

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VW080122\  
 Data File : VW027138.D  
 Acq On : 01 Aug 2022 20:30  
 Operator : SY/MD  
 Sample : N3897-01  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 DBUP0

Quant Time: Aug 02 00:36:41 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVLM080122WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Aug 02 00:27:15 2022  
 Response via : Initial Calibration

| Compound                      | R.T.    | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|---------|-------|----------|----------|--------|----------|
| -----                         |         |       |          |          |        |          |
| Internal Standards            |         |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 5.612   | 114   | 609412   | 50.000   | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 8.850   | 117   | 584910   | 50.000   | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.249  | 152   | 254112   | 50.000   | ug/L   | 0.00     |
| System Monitoring Compounds   |         |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.304   | 65    | 186083   | 47.115   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =      | 94.240%  |
| 7) Chloroethane-d5            | 1.551   | 69    | 123292   | 41.716   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =      | 83.440%  |
| 11) 1,1-Dichloroethene-d2     | 2.101   | 63    | 303774   | 40.391   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 80.780%  |
| 21) 2-Butanone-d5             | 3.873   | 46    | 252423   | 97.075   | ug/L   | 0.00     |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =      | 97.080%  |
| 24) Chloroform-d              | 4.342   | 84    | 387790   | 48.575   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 97.140%  |
| 26) 1,2-Dichloroethane-d4     | 5.027   | 65    | 224634   | 49.594   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 99.180%  |
| 32) Benzene-d6                | 5.043   | 84    | 785879   | 50.775   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 101.560% |
| 36) 1,2-Dichloropropane-d6    | 6.066   | 67    | 250164   | 52.249   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =      | 104.500% |
| 41) Toluene-d8                | 7.313   | 98    | 712628   | 51.072   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 102.140% |
| 43) trans-1,3-Dichloroprop... | 7.619   | 79    | 104705   | 49.828   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 99.660%  |
| 47) 2-Hexanone-d5             | 8.088   | 63    | 185858   | 100.548  | ug/L   | 0.00     |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =      | 100.550% |
| 56) 1,1,2,2-Tetrachloroeth... | 10.214  | 84    | 354601   | 49.546   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =      | 99.100%  |
| 66) 1,2-Dichlorobenzene-d4    | 11.622  | 152   | 253815   | 56.834   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 113.660% |
| Target Compounds              |         |       |          |          |        |          |
|                               |         |       |          |          | Qvalue |          |
| 3) Chloromethane              | 1.236   | 50    | 112351   | 20.319   | ug/L   | 98       |
| 8) Chloroethane               | 1.571   | 64    | 57530    | 18.655   | ug/L   | 100      |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.098   | 101   | 3037     | 0.698    | ug/L # | 31       |
| 12) 1,1-Dichloroethene        | 2.111   | 96    | 74702    | 17.677   | ug/L # | 57       |
| 13) Acetone                   | 2.162   | 43    | 104863   | 47.758   | ug/L   | 98       |
| 16) Methylene chloride        | 2.500   | 84    | 170124   | 31.760   | ug/L   | 98       |
| 19) 1,1-Dichloroethane        | 3.182   | 63    | 153723   | 18.663   | ug/L   | 99       |
| 22) 2-Butanone                | 3.963   | 43    | 102384   | 33.838   | ug/L   | 100      |
| 25) Chloroform                | 4.368   | 83    | 268042   | 30.908   | ug/L   | 98       |
| 27) 1,2-Dichloroethane        | 5.124   | 62    | 220126   | 36.661   | ug/L   | 99       |
| 31) Carbon tetrachloride      | 4.821   | 117   | 129649   | 20.557   | ug/L   | 100      |
| 33) Benzene                   | 5.095   | 78    | 383690   | 21.388   | ug/L   | 100      |
| 34) Trichloroethene           | 5.908   | 95    | 231313   | 50.139   | ug/L   | 98       |
| 37) 1,2-Dichloropropane       | 6.169   | 63    | 94099    | 19.980   | ug/L   | 99       |
| 39) cis-1,3-Dichloropropene   | 6.982   | 75    | 5846     | 0.885    | ug/L # | 51       |
| 40) 4-Methyl-2-pentanone      | 7.223   | 43    | 217133   | 39.010   | ug/L   | 98       |
| 45) 1,1,2-Trichloroethane     | 7.837   | 97    | 101314   | 20.464   | ug/L   | 98       |
| 46) Tetrachloroethene         | 7.976   | 164   | 4130     | 1.173    | ug/L   | 97       |
| 48) 2-Hexanone                | 8.140   | 43    | 185656   | 42.900   | ug/L   | 99       |

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 ALS Vial : 17 Sample Multiplier: 1

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 MSVOA\_V  
 ClientSampleId :  
 DBUP0

Quant Time: Aug 02 00:36:41 2022  
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 Quant Title : VOC Analysis  
 QLast Update : Tue Aug 02 00:27:15 2022  
 Response via : Initial Calibration

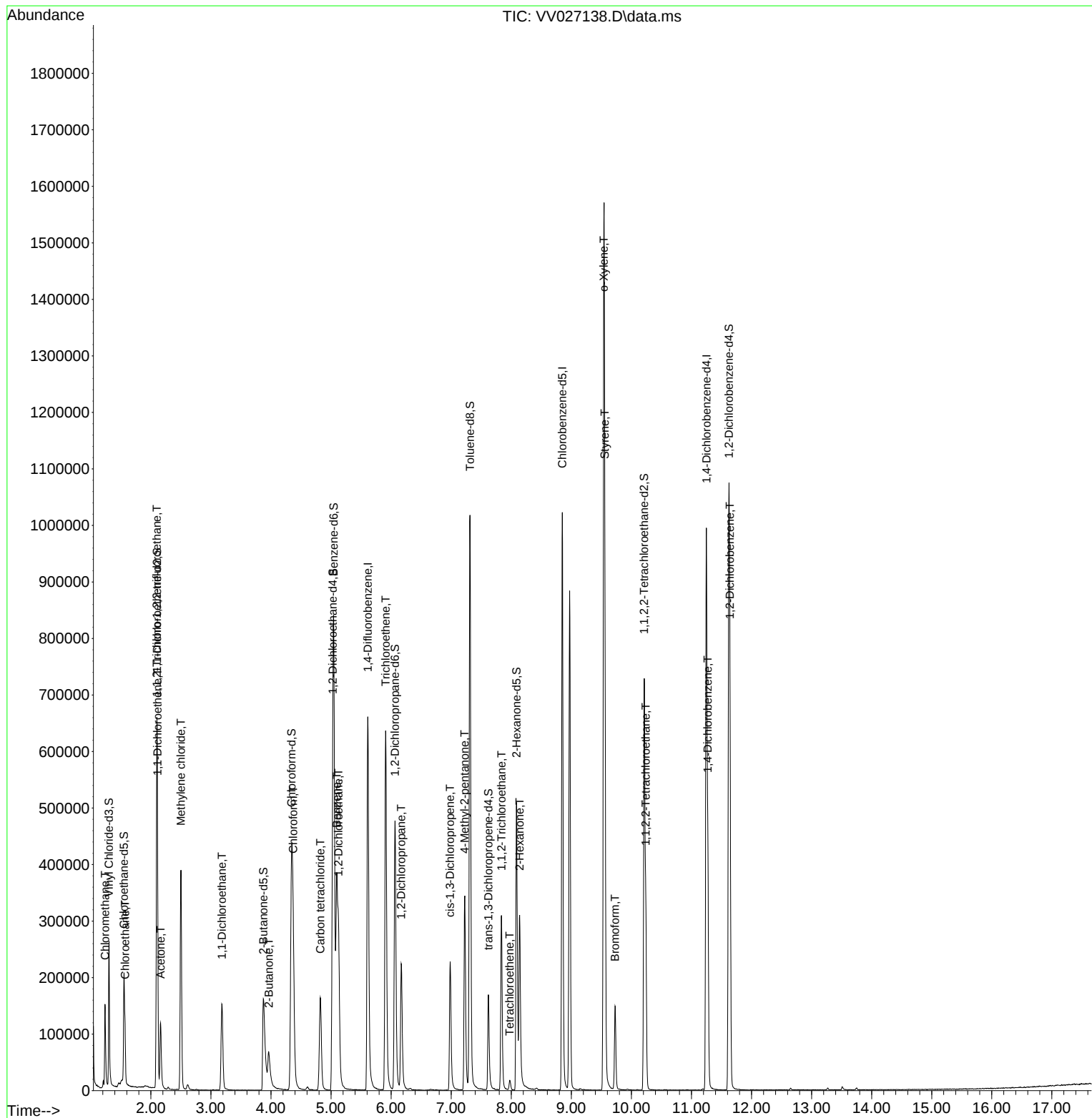
| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 54) o-Xylene                  | 9.542  | 106  | 372323   | 51.122 | ug/L  | 100      |
| 55) Styrene                   | 9.558  | 104  | 353217   | 27.905 | ug/L  | 95       |
| 57) 1,1,2,2-Tetrachloroethane | 10.239 | 83   | 156304   | 19.470 | ug/L  | 98       |
| 59) Bromoform                 | 9.728  | 173  | 67395    | 22.972 | ug/L  | 100      |
| 65) 1,4-Dichlorobenzene       | 11.271 | 146  | 177689   | 21.919 | ug/L  | 99       |
| 67) 1,2-Dichlorobenzene       | 11.641 | 146  | 238020   | 29.496 | ug/L  | 99       |

