

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081220\  
 Data File : VN062880.D  
 Acq On : 13 Aug 2020 1:30  
 Operator : JC/MD  
 Sample : PB130908ZHE#10  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130908ZHE#10

Quant Time: Aug 13 05:28:39 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080520W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 05 13:26:42 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 136398   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 244623   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 240960   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 91165    | 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   | 114815   | 50.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.80% |          |
| 35) Dibromofluoromethane    | 7.55  | 113  | 85525    | 51.11 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.22% |          |
| 50) Toluene-d8              | 10.06 | 98   | 315668   | 48.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.64%  |          |
| 62) 4-Bromofluorobenzene    | 12.38 | 95   | 113199   | 45.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.70%  |          |

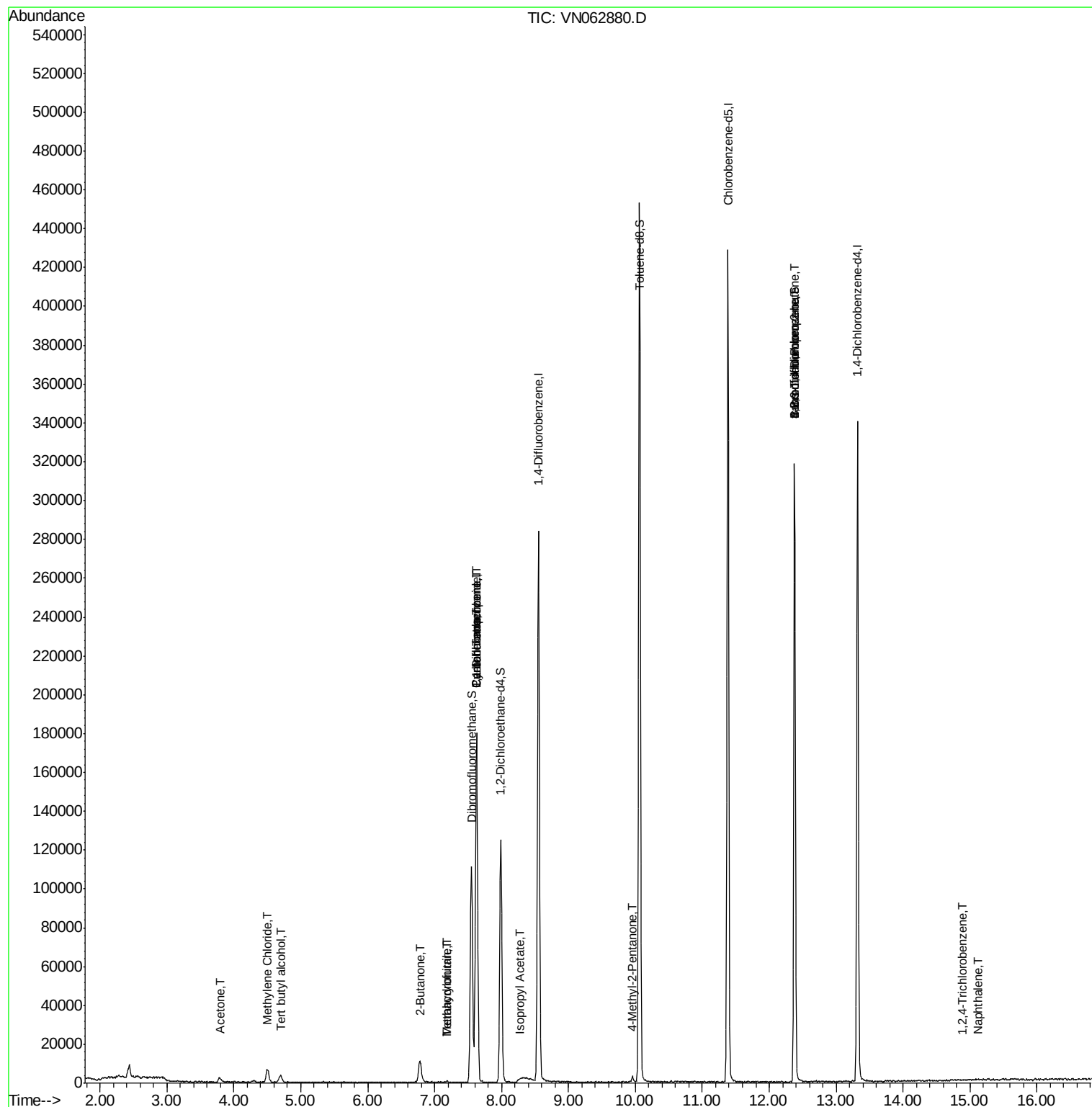
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.70  | 59   | 2335     | 6.316     | ug/l # | 72     |
| 16) Acetone                    | 3.79  | 43   | 4201     | 5.154     | ug/l   | 98     |
| 17) Carbon Disulfide           | 4.00  | 76   | 64       | Below Cal | #      | 74     |
| 18) Methyl Acetate             | 4.29  | 43   | 1391     | Below Cal | #      | 52     |
| 20) Methylene Chloride         | 4.49  | 84   | 2562     | 0.972     | ug/l   | 90     |
| 25) 2-Butanone                 | 6.79  | 43   | 806      | 0.698     | ug/l # | 49     |
| 29) Tetrahydrofuran            | 7.18  | 42   | 756      | 1.008     | ug/l # | 40     |
| 31) Cyclohexane                | 7.63  | 56   | 3213     | 1.175     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.63  | 75   | 11437    | 4.802     | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 7.63  | 117  | 14539    | 5.161     | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.18  | 41   | 381      | 0.339     | ug/l # | 6      |
| 43) Isopropyl Acetate          | 8.27  | 43   | 1677     | 0.404     | ug/l # | 61     |
| 51) 4-Methyl-2-Pentanone       | 9.96  | 43   | 2771     | 1.032     | ug/l # | 72     |
| 71) Bromoform                  | 12.38 | 173  | 630      | 0.381     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75   | 60694    | 24.686    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 60694    | 75.360    | ug/l # | 10     |
| 93) 1,2,4-Trichlorobenzene     | 14.89 | 180  | 29       | 3.340     | ug/l # | 11     |
| 95) Naphthalene                | 15.11 | 128  | 628      | 3.847     | ug/l # | 68     |

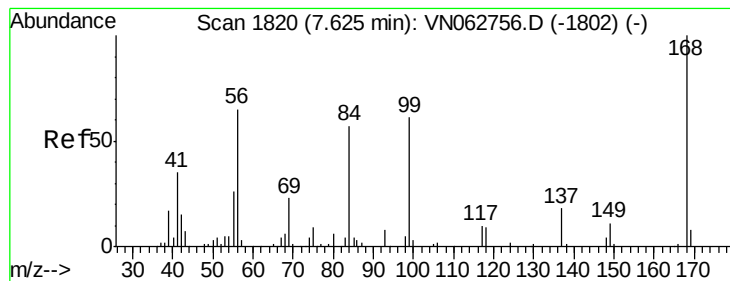
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN081220\  
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Sample : PB130908ZHE#10  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 36 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
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Quant Time: Aug 13 05:28:39 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N080520W.M  
Quant Title : SW846 8260  
QLast Update : Wed Aug 05 13:26:42 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: VN062880.D

Acq: 13 Aug 2020 1:30

Instrument :

MSVOA\_N

ClientSampleId :

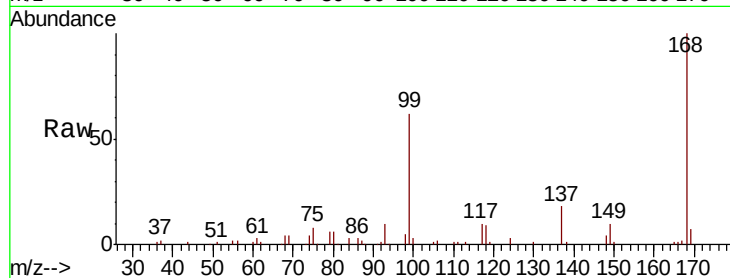
PB130908ZHE#10

Tot Ion:168 Resp: 136398

Ion Ratio Lower Upper

168 100

99 62.1 52.9 79.3



Abundance Ion 167.90 (167.60 to 168.60): VN062756.D (-1802) (-)

Ion 98.90 (98.60 to 99.60): VN062756.D (-1802) (-)

7.63

60000

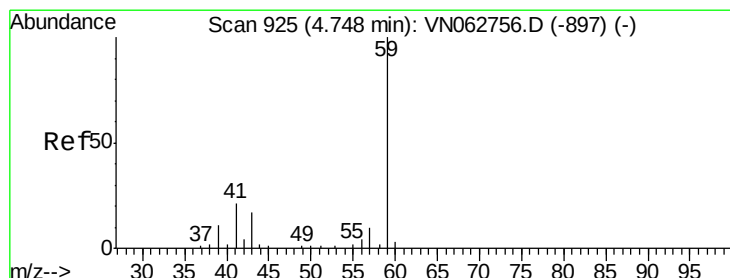
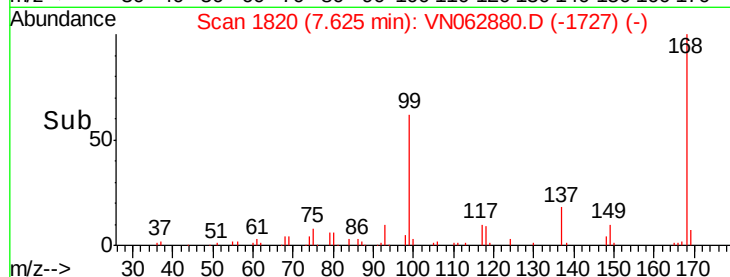
40000

