

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081318\  
 Data File : VN050569.D  
 Acq On : 13 Aug 2018 15:33  
 Operator : MD\SY  
 Sample : PB111961ZHE#02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB111961ZHE#02

Quant Time: Aug 14 01:00:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 05:22:15 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 657076   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1075502  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 923754   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 341019   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 447860   | 51.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.02% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 413385   | 47.90 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.80%  |      |
| 50) Toluene-d8            | 10.09  | 98  | 1481768  | 45.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.34%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 408246   | 36.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 73.84%  |      |

## Target Compounds

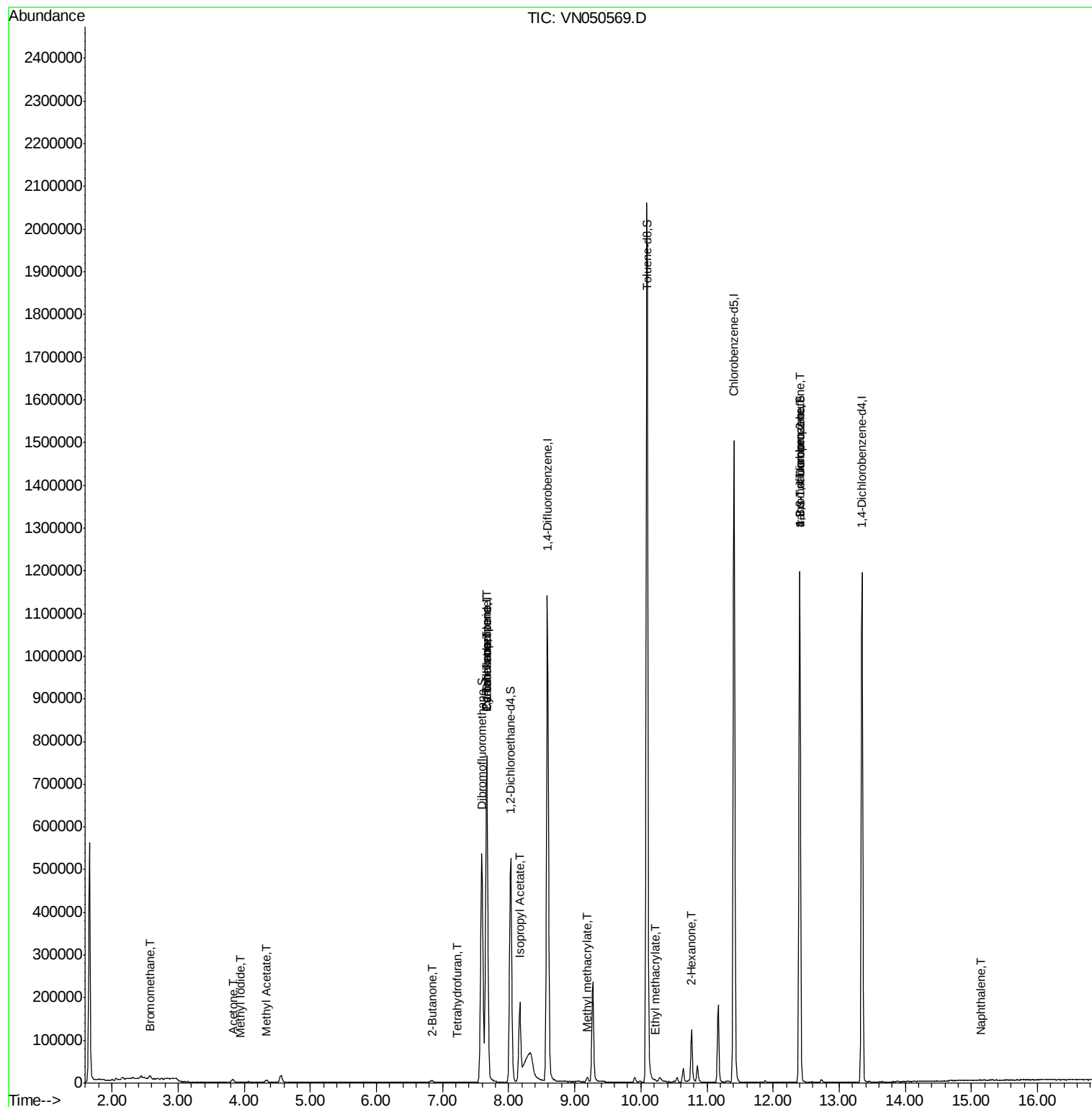
|                                |       |     |        |               |  | Qvalue |
|--------------------------------|-------|-----|--------|---------------|--|--------|
| 3) Chloromethane               | 2.06  | 50  | 2925   | Below Cal     |  | 91     |
| 5) Bromomethane                | 2.57  | 94  | 3950   | 1.03 ug/l #   |  | 79     |
| 10) Methyl Iodide              | 3.95  | 142 | 1210   | 0.36 ug/l #   |  | 74     |
| 16) Acetone                    | 3.82  | 43  | 14292  | 5.11 ug/l     |  | 89     |
| 18) Methyl Acetate             | 4.33  | 43  | 10675  | 1.38 ug/l #   |  | 78     |
| 25) 2-Butanone                 | 6.84  | 43  | 1754   | 0.40 ug/l #   |  | 48     |
| 29) Tetrahydrofuran            | 7.21  | 42  | 557    | 0.24 ug/l #   |  | 47     |
| 31) Cyclohexane                | 7.67  | 56  | 12257  | 0.35 ug/l #   |  | 1      |
| 36) 1,1-Dichloropropene        | 7.67  | 75  | 46177  | 3.91 ug/l #   |  | 47     |
| 38) Carbon Tetrachloride       | 7.67  | 117 | 59229  | 4.80 ug/l #   |  | 16     |
| 43) Isopropyl Acetate          | 8.17  | 43  | 220367 | 15.00 ug/l    |  | 98     |
| 48) Methyl methacrylate        | 9.18  | 41  | 7330   | 1.00 ug/l #   |  | 21     |
| 56) Ethyl methacrylate         | 10.23 | 69  | 2271   | 1.89 ug/l #   |  | 45     |
| 59) 2-Hexanone                 | 10.76 | 43  | 17262  | 2.34 ug/l #   |  | 61     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75  | 197571 | 32.01 ug/l #  |  | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75  | 197571 | 112.46 ug/l # |  | 13     |
| 95) Naphthalene                | 15.14 | 128 | 1059   | 3.68 ug/l #   |  | 69     |

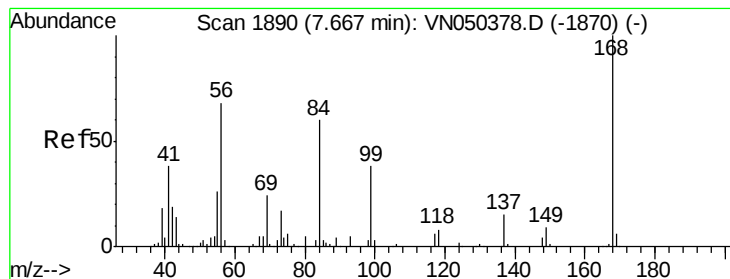
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081318\  
Data File : VN050569.D  
Acq On : 13 Aug 2018 15:33  
Operator : MD\SY  
Sample : PB111961ZHE#02  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB111961ZHE#02

Quant Time: Aug 14 01:00:31 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 05:22:15 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.67 min Scan# 1890

Delta R.T. -0.00 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

Instrument :

MSVOA\_N

ClientSampleId :

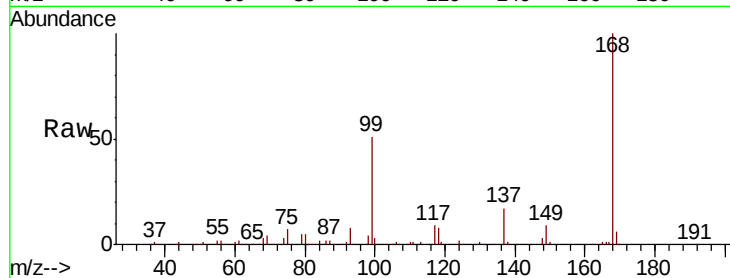
PB111961ZHE#02

Tot Ion:168 Resp: 657076

Ion Ratio Lower Upper

168 100

99 50.8 40.0 60.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.67

300000

250000

200000

150000

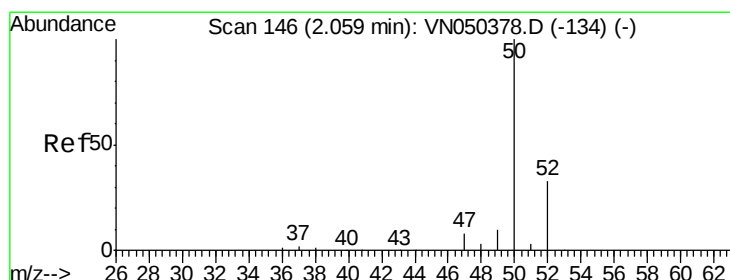
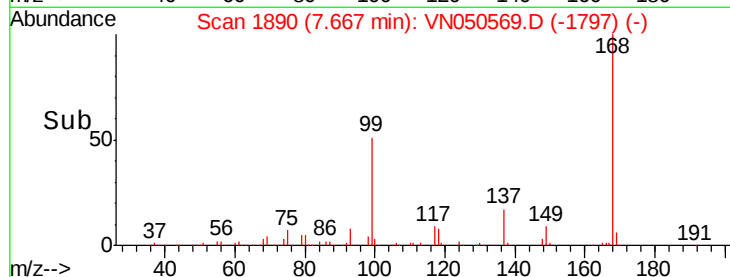
100000

