

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX071224\  
 Data File : VX042299.D  
 Acq On : 12 Jul 2024 13:53  
 Operator : JC/MD  
 Sample : P3220-02  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jul 15 03:26:22 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

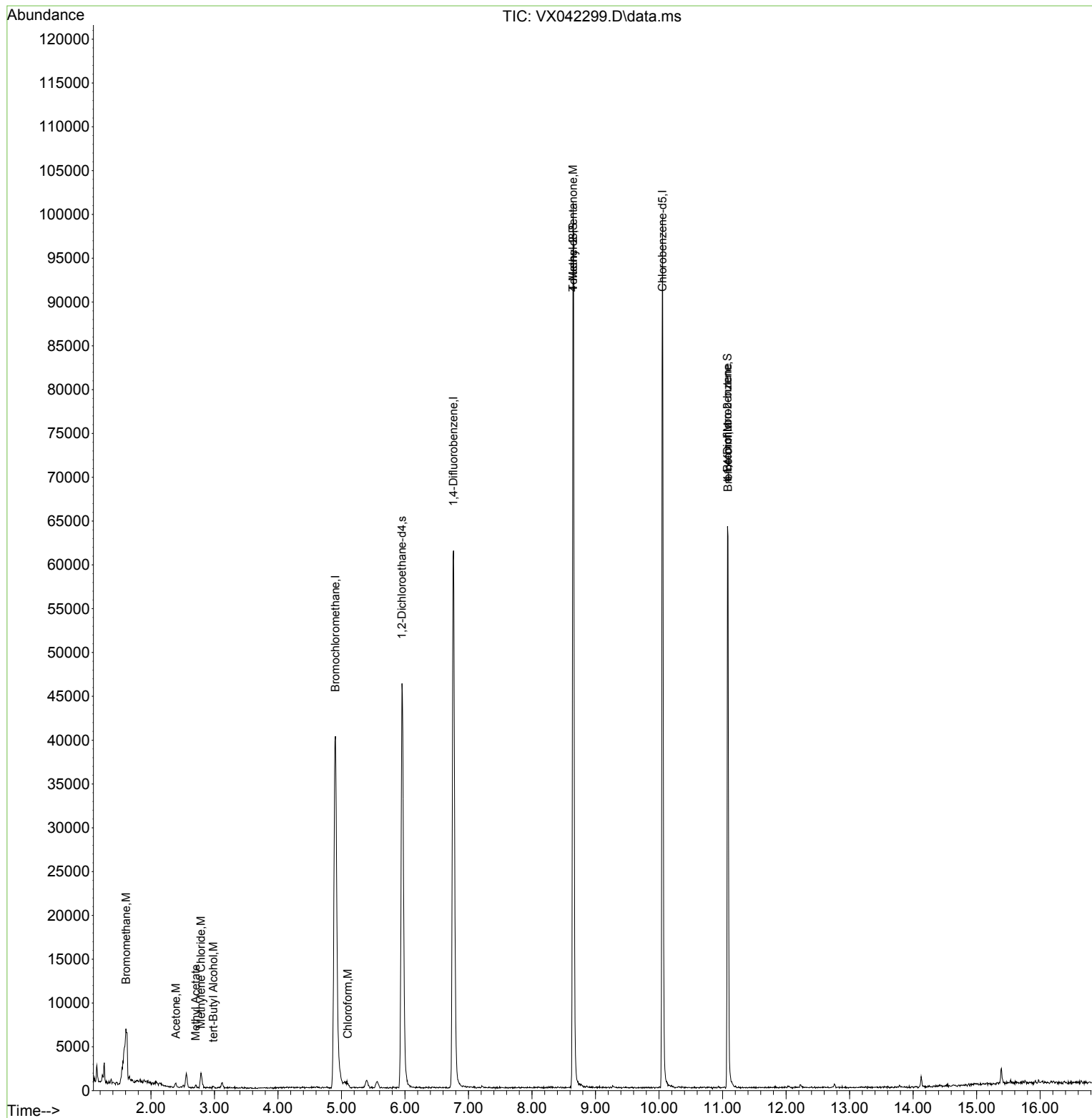
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 4.903  | 128   | 21866    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 6.763  | 114   | 71819    | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 10.055 | 117   | 50290    | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 5.952  | 65    | 45343    | 30.124   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 100.400% |
| 60) 4-Bromofluorobenzene    | 11.079 | 95    | 18300    | 23.508   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 78.367%  |
| 63) Toluene-d8              | 8.647  | 98    | 66250    | 30.791   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 102.633% |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 5) Bromomethane             | 1.605  | 94    | 249      | 0.301    | ug/l # | 78       |
| 12) Methyl Acetate          | 2.703  | 43    | 378      | 0.222    | ug/l # | 51       |
| 15) Acetone                 | 2.392  | 58    | 207      | 0.895    | ug/l # | 13       |
| 18) Methylene Chloride      | 2.788  | 84    | 1030     | 0.672    | ug/l   | 98       |
| 23) tert-Butyl Alcohol      | 2.983  | 59    | 193      | 0.642    | ug/l # | 100      |
| 25) Chloroform              | 5.098  | 83    | 577      | 0.238    | ug/l   | 99       |
| 56) Bromoform               | 11.085 | 173   | 154      | 0.216    | ug/l # | 1        |
| 58) 4-Methyl-2-Pentanone    | 8.647  | 43    | 215      | 0.239    | ug/l # | 41       |
| 77) t-1,4-Dichloro-2-butene | 11.079 | 75    | 8590     | 29.528   | ug/l # | 7        |
| -----                       |        |       |          |          |        |          |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX071224\  
Data File : VX042299.D  
Acq On : 12 Jul 2024 13:53  
Operator : JC/MD  
Sample : P3220-02  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

