

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW022819\  
 Data File : VW008904.D  
 Acq On : 01 Mar 2019 00:28  
 Operator : SY/VA  
 Sample : VW0228SBL02  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0228SBL02

Quant Time: Mar 01 06:04:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W022119S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 22 00:38:32 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 329749   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 504446   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 458754   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 214540   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 180436   | 58.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 116.68% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 152327   | 50.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.58% |      |
| 50) Toluene-d8            | 10.32  | 98  | 608226   | 52.02 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.04% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 205630   | 44.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.84%  |      |

## Target Compounds

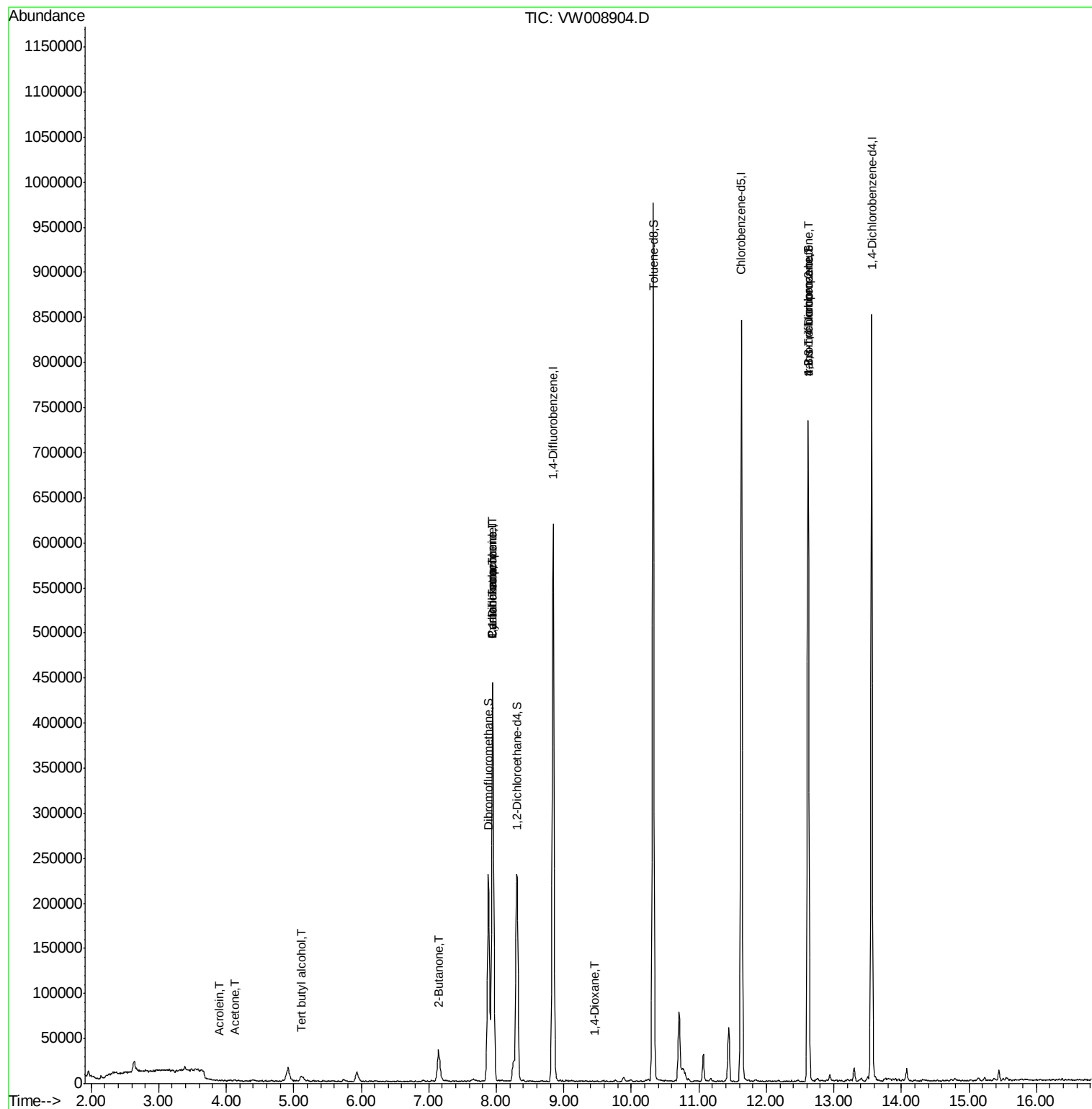
|                                |       |     |        |           |        | Qvalue |
|--------------------------------|-------|-----|--------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.12  | 59  | 5684   | 20.644    | ug/l # | 75     |
| 13) Acrolein                   | 3.89  | 56  | 93     | 20.075    | ug/l # | 14     |
| 16) Acetone                    | 4.13  | 43  | 3204   | 4.469     | ug/l # | 74     |
| 20) Methylene Chloride         | 4.92  | 84  | 9946   | Below Cal |        | 97     |
| 25) 2-Butanone                 | 7.16  | 43  | 2181   | 2.176     | ug/l # | 51     |
| 31) Cyclohexane                | 7.95  | 56  | 7655   | 1.313     | ug/l # | 40     |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 25183  | 5.128     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 32539  | 6.283     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 9.46  | 88  | 102    | 3.456     | ug/l # | 20     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 112157 | 63.319    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 112157 | 153.932   | ug/l # | 6      |

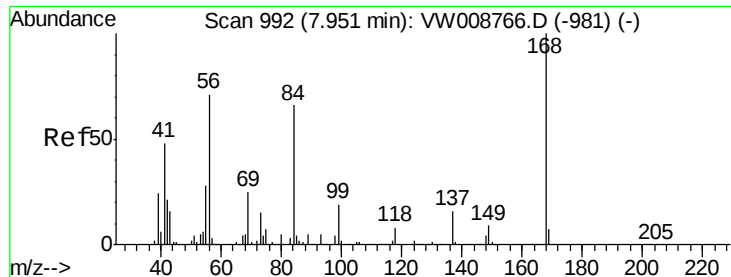
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW022819\  
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Quant Time: Mar 01 06:04:54 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W022119S.M  
Quant Title : SW846 8260  
QLast Update : Fri Feb 22 00:38:32 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampleId :

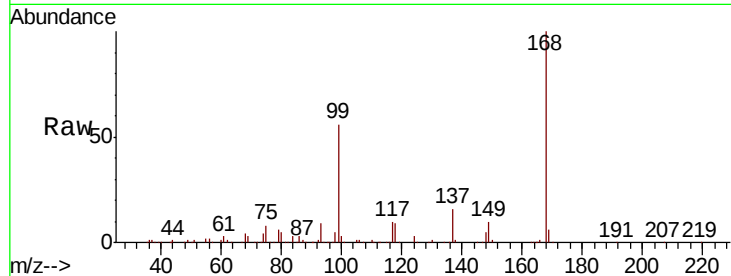
VW0228SBL02

Tot Ion:168 Resp: 329749

Ion Ratio Lower Upper

168 100

99 56.1 42.2 63.2



Abundance Ion 167.90 (167.60 to 168.60): VW

Ion 98.90 (98.60 to 99.60): VW

7.95

150000

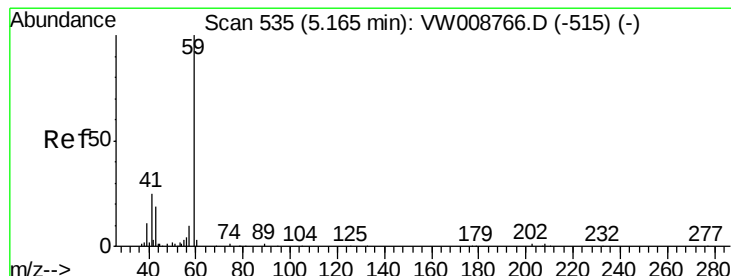
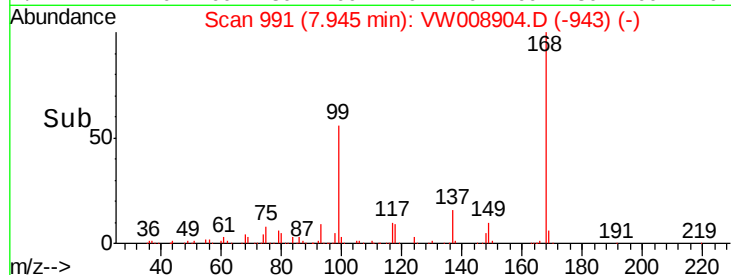
100000

50000

0

7.85 7.90 7.95 8.00 8.05

Time-->



#11

Tert butyl alcohol

Concen: 20.644 ug/l

RT: 5.12 min Scan# 528

Delta R.T. -0.04 min

Lab File: VW008904.D

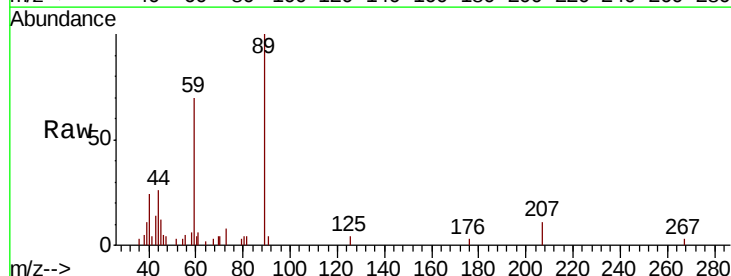
Acq: 01 Mar 2019 00:28

Tgt Ion: 59 Resp: 5684

Ion Ratio Lower Upper

59 100

57 2.0 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.12

1500

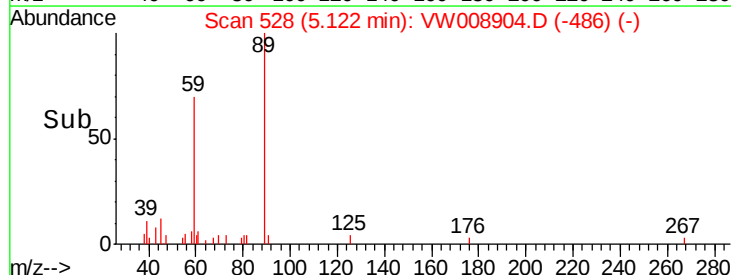
1000

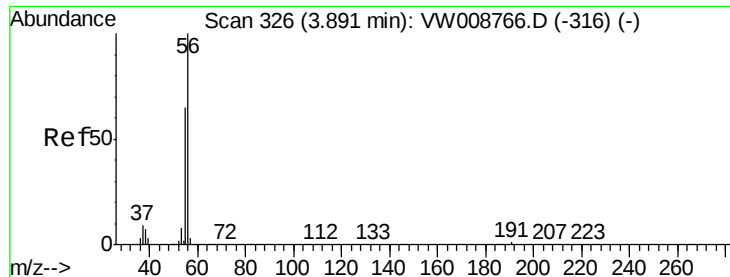
500

0

5.00 5.10 5.20

Time-->





#13

Acrolein

Concen: 20.075 ug/l

RT: 3.89 min Scan# 326

Delta R.T. -0.00 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampled :

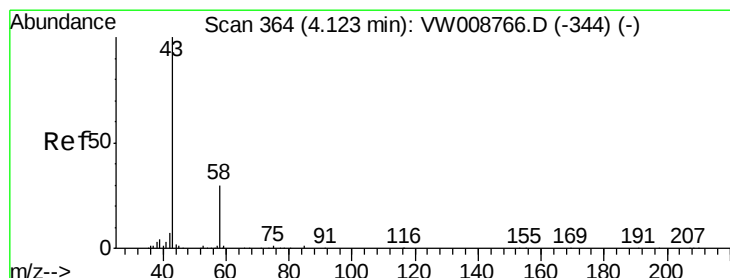
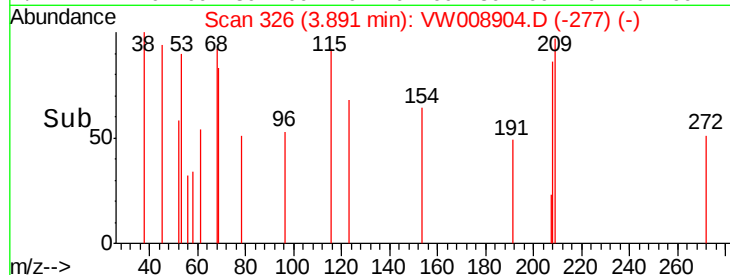
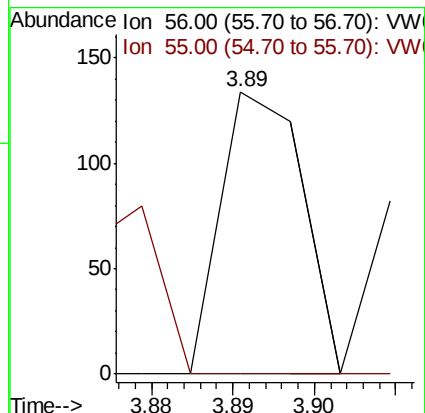
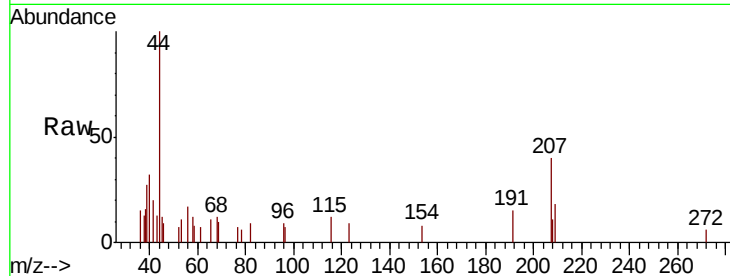
VW0228SBL02

