

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX032224\  
 Data File : VX040776.D  
 Acq On : 22 Mar 2024 13:35  
 Operator : JC/MD  
 Sample : P1836-04  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 240308028-08

Quant Time: Mar 23 05:04:44 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X030524W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Mar 05 13:21:29 2024  
 Response via : Initial Calibration

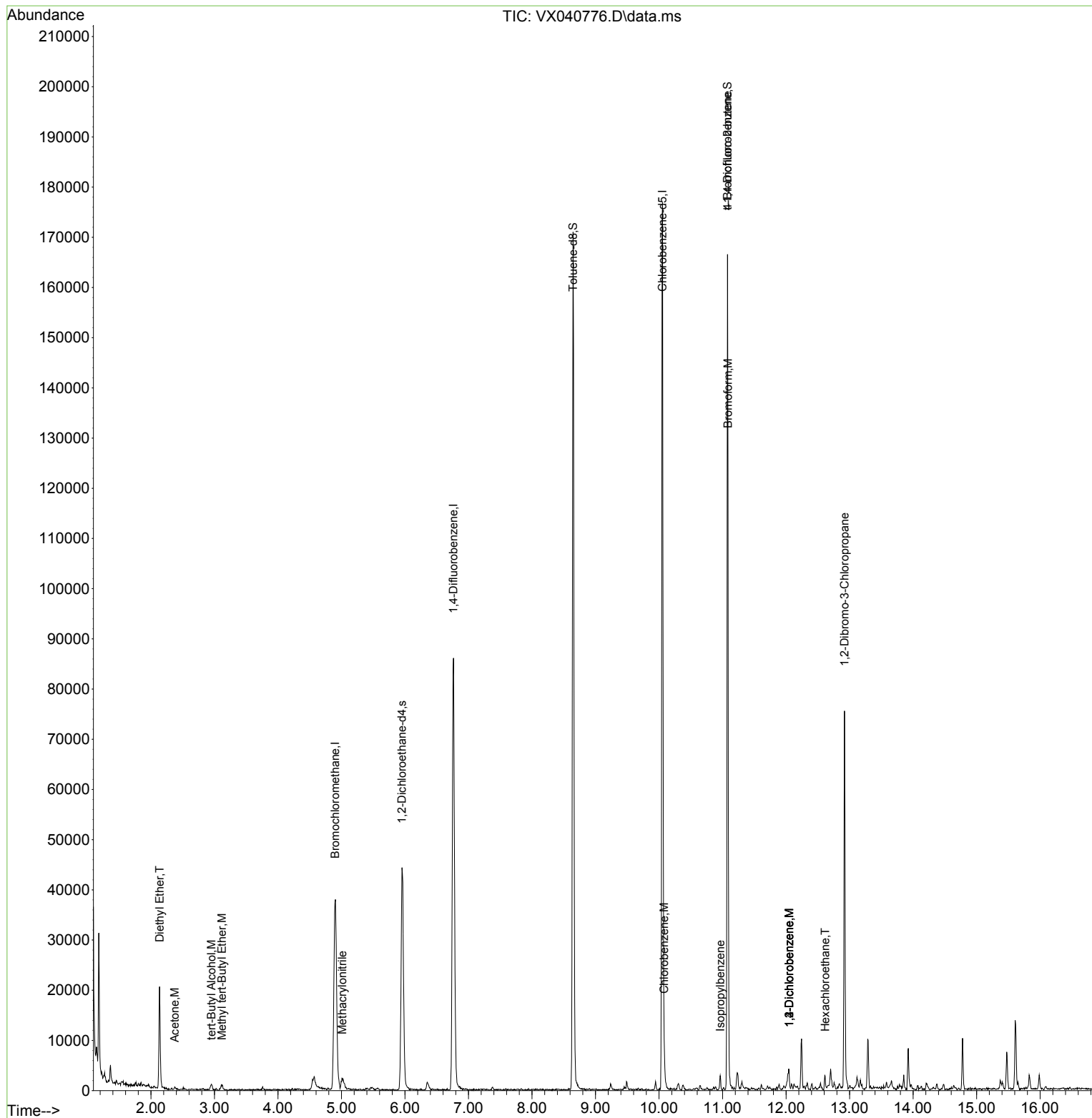
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 4.897  | 128   | 14773    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene       | 6.763  | 114   | 82436    | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5          | 10.055 | 117   | 76209    | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4     | 5.952  | 65    | 44134    | 29.912   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 91 - 110 | Recovery | =      | 99.700%  |
| 60) 4-Bromofluorobenzene      | 11.079 | 95    | 39006    | 29.839   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 63 - 112 | Recovery | =      | 99.467%  |
| 63) Toluene-d8                | 8.647  | 98    | 97830    | 29.048   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 91 - 112 | Recovery | =      | 96.833%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 8) Diethyl Ether              | 2.136  | 74    | 6140     | 10.705   | ug/l   | 98       |
| 15) Acetone                   | 2.373  | 58    | 63       | 0.386    | ug/l # | 33       |
| 23) tert-Butyl Alcohol        | 2.953  | 59    | 1172     | 4.341    | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether   | 3.117  | 73    | 946      | 0.291    | ug/l   | 97       |
| 35) Methacrylonitrile         | 5.013  | 41    | 830      | 0.929    | ug/l # | 46       |
| 56) Bromoform                 | 11.085 | 173   | 188      | 0.227    | ug/l # | 1        |
| 64) Chlorobenzene             | 10.079 | 112   | 2340     | 0.912    | ug/l   | 93       |
| 70) Isopropylbenzene          | 10.963 | 105   | 1324     | 0.285    | ug/l   | 97       |
| 77) t-1,4-Dichloro-2-butene   | 11.079 | 75    | 23663    | 51.927   | ug/l # | 12       |
| 83) 1,3-Dichlorobenzene       | 12.049 | 146   | 1419     | 0.663    | ug/l   | 84       |
| 84) 1,4-Dichlorobenzene       | 12.049 | 146   | 1419     | 0.648    | ug/l   | 86       |
| 86) Hexachloroethane          | 12.615 | 117   | 150      | 0.208    | ug/l # | 18       |
| 87) 1,2-Dichlorobenzene       | 12.049 | 146   | 1419     | 0.682    | ug/l   | 85       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.920 | 75    | 333      | 0.764    | ug/l # | 7        |
| -----                         |        |       |          |          |        |          |