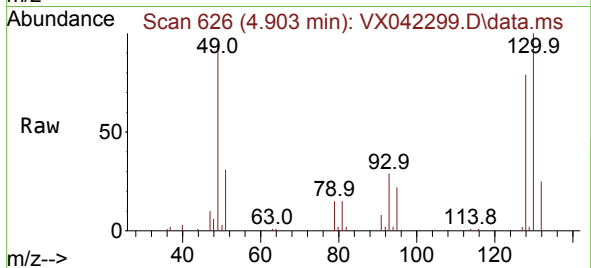
Quant Time: Jul 15 03:26:22 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X061424W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Jun 15 04:02:59 2024  
Response via : Initial Calibration



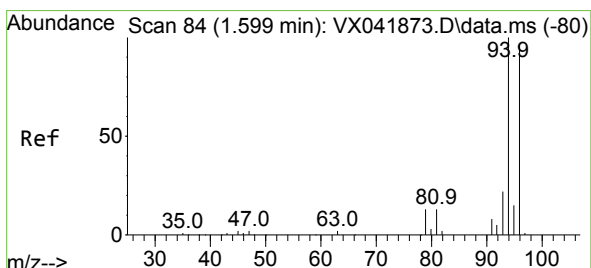
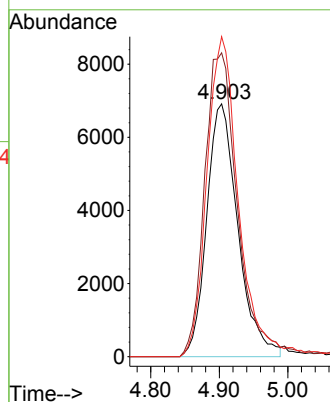
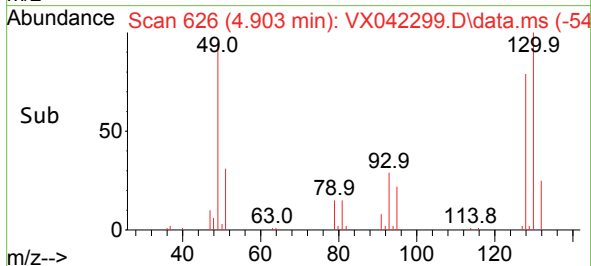


#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 4.903 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

Instrument :  
MSVOA\_X  
ClientSampleId :

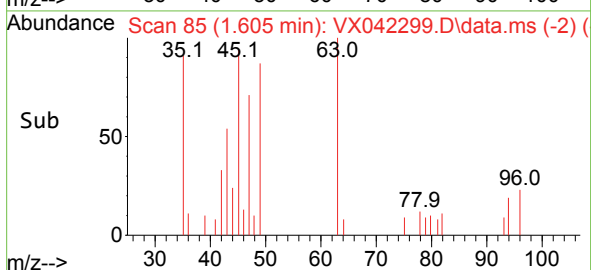
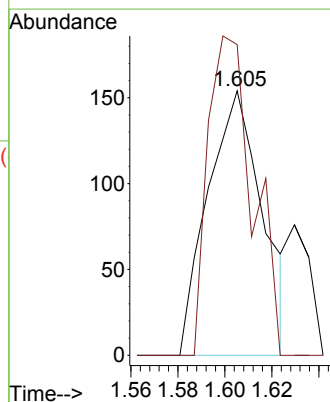
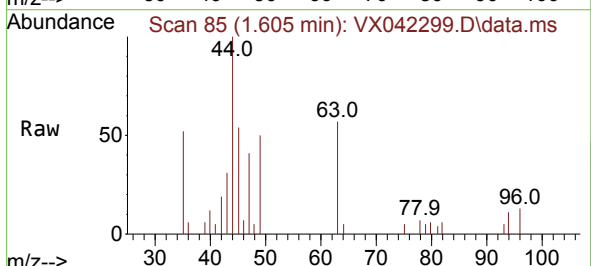


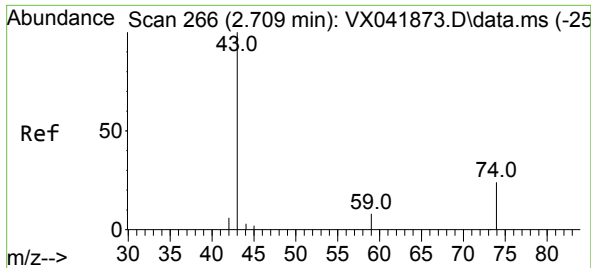
Tgt Ion:128 Resp: 21866  
Ion Ratio Lower Upper  
128 100  
49 125.7 0.0 338.5  
130 126.7 0.0 324.5



