

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN073120\  
 Data File : VN062714.D  
 Acq On : 1 Aug 2020 3:35  
 Operator : JC/MD  
 Sample : L3518-08  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TP-5

Quant Time: Aug 01 06:14:11 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072120W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 21 18:48:59 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 145486   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 260163   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 274709   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 100862   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 125964   | 55.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.46% |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 88643    | 51.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.74% |      |
| 50) Toluene-d8            | 10.06  | 98  | 350567   | 51.41 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.82% |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 131615   | 52.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.58% |      |

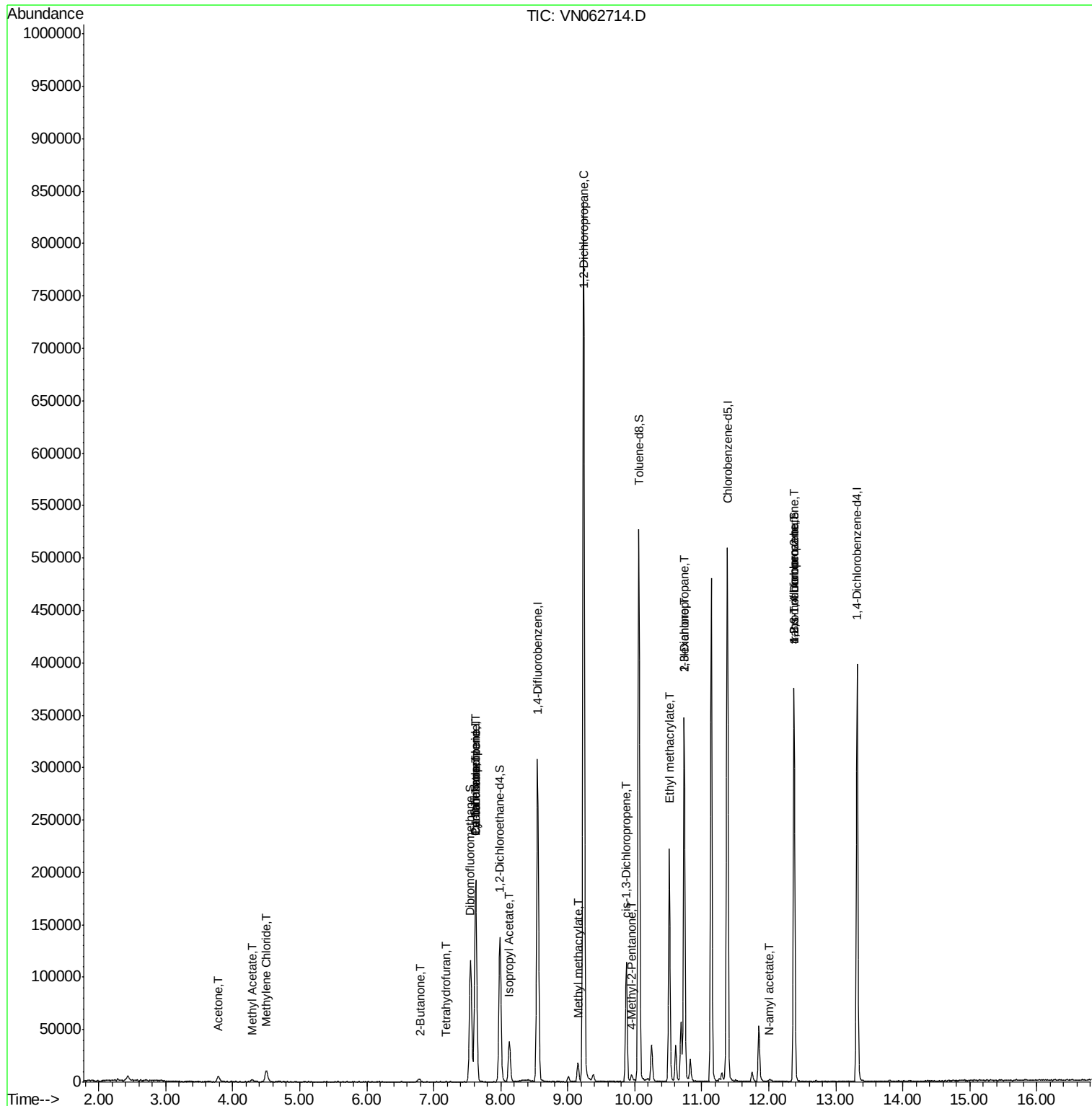
## Target Compounds

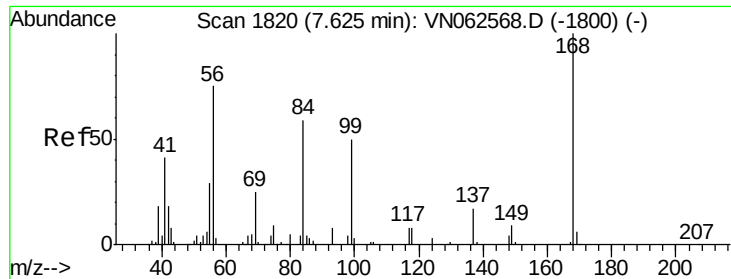
|                                |       |     |       |        | Qvalue |     |
|--------------------------------|-------|-----|-------|--------|--------|-----|
| 16) Acetone                    | 3.79  | 43  | 9285  | 10.917 | ug/l   | 98  |
| 18) Methyl Acetate             | 4.28  | 43  | 2403  | 1.116  | ug/l # | 71  |
| 20) Methylene Chloride         | 4.50  | 84  | 7781  | 3.815  | ug/l   | 93  |
| 25) 2-Butanone                 | 6.81  | 43  | 1426  | 1.101  | ug/l # | 52  |
| 29) Tetrahydrofuran            | 7.18  | 42  | 388   | 0.443  | ug/l # | 38  |
| 31) Cyclohexane                | 7.63  | 56  | 3738  | 1.122  | ug/l # | 16  |
| 36) 1,1-Dichloropropene        | 7.62  | 75  | 12532 | 4.519  | ug/l # | 49  |
| 38) Carbon Tetrachloride       | 7.63  | 117 | 15678 | 5.882  | ug/l # | 18  |
| 43) Isopropyl Acetate          | 8.13  | 43  | 47014 | 9.756  | ug/l # | 89  |
| 45) 1,2-Dichloropropane        | 9.24  | 63  | 893   | 0.379  | ug/l # | 44  |
| 48) Methyl methacrylate        | 9.15  | 41  | 2485  | 1.085  | ug/l # | 15  |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43  | 4153  | 1.440  | ug/l   | 92  |
| 54) cis-1,3-Dichloropropene    | 9.88  | 75  | 19578 | 5.553  | ug/l # | 64  |
| 56) Ethyl methacrylate         | 10.52 | 69  | 1037  | 2.064  | ug/l # | 1   |
| 57) 1,3-Dichloropropane        | 10.74 | 76  | 3445  | 0.994  | ug/l # | 42  |
| 59) 2-Hexanone                 | 10.74 | 43  | 53675 | 26.745 | ug/l # | 51  |
| 74) N-amyl acetate             | 12.01 | 43  | 1357  | 0.381  | ug/l # | 49  |
| 76) 1,2,3-Trichloropropane     | 12.37 | 75  | 73843 | 28.763 | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.37 | 75  | 73843 | 80.069 | ug/l # | 12  |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN073120\  
Data File : VN062714.D  
Acq On : 1 Aug 2020 3:35  
Operator : JC/MD  
Sample : L3518-08  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Aug 01 06:14:11 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N072120W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 21 18:48:59 2020  
Response via : Initial Calibration

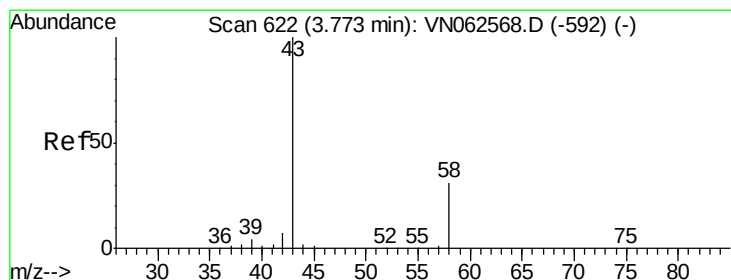
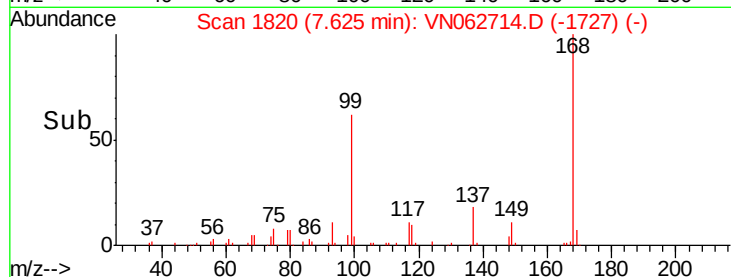
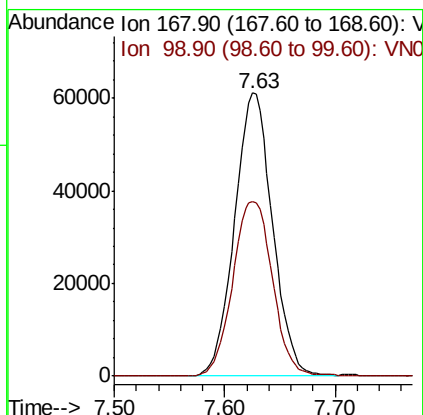
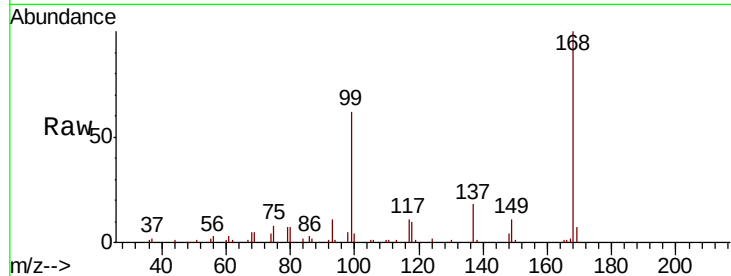




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.63 min Scan# 1820  
Delta R.T. 0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

