

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101220\  
 Data File : VN064090.D  
 Acq On : 12 Oct 2020 20:14  
 Operator : JC/MD  
 Sample : L4333-09  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 OH-WC-C-G2

Quant Time: Oct 13 01:10:05 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N093020W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 01 01:46:38 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 226418   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 410953   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 428366   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 171573   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 186739   | 49.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.84%  |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 138441   | 48.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.10%  |      |
| 50) Toluene-d8            | 10.06  | 98  | 531214   | 49.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.28%  |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 206494   | 50.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.64% |      |

## Target Compounds

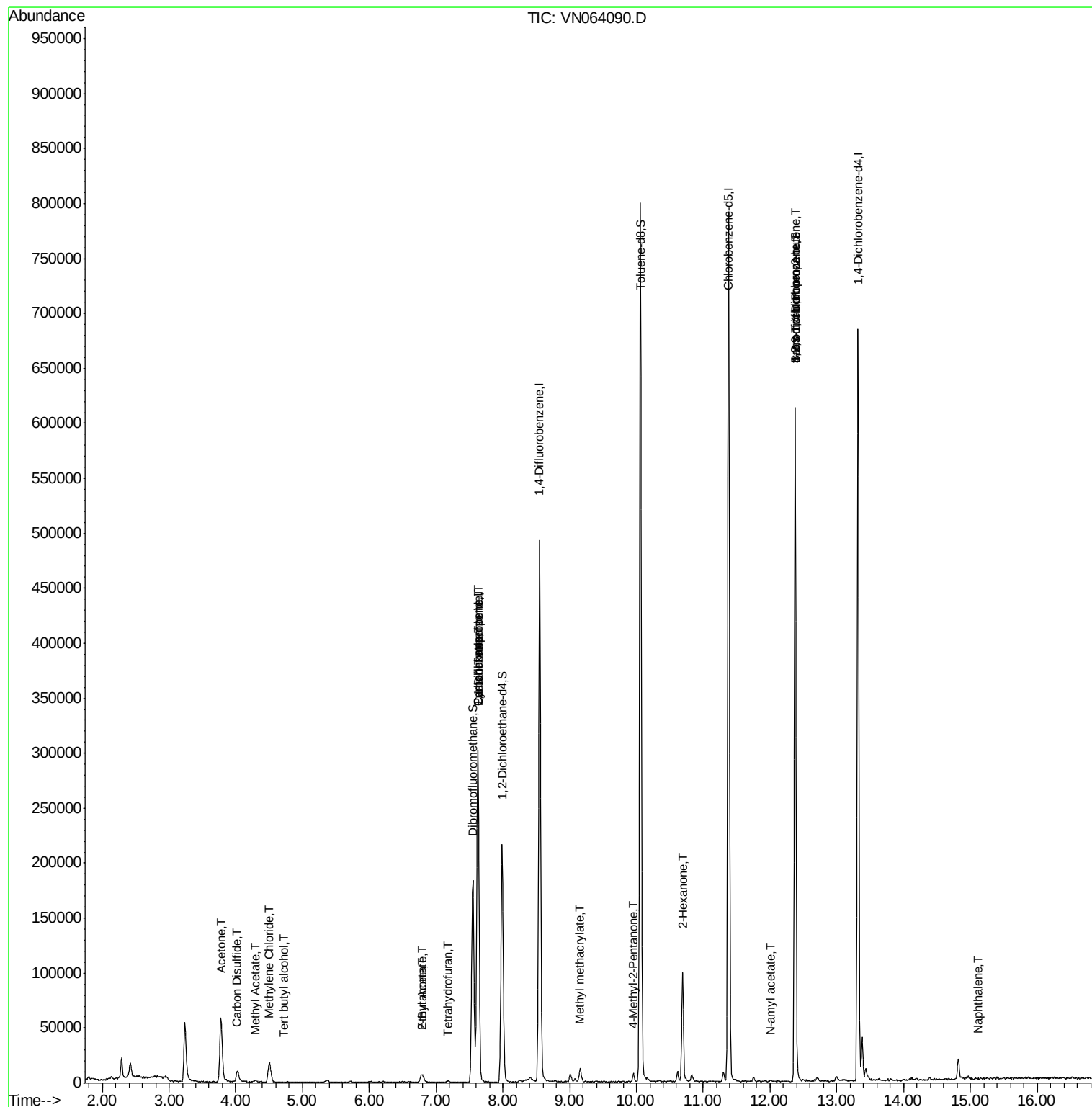
|                                |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.72  | 59  | 102    | 0.247  | ug/l # | 71     |
| 16) Acetone                    | 3.78  | 43  | 102487 | 89.005 | ug/l   | 99     |
| 17) Carbon Disulfide           | 4.02  | 76  | 674    | 0.808  | ug/l # | 76     |
| 18) Methyl Acetate             | 4.29  | 43  | 4168   | 1.394  | ug/l # | 63     |
| 20) Methylene Chloride         | 4.50  | 84  | 12535  | 4.841  | ug/l # | 93     |
| 25) 2-Butanone                 | 6.80  | 43  | 9452   | 5.790  | ug/l   | 91     |
| 29) Tetrahydrofuran            | 7.16  | 42  | 580    | 0.530  | ug/l # | 64     |
| 31) Cyclohexane                | 7.63  | 56  | 6364   | 1.465  | ug/l # | 52     |
| 36) 1,1-Dichloropropene        | 7.63  | 75  | 19884  | 4.776  | ug/l # | 46     |
| 37) Ethyl Acetate              | 6.80  | 43  | 9452   | 2.285  | ug/l # | 70     |
| 38) Carbon Tetrachloride       | 7.63  | 117 | 23881  | 5.115  | ug/l # | 15     |
| 48) Methyl methacrylate        | 9.14  | 41  | 1341   | 0.398  | ug/l # | 40     |
| 51) 4-Methyl-2-Pentanone       | 9.96  | 43  | 5479   | 1.368  | ug/l   | 97     |
| 59) 2-Hexanone                 | 10.69 | 43  | 80896  | 27.198 | ug/l # | 28     |
| 71) Bromoform                  | 12.37 | 173 | 776    | 0.301  | ug/l # | 1      |
| 74) N-amyl acetate             | 12.01 | 43  | 1106   | 2.398  | ug/l # | 53     |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75  | 112523 | 29.751 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75  | 112523 | 85.688 | ug/l # | 6      |
| 95) Naphthalene                | 15.12 | 128 | 477    | 1.974  | ug/l # | 69     |

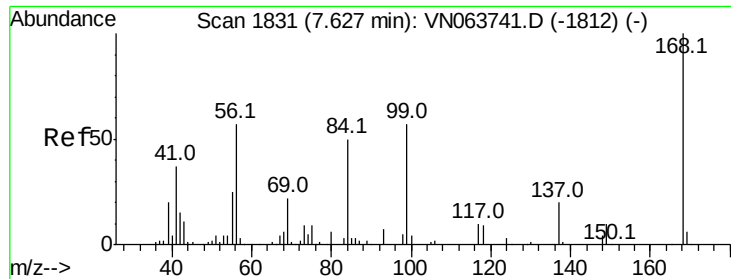
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN101220\  
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Operator : JC/MD  
Sample : L4333-09  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
OH-WC-C-G2

Quant Time: Oct 13 01:10:05 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N093020W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 01 01:46:38 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampleId :

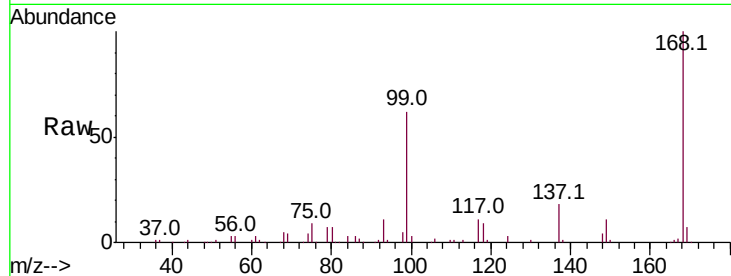
OH-WC-C-G2

Tot Ion:168 Resp: 226418

Ion Ratio Lower Upper

168 100

99 61.9 51.8 77.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.63

100000

80000

60000

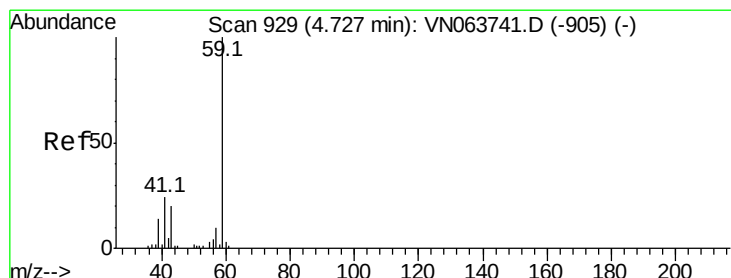
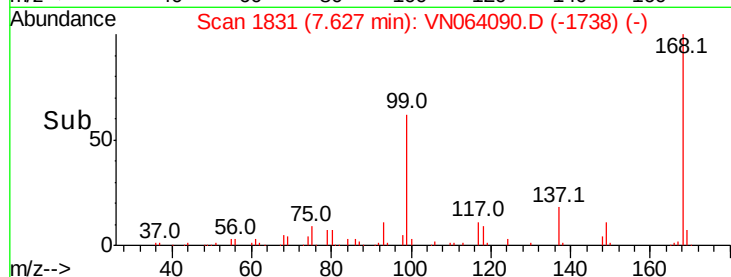
40000

