

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122018\  
 Data File : VW007679.D  
 Acq On : 19 Dec 2018 02:23  
 Operator : SY/AP  
 Sample : J6386-01  
 Misc : 6.58G/5ML/MSVOA W/SOIL  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Dec 19 03:23:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 11 02:58:16 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 31179    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 61076    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 45356    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 11908    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 30772    | 88.96 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 177.92% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 23435    | 63.39 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 126.78% |      |
| 50) Toluene-d8            | 10.32  | 98  | 58395    | 42.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 84.24%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 15950    | 31.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 62.58%  |      |

## Target Compounds

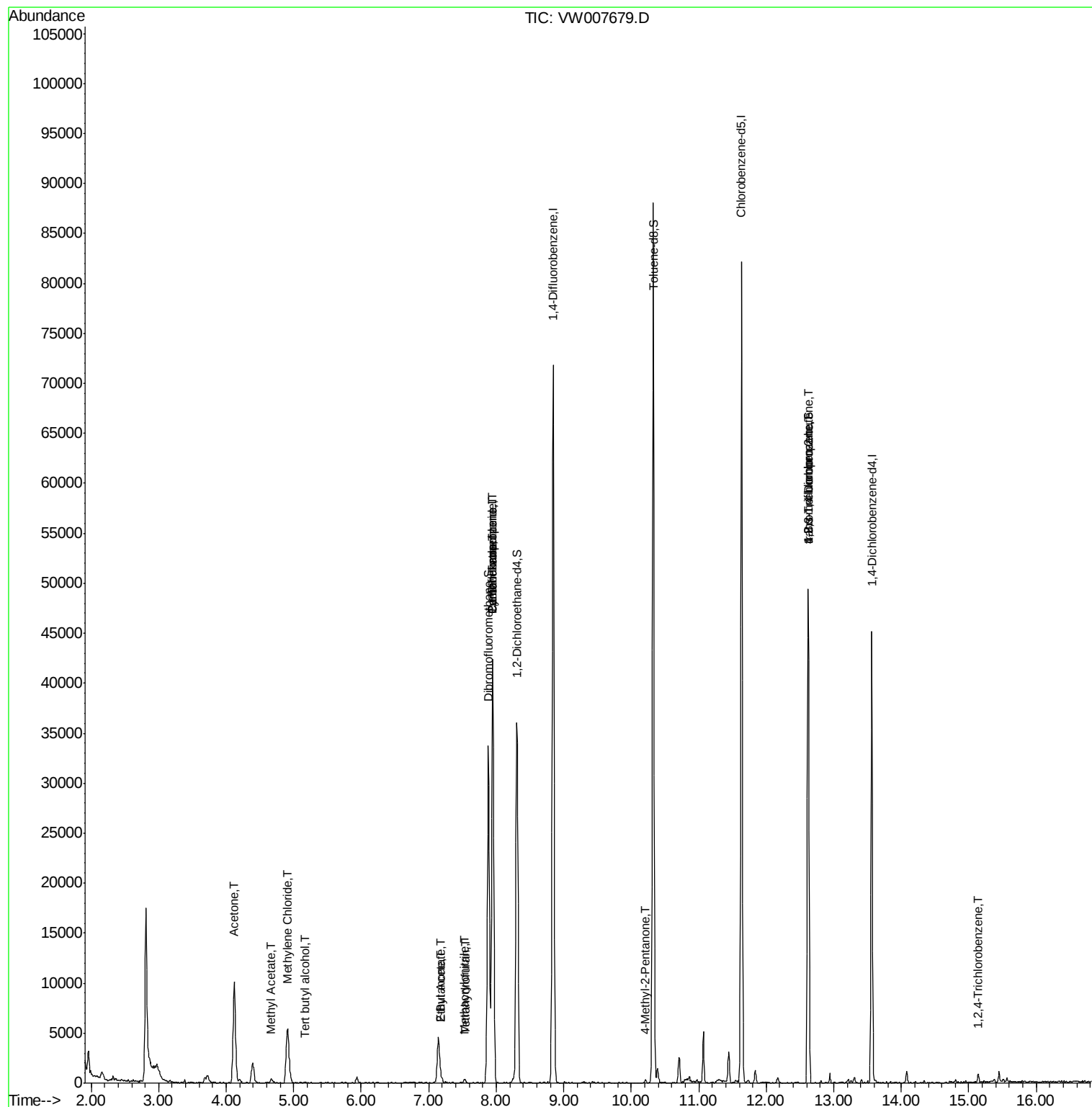
|                                |       |     |       |         |        | Qvalue |
|--------------------------------|-------|-----|-------|---------|--------|--------|
| 11) Tert butyl alcohol         | 5.17  | 59  | 214   | 9.008   | ug/l # | 74     |
| 16) Acetone                    | 4.12  | 43  | 16435 | 272.015 | ug/l   | 95     |
| 18) Methyl Acetate             | 4.67  | 43  | 919   | 5.604   | ug/l # | 74     |
| 20) Methylene Chloride         | 4.92  | 84  | 4338  | 9.995   | ug/l   | 94     |
| 25) 2-Butanone                 | 7.18  | 43  | 887   | 11.245  | ug/l # | 45     |
| 29) Tetrahydrofuran            | 7.54  | 42  | 215   | 4.306   | ug/l # | 61     |
| 31) Cyclohexane                | 7.95  | 56  | 688   | 1.280   | ug/l # | 30     |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 2291  | 4.112   | ug/l # | 46     |
| 37) Ethyl Acetate              | 7.18  | 43  | 887   | 4.280   | ug/l # | 66     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 3365  | 5.551   | ug/l # | 17     |
| 41) Methacrylonitrile          | 7.52  | 41  | 163   | 1.381   | ug/l # | 43     |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43  | 360   | 1.861   | ug/l # | 61     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 8730  | 88.914  | ug/l # | 1      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 8730  | 196.412 | ug/l # | 7      |
| 93) 1,2,4-Trichlorobenzene     | 15.14 | 180 | 370   | 1.489   | ug/l # | 87     |

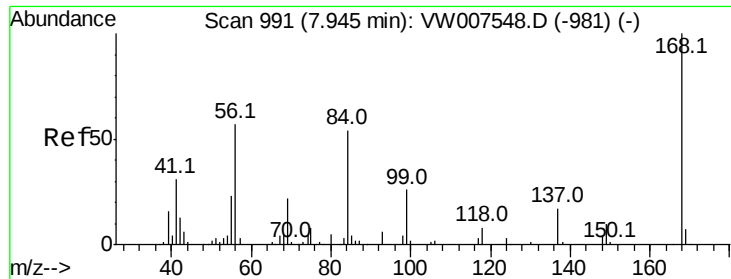
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW122018\  
Data File : VW007679.D  
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Sample : J6386-01  
Misc : 6.58G/5ML/MSVOA W/SOIL  
ALS Vial : 38 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Dec 19 03:23:49 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 11 02:58:16 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: VW007679.D

Acq: 19 Dec 2018 02:23

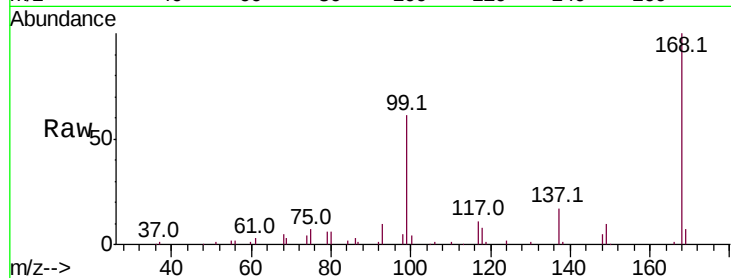
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:168 Resp: 31179

Ion Ratio Lower Upper

168 100

99 60.5 48.3 72.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

15000

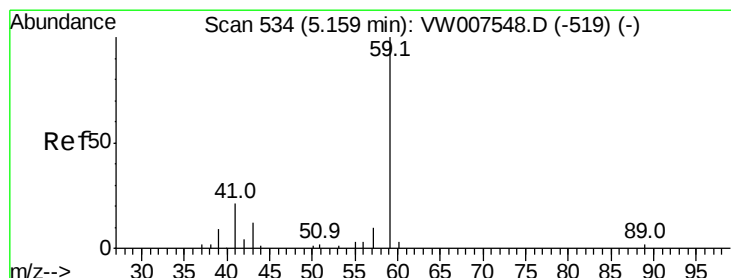
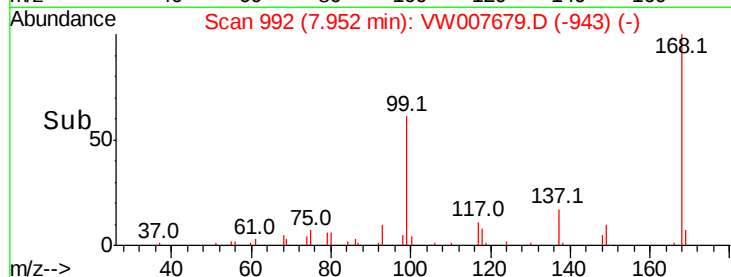
10000

