

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN121222\  
 Data File : VN075720.D  
 Acq On : 12 Dec 2022 18:05  
 Operator : JC\MD  
 Sample : N5978-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TOLL-MW-04

Quant Time: Dec 13 01:34:25 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N120922W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Dec 12 07:54:35 2022  
 Response via : Initial Calibration

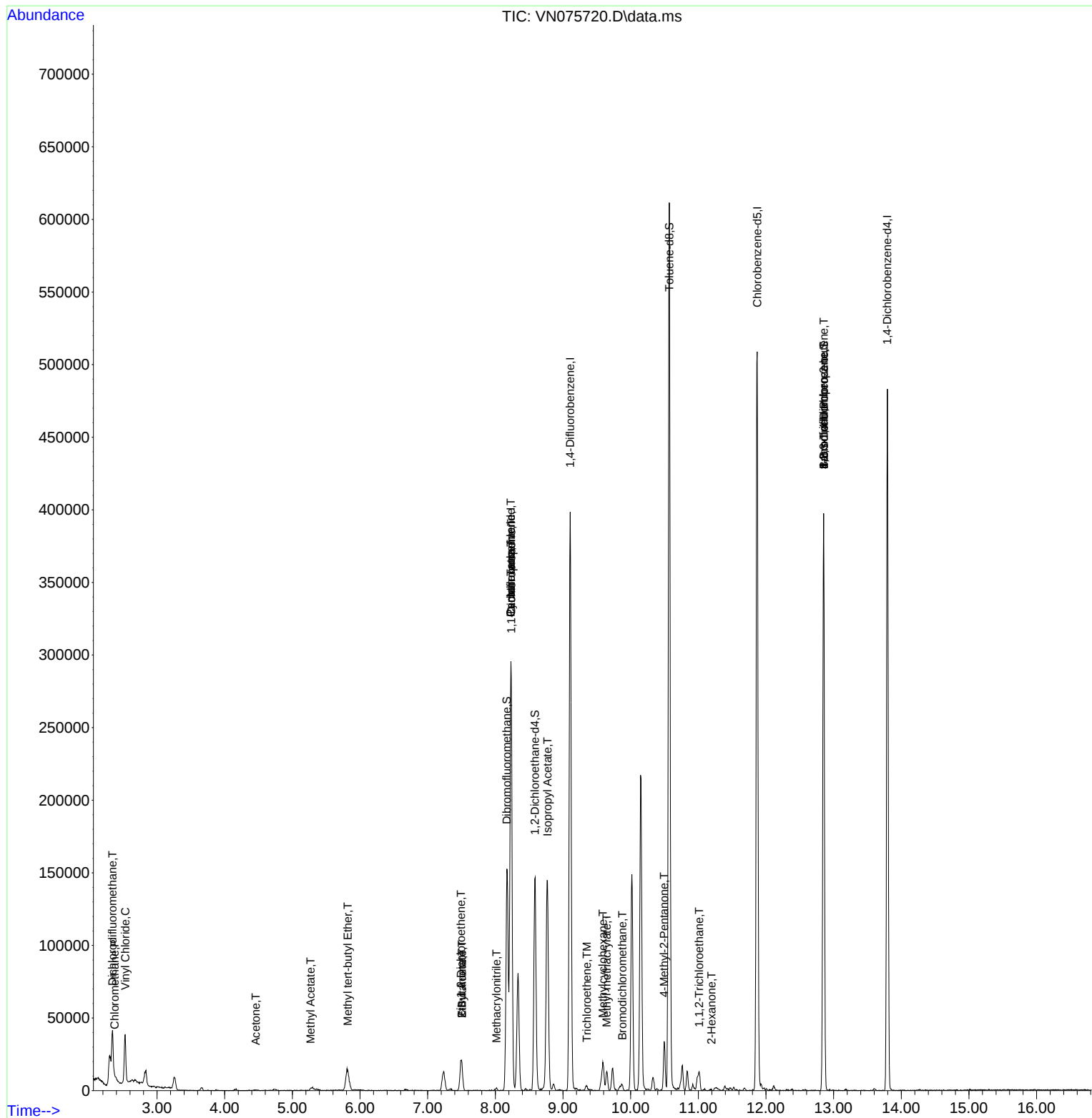
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 8.230  | 168   | 231336   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.106  | 114   | 366482   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.870 | 117   | 319495   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794 | 152   | 136282   | 50.000   | ug/l   | 0.00     |
|                               |        |       |          |          |        |          |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.582  | 65    | 119410   | 48.649   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery | =      | 97.300%  |
| 35) Dibromofluoromethane      | 8.171  | 113   | 109988   | 49.190   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =      | 98.380%  |
| 50) Toluene-d8                | 10.571 | 98    | 433610   | 51.639   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery | =      | 103.280% |
| 62) 4-Bromofluorobenzene      | 12.853 | 95    | 133510   | 46.503   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery | =      | 93.000%  |
|                               |        |       |          |          |        |          |
| Target Compounds              |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane    | 2.342  | 85    | 2980     | 1.751    | ug/l   | 98       |
| 3) Chloromethane              | 2.371  | 50    | 417      | 0.206    | ug/l # | 40       |
| 4) Vinyl Chloride             | 2.530  | 62    | 17554    | 7.050    | ug/l   | 98       |
| 16) Acetone                   | 4.459  | 43    | 679      | 0.817    | ug/l # | 41       |
| 18) Methyl Acetate            | 5.271  | 43    | 908      | 0.340    | ug/l # | 44       |
| 19) Methyl tert-butyl Ether   | 5.818  | 73    | 21186    | 3.178    | ug/l # | 70       |
| 25) 2-Butanone                | 7.506  | 43    | 565      | 0.465    | ug/l # | 43       |
| 27) cis-1,2-Dichloroethene    | 7.494  | 96    | 14221    | 5.289    | ug/l   | 91       |
| 31) Cyclohexane               | 8.230  | 56    | 4593     | 1.264    | ug/l # | 21       |
| 36) 1,1-Dichloropropene       | 8.235  | 75    | 15959    | 5.375    | ug/l # | 48       |
| 37) Ethyl Acetate             | 7.506  | 43    | 565      | 0.237    | ug/l # | 1        |
| 38) Carbon Tetrachloride      | 8.230  | 117   | 23145    | 6.755    | ug/l # | 15       |
| 39) Methylcyclohexane         | 9.588  | 83    | 856      | 0.227    | ug/l # | 12       |
| 41) Methacrylonitrile         | 8.018  | 41    | 324      | 0.265    | ug/l # | 16       |
| 43) Isopropyl Acetate         | 8.771  | 43    | 26922    | 6.765    | ug/l # | 51       |
| 44) Trichloroethene           | 9.353  | 130   | 574      | 0.223    | ug/l   | 88       |
| 47) Bromodichloromethane      | 9.876  | 83    | 721      | 0.226    | ug/l # | 28       |
| 48) Methyl methacrylate       | 9.647  | 41    | 2756     | 1.504    | ug/l # | 40       |
| 51) 4-Methyl-2-Pentanone      | 10.494 | 43    | 3302     | 1.346    | ug/l # | 75       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97    | 3236     | 1.367    | ug/l # | 36       |
| 59) 2-Hexanone                | 11.194 | 43    | 459      | 0.257    | ug/l # | 20       |
| 71) Bromoform                 | 12.853 | 173   | 1090     | 0.601    | ug/l # | 1        |
| 76) 1,2,3-Trichloropropane    | 12.853 | 75    | 67418    | 24.633   | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853 | 75    | 67418    | 78.632   | ug/l # | 13       |
| -----                         |        |       |          |          |        |          |

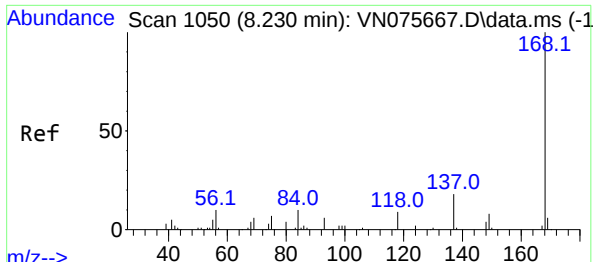
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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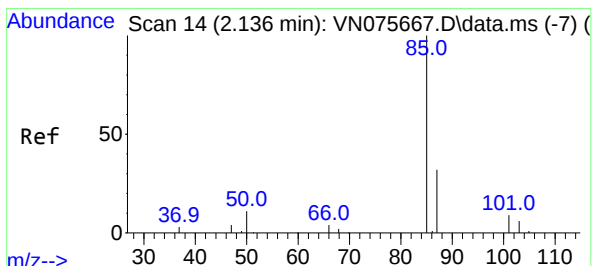
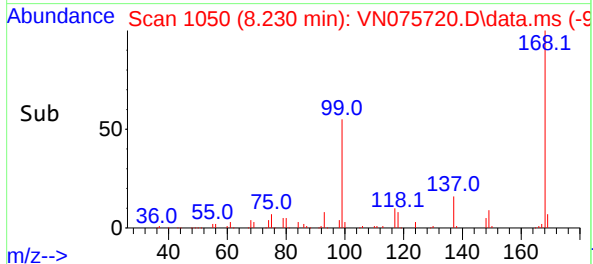
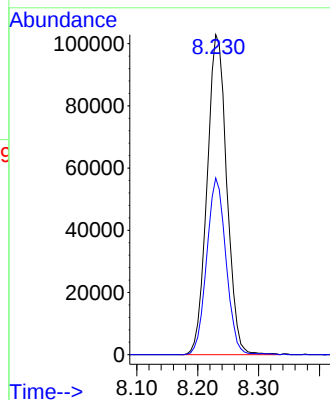
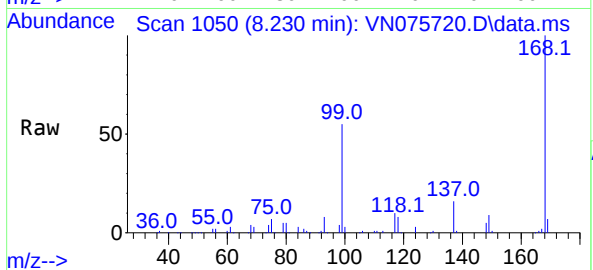




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.230 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

