

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU072822\  
 Data File : VU049987.D  
 Acq On : 28 Jul 2022 15:57  
 Operator : SY/MD  
 Sample : N3922-01DL 2X  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0C54DL

Quant Time: Jul 29 02:37:23 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMUTR072722WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Fri Jul 29 02:27:55 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 6.250  | 114   | 91710    | 5.000    | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 9.417  | 117   | 91094    | 5.000    | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.812 | 152   | 37141    | 5.000    | ug/L   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.597  | 65    | 36425    | 4.626    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 40 - 130 | Recovery | =      | 92.600%  |
| 7) Chloroethane-d5            | 1.912  | 69    | 28204    | 4.987    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 130 | Recovery | =      | 99.800%  |
| 11) 1,1-Dichloroethene-d2     | 2.562  | 65    | 14044    | 5.175    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 125 | Recovery | =      | 103.400% |
| 20) 2-Butanone-d5             | 4.655  | 46    | 83424    | 47.594   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 40 - 130 | Recovery | =      | 95.180%  |
| 24) Chloroform-d              | 5.063  | 84    | 64988    | 4.987    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 99.800%  |
| 26) 1,2-Dichloroethane-d4     | 5.706  | 65    | 33467    | 5.097    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 102.000% |
| 32) Benzene-d6                | 5.726  | 84    | 127574   | 4.739    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 94.800%  |
| 36) 1,2-Dichloropropane-d6    | 6.693  | 67    | 43729    | 4.959    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 140 | Recovery | =      | 99.200%  |
| 41) Toluene-d8                | 7.896  | 98    | 103612   | 4.331    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 86.600%  |
| 43) trans-1,3-Dichloroprop... | 8.182  | 79    | 15184    | 4.913    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 55 - 130 | Recovery | =      | 98.200%  |
| 46) 2-Hexanone-d5             | 8.642  | 63    | 56678    | 48.987   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 45 - 130 | Recovery | =      | 97.980%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.758 | 84    | 38941    | 5.256    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 120 | Recovery | =      | 105.200% |
| 66) 1,2-Dichlorobenzene-d4    | 12.195 | 152   | 35374    | 5.135    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 80 - 120 | Recovery | =      | 102.600% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 1.385  | 85    | 28300    | 3.998    | ug/L   | 100      |
| 5) Vinyl chloride             | 1.600  | 62    | 63107    | 8.006    | ug/L   | 98       |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.565  | 101   | 403      | 0.074    | ug/L # | 21       |
| 12) 1,1-Dichloroethene        | 2.575  | 96    | 13922    | 2.751    | ug/L # | 57       |
| 16) Methylene chloride        | 3.041  | 84    | 6969     | 0.895    | ug/L   | 98       |
| 18) trans-1,2-Dichloroethene  | 3.346  | 96    | 7567     | 1.360    | ug/L   | 94       |
| 19) 1,1-Dichloroethane        | 3.861  | 63    | 10798    | 0.946    | ug/L   | 96       |
| 22) cis-1,2-Dichloroethene    | 4.665  | 96    | 429      | 0.065    | ug/L # | 1        |
| 25) Chloroform                | 5.089  | 83    | 42866    | 3.352    | ug/L   | 99       |
| 27) 1,2-Dichloroethane        | 5.719  | 62    | 643      | 0.090    | ug/L # | 73       |
| 29) 1,1,1-Trichloroethane     | 5.311  | 97    | 10856    | 1.122    | ug/L   | 97       |
| 31) Carbon tetrachloride      | 5.311  | 117   | 1433     | 0.182    | ug/L   | 96       |
| 34) Trichloroethene           | 6.539  | 95    | 11567    | 1.790    | ug/L   | 98       |
| 35) Methylcyclohexane         | 6.693  | 83    | 10061    | 1.180    | ug/L # | 22       |
| 37) 1,2-Dichloropropane       | 6.793  | 63    | 32544    | 4.441    | ug/L   | 99       |
| 38) Bromodichloromethane      | 7.108  | 83    | 15079    | 1.701    | ug/L   | 95       |
| 47) Tetrachloroethene         | 8.552  | 164   | 10433    | 2.243    | ug/L   | 94       |
| 48) 2-Hexanone                | 8.690  | 43    | 16933    | 5.247    | ug/L # | 89       |
| 49) Dibromochloromethane      | 8.812  | 129   | 35050    | 5.851    | ug/L   | 96       |

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 Sample : N3922-01DL 2X  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

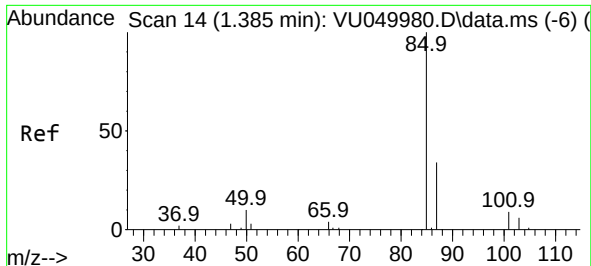
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0C54DL

Quant Time: Jul 29 02:37:23 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMUTR072722WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Fri Jul 29 02:27:55 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| -----                         |        |      |          |        |        |          |
| 50) 1,2-Dibromoethane         | 8.925  | 107  | 17927    | 3.688  | ug/L   | 95       |
| 51) Chlorobenzene             | 9.446  | 112  | 176790   | 10.302 | ug/L   | 99       |
| 59) Bromoform                 | 10.291 | 173  | 29505    | 9.883  | ug/L   | 100      |
| 64) 1,3-Dichlorobenzene       | 11.838 | 146  | 45367    | 4.318  | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene       | 11.838 | 146  | 45367    | 4.364  | ug/L   | 96       |
| 68) 1,2-Dibromo-3-chloropr... | 12.999 | 75   | 5547     | 6.510  | ug/L   | 94       |
| 71) Naphthalene               | 14.092 | 128  | 2596     | 0.217  | ug/L # | 91       |
| 72) 1,2,3-Trichlorobenzene    | 14.333 | 180  | 831      | 0.139  | ug/L # | 89       |
| -----                         |        |      |          |        |        |          |

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

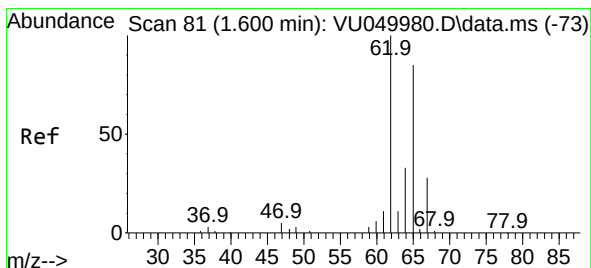
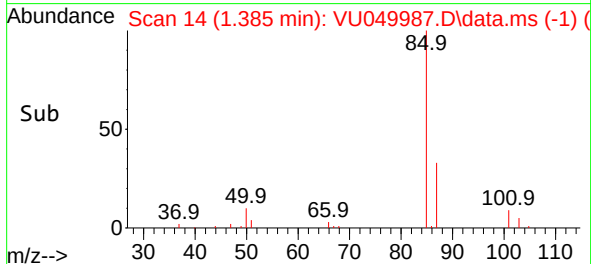
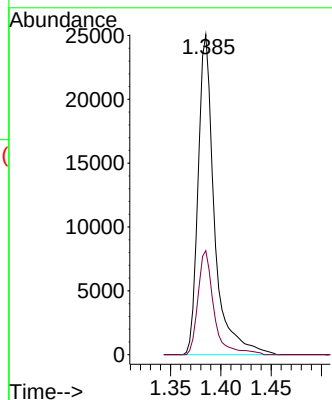
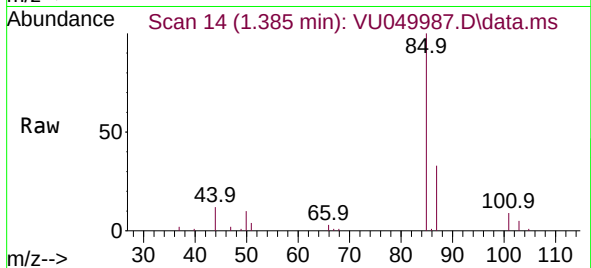




#2  
Dichlorodifluoromethane  
Concen: 3.998 ug/L  
RT: 1.385 min Scan# 14  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

