

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092019\  
 Data File : VN058238.D  
 Acq On : 20 Sep 2019 10:36  
 Operator : JC/SP  
 Sample : K4973-01 5X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 EFF-WW

Quant Time: Sep 23 03:53:35 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N090919W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Sep 09 12:14:07 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.18  | 128  | 71394    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.57  | 114  | 429538   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 370788   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.01   | 65    | 200248   | 31.71    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 105.70% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 177252   | 27.94    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 93.13%  |
| 63) Toluene-d8            | 10.08  | 98    | 525381   | 29.52    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 98.40%  |

## Target Compounds

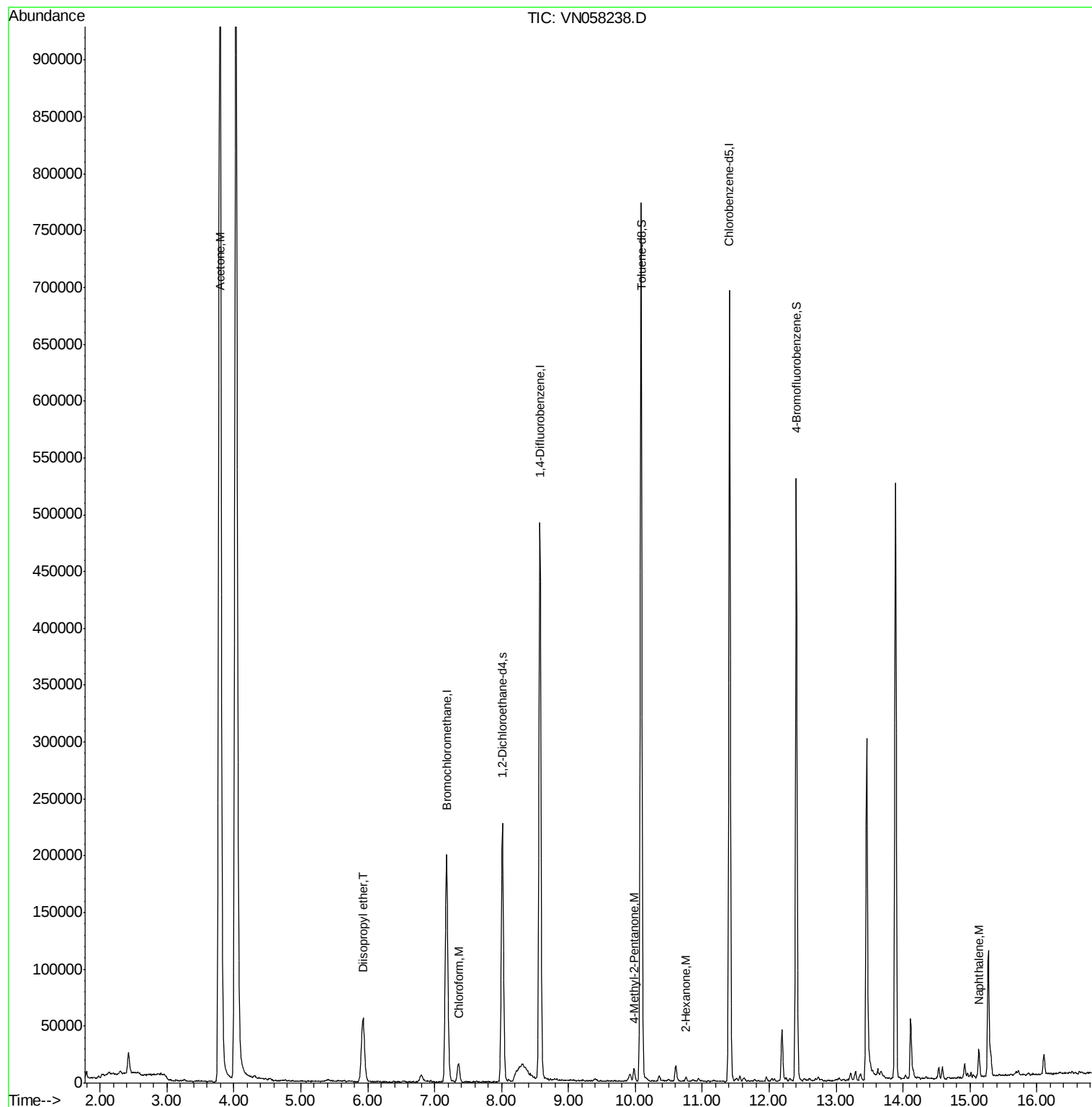
|                          |       |     |        |         | Ovalue |    |
|--------------------------|-------|-----|--------|---------|--------|----|
| 15) Acetone              | 3.79  | 58  | 523224 | 872.647 | ug/l   | 96 |
| 20) Diisopropyl ether    | 5.93  | 45  | 73646  | 4.554   | ug/l   | 89 |
| 25) Chloroform           | 7.36  | 83  | 16247  | 1.790   | ug/l   | 98 |
| 58) 4-Methyl-2-Pentanone | 9.98  | 43  | 8286   | 1.441   | ug/l   | 98 |
| 59) 2-Hexanone           | 10.75 | 43  | 2616   | 0.606   | ug/l # | 95 |
| 91) Naphthalene          | 15.13 | 128 | 18720  | 1.164   | ug/l   | 98 |

