

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN070820\  
 Data File : VN062424.D  
 Acq On : 8 Jul 2020 23:10  
 Operator : JC/MD  
 Sample : L3212-04  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-MW180-TB-20200701

Quant Time: Jul 09 02:26:26 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N070820W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 09 02:12:34 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 172848   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 304908   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 290402   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 105385   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.99  | 65   | 136202   | 51.23 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.46% |          |
| 35) Dibromofluoromethane    | 7.55  | 113  | 98313    | 52.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.32% |          |
| 50) Toluene-d8              | 10.06 | 98   | 395843   | 53.20 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.40% |          |
| 62) 4-Bromofluorobenzene    | 12.38 | 95   | 137499   | 50.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.14% |          |

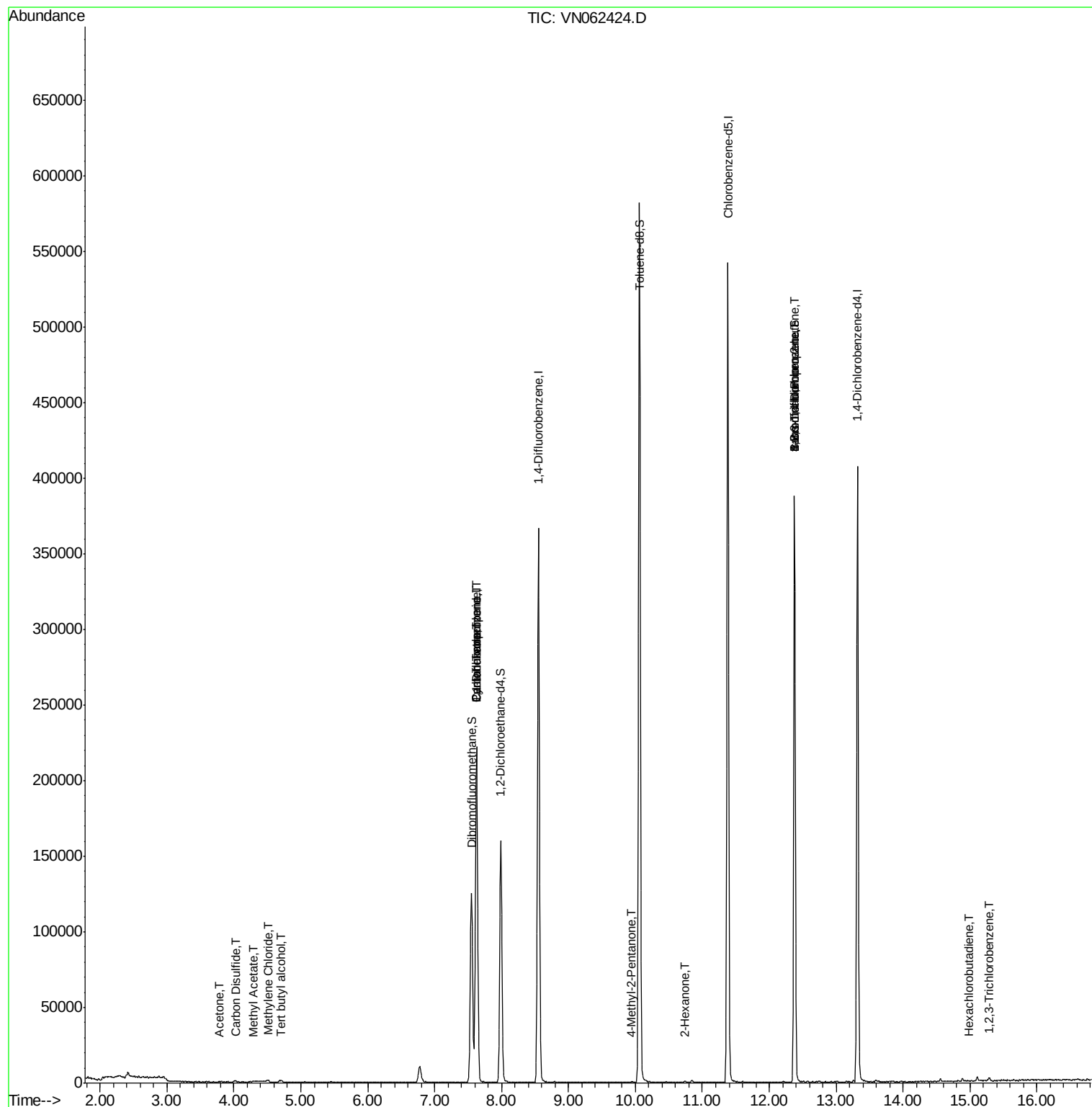
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.71  | 59   | 1340     | 3.038     | ug/l # | 74     |
| 16) Acetone                    | 3.78  | 43   | 535      | 0.474     | ug/l # | 45     |
| 17) Carbon Disulfide           | 4.02  | 76   | 1646     | 0.296     | ug/l # | 75     |
| 18) Methyl Acetate             | 4.28  | 43   | 584      | 0.207     | ug/l # | 56     |
| 20) Methylene Chloride         | 4.50  | 84   | 618      | 0.256     | ug/l # | 31     |
| 31) Cyclohexane                | 7.62  | 56   | 4158     | 1.030     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.63  | 75   | 15371    | 5.004     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.63  | 117  | 17343    | 6.280     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 770      | 0.227     | ug/l # | 39     |
| 59) 2-Hexanone                 | 10.74 | 43   | 935      | 0.380     | ug/l # | 60     |
| 71) Bromoform                  | 12.38 | 173  | 694      | 0.455     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75   | 73540    | 28.440    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 73540    | 76.122    | ug/l # | 10     |
| 93) 1,2,4-Trichlorobenzene     | 14.89 | 180  | 784      | Below Cal | #      | 83     |
| 94) Hexachlorobutadiene        | 14.98 | 225  | 243      | 0.296     | ug/l # | 34     |
| 95) Naphthalene                | 15.11 | 128  | 3237     | Below Cal | #      | 81     |
| 96) 1,2,3-Trichlorobenzene     | 15.28 | 180  | 927      | 3.741     | ug/l # | 89     |

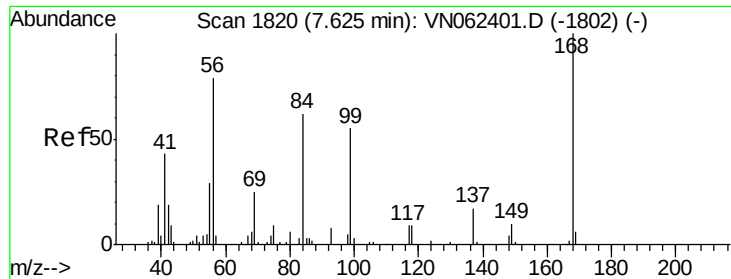
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Thu Jul 09 02:12:34 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1820

Delta R.T. -0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

Instrument :

MSVOA\_N

ClientSampleId :

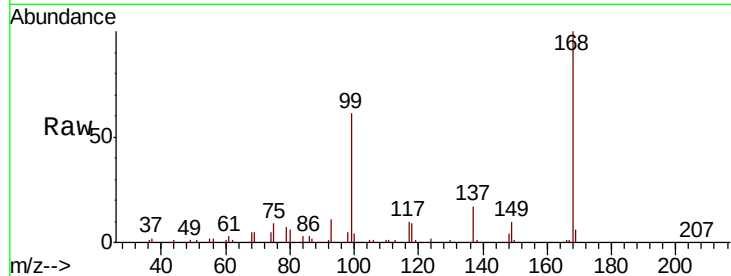
BP-MW180-TB-20200701

Tot Ion:168 Resp: 172848

Ion Ratio Lower Upper

168 100

99 61.3 48.8 73.2



Abundance Ion 167.90 (167.60 to 168.60): VN062424.D (-1727) (-)

Ion 98.90 (98.60 to 99.60): VN062424.D (-1727) (-)

7.63

80000

60000

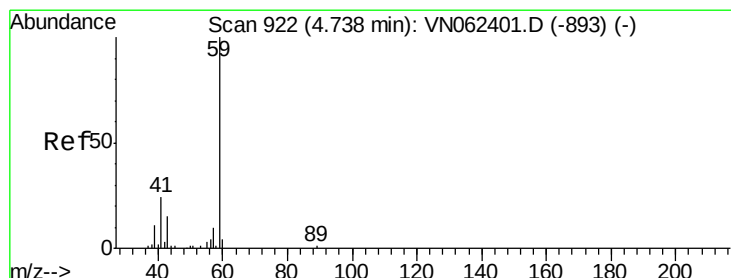
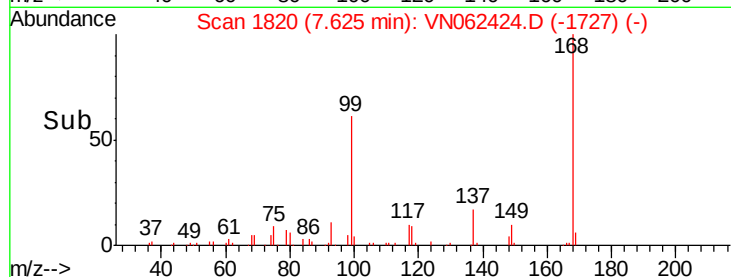
40000

