

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092218\  
 Data File : VW005561.D  
 Acq On : 21 Sep 2018 15:40  
 Operator : VA/AP  
 Sample : J5046-02  
 Misc : 5.02G/5ML/MSVOA W/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Sep 21 16:04:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092118S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 21 09:05:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 179377   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 282107   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 235602   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 89416    | 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   | 90242    | 42.70 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.40% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 73729    | 41.56 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 83.12% |          |
| 50) Toluene-d8              | 10.33 | 98   | 250106   | 34.62 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 69.24% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 75807    | 28.36 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 56.72% |          |

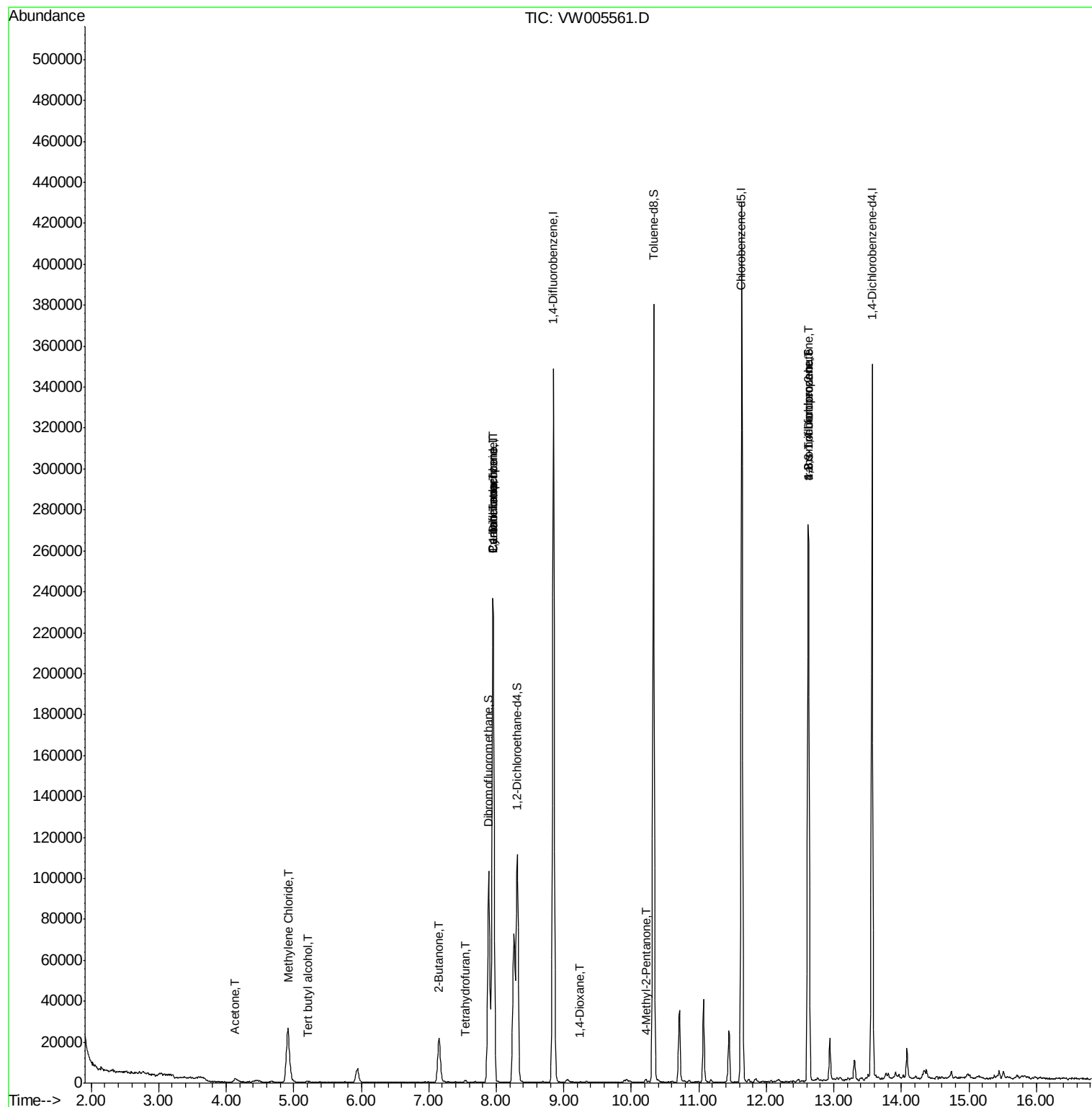
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.00  | 85   | 41       | Below Cal | #      | 41     |
| 11) Tert butyl alcohol         | 5.20  | 59   | 469      | 1.945     | ug/l # | 72     |
| 16) Acetone                    | 4.14  | 43   | 3718     | 1.824     | ug/l   | 93     |
| 20) Methylene Chloride         | 4.92  | 84   | 20815    | 8.169     | ug/l   | 92     |
| 25) 2-Butanone                 | 7.15  | 43   | 1363     | 2.656     | ug/l # | 50     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 469      | 1.463     | ug/l # | 74     |
| 31) Cyclohexane                | 7.95  | 56   | 4180     | 1.276     | ug/l # | 9      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 14210    | 5.004     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 17802    | 5.850     | ug/l # | 15     |
| 49) 1,4-Dioxane                | 9.23  | 88   | 20       | 1.272     | ug/l # | 11     |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 1222     | 1.033     | ug/l   | 92     |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 39809    | 52.228    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.63 | 75   | 39809    | 117.634   | ug/l # | 7      |

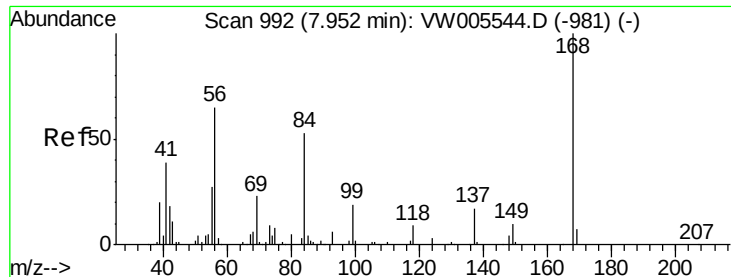
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW092218\  
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Operator : VA/AP  
Sample : J5046-02  
Misc : 5.02G/5ML/MSVOA W/SOIL  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Sep 21 16:04:43 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W092118S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 21 09:05:42 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.00 min

Lab File: VW005561.D

Acq: 21 Sep 2018 15:40

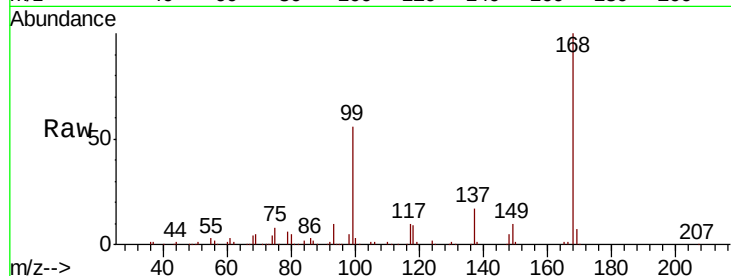
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:168 Resp: 179377

Ion Ratio Lower Upper

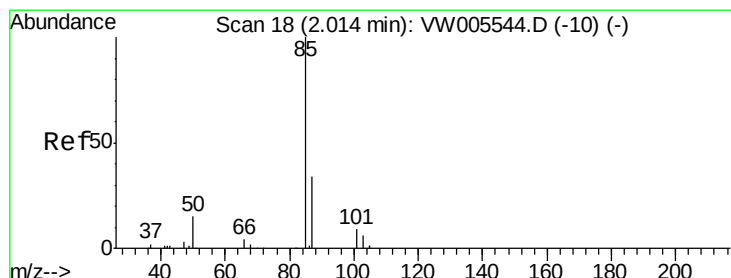
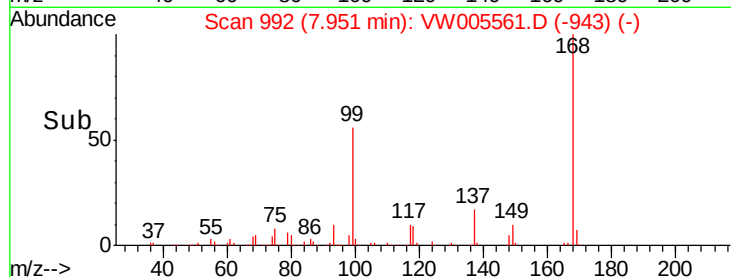
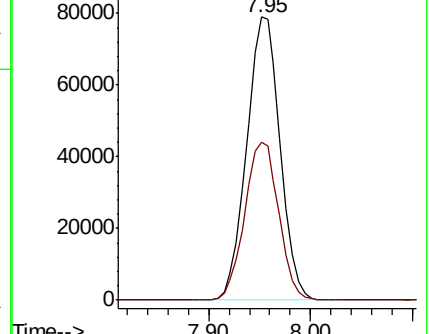
168 100

