

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN112618\  
 Data File : VN052462.D  
 Acq On : 26 Nov 2018 16:44  
 Operator : MD\SY  
 Sample : J6053-01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 27 00:58:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N112618W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Nov 27 00:48:33 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.20  | 128  | 166257   | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.59  | 114  | 950312   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 783968   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.03   | 65    | 342917   | 30.27    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 100.90% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 309637   | 25.83    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 86.10%  |
| 63) Toluene-d8            | 10.09  | 98    | 1120659  | 30.83    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 102.77% |

## Target Compounds

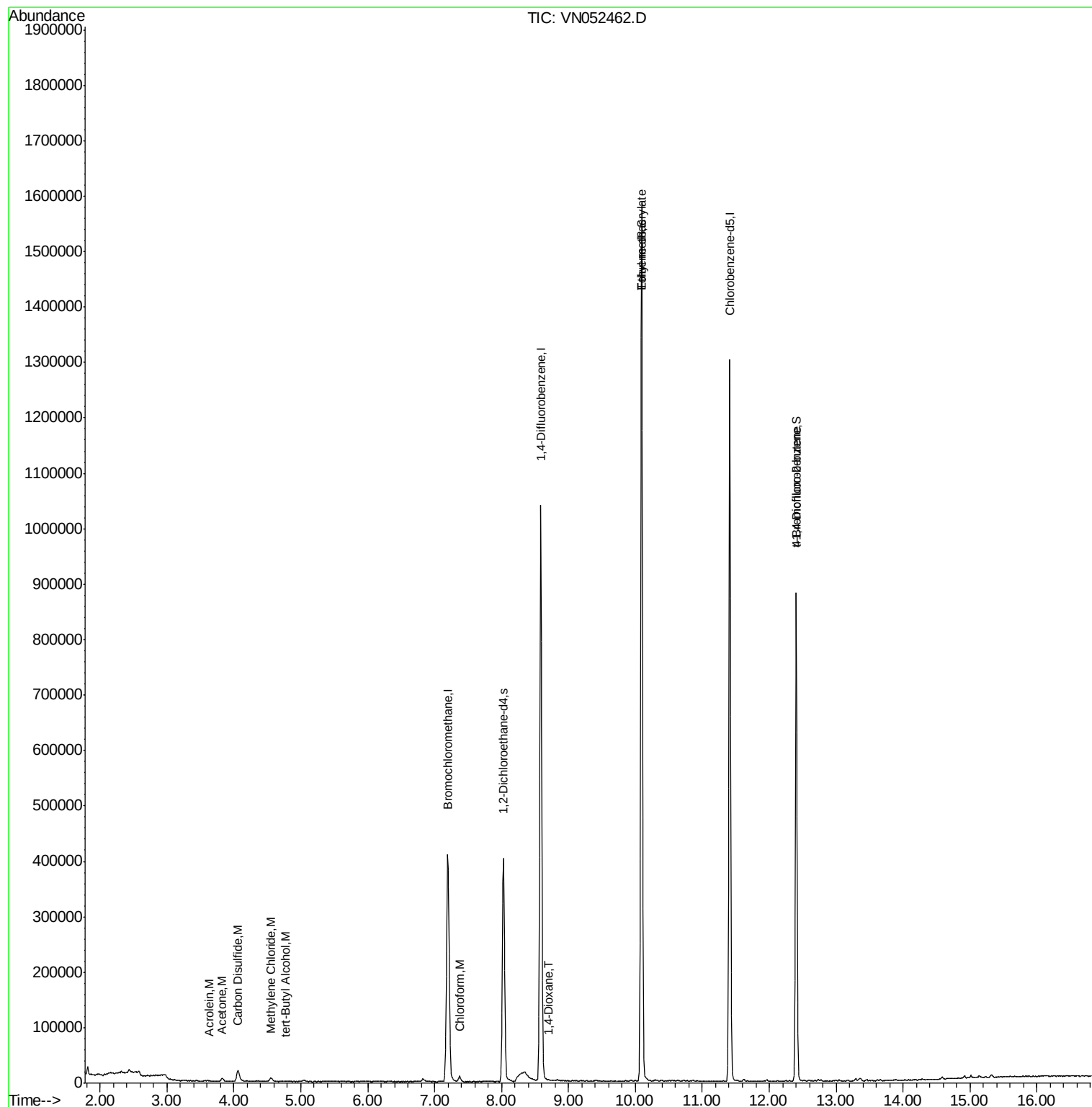
|                             |       |    |        |               | Ovalue |
|-----------------------------|-------|----|--------|---------------|--------|
| 13) Acrolein                | 3.62  | 56 | 1099   | 1.181 ug/l #  | 44     |
| 15) Acetone                 | 3.82  | 58 | 1393   | 1.594 ug/l #  | 57     |
| 16) Carbon Disulfide        | 4.07  | 76 | 8684   | 0.294 ug/l    | 96     |
| 18) Methylene Chloride      | 4.56  | 84 | 4560   | 0.422 ug/l #  | 89     |
| 23) tert-Butyl Alcohol      | 4.77  | 59 | 165    | 0.329 ug/l #  | 100    |
| 25) Chloroform              | 7.37  | 83 | 9946   | 0.529 ug/l    | 96     |
| 45) 1,4-Dioxane             | 8.71  | 88 | 62     | 0.783 ug/l #  | 1      |
| 51) Ethyl methacrylate      | 10.10 | 69 | 3599   | 0.320 ug/l    | 95     |
| 77) t-1,4-Dichloro-2-butene | 12.40 | 75 | 148641 | 56.228 ug/l # | 11     |