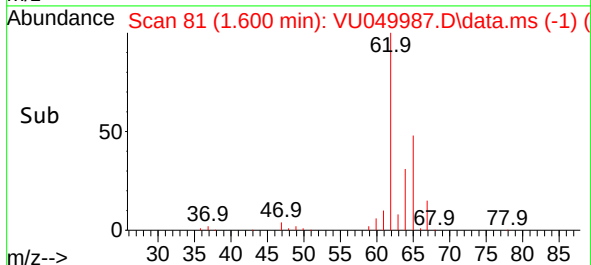
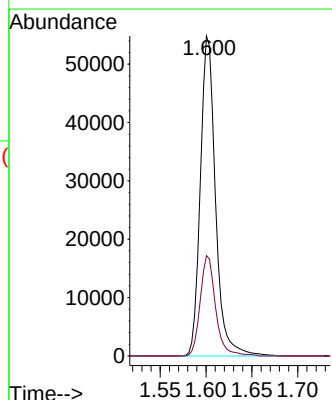
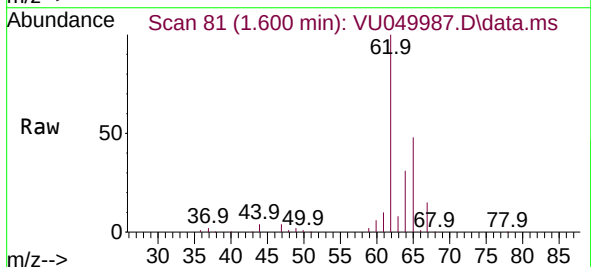
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

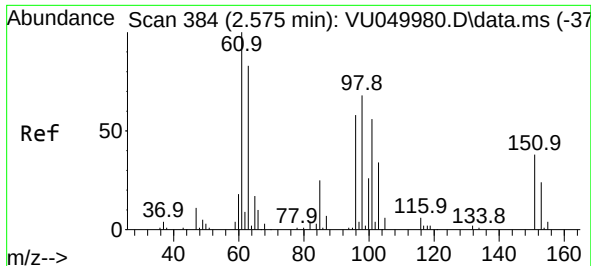
Tgt Ion: 85 Resp: 28300  
Ion Ratio Lower Upper  
85 100  
87 31.8 25.7 38.5



#5  
Vinyl chloride  
Concen: 8.006 ug/L  
RT: 1.600 min Scan# 81  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion: 62 Resp: 63107  
Ion Ratio Lower Upper  
62 100  
64 31.4 22.5 41.9

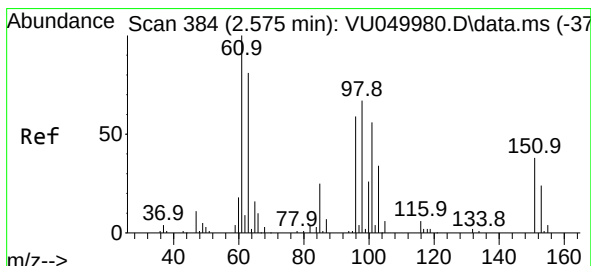
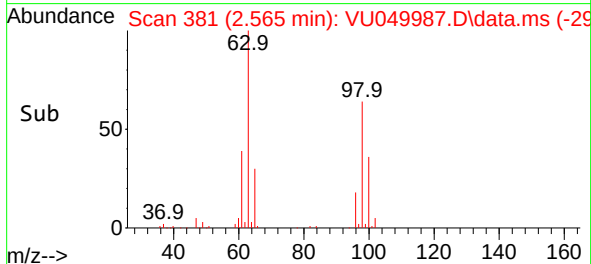
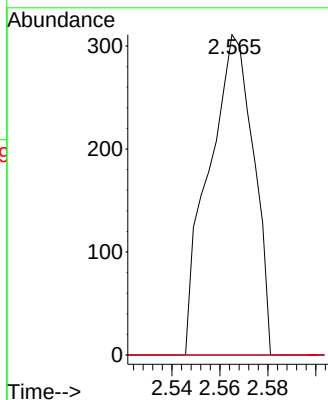
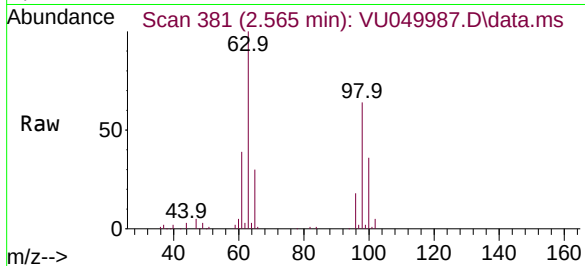




#10  
1,1,2-Trichloro-1,2,2-trifluoroethane  
Concen: 0.074 ug/L  
RT: 2.565 min Scan# 381  
Delta R.T. -0.010 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

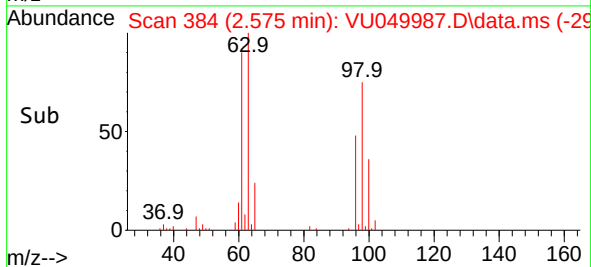
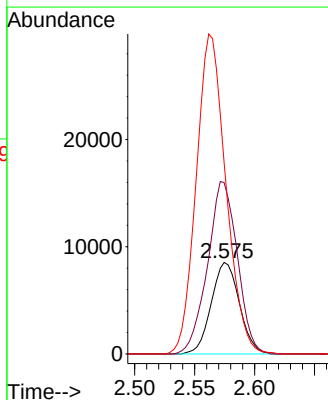
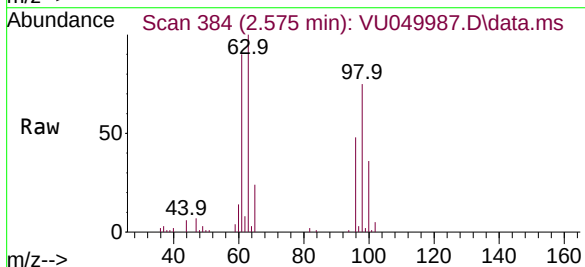
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

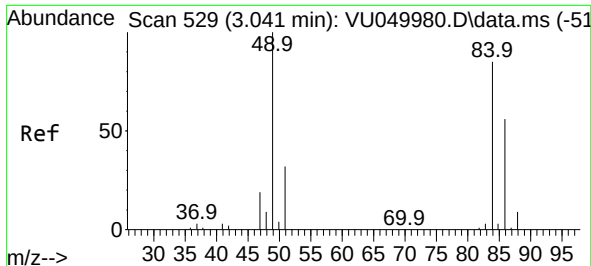
Tgt Ion:101 Resp: 403  
Ion Ratio Lower Upper  
101 100  
85 0.0 34.1 51.1#  
151 0.0 56.6 85.0#



#12  
1,1-Dichloroethene  
Concen: 2.751 ug/L  
RT: 2.575 min Scan# 384  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion: 96 Resp: 13922  
Ion Ratio Lower Upper  
96 100  
61 187.2 115.7 214.9  
63 209.0 84.8 157.4#

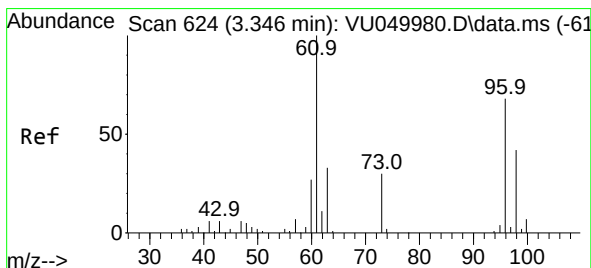
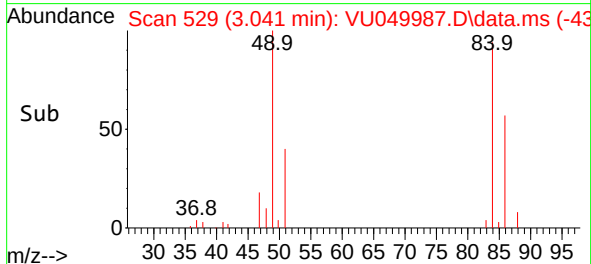
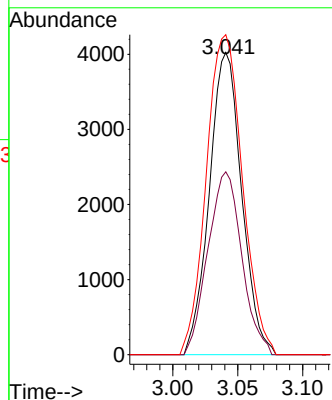
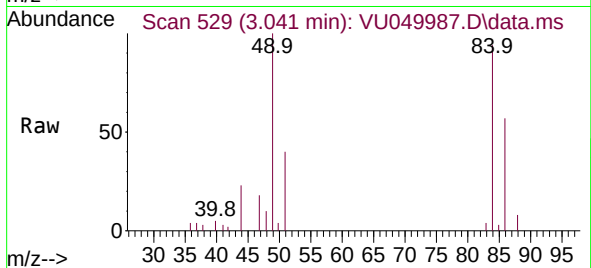




