

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF062018\  
 Data File : VF059236.D  
 Acq On : 20 Jun 2018 20:04  
 Operator : VA/AP  
 Sample : J3575-10  
 Misc : 10.87g/5mL/MSVOA-F/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Jun 21 06:38:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F060618S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 07 10:52:00 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.04  | 168  | 528      | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 746      | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 628      | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.67 | 152  | 69       | 50.00 | ug/l  | 0.04     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 5.02   | 65  | 115      | 17.96 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 35.92% |      |
| 35) Dibromofluoromethane    | 0.00   | 113 | 0        | 0.00  | ug/l   |      |
| Spiked Amount               | 50.000 |     | Recovery | =     | 0.00%  |      |
| 50) Toluene-d8              | 7.70   | 98  | 633      | 41.16 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 82.32% |      |
| 62) 4-Bromofluorobenzene    | 11.51  | 95  | 343      | 43.49 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 86.98% |      |

| Target Compounds              |      |     |     |           |        | Qvalue |
|-------------------------------|------|-----|-----|-----------|--------|--------|
| 3) Chloromethane              | 1.09 | 50  | 212 | 45.798    | ug/l # | 41     |
| 4) Vinyl Chloride             | 1.08 | 62  | 63  | 15.085    | ug/l # | 43     |
| 5) Bromomethane               | 1.24 | 94  | 183 | 75.203    | ug/l # | 1      |
| 9) 1,1,2-Trichlorotrifluoroet | 1.85 | 101 | 78  | 18.853    | ug/l # | 19     |
| 10) Methyl Iodide             | 2.06 | 142 | 70  | 9.670     | ug/l # | 25     |
| 11) Tert butyl alcohol        | 2.69 | 59  | 64  | 155.985   | ug/l # | 71     |
| 12) 1,1-Dichloroethene        | 1.79 | 96  | 60  | 17.246    | ug/l # | 1      |
| 13) Acrolein                  | 1.93 | 56  | 73  | 205.559   | ug/l # | 12     |
| 14) Allyl chloride            | 2.15 | 41  | 245 | 35.880    | ug/l # | 1      |
| 15) Acrylonitrile             | 2.93 | 53  | 61  | 74.858    | ug/l # | 72     |
| 16) Acetone                   | 2.34 | 43  | 259 | 169.402   | ug/l # | 59     |
| 17) Carbon Disulfide          | 1.88 | 76  | 88  | 9.009     | ug/l # | 73     |
| 18) Methyl Acetate            | 2.45 | 43  | 196 | 74.572    | ug/l # | 66     |
| 19) Methyl tert-butyl Ether   | 2.52 | 73  | 101 | 9.352     | ug/l # | 58     |
| 21) trans-1,2-Dichloroethene  | 2.38 | 96  | 75  | 19.657    | ug/l # | 1      |
| 22) Diisopropyl ether         | 2.89 | 45  | 151 | 11.249    | ug/l # | 38     |
| 23) Vinyl Acetate             | 3.34 | 43  | 70  | 7.909     | ug/l # | 78     |
| 25) 2-Butanone                | 4.49 | 43  | 70  | 29.532    | ug/l # | 56     |
| 26) 2,2-Dichloropropane       | 3.75 | 77  | 66  | 11.179    | ug/l # | 65     |
| 27) cis-1,2-Dichloroethene    | 3.57 | 96  | 75  | 12.772    | ug/l   | 1      |
| 29) Tetrahydrofuran           | 4.33 | 42  | 69  | 66.064    | ug/l # | 36     |
| 31) Cyclohexane               | 3.75 | 56  | 69  | 9.706     | ug/l # | 15     |
| 32) 1,1,1-Trichloroethane     | 4.11 | 97  | 59  | 6.789     | ug/l # | 20     |
| 37) Ethyl Acetate             | 4.29 | 43  | 276 | 61.774    | ug/l # | 17     |
| 38) Carbon Tetrachloride      | 4.32 | 117 | 81  | 10.336    | ug/l # | 13     |
| 40) Benzene                   | 4.89 | 78  | 63  | 3.754     | ug/l # | 50     |
| 41) Methacrylonitrile         | 4.87 | 41  | 143 | 65.147    | ug/l # | 48     |
| 43) Isopropyl Acetate         | 7.09 | 43  | 89  | 14.874    | ug/l # | 44     |
| 45) 1,2-Dichloropropane       | 6.34 | 63  | 66  | 13.638    | ug/l # | 44     |
| 48) Methyl methacrylate       | 6.89 | 41  | 151 | 40.936    | ug/l # | 44     |
| 49) 1,4-Dioxane               | 6.81 | 88  | 68  | Below Cal | #      | 16     |
| 51) 4-Methyl-2-Pentanone      | 8.43 | 43  | 68  | 16.581    | ug/l # | 38     |
| 53) t-1,3-Dichloropropene     | 8.40 | 75  | 77  | 9.599     | ug/l # | 43     |
| 54) cis-1,3-Dichloropropene   | 7.43 | 75  | 66  | 7.162     | ug/l # | 56     |

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 ALS Vial : 9 Sample Multiplier: 1

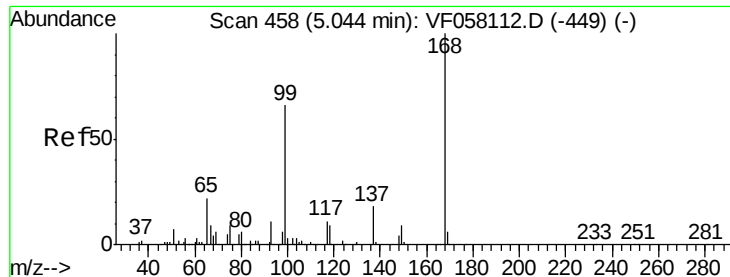
Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Jun 21 06:38:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F060618S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 07 10:52:00 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 55) 1,1,2-Trichloroethane      | 8.56  | 97   | 65       | 14.838  | ug/l # | 8        |
| 56) Ethyl methacrylate         | 8.78  | 69   | 148      | 26.803  | ug/l # | 40       |
| 57) 1,3-Dichloropropane        | 9.16  | 76   | 79       | 10.542  | ug/l # | 11       |
| 58) 2-Chloroethyl Vinyl ether  | 7.61  | 63   | 60       | 151.963 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.60  | 43   | 231      | 71.208  | ug/l # | 26       |
| 60) Dibromochloromethane       | 9.01  | 129  | 60       | 9.531   | ug/l # | 12       |
| 74) N-amyl acetate             | 11.45 | 43   | 83       | 48.638  | ug/l # | 46       |
| 76) 1,2,3-Trichloropropane     | 11.81 | 75   | 98       | 117.160 | ug/l # | 29       |
| 78) n-propylbenzene            | 11.63 | 91   | 96       | 16.978  | ug/l # | 53       |
| 79) 2-Chlorotoluene            | 11.76 | 91   | 67       | 20.057  | ug/l # | 39       |
| 80) 1,3,5-Trimethylbenzene     | 11.80 | 105  | 63       | 15.934  | ug/l # | 28       |
| 81) trans-1,4-Dichloro-2-buten | 11.98 | 75   | 69       | 127.229 | ug/l # | 19       |
| 84) 1,2,4-Trimethylbenzene     | 12.32 | 105  | 66       | 16.110  | ug/l # | 28       |
| 85) sec-Butylbenzene           | 12.36 | 105  | 143      | 26.806  | ug/l # | 58       |
| 86) p-Isopropyltoluene         | 12.56 | 119  | 75       | 17.117  | ug/l # | 50       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.72 | 75   | 77       | 346.599 | ug/l # | 8        |
| 95) Naphthalene                | 14.52 | 128  | 65       | 20.346  | ug/l # | 70       |

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

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ALS Vial : 9 Sample Multiplier: 1



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.04 min Scan# 457

Delta R.T. -0.00 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

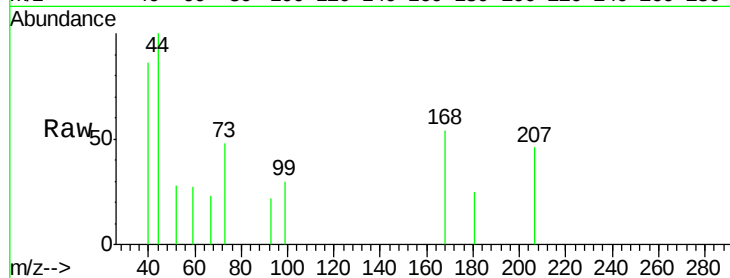
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion:168 Resp: 528

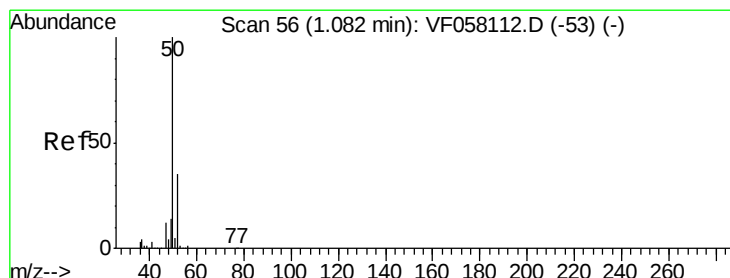
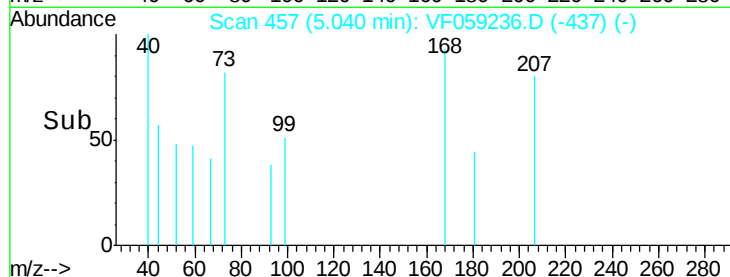
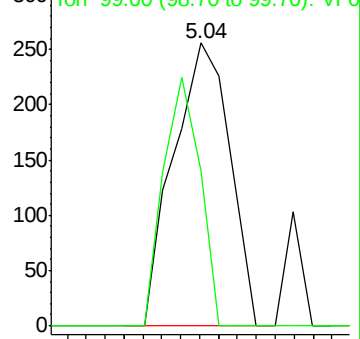
Ion Ratio Lower Upper

168 100

99 54.7 52.9 79.3



Abundance Ion 168.00 (167.70 to 168.70): VF0



#3

Chloromethane

Concen: 45.798 ug/l

RT: 1.09 min Scan# 56

Delta R.T. 0.01 min

Lab File: VF059236.D

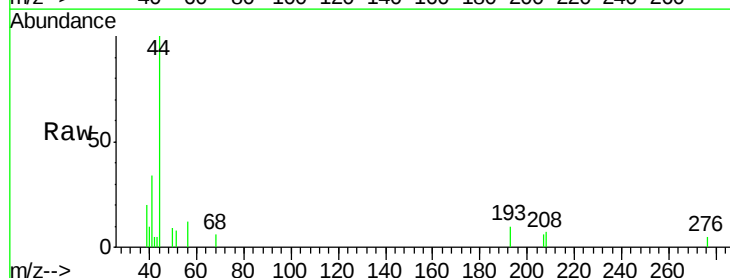
Acq: 20 Jun 2018 20:04

Tgt Ion: 50 Resp: 212

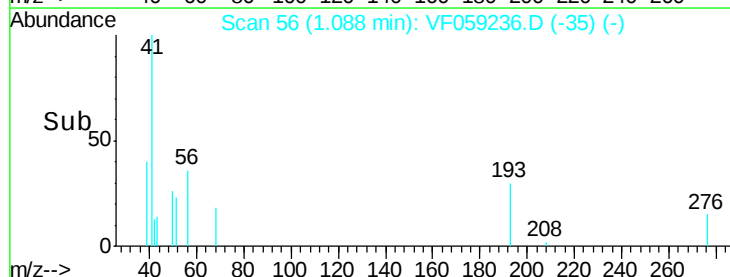
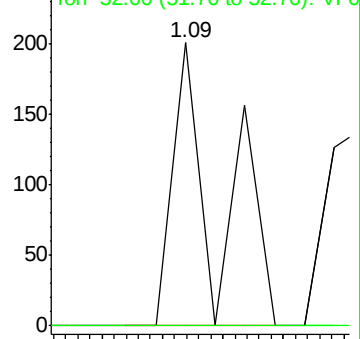
Ion Ratio Lower Upper

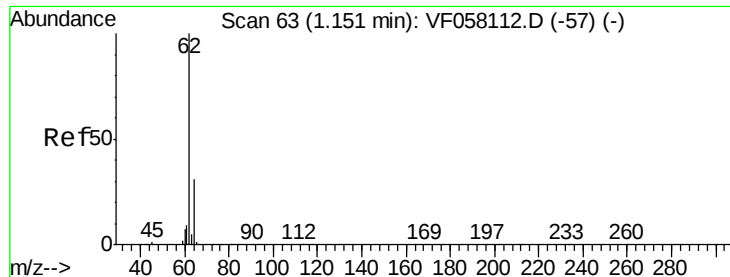
50 100

52 0.0 27.3 40.9#



Abundance Ion 50.00 (49.70 to 50.70): VF0





#4

Vinyl Chloride

Concen: 15.085 ug/l

RT: 1.08 min Scan# 55

Delta R.T. -0.07 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

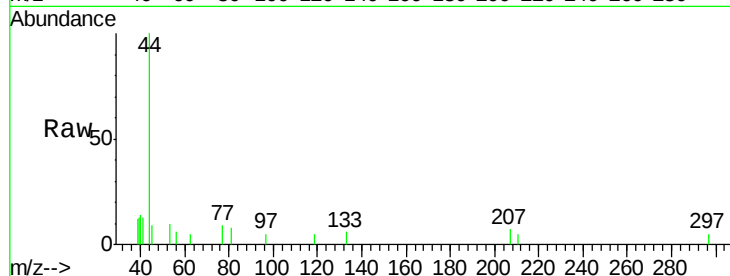
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 62 Resp: 63

Ion Ratio Lower Upper

62 100

64 0.0 25.0 37.6#



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0

1.08

100

80

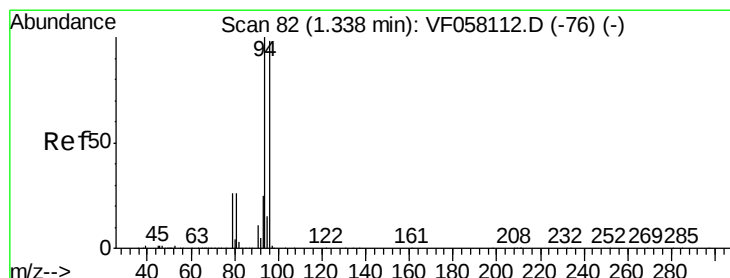
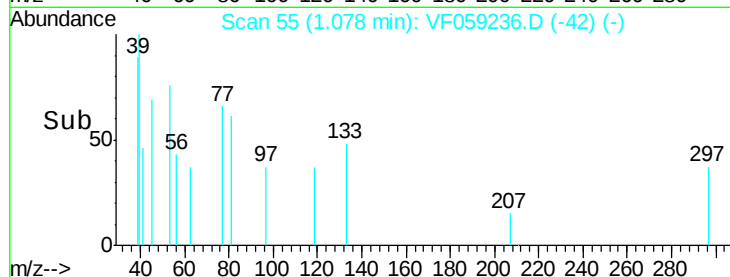
60

40

20

0

Time--> 1.04 1.06 1.08 1.10



#5

Bromomethane

Concen: 75.203 ug/l

RT: 1.24 min Scan# 71

Delta R.T. -0.10 min

Lab File: VF059236.D

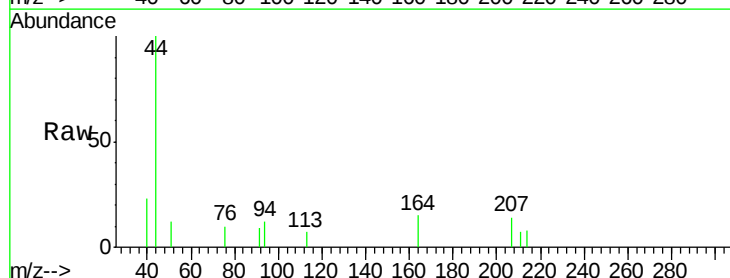
Acq: 20 Jun 2018 20:04

Tgt Ion: 94 Resp: 183

Ion Ratio Lower Upper

94 100

96 0.0 78.6 117.8#



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0

1.24

200

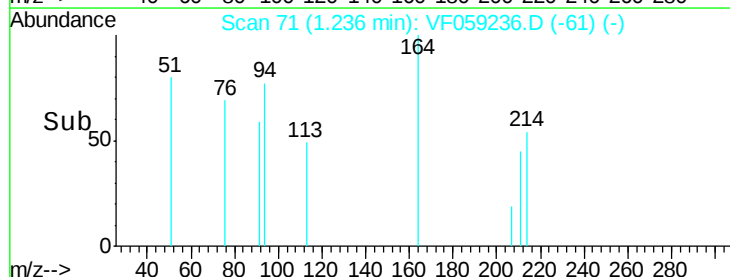
150

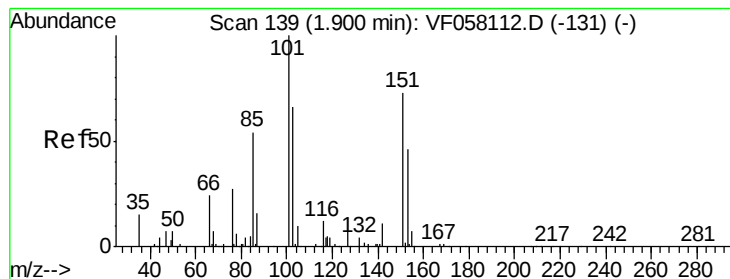
100

50

0

Time--> 1.20 1.25





#9

1,1,2-Trichlorotrifluoroethane

Concen: 18.853 ug/l

RT: 1.85 min Scan# 133

Delta R.T. -0.05 min

Lab File: VF059236.D

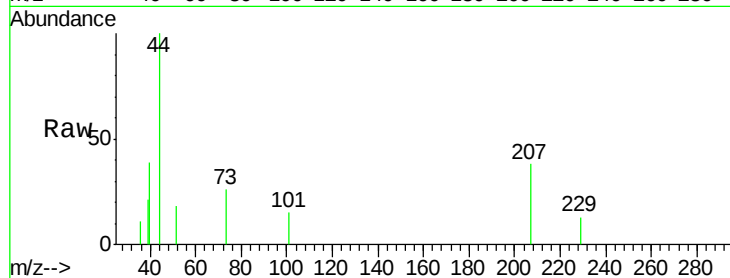
Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

ClientSampleId :

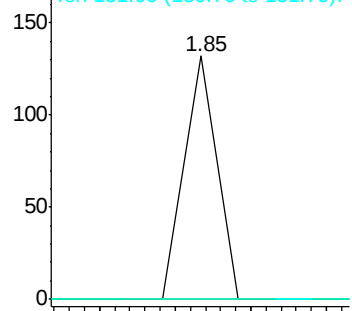
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 101   | Resp: | 78    |
| Ion      | Ratio | Lower | Upper |
| 101      | 100   |       |       |
| 85       | 0.0   | 42.2  | 63.4# |
| 151      | 0.0   | 56.8  | 85.2# |



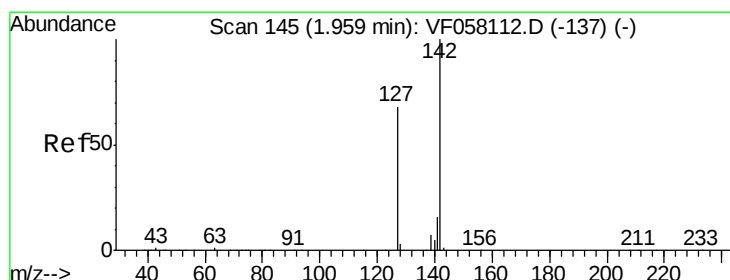
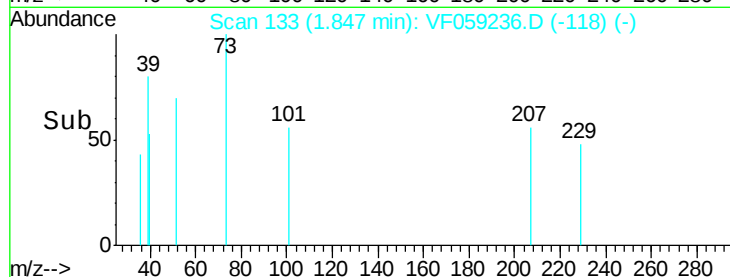
Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VF0