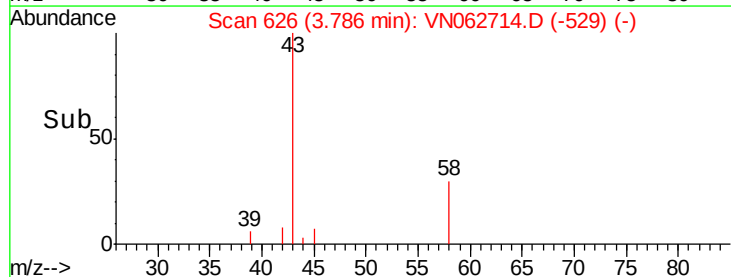
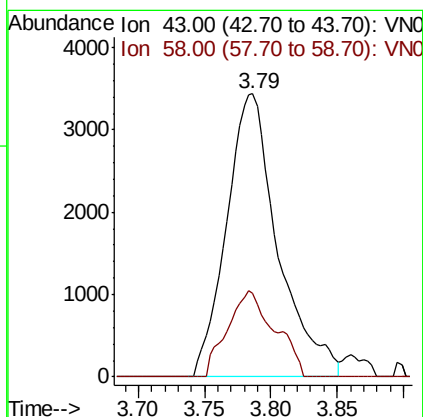
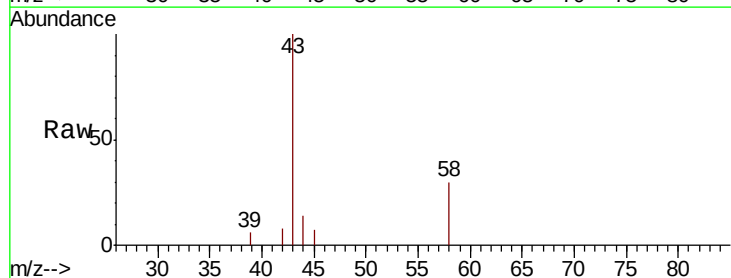
Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

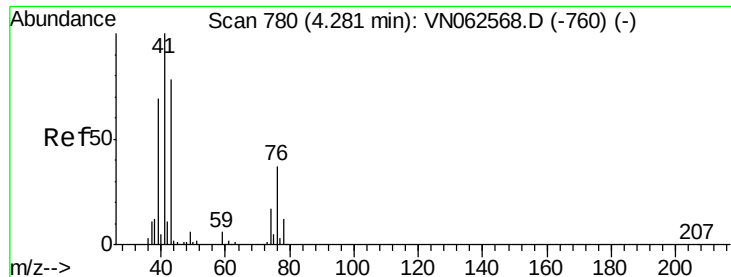
Tot Ion:168 Resp: 145486  
Ion Ratio Lower Upper  
168 100  
99 61.7 48.4 72.6



#16  
Acetone  
Concen: 10.917 ug/l  
RT: 3.79 min Scan# 626  
Delta R.T. 0.01 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 43 Resp: 9285  
Ion Ratio Lower Upper  
43 100  
58 29.7 24.6 37.0





#18

Methyl Acetate

Concen: 1.116 ug/l

RT: 4.28 min Scan# 781

Delta R.T. 0.00 min

Lab File: VN062714.D

Acq: 1 Aug 2020 3:35

Instrument :

MSVOA\_N

ClientSampled :

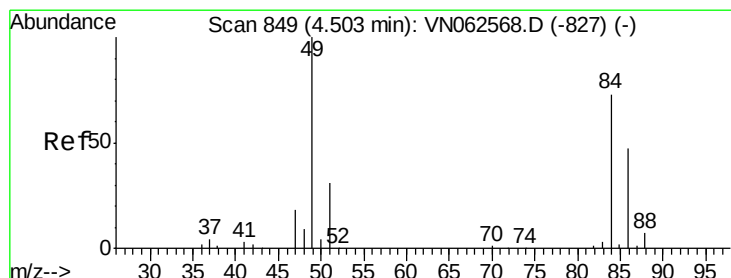
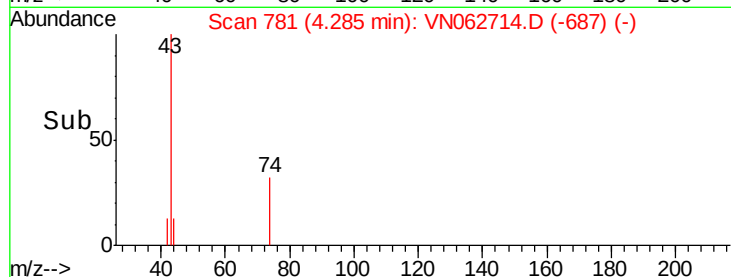
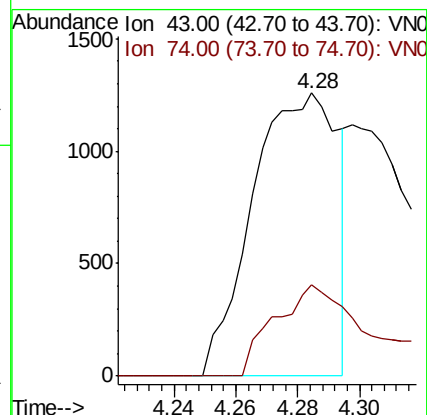
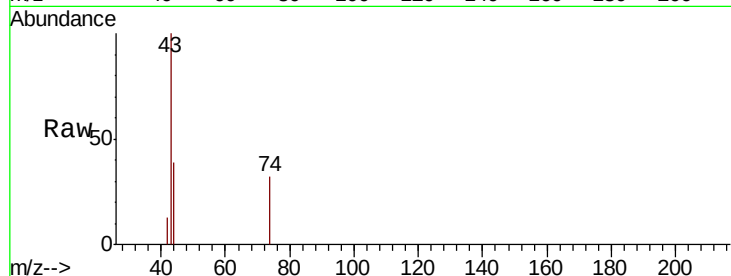
TP-5

Tot Ion: 43 Resp: 2403

Ion Ratio Lower Upper

43 100

74 34.0 16.6 24.8#



#20

Methylene Chloride

Concen: 3.815 ug/l

RT: 4.50 min Scan# 849

Delta R.T. 0.00 min

Lab File: VN062714.D

Acq: 1 Aug 2020 3:35

Tgt Ion: 84 Resp: 7781

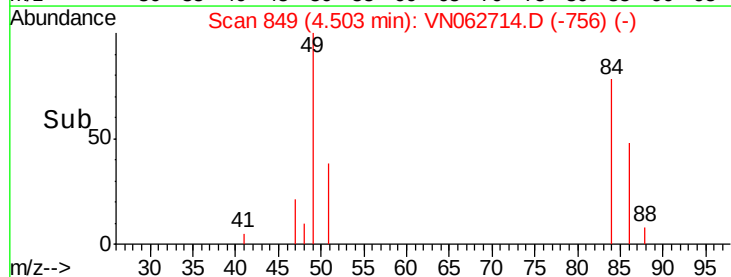
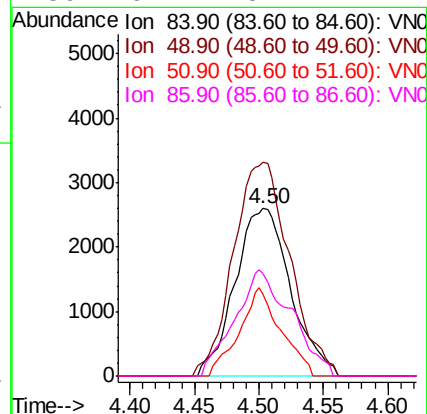
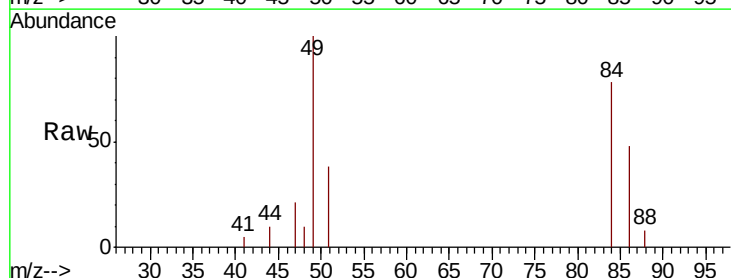
Ion Ratio Lower Upper

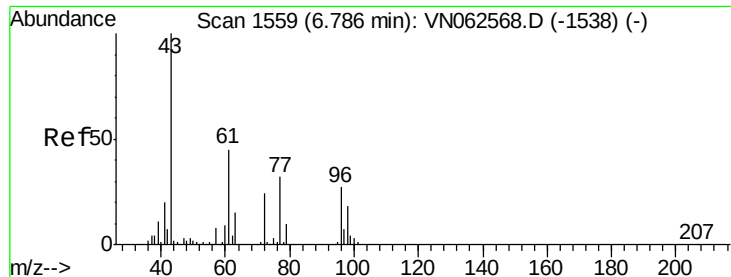
84 100

49 127.5 109.4 164.0

51 48.8 33.6 50.4

86 61.1 51.4 77.2

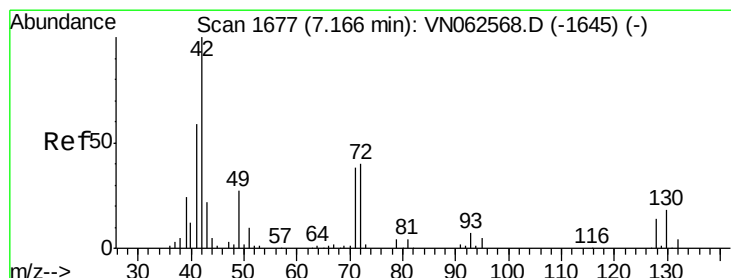
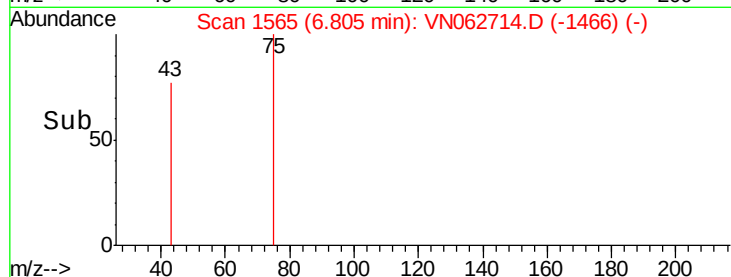
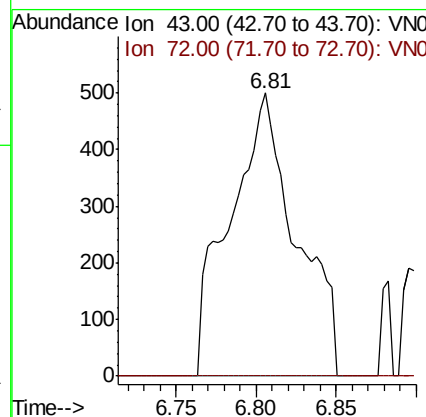
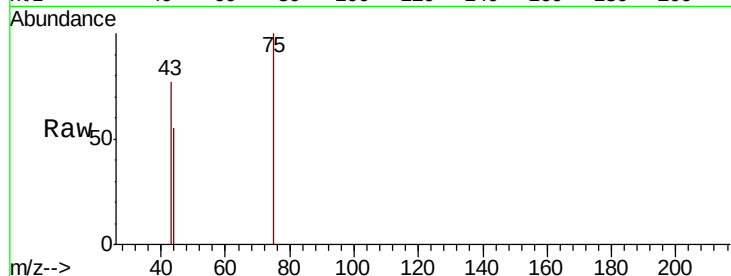