#16  
Methylene chloride  
Concen: 0.895 ug/L  
RT: 3.041 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

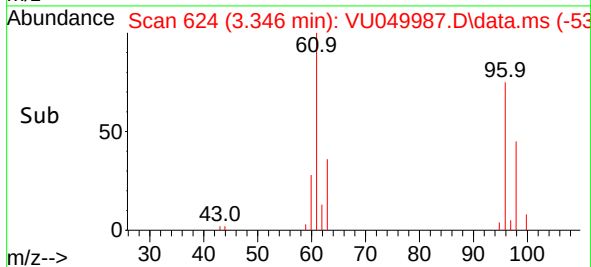
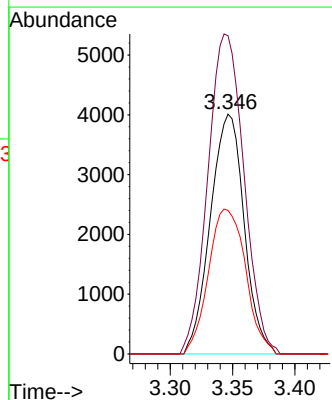
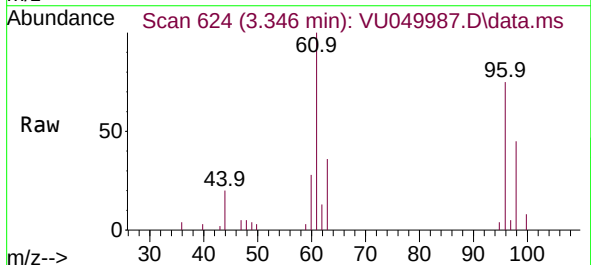
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

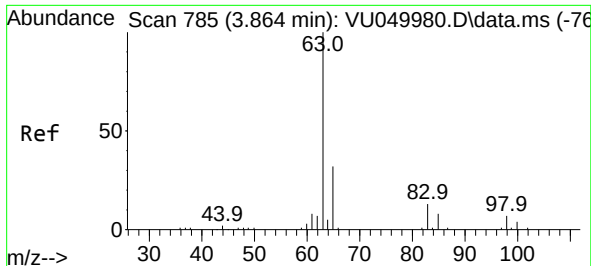
Tgt Ion: 84 Resp: 6969  
Ion Ratio Lower Upper  
84 100  
86 60.5 45.2 84.0  
49 110.5 77.6 144.0



#18  
trans-1,2-Dichloroethene  
Concen: 1.360 ug/L  
RT: 3.346 min Scan# 624  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion: 96 Resp: 7567  
Ion Ratio Lower Upper  
96 100  
61 132.7 98.0 182.0  
98 59.9 44.5 82.7





#19

1,1-Dichloroethane

Concen: 0.946 ug/L

RT: 3.861 min Scan# 71

Delta R.T. -0.003 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

C0C54DL

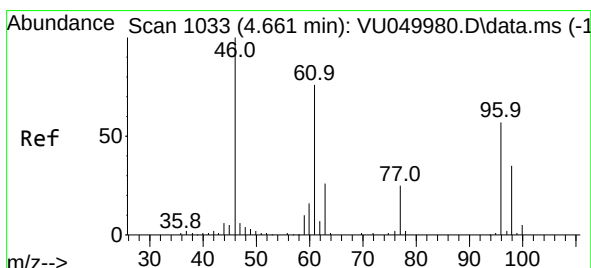
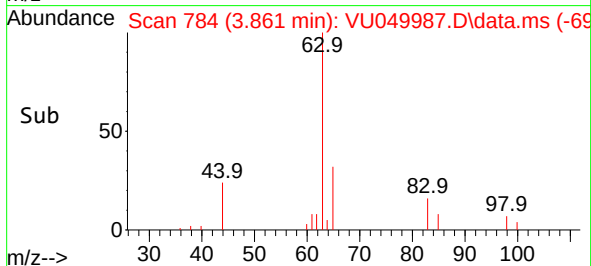
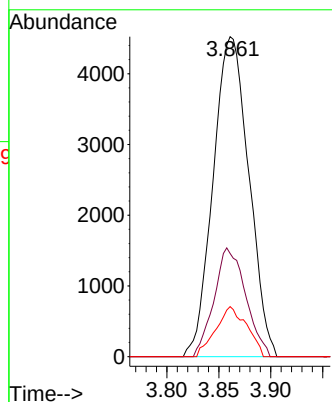
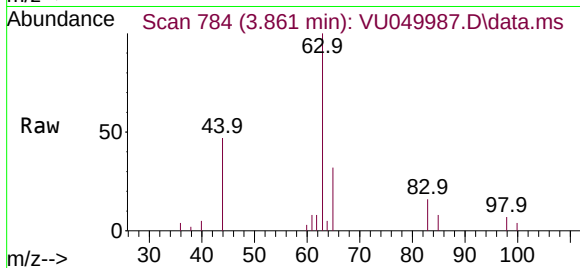
Tgt Ion: 63 Resp: 10798

Ion Ratio Lower Upper

63 100

65 30.8 23.4 43.6

83 14.9 9.4 17.4



#22

cis-1,2-Dichloroethene

Concen: 0.065 ug/L

RT: 4.665 min Scan# 1034

Delta R.T. 0.003 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

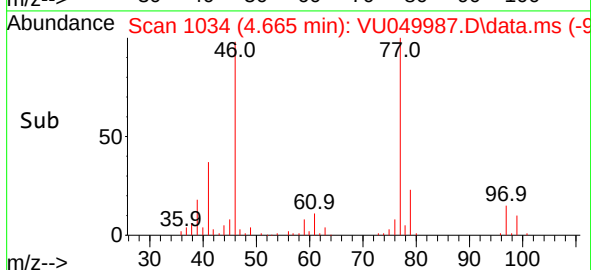
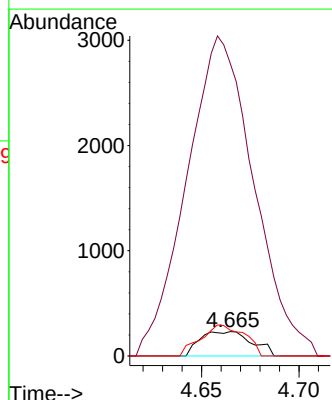
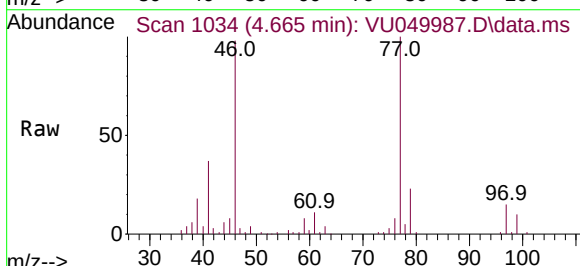
Tgt Ion: 96 Resp: 429

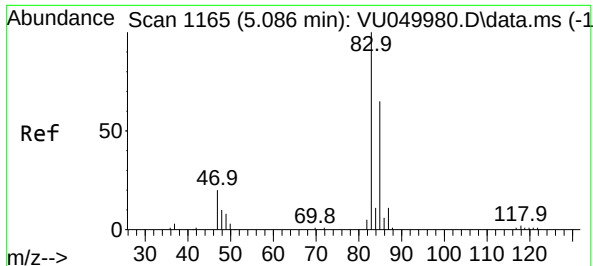
Ion Ratio Lower Upper

96 100

61 1206.9 87.2 161.9#

98 106.9 44.7 83.1#





#25

Chloroform

Concen: 3.352 ug/L

RT: 5.089 min Scan# 1165

Delta R.T. 0.003 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

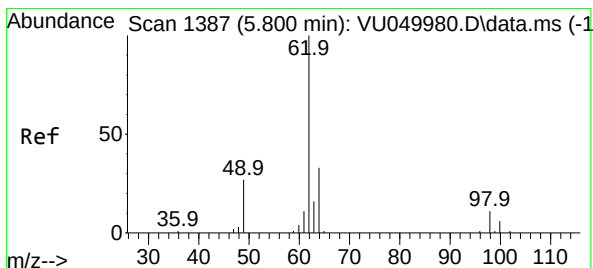
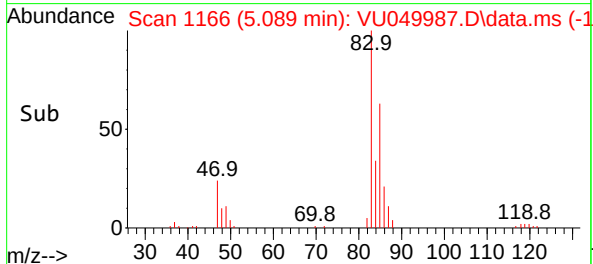
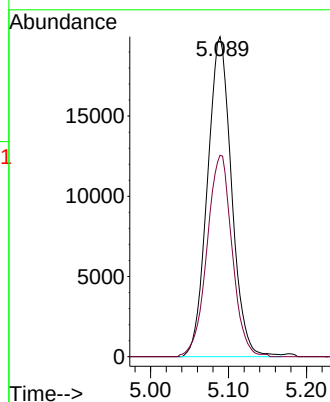
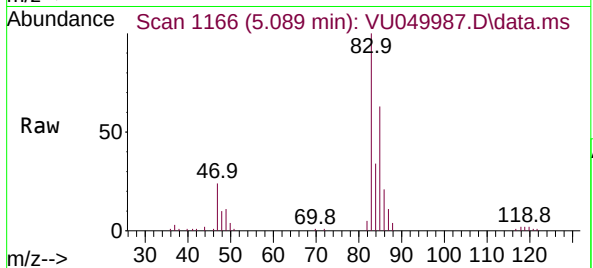
C0C54DL