99 55.9 48.4 72.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 2.00 min Scan# 16

Delta R.T. -0.01 min

Lab File: VW005561.D

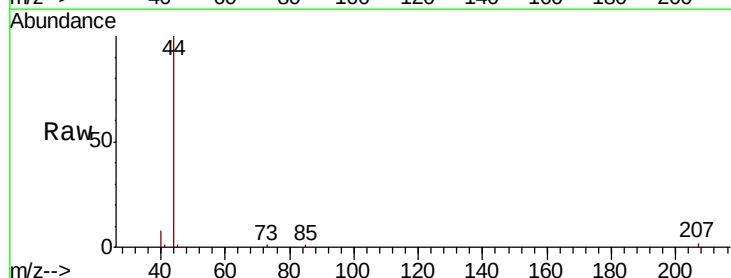
Acq: 21 Sep 2018 15:40

Tgt Ion: 85 Resp: 41

Ion Ratio Lower Upper

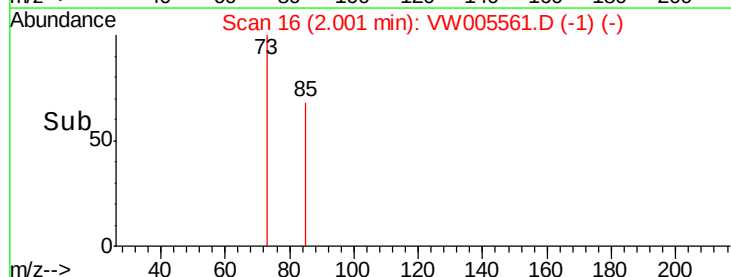
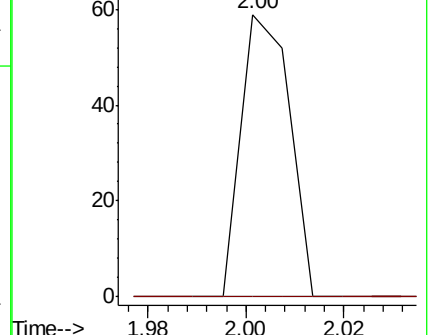
85 100

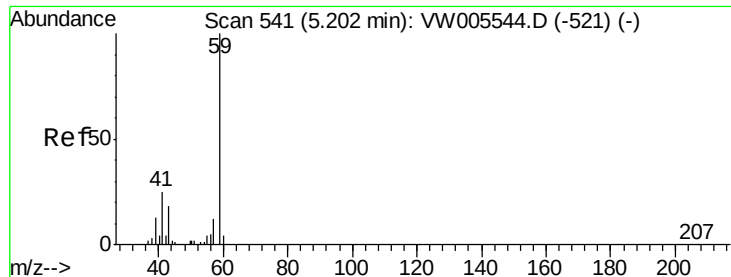
87 0.0 17.0 50.9#



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW



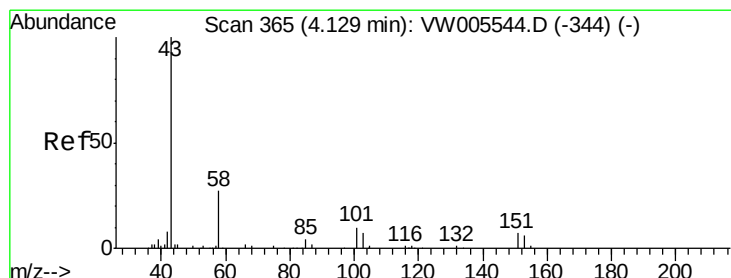
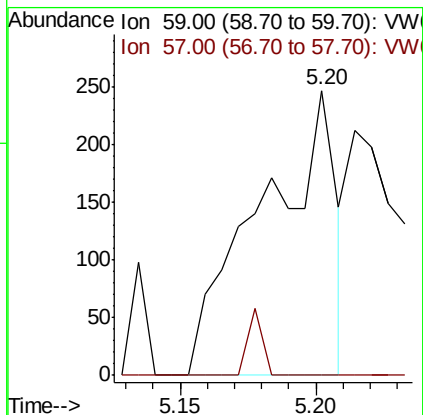
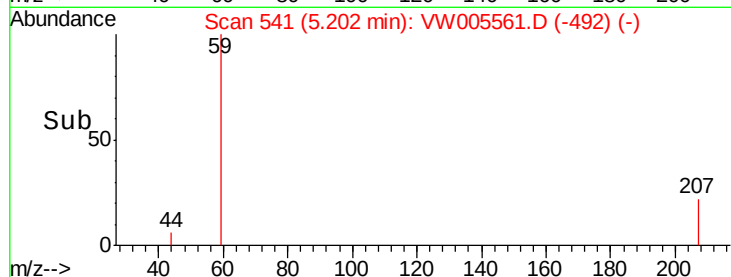
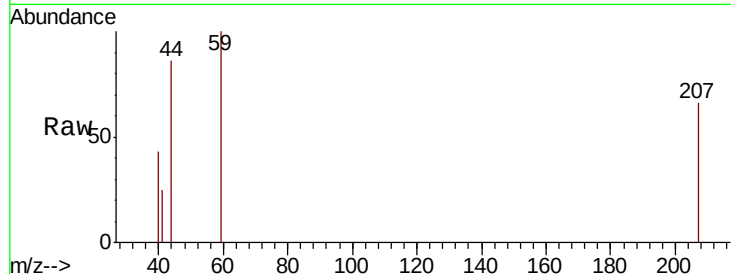


#11

Tert butyl alcohol  
 Concen: 1.945 ug/l  
 RT: 5.20 min Scan# 541  
 Delta R.T. -0.00 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

Instrument :  
 MSVOA\_W  
 ClientSampled :

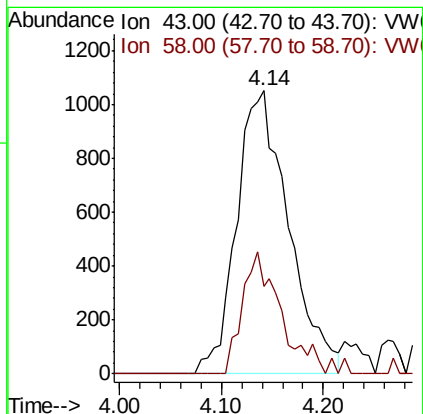
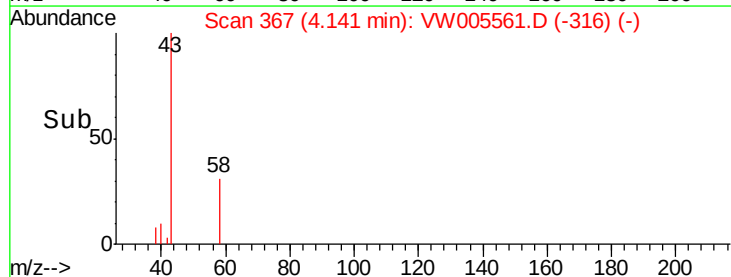
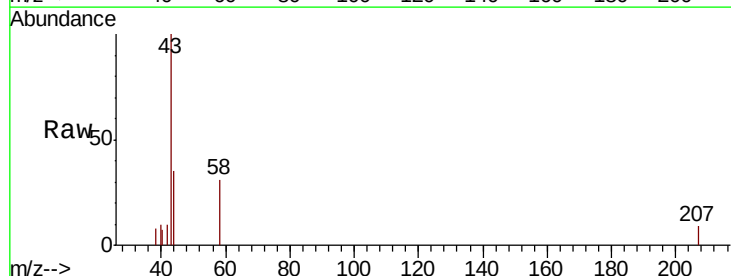
Tot Ion: 59 Resp: 469  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.3 12.5#