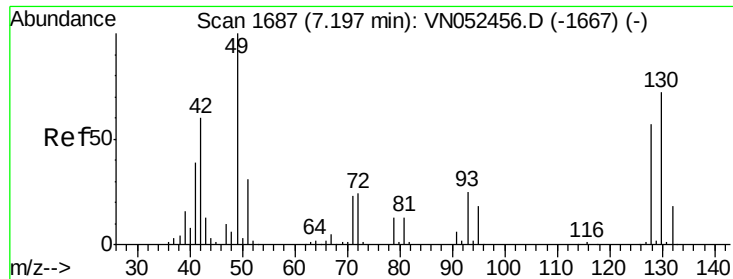
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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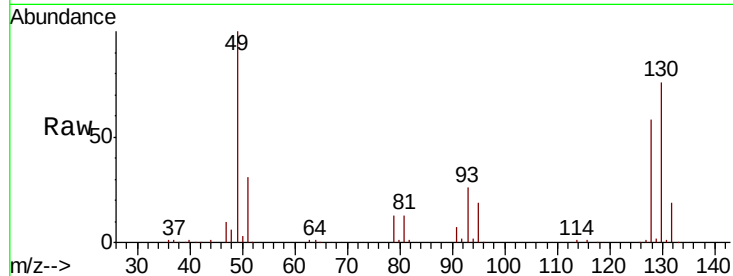




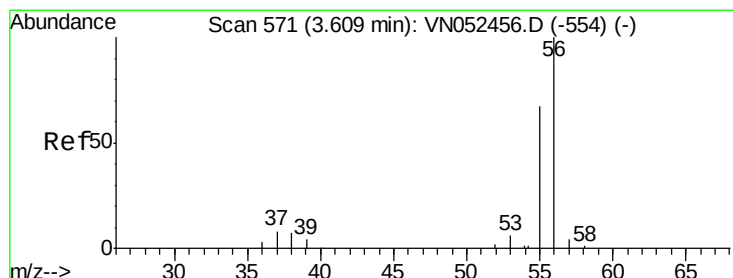
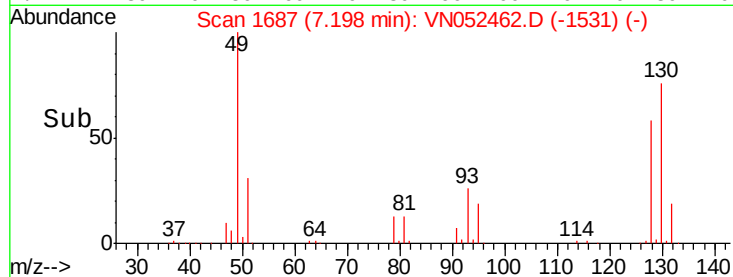
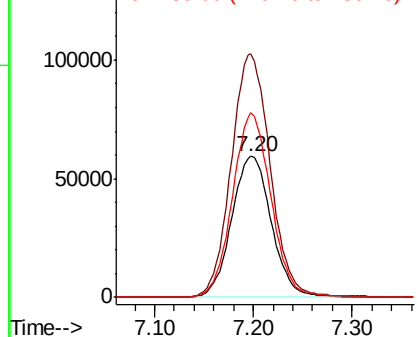
#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.20 min Scan# 1687  
Delta R.T. 0.00 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:128 Resp: 166257  
Ion Ratio Lower Upper  
128 100  
49 170.0 0.0 431.8  
130 127.0 0.0 317.0

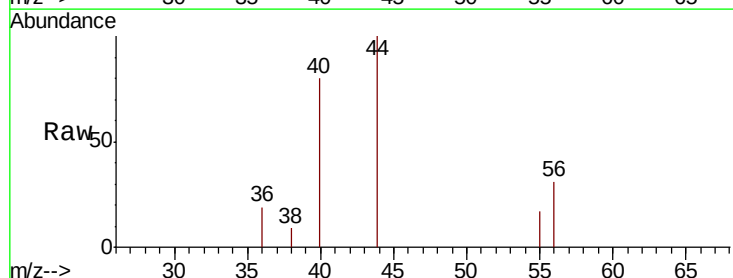


Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 49.00 (48.70 to 49.70): VN  
Ion 130.00 (129.70 to 130.70): V

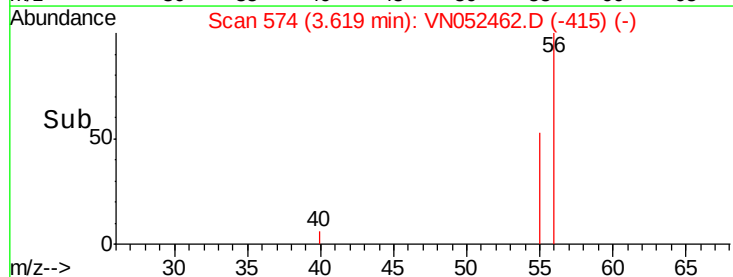
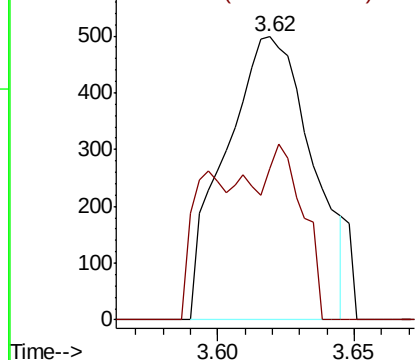


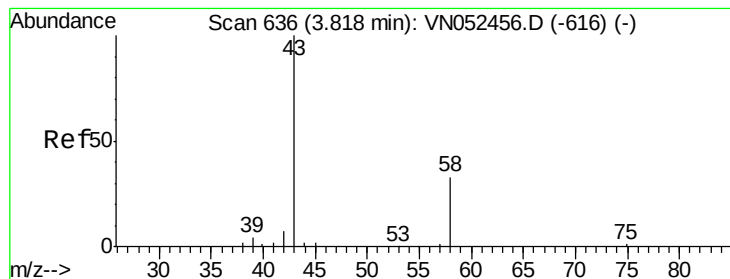
#13  
Acrolein  
Concen: 1.181 ug/l  
RT: 3.62 min Scan# 574  
Delta R.T. 0.01 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Tgt Ion: 56 Resp: 1099  
Ion Ratio Lower Upper  
56 100  
55 25.0 56.7 85.1#



Abundance Ion 56.00 (55.70 to 56.70): VN  
Ion 55.00 (54.70 to 55.70): VN





#15

Acetone

Concen: 1.594 ug/l

RT: 3.82 min Scan# 636

Delta R.T. 0.00 min

Lab File: VN052462.D

Acq: 26 Nov 2018 16:44

Instrument :