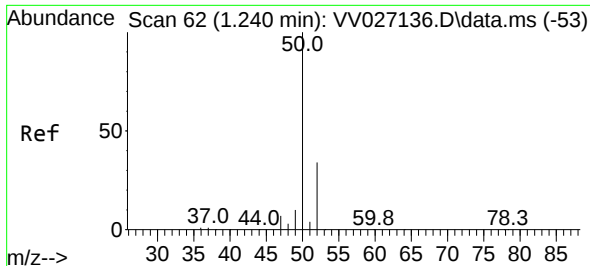
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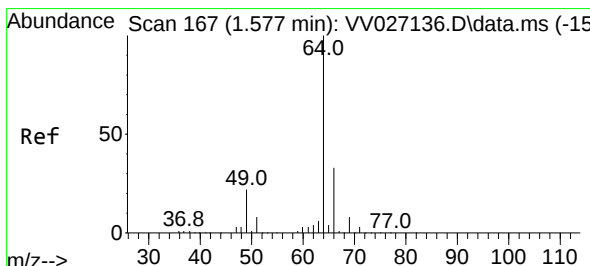
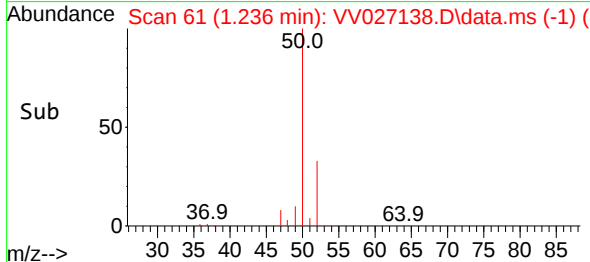
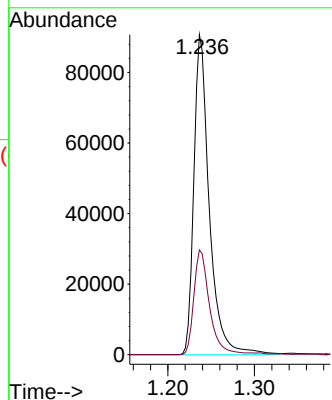
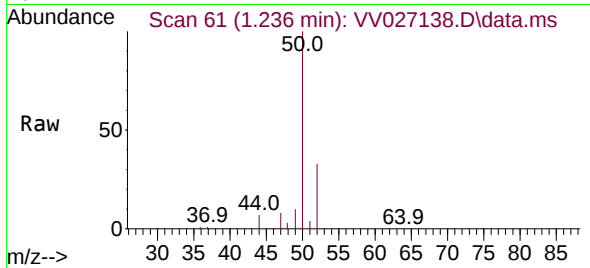




#3  
Chloromethane  
Concen: 20.319 ug/L  
RT: 1.236 min Scan# 61  
Delta R.T. -0.003 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

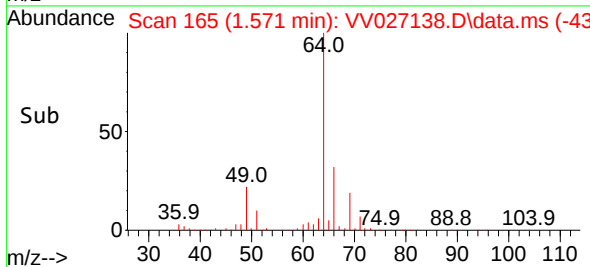
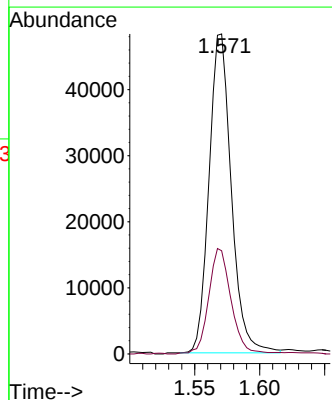
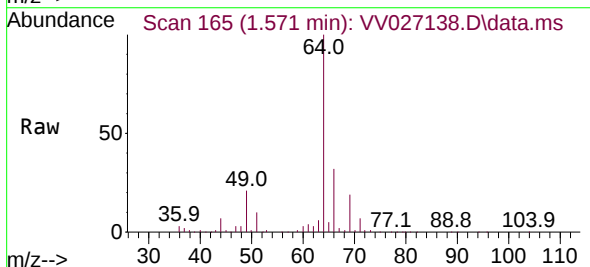
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

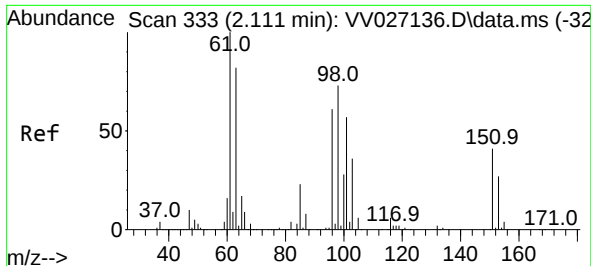
Tgt Ion: 50 Resp: 112351  
Ion Ratio Lower Upper  
50 100  
52 32.7 23.7 43.9



#8  
Chloroethane  
Concen: 18.655 ug/L  
RT: 1.571 min Scan# 165  
Delta R.T. -0.006 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

Tgt Ion: 64 Resp: 57530  
Ion Ratio Lower Upper  
64 100  
66 32.3 22.6 42.0

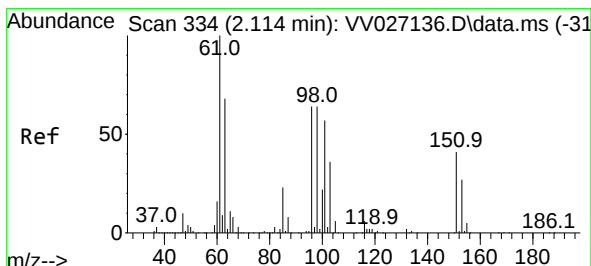
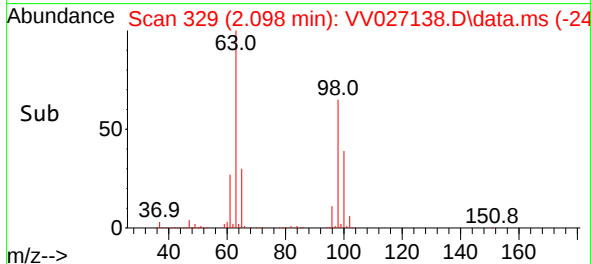
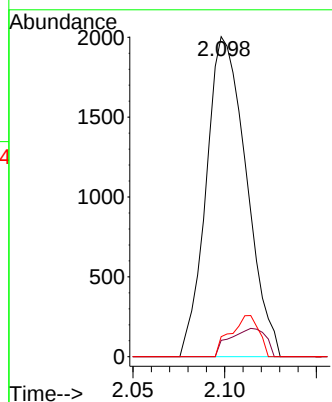
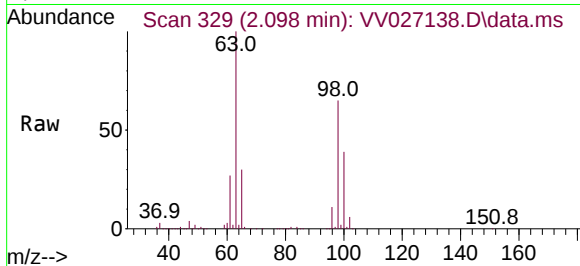




#10  
1,1,2-Trichloro-1,2,2-trifluoroethane  
Concen: 0.698 ug/L  
RT: 2.098 min Scan# 31  
Delta R.T. -0.013 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