20000

0

Time-->

7.55 7.60 7.65 7.70



#11

Tert butyl alcohol

Concen: 0.247 ug/l

RT: 4.72 min Scan# 927

Delta R.T. -0.01 min

Lab File: VN064090.D

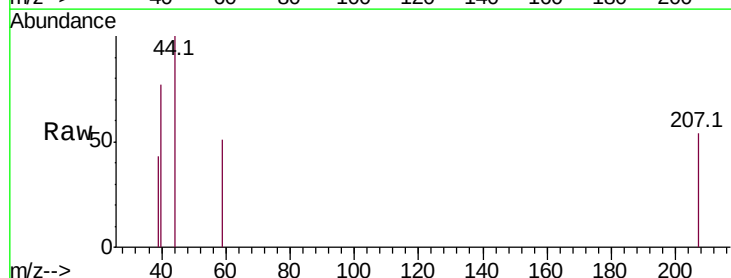
Acq: 12 Oct 2020 20:14

Tgt Ion: 59 Resp: 102

Ion Ratio Lower Upper

59 100

57 0.0 8.7 13.1#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

4.72

250

200

150

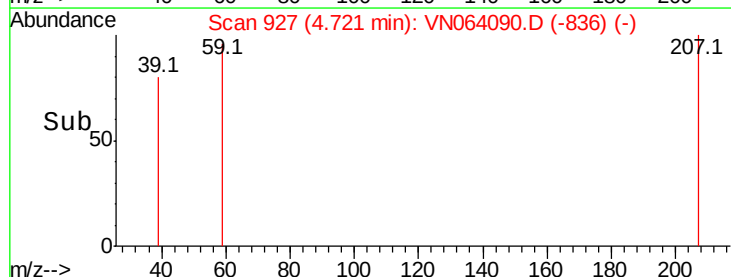
100

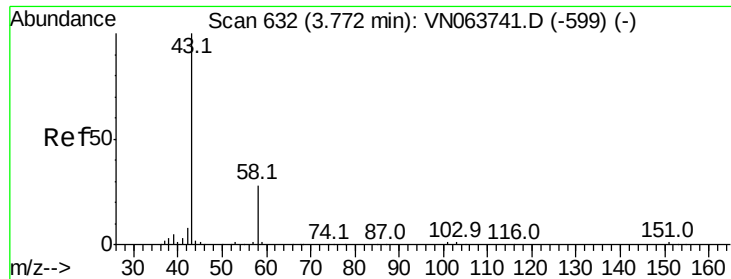
50

0

Time-->

4.71 4.72 4.73





#16

Acetone

Concen: 89.005 ug/l

RT: 3.78 min Scan# 633

Delta R.T. 0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampleId :

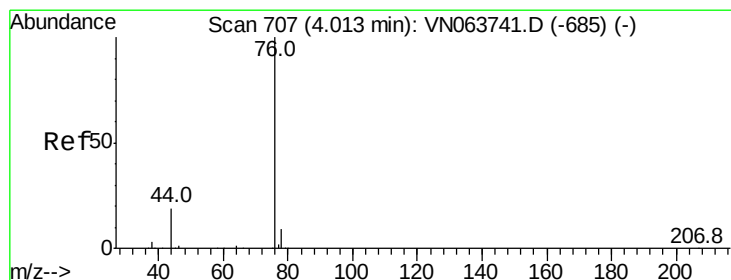
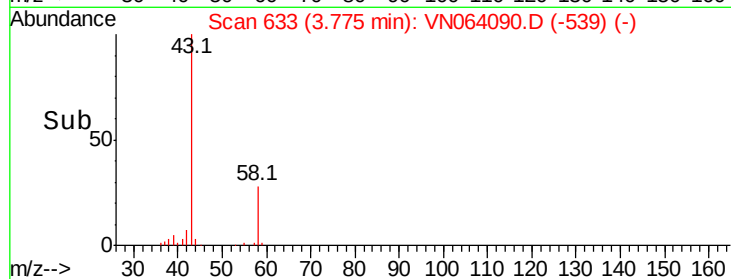
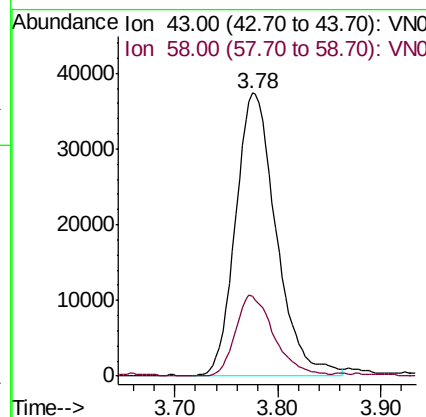
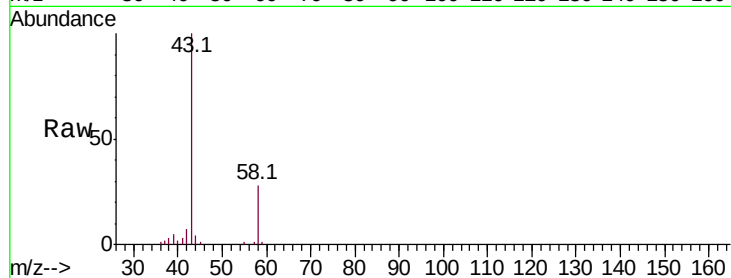
OH-WC-C-G2

Tot Ion: 43 Resp: 102487

Ion Ratio Lower Upper

43 100

58 28.4 22.3 33.5



#17

Carbon Disulfide

Concen: 0.808 ug/l

RT: 4.02 min Scan# 710

Delta R.T. 0.01 min

Lab File: VN064090.D

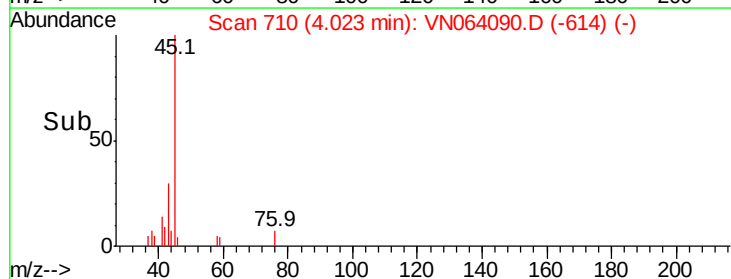
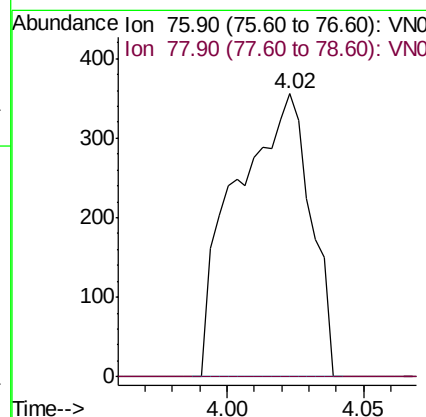
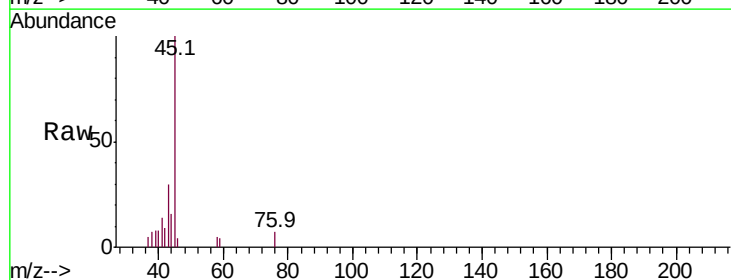
Acq: 12 Oct 2020 20:14

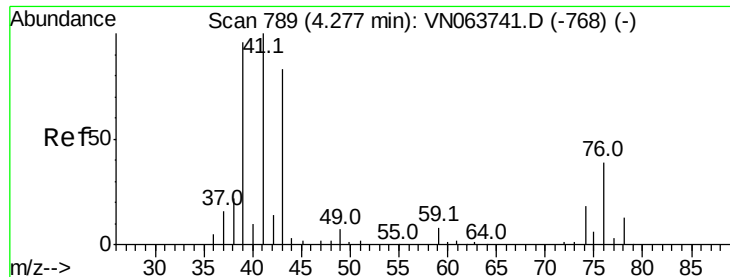
Tgt Ion: 76 Resp: 674

Ion Ratio Lower Upper

76 100

78 0.0 7.0 10.4#





#18

Methyl Acetate

Concen: 1.394 ug/l

RT: 4.29 min Scan# 793

Delta R.T. 0.01 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampled :

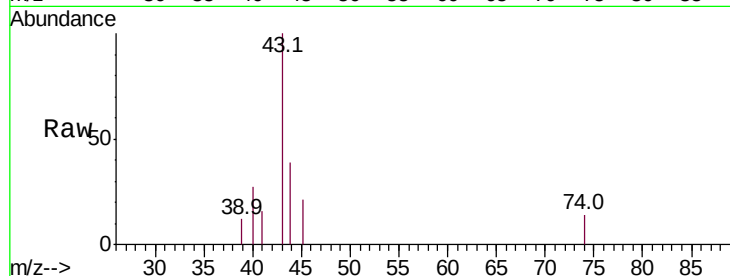
OH-WC-C-G2

Tot Ion: 43 Resp: 4168

Ion Ratio Lower Upper

43 100

74 4.1 17.4 26.2#



Abundance Ion 43.00 (42.70 to 43.70): VN063741.D (-768) (-)

Ion 74.00 (73.70 to 74.70): VN063741.D (-768) (-)

4.29

1500

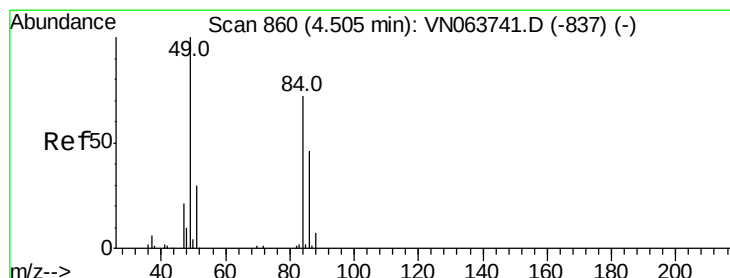
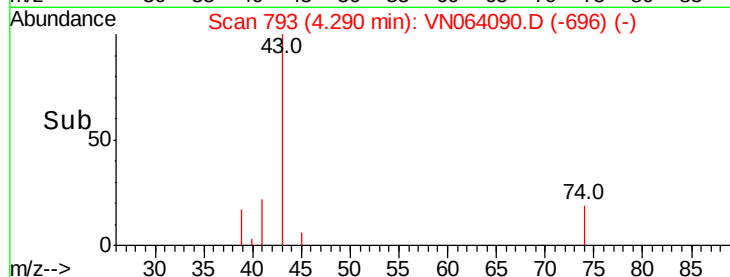
1000

500

0

Time-->

4.20 4.25 4.30 4.35



#20

Methylene Chloride

Concen: 4.841 ug/l

RT: 4.50 min Scan# 859

Delta R.T. -0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Tgt Ion: 84 Resp: 12535

