

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW031119\  
 Data File : VW009082.D  
 Acq On : 11 Mar 2019 13:18  
 Operator : SY/VA  
 Sample : K1809-02RE  
 Misc : 5.5G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 FK-BPM-01-A0-B0-A0A-A0B

Quant Time: Mar 12 08:10:49 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W030719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 08 05:22:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 195877   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 299801   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 264167   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 117164   | 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   | 106350   | 53.97 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.94% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 92692    | 51.35 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.70% |          |
| 50) Toluene-d8              | 10.32 | 98   | 360770   | 48.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.32%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 114789   | 39.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 78.66%  |          |

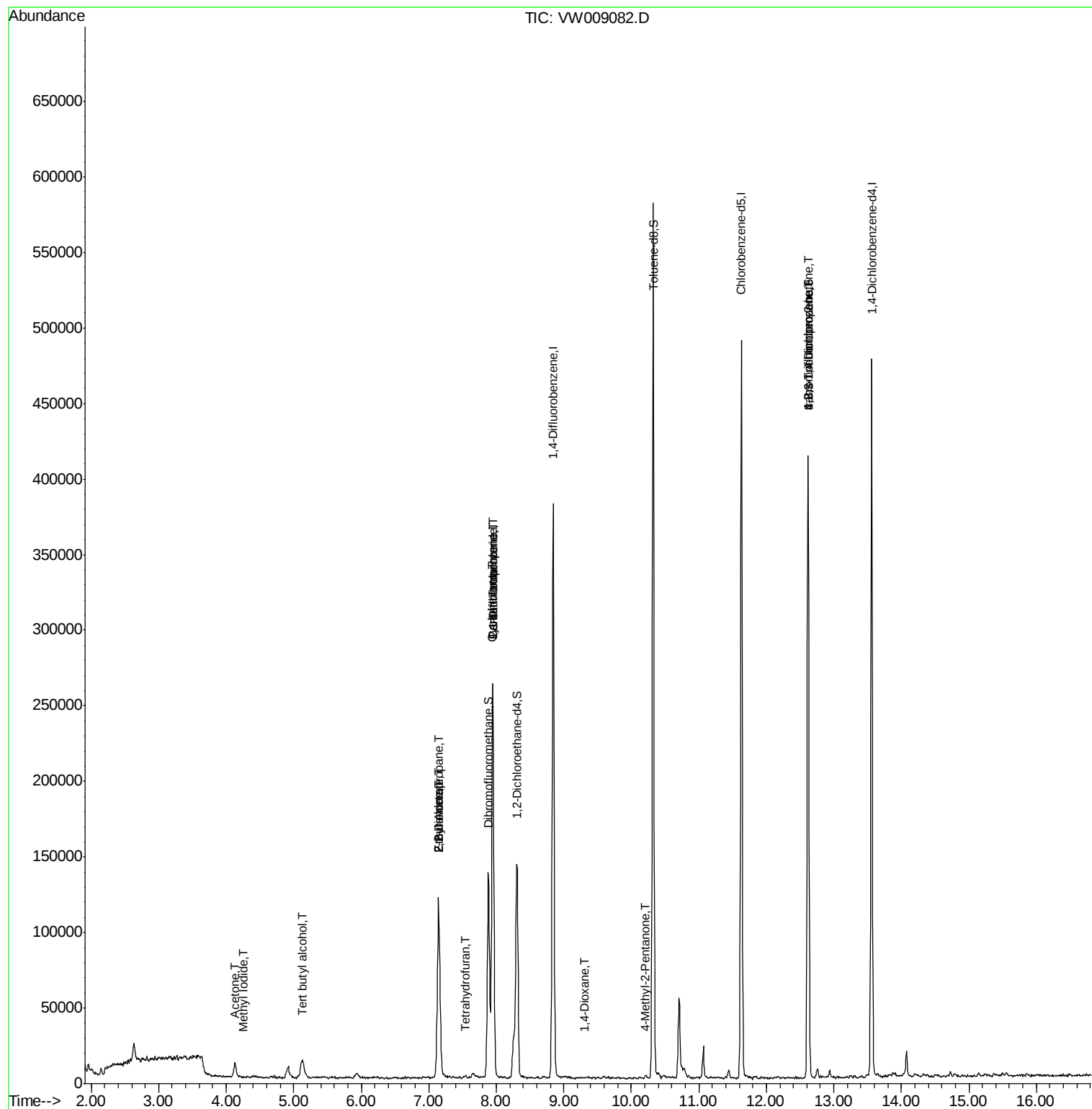
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 10) Methyl Iodide              | 4.25  | 142  | 45       | 3.206     | ug/l # | 1      |
| 11) Tert butyl alcohol         | 5.13  | 59   | 11598    | 76.800    | ug/l # | 74     |
| 16) Acetone                    | 4.13  | 43   | 16093    | 36.188    | ug/l   | 97     |
| 20) Methylene Chloride         | 4.92  | 84   | 4533     | Below Cal |        | 90     |
| 25) 2-Butanone                 | 7.15  | 43   | 7044     | 11.461    | ug/l # | 78     |
| 26) 2,2-Dichloropropane        | 7.15  | 77   | 8259     | 2.538     | ug/l # | 54     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 716      | 1.849     | ug/l # | 66     |
| 31) Cyclohexane                | 7.94  | 56   | 4755     | 1.294     | ug/l # | 43     |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 16895    | 5.390     | ug/l # | 51     |
| 37) Ethyl Acetate              | 7.15  | 43   | 7044     | 4.784     | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 19785    | 6.111     | ug/l # | 19     |
| 49) 1,4-Dioxane                | 9.32  | 88   | 46       | 2.806     | ug/l # | 21     |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 1652     | 1.187     | ug/l   | 95     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 63268    | 68.347    | ug/l # | 1      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 63268    | 152.874   | ug/l # | 5      |

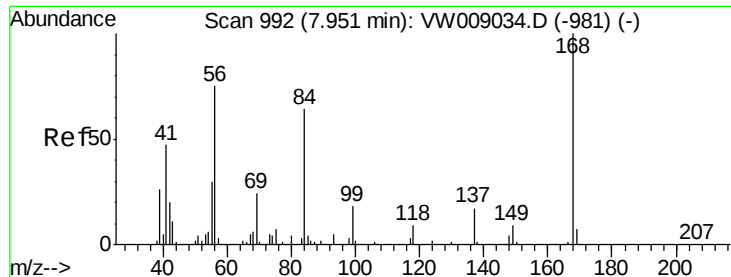
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Mar 12 08:10:49 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W030719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 08 05:22:30 2019  
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: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

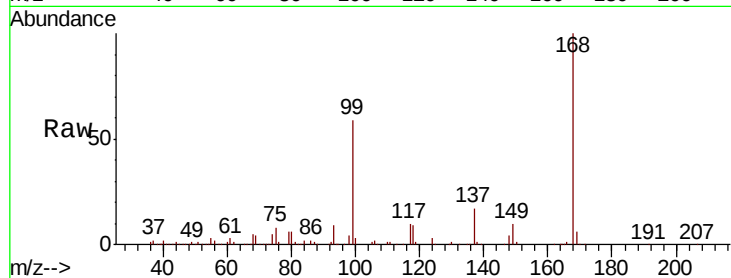
FK-BPM-01-A0-B0-A0A-A0B

Tgt Ion:168 Resp: 195877

Ion Ratio Lower Upper

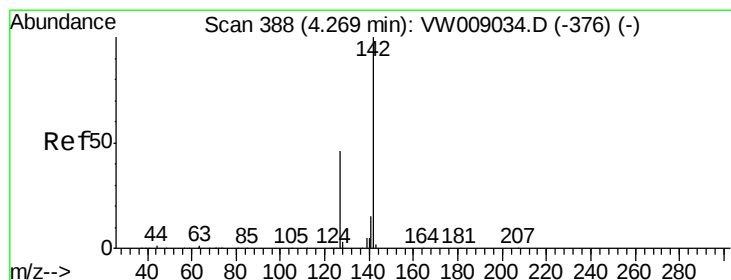
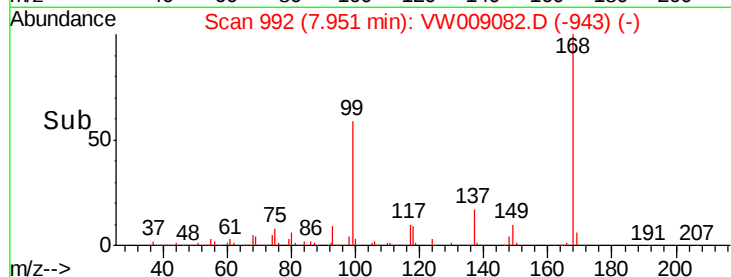
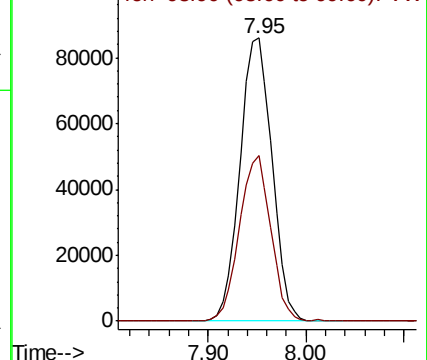
168 100

