

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061820\  
 Data File : VN061913.D  
 Acq On : 18 Jun 2020 20:28  
 Operator : JC/MD  
 Sample : L3024-11  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RO-7

Quant Time: Jun 19 05:29:25 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 17 01:19:44 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 138243   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 259537   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 260511   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 98961    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 95316    | 51.41 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.82% |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 83863    | 50.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.02% |      |
| 50) Toluene-d8            | 10.06  | 98  | 333792   | 51.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.28% |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 108844   | 48.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.22%  |      |

## Target Compounds

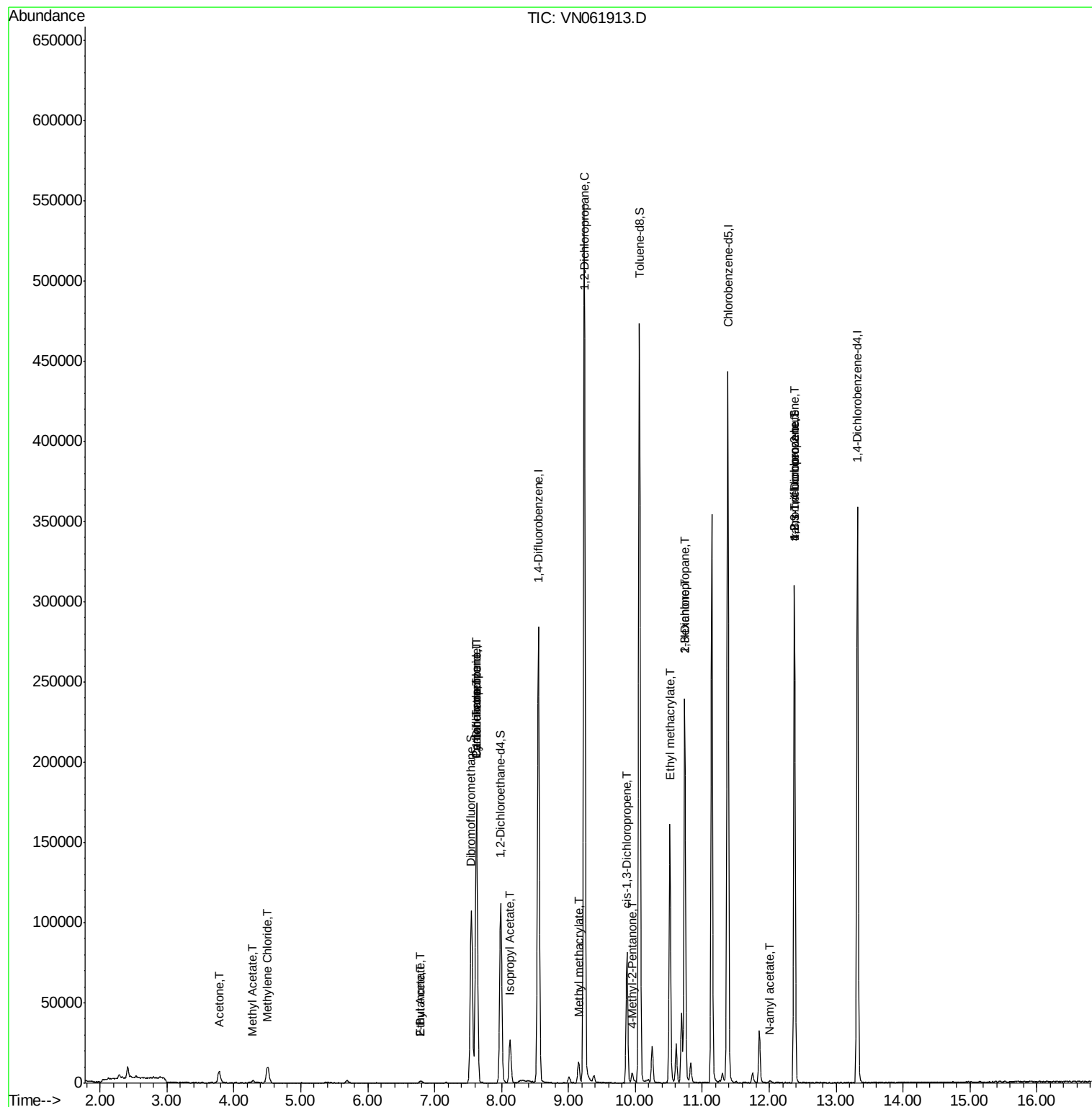
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 16) Acetone                    | 3.78  | 43  | 12307 | 22.472 | ug/l   | 99     |
| 18) Methyl Acetate             | 4.28  | 43  | 2580  | 1.636  | ug/l # | 80     |
| 20) Methylene Chloride         | 4.50  | 84  | 9044  | 5.069  | ug/l   | 87     |
| 25) 2-Butanone                 | 6.80  | 43  | 2072  | 2.593  | ug/l   | 100    |
| 31) Cyclohexane                | 7.63  | 56  | 2932  | 1.200  | ug/l # | 16     |
| 36) 1,1-Dichloropropene        | 7.62  | 75  | 10954 | 4.627  | ug/l # | 47     |
| 37) Ethyl Acetate              | 6.80  | 43  | 2072  | 1.121  | ug/l # | 65     |
| 38) Carbon Tetrachloride       | 7.63  | 117 | 14276 | 6.090  | ug/l # | 17     |
| 43) Isopropyl Acetate          | 8.13  | 43  | 29377 | 9.430  | ug/l # | 91     |
| 45) 1,2-Dichloropropane        | 9.24  | 63  | 718   | 0.407  | ug/l # | 43     |
| 48) Methyl methacrylate        | 9.14  | 41  | 1645  | 1.161  | ug/l # | 5      |
| 51) 4-Methyl-2-Pentanone       | 9.96  | 43  | 3672  | 1.995  | ug/l   | 98     |
| 54) cis-1,3-Dichloropropene    | 9.87  | 75  | 16170 | 5.519  | ug/l # | 68     |
| 56) Ethyl methacrylate         | 10.51 | 69  | 696   | 3.145  | ug/l # | 1      |
| 57) 1,3-Dichloropropane        | 10.74 | 76  | 2690  | 0.896  | ug/l # | 42     |
| 59) 2-Hexanone                 | 10.74 | 43  | 31336 | 33.570 | ug/l # | 49     |
| 74) N-amyl acetate             | 12.00 | 43  | 846   | 3.376  | ug/l # | 38     |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75  | 55081 | 28.351 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75  | 55081 | 77.324 | ug/l # | 14     |

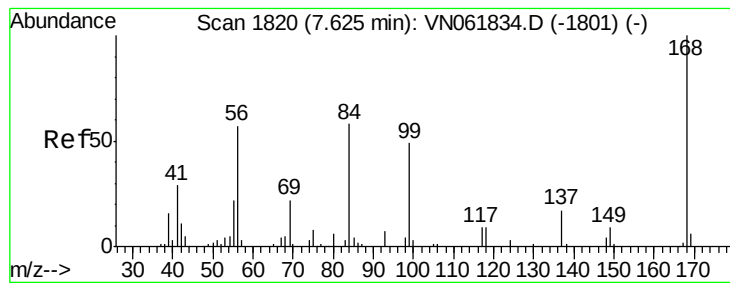
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN061820\  
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Quant Time: Jun 19 05:29:25 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 17 01:19:44 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: VN061913.D

Acq: 18 Jun 2020 20:28

Instrument :

MSVOA\_N

ClientSampleId :

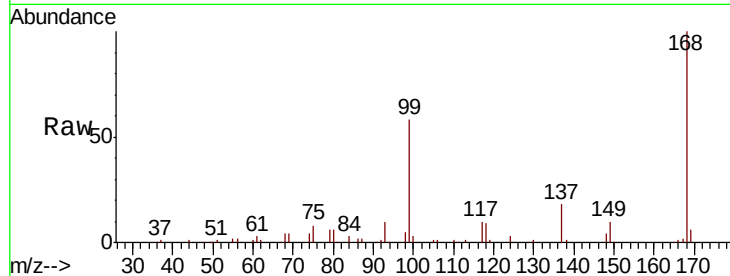
RO-7

Tot Ion:168 Resp: 138243

Ion Ratio Lower Upper

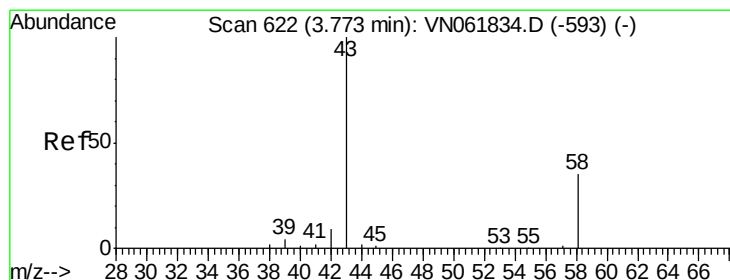
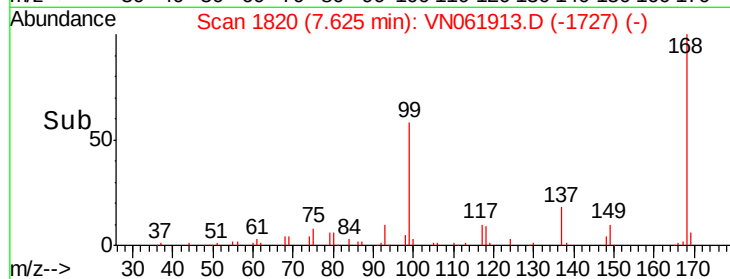
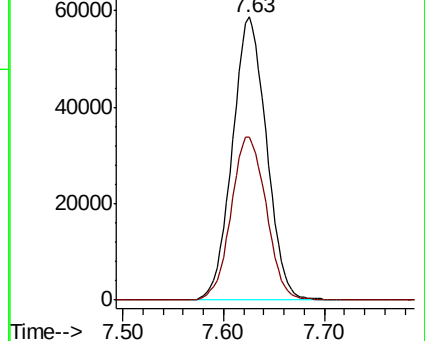
168 100

