

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122118\  
 Data File : VW007743.D  
 Acq On : 20 Dec 2018 12:25  
 Operator : SY/AP  
 Sample : J6386-11RE  
 Misc : 5.89G/5ML/MSVOA W/SOIL  
 ALS Vial : 45 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Dec 20 13:10:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 50622    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 93462    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 70446    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 22197    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 32618    | 58.79 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 117.58% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 28056    | 49.21 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.42%  |          |
| 50) Toluene-d8              | 10.32 | 98   | 75916    | 35.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 70.64%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 22969    | 27.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 55.32%  |          |

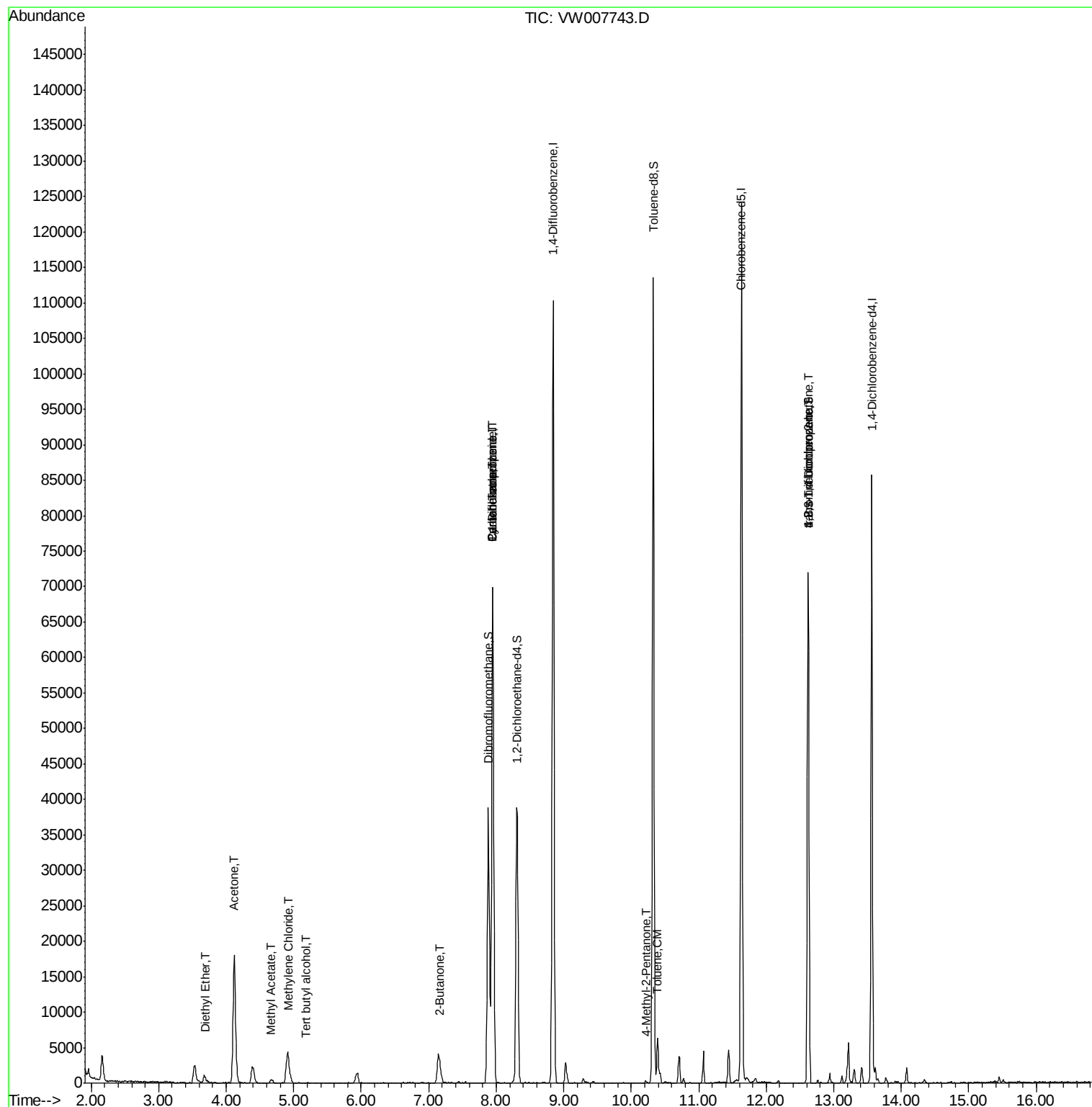
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 8) Diethyl Ether               | 3.69  | 74   | 441      | 1.966   | ug/l # | 1      |
| 11) Tert butyl alcohol         | 5.18  | 59   | 44       | 1.176   | ug/l # | 73     |
| 16) Acetone                    | 4.12  | 43   | 30399    | 292.582 | ug/l   | 95     |
| 18) Methyl Acetate             | 4.67  | 43   | 535      | 2.165   | ug/l   | 97     |
| 20) Methylene Chloride         | 4.92  | 84   | 3845     | 1.252   | ug/l # | 95     |
| 25) 2-Butanone                 | 7.17  | 43   | 2071     | 17.018  | ug/l   | 91     |
| 31) Cyclohexane                | 7.95  | 56   | 936      | 1.133   | ug/l # | 7      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 3950     | 4.379   | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 5713     | 5.378   | ug/l # | 14     |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 357      | 1.211   | ug/l # | 82     |
| 52) Toluene                    | 10.39 | 92   | 3013     | 1.866   | ug/l   | 91     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 11712    | 68.267  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 11712    | 143.297 | ug/l # | 9      |

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

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MSVOA\_W  
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Quant Time: Dec 20 13:10:43 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 06:30:23 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

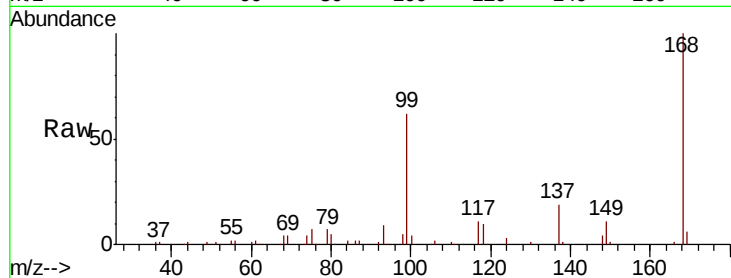
ClientSampled :

Tot Ion:168 Resp: 50622

Ion Ratio Lower Upper

168 100

99 62.4 54.0 81.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

25000

20000

15000

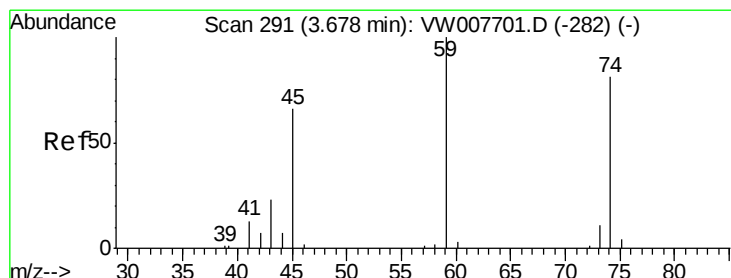
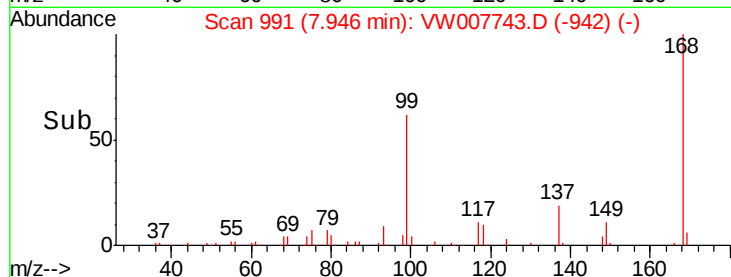
10000