99 58.5 42.2 63.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#10

Methyl Iodide

Concen: 3.206 ug/l

RT: 4.25 min Scan# 385

Delta R.T. -0.02 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

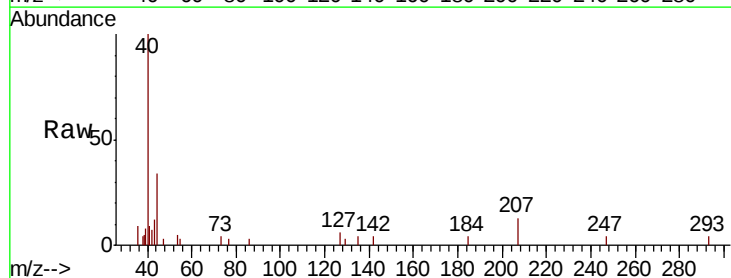
Tgt Ion:142 Resp: 45

Ion Ratio Lower Upper

142 100

127 217.8 35.8 53.6#

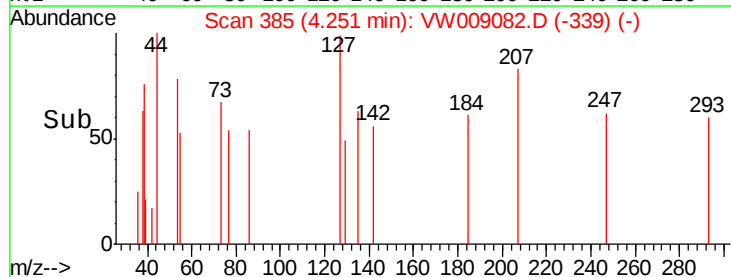
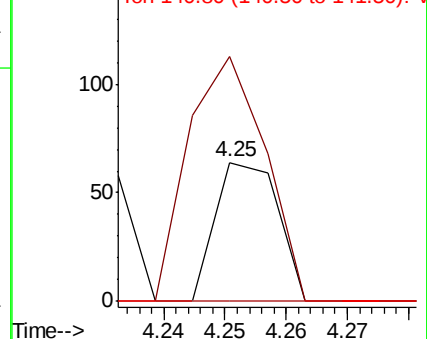
141 0.0 11.8 17.8#

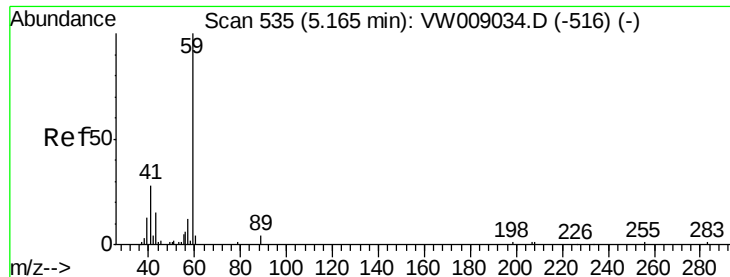


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

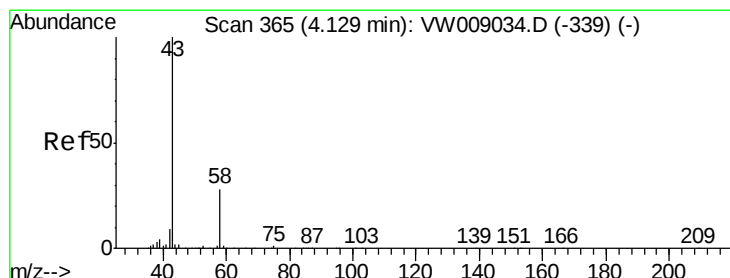
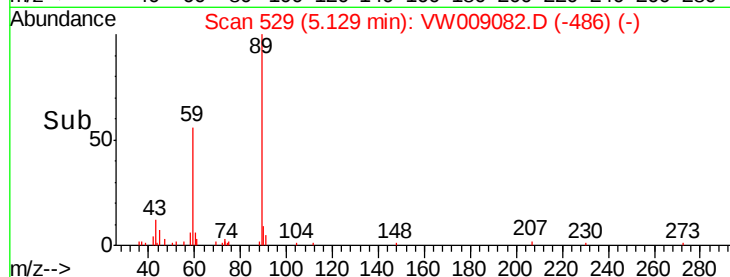
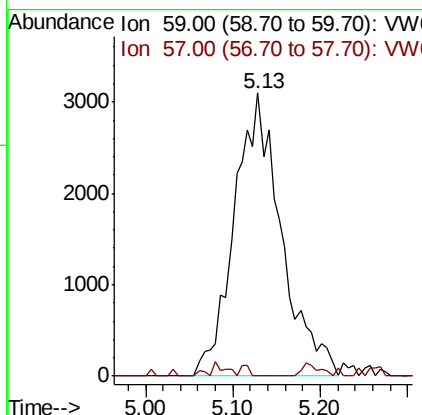
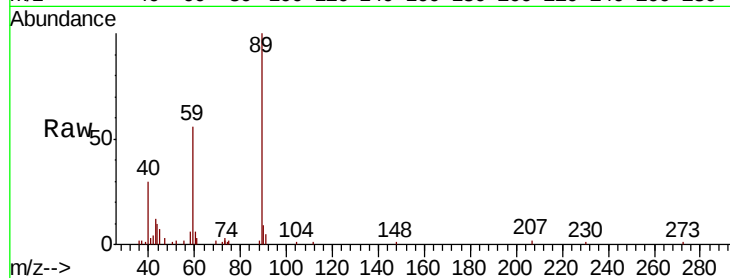




#11  
Tert butyl alcohol  
Concen: 76.800 ug/l  
RT: 5.13 min Scan# 529  
Delta R.T. -0.04 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

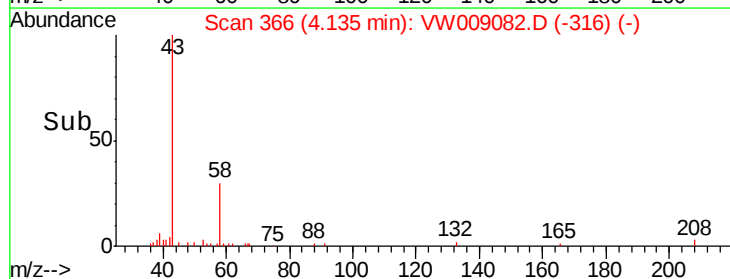
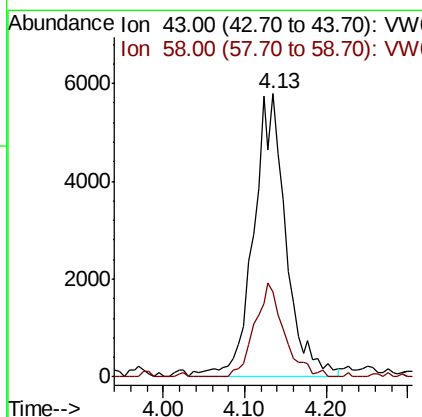
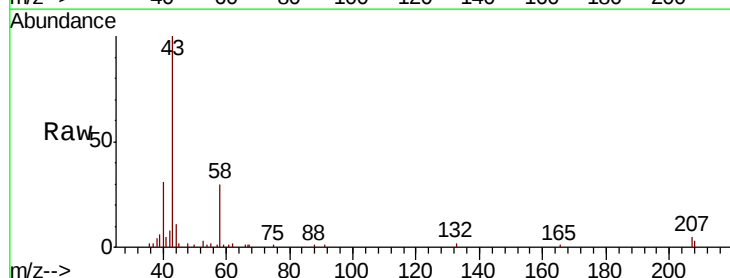
Instrument :  
MSVOA\_W  
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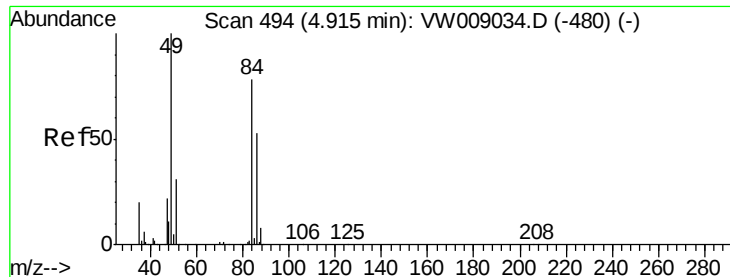
Tgt Ion: 59 Resp: 11598  
Ion Ratio Lower Upper  
59 100  
57 0.8 8.6 12.8#



