

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU120921\  
 Data File : VU046226.D  
 Acq On : 09 Dec 2021 17:43  
 Operator : SY/MD  
 Sample : M4983-14  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 EW5P4

Quant Time: Dec 10 03:45:30 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM112921WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Dec 03 05:08:36 2021  
 Response via : Initial Calibration

| Compound                      | R.T.    | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|---------|-------|----------|----------|--------|-----------|
| -----                         |         |       |          |          |        |           |
| Internal Standards            |         |       |          |          |        |           |
| 1) 1,4-Difluorobenzene        | 6.253   | 114   | 138622   | 50.000   | ug/L   | 0.00      |
| 28) Chlorobenzene-d5          | 9.420   | 117   | 144724   | 50.000   | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 11.812  | 152   | 81227    | 50.000   | ug/L   | 0.00      |
| System Monitoring Compounds   |         |       |          |          |        |           |
| 4) Vinyl Chloride-d3          | 1.604   | 65    | 85182    | 74.597   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =      | 149.200%# |
| 7) Chloroethane-d5            | 1.919   | 69    | 63384    | 72.295   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =      | 144.600%# |
| 11) 1,1-Dichloroethene-d2     | 2.575   | 63    | 131001   | 63.906   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 127.820%# |
| 21) 2-Butanone-d5             | 4.642   | 46    | 137668   | 151.658  | ug/L   | 0.00      |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =      | 151.660%# |
| 24) Chloroform-d              | 5.070   | 84    | 134498   | 70.532   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 141.060%# |
| 26) 1,2-Dichloroethane-d4     | 5.703   | 65    | 93882    | 73.360   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 146.720%# |
| 32) Benzene-d6                | 5.732   | 84    | 298055   | 71.854   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 143.700%# |
| 36) 1,2-Dichloropropane-d6    | 6.693   | 67    | 93195    | 72.494   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =      | 144.980%# |
| 41) Toluene-d8                | 7.899   | 98    | 267858   | 70.922   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 141.840%# |
| 43) trans-1,3-Dichloroprop... | 8.179   | 79    | 47067    | 75.844   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 151.680%# |
| 47) 2-Hexanone-d5             | 8.636   | 63    | 94305    | 154.718  | ug/L   | 0.00      |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =      | 154.720%# |
| 56) 1,1,2,2-Tetrachloroeth... | 10.758  | 84    | 145610   | 74.688   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =      | 149.380%# |
| 66) 1,2-Dichlorobenzene-d4    | 12.195  | 152   | 111445   | 71.243   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 142.480%# |
| Target Compounds              |         |       |          |          |        |           |
|                               |         |       |          |          | Qvalue |           |
| 5) Vinyl chloride             | 1.607   | 62    | 85527    | 62.880   | ug/L   | 99        |
| 8) Chloroethane               | 1.938   | 64    | 515824   | 654.984  | ug/L   | 99        |
| 9) Trichlorofluoromethane     | 2.144   | 101   | 6513     | 3.668    | ug/L   | 98        |
| 12) 1,1-Dichloroethene        | 2.588   | 96    | 40191    | 41.932   | ug/L   | 85        |
| 17) trans-1,2-Dichloroethene  | 3.359   | 96    | 11152    | 10.994   | ug/L   | 98        |
| 19) 1,1-Dichloroethane        | 3.877   | 63    | 1218109  | 660.477  | ug/L   | 99        |
| 20) cis-1,2-Dichloroethene    | 4.671   | 96    | 1261422  | 1146.106 | ug/L   | 99        |
| 25) Chloroform                | 5.092   | 83    | 13861    | 6.764    | ug/L   | 98        |
| 27) 1,2-Dichloroethane        | 5.796   | 62    | 4272     | 2.809    | ug/L   | 99        |
| 30) 1,1,1-Trichloroethane     | 5.324   | 97    | 3634793  | 2046.047 | ug/L   | 99        |
| 33) Benzene                   | 5.777   | 78    | 9209     | 2.102    | ug/L   | 100       |
| 34) Trichloroethene           | 6.546   | 95    | 13571    | 11.761   | ug/L   | 98        |
| 35) Methylcyclohexane         | 6.761   | 83    | 2447     | 1.368    | ug/L   | 90        |
| 42) Toluene                   | 7.970   | 91    | 196950   | 41.903   | ug/L   | 99        |
| 46) Tetrachloroethene         | 8.555   | 164   | 23490    | 27.700   | ug/L   | 98        |
| 52) Ethylbenzene              | 9.571   | 91    | 42988    | 8.498    | ug/L   | 98        |
| 53) m,p-Xylene                | 9.693   | 106   | 49283    | 24.983   | ug/L   | 97        |
| 54) o-xylene                  | 10.102  | 106   | 28188    | 14.726   | ug/L   | 96        |
| 61) Isopropylbenzene          | 10.488  | 105   | 7318     | 1.385    | ug/L   | 98        |

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Sample : M4983-14  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

Quant Time: Dec 10 03:45:30 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM112921WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Dec 03 05:08:36 2021  
Response via : Initial Calibration

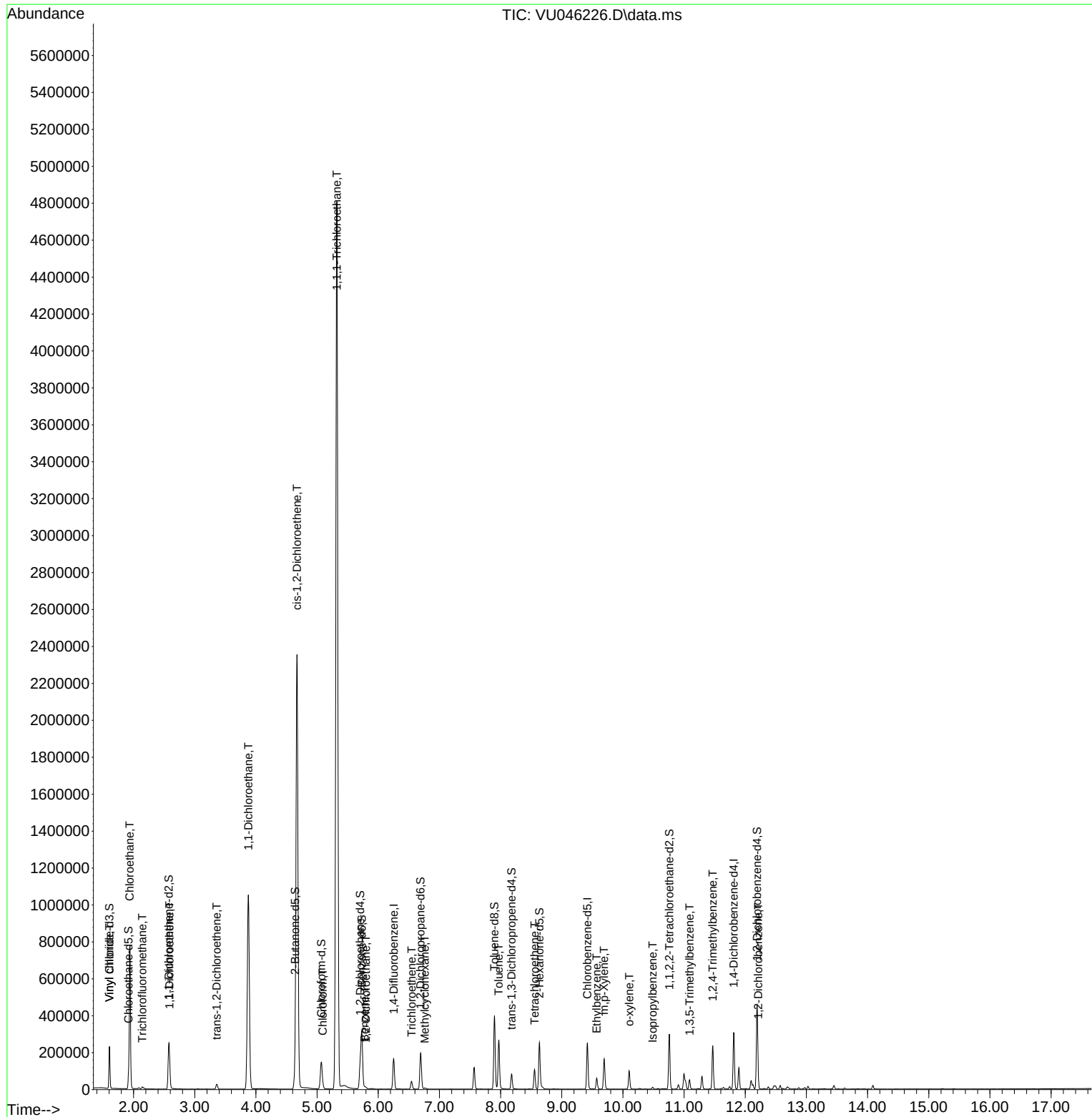
| Compound                   | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|----------------------------|--------|------|----------|--------|--------|----------|
| 62) 1,3,5-Trimethylbenzene | 11.089 | 105  | 28691    | 6.513  | ug/L   | 100      |
| 63) 1,2,4-Trimethylbenzene | 11.468 | 105  | 132685   | 30.106 | ug/L   | 99       |
| 67) 1,2-Dichlorobenzene    | 12.211 | 146  | 5480     | 2.168  | ug/L # | 92       |