20000

0

7.55 7.60 7.65 7.70

Time-->



#11

Tert butyl alcohol

Concen: 3.038 ug/l

RT: 4.71 min Scan# 913

Delta R.T. -0.03 min

Lab File: VN062424.D

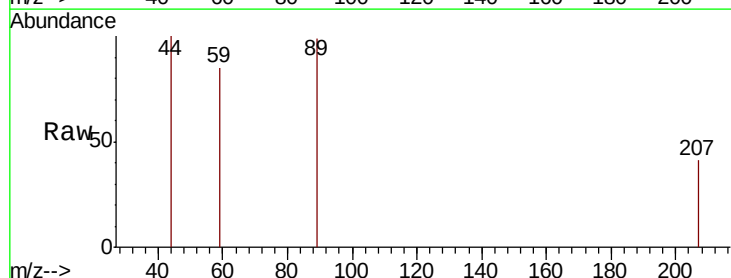
Acq: 8 Jul 2020 23:10

Tgt Ion: 59 Resp: 1340

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.6#



Abundance Ion 59.00 (58.70 to 59.70): VN062424.D (-829) (-)

Ion 57.00 (56.70 to 57.70): VN062424.D (-829) (-)

4.71

500

400

300

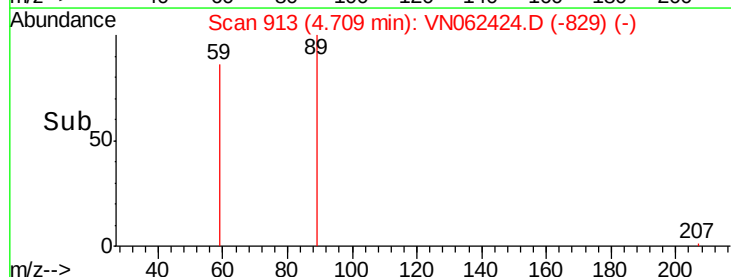
200

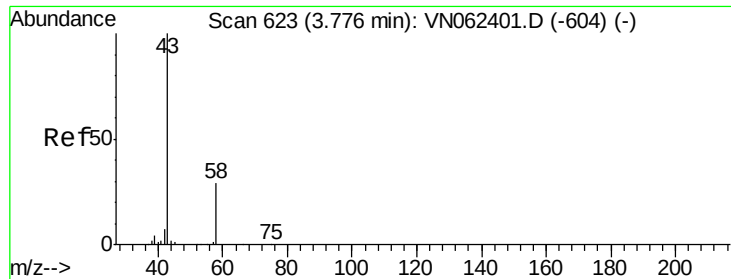
100

0

4.65 4.70 4.75

Time-->





#16

Acetone

Concen: 0.474 ug/l

RT: 3.78 min Scan# 624

Delta R.T. 0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

Instrument :

MSVOA\_N

ClientSampleId :

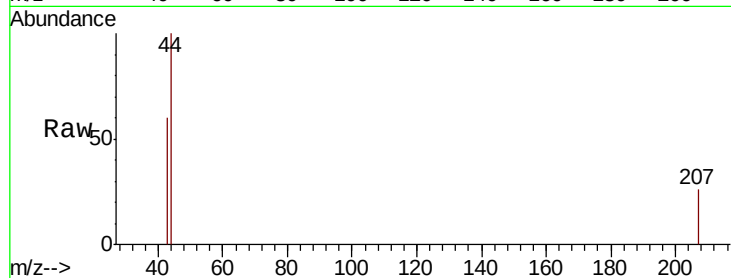
BP-MW180-TB-20200701

Tot Ion: 43 Resp: 535

Ion Ratio Lower Upper

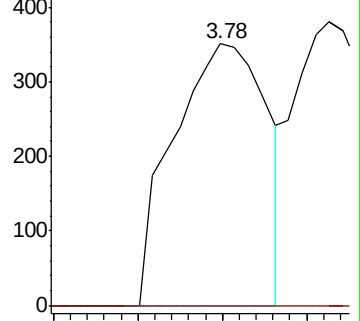
43 100

58 0.0 23.5 35.3#

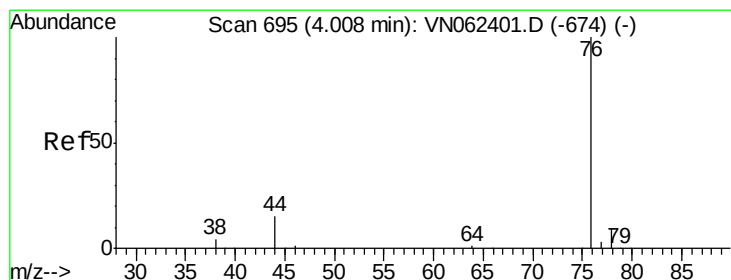
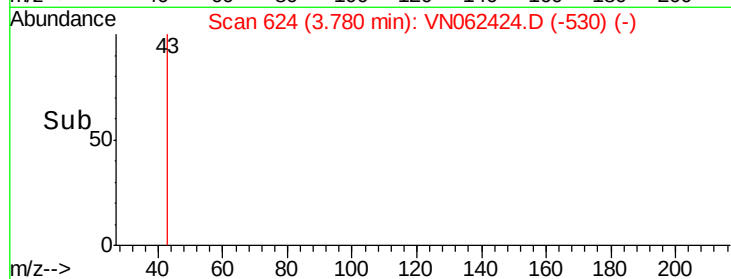


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



Time--> 3.74 3.76 3.78 3.80



#17

Carbon Disulfide

Concen: 0.296 ug/l

RT: 4.02 min Scan# 699

Delta R.T. 0.01 min

Lab File: VN062424.D

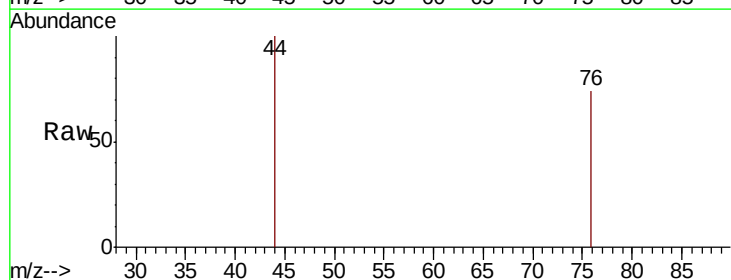
Acq: 8 Jul 2020 23:10

Tgt Ion: 76 Resp: 1646

Ion Ratio Lower Upper

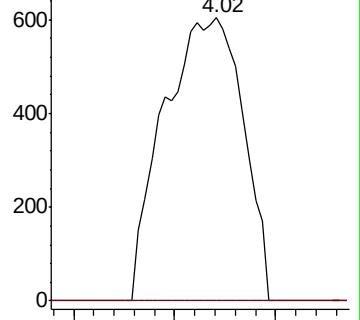
76 100

78 0.0 7.3 10.9#

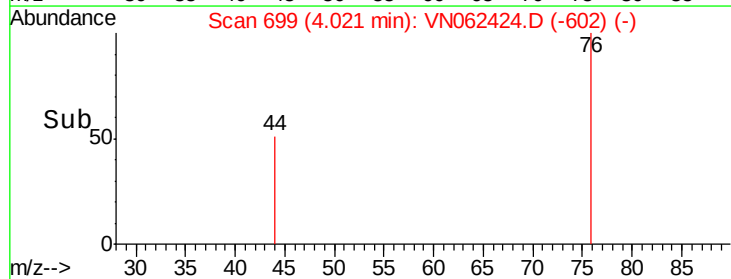


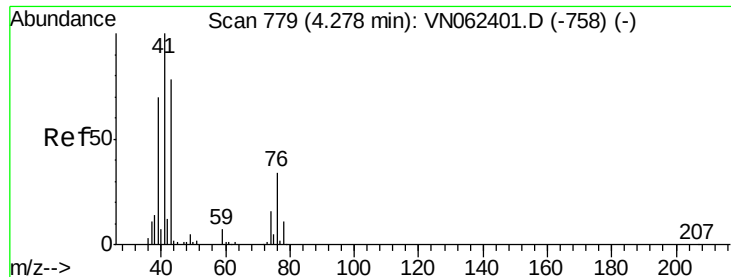
Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



Time--> 3.95 4.00 4.05

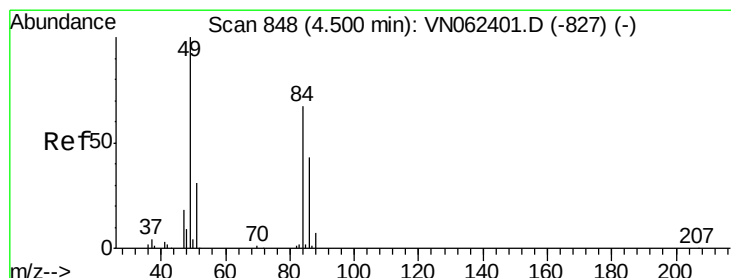
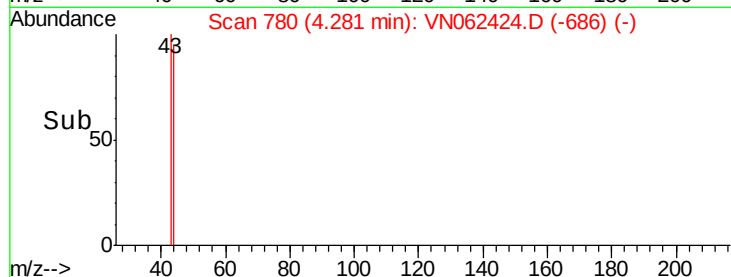
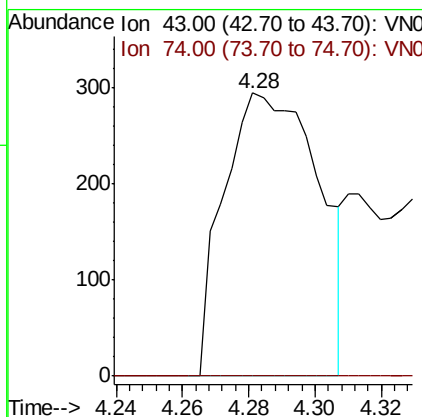
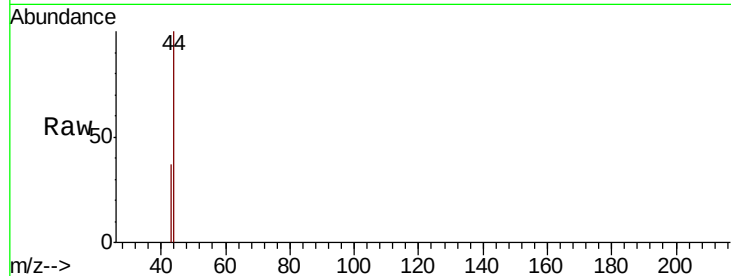




