

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW052219\  
 Data File : VW010512.D  
 Acq On : 22 May 2019 16:04  
 Operator : SY/VA  
 Sample : K3002-05  
 Misc : 5.09G/5ML/MSVOA W/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 23-C3-20190399

Quant Time: May 23 06:57:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W052019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 21 06:38:43 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 108136   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 200224   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 169119   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 64756    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 67823    | 60.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 121.54% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 63396    | 52.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.36% |      |
| 50) Toluene-d8            | 10.32  | 98  | 240692   | 51.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.72% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 83256    | 45.04 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.08%  |      |

## Target Compounds

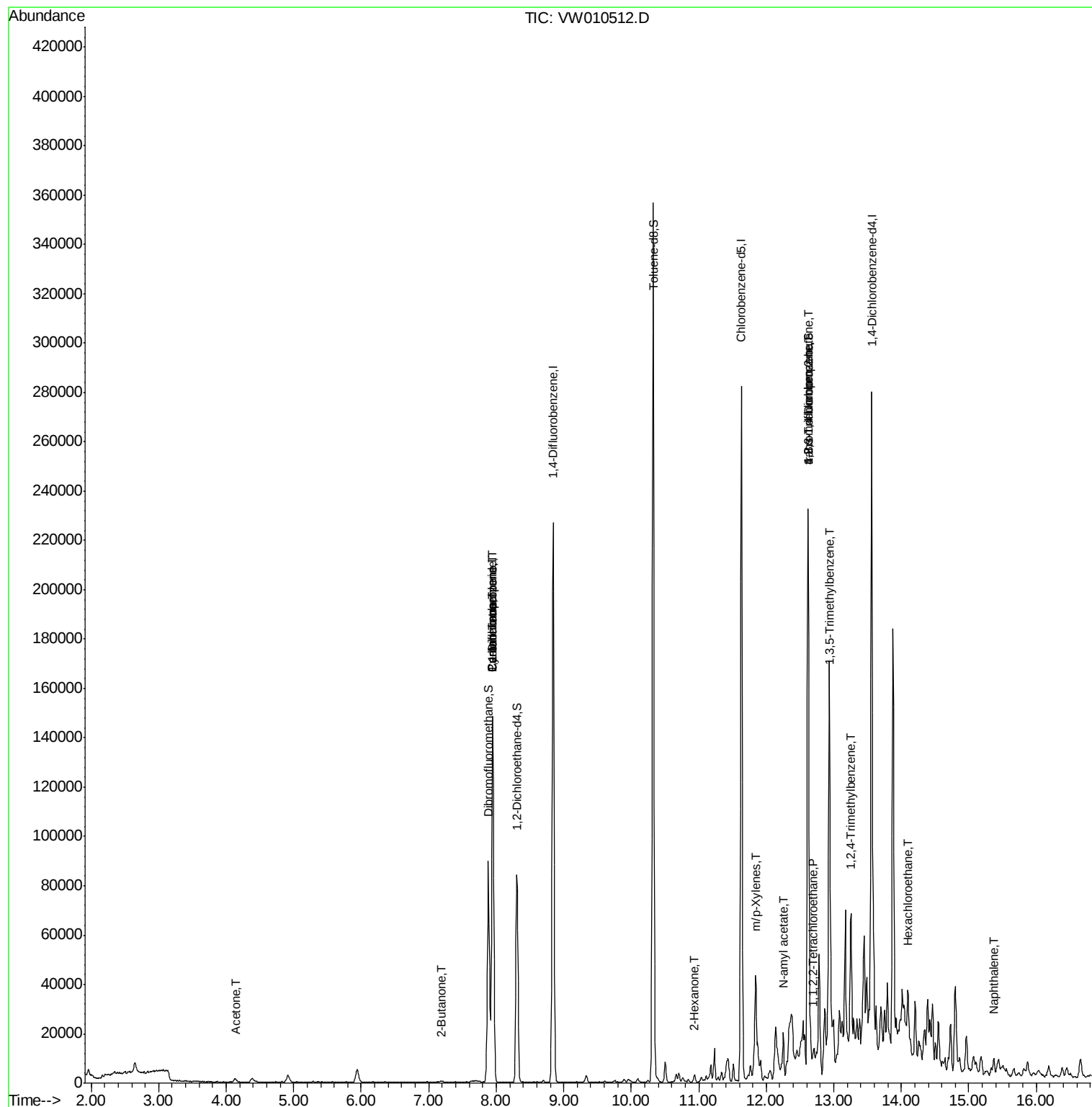
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.00  | 85  | 76    | Below Cal | #      | 42     |
| 13) Acrolein                   | 3.91  | 56  | 47    | Below Cal | #      | 67     |
| 16) Acetone                    | 4.14  | 43  | 2435  | 10.688    | ug/l   | 98     |
| 20) Methylene Chloride         | 4.91  | 84  | 2262  | Below Cal |        | 88     |
| 25) 2-Butanone                 | 7.19  | 43  | 674   | 2.067     | ug/l # | 45     |
| 31) Cyclohexane                | 7.95  | 56  | 2513  | 1.186     | ug/l # | 11     |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 8683  | 4.655     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 11739 | 5.834     | ug/l # | 16     |
| 59) 2-Hexanone                 | 10.94 | 43  | 1229  | 2.146     | ug/l # | 22     |
| 68) m/p-Xylenes                | 11.83 | 106 | 2951  | 1.182     | ug/l   | 88     |
| 74) N-amyl acetate             | 12.26 | 43  | 3503  | 2.975     | ug/l # | 61     |
| 75) 1,1,2,2-Tetrachloroethane  | 12.69 | 83  | 944   | 1.010     | ug/l # | 75     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 40162 | 61.100    | ug/l # | 1      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105 | 14798 | 3.400     | ug/l   | 97     |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 40162 | 127.518   | ug/l # | 14     |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105 | 30982 | 7.148     | ug/l   | 100    |
| 90) Hexachloroethane           | 14.10 | 117 | 1069  | 1.147     | ug/l # | 15     |
| 95) Naphthalene                | 15.37 | 128 | 6282  | 2.140     | ug/l   | 96     |

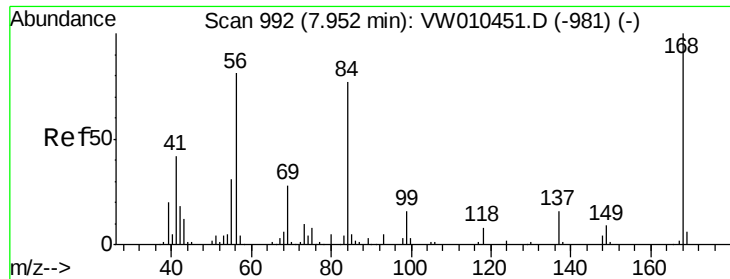
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW052219\  
Data File : VW010512.D  
Acq On : 22 May 2019 16:04  
Operator : SY/VA  
Sample : K3002-05  
Misc : 5.09G/5ML/MSVOA W/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
23-C3-20190399

Quant Time: May 23 06:57:59 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W052019S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 21 06:38:43 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: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

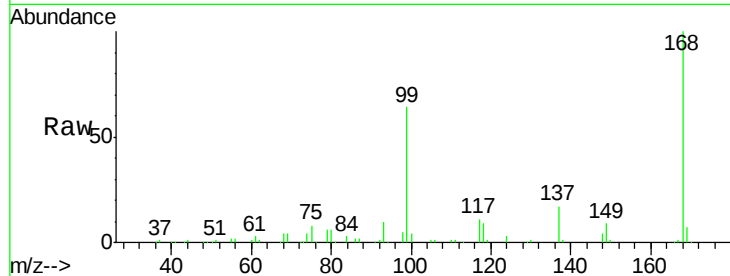
23-C3-20190399

Tot Ion:168 Resp: 108136

Ion Ratio Lower Upper

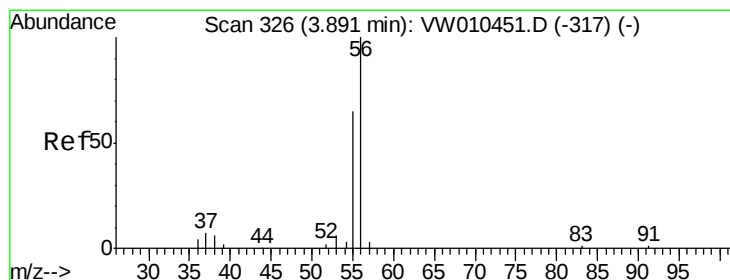
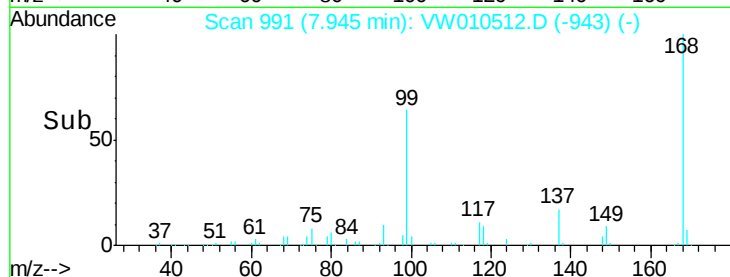
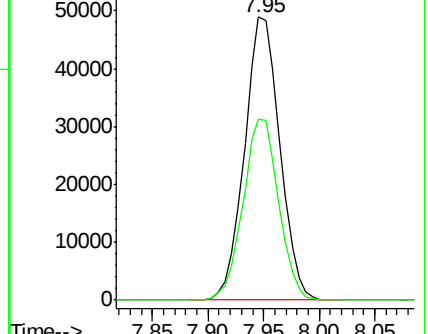
168 100

