

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX071224\  
 Data File : VX042304.D  
 Acq On : 12 Jul 2024 15:49  
 Operator : JC/MD  
 Sample : PB162021ZHE#01  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB162021ZHE#01

Quant Time: Jul 15 04:33:34 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X061424W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Jun 15 04:02:59 2024  
 Response via : Initial Calibration

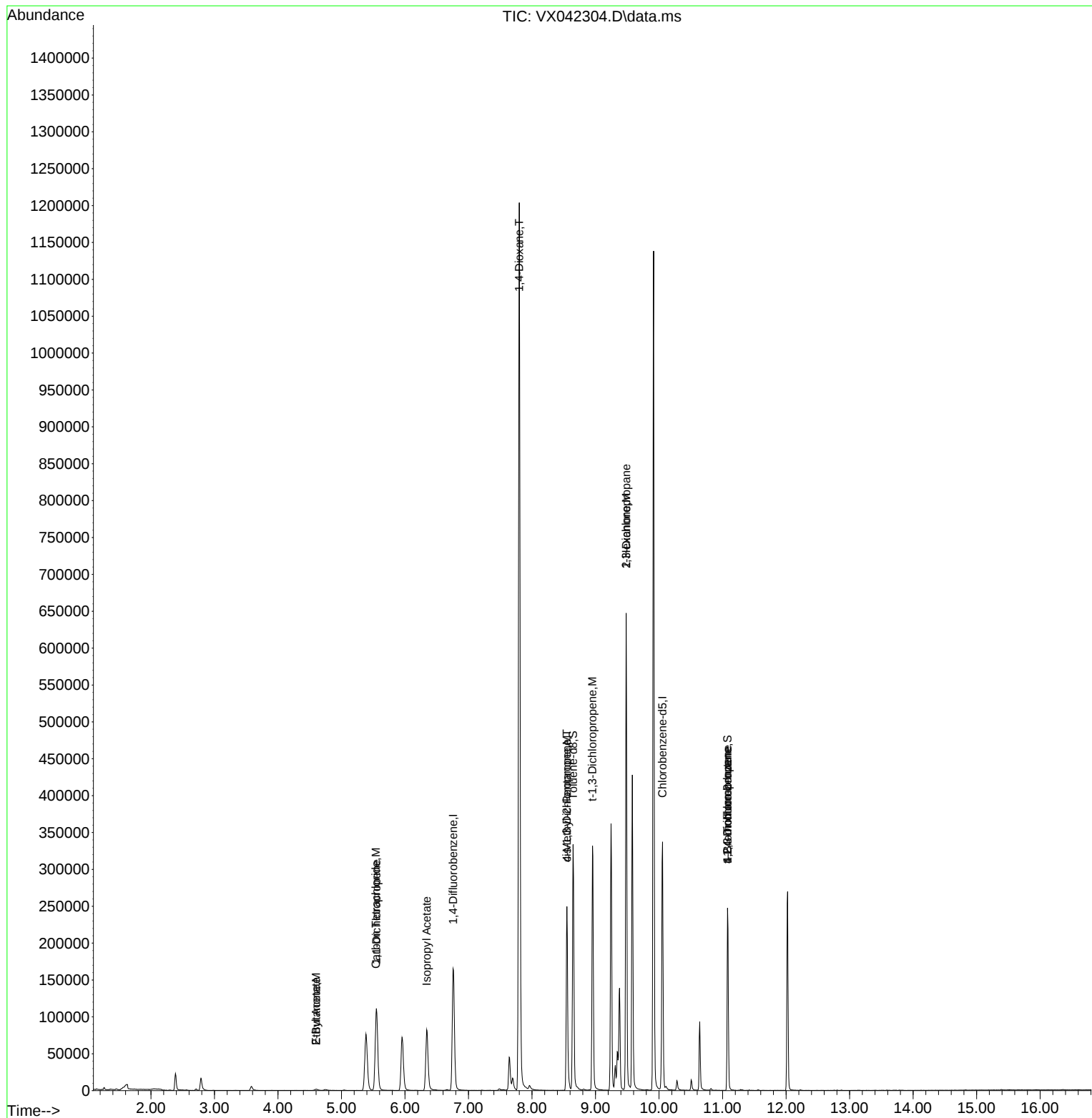
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 0.000  | 128   | 0        | 0.000    | ug/l   | -4.90    |
| 28) 1,4-Difluorobenzene     | 6.757  | 114   | 188978   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 10.055 | 117   | 162281   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 5.952  | 65    | 69514    | 0.000    | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 0.000%#  |
| 60) 4-Bromofluorobenzene    | 11.079 | 95    | 66615    | 26.519   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 88.400%  |
| 63) Toluene-d8              | 8.647  | 98    | 203744   | 29.345   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 97.833%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 29) 1,1-Dichloropropene     | 5.550  | 75    | 7108     | 2.882    | ug/l # | 42       |
| 30) 2-Butanone              | 4.599  | 43    | 818      | 0.496    | ug/l   | 94       |
| 33) Carbon Tetrachloride    | 5.544  | 117   | 10531    | 3.905    | ug/l # | 17       |
| 43) Ethyl Acetate           | 4.599  | 43    | 818      | 0.265    | ug/l   | 98       |
| 44) Isopropyl Acetate       | 6.342  | 43    | 112998   | 24.415   | ug/l   | 99       |
| 45) 1,4-Dioxane             | 7.799  | 88    | 201      | 3.563    | ug/l # | 1        |
| 48) t-1,3-Dichloropropene   | 8.951  | 75    | 819      | 0.307    | ug/l # | 43       |
| 49) cis-1,3-Dichloropropene | 8.549  | 75    | 44834    | 14.966   | ug/l # | 58       |
| 52) 1,3-Dichloropropane     | 9.482  | 76    | 5803     | 1.686    | ug/l # | 42       |
| 58) 4-Methyl-2-Pentanone    | 8.549  | 43    | 81622    | 28.069   | ug/l # | 49       |
| 59) 2-Hexanone              | 9.482  | 43    | 71069    | 31.664   | ug/l # | 1        |
| 72) 1,2,3-Trichloropropane  | 11.079 | 75    | 29917    | 11.789   | ug/l   | 38       |
| 77) t-1,4-Dichloro-2-butene | 11.079 | 75    | 29917    | 31.869   | ug/l # | 7        |
| -----                       |        |       |          |          |        |          |