#25  
2-Butanone  
Concen: 1.101 ug/l  
RT: 6.81 min Scan# 1565  
Delta R.T. 0.02 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

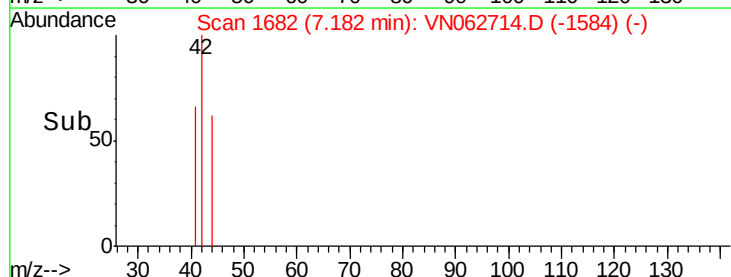
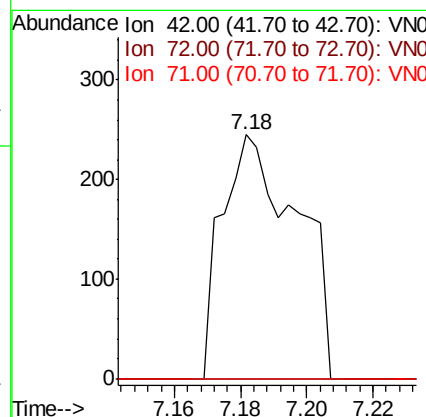
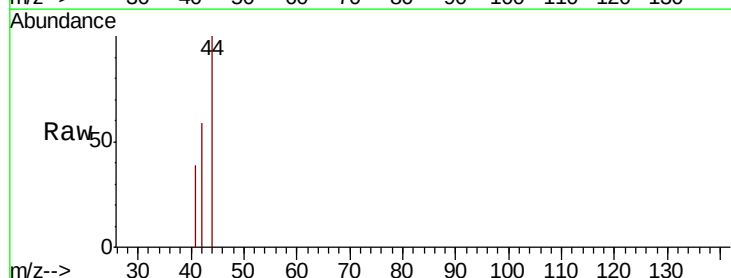
Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

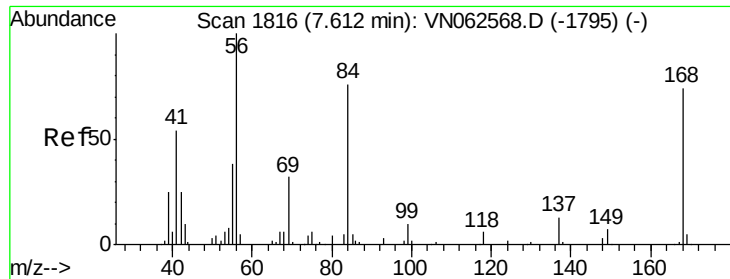
Tot Ion: 43 Resp: 1426  
Ion Ratio Lower Upper  
43 100  
72 0.0 19.0 28.6#



#29  
Tetrahydrofuran  
Concen: 0.443 ug/l  
RT: 7.18 min Scan# 1682  
Delta R.T. 0.02 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 42 Resp: 388  
Ion Ratio Lower Upper  
42 100  
72 0.0 30.7 46.1#  
71 0.0 29.1 43.7#

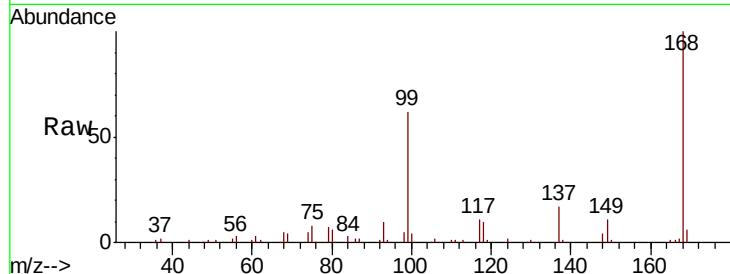




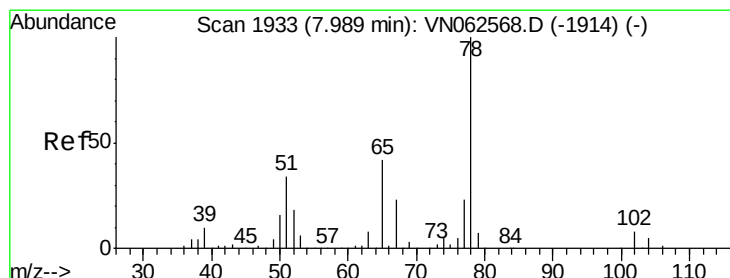
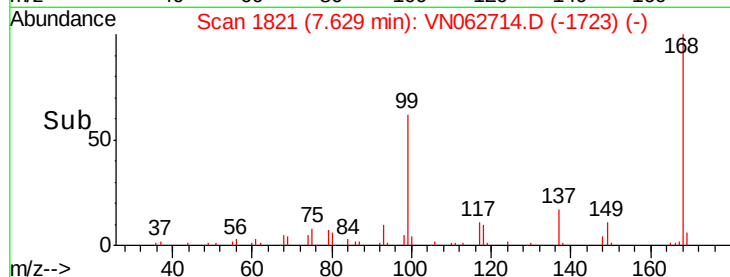
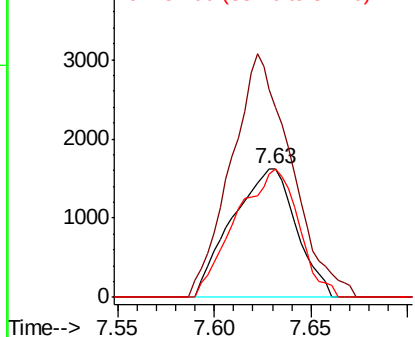
#31  
Cyclohexane  
Concen: 1.122 ug/l  
RT: 7.63 min Scan# 1821  
Delta R.T. 0.02 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

Tot Ion: 56 Resp: 3738  
Ion Ratio Lower Upper  
56 100  
69 160.9 25.3 37.9#  
84 95.3 61.0 91.4#

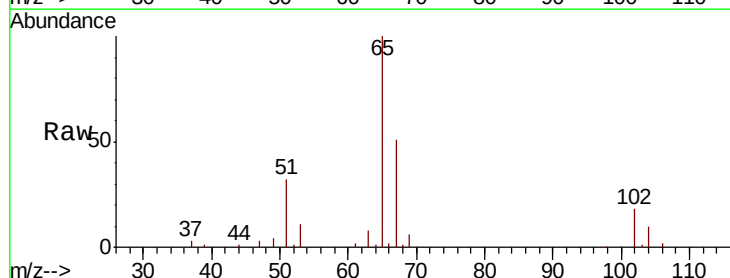


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

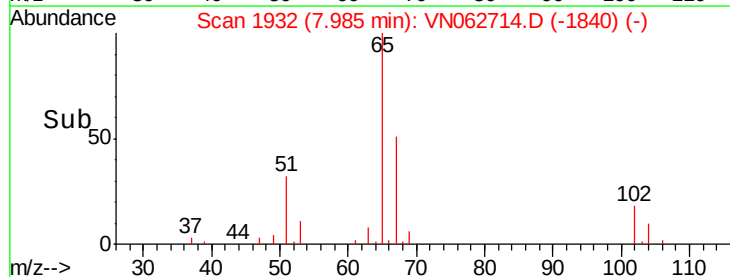
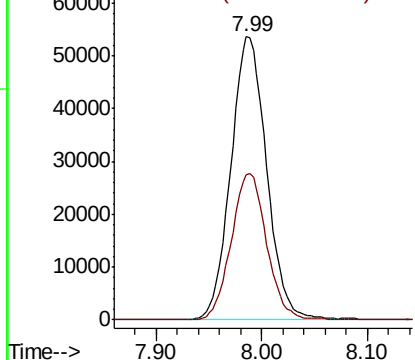


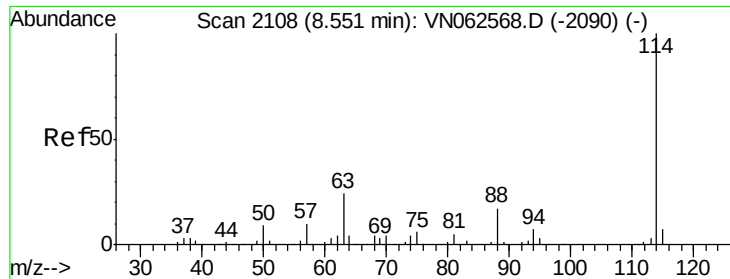
#33  
1,2-Dichloroethane-d4  
Concen: 55.735 ug/l  
RT: 7.99 min Scan# 1932  
Delta R.T. -0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 65 Resp: 125964  
Ion Ratio Lower Upper  
65 100  
67 51.1 0.0 106.0