50000

0

Time-->

7.60 7.70 7.80



#3

Chloromethane

Concen: Below Cal

RT: 2.06 min Scan# 146

Delta R.T. 0.00 min

Lab File: VN050569.D

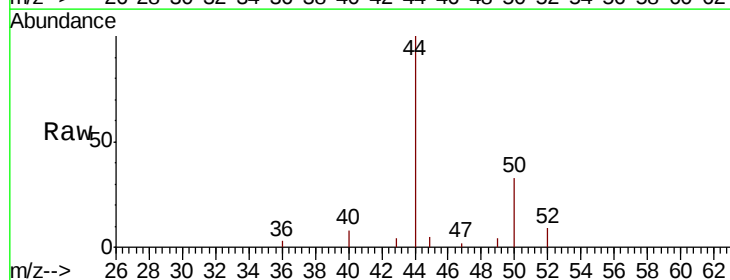
Acq: 13 Aug 2018 15:33

Tgt Ion: 50 Resp: 2925

Ion Ratio Lower Upper

50 100

52 27.3 25.9 38.9



Abundance Ion 49.90 (49.60 to 50.60): VN

Ion 51.90 (51.60 to 52.60): VN

2500

2000

1500

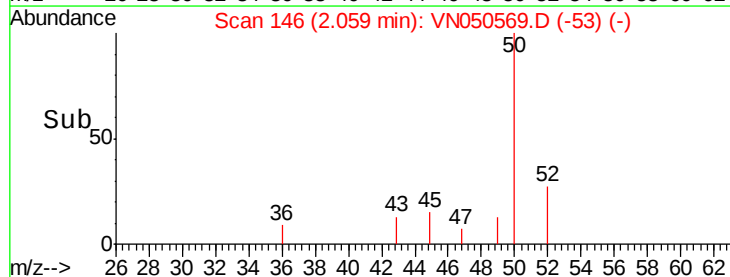
1000

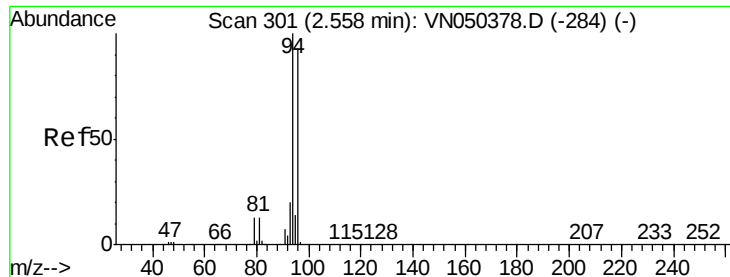
500

0

Time-->

2.00 2.05 2.10





#5

Bromomethane

Concen: 1.03 ug/l

RT: 2.57 min Scan# 305

Delta R.T. 0.01 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

Instrument :

MSVOA\_N

ClientSampleId :

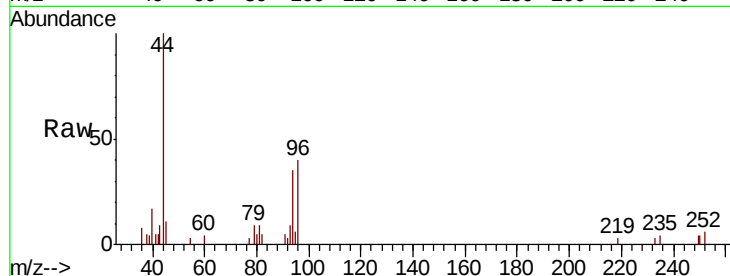
PB111961ZHE#02

Tot Ion: 94 Resp: 3950

Ion Ratio Lower Upper

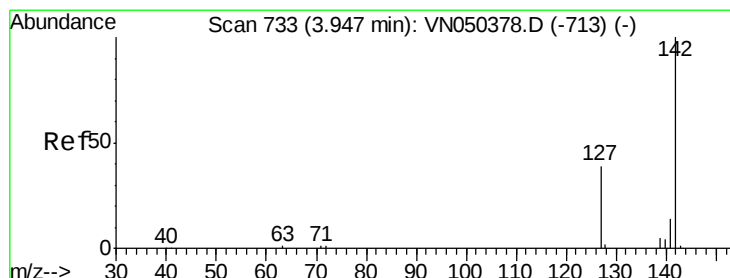
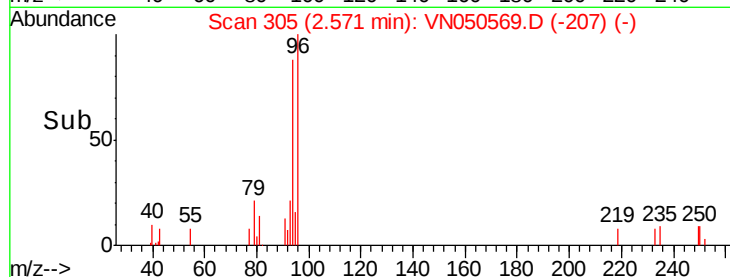
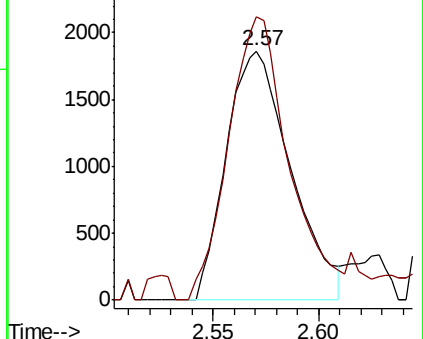
94 100

96 113.6 74.6 112.0#



Abundance Ion 93.90 (93.60 to 94.60): VN050378.D (-284) (-)

Ion 95.90 (95.60 to 96.60): VN050378.D (-284) (-)



#10

Methyl Iodide

Concen: 0.36 ug/l

RT: 3.95 min Scan# 734

Delta R.T. 0.00 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

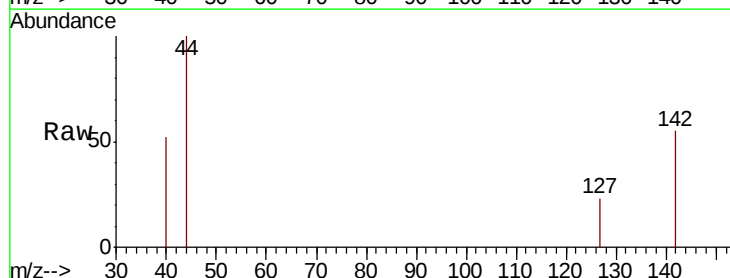
Tgt Ion: 142 Resp: 1210

Ion Ratio Lower Upper

142 100

127 27.0 33.4 50.2#

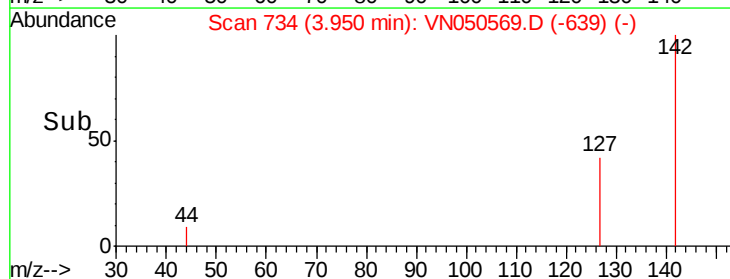
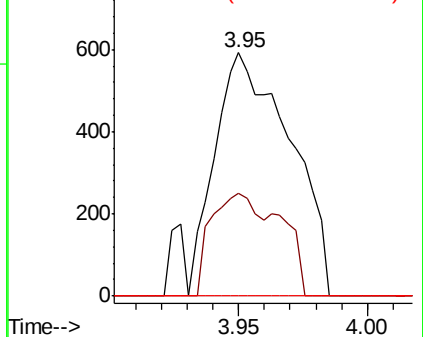
141 0.0 11.6 17.4#

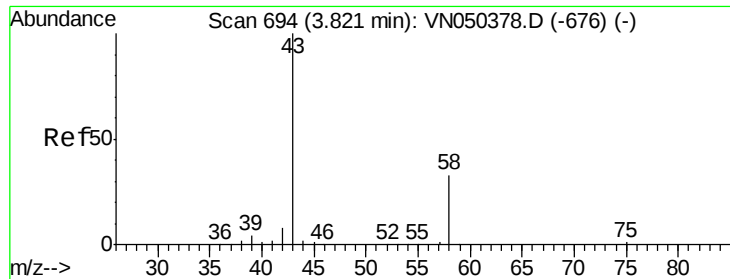


Abundance Ion 141.80 (141.50 to 142.50): VN050378.D (-713) (-)

Ion 126.80 (126.50 to 127.50): VN050378.D (-713) (-)

Ion 140.80 (140.50 to 141.50): VN050378.D (-713) (-)





#16

Acetone

Concen: 5.11 ug/l

RT: 3.82 min Scan# 695

Delta R.T. 0.00 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

Instrument :

MSVOA\_N

ClientSampleId :

