

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110920\  
 Data File : VN064512.D  
 Acq On : 9 Nov 2020 17:34  
 Operator : JC/MD  
 Sample : L4628-01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

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

Quant Time: Nov 10 03:18:24 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N110920W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Nov 09 13:16:36 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.15  | 128  | 60183    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.55  | 114  | 313242   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.38 | 117  | 280833   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 7.99   | 65    | 168989   | 31.72    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 91 - 110 | Recovery | =    | 105.73% |
| 60) 4-Bromofluorobenzene  | 12.38  | 95    | 116112   | 24.14    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 63 - 112 | Recovery | =    | 80.47%  |
| 63) Toluene-d8            | 10.06  | 98    | 384840   | 29.38    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 91 - 112 | Recovery | =    | 97.93%  |

## Target Compounds

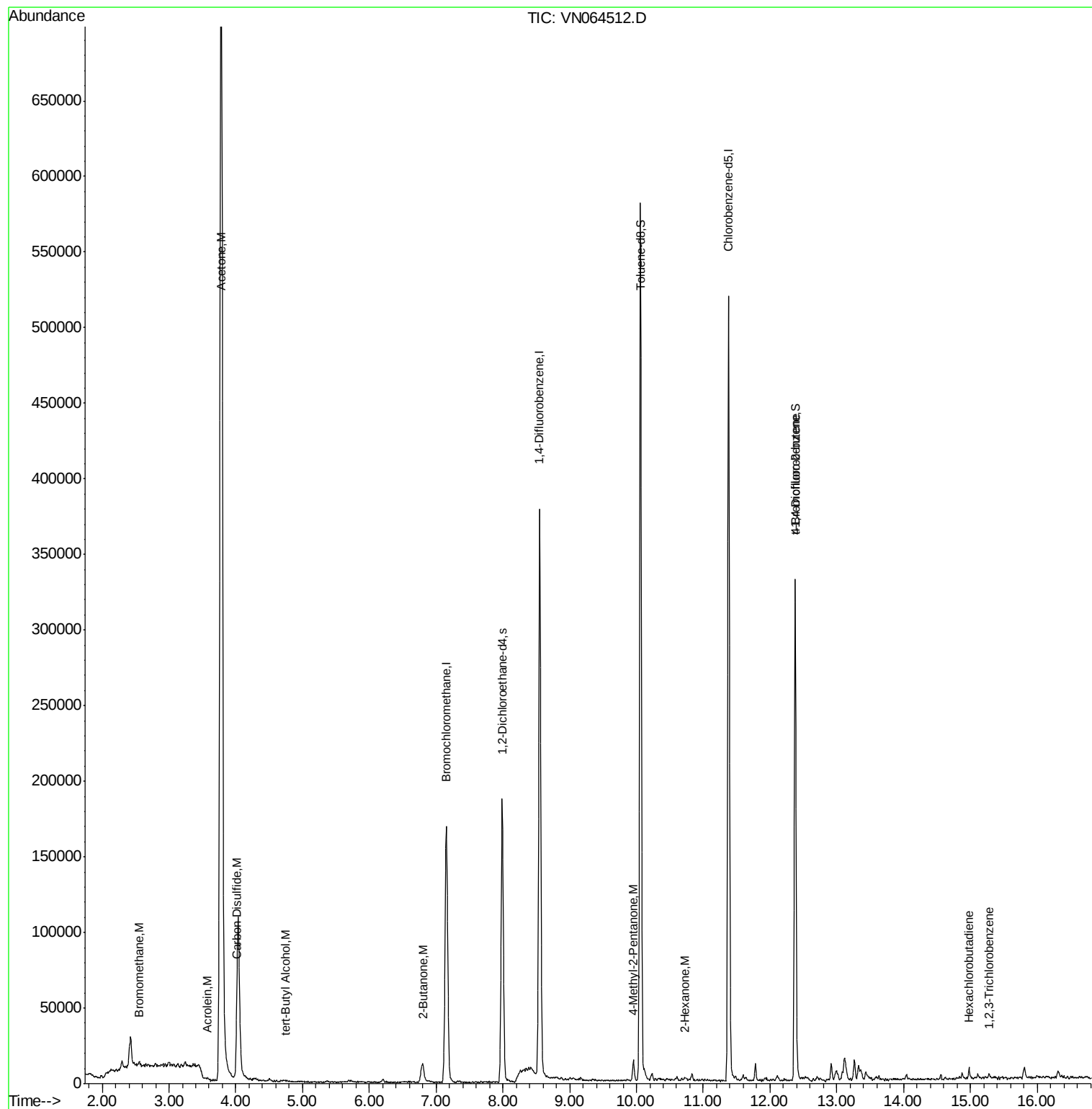
|                             |       |     |        |         | Ovalue |     |
|-----------------------------|-------|-----|--------|---------|--------|-----|
| 5) Bromomethane             | 2.55  | 94  | 662    | 0.203   | ug/l # | 37  |
| 13) Acrolein                | 3.59  | 56  | 326    | 0.814   | ug/l   | 97  |
| 15) Acetone                 | 3.78  | 58  | 441294 | 759.007 | ug/l   | 95  |
| 16) Carbon Disulfide        | 4.00  | 76  | 3346   | 0.339   | ug/l # | 92  |
| 23) tert-Butyl Alcohol      | 4.75  | 59  | 258    | 0.428   | ug/l # | 100 |
| 30) 2-Butanone              | 6.79  | 43  | 5511   | 2.048   | ug/l # | 92  |
| 58) 4-Methyl-2-Pentanone    | 9.96  | 43  | 9472   | 1.837   | ug/l # | 94  |
| 59) 2-Hexanone              | 10.73 | 43  | 804    | 0.207   | ug/l # | 70  |
| 77) t-1,4-Dichloro-2-butene | 12.38 | 75  | 64920  | 34.261  | ug/l # | 9   |
| 90) Hexachlorobutadiene     | 14.98 | 225 | 971    | 0.623   | ug/l   | 83  |
| 92) 1,2,3-Trichlorobenzene  | 15.29 | 180 | 1381   | 0.436   | ug/l   | 58  |

