

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100118\  
 Data File : VN051642.D  
 Acq On : 1 Oct 2018 16:56  
 Operator : MD\SY  
 Sample : J5167-01DL 5X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 18 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 001-WILLETS-PT-BLVD(SEP)DL

Quant Time: Oct 02 01:48:20 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N092818W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Sep 29 01:07:29 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.20  | 128  | 93658    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.59  | 114  | 454296   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 397906   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.03   | 65    | 206339   | 31.64    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 105.47% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 141164   | 23.07    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 76.90%  |
| 63) Toluene-d8            | 10.09  | 98    | 519920   | 27.69    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 92.30%  |

## Target Compounds

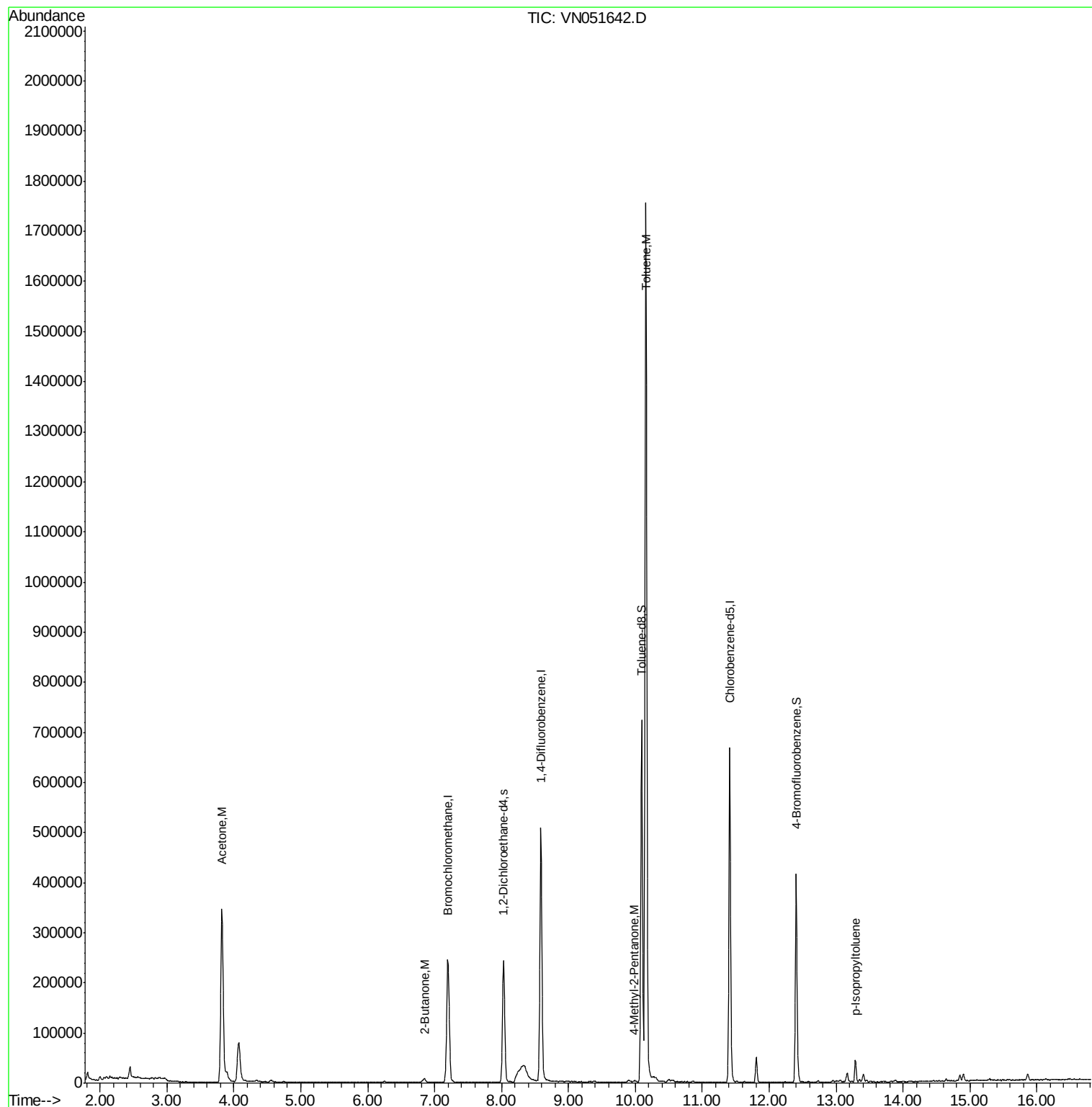
|                          |       |     |         |         | Ovalue |     |
|--------------------------|-------|-----|---------|---------|--------|-----|
| 15) Acetone              | 3.82  | 58  | 184140  | 351.362 | ug/l   | 90  |
| 30) 2-Butanone           | 6.85  | 43  | 7254    | 3.441   | ug/l # | 82  |
| 58) 4-Methyl-2-Pentanone | 9.98  | 43  | 2702    | 0.598   | ug/l # | 82  |
| 62) Toluene              | 10.16 | 91  | 1383279 | 56.695  | ug/l   | 100 |
| 82) p-Isopropyltoluene   | 13.29 | 119 | 22089   | 1.055   | ug/l   | 98  |

