

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092019\  
 Data File : VW013214.D  
 Acq On : 21 Sep 2019 05:39  
 Operator : SY/VA  
 Sample : K4972-02  
 Misc : 4.65G/5ML/MSVOA W/SOIL  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Sep 21 06:25:52 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 377174   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 554513   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 440015   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 159456   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.30  | 65   | 159236   | 51.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.46% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 154969   | 50.81 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.62% |          |
| 50) Toluene-d8              | 10.32 | 98   | 630561   | 49.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.80%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 176338   | 40.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 80.88%  |          |

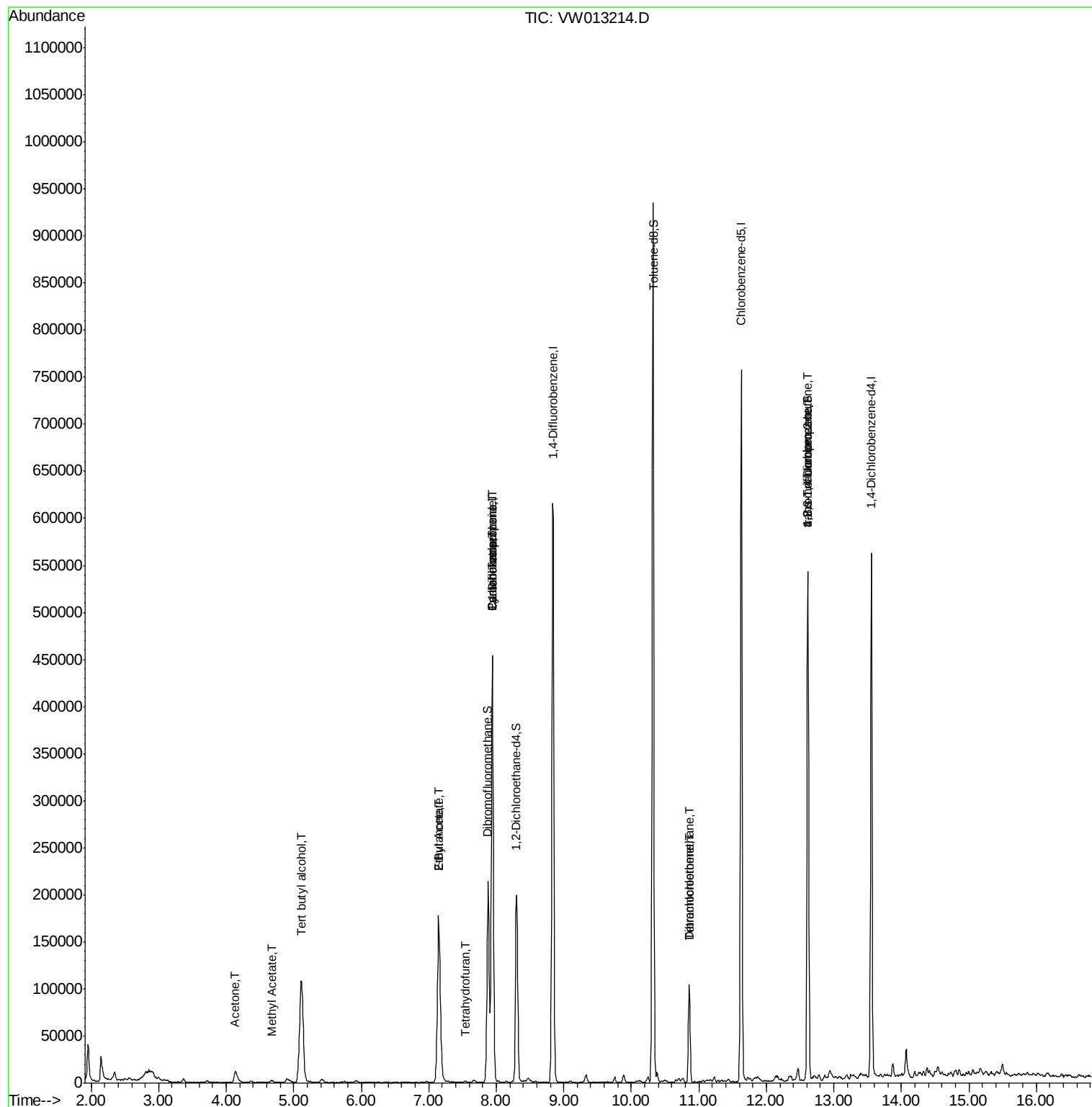
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.11  | 59   | 107963   | 497.205   | ug/l # | 75     |
| 16) Acetone                    | 4.14  | 43   | 25223    | 36.334    | ug/l   | 98     |
| 18) Methyl Acetate             | 4.68  | 43   | 4683     | 2.400     | ug/l   | 98     |
| 20) Methylene Chloride         | 4.90  | 84   | 2944     | Below Cal | #      | 89     |
| 25) 2-Butanone                 | 7.15  | 43   | 9433     | 9.052     | ug/l # | 74     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 1344     | 2.103     | ug/l # | 86     |
| 31) Cyclohexane                | 7.95  | 56   | 7541     | 1.130     | ug/l # | 12     |
| 36) 1,1-Dichloropropene        | 7.94  | 75   | 25362    | 4.722     | ug/l # | 48     |
| 37) Ethyl Acetate              | 7.15  | 43   | 9433     | 4.133     | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 31697    | 6.584     | ug/l # | 18     |
| 60) Dibromochloromethane       | 10.86 | 129  | 21342    | 7.082     | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.86 | 164  | 25573    | 7.660     | ug/l   | 94     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 83002    | 58.942    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 83002    | 132.260   | ug/l # | 12     |

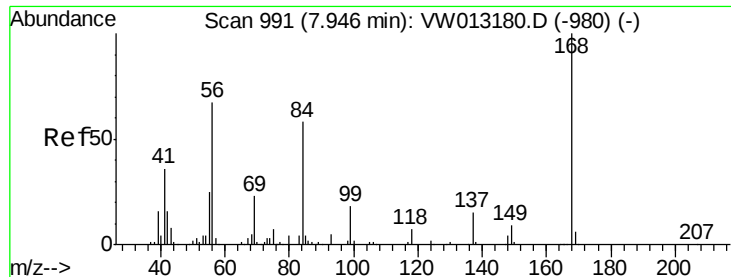
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW092019\  
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Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Sep 21 06:25:52 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 20 15:58:08 2019  
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: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

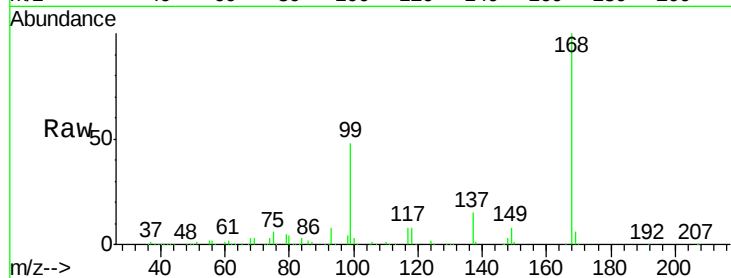
ClientSampled :

Tot Ion:168 Resp: 377174

Ion Ratio Lower Upper

168 100

99 48.0 40.2 60.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

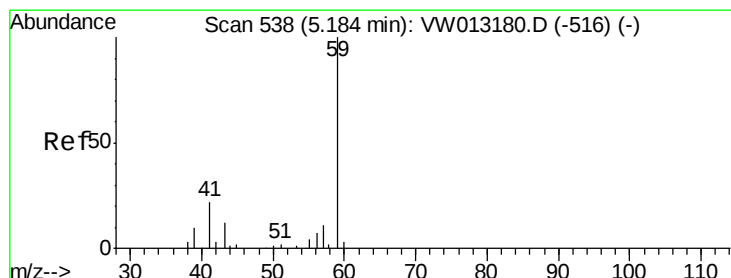
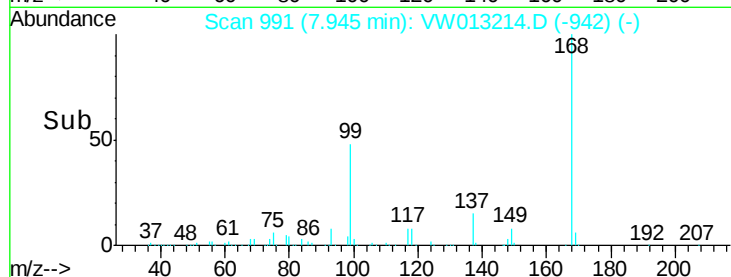
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 497.205 ug/l