99 63.8 46.1 69.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#13

Acrolein

Concen: Below Cal

RT: 3.91 min Scan# 329

Delta R.T. 0.02 min

Lab File: VW010512.D

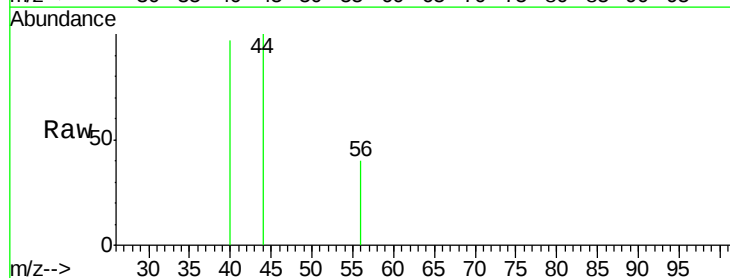
Acq: 22 May 2019 16:04

Tgt Ion: 56 Resp: 47

Ion Ratio Lower Upper

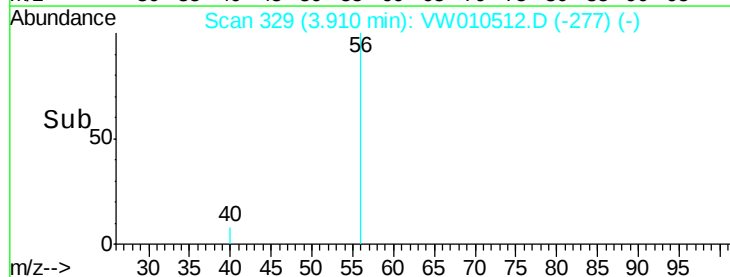
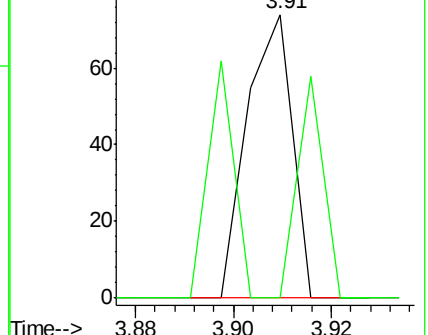
56 100

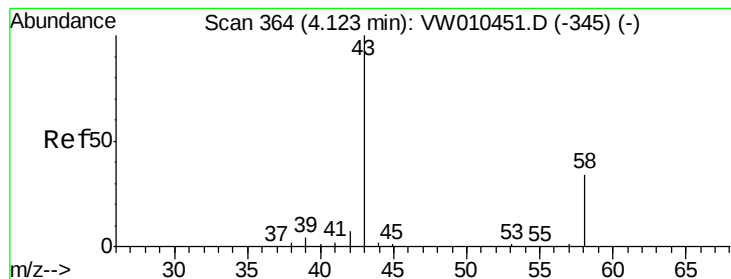
55 44.7 57.9 86.9#



Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 55.00 (54.70 to 55.70): VW





#16

Acetone

Concen: 10.688 ug/l

RT: 4.14 min Scan# 366

Delta R.T. 0.01 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

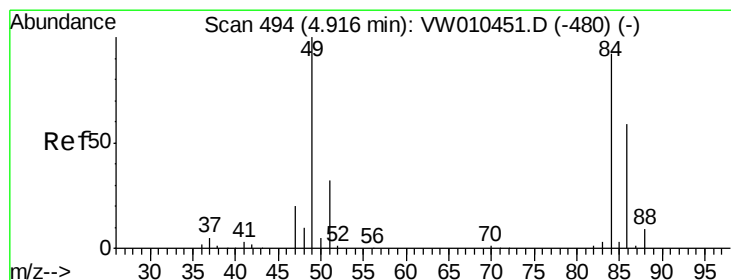
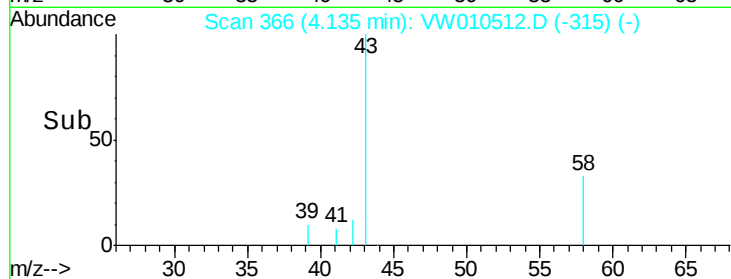
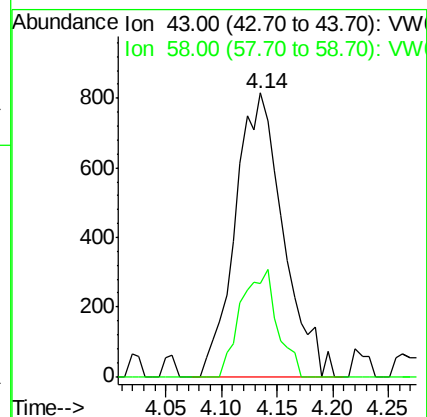
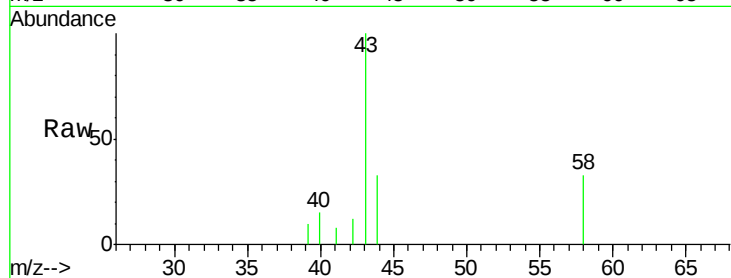
23-C3-20190399

Tot Ion: 43 Resp: 2435

Ion Ratio Lower Upper

43 100

58 32.6 27.0 40.4



#20

Methylene Chloride

Concen: Below Cal

RT: 4.91 min Scan# 493

Delta R.T. -0.01 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Tgt Ion: 84 Resp: 2262

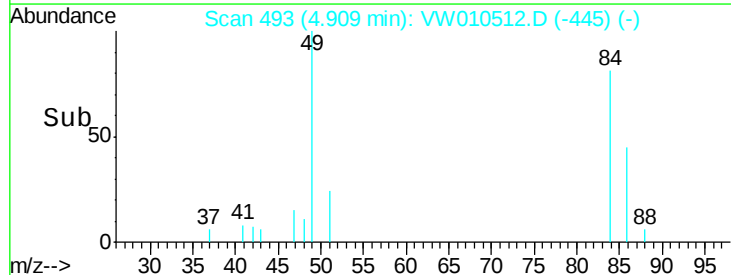
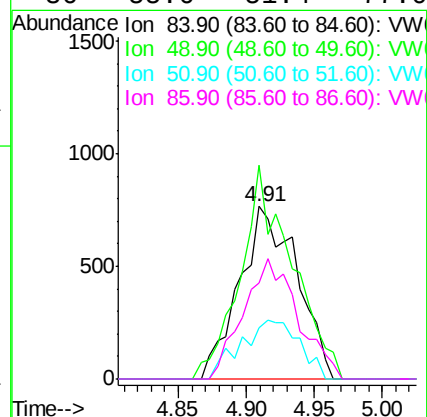
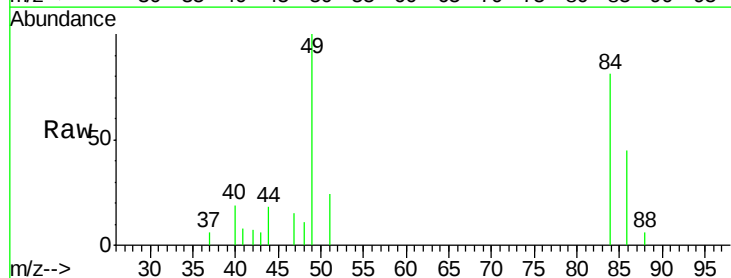
Ion Ratio Lower Upper