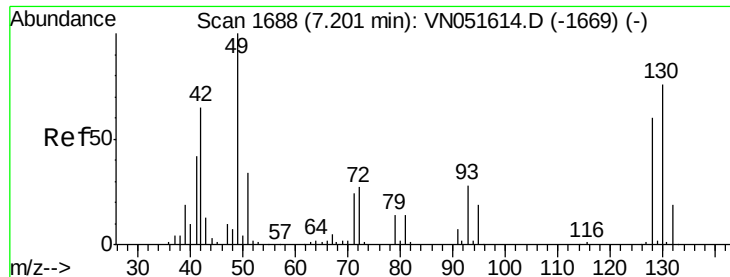
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN100118\  
Data File : VN051642.D  
Acq On : 1 Oct 2018 16:56  
Operator : MD\SY  
Sample : J5167-01DL 5X  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 18 Sample Multiplier: 28

Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(SEP)DL

Quant Time: Oct 02 01:48:20 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N092818W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Sep 29 01:07:29 2018  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.20 min Scan# 1687

Delta R.T. -0.00 min

Lab File: VN051642.D

Acq: 1 Oct 2018 16:56

Instrument :

MSVOA\_N

ClientSampleId :

001-WILLETS-PT-BLVD(SEP)DL

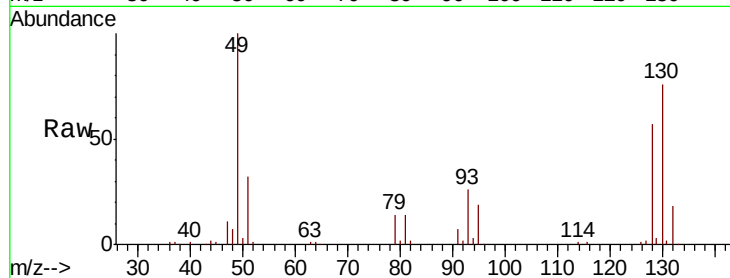
Tot Ion:128 Resp: 93658

Ion Ratio Lower Upper

128 100

49 171.9 0.0 426.8

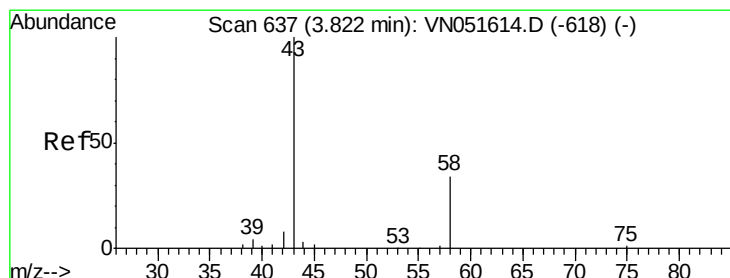
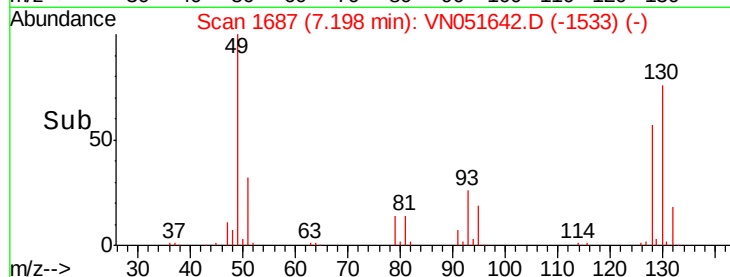
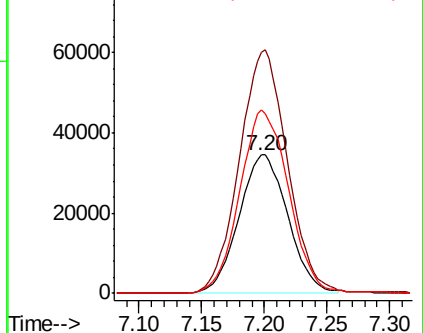
130 132.4 0.0 326.3