RT: 5.11 min Scan# 526

Delta R.T. -0.07 min

Lab File: VW013214.D

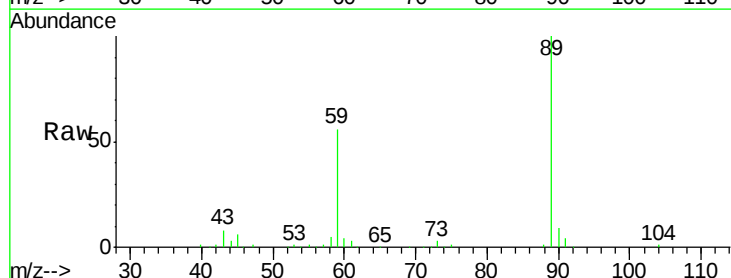
Acq: 21 Sep 2019 05:39

Tgt Ion: 59 Resp: 107963

Ion Ratio Lower Upper

59 100

57 0.8 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.11

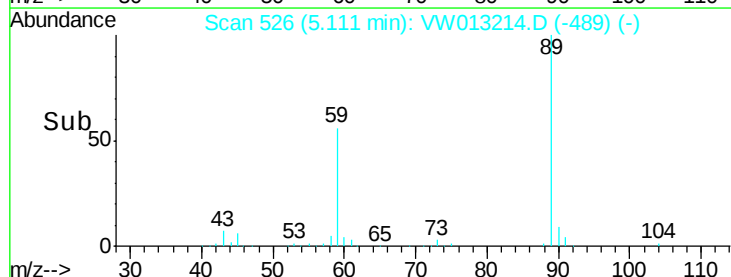
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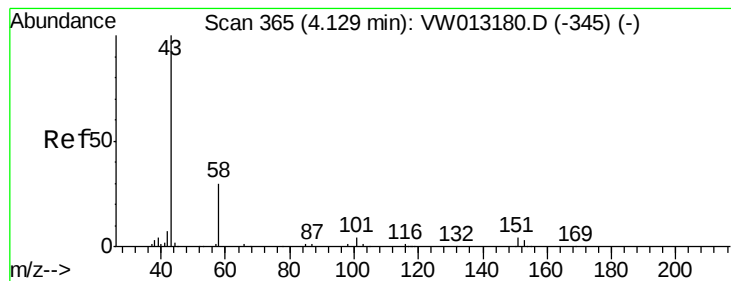
20000

10000

0

Time-->





#16

Acetone

Concen: 36.334 ug/l

RT: 4.14 min Scan# 366

Delta R.T. 0.01 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

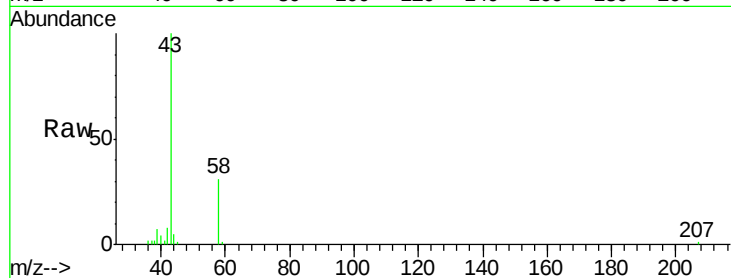
ClientSampleId :

Tot Ion: 43 Resp: 25223

Ion Ratio Lower Upper

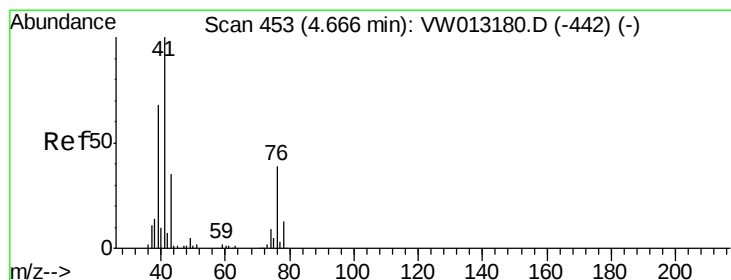
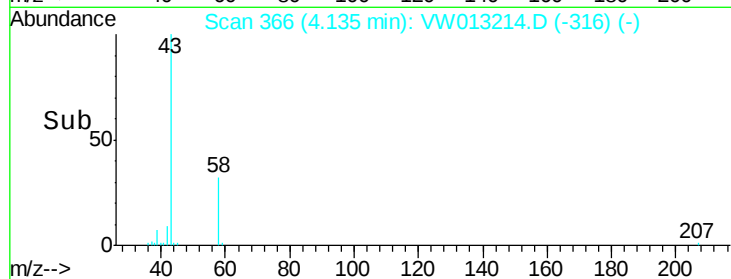
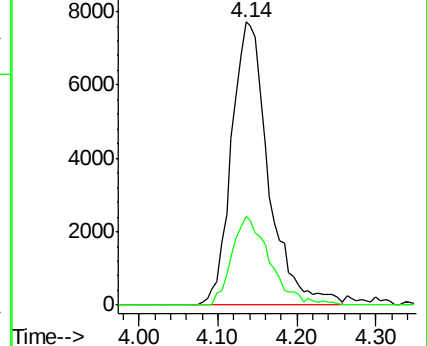
43 100

58 31.3 24.1 36.1



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#18

Methyl Acetate

Concen: 2.400 ug/l

RT: 4.68 min Scan# 455

Delta R.T. 0.01 min

Lab File: VW013214.D

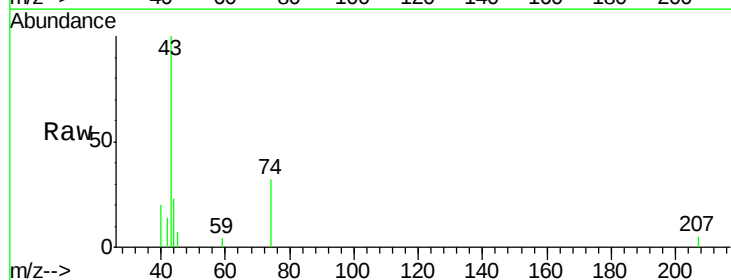
Acq: 21 Sep 2019 05:39

Tgt Ion: 43 Resp: 4683

Ion Ratio Lower Upper

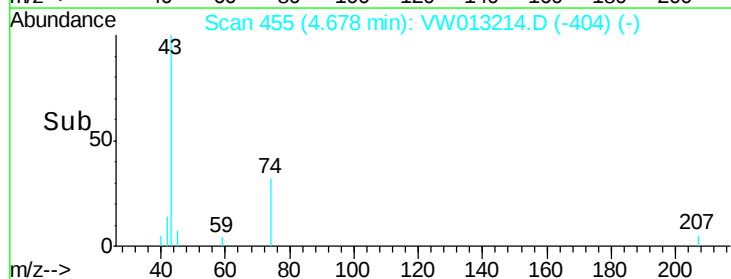
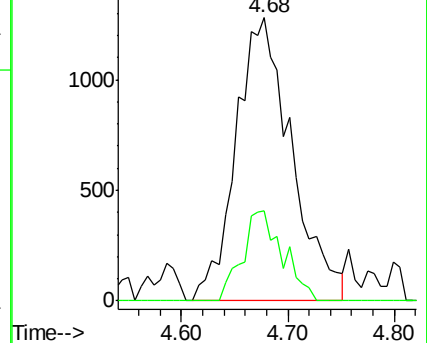
43 100