99 57.5 44.6 67.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN



#16

Acetone

Concen: 22.472 ug/l

RT: 3.78 min Scan# 623

Delta R.T. 0.00 min

Lab File: VN061913.D

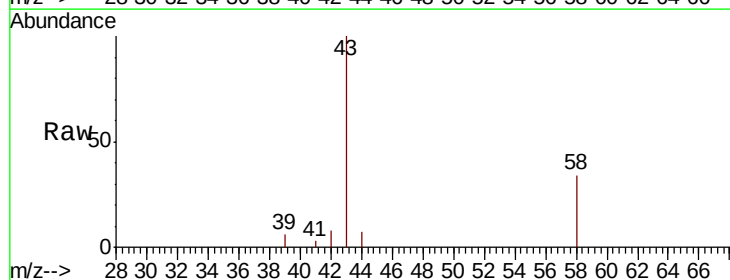
Acq: 18 Jun 2020 20:28

Tgt Ion: 43 Resp: 12307

Ion Ratio Lower Upper

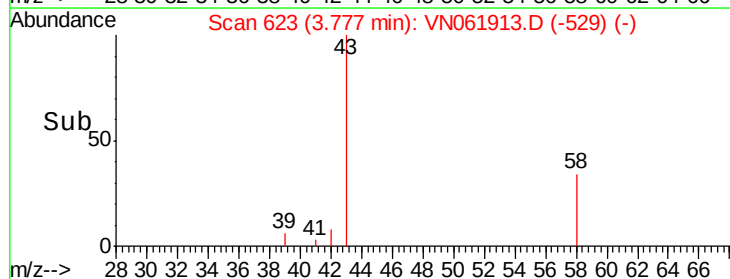
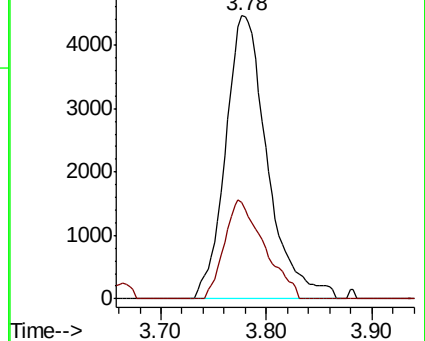
43 100

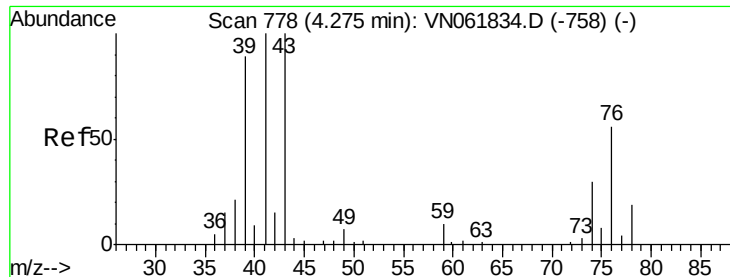
58 34.2 27.8 41.8



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

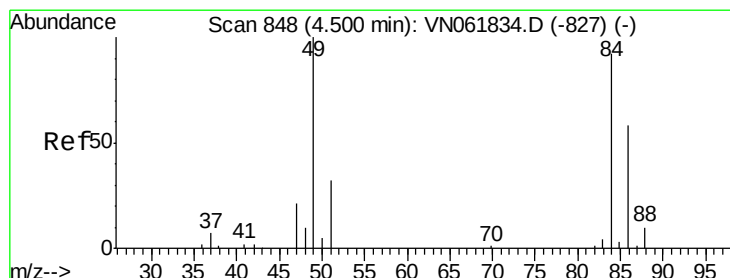
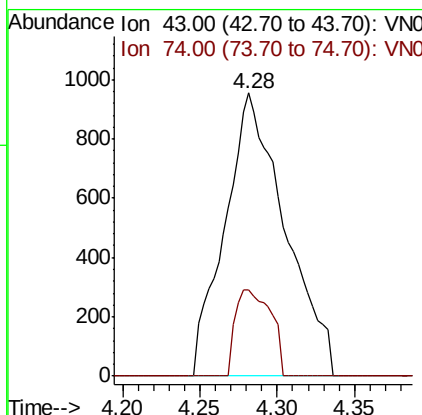
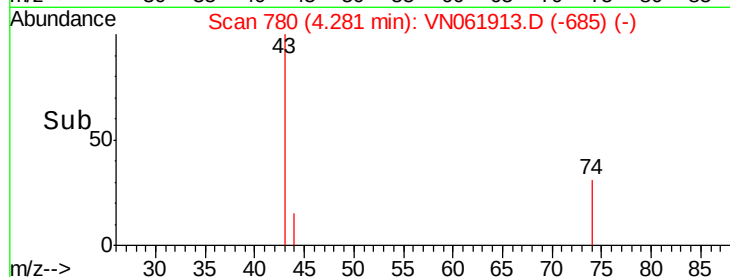
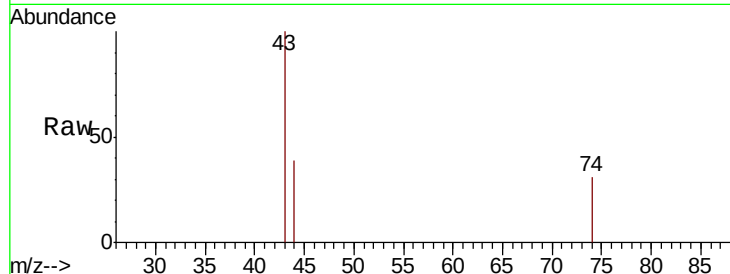




#18  
Methyl Acetate  
Concen: 1.636 ug/l  
RT: 4.28 min Scan# 780  
Delta R.T. 0.01 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

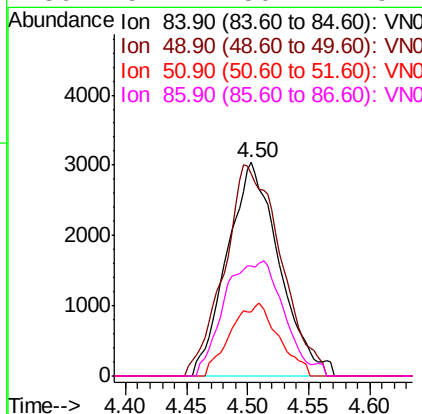
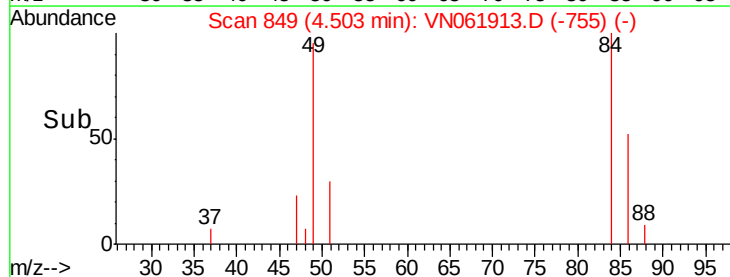
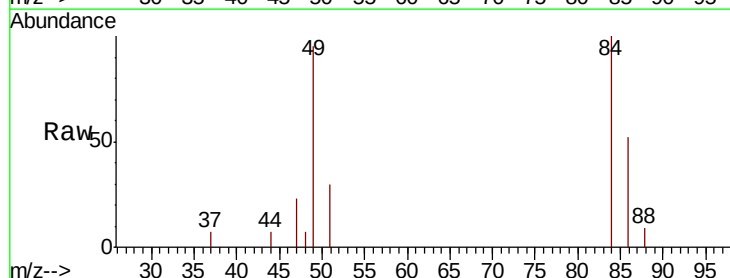
Instrument :  
MSVOA\_N  
ClientSampled :  
RO-7

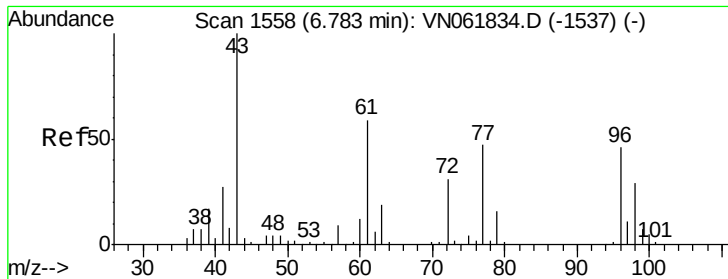
Tot Ion: 43 Resp: 2580  
Ion Ratio Lower Upper  
43 100  
74 17.9 23.0 34.4#



#20  
Methylene Chloride  
Concen: 5.069 ug/l  
RT: 4.50 min Scan# 849  
Delta R.T. 0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 84 Resp: 9044  
Ion Ratio Lower Upper  
84 100  
49 94.8 87.0 130.4  
51 29.8 27.8 41.6  
86 51.7 50.2 75.2

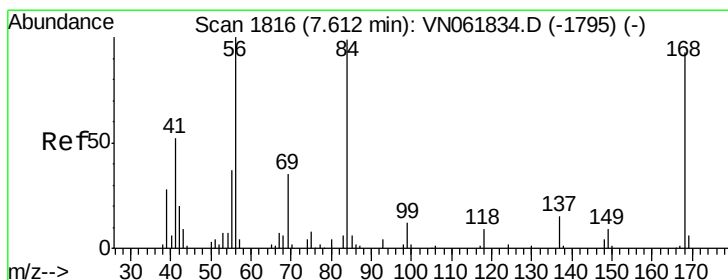
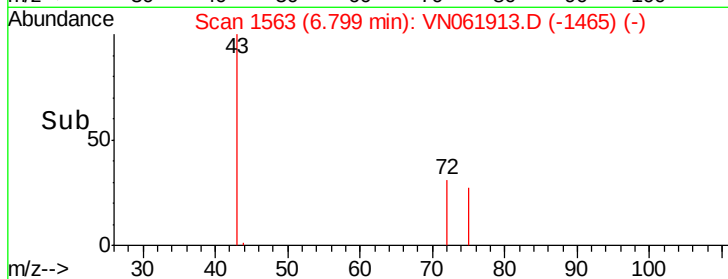
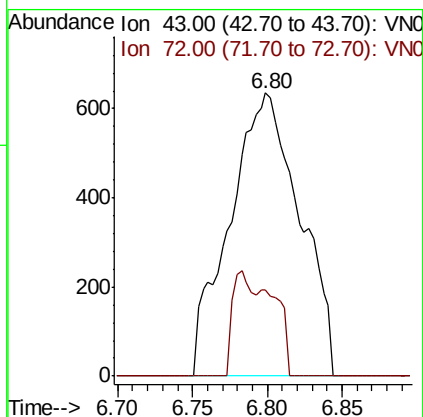
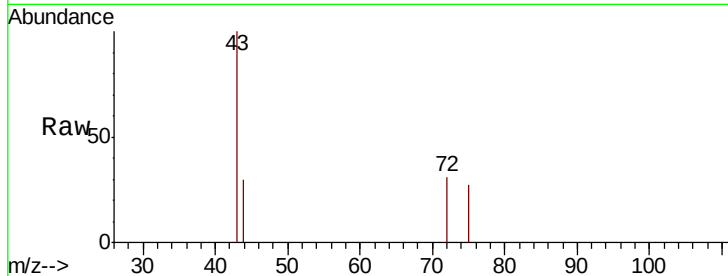