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

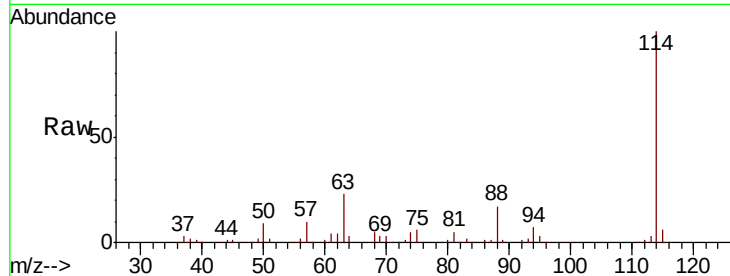




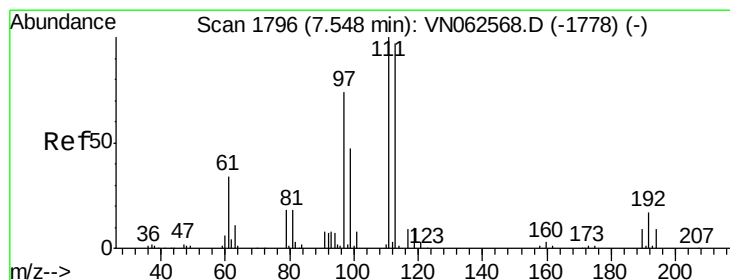
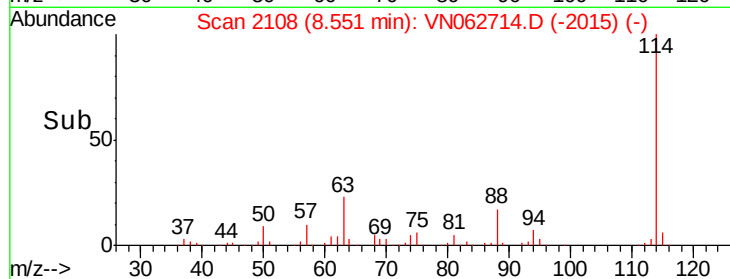
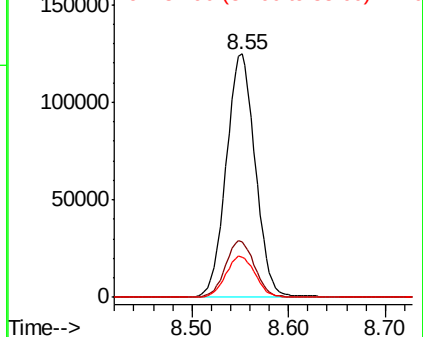
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. 0.00 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TP-5

Tot Ion:114 Resp: 260163  
 Ion Ratio Lower Upper  
 114 100  
 63 22.9 0.0 48.4  
 88 16.6 0.0 33.8

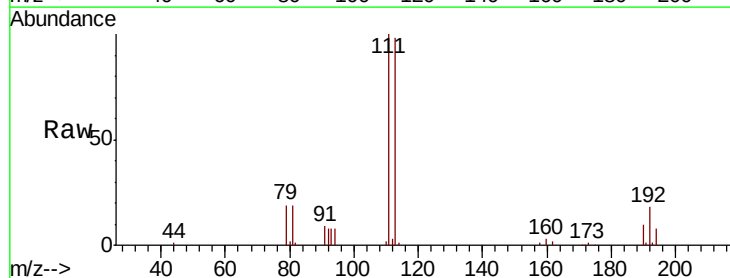


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

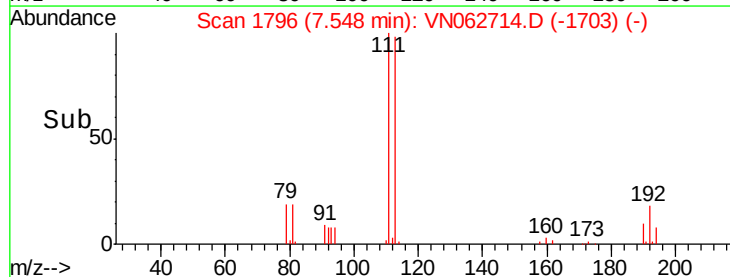
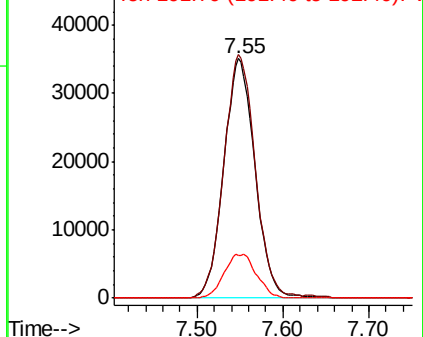


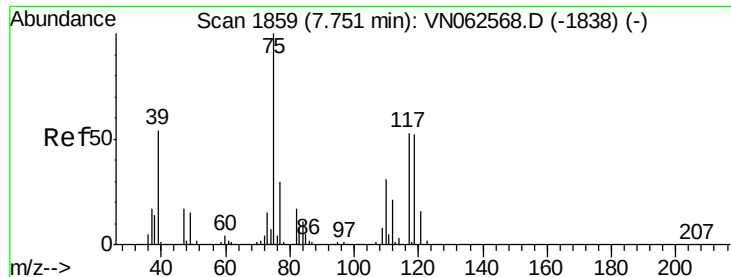
#35  
 Dibromofluoromethane  
 Concen: 51.871 ug/l  
 RT: 7.55 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

Tgt Ion:113 Resp: 88643  
 Ion Ratio Lower Upper  
 113 100  
 111 101.8 82.7 124.1  
 192 18.9 14.8 22.2



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

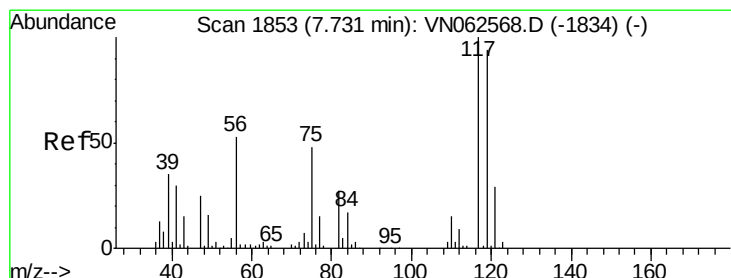
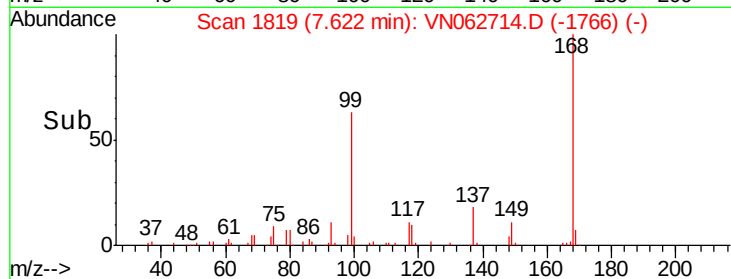
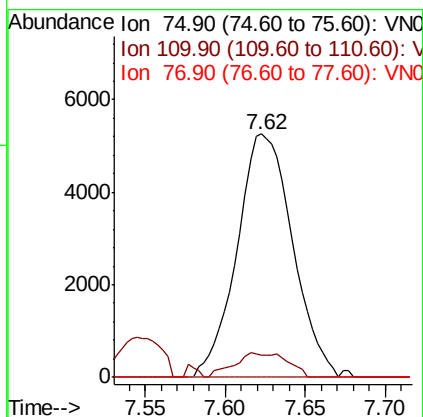
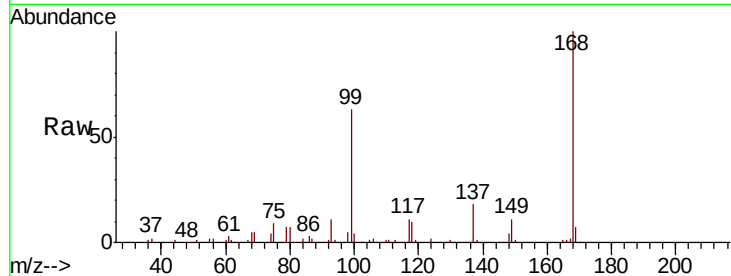




#36  
 1,1-Dichloropropene  
 Concen: 4.519 ug/l  
 RT: 7.62 min Scan# 1819  
 Delta R.T. -0.13 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

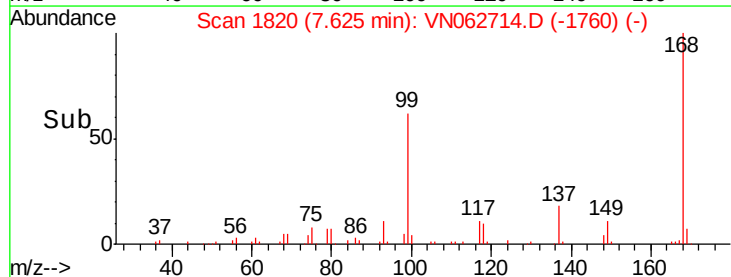
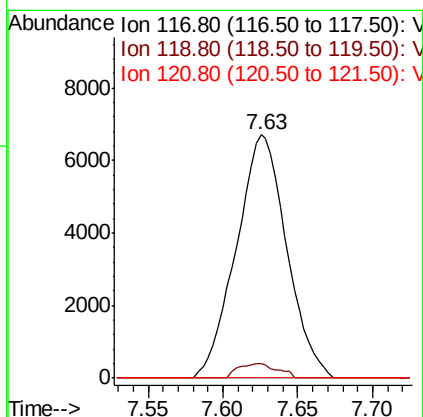
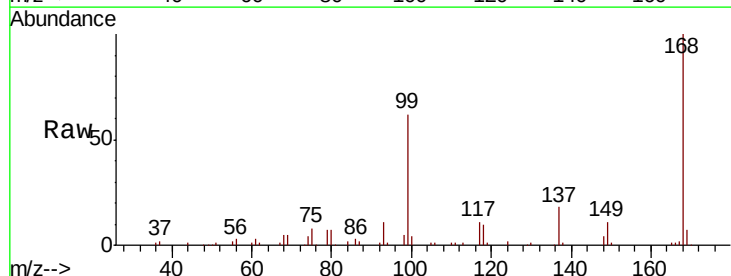
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 TP-5

| Tot Ion   | 75    | Resp  | 12532 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 110       | 5.8   | 16.0  | 48.0# |
| 77        | 0.0   | 24.6  | 36.8# |

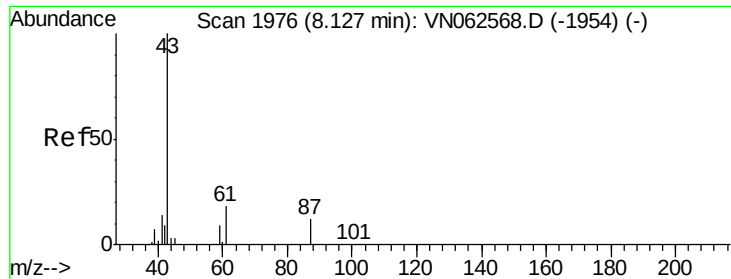


#38  
 Carbon Tetrachloride  
 Concen: 5.882 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.11 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

| Tgt Ion   | 117   | Resp  | 15678  |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 119       | 6.0   | 74.8  | 112.2# |
| 121       | 0.0   | 23.0  | 34.6#  |