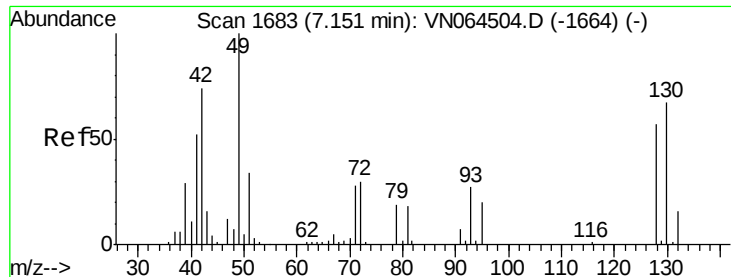
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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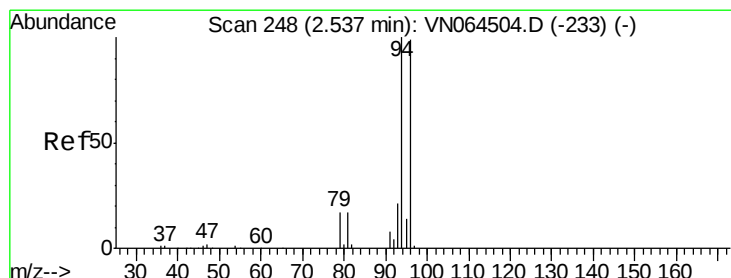
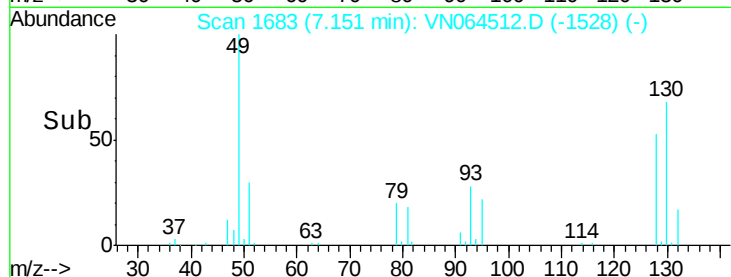
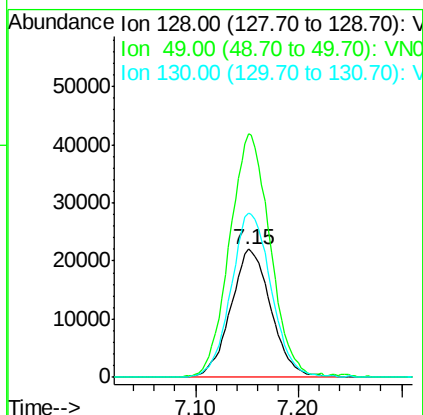
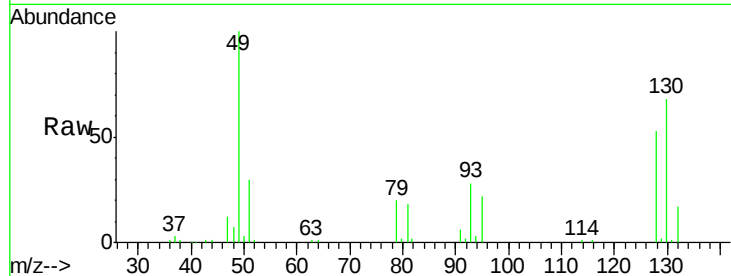




#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.15 min Scan# 1683  
Delta R.T. -0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

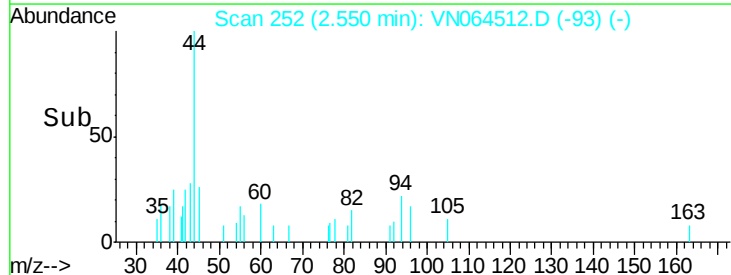
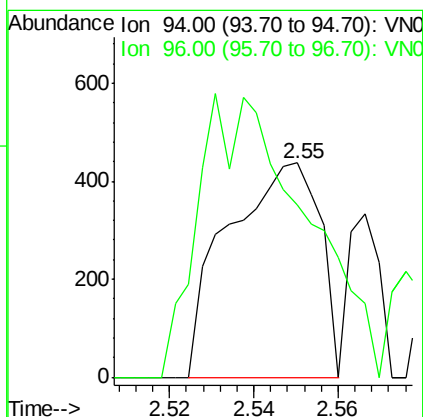
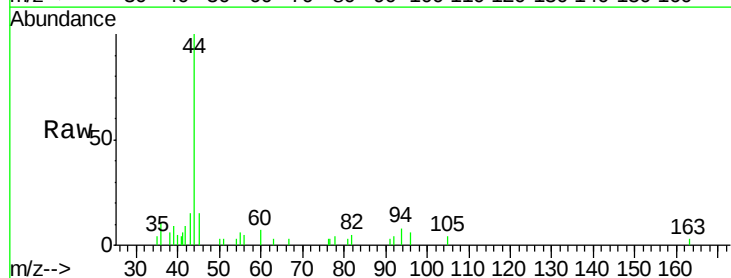
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(NOV)

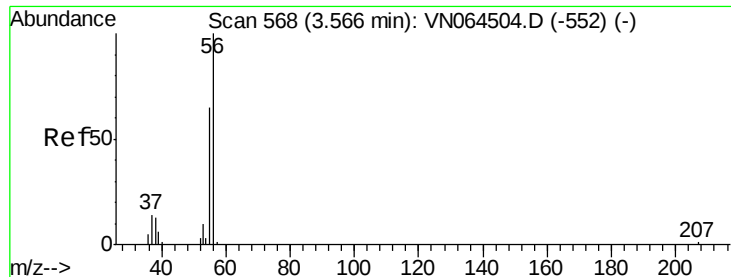
Tot Ion:128 Resp: 60183  
Ion Ratio Lower Upper  
128 100  
49 189.8 0.0 475.5  
130 128.0 0.0 315.3



#5  
Bromomethane  
Concen: 0.203 ug/l  
RT: 2.55 min Scan# 252  
Delta R.T. 0.01 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

Tgt Ion: 94 Resp: 662  
Ion Ratio Lower Upper  
94 100  
96 36.8 79.3 118.9#





#13

Acrolein

Concen: 0.814 ug/l

RT: 3.59 min Scan# 575

Delta R.T. 0.02 min

Lab File: VN064512.D

Acq: 9 Nov 2020 17:34

Instrument :

MSVOA\_N

ClientSampleId :

