

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN081123\  
 Data File : VN078861.D  
 Acq On : 11 Aug 2023 14:27  
 Operator : JC\MD  
 Sample : 03988-01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

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

Quant Time: Aug 12 01:41:03 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N080823W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Aug 09 05:05:47 2023  
 Response via : Initial Calibration

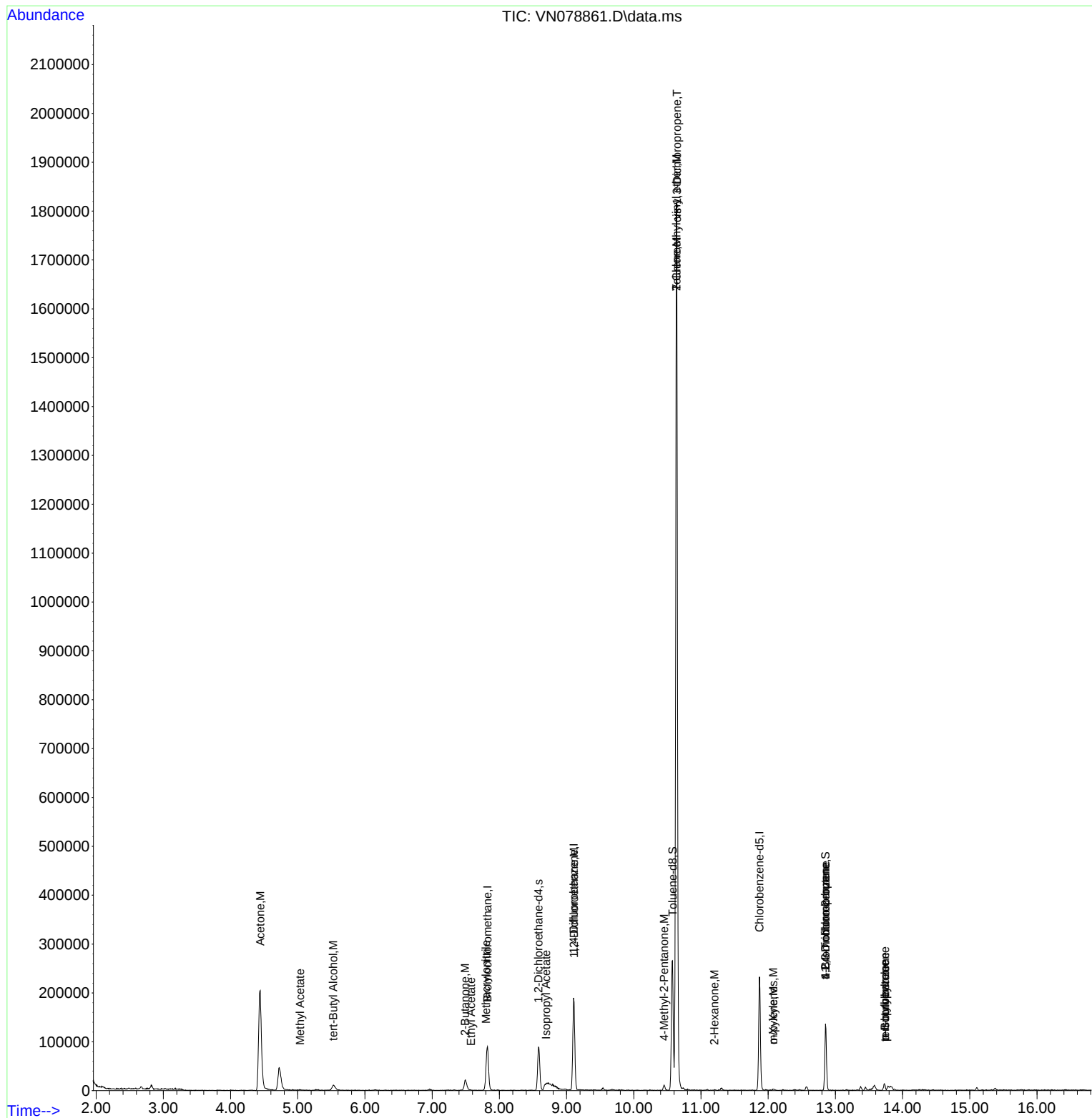
| Compound                      | R.T.           | QIon | Response   | Conc    | Units | Dev(Min) |
|-------------------------------|----------------|------|------------|---------|-------|----------|
| -----                         |                |      |            |         |       |          |
| Internal Standards            |                |      |            |         |       |          |
| 1) Bromochloromethane         | 7.824          | 128  | 29780      | 30.000  | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene       | 9.106          | 114  | 148473     | 30.000  | ug/l  | # 0.00   |
| 57) Chlorobenzene-d5          | 11.871         | 117  | 127061     | 30.000  | ug/l  | 0.00     |
|                               |                |      |            |         |       |          |
| System Monitoring Compounds   |                |      |            |         |       |          |
| 27) 1,2-Dichloroethane-d4     | 8.582          | 65   | 70033      | 29.210  | ug/l  | 0.00     |
| Spiked Amount 30.000          | Range 91 - 110 |      | Recovery = | 97.367% |       |          |
| 60) 4-Bromofluorobenzene      | 12.853         | 95   | 42294      | 23.714  | ug/l  | 0.00     |
| Spiked Amount 30.000          | Range 63 - 112 |      | Recovery = | 79.033% |       |          |
| 63) Toluene-d8                | 10.576         | 98   | 185820     | 29.844  | ug/l  | 0.00     |
| Spiked Amount 30.000          | Range 91 - 112 |      | Recovery = | 99.467% |       |          |
|                               |                |      |            |         |       |          |
| Target Compounds              |                |      |            |         |       | Qvalue   |
| 12) Methyl Acetate            | 5.036          | 43   | 1594       | 0.442   | ug/l  | # 83     |
| 15) Acetone                   | 4.442          | 58   | 118597     | 484.598 | ug/l  | 96       |
| 23) tert-Butyl Alcohol        | 5.530          | 59   | 15718      | 44.533  | ug/l  | # 100    |
| 30) 2-Butanone                | 7.488          | 43   | 36832      | 31.153  | ug/l  | # 82     |
| 35) Methacrylonitrile         | 7.800          | 41   | 538        | 0.388   | ug/l  | # 38     |
| 36) 1,2-Dichloroethane        | 9.112          | 62   | 6337       | 2.470   | ug/l  | # 75     |
| 43) Ethyl Acetate             | 7.577          | 43   | 549        | 0.224   | ug/l  | # 66     |
| 44) Isopropyl Acetate         | 8.694          | 43   | 10098      | 2.291   | ug/l  | # 47     |
| 49) cis-1,3-Dichloropropene   | 10.641         | 75   | 9122       | 3.118   | ug/l  | # 1      |
| 55) 2-Chloroethyl vinyl ether | 10.635         | 63   | 95049      | 104.650 | ug/l  | # 1      |
| 58) 4-Methyl-2-Pentanone      | 10.453         | 43   | 7672       | 3.141   | ug/l  | # 82     |
| 59) 2-Hexanone                | 11.200         | 43   | 601        | 0.354   | ug/l  | # 89     |
| 62) Toluene                   | 10.635         | 91   | 1302492    | 174.117 | ug/l  | 98       |
| 67) m/p-Xylenes               | 12.076         | 106  | 951        | 0.334   | ug/l  | 87       |
| 68) o-Xylene                  | 12.076         | 106  | 951        | 0.335   | ug/l  | 82       |
| 72) 1,2,3-Trichloropropane    | 12.853         | 75   | 25023      | 12.079  | ug/l  | # 1      |
| 77) t-1,4-Dichloro-2-butene   | 12.853         | 75   | 25023      | 38.482  | ug/l  | # 15     |
| 79) tert-butylbenzene         | 13.741         | 119  | 6007       | 1.316   | ug/l  | 63       |
| 82) p-Isopropyltoluene        | 13.741         | 119  | 6007       | 1.255   | ug/l  | 91       |
| 85) n-Butylbenzene            | 13.735         | 91   | 1584       | 0.450   | ug/l  | # 20     |
| -----                         |                |      |            |         |       |          |