#18  
Methyl Acetate  
Concen: 0.207 ug/l  
RT: 4.28 min Scan# 780  
Delta R.T. 0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

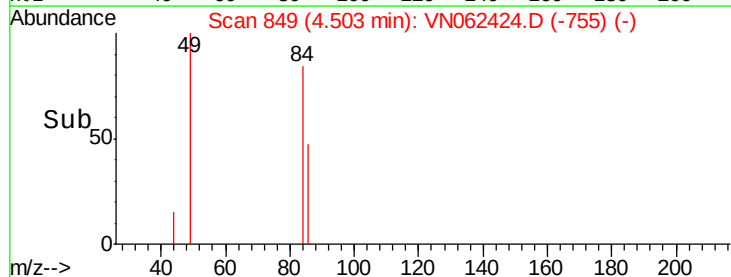
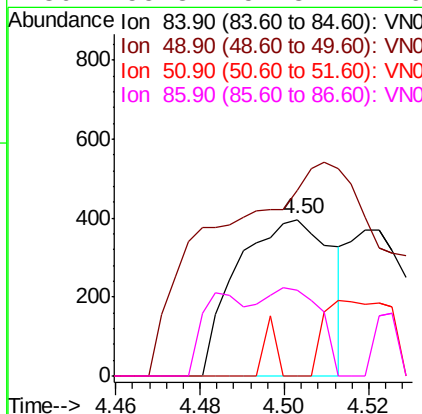
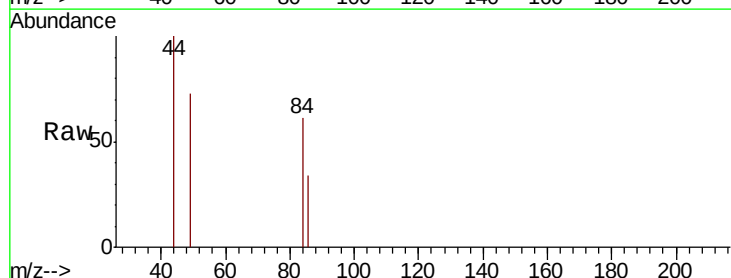
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BP-MW180-TB-20200701

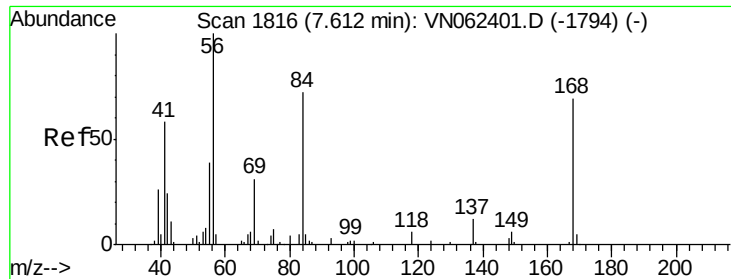
Tot Ion: 43 Resp: 584  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.0 24.0#



#20  
Methylene Chloride  
Concen: 0.256 ug/l  
RT: 4.50 min Scan# 849  
Delta R.T. 0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

Tgt Ion: 84 Resp: 618  
Ion Ratio Lower Upper  
84 100  
49 32.3 120.0 180.0#  
51 0.0 37.0 55.6#  
86 55.3 51.8 77.6

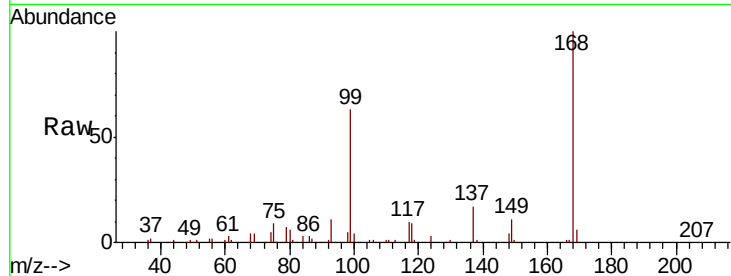




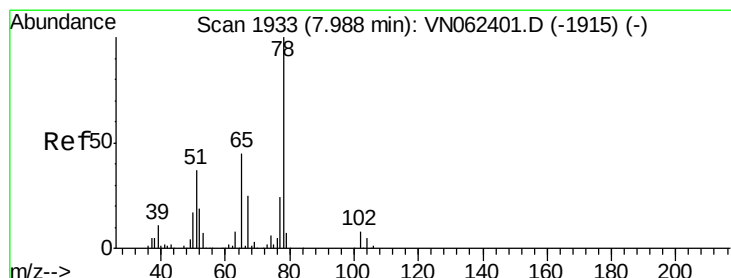
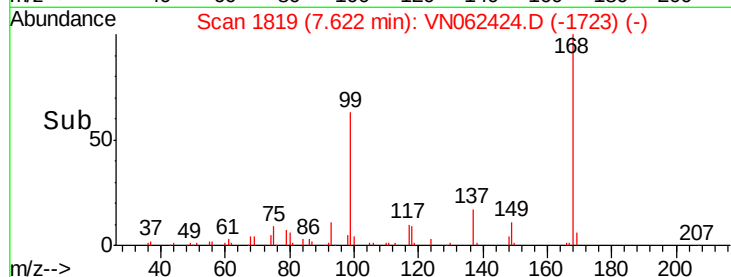
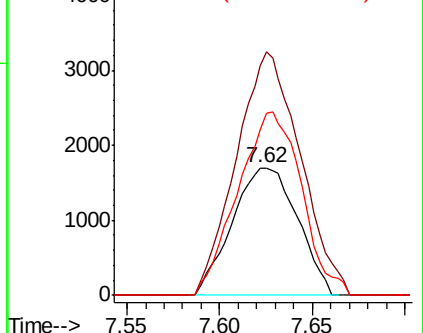
#31  
Cyclohexane  
Concen: 1.030 ug/l  
RT: 7.62 min Scan# 1819  
Delta R.T. 0.01 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-MW180-TB-20200701

Tot Ion: 56 Resp: 4158  
Ion Ratio Lower Upper  
56 100  
69 180.5 24.5 36.7#  
84 130.0 57.4 86.2#

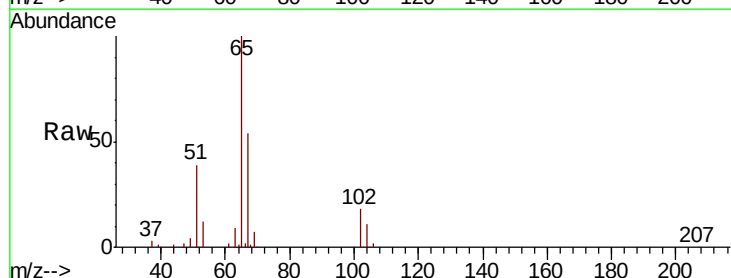


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

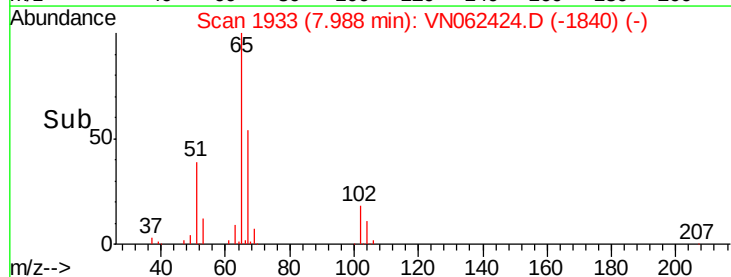
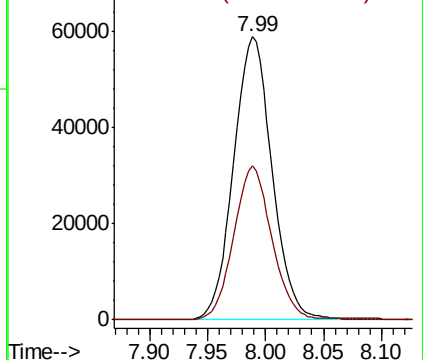


