

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX080624\  
 Data File : VX042872.D  
 Acq On : 06 Aug 2024 15:33  
 Operator : JC/MD  
 Sample : P3446-02DL 4X  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Aug 07 05:00:27 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X080624W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Aug 07 04:53:59 2024  
 Response via : Initial Calibration

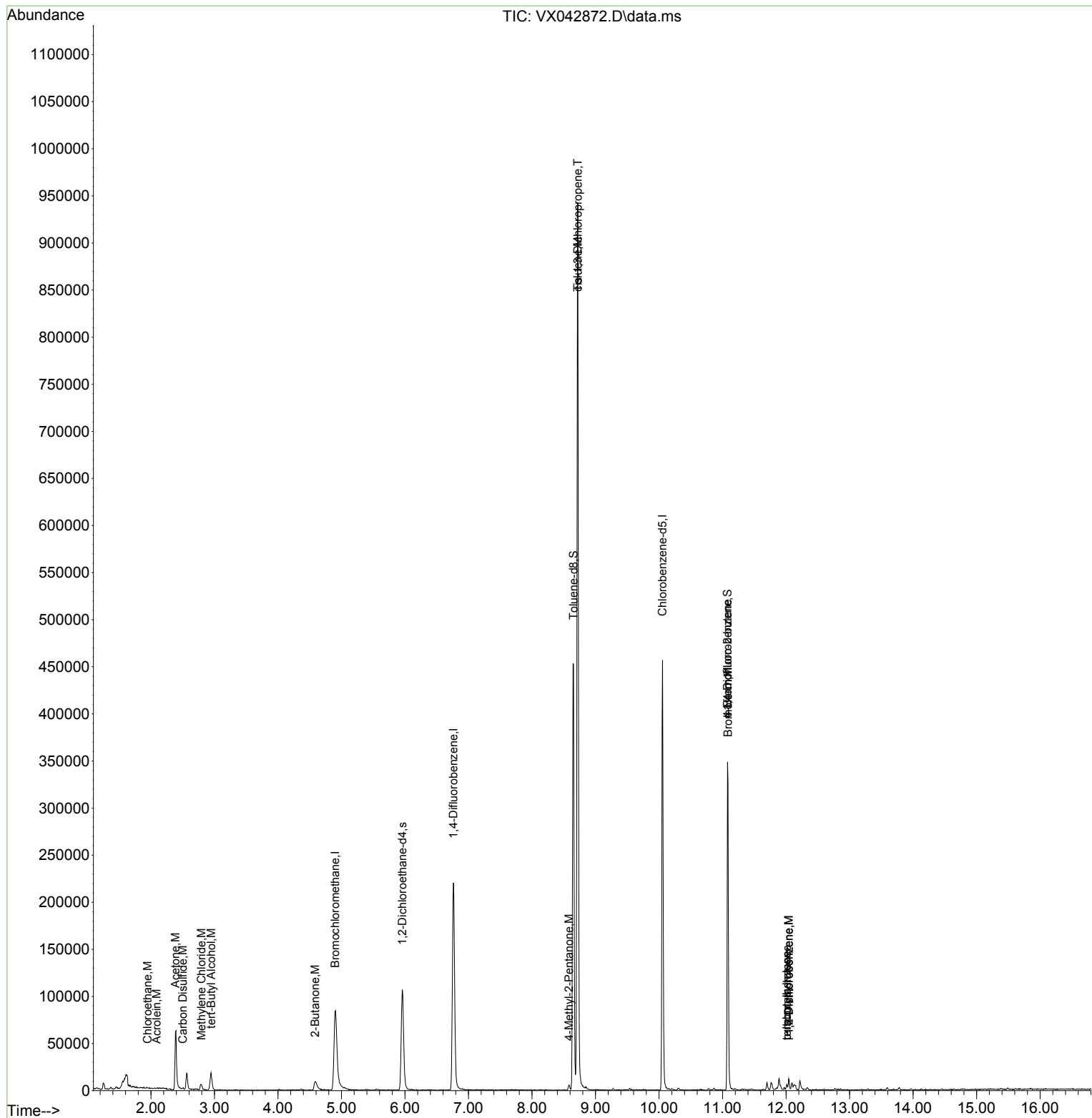
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 4.897  | 128   | 42426    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 6.763  | 114   | 235044   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 10.055 | 117   | 208281   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 5.958  | 65    | 107231   | 27.371   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 91.233%  |
| 60) 4-Bromofluorobenzene    | 11.079 | 95    | 94883    | 27.923   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 93.067%  |
| 63) Toluene-d8              | 8.653  | 98    | 292884   | 31.131   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 103.767% |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 6) Chloroethane             | 1.947  | 64    | 344      | 0.237    | ug/l   | 97       |
| 13) Acrolein                | 2.087  | 56    | 61       | 0.380    | ug/l   | 97       |
| 15) Acetone                 | 2.386  | 58    | 22899    | 41.866   | ug/l   | 83       |
| 16) Carbon Disulfide        | 2.501  | 76    | 1682     | 0.318    | ug/l # | 92       |
| 18) Methylene Chloride      | 2.794  | 84    | 3151     | 1.070    | ug/l   | 94       |
| 23) tert-Butyl Alcohol      | 2.946  | 59    | 10364    | 13.325   | ug/l # | 100      |
| 30) 2-Butanone              | 4.586  | 43    | 13615    | 6.104    | ug/l # | 81       |
| 49) cis-1,3-Dichloropropene | 8.720  | 75    | 4435     | 1.154    | ug/l # | 1        |
| 56) Bromoform               | 11.085 | 173   | 727      | 0.342    | ug/l # | 1        |
| 58) 4-Methyl-2-Pentanone    | 8.580  | 43    | 3595     | 0.917    | ug/l   | 97       |
| 62) Toluene                 | 8.720  | 91    | 625568   | 61.322   | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene | 11.079 | 75    | 49481    | 42.472   | ug/l # | 11       |
| 79) tert-butylbenzene       | 12.012 | 119   | 2310     | 0.239    | ug/l   | 69       |
| 82) p-Isopropyltoluene      | 12.012 | 119   | 2310     | 0.233    | ug/l   | 95       |
| 84) 1,4-Dichlorobenzene     | 12.042 | 146   | 1930     | 0.369    | ug/l   | 87       |
| 87) 1,2-Dichlorobenzene     | 12.042 | 146   | 1930     | 0.372    | ug/l   | 88       |
| -----                       |        |       |          |          |        |          |

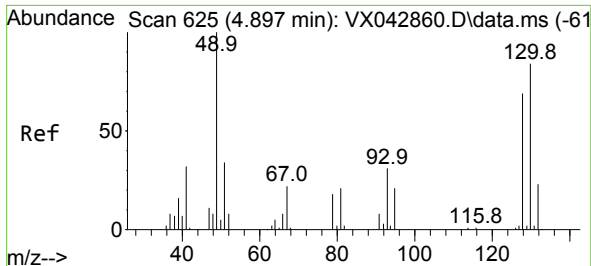
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX080624\  
Data File : VX042872.D  
Acq On : 06 Aug 2024 15:33  
Operator : JC/MD  
Sample : P3446-02DL 4X  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