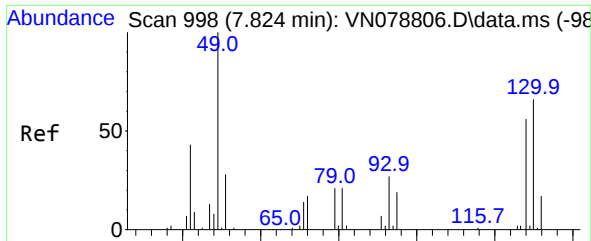
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Aug 09 05:05:47 2023  
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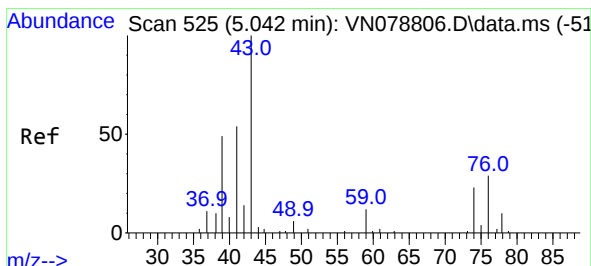
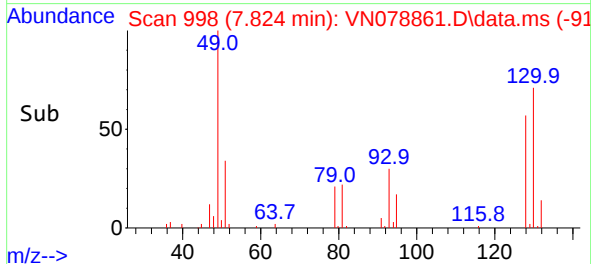
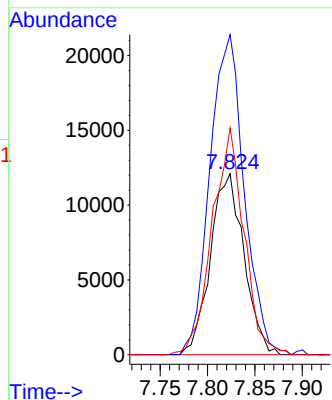
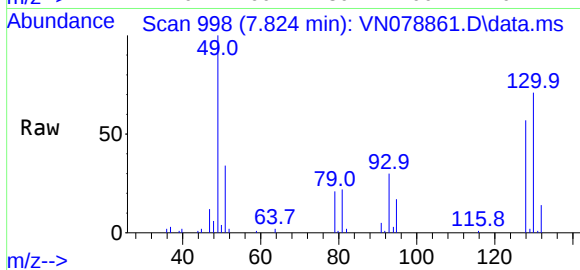




#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.824 min Scan# 998  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

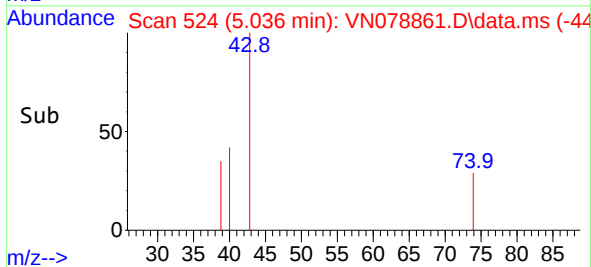
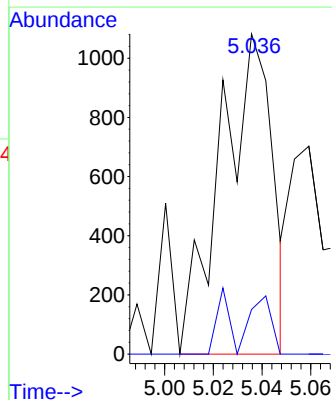
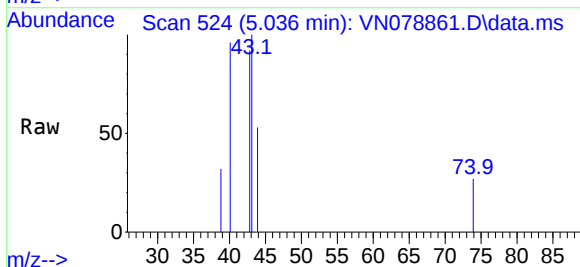
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

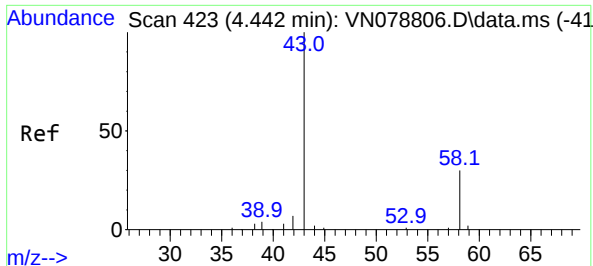
Tgt Ion:128 Resp: 29780  
Ion Ratio Lower Upper  
128 100  
49 181.0 0.0 370.8  
130 119.0 0.0 307.0



#12  
Methyl Acetate  
Concen: 0.442 ug/l  
RT: 5.036 min Scan# 524  
Delta R.T. -0.006 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 43 Resp: 1594  
Ion Ratio Lower Upper  
43 100  
74 16.9 20.5 30.7#





#15

Acetone

Concen: 484.598 ug/l

RT: 4.442 min Scan# 41

Delta R.T. -0.000 min

Lab File: VN078861.D

Acq: 11 Aug 2023 14:27

Instrument :

MSVOA\_N

ClientSampleId :

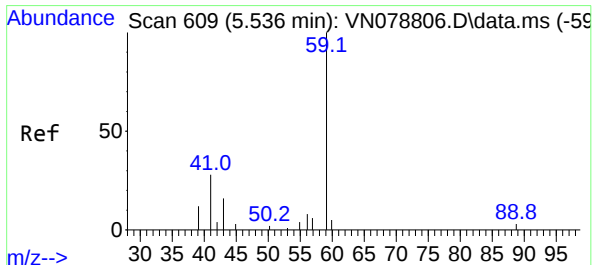
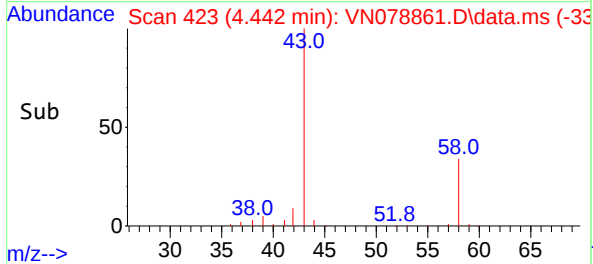
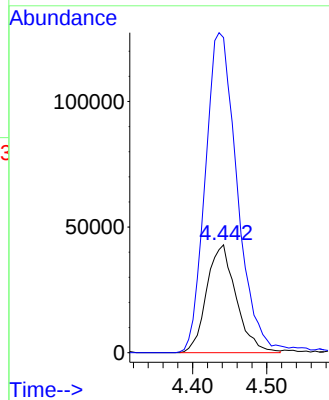
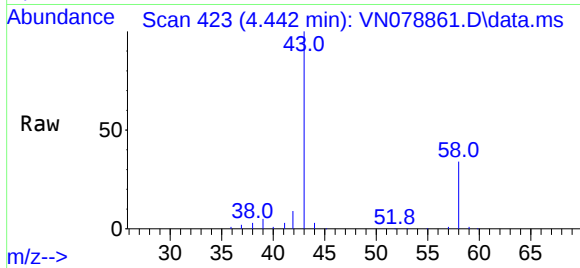
001-WILLETS-PT-BLVD(AUG)

Tgt Ion: 58 Resp: 118597

Ion Ratio Lower Upper

58 100

43 291.2 227.5 341.3



#23

tert-Butyl Alcohol

Concen: 44.533 ug/l

RT: 5.530 min Scan# 608

Delta R.T. -0.006 min

Lab File: VN078861.D

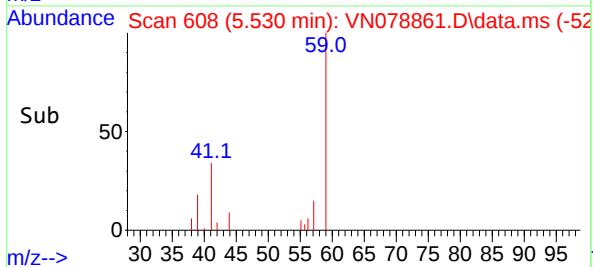
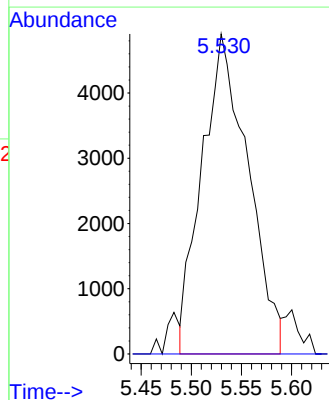
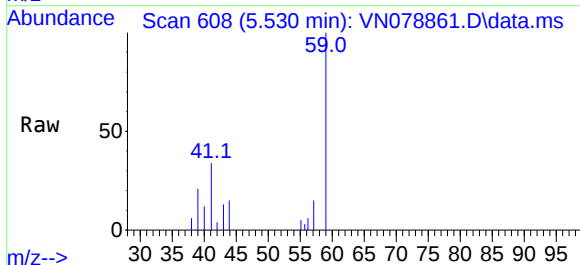
Acq: 11 Aug 2023 14:27

