

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF032219\  
 Data File : VF062086.D  
 Acq On : 22 Mar 2019 16:53  
 Operator : VA/AP  
 Sample : K2043-02  
 Misc : 5.69g/5mL/MSVOA-F/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

Quant Time: Mar 23 04:14:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F032219S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 23 01:16:37 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.90  | 168  | 25260    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.63  | 114  | 35953    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.80  | 117  | 13946    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.58 | 152  | 5552     | 50.00 | ug/l  | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.88  | 65   | 4529     | 24.11 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 48.22% |          |
| 35) Dibromofluoromethane    | 4.14  | 113  | 9662     | 39.73 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.46% |          |
| 50) Toluene-d8              | 7.58  | 98   | 35107    | 48.36 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.72% |          |
| 62) 4-Bromofluorobenzene    | 11.40 | 95   | 13838    | 49.37 | ug/l   | -0.04    |
| Spiked Amount               |       |      | Recovery | =     | 98.74% |          |

| Target Compounds              | R.T.  | QIon | Response | Conc     | Units  | Qvalue |
|-------------------------------|-------|------|----------|----------|--------|--------|
| 3) Chloromethane              | 1.07  | 50   | 482      | 1.424    | ug/l # | 42     |
| 5) Bromomethane               | 1.31  | 94   | 231      | 1.026    | ug/l # | 5      |
| 11) Tert butyl alcohol        | 2.58  | 59   | 103      | 9.963    | ug/l # | 66     |
| 13) Acrolein                  | 2.02  | 56   | 482      | 38.773   | ug/l   | 89     |
| 14) Allyl chloride            | 2.21  | 41   | 1403     | 5.397    | ug/l # | 21     |
| 15) Acrylonitrile             | 2.95  | 53   | 615      | 16.918   | ug/l # | 20     |
| 16) Acetone                   | 2.26  | 43   | 1923     | 48.630   | ug/l # | 49     |
| 18) Methyl Acetate            | 2.40  | 43   | 3146     | 33.352   | ug/l # | 56     |
| 20) Methylene Chloride        | 2.20  | 84   | 1051     | 1.291    | ug/l # | 86     |
| 23) Vinyl Acetate             | 3.20  | 43   | 453      | 1.623    | ug/l # | 76     |
| 25) 2-Butanone                | 4.37  | 43   | 7791     | 94.376   | ug/l # | 55     |
| 29) Tetrahydrofuran           | 4.02  | 42   | 5691     | 158.557  | ug/l # | 1      |
| 31) Cyclohexane               | 3.77  | 56   | 14078    | 32.979   | ug/l # | 51     |
| 37) Ethyl Acetate             | 4.04  | 43   | 33809    | 225.903  | ug/l # | 15     |
| 39) Methylcyclohexane         | 5.48  | 83   | 119487   | 300.633  | ug/l   | 96     |
| 40) Benzene                   | 4.67  | 78   | 93886    | 102.267  | ug/l   | 99     |
| 41) Methacrylonitrile         | 4.71  | 41   | 19758    | 249.510  | ug/l # | 52     |
| 43) Isopropyl Acetate         | 7.04  | 43   | 17537    | 96.757   | ug/l # | 42     |
| 48) Methyl methacrylate       | 6.84  | 41   | 62177    | 602.504  | ug/l # | 37     |
| 51) 4-Methyl-2-Pentanone      | 8.31  | 43   | 113622   | 936.617  | ug/l # | 38     |
| 52) Toluene                   | 7.65  | 92   | 2716     | 5.108    | ug/l # | 41     |
| 55) 1,1,2-Trichloroethane     | 8.42  | 97   | 28828    | 190.866  | ug/l # | 52     |
| 56) Ethyl methacrylate        | 8.65  | 69   | 134339   | 745.789  | ug/l # | 78     |
| 58) 2-Chloroethyl Vinyl ether | 7.34  | 63   | 191      | 6.988    | ug/l # | 48     |
| 59) 2-Hexanone                | 9.55  | 43   | 29715    | 334.214  | ug/l # | 46     |
| 65) Chlorobenzene             | 9.83  | 112  | 1938173  | 7427.681 | ug/l   | 93     |
| 67) Ethyl Benzene             | 9.93  | 91   | 7042     | 15.518   | ug/l   | 92     |
| 68) m/p-Xylenes               | 10.16 | 106  | 3094     | 18.242   | ug/l # | 63     |
| 69) o-Xylene                  | 10.74 | 106  | 2794     | 15.728   | ug/l # | 32     |
| 73) Isopropylbenzene          | 11.15 | 105  | 37551    | 96.118   | ug/l   | 98     |
| 74) N-amyl acetate            | 11.42 | 43   | 125046   | 1343.303 | ug/l # | 63     |
| 75) 1,1,2,2-Tetrachloroethane | 11.70 | 83   | 78553    | 1171.039 | ug/l # | 45     |
| 76) 1,2,3-Trichloropropane    | 11.80 | 75   | 109      | 2.309    | ug/l # | 1      |
| 77) Bromobenzene              | 11.52 | 156  | 245      | 2.567    | ug/l # | 1      |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF032219\  
 Data File : VF062086.D  
 Acq On : 22 Mar 2019 16:53  
 Operator : VA/AP  
 Sample : K2043-02  
 Misc : 5.69g/5mL/MSVOA-F/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

Quant Time: Mar 23 04:14:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F032219S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 23 01:16:37 2019  
 Response via : Initial Calibration

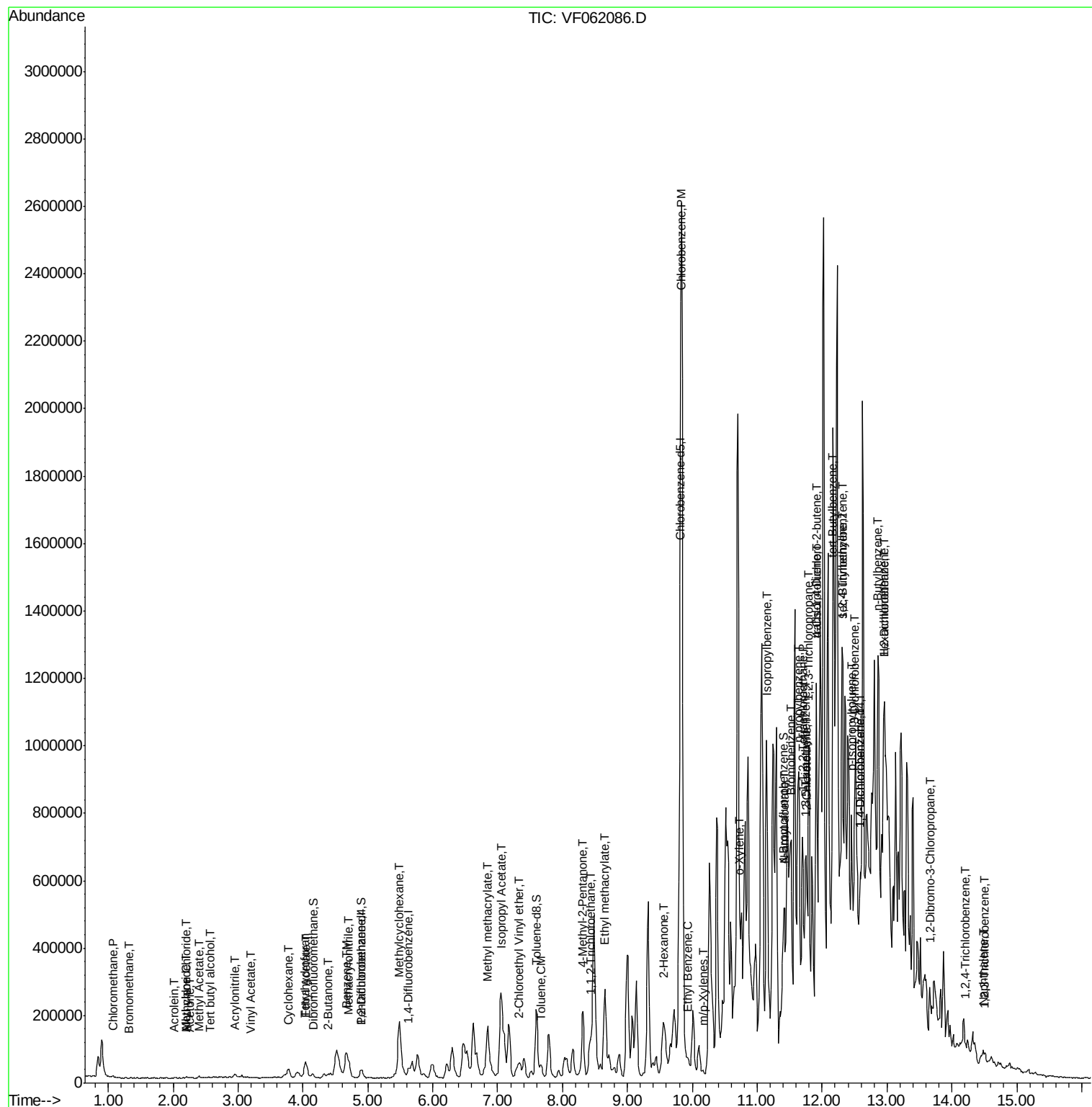
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 78) n-propylbenzene            | 11.62 | 91   | 88541    | 195.177 | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 11.75 | 91   | 6527     | 25.886  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 11.74 | 105  | 1677     | 5.219   | ug/l # | 50       |
| 81) trans-1,4-Dichloro-2-buten | 11.91 | 75   | 70       | 3.639   | ug/l # | 1        |
| 82) 4-Chlorotoluene            | 11.91 | 91   | 2653     | 10.262  | ug/l # | 1        |
| 83) tert-Butylbenzene          | 12.15 | 119  | 48514    | 144.219 | ug/l   | 83       |
| 84) 1,2,4-Trimethylbenzene     | 12.33 | 105  | 83974    | 266.567 | ug/l # | 26       |
| 85) sec-Butylbenzene           | 12.33 | 105  | 84066    | 193.178 | ug/l # | 59       |
| 86) p-Isopropyltoluene         | 12.45 | 119  | 2429     | 6.443   | ug/l # | 1        |
| 87) 1,3-Dichlorobenzene        | 12.50 | 146  | 68823    | 388.106 | ug/l # | 76       |
| 88) 1,4-Dichlorobenzene        | 12.58 | 146  | 76064    | 439.579 | ug/l # | 74       |
| 89) n-Butylbenzene             | 12.86 | 91   | 56778    | 157.847 | ug/l   | 95       |
| 90) Hexachloroethane           | 12.95 | 117  | 5255     | 58.536  | ug/l # | 22       |
| 91) 1,2-Dichlorobenzene        | 12.97 | 146  | 3449     | 20.713  | ug/l # | 1        |
| 92) 1,2-Dibromo-3-Chloropropan | 13.66 | 75   | 312      | 30.697  | ug/l # | 30       |
| 93) 1,2,4-Trichlorobenzene     | 14.22 | 180  | 706      | 6.084   | ug/l # | 27       |
| 95) Naphthalene                | 14.48 | 128  | 4465     | 21.955  | ug/l # | 66       |
| 96) 1,2,3-Trichlorobenzene     | 14.52 | 180  | 336      | 3.093   | ug/l   | 60       |
| -----                          |       |      |          |         |        |          |

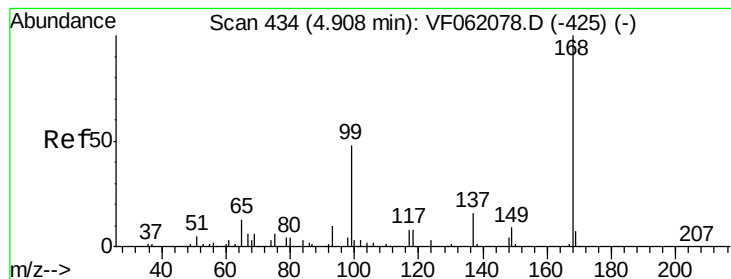
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF032219\  
Data File : VF062086.D  
Acq On : 22 Mar 2019 16:53  
Operator : VA/AP  
Sample : K2043-02  
Misc : 5.69g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

Quant Time: Mar 23 04:14:45 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F032219S.M  
Quant Title : SW846 8260  
QLast Update : Sat Mar 23 01:16:37 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.90 min Scan# 433

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

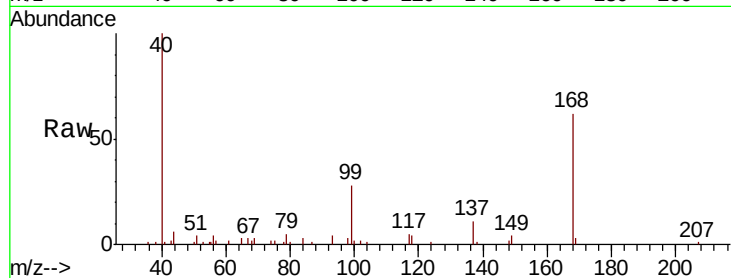
WP022SB442-190319-FD-(12-14)

Tot Ion:168 Resp: 25260

Ion Ratio Lower Upper

168 100

99 44.9 38.2 57.4



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.90

8000

6000

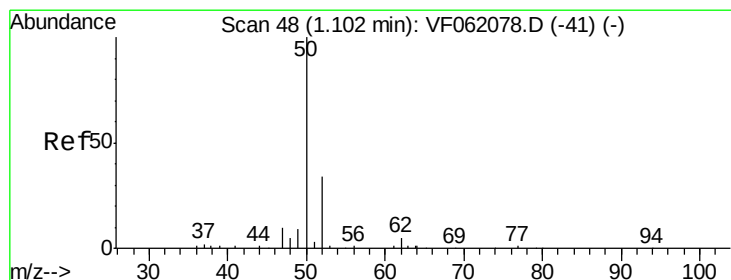
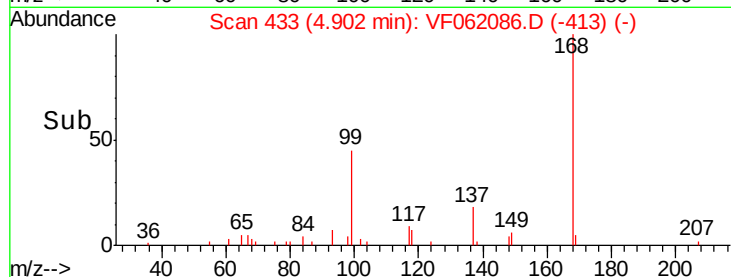
4000

2000

0

4.80 4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: 1.424 ug/l

RT: 1.07 min Scan# 44

Delta R.T. -0.04 min

Lab File: VF062086.D

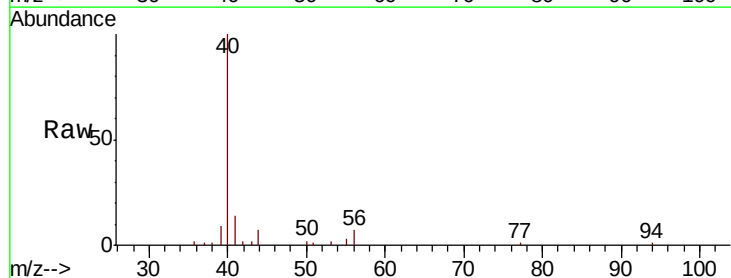
Acq: 22 Mar 2019 16:53

Tgt Ion: 50 Resp: 482

Ion Ratio Lower Upper

50 100

52 0.0 26.1 39.1#



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

1.07

300

250

200

150

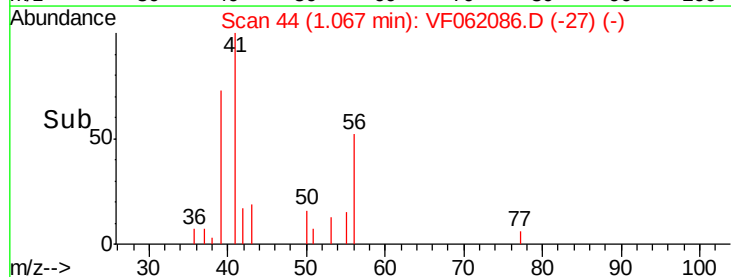
100

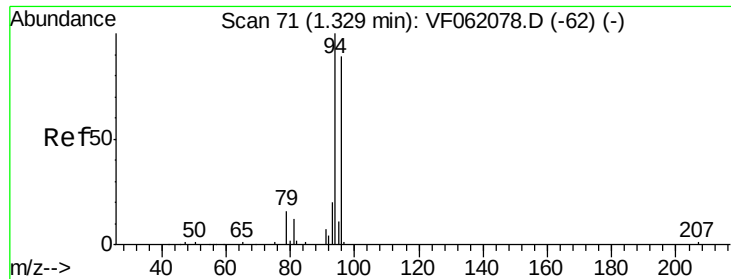
50

0

1.00 1.05 1.10 1.15

Time-->





#5

Bromomethane

Concen: 1.026 ug/l

RT: 1.31 min Scan# 69

Delta R.T. -0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

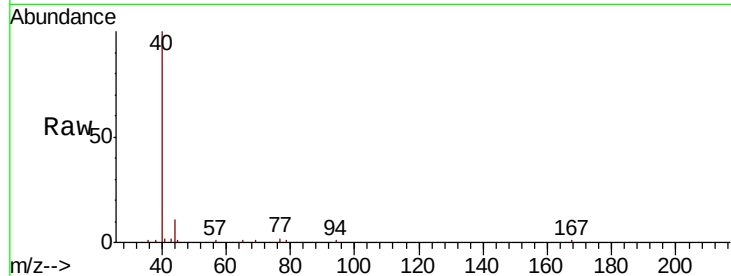
WP022SB442-190319-FD-(12-14)

Tot Ion: 94 Resp: 231

Ion Ratio Lower Upper

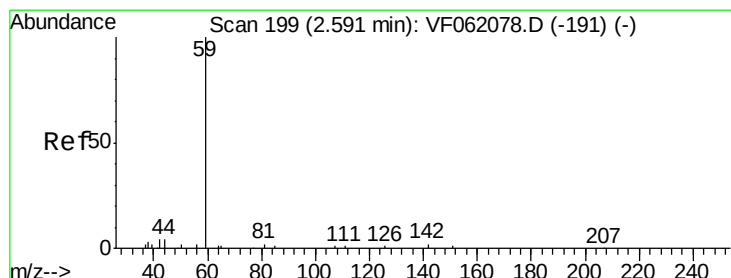
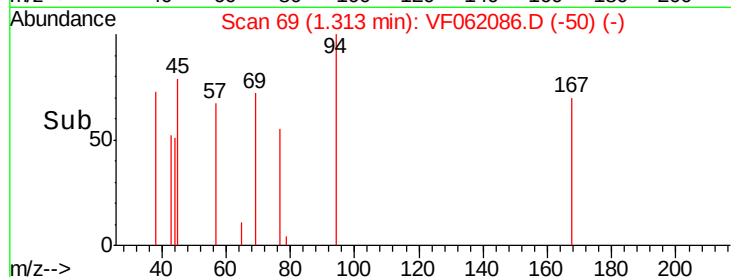
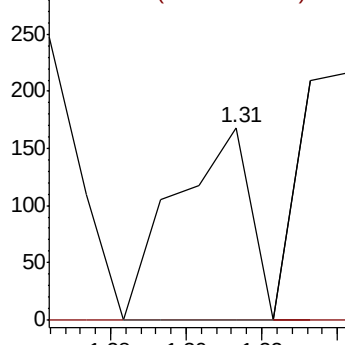
94 100

96 0.0 70.9 106.3#



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0



#11

Tert butyl alcohol

Concen: 9.963 ug/l

RT: 2.58 min Scan# 197

Delta R.T. -0.02 min

Lab File: VF062086.D

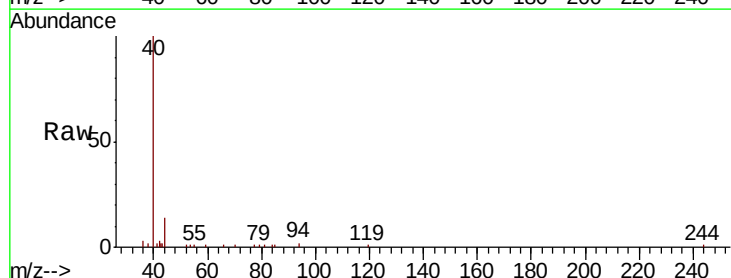
Acq: 22 Mar 2019 16:53

Tgt Ion: 59 Resp: 103

Ion Ratio Lower Upper

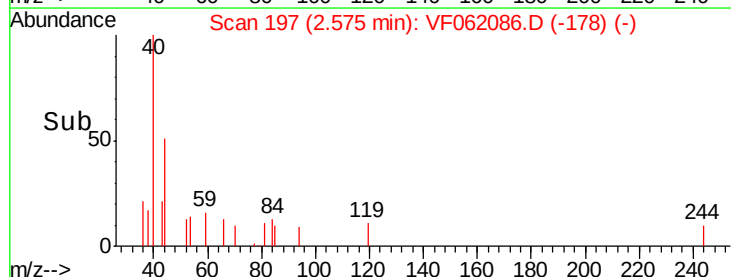
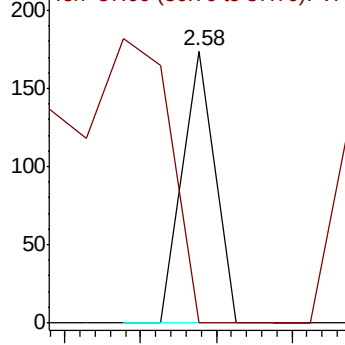
59 100

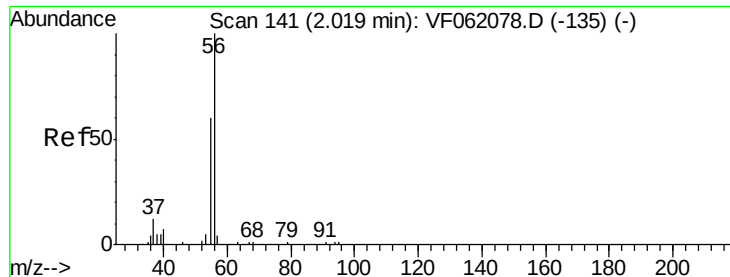
57 0.0 11.0 16.4#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#13