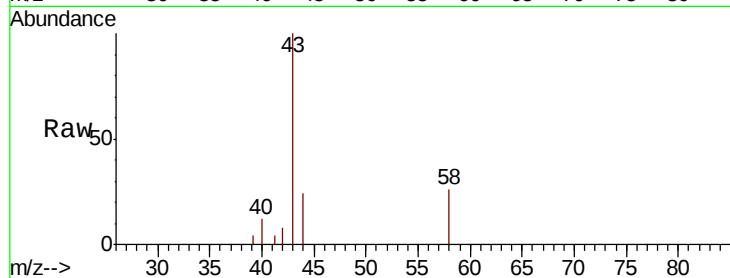
PB111961ZHE#02

Tot Ion: 43 Resp: 14292

Ion Ratio Lower Upper

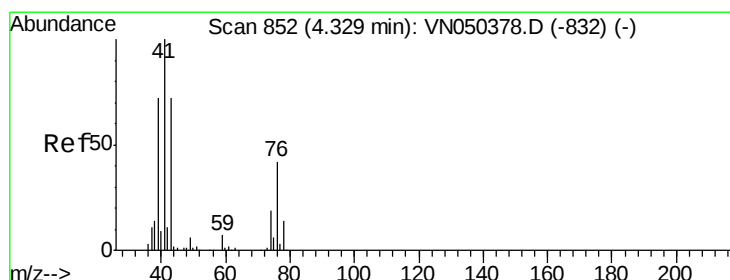
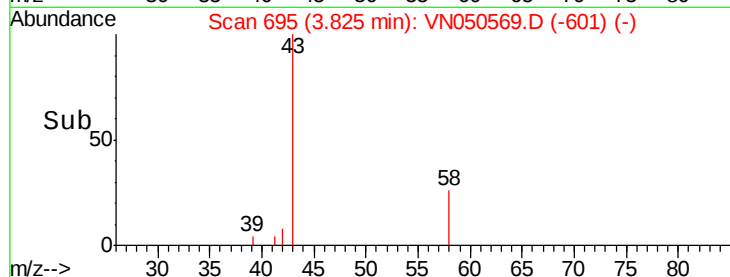
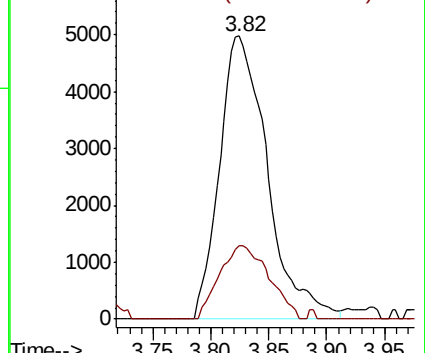
43 100

58 26.1 25.8 38.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 1.38 ug/l

RT: 4.33 min Scan# 852

Delta R.T. 0.00 min

Lab File: VN050569.D

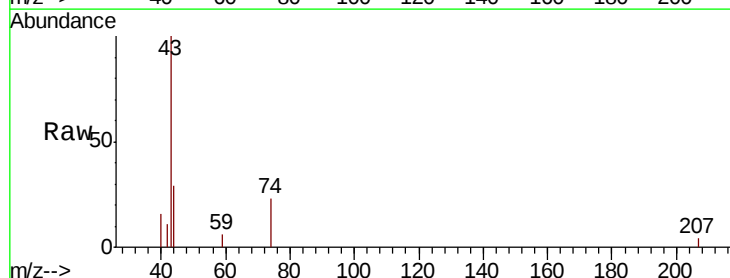
Acq: 13 Aug 2018 15:33

Tgt Ion: 43 Resp: 10675

Ion Ratio Lower Upper

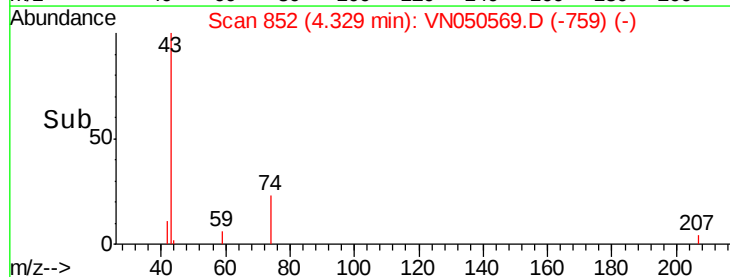
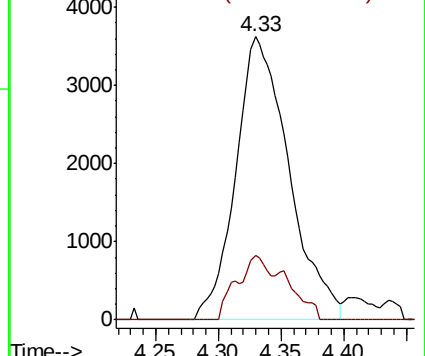
43 100

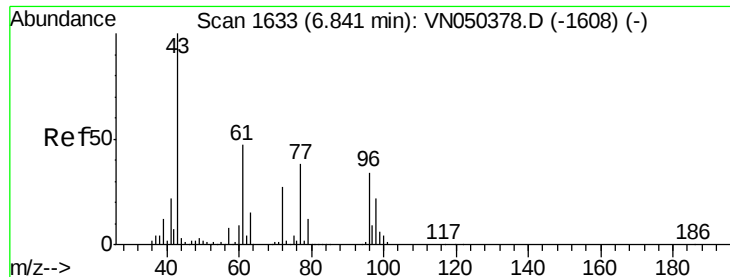
74 13.4 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0





#25

2-Butanone

Concen: 0.40 ug/l

RT: 6.84 min Scan# 1632

Delta R.T. -0.00 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

Instrument :

MSVOA\_N

ClientSampleId :

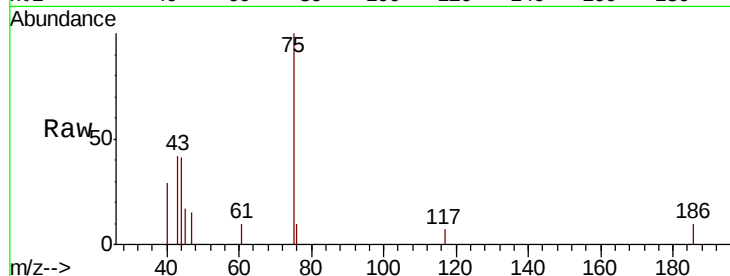
PB111961ZHE#02

Tot Ion: 43 Resp: 1754

Ion Ratio Lower Upper

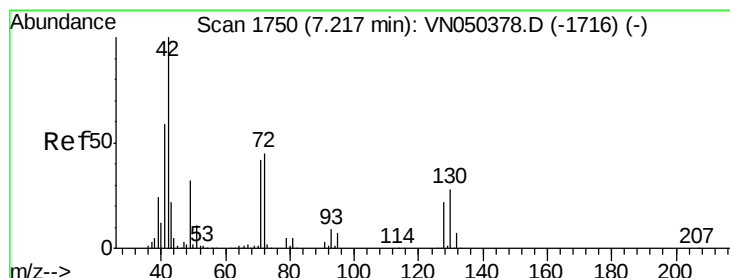
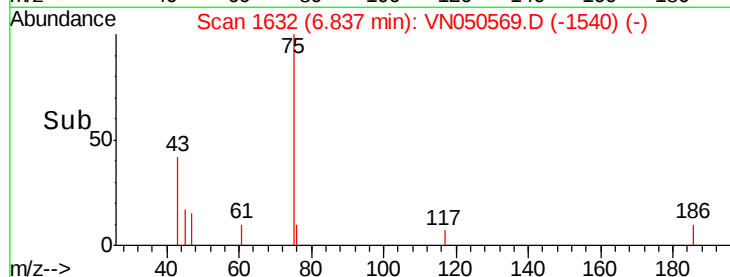
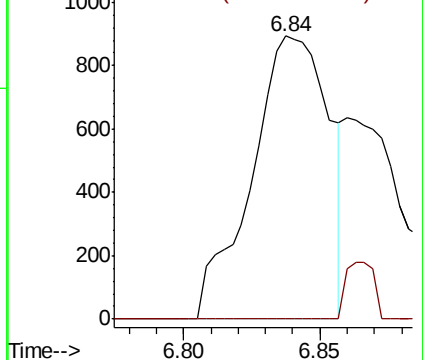
43 100

72 0.0 21.5 32.3#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0



#29

Tetrahydrofuran

Concen: 0.24 ug/l

RT: 7.21 min Scan# 1749

Delta R.T. -0.00 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

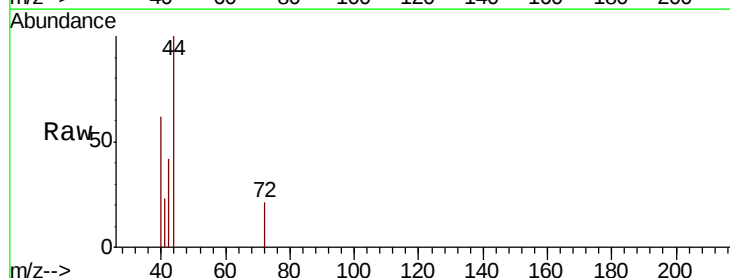
Tgt Ion: 42 Resp: 557

Ion Ratio Lower Upper

42 100

72 18.9 35.9 53.9#

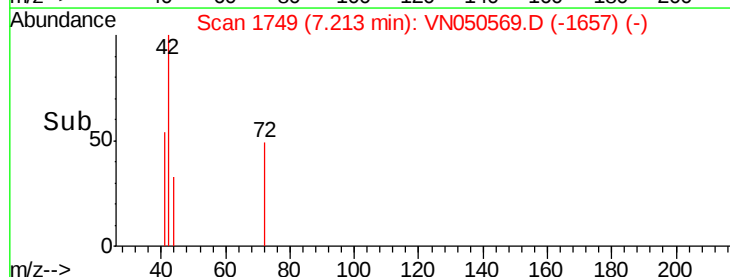
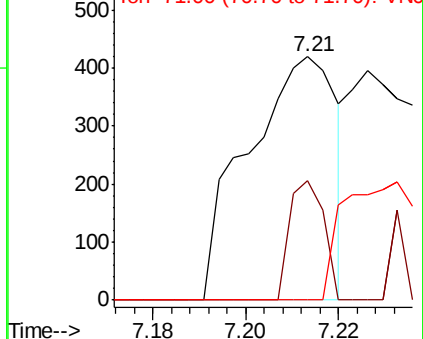
71 0.0 33.7 50.5#

