

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\U020223\  
 Data File : U052924.D  
 Acq On : 02 Feb 2023 14:37  
 Operator : JC/MD  
 Sample : 01381-27  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 A44Q3

Quant Time: Feb 03 00:25:59 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM012623WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 03 00:24:34 2023  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc     | Units | Dev(Min) |
|-------------------------------|----------------|------|------------|----------|-------|----------|
| -----                         |                |      |            |          |       |          |
| Internal Standards            |                |      |            |          |       |          |
| 1) 1,4-Difluorobenzene        | 6.243          | 114  | 235726     | 50.000   | ug/L  | 0.00     |
| 28) Chlorobenzene-d5          | 9.414          | 117  | 235937     | 50.000   | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.809         | 152  | 124787     | 50.000   | ug/L  | 0.00     |
|                               |                |      |            |          |       |          |
| System Monitoring Compounds   |                |      |            |          |       |          |
| 4) Vinyl Chloride-d3          | 1.597          | 65   | 67736      | 39.923   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 60 - 135 |      | Recovery = | 79.840%  |       |          |
| 7) Chloroethane-d5            | 1.906          | 69   | 65690      | 46.989   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 70 - 130 |      | Recovery = | 93.980%  |       |          |
| 11) 1,1-Dichloroethene-d2     | 2.555          | 63   | 106354     | 31.516   | ug/L  | -0.01    |
| Spiked Amount 50.000          | Range 60 - 125 |      | Recovery = | 63.040%  |       |          |
| 21) 2-Butanone-d5             | 4.629          | 46   | 87607      | 83.586   | ug/L  | 0.00     |
| Spiked Amount 100.000         | Range 40 - 130 |      | Recovery = | 83.590%  |       |          |
| 24) Chloroform-d              | 5.057          | 84   | 164420     | 45.408   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 90.820%  |       |          |
| 26) 1,2-Dichloroethane-d4     | 5.694          | 65   | 113191     | 48.957   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 97.920%  |       |          |
| 32) Benzene-d6                | 5.723          | 84   | 324318     | 44.992   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 89.980%  |       |          |
| 36) 1,2-Dichloropropane-d6    | 6.684          | 67   | 98051      | 46.380   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 70 - 120 |      | Recovery = | 92.760%  |       |          |
| 41) Toluene-d8                | 7.893          | 98   | 296745     | 45.210   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 80 - 120 |      | Recovery = | 90.420%  |       |          |
| 43) trans-1,3-Dichloroprop... | 8.176          | 79   | 49264      | 46.493   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 60 - 125 |      | Recovery = | 92.980%  |       |          |
| 47) 2-Hexanone-d5             | 8.648          | 63   | 62627      | 84.309   | ug/L  | 0.02     |
| Spiked Amount 100.000         | Range 45 - 130 |      | Recovery = | 84.310%  |       |          |
| 56) 1,1,2,2-Tetrachloroeth... | 10.758         | 84   | 134894     | 43.187   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 65 - 120 |      | Recovery = | 86.380%  |       |          |
| 66) 1,2-Dichlorobenzene-d4    | 12.192         | 152  | 122100     | 50.392   | ug/L  | 0.00     |
| Spiked Amount 50.000          | Range 80 - 120 |      | Recovery = | 100.780% |       |          |
|                               |                |      |            |          |       |          |
| Target Compounds              |                |      |            |          |       | Qvalue   |
| 2) Dichlorodifluoromethane    | 1.385          | 85   | 37682      | 17.072   | ug/L  | 99       |
| 3) Chloromethane              | 1.517          | 50   | 77852      | 42.764   | ug/L  | 100      |
| 6) Bromomethane               | 1.855          | 94   | 35452      | 27.912   | ug/L  | 96       |
| 9) Trichlorofluoromethane     | 2.121          | 101  | 89512      | 26.535   | ug/L  | 99       |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.572          | 101  | 66869      | 35.168   | ug/L  | 99       |
| 13) Acetone                   | 2.633          | 43   | 359034     | 280.476  | ug/L  | 99       |
| 15) Methyl Acetate            | 2.945          | 43   | 161536     | 93.658   | ug/L  | 98       |
| 16) Methylene chloride        | 3.038          | 84   | 48381      | 23.323   | ug/L  | 99       |
| 18) Methyl tert-butyl Ether   | 3.359          | 73   | 629666     | 113.633  | ug/L  | 99       |
| 22) 2-Butanone                | 4.710          | 43   | 57349      | 41.914   | ug/L  | 98       |
| 27) 1,2-Dichloroethane        | 5.787          | 62   | 225585     | 76.802   | ug/L  | 100      |
| 29) Cyclohexane               | 5.382          | 56   | 48897      | 17.489   | ug/L  | 98       |
| 34) Trichloroethene           | 6.536          | 95   | 76722      | 37.584   | ug/L  | 98       |
| 35) Methylcyclohexane         | 6.758          | 83   | 175962     | 54.463   | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone      | 7.806          | 43   | 283898     | 122.041  | ug/L  | 99       |
| 42) Toluene                   | 7.964          | 91   | 498677     | 60.585   | ug/L  | 99       |
| 46) Tetrachloroethene         | 8.549          | 164  | 31698      | 18.033   | ug/L  | 98       |
| 48) 2-Hexanone                | 8.700          | 43   | 178136     | 90.518   | ug/L  | 99       |
| 51) Chlorobenzene             | 9.443          | 112  | 139907     | 24.706   | ug/L  | 97       |

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Data File : VU052924.D  
Acq On : 02 Feb 2023 14:37  
Operator : JC/MD  
Sample : 01381-27  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

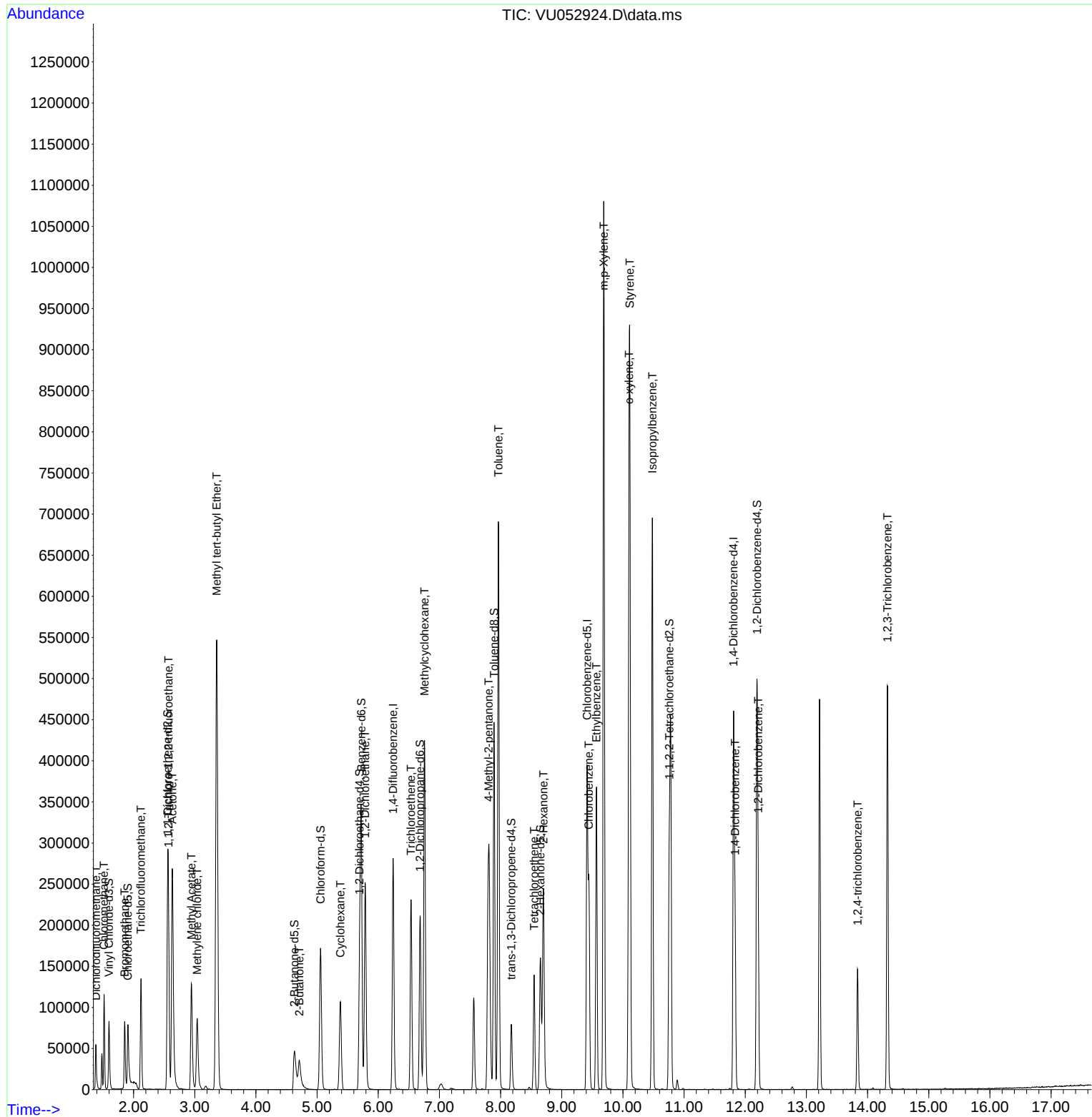
Quant Time: Feb 03 00:25:59 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM012623WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Feb 03 00:24:34 2023  
Response via : Initial Calibration