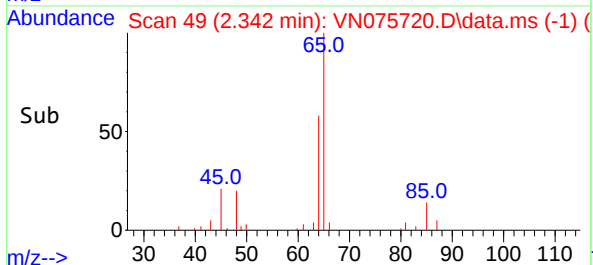
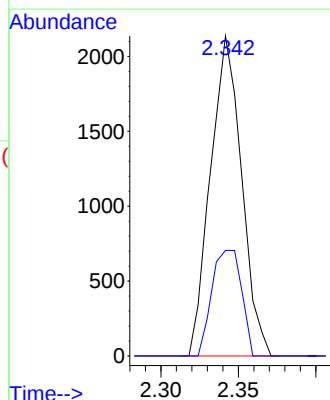
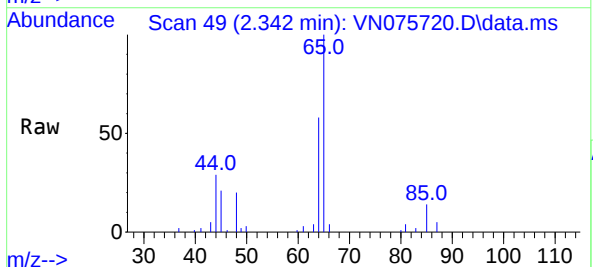
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MSVOA\_N  
ClientSampleId :  
TOLL-MW-04

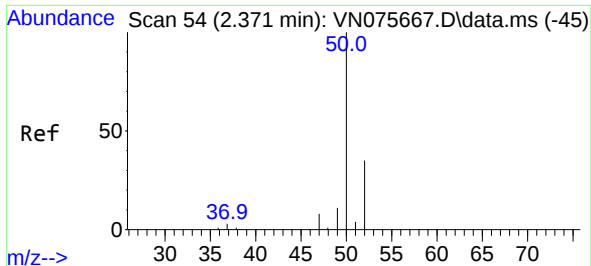
Tgt Ion:168 Resp: 231336  
Ion Ratio Lower Upper  
168 100  
99 55.2 41.2 61.8



#2  
Dichlorodifluoromethane  
Concen: 1.751 ug/l  
RT: 2.342 min Scan# 49  
Delta R.T. 0.206 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 85 Resp: 2980  
Ion Ratio Lower Upper  
85 100  
87 33.0 16.1 48.2

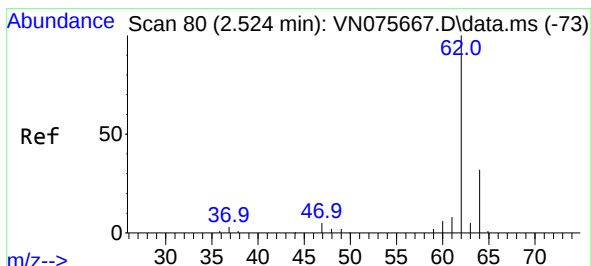
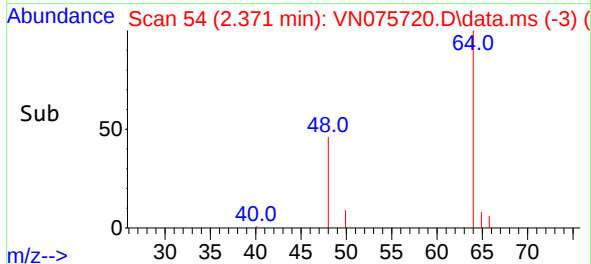
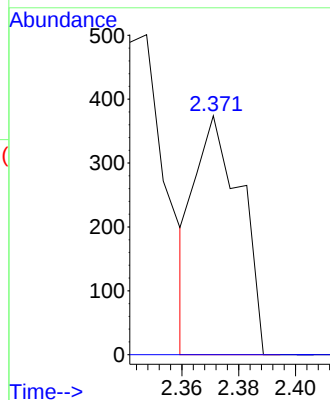
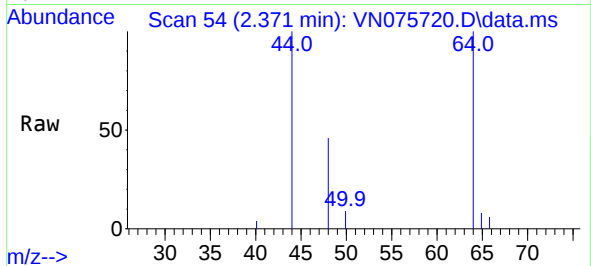




#3  
Chloromethane  
Concen: 0.206 ug/l  
RT: 2.371 min Scan# 54  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

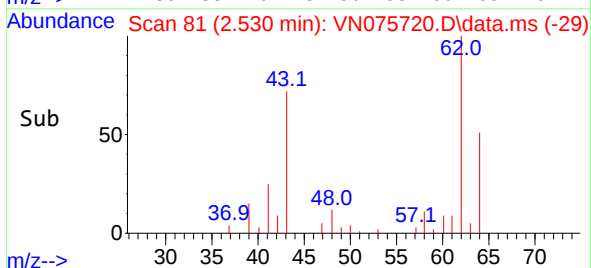
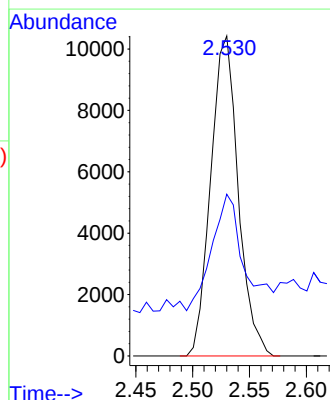
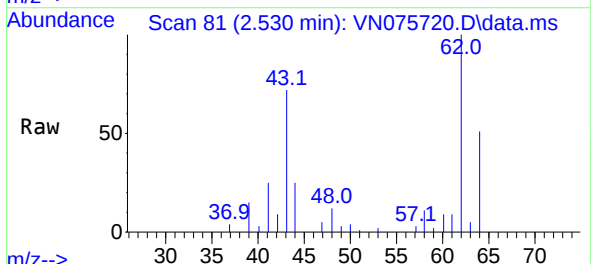
Instrument :  
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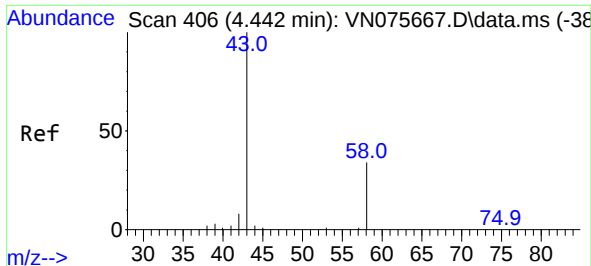
Tgt Ion: 50 Resp: 417  
Ion Ratio Lower Upper  
50 100  
52 0.0 27.9 41.9#



#4  
Vinyl Chloride  
Concen: 7.050 ug/l  
RT: 2.530 min Scan# 81  
Delta R.T. 0.006 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 62 Resp: 17554  
Ion Ratio Lower Upper  
62 100  
64 33.4 25.9 38.9

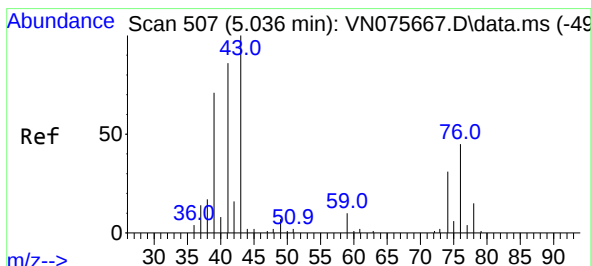
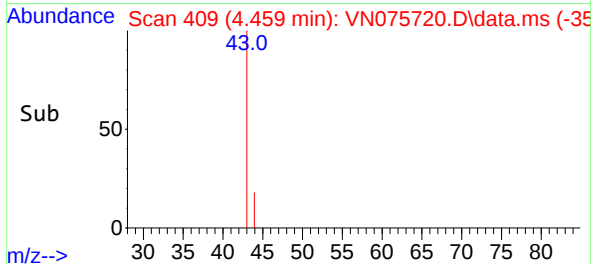
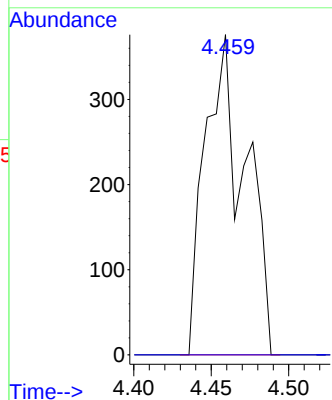
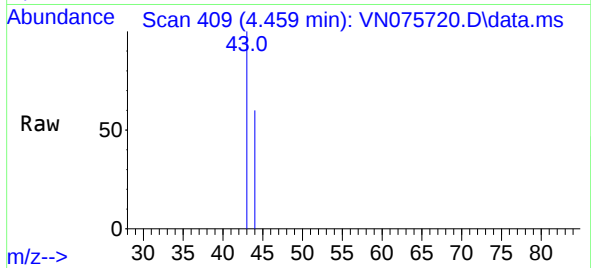




#16  
Acetone  
Concen: 0.817 ug/l  
RT: 4.459 min Scan# 409  
Delta R.T. 0.018 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