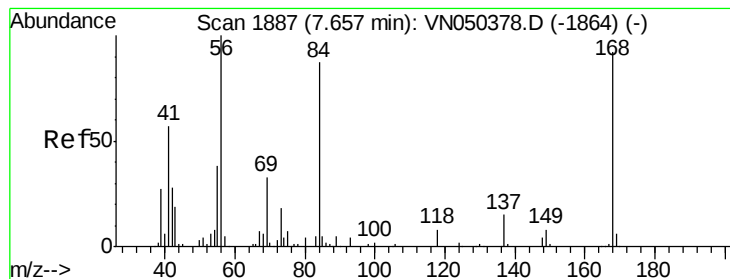


Abundance Ion 42.00 (41.70 to 42.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

Ion 71.00 (70.70 to 71.70): VN0





#31

Cyclohexane

Concen: 0.35 ug/l

RT: 7.67 min Scan# 1890

Delta R.T. 0.01 min

Lab File: VN050569.D

Acq: 13 Aug 2018 15:33

Instrument :

MSVOA\_N

ClientSampleId :

PB111961ZHE#02

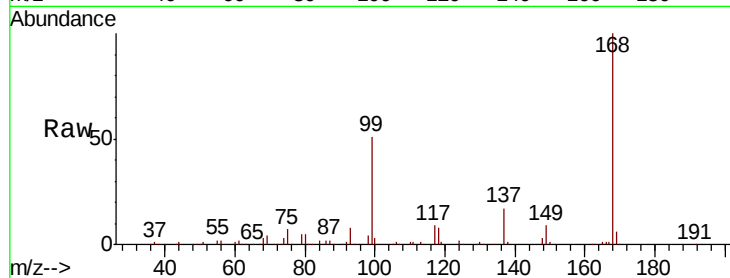
Tot Ion: 56 Resp: 12257

Ion Ratio Lower Upper

56 100

69 198.8 26.2 39.4#

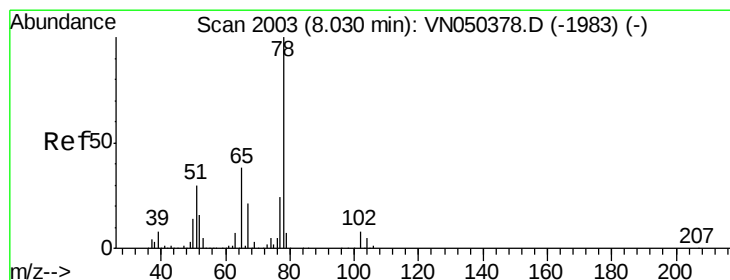
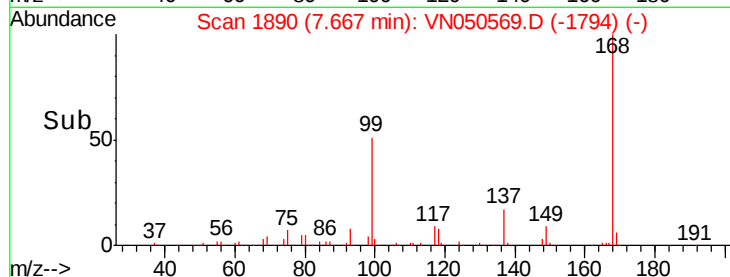
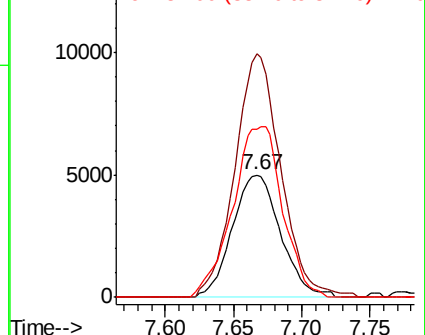
84 137.5 67.4 101.0#



Abundance Ion 56.00 (55.70 to 56.70): VNC

Ion 69.00 (68.70 to 69.70): VNC

Ion 84.00 (83.70 to 84.70): VNC



#33

1,2-Dichloroethane-d4

Concen: 51.01 ug/l

RT: 8.03 min Scan# 2003

Delta R.T. -0.00 min

Lab File: VN050569.D

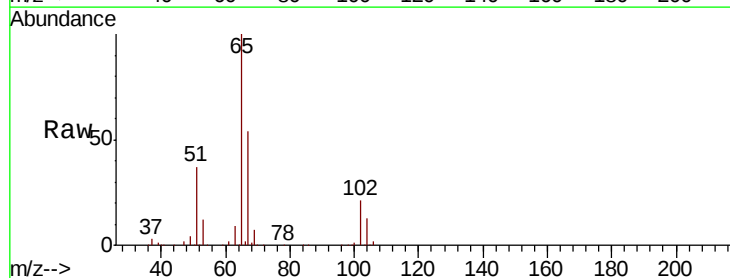
Acq: 13 Aug 2018 15:33

Tgt Ion: 65 Resp: 447860

Ion Ratio Lower Upper

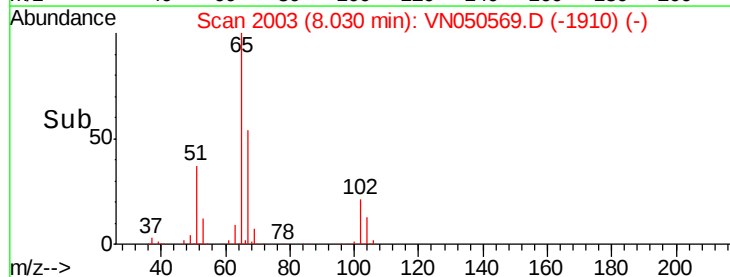
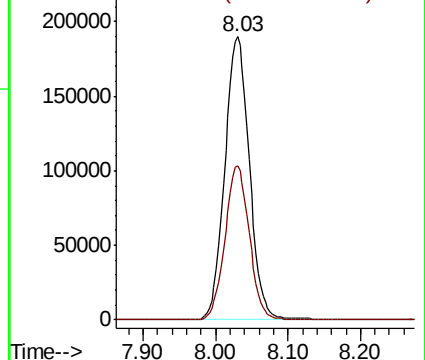
65 100

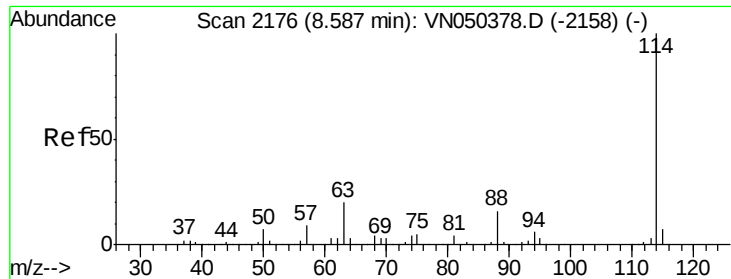
67 53.6 0.0 108.4



Abundance Ion 64.90 (64.60 to 65.60): VNC

Ion 66.90 (66.60 to 67.60): VNC

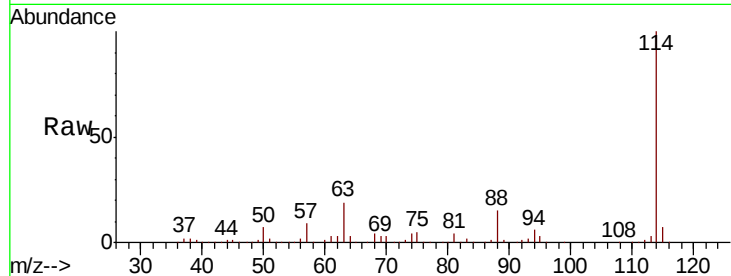




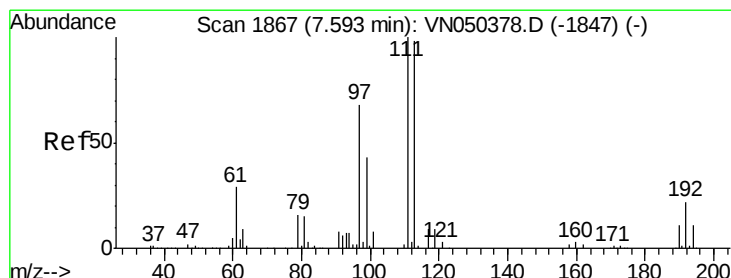
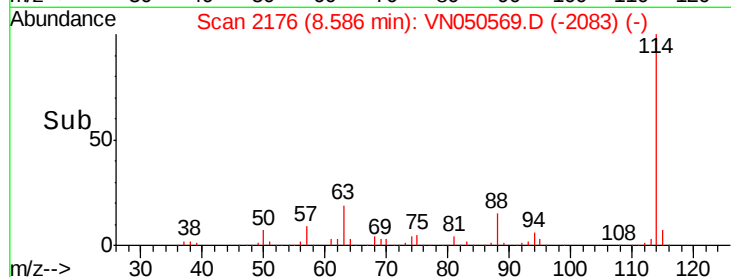
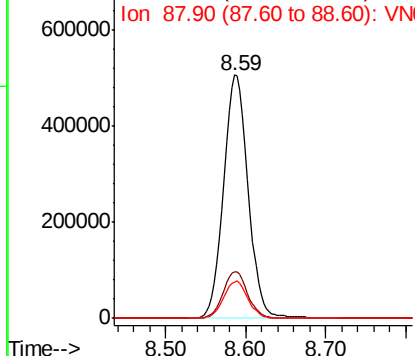
#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 8.59 min Scan# 2176  
 Delta R.T. -0.00 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB111961ZHE#02

Tot Ion:114 Resp: 1075502  
 Ion Ratio Lower Upper  
 114 100  
 63 19.3 0.0 40.0  
 88 15.1 0.0 31.2