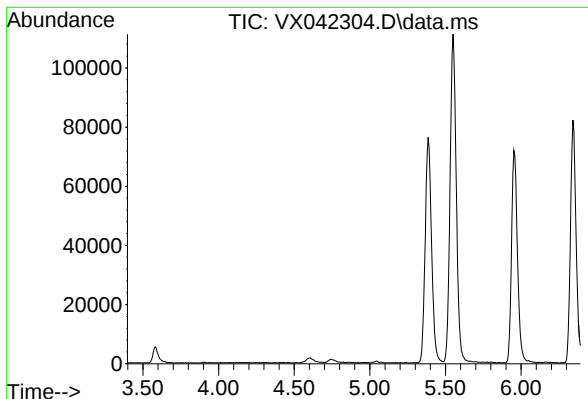
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX071224\  
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Sample : PB162021ZHE#01  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
PB162021ZHE#01

Quant Time: Jul 15 04:33:34 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X061424W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Jun 15 04:02:59 2024  
Response via : Initial Calibration

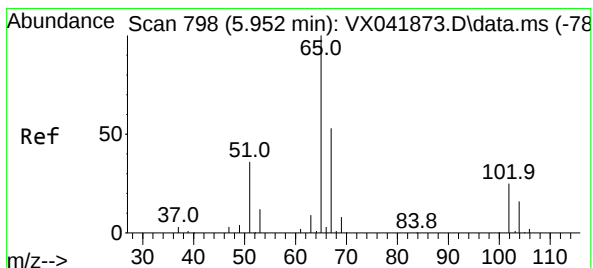
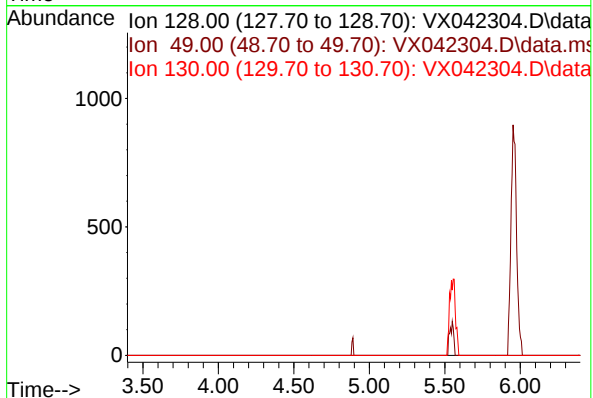




#1  
 Bromochloromethane  
 Concen: 0.000 ug/l  
 Expected RT: 4.90 min  
 Lab File: VX042304.D  
 Acq: 12 Jul 2024 15:49

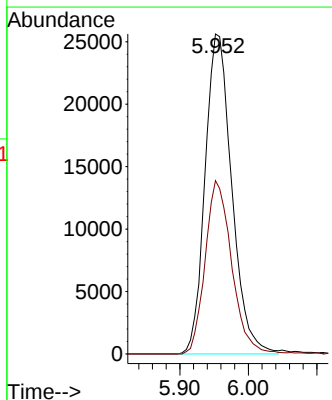
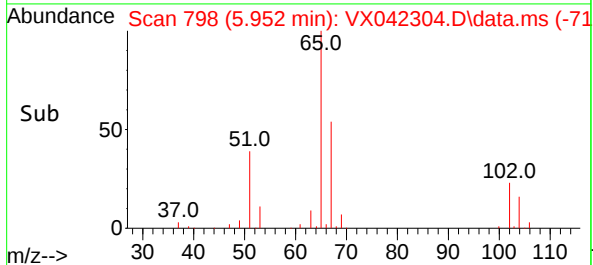
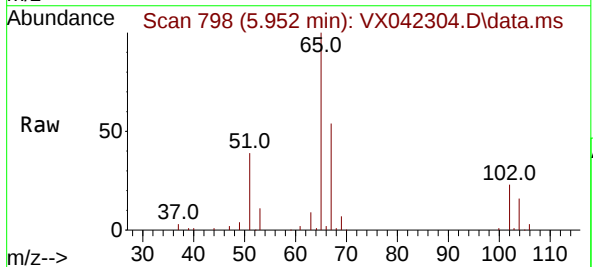
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
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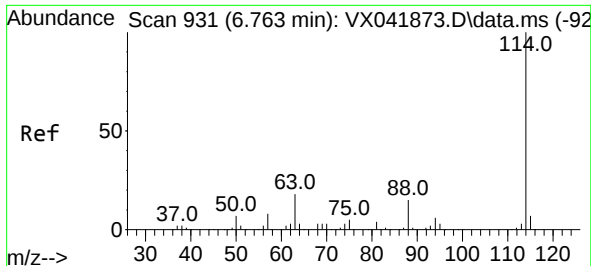
Tgt Ion: 128  
 Sig Exp Ratio  
 128 100  
 49 135.4  
 130 129.8



#27  
 1,2-Dichloroethane-d4  
 Concen: 0.000 ug/l  
 RT: 5.952 min Scan# 798  
 Delta R.T. -0.000 min  
 Lab File: VX042304.D  
 Acq: 12 Jul 2024 15:49

Tgt Ion: 65 Resp: 69514  
 Ion Ratio Lower Upper  
 65 100  
 67 53.6 43.4 65.0

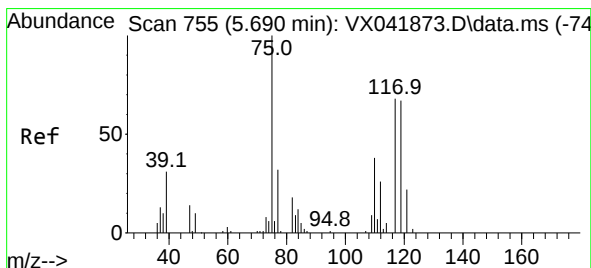
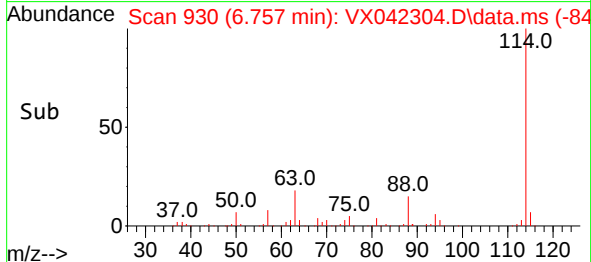
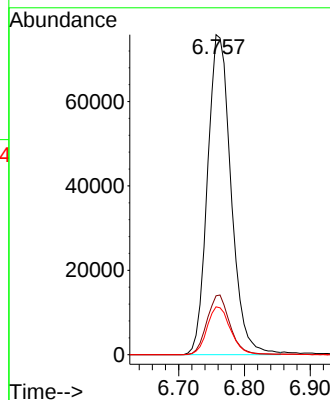
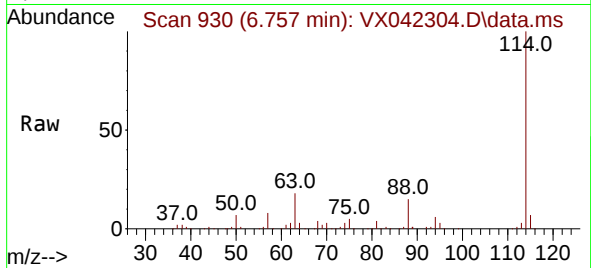