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



#15

Acetone

Concen: 351.362 ug/l

RT: 3.82 min Scan# 637

Delta R.T. -0.00 min

Lab File: VN051642.D

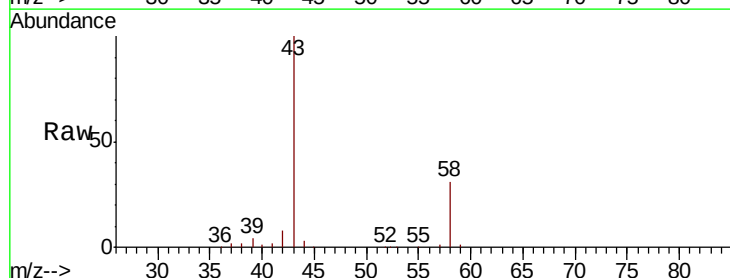
Acq: 1 Oct 2018 16:56

Tgt Ion: 58 Resp: 184140

Ion Ratio Lower Upper

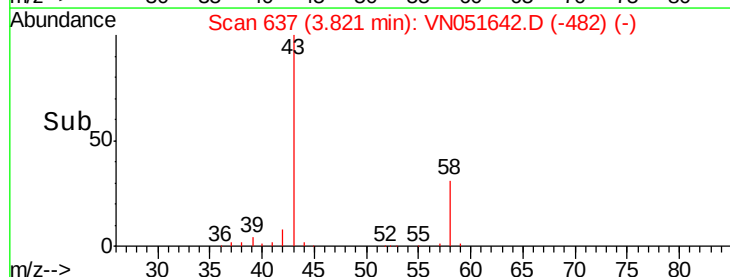
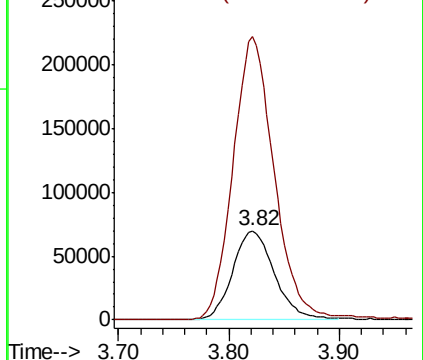
58 100

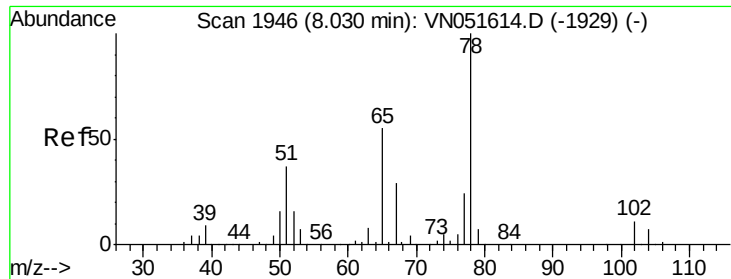
43 317.1 238.0 357.0



Abundance Ion 58.00 (57.70 to 58.70): VN

Ion 43.00 (42.70 to 43.70): VN

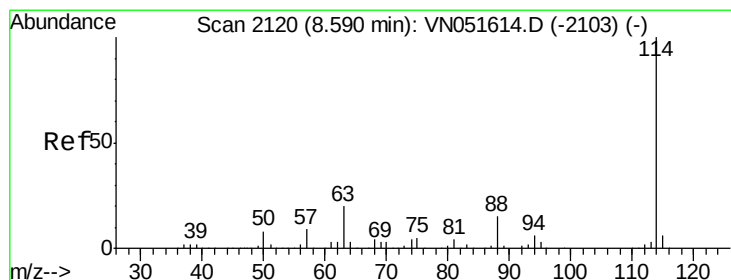
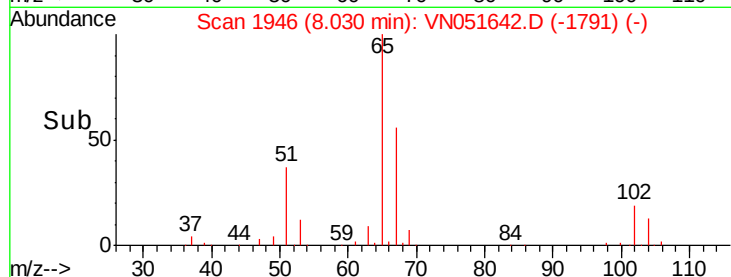
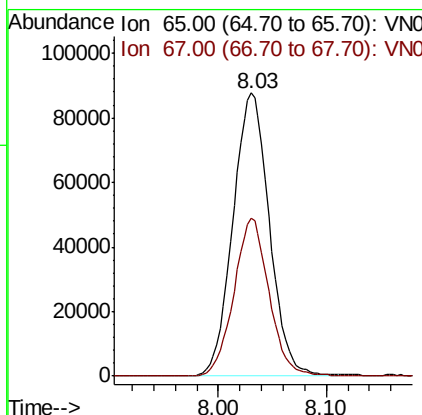
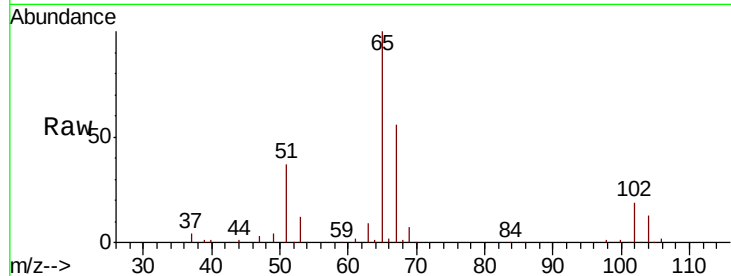




