

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN073120\  
 Data File : VN062682.D  
 Acq On : 31 Jul 2020 13:53  
 Operator : JC/MD  
 Sample : PB130640ZHE#05  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130640ZHE#05

Quant Time: Aug 01 06:04:41 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  | 126972   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 236584   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 234793   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 83485    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.99  | 65   | 112834   | 57.21 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 114.42% |          |
| 35) Dibromofluoromethane    | 7.55  | 113  | 76606    | 49.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.60%  |          |
| 50) Toluene-d8              | 10.06 | 98   | 308324   | 49.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.46%  |          |
| 62) 4-Bromofluorobenzene    | 12.38 | 95   | 113007   | 49.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.70%  |          |

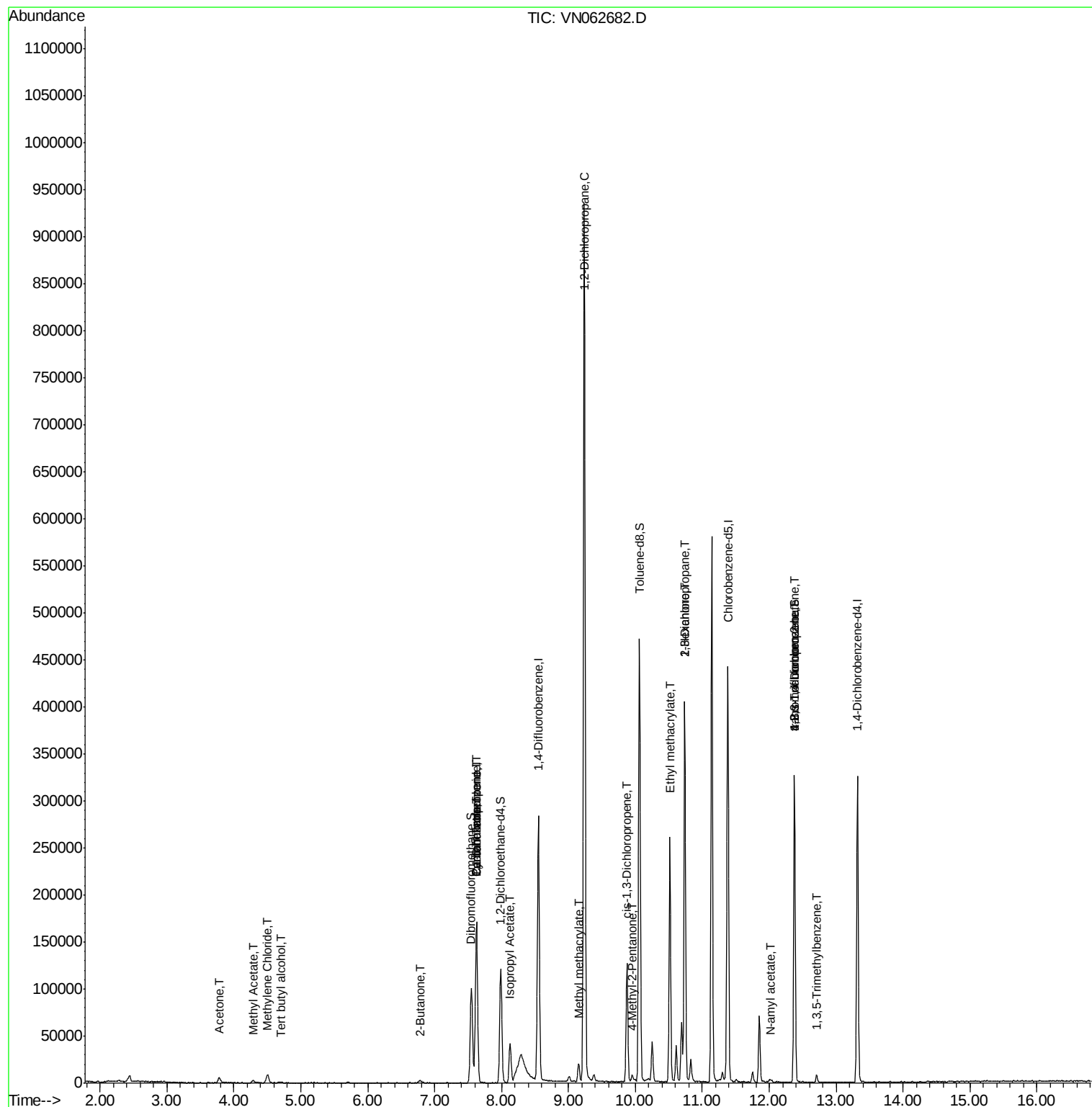
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.70  | 59   | 553      | 1.762  | ug/l # | 73     |
| 16) Acetone                    | 3.78  | 43   | 9647     | 12.997 | ug/l   | 93     |
| 18) Methyl Acetate             | 4.29  | 43   | 5561     | 2.959  | ug/l   | 95     |
| 20) Methylene Chloride         | 4.51  | 84   | 6486     | 3.643  | ug/l # | 79     |
| 25) 2-Butanone                 | 6.78  | 43   | 430      | 0.380  | ug/l # | 52     |
| 31) Cyclohexane                | 7.63  | 56   | 3268     | 1.124  | ug/l # | 23     |
| 36) 1,1-Dichloropropene        | 7.63  | 75   | 11053    | 4.383  | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.63  | 117  | 14014    | 5.781  | ug/l # | 18     |
| 43) Isopropyl Acetate          | 8.13  | 43   | 50187    | 11.453 | ug/l # | 89     |
| 45) 1,2-Dichloropropane        | 9.23  | 63   | 990      | 0.462  | ug/l # | 44     |
| 48) Methyl methacrylate        | 9.14  | 41   | 2810     | 1.349  | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 4783     | 1.824  | ug/l   | 95     |
| 54) cis-1,3-Dichloropropene    | 9.87  | 75   | 21701    | 6.769  | ug/l # | 62     |
| 56) Ethyl methacrylate         | 10.51 | 69   | 1197     | 2.143  | ug/l # | 1      |
| 57) 1,3-Dichloropropane        | 10.73 | 76   | 3702     | 1.175  | ug/l # | 42     |
| 59) 2-Hexanone                 | 10.74 | 43   | 59165    | 31.791 | ug/l # | 53     |
| 74) N-amyl acetate             | 12.00 | 43   | 1473     | 0.500  | ug/l # | 49     |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75   | 61874    | 29.117 | ug/l # | 100    |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 4567     | 0.834  | ug/l   | 89     |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 61874    | 81.056 | ug/l # | 12     |

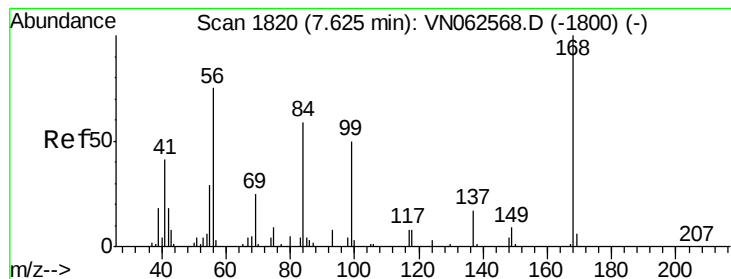
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

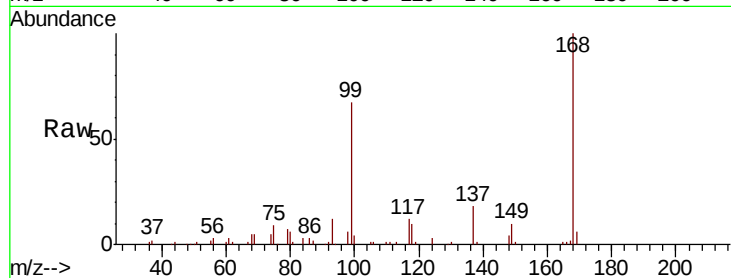
PB130640ZHE#05

Tot Ion:168 Resp: 126972

Ion Ratio Lower Upper

168 100

99 67.2 48.4 72.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

60000

50000

40000

30000

20000

10000

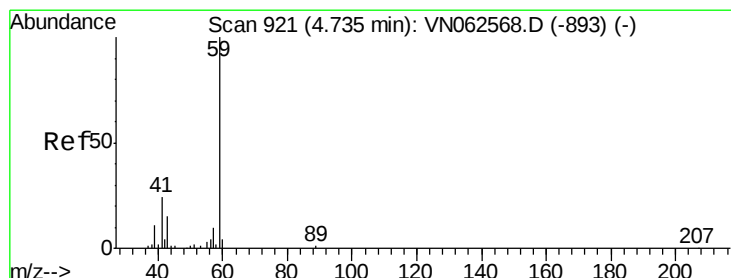
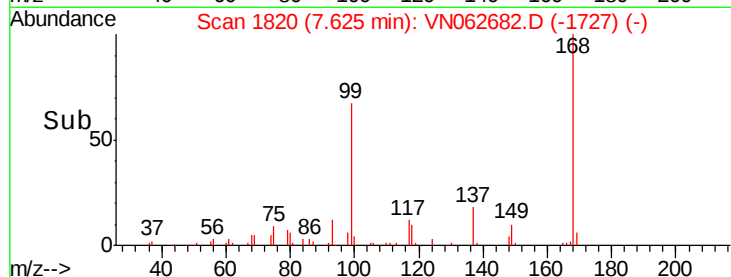
0