MSVOA\_N

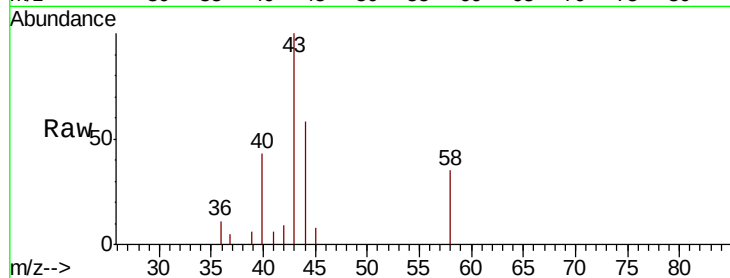
ClientSampleId :

Tot Ion: 58 Resp: 1393

Ion Ratio Lower Upper

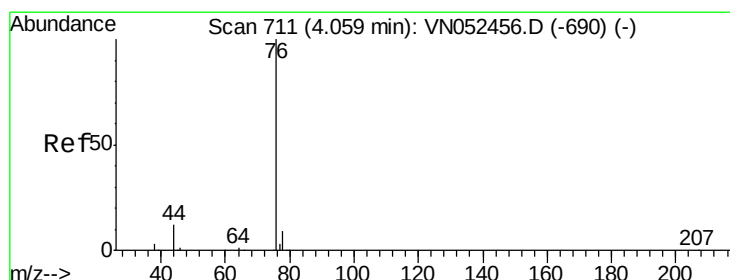
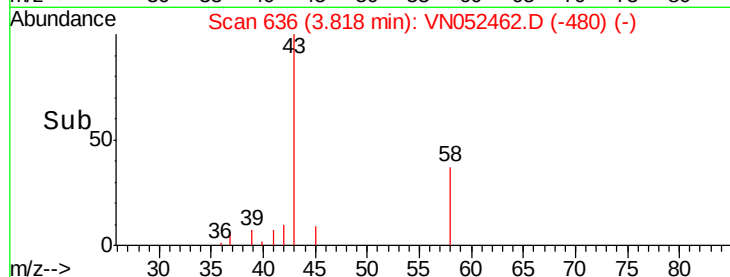
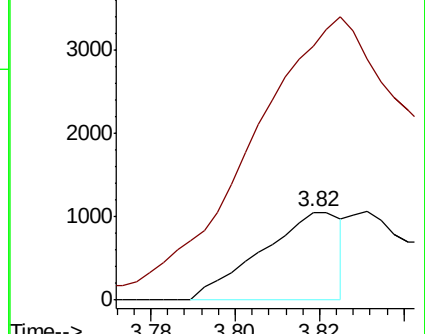
58 100

43 219.7 243.6 365.4#



Abundance Ion 58.00 (57.70 to 58.70): VN0

Ion 43.00 (42.70 to 43.70): VN0



#16

Carbon Disulfide

Concen: 0.294 ug/l

RT: 4.07 min Scan# 713

Delta R.T. 0.01 min

Lab File: VN052462.D

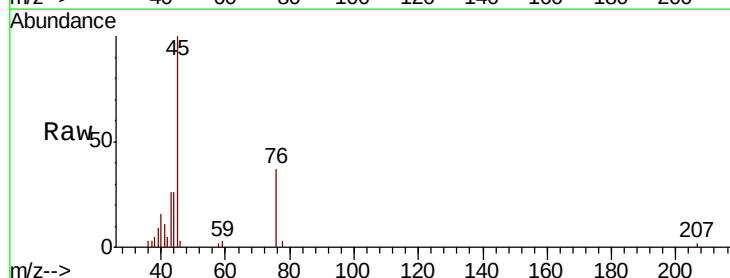
Acq: 26 Nov 2018 16:44

Tgt Ion: 76 Resp: 8684

Ion Ratio Lower Upper

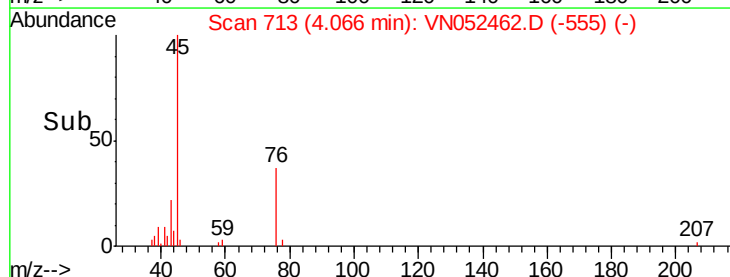
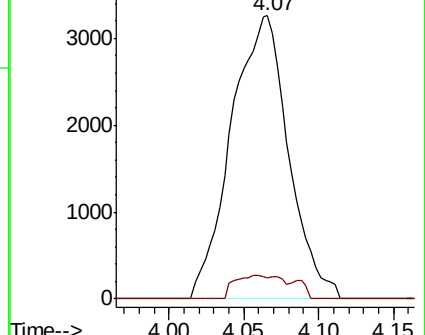
76 100

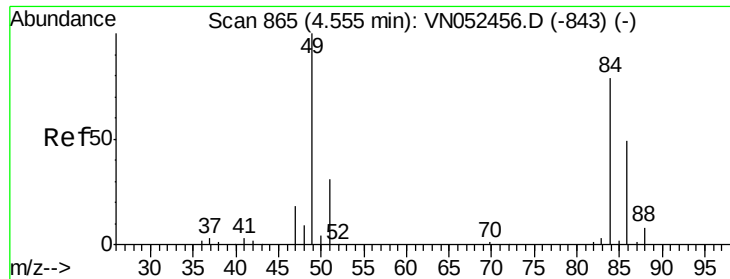
78 7.5 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VN0