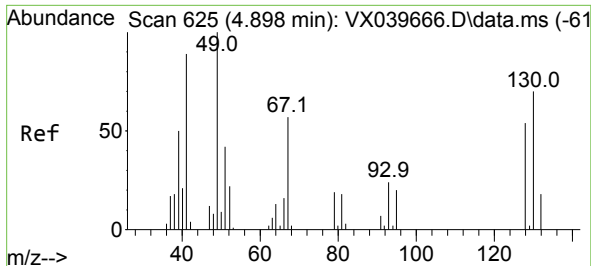
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_X  
ClientSampleId :  
240308028-08

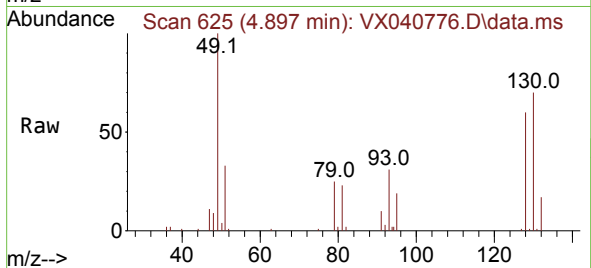
Quant Time: Mar 23 05:04:44 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X030524W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Tue Mar 05 13:21:29 2024  
Response via : Initial Calibration



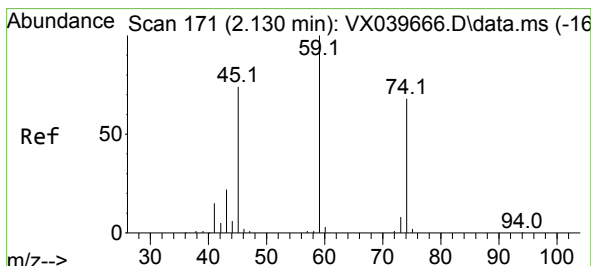
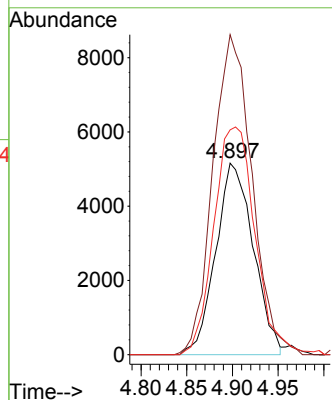
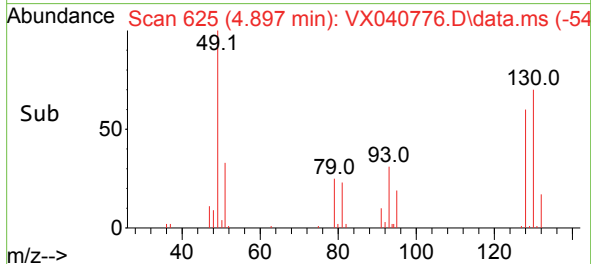


#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 4.897 min Scan# 61  
Delta R.T. -0.001 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

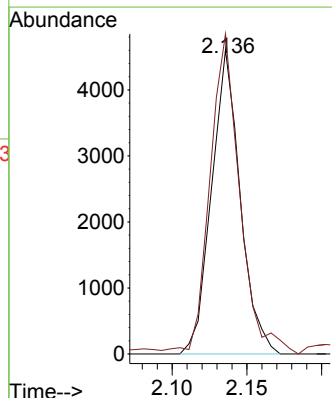
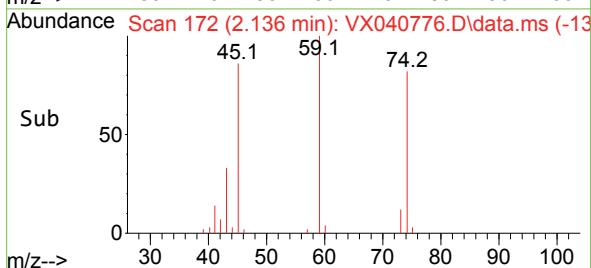
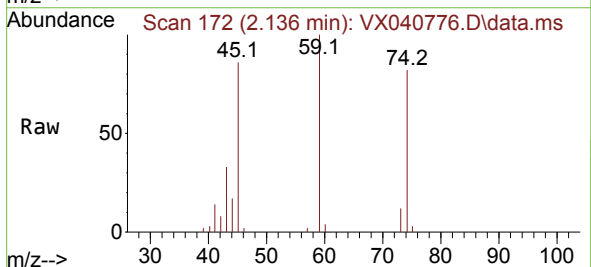


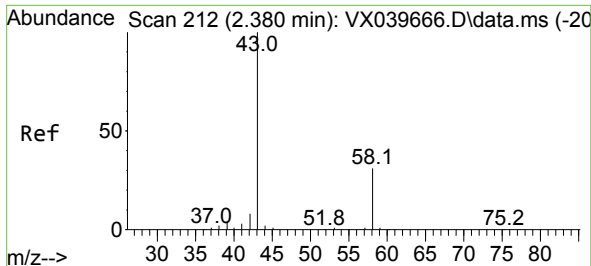
Tgt Ion:128 Resp: 14773  
Ion Ratio Lower Upper  
128 100  
49 173.5 0.0 444.0  
130 130.3 0.0 297.8



#8  
Diethyl Ether  
Concen: 10.705 ug/l  
RT: 2.136 min Scan# 172  
Delta R.T. 0.006 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 74 Resp: 6140  
Ion Ratio Lower Upper  
74 100  
45 104.6 20.5 184.5

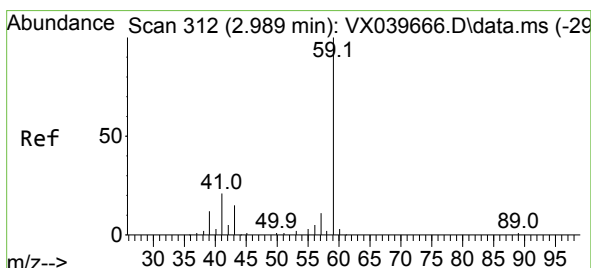
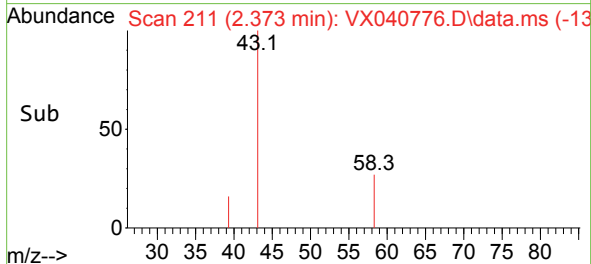
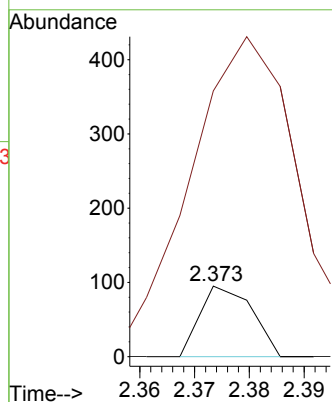
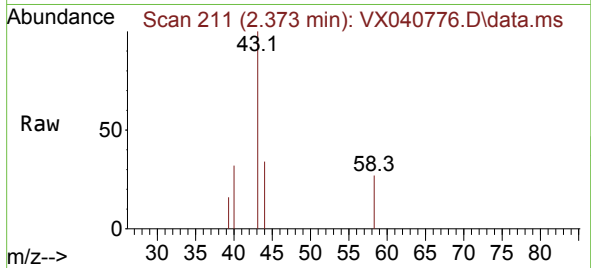