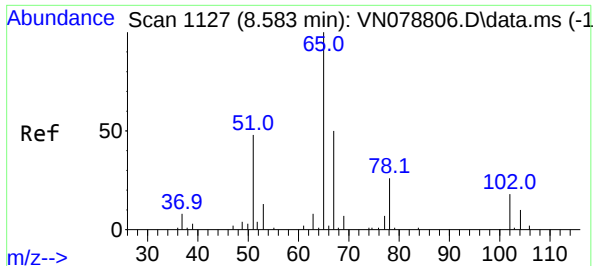
Tgt Ion: 59 Resp: 15718

Ion Ratio Lower Upper

59 100

52 0.0 0.1 0.1#

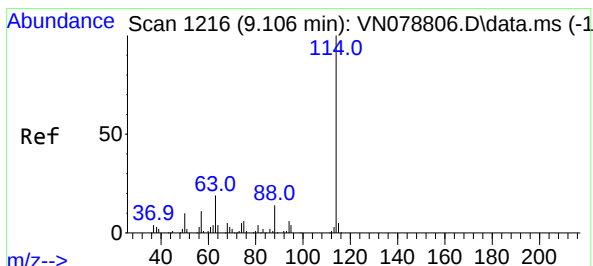
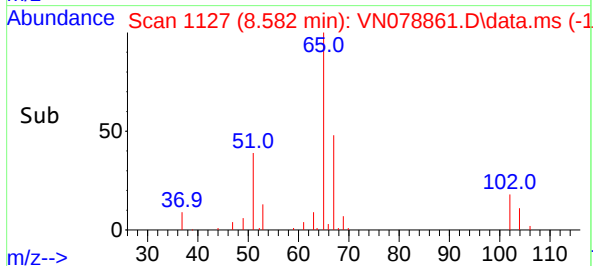
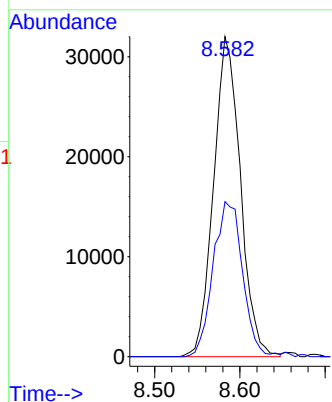
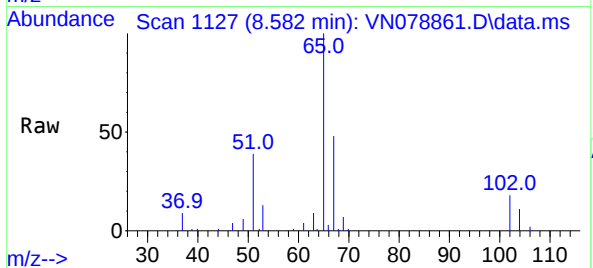




#27  
1,2-Dichloroethane-d4  
Concen: 29.210 ug/l  
RT: 8.582 min Scan# 1127  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

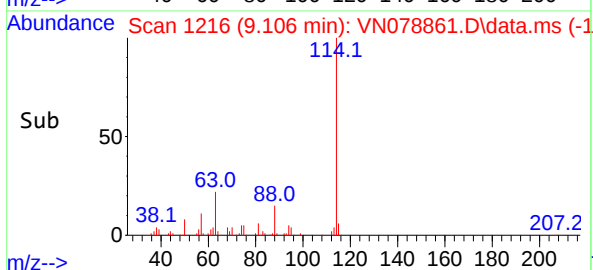
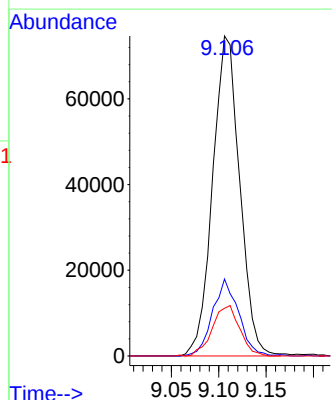
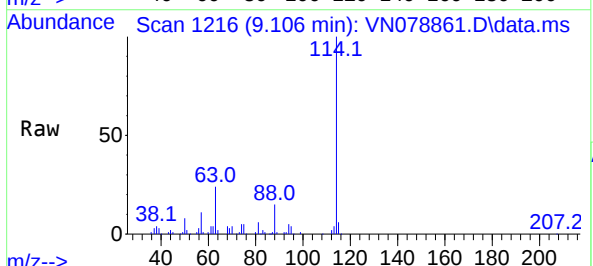
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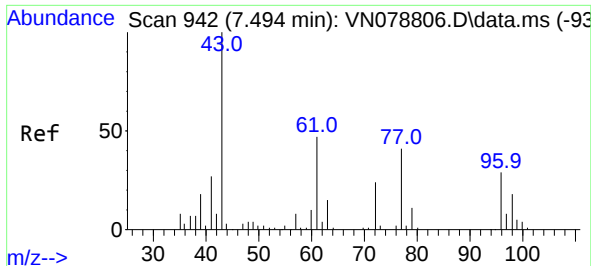
Tgt Ion: 65 Resp: 70033  
Ion Ratio Lower Upper  
65 100  
67 52.9 42.9 64.3



#28  
1,4-Difluorobenzene  
Concen: 30.000 ug/l  
RT: 9.106 min Scan# 1216  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 114 Resp: 148473  
Ion Ratio Lower Upper  
114 100  
63 23.1 15.2 22.8#  
88 15.9 12.5 18.7

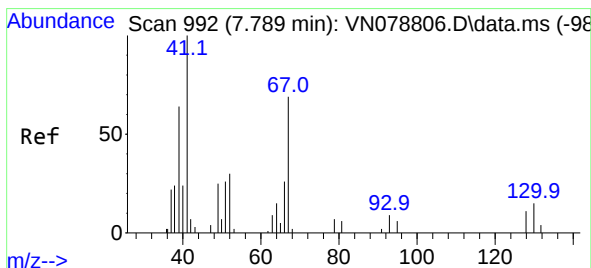
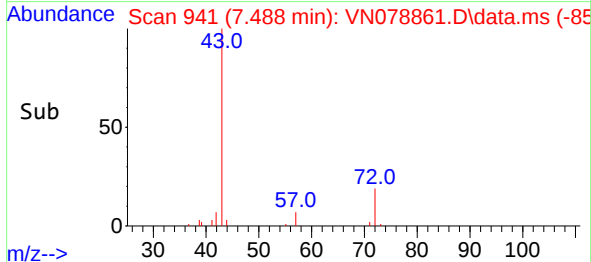
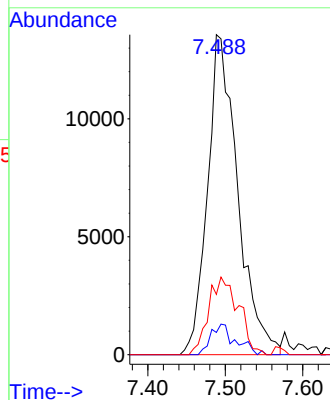
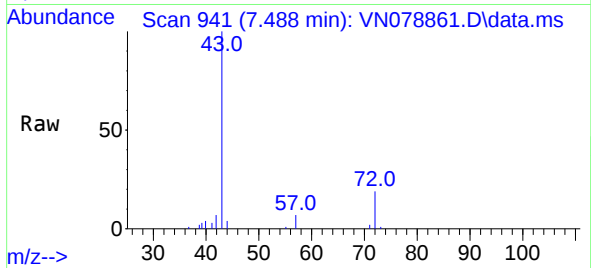




#30  
2-Butanone  
Concen: 31.153 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. -0.006 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

