

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122118\  
 Data File : VW007709.D  
 Acq On : 19 Dec 2018 19:36  
 Operator : SY/AP  
 Sample : J6452-01  
 Misc : 7.47G/5ML/MSVOA W/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MIHPT-20(17-20)

Quant Time: Dec 20 07:17:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 65144    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 109333   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 85814    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 36133    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 32864    | 46.03 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.06% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 28491    | 42.72 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.44% |          |
| 50) Toluene-d8              | 10.32 | 98   | 94827    | 37.71 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 75.42% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 36417    | 37.49 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 74.98% |          |

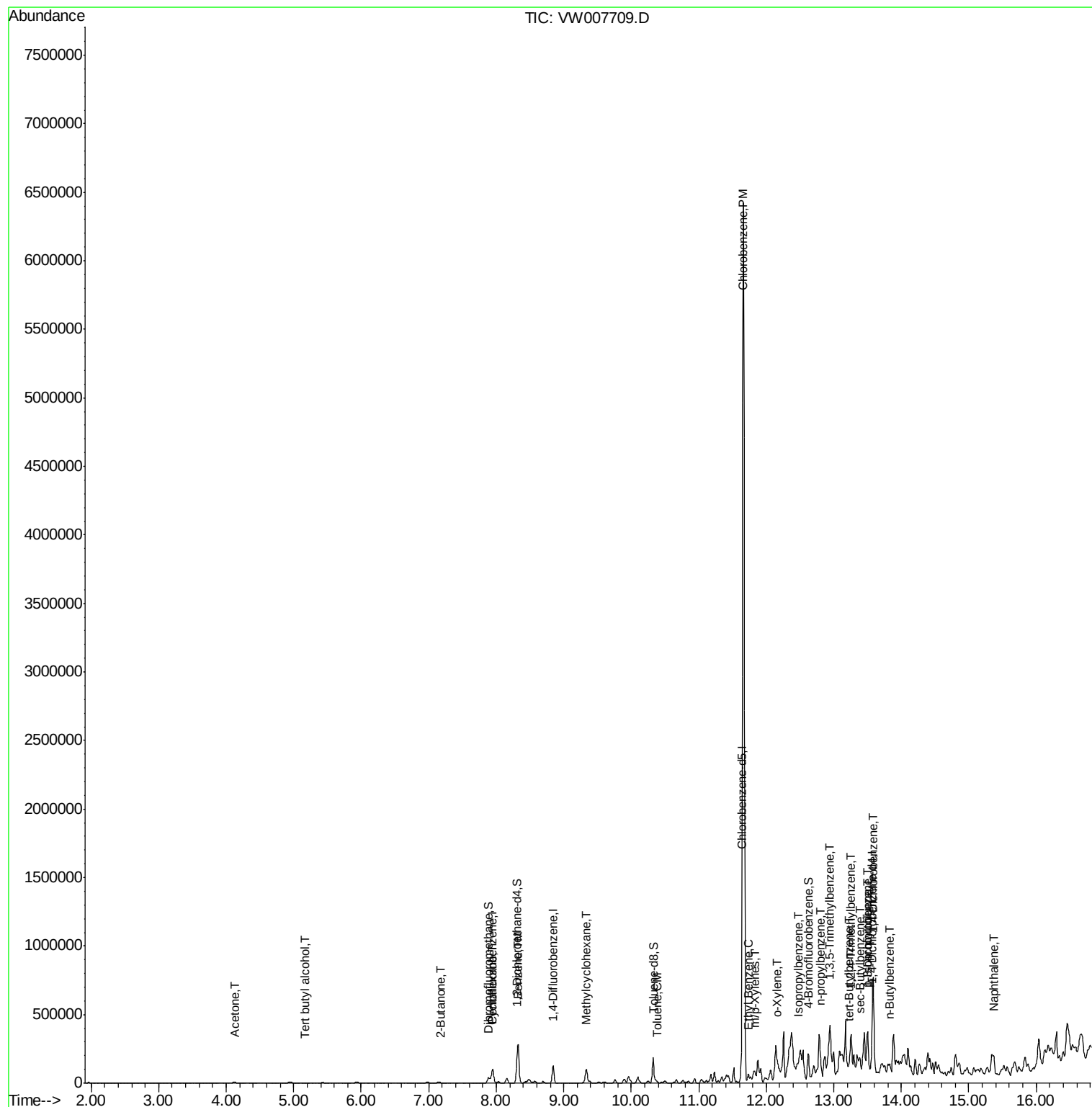
| Target Compounds           | R.T.  | QIon | Response | Conc     | Units  | Qvalue |
|----------------------------|-------|------|----------|----------|--------|--------|
| 11) Tert butyl alcohol     | 5.18  | 59   | 1709     | 35.482   | ug/l # | 73     |
| 16) Acetone                | 4.12  | 43   | 15326    | 114.626  | ug/l # | 88     |
| 25) 2-Butanone             | 7.18  | 43   | 2446     | 15.619   | ug/l   | 91     |
| 31) Cyclohexane            | 7.93  | 56   | 10278    | 9.670    | ug/l # | 75     |
| 39) Methylcyclohexane      | 9.34  | 83   | 40669    | 31.015   | ug/l   | 95     |
| 40) Benzene                | 8.32  | 78   | 272922   | 96.920   | ug/l   | 100    |
| 52) Toluene                | 10.39 | 92   | 3657     | 1.936    | ug/l   | 98     |
| 65) Chlorobenzene          | 11.66 | 112  | 3504080  | 1886.571 | ug/l   | 98     |
| 67) Ethyl Benzene          | 11.73 | 91   | 33273    | 10.439   | ug/l   | 95     |
| 68) m/p-Xylenes            | 11.84 | 106  | 10534    | 8.520    | ug/l   | 91     |
| 69) o-Xylene               | 12.17 | 106  | 17865    | 15.415   | ug/l   | 91     |
| 73) Isopropylbenzene       | 12.47 | 105  | 18843    | 6.899    | ug/l   | 97     |
| 78) n-propylbenzene        | 12.80 | 91   | 60388    | 18.994   | ug/l   | 98     |
| 80) 1,3,5-Trimethylbenzene | 12.94 | 105  | 24595    | 10.440   | ug/l   | 98     |
| 83) tert-Butylbenzene      | 13.21 | 119  | 3871     | 1.873    | ug/l   | 83     |
| 84) 1,2,4-Trimethylbenzene | 13.26 | 105  | 151424   | 63.698   | ug/l   | 100    |
| 85) sec-Butylbenzene       | 13.39 | 105  | 34771    | 12.205   | ug/l # | 67     |
| 86) p-Isopropyltoluene     | 13.51 | 119  | 19255    | 7.433    | ug/l   | 98     |
| 87) 1,3-Dichlorobenzene    | 13.51 | 146  | 79230    | 63.752   | ug/l   | 93     |
| 88) 1,4-Dichlorobenzene    | 13.58 | 146  | 243142   | 195.586  | ug/l   | 99     |
| 89) n-Butylbenzene         | 13.83 | 91   | 37834    | 15.929   | ug/l # | 76     |
| 95) Naphthalene            | 15.37 | 128  | 96600    | 67.646   | ug/l # | 92     |

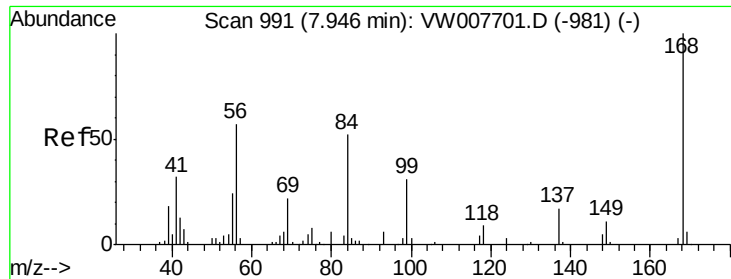
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Thu Dec 20 06:30:23 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 992

Delta R.T. 0.01 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

Instrument :

MSVOA\_W

ClientSampleId :

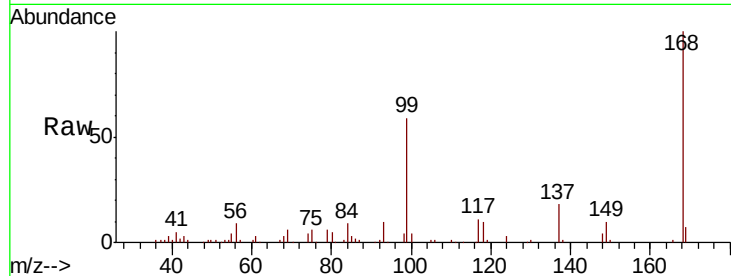
MIHPT-20(17-20)

Tot Ion:168 Resp: 65144

Ion Ratio Lower Upper

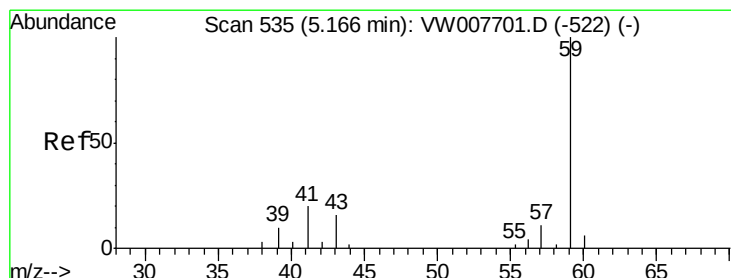
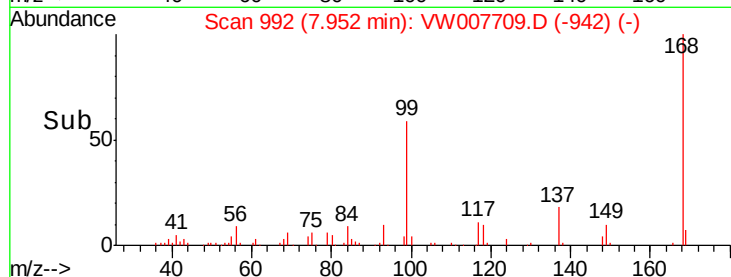
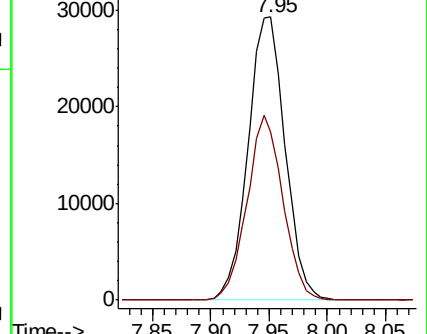
168 100

99 59.2 54.0 81.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: 35.482 ug/l