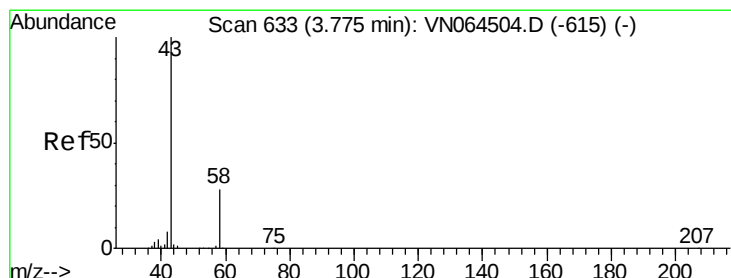
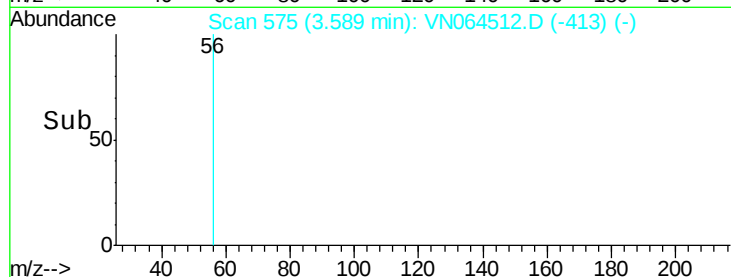
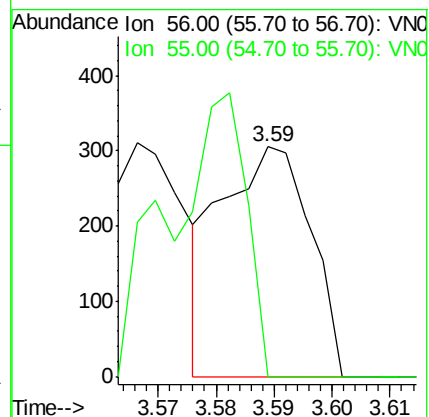
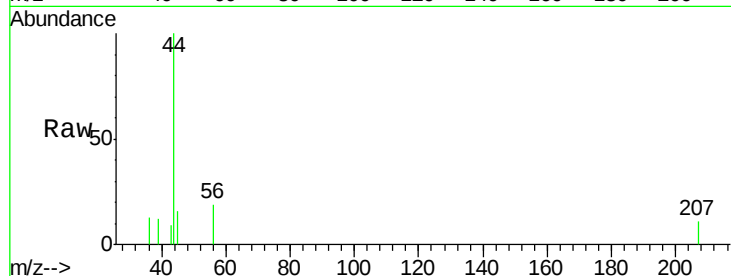
001-WILLETS-PT-BLVD(NOV)

Tot Ion: 56 Resp: 326

Ion Ratio Lower Upper

56 100

55 69.9 58.2 87.2



#15

Acetone

Concen: 759.007 ug/l

RT: 3.78 min Scan# 635

Delta R.T. 0.01 min

Lab File: VN064512.D

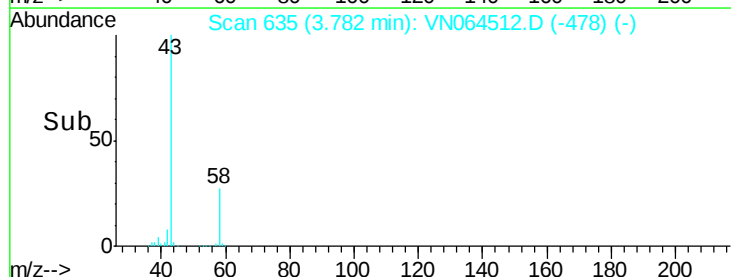
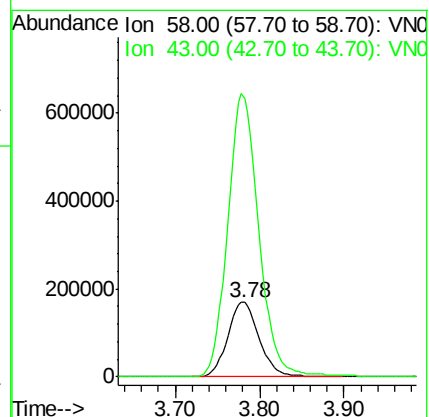
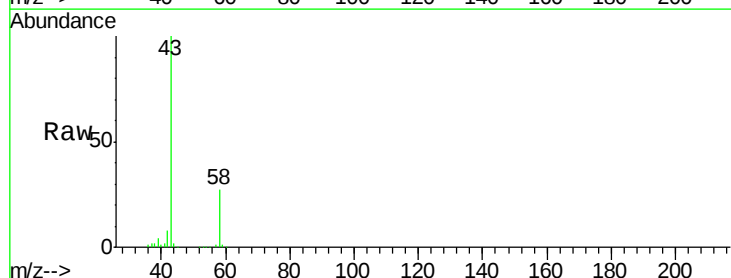
Acq: 9 Nov 2020 17:34

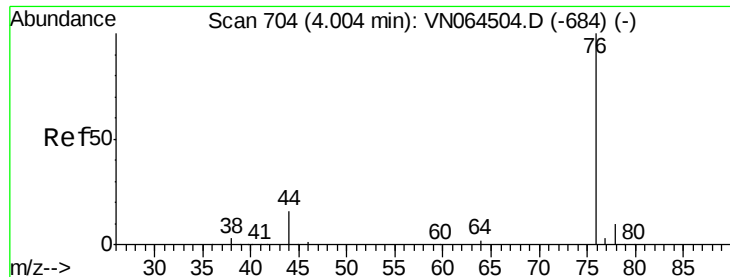
Tgt Ion: 58 Resp: 441294

Ion Ratio Lower Upper

58 100

43 372.6 289.8 434.8





#16

Carbon Disulfide

Concen: 0.339 ug/l

RT: 4.00 min Scan# 704

Delta R.T. -0.00 min

Lab File: VN064512.D

Acq: 9 Nov 2020 17:34

Instrument :

MSVOA\_N

ClientSampleId :

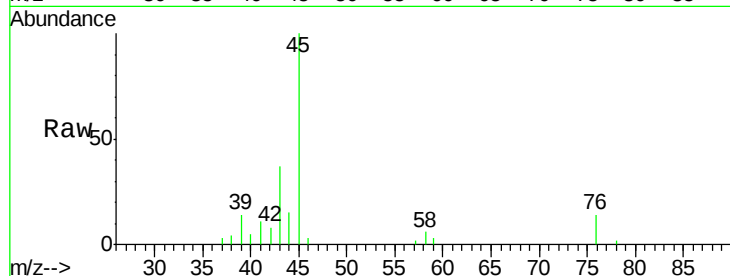
001-WILLETS-PT-BLVD(NOV)

Tot Ion: 76 Resp: 3346

Ion Ratio Lower Upper

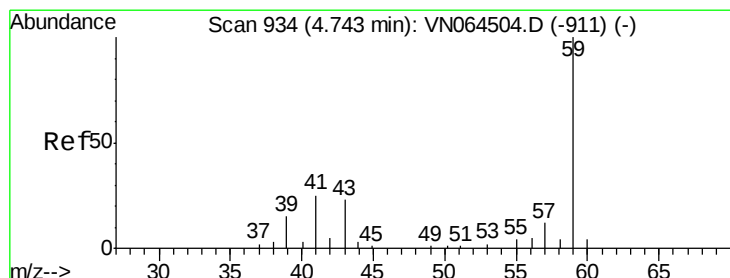
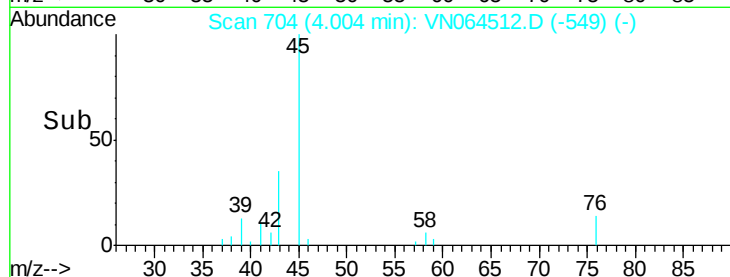
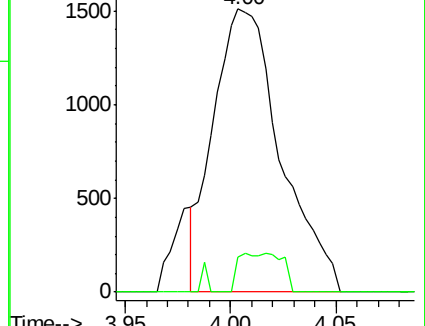
76 100