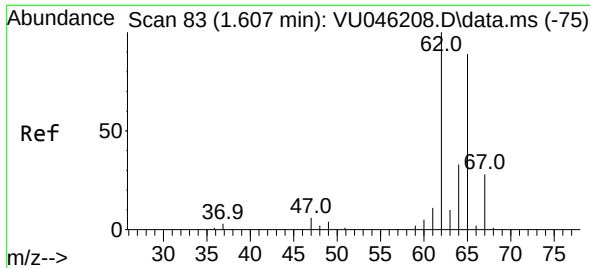
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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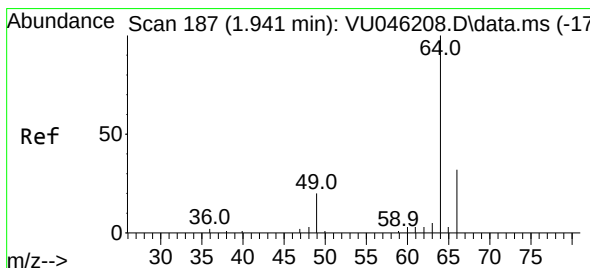
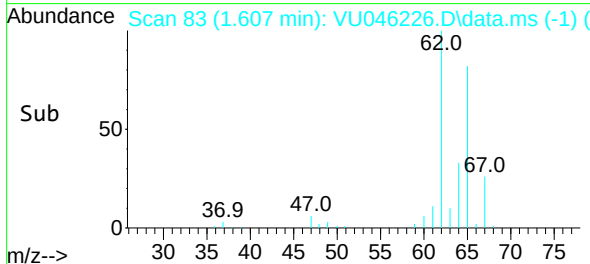
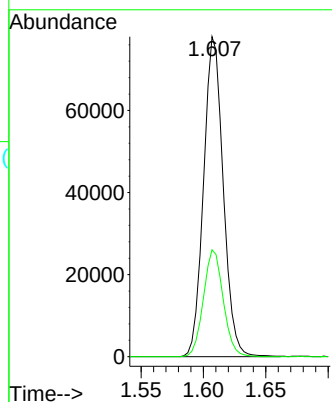
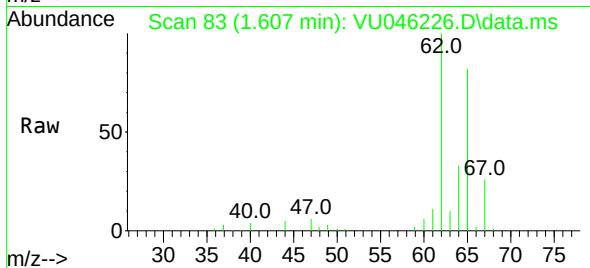




#5  
 Vinyl chloride  
 Concen: 62.880 ug/L  
 RT: 1.607 min Scan# 81  
 Delta R.T. -0.000 min  
 Lab File: VU046226.D  
 Acq: 09 Dec 2021 17:43

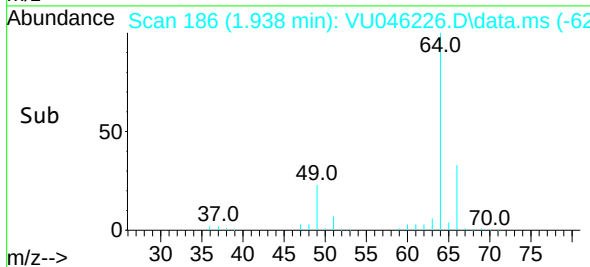
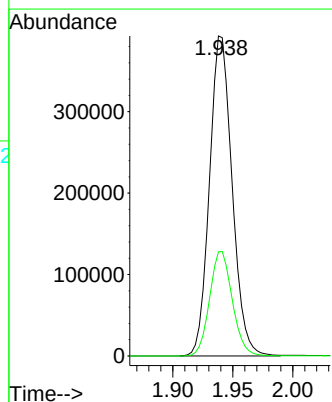
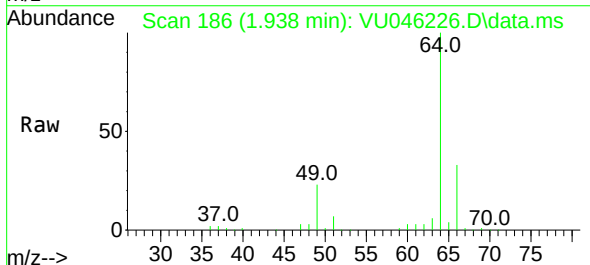
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
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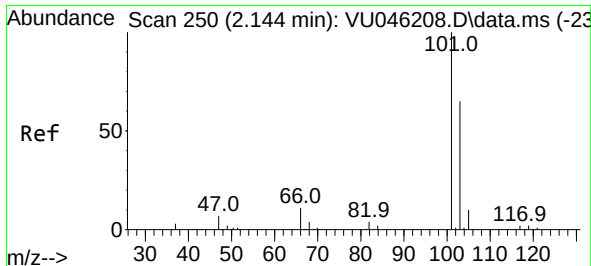
Tgt Ion: 62 Resp: 85527  
 Ion Ratio Lower Upper  
 62 100  
 64 33.4 22.9 42.5



#8  
 Chloroethane  
 Concen: 654.984 ug/L  
 RT: 1.938 min Scan# 186  
 Delta R.T. -0.000 min  
 Lab File: VU046226.D  
 Acq: 09 Dec 2021 17:43