#43

Isopropyl Acetate

Concen: 9.756 ug/l

RT: 8.13 min Scan# 1976

Delta R.T. 0.00 min

Lab File: VN062714.D

Acq: 1 Aug 2020 3:35

Instrument :

MSVOA\_N

ClientSampled :

TP-5

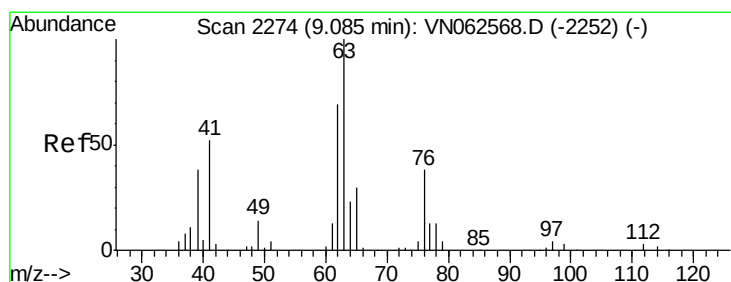
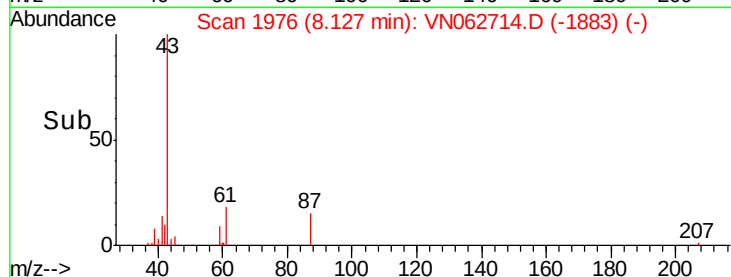
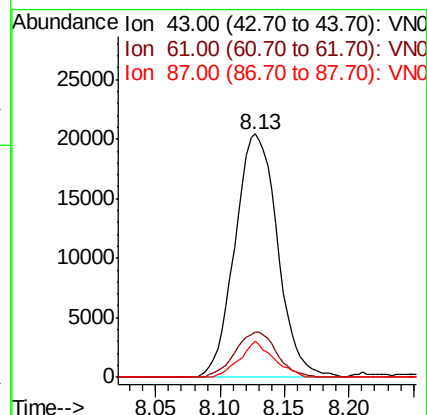
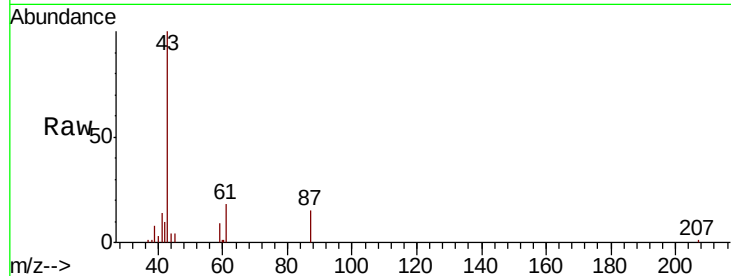
Tot Ion: 43 Resp: 47014

Ion Ratio Lower Upper

43 100

61 18.1 20.8 31.2#

87 11.8 9.2 13.8



#45

1,2-Dichloropropane

Concen: 0.379 ug/l

RT: 9.24 min Scan# 2322

Delta R.T. 0.15 min

Lab File: VN062714.D

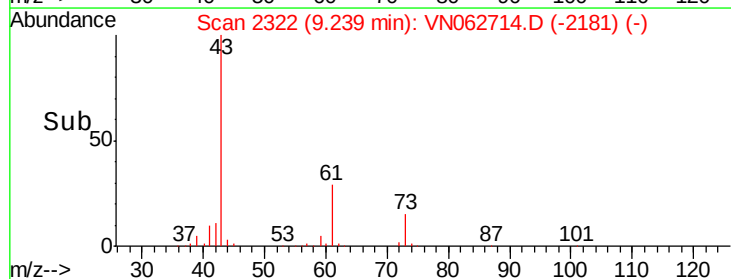
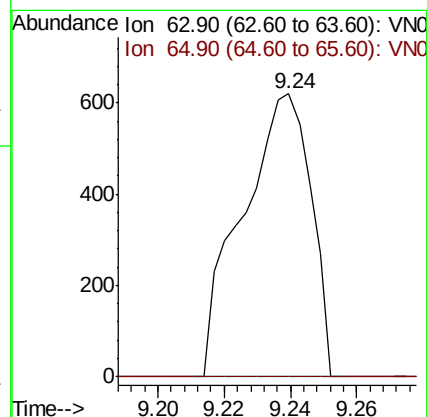
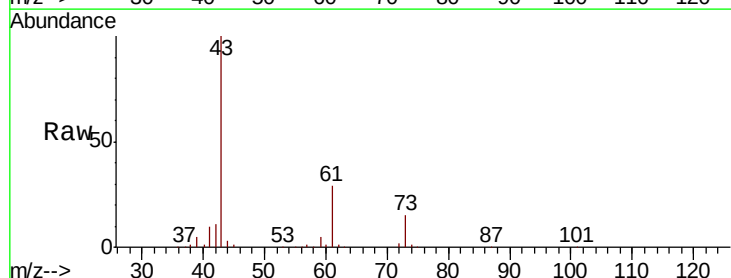
Acq: 1 Aug 2020 3:35

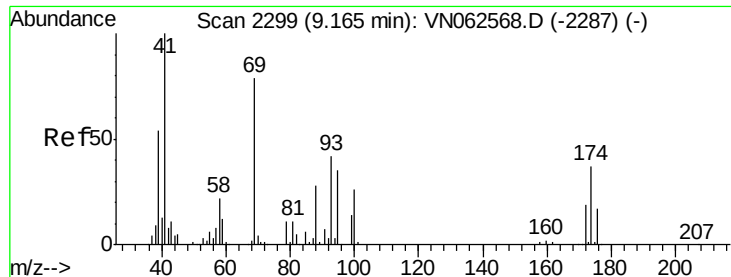
Tgt Ion: 63 Resp: 893

Ion Ratio Lower Upper

63 100

65 0.0 24.4 36.6#

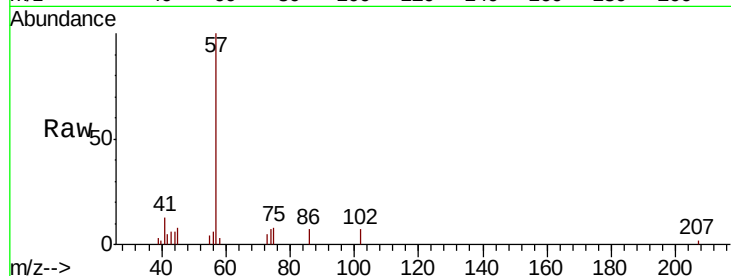




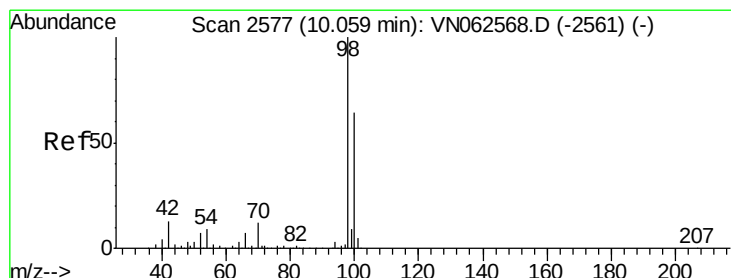
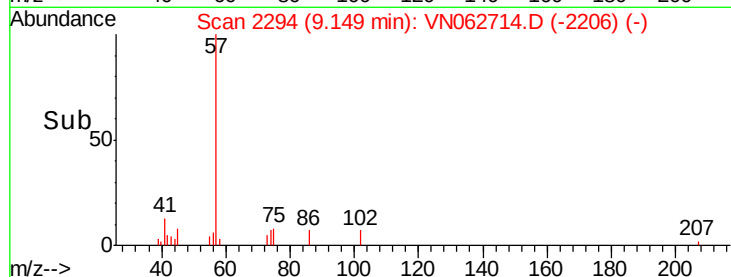
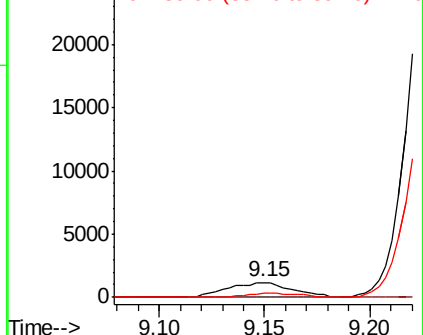
#48  
Methvl methacrylate  
Concen: 1.085 ug/l  
RT: 9.15 min Scan# 2294  
Delta R.T. -0.02 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

Tot Ion: 41 Resp: 2485  
Ion Ratio Lower Upper  
41 100  
69 0.0 64.4 96.6#  
39 0.0 43.5 65.3#

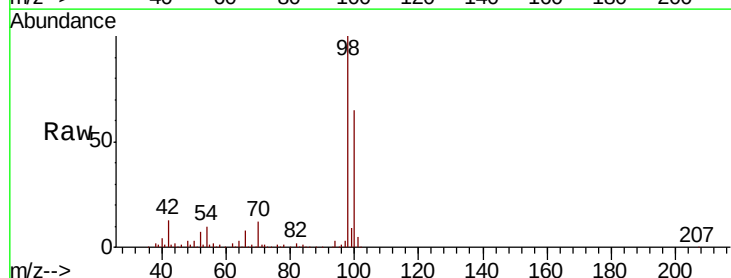


Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0

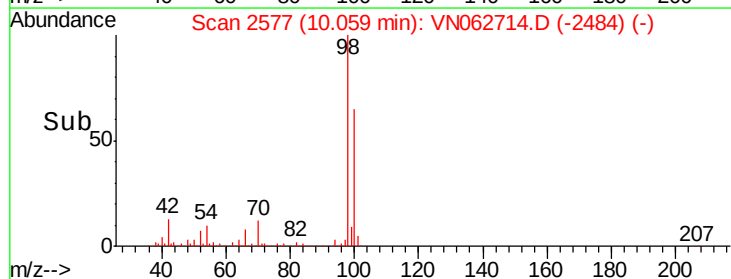
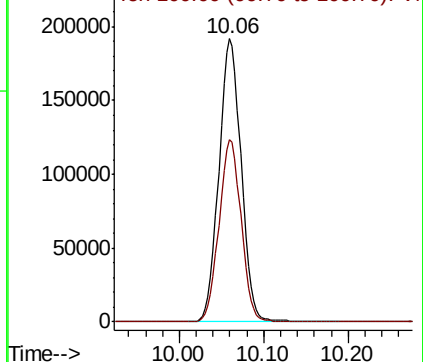