20000

0

7.55 7.60 7.65 7.70

Time-->



#11

Tert butyl alcohol

Concen: 6.316 ug/l

RT: 4.70 min Scan# 909

Delta R.T. -0.05 min

Lab File: VN062880.D

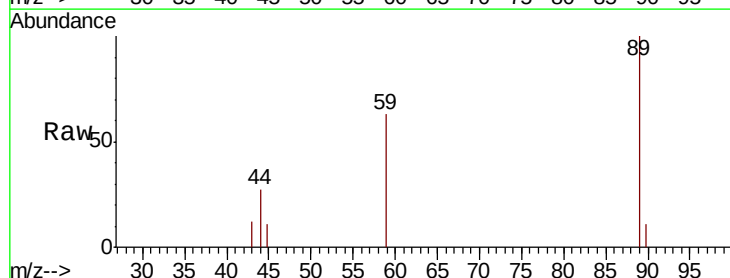
Acq: 13 Aug 2020 1:30

Tgt Ion: 59 Resp: 2335

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VN062756.D (-897) (-)

Ion 57.00 (56.70 to 57.70): VN062756.D (-897) (-)

4.70

1200

1000

800

600

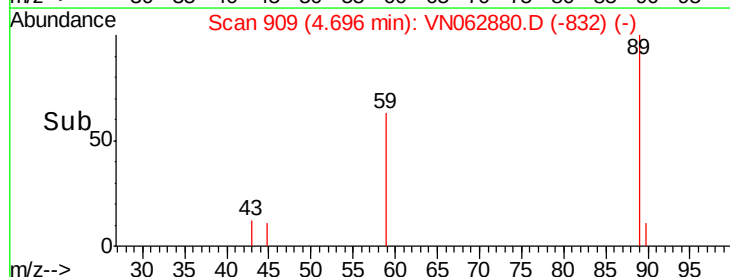
400

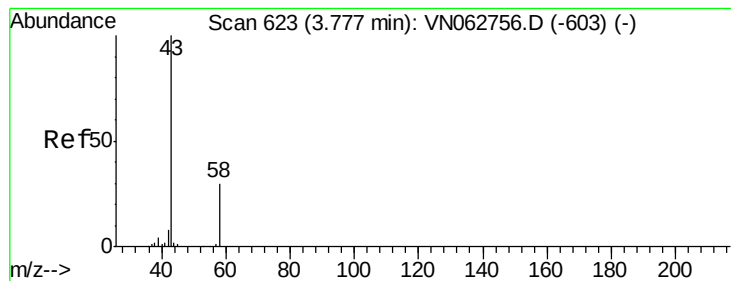
200

0

4.65 4.70

Time-->





#16

Acetone

Concen: 5.154 ug/l

RT: 3.79 min Scan# 628

Delta R.T. 0.02 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

Instrument :

MSVOA\_N

ClientSampleId :

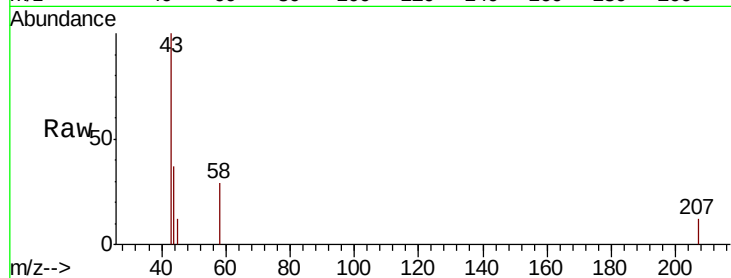
PB130908ZHE#10

Tot Ion: 43 Resp: 4201

Ion Ratio Lower Upper

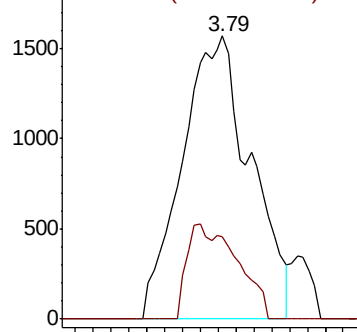
43 100

58 29.0 24.1 36.1

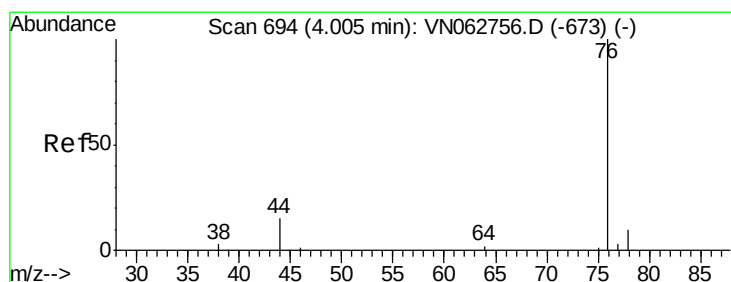
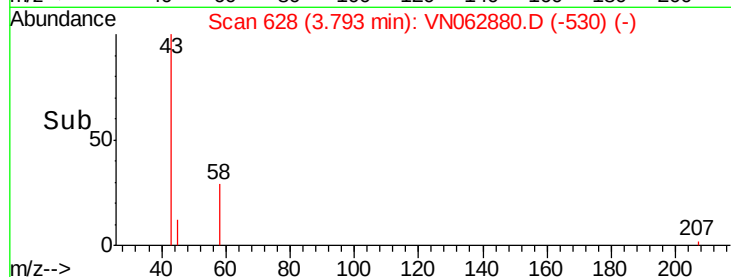


Abundance Ion 43.00 (42.70 to 43.70): VN062756.D (-603) (-)

Ion 58.00 (57.70 to 58.70): VN062756.D (-603) (-)



Time-->



#17

Carbon Disulfide

Concen: Below Cal

RT: 4.00 min Scan# 692

Delta R.T. -0.01 min

Lab File: VN062880.D

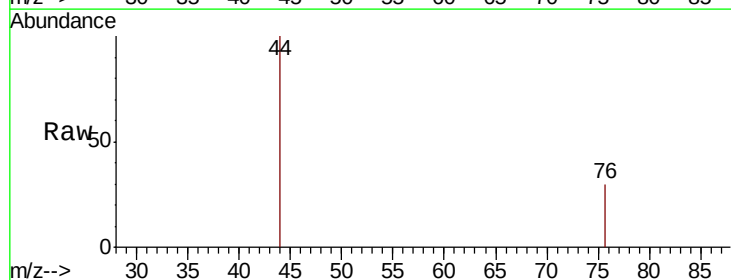
Acq: 13 Aug 2020 1:30

Tgt Ion: 76 Resp: 64

Ion Ratio Lower Upper

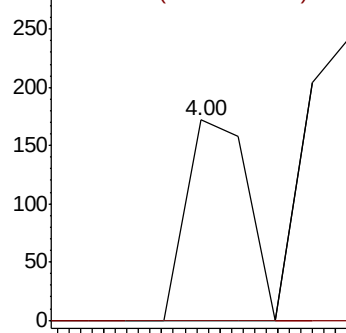
76 100

78 0.0 7.7 11.5#

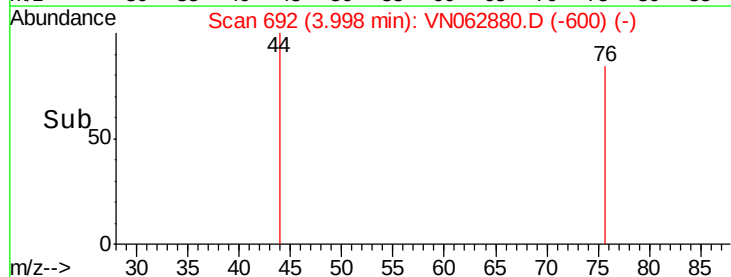


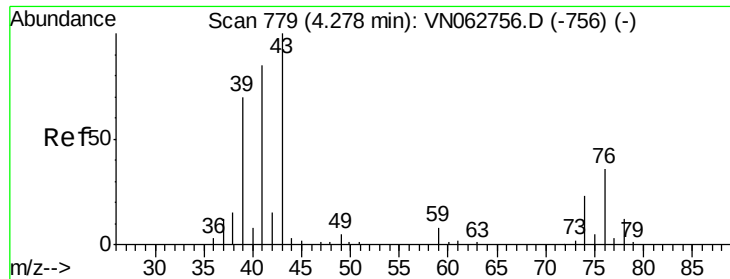
Abundance Ion 75.90 (75.60 to 76.60): VN062756.D (-673) (-)

Ion 77.90 (77.60 to 78.60): VN062756.D (-673) (-)



Time-->

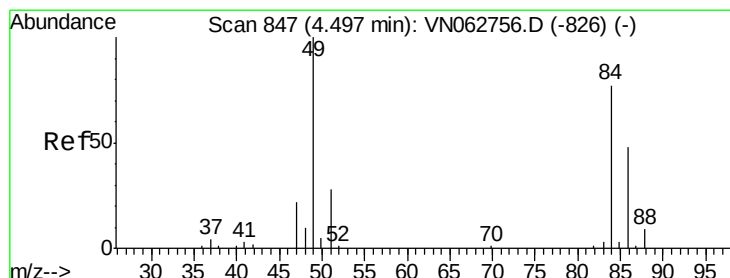
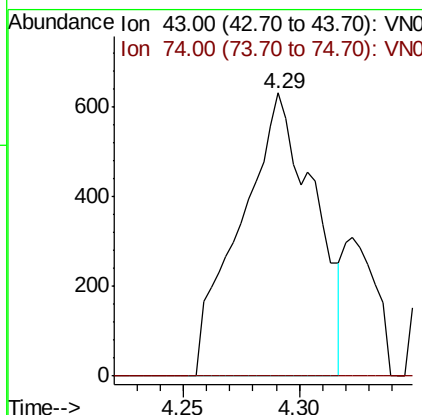
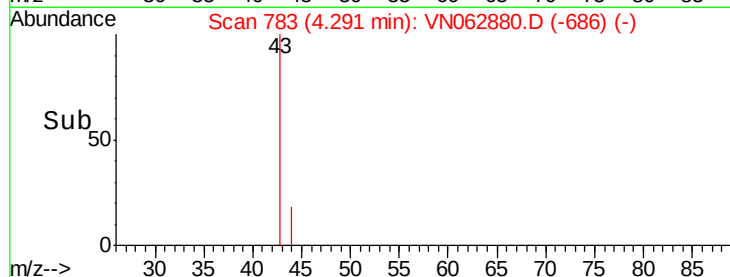
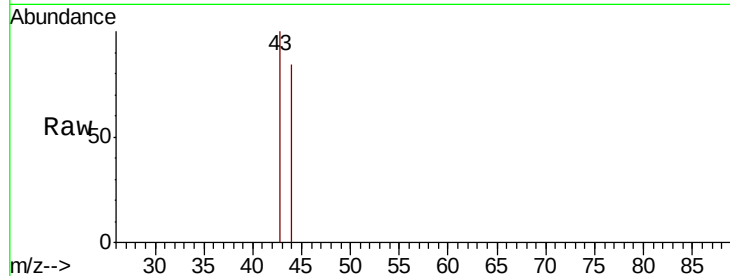