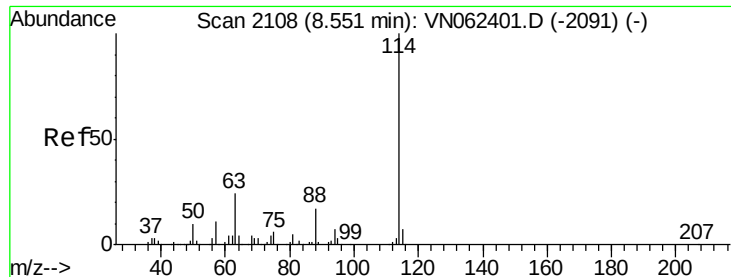
#33  
1,2-Dichloroethane-d4  
Concen: 51.230 ug/l  
RT: 7.99 min Scan# 1933  
Delta R.T. -0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

Tgt Ion: 65 Resp: 136202  
Ion Ratio Lower Upper  
65 100  
67 53.9 0.0 107.6



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

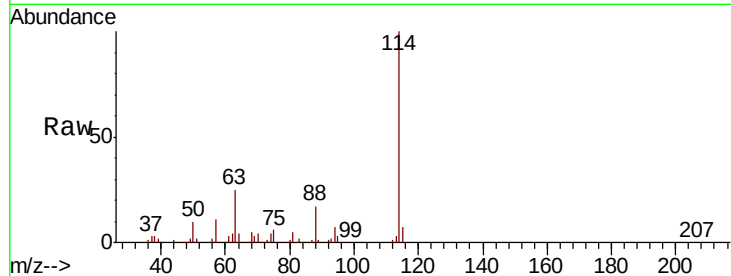




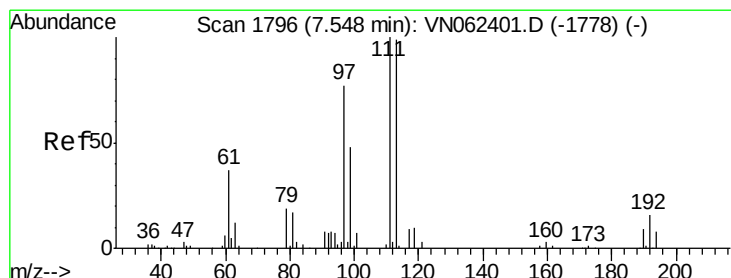
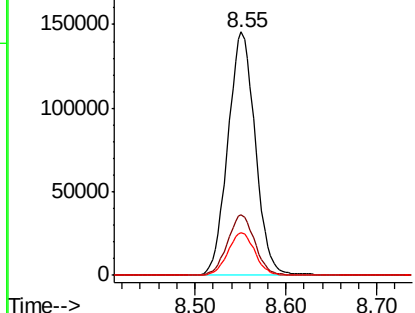
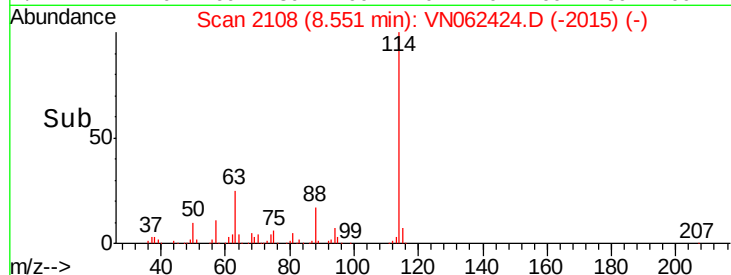
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. -0.00 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

Instrument :  
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| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 25.0  | 0.0   | 48.4  |
| 88      | 17.5  | 0.0   | 33.8  |

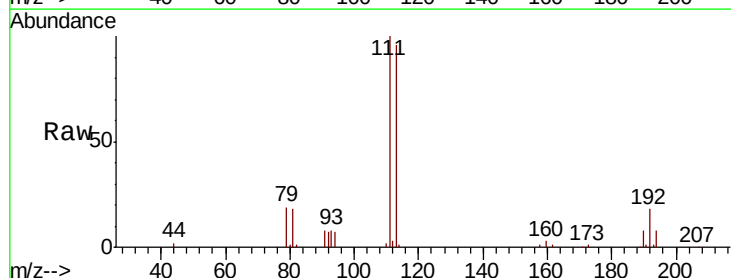


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

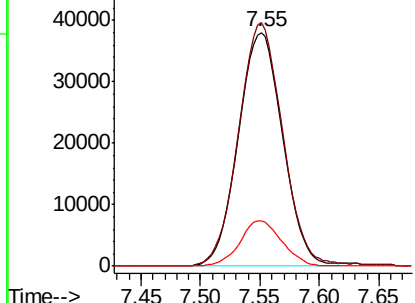
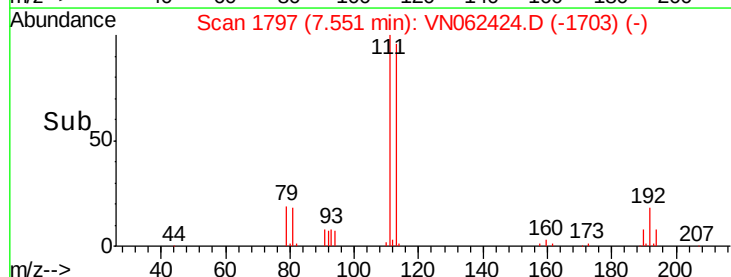


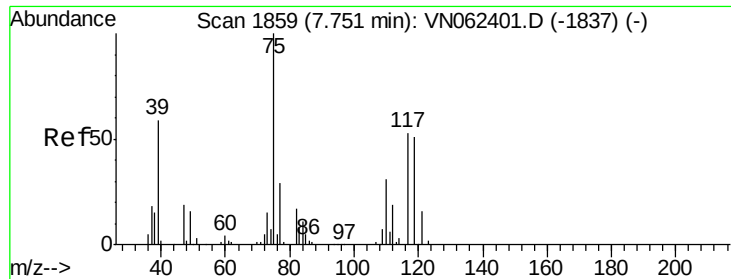
#35  
 Dibromofluoromethane  
 Concen: 52.163 ug/l  
 RT: 7.55 min Scan# 1797  
 Delta R.T. 0.00 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.3 | 83.1  | 124.7 |
| 192     | 18.3  | 14.1  | 21.1  |



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

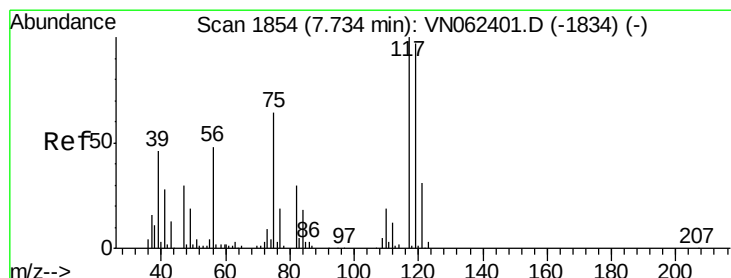
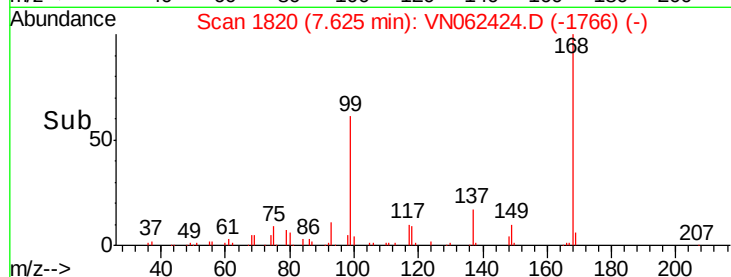
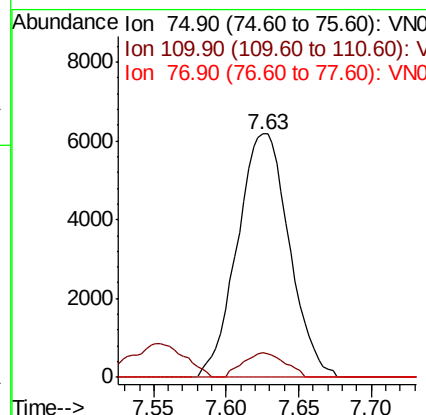
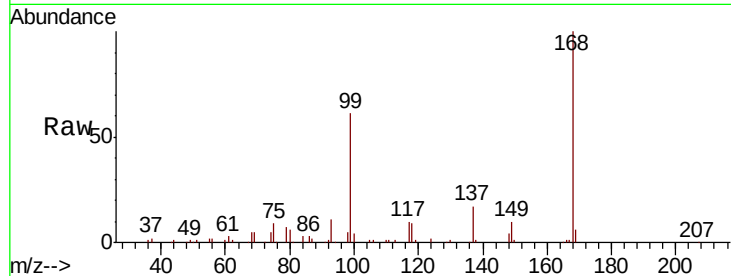




#36  
 1,1-Dichloropropene  
 Concen: 5.004 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.13 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