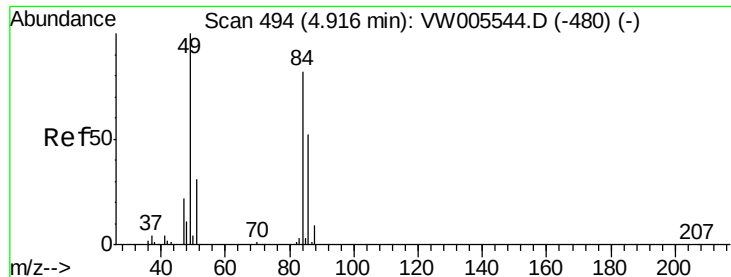


#16

Acetone  
 Concen: 1.824 ug/l  
 RT: 4.14 min Scan# 367  
 Delta R.T. 0.01 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

Tgt Ion: 43 Resp: 3718  
 Ion Ratio Lower Upper  
 43 100  
 58 30.9 21.8 32.8





#20

Methylene Chloride

Concen: 8.169 ug/l

RT: 4.92 min Scan# 494

Delta R.T. 0.00 min

Lab File: VW005561.D

Acq: 21 Sep 2018 15:40

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 84 Resp: 20815

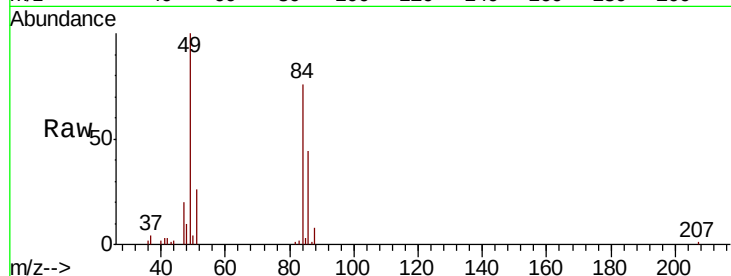
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 84  | 100   |       |       |
| 49  | 131.8 | 97.0  | 145.6 |
| 51  | 34.5  | 30.2  | 45.2  |
| 86  | 57.6  | 50.2  | 75.4  |

84 100

49 131.8 97.0 145.6

51 34.5 30.2 45.2

86 57.6 50.2 75.4



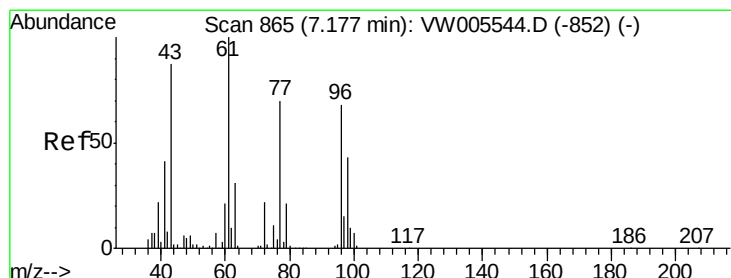
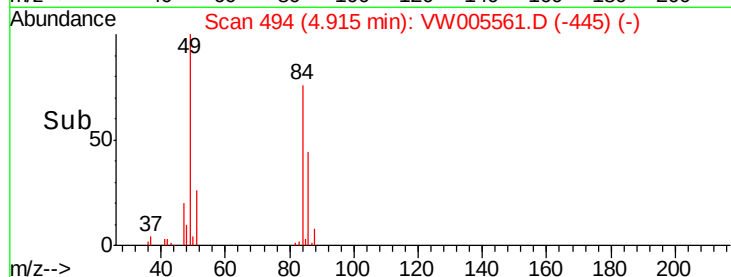
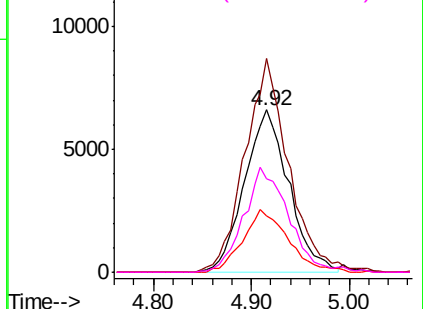
Abundance

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: 2.656 ug/l

RT: 7.15 min Scan# 861

Delta R.T. -0.02 min

Lab File: VW005561.D

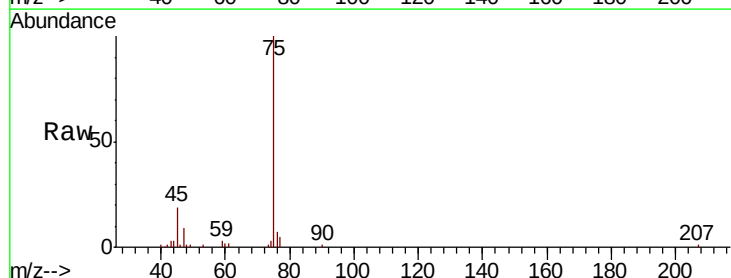
Acq: 21 Sep 2018 15:40

Tgt Ion: 43 Resp: 1363

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 0.0   | 19.9  | 29.9# |

43 100

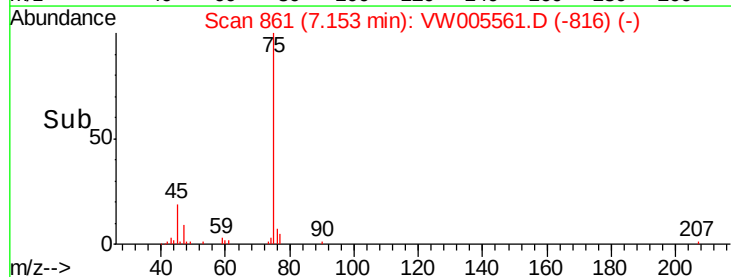
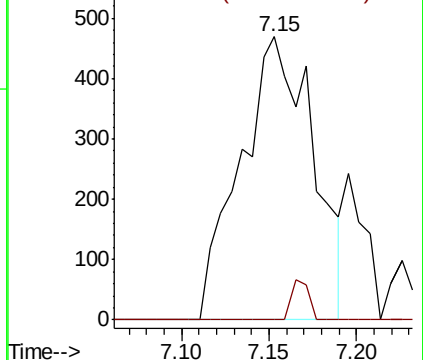
72 0.0 19.9 29.9#