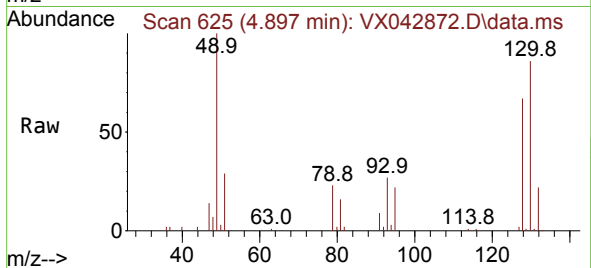
Quant Time: Aug 07 05:00:27 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X080624W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Wed Aug 07 04:53:59 2024  
Response via : Initial Calibration



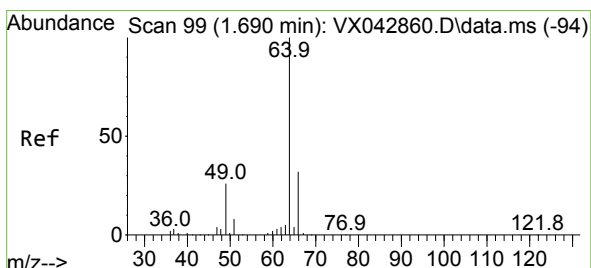
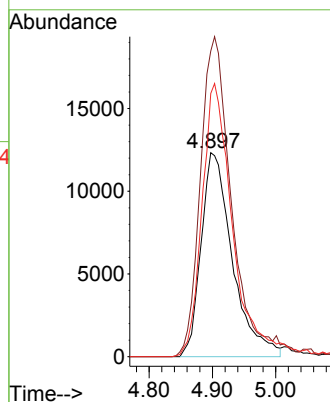
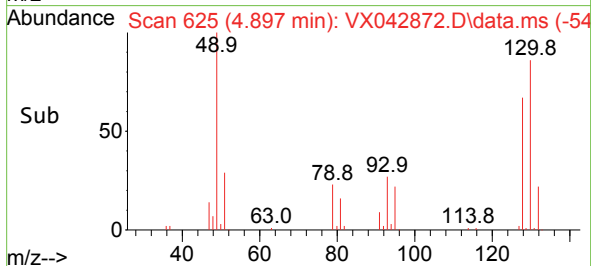


#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 4.897 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Instrument :  
MSVOA\_X  
ClientSampleId :

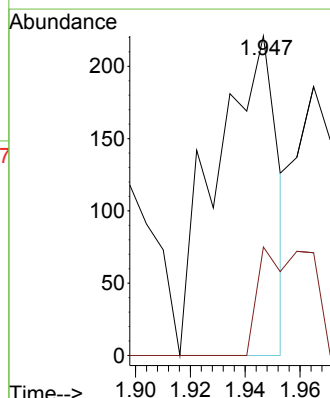
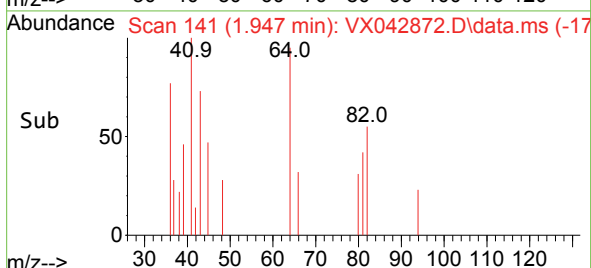
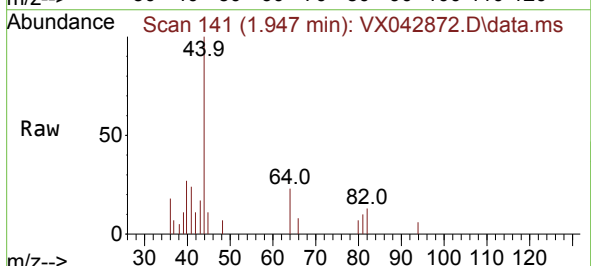


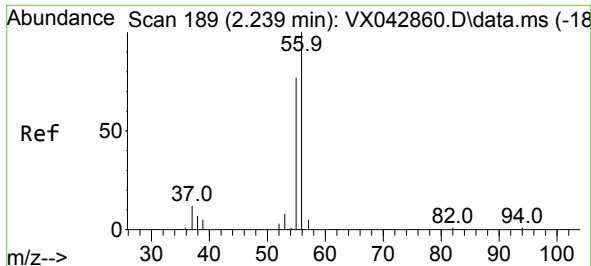
Tgt Ion:128 Resp: 42426  
Ion Ratio Lower Upper  
128 100  
49 153.7 0.0 400.5  
130 128.7 0.0 333.0



#6  
Chloroethane  
Concen: 0.237 ug/l  
RT: 1.947 min Scan# 141  
Delta R.T. 0.256 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 64 Resp: 344  
Ion Ratio Lower Upper  
64 100  
66 33.9 25.9 38.9

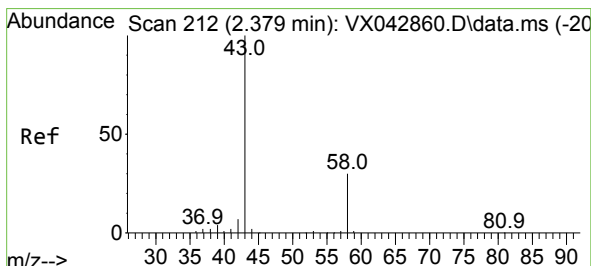
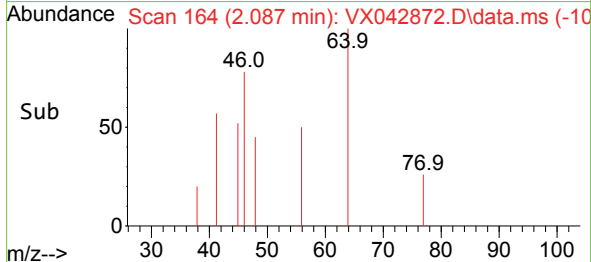
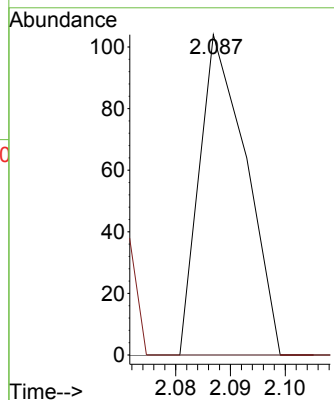
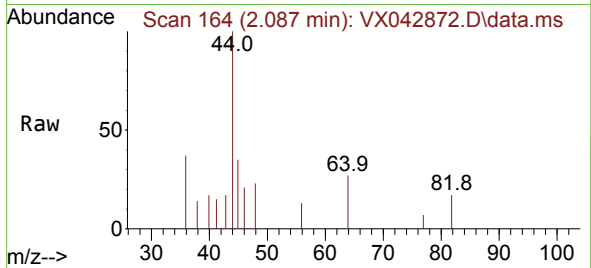




#13  
Acrolein  
Concen: 0.380 ug/l  
RT: 2.087 min Scan# 11  
Delta R.T. -0.152 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