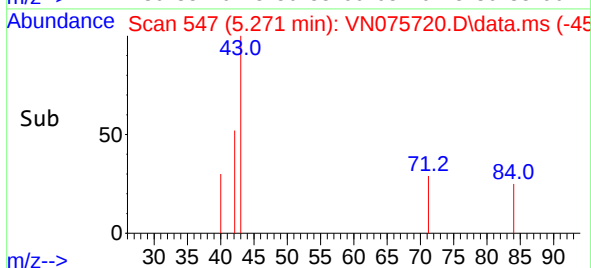
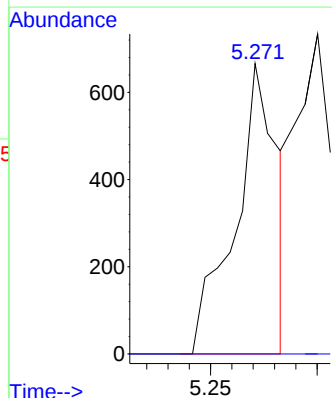
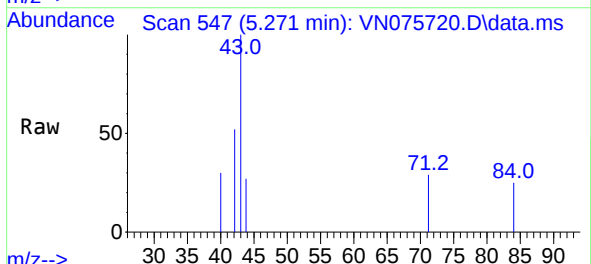
Instrument :  
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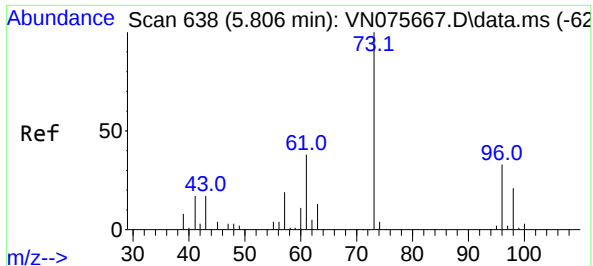
Tgt Ion: 43 Resp: 679  
Ion Ratio Lower Upper  
43 100  
58 0.0 27.0 40.4#



#18  
Methyl Acetate  
Concen: 0.340 ug/l  
RT: 5.271 min Scan# 547  
Delta R.T. 0.235 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 43 Resp: 908  
Ion Ratio Lower Upper  
43 100  
74 0.0 24.5 36.7#

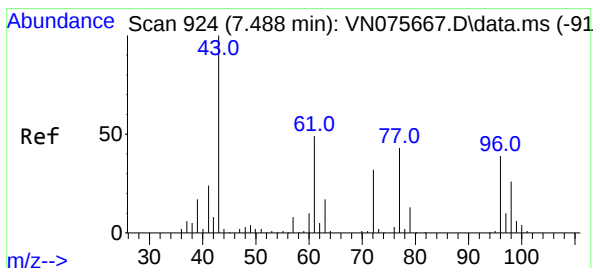
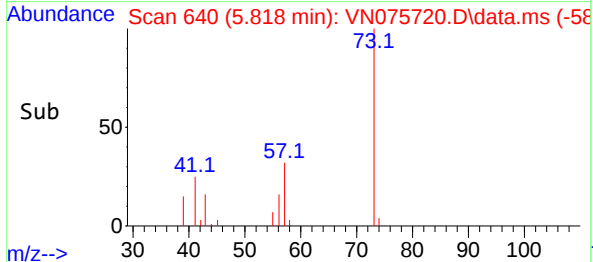
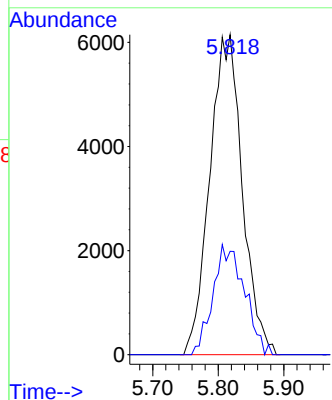
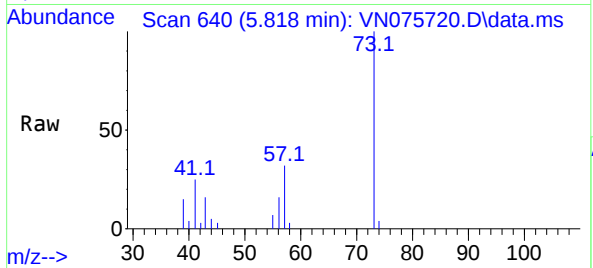




#19  
Methyl tert-butyl Ether  
Concen: 3.178 ug/l  
RT: 5.818 min Scan# 641  
Delta R.T. 0.012 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

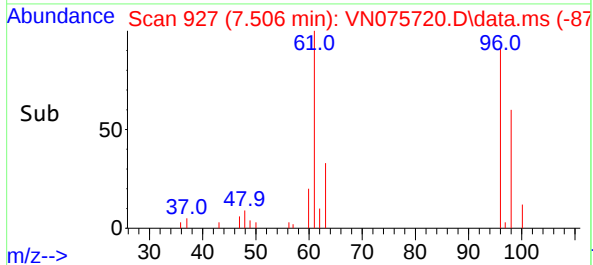
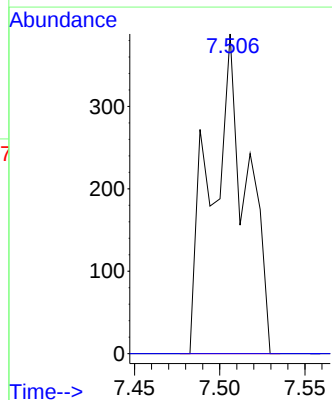
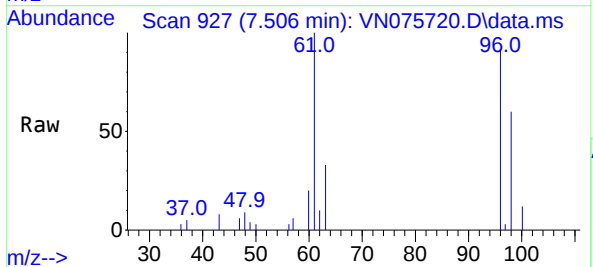
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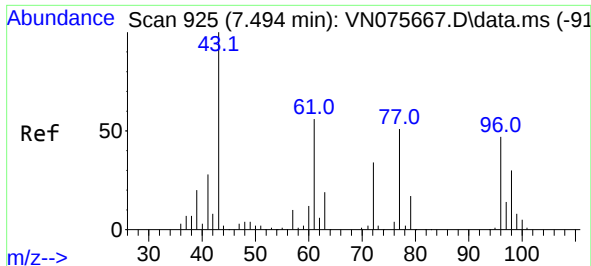
Tgt Ion: 73 Resp: 21186  
Ion Ratio Lower Upper  
73 100  
57 32.3 15.1 22.7#



#25  
2-Butanone  
Concen: 0.465 ug/l  
RT: 7.506 min Scan# 927  
Delta R.T. 0.018 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 43 Resp: 565  
Ion Ratio Lower Upper  
43 100  
72 0.0 25.3 37.9#

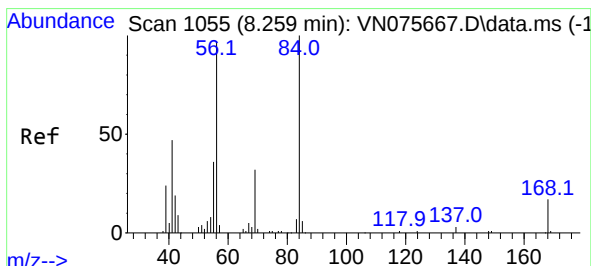
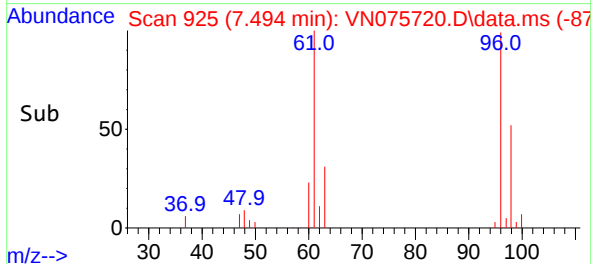
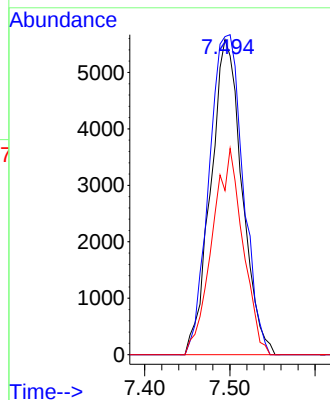
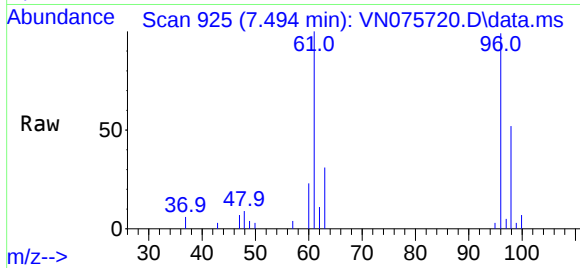




#27  
 cis-1,2-Dichloroethene  
 Concen: 5.289 ug/l  
 RT: 7.494 min Scan# 91  
 Delta R.T. 0.000 min  
 Lab File: VN075720.D  
 Acq: 12 Dec 2022 18:05

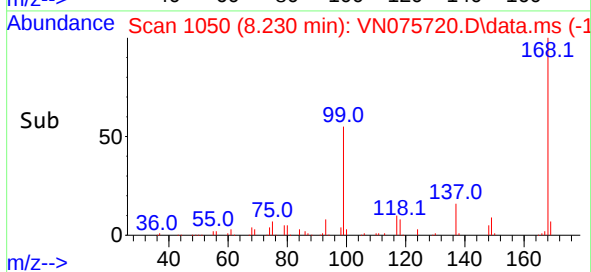
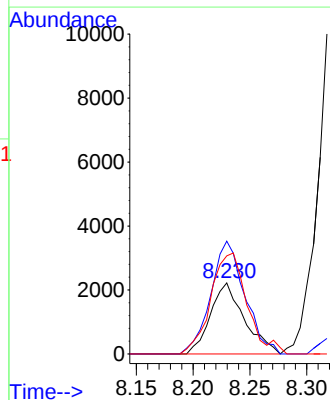
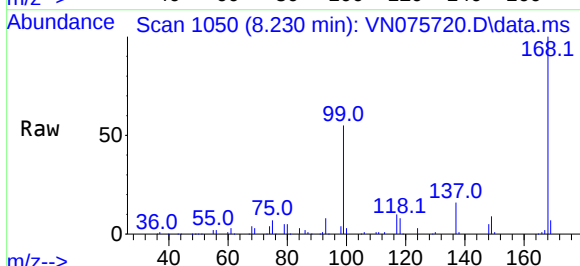
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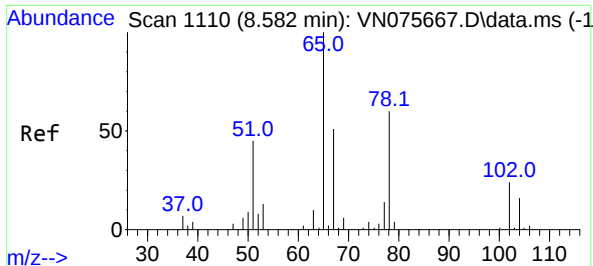
Tgt Ion: 96 Resp: 14221  
 Ion Ratio Lower Upper  
 96 100  
 61 110.1 0.0 247.8  
 98 64.3 0.0 126.0