5000

0

7.85 7.90 7.95 8.00 8.05

Time-->



#8

Diethyl Ether

Concen: 1.966 ug/l

RT: 3.69 min Scan# 293

Delta R.T. 0.01 min

Lab File: VW007743.D

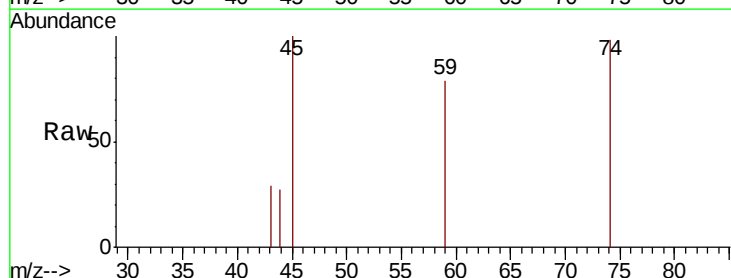
Acq: 20 Dec 2018 12:25

Tgt Ion: 74 Resp: 441

Ion Ratio Lower Upper

74 100

45 185.0 39.4 118.1#



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

300

250

200

150

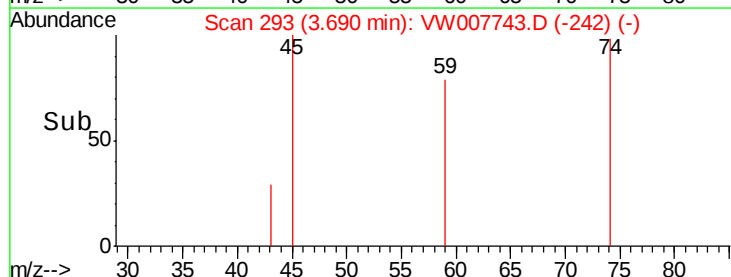
100

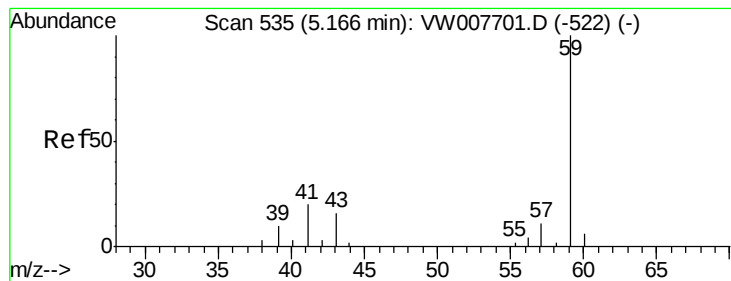
50

0

3.65 3.69 3.73

Time-->



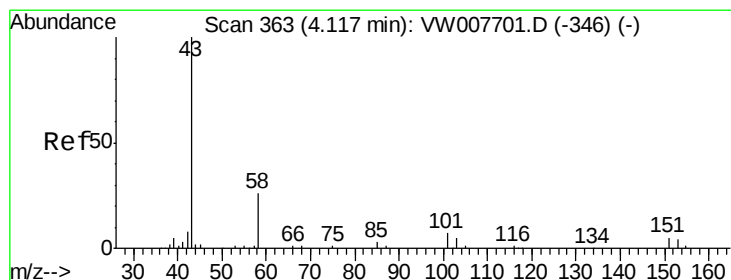
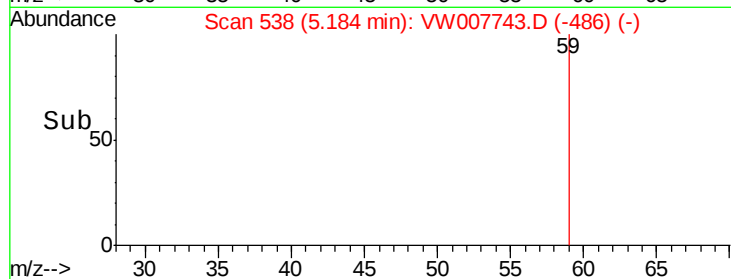
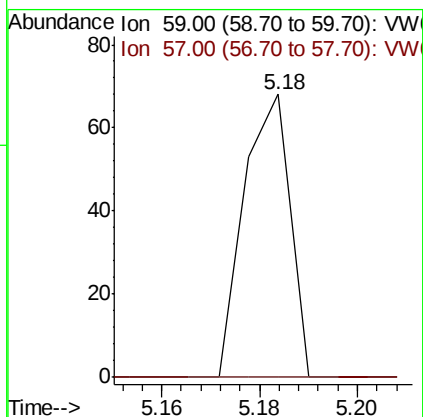
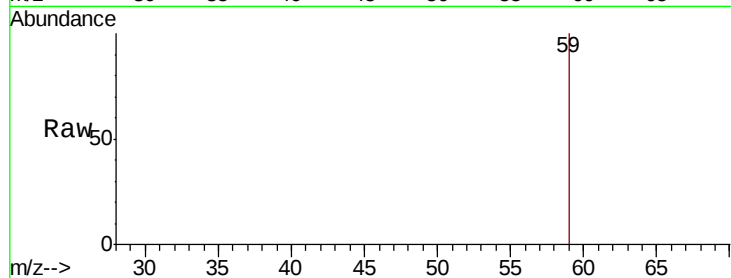


#11

Tert butyl alcohol  
 Concen: 1.176 ug/l  
 RT: 5.18 min Scan# 538  
 Delta R.T. 0.02 min  
 Lab File: VW007743.D  
 Acq: 20 Dec 2018 12:25

Instrument :  
 MSVOA\_W  
 ClientSampleId :

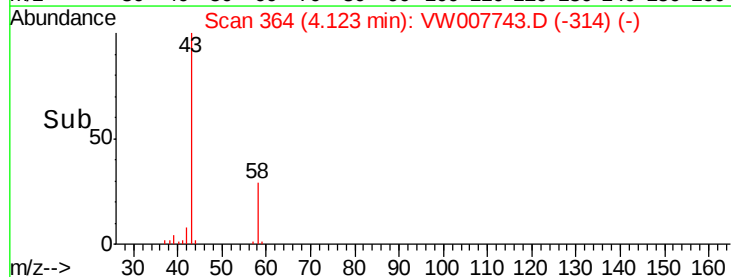
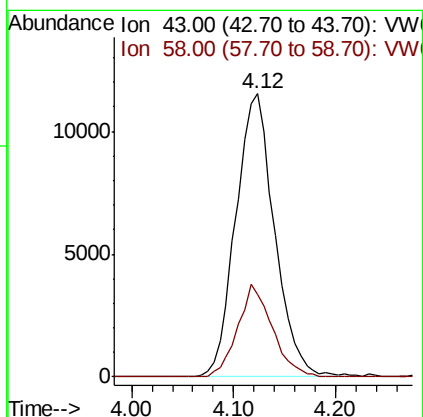
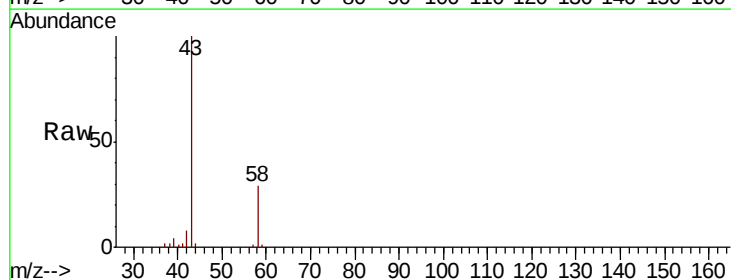
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 0.0   | 7.8   | 11.8# |