#28  
1,4-Difluorobenzene  
Concen: 30.000 ug/l  
RT: 6.757 min Scan# 91  
Delta R.T. -0.006 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

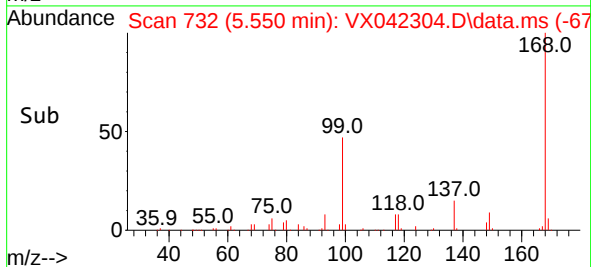
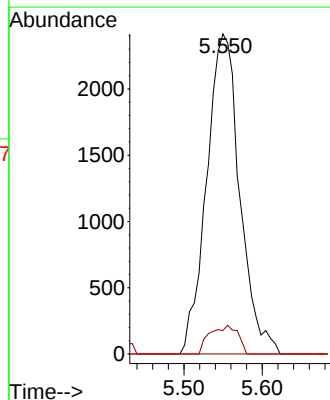
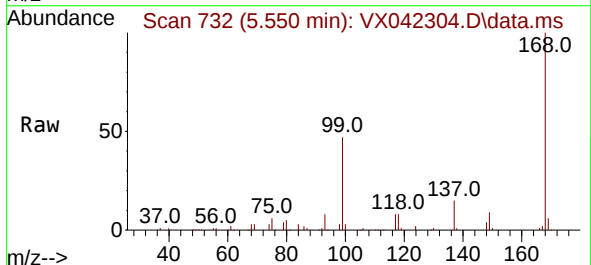
Instrument :  
MSVOA\_X  
ClientSampleId :  
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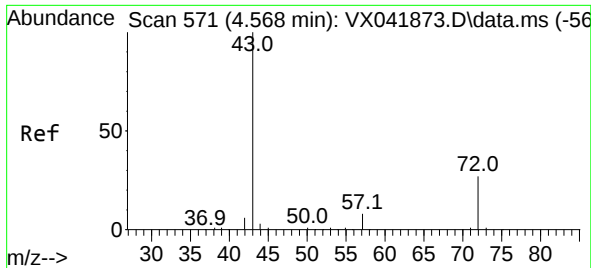
Tgt Ion:114 Resp: 188978  
Ion Ratio Lower Upper  
114 100  
63 18.1 14.6 21.8  
88 14.8 11.8 17.8



#29  
1,1-Dichloropropene  
Concen: 2.882 ug/l  
RT: 5.550 min Scan# 732  
Delta R.T. -0.140 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 75 Resp: 7108  
Ion Ratio Lower Upper  
75 100  
110 4.1 0.0 80.2  
77 0.0 0.0 65.2

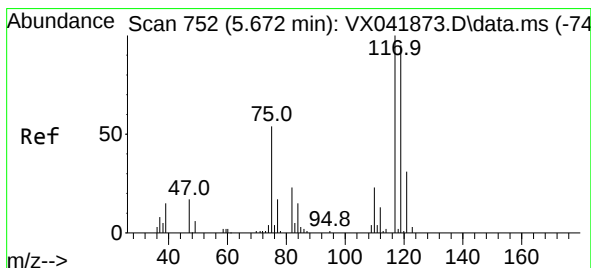
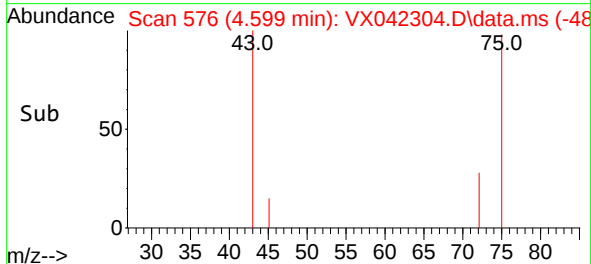
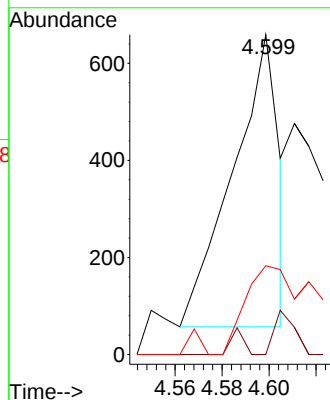
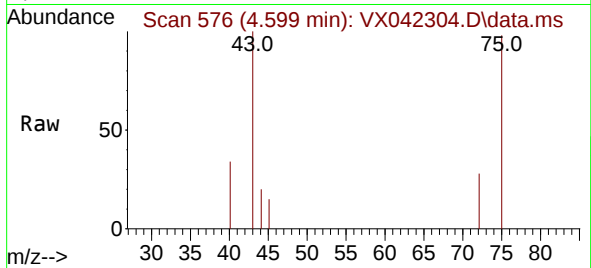




#30  
2-Butanone  
Concen: 0.496 ug/l  
RT: 4.599 min Scan# 51  
Delta R.T. 0.030 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

