

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX111023\  
 Data File : VX038738.D  
 Acq On : 10 Nov 2023 18:52  
 Operator : JC/MD  
 Sample : 05358-04  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

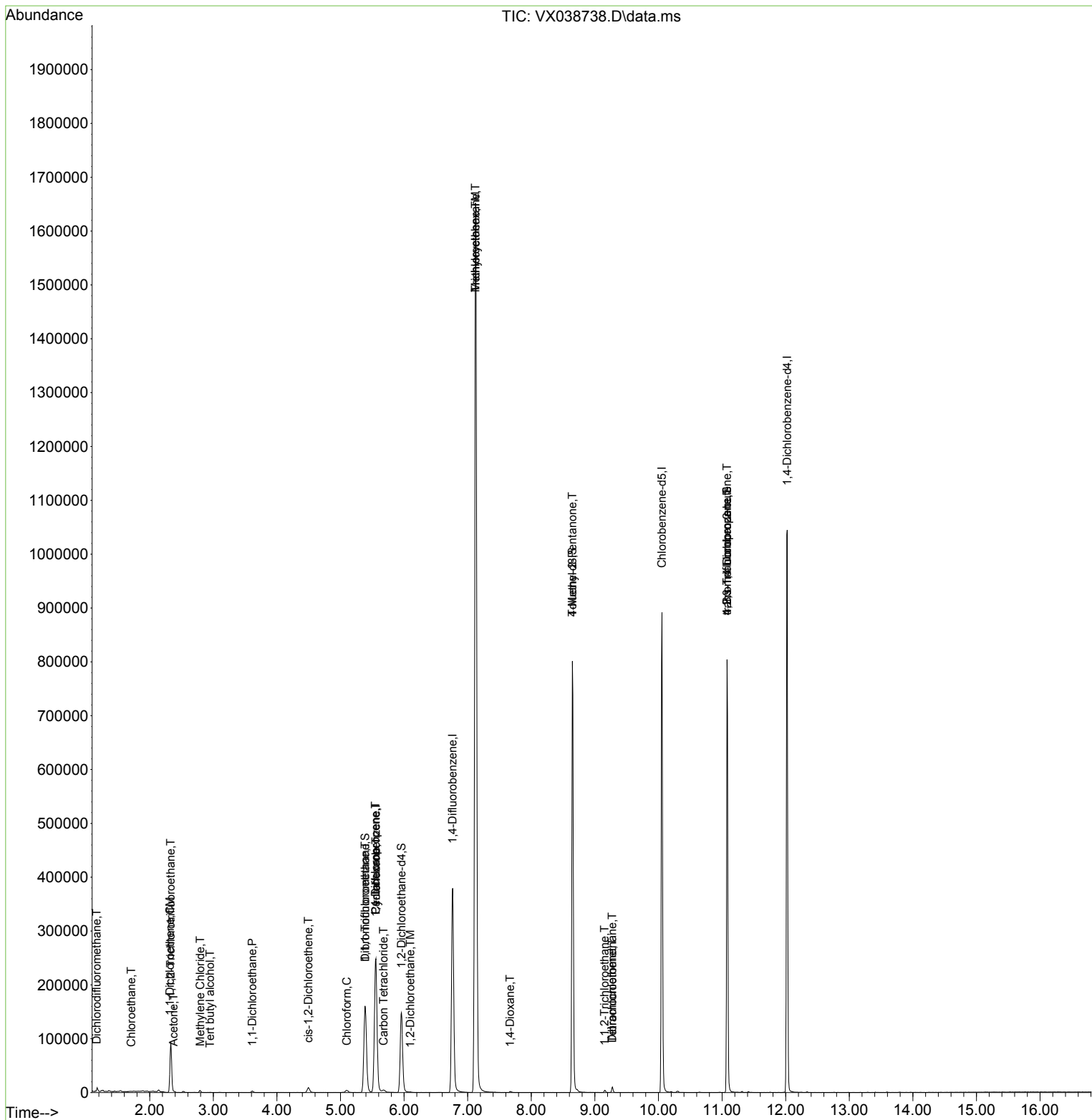
Instrument :  
 MSVOA\_X  
 ClientSampleId :

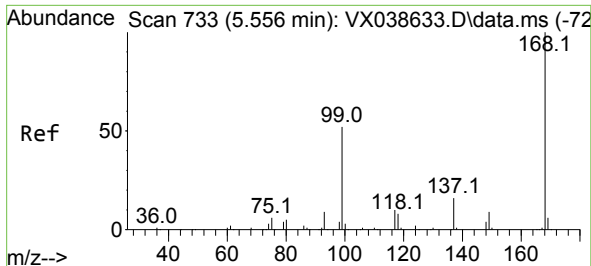
Quant Time: Nov 11 01:58:41 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X110723W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 08 03:19:07 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|-------|----------|
| -----                         |        |       |          |          |       |          |
| Internal Standards            |        |       |          |          |       |          |
| 1) Pentafluorobenzene         | 5.556  | 168   | 259176   | 50.000   | ug/l  | # 0.00   |
| 34) 1,4-Difluorobenzene       | 6.763  | 114   | 431939   | 50.000   | ug/l  | 0.00     |
| 63) Chlorobenzene-d5          | 10.055 | 117   | 443724   | 50.000   | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.024 | 152   | 249166   | 50.000   | ug/l  | 0.00     |
| System Monitoring Compounds   |        |       |          |          |       |          |
| 33) 1,2-Dichloroethane-d4     | 5.958  | 65    | 150194   | 46.548   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 78 - 117 | Recovery | =     | 93.100%  |
| 35) Dibromofluoromethane      | 5.385  | 113   | 141711   | 45.552   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =     | 91.100%  |
| 50) Toluene-d8                | 8.647  | 98    | 512727   | 46.058   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 92 - 112 | Recovery | =     | 92.120%  |
| 62) 4-Bromofluorobenzene      | 11.079 | 95    | 215100   | 49.837   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery | =     | 99.680%  |
| Target Compounds              |        |       |          |          |       |          |
|                               |        |       |          |          |       | Qvalue   |
| 2) Dichlorodifluoromethane    | 1.166  | 85    | 2850     | 1.059    | ug/l  | 97       |
| 6) Chloroethane               | 1.709  | 64    | 835      | 0.532    | ug/l  | # 43     |
| 9) 1,1,2-Trichlorotrifluo...  | 2.331  | 101   | 31264    | 12.384   | ug/l  | 90       |
| 11) Tert butyl alcohol        | 2.946  | 59    | 206      | 0.312    | ug/l  | # 78     |
| 12) 1,1-Dichloroethene        | 2.319  | 96    | 6597     | 2.727    | ug/l  | # 76     |
| 16) Acetone                   | 2.373  | 43    | 1302     | 0.958    | ug/l  | 93       |
| 20) Methylene Chloride        | 2.794  | 84    | 1718     | 0.627    | ug/l  | # 73     |
| 24) 1,1-Dichloroethane        | 3.611  | 63    | 2971     | 0.688    | ug/l  | 96       |
| 27) cis-1,2-Dichloroethene    | 4.495  | 96    | 6475     | 2.129    | ug/l  | 74       |
| 30) Chloroform                | 5.099  | 83    | 5403     | 1.066    | ug/l  | 97       |
| 31) Cyclohexane               | 5.556  | 56    | 4380     | 1.227    | ug/l  | # 1      |
| 32) 1,1,1-Trichloroethane     | 5.385  | 97    | 1431     | 0.321    | ug/l  | # 50     |
| 36) 1,1-Dichloropropene       | 5.550  | 75    | 16880    | 4.368    | ug/l  | # 52     |
| 38) Carbon Tetrachloride      | 5.678  | 117   | 3385     | 0.784    | ug/l  | 95       |
| 39) Methylcyclohexane         | 7.123  | 83    | 7105     | 1.471    | ug/l  | # 1      |
| 42) 1,2-Dichloroethane        | 6.098  | 62    | 934      | 0.233    | ug/l  | # 77     |
| 44) Trichloroethene           | 7.123  | 130   | 699894   | 202.096  | ug/l  | 92       |
| 49) 1,4-Dioxane               | 7.665  | 88    | 1726     | 25.936   | ug/l  | # 86     |
| 51) 4-Methyl-2-Pentanone      | 8.647  | 43    | 1679     | 0.425    | ug/l  | # 1      |
| 55) 1,1,2-Trichloroethane     | 9.153  | 97    | 1426     | 0.461    | ug/l  | # 91     |
| 60) Dibromochloromethane      | 9.275  | 129   | 1822     | 0.525    | ug/l  | # 11     |
| 64) Tetrachloroethene         | 9.275  | 164   | 2041     | 0.614    | ug/l  | 87       |
| 76) 1,2,3-Trichloropropane    | 11.079 | 75    | 103654   | 21.005   | ug/l  | # 38     |
| 81) trans-1,4-Dichloro-2-b... | 11.079 | 75    | 103654   | 63.847   | ug/l  | # 5      |
| -----                         |        |       |          |          |       |          |

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

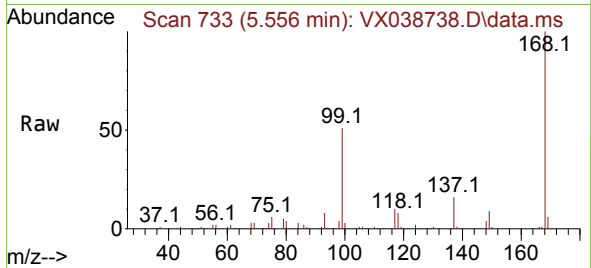
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X110723W.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 08 03:19:07 2023  
Response via : Initial Calibration



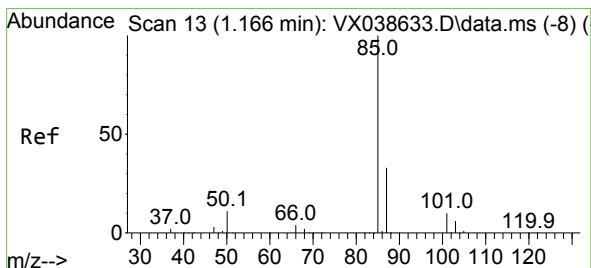
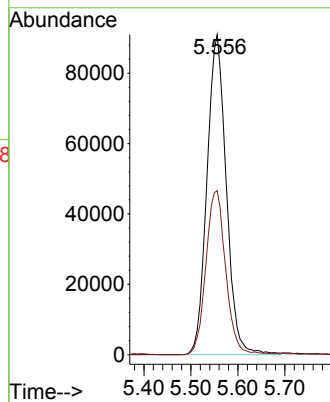
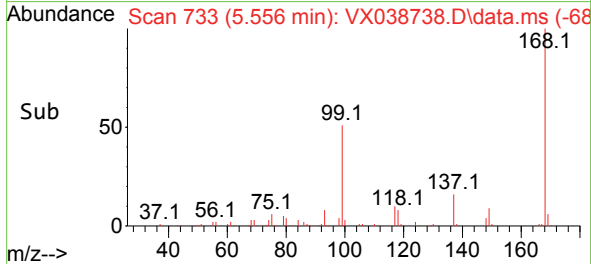


