

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN112018\  
 Data File : VN052408.D  
 Acq On : 20 Nov 2018 15:32  
 Operator : MD\SY  
 Sample : PB114952ZHE#02  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 11 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB114952ZHE#02

Quant Time: Nov 20 15:55:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N111418W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 15 03:02:37 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 308020   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 509830   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 431954   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 146029   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 228659   | 52.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.12% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 169805   | 51.64 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.28% |          |
| 50) Toluene-d8              | 10.09 | 98   | 651983   | 50.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.80% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 184974   | 43.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 86.94%  |          |

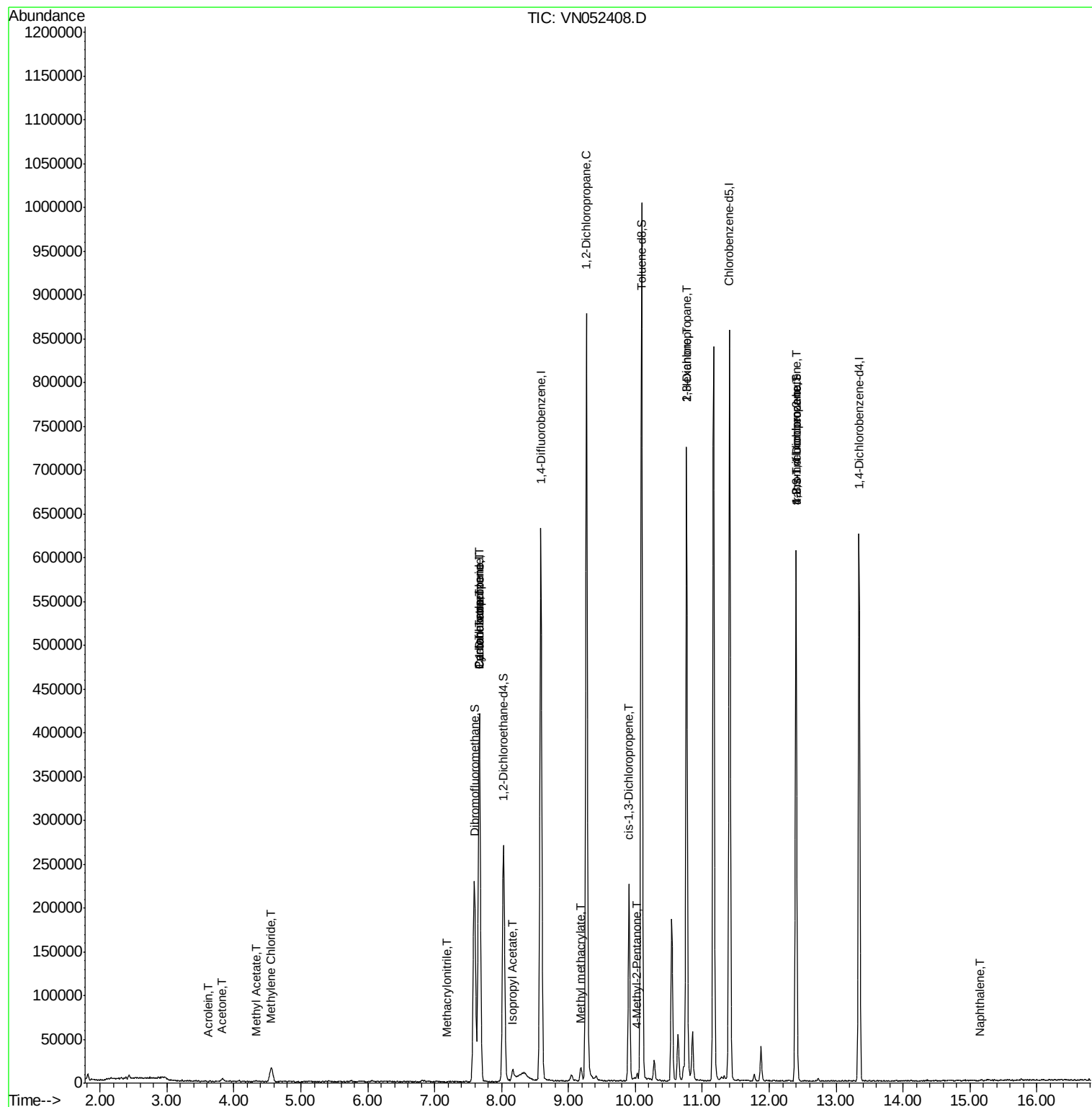
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 13) Acrolein                   | 3.62  | 56   | 68       | 21.95  | ug/l # | 22     |
| 16) Acetone                    | 3.83  | 43   | 5515     | 4.60   | ug/l # | 86     |
| 18) Methyl Acetate             | 4.33  | 43   | 536      | 0.59   | ug/l # | 68     |
| 20) Methylene Chloride         | 4.55  | 84   | 9712     | 1.99   | ug/l   | 96     |
| 31) Cyclohexane                | 7.67  | 56   | 9894     | 0.44   | ug/l # | 50     |
| 36) 1,1-Dichloropropene        | 7.67  | 75   | 28427    | 5.56   | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 33636    | 7.16   | ug/l # | 15     |
| 41) Methacrylonitrile          | 7.19  | 41   | 112      | 3.75   | ug/l # | 100    |
| 43) Isopropyl Acetate          | 8.17  | 43   | 18819    | 2.63   | ug/l   | 95     |
| 45) 1,2-Dichloropropane        | 9.27  | 63   | 1016     | 0.25   | ug/l # | 44     |
| 48) Methyl methacrylate        | 9.18  | 41   | 6362     | 1.75   | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.03 | 43   | 6644     | 1.84   | ug/l # | 41     |
| 54) cis-1,3-Dichloropropene    | 9.90  | 75   | 31672    | 5.60   | ug/l # | 75     |
| 57) 1,3-Dichloropropane        | 10.77 | 76   | 6414     | 1.14   | ug/l # | 43     |
| 59) 2-Hexanone                 | 10.76 | 43   | 121299   | 48.96  | ug/l # | 54     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 109738   | 44.29  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 109738   | 143.64 | ug/l # | 5      |
| 95) Naphthalene                | 15.14 | 128  | 191      | 2.64   | ug/l # | 69     |

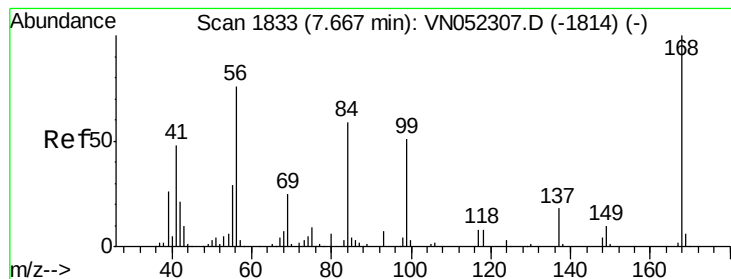
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_N\DATA\VN112018\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N111418W.M  
Quant Title : SW846 8260  
QLast Update : Thu Nov 15 03:02:37 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.00 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

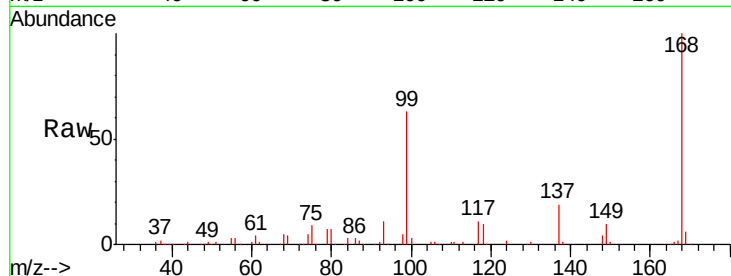
PB114952ZHE#02

Tgt Ion:168 Resp: 308020

Ion Ratio Lower Upper

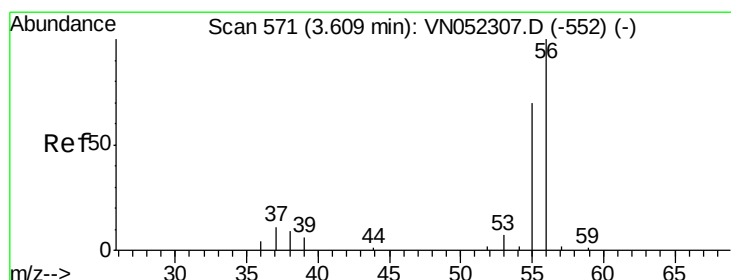
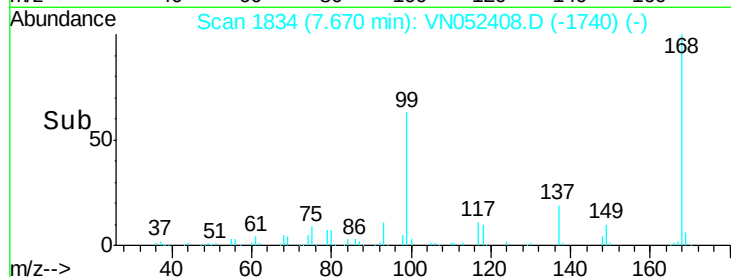
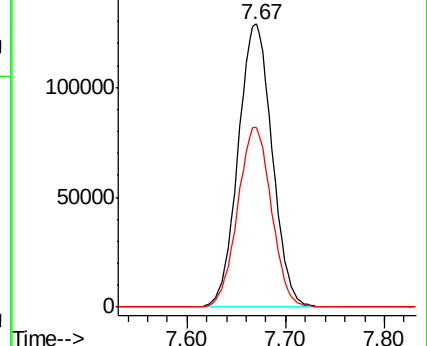
168 100