7.50

7.60

7.70

Time-->



#11

Tert butyl alcohol

Concen: 1.762 ug/l

RT: 4.70 min Scan# 911

Delta R.T. -0.03 min

Lab File: VN062682.D

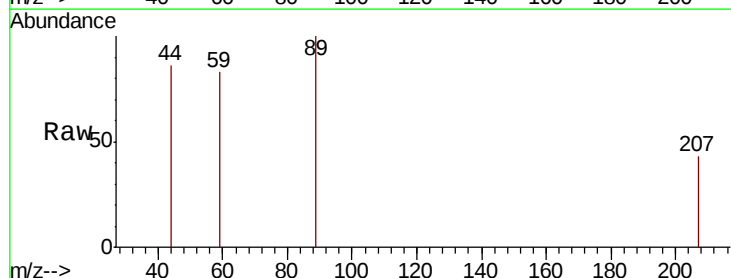
Acq: 31 Jul 2020 13:53

Tgt Ion: 59 Resp: 553

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VN

Ion 57.00 (56.70 to 57.70): VN

400

300

200

100

0

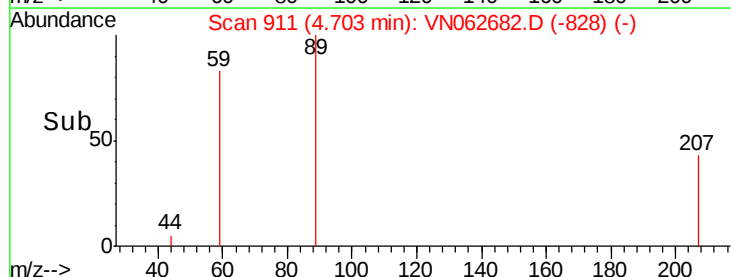
4.68

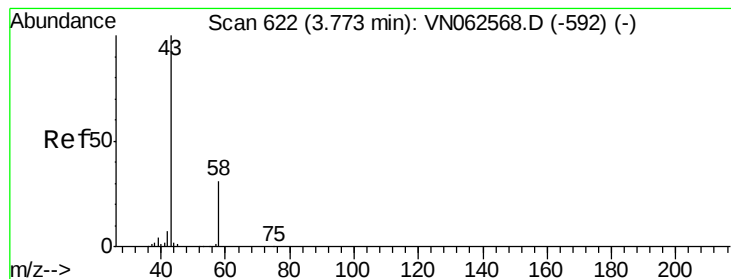
4.70

4.72

4.74

Time-->





#16

Acetone

Concen: 12.997 ug/l

RT: 3.78 min Scan# 624

Delta R.T. 0.01 min

Lab File: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

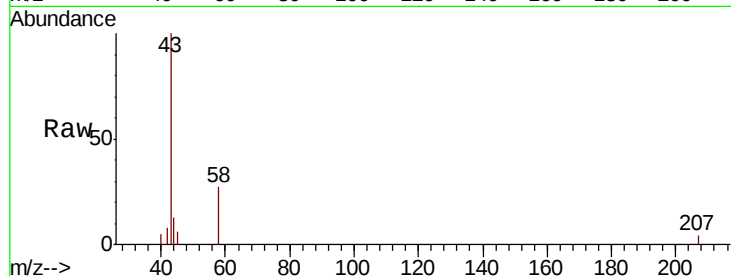
PB130640ZHE#05

Tot Ion: 43 Resp: 9647

Ion Ratio Lower Upper

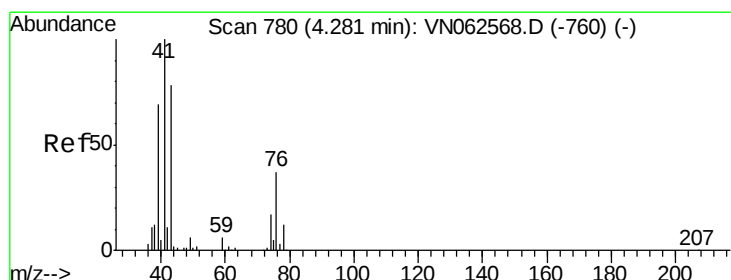
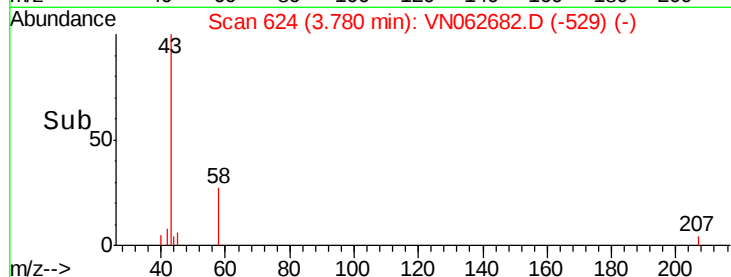
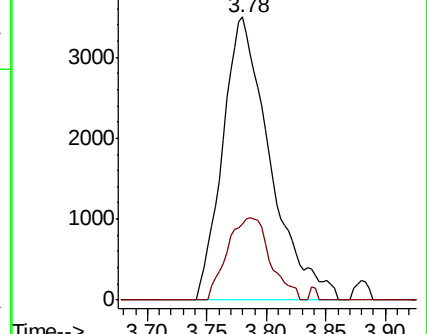
43 100

58 26.9 24.6 37.0



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 2.959 ug/l

RT: 4.29 min Scan# 783

Delta R.T. 0.01 min

Lab File: VN062682.D

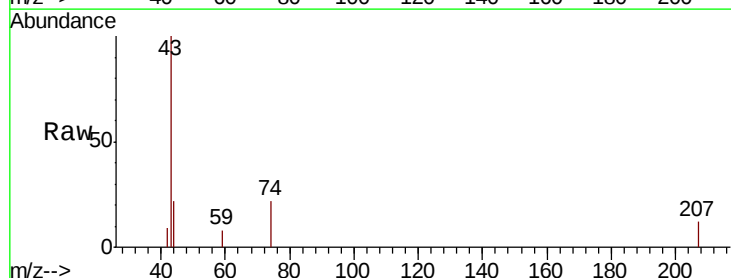
Acq: 31 Jul 2020 13:53

Tgt Ion: 43 Resp: 5561

Ion Ratio Lower Upper

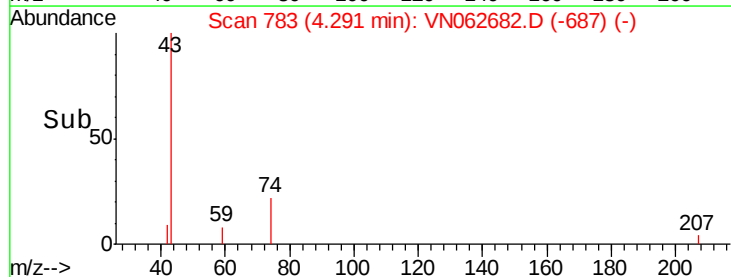
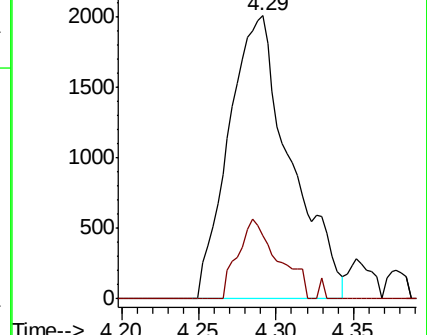
43 100

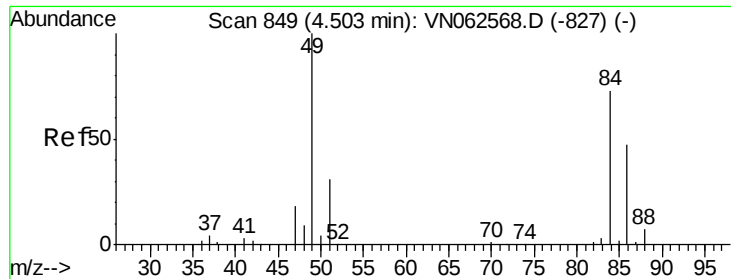
74 18.2 16.6 24.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

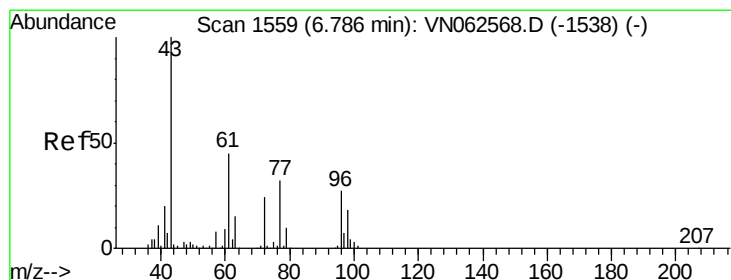
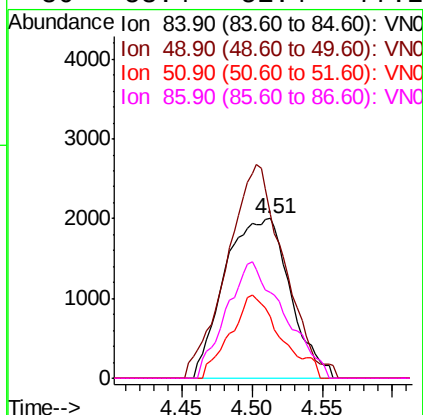
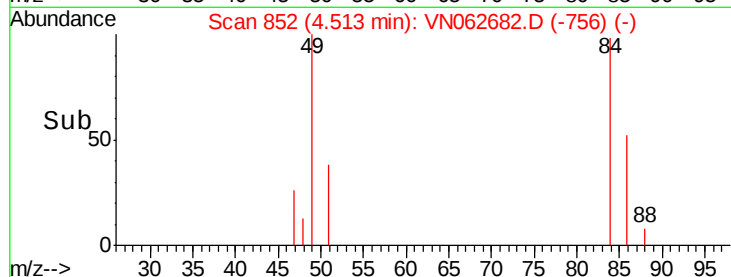
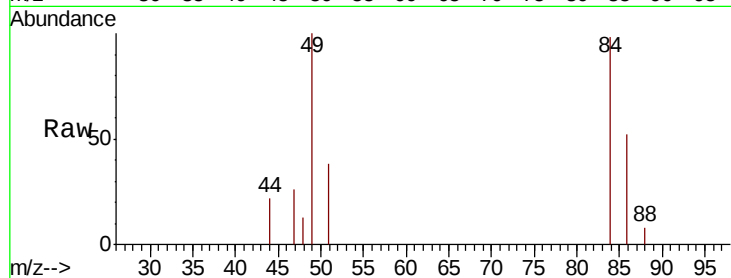




#20  
Methvlene Chloride  
Concen: 3.643 ug/l  
RT: 4.51 min Scan# 852  
Delta R.T. 0.01 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