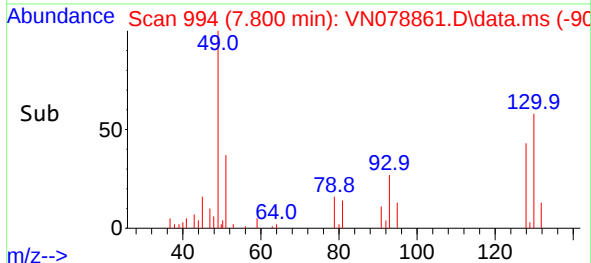
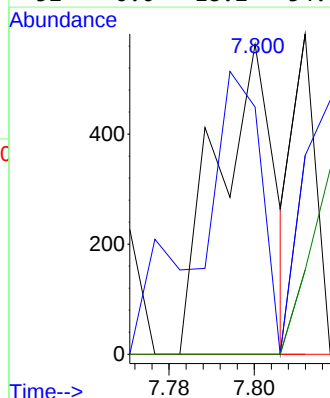
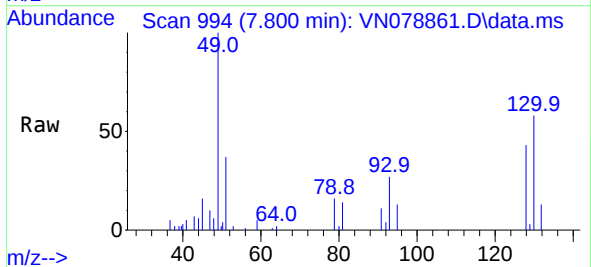
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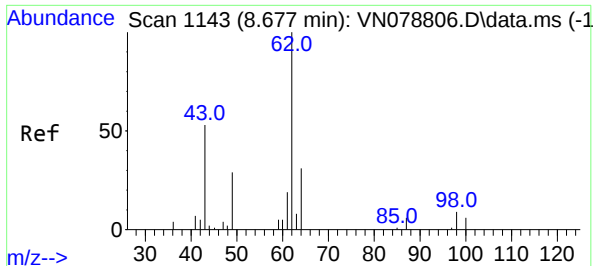
Tgt Ion: 43 Resp: 36832  
Ion Ratio Lower Upper  
43 100  
57 5.4 6.8 10.2#  
72 18.9 23.8 35.6#



#35  
Methacrylonitrile  
Concen: 0.388 ug/l  
RT: 7.800 min Scan# 994  
Delta R.T. 0.012 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 41 Resp: 538  
Ion Ratio Lower Upper  
41 100  
39 79.8 33.9 101.6  
67 0.0 45.9 137.6#  
52 0.0 18.2 54.6#

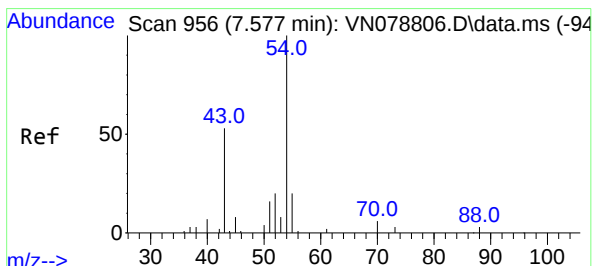
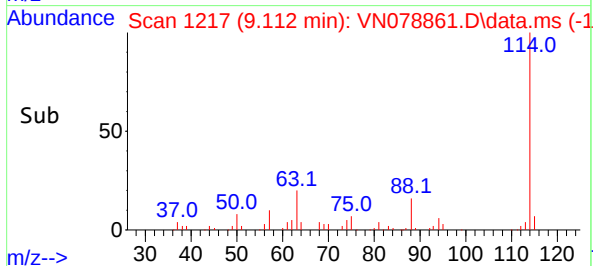
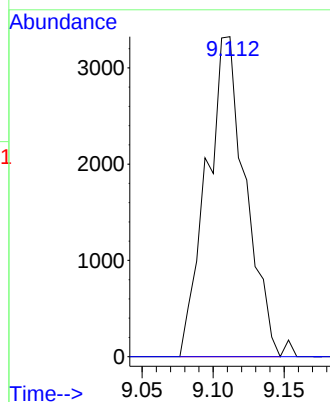
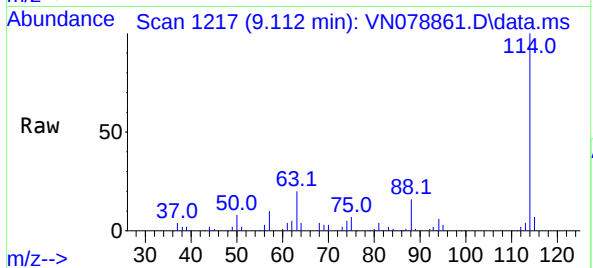




#36  
1,2-Dichloroethane  
Concen: 2.470 ug/l  
RT: 9.112 min Scan# 1143  
Delta R.T. 0.435 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

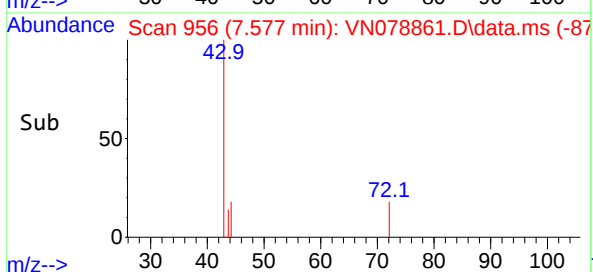
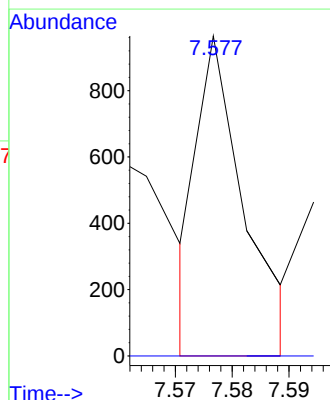
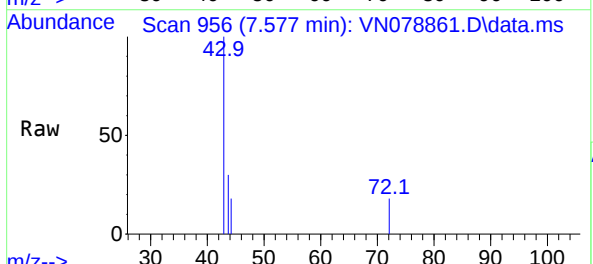
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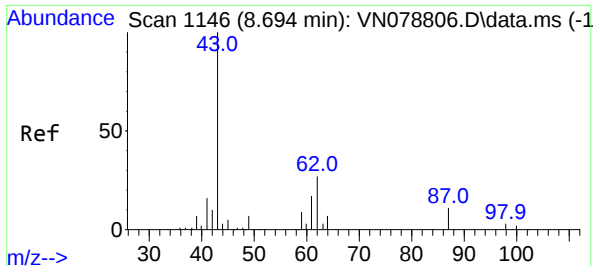
Tgt Ion: 62 Resp: 6337  
Ion Ratio Lower Upper  
62 100  
98 0.0 7.4 11.0#



#43  
Ethyl Acetate  
Concen: 0.224 ug/l  
RT: 7.577 min Scan# 956  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 43 Resp: 549  
Ion Ratio Lower Upper  
43 100  
45 0.0 10.9 16.3#

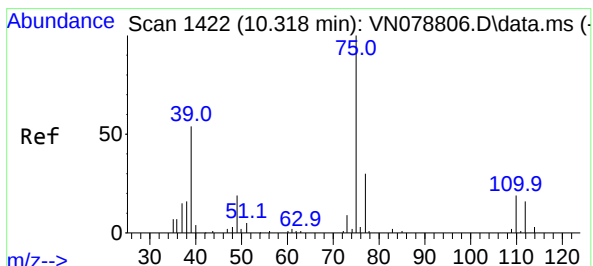
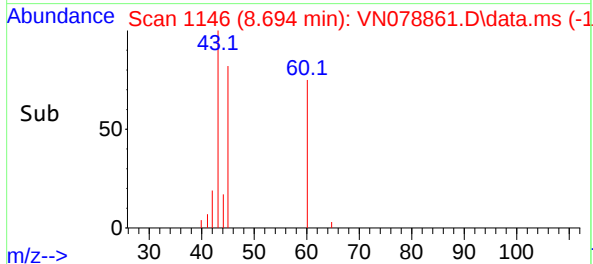
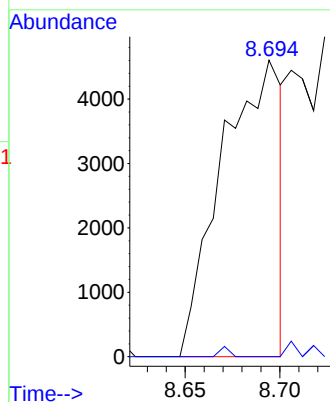
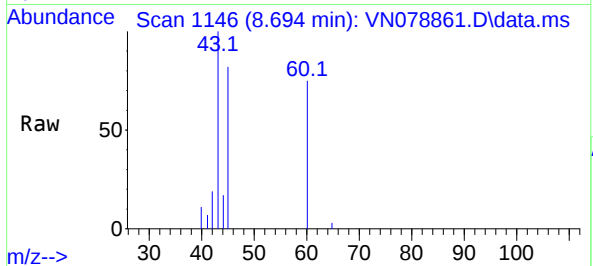