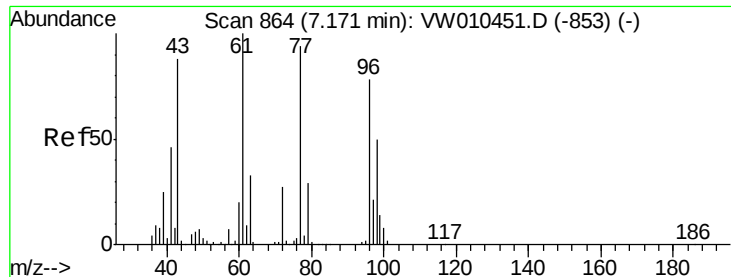
84 100

49 123.9 87.2 130.8

51 29.9 27.7 41.5

86 55.6 51.4 77.0





#25

2-Butanone

Concen: 2.067 ug/l

RT: 7.19 min Scan# 867

Delta R.T. 0.02 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

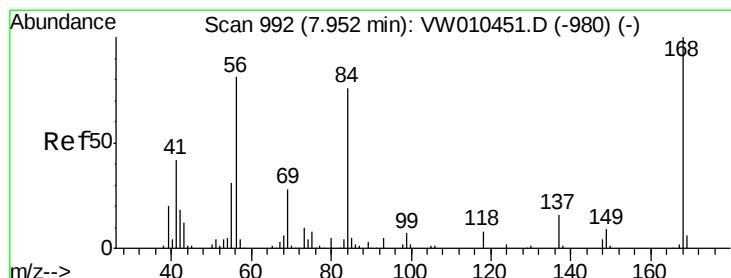
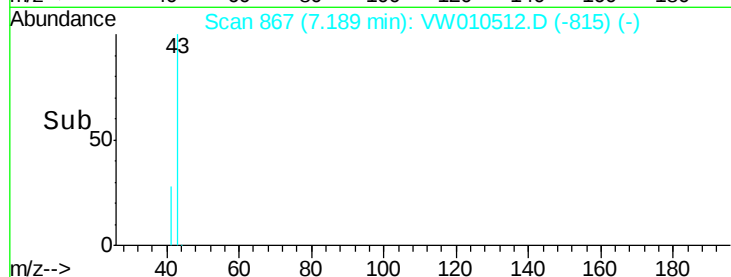
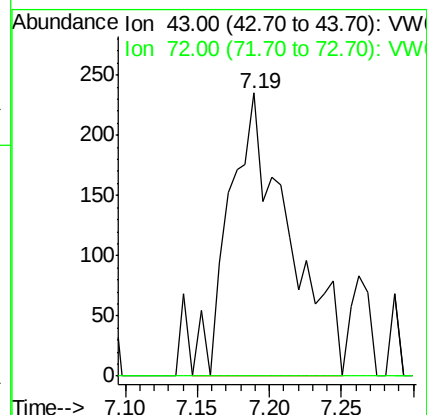
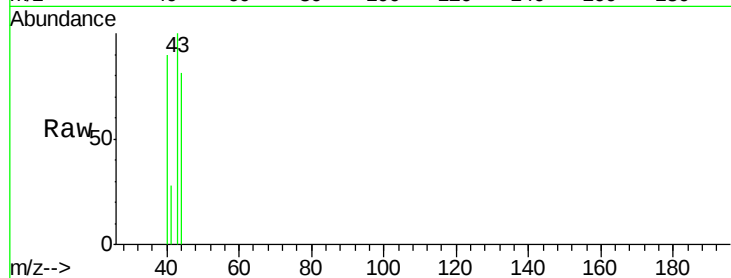
23-C3-20190399

Tot Ion: 43 Resp: 674

Ion Ratio Lower Upper

43 100

72 0.0 24.1 36.1#



#31

Cyclohexane

Concen: 1.186 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

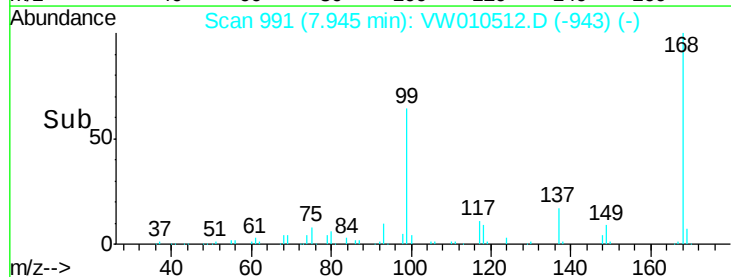
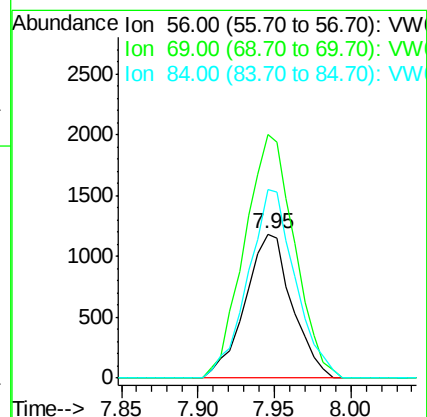
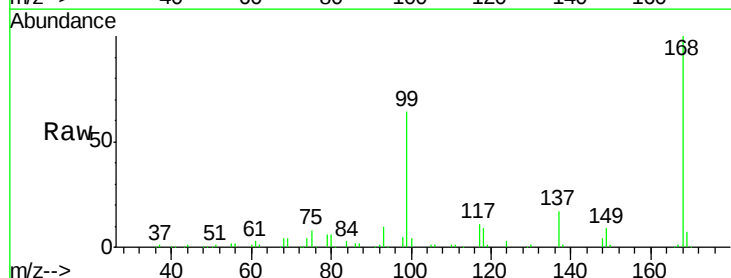
Tgt Ion: 56 Resp: 2513

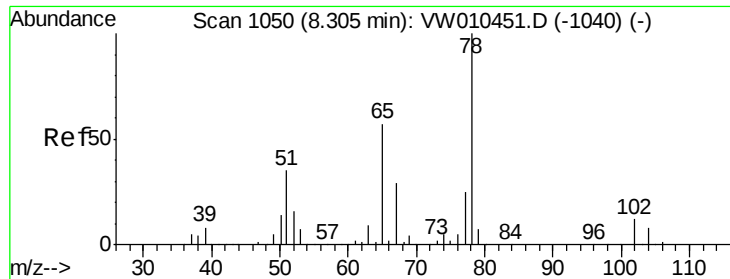
Ion Ratio Lower Upper

56 100

69 168.9 28.2 42.2#

84 130.5 75.8 113.8#

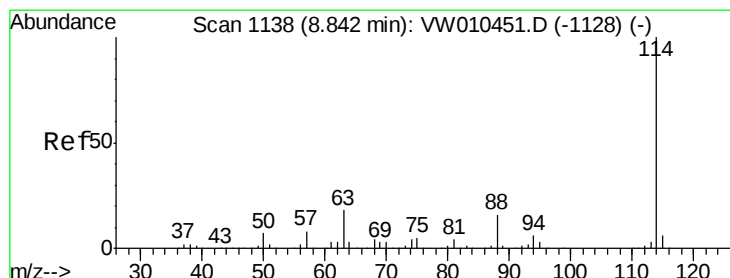
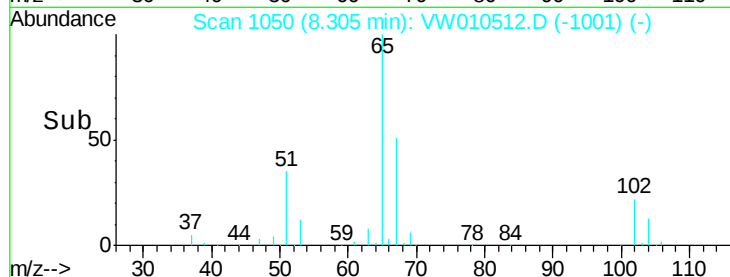
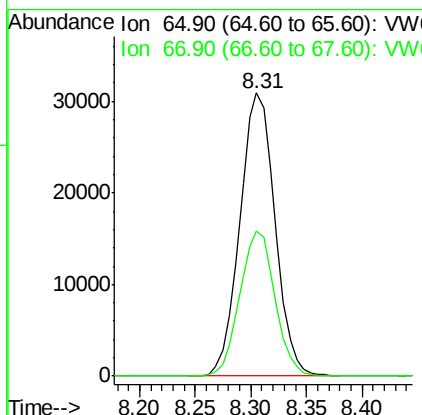
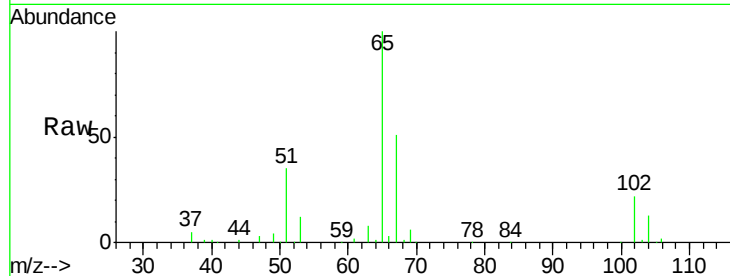




#33  
 1,2-Dichloroethane-d4  
 Concen: 60.765 ug/l  
 RT: 8.31 min Scan# 1050  
 Delta R.T. -0.00 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

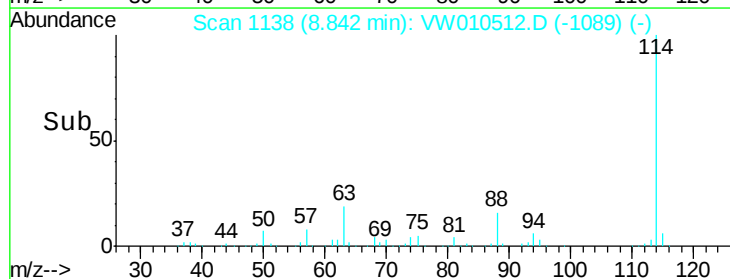
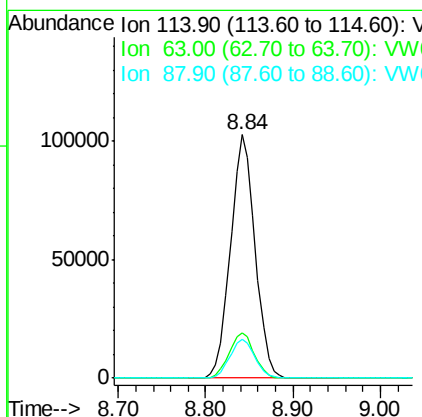
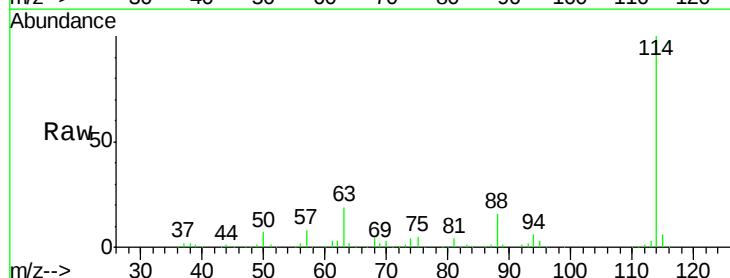
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 23-C3-20190399