RT: 5.18 min Scan# 537

Delta R.T. 0.01 min

Lab File: VW007709.D

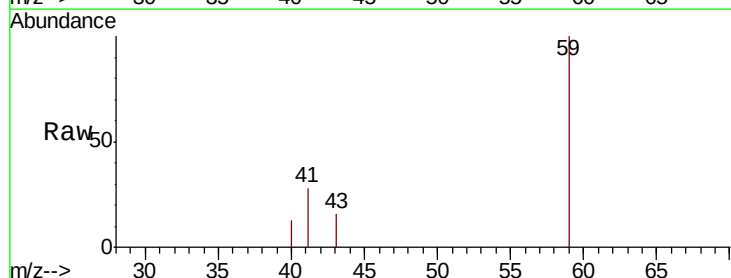
Acq: 19 Dec 2018 19:36

Tgt Ion: 59 Resp: 1709

Ion Ratio Lower Upper

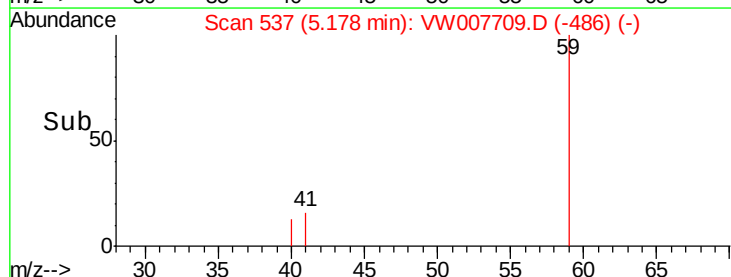
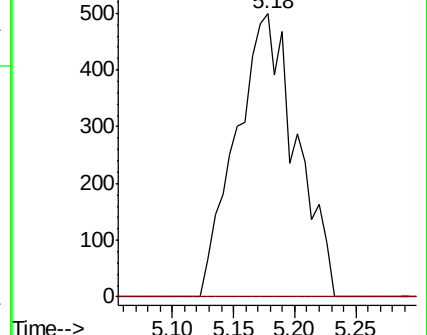
59 100

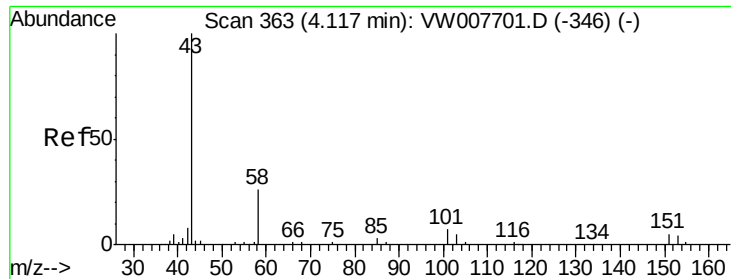
57 0.0 7.8 11.8#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 114.626 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.01 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

Instrument :

MSVOA\_W

ClientSampleId :

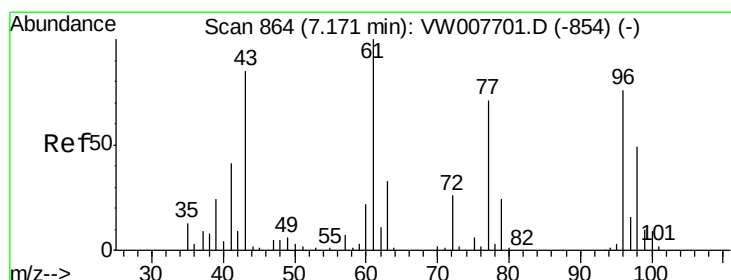
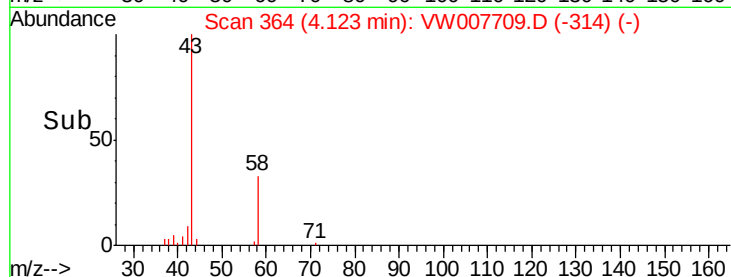
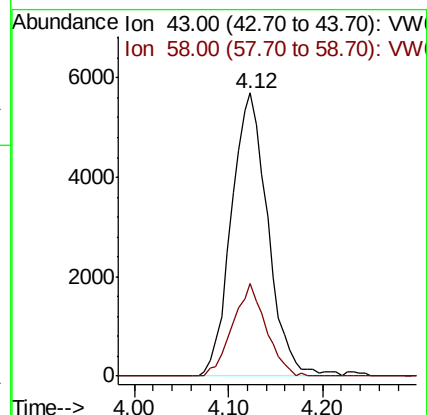
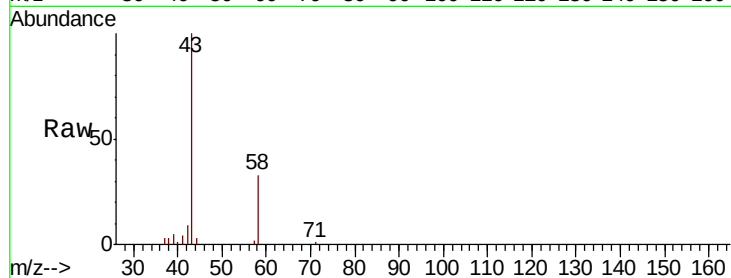
MIHPT-20(17-20)

Tot Ion: 43 Resp: 15326

Ion Ratio Lower Upper

43 100

58 32.8 21.2 31.8#



#25

2-Butanone

Concen: 15.619 ug/l

RT: 7.18 min Scan# 865

Delta R.T. 0.01 min

Lab File: VW007709.D

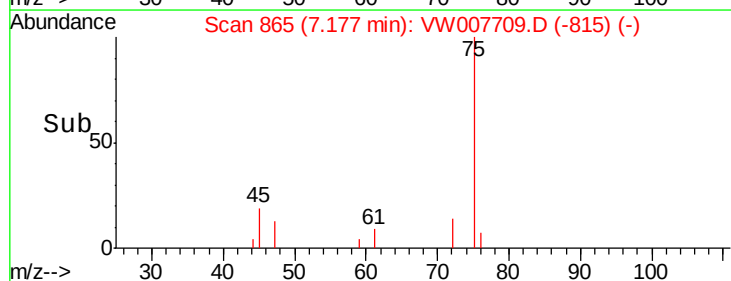
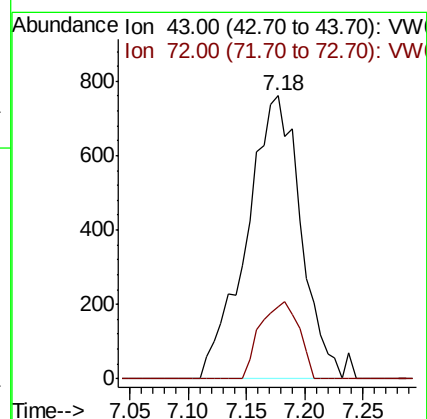
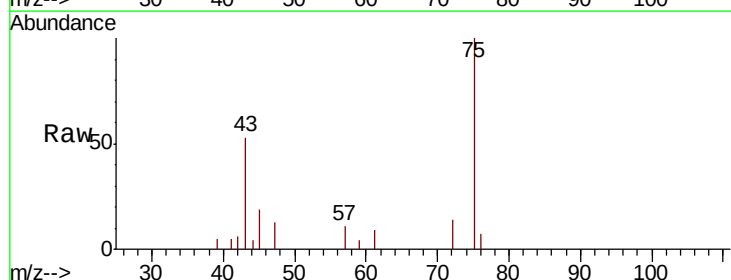
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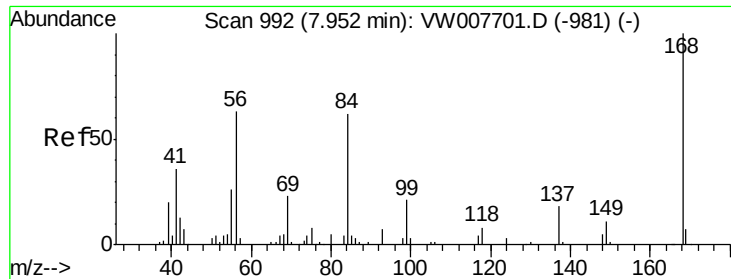
Tgt Ion: 43 Resp: 2446

Ion Ratio Lower Upper

43 100

72 25.6 24.5 36.7

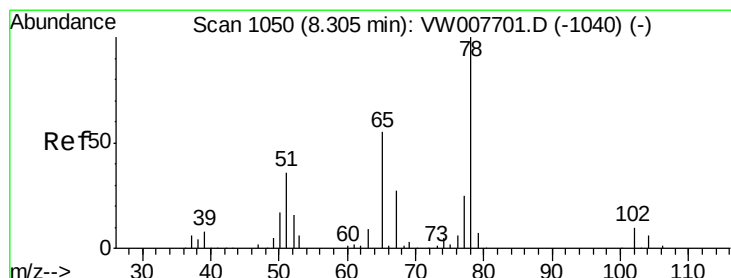
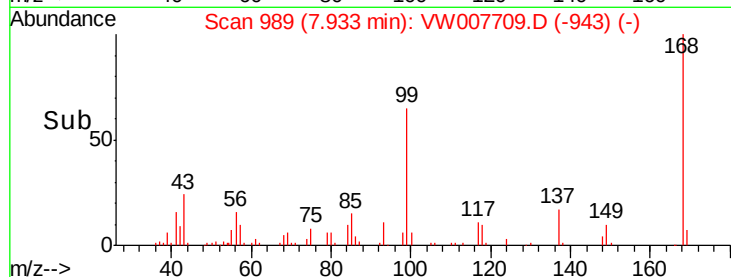
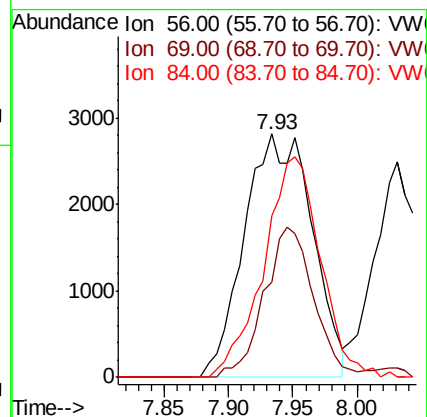
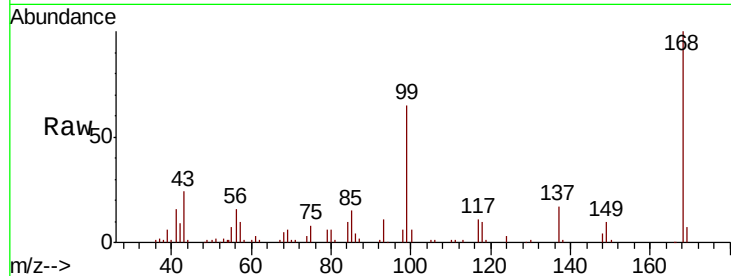




#31  
Cyclohexane  
Concen: 9.670 ug/l  
RT: 7.93 min Scan# 989  
Delta R.T. -0.02 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

