49.8 149.4



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 6.545 ug/l

RT: 11.67 min Scan# 1130

Delta R.T. 0.01 min

Lab File: VF062207.D

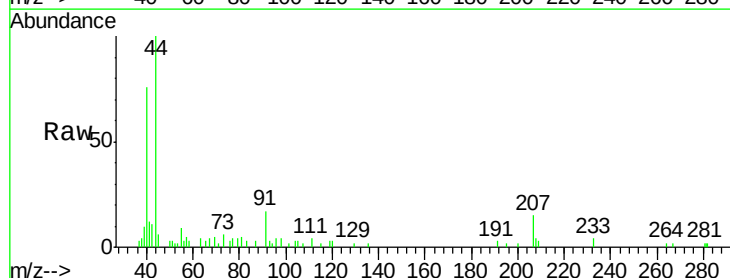
Acq: 18 Apr 2019 16:13

Tgt Ion: 91 Resp: 2504

Ion Ratio Lower Upper

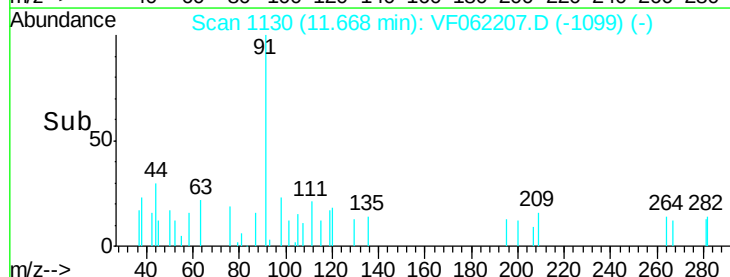
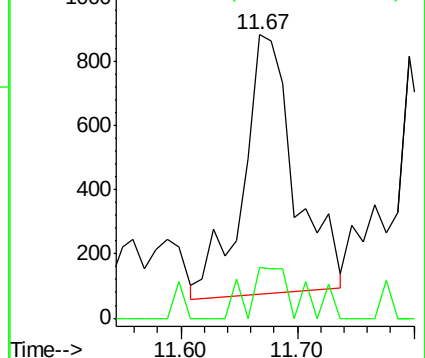
91 100

120 13.9 11.2 33.6

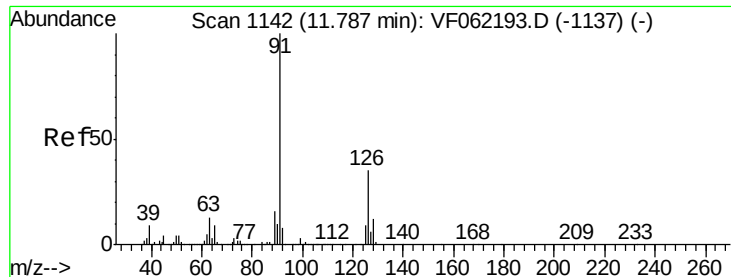


Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V



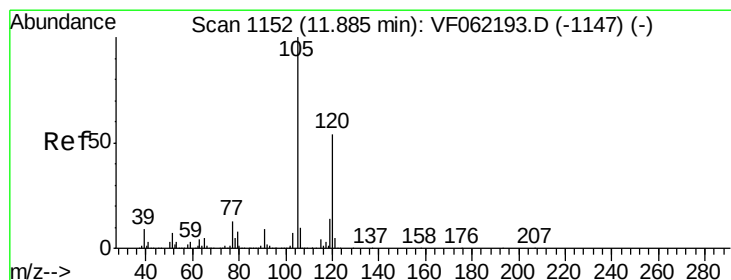
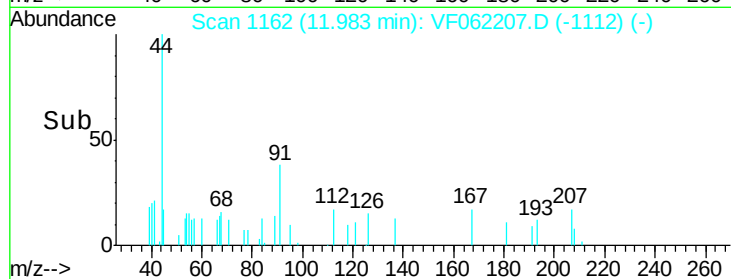
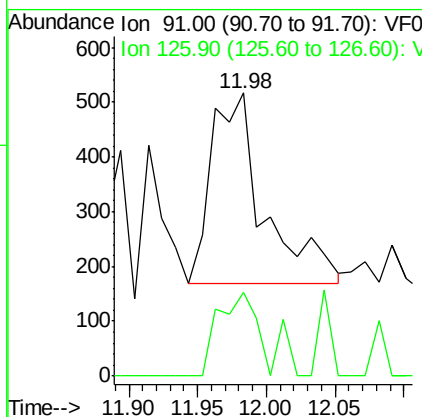
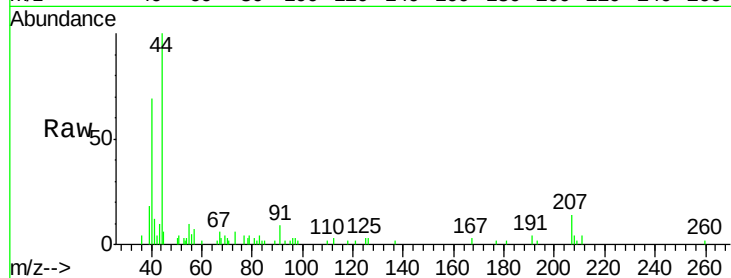




#79  
 2-Chlorotoluene  
 Concen: 3.964 ug/l  
 RT: 11.98 min Scan# 1162  
 Delta R.T. 0.20 min  
 Lab File: VF062207.D  
 Acq: 18 Apr 2019 16:13