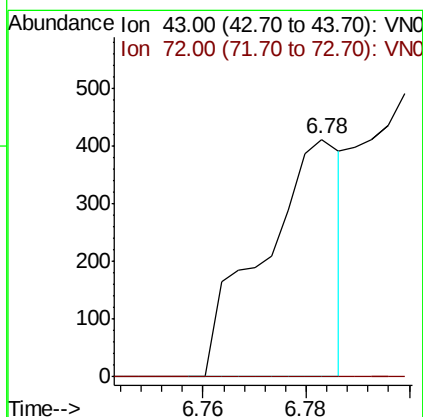
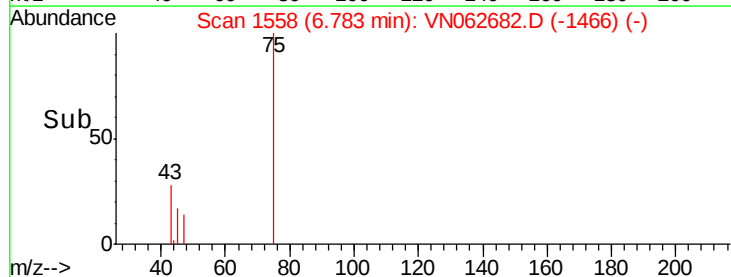
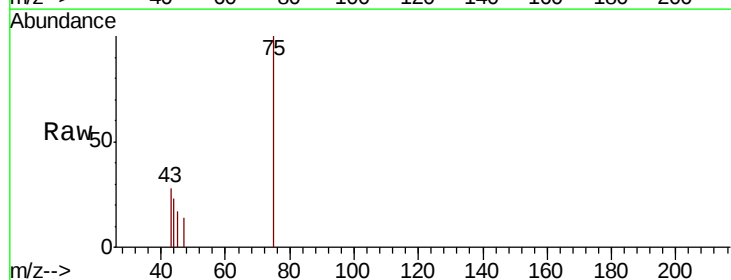
Instrument :  
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PB130640ZHE#05

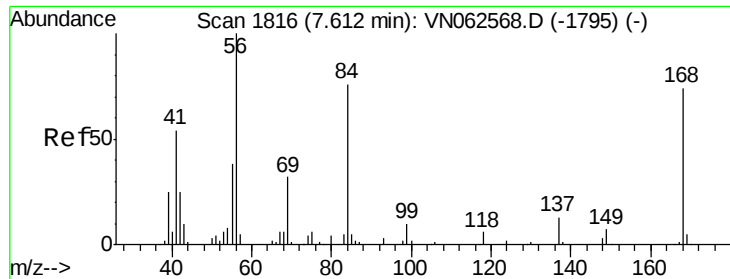
Tot Ion: 84 Resp: 6486  
Ion Ratio Lower Upper  
84 100  
49 102.1 109.4 164.0#  
51 38.4 33.6 50.4  
86 53.4 51.4 77.2



#25  
2-Butanone  
Concen: 0.380 ug/l  
RT: 6.78 min Scan# 1558  
Delta R.T. -0.00 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Tgt Ion: 43 Resp: 430  
Ion Ratio Lower Upper  
43 100  
72 0.0 19.0 28.6#

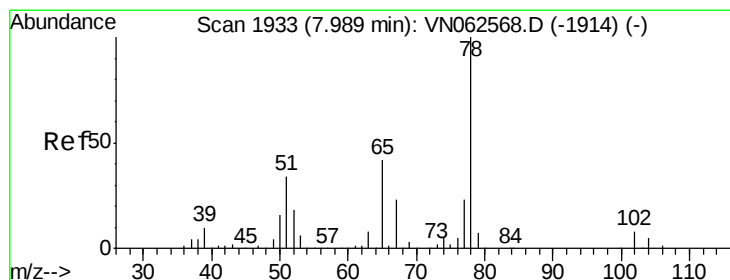
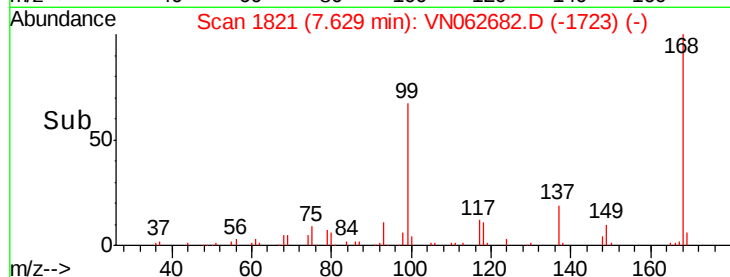
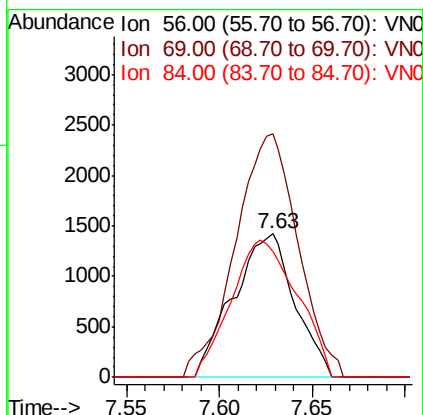
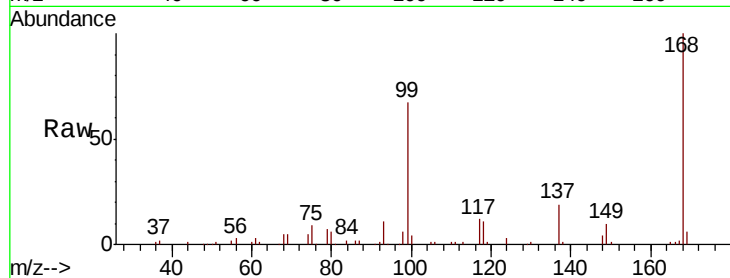




#31  
Cyclohexane  
Concen: 1.124 ug/l  
RT: 7.63 min Scan# 1821  
Delta R.T. 0.02 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

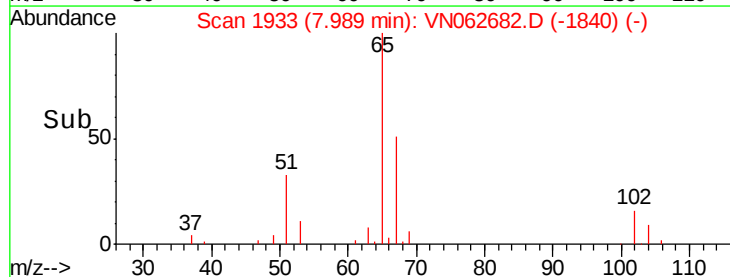
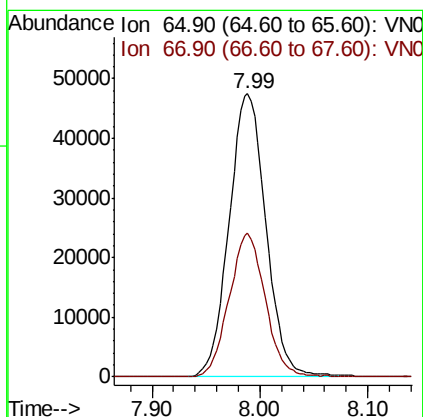
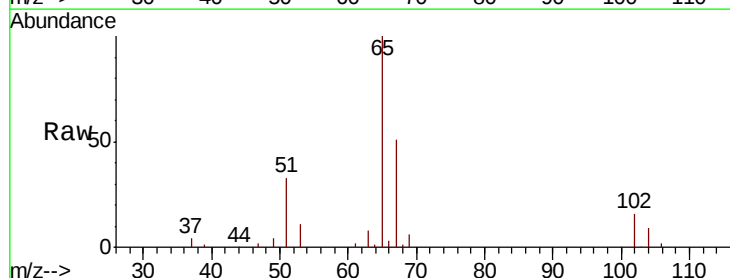
Instrument :  
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PB130640ZHE#05

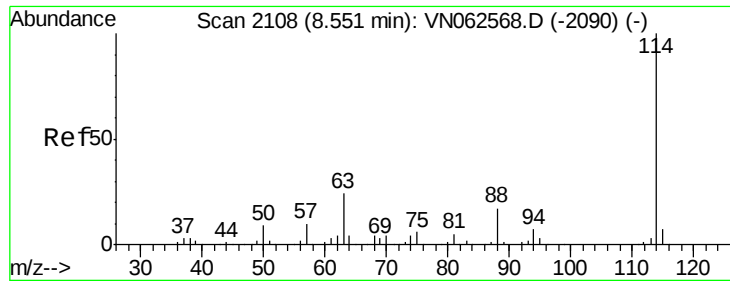
Tot Ion: 56 Resp: 3268  
Ion Ratio Lower Upper  
56 100  
69 159.0 25.3 37.9#  
84 88.0 61.0 91.4



#33  
1,2-Dichloroethane-d4  
Concen: 57.205 ug/l  
RT: 7.99 min Scan# 1933  
Delta R.T. 0.00 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Tgt Ion: 65 Resp: 112834  
Ion Ratio Lower Upper  
65 100  
67 49.7 0.0 106.0

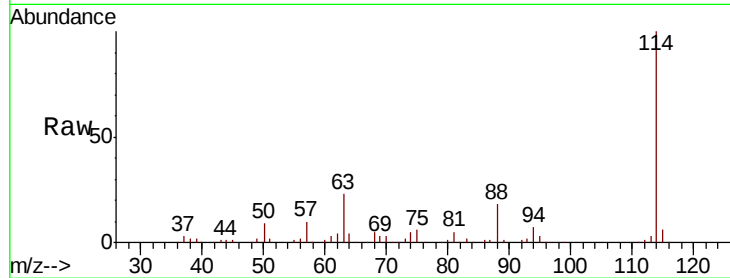




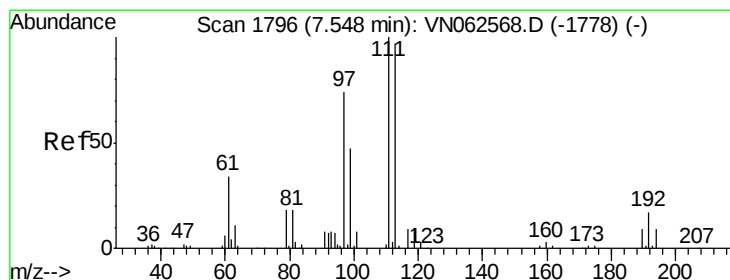
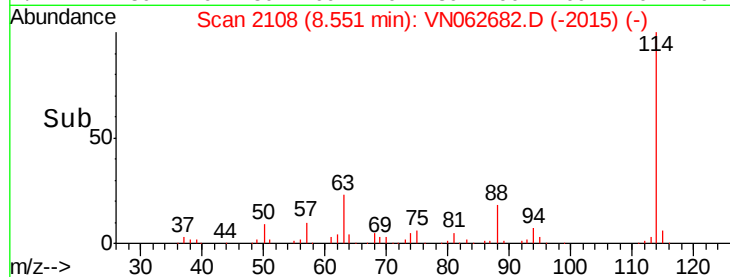
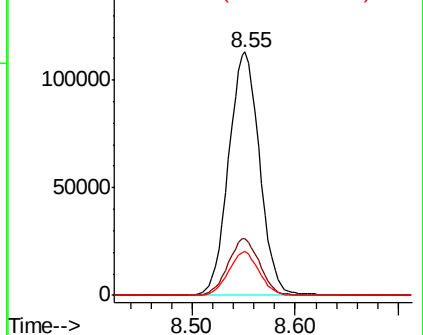
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. 0.00 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130640ZHE#05

