

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072419\  
 Data File : VW011461.D  
 Acq On : 24 Jul 2019 04:50  
 Operator : SY/VA  
 Sample : K3615-05  
 Misc : 6.30G/5ML/MSVOA W/SOIL  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 HR-06-071719-C

Quant Time: Jul 24 08:10:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W070819S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 11 08:14:17 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 245696   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 421693   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 276754   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 97824    | 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   | 165061   | 53.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.94% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 128365   | 51.07 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.14% |          |
| 50) Toluene-d8              | 10.32 | 98   | 480530   | 47.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.60%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 191933   | 51.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.08% |          |

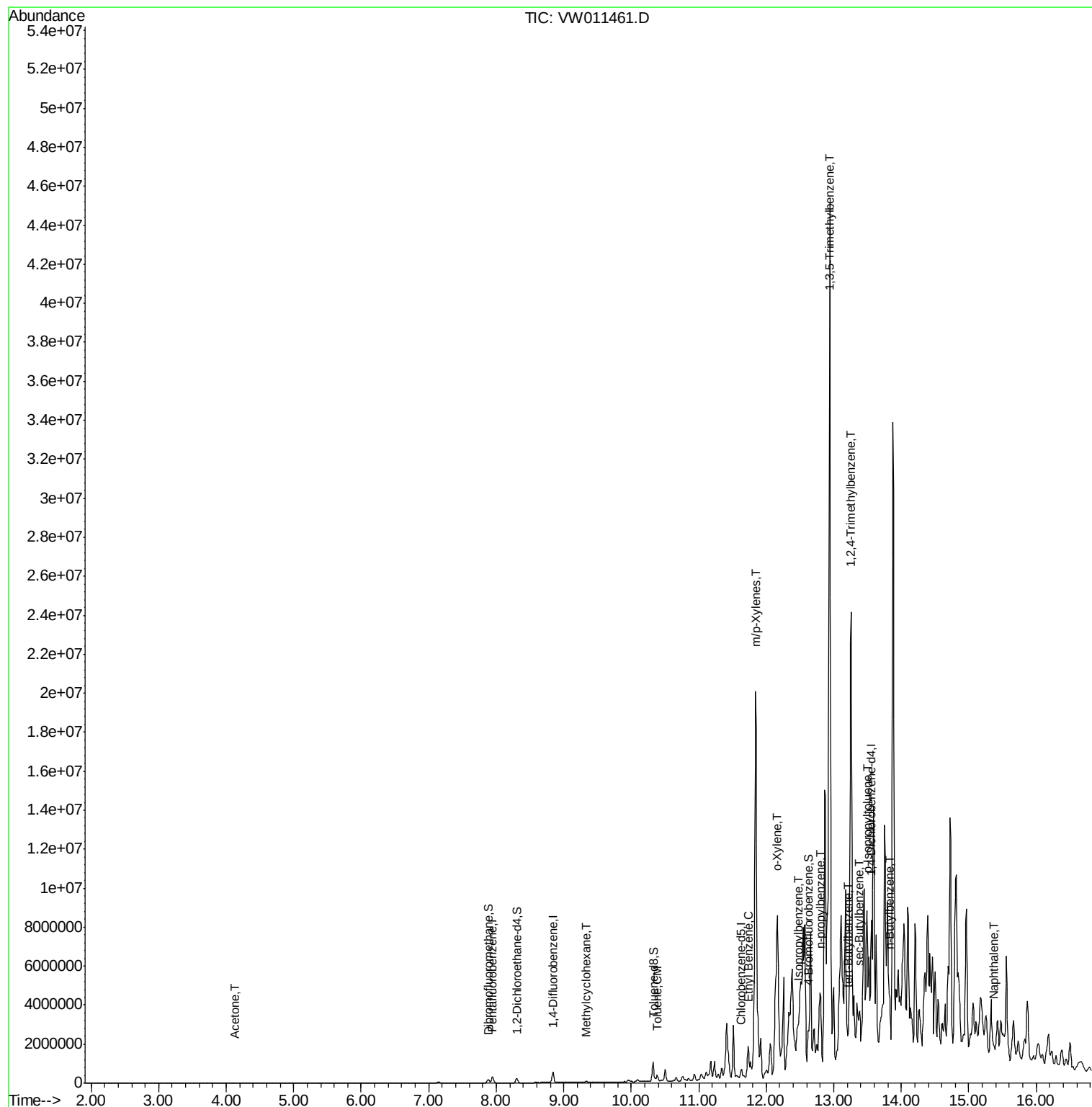
| Target Compounds           | R.T.  | QIon | Response | Conc     | Units  | Qvalue |
|----------------------------|-------|------|----------|----------|--------|--------|
| 16) Acetone                | 4.13  | 43   | 13853    | 18.649   | ug/l   | 98     |
| 39) Methylcyclohexane      | 9.34  | 83   | 19150    | 3.518    | ug/l   | 91     |
| 52) Toluene                | 10.38 | 92   | 128942   | 17.128   | ug/l   | 99     |
| 67) Ethyl Benzene          | 11.73 | 91   | 994221   | 92.301   | ug/l   | 99     |
| 68) m/p-Xylenes            | 11.83 | 106  | 1670141  | 428.505  | ug/l   | 99     |
| 69) o-Xylene               | 12.16 | 106  | 1708963  | 465.207  | ug/l   | 100    |
| 73) Isopropylbenzene       | 12.46 | 105  | 465832   | 63.702   | ug/l   | 99     |
| 78) n-propylbenzene        | 12.80 | 91   | 2245346  | 249.255  | ug/l   | 99     |
| 80) 1,3,5-Trimethylbenzene | 12.94 | 105  | 6510416  | 1047.949 | ug/l   | 99     |
| 83) tert-Butylbenzene      | 13.21 | 119  | 48380    | 9.338    | ug/l   | 85     |
| 84) 1,2,4-Trimethylbenzene | 13.26 | 105  | 11669314 | 1870.652 | ug/l   | 94     |
| 85) sec-Butylbenzene       | 13.38 | 105  | 644948   | 86.267   | ug/l # | 68     |
| 86) p-Isopropyltoluene     | 13.50 | 119  | 640037   | 95.449   | ug/l   | 100    |
| 89) n-Butylbenzene         | 13.83 | 91   | 1262463  | 188.729  | ug/l # | 79     |
| 95) Naphthalene            | 15.37 | 128  | 231629   | 61.264   | ug/l # | 91     |

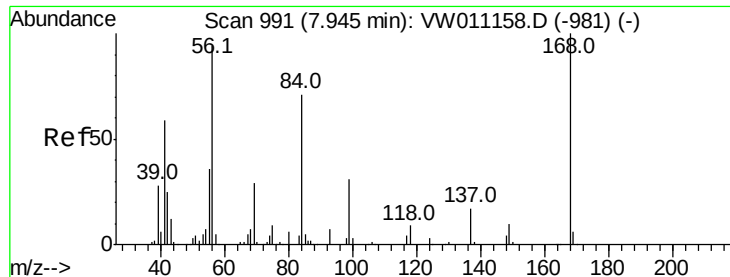
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Thu Jul 11 08:14:17 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

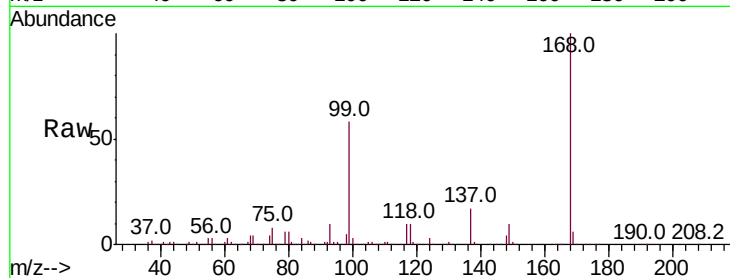
HR-06-071719-C

Tot Ion:168 Resp: 245696

Ion Ratio Lower Upper

168 100

99 57.8 50.1 75.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

120000

100000

80000

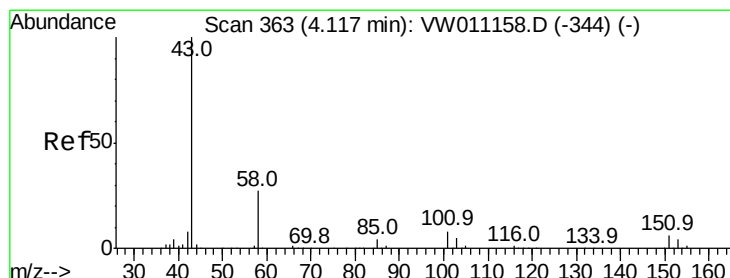
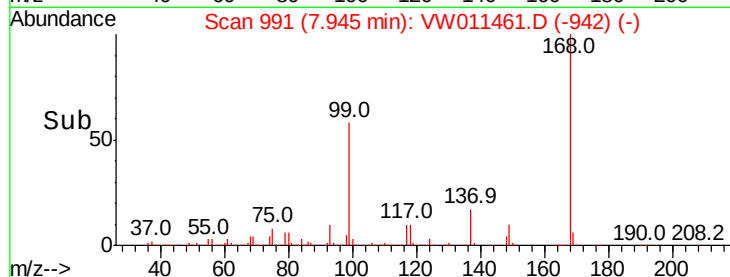
60000