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.556 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Instrument :  
MSVOA\_X  
ClientSampleId :

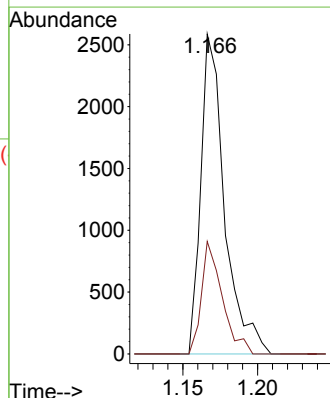
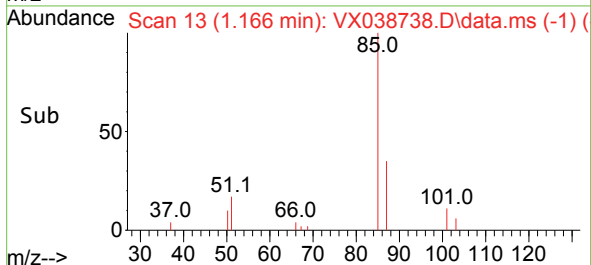
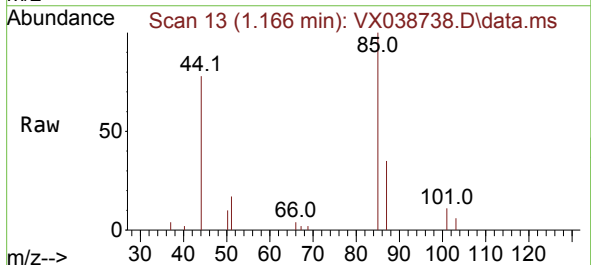


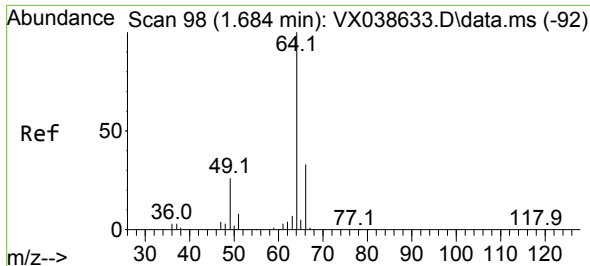
Tgt Ion:168 Resp: 259176  
Ion Ratio Lower Upper  
168 100  
99 51.3 56.6 85.0#



#2  
Dichlorodifluoromethane  
Concen: 1.059 ug/l  
RT: 1.166 min Scan# 13  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

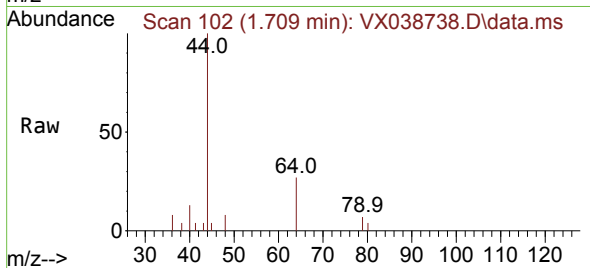
Tgt Ion: 85 Resp: 2850  
Ion Ratio Lower Upper  
85 100  
87 35.1 16.7 50.1



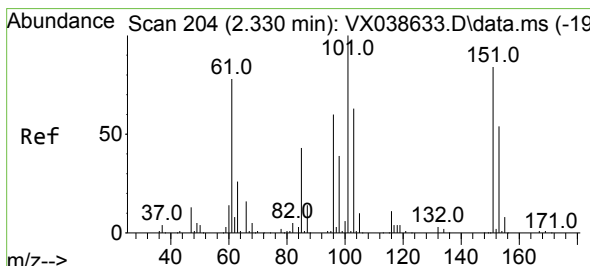
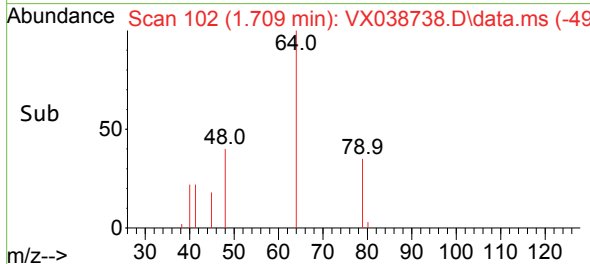
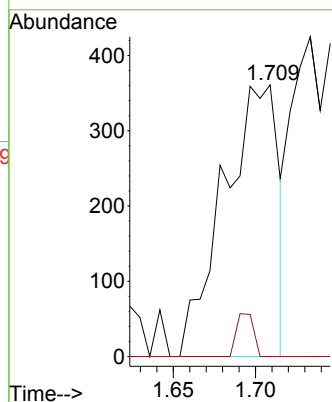


#6  
Chloroethane  
Concen: 0.532 ug/l  
RT: 1.709 min Scan# 102  
Delta R.T. 0.025 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Instrument :  
MSVOA\_X  
ClientSampleId :

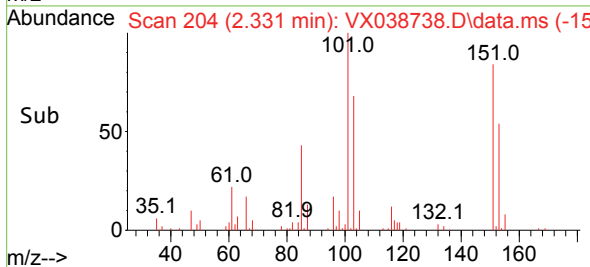
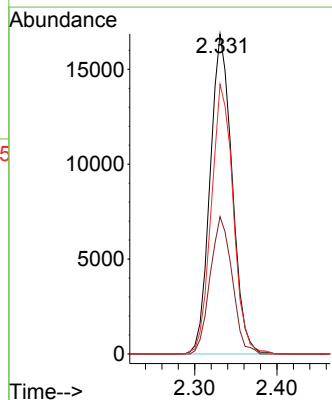
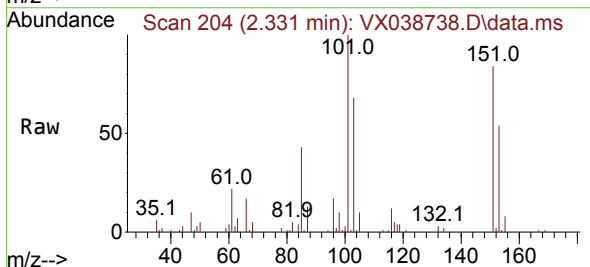


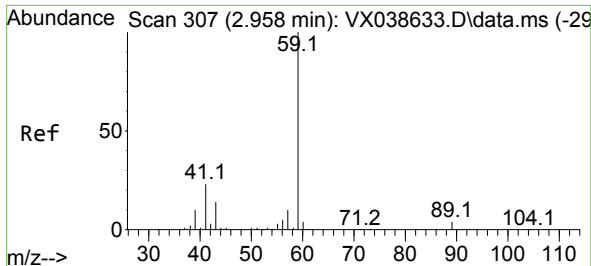
Tgt Ion: 64 Resp: 835  
Ion Ratio Lower Upper  
64 100  
66 0.0 25.1 37.7#



#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 12.384 ug/l  
RT: 2.331 min Scan# 204  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

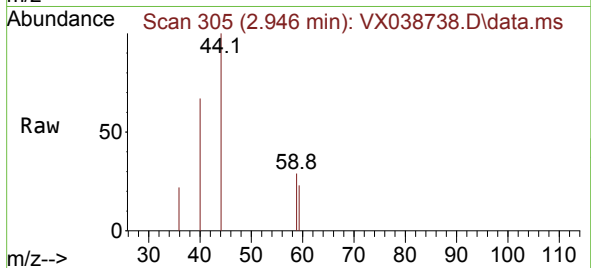
Tgt Ion: 101 Resp: 31264  
Ion Ratio Lower Upper  
101 100  
85 42.8 37.0 55.6  
151 84.2 58.6 87.8



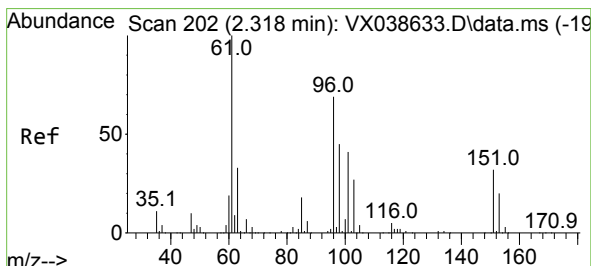
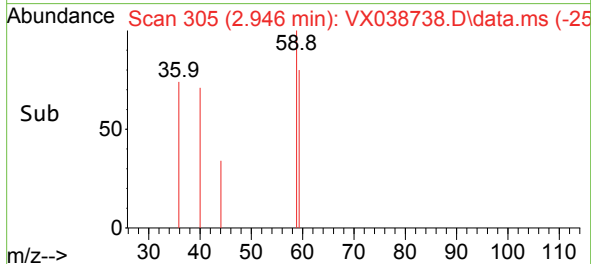
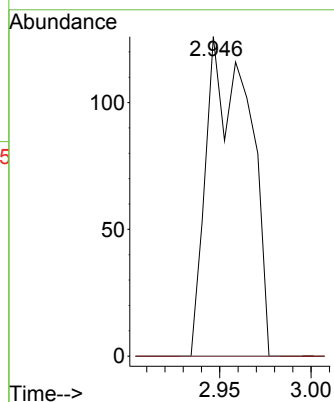


#11  
Tert butyl alcohol  
Concen: 0.312 ug/l  
RT: 2.946 min Scan# 307  
Delta R.T. -0.012 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Instrument :  
MSVOA\_X  
ClientSampleId :