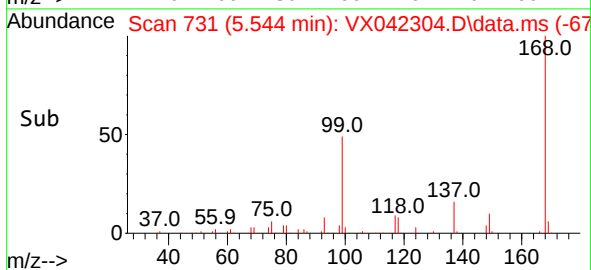
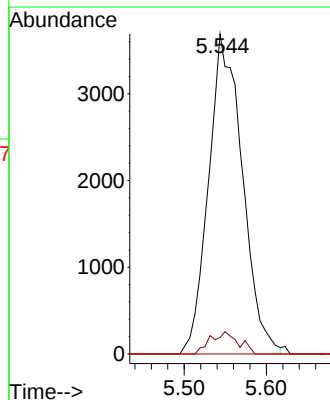
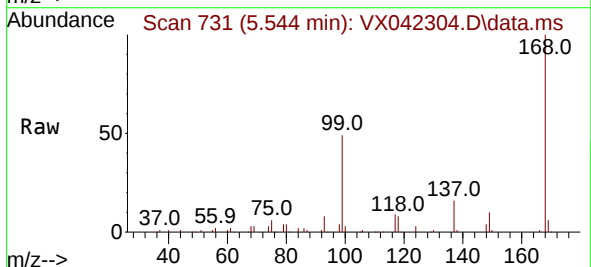
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB162021ZHE#01

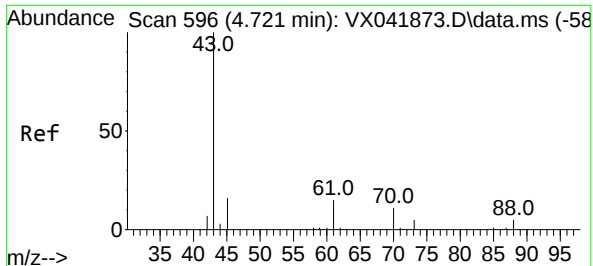
Tgt Ion: 43 Resp: 818  
Ion Ratio Lower Upper  
43 100  
57 6.6 6.5 9.7  
72 30.8 22.0 33.0



#33  
Carbon Tetrachloride  
Concen: 3.905 ug/l  
RT: 5.544 min Scan# 731  
Delta R.T. -0.128 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 117 Resp: 10531  
Ion Ratio Lower Upper  
117 100  
119 5.1 75.7 113.5#  
121 0.0 24.9 37.3#





#43

Ethyl Acetate

Concen: 0.265 ug/l

RT: 4.599 min Scan# 51

Delta R.T. -0.122 min

Lab File: VX042304.D

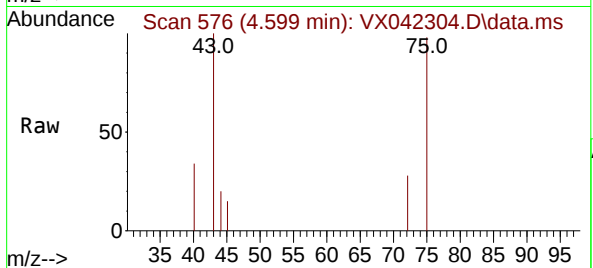
Acq: 12 Jul 2024 15:49

Instrument :

MSVOA\_X

ClientSampleId :

PB162021ZHE#01

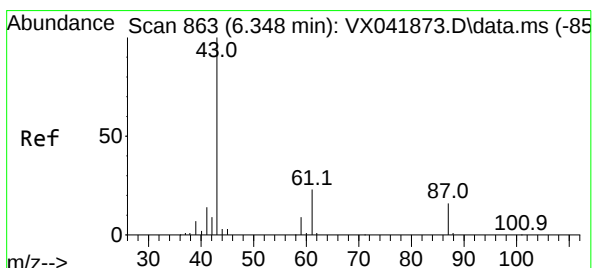
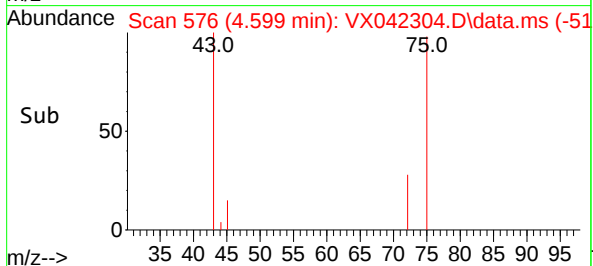
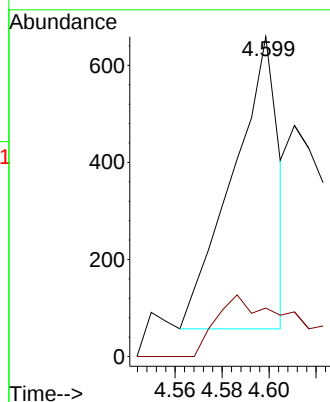


Tgt Ion: 43 Resp: 818

Ion Ratio Lower Upper

43 100

45 16.5 12.4 18.6



#44

Isopropyl Acetate

Concen: 24.415 ug/l

RT: 6.342 min Scan# 862

Delta R.T. -0.006 min

Lab File: VX042304.D

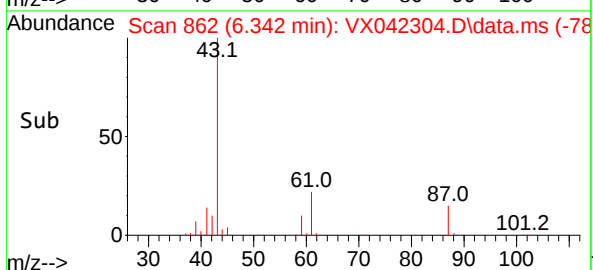
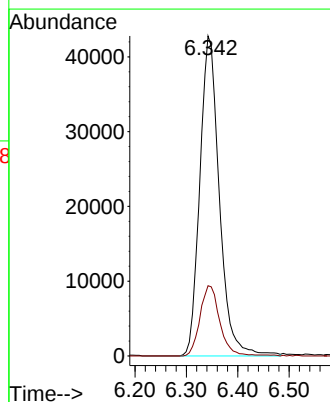
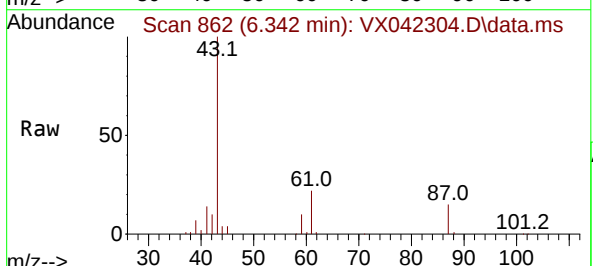
Acq: 12 Jul 2024 15:49