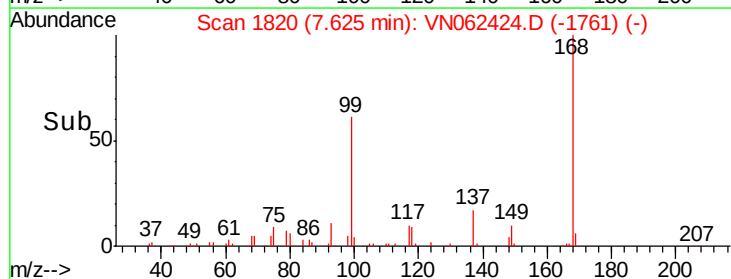
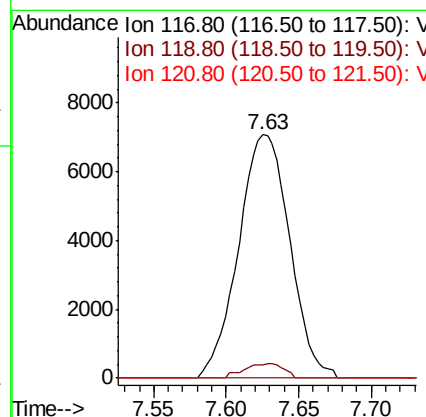
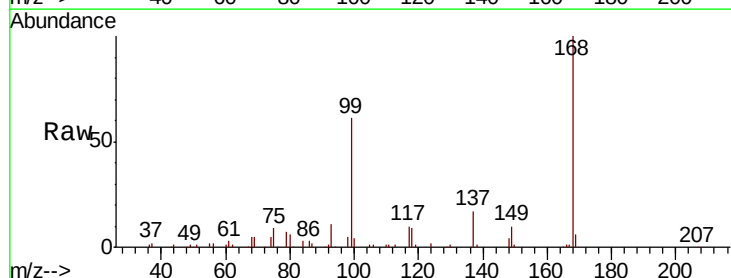
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-MW180-TB-20200701

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.2   | 15.4  | 46.2# |
| 77      | 0.0   | 24.1  | 36.1# |

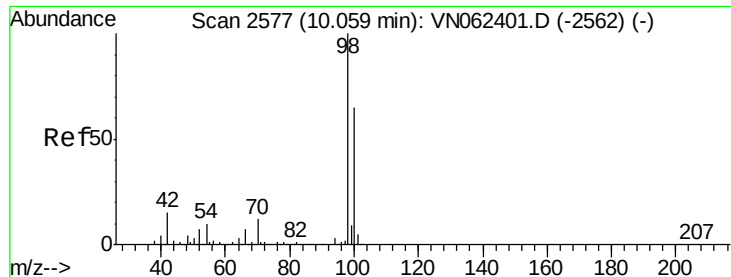


#38  
 Carbon Tetrachloride  
 Concen: 6.280 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.11 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.5   | 77.2  | 115.8# |
| 121     | 0.0   | 24.8  | 37.2#  |



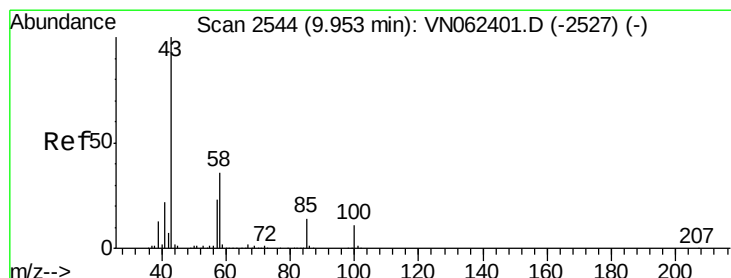
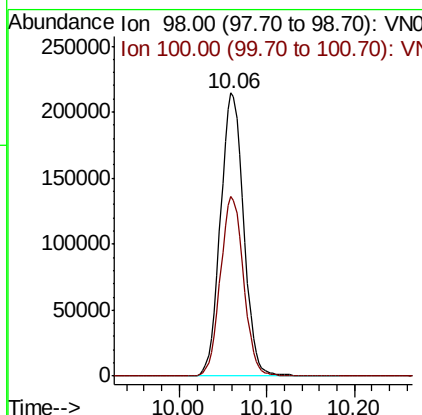
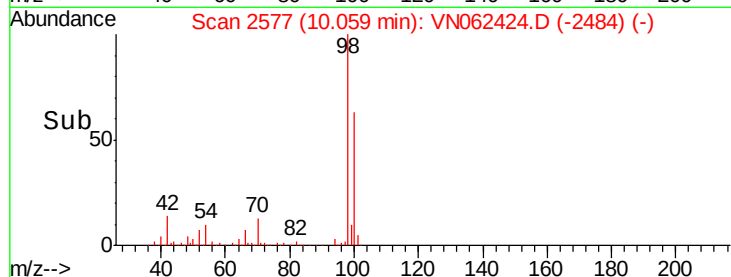
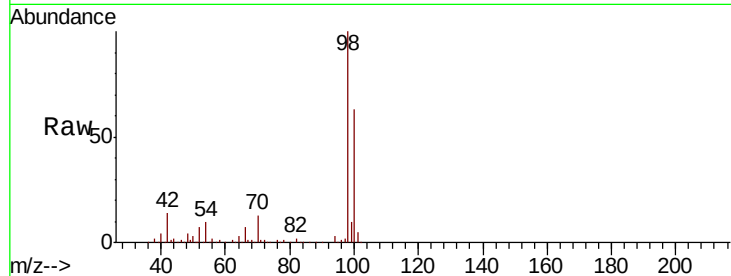




#50  
Toluene-d8  
Concen: 53.202 ug/l  
RT: 10.06 min Scan# 2577  
Delta R.T. -0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

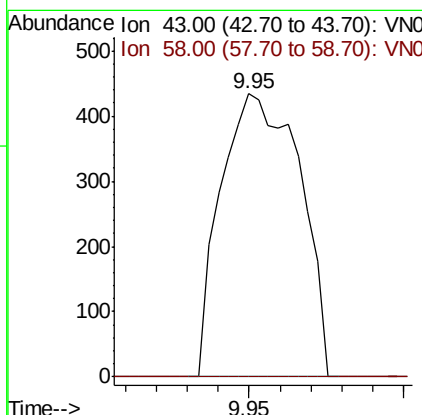
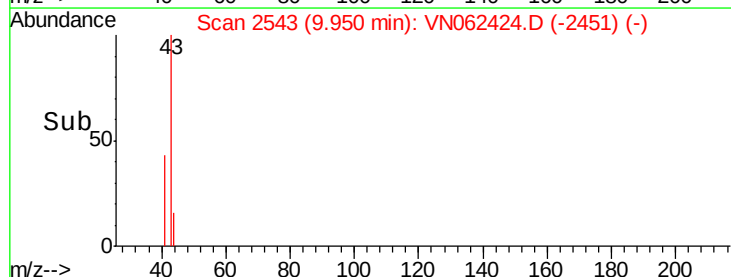
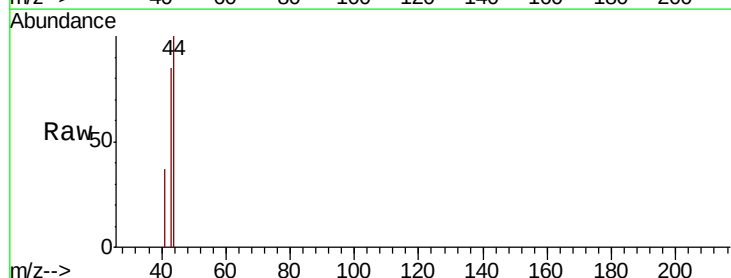
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-MW180-TB-20200701

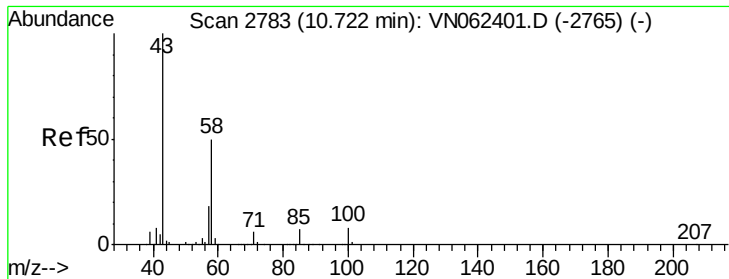
Tot Ion: 98 Resp: 395843  
Ion Ratio Lower Upper  
98 100  
100 63.4 51.5 77.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.227 ug/l  
RT: 9.95 min Scan# 2543  
Delta R.T. -0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

Tgt Ion: 43 Resp: 770  
Ion Ratio Lower Upper  
43 100  
58 0.0 29.0 43.6#





#59

2-Hexanone

Concen: 0.380 ug/l

RT: 10.74 min Scan# 2788

Delta R.T. 0.02 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

Instrument :

MSVOA\_N

ClientSampleId :