Ion 151.00 (150.70 to 151.70): V



Time-->



#10

Methyl Iodide

Concen: 9.670 ug/l

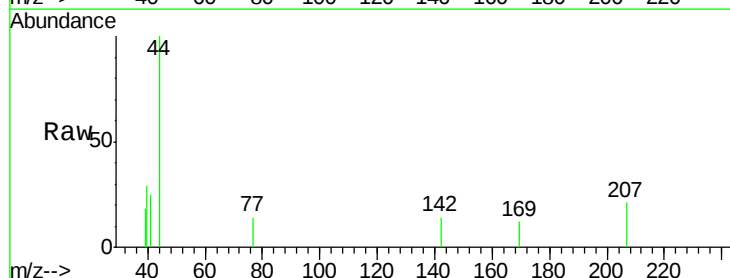
RT: 2.06 min Scan# 155

Delta R.T. 0.10 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

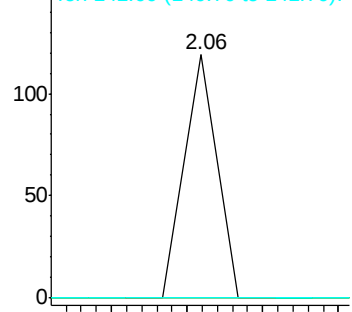
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 70    |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 127      | 0.0   | 54.1  | 81.1# |
| 141      | 0.0   | 13.0  | 19.4# |



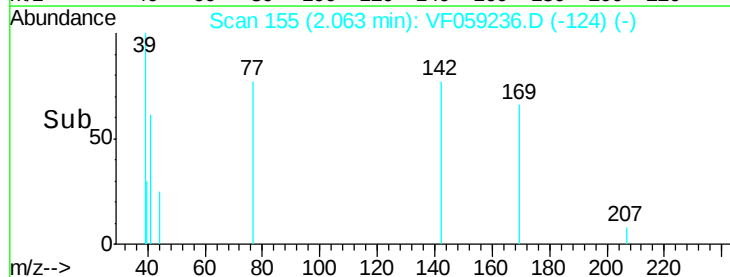
Abundance Ion 142.00 (141.70 to 142.70): V

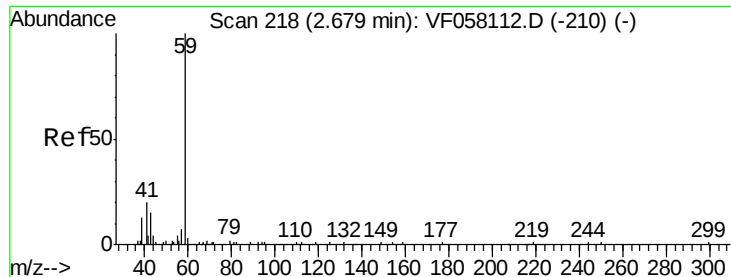
Ion 127.00 (126.70 to 127.70): V

Ion 141.00 (140.70 to 141.70): V



Time-->



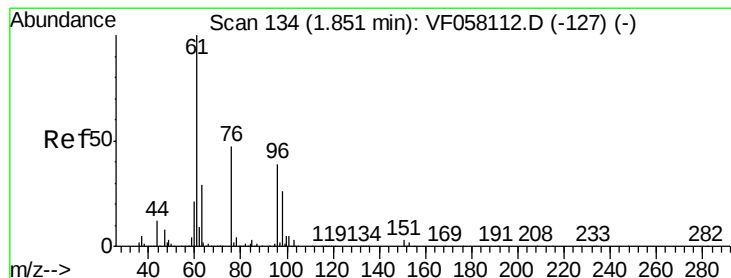
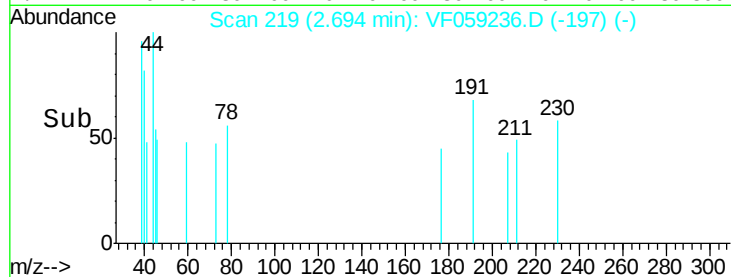
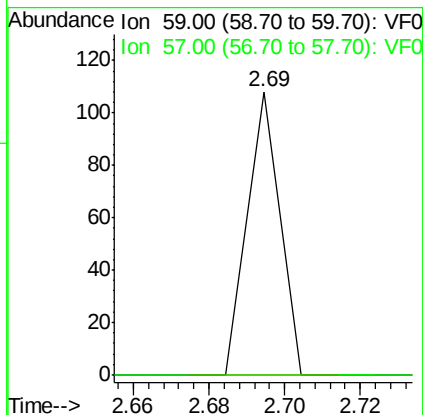
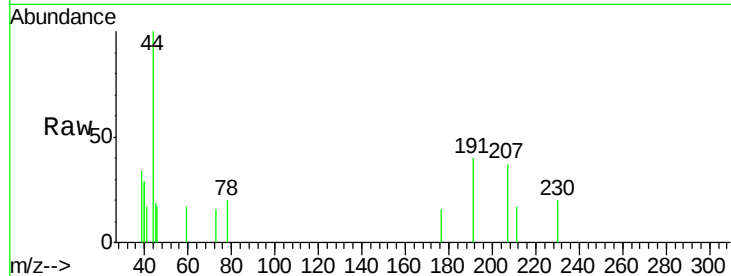


#11

Tert butyl alcohol  
Concen: 155.985 ug/l  
RT: 2.69 min Scan# 219  
Delta R.T. 0.02 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampled :

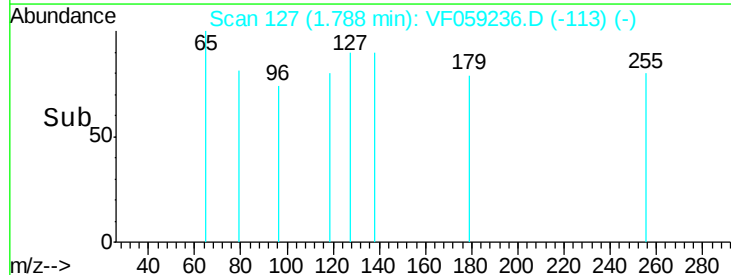
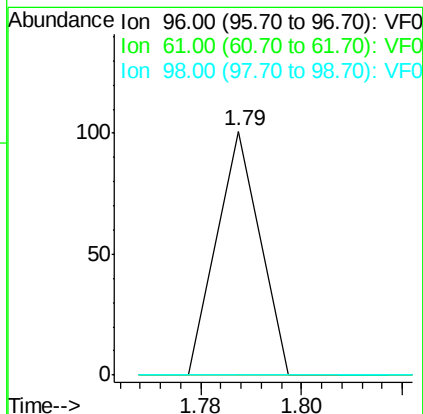
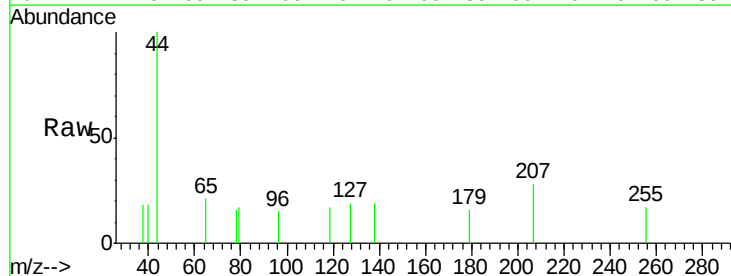
Tot Ion: 59 Resp: 64  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.7 13.1#

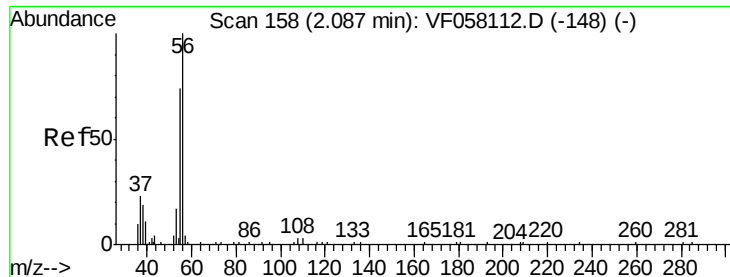


#12

1,1-Dichloroethene  
Concen: 17.246 ug/l  
RT: 1.79 min Scan# 127  
Delta R.T. -0.06 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Tgt Ion: 96 Resp: 60  
Ion Ratio Lower Upper  
96 100  
61 0.0 203.0 304.4#  
98 0.0 52.7 79.1#





#13

Acrolein

Concen: 205.559 ug/l

RT: 1.93 min Scan# 141

Delta R.T. -0.16 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

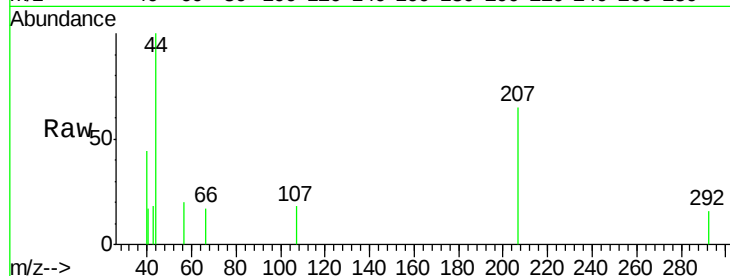
ClientSampled :

Tot Ion: 56 Resp: 73

Ion Ratio Lower Upper

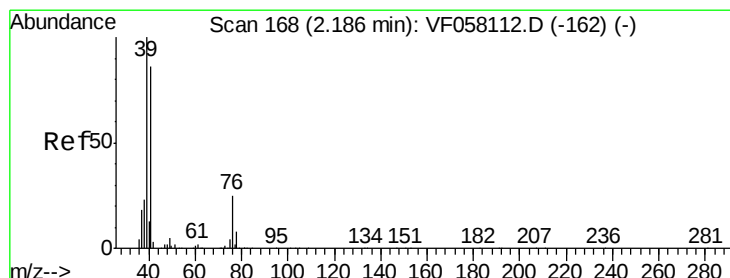
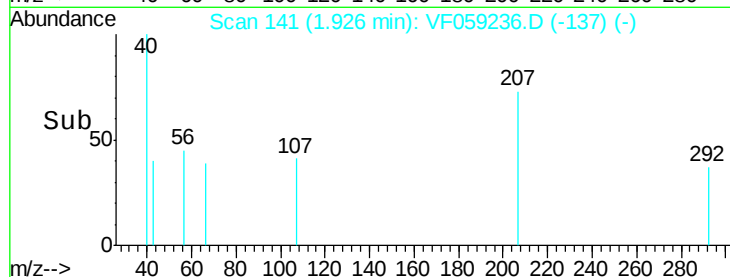
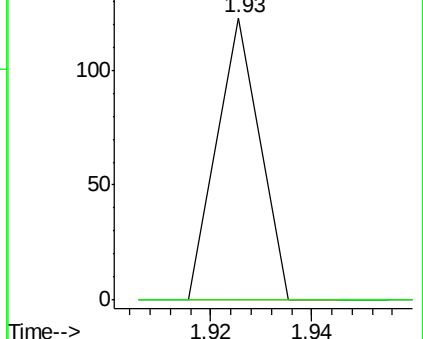
56 100

55 0.0 60.0 90.0#



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0



#14

Allyl chloride

Concen: 35.880 ug/l

RT: 2.15 min Scan# 164

Delta R.T. -0.03 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

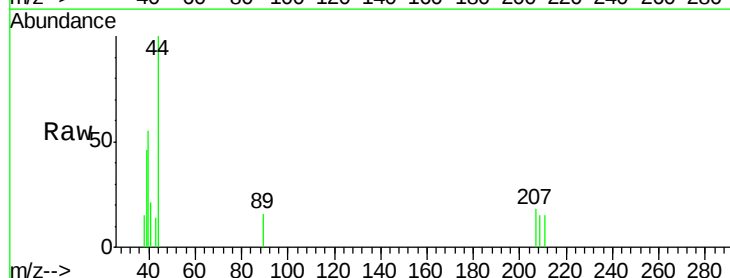
Tgt Ion: 41 Resp: 245

Ion Ratio Lower Upper

41 100

39 487.5 93.5 140.3#

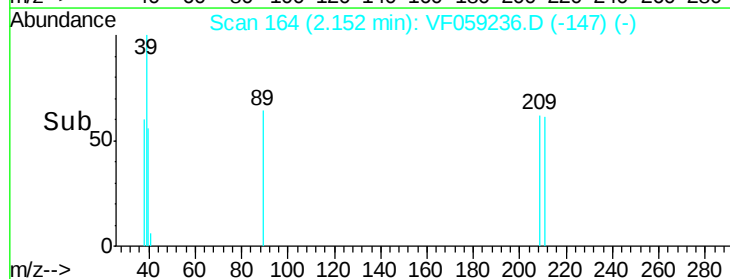
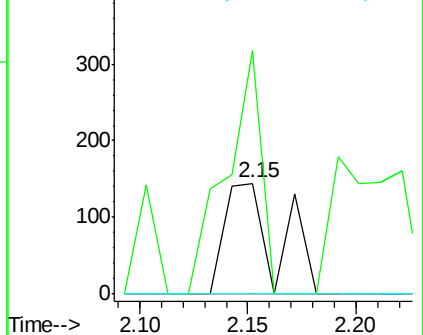
76 0.0 23.9 35.9#

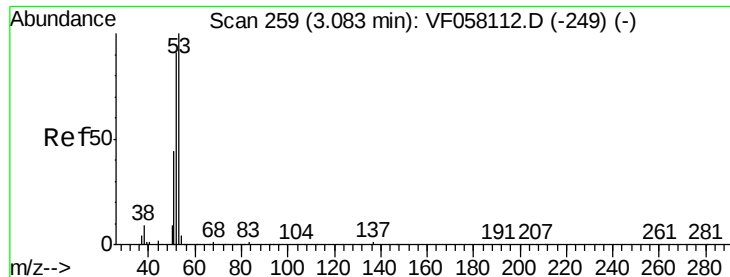


Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

Ion 76.00 (75.70 to 76.70): VF0





#15

Acrylonitrile

Concen: 74.858 ug/l

RT: 2.93 min Scan# 243

Delta R.T. -0.15 min

Lab File: VF059236.D

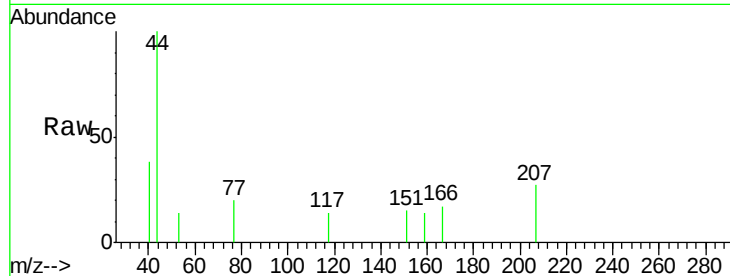
Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

ClientSampled :

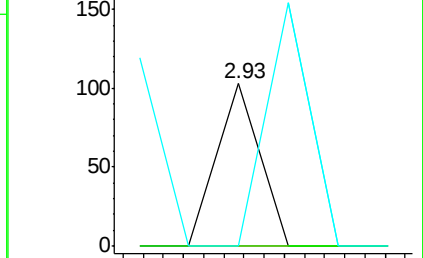
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 53    | Resp: | 61    |
| Ion      | Ratio | Lower | Upper |
| 53       | 100   |       |       |
| 52       | 100.0 | 73.2  | 109.8 |
| 51       | 0.0   | 35.6  | 53.4# |



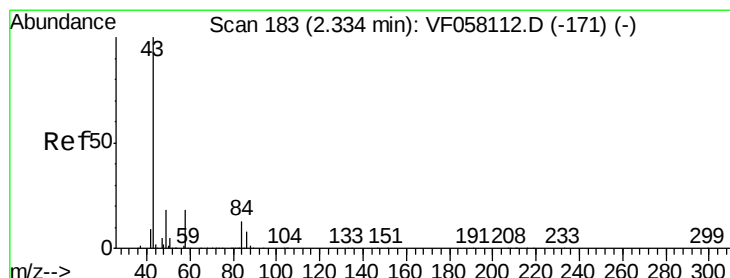
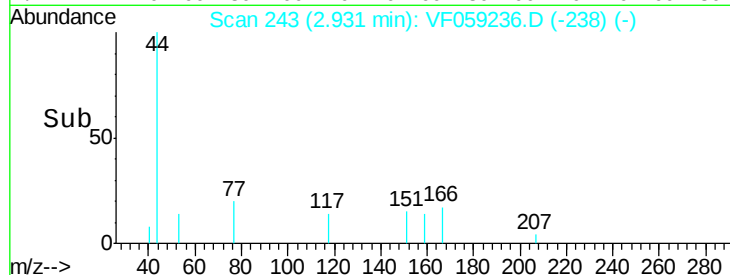
Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0



Time-->



#16

Acetone

Concen: 169.402 ug/l

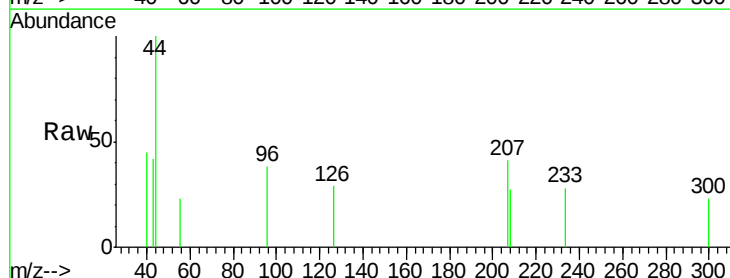
RT: 2.34 min Scan# 183

Delta R.T. 0.01 min

Lab File: VF059236.D

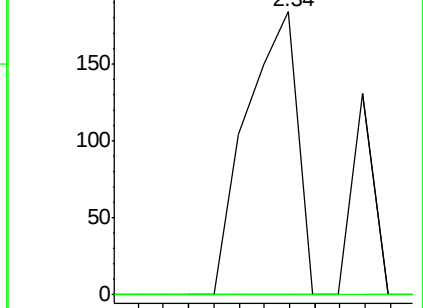
Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 259   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 0.0   | 14.4  | 21.6# |

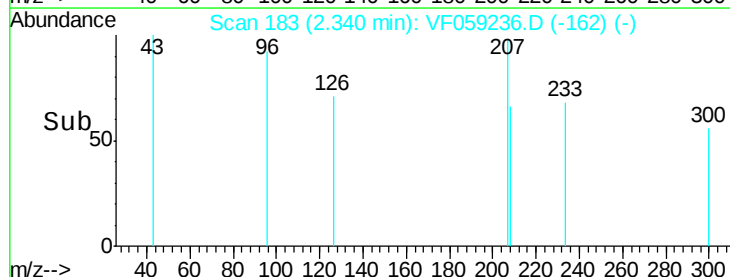


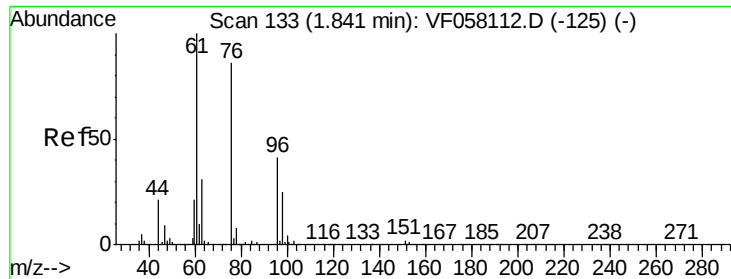
Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



Time-->





#17

Carbon Disulfide

Concen: 9.009 ug/l

RT: 1.88 min Scan# 136

Delta R.T. 0.04 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

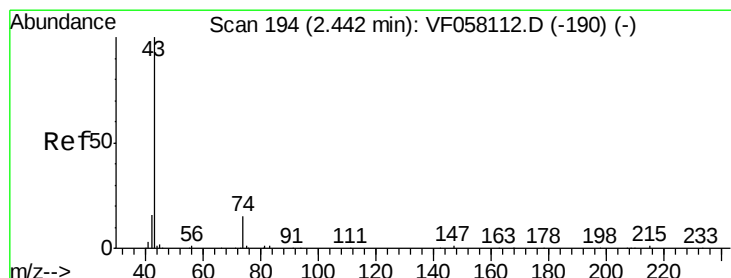
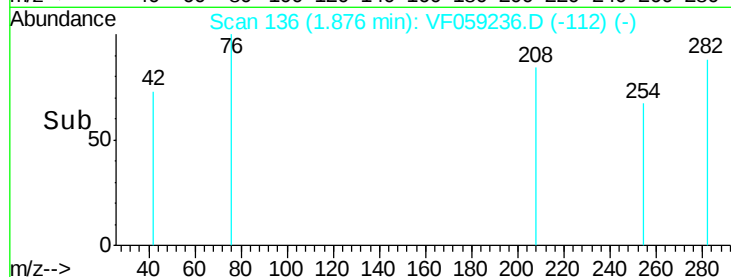
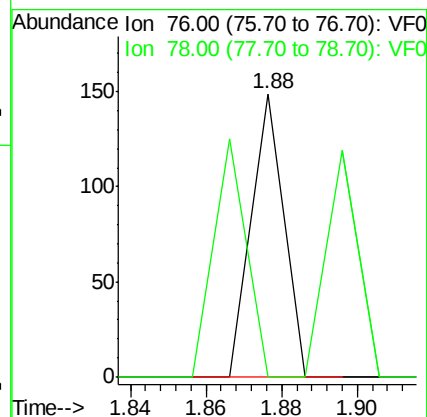
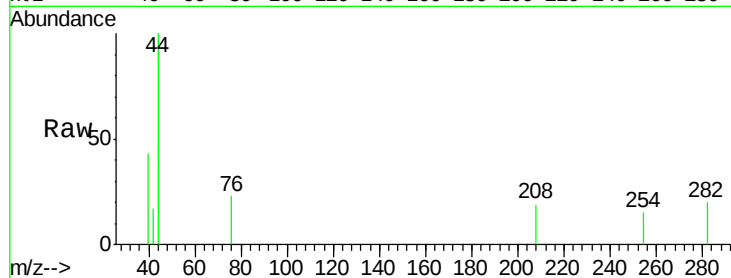
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 76 Resp: 88