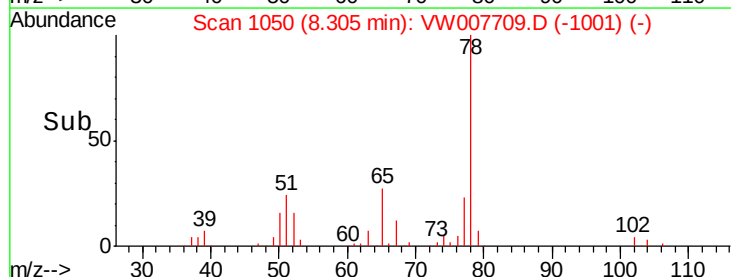
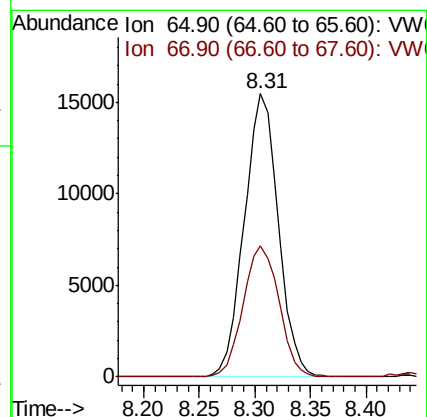
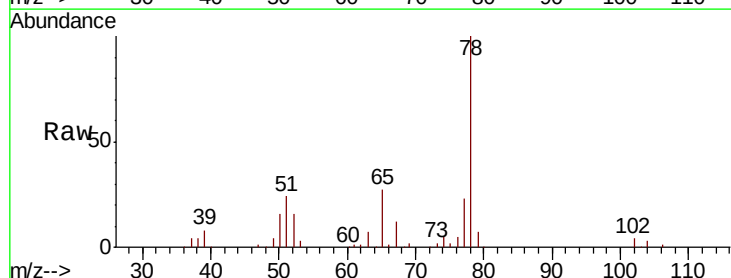
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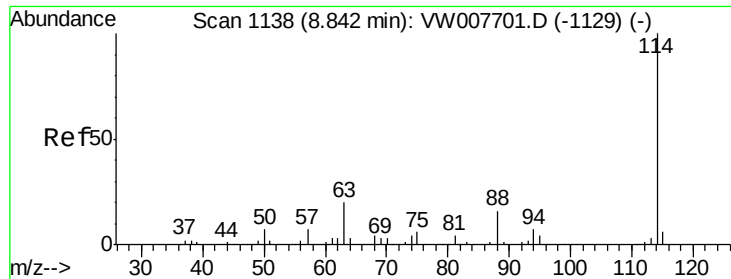
Tot Ion: 56 Resp: 10278  
Ion Ratio Lower Upper  
56 100  
69 39.1 29.7 44.5  
84 66.4 78.9 118.3#



#33  
1,2-Dichloroethane-d4  
Concen: 46.028 ug/l  
RT: 8.31 min Scan# 1050  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Tgt Ion: 65 Resp: 32864  
Ion Ratio Lower Upper  
65 100  
67 48.6 0.0 100.6

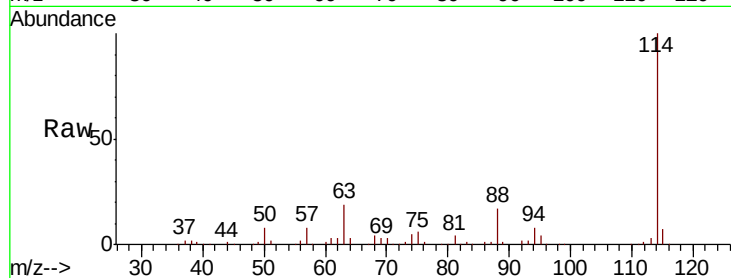




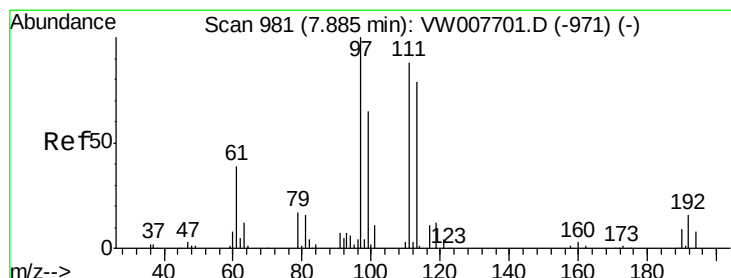
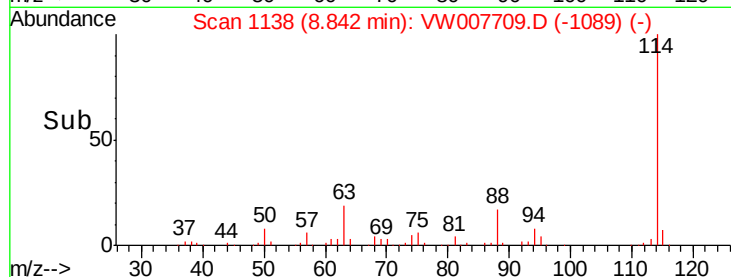
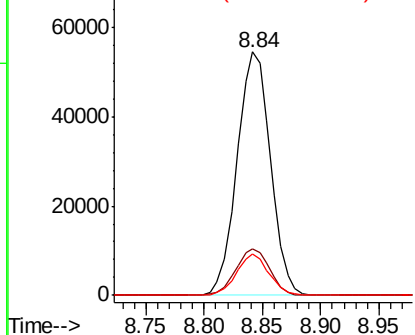
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.84 min Scan# 1138  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Instrument :  
MSVOA\_W  
ClientSampleId :  
MIHPT-20(17-20)

Tot Ion:114 Resp: 109333  
Ion Ratio Lower Upper  
114 100  
63 19.3 0.0 40.0  
88 17.2 0.0 32.6

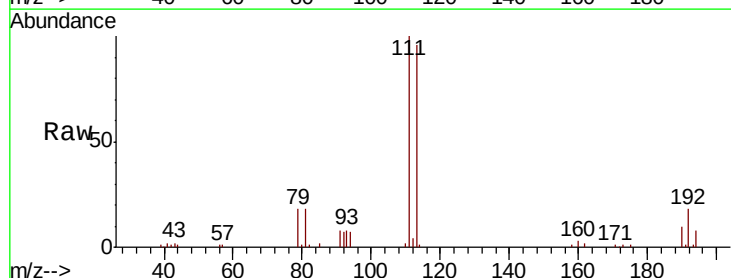


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VW  
Ion 87.90 (87.60 to 88.60): VW

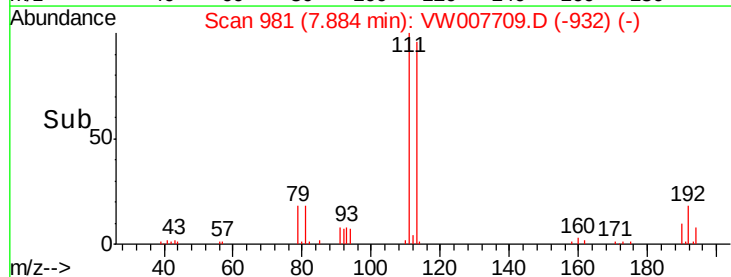
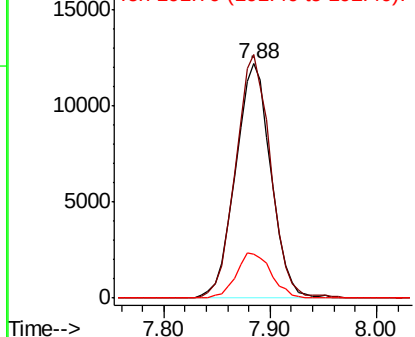


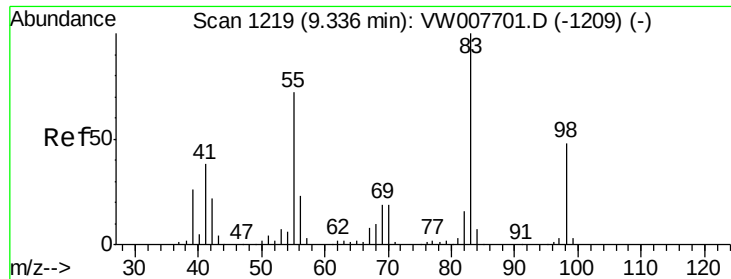
#35  
Dibromofluoromethane  
Concen: 42.716 ug/l  
RT: 7.88 min Scan# 981  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
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Tgt Ion:113 Resp: 28491  
Ion Ratio Lower Upper  
113 100  
111 102.6 82.6 124.0  
192 19.1 15.5 23.3



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

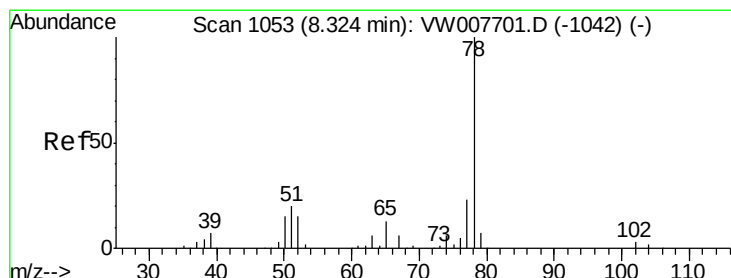
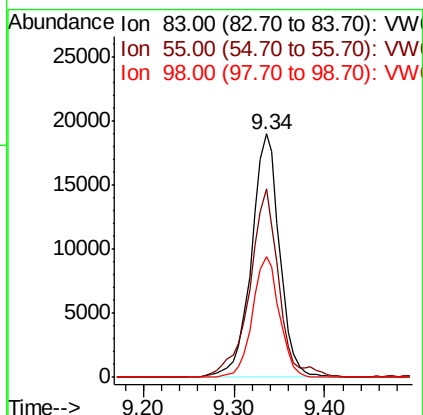
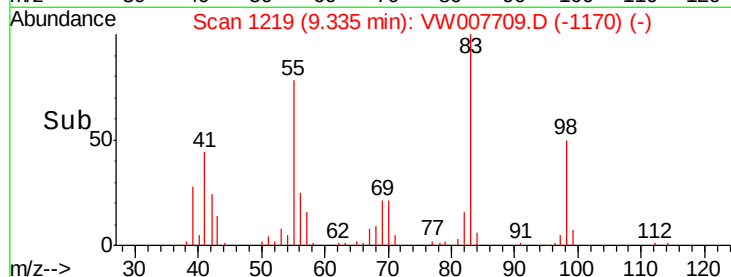
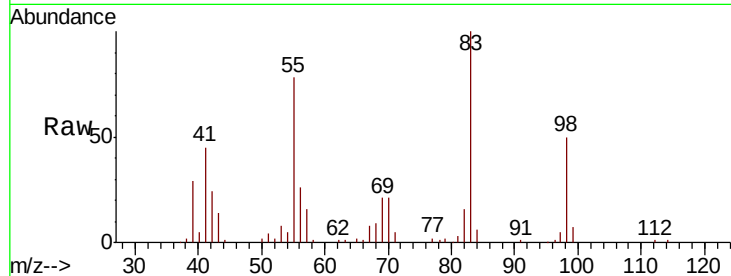




#39  
Methylvlcyclohexane  
Concen: 31.015 ug/l  
RT: 9.34 min Scan# 1219  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