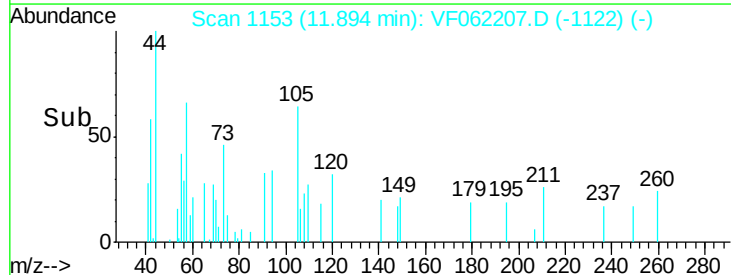
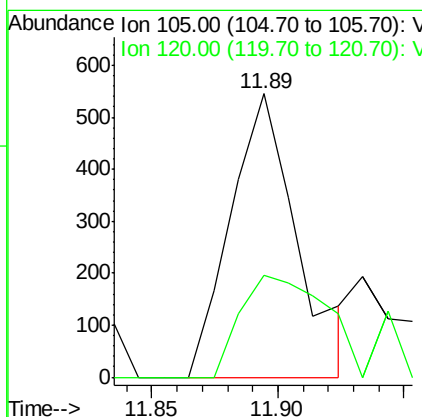
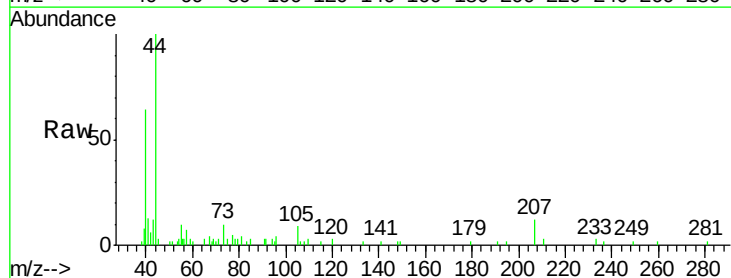
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 RBR-200048-49

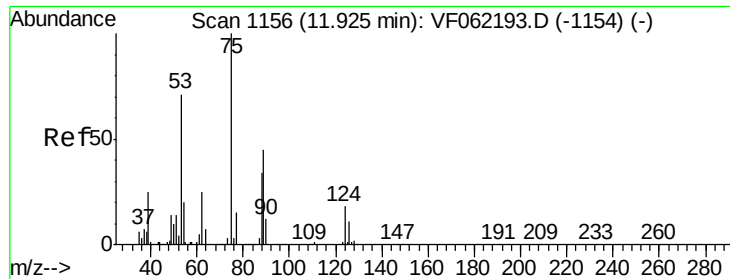
Tot Ion: 91 Resp: 920  
 Ion Ratio Lower Upper  
 91 100  
 126 38.2 16.9 50.6



#80  
 1,3,5-Trimethylbenzene  
 Concen: 3.307 ug/l  
 RT: 11.89 min Scan# 1153  
 Delta R.T. 0.01 min  
 Lab File: VF062207.D  
 Acq: 18 Apr 2019 16:13

Tgt Ion:105 Resp: 999  
 Ion Ratio Lower Upper  
 105 100  
 120 53.7 26.2 78.5





#81

trans-1,4-Dichloro-2-butene

Concen: 12.566 ug/l

RT: 11.87 min Scan# 1151

Delta R.T. -0.05 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

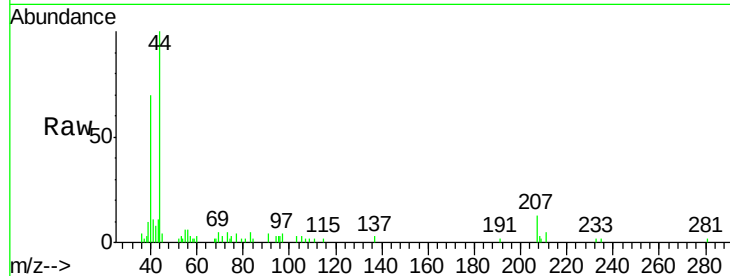
Tot Ion: 75 Resp: 275

Ion Ratio Lower Upper

75 100

53 126.5 50.2 75.4#

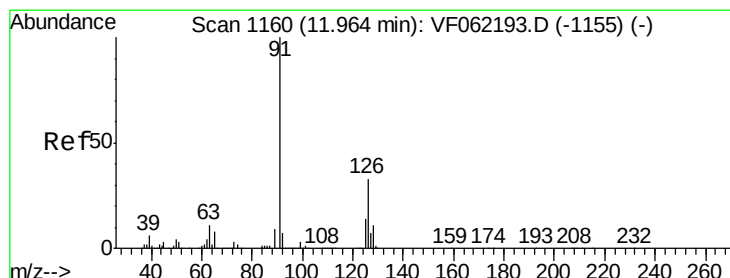
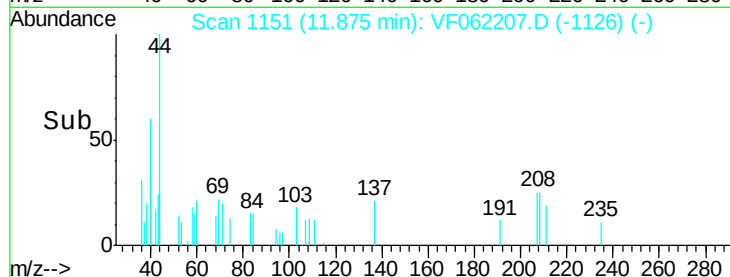
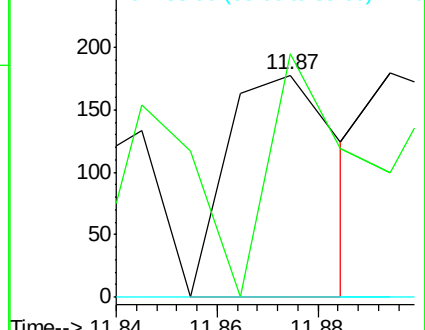
89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 88.90 (88.60 to 89.60): VF0