Ion Ratio Lower Upper

76 100

78 0.0 7.8 11.8#



#18

Methyl Acetate

Concen: 74.572 ug/l

RT: 2.45 min Scan# 194

Delta R.T. 0.01 min

Lab File: VF059236.D

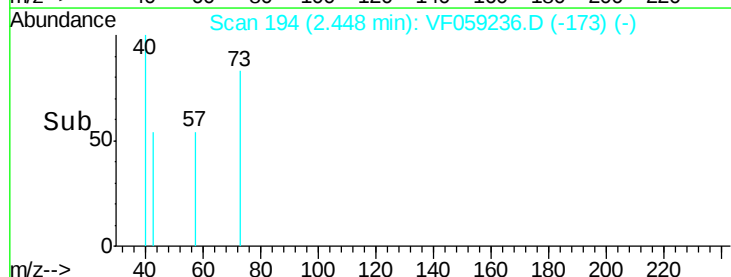
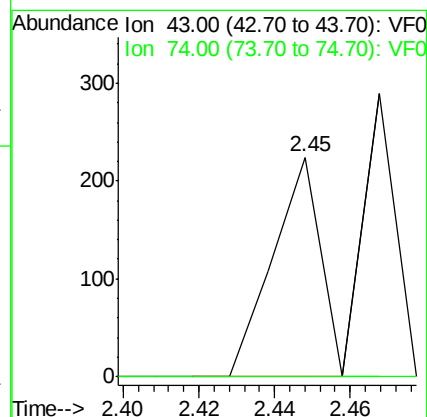
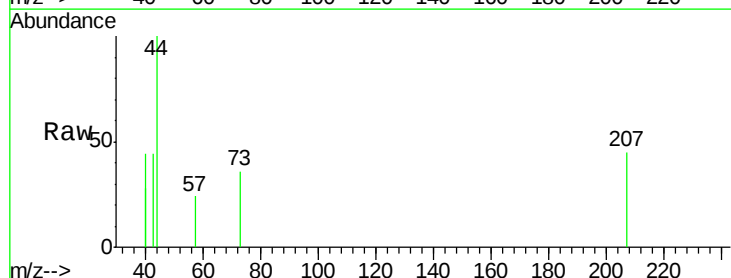
Acq: 20 Jun 2018 20:04

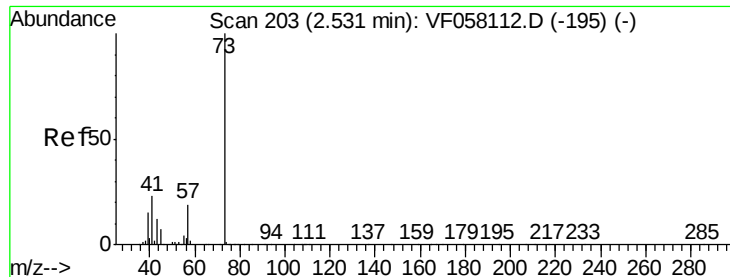
Tgt Ion: 43 Resp: 196

Ion Ratio Lower Upper

43 100

74 0.0 10.9 16.3#



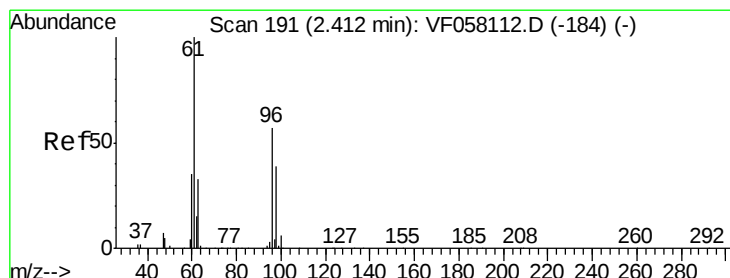
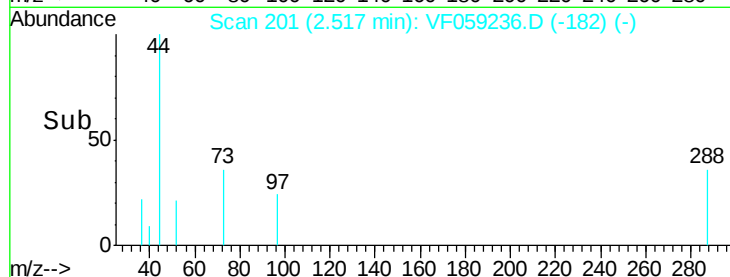
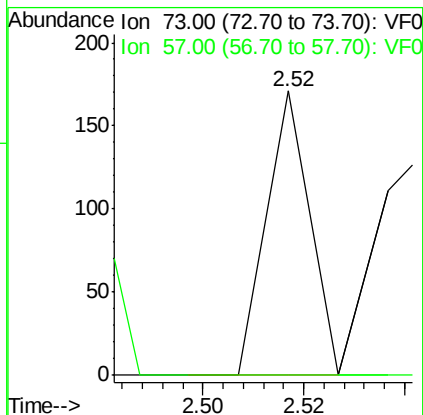
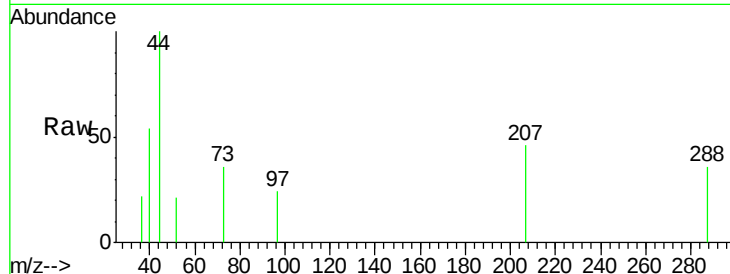


#19

Methvl tert-butvl Ether  
Concen: 9.352 ug/l  
RT: 2.52 min Scan# 201  
Delta R.T. -0.01 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

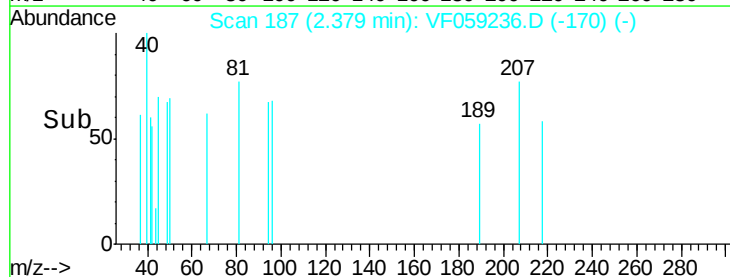
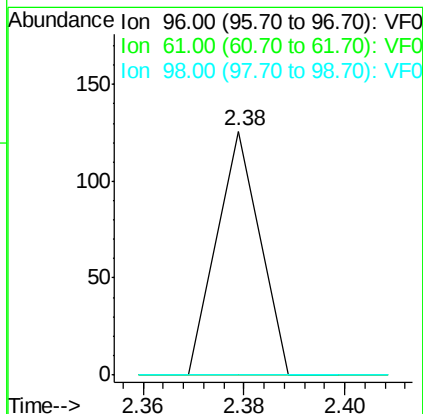
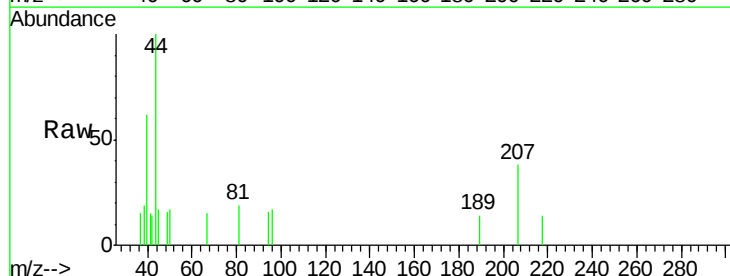
Tot Ion: 73 Resp: 101  
Ion Ratio Lower Upper  
73 100  
57 0.0 15.0 22.4#

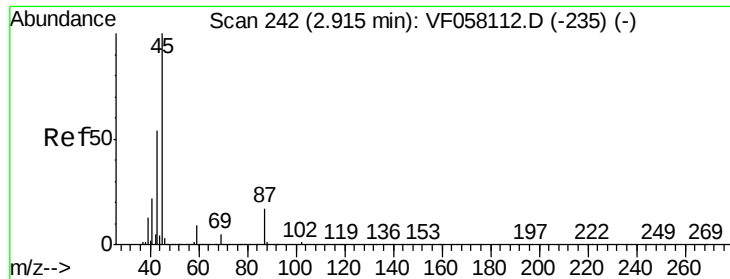


#21

trans-1,2-Dichloroethene  
Concen: 19.657 ug/l  
RT: 2.38 min Scan# 187  
Delta R.T. -0.03 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Tgt Ion: 96 Resp: 75  
Ion Ratio Lower Upper  
96 100  
61 0.0 139.4 209.2#  
98 0.0 54.0 81.0#





#22

Diisopropyl ether

Concen: 11.249 ug/l

RT: 2.89 min Scan# 239

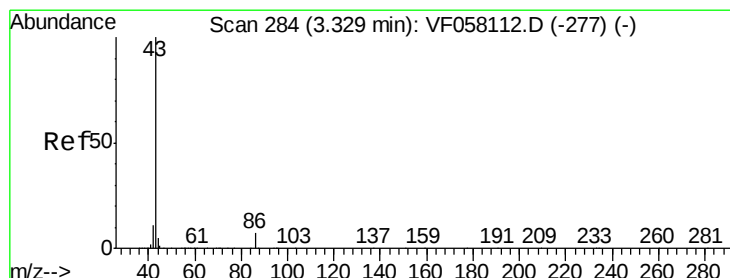
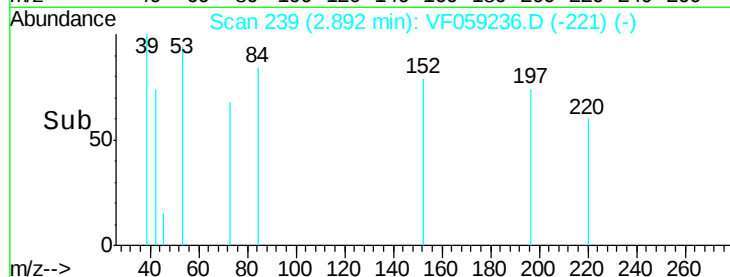
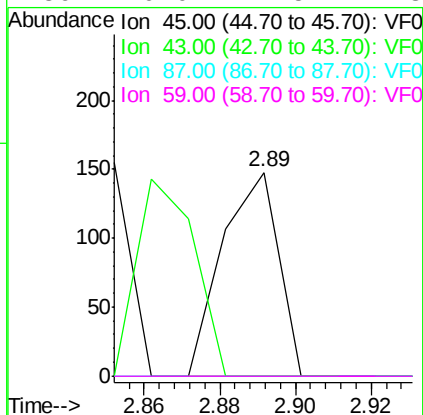
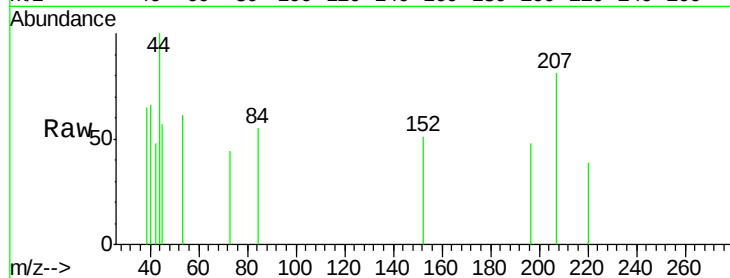
Delta R.T. -0.02 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 45    | Resp: | 151   |
| Ion      | Ratio | Lower | Upper |
| 45       | 100   |       |       |
| 43       | 0.0   | 43.2  | 64.8# |
| 87       | 0.0   | 13.8  | 20.6# |
| 59       | 0.0   | 7.5   | 11.3# |



#23

Vinyl Acetate

Concen: 7.909 ug/l

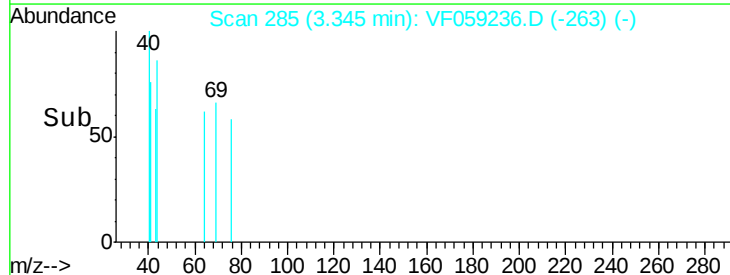
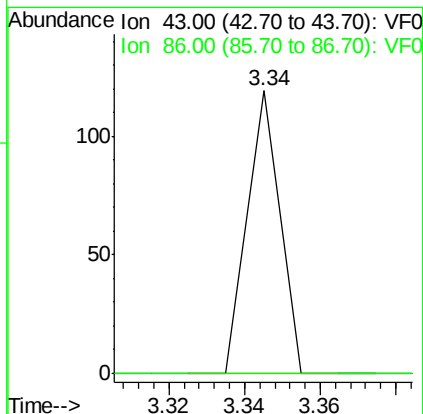
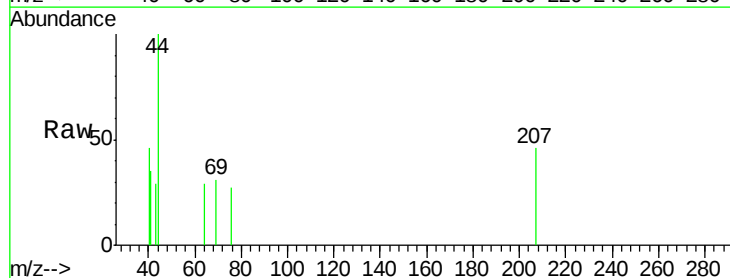
RT: 3.34 min Scan# 285

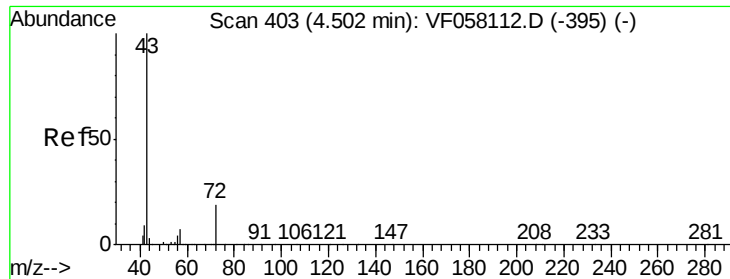
Delta R.T. 0.02 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 70    |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 0.0   | 6.0   | 9.0#  |

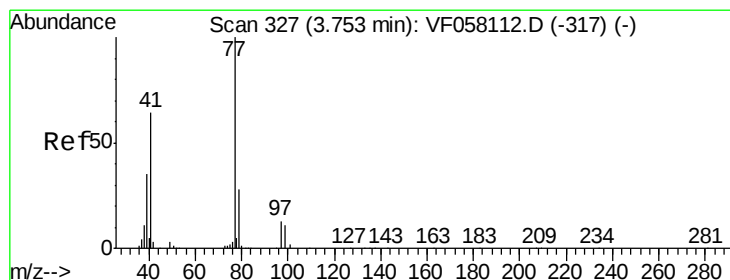
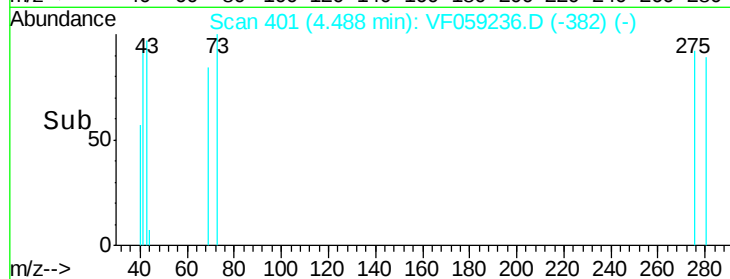
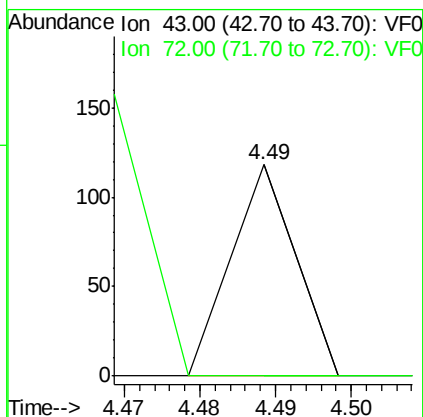
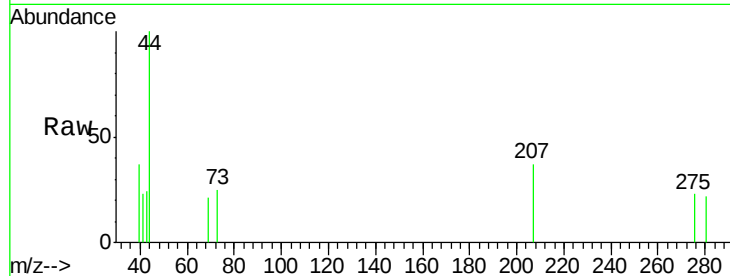




#25  
2-Butanone  
Concen: 29.532 ug/l  
RT: 4.49 min Scan# 401  
Delta R.T. -0.01 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

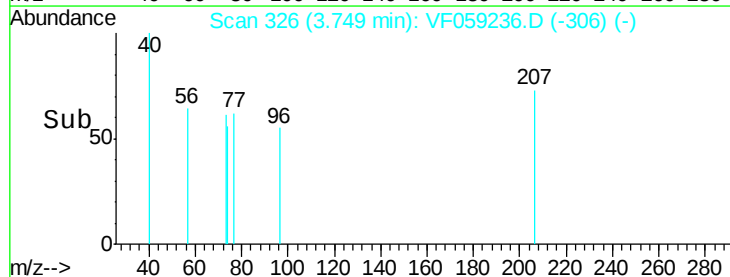
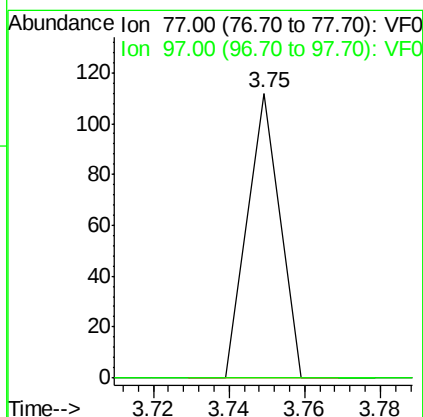
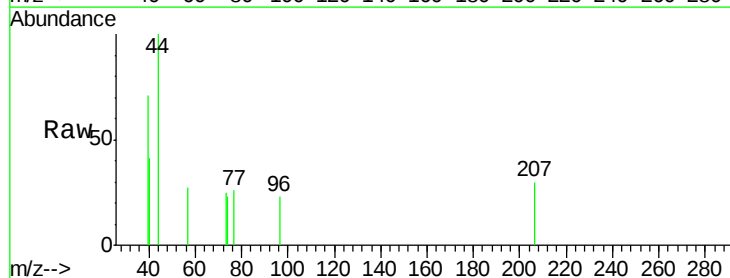
Instrument :  
MSVOA\_F  
ClientSampleId :

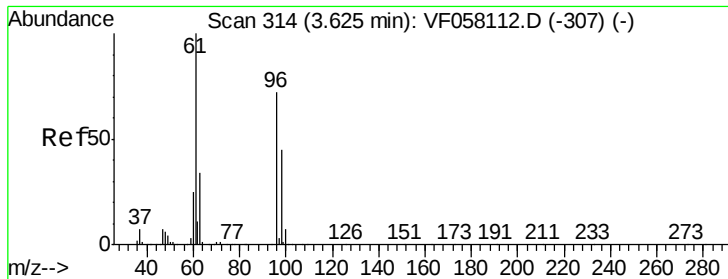
Tot Ion: 43 Resp: 70  
Ion Ratio Lower Upper  
43 100  
72 0.0 16.1 24.1#