#31  
 Cyclohexane  
 Concen: 1.264 ug/l  
 RT: 8.230 min Scan# 1050  
 Delta R.T. -0.029 min  
 Lab File: VN075720.D  
 Acq: 12 Dec 2022 18:05

Tgt Ion: 56 Resp: 4593  
 Ion Ratio Lower Upper  
 56 100  
 69 158.6 26.2 39.2#  
 84 138.0 82.8 124.2#

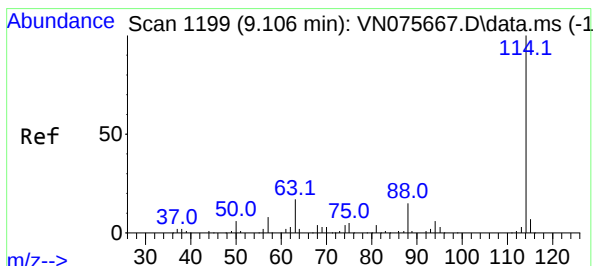
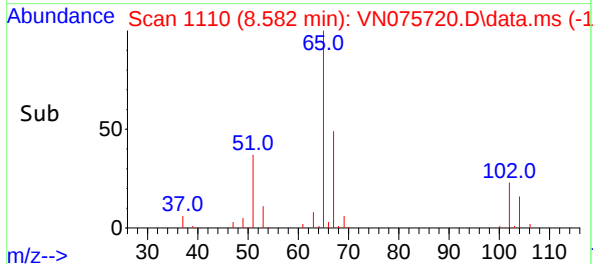
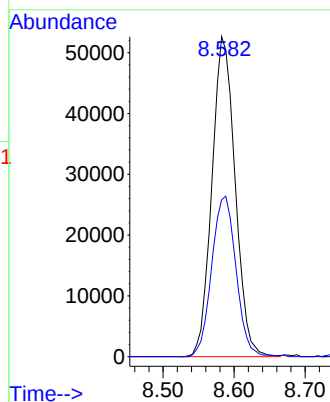
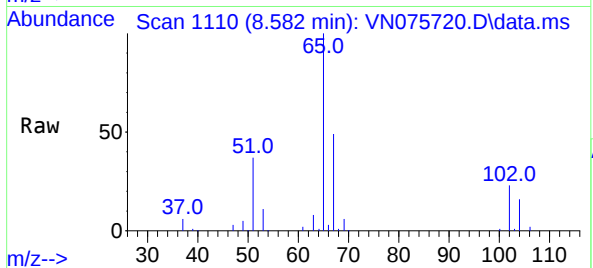




#33  
1,2-Dichloroethane-d4  
Concen: 48.649 ug/l  
RT: 8.582 min Scan# 1110  
Delta R.T. 0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

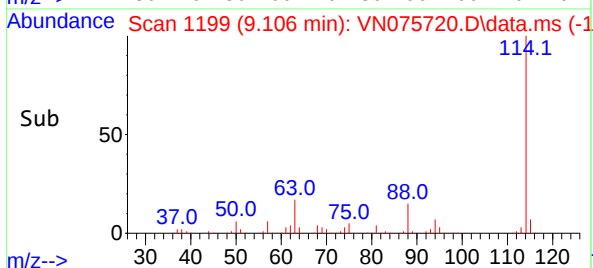
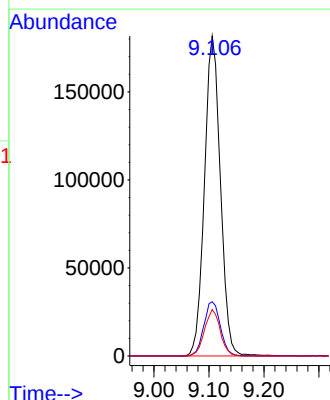
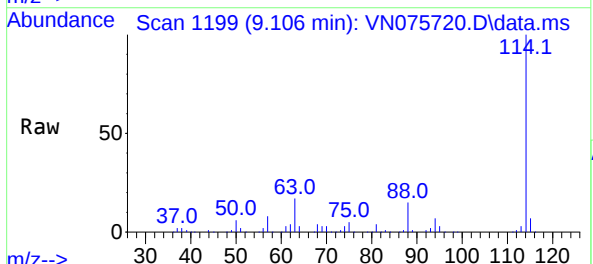
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MSVOA\_N  
ClientSampleId :  
TOLL-MW-04

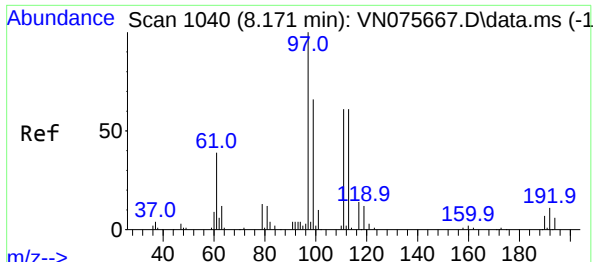
Tgt Ion: 65 Resp: 119410  
Ion Ratio Lower Upper  
65 100  
67 52.6 0.0 104.2



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.106 min Scan# 1199  
Delta R.T. 0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 114 Resp: 366482  
Ion Ratio Lower Upper  
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63 16.9 0.0 34.4  
88 14.5 0.0 29.2

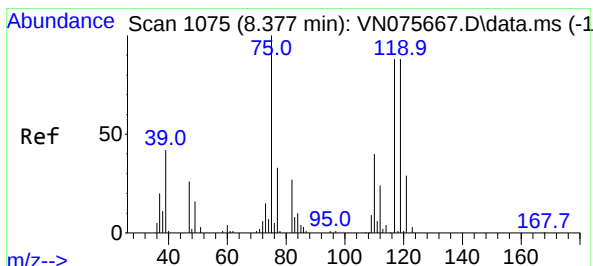
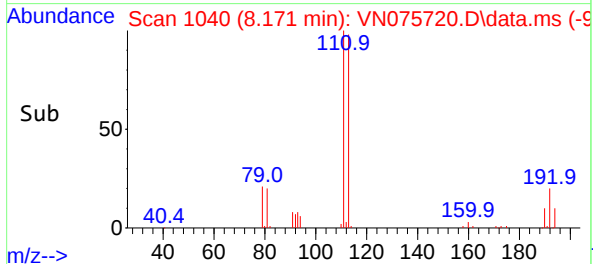
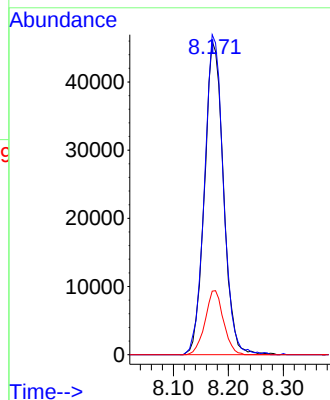
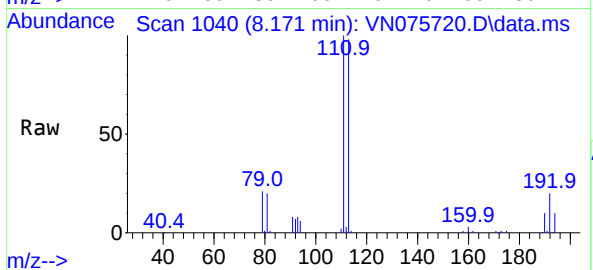




#35  
Dibromofluoromethane  
Concen: 49.190 ug/l  
RT: 8.171 min Scan# 1099  
Delta R.T. 0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

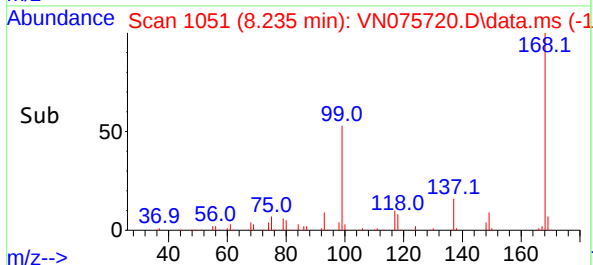
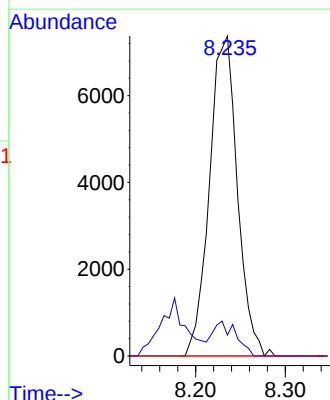
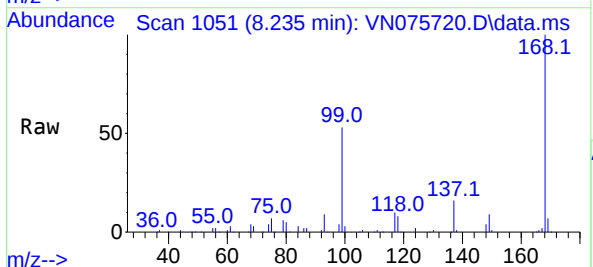
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ClientSampleId :  
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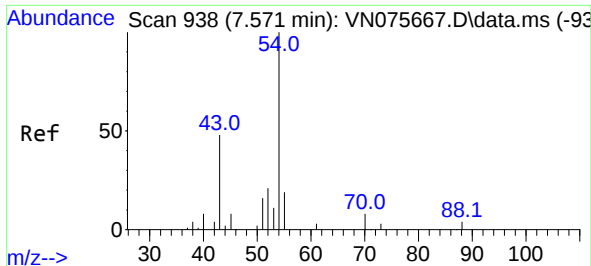
Tgt Ion:113 Resp: 109988  
Ion Ratio Lower Upper  
113 100  
111 101.7 81.0 121.6  
192 19.8 16.2 24.2



#36  
1,1-Dichloropropene  
Concen: 5.375 ug/l  
RT: 8.235 min Scan# 1051  
Delta R.T. -0.141 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 75 Resp: 15959  
Ion Ratio Lower Upper  
75 100  
110 9.0 18.9 56.9#  
77 0.0 25.4 38.2#