#16  
Acetone  
Concen: 36.188 ug/l  
RT: 4.13 min Scan# 366  
Delta R.T. 0.01 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Tgt Ion: 43 Resp: 16093  
Ion Ratio Lower Upper  
43 100  
58 29.9 22.5 33.7

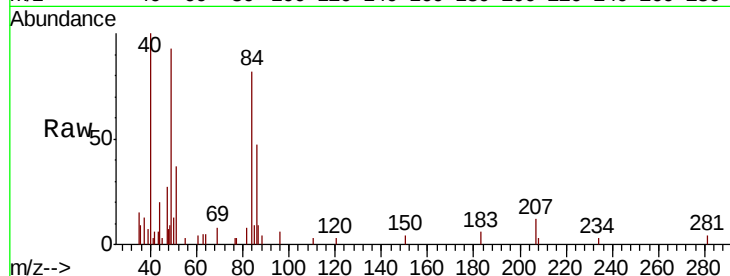




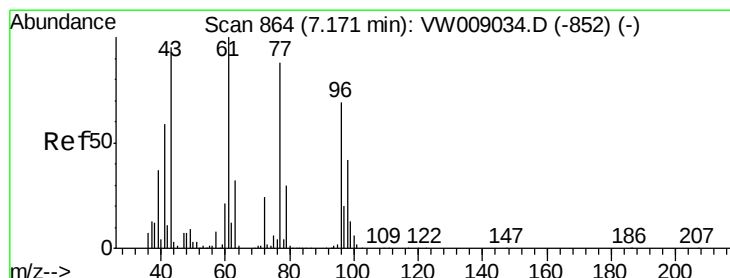
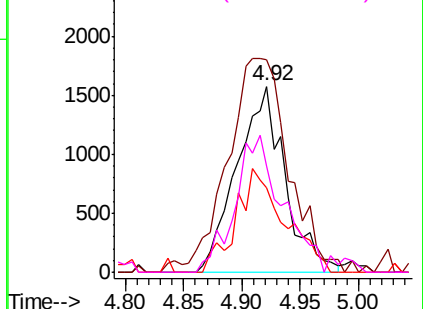
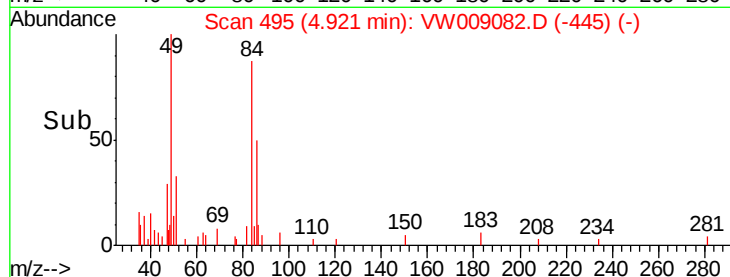
#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Instrument :  
MSVOA\_W  
ClientSampleId :  
FK-BPM-01-A0-B0-A0A-A0B

Tgt Ion: 84 Resp: 4533  
Ion Ratio Lower Upper  
84 100  
49 109.3 102.4 153.6  
51 45.4 31.6 47.4  
86 68.0 54.5 81.7

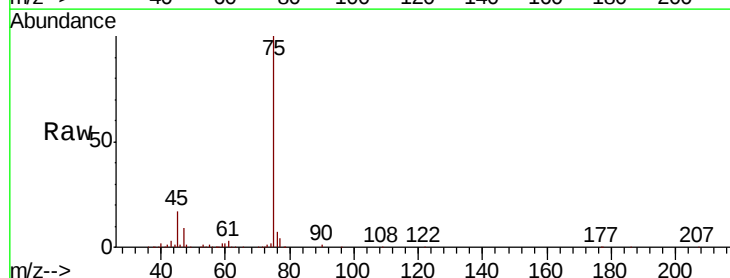


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

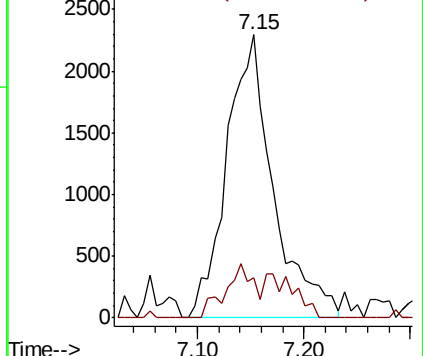
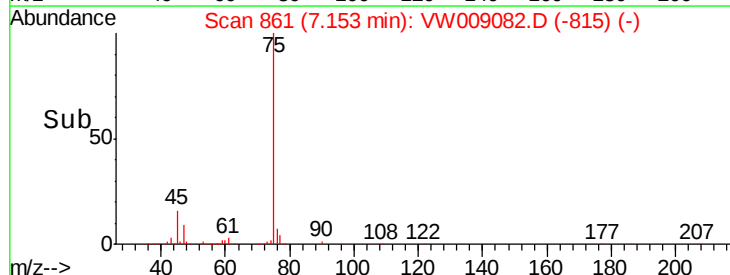


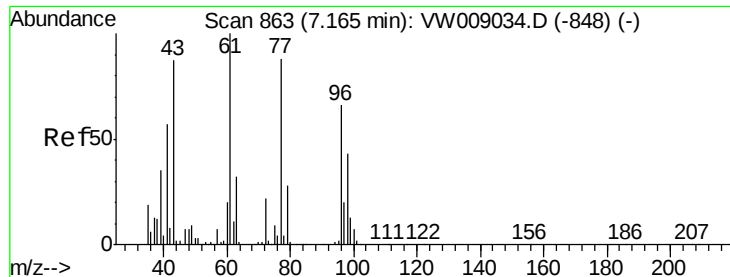
#25  
2-Butanone  
Concen: 11.461 ug/l  
RT: 7.15 min Scan# 861  
Delta R.T. -0.02 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Tgt Ion: 43 Resp: 7044  
Ion Ratio Lower Upper  
43 100  
72 14.0 20.0 30.0#



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





#26

2,2-Dichloropropane

Concen: 2.538 ug/l

RT: 7.15 min Scan# 861

Delta R.T. -0.01 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

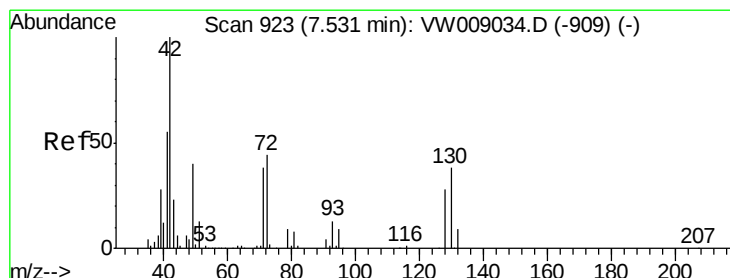
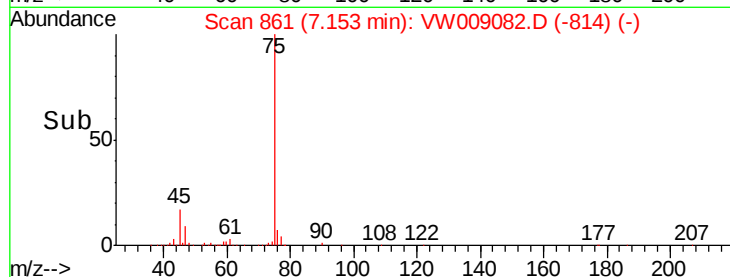
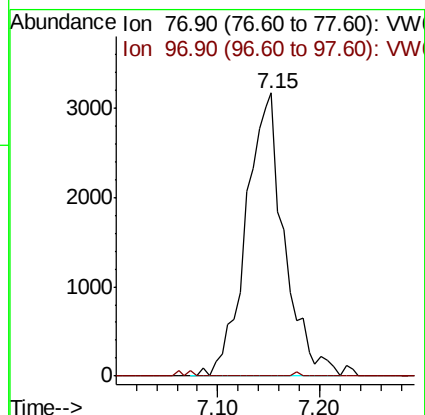
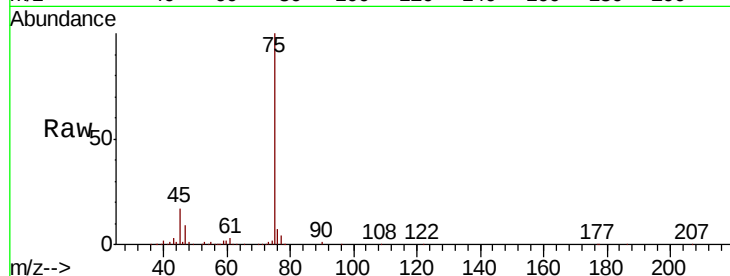
FK-BPM-01-A0-B0-A0A-A0B