Acrolein

Concen: 38.773 ug/l

RT: 2.02 min Scan# 141

Delta R.T. 0.00 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

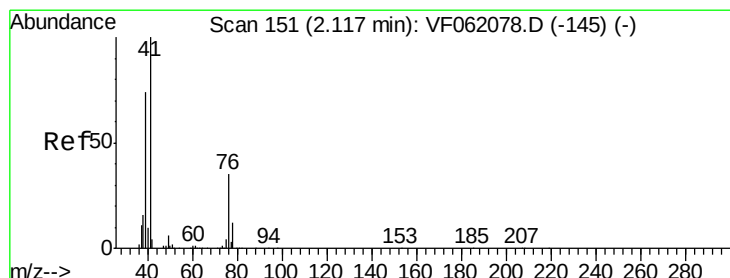
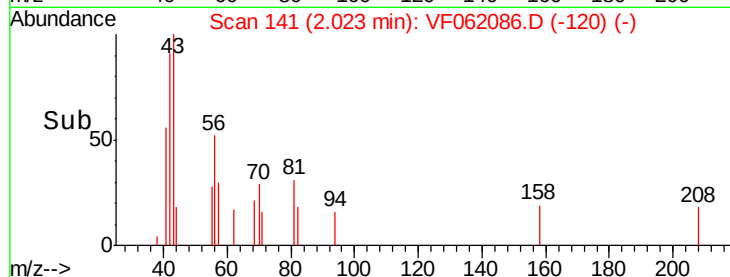
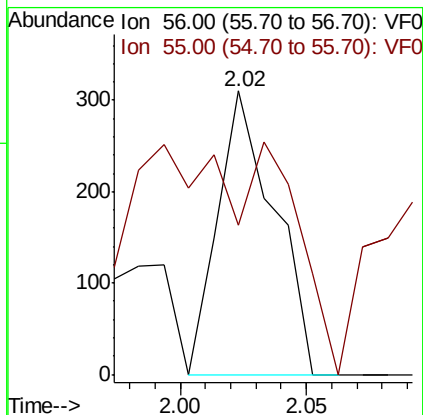
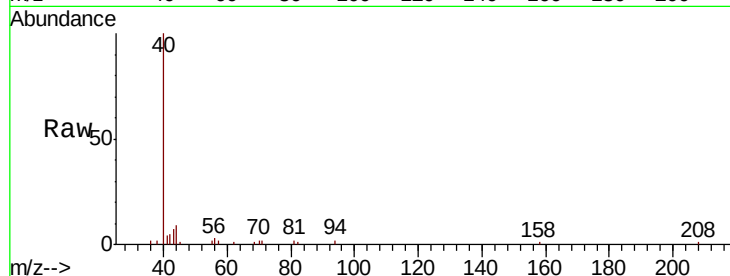
WP022SB442-190319-FD-(12-14)

Tot Ion: 56 Resp: 482

Ion Ratio Lower Upper

56 100

55 52.9 49.0 73.4



#14

Allyl chloride

Concen: 5.397 ug/l

RT: 2.21 min Scan# 160

Delta R.T. 0.09 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

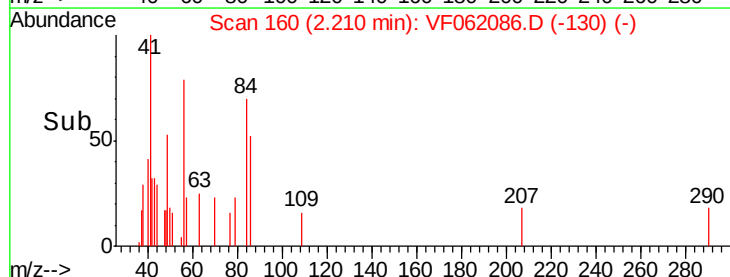
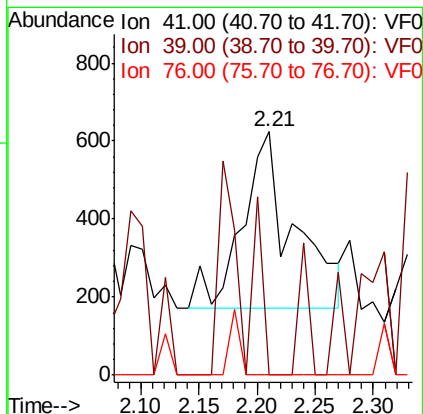
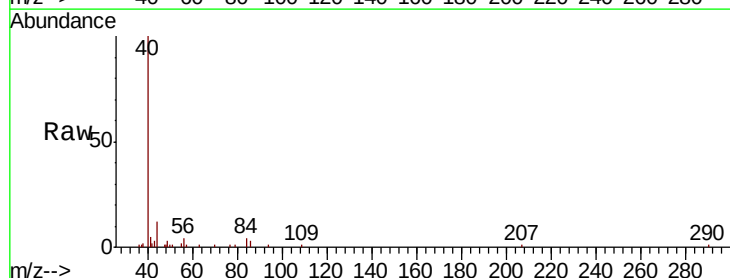
Tgt Ion: 41 Resp: 1403

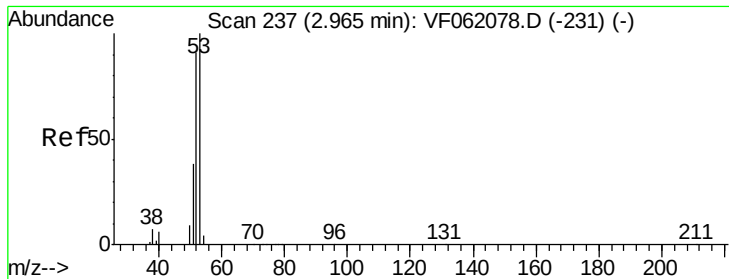
Ion Ratio Lower Upper

41 100

39 0.0 59.8 89.8#

76 0.0 30.0 45.0#





#15

Acrylonitrile

Concen: 16.918 ug/l

RT: 2.95 min Scan# 235

Delta R.T. -0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

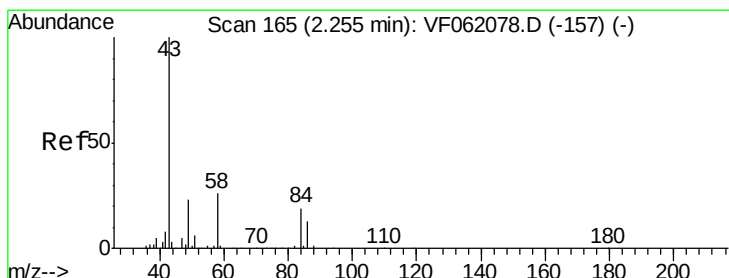
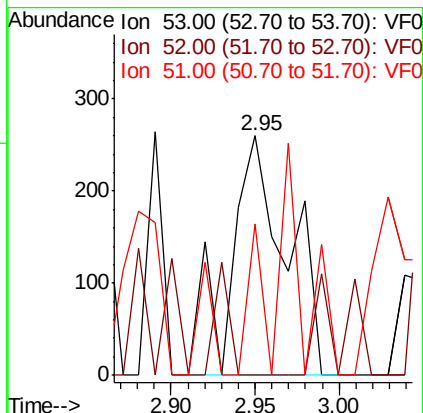
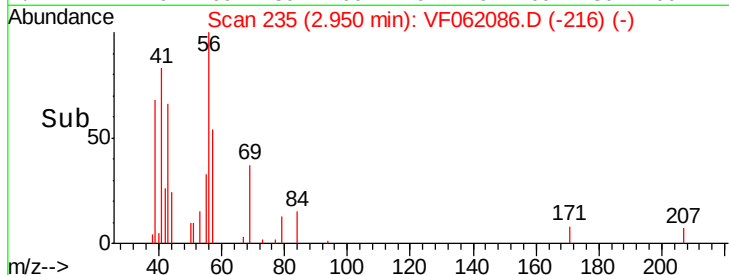
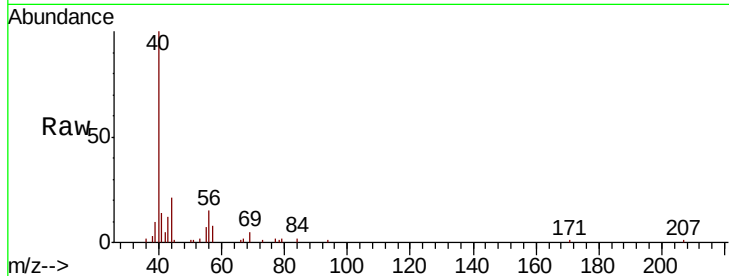
Tot Ion: 53 Resp: 615

Ion Ratio Lower Upper

53 100

52 0.0 72.3 108.5#

51 63.1 30.4 45.6#



#16

Acetone

Concen: 48.630 ug/l

RT: 2.26 min Scan# 165

Delta R.T. 0.00 min

Lab File: VF062086.D

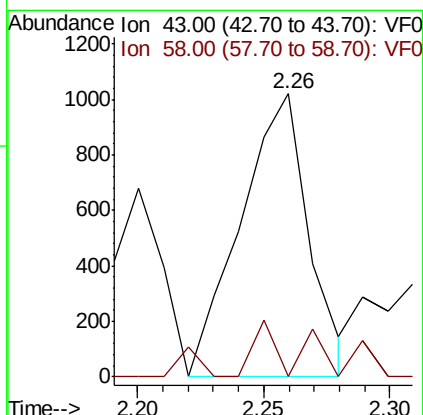
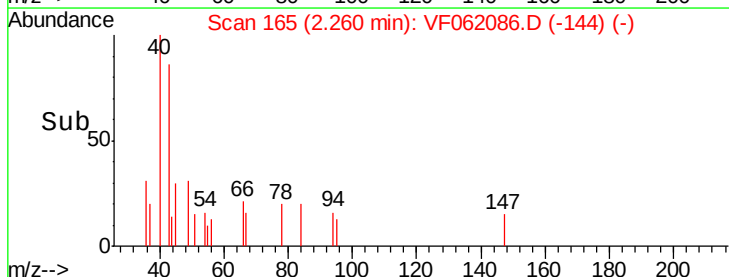
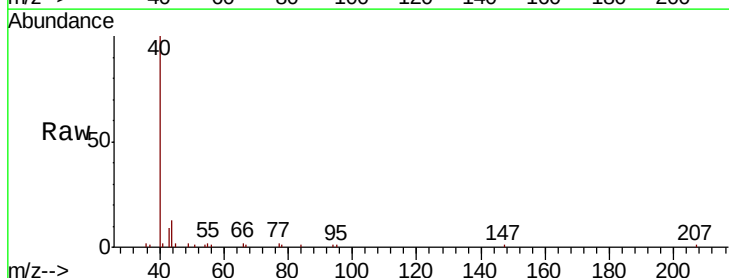
Acq: 22 Mar 2019 16:53

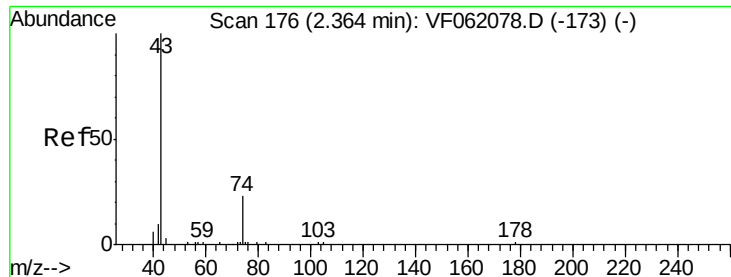
Tgt Ion: 43 Resp: 1923

Ion Ratio Lower Upper

43 100

58 0.0 20.8 31.2#

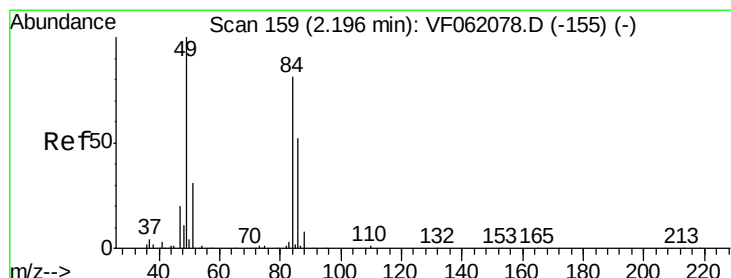
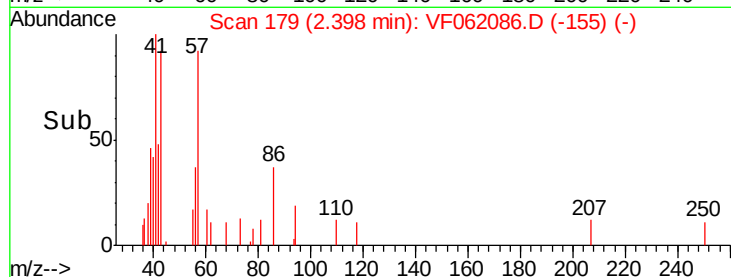
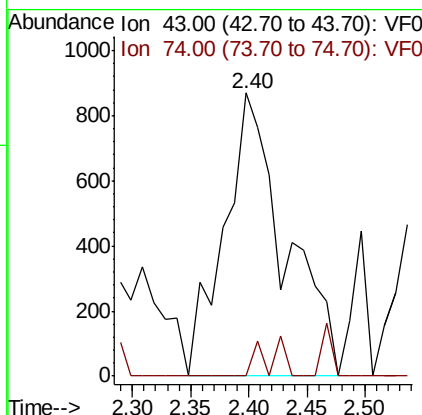
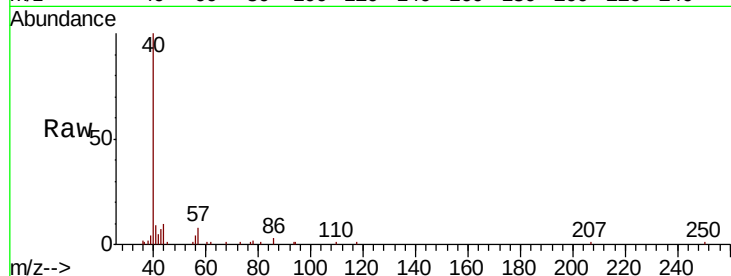




#18  
Methyl Acetate  
Concen: 33.352 ug/l  
RT: 2.40 min Scan# 179  
Delta R.T. 0.03 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

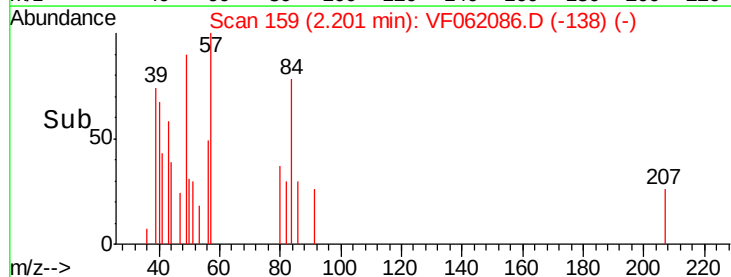
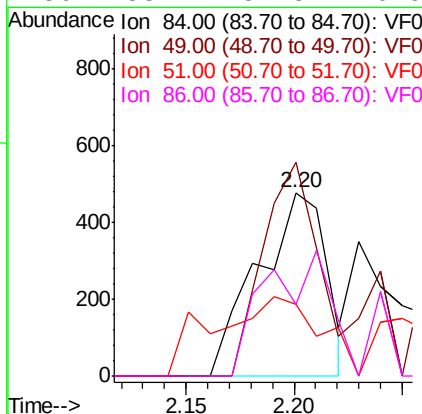
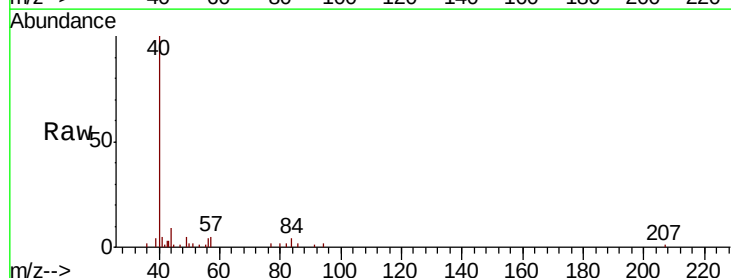
Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

Tot Ion: 43 Resp: 3146  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.3 24.5#

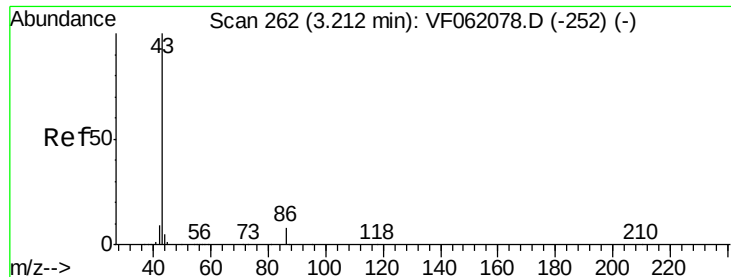


#20  
Methylene Chloride  
Concen: 1.291 ug/l  
RT: 2.20 min Scan# 159  
Delta R.T. 0.00 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Tgt Ion: 84 Resp: 1051  
Ion Ratio Lower Upper  
84 100  
49 116.3 100.4 150.6  
51 38.7 31.0 46.6  
86 38.7 51.3 76.9#







#23

Vinyl Acetate

Concen: 1.623 ug/l

RT: 3.20 min Scan# 260

Delta R.T. -0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

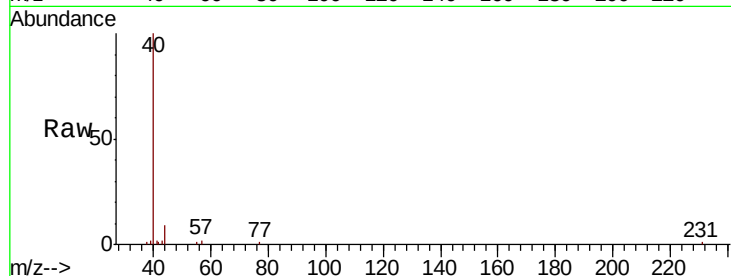
WP022SB442-190319-FD-(12-14)

Tot Ion: 43 Resp: 453

Ion Ratio Lower Upper

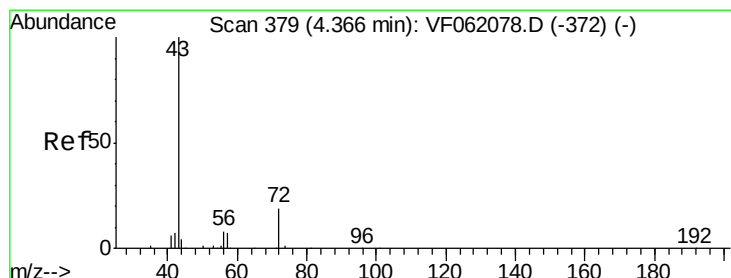
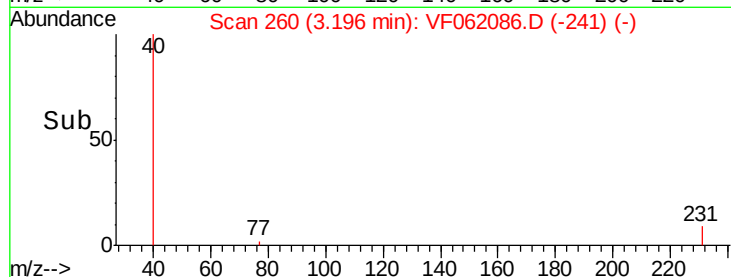
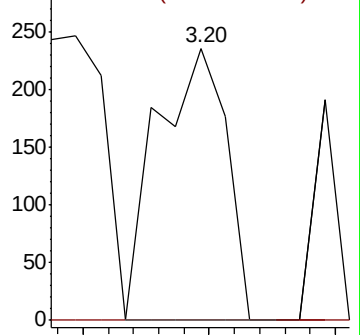
43 100

86 0.0 6.8 10.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0



#25

2-Butanone

Concen: 94.376 ug/l

RT: 4.37 min Scan# 379

Delta R.T. 0.00 min

Lab File: VF062086.D

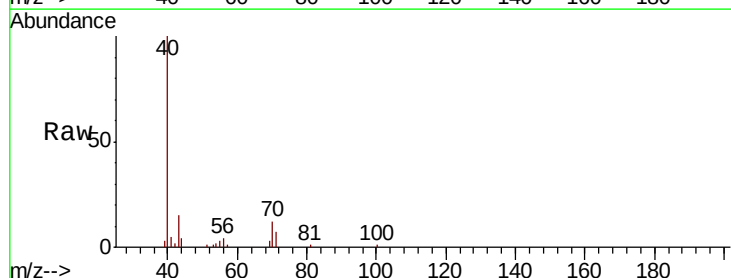
Acq: 22 Mar 2019 16:53

Tgt Ion: 43 Resp: 7791

Ion Ratio Lower Upper

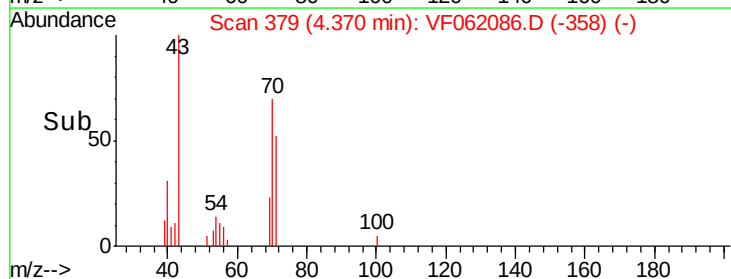
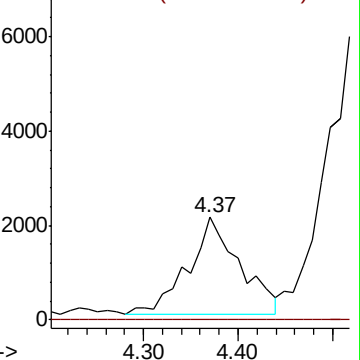
43 100

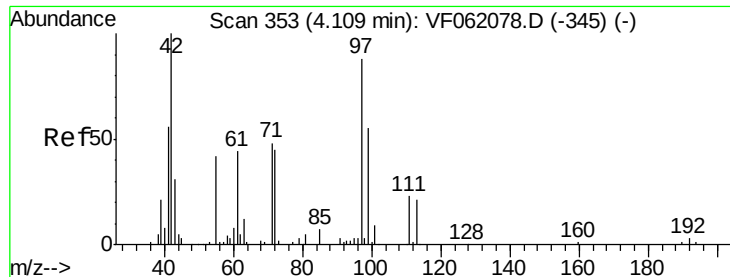
72 0.0 16.7 25.1#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0