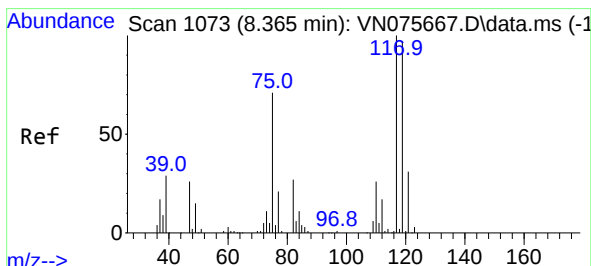
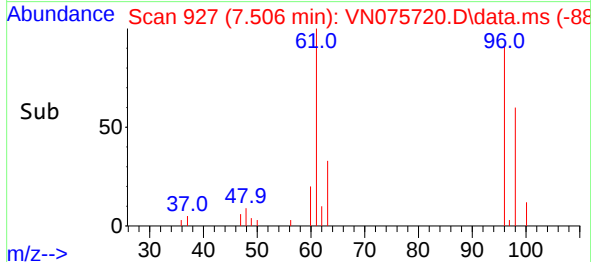
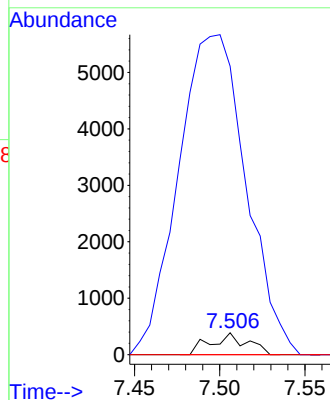
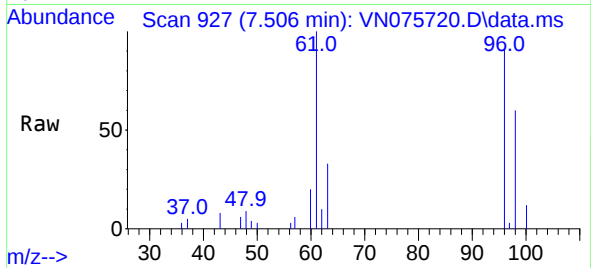




#37  
Ethyl Acetate  
Concen: 0.237 ug/l  
RT: 7.506 min Scan# 91  
Delta R.T. -0.065 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

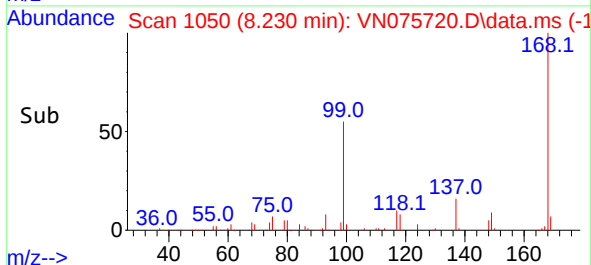
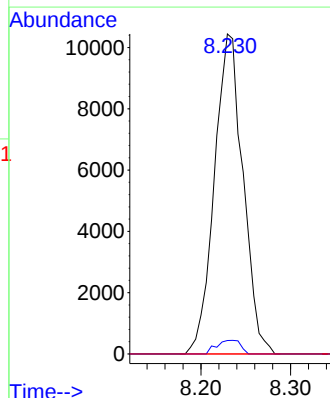
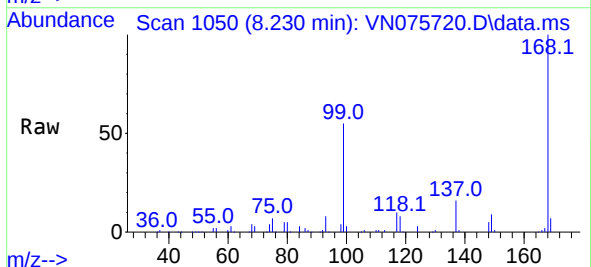
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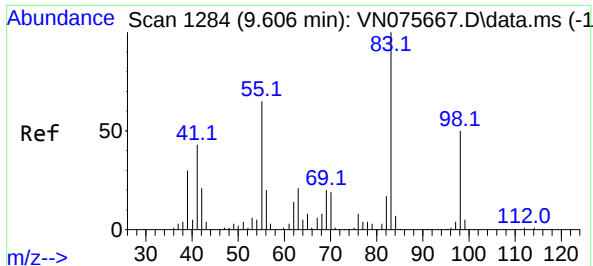
Tgt Ion: 43 Resp: 565  
Ion Ratio Lower Upper  
43 100  
61 2771.9 13.3 19.9#  
70 0.0 9.9 14.9#



#38  
Carbon Tetrachloride  
Concen: 6.755 ug/l  
RT: 8.230 min Scan# 1050  
Delta R.T. -0.135 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 117 Resp: 23145  
Ion Ratio Lower Upper  
117 100  
119 4.2 77.2 115.8#  
121 0.0 24.6 37.0#

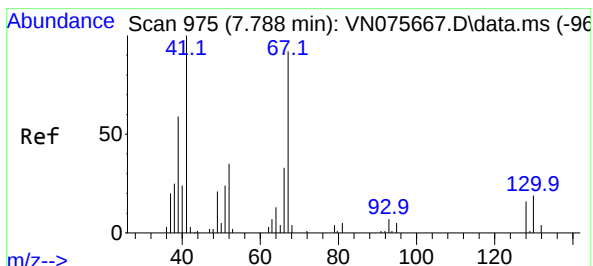
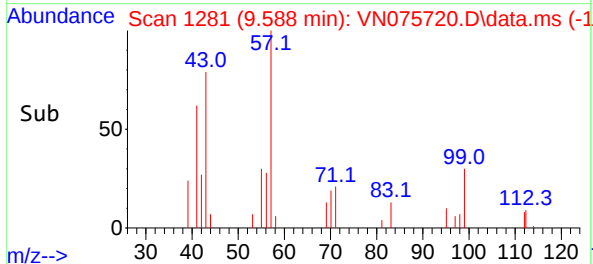
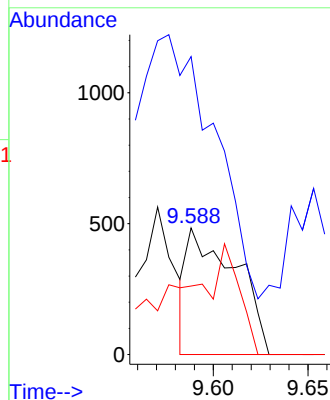
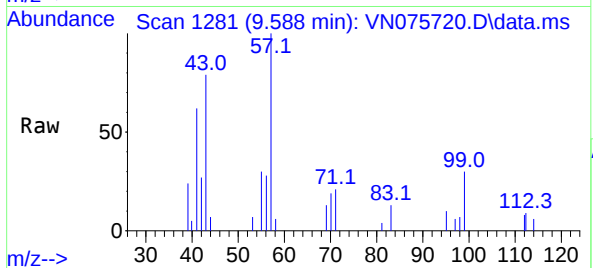




#39  
Methylcyclohexane  
Concen: 0.227 ug/l  
RT: 9.588 min Scan# 1014  
Delta R.T. -0.018 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

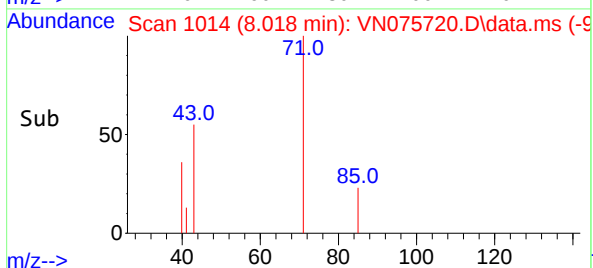
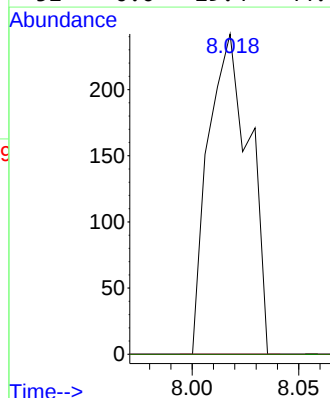
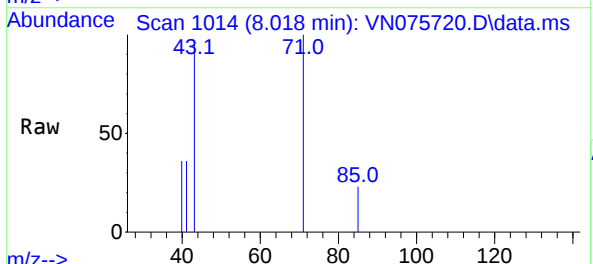
Instrument :  
MSVOA\_N  
ClientSampleId :  
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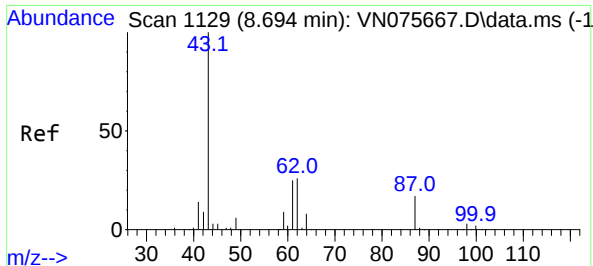
Tgt Ion: 83 Resp: 856  
Ion Ratio Lower Upper  
83 100  
55 182.6 51.6 77.4#  
98 54.1 39.8 59.8



#41  
Methacrylonitrile  
Concen: 0.265 ug/l  
RT: 8.018 min Scan# 1014  
Delta R.T. 0.229 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 41 Resp: 324  
Ion Ratio Lower Upper  
41 100  
39 0.0 46.3 69.5#  
67 0.0 74.0 111.0#  
52 0.0 29.4 44.0#