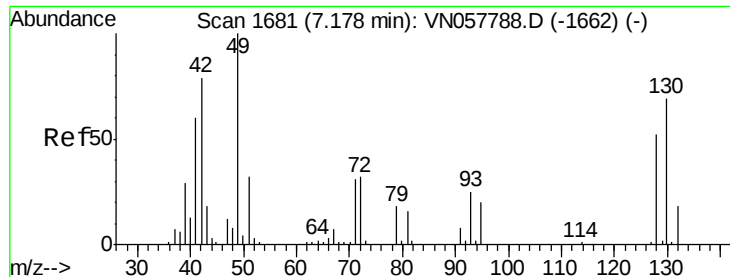
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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EFF-WW

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Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Mon Sep 09 12:14:07 2019  
Response via : Initial Calibration

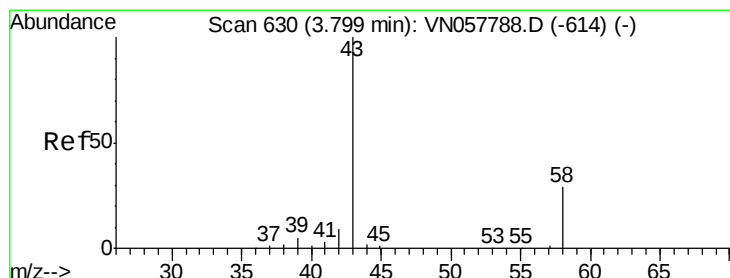
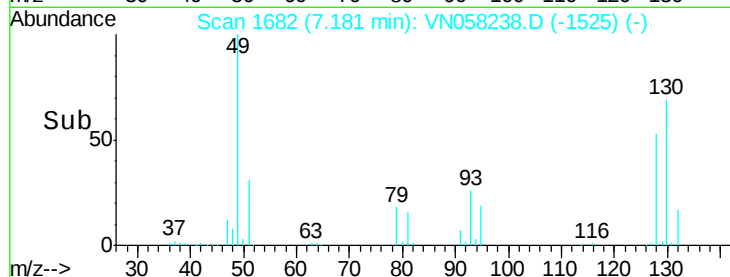
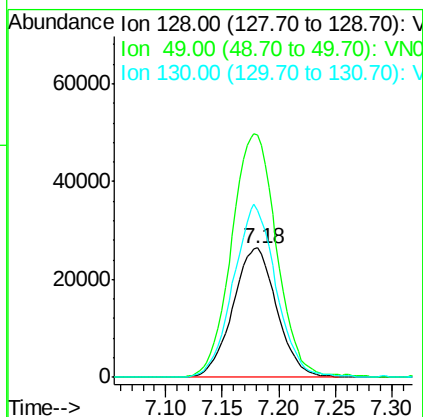
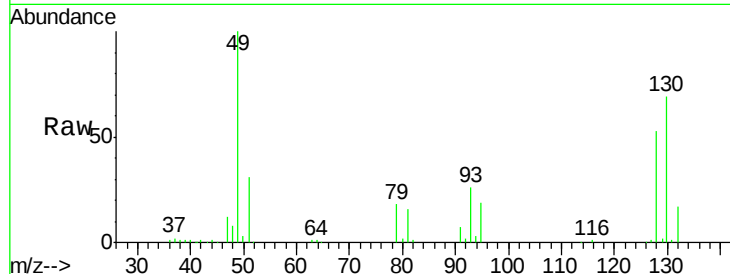




#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.18 min Scan# 1682  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

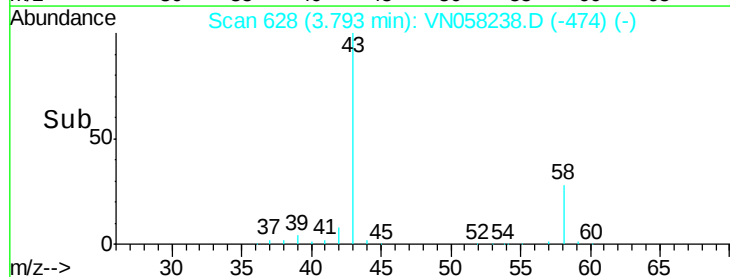
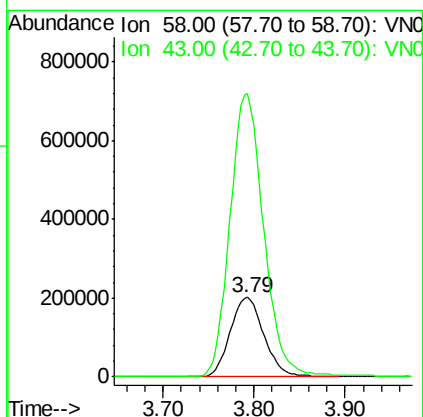
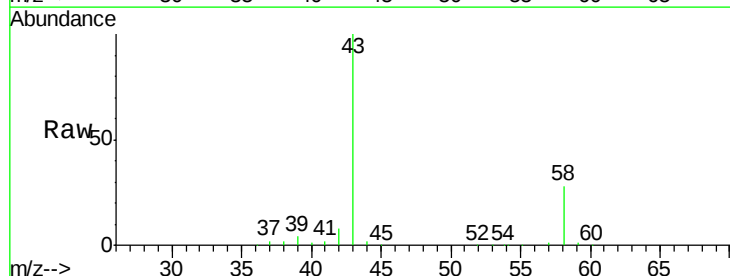
Instrument :  
MSVOA\_N  
ClientSampled :  
EFF-WW