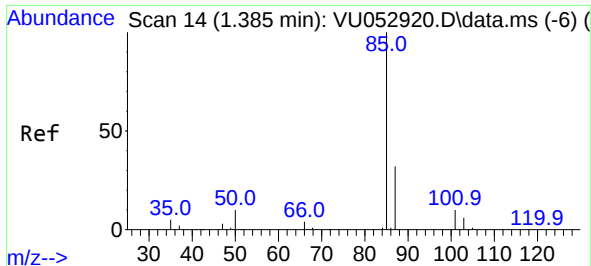
| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| 52) Ethylbenzene           | 9.568  | 91   | 258512   | 29.388 | ug/L  | 100      |
| 53) m,p-Xylene             | 9.687  | 106  | 303866   | 85.330 | ug/L  | 98       |
| 54) o-xylene               | 10.099 | 106  | 142322   | 41.865 | ug/L  | 96       |
| 55) Styrene                | 10.111 | 104  | 361715   | 62.005 | ug/L  | 100      |
| 61) Isopropylbenzene       | 10.481 | 105  | 446798   | 55.438 | ug/L  | 100      |
| 65) 1,4-Dichlorobenzene    | 11.835 | 146  | 84738    | 20.130 | ug/L  | 97       |
| 67) 1,2-Dichlorobenzene    | 12.211 | 146  | 90028    | 21.890 | ug/L  | 96       |
| 70) 1,2,4-trichlorobenzene | 13.838 | 180  | 48123    | 19.068 | ug/L  | 97       |
| 72) 1,2,3-Trichlorobenzene | 14.327 | 180  | 158452   | 59.408 | ug/L  | 99       |

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

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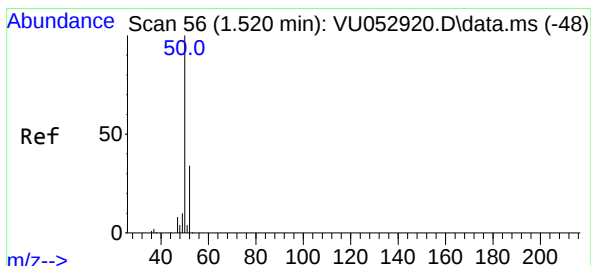
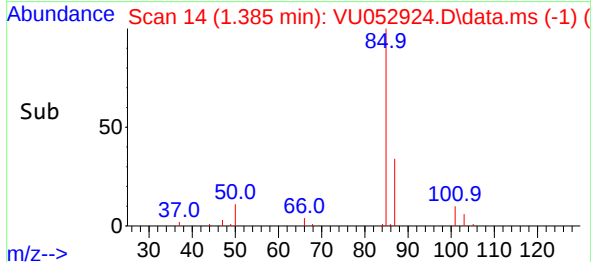
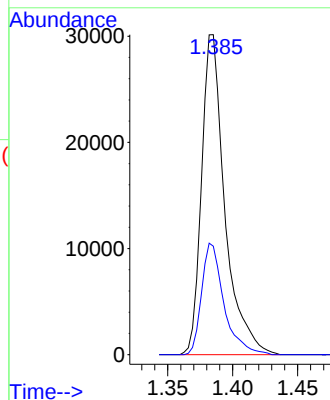
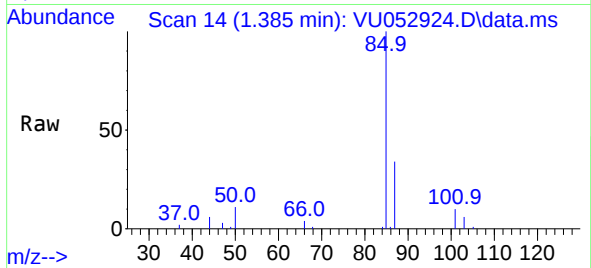




#2  
Dichlorodifluoromethane  
Concen: 17.072 ug/L  
RT: 1.385 min Scan# 14  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

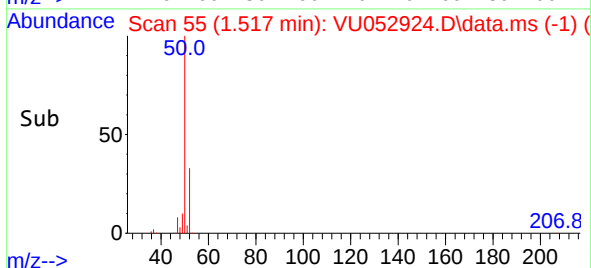
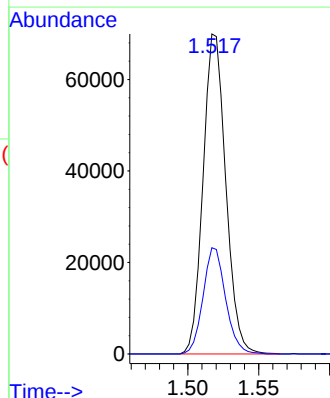
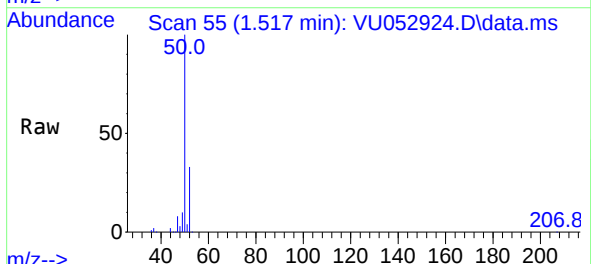
Instrument :  
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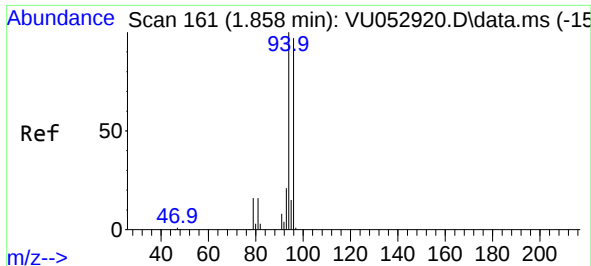
Tgt Ion: 85 Resp: 37682  
Ion Ratio Lower Upper  
85 100  
87 33.4 26.4 39.6



#3  
Chloromethane  
Concen: 42.764 ug/L  
RT: 1.517 min Scan# 55  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 50 Resp: 77852  
Ion Ratio Lower Upper  
50 100  
52 33.2 23.4 43.4

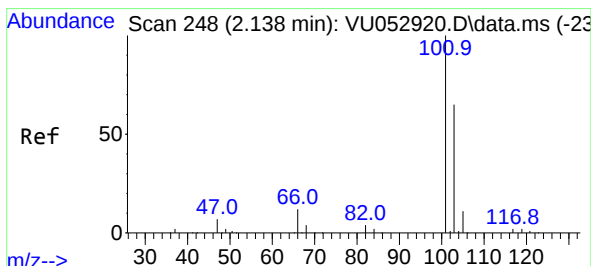
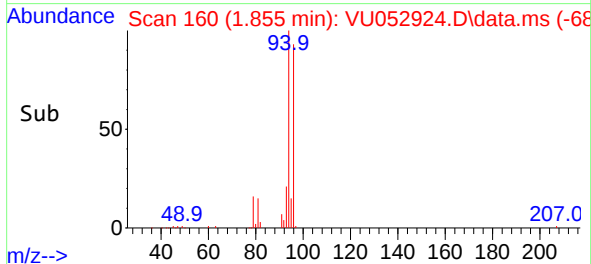
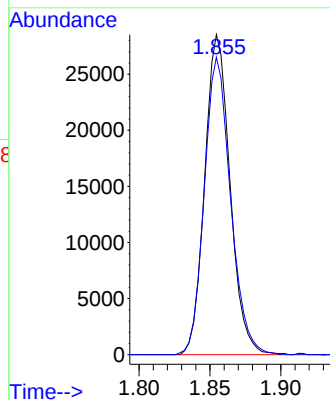
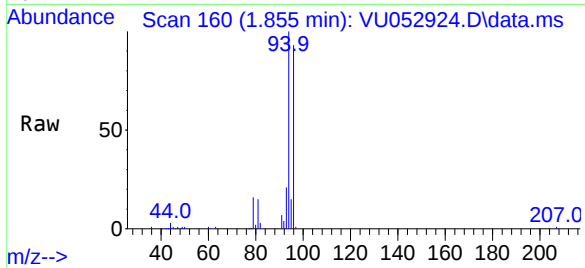




#6  
Bromomethane  
Concen: 27.912 ug/L  
RT: 1.855 min Scan# 1  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