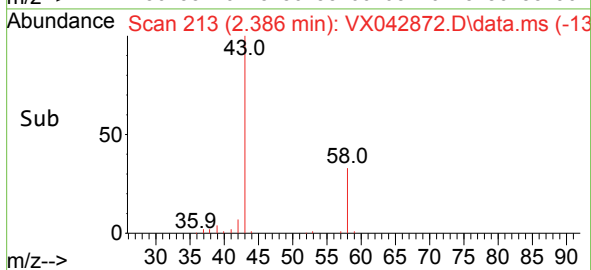
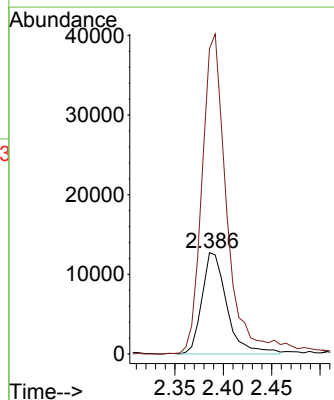
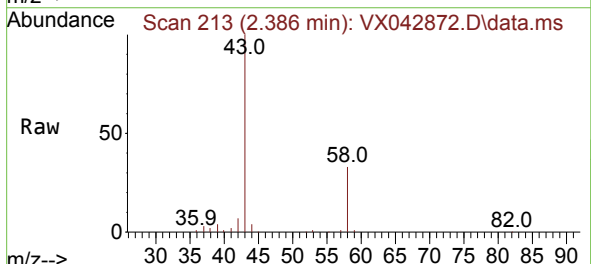
Instrument :  
MSVOA\_X  
ClientSampleId :

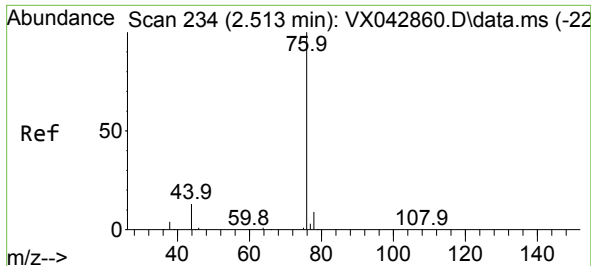
Tgt Ion: 56 Resp: 61  
Ion Ratio Lower Upper  
56 100  
55 78.7 60.6 90.8



#15  
Acetone  
Concen: 41.866 ug/l  
RT: 2.386 min Scan# 213  
Delta R.T. 0.006 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 58 Resp: 22899  
Ion Ratio Lower Upper  
58 100  
43 300.7 269.9 404.9

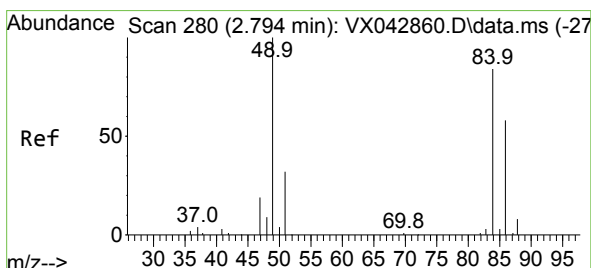
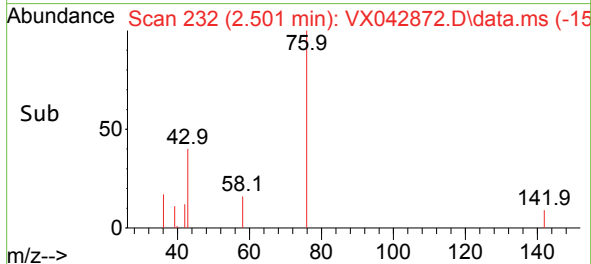
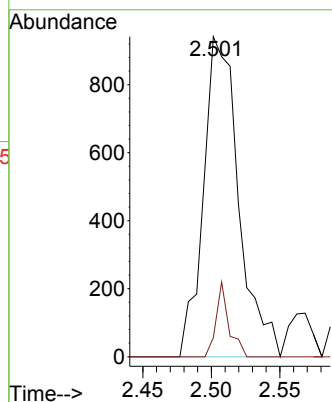
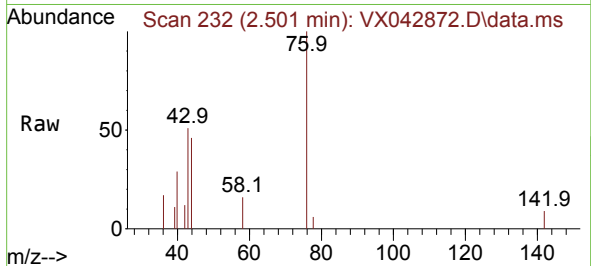




#16  
Carbon Disulfide  
Concen: 0.318 ug/l  
RT: 2.501 min Scan# 21  
Delta R.T. -0.012 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

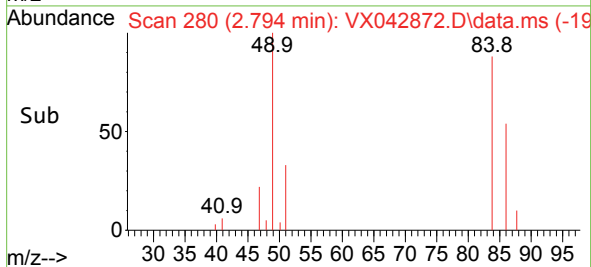
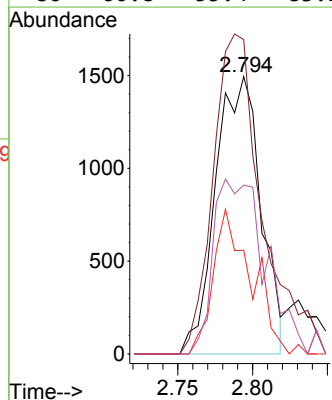
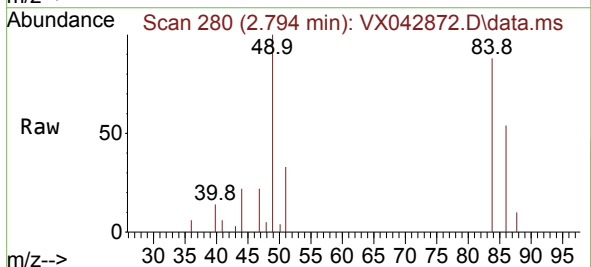
Instrument :  
MSVOA\_X  
ClientSampleId :

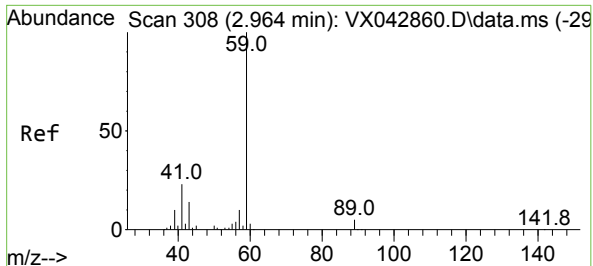
Tgt Ion: 76 Resp: 1682  
Ion Ratio Lower Upper  
76 100  
78 6.0 7.1 10.7#



#18  
Methylene Chloride  
Concen: 1.070 ug/l  
RT: 2.794 min Scan# 280  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 84 Resp: 3151  
Ion Ratio Lower Upper  
84 100  
49 113.4 95.0 142.6  
51 37.3 30.1 45.1  
86 60.8 55.4 83.2