#27  
 1,2-Dichloroethane-d4  
 Concen: N.D. ug/l  
 RT: 8.03 min Scan# 1946  
 Delta R.T. -0.00 min  
 Lab File: VN051642.D  
 Acq: 1 Oct 2018 16:56

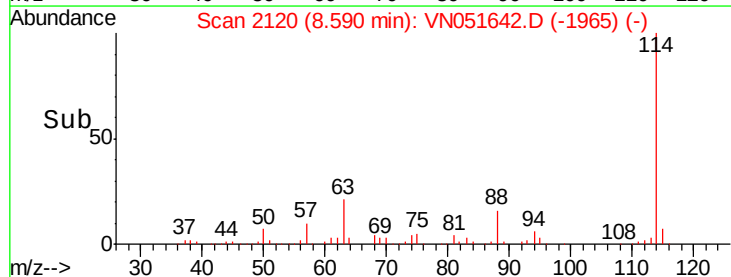
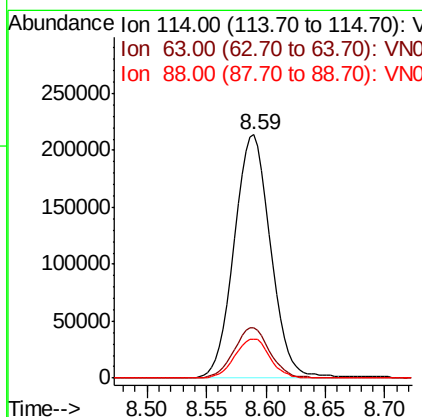
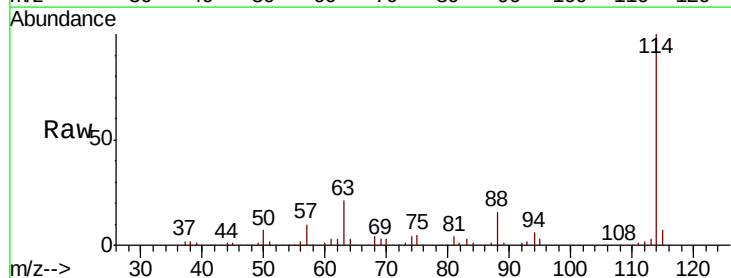
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 001-WILLETS-PT-BLVD(SEP)DL

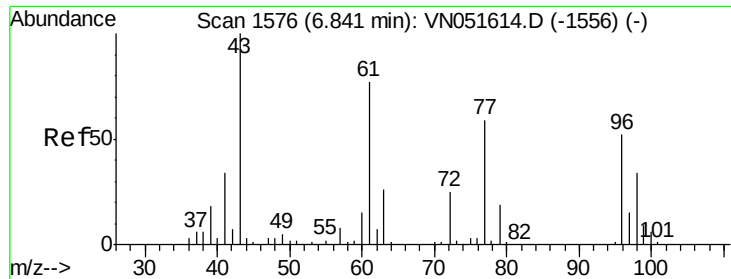
Tot Ion: 65 Resp: 206339  
 Ion Ratio Lower Upper  
 65 100  
 67 53.7 43.1 64.7



#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.59 min Scan# 2120  
 Delta R.T. -0.00 min  
 Lab File: VN051642.D  
 Acq: 1 Oct 2018 16:56

Tgt Ion: 114 Resp: 454296  
 Ion Ratio Lower Upper  
 114 100  
 63 20.4 16.4 24.6  
 88 15.4 12.6 18.8