#29

Tetrahydrofuran

Concen: 158.557 ug/l

RT: 4.02 min Scan# 344

Delta R.T. -0.08 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

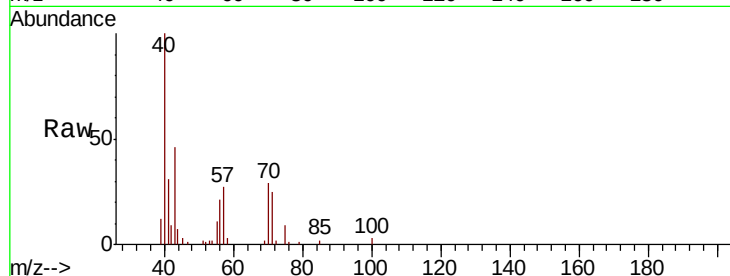
Tot Ion: 42 Resp: 5691

Ion Ratio Lower Upper

42 100

72 16.7 33.3 49.9#

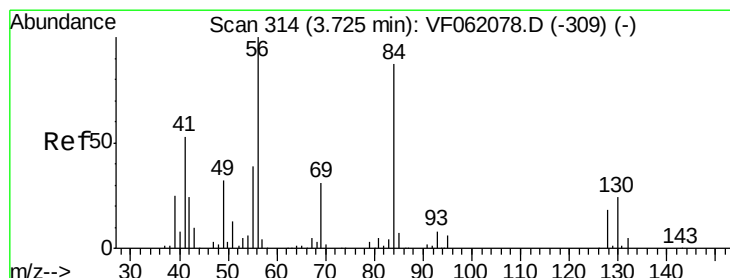
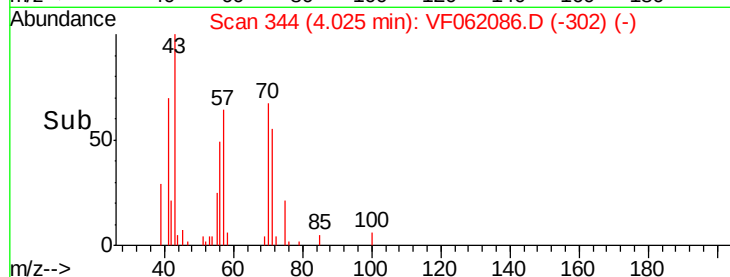
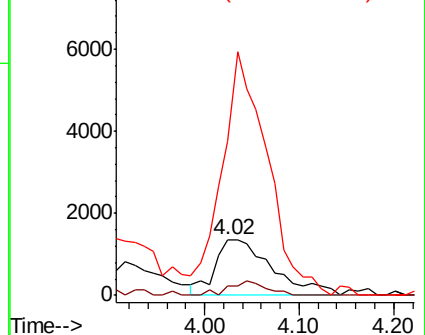
71 346.9 35.0 52.4#



Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0



#31

Cyclohexane

Concen: 32.979 ug/l

RT: 3.77 min Scan# 318

Delta R.T. 0.04 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

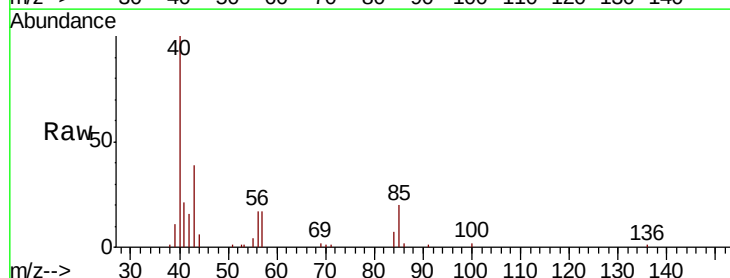
Tgt Ion: 56 Resp: 14078

Ion Ratio Lower Upper

56 100

69 9.9 25.9 38.9#

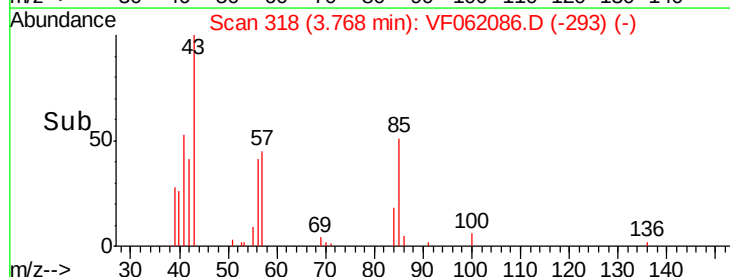
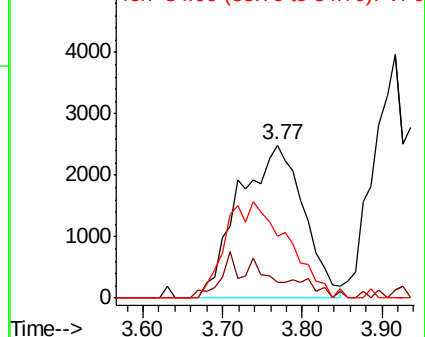
84 40.3 71.1 106.7#

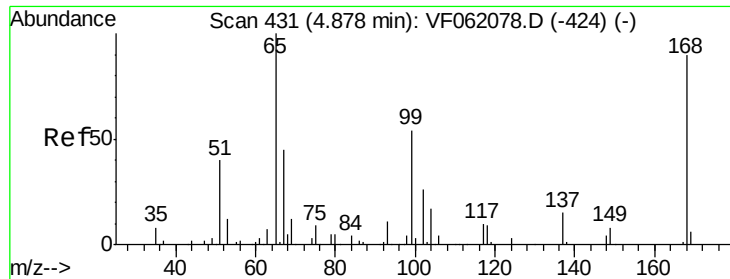


Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 69.00 (68.70 to 69.70): VF0

Ion 84.00 (83.70 to 84.70): VF0





#33

1,2-Dichloroethane-d4

Concen: 24.105 ug/l

RT: 4.88 min Scan# 431

Delta R.T. 0.00 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

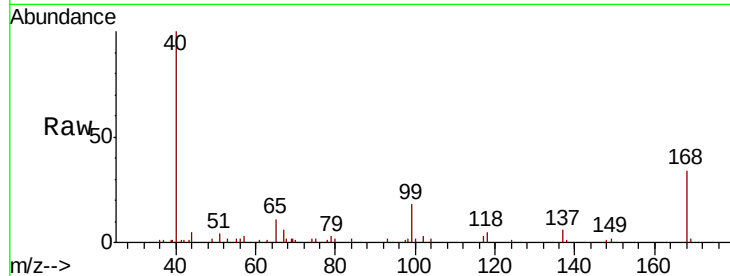
WP022SB442-190319-FD-(12-14)

Tot Ion: 65 Resp: 4529

Ion Ratio Lower Upper

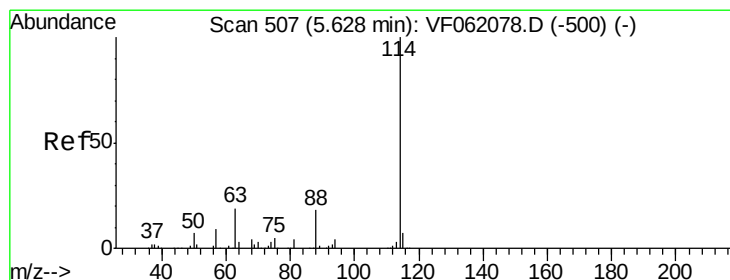
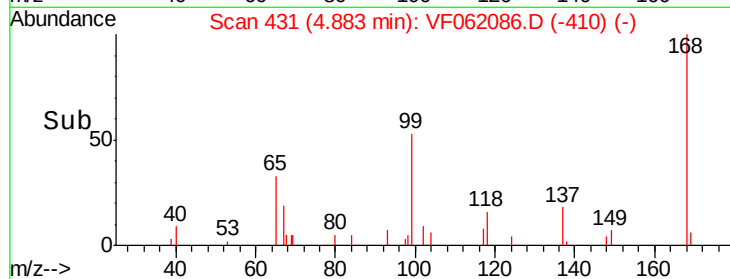
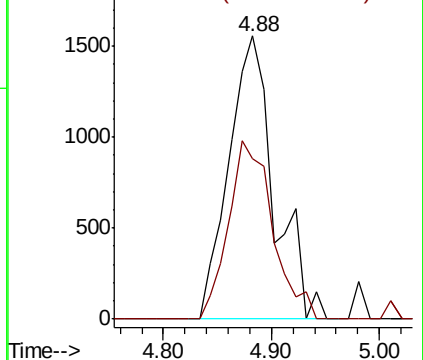
65 100

67 56.7 0.0 106.2



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 507

Delta R.T. 0.00 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

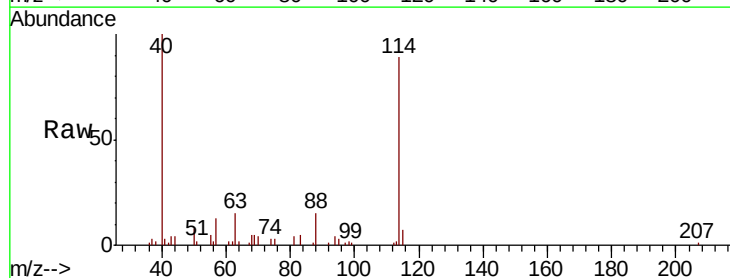
Tgt Ion: 114 Resp: 35953

Ion Ratio Lower Upper

114 100

63 17.2 0.0 37.8

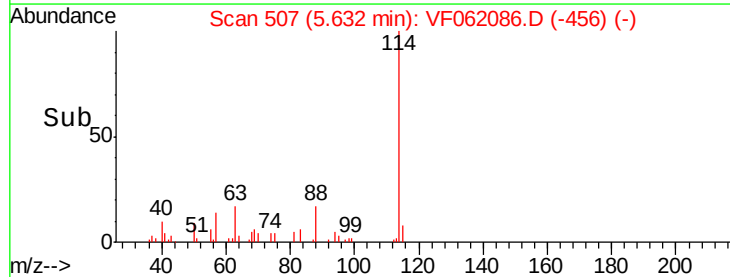
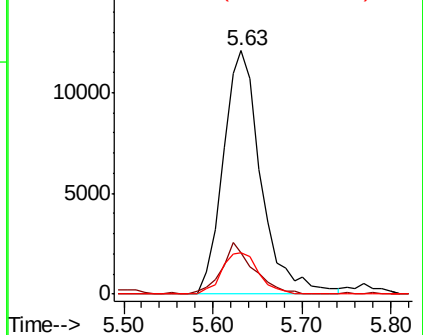
88 17.2 0.0 36.4

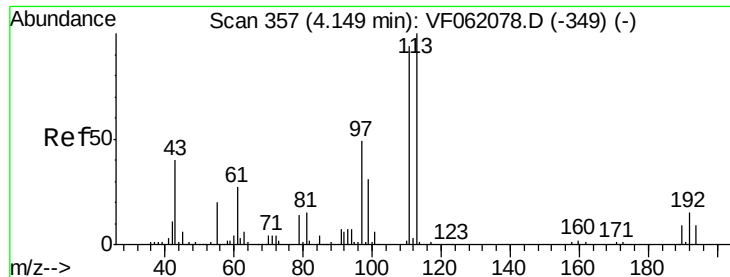


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0

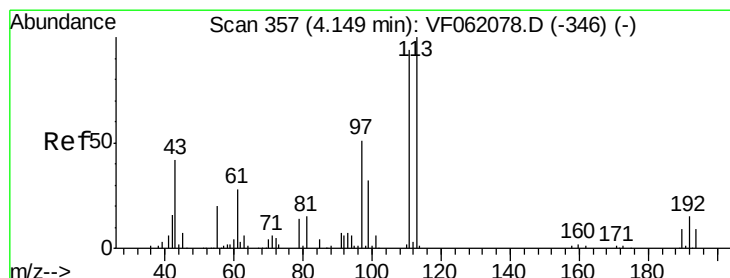
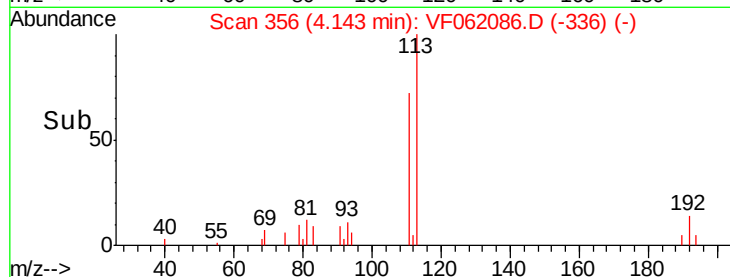
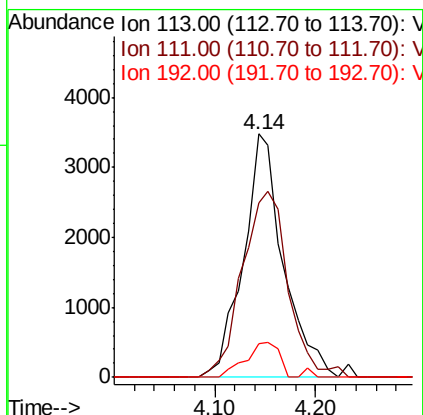
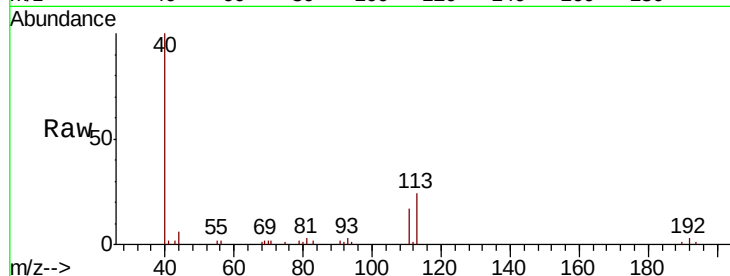




#35  
 Dibromofluoromethane  
 Concen: 39.727 ug/l  
 RT: 4.14 min Scan# 356  
 Delta R.T. -0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

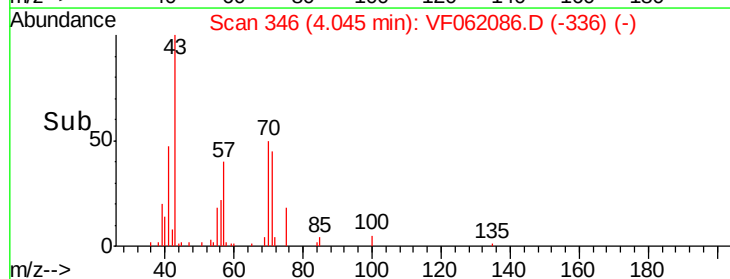
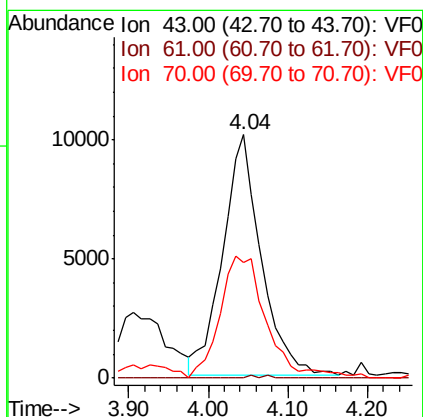
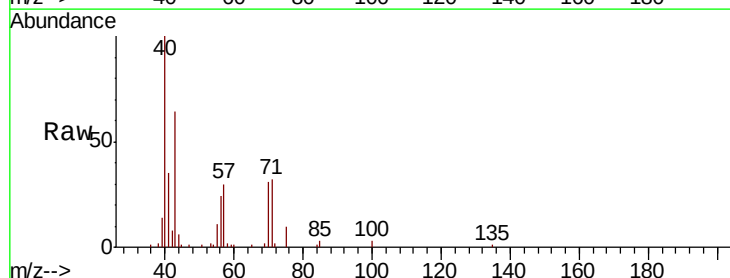
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

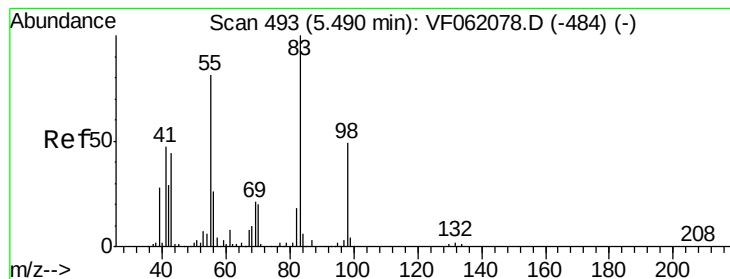
Tot Ion:113 Resp: 9662  
 Ion Ratio Lower Upper  
 113 100  
 111 71.6 75.4 113.0#  
 192 13.6 12.3 18.5



#37  
 Ethyl Acetate  
 Concen: 225.903 ug/l  
 RT: 4.04 min Scan# 346  
 Delta R.T. -0.10 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion: 43 Resp: 33809  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 53.6 80.4#  
 70 47.7 9.0 13.6#





#39

Methylvlcyclohexane

Concen: 300.633 ug/l

RT: 5.48 min Scan# 492

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

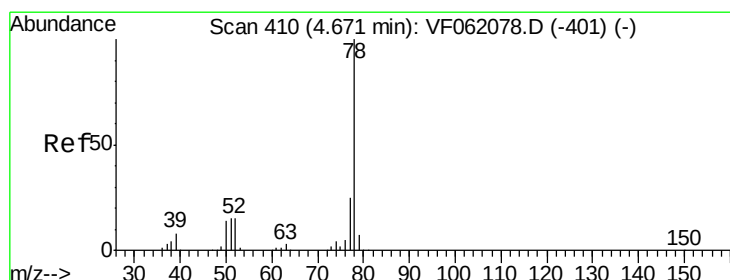
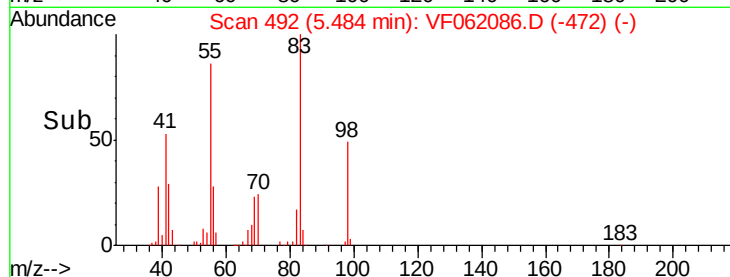
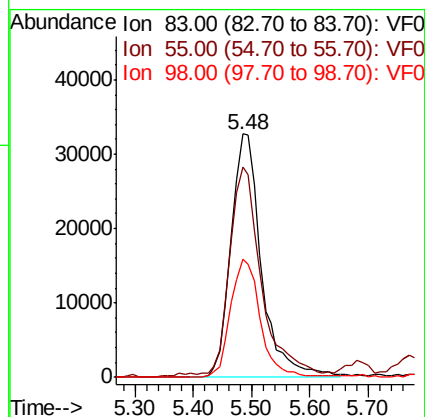
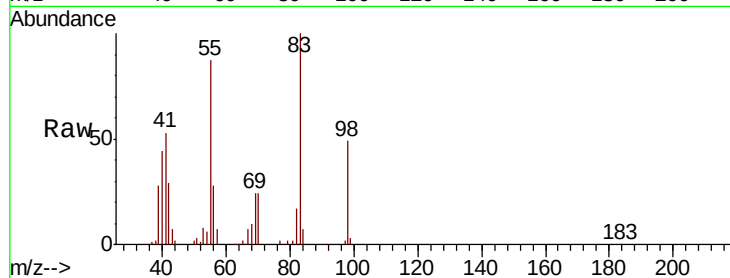
Tot Ion: 83 Resp: 119487

Ion Ratio Lower Upper

83 100

55 86.6 64.5 96.7

98 48.6 39.1 58.7



#40

Benzene

Concen: 102.267 ug/l

RT: 4.67 min Scan# 409

Delta R.T. -0.01 min

Lab File: VF062086.D

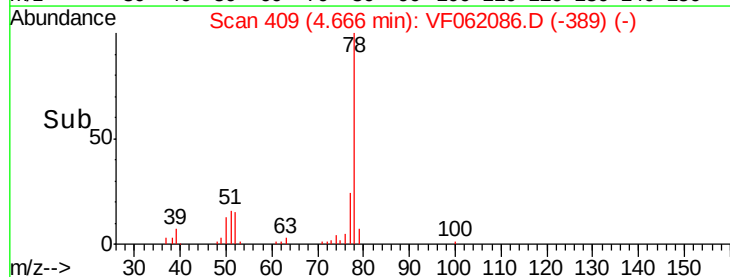
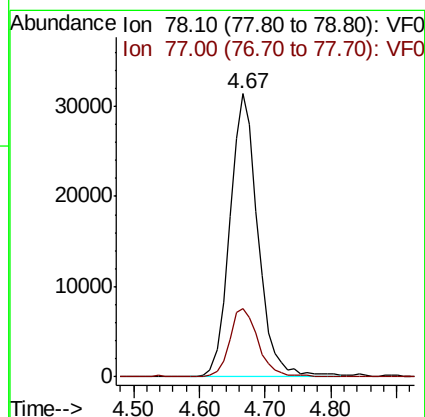
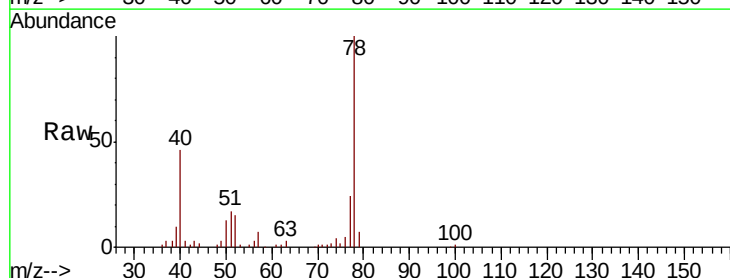
Acq: 22 Mar 2019 16:53