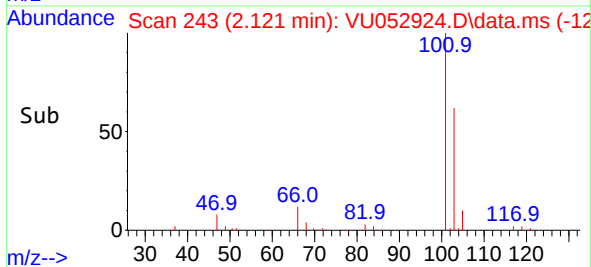
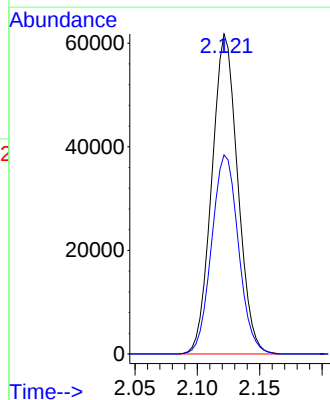
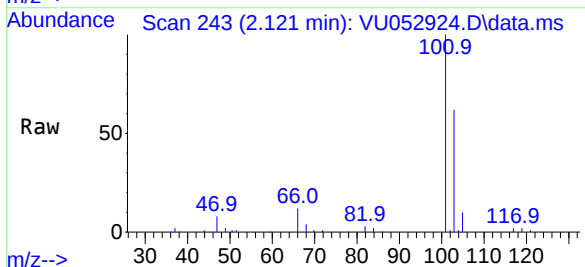
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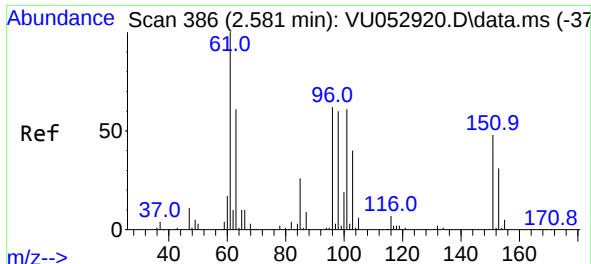
Tgt Ion: 94 Resp: 35452  
Ion Ratio Lower Upper  
94 100  
96 93.0 67.8 125.8



#9  
Trichlorofluoromethane  
Concen: 26.535 ug/L  
RT: 2.121 min Scan# 243  
Delta R.T. -0.016 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion:101 Resp: 89512  
Ion Ratio Lower Upper  
101 100  
103 64.4 52.0 78.0

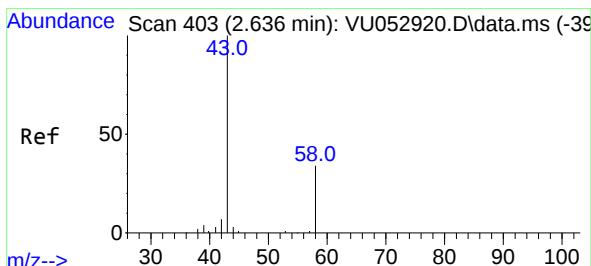
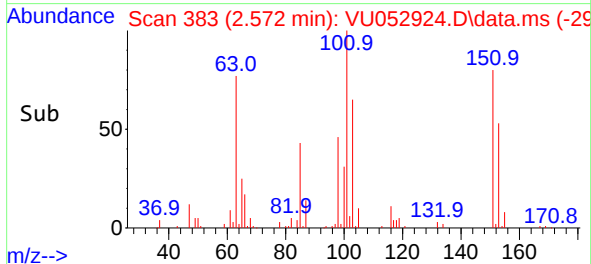
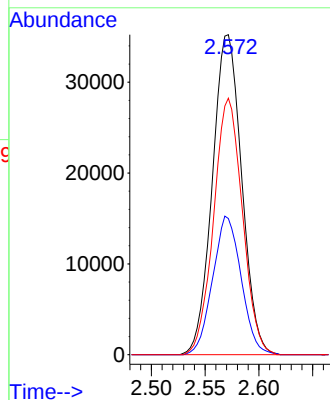
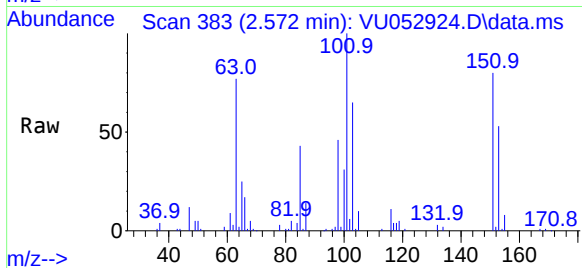




#10  
1,1,2-Trichloro-1,2,2-trifluoroethane  
Concen: 35.168 ug/L  
RT: 2.572 min Scan# 383  
Delta R.T. -0.010 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

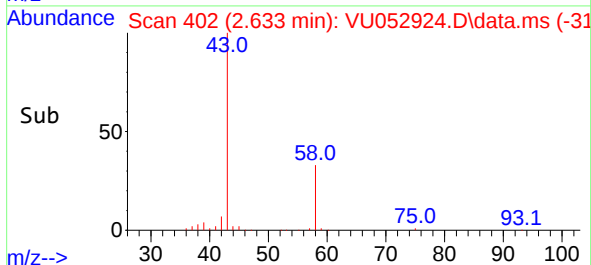
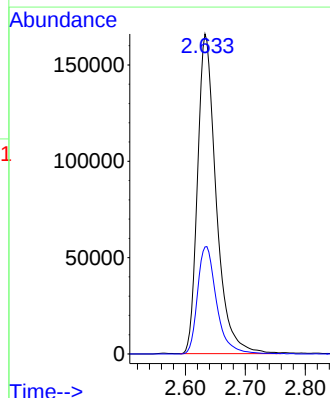
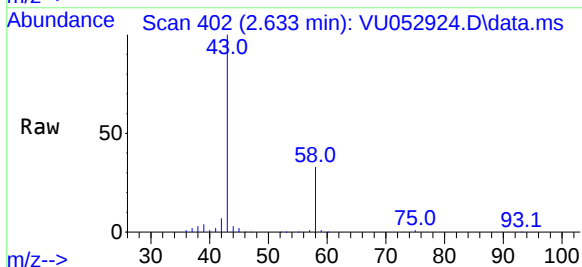
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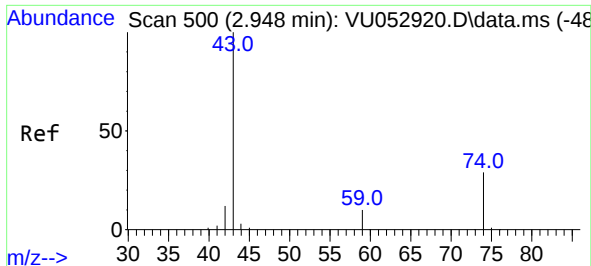
Tgt Ion:101 Resp: 66869  
Ion Ratio Lower Upper  
101 100  
85 42.1 32.9 49.3  
151 78.6 62.6 94.0



#13  
Acetone  
Concen: 280.476 ug/L  
RT: 2.633 min Scan# 402  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 43 Resp: 359034  
Ion Ratio Lower Upper  
43 100  
58 34.2 0.0 70.2

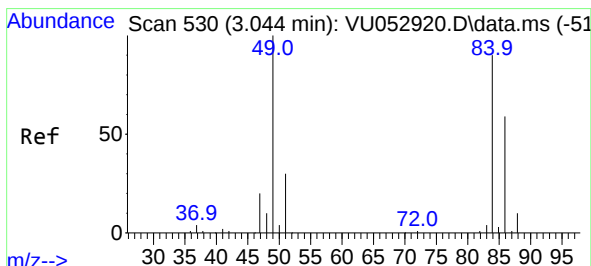
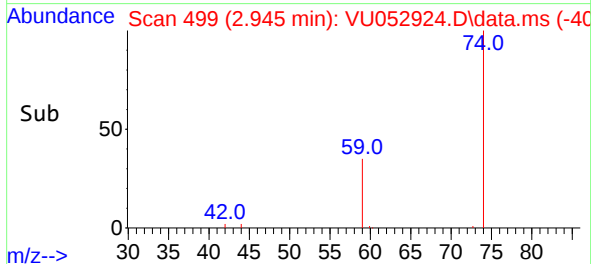
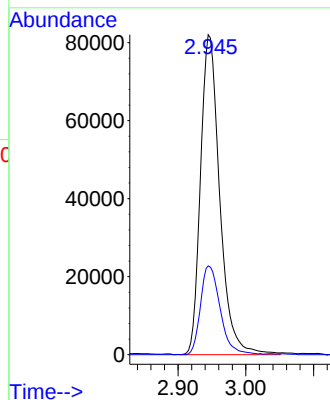
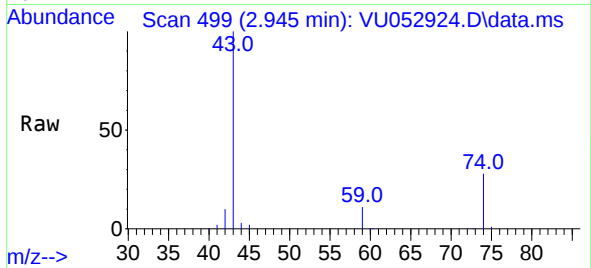




#15  
Methyl Acetate  
Concen: 93.658 ug/L  
RT: 2.945 min Scan# 499  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