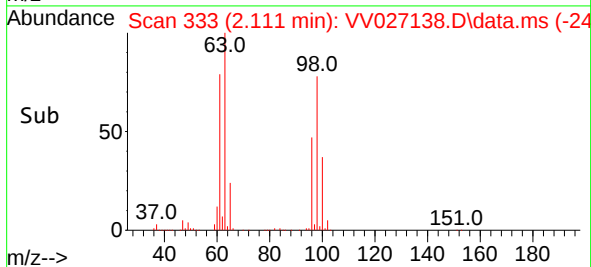
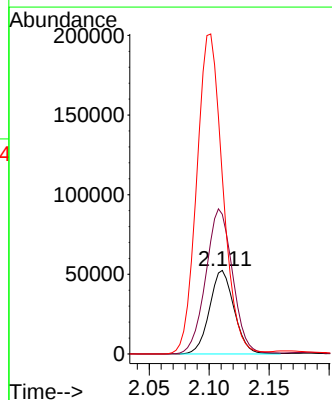
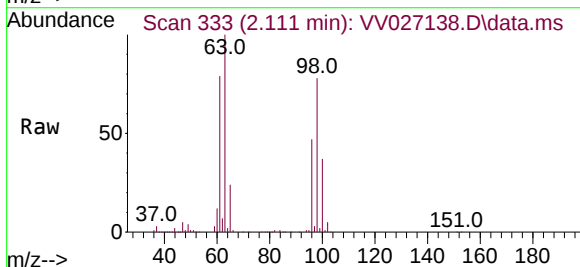
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

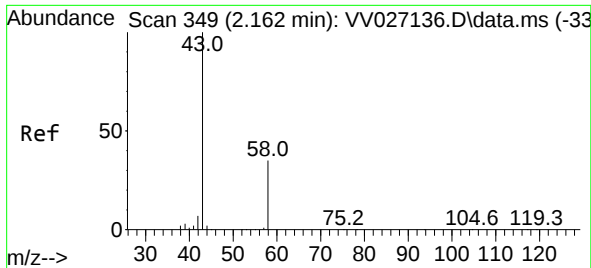
Tgt Ion:101 Resp: 3037  
Ion Ratio Lower Upper  
101 100  
85 7.9 33.9 50.9#  
151 7.4 58.4 87.6#



#12  
1,1-Dichloroethene  
Concen: 17.677 ug/L  
RT: 2.111 min Scan# 333  
Delta R.T. -0.003 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

Tgt Ion: 96 Resp: 74702  
Ion Ratio Lower Upper  
96 100  
61 167.3 110.7 205.5  
63 213.0 78.4 145.6#





#13

Acetone

Concen: 47.758 ug/L

RT: 2.162 min Scan# 349

Delta R.T. 0.000 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

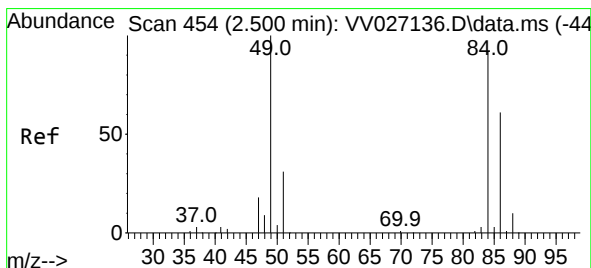
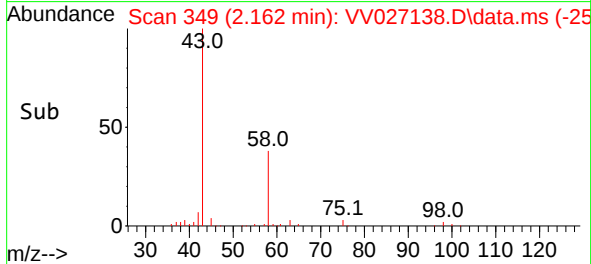
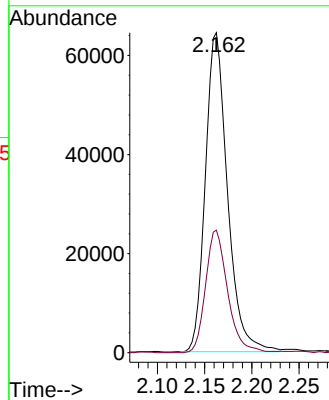
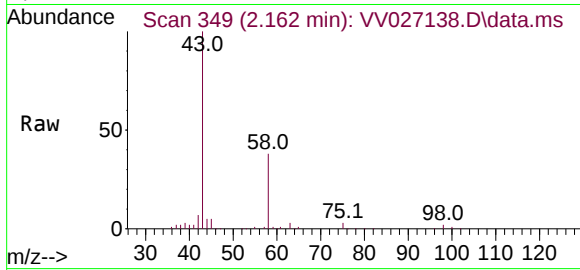
DBUP0

Tgt Ion: 43 Resp: 104863

Ion Ratio Lower Upper

43 100

58 38.2 0.0 73.6



#16

Methylene chloride

Concen: 31.760 ug/L

RT: 2.500 min Scan# 454

Delta R.T. 0.000 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

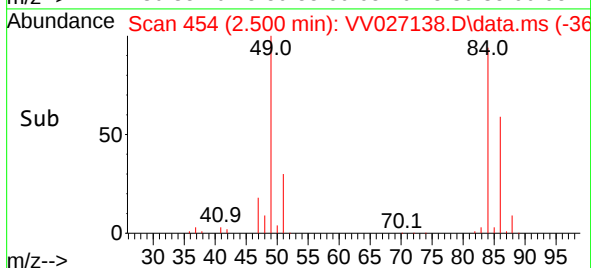
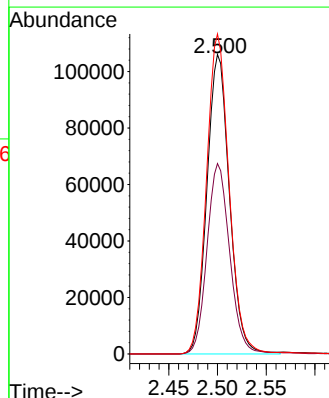
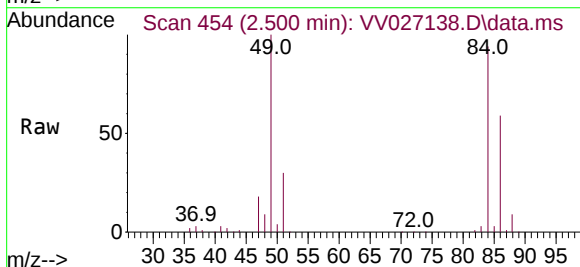
Tgt Ion: 84 Resp: 170124

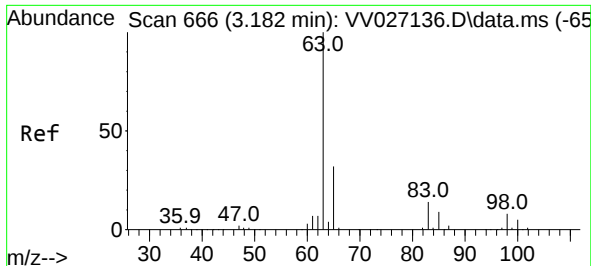
Ion Ratio Lower Upper

84 100

86 63.6 45.3 84.1

49 106.8 76.0 141.2





#19

1,1-Dichloroethane

Concen: 18.663 ug/L

RT: 3.182 min Scan# 60

Delta R.T. 0.000 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

DBUP0

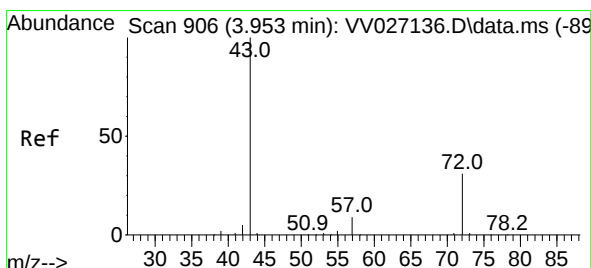
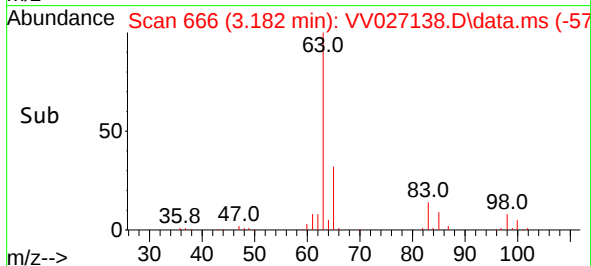
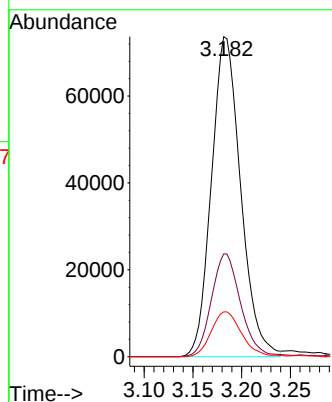
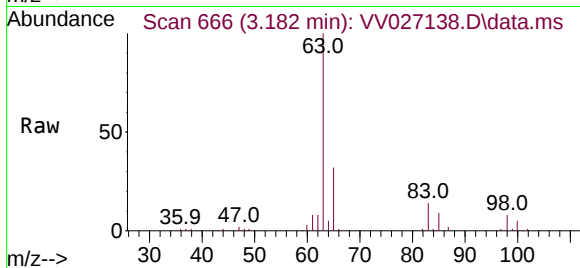
Tgt Ion: 63 Resp: 153723