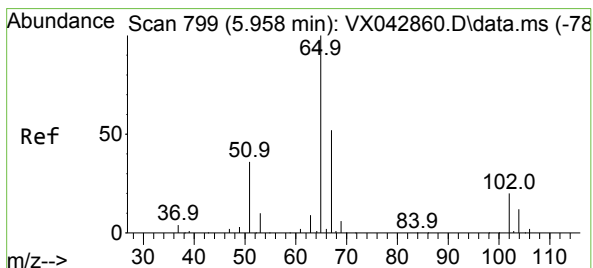
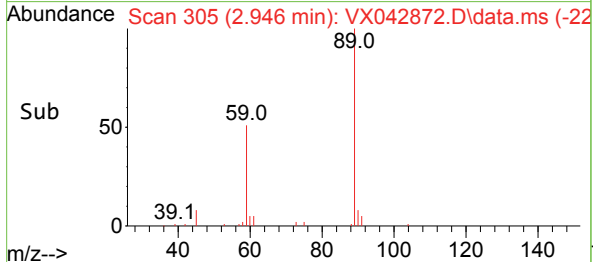
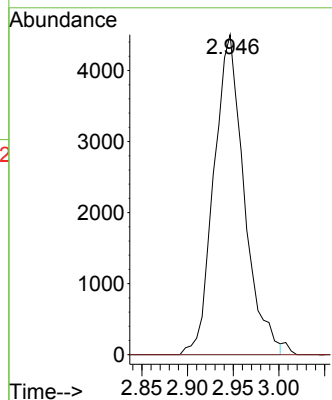
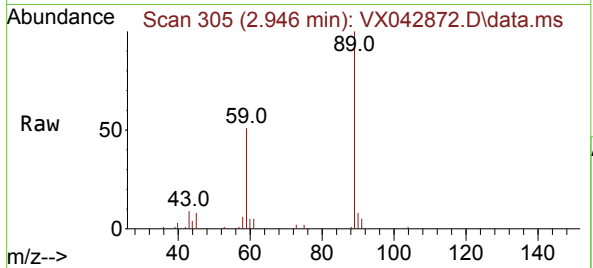




#23  
tert-Butyl Alcohol  
Concen: 13.325 ug/l  
RT: 2.946 min Scan# 308  
Delta R.T. -0.018 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

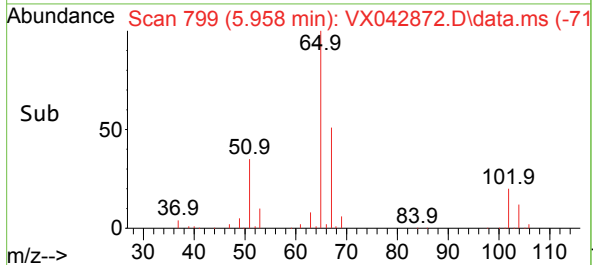
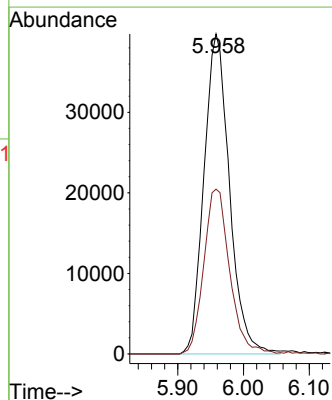
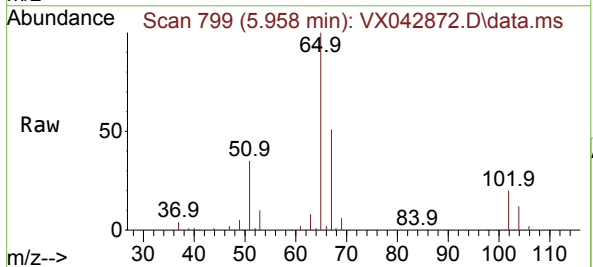
Instrument :  
MSVOA\_X  
ClientSampleId :

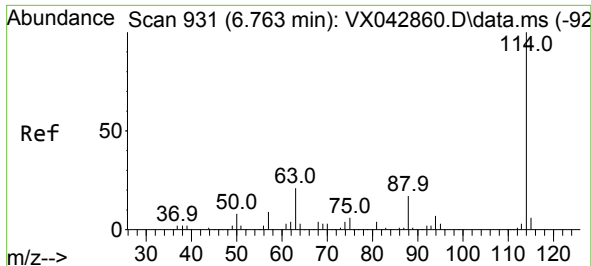
Tgt Ion: 59 Resp: 10364  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.1 0.1#



#27  
1,2-Dichloroethane-d4  
Concen: 27.371 ug/l  
RT: 5.958 min Scan# 799  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 65 Resp: 107231  
Ion Ratio Lower Upper  
65 100  
67 51.2 40.6 60.8





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.763 min Scan# 91

Delta R.T. 0.000 min

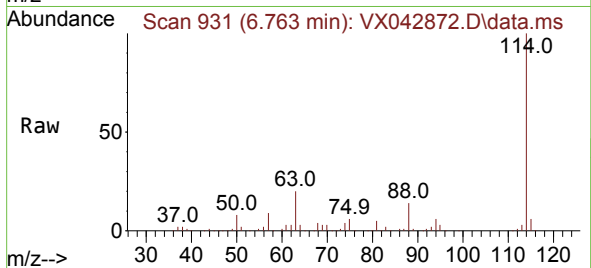
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Acq: 06 Aug 2024 15:33

Instrument :

MSVOA\_X

ClientSampleId :



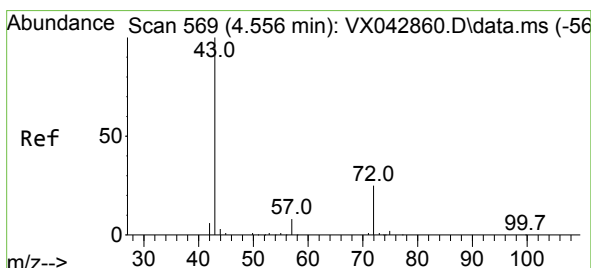
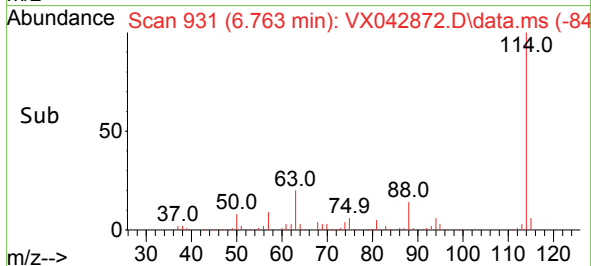
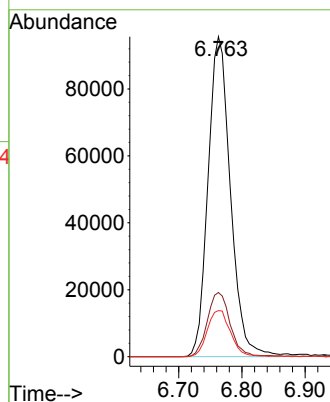
Tgt Ion:114 Resp: 235044