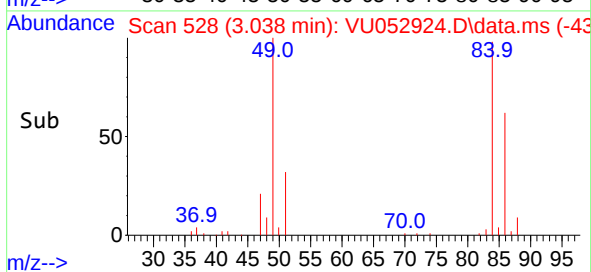
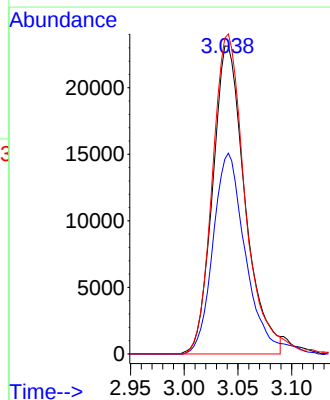
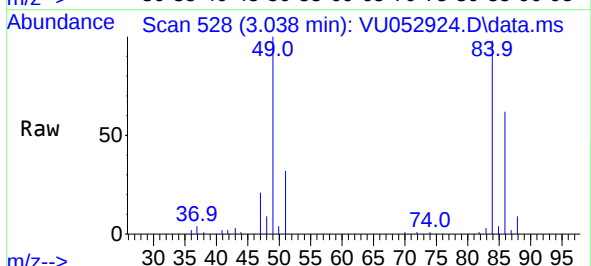
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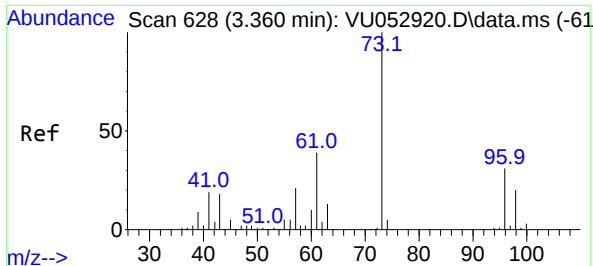
Tgt Ion: 43 Resp: 161536  
Ion Ratio Lower Upper  
43 100  
74 28.3 22.0 33.0



#16  
Methylene chloride  
Concen: 23.323 ug/L  
RT: 3.038 min Scan# 528  
Delta R.T. -0.007 min  
Lab File: VU052924.D  
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Tgt Ion: 84 Resp: 48381  
Ion Ratio Lower Upper  
84 100  
86 63.3 43.4 80.6  
49 102.5 72.4 134.5

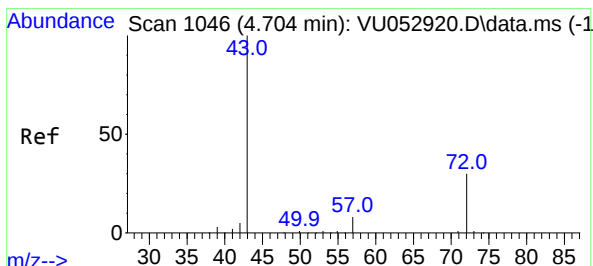
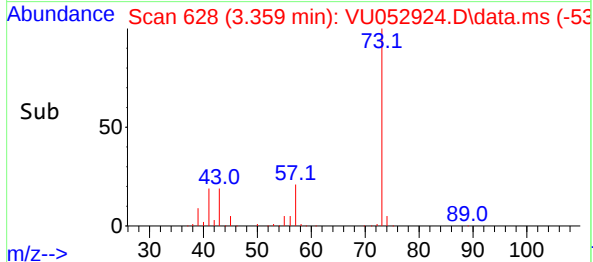
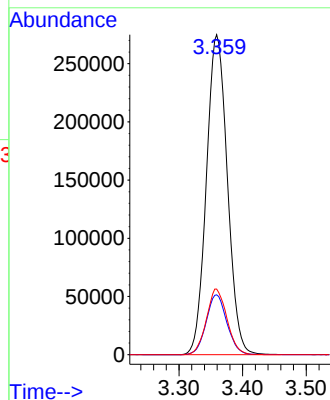
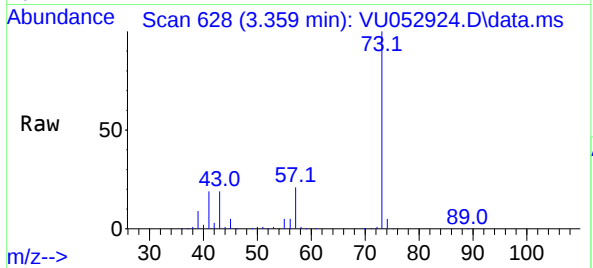




#18  
Methyl tert-butyl Ether  
Concen: 113.633 ug/L  
RT: 3.359 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

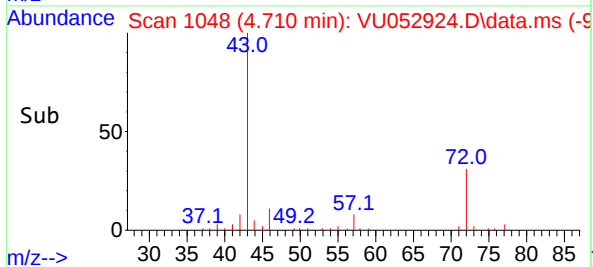
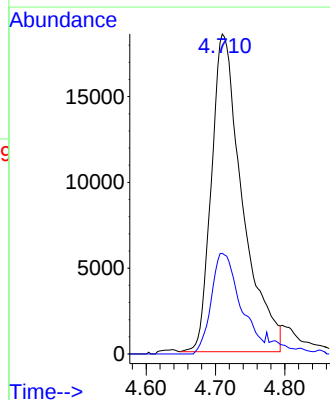
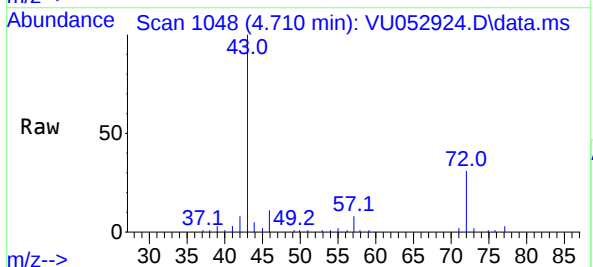
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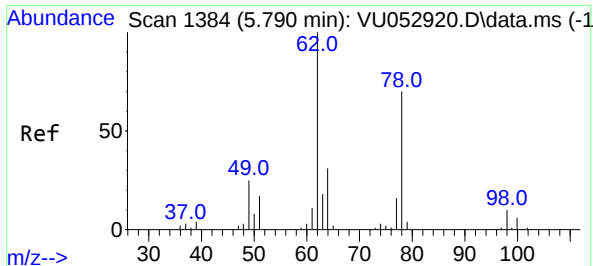
Tgt Ion: 73 Resp: 629666  
Ion Ratio Lower Upper  
73 100  
43 18.5 14.2 21.2  
57 20.1 16.3 24.5



#22  
2-Butanone  
Concen: 41.914 ug/L  
RT: 4.710 min Scan# 1048  
Delta R.T. 0.006 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 43 Resp: 57349  
Ion Ratio Lower Upper  
43 100  
72 30.1 15.5 46.5

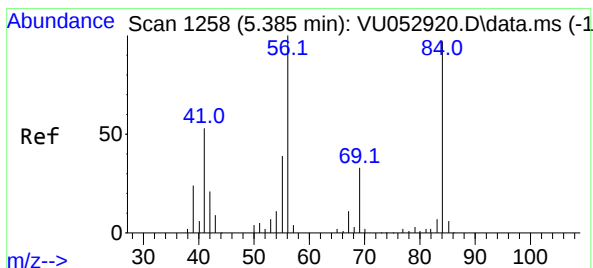
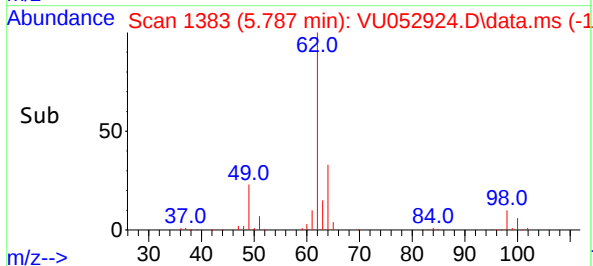
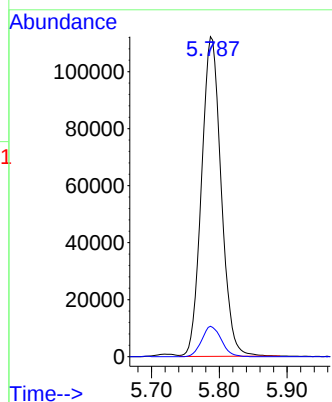
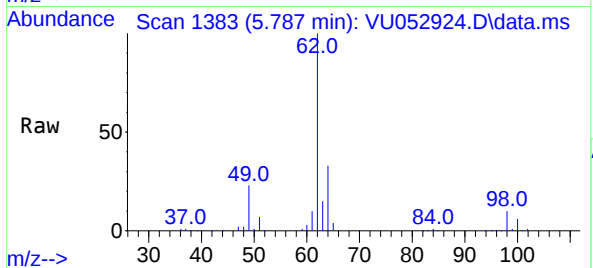




#27  
1,2-Dichloroethane  
Concen: 76.802 ug/L  
RT: 5.787 min Scan# 11  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

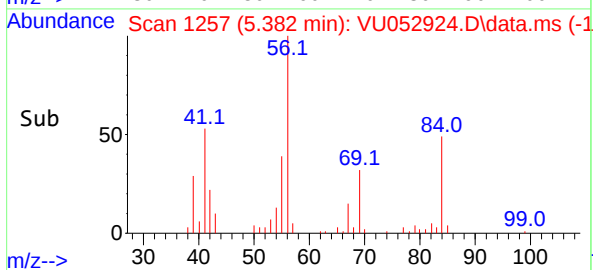
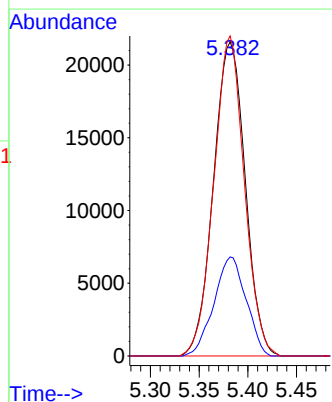
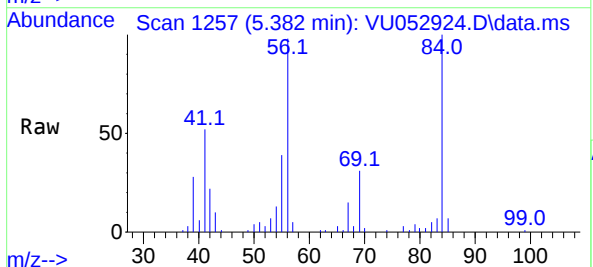
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