Tgt Ion: 64 Resp: 515824  
 Ion Ratio Lower Upper  
 64 100  
 66 32.5 22.5 41.9

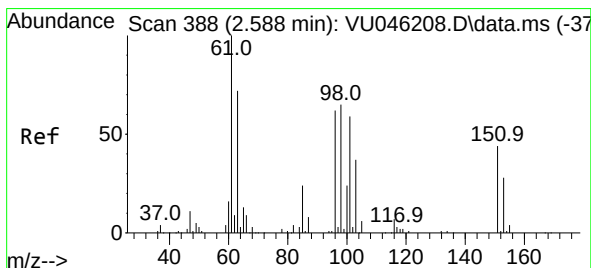
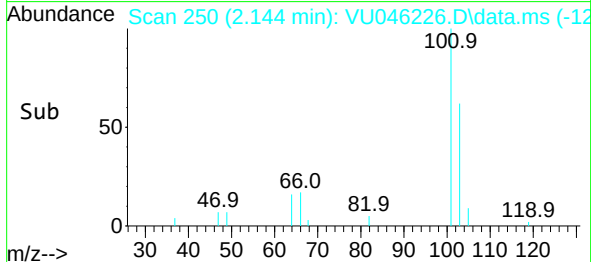
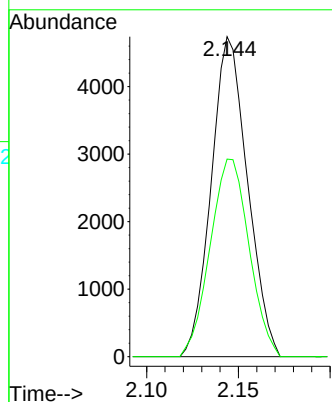
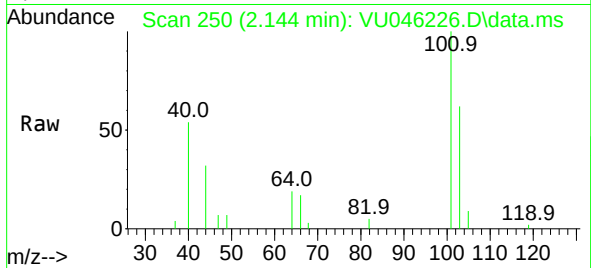




#9  
 Trichlorofluoromethane  
 Concen: 3.668 ug/L  
 RT: 2.144 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: VU046226.D  
 Acq: 09 Dec 2021 17:43

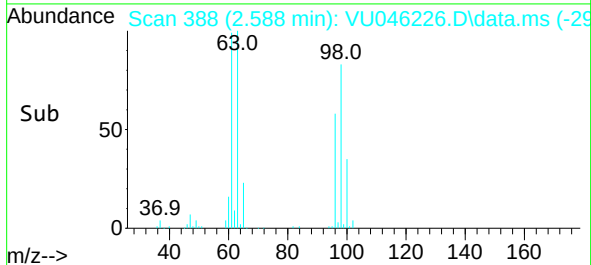
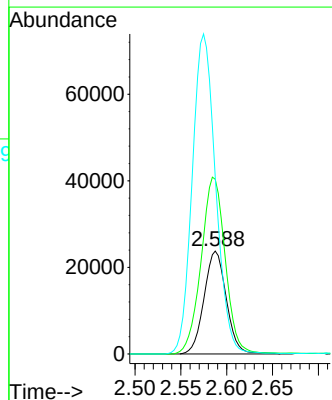
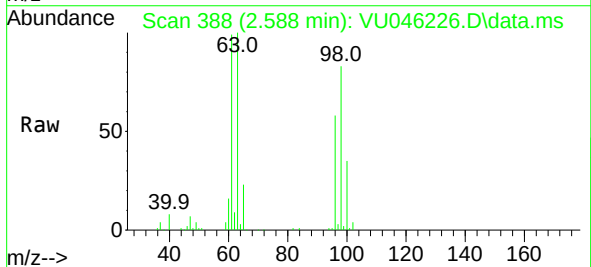
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 EW5P4

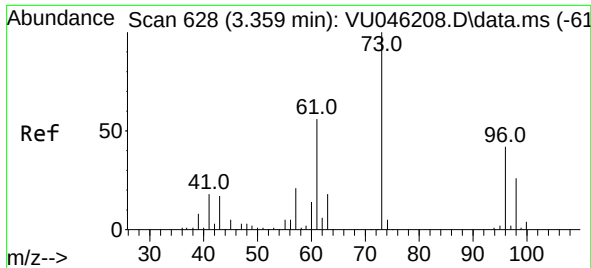
Tgt Ion:101 Resp: 6513  
 Ion Ratio Lower Upper  
 101 100  
 103 66.2 51.8 77.6



#12  
 1,1-Dichloroethene  
 Concen: 41.932 ug/L  
 RT: 2.588 min Scan# 388  
 Delta R.T. 0.003 min  
 Lab File: VU046226.D  
 Acq: 09 Dec 2021 17:43

Tgt Ion: 96 Resp: 40191  
 Ion Ratio Lower Upper  
 96 100  
 61 169.9 118.6 220.2  
 63 172.0 93.0 172.8

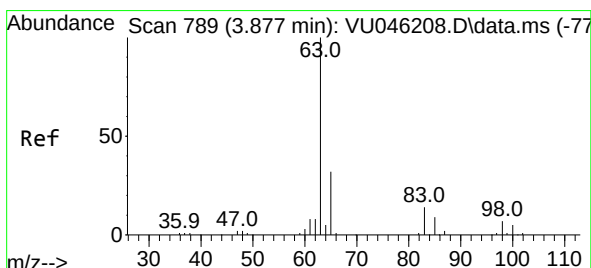
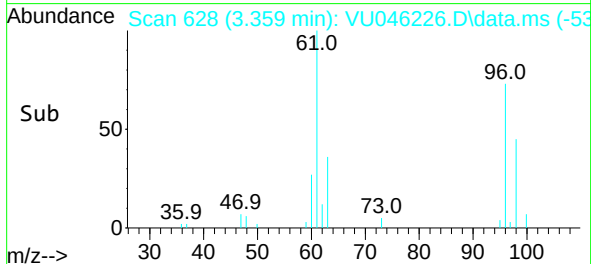
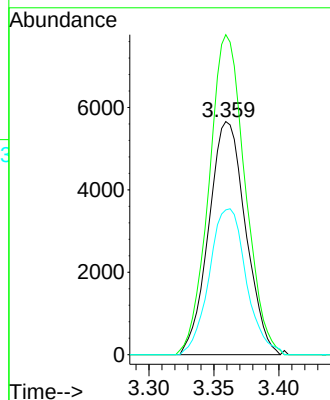
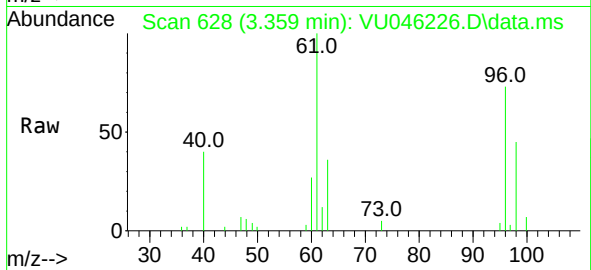




#17  
trans-1,2-Dichloroethene  
Concen: 10.994 ug/L  
RT: 3.359 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

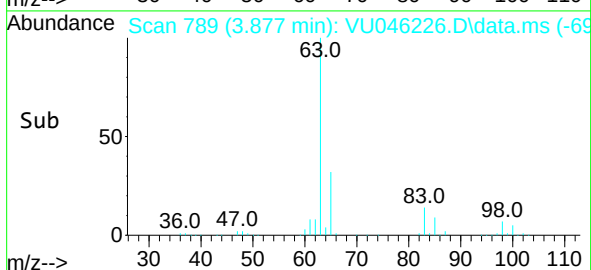
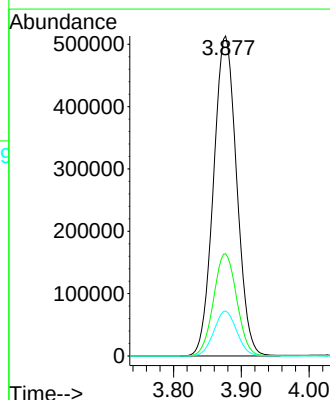
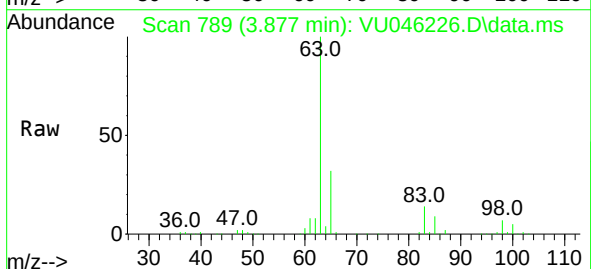
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