Tot Ion: 56 Resp: 93

Ion Ratio Lower Upper

56 100

55 0.0 56.9 85.3#



#16

Acetone

Concen: 4.469 ug/l

RT: 4.13 min Scan# 365

Delta R.T. 0.01 min

Lab File: VW008904.D

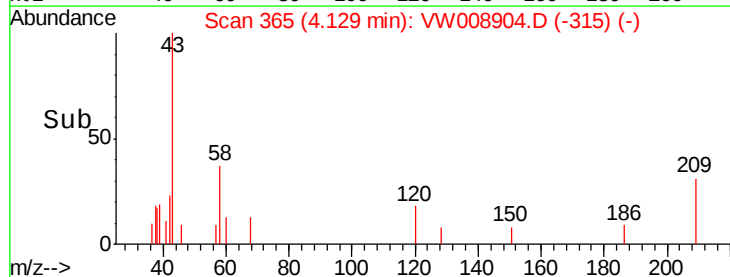
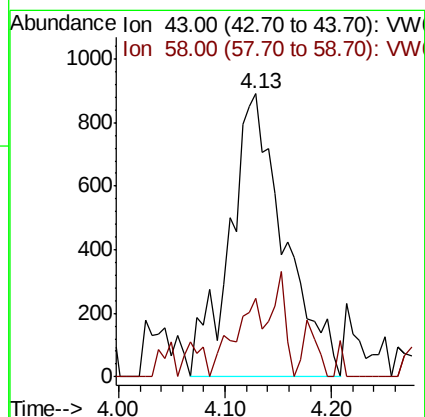
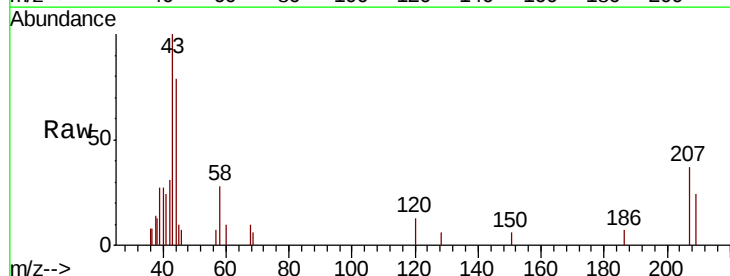
Acq: 01 Mar 2019 00:28

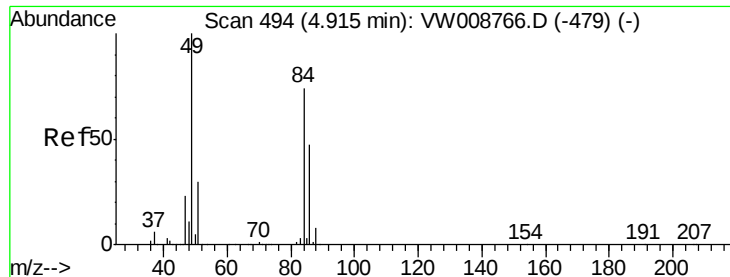
Tgt Ion: 43 Resp: 3204

Ion Ratio Lower Upper

43 100

58 15.5 23.8 35.6#

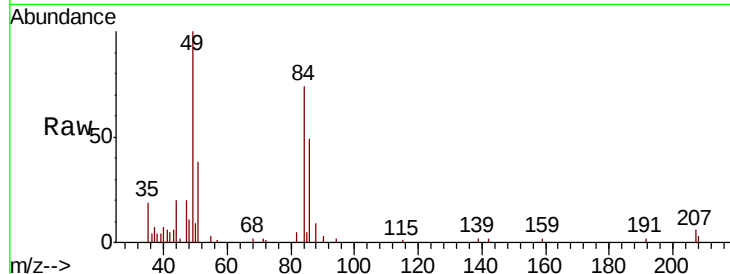




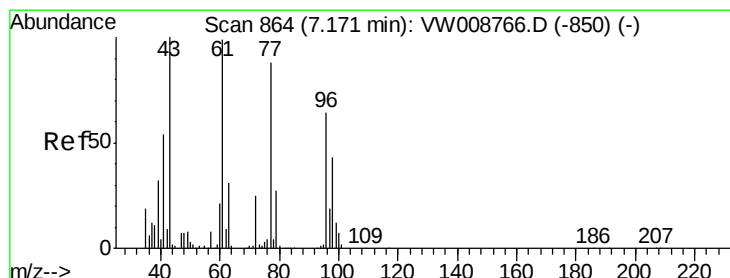
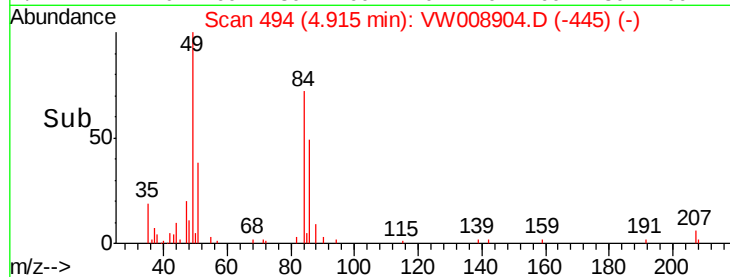
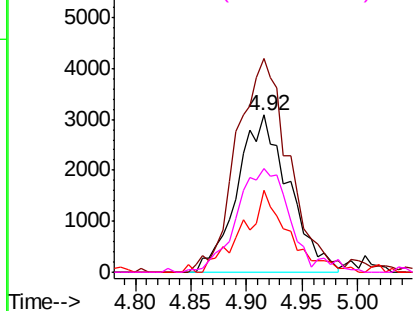
#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 4.92 min Scan# 494  
Delta R.T. 0.00 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0228SBL02

Tot Ion: 84 Resp: 9946  
Ion Ratio Lower Upper  
84 100  
49 135.9 108.2 162.2  
51 49.0 32.7 49.1  
86 64.2 50.3 75.5

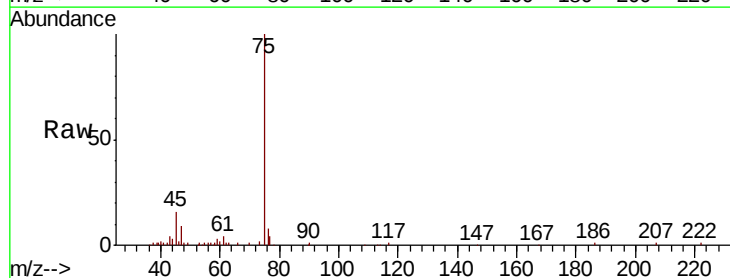


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

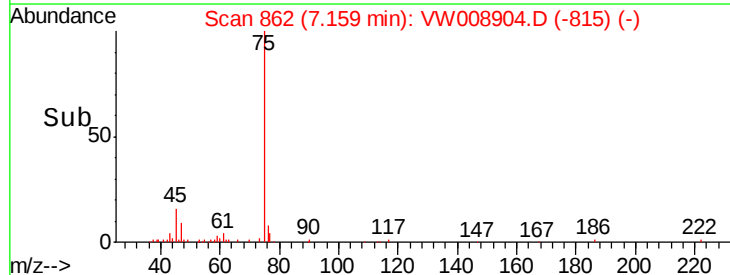
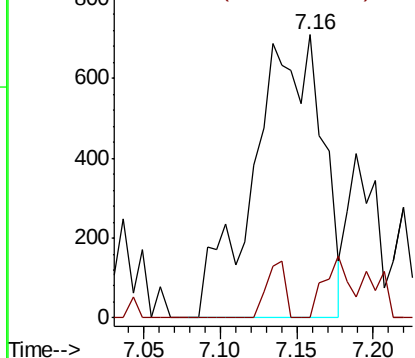