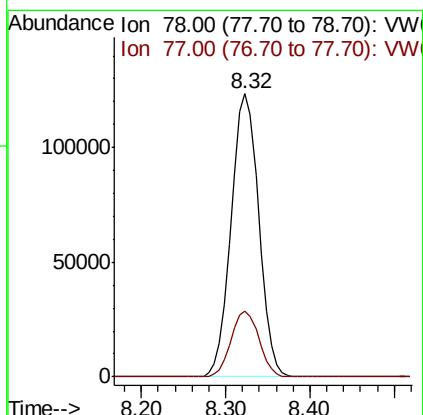
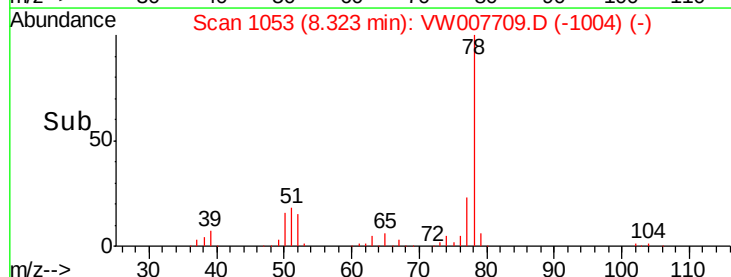
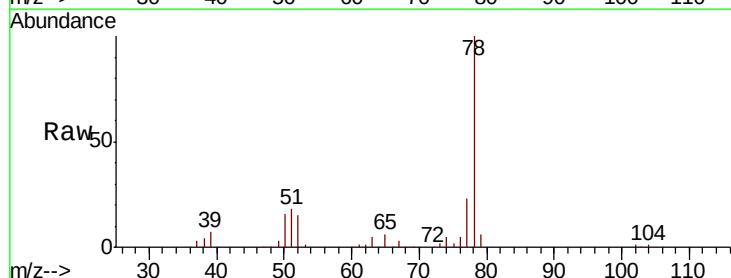
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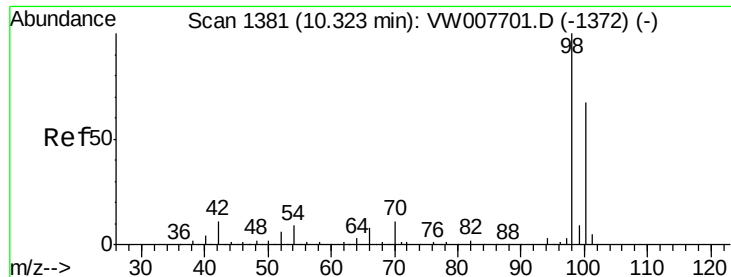
Tot Ion: 83 Resp: 40669  
Ion Ratio Lower Upper  
83 100  
55 77.6 57.2 85.8  
98 49.8 38.6 58.0



#40  
Benzene  
Concen: 96.920 ug/l  
RT: 8.32 min Scan# 1053  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Tgt Ion: 78 Resp: 272922  
Ion Ratio Lower Upper  
78 100  
77 23.4 18.7 28.1





#50

Toluene-d8

Concen: 37.713 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

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MSVOA\_W

ClientSampleId :

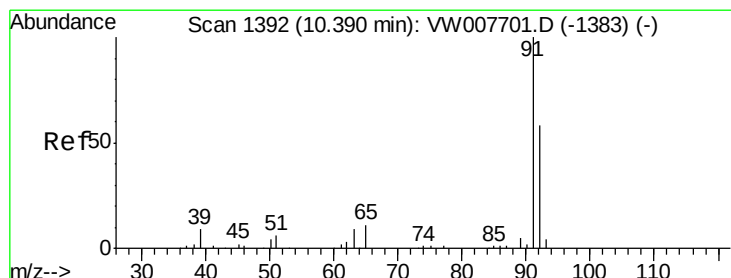
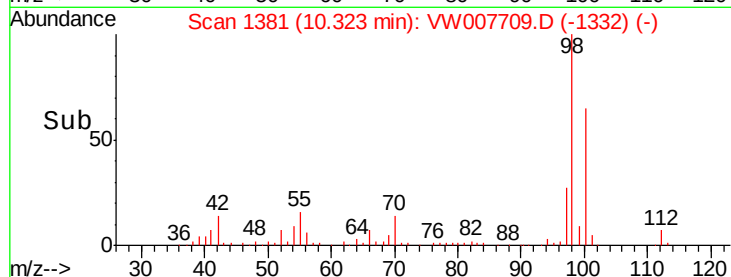
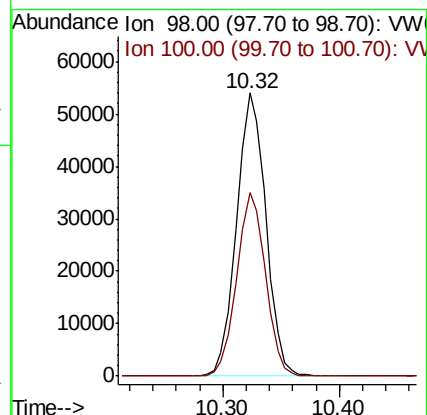
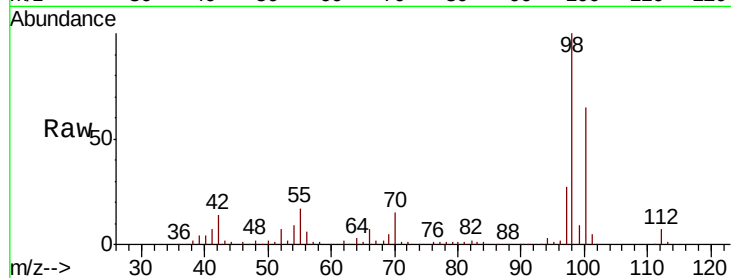
MIHPT-20(17-20)

Tot Ion: 98 Resp: 94827

Ion Ratio Lower Upper

98 100

100 63.4 52.2 78.2



#52

Toluene

Concen: 1.936 ug/l

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW007709.D

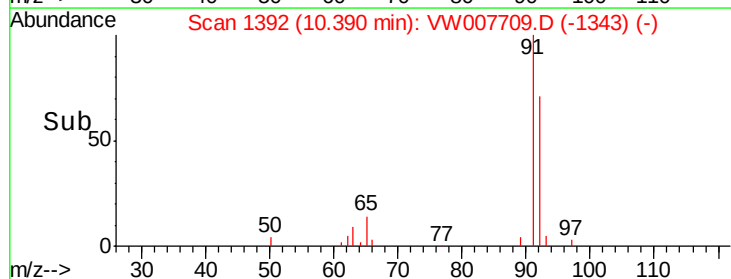
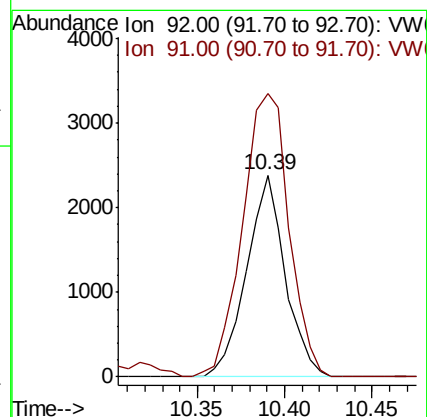
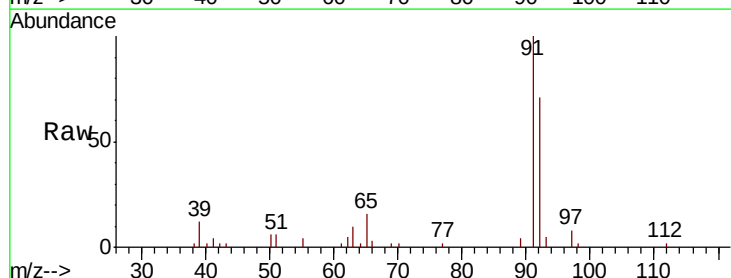
Acq: 19 Dec 2018 19:36

Tgt Ion: 92 Resp: 3657

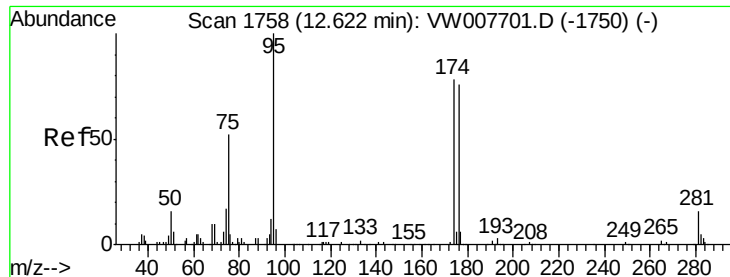
Ion Ratio Lower Upper

92 100

91 168.9 137.0 205.4







#62

4-Bromofluorobenzene

Concen: 37.490 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

Instrument :

MSVOA\_W

ClientSampleId :

MIHPT-20(17-20)

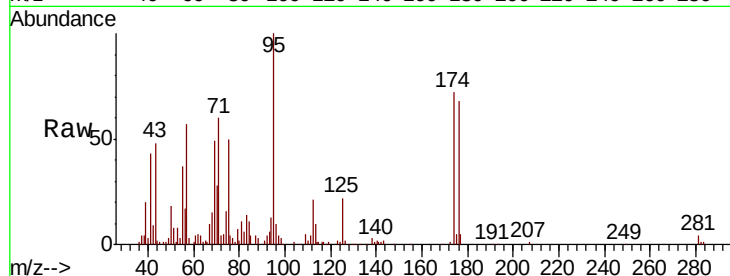
Tot Ion: 95 Resp: 36417

Ion Ratio Lower Upper

95 100

174 69.1 0.0 152.2

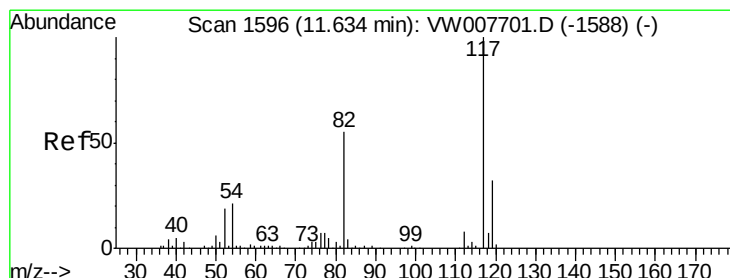
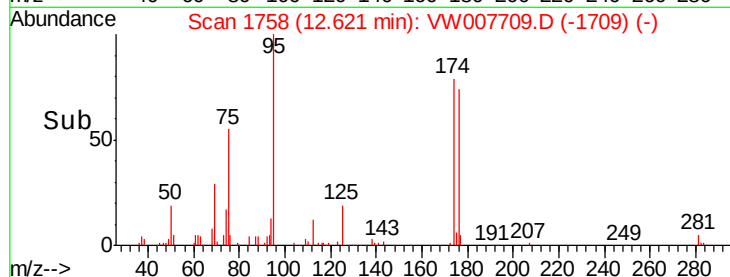
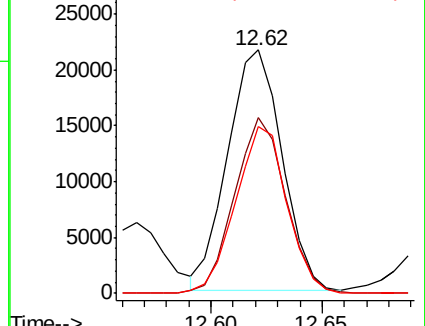
176 65.9 0.0 146.8



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: VW007709.D

Acq: 19 Dec 2018 19:36

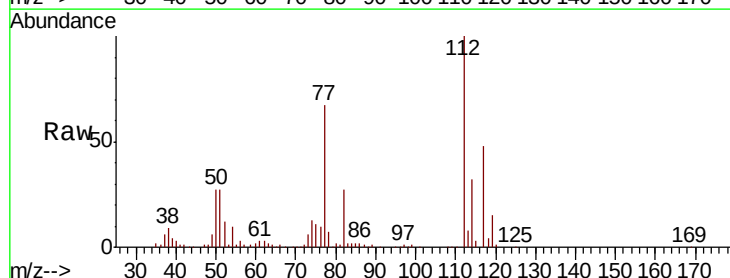
Tgt Ion: 117 Resp: 85814

Ion Ratio Lower Upper

117 100

82 55.7 44.3 66.5

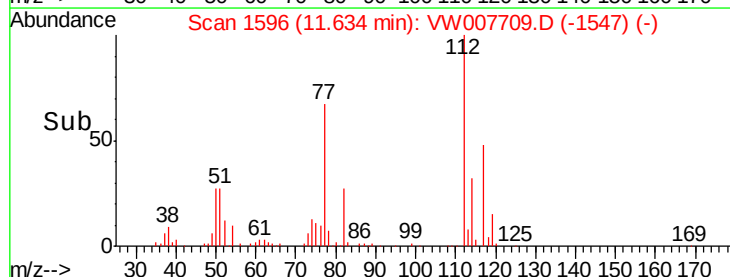
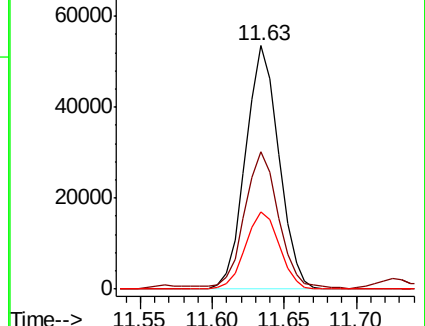
119 31.9 25.7 38.5