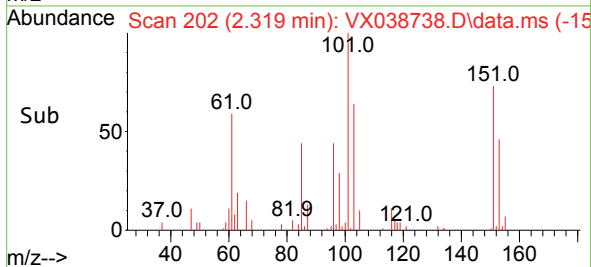
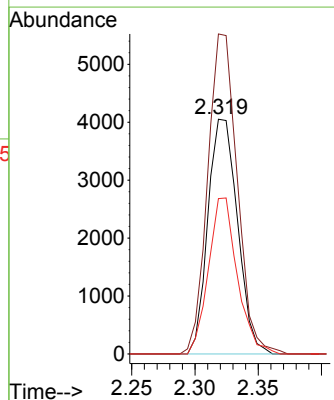
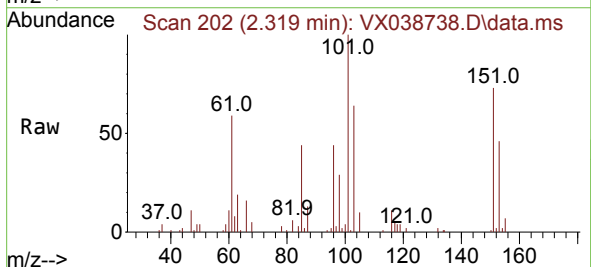


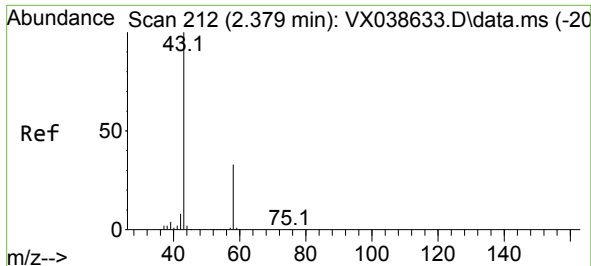
Tgt Ion: 59 Resp: 206  
Ion Ratio Lower Upper  
59 100  
57 0.0 6.0 9.0#



#12  
1,1-Dichloroethene  
Concen: 2.727 ug/l  
RT: 2.319 min Scan# 202  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 96 Resp: 6597  
Ion Ratio Lower Upper  
96 100  
61 136.4 144.6 216.8#  
98 66.2 50.4 75.6

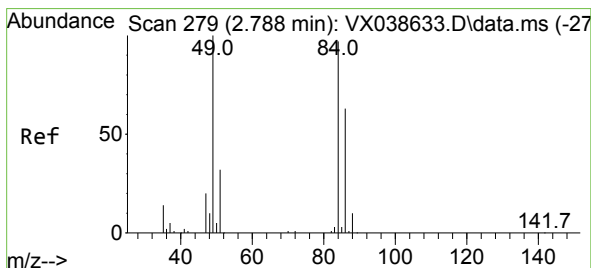
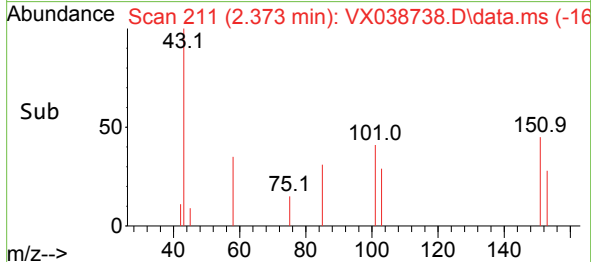
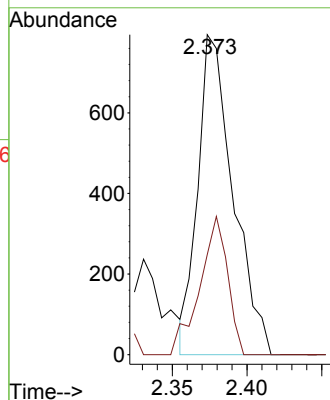
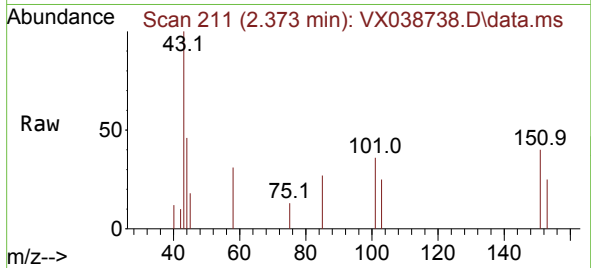




#16  
Acetone  
Concen: 0.958 ug/l  
RT: 2.373 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

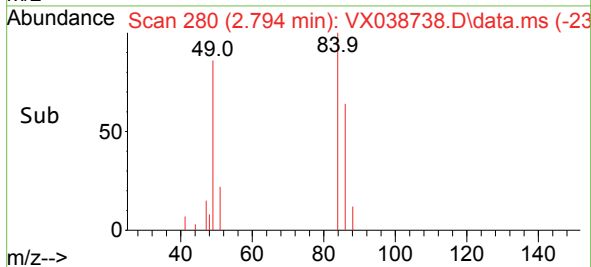
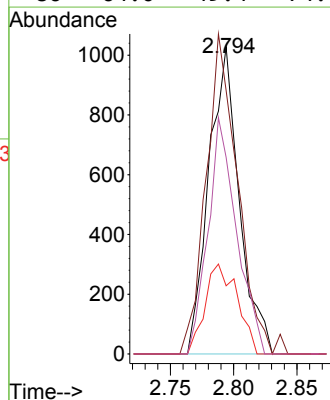
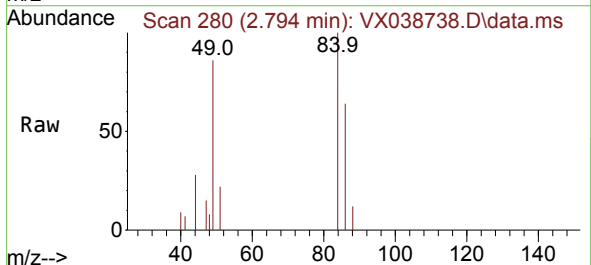
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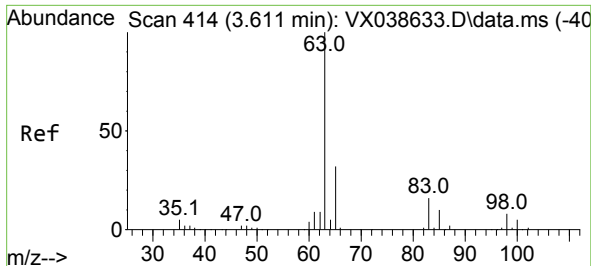
Tgt Ion: 43 Resp: 1302  
Ion Ratio Lower Upper  
43 100  
58 31.2 21.9 32.9



#20  
Methylene Chloride  
Concen: 0.627 ug/l  
RT: 2.794 min Scan# 280  
Delta R.T. 0.006 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 84 Resp: 1718  
Ion Ratio Lower Upper  
84 100  
49 85.8 103.6 155.4#  
51 22.2 33.8 50.6#  
86 64.0 49.4 74.0

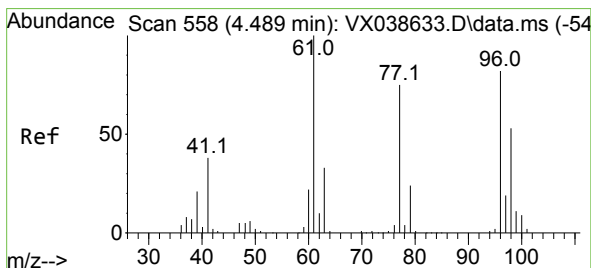
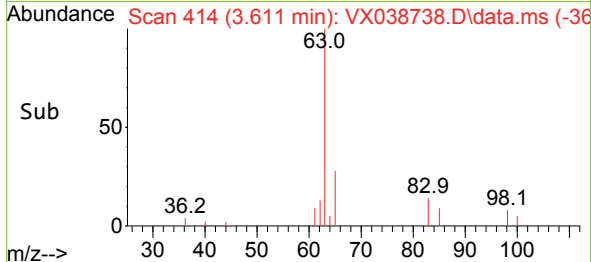
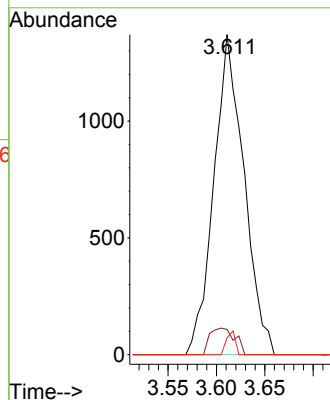
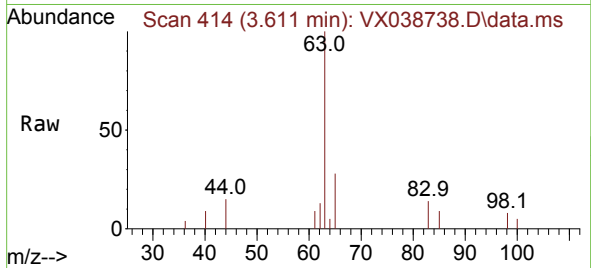




#24  
1,1-Dichloroethane  
Concen: 0.688 ug/l  
RT: 3.611 min Scan# 414  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

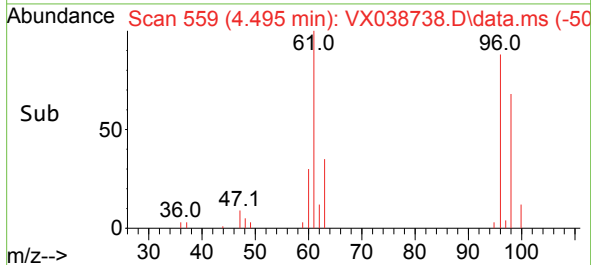
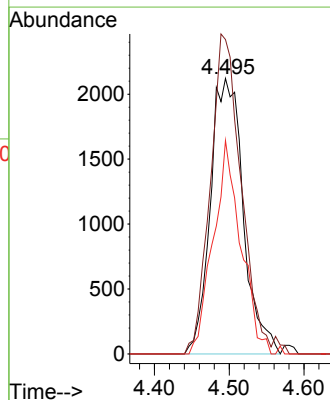
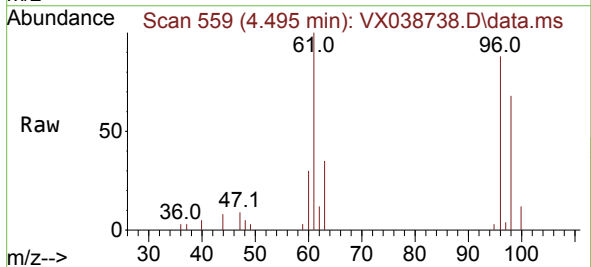
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MSVOA\_X  
ClientSampleId :