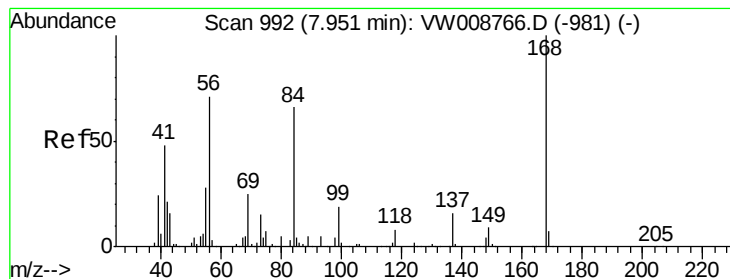
#25  
2-Butanone  
Concen: 2.176 ug/l  
RT: 7.16 min Scan# 862  
Delta R.T. -0.01 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

Tgt Ion: 43 Resp: 2181  
Ion Ratio Lower Upper  
43 100  
72 0.0 19.7 29.5#



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





#31

Cyclohexane

Concen: 1.313 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampleId :

VW0228SBL02

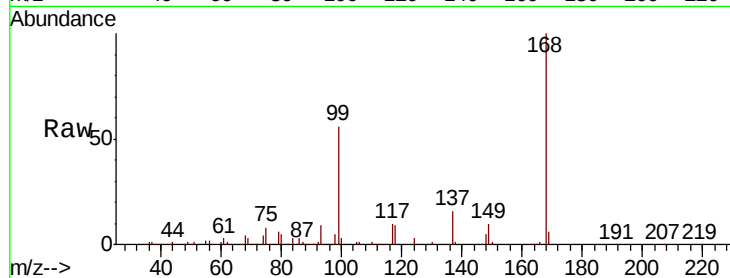
Tot Ion: 56 Resp: 7655

Ion Ratio Lower Upper

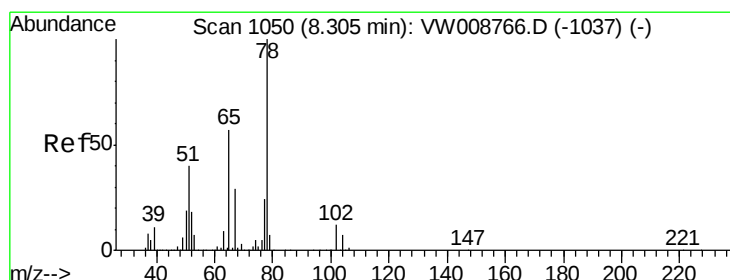
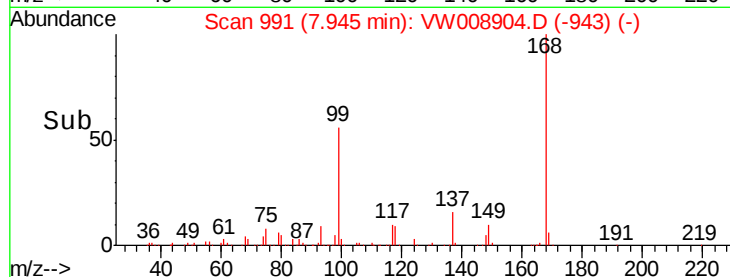
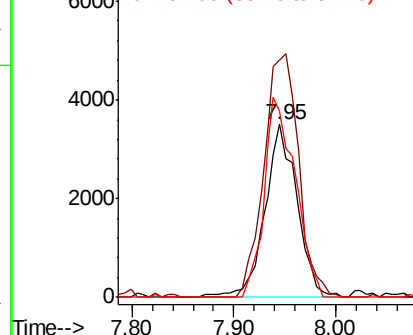
56 100

69 137.3 28.2 42.4#

84 107.5 74.1 111.1



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: 58.342 ug/l

RT: 8.30 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW008904.D

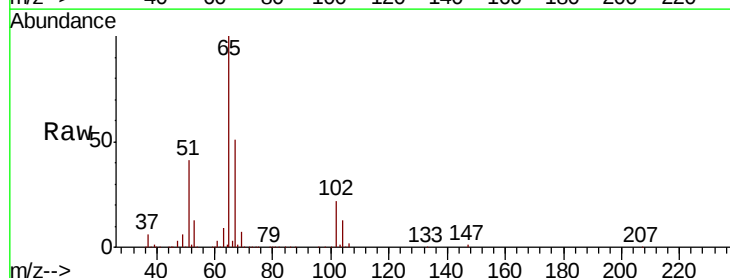
Acq: 01 Mar 2019 00:28

Tgt Ion: 65 Resp: 180436

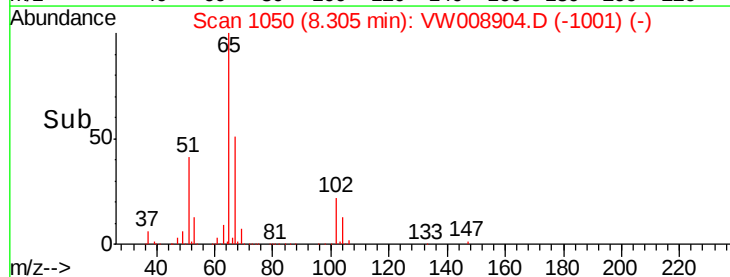
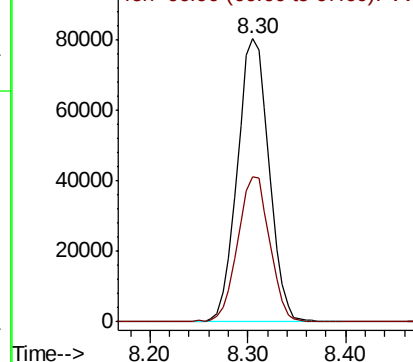
Ion Ratio Lower Upper