#26  
2,2-Dichloropropane  
Concen: 11.179 ug/l  
RT: 3.75 min Scan# 326  
Delta R.T. -0.00 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Tgt Ion: 77 Resp: 66  
Ion Ratio Lower Upper  
77 100  
97 0.0 7.2 21.6#



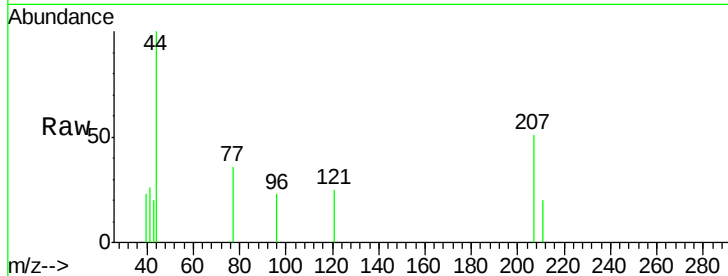


#27

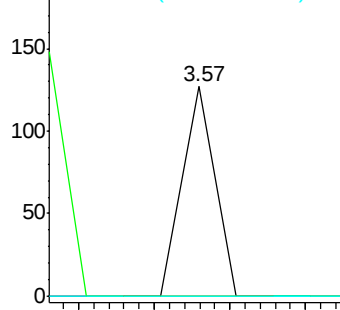
cis-1,2-Dichloroethene  
Concen: 12.772 ug/l  
RT: 3.57 min Scan# 308  
Delta R.T. -0.05 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

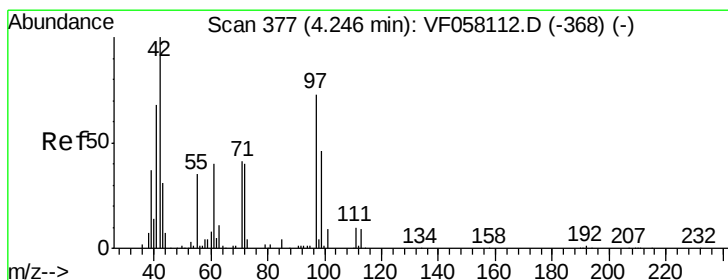
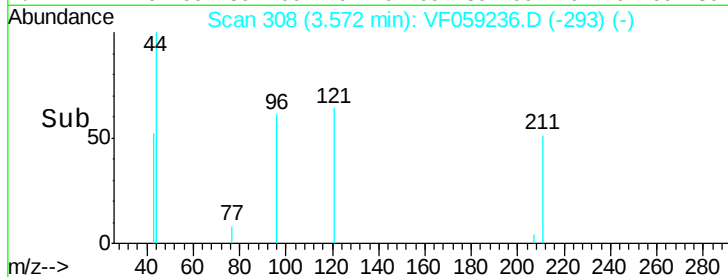
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 0.0   | 0.0   | 278.6 |
| 98      | 0.0   | 0.0   | 125.2 |



Abundance Ion 96.00 (95.70 to 96.70): VF0  
Ion 61.00 (60.70 to 61.70): VF0  
Ion 98.00 (97.70 to 98.70): VF0



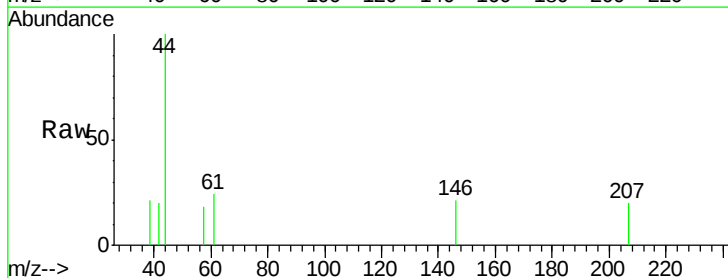
Time-->



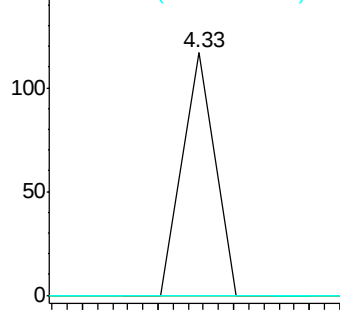
#29

Tetrahydrofuran  
Concen: 66.064 ug/l  
RT: 4.33 min Scan# 385  
Delta R.T. 0.08 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

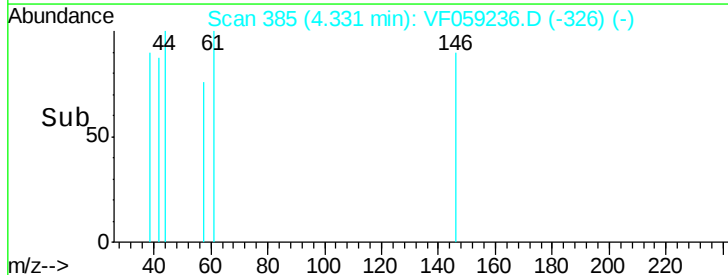
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 0.0   | 30.5  | 45.7# |
| 71      | 0.0   | 31.5  | 47.3# |

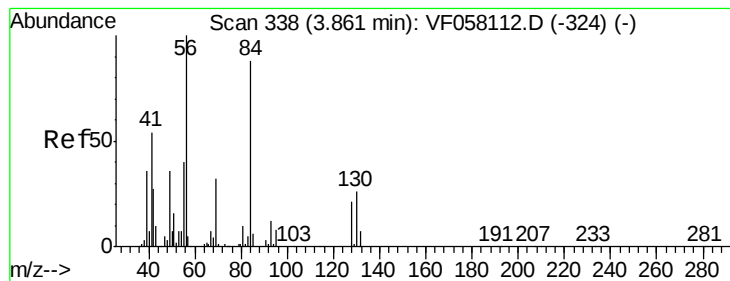


Abundance Ion 42.00 (41.70 to 42.70): VF0  
Ion 72.00 (71.70 to 72.70): VF0  
Ion 71.00 (70.70 to 71.70): VF0



Time-->





#31

Cyclohexane

Concen: 9.706 ug/l

RT: 3.75 min Scan# 326

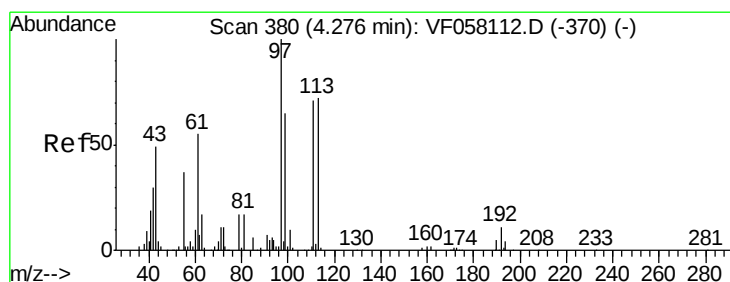
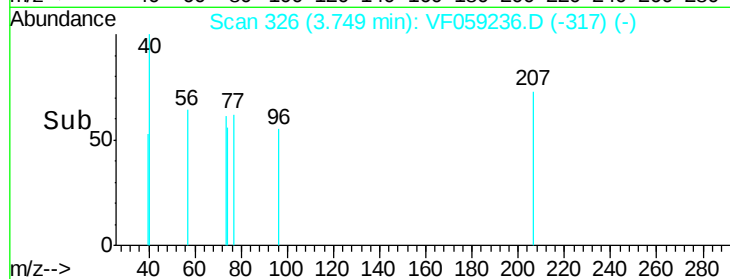
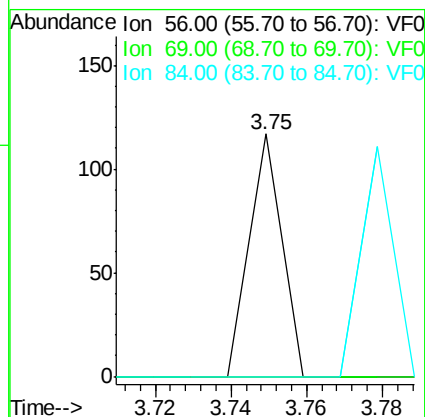
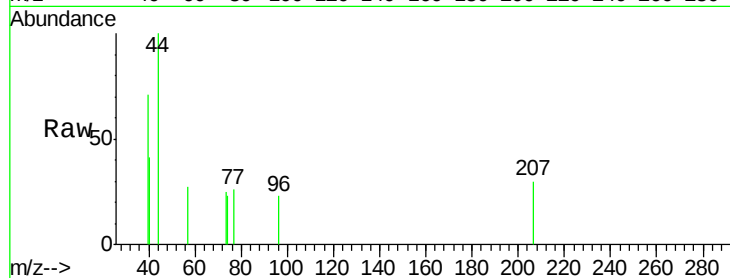
Delta R.T. -0.11 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 56    | Resp: | 69     |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 0.0   | 25.9  | 38.9#  |
| 84       | 0.0   | 70.3  | 105.5# |



#32

1,1,1-Trichloroethane

Concen: 6.789 ug/l

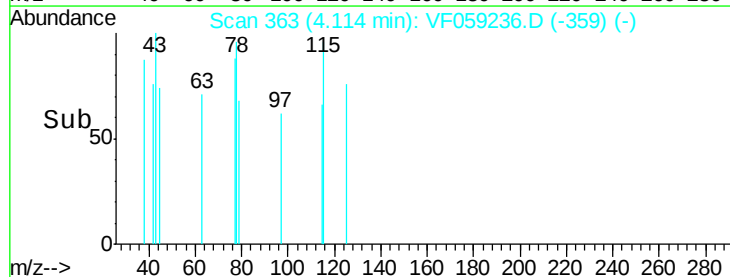
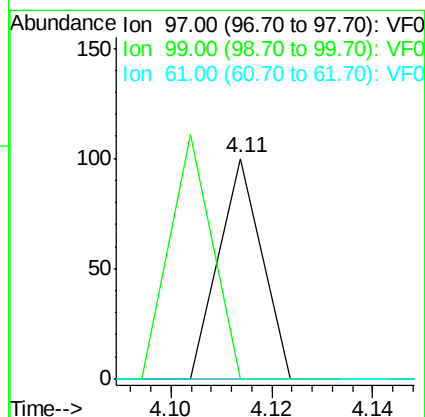
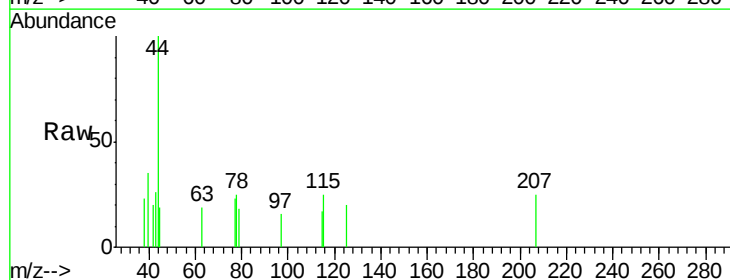
RT: 4.11 min Scan# 363

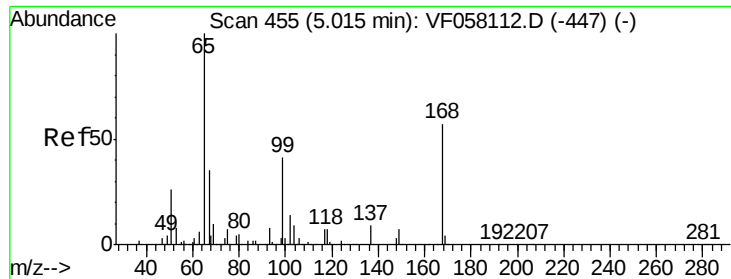
Delta R.T. -0.16 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 59    |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 0.0   | 52.0  | 78.0# |
| 61       | 0.0   | 44.3  | 66.5# |





#33

1,2-Dichloroethane-d4

Concen: 17.959 ug/l

RT: 5.02 min Scan# 455

Delta R.T. 0.01 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

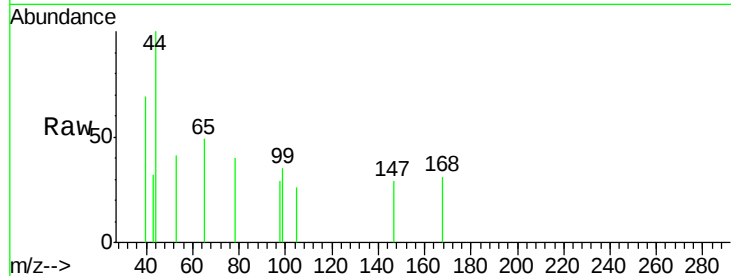
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 65 Resp: 115

Ion Ratio Lower Upper

65 100

67 0.0 0.0 97.0

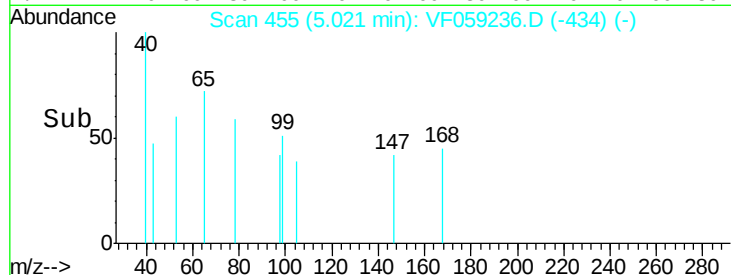


Abundance Ion 65.00 (64.70 to 65.70): VF0

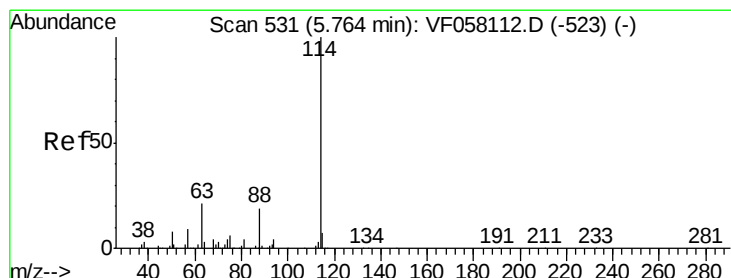
Ion 67.00 (66.70 to 67.70): VF0

5.02

5.04



Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.77 min Scan# 531

Delta R.T. 0.01 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

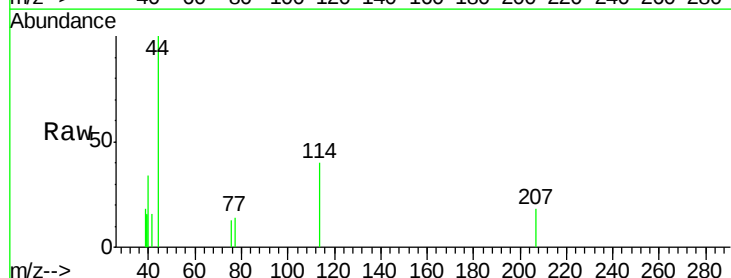
Tgt Ion:114 Resp: 746

Ion Ratio Lower Upper

114 100

63 0.0 0.0 41.6

88 0.0 0.0 38.8



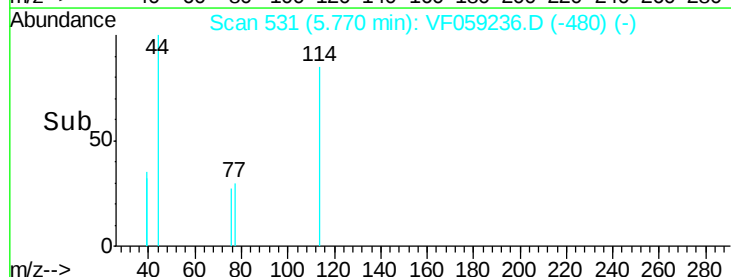
Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

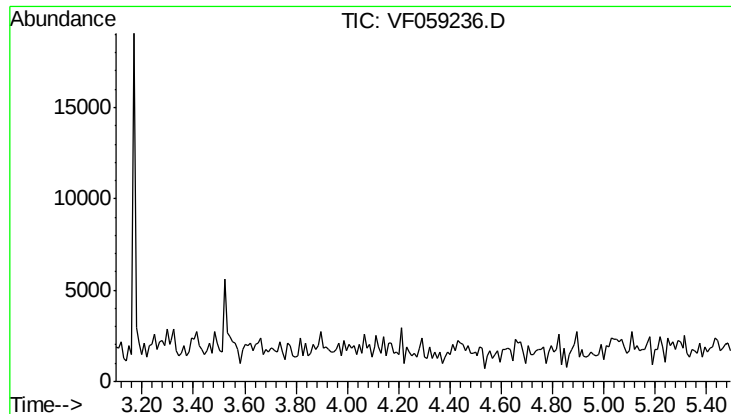
Ion 88.00 (87.70 to 88.70): VF0

5.77

5.80



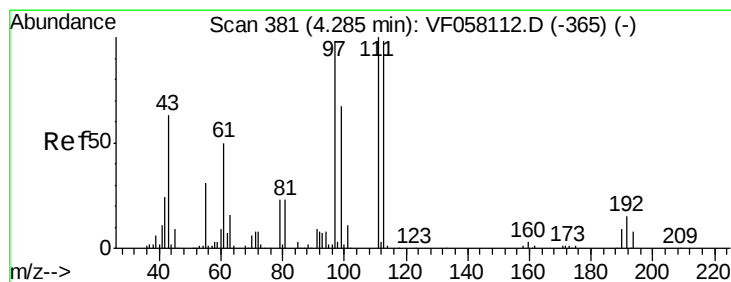
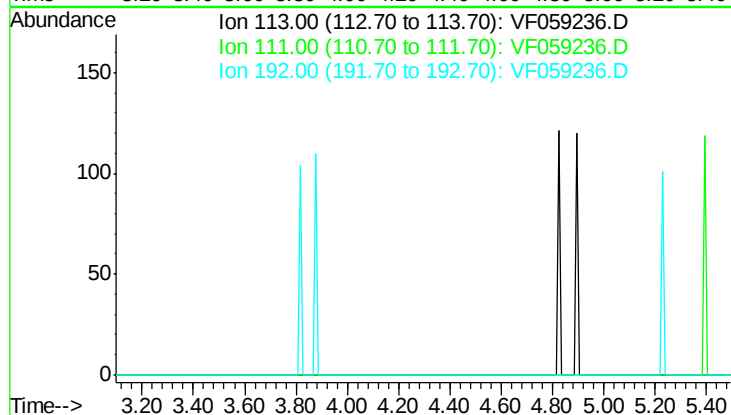
Time-->



#35  
 Dibromofluoromethane  
 Concen: 0.000 ug/l  
 Expected RT: 4.30 min  
 Lab File: VF059236.D  
 Acq: 20 Jun 2018 20:04

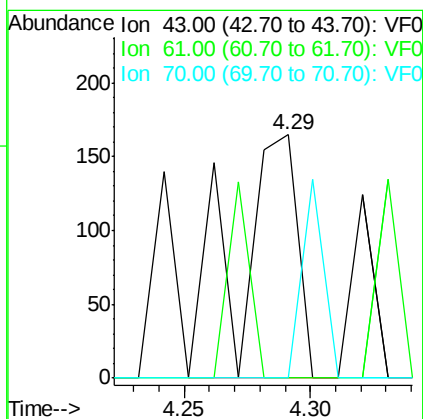
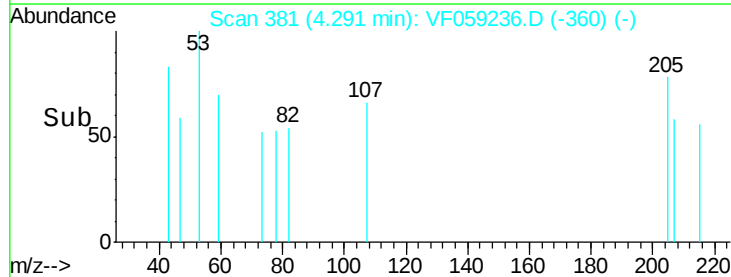
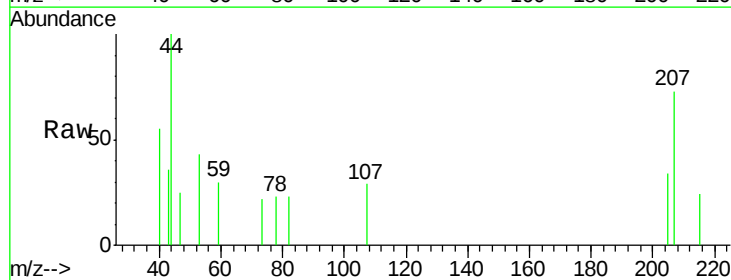
Instrument :  
 MSVOA\_F  
 ClientSampleId :