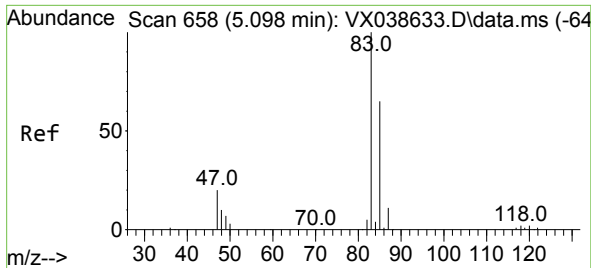
Tgt Ion: 63 Resp: 2971  
Ion Ratio Lower Upper  
63 100  
98 7.9 3.3 9.8  
100 5.3 2.1 6.5



#27  
cis-1,2-Dichloroethene  
Concen: 2.129 ug/l  
RT: 4.495 min Scan# 559  
Delta R.T. 0.006 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 96 Resp: 6475  
Ion Ratio Lower Upper  
96 100  
61 108.4 0.0 312.2  
98 65.3 0.0 129.0

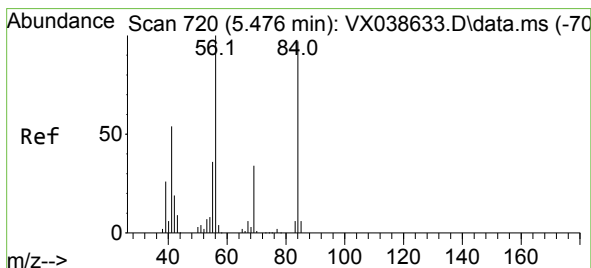
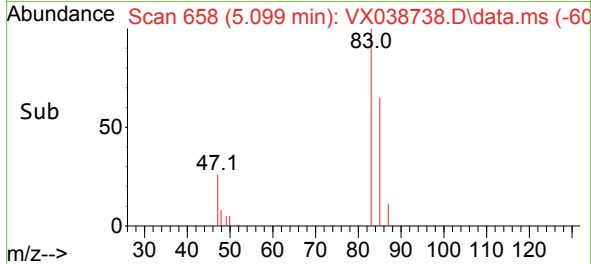
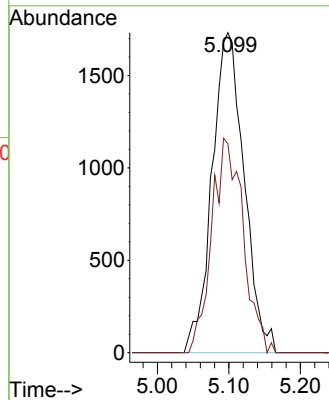
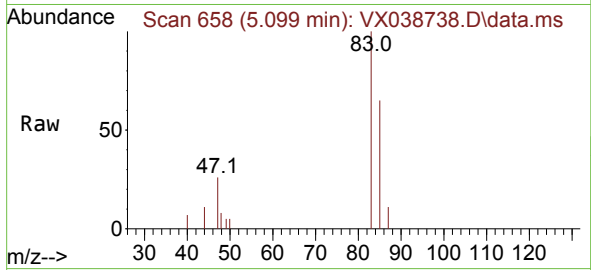




#30  
Chloroform  
Concen: 1.066 ug/l  
RT: 5.099 min Scan# 610  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

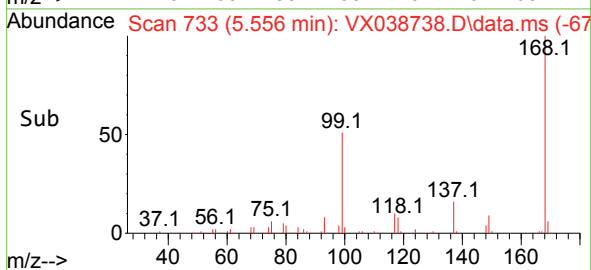
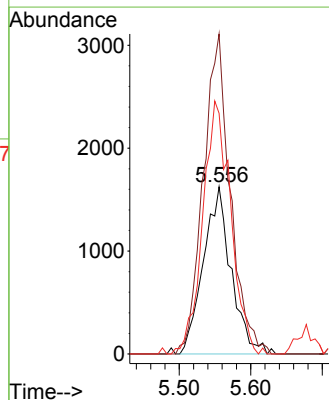
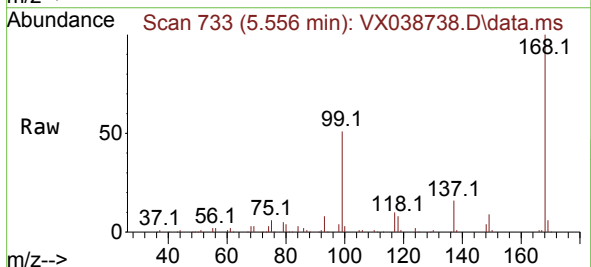
Instrument :  
MSVOA\_X  
ClientSampleId :

Tgt Ion: 83 Resp: 5403  
Ion Ratio Lower Upper  
83 100  
85 65.3 50.3 75.5

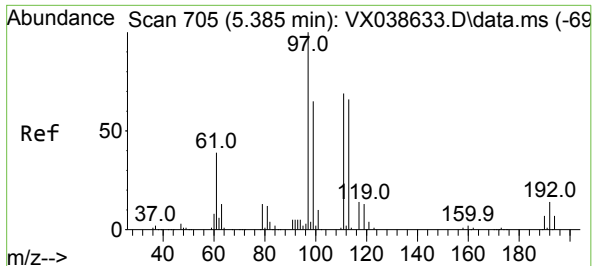


#31  
Cyclohexane  
Concen: 1.227 ug/l  
RT: 5.556 min Scan# 733  
Delta R.T. 0.079 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 56 Resp: 4380  
Ion Ratio Lower Upper  
56 100  
69 191.4 23.4 35.2#  
84 143.9 65.9 98.9#







#32

1,1,1-Trichloroethane

Concen: 0.321 ug/l

RT: 5.385 min Scan# 705

Delta R.T. 0.000 min

Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

Instrument :

MSVOA\_X

ClientSampleId :

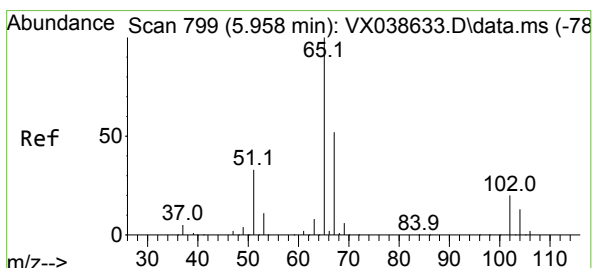
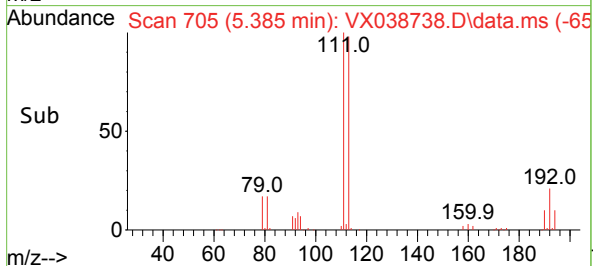
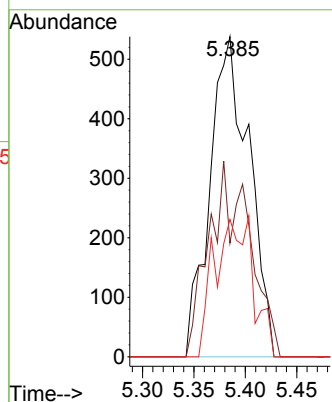
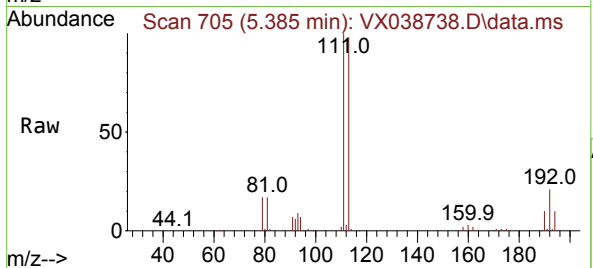
Tgt Ion: 97 Resp: 1431

Ion Ratio Lower Upper

97 100

99 0.0 51.1 76.7#

61 42.3 36.4 54.6



#33

1,2-Dichloroethane-d4

Concen: 46.548 ug/l

RT: 5.958 min Scan# 799

Delta R.T. 0.000 min

Lab File: VX038738.D

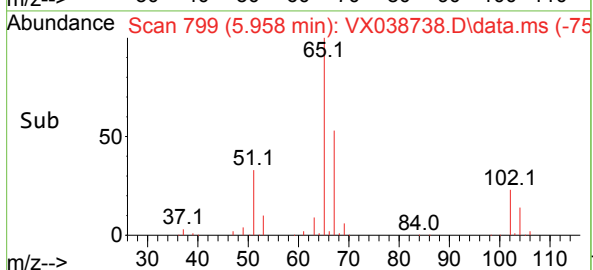
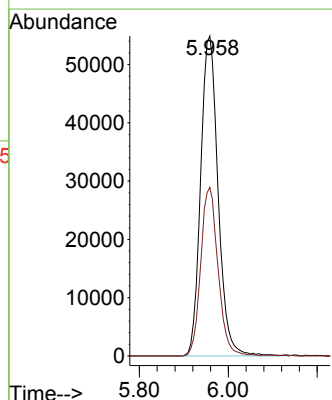
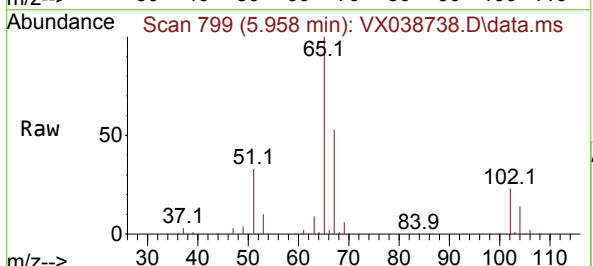
Acq: 10 Nov 2023 18:52