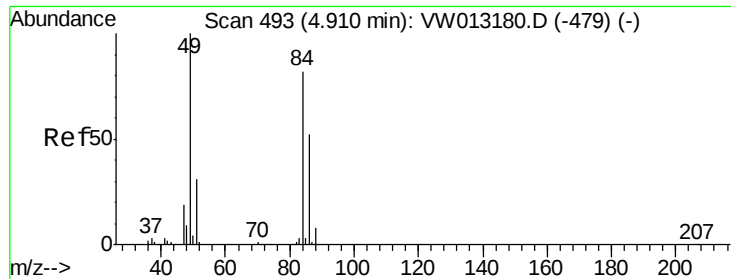
74 23.1 19.3 28.9



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 74.00 (73.70 to 74.70): VW

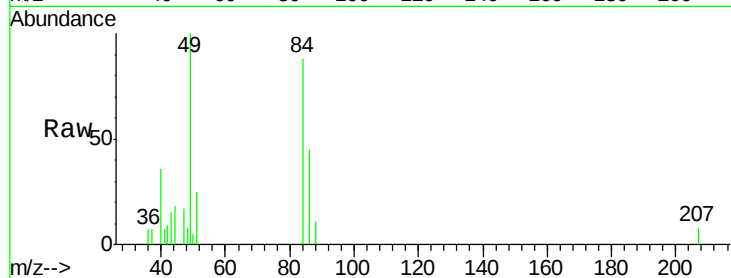




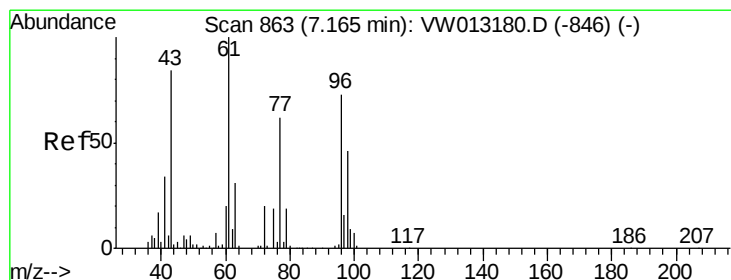
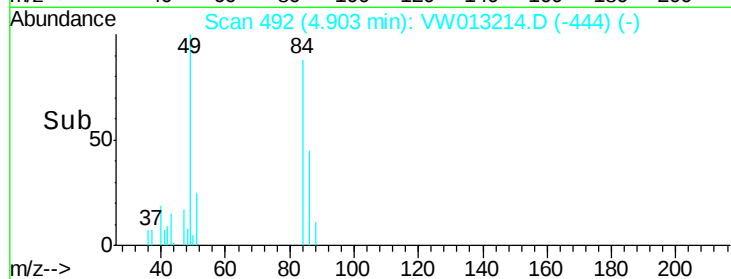
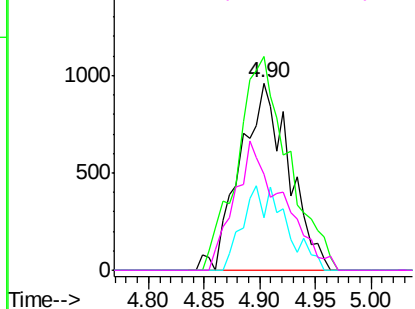
#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 4.90 min Scan# 492  
Delta R.T. -0.01 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 84 Resp: 2944  
Ion Ratio Lower Upper  
84 100  
49 114.0 97.6 146.4  
51 28.2 30.2 45.2#  
86 51.1 50.6 76.0

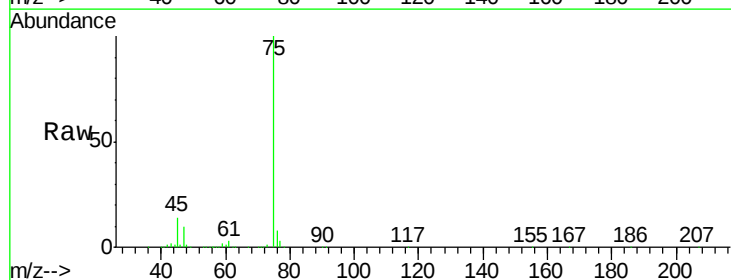


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

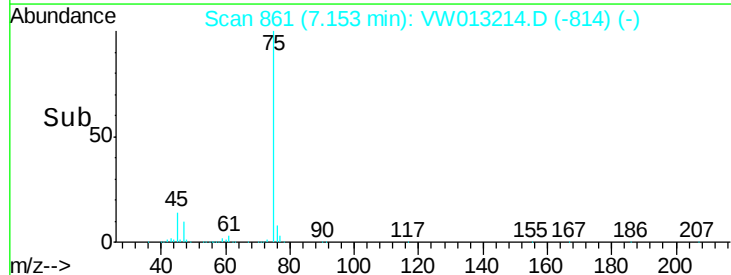
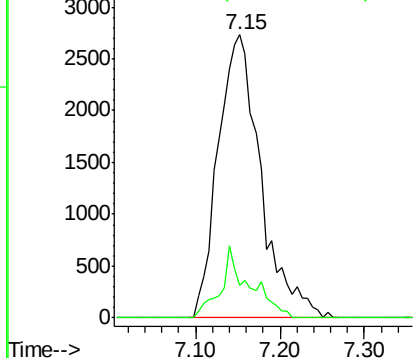


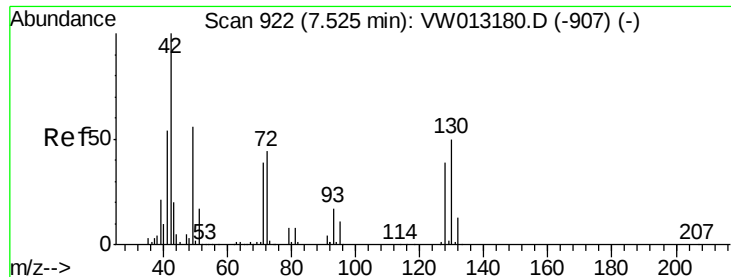
#25  
2-Butanone  
Concen: 9.052 ug/l  
RT: 7.15 min Scan# 861  
Delta R.T. -0.01 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

Tgt Ion: 43 Resp: 9433  
Ion Ratio Lower Upper  
43 100  
72 11.4 19.4 29.0#



Abundance Ion 43.00 (42.70 to 43.70): VW  
Ion 72.00 (71.70 to 72.70): VW

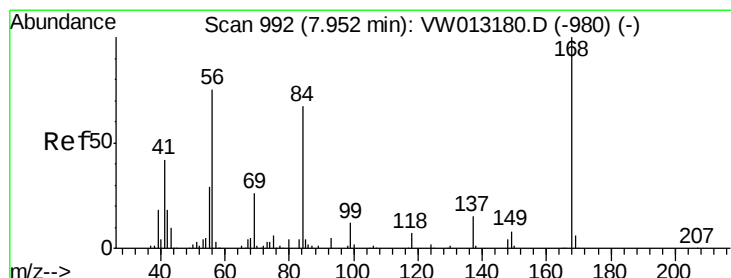
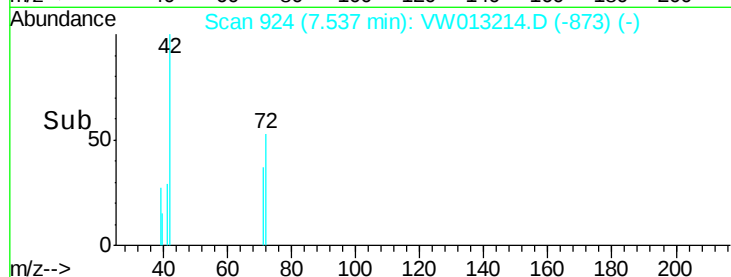
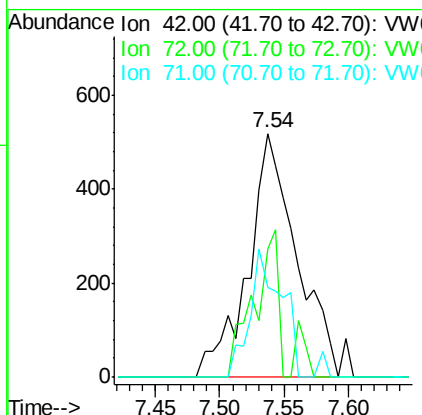
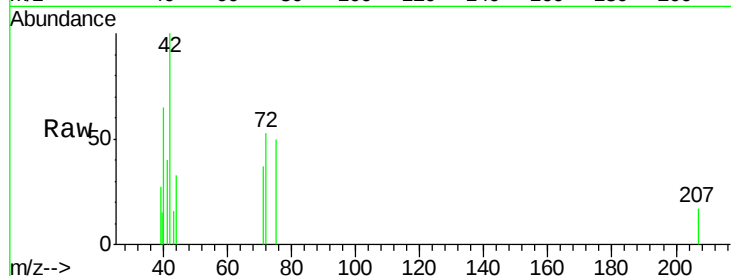