#15  
Acetone  
Concen: 0.386 ug/l  
RT: 2.373 min Scan# 211  
Delta R.T. -0.007 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

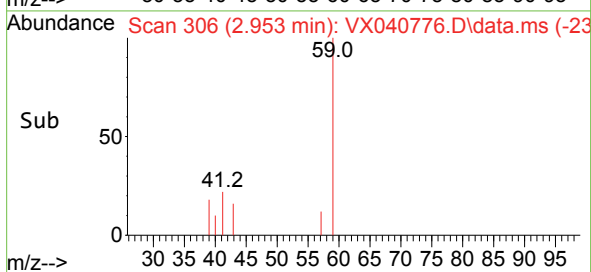
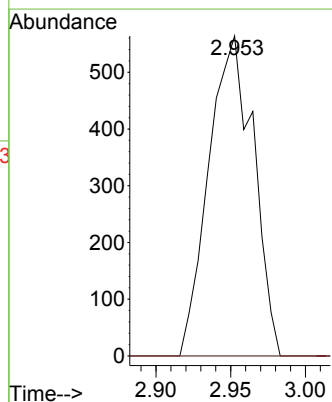
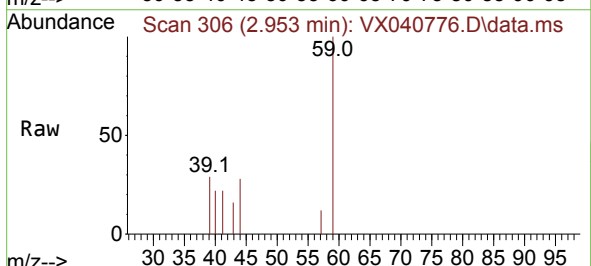
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

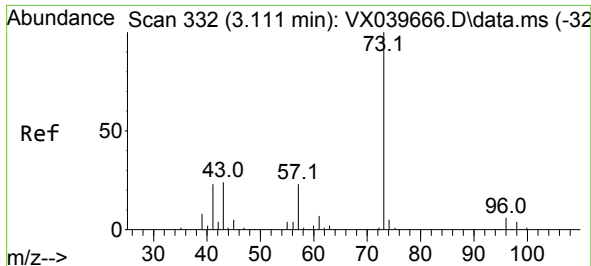
Tgt Ion: 58 Resp: 63  
Ion Ratio Lower Upper  
58 100  
43 176.8 249.9 374.9#



#23  
tert-Butyl Alcohol  
Concen: 4.341 ug/l  
RT: 2.953 min Scan# 306  
Delta R.T. -0.036 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 59 Resp: 1172  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.0 0.0

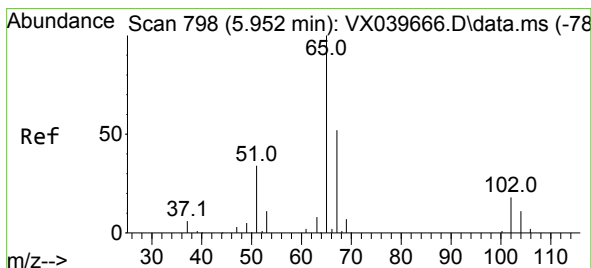
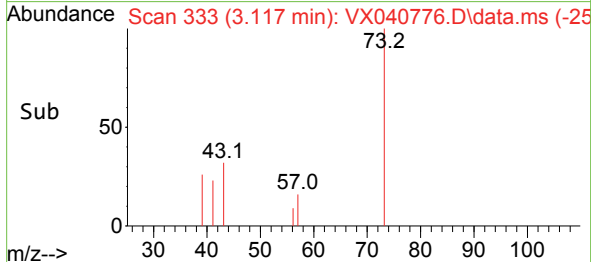
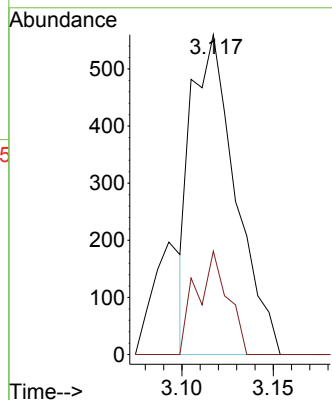
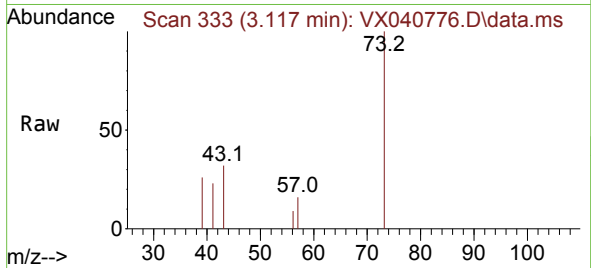




#24  
Methyl tert-Butyl Ether  
Concen: 0.291 ug/l  
RT: 3.117 min Scan# 311  
Delta R.T. 0.006 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

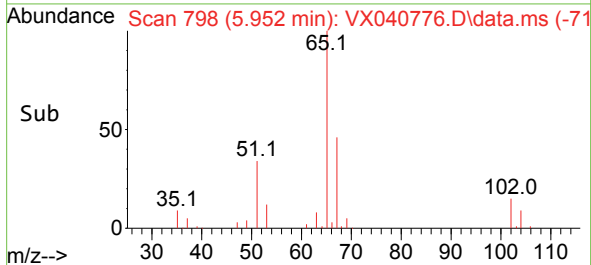
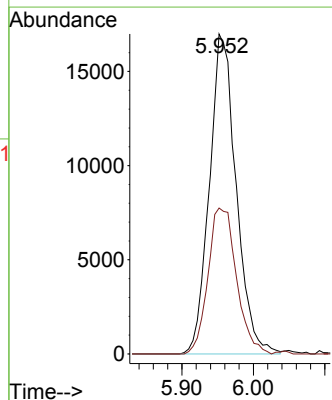
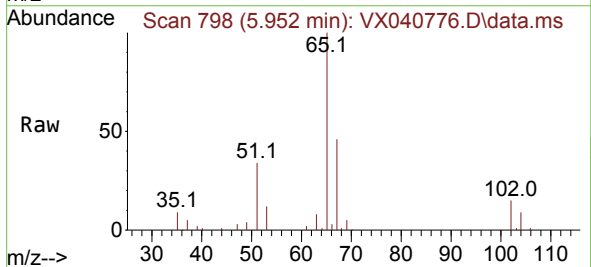
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