40000

20000

0

Time--> 7.80 7.90 8.00 8.10



#16

Acetone

Concen: 18.649 ug/l

RT: 4.13 min Scan# 365

Delta R.T. 0.01 min

Lab File: VW011461.D

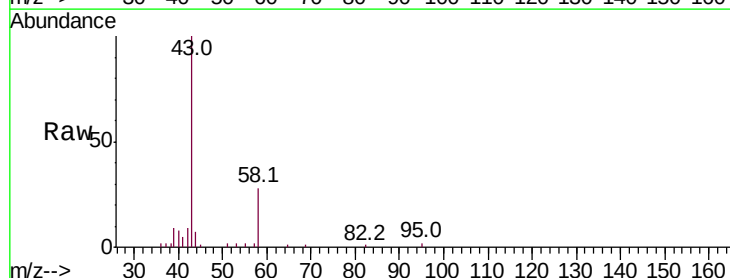
Acq: 24 Jul 2019 04:50

Tgt Ion: 43 Resp: 13853

Ion Ratio Lower Upper

43 100

58 28.0 21.8 32.6



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

4.13

5000

4000

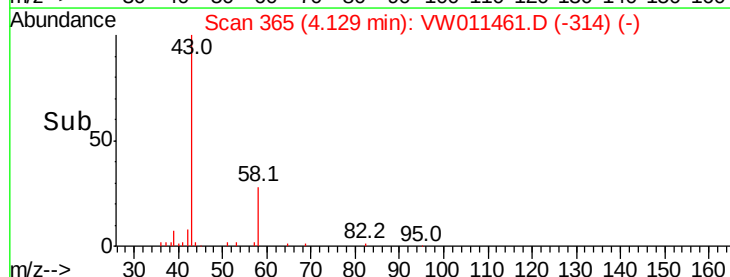
3000

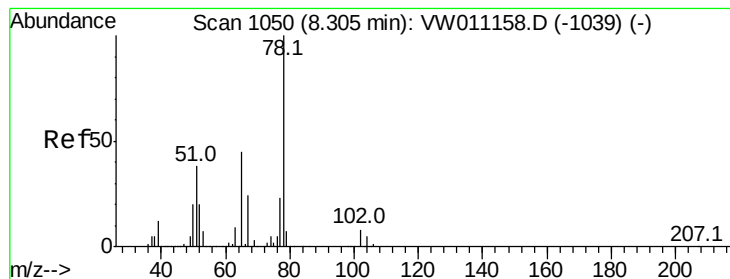
2000

1000

0

Time--> 4.00 4.10 4.20 4.30





#33

1,2-Dichloroethane-d4

Concen: 53.465 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

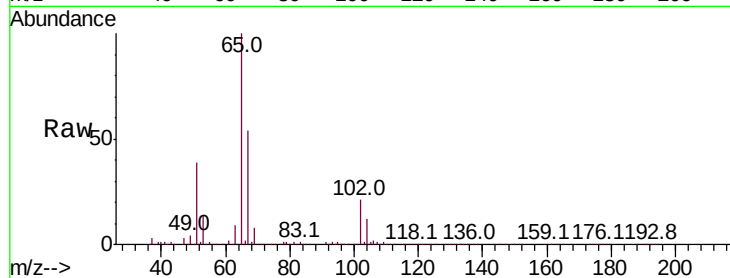
HR-06-071719-C

Tot Ion: 65 Resp: 165061

Ion Ratio Lower Upper

65 100

67 51.9 0.0 104.4



Abundance Ion 64.90 (64.60 to 65.60): VW

Ion 66.90 (66.60 to 67.60): VW

8.31

80000

60000

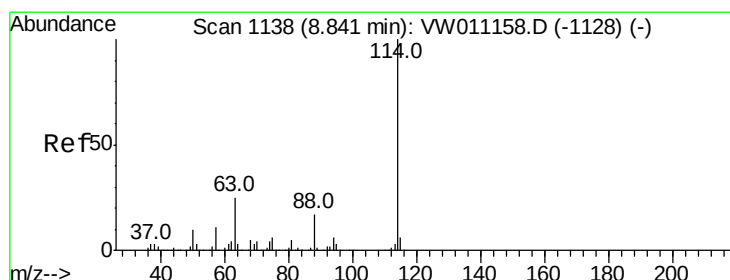
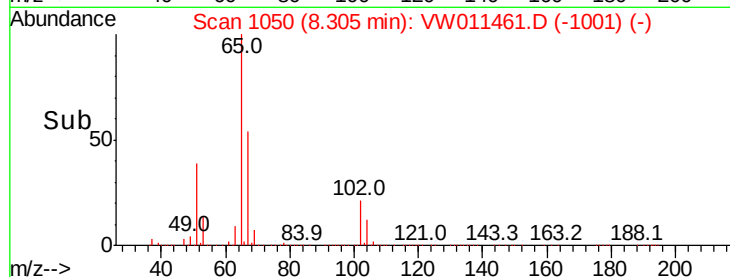
40000

20000

0

8.20 8.30 8.40

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

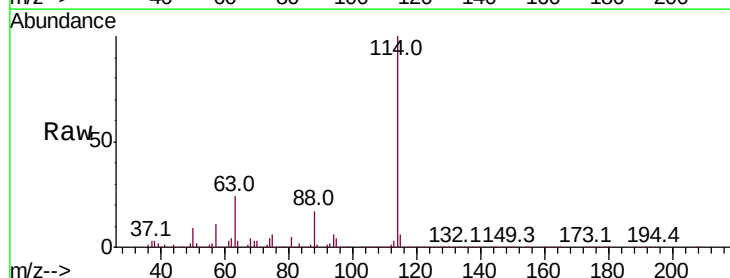
Tgt Ion: 114 Resp: 421693

Ion Ratio Lower Upper

114 100

63 24.4 0.0 50.8

88 16.5 0.0 34.2



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

8.84

300000

250000

200000

150000

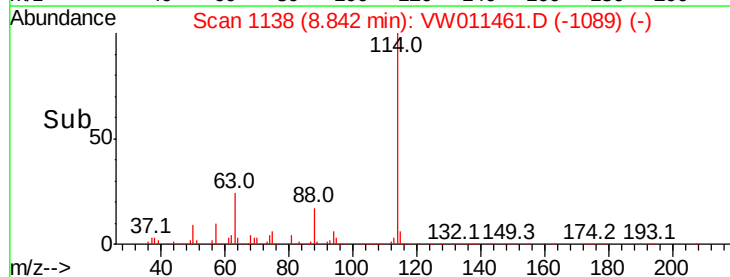
100000

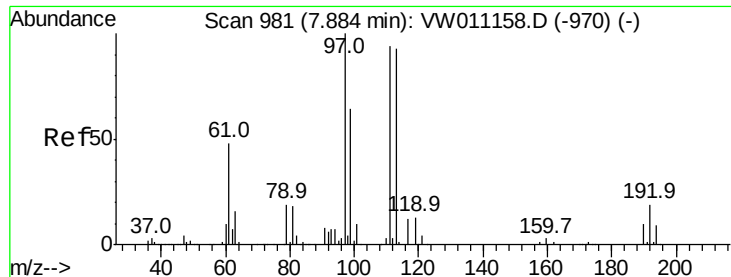
50000

0

8.80 8.90

Time-->





#35

Dibromofluoromethane

Concen: 51.071 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.01 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