Ion Ratio Lower Upper

63 100

65 32.1 22.9 42.5

83 14.0 9.7 17.9



#22

2-Butanone

Concen: 33.838 ug/L

RT: 3.963 min Scan# 909

Delta R.T. 0.010 min

Lab File: VV027138.D

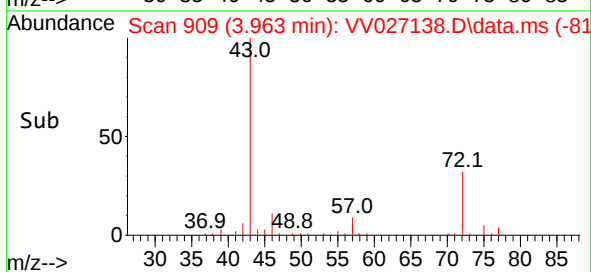
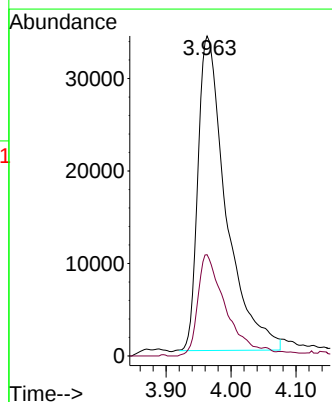
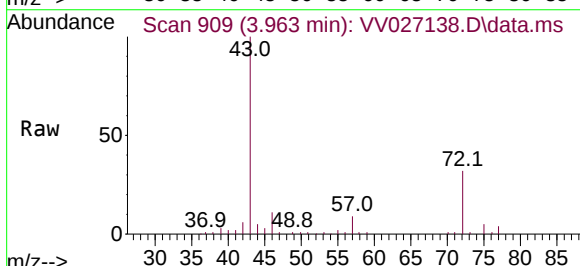
Acq: 01 Aug 2022 20:30

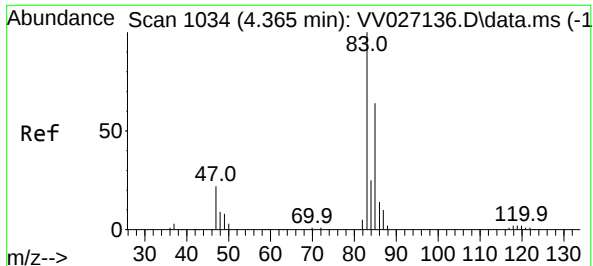
Tgt Ion: 43 Resp: 102384

Ion Ratio Lower Upper

43 100

72 31.5 15.7 47.1





#25

Chloroform

Concen: 30.908 ug/L

RT: 4.368 min Scan# 1034

Delta R.T. 0.003 min

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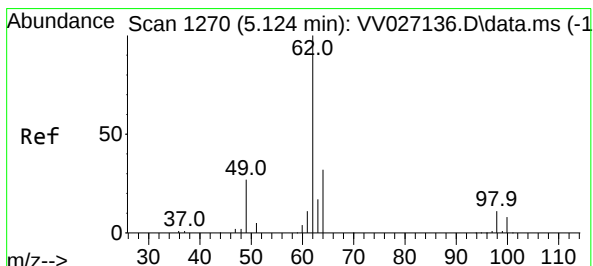
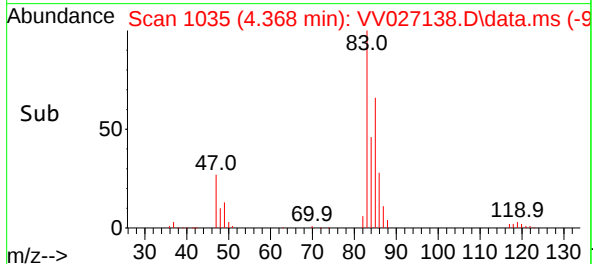
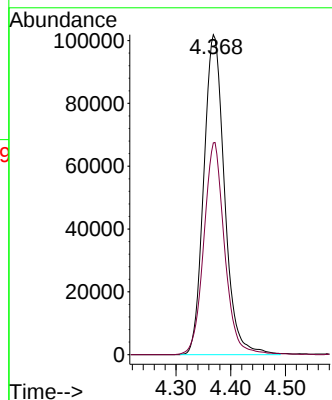
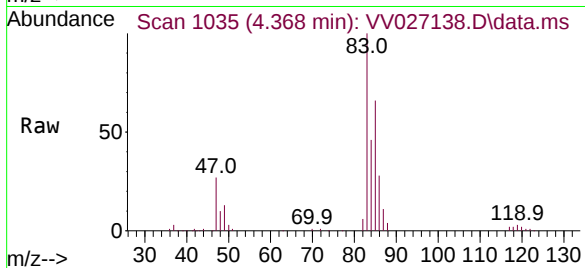
DBUP0

Tgt Ion: 83 Resp: 268042

Ion Ratio Lower Upper

83 100

85 66.2 45.3 84.1



#27

1,2-Dichloroethane

Concen: 36.661 ug/L

RT: 5.124 min Scan# 1270

Delta R.T. 0.000 min

Lab File: VV027138.D

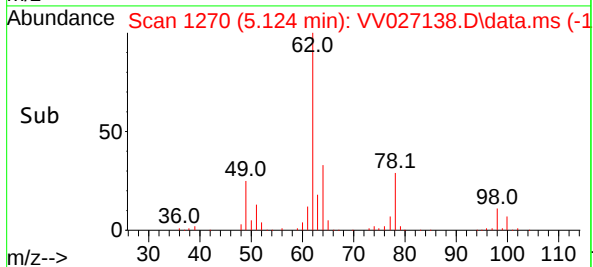
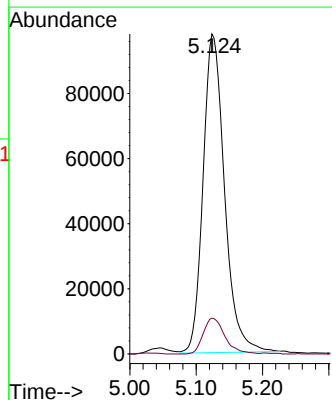
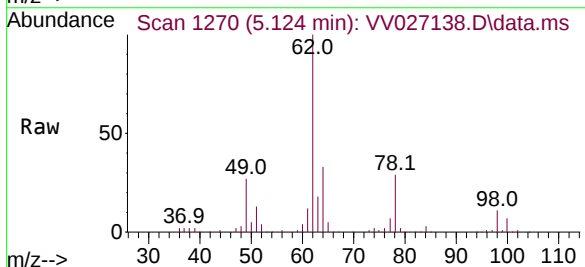
Acq: 01 Aug 2022 20:30