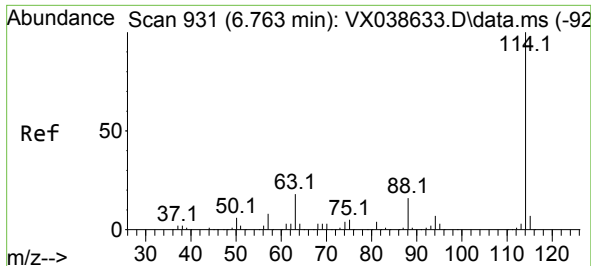
Tgt Ion: 65 Resp: 150194

Ion Ratio Lower Upper

65 100

67 52.2 0.0 100.2

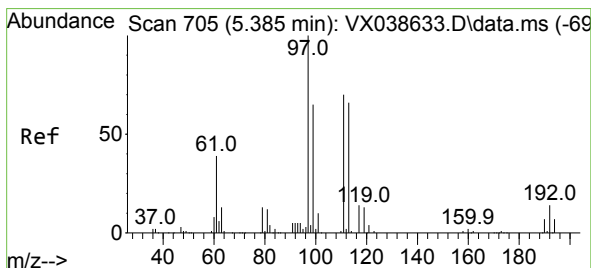
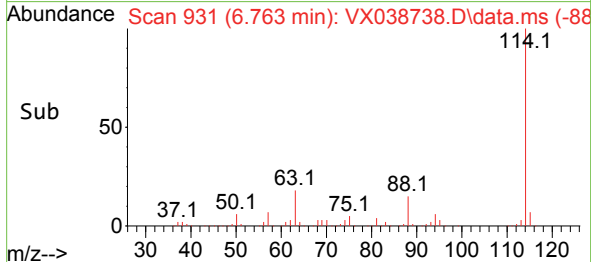
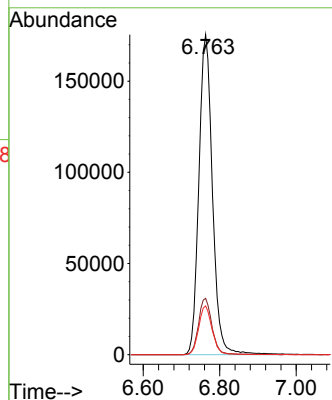
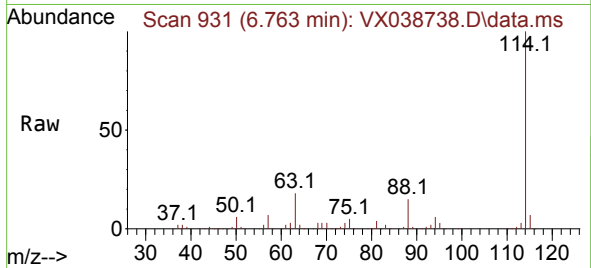




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.763 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

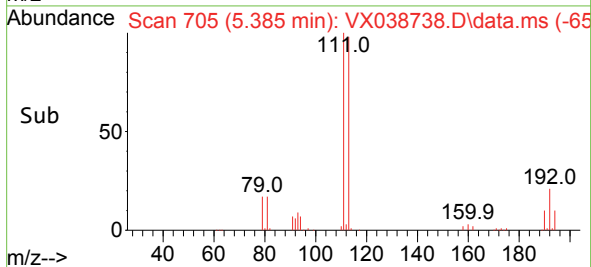
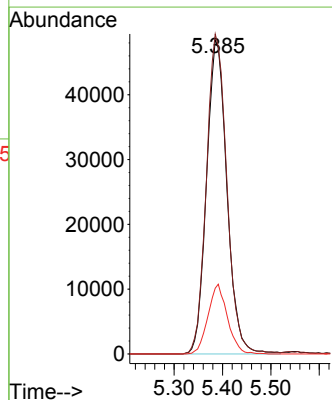
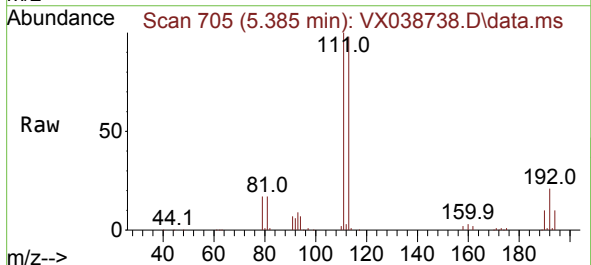
Instrument :  
MSVOA\_X  
ClientSampleId :

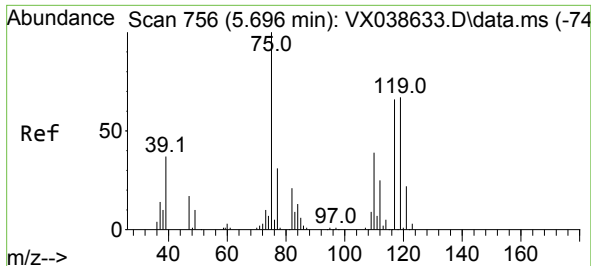
Tgt Ion:114 Resp: 431939  
Ion Ratio Lower Upper  
114 100  
63 17.6 0.0 45.0  
88 15.3 0.0 36.6



#35  
Dibromofluoromethane  
Concen: 45.552 ug/l  
RT: 5.385 min Scan# 705  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion:113 Resp: 141711  
Ion Ratio Lower Upper  
113 100  
111 102.5 82.9 124.3  
192 21.2 13.3 19.9#

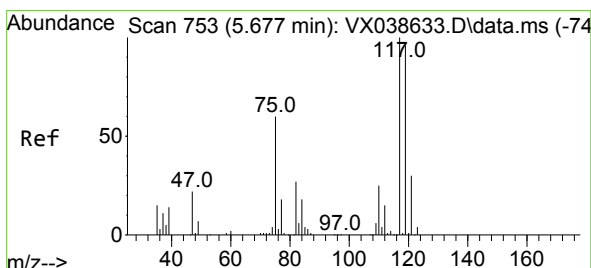
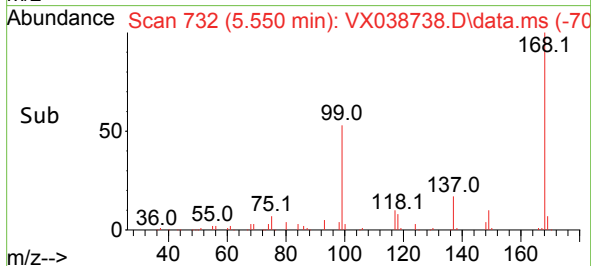
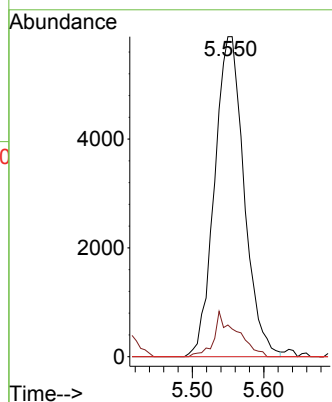
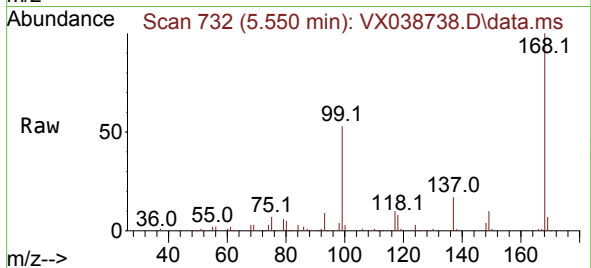




#36  
1,1-Dichloropropene  
Concen: 4.368 ug/l  
RT: 5.550 min Scan# 71  
Delta R.T. -0.146 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

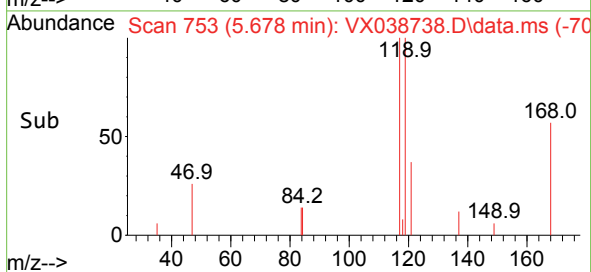
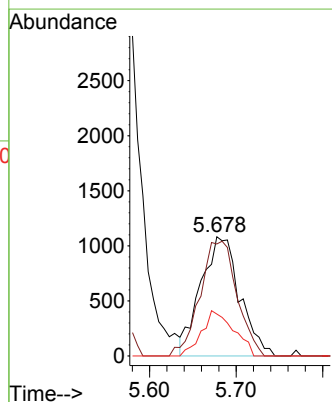
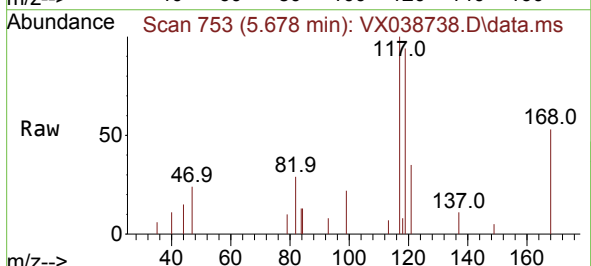
Instrument :  
MSVOA\_X  
ClientSampleId :

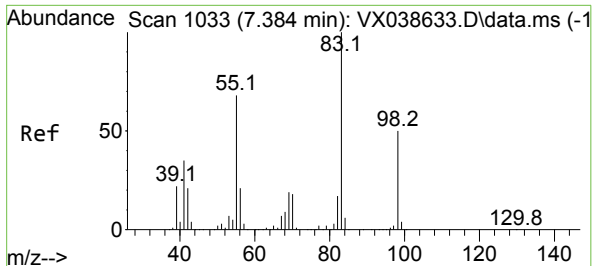
Tgt Ion: 75 Resp: 16880  
Ion Ratio Lower Upper  
75 100  
110 10.9 17.0 50.9#  
77 0.0 24.7 37.1#



#38  
Carbon Tetrachloride  
Concen: 0.784 ug/l  
RT: 5.678 min Scan# 753  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 117 Resp: 3385  
Ion Ratio Lower Upper  
117 100  
119 94.0 78.2 117.2  
121 35.2 24.4 36.6





#39

Methylcyclohexane

Concen: 1.471 ug/l

RT: 7.123 min Scan# 91

Delta R.T. -0.262 min

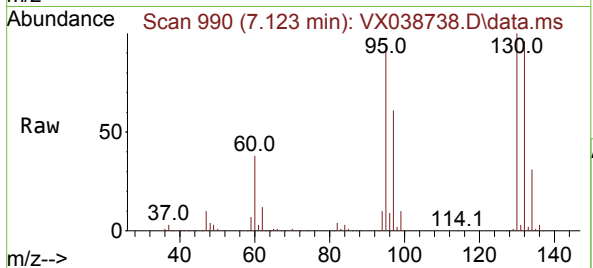
Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