78 12.3 7.6 11.4#



Abundance Ion 76.00 (75.70 to 76.70): VN0

Ion 78.00 (77.70 to 78.70): VN0



#23

tert-Butyl Alcohol

Concen: 0.428 ug/l

RT: 4.75 min Scan# 935

Delta R.T. 0.00 min

Lab File: VN064512.D

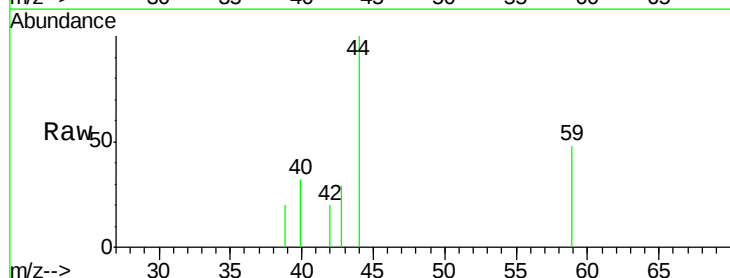
Acq: 9 Nov 2020 17:34

Tgt Ion: 59 Resp: 258

Ion Ratio Lower Upper

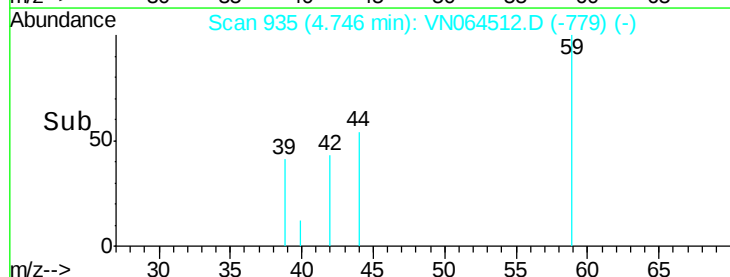
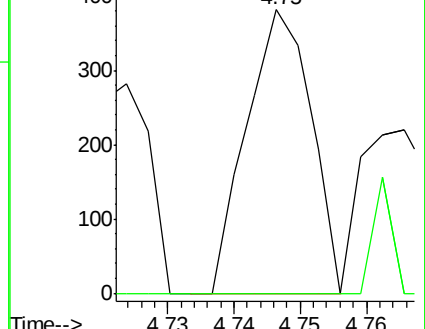
59 100

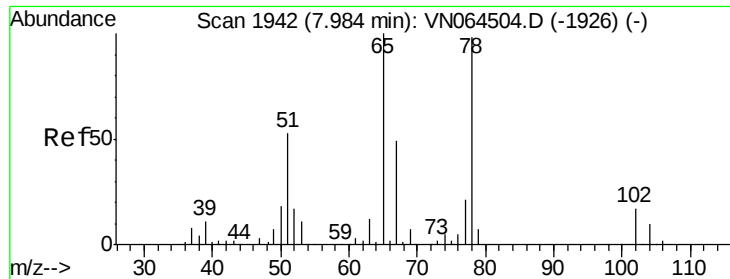
52 0.0 0.0 0.0



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 52.00 (51.70 to 52.70): VN0

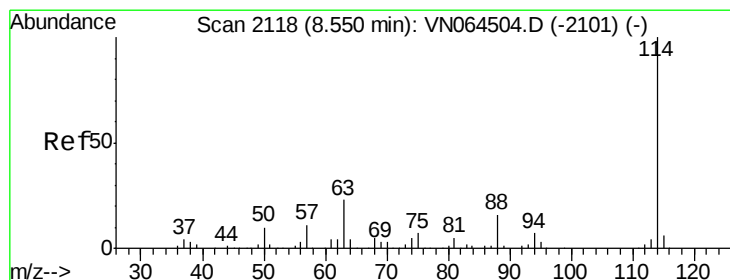
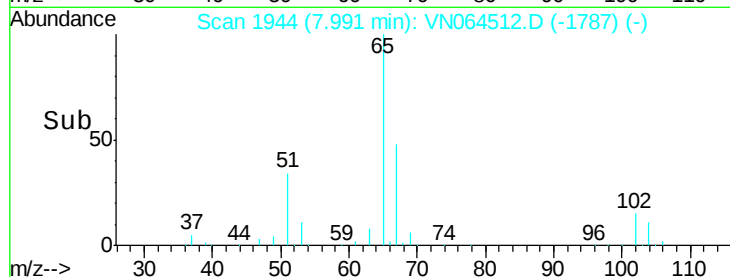
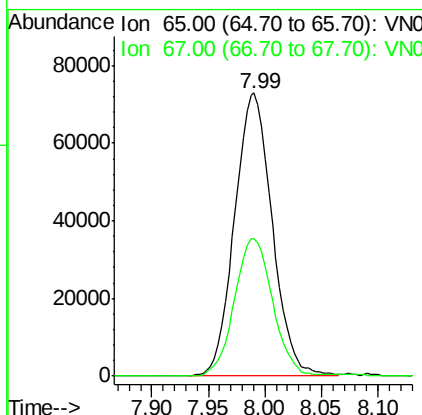
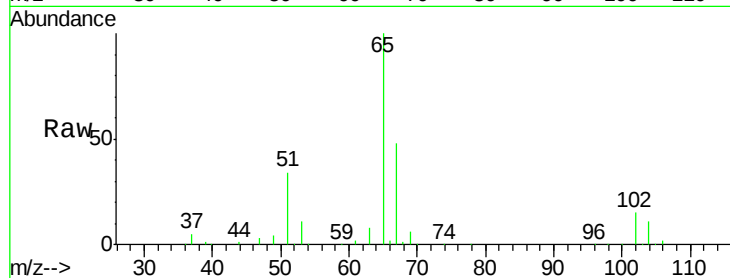




#27  
 1,2-Dichloroethane-d4  
 Concen: 31.719 ug/l  
 RT: 7.99 min Scan# 1944  
 Delta R.T. 0.01 min  
 Lab File: VN064512.D  
 Acq: 9 Nov 2020 17:34