5000

0

Time-->

7.85 7.90 7.95 8.00 8.05



#11

Tert butyl alcohol

Concen: 9.008 ug/l

RT: 5.17 min Scan# 536

Delta R.T. 0.01 min

Lab File: VW007679.D

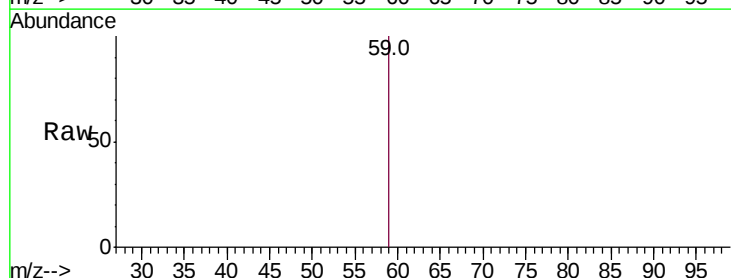
Acq: 19 Dec 2018 02:23

Tgt Ion: 59 Resp: 214

Ion Ratio Lower Upper

59 100

57 0.0 7.6 11.4#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.17

120

100

80

60

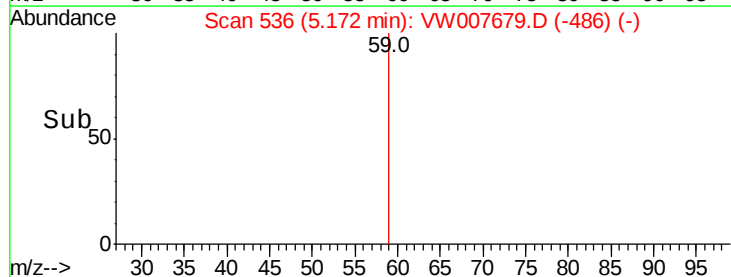
40

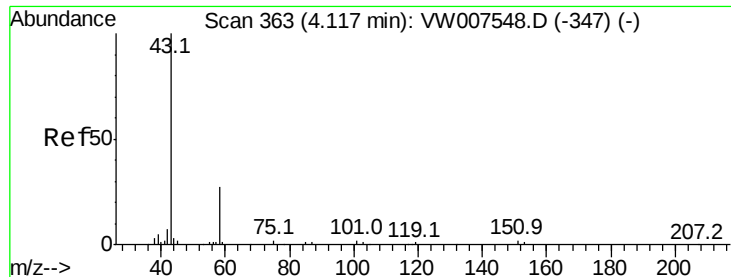
20

0

Time-->

5.15 5.20





#16

Acetone

Concen: 272.015 ug/l

RT: 4.12 min Scan# 363

Delta R.T. 0.00 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

Instrument :

MSVOA\_W

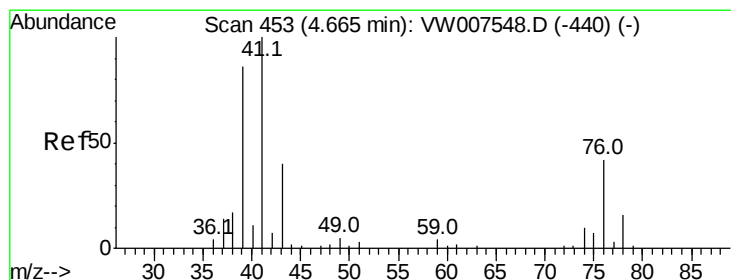
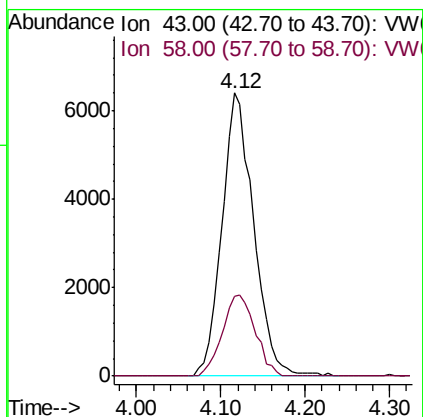
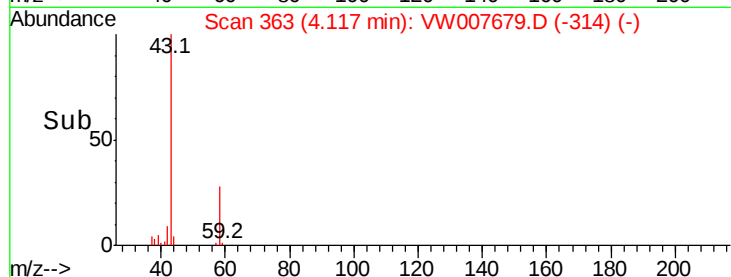
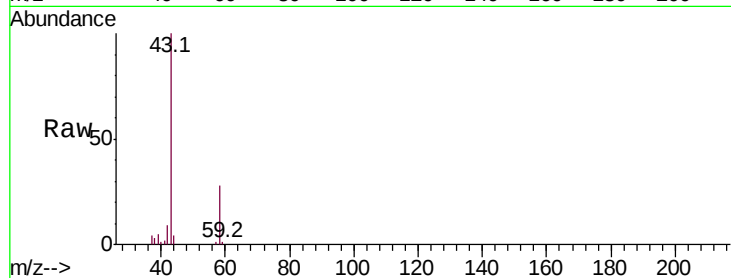
ClientSampled :

Tot Ion: 43 Resp: 16435

Ion Ratio Lower Upper

43 100

58 28.3 24.9 37.3



#18

Methyl Acetate

Concen: 5.604 ug/l

RT: 4.67 min Scan# 454

Delta R.T. 0.01 min

Lab File: VW007679.D

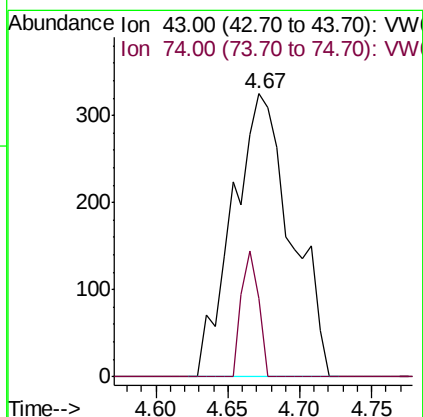
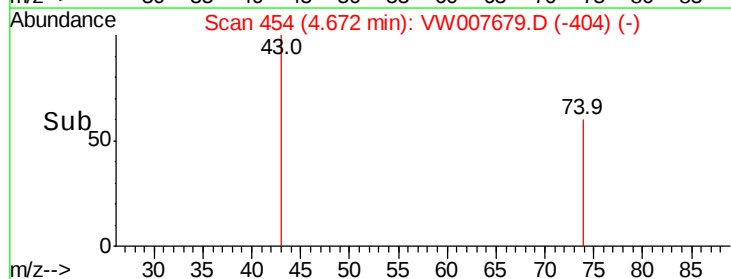
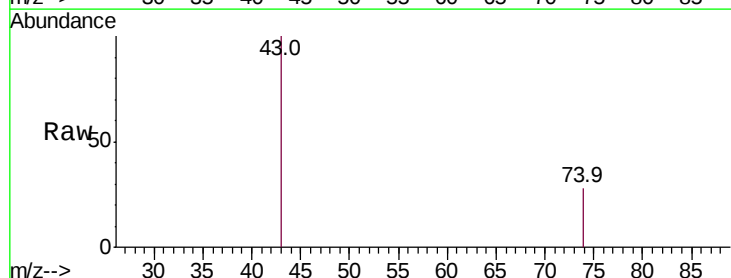
Acq: 19 Dec 2018 02:23