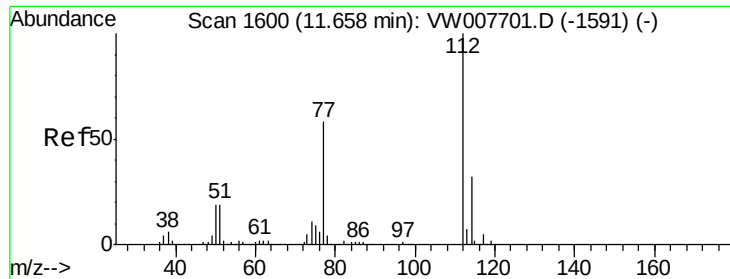


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW

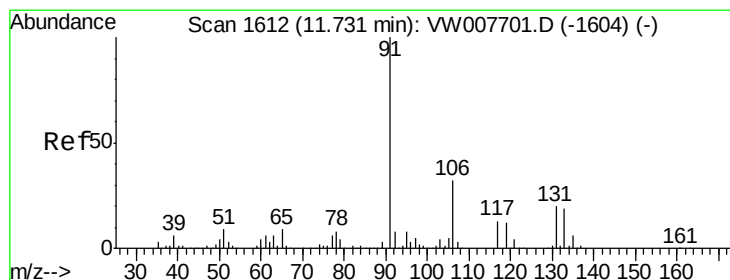
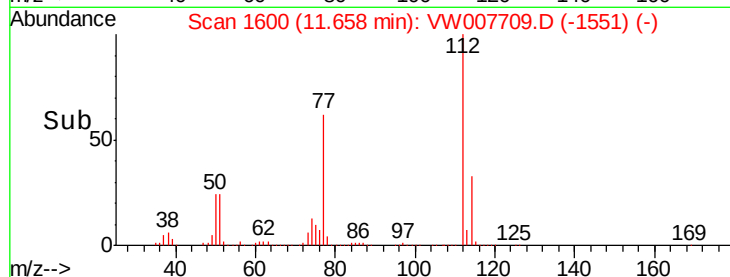
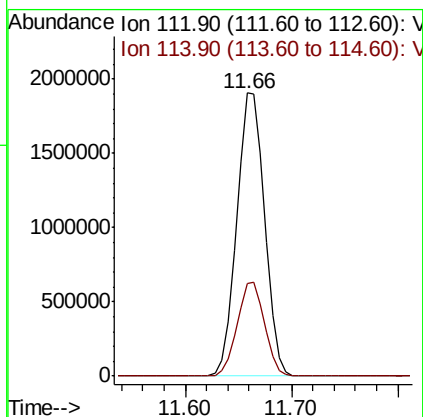
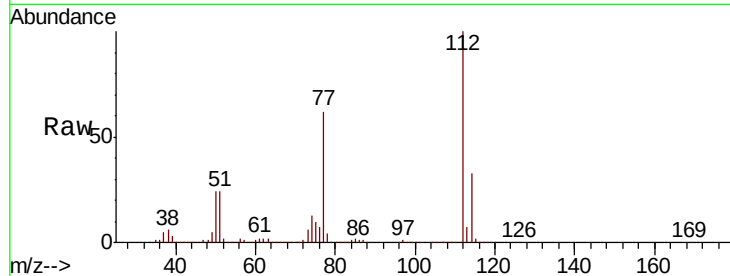




#65  
Chlorobenzene  
Concen: 1886.571 ug/l  
RT: 11.66 min Scan# 1600  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

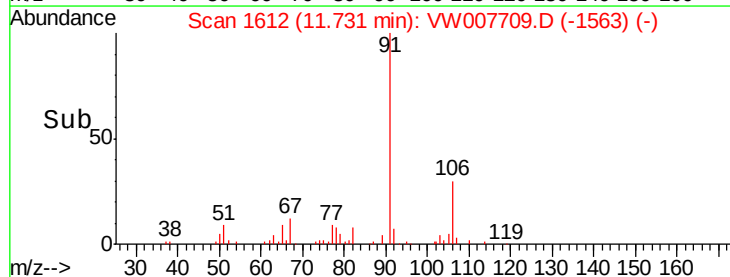
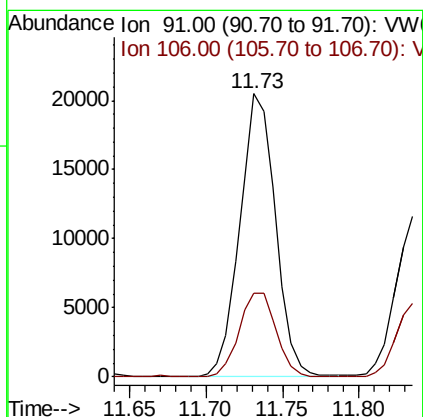
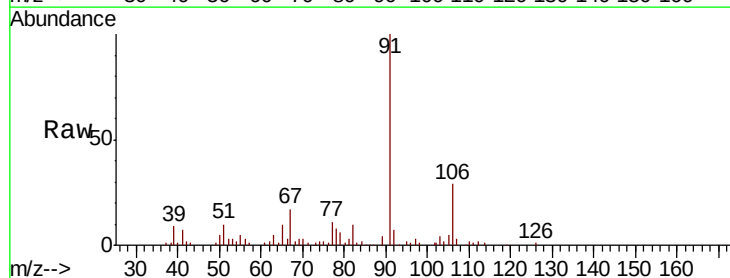
Instrument :  
MSVOA\_W  
ClientSampleId :  
MIHPT-20(17-20)

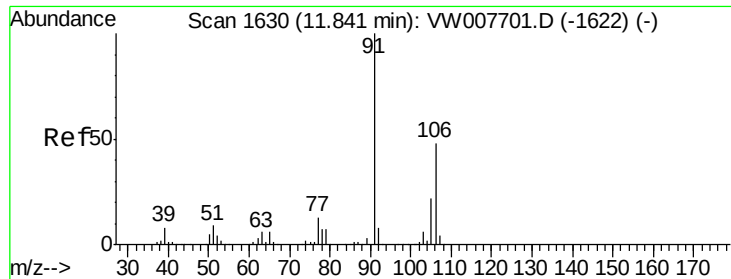
Tot Ion:112 Resp: 3504080  
Ion Ratio Lower Upper  
112 100  
114 32.7 25.2 37.8



#67  
Ethyl Benzene  
Concen: 10.439 ug/l  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Tgt Ion: 91 Resp: 33273  
Ion Ratio Lower Upper  
91 100  
106 29.5 25.8 38.8

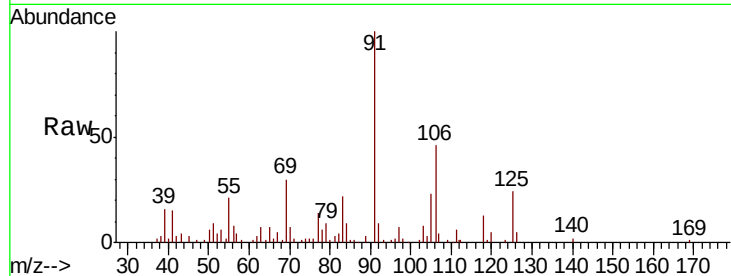




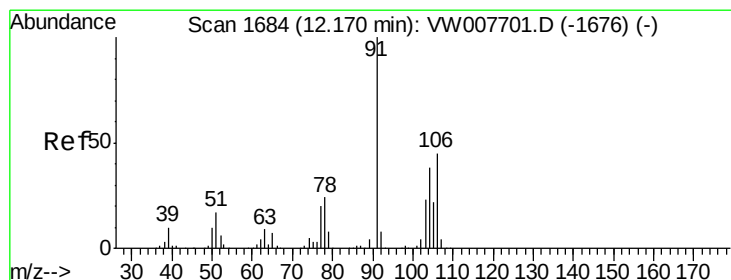
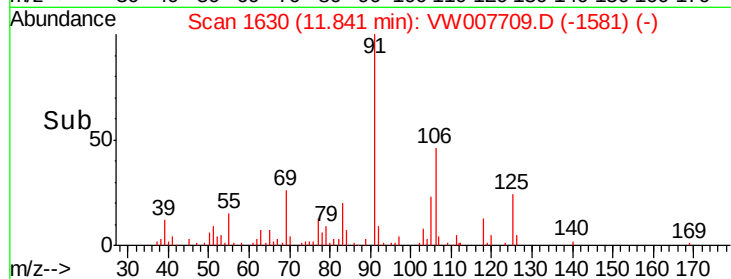
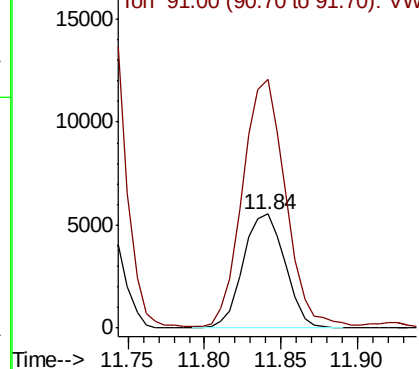
#68  
m/p-Xylenes  
Concen: 8.520 ug/l  
RT: 11.84 min Scan# 1630  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Instrument :  
MSVOA\_W  
ClientSampleId :  
MIHPT-20(17-20)

Tot Ion:106 Resp: 10534  
Ion Ratio Lower Upper  
106 100  
91 220.8 165.2 247.8

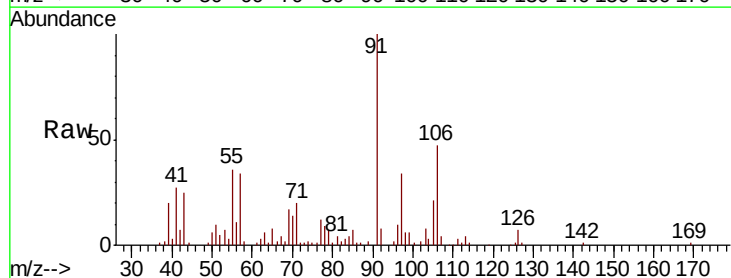


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VW

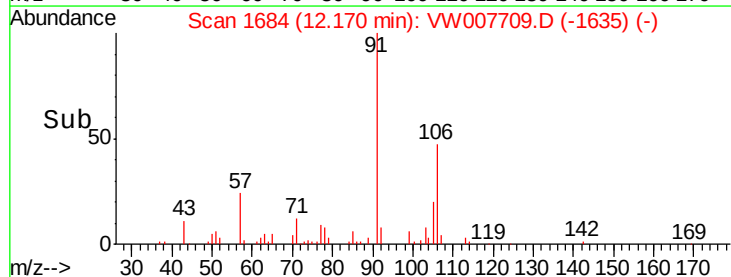
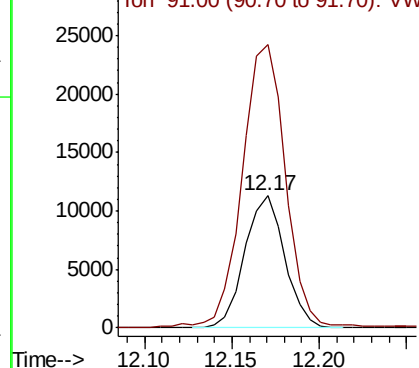