99 63.3 47.9 71.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN



#13

Acrolein

Concen: 21.95 ug/l

RT: 3.62 min Scan# 575

Delta R.T. 0.01 min

Lab File: VN052408.D

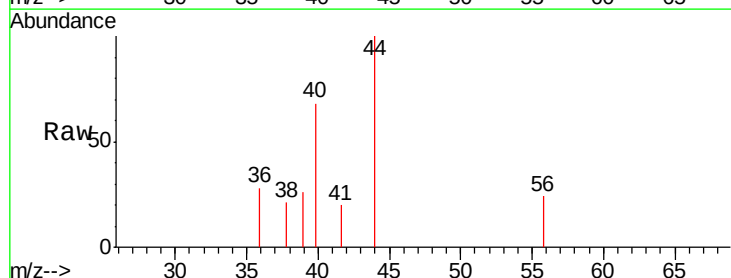
Acq: 20 Nov 2018 15:32

Tgt Ion: 56 Resp: 68

Ion Ratio Lower Upper

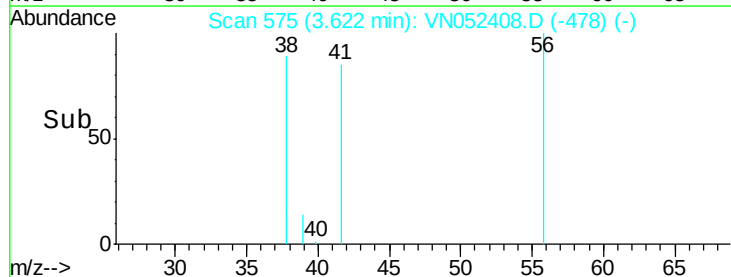
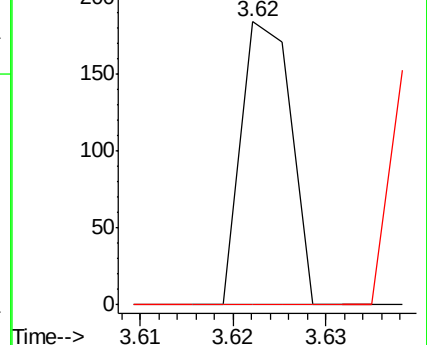
56 100

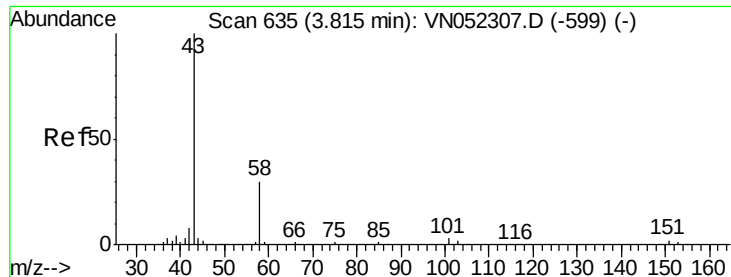
55 136.8 57.6 86.4#



Abundance Ion 56.00 (55.70 to 56.70): VN

Ion 55.00 (54.70 to 55.70): VN





#16

Acetone

Concen: 4.60 ug/l

RT: 3.83 min Scan# 639

Delta R.T. 0.01 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

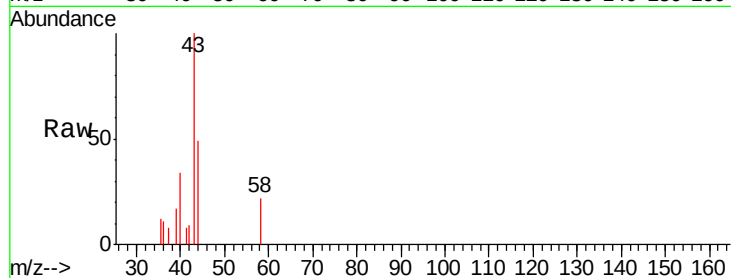
PB114952ZHE#02

Tgt Ion: 43 Resp: 5515

Ion Ratio Lower Upper

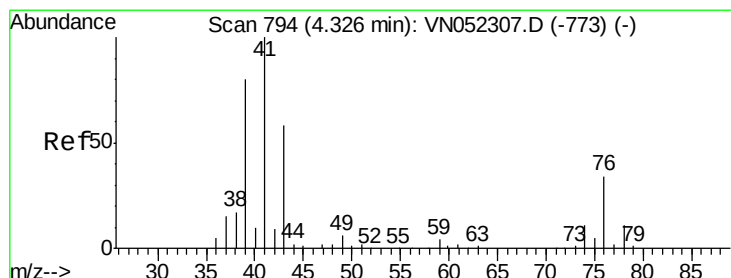
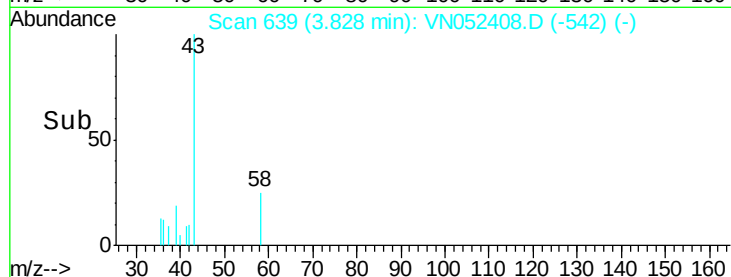
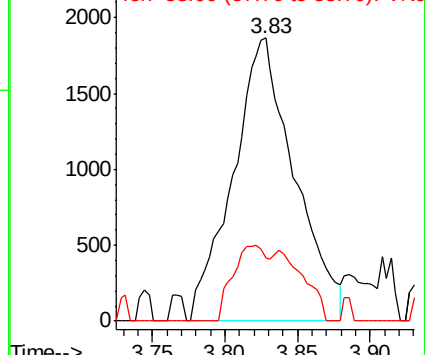
43 100

58 22.4 24.2 36.4#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 0.59 ug/l

RT: 4.33 min Scan# 796

Delta R.T. 0.01 min

Lab File: VN052408.D

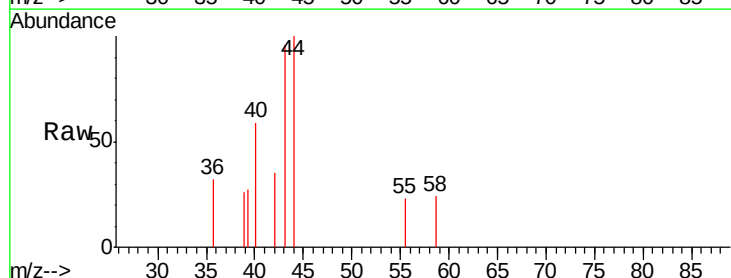
Acq: 20 Nov 2018 15:32

Tgt Ion: 43 Resp: 536

Ion Ratio Lower Upper

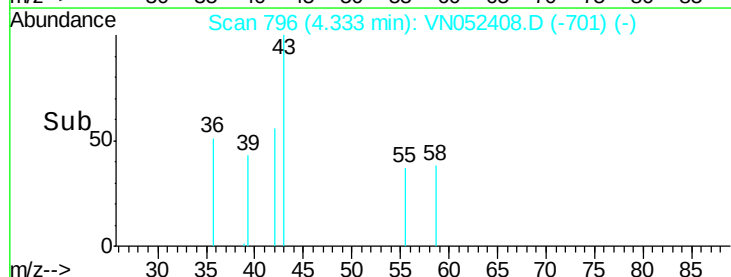
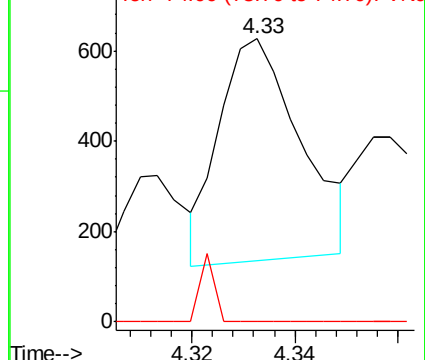
43 100

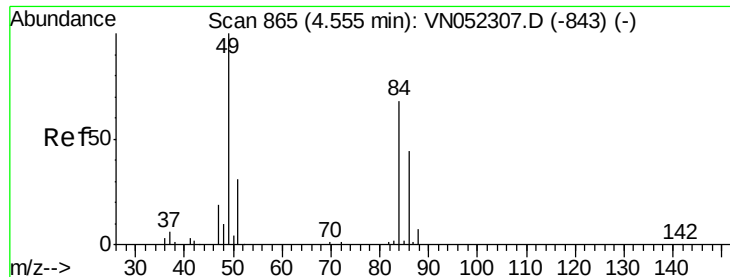
74 5.4 15.9 23.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

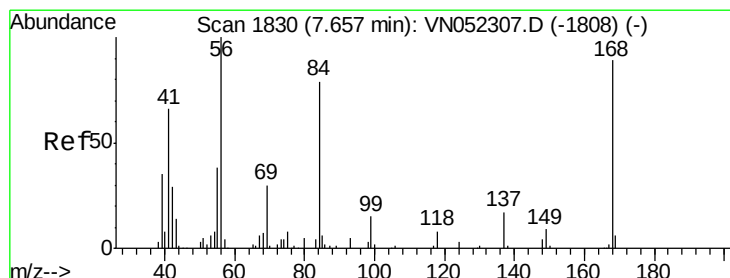
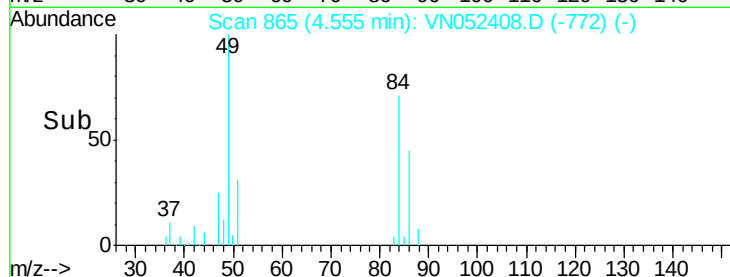
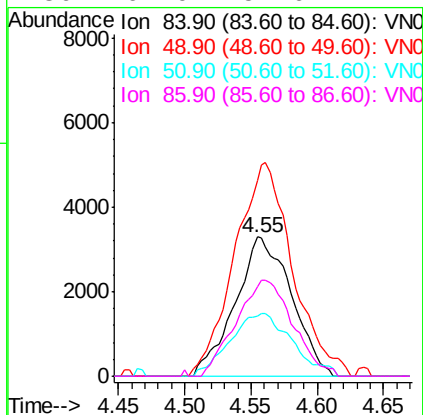
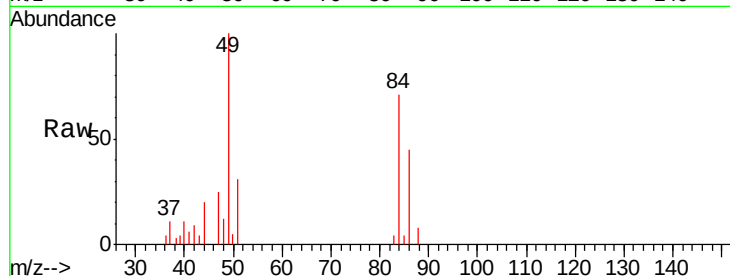