Tgt Ion: 77 Resp: 8259

Ion Ratio Lower Upper

77 100

97 0.0 10.9 32.9#



#29

Tetrahydrofuran

Concen: 1.849 ug/l

RT: 7.54 min Scan# 924

Delta R.T. 0.01 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

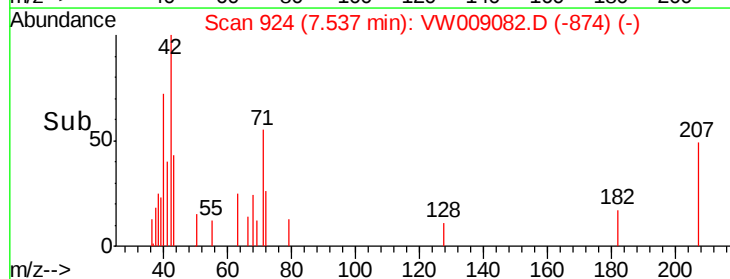
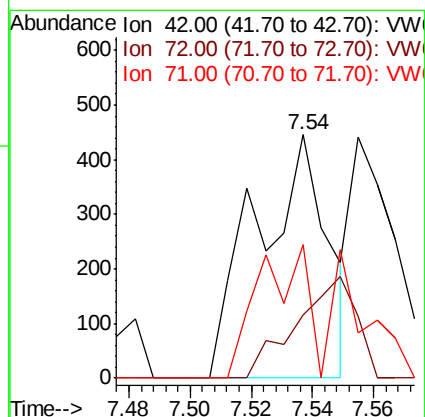
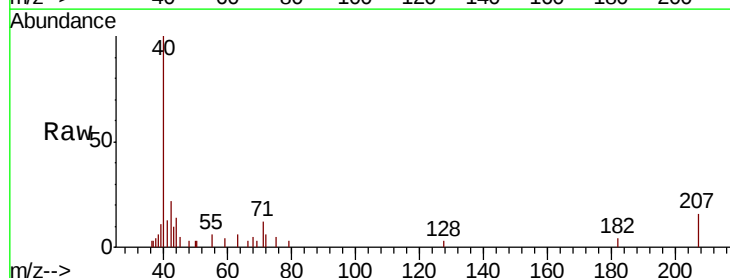
Tgt Ion: 42 Resp: 716

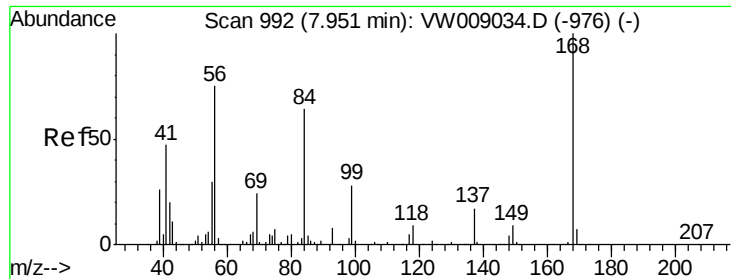
Ion Ratio Lower Upper

42 100

72 0.0 32.2 48.4#

71 37.3 30.7 46.1

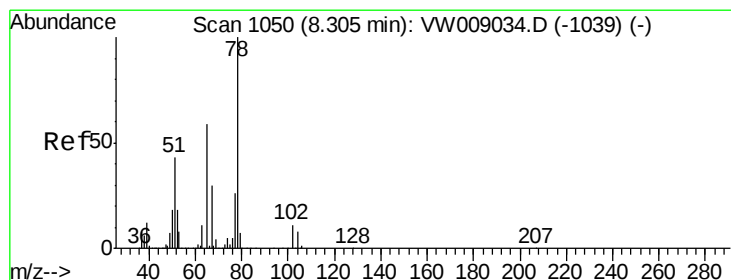
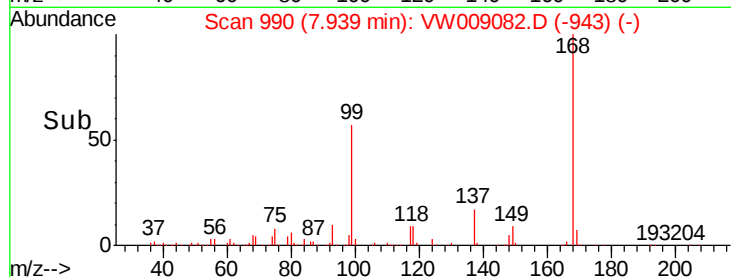
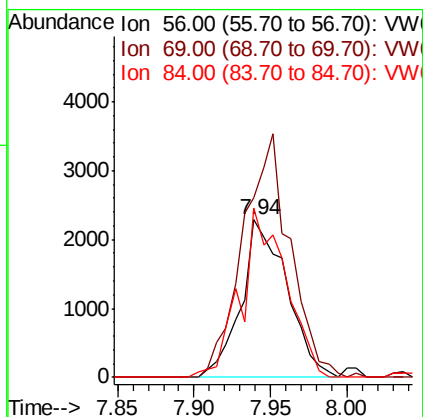
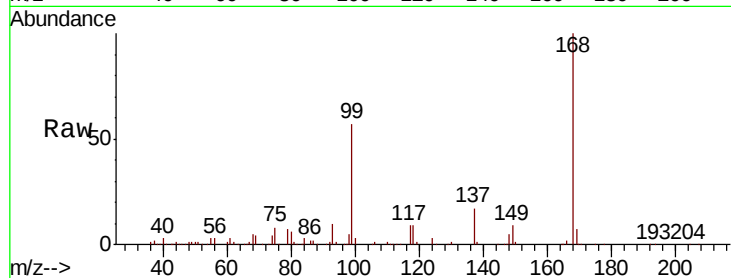




#31  
Cyclohexane  
Concen: 1.294 ug/l  
RT: 7.94 min Scan# 990  
Delta R.T. -0.01 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

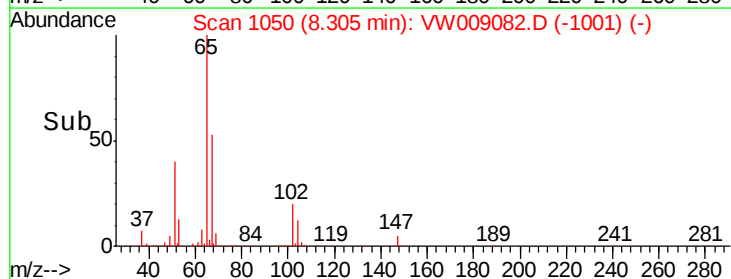
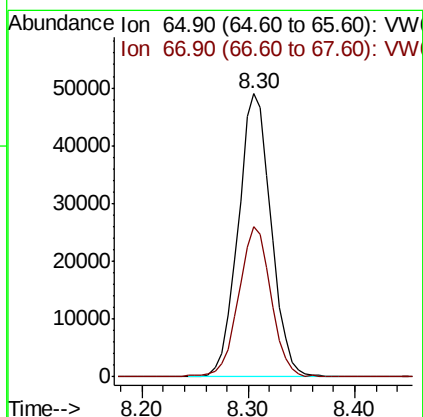
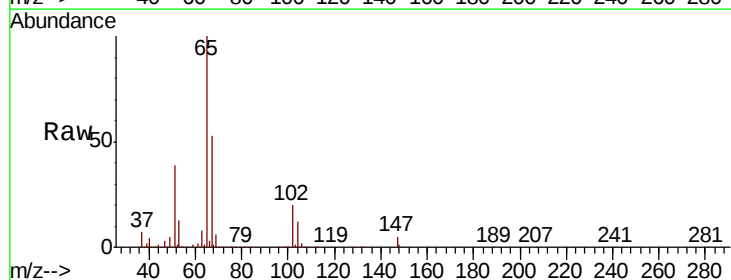
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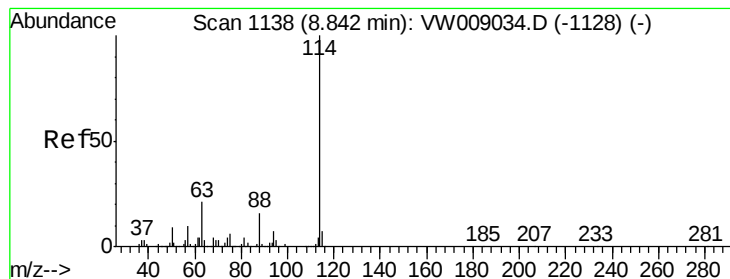
Tgt Ion: 56 Resp: 4755  
Ion Ratio Lower Upper  
56 100  
69 113.7 25.5 38.3#  
84 108.0 68.6 103.0#



#33  
1,2-Dichloroethane-d4  
Concen: 53.965 ug/l  
RT: 8.30 min Scan# 1050  
Delta R.T. -0.00 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Tgt Ion: 65 Resp: 106350  
Ion Ratio Lower Upper  
65 100  
67 52.4 0.0 103.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