#29  
Tetrahydrofuran  
Concen: 2.103 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.01 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

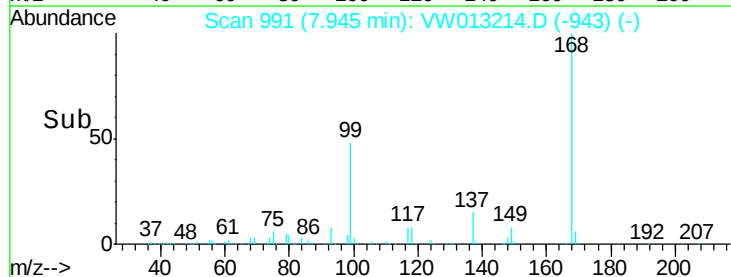
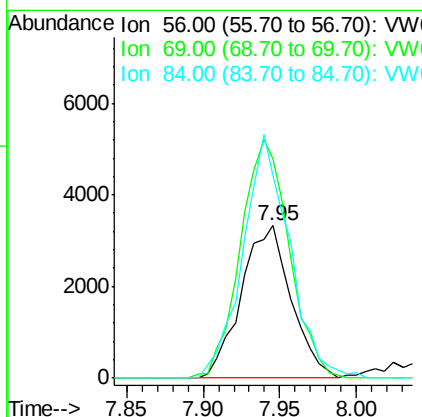
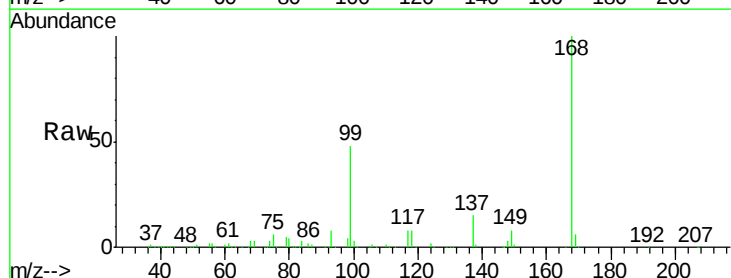
Instrument :  
MSVOA\_W  
ClientSampleId :

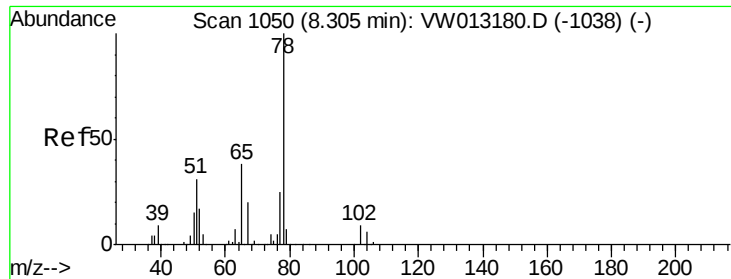
Tot Ion: 42 Resp: 1344  
Ion Ratio Lower Upper  
42 100  
72 30.3 33.9 50.9#  
71 34.4 31.9 47.9



#31  
Cyclohexane  
Concen: 1.130 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

Tgt Ion: 56 Resp: 7541  
Ion Ratio Lower Upper  
56 100  
69 144.0 27.2 40.8#  
84 133.1 70.8 106.2#





#33

1,2-Dichloroethane-d4

Concen: 51.729 ug/l

RT: 8.30 min Scan# 1049

Delta R.T. -0.01 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

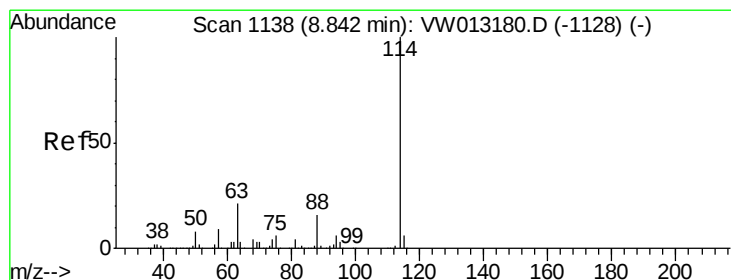
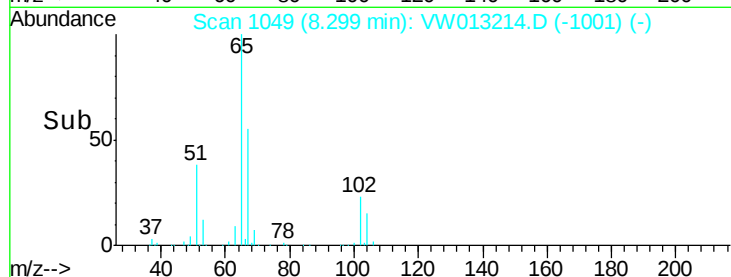
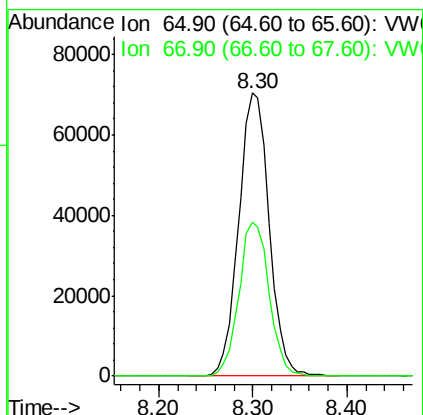
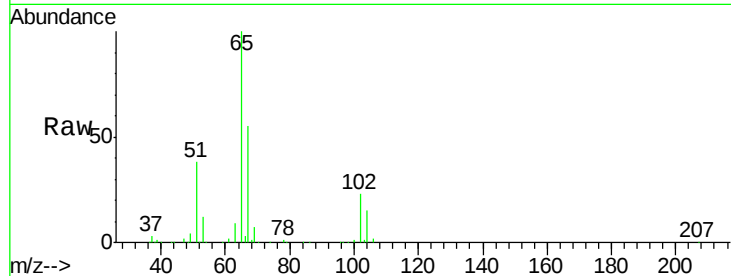
ClientSampleId :

Tot Ion: 65 Resp: 159236

Ion Ratio Lower Upper

65 100

67 54.0 0.0 106.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1137

Delta R.T. -0.01 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

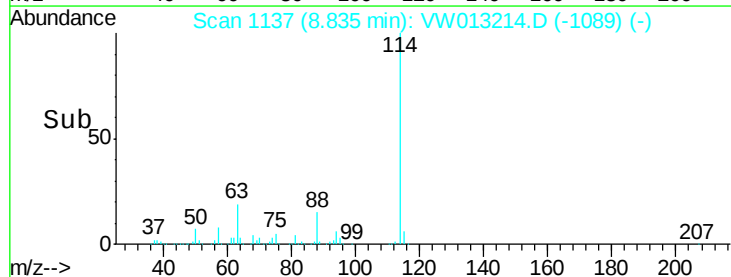
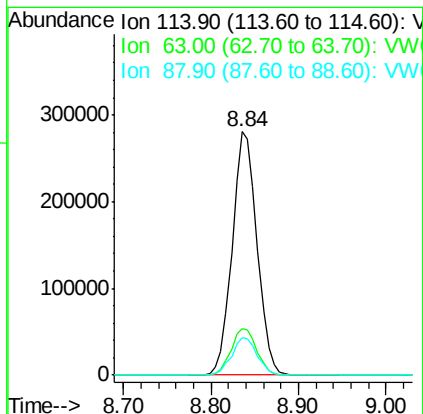
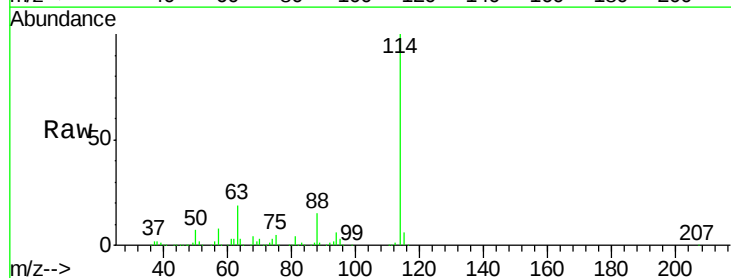
Tgt Ion: 114 Resp: 554513