#20  
Methylene Chloride  
Concen: 1.99 ug/l  
RT: 4.55 min Scan# 865  
Delta R.T. 0.00 min  
Lab File: VN052408.D  
Acq: 20 Nov 2018 15:32

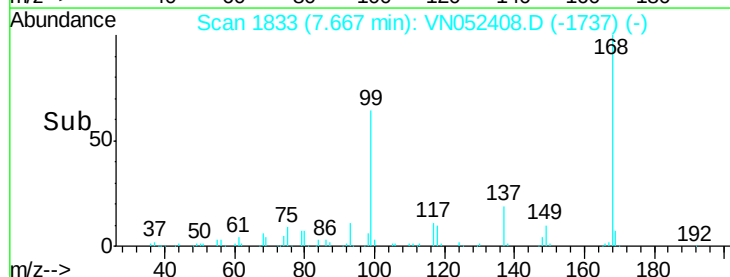
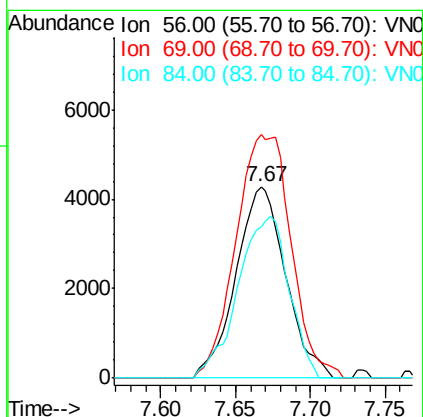
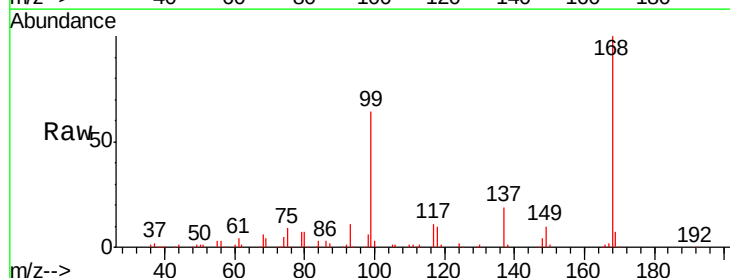
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB114952ZHE#02

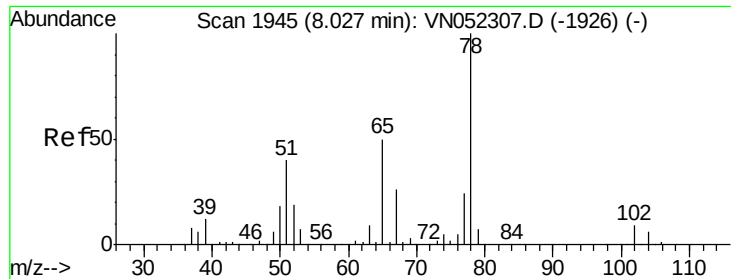
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 9712  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 140.8 | 118.2 | 177.2 |
| 51       | 43.5  | 36.1  | 54.1  |
| 86       | 64.0  | 51.6  | 77.4  |



#31  
Cyclohexane  
Concen: 0.44 ug/l  
RT: 7.67 min Scan# 1833  
Delta R.T. 0.01 min  
Lab File: VN052408.D  
Acq: 20 Nov 2018 15:32

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 9894  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 127.2 | 23.8  | 35.8# |
| 84       | 79.0  | 63.0  | 94.6  |

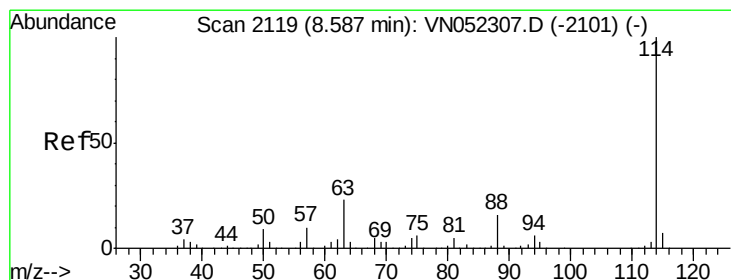
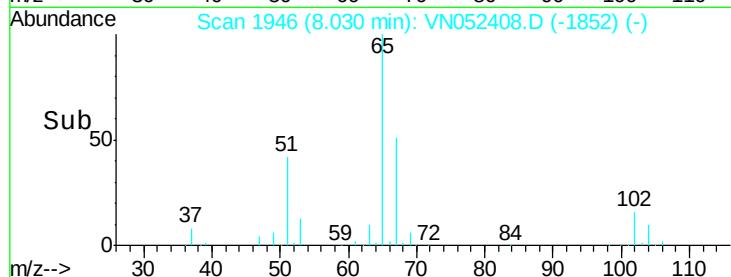
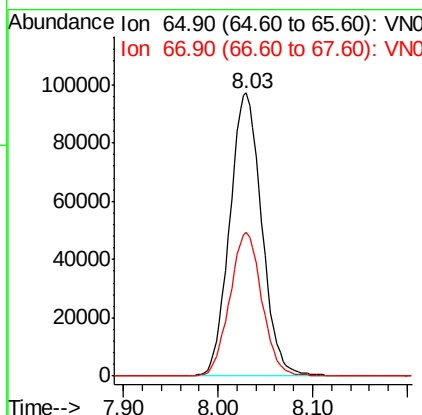
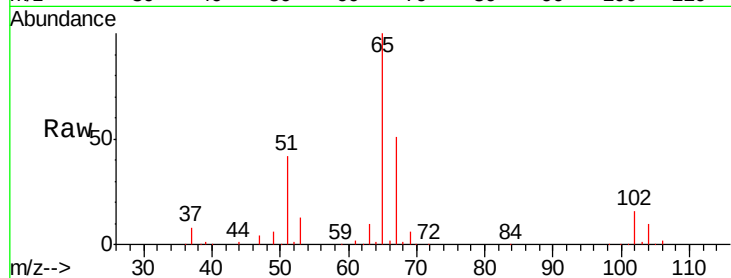




#33  
 1,2-Dichloroethane-d4  
 Concen: Below ug/l  
 RT: 8.03 min Scan# 1946  
 Delta R.T. 0.00 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

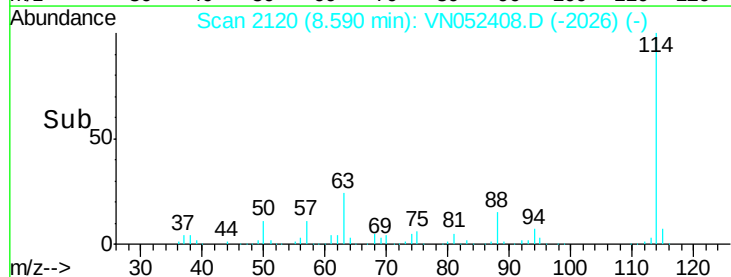
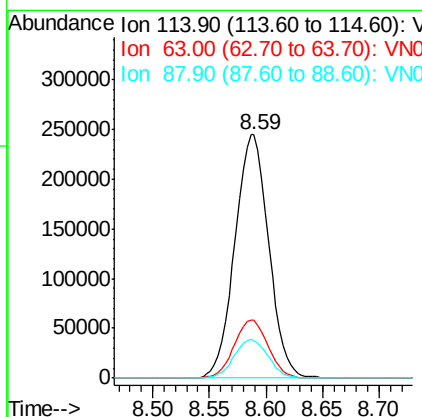
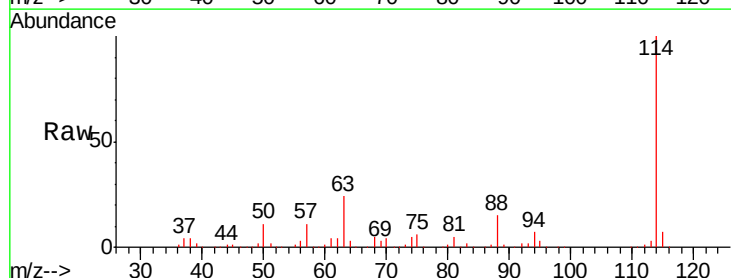
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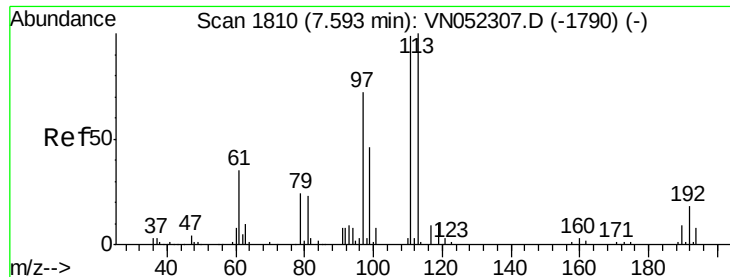
Tgt Ion: 65 Resp: 228659  
 Ion Ratio Lower Upper  
 65 100  
 67 50.9 0.0 105.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 8.59 min Scan# 2120  
 Delta R.T. 0.00 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