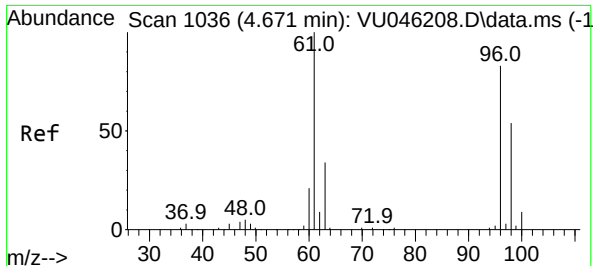
Tgt Ion: 96 Resp: 11152  
Ion Ratio Lower Upper  
96 100  
61 137.3 94.6 175.6  
98 62.1 44.0 81.8



#19  
1,1-Dichloroethane  
Concen: 660.477 ug/L  
RT: 3.877 min Scan# 789  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion: 63 Resp: 1218109  
Ion Ratio Lower Upper  
63 100  
65 31.9 22.8 42.4  
83 14.1 9.6 17.8



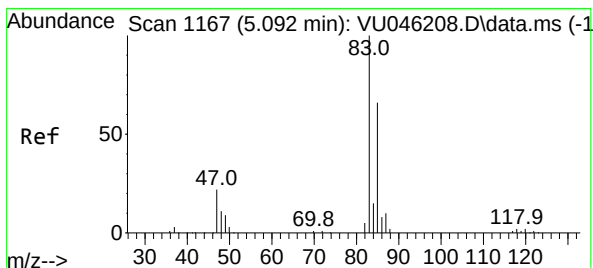
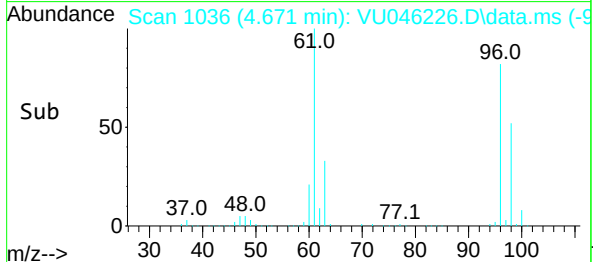
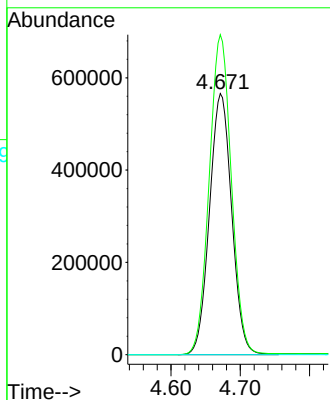
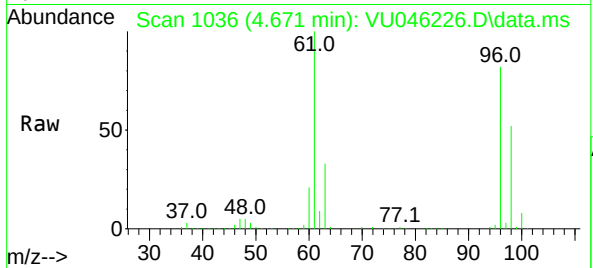


#20  
cis-1,2-Dichloroethene  
Concen: 1146.106 ug/L  
RT: 4.671 min Scan# 1036  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

Tgt Ion: 96 Resp: 1261422

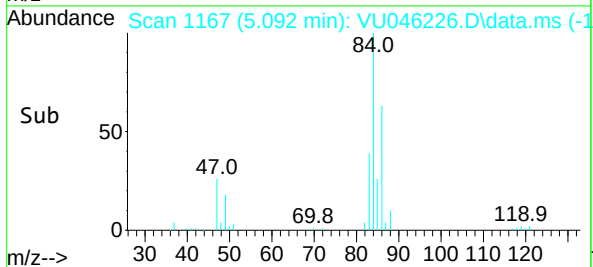
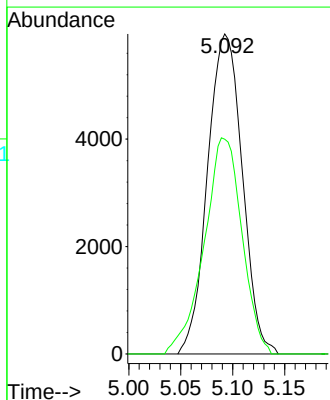
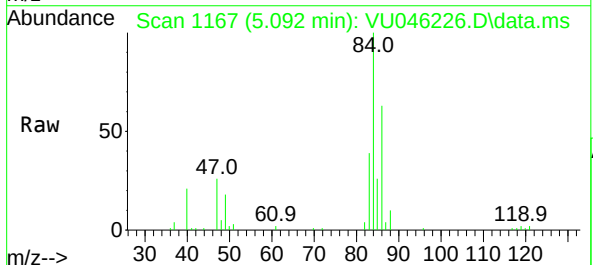
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 122.6 | 86.8  | 161.2 |
| 68  | 0.0   | 0.0   | 0.0   |

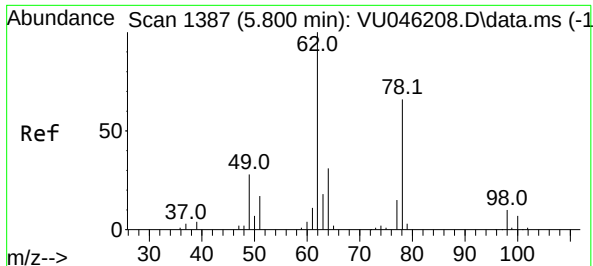


#25  
Chloroform  
Concen: 6.764 ug/L  
RT: 5.092 min Scan# 1167  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion: 83 Resp: 13861

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 85  | 67.1  | 45.8  | 85.2  |

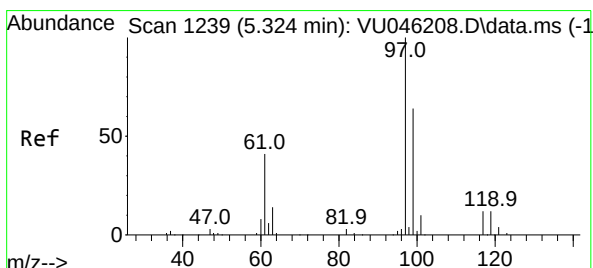
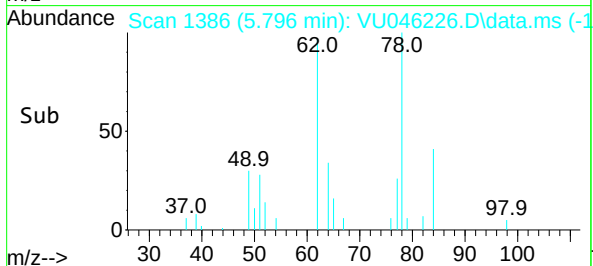
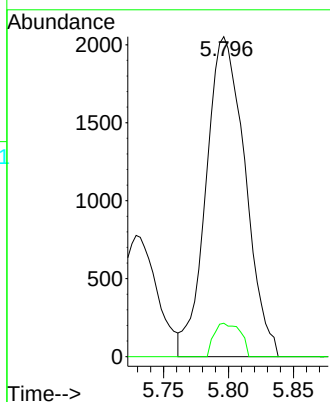
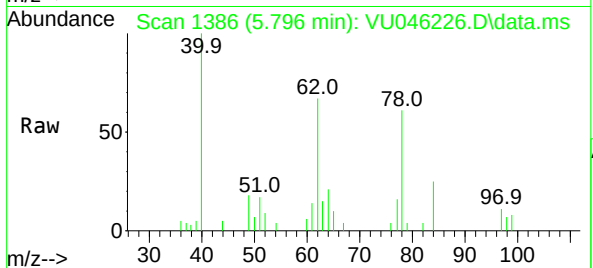