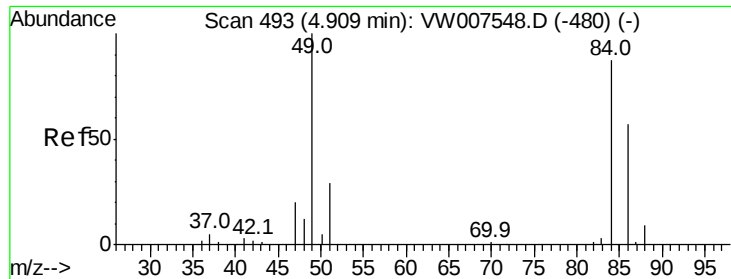
Tgt Ion: 43 Resp: 919

Ion Ratio Lower Upper

43 100

74 13.1 21.1 31.7#

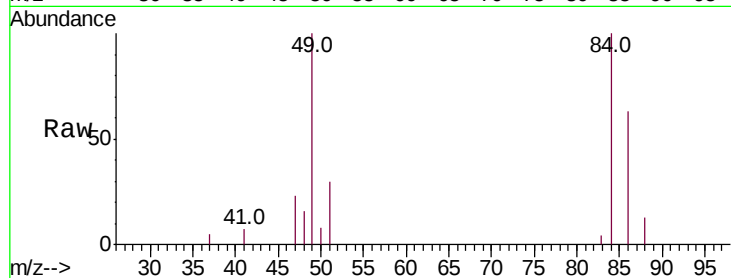




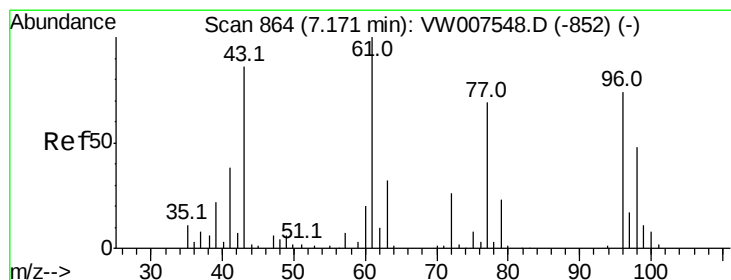
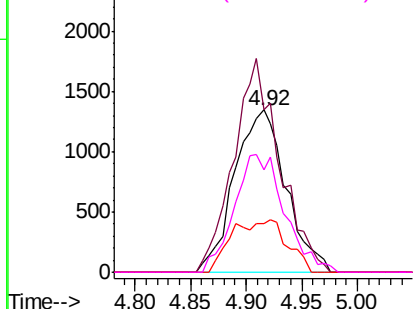
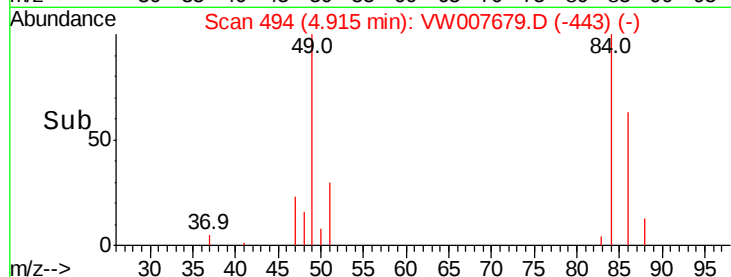
#20  
Methvlene Chloride  
Concen: 9.995 ug/l  
RT: 4.92 min Scan# 494  
Delta R.T. 0.01 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 84 Resp: 4338  
Ion Ratio Lower Upper  
84 100  
49 100.2 87.1 130.7  
51 30.2 28.2 42.2  
86 63.1 50.8 76.2

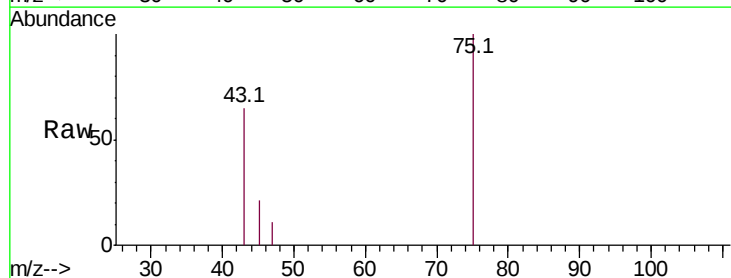


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

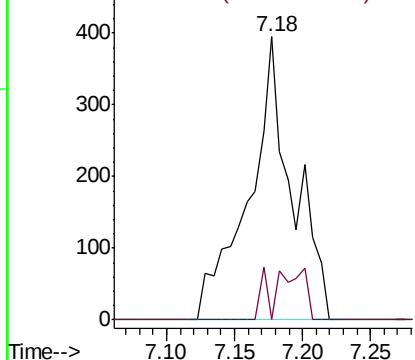
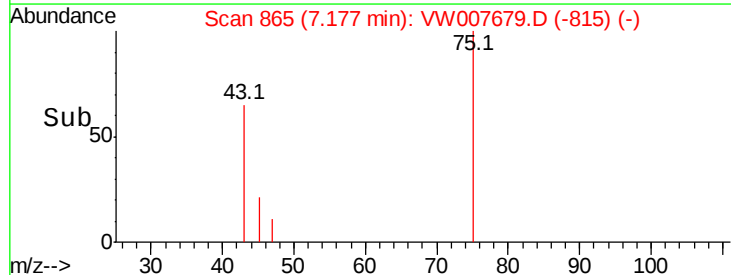


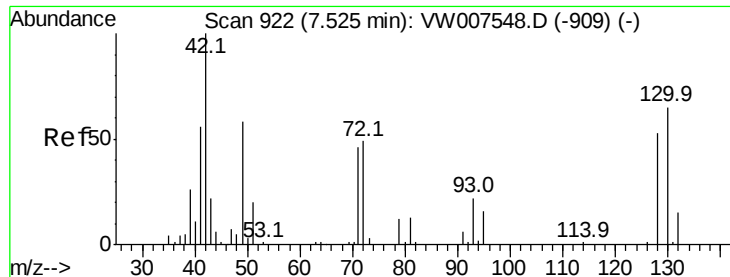
#25  
2-Butanone  
Concen: 11.245 ug/l  
RT: 7.18 min Scan# 865  
Delta R.T. 0.01 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Tgt Ion: 43 Resp: 887  
Ion Ratio Lower Upper  
43 100  
72 0.0 23.4 35.2#



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





#29

Tetrahydrofuran

Concen: 4.306 ug/l

RT: 7.54 min Scan# 924

Delta R.T. 0.01 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

Instrument :

MSVOA\_W

ClientSampled :

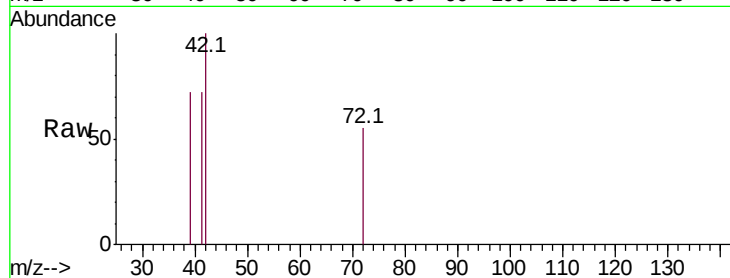
Tot Ion: 42 Resp: 215

Ion Ratio Lower Upper

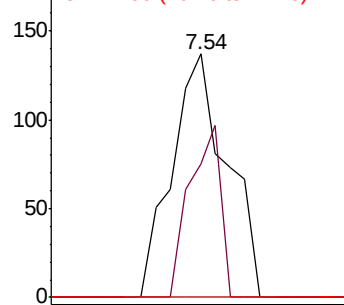
42 100

72 39.5 38.2 57.4

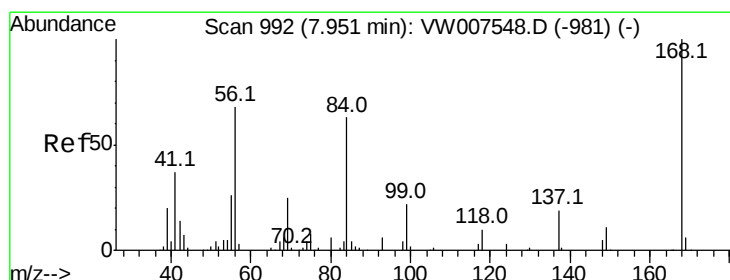
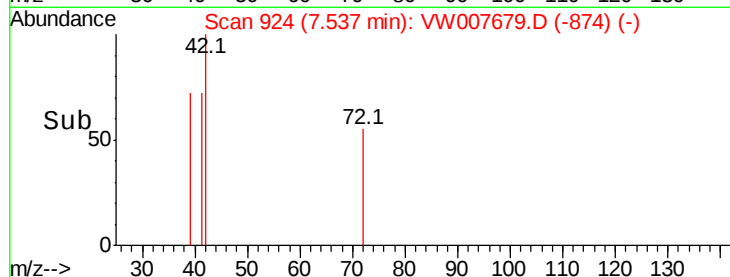
71 0.0 35.5 53.3#