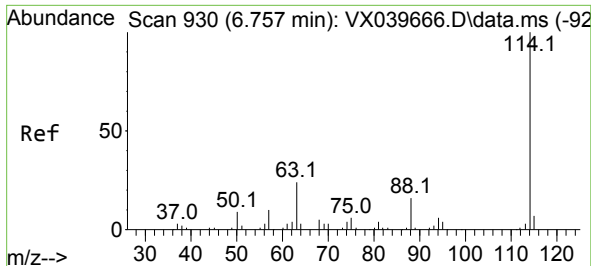
Tgt Ion: 73 Resp: 946  
Ion Ratio Lower Upper  
73 100  
43 22.9 17.0 25.6



#27  
1,2-Dichloroethane-d4  
Concen: 29.912 ug/l  
RT: 5.952 min Scan# 798  
Delta R.T. 0.000 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 65 Resp: 44134  
Ion Ratio Lower Upper  
65 100  
67 48.5 42.5 63.7

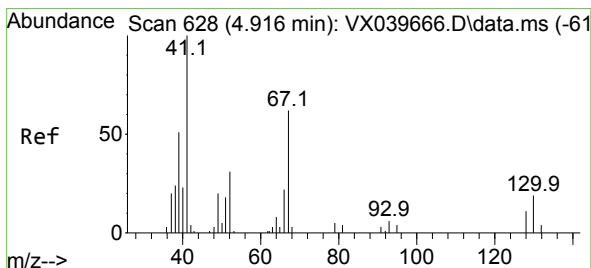
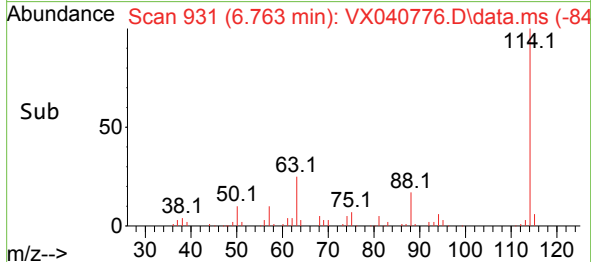
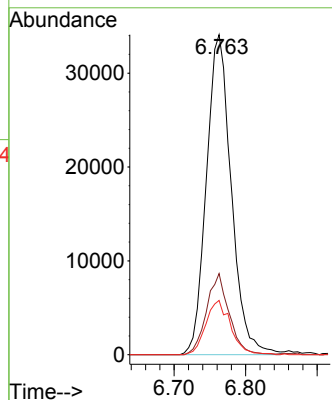
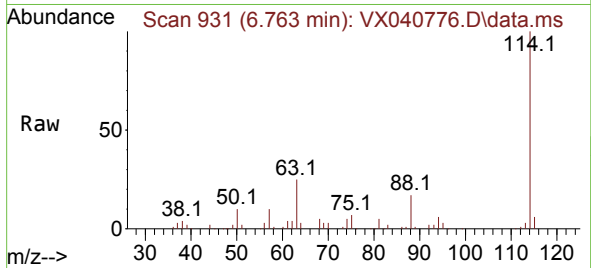




#28  
1,4-Difluorobenzene  
Concen: 30.000 ug/l  
RT: 6.763 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

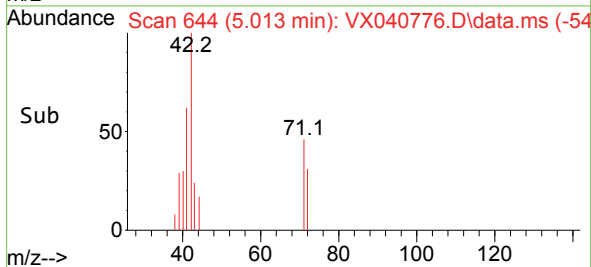
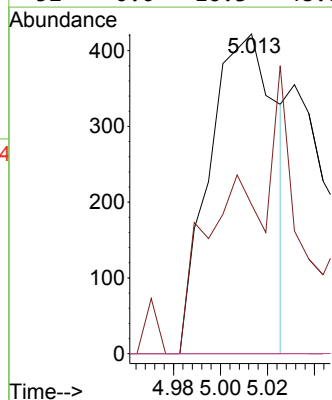
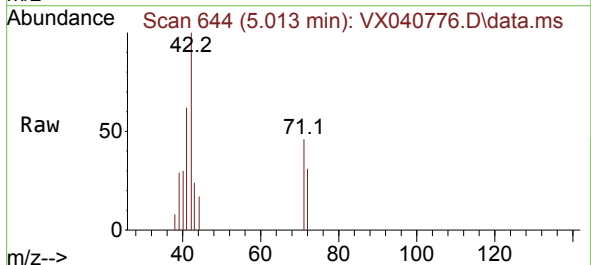
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

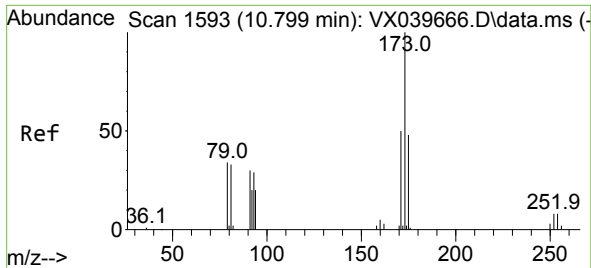
Tgt Ion:114 Resp: 82436  
Ion Ratio Lower Upper  
114 100  
63 23.0 17.0 25.4  
88 16.9 12.7 19.1



#35  
Methacrylonitrile  
Concen: 0.929 ug/l  
RT: 5.013 min Scan# 644  
Delta R.T. 0.097 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 41 Resp: 830  
Ion Ratio Lower Upper  
41 100  
39 46.7 28.2 84.7  
67 0.0 34.5 103.5#  
52 0.0 16.3 48.8#