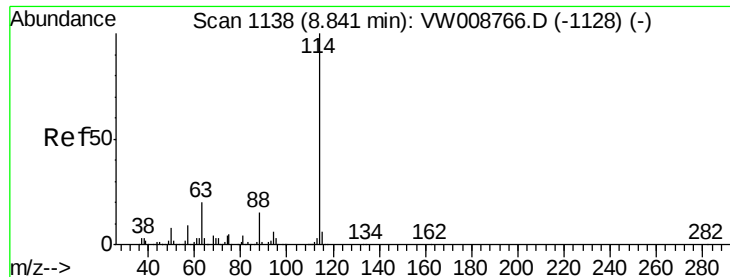
65 100

67 51.9 0.0 101.4



Abundance Ion 64.90 (64.60 to 65.60): VW  
Ion 66.90 (66.60 to 67.60): VW

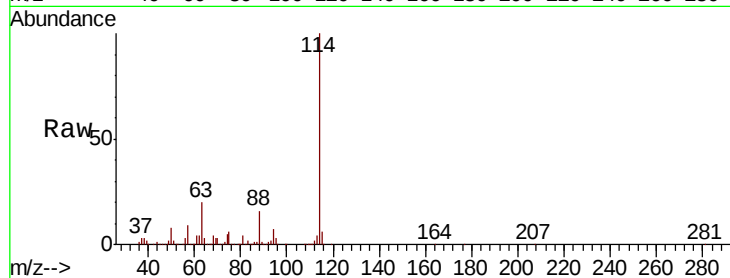




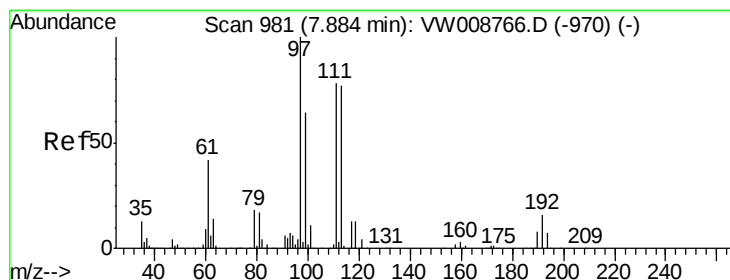
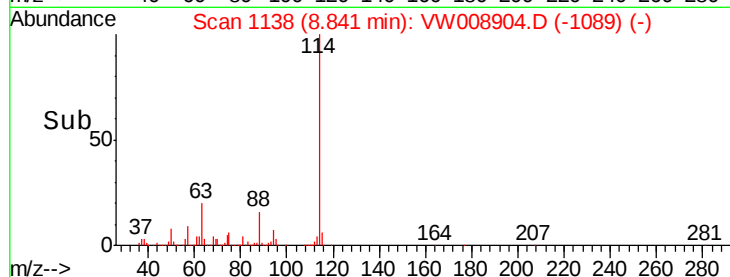
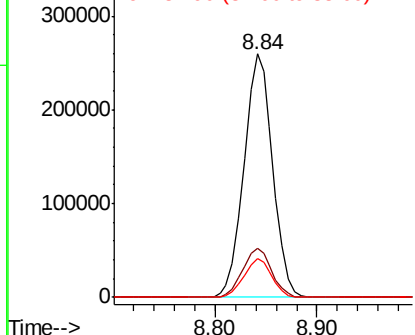
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.84 min Scan# 1138  
Delta R.T. -0.00 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0228SBL02

Tot Ion:114 Resp: 504446  
Ion Ratio Lower Upper  
114 100  
63 20.1 0.0 40.8  
88 16.0 0.0 30.4

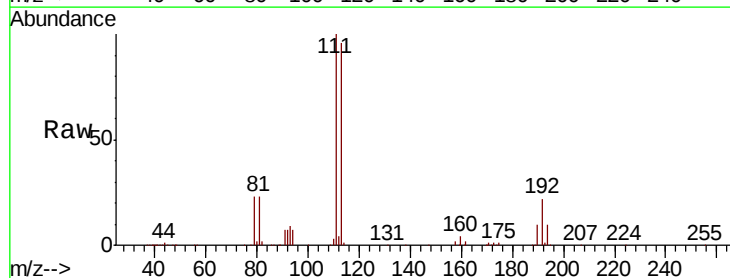


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VW  
Ion 87.90 (87.60 to 88.60): VW

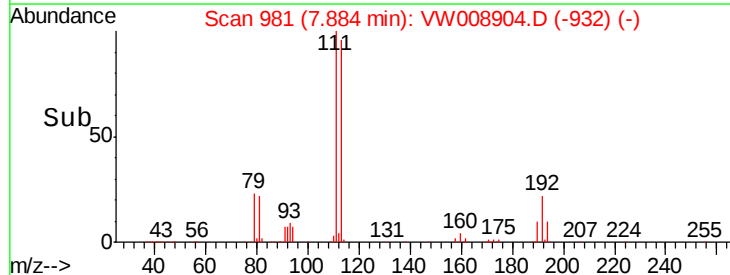
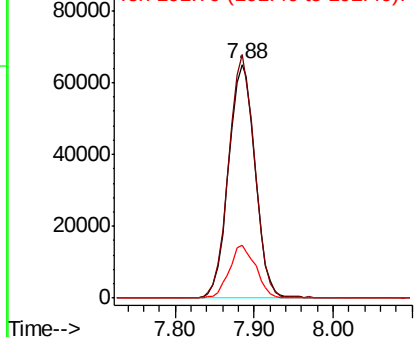


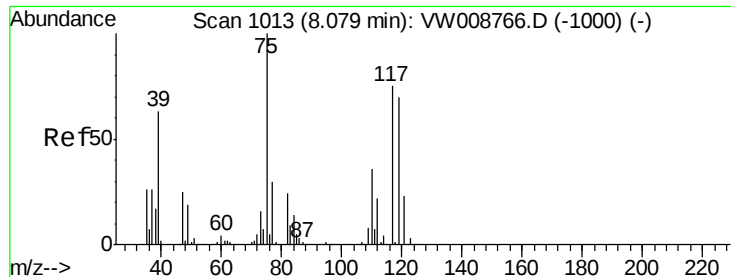
#35  
Dibromofluoromethane  
Concen: 50.294 ug/l  
RT: 7.88 min Scan# 981  
Delta R.T. -0.00 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

Tgt Ion:113 Resp: 152327  
Ion Ratio Lower Upper  
113 100  
111 102.1 81.9 122.9  
192 22.5 17.1 25.7



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

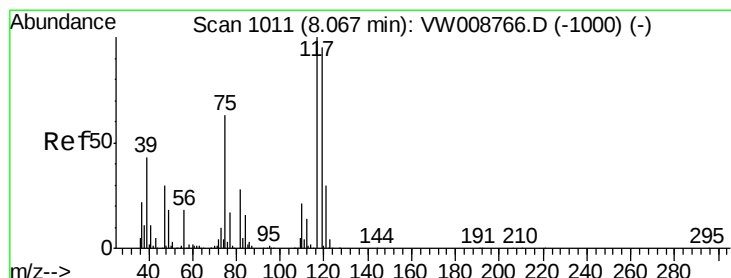
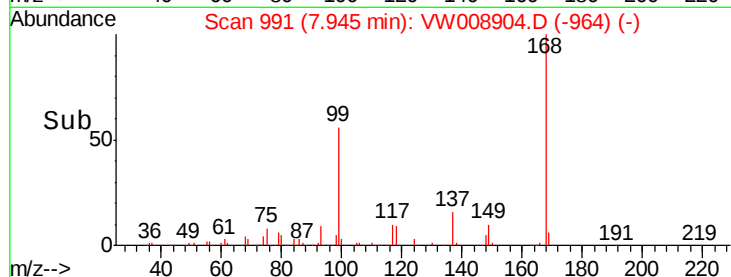
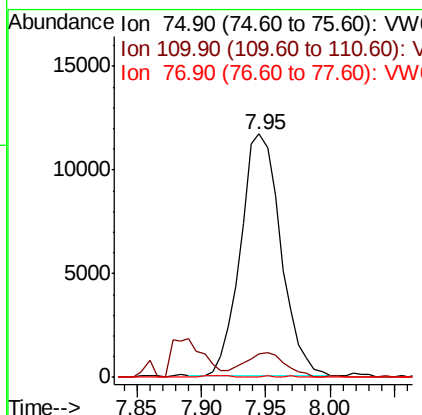
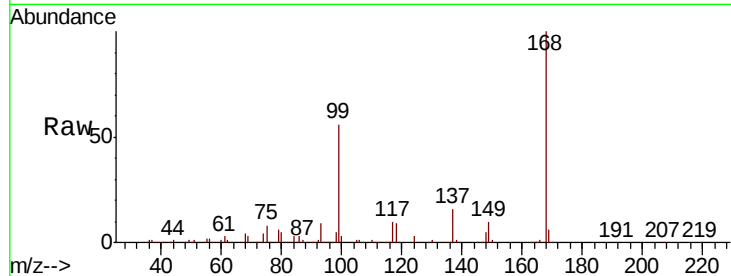