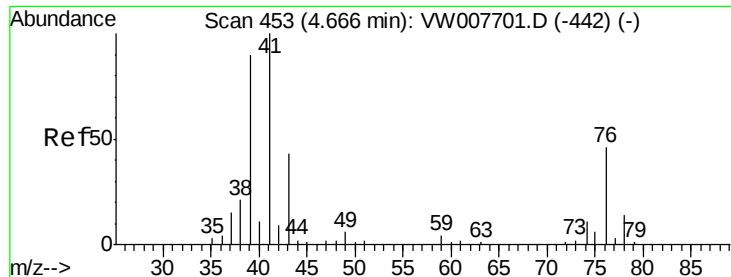


#16

Acetone  
 Concen: 292.582 ug/l  
 RT: 4.12 min Scan# 364  
 Delta R.T. 0.01 min  
 Lab File: VW007743.D  
 Acq: 20 Dec 2018 12:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 29.1  | 21.2  | 31.8  |

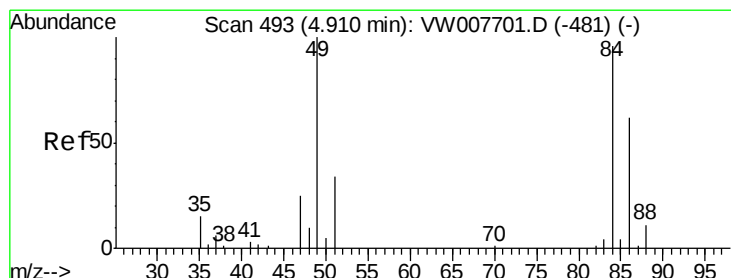
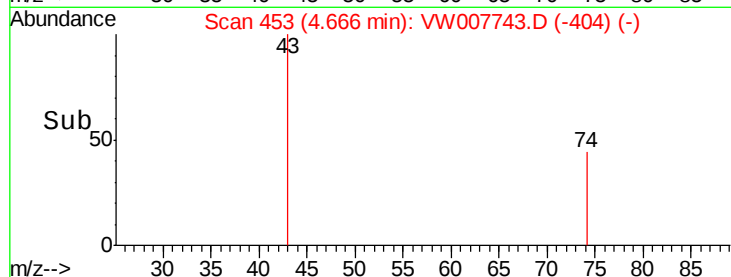
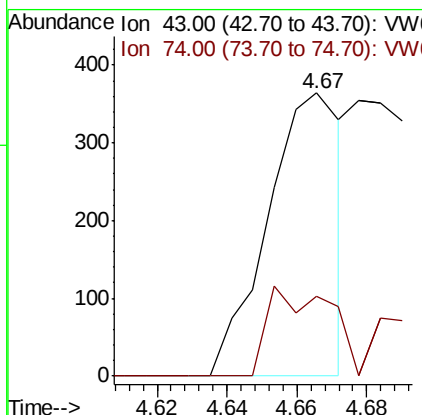
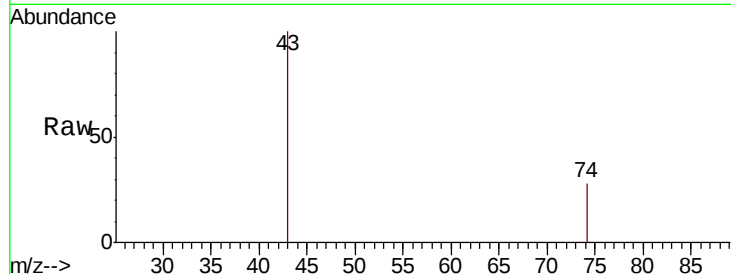




#18  
Methyl Acetate  
Concen: 2.165 ug/l  
RT: 4.67 min Scan# 453  
Delta R.T. -0.00 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

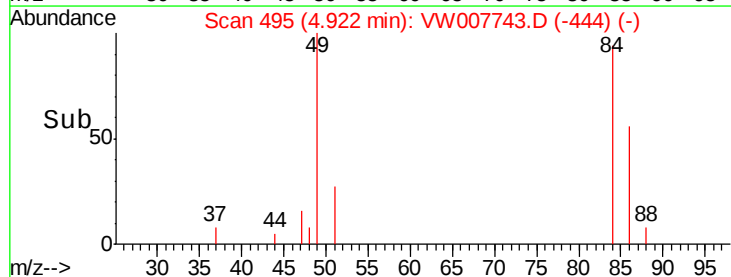
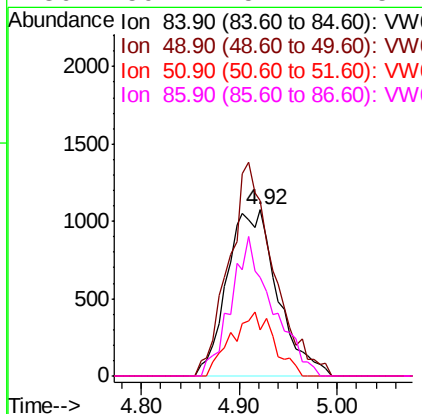
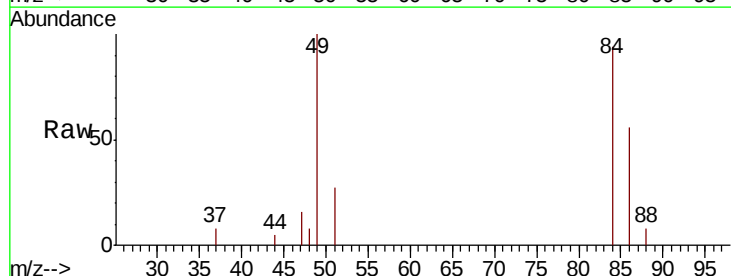
Instrument :  
MSVOA\_W  
ClientSampled :

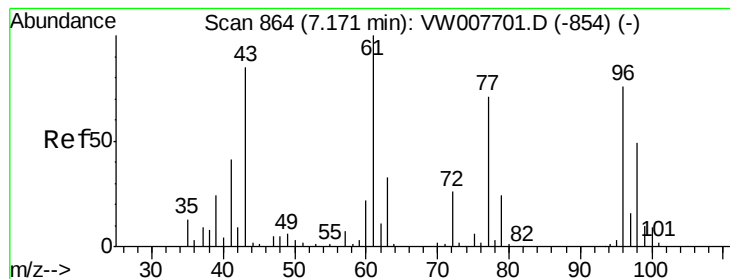
Tot Ion: 43 Resp: 535  
Ion Ratio Lower Upper  
43 100  
74 26.7 22.7 34.1



#20  
Methylene Chloride  
Concen: 1.252 ug/l  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

Tgt Ion: 84 Resp: 3845  
Ion Ratio Lower Upper  
84 100  
49 106.0 83.7 125.5  
51 28.1 28.2 42.2#  
86 59.7 52.2 78.2





#25

2-Butanone

Concen: 17.018 ug/l

RT: 7.17 min Scan# 864

Delta R.T. -0.00 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

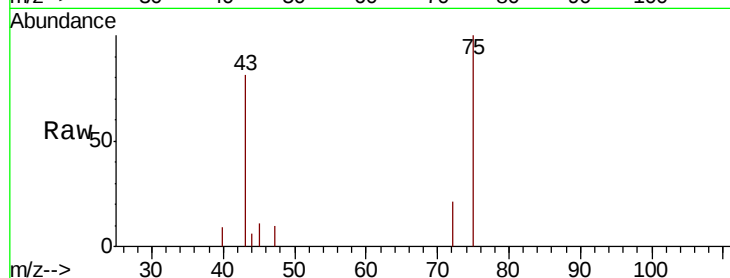
ClientSampled :