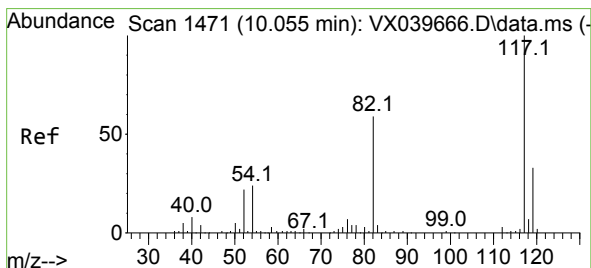
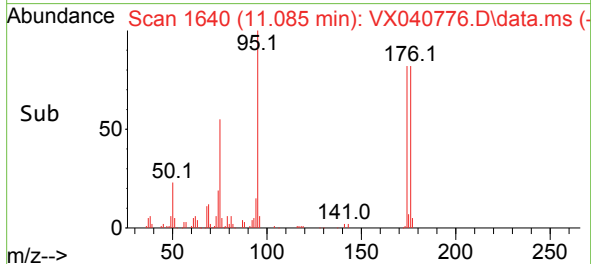
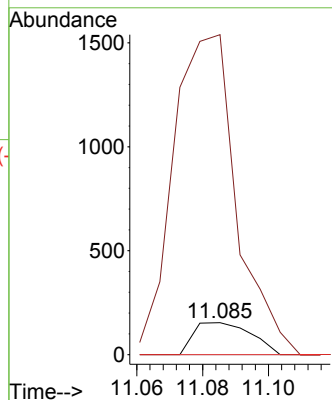
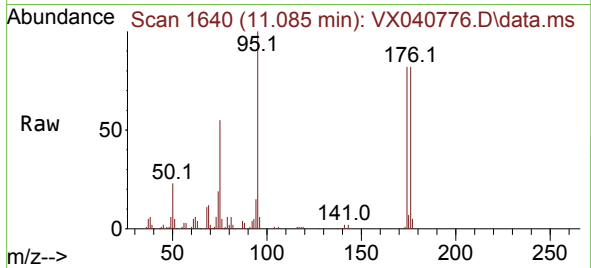




#56  
Bromoform  
Concen: 0.227 ug/l  
RT: 11.085 min Scan# 11  
Delta R.T. 0.286 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

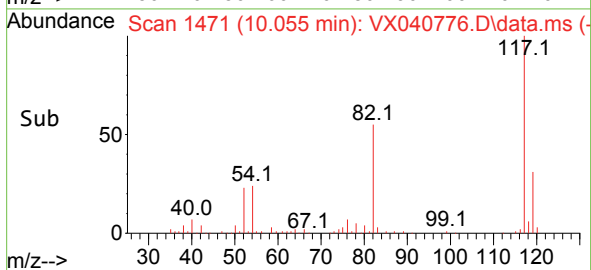
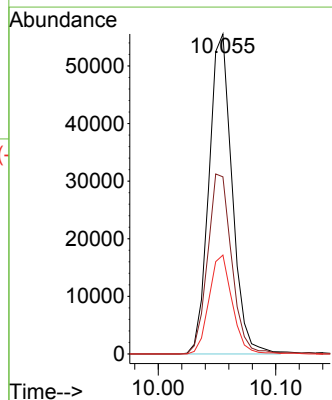
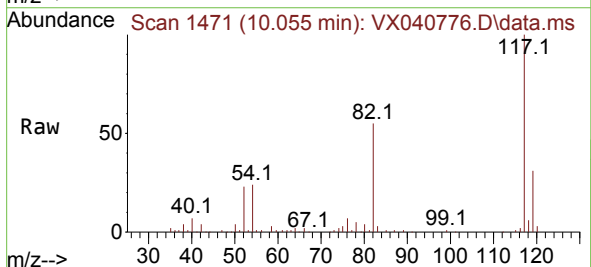
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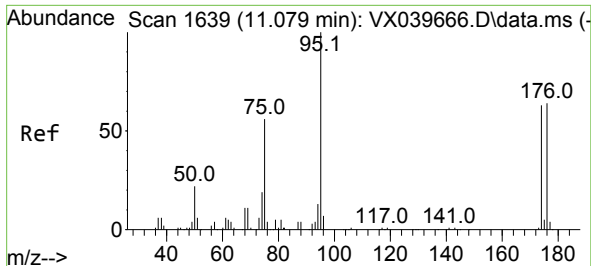
Tgt Ion:173 Resp: 188  
Ion Ratio Lower Upper  
173 100  
175 1098.4 37.6 56.4#  
254 0.0 5.8 8.8#



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 10.055 min Scan# 1471  
Delta R.T. -0.000 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion:117 Resp: 76209  
Ion Ratio Lower Upper  
117 100  
82 58.6 47.0 70.6  
119 30.8 25.2 37.8

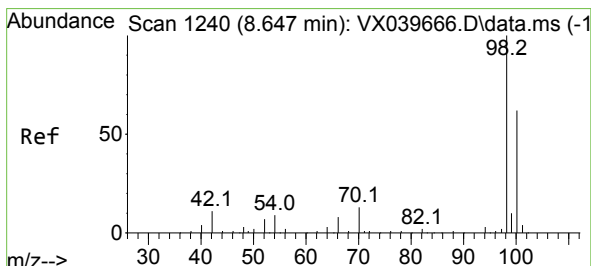
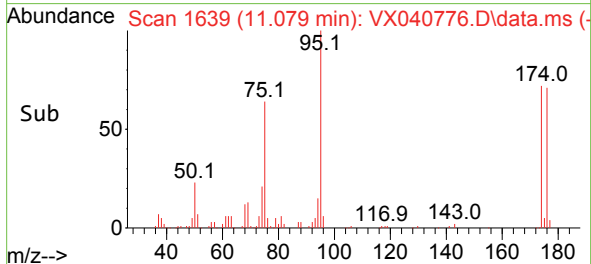
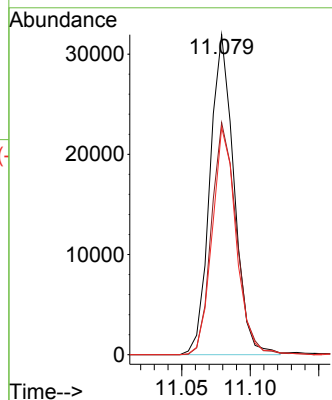
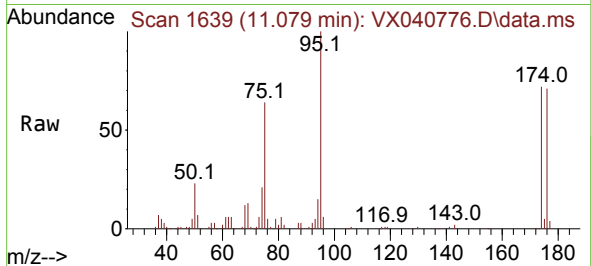




#60  
4-Bromofluorobenzene  
Concen: 29.839 ug/l  
RT: 11.079 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