Ion 78.00 (77.70 to 78.70): VN0

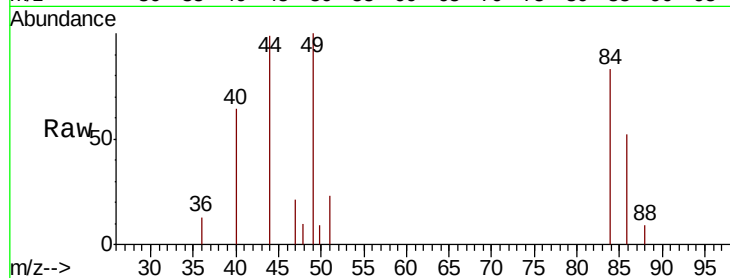




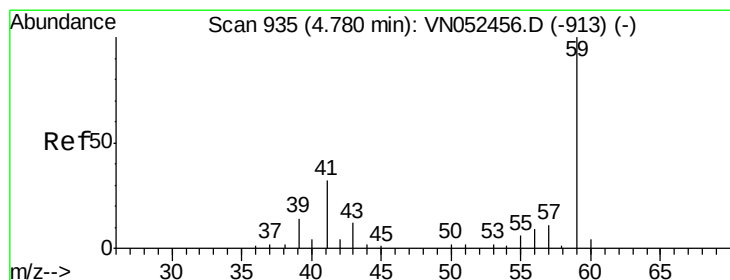
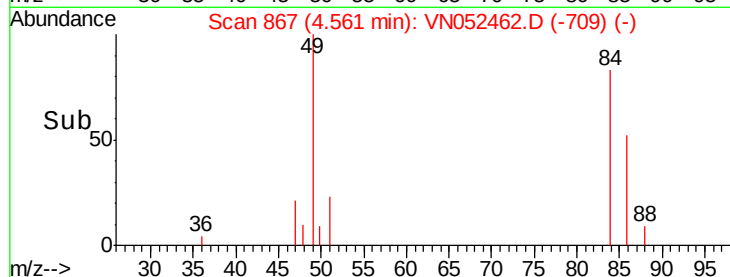
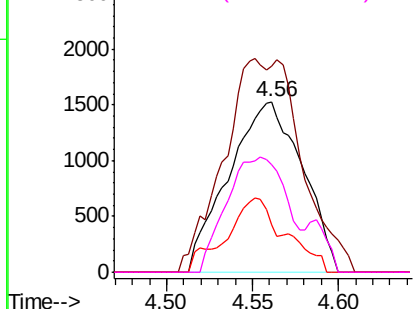
#18  
Methvlene Chloride  
Concen: 0.422 ug/l  
RT: 4.56 min Scan# 867  
Delta R.T. 0.01 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Instrument :  
MSVOA\_N  
ClientSampleId :

Tot Ion: 84 Resp: 4560  
Ion Ratio Lower Upper  
84 100  
49 110.6 101.4 152.0  
51 28.1 31.7 47.5#  
86 62.9 50.1 75.1

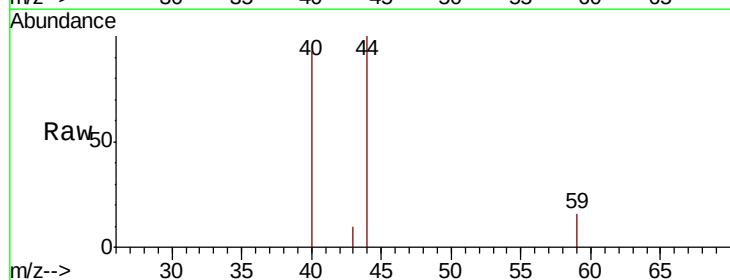


Abundance Ion 84.00 (83.70 to 84.70): VN0  
Ion 49.00 (48.70 to 49.70): VN0  
Ion 51.00 (50.70 to 51.70): VN0  
Ion 86.00 (85.70 to 86.70): VN0

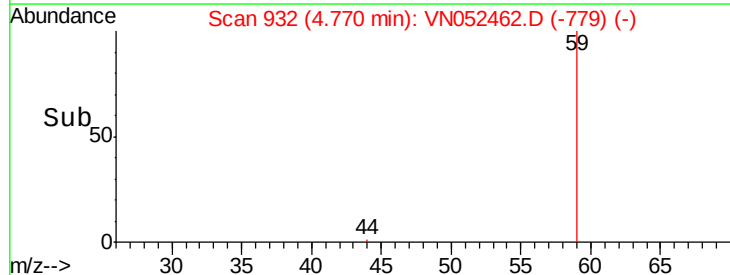
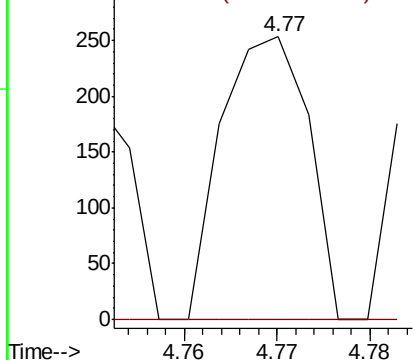


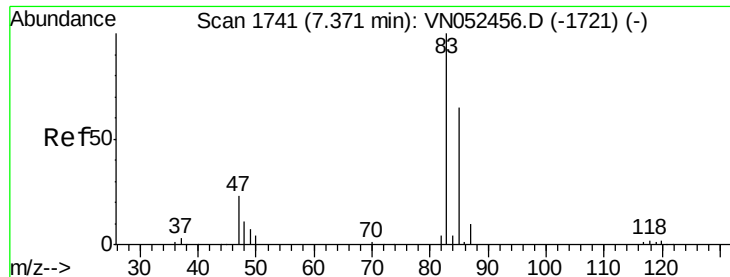
#23  
tert-Butyl Alcohol  
Concen: 0.329 ug/l  
RT: 4.77 min Scan# 932  
Delta R.T. -0.01 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Tgt Ion: 59 Resp: 165  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.0 0.0