#27  
1,2-Dichloroethane  
Concen: 2.809 ug/L  
RT: 5.796 min Scan# 11  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

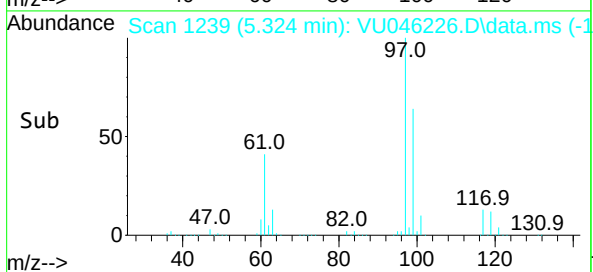
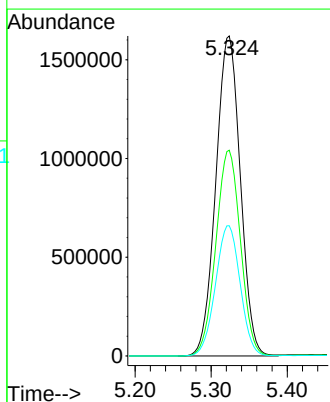
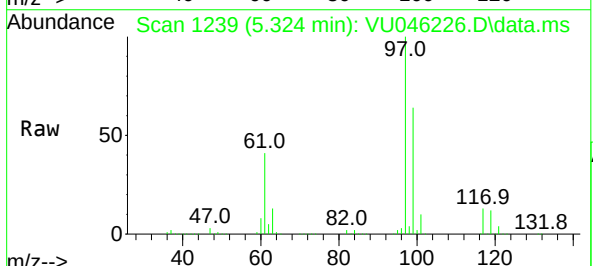
Instrument :  
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Tgt Ion: 62 Resp: 4272  
Ion Ratio Lower Upper  
62 100  
98 10.4 7.9 11.9

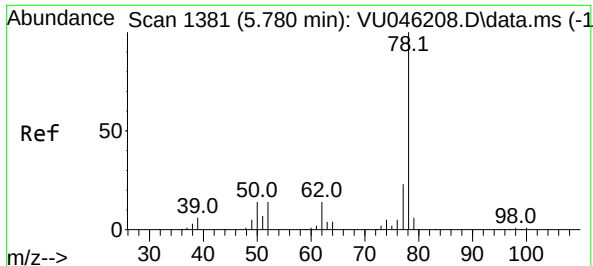


#30  
1,1,1-Trichloroethane  
Concen: 2046.047 ug/L  
RT: 5.324 min Scan# 1239  
Delta R.T. 0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion: 97 Resp: 3634793  
Ion Ratio Lower Upper  
97 100  
99 64.4 51.8 77.6  
61 41.0 34.4 51.6



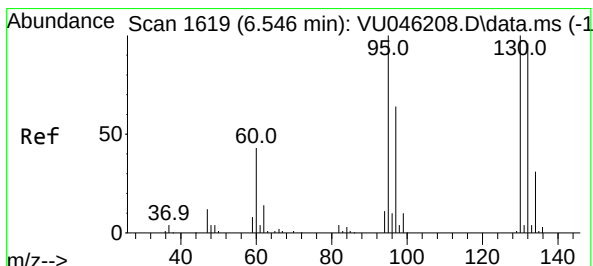
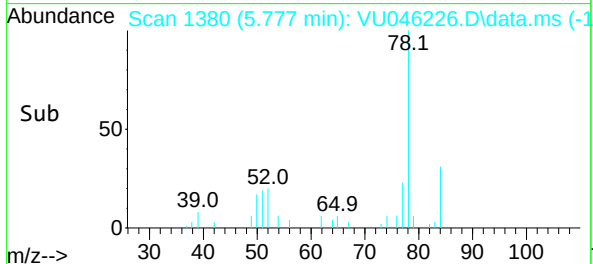
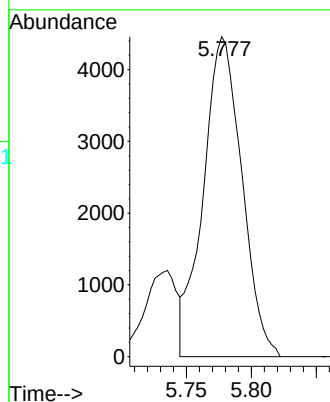
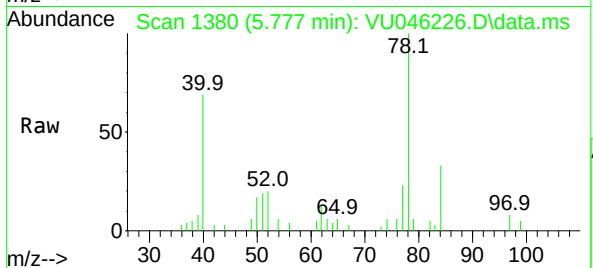




#33  
Benzene  
Concen: 2.102 ug/L  
RT: 5.777 min Scan# 11  
Delta R.T. -0.003 min  
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Instrument :  
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ClientSampleId :  
EW5P4

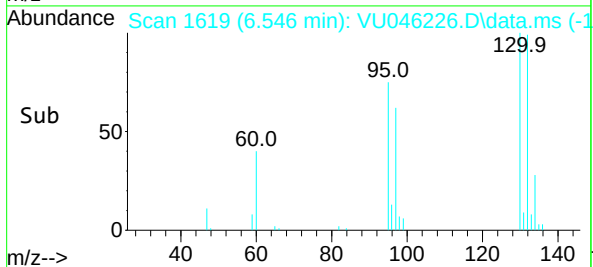
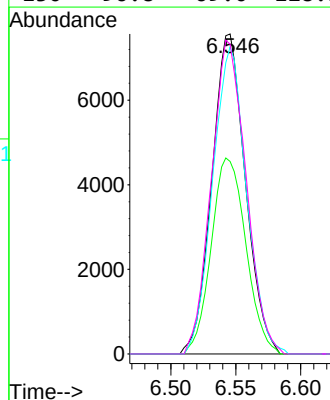
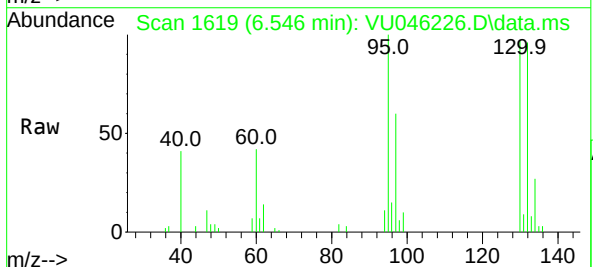
Tgt Ion: 78 Resp: 9209