Instrument :

MSVOA\_X

ClientSampleId :



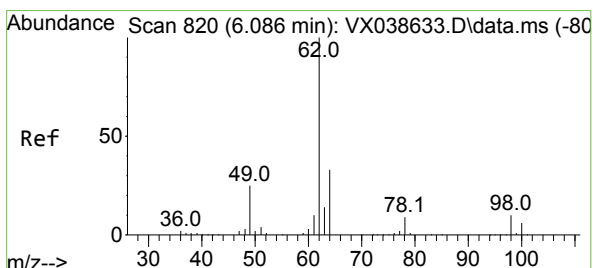
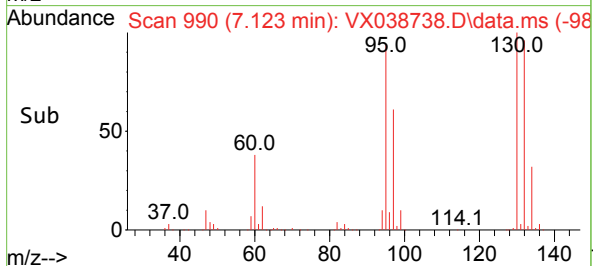
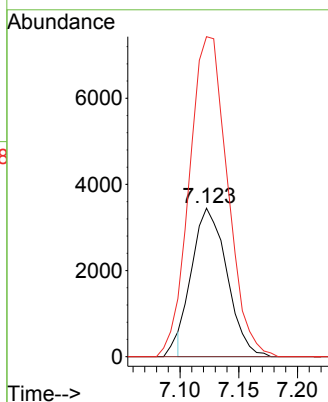
Tgt Ion: 83 Resp: 7105

Ion Ratio Lower Upper

83 100

55 0.0 64.6 97.0#

98 215.6 36.7 55.1#



#42

1,2-Dichloroethane

Concen: 0.233 ug/l

RT: 6.098 min Scan# 822

Delta R.T. 0.012 min

Lab File: VX038738.D

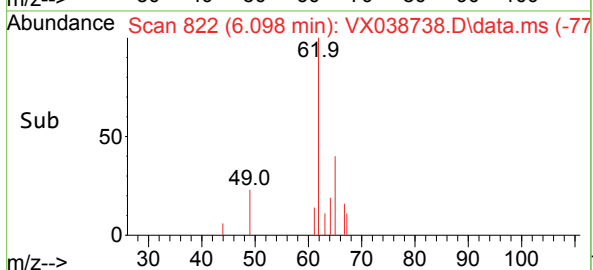
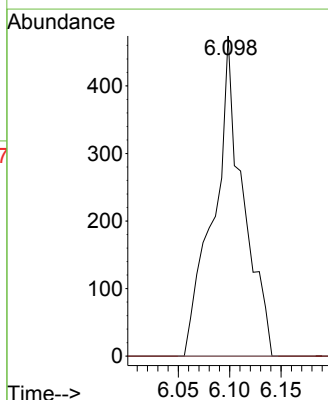
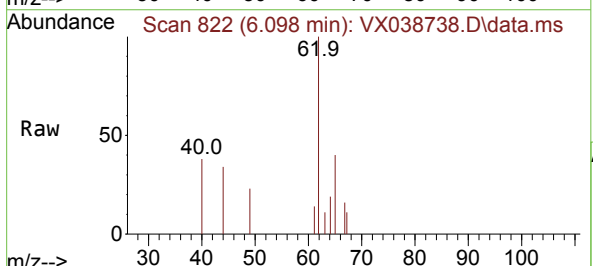
Acq: 10 Nov 2023 18:52

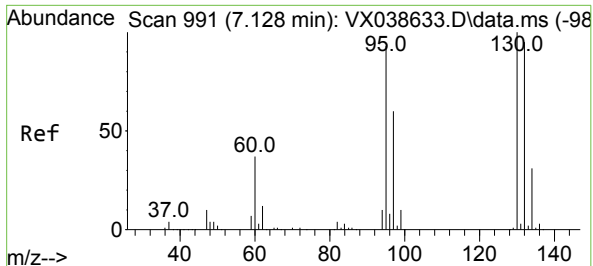
Tgt Ion: 62 Resp: 934

Ion Ratio Lower Upper

62 100

98 0.0 0.0 16.0

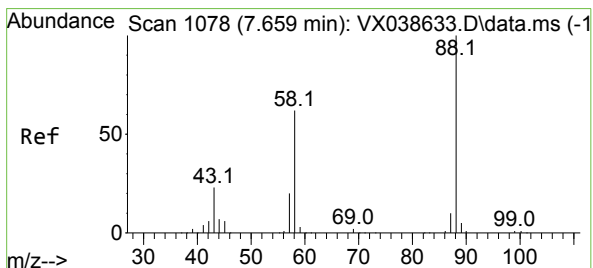
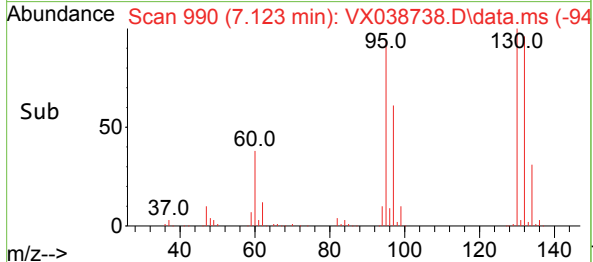
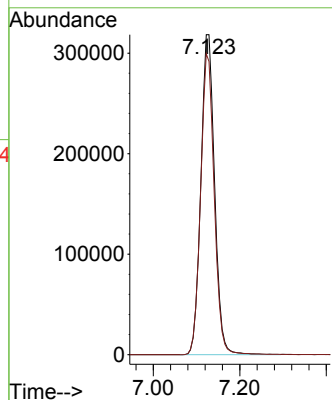
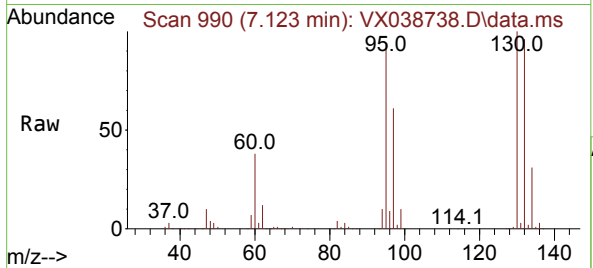




#44  
Trichloroethene  
Concen: 202.096 ug/l  
RT: 7.123 min Scan# 991  
Delta R.T. -0.006 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

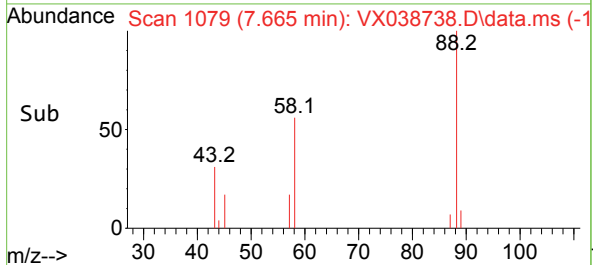
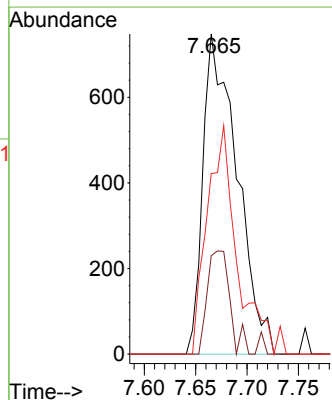
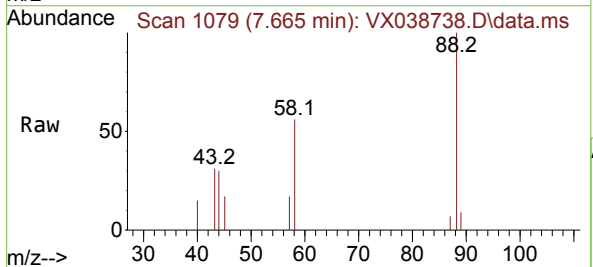
Instrument :  
MSVOA\_X  
ClientSampleId :

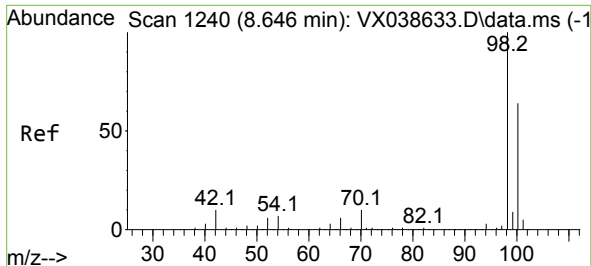
Tgt Ion:130 Resp: 699894  
Ion Ratio Lower Upper  
130 100  
95 94.1 0.0 204.4



#49  
1,4-Dioxane  
Concen: 25.936 ug/l  
RT: 7.665 min Scan# 1079  
Delta R.T. 0.006 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Tgt Ion: 88 Resp: 1726  
Ion Ratio Lower Upper  
88 100  
43 21.4 0.0 0.0#  
58 63.2 60.1 90.1

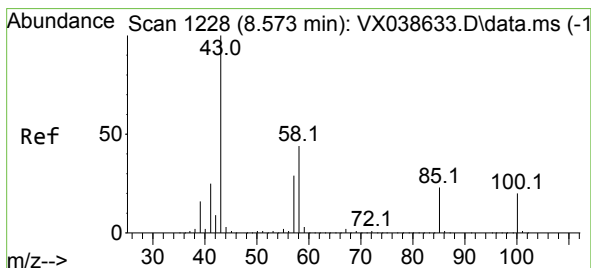
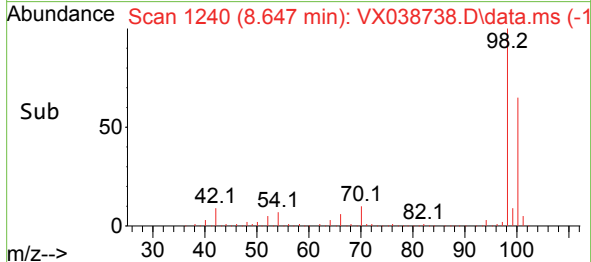
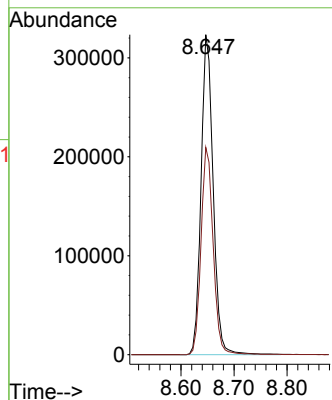
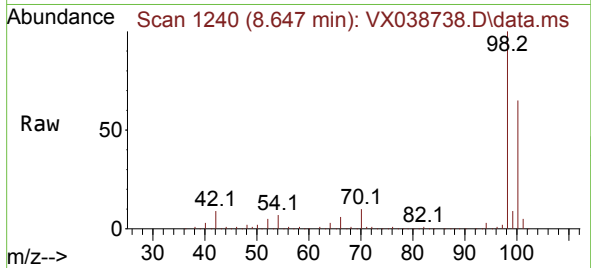