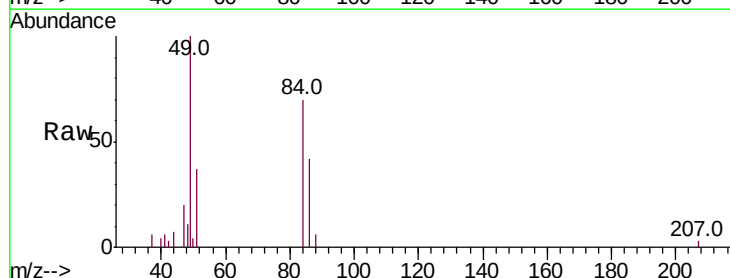
Ion Ratio Lower Upper

84 100

49 142.9 110.4 165.6

51 53.0 33.3 49.9#

86 59.5 50.7 76.1



Abundance Ion 83.90 (83.60 to 84.60): VN063741.D (-837) (-)

Ion 48.90 (48.60 to 49.60): VN063741.D (-837) (-)

Ion 50.90 (50.60 to 51.60): VN063741.D (-837) (-)

Ion 85.90 (85.60 to 86.60): VN063741.D (-837) (-)

8000

6000

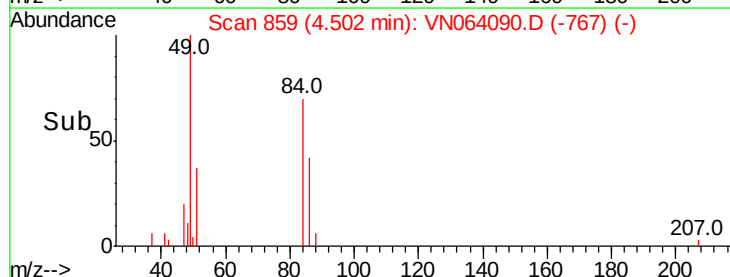
4000

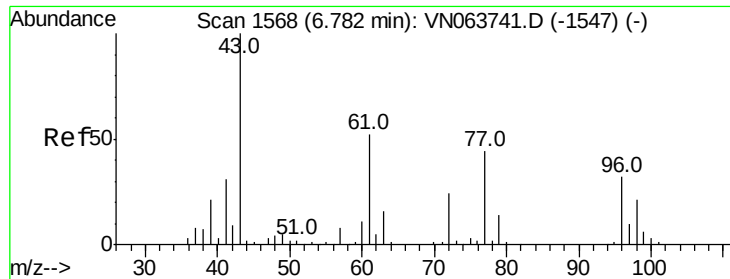
2000

0

Time-->

4.40 4.45 4.50 4.55 4.60

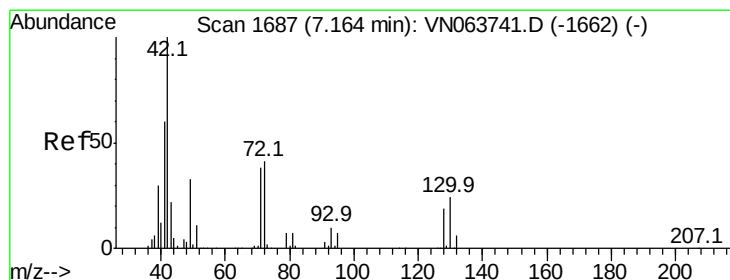
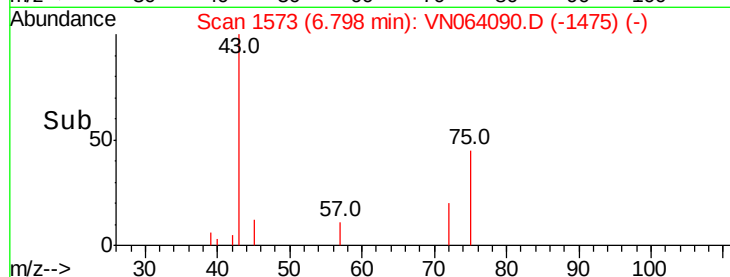
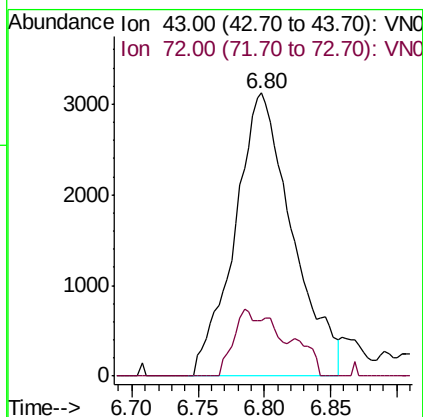
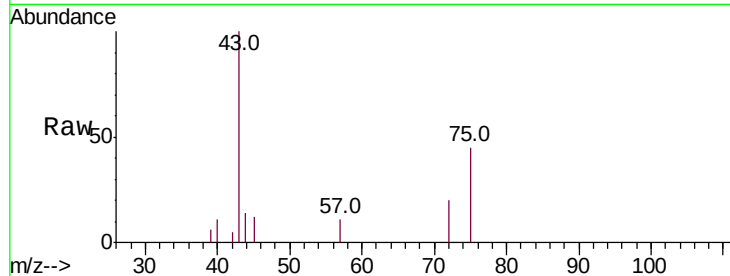




#25  
2-Butanone  
Concen: 5.790 ug/l  
RT: 6.80 min Scan# 1573  
Delta R.T. 0.02 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

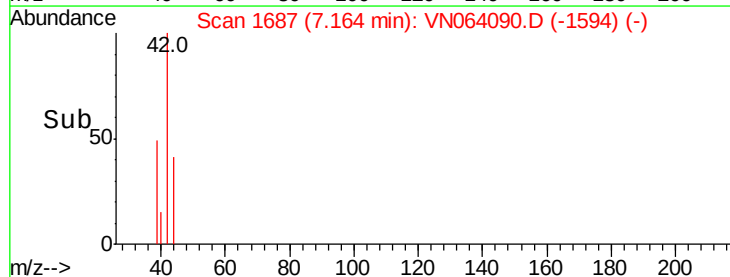
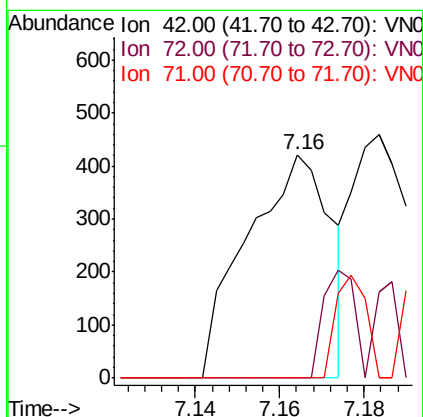
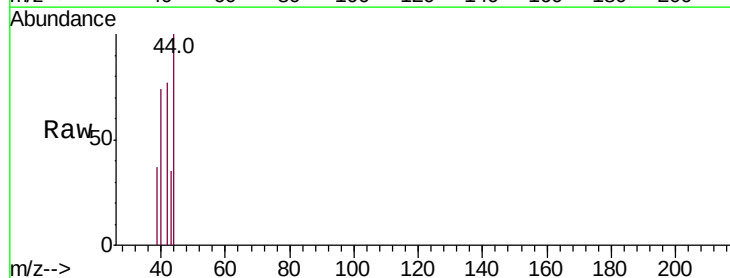
Instrument :  
MSVOA\_N  
ClientSampleId :  
OH-WC-C-G2

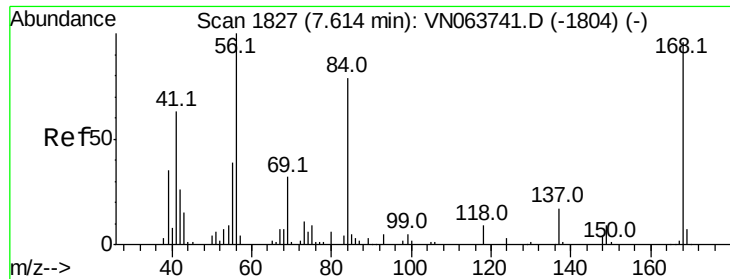
Tot Ion: 43 Resp: 9452  
Ion Ratio Lower Upper  
43 100  
72 19.5 19.3 28.9



#29  
Tetrahydrofuran  
Concen: 0.530 ug/l  
RT: 7.16 min Scan# 1687  
Delta R.T. 0.00 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

Tgt Ion: 42 Resp: 580  
Ion Ratio Lower Upper  
42 100  
72 18.1 32.8 49.2#  
71 16.9 30.6 45.8#

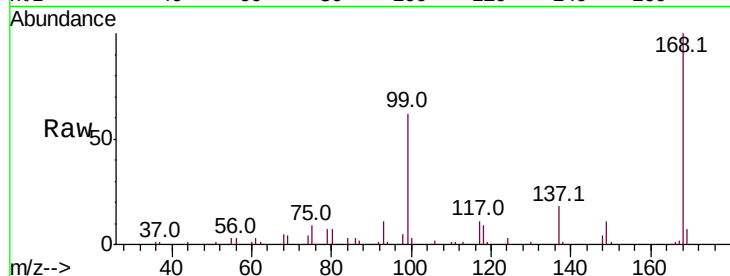




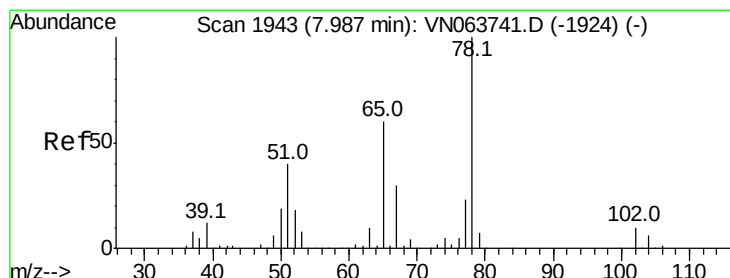
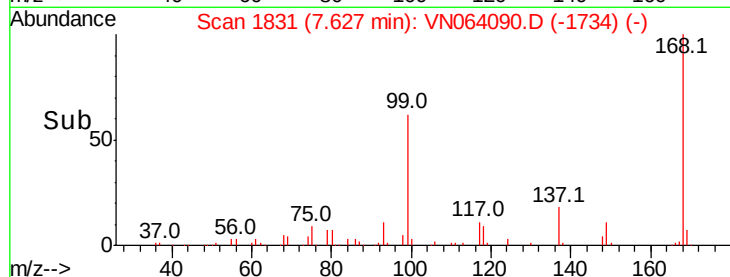
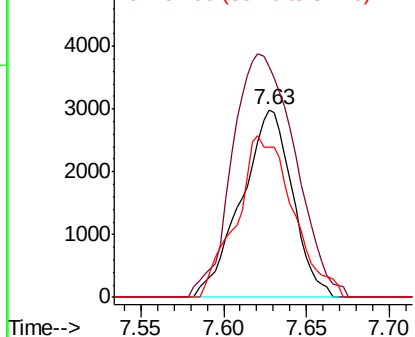
#31  
Cyclohexane  
Concen: 1.465 ug/l  
RT: 7.63 min Scan# 1831  
Delta R.T. 0.01 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