Tgt Ion: 83 Resp: 42866

Ion Ratio Lower Upper

83 100

85 62.9 44.4 82.4



#27

1,2-Dichloroethane

Concen: 0.090 ug/L

RT: 5.719 min Scan# 1362

Delta R.T. -0.080 min

Lab File: VU049987.D

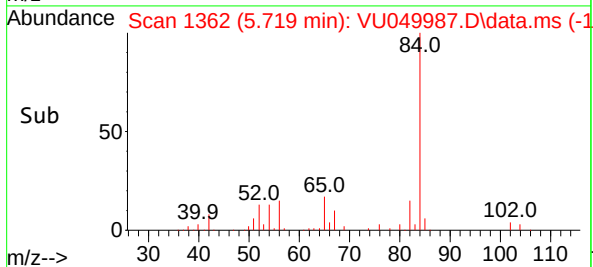
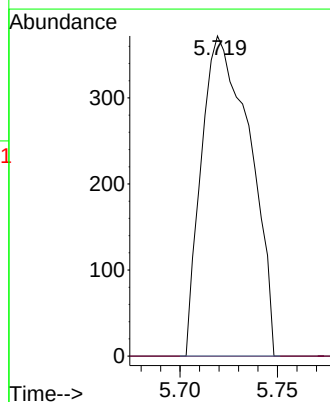
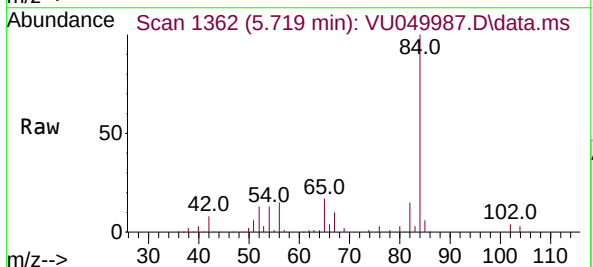
Acq: 28 Jul 2022 15:57

Tgt Ion: 62 Resp: 643

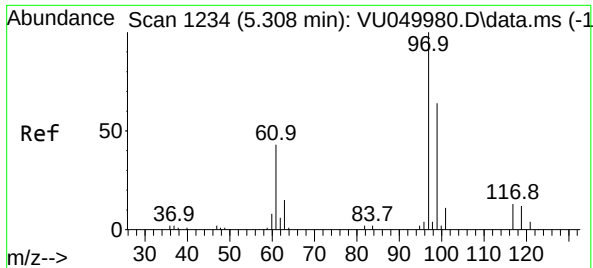
Ion Ratio Lower Upper

62 100

98 0.0 7.9 11.9#







#29

1,1,1-Trichloroethane

Concen: 1.122 ug/L

RT: 5.311 min Scan# 1235

Delta R.T. 0.003 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

C0C54DL

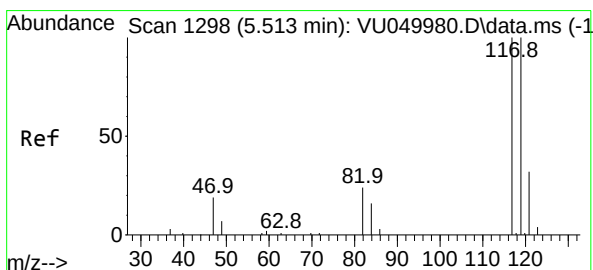
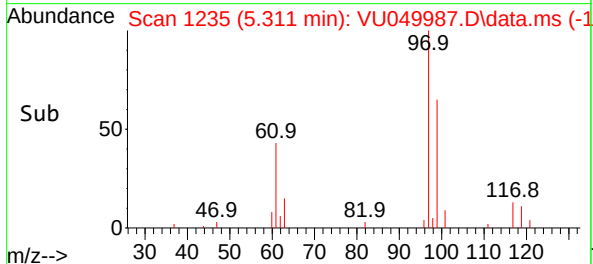
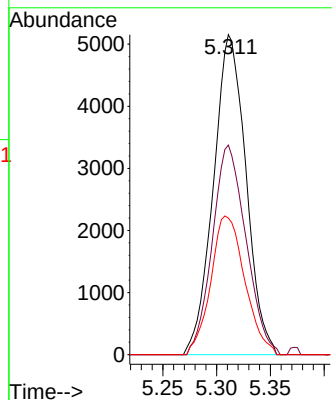
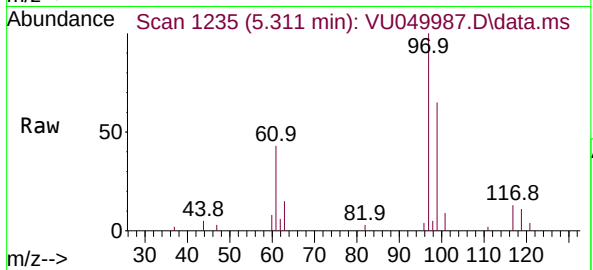
Tgt Ion: 97 Resp: 10856

Ion Ratio Lower Upper

97 100

99 67.5 52.0 78.0

61 45.2 35.0 52.6



#31

Carbon tetrachloride

Concen: 0.182 ug/L

RT: 5.311 min Scan# 1235

Delta R.T. -0.203 min

Lab File: VU049987.D

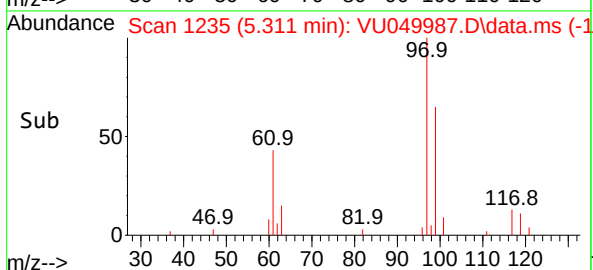
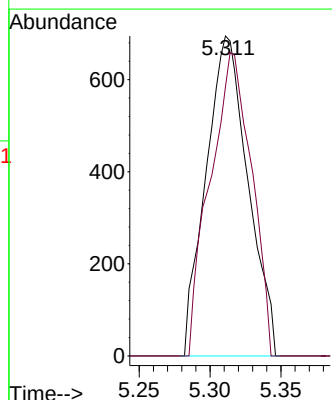
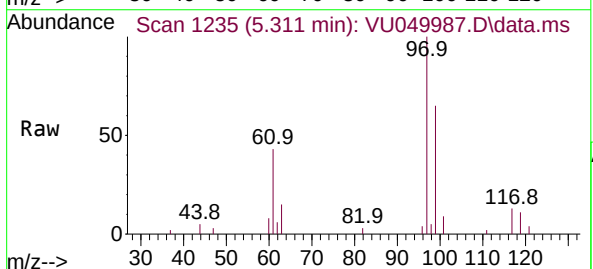
Acq: 28 Jul 2022 15:57