#36  
 1,1-Dichloropropene  
 Concen: 5.128 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW008904.D  
 Acq: 01 Mar 2019 00:28

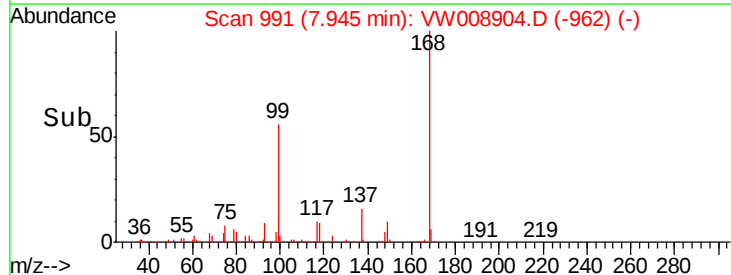
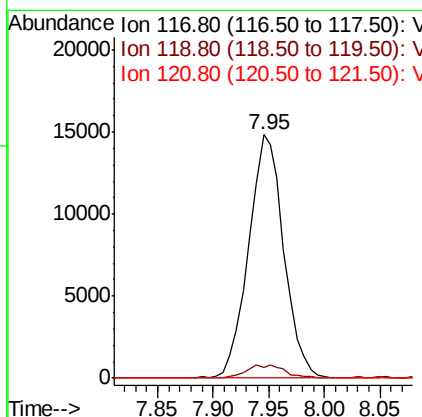
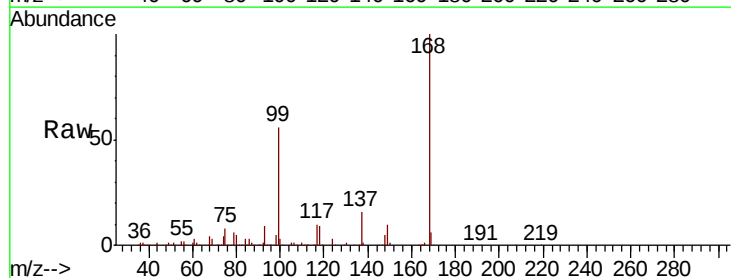
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0228SBL02

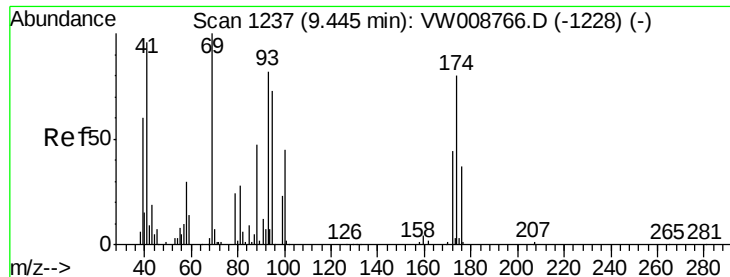
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.3  | 17.5  | 52.6# |
| 77      | 0.1   | 24.5  | 36.7# |



#38  
 Carbon Tetrachloride  
 Concen: 6.283 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW008904.D  
 Acq: 01 Mar 2019 00:28

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.5   | 76.1  | 114.1# |
| 121     | 0.0   | 24.0  | 36.0#  |

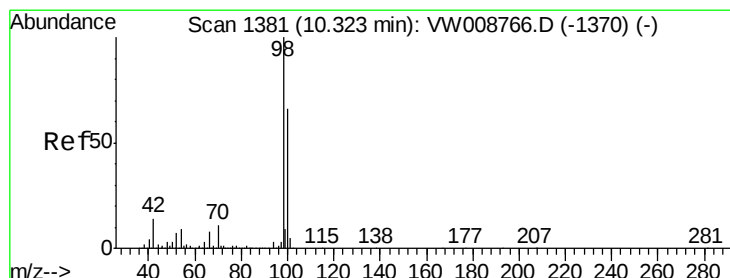
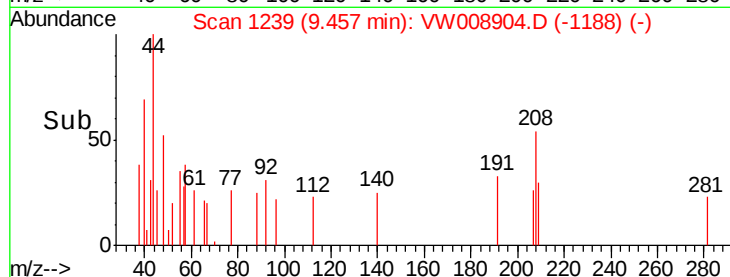
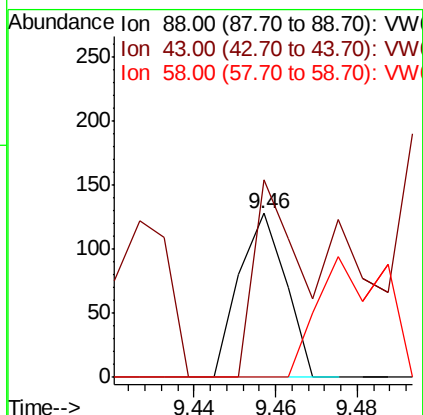
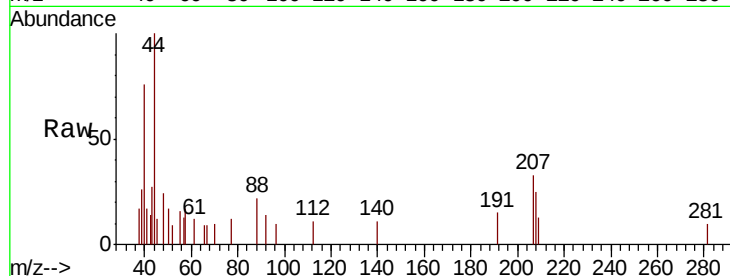




#49  
1,4-Dioxane  
Concen: 3.456 ug/l  
RT: 9.46 min Scan# 1239  
Delta R.T. 0.01 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