#18  
Methvl Acetate  
Concen: Below Cal  
RT: 4.29 min Scan# 783  
Delta R.T. 0.01 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

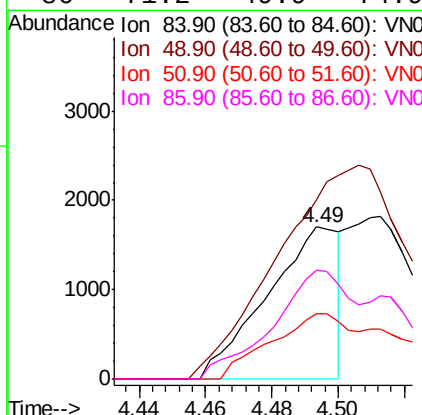
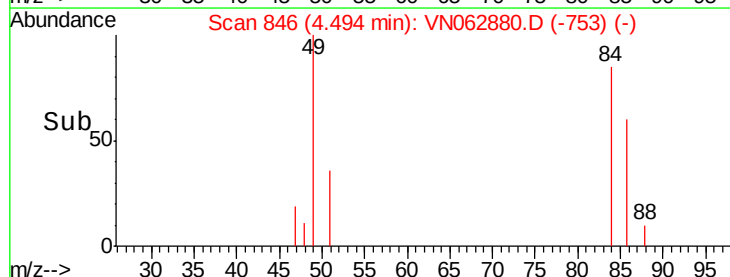
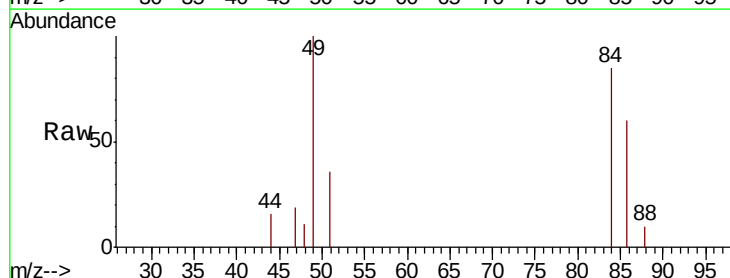
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130908ZHE#10

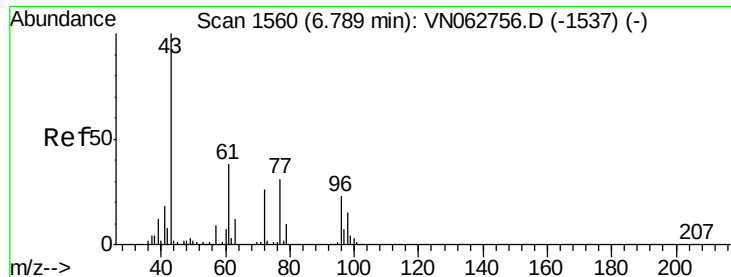
Tot Ion: 43 Resp: 1391  
Ion Ratio Lower Upper  
43 100  
74 0.0 18.6 28.0#



#20  
Methylene Chloride  
Concen: 0.972 ug/l  
RT: 4.49 min Scan# 846  
Delta R.T. -0.00 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

Tgt Ion: 84 Resp: 2562  
Ion Ratio Lower Upper  
84 100  
49 117.7 103.4 155.2  
51 42.9 29.3 43.9  
86 71.2 49.9 74.9





#25

2-Butanone

Concen: 0.698 ug/l

RT: 6.79 min Scan# 1559

Delta R.T. -0.00 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

Instrument :

MSVOA\_N

ClientSampleId :

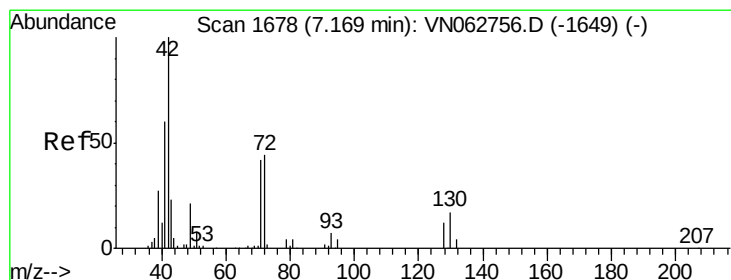
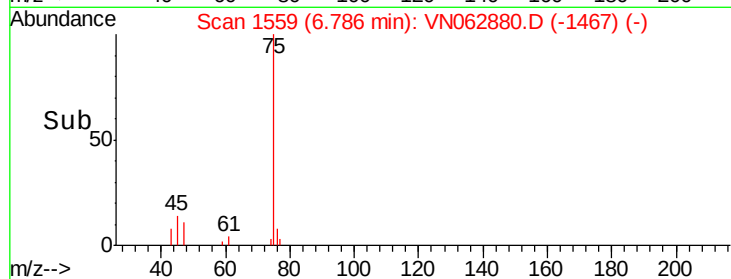
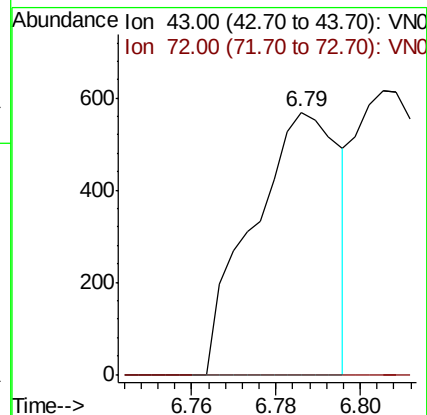
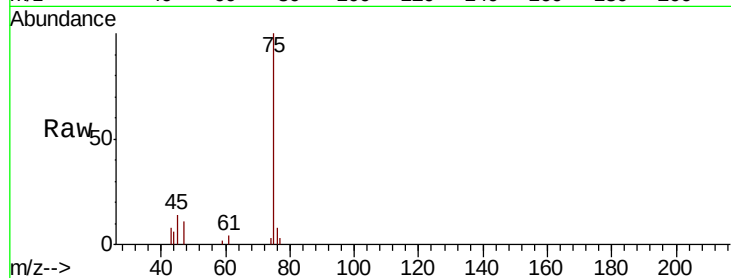
PB130908ZHE#10

Tot Ion: 43 Resp: 806

Ion Ratio Lower Upper

43 100

72 0.0 21.1 31.7#



#29

Tetrahydrofuran

Concen: 1.008 ug/l

RT: 7.18 min Scan# 1680

Delta R.T. 0.01 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

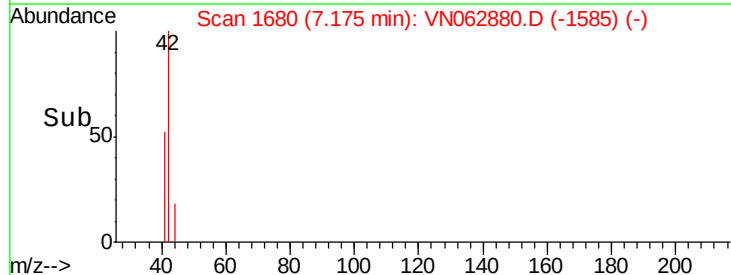
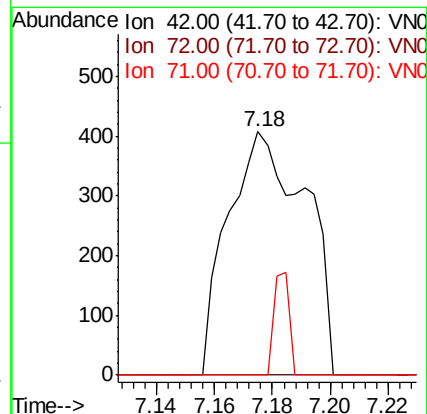
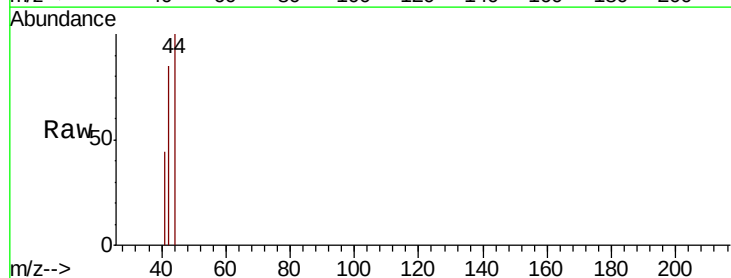
Tgt Ion: 42 Resp: 756