#82

4-Chlorotoluene

Concen: 4.254 ug/l

RT: 11.98 min Scan# 1162

Delta R.T. 0.02 min

Lab File: VF062207.D

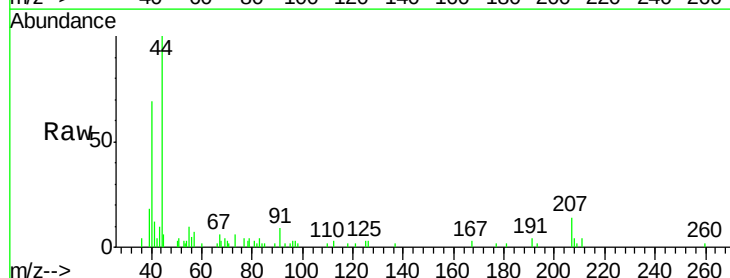
Acq: 18 Apr 2019 16:13

Tgt Ion: 91 Resp: 954

Ion Ratio Lower Upper

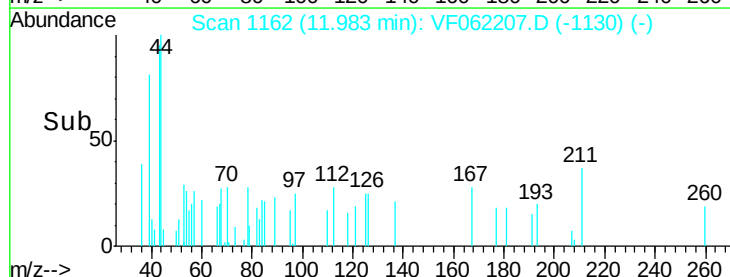
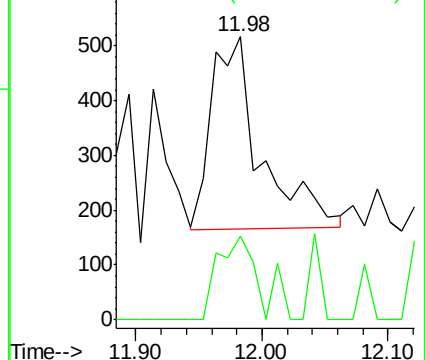
91 100

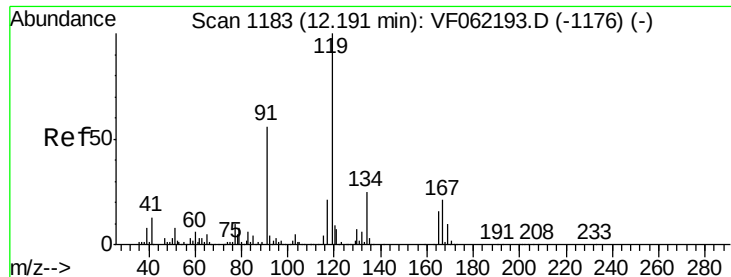
126 36.8 16.9 50.6



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 125.90 (125.60 to 126.60): V





#83

tert-Butylbenzene

Concen: 3.634 ug/l

RT: 12.20 min Scan# 1184

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampled :

RBR-200048-49

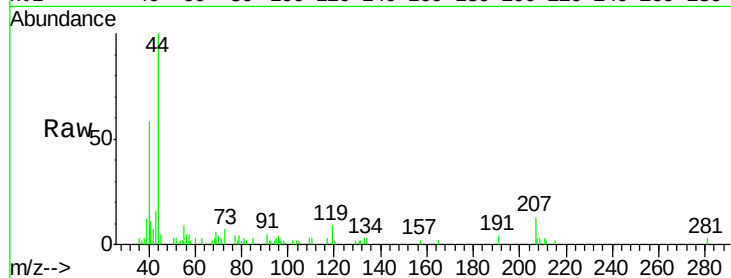
Tot Ion:119 Resp: 1135

Ion Ratio Lower Upper

119 100

91 65.0 29.4 88.2

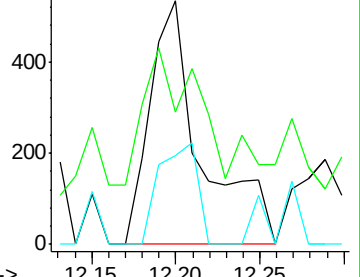
134 30.9 11.8 35.3



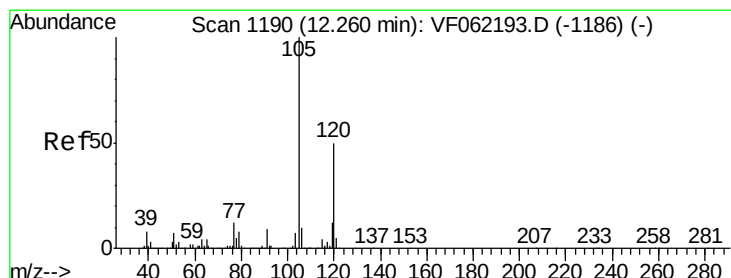
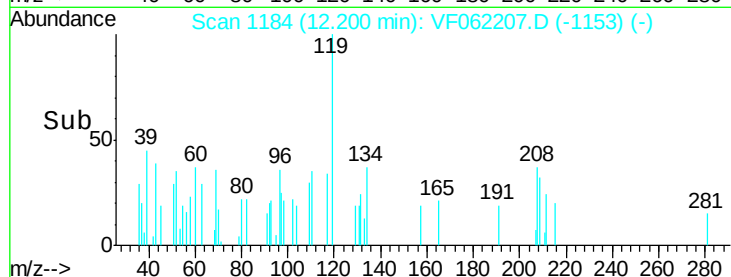
Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): VF0