Tot Ion: 43 Resp: 2071

Ion Ratio Lower Upper

43 100

72 25.5 24.5 36.7



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW

7.17

800

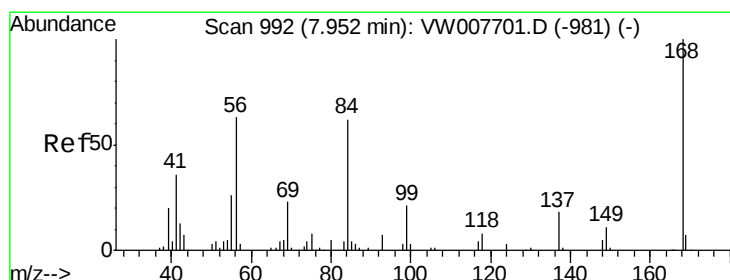
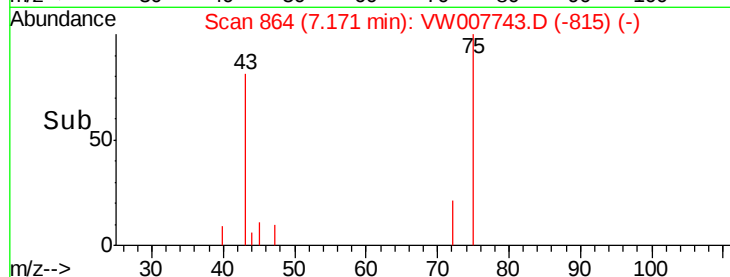
600

400

200

0

Time-->



#31

Cyclohexane

Concen: 1.133 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

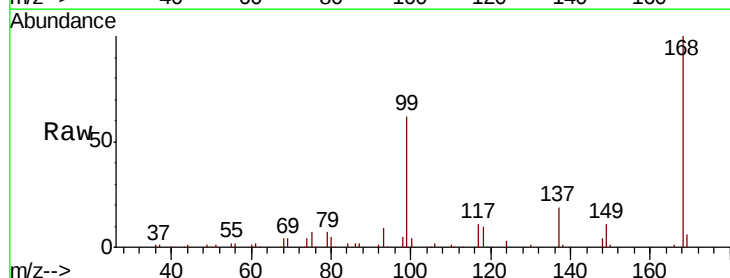
Tgt Ion: 56 Resp: 936

Ion Ratio Lower Upper

56 100

69 201.2 29.7 44.5#

84 122.4 78.9 118.3#



Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 69.00 (68.70 to 69.70): VW

Ion 84.00 (83.70 to 84.70): VW

1200

1000

800

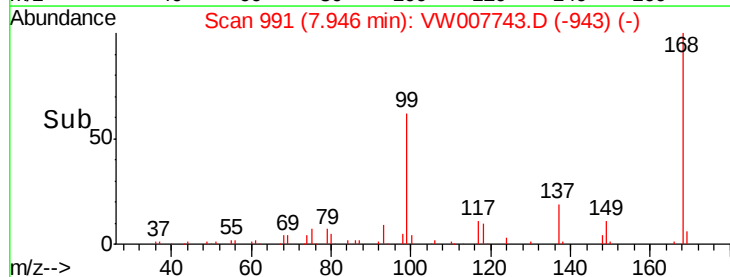
600

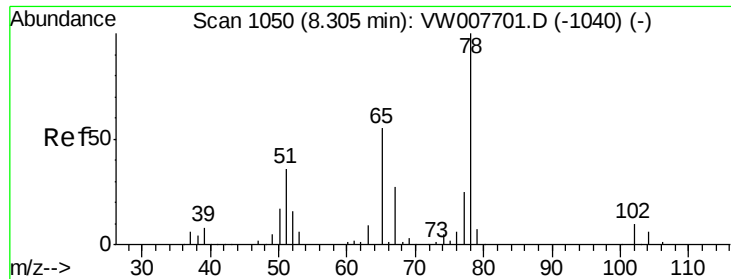
400

200

0

Time-->

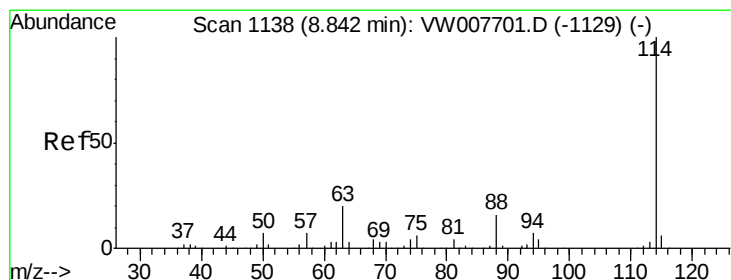
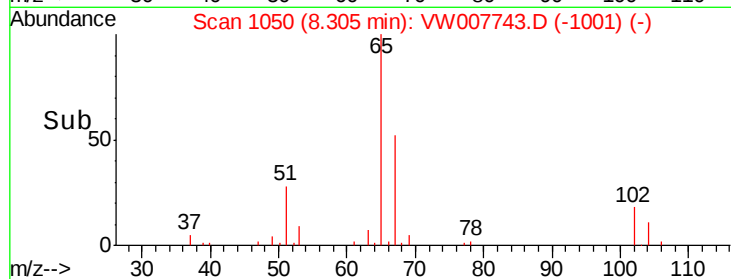
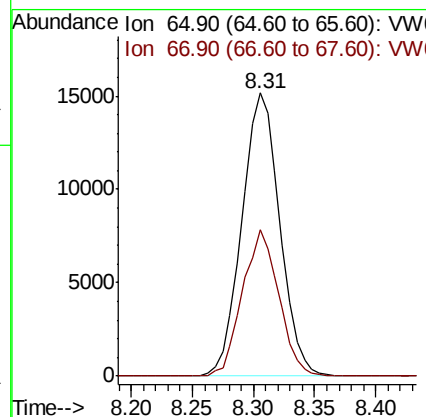
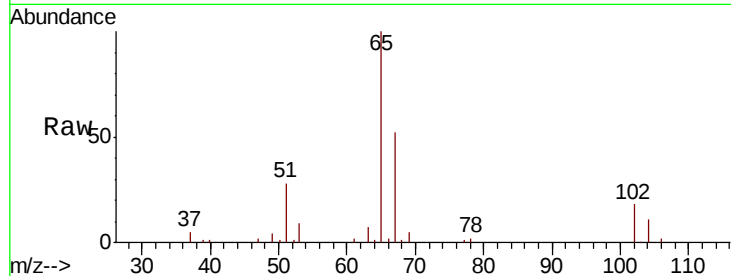




#33  
 1,2-Dichloroethane-d4  
 Concen: 58.788 ug/l  
 RT: 8.31 min Scan# 1050  
 Delta R.T. -0.00 min  
 Lab File: VW007743.D  
 Acq: 20 Dec 2018 12:25

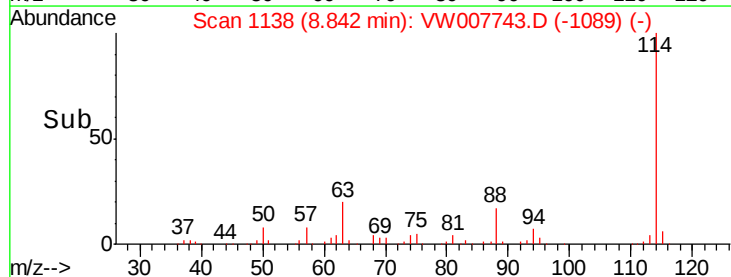
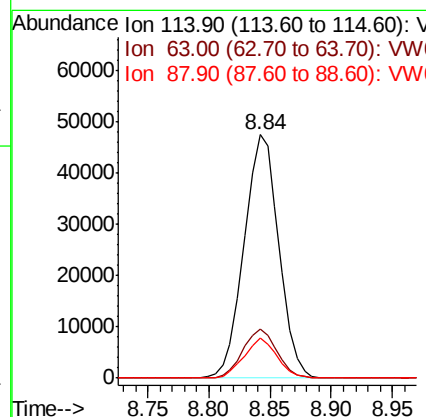
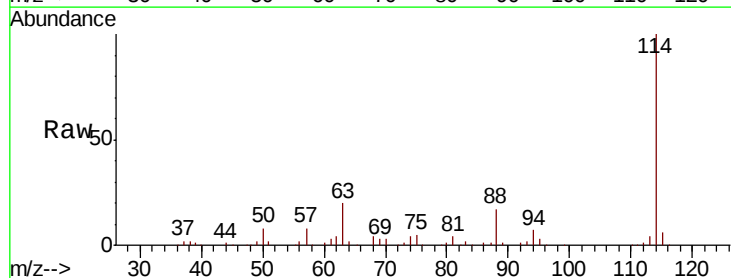
Instrument :  
 MSVOA\_W  
 ClientSampleId :