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



Time-->



#31

Cyclohexane

Concen: 1.280 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

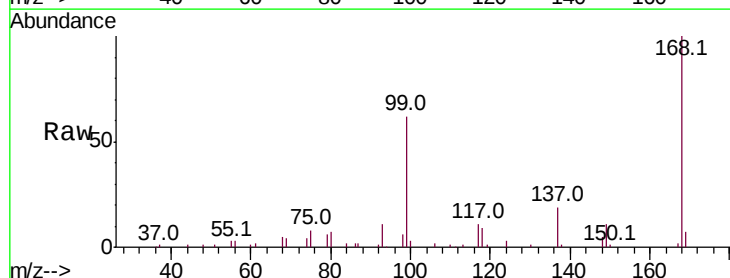
Tgt Ion: 56 Resp: 688

Ion Ratio Lower Upper

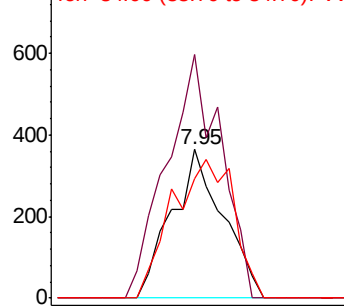
56 100

69 164.0 28.9 43.3#

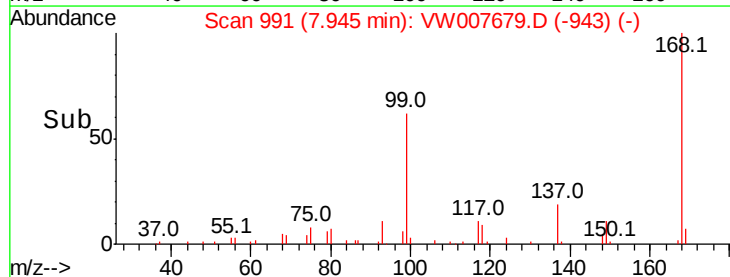
84 80.2 71.8 107.6

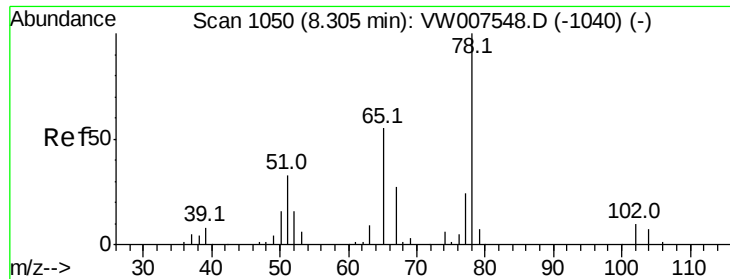


Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW



Time-->

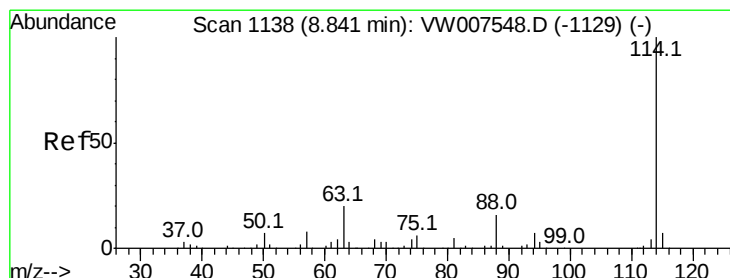
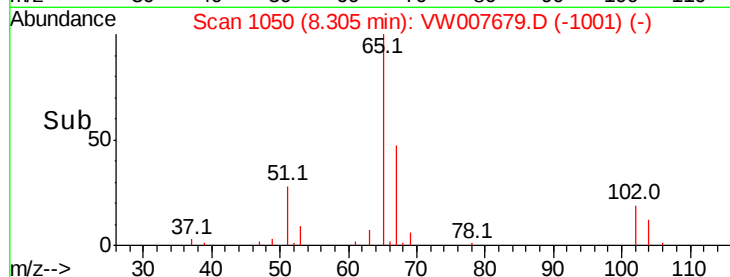
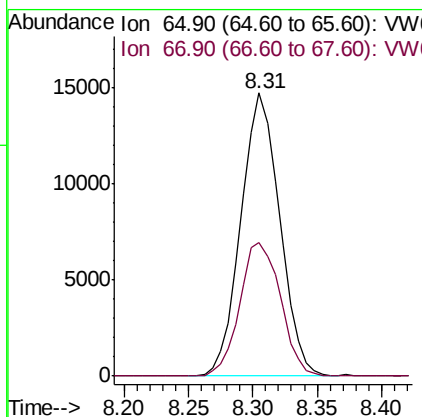
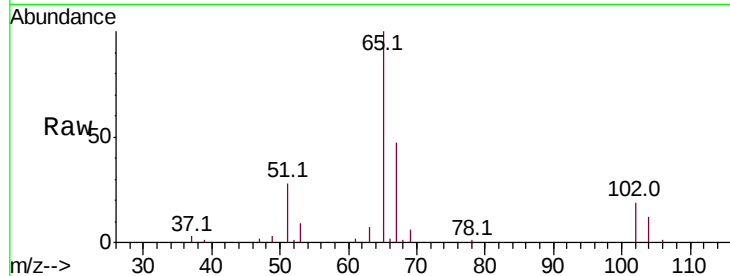




#33  
 1,2-Dichloroethane-d4  
 Concen: 88.961 ug/l  
 RT: 8.31 min Scan# 1050  
 Delta R.T. 0.00 min  
 Lab File: VW007679.D  
 Acq: 19 Dec 2018 02:23

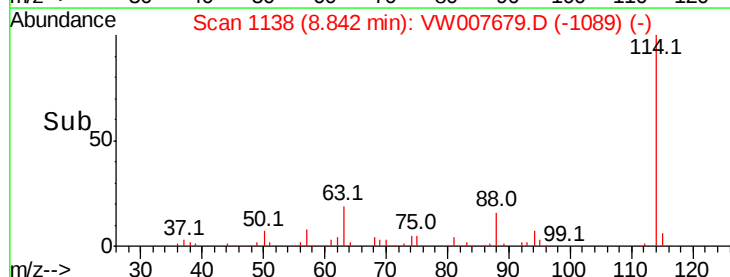
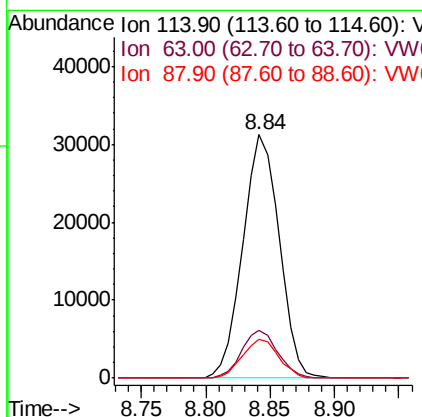
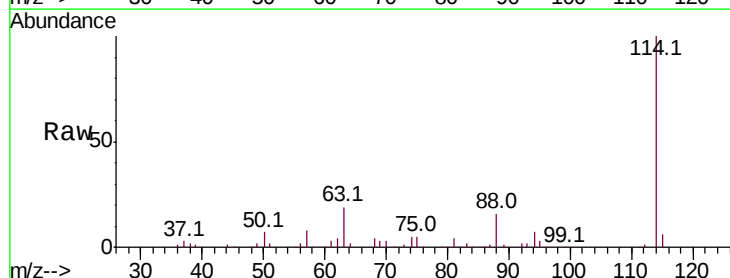
Instrument :  
 MSVOA\_W  
 ClientSampleId :

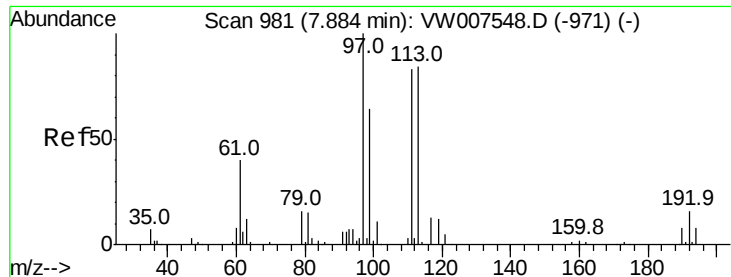
Tot Ion: 65 Resp: 30772  
 Ion Ratio Lower Upper  
 65 100  
 67 49.3 0.0 101.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW007679.D  
 Acq: 19 Dec 2018 02:23

Tgt Ion: 114 Resp: 61076  
 Ion Ratio Lower Upper  
 114 100  
 63 19.4 0.0 39.6  
 88 15.9 0.0 31.4