#25  
2-Butanone  
Concen: 2.593 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. 0.02 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

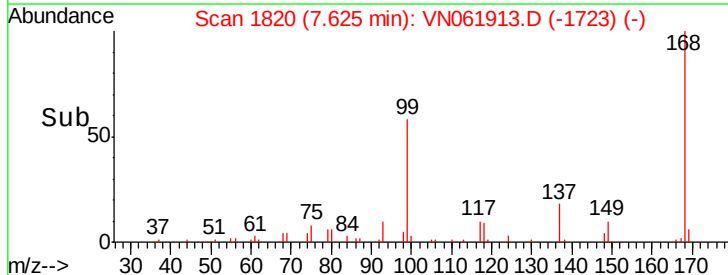
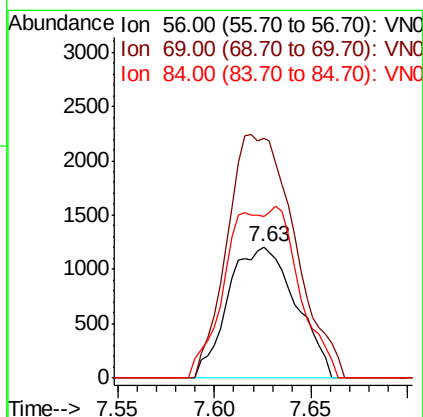
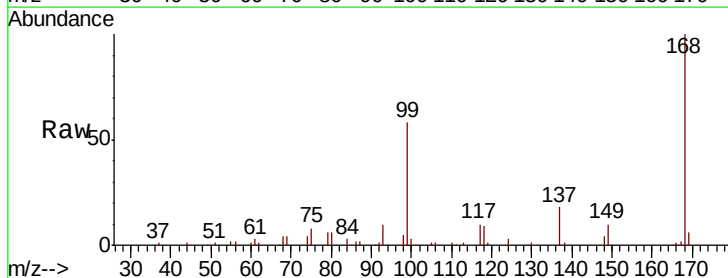
Instrument :  
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ClientSampleId :  
RO-7

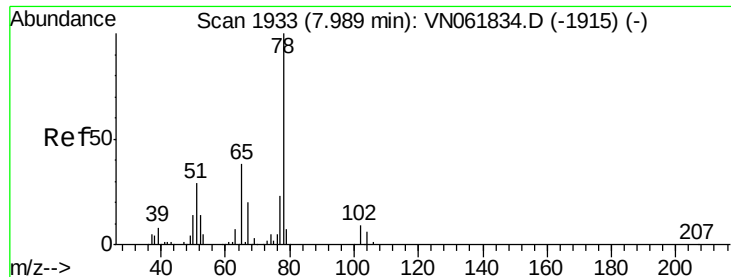
Tot Ion: 43 Resp: 2072  
Ion Ratio Lower Upper  
43 100  
72 30.7 24.6 37.0



#31  
Cyclohexane  
Concen: 1.200 ug/l  
RT: 7.63 min Scan# 1820  
Delta R.T. 0.01 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 56 Resp: 2932  
Ion Ratio Lower Upper  
56 100  
69 182.3 27.7 41.5#  
84 122.8 79.1 118.7#

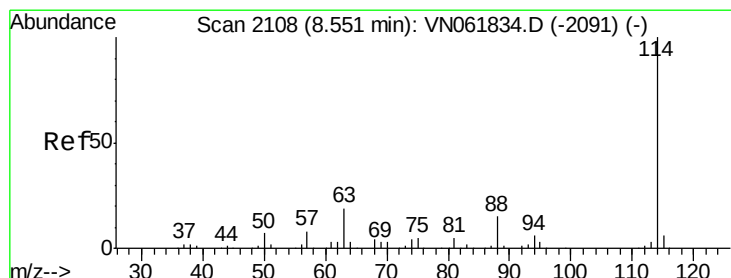
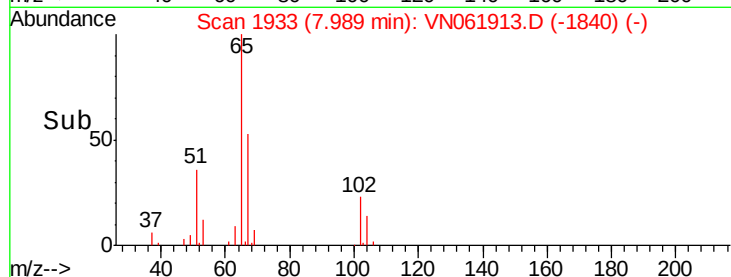
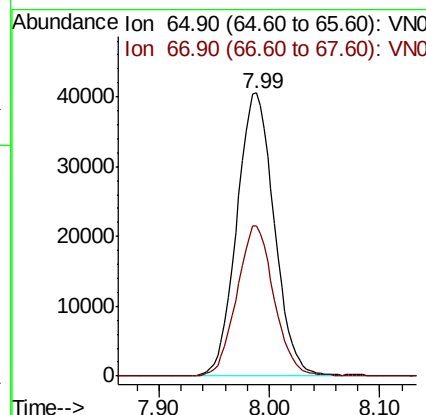
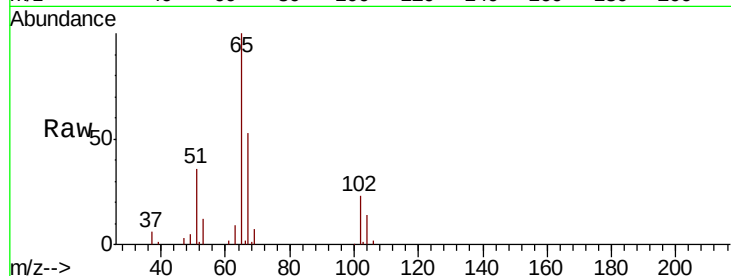




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.410 ug/l  
 RT: 7.99 min Scan# 1933  
 Delta R.T. -0.00 min  
 Lab File: VN061913.D  
 Acq: 18 Jun 2020 20:28

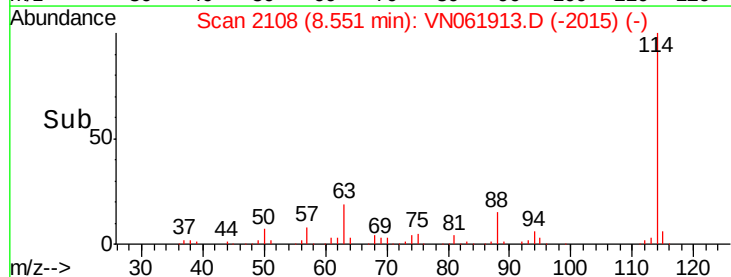
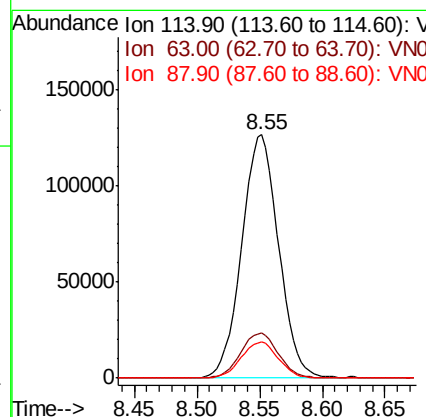
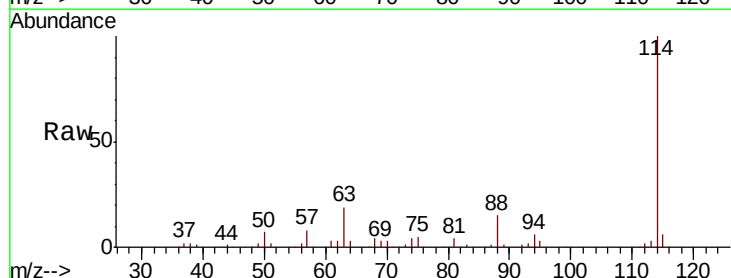
Instrument :  
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 RO-7

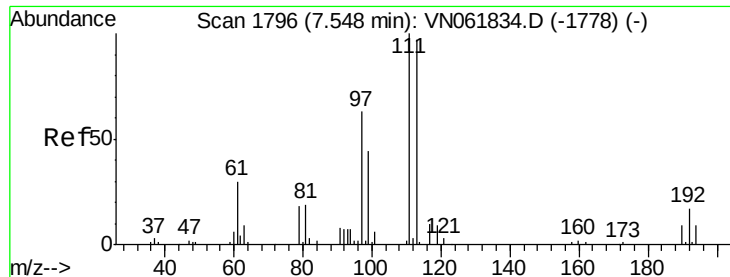
Tot Ion: 65 Resp: 95316  
 Ion Ratio Lower Upper  
 65 100  
 67 52.6 0.0 106.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. -0.00 min  
 Lab File: VN061913.D  
 Acq: 18 Jun 2020 20:28

Tgt Ion: 114 Resp: 259537  
 Ion Ratio Lower Upper  
 114 100  
 63 18.5 0.0 37.6  
 88 14.8 0.0 31.0

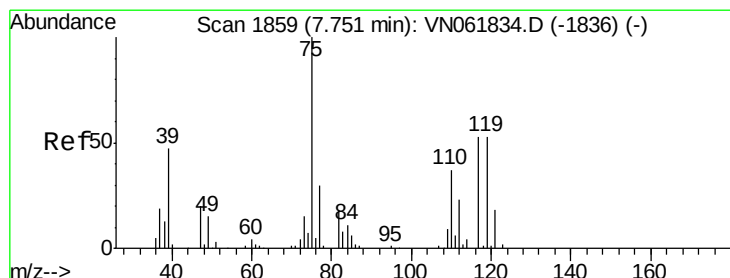
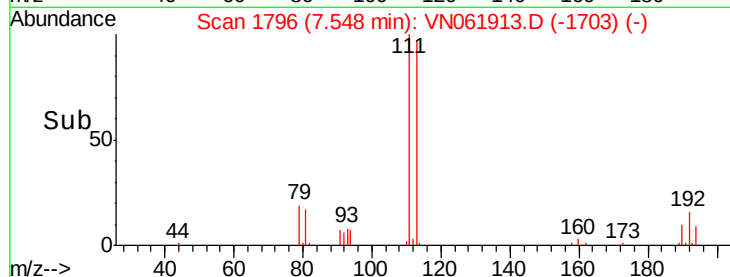
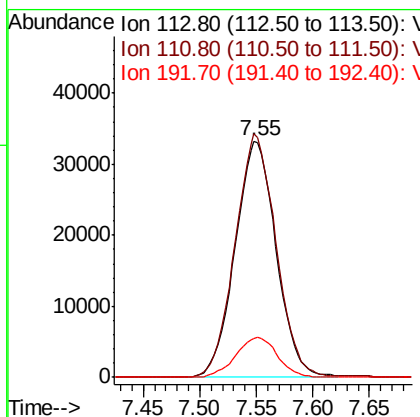
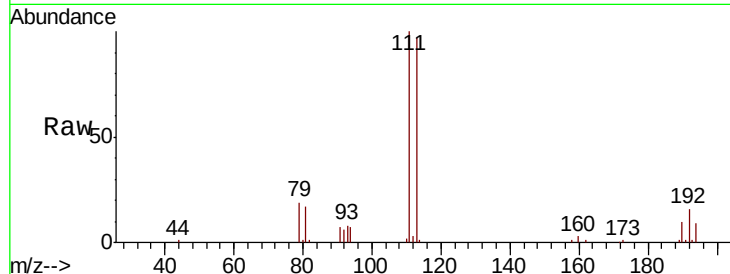