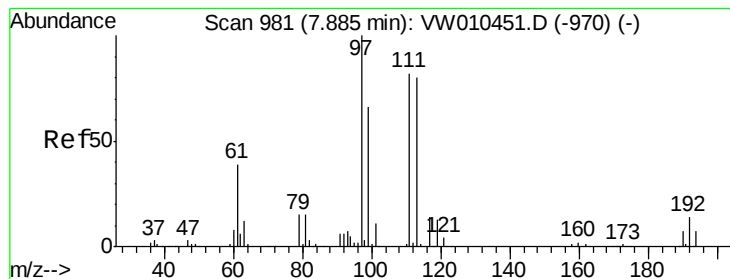
Tot Ion: 65 Resp: 67823  
 Ion Ratio Lower Upper  
 65 100  
 67 51.4 0.0 103.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

Tgt Ion: 114 Resp: 200224  
 Ion Ratio Lower Upper  
 114 100  
 63 18.8 0.0 36.0  
 88 16.0 0.0 32.0





#35

Dibromofluoromethane

Concen: 52.181 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

23-C3-20190399

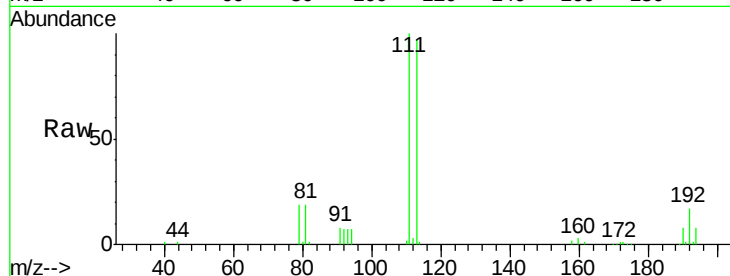
Tot Ion:113 Resp: 63396

Ion Ratio Lower Upper

113 100

111 104.1 82.2 123.4

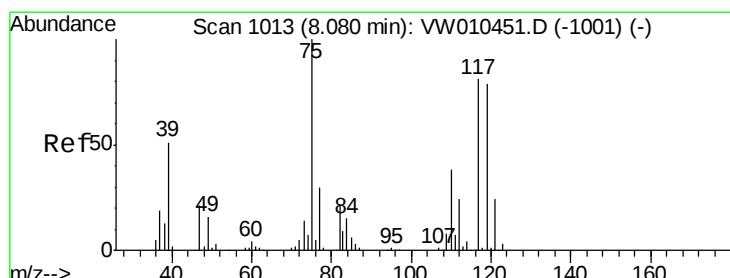
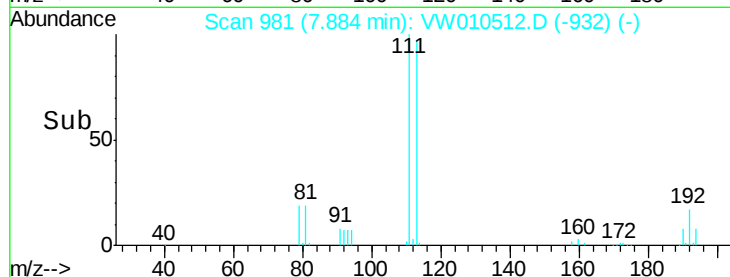
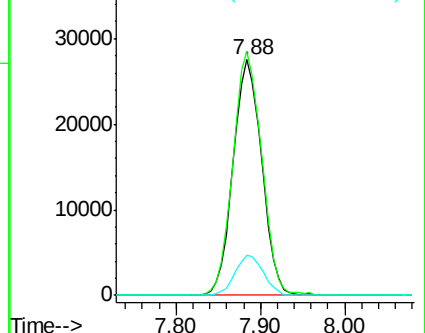
192 16.8 14.3 21.5



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: 4.655 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

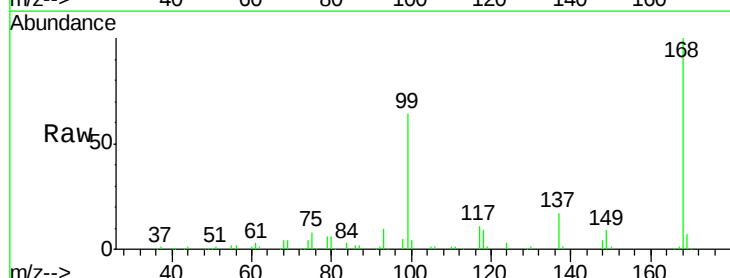
Tgt Ion: 75 Resp: 8683

Ion Ratio Lower Upper

75 100

110 9.4 19.2 57.6#

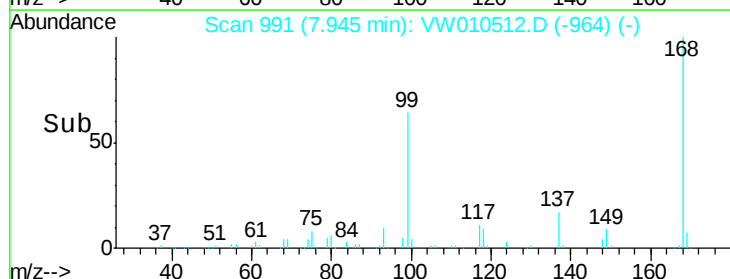
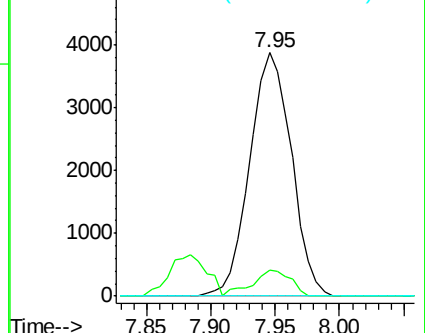
77 0.0 25.2 37.8#

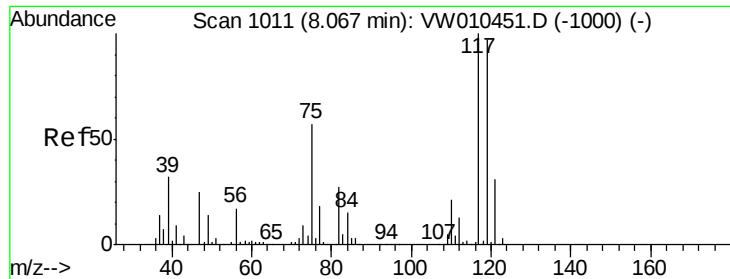


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW

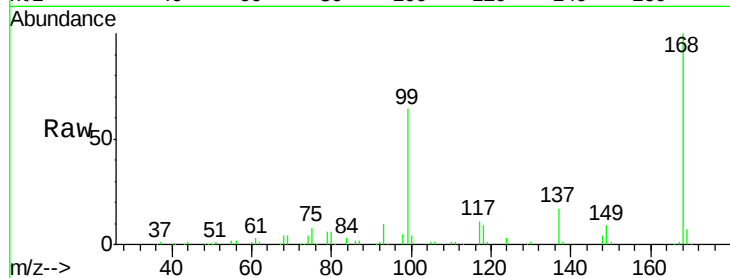




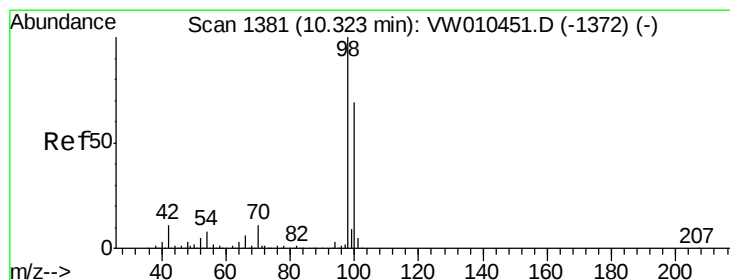
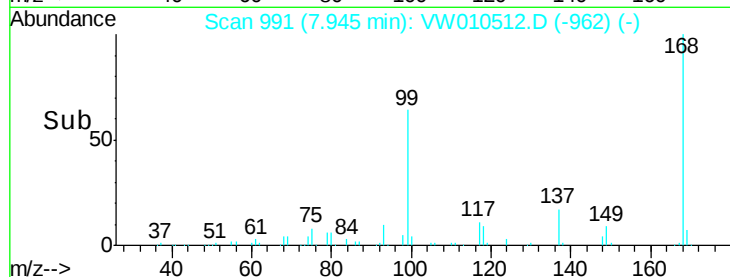
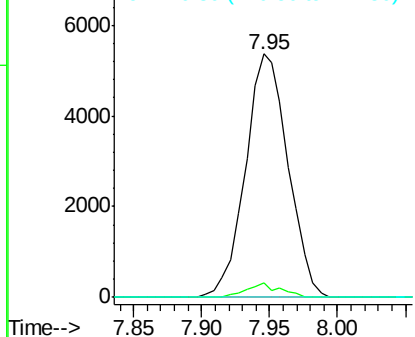
#38  
Carbon Tetrachloride  
Concen: 5.834 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