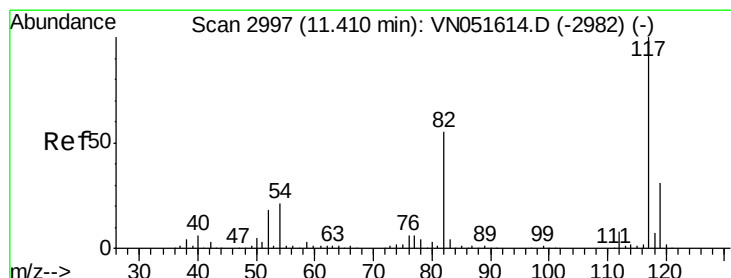
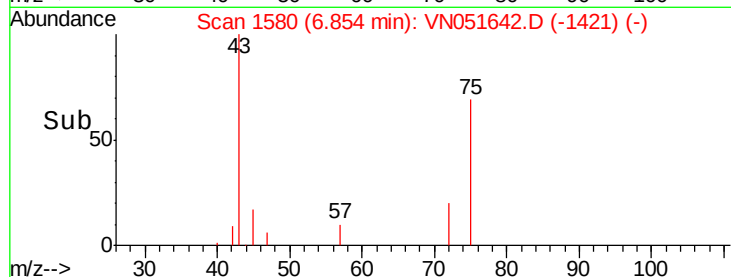
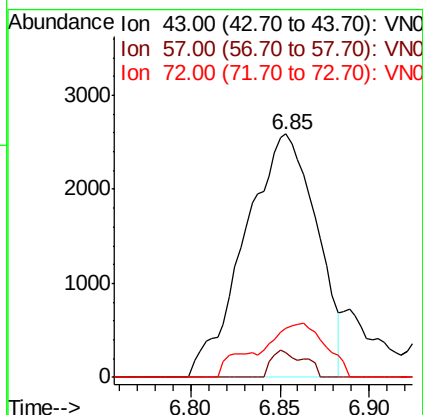
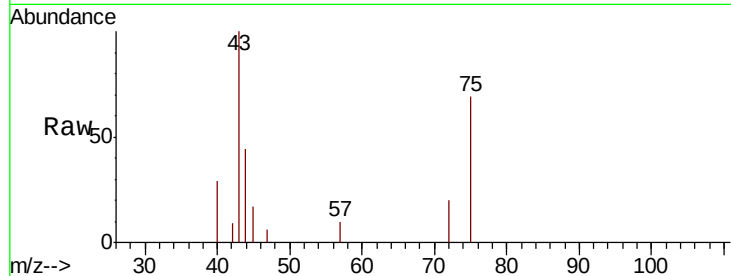




#30  
2-Butanone  
Concen: 3.441 ug/l  
RT: 6.85 min Scan# 1580  
Delta R.T. 0.01 min  
Lab File: VN051642.D  
Acq: 1 Oct 2018 16:56

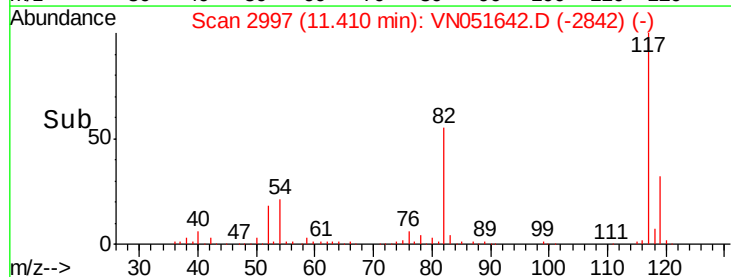
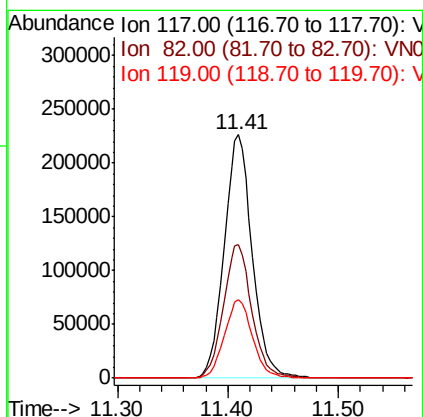
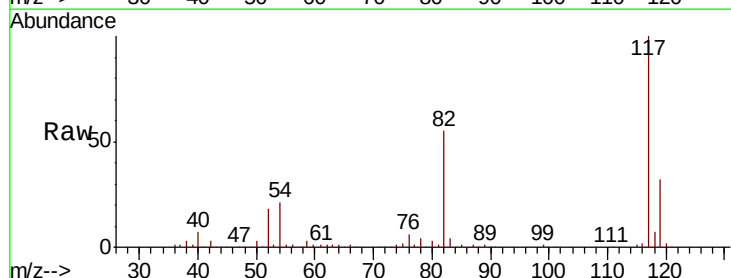
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(SEP)DL