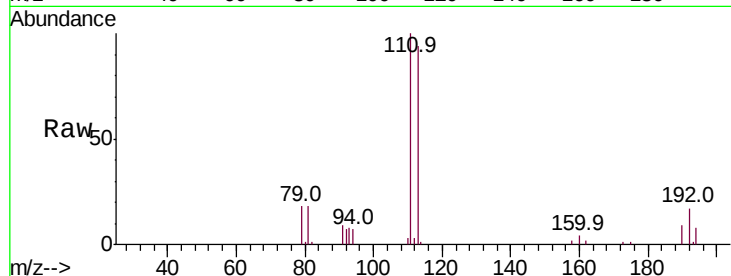




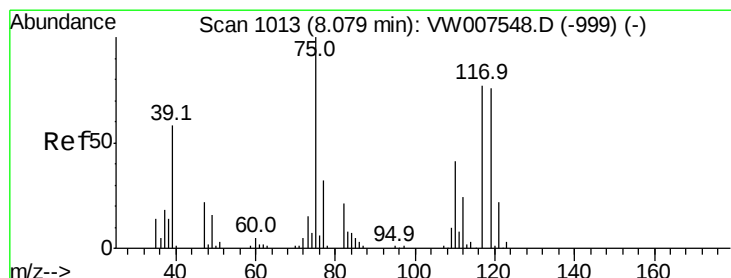
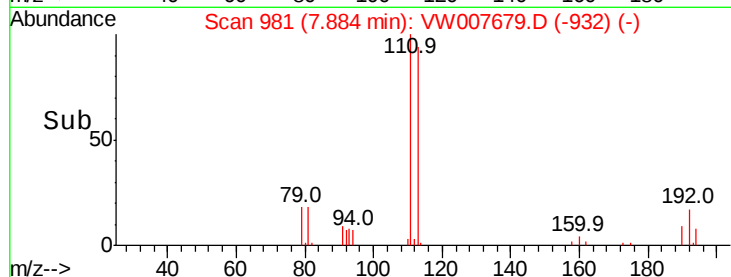
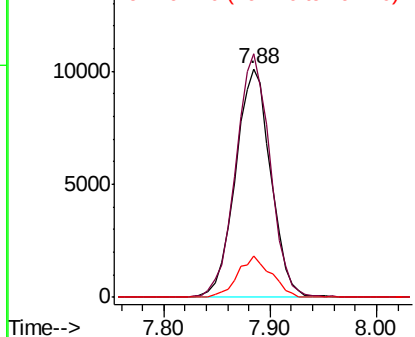
#35  
 Dibromofluoromethane  
 Concen: 63.386 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. 0.00 min  
 Lab File: VW007679.D  
 Acq: 19 Dec 2018 02:23

Instrument :  
 MSVOA\_W  
 ClientSampled :

Tot Ion:113 Resp: 23435  
 Ion Ratio Lower Upper  
 113 100  
 111 104.3 81.1 121.7  
 192 17.1 14.6 21.8

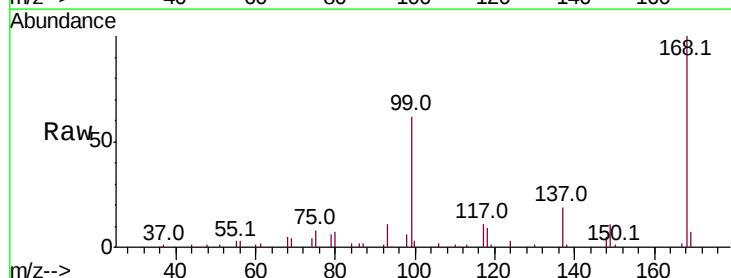


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

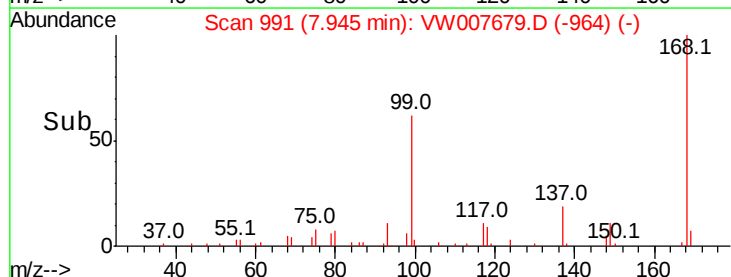
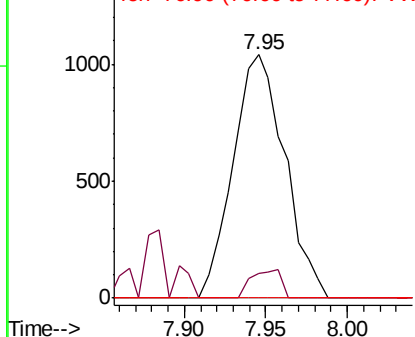


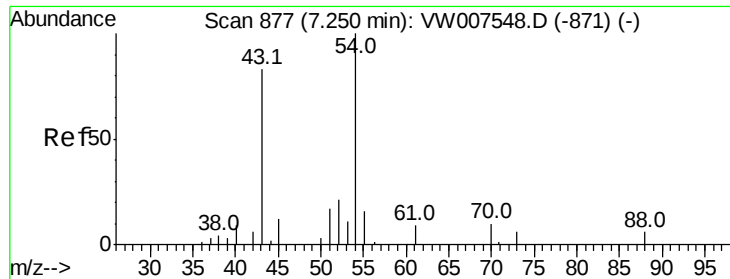
#36  
 1,1-Dichloropropene  
 Concen: 4.112 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW007679.D  
 Acq: 19 Dec 2018 02:23

Tgt Ion: 75 Resp: 2291  
 Ion Ratio Lower Upper  
 75 100  
 110 6.7 18.5 55.5#  
 77 0.0 25.6 38.4#



Abundance Ion 74.90 (74.60 to 75.60): VW  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VW

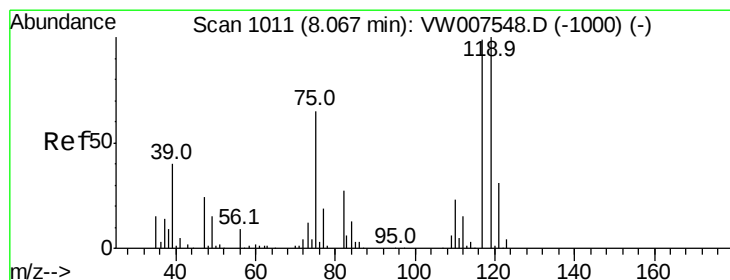
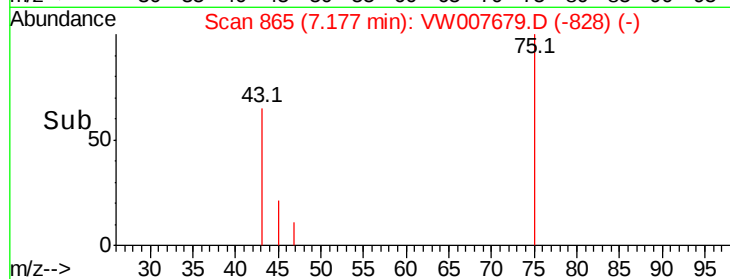
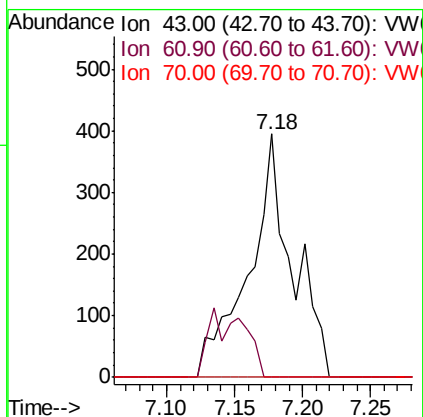
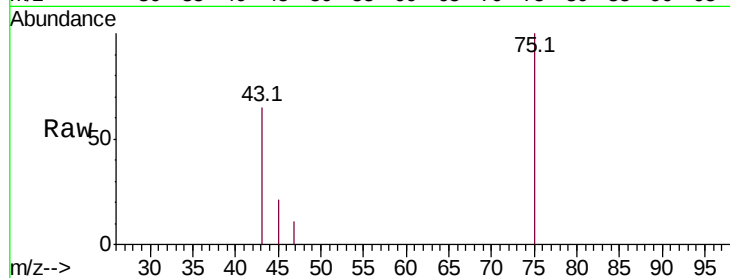




#37  
Ethyl Acetate  
Concen: 4.280 ug/l  
RT: 7.18 min Scan# 865  
Delta R.T. -0.07 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