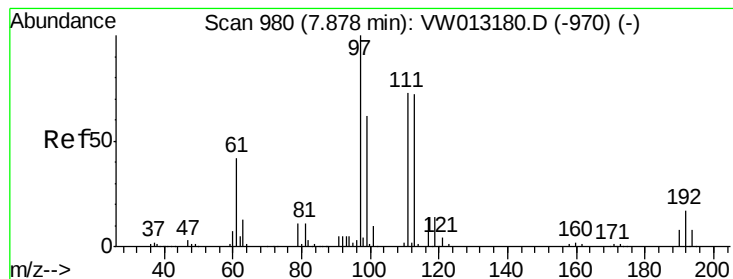
Ion Ratio Lower Upper

114 100

63 19.4 0.0 41.4

88 15.2 0.0 32.0





#35

Dibromofluoromethane

Concen: 50.812 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.00 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

ClientSampleId :

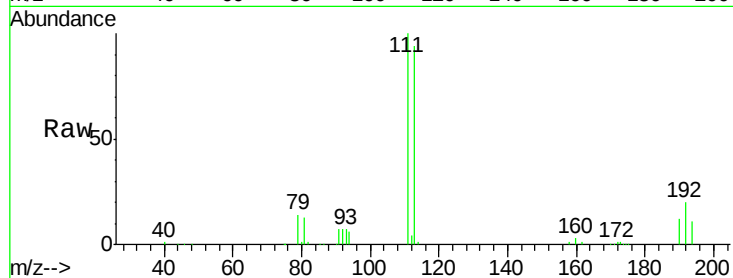
Tot Ion:113 Resp: 154969

Ion Ratio Lower Upper

113 100

111 102.7 81.9 122.9

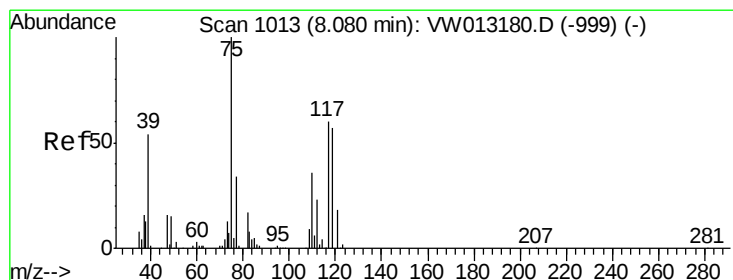
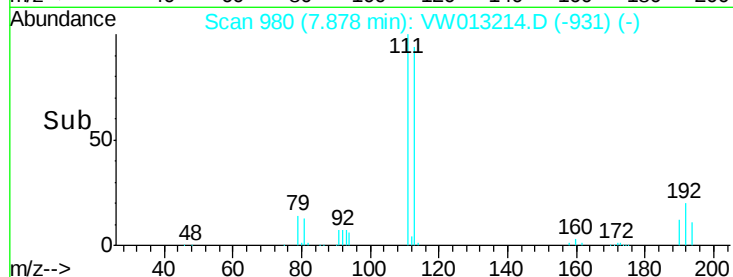
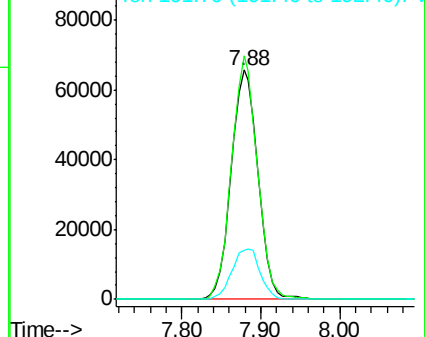
192 23.1 19.1 28.7



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: 4.722 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.14 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

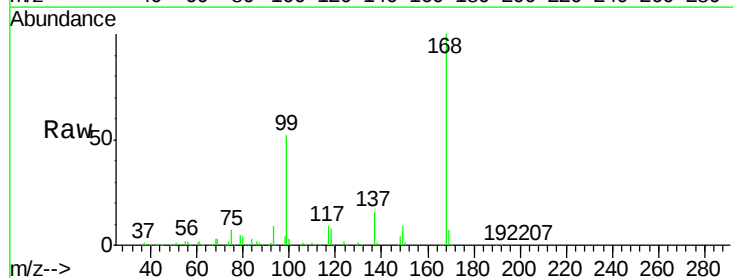
Tgt Ion: 75 Resp: 25362

Ion Ratio Lower Upper

75 100

110 8.5 18.1 54.3#

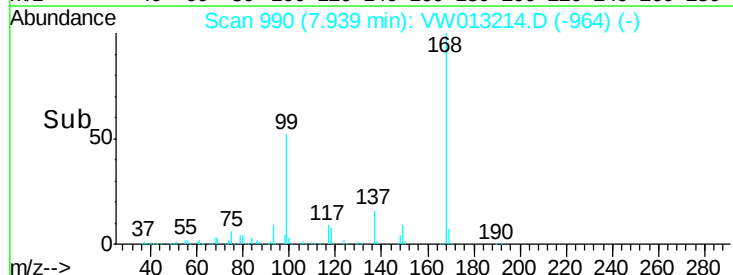
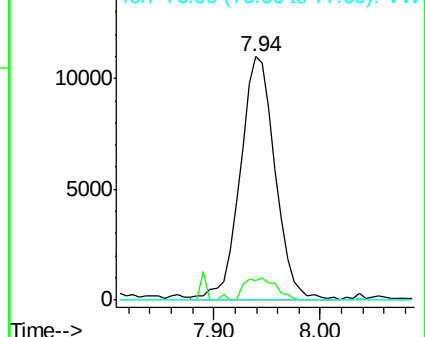
77 0.0 25.8 38.6#

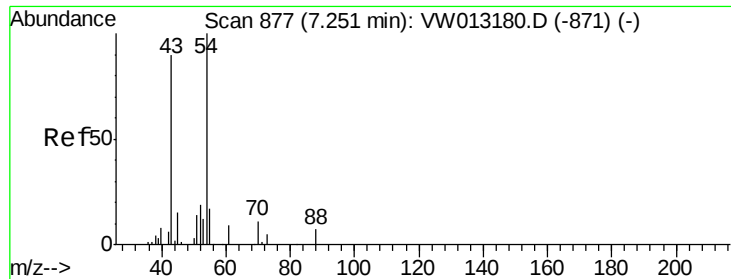


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW

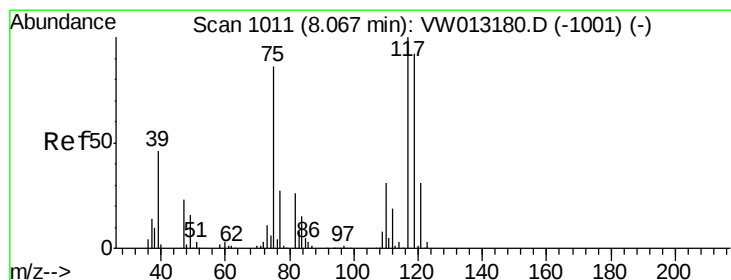
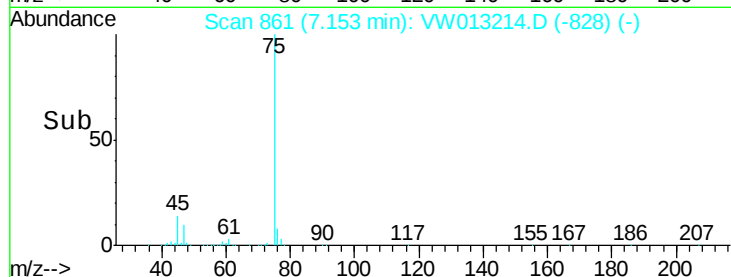
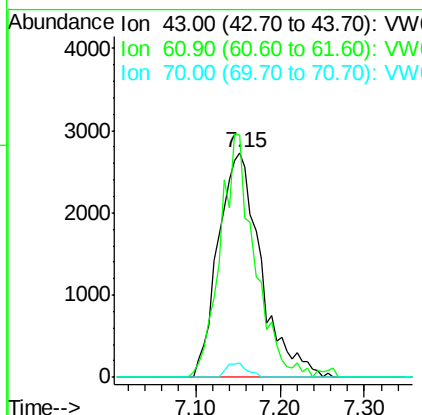
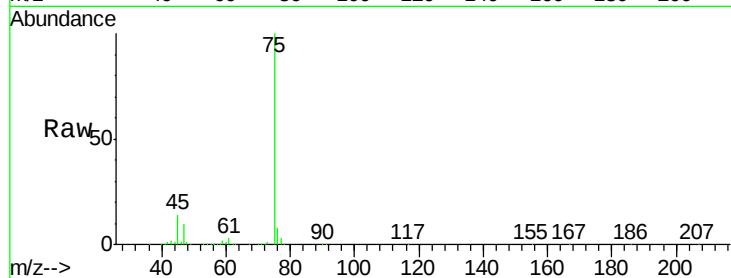