HR-06-071719-C

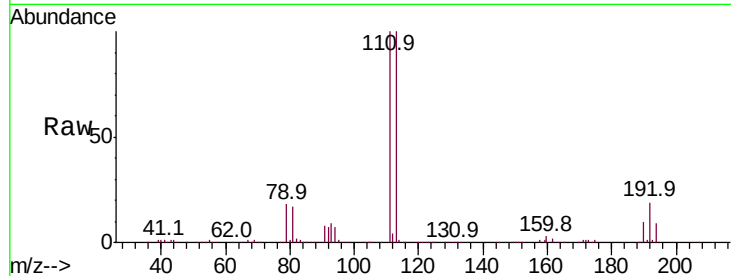
Tot Ion:113 Resp: 128365

Ion Ratio Lower Upper

113 100

111 103.9 82.4 123.6

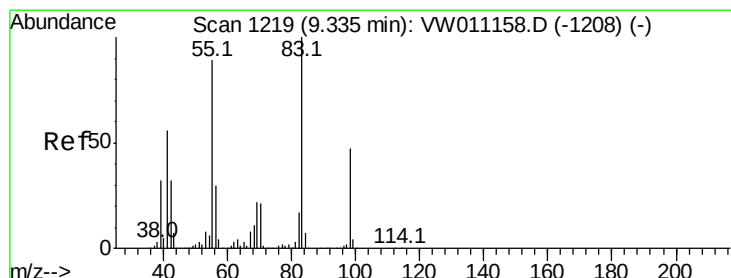
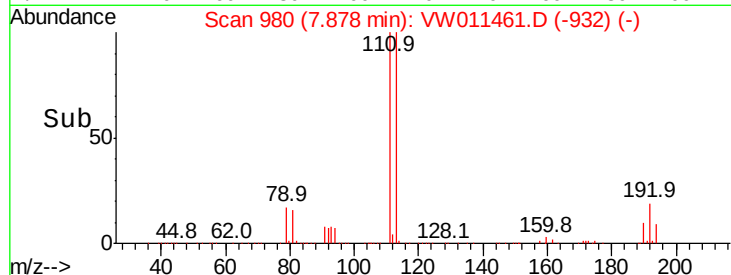
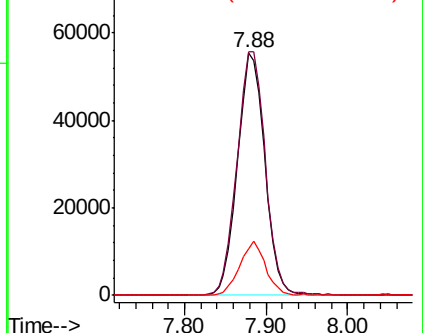
192 21.4 15.8 23.8



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



#39

Methylcyclohexane

Concen: 3.518 ug/l

RT: 9.34 min Scan# 1219

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

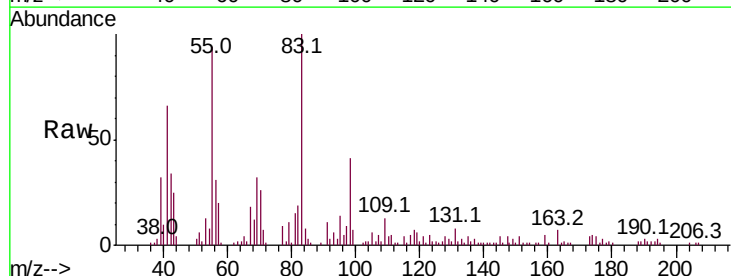
Tgt Ion: 83 Resp: 19150

Ion Ratio Lower Upper

83 100

55 78.9 71.2 106.8

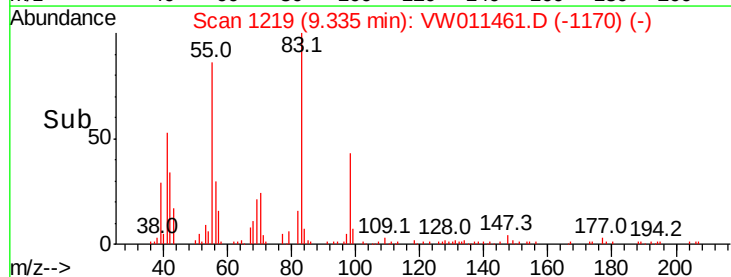
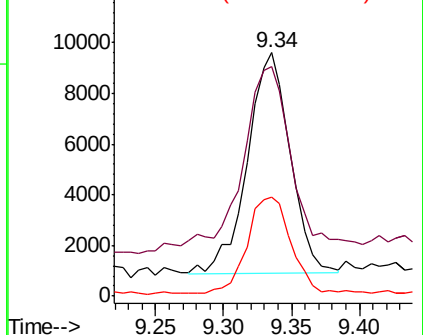
98 43.6 37.5 56.3

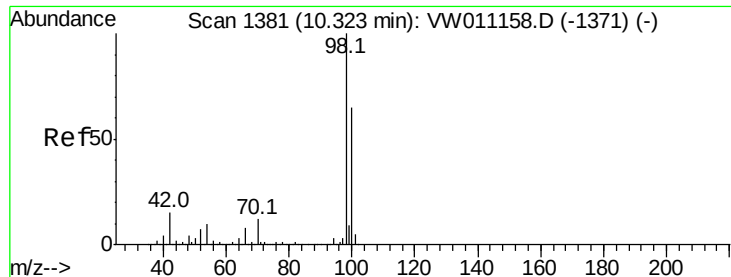


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 98.00 (97.70 to 98.70): VW





#50

Toluene-d8

Concen: 47.297 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

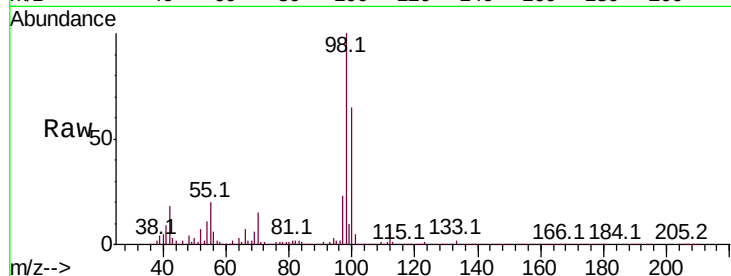
HR-06-071719-C

Tot Ion: 98 Resp: 480530

Ion Ratio Lower Upper

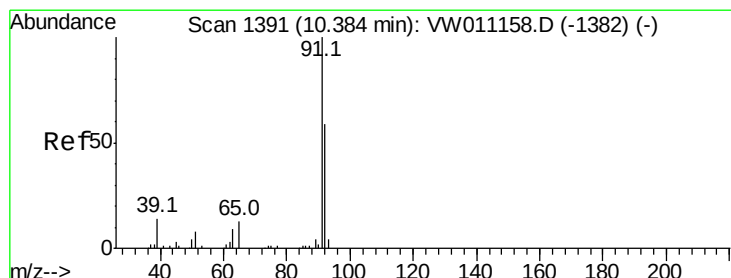
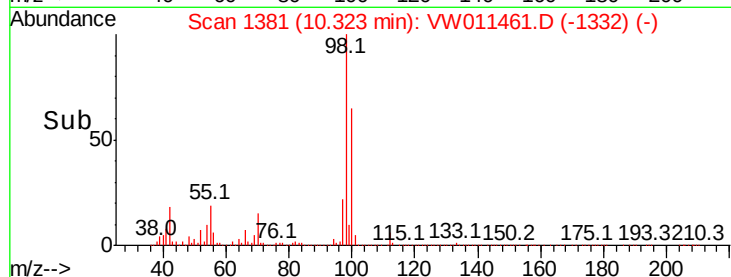
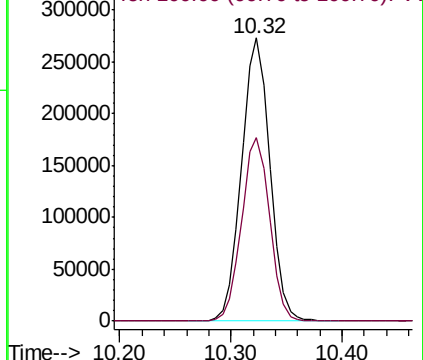
98 100

100 64.3 52.4 78.6



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW



#52

Toluene

Concen: 17.128 ug/l

RT: 10.38 min Scan# 1391

Delta R.T. 0.00 min

Lab File: VW011461.D

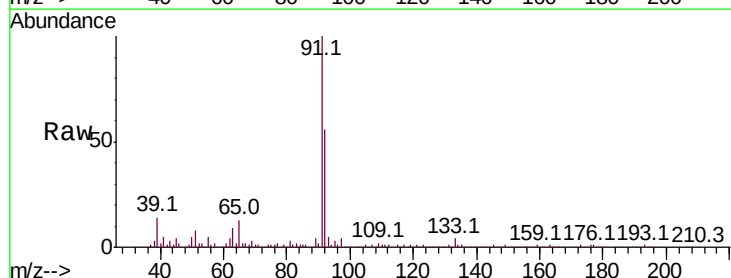
Acq: 24 Jul 2019 04:50

Tgt Ion: 92 Resp: 128942

Ion Ratio Lower Upper

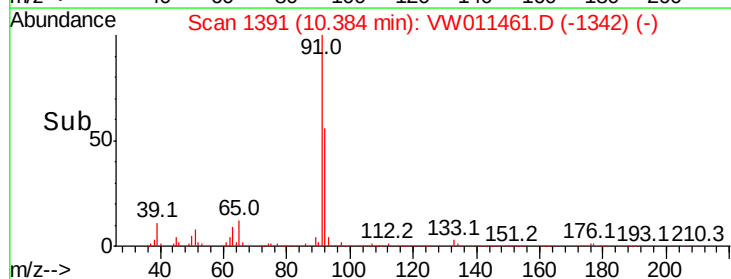
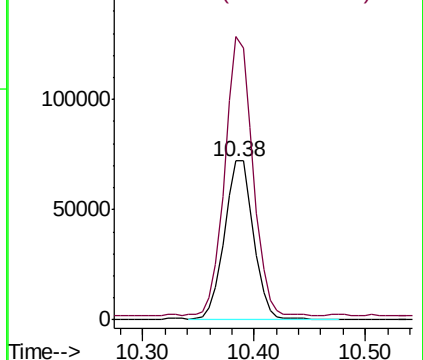
92 100