Tgt Ion: 114 Resp: 509830  
 Ion Ratio Lower Upper  
 114 100  
 63 23.7 0.0 45.4  
 88 15.4 0.0 31.2

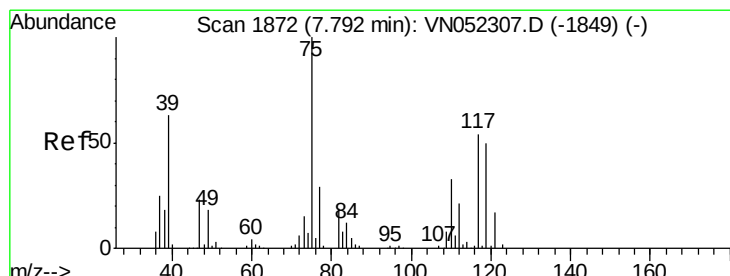
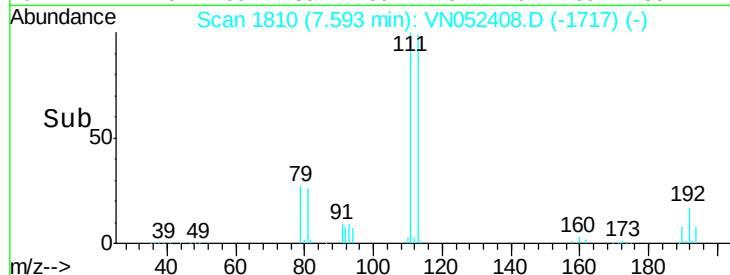
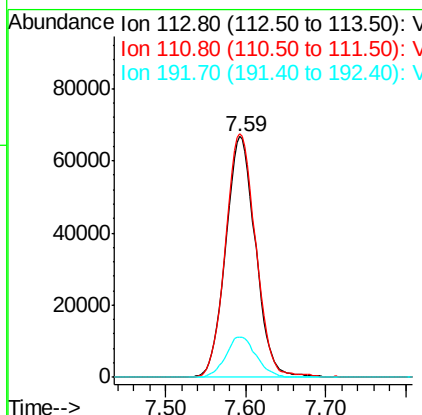
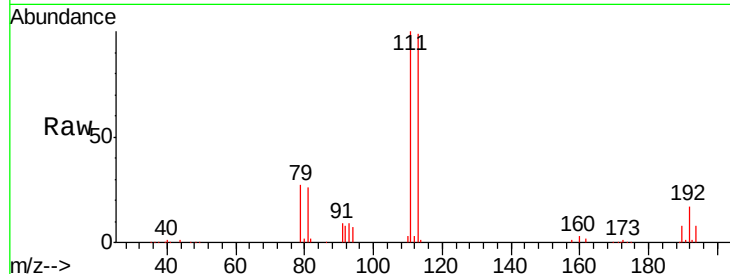




#35  
 Dibromofluoromethane  
 Concen: 50.00 ug/l  
 RT: 7.59 min Scan# 1810  
 Delta R.T. -0.00 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

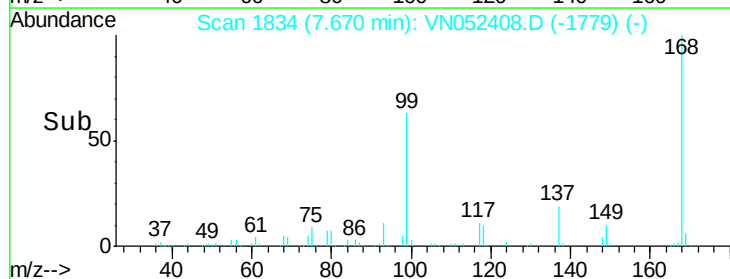
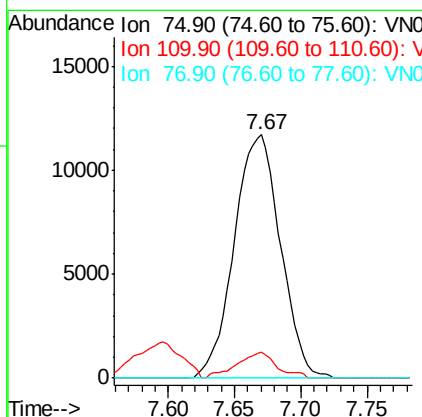
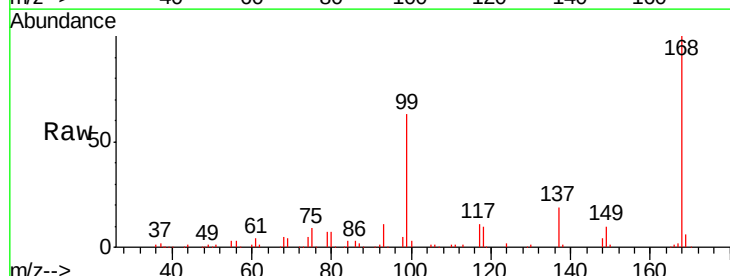
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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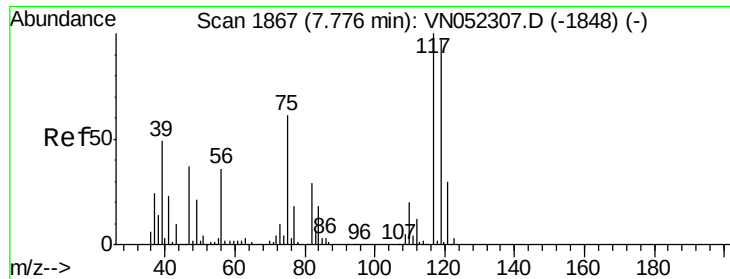
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.0 | 81.0  | 121.6 |
| 192     | 17.1  | 13.8  | 20.6  |



#36  
 1,1-Dichloropropene  
 Concen: 5.56 ug/l  
 RT: 7.67 min Scan# 1834  
 Delta R.T. -0.12 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.6   | 16.5  | 49.5# |
| 77      | 0.0   | 24.2  | 36.2# |





#38

Carbon Tetrachloride

Concen: 7.16 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

PB114952ZHE#02

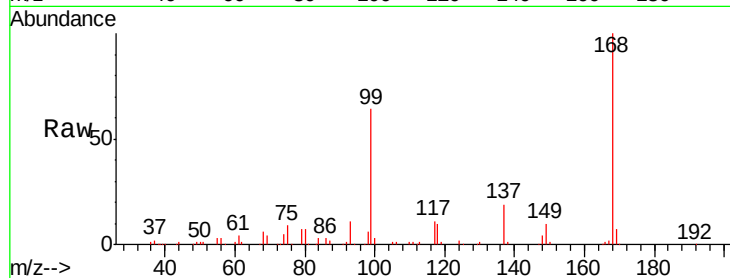
Tgt Ion:117 Resp: 33636

Ion Ratio Lower Upper

117 100

119 4.7 77.4 116.0#

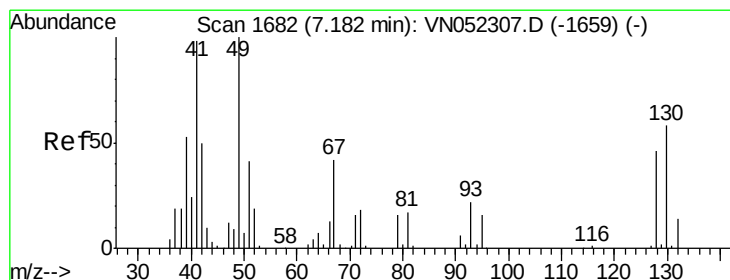
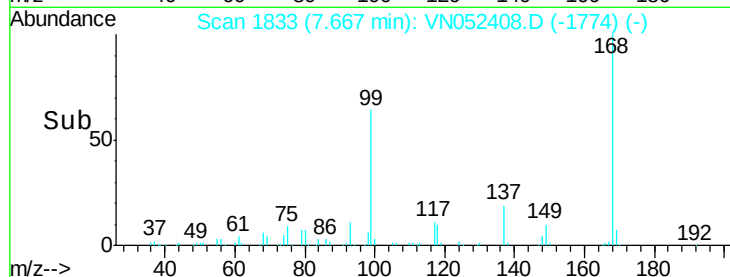
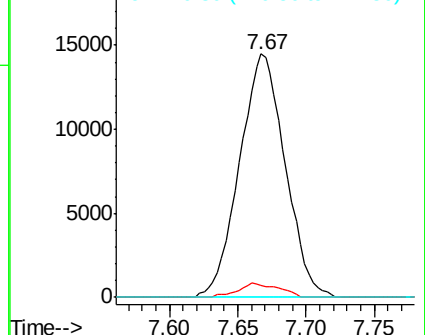
121 0.0 24.0 36.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 3.75 ug/l

RT: 7.19 min Scan# 1684

Delta R.T. 0.01 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Tgt Ion: 41 Resp: 112

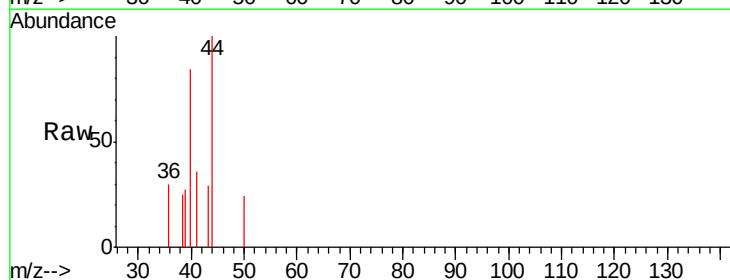
Ion Ratio Lower Upper

41 100

39 117.0 0.0 0.0#

67 0.0 0.0 0.0

52 0.0 0.0 0.0

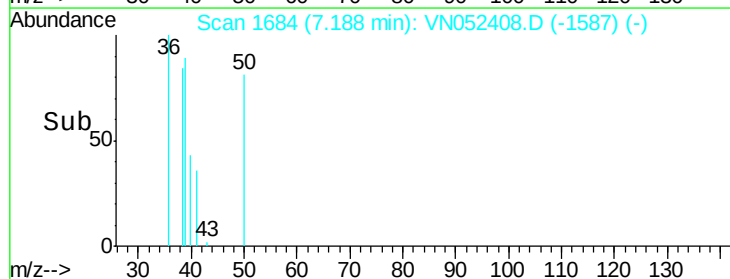
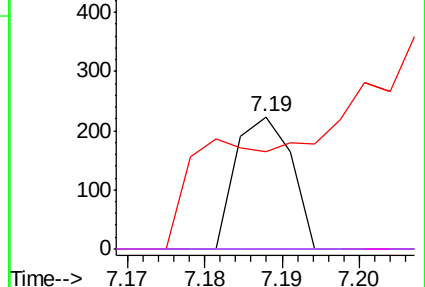