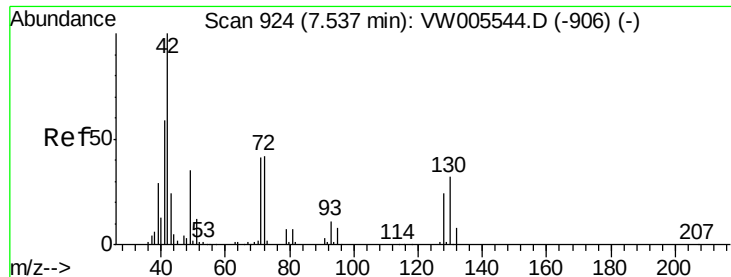


Abundance

Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW

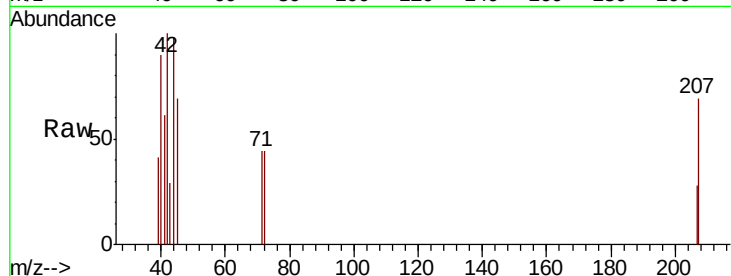




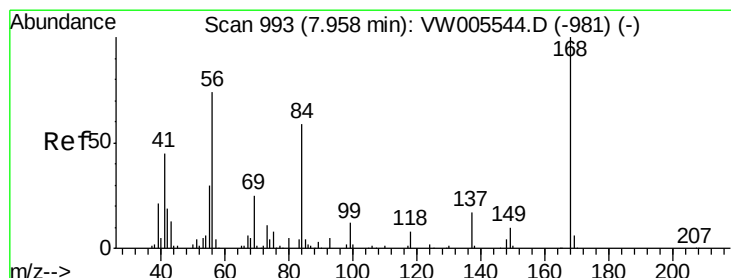
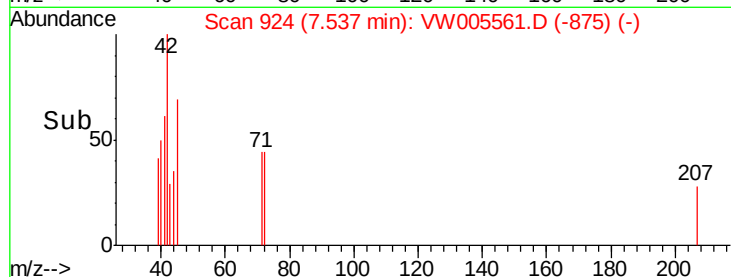
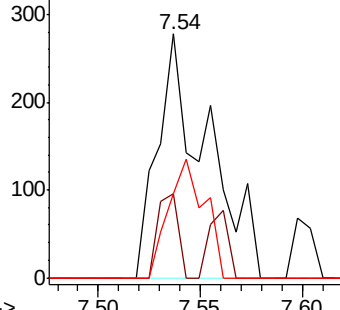
#29  
Tetrahydrofuran  
Concen: 1.463 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. -0.00 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 42 Resp: 469  
Ion Ratio Lower Upper  
42 100  
72 14.3 33.6 50.4#  
71 35.4 31.8 47.6

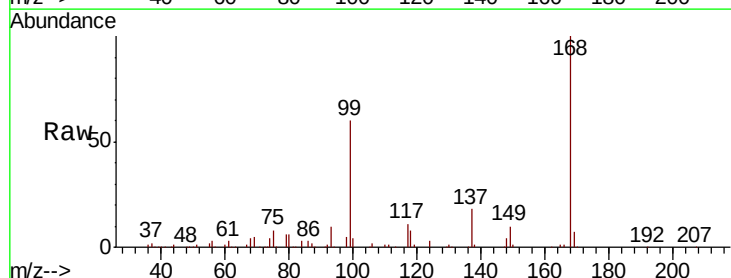


Abundance Ion 42.00 (41.70 to 42.70): VW  
Ion 72.00 (71.70 to 72.70): VW  
Ion 71.00 (70.70 to 71.70): VW

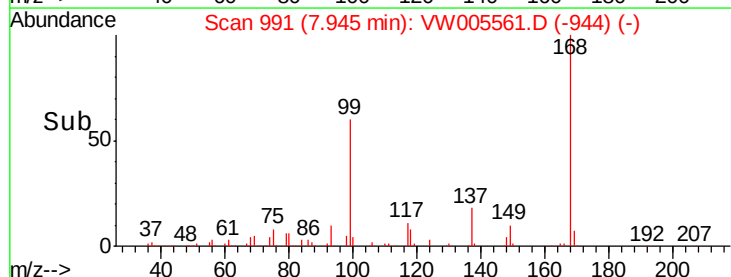
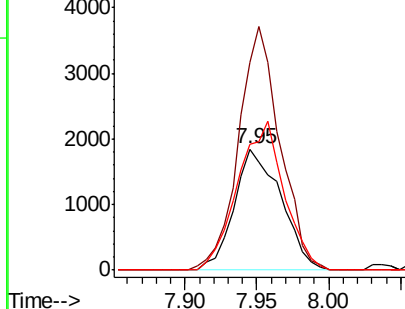


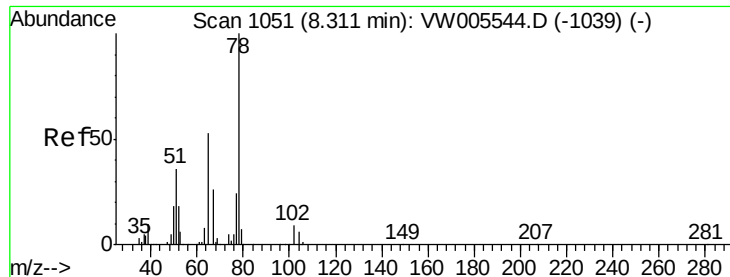
#31  
Cyclohexane  
Concen: 1.276 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

Tgt Ion: 56 Resp: 4180  
Ion Ratio Lower Upper  
56 100  
69 171.9 27.0 40.4#  
84 104.2 64.2 96.4#



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

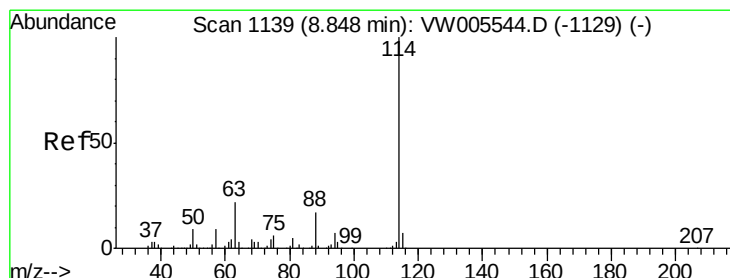
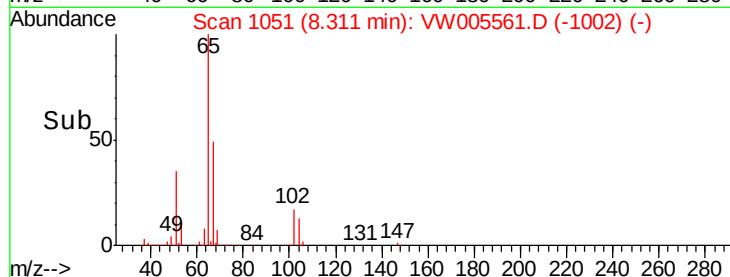
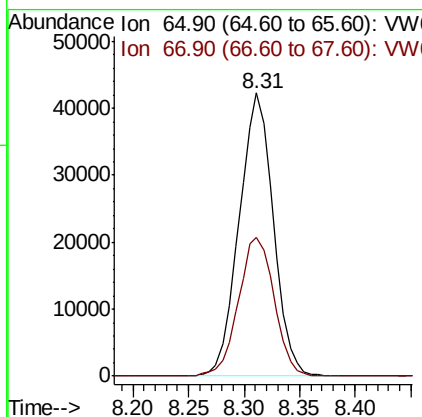
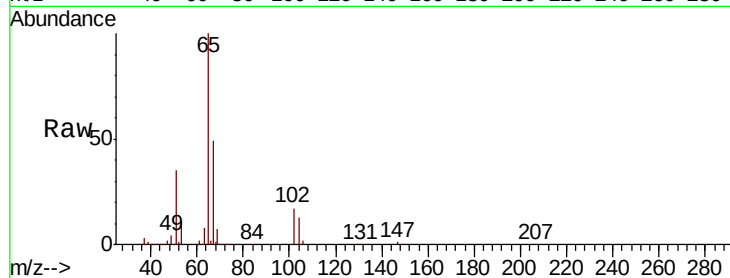




#33  
 1,2-Dichloroethane-d4  
 Concen: 42.704 ug/l  
 RT: 8.31 min Scan# 1051  
 Delta R.T. -0.00 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