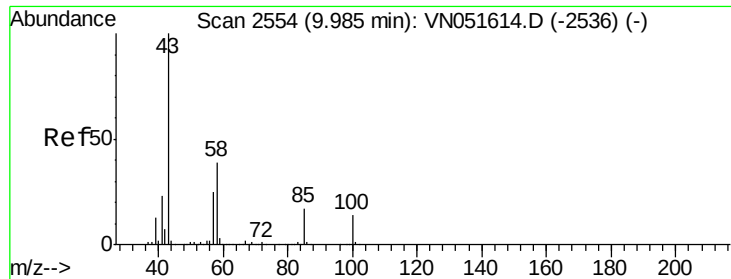
Tot Ion: 43 Resp: 7254  
Ion Ratio Lower Upper  
43 100  
57 3.5 6.6 10.0#  
72 16.3 20.8 31.2#



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.41 min Scan# 2997  
Delta R.T. -0.00 min  
Lab File: VN051642.D  
Acq: 1 Oct 2018 16:56

Tgt Ion: 117 Resp: 397906  
Ion Ratio Lower Upper  
117 100  
82 55.6 44.2 66.2  
119 32.4 25.2 37.8

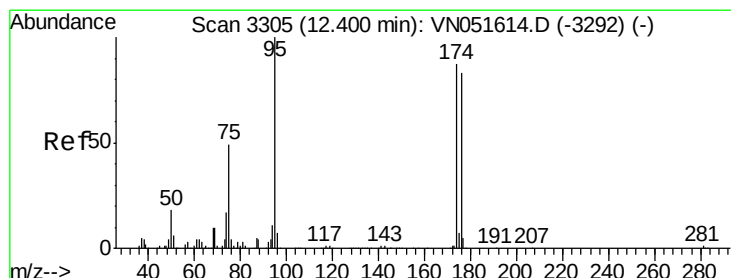
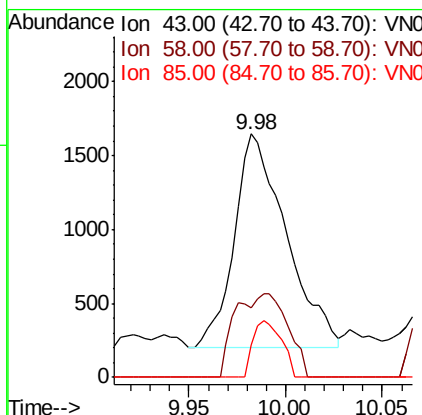
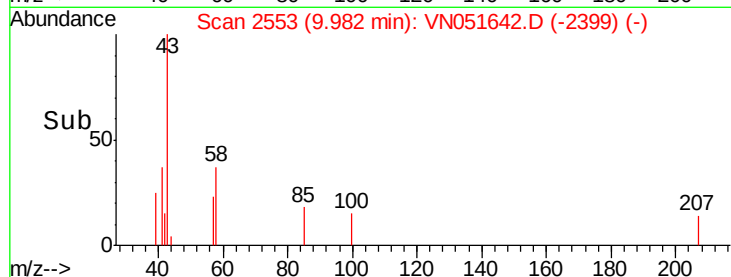
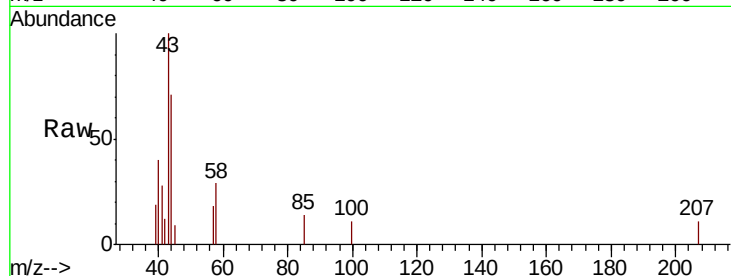




#58  
4-Methyl-2-Pentanone  
Concen: 0.598 ug/l  
RT: 9.98 min Scan# 2553  
Delta R.T. -0.00 min  
Lab File: VN051642.D  
Acq: 1 Oct 2018 16:56