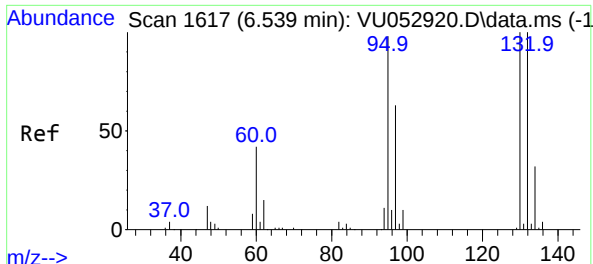
Tgt Ion: 62 Resp: 225585  
Ion Ratio Lower Upper  
62 100  
98 9.5 7.6 11.4



#29  
Cyclohexane  
Concen: 17.489 ug/L  
RT: 5.382 min Scan# 1257  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 56 Resp: 48897  
Ion Ratio Lower Upper  
56 100  
69 32.0 26.6 40.0  
84 98.0 77.0 115.4



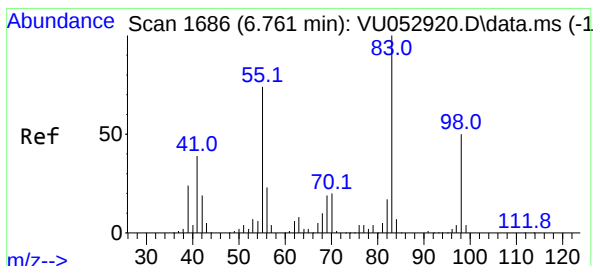
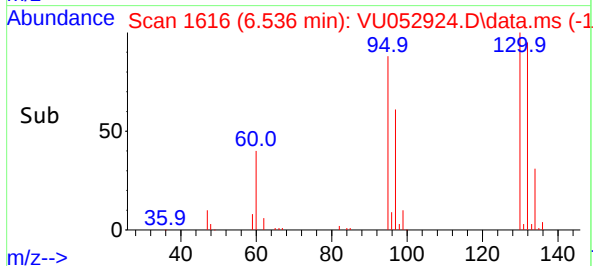
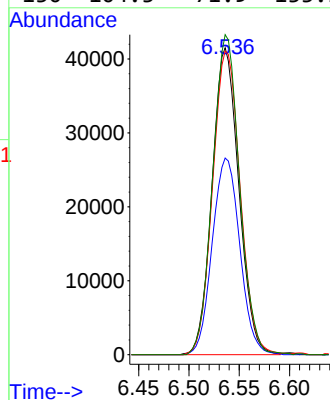
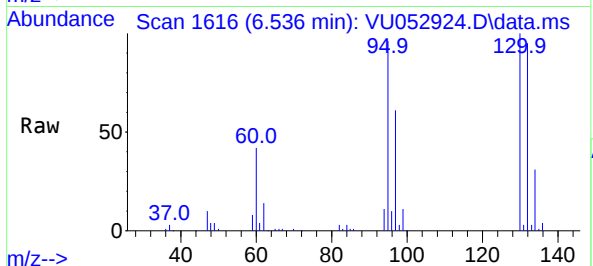


#34  
Trichloroethene  
Concen: 37.584 ug/L  
RT: 6.536 min Scan# 1616  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

Tgt Ion: 95 Resp: 76722

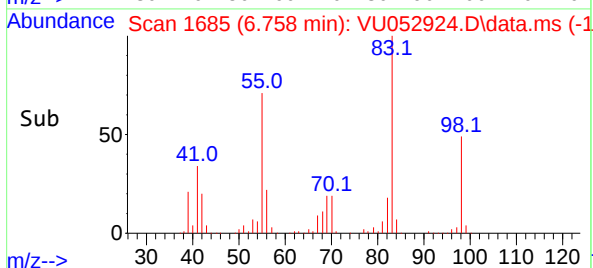
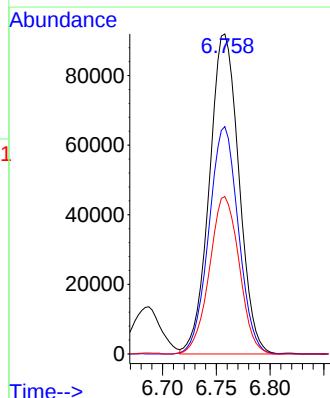
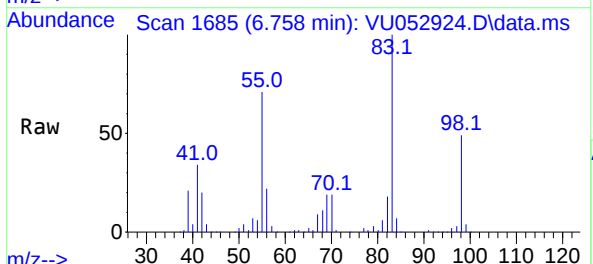
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 64.1  | 44.5  | 82.7  |
| 132 | 99.0  | 66.8  | 124.0 |
| 130 | 104.3 | 71.9  | 133.5 |

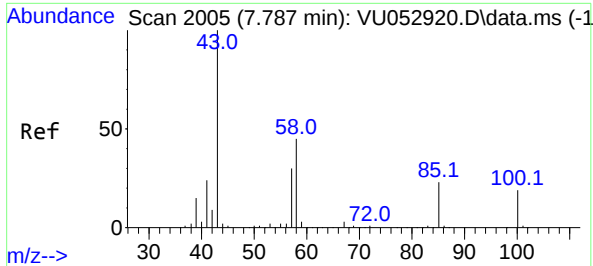


#35  
Methylcyclohexane  
Concen: 54.463 ug/L  
RT: 6.758 min Scan# 1685  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 83 Resp: 175962

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 55  | 70.9  | 57.1  | 85.7  |
| 98  | 49.6  | 38.9  | 58.3  |

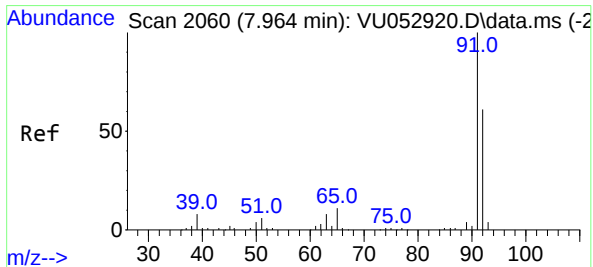
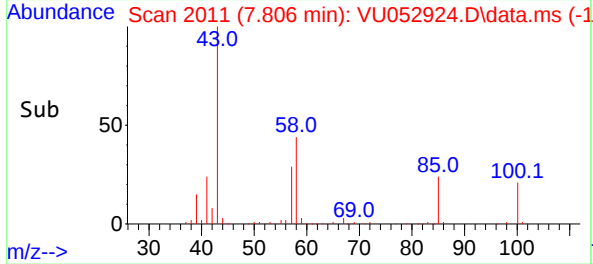
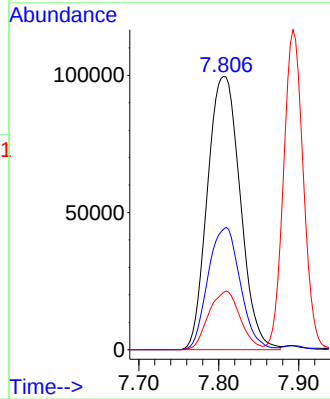
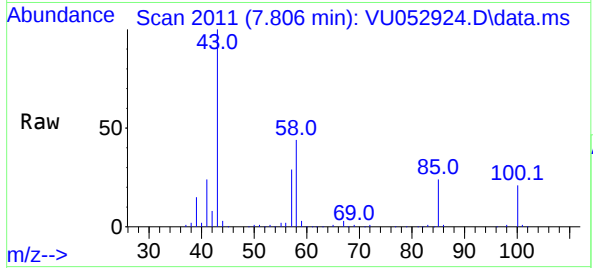




#40  
4-Methyl-2-pentanone  
Concen: 122.041 ug/L  
RT: 7.806 min Scan# 2011  
Delta R.T. 0.019 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

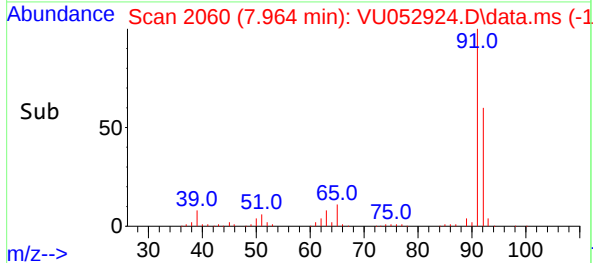
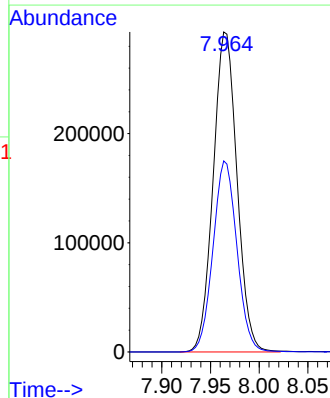
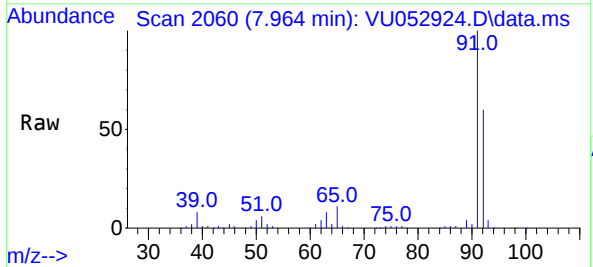
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