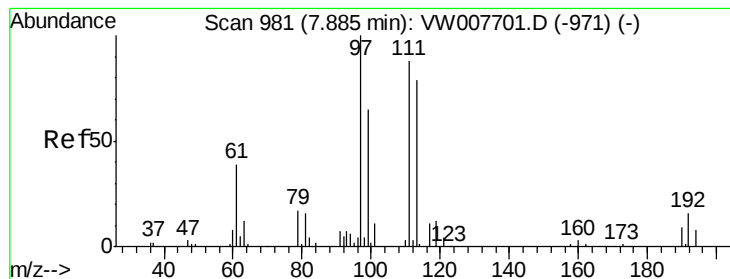
Tot Ion: 65 Resp: 32618  
 Ion Ratio Lower Upper  
 65 100  
 67 49.5 0.0 100.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW007743.D  
 Acq: 20 Dec 2018 12:25

Tgt Ion: 114 Resp: 93462  
 Ion Ratio Lower Upper  
 114 100  
 63 20.2 0.0 40.0  
 88 16.5 0.0 32.6





#35

Dibromofluoromethane

Concen: 49.207 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

ClientSampleId :

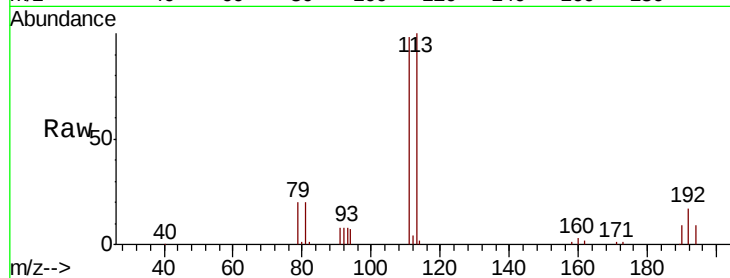
Tot Ion:113 Resp: 28056

Ion Ratio Lower Upper

113 100

111 103.1 82.6 124.0

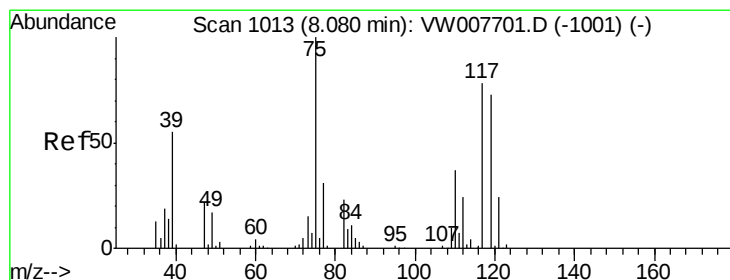
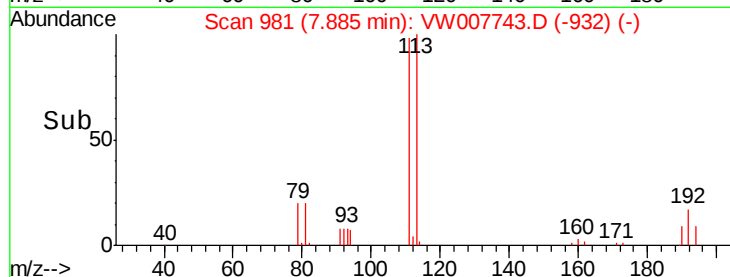
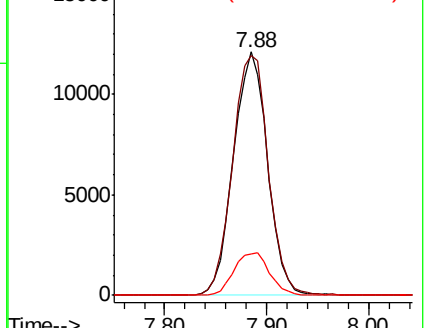
192 18.2 15.5 23.3



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.379 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.13 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

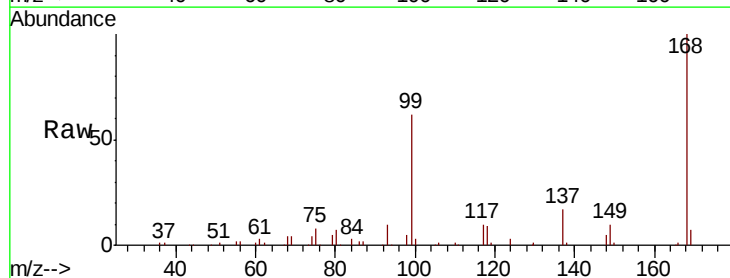
Tgt Ion: 75 Resp: 3950

Ion Ratio Lower Upper

75 100

110 9.8 18.6 55.8#

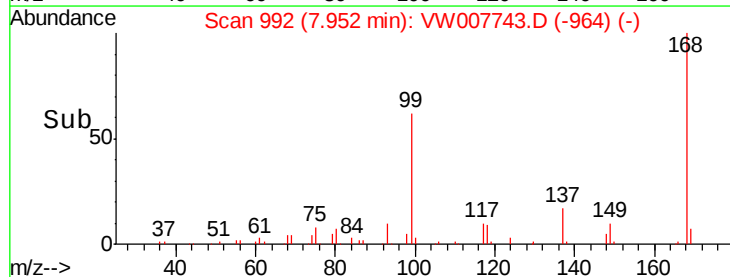
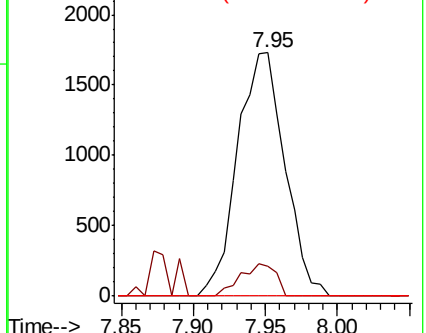
77 0.0 25.0 37.4#