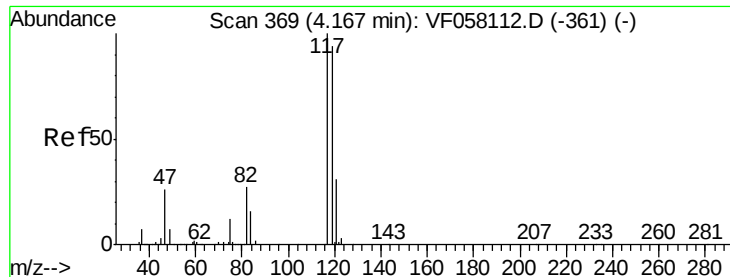
Tot Ion: 113  
 Sig Exp Ratio  
 113 100  
 111 101.6  
 192 15.9



#37  
 Ethyl Acetate  
 Concen: 61.774 ug/l  
 RT: 4.29 min Scan# 381  
 Delta R.T. 0.01 min  
 Lab File: VF059236.D  
 Acq: 20 Jun 2018 20:04

Tgt Ion: 43 Resp: 276  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 63.0 94.4#  
 70 0.0 7.5 11.3#

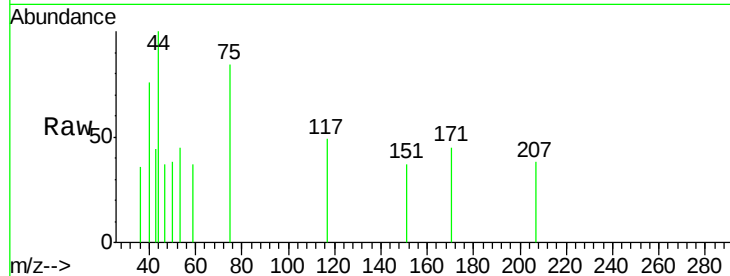




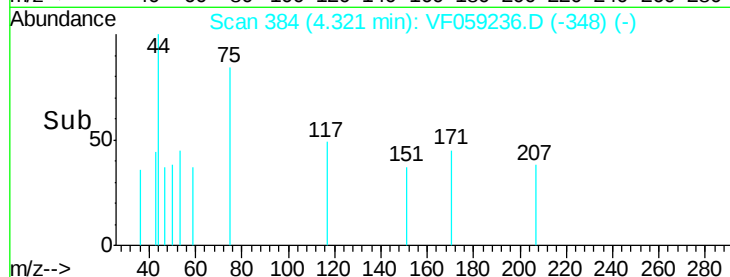
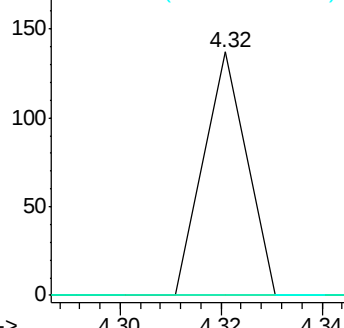
#38  
Carbon Tetrachloride  
Concen: 10.336 ug/l  
RT: 4.32 min Scan# 384  
Delta R.T. 0.15 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:117 Resp: 81  
Ion Ratio Lower Upper  
117 100  
119 0.0 75.7 113.5#  
121 0.0 24.8 37.2#

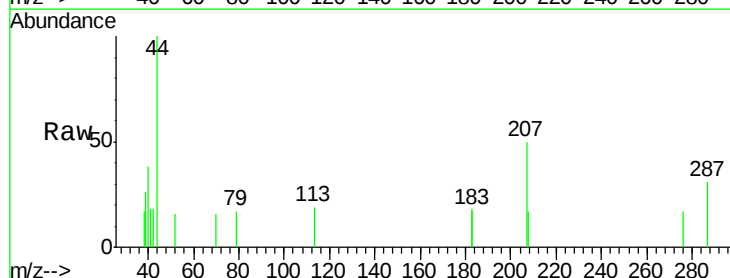
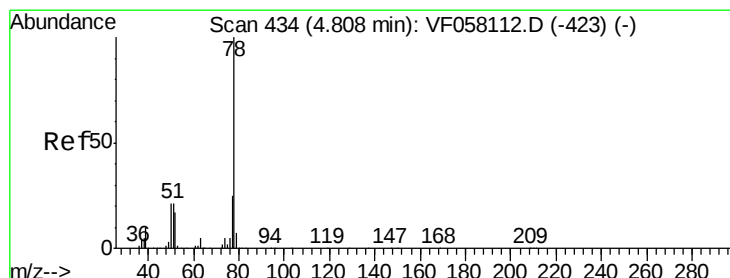


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V  
Ion 121.00 (120.70 to 121.70): V

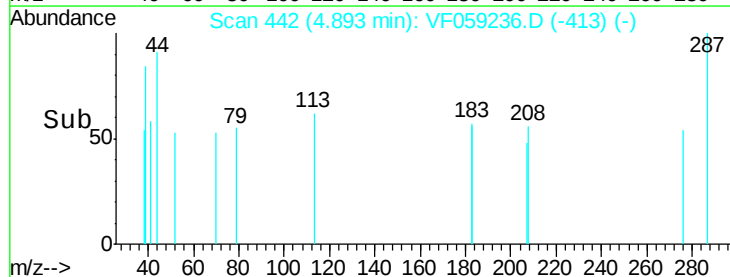
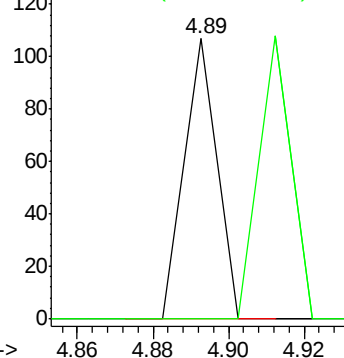


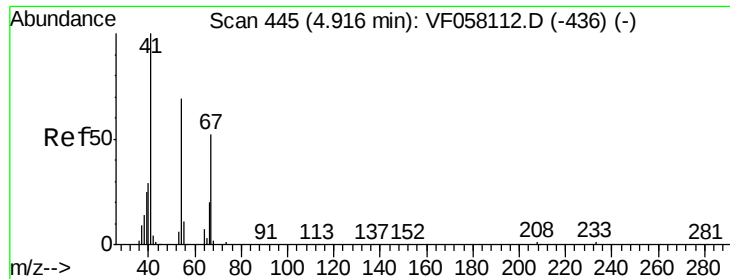
#40  
Benzene  
Concen: 3.754 ug/l  
RT: 4.89 min Scan# 442  
Delta R.T. 0.08 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Tgt Ion: 78 Resp: 63  
Ion Ratio Lower Upper  
78 100  
77 0.0 20.2 30.2#



Abundance Ion 78.10 (77.80 to 78.80): VF0  
Ion 77.00 (76.70 to 77.70): VF0

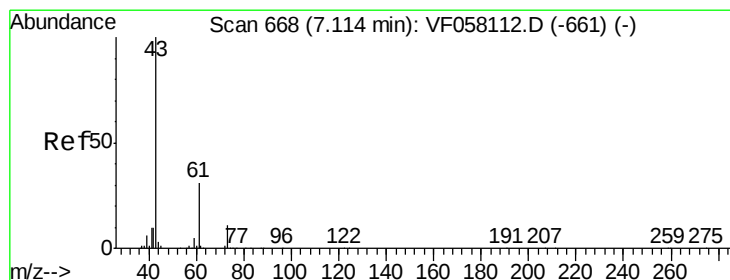
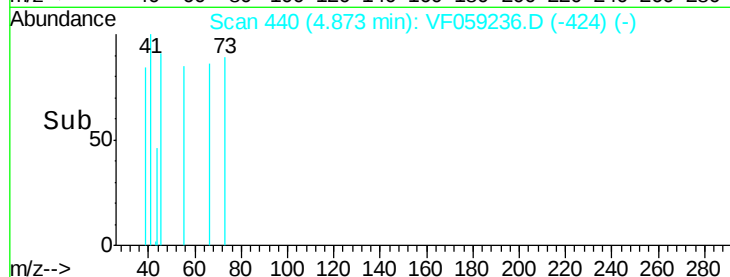
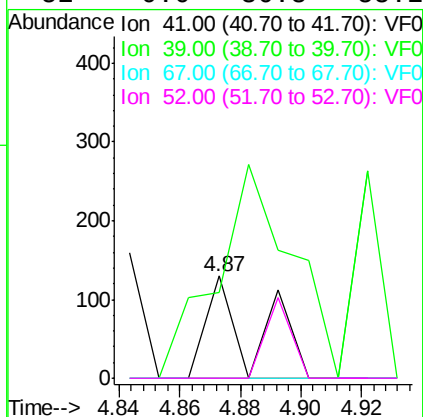
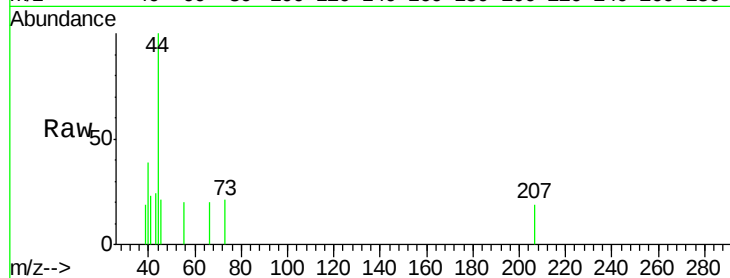




#41  
Methacrylonitrile  
Concen: 65.147 ug/l  
RT: 4.87 min Scan# 440  
Delta R.T. -0.04 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

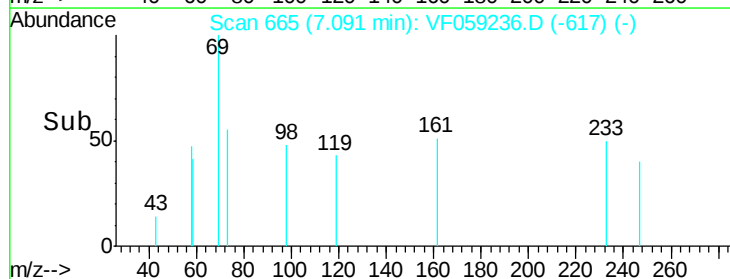
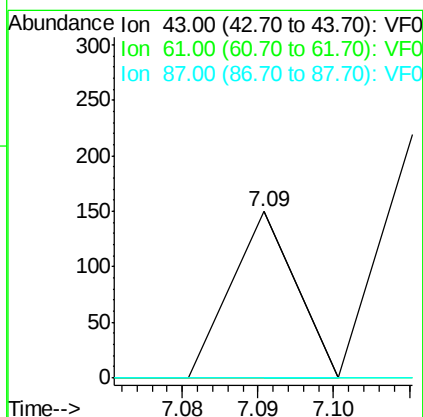
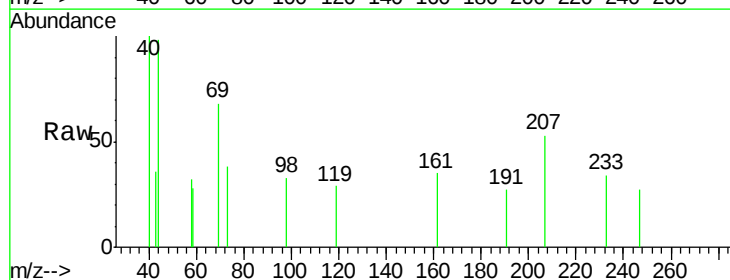
Instrument :  
MSVOA\_F  
ClientSampleId :

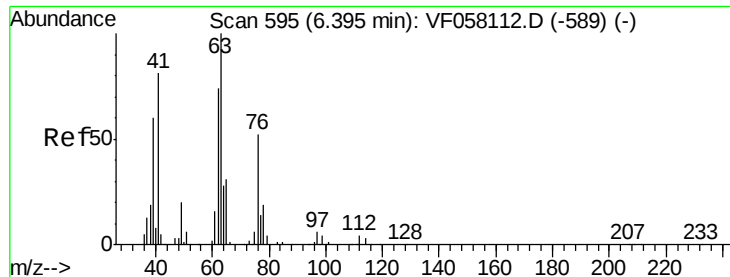
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 41    | Resp: | 143   |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 83.8  | 53.0  | 79.4# |
| 67       | 0.0   | 41.0  | 61.6# |
| 52       | 0.0   | 36.8  | 55.2# |



#43  
Isopropyl Acetate  
Concen: 14.874 ug/l  
RT: 7.09 min Scan# 665  
Delta R.T. -0.02 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 89    |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 25.1  | 37.7# |
| 87       | 0.0   | 0.2   | 0.4#  |





#45

1,2-Dichloropropane

Concen: 13.638 ug/l

RT: 6.34 min Scan# 589

Delta R.T. -0.05 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

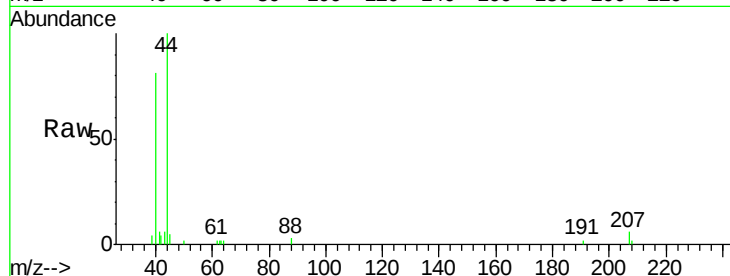
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 63 Resp: 66

Ion Ratio Lower Upper

63 100

65 0.0 24.6 37.0#



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 65.00 (64.70 to 65.70): VF0

6.34

120

100

80

60

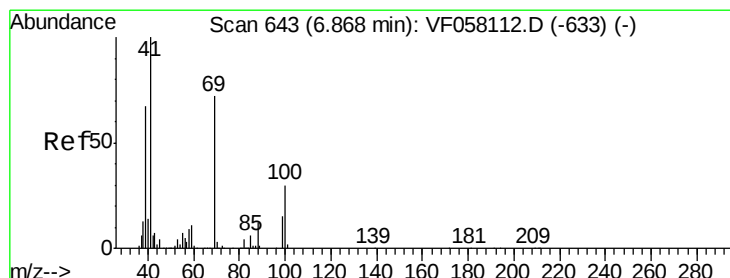
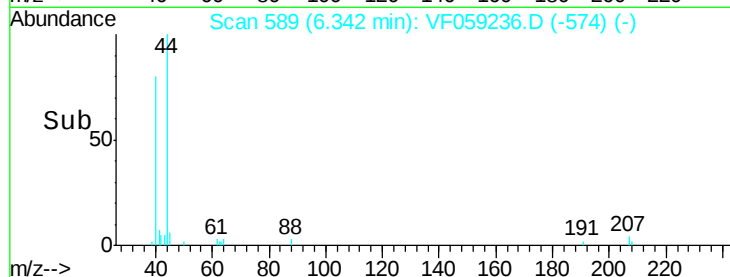
40

20

0

6.32 6.34 6.36

Time-->



#48

Methyl methacrylate

Concen: 40.936 ug/l

RT: 6.89 min Scan# 645

Delta R.T. 0.03 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

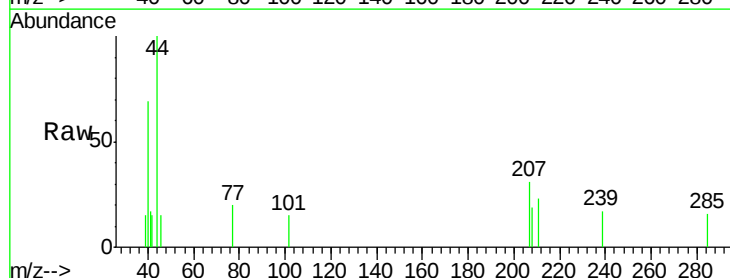
Tgt Ion: 41 Resp: 151

Ion Ratio Lower Upper

41 100

69 0.0 57.2 85.8#

39 48.4 54.3 81.5#



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

300

250

200

150

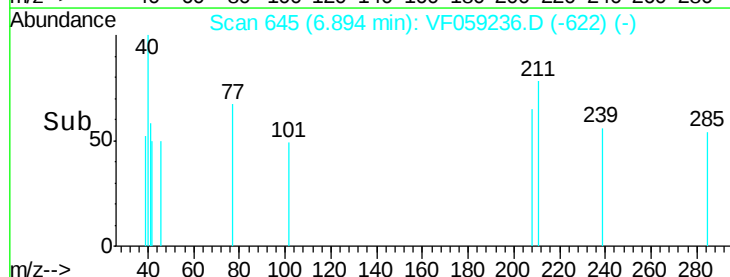
100

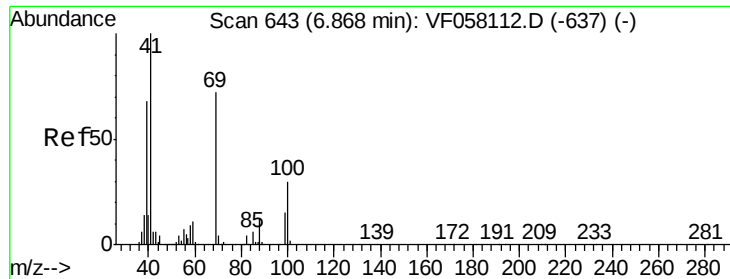
50

0

6.85 6.89 6.95

Time-->





#49

1,4-Dioxane

Concen: Below Cal

RT: 6.81 min Scan# 637

Delta R.T. -0.05 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

ClientSampled :

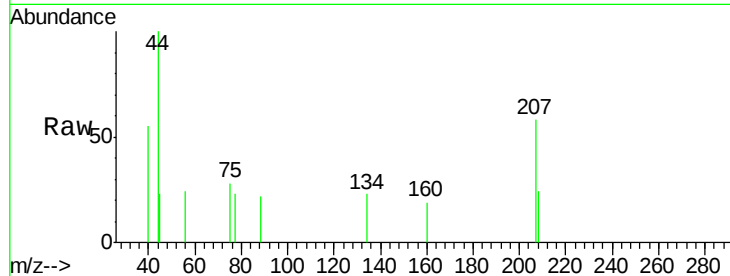
Tot Ion: 88 Resp: 68

Ion Ratio Lower Upper

88 100

43 0.0 47.8 71.8#

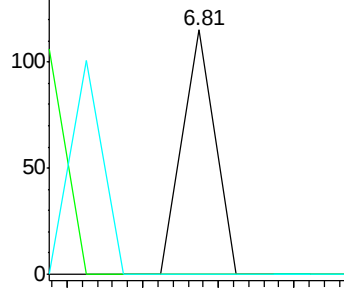
58 0.0 59.4 89.0#



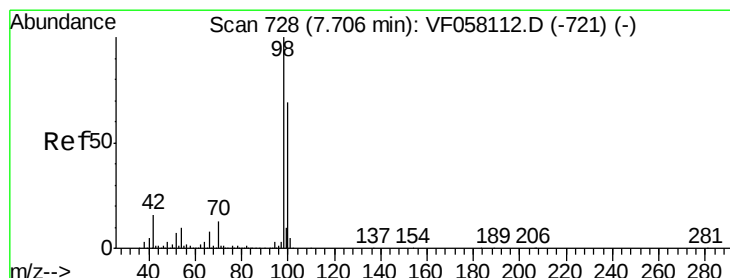
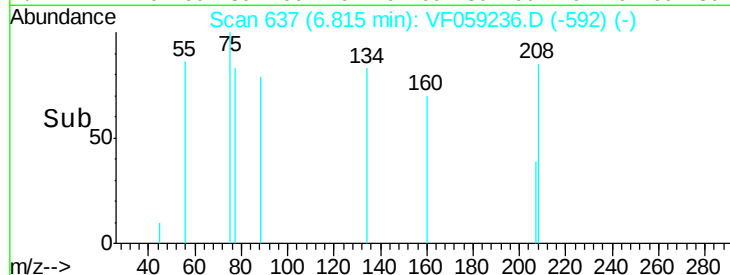
Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



Time-->



#50

Toluene-d8

Concen: 41.163 ug/l

RT: 7.70 min Scan# 727

Delta R.T. -0.00 min

Lab File: VF059236.D

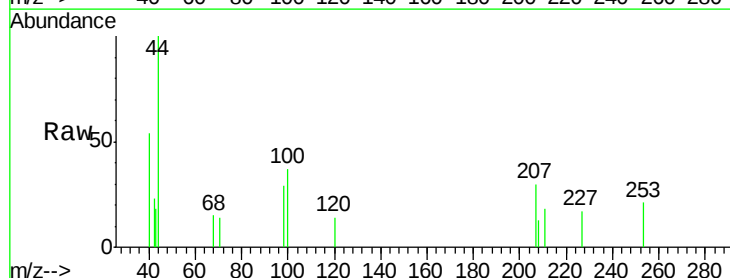
Acq: 20 Jun 2018 20:04

Tgt Ion: 98 Resp: 633

Ion Ratio Lower Upper

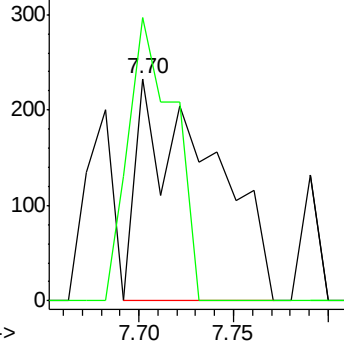
98 100

100 127.5 55.6 83.4#

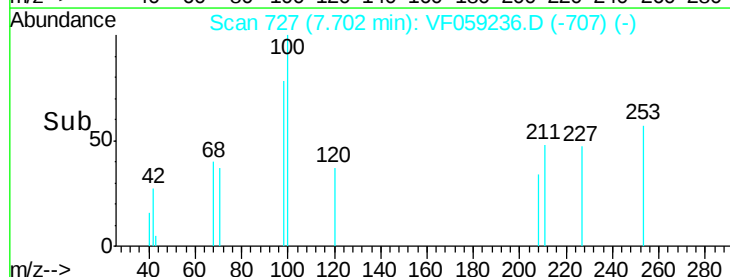


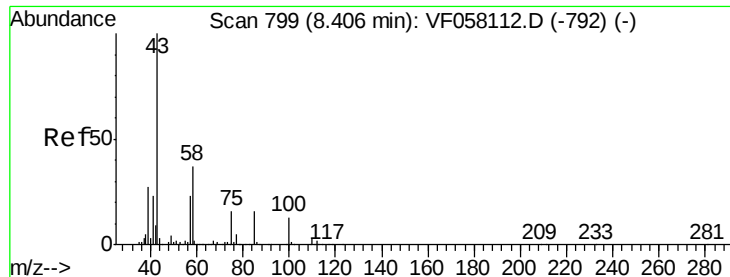
Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0