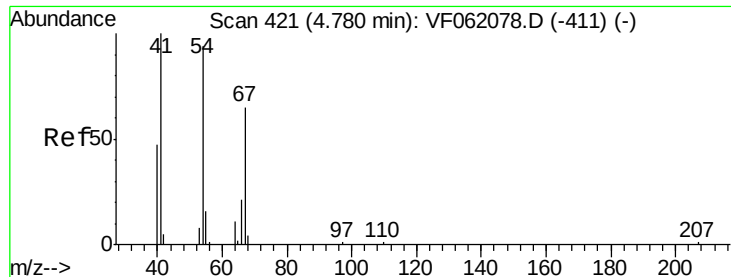
Tgt Ion: 78 Resp: 93886

Ion Ratio Lower Upper

78 100

77 24.3 19.8 29.6

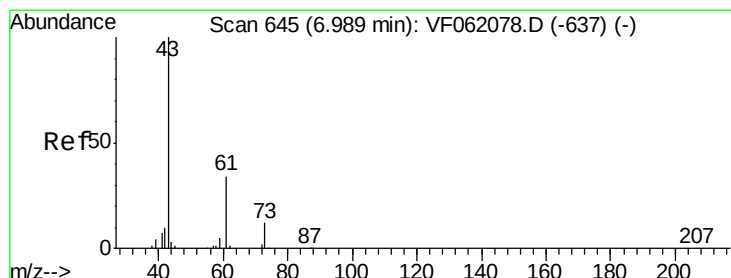
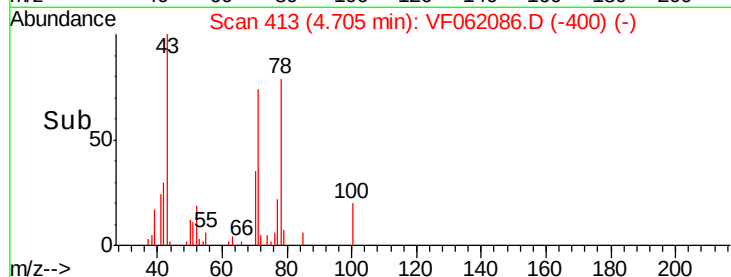
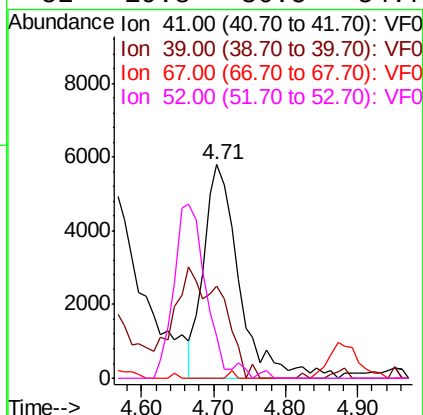
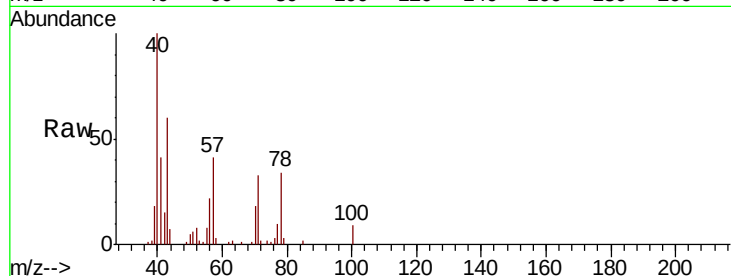




#41  
Methacrylonitrile  
Concen: 249.510 ug/l  
RT: 4.71 min Scan# 413  
Delta R.T. -0.07 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

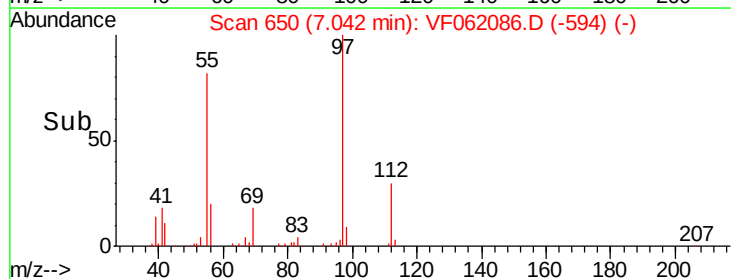
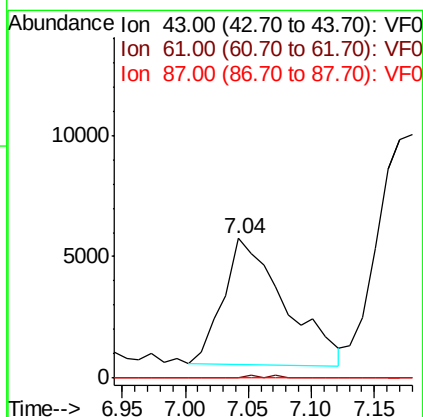
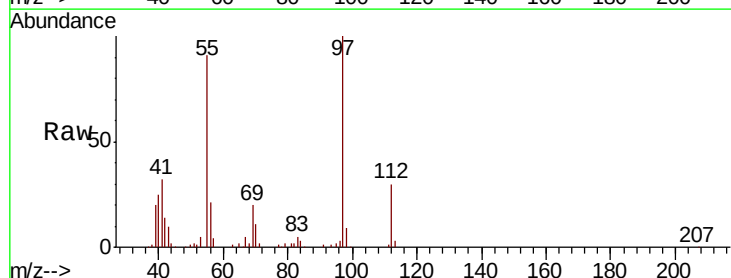
Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

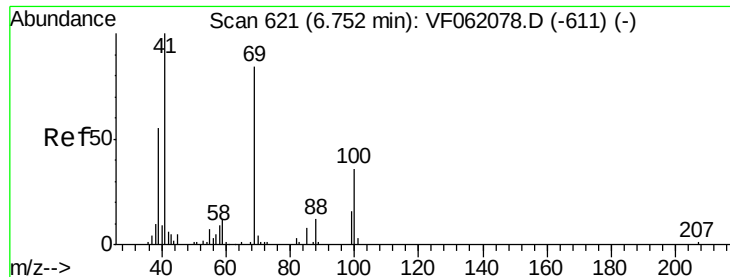
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 41    | Resp: | 19758 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 42.9  | 43.5  | 65.3# |
| 67       | 0.0   | 51.6  | 77.4# |
| 52       | 19.8  | 36.5  | 54.7# |



#43  
Isopropyl Acetate  
Concen: 96.757 ug/l  
RT: 7.04 min Scan# 650  
Delta R.T. 0.05 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 17537 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 27.0  | 40.4# |
| 87       | 0.0   | 0.4   | 0.6#  |

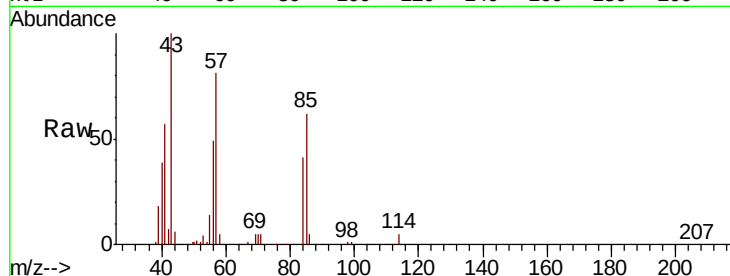




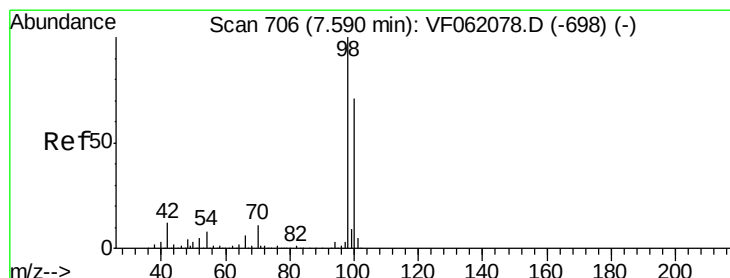
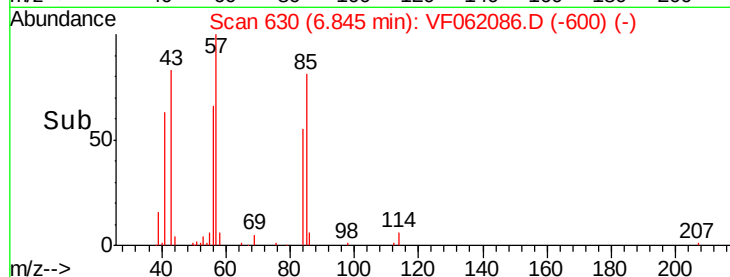
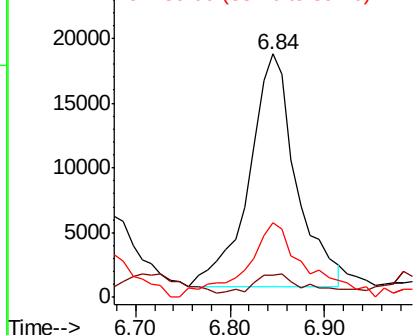
#48  
Methyl methacrylate  
Concen: 602.504 ug/l  
RT: 6.84 min Scan# 630  
Delta R.T. 0.09 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

Tot Ion: 41 Resp: 62177  
Ion Ratio Lower Upper  
41 100  
69 9.0 66.6 100.0#  
39 30.7 43.6 65.4#

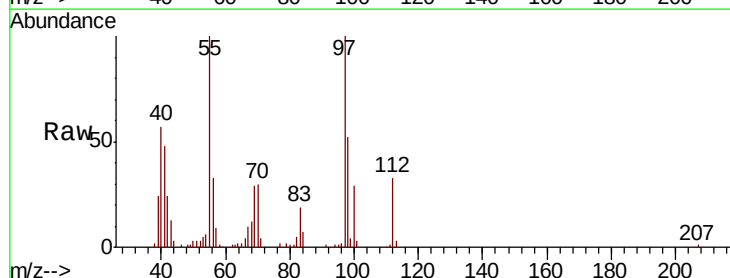


Abundance Ion 41.00 (40.70 to 41.70): VF0  
Ion 69.00 (68.70 to 69.70): VF0  
Ion 39.00 (38.70 to 39.70): VF0

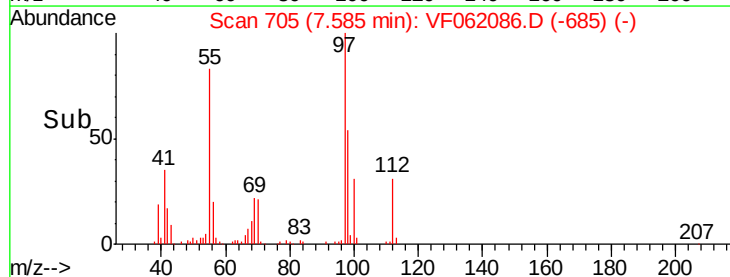
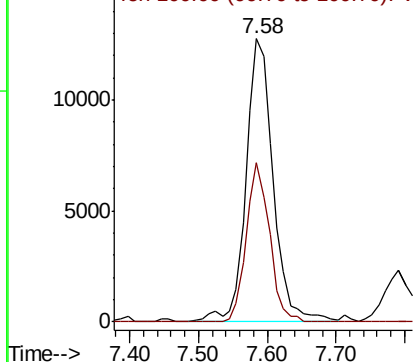


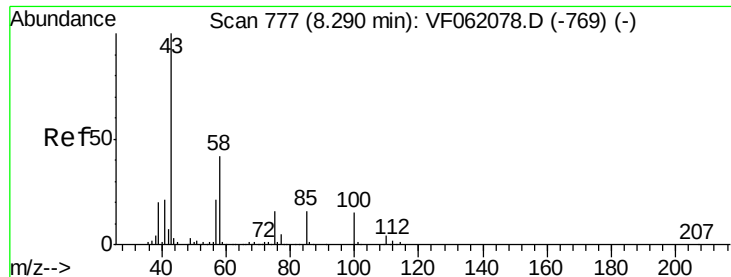
#50  
Toluene-d8  
Concen: 48.358 ug/l  
RT: 7.58 min Scan# 705  
Delta R.T. -0.01 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Tgt Ion: 98 Resp: 35107  
Ion Ratio Lower Upper  
98 100  
100 56.2 57.0 85.6#



Abundance Ion 98.00 (97.70 to 98.70): VF0  
Ion 100.00 (99.70 to 100.70): VF0





#51

4-Methyl-2-Pentanone

Concen: 936.617 ug/l

RT: 8.31 min Scan# 779

Delta R.T. 0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

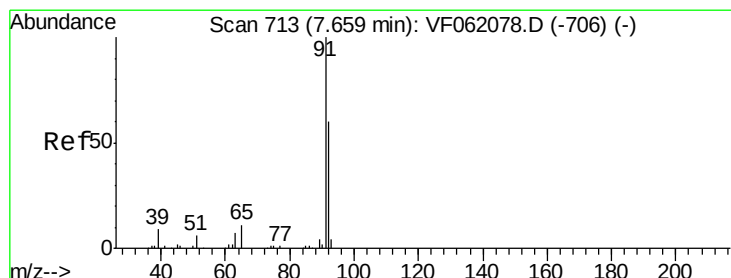
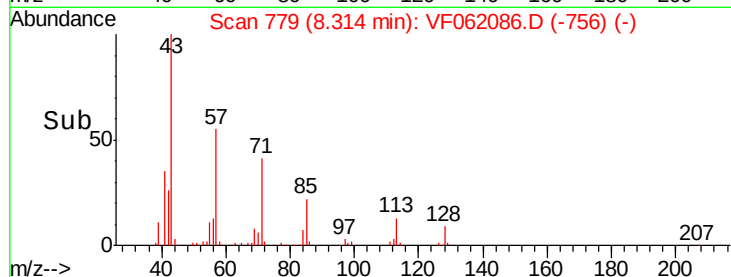
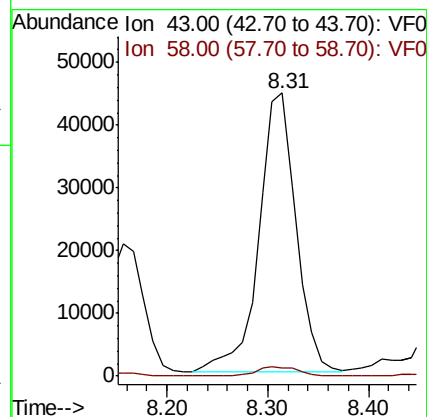
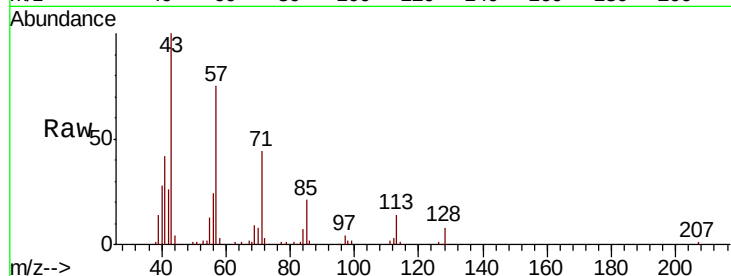
WP022SB442-190319-FD-(12-14)

Tot Ion: 43 Resp: 113622

Ion Ratio Lower Upper

43 100

58 3.1 33.8 50.8#



#52

Toluene

Concen: 5.108 ug/l

RT: 7.65 min Scan# 712

Delta R.T. -0.01 min

Lab File: VF062086.D

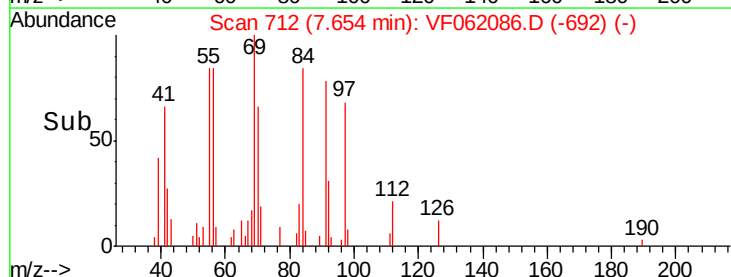
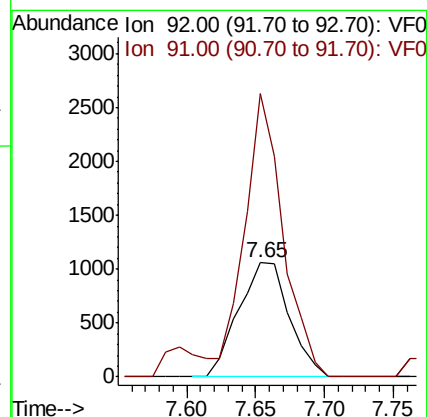
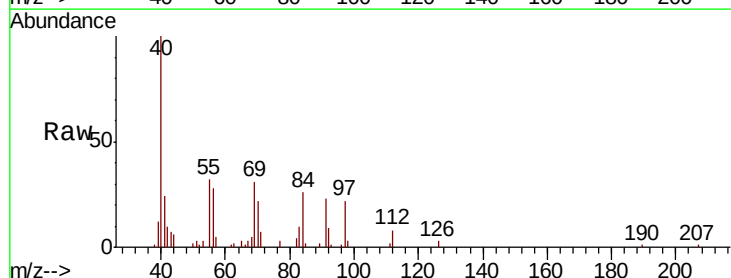
Acq: 22 Mar 2019 16:53

Tgt Ion: 92 Resp: 2716

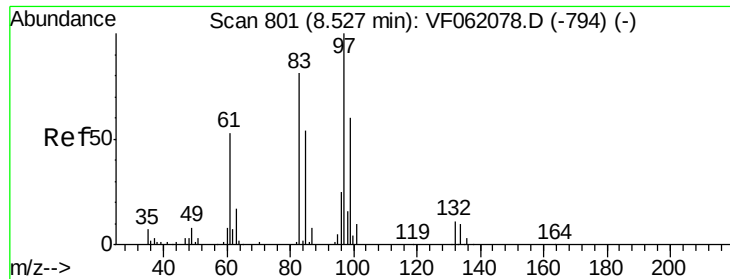
Ion Ratio Lower Upper

92 100

91 248.3 134.1 201.1#







#55

1,1,2-Trichloroethane

Concen: 190.866 ug/l

RT: 8.42 min Scan# 790

Delta R.T. -0.10 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

Tot Ion: 97 Resp: 28828

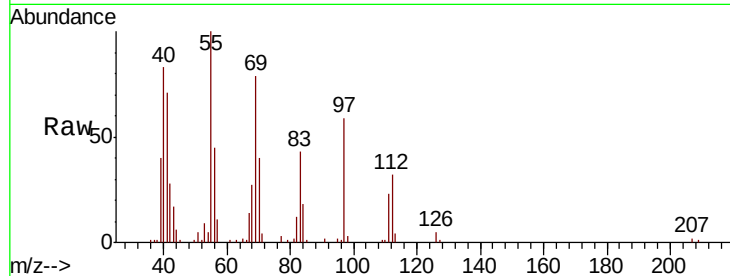
Ion Ratio Lower Upper

97 100

83 73.5 64.6 97.0

85 2.2 43.6 65.4#

99 0.0 48.2 72.2#

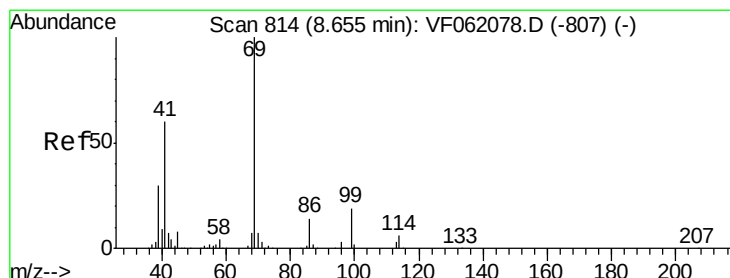
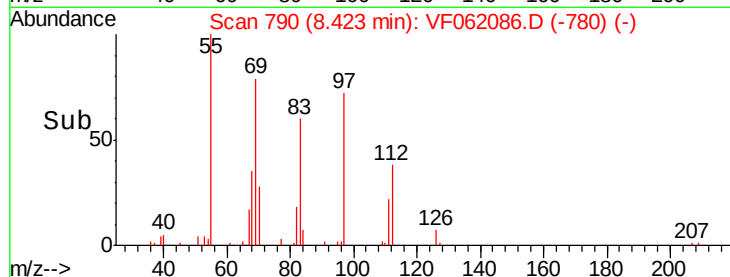
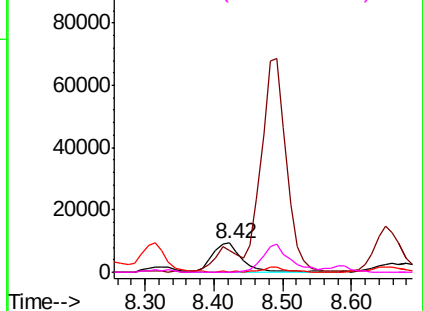


Abundance Ion 97.00 (96.70 to 97.70): VF0

Ion 82.95 (82.65 to 83.65): VF0

Ion 84.95 (84.65 to 85.65): VF0

Ion 98.95 (98.65 to 99.65): VF0



#56

Ethyl methacrylate

Concen: 745.789 ug/l

RT: 8.65 min Scan# 813

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

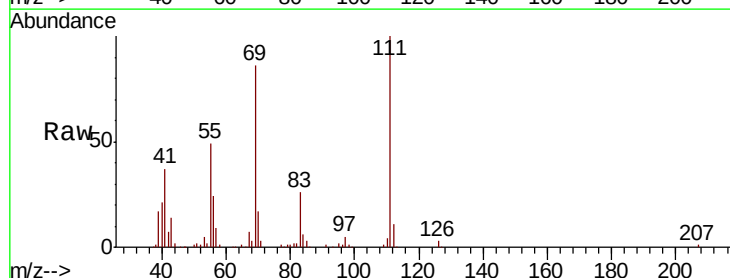
Tgt Ion: 69 Resp: 134339

Ion Ratio Lower Upper

69 100

41 43.0 48.2 72.2#

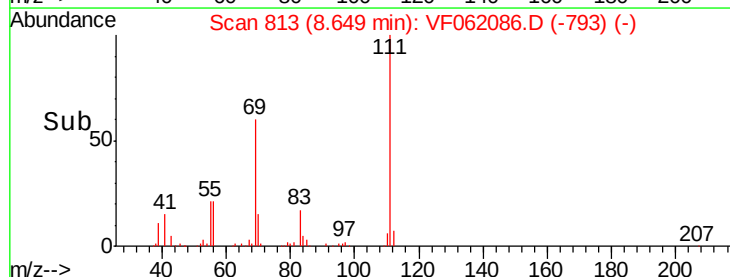
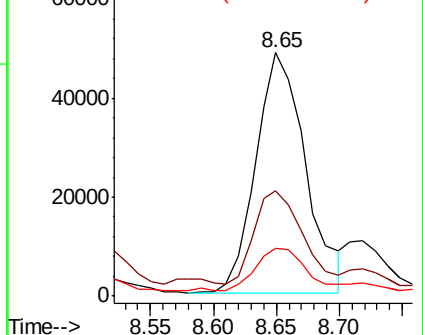
39 19.5 24.0 36.0#