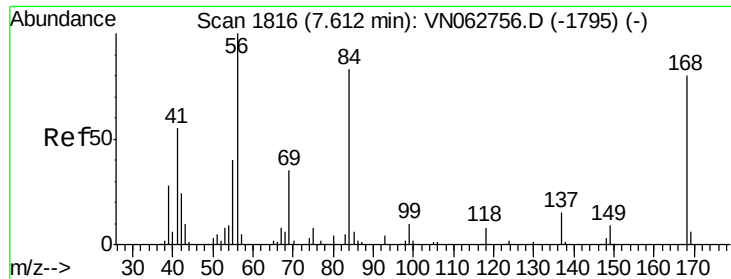
Ion Ratio Lower Upper

42 100

72 0.0 35.0 52.4#

71 8.6 33.2 49.8#

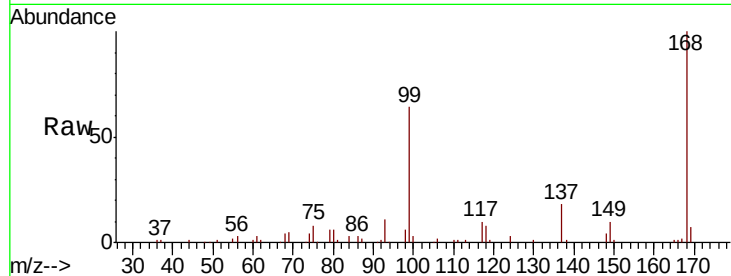




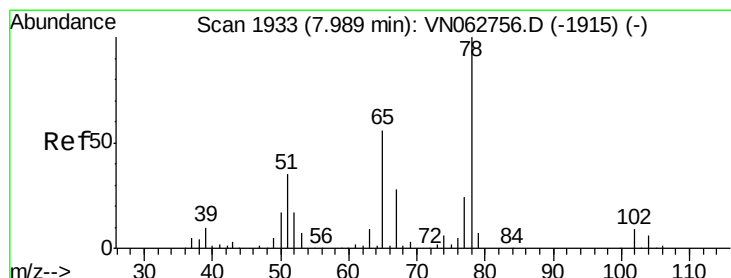
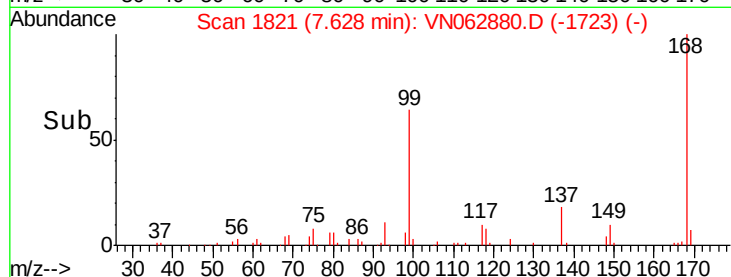
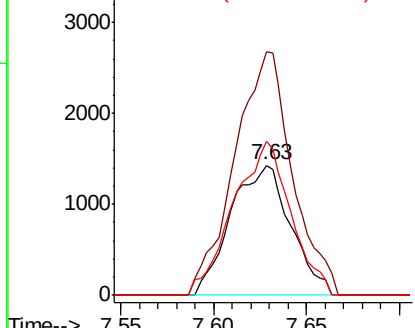
#31  
Cyclohexane  
Concen: 1.175 ug/l  
RT: 7.63 min Scan# 1821  
Delta R.T. 0.02 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130908ZHE#10

Tot Ion: 56 Resp: 3213  
Ion Ratio Lower Upper  
56 100  
69 187.0 28.1 42.1#  
84 118.1 66.8 100.2#

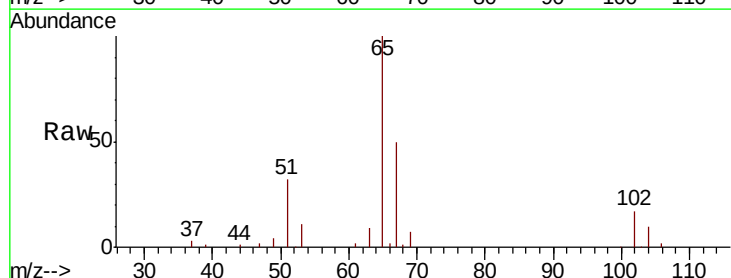


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

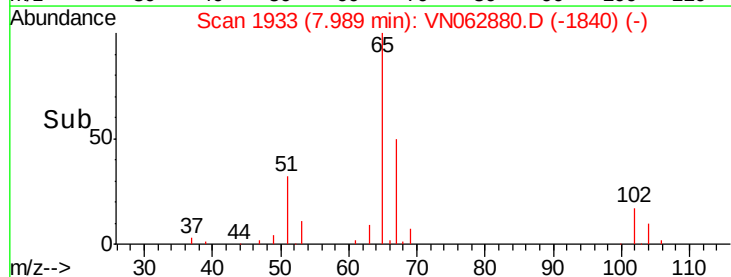
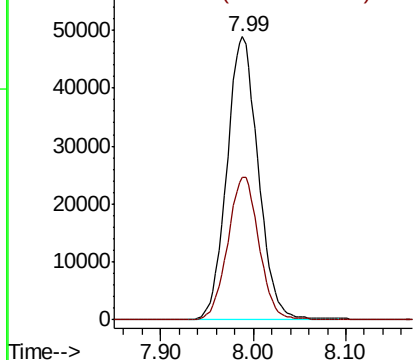


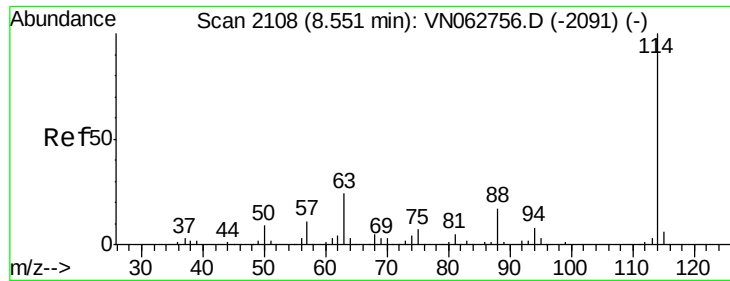
#33  
1,2-Dichloroethane-d4  
Concen: 50.902 ug/l  
RT: 7.99 min Scan# 1933  
Delta R.T. -0.00 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

Tgt Ion: 65 Resp: 114815  
Ion Ratio Lower Upper  
65 100  
67 50.0 0.0 101.4



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

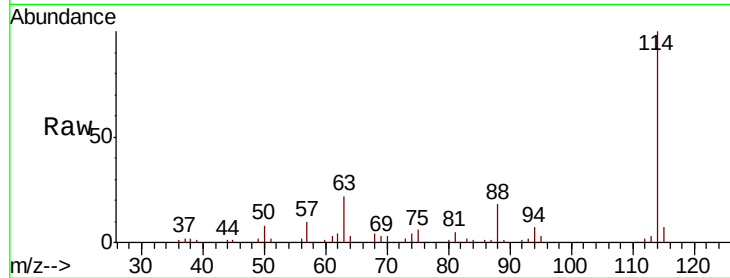




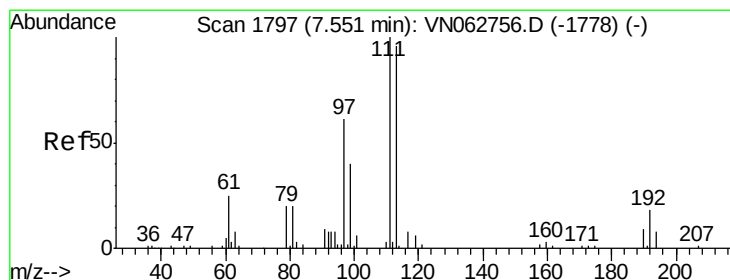
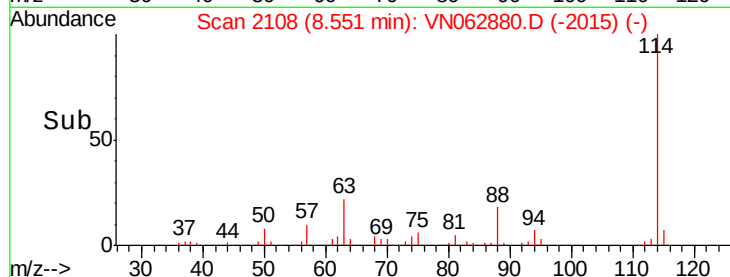
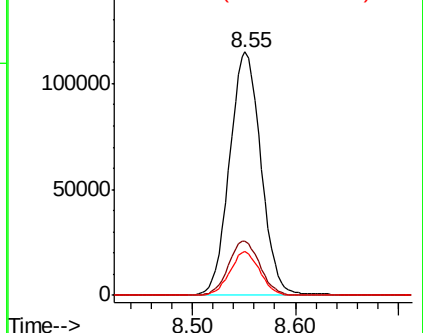
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. -0.00 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130908ZHE#10

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.2  | 0.0   | 47.6  |
| 88      | 18.1  | 0.0   | 34.4  |

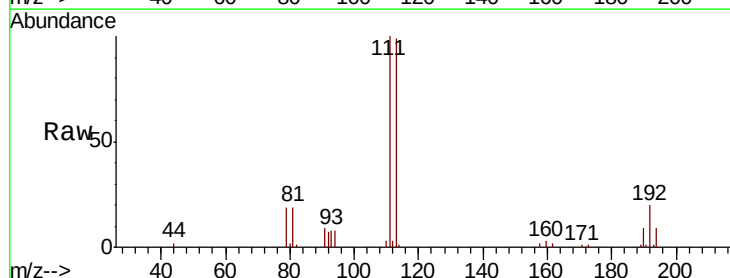


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

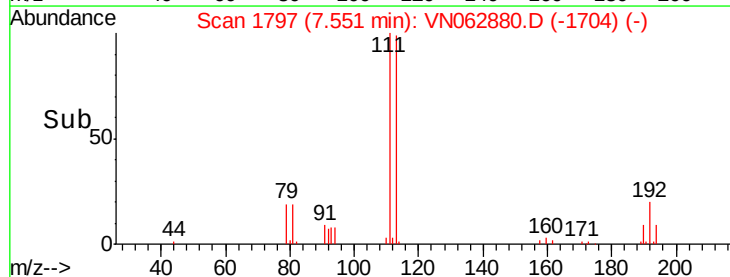
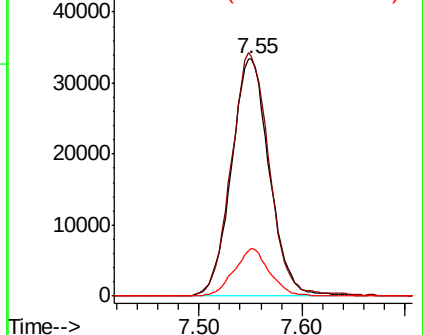


#35  
 Dibromofluoromethane  
 Concen: 51.110 ug/l  
 RT: 7.55 min Scan# 1797  
 Delta R.T. -0.00 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