#5  
Bromomethane  
Concen: 0.301 ug/l  
RT: 1.605 min Scan# 85  
Delta R.T. 0.006 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

Tgt Ion: 94 Resp: 249  
Ion Ratio Lower Upper  
94 100  
96 117.5 76.6 115.0#

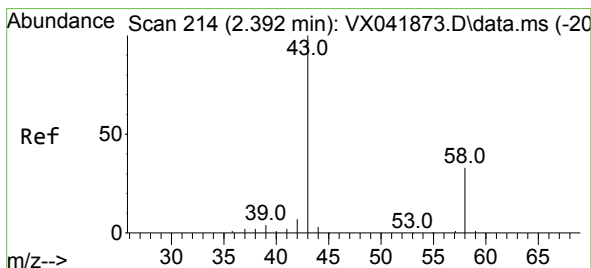
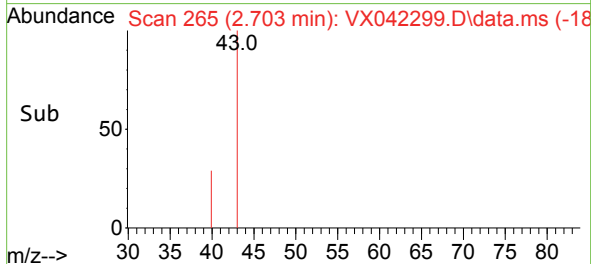
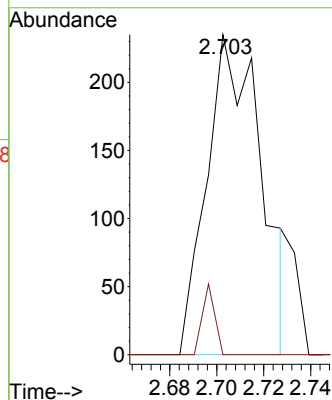
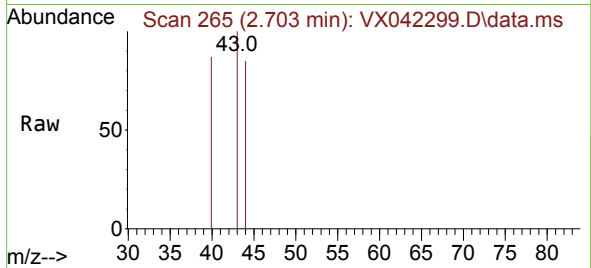




#12  
Methyl Acetate  
Concen: 0.222 ug/l  
RT: 2.703 min Scan# 214  
Delta R.T. -0.006 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

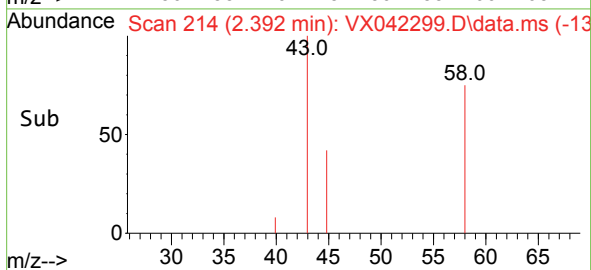
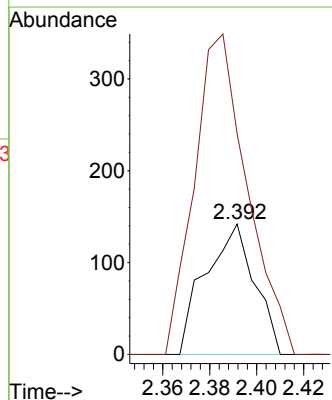
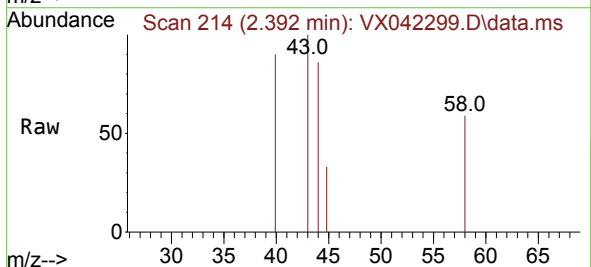
Instrument :  
MSVOA\_X  
ClientSampleId :

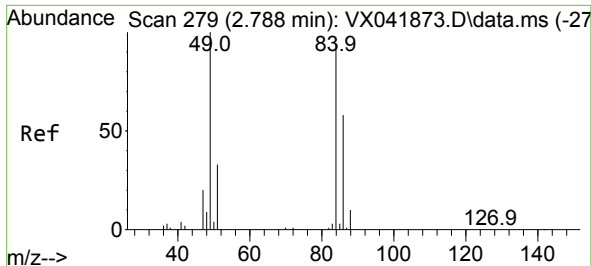
Tgt Ion: 43 Resp: 378  
Ion Ratio Lower Upper  
43 100  
74 0.0 19.4 29.2#



#15  
Acetone  
Concen: 0.895 ug/l  
RT: 2.392 min Scan# 214  
Delta R.T. -0.000 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