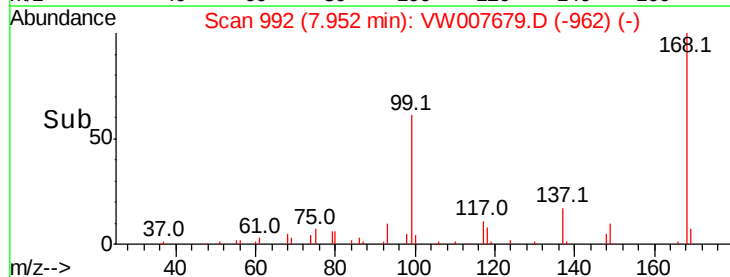
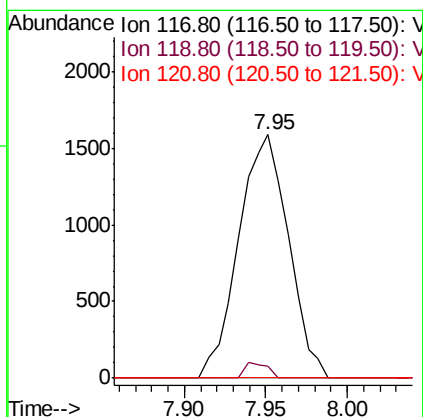
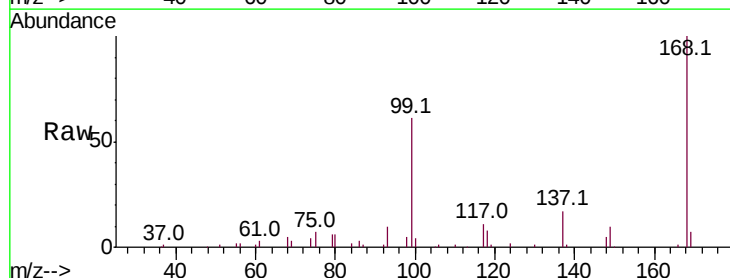
Instrument :  
MSVOA\_W  
ClientSampled :

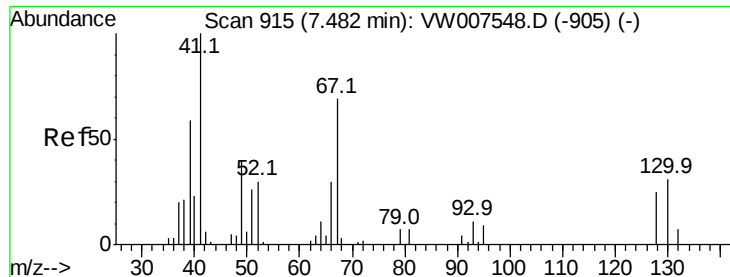
Tot Ion: 43 Resp: 887  
Ion Ratio Lower Upper  
43 100  
61 0.0 12.1 18.1#  
70 0.0 10.0 15.0#



#38  
Carbon Tetrachloride  
Concen: 5.551 ug/l  
RT: 7.95 min Scan# 992  
Delta R.T. -0.12 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Tgt Ion: 117 Resp: 3365  
Ion Ratio Lower Upper  
117 100  
119 4.9 74.3 111.5#  
121 0.0 24.3 36.5#

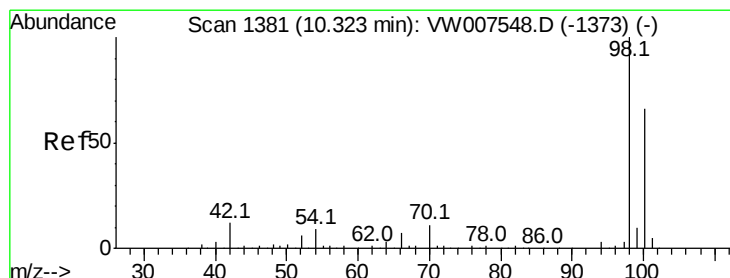
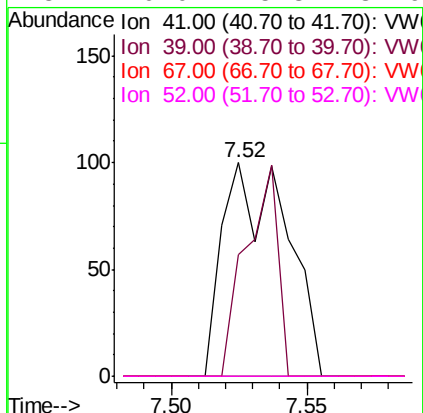
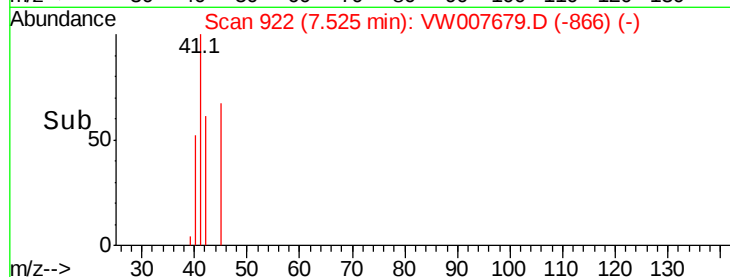
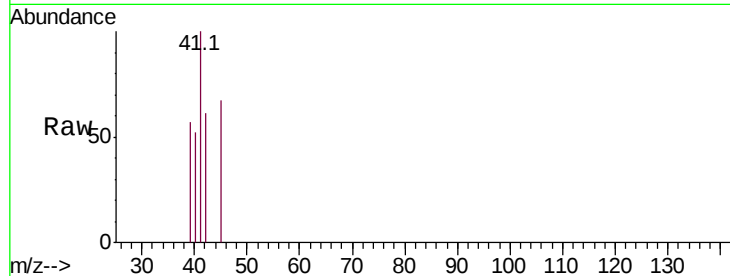




#41  
Methacrylonitrile  
Concen: 1.381 ug/l  
RT: 7.52 min Scan# 922  
Delta R.T. 0.04 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

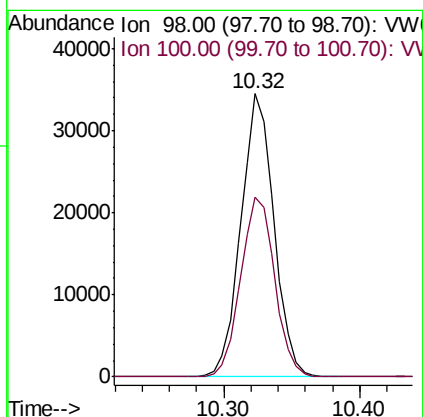
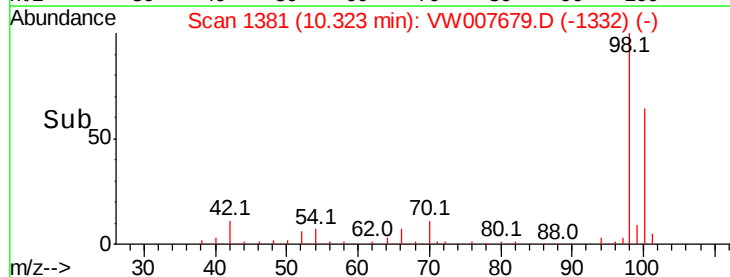
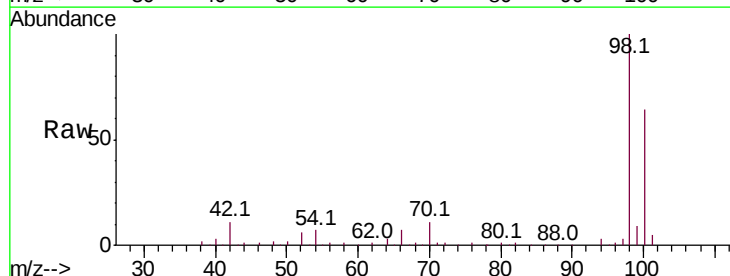
Instrument :  
MSVOA\_W  
ClientSampleId :

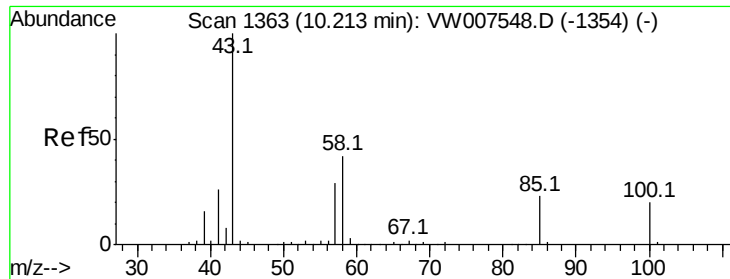
Tot Ion: 41 Resp: 163  
Ion Ratio Lower Upper  
41 100  
39 49.1 52.2 78.2#  
67 0.0 60.5 90.7#  
52 0.0 25.3 37.9#



#50  
Toluene-d8  
Concen: 42.125 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. 0.00 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Tgt Ion: 98 Resp: 58395  
Ion Ratio Lower Upper  
98 100  
100 65.6 51.8 77.8





#51

4-Methyl-2-Pentanone

Concen: 1.861 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

Instrument :