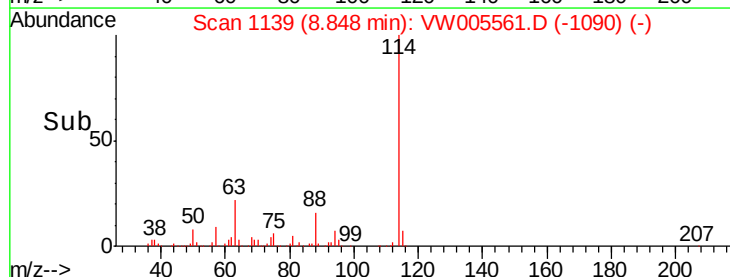
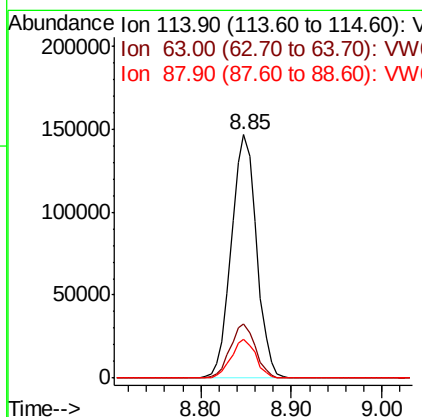
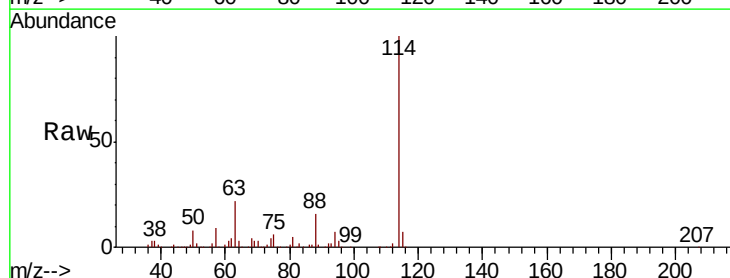
Instrument :  
 MSVOA\_W  
 ClientSampled :

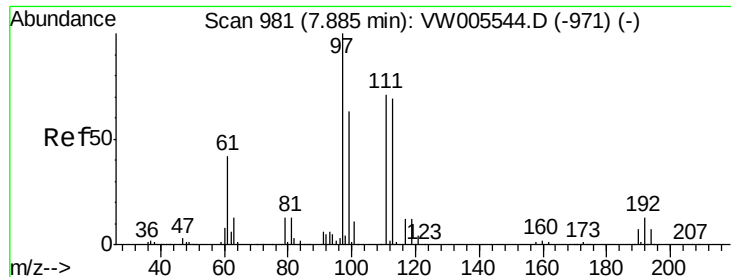
Tot Ion: 65 Resp: 90242  
 Ion Ratio Lower Upper  
 65 100  
 67 51.5 0.0 100.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.85 min Scan# 1139  
 Delta R.T. -0.00 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

Tgt Ion: 114 Resp: 282107  
 Ion Ratio Lower Upper  
 114 100  
 63 22.2 0.0 43.0  
 88 16.0 0.0 33.0





#35

Dibromofluoromethane

Concen: 41.559 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW005561.D

Acq: 21 Sep 2018 15:40

Instrument :

MSVOA\_W

ClientSampleId :

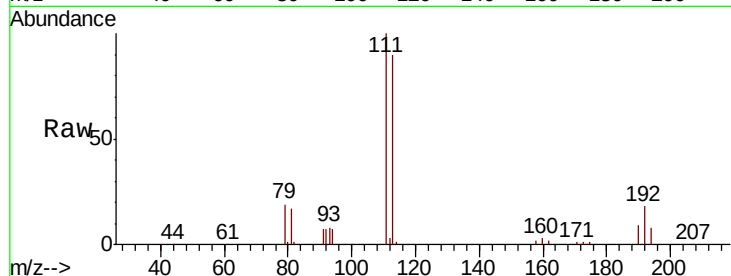
Tot Ion:113 Resp: 73729

Ion Ratio Lower Upper

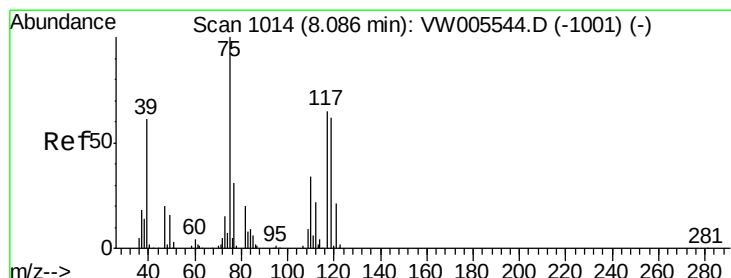
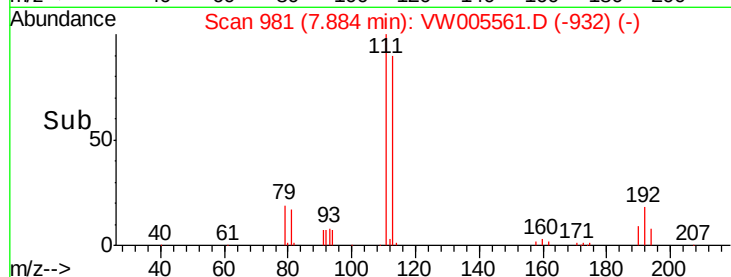
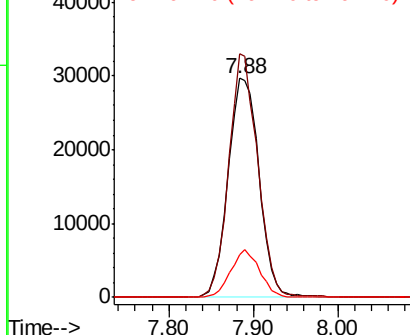
113 100

111 104.0 82.6 123.8

192 20.4 17.0 25.4



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: 5.004 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.13 min

Lab File: VW005561.D

Acq: 21 Sep 2018 15:40

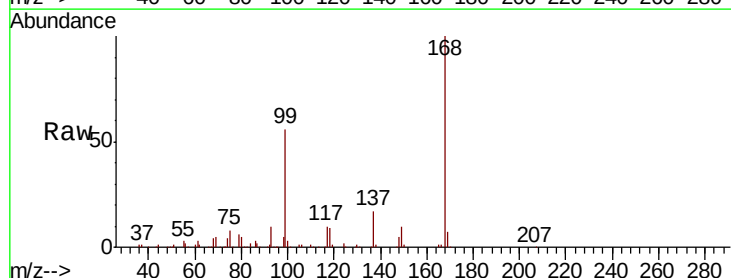
Tgt Ion: 75 Resp: 14210

Ion Ratio Lower Upper

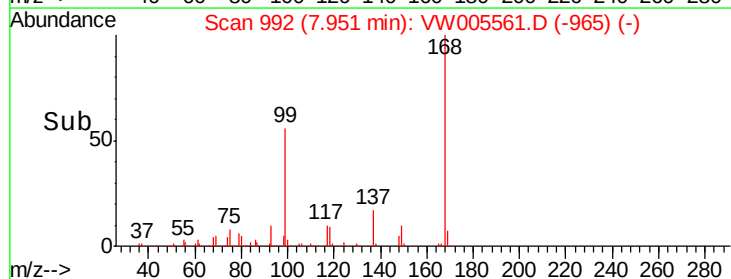
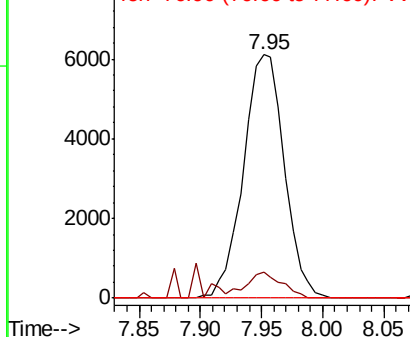
75 100