Tot Ion:114 Resp: 236584  
 Ion Ratio Lower Upper  
 114 100  
 63 23.4 0.0 48.4  
 88 17.8 0.0 33.8

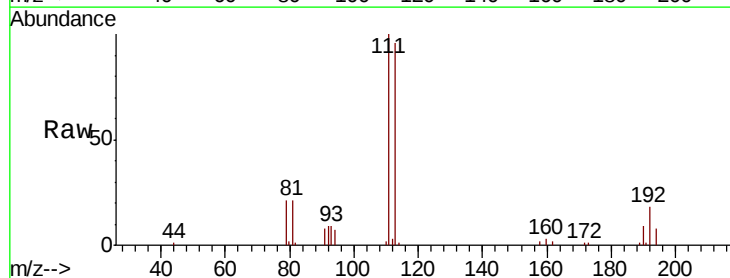


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

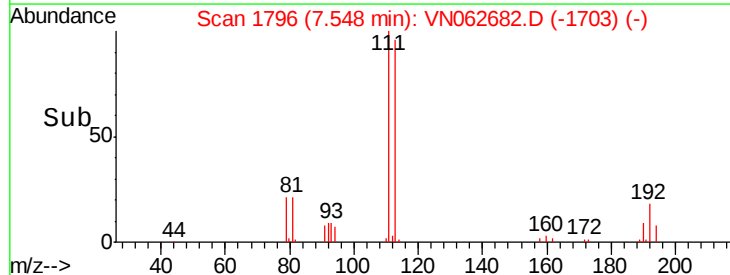
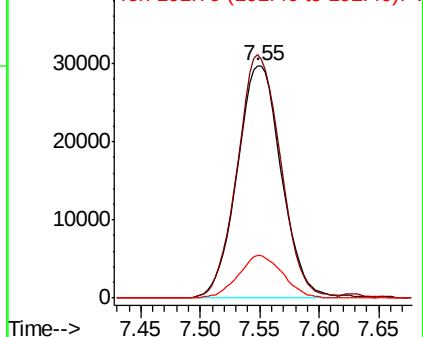


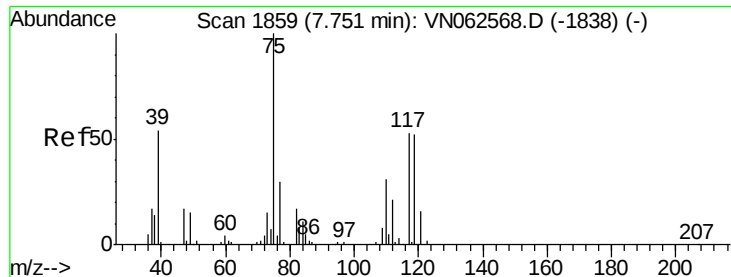
#35  
 Dibromofluoromethane  
 Concen: 49.295 ug/l  
 RT: 7.55 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

Tgt Ion:113 Resp: 76606  
 Ion Ratio Lower Upper  
 113 100  
 111 102.5 82.7 124.1  
 192 18.5 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

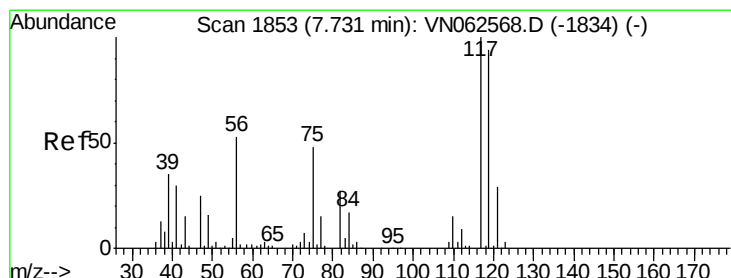
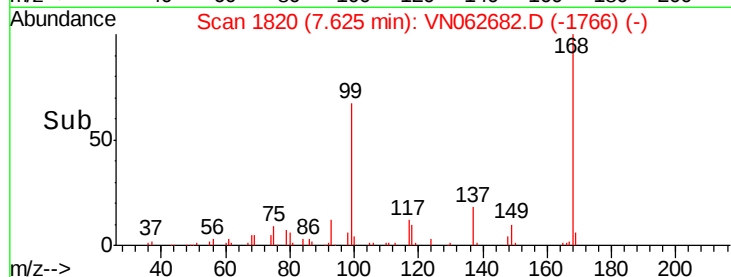
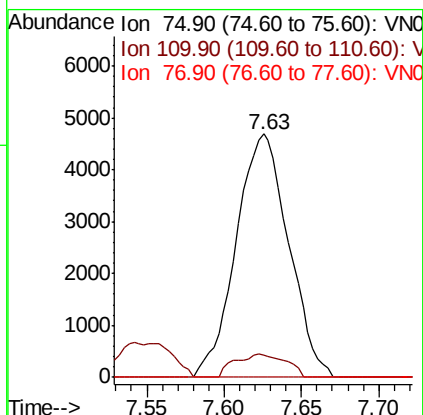
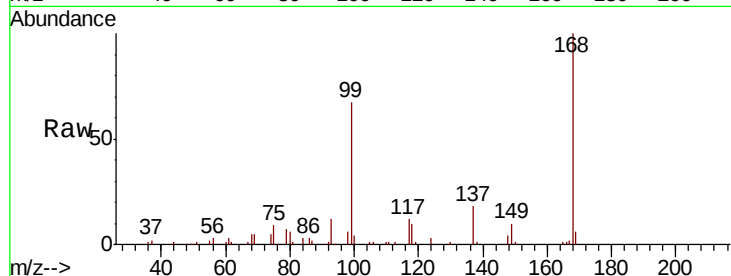




#36  
 1,1-Dichloropropene  
 Concen: 4.383 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.13 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

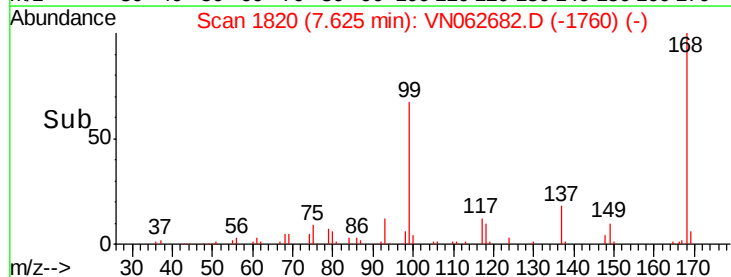
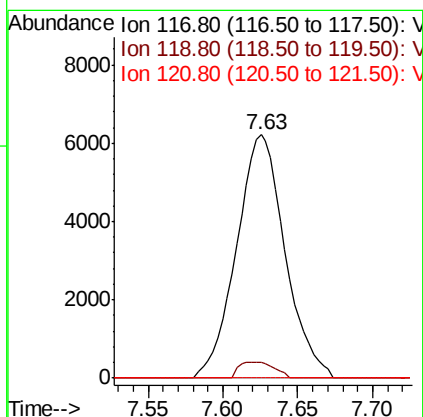
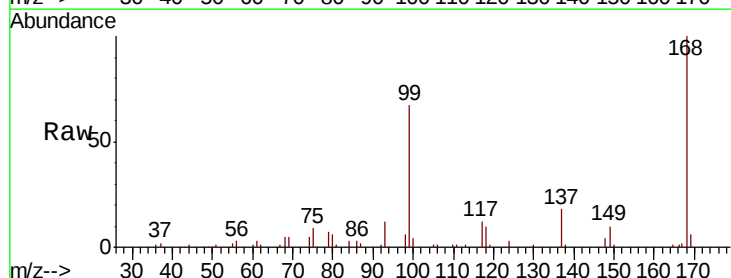
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130640ZHE#05

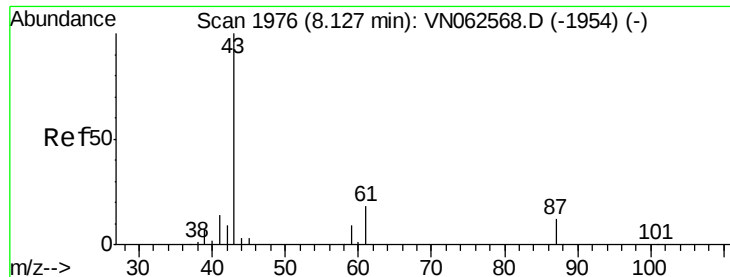
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.2   | 16.0  | 48.0# |
| 77      | 0.0   | 24.6  | 36.8# |



#38  
 Carbon Tetrachloride  
 Concen: 5.781 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.11 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.3   | 74.8  | 112.2# |
| 121     | 0.0   | 23.0  | 34.6#  |





#43

Isopropyl Acetate

Concen: 11.453 ug/l

RT: 8.13 min Scan# 1976

Delta R.T. 0.00 min

Lab File: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

PB130640ZHE#05

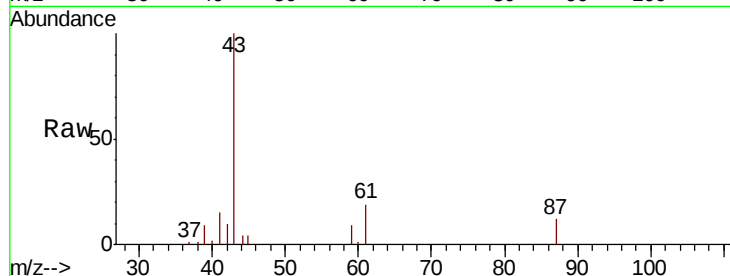
Tot Ion: 43 Resp: 50187

Ion Ratio Lower Upper

43 100

61 18.1 20.8 31.2#

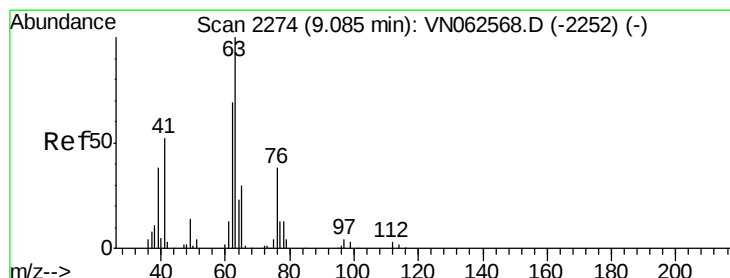
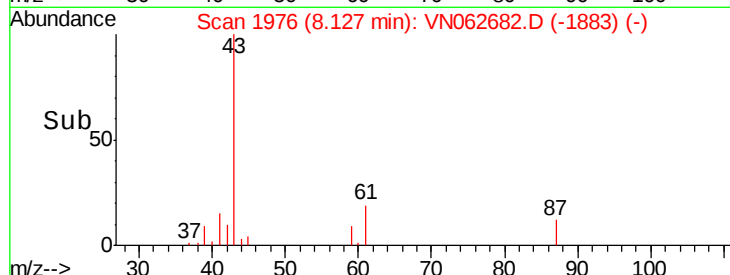
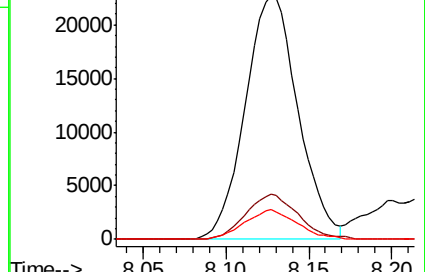
87 12.0 9.2 13.8