Ion 134.00 (133.70 to 134.70): V



Time-->



#84

1,2,4-Trimethylbenzene

Concen: 3.226 ug/l

RT: 12.27 min Scan# 1191

Delta R.T. 0.01 min

Lab File: VF062207.D

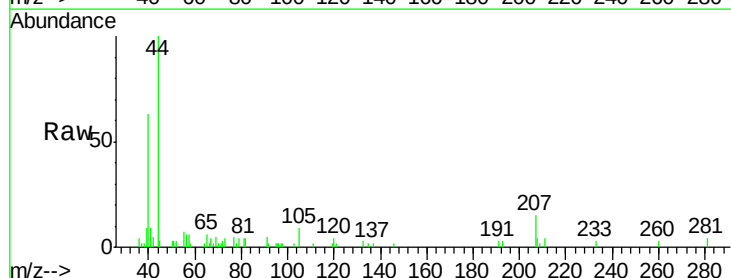
Acq: 18 Apr 2019 16:13

Tgt Ion:105 Resp: 943

Ion Ratio Lower Upper

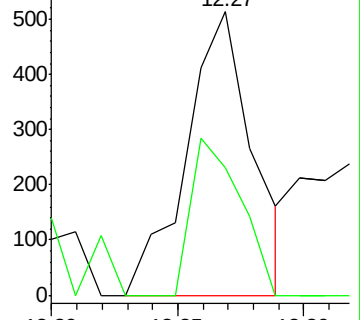
105 100

120 41.3 24.0 72.0

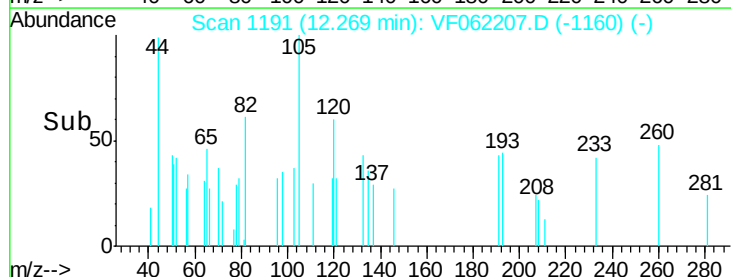


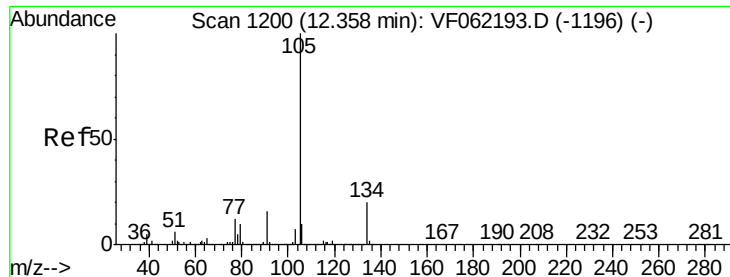
Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



Time-->





#85

sec-Butylbenzene

Concen: 4.293 ug/l

RT: 12.37 min Scan# 1201

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

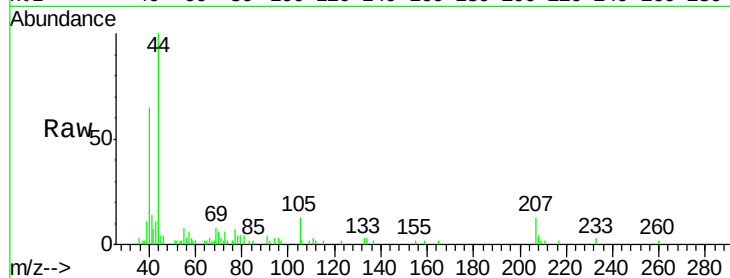
RBR-200048-49

Tot Ion:105 Resp: 1741

Ion Ratio Lower Upper

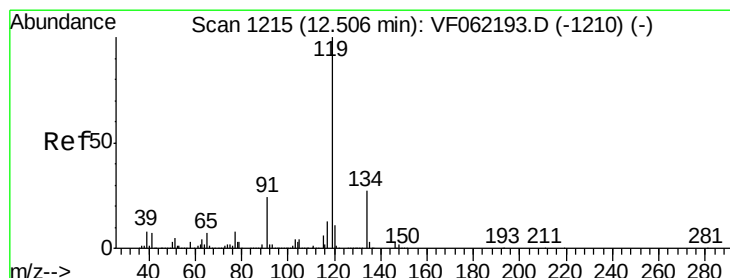
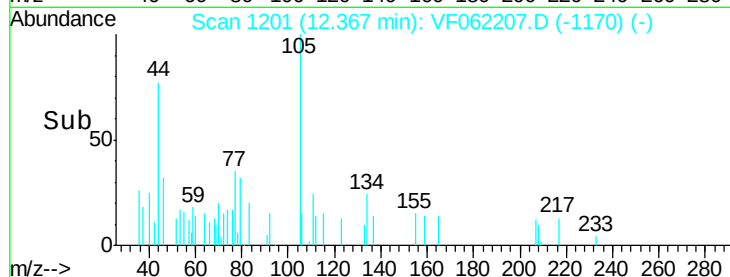
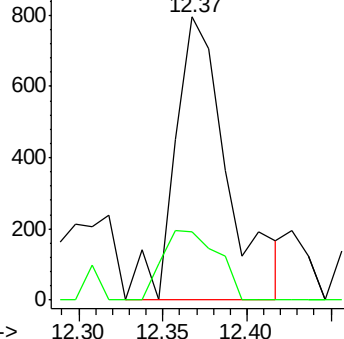
105 100

134 25.6 9.7 29.1



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 3.642 ug/l

RT: 12.51 min Scan# 1215

Delta R.T. -0.00 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

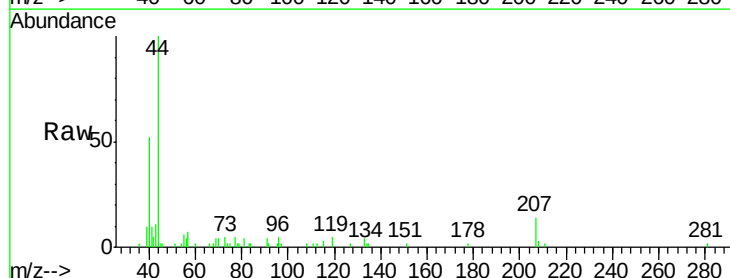
Tgt Ion:119 Resp: 1253

Ion Ratio Lower Upper

119 100

134 0.0 13.2 39.5#

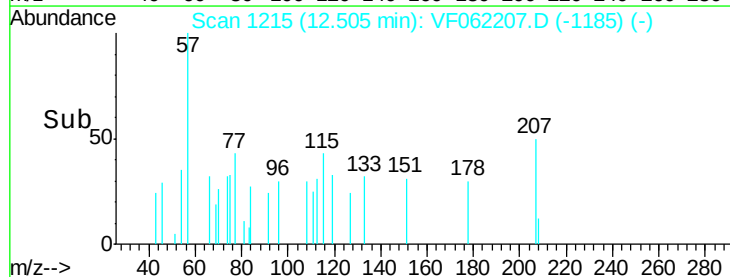
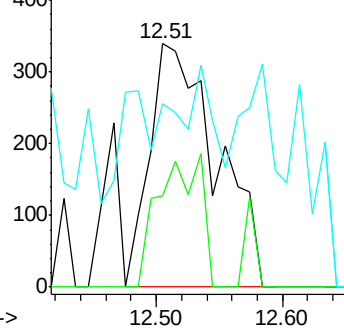
91 19.7 11.7 35.1