Abundance Ion 59.00 (58.70 to 59.70): VN0  
Ion 52.00 (51.70 to 52.70): VN0

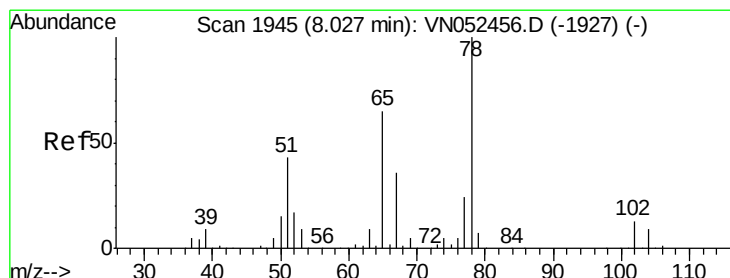
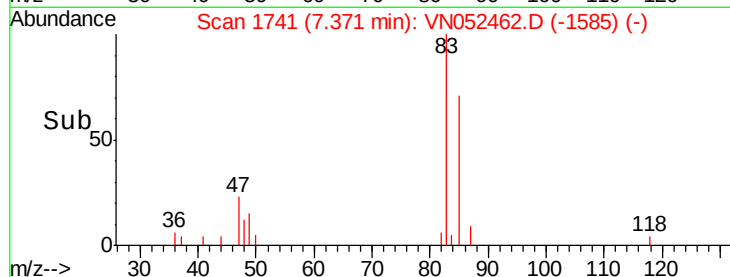
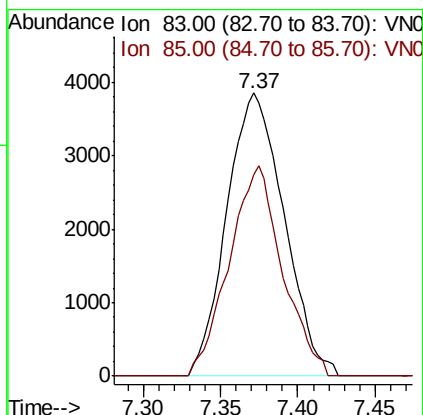
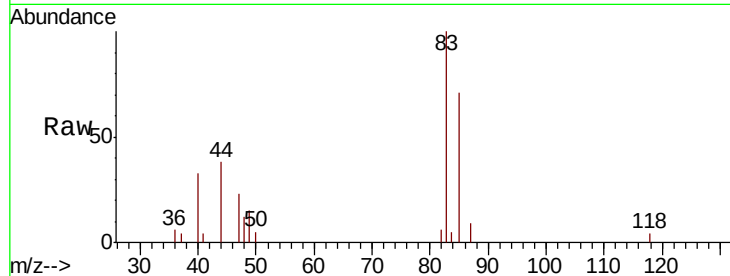




#25  
Chloroform  
Concen: 0.529 ug/l  
RT: 7.37 min Scan# 1741  
Delta R.T. 0.00 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

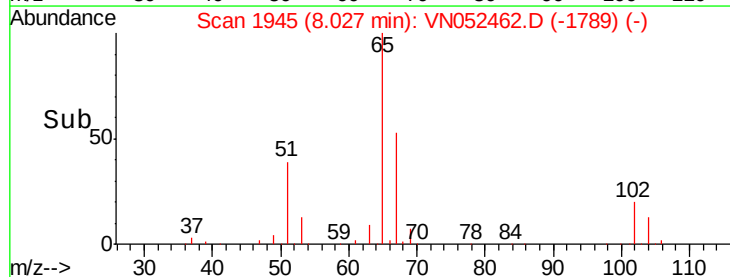
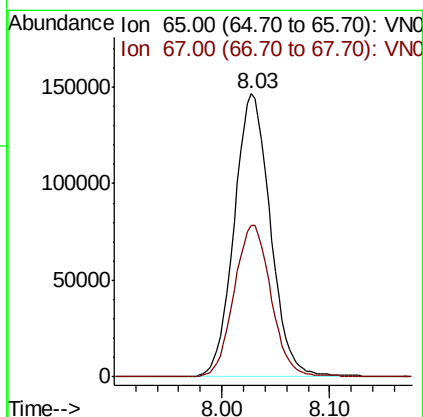
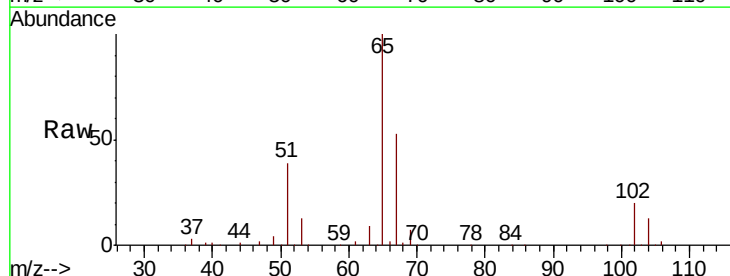
Instrument :  
MSVOA\_N  
ClientSampleId :

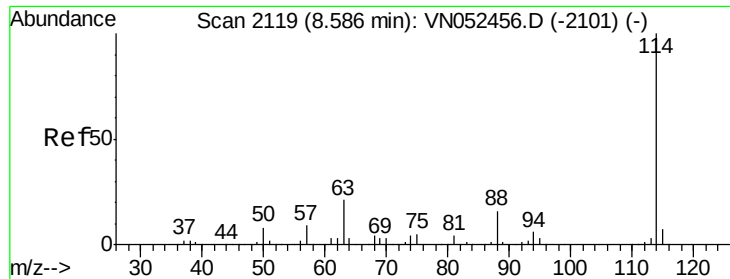
Tot Ion: 83 Resp: 9946  
Ion Ratio Lower Upper  
83 100  
85 68.0 51.7 77.5



#27  
1,2-Dichloroethane-d4  
Concen: Below ug/l  
RT: 8.03 min Scan# 1945  
Delta R.T. 0.00 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Tgt Ion: 65 Resp: 342917  
Ion Ratio Lower Upper  
65 100  
67 54.5 44.6 66.8