Instrument :  
MSVOA\_N  
ClientSampleId :  
OH-WC-C-G2

Tot Ion: 56 Resp: 6364  
Ion Ratio Lower Upper  
56 100  
69 123.4 25.4 38.2#  
84 80.2 63.3 94.9

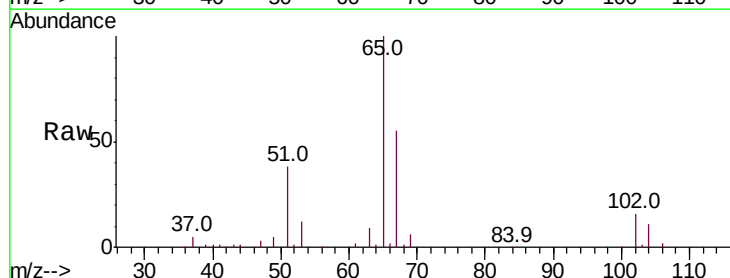


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

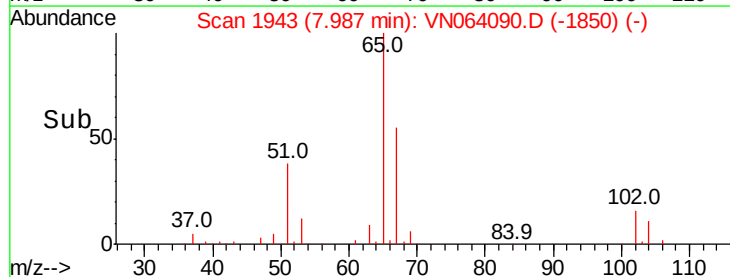
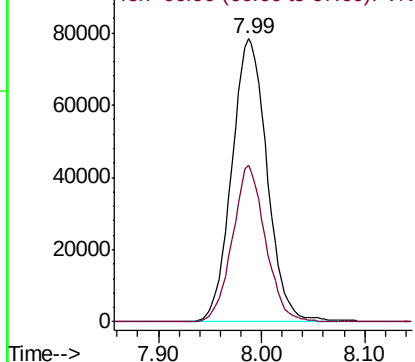


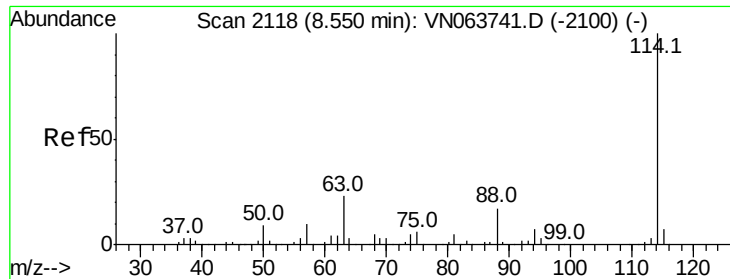
#33  
1,2-Dichloroethane-d4  
Concen: 49.922 ug/l  
RT: 7.99 min Scan# 1943  
Delta R.T. 0.00 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

Tgt Ion: 65 Resp: 186739  
Ion Ratio Lower Upper  
65 100  
67 52.0 0.0 99.6



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

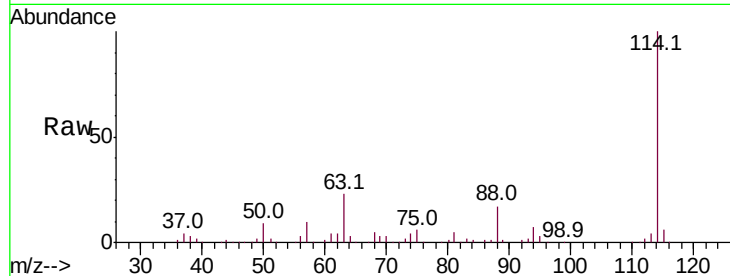




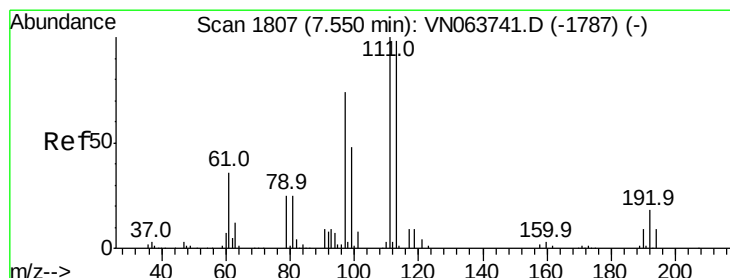
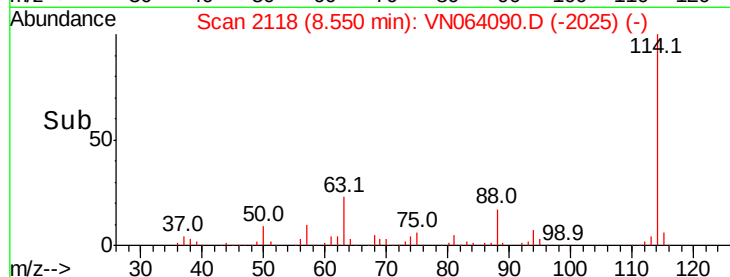
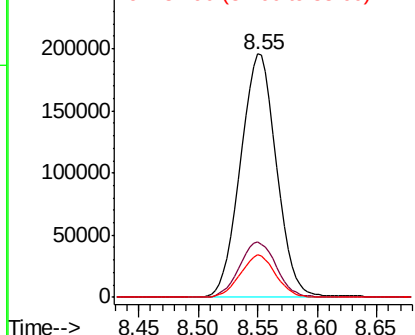
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2118  
 Delta R.T. 0.00 min  
 Lab File: VN064090.D  
 Acq: 12 Oct 2020 20:14

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 OH-WC-C-G2

Tot Ion:114 Resp: 410953  
 Ion Ratio Lower Upper  
 114 100  
 63 22.6 0.0 45.0  
 88 17.3 0.0 34.0

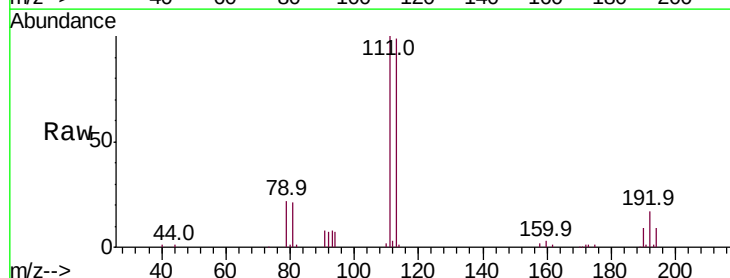


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

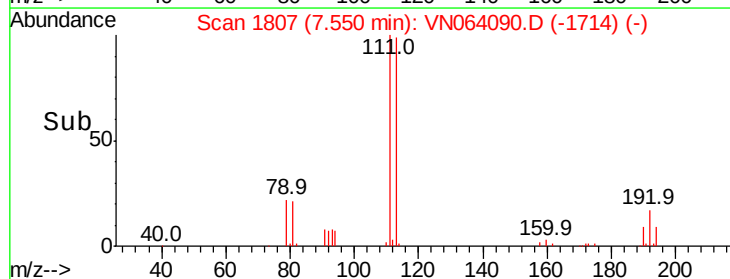
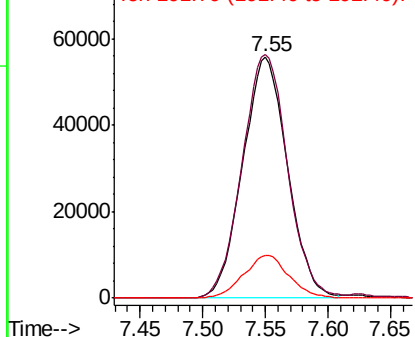


#35  
 Dibromofluoromethane  
 Concen: 48.550 ug/l  
 RT: 7.55 min Scan# 1807  
 Delta R.T. 0.00 min  
 Lab File: VN064090.D  
 Acq: 12 Oct 2020 20:14

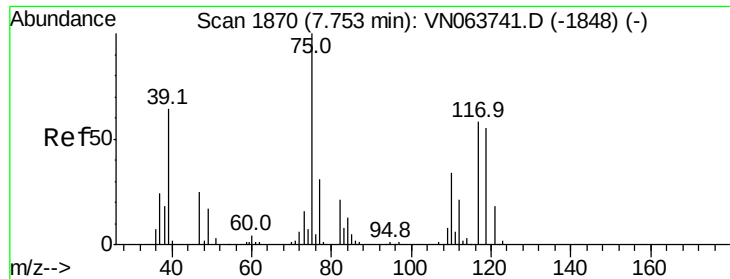
Tgt Ion:113 Resp: 138441  
 Ion Ratio Lower Upper  
 113 100  
 111 102.8 81.8 122.8  
 192 18.0 14.2 21.2