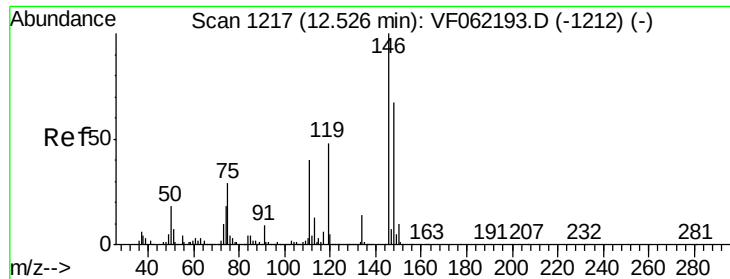


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): VF0





#87

1,3-Dichlorobenzene

Concen: 3.475 ug/l

RT: 12.54 min Scan# 1219

Delta R.T. 0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

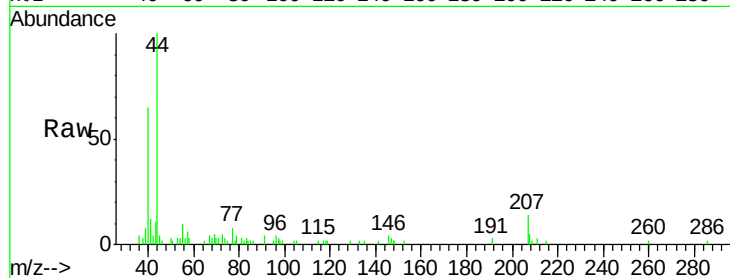
Tot Ion:146 Resp: 501

Ion Ratio Lower Upper

146 100

111 30.7 19.7 59.0

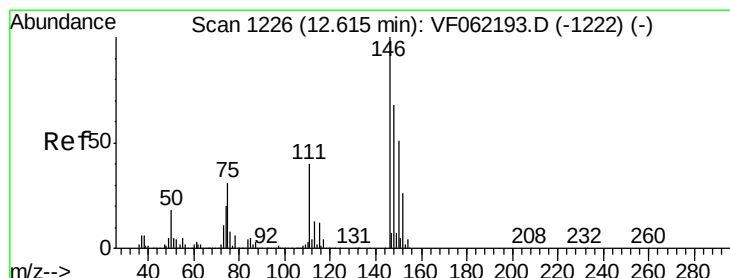
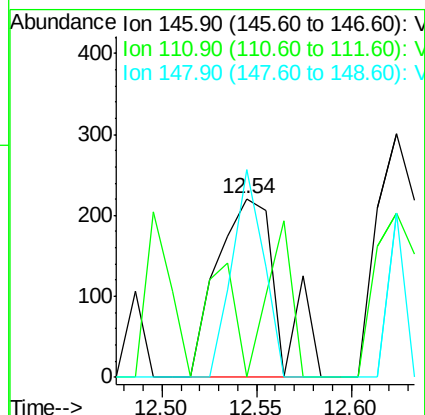
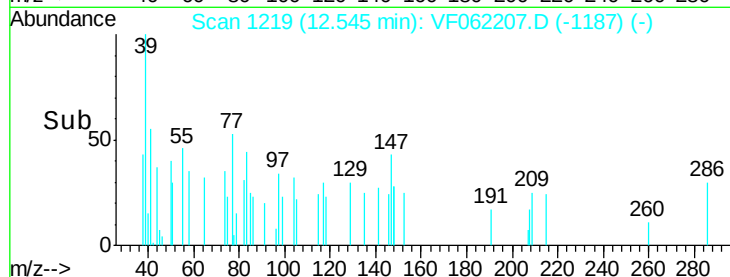
148 59.1 32.9 98.6



Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V



#88

1,4-Dichlorobenzene

Concen: 3.603 ug/l

RT: 12.54 min Scan# 1219

Delta R.T. -0.07 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

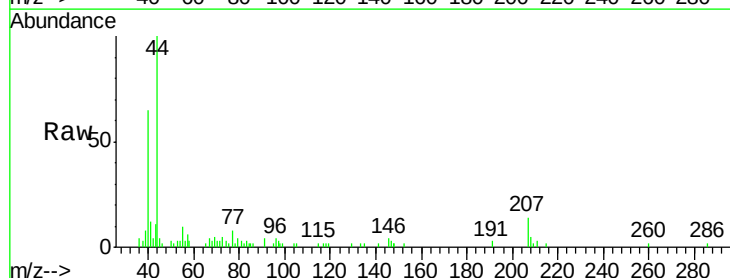
Tgt Ion:146 Resp: 501

Ion Ratio Lower Upper

146 100

111 30.7 20.0 60.0

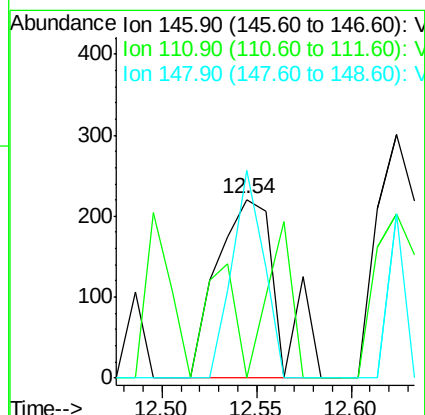
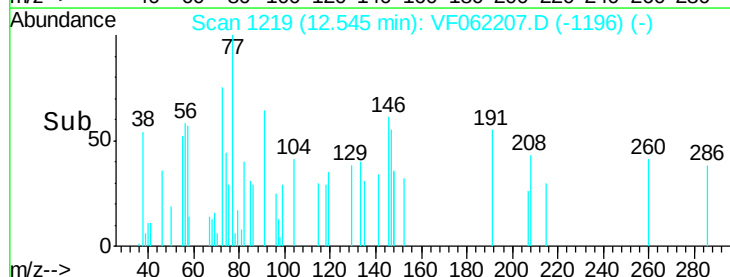
148 59.1 33.6 100.8