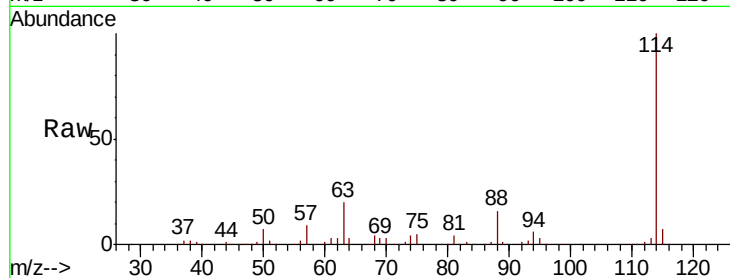




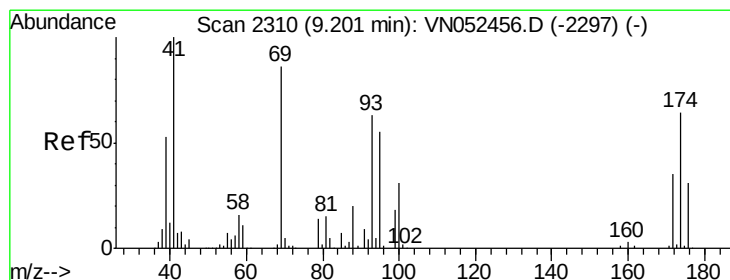
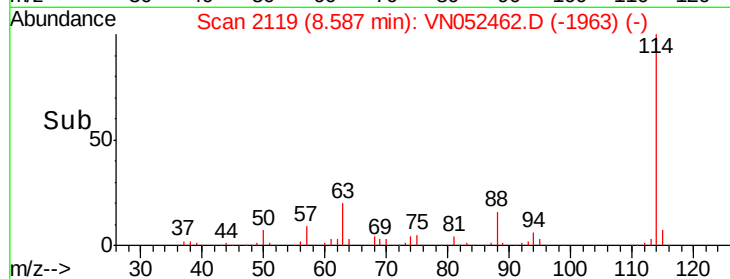
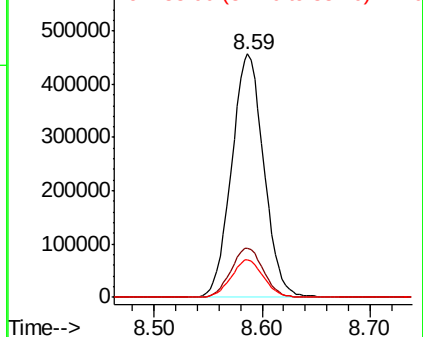
#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.59 min Scan# 2119  
 Delta R.T. 0.00 min  
 Lab File: VN052462.D  
 Acq: 26 Nov 2018 16:44

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Tot Ion:114 Resp: 950312  
 Ion Ratio Lower Upper  
 114 100  
 63 20.5 16.9 25.3  
 88 15.5 12.8 19.2

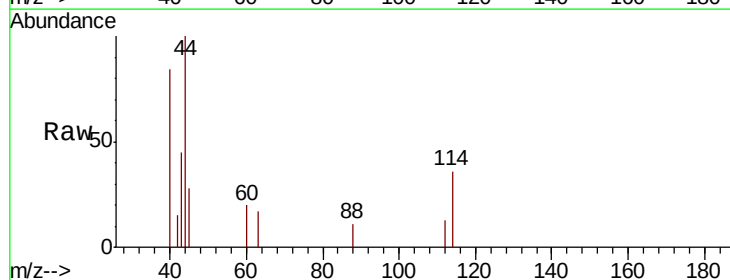


Abundance Ion 114.00 (113.70 to 114.70): VN052456.D (-2101) (-)  
 Ion 63.00 (62.70 to 63.70): VN052456.D (-2101) (-)  
 Ion 88.00 (87.70 to 88.70): VN052456.D (-2101) (-)

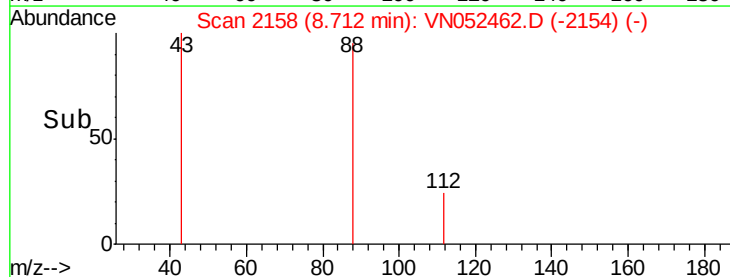
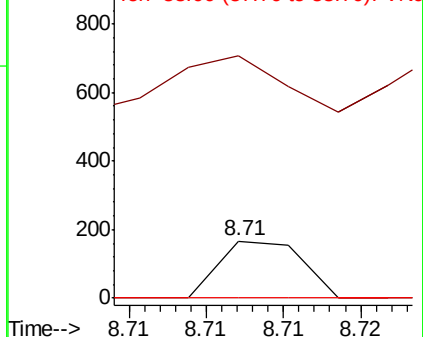


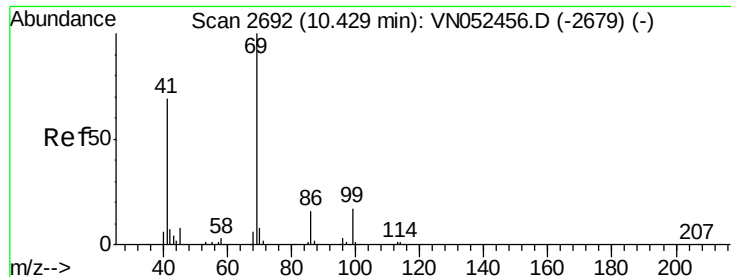
#45  
 1,4-Dioxane  
 Concen: 0.783 ug/l  
 RT: 8.71 min Scan# 2158  
 Delta R.T. -0.49 min  
 Lab File: VN052462.D  
 Acq: 26 Nov 2018 16:44

Tgt Ion: 88 Resp: 62  
 Ion Ratio Lower Upper  
 88 100  
 43 122.6 29.5 44.3#  
 58 0.0 61.5 92.3#



Abundance Ion 88.00 (87.70 to 88.70): VN052456.D (-2297) (-)  
 Ion 43.00 (42.70 to 43.70): VN052456.D (-2297) (-)  
 Ion 58.00 (57.70 to 58.70): VN052456.D (-2297) (-)