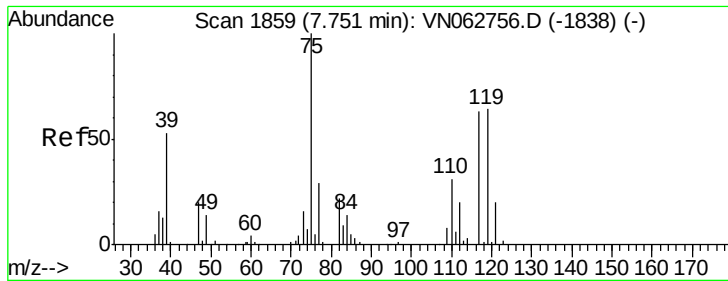
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.5 | 81.8  | 122.6 |
| 192     | 18.7  | 15.0  | 22.4  |



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



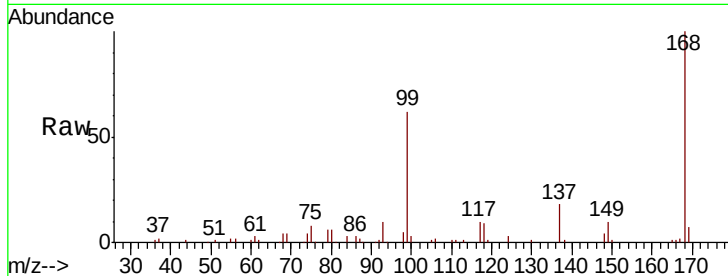




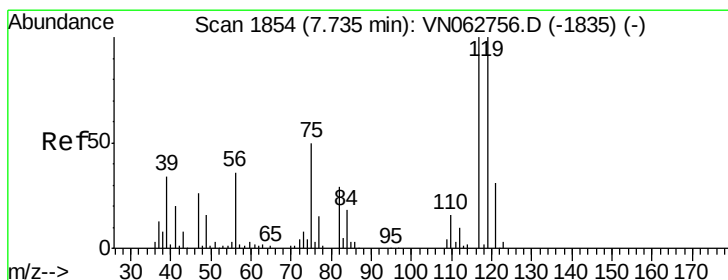
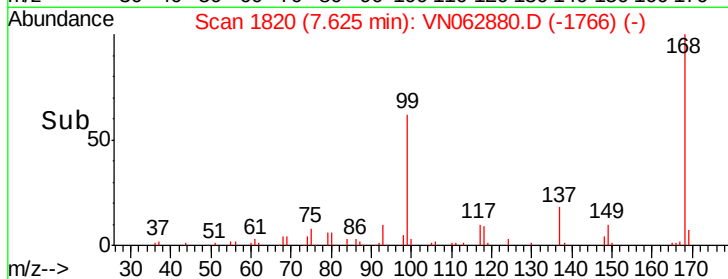
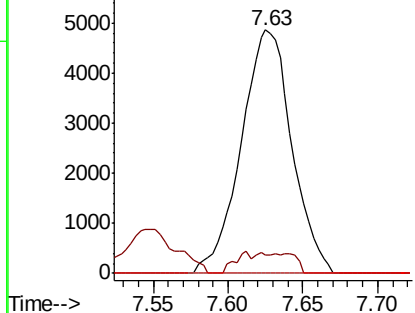
#36  
 1,1-Dichloropropene  
 Concen: 4.802 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.13 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130908ZHE#10

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 2.9   | 15.6  | 46.7# |
| 77      | 0.0   | 24.1  | 36.1# |

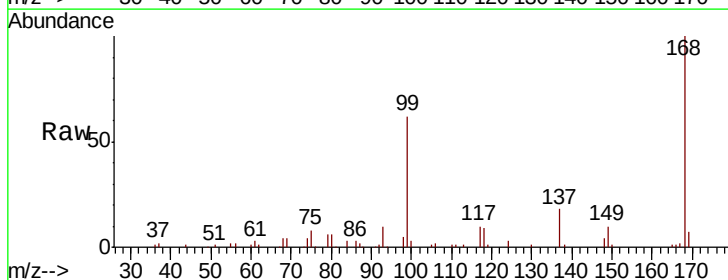


Abundance Ion 74.90 (74.60 to 75.60): VN062756.D (-1838) (-)  
 Ion 109.90 (109.60 to 110.60): VN062756.D (-1838) (-)  
 Ion 76.90 (76.60 to 77.60): VN062756.D (-1838) (-)

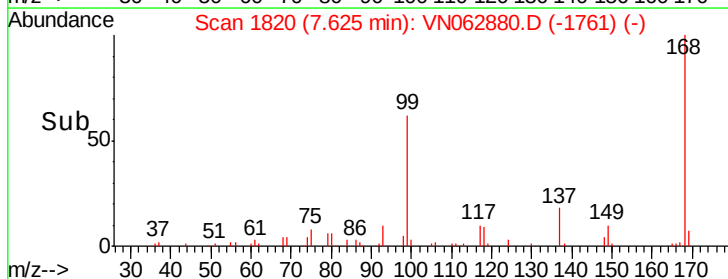
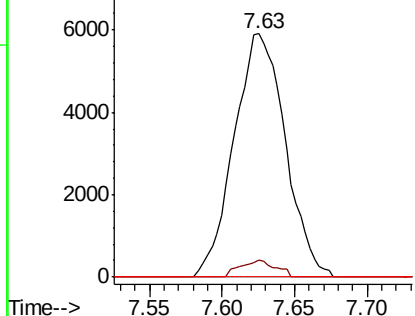


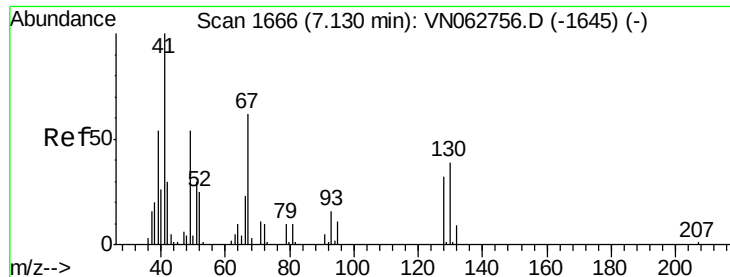
#38  
 Carbon Tetrachloride  
 Concen: 5.161 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.11 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.8   | 79.4  | 119.2# |
| 121     | 0.0   | 24.9  | 37.3#  |



Abundance Ion 116.80 (116.50 to 117.50): VN062756.D (-1835) (-)  
 Ion 118.80 (118.50 to 119.50): VN062756.D (-1835) (-)  
 Ion 120.80 (120.50 to 121.50): VN062756.D (-1835) (-)

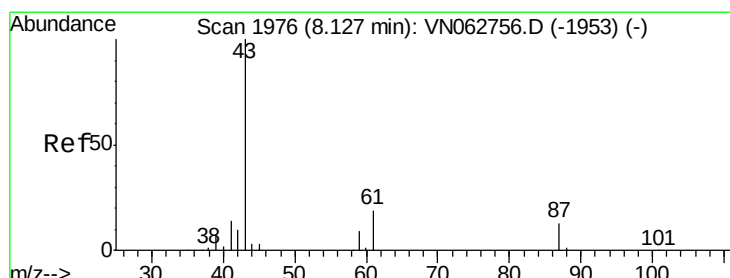
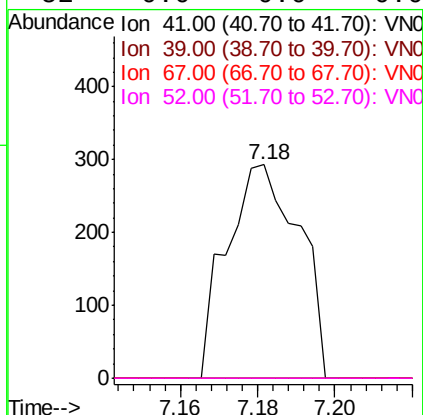
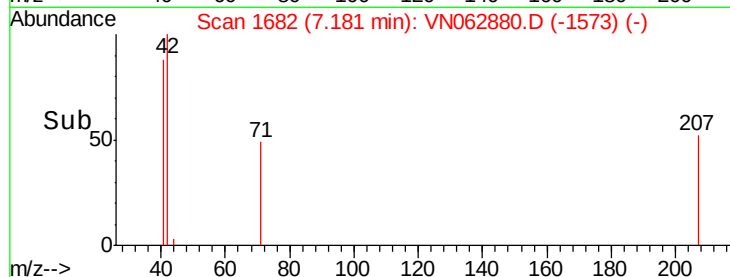
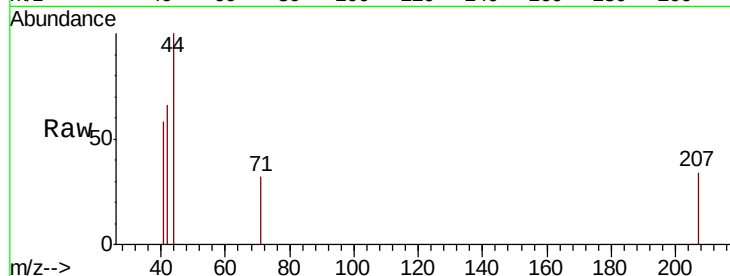




#41  
Methacrylonitrile  
Concen: 0.339 ug/l  
RT: 7.18 min Scan# 1682  
Delta R.T. 0.05 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