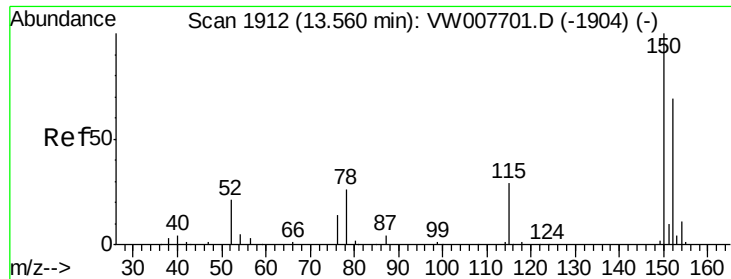
#69  
o-Xylene  
Concen: 15.415 ug/l  
RT: 12.17 min Scan# 1684  
Delta R.T. -0.00 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Tgt Ion:106 Resp: 17865  
Ion Ratio Lower Upper  
106 100  
91 235.9 110.5 331.4



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: VW007709.D

Acq: 19 Dec 2018 19:36

Instrument :

MSVOA\_W

ClientSampleId :

MIHPT-20(17-20)

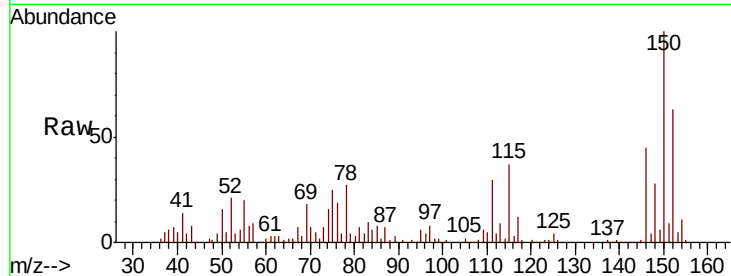
Tot Ion:152 Resp: 36133

Ion Ratio Lower Upper

152 100

115 65.7 31.8 95.4

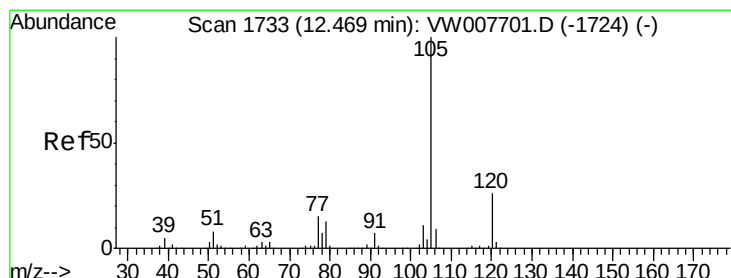
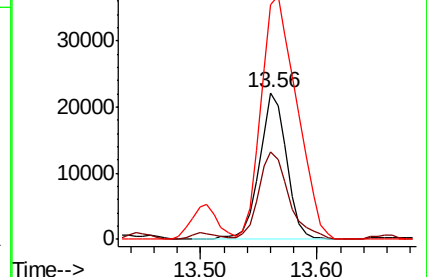
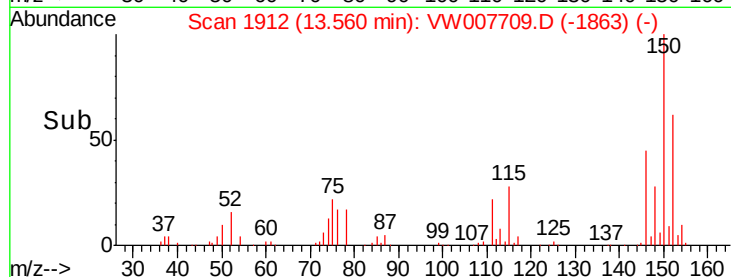
150 217.2 0.0 350.8



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



#73

Isopropylbenzene

Concen: 6.899 ug/l

RT: 12.47 min Scan# 1733

Delta R.T. -0.00 min

Lab File: VW007709.D

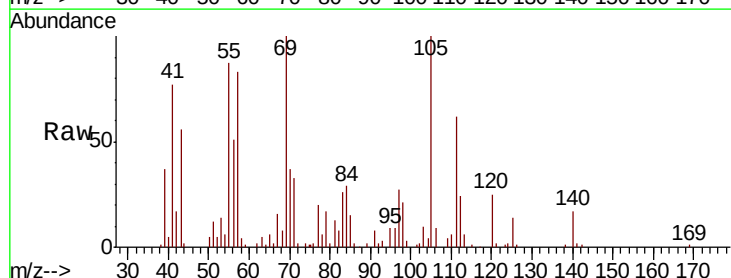
Acq: 19 Dec 2018 19:36

Tgt Ion:105 Resp: 18843

Ion Ratio Lower Upper

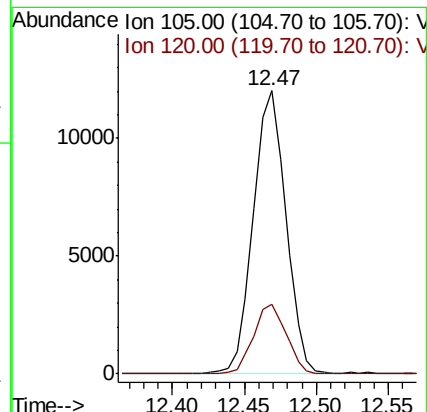
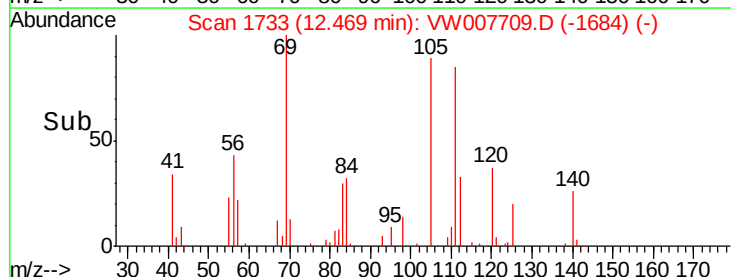
105 100

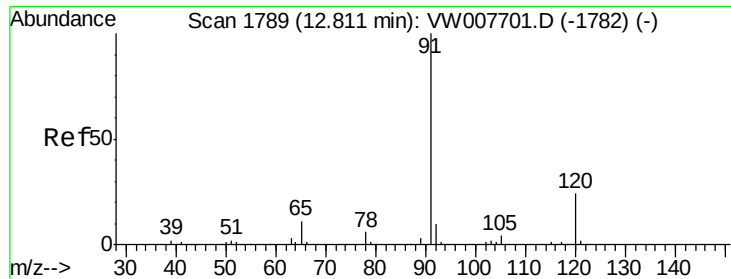
120 24.6 13.1 39.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

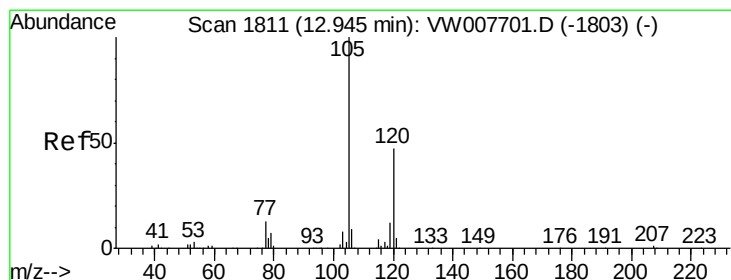
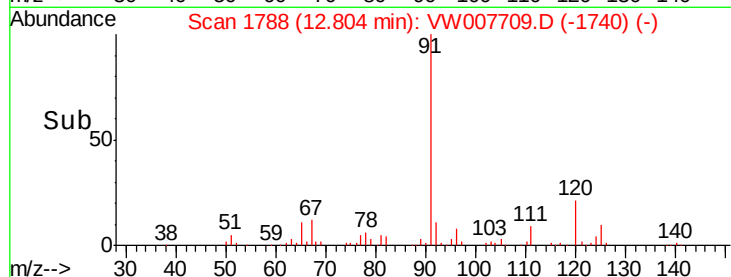
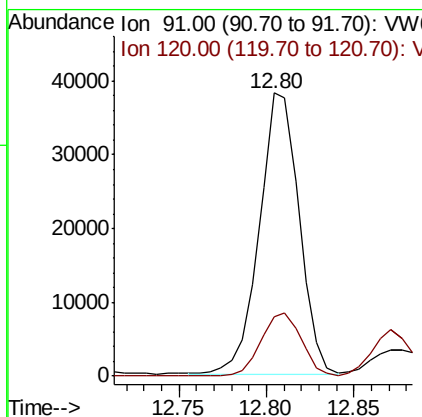
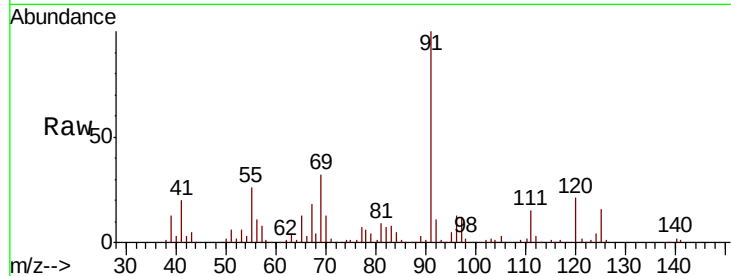




#78  
 n-propylbenzene  
 Concen: 18.994 ug/l  
 RT: 12.80 min Scan# 1788  
 Delta R.T. -0.01 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

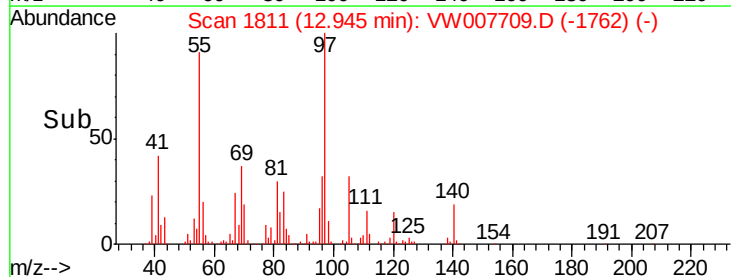
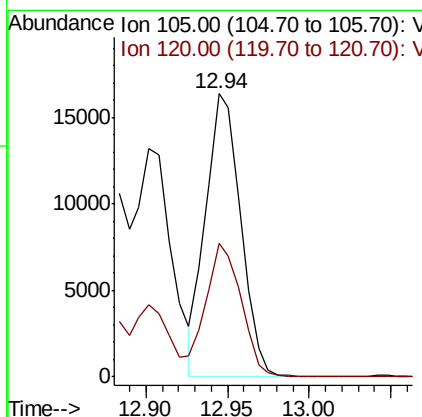
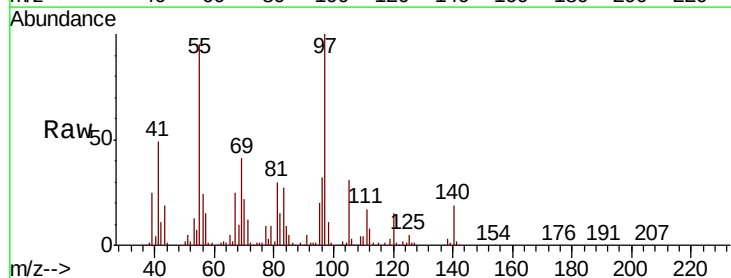
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MIHPT-20(17-20)