Abundance Ion 41.00 (40.70 to 41.70): VNO

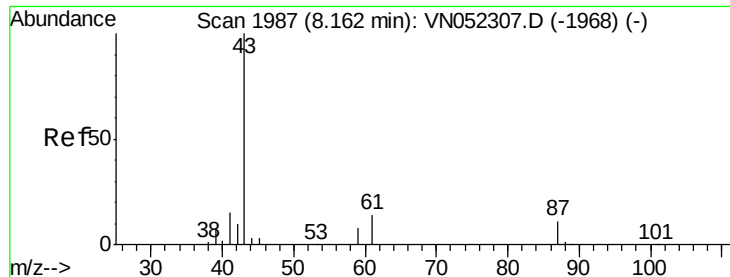
Ion 39.00 (38.70 to 39.70): VNO

Ion 67.00 (66.70 to 67.70): VNO

Ion 52.00 (51.70 to 52.70): VNO







#43

Isopropyl Acetate

Concen: 2.63 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

PB114952ZHE#02

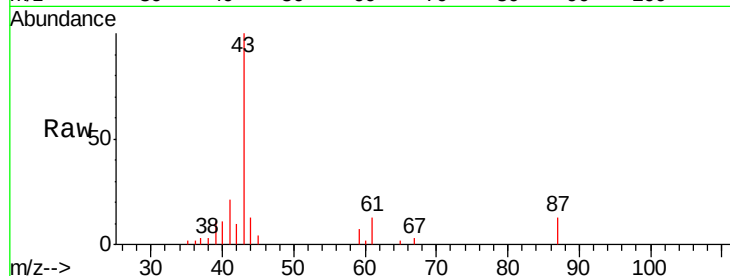
Tgt Ion: 43 Resp: 18819

Ion Ratio Lower Upper

43 100

61 12.5 12.0 18.0

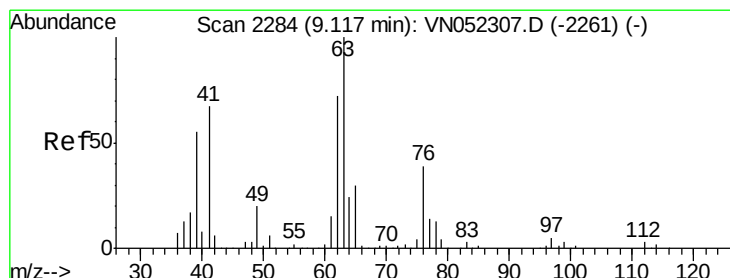
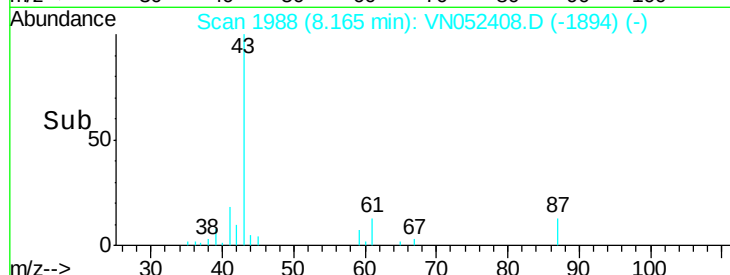
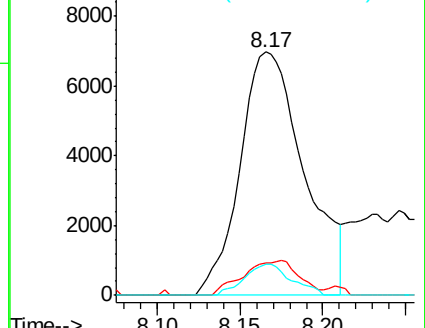
87 9.3 8.3 12.5



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#45

1,2-Dichloropropane

Concen: 0.25 ug/l

RT: 9.27 min Scan# 2333

Delta R.T. 0.16 min

Lab File: VN052408.D

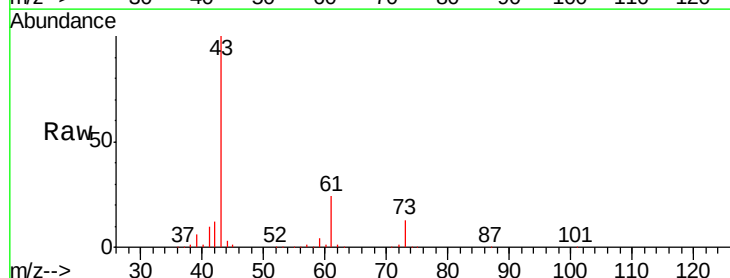
Acq: 20 Nov 2018 15:32

Tgt Ion: 63 Resp: 1016

Ion Ratio Lower Upper

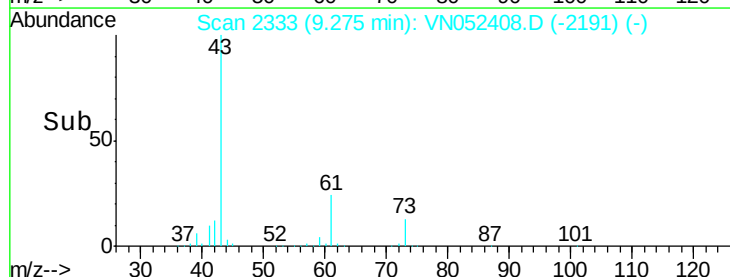
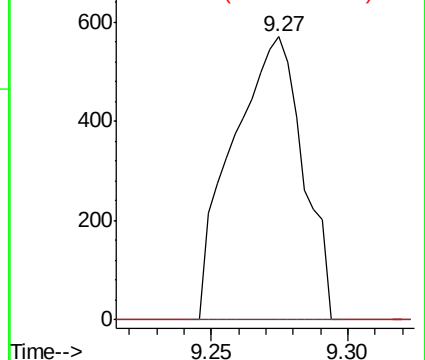
63 100

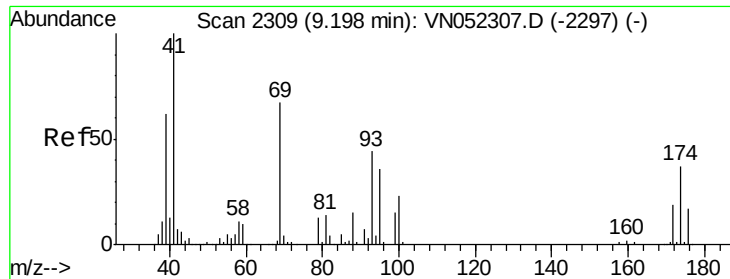
65 0.0 24.2 36.4#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

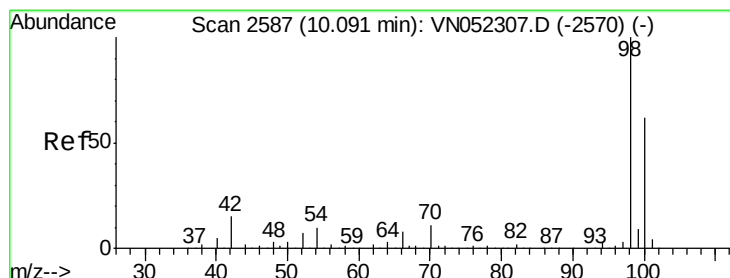
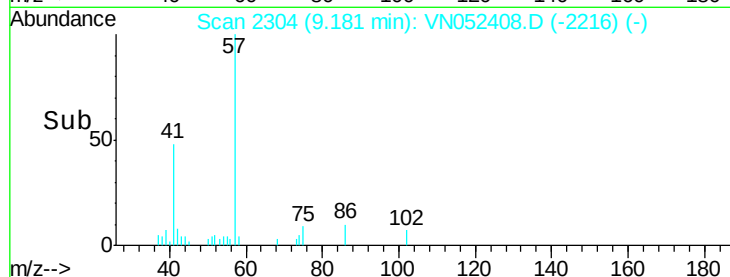
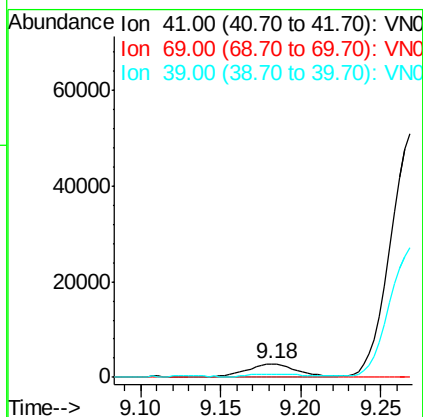
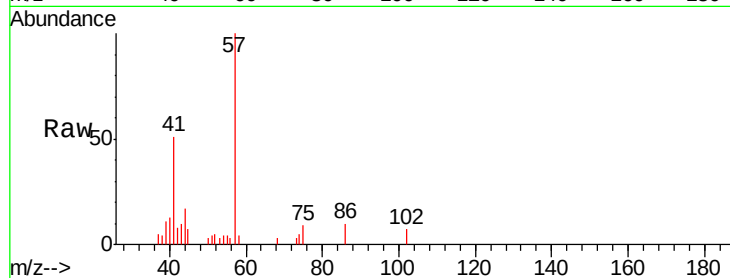