110 9.3 17.0 50.9#

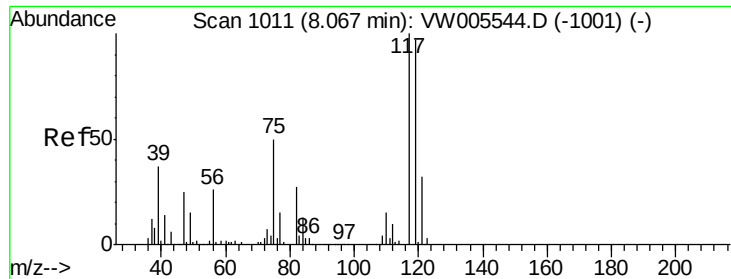
77 0.0 24.8 37.2#



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



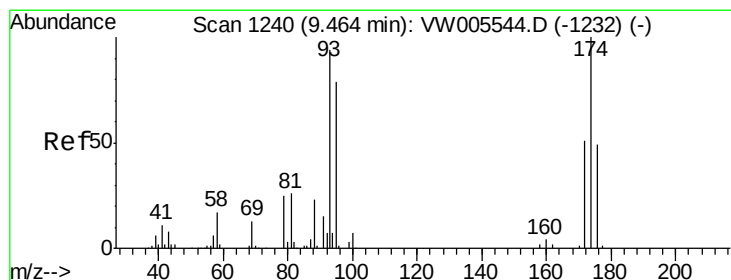
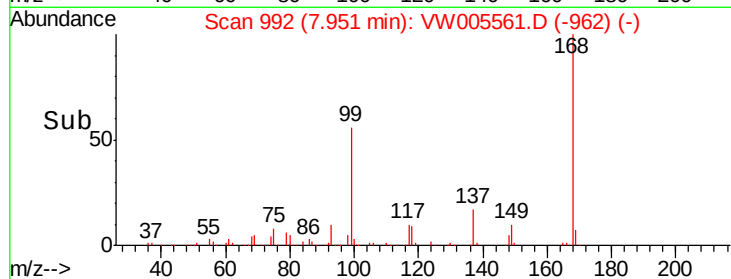
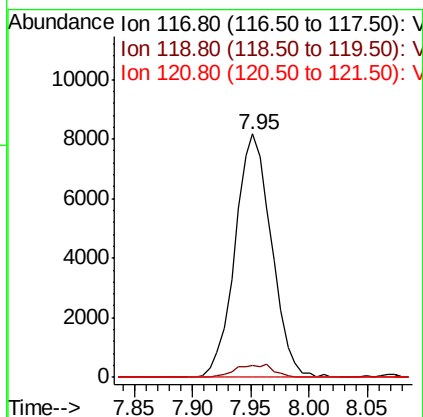
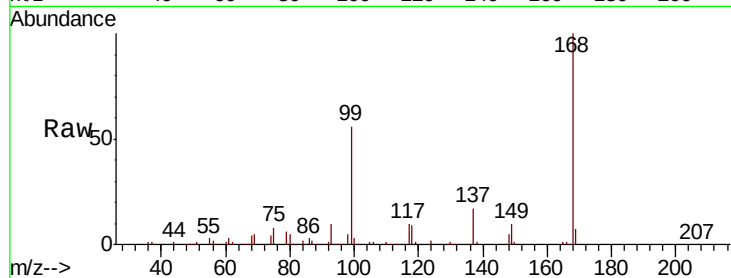




#38  
Carbon Tetrachloride  
Concen: 5.850 ug/l  
RT: 7.95 min Scan# 992  
Delta R.T. -0.12 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

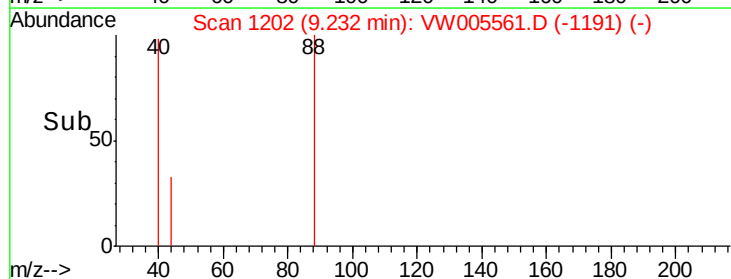
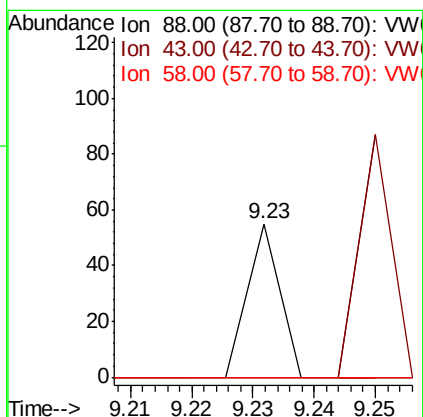
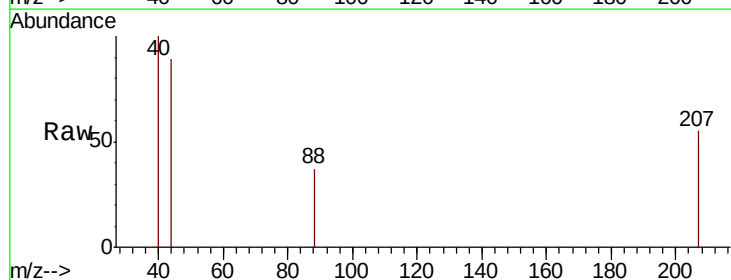
Instrument :  
MSVOA\_W  
ClientSampled :

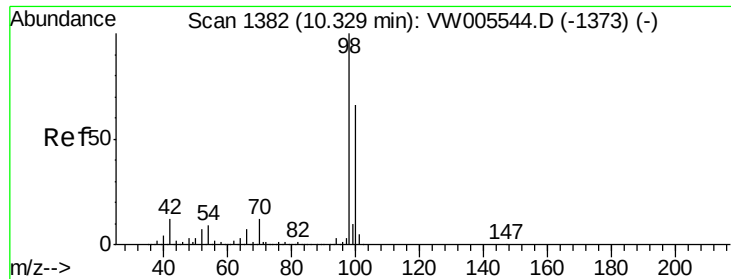
Tot Ion:117 Resp: 17802  
Ion Ratio Lower Upper  
117 100  
119 5.1 77.6 116.4#  
121 0.0 25.7 38.5#



#49  
1,4-Dioxane  
Concen: 1.272 ug/l  
RT: 9.23 min Scan# 1202  
Delta R.T. -0.23 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

Tgt Ion: 88 Resp: 20  
Ion Ratio Lower Upper  
88 100  
43 160.0 0.0 0.0#  
58 0.0 61.2 91.8#

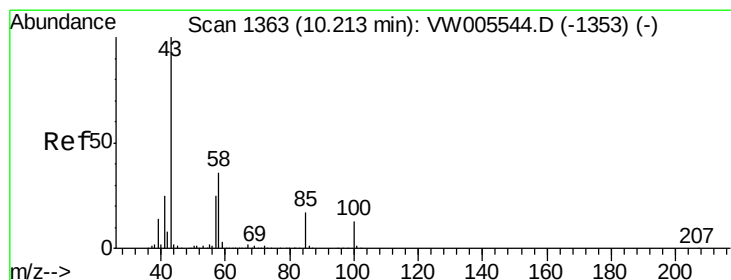
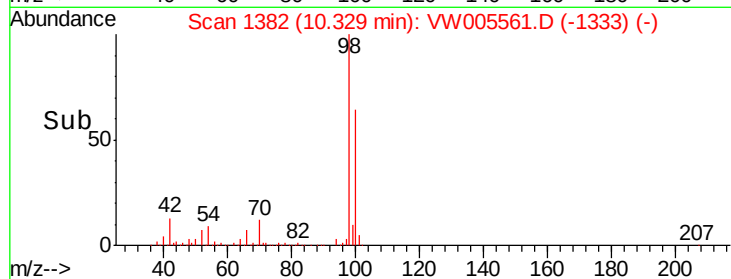
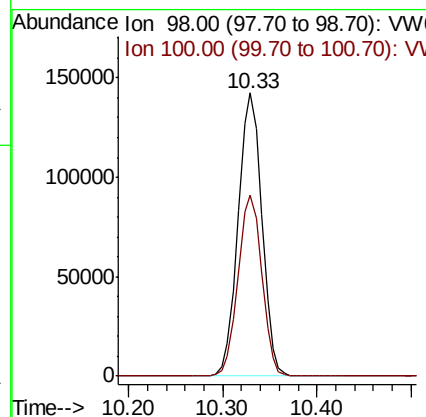
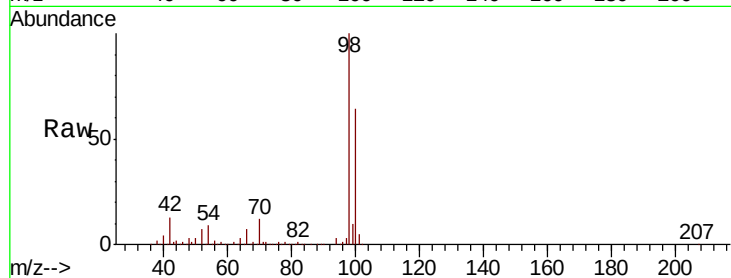