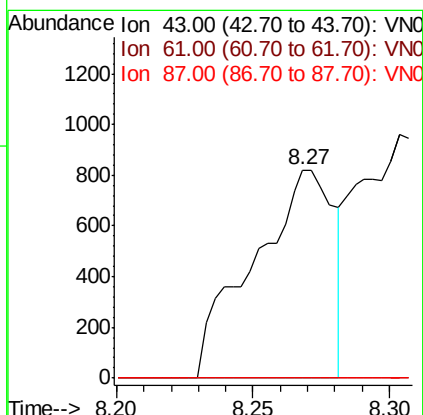
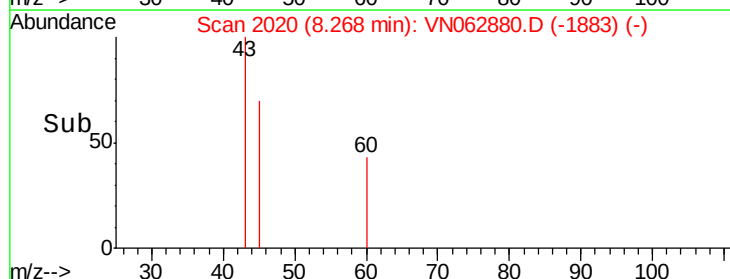
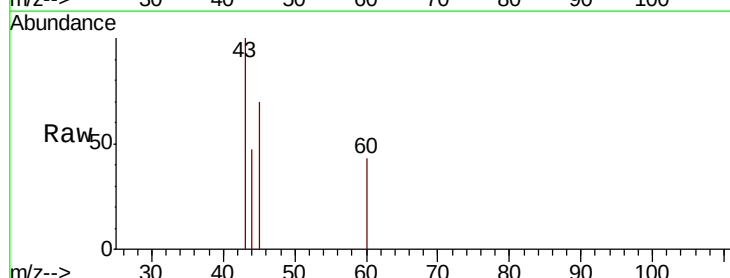
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130908ZHE#10

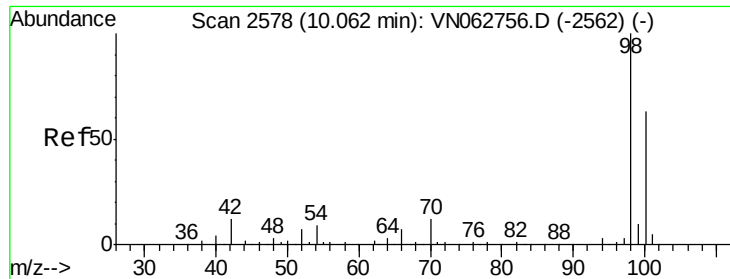
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 41    | Resp: | 381    |
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 39       | 0.0   | 69.4  | 104.2# |
| 67       | 0.0   | 0.0   | 0.0    |
| 52       | 0.0   | 0.0   | 0.0    |



#43  
Isopropyl Acetate  
Concen: 0.404 ug/l  
RT: 8.27 min Scan# 2020  
Delta R.T. 0.14 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 1677  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 15.8  | 23.6# |
| 87       | 0.0   | 9.9   | 14.9# |

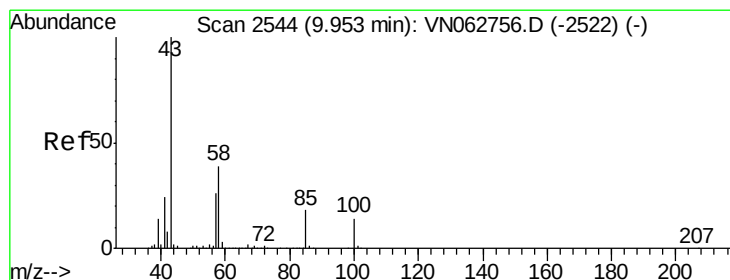
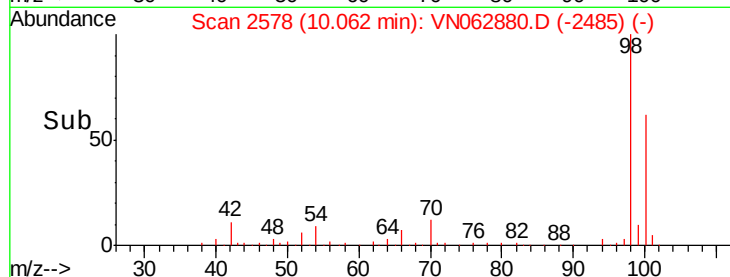
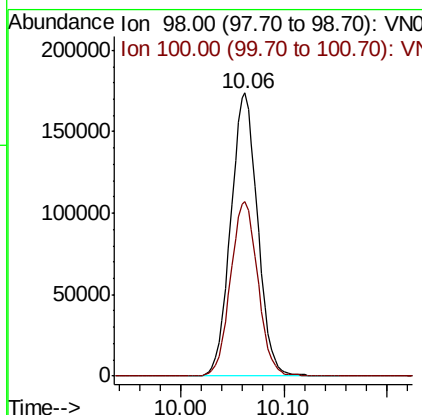
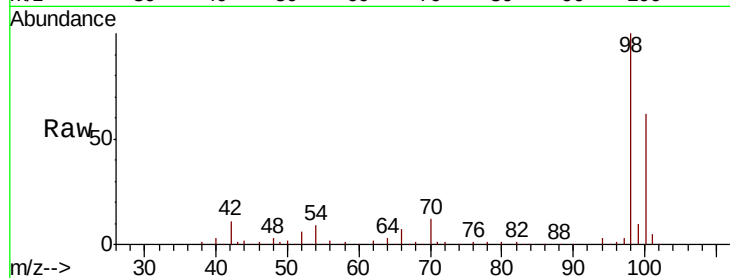




#50  
Toluene-d8  
Concen: 48.320 ug/l  
RT: 10.06 min Scan# 2578  
Delta R.T. -0.00 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

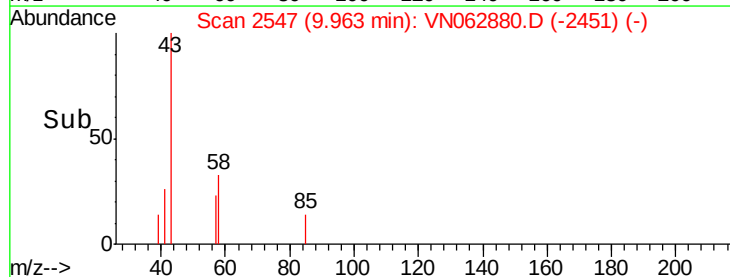
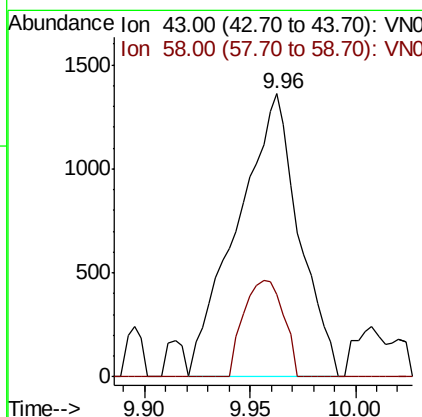
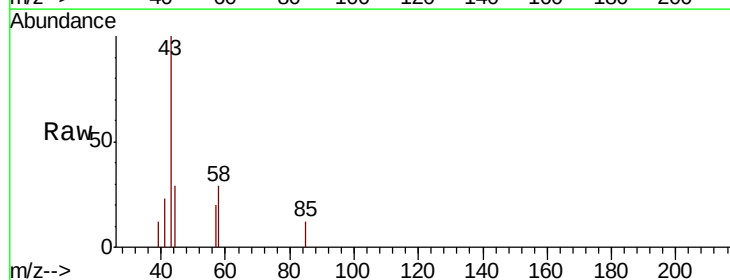
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB130908ZHE#10

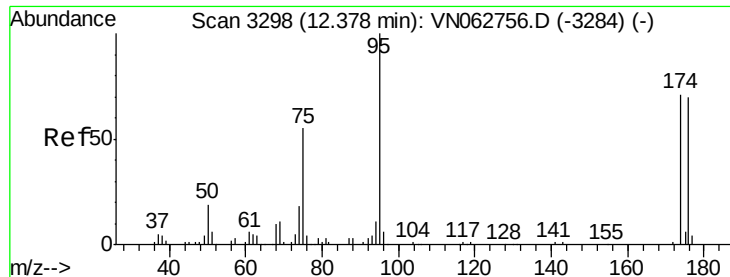
Tot Ion: 98 Resp: 315668  
Ion Ratio Lower Upper  
98 100  
100 62.7 50.9 76.3



#51  
4-Methyl-2-Pentanone  
Concen: 1.032 ug/l  
RT: 9.96 min Scan# 2547  
Delta R.T. 0.01 min  
Lab File: VN062880.D  
Acq: 13 Aug 2020 1:30

Tgt Ion: 43 Resp: 2771  
Ion Ratio Lower Upper  
43 100  
58 21.9 31.1 46.7#





#62

4-Bromofluorobenzene

Concen: 45.852 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. -0.00 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

Instrument :

MSVOA\_N

ClientSampleId :

PB130908ZHE#10

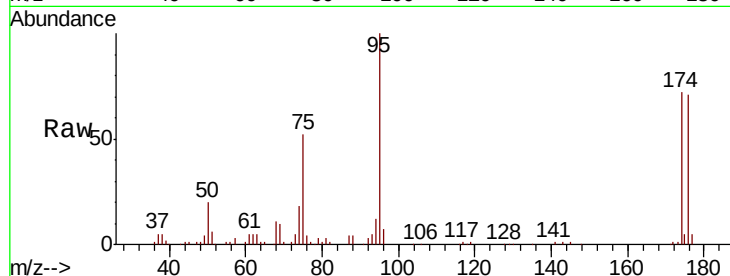
Tot Ion: 95 Resp: 113199

Ion Ratio Lower Upper

95 100

174 74.6 0.0 144.8

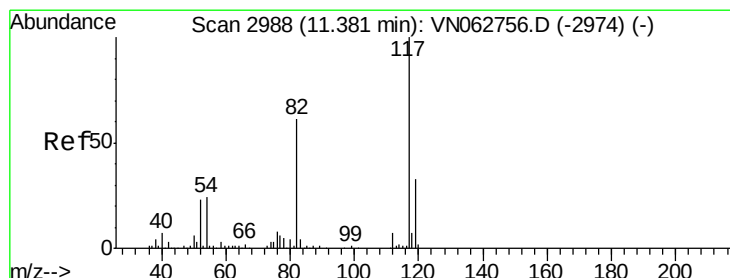
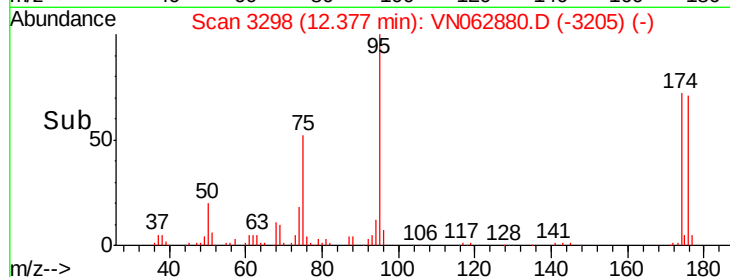
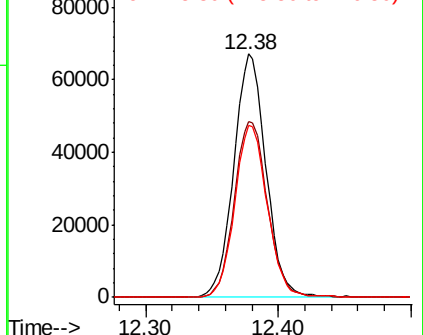
176 71.7 0.0 142.2