#48  
Methyl methacrylate  
Concen: 1.75 ug/l  
RT: 9.18 min Scan# 2304  
Delta R.T. -0.02 min  
Lab File: VN052408.D  
Acq: 20 Nov 2018 15:32

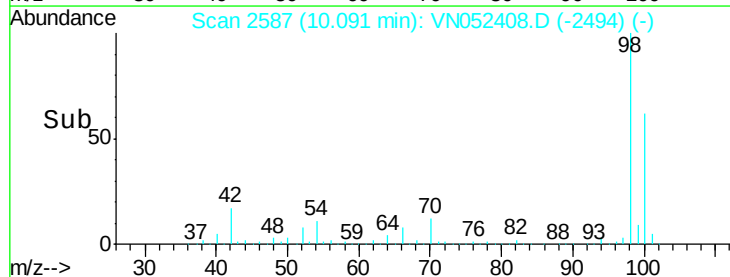
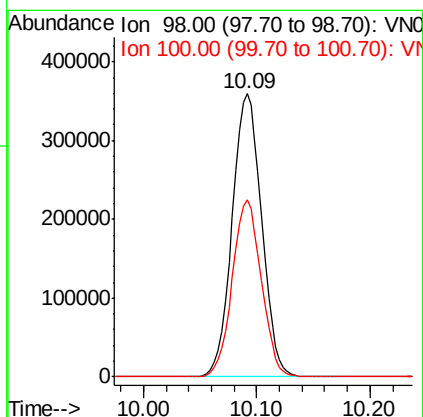
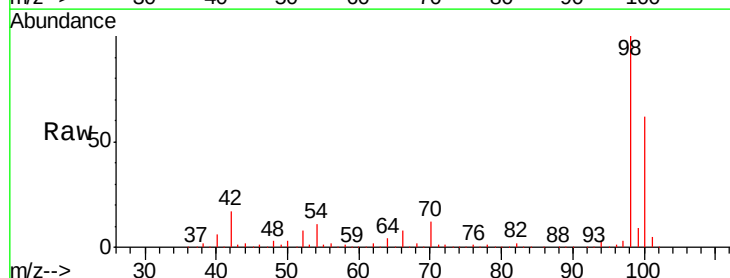
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB114952ZHE#02

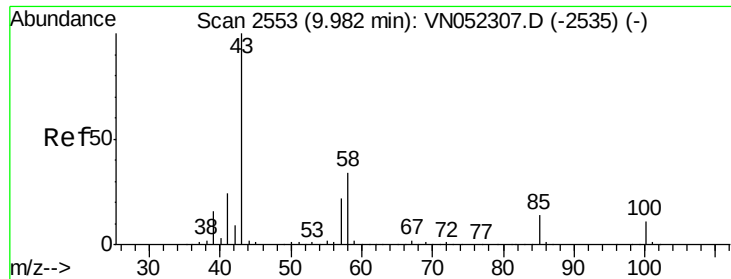
Tgt Ion: 41 Resp: 6362  
Ion Ratio Lower Upper  
41 100  
69 0.0 57.1 85.7#  
39 0.0 52.5 78.7#



#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. -0.00 min  
Lab File: VN052408.D  
Acq: 20 Nov 2018 15:32

Tgt Ion: 98 Resp: 651983  
Ion Ratio Lower Upper  
98 100  
100 61.7 49.5 74.3





#51

4-Methyl-2-Pentanone

Concen: 1.84 ug/l

RT: 10.03 min Scan# 2567

Delta R.T. 0.04 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

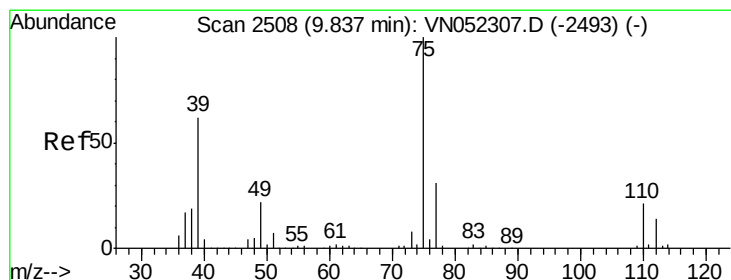
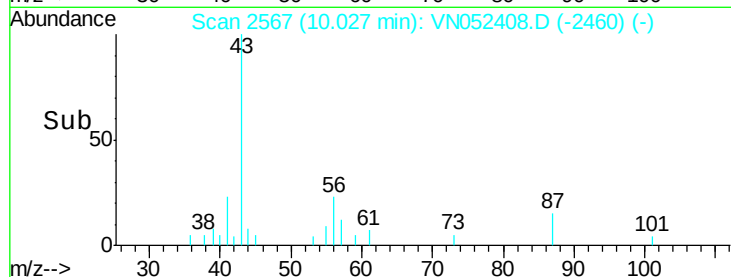
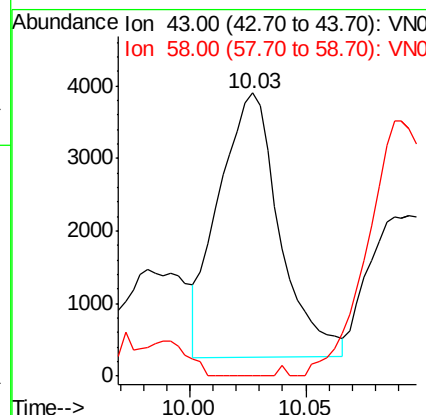
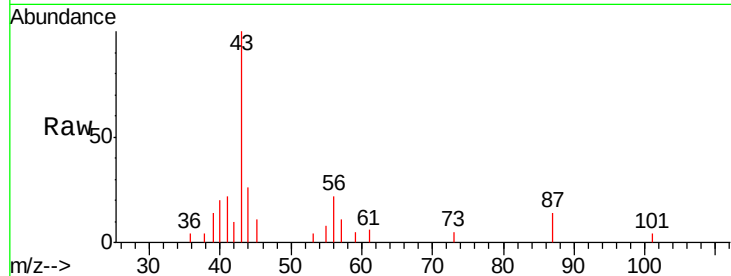
PB114952ZHE#02

Tgt Ion: 43 Resp: 6644

Ion Ratio Lower Upper

43 100

58 0.0 27.0 40.6#



#54

cis-1,3-Dichloropropene

Concen: 5.60 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.07 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

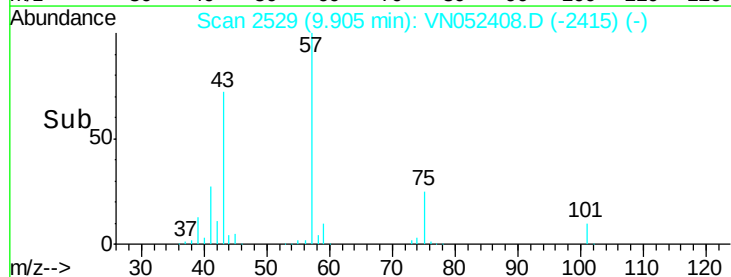
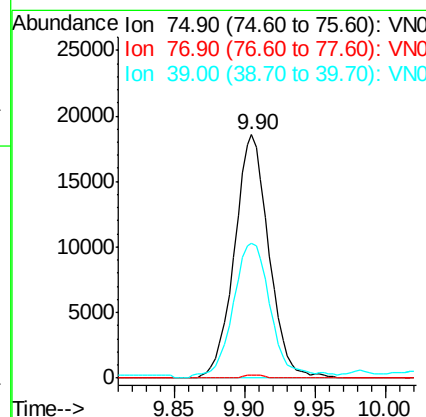
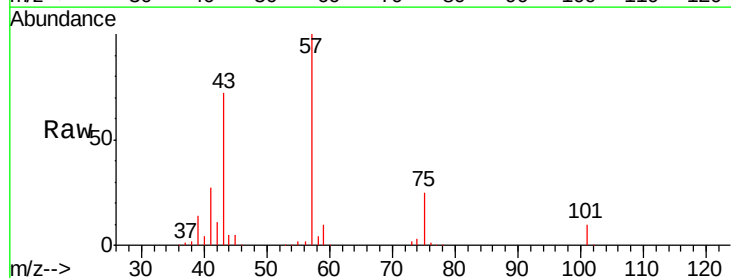
Tgt Ion: 75 Resp: 31672