#37  
Ethyl Acetate  
Concen: 4.133 ug/l  
RT: 7.15 min Scan# 861  
Delta R.T. -0.10 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

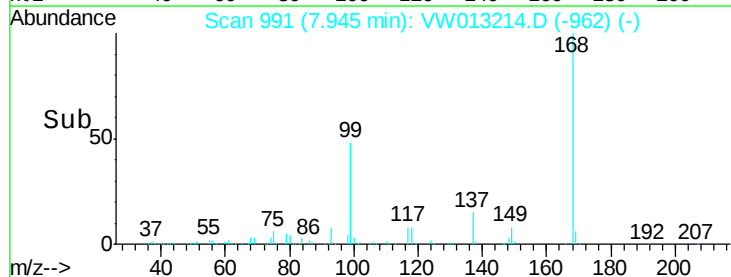
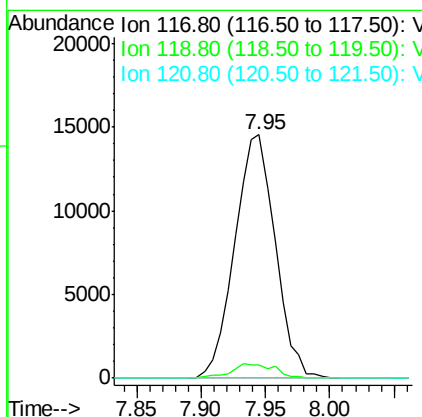
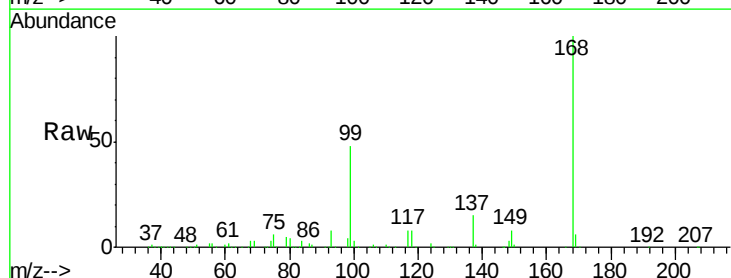
Instrument :  
MSVOA\_W  
ClientSampleId :

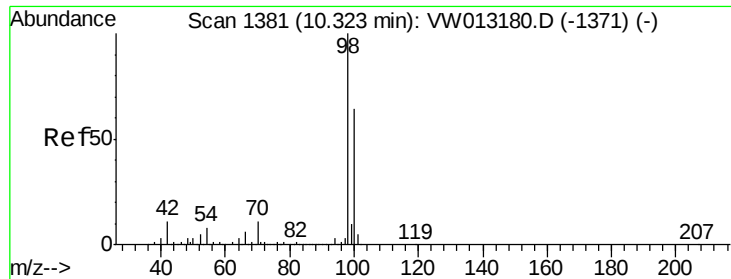
Tot Ion: 43 Resp: 9433  
Ion Ratio Lower Upper  
43 100  
61 86.5 10.9 16.3#  
70 3.1 8.2 12.2#



#38  
Carbon Tetrachloride  
Concen: 6.584 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

Tgt Ion: 117 Resp: 31697  
Ion Ratio Lower Upper  
117 100  
119 5.3 73.5 110.3#  
121 0.0 25.0 37.6#

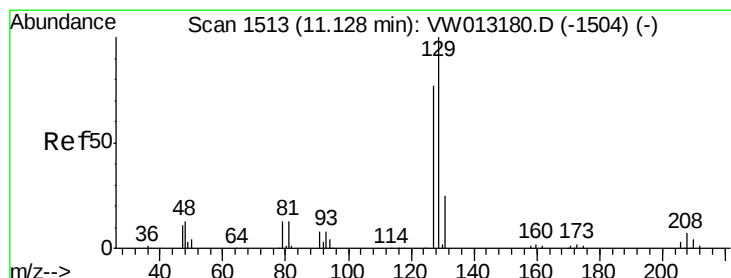
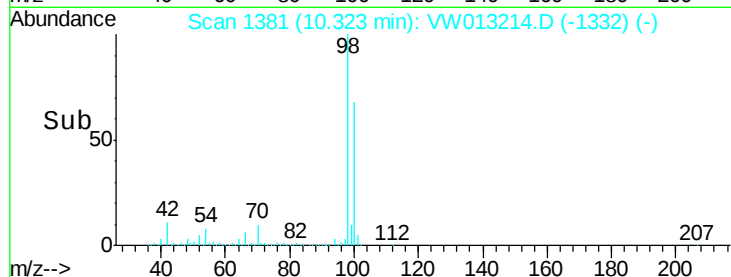
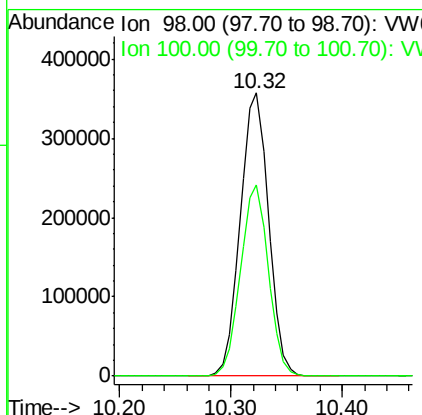
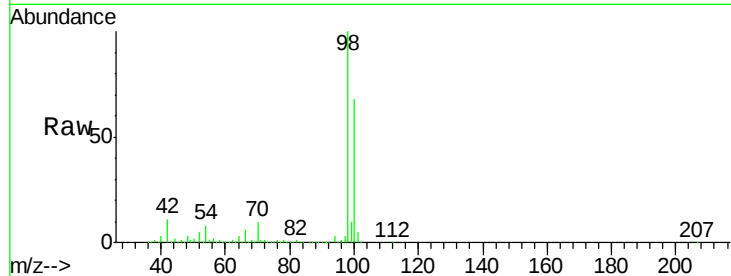




#50  
Toluene-d8  
Concen: 49.402 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

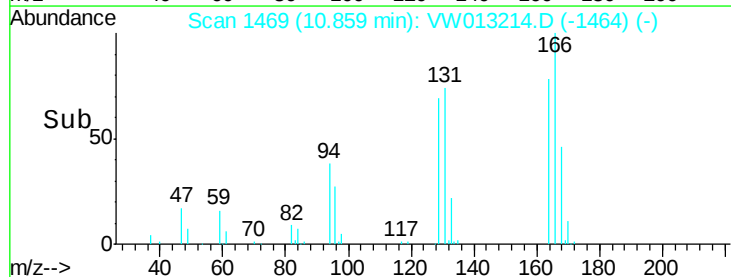
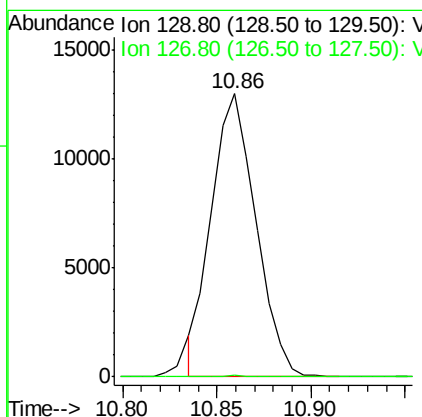
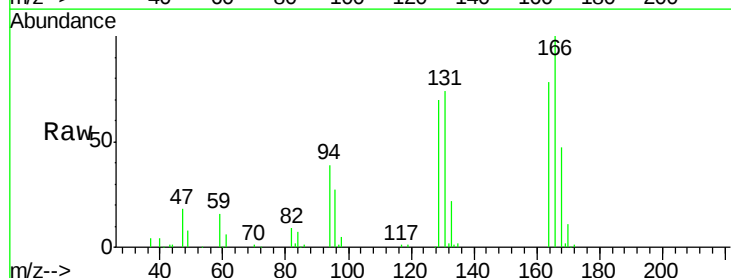
Instrument :  
MSVOA\_W  
ClientSampled :