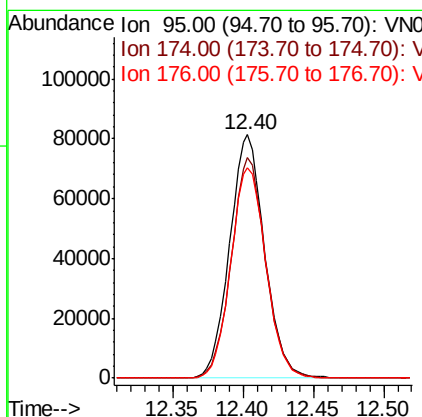
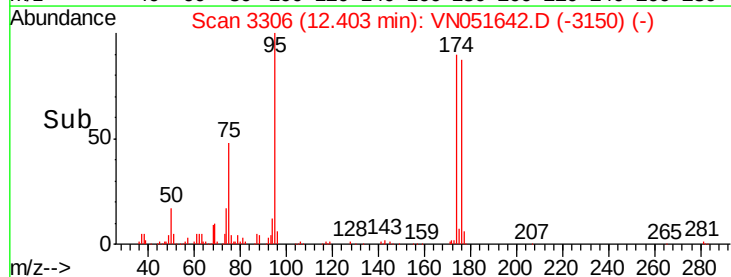
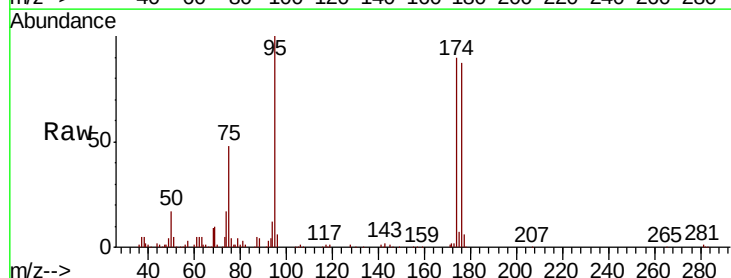
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(SEP)DL

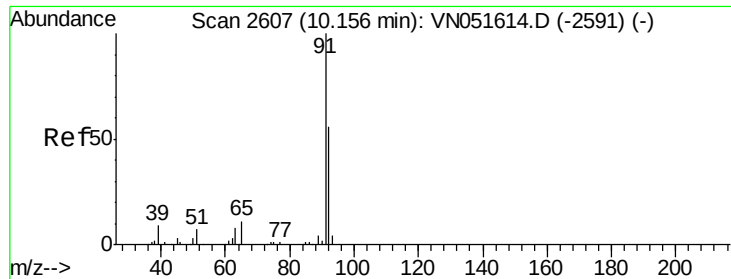
Tot Ion: 43 Resp: 2702  
Ion Ratio Lower Upper  
43 100  
58 24.2 31.0 46.4#  
85 14.7 13.4 20.2



#60  
4-Bromofluorobenzene  
Concen: Below ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.00 min  
Lab File: VN051642.D  
Acq: 1 Oct 2018 16:56

Tgt Ion: 95 Resp: 141164  
Ion Ratio Lower Upper  
95 100  
174 88.8 71.2 106.8  
176 87.0 67.8 101.8





#62

Toluene

Concen: 56.695 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. -0.00 min

Lab File: VN051642.D

Acq: 1 Oct 2018 16:56

Instrument :

MSVOA\_N

ClientSampleId :

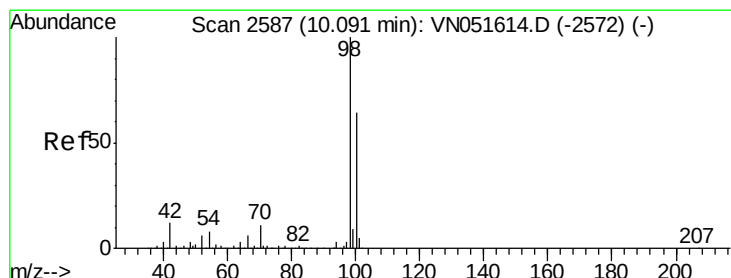
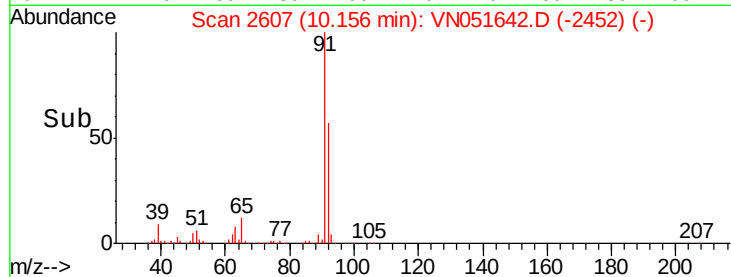
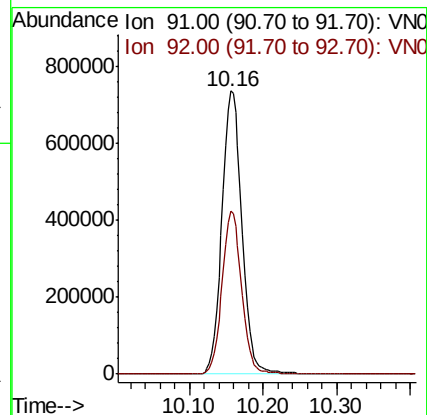
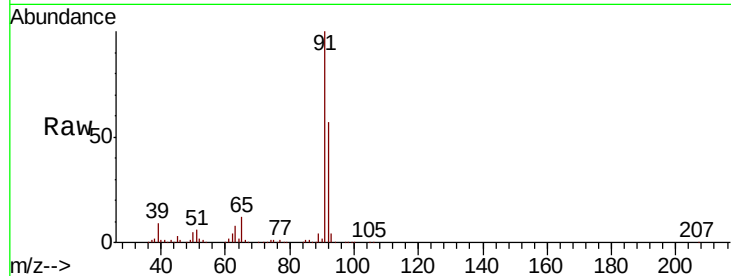
001-WILLETS-PT-BLVD(SEP)DL