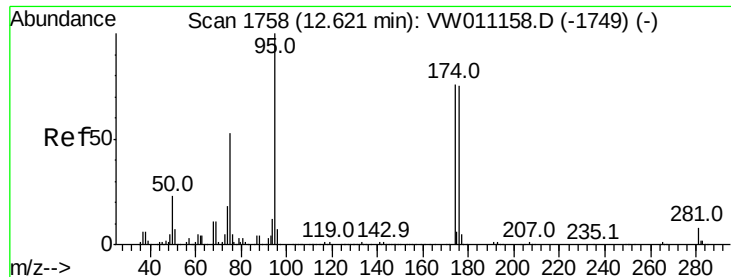
91 171.6 136.6 205.0



Abundance Ion 92.00 (91.70 to 92.70): VW

Ion 91.00 (90.70 to 91.70): VW





#62

4-Bromofluorobenzene

Concen: 51.540 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.01 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

HR-06-071719-C

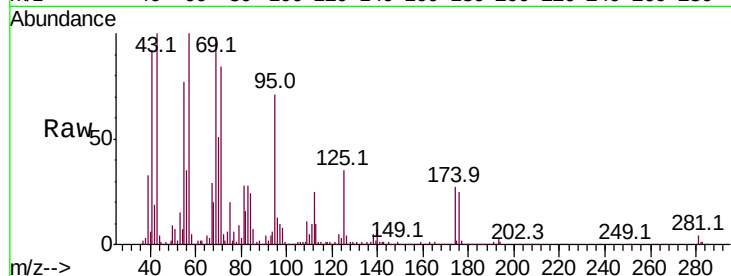
Tot Ion: 95 Resp: 191933

Ion Ratio Lower Upper

95 100

174 43.5 0.0 147.6

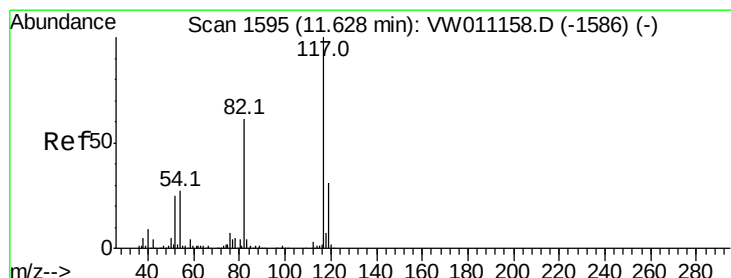
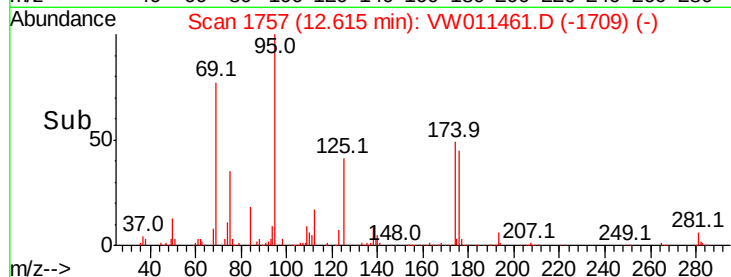
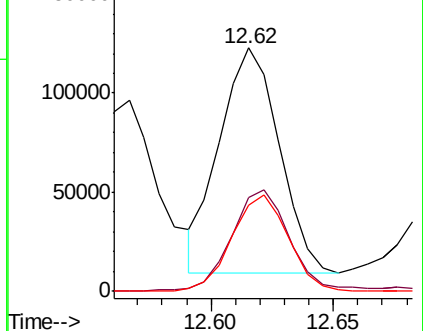
176 40.8 0.0 144.6



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1596

Delta R.T. 0.01 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

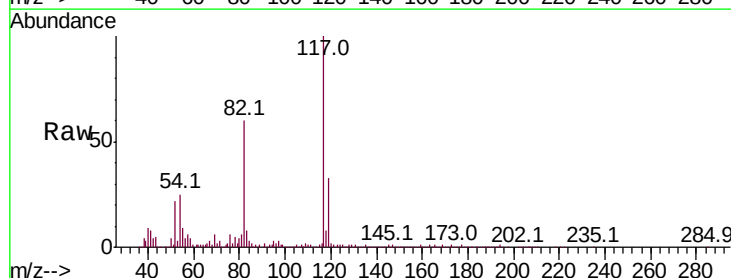
Tgt Ion: 117 Resp: 276754

Ion Ratio Lower Upper

117 100

82 56.3 48.9 73.3

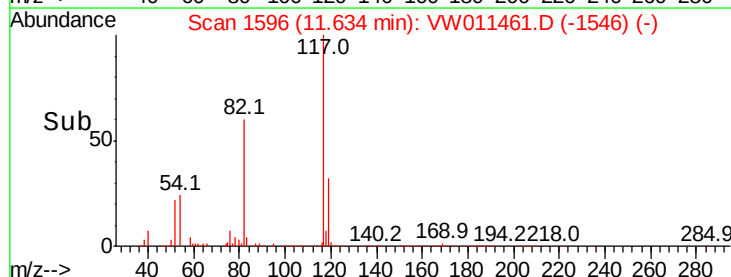
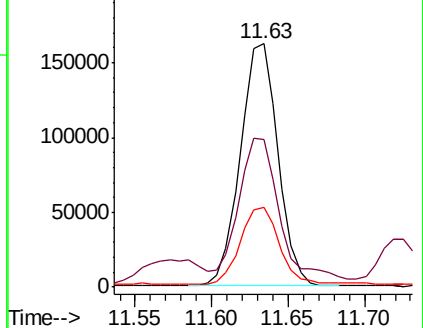
119 31.7 25.0 37.6

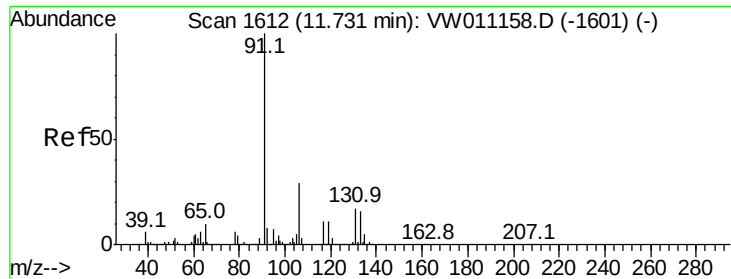


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW

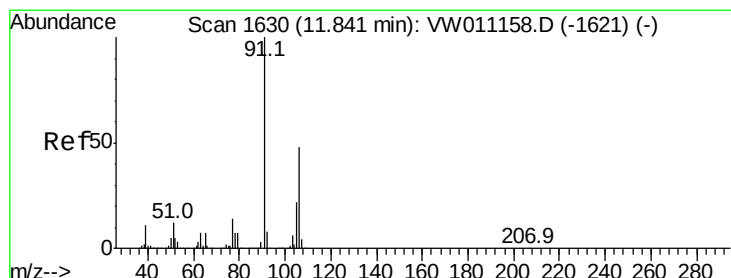
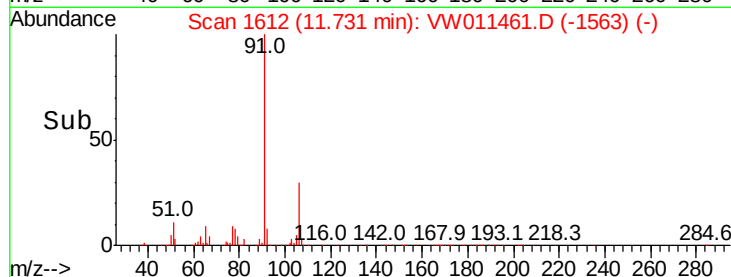
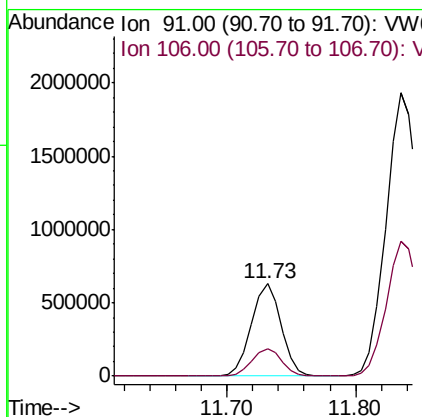
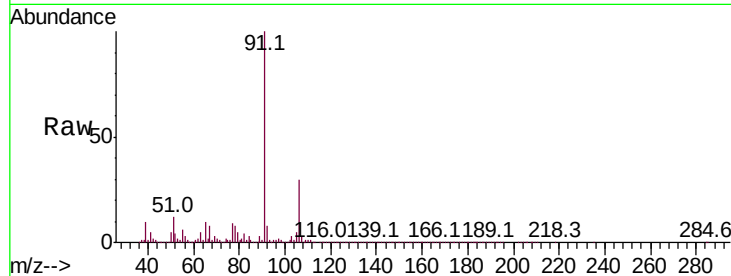