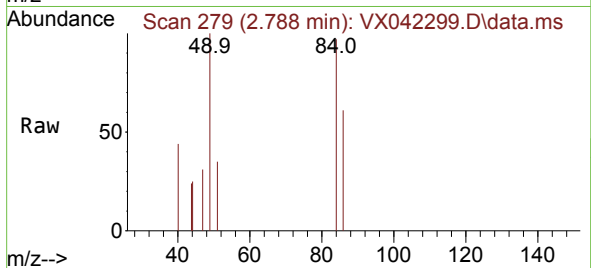
Tgt Ion: 58 Resp: 207  
Ion Ratio Lower Upper  
58 100  
43 132.4 243.4 365.2#



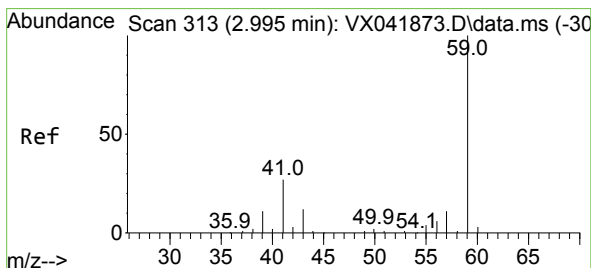
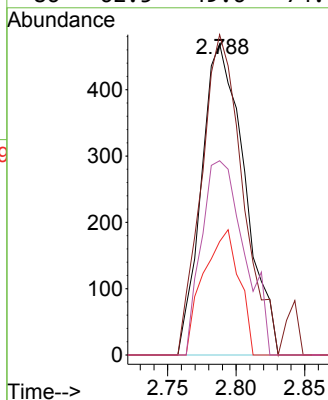
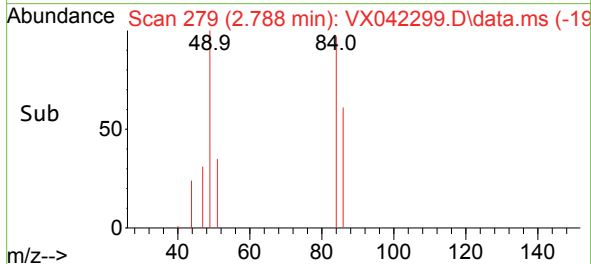


#18  
Methylene Chloride  
Concen: 0.672 ug/l  
RT: 2.788 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

Instrument :  
MSVOA\_X  
ClientSampleId :

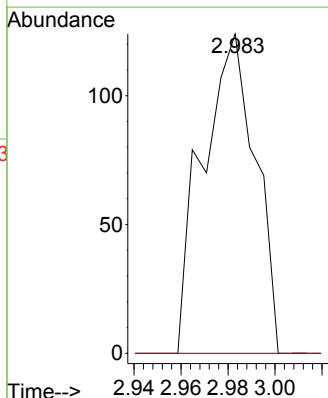
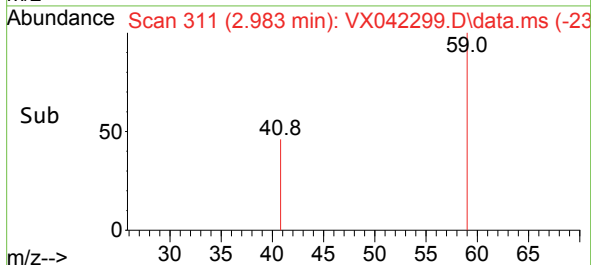
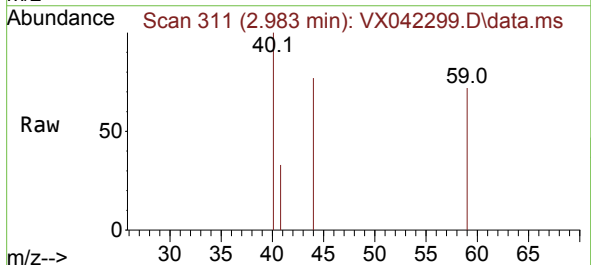


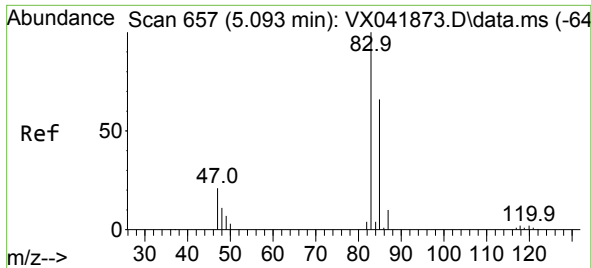
|             |             |
|-------------|-------------|
| Tgt Ion: 84 | Resp: 1030  |
| Ion Ratio   | Lower Upper |
| 84 100      |             |
| 49 103.0    | 85.3 127.9  |
| 51 36.5     | 28.5 42.7   |
| 86 62.5     | 49.6 74.4   |



#23  
tert-Butyl Alcohol  
Concen: 0.642 ug/l  
RT: 2.983 min Scan# 311  
Delta R.T. -0.012 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

|             |             |
|-------------|-------------|
| Tgt Ion: 59 | Resp: 193   |
| Ion Ratio   | Lower Upper |
| 59 100      |             |
| 52 0.0      | 0.0 0.0     |