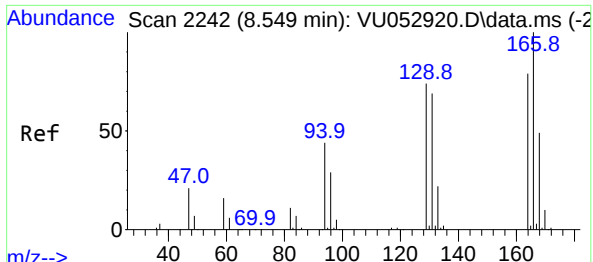
Tgt Ion: 43 Resp: 283898  
Ion Ratio Lower Upper  
43 100  
58 44.0 35.4 53.2  
100 20.5 16.0 24.0



#42  
Toluene  
Concen: 60.585 ug/L  
RT: 7.964 min Scan# 2060  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 91 Resp: 498677  
Ion Ratio Lower Upper  
91 100  
92 59.7 42.6 79.0





#46

Tetrachloroethene

Concen: 18.033 ug/L

RT: 8.549 min Scan# 21

Delta R.T. -0.000 min

Lab File: VU052924.D

Acq: 02 Feb 2023 14:37

Instrument :

MSVOA\_U

ClientSampleId :

A44Q3

Tgt Ion:164 Resp: 31698

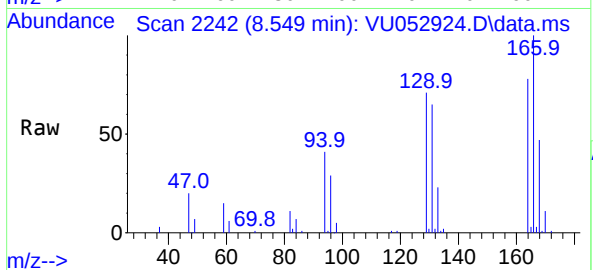
Ion Ratio Lower Upper

164 100

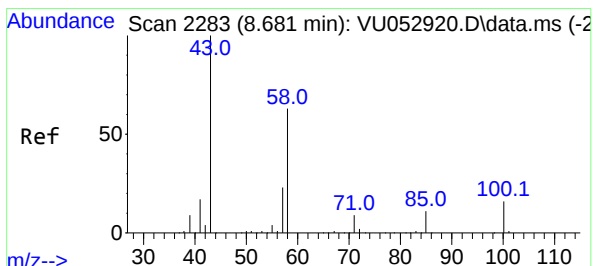
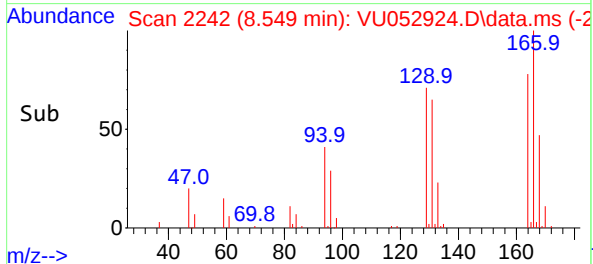
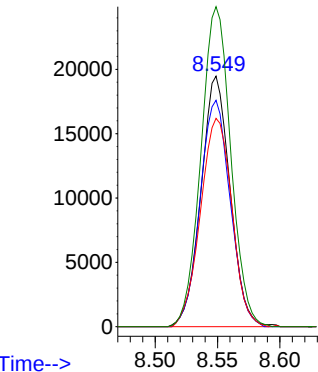
129 90.3 64.8 120.3

131 83.2 61.2 113.6

166 127.7 89.2 165.8



Abundance



#48

2-Hexanone

Concen: 90.518 ug/L

RT: 8.700 min Scan# 2289

Delta R.T. 0.019 min

Lab File: VU052924.D

Acq: 02 Feb 2023 14:37

Tgt Ion: 43 Resp: 178136

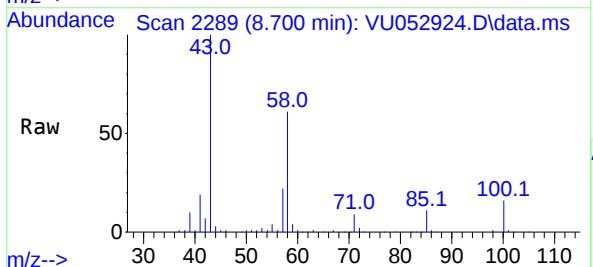
Ion Ratio Lower Upper

43 100

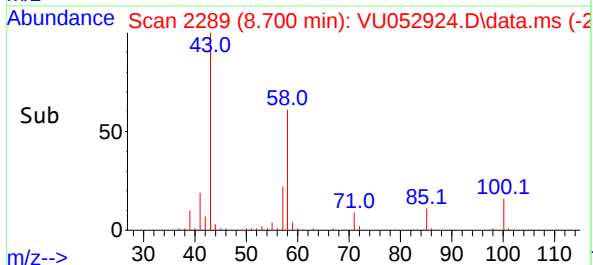
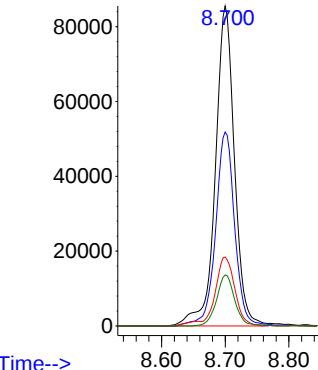
58 60.7 48.0 72.0

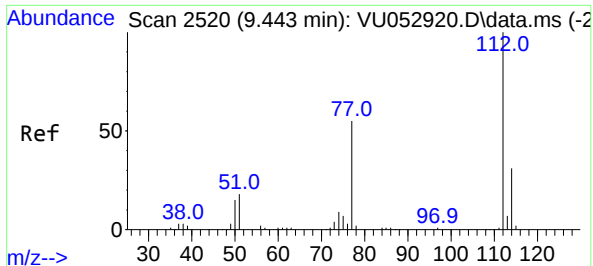
57 21.6 16.8 25.2

100 15.1 12.7 19.1



Abundance

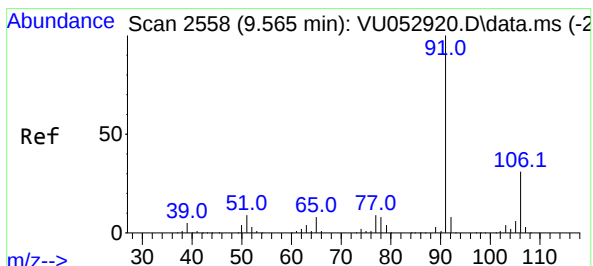
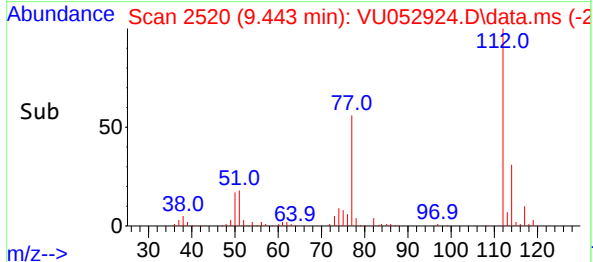
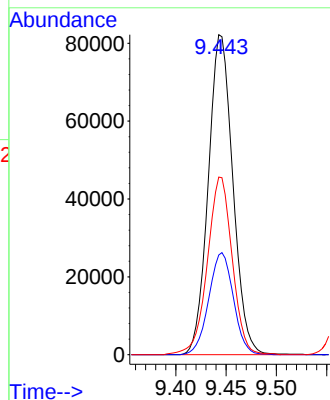
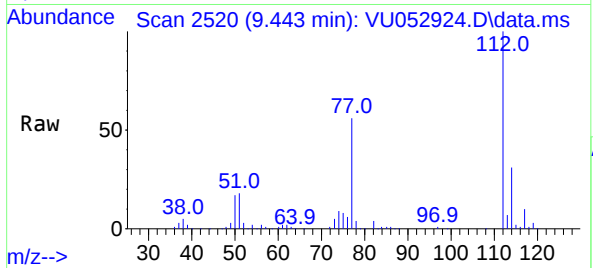




#51  
Chlorobenzene  
Concen: 24.706 ug/L  
RT: 9.443 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