#67  
Ethyl Benzene  
Concen: 92.301 ug/l  
RT: 11.73 min Scan# 1612  
Delta R.T. 0.00 min  
Lab File: VW011461.D  
Acq: 24 Jul 2019 04:50

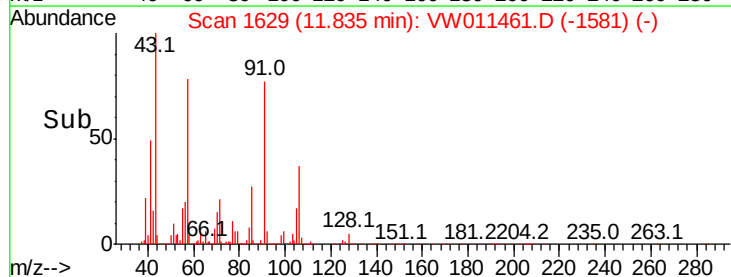
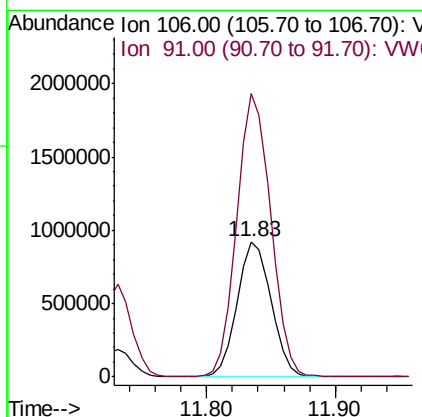
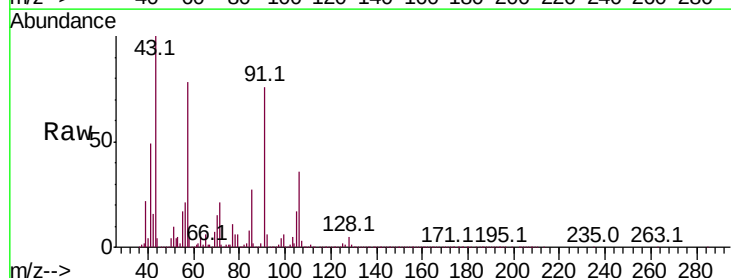
Instrument :  
MSVOA\_W  
ClientSampled :  
HR-06-071719-C

Tot Ion: 91 Resp: 994221  
Ion Ratio Lower Upper  
91 100  
106 30.1 23.5 35.3

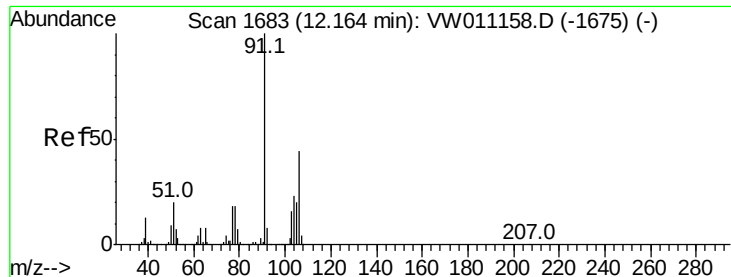


#68  
m/p-Xylenes  
Concen: 428.505 ug/l  
RT: 11.83 min Scan# 1629  
Delta R.T. -0.01 min  
Lab File: VW011461.D  
Acq: 24 Jul 2019 04:50

Tgt Ion: 106 Resp: 1670141  
Ion Ratio Lower Upper  
106 100  
91 210.7 167.7 251.5



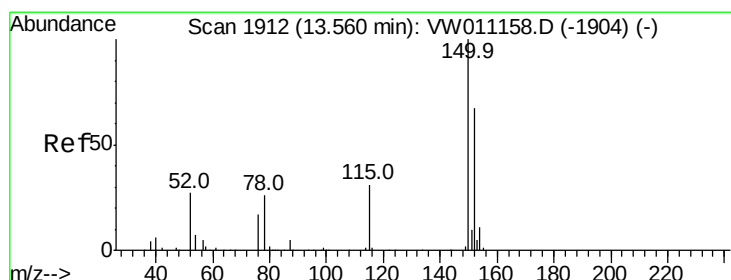
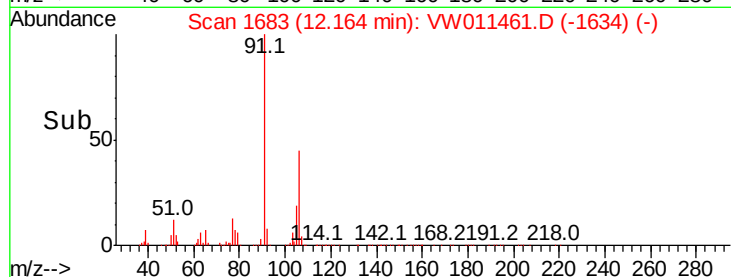
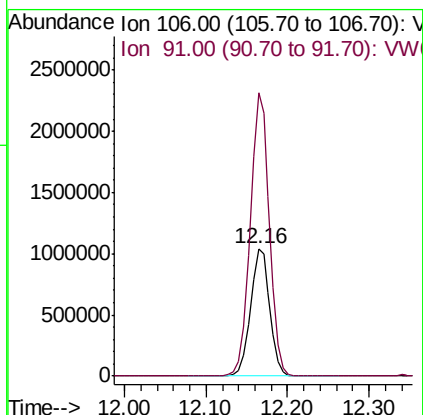
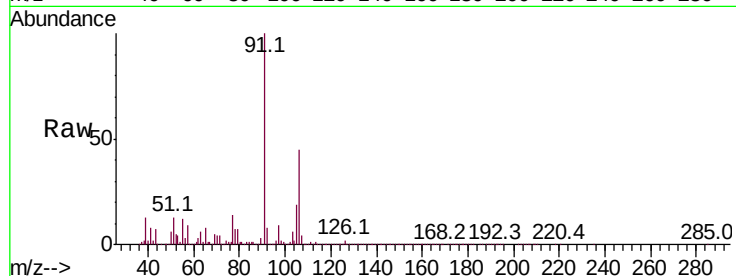




#69  
o-Xylene  
Concen: 465.207 ug/l  
RT: 12.16 min Scan# 1683  
Delta R.T. 0.00 min  
Lab File: VW011461.D  
Acq: 24 Jul 2019 04:50

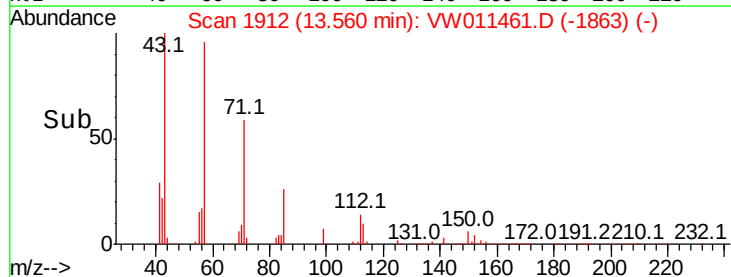
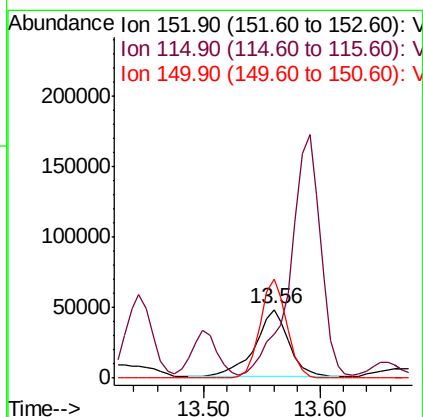
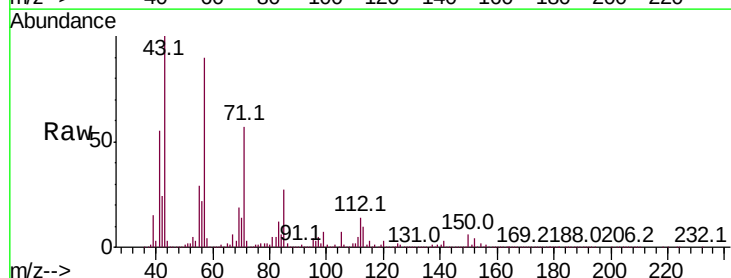
Instrument :  
MSVOA\_W  
ClientSampleId :  
HR-06-071719-C