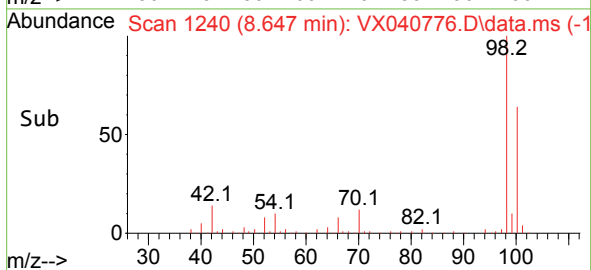
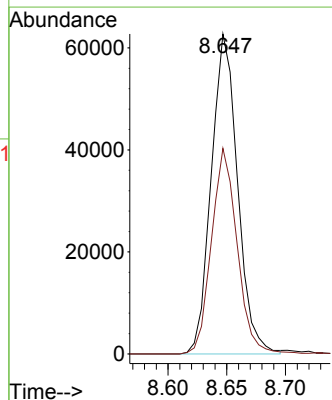
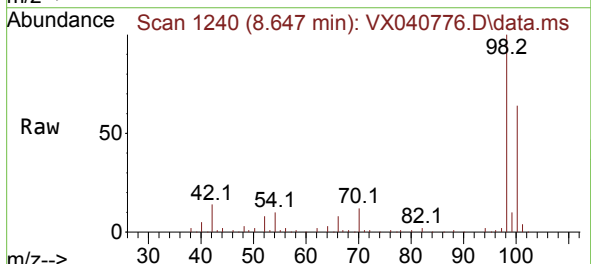
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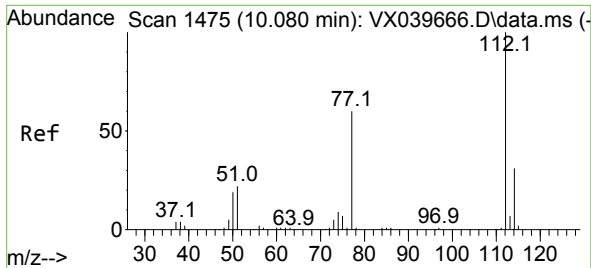
Tgt Ion: 95 Resp: 39006  
Ion Ratio Lower Upper  
95 100  
174 74.7 55.4 83.2  
176 70.7 52.6 78.8



#63  
Toluene-d8  
Concen: 29.048 ug/l  
RT: 8.647 min Scan# 1240  
Delta R.T. -0.000 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 98 Resp: 97830  
Ion Ratio Lower Upper  
98 100  
100 62.7 51.0 76.4

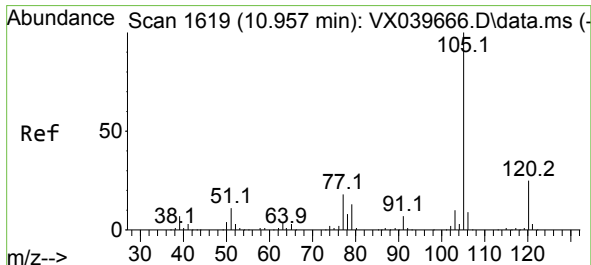
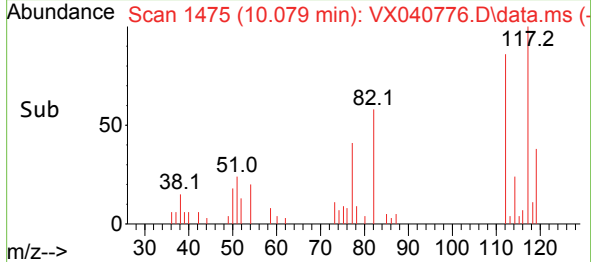
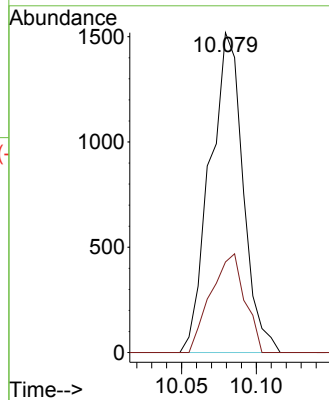
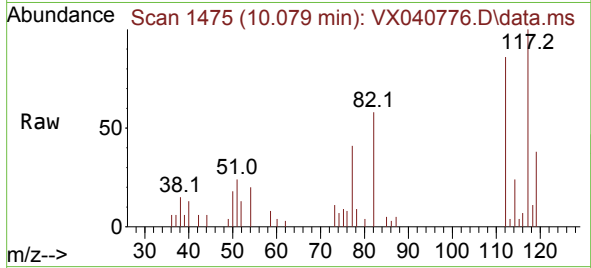




#64  
Chlorobenzene  
Concen: 0.912 ug/l  
RT: 10.079 min Scan# 1475  
Delta R.T. -0.001 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

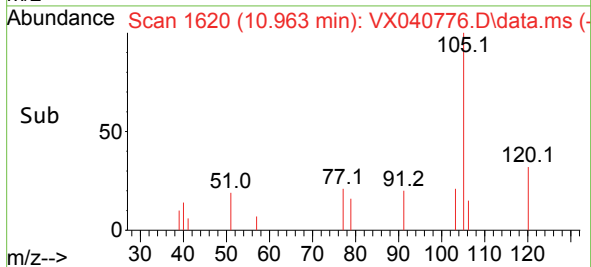
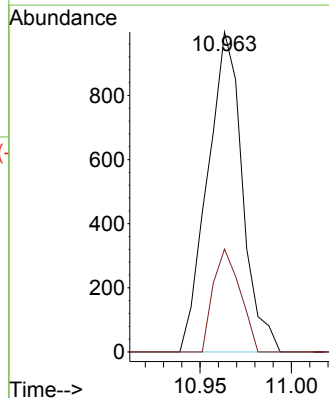
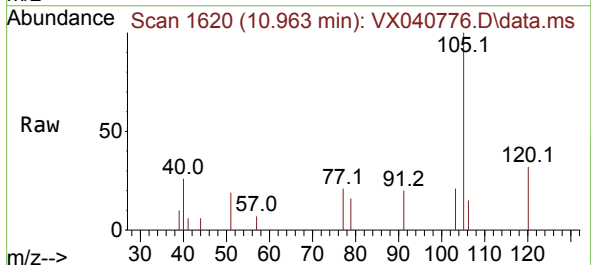
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