FK-BPM-01-A0-B0-A0A-A0B

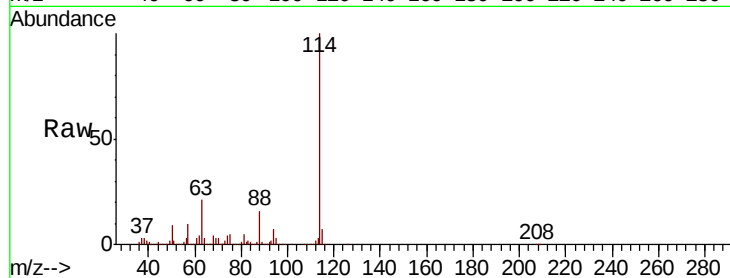
Tgt Ion:114 Resp: 299801

Ion Ratio Lower Upper

114 100

63 21.1 0.0 41.2

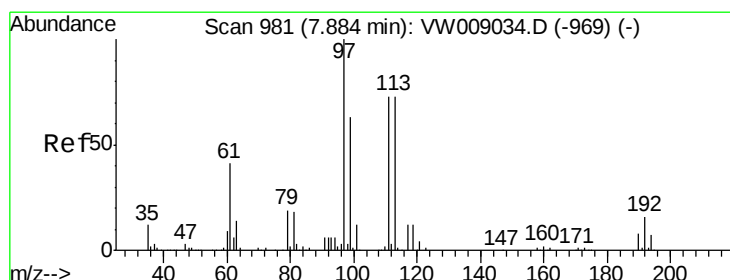
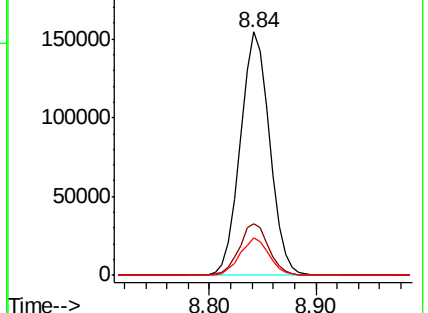
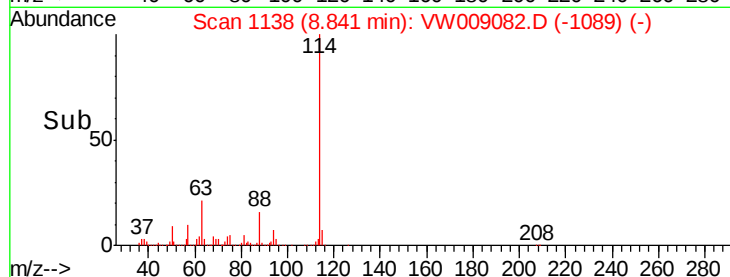
88 15.5 0.0 31.2



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: 51.351 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.01 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

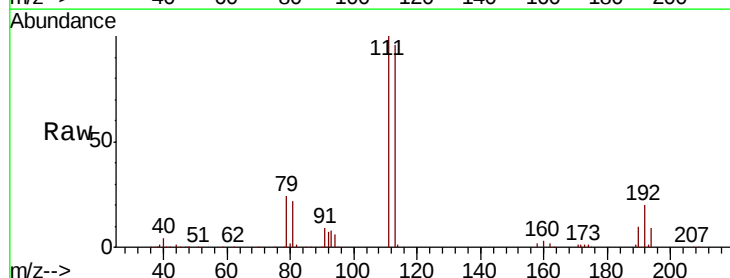
Tgt Ion:113 Resp: 92692

Ion Ratio Lower Upper

113 100

111 103.5 81.0 121.4

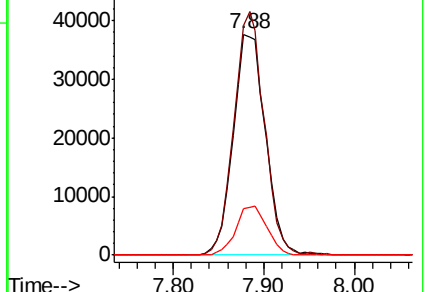
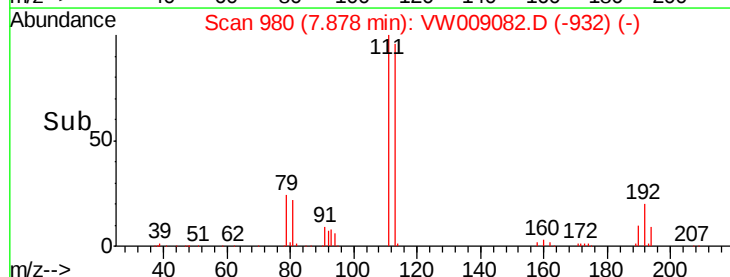
192 21.7 17.1 25.7

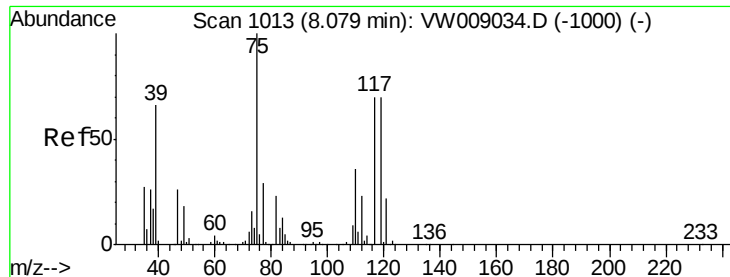


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

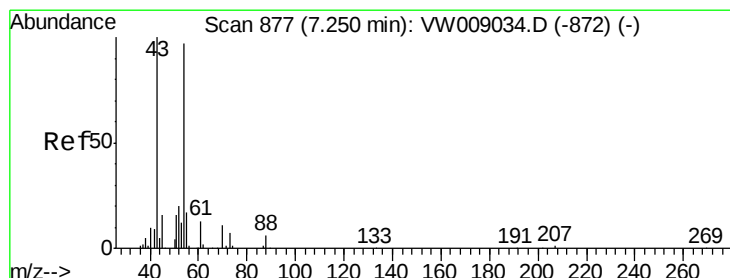
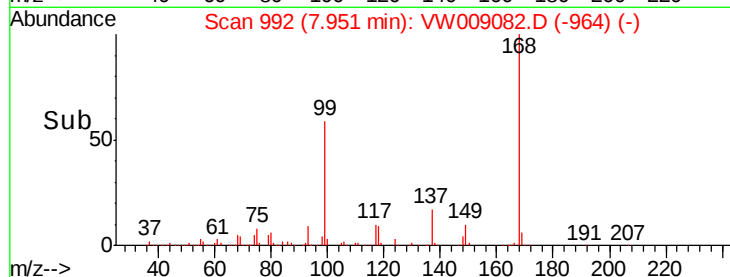
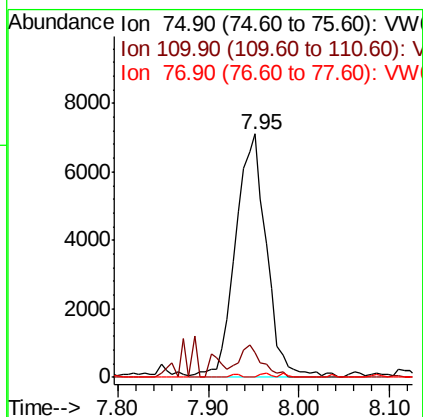
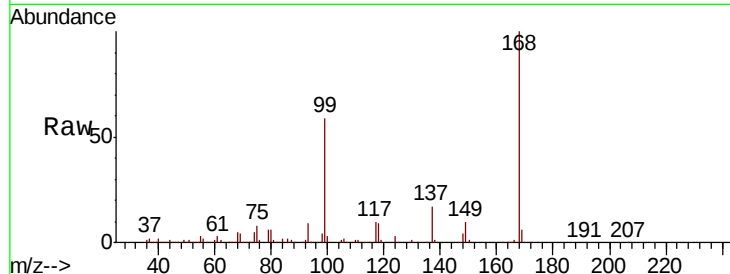




#36  
 1,1-Dichloropropene  
 Concen: 5.390 ug/l  
 RT: 7.95 min Scan# 992  
 Delta R.T. -0.13 min  
 Lab File: VW009082.D  
 Acq: 11 Mar 2019 13:18