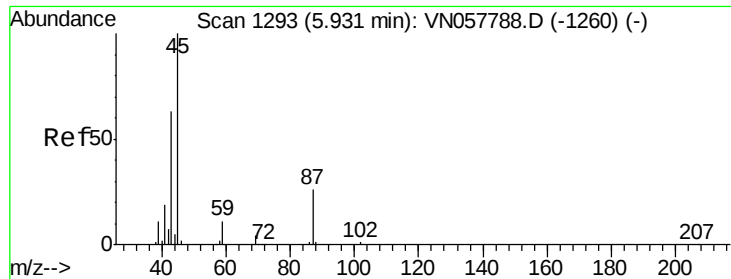
Tot Ion:128 Resp: 71394  
Ion Ratio Lower Upper  
128 100  
49 192.4 0.0 486.5  
130 130.4 0.0 324.5



#15  
Acetone  
Concen: 872.647 ug/l  
RT: 3.79 min Scan# 628  
Delta R.T. -0.01 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

Tgt Ion: 58 Resp: 523224  
Ion Ratio Lower Upper  
58 100  
43 356.0 277.7 416.5

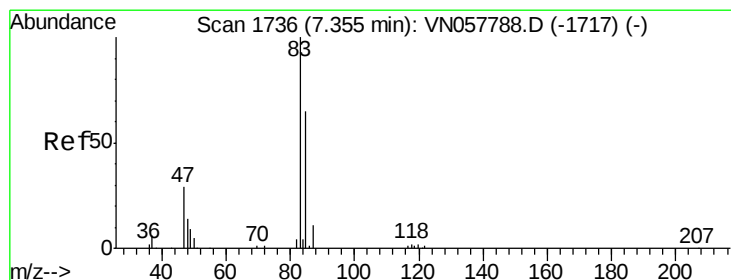
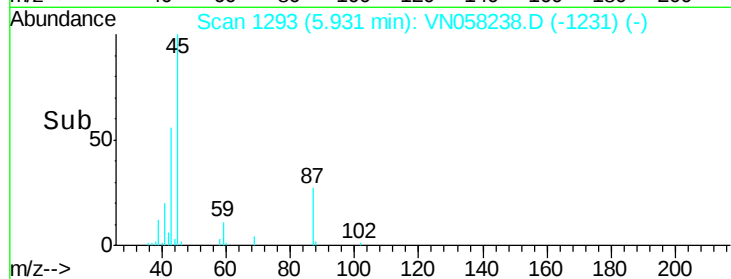
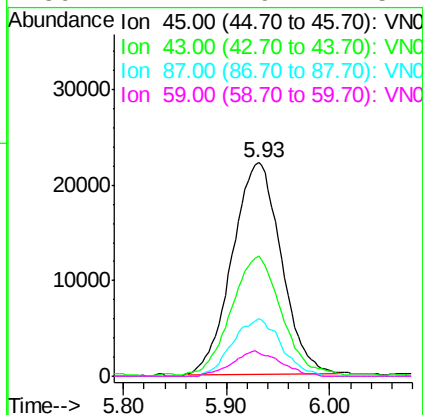
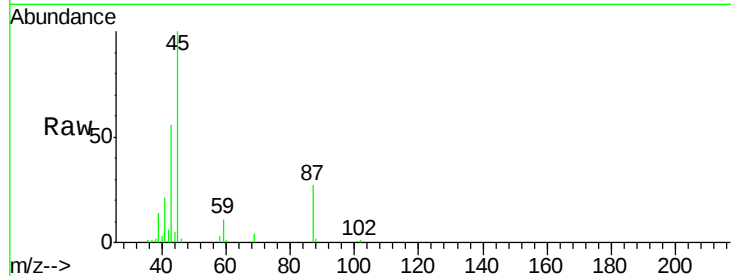




#20  
Diisopropyl ether  
Concen: 4.554 ug/l  
RT: 5.93 min Scan# 1293  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