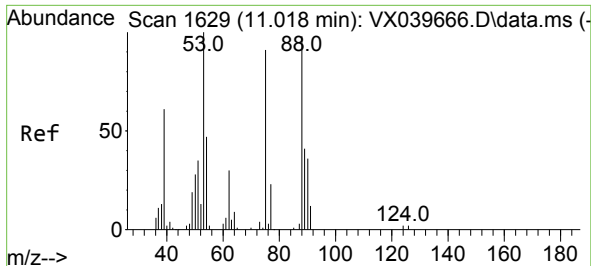
Tgt Ion:112 Resp: 2340  
Ion Ratio Lower Upper  
112 100  
114 28.3 25.9 38.9



#70  
Isopropylbenzene  
Concen: 0.285 ug/l  
RT: 10.963 min Scan# 1620  
Delta R.T. 0.006 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion:105 Resp: 1324  
Ion Ratio Lower Upper  
105 100  
120 24.8 18.5 34.3

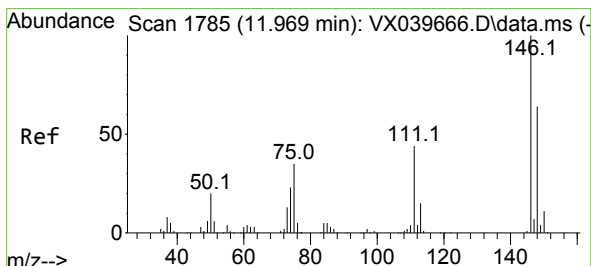
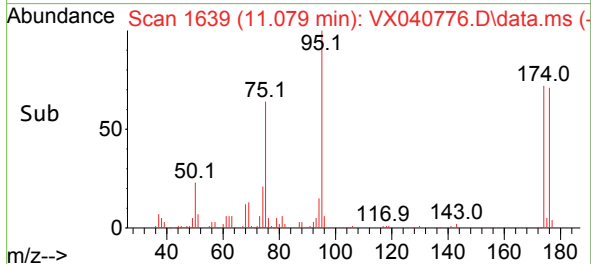
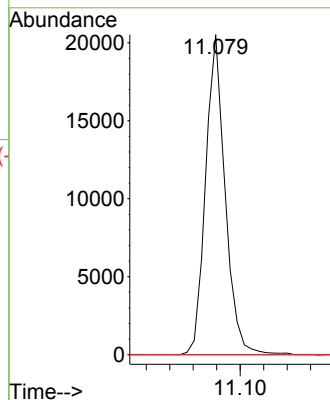
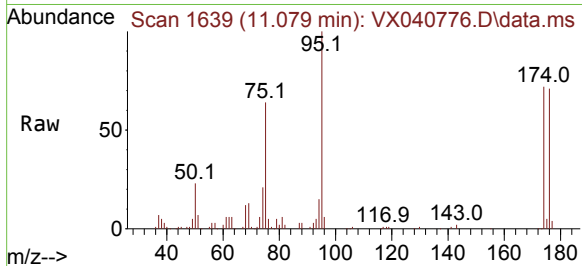




#77  
t-1,4-Dichloro-2-butene  
Concen: 51.927 ug/l  
RT: 11.079 min Scan# 1  
Delta R.T. 0.061 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

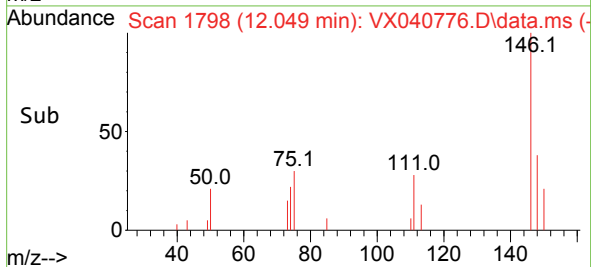
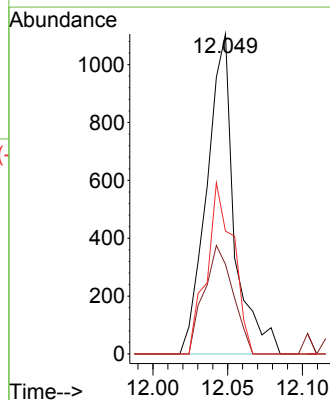
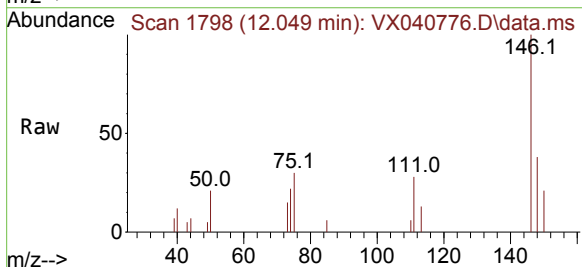
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

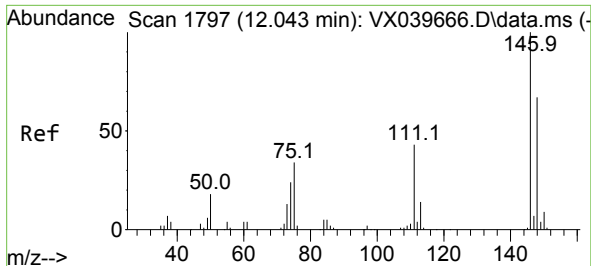
Tgt Ion: 75 Resp: 23663  
Ion Ratio Lower Upper  
75 100  
53 0.0 46.9 140.8#  
89 0.0 21.3 63.7#



#83  
1,3-Dichlorobenzene  
Concen: 0.663 ug/l  
RT: 12.049 min Scan# 1798  
Delta R.T. 0.080 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 146 Resp: 1419  
Ion Ratio Lower Upper  
146 100  
111 35.4 22.3 66.9  
148 51.5 32.8 98.3

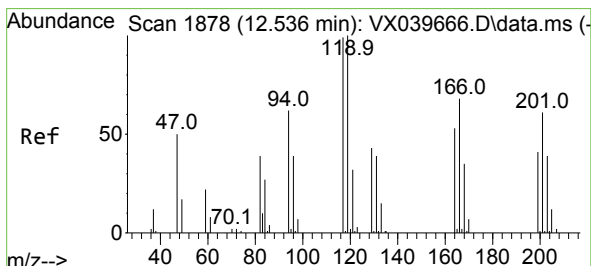
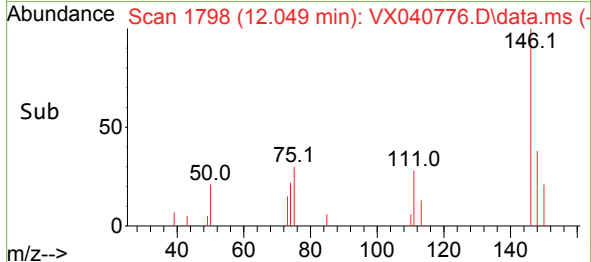
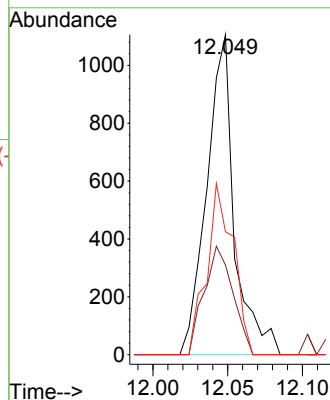
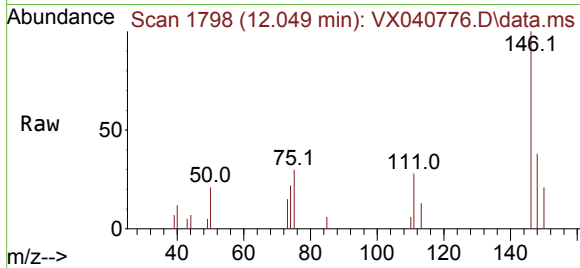