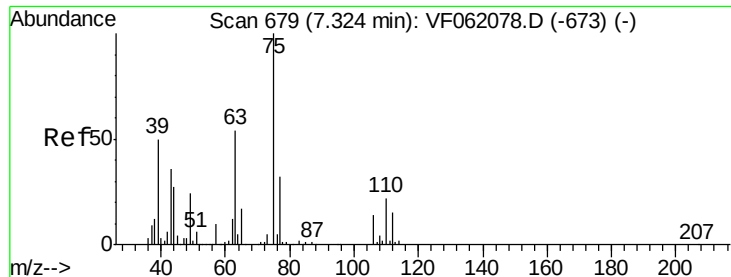


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

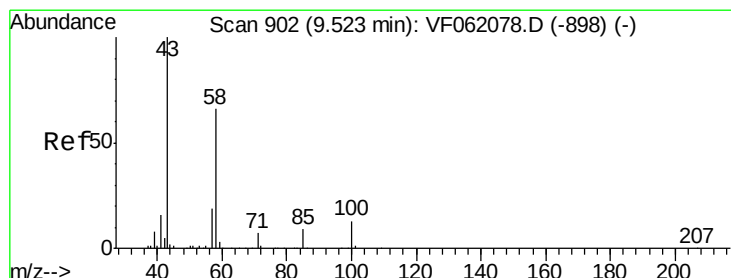
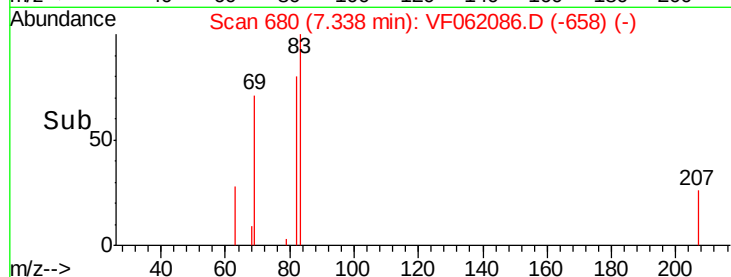
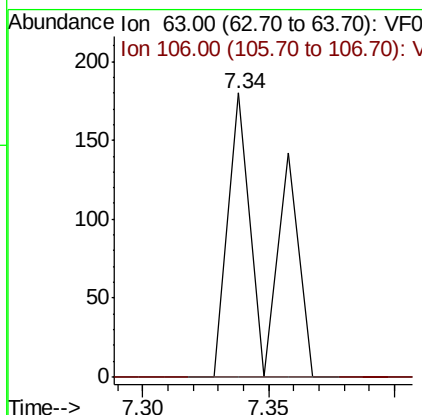
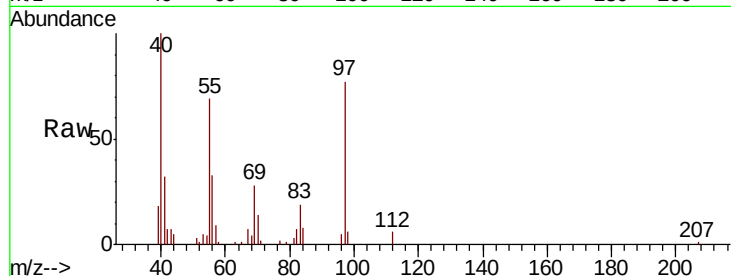




#58  
 2-Chloroethyl Vinyl ether  
 Concen: 6.988 ug/l  
 RT: 7.34 min Scan# 680  
 Delta R.T. 0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

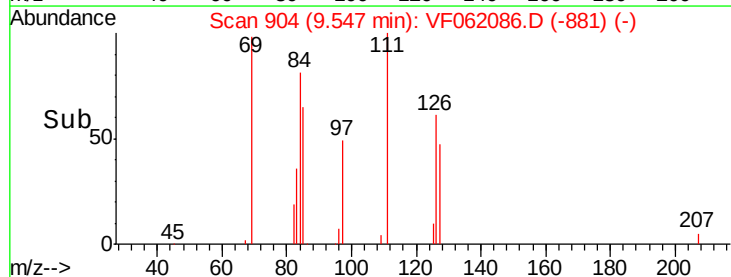
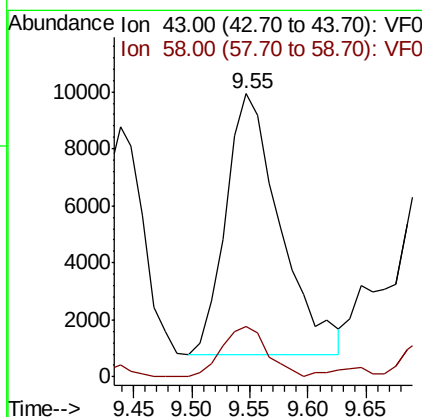
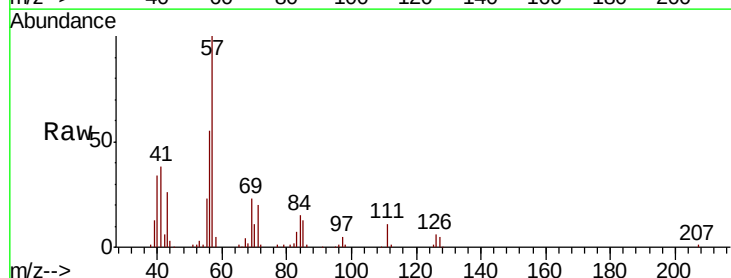
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

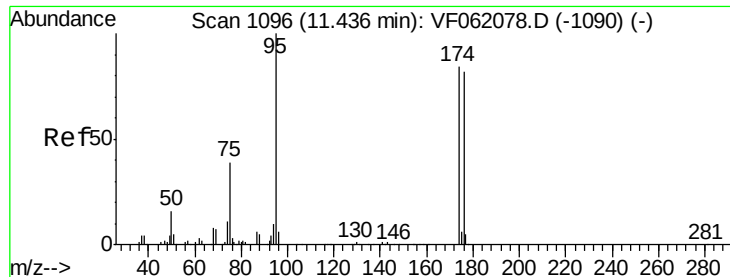
Tot Ion: 63 Resp: 191  
 Ion Ratio Lower Upper  
 63 100  
 106 0.0 21.5 32.3#



#59  
 2-Hexanone  
 Concen: 334.214 ug/l  
 RT: 9.55 min Scan# 904  
 Delta R.T. 0.02 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion: 43 Resp: 29715  
 Ion Ratio Lower Upper  
 43 100  
 58 17.8 28.8 86.4#





#62

4-Bromofluorobenzene

Concen: 49.374 ug/l

RT: 11.40 min Scan# 1092

Delta R.T. -0.04 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

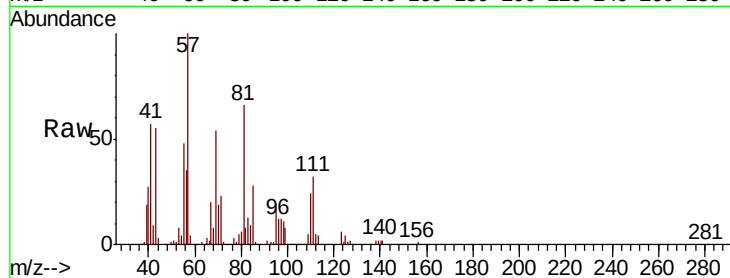
Tot Ion: 95 Resp: 13838

Ion Ratio Lower Upper

95 100

174 0.0 0.0 168.2

176 0.0 0.0 164.2

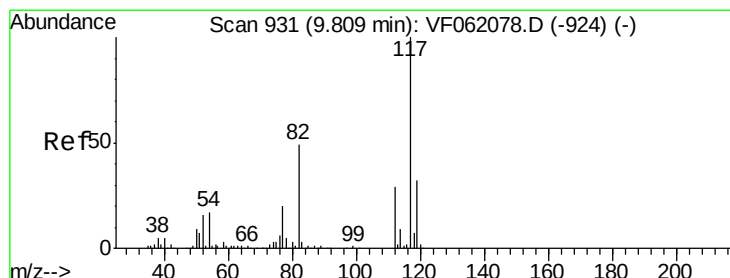
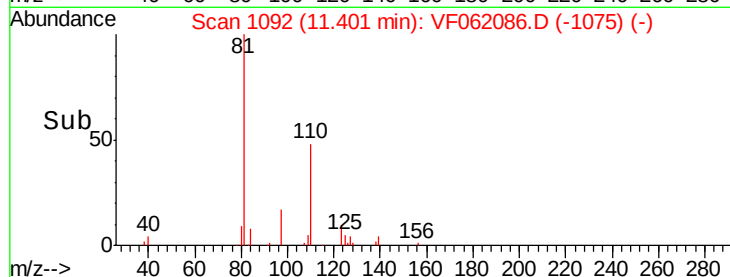
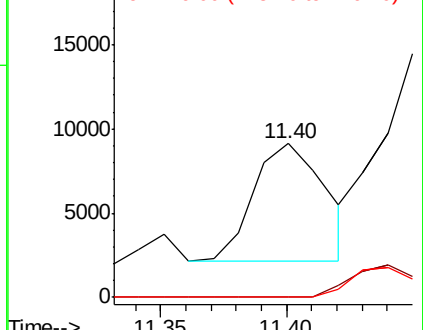


Abundance

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: 9.80 min Scan# 930

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

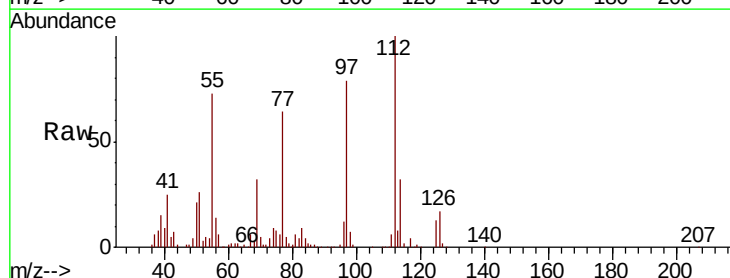
Tgt Ion: 117 Resp: 13946

Ion Ratio Lower Upper

117 100

82 85.3 39.2 58.8#

119 30.3 25.4 38.2

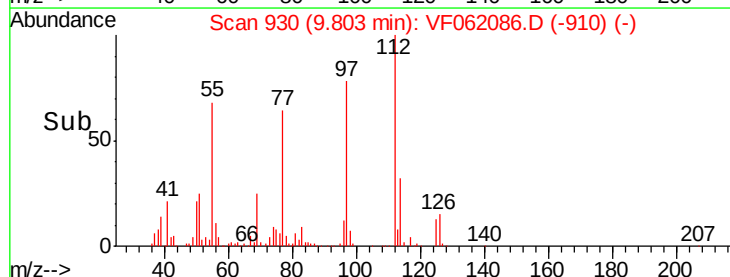
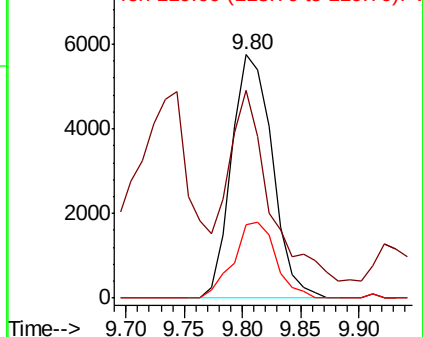


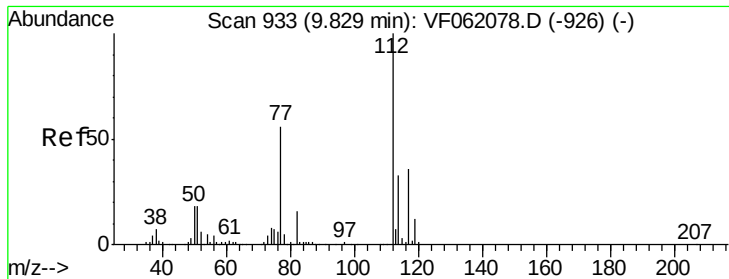
Abundance

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

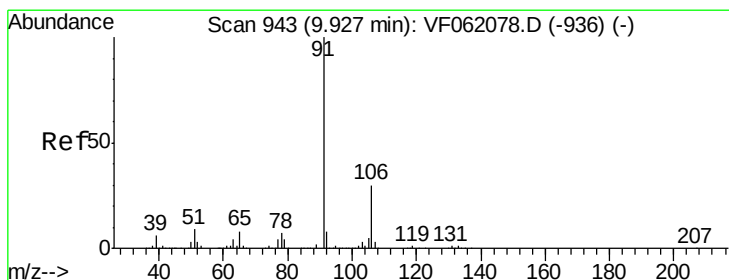
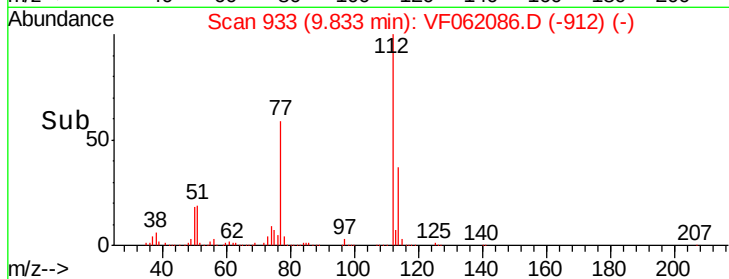
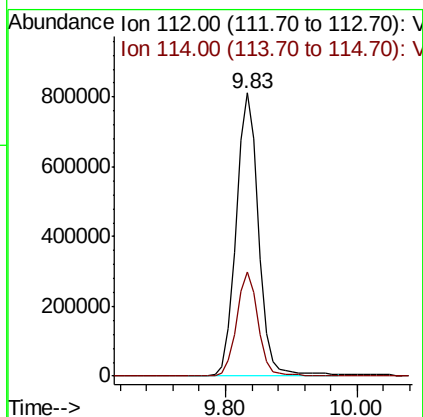
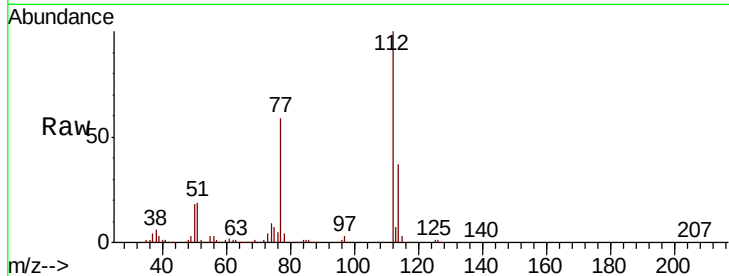




#65  
Chlorobenzene  
Concen: 7427.681 ug/l  
RT: 9.83 min Scan# 933  
Delta R.T. 0.00 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

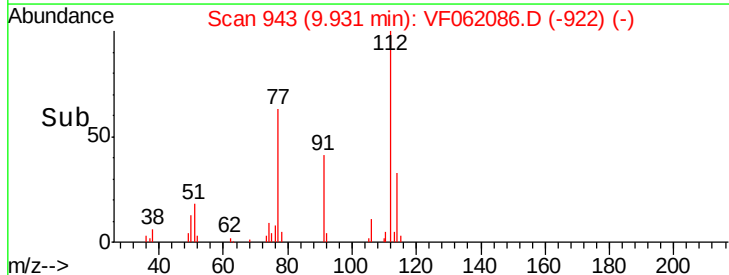
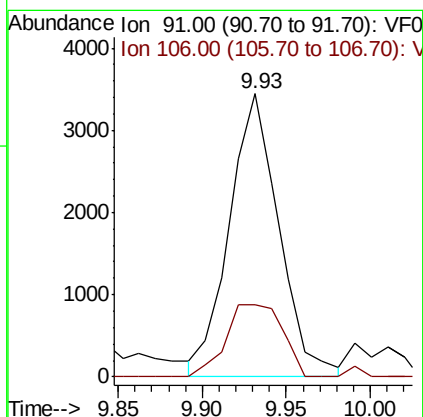
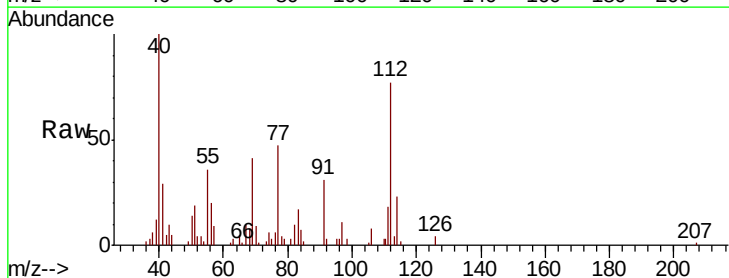
Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

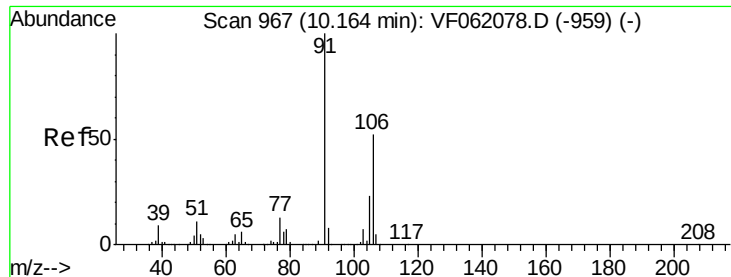
Tot Ion:112 Resp: 1938173  
Ion Ratio Lower Upper  
112 100  
114 36.6 26.0 39.0



#67  
Ethyl Benzene  
Concen: 15.518 ug/l  
RT: 9.93 min Scan# 943  
Delta R.T. 0.00 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Tgt Ion: 91 Resp: 7042  
Ion Ratio Lower Upper  
91 100  
106 25.4 24.0 36.0





#68

m/p-Xylenes

Concen: 18.242 ug/l

RT: 10.16 min Scan# 966

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

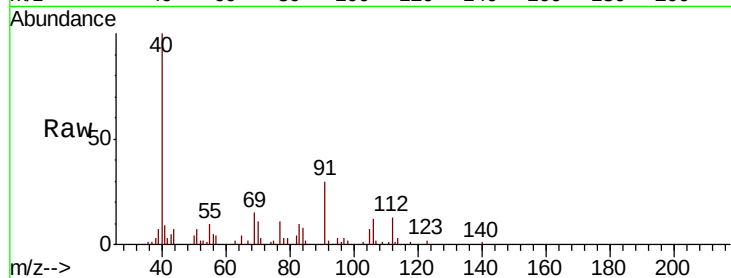
WP022SB442-190319-FD-(12-14)

Tot Ion:106 Resp: 3094

Ion Ratio Lower Upper

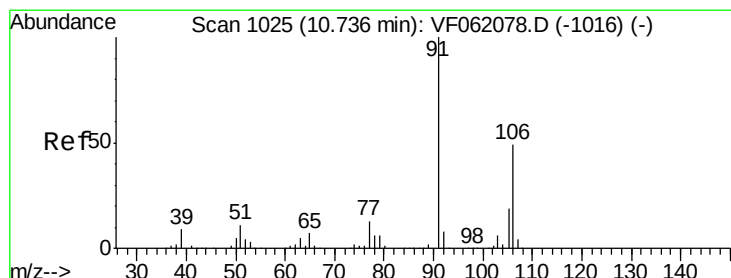
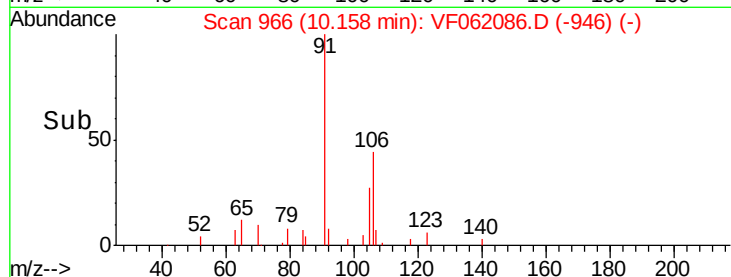
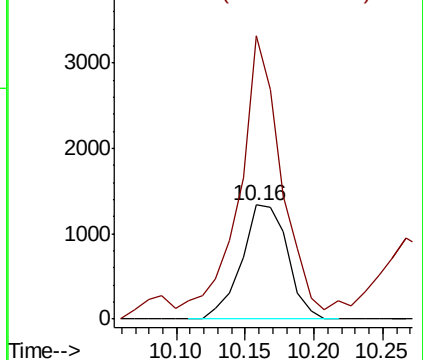
106 100

91 248.4 154.4 231.6#



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0



#69

o-Xylene

Concen: 15.728 ug/l

RT: 10.74 min Scan# 1025

Delta R.T. 0.00 min

Lab File: VF062086.D

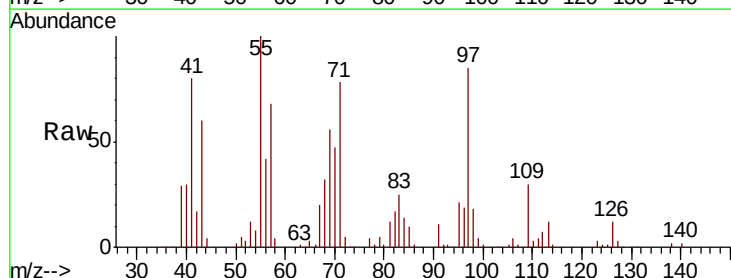
Acq: 22 Mar 2019 16:53

Tgt Ion:106 Resp: 2794

Ion Ratio Lower Upper

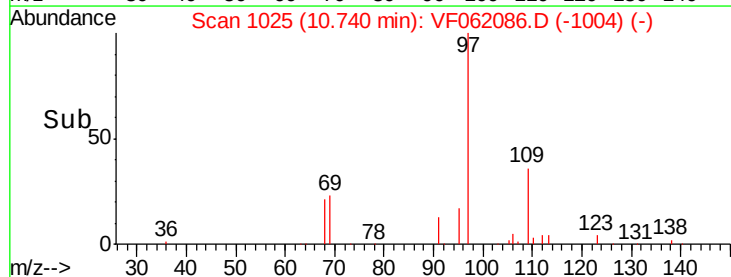
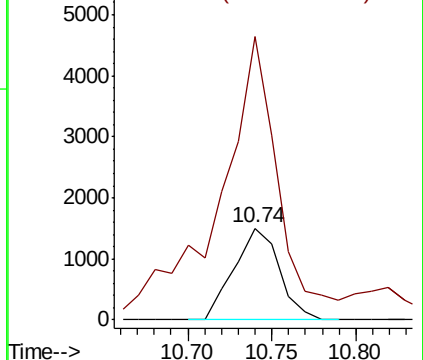
106 100