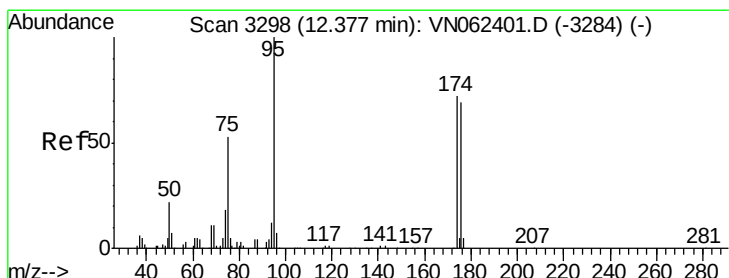
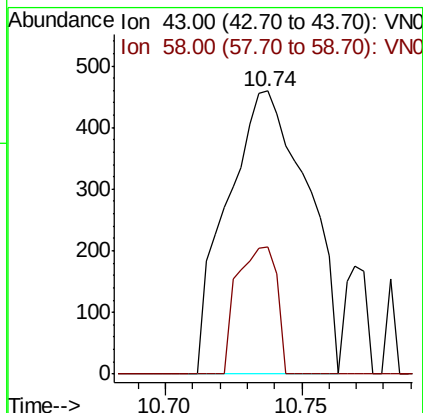
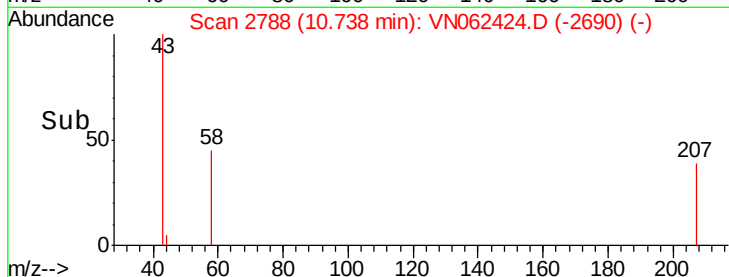
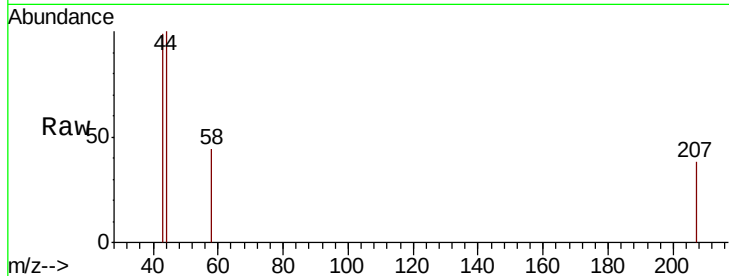
BP-MW180-TB-20200701

Tot Ion: 43 Resp: 935

Ion Ratio Lower Upper

43 100

58 22.4 25.1 75.2#



#62

4-Bromofluorobenzene

Concen: 50.570 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. -0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

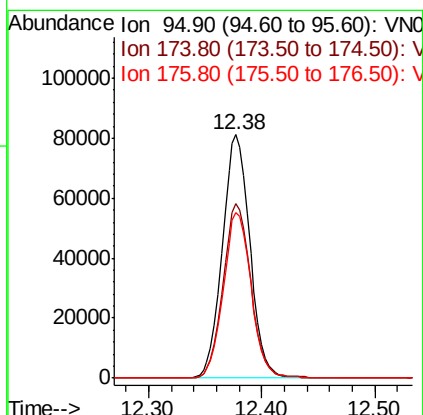
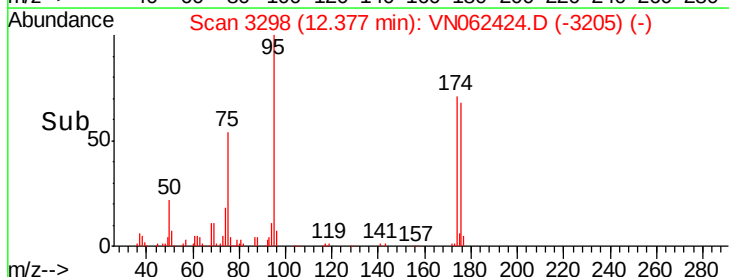
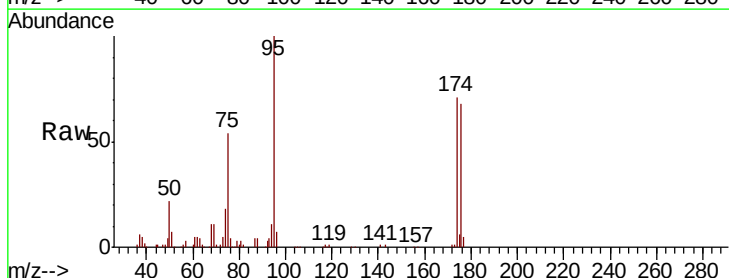
Tgt Ion: 95 Resp: 137499

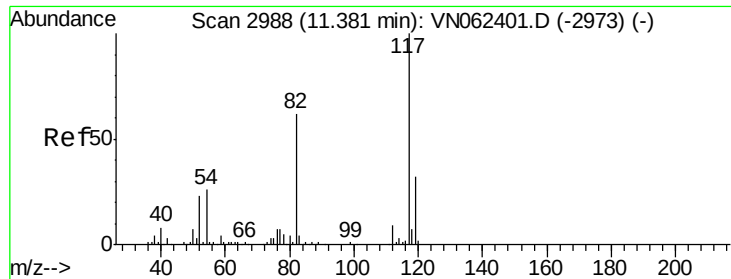
Ion Ratio Lower Upper

95 100

174 72.2 0.0 141.6

176 68.9 0.0 137.2

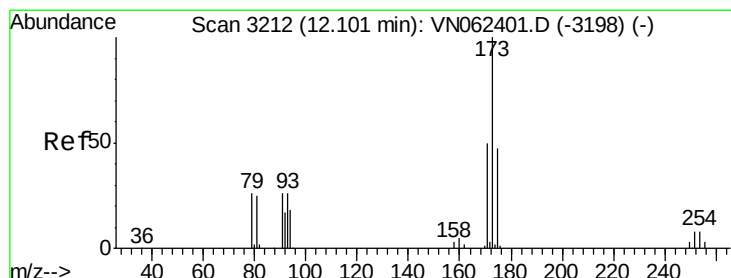
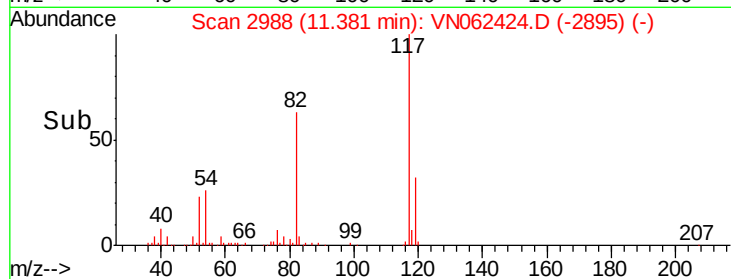
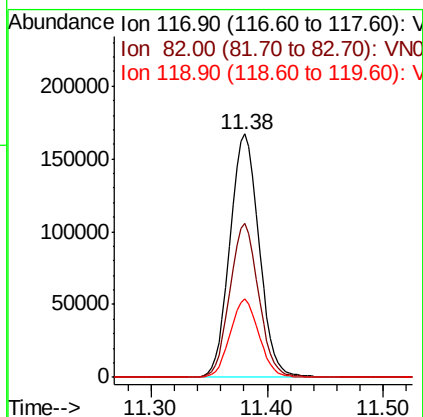
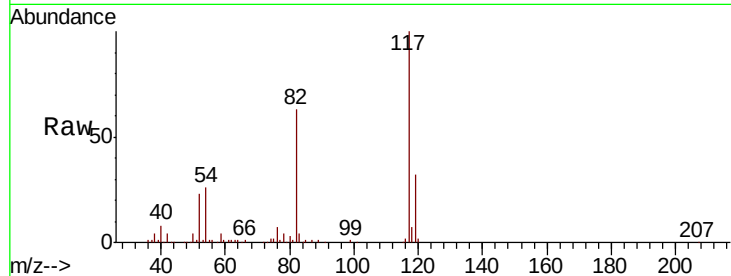




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2988  
Delta R.T. -0.00 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

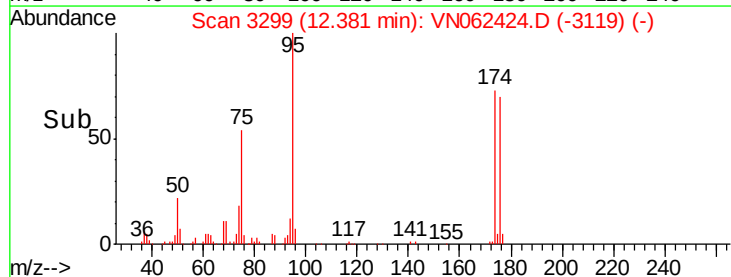
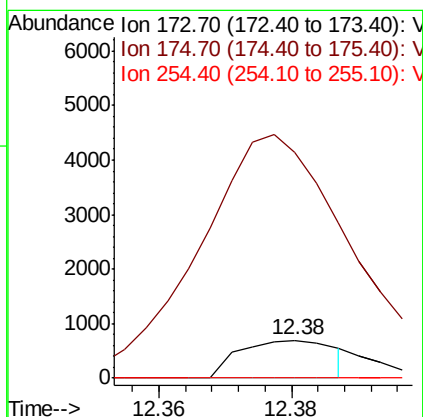
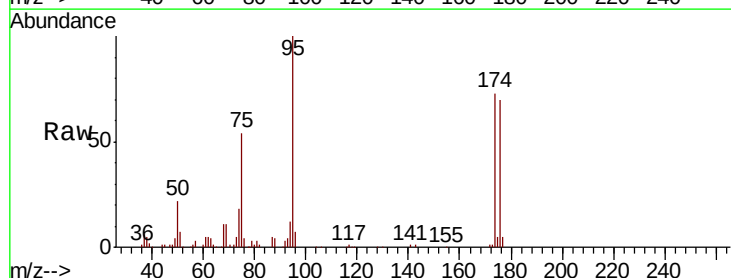
Instrument :  
MSVOA\_N  
ClientSampleId :  
BP-MW180-TB-20200701