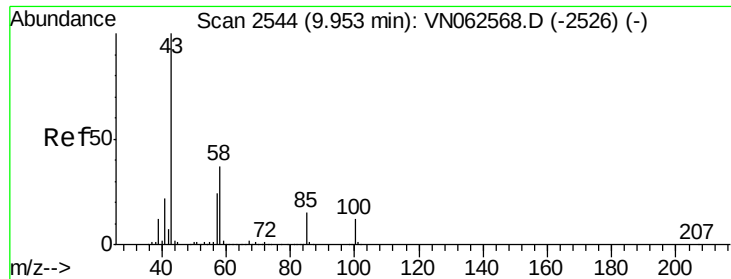
#50  
Toluene-d8  
Concen: 51.415 ug/l  
RT: 10.06 min Scan# 2577  
Delta R.T. 0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 98 Resp: 350567  
Ion Ratio Lower Upper  
98 100  
100 64.2 50.9 76.3



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

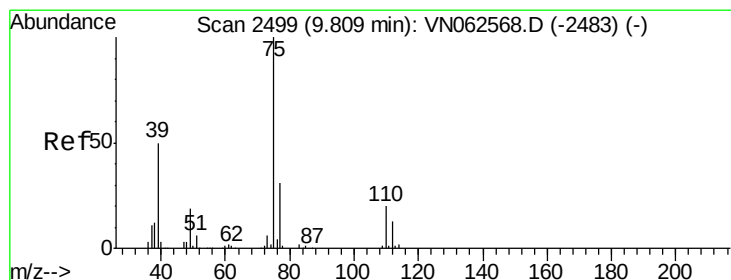
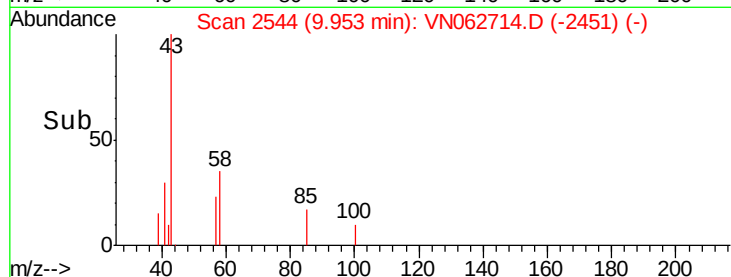
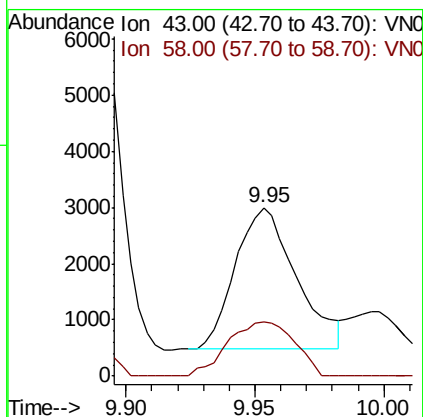
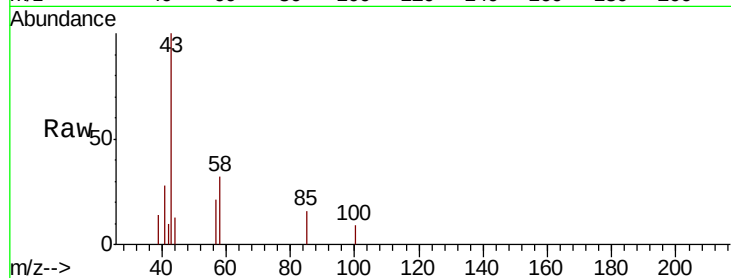




#51  
 4-Methyl-2-Pentanone  
 Concen: 1.440 ug/l  
 RT: 9.95 min Scan# 2544  
 Delta R.T. 0.00 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

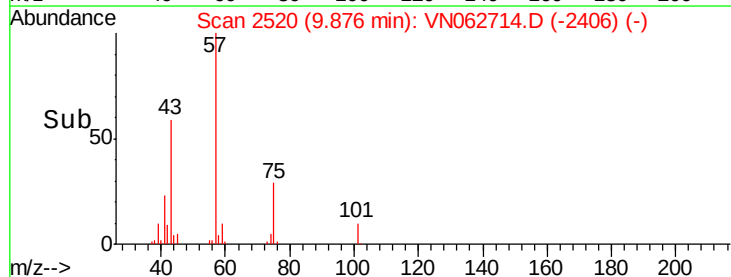
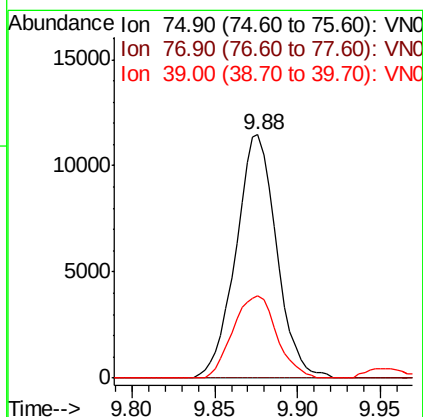
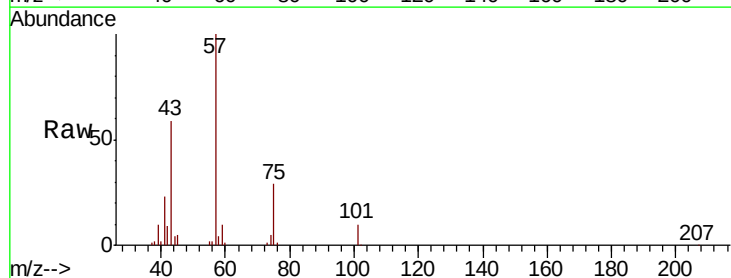
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 TP-5

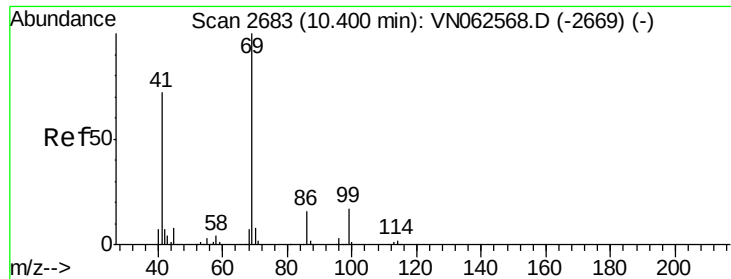
Tot Ion: 43 Resp: 4153  
 Ion Ratio Lower Upper  
 43 100  
 58 41.7 29.8 44.6



#54  
 cis-1,3-Dichloropropene  
 Concen: 5.553 ug/l  
 RT: 9.88 min Scan# 2520  
 Delta R.T. 0.07 min  
 Lab File: VN062714.D  
 Acq: 1 Aug 2020 3:35

Tgt Ion: 75 Resp: 19578  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.0 37.6#  
 39 34.0 39.8 59.8#





#56

Ethyl methacrylate

Concen: 2.064 ug/l

RT: 10.52 min Scan# 2719

Delta R.T. 0.12 min

Lab File: VN062714.D

Acq: 1 Aug 2020 3:35

Instrument :

MSVOA\_N

ClientSampled :

TP-5

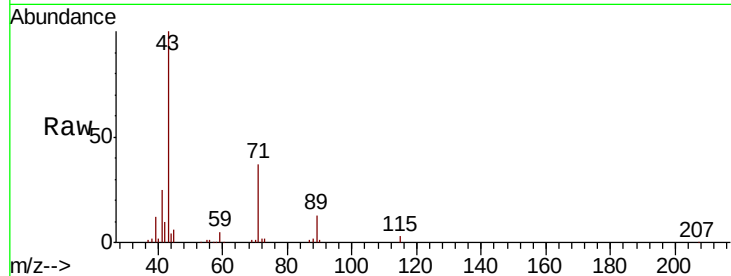
Tot Ion: 69 Resp: 1037

Ion Ratio Lower Upper

69 100

41 4013.5 57.2 85.8#

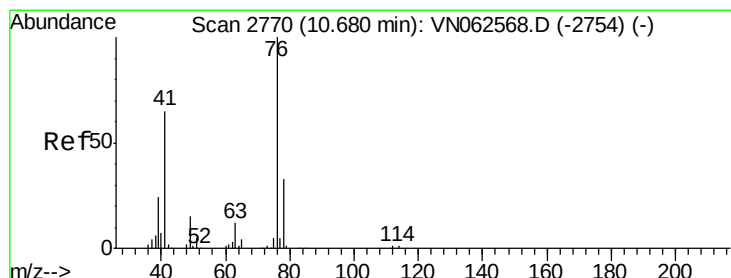
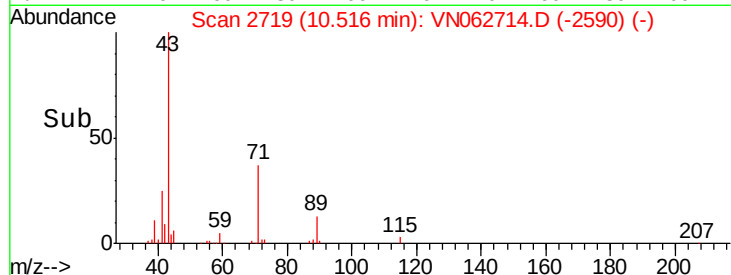
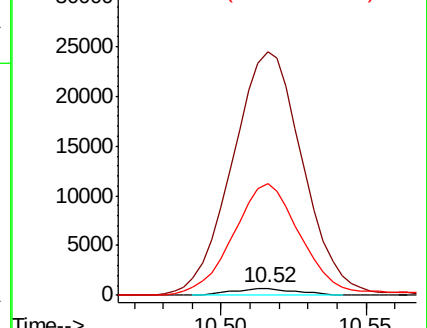
39 1792.3 28.6 43.0#