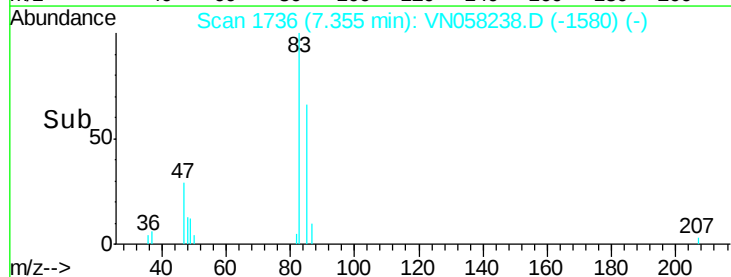
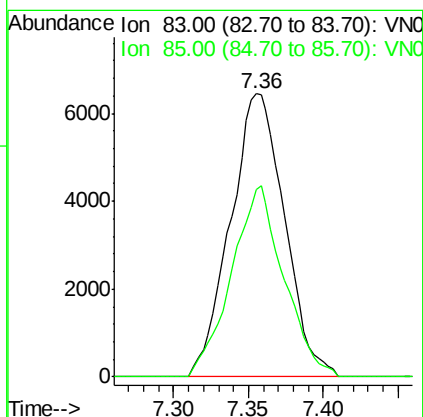
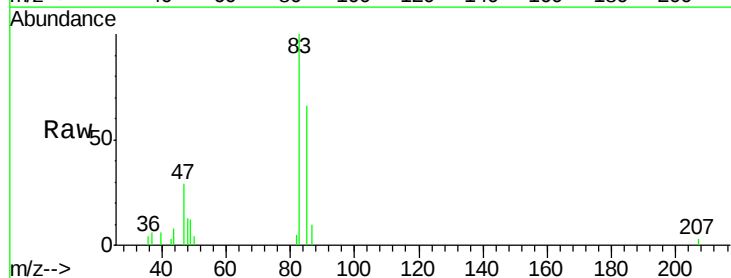
Instrument :  
MSVOA\_N  
ClientSampled :  
EFF-WW

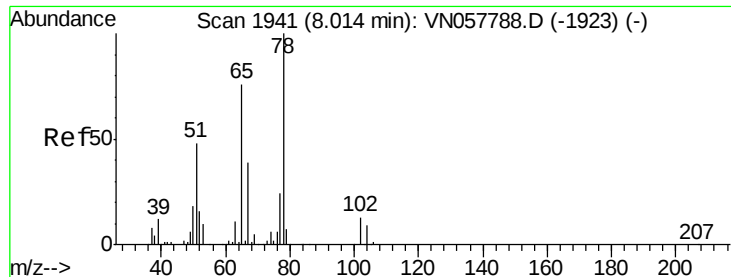
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 45    | Resp: | 73646 |
| Ion      | Ratio | Lower | Upper |
| 45       | 100   |       |       |
| 43       | 55.5  | 55.2  | 82.8  |
| 87       | 27.0  | 21.3  | 31.9  |
| 59       | 11.1  | 9.1   | 13.7  |



#25  
Chloroform  
Concen: 1.790 ug/l  
RT: 7.36 min Scan# 1736  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 16247 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 66.3  | 51.8  | 77.6  |





#27

1,2-Dichloroethane-d4

Concen: 31.709 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN058238.D

Acq: 20 Sep 2019 10:36

Instrument :

MSVOA\_N

ClientSampleId :

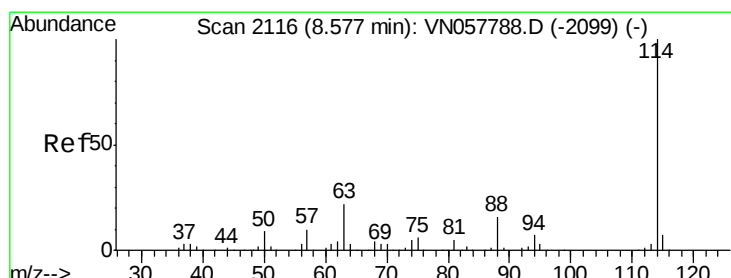
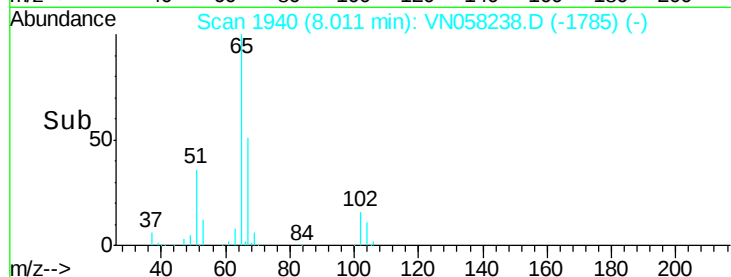
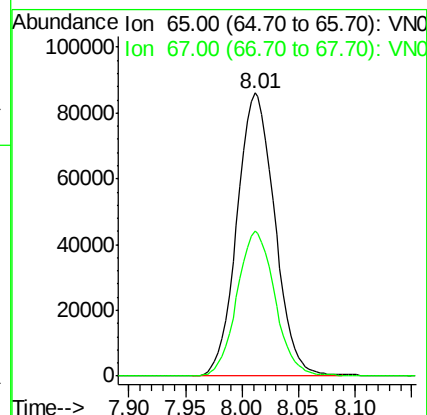
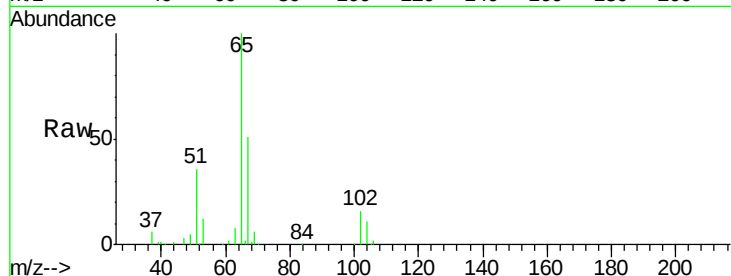
EFF-WW