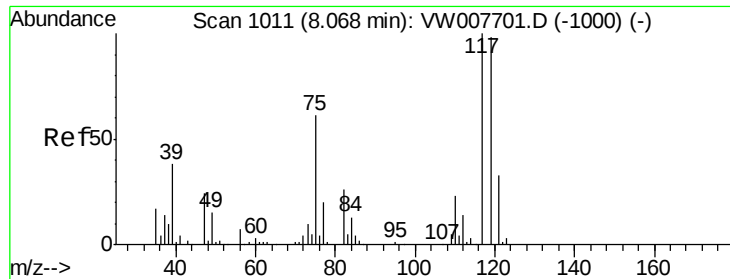


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW

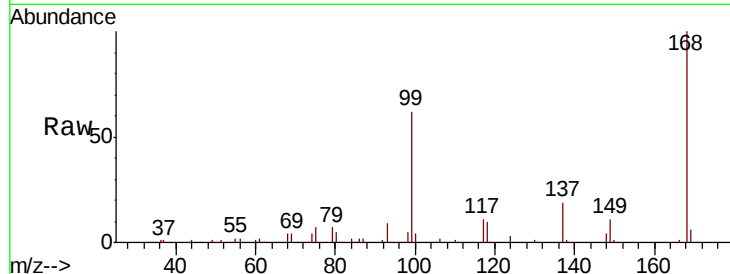




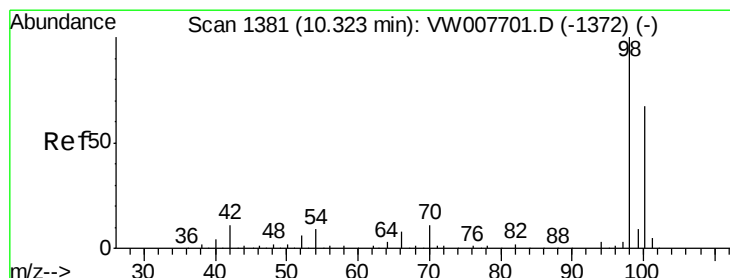
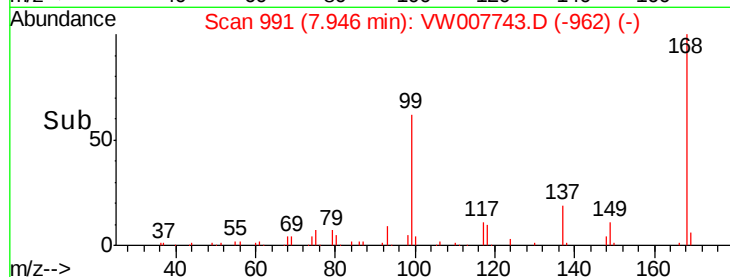
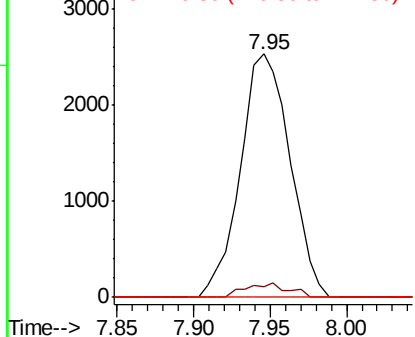
#38  
Carbon Tetrachloride  
Concen: 5.378 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:117 Resp: 5713  
Ion Ratio Lower Upper  
117 100  
119 4.3 78.2 117.2#  
121 0.0 26.1 39.1#

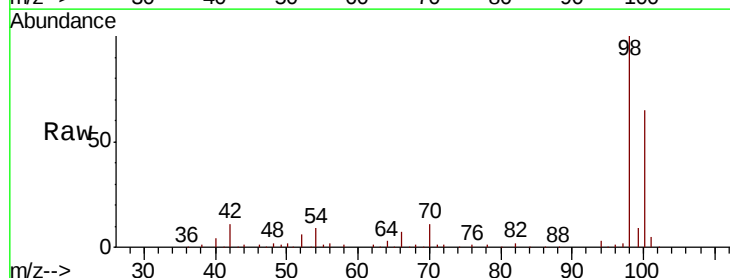


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

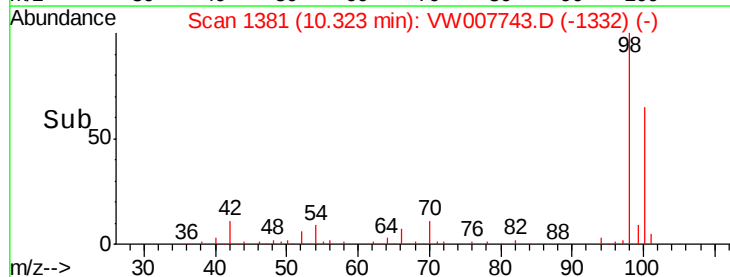
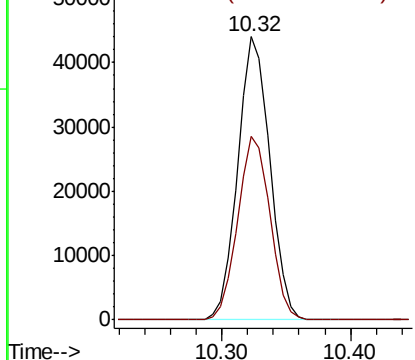


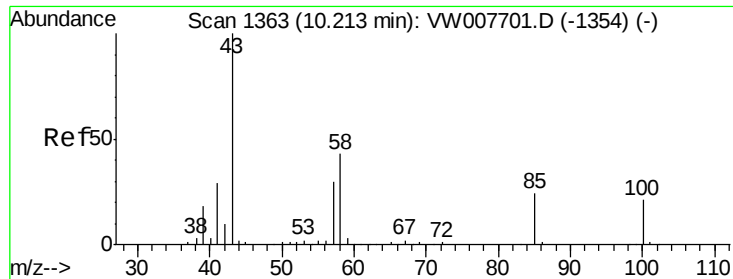
#50  
Toluene-d8  
Concen: 35.319 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

Tgt Ion: 98 Resp: 75916  
Ion Ratio Lower Upper  
98 100  
100 65.3 52.2 78.2



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





#51

4-Methyl-2-Pentanone

Concen: 1.211 ug/l

RT: 10.23 min Scan# 1365

Delta R.T. 0.01 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

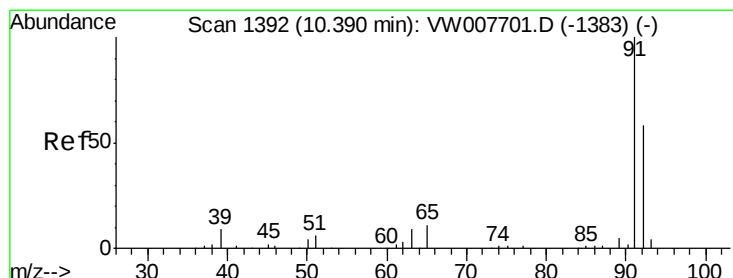
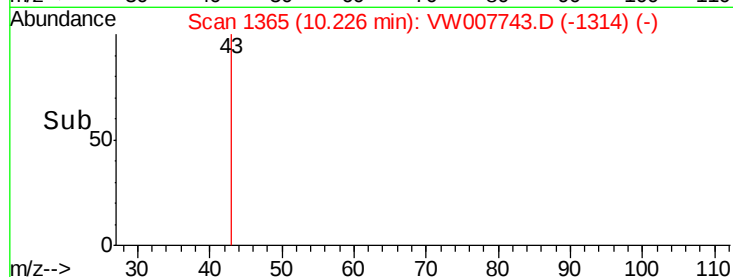
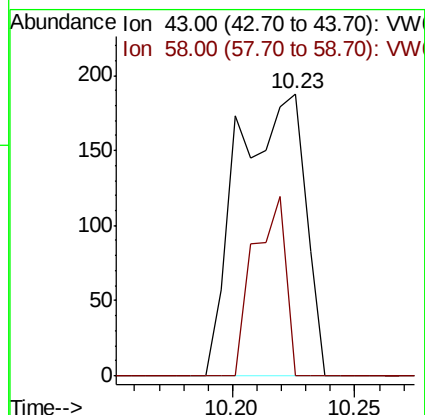
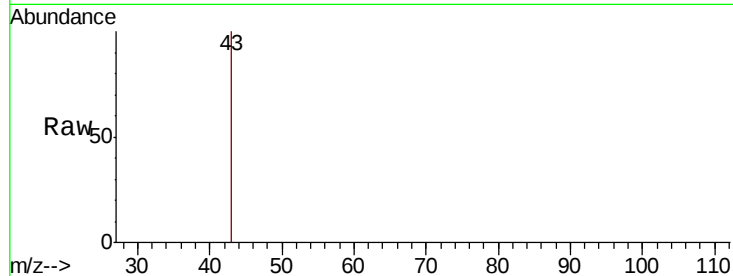
ClientSampled :