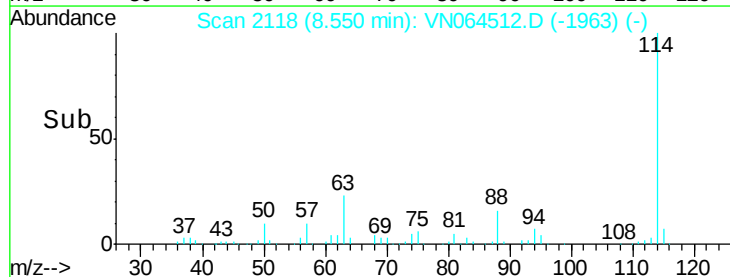
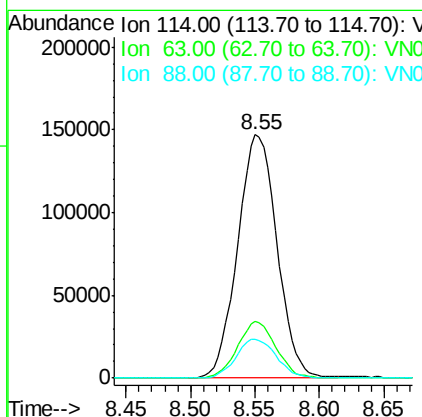
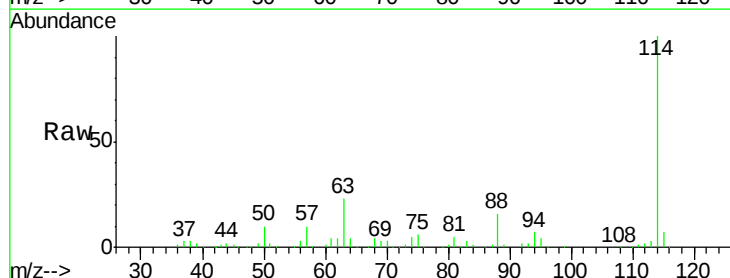
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 001-WILLETS-PT-BLVD(NOV)

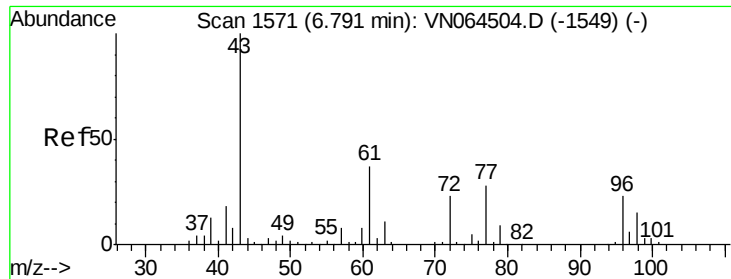
Tot Ion: 65 Resp: 168989  
 Ion Ratio Lower Upper  
 65 100  
 67 49.1 41.1 61.7



#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.55 min Scan# 2118  
 Delta R.T. -0.00 min  
 Lab File: VN064512.D  
 Acq: 9 Nov 2020 17:34

Tgt Ion: 114 Resp: 313242  
 Ion Ratio Lower Upper  
 114 100  
 63 22.7 18.5 27.7  
 88 16.3 13.0 19.6

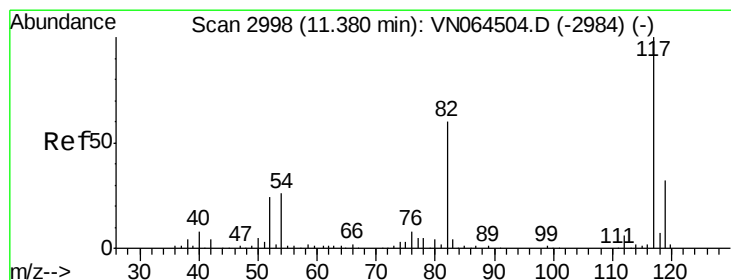
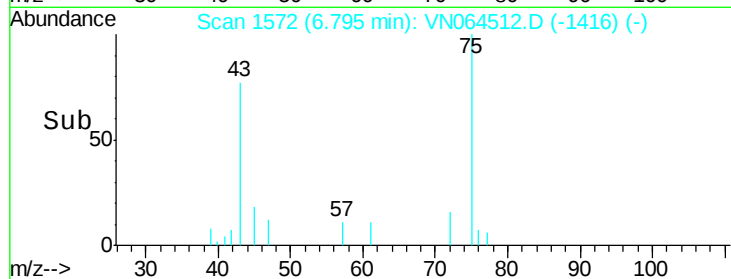
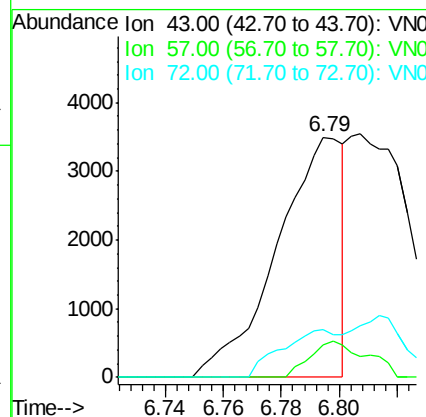
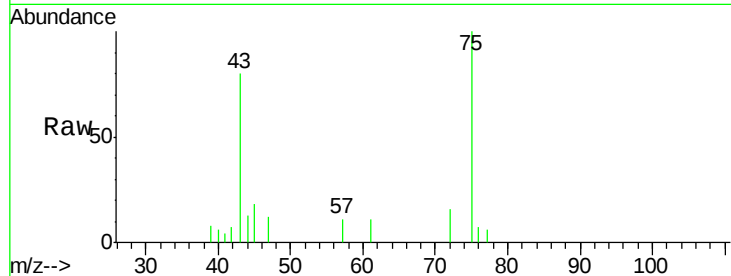




#30  
2-Butanone  
Concen: 2.048 ug/l  
RT: 6.79 min Scan# 1572  
Delta R.T. 0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

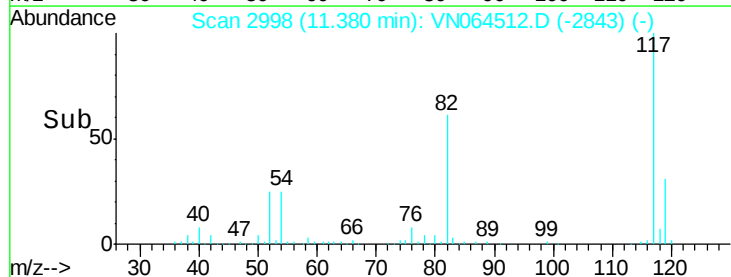
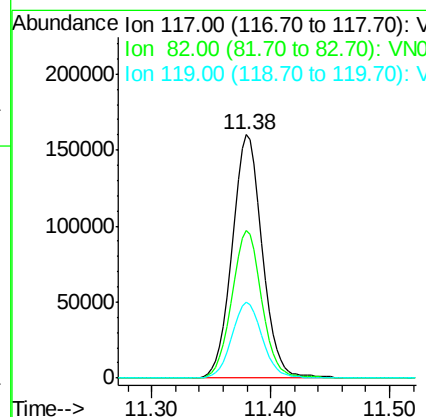
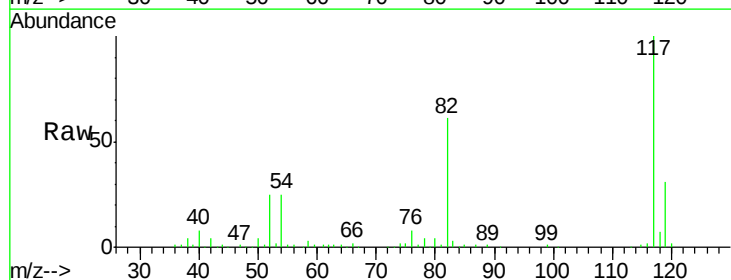
Instrument :  
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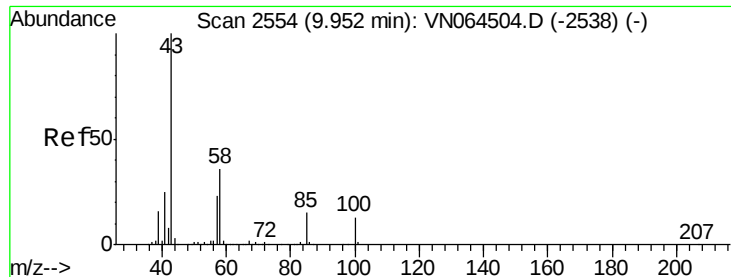
Tot Ion: 43 Resp: 5511  
Ion Ratio Lower Upper  
43 100  
57 10.0 6.2 9.4#  
72 15.7 9.9 14.9#