Tot Ion: 65 Resp: 200248

Ion Ratio Lower Upper

65 100

67 51.1 40.9 61.3



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. -0.00 min

Lab File: VN058238.D

Acq: 20 Sep 2019 10:36

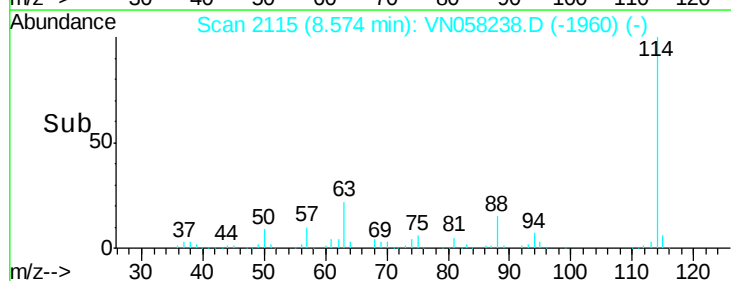
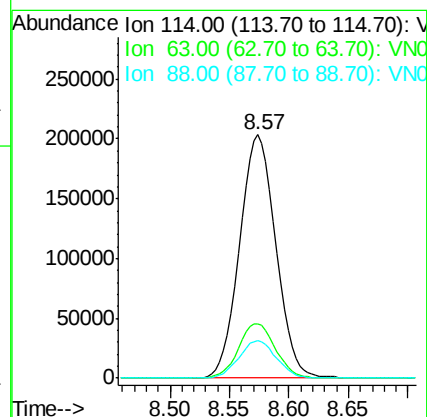
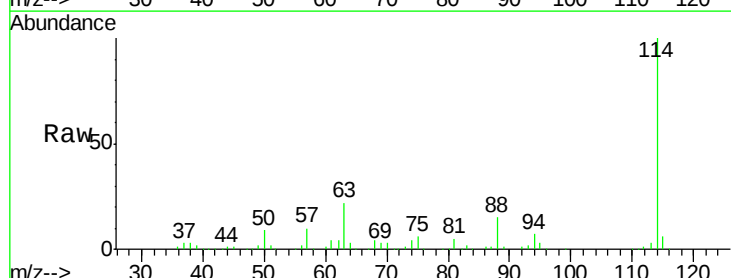
Tgt Ion: 114 Resp: 429538