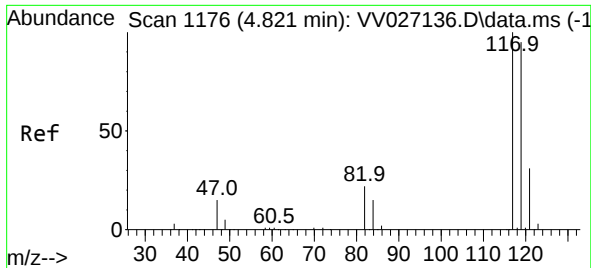
Tgt Ion: 62 Resp: 220126

Ion Ratio Lower Upper

62 100

98 11.2 9.2 13.8

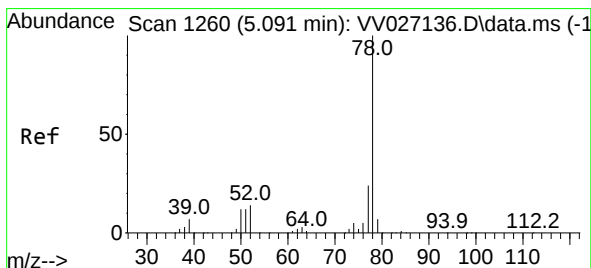
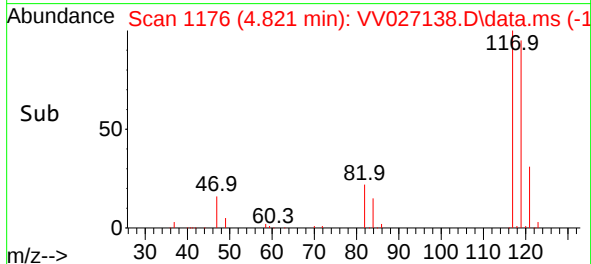
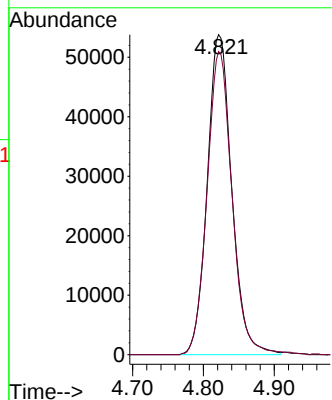
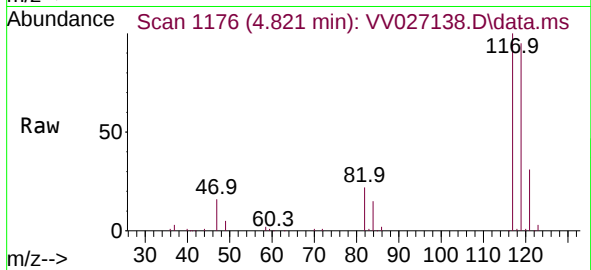




#31  
Carbon tetrachloride  
Concen: 20.557 ug/L  
RT: 4.821 min Scan# 1176  
Delta R.T. 0.000 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

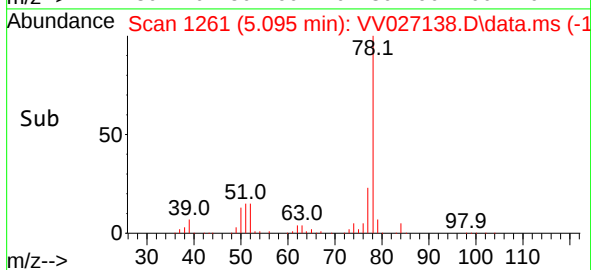
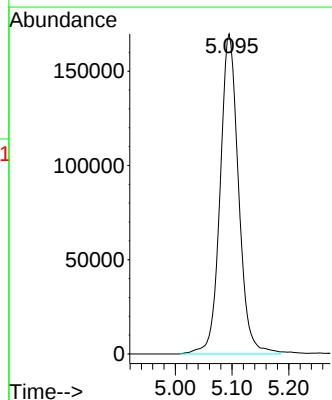
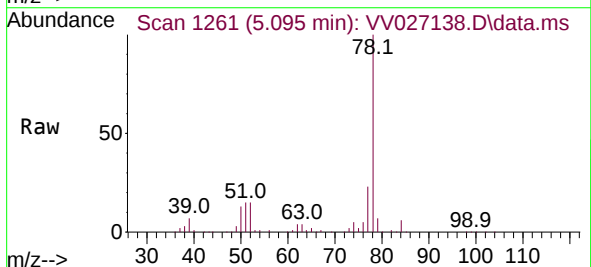
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

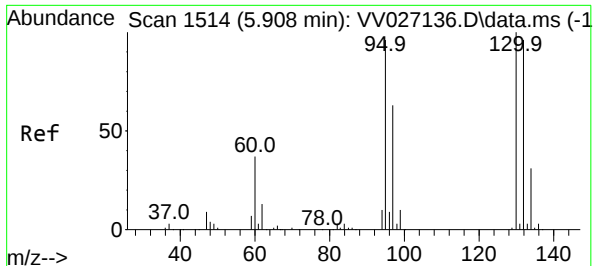
Tgt Ion:117 Resp: 129649  
Ion Ratio Lower Upper  
117 100  
119 96.1 77.1 115.7



#33  
Benzene  
Concen: 21.388 ug/L  
RT: 5.095 min Scan# 1261  
Delta R.T. 0.003 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

Tgt Ion: 78 Resp: 383690

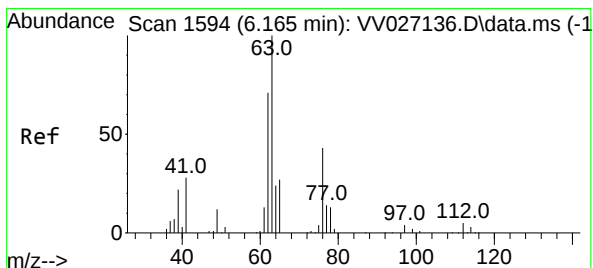
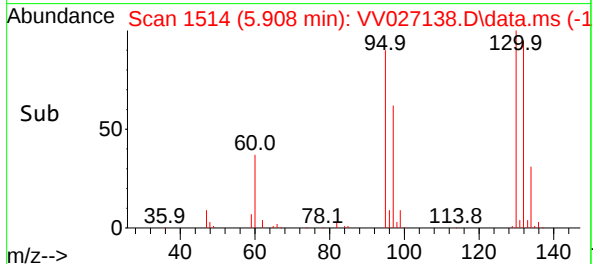
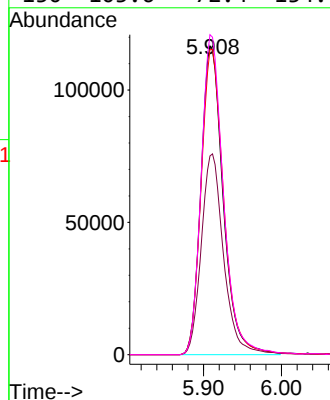
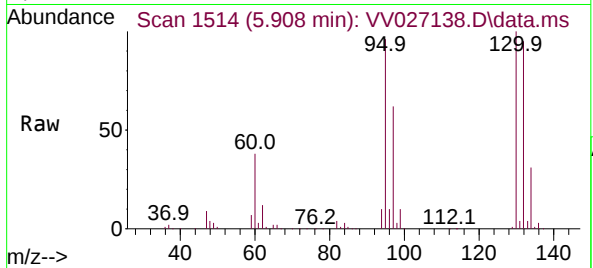




#34  
Trichloroethene  
Concen: 50.139 ug/L  
RT: 5.908 min Scan# 1514  
Delta R.T. 0.000 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

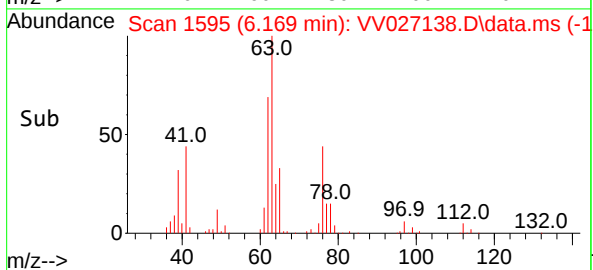
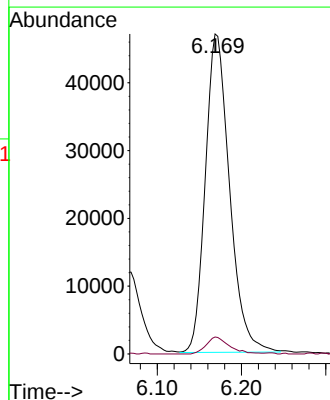
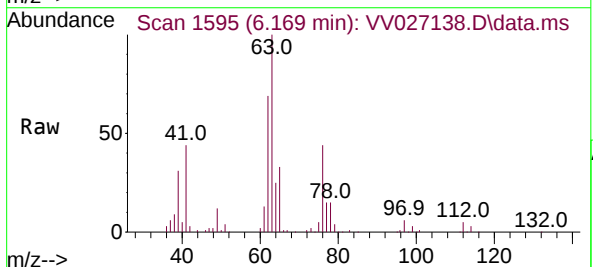
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