Time-->





#51

4-Methyl-2-Pentanone

Concen: 16.581 ug/l

RT: 8.43 min Scan# 801

Delta R.T. 0.03 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

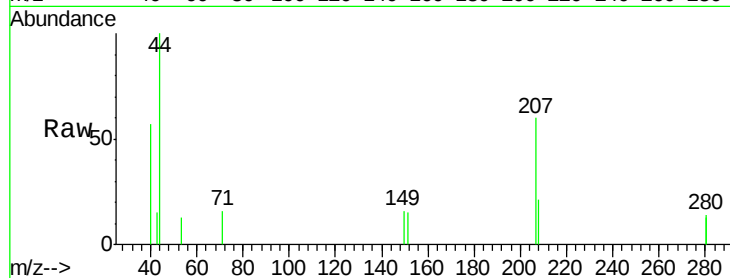
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 43 Resp: 68

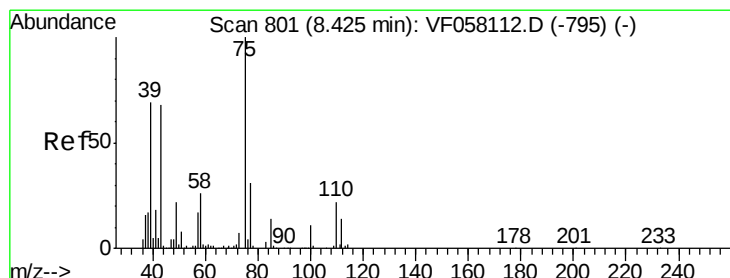
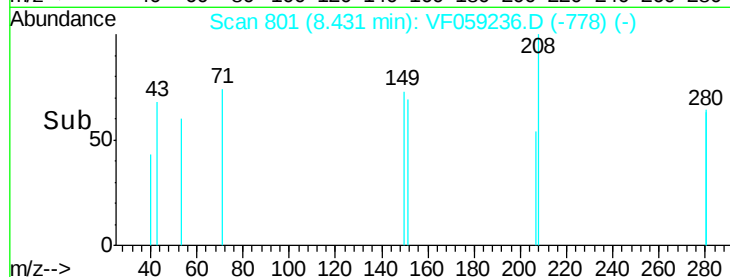
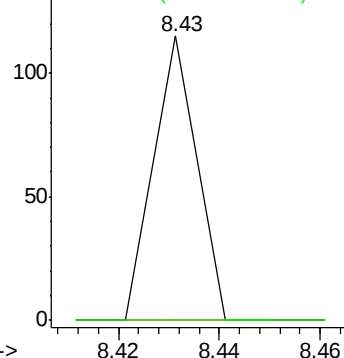
Ion Ratio Lower Upper

43 100

58 0.0 29.4 44.0#



Abundance Ion 43.00 (42.70 to 43.70): VF0  
Ion 58.00 (57.70 to 58.70): VF0



#53

t-1,3-Dichloropropene

Concen: 9.599 ug/l

RT: 8.40 min Scan# 798

Delta R.T. -0.02 min

Lab File: VF059236.D

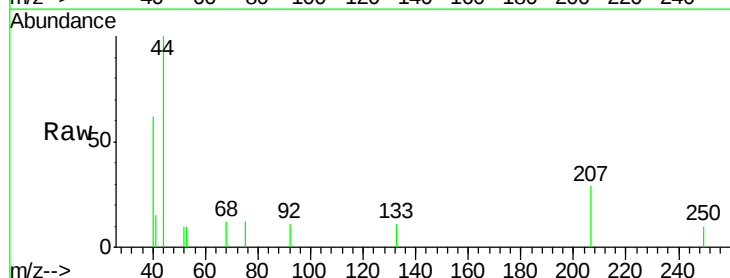
Acq: 20 Jun 2018 20:04

Tgt Ion: 75 Resp: 77

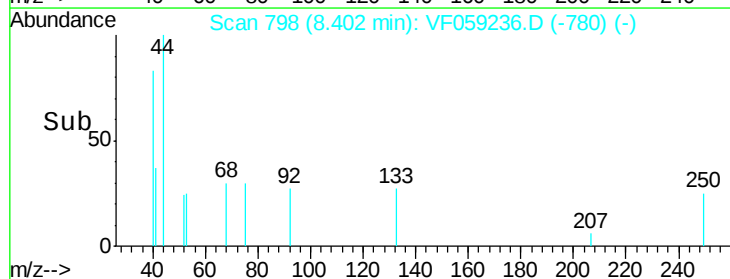
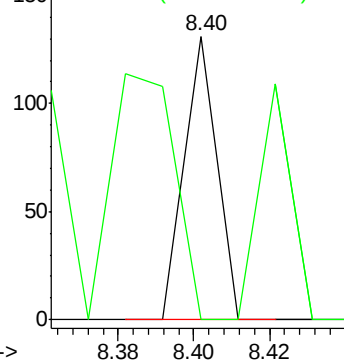
Ion Ratio Lower Upper

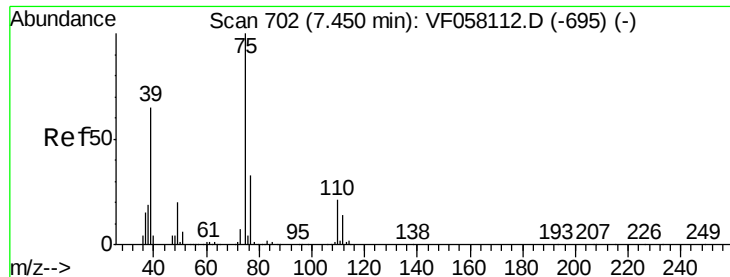
75 100

77 0.0 25.1 37.7#



Abundance Ion 75.00 (74.70 to 75.70): VF0  
Ion 77.00 (76.70 to 77.70): VF0





#54

cis-1,3-Dichloropropene

Concen: 7.162 ug/l

RT: 7.43 min Scan# 699

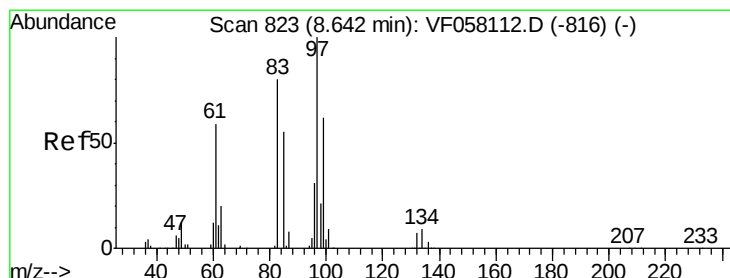
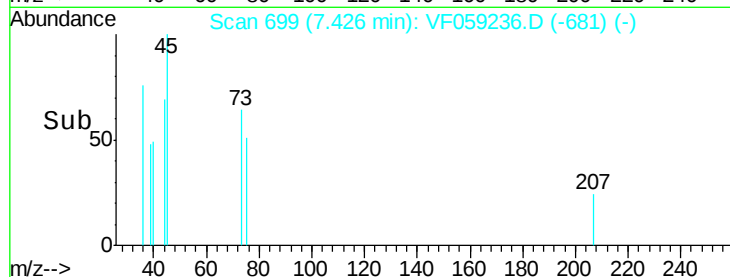
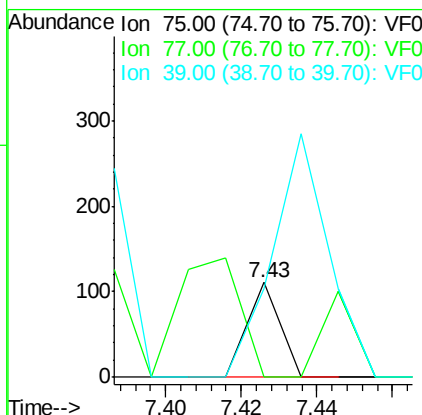
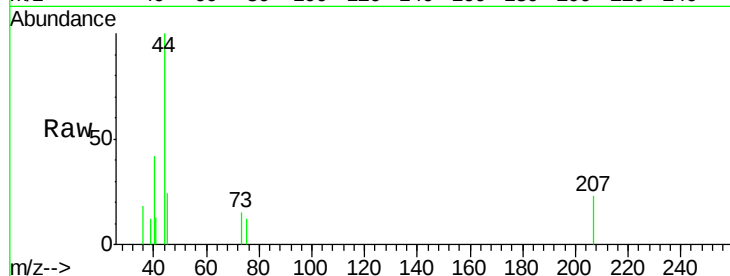
Delta R.T. -0.02 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 75    | Resp: | 66    |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 0.0   | 26.3  | 39.5# |
| 39       | 93.7  | 52.1  | 78.1# |



#55

1,1,2-Trichloroethane

Concen: 14.838 ug/l

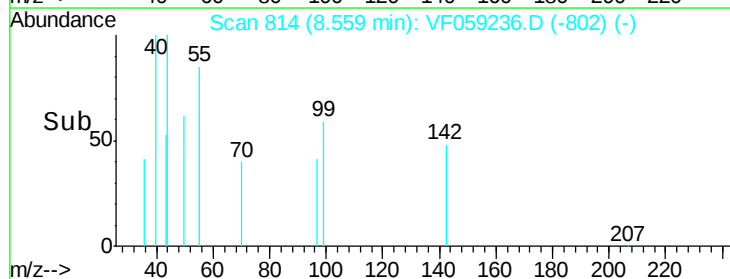
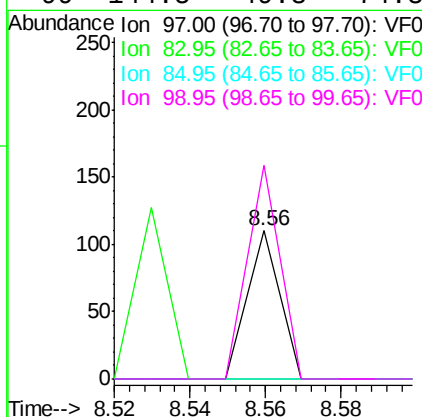
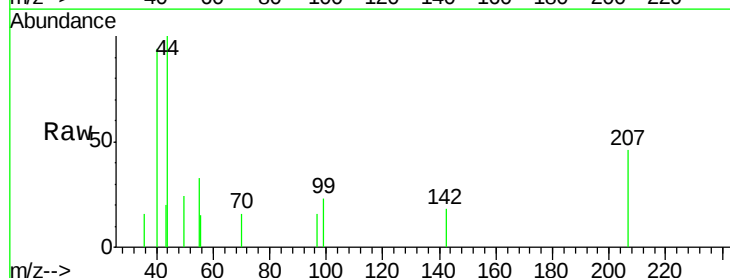
RT: 8.56 min Scan# 814

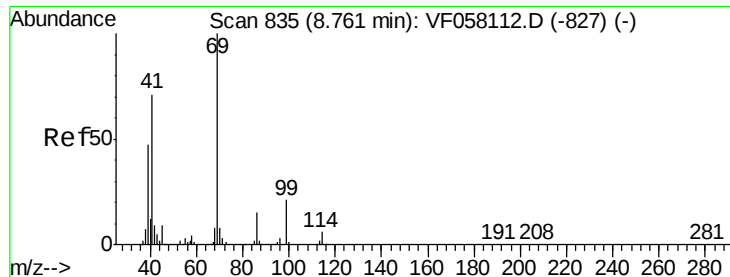
Delta R.T. -0.08 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 65    |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 0.0   | 64.3  | 96.5# |
| 85       | 0.0   | 43.8  | 65.8# |
| 99       | 144.5 | 49.8  | 74.8# |





#56

Ethyl methacrylate

Concen: 26.803 ug/l

RT: 8.78 min Scan# 836

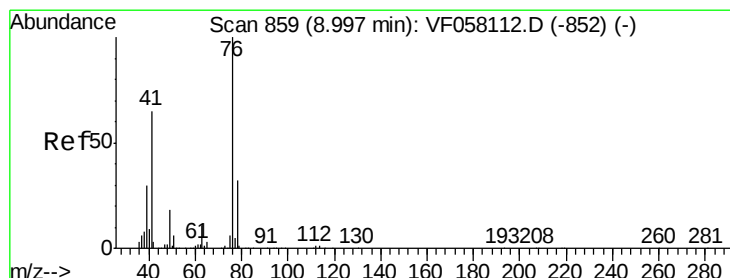
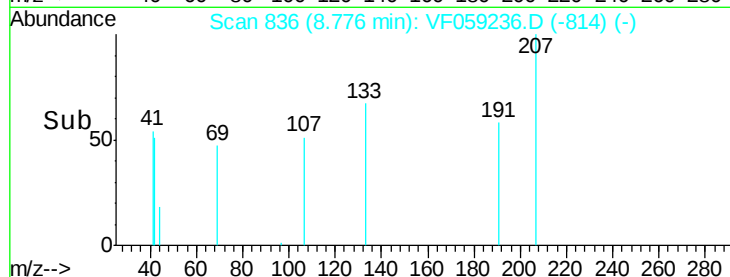
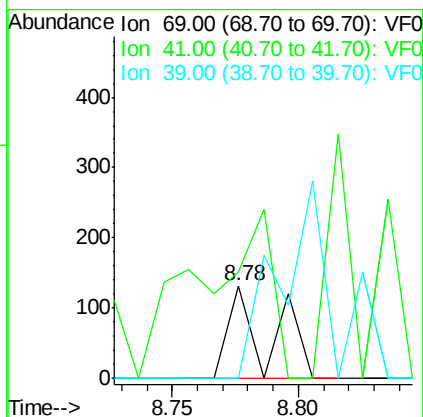
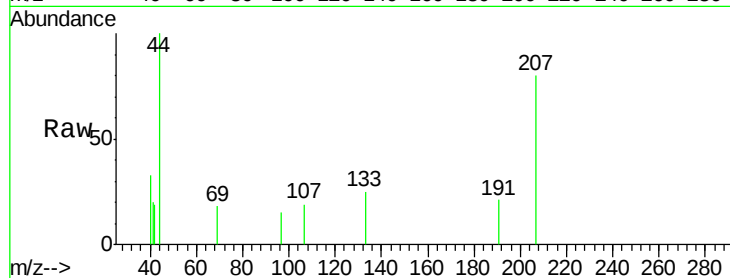
Delta R.T. 0.02 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :  
MSVOA\_F  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 69    | Resp: | 148   |
| Ion      | Ratio | Lower | Upper |
| 69       | 100   |       |       |
| 41       | 115.3 | 56.9  | 85.3# |
| 39       | 0.0   | 38.0  | 57.0# |



#57

1,3-Dichloropropane

Concen: 10.542 ug/l

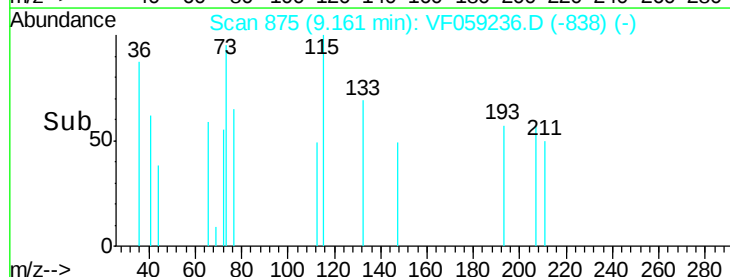
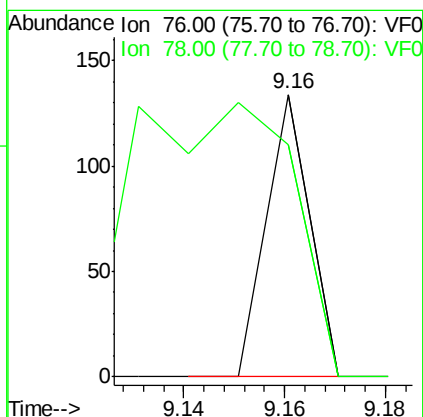
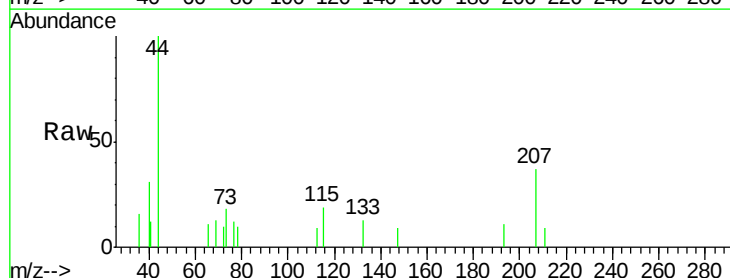
RT: 9.16 min Scan# 875

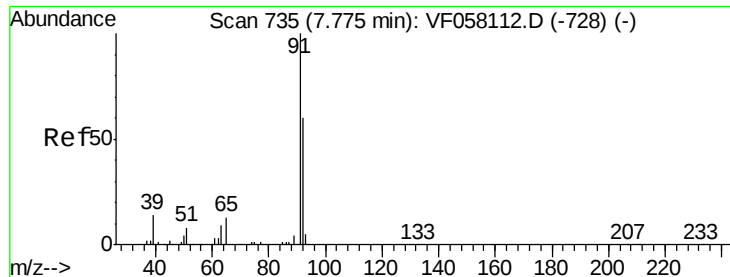
Delta R.T. 0.16 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 76    | Resp: | 79    |
| Ion      | Ratio | Lower | Upper |
| 76       | 100   |       |       |
| 78       | 82.1  | 25.8  | 38.6# |





#58

2-Chloroethyl Vinyl ether

Concen: 151.963 ug/l

RT: 7.61 min Scan# 718

Delta R.T. -0.16 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

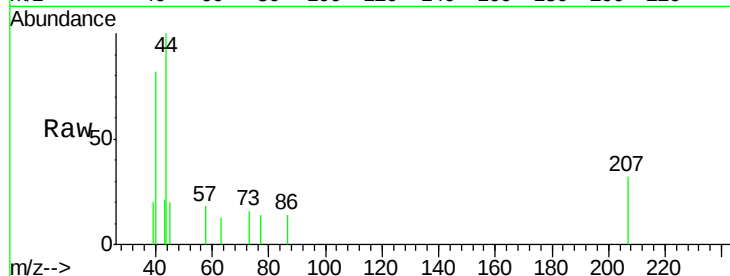
ClientSampleId :

Tot Ion: 63 Resp: 60

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): V

7.61

120

100

80

60

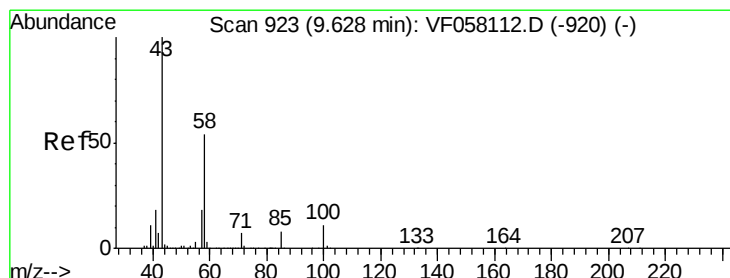
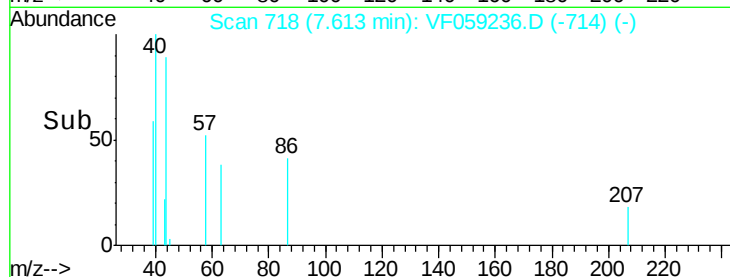
40