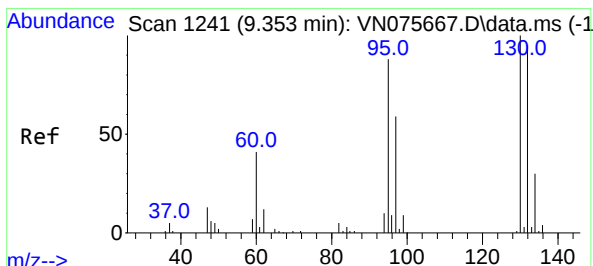
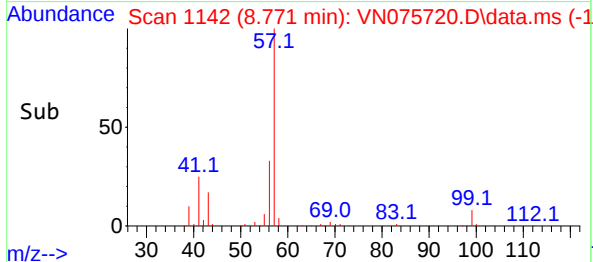
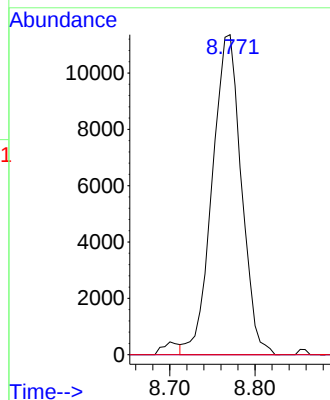
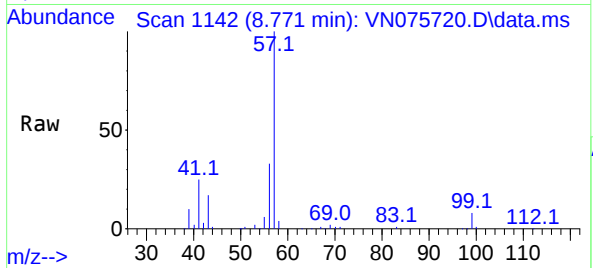




#43  
Isopropyl Acetate  
Concen: 6.765 ug/l  
RT: 8.771 min Scan# 1129  
Delta R.T. 0.076 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

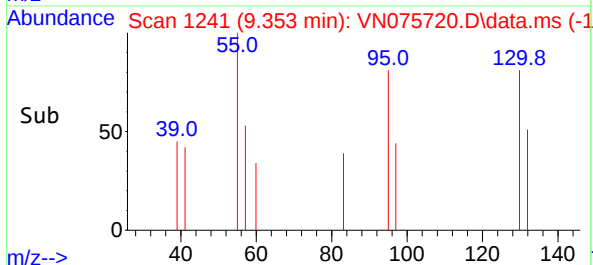
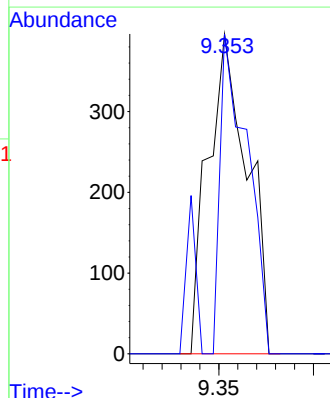
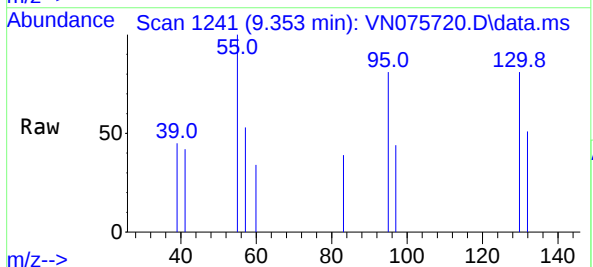
Instrument :  
MSVOA\_N  
ClientSampleId :  
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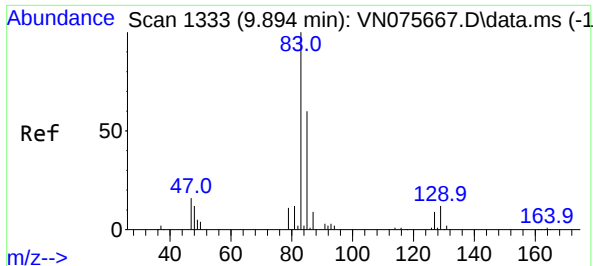
Tgt Ion: 43 Resp: 26922  
Ion Ratio Lower Upper  
43 100  
61 0.0 23.8 35.8#  
87 0.0 13.7 20.5#



#44  
Trichloroethene  
Concen: 0.223 ug/l  
RT: 9.353 min Scan# 1241  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion:130 Resp: 574  
Ion Ratio Lower Upper  
130 100  
95 100.0 0.0 176.8

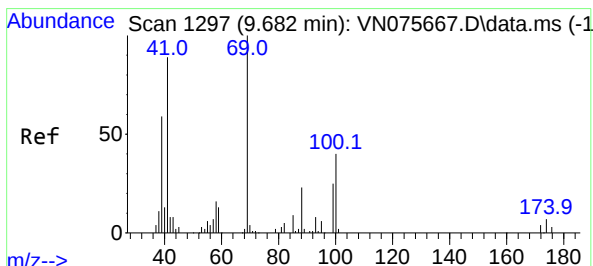
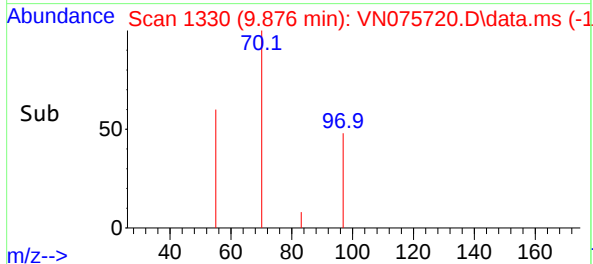
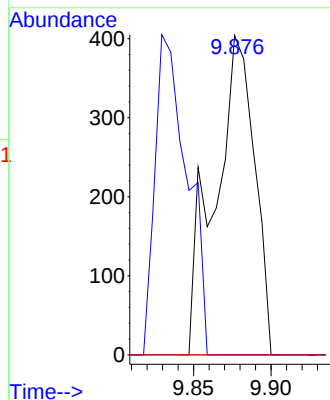
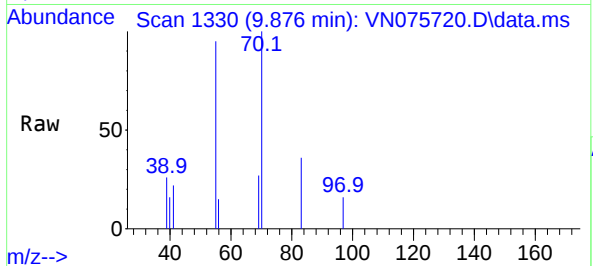




#47  
Bromodichloromethane  
Concen: 0.226 ug/l  
RT: 9.876 min Scan# 11  
Delta R.T. -0.018 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

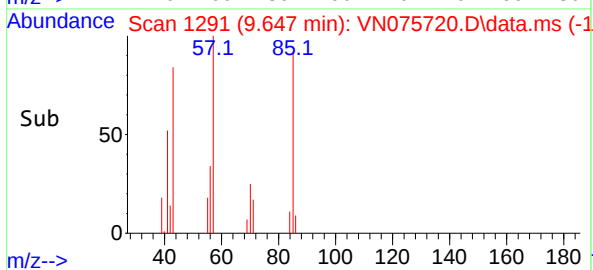
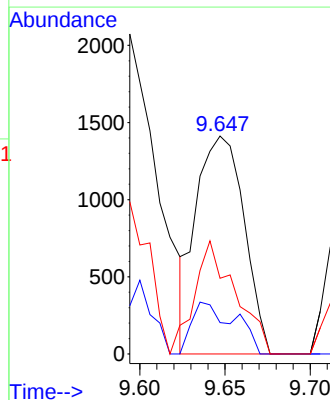
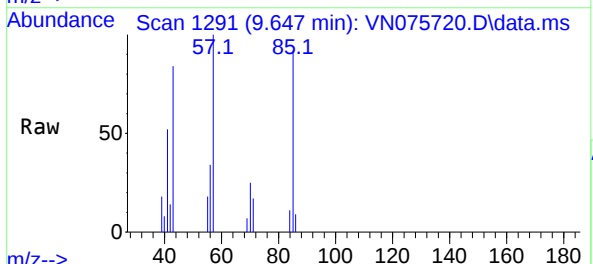
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MSVOA\_N  
ClientSampleId :  
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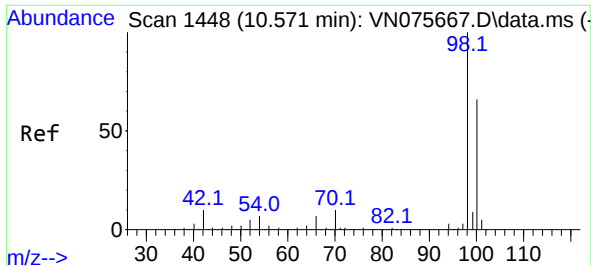
Tgt Ion: 83 Resp: 721  
Ion Ratio Lower Upper  
83 100  
85 0.0 48.0 72.0#  
127 0.0 7.4 11.2#



#48  
Methyl methacrylate  
Concen: 1.504 ug/l  
RT: 9.647 min Scan# 1291  
Delta R.T. -0.035 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 41 Resp: 2756  
Ion Ratio Lower Upper  
41 100  
69 21.2 82.5 123.7#  
39 44.4 53.2 79.8#

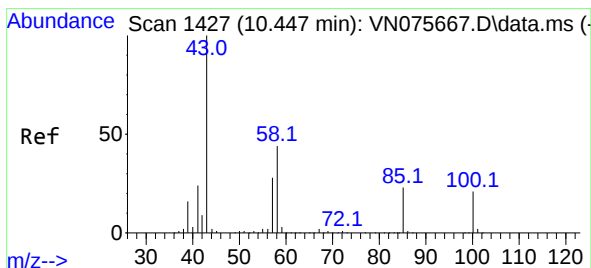
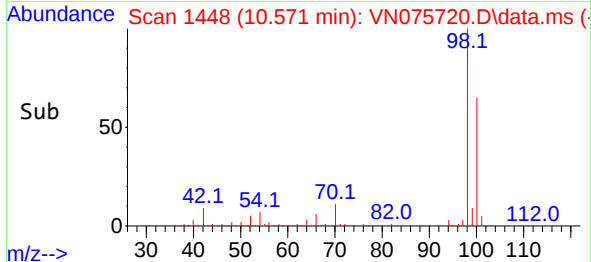
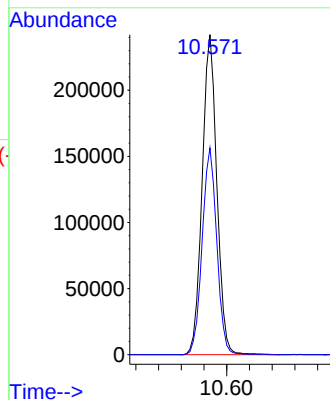
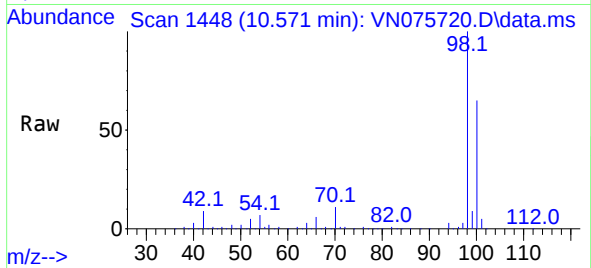