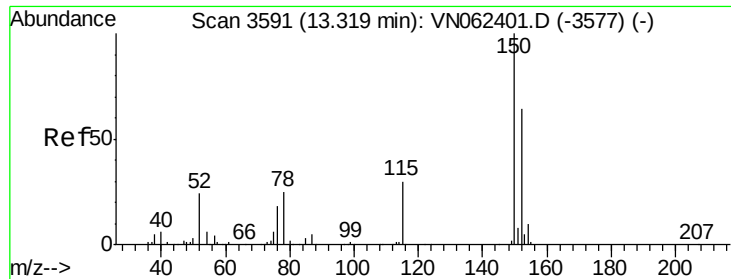
Tot Ion:117 Resp: 290402  
Ion Ratio Lower Upper  
117 100  
82 63.0 49.6 74.4  
119 32.0 25.4 38.0



#71  
Bromoform  
Concen: 0.455 ug/l  
RT: 12.38 min Scan# 3299  
Delta R.T. 0.28 min  
Lab File: VN062424.D  
Acq: 8 Jul 2020 23:10

Tgt Ion:173 Resp: 694  
Ion Ratio Lower Upper  
173 100  
175 858.4 23.7 71.1#  
254 0.0 0.0 0.0

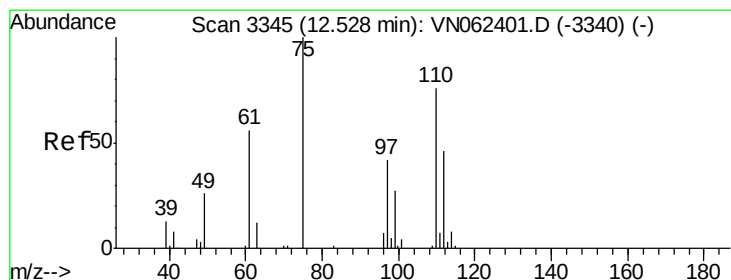
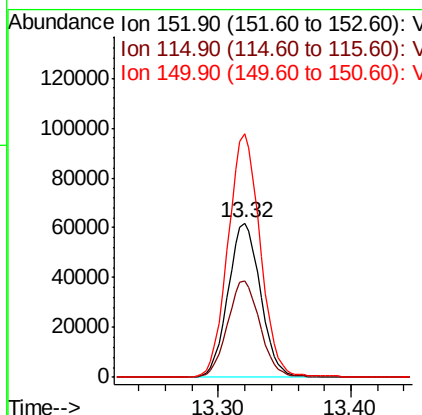
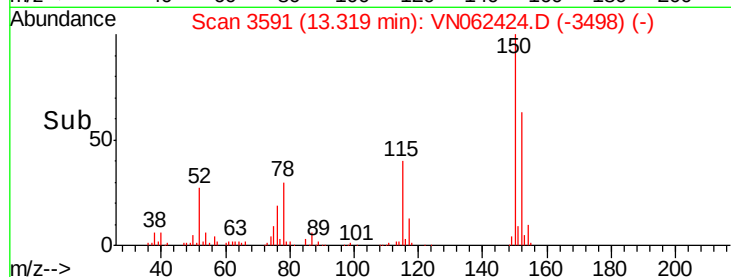
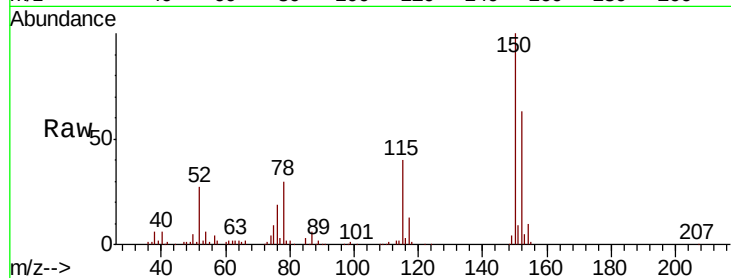




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.32 min Scan# 3591  
 Delta R.T. -0.00 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

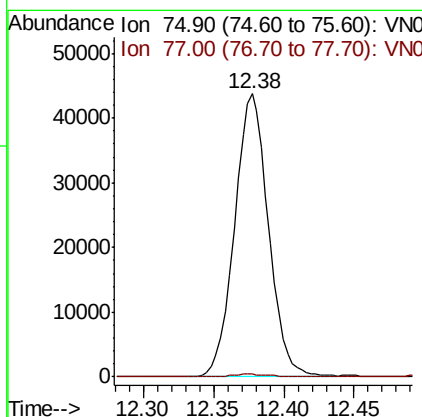
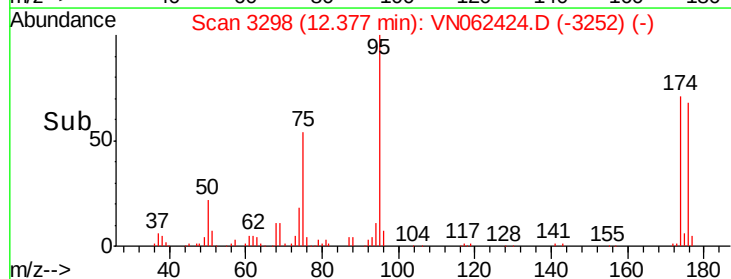
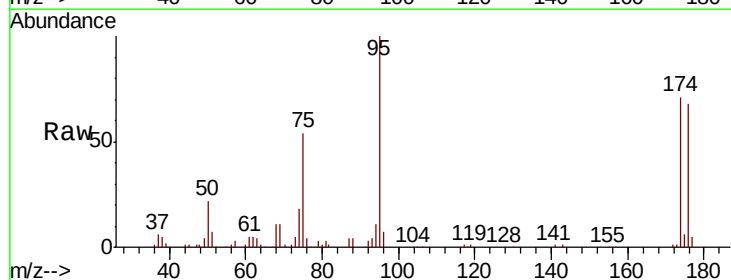
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-MW180-TB-20200701

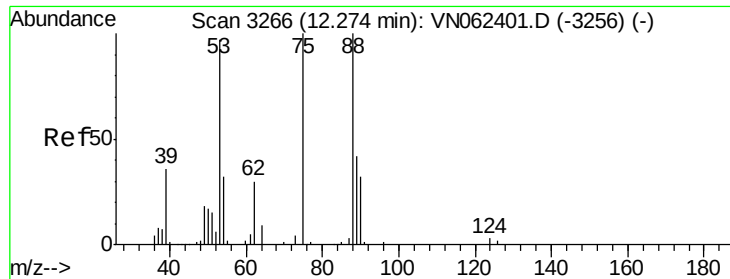
Tot Ion:152 Resp: 105385  
 Ion Ratio Lower Upper  
 152 100  
 115 62.7 31.4 94.2  
 150 157.0 0.0 347.4



#76  
 1,2,3-Trichloropropane  
 Concen: 28.440 ug/l  
 RT: 12.38 min Scan# 3298  
 Delta R.T. -0.15 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

Tgt Ion: 75 Resp: 73540  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 76.122 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.10 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

Instrument :

MSVOA\_N

ClientSampleId :

BP-MW180-TB-20200701

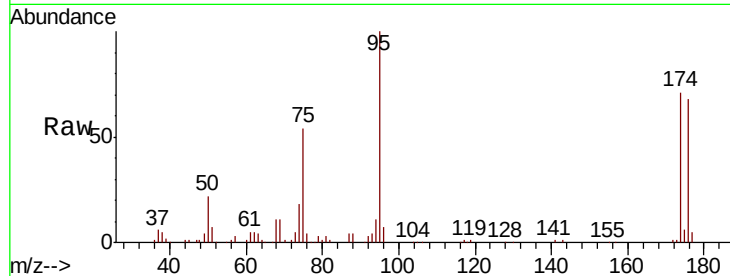
Tot Ion: 75 Resp: 73540

Ion Ratio Lower Upper

75 100

53 0.0 79.2 118.8#

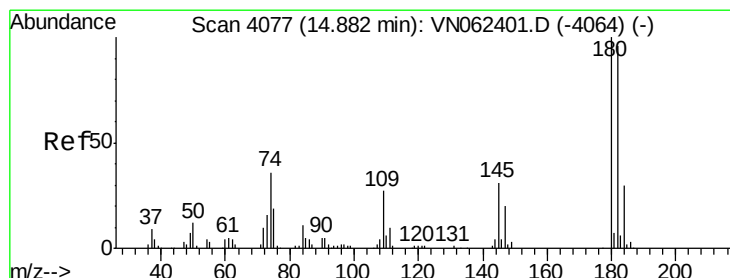
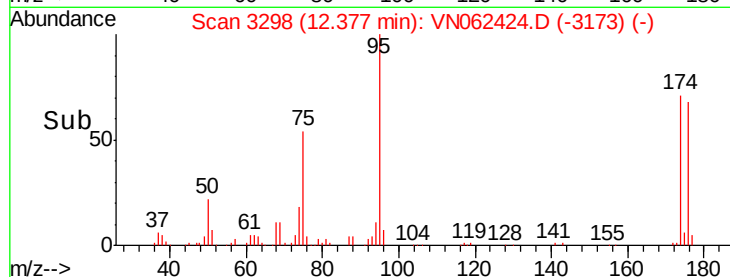
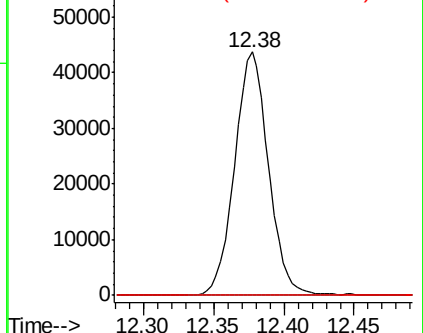
89 0.0 34.6 52.0#



Abundance Ion 74.90 (74.60 to 75.60): VN062401.D (-3256) (-)