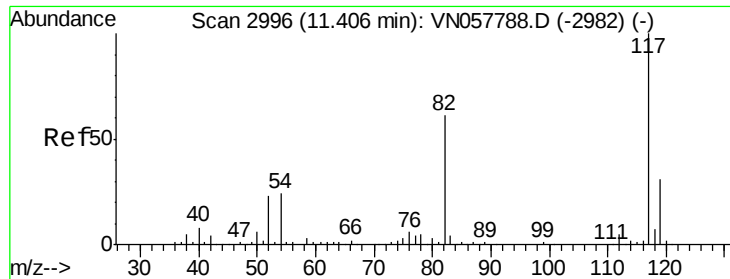
Ion Ratio Lower Upper

114 100

63 22.8 18.0 27.0

88 15.9 12.6 19.0

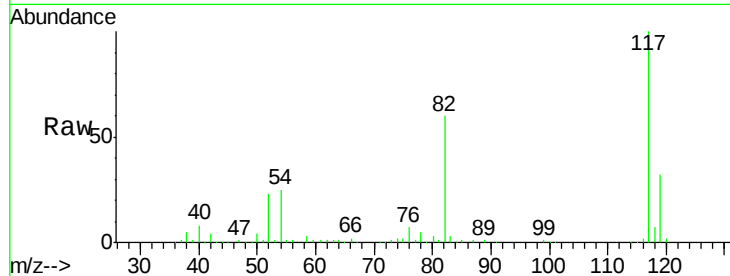




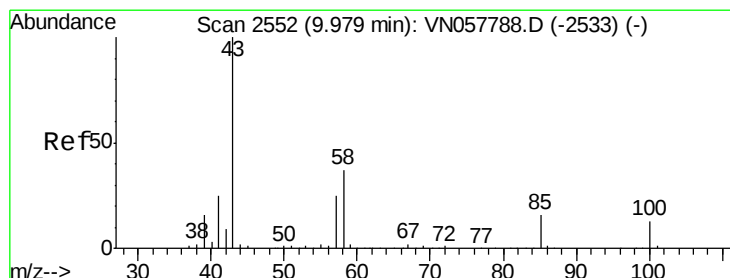
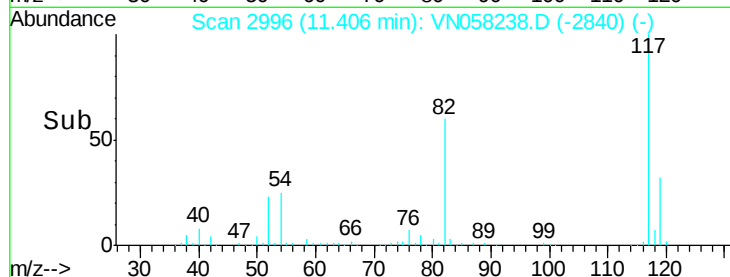
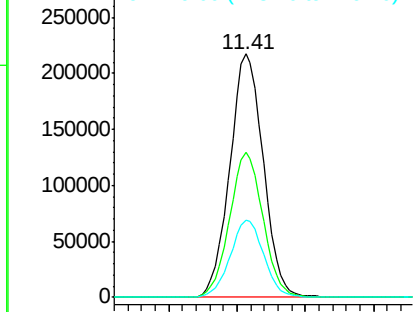
#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

Instrument :  
MSVOA\_N  
ClientSampled :  
EFF-WW

Tot Ion:117 Resp: 370788  
Ion Ratio Lower Upper  
117 100  
82 59.4 47.6 71.4  
119 31.8 25.4 38.2

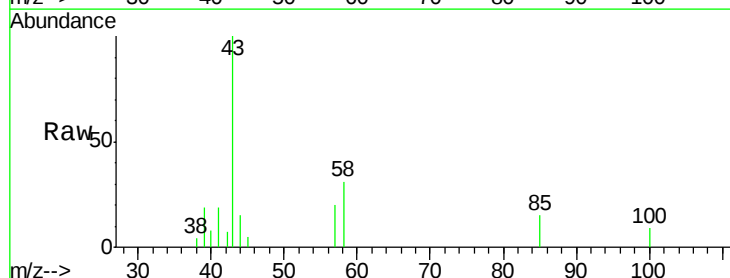


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 119.00 (118.70 to 119.70): V

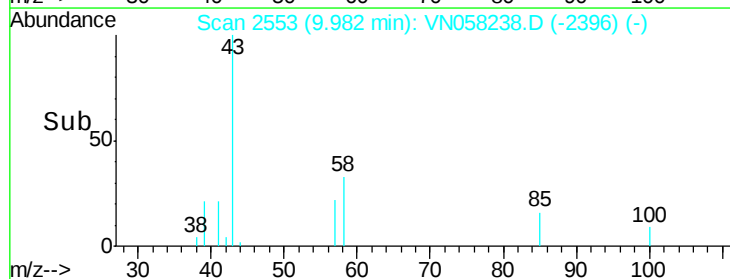
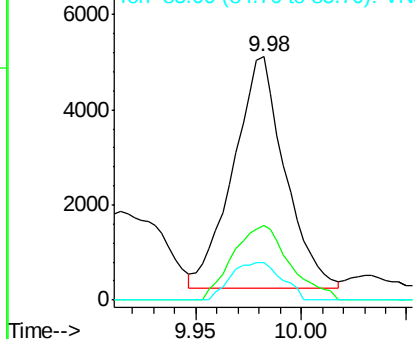


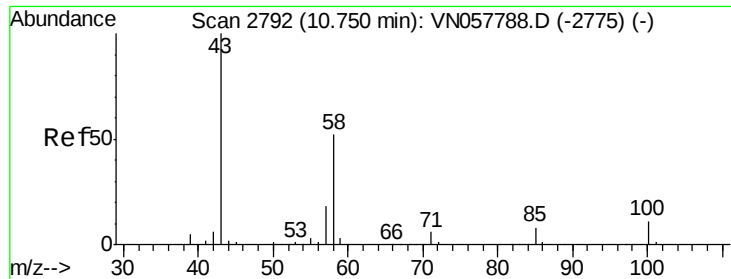
#58  
4-Methyl-2-Pentanone  
Concen: 1.441 ug/l  
RT: 9.98 min Scan# 2553  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

Tgt Ion: 43 Resp: 8286  
Ion Ratio Lower Upper  
43 100  
58 35.4 29.4 44.0  
85 16.0 12.9 19.3



Abundance Ion 43.00 (42.70 to 43.70): V  
Ion 58.00 (57.70 to 58.70): V  
Ion 85.00 (84.70 to 85.70): V