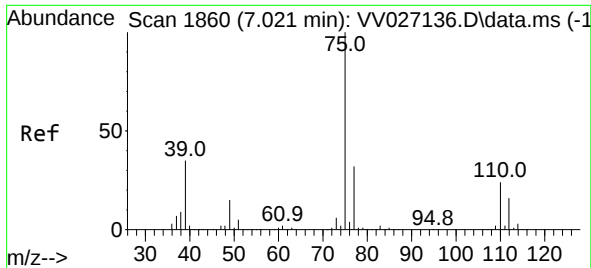
Tgt Ion: 95 Resp: 231313  
Ion Ratio Lower Upper  
95 100  
97 64.4 47.0 87.2  
132 98.8 71.5 132.7  
130 103.6 72.4 134.4



#37  
1,2-Dichloropropane  
Concen: 19.980 ug/L  
RT: 6.169 min Scan# 1595  
Delta R.T. 0.003 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

Tgt Ion: 63 Resp: 94099  
Ion Ratio Lower Upper  
63 100  
112 4.7 4.0 6.0





#39

cis-1,3-Dichloropropene

Concen: 0.885 ug/L

RT: 6.982 min Scan# 11

Delta R.T. -0.039 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

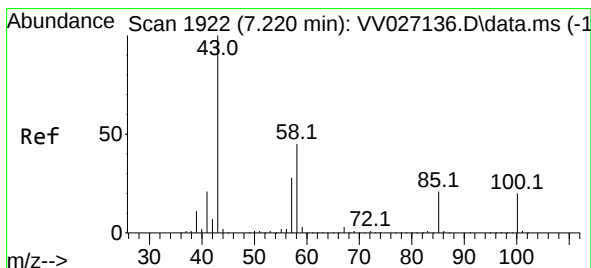
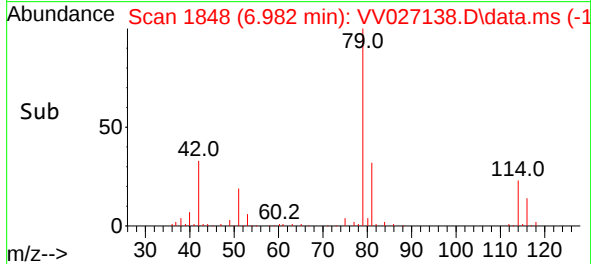
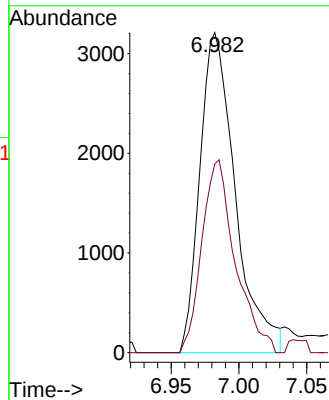
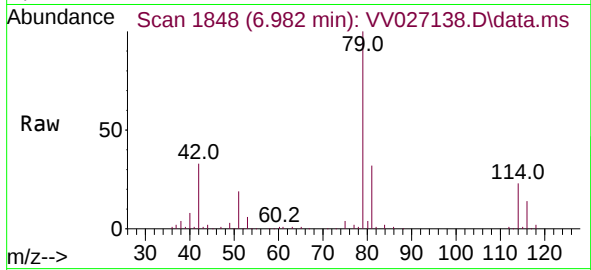
DBUP0

Tgt Ion: 75 Resp: 5846

Ion Ratio Lower Upper

75 100

77 58.9 22.3 41.5#



#40

4-Methyl-2-pentanone

Concen: 39.010 ug/L

RT: 7.223 min Scan# 1923

Delta R.T. 0.003 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

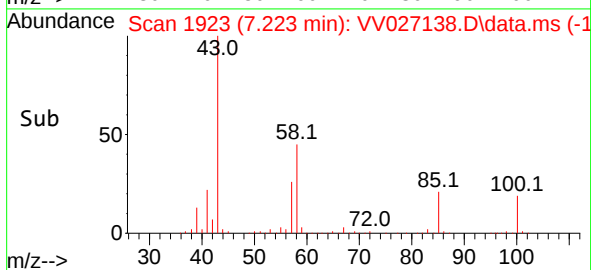
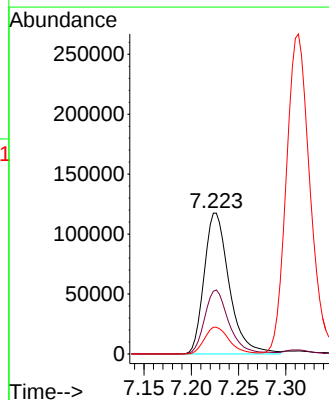
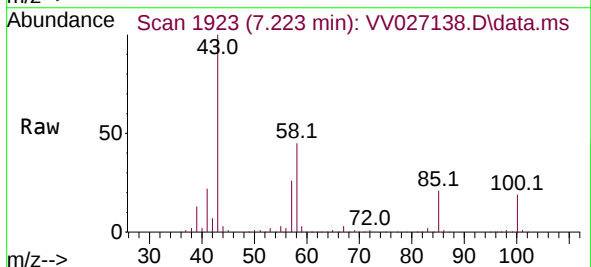
Tgt Ion: 43 Resp: 217133

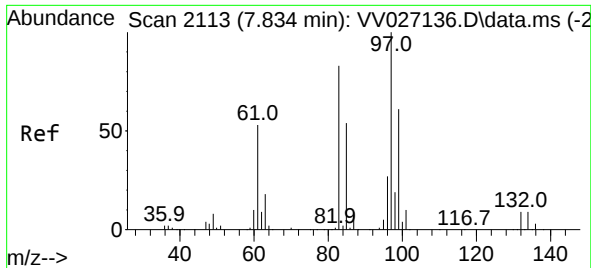
Ion Ratio Lower Upper

43 100

58 44.1 36.1 54.1

100 18.9 15.8 23.6

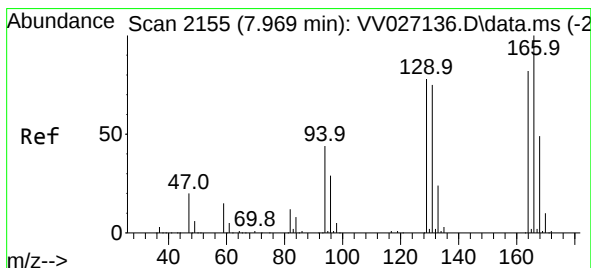
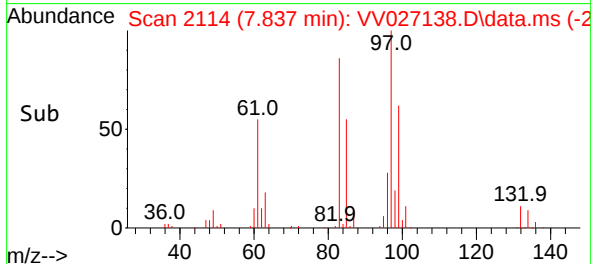
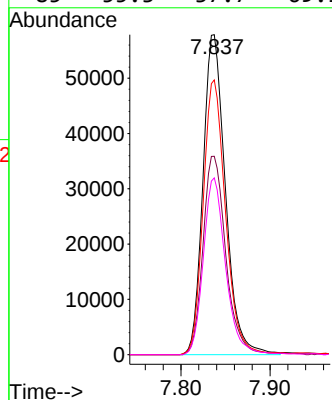
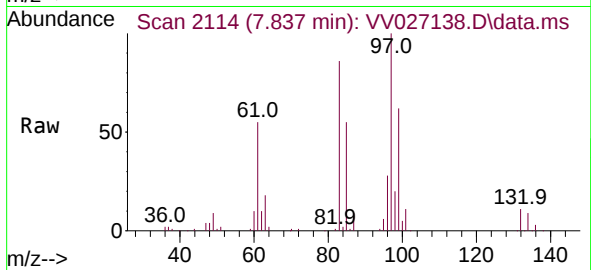




#45  
1,1,2-Trichloroethane  
Concen: 20.464 ug/L  
RT: 7.837 min Scan# 2113  
Delta R.T. 0.003 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