#44  
Isopropyl Acetate  
Concen: 2.291 ug/l  
RT: 8.694 min Scan# 1146  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

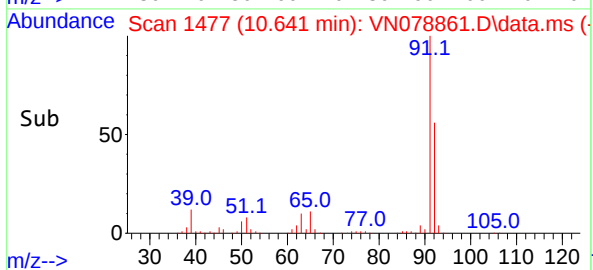
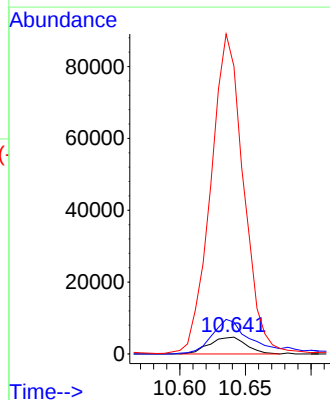
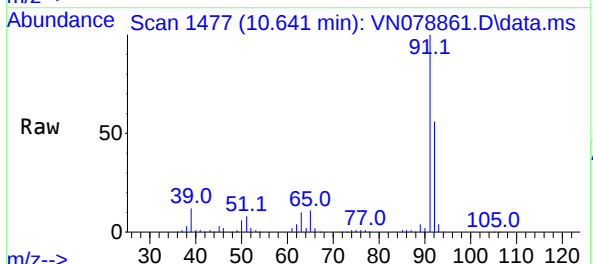
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ClientSampleId :  
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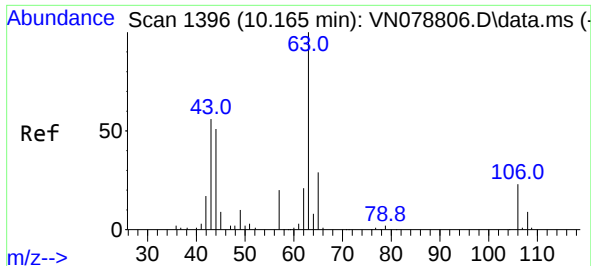
Tgt Ion: 43 Resp: 10098  
Ion Ratio Lower Upper  
43 100  
61 0.8 23.0 34.6#



#49  
cis-1,3-Dichloropropene  
Concen: 3.118 ug/l  
RT: 10.641 min Scan# 1477  
Delta R.T. 0.323 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 75 Resp: 9122  
Ion Ratio Lower Upper  
75 100  
77 184.4 24.0 36.0#  
39 1686.1 35.1 52.7#

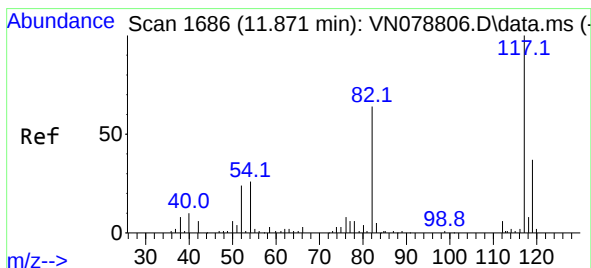
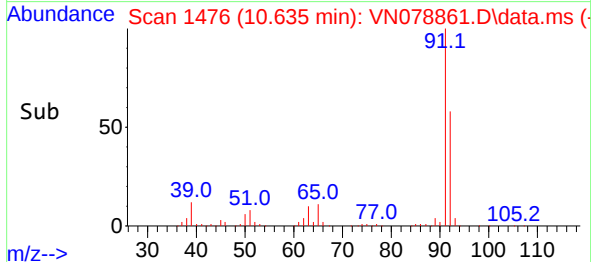
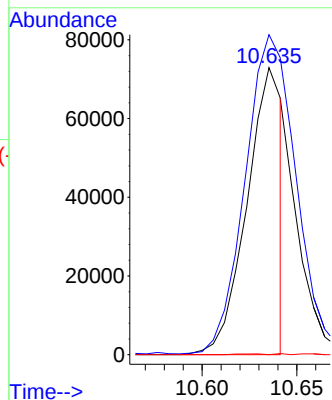
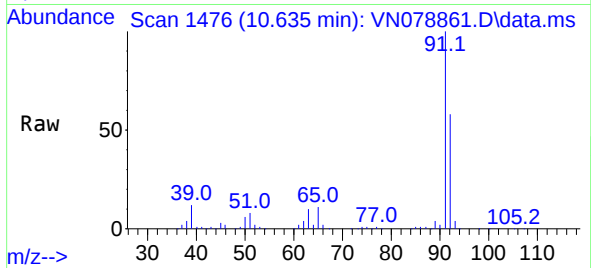




#55  
2-Chloroethyl vinyl ether  
Concen: 104.650 ug/l  
RT: 10.635 min Scan# 1476  
Delta R.T. 0.470 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

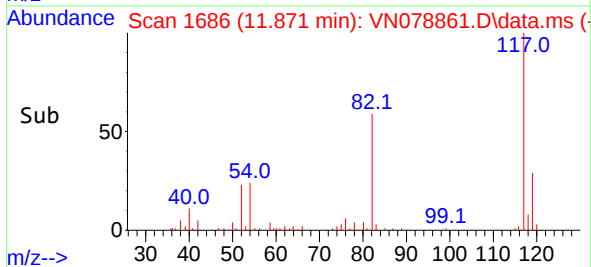
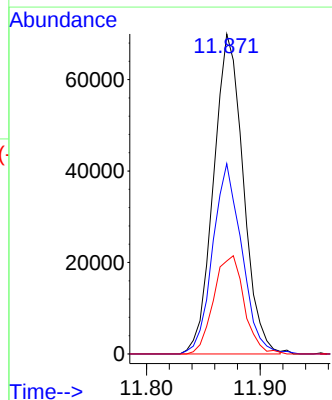
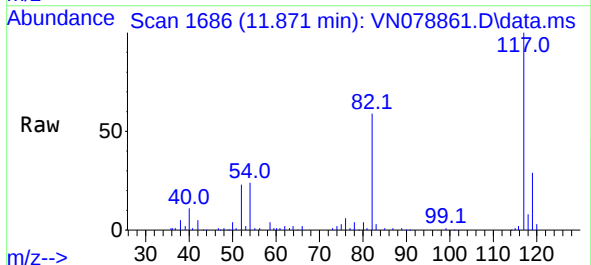
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

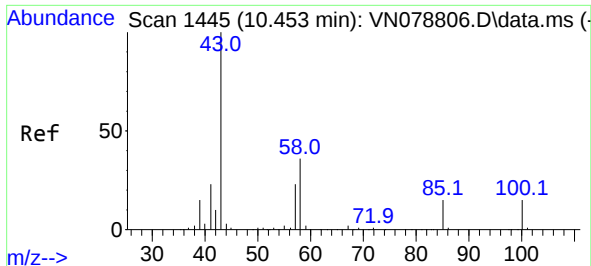
Tgt Ion: 63 Resp: 95049  
Ion Ratio Lower Upper  
63 100  
65 117.6 26.3 39.5#  
106 0.2 23.8 35.6#



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.871 min Scan# 1686  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 117 Resp: 127061  
Ion Ratio Lower Upper  
117 100  
82 58.4 43.9 65.9  
119 31.1 26.2 39.4