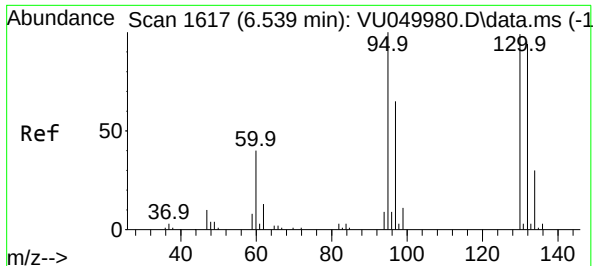
Tgt Ion: 117 Resp: 1433

Ion Ratio Lower Upper

117 100

119 93.2 77.8 116.6



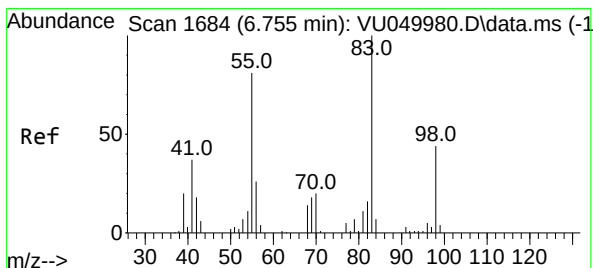
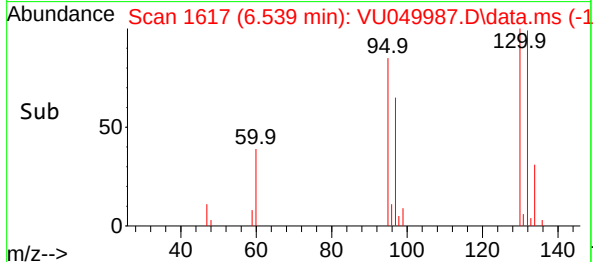
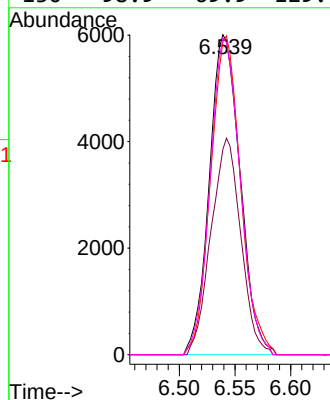
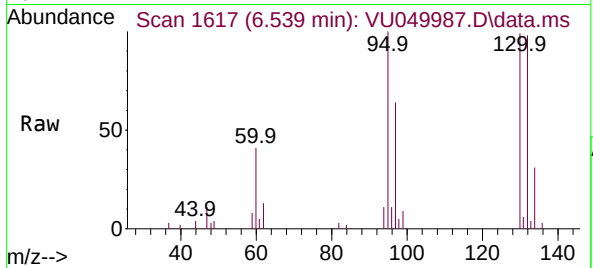


#34  
Trichloroethene  
Concen: 1.790 ug/L  
RT: 6.539 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

Tgt Ion: 95 Resp: 11567

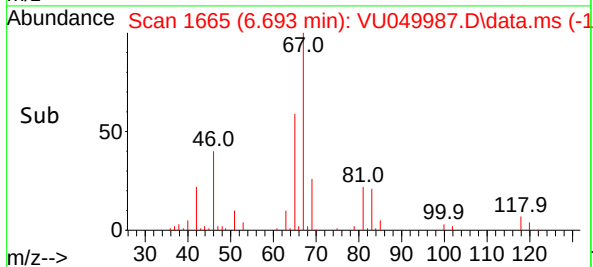
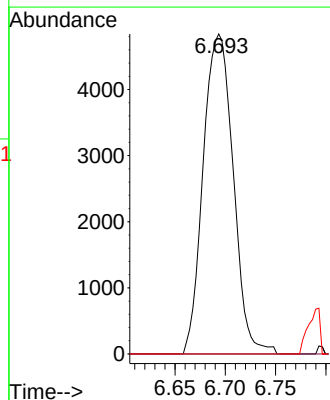
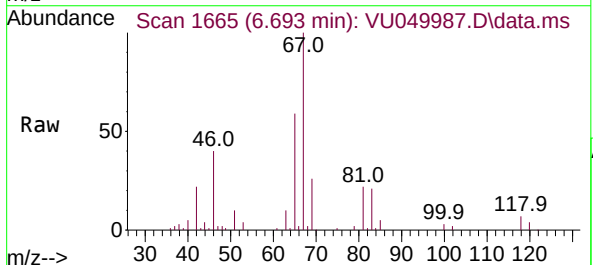
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 64.2  | 45.6  | 84.8  |
| 132 | 97.9  | 66.8  | 124.2 |
| 130 | 98.9  | 69.9  | 129.7 |

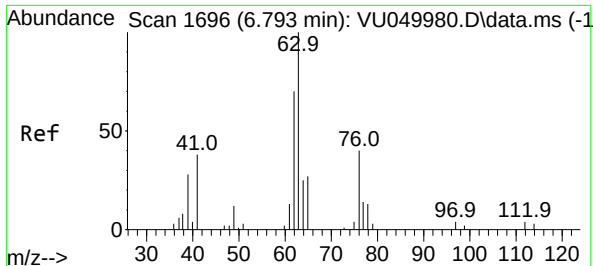


#35  
Methylcyclohexane  
Concen: 1.180 ug/L  
RT: 6.693 min Scan# 1665  
Delta R.T. -0.061 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion: 83 Resp: 10061

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 55  | 0.0   | 61.6  | 92.4# |
| 98  | 5.6   | 34.8  | 52.2# |





#37

1,2-Dichloropropane

Concen: 4.441 ug/L

RT: 6.793 min Scan# 1

Delta R.T. 0.000 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

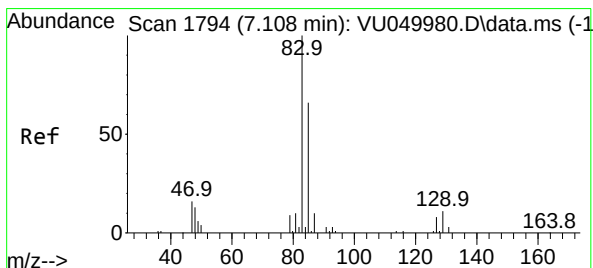
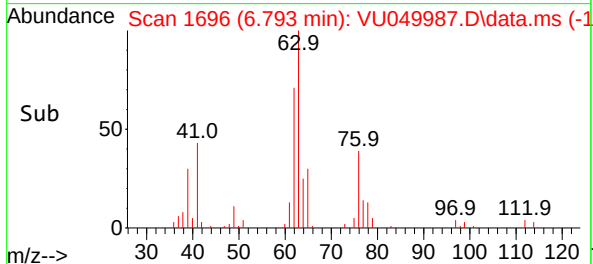
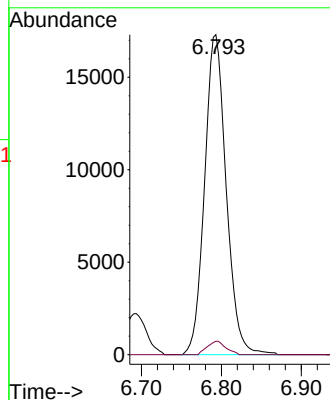
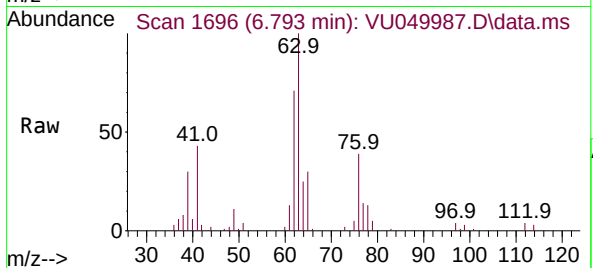
C0C54DL

Tgt Ion: 63 Resp: 32544

Ion Ratio Lower Upper

63 100

112 3.6 3.0 4.6



#38

Bromodichloromethane

Concen: 1.701 ug/L

RT: 7.108 min Scan# 1794

Delta R.T. 0.000 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

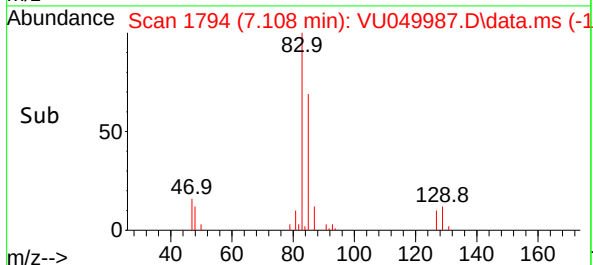
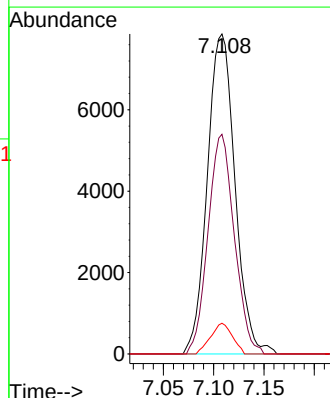
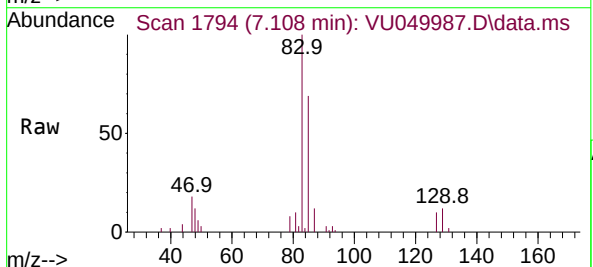
Tgt Ion: 83 Resp: 15079