#50  
Toluene-d8  
Concen: 46.058 ug/l  
RT: 8.647 min Scan# 1240  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

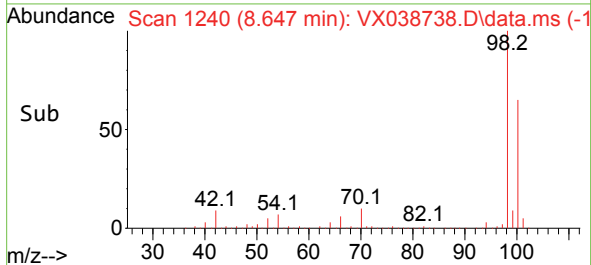
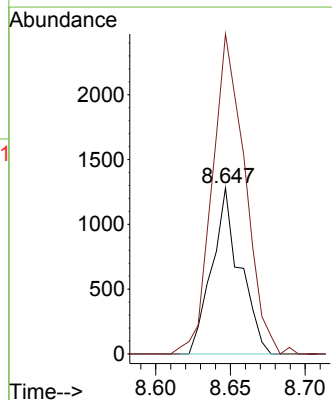
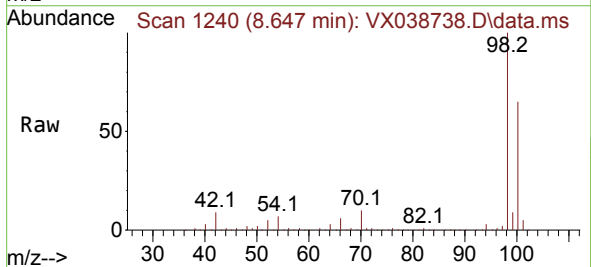
Instrument :  
MSVOA\_X  
ClientSampleId :

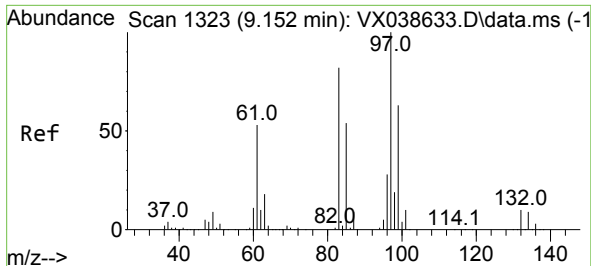
Tgt Ion: 98 Resp: 512727  
Ion Ratio Lower Upper  
98 100  
100 65.3 53.1 79.7



#51  
4-Methyl-2-Pentanone  
Concen: 0.425 ug/l  
RT: 8.647 min Scan# 1240  
Delta R.T. 0.073 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

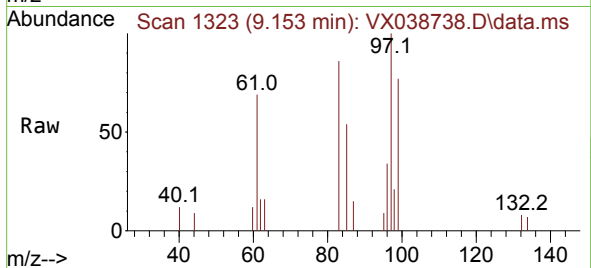
Tgt Ion: 43 Resp: 1679  
Ion Ratio Lower Upper  
43 100  
58 224.2 30.4 45.6#



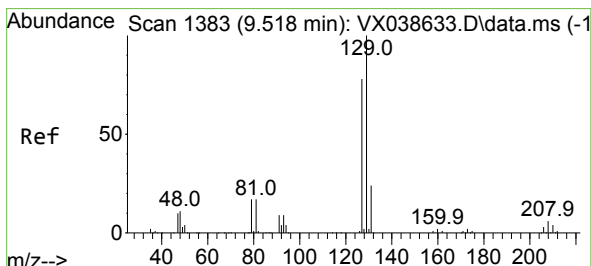
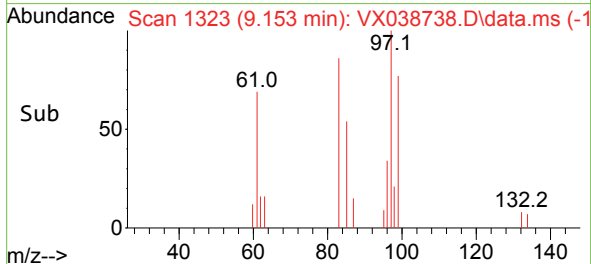
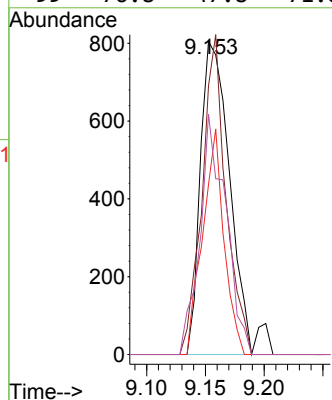


#55  
 1,1,2-Trichloroethane  
 Concen: 0.461 ug/l  
 RT: 9.153 min Scan# 11  
 Delta R.T. 0.000 min  
 Lab File: VX038738.D  
 Acq: 10 Nov 2023 18:52

Instrument :  
 MSVOA\_X  
 ClientSampleId :

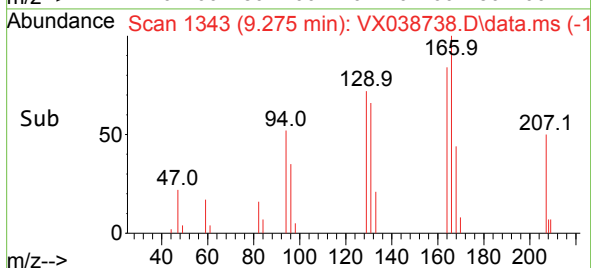
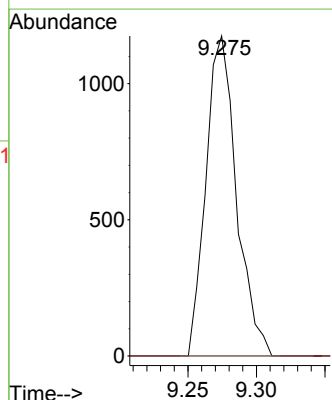
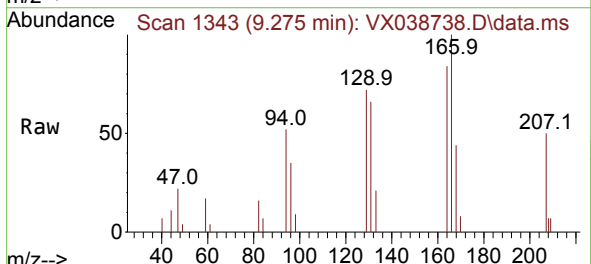


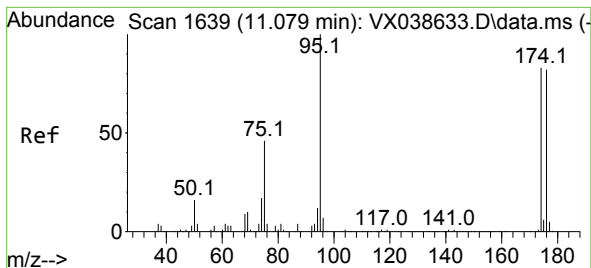
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 1426  |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 83 85.8     | 65.8 98.8   |
| 85 54.3     | 41.6 62.4   |
| 99 76.8     | 47.8 71.8#  |



#60  
 Dibromochloromethane  
 Concen: 0.525 ug/l  
 RT: 9.275 min Scan# 1343  
 Delta R.T. -0.244 min  
 Lab File: VX038738.D  
 Acq: 10 Nov 2023 18:52

|             |       |       |        |
|-------------|-------|-------|--------|
| Tgt Ion:129 | Resp: | 1822  |        |
| Ion         | Ratio | Lower | Upper  |
| 129         | 100   |       |        |
| 127         | 0.0   | 38.8  | 116.4# |





#62

4-Bromofluorobenzene

Concen: 49.837 ug/l

RT: 11.079 min Scan# 1

Delta R.T. 0.000 min

Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

Instrument :

MSVOA\_X

ClientSampleId :

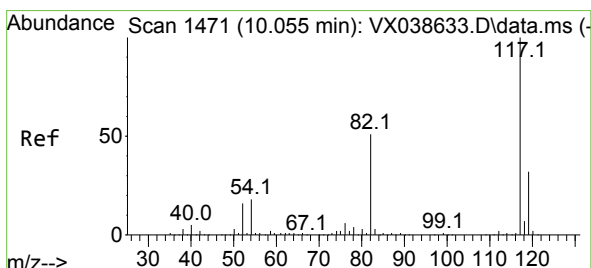
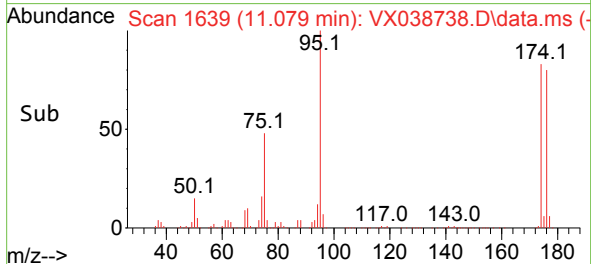
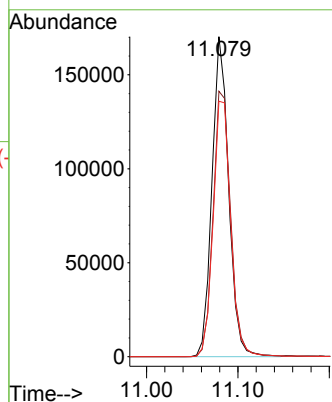
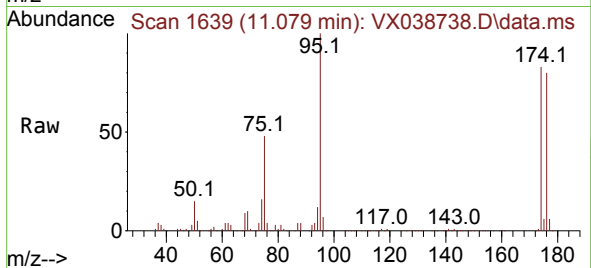
Tgt Ion: 95 Resp: 215100