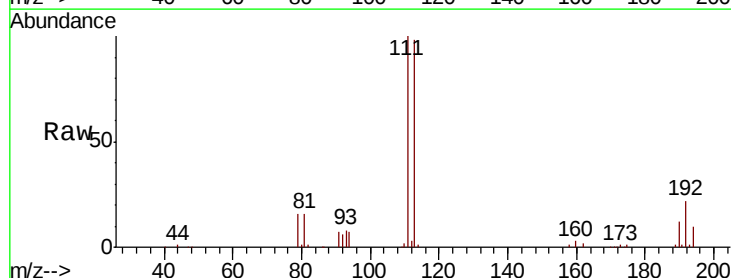


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

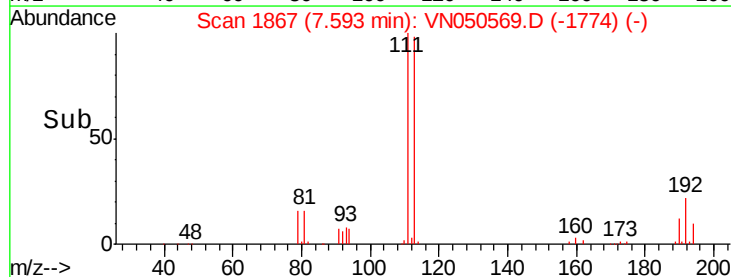
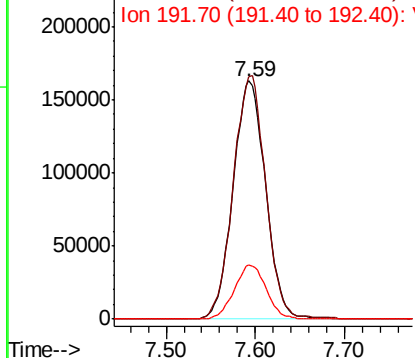


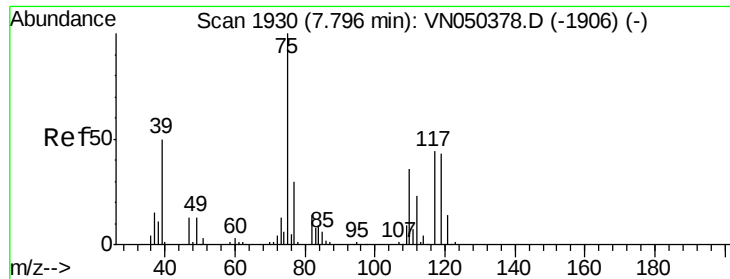
#35  
 Dibromofluoromethane  
 Concen: 47.90 ug/l  
 RT: 7.59 min Scan# 1867  
 Delta R.T. -0.00 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Tgt Ion:113 Resp: 413385  
 Ion Ratio Lower Upper  
 113 100  
 111 101.8 80.7 121.1  
 192 22.2 17.8 26.6



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

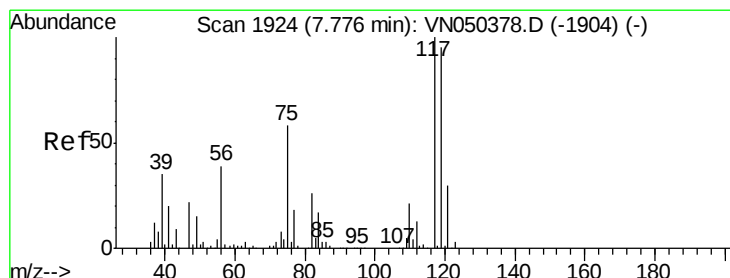
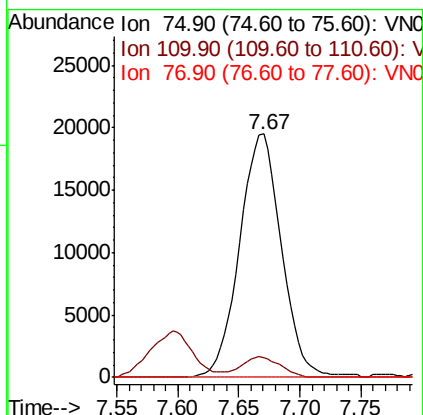
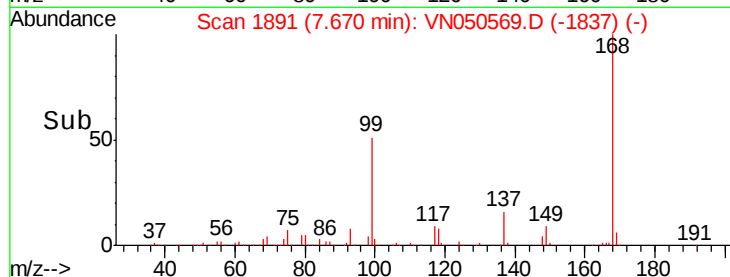
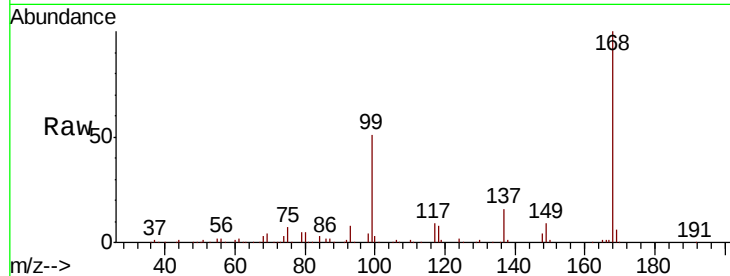




#36  
 1,1-Dichloropropene  
 Concen: 3.91 ug/l  
 RT: 7.67 min Scan# 1891  
 Delta R.T. -0.13 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

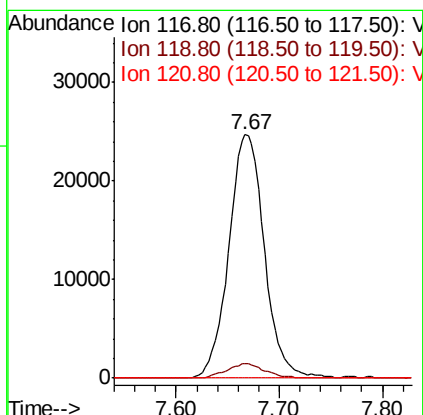
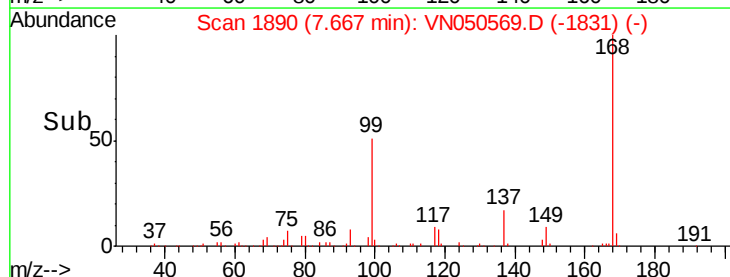
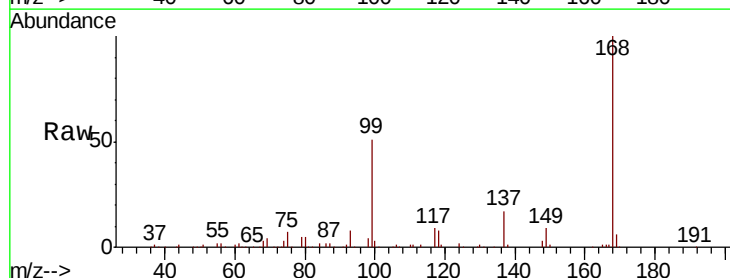
Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 PB111961ZHE#02

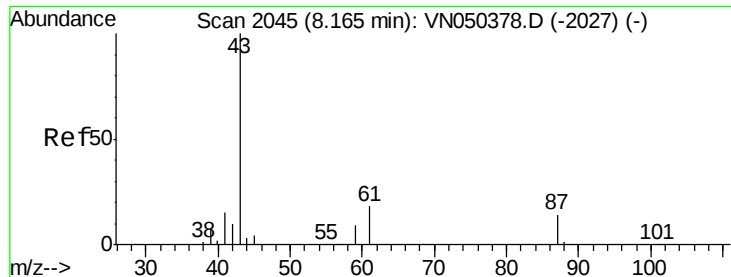
Tot Ion: 75 Resp: 46177  
 Ion Ratio Lower Upper  
 75 100  
 110 7.6 18.4 55.2#  
 77 0.0 25.3 37.9#



#38  
 Carbon Tetrachloride  
 Concen: 4.80 ug/l  
 RT: 7.67 min Scan# 1890  
 Delta R.T. -0.11 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Tgt Ion: 117 Resp: 59229  
 Ion Ratio Lower Upper  
 117 100  
 119 6.1 77.4 116.0#  
 121 0.0 23.9 35.9#