Ion Ratio Lower Upper

114 100

63 20.2 16.0 24.0

88 15.0 12.5 18.7



#30

2-Butanone

Concen: 6.104 ug/l

RT: 4.586 min Scan# 574

Delta R.T. 0.031 min

Lab File: VX042872.D

Acq: 06 Aug 2024 15:33

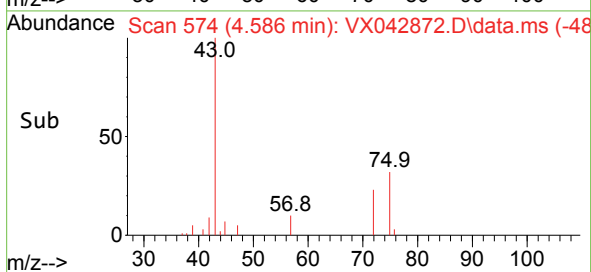
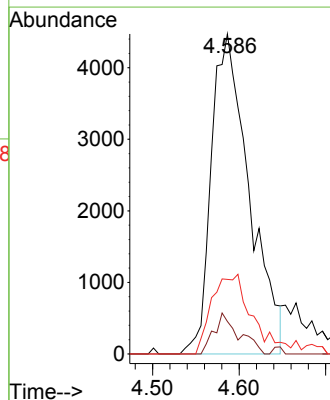
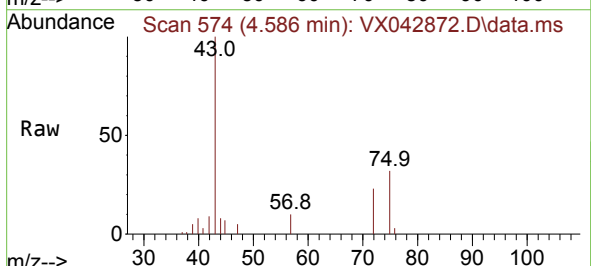
Tgt Ion: 43 Resp: 13615

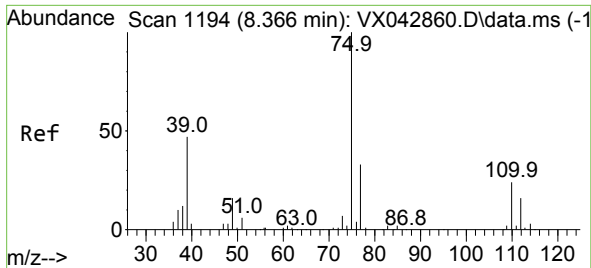
Ion Ratio Lower Upper

43 100

57 6.3 6.6 10.0#

72 14.6 21.0 31.4#

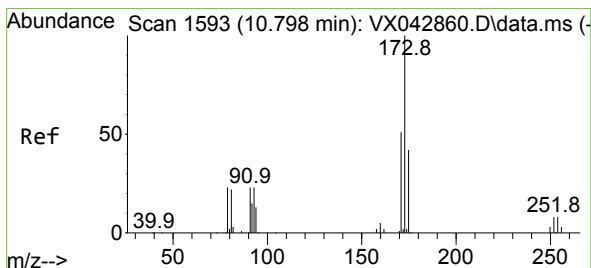
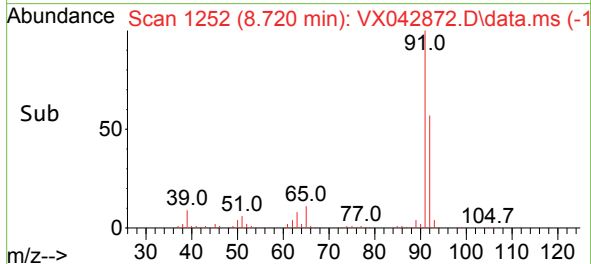
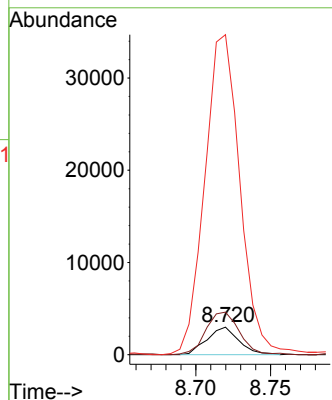
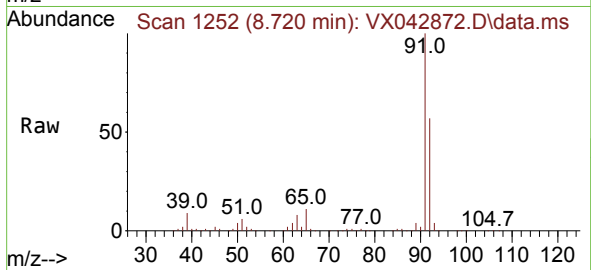




#49  
cis-1,3-Dichloropropene  
Concen: 1.154 ug/l  
RT: 8.720 min Scan# 1194  
Delta R.T. 0.354 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

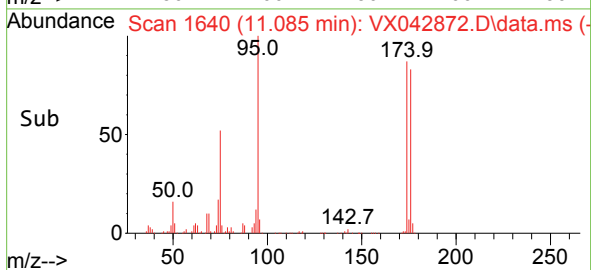
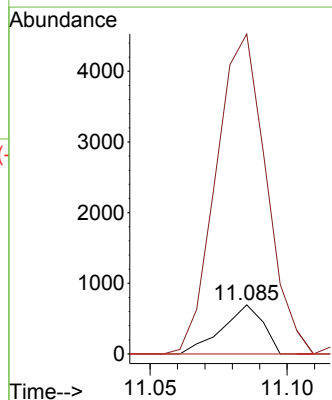
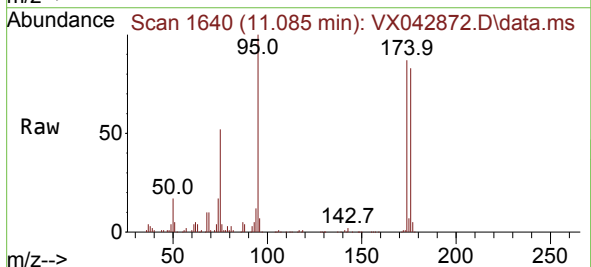
Instrument :  
MSVOA\_X  
ClientSampleId :

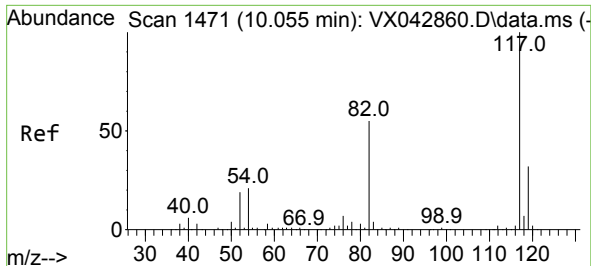
Tgt Ion: 75 Resp: 4435  
Ion Ratio Lower Upper  
75 100  
77 151.7 26.8 40.2#  
39 1141.9 37.5 56.3#



#56  
Bromoform  
Concen: 0.342 ug/l  
RT: 11.085 min Scan# 1640  
Delta R.T. 0.287 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 173 Resp: 727  
Ion Ratio Lower Upper  
173 100  
175 793.5 37.1 55.7#  
254 0.0 6.6 10.0#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. 0.000 min

Lab File: VX042872.D

Acq: 06 Aug 2024 15:33

Instrument :

MSVOA\_X

ClientSampleId :