20

0

7.60 7.62 7.64

Time-->



#59

2-Hexanone

Concen: 71.208 ug/l

RT: 9.60 min Scan# 920

Delta R.T. -0.02 min

Lab File: VF059236.D

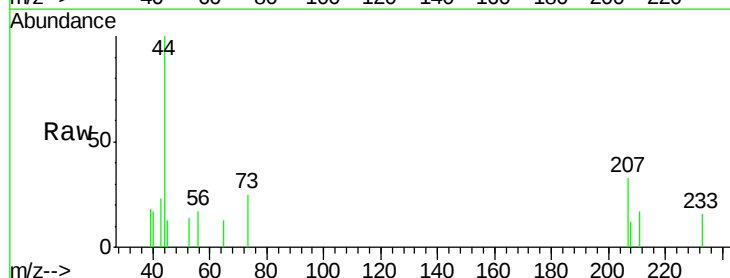
Acq: 20 Jun 2018 20:04

Tgt Ion: 43 Resp: 231

Ion Ratio Lower Upper

43 100

58 0.0 26.3 78.8#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

9.60

200

150

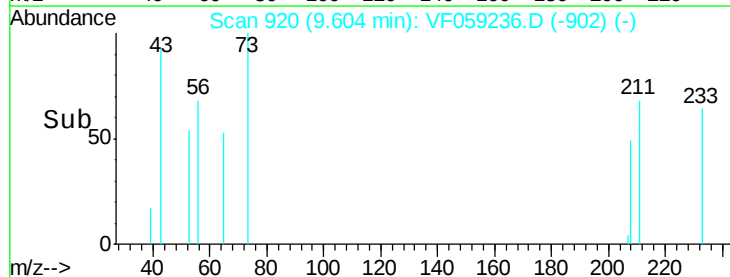
100

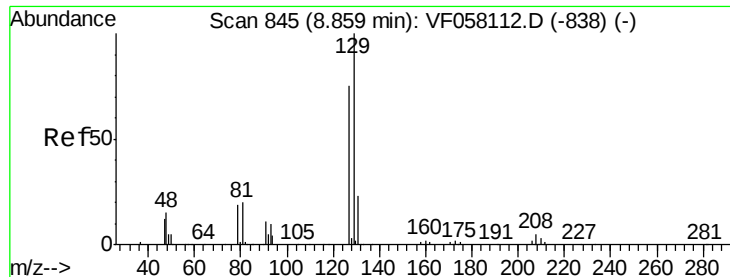
50

0

9.56 9.58 9.60 9.62 9.64

Time-->





#60

Dibromochloromethane

Concen: 9.531 ug/l

RT: 9.01 min Scan# 860

Delta R.T. 0.15 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

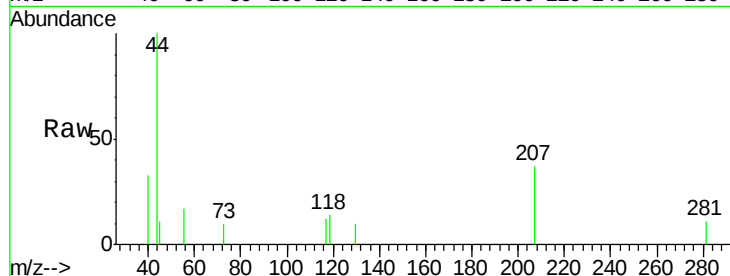
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion:129 Resp: 60

Ion Ratio Lower Upper

129 100

127 0.0 37.6 112.9#



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

9.01

100

80

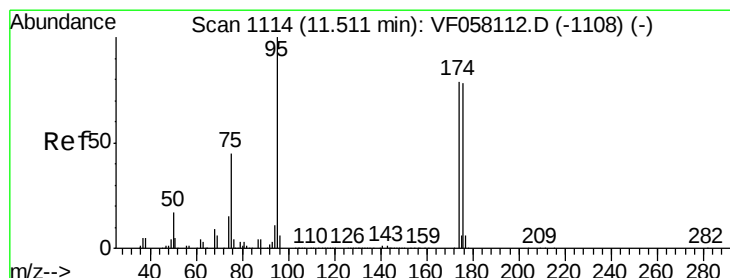
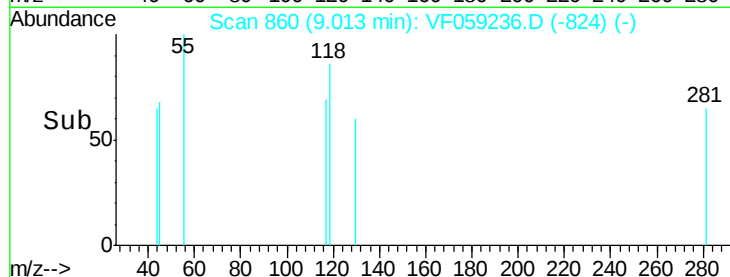
60

40

20

0

Time--> 8.98 9.00 9.02



#62

4-Bromofluorobenzene

Concen: 43.487 ug/l

RT: 11.51 min Scan# 1113

Delta R.T. -0.00 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

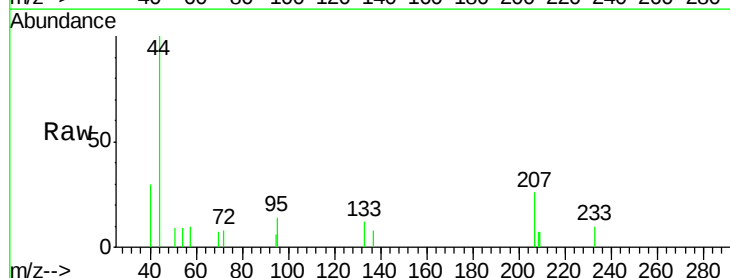
Tgt Ion: 95 Resp: 343

Ion Ratio Lower Upper

95 100

174 0.0 0.0 157.8

176 0.0 0.0 155.8



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

300

250

200

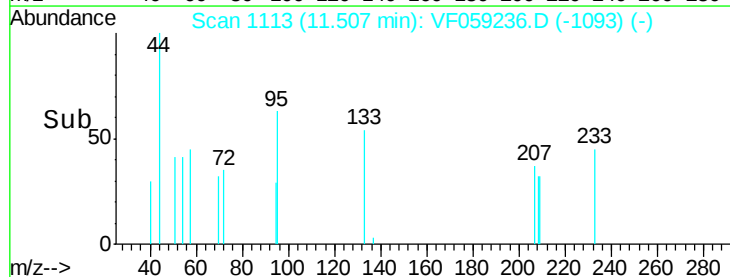
150

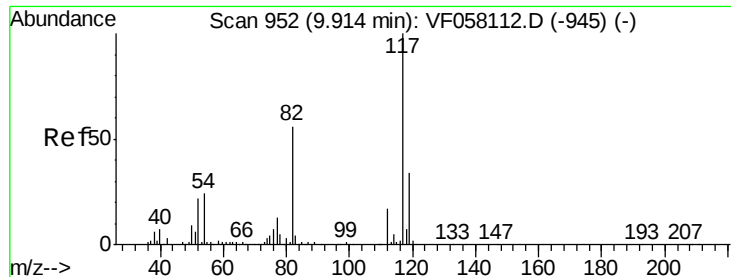
100

50

0

Time--> 11.45 11.50 11.55

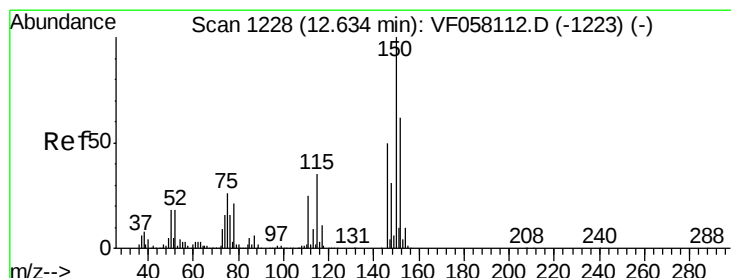
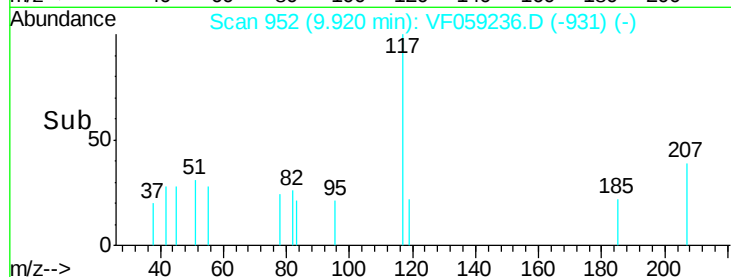
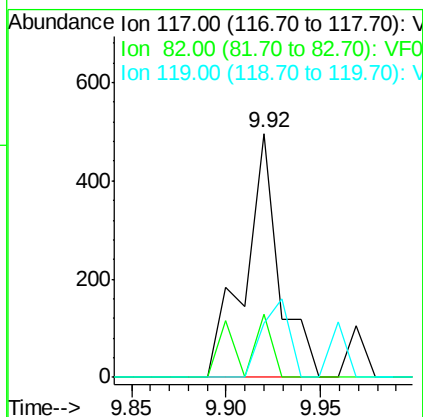
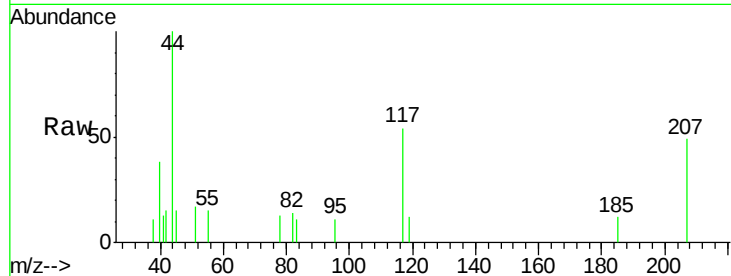




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.92 min Scan# 952  
Delta R.T. 0.01 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

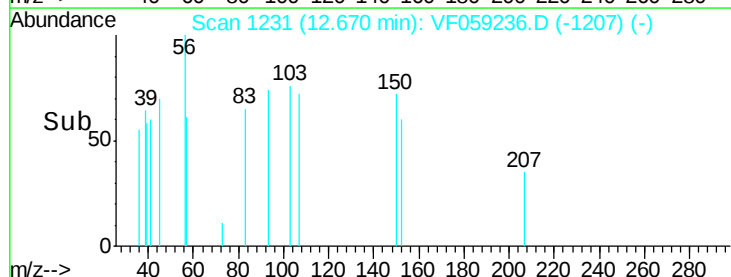
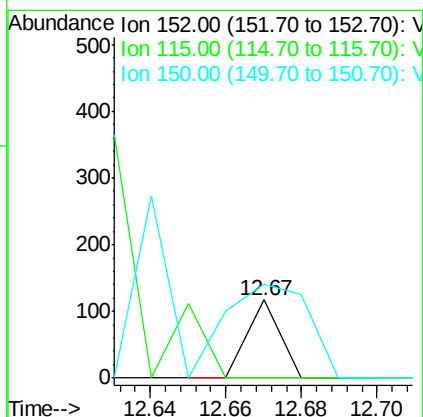
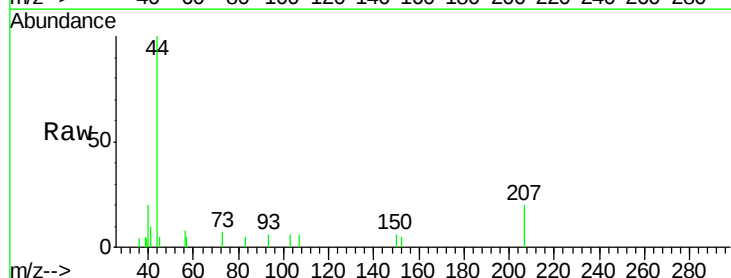
Instrument :  
MSVOA\_F  
ClientSampleId :

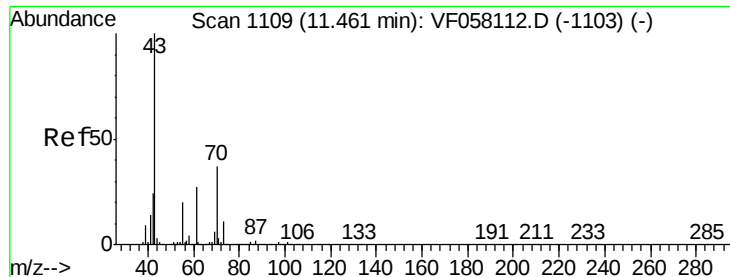
Tot Ion:117 Resp: 628  
Ion Ratio Lower Upper  
117 100  
82 25.8 45.2 67.8#  
119 22.0 27.5 41.3#



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.67 min Scan# 1231  
Delta R.T. 0.04 min  
Lab File: VF059236.D  
Acq: 20 Jun 2018 20:04

Tgt Ion:152 Resp: 69  
Ion Ratio Lower Upper  
152 100  
115 0.0 28.5 85.5#  
150 119.7 0.0 323.8





#74

N-amvl acetate

Concen: 48.638 ug/l

RT: 11.45 min Scan# 1107

Delta R.T. -0.01 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

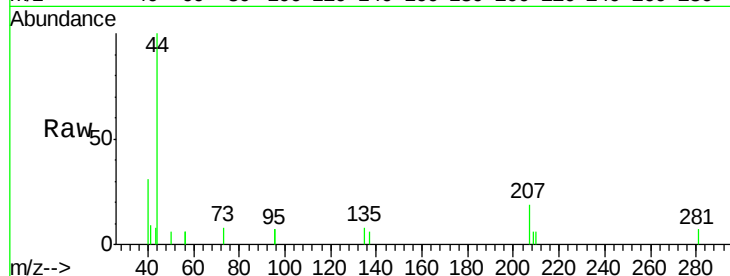
Instrument :

MSVOA\_F

ClientSampleId :

Tot Ion: 43 Resp: 83

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 70  | 0.0   | 29.2  | 43.8# |
| 55  | 0.0   | 15.8  | 23.6# |
| 61  | 0.0   | 21.3  | 31.9# |

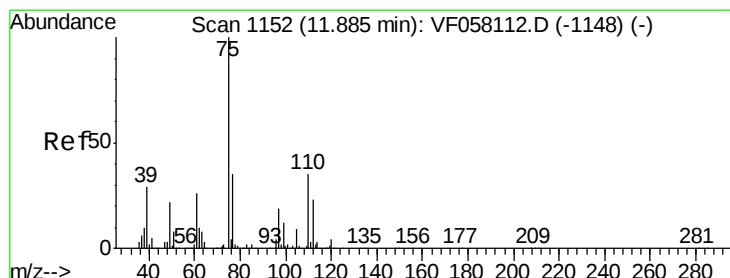
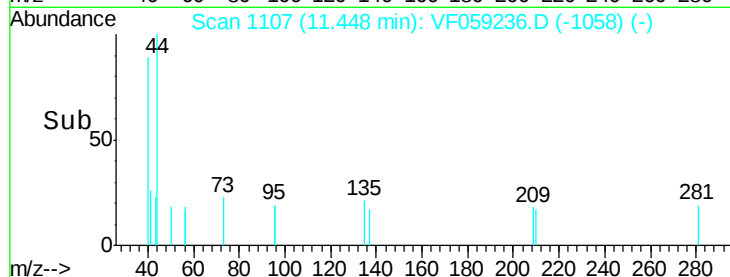
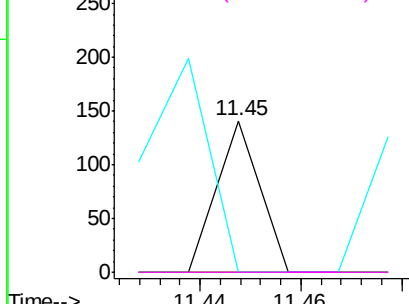


Abundance Ion 43.00 (42.70 to 43.70): VF0

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



#76

1,2,3-Trichloropropane

Concen: 117.160 ug/l

RT: 11.81 min Scan# 1144

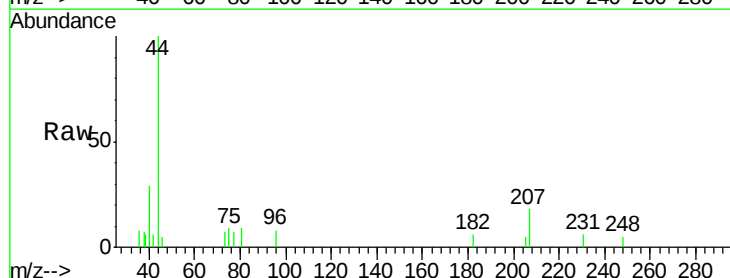
Delta R.T. -0.07 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

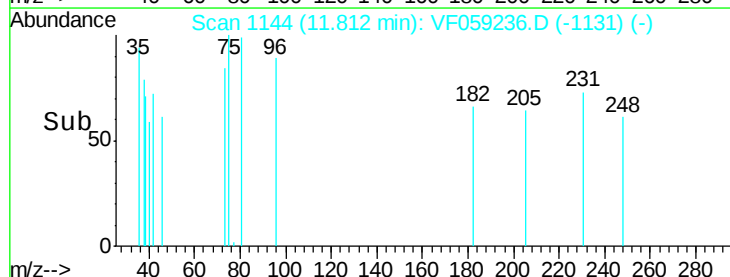
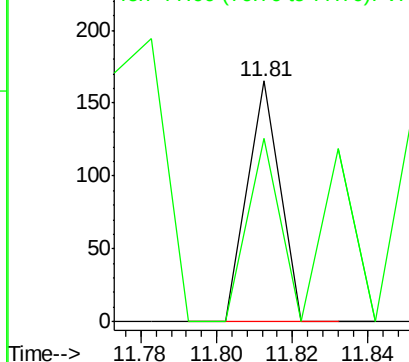
Tgt Ion: 75 Resp: 98

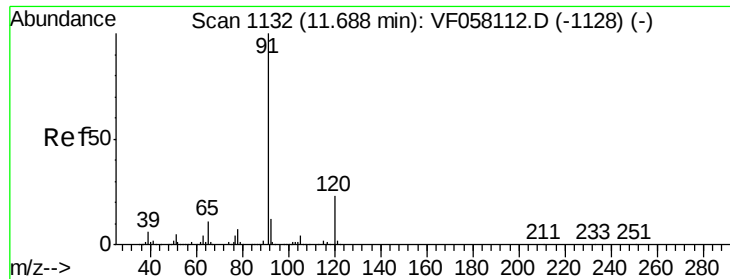
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 77  | 76.4  | 17.5  | 52.5# |



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0





#78

n-propylbenzene

Concen: 16.978 ug/l

RT: 11.63 min Scan# 1126

Delta R.T. -0.05 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

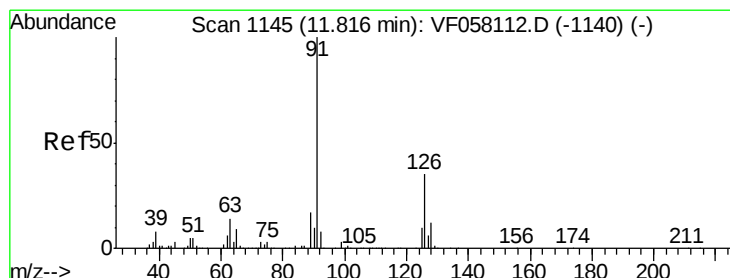
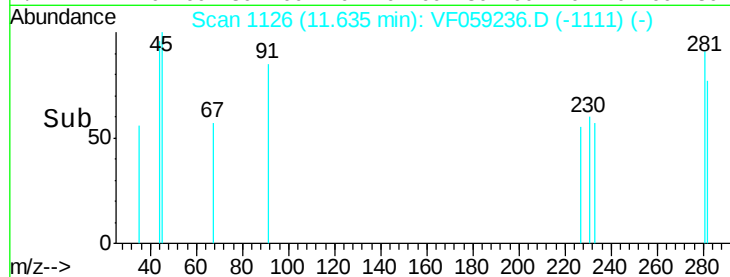
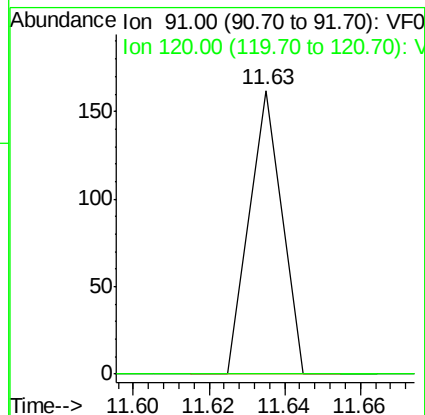
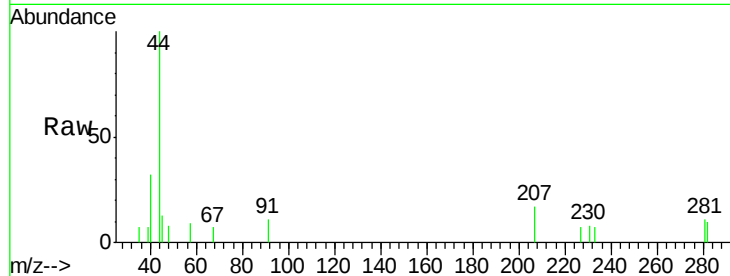
ClientSampleId :