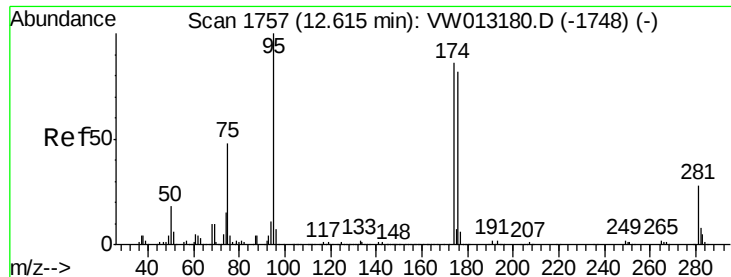
Tot Ion: 98 Resp: 630561  
Ion Ratio Lower Upper  
98 100  
100 66.6 52.9 79.3



#60  
Dibromochloromethane  
Concen: 7.082 ug/l  
RT: 10.86 min Scan# 1469  
Delta R.T. -0.27 min  
Lab File: VW013214.D  
Acq: 21 Sep 2019 05:39

Tgt Ion: 129 Resp: 21342  
Ion Ratio Lower Upper  
129 100  
127 0.1 38.8 116.4#





#62

4-Bromofluorobenzene

Concen: 40.444 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

ClientSampleId :

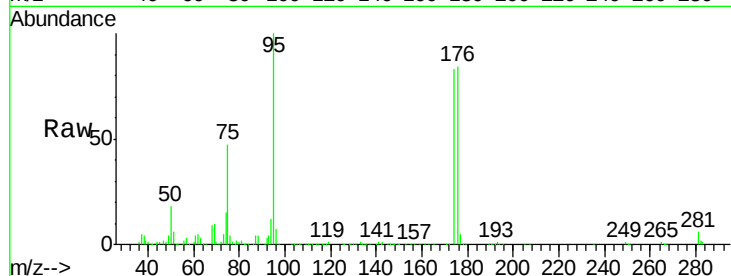
Tot Ion: 95 Resp: 176338

Ion Ratio Lower Upper

95 100

174 89.3 0.0 178.4

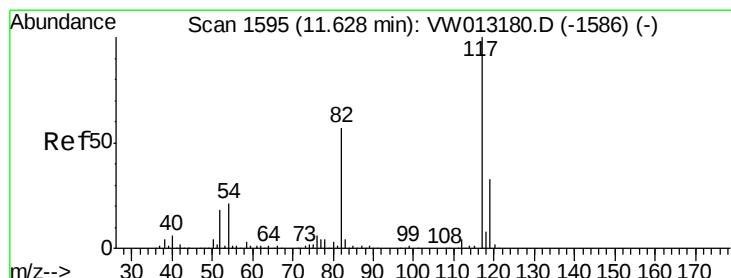
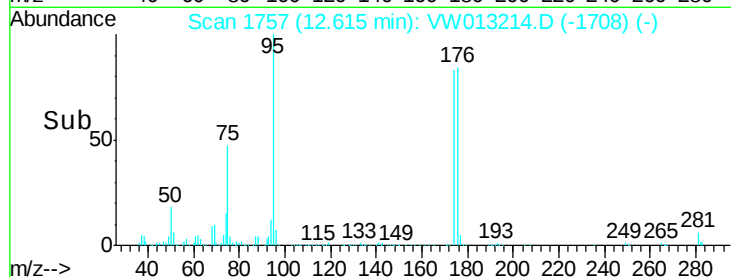
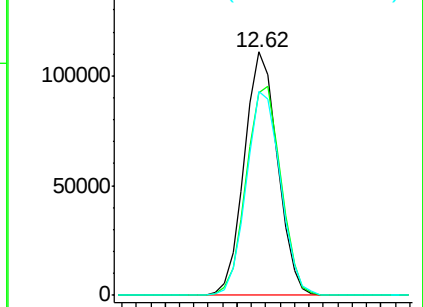
176 86.1 0.0 172.2



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1595

Delta R.T. -0.00 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

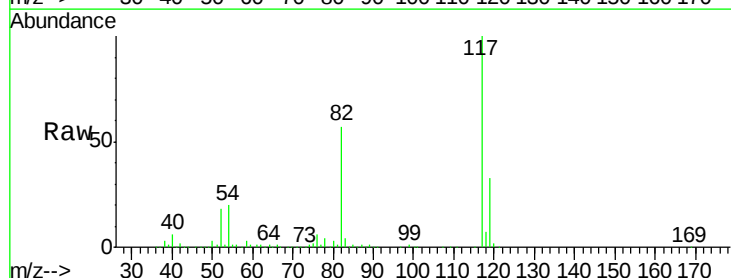
Tgt Ion: 117 Resp: 440015

Ion Ratio Lower Upper

117 100

82 56.8 45.9 68.9

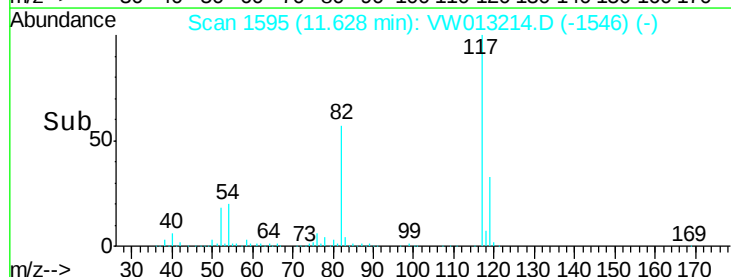
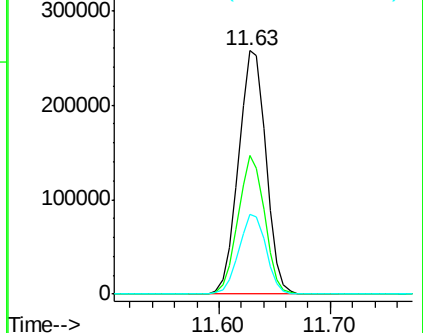
119 32.8 26.2 39.2

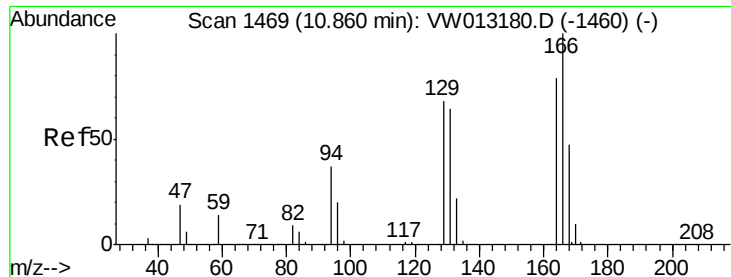


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW





#64

Tetrachloroethene

Concen: 7.660 ug/l

RT: 10.86 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

Instrument :

MSVOA\_W

ClientSampleId :