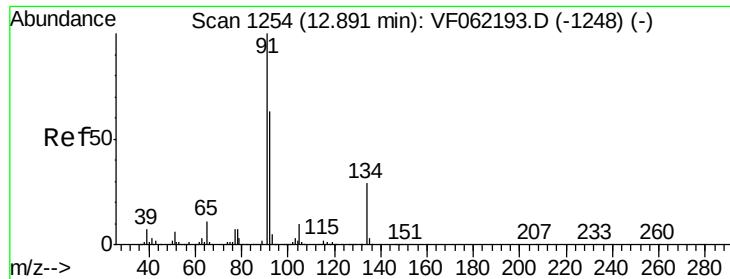


Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V





#89

n-Butylbenzene

Concen: Below Cal

RT: 12.92 min Scan# 1257

Delta R.T. 0.03 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

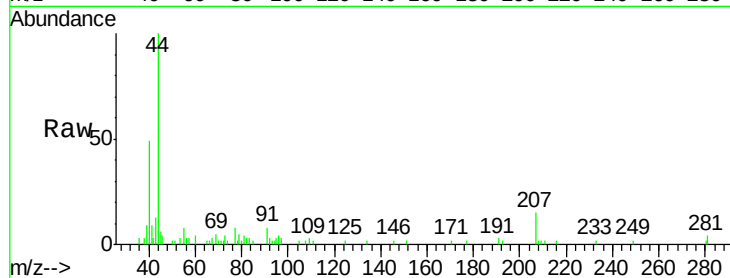
Tot Ion: 91 Resp: 1051

Ion Ratio Lower Upper

91 100

92 54.5 31.2 93.6

134 33.7 13.1 39.1



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

12.92

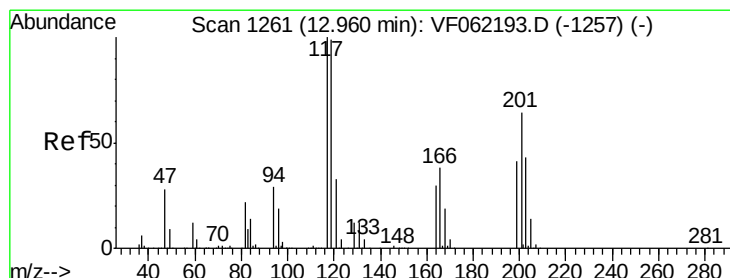
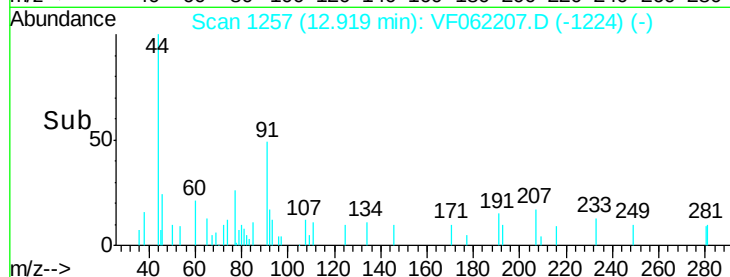
400