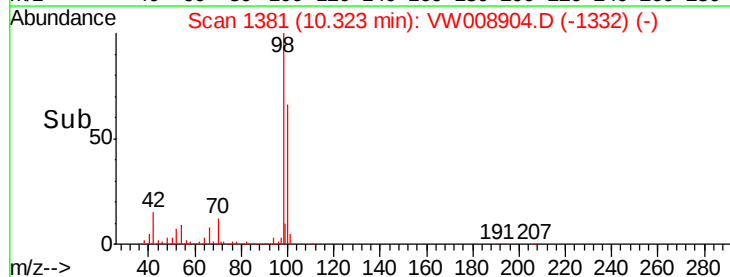
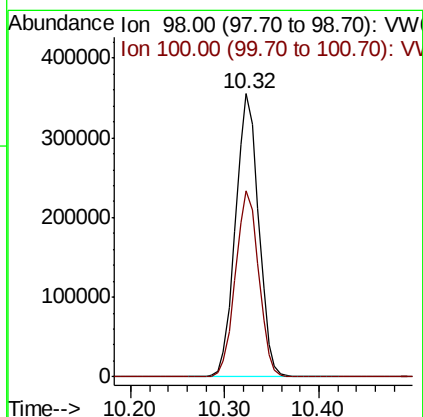
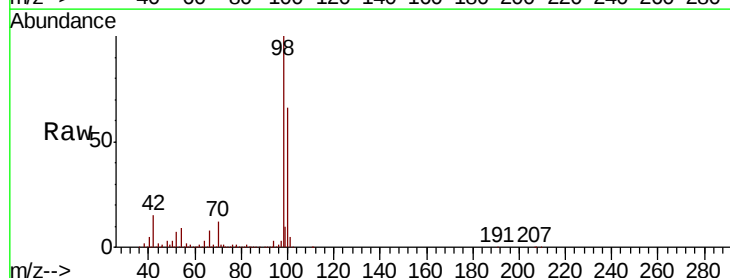
Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0228SBL02

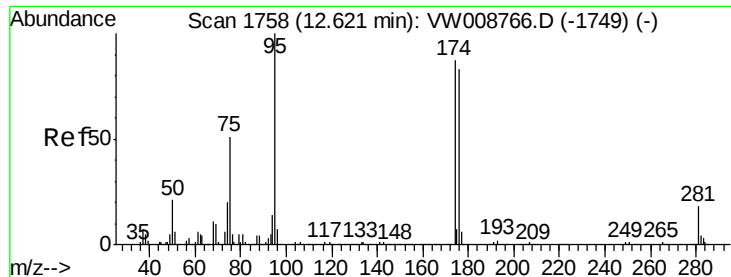
Tot Ion: 88 Resp: 102  
Ion Ratio Lower Upper  
88 100  
43 115.7 29.0 43.4#  
58 103.9 52.0 78.0#



#50  
Toluene-d8  
Concen: 52.021 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW008904.D  
Acq: 01 Mar 2019 00:28

Tgt Ion: 98 Resp: 608226  
Ion Ratio Lower Upper  
98 100  
100 66.0 52.4 78.6





#62

4-Bromofluorobenzene

Concen: 44.918 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampleId :

VW0228SBL02

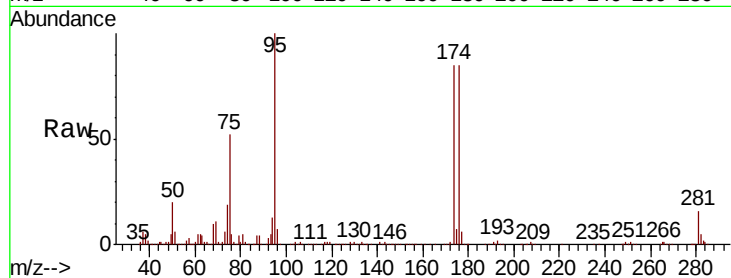
Tot Ion: 95 Resp: 205630

Ion Ratio Lower Upper

95 100

174 87.3 0.0 169.2

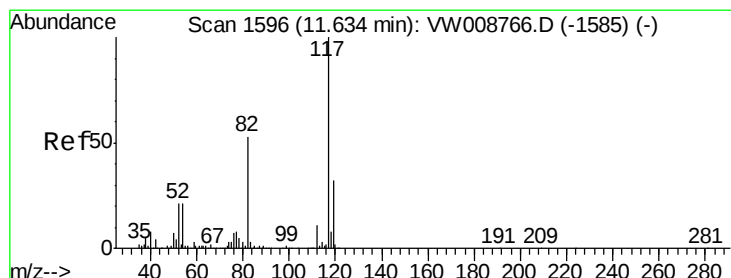
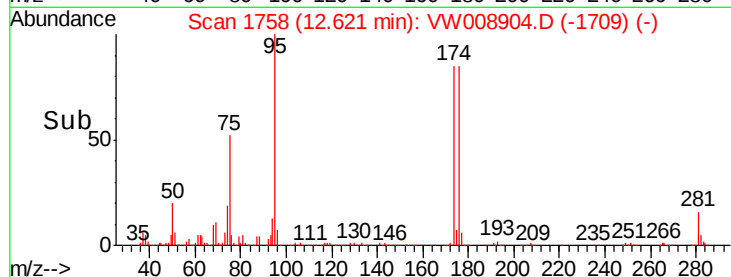
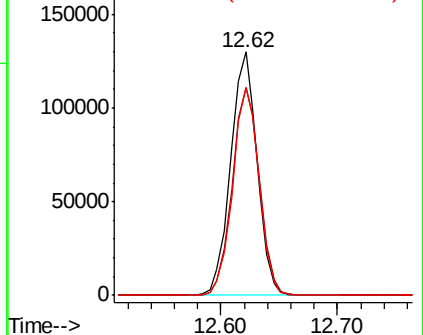
176 84.9 0.0 163.6



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# 1596

Delta R.T. -0.00 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

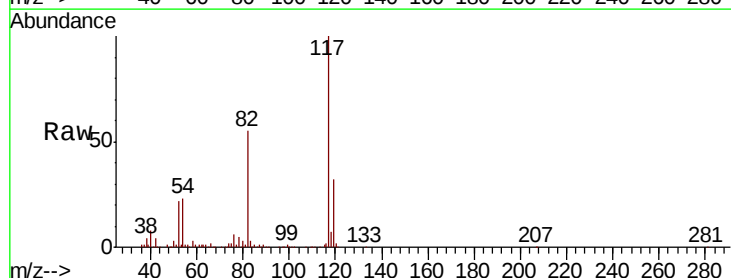
Tgt Ion: 117 Resp: 458754

Ion Ratio Lower Upper

117 100

82 54.8 42.2 63.4

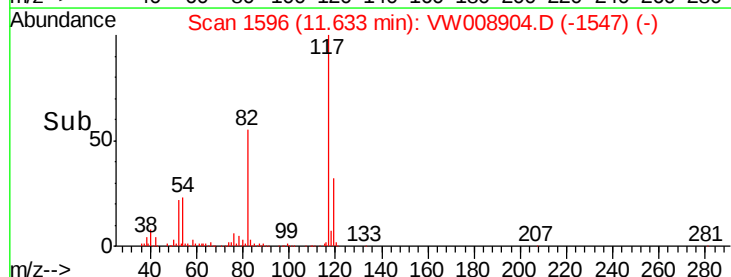
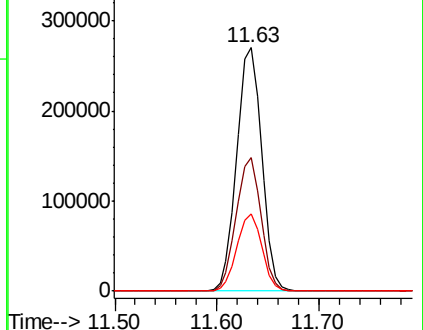
119 31.5 25.9 38.9