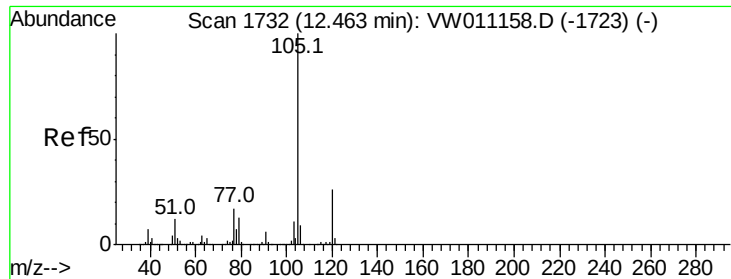
Tot Ion:106 Resp: 1708963  
Ion Ratio Lower Upper  
106 100  
91 220.9 110.7 332.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. 0.00 min  
Lab File: VW011461.D  
Acq: 24 Jul 2019 04:50

Tgt Ion:152 Resp: 97824  
Ion Ratio Lower Upper  
152 100  
115 0.0 30.1 90.3#  
150 112.7 0.0 346.0





#73

Isopropylbenzene

Concen: 63.702 ug/l

RT: 12.46 min Scan# 1732

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

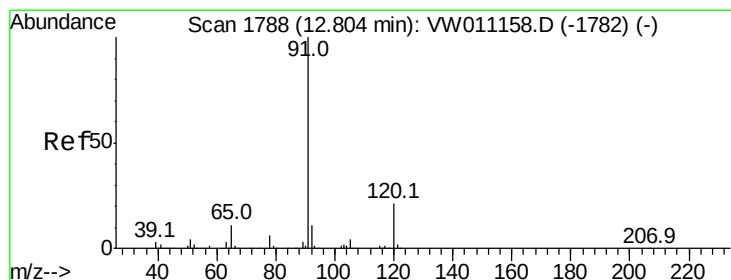
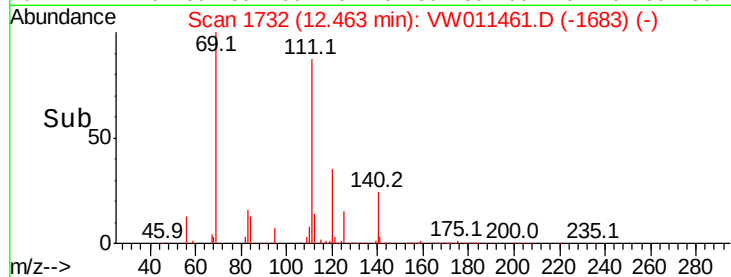
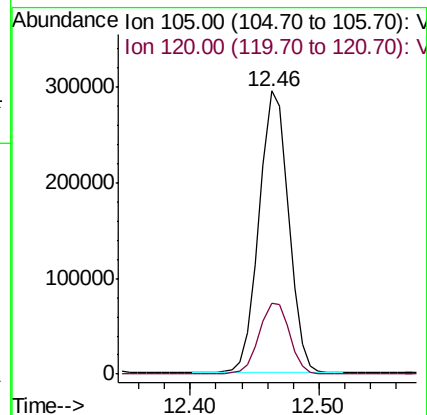
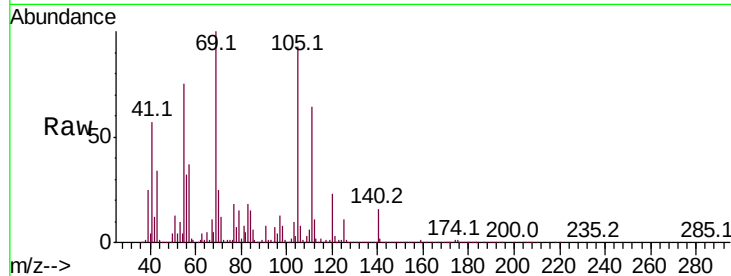
HR-06-071719-C

Tot Ion:105 Resp: 465832

Ion Ratio Lower Upper

105 100

120 25.8 12.8 38.3



#78

n-propylbenzene

Concen: 249.255 ug/l

RT: 12.80 min Scan# 1788

Delta R.T. 0.00 min

Lab File: VW011461.D

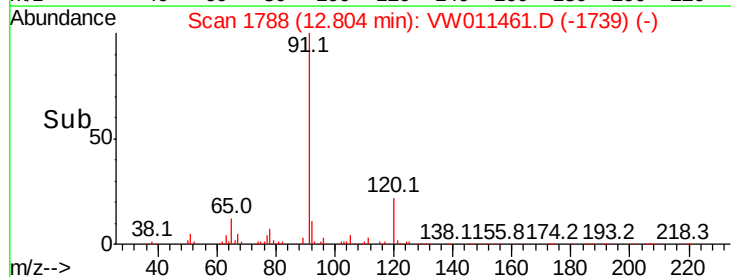
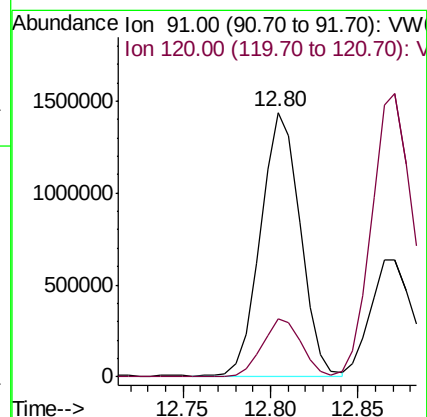
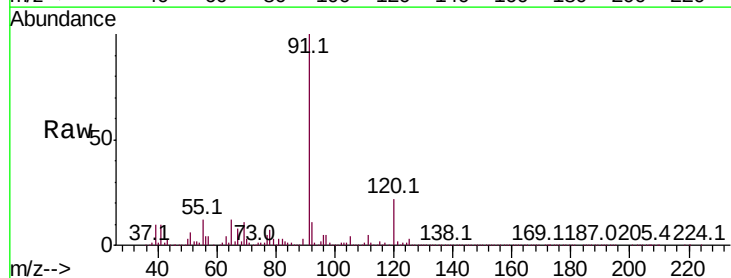
Acq: 24 Jul 2019 04:50

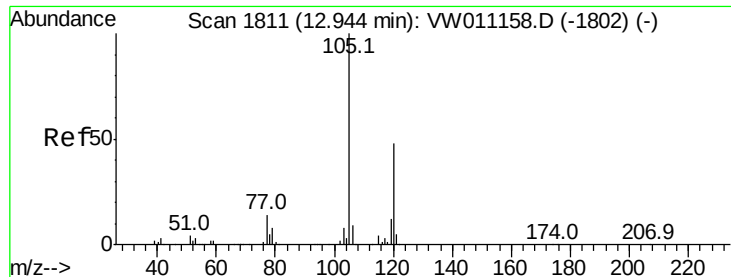
Tgt Ion: 91 Resp: 2245346

Ion Ratio Lower Upper

91 100

120 21.8 10.8 32.3

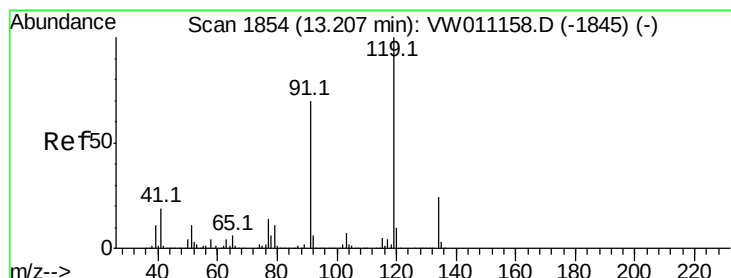
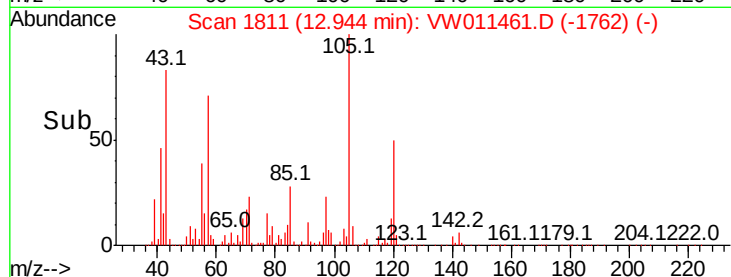
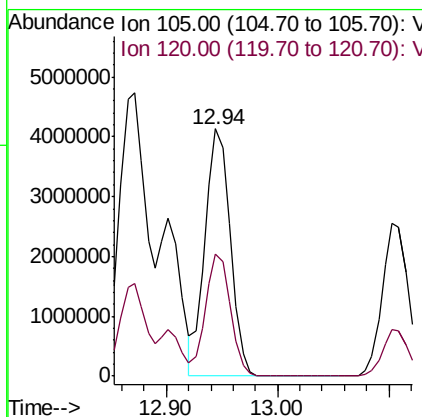
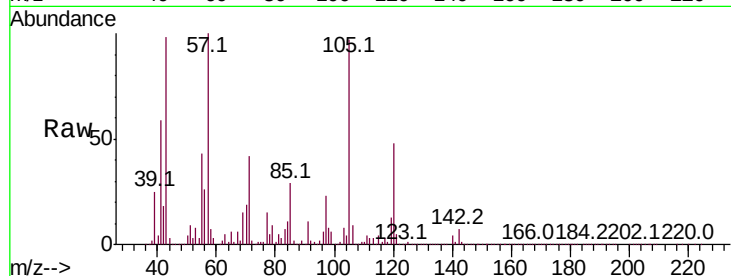