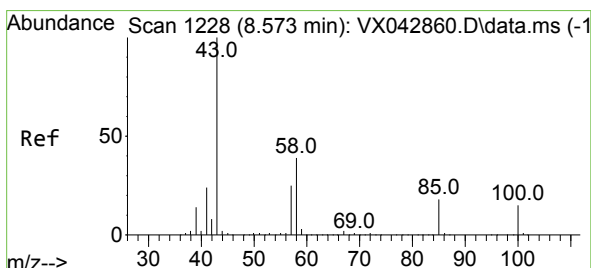
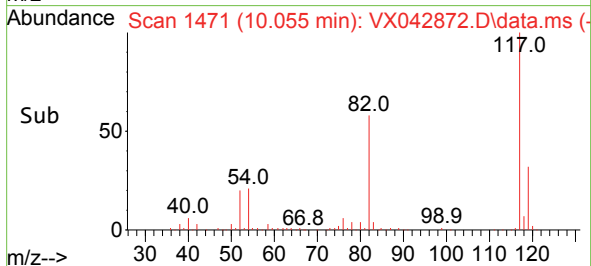
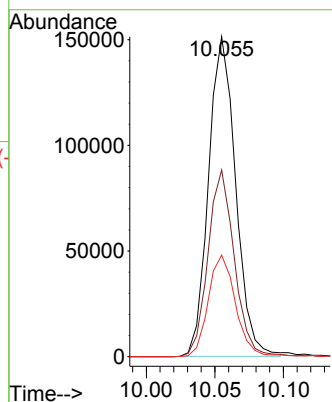
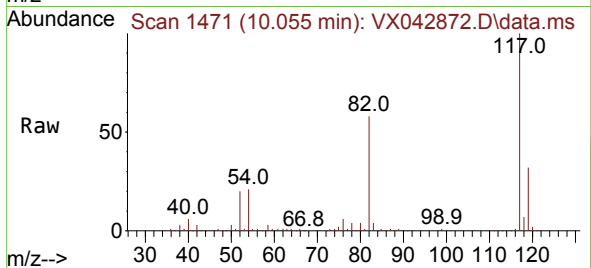
Tgt Ion:117 Resp: 208281

Ion Ratio Lower Upper

117 100

82 56.8 44.9 67.3

119 31.9 25.4 38.2



#58

4-Methyl-2-Pentanone

Concen: 0.917 ug/l

RT: 8.580 min Scan# 1229

Delta R.T. 0.006 min

Lab File: VX042872.D

Acq: 06 Aug 2024 15:33

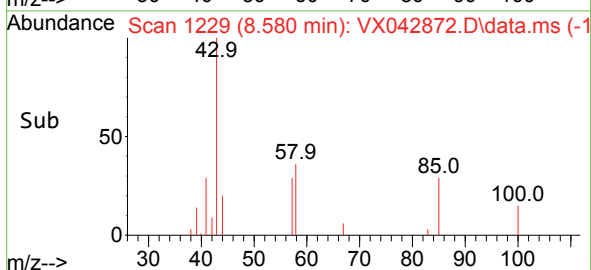
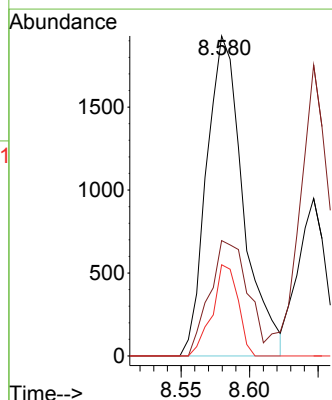
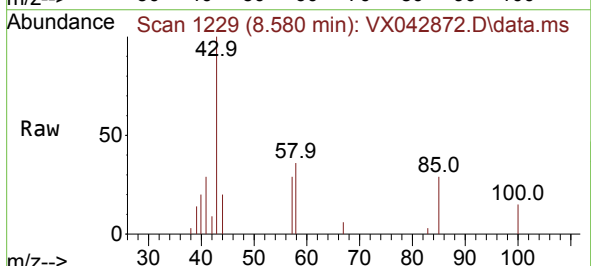
Tgt Ion: 43 Resp: 3595

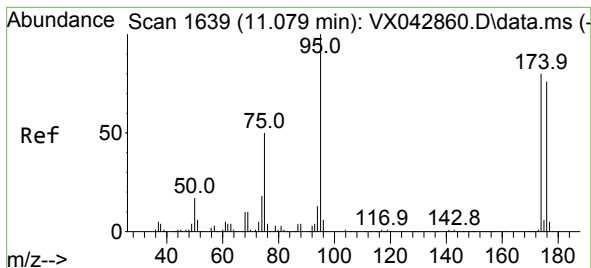
Ion Ratio Lower Upper

43 100

58 37.3 31.4 47.0

85 19.9 14.6 21.8

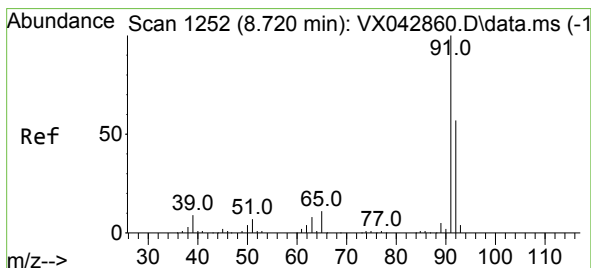
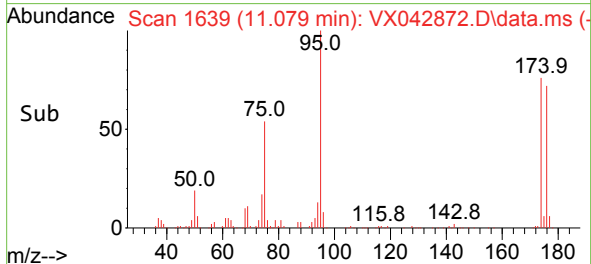
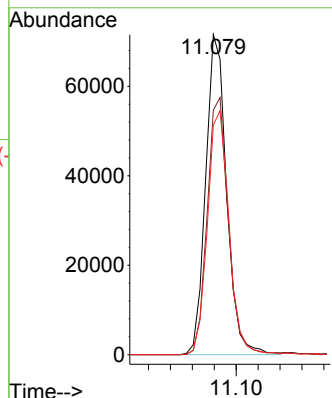
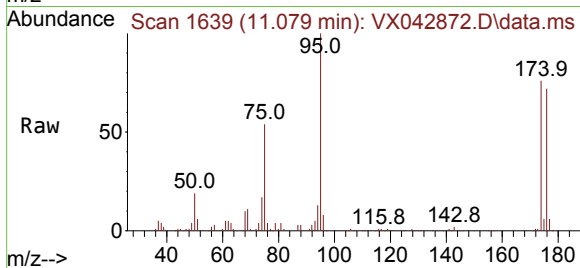




#60  
4-Bromofluorobenzene  
Concen: 27.923 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

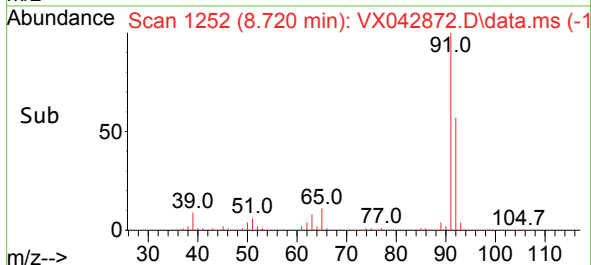
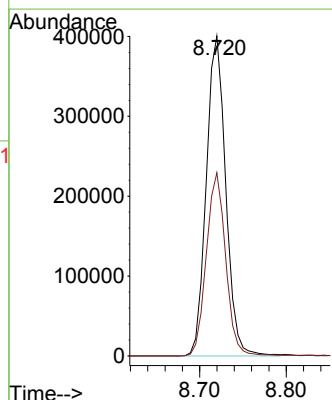
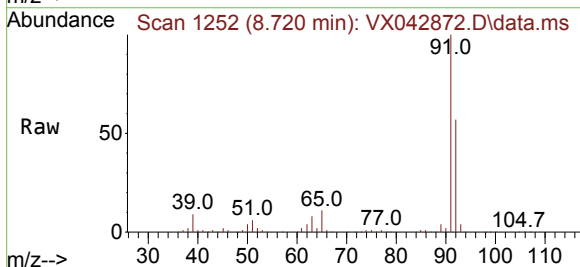
Instrument :  
MSVOA\_X  
ClientSampleId :