Abundance Ion 43.00 (42.70 to 43.70): VN062682.D (-1883) (-)

Ion 61.00 (60.70 to 61.70): VN062682.D (-1883) (-)

Ion 87.00 (86.70 to 87.70): VN062682.D (-1883) (-)



#45

1,2-Dichloropropane

Concen: 0.462 ug/l

RT: 9.23 min Scan# 2320

Delta R.T. 0.15 min

Lab File: VN062682.D

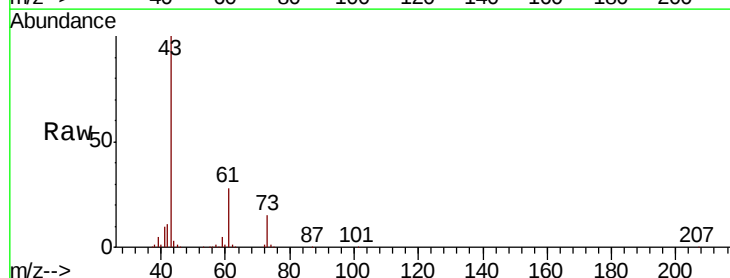
Acq: 31 Jul 2020 13:53

Tgt Ion: 63 Resp: 990

Ion Ratio Lower Upper

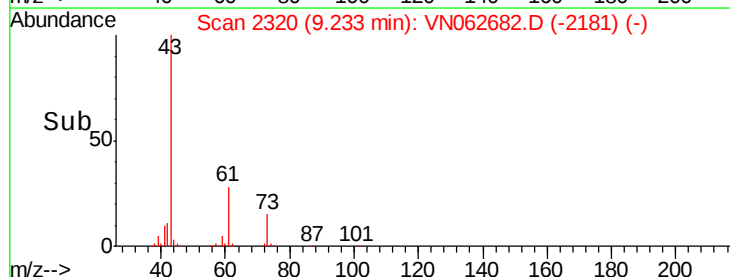
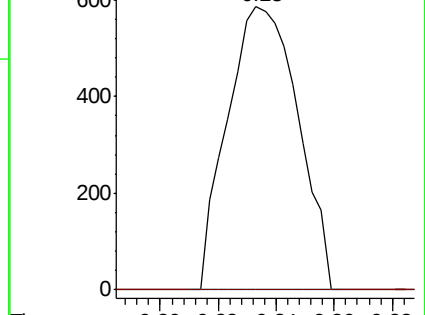
63 100

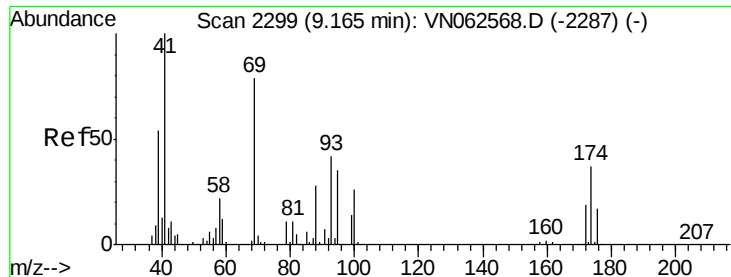
65 0.0 24.4 36.6#



Abundance Ion 62.90 (62.60 to 63.60): VN062682.D (-2181) (-)

Ion 64.90 (64.60 to 65.60): VN062682.D (-2181) (-)

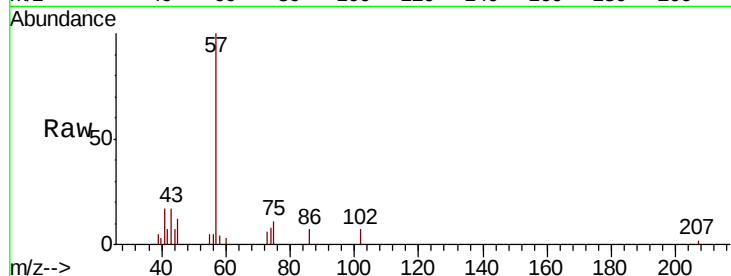




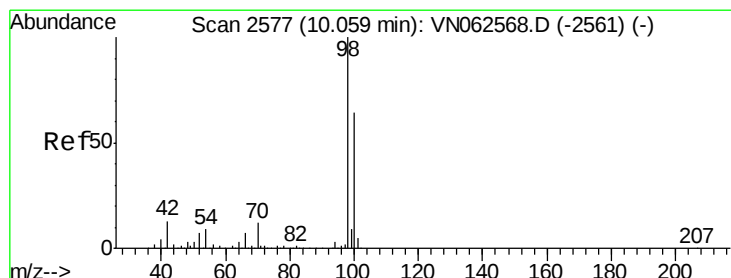
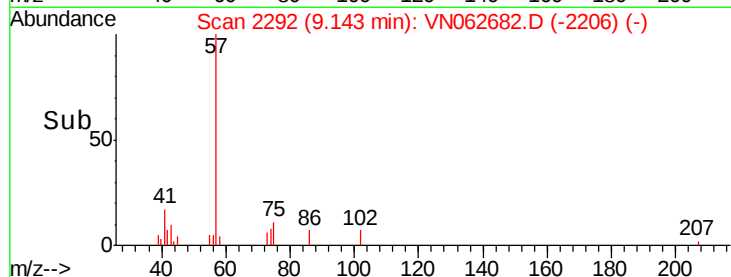
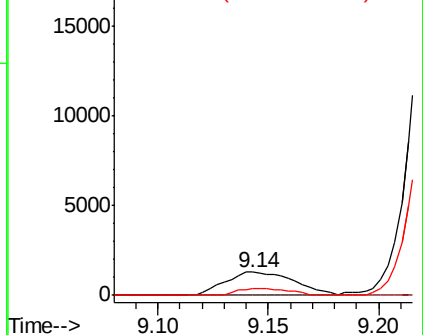
#48  
Methvl methacrylate  
Concen: 1.349 ug/l  
RT: 9.14 min Scan# 2292  
Delta R.T. -0.02 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130640ZHE#05

Tot Ion: 41 Resp: 2810  
Ion Ratio Lower Upper  
41 100  
69 0.0 64.4 96.6#  
39 0.0 43.5 65.3#

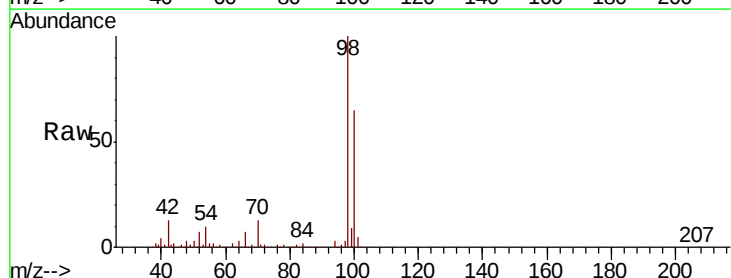


Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0

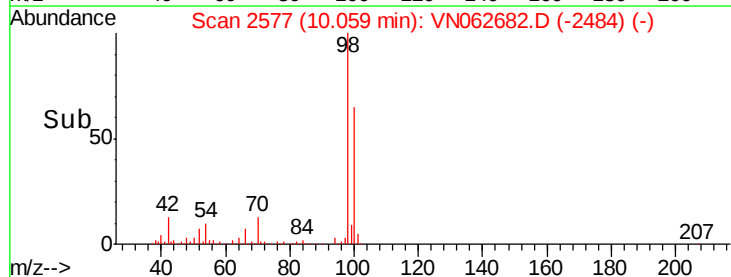
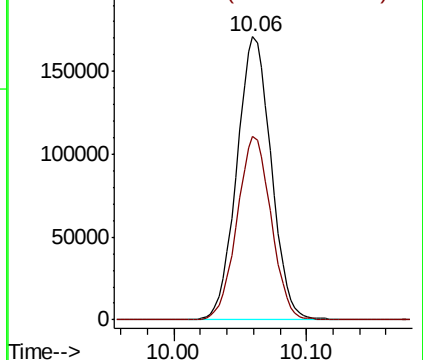


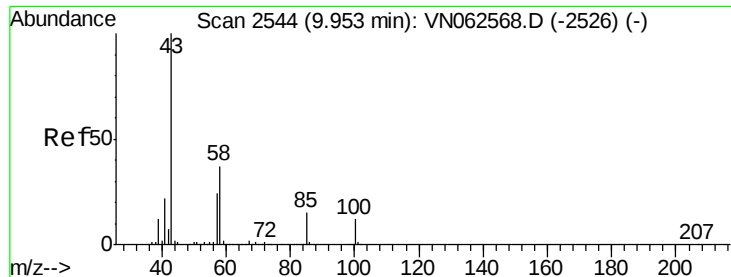
#50  
Toluene-d8  
Concen: 49.726 ug/l  
RT: 10.06 min Scan# 2577  
Delta R.T. 0.00 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Tgt Ion: 98 Resp: 308324  
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