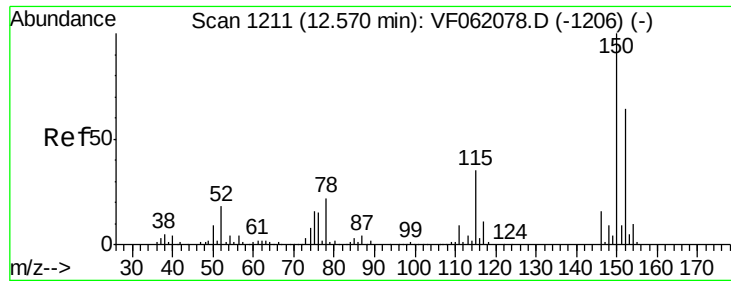
91 309.2 102.6 307.8#



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0

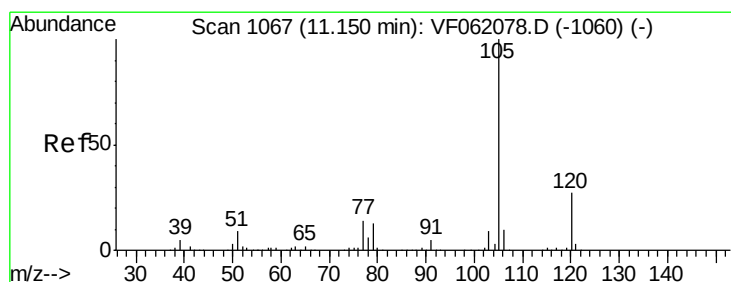
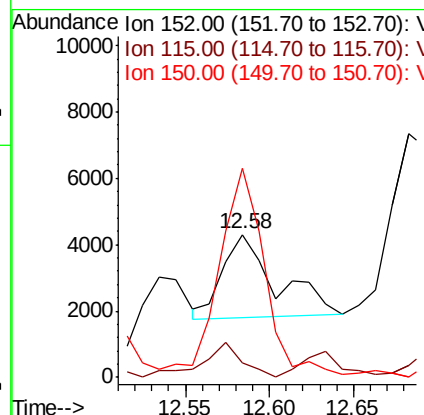
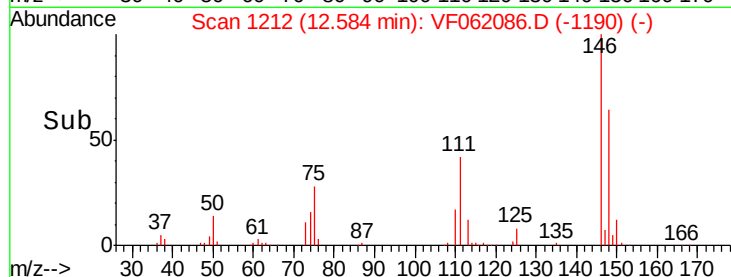
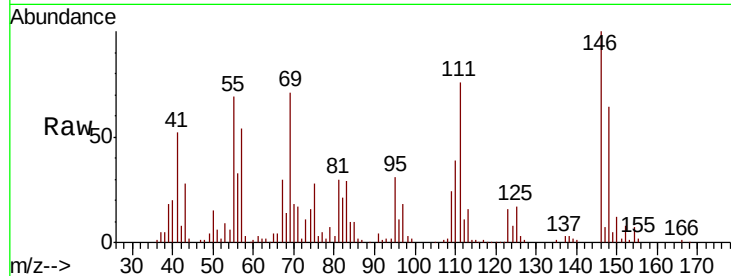




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.58 min Scan# 1212  
 Delta R.T. 0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

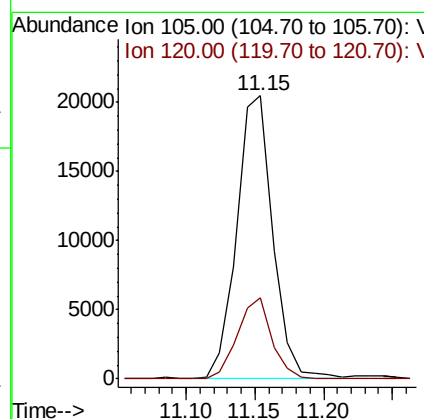
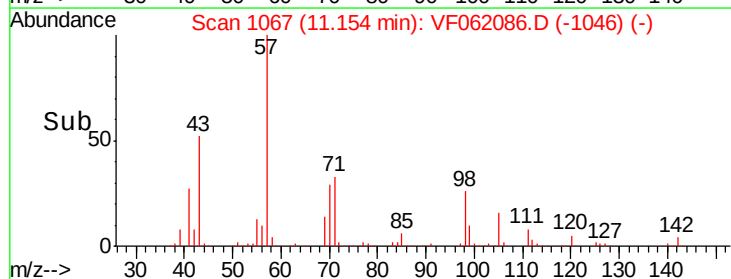
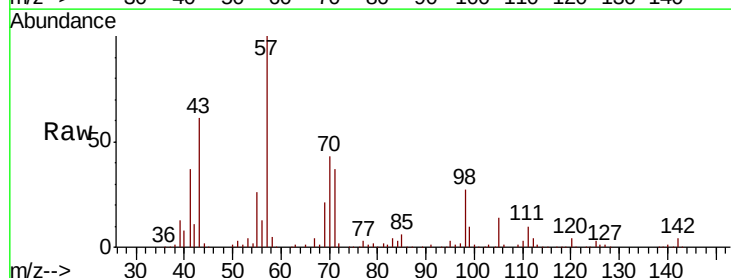
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

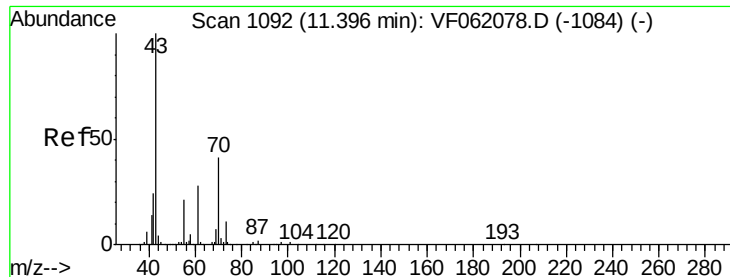
Tot Ion:152 Resp: 5552  
 Ion Ratio Lower Upper  
 152 100  
 115 10.5 27.7 83.1#  
 150 146.7 0.0 313.2



#73  
 Isopropylbenzene  
 Concen: 96.118 ug/l  
 RT: 11.15 min Scan# 1067  
 Delta R.T. 0.00 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion:105 Resp: 37551  
 Ion Ratio Lower Upper  
 105 100  
 120 28.7 13.8 41.3





#74

N-amvl acetate

Concen: 1343.303 ug/l

RT: 11.42 min Scan# 1094

Delta R.T. 0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

Tot Ion: 43 Resp: 125046

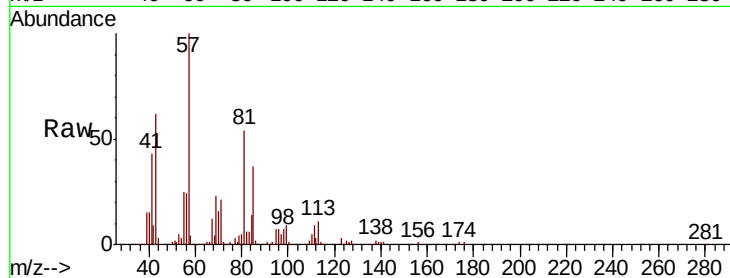
Ion Ratio Lower Upper

43 100

70 25.8 32.9 49.3#

55 40.8 17.1 25.7#

61 0.0 22.2 33.2#

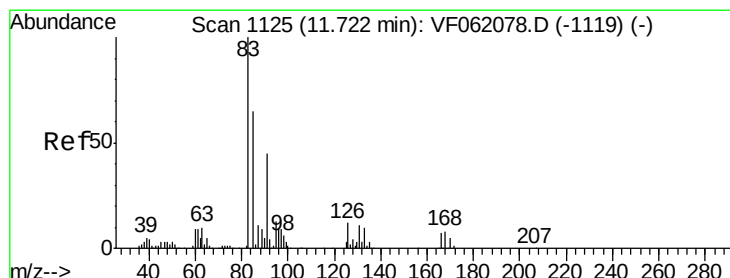
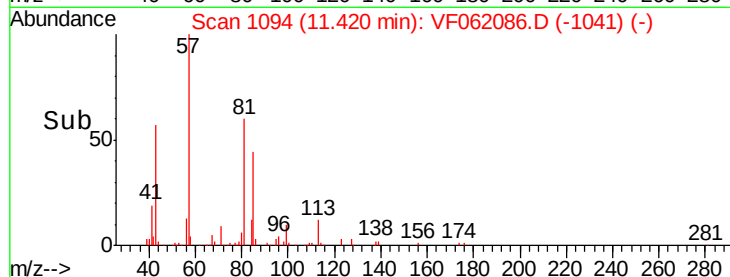
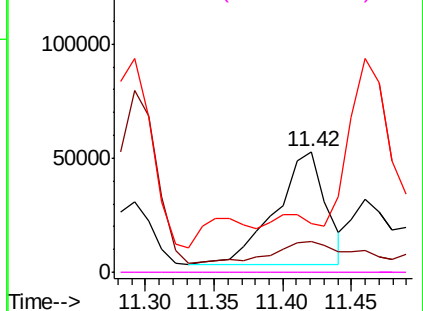


Abundance Ion 43.00 (42.70 to 43.70): VF0

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: 1171.039 ug/l

RT: 11.70 min Scan# 1122

Delta R.T. -0.03 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

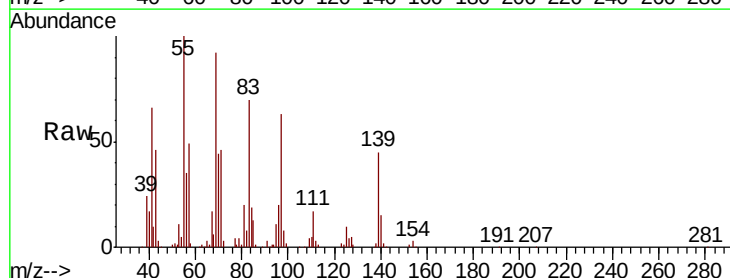
Tgt Ion: 83 Resp: 78553

Ion Ratio Lower Upper

83 100

131 0.0 5.3 15.8#

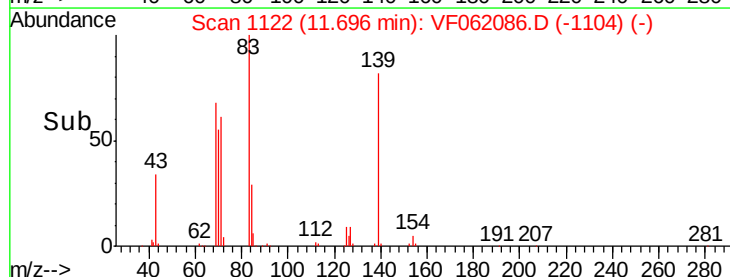
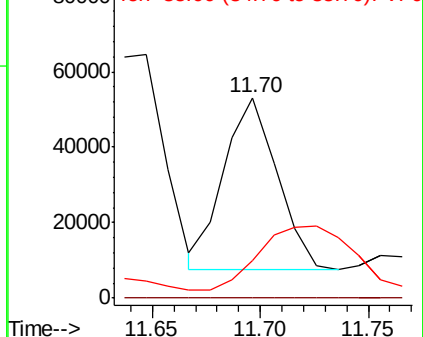
85 18.7 32.6 98.0#

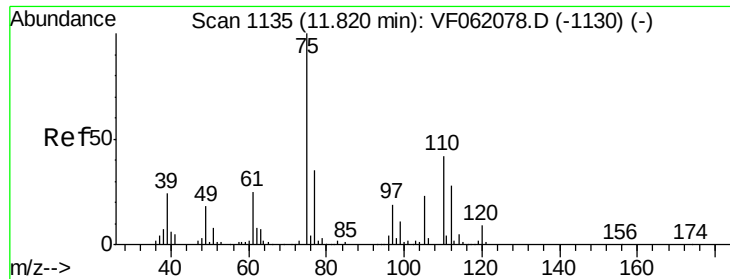


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0

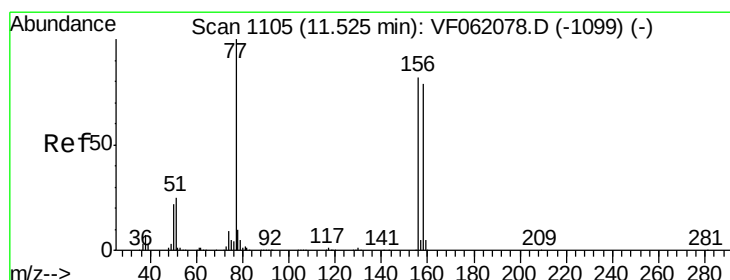
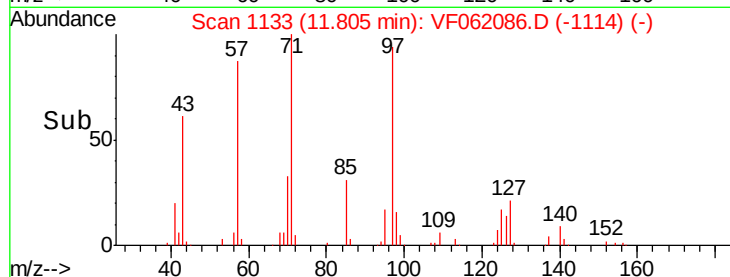
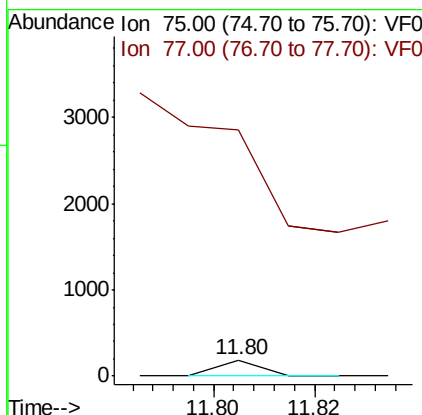
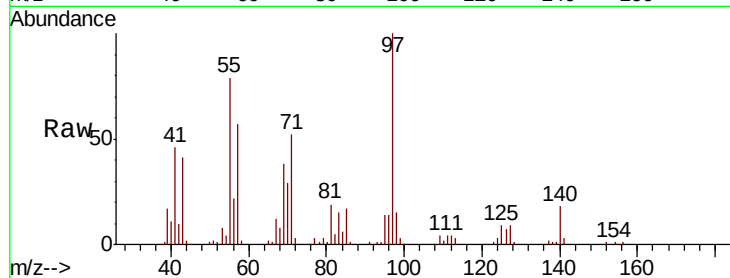




#76  
 1,2,3-Trichloropropane  
 Concen: 2.309 ug/l  
 RT: 11.80 min Scan# 1133  
 Delta R.T. -0.02 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

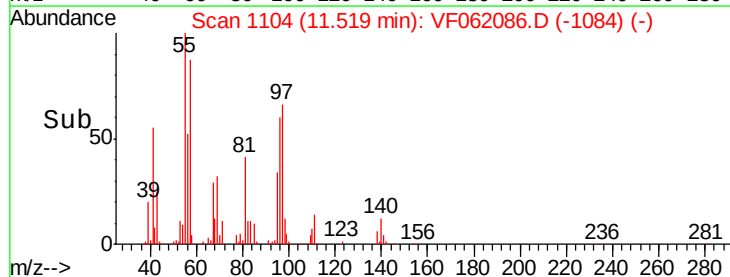
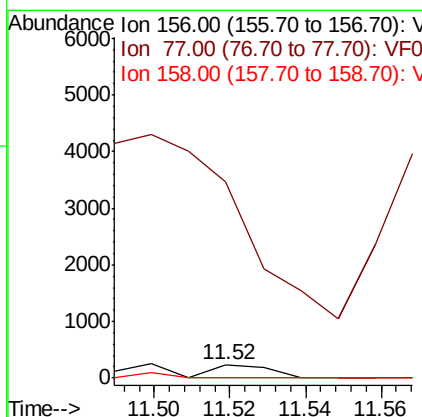
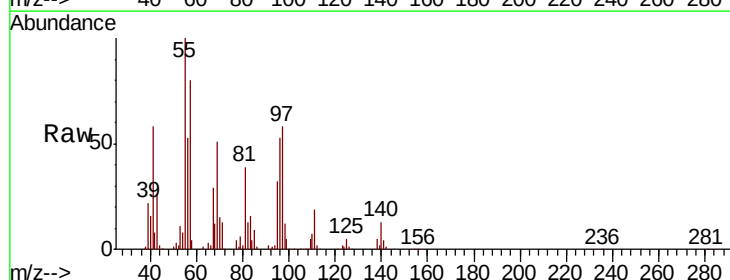
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

Tot Ion: 75 Resp: 109  
 Ion Ratio Lower Upper  
 75 100  
 77 1545.4 17.8 53.3#

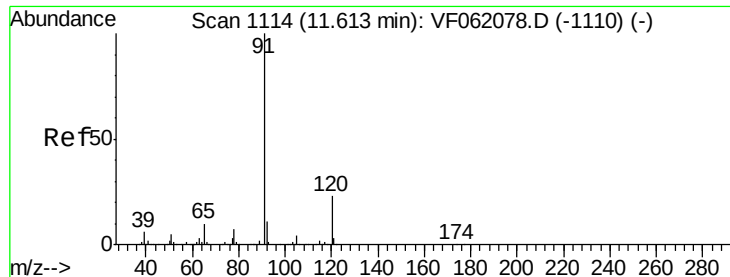


#77  
 Bromobenzene  
 Concen: 2.567 ug/l  
 RT: 11.52 min Scan# 1104  
 Delta R.T. -0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion: 156 Resp: 245  
 Ion Ratio Lower Upper  
 156 100  
 77 1486.7 61.3 183.9#  
 158 0.0 48.6 145.9#







#78

n-propylbenzene

Concen: 195.177 ug/l

RT: 11.62 min Scan# 1114

Delta R.T. 0.00 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

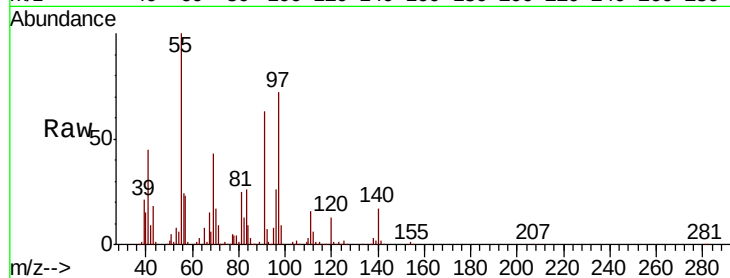
WP022SB442-190319-FD-(12-14)

Tot Ion: 91 Resp: 88541

Ion Ratio Lower Upper

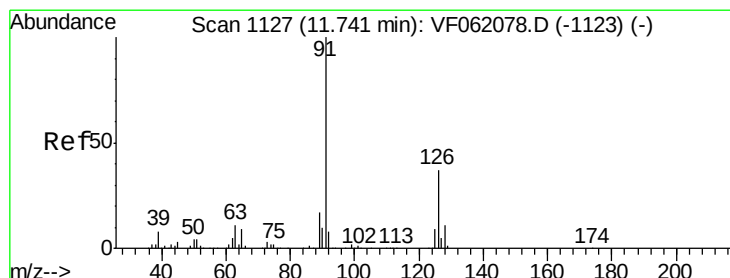
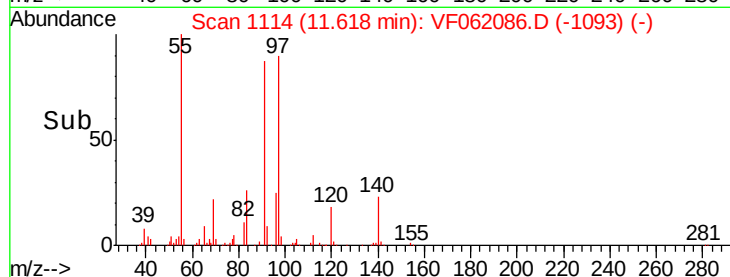
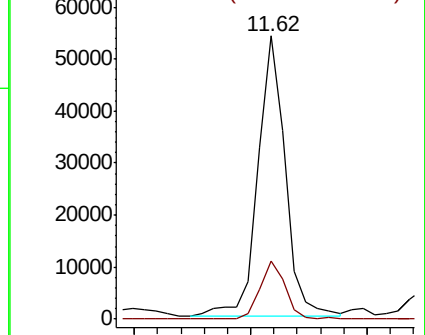
91 100

120 20.6 11.3 33.8



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V



#79

2-Chlorotoluene

Concen: 25.886 ug/l

RT: 11.75 min Scan# 1127

Delta R.T. 0.00 min

Lab File: VF062086.D

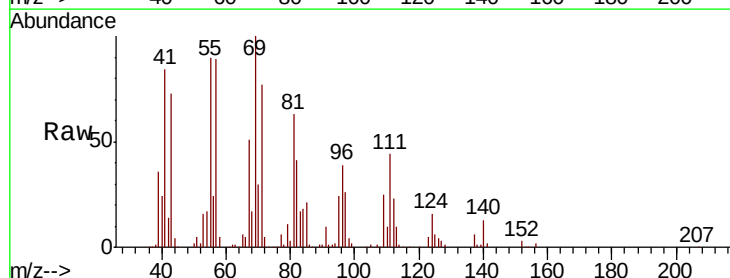
Acq: 22 Mar 2019 16:53

Tgt Ion: 91 Resp: 6527

Ion Ratio Lower Upper

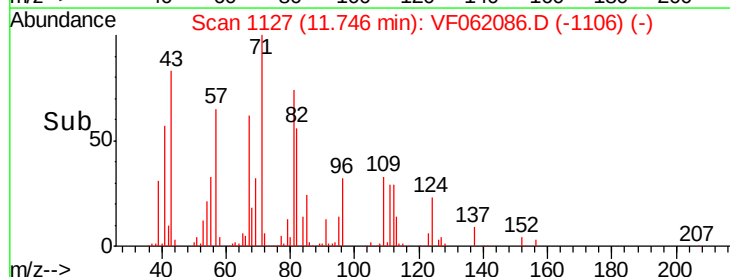
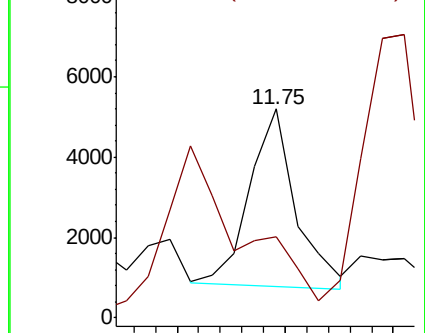
91 100