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.38 min Scan# 2998  
Delta R.T. -0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

Tgt Ion: 117 Resp: 280833  
Ion Ratio Lower Upper  
117 100  
82 60.7 47.8 71.8  
119 31.3 25.7 38.5

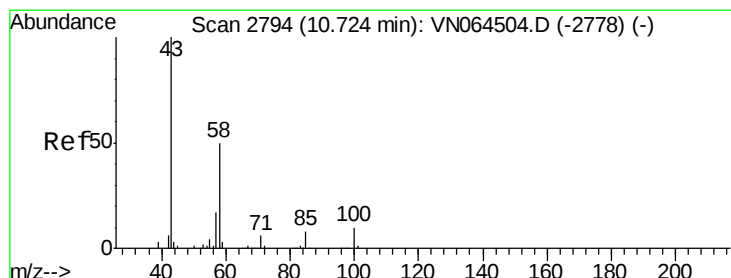
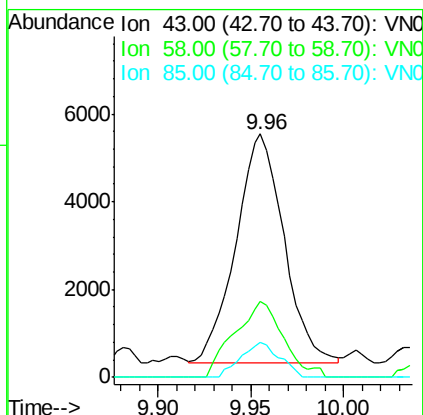
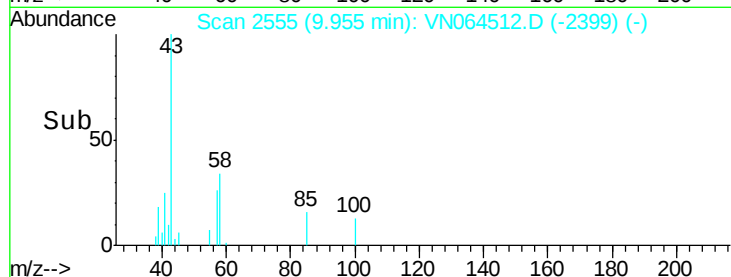
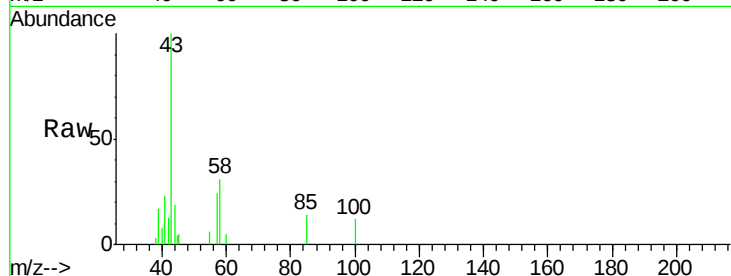




#58  
4-Methyl-2-Pentanone  
Concen: 1.837 ug/l  
RT: 9.96 min Scan# 2555  
Delta R.T. 0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

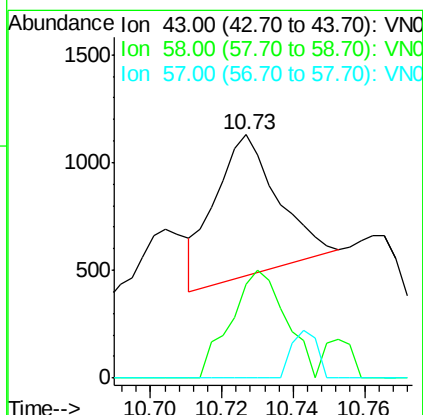
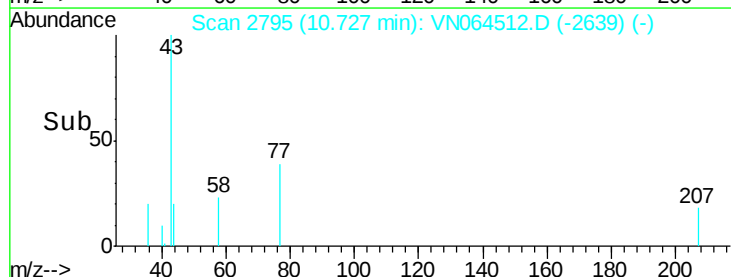
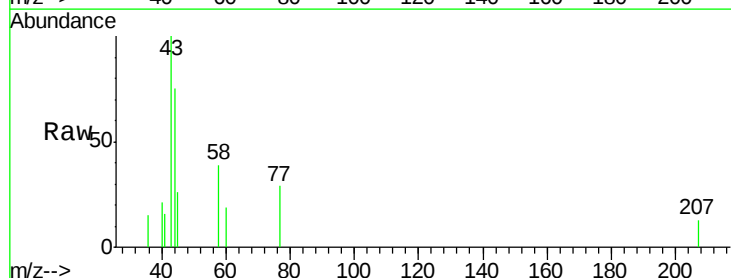
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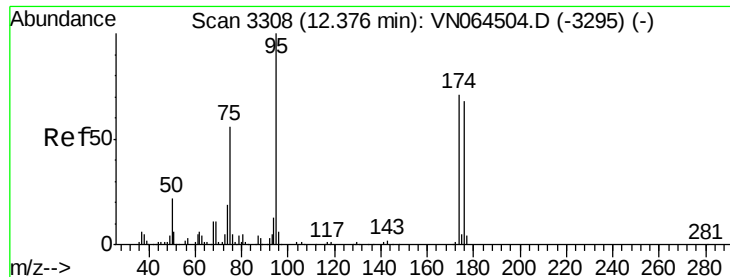
Tot Ion: 43 Resp: 9472  
Ion Ratio Lower Upper  
43 100  
58 32.6 28.8 43.2  
85 12.2 12.3 18.5#



