

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF070518\  
 Data File : VF059427.D  
 Acq On : 5 Jul 2018 11:43  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Jul 06 02:02:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F062518S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 26 08:45:17 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.00  | 168  | 268763   | 50.00 | ug/l  | -0.03    |
| 34) 1,4-Difluorobenzene    | 5.73  | 114  | 403347   | 50.00 | ug/l  | -0.03    |
| 63) Chlorobenzene-d5       | 9.88  | 117  | 399632   | 50.00 | ug/l  | -0.03    |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 238379   | 50.00 | ug/l  | -0.02    |

| System Monitoring Compounds | R.T.   | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|--------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.98   | 65   | 172390   | 49.65 | ug/l    | -0.03    |
| Spiked Amount               | 50.000 |      | Recovery | =     | 99.30%  |          |
| 35) Dibromofluoromethane    | 4.25   | 113  | 148222   | 50.29 | ug/l    | -0.03    |
| Spiked Amount               | 50.000 |      | Recovery | =     | 100.58% |          |
| 50) Toluene-d8              | 7.67   | 98   | 351004   | 48.10 | ug/l    | -0.03    |
| Spiked Amount               | 50.000 |      | Recovery | =     | 96.20%  |          |
| 62) 4-Bromofluorobenzene    | 11.49  | 95   | 199372   | 48.44 | ug/l    | -0.02    |
| Spiked Amount               | 50.000 |      | Recovery | =     | 96.88%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 0.98 | 85   | 117005   | 47.650  | ug/l  | 96     |
| 3) Chloromethane              | 1.08 | 50   | 71015    | 43.048  | ug/l  | 99     |
| 4) Vinyl Chloride             | 1.14 | 62   | 73001    | 44.957  | ug/l  | 98     |
| 5) Bromomethane               | 1.32 | 94   | 42285    | 46.275  | ug/l  | 97     |
| 6) Chloroethane               | 1.41 | 64   | 34440    | 42.110  | ug/l  | 94     |
| 7) Trichlorofluoromethane     | 1.50 | 101  | 170964   | 53.243  | ug/l  | 94     |
| 8) Diethyl Ether              | 1.69 | 74   | 38813    | 47.142  | ug/l  | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 1.88 | 101  | 83820    | 44.720  | ug/l  | 94     |
| 10) Methyl Iodide             | 1.94 | 142  | 145641   | 42.611  | ug/l  | 96     |
| 11) Tert butyl alcohol        | 2.66 | 59   | 57704    | 249.618 | ug/l  | 95     |
| 12) 1,1-Dichloroethene        | 1.84 | 96   | 82813    | 52.264  | ug/l  | 98     |
| 13) Acrolein                  | 2.07 | 56   | 28535    | 259.619 | ug/l  | 93     |
| 14) Allyl chloride            | 2.16 | 41   | 139993   | 47.066  | ug/l  | 98     |
| 15) Acrylonitrile             | 3.05 | 53   | 99155    | 243.574 | ug/l  | 98     |
| 16) Acetone                   | 2.32 | 43   | 252406   | 292.799 | ug/l  | 99     |
| 17) Carbon Disulfide          | 1.86 | 76   | 162820   | 43.684  | ug/l  | 99     |
| 18) Methyl Acetate            | 2.43 | 43   | 96685    | 61.969  | ug/l  | 94     |
| 19) Methyl tert-butyl Ether   | 2.52 | 73   | 310292   | 52.501  | ug/l  | 96     |
| 20) Methylene Chloride        | 2.30 | 84   | 86918    | 43.704  | ug/l  | 95     |
| 21) trans-1,2-Dichloroethene  | 2.39 | 96   | 81333    | 48.118  | ug/l  | 93     |
| 22) Diisopropyl ether         | 2.90 | 45   | 344107   | 52.243  | ug/l  | # 98   |
| 23) Vinyl Acetate             | 3.29 | 43   | 1048336  | 249.916 | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 2.97 | 63   | 201388   | 49.314  | ug/l  | 98     |
| 25) 2-Butanone                | 4.47 | 43   | 292140   | 278.427 | ug/l  | 99     |
| 26) 2,2-Dichloropropane       | 3.72 | 77   | 145634   | 51.704  | ug/l  | 95     |
| 27) cis-1,2-Dichloroethene    | 3.59 | 96   | 123957   | 48.302  | ug/l  | 93     |
| 28) Bromochloromethane        | 3.85 | 49   | 75153    | 47.728  | ug/l  | 99     |
| 29) Tetrahydrofuran           | 4.21 | 42   | 115990   | 260.064 | ug/l  | 98     |
| 30) Chloroform                | 3.99 | 83   | 302706   | 51.202  | ug/l  | 99     |
| 31) Cyclohexane               | 3.82 | 56   | 115853   | 43.305  | ug/l  | 96     |
| 32) 1,1,1-Trichloroethane     | 4.23 | 97   | 204062   | 47.168  | ug/l  | 98     |
| 36) 1,1-Dichloropropene       | 4.41 | 75   | 179726   | 51.007  | ug/l  | 97     |
| 37) Ethyl Acetate             | 4.25 | 43   | 123341   | 54.865  | ug/l  | # 97   |
| 38) Carbon Tetrachloride      | 4.12 | 117  | 264008   | 59.372  | ug/l  | 96     |

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 MSVOA\_F  
 ClientSampleId :

Quant Time: Jul 06 02:02:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F062518S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 26 08:45:17 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.58  | 83   | 144325   | 46.222   | ug/l   | 95       |
| 40) Benzene                    | 4.76  | 78   | 367161   | 46.997   | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.87  | 41   | 59883    | 49.822   | ug/l # | 88       |
| 42) 1,2-Dichloroethane         | 5.08  | 62   | 240270   | 52.632   | ug/l   | 96       |
| 43) Isopropyl Acetate          | 7.07  | 43   | 154657   | 52.695   | ug/l # | 95       |
| 44) Trichloroethene            | 5.63  | 130  | 132682   | 49.508   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 6.36  | 63   | 112878   | 50.570   | ug/l   | 98       |
| 46) Dibromomethane             | 6.21  | 93   | 103274   | 53.307   | ug/l   | 97       |
| 47) Bromodichloromethane       | 6.51  | 83   | 254691   | 54.309   | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.83  | 41   | 109500   | 55.667   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 6.82  | 88   | 11623    | 1112.206 | ug/l   | 89       |
| 51) 4-Methyl-2-Pentanone       | 8.37  | 43   | 562611   | 258.747  | ug/l   | 99       |
| 52) Toluene                    | 7.74  | 92   | 279346   | 47.785   | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 8.39  | 75   | 222397   | 52.026   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 7.42  | 75   | 242414   | 52.208   | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 8.60  | 97   | 118924   | 52.395   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.73  | 69   | 143524   | 51.045   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 8.96  | 76   | 200201   | 51.429   | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether  | 7.74  | 63   | 52690    | 249.862  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.59  | 43   | 481967   | 298.315  | ug/l   | 96       |
| 60) Dibromochloromethane       | 8.82  | 129  | 196035   | 55.944   | ug/l   | 95       |
| 61) 1,2-Dibromoethane          | 9.10  | 107  | 134638   | 48.911   | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.26  | 164  | 138740   | 53.528   | ug/l   | 99       |
| 65) Chlorobenzene              | 9.90  | 112  | 369912   | 49.953   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.03 | 131  | 171756   | 53.627   | ug/l   | 96       |
| 67) Ethyl Benzene              | 10.00 | 91   | 652432   | 51.935   | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.23 | 106  | 465155   | 104.030  | ug/l   | 97       |
| 69) o-Xylene                   | 10.80 | 106  | 248490   | 49.686   | ug/l   | 99       |
| 70) Styrene                    | 10.88 | 104  | 384402   | 50.457   | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 123790   | 56.390   | ug/l   | 97       |
| 73) Isopropylbenzene           | 11.20 | 105  | 788423   | 56.773   | ug/l   | 99       |
| 74) N-amyl acetate             | 11.44 | 43   | 280241   | 55.608   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.76 | 83   | 180268   | 51.398   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.86 | 75   | 144895   | 54.767   | ug/l   | 96       |
| 77) Bromobenzene               | 11.57 | 156  | 203950   | 52.934   | ug/l   | 93       |
| 78) n-propylbenzene            | 11.66 | 91   | 866960   | 51.982   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.78 | 91   | 528881   | 51.904   | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 11.89 | 105  | 658128   | 54.101   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.93 | 75   | 86518    | 54.944   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 11.96 | 91   | 576304   | 52.803   | ug/l   | 93       |
| 83) tert-Butylbenzene          | 12.19 | 119  | 674276   | 55.419   | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 12.26 | 105  | 683442   | 53.345   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.36 | 105  | 874867   | 54.247   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.51 | 119  | 761448   | 56.260   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.53 | 146  | 367740   | 58.600   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.62 | 146  | 365744   | 53.154   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.90 | 91   | 762168   | 55.472   | ug/l   | 98       |
| 90) Hexachloroethane           | 12.97 | 117  | 182070   | 53.975   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.99 | 146  | 371570   | 53.122   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.69 | 75   | 44864    | 57.704   | ug/l   | 88       |

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Sample : VSTDCCC050  
Misc : 5.00g/5mL/MSVOA-F/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :

Quant Time: Jul 06 02:02:59 2018  
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QLast Update : Tue Jun 26 08:45:17 2018  
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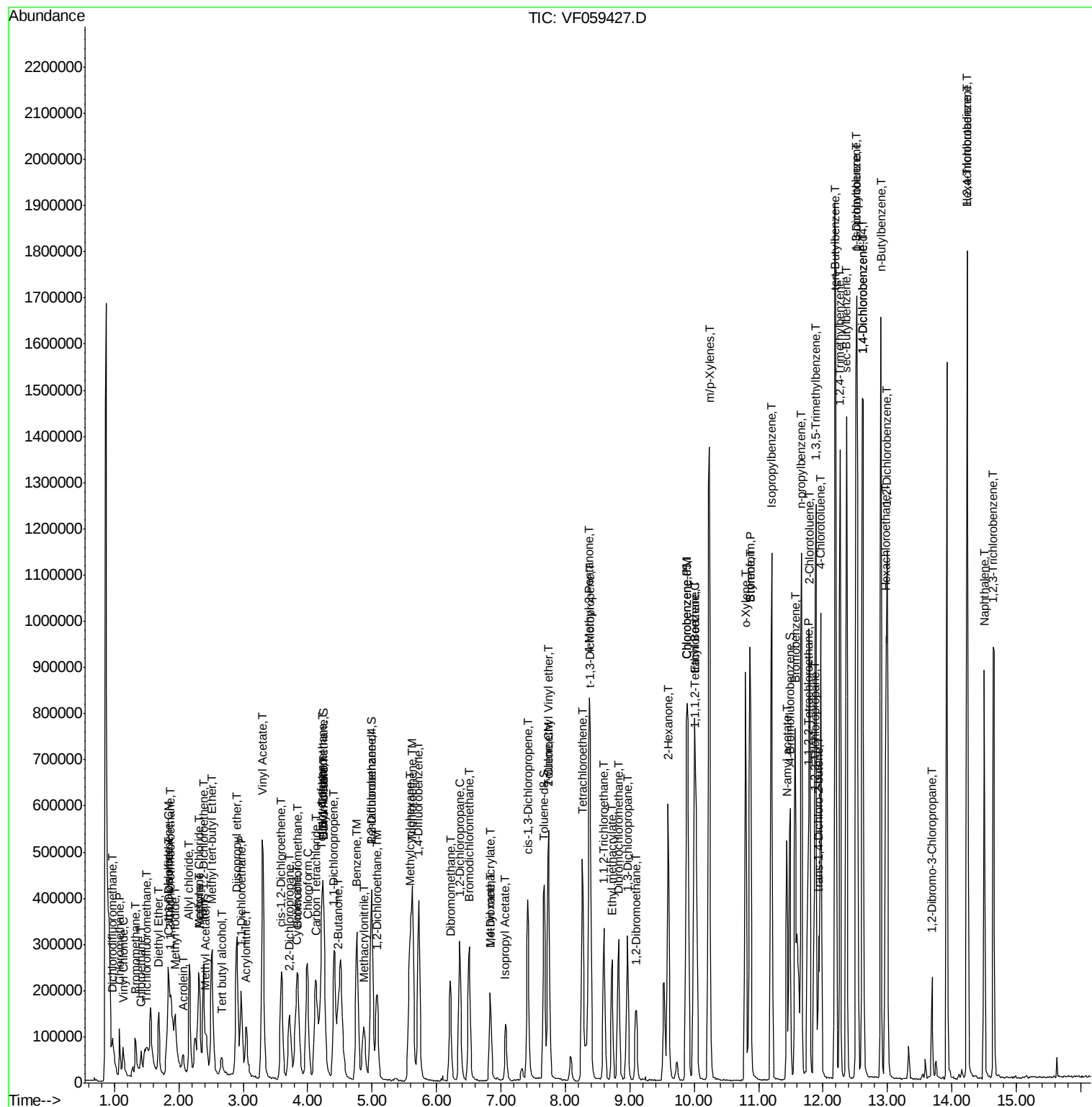
| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.25 | 180  | 295795   | 57.192 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.24 | 225  | 176355   | 61.046 | ug/l  | 96       |
| 95) Naphthalene            | 14.50 | 128  | 635462   | 58.724 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.65 | 180  | 288938   | 58.973 | ug/l  | 97       |

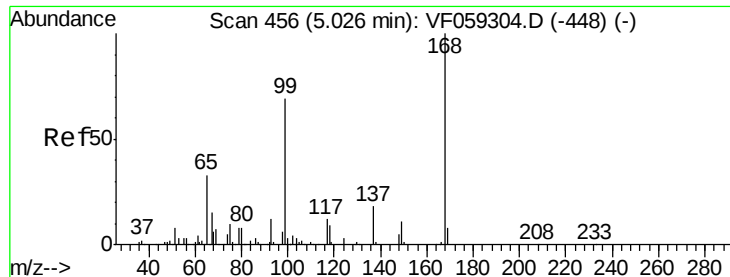
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 Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.00 min Scan# 453

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

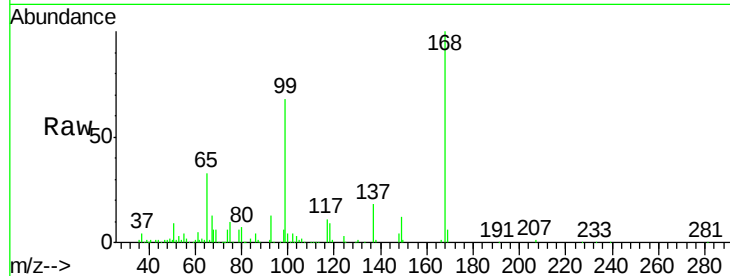
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion:168 Resp: 268763

Ion Ratio Lower Upper

168 100

99 68.4 54.9 82.3



Abundance Ion 168.00 (167.70 to 168.70): V

Ion 99.00 (98.70 to 99.70): VF0

5.00

100000

80000

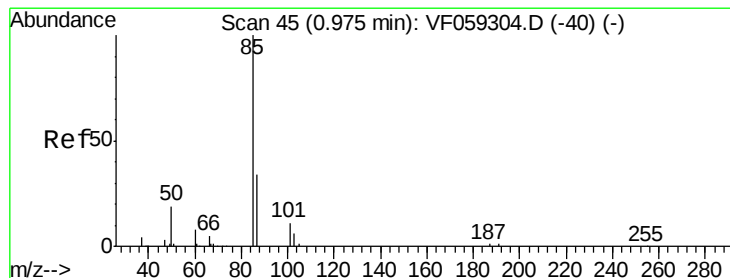
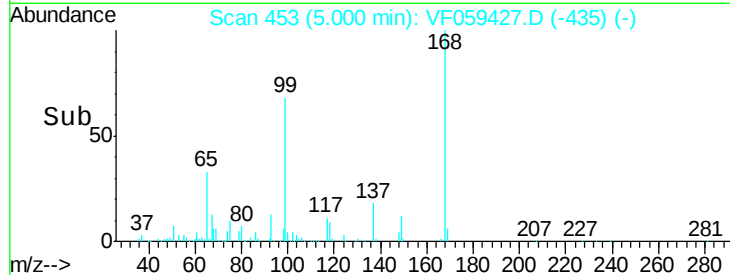
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 47.650 ug/l

RT: 0.98 min Scan# 45

Delta R.T. 0.00 min

Lab File: VF059427.D

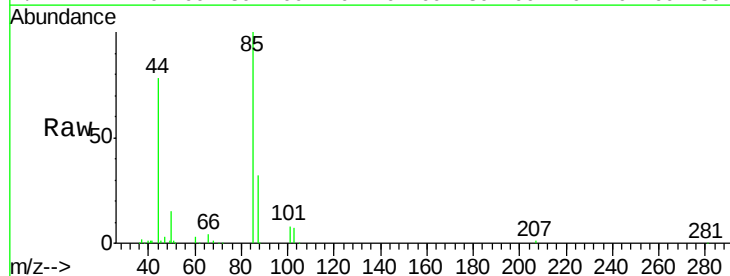
Acq: 5 Jul 2018 11:43

Tgt Ion: 85 Resp: 117005

Ion Ratio Lower Upper

85 100

87 32.1 17.1 51.3



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.98

40000

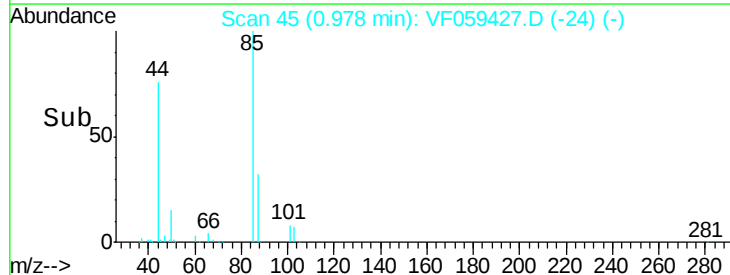
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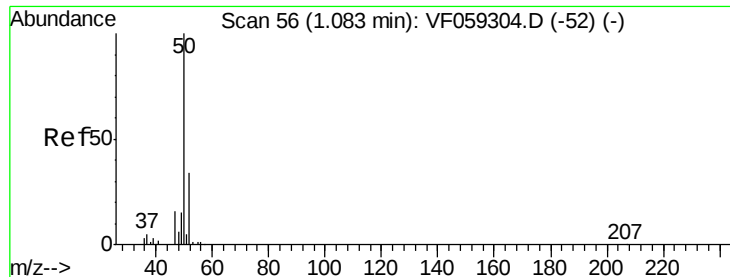
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10000

0

Time-->





#3

Chloromethane

Concen: 43.048 ug/l

RT: 1.08 min Scan# 55

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

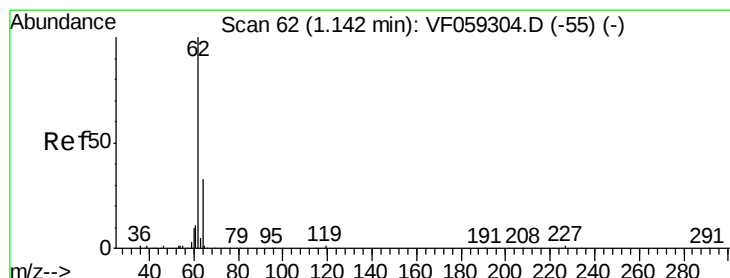
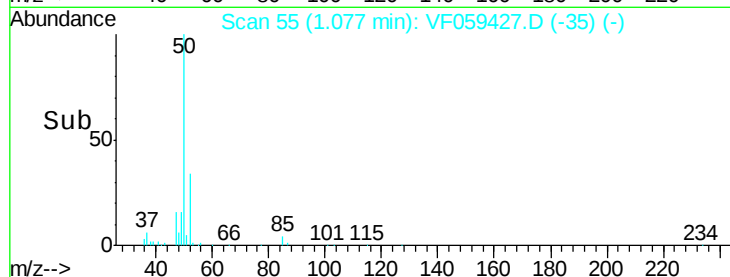
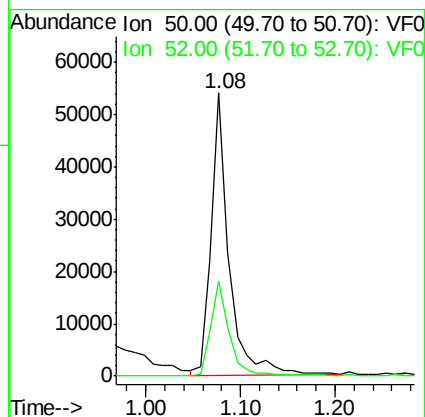
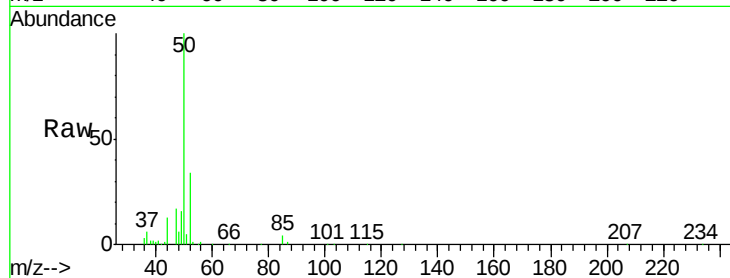
ClientSampleId :

Tot Ion: 50 Resp: 71015

Ion Ratio Lower Upper

50 100

52 33.8 26.7 40.1



#4

Vinyl Chloride

Concen: 44.957 ug/l

RT: 1.14 min Scan# 61

Delta R.T. -0.01 min

Lab File: VF059427.D

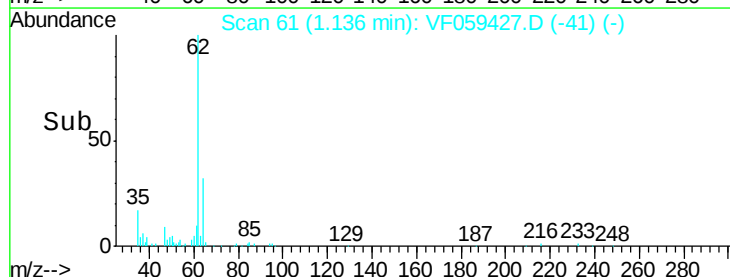
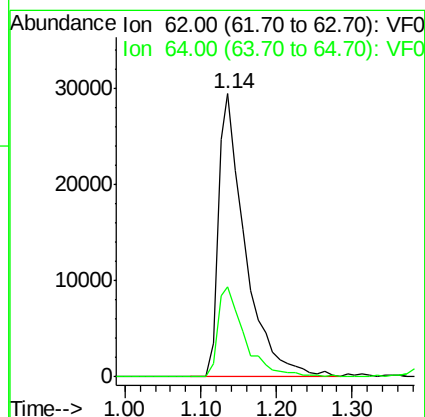
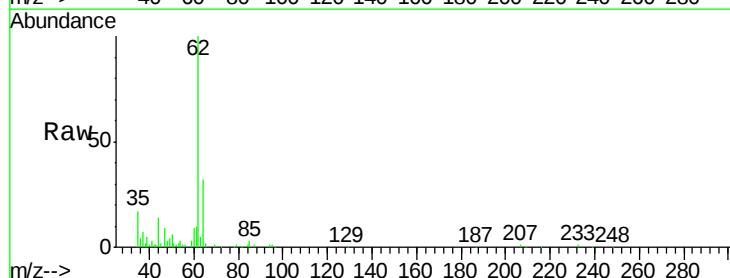
Acq: 5 Jul 2018 11:43

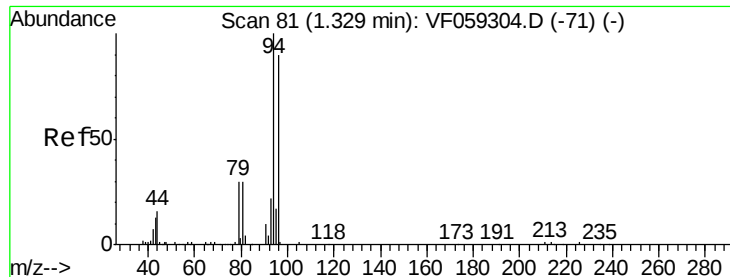
Tgt Ion: 62 Resp: 73001

Ion Ratio Lower Upper

62 100

64 31.9 26.3 39.5





#5

Bromomethane

Concen: 46.275 ug/l

RT: 1.32 min Scan# 80

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

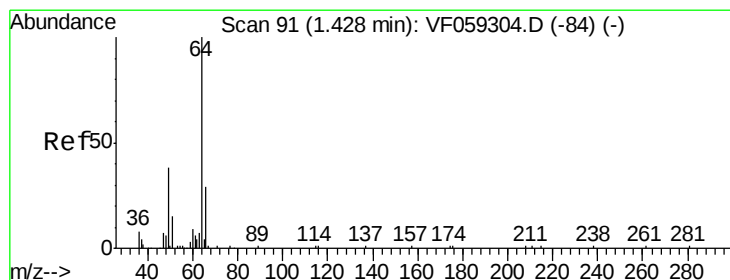
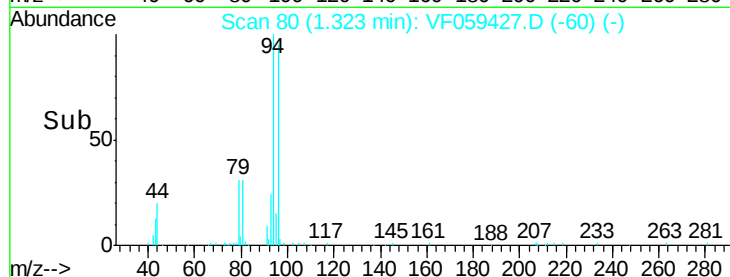
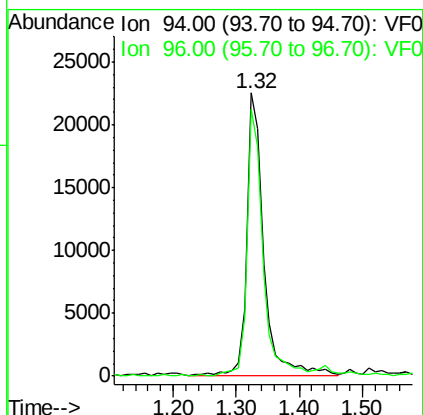
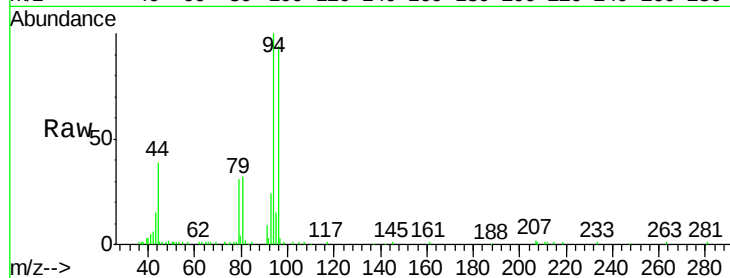
ClientSampleId :

Tot Ion: 94 Resp: 42285

Ion Ratio Lower Upper

94 100

96 94.3 73.4 110.0



#6

Chloroethane

Concen: 42.110 ug/l

RT: 1.41 min Scan# 89

Delta R.T. -0.02 min

Lab File: VF059427.D

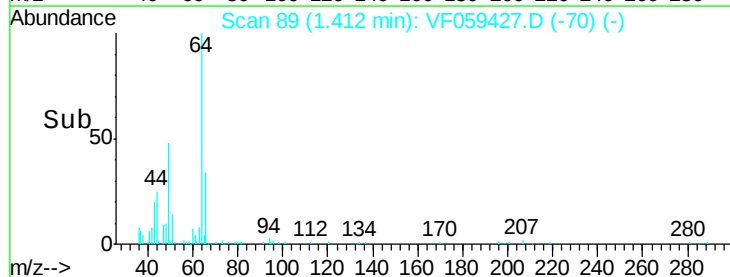
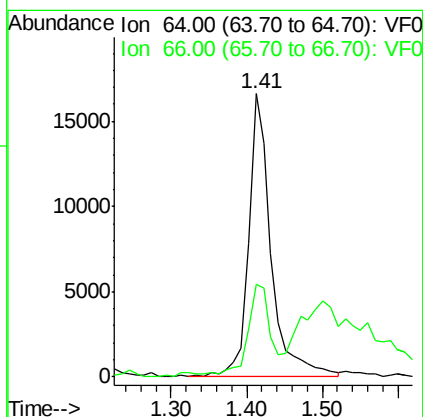
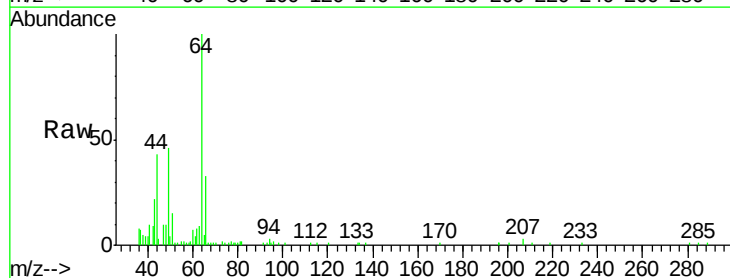
Acq: 5 Jul 2018 11:43

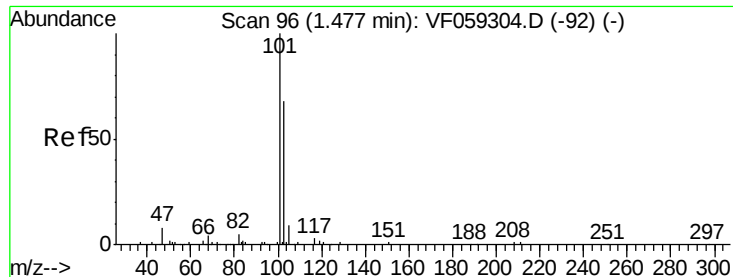
Tgt Ion: 64 Resp: 34440

Ion Ratio Lower Upper

64 100

66 32.9 23.9 35.9



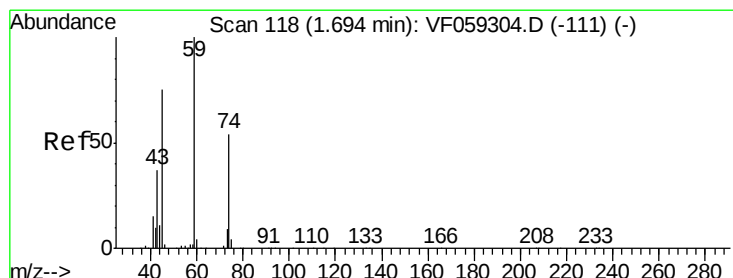
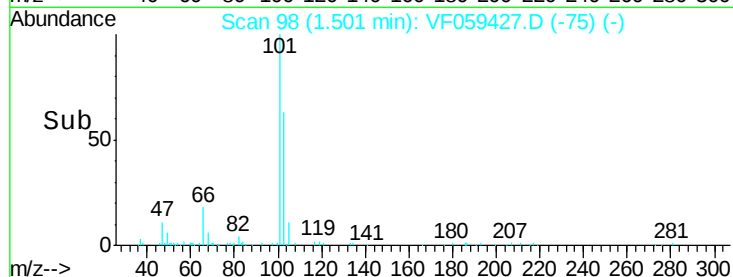
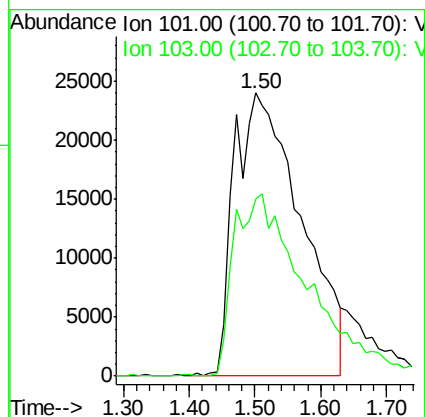
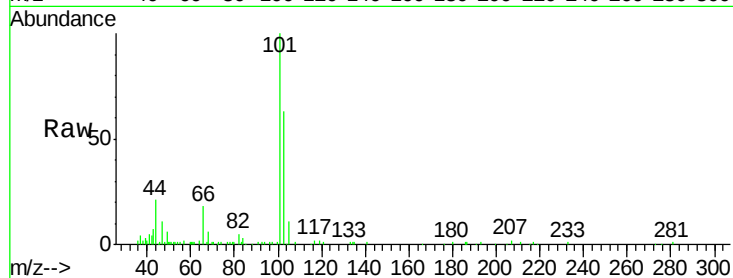


#7

Trichlorofluoromethane  
 Concen: 53.243 ug/l  
 RT: 1.50 min Scan# 98  
 Delta R.T. 0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Instrument :  
 MSVOA\_F  
 ClientSampled :

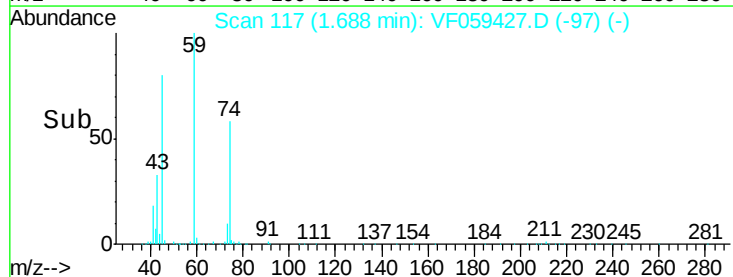
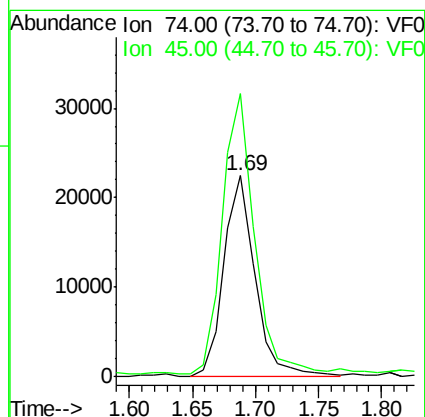
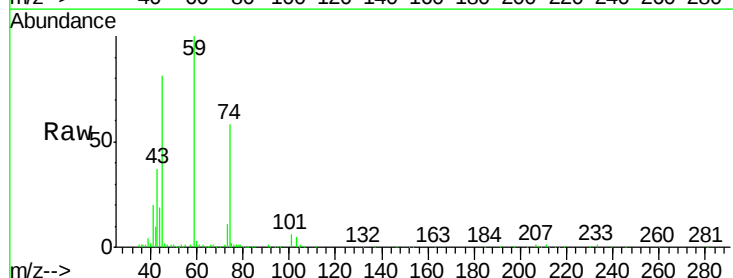
Tot Ion:101 Resp: 170964  
 Ion Ratio Lower Upper  
 101 100  
 103 62.7 54.2 81.2