#84  
1,4-Dichlorobenzene  
Concen: 0.648 ug/l  
RT: 12.049 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

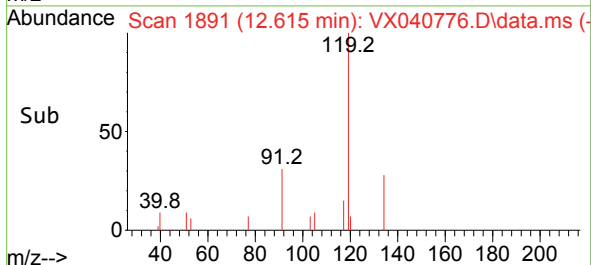
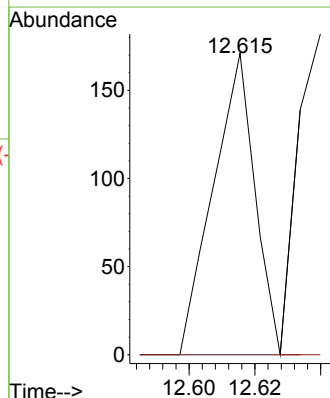
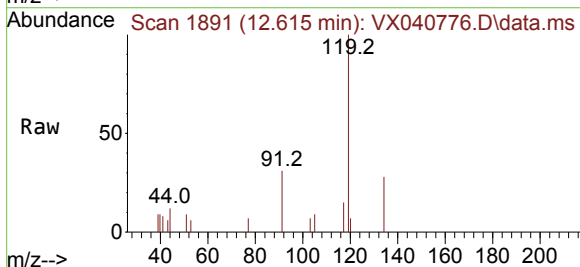
Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

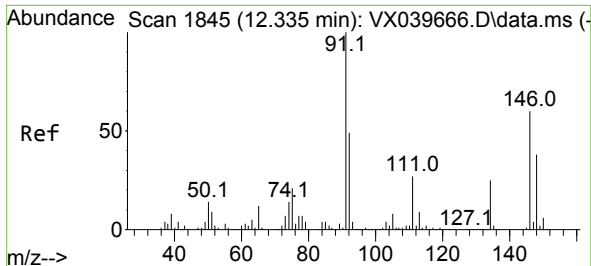
Tgt Ion:146 Resp: 1419  
Ion Ratio Lower Upper  
146 100  
111 35.4 21.4 64.2  
148 51.5 31.8 95.4



#86  
Hexachloroethane  
Concen: 0.208 ug/l  
RT: 12.615 min Scan# 1891  
Delta R.T. 0.079 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion:117 Resp: 150  
Ion Ratio Lower Upper  
117 100  
201 0.0 31.8 95.3#

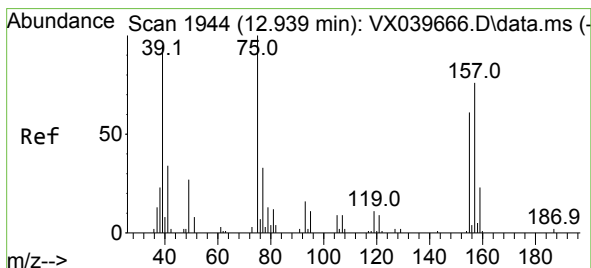
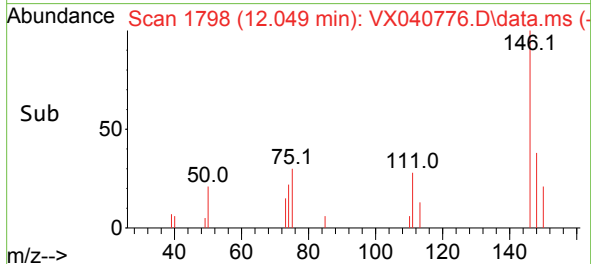
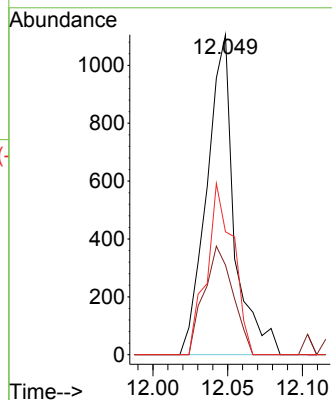
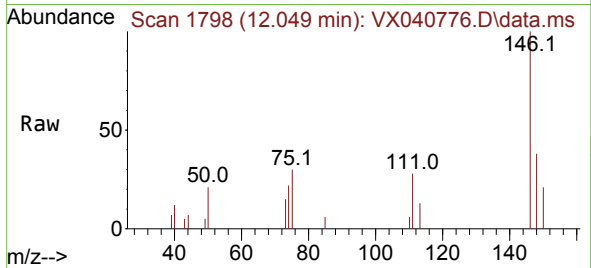




#87  
1,2-Dichlorobenzene  
Concen: 0.682 ug/l  
RT: 12.049 min Scan# 11  
Delta R.T. -0.286 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Instrument :  
MSVOA\_X  
ClientSampleId :  
240308028-08

Tgt Ion:146 Resp: 1419  
Ion Ratio Lower Upper  
146 100  
111 35.4 22.4 67.2  
148 51.5 31.9 95.7



#88  
1,2-Dibromo-3-Chloropropane  
Concen: 0.764 ug/l  
RT: 12.920 min Scan# 1941  
Delta R.T. -0.019 min  
Lab File: VX040776.D  
Acq: 22 Mar 2024 13:35

Tgt Ion: 75 Resp: 333  
Ion Ratio Lower Upper  
75 100  
155 0.0 58.2 87.4#  
157 0.0 76.5 114.7#