Tot Ion:164 Resp: 25573

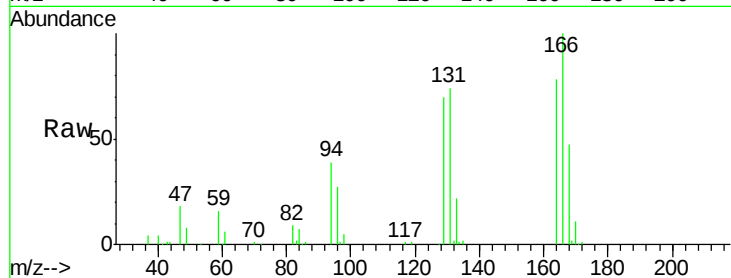
Ion Ratio Lower Upper

164 100

166 128.2 101.2 151.8

129 90.0 68.8 103.2

131 95.3 65.2 97.8

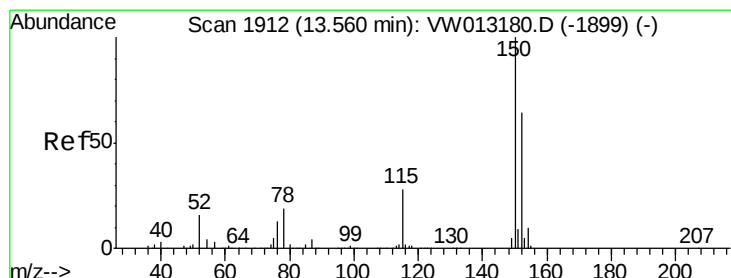
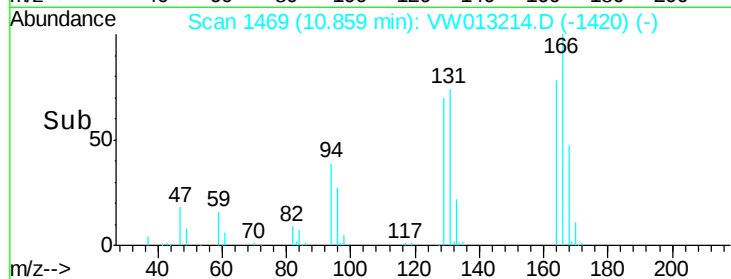
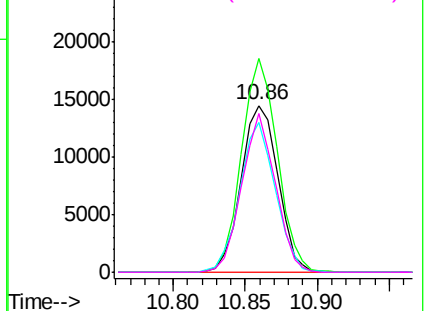


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW013214.D

Acq: 21 Sep 2019 05:39

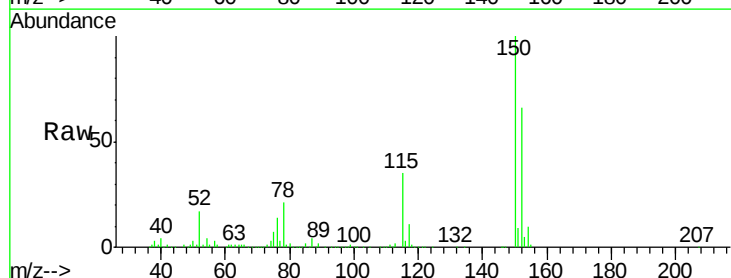
Tgt Ion:152 Resp: 159456

Ion Ratio Lower Upper

152 100

115 54.3 27.3 81.9

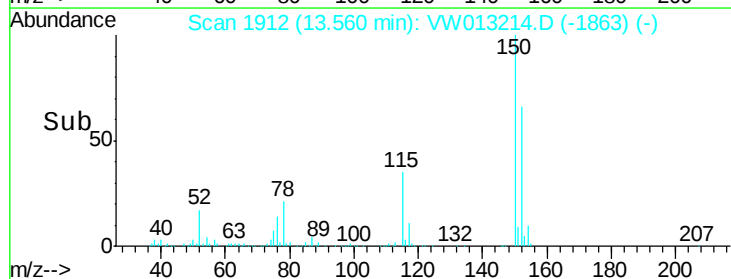
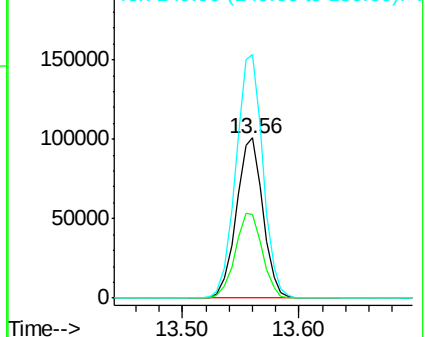
150 154.9 0.0 349.0

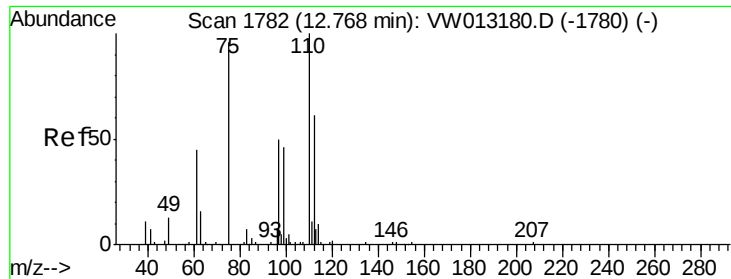


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

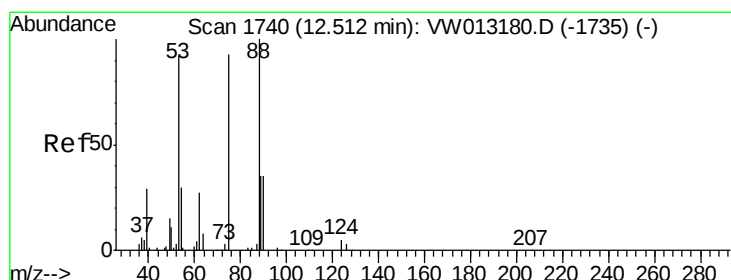
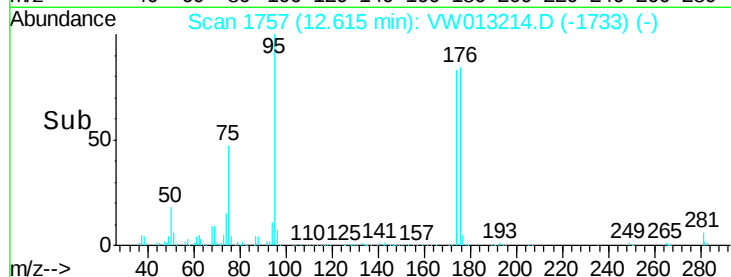
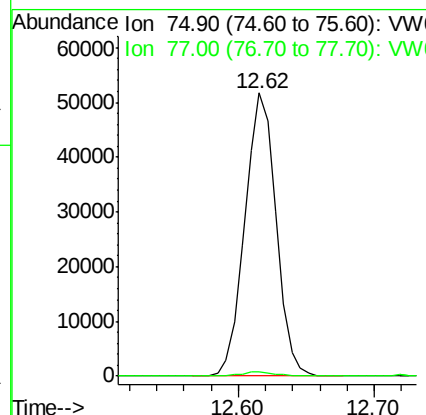
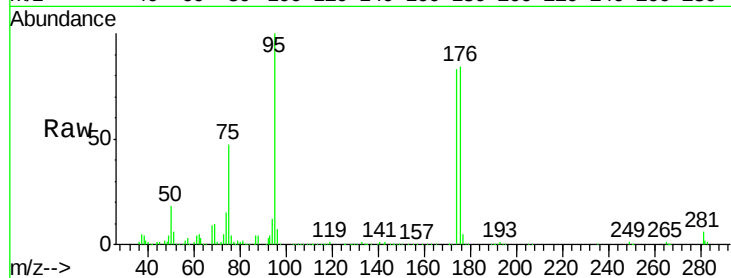




#76  
 1,2,3-Trichloropropane  
 Concen: 58.942 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. -0.15 min  
 Lab File: VW013214.D  
 Acq: 21 Sep 2019 05:39

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Tot Ion: 75 Resp: 83002  
 Ion Ratio Lower Upper  
 75 100  
 77 1.8 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 132.260 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. 0.10 min  
 Lab File: VW013214.D  
 Acq: 21 Sep 2019 05:39

Tgt Ion: 75 Resp: 83002  
 Ion Ratio Lower Upper  
 75 100  
 53 0.2 76.6 114.8#  
 89 0.0 33.5 50.3#