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V







#36

1,1-Dichloropropene

Concen: 4.776 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. -0.13 min

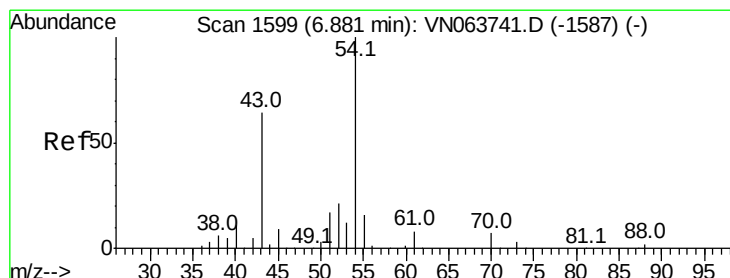
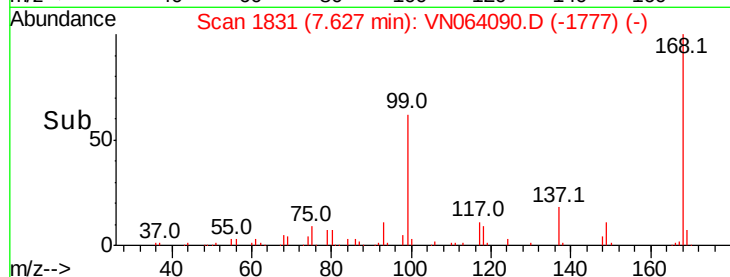
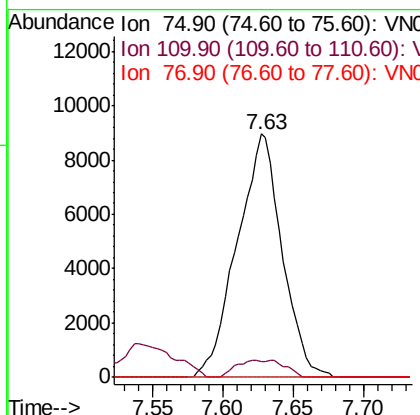
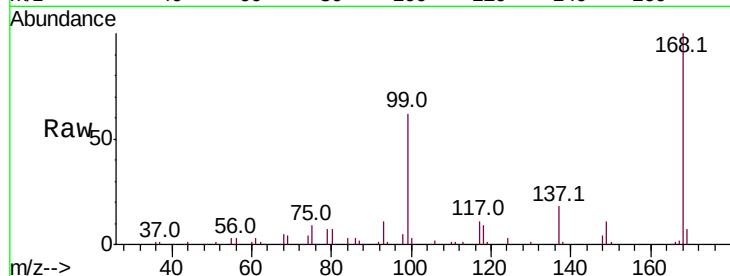
Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :  
MSVOA\_N  
ClientSampled :  
OH-WC-C-G2

Tot Ion: 75 Resp: 19884

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 110 | 4.1   | 16.9  | 50.6# |
| 77  | 0.0   | 24.5  | 36.7# |



#37

Ethyl Acetate

Concen: 2.285 ug/l

RT: 6.80 min Scan# 1573

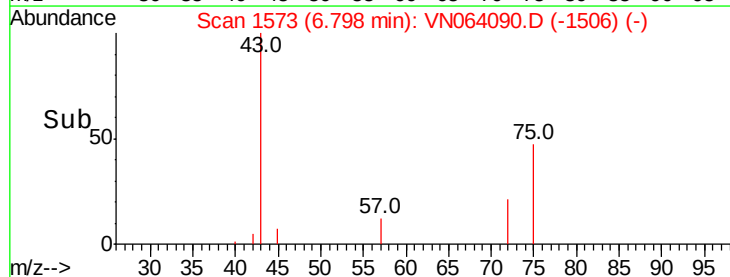
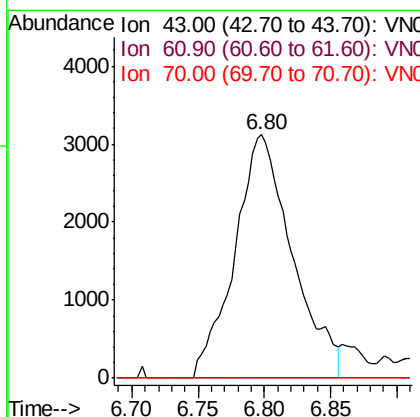
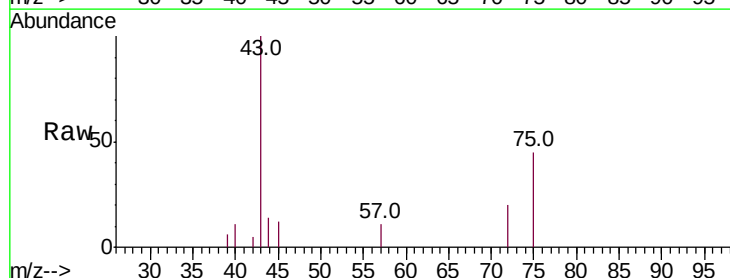
Delta R.T. -0.08 min

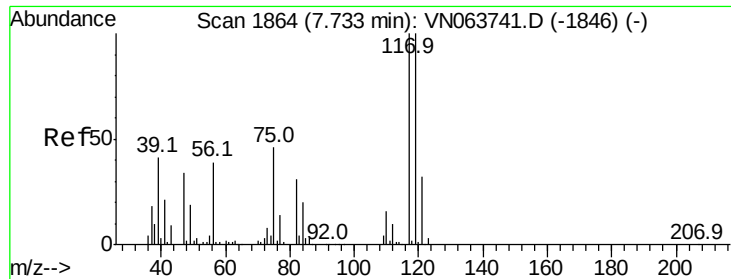
Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Tgt Ion: 43 Resp: 9452

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 61  | 0.0   | 10.4  | 15.6# |
| 70  | 0.0   | 7.3   | 10.9# |





#38

Carbon Tetrachloride

Concen: 5.115 ug/l

RT: 7.63 min Scan# 1832

Delta R.T. -0.10 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampled :

OH-WC-C-G2

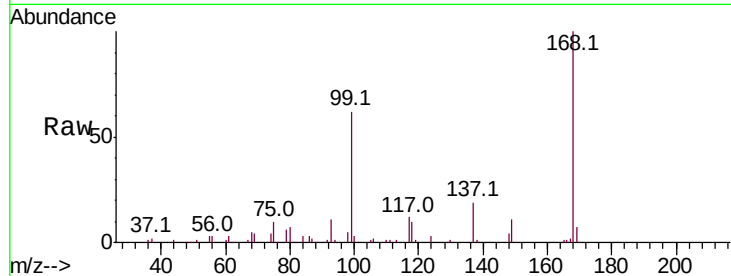
Tot Ion:117 Resp: 23881

Ion Ratio Lower Upper

117 100

119 5.6 80.1 120.1#

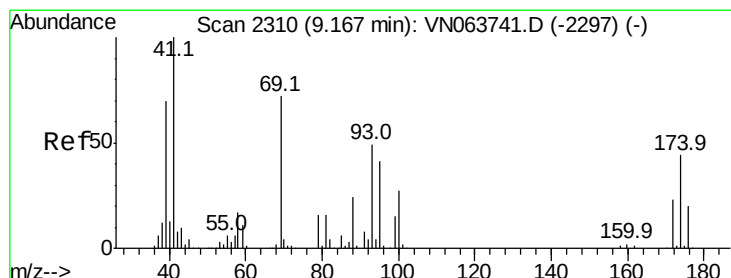
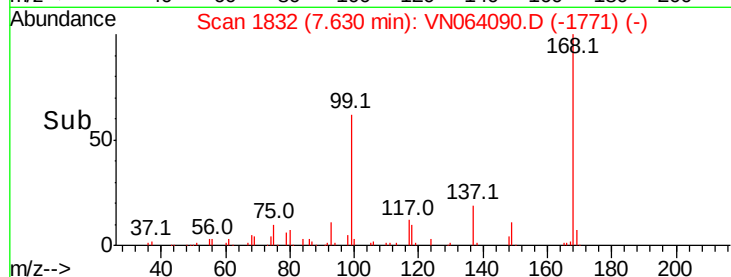
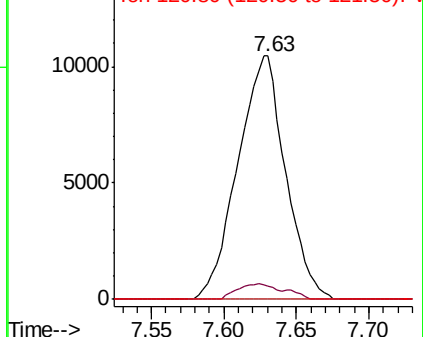
121 0.0 25.7 38.5#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#48

Methyl methacrylate

Concen: 0.398 ug/l

RT: 9.14 min Scan# 2303

Delta R.T. -0.02 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

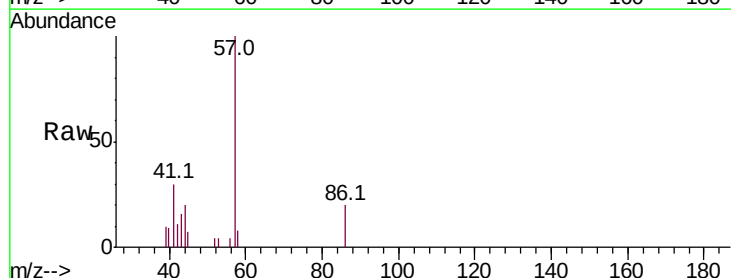
Tgt Ion: 41 Resp: 1341

Ion Ratio Lower Upper

41 100

69 0.0 60.9 91.3#

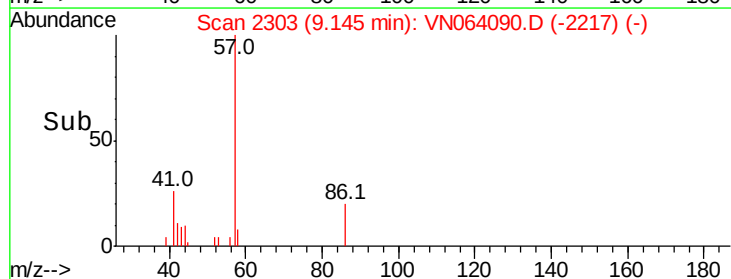
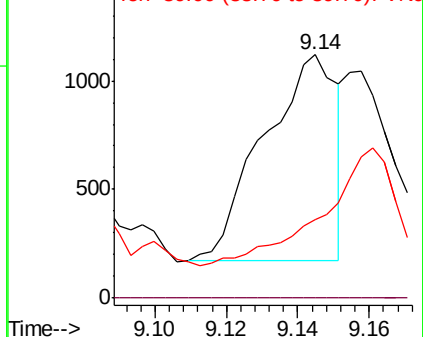
39 96.5 57.5 86.3#