Instrument :  
MSVOA\_W  
ClientSampleId :  
23-C3-20190399

Tot Ion:117 Resp: 11739  
Ion Ratio Lower Upper  
117 100  
119 6.1 77.4 116.0#  
121 0.0 25.0 37.6#

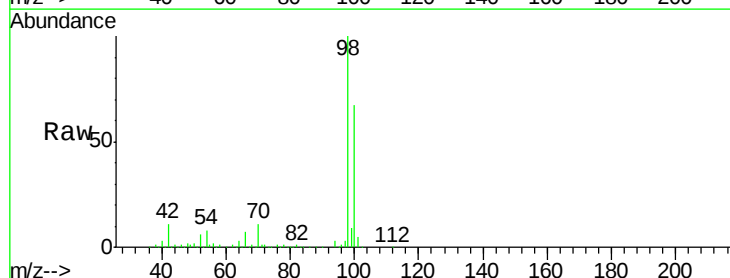


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

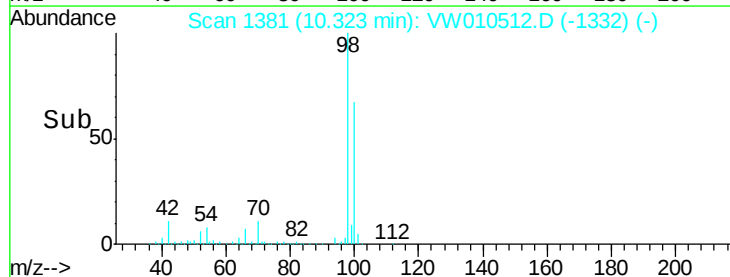
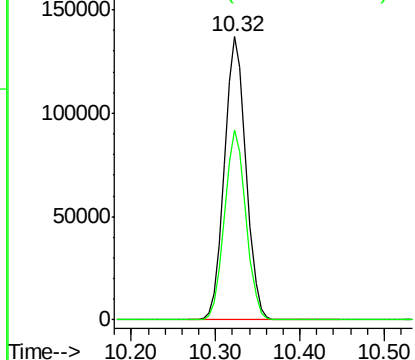


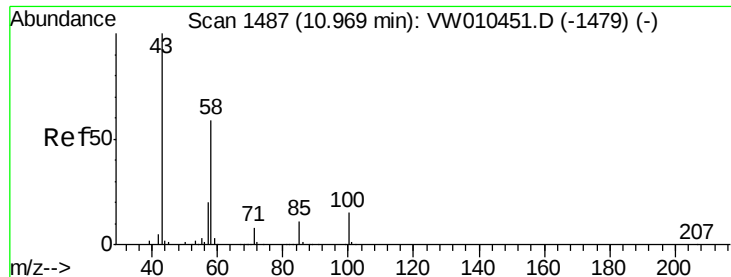
#50  
Toluene-d8  
Concen: 51.859 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

Tgt Ion: 98 Resp: 240692  
Ion Ratio Lower Upper  
98 100  
100 66.6 53.7 80.5



Abundance Ion 98.00 (97.70 to 98.70): VW  
Ion 100.00 (99.70 to 100.70): VW

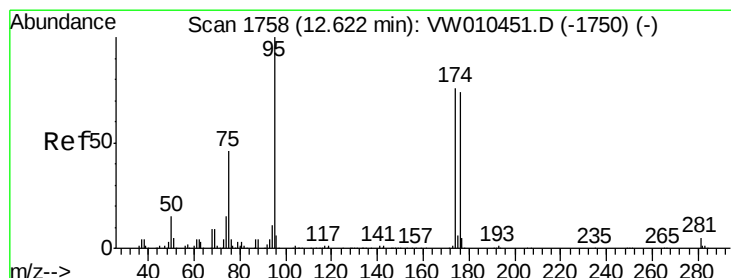
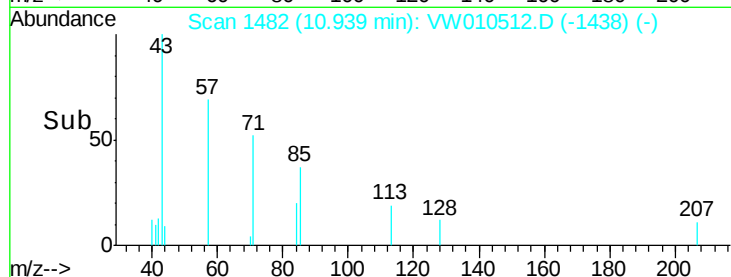
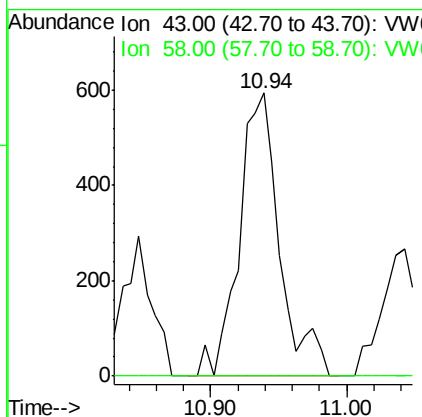
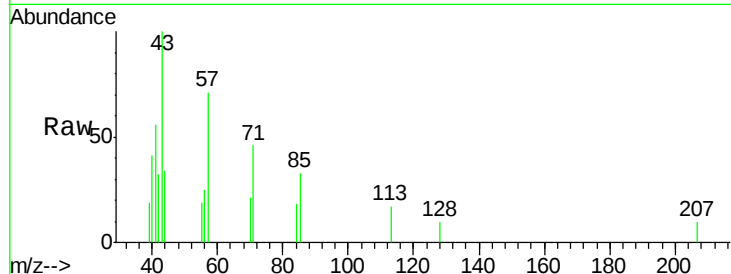




#59  
2-Hexanone  
Concen: 2.146 ug/l  
RT: 10.94 min Scan# 1482  
Delta R.T. -0.03 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

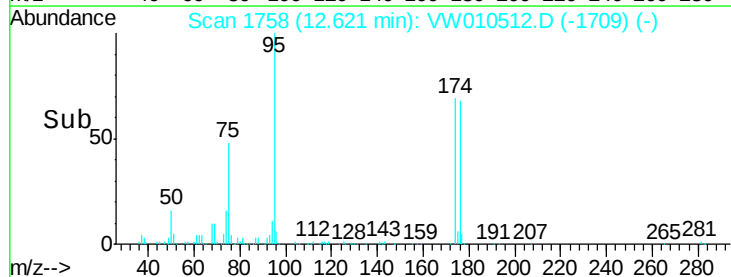
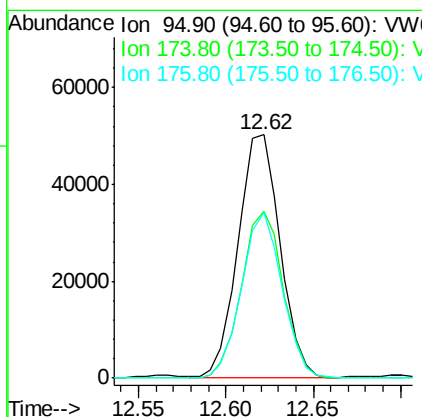
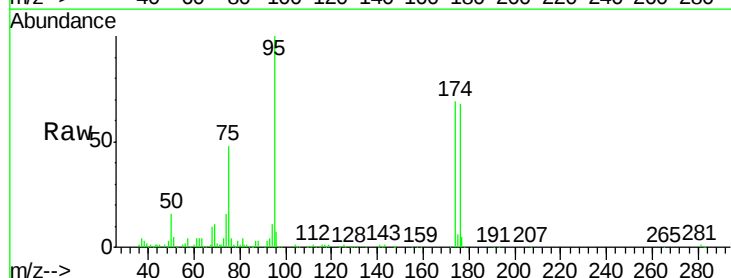
Instrument :  
MSVOA\_W  
ClientSampleId :  
23-C3-20190399

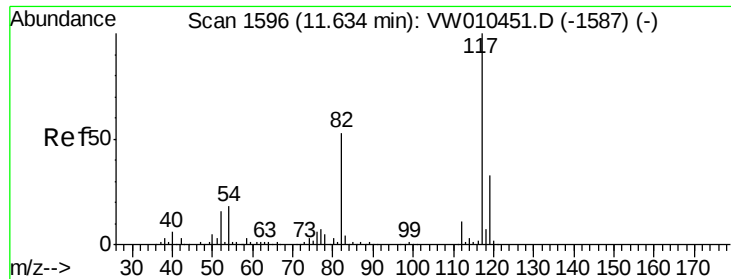
Tot Ion: 43 Resp: 1229  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.9 86.8#



#62  
4-Bromofluorobenzene  
Concen: 45.035 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.00 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

Tgt Ion: 95 Resp: 83256  
Ion Ratio Lower Upper  
95 100  
174 68.9 0.0 148.6  
176 66.1 0.0 144.2