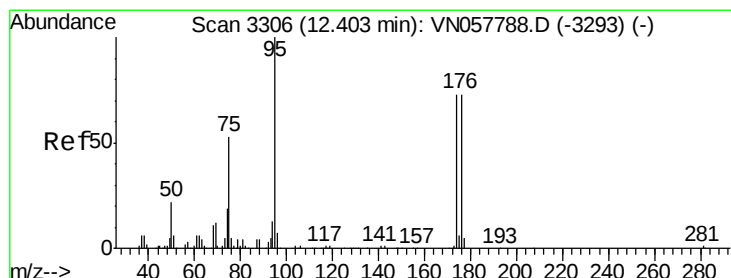
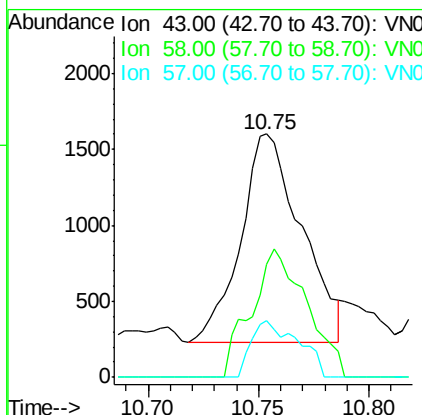
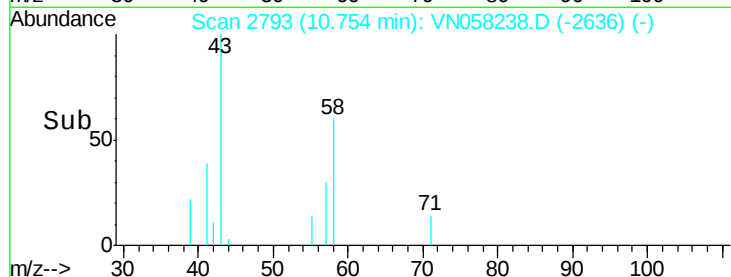
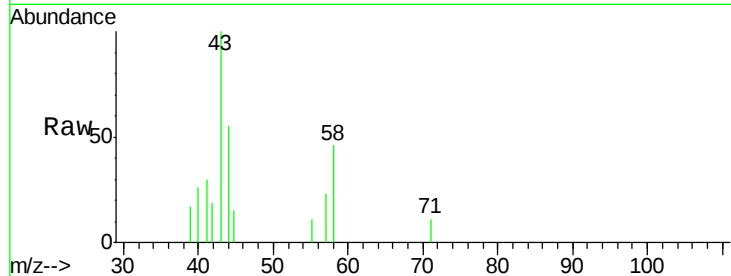




#59  
2-Hexanone  
Concen: 0.606 ug/l  
RT: 10.75 min Scan# 2793  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

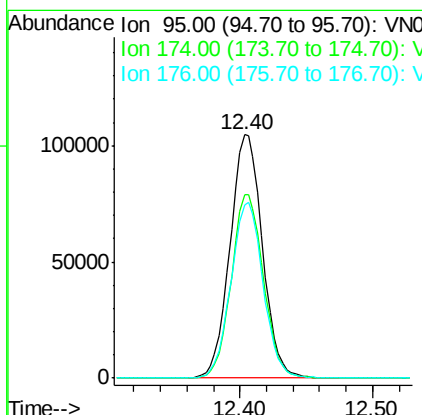
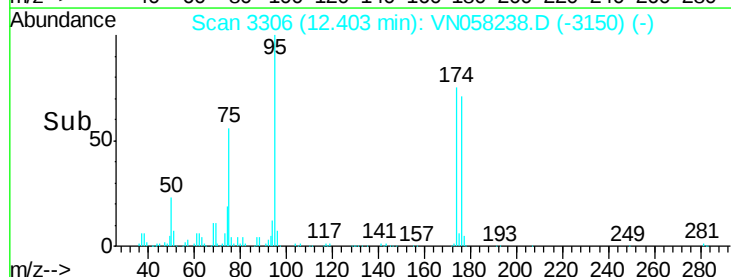
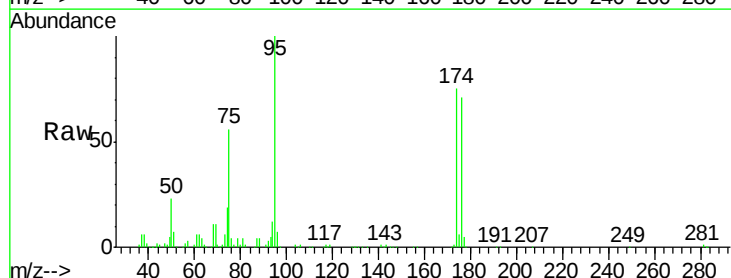
Instrument :  
MSVOA\_N  
ClientSampleId :  
EFF-WW