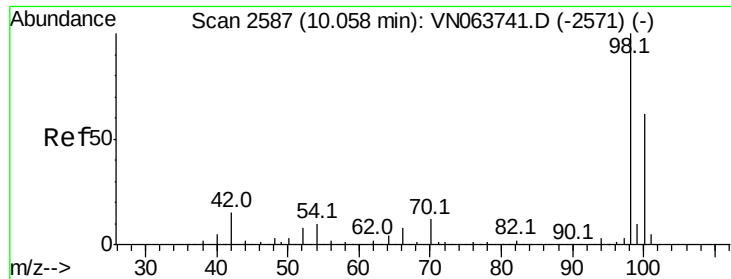


Abundance Ion 41.00 (40.70 to 41.70): V

Ion 69.00 (68.70 to 69.70): V

Ion 39.00 (38.70 to 39.70): V





#50

Toluene-d8

Concen: 49.142 ug/l

RT: 10.06 min Scan# 2588

Delta R.T. 0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampleId :

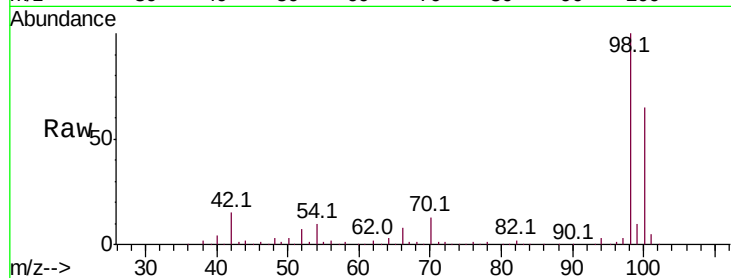
OH-WC-C-G2

Tot Ion: 98 Resp: 531214

Ion Ratio Lower Upper

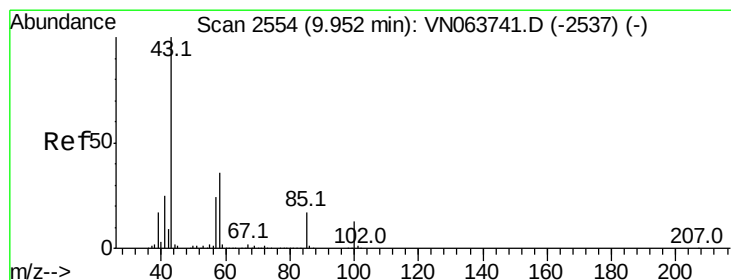
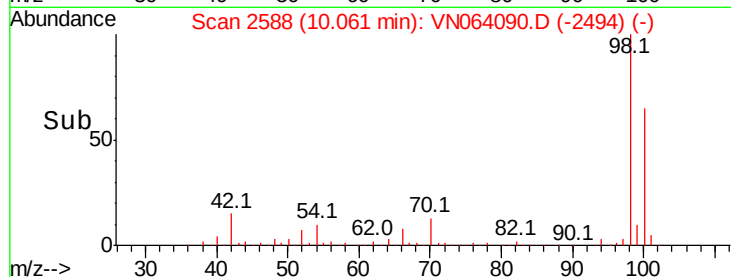
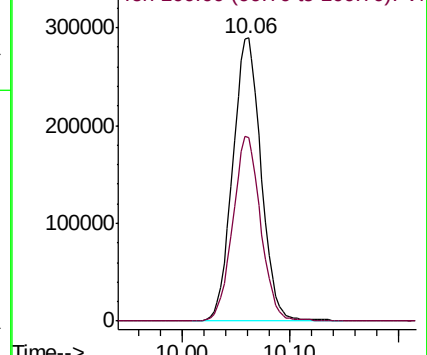
98 100

100 64.1 49.8 74.6



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN



#51

4-Methyl-2-Pentanone

Concen: 1.368 ug/l

RT: 9.96 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN064090.D

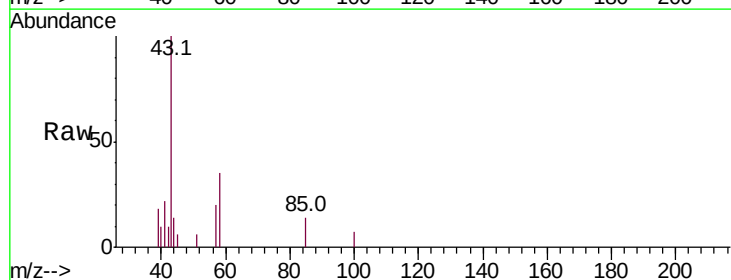
Acq: 12 Oct 2020 20:14

Tgt Ion: 43 Resp: 5479

Ion Ratio Lower Upper

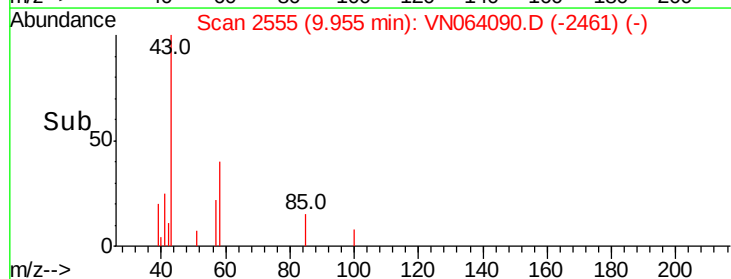
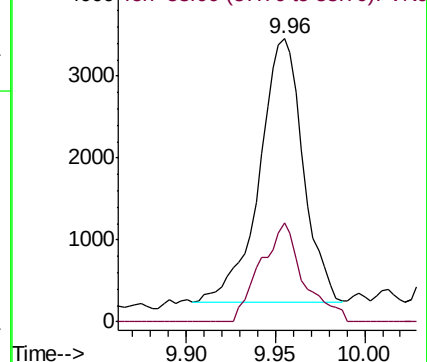
43 100

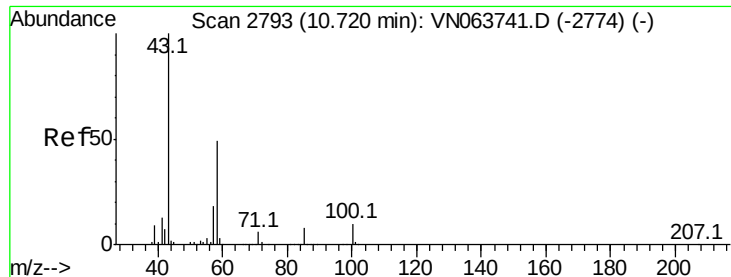
58 37.0 28.4 42.6



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#59

2-Hexanone

Concen: 27.198 ug/l

RT: 10.69 min Scan# 2784

Delta R.T. -0.03 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampled :

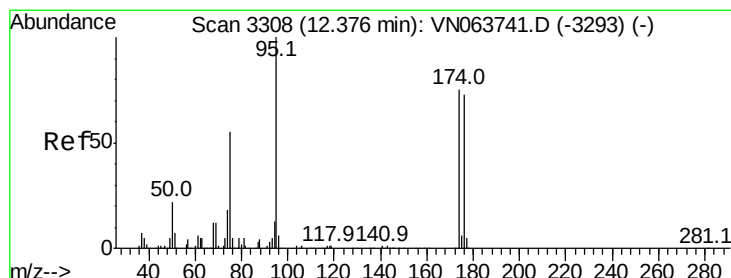
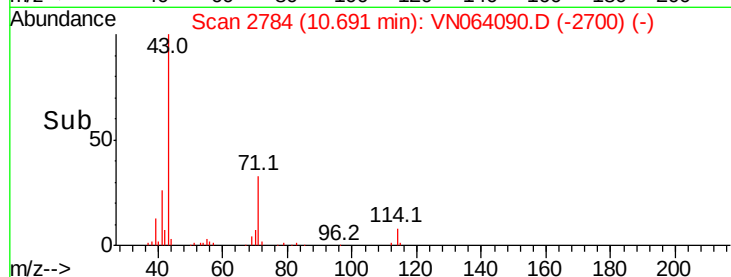
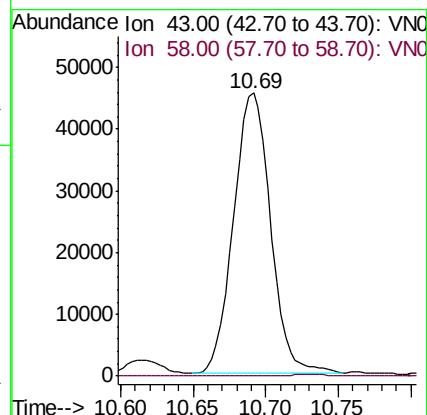
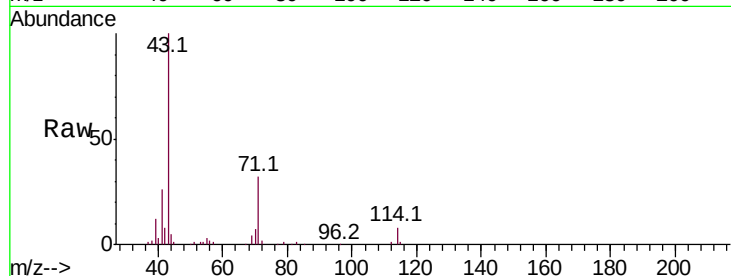
OH-WC-C-G2