MSVOA\_W

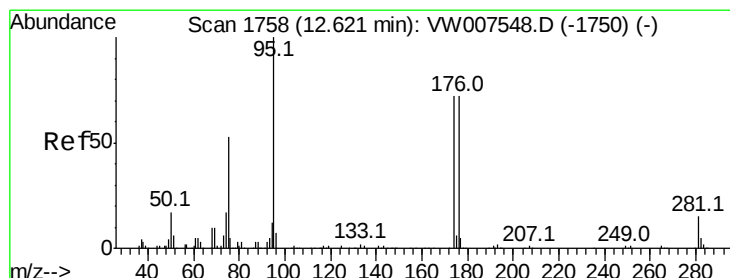
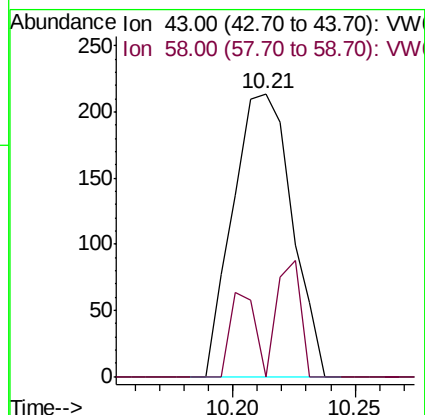
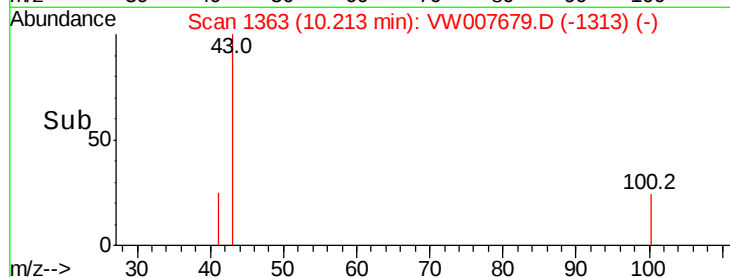
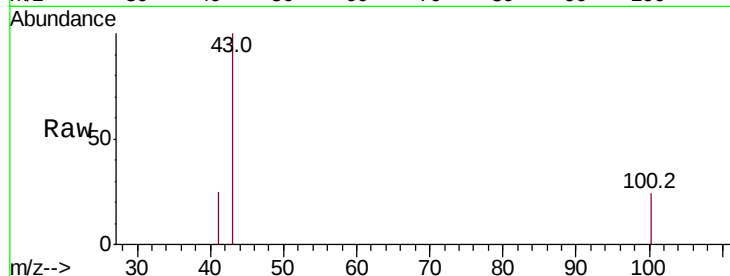
ClientSampled :

Tot Ion: 43 Resp: 360

Ion Ratio Lower Upper

43 100

58 16.7 33.1 49.7#



#62

4-Bromofluorobenzene

Concen: 31.294 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.00 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

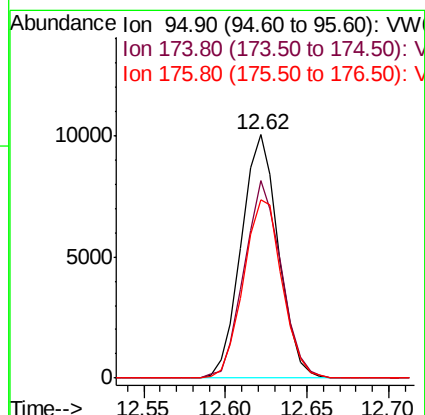
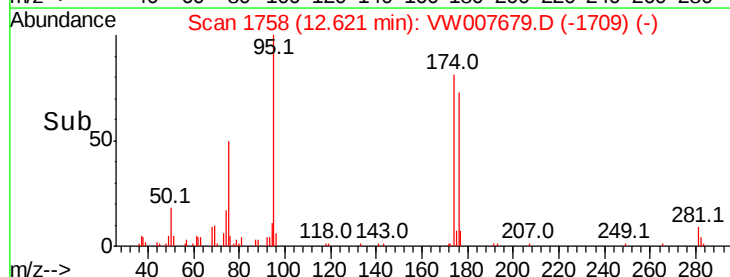
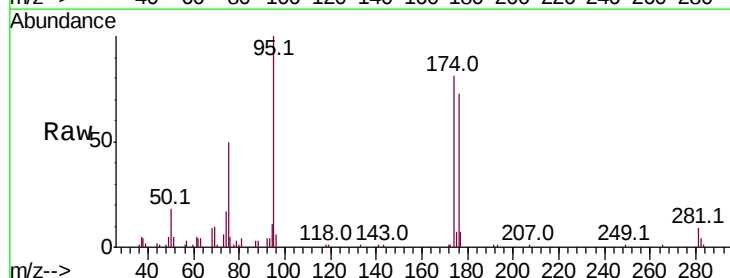
Tgt Ion: 95 Resp: 15950

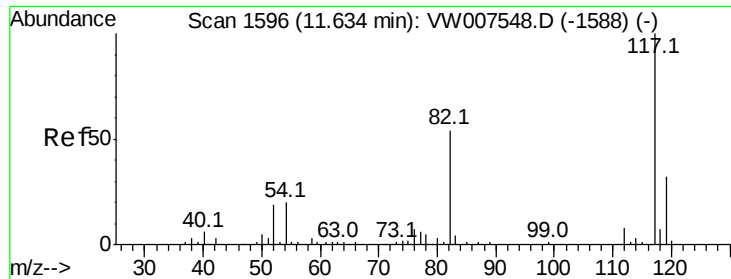
Ion Ratio Lower Upper

95 100

174 80.8 0.0 147.2

176 76.1 0.0 138.8

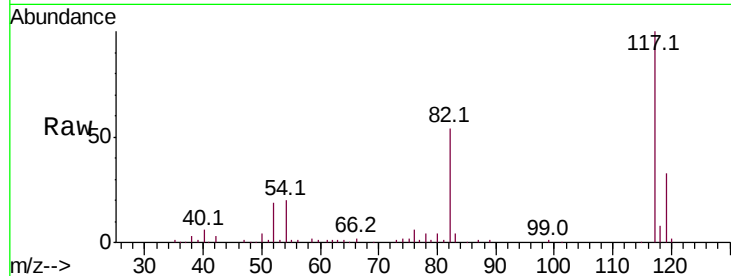




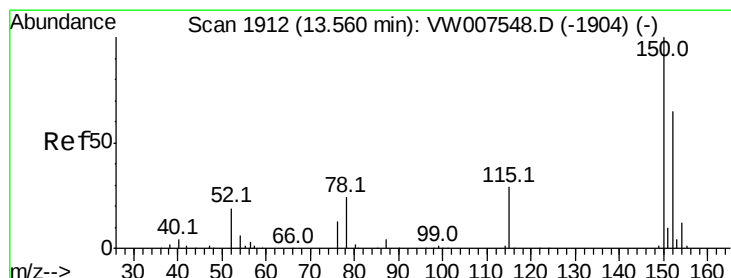
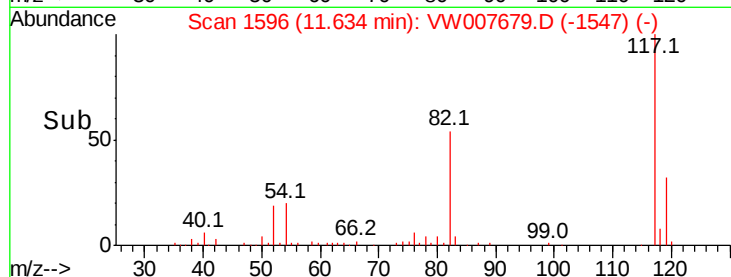
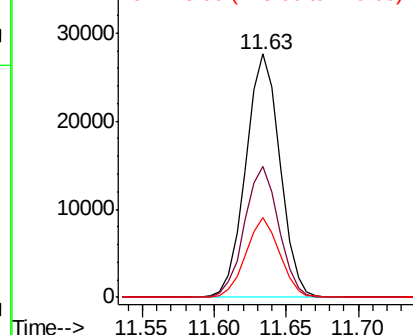
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. 0.00 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:117 Resp: 45356  
Ion Ratio Lower Upper  
117 100  
82 53.9 42.3 63.5  
119 32.9 23.0 34.6

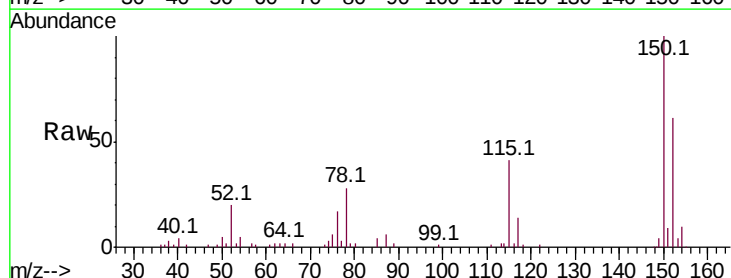


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VW  
Ion 118.90 (118.60 to 119.60): V