#59  
2-Hexanone  
Concen: 0.207 ug/l  
RT: 10.73 min Scan# 2795  
Delta R.T. 0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

Tgt Ion: 43 Resp: 804  
Ion Ratio Lower Upper  
43 100  
58 66.0 38.2 57.4#  
57 0.0 13.8 20.8#





#60

4-Bromofluorobenzene

Concen: 24.136 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.00 min

Lab File: VN064512.D

Acq: 9 Nov 2020 17:34

Instrument :

MSVOA\_N

ClientSampleId :

001-WILLETS-PT-BLVD(NOV)

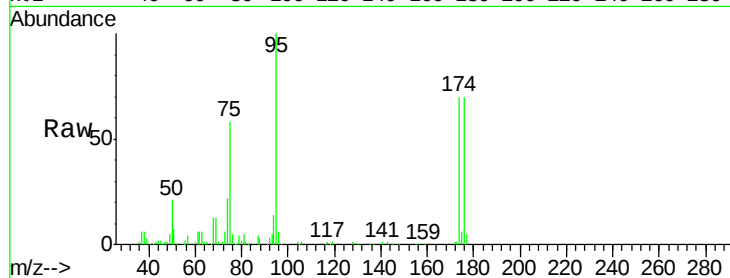
Tot Ion: 95 Resp: 116112

Ion Ratio Lower Upper

95 100

174 69.6 56.4 84.6

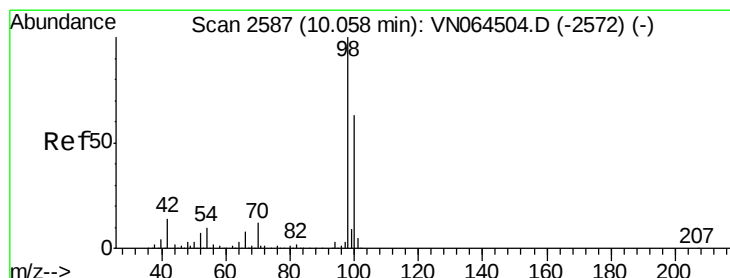
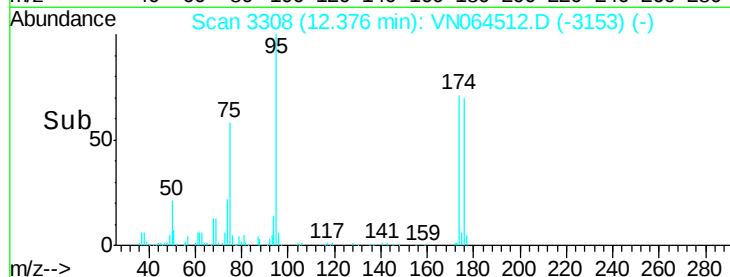
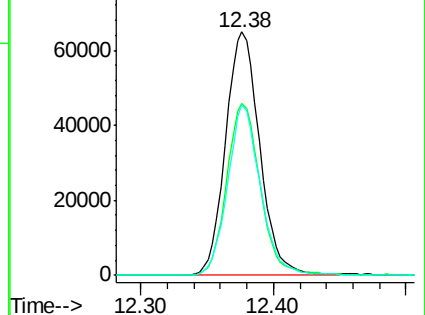
176 66.9 53.3 79.9



Abundance Ion 95.00 (94.70 to 95.70): VN064504.D (-3295) (-)

Ion 174.00 (173.70 to 174.70): VN064504.D (-3295) (-)

Ion 176.00 (175.70 to 176.70): VN064504.D (-3295) (-)



#63

Toluene-d8

Concen: 29.383 ug/l

RT: 10.06 min Scan# 2588

Delta R.T. 0.00 min

Lab File: VN064512.D

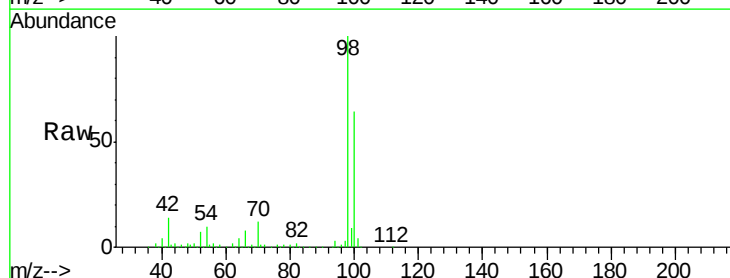
Acq: 9 Nov 2020 17:34

Tgt Ion: 98 Resp: 384840

Ion Ratio Lower Upper

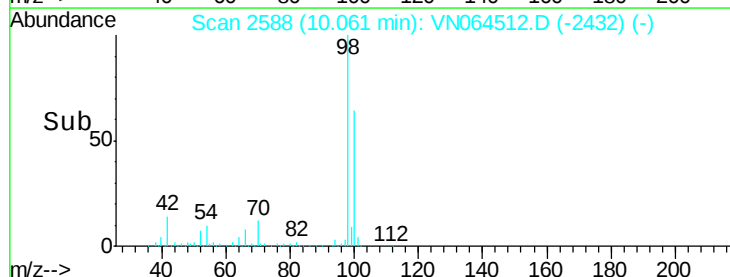
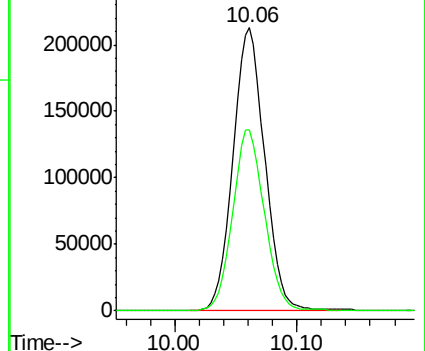
98 100

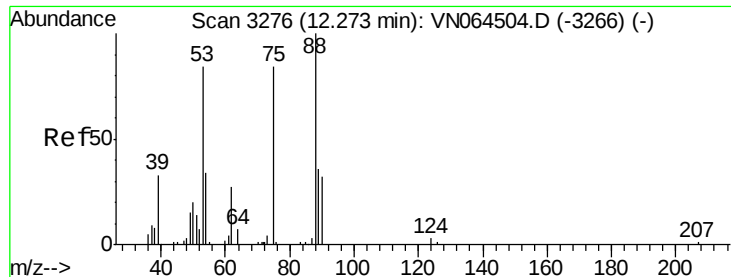
100 64.2 49.4 74.2



Abundance Ion 98.00 (97.70 to 98.70): VN064504.D (-2572) (-)

Ion 100.00 (99.70 to 100.70): VN064504.D (-2572) (-)