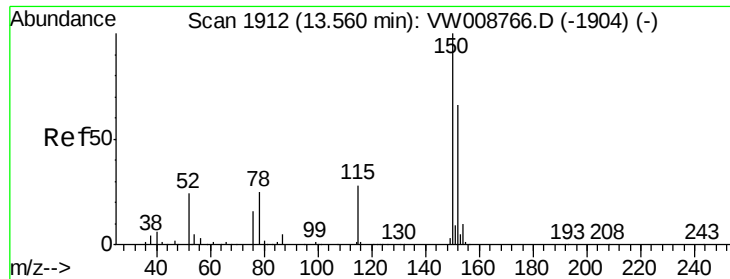


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampleId :

VW0228SBL02

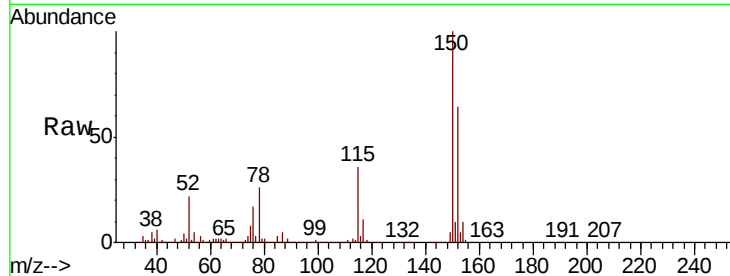
Tot Ion:152 Resp: 214540

Ion Ratio Lower Upper

152 100

115 57.8 28.6 85.8

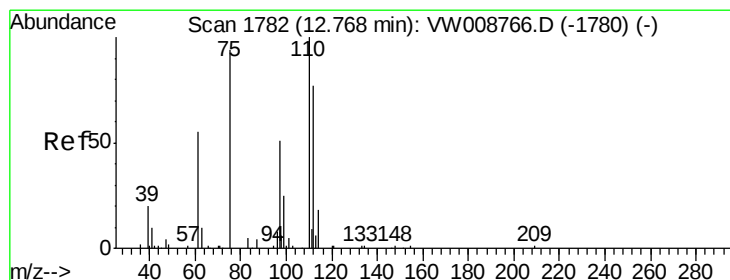
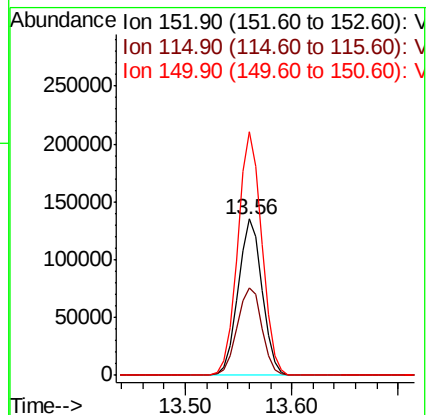
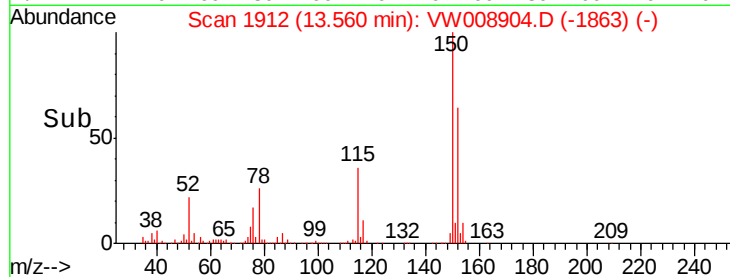
150 155.2 0.0 348.0



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: 63.319 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW008904.D

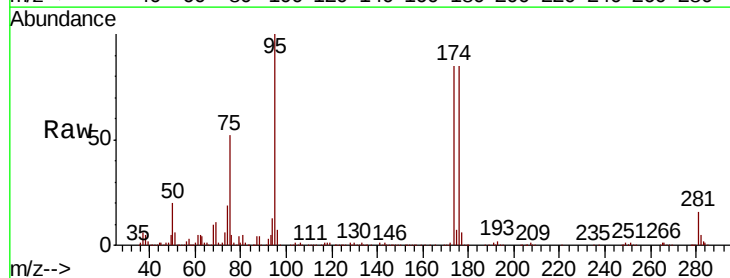
Acq: 01 Mar 2019 00:28

Tgt Ion: 75 Resp: 112157

Ion Ratio Lower Upper

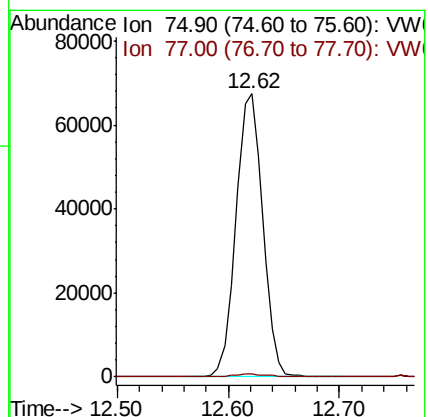
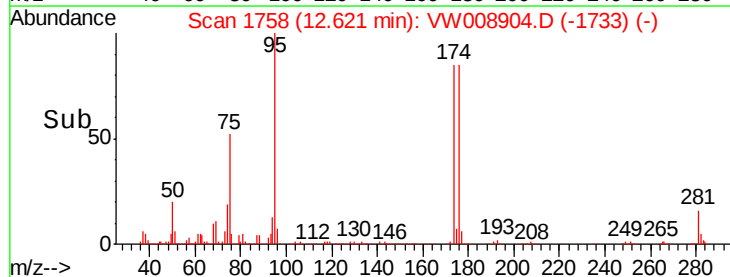
75 100

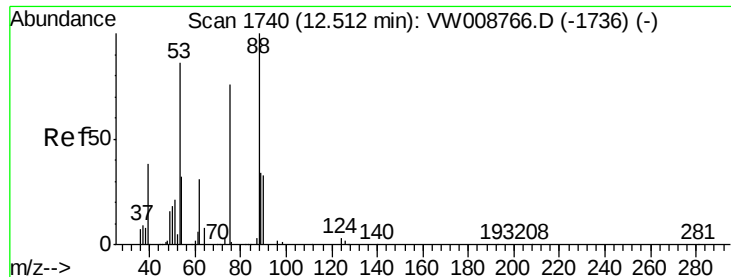
77 1.3 0.0 0.0#



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: 153.932 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.11 min

Lab File: VW008904.D

Acq: 01 Mar 2019 00:28

Instrument :

MSVOA\_W

ClientSampleId :

VW0228SBL02

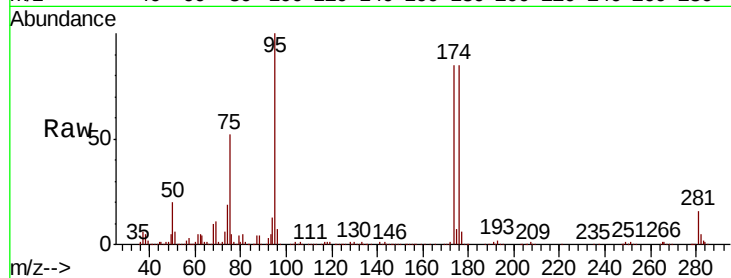
Tot Ion: 75 Resp: 112157

Ion Ratio Lower Upper

75 100

53 0.3 88.2 132.2#

89 0.2 39.5 59.3#



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