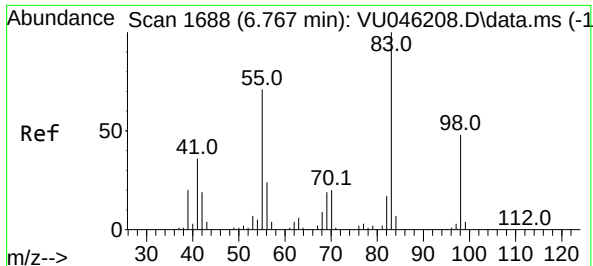


#34  
Trichloroethene  
Concen: 11.761 ug/L  
RT: 6.546 min Scan# 1619  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion: 95 Resp: 13571

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 60.1  | 44.1  | 81.9  |
| 132 | 96.0  | 66.8  | 124.0 |
| 130 | 96.8  | 69.0  | 128.1 |





#35

Methylcyclohexane

Concen: 1.368 ug/L

RT: 6.761 min Scan# 1

Delta R.T. -0.007 min

Lab File: VU046226.D

Acq: 09 Dec 2021 17:43

Instrument :

MSVOA\_U

ClientSampleId :

EW5P4

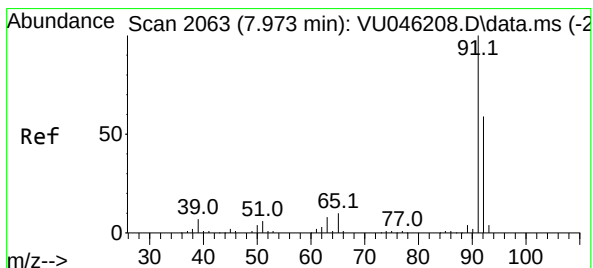
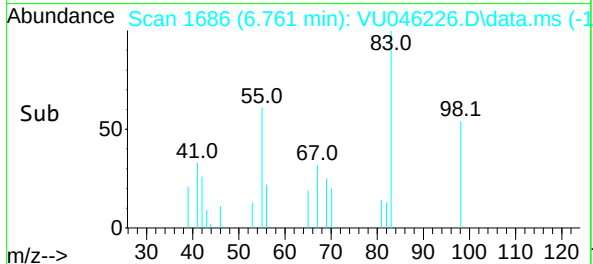
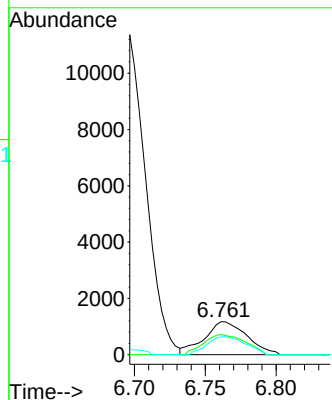
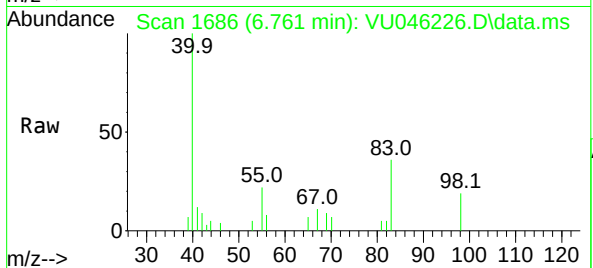
Tgt Ion: 83 Resp: 2447

Ion Ratio Lower Upper

83 100

55 59.9 57.8 86.6

98 49.4 38.4 57.6



#42

Toluene

Concen: 41.903 ug/L

RT: 7.970 min Scan# 2062

Delta R.T. -0.003 min

Lab File: VU046226.D

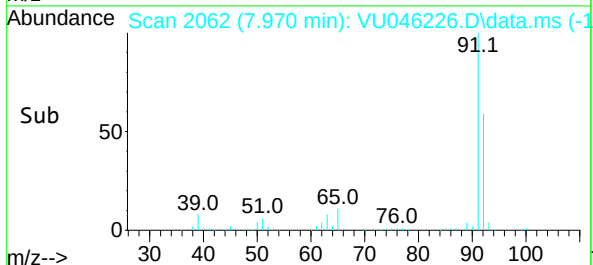
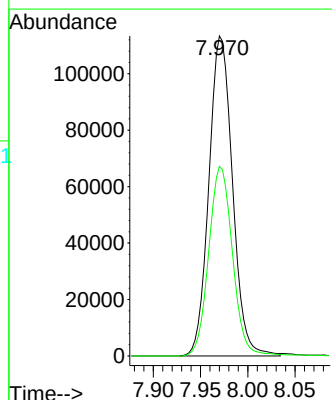
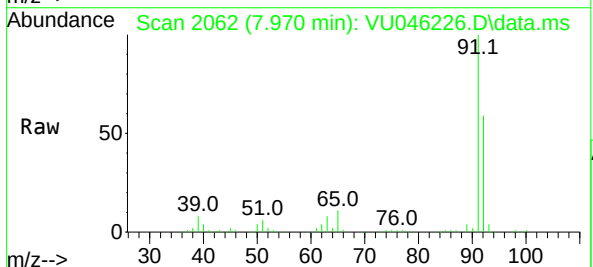
Acq: 09 Dec 2021 17:43

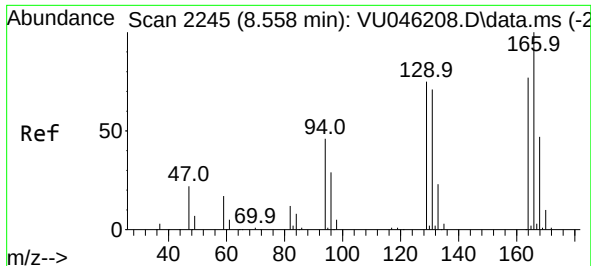
Tgt Ion: 91 Resp: 196950

Ion Ratio Lower Upper

91 100

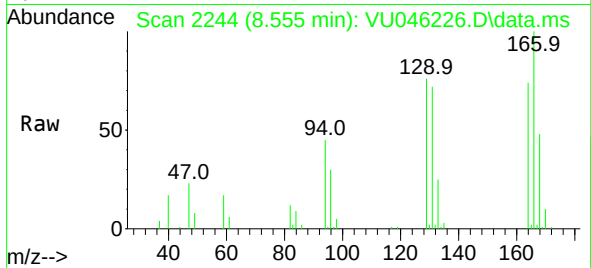
92 59.3 41.9 77.7



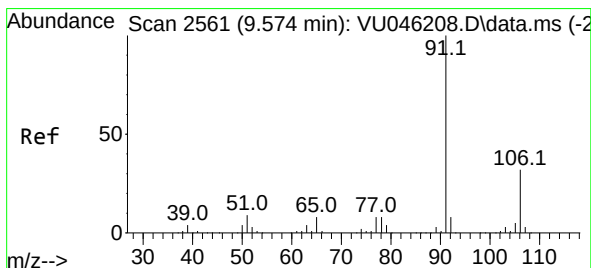
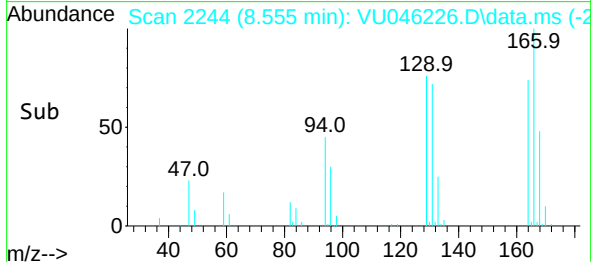
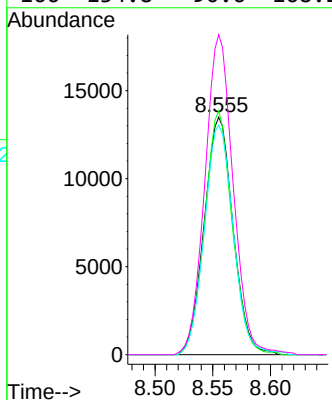