Ion 53.00 (52.70 to 53.70): VN062401.D (-3256) (-)

Ion 88.90 (88.60 to 89.60): VN062401.D (-3256) (-)



#93

1,2,4-Trichlorobenzene

Concen: Below Cal

RT: 14.89 min Scan# 4078

Delta R.T. 0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

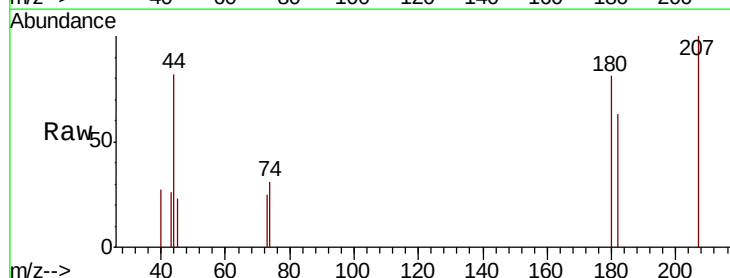
Tgt Ion: 180 Resp: 784

Ion Ratio Lower Upper

180 100

182 89.7 48.4 145.2

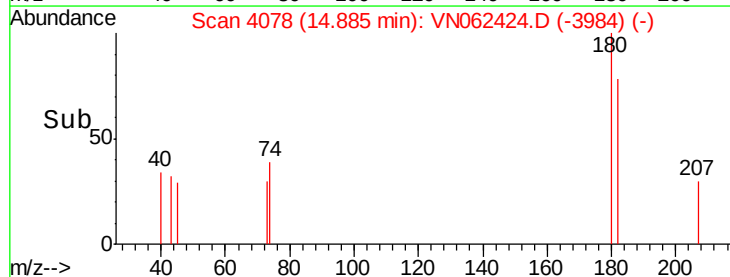
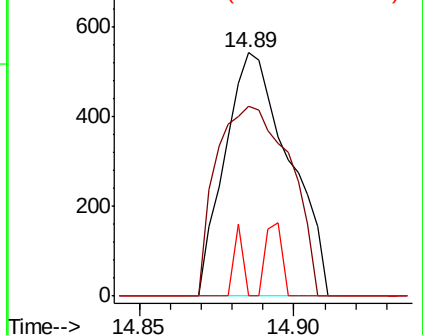
145 4.0 15.5 46.5#

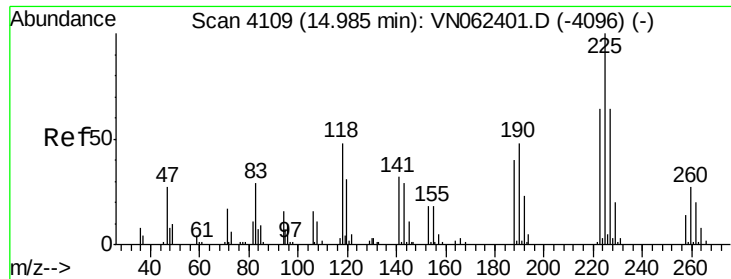


Abundance Ion 179.80 (179.50 to 180.50): VN062401.D (-4064) (-)

Ion 181.80 (181.50 to 182.50): VN062401.D (-4064) (-)

Ion 144.80 (144.50 to 145.50): VN062401.D (-4064) (-)





#94

Hexachlorobutadiene

Concen: 0.296 ug/l

RT: 14.98 min Scan# 4108

Delta R.T. -0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

Instrument :

MSVOA\_N

ClientSampleId :

BP-MW180-TB-20200701

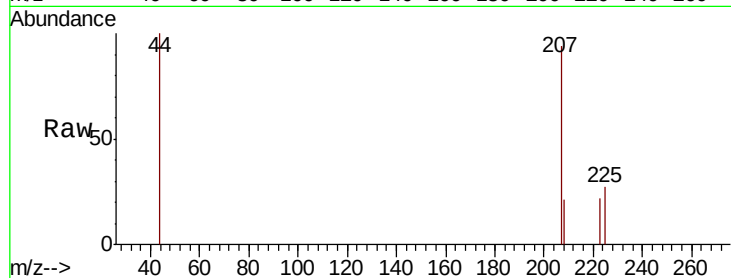
Tot Ion:225 Resp: 243

Ion Ratio Lower Upper

225 100

223 25.1 32.3 96.8#

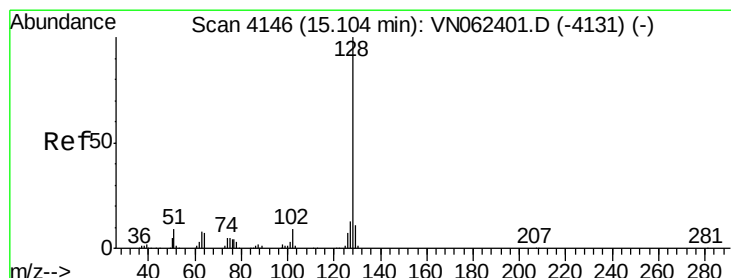
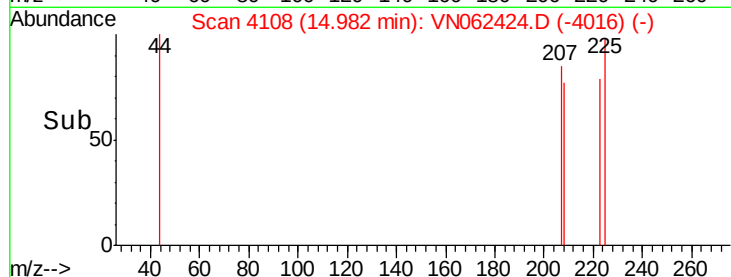
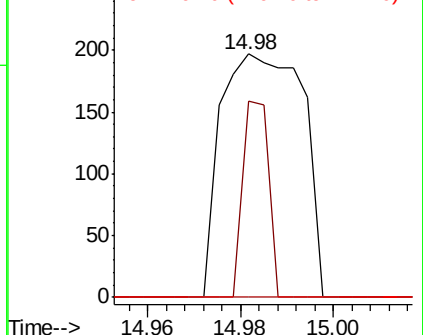
227 0.0 31.9 95.7#



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: Below Cal

RT: 15.11 min Scan# 4147

Delta R.T. 0.00 min

Lab File: VN062424.D

Acq: 8 Jul 2020 23:10

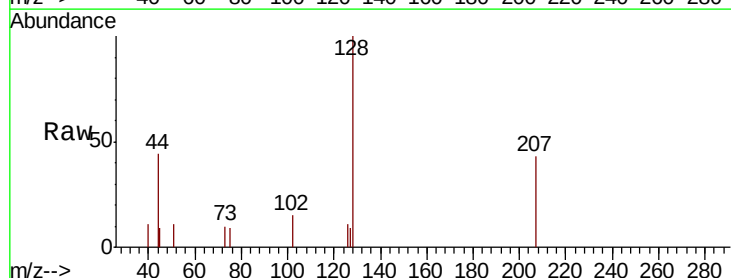
Tgt Ion:128 Resp: 3237

Ion Ratio Lower Upper

128 100

127 5.7 10.2 15.2#

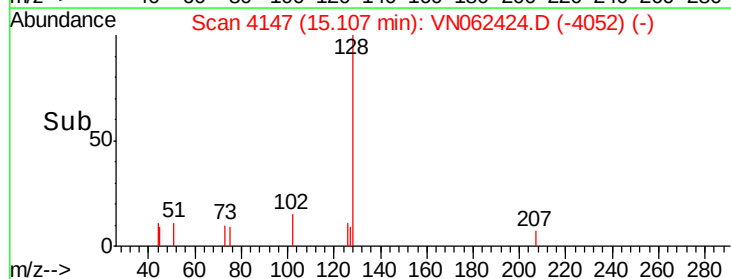
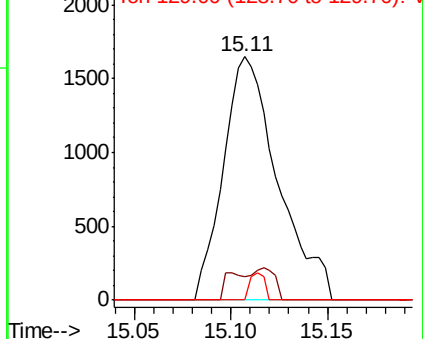
129 3.0 8.6 12.8#

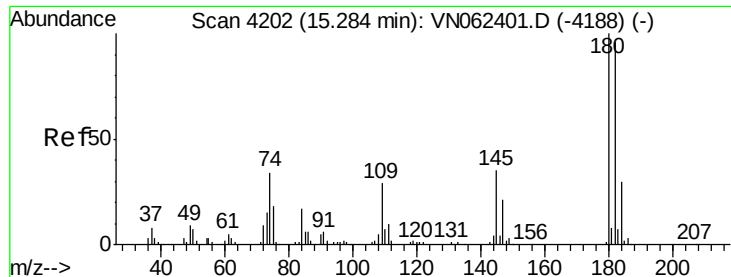


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96  
 1,2,3-Trichlorobenzene  
 Concen: 3.741 ug/l  
 RT: 15.28 min Scan# 4202  
 Delta R.T. -0.00 min  
 Lab File: VN062424.D  
 Acq: 8 Jul 2020 23:10

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BP-MW180-TB-20200701

Tot Ion:180 Resp: 927  
 Ion Ratio Lower Upper  
 180 100  
 182 95.9 47.8 143.4  
 145 10.5 17.0 50.9#