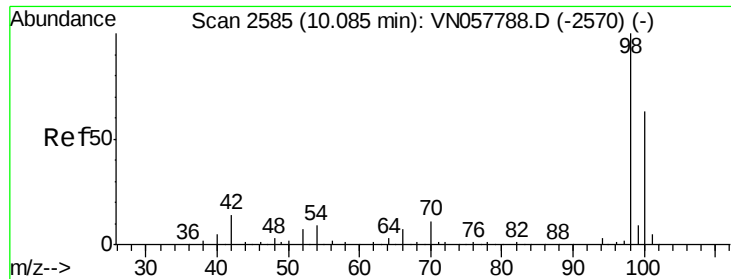
Tot Ion: 43 Resp: 2616  
Ion Ratio Lower Upper  
43 100  
58 48.7 40.6 61.0  
57 12.7 14.5 21.7#



#60  
4-Bromofluorobenzene  
Concen: 27.936 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.00 min  
Lab File: VN058238.D  
Acq: 20 Sep 2019 10:36

Tgt Ion: 95 Resp: 177252  
Ion Ratio Lower Upper  
95 100  
174 74.8 59.4 89.0  
176 71.6 57.4 86.0





#63

Toluene-d8

Concen: 29.521 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. 0.00 min

Lab File: VN058238.D

Acq: 20 Sep 2019 10:36

Instrument :

MSVOA\_N

ClientSampleId :

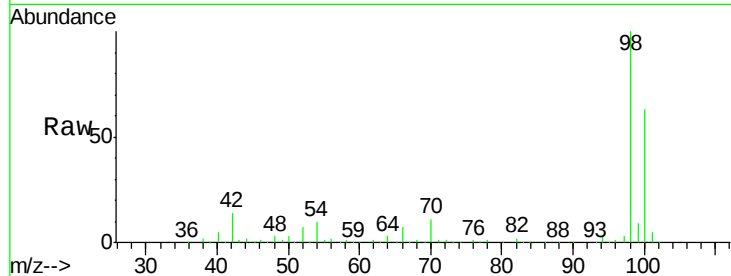
EFF-WW

Tot Ion: 98 Resp: 525381

Ion Ratio Lower Upper

98 100

100 63.5 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VN057788.D (-2570) (-)

Ion 100.00 (99.70 to 100.70): VN058238.D (-2429) (-)

10.08

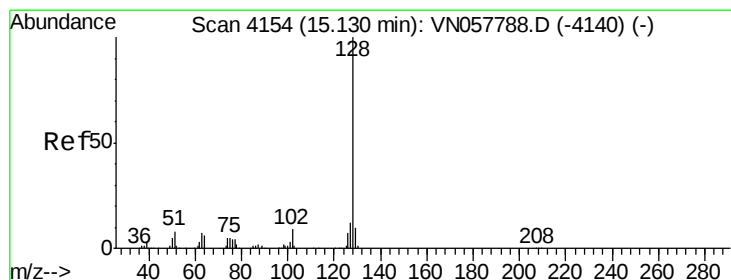
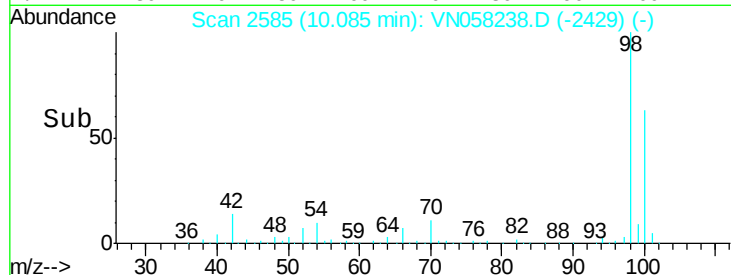
300000

200000

100000

0

Time-->



#91

Naphthalene

Concen: 1.164 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN058238.D

Acq: 20 Sep 2019 10:36

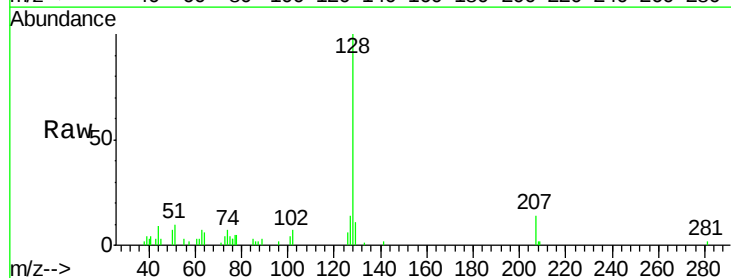
Tgt Ion: 128 Resp: 18720

Ion Ratio Lower Upper

128 100

127 11.8 9.9 14.9

129 10.6 8.1 12.1



Abundance Ion 128.00 (127.70 to 128.70): VN057788.D (-4140) (-)

Ion 127.00 (126.70 to 127.70): VN058238.D (-3998) (-)

Ion 129.00 (128.70 to 129.70): VN058238.D (-3998) (-)

15.13

15000

10000

5000

0

Time-->