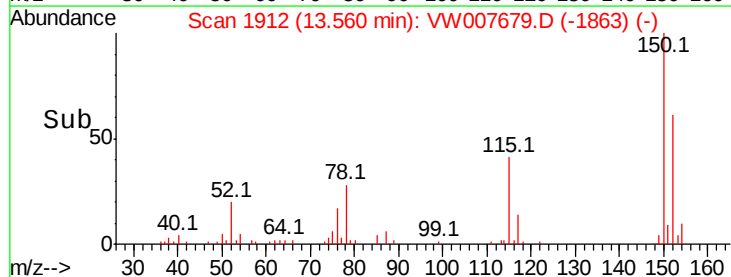
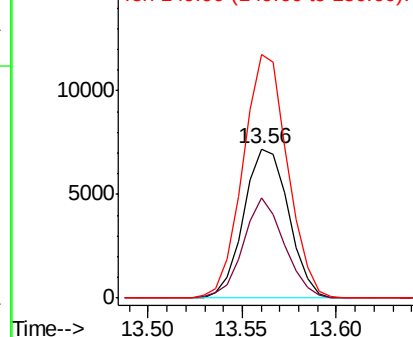


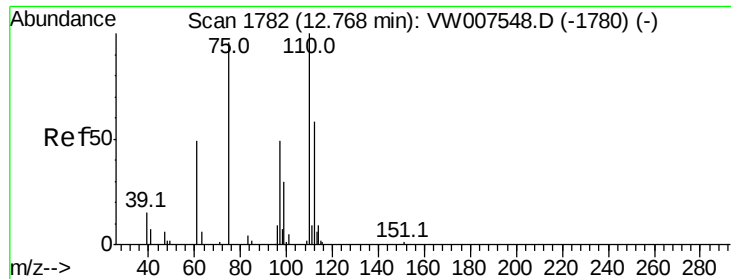
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. 0.00 min  
Lab File: VW007679.D  
Acq: 19 Dec 2018 02:23

Tgt Ion:152 Resp: 11908  
Ion Ratio Lower Upper  
152 100  
115 61.6 31.4 94.2  
150 161.7 0.0 358.4



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: 88.914 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

Instrument :

MSVOA\_W

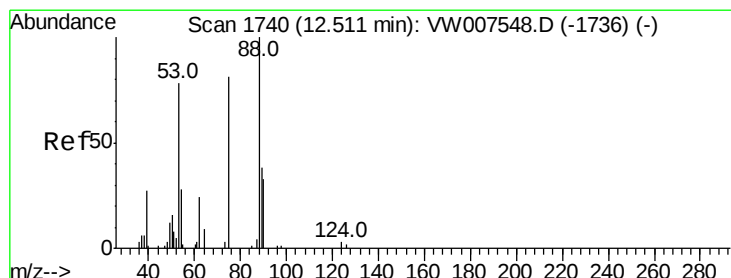
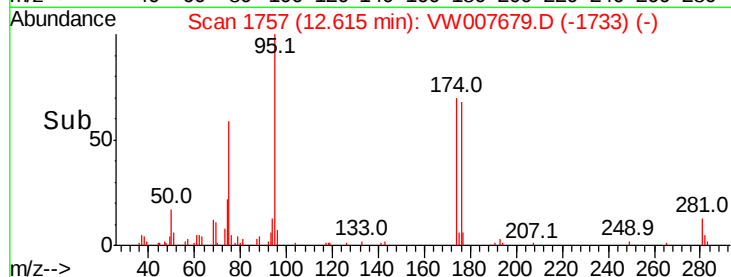
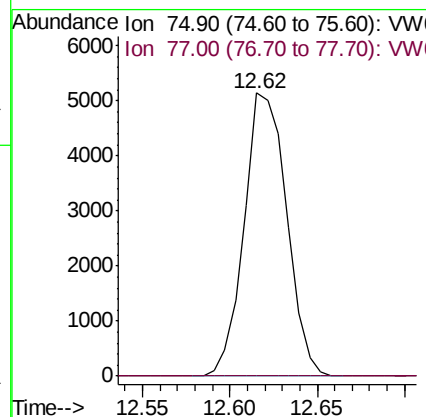
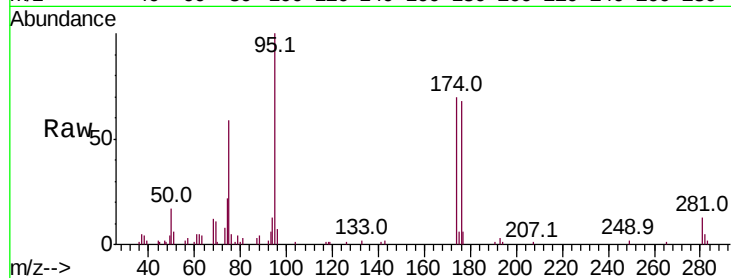
ClientSampleId :

Tot Ion: 75 Resp: 8730

Ion Ratio Lower Upper

75 100

77 0.0 166.9 500.8#



#81

trans-1,4-Dichloro-2-butene

Concen: 196.412 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW007679.D

Acq: 19 Dec 2018 02:23

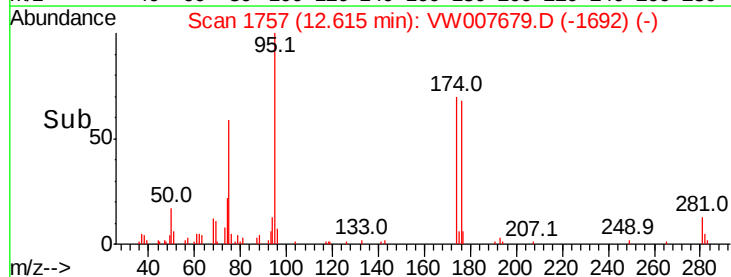
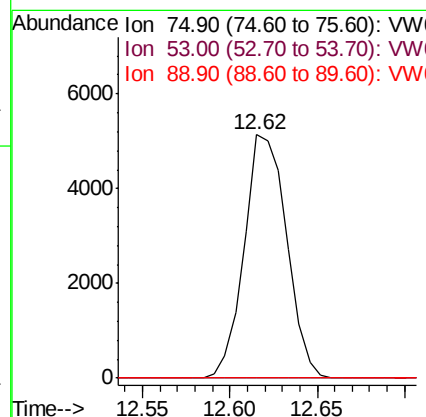
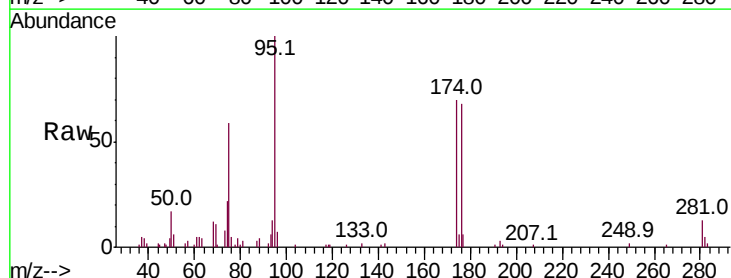
Tgt Ion: 75 Resp: 8730

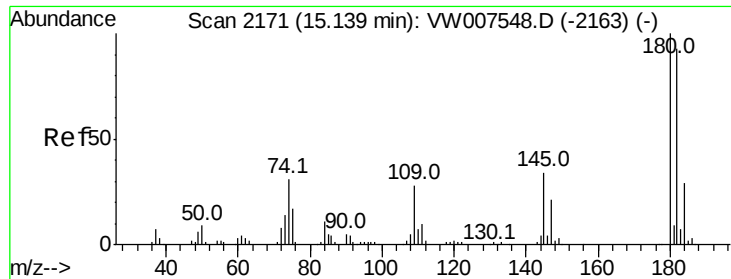
Ion Ratio Lower Upper

75 100

53 0.0 84.9 127.3#

89 0.0 40.3 60.5#

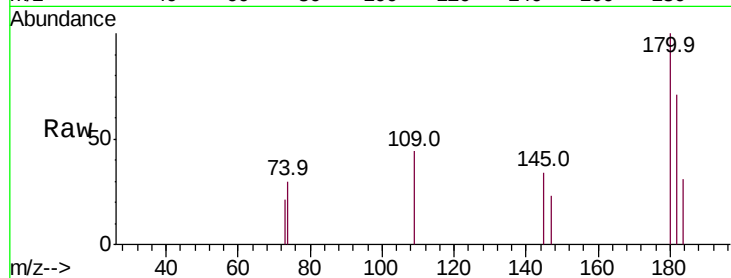




#93  
 1,2,4-Trichlorobenzene  
 Concen: 1.489 ug/l  
 RT: 15.14 min Scan# 2171  
 Delta R.T. 0.00 min  
 Lab File: VW007679.D  
 Acq: 19 Dec 2018 02:23

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Tot Ion:180 Resp: 370  
 Ion Ratio Lower Upper  
 180 100  
 182 95.4 49.9 149.6  
 145 14.3 17.8 53.4#



Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.80 (144.50 to 145.50): V