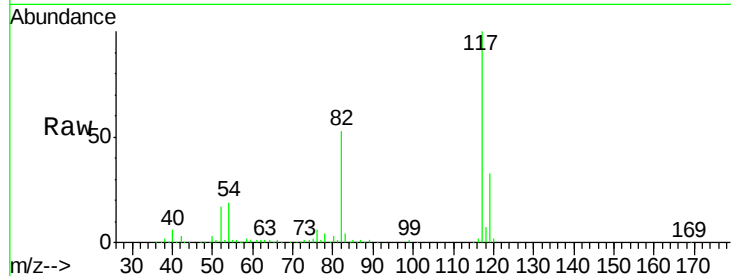




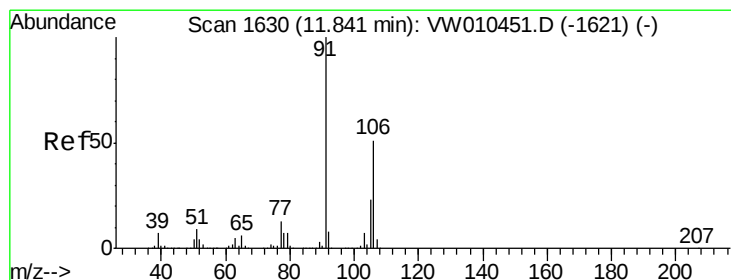
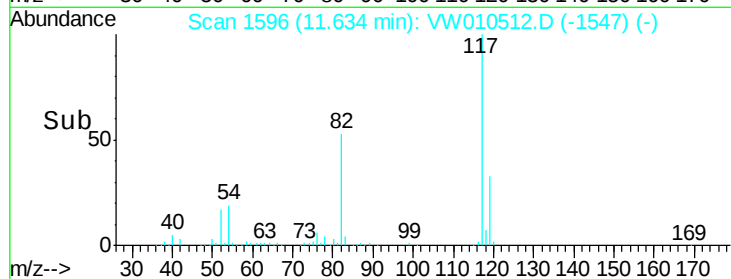
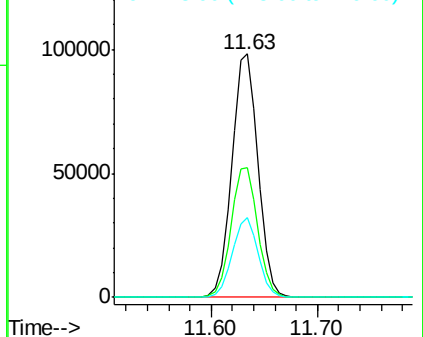
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

Instrument :  
MSVOA\_W  
ClientSampleId :  
23-C3-20190399

Tot Ion:117 Resp: 169119  
Ion Ratio Lower Upper  
117 100  
82 53.4 42.8 64.2  
119 32.6 26.3 39.5

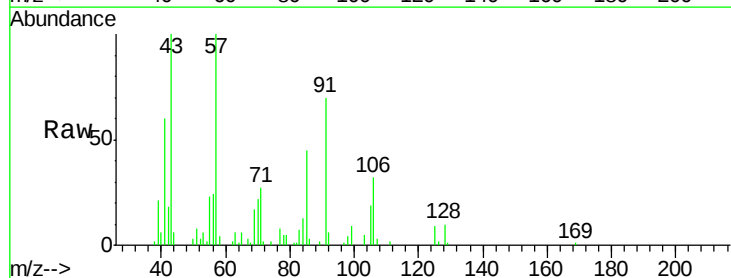


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VW  
Ion 118.90 (118.60 to 119.60): V

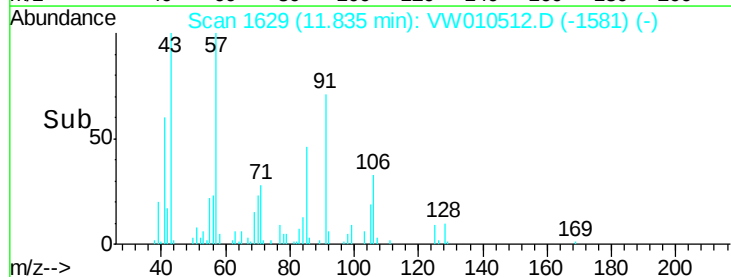
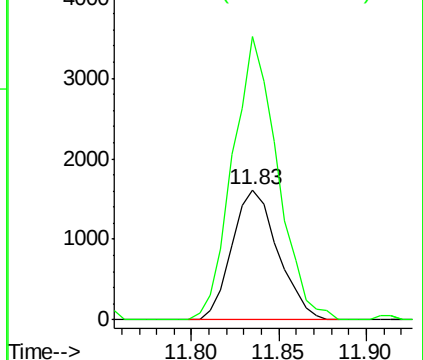


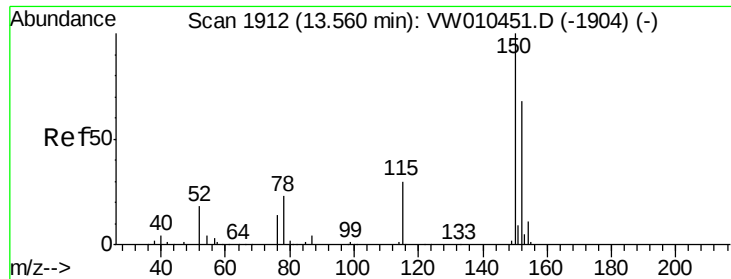
#68  
m/p-Xylenes  
Concen: 1.182 ug/l  
RT: 11.83 min Scan# 1629  
Delta R.T. -0.01 min  
Lab File: VW010512.D  
Acq: 22 May 2019 16:04

Tgt Ion:106 Resp: 2951  
Ion Ratio Lower Upper  
106 100  
91 212.4 156.0 234.0



Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): 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: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

23-C3-20190399

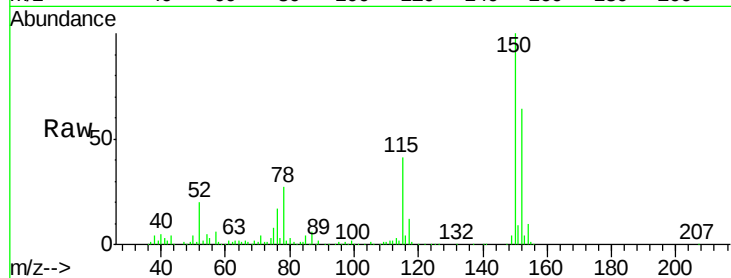
Tot Ion:152 Resp: 64756

Ion Ratio Lower Upper

152 100

115 65.8 30.3 91.0

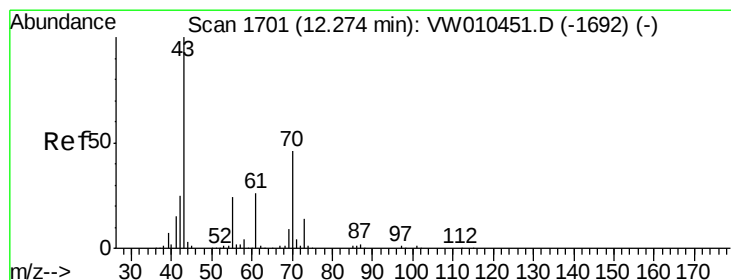
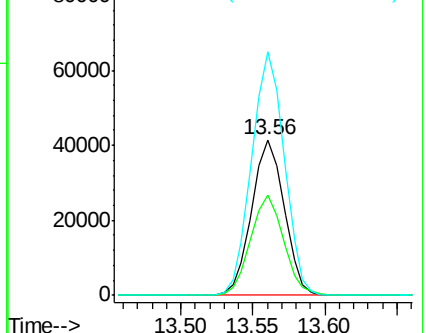
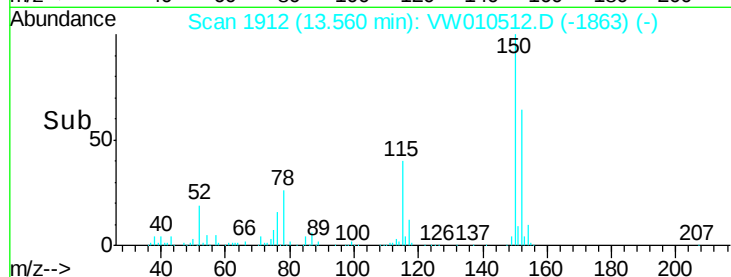
150 157.2 0.0 349.8



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



#74

N-ethyl acetate

Concen: 2.975 ug/l

RT: 12.26 min Scan# 1698

Delta R.T. -0.02 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Tgt Ion: 43 Resp: 3503

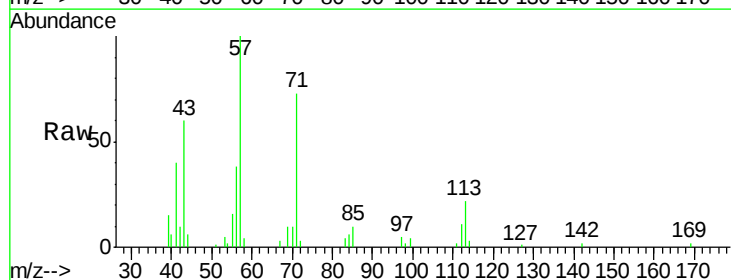
Ion Ratio Lower Upper

43 100

70 13.4 37.1 55.7#

55 21.1 19.6 29.4

61 0.0 20.7 31.1#

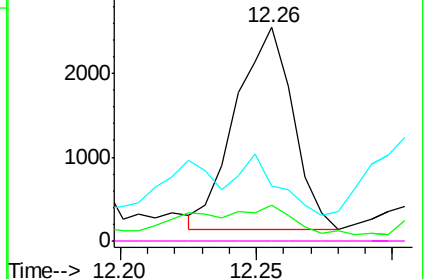
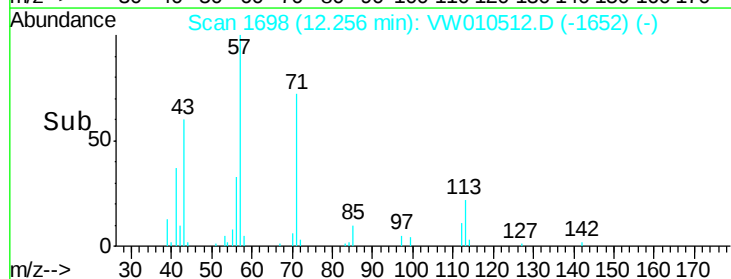