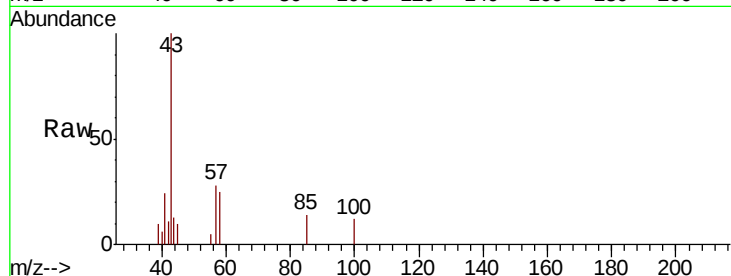




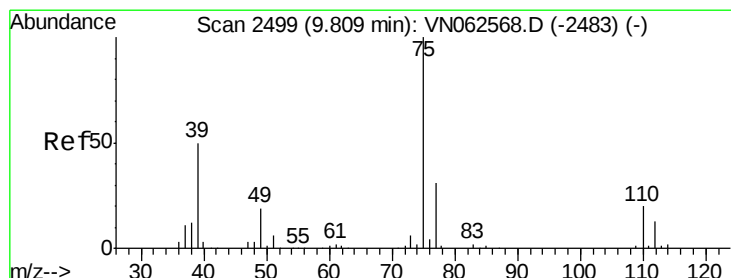
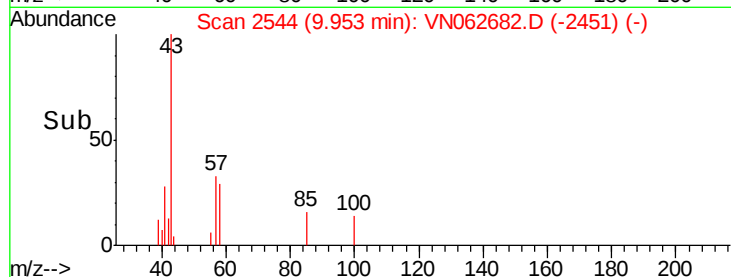
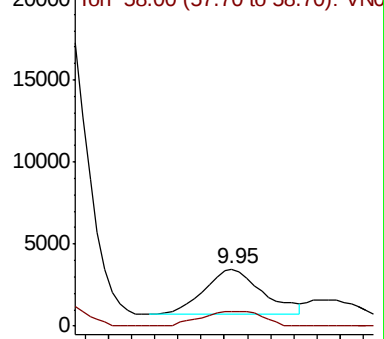
#51  
4-Methyl-2-Pentanone  
Concen: 1.824 ug/l  
RT: 9.95 min Scan# 2544  
Delta R.T. 0.00 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130640ZHE#05

Tot Ion: 43 Resp: 4783  
Ion Ratio Lower Upper  
43 100  
58 34.3 29.8 44.6

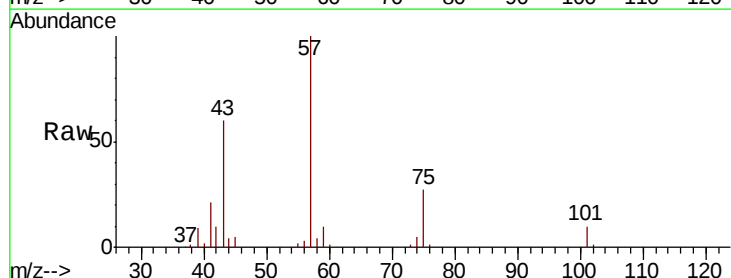


Abundance Ion 43.00 (42.70 to 43.70): VN0  
Ion 58.00 (57.70 to 58.70): VN0

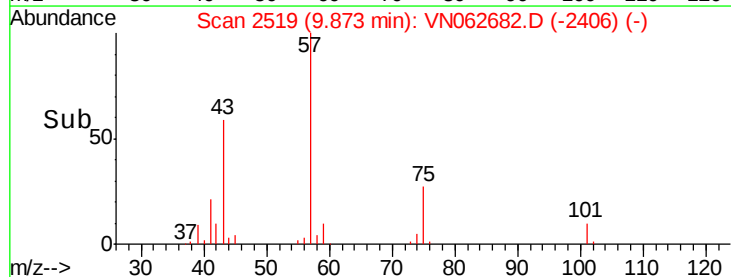
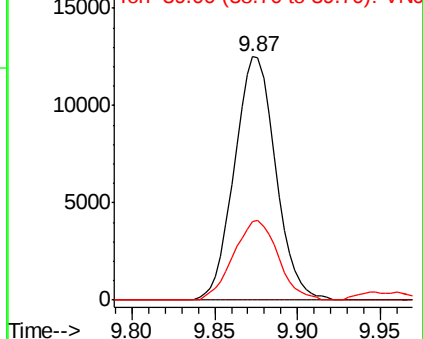


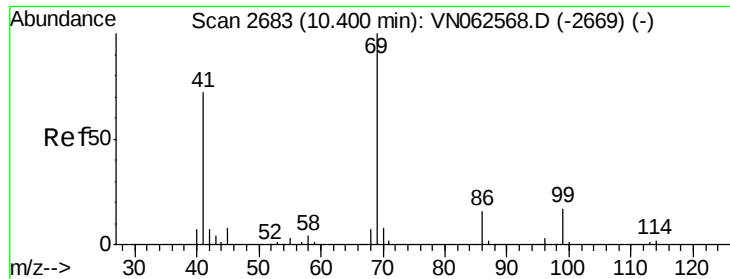
#54  
cis-1,3-Dichloropropene  
Concen: 6.769 ug/l  
RT: 9.87 min Scan# 2519  
Delta R.T. 0.06 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Tgt Ion: 75 Resp: 21701  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.0 37.6#  
39 32.2 39.8 59.8#



Abundance Ion 74.90 (74.60 to 75.60): VN0  
Ion 76.90 (76.60 to 77.60): VN0  
Ion 39.00 (38.70 to 39.70): VN0





#56

Ethyl methacrylate

Concen: 2.143 ug/l

RT: 10.51 min Scan# 2718

Delta R.T. 0.11 min

Lab File: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

PB130640ZHE#05

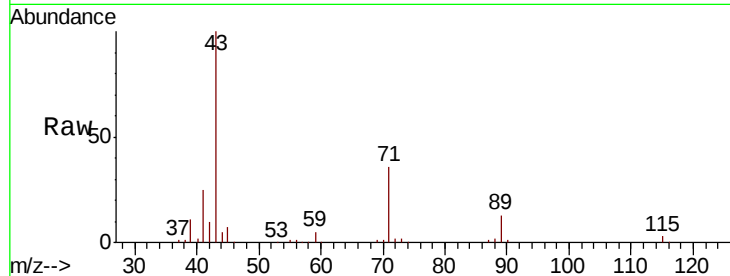
Tot Ion: 69 Resp: 1197

Ion Ratio Lower Upper

69 100

41 4085.4 57.2 85.8#

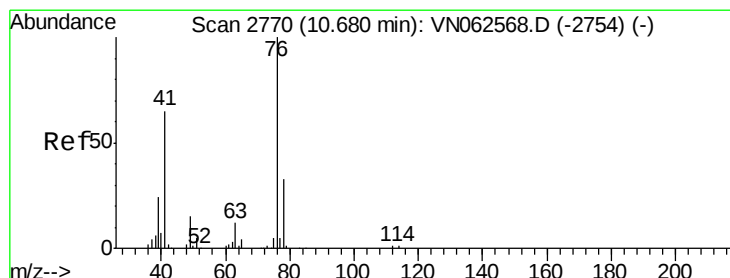
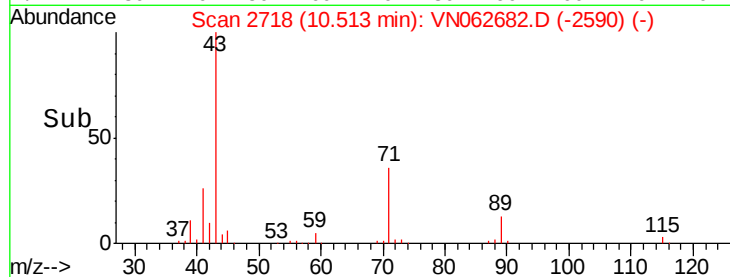
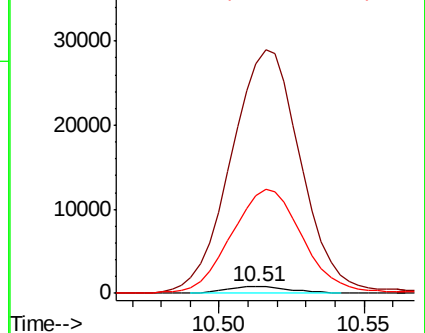
39 1788.1 28.6 43.0#



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: 1.175 ug/l

RT: 10.73 min Scan# 2787

Delta R.T. 0.05 min

Lab File: VN062682.D

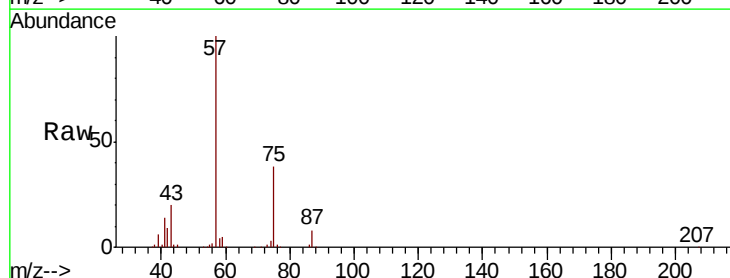
Acq: 31 Jul 2020 13:53

Tgt Ion: 76 Resp: 3702

Ion Ratio Lower Upper

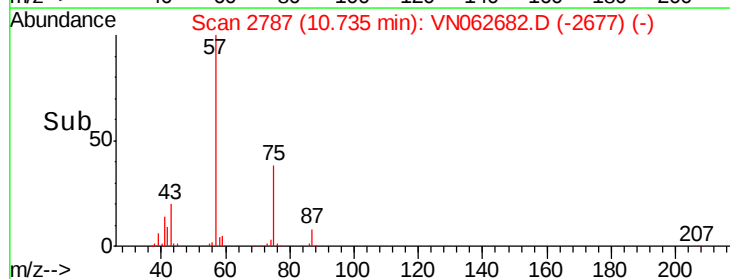
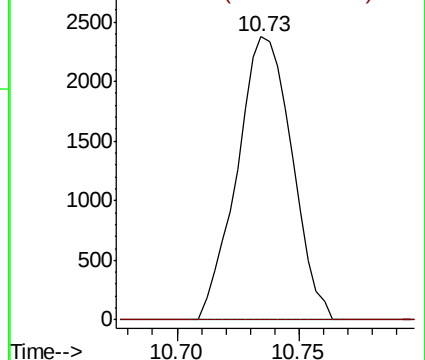
76 100