#50  
Toluene-d8  
Concen: 51.639 ug/l  
RT: 10.571 min Scan# 1448  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

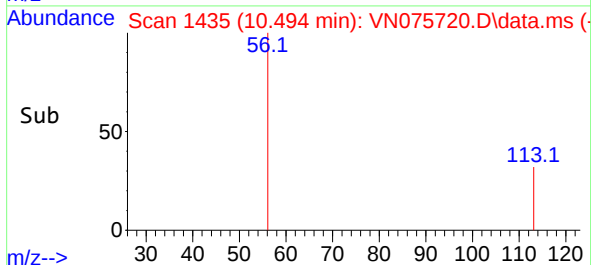
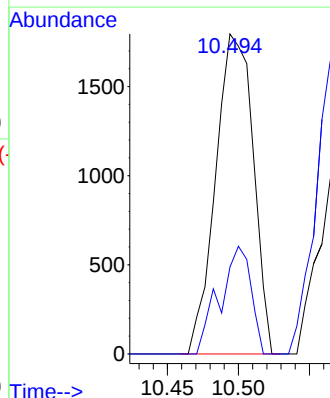
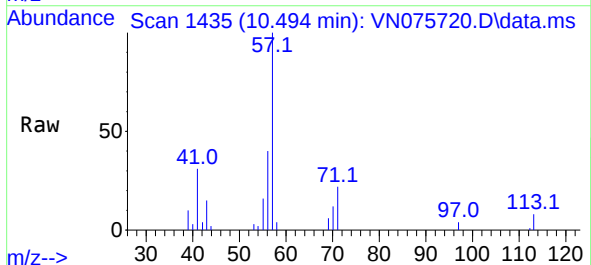
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ClientSampleId :  
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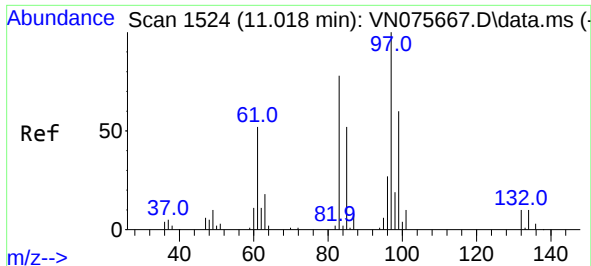
Tgt Ion: 98 Resp: 433610  
Ion Ratio Lower Upper  
98 100  
100 64.4 52.6 78.8



#51  
4-Methyl-2-Pentanone  
Concen: 1.346 ug/l  
RT: 10.494 min Scan# 1435  
Delta R.T. 0.047 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 43 Resp: 3302  
Ion Ratio Lower Upper  
43 100  
58 27.9 35.0 52.6#

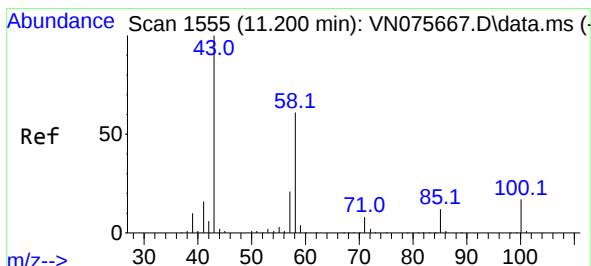
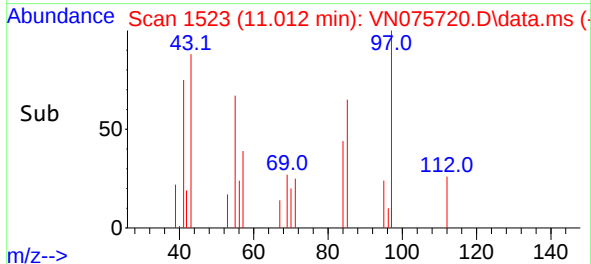
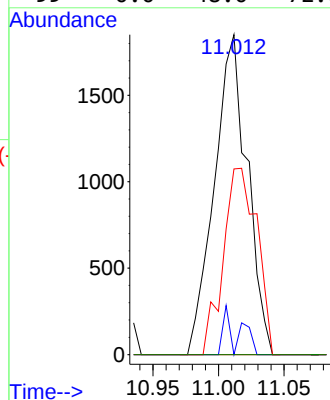
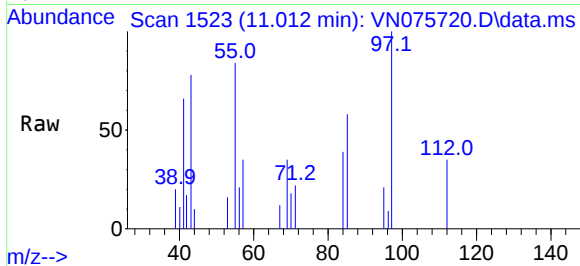




#55  
1,1,2-Trichloroethane  
Concen: 1.367 ug/l  
RT: 11.012 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

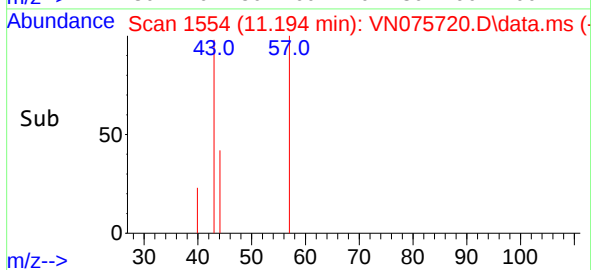
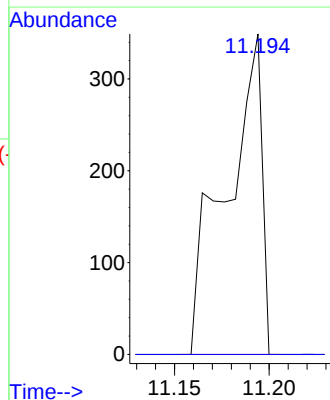
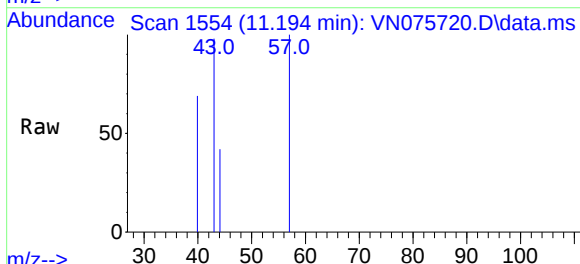
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ClientSampleId :  
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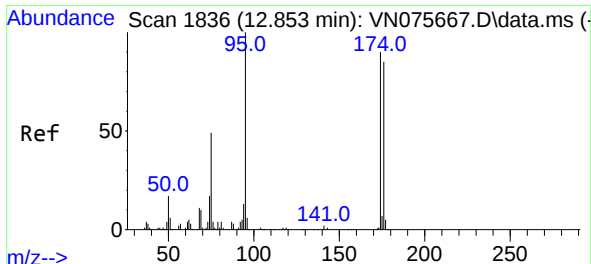
|             |       |       |       |
|-------------|-------|-------|-------|
| Tgt Ion: 97 | Resp: | 3236  |       |
| Ion         | Ratio | Lower | Upper |
| 97          | 100   |       |       |
| 83          | 0.0   | 62.7  | 94.1# |
| 85          | 58.0  | 41.8  | 62.6  |
| 99          | 0.0   | 48.0  | 72.0# |



#59  
2-Hexanone  
Concen: 0.257 ug/l  
RT: 11.194 min Scan# 1554  
Delta R.T. -0.006 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

|             |       |       |  |
|-------------|-------|-------|--|
| Tgt Ion: 43 | Resp: | 459   |  |
| Ion Ratio   | Lower | Upper |  |
| 43 100      |       |       |  |
| 58 0.0      | 30.9  | 92.5# |  |

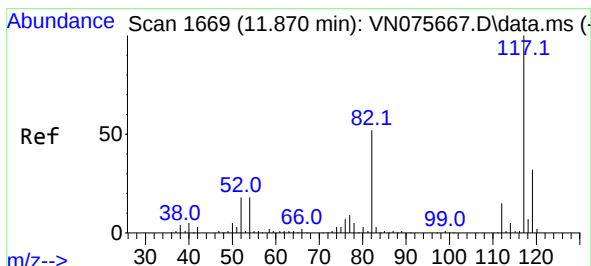
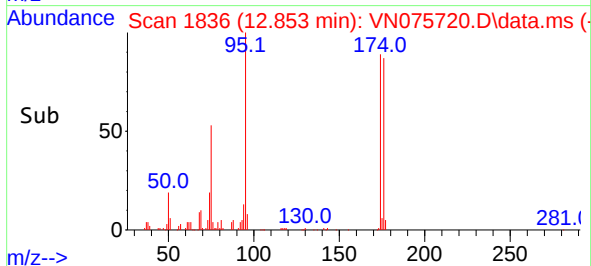
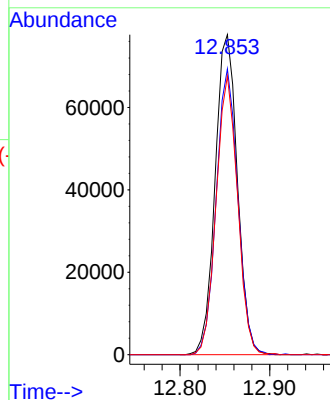
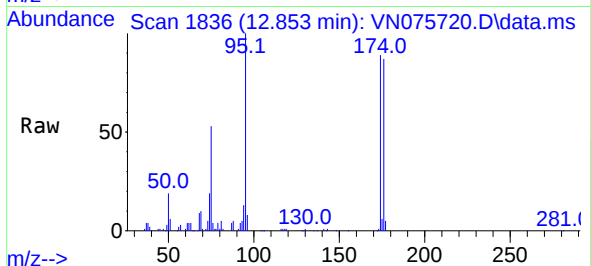