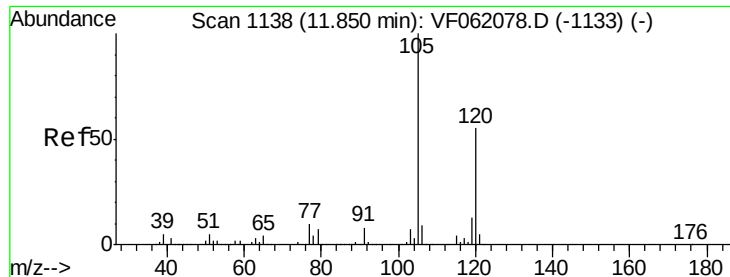
126 38.6 18.3 54.8



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 126.00 (125.70 to 126.70): V





#80

1,3,5-Trimethylbenzene

Concen: 5.219 ug/l

RT: 11.74 min Scan# 1126

Delta R.T. -0.11 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

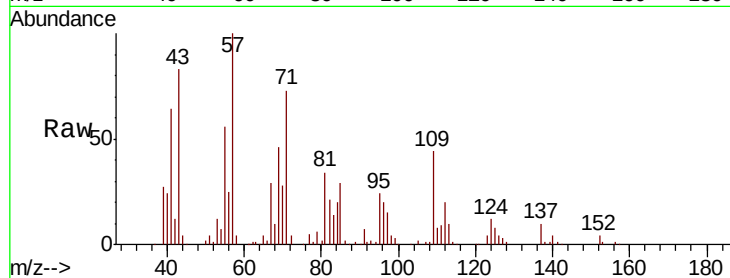
WP022SB442-190319-FD-(12-14)

Tot Ion:105 Resp: 1677

Ion Ratio Lower Upper

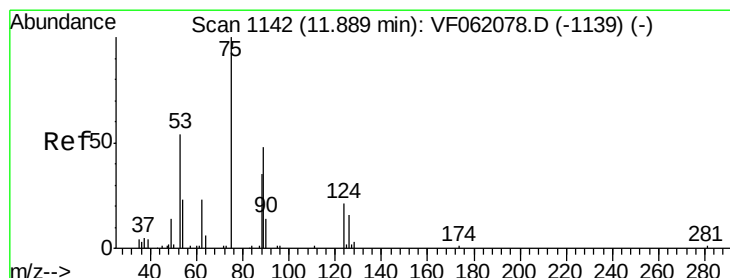
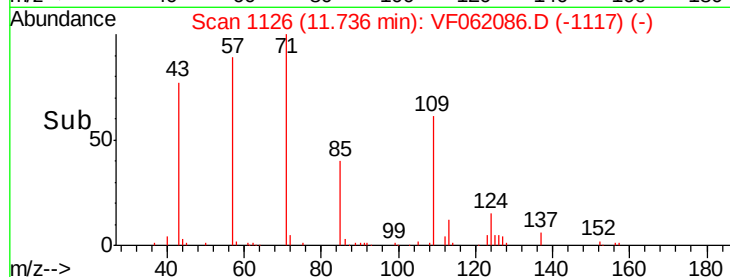
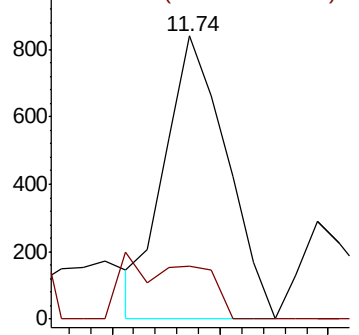
105 100

120 18.8 27.8 83.3#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 3.639 ug/l

RT: 11.91 min Scan# 1144

Delta R.T. 0.02 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

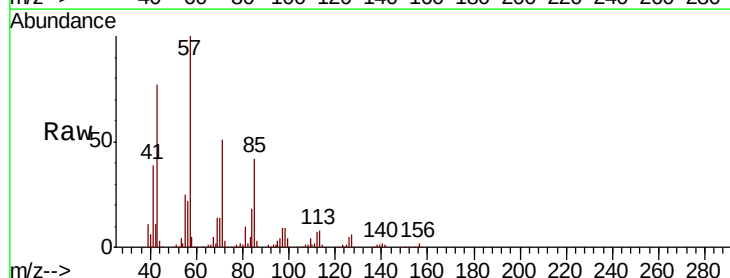
Tgt Ion: 75 Resp: 70

Ion Ratio Lower Upper

75 100

53 7207.6 49.4 74.0#

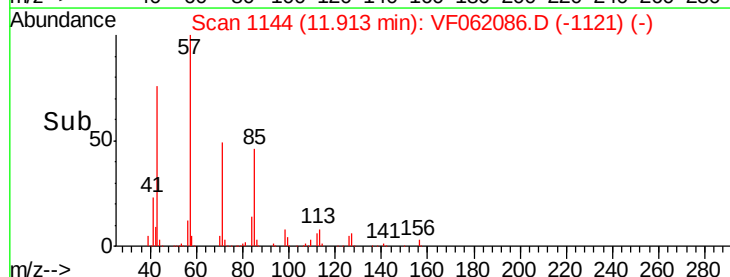
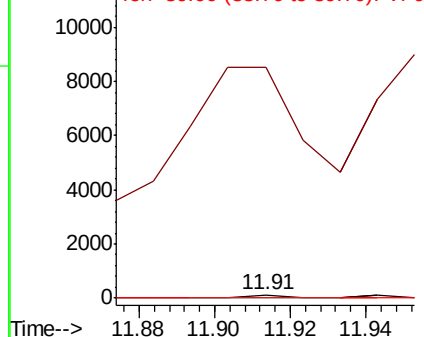
89 0.0 40.6 60.8#

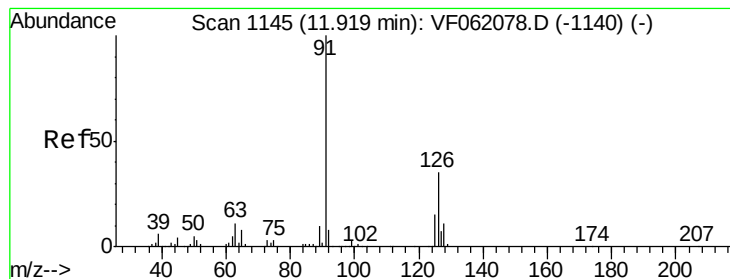


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 89.00 (88.70 to 89.70): VF0





#82

4-Chlorotoluene

Concen: 10.262 ug/l

RT: 11.91 min Scan# 1144

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

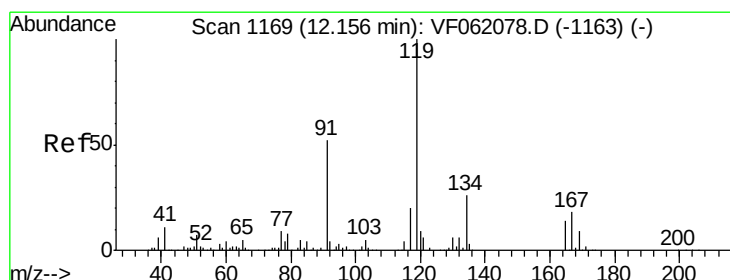
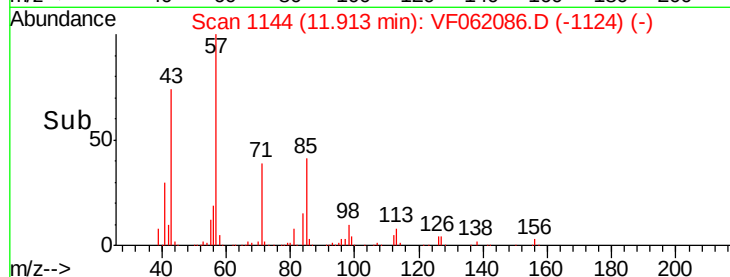
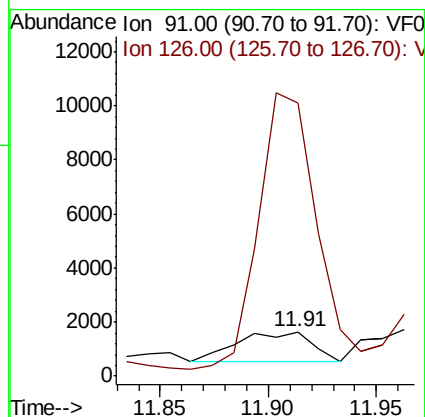
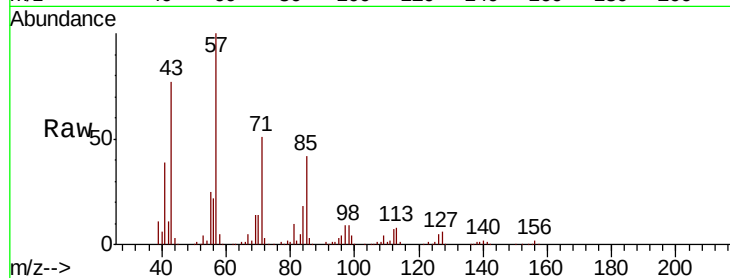
WP022SB442-190319-FD-(12-14)

Tot Ion: 91 Resp: 2653

Ion Ratio Lower Upper

91 100

126 617.1 17.2 51.6#



#83

tert-Butylbenzene

Concen: 144.219 ug/l

RT: 12.15 min Scan# 1168

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

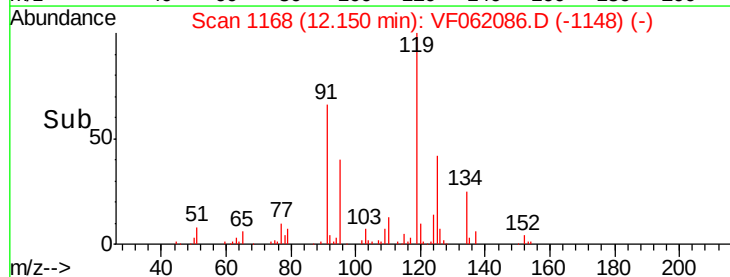
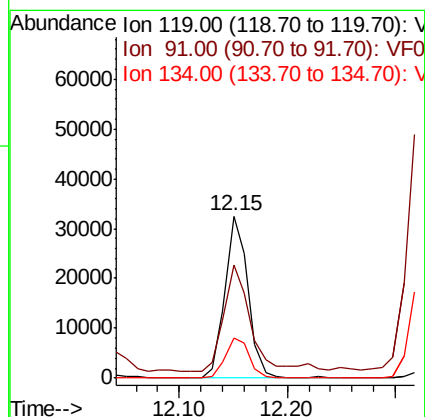
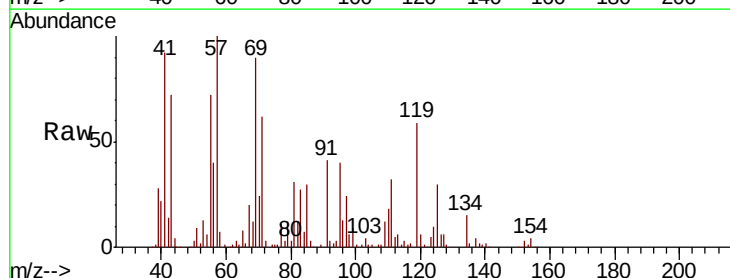
Tgt Ion: 119 Resp: 48514

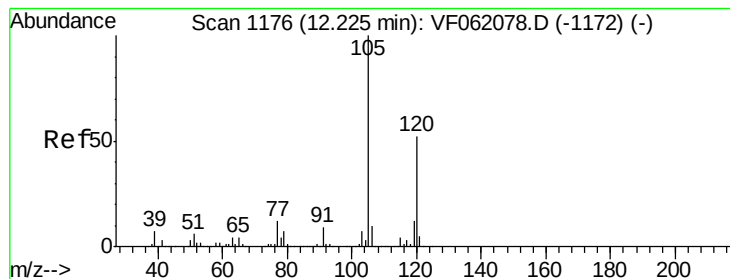
Ion Ratio Lower Upper

119 100

91 70.0 26.1 78.2

134 25.0 12.8 38.4





#84

1,2,4-Trimethylbenzene

Concen: 266.567 ug/l

RT: 12.33 min Scan# 1186

Delta R.T. 0.10 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

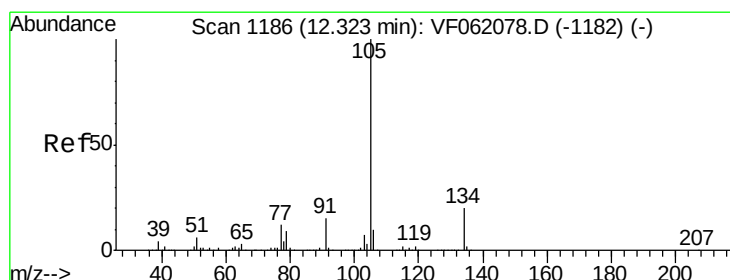
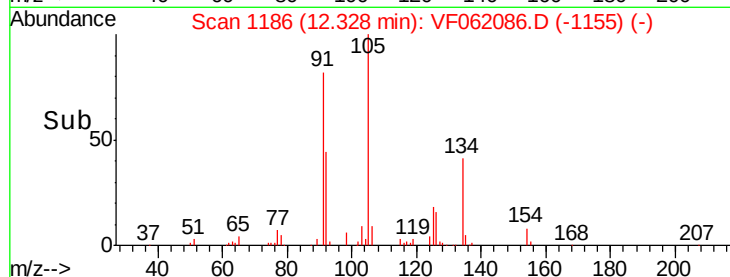
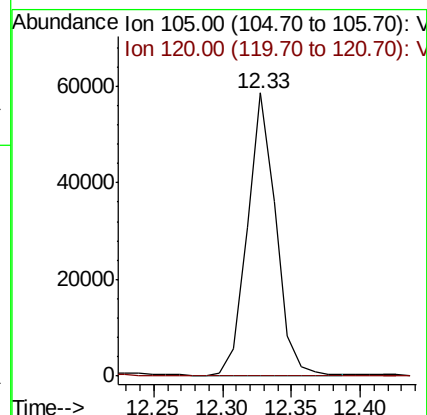
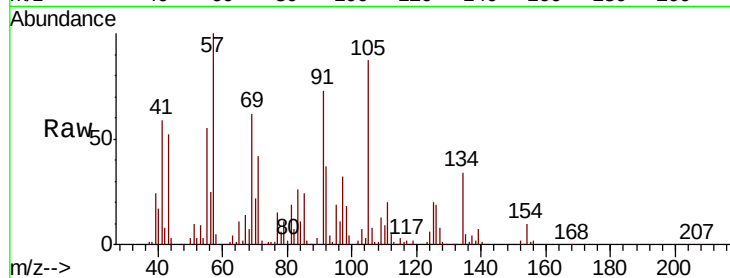
WP022SB442-190319-FD-(12-14)

Tot Ion:105 Resp: 83974

Ion Ratio Lower Upper

105 100

120 0.0 26.1 78.2#



#85

sec-Butylbenzene

Concen: 193.178 ug/l

RT: 12.33 min Scan# 1186

Delta R.T. 0.00 min

Lab File: VF062086.D

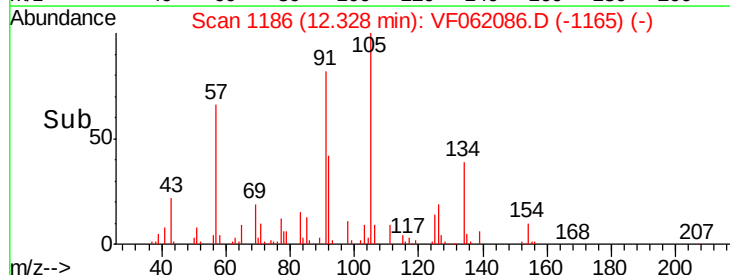
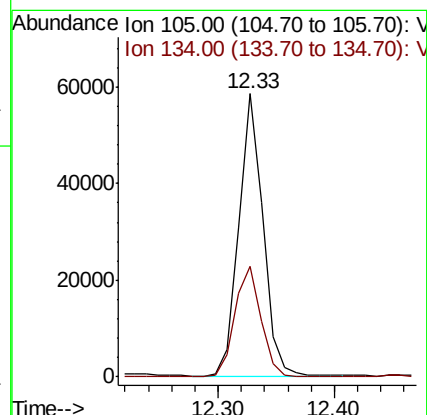
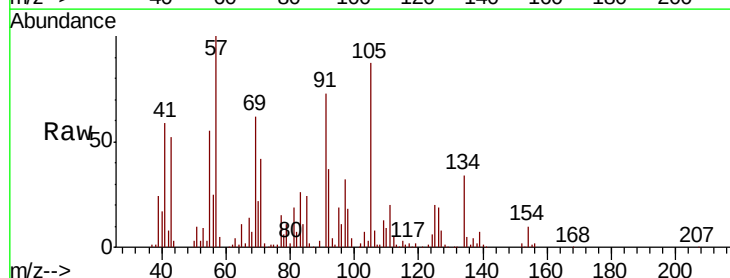
Acq: 22 Mar 2019 16:53

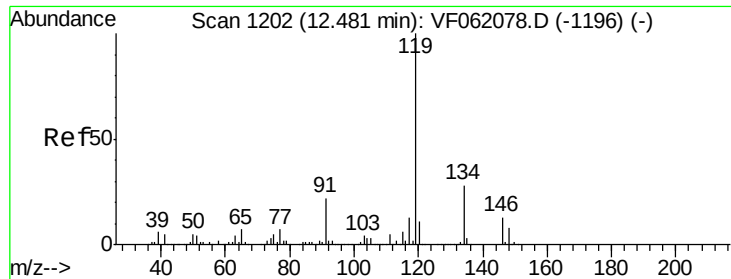
Tgt Ion:105 Resp: 84066

Ion Ratio Lower Upper

105 100

134 39.1 10.2 30.4#

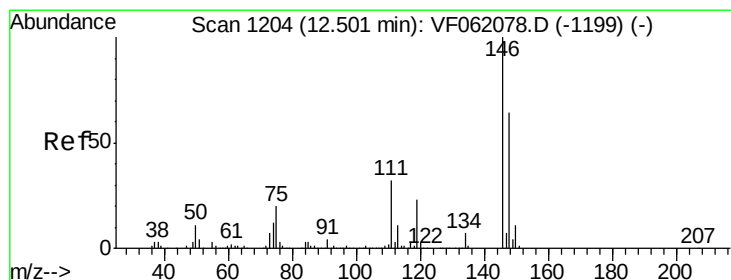
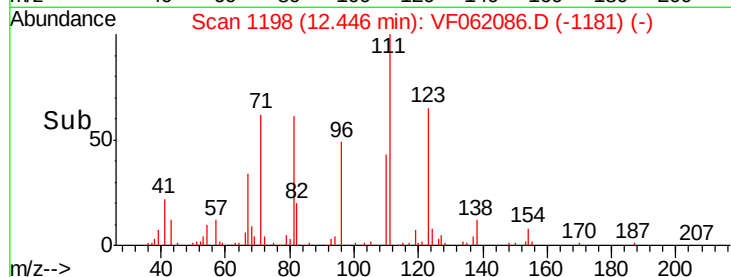
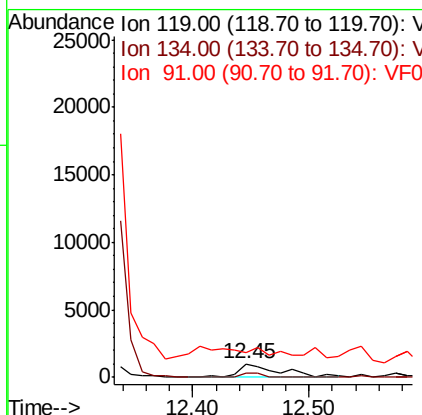
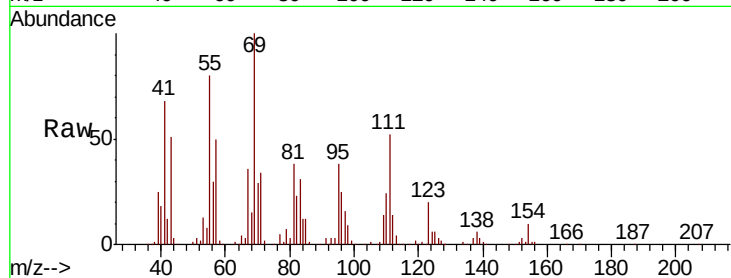




#86  
 p-Isopropyltoluene  
 Concen: 6.443 ug/l  
 RT: 12.45 min Scan# 1198  
 Delta R.T. -0.04 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

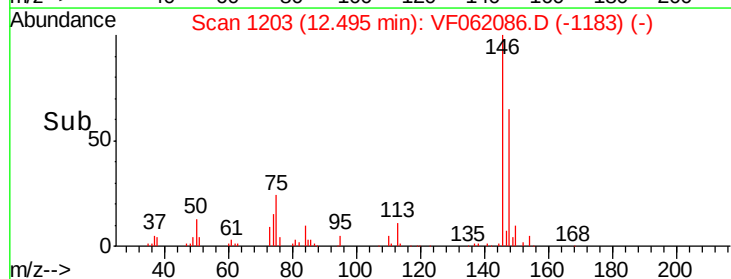
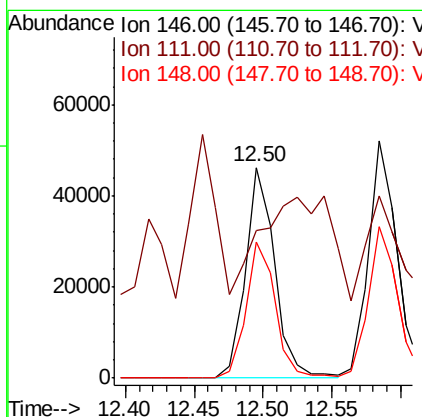
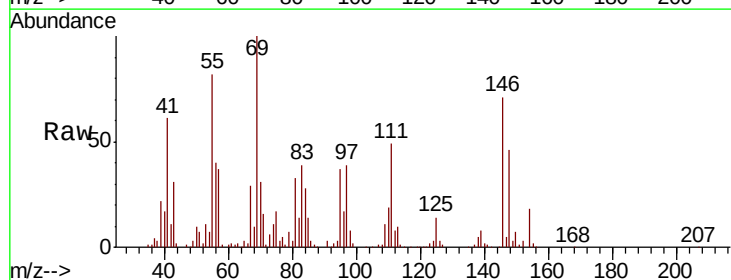
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