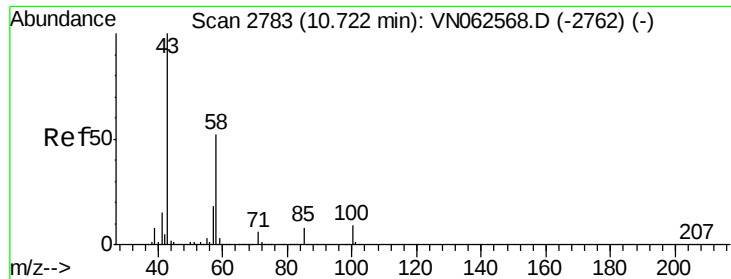
78 0.0 26.3 39.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

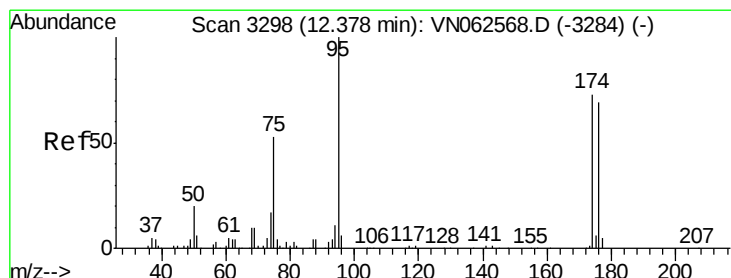
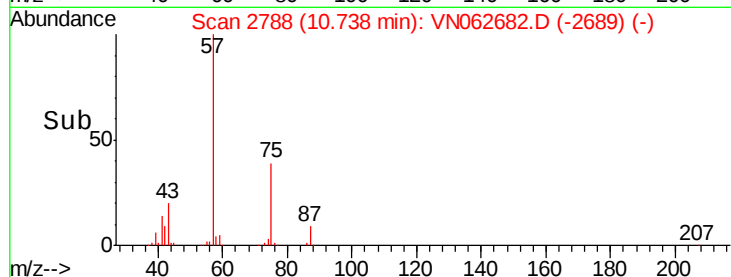
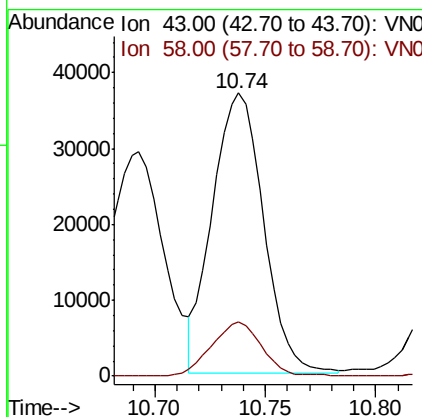
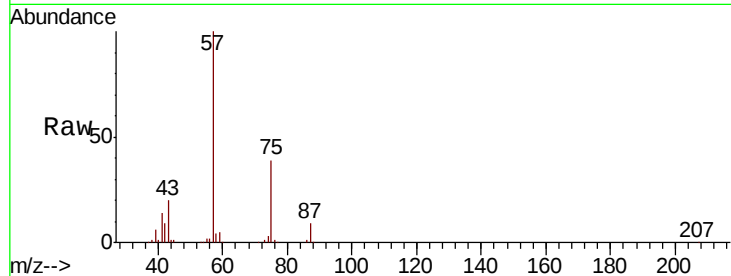




#59  
2-Hexanone  
Concen: 31.791 ug/l  
RT: 10.74 min Scan# 2788  
Delta R.T. 0.02 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

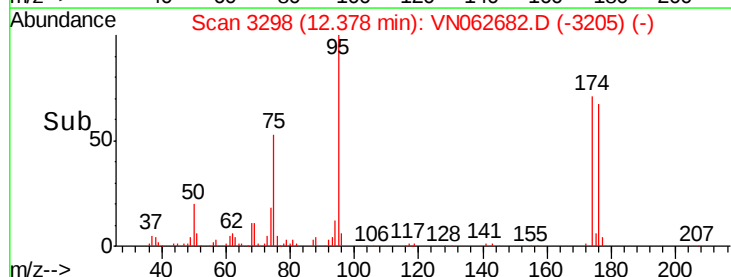
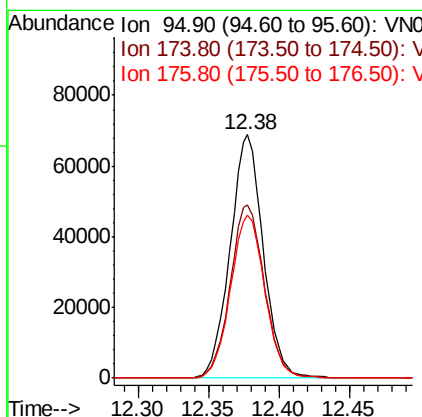
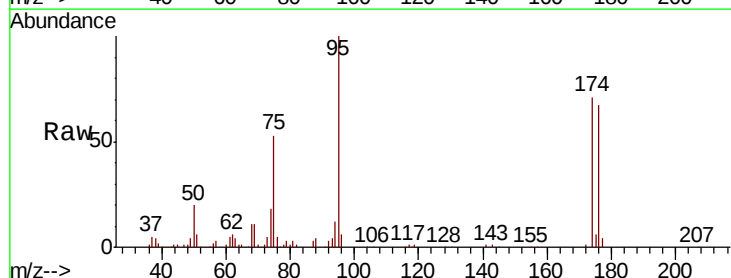
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130640ZHE#05

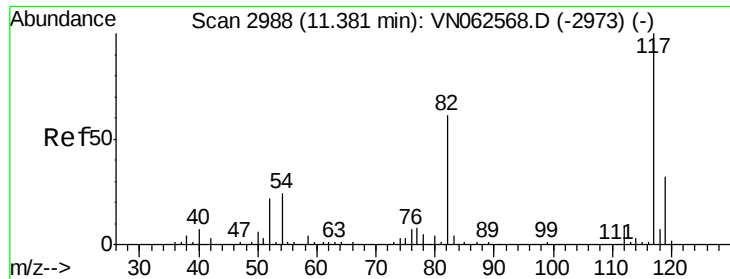
Tot Ion: 43 Resp: 59165  
Ion Ratio Lower Upper  
43 100  
58 19.1 26.0 78.0#



#62  
4-Bromofluorobenzene  
Concen: 49.846 ug/l  
RT: 12.38 min Scan# 3298  
Delta R.T. 0.00 min  
Lab File: VN062682.D  
Acq: 31 Jul 2020 13:53

Tgt Ion: 95 Resp: 113007  
Ion Ratio Lower Upper  
95 100  
174 73.5 0.0 144.6  
176 69.4 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: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

PB130640ZHE#05

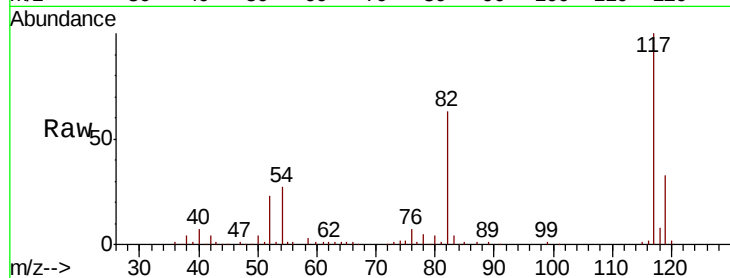
Tot Ion:117 Resp: 234793

Ion Ratio Lower Upper

117 100

82 63.0 49.0 73.6

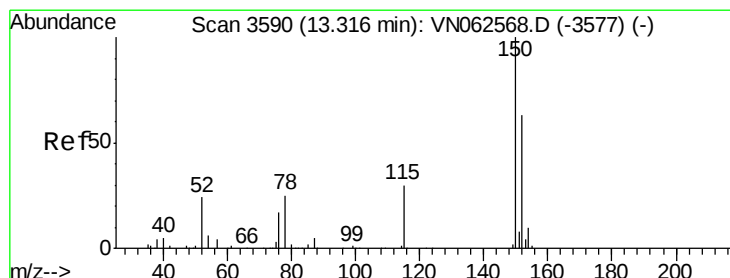
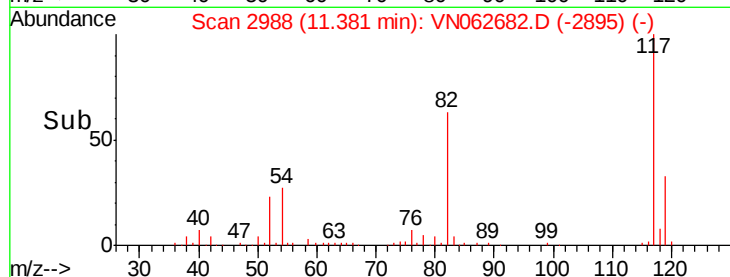
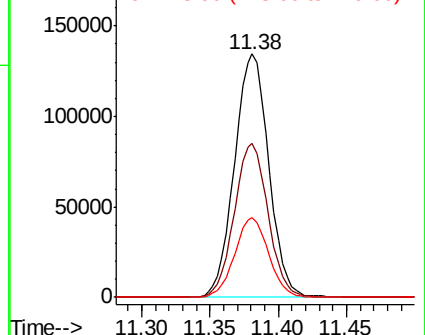
119 32.8 25.4 38.2