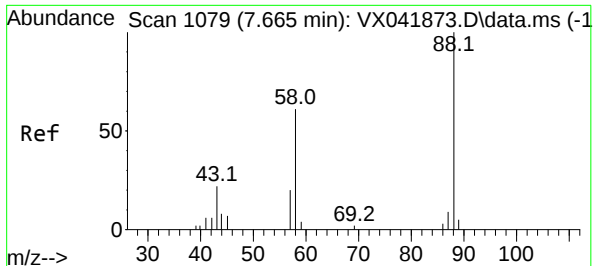
Tgt Ion: 43 Resp: 112998

Ion Ratio Lower Upper

43 100

61 22.0 17.4 26.0

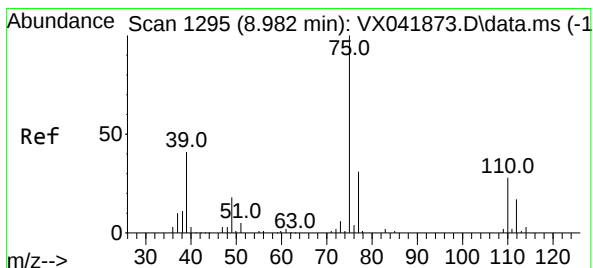
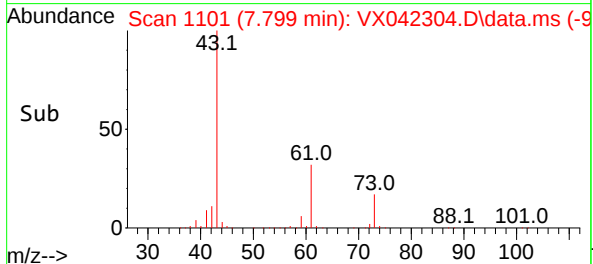
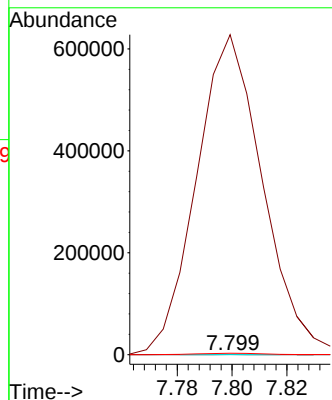
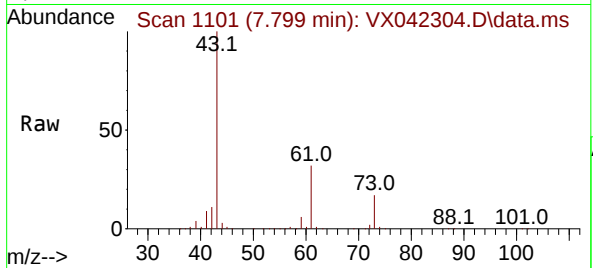




#45  
1,4-Dioxane  
Concen: 3.563 ug/l  
RT: 7.799 min Scan# 1101  
Delta R.T. 0.134 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

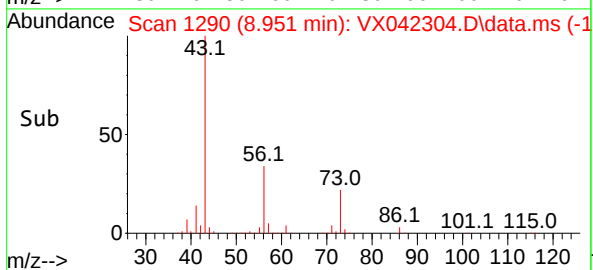
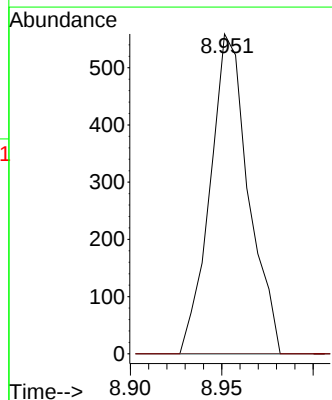
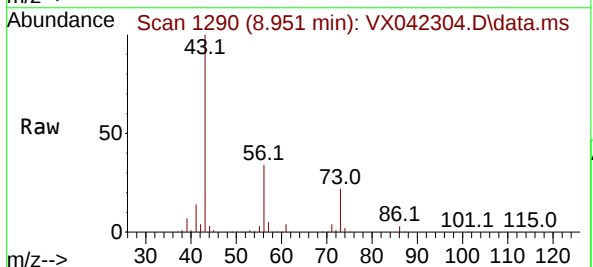
Instrument :  
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ClientSampleId :  
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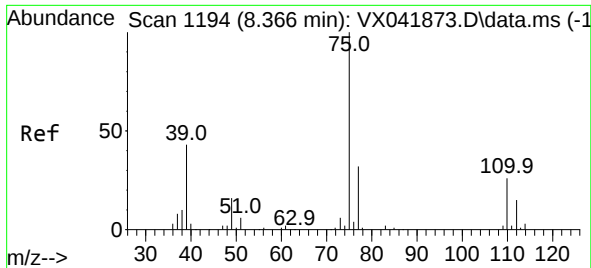
Tgt Ion: 88 Resp: 201  
Ion Ratio Lower Upper  
88 100  
43 533978.1 23.2 34.8#  
58 2456.2 52.6 78.8#



#48  
t-1,3-Dichloropropene  
Concen: 0.307 ug/l  
RT: 8.951 min Scan# 1290  
Delta R.T. -0.031 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 75 Resp: 819  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.1 37.7#





#49

cis-1,3-Dichloropropene

Concen: 14.966 ug/l

RT: 8.549 min Scan# 11

Delta R.T. 0.183 min

Lab File: VX042304.D

Acq: 12 Jul 2024 15:49

Instrument :

MSVOA\_X

ClientSampleId :