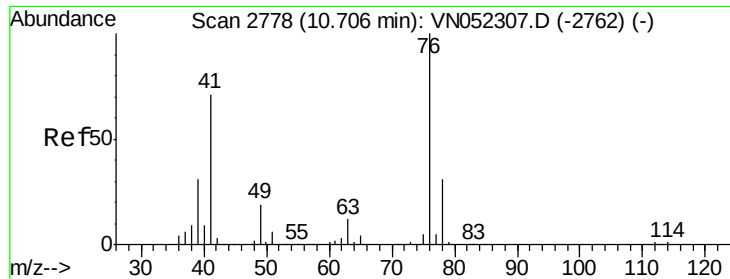
Ion Ratio Lower Upper

75 100

77 1.2 24.6 36.8#

39 54.5 49.9 74.9

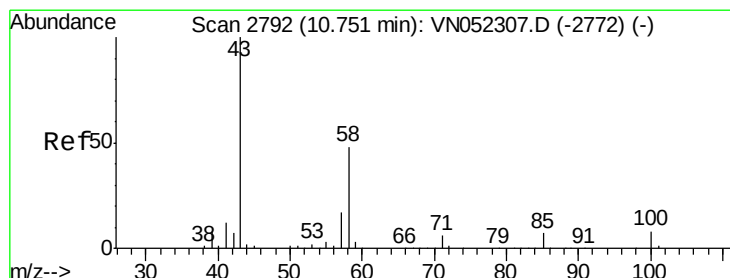
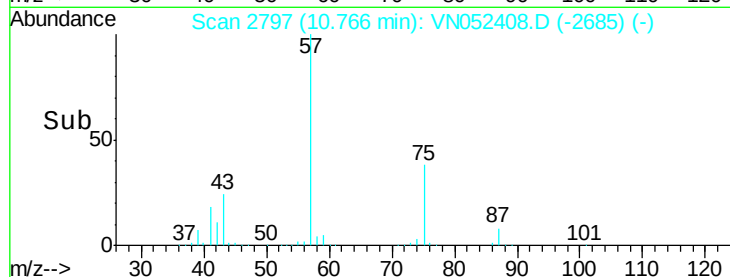
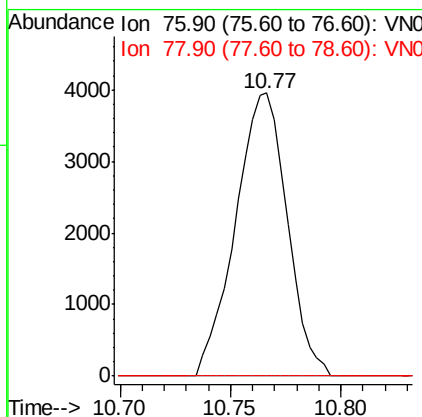
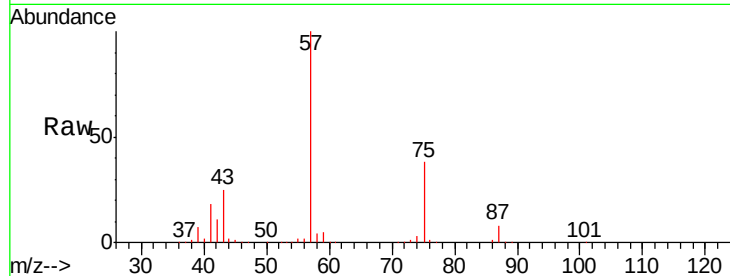




#57  
 1,3-Dichloropropane  
 Concen: 1.14 ug/l  
 RT: 10.77 min Scan# 2797  
 Delta R.T. 0.06 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

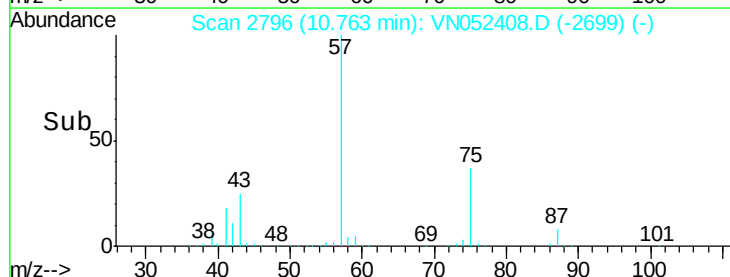
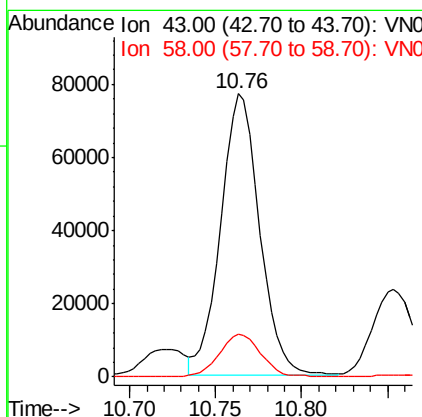
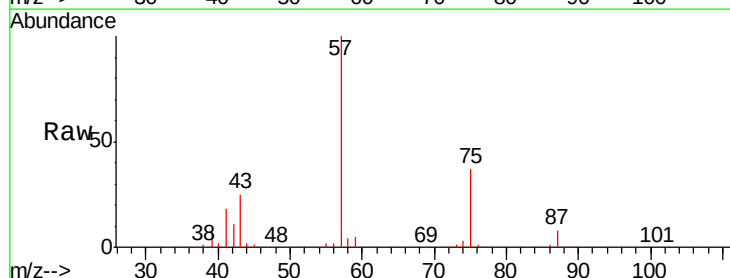
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB114952ZHE#02

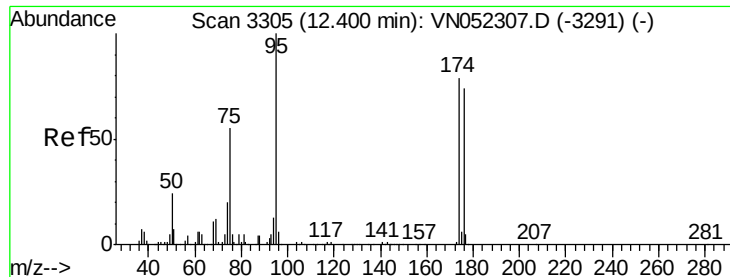
Tgt Ion: 76 Resp: 6414  
 Ion Ratio Lower Upper  
 76 100  
 78 0.0 25.7 38.5#



#59  
 2-Hexanone  
 Concen: 48.96 ug/l  
 RT: 10.76 min Scan# 2796  
 Delta R.T. 0.01 min  
 Lab File: VN052408.D  
 Acq: 20 Nov 2018 15:32

Tgt Ion: 43 Resp: 121299  
 Ion Ratio Lower Upper  
 43 100  
 58 16.3 23.5 70.6#





#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

PB114952ZHE#02

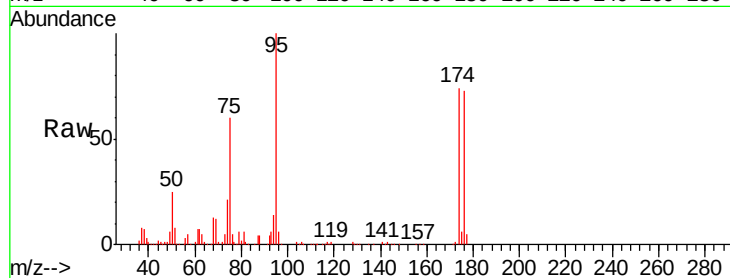
Tgt Ion: 95 Resp: 184974

Ion Ratio Lower Upper

95 100

174 76.7 0.0 156.0

176 74.0 0.0 148.4



Abundance Ion 94.90 (94.60 to 95.60): VN052408.D (-3212) (-)

Ion 173.80 (173.50 to 174.50): VN052408.D (-3212) (-)

Ion 175.80 (175.50 to 176.50): VN052408.D (-3212) (-)

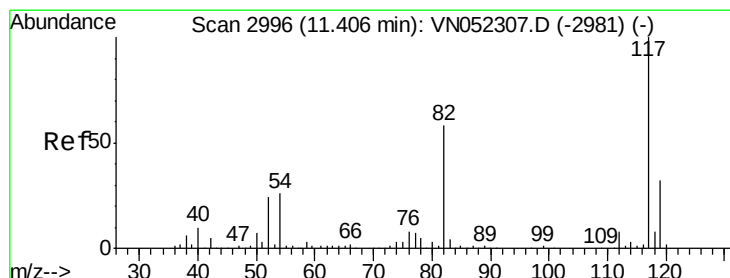
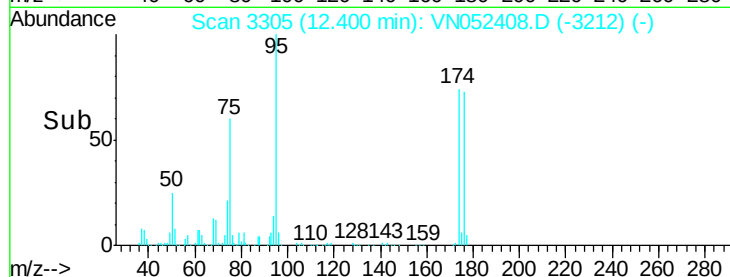
12.40

100000

50000

0

Time--> 12.30 12.35 12.40 12.45



#63

Chlorobenzene-d5

Concen: 50.00 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

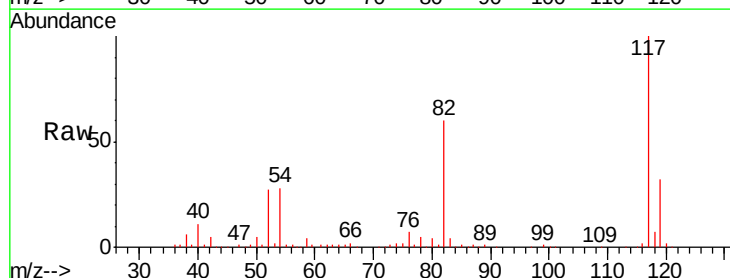
Tgt Ion: 117 Resp: 431954

Ion Ratio Lower Upper

117 100

82 60.0 46.5 69.7

119 31.9 25.7 38.5



Abundance Ion 116.90 (116.60 to 117.60): VN052408.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN052408.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN052408.D (-2903) (-)

11.41

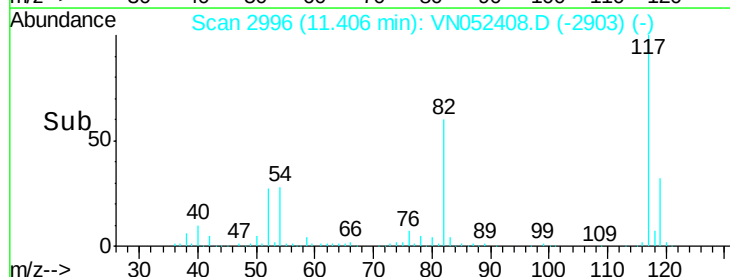
300000

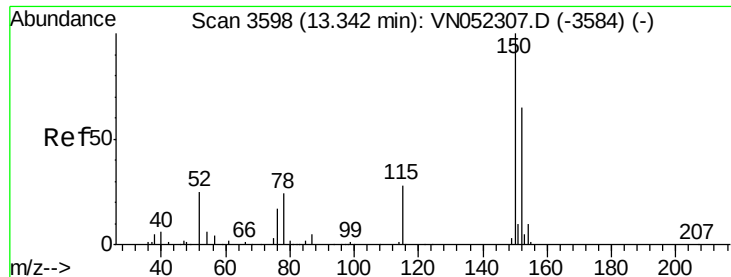
200000

100000

0

Time--> 11.30 11.40 11.50





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. -0.00 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