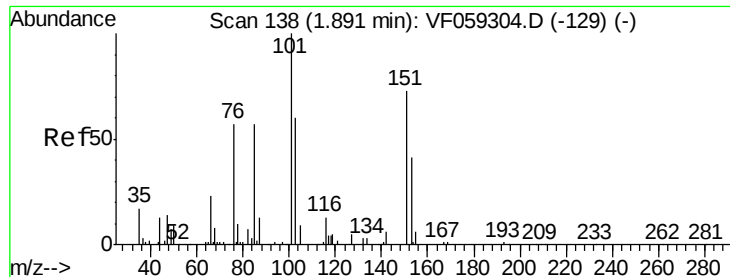


#8

Diethyl Ether  
 Concen: 47.142 ug/l  
 RT: 1.69 min Scan# 117  
 Delta R.T. -0.01 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion: 74 Resp: 38813  
 Ion Ratio Lower Upper  
 74 100  
 45 140.6 70.0 210.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 44.720 ug/l

RT: 1.88 min Scan# 136

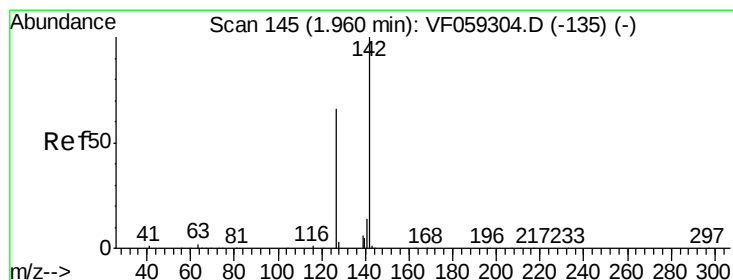
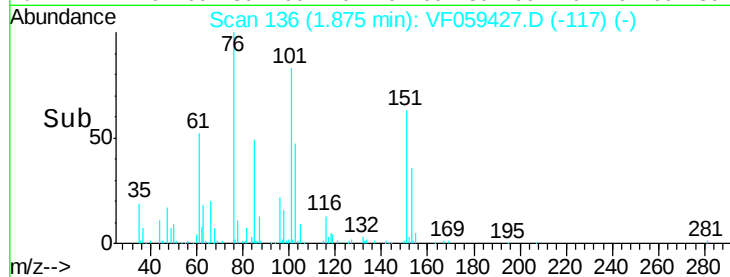
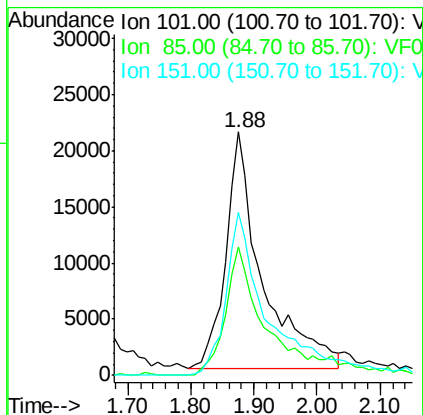
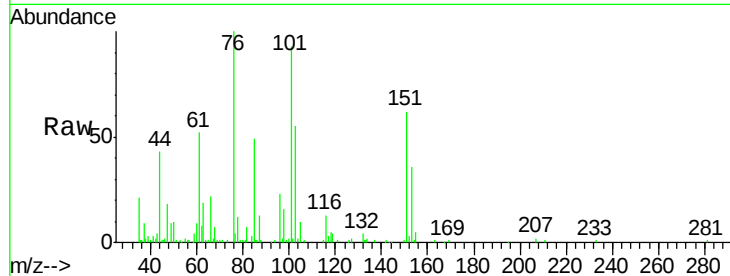
Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 101   | Resp: | 83820 |
| Ion      | Ratio | Lower | Upper |
| 101      | 100   |       |       |
| 85       | 52.4  | 44.5  | 66.7  |
| 151      | 65.6  | 56.8  | 85.2  |



#10

Methyl Iodide

Concen: 42.611 ug/l

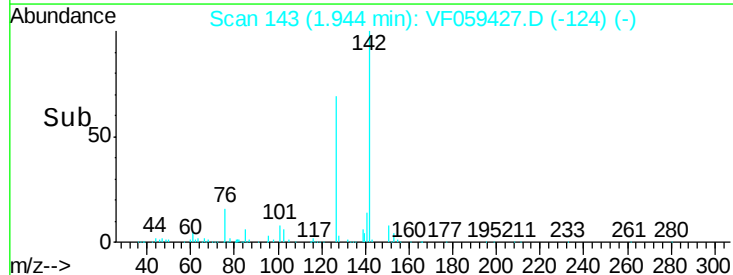
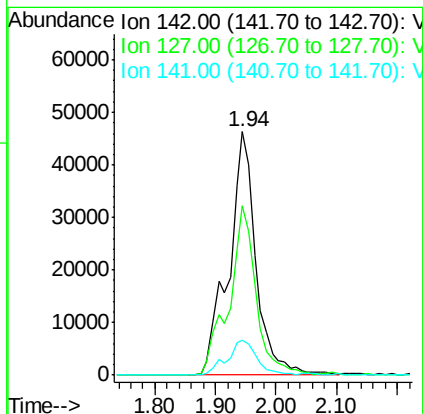
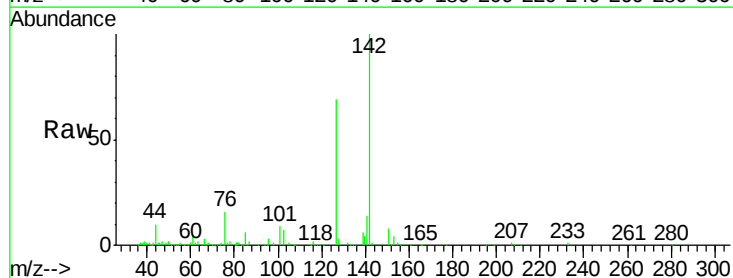
RT: 1.94 min Scan# 143

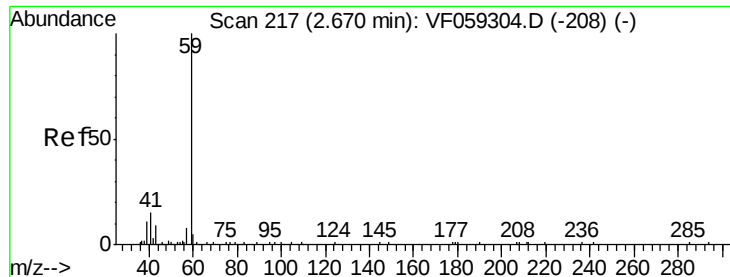
Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 142   | Resp: | 145641 |
| Ion      | Ratio | Lower | Upper  |
| 142      | 100   |       |        |
| 127      | 69.4  | 52.5  | 78.7   |
| 141      | 14.5  | 11.5  | 17.3   |



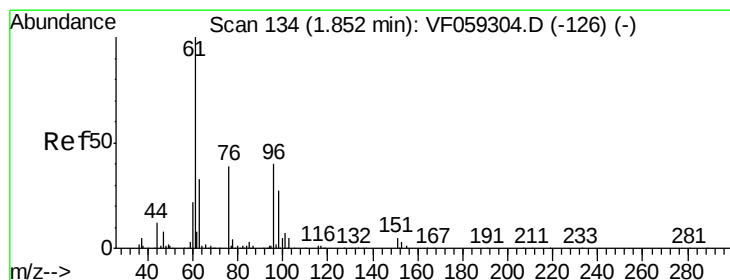
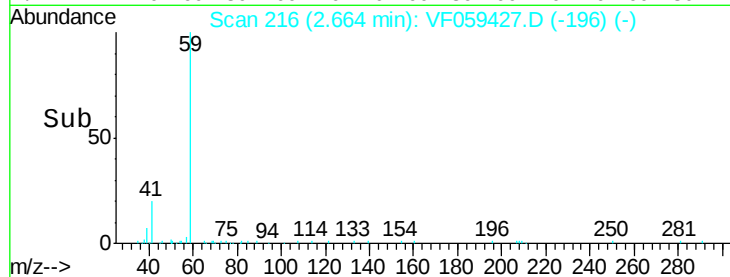
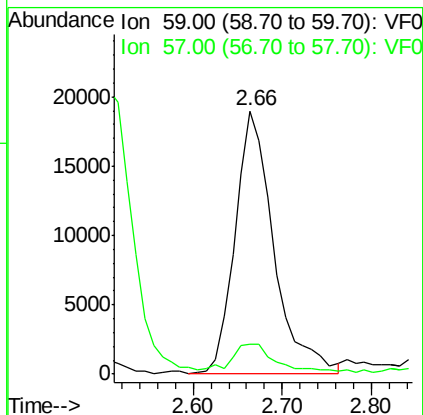
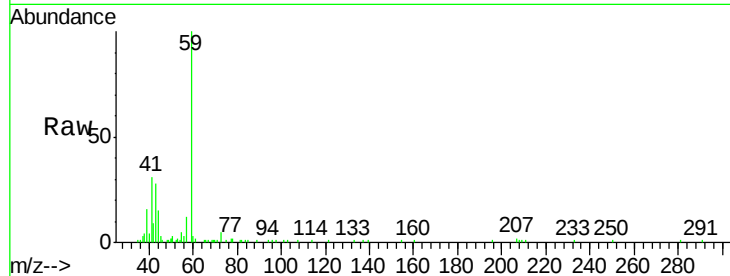


#11

Tert butyl alcohol  
 Concen: 249.618 ug/l  
 RT: 2.66 min Scan# 216  
 Delta R.T. -0.01 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Instrument :  
 MSVOA\_F  
 ClientSampled :

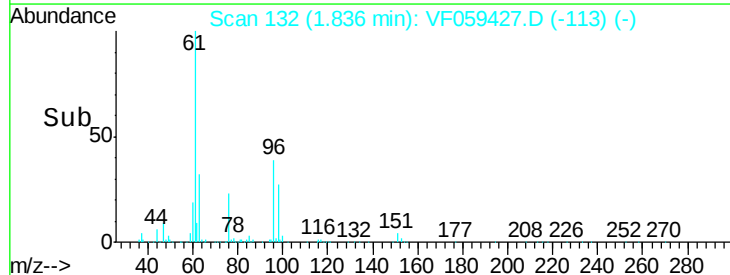
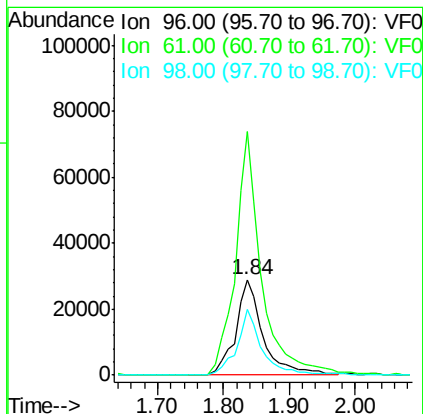
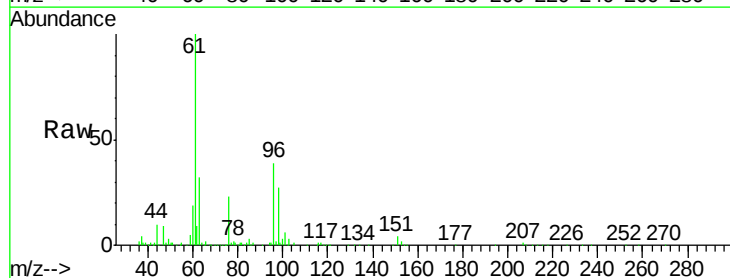
Tot Ion: 59 Resp: 57704  
 Ion Ratio Lower Upper  
 59 100  
 57 11.5 11.0 16.4

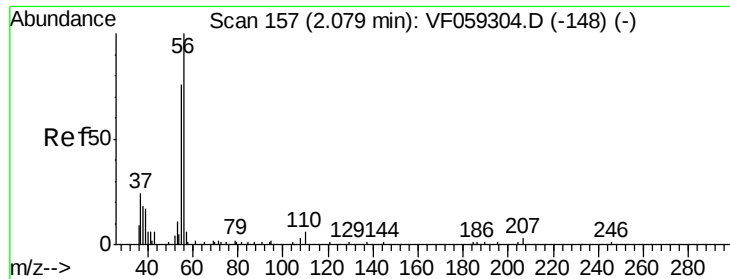


#12

1,1-Dichloroethene  
 Concen: 52.264 ug/l  
 RT: 1.84 min Scan# 132  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion: 96 Resp: 82813  
 Ion Ratio Lower Upper  
 96 100  
 61 255.2 201.1 301.7  
 98 68.7 53.9 80.9





#13

Acrolein

Concen: 259.619 ug/l

RT: 2.07 min Scan# 156

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

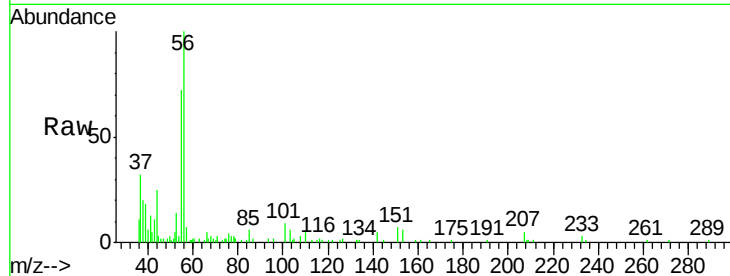
ClientSampled :

Tot Ion: 56 Resp: 28535

Ion Ratio Lower Upper

56 100

55 72.3 62.4 93.6



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

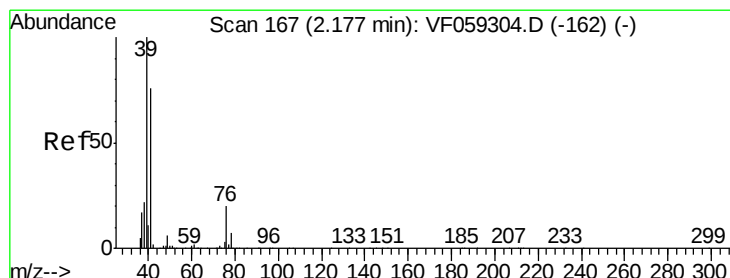
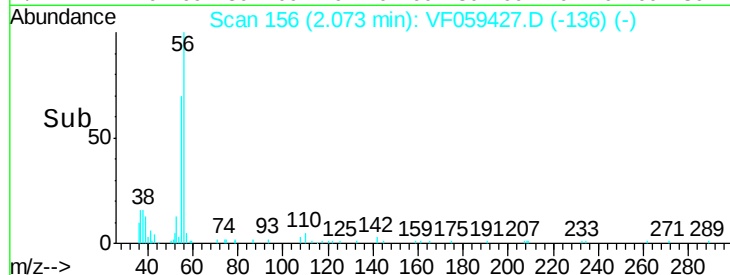
2.07

10000

5000

0

Time-->



#14

Allyl chloride

Concen: 47.066 ug/l

RT: 2.16 min Scan# 165

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

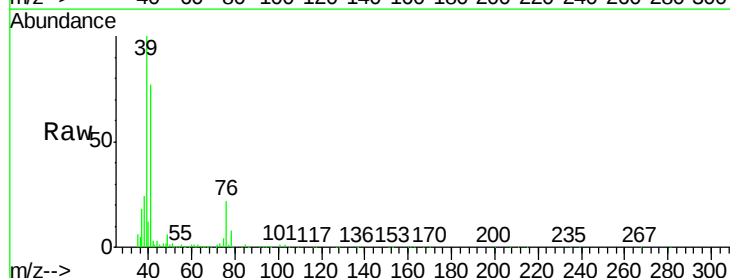
Tgt Ion: 41 Resp: 139993

Ion Ratio Lower Upper

41 100

39 129.1 105.6 158.4

76 27.9 21.6 32.4



Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

Ion 76.00 (75.70 to 76.70): VF0

100000

80000

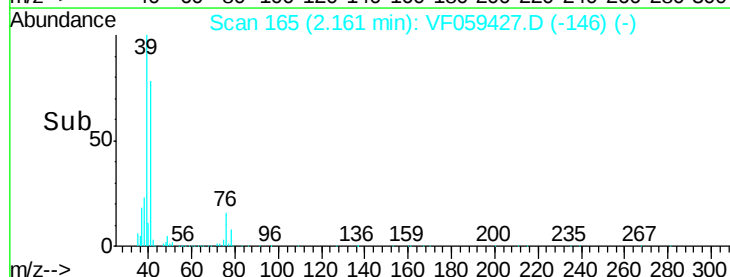
60000

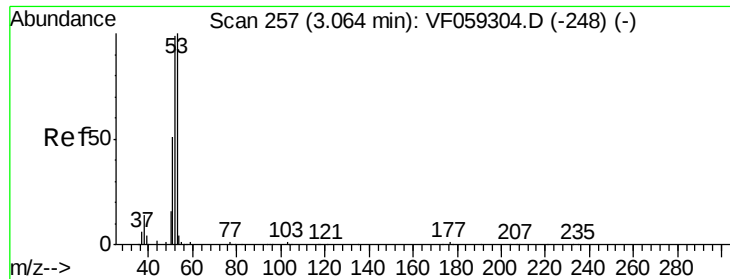
40000

20000

0

Time-->





#15

Acrylonitrile

Concen: 243.574 ug/l

RT: 3.05 min Scan# 255

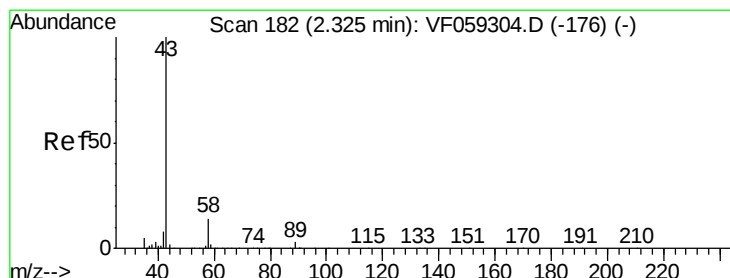
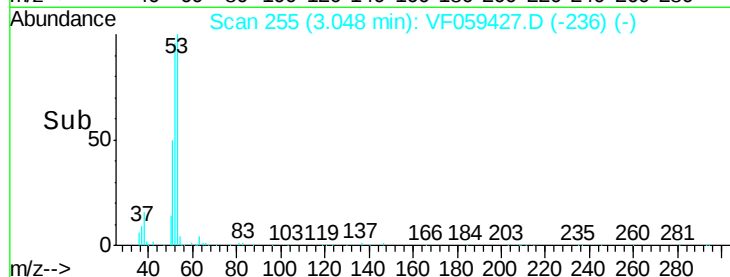
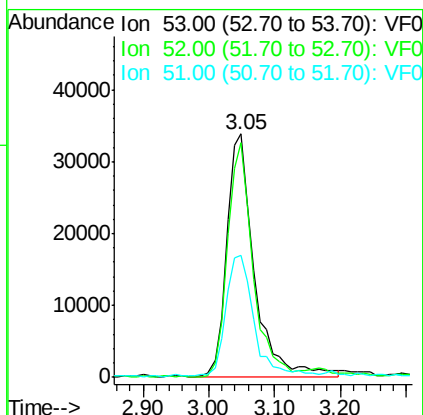
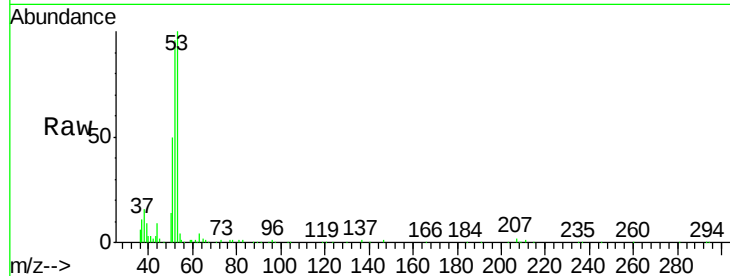
Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 53    | Resp: | 99155 |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 96.5  | 79.2  | 118.8 |
| 51       | 50.3  | 40.9  | 61.3  |



#16

Acetone

Concen: 292.799 ug/l

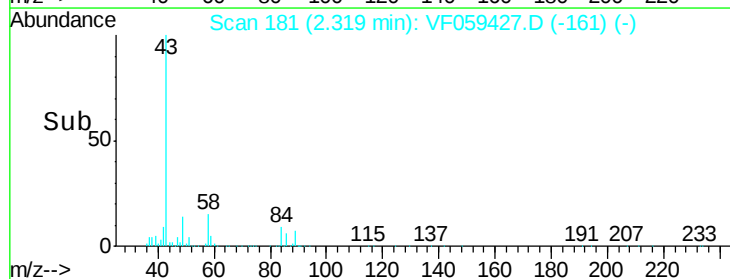
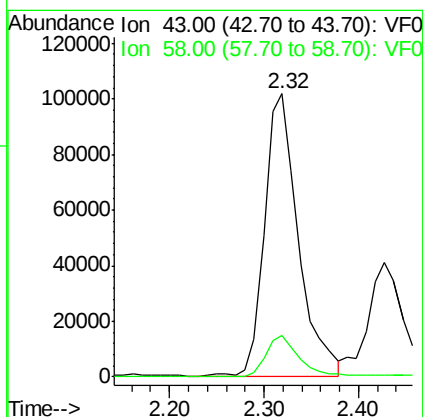
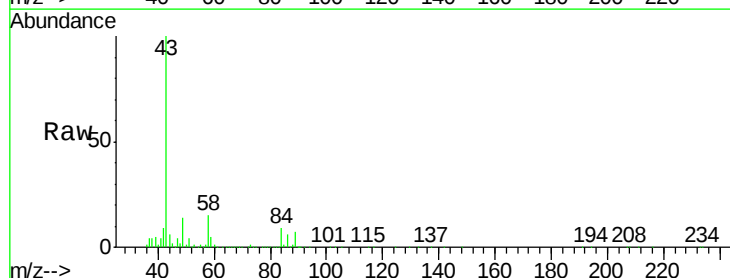
RT: 2.32 min Scan# 181

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 252406 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 14.7  | 11.4  | 17.0   |





#17

Carbon Disulfide

Concen: 43.684 ug/l

RT: 1.86 min Scan# 134

Delta R.T. 0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

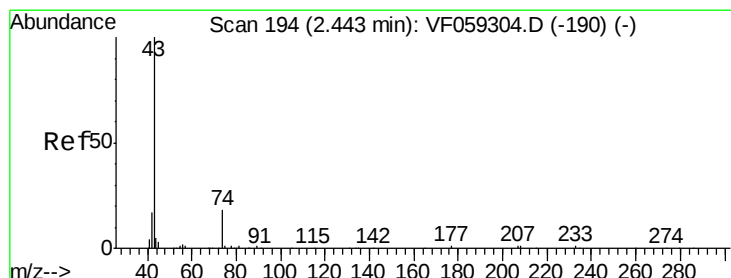
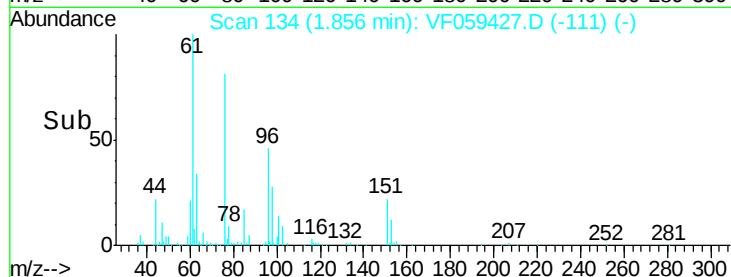
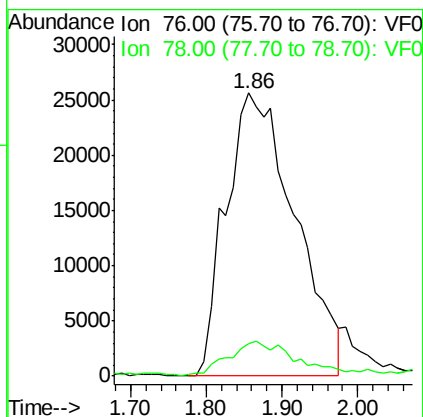
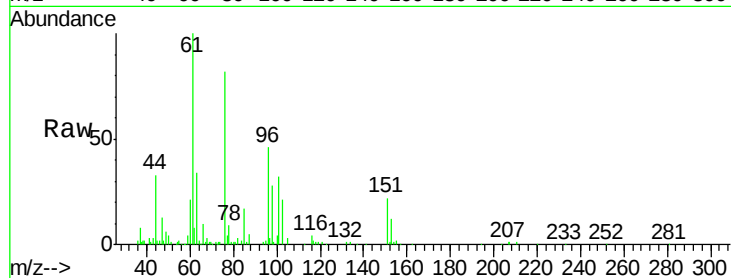
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 76 Resp: 162820

Ion Ratio Lower Upper

76 100

78 11.6 8.9 13.3



#18

Methyl Acetate

Concen: 61.969 ug/l

RT: 2.43 min Scan# 192

Delta R.T. -0.02 min

Lab File: VF059427.D

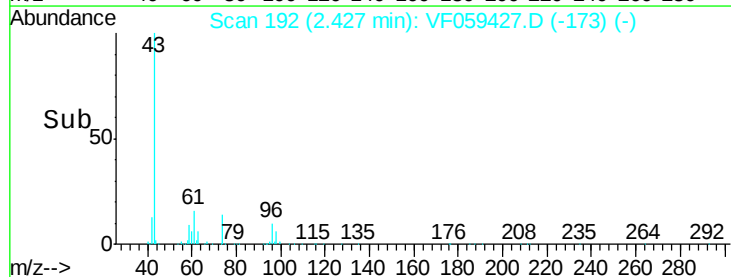
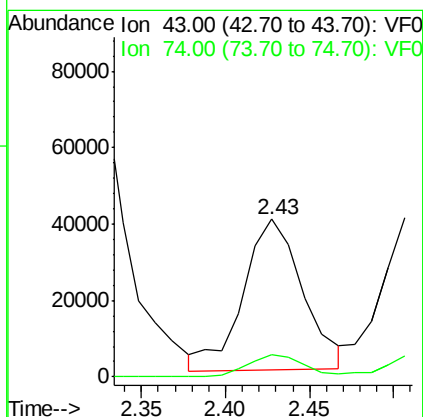
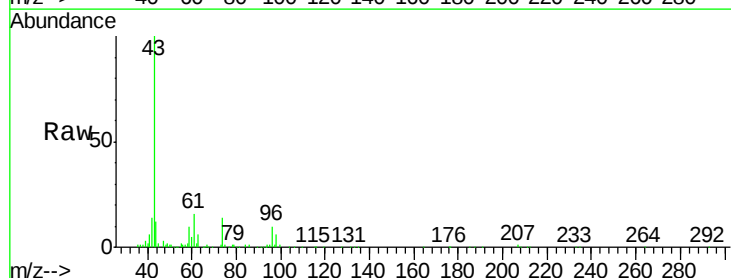
Acq: 5 Jul 2018 11:43

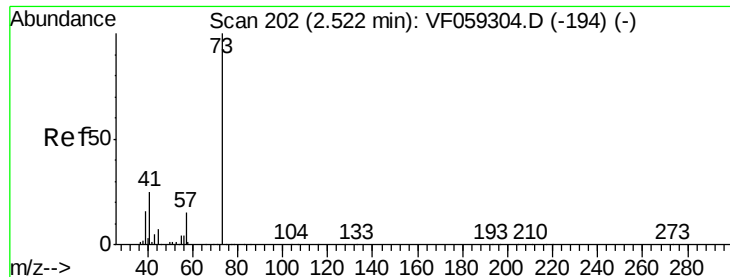
Tgt Ion: 43 Resp: 96685

Ion Ratio Lower Upper

43 100

74 14.2 13.3 19.9



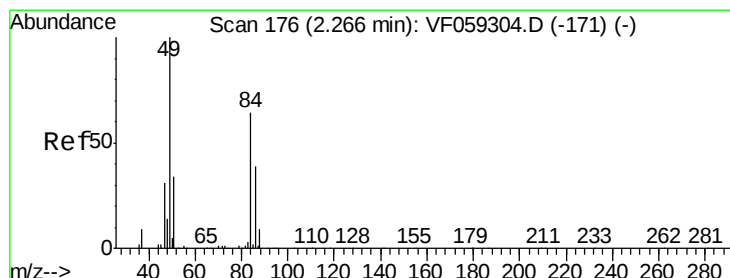
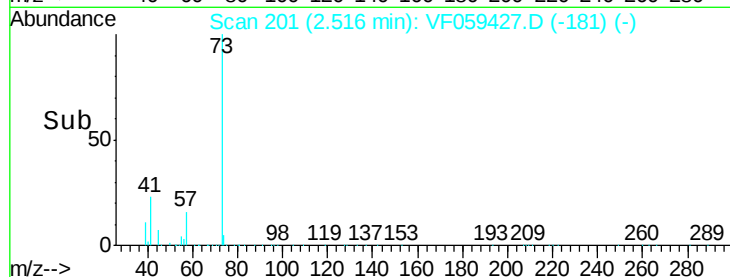
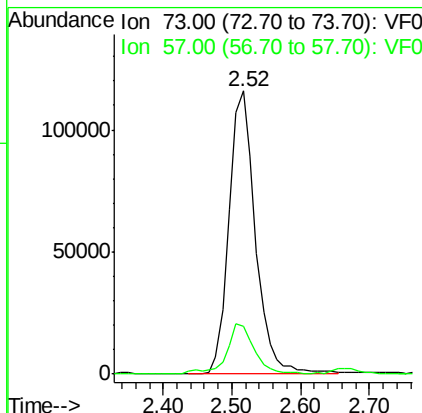
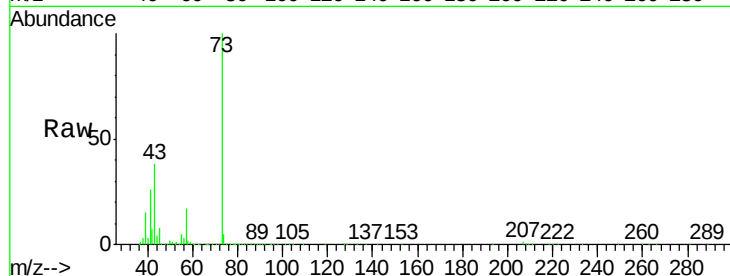


#19

Methyl tert-butyl Ether  
Concen: 52.501 ug/l  
RT: 2.52 min Scan# 201  
Delta R.T. -0.01 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampleId :

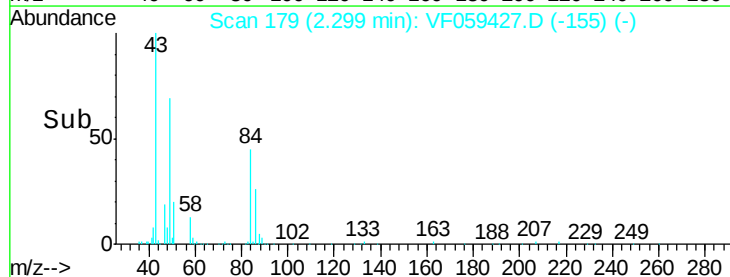
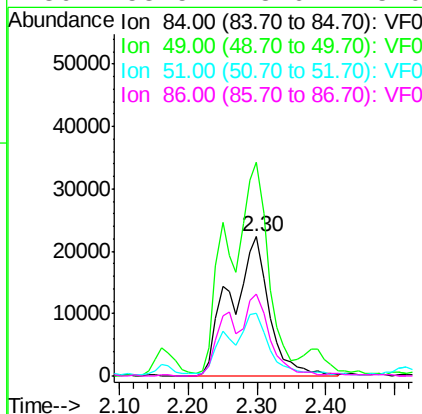
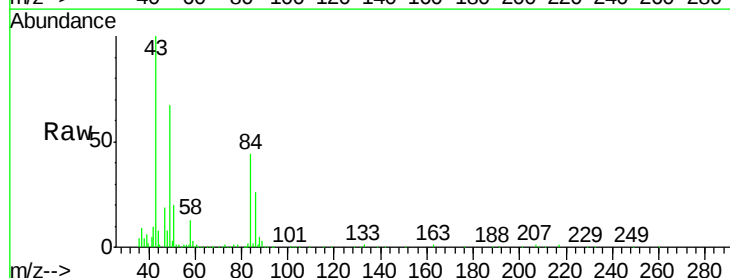
Tot Ion: 73 Resp: 310292  
Ion Ratio Lower Upper  
73 100  
57 16.9 12.3 18.5

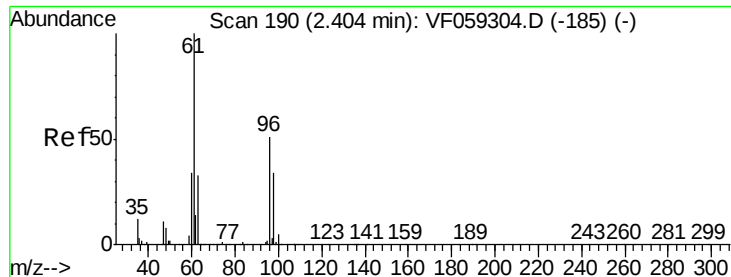


#20

Methylene Chloride  
Concen: 43.704 ug/l  
RT: 2.30 min Scan# 179  
Delta R.T. 0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 84 Resp: 86918  
Ion Ratio Lower Upper  
84 100  
49 153.4 126.5 189.7  
51 45.1 42.9 64.3  
86 58.5 48.6 73.0





#21

trans-1,2-Dichloroethene

Concen: 48.118 ug/l

RT: 2.39 min Scan# 188

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampleId :

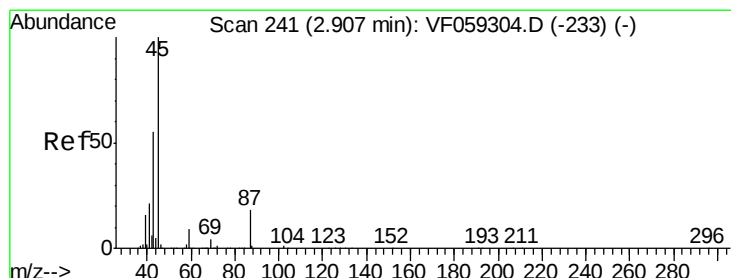
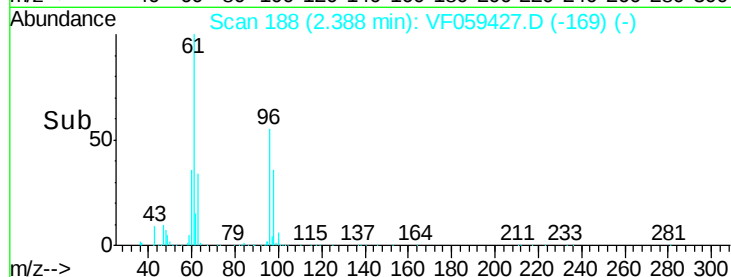
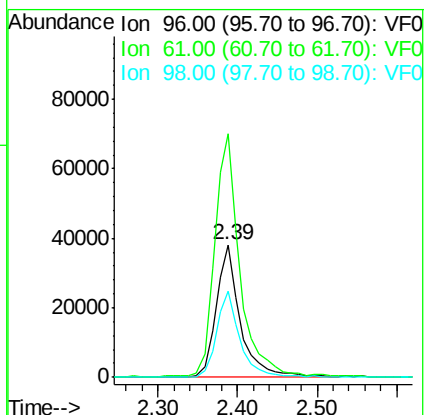
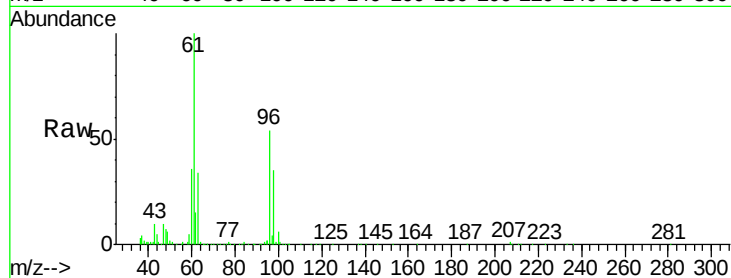
Tot Ion: 96 Resp: 81333

Ion Ratio Lower Upper

96 100

61 183.7 157.4 236.2

98 64.9 53.7 80.5



#22

Diisopropyl ether

Concen: 52.243 ug/l

RT: 2.90 min Scan# 240

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Tgt Ion: 45 Resp: 344107

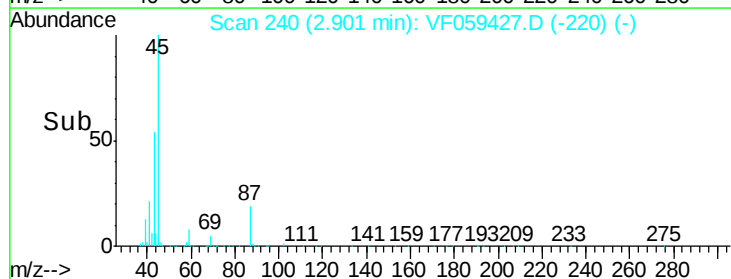
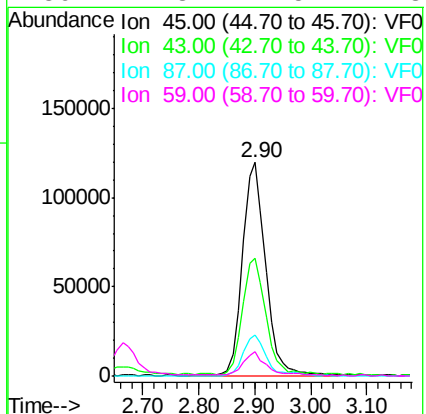
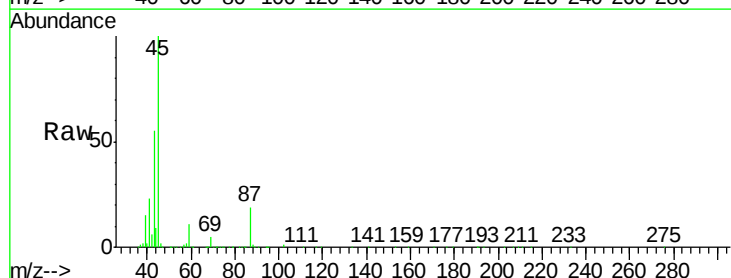
Ion Ratio Lower Upper

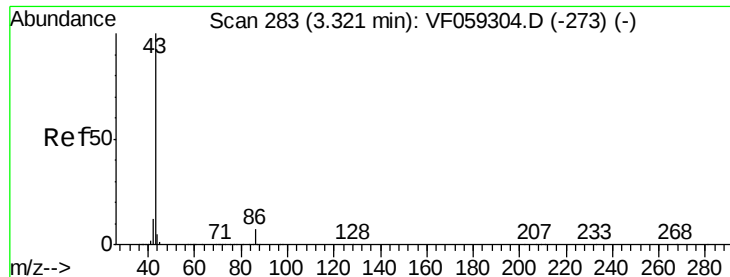
45 100

43 55.2 44.6 66.8

87 19.1 14.3 21.5

59 11.3 7.5 11.3#





#23

Vinyl Acetate

Concen: 249.916 ug/l

RT: 3.29 min Scan# 280

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

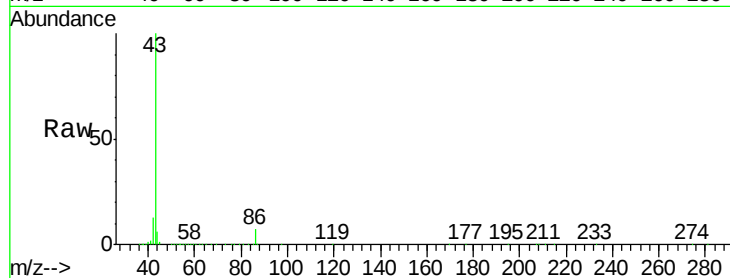
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 43 Resp: 1048336

Ion Ratio Lower Upper

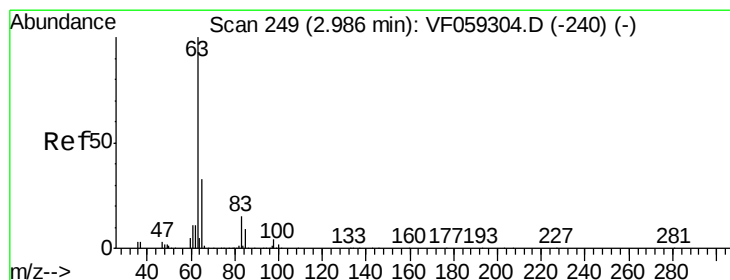
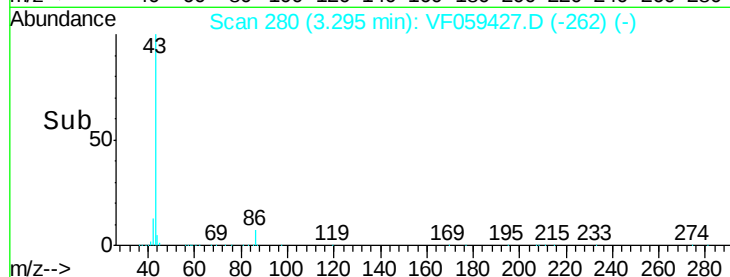
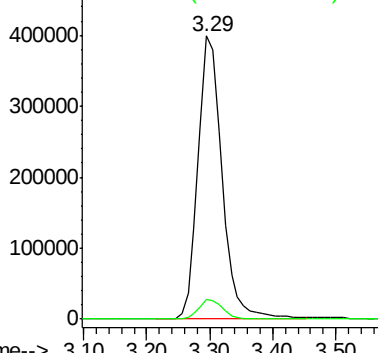
43 100

86 6.7 5.8 8.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0



#24

1,1-Dichloroethane

Concen: 49.314 ug/l

RT: 2.97 min Scan# 247

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

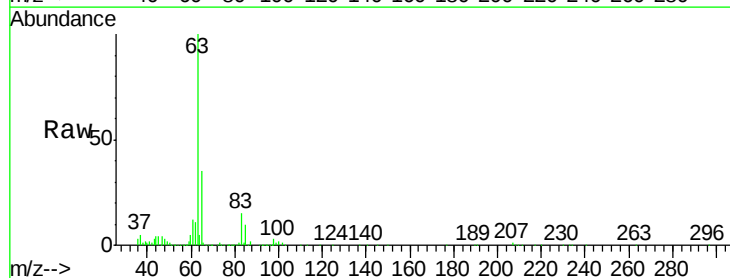
Tgt Ion: 63 Resp: 201388

Ion Ratio Lower Upper

63 100

98 2.9 2.0 6.0

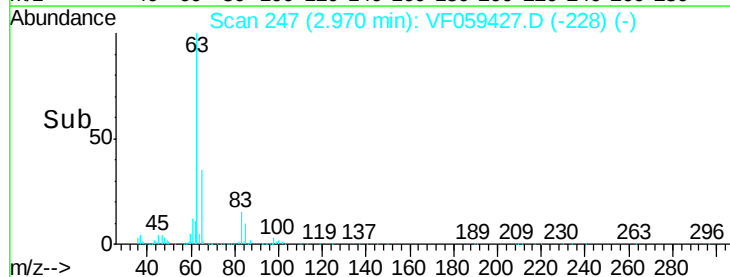
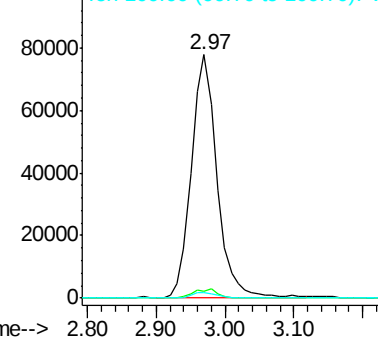
100 2.4 1.3 3.9

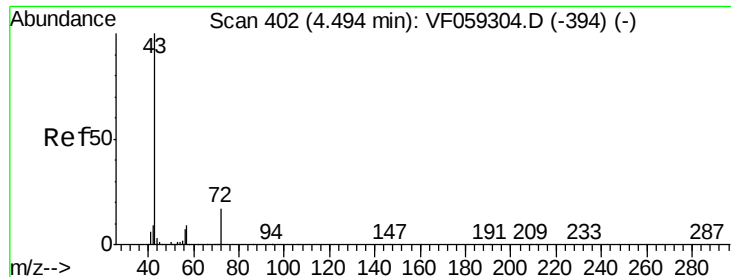


Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0





#25

2-Butanone

Concen: 278.427 ug/l

RT: 4.47 min Scan# 399

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

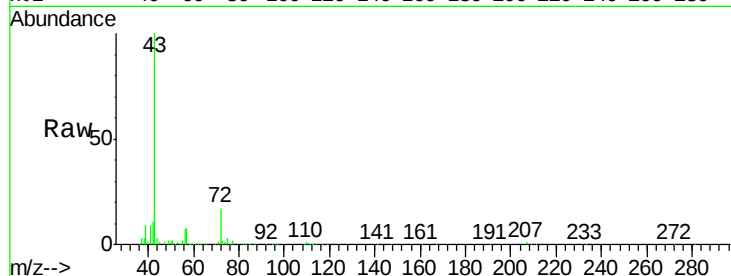
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 43 Resp: 292140

Ion Ratio Lower Upper

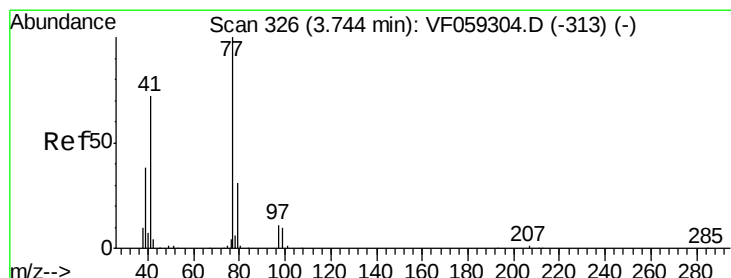
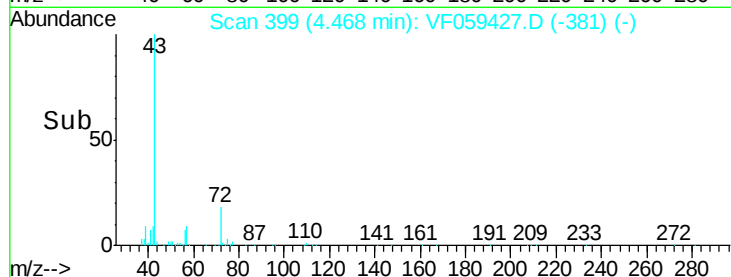
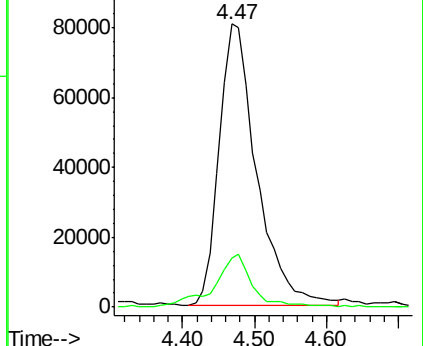
43 100

72 17.5 14.4 21.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#26

2,2-Dichloropropane

Concen: 51.704 ug/l

RT: 3.72 min Scan# 323

Delta R.T. -0.03 min

Lab File: VF059427.D

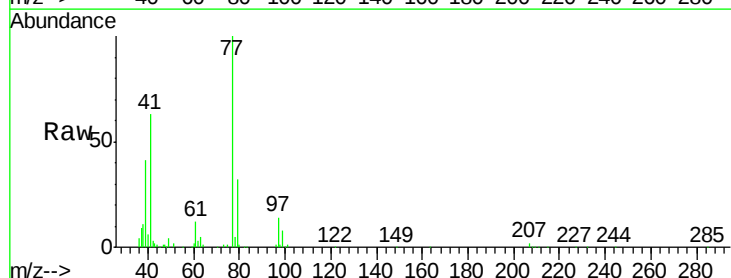
Acq: 5 Jul 2018 11:43

Tgt Ion: 77 Resp: 145634

Ion Ratio Lower Upper

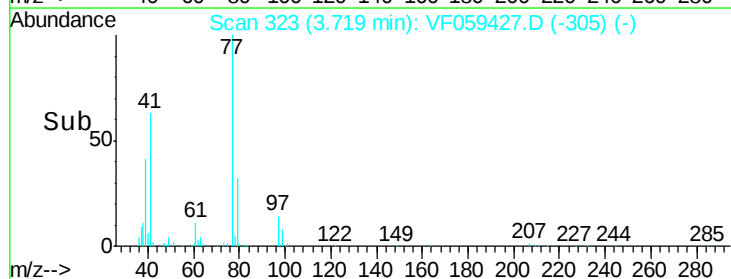
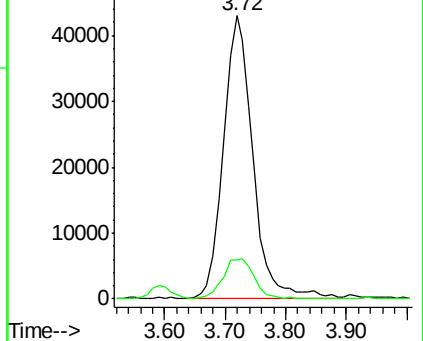
77 100

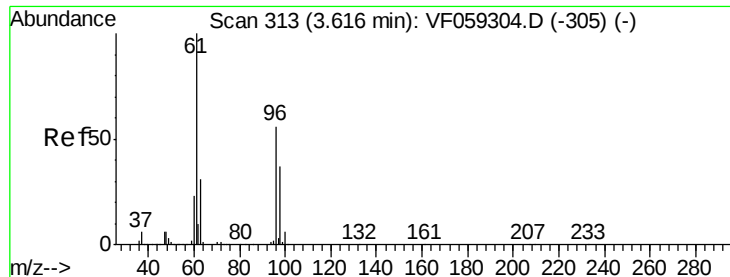
97 13.9 8.0 23.8



Abundance Ion 77.00 (76.70 to 77.70): VF0

Ion 97.00 (96.70 to 97.70): VF0



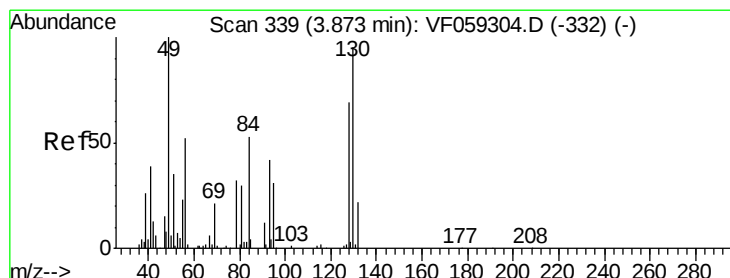
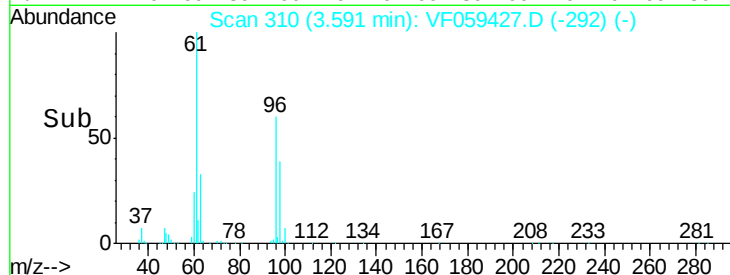
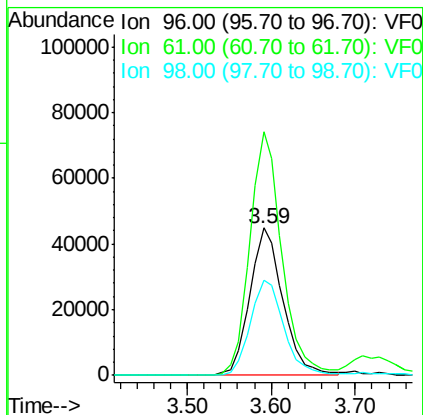
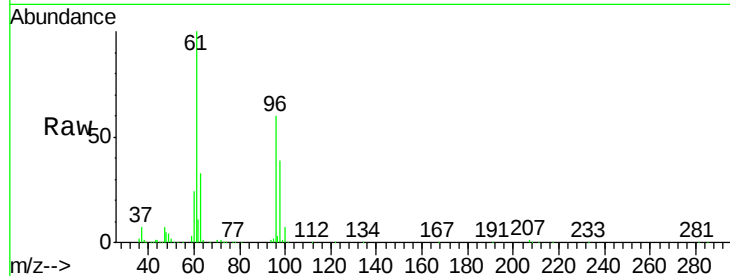


#27

cis-1,2-Dichloroethene  
Concen: 48.302 ug/l  
RT: 3.59 min Scan# 310  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampleId :

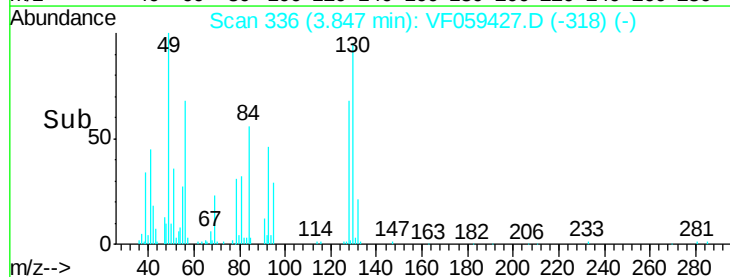
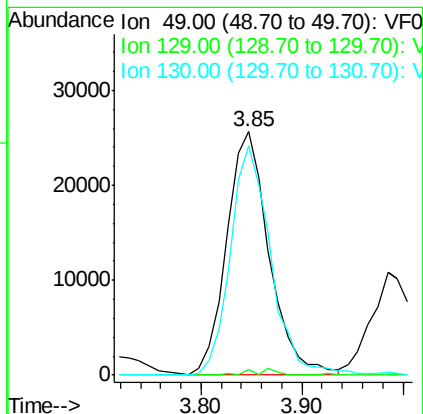
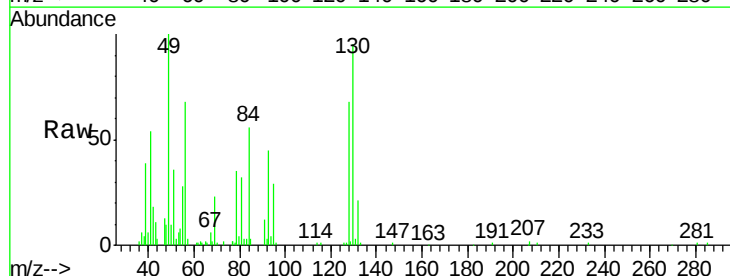
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 165.3 | 0.0   | 355.4 |
| 98      | 64.7  | 0.0   | 131.0 |

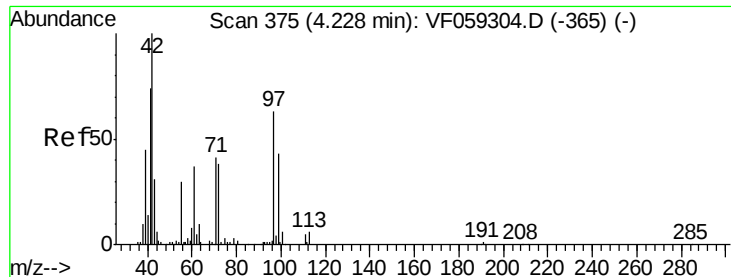


#28

Bromochloromethane  
Concen: 47.728 ug/l  
RT: 3.85 min Scan# 336  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 129     | 2.2   | 0.0   | 6.4   |
| 130     | 94.5  | 75.1  | 112.7 |

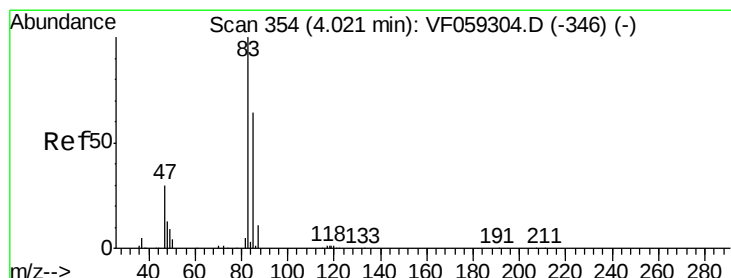
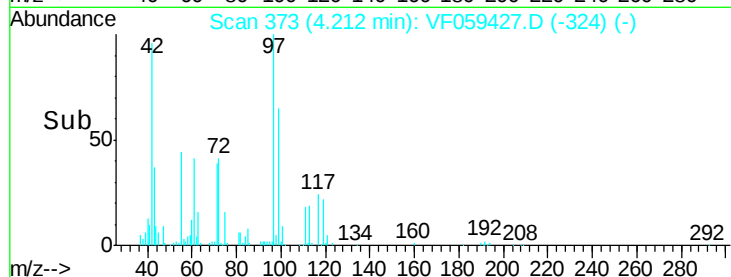
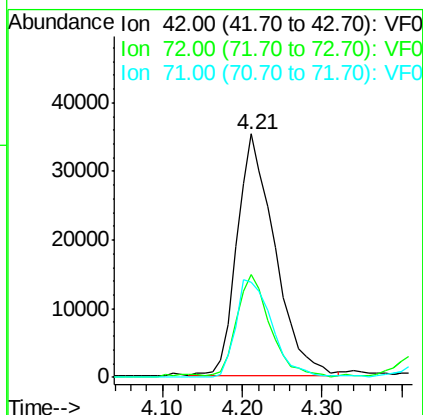
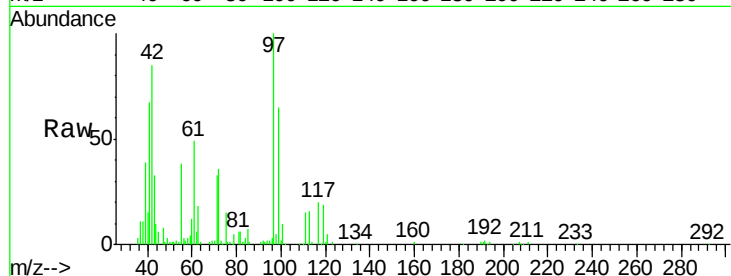




#29  
Tetrahydrofuran  
Concen: 260.064 ug/l  
RT: 4.21 min Scan# 373  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

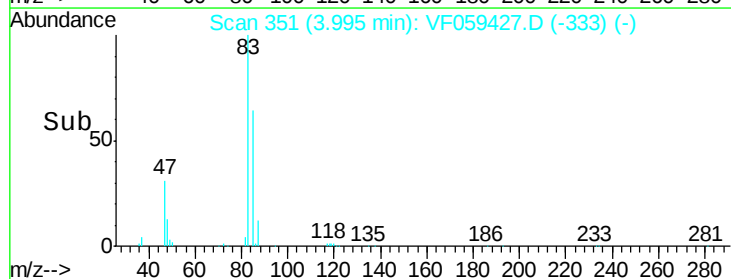
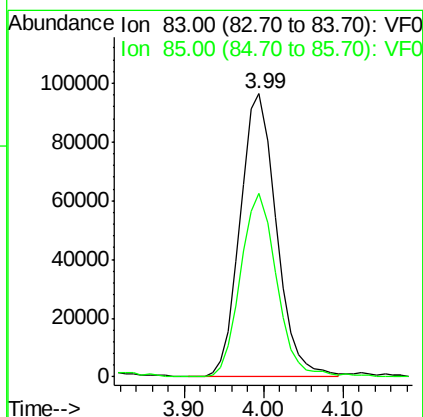
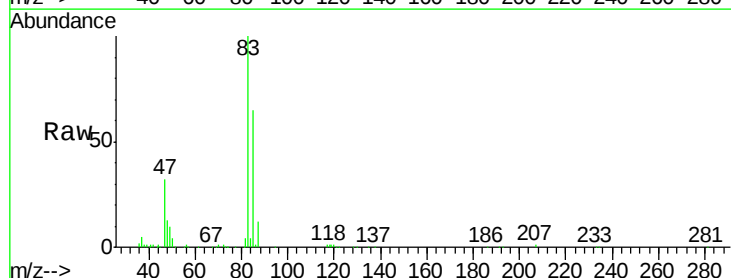
Instrument :  
MSVOA\_F  
ClientSampleId :

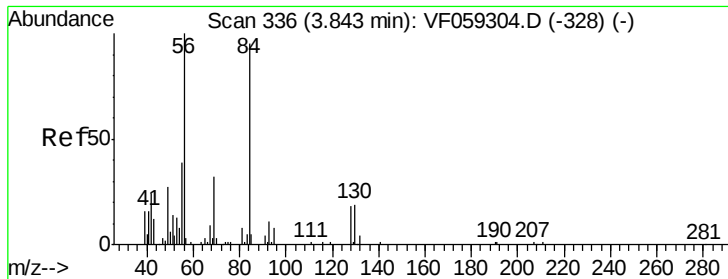
Tot Ion: 42 Resp: 115990  
Ion Ratio Lower Upper  
42 100  
72 37.6 30.5 45.7  
71 38.8 32.5 48.7



#30  
Chloroform  
Concen: 51.202 ug/l  
RT: 3.99 min Scan# 351  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 83 Resp: 302706  
Ion Ratio Lower Upper  
83 100  
85 64.9 51.3 76.9

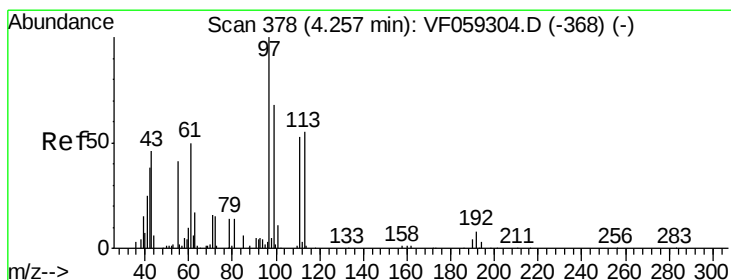
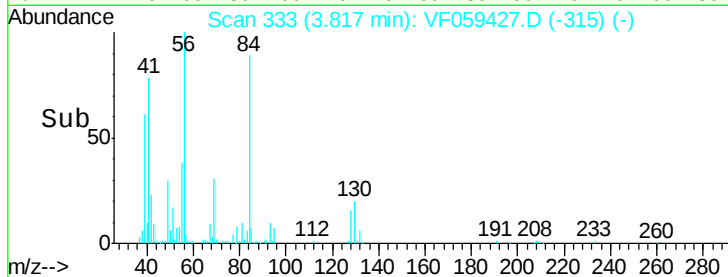
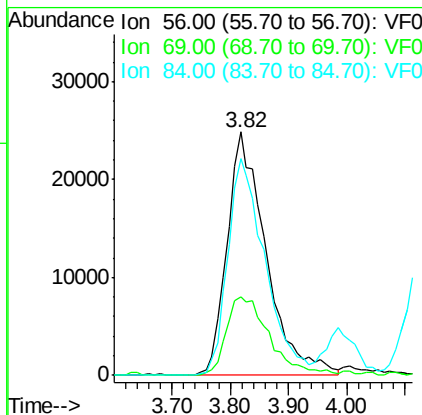
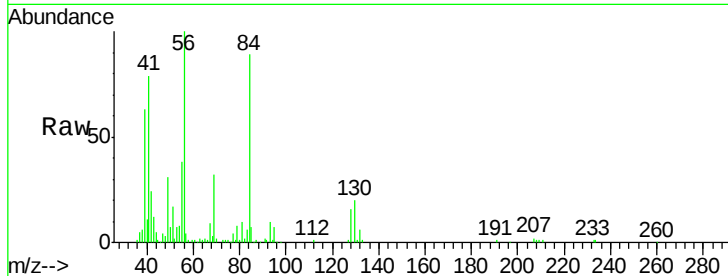




#31  
Cyclohexane  
Concen: 43.305 ug/l  
RT: 3.82 min Scan# 333  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

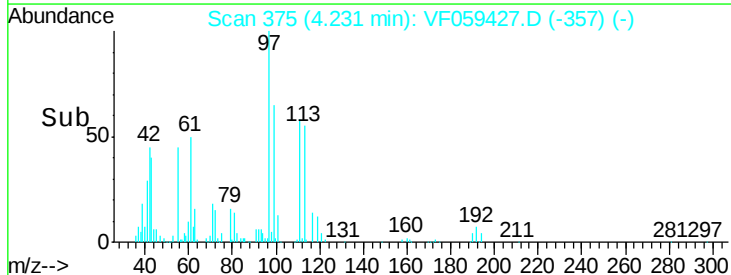
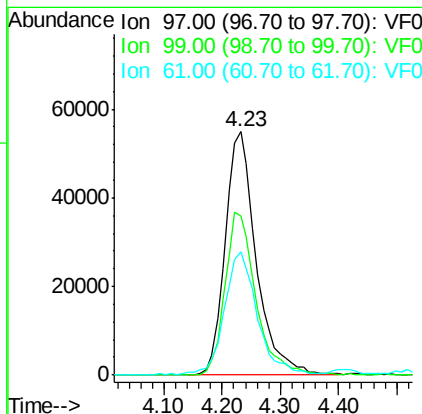
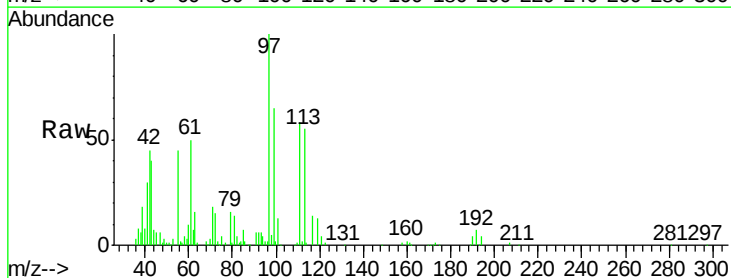
Instrument :  
MSVOA\_F  
ClientSampleId :

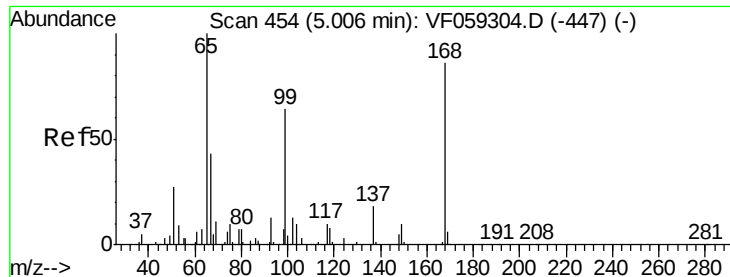
Tot Ion: 56 Resp: 115853  
Ion Ratio Lower Upper  
56 100  
69 32.1 25.8 38.8  
84 89.0 75.6 113.4



#32  
1,1,1-Trichloroethane  
Concen: 47.168 ug/l  
RT: 4.23 min Scan# 375  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 97 Resp: 204062  
Ion Ratio Lower Upper  
97 100  
99 65.1 54.1 81.1  
61 50.4 41.2 61.8





#33

1,2-Dichloroethane-d4

Concen: 49.646 ug/l

RT: 4.98 min Scan# 451

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

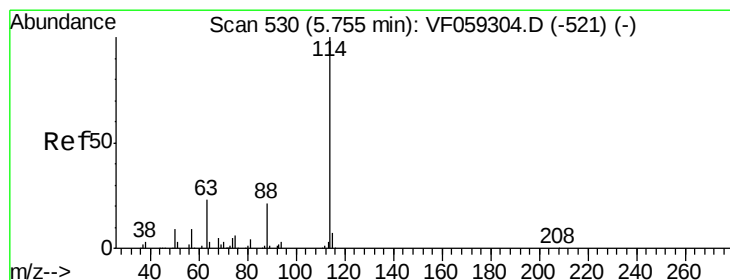
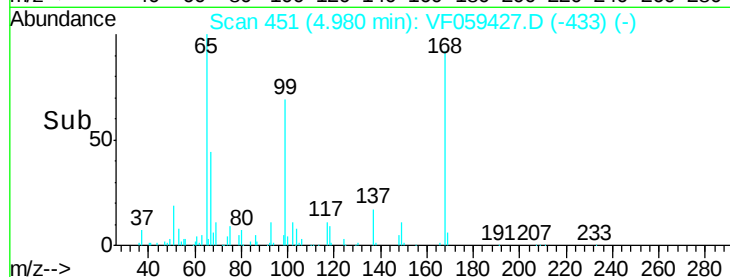
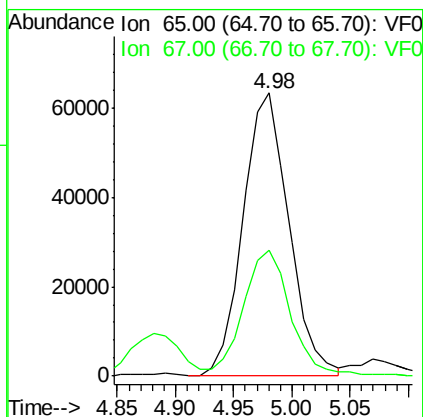
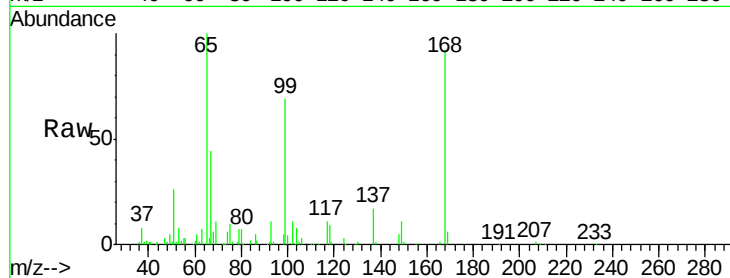
ClientSampleId :