Abundance Ion 94.90 (94.60 to 95.60): VN062880.D (-3205) (-)

Ion 173.80 (173.50 to 174.50): VN062880.D (-3205) (-)

Ion 175.80 (175.50 to 176.50): VN062880.D (-3205) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.38 min Scan# 2988

Delta R.T. -0.00 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

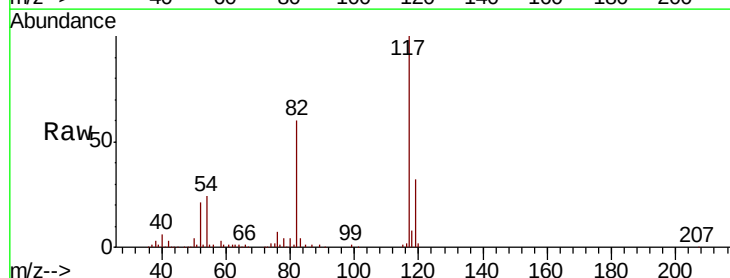
Tgt Ion: 117 Resp: 240960

Ion Ratio Lower Upper

117 100

82 60.4 49.0 73.4

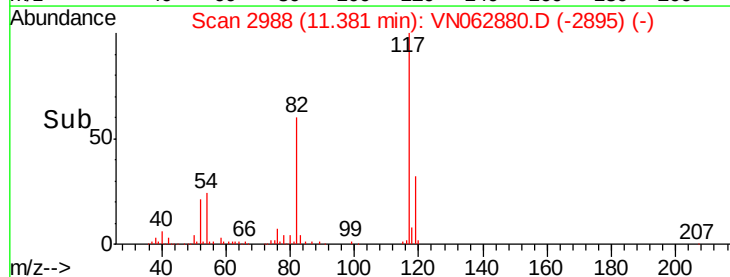
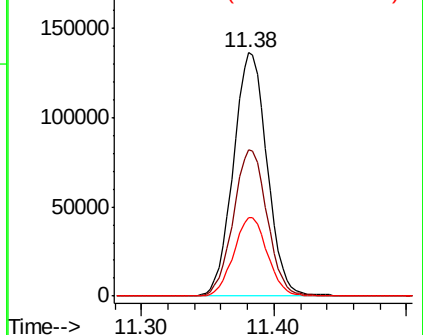
119 32.2 26.2 39.2

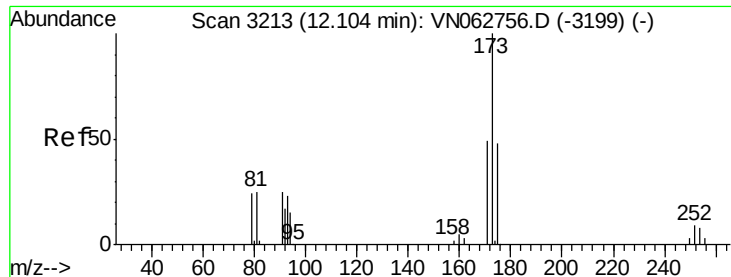


Abundance Ion 116.90 (116.60 to 117.60): VN062880.D (-2895) (-)

Ion 82.00 (81.70 to 82.70): VN062880.D (-2895) (-)

Ion 118.90 (118.60 to 119.60): VN062880.D (-2895) (-)





#71

Bromoform

Concen: 0.381 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.27 min

Lab File: VN062880.D

Acq: 13 Aug 2020 1:30

Instrument :

MSVOA\_N

ClientSampleId :

PB130908ZHE#10

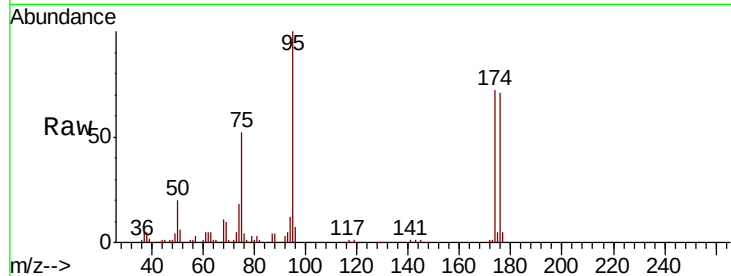
Tot Ion:173 Resp: 630

Ion Ratio Lower Upper

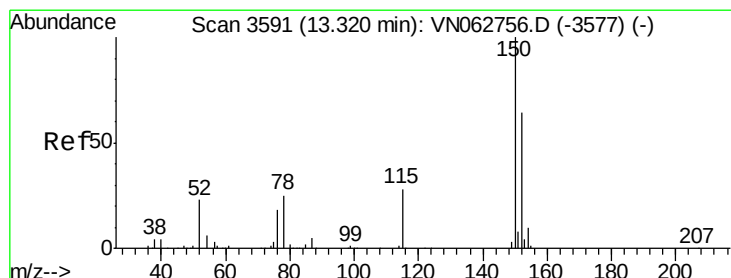
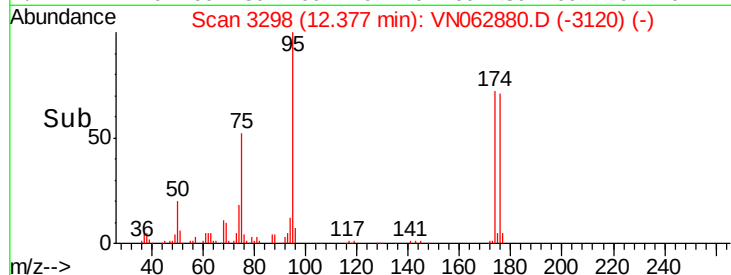
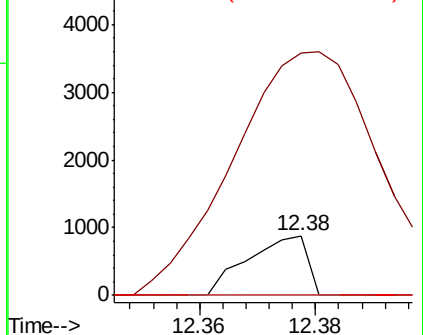
173 100

175 885.6 24.0 72.0#

254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): 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: VN062880.D

Acq: 13 Aug 2020 1:30

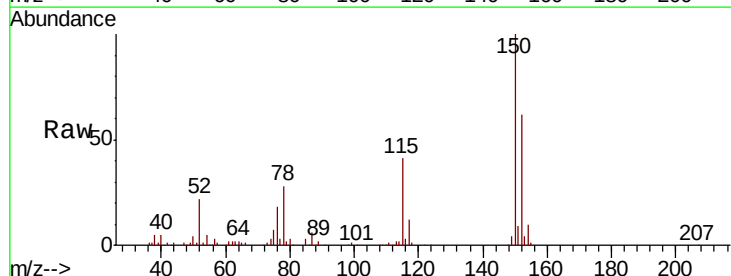
Tgt Ion:152 Resp: 91165

Ion Ratio Lower Upper

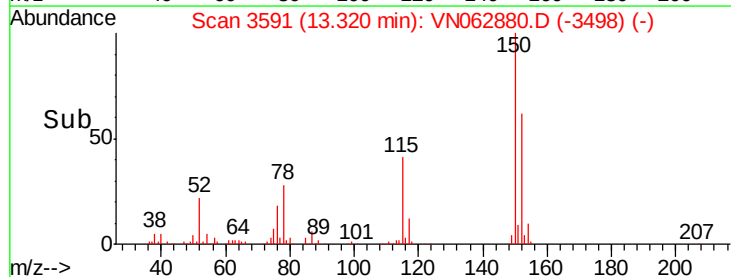
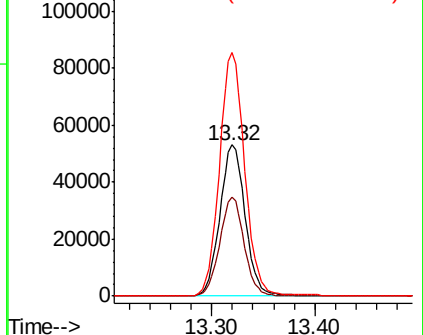
152 100