200

0

12.85 12.90 12.95

Time-->



#90

Hexachloroethane

Concen: 4.211 ug/l

RT: 12.98 min Scan# 1263

Delta R.T. 0.02 min

Lab File: VF062207.D

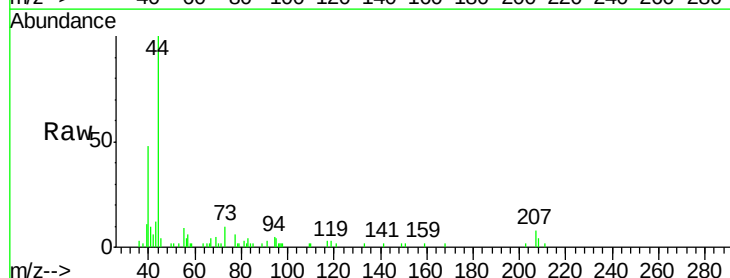
Acq: 18 Apr 2019 16:13

Tgt Ion: 117 Resp: 372

Ion Ratio Lower Upper

117 100

201 19.6 37.7 113.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V

12.98

250

200

150

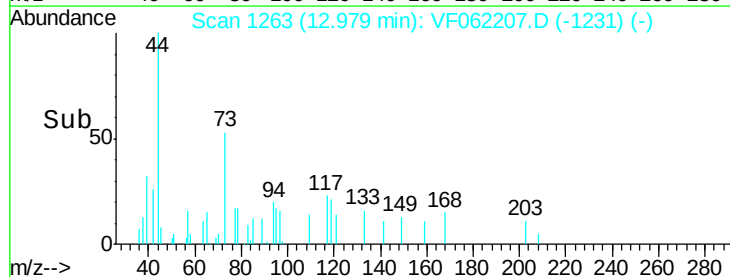
100

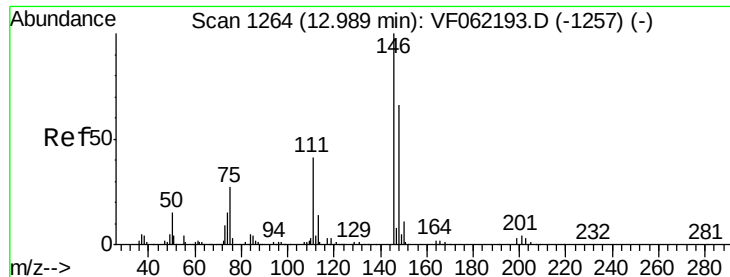
50

0

12.90 12.95 13.00

Time-->





#91

1,2-Dichlorobenzene

Concen: 3.010 ug/l

RT: 13.00 min Scan# 1265

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

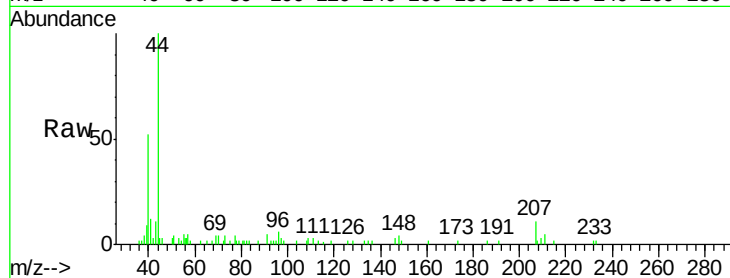
Tot Ion:146 Resp: 419

Ion Ratio Lower Upper

146 100

111 100.5 20.8 62.5#

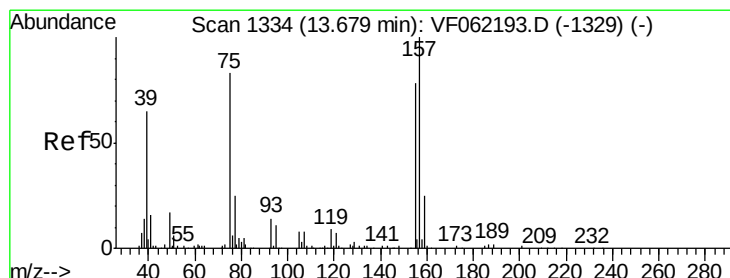
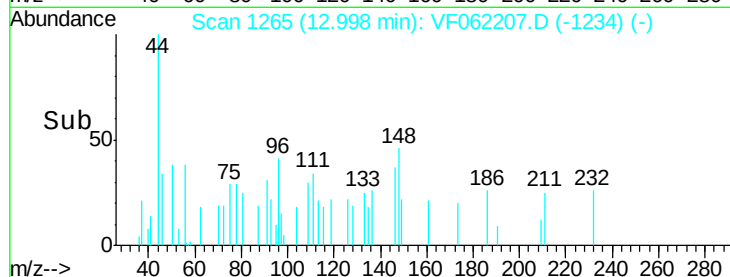
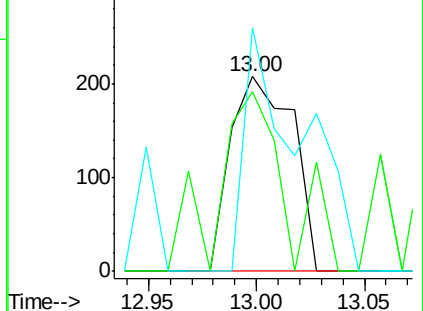
148 114.6 33.0 99.0#



Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V



#92

1,2-Dibromo-3-Chloropropane

Concen: 11.098 ug/l

RT: 13.67 min Scan# 1333

Delta R.T. -0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

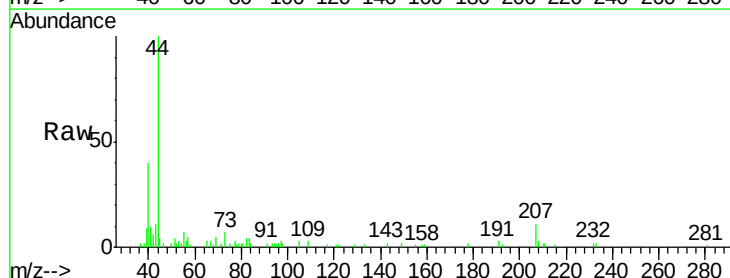
Tgt Ion: 75 Resp: 136

Ion Ratio Lower Upper

75 100

155 49.3 47.6 142.8

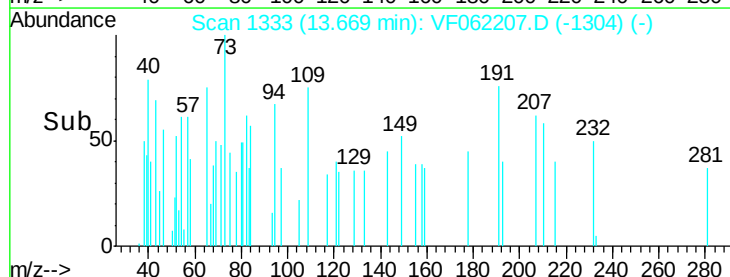
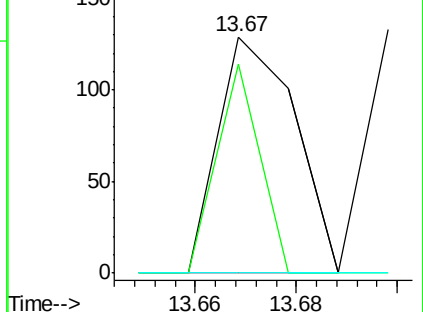
157 0.0 61.3 183.9#