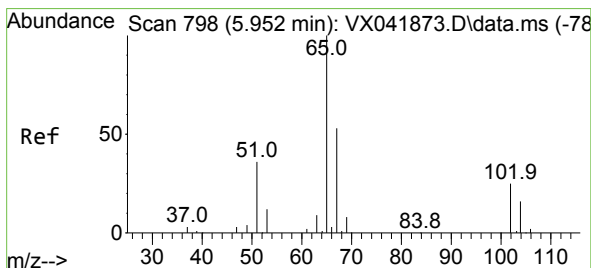
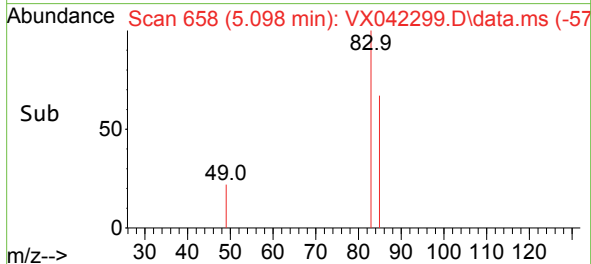
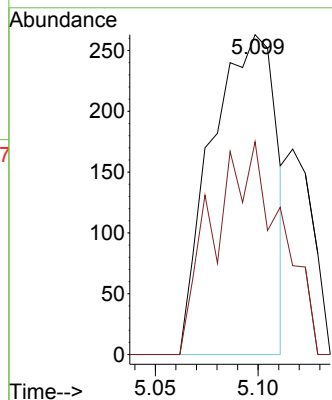
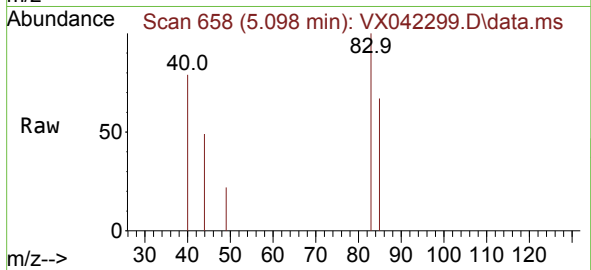




#25  
Chloroform  
Concen: 0.238 ug/l  
RT: 5.098 min Scan# 61  
Delta R.T. 0.006 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

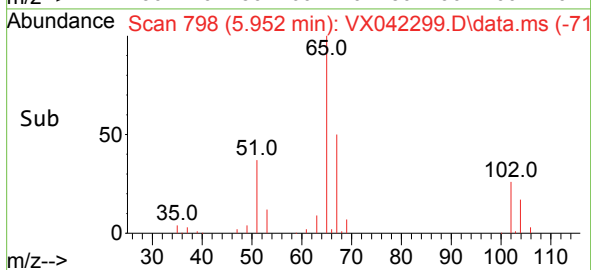
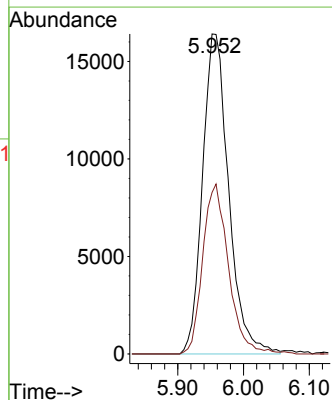
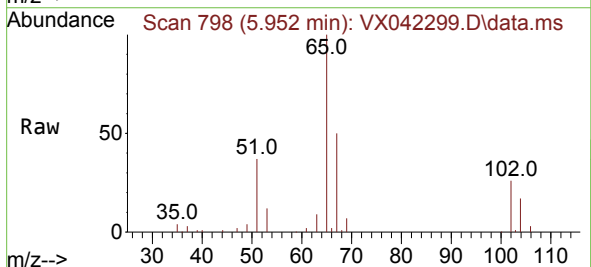
Instrument :  
MSVOA\_X  
ClientSampleId :

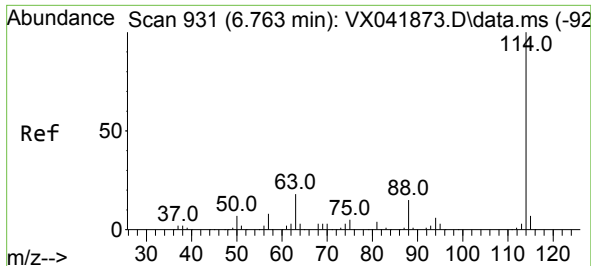
Tgt Ion: 83 Resp: 577  
Ion Ratio Lower Upper  
83 100  
85 66.5 52.7 79.1



#27  
1,2-Dichloroethane-d4  
Concen: 30.124 ug/l  
RT: 5.952 min Scan# 798  
Delta R.T. -0.000 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

Tgt Ion: 65 Resp: 45343  
Ion Ratio Lower Upper  
65 100  
67 51.9 43.4 65.0





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.763 min Scan# 91

Delta R.T. -0.000 min

Lab File: VX042299.D

Acq: 12 Jul 2024 13:53

Instrument :

MSVOA\_X

ClientSampleId :