#35  
 Dibromofluoromethane  
 Concen: 50.508 ug/l  
 RT: 7.55 min Scan# 1796  
 Delta R.T. -0.00 min  
 Lab File: VN061913.D  
 Acq: 18 Jun 2020 20:28

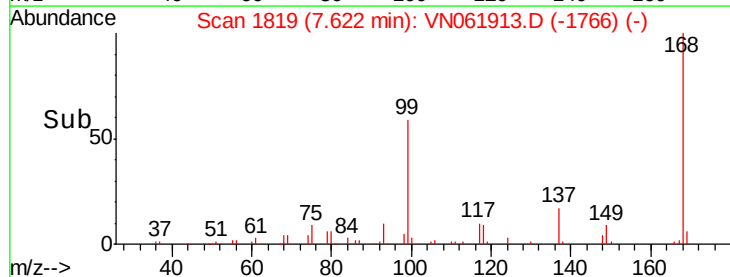
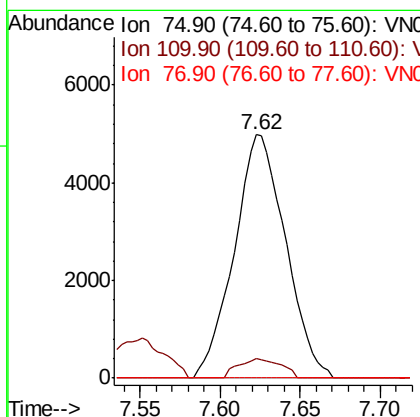
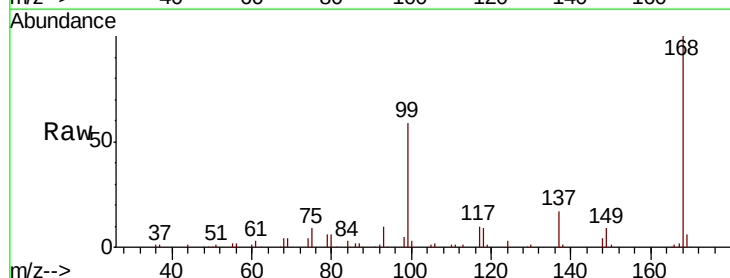
Instrument :  
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 ClientSampleId :  
 RO-7

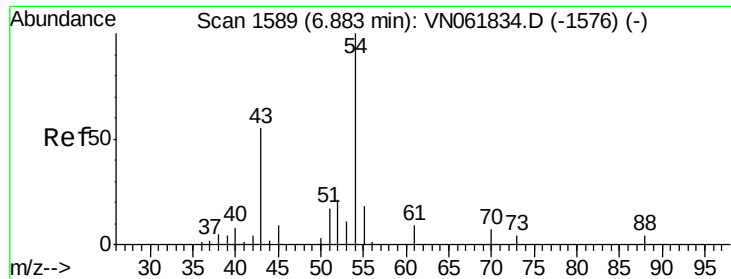
Tot Ion:113 Resp: 83863  
 Ion Ratio Lower Upper  
 113 100  
 111 102.6 83.7 125.5  
 192 17.1 13.9 20.9



#36  
 1,1-Dichloropropene  
 Concen: 4.627 ug/l  
 RT: 7.62 min Scan# 1819  
 Delta R.T. -0.13 min  
 Lab File: VN061913.D  
 Acq: 18 Jun 2020 20:28

Tgt Ion: 75 Resp: 10954  
 Ion Ratio Lower Upper  
 75 100  
 110 6.6 18.2 54.6#  
 77 0.0 24.2 36.4#

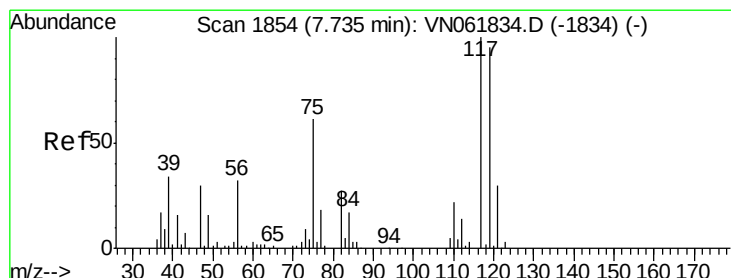
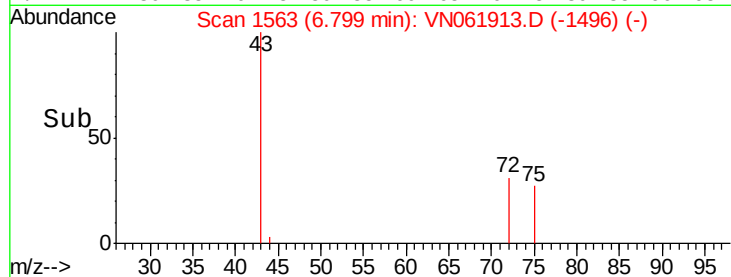
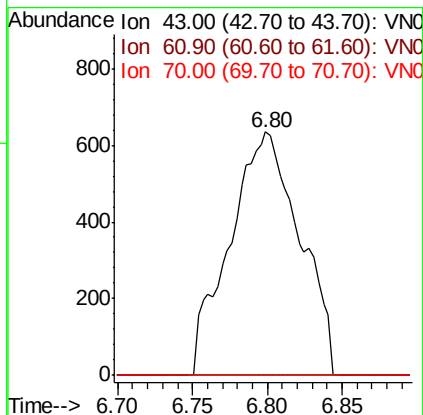
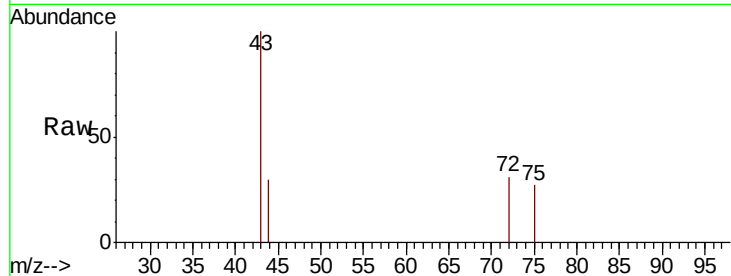




#37  
Ethyl Acetate  
Concen: 1.121 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. -0.08 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

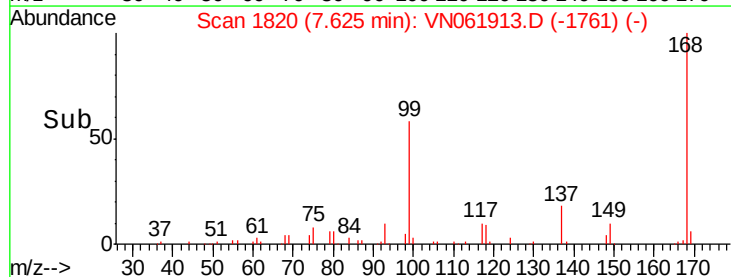
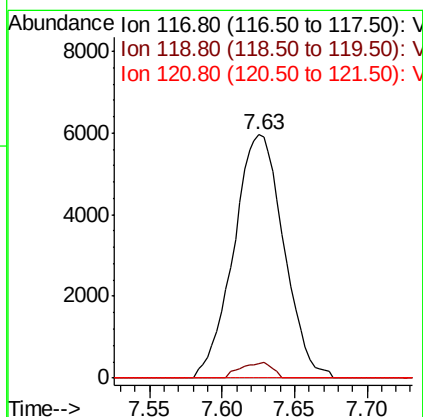
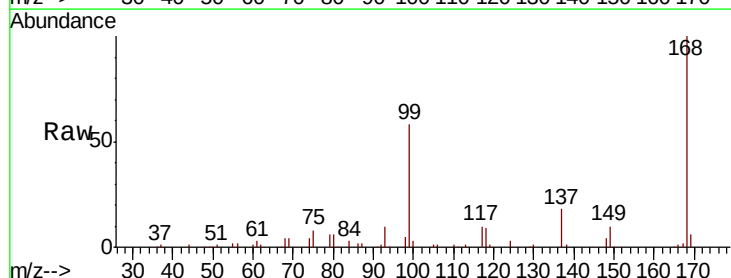
Instrument :  
MSVOA\_N  
ClientSampleId :  
RO-7

Tot Ion: 43 Resp: 2072  
Ion Ratio Lower Upper  
43 100  
61 0.0 13.0 19.4#  
70 0.0 9.4 14.2#

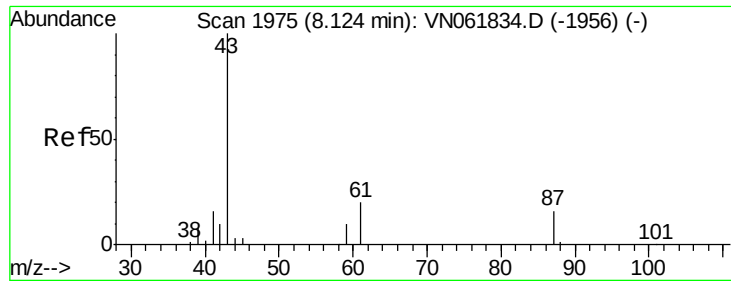


#38  
Carbon Tetrachloride  
Concen: 6.090 ug/l  
RT: 7.63 min Scan# 1820  
Delta R.T. -0.11 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 117 Resp: 14276  
Ion Ratio Lower Upper  
117 100  
119 6.0 75.8 113.6#  
121 0.0 23.8 35.6#