#80  
 1,3,5-Trimethylbenzene  
 Concen: 1047.949 ug/l  
 RT: 12.94 min Scan# 1811  
 Delta R.T. 0.00 min  
 Lab File: VW011461.D  
 Acq: 24 Jul 2019 04:50

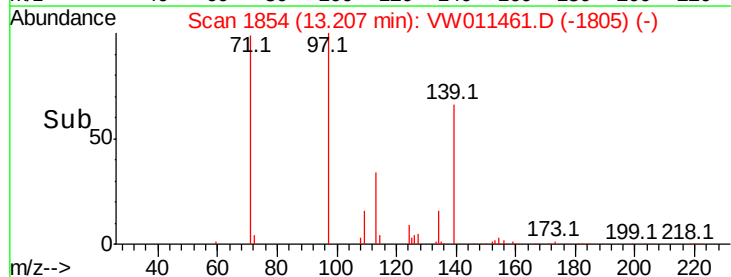
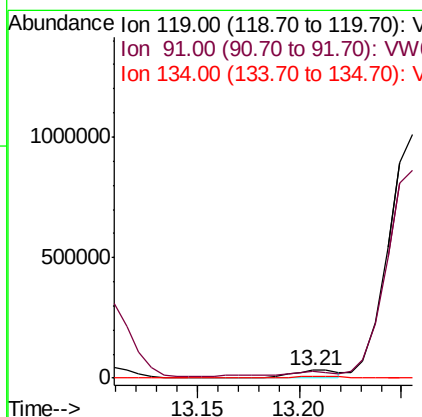
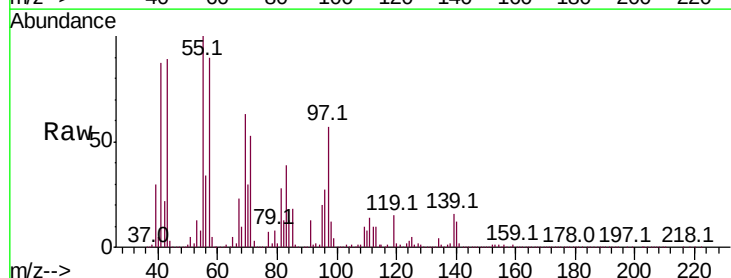
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 HR-06-071719-C

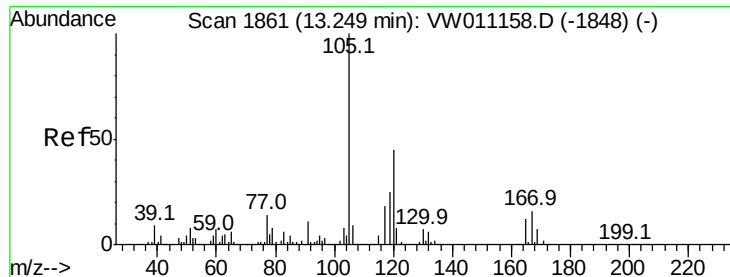
Tot Ion:105 Resp: 6510416  
 Ion Ratio Lower Upper  
 105 100  
 120 49.0 24.1 72.2



#83  
 tert-Butylbenzene  
 Concen: 9.338 ug/l  
 RT: 13.21 min Scan# 1854  
 Delta R.T. 0.00 min  
 Lab File: VW011461.D  
 Acq: 24 Jul 2019 04:50

Tgt Ion:119 Resp: 48380  
 Ion Ratio Lower Upper  
 119 100  
 91 87.4 35.4 106.3  
 134 27.5 13.4 40.2

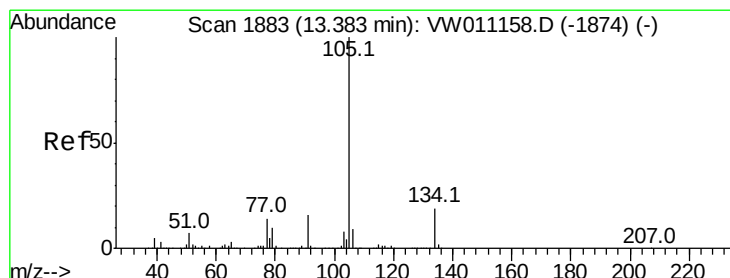
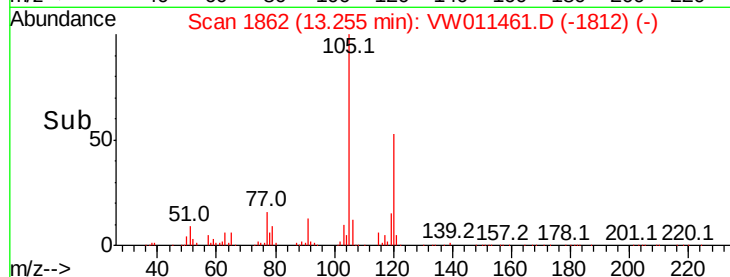
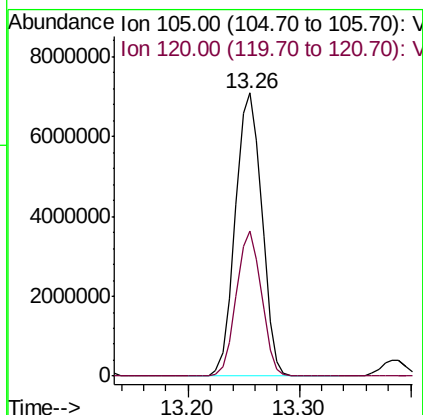
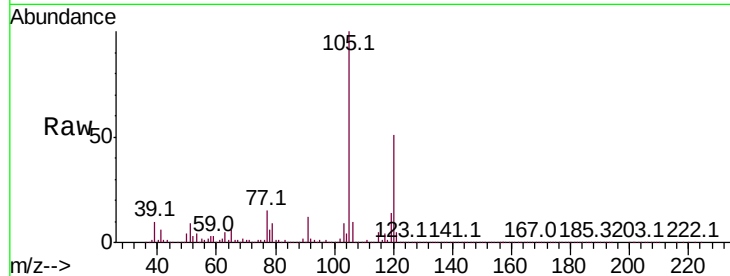




#84  
 1,2,4-Trimethylbenzene  
 Concen: 1870.652 ug/l  
 RT: 13.26 min Scan# 1862  
 Delta R.T. 0.01 min  
 Lab File: VW011461.D  
 Acq: 24 Jul 2019 04:50

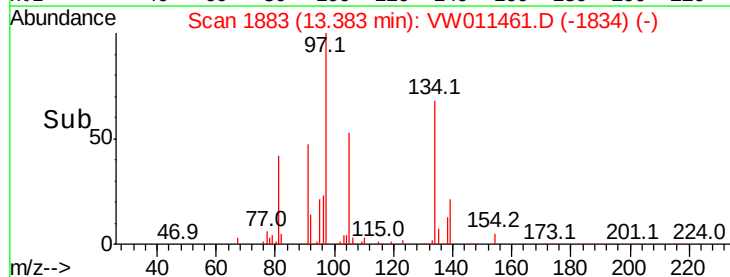
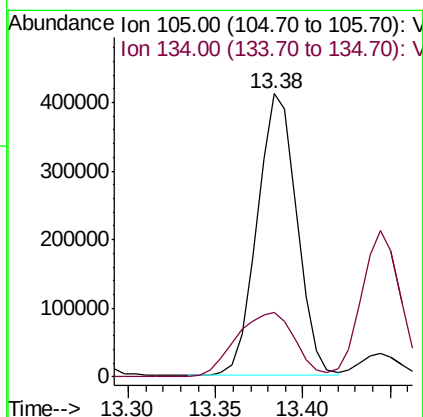
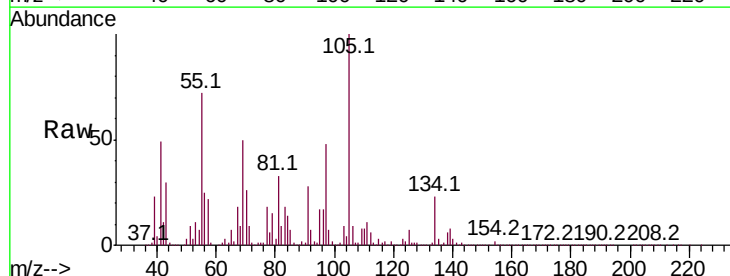
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 HR-06-071719-C