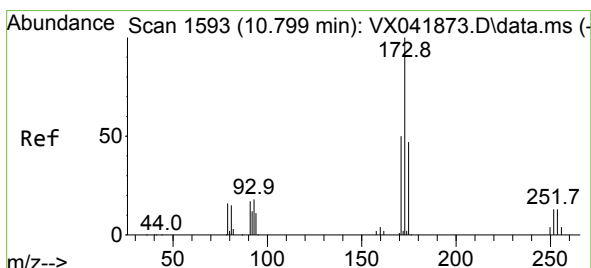
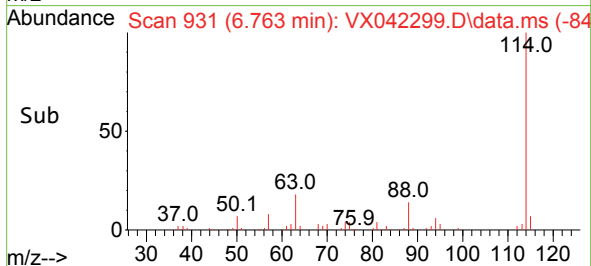
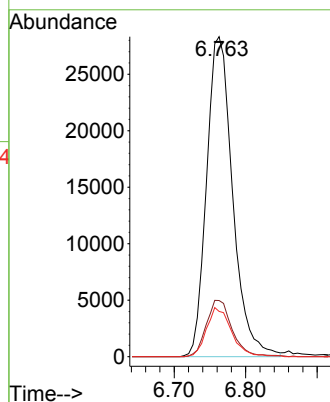
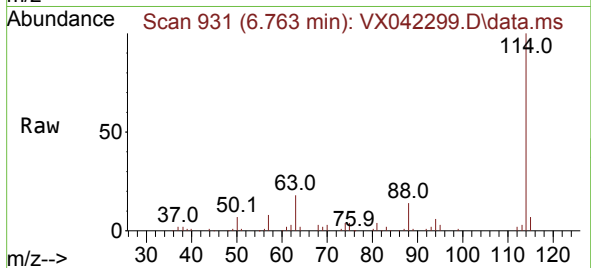
Tgt Ion:114 Resp: 71819

Ion Ratio Lower Upper

114 100

63 17.4 14.6 21.8

88 14.7 11.8 17.8



#56

Bromoform

Concen: 0.216 ug/l

RT: 11.085 min Scan# 1640

Delta R.T. 0.286 min

Lab File: VX042299.D

Acq: 12 Jul 2024 13:53

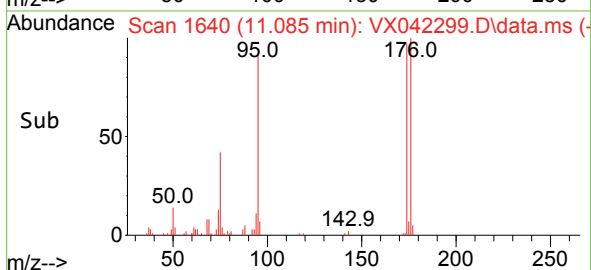
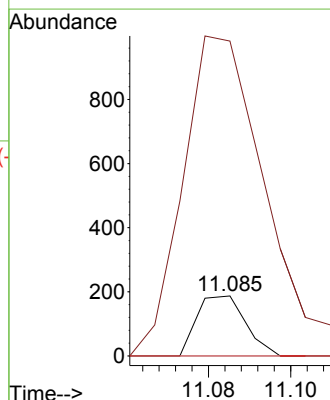
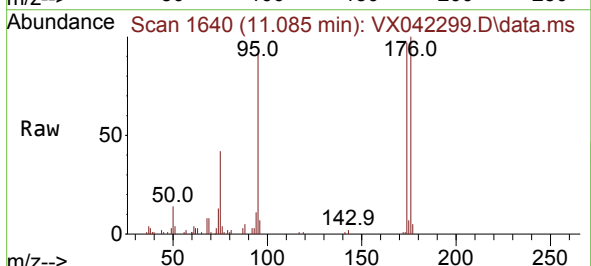
Tgt Ion:173 Resp: 154

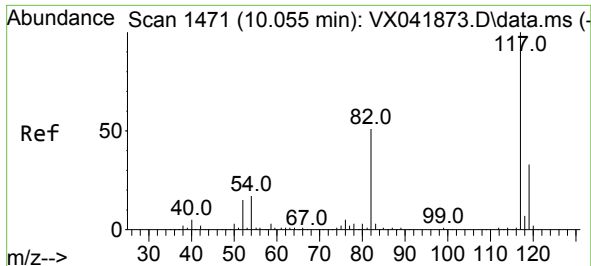
Ion Ratio Lower Upper

173 100

175 896.1 39.3 58.9#

254 0.0 9.6 14.4#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. -0.000 min