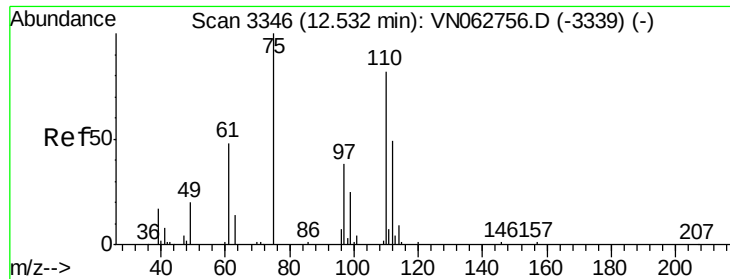
115 62.7 31.6 94.8

150 159.2 0.0 349.2



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

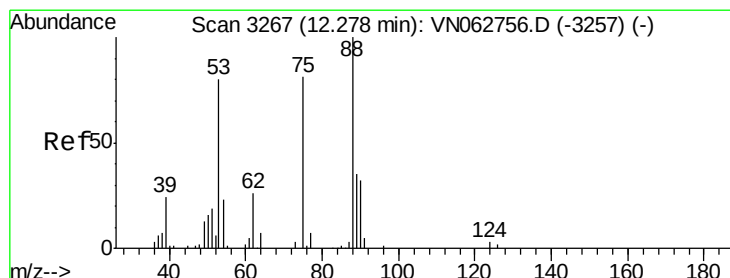
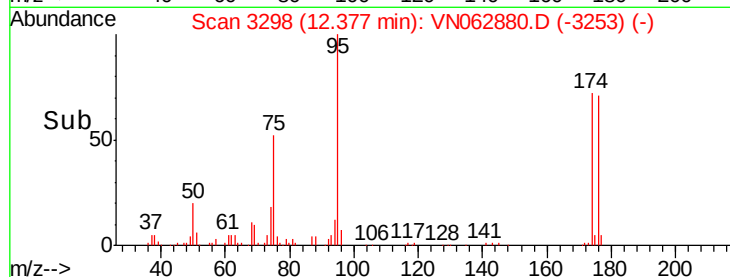
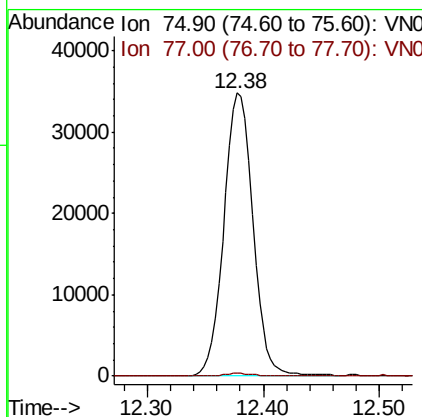
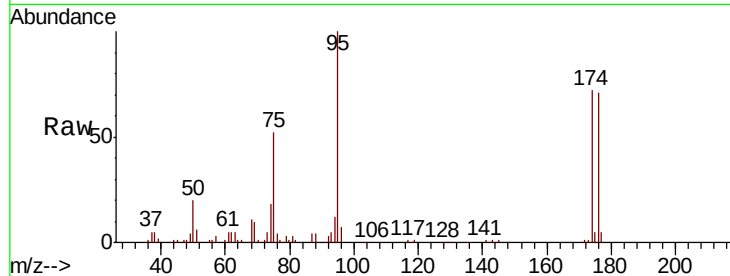




#76  
 1,2,3-Trichloropropane  
 Concen: 24.686 ug/l  
 RT: 12.38 min Scan# 3298  
 Delta R.T. -0.15 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

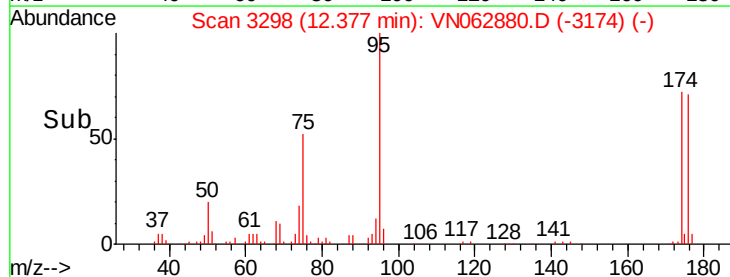
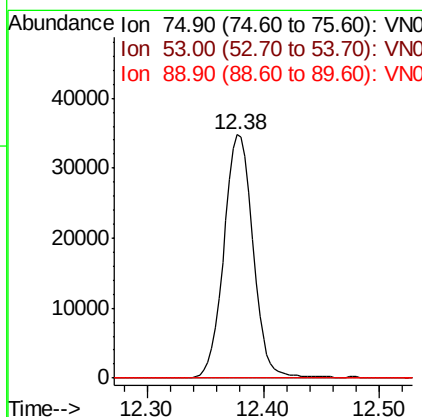
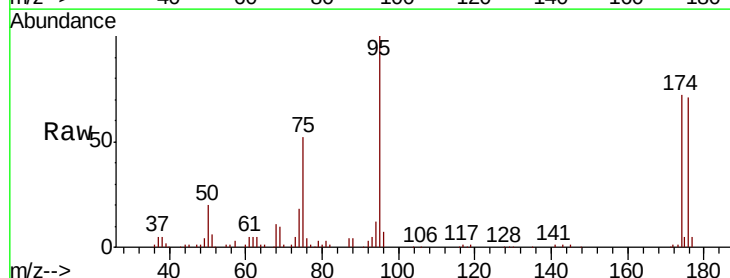
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130908ZHE#10

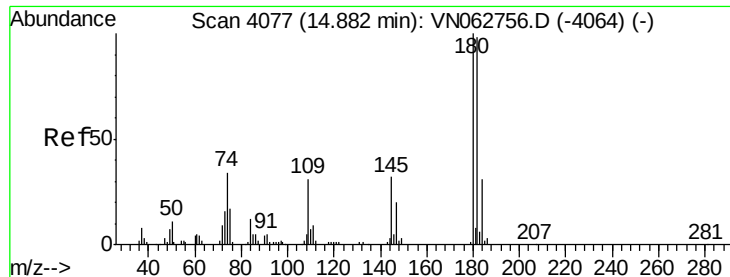
Tot Ion: 75 Resp: 60694  
 Ion Ratio Lower Upper  
 75 100  
 77 0.9 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 75.360 ug/l  
 RT: 12.38 min Scan# 3298  
 Delta R.T. 0.10 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

Tgt Ion: 75 Resp: 60694  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 79.1 118.7#  
 89 0.0 36.2 54.2#

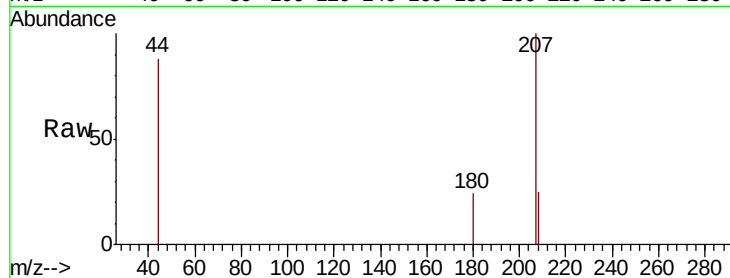




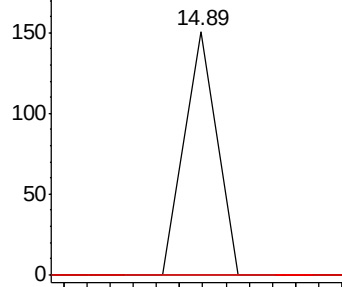
#93  
 1,2,4-Trichlorobenzene  
 Concen: 3.340 ug/l  
 RT: 14.89 min Scan# 4080  
 Delta R.T. 0.01 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB130908ZHE#10

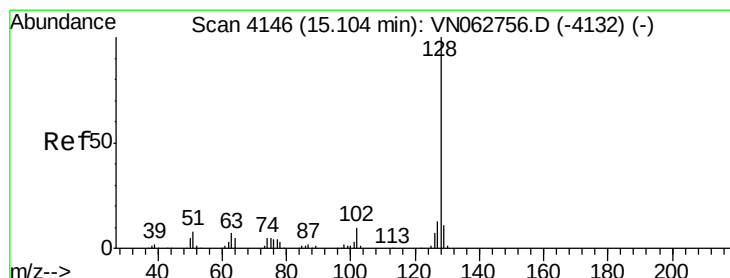
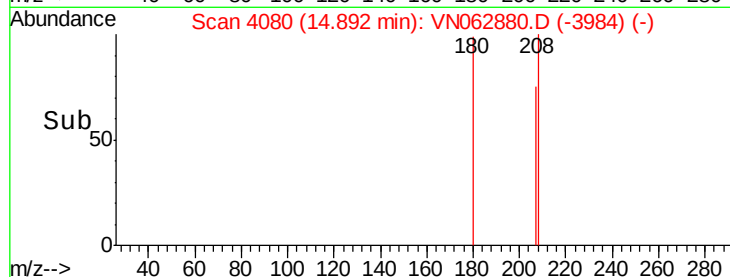
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 180     | 100   |       |        |
| 182     | 0.0   | 49.1  | 147.4# |
| 145     | 0.0   | 16.3  | 48.8#  |



Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.80 (144.50 to 145.50): V

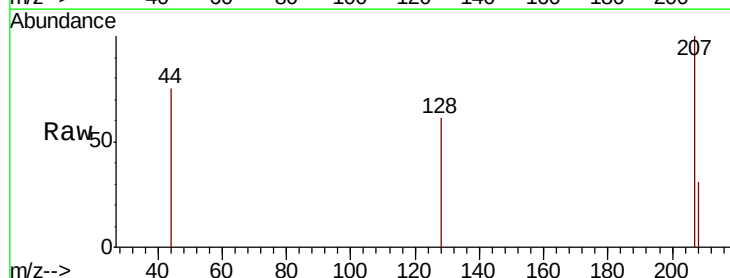


Time--> 14.88 14.89 14.90

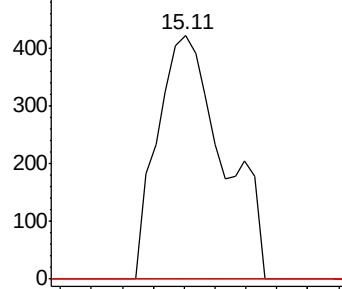


#95  
 Naphthalene  
 Concen: 3.847 ug/l  
 RT: 15.11 min Scan# 4148  
 Delta R.T. 0.01 min  
 Lab File: VN062880.D  
 Acq: 13 Aug 2020 1:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 0.0   | 10.8  | 16.2# |
| 129     | 0.0   | 8.8   | 13.2# |



Abundance Ion 128.00 (127.70 to 128.70): V  
 Ion 127.00 (126.70 to 127.70): V  
 Ion 129.00 (128.70 to 129.70): V



Time--> 15.10 15.11 15.15