#50  
Toluene-d8  
Concen: 34.623 ug/l  
RT: 10.33 min Scan# 1382  
Delta R.T. -0.00 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

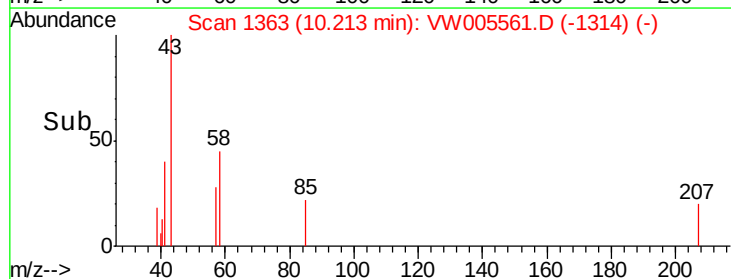
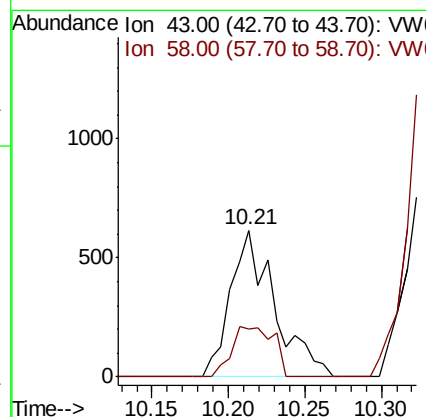
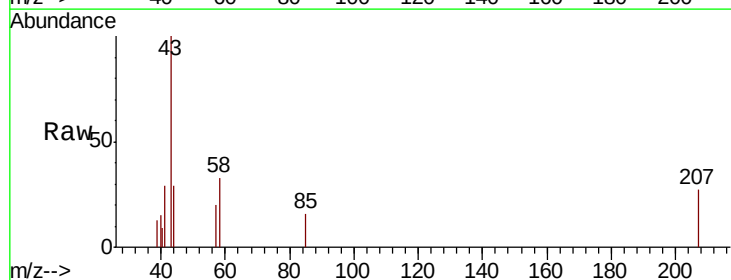
Instrument :  
MSVOA\_W  
ClientSampleId :

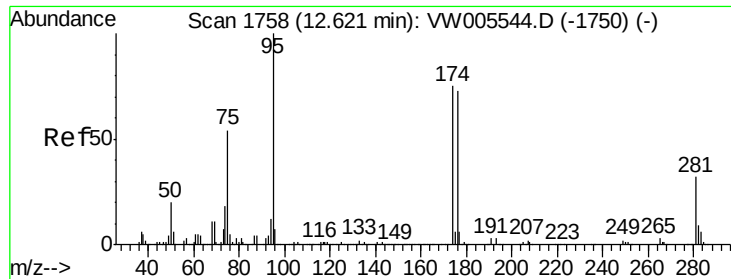
Tot Ion: 98 Resp: 250106  
Ion Ratio Lower Upper  
98 100  
100 63.9 51.6 77.4



#51  
4-Methyl-2-Pentanone  
Concen: 1.033 ug/l  
RT: 10.21 min Scan# 1363  
Delta R.T. -0.00 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

Tgt Ion: 43 Resp: 1222  
Ion Ratio Lower Upper  
43 100  
58 32.8 30.0 45.0

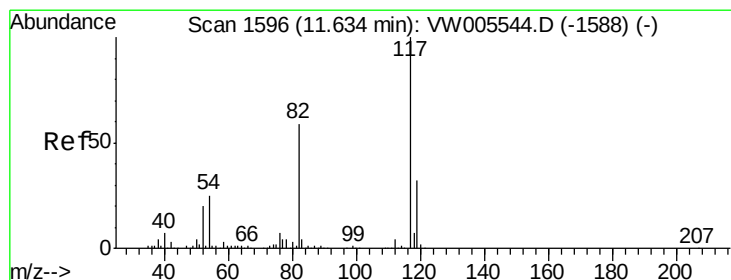
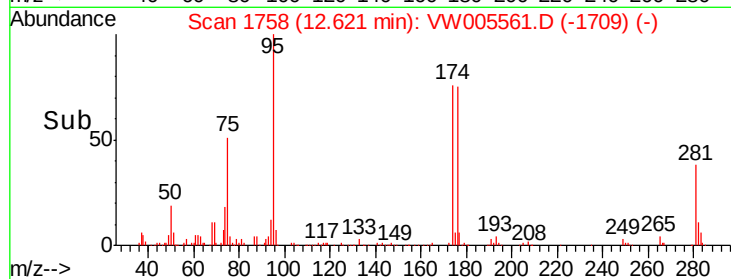
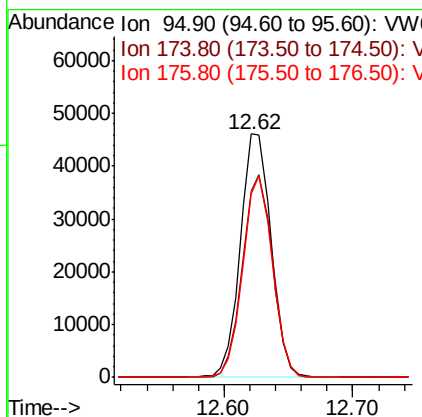
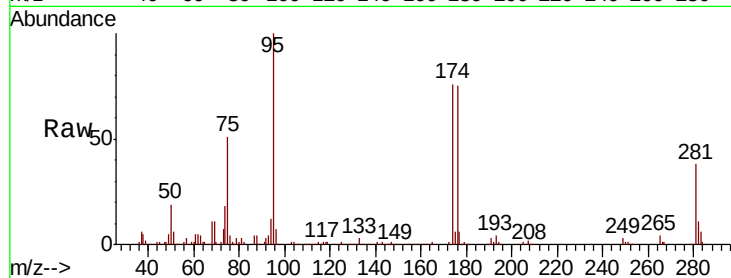




#62  
4-Bromofluorobenzene  
Concen: 28.361 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.00 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

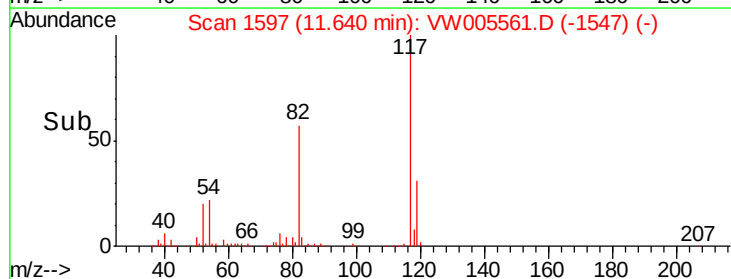
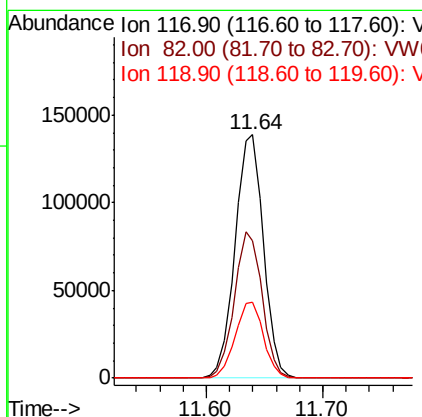
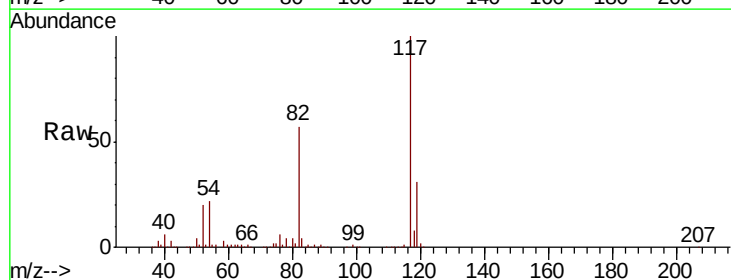
Instrument :  
MSVOA\_W  
ClientSampleId :