PB114952ZHE#02

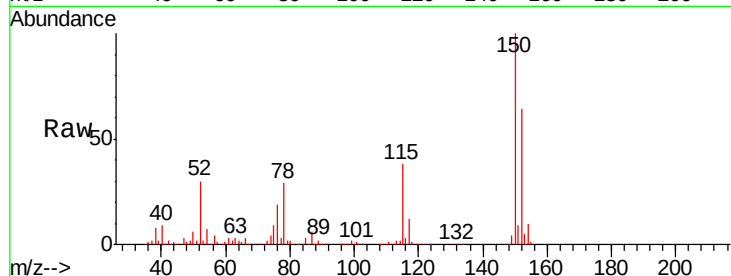
Tgt Ion:152 Resp: 146029

Ion Ratio Lower Upper

152 100

115 61.0 30.3 91.0

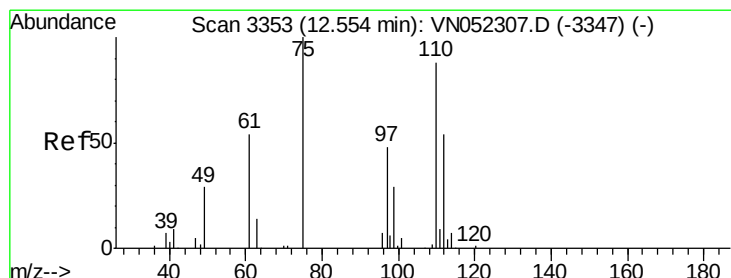
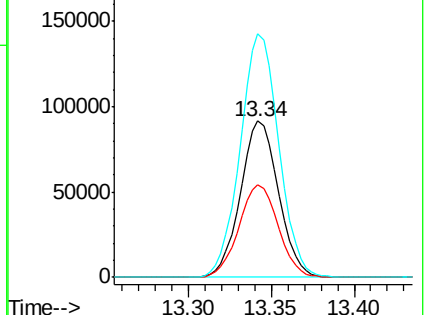
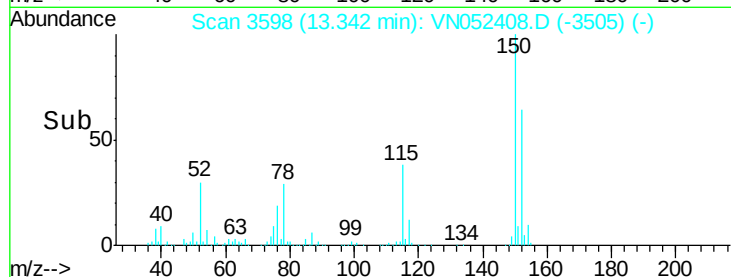
150 157.8 0.0 348.2



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: 44.29 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN052408.D

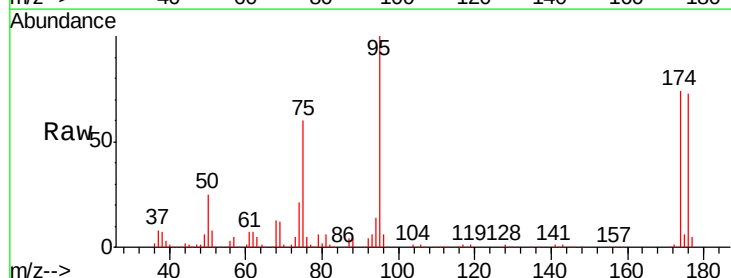
Acq: 20 Nov 2018 15:32

Tgt Ion: 75 Resp: 109738

Ion Ratio Lower Upper

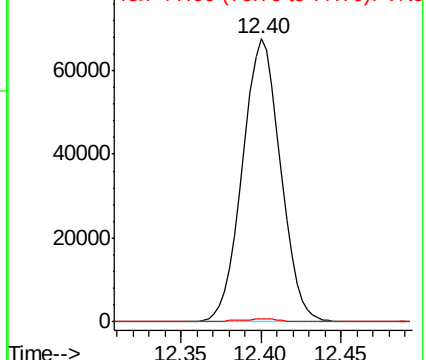
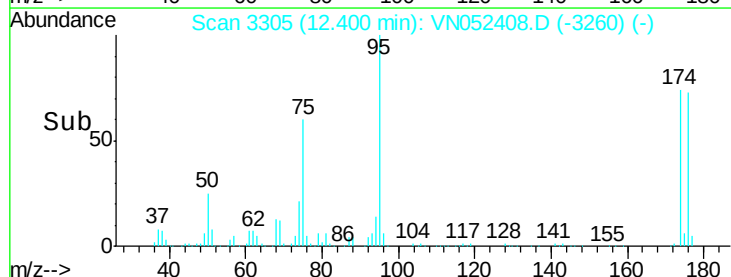
75 100

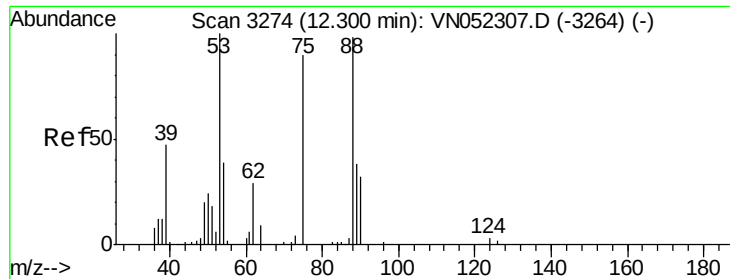
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#81

trans-1,4-Dichloro-2-butene

Concen: 143.64 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

Instrument :

MSVOA\_N

ClientSampleId :

PB114952ZHE#02

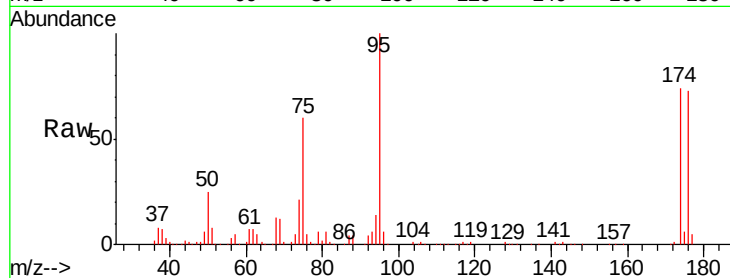
Tgt Ion: 75 Resp: 109738

Ion Ratio Lower Upper

75 100

53 0.1 90.2 135.2#

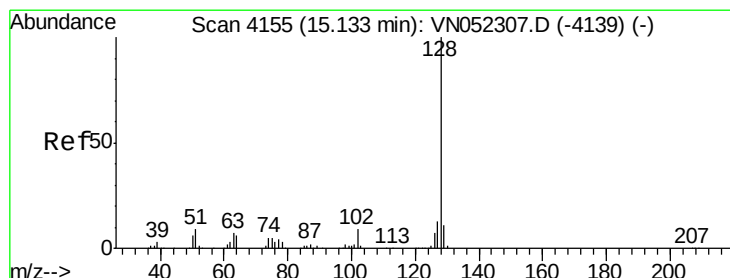
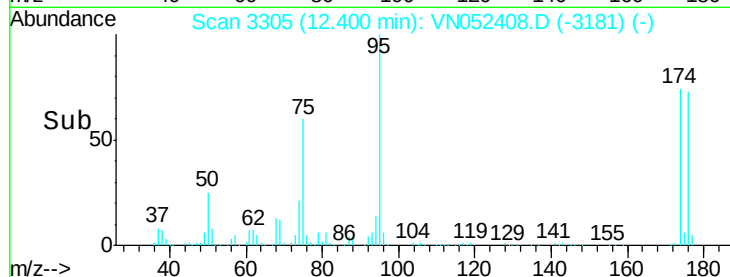
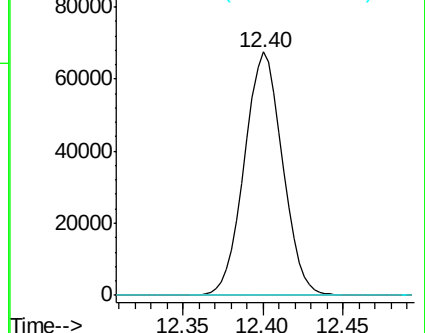
89 0.0 35.4 53.0#



Abundance Ion 74.90 (74.60 to 75.60): VN052307.D (-3264) (-)

Ion 53.00 (52.70 to 53.70): VN052307.D (-3264) (-)

Ion 88.90 (88.60 to 89.60): VN052307.D (-3264) (-)



#95

Naphthalene

Concen: 2.64 ug/l

RT: 15.14 min Scan# 4157

Delta R.T. 0.01 min

Lab File: VN052408.D

Acq: 20 Nov 2018 15:32

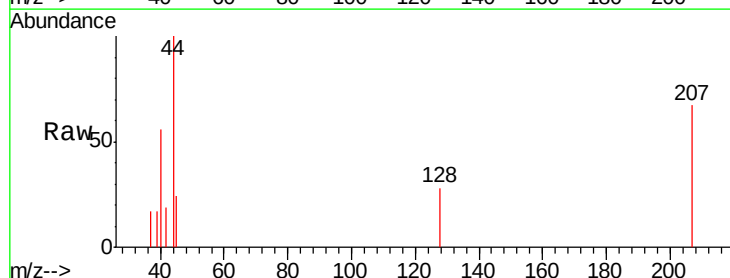
Tgt Ion: 128 Resp: 191

Ion Ratio Lower Upper

128 100

127 0.0 10.4 15.6#

129 0.0 8.6 13.0#



Abundance Ion 128.00 (127.70 to 128.70): VN052307.D (-4139) (-)

Ion 127.00 (126.70 to 127.70): VN052307.D (-4139) (-)

Ion 129.00 (128.70 to 129.70): VN052307.D (-4139) (-)