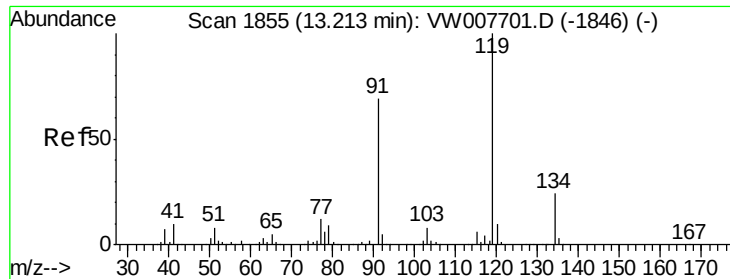
Tot Ion: 91 Resp: 60388  
 Ion Ratio Lower Upper  
 91 100  
 120 22.6 11.9 35.7



#80  
 1,3,5-Trimethylbenzene  
 Concen: 10.440 ug/l  
 RT: 12.94 min Scan# 1811  
 Delta R.T. -0.00 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

Tgt Ion: 105 Resp: 24595  
 Ion Ratio Lower Upper  
 105 100  
 120 48.4 23.6 70.8

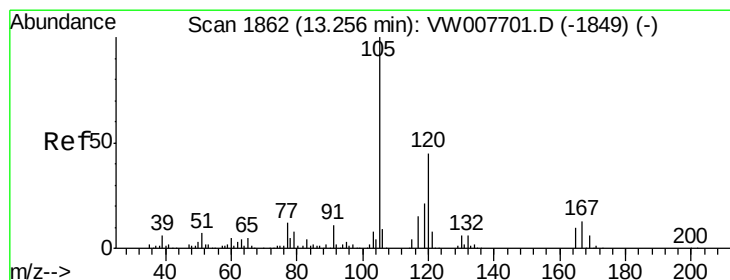
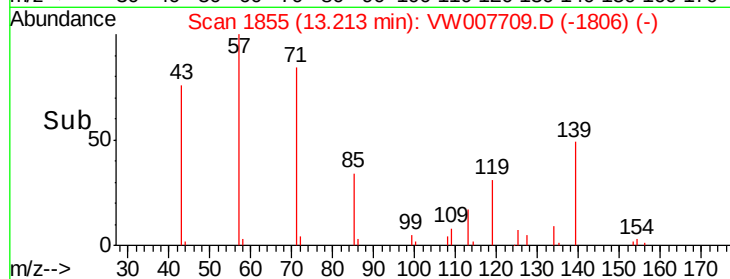
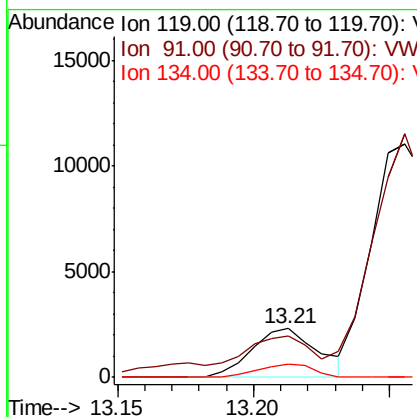
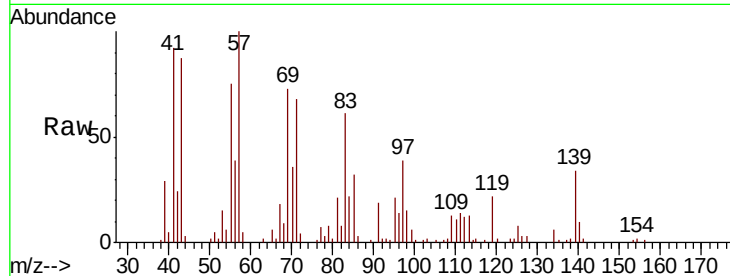




#83  
 tert-Butylbenzene  
 Concen: 1.873 ug/l  
 RT: 13.21 min Scan# 1855  
 Delta R.T. -0.00 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

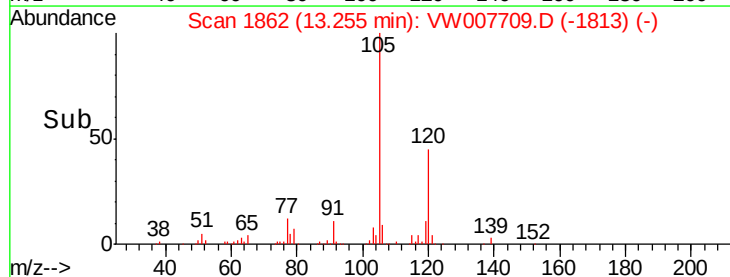
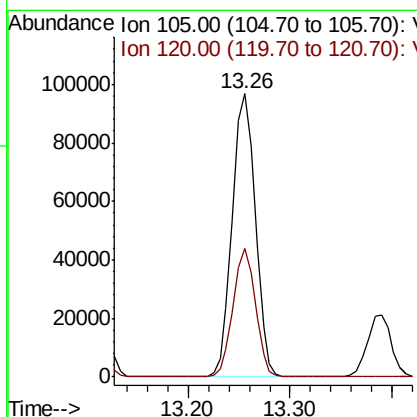
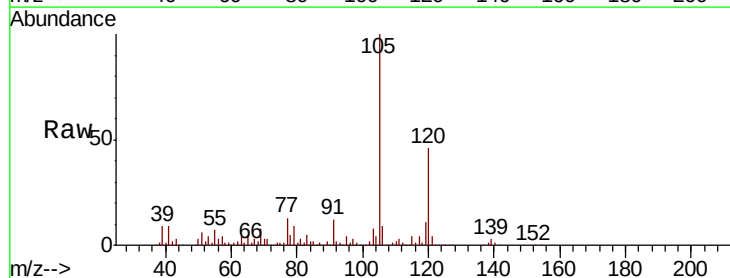
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MIHPT-20(17-20)

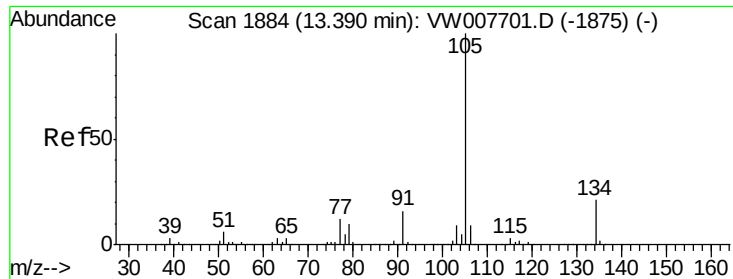
Tot Ion:119 Resp: 3871  
 Ion Ratio Lower Upper  
 119 100  
 91 85.3 34.2 102.5  
 134 22.3 12.8 38.4



#84  
 1,2,4-Trimethylbenzene  
 Concen: 63.698 ug/l  
 RT: 13.26 min Scan# 1862  
 Delta R.T. -0.00 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

Tgt Ion:105 Resp: 151424  
 Ion Ratio Lower Upper  
 105 100  
 120 44.1 22.0 66.0

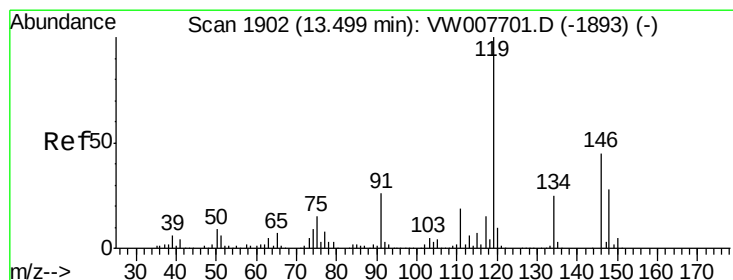
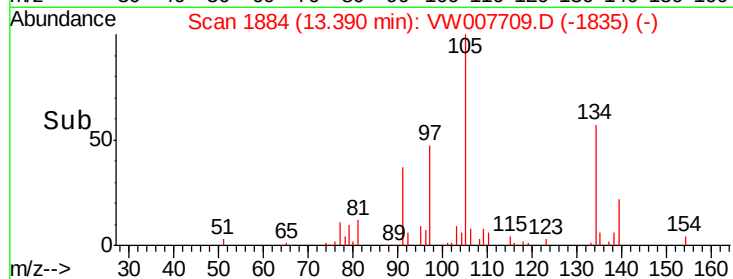
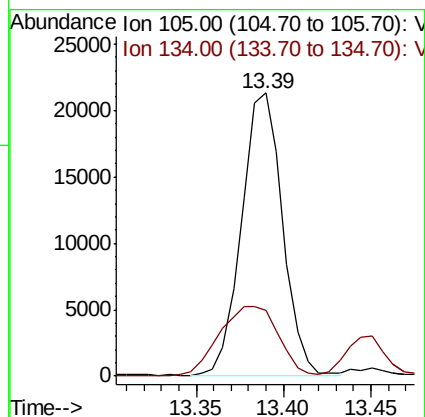
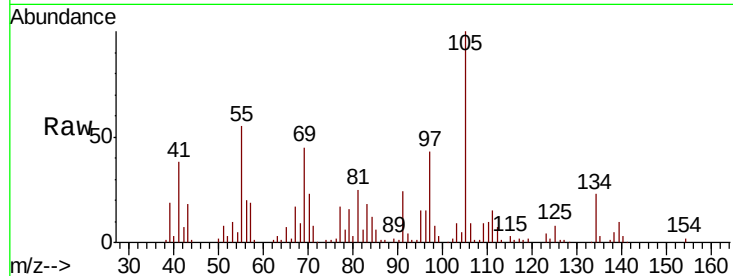




#85  
 sec-Butylbenzene  
 Concen: 12.205 ug/l  
 RT: 13.39 min Scan# 1884  
 Delta R.T. -0.00 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

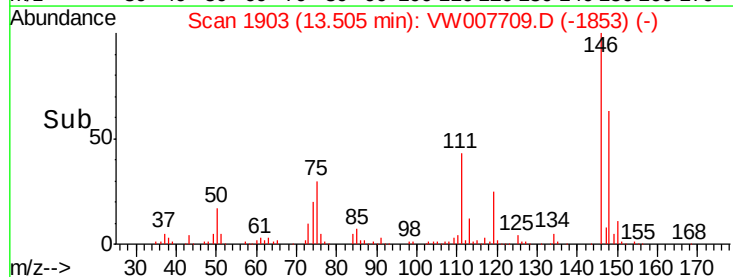
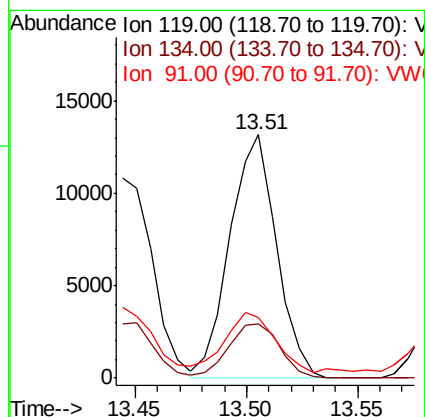
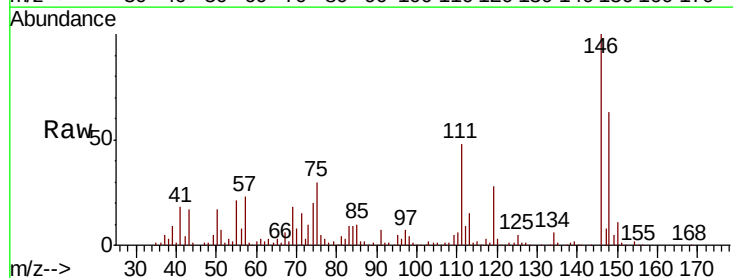
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MIHPT-20(17-20)