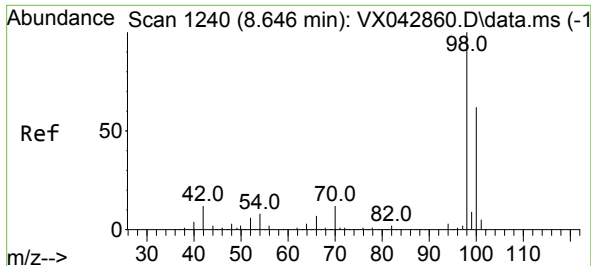
Tgt Ion: 95 Resp: 94883  
Ion Ratio Lower Upper  
95 100  
174 80.9 65.0 97.6  
176 78.1 63.4 95.0



#62  
Toluene  
Concen: 61.322 ug/l  
RT: 8.720 min Scan# 1252  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 91 Resp: 625568  
Ion Ratio Lower Upper  
91 100  
92 57.0 45.7 68.5

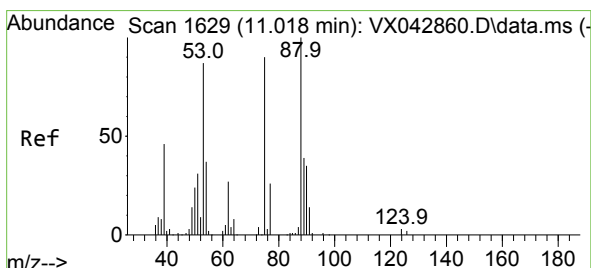
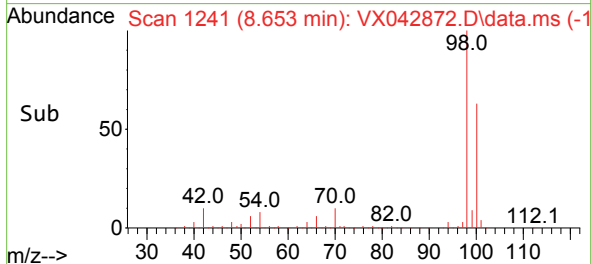
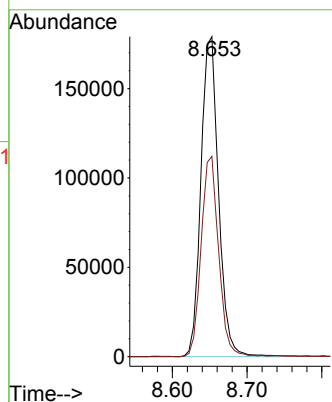
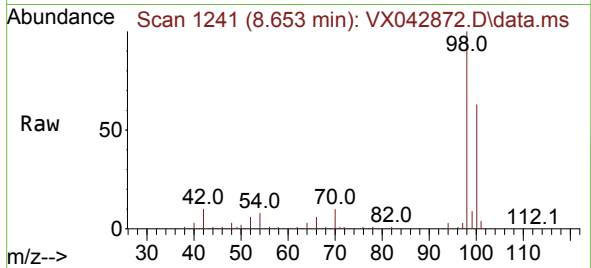




#63  
Toluene-d8  
Concen: 31.131 ug/l  
RT: 8.653 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

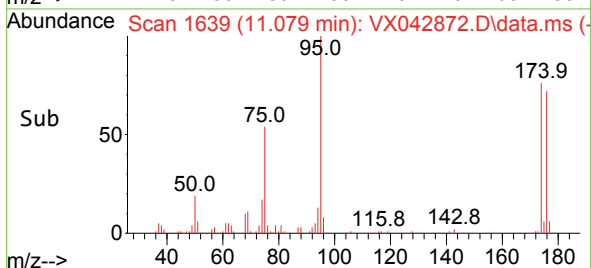
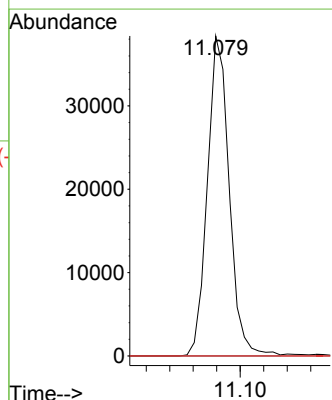
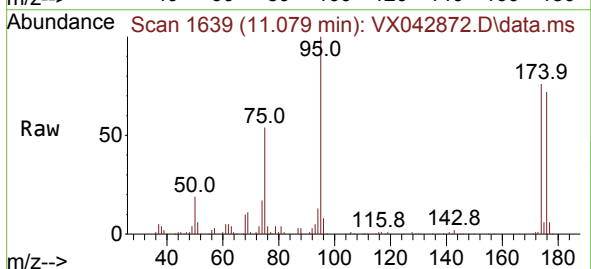
Instrument :  
MSVOA\_X  
ClientSampleId :

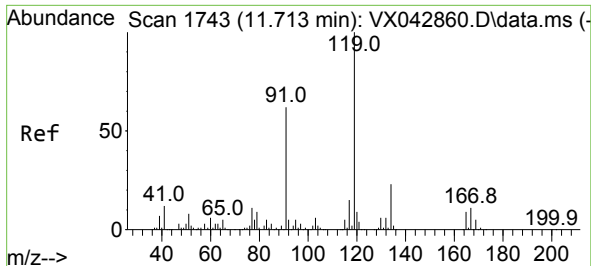
Tgt Ion: 98 Resp: 292884  
Ion Ratio Lower Upper  
98 100  
100 62.2 50.9 76.3



#77  
t-1,4-Dichloro-2-butene  
Concen: 42.472 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. 0.061 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

Tgt Ion: 75 Resp: 49481  
Ion Ratio Lower Upper  
75 100  
53 0.0 48.5 145.5#  
89 0.0 21.9 65.5#