Tot Ion: 91 Resp: 96

Ion Ratio Lower Upper

91 100

120 0.0 11.5 34.5#



#79

2-Chlorotoluene

Concen: 20.057 ug/l

RT: 11.76 min Scan# 1139

Delta R.T. -0.05 min

Lab File: VF059236.D

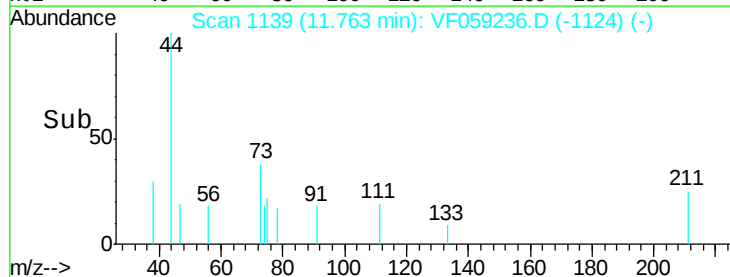
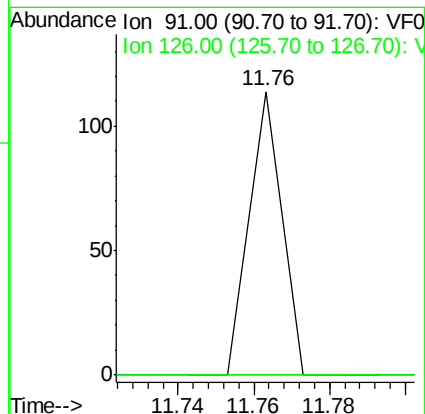
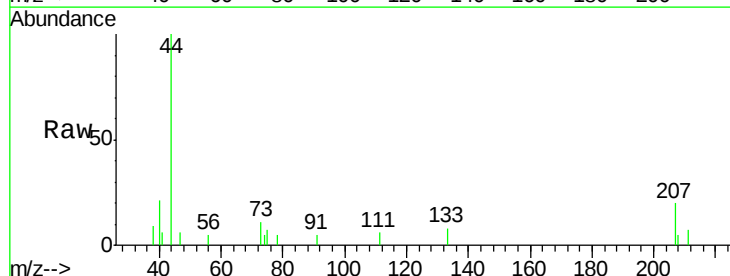
Acq: 20 Jun 2018 20:04

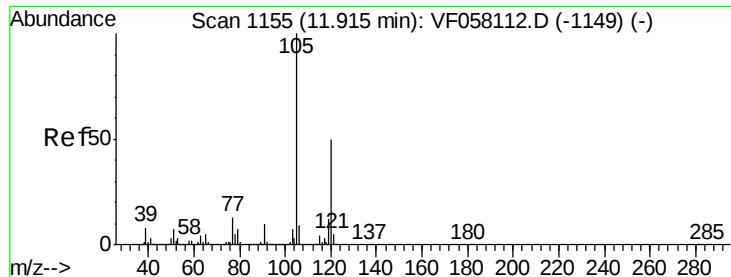
Tgt Ion: 91 Resp: 67

Ion Ratio Lower Upper

91 100

126 0.0 17.6 52.9#





#80

1,3,5-Trimethylbenzene

Concen: 15.934 ug/l

RT: 11.80 min Scan# 1143

Delta R.T. -0.11 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

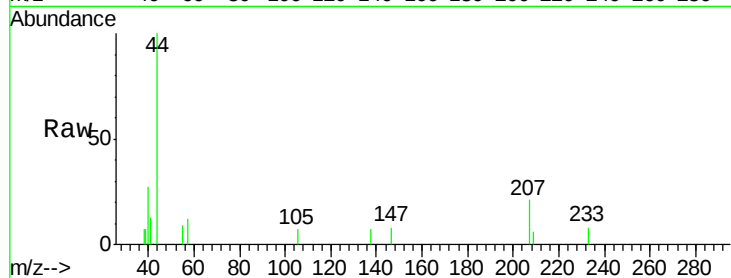
ClientSampleId :

Tot Ion:105 Resp: 63

Ion Ratio Lower Upper

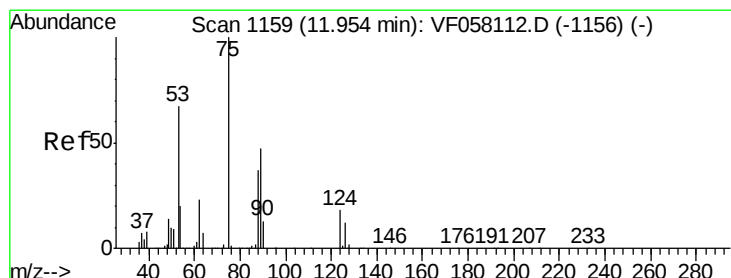
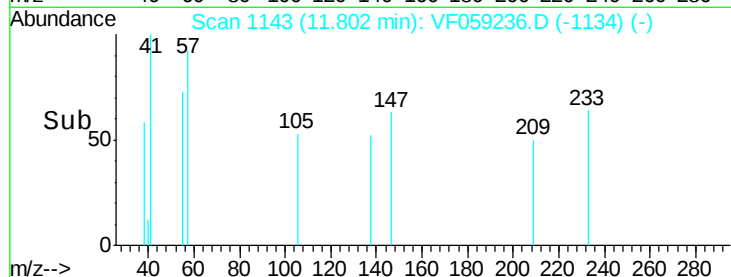
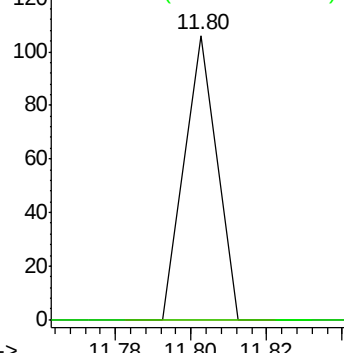
105 100

120 0.0 24.9 74.6#



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: 127.229 ug/l

RT: 11.98 min Scan# 1161

Delta R.T. 0.03 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

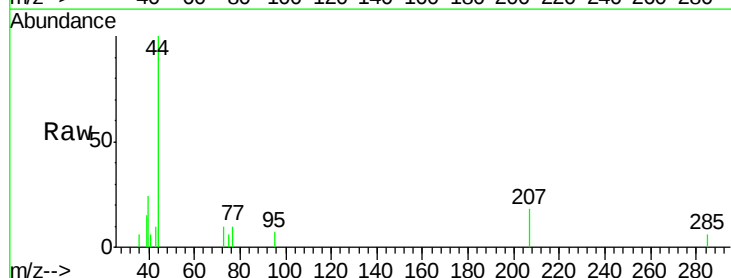
Tgt Ion: 75 Resp: 69

Ion Ratio Lower Upper

75 100

53 0.0 58.7 88.1#

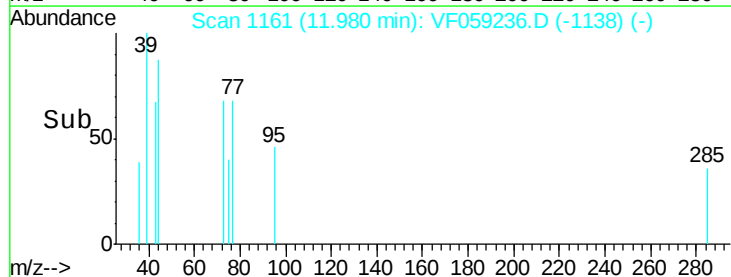
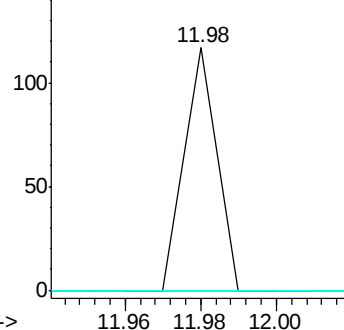
89 0.0 39.8 59.6#

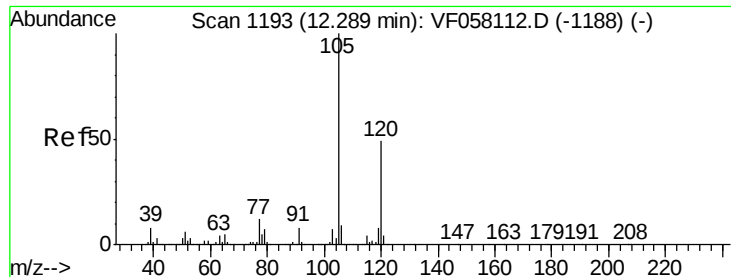


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 89.00 (88.70 to 89.70): VF0





#84

1,2,4-Trimethylbenzene

Concen: 16.110 ug/l

RT: 12.32 min Scan# 1195

Delta R.T. 0.03 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

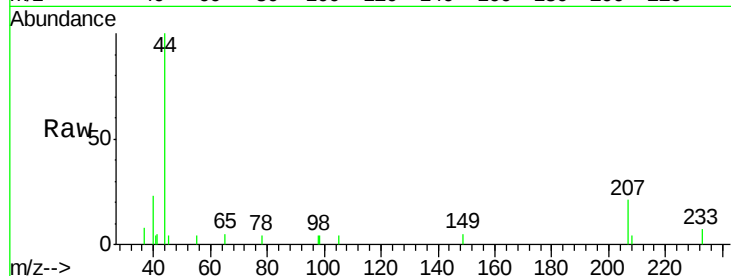
ClientSampled :

Tot Ion:105 Resp: 66

Ion Ratio Lower Upper

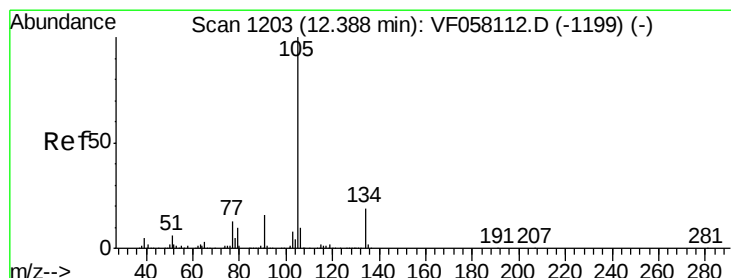
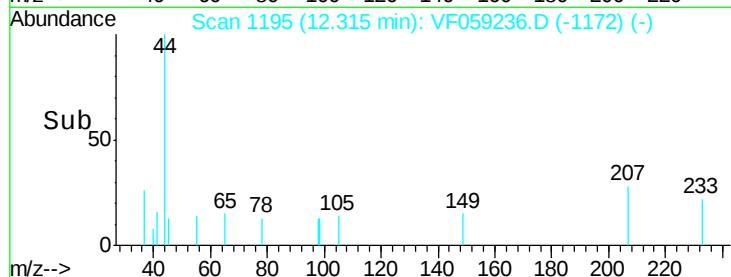
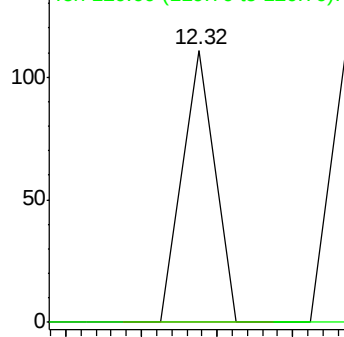
105 100

120 0.0 24.7 74.1#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#85

sec-Butylbenzene

Concen: 26.806 ug/l

RT: 12.36 min Scan# 1200

Delta R.T. -0.02 min

Lab File: VF059236.D

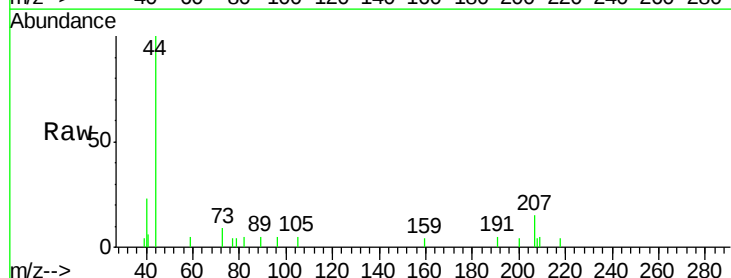
Acq: 20 Jun 2018 20:04

Tgt Ion:105 Resp: 143

Ion Ratio Lower Upper

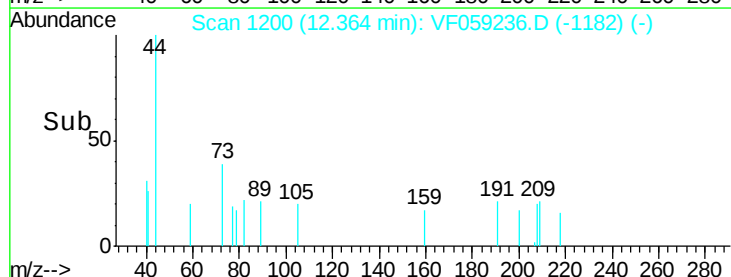
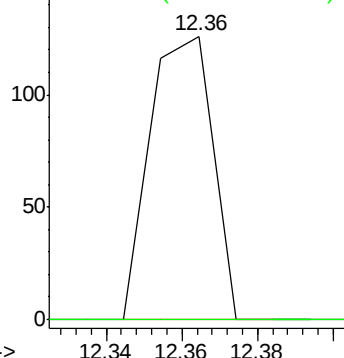
105 100

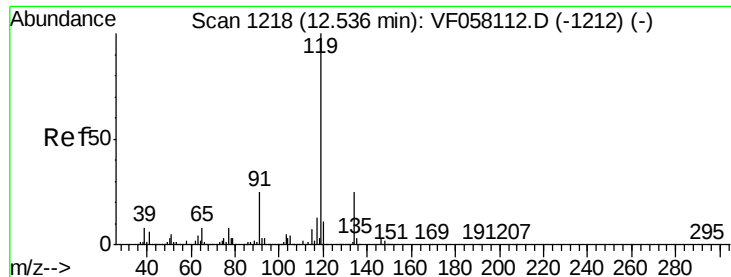
134 0.0 9.6 28.6#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V





#86

p-Isopropyltoluene

Concen: 17.117 ug/l

RT: 12.56 min Scan# 1220

Delta R.T. 0.03 min

Lab File: VF059236.D

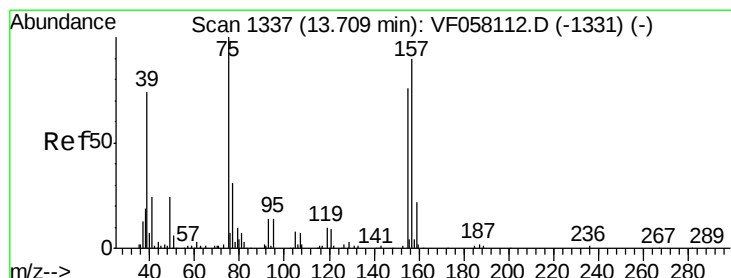
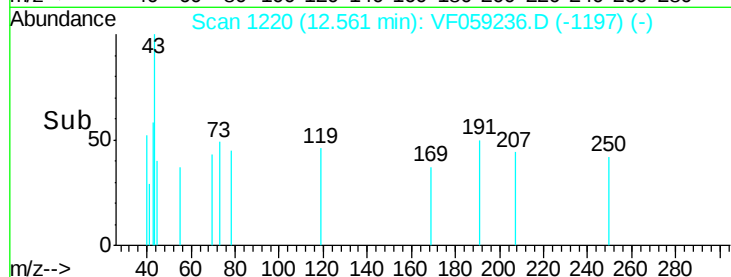
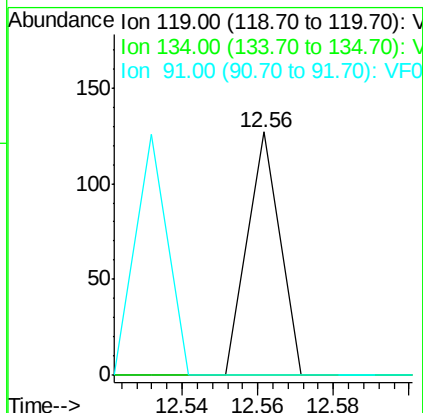
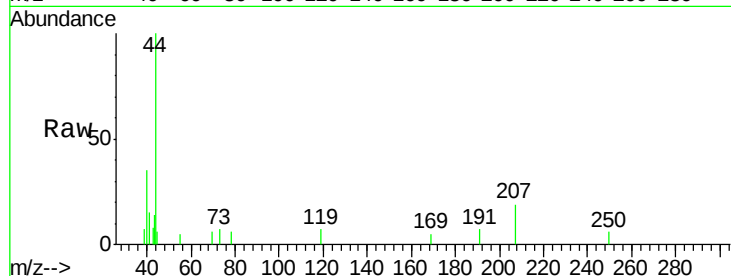
Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 119   | Resp: | 75    |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 134      | 0.0   | 12.7  | 38.0# |
| 91       | 0.0   | 12.6  | 37.6# |



#92

1,2-Dibromo-3-Chloropropane

Concen: 346.599 ug/l

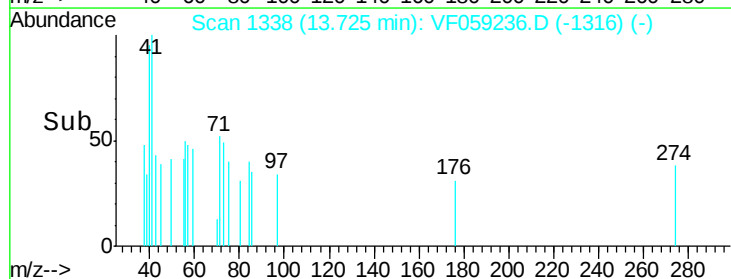
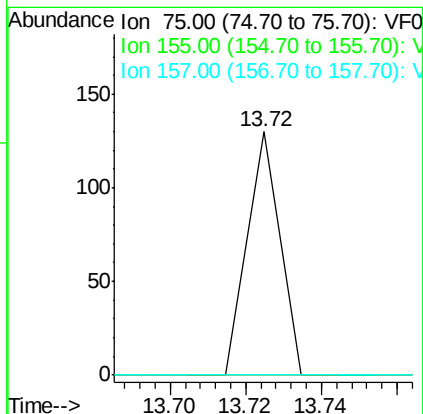
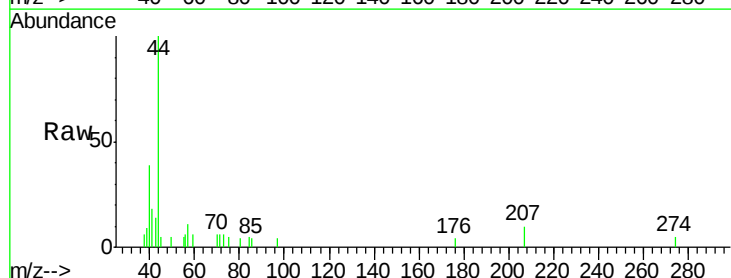
RT: 13.72 min Scan# 1338

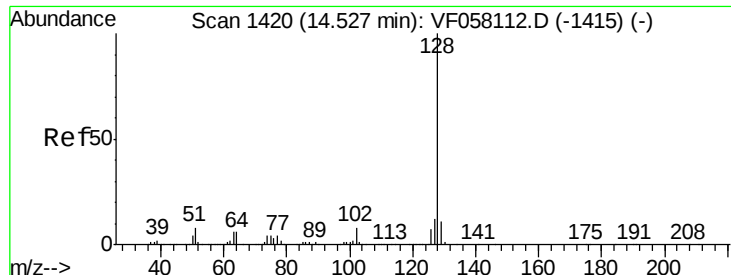
Delta R.T. 0.02 min

Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 77     |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 155      | 0.0   | 38.0  | 114.0# |
| 157      | 0.0   | 45.1  | 135.5# |





#95

Naphthalene

Concen: 20.346 ug/l

RT: 14.52 min Scan# 1419

Delta R.T. -0.00 min

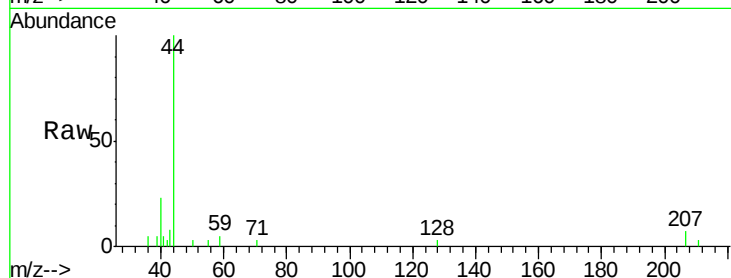
Lab File: VF059236.D

Acq: 20 Jun 2018 20:04

Instrument :

MSVOA\_F

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 128   | Resp: | 65    |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 0.0   | 9.9   | 14.9# |
| 129      | 0.0   | 8.7   | 13.1# |