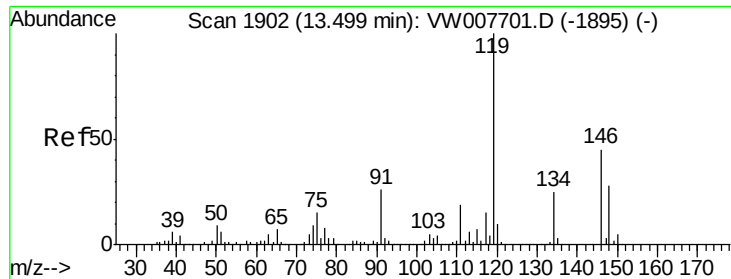
Tot Ion:105 Resp: 34771  
 Ion Ratio Lower Upper  
 105 100  
 134 35.5 10.2 30.4#



#86  
 p-Isopropyltoluene  
 Concen: 7.433 ug/l  
 RT: 13.51 min Scan# 1903  
 Delta R.T. 0.01 min  
 Lab File: VW007709.D  
 Acq: 19 Dec 2018 19:36

Tgt Ion:119 Resp: 19255  
 Ion Ratio Lower Upper  
 119 100  
 134 24.3 13.0 39.0  
 91 25.3 12.8 38.4

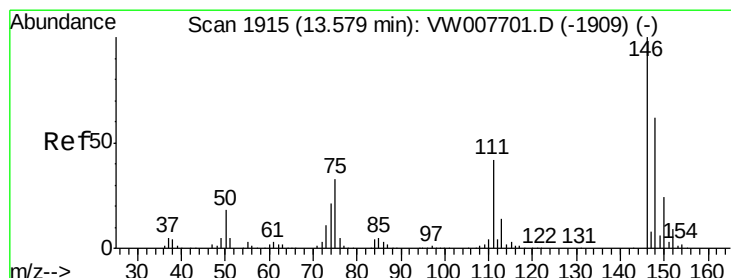
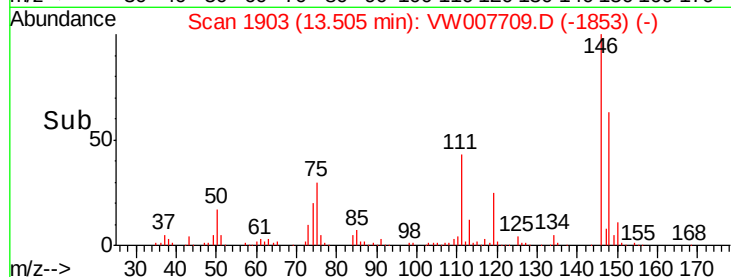
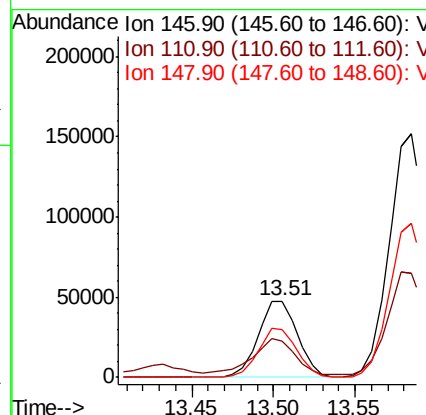
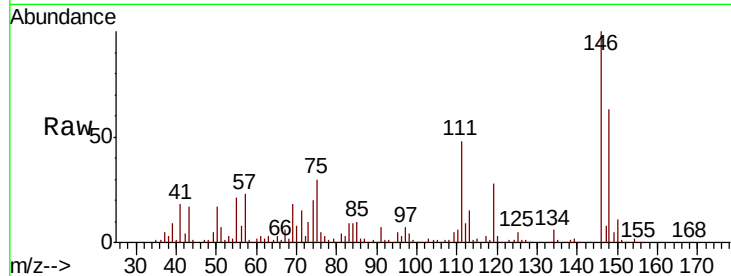




#87  
1,3-Dichlorobenzene  
Concen: 63.752 ug/l  
RT: 13.51 min Scan# 1903  
Delta R.T. 0.01 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

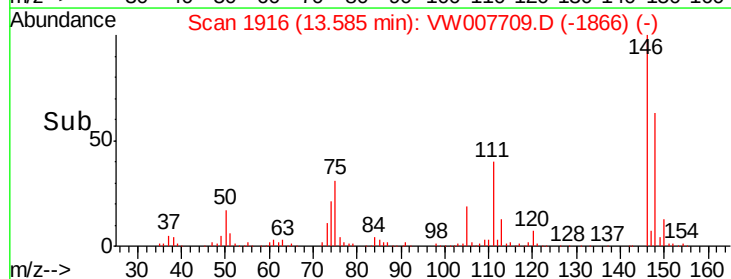
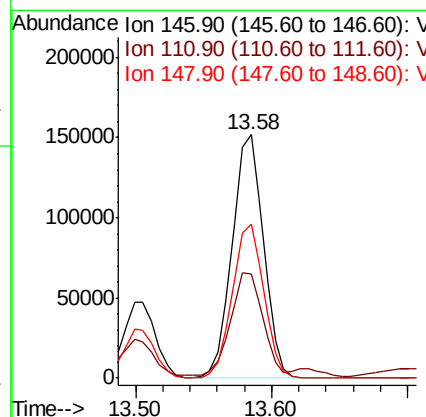
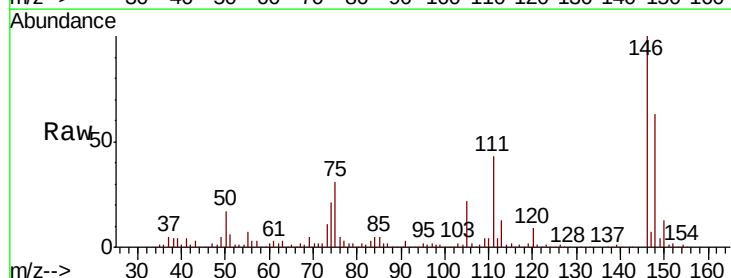
Instrument :  
MSVOA\_W  
ClientSampleId :  
MIHPT-20(17-20)

Tot Ion:146 Resp: 79230  
Ion Ratio Lower Upper  
146 100  
111 51.2 21.1 63.4  
148 63.1 32.1 96.5

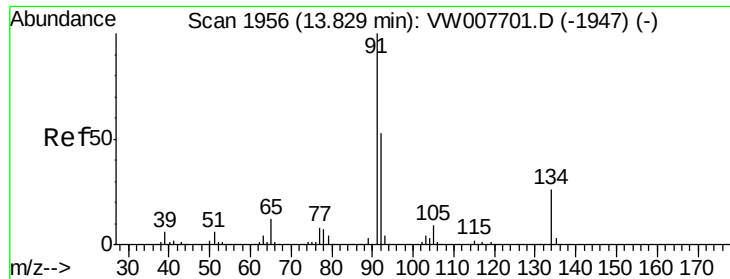


#88  
1,4-Dichlorobenzene  
Concen: 195.586 ug/l  
RT: 13.58 min Scan# 1916  
Delta R.T. 0.01 min  
Lab File: VW007709.D  
Acq: 19 Dec 2018 19:36

Tgt Ion:146 Resp: 243142  
Ion Ratio Lower Upper  
146 100  
111 43.5 21.0 63.0  
148 63.5 31.8 95.4







#89

n-Butylbenzene

Concen: 15.929 ug/l

RT: 13.83 min Scan# 1956

Delta R.T. -0.00 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

Instrument :

MSVOA\_W

ClientSampleId :

MIHPT-20(17-20)

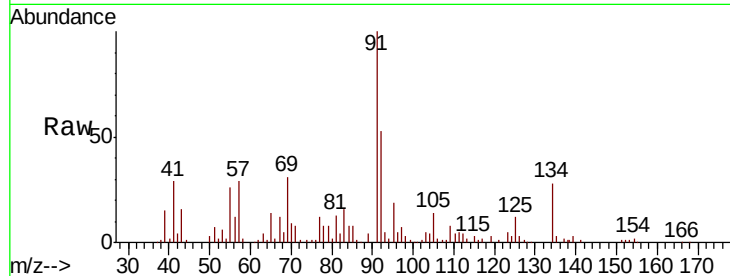
Tot Ion: 91 Resp: 37834

Ion Ratio Lower Upper

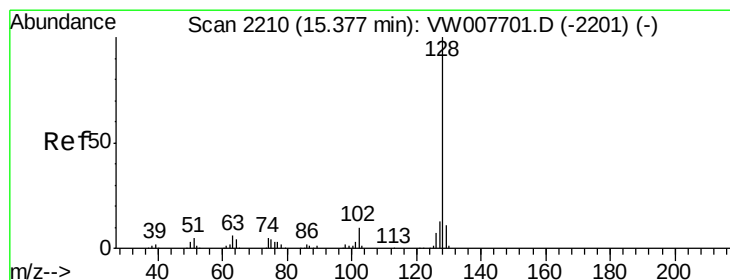
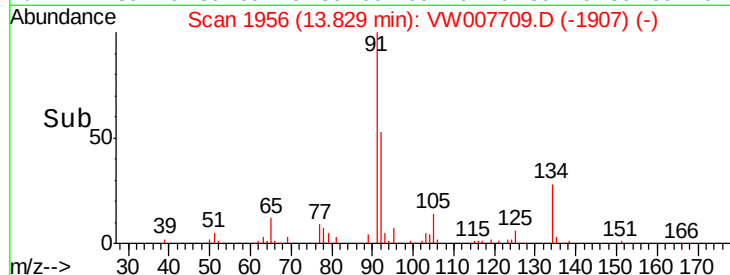
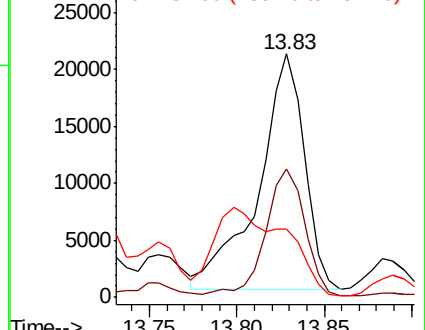
91 100

92 46.1 26.4 79.2

134 0.0 13.7 41.0#



Abundance Ion 91.00 (90.70 to 91.70): VW  
Ion 92.00 (91.70 to 92.70): VW  
Ion 134.00 (133.70 to 134.70): V



#95

Naphthalene

Concen: 67.646 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. -0.01 min

Lab File: VW007709.D

Acq: 19 Dec 2018 19:36

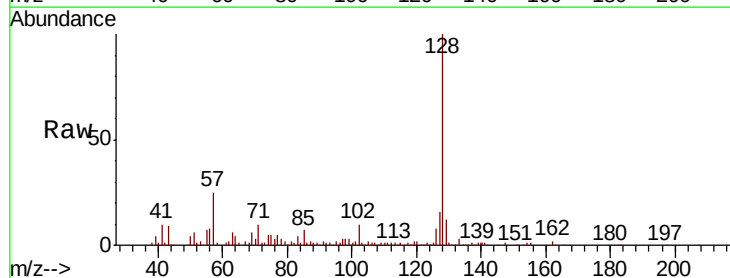
Tgt Ion:128 Resp: 96600

Ion Ratio Lower Upper

128 100

127 19.3 10.7 16.1#

129 11.2 8.8 13.2



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V