PB162021ZHE#01

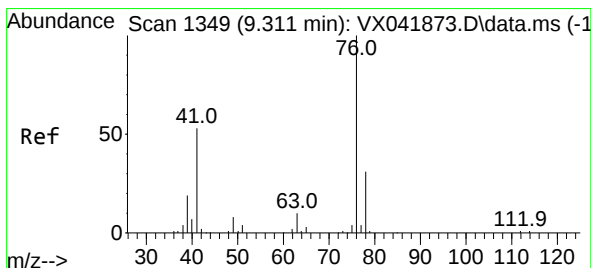
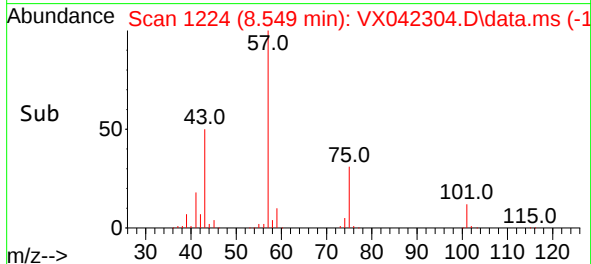
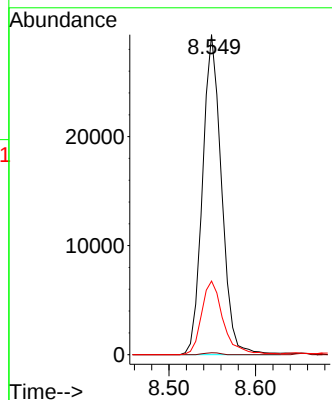
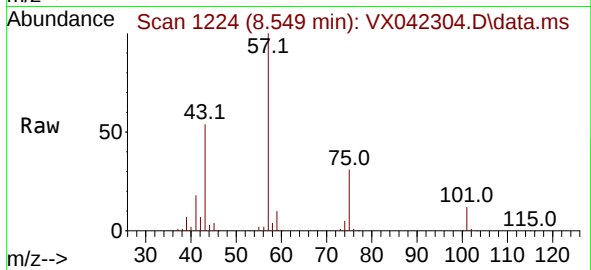
Tgt Ion: 75 Resp: 44834

Ion Ratio Lower Upper

75 100

77 0.6 25.8 38.8#

39 23.0 34.8 52.2#



#52

1,3-Dichloropropane

Concen: 1.686 ug/l

RT: 9.482 min Scan# 1377

Delta R.T. 0.171 min

Lab File: VX042304.D

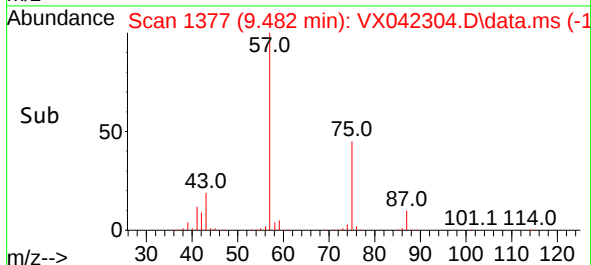
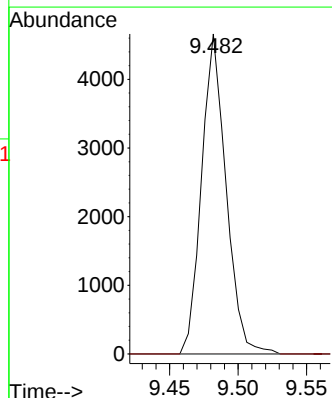
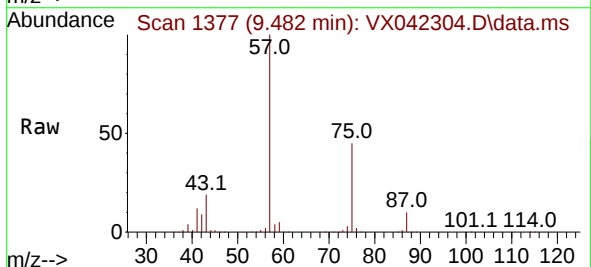
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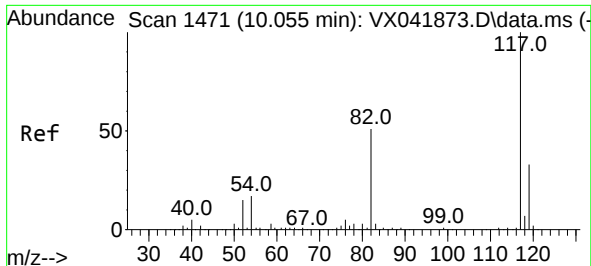
Tgt Ion: 76 Resp: 5803

Ion Ratio Lower Upper

76 100

78 0.0 0.0 66.0

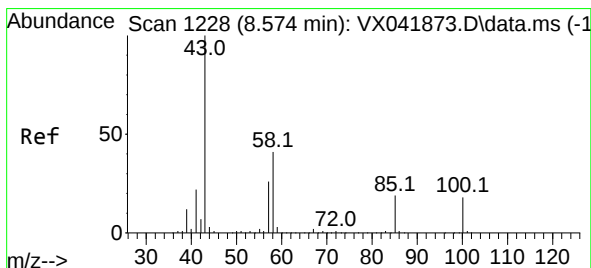
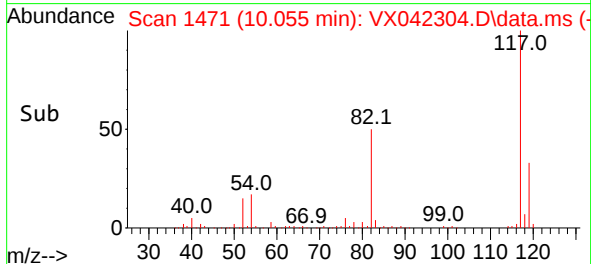
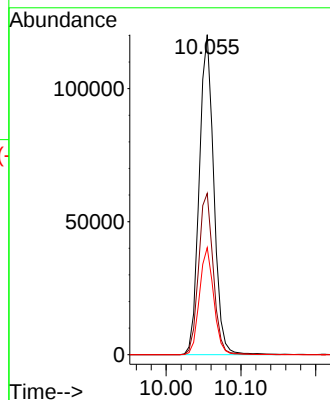
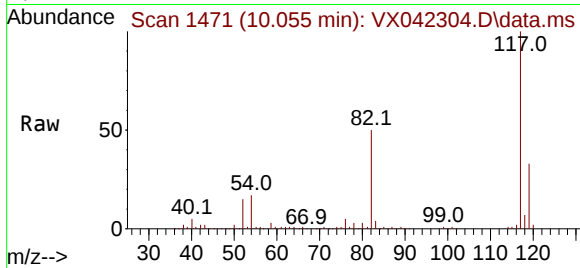




#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 10.055 min Scan# 1471  
Delta R.T. -0.000 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