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: 0.994 ug/l

RT: 10.74 min Scan# 2788

Delta R.T. 0.06 min

Lab File: VN062714.D

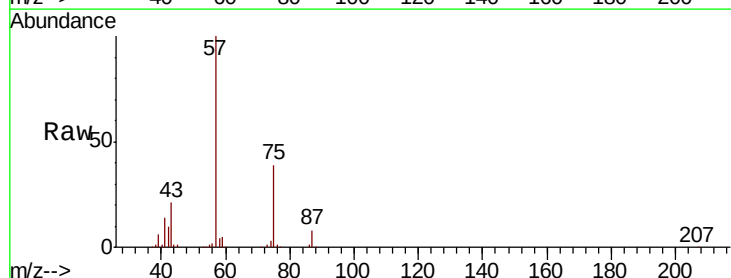
Acq: 1 Aug 2020 3:35

Tgt Ion: 76 Resp: 3445

Ion Ratio Lower Upper

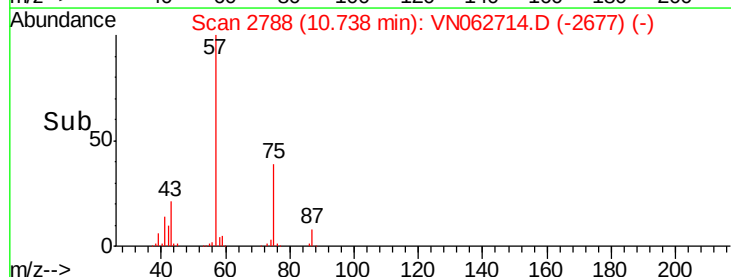
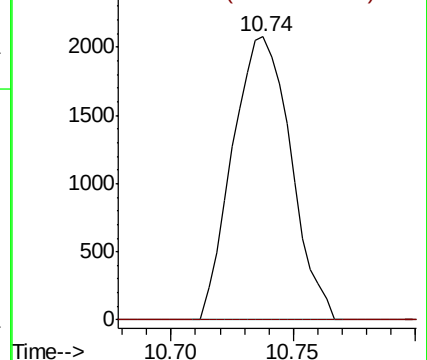
76 100

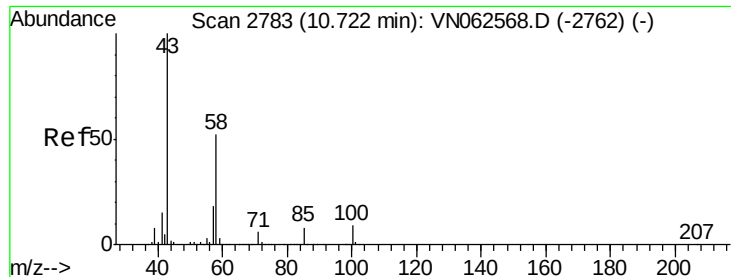
78 0.0 26.3 39.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

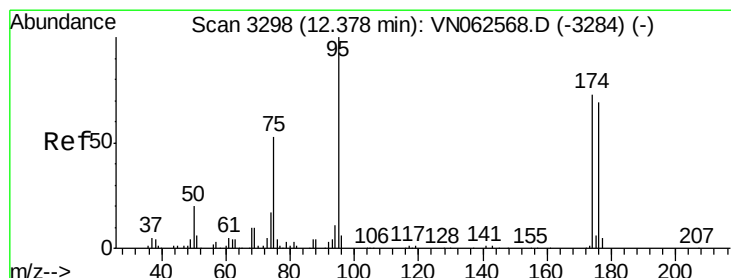
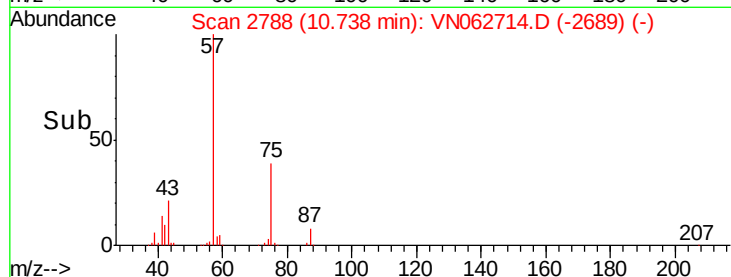
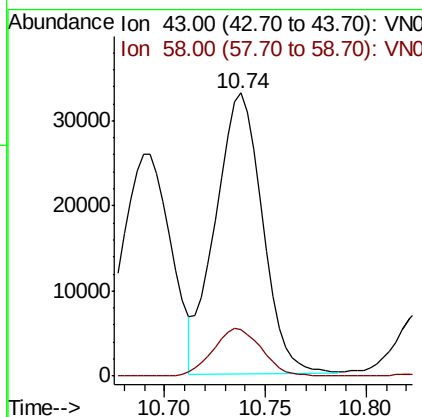
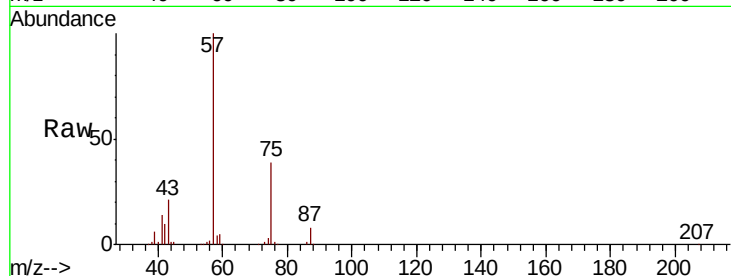




#59  
2-Hexanone  
Concen: 26.745 ug/l  
RT: 10.74 min Scan# 2788  
Delta R.T. 0.02 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

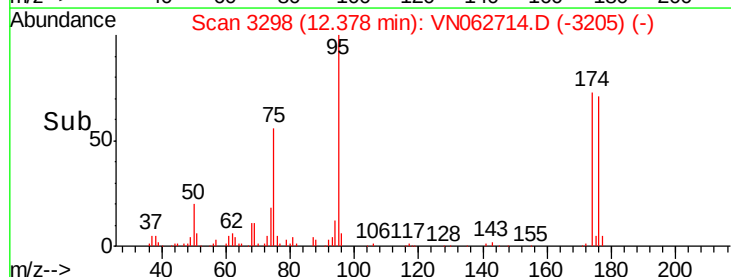
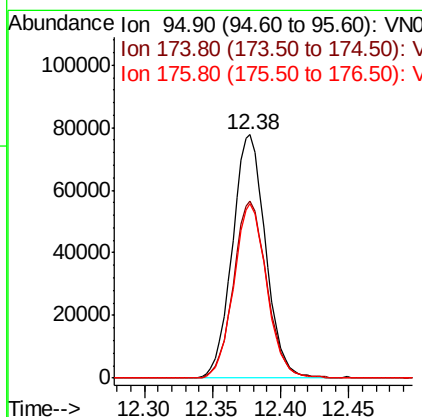
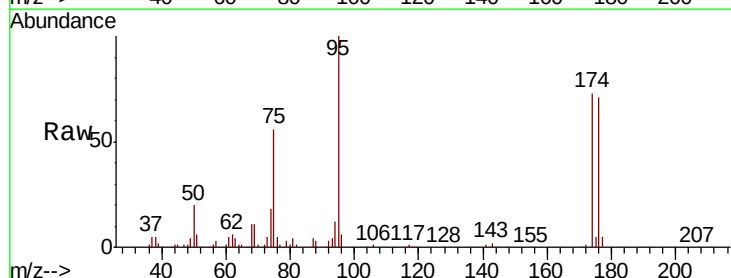
Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

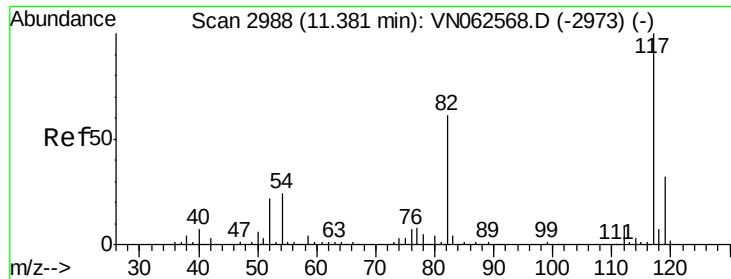
Tot Ion: 43 Resp: 53675  
Ion Ratio Lower Upper  
43 100  
58 17.6 26.0 78.0#



#62  
4-Bromofluorobenzene  
Concen: 52.792 ug/l  
RT: 12.38 min Scan# 3298  
Delta R.T. 0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 95 Resp: 131615  
Ion Ratio Lower Upper  
95 100  
174 73.1 0.0 144.6  
176 70.9 0.0 139.4

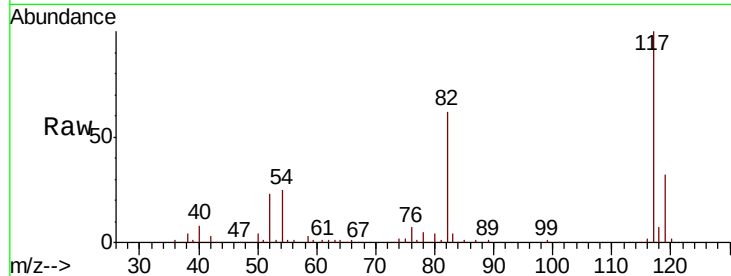




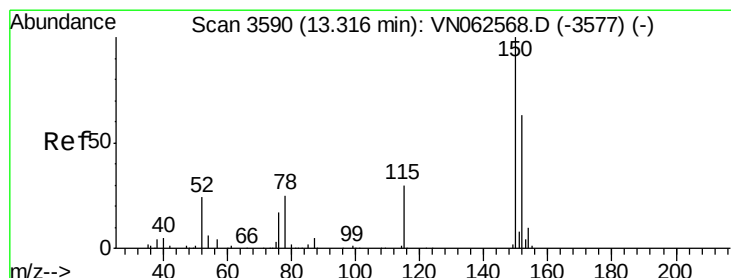
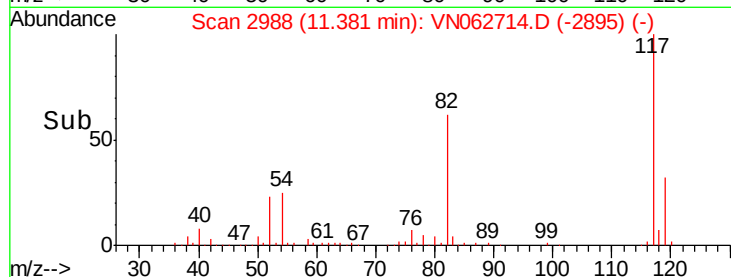
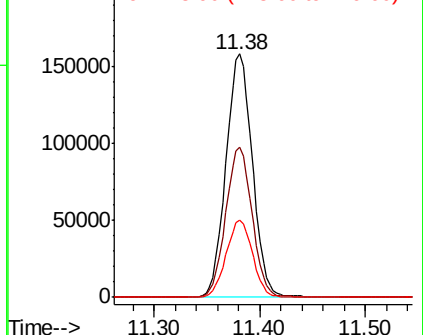
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2988  
Delta R.T. 0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