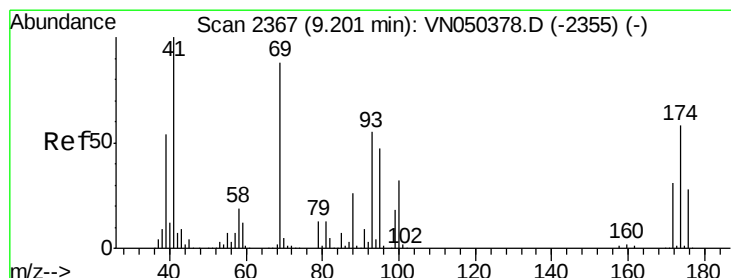
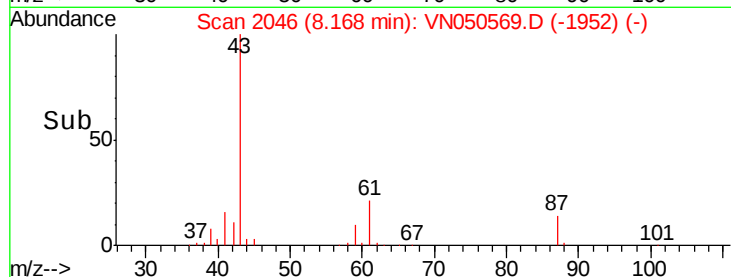
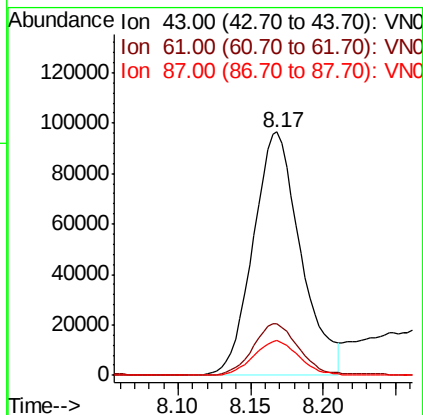
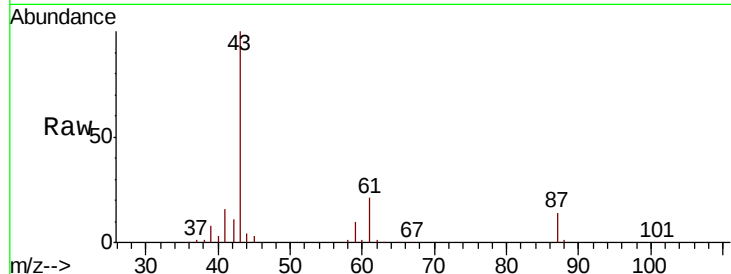


#43

Isopropyl Acetate  
 Concen: 15.00 ug/l  
 RT: 8.17 min Scan# 2046  
 Delta R.T. 0.00 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB111961ZHE#02

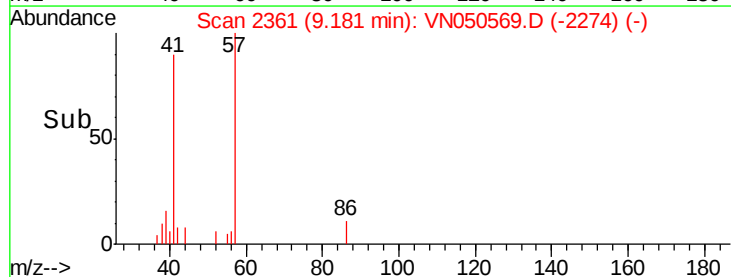
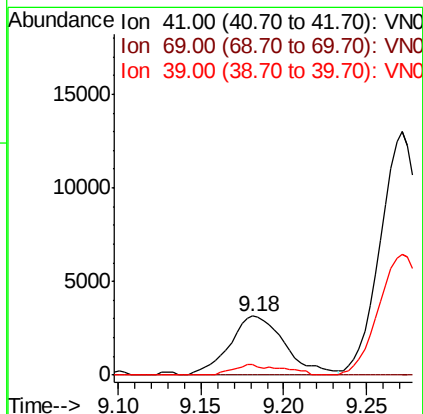
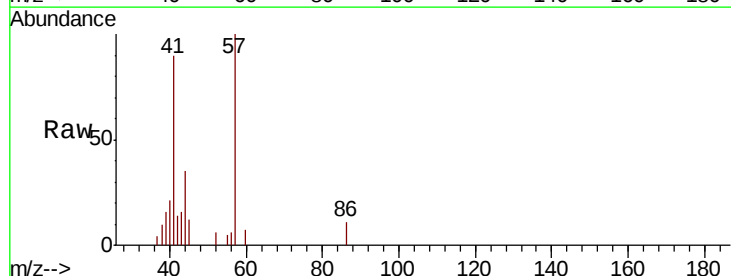
| Tot Ion   | 43   | Resp  | 220367 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 61        | 20.6 | 15.8  | 23.6   |
| 87        | 13.6 | 10.3  | 15.5   |

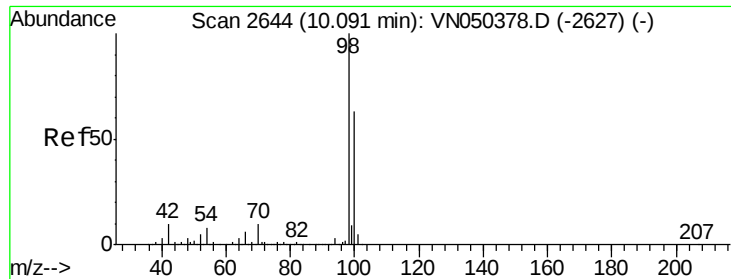


#48

Methyl methacrylate  
 Concen: 1.00 ug/l  
 RT: 9.18 min Scan# 2361  
 Delta R.T. -0.02 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

| Tgt Ion   | 41   | Resp  | 7330   |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 69        | 0.0  | 70.6  | 105.8# |
| 39        | 15.9 | 43.9  | 65.9#  |

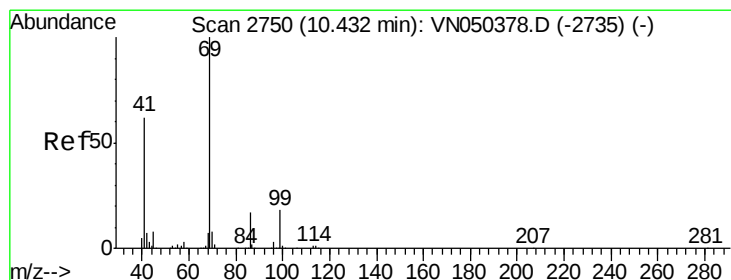
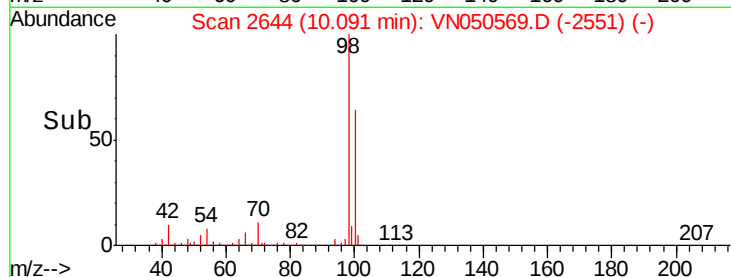
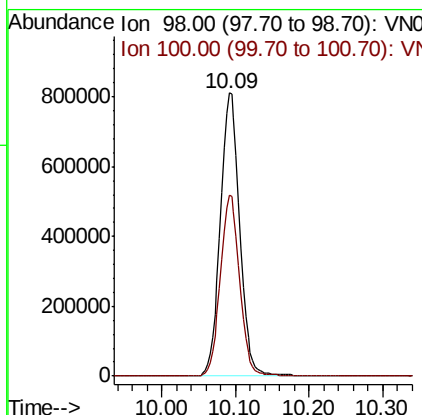
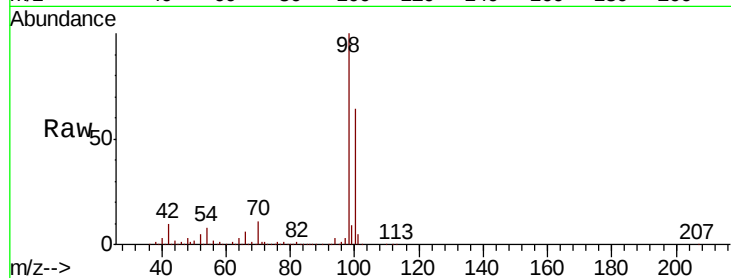




#50  
Toluene-d8  
Concen: 45.67 ug/l  
RT: 10.09 min Scan# 2644  
Delta R.T. -0.00 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

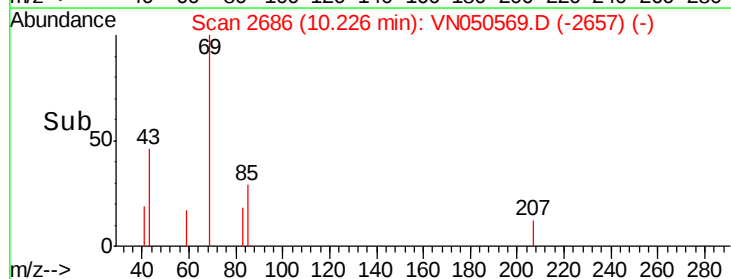
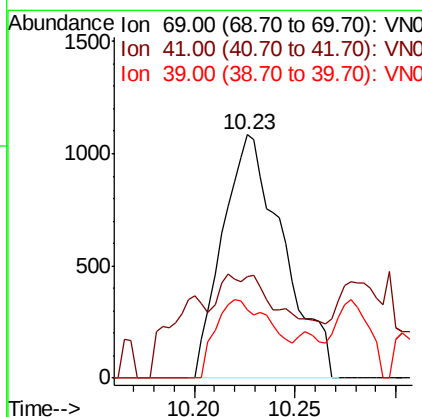
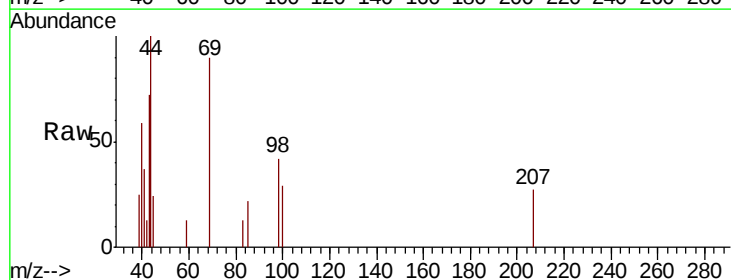
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB111961ZHE#02