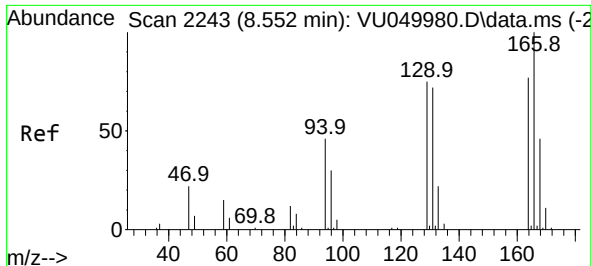
Ion Ratio Lower Upper

83 100

85 68.7 44.9 83.5

127 9.6 7.2 10.8

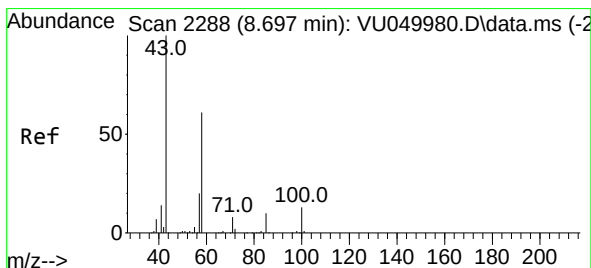
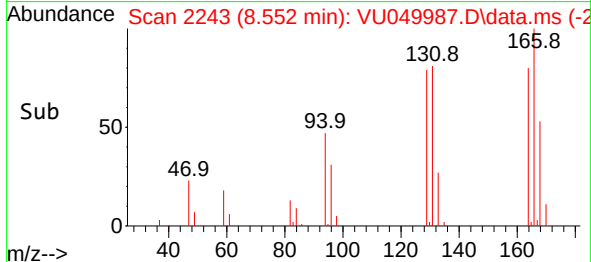
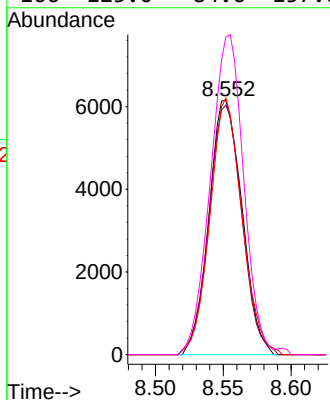
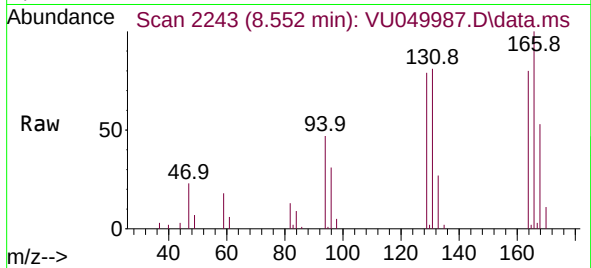




#47  
Tetrachloroethene  
Concen: 2.243 ug/L  
RT: 8.552 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

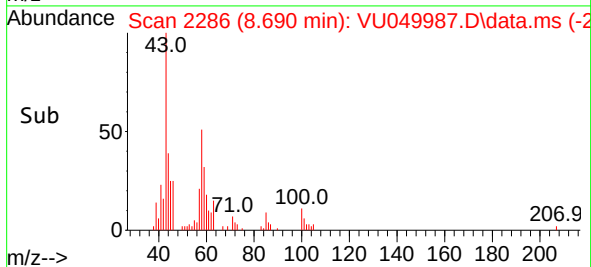
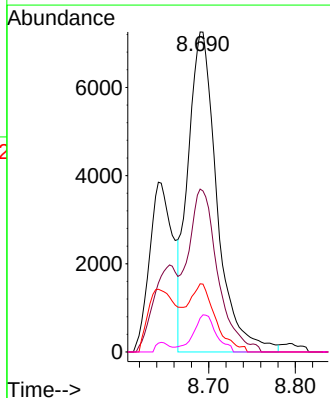
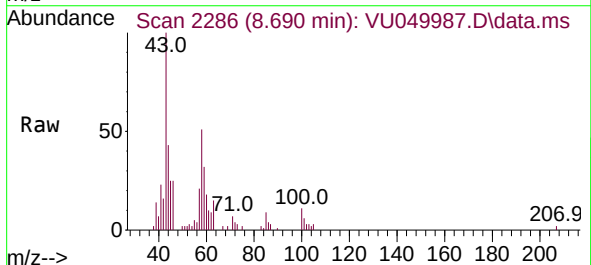
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

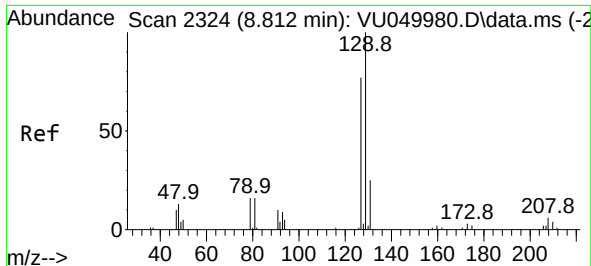
Tgt Ion:164 Resp: 10433  
Ion Ratio Lower Upper  
164 100  
129 98.2 66.3 123.1  
131 100.9 63.1 117.1  
166 125.0 84.6 157.0



#48  
2-Hexanone  
Concen: 5.247 ug/L  
RT: 8.690 min Scan# 2286  
Delta R.T. -0.006 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion: 43 Resp: 16933  
Ion Ratio Lower Upper  
43 100  
58 50.9 49.4 74.0  
57 19.2 17.0 25.4  
100 9.2 10.2 15.2#





#49

Dibromochloromethane

Concen: 5.851 ug/L

RT: 8.812 min Scan# 21

Delta R.T. 0.000 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

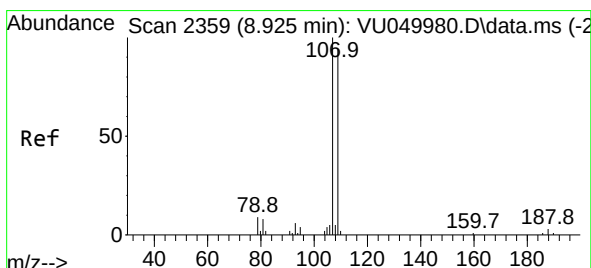
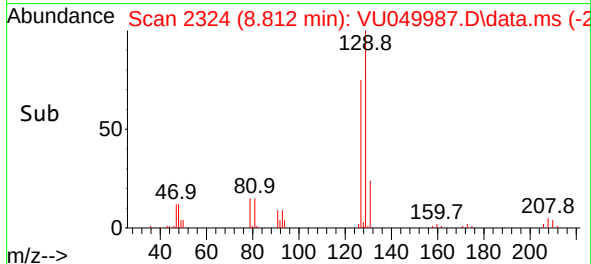
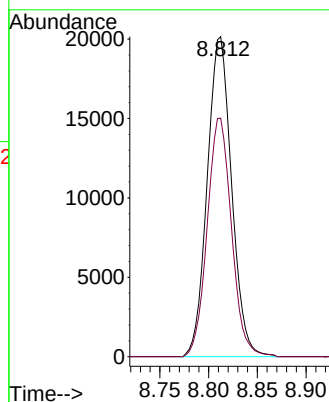
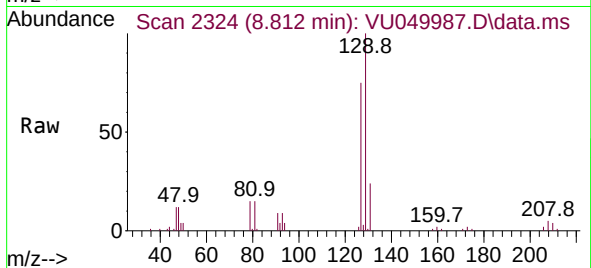
C0C54DL