#62  
4-Bromofluorobenzene  
Concen: 46.503 ug/l  
RT: 12.853 min Scan# 1836  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

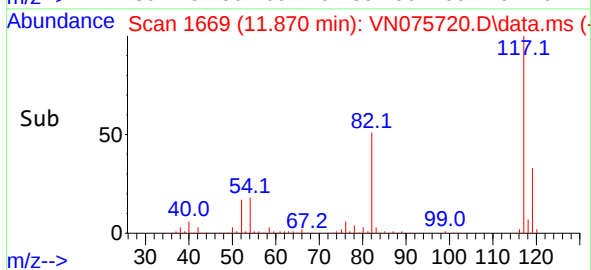
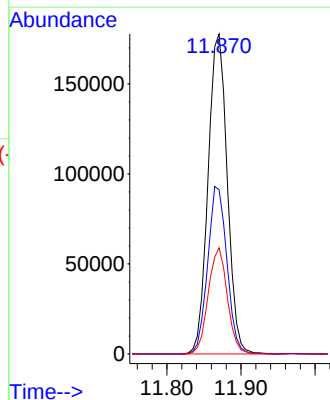
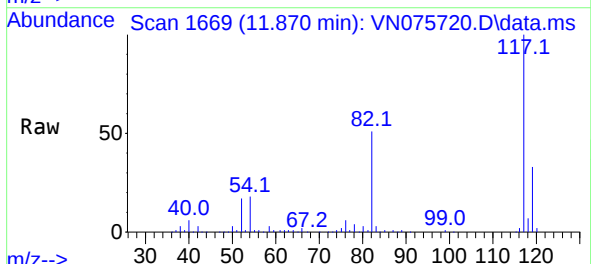
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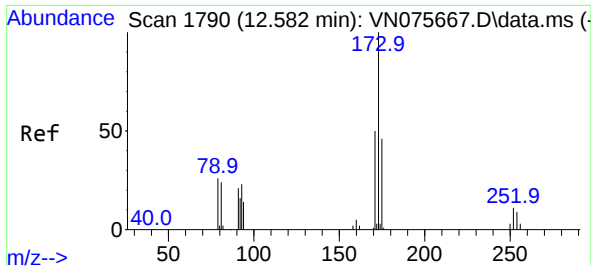
Tgt Ion: 95 Resp: 133510  
Ion Ratio Lower Upper  
95 100  
174 86.8 0.0 178.6  
176 83.8 0.0 170.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.870 min Scan# 1669  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 117 Resp: 319495  
Ion Ratio Lower Upper  
117 100  
82 51.3 41.8 62.8  
119 33.2 25.8 38.6

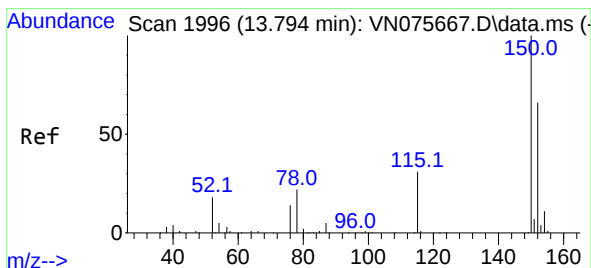
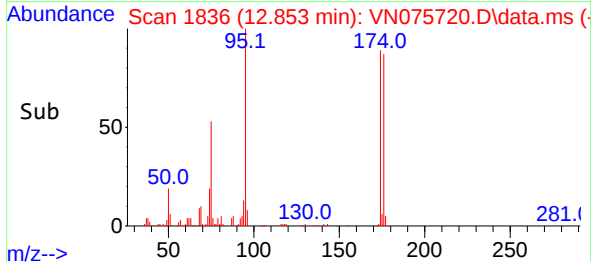
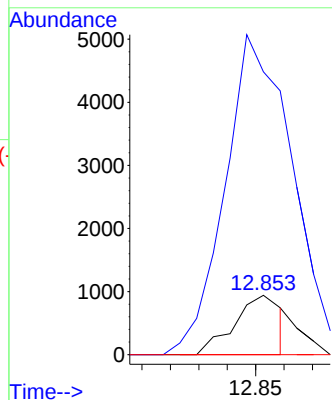
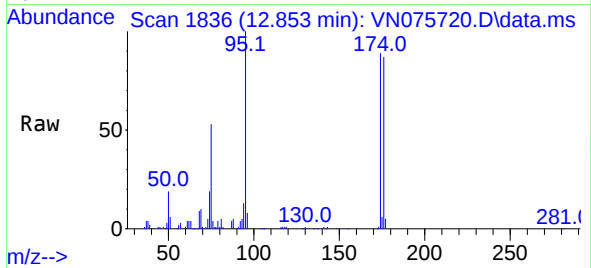




#71  
Bromoform  
Concen: 0.601 ug/l  
RT: 12.853 min Scan# 11  
Delta R.T. 0.271 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

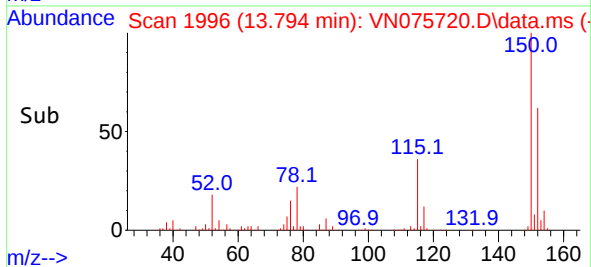
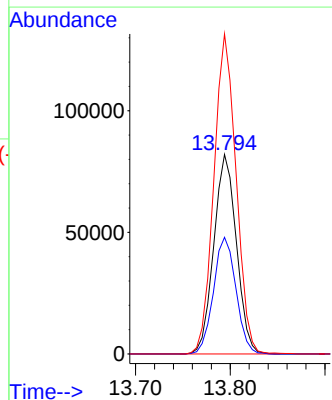
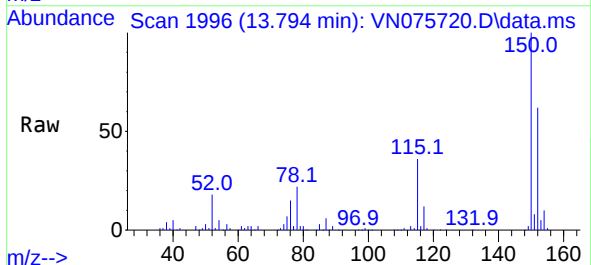
Instrument :  
MSVOA\_N  
ClientSampleId :  
TOLL-MW-04

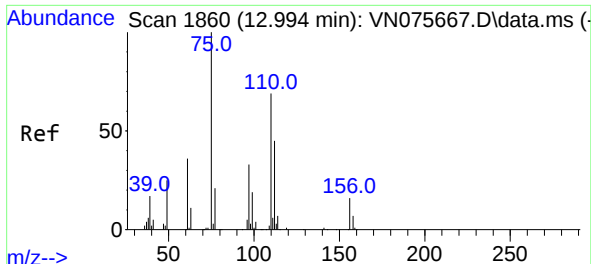
Tgt Ion:173 Resp: 1090  
Ion Ratio Lower Upper  
173 100  
175 622.4 23.8 71.2#  
254 0.0 0.0 0.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.794 min Scan# 1996  
Delta R.T. -0.000 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion:152 Resp: 136282  
Ion Ratio Lower Upper  
152 100  
115 58.1 28.4 85.2  
150 157.8 0.0 347.6

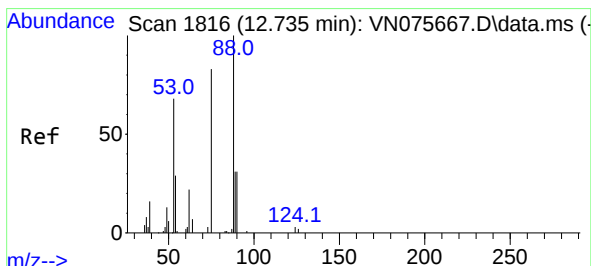
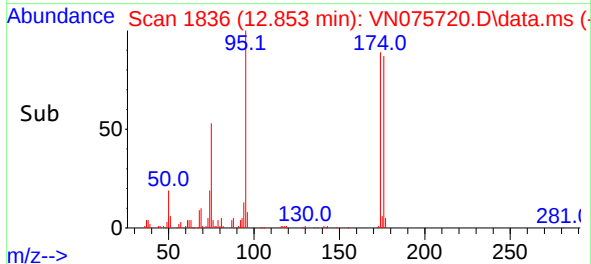
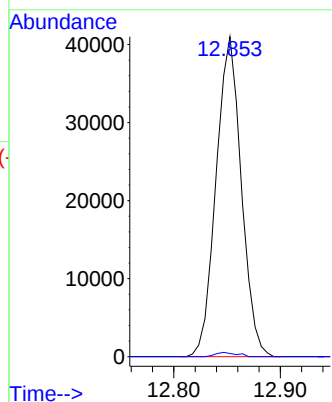
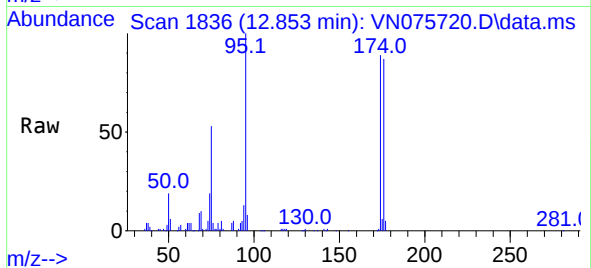




#76  
1,2,3-Trichloropropane  
Concen: 24.633 ug/l  
RT: 12.853 min Scan# 1836  
Delta R.T. -0.141 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Instrument :  
MSVOA\_N  
ClientSampleId :  
TOLL-MW-04

Tgt Ion: 75 Resp: 67418  
Ion Ratio Lower Upper  
75 100  
77 1.1 81.8 245.4#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 78.632 ug/l  
RT: 12.853 min Scan# 1836  
Delta R.T. 0.118 min  
Lab File: VN075720.D  
Acq: 12 Dec 2022 18:05

Tgt Ion: 75 Resp: 67418  
Ion Ratio Lower Upper  
75 100  
53 0.0 72.4 108.6#  
89 0.0 36.6 55.0#