Tot Ion: 65 Resp: 172390

Ion Ratio Lower Upper

65 100

67 44.4 0.0 96.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.73 min Scan# 527

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

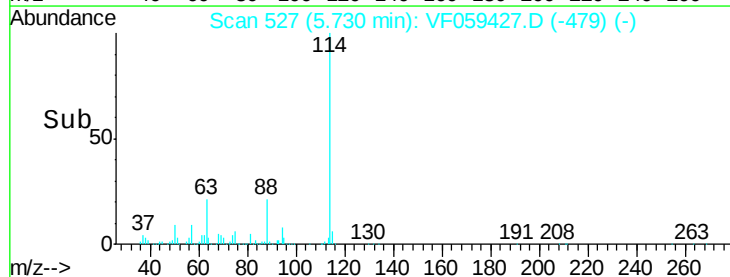
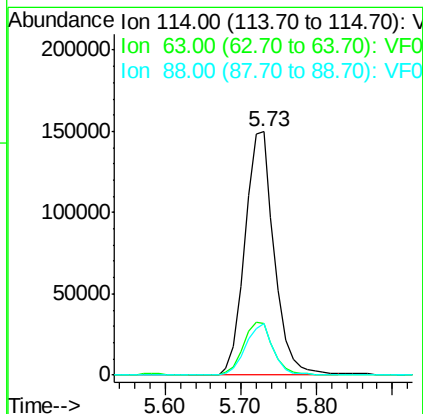
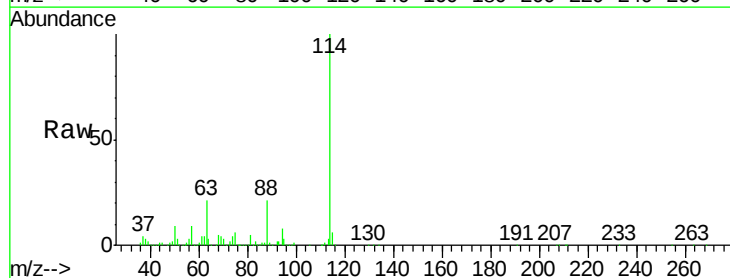
Tgt Ion: 114 Resp: 403347

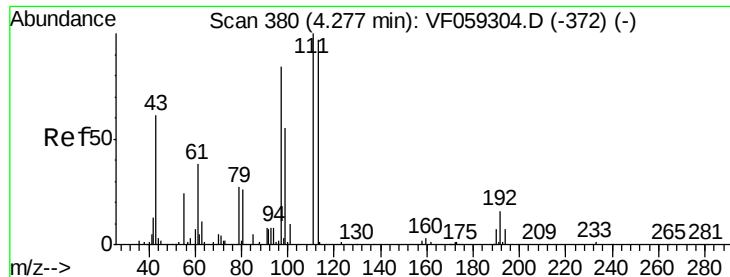
Ion Ratio Lower Upper

114 100

63 21.2 0.0 45.8

88 21.0 0.0 41.2

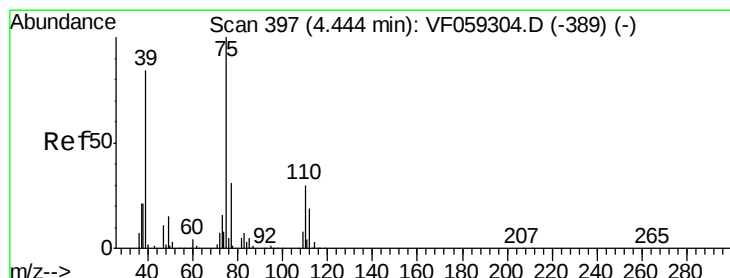
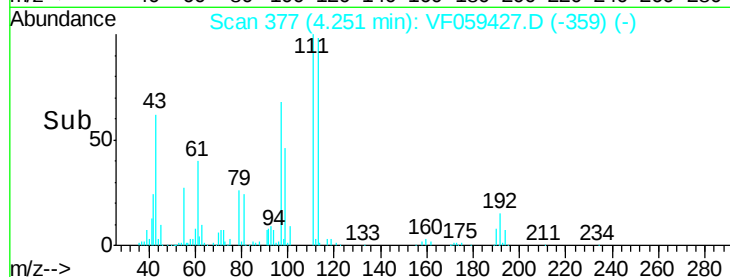
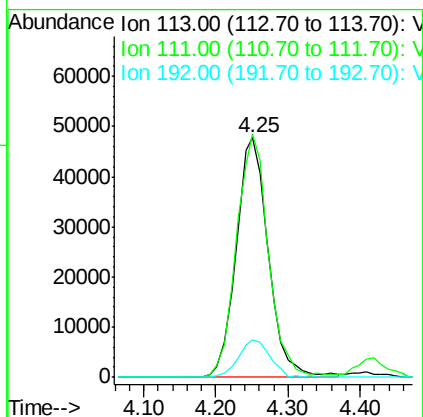
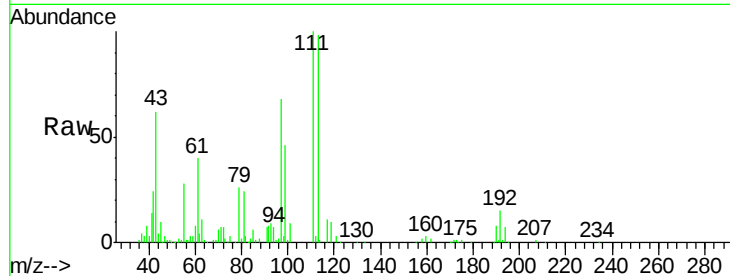




#35  
 Dibromofluoromethane  
 Concen: 50.294 ug/l  
 RT: 4.25 min Scan# 377  
 Delta R.T. -0.03 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

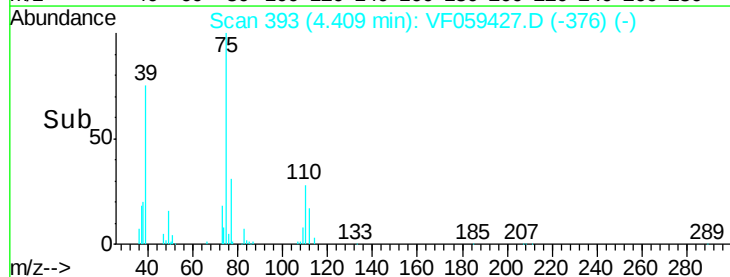
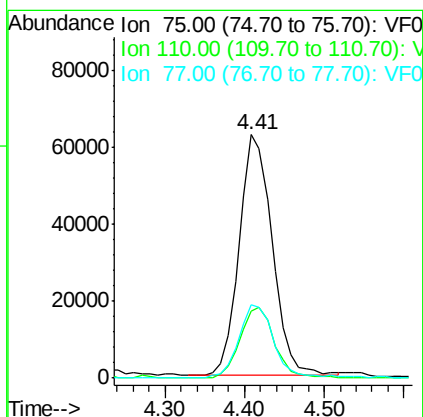
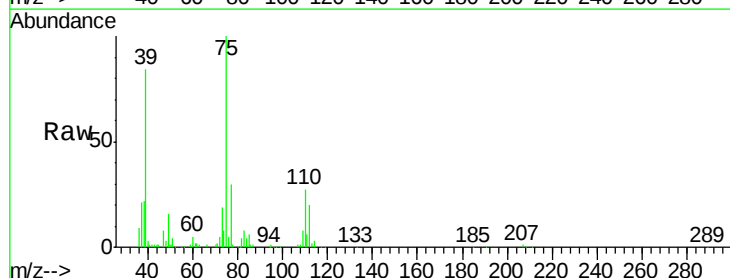
Instrument :  
 MSVOA\_F  
 ClientSampleId :

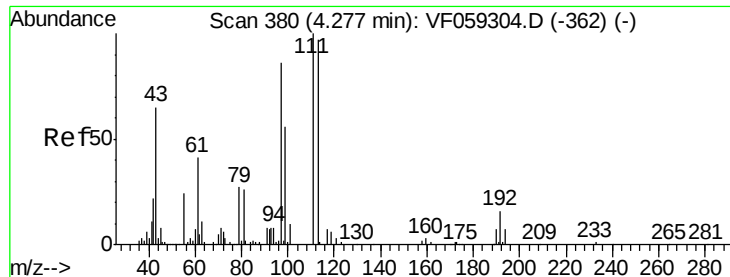
Tot Ion:113 Resp: 148222  
 Ion Ratio Lower Upper  
 113 100  
 111 101.7 82.1 123.1  
 192 15.6 13.0 19.6



#36  
 1,1-Dichloropropene  
 Concen: 51.007 ug/l  
 RT: 4.41 min Scan# 393  
 Delta R.T. -0.04 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion: 75 Resp: 179726  
 Ion Ratio Lower Upper  
 75 100  
 110 27.3 14.8 44.4  
 77 29.9 25.2 37.8

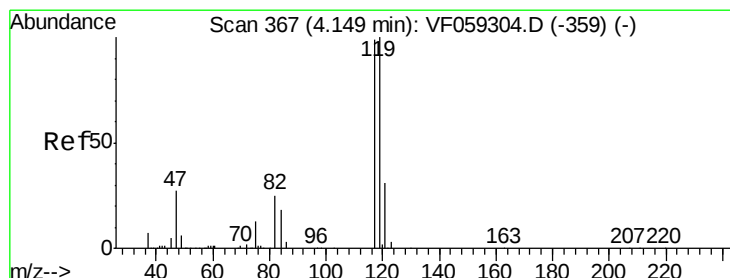
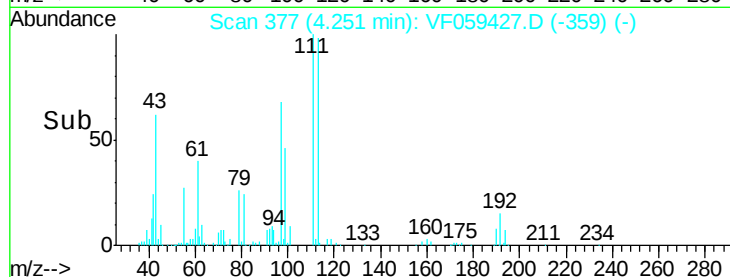
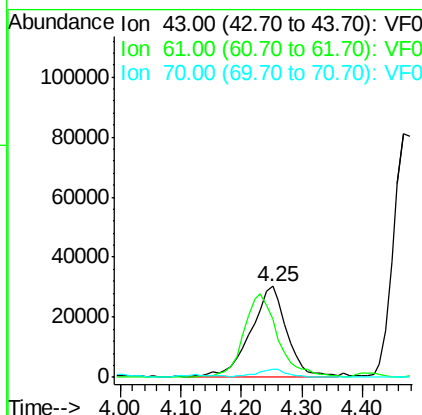
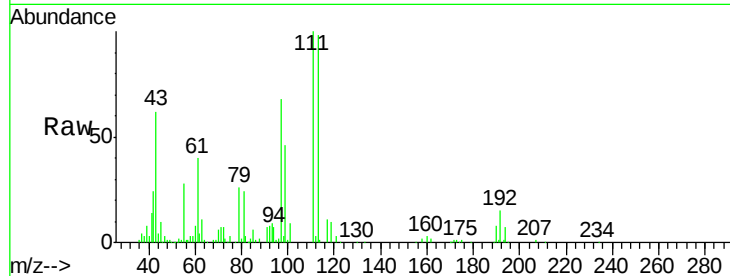




#37  
Ethyl Acetate  
Concen: 54.865 ug/l  
RT: 4.25 min Scan# 377  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

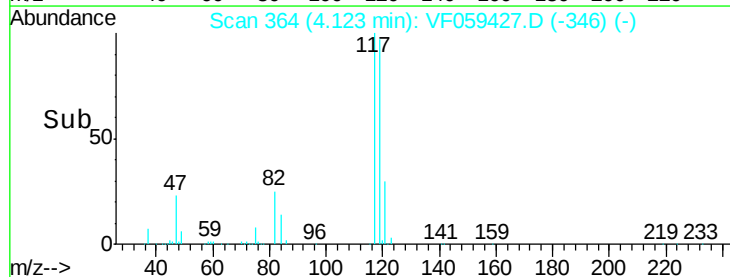
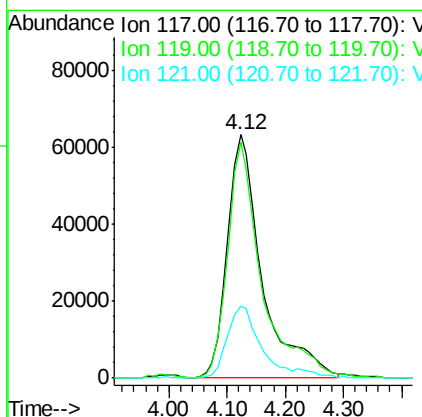
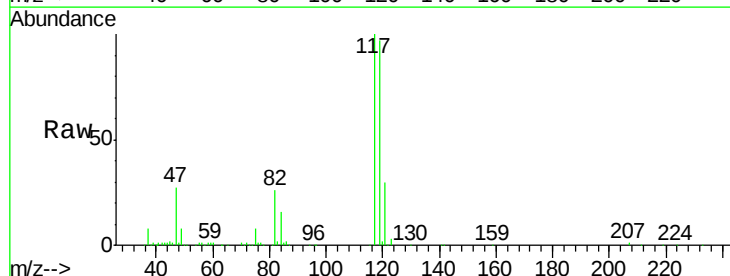
Instrument :  
MSVOA\_F  
ClientSampled :

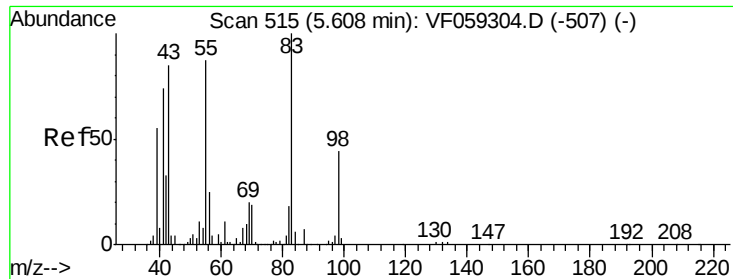
Tot Ion: 43 Resp: 123341  
Ion Ratio Lower Upper  
43 100  
61 64.5 50.1 75.1  
70 9.6 6.2 9.4#



#38  
Carbon Tetrachloride  
Concen: 59.372 ug/l  
RT: 4.12 min Scan# 364  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 117 Resp: 264008  
Ion Ratio Lower Upper  
117 100  
119 97.0 81.0 121.4  
121 29.7 24.7 37.1

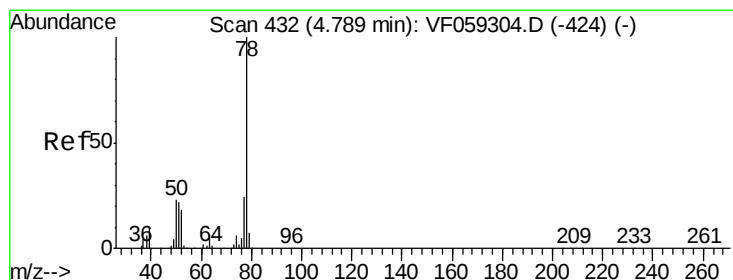
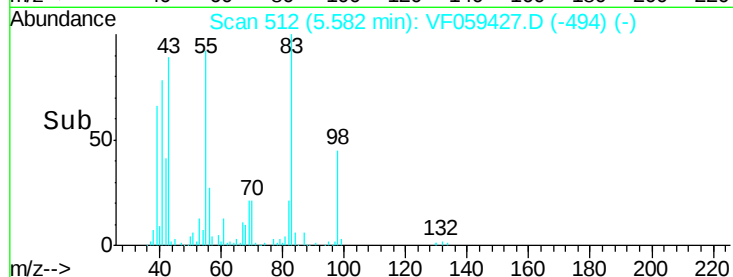
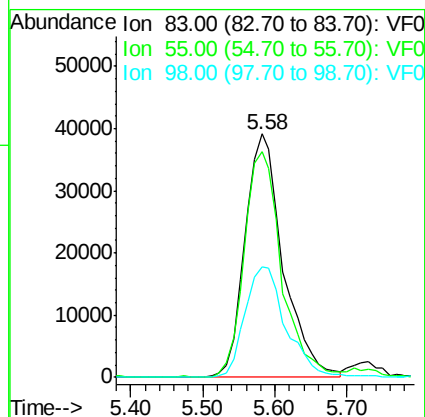
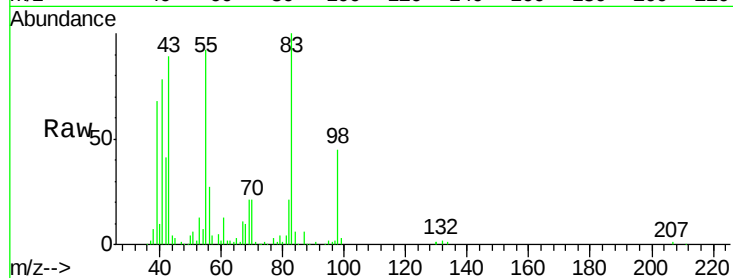




#39  
Methvlcvclohexane  
Concen: 46.222 ug/l  
RT: 5.58 min Scan# 512  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

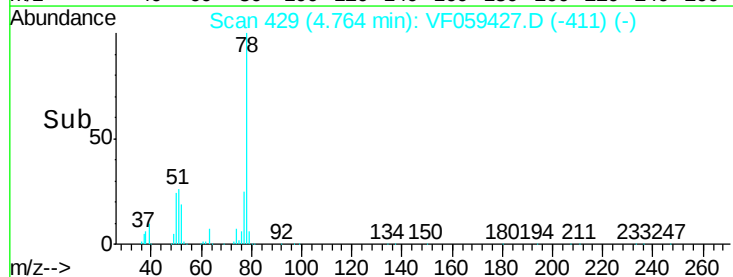
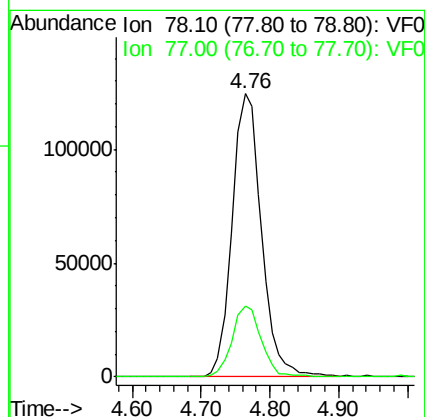
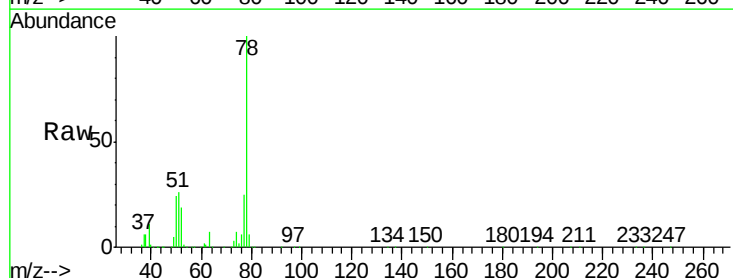
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 83 Resp: 144325  
Ion Ratio Lower Upper  
83 100  
55 92.4 69.2 103.8  
98 45.5 35.0 52.6



#40  
Benzene  
Concen: 46.997 ug/l  
RT: 4.76 min Scan# 429  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 78 Resp: 367161  
Ion Ratio Lower Upper  
78 100  
77 25.1 19.6 29.4

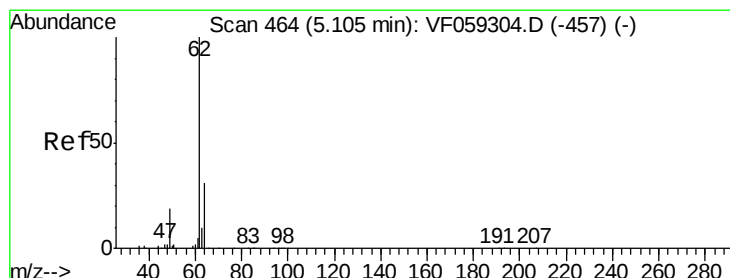
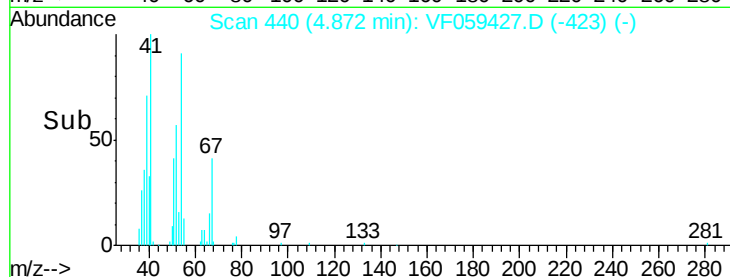
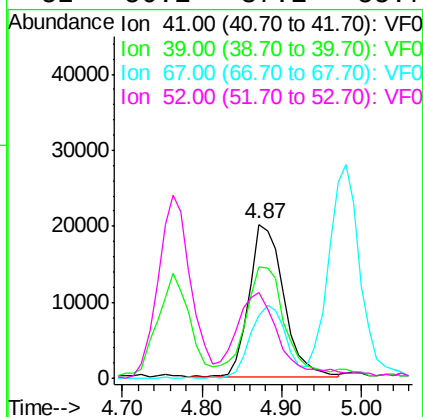
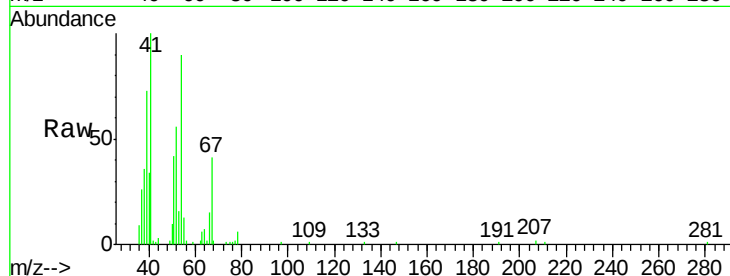




#41  
Methacrylonitrile  
Concen: 49.822 ug/l  
RT: 4.87 min Scan# 440  
Delta R.T. -0.04 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

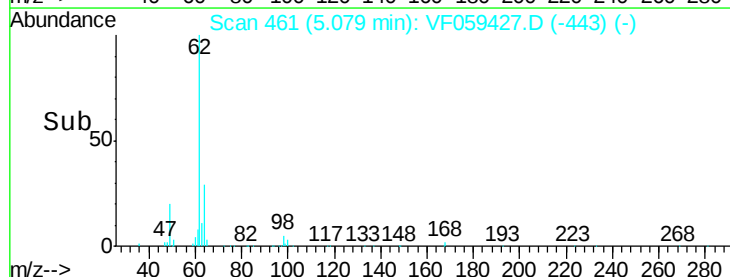
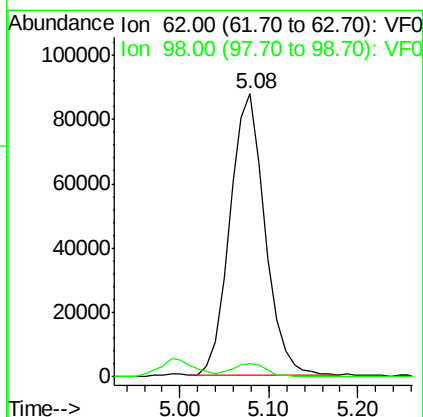
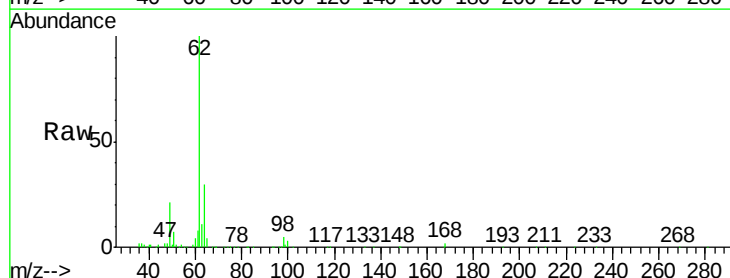
Instrument :  
MSVOA\_F  
ClientSampleId :

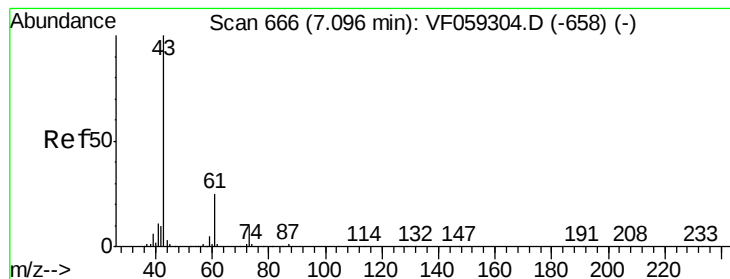
Tot Ion: 41 Resp: 59883  
Ion Ratio Lower Upper  
41 100  
39 72.6 50.0 75.0  
67 40.6 37.0 55.6  
52 56.1 37.1 55.7#



#42  
1,2-Dichloroethane  
Concen: 52.632 ug/l  
RT: 5.08 min Scan# 461  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 62 Resp: 240270  
Ion Ratio Lower Upper  
62 100  
98 4.5 0.0 11.4



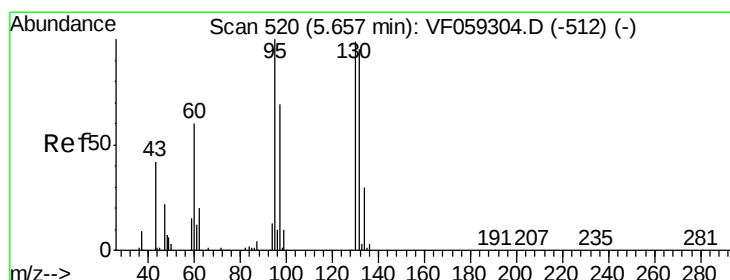
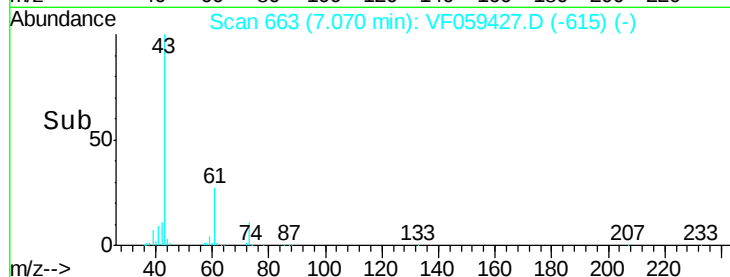
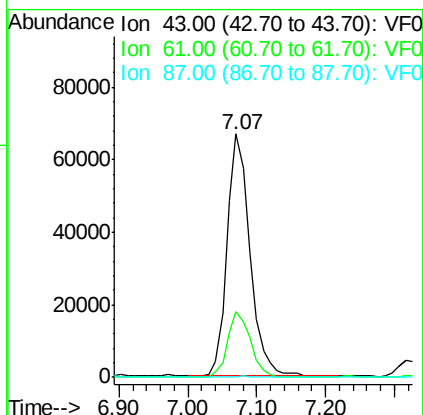
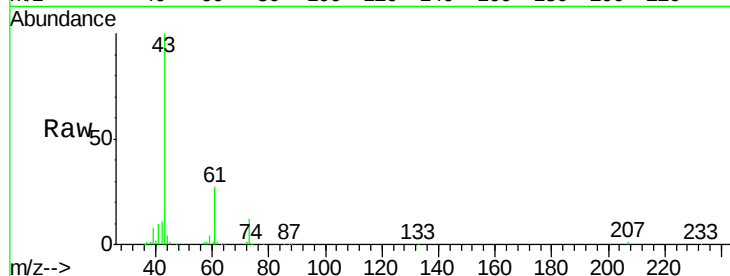


#43

Isopropyl Acetate  
 Concen: 52.695 ug/l  
 RT: 7.07 min Scan# 663  
 Delta R.T. -0.03 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Instrument :  
 MSVOA\_F  
 ClientSampleId :

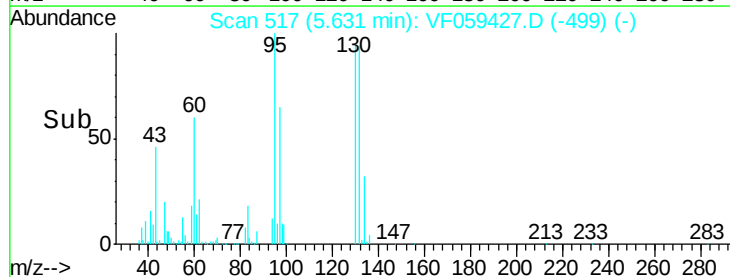
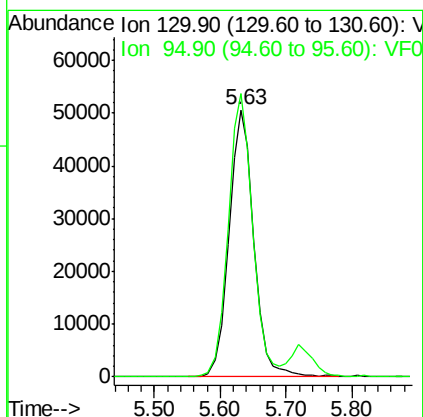
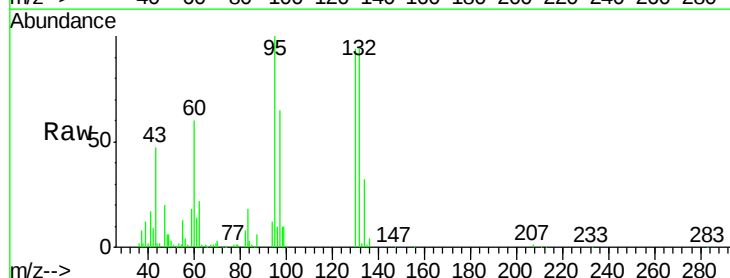
Tot Ion: 43 Resp: 154657  
 Ion Ratio Lower Upper  
 43 100  
 61 27.1 19.7 29.5  
 87 0.2 0.5 0.7#

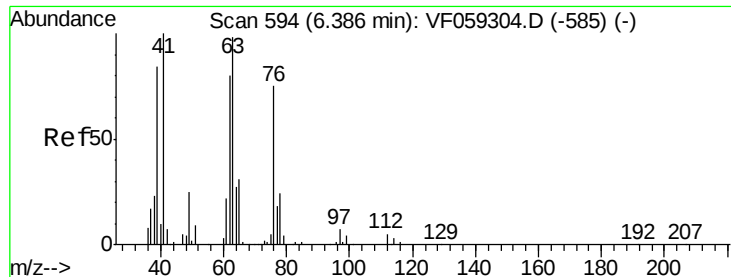


#44

Trichloroethene  
 Concen: 49.508 ug/l  
 RT: 5.63 min Scan# 517  
 Delta R.T. -0.03 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion: 130 Resp: 132682  
 Ion Ratio Lower Upper  
 130 100  
 95 106.0 0.0 202.4





#45

1,2-Dichloropropane

Concen: 50.570 ug/l

RT: 6.36 min Scan# 591

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

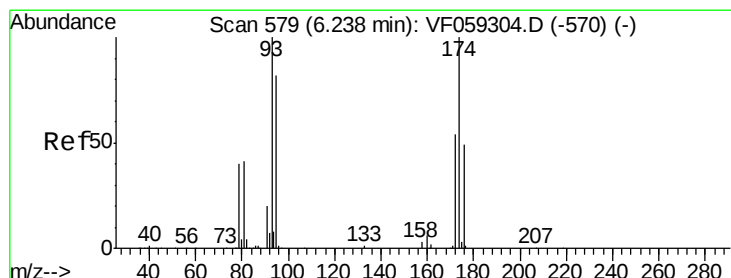
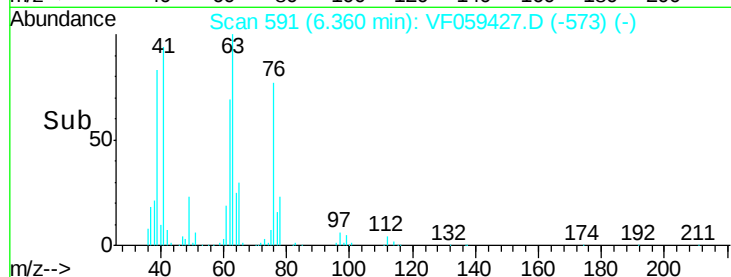
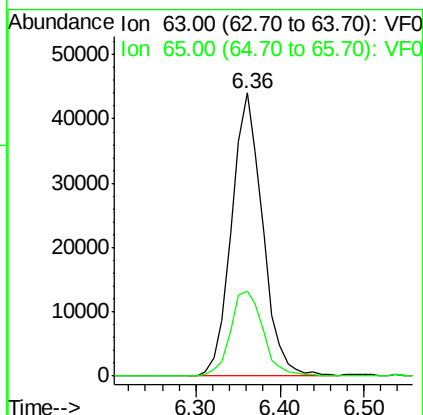
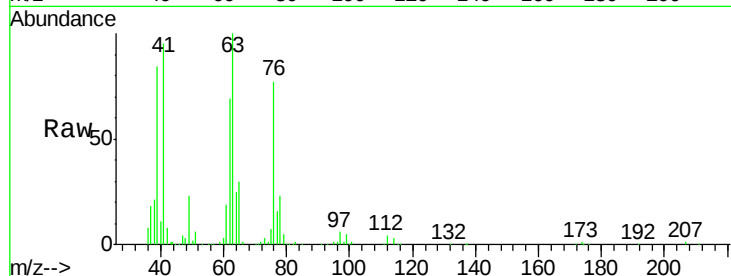
ClientSampleId :