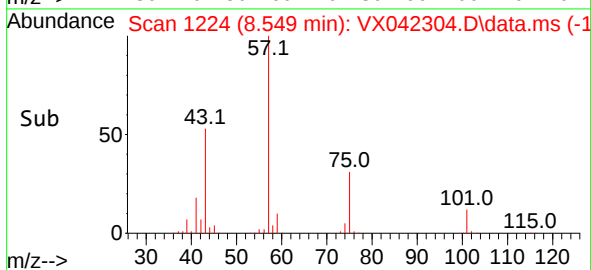
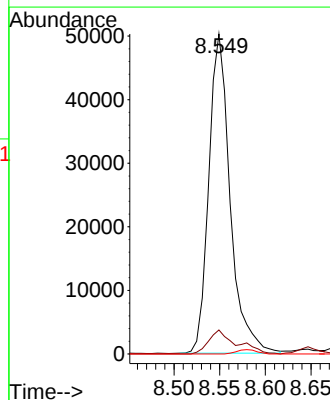
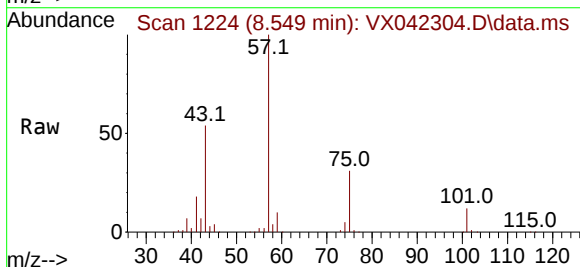
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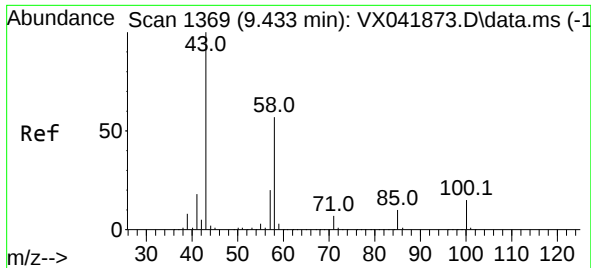
Tgt Ion:117 Resp: 162281  
Ion Ratio Lower Upper  
117 100  
82 50.7 41.1 61.7  
119 32.9 26.1 39.1



#58  
4-Methyl-2-Pentanone  
Concen: 28.069 ug/l  
RT: 8.549 min Scan# 1224  
Delta R.T. -0.024 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 43 Resp: 81622  
Ion Ratio Lower Upper  
43 100  
58 7.1 33.2 49.8#  
85 0.0 15.5 23.3#

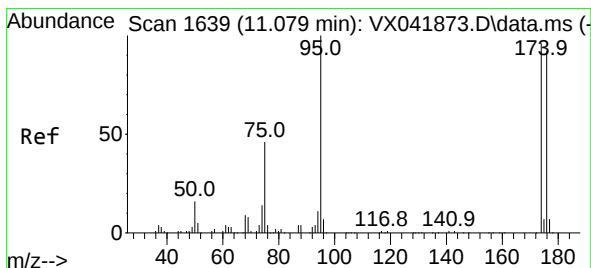
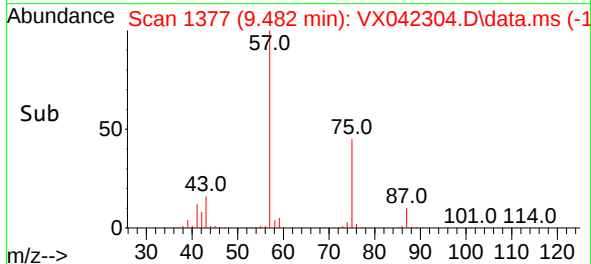
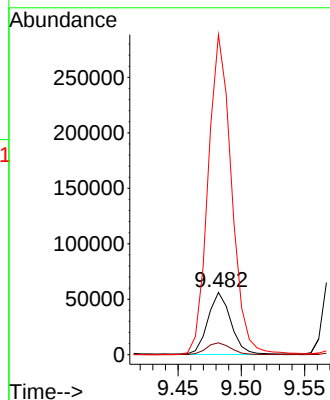
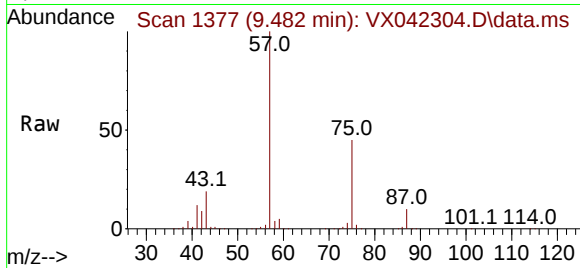




#59  
2-Hexanone  
Concen: 31.664 ug/l  
RT: 9.482 min Scan# 11  
Delta R.T. 0.049 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

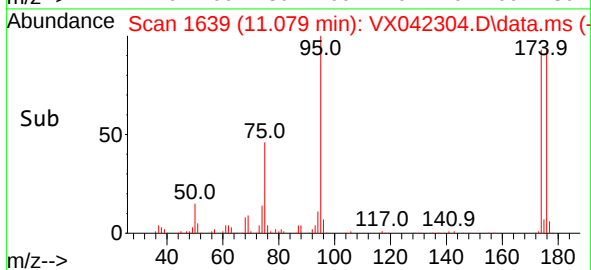
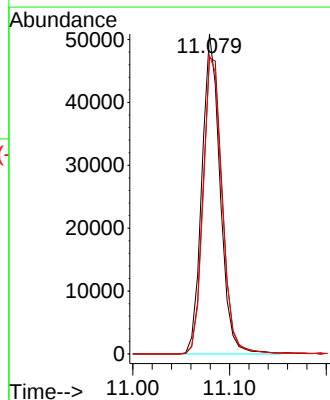
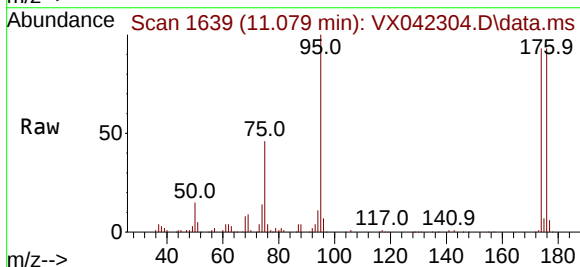
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB162021ZHE#01