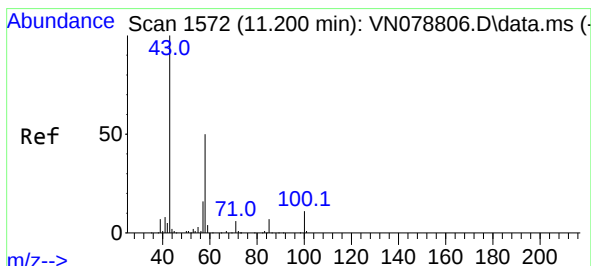
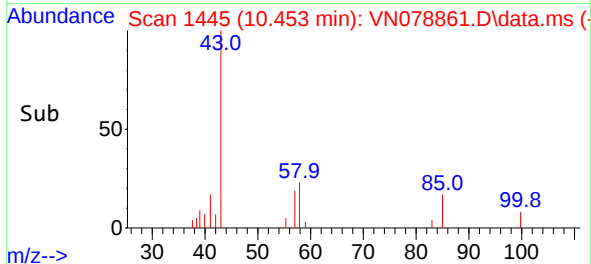
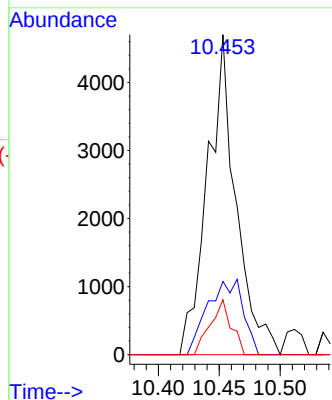
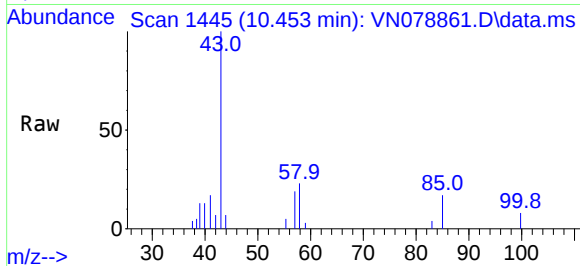




#58  
4-Methyl-2-Pentanone  
Concen: 3.141 ug/l  
RT: 10.453 min Scan# 1445  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

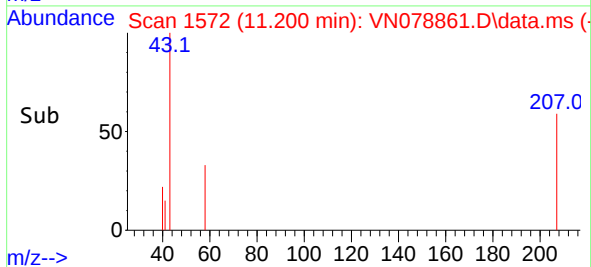
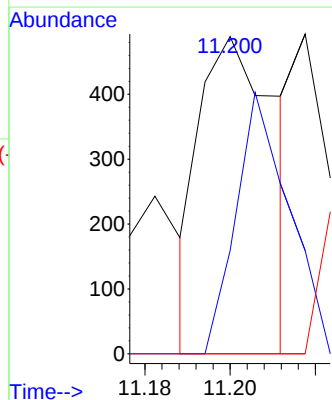
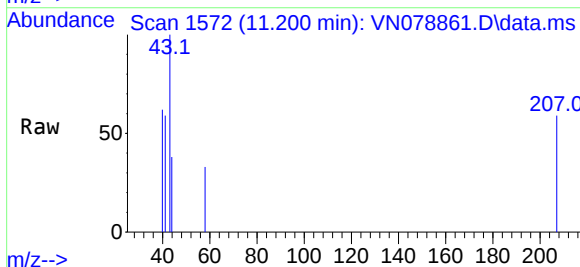
Instrument : MSVOA\_N  
ClientSampleId : 001-WILLETS-PT-BLVD(AUG)

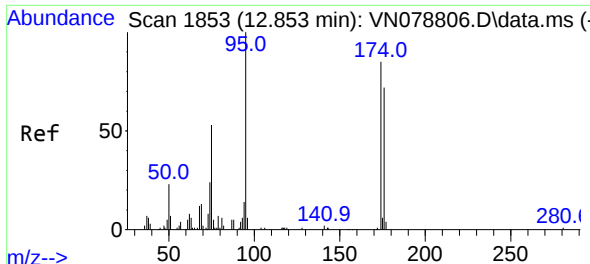
Tgt Ion: 43 Resp: 7672  
Ion Ratio Lower Upper  
43 100  
58 29.1 32.6 48.8#  
85 12.7 16.2 24.2#



#59  
2-Hexanone  
Concen: 0.354 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 43 Resp: 601  
Ion Ratio Lower Upper  
43 100  
58 57.7 45.9 68.9  
57 0.0 15.8 23.6#

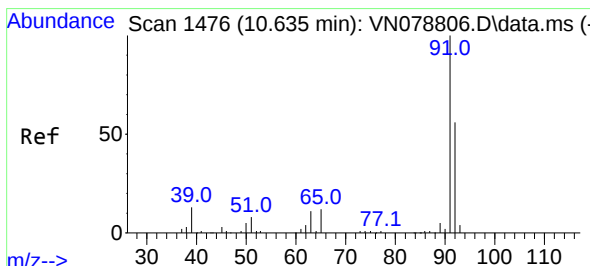
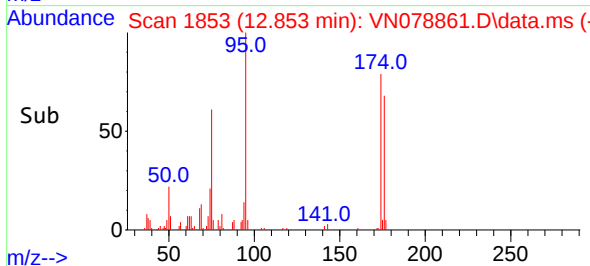
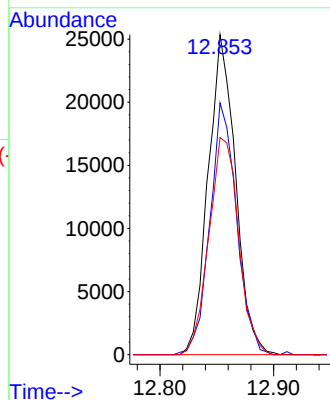
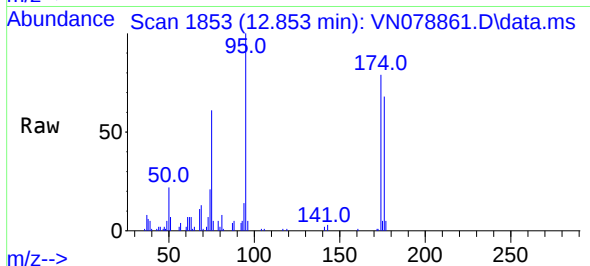




#60  
4-Bromofluorobenzene  
Concen: 23.714 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

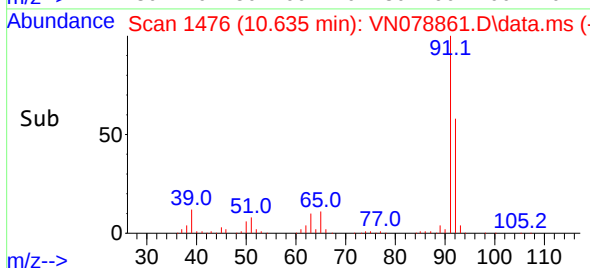
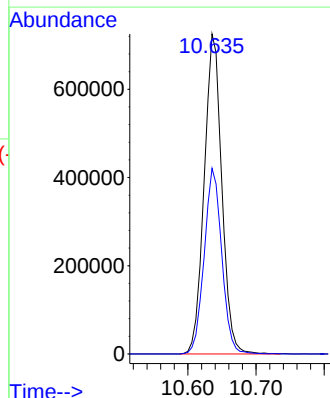
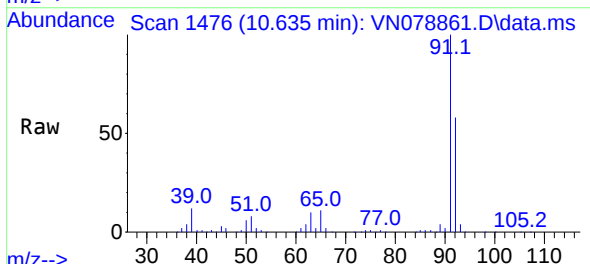
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

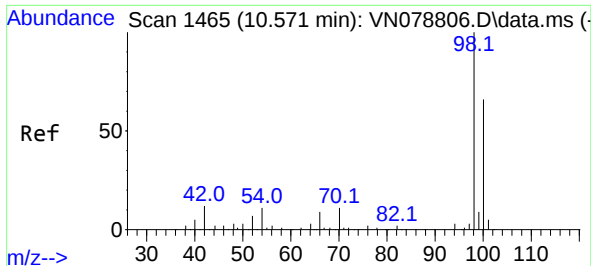
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 95    | Resp: | 42294 |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 174      | 77.0  | 61.7  | 92.5  |
| 176      | 73.8  | 58.1  | 87.1  |



#62  
Toluene  
Concen: 174.117 ug/l  
RT: 10.635 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 91    | Resp: | 1302492 |
| Ion      | Ratio | Lower | Upper   |
| 91       | 100   |       |         |
| 92       | 57.8  | 45.2  | 67.8    |