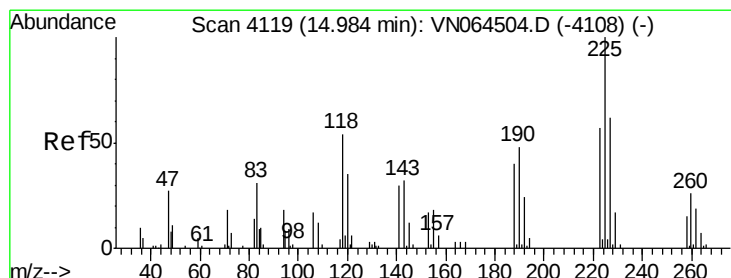
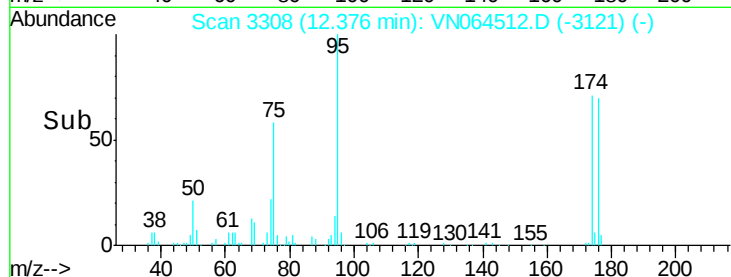
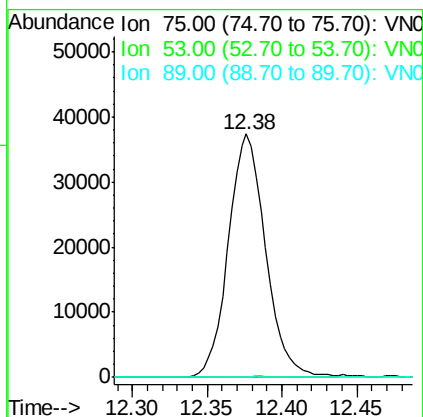
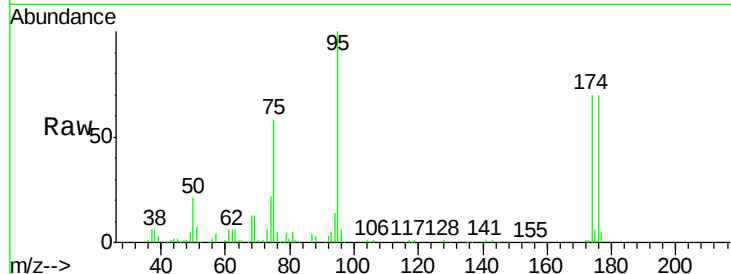




#77  
t-1,4-Dichloro-2-butene  
Concen: 34.261 ug/l  
RT: 12.38 min Scan# 3308  
Delta R.T. 0.10 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

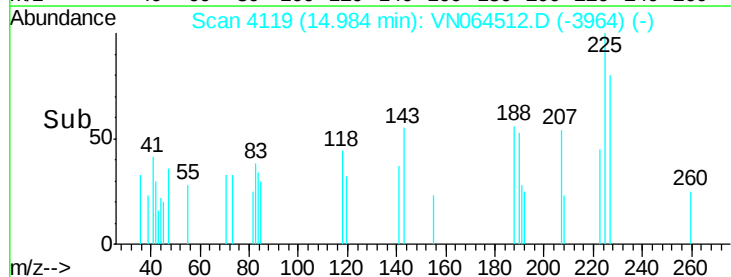
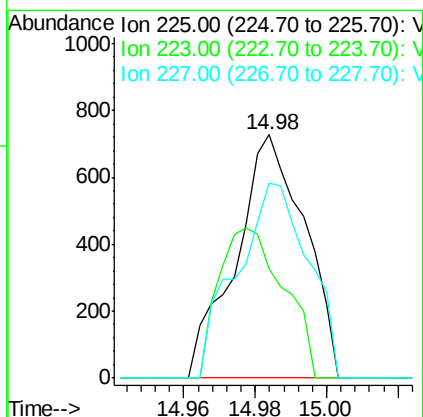
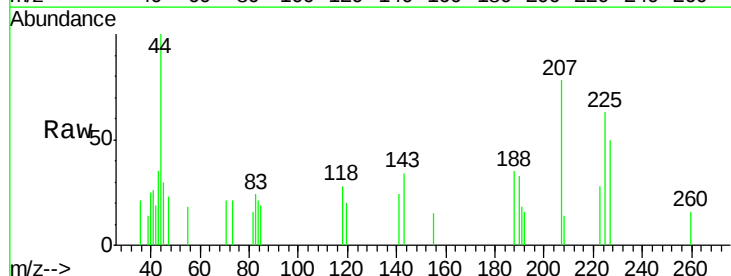
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(NOV)

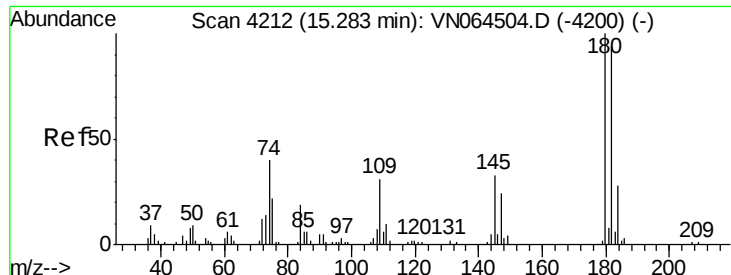
Tot Ion: 75 Resp: 64920  
Ion Ratio Lower Upper  
75 100  
53 0.0 50.3 150.9#  
89 0.0 23.3 69.8#



#90  
Hexachlorobutadiene  
Concen: 0.623 ug/l  
RT: 14.98 min Scan# 4119  
Delta R.T. -0.00 min  
Lab File: VN064512.D  
Acq: 9 Nov 2020 17:34

Tgt Ion: 225 Resp: 971  
Ion Ratio Lower Upper  
225 100  
223 58.1 0.0 125.4  
227 83.2 0.0 122.0

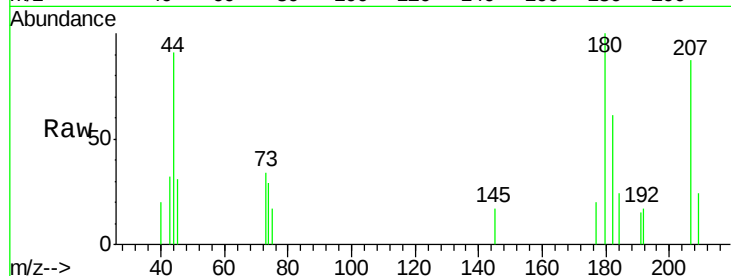




#92  
 1,2,3-Trichlorobenzene  
 Concen: 0.436 ug/l  
 RT: 15.29 min Scan# 4213  
 Delta R.T. 0.00 min  
 Lab File: VN064512.D  
 Acq: 9 Nov 2020 17:34

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

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 52.6  | 0.0   | 186.0 |
| 145     | 10.1  | 0.0   | 69.6  |



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V