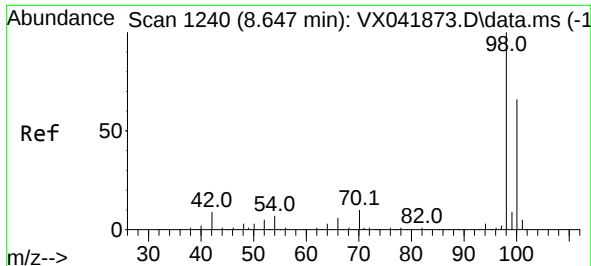
Tgt Ion: 43 Resp: 71069  
Ion Ratio Lower Upper  
43 100  
58 20.7 46.0 69.0#  
57 525.7 15.8 23.6#



#60  
4-Bromofluorobenzene  
Concen: 26.519 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.000 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 95 Resp: 66615  
Ion Ratio Lower Upper  
95 100  
174 98.5 78.9 118.3  
176 96.2 77.1 115.7

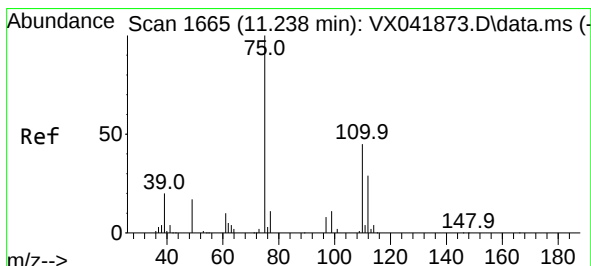
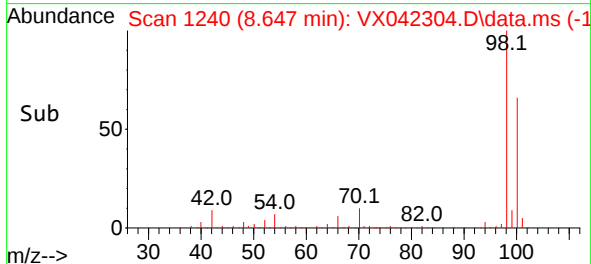
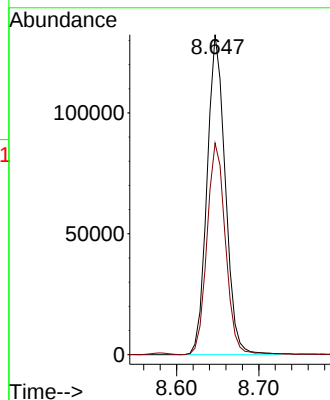
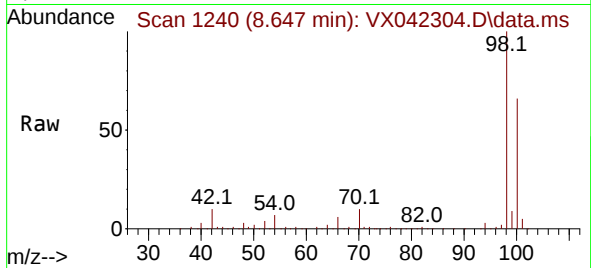




#63  
Toluene-d8  
Concen: 29.345 ug/l  
RT: 8.647 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

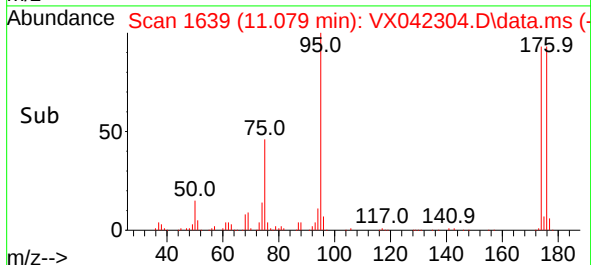
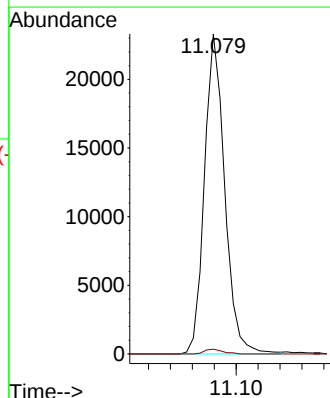
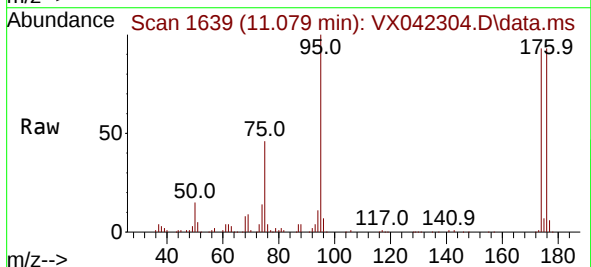
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB162021ZHE#01

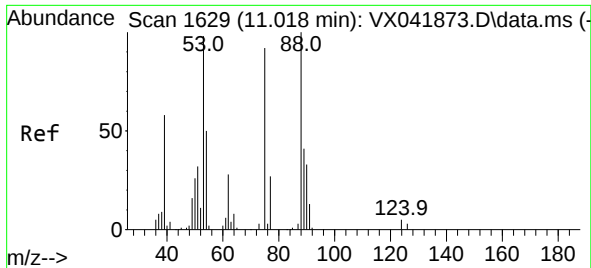
Tgt Ion: 98 Resp: 203744  
Ion Ratio Lower Upper  
98 100  
100 66.5 52.7 79.1



#72  
1,2,3-Trichloropropane  
Concen: 11.789 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.159 min  
Lab File: VX042304.D  
Acq: 12 Jul 2024 15:49

Tgt Ion: 75 Resp: 29917  
Ion Ratio Lower Upper  
75 100  
77 1.4 0.0 79.6





#77

t-1,4-Dichloro-2-butene

Concen: 31.869 ug/l

RT: 11.079 min Scan# 10

Delta R.T. 0.061 min

Lab File: VX042304.D

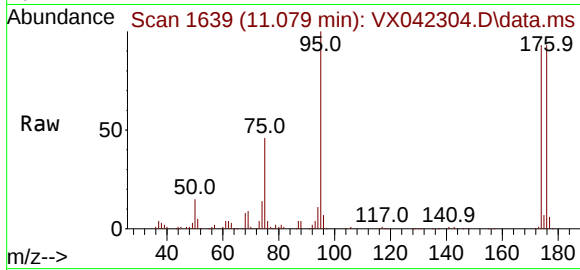
Acq: 12 Jul 2024 15:49

Instrument :

MSVOA\_X

ClientSampleId :

PB162021ZHE#01



Tgt Ion: 75 Resp: 29917

Ion Ratio Lower Upper

75 100

53 0.0 53.4 160.2#

89 0.0 22.5 67.5#