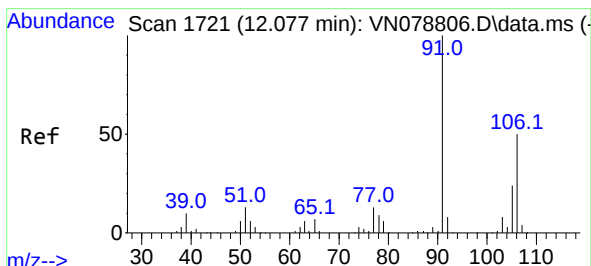
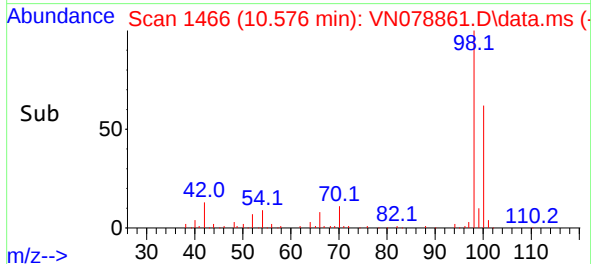
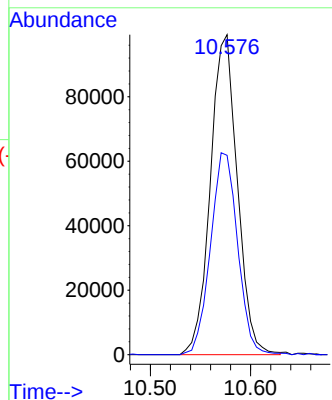
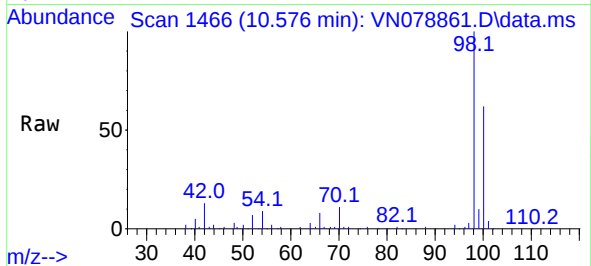




#63  
Toluene-d8  
Concen: 29.844 ug/l  
RT: 10.576 min Scan# 1466  
Delta R.T. 0.006 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

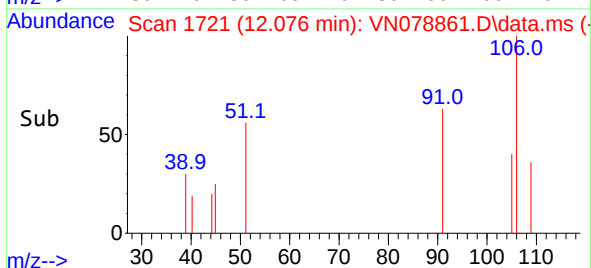
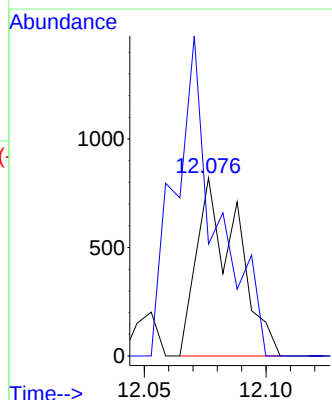
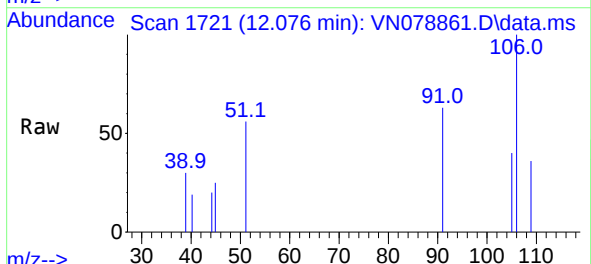
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

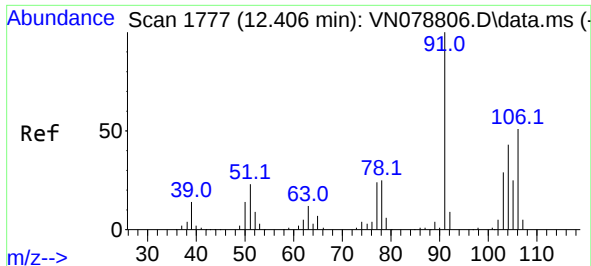
Tgt Ion: 98 Resp: 185820  
Ion Ratio Lower Upper  
98 100  
100 63.3 49.7 74.5



#67  
m/p-Xylenes  
Concen: 0.334 ug/l  
RT: 12.076 min Scan# 1721  
Delta R.T. -0.000 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion:106 Resp: 951  
Ion Ratio Lower Upper  
106 100  
91 183.7 162.5 243.7

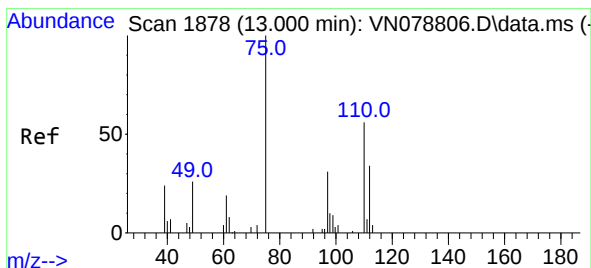
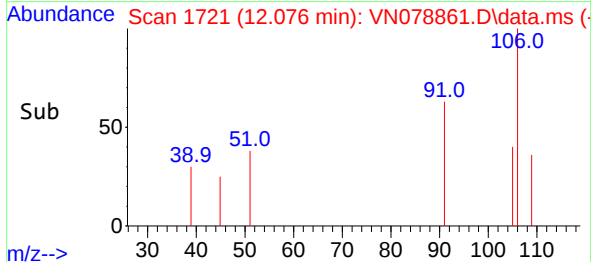
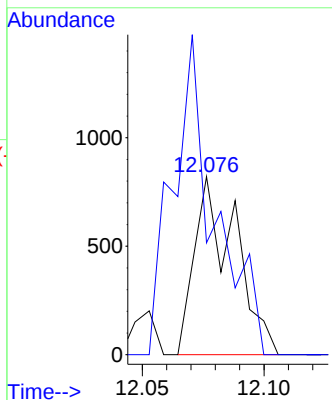
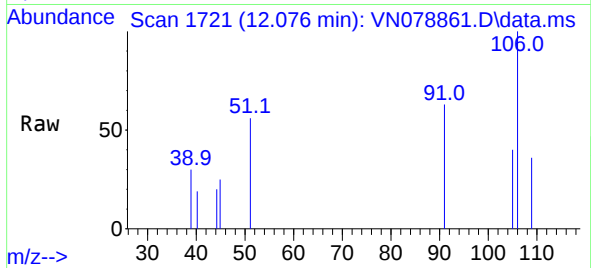




#68  
o-Xylene  
Concen: 0.335 ug/l  
RT: 12.076 min Scan# 11  
Delta R.T. -0.330 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

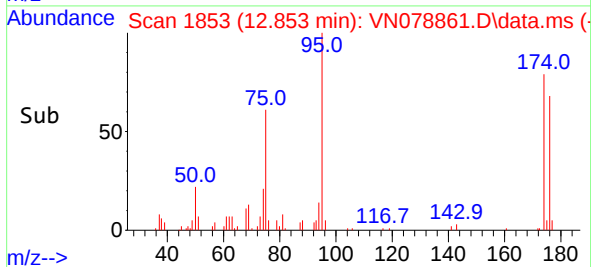
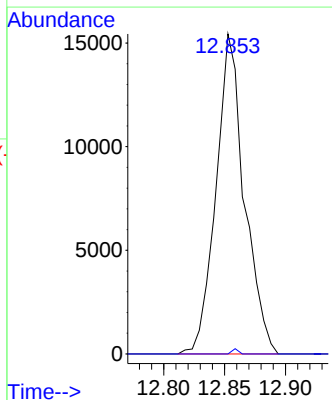
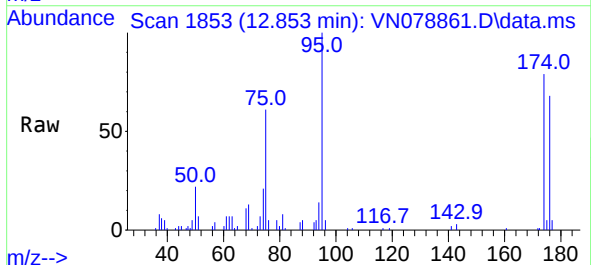
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