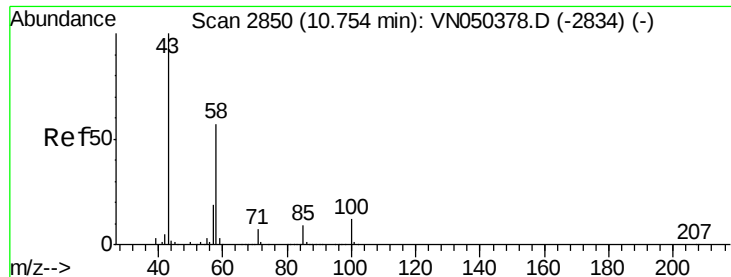
Tot Ion: 98 Resp: 1481768  
Ion Ratio Lower Upper  
98 100  
100 63.7 50.7 76.1



#56  
Ethyl methacrylate  
Concen: 1.89 ug/l  
RT: 10.23 min Scan# 2686  
Delta R.T. -0.21 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

Tgt Ion: 69 Resp: 2271  
Ion Ratio Lower Upper  
69 100  
41 0.0 51.0 76.4#  
39 30.6 26.6 40.0

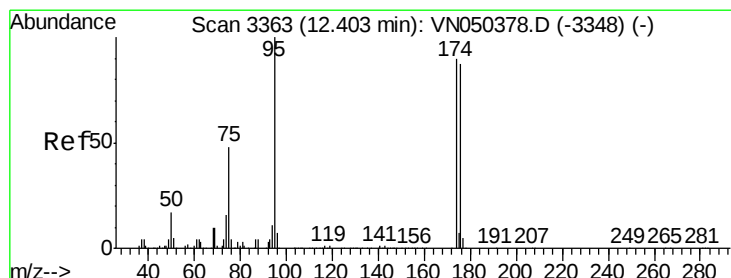
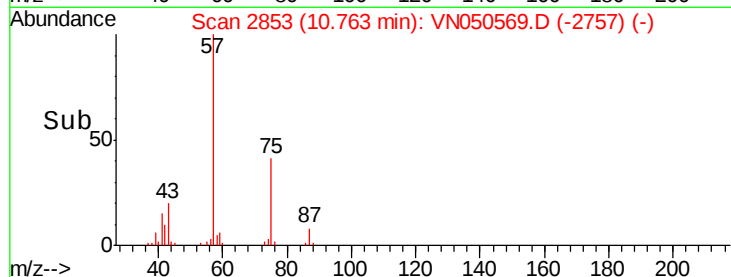
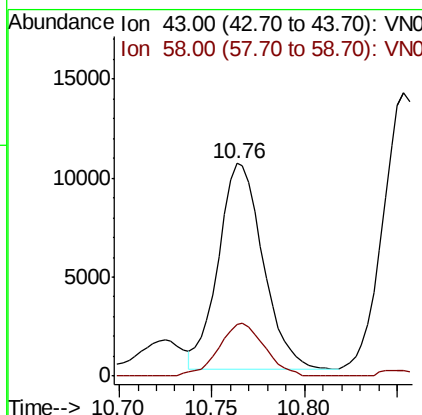
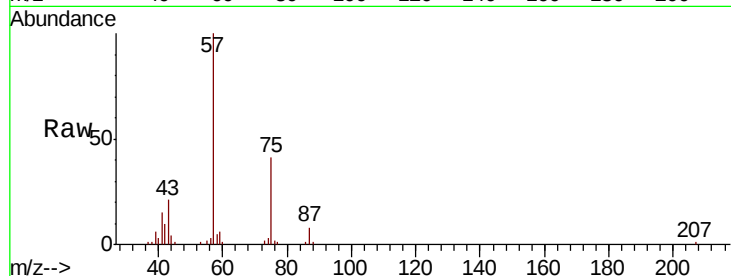




#59  
2-Hexanone  
Concen: 2.34 ug/l  
RT: 10.76 min Scan# 2853  
Delta R.T. 0.01 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

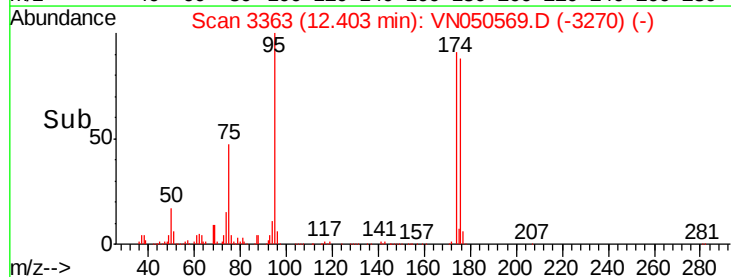
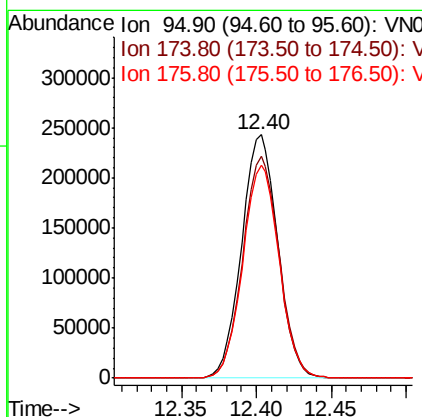
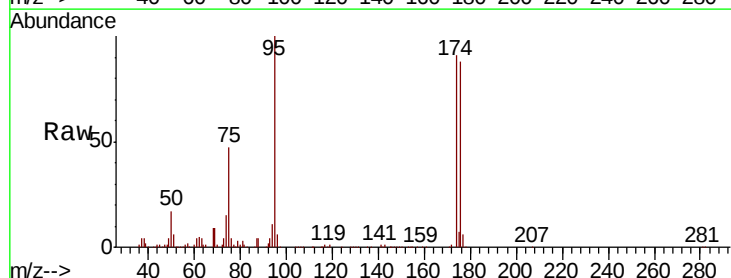
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB111961ZHE#02

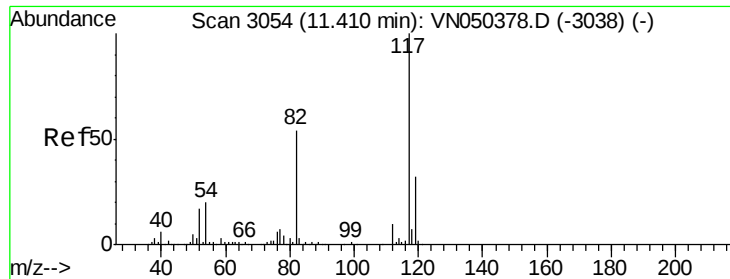
Tot Ion: 43 Resp: 17262  
Ion Ratio Lower Upper  
43 100  
58 26.6 27.6 82.7#



#62  
4-Bromofluorobenzene  
Concen: 36.92 ug/l  
RT: 12.40 min Scan# 3363  
Delta R.T. -0.00 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

Tgt Ion: 95 Resp: 408246  
Ion Ratio Lower Upper  
95 100  
174 91.8 0.0 178.2  
176 87.9 0.0 173.4

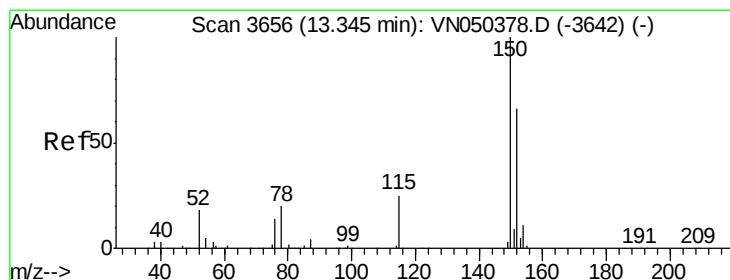
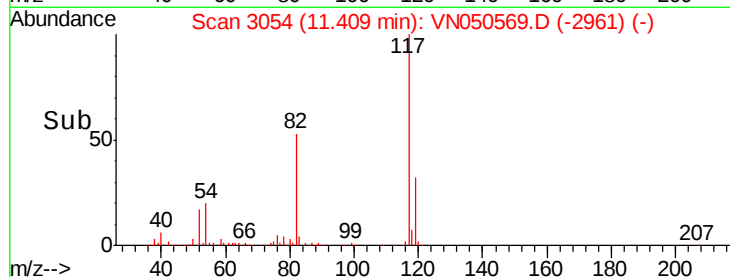
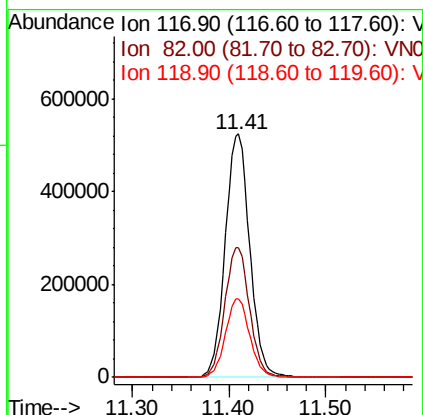
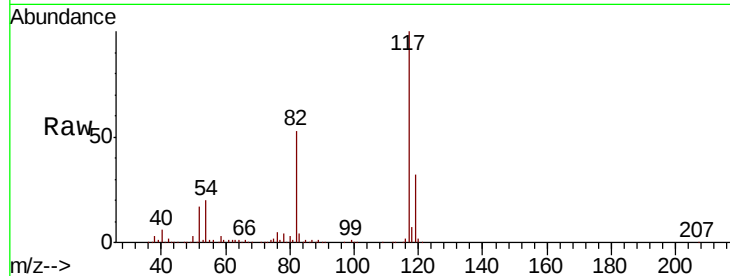




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.41 min Scan# 3054  
Delta R.T. -0.00 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