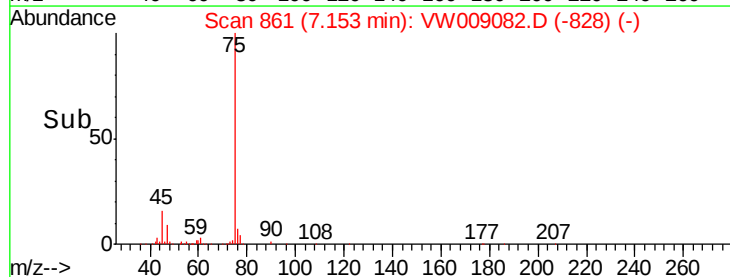
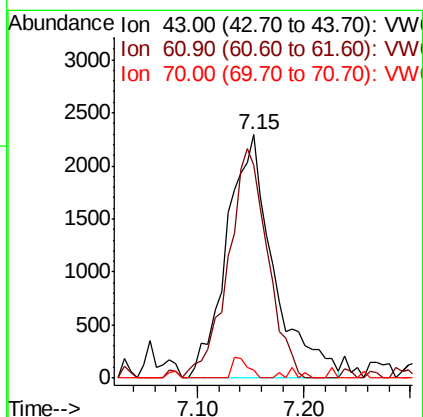
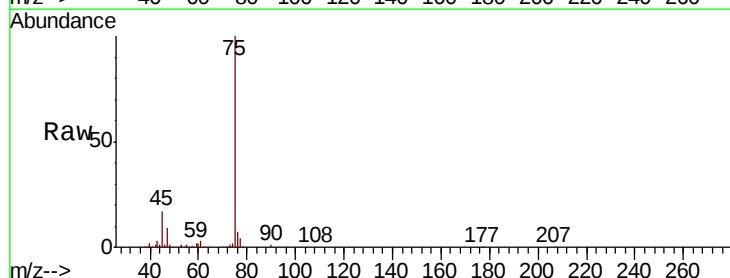
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 FK-BPM-01-A0-B0-A0A-A0B

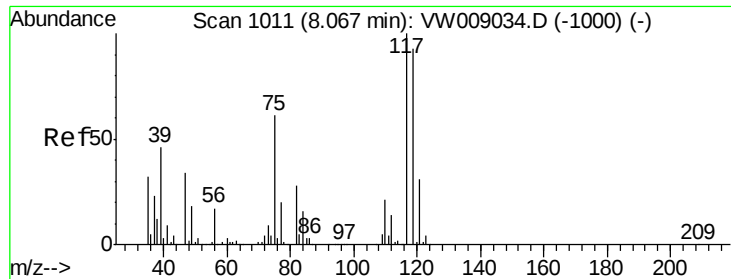
Tgt Ion: 75 Resp: 16895  
 Ion Ratio Lower Upper  
 75 100  
 110 9.8 17.6 52.9#  
 77 0.6 25.1 37.7#



#37  
 Ethyl Acetate  
 Concen: 4.784 ug/l  
 RT: 7.15 min Scan# 861  
 Delta R.T. -0.10 min  
 Lab File: VW009082.D  
 Acq: 11 Mar 2019 13:18

Tgt Ion: 43 Resp: 7044  
 Ion Ratio Lower Upper  
 43 100  
 61 79.5 9.8 14.6#  
 70 2.9 7.2 10.8#





#38

Carbon Tetrachloride

Concen: 6.111 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.12 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

FK-BPM-01-A0-B0-A0A-A0B

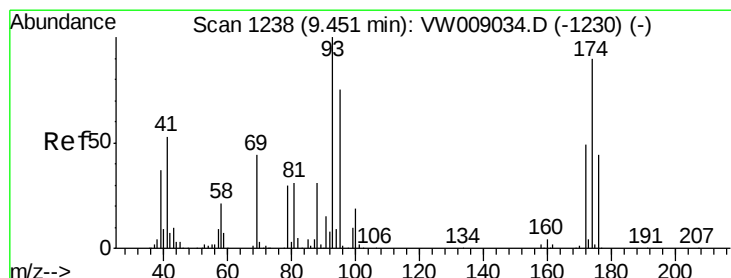
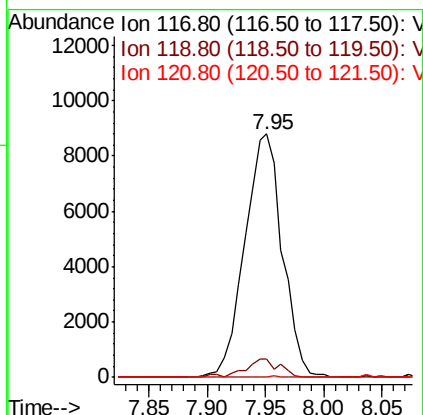
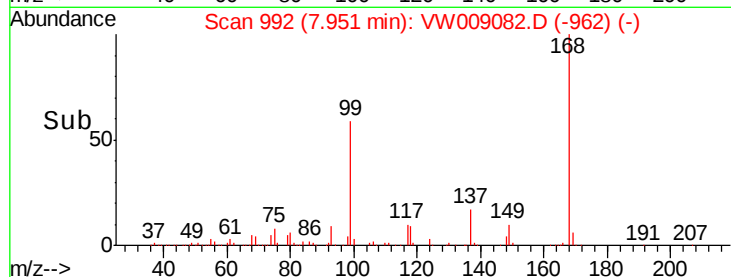
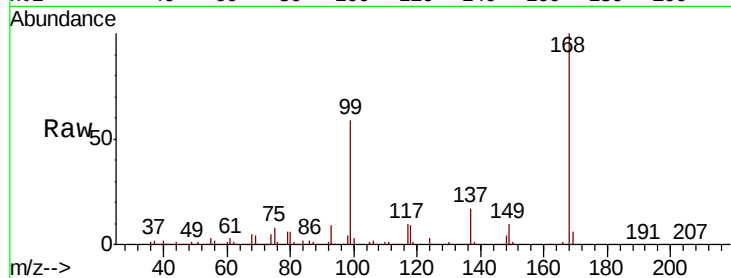
Tgt Ion:117 Resp: 19785

Ion Ratio Lower Upper

117 100

119 7.3 74.6 112.0#

121 0.0 24.7 37.1#



#49

1,4-Dioxane

Concen: 2.806 ug/l

RT: 9.32 min Scan# 1216

Delta R.T. -0.13 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

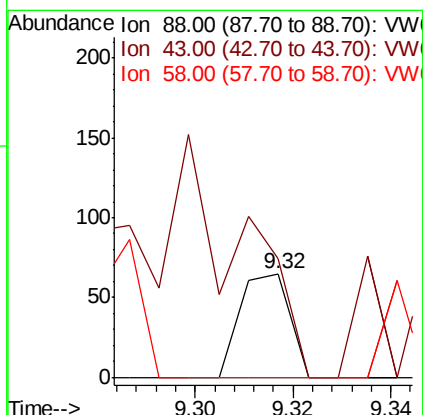
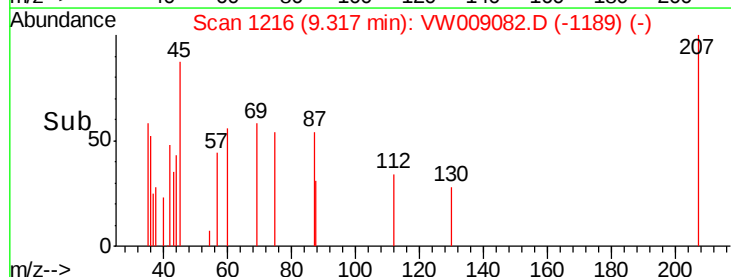
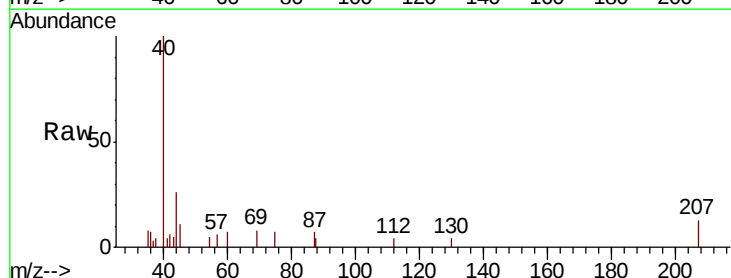
Tgt Ion: 88 Resp: 46