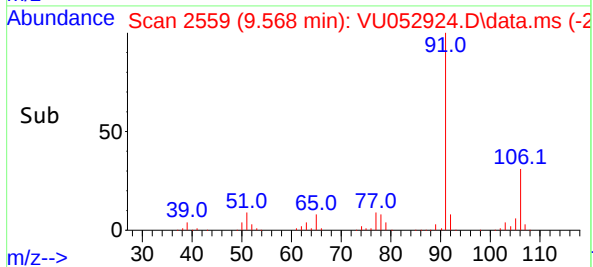
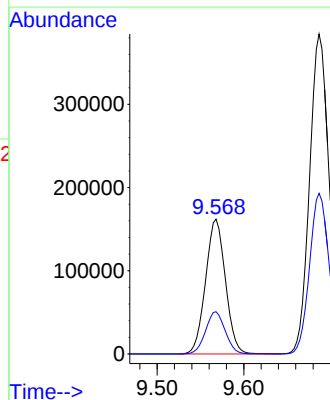
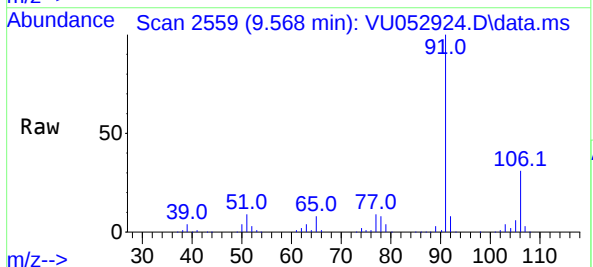
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

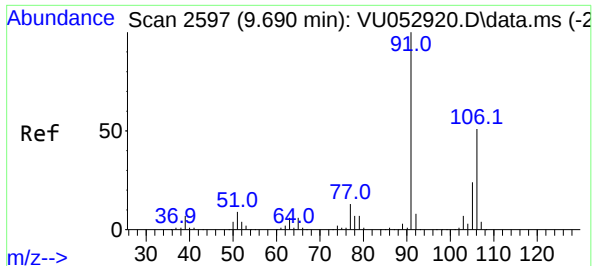
Tgt Ion:112 Resp: 139907  
Ion Ratio Lower Upper  
112 100  
114 31.2 22.8 42.4  
77 55.5 45.9 68.9



#52  
Ethylbenzene  
Concen: 29.388 ug/L  
RT: 9.568 min Scan# 2559  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion: 91 Resp: 258512  
Ion Ratio Lower Upper  
91 100  
106 31.3 22.0 40.8

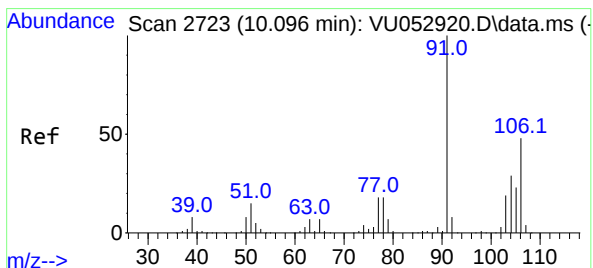
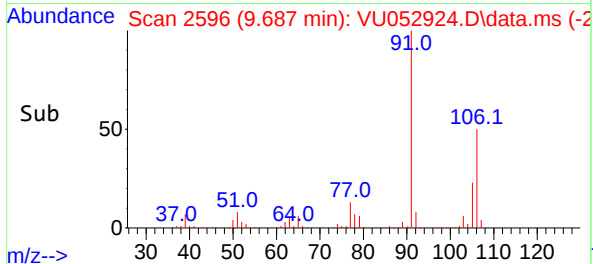
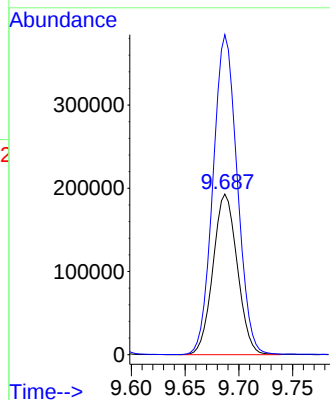
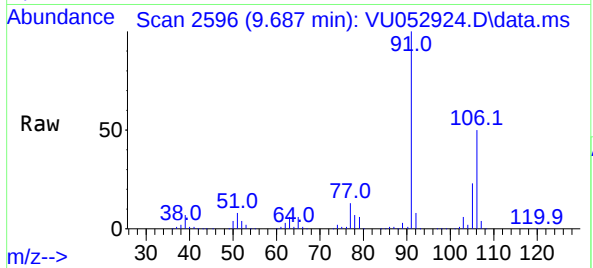




#53  
m,p-Xylene  
Concen: 85.330 ug/L  
RT: 9.687 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

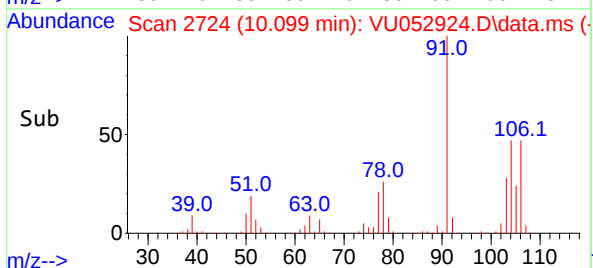
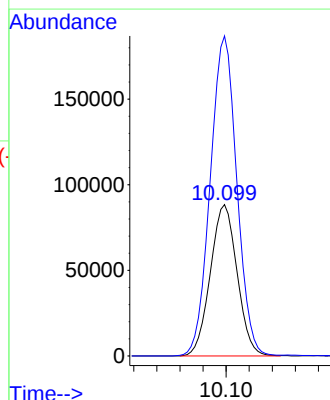
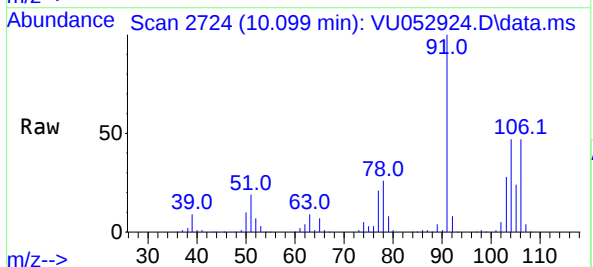
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

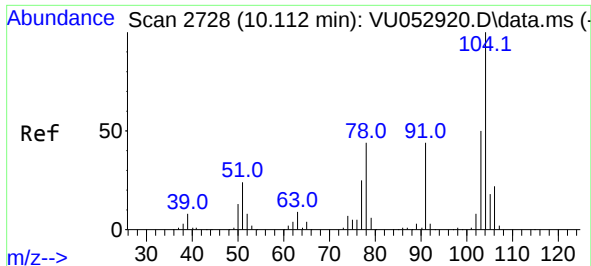
Tgt Ion:106 Resp: 303866  
Ion Ratio Lower Upper  
106 100  
91 199.2 137.4 255.2



#54  
o-xylene  
Concen: 41.865 ug/L  
RT: 10.099 min Scan# 2724  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion:106 Resp: 142322  
Ion Ratio Lower Upper  
106 100  
91 211.5 143.4 266.2

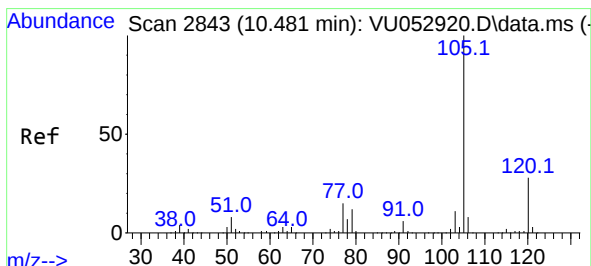
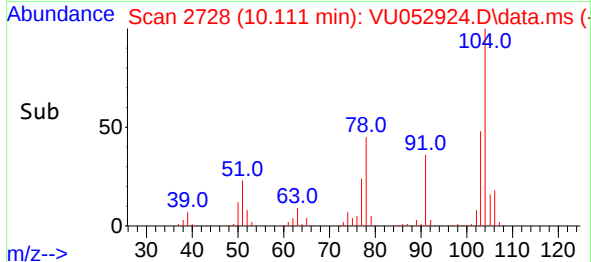
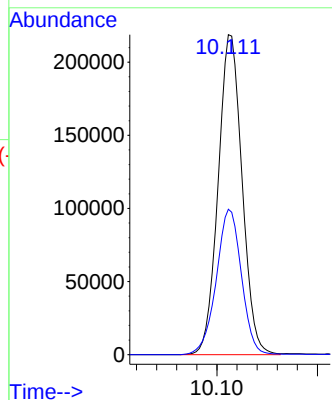
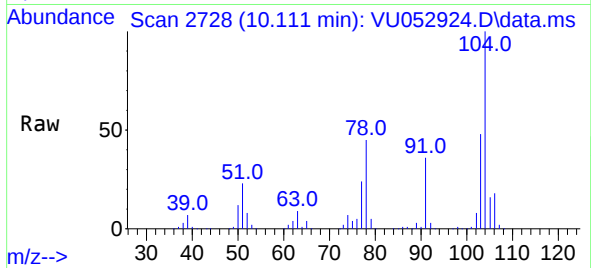




#55  
Styrene  
Concen: 62.005 ug/L  
RT: 10.111 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