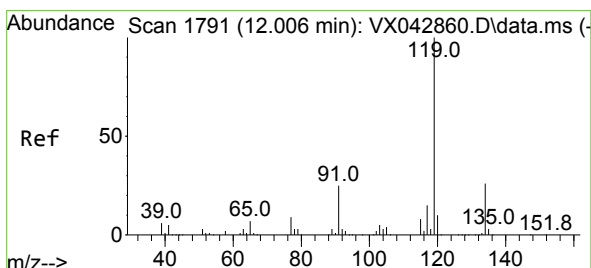
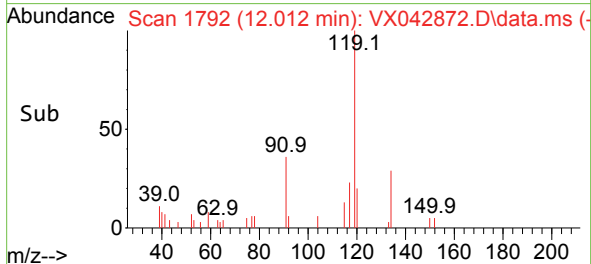
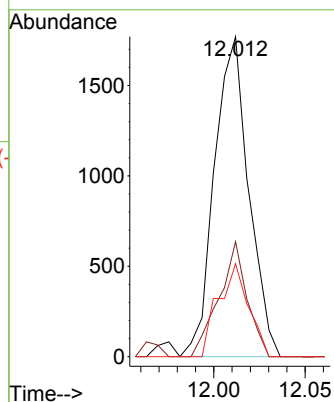
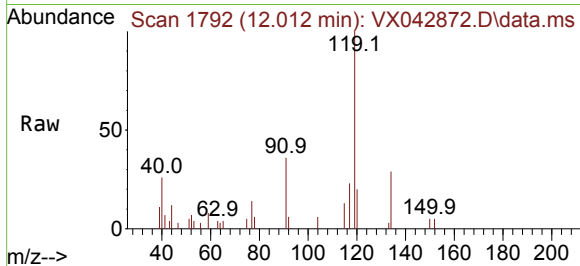




#79  
tert-butylbenzene  
Concen: 0.239 ug/l  
RT: 12.012 min Scan# 1792  
Delta R.T. 0.299 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

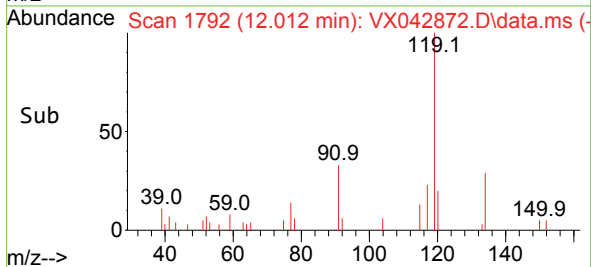
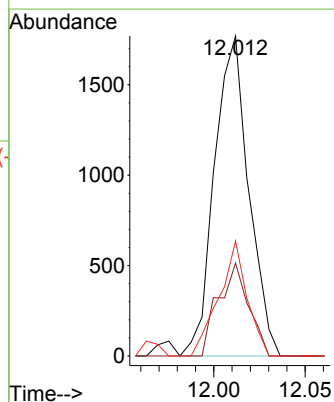
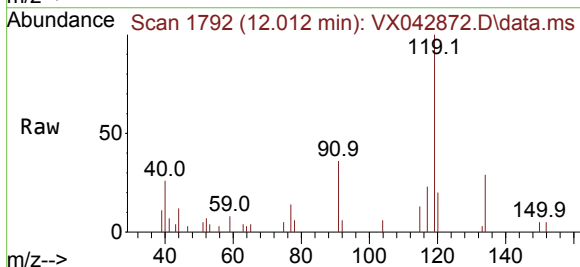
Instrument :  
MSVOA\_X  
ClientSampleId :

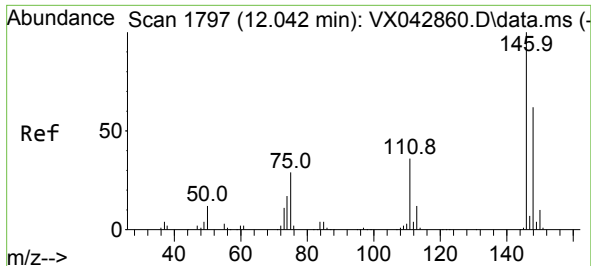
Tgt Ion:119 Resp: 2310  
Ion Ratio Lower Upper  
119 100  
91 29.5 0.0 118.6  
134 25.6 0.0 44.4



#82  
p-Isopropyltoluene  
Concen: 0.233 ug/l  
RT: 12.012 min Scan# 1792  
Delta R.T. 0.006 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

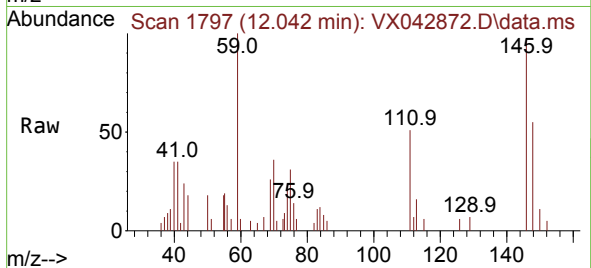
Tgt Ion:119 Resp: 2310  
Ion Ratio Lower Upper  
119 100  
134 25.6 0.0 51.8  
91 29.5 0.0 48.4



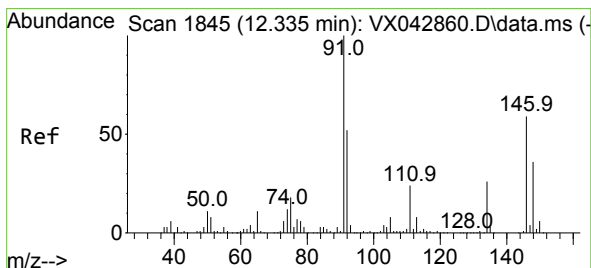
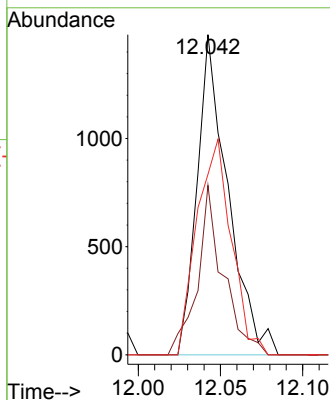
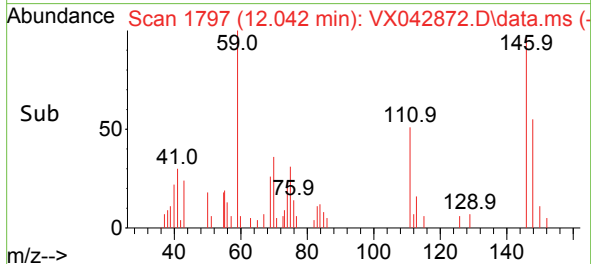


#84  
1,4-Dichlorobenzene  
Concen: 0.369 ug/l  
RT: 12.042 min Scan# 1797  
Delta R.T. 0.000 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33

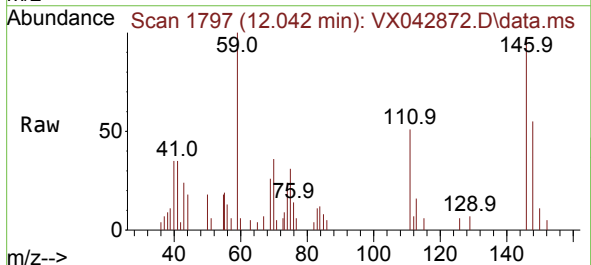
Instrument :  
MSVOA\_X  
ClientSampleId :



Tgt Ion:146 Resp: 1930  
Ion Ratio Lower Upper  
146 100  
111 44.2 19.4 58.4  
148 75.3 31.4 94.2



#87  
1,2-Dichlorobenzene  
Concen: 0.372 ug/l  
RT: 12.042 min Scan# 1797  
Delta R.T. -0.292 min  
Lab File: VX042872.D  
Acq: 06 Aug 2024 15:33



Tgt Ion:146 Resp: 1930  
Ion Ratio Lower Upper  
146 100  
111 44.2 21.0 63.0  
148 75.3 30.8 92.4