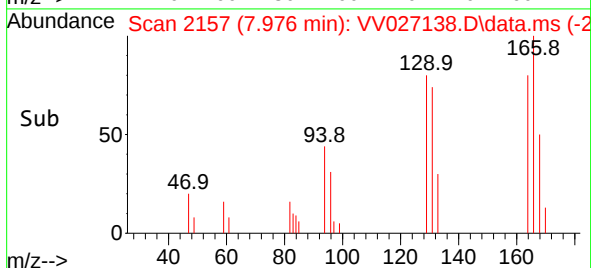
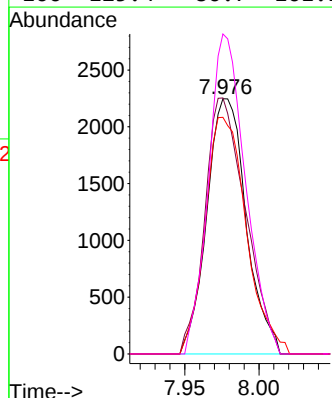
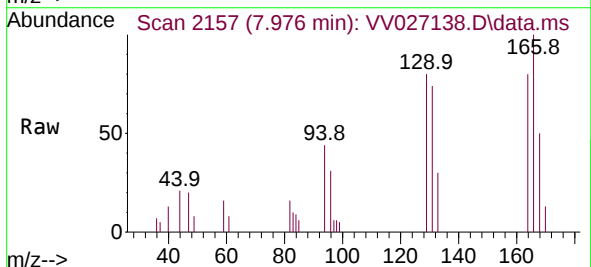
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

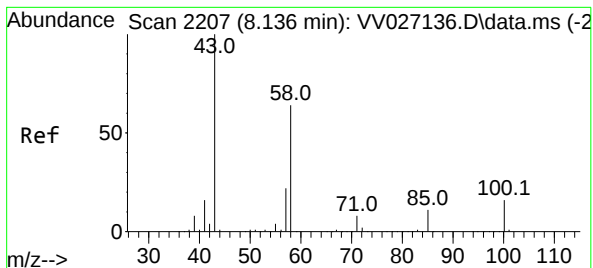
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 101314 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 62.0  | 43.3  | 80.5   |
| 83       | 85.9  | 58.2  | 108.2  |
| 85       | 55.3  | 37.7  | 69.9   |



#46  
Tetrachloroethene  
Concen: 1.173 ug/L  
RT: 7.976 min Scan# 2157  
Delta R.T. 0.006 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 4130  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 100.3 | 66.0  | 122.6 |
| 131      | 92.7  | 63.1  | 117.1 |
| 166      | 125.4 | 86.7  | 161.1 |





#48

2-Hexanone

Concen: 42.900 ug/L

RT: 8.140 min Scan# 21

Delta R.T. 0.003 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

DBUP0

Tgt Ion: 43 Resp: 185656

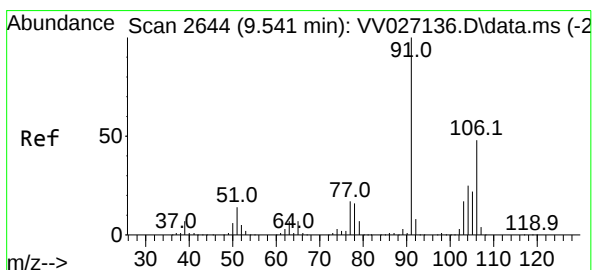
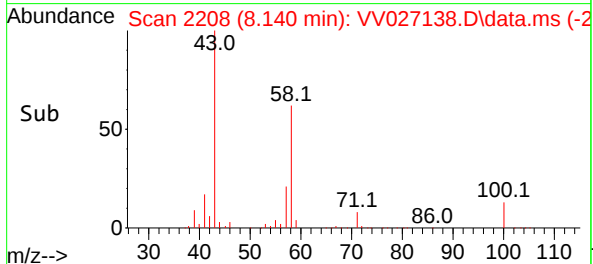
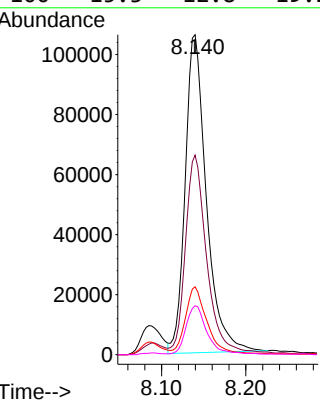
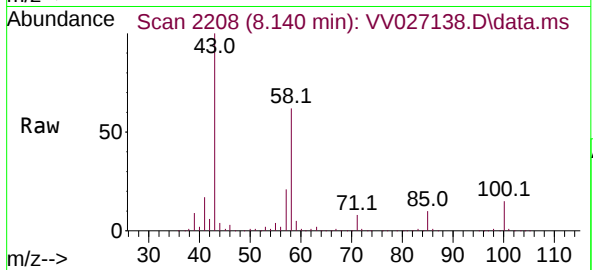
Ion Ratio Lower Upper

43 100

58 63.3 51.3 76.9

57 21.4 16.7 25.1

100 15.3 12.8 19.2



#54

o-Xylene

Concen: 51.122 ug/L

RT: 9.542 min Scan# 2644

Delta R.T. 0.000 min

Lab File: VV027138.D

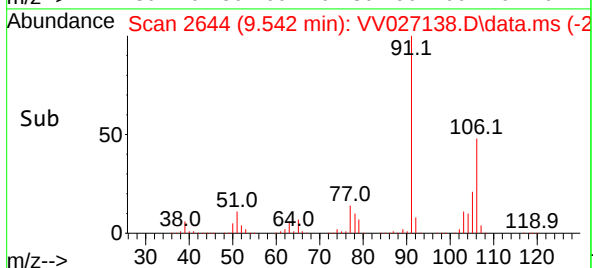
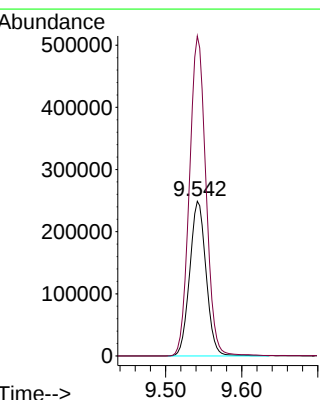
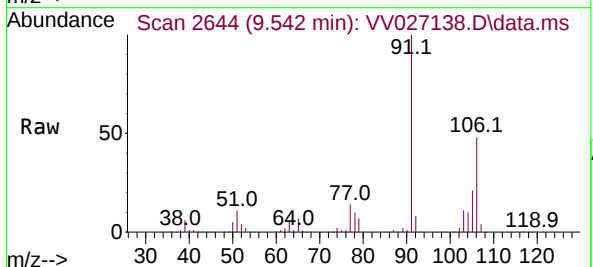
Acq: 01 Aug 2022 20:30

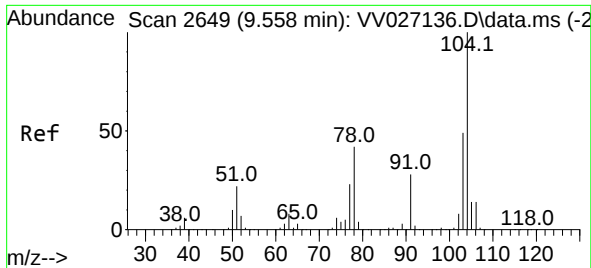
Tgt Ion:106 Resp: 372323

Ion Ratio Lower Upper

106 100

91 206.8 145.1 269.5

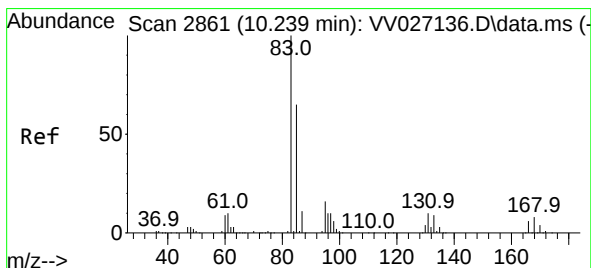
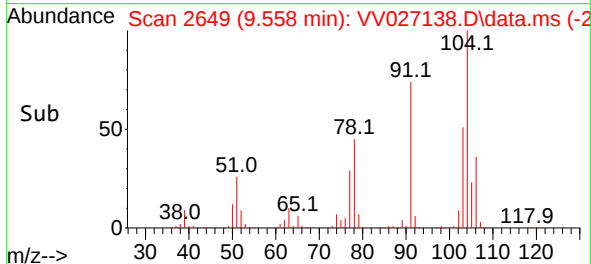
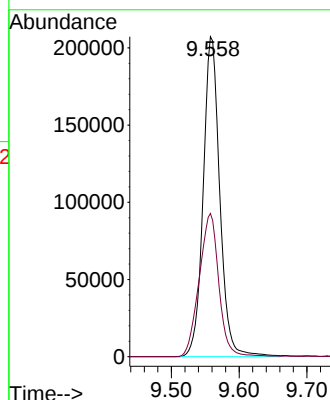
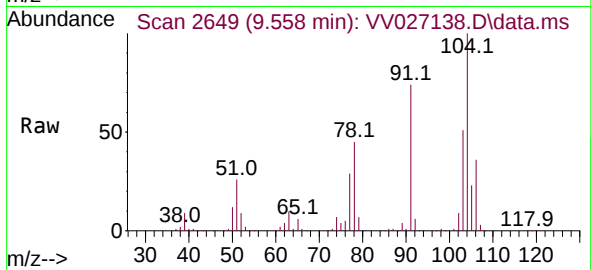