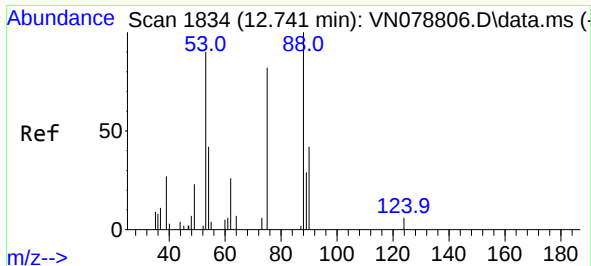
Tgt Ion:106 Resp: 951  
Ion Ratio Lower Upper  
106 100  
91 183.7 106.1 318.3



#72  
1,2,3-Trichloropropane  
Concen: 12.079 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.147 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 75 Resp: 25023  
Ion Ratio Lower Upper  
75 100  
77 0.0 0.0 387.4

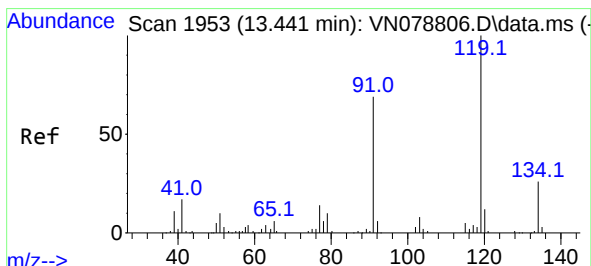
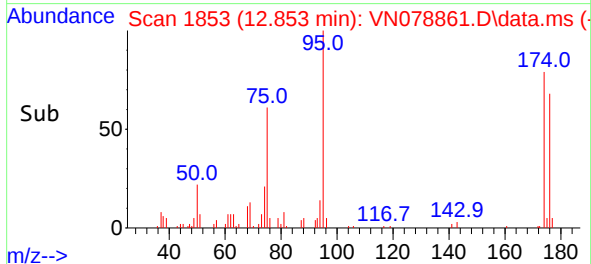
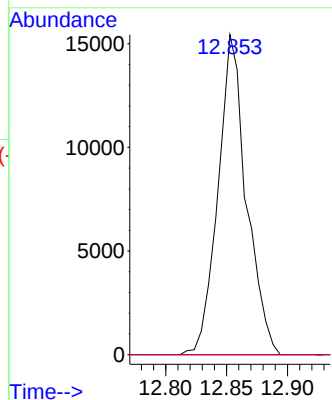
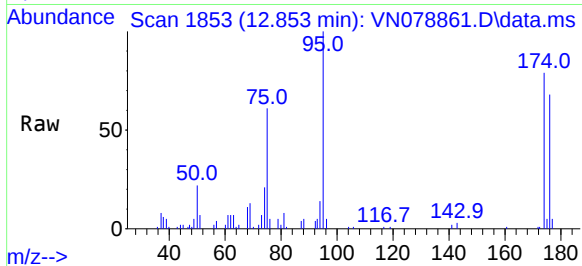




#77  
t-1,4-Dichloro-2-butene  
Concen: 38.482 ug/l  
RT: 12.853 min Scan# 11  
Delta R.T. 0.112 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

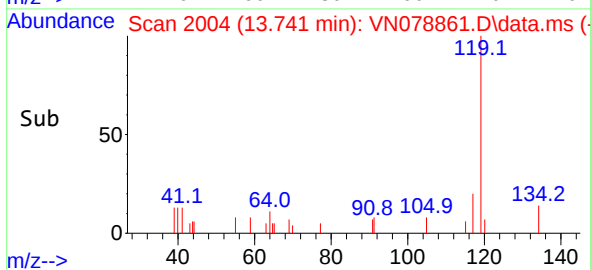
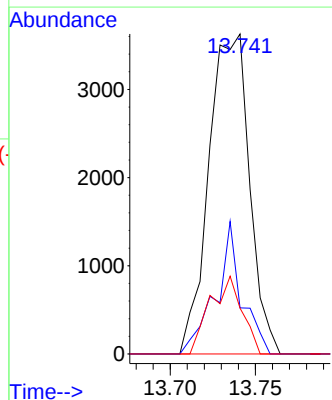
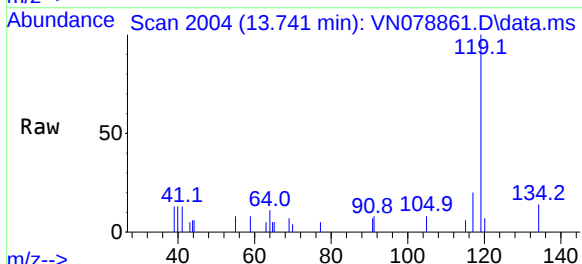
Instrument :  
MSVOA\_N  
ClientSampleId :  
001-WILLETS-PT-BLVD(AUG)

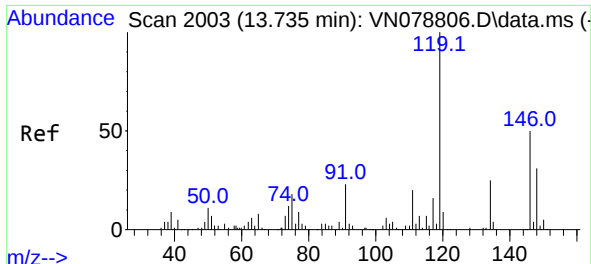
Tgt Ion: 75 Resp: 25023  
Ion Ratio Lower Upper  
75 100  
53 0.0 41.6 124.9#  
89 0.0 25.1 75.4#



#79  
tert-butylbenzene  
Concen: 1.316 ug/l  
RT: 13.741 min Scan# 2004  
Delta R.T. 0.300 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 119 Resp: 6007  
Ion Ratio Lower Upper  
119 100  
91 26.4 0.0 126.6  
134 19.1 0.0 44.0

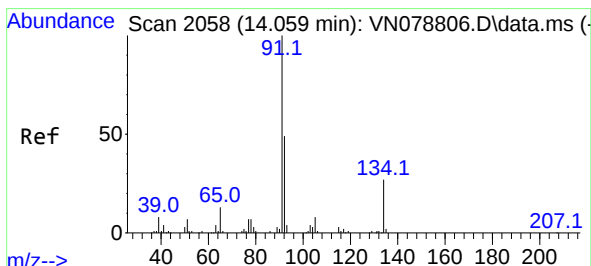
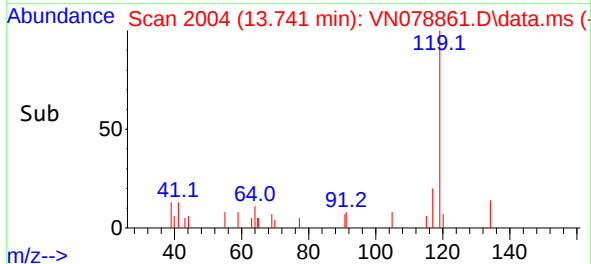
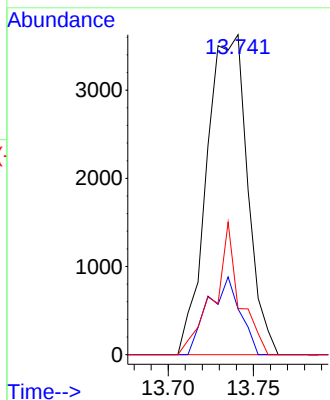
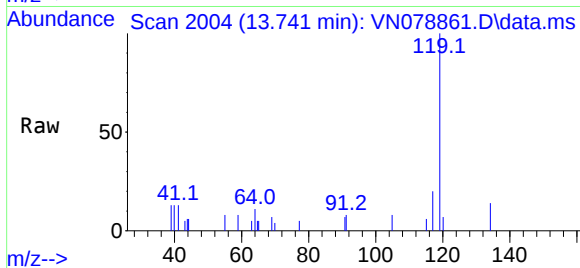




#82  
p-Isopropyltoluene  
Concen: 1.255 ug/l  
RT: 13.741 min Scan# 2003  
Delta R.T. 0.006 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

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

Tgt Ion:119 Resp: 6007  
Ion Ratio Lower Upper  
119 100  
134 19.1 0.0 52.4  
91 26.4 0.0 48.2



#85  
n-Butylbenzene  
Concen: 0.450 ug/l  
RT: 13.735 min Scan# 2003  
Delta R.T. -0.324 min  
Lab File: VN078861.D  
Acq: 11 Aug 2023 14:27

Tgt Ion: 91 Resp: 1584  
Ion Ratio Lower Upper  
91 100  
92 0.0 0.0 99.6  
134 72.5 0.0 50.0#