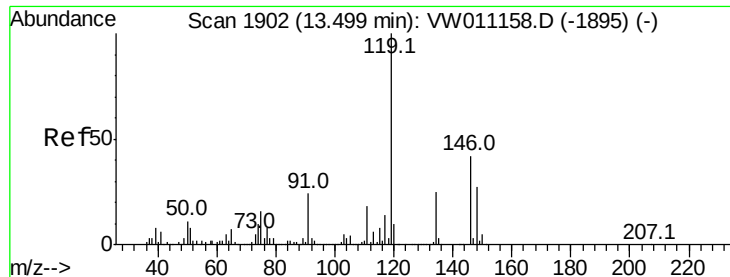
Tot Ion:105 Resp:11669314  
 Ion Ratio Lower Upper  
 105 100  
 120 48.6 22.3 66.9



#85  
 sec-Butylbenzene  
 Concen: 86.267 ug/l  
 RT: 13.38 min Scan# 1883  
 Delta R.T. 0.00 min  
 Lab File: VW011461.D  
 Acq: 24 Jul 2019 04:50

Tgt Ion:105 Resp: 644948  
 Ion Ratio Lower Upper  
 105 100  
 134 33.9 9.7 28.9#





#86

p-Isopropyltoluene

Concen: 95.449 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

HR-06-071719-C

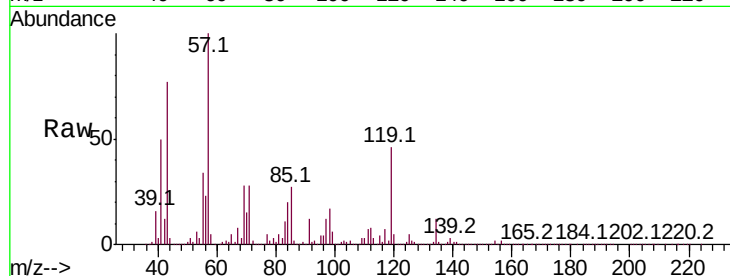
Tot Ion:119 Resp: 640037

Ion Ratio Lower Upper

119 100

134 25.6 12.9 38.6

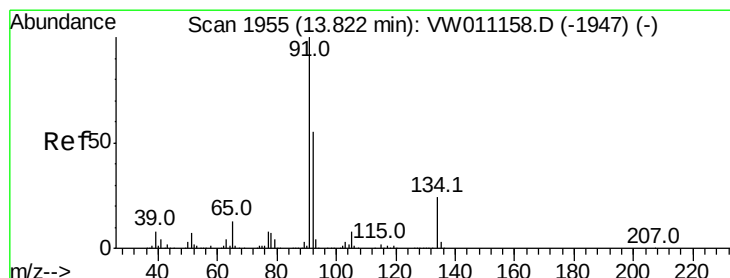
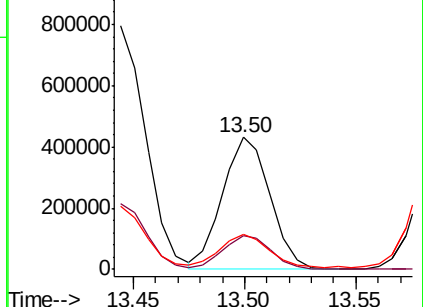
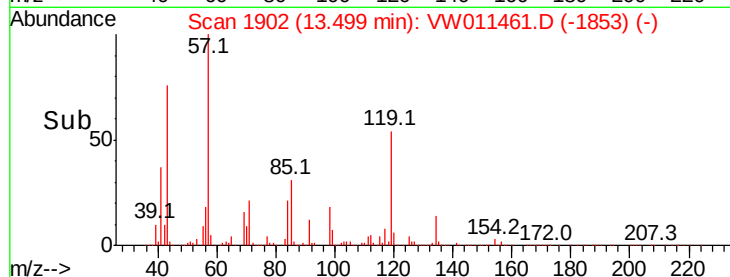
91 24.1 12.3 36.8



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V



#89

n-Butylbenzene

Concen: 188.729 ug/l

RT: 13.83 min Scan# 1956

Delta R.T. 0.01 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

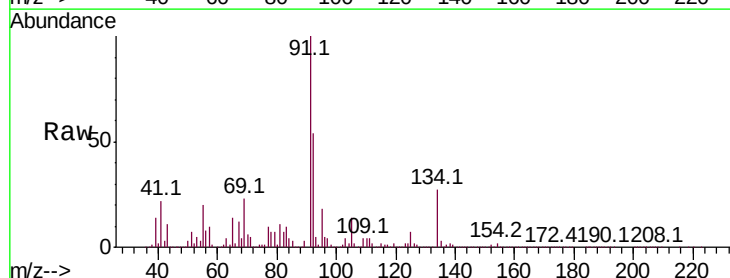
Tgt Ion: 91 Resp: 1262463

Ion Ratio Lower Upper

91 100

92 59.4 26.9 80.7

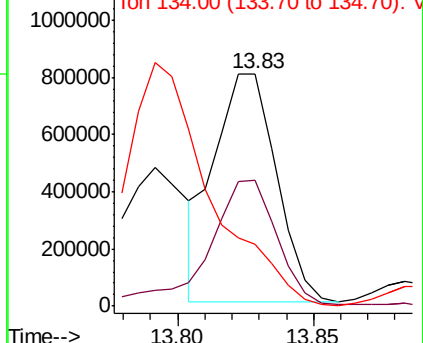
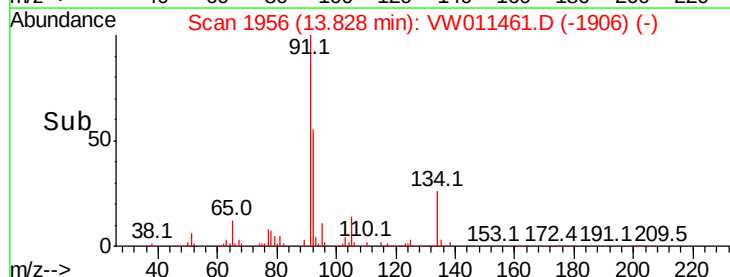
134 0.0 12.2 36.4#

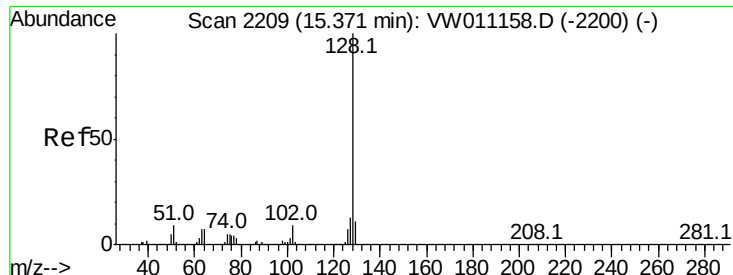


Abundance Ion 91.00 (90.70 to 91.70): V

Ion 92.00 (91.70 to 92.70): V

Ion 134.00 (133.70 to 134.70): V





#95

Naphthalene

Concen: 61.264 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. 0.00 min

Lab File: VW011461.D

Acq: 24 Jul 2019 04:50

Instrument :

MSVOA\_W

ClientSampleId :

HR-06-071719-C

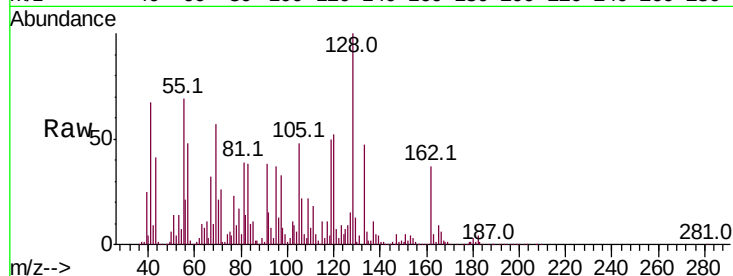
Tot Ion:128 Resp: 231629

Ion Ratio Lower Upper

128 100

127 9.6 10.6 16.0#

129 7.1 8.7 13.1#



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