#46  
Tetrachloroethene  
Concen: 27.700 ug/L  
RT: 8.555 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

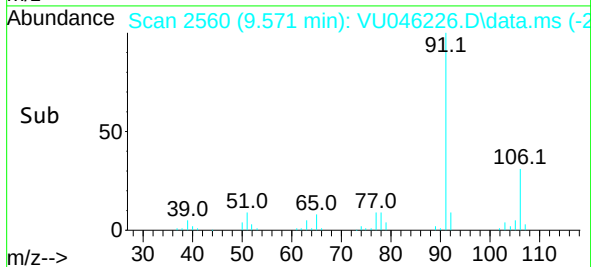
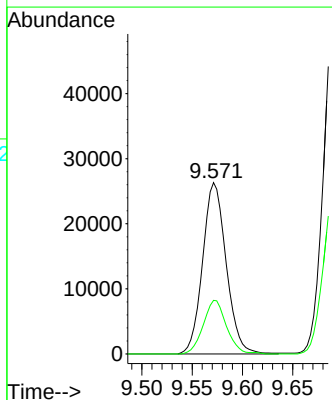
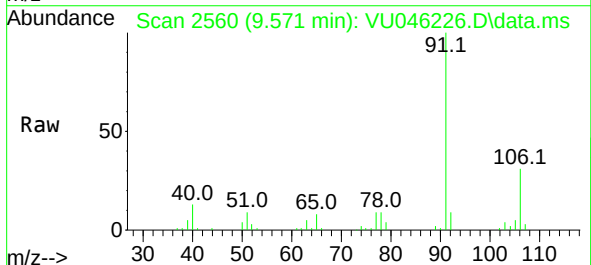


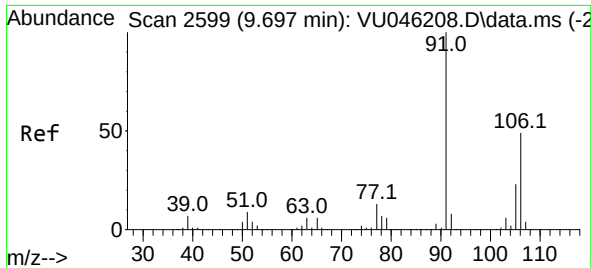
Tgt Ion:164 Resp: 23490  
Ion Ratio Lower Upper  
164 100  
129 102.6 71.1 132.1  
131 96.7 67.8 126.0  
166 134.8 90.6 168.2



#52  
Ethylbenzene  
Concen: 8.498 ug/L  
RT: 9.571 min Scan# 2560  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion: 91 Resp: 42988  
Ion Ratio Lower Upper  
91 100  
106 31.3 21.1 39.3

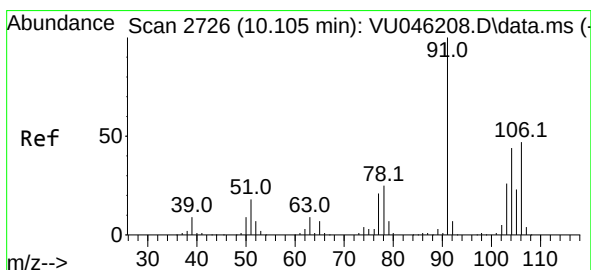
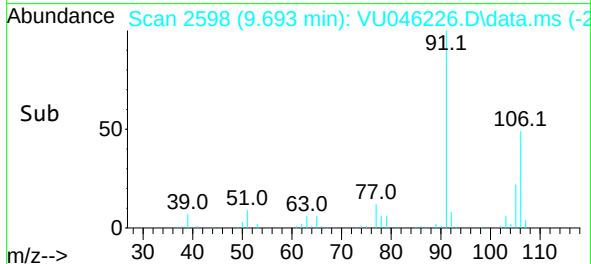
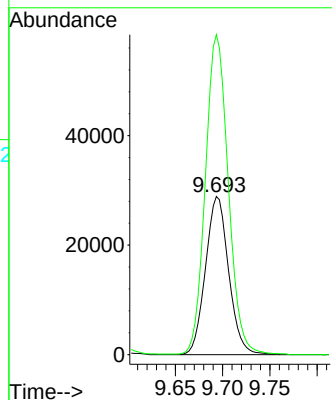
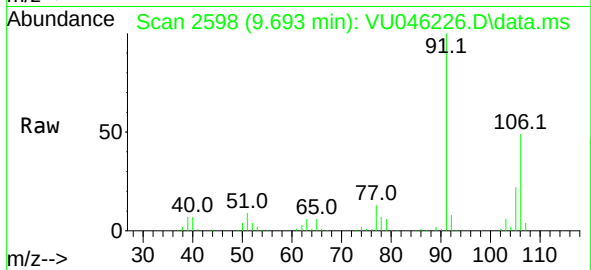




#53  
m,p-Xylene  
Concen: 24.983 ug/L  
RT: 9.693 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

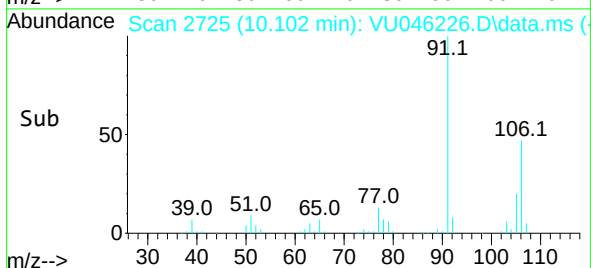
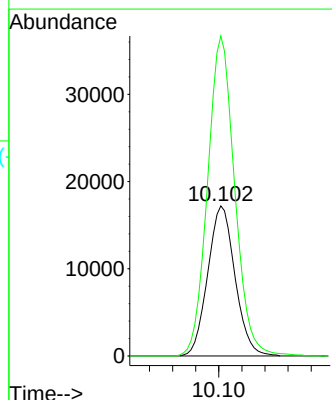
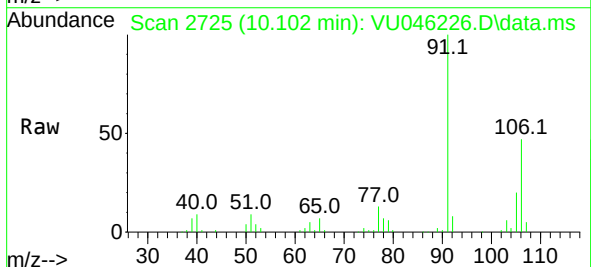
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

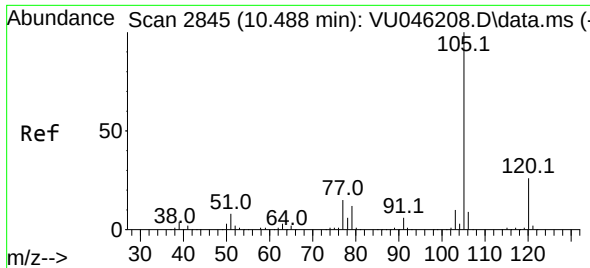
Tgt Ion:106 Resp: 49283  
Ion Ratio Lower Upper  
106 100  
91 202.3 144.3 268.1



#54  
o-xylene  
Concen: 14.726 ug/L  
RT: 10.102 min Scan# 2725  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion:106 Resp: 28188  
Ion Ratio Lower Upper  
106 100  
91 213.1 154.2 286.4