Tot Ion: 63 Resp: 112878

Ion Ratio Lower Upper

63 100

65 30.2 25.3 37.9



#46

Dibromomethane

Concen: 53.307 ug/l

RT: 6.21 min Scan# 576

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

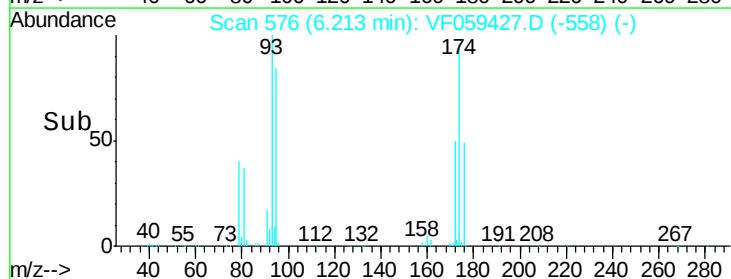
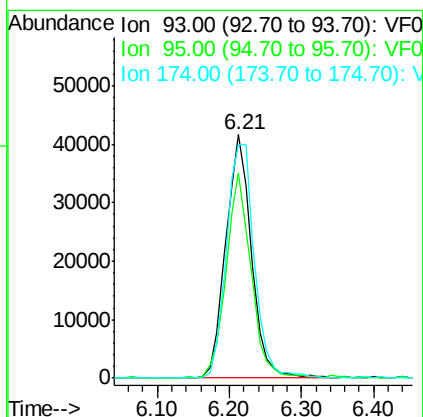
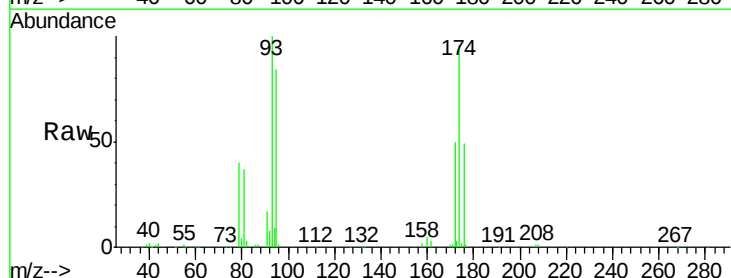
Tgt Ion: 93 Resp: 103274

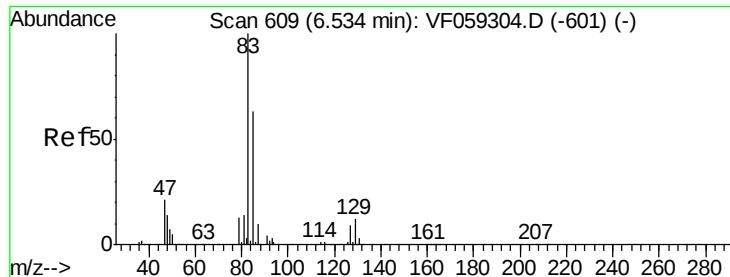
Ion Ratio Lower Upper

93 100

95 84.4 65.6 98.4

174 95.9 80.0 120.0





#47

Bromodichloromethane

Concen: 54.309 ug/l

RT: 6.51 min Scan# 606

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :  
MSVOA\_F  
ClientSampleId :

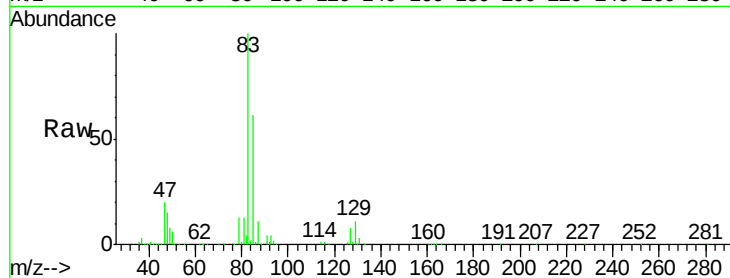
Tot Ion: 83 Resp: 254691

Ion Ratio Lower Upper

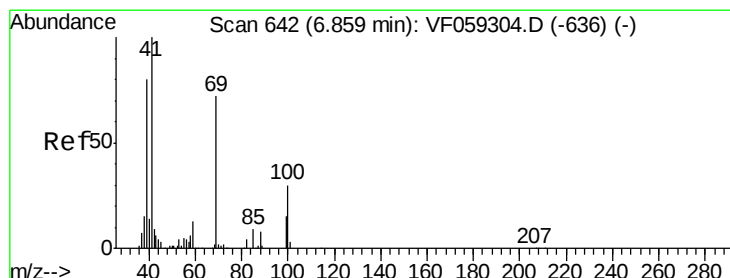
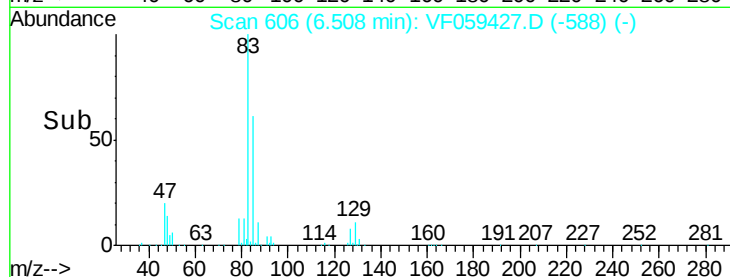
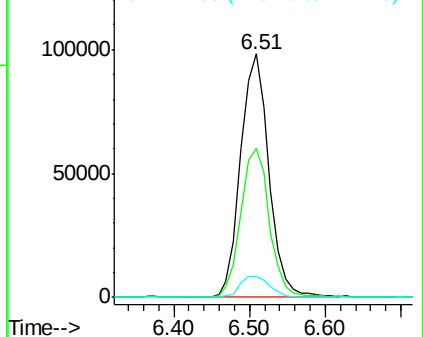
83 100

85 61.2 50.2 75.2

127 8.5 7.0 10.4



Abundance Ion 83.00 (82.70 to 83.70): VF0  
Ion 85.00 (84.70 to 85.70): VF0  
Ion 127.00 (126.70 to 127.70): V



#48

Methyl methacrylate

Concen: 55.667 ug/l

RT: 6.83 min Scan# 639

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

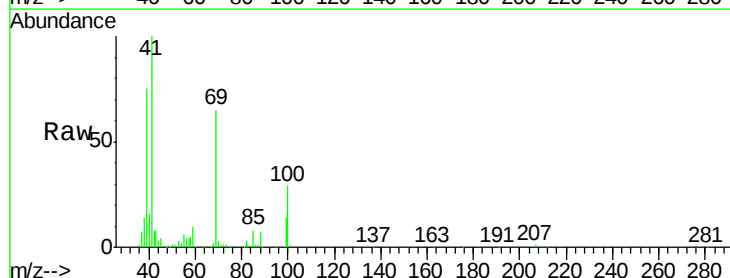
Tgt Ion: 41 Resp: 109500

Ion Ratio Lower Upper

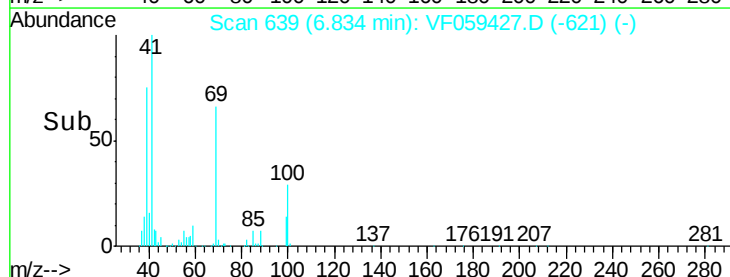
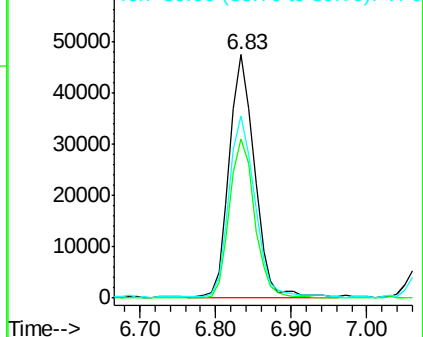
41 100

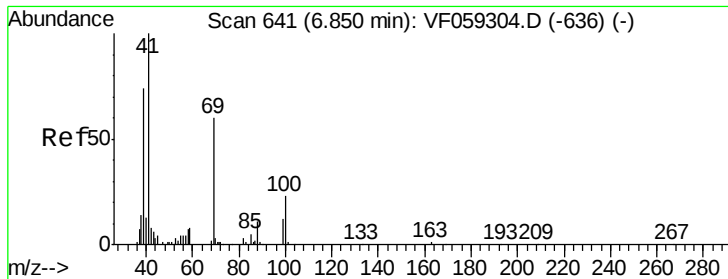
69 65.3 57.3 85.9

39 75.0 64.4 96.6



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

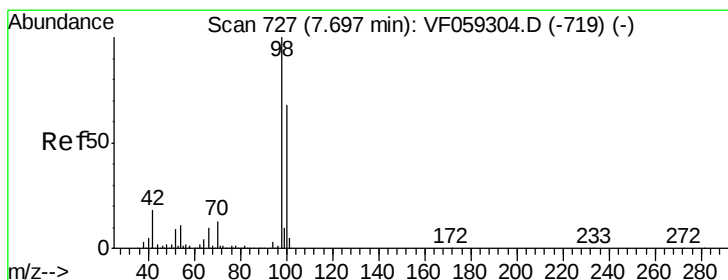
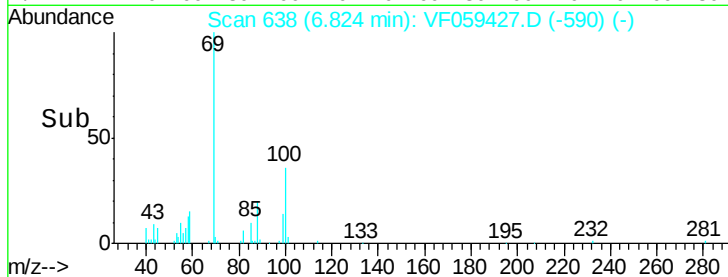
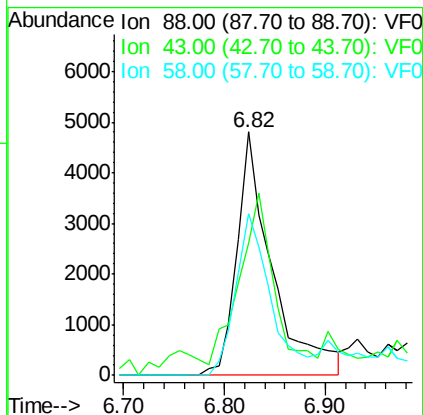
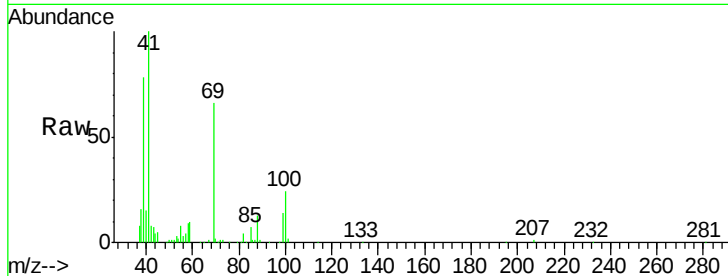




#49  
1,4-Dioxane  
Concen: 1112.206 ug/l  
RT: 6.82 min Scan# 638  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

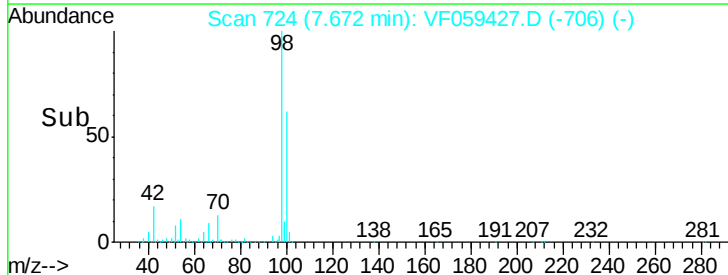
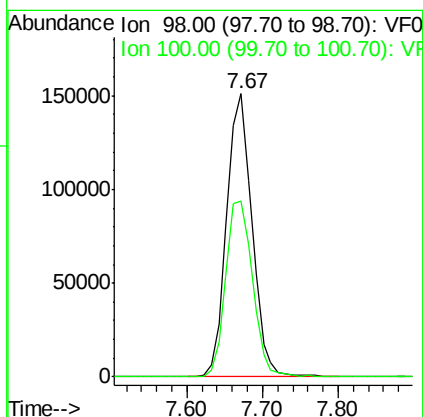
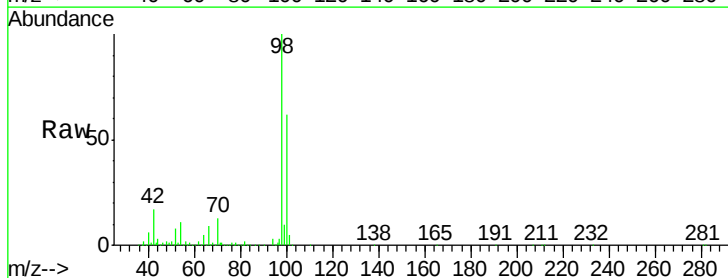
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 88 Resp: 11623  
Ion Ratio Lower Upper  
88 100  
43 54.1 50.6 75.8  
58 66.5 46.6 69.8



#50  
Toluene-d8  
Concen: 48.104 ug/l  
RT: 7.67 min Scan# 724  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 98 Resp: 351004  
Ion Ratio Lower Upper  
98 100  
100 61.9 54.6 82.0





#51

4-Methyl-2-Pentanone

Concen: 258.747 ug/l

RT: 8.37 min Scan# 795

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

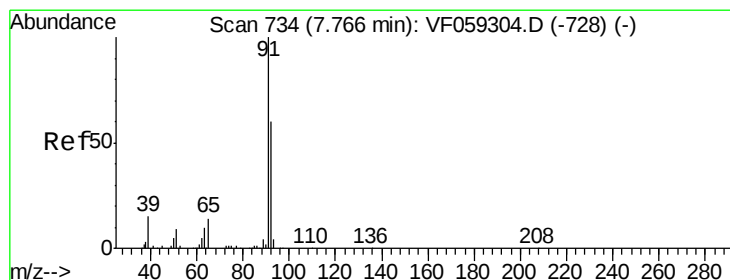
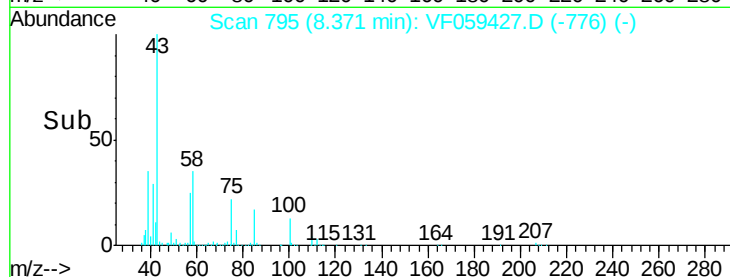
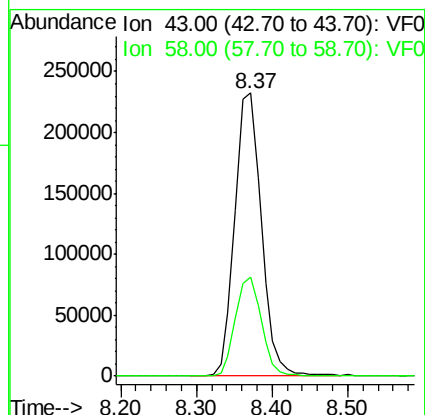
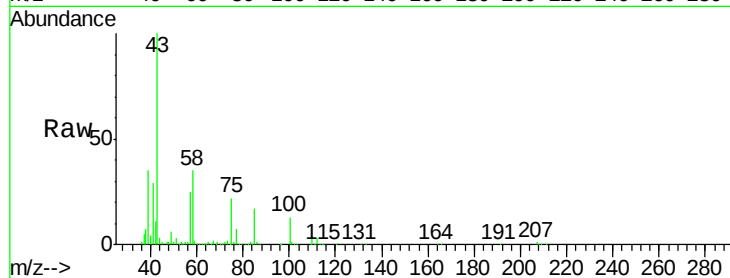
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 43 Resp: 562611

Ion Ratio Lower Upper

43 100

58 34.9 28.4 42.6



#52

Toluene

Concen: 47.785 ug/l

RT: 7.74 min Scan# 731

Delta R.T. -0.03 min

Lab File: VF059427.D

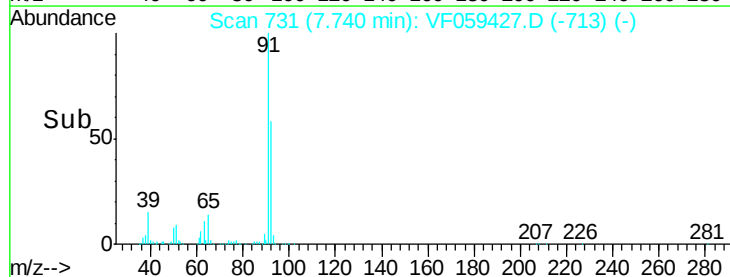
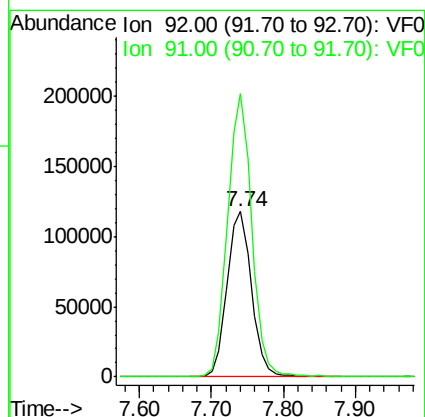
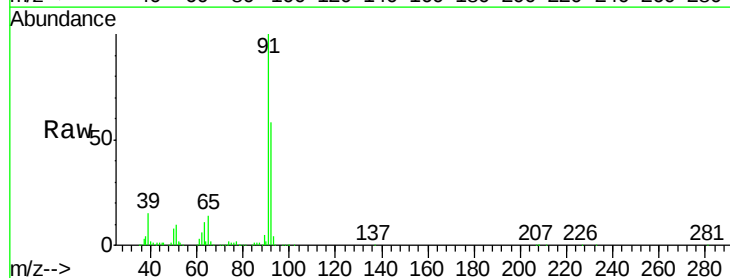
Acq: 5 Jul 2018 11:43

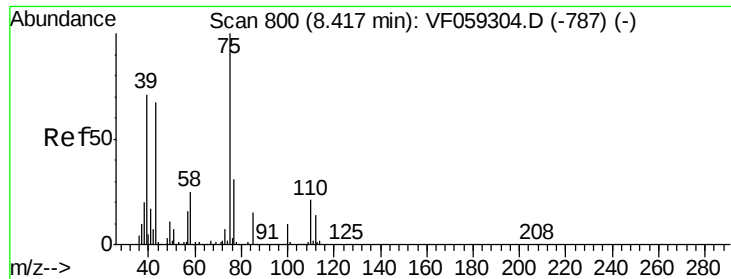
Tgt Ion: 92 Resp: 279346

Ion Ratio Lower Upper

92 100

91 171.2 132.8 199.2





#53

t-1,3-Dichloropropene

Concen: 52.026 ug/l

RT: 8.39 min Scan# 797

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

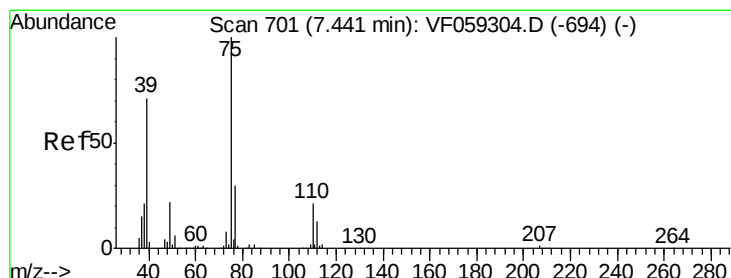
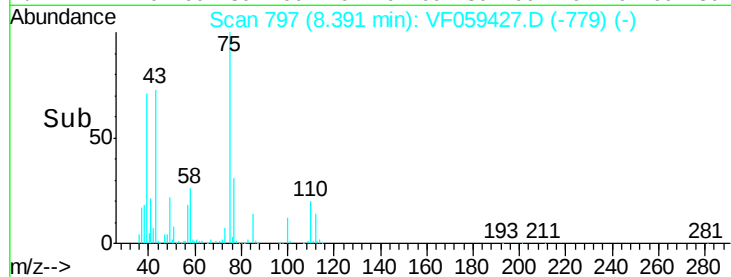
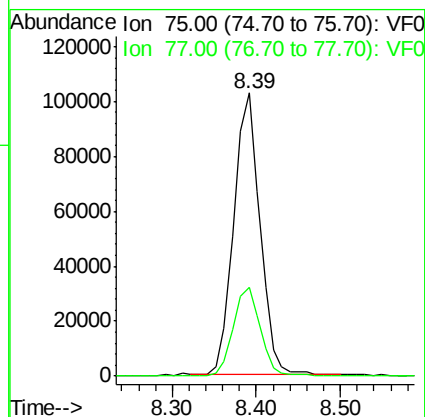
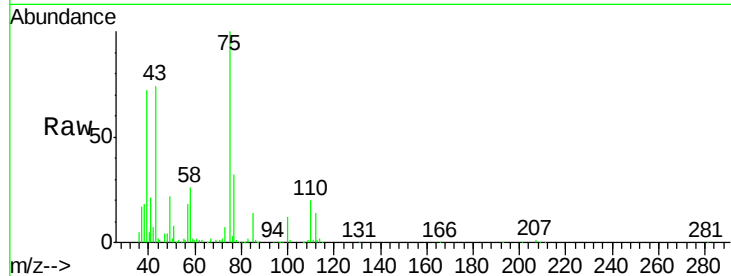
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 75 Resp: 222397

Ion Ratio Lower Upper

75 100

77 31.5 25.3 37.9



#54

cis-1,3-Dichloropropene

Concen: 52.208 ug/l

RT: 7.42 min Scan# 698

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

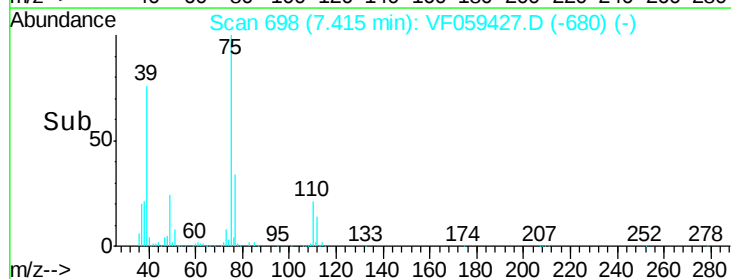
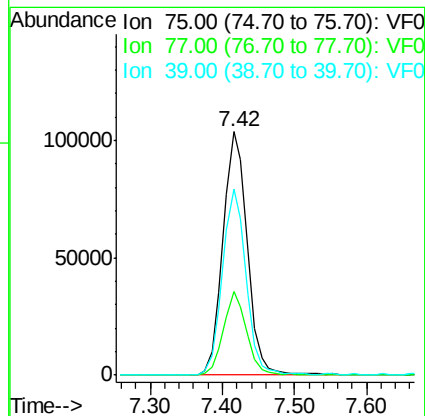
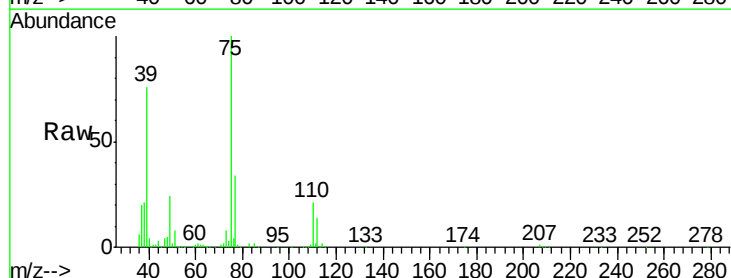
Tgt Ion: 75 Resp: 242414

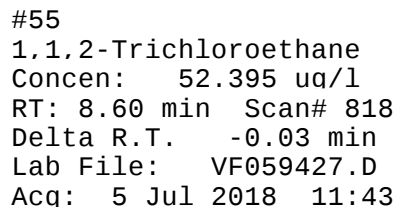
Ion Ratio Lower Upper

75 100

77 34.2 24.3 36.5

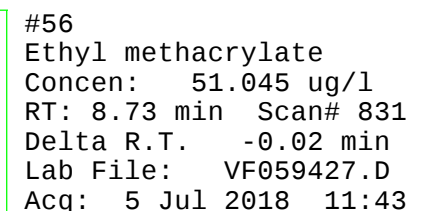
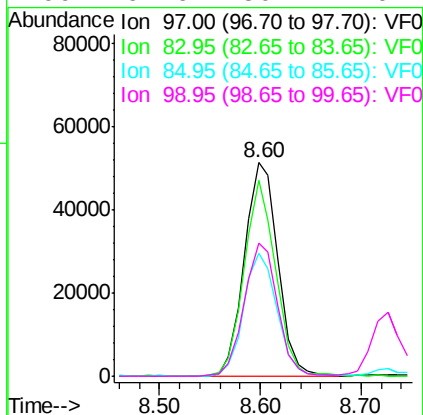
39 76.5 57.2 85.8



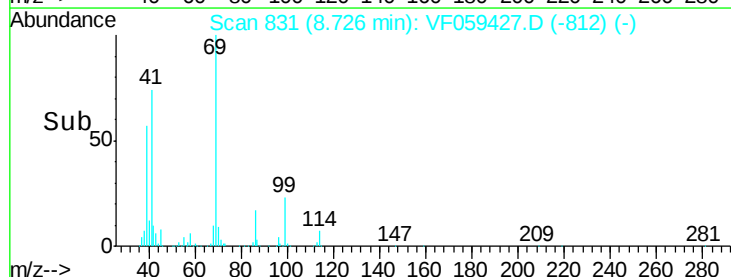
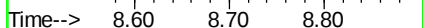
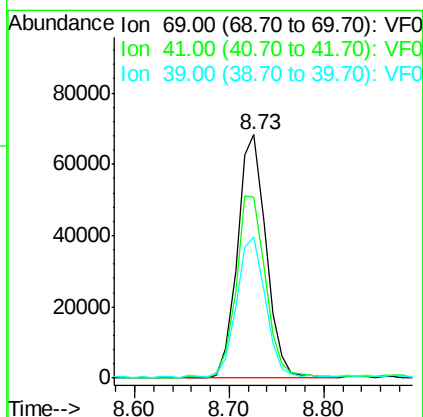


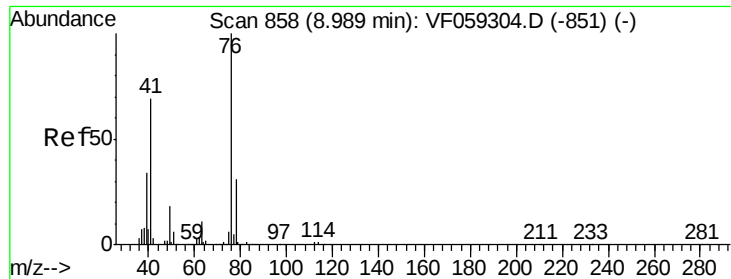
**Instrument :**  
MSVOA\_F  
**ClientSampleId :**

|     |         |       |        |
|-----|---------|-------|--------|
| Tat | Ion: 97 | Resp: | 118924 |
| Ion | Ratio   | Lower | Upper  |
| 97  | 100     |       |        |
| 83  | 91.5    | 73.8  | 110.8  |
| 85  | 57.7    | 45.5  | 68.3   |
| 99  | 62.6    | 50.7  | 76.1   |



|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion: 69 | Resp: | 143524 |
| Ion | Ratio   | Lower | Upper  |
| 69  | 100     |       |        |
| 41  | 74.4    | 60.3  | 90.5   |
| 39  | 58.2    | 42.2  | 63.4   |





#57

1,3-Dichloropropane

Concen: 51.429 ug/l

RT: 8.96 min Scan# 855

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

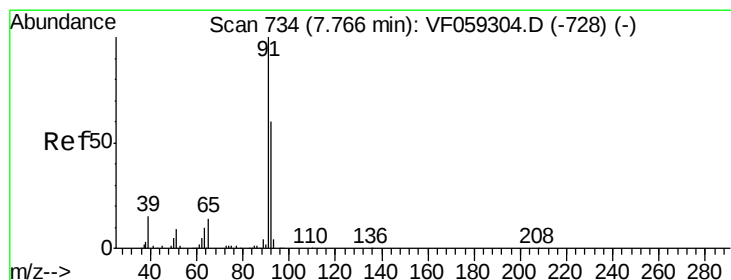
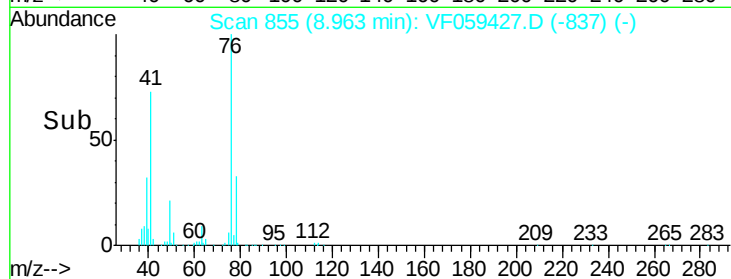
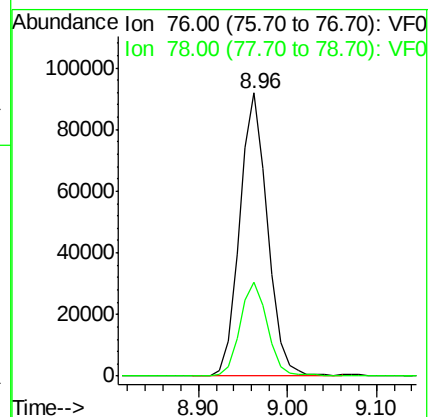
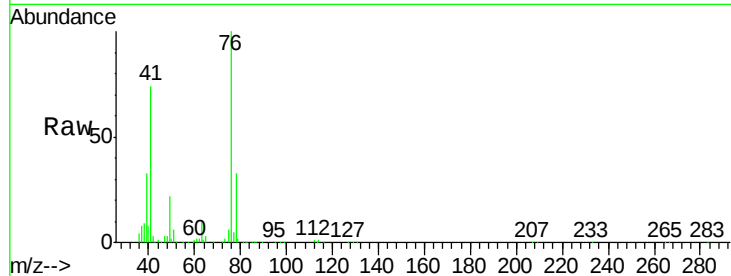
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 76 Resp: 200201

Ion Ratio Lower Upper

76 100

78 33.2 24.9 37.3



#58

2-Chloroethyl Vinyl ether

Concen: 249.862 ug/l

RT: 7.74 min Scan# 731

Delta R.T. -0.03 min

Lab File: VF059427.D

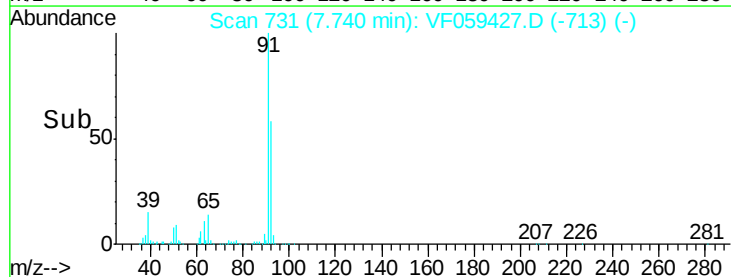
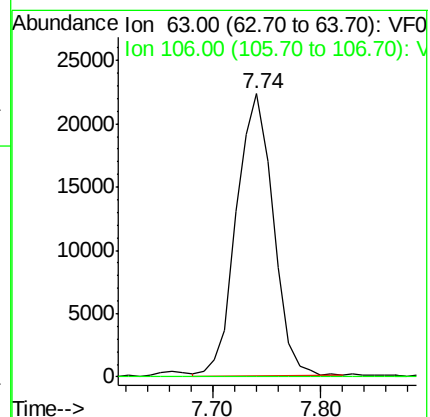
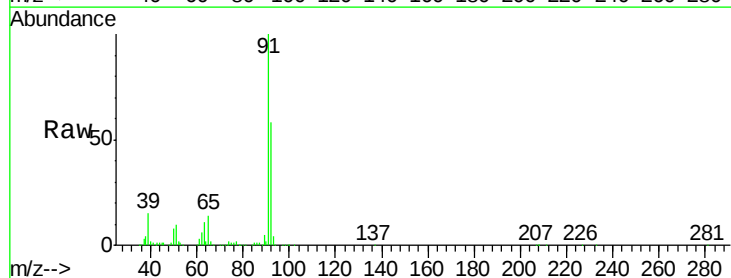
Acq: 5 Jul 2018 11:43