Tot Ion: 43 Resp: 80896

Ion Ratio Lower Upper

43 100

58 0.0 24.6 73.8#



#62

4-Bromofluorobenzene

Concen: 50.817 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

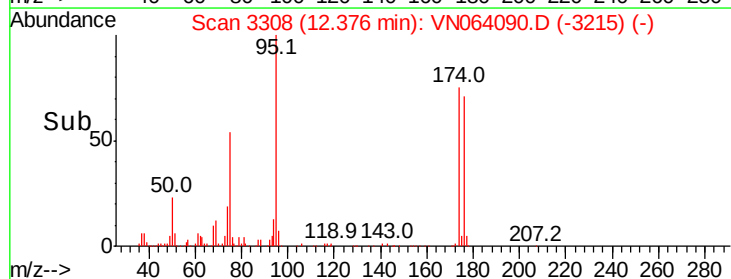
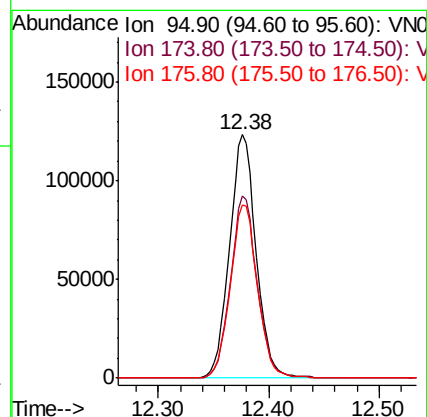
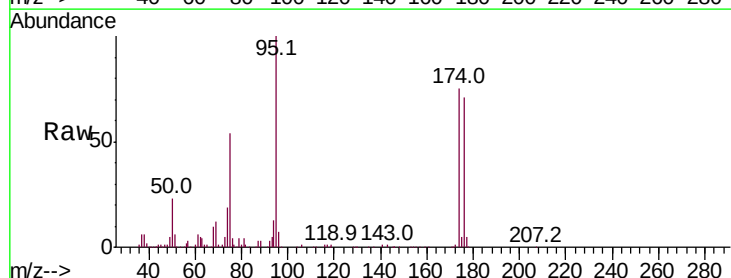
Tgt Ion: 95 Resp: 206494

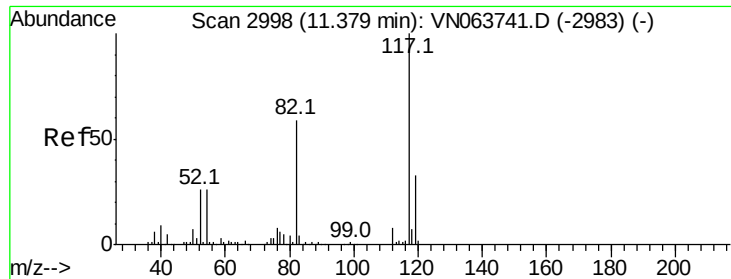
Ion Ratio Lower Upper

95 100

174 75.1 0.0 150.6

176 72.6 0.0 145.4

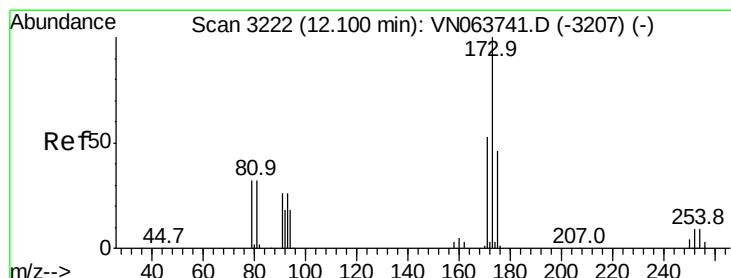
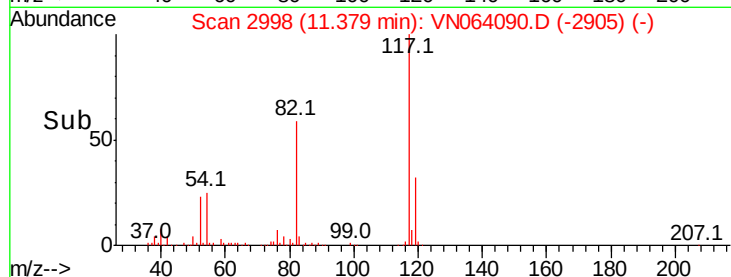
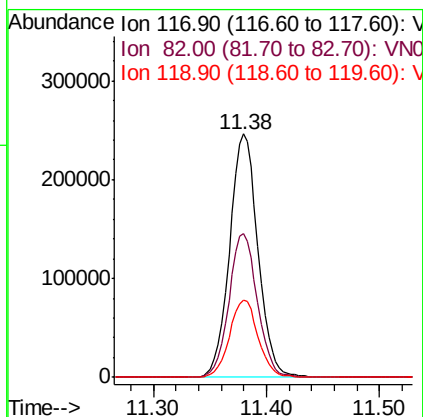
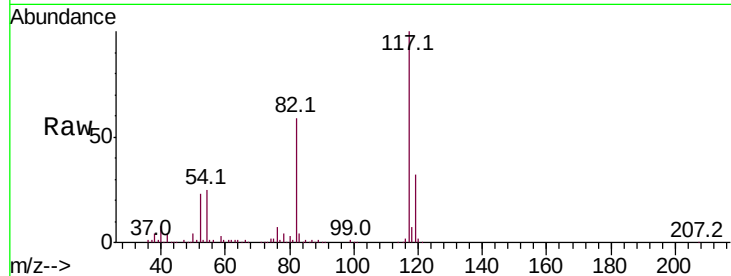




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2998  
Delta R.T. 0.00 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

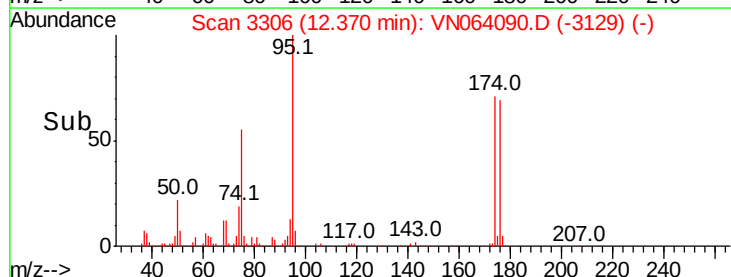
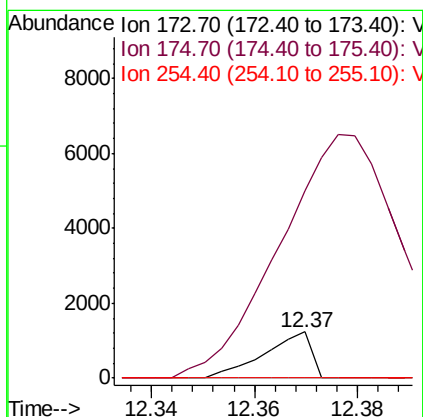
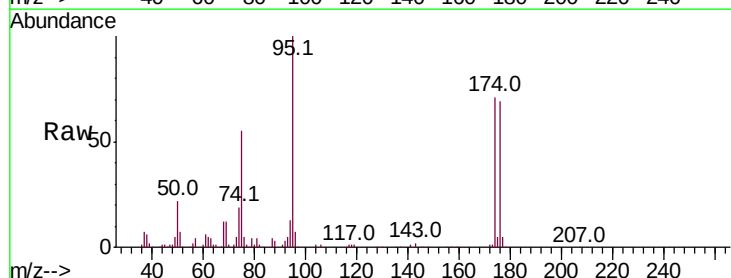
Instrument :  
MSVOA\_N  
ClientSampleId :  
OH-WC-C-G2

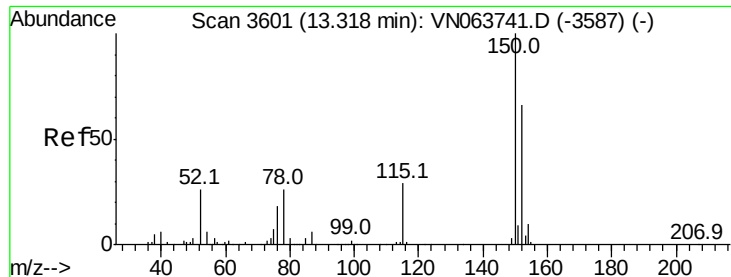
Tot Ion:117 Resp: 428366  
Ion Ratio Lower Upper  
117 100  
82 59.2 47.4 71.2  
119 31.9 26.4 39.6



#71  
Bromoform  
Concen: 0.301 ug/l  
RT: 12.37 min Scan# 3306  
Delta R.T. 0.27 min  
Lab File: VN064090.D  
Acq: 12 Oct 2020 20:14

Tgt Ion:173 Resp: 776  
Ion Ratio Lower Upper  
173 100  
175 1154.3 23.5 70.5#  
254 0.0 0.0 0.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampleId :

OH-WC-C-G2

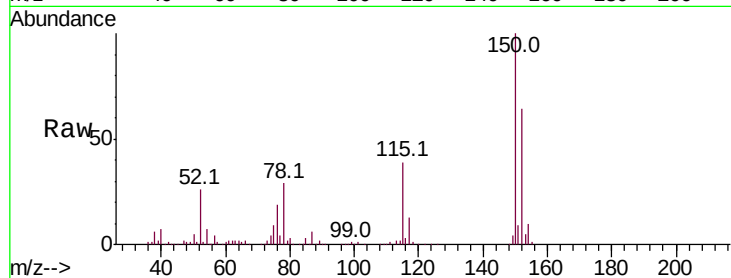
Tot Ion:152 Resp: 171573

Ion Ratio Lower Upper

152 100

115 62.7 31.3 93.8

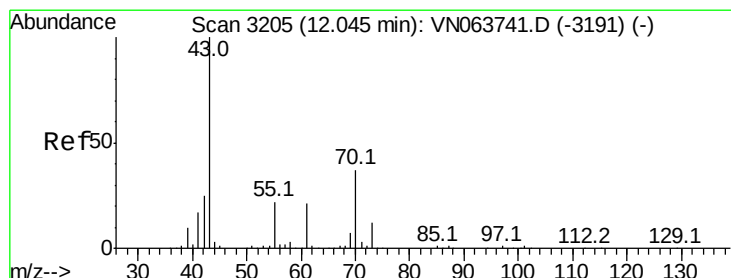
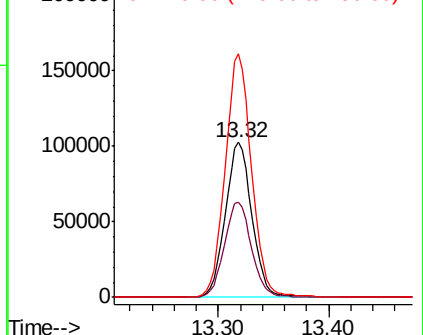
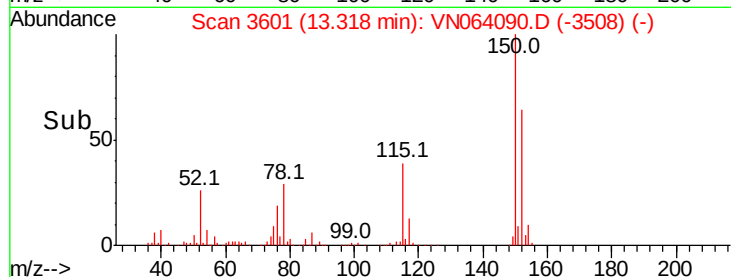
150 155.4 0.0 341.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 2.398 ug/l