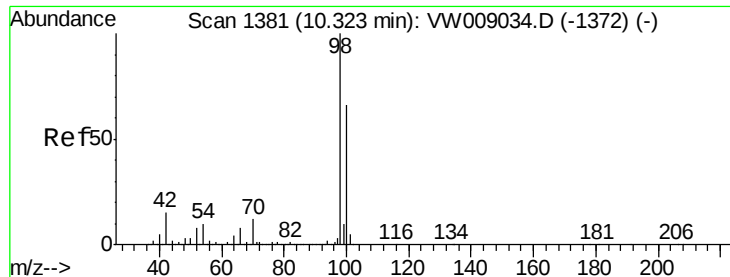
Ion Ratio Lower Upper

88 100

43 0.0 29.0 43.4#

58 0.0 59.2 88.8#

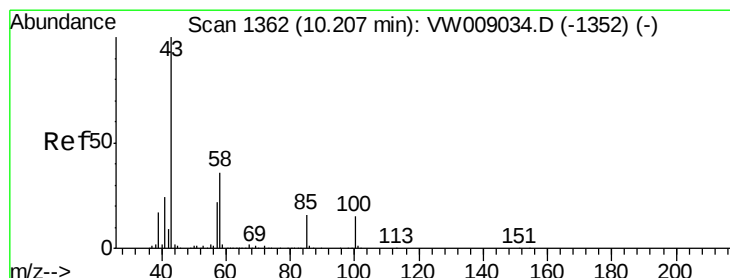
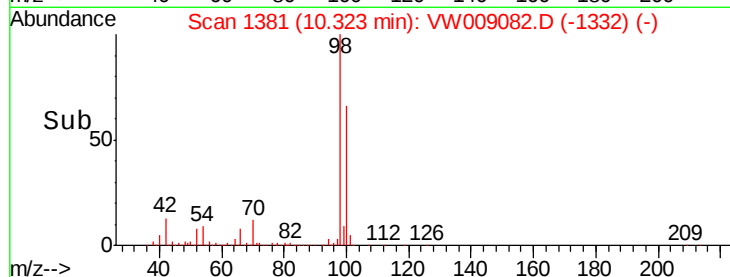
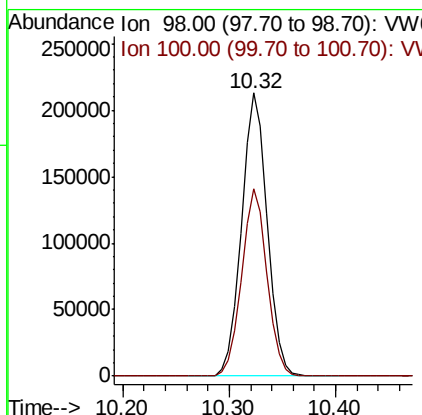
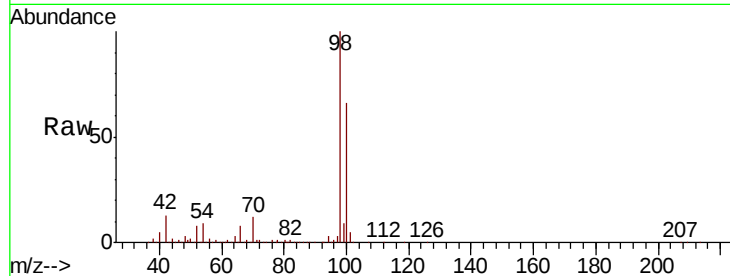




#50  
Toluene-d8  
Concen: 48.663 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

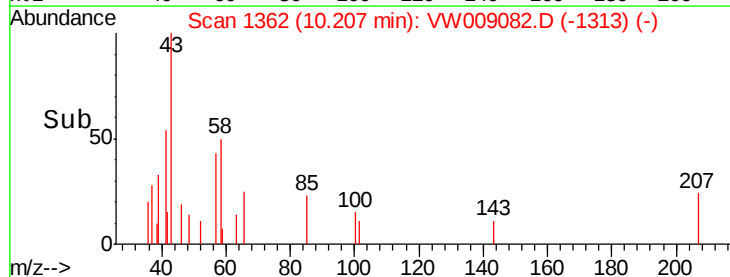
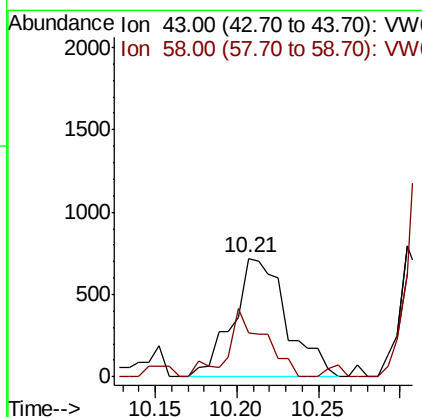
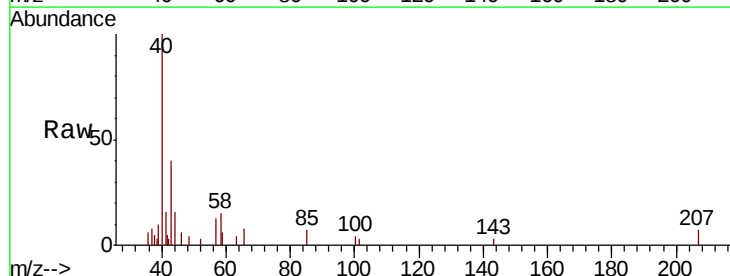
Instrument :  
MSVOA\_W  
ClientSampleId :  
FK-BPM-01-A0-B0-A0A-A0B

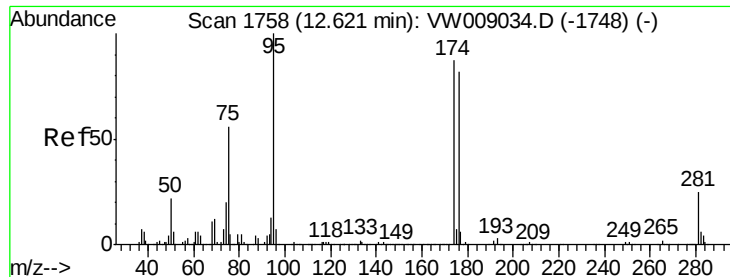
Tgt Ion: 98 Resp: 360770  
Ion Ratio Lower Upper  
98 100  
100 65.2 51.9 77.9



#51  
4-Methyl-2-Pentanone  
Concen: 1.187 ug/l  
RT: 10.21 min Scan# 1362  
Delta R.T. -0.00 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Tgt Ion: 43 Resp: 1652  
Ion Ratio Lower Upper  
43 100  
58 39.0 28.8 43.2





#62

4-Bromofluorobenzene

Concen: 39.332 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

FK-BPM-01-A0-B0-A0A-A0B

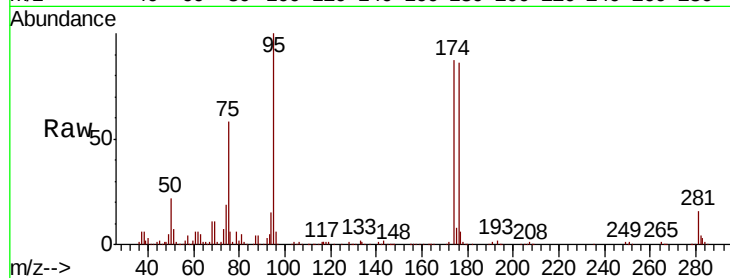
Tgt Ion: 95 Resp: 114789

Ion Ratio Lower Upper

95 100

174 84.6 0.0 167.0

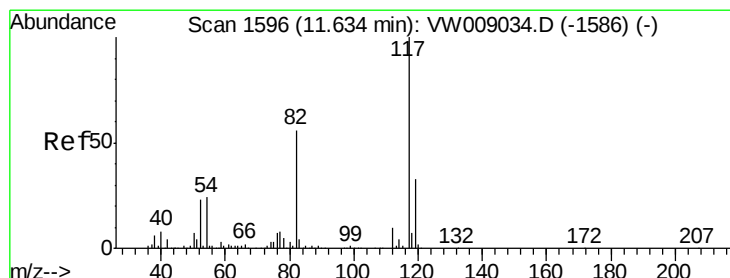
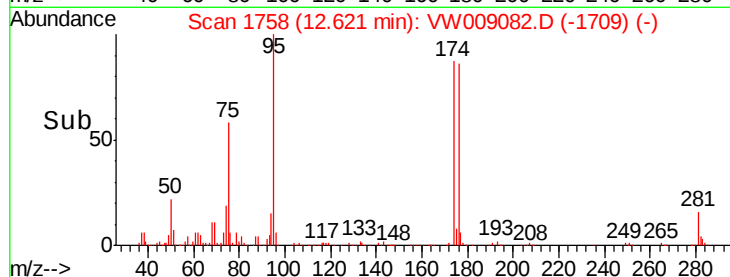
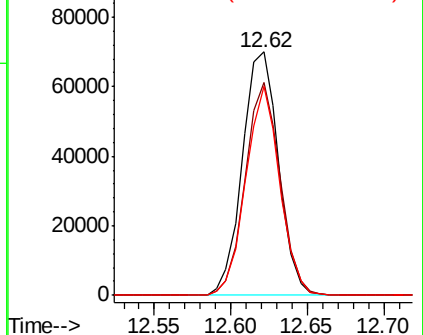
176 81.0 0.0 159.4