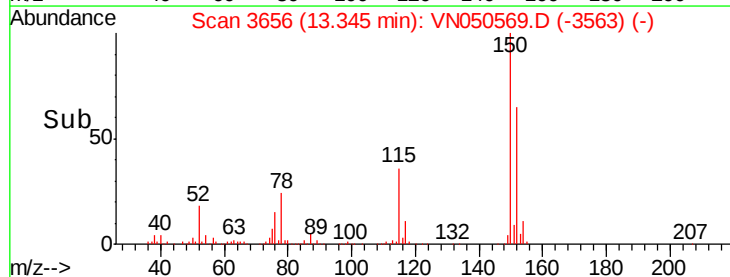
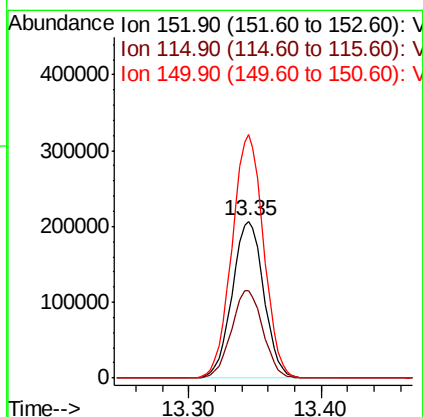
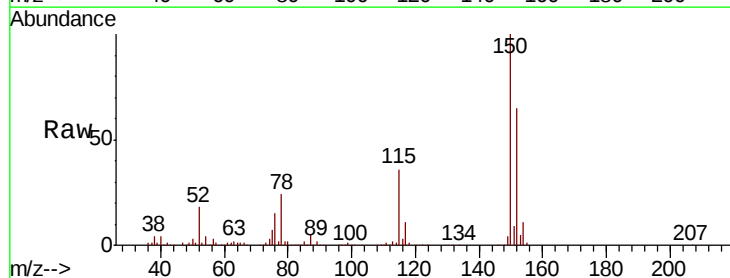
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB111961ZHE#02

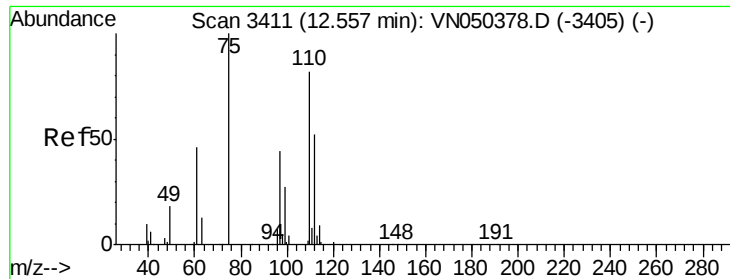
Tot Ion:117 Resp: 923754  
Ion Ratio Lower Upper  
117 100  
82 53.3 43.7 65.5  
119 32.5 26.1 39.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 13.35 min Scan# 3656  
Delta R.T. -0.00 min  
Lab File: VN050569.D  
Acq: 13 Aug 2018 15:33

Tgt Ion:152 Resp: 341019  
Ion Ratio Lower Upper  
152 100  
115 56.0 27.8 83.3  
150 155.5 0.0 348.6

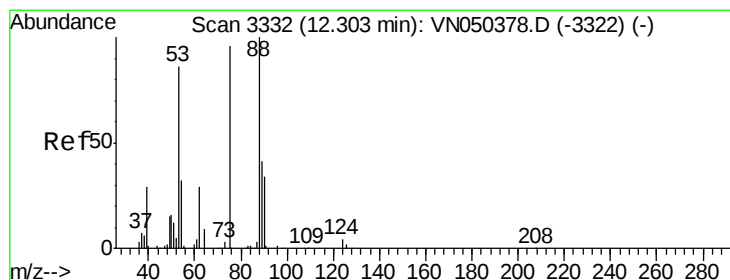
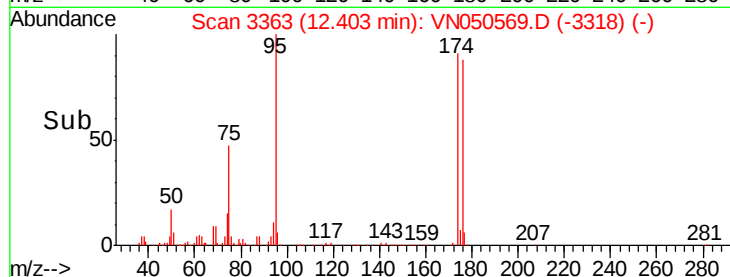
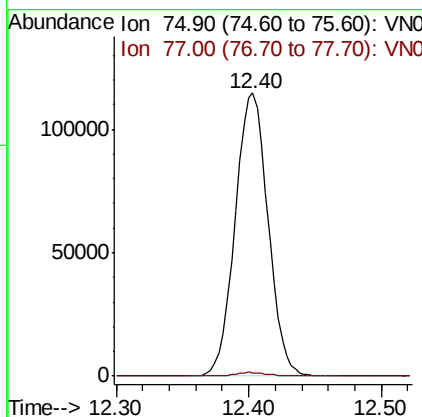
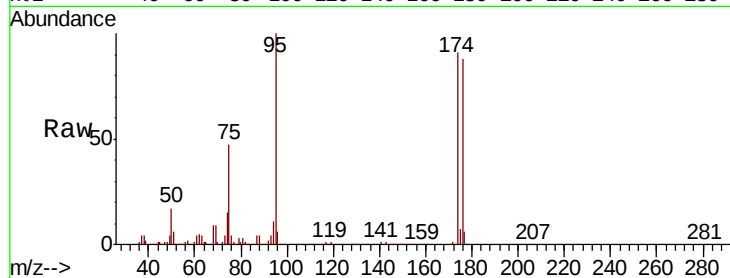




#76  
 1,2,3-Trichloropropane  
 Concen: 32.01 ug/l  
 RT: 12.40 min Scan# 3363  
 Delta R.T. -0.15 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

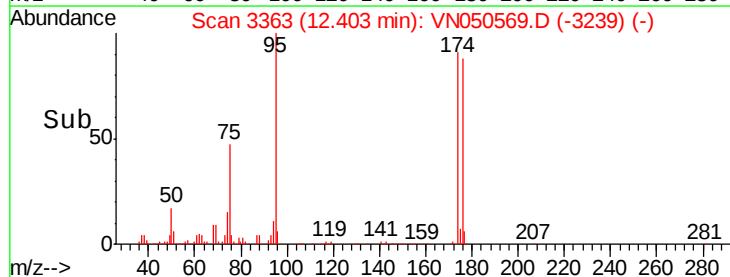
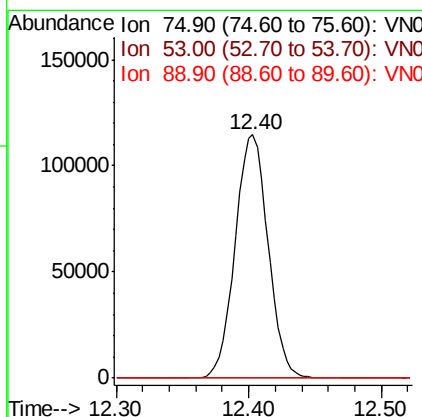
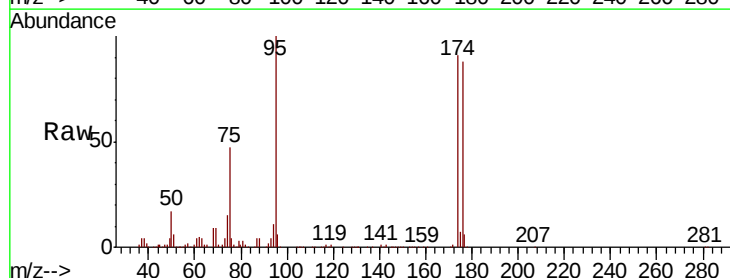
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB111961ZHE#02

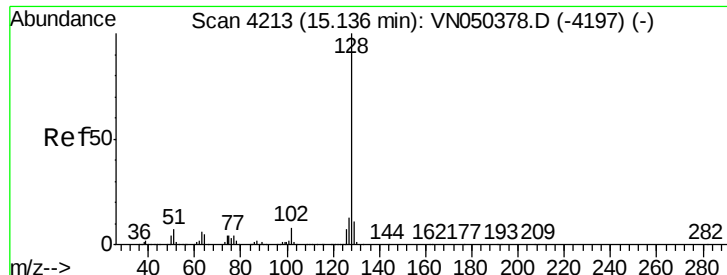
Tot Ion: 75 Resp: 197571  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 112.46 ug/l  
 RT: 12.40 min Scan# 3363  
 Delta R.T. 0.10 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Tgt Ion: 75 Resp: 197571  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 73.5 110.3#  
 89 0.0 36.0 54.0#

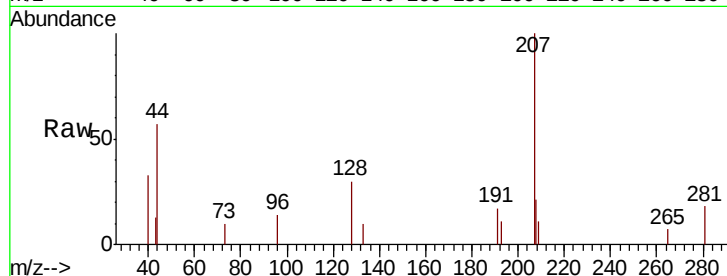




#95  
 Naphthalene  
 Concen: 3.68 ug/l  
 RT: 15.14 min Scan# 4214  
 Delta R.T. 0.00 min  
 Lab File: VN050569.D  
 Acq: 13 Aug 2018 15:33

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB111961ZHE#02

Tot Ion:128 Resp: 1059  
 Ion Ratio Lower Upper  
 128 100  
 127 0.0 10.4 15.6#  
 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