Lab File: VX042299.D

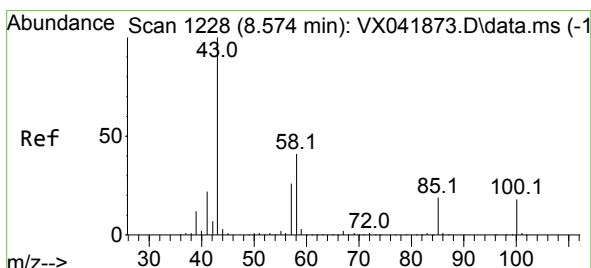
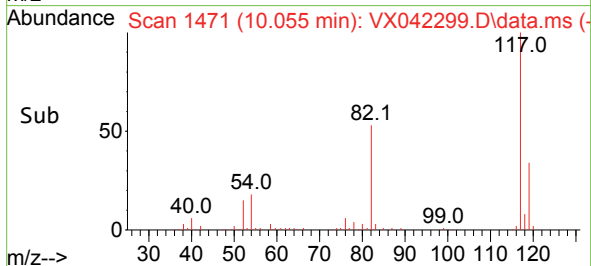
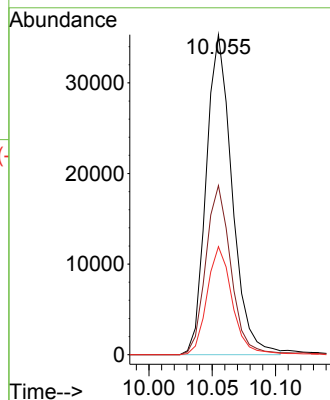
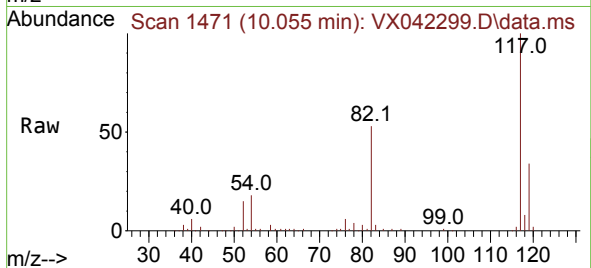
Acq: 12 Jul 2024 13:53

Instrument :

MSVOA\_X

ClientSampleId :

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:117 | Resp: | 50290       |
| Ion         | Ratio | Lower Upper |
| 117         | 100   |             |
| 82          | 51.6  | 41.1 61.7   |
| 119         | 33.1  | 26.1 39.1   |



#58

4-Methyl-2-Pentanone

Concen: 0.239 ug/l

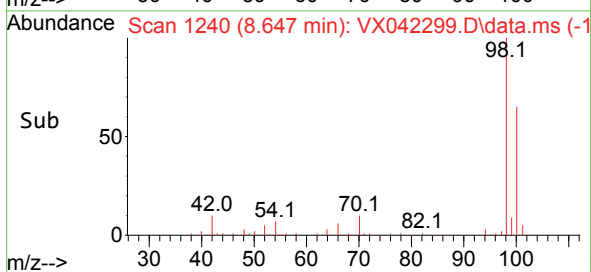
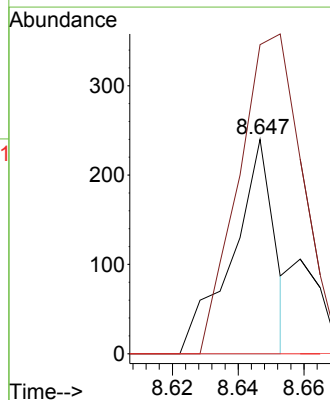
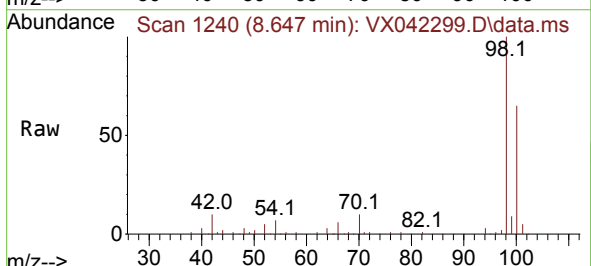
RT: 8.647 min Scan# 1240

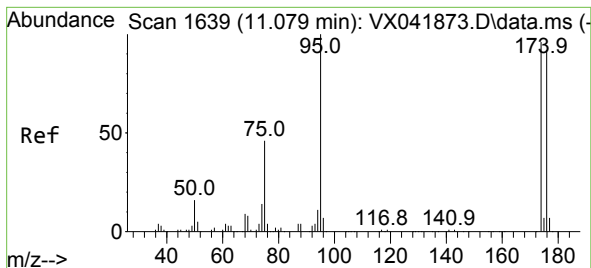
Delta R.T. 0.073 min

Lab File: VX042299.D

Acq: 12 Jul 2024 13:53

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 43 | Resp: | 215         |
| Ion         | Ratio | Lower Upper |
| 43          | 100   |             |
| 58          | 0.0   | 33.2 49.8#  |
| 85          | 0.0   | 15.5 23.3#  |