RT: 12.01 min Scan# 3194

Delta R.T. -0.03 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Tgt Ion: 43 Resp: 1106

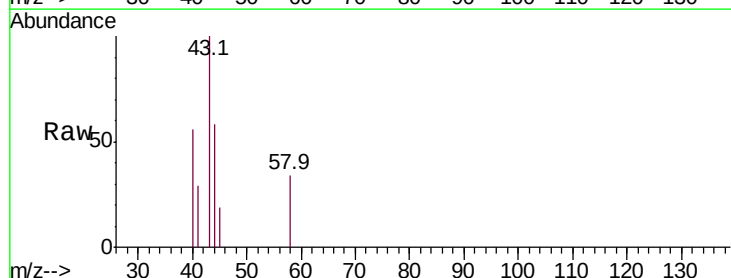
Ion Ratio Lower Upper

43 100

70 0.0 29.8 44.8#

55 10.7 17.9 26.9#

61 0.0 17.0 25.4#

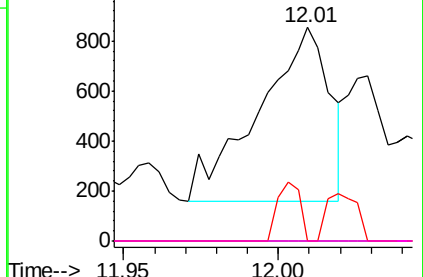
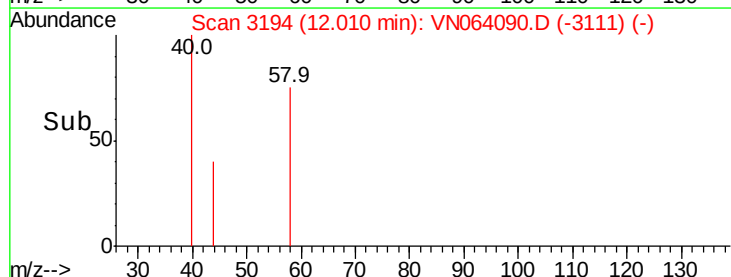


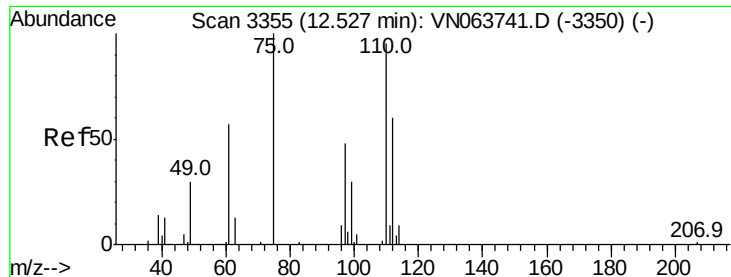
Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

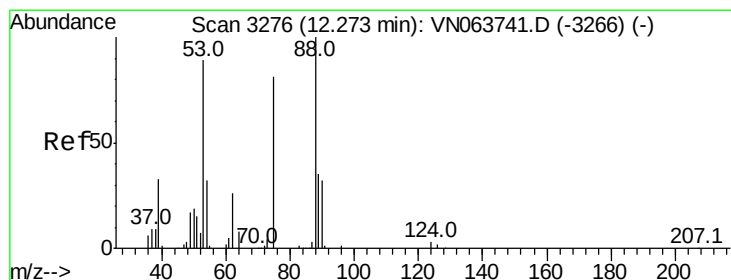
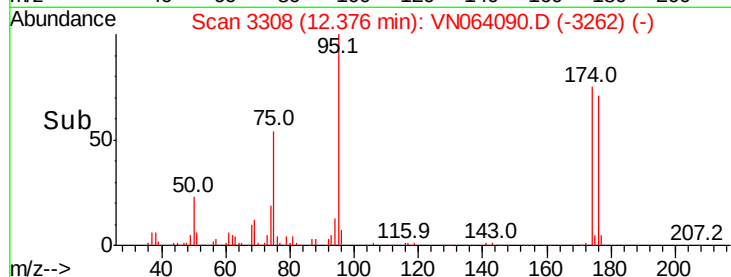
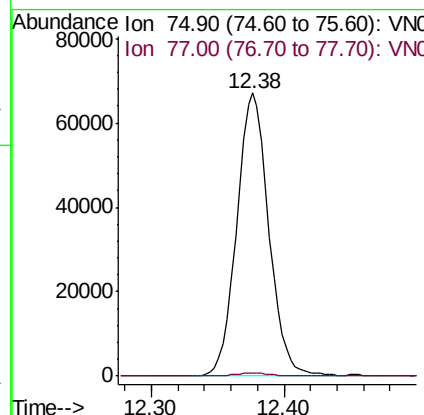
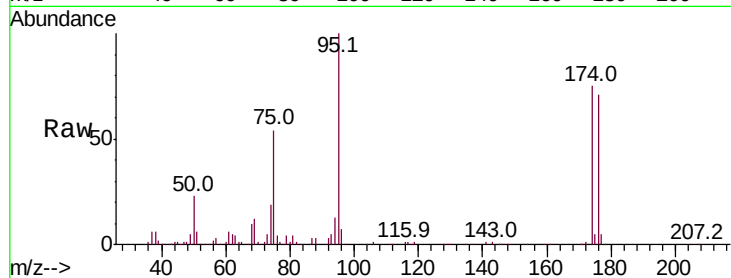




#76  
 1,2,3-Trichloropropane  
 Concen: 29.751 ug/l  
 RT: 12.38 min Scan# 3308  
 Delta R.T. -0.15 min  
 Lab File: VN064090.D  
 Acq: 12 Oct 2020 20:14

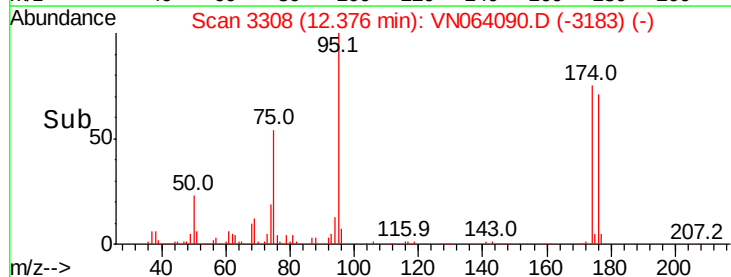
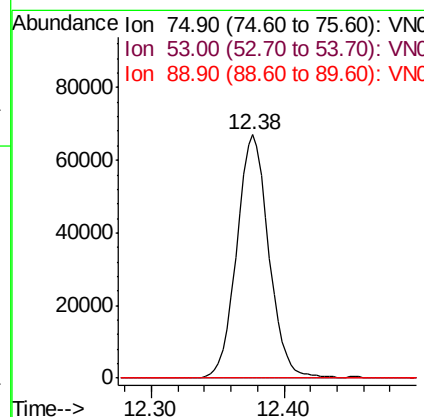
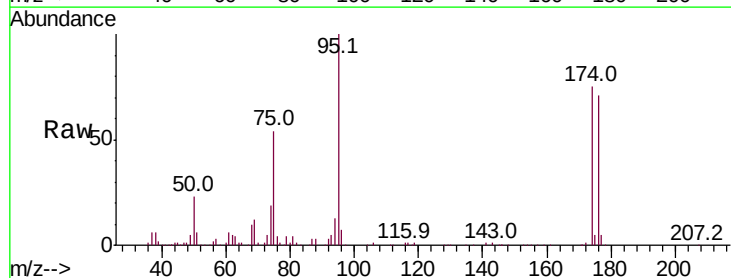
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 OH-WC-C-G2

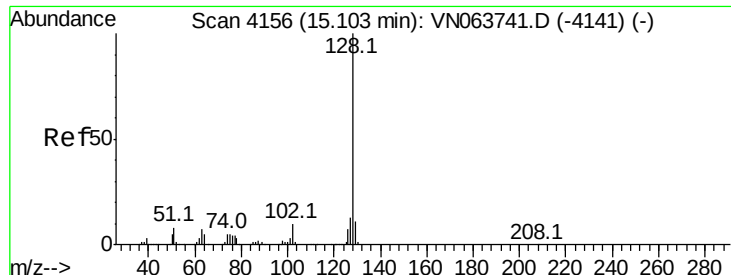
Tot Ion: 75 Resp: 112523  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 85.688 ug/l  
 RT: 12.38 min Scan# 3308  
 Delta R.T. 0.10 min  
 Lab File: VN064090.D  
 Acq: 12 Oct 2020 20:14

Tgt Ion: 75 Resp: 112523  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 88.2 132.2#  
 89 0.0 36.0 54.0#





#95

Naphthalene

Concen: 1.974 ug/l

RT: 15.12 min Scan# 4160

Delta R.T. 0.01 min

Lab File: VN064090.D

Acq: 12 Oct 2020 20:14

Instrument :

MSVOA\_N

ClientSampleId :

OH-WC-C-G2

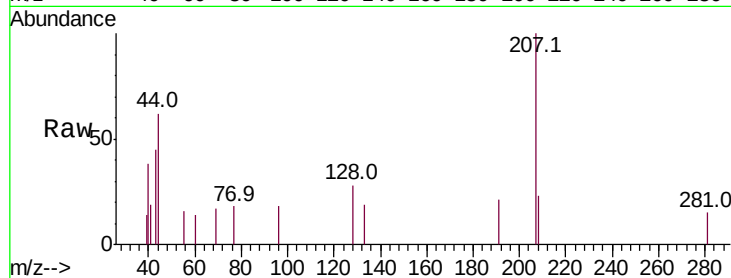
Tot Ion:128 Resp: 477

Ion Ratio Lower Upper

128 100

127 0.0 10.5 15.7#

129 0.0 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