#51

Ethyl methacrylate

Concen: 0.320 ug/l

RT: 10.10 min Scan# 2589

Delta R.T. -0.33 min

Lab File: VN052462.D

Acq: 26 Nov 2018 16:44

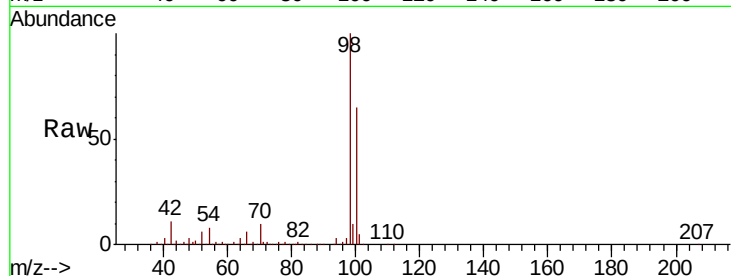
Instrument :

MSVOA\_N

ClientSampleId :

Tot Ion: 69 Resp: 3599

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 69.8  | 34.4  | 103.3 |
| 39  | 25.6  | 16.4  | 49.2  |

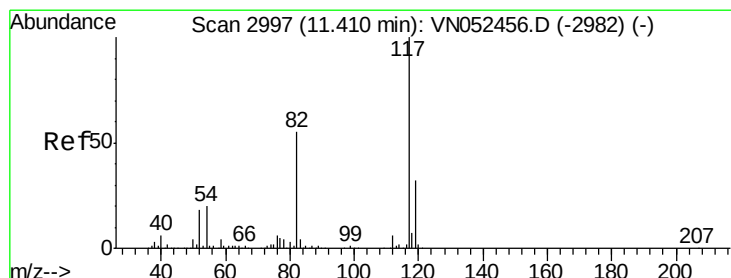
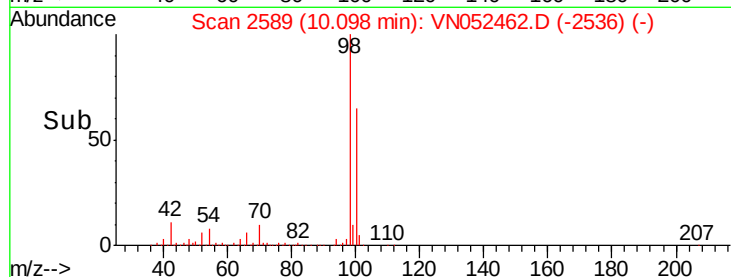
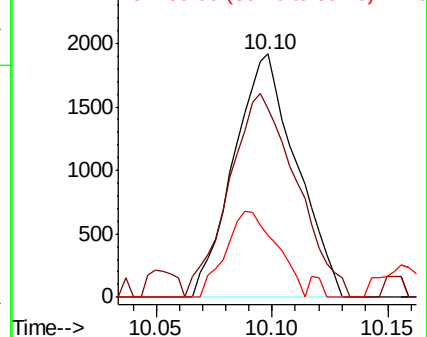


Abundance

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

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.41 min Scan# 2997

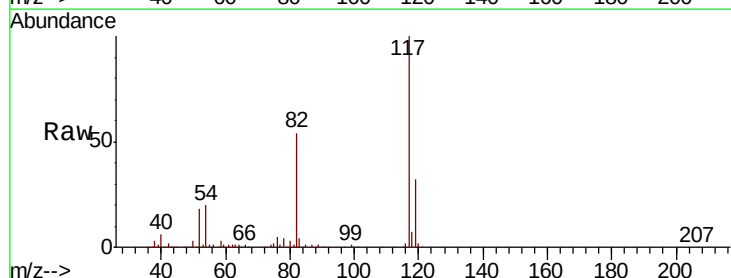
Delta R.T. 0.00 min

Lab File: VN052462.D

Acq: 26 Nov 2018 16:44

Tgt Ion: 117 Resp: 783968

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 54.6  | 44.2  | 66.2  |
| 119 | 32.2  | 25.4  | 38.2  |

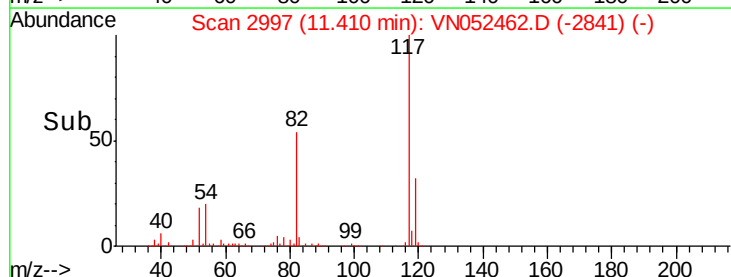
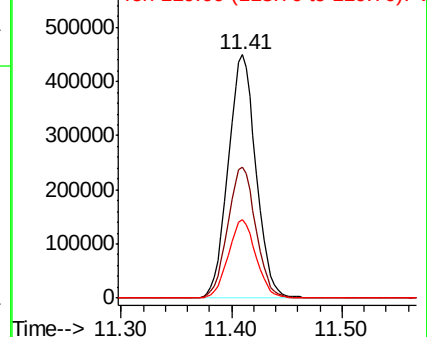


Abundance

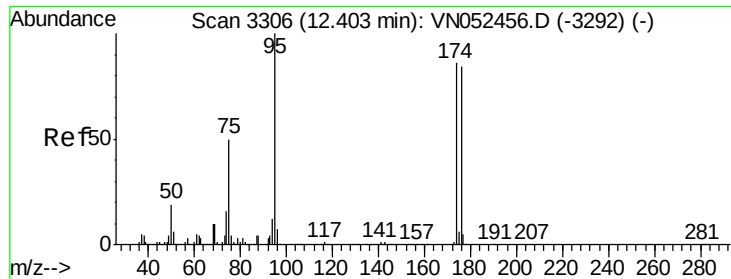
Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VN0