Tgt Ion:129 Resp: 35050

Ion Ratio Lower Upper

129 100

127 74.5 54.5 101.1



#50

1,2-Dibromoethane

Concen: 3.688 ug/L

RT: 8.925 min Scan# 2359

Delta R.T. 0.000 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

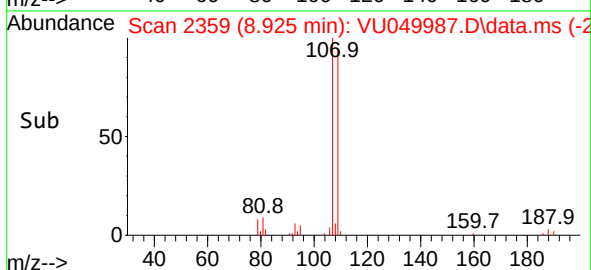
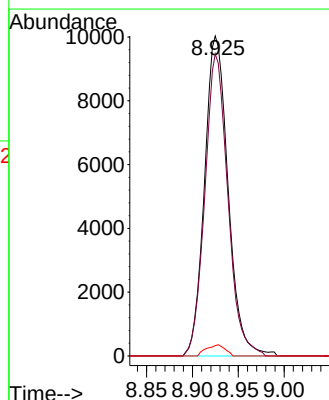
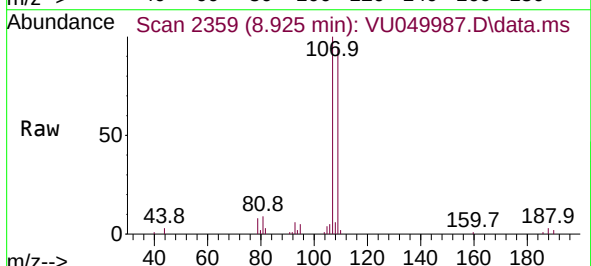
Tgt Ion:107 Resp: 17927

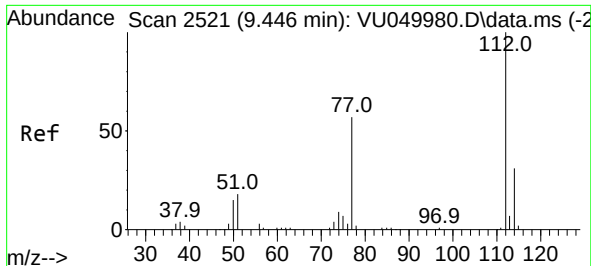
Ion Ratio Lower Upper

107 100

109 94.4 62.7 116.5

188 3.3 2.4 3.6

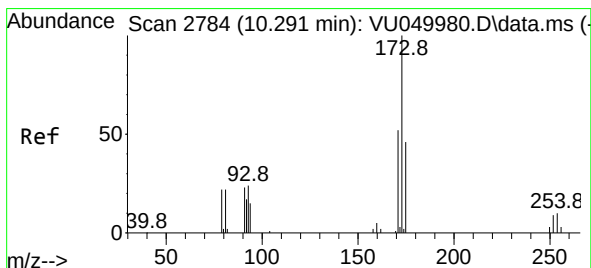
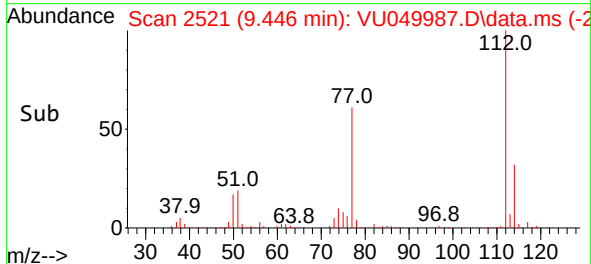
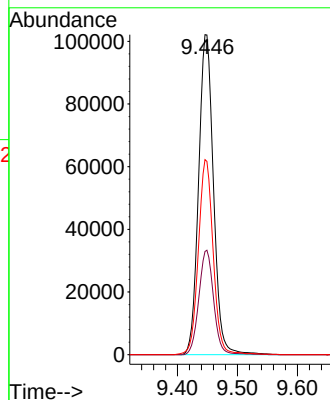
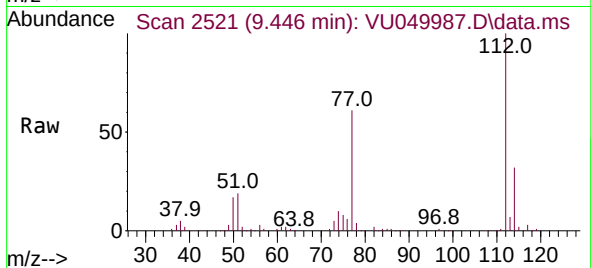




#51  
Chlorobenzene  
Concen: 10.302 ug/L  
RT: 9.446 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

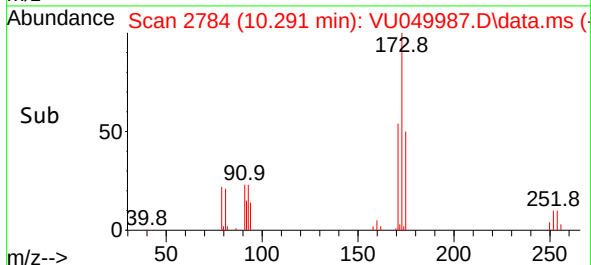
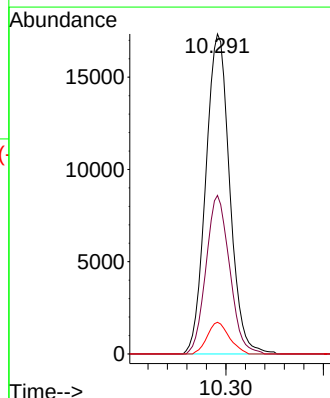
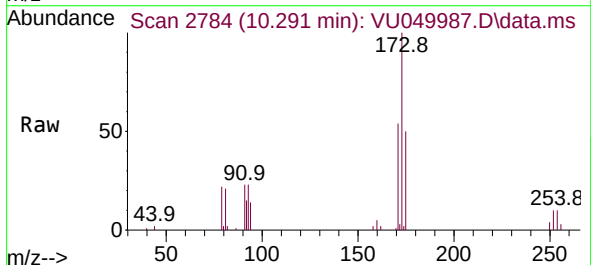
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

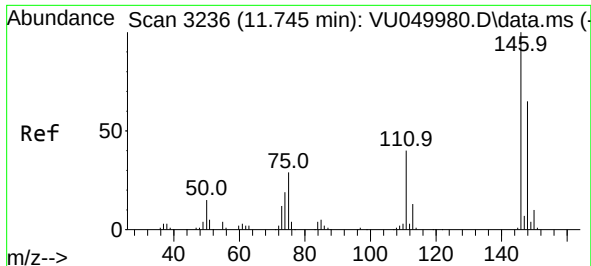
Tgt Ion:112 Resp: 176790  
Ion Ratio Lower Upper  
112 100  
114 32.3 22.4 41.6  
77 61.0 48.2 72.4



#59  
Bromoform  
Concen: 9.883 ug/L  
RT: 10.291 min Scan# 2784  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion:173 Resp: 29505  
Ion Ratio Lower Upper  
173 100  
175 48.9 39.1 58.7  
254 9.1 7.5 11.3

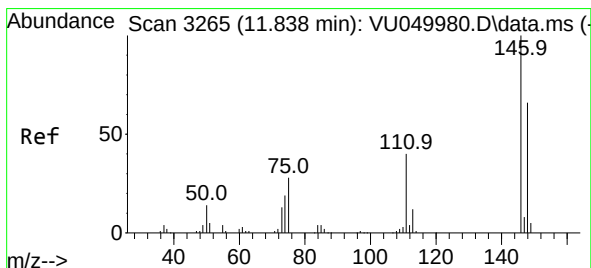
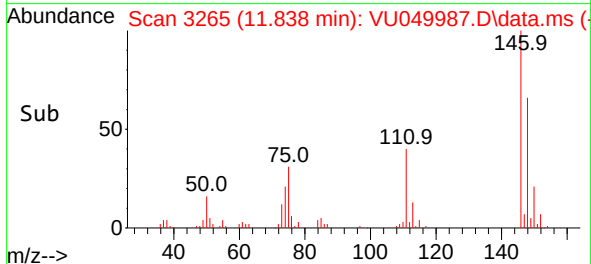
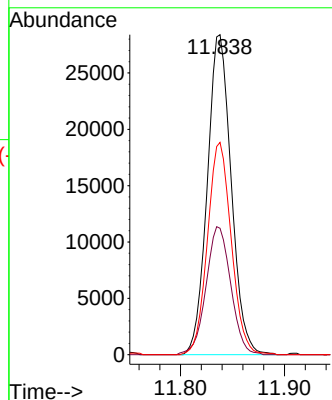
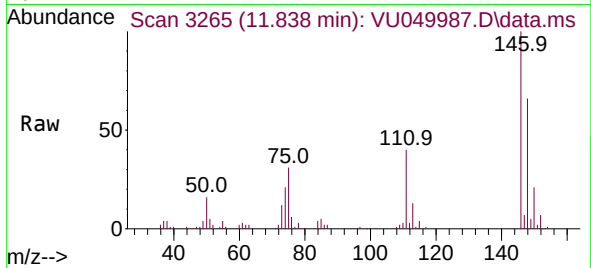