Tot Ion: 91 Resp: 1383279

Ion Ratio Lower Upper

91 100

92 56.5 45.3 67.9



#63

Toluene-d8

Concen: 56.695 ug/l

RT: 10.09 min Scan# 2588

Delta R.T. 0.00 min

Lab File: VN051642.D

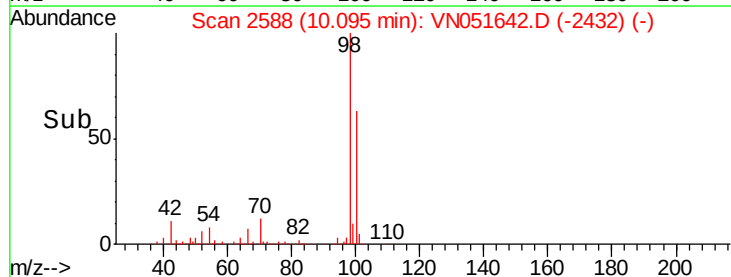
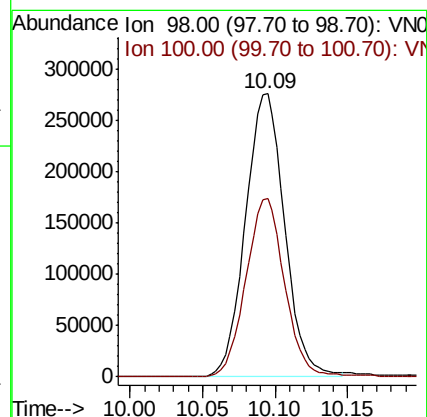
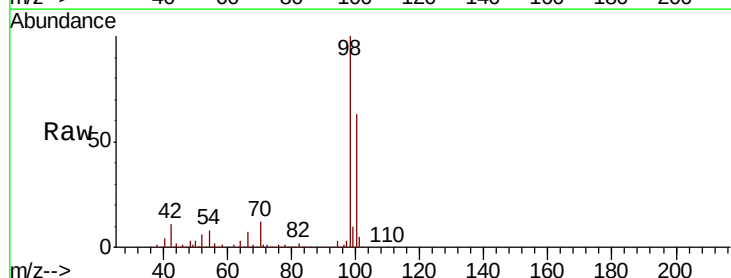
Acq: 1 Oct 2018 16:56

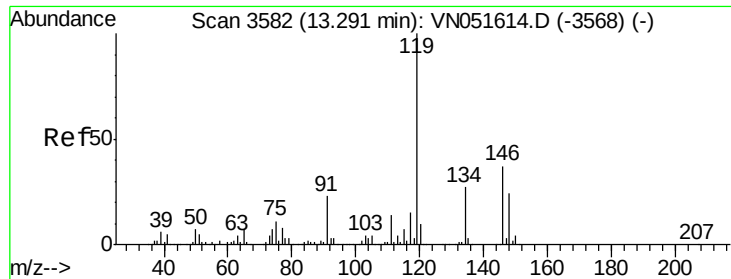
Tgt Ion: 98 Resp: 519920

Ion Ratio Lower Upper

98 100

100 62.5 51.4 77.0





#82  
 p-Isopropyltoluene  
 Concen: 1.055 ug/l  
 RT: 13.29 min Scan# 3581  
 Delta R.T. -0.00 min  
 Lab File: VN051642.D  
 Acq: 1 Oct 2018 16:56

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 001-WILLETS-PT-BLVD(SEP)DL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 119   | Resp: | 22089 |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 134      | 26.5  | 0.0   | 52.0  |
| 91       | 24.3  | 0.0   | 46.0  |