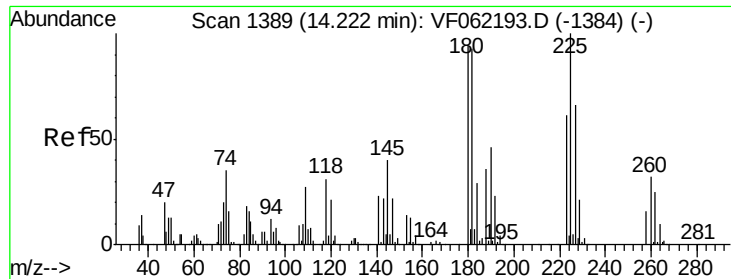


Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V





#94

Hexachlorobutadiene

Concen: 1.715 ug/l

RT: 14.23 min Scan# 1390

Delta R.T. 0.01 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

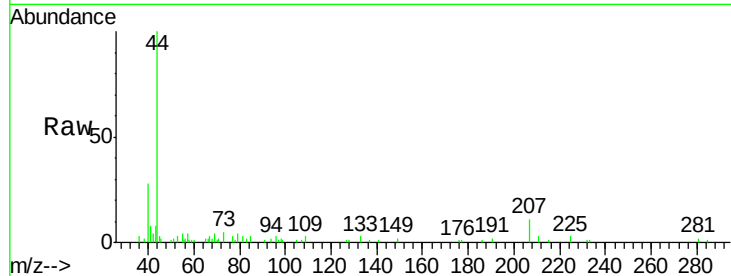
Tot Ion:225 Resp: 137

Ion Ratio Lower Upper

225 100

223 0.0 31.0 93.0#

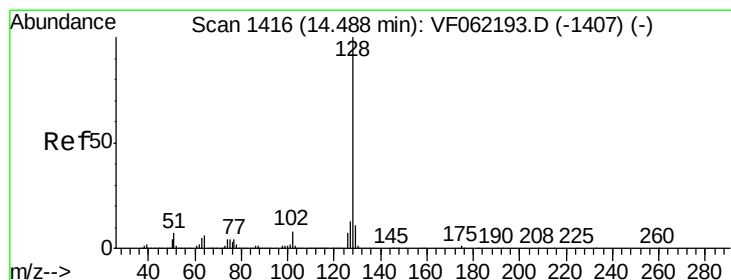
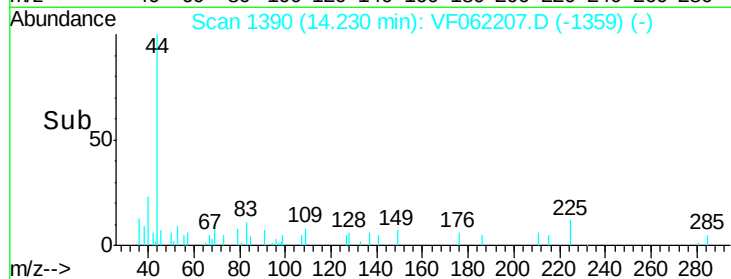
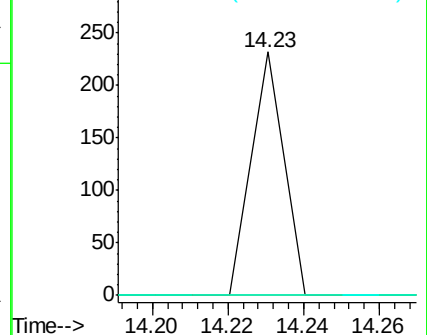
227 0.0 32.4 97.0#



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 1.345 ug/l

RT: 14.47 min Scan# 1414

Delta R.T. -0.02 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

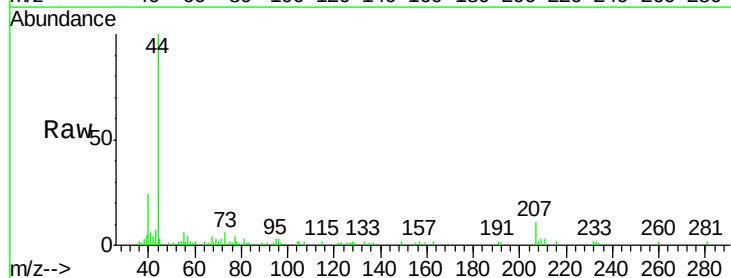
Tgt Ion:128 Resp: 274

Ion Ratio Lower Upper

128 100

127 45.3 10.4 15.6#

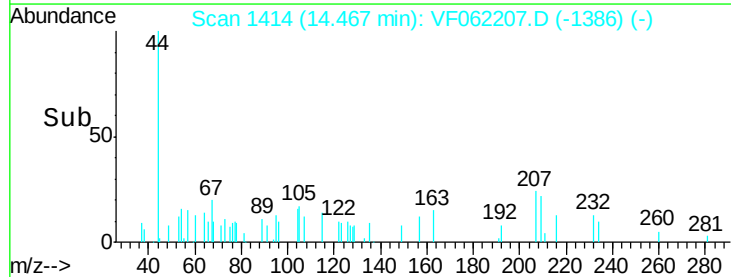
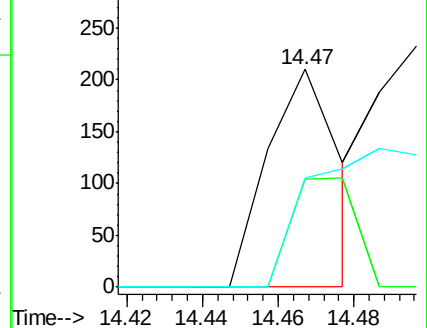
129 104.0 9.2 13.8#



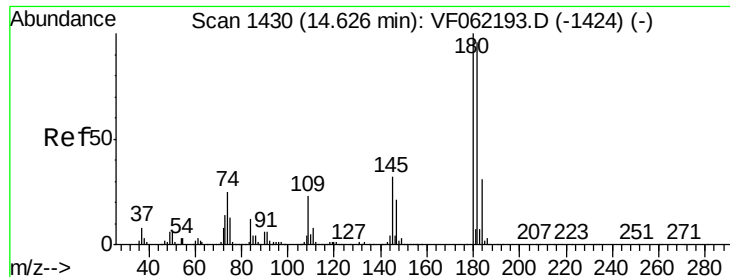
Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V







#96

1,2,3-Trichlorobenzene

Concen: 1.851 ug/l

RT: 14.65 min Scan# 1433

Delta R.T. 0.03 min

Lab File: VF062207.D

Acq: 18 Apr 2019 16:13

Instrument :

MSVOA\_F

ClientSampleId :

RBR-200048-49

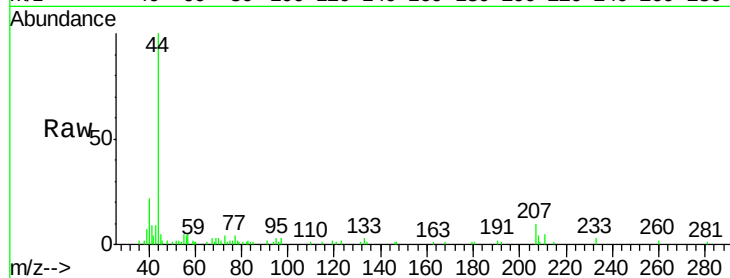
Tot Ion:180 Resp: 207

Ion Ratio Lower Upper

180 100

182 0.0 48.4 145.3#

145 0.0 15.6 46.8#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