#64  
1,3-Dichlorobenzene  
Concen: 4.318 ug/L  
RT: 11.838 min Scan# 31  
Delta R.T. 0.093 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

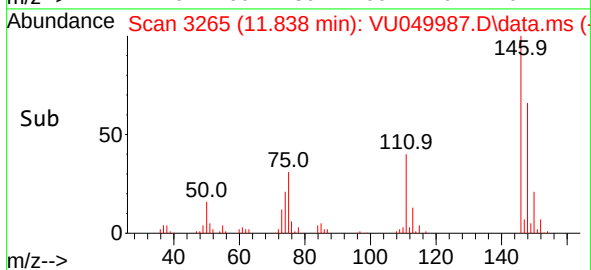
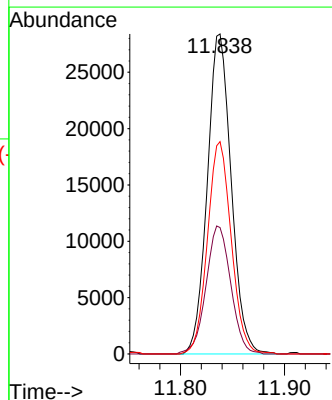
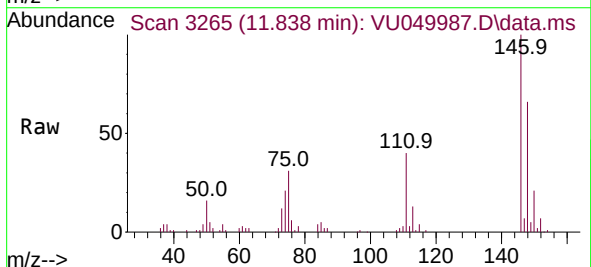
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0C54DL

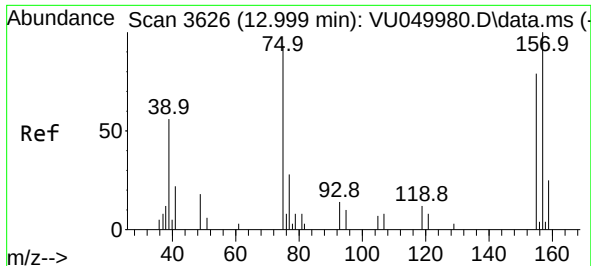
Tgt Ion:146 Resp: 45367  
Ion Ratio Lower Upper  
146 100  
111 39.5 28.9 53.7  
148 66.4 45.9 85.3



#65  
1,4-Dichlorobenzene  
Concen: 4.364 ug/L  
RT: 11.838 min Scan# 3265  
Delta R.T. 0.000 min  
Lab File: VU049987.D  
Acq: 28 Jul 2022 15:57

Tgt Ion:146 Resp: 45367  
Ion Ratio Lower Upper  
146 100  
111 39.5 26.4 49.0  
148 66.4 44.3 82.3





#68

1,2-Dibromo-3-chloropropane

Concen: 6.510 ug/L

RT: 12.999 min Scan# 3626

Delta R.T. 0.000 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

C0C54DL

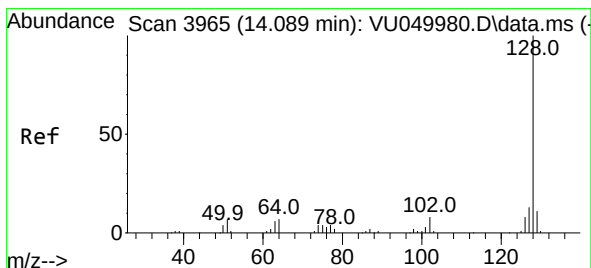
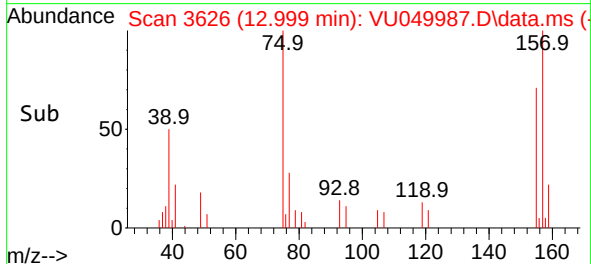
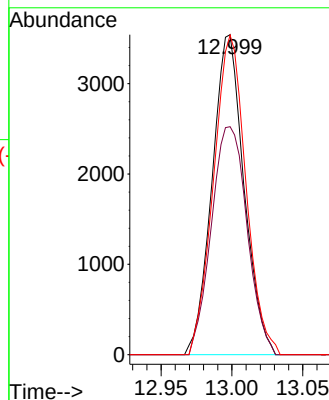
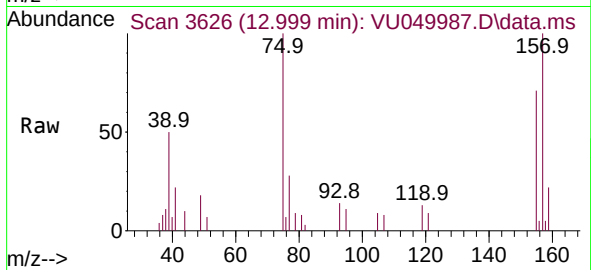
Tgt Ion: 75 Resp: 5547

Ion Ratio Lower Upper

75 100

155 71.2 59.4 89.0

157 99.9 73.8 110.6



#71

Naphthalene

Concen: 0.217 ug/L

RT: 14.092 min Scan# 3966

Delta R.T. 0.003 min

Lab File: VU049987.D

Acq: 28 Jul 2022 15:57

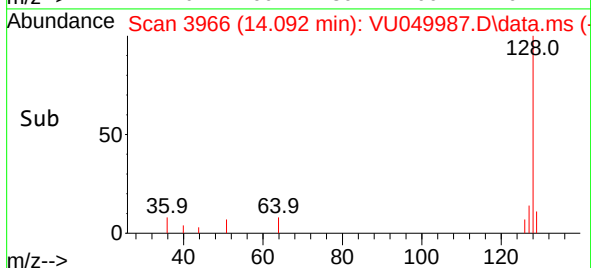
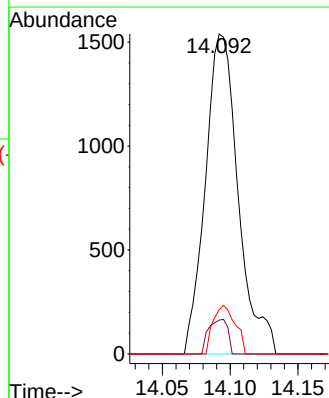
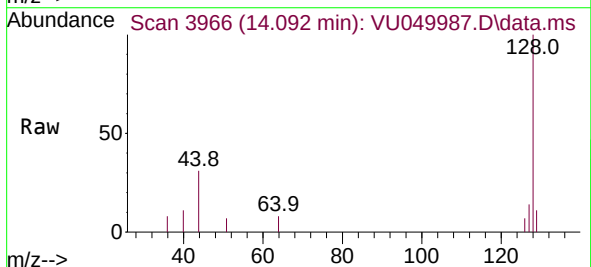
Tgt Ion: 128 Resp: 2596

Ion Ratio Lower Upper

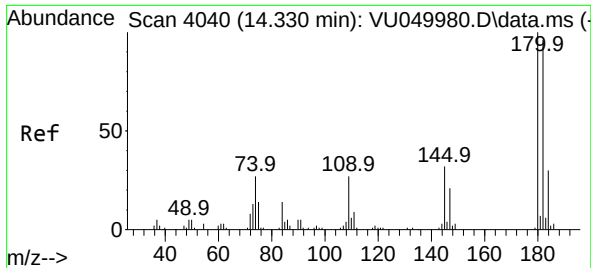
128 100

129 6.3 8.5 12.7#

127 10.2 10.3 15.5#







#72

1,2,3-Trichlorobenzene

Concen: 0.139 ug/L

RT: 14.333 min Scan# 40

Delta R.T. 0.003 min

Lab File: VU049987.D

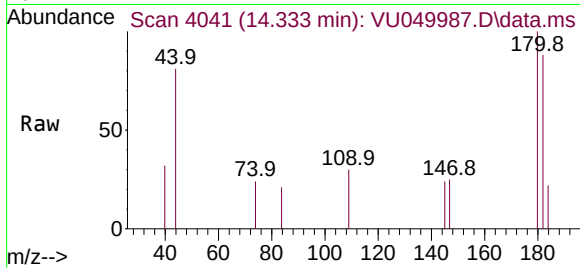
Acq: 28 Jul 2022 15:57

Instrument :

MSVOA\_U

ClientSampleId :

C0C54DL



Tgt Ion:180 Resp: 831

Ion Ratio Lower Upper

180 100

182 87.5 77.0 115.4

145 22.5 26.3 39.5#