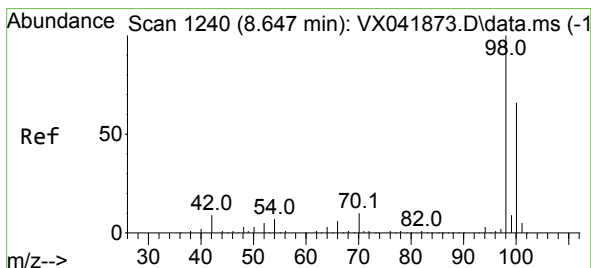
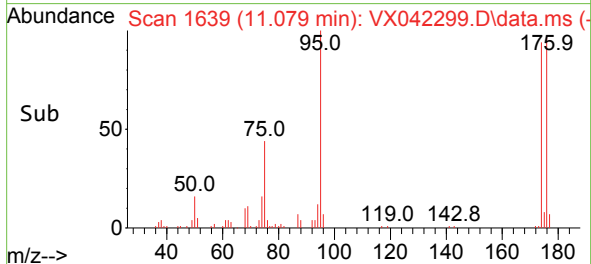
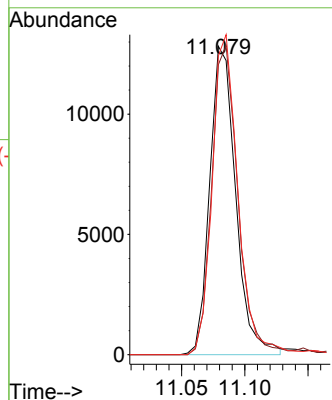
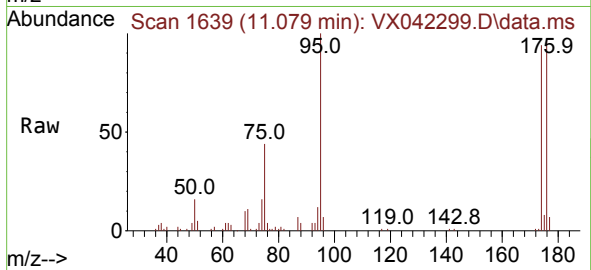




#60  
4-Bromofluorobenzene  
Concen: 23.508 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.000 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

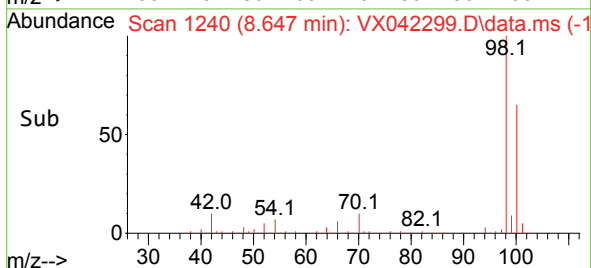
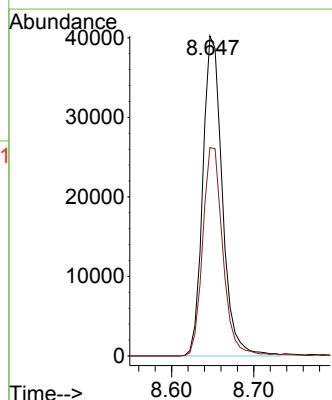
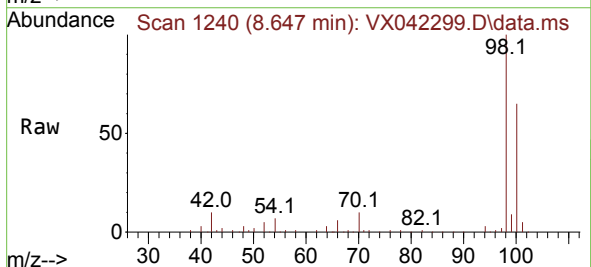
Instrument :  
MSVOA\_X  
ClientSampleId :

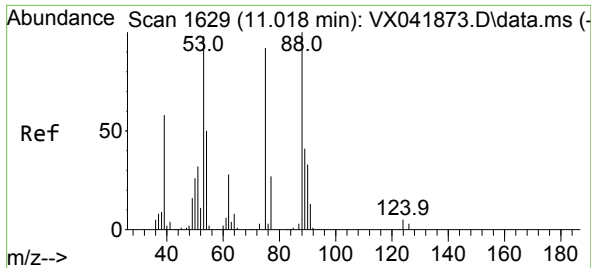
Tgt Ion: 95 Resp: 18300  
Ion Ratio Lower Upper  
95 100  
174 101.1 78.9 118.3  
176 103.3 77.1 115.7



#63  
Toluene-d8  
Concen: 30.791 ug/l  
RT: 8.647 min Scan# 1240  
Delta R.T. -0.000 min  
Lab File: VX042299.D  
Acq: 12 Jul 2024 13:53

Tgt Ion: 98 Resp: 66250  
Ion Ratio Lower Upper  
98 100  
100 67.7 52.7 79.1





#77

t-1,4-Dichloro-2-butene

Concen: 29.528 ug/l

RT: 11.079 min Scan# 1

Delta R.T. 0.061 min

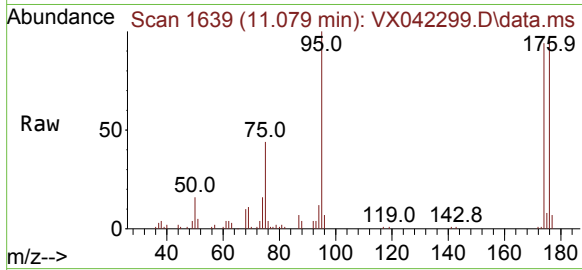
Lab File: VX042299.D

Acq: 12 Jul 2024 13:53

Instrument :

MSVOA\_X

ClientSampleId :



Tgt Ion: 75 Resp: 8590

Ion Ratio Lower Upper

75 100

53 0.0 53.4 160.2#

89 0.0 22.5 67.5#