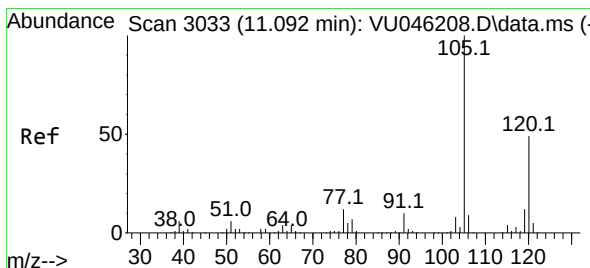
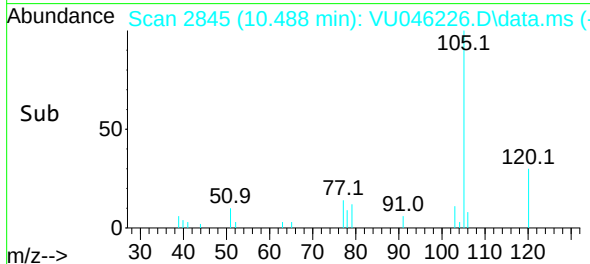
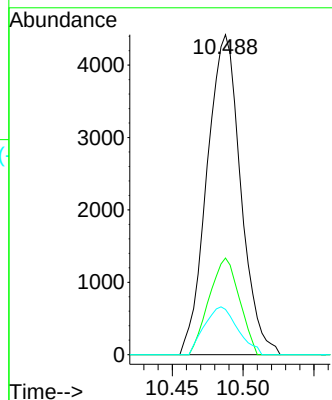
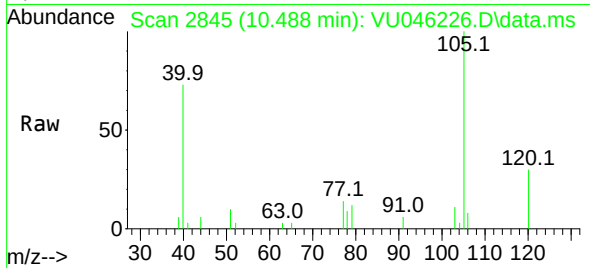




#61  
Isopropylbenzene  
Concen: 1.385 ug/L  
RT: 10.488 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

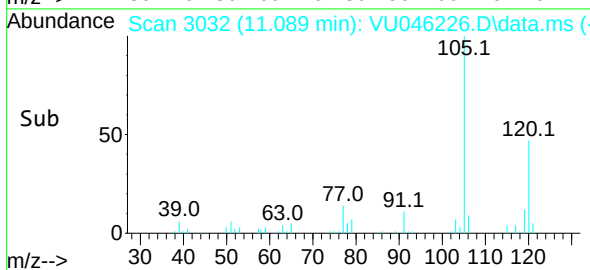
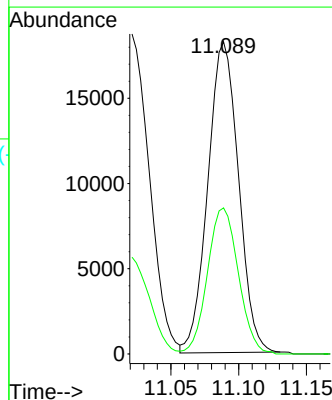
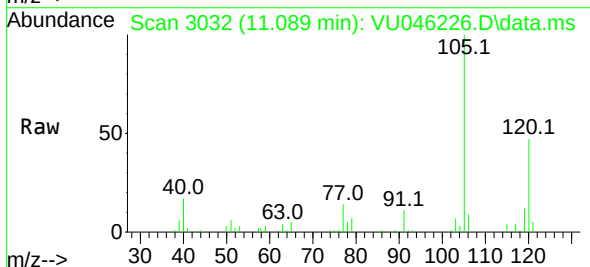
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

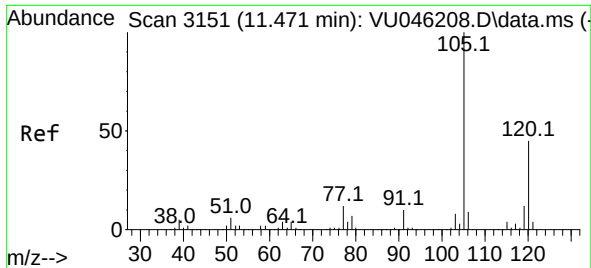
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:105 | Resp: | 7318      |
| Ion Ratio   | Lower | Upper     |
| 105         | 100   |           |
| 120         | 27.1  | 20.7 31.1 |
| 77          | 14.7  | 12.2 18.4 |



#62  
1,3,5-Trimethylbenzene  
Concen: 6.513 ug/L  
RT: 11.089 min Scan# 3032  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:105 | Resp: | 28691     |
| Ion Ratio   | Lower | Upper     |
| 105         | 100   |           |
| 120         | 47.4  | 37.8 56.6 |

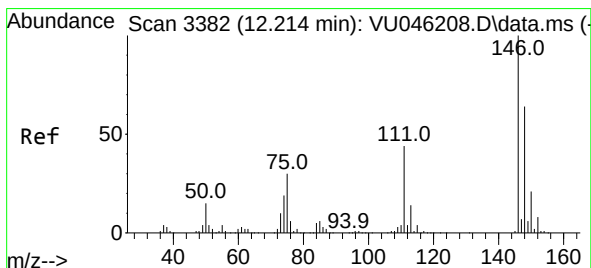
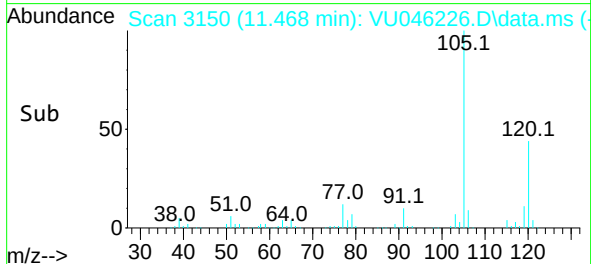
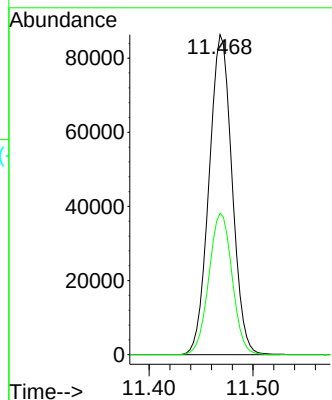
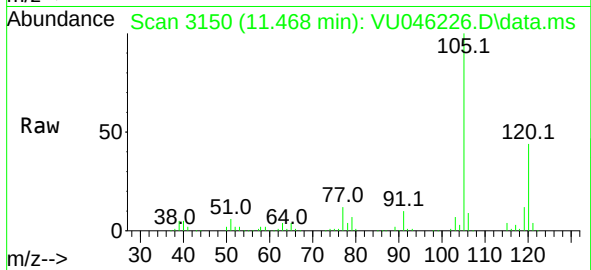




#63  
1,2,4-Trimethylbenzene  
Concen: 30.106 ug/L  
RT: 11.468 min Scan# 3151  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5P4

Tgt Ion:105 Resp: 132685  
Ion Ratio Lower Upper  
105 100  
120 44.7 35.2 52.8



#67  
1,2-Dichlorobenzene  
Concen: 2.168 ug/L  
RT: 12.211 min Scan# 3381  
Delta R.T. -0.003 min  
Lab File: VU046226.D  
Acq: 09 Dec 2021 17:43

Tgt Ion:146 Resp: 5480  
Ion Ratio Lower Upper  
146 100  
111 53.6 35.7 53.5#  
148 66.6 51.2 76.8