#43

Isopropyl Acetate

Concen: 9.430 ug/l

RT: 8.13 min Scan# 1976

Delta R.T. 0.00 min

Lab File: VN061913.D

Acq: 18 Jun 2020 20:28

Instrument :

MSVOA\_N

ClientSampleId :

RO-7

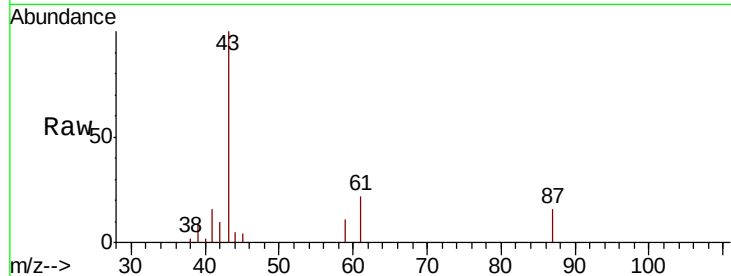
Tot Ion: 43 Resp: 29377

Ion Ratio Lower Upper

43 100

61 22.9 24.0 36.0#

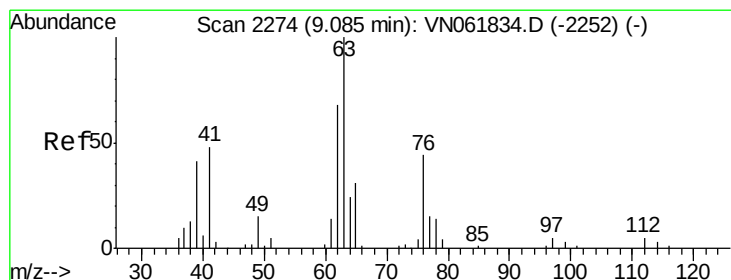
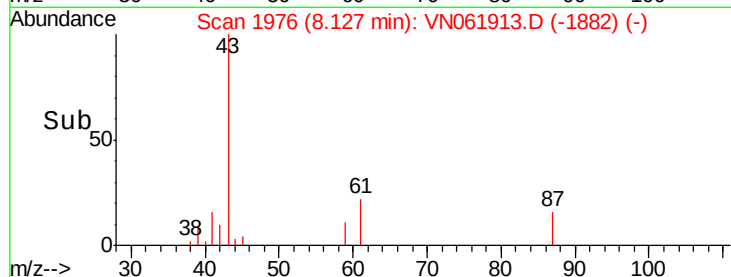
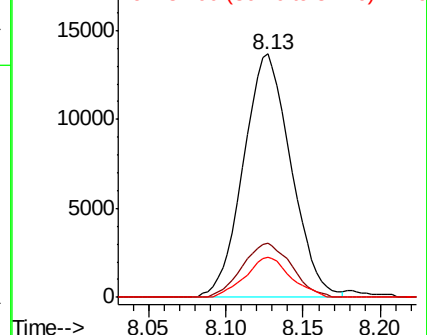
87 15.7 12.5 18.7



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#45

1,2-Dichloropropane

Concen: 0.407 ug/l

RT: 9.24 min Scan# 2321

Delta R.T. 0.15 min

Lab File: VN061913.D

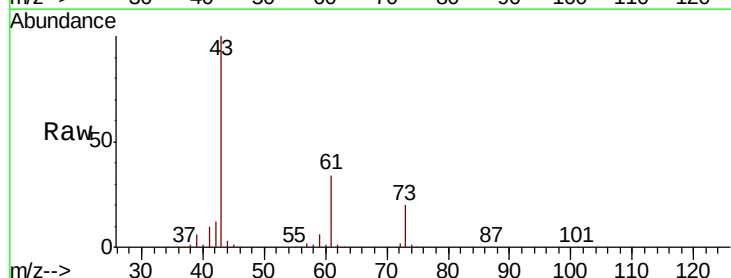
Acq: 18 Jun 2020 20:28

Tgt Ion: 63 Resp: 718

Ion Ratio Lower Upper

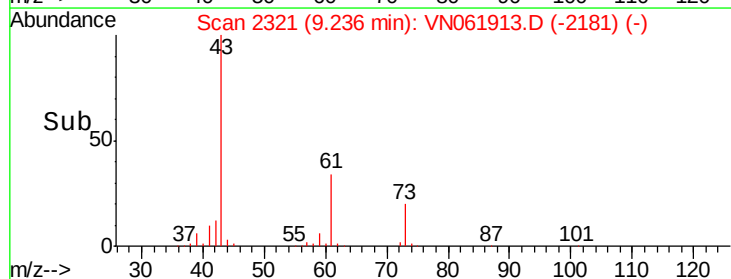
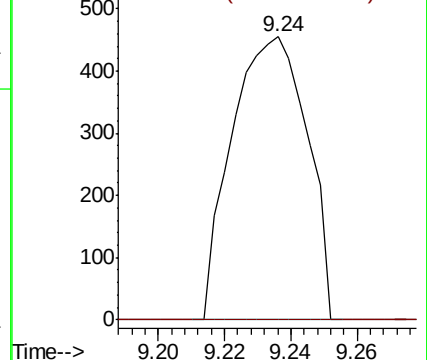
63 100

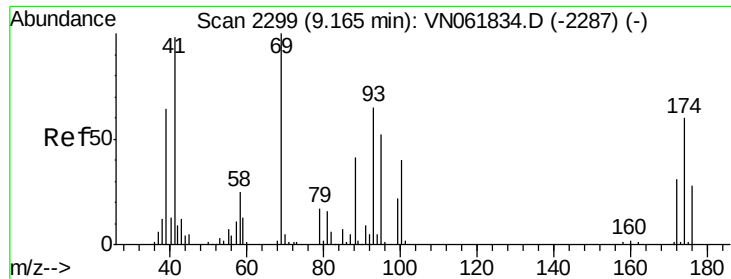
65 0.0 25.1 37.7#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

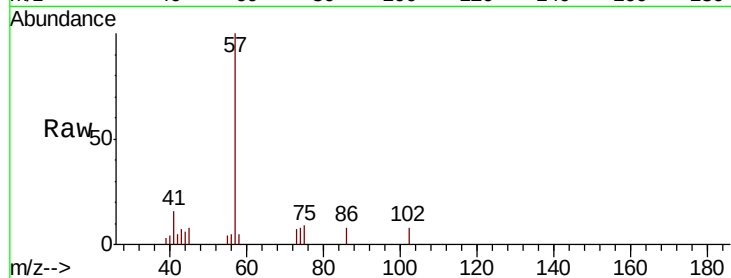




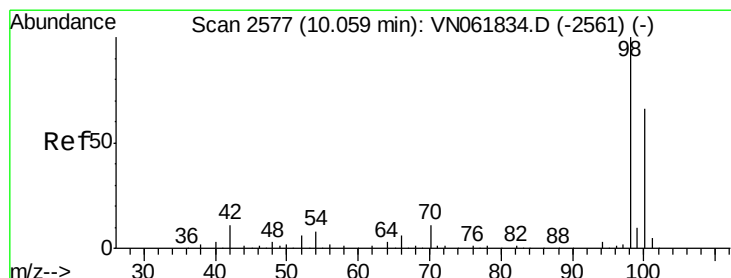
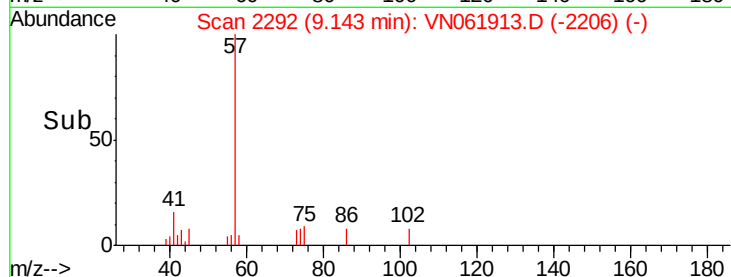
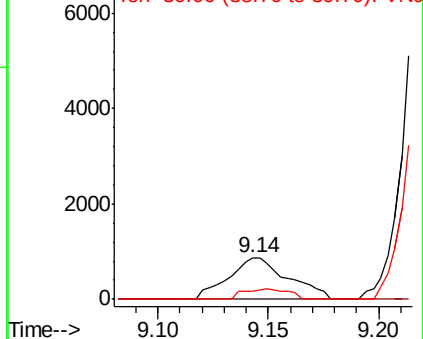
#48  
Methvl methacrylate  
Concen: 1.161 ug/l  
RT: 9.14 min Scan# 2292  
Delta R.T. -0.02 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Instrument :  
MSVOA\_N  
ClientSampleId :  
RO-7

Tot Ion: 41 Resp: 1645  
Ion Ratio Lower Upper  
41 100  
69 0.0 83.0 124.4#  
39 0.0 55.1 82.7#

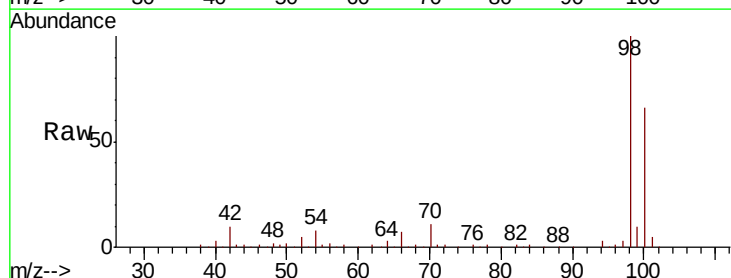


Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0

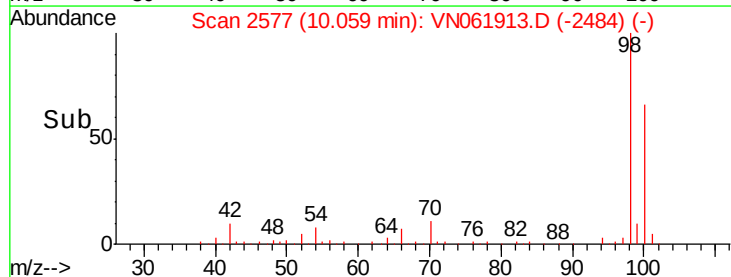
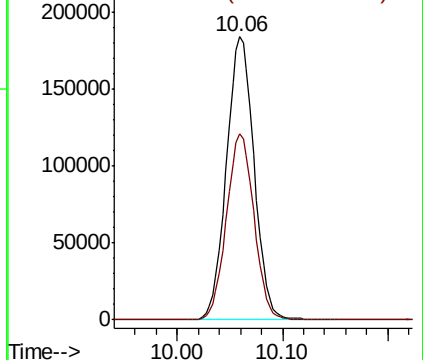