Tot Ion:117 Resp: 274709  
Ion Ratio Lower Upper  
117 100  
82 61.7 49.0 73.6  
119 31.5 25.4 38.2

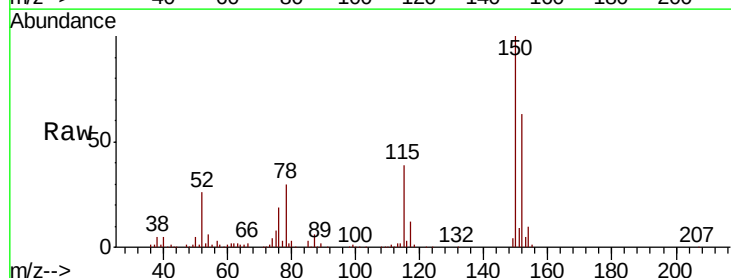


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

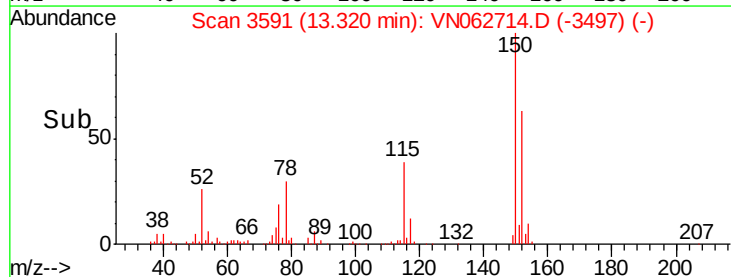
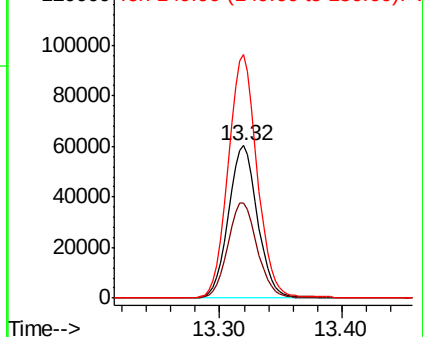


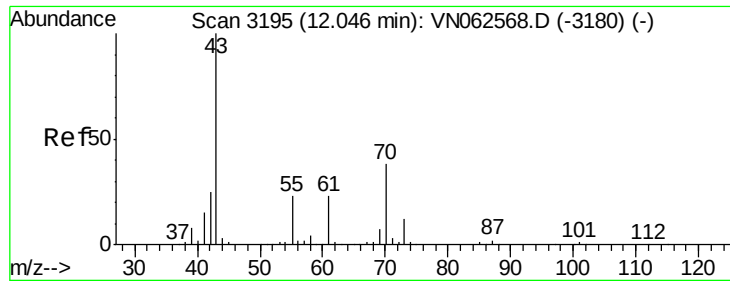
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.32 min Scan# 3591  
Delta R.T. 0.00 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion:152 Resp: 100862  
Ion Ratio Lower Upper  
152 100  
115 63.0 31.8 95.4  
150 157.9 0.0 351.4



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

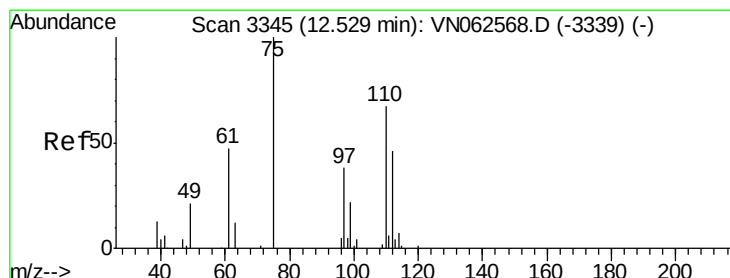
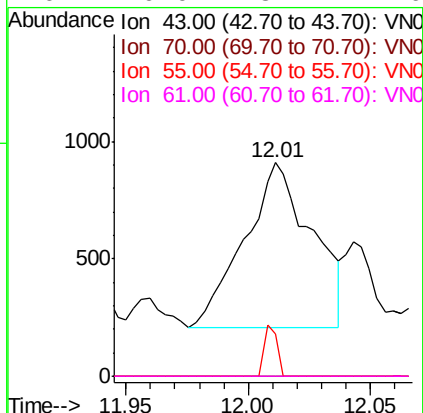
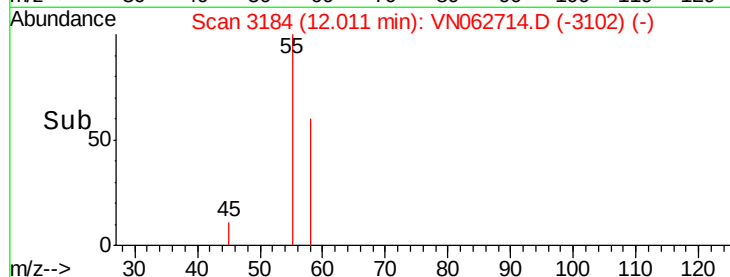
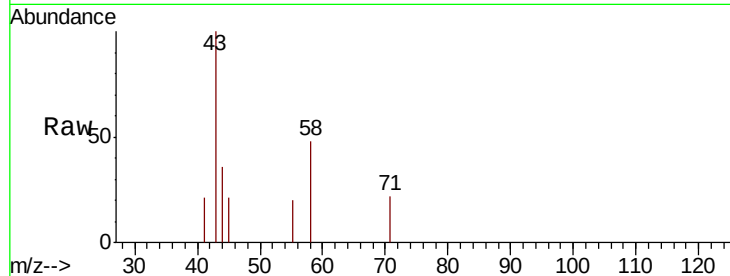




#74  
N-amvl acetate  
Concen: 0.381 ug/l  
RT: 12.01 min Scan# 3184  
Delta R.T. -0.04 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

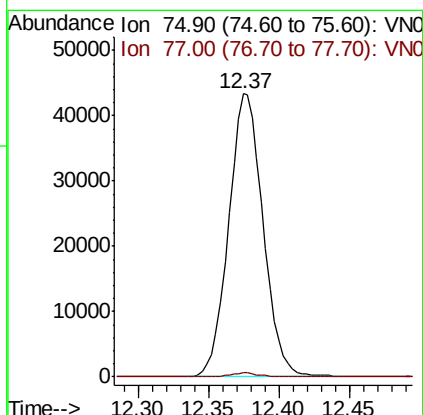
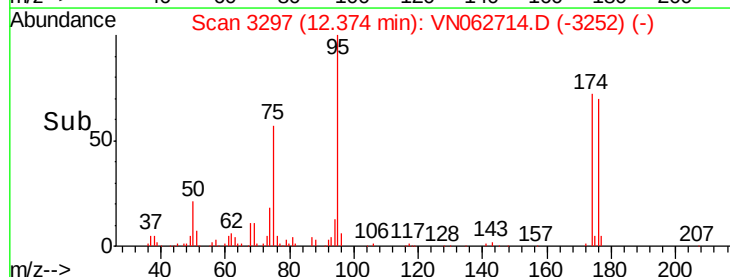
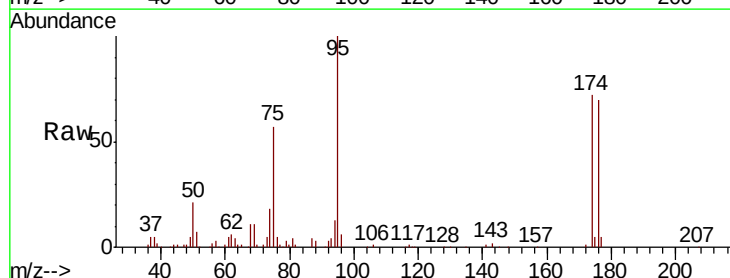
Instrument :  
MSVOA\_N  
ClientSampled :  
TP-5

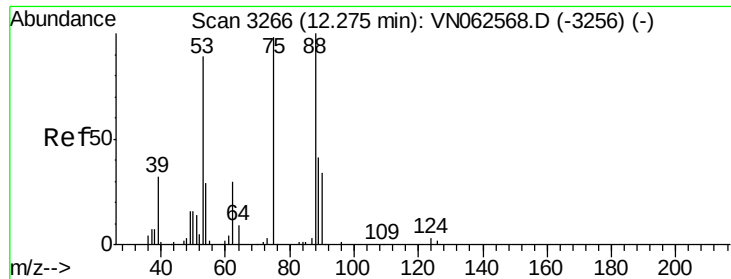
Tot Ion: 43 Resp: 1357  
Ion Ratio Lower Upper  
43 100  
70 0.0 30.5 45.7#  
55 5.7 19.0 28.6#  
61 0.0 18.4 27.6#



#76  
1,2,3-Trichloropropane  
Concen: 28.763 ug/l  
RT: 12.37 min Scan# 3297  
Delta R.T. -0.15 min  
Lab File: VN062714.D  
Acq: 1 Aug 2020 3:35

Tgt Ion: 75 Resp: 73843  
Ion Ratio Lower Upper  
75 100  
77 1.0 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 80.069 ug/l

RT: 12.37 min Scan# 3297

Delta R.T. 0.10 min

Lab File: VN062714.D

Acq: 1 Aug 2020 3:35

Instrument :

MSVOA\_N

ClientSampleId :

TP-5

Tot Ion: 75 Resp: 73843

Ion Ratio Lower Upper

75 100

53 0.0 75.4 113.0#

89 0.0 34.5 51.7#