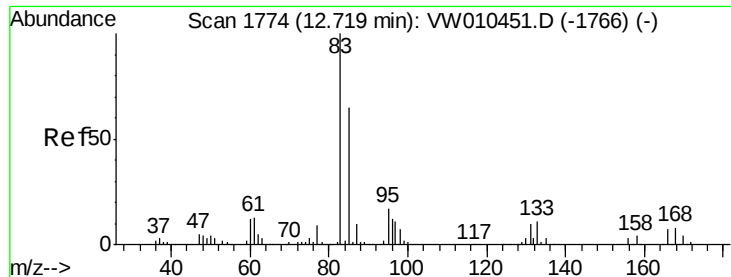
Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 70.00 (69.70 to 70.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 61.00 (60.70 to 61.70): VW





#75

1,1,2,2-Tetrachloroethane

Concen: 1.010 ug/l

RT: 12.69 min Scan# 1769

Delta R.T. -0.03 min

Lab File: VW010512.D

Acq: 22 May 2019 16:04

Instrument :

MSVOA\_W

ClientSampleId :

23-C3-20190399

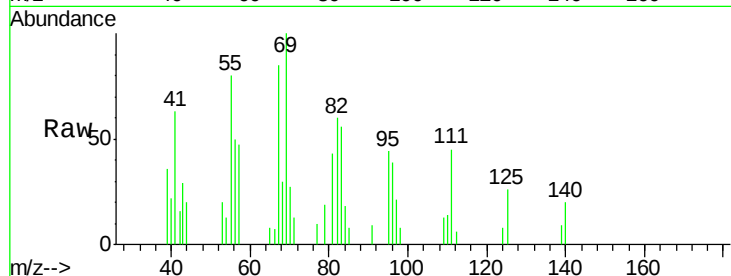
Tot Ion: 83 Resp: 944

Ion Ratio Lower Upper

83 100

131 0.0 5.6 16.8#

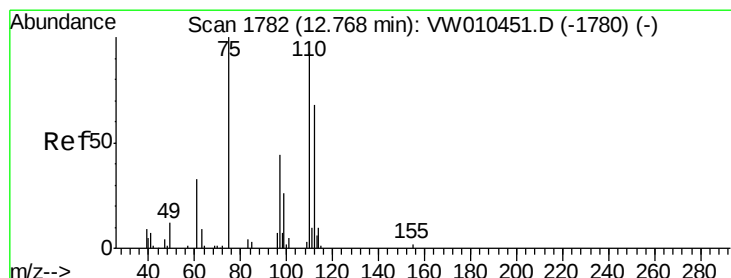
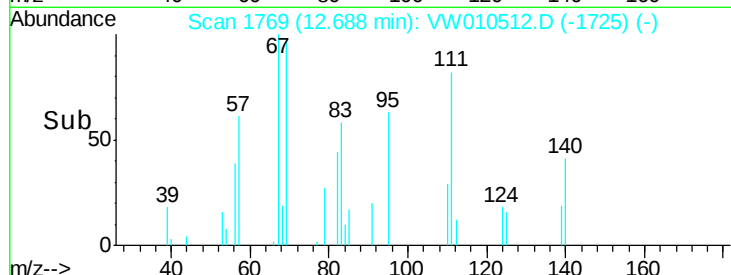
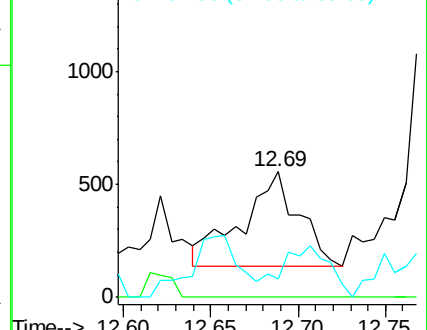
85 46.0 32.4 97.0



Abundance Ion 82.90 (82.60 to 83.60): VW

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VW



#76

1,2,3-Trichloropropane

Concen: 61.100 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW010512.D

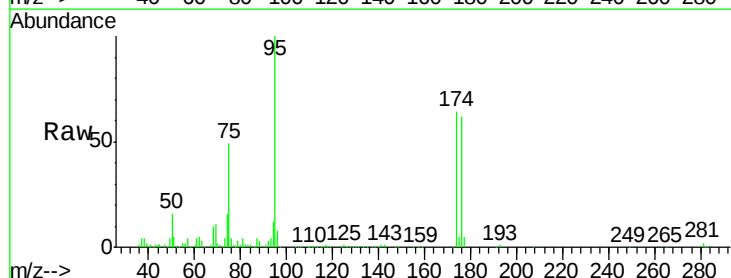
Acq: 22 May 2019 16:04

Tgt Ion: 75 Resp: 40162

Ion Ratio Lower Upper

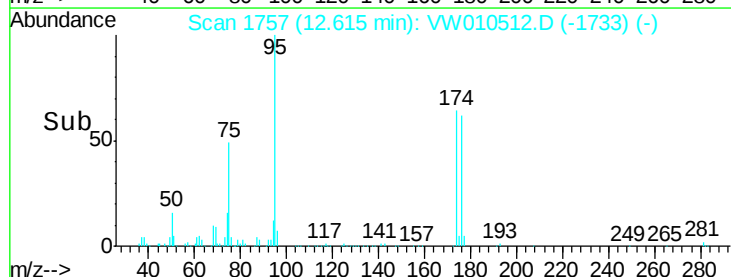
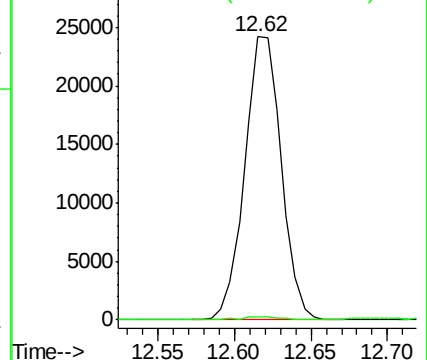
75 100

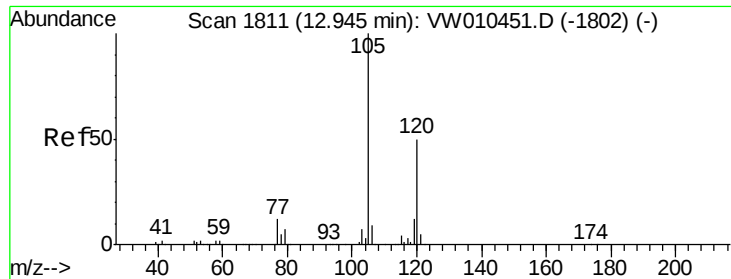
77 1.3 170.0 510.1#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW

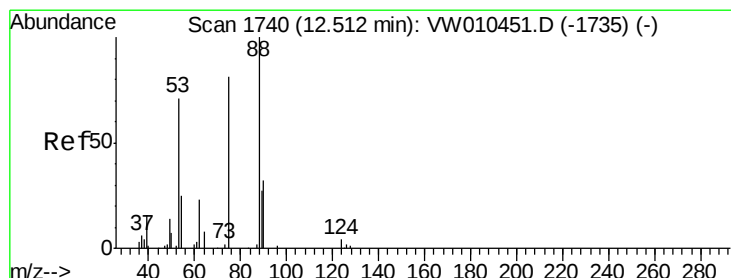
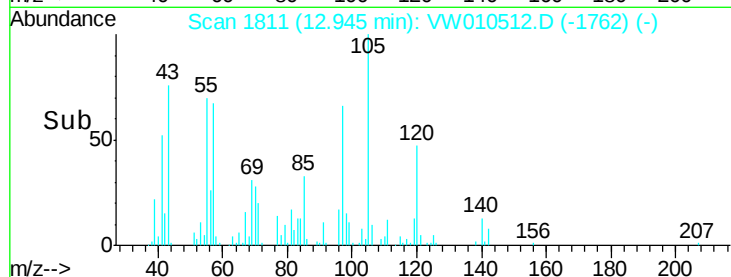
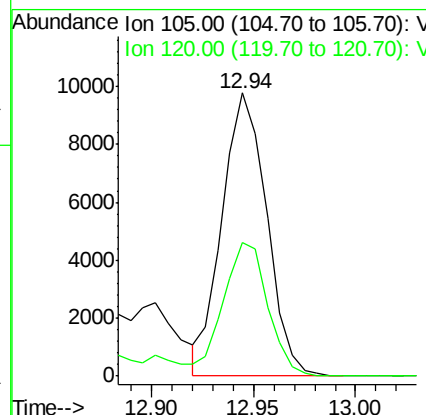
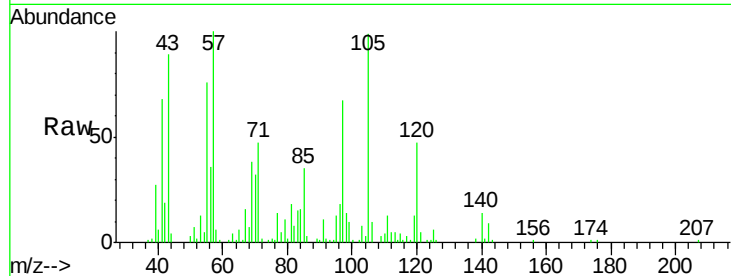