Tot Ion: 43 Resp: 357

Ion Ratio Lower Upper

43 100

58 30.3 33.2 49.8#



#52

Toluene

Concen: 1.866 ug/l

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW007743.D

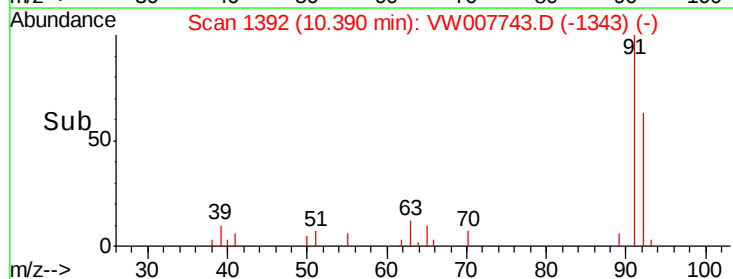
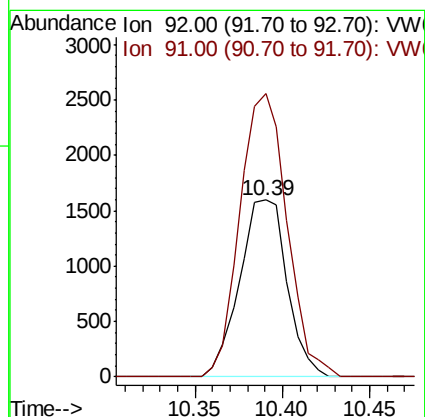
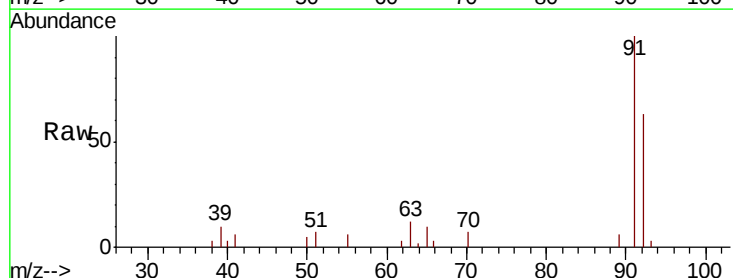
Acq: 20 Dec 2018 12:25

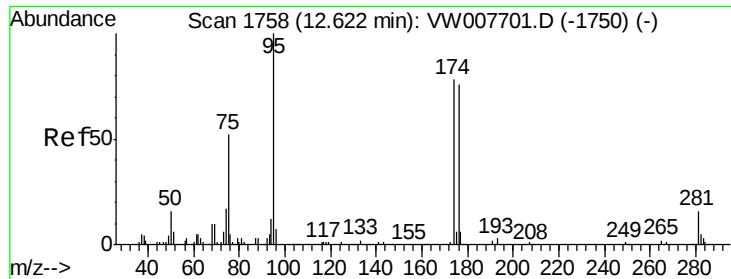
Tgt Ion: 92 Resp: 3013

Ion Ratio Lower Upper

92 100

91 158.8 137.0 205.4

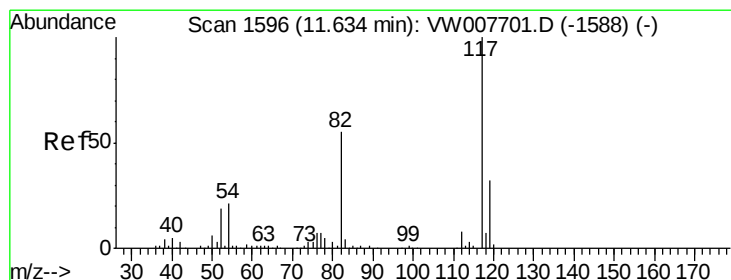
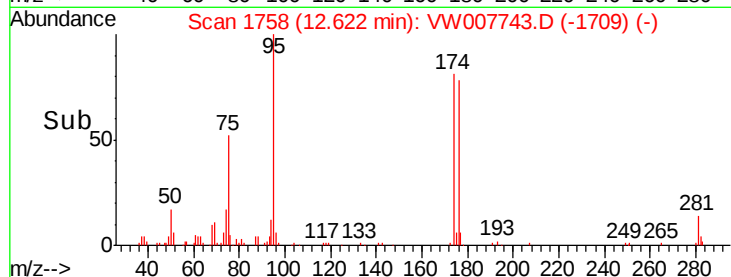
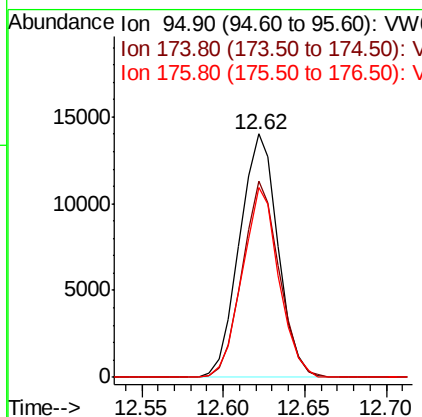
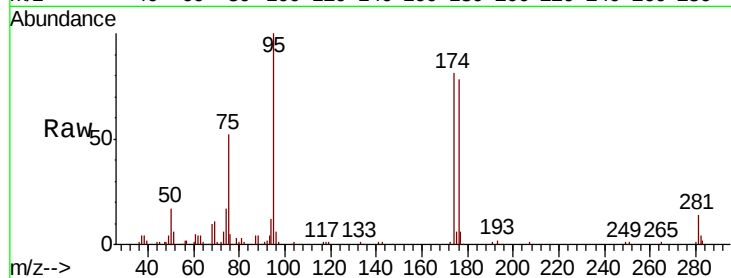




#62  
4-Bromofluorobenzene  
Concen: 27.661 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.00 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

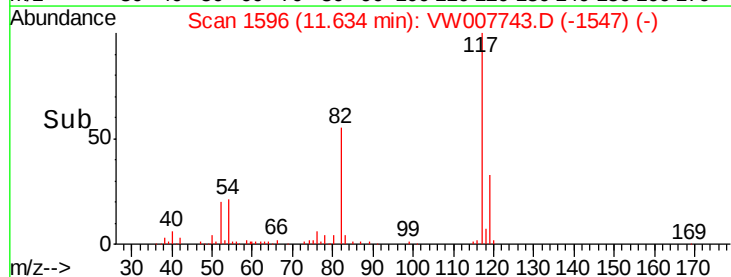
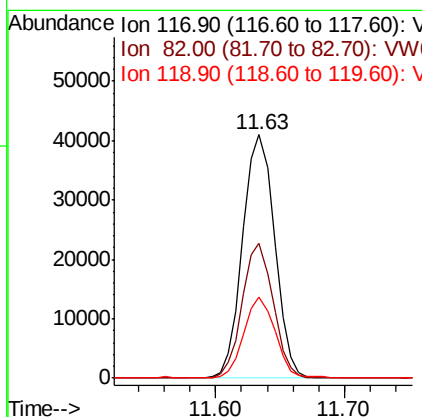
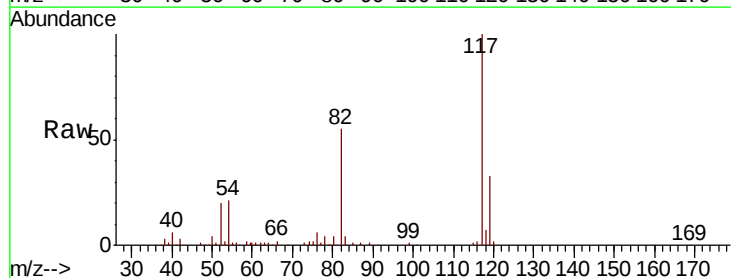
Instrument :  
MSVOA\_W  
ClientSampleId :