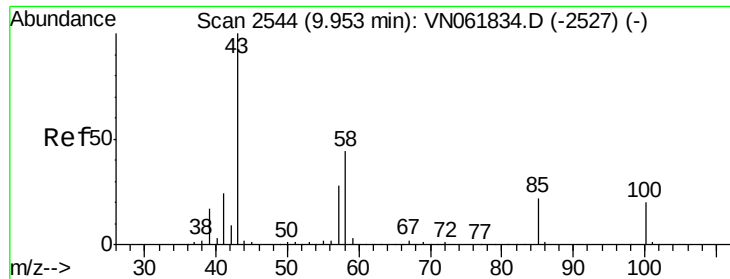
#50  
Toluene-d8  
Concen: 51.135 ug/l  
RT: 10.06 min Scan# 2577  
Delta R.T. -0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 98 Resp: 333792  
Ion Ratio Lower Upper  
98 100  
100 65.5 52.7 79.1



Abundance Ion 98.00 (97.70 to 98.70): VN0  
Ion 100.00 (99.70 to 100.70): VN0

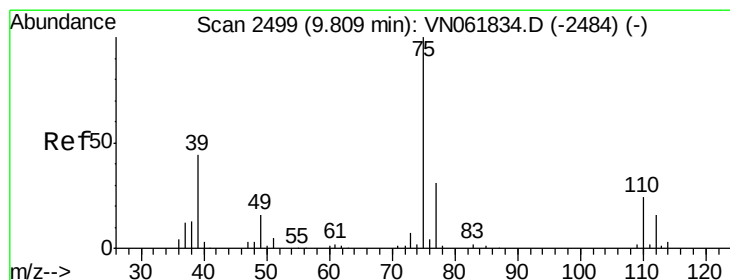
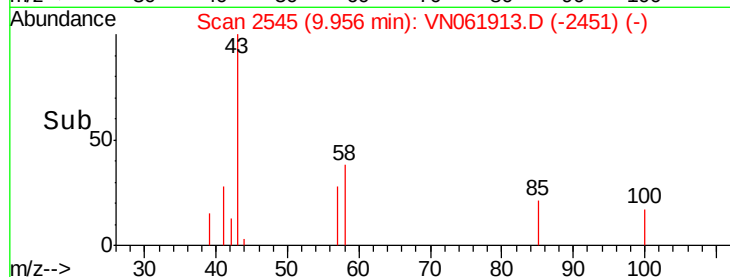
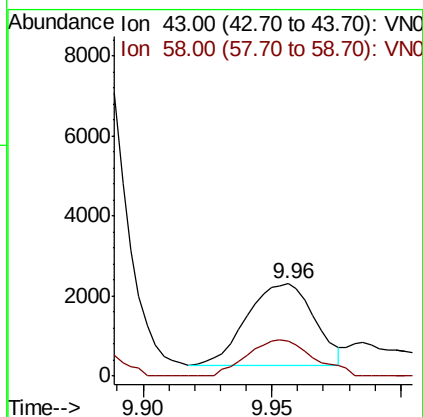
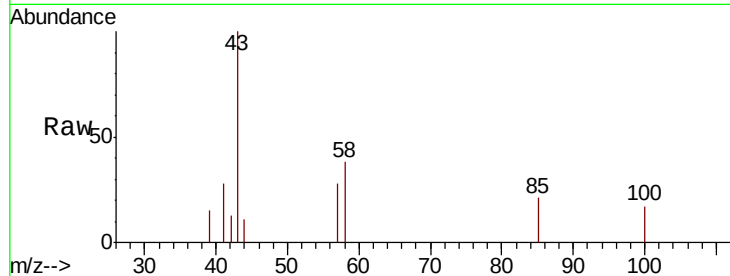




#51  
4-Methyl-2-Pentanone  
Concen: 1.995 ug/l  
RT: 9.96 min Scan# 2545  
Delta R.T. 0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

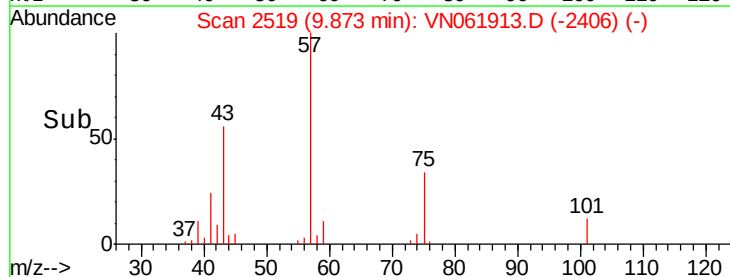
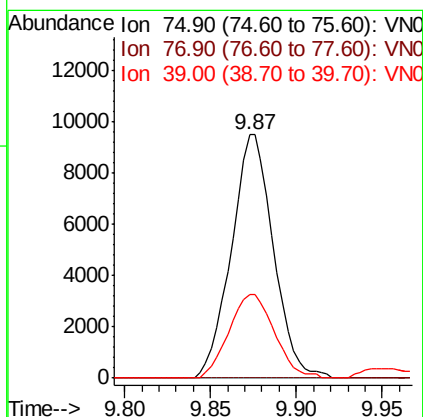
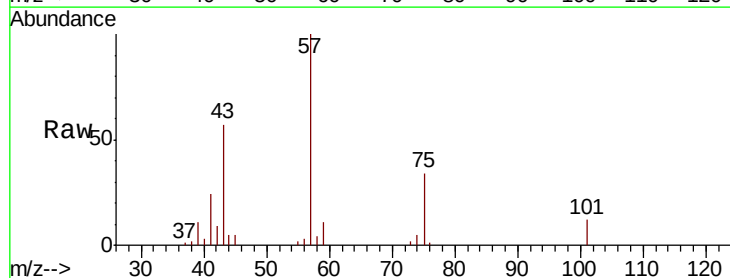
Instrument :  
MSVOA\_N  
ClientSampled :  
RO-7

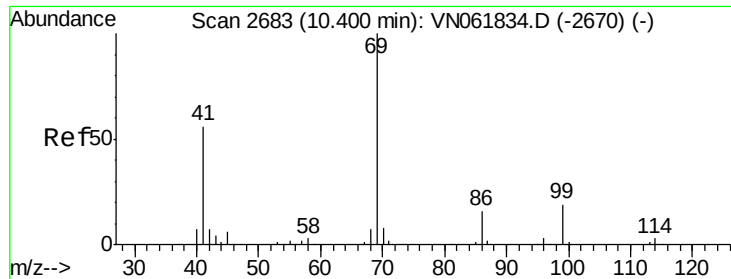
Tot Ion: 43 Resp: 3672  
Ion Ratio Lower Upper  
43 100  
58 44.3 34.6 52.0



#54  
cis-1,3-Dichloropropene  
Concen: 5.519 ug/l  
RT: 9.87 min Scan# 2519  
Delta R.T. 0.06 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 75 Resp: 16170  
Ion Ratio Lower Upper  
75 100  
77 0.0 24.8 37.2#  
39 34.3 35.4 53.0#





#56

Ethyl methacrylate

Concen: 3.145 ug/l

RT: 10.51 min Scan# 2718

Delta R.T. 0.11 min

Lab File: VN061913.D

Acq: 18 Jun 2020 20:28

Instrument :

MSVOA\_N

ClientSampled :

RO-7

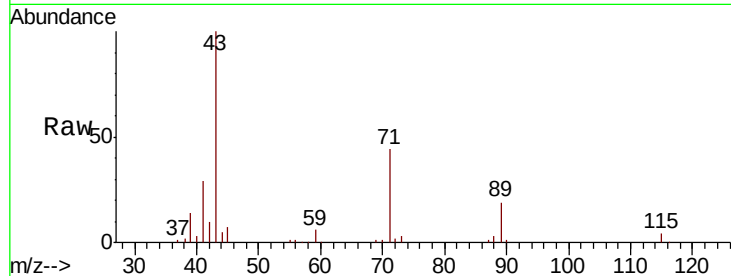
Tot Ion: 69 Resp: 696

Ion Ratio Lower Upper

69 100

41 4384.5 44.9 67.3#

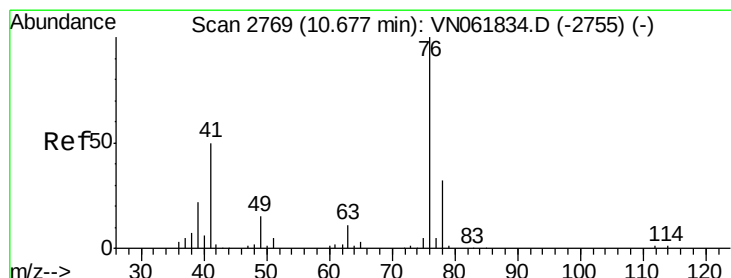
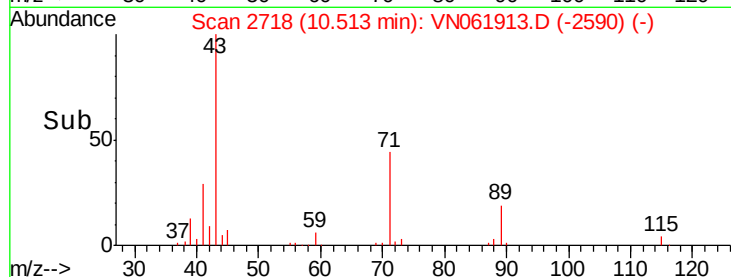
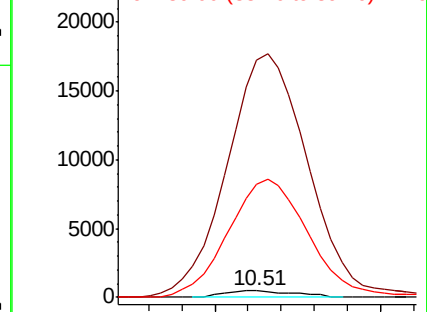
39 2073.4 30.0 45.0#