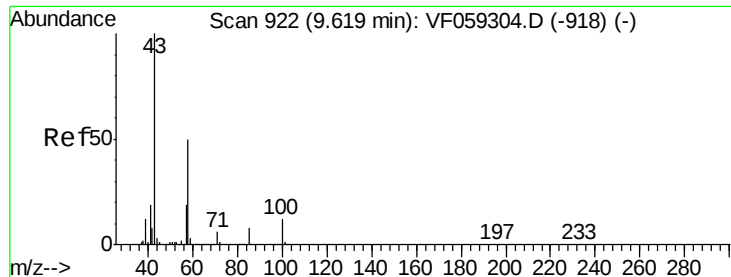
Tgt Ion: 63 Resp: 52690

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0

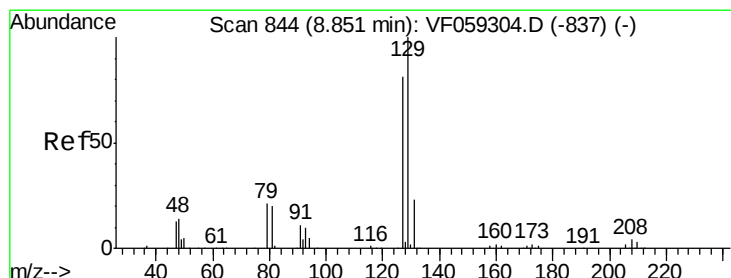
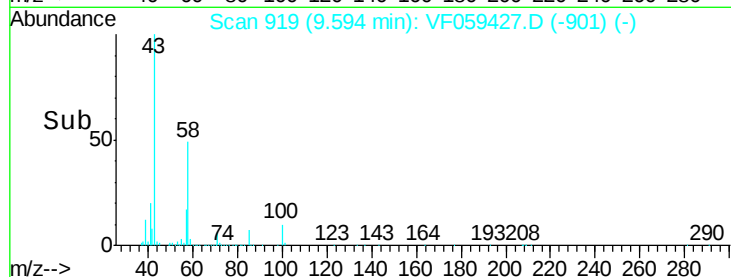
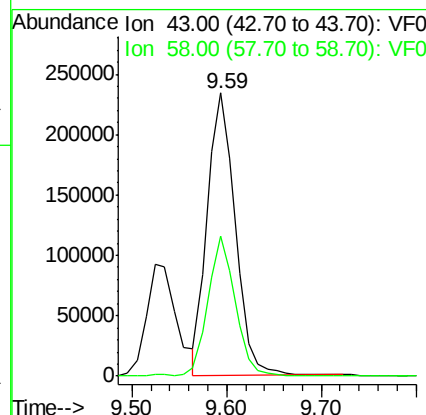
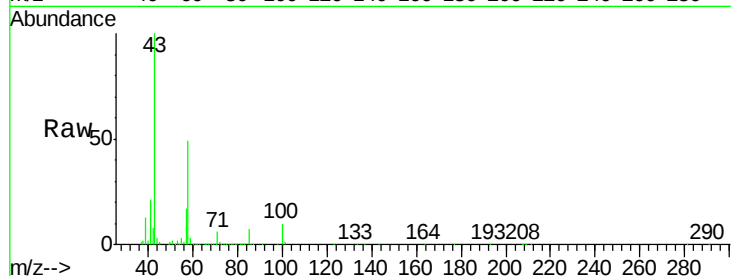




#59  
2-Hexanone  
Concen: 298.315 ug/l  
RT: 9.59 min Scan# 919  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

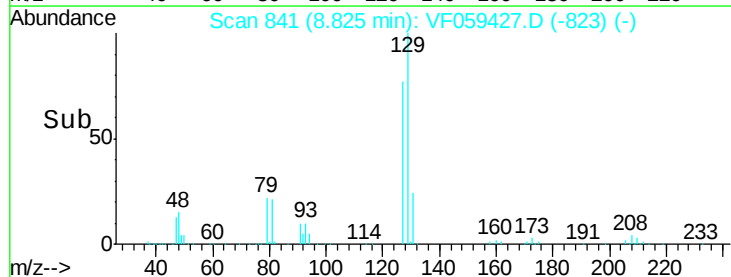
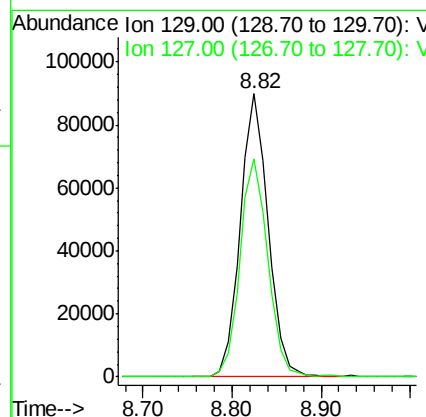
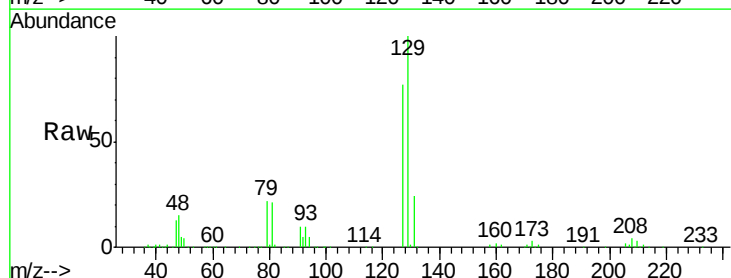
Instrument :  
MSVOA\_F  
ClientSampleId :

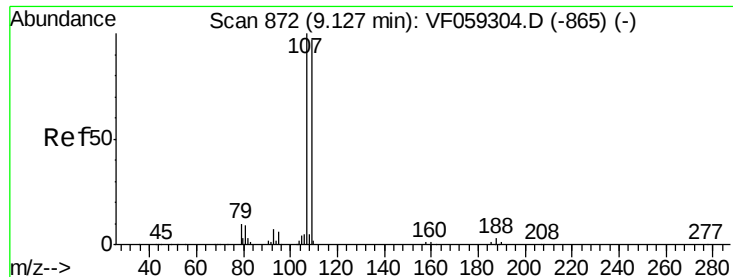
Tot Ion: 43 Resp: 481967  
Ion Ratio Lower Upper  
43 100  
58 49.4 23.3 69.9



#60  
Dibromochloromethane  
Concen: 55.944 ug/l  
RT: 8.82 min Scan# 841  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 129 Resp: 196035  
Ion Ratio Lower Upper  
129 100  
127 77.1 40.7 122.1





#61

1,2-Dibromoethane

Concen: 48.911 ug/l

RT: 9.10 min Scan# 869

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

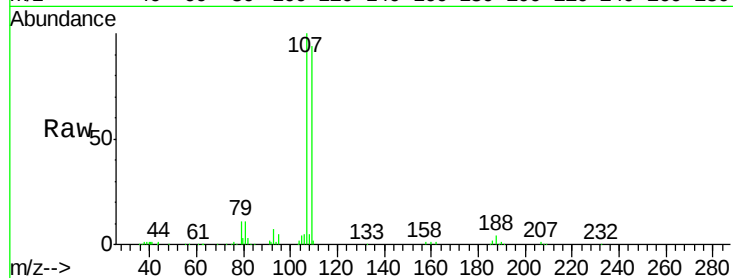
ClientSampleId :

Tot Ion:107 Resp: 134638

Ion Ratio Lower Upper

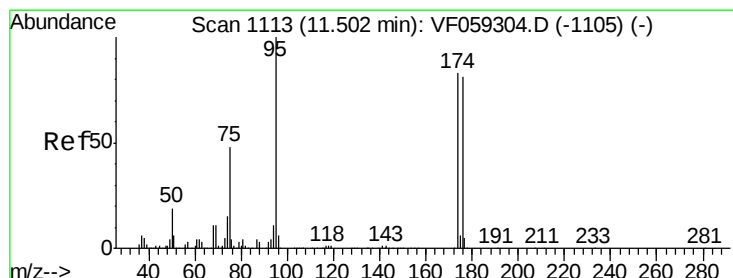
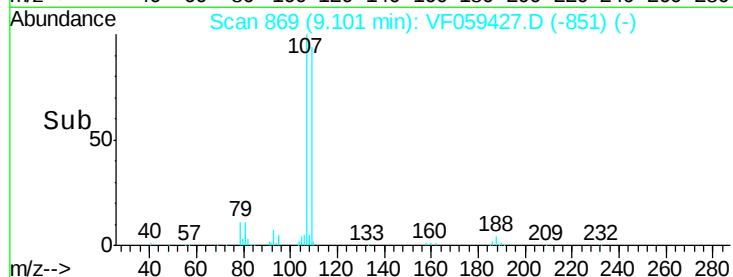
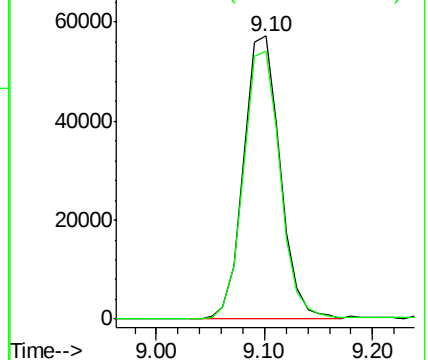
107 100

109 94.5 77.3 115.9



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V



#62

4-Bromofluorobenzene

Concen: 48.438 ug/l

RT: 11.49 min Scan# 1111

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

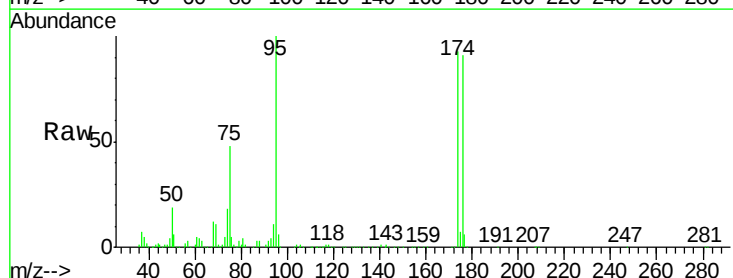
Tgt Ion: 95 Resp: 199372

Ion Ratio Lower Upper

95 100

174 93.0 0.0 165.2

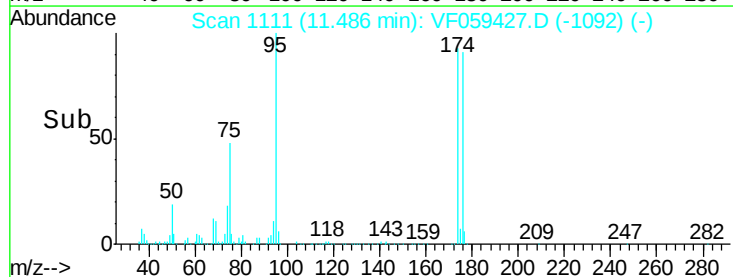
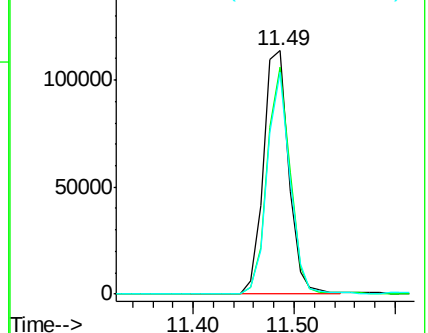
176 91.3 0.0 161.0

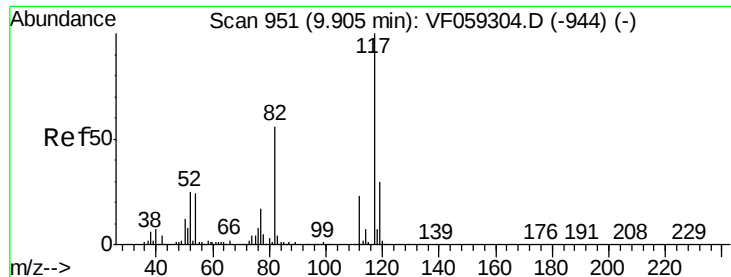


Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

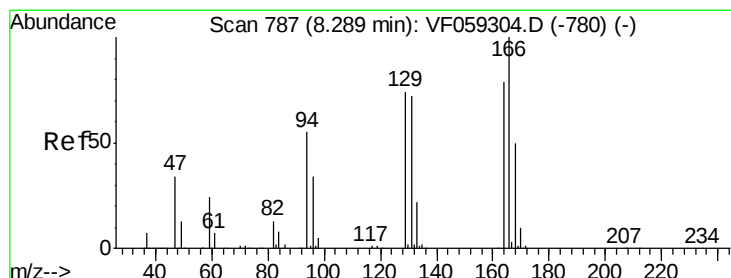
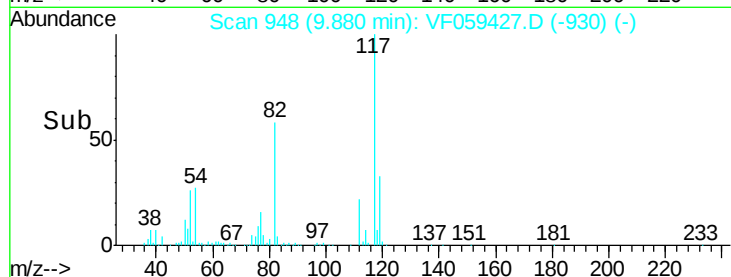
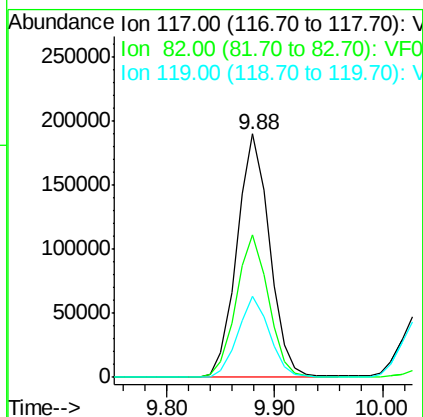
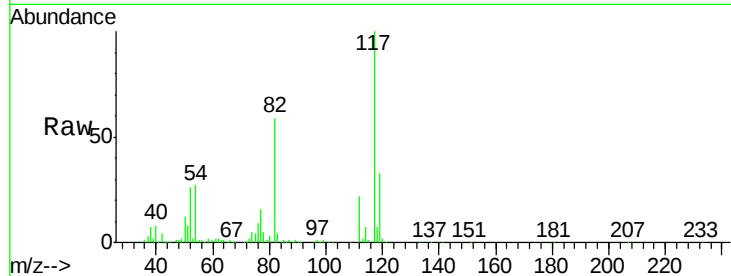




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.88 min Scan# 948  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

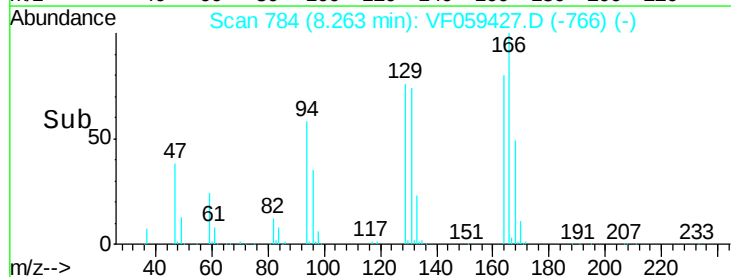
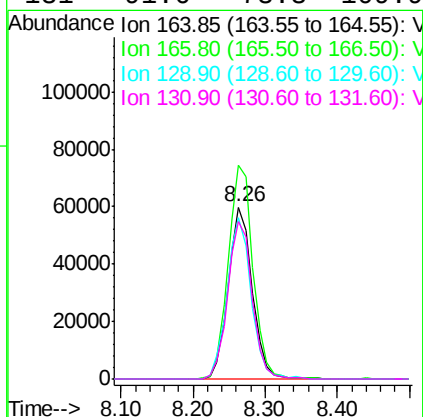
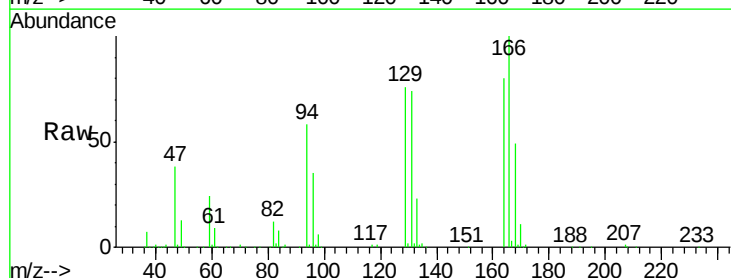
Instrument :  
MSVOA\_F  
ClientSampleId :

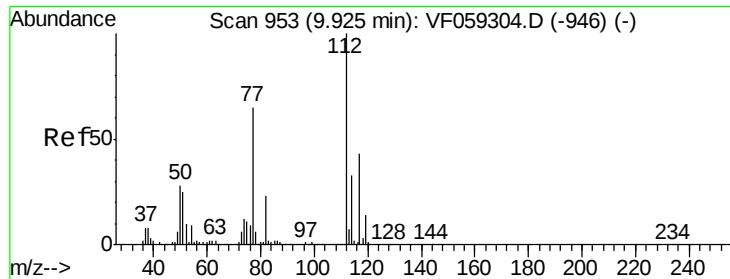
Tot Ion:117 Resp: 399632  
Ion Ratio Lower Upper  
117 100  
82 58.5 44.6 66.8  
119 33.3 24.1 36.1



#64  
Tetrachloroethene  
Concen: 53.528 ug/l  
RT: 8.26 min Scan# 784  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion:164 Resp: 138740  
Ion Ratio Lower Upper  
164 100  
166 124.3 101.1 151.7  
129 93.9 75.0 112.4  
131 91.6 73.3 109.9

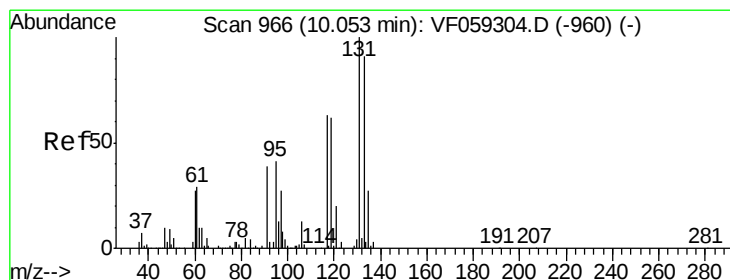
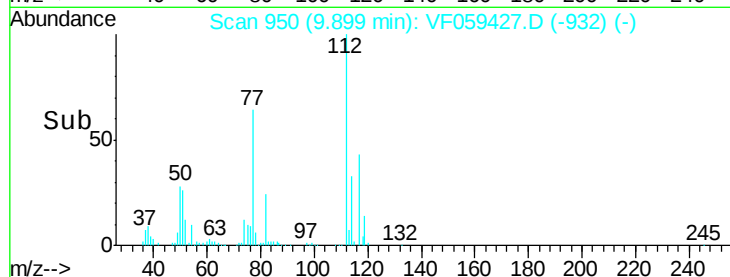
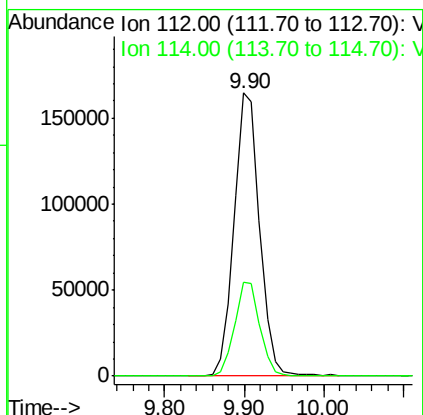
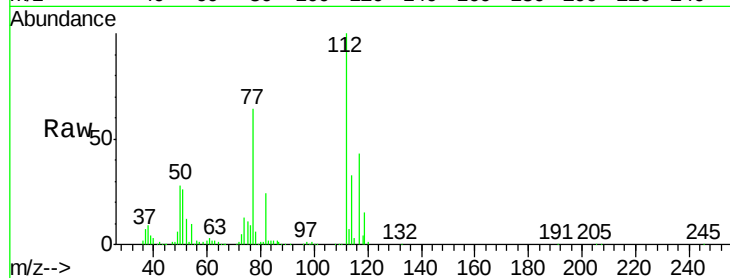




#65  
Chlorobenzene  
Concen: 49.953 ug/l  
RT: 9.90 min Scan# 950  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

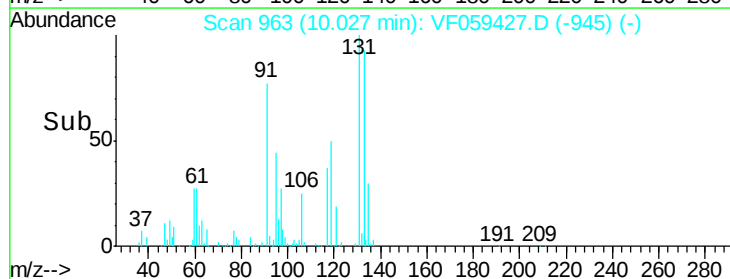
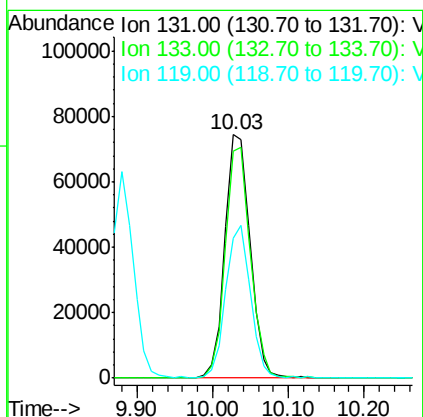
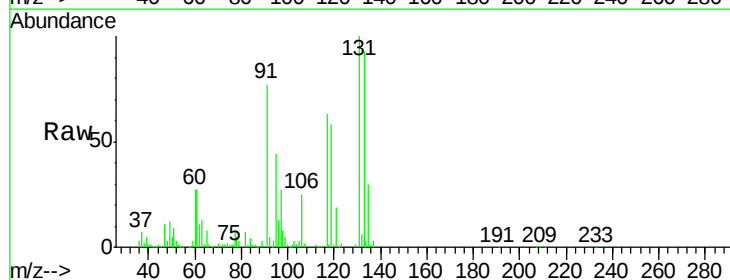
Instrument :  
MSVOA\_F  
ClientSampleId :

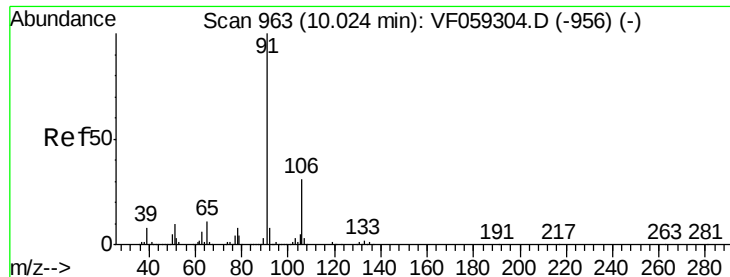
Tot Ion:112 Resp: 369912  
Ion Ratio Lower Upper  
112 100  
114 33.1 26.5 39.7



#66  
1,1,1,2-Tetrachloroethane  
Concen: 53.627 ug/l  
RT: 10.03 min Scan# 963  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion:131 Resp: 171756  
Ion Ratio Lower Upper  
131 100  
133 93.4 45.3 135.9  
119 57.7 31.3 93.9

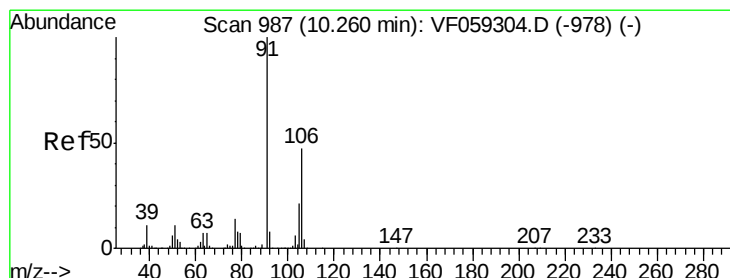
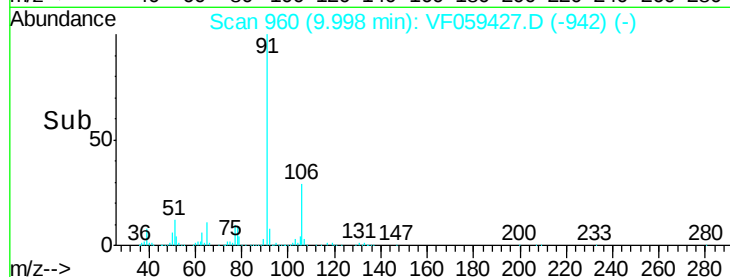
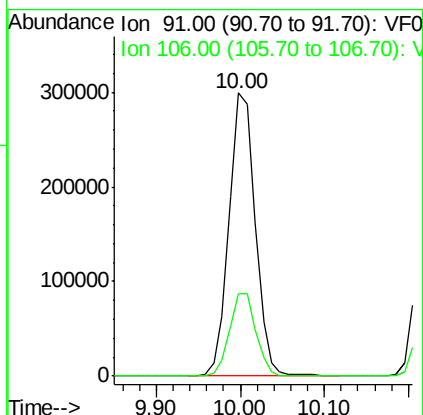
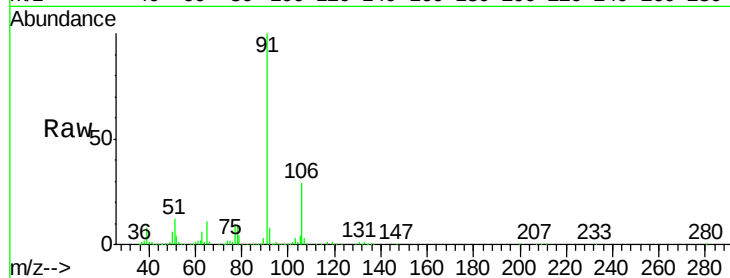




#67  
Ethyl Benzene  
Concen: 51.935 ug/l  
RT: 10.00 min Scan# 960  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

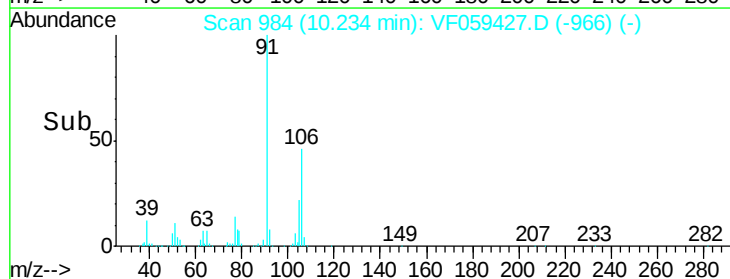
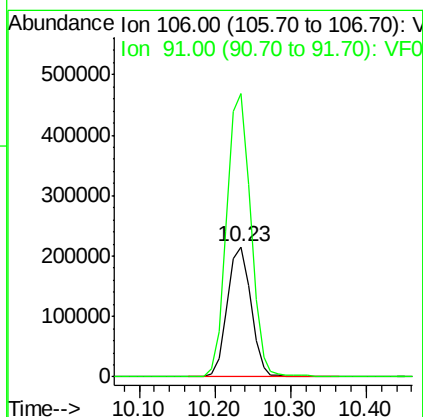
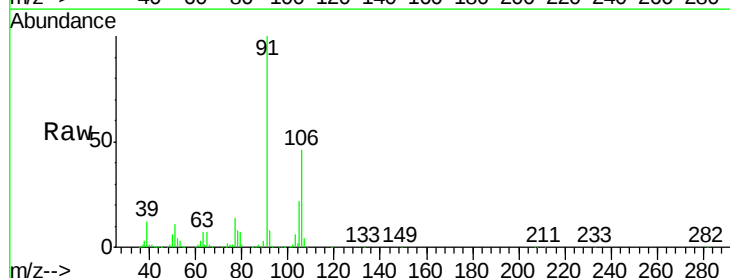
Instrument :  
MSVOA\_F  
ClientSampled :

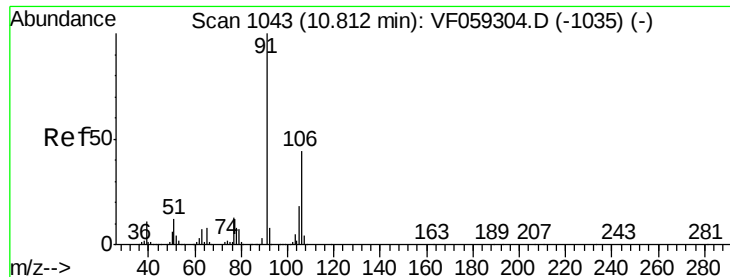
Tot Ion: 91 Resp: 652432  
Ion Ratio Lower Upper  
91 100  
106 29.2 24.8 37.2



#68  
m/p-Xylenes  
Concen: 104.030 ug/l  
RT: 10.23 min Scan# 984  
Delta R.T. -0.03 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 106 Resp: 465155  
Ion Ratio Lower Upper  
106 100  
91 217.9 170.8 256.2

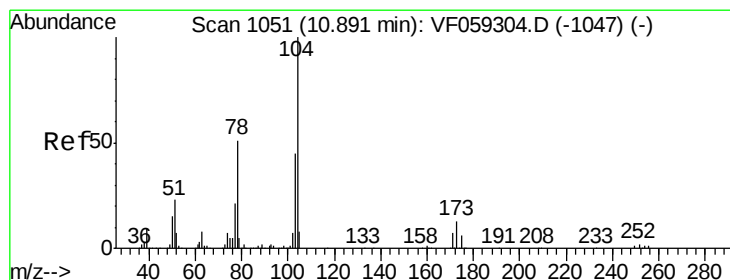
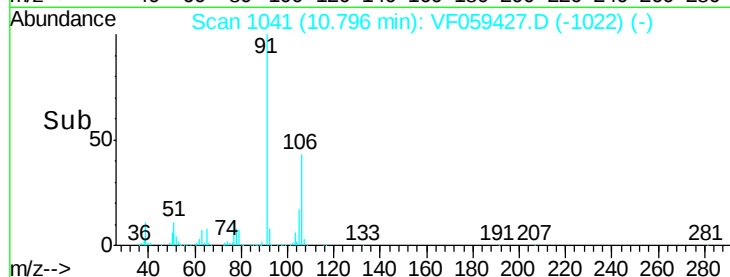
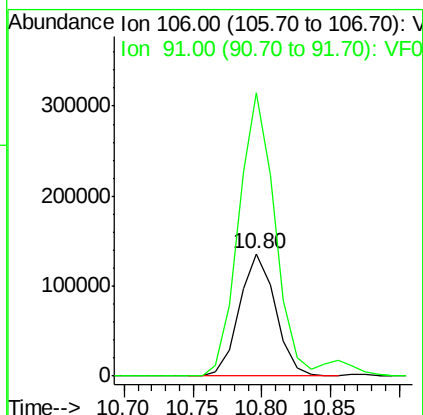
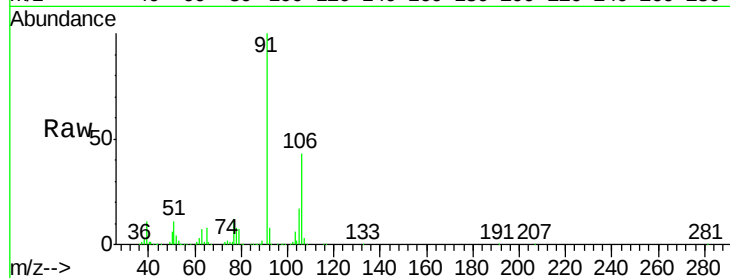




#69  
o-Xylene  
Concen: 49.686 ug/l  
RT: 10.80 min Scan# 1041  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

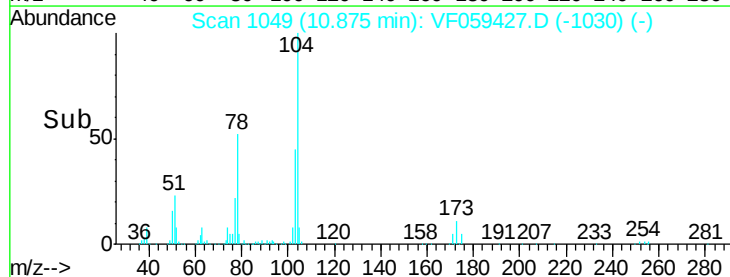
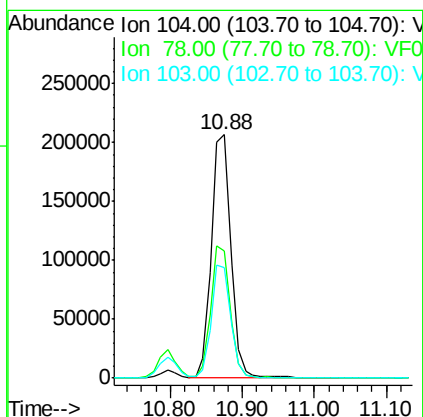
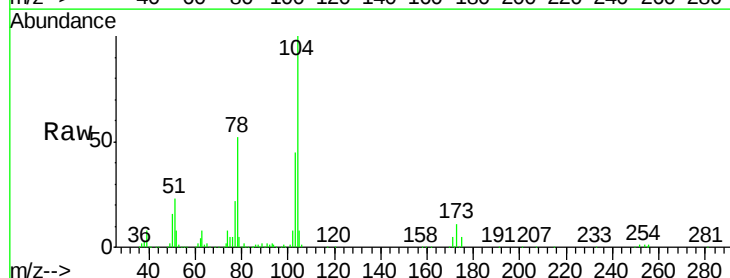
Instrument :  
MSVOA\_F  
ClientSampled :

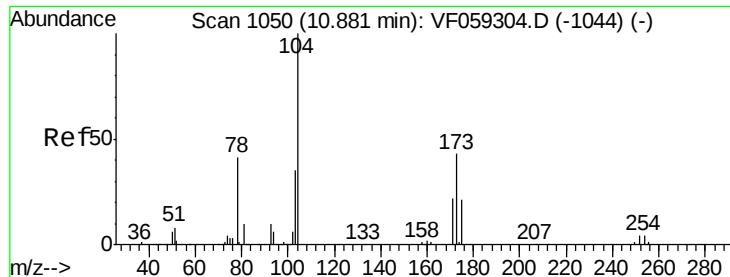
Tot Ion:106 Resp: 248490  
Ion Ratio Lower Upper  
106 100  
91 230.8 114.6 343.6



#70  
Styrene  
Concen: 50.457 ug/l  
RT: 10.88 min Scan# 1049  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion:104 Resp: 384402  
Ion Ratio Lower Upper  
104 100  
78 52.2 40.9 61.3  
103 45.4 36.5 54.7





#71

Bromoform

Concen: 56.390 ug/l

RT: 10.86 min Scan# 1047

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampled :

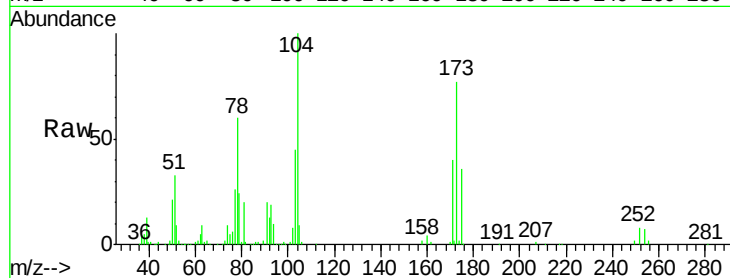
Tot Ion:173 Resp: 123790

Ion Ratio Lower Upper

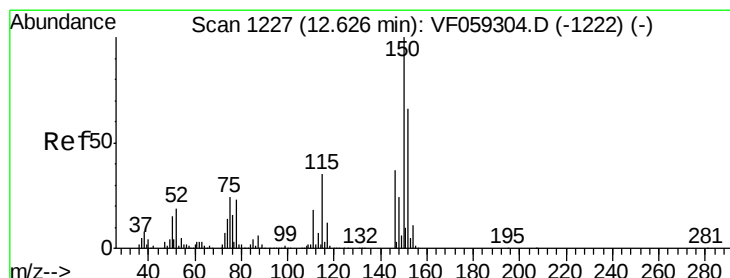
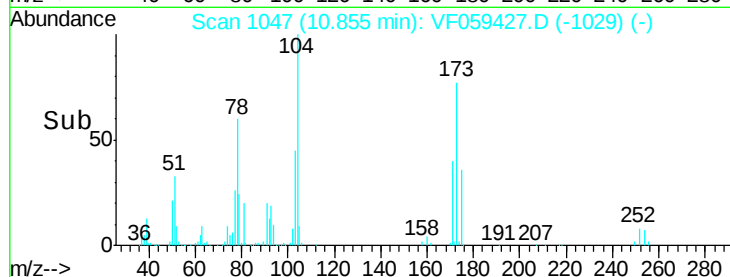
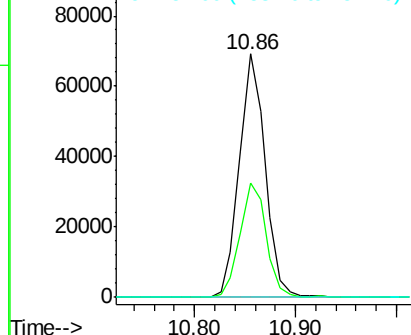
173 100