#80  
 1,3,5-Trimethylbenzene  
 Concen: 3.400 ug/l  
 RT: 12.94 min Scan# 1811  
 Delta R.T. -0.00 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

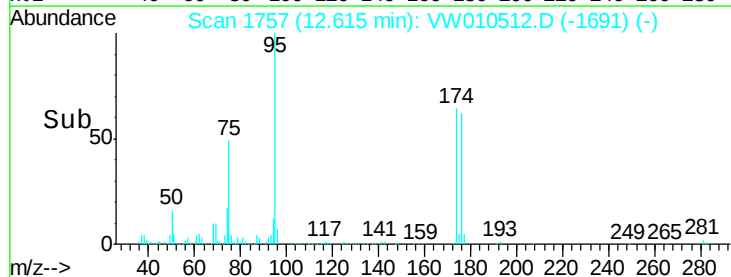
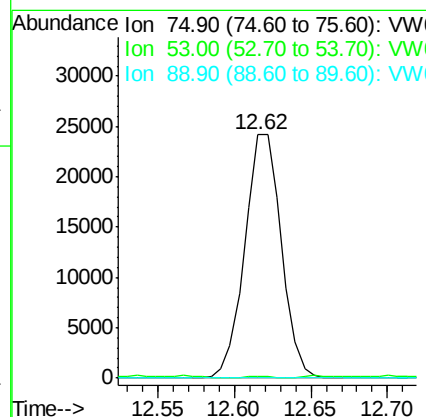
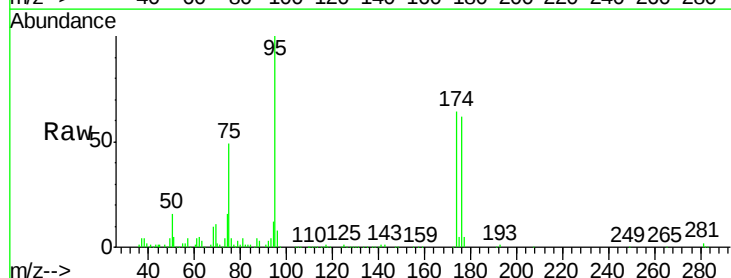
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 23-C3-20190399

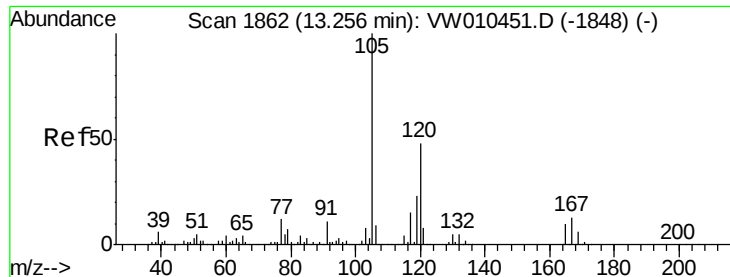
Tot Ion:105 Resp: 14798  
 Ion Ratio Lower Upper  
 105 100  
 120 48.2 25.2 75.6



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 127.518 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. 0.10 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

Tgt Ion: 75 Resp: 40162  
 Ion Ratio Lower Upper  
 75 100  
 53 0.6 69.8 104.8#  
 89 0.0 39.5 59.3#

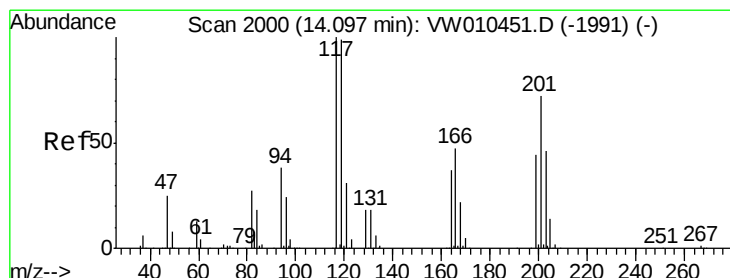
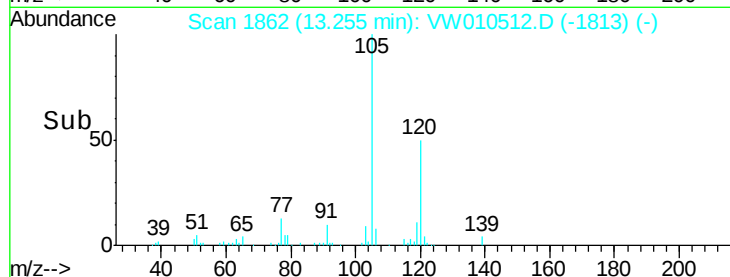
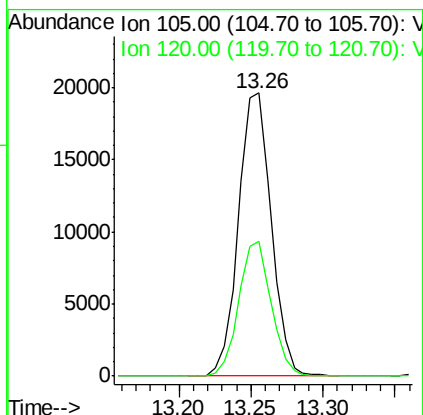
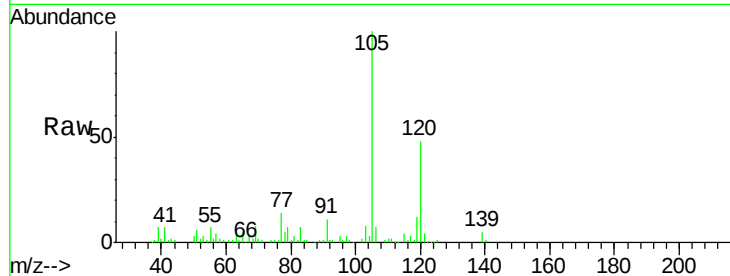




#84  
 1,2,4-Trimethylbenzene  
 Concen: 7.148 ug/l  
 RT: 13.26 min Scan# 1862  
 Delta R.T. -0.00 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

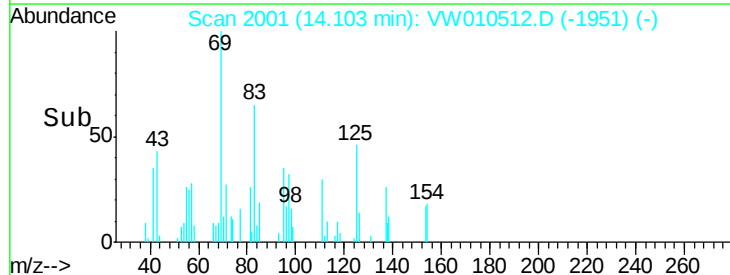
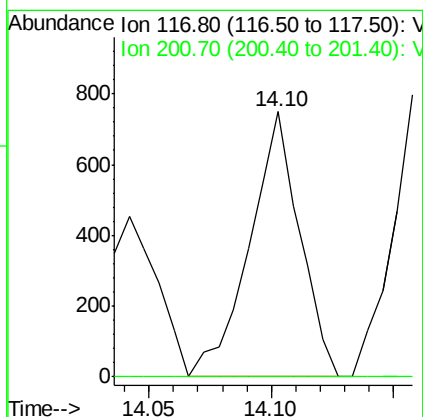
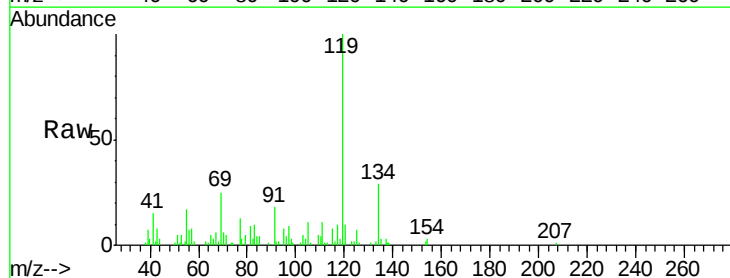
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 23-C3-20190399

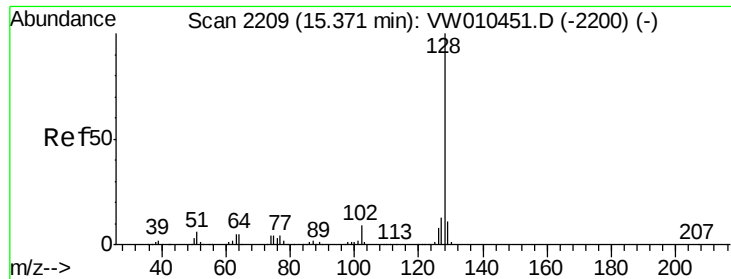
Tot Ion:105 Resp: 30982  
 Ion Ratio Lower Upper  
 105 100  
 120 47.1 23.4 70.2



#90  
 Hexachloroethane  
 Concen: 1.147 ug/l  
 RT: 14.10 min Scan# 2001  
 Delta R.T. 0.01 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

Tgt Ion:117 Resp: 1069  
 Ion Ratio Lower Upper  
 117 100  
 201 0.0 34.6 103.8#





#95  
 Naphthalene  
 Concen: 2.140 ug/l  
 RT: 15.37 min Scan# 2209  
 Delta R.T. -0.00 min  
 Lab File: VW010512.D  
 Acq: 22 May 2019 16:04

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 23-C3-20190399

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 15.3  | 10.6  | 15.8  |
| 129     | 12.2  | 8.9   | 13.3  |