Abundance Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0



#57

1,3-Dichloropropane

Concen: 0.896 ug/l

RT: 10.74 min Scan# 2788

Delta R.T. 0.06 min

Lab File: VN061913.D

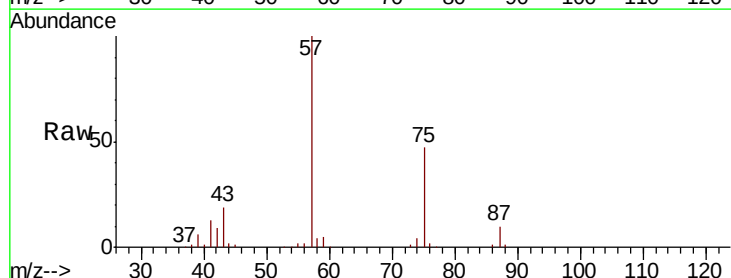
Acq: 18 Jun 2020 20:28

Tgt Ion: 76 Resp: 2690

Ion Ratio Lower Upper

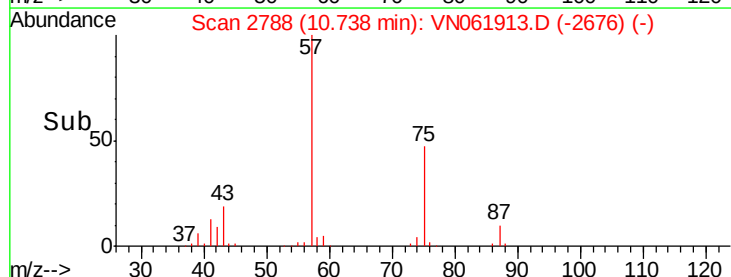
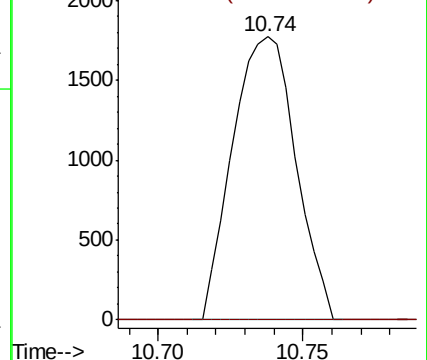
76 100

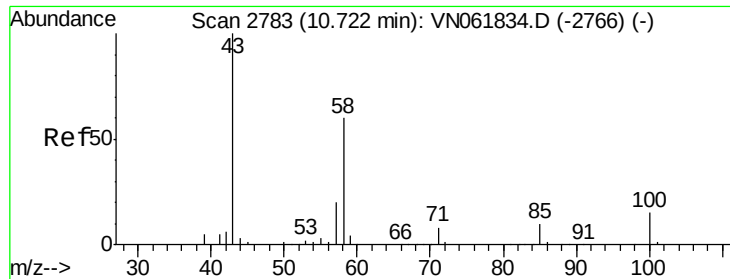
78 0.0 25.8 38.8#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

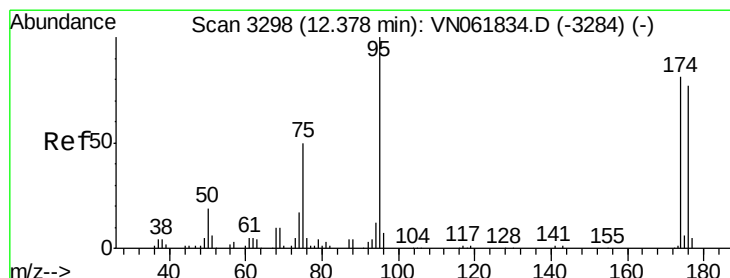
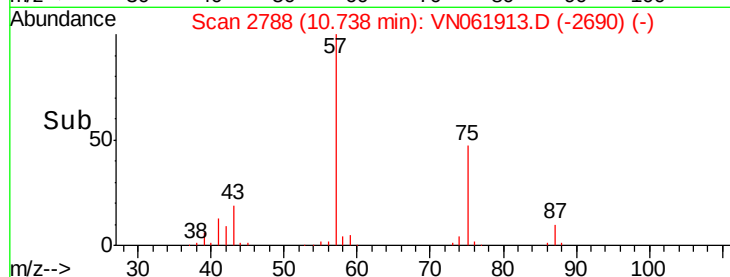
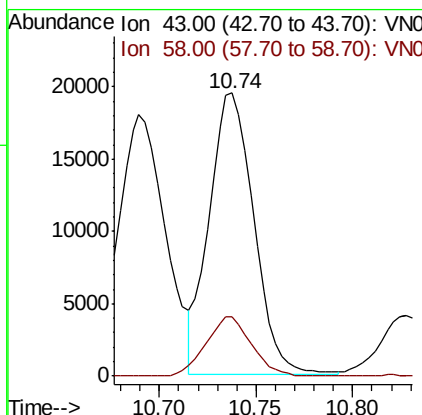
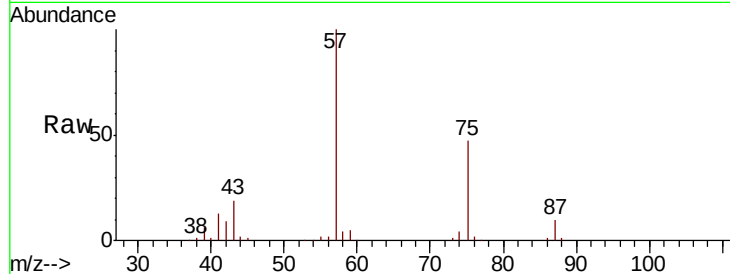




#59  
2-Hexanone  
Concen: 33.570 ug/l  
RT: 10.74 min Scan# 2788  
Delta R.T. 0.02 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

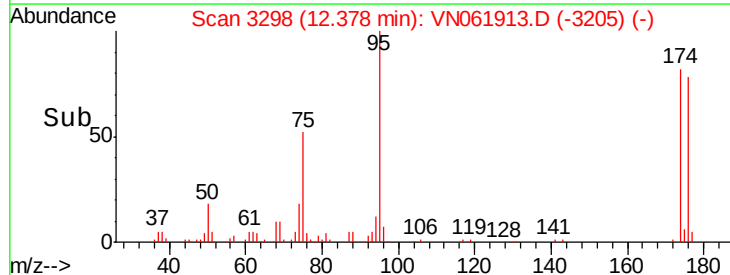
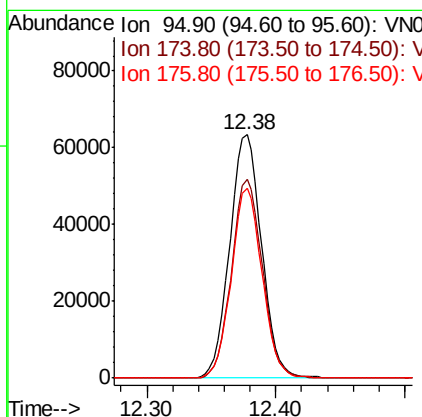
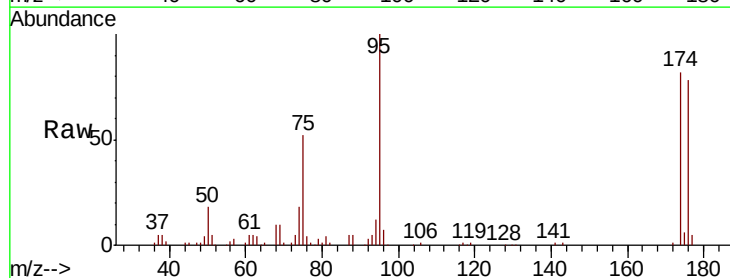
Instrument :  
MSVOA\_N  
ClientSampled :  
RO-7

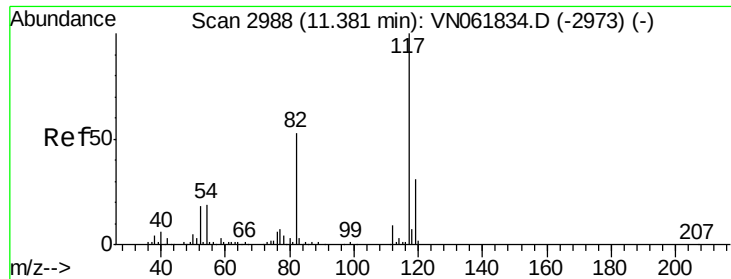
Tot Ion: 43 Resp: 31336  
Ion Ratio Lower Upper  
43 100  
58 21.4 30.1 90.5#



#62  
4-Bromofluorobenzene  
Concen: 48.611 ug/l  
RT: 12.38 min Scan# 3298  
Delta R.T. -0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion: 95 Resp: 108844  
Ion Ratio Lower Upper  
95 100  
174 79.3 0.0 158.6  
176 75.4 0.0 152.0

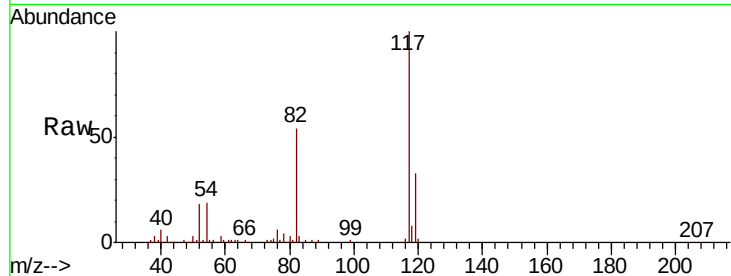




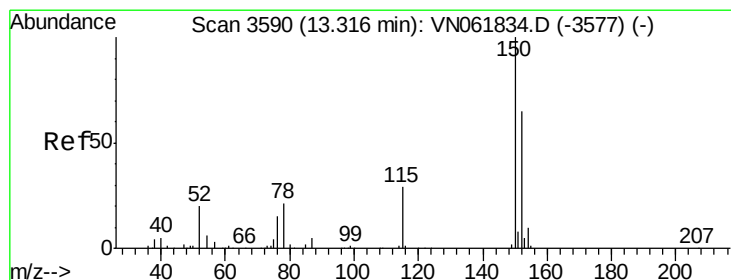
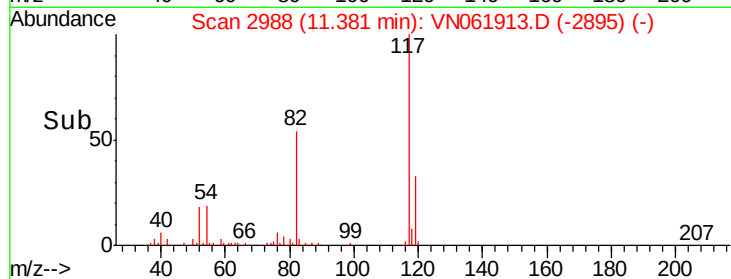
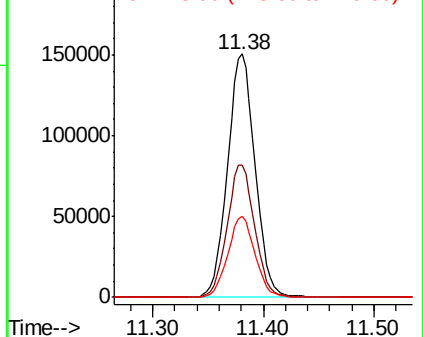
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2988  
Delta R.T. -0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Instrument :  
MSVOA\_N  
ClientSampleId :  
RO-7