Ion Ratio Lower Upper

95 100

174 87.7 0.0 135.6

176 85.1 0.0 131.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. 0.000 min

Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

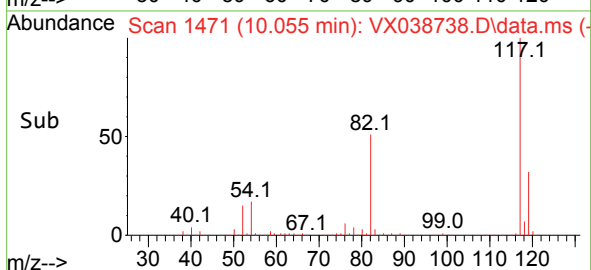
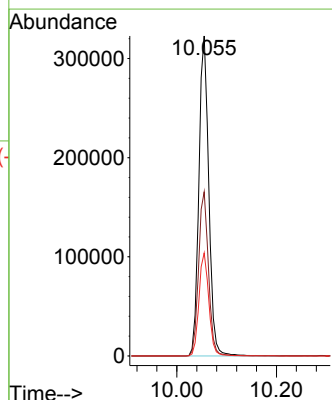
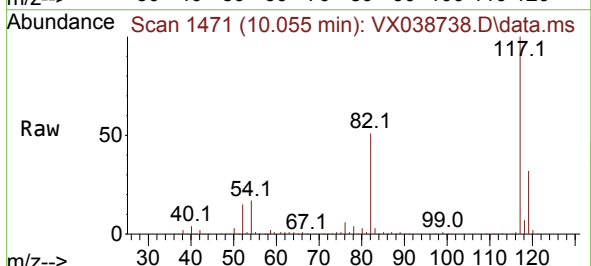
Tgt Ion: 117 Resp: 443724

Ion Ratio Lower Upper

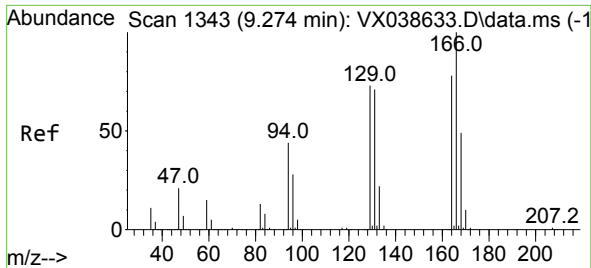
117 100

82 51.3 46.2 69.4

119 32.2 25.5 38.3

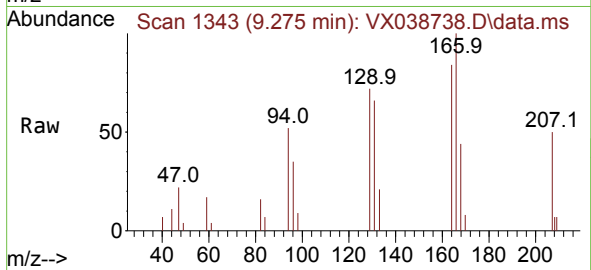




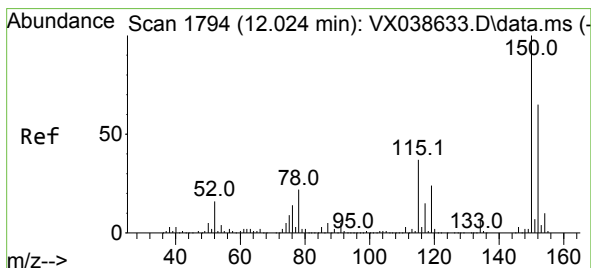
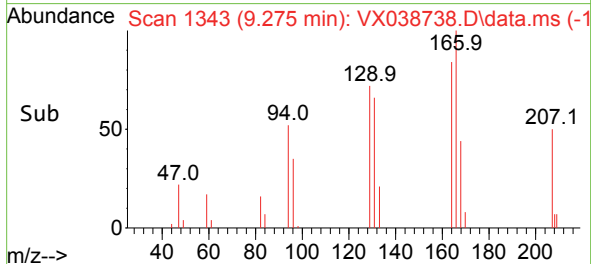
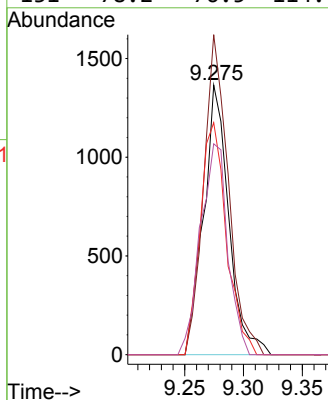


#64  
Tetrachloroethene  
Concen: 0.614 ug/l  
RT: 9.275 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

Instrument :  
MSVOA\_X  
ClientSampleId :

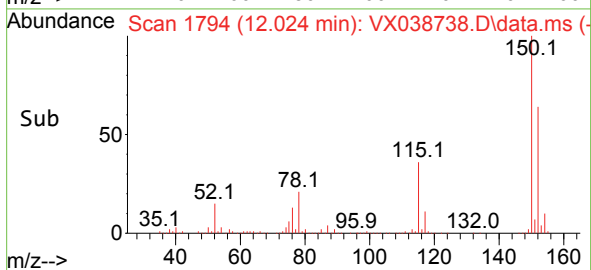
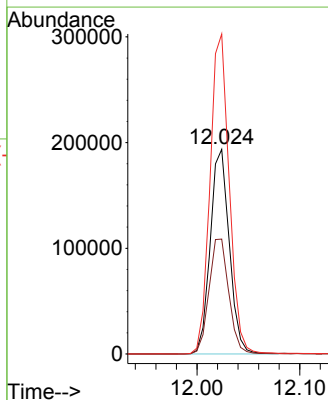
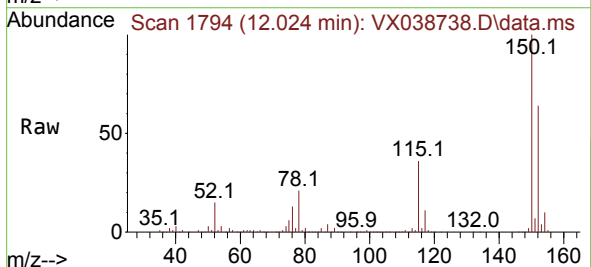


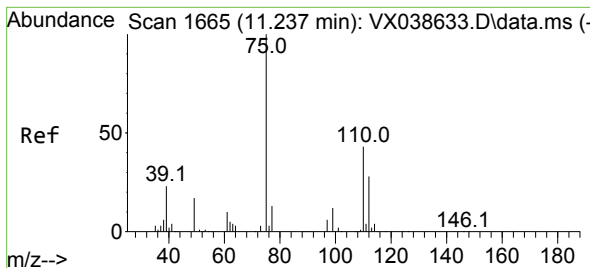
|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:164 | Resp: | 2041  |
| Ion | Ratio   | Lower | Upper |
| 164 | 100     |       |       |
| 166 | 118.7   | 102.7 | 154.1 |
| 129 | 86.0    | 80.4  | 120.6 |
| 131 | 78.2    | 76.5  | 114.7 |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.024 min Scan# 1794  
Delta R.T. 0.000 min  
Lab File: VX038738.D  
Acq: 10 Nov 2023 18:52

|             |       |        |       |
|-------------|-------|--------|-------|
| Tgt Ion:152 | Resp: | 249166 |       |
| Ion         | Ratio | Lower  | Upper |
| 152         | 100   |        |       |
| 115         | 58.7  | 43.3   | 129.9 |
| 150         | 157.6 | 0.0    | 345.0 |





#76

1,2,3-Trichloropropane

Concen: 21.005 ug/l

RT: 11.079 min Scan# 1

Delta R.T. -0.158 min

Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

Instrument :

MSVOA\_X

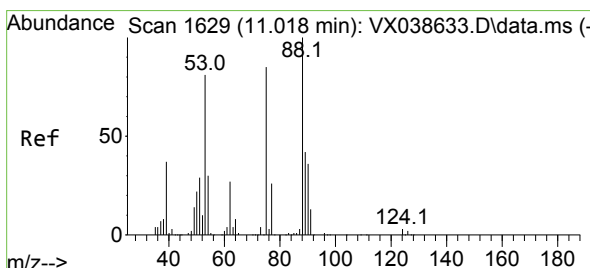
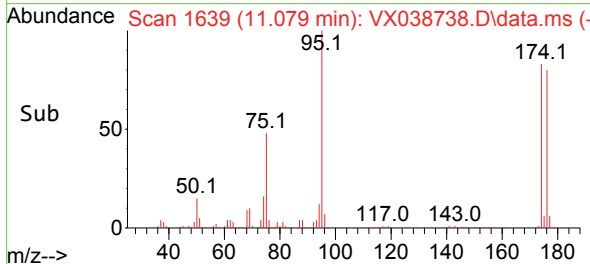
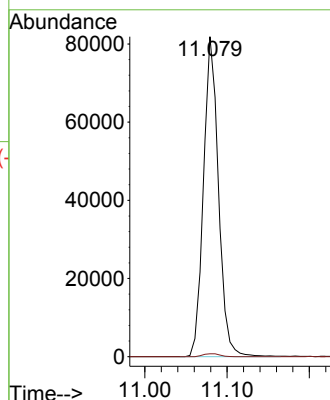
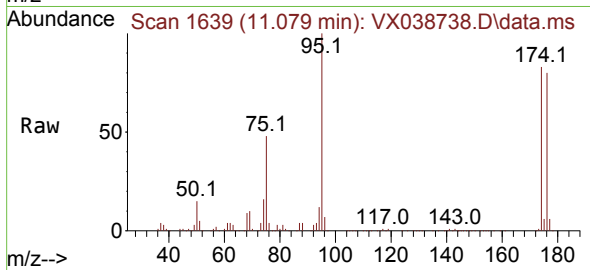
ClientSampleId :

Tgt Ion: 75 Resp: 103654

Ion Ratio Lower Upper

75 100

77 1.0 19.1 57.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 63.847 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. 0.061 min

Lab File: VX038738.D

Acq: 10 Nov 2023 18:52

Tgt Ion: 75 Resp: 103654

Ion Ratio Lower Upper

75 100

53 0.0 90.5 135.7#

89 0.0 36.9 55.3#