175 47.4 24.8 74.3

254 0.0 0.0 0.0



Abundance Ion 173.00 (172.70 to 173.70): V  
Ion 175.00 (174.70 to 175.70): V  
Ion 254.00 (253.70 to 254.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.61 min Scan# 1225

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

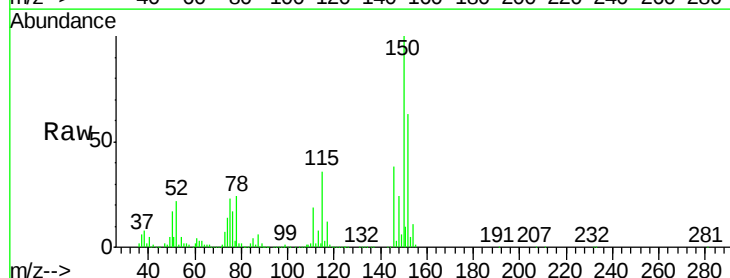
Tgt Ion:152 Resp: 238379

Ion Ratio Lower Upper

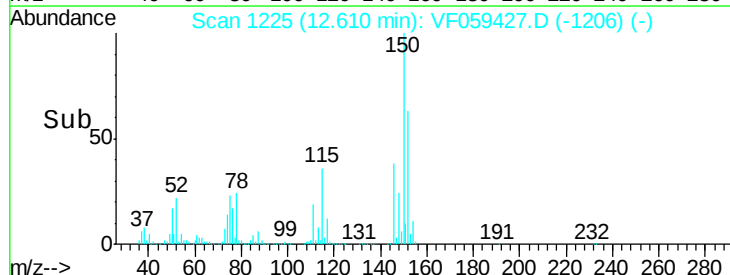
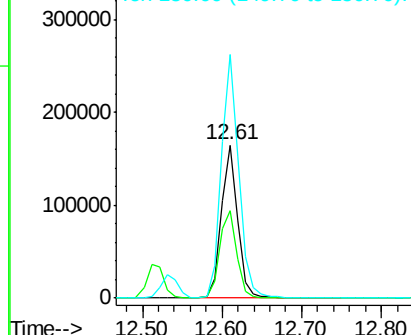
152 100

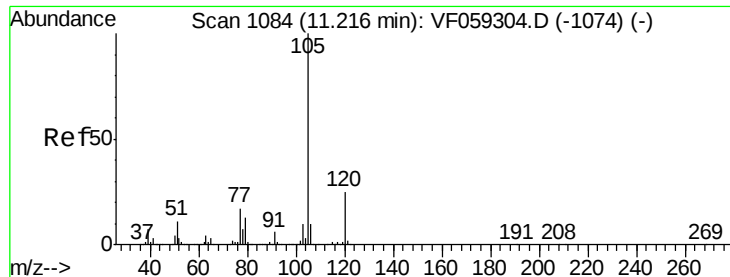
115 57.1 27.1 81.3

150 159.0 0.0 305.2



Abundance Ion 152.00 (151.70 to 152.70): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 150.00 (149.70 to 150.70): V





#73

Isopropylbenzene

Concen: 56.773 ug/l

RT: 11.20 min Scan# 1082

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

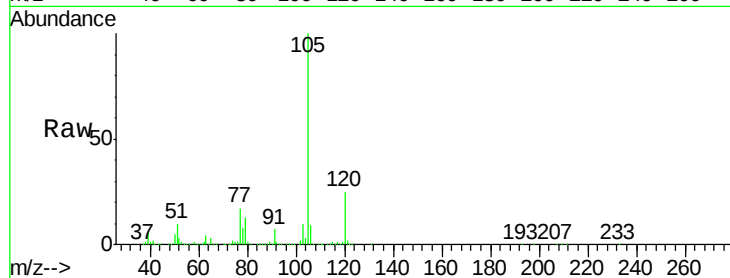
ClientSampleId :

Tot Ion:105 Resp: 788423

Ion Ratio Lower Upper

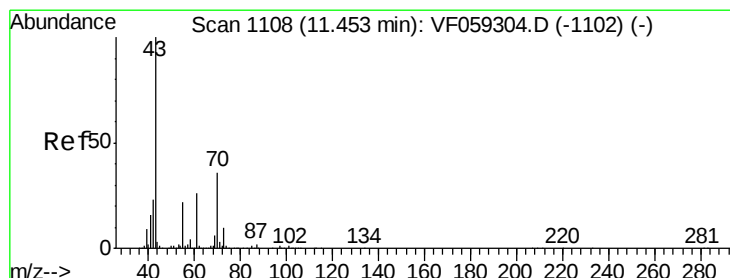
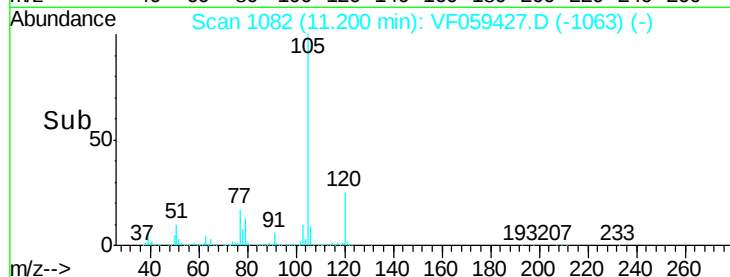
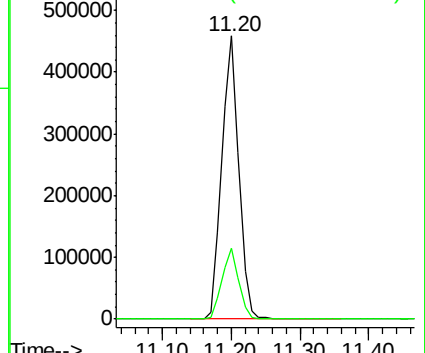
105 100

120 24.9 12.3 36.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

N-ethyl acetate

Concen: 55.608 ug/l

RT: 11.44 min Scan# 1106

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Tgt Ion: 43 Resp: 280241

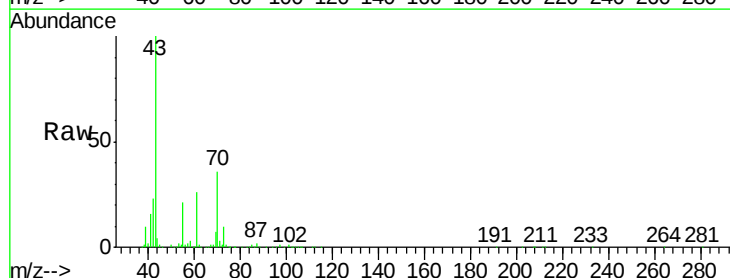
Ion Ratio Lower Upper

43 100

70 36.2 28.8 43.2

55 21.1 17.4 26.0

61 25.5 21.1 31.7

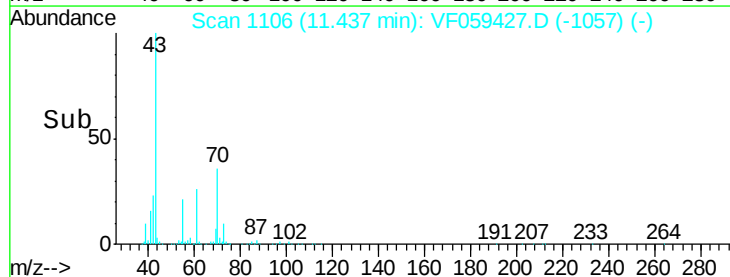
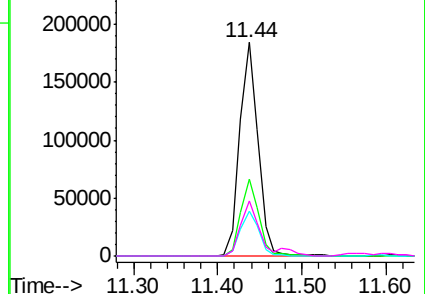


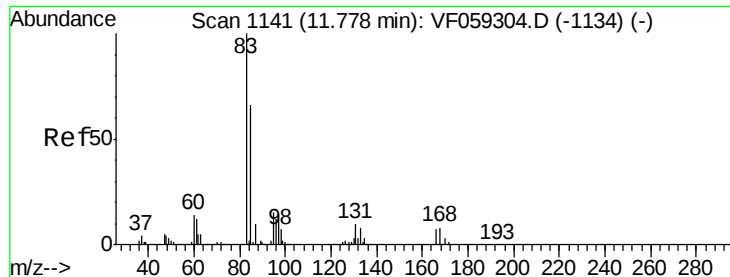
Abundance Ion 43.00 (42.70 to 43.70): VF0

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: 51.398 ug/l

RT: 11.76 min Scan# 1139

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampleId :

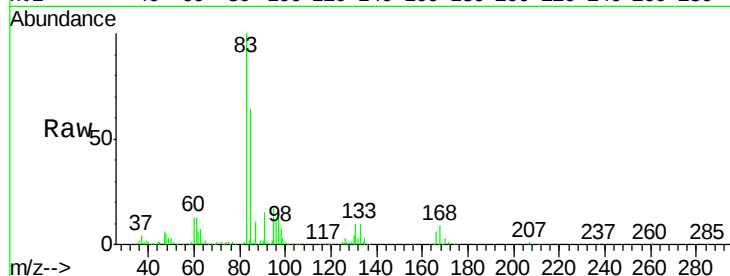
Tot Ion: 83 Resp: 180268

Ion Ratio Lower Upper

83 100

131 10.0 4.9 14.6

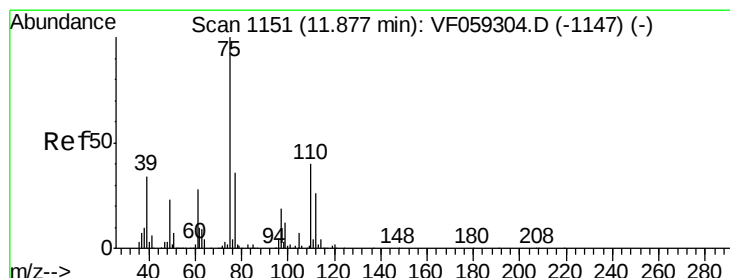
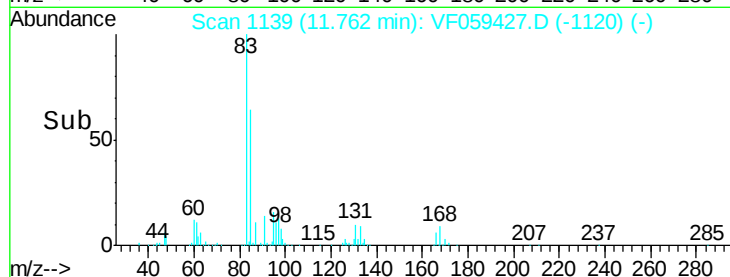
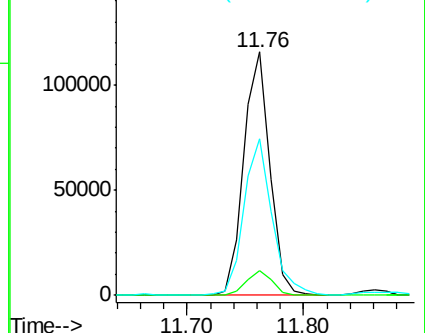
85 64.4 32.8 98.4



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: 54.767 ug/l

RT: 11.86 min Scan# 1149

Delta R.T. -0.02 min

Lab File: VF059427.D

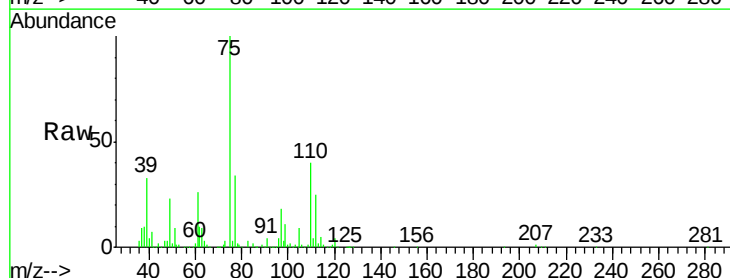
Acq: 5 Jul 2018 11:43

Tgt Ion: 75 Resp: 144895

Ion Ratio Lower Upper

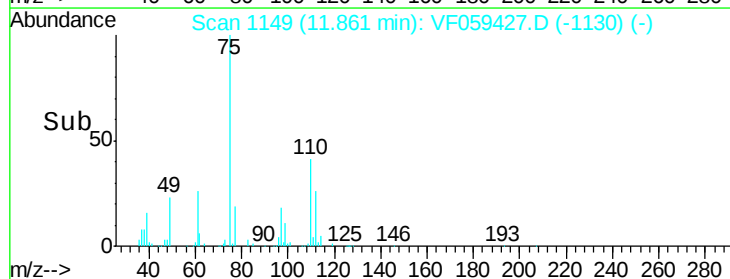
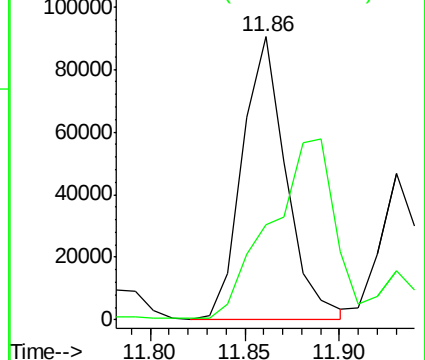
75 100

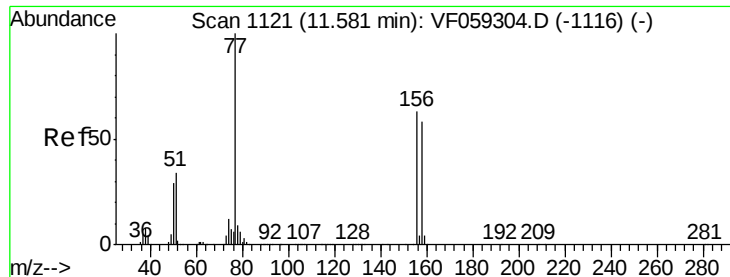
77 33.6 18.0 54.0



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0





#77

Bromobenzene

Concen: 52.934 ug/l

RT: 11.57 min Scan# 1119

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampleId :

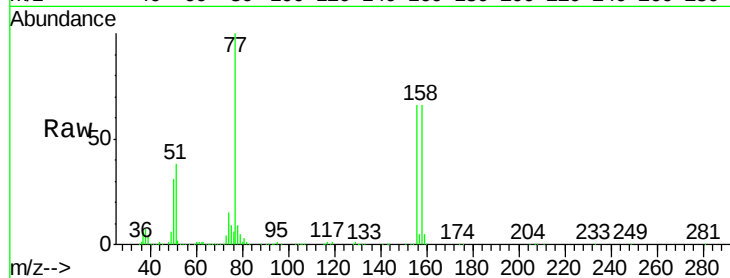
Tot Ion:156 Resp: 203950

Ion Ratio Lower Upper

156 100

77 150.5 79.7 238.9

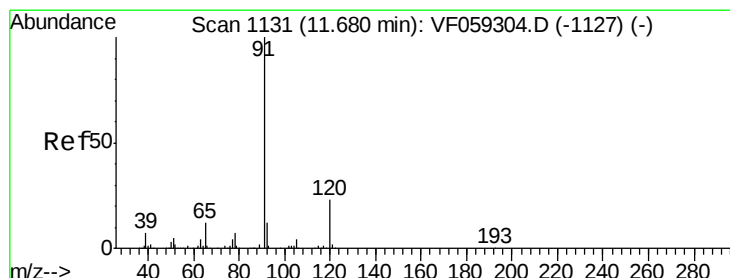
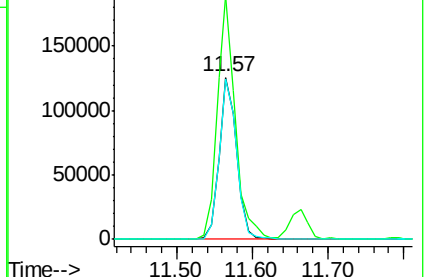
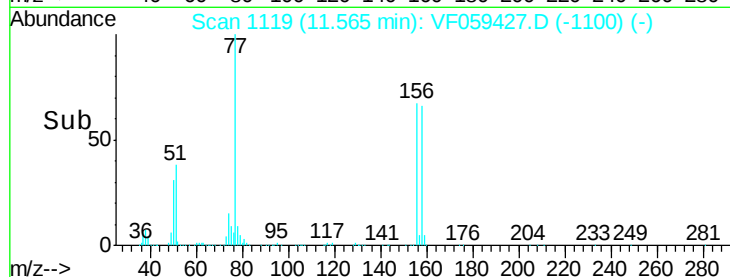
158 98.9 46.2 138.6



Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 158.00 (157.70 to 158.70): V



#78

n-propylbenzene

Concen: 51.982 ug/l

RT: 11.66 min Scan# 1129

Delta R.T. -0.02 min

Lab File: VF059427.D

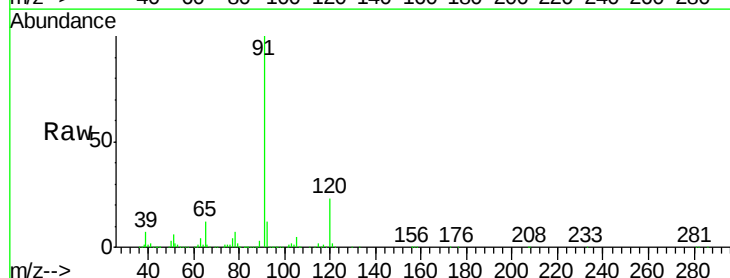
Acq: 5 Jul 2018 11:43

Tgt Ion: 91 Resp: 866960

Ion Ratio Lower Upper

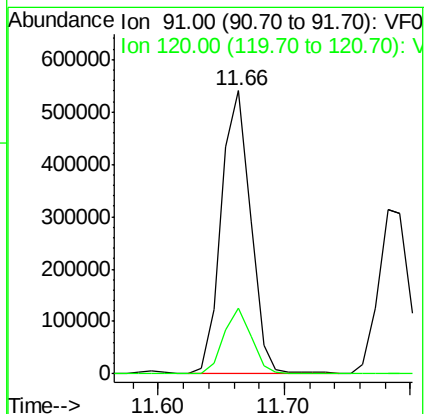
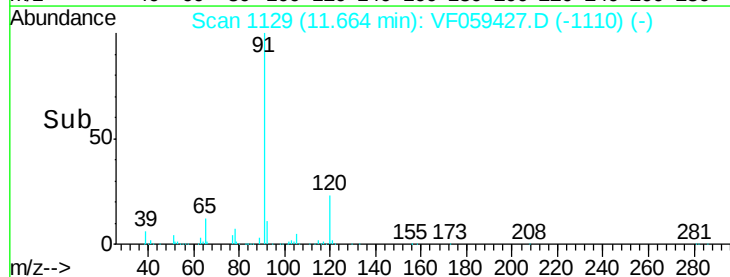
91 100

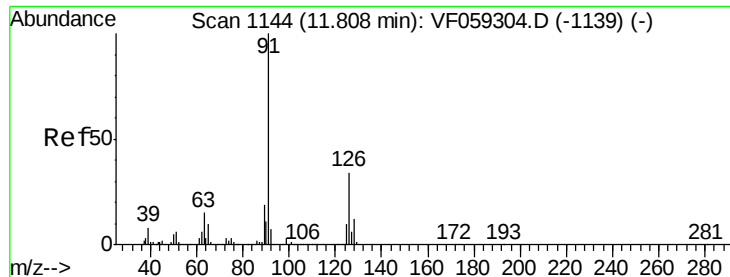
120 23.4 11.7 35.0



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 51.904 ug/l

RT: 11.78 min Scan# 1141

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

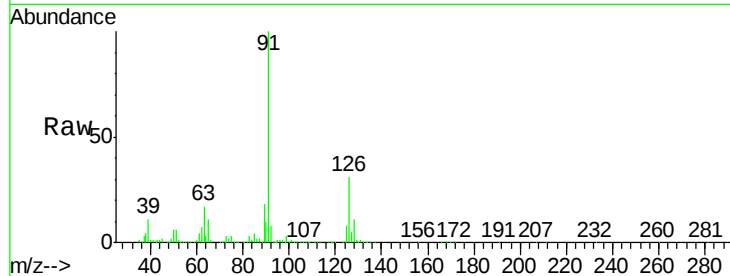
ClientSampleId :

Tot Ion: 91 Resp: 528881

Ion Ratio Lower Upper

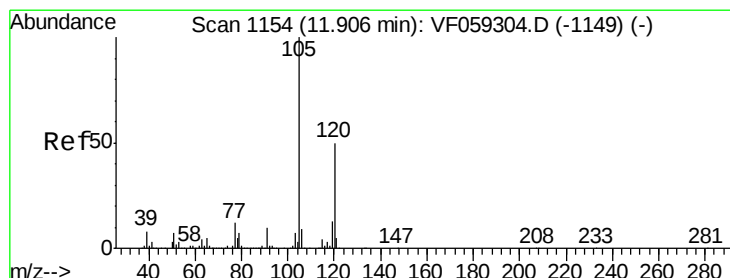
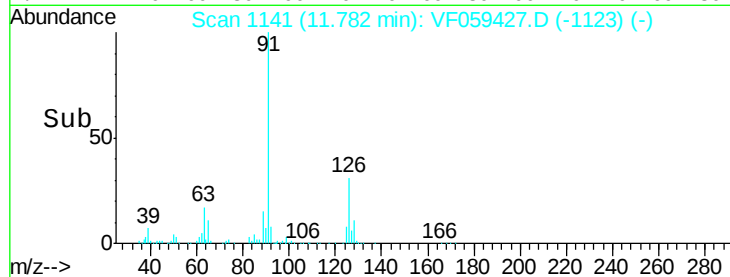
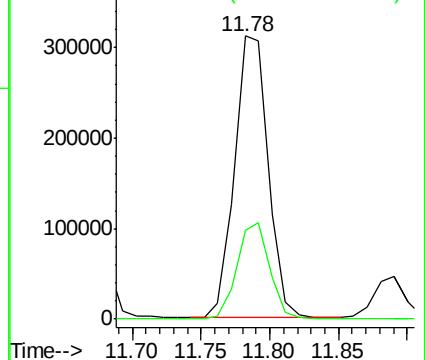
91 100

126 31.2 17.2 51.5



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: 54.101 ug/l

RT: 11.89 min Scan# 1152

Delta R.T. -0.02 min

Lab File: VF059427.D

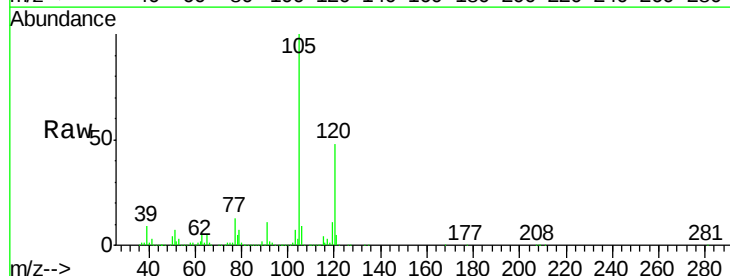
Acq: 5 Jul 2018 11:43

Tgt Ion: 105 Resp: 658128

Ion Ratio Lower Upper

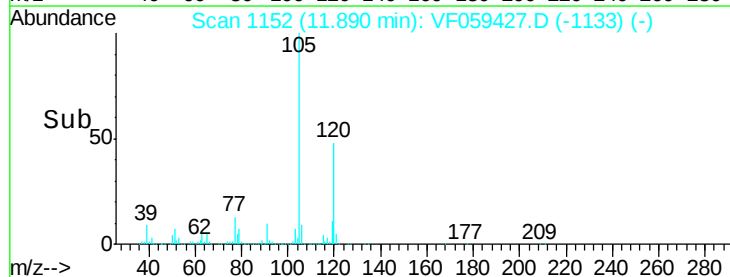
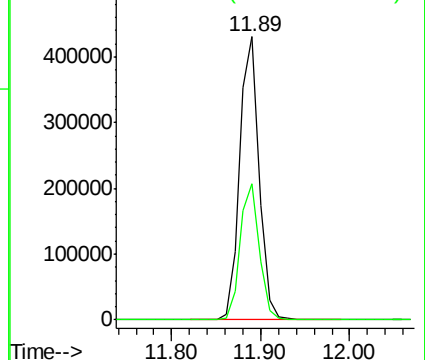
105 100

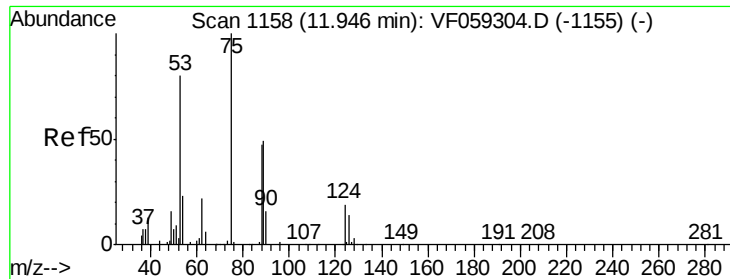
120 48.2 24.9 74.7



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: 54.944 ug/l

RT: 11.93 min Scan# 1156

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampleId :

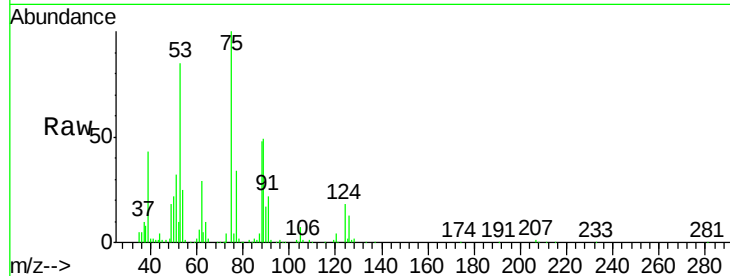
Tot Ion: 75 Resp: 86518

Ion Ratio Lower Upper

75 100

53 84.6 68.8 103.2

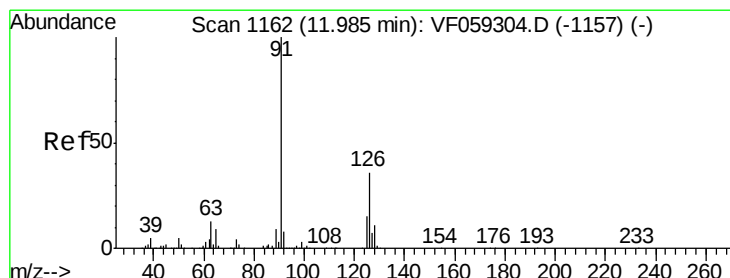
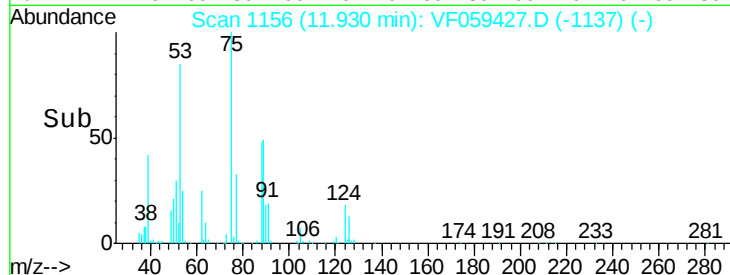
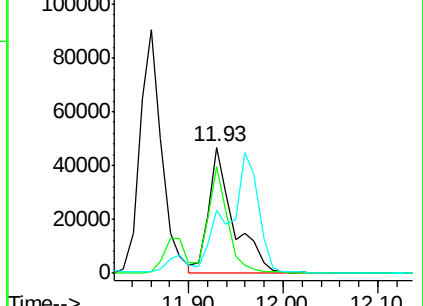
89 49.5 42.0 63.0



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: 52.803 ug/l

RT: 11.96 min Scan# 1159

Delta R.T. -0.03 min

Lab File: VF059427.D

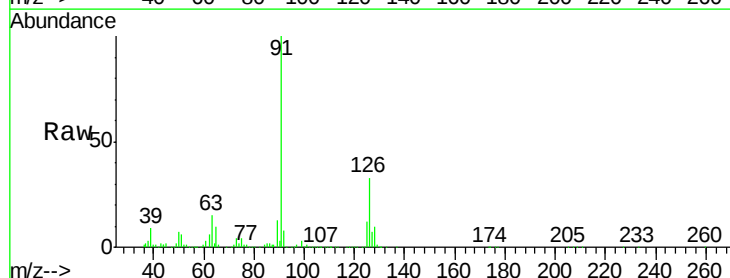
Acq: 5 Jul 2018 11:43

Tgt Ion: 91 Resp: 576304

Ion Ratio Lower Upper

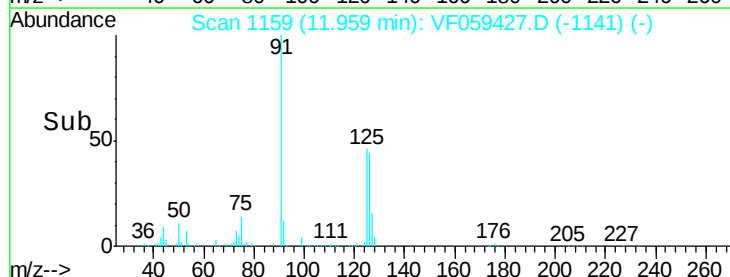
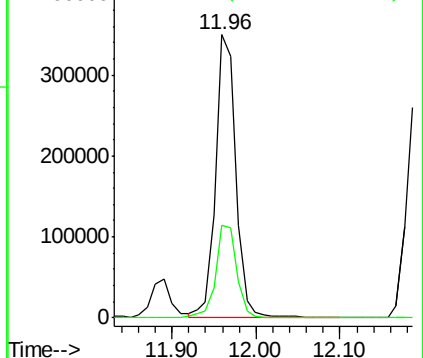
91 100

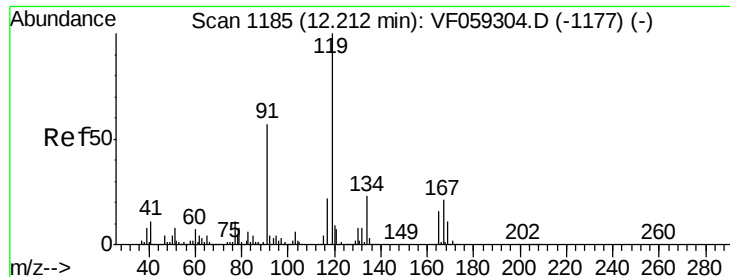
126 32.5 18.2 54.6



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 126.00 (125.70 to 126.70): V





#83

tert-Butylbenzene

Concen: 55.419 ug/l

RT: 12.19 min Scan# 1182

Delta R.T. -0.03 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampleId :

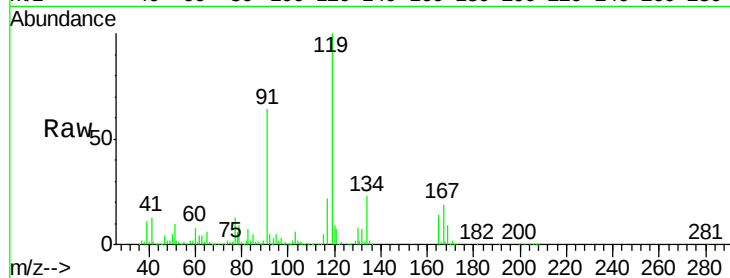
Tot Ion:119 Resp: 674276

Ion Ratio Lower Upper

119 100

91 64.5 28.4 85.2

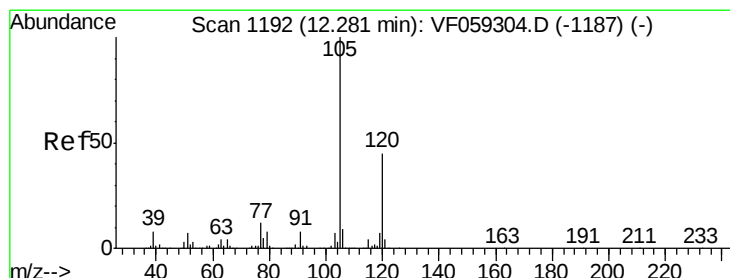
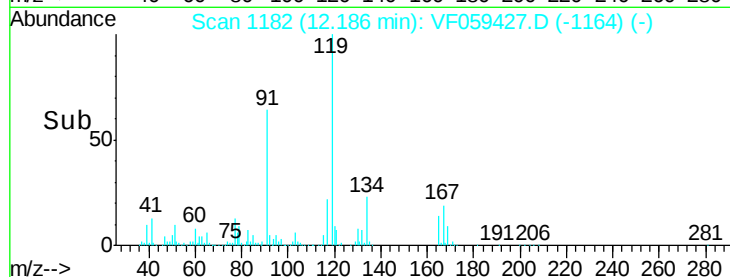
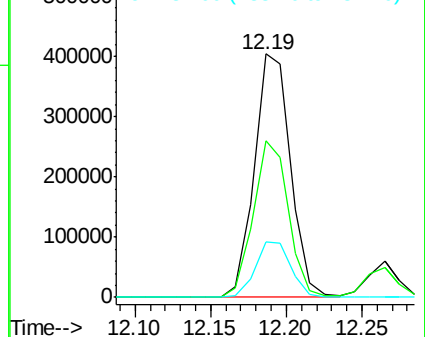
134 22.6 11.7 35.1