Tot Ion:117 Resp: 260511  
Ion Ratio Lower Upper  
117 100  
82 54.5 42.6 64.0  
119 33.1 24.7 37.1

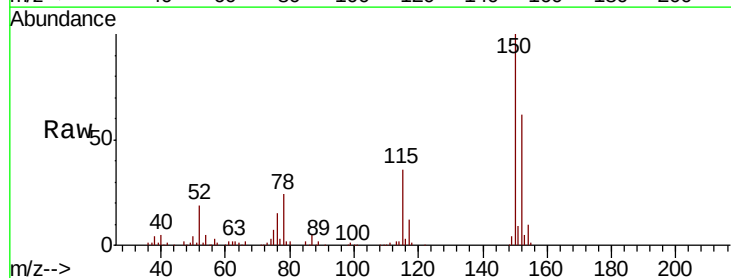


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

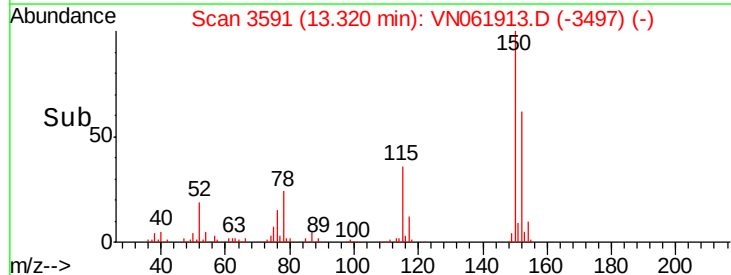
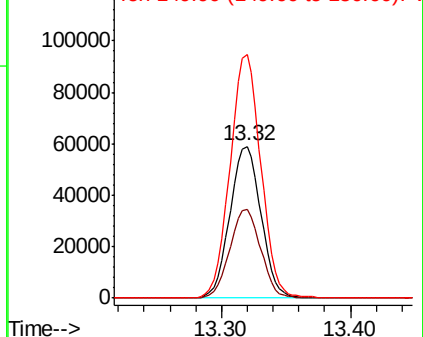


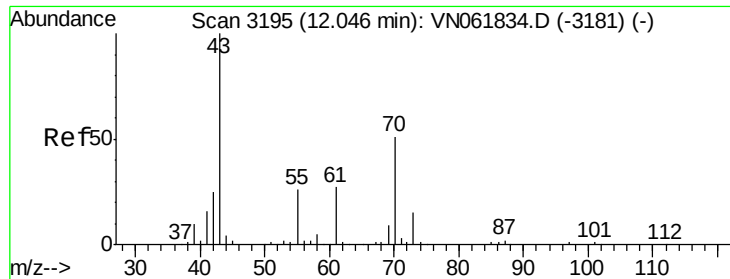
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.32 min Scan# 3591  
Delta R.T. 0.00 min  
Lab File: VN061913.D  
Acq: 18 Jun 2020 20:28

Tgt Ion:152 Resp: 98961  
Ion Ratio Lower Upper  
152 100  
115 57.9 29.1 87.3  
150 158.4 0.0 347.6



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-amvl acetate

Concen: 3.376 ug/l

RT: 12.00 min Scan# 3182

Delta R.T. -0.04 min

Lab File: VN061913.D

Acq: 18 Jun 2020 20:28

Instrument :

MSVOA\_N

ClientSampled :

RO-7

Tot Ion: 43 Resp: 846

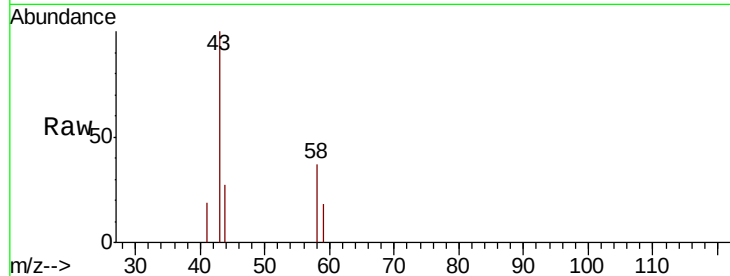
Ion Ratio Lower Upper

43 100

70 0.0 40.6 60.8#

55 0.0 21.5 32.3#

61 0.0 21.6 32.4#

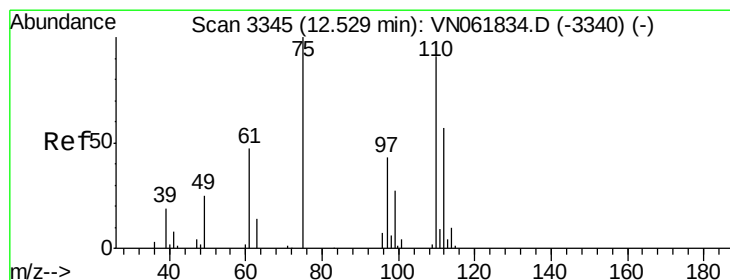
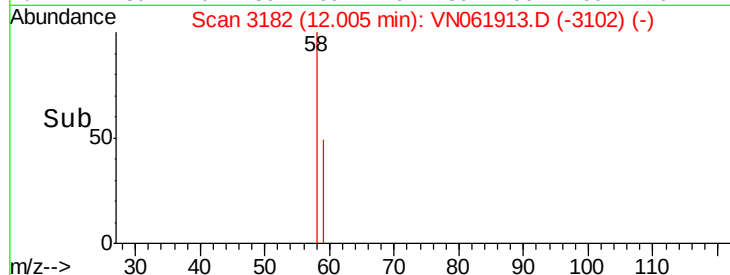
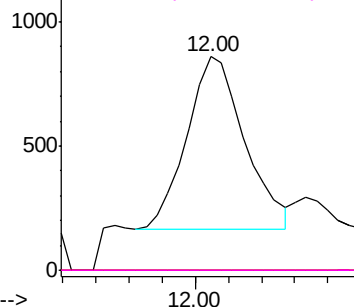


Abundance Ion 43.00 (42.70 to 43.70): VN0

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: 28.351 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. -0.15 min

Lab File: VN061913.D

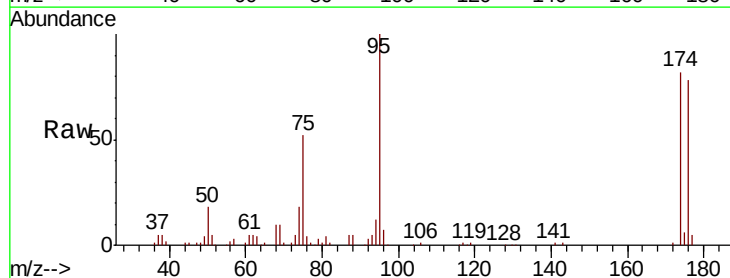
Acq: 18 Jun 2020 20:28

Tgt Ion: 75 Resp: 55081

Ion Ratio Lower Upper

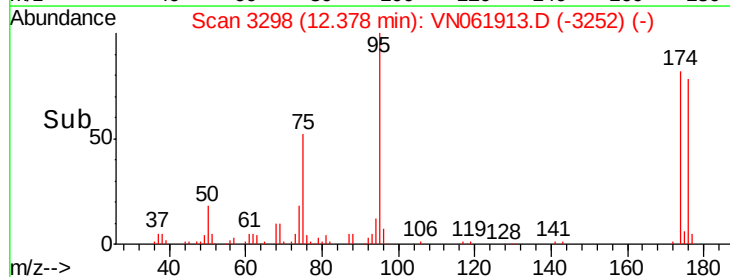
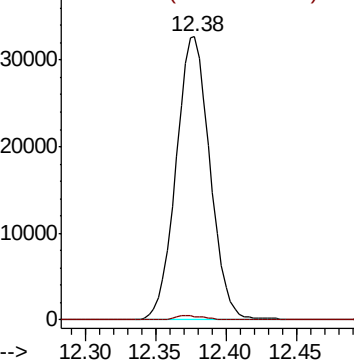
75 100

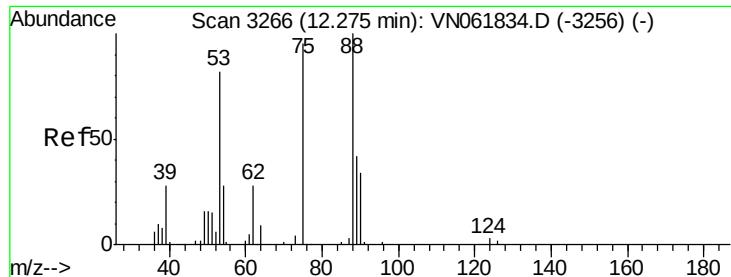
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#81

trans-1,4-Dichloro-2-butene

Concen: 77.324 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.10 min

Lab File: VN061913.D

Acq: 18 Jun 2020 20:28

Instrument :

MSVOA\_N

ClientSampleId :

RO-7

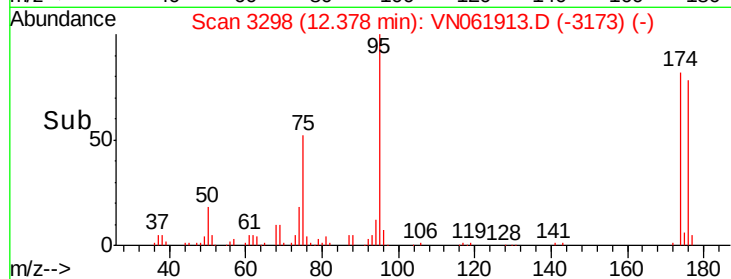
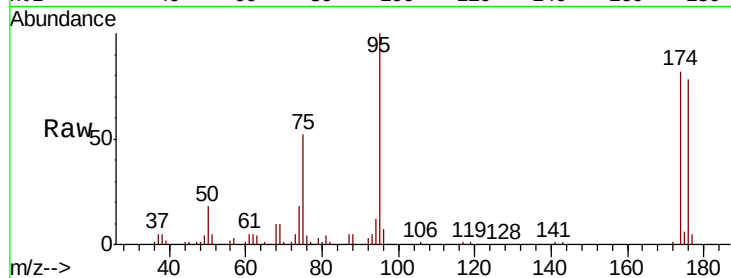
Tot Ion: 75 Resp: 55081

Ion Ratio Lower Upper

75 100

53 0.0 70.4 105.6#

89 0.0 36.0 54.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