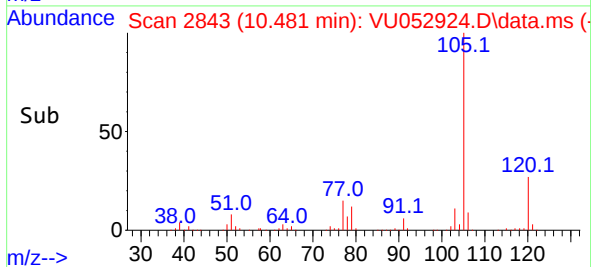
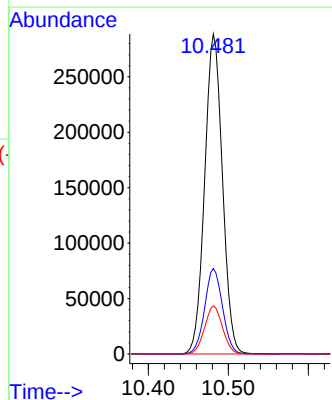
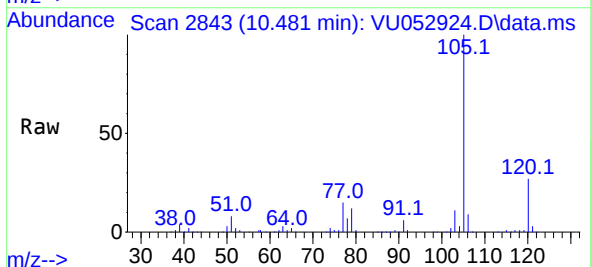
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

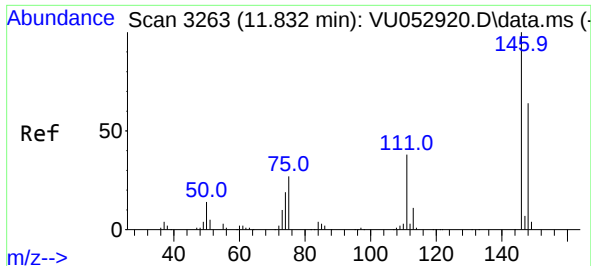
Tgt Ion:104 Resp: 361715  
Ion Ratio Lower Upper  
104 100  
78 45.4 31.9 59.2



#61  
Isopropylbenzene  
Concen: 55.438 ug/L  
RT: 10.481 min Scan# 2843  
Delta R.T. -0.000 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion:105 Resp: 446798  
Ion Ratio Lower Upper  
105 100  
120 26.8 21.4 32.2  
77 15.2 12.2 18.2

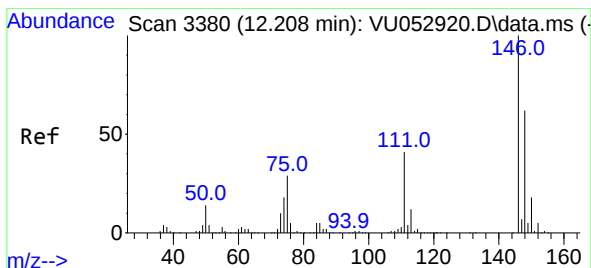
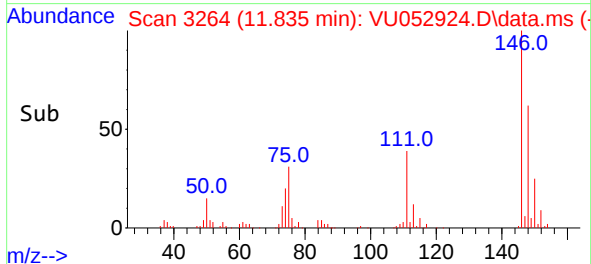
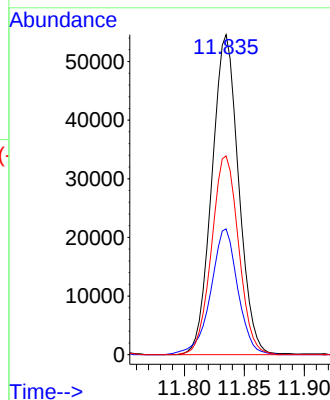
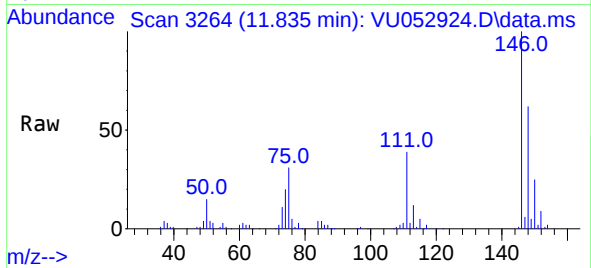




#65  
1,4-Dichlorobenzene  
Concen: 20.130 ug/L  
RT: 11.835 min Scan# 31  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

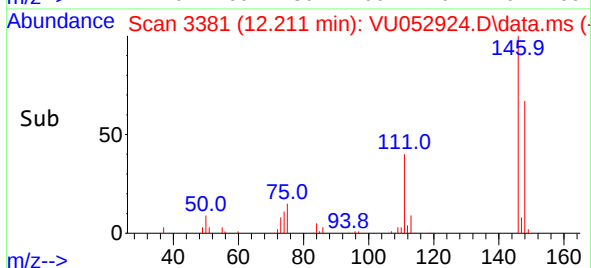
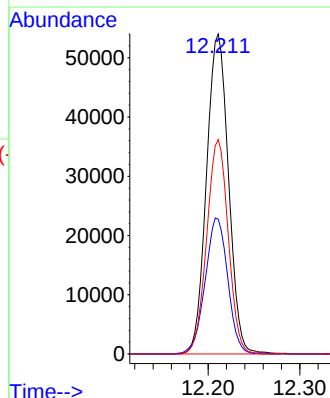
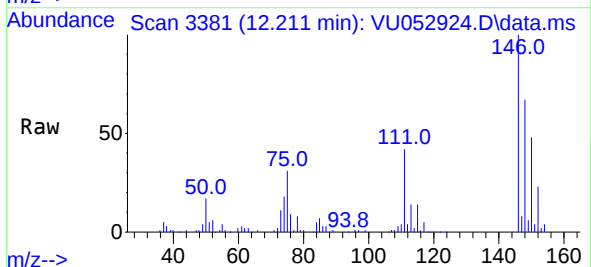
Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

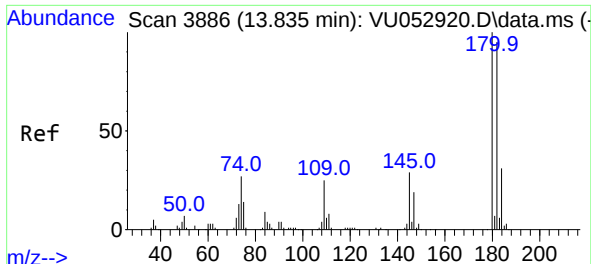
Tgt Ion:146 Resp: 84738  
Ion Ratio Lower Upper  
146 100  
111 39.3 26.7 49.7  
148 62.1 45.6 84.6



#67  
1,2-Dichlorobenzene  
Concen: 21.890 ug/L  
RT: 12.211 min Scan# 3381  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion:146 Resp: 90028  
Ion Ratio Lower Upper  
146 100  
111 42.1 33.2 49.8  
148 67.0 50.2 75.4

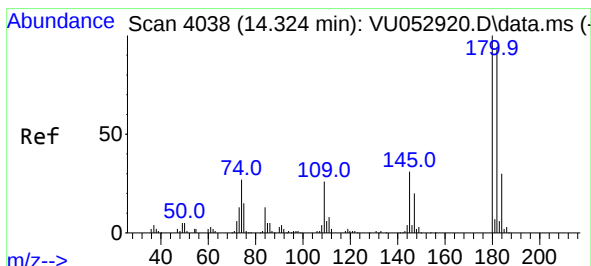
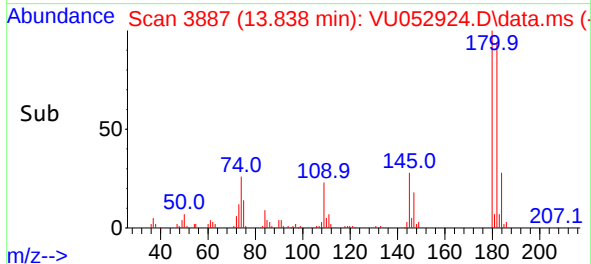
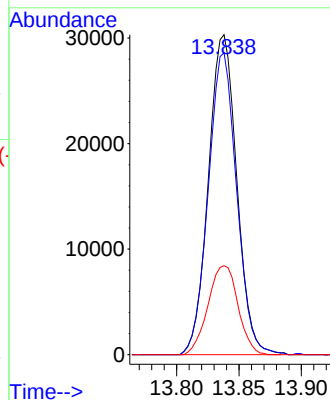
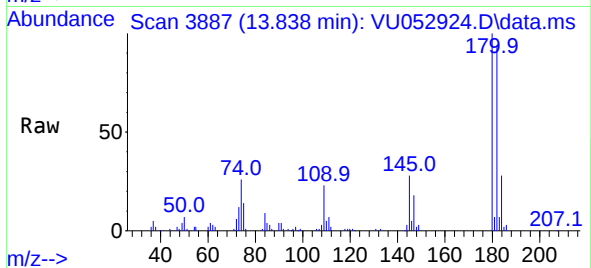




#70  
1,2,4-trichlorobenzene  
Concen: 19.068 ug/L  
RT: 13.838 min Scan# 3887  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Instrument :  
MSVOA\_U  
ClientSampleId :  
A44Q3

Tgt Ion:180 Resp: 48123  
Ion Ratio Lower Upper  
180 100  
182 94.4 78.2 117.2  
145 29.4 23.4 35.2



#72  
1,2,3-Trichlorobenzene  
Concen: 59.408 ug/L  
RT: 14.327 min Scan# 4039  
Delta R.T. 0.003 min  
Lab File: VU052924.D  
Acq: 02 Feb 2023 14:37

Tgt Ion:180 Resp: 158452  
Ion Ratio Lower Upper  
180 100  
182 96.4 77.5 116.3  
145 30.9 24.2 36.4