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): VF0

Ion 134.00 (133.70 to 134.70): V



#84

1,2,4-Trimethylbenzene

Concen: 53.345 ug/l

RT: 12.26 min Scan# 1190

Delta R.T. -0.02 min

Lab File: VF059427.D

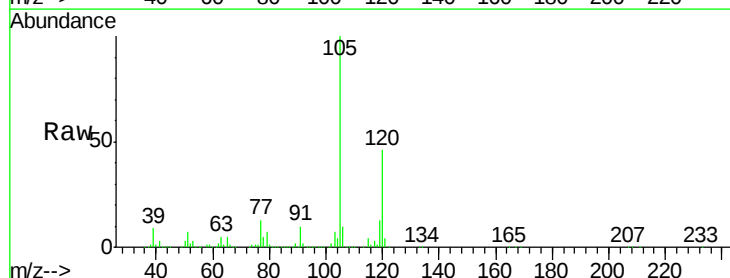
Acq: 5 Jul 2018 11:43

Tgt Ion:105 Resp: 683442

Ion Ratio Lower Upper

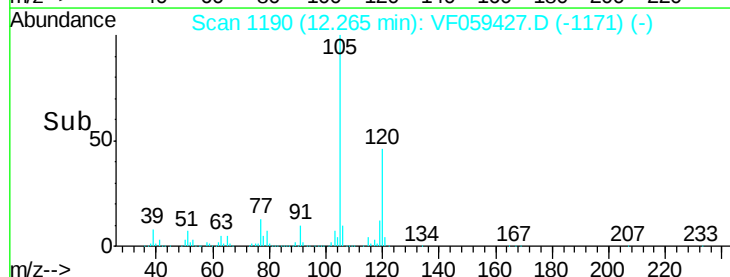
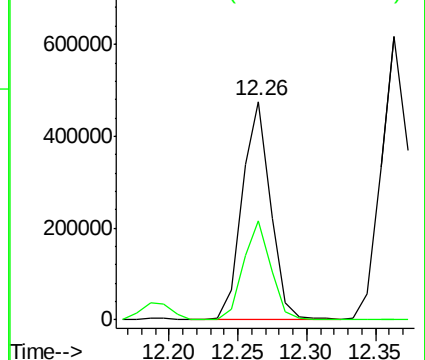
105 100

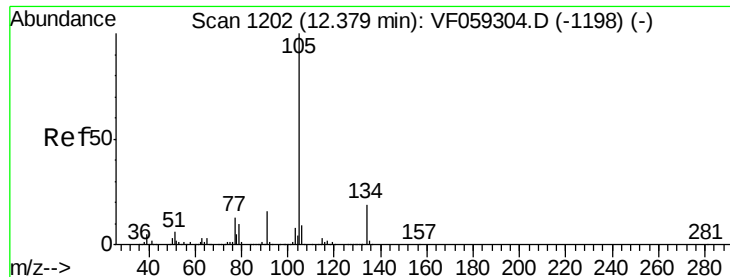
120 45.5 22.8 68.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

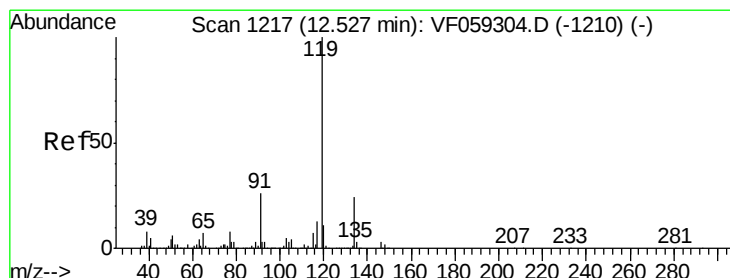
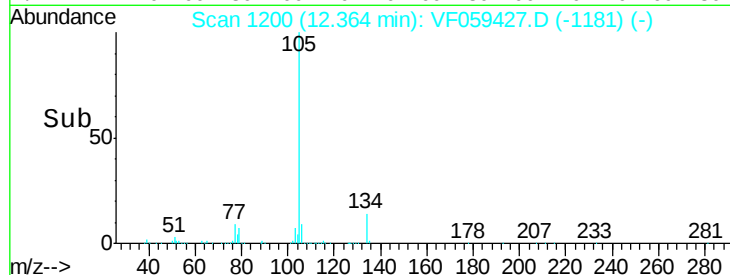
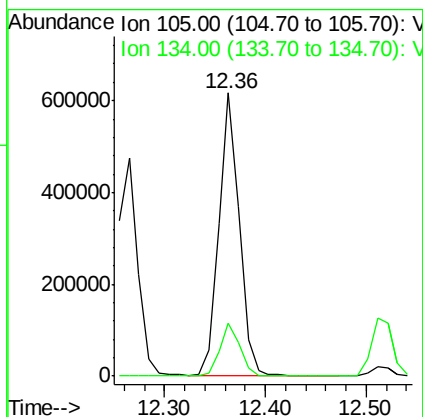
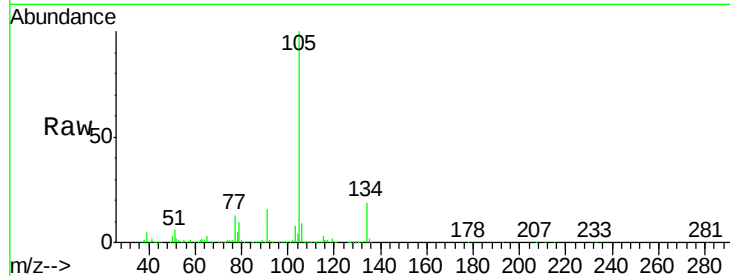




#85  
 sec-Butylbenzene  
 Concen: 54.247 ug/l  
 RT: 12.36 min Scan# 1200  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

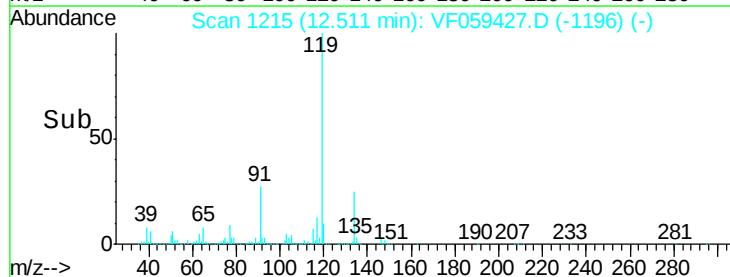
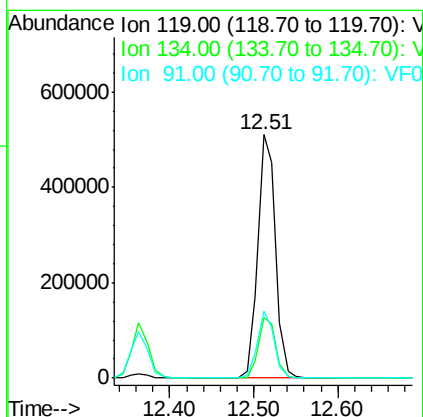
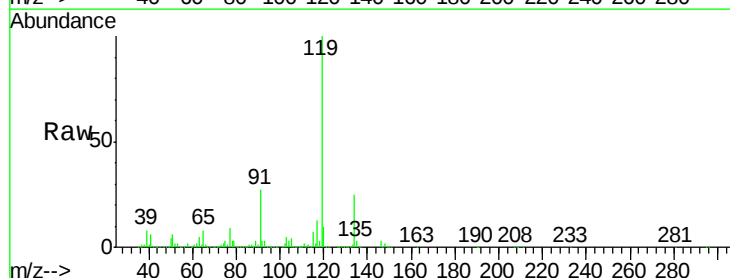
Instrument :  
 MSVOA\_F  
 ClientSampleId :

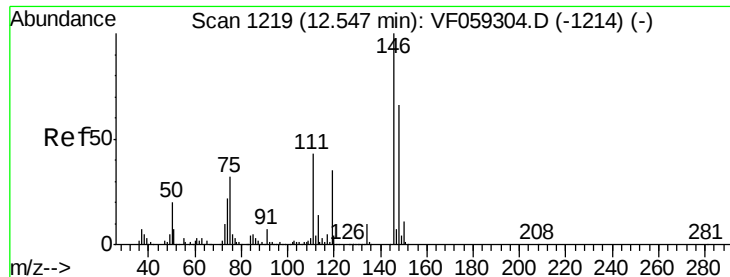
Tot Ion:105 Resp: 874867  
 Ion Ratio Lower Upper  
 105 100  
 134 18.8 9.4 28.3



#86  
 p-Isopropyltoluene  
 Concen: 56.260 ug/l  
 RT: 12.51 min Scan# 1215  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion:119 Resp: 761448  
 Ion Ratio Lower Upper  
 119 100  
 134 24.7 12.2 36.4  
 91 27.3 12.9 38.6

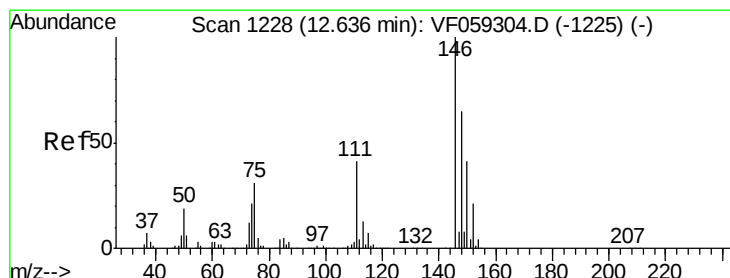
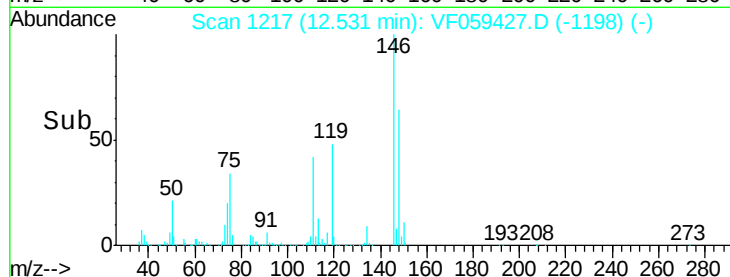
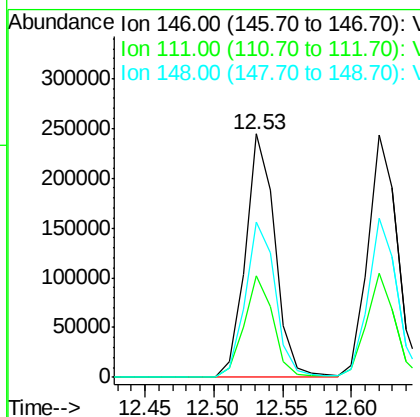
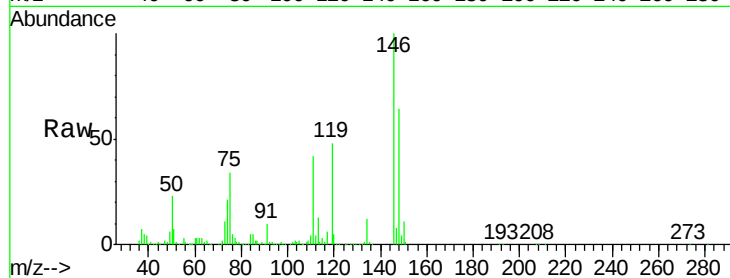




#87  
 1,3-Dichlorobenzene  
 Concen: 58.600 ug/l  
 RT: 12.53 min Scan# 1217  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

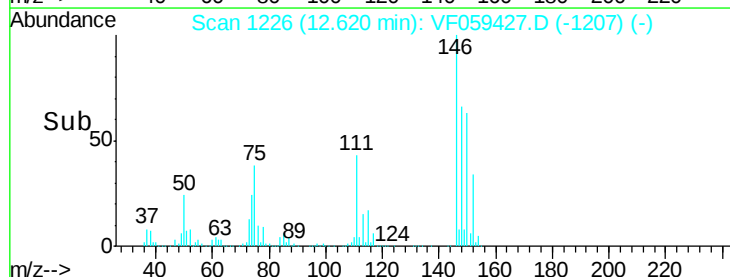
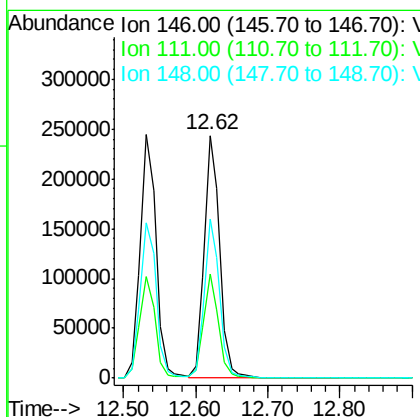
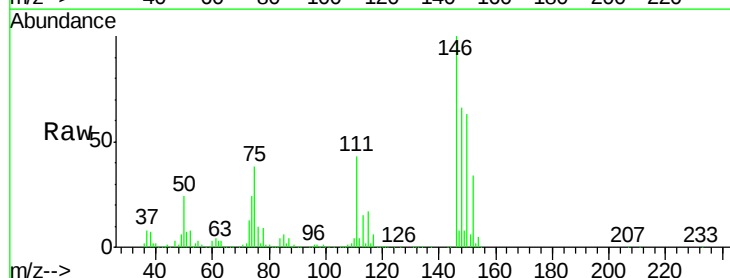
Instrument :  
 MSVOA\_F  
 ClientSampleId :

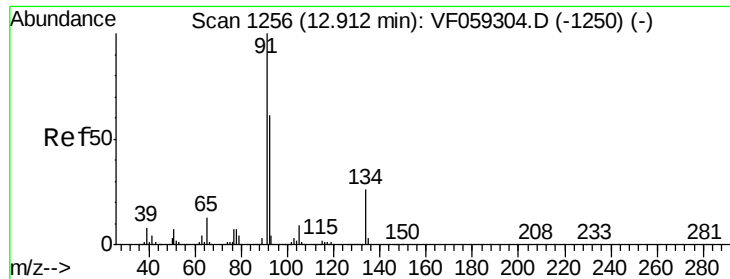
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.8  | 21.4  | 64.2  |
| 148     | 63.8  | 32.8  | 98.4  |



#88  
 1,4-Dichlorobenzene  
 Concen: 53.154 ug/l  
 RT: 12.62 min Scan# 1226  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.1  | 20.7  | 62.1  |
| 148     | 65.7  | 32.8  | 98.3  |

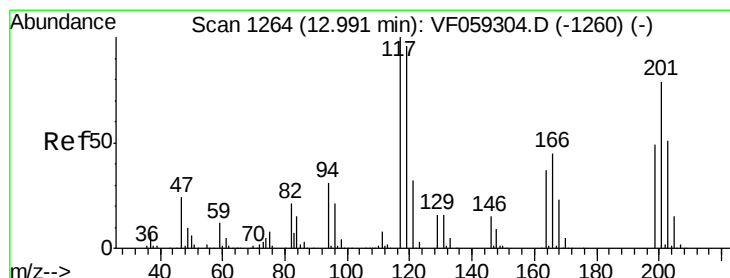
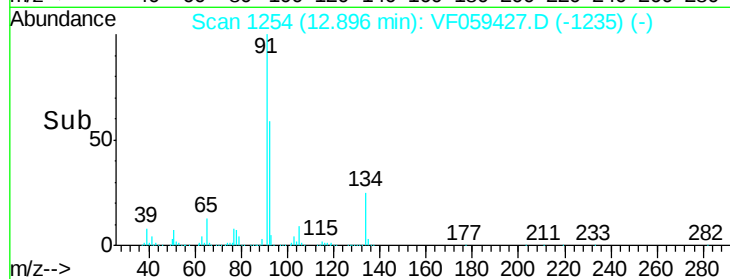
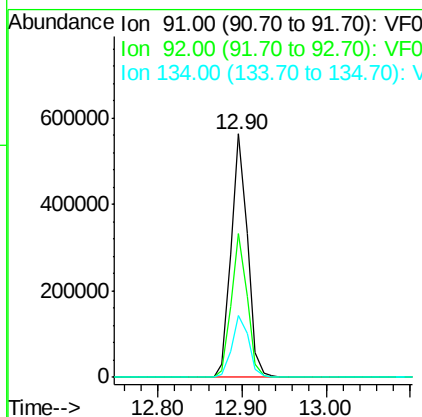
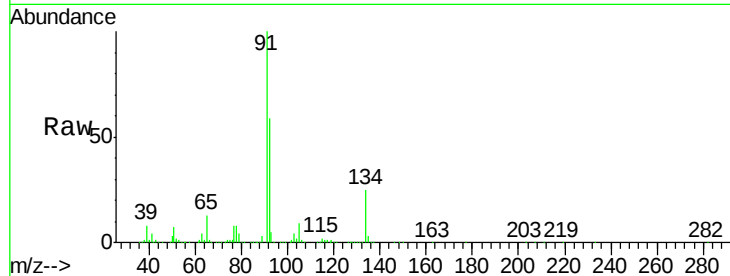




#89  
n-Butylbenzene  
Concen: 55.472 ug/l  
RT: 12.90 min Scan# 1254  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

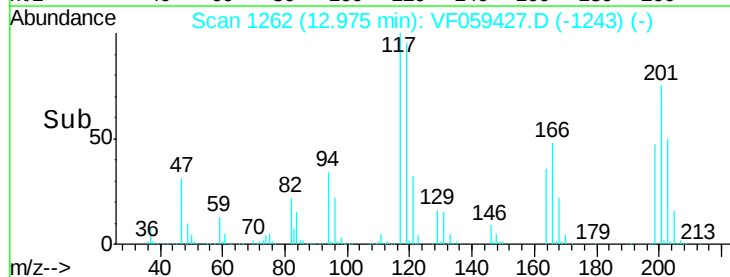
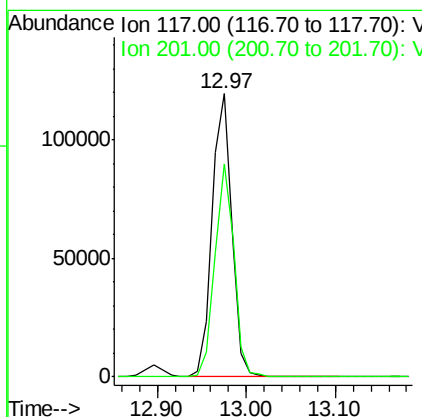
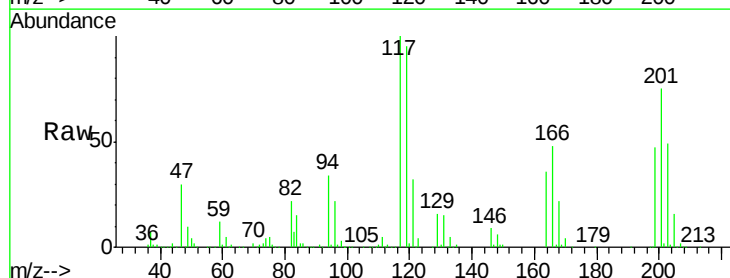
Instrument :  
MSVOA\_F  
ClientSampleId :

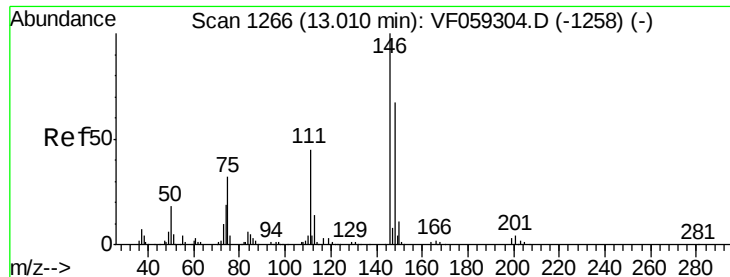
Tot Ion: 91 Resp: 762168  
Ion Ratio Lower Upper  
91 100  
92 59.3 30.3 91.0  
134 25.2 12.9 38.7



#90  
Hexachloroethane  
Concen: 53.975 ug/l  
RT: 12.97 min Scan# 1262  
Delta R.T. -0.02 min  
Lab File: VF059427.D  
Acq: 5 Jul 2018 11:43

Tgt Ion: 117 Resp: 182070  
Ion Ratio Lower Upper  
117 100  
201 76.9 39.5 118.5

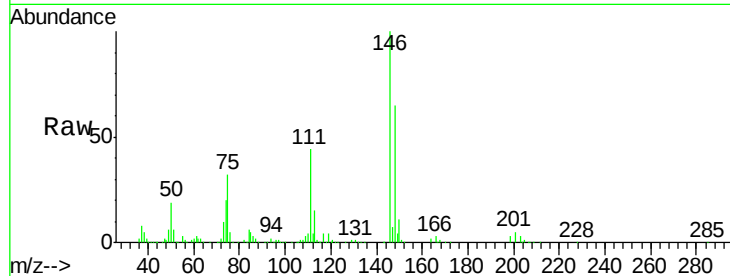




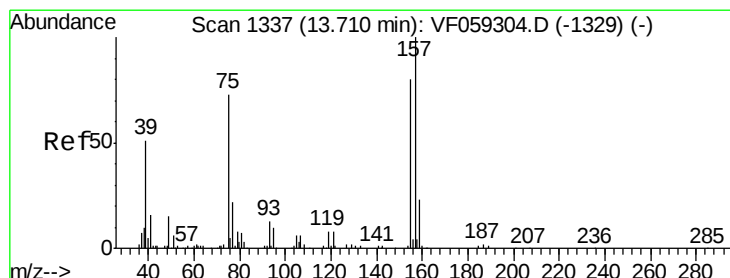
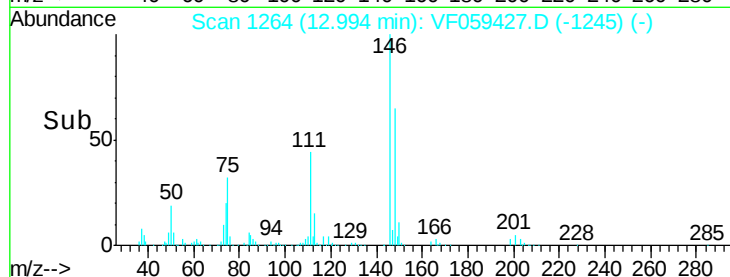
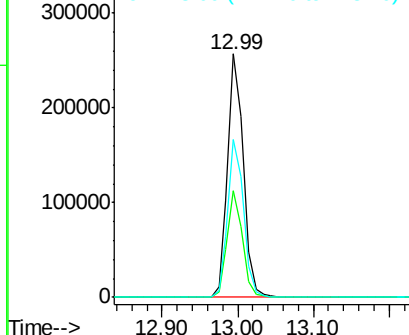
#91  
 1,2-Dichlorobenzene  
 Concen: 53.122 ug/l  
 RT: 12.99 min Scan# 1264  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Instrument :  
 MSVOA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.7  | 22.7  | 68.0  |
| 148     | 64.8  | 33.5  | 100.4 |

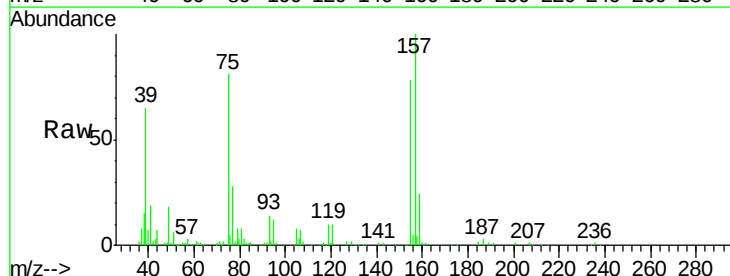


Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

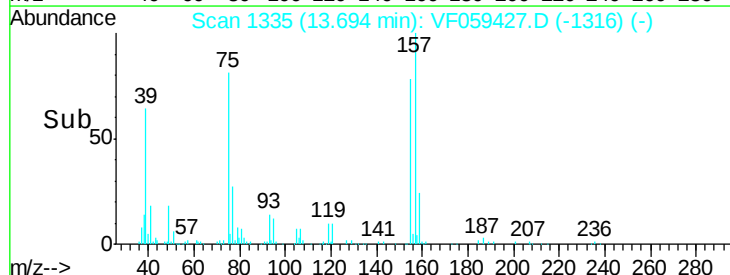
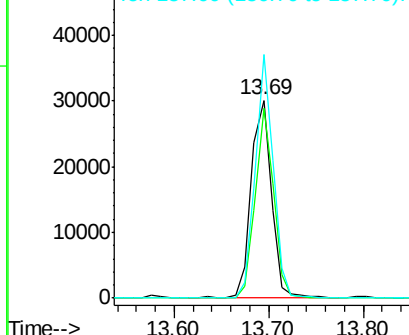


#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 57.704 ug/l  
 RT: 13.69 min Scan# 1335  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 96.2  | 54.6  | 163.8 |
| 157     | 123.2 | 68.7  | 205.9 |



Abundance Ion 75.00 (74.70 to 75.70): VF0  
 Ion 155.00 (154.70 to 155.70): V  
 Ion 157.00 (156.70 to 157.70): V

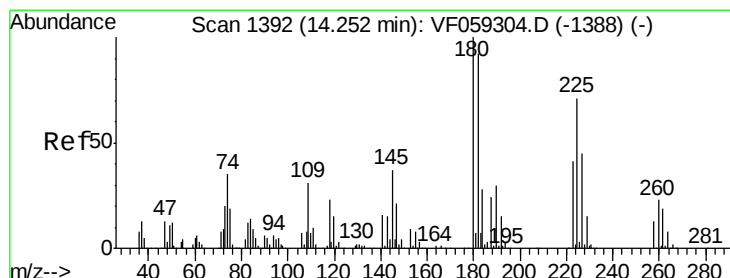
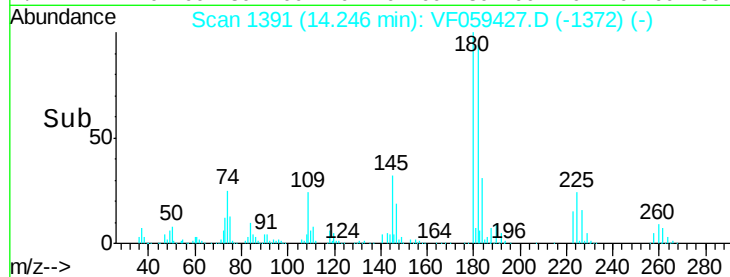
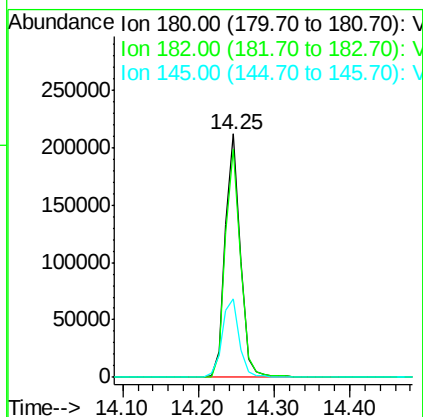
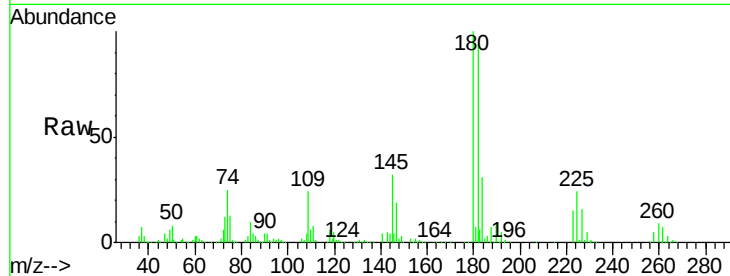




#93  
 1,2,4-Trichlorobenzene  
 Concen: 57.192 ug/l  
 RT: 14.25 min Scan# 1391  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

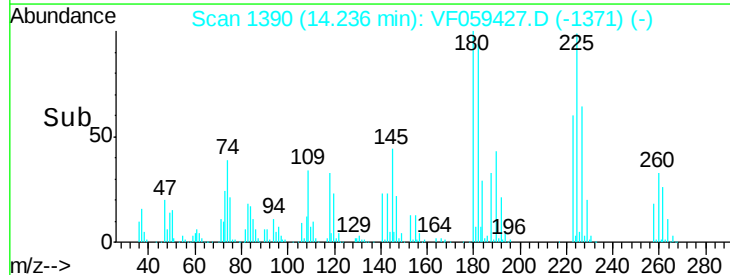
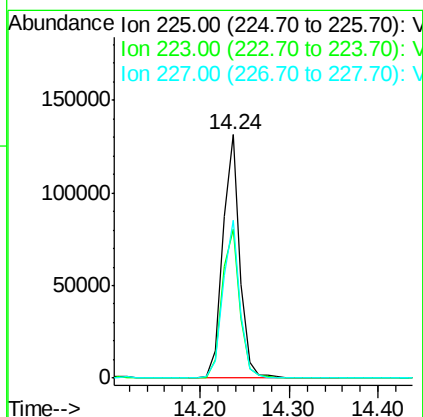
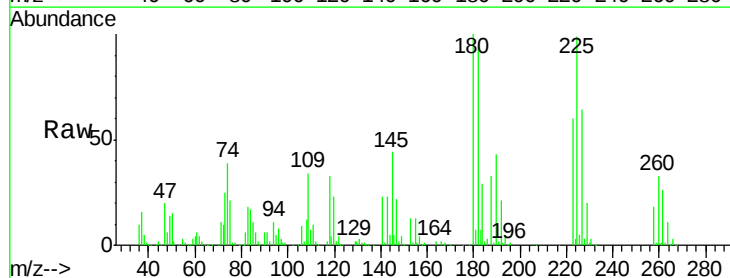
Instrument :  
 MSVOA\_F  
 ClientSampleId :

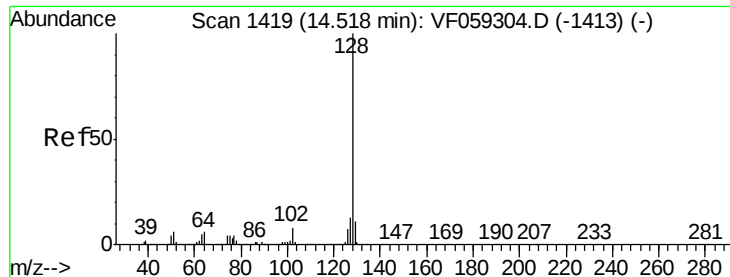
Tot Ion:180 Resp: 295795  
 Ion Ratio Lower Upper  
 180 100  
 182 93.6 48.1 144.3  
 145 32.4 15.3 45.8



#94  
 Hexachlorobutadiene  
 Concen: 61.046 ug/l  
 RT: 14.24 min Scan# 1390  
 Delta R.T. -0.02 min  
 Lab File: VF059427.D  
 Acq: 5 Jul 2018 11:43

Tgt Ion:225 Resp: 176355  
 Ion Ratio Lower Upper  
 225 100  
 223 61.2 28.9 86.8  
 227 64.7 31.3 93.8





#95

Naphthalene

Concen: 58.724 ug/l

RT: 14.50 min Scan# 1417

Delta R.T. -0.02 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

Instrument :

MSVOA\_F

ClientSampleId :

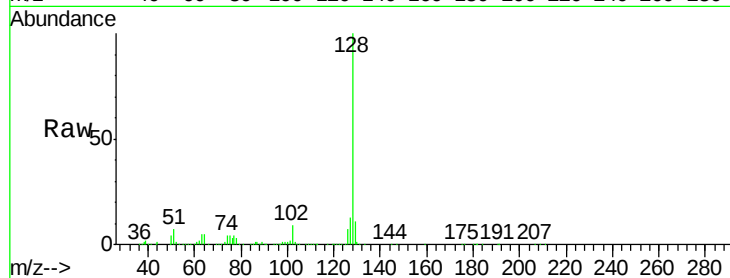
Tot Ion:128 Resp: 635462

Ion Ratio Lower Upper

128 100

127 12.8 10.1 15.1

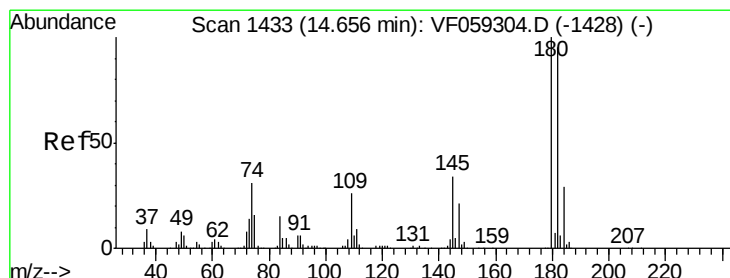
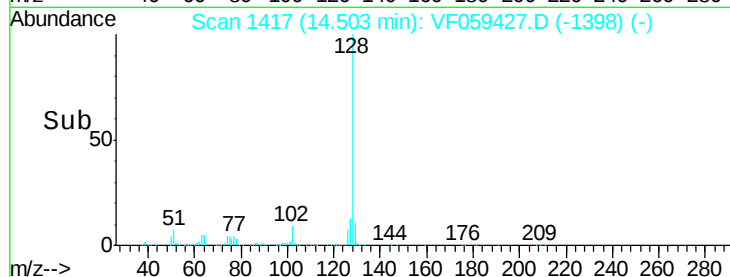
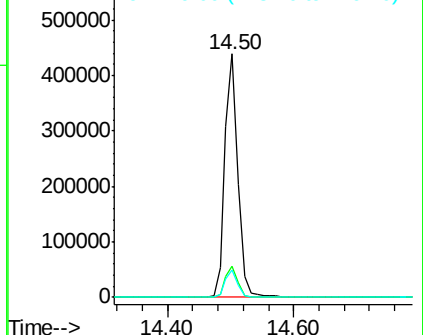
129 11.3 8.8 13.2



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: 58.973 ug/l

RT: 14.65 min Scan# 1432

Delta R.T. -0.01 min

Lab File: VF059427.D

Acq: 5 Jul 2018 11:43

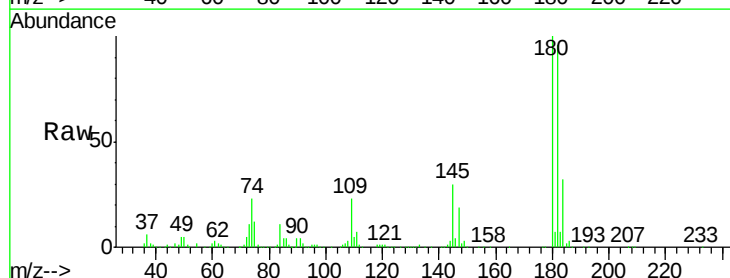
Tgt Ion:180 Resp: 288938

Ion Ratio Lower Upper

180 100

182 96.2 47.5 142.5

145 29.6 17.0 50.9



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