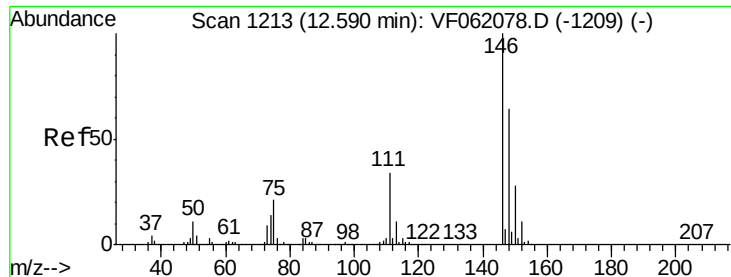
Tot Ion:119 Resp: 2429  
 Ion Ratio Lower Upper  
 119 100  
 134 32.5 14.0 42.0  
 91 183.9 10.8 32.4#



#87  
 1,3-Dichlorobenzene  
 Concen: 388.106 ug/l  
 RT: 12.50 min Scan# 1203  
 Delta R.T. -0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion:146 Resp: 68823  
 Ion Ratio Lower Upper  
 146 100  
 111 70.1 16.1 48.3#  
 148 64.9 31.9 95.7

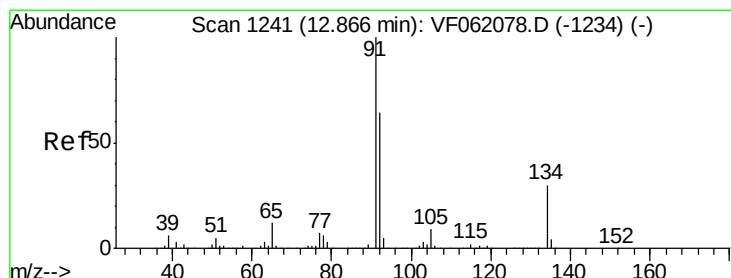
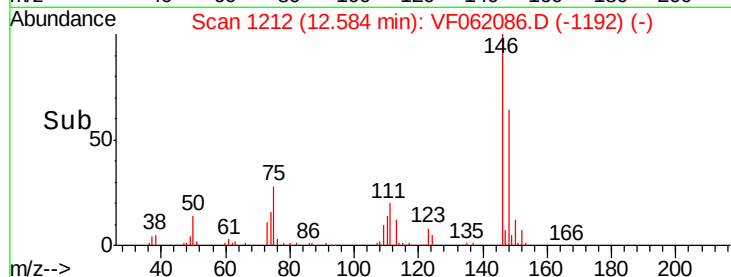
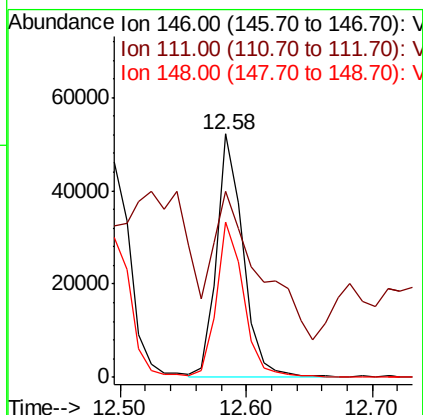
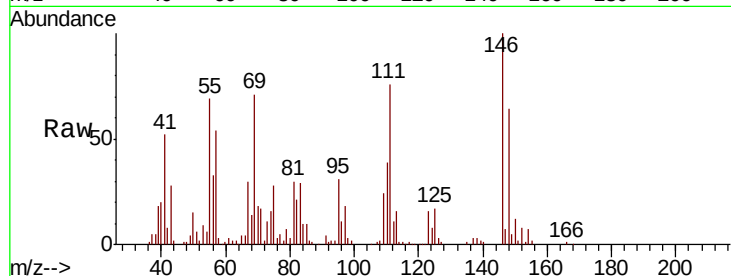




#88  
 1,4-Dichlorobenzene  
 Concen: 439.579 ug/l  
 RT: 12.58 min Scan# 1212  
 Delta R.T. -0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

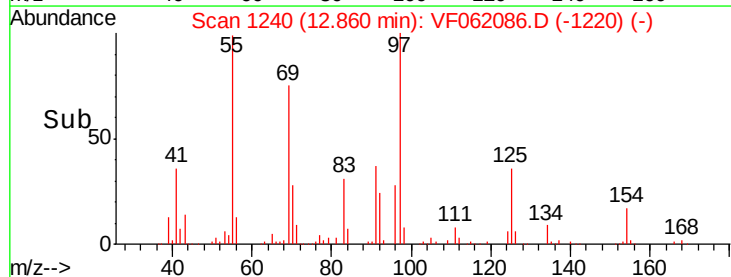
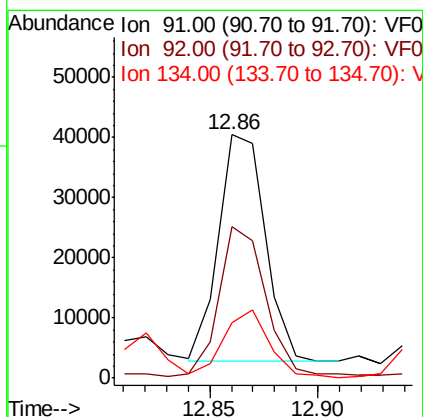
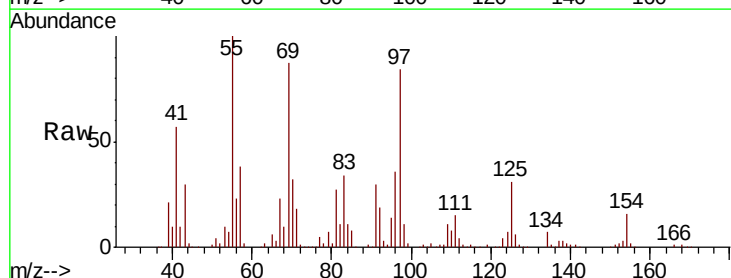
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 WP022SB442-190319-FD-(12-14)

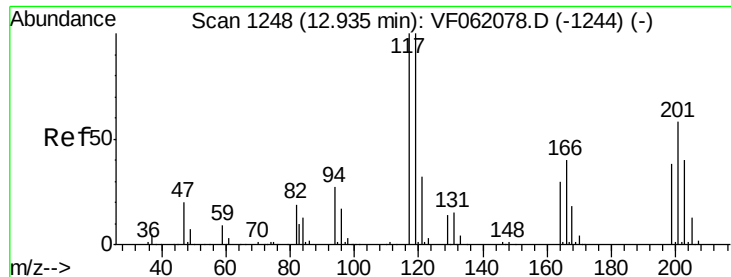
Tot Ion:146 Resp: 76064  
 Ion Ratio Lower Upper  
 146 100  
 111 76.4 16.9 50.6#  
 148 63.7 31.9 95.7



#89  
 n-Butylbenzene  
 Concen: 157.847 ug/l  
 RT: 12.86 min Scan# 1240  
 Delta R.T. -0.01 min  
 Lab File: VF062086.D  
 Acq: 22 Mar 2019 16:53

Tgt Ion: 91 Resp: 56778  
 Ion Ratio Lower Upper  
 91 100  
 92 62.4 31.9 95.5  
 134 22.8 14.9 44.9

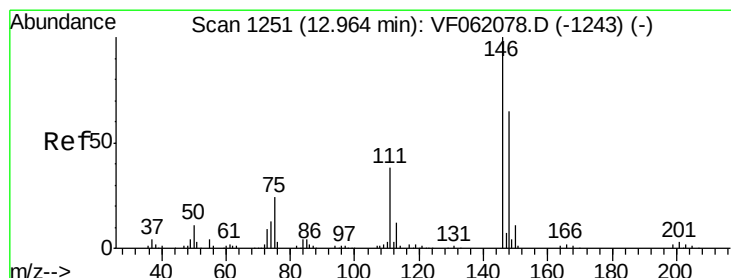
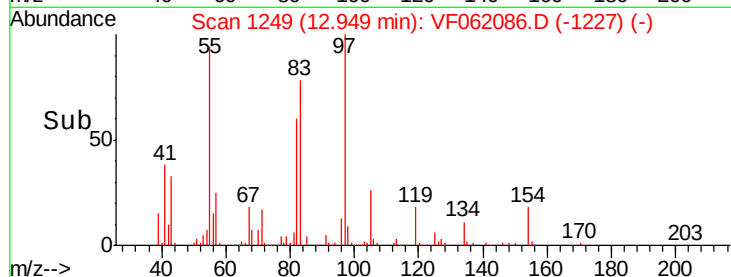
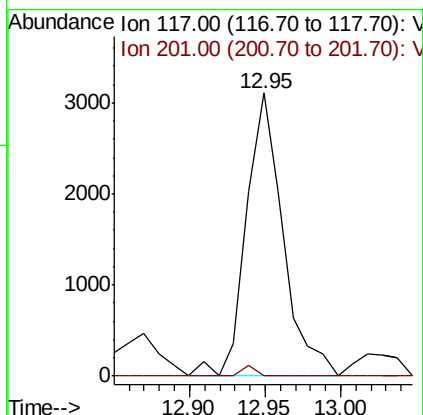
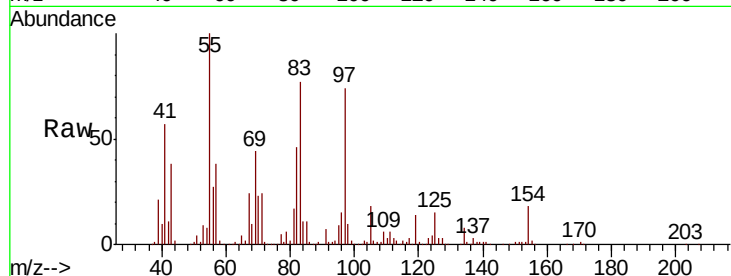




#90  
Hexachloroethane  
Concen: 58.536 ug/l  
RT: 12.95 min Scan# 1249  
Delta R.T. 0.01 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

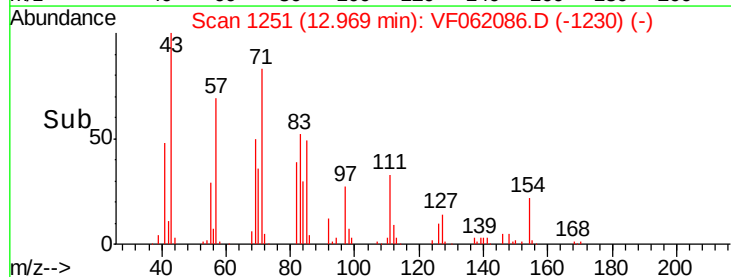
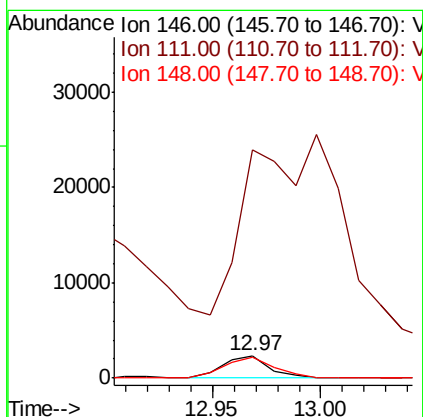
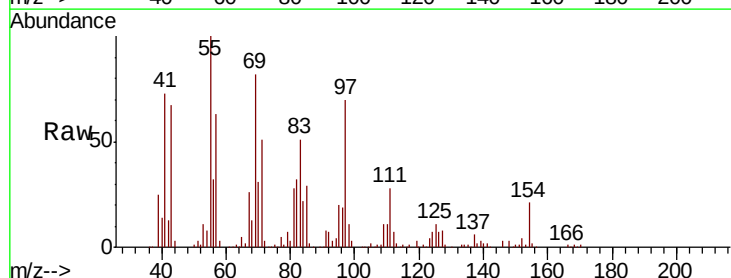
Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

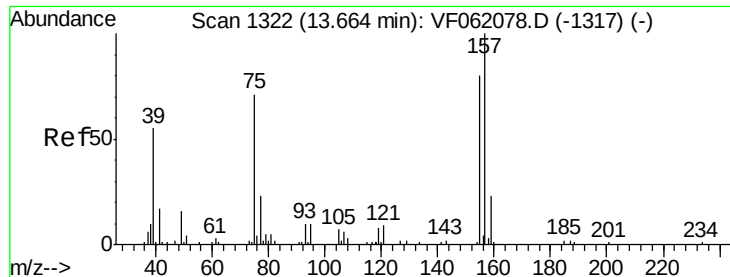
Tot Ion:117 Resp: 5255  
Ion Ratio Lower Upper  
117 100  
201 0.0 28.7 86.1#



#91  
1,2-Dichlorobenzene  
Concen: 20.713 ug/l  
RT: 12.97 min Scan# 1251  
Delta R.T. 0.00 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Tgt Ion:146 Resp: 3449  
Ion Ratio Lower Upper  
146 100  
111 1013.7 19.1 57.3#  
148 95.5 32.8 98.3





#92

1,2-Dibromo-3-Chloropropane

Concen: 30.697 ug/l

RT: 13.66 min Scan# 1321

Delta R.T. -0.01 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

Instrument :

MSVOA\_F

ClientSampleId :

WP022SB442-190319-FD-(12-14)

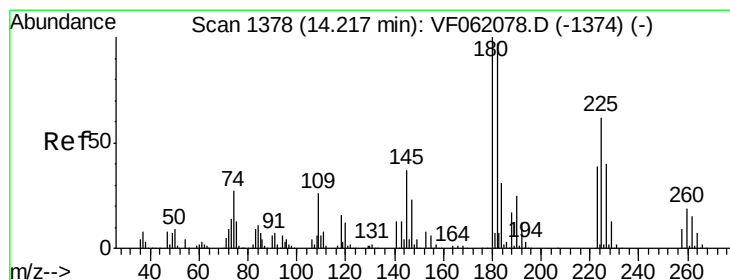
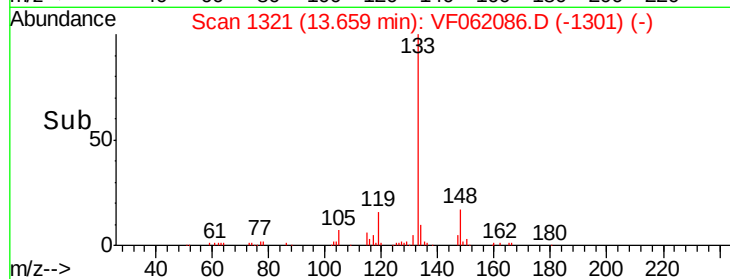
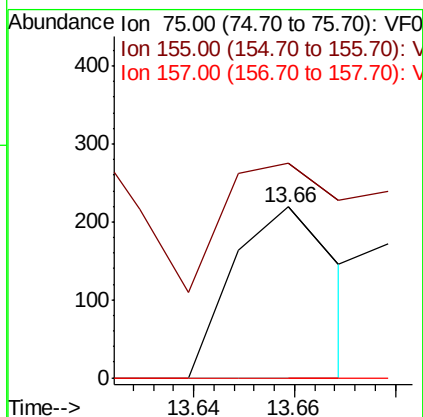
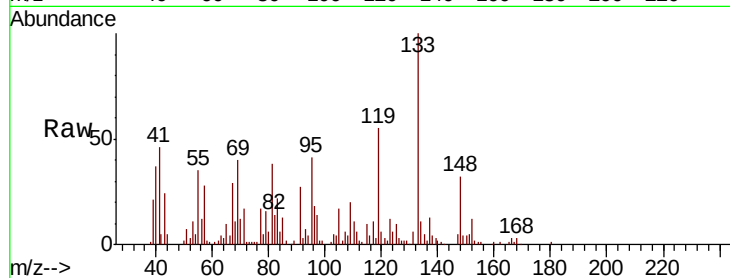
Tot Ion: 75 Resp: 312

Ion Ratio Lower Upper

75 100

155 126.0 56.1 168.4

157 0.0 70.4 211.2#



#93

1,2,4-Trichlorobenzene

Concen: 6.084 ug/l

RT: 14.22 min Scan# 1378

Delta R.T. 0.00 min

Lab File: VF062086.D

Acq: 22 Mar 2019 16:53

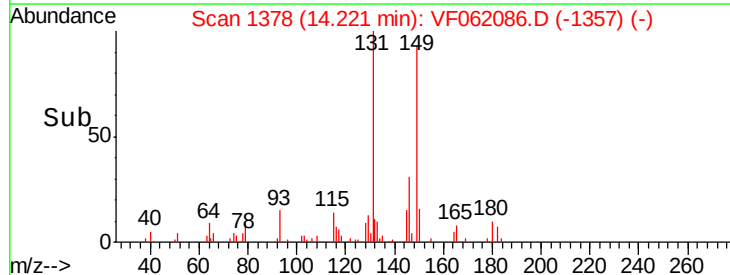
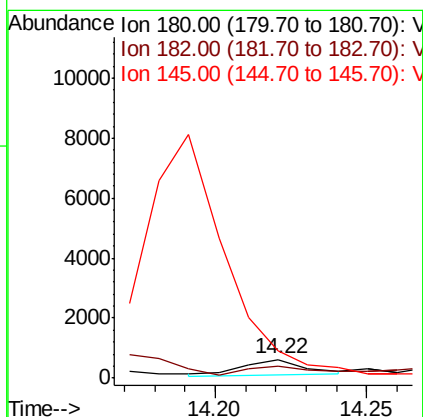
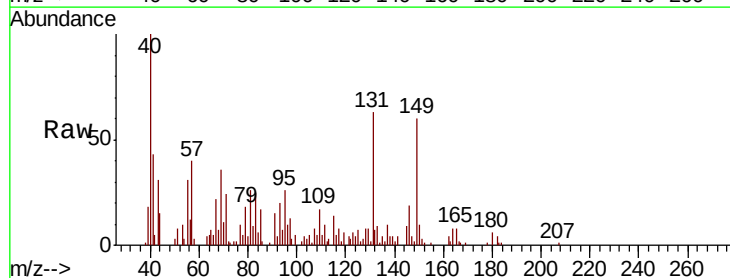
Tgt Ion:180 Resp: 706

Ion Ratio Lower Upper

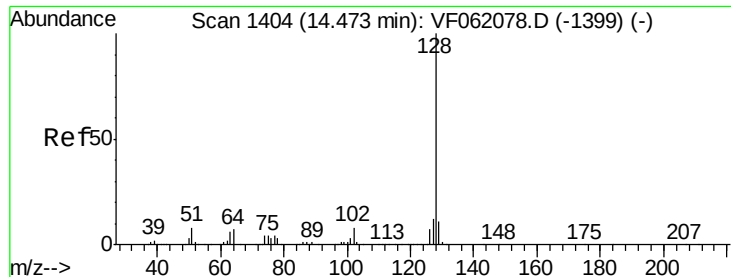
180 100

182 66.2 48.7 146.1

145 144.9 18.3 54.8#



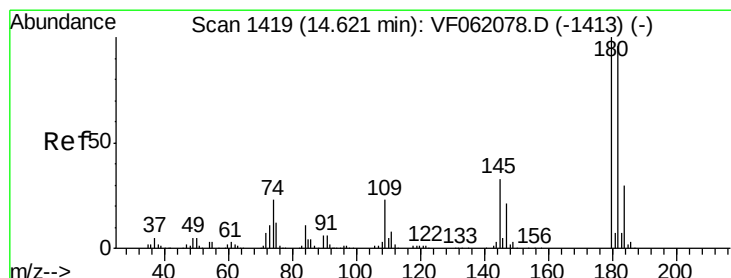
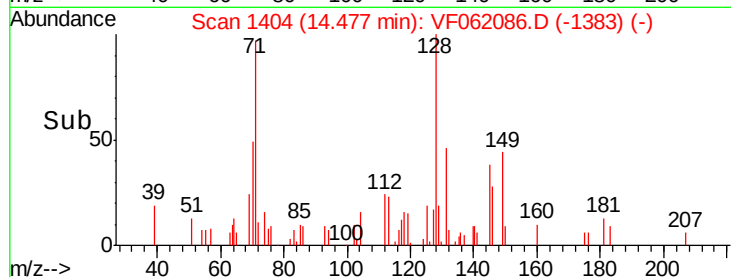
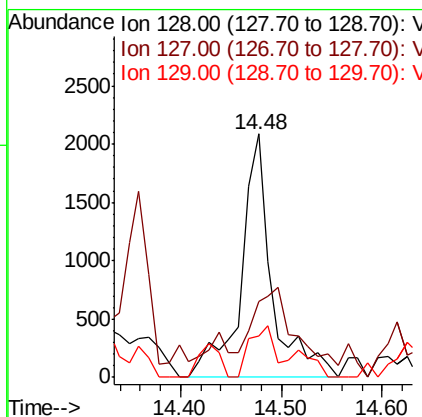
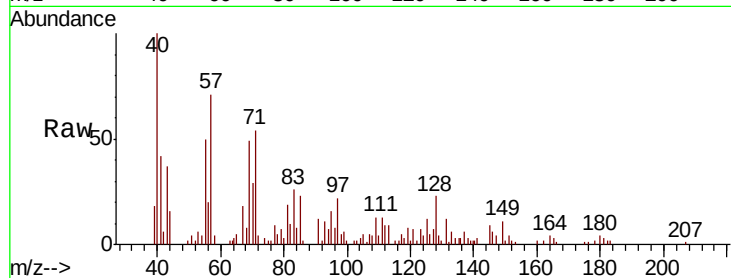




#95  
Naphthalene  
Concen: 21.955 ug/l  
RT: 14.48 min Scan# 1404  
Delta R.T. 0.00 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Instrument :  
MSVOA\_F  
ClientSampleId :  
WP022SB442-190319-FD-(12-14)

Tot Ion:128 Resp: 4465  
Ion Ratio Lower Upper  
128 100  
127 31.4 9.5 14.3#  
129 16.8 8.7 13.1#



#96  
1,2,3-Trichlorobenzene  
Concen: 3.093 ug/l  
RT: 14.52 min Scan# 1408  
Delta R.T. -0.10 min  
Lab File: VF062086.D  
Acq: 22 Mar 2019 16:53

Tgt Ion:180 Resp: 336  
Ion Ratio Lower Upper  
180 100  
182 52.6 47.9 143.7  
145 48.0 16.6 49.7