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: VW009082.D

Acq: 11 Mar 2019 13:18

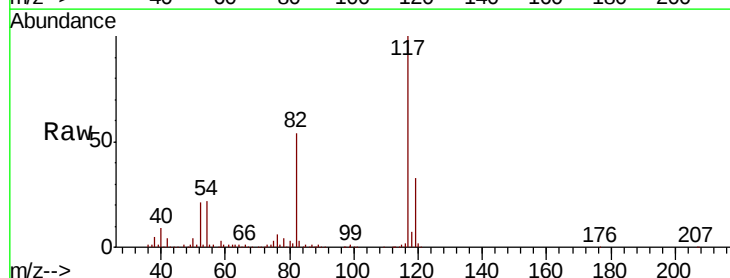
Tgt Ion: 117 Resp: 264167

Ion Ratio Lower Upper

117 100

82 53.8 45.0 67.6

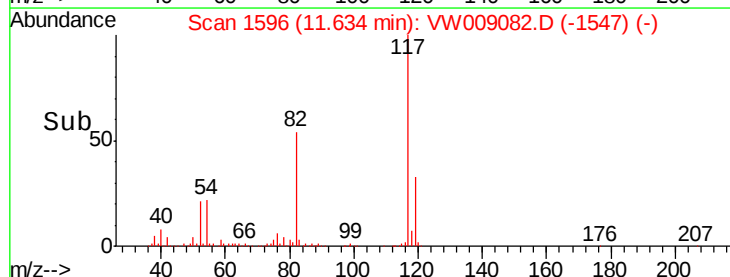
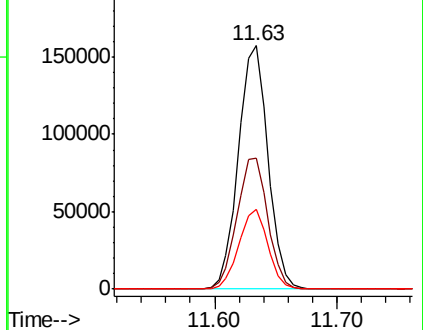
119 32.7 26.6 39.8

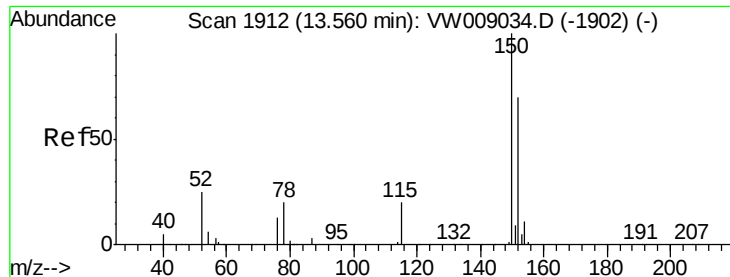


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW



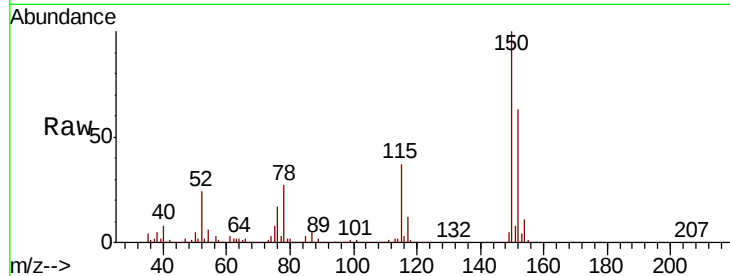


#72

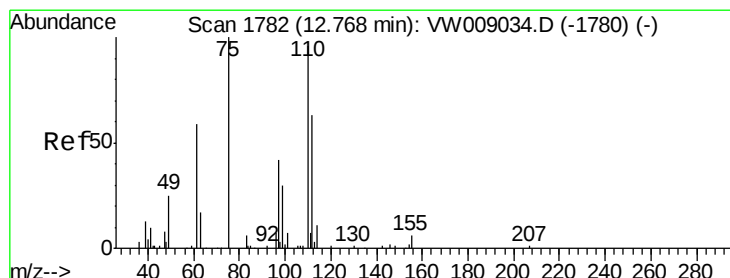
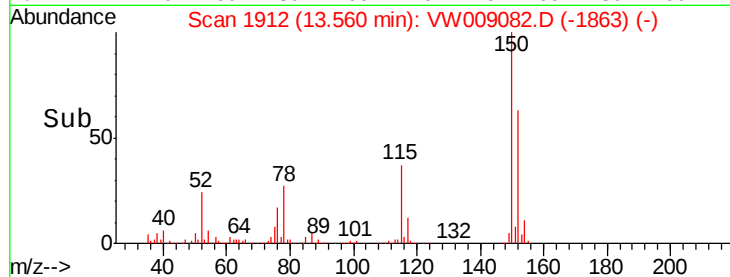
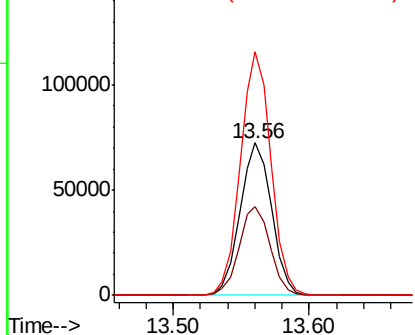
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Instrument :  
MSVOA\_W  
ClientSampleId :  
FK-BPM-01-A0-B0-A0A-A0B

Tgt Ion:152 Resp: 117164  
Ion Ratio Lower Upper  
152 100  
115 57.6 28.9 86.7  
150 154.8 0.0 349.2



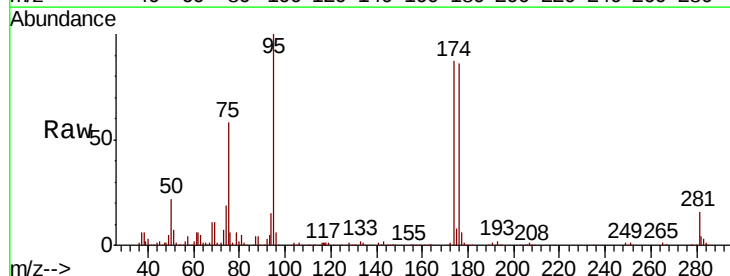
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



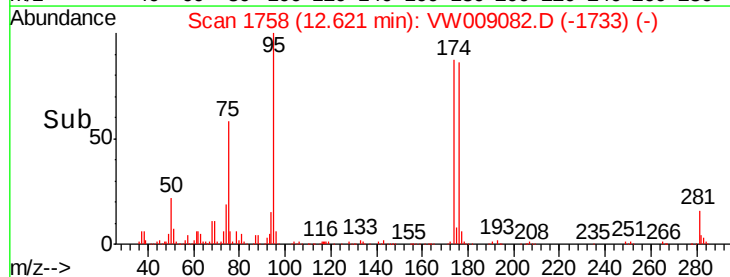
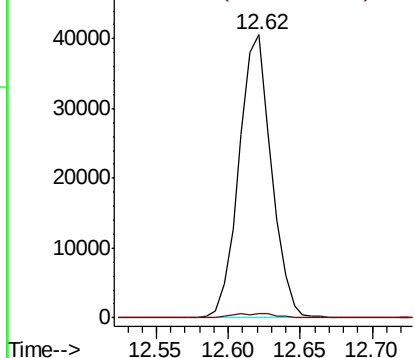
#76

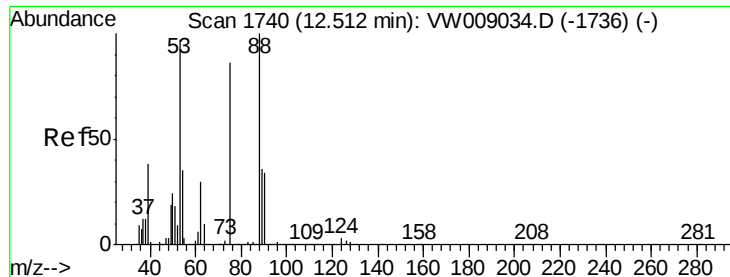
1,2,3-Trichloropropane  
Concen: 68.347 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.15 min  
Lab File: VW009082.D  
Acq: 11 Mar 2019 13:18

Tgt Ion: 75 Resp: 63268  
Ion Ratio Lower Upper  
75 100  
77 2.1 186.7 560.0#



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: 152.874 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.11 min

Lab File: VW009082.D

Acq: 11 Mar 2019 13:18

Instrument :

MSVOA\_W

ClientSampleId :

FK-BPM-01-A0-B0-A0A-A0B

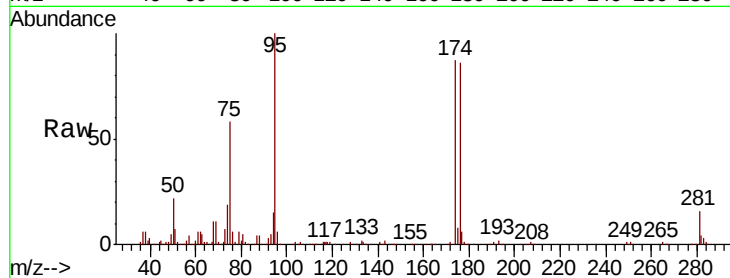
Tgt Ion: 75 Resp: 63268

Ion Ratio Lower Upper

75 100

53 0.5 90.5 135.7#

89 0.2 37.5 56.3#



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