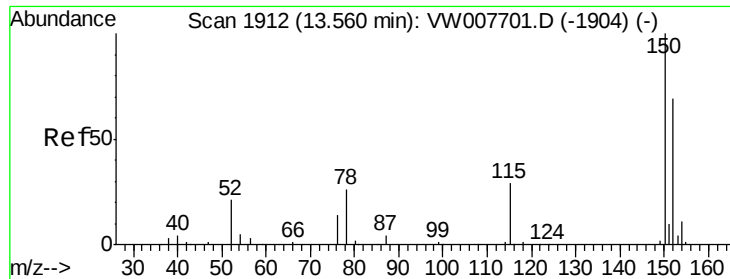
Tot Ion: 95 Resp: 22969  
Ion Ratio Lower Upper  
95 100  
174 77.5 0.0 152.2  
176 74.2 0.0 146.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW007743.D  
Acq: 20 Dec 2018 12:25

Tgt Ion: 117 Resp: 70446  
Ion Ratio Lower Upper  
117 100  
82 55.1 44.3 66.5  
119 33.3 25.7 38.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

ClientSampleId :

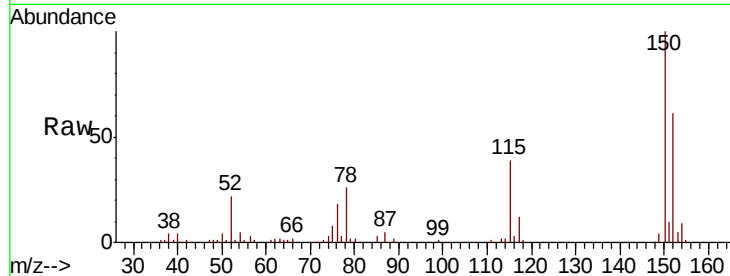
Tot Ion:152 Resp: 22197

Ion Ratio Lower Upper

152 100

115 60.8 31.8 95.4

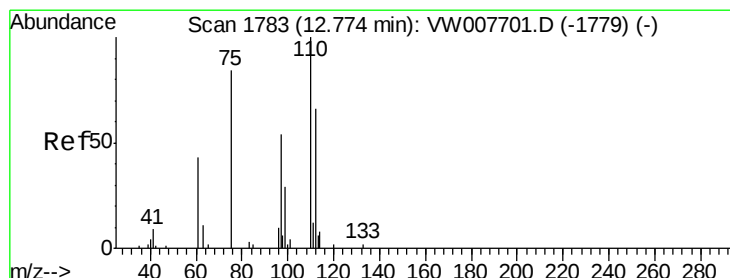
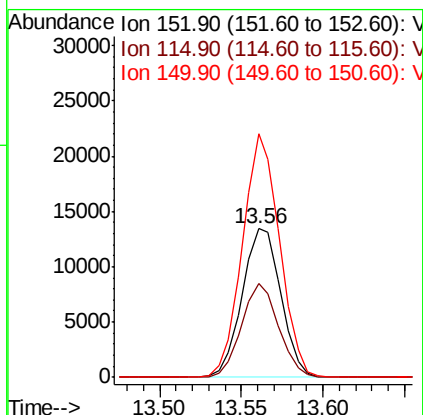
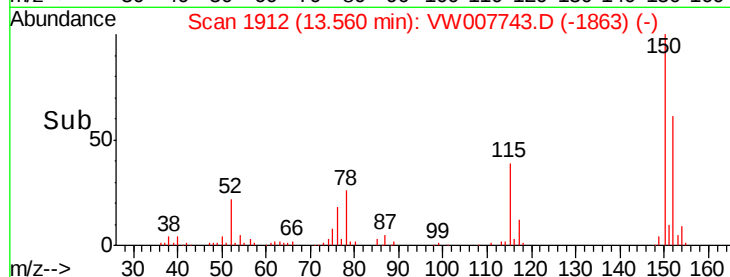
150 156.7 0.0 350.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 68.267 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW007743.D

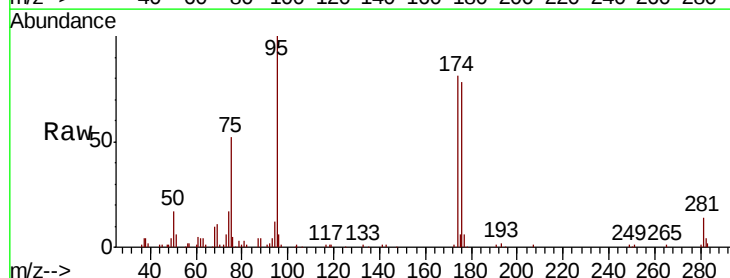
Acq: 20 Dec 2018 12:25

Tgt Ion: 75 Resp: 11712

Ion Ratio Lower Upper

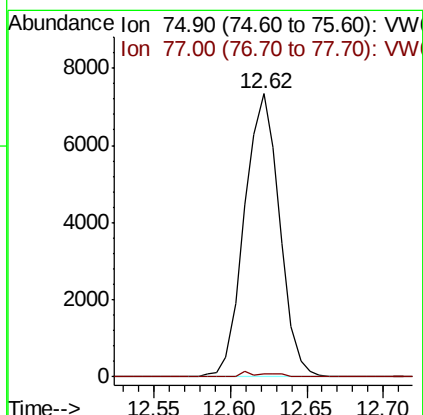
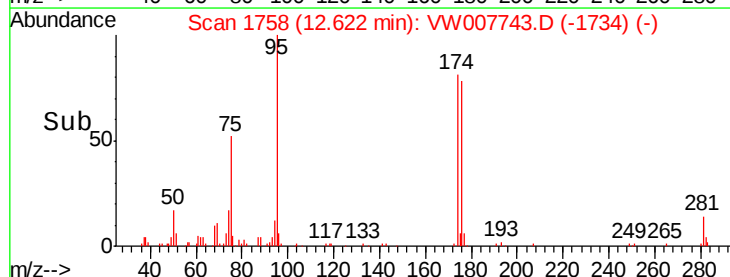
75 100

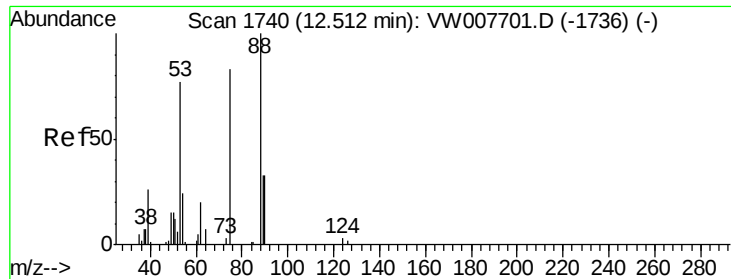
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 143.297 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.11 min

Lab File: VW007743.D

Acq: 20 Dec 2018 12:25

Instrument :

MSVOA\_W

ClientSampleId :

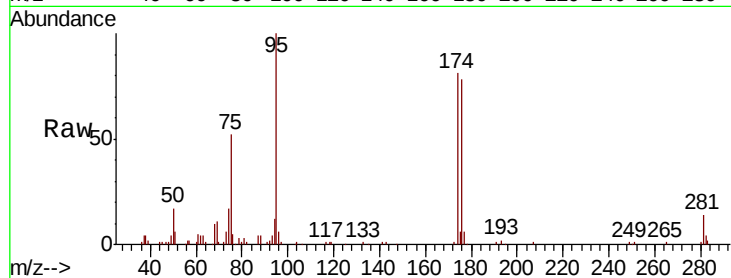
Tot Ion: 75 Resp: 11712

Ion Ratio Lower Upper

75 100

53 0.0 80.2 120.2#

89 0.0 39.2 58.8#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