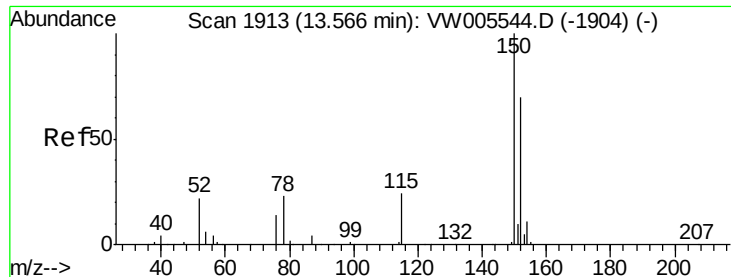
Tot Ion: 95 Resp: 75807  
Ion Ratio Lower Upper  
95 100  
174 81.6 0.0 163.8  
176 79.4 0.0 158.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1597  
Delta R.T. 0.01 min  
Lab File: VW005561.D  
Acq: 21 Sep 2018 15:40

Tgt Ion: 117 Resp: 235602  
Ion Ratio Lower Upper  
117 100  
82 56.5 46.9 70.3  
119 31.4 25.7 38.5

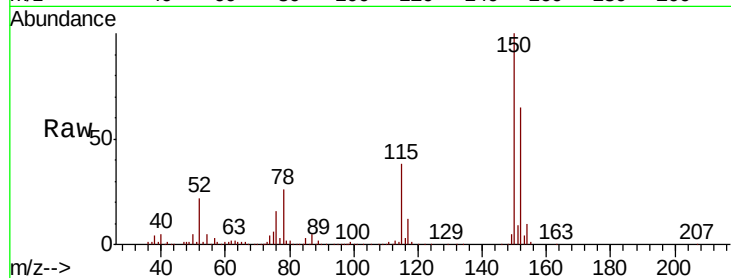




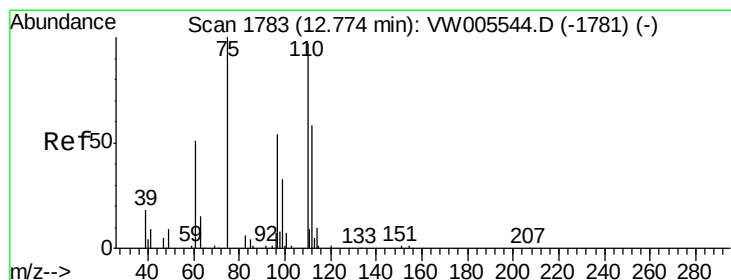
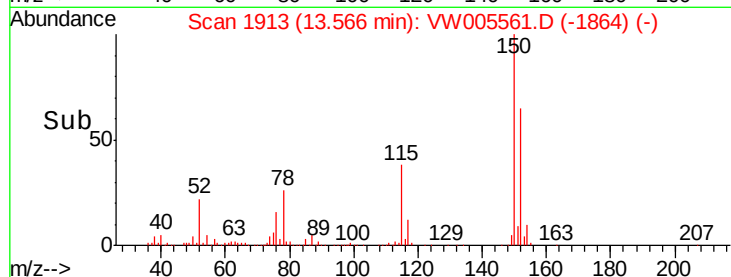
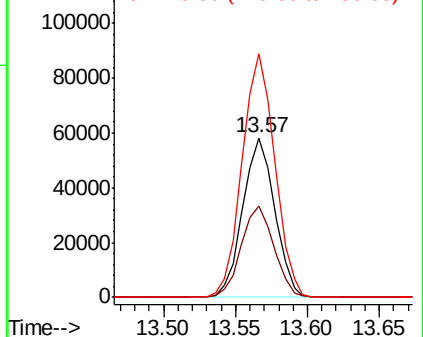
#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.57 min Scan# 1913  
 Delta R.T. -0.00 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

Instrument :  
 MSVOA\_W  
 ClientSampled :

Tot Ion:152 Resp: 89416  
 Ion Ratio Lower Upper  
 152 100  
 115 58.8 30.0 90.0  
 150 156.0 0.0 348.6

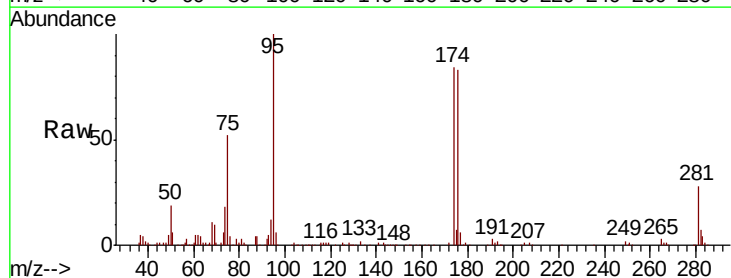


Abundance Ion 151.90 (151.60 to 152.60): V  
 Ion 114.90 (114.60 to 115.60): V  
 Ion 149.90 (149.60 to 150.60): V

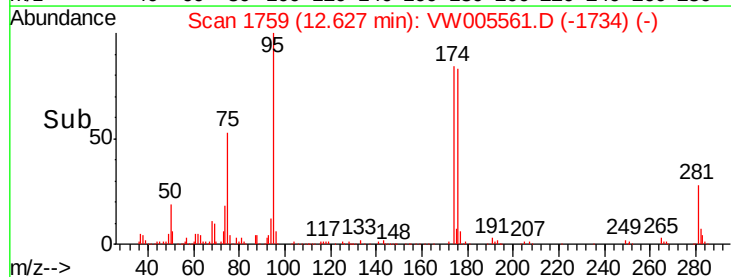
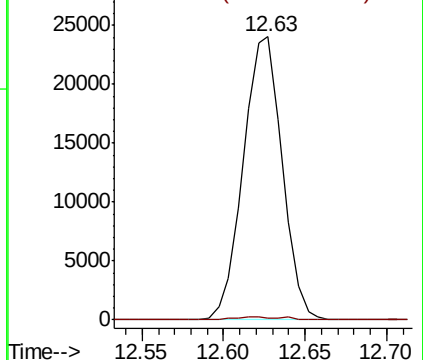


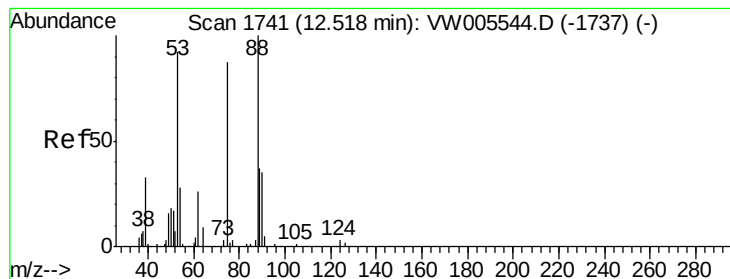
#76  
 1,2,3-Trichloropropane  
 Concen: 52.228 ug/l  
 RT: 12.63 min Scan# 1759  
 Delta R.T. -0.15 min  
 Lab File: VW005561.D  
 Acq: 21 Sep 2018 15:40

Tgt Ion: 75 Resp: 39809  
 Ion Ratio Lower Upper  
 75 100  
 77 1.5 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: 117.634 ug/l

RT: 12.63 min Scan# 1759

Delta R.T. 0.11 min

Lab File: VW005561.D

Acq: 21 Sep 2018 15:40

Instrument :

MSVOA\_W

ClientSampleId :

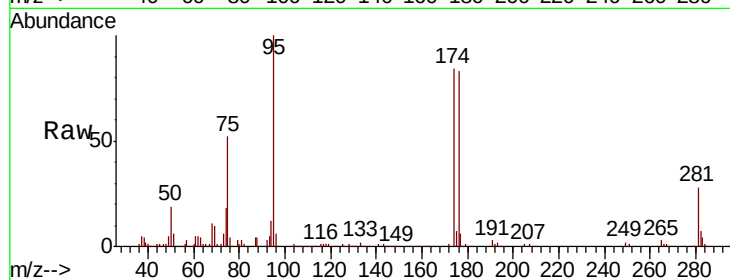
Tot Ion: 75 Resp: 39809

Ion Ratio Lower Upper

75 100

53 0.1 85.8 128.6#

89 0.6 37.3 55.9#



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