Ion 119.00 (118.70 to 119.70): V



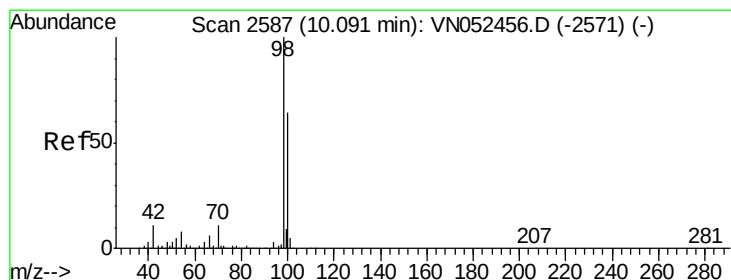
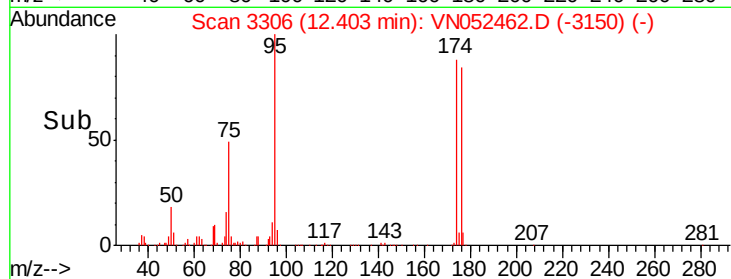
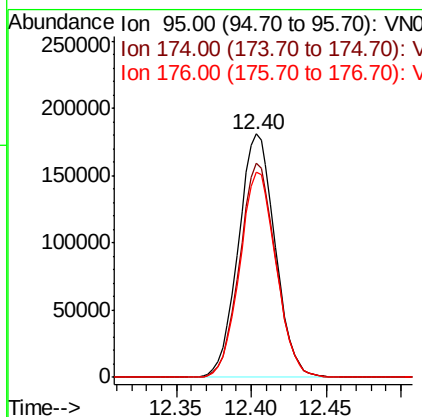
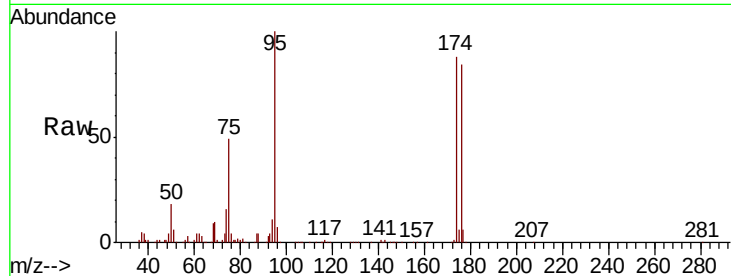




#60  
4-Bromofluorobenzene  
Concen: Below ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.00 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

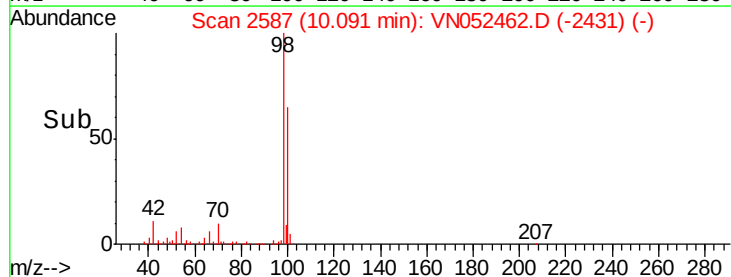
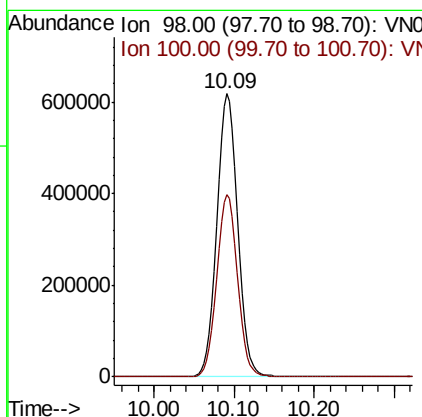
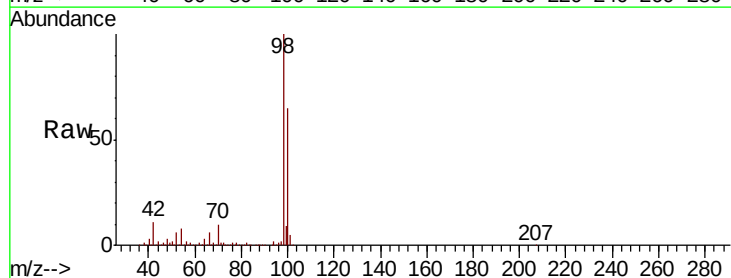
Instrument :  
MSVOA\_N  
ClientSampled :

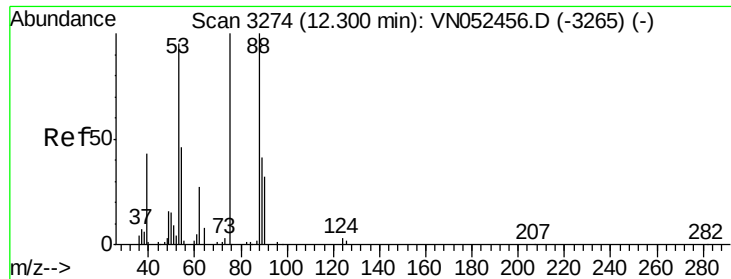
| Tot Ion   | 95    | Resp  | 309637 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 86.6  | 67.9  | 101.9  |
| 176       | 83.4  | 66.4  | 99.6   |



#63  
Toluene-d8  
Concen: Below ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. 0.00 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

| Tgt Ion   | 98    | Resp  | 1120659 |
|-----------|-------|-------|---------|
| Ion Ratio | Lower | Upper |         |
| 98        | 100   |       |         |
| 100       | 64.2  | 51.1  | 76.7    |





#77  
t-1,4-Dichloro-2-butene  
Concen: 56.228 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.10 min  
Lab File: VN052462.D  
Acq: 26 Nov 2018 16:44

Instrument :  
MSVOA\_N  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 75      | 100   |       |        |
| 53      | 0.0   | 48.5  | 145.6# |
| 89      | 0.0   | 21.7  | 65.1#  |