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN

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: VN062682.D

Acq: 31 Jul 2020 13:53

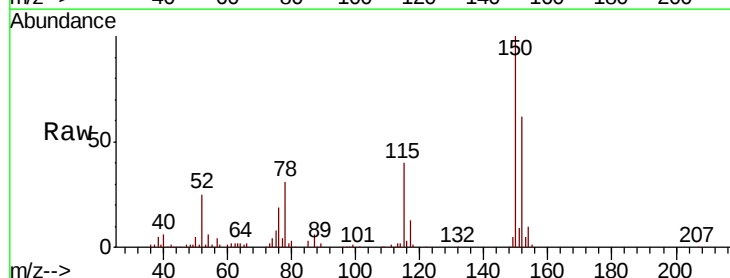
Tgt Ion:152 Resp: 83485

Ion Ratio Lower Upper

152 100

115 64.9 31.8 95.4

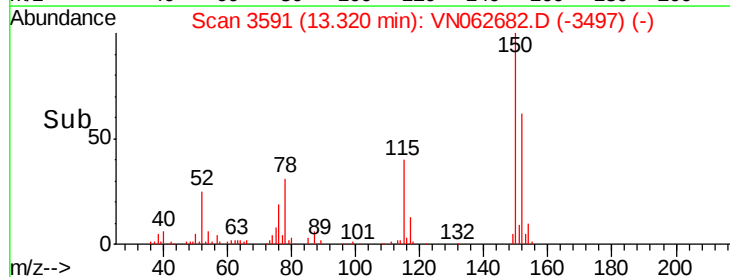
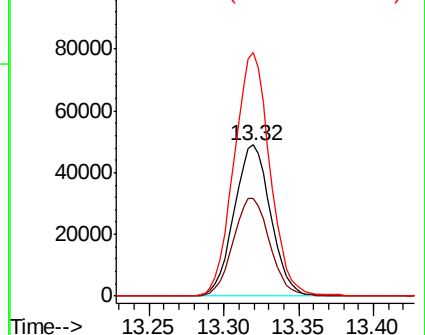
150 158.4 0.0 351.4

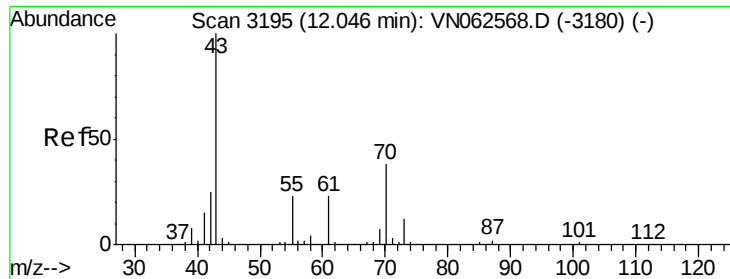


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 0.500 ug/l

RT: 12.00 min Scan# 3182

Delta R.T. -0.04 min

Lab File: VN062682.D

Acq: 31 Jul 2020 13:53

Instrument :

MSVOA\_N

ClientSampleId :

PB130640ZHE#05

Tot Ion: 43 Resp: 1473

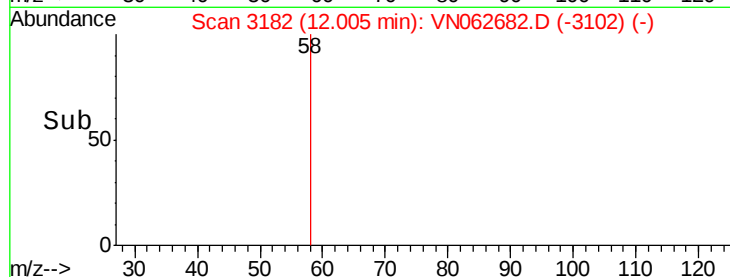
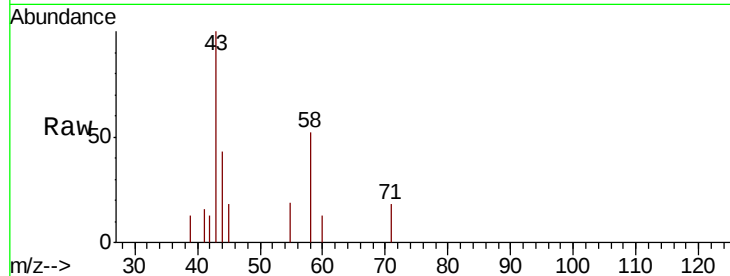
Ion Ratio Lower Upper

43 100

70 0.0 30.5 45.7#

55 6.0 19.0 28.6#

61 0.0 18.4 27.6#

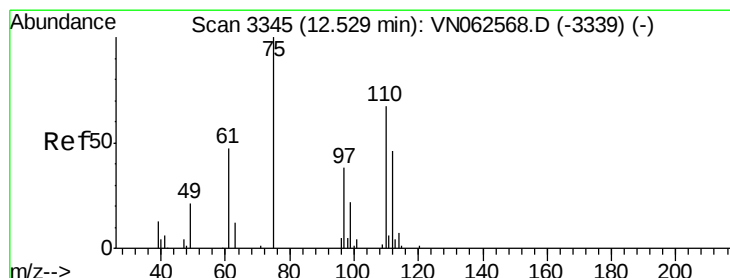
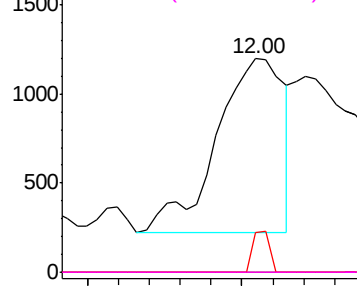


Abundance Ion 43.00 (42.70 to 43.70): VN0

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: 29.117 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. -0.15 min

Lab File: VN062682.D

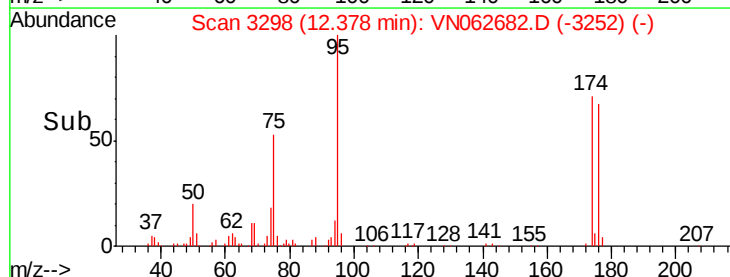
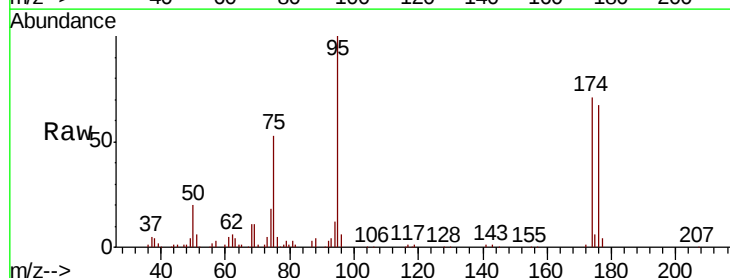
Acq: 31 Jul 2020 13:53

Tgt Ion: 75 Resp: 61874

Ion Ratio Lower Upper

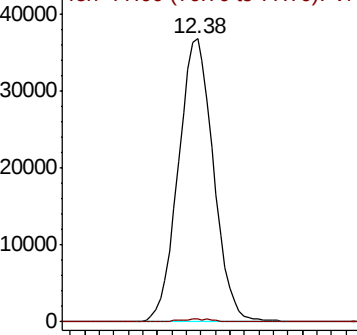
75 100

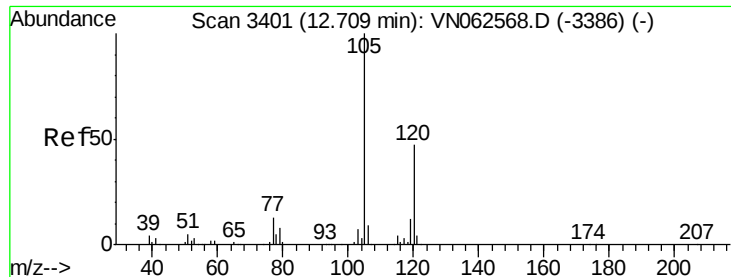
77 0.8 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

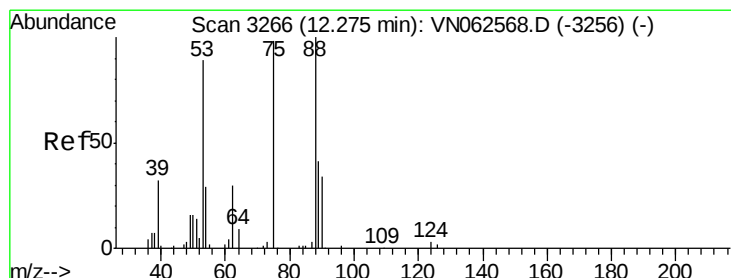
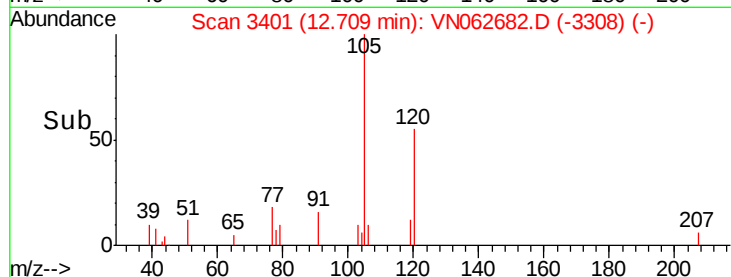
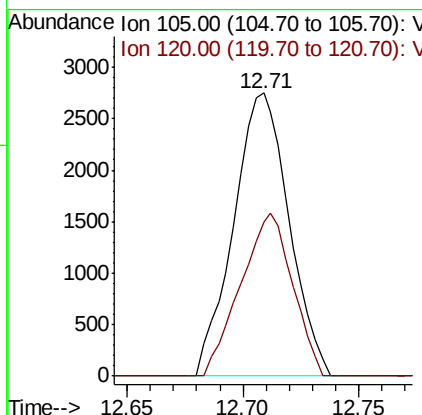
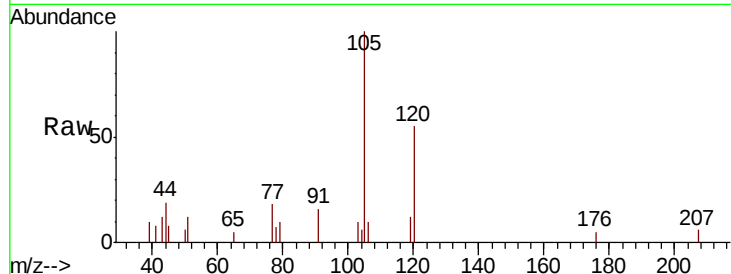




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.834 ug/l  
 RT: 12.71 min Scan# 3401  
 Delta R.T. 0.00 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130640ZHE#05

Tot Ion:105 Resp: 4567  
 Ion Ratio Lower Upper  
 105 100  
 120 53.8 23.2 69.6



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 81.056 ug/l  
 RT: 12.38 min Scan# 3298  
 Delta R.T. 0.10 min  
 Lab File: VN062682.D  
 Acq: 31 Jul 2020 13:53

Tgt Ion: 75 Resp: 61874  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 75.4 113.0#  
 89 0.0 34.5 51.7#