#55  
Styrene  
Concen: 27.905 ug/L  
RT: 9.558 min Scan# 2649  
Delta R.T. 0.000 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

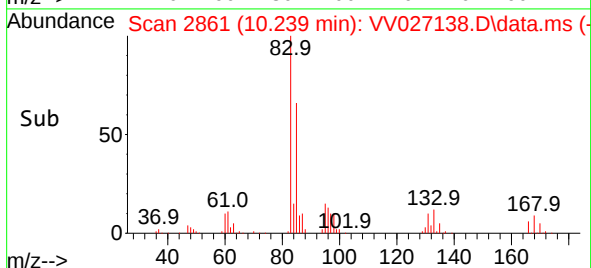
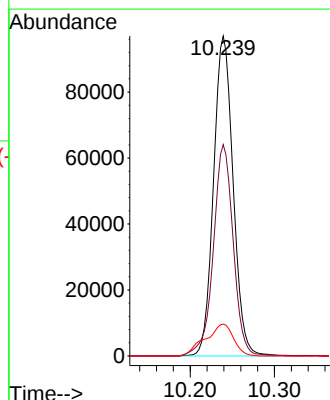
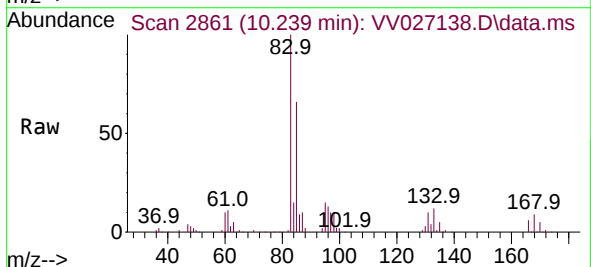
Instrument :  
MSVOA\_V  
ClientSampleId :  
DBUP0

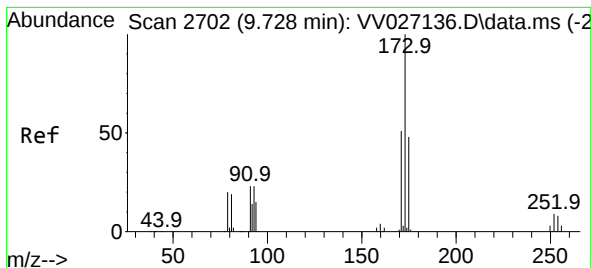
Tgt Ion:104 Resp: 353217  
Ion Ratio Lower Upper  
104 100  
78 44.7 29.2 54.2



#57  
1,1,2,2-Tetrachloroethane  
Concen: 19.470 ug/L  
RT: 10.239 min Scan# 2861  
Delta R.T. 0.000 min  
Lab File: VV027138.D  
Acq: 01 Aug 2022 20:30

Tgt Ion: 83 Resp: 156304  
Ion Ratio Lower Upper  
83 100  
85 66.0 45.2 84.0  
131 10.0 7.8 11.6





#59

Bromoform

Concen: 22.972 ug/L

RT: 9.728 min Scan# 21

Delta R.T. 0.000 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

DBUP0

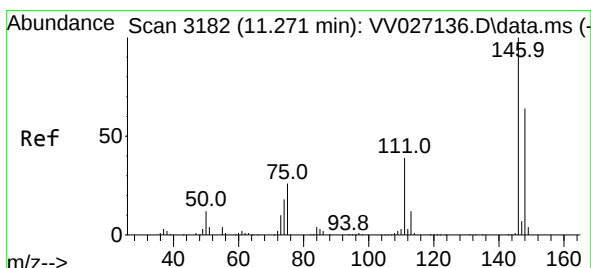
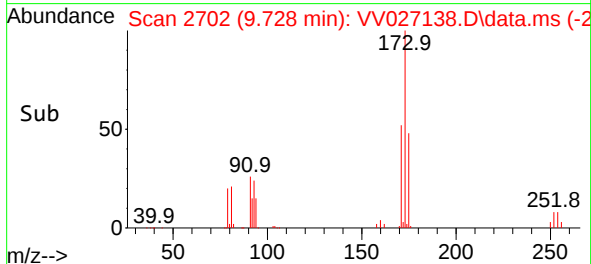
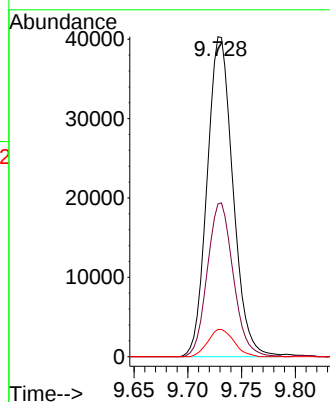
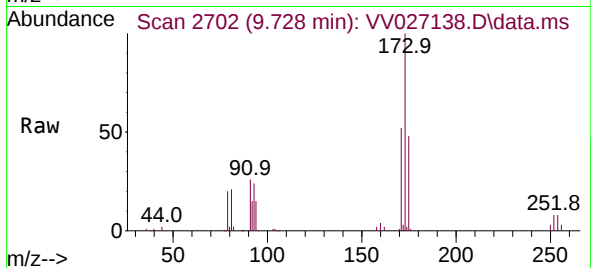
Tgt Ion:173 Resp: 67395

Ion Ratio Lower Upper

173 100

175 48.1 38.2 57.4

254 8.6 6.8 10.2



#65

1,4-Dichlorobenzene

Concen: 21.919 ug/L

RT: 11.271 min Scan# 3182

Delta R.T. 0.000 min

Lab File: VV027138.D

Acq: 01 Aug 2022 20:30

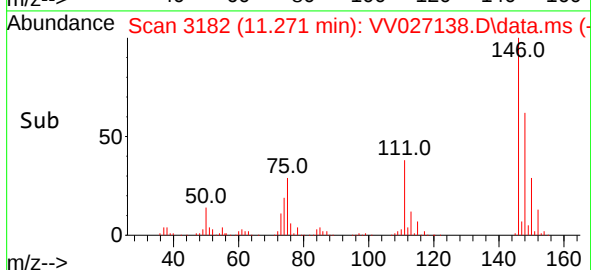
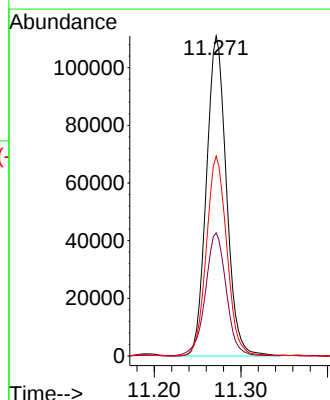
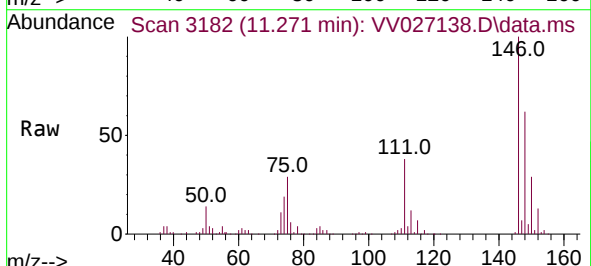
Tgt Ion:146 Resp: 177689

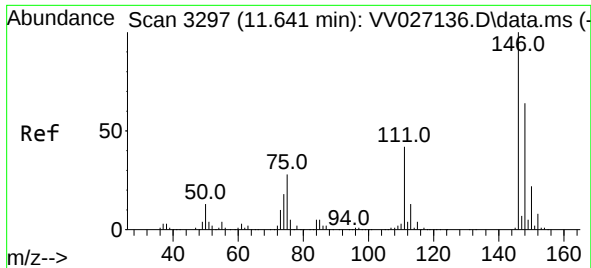
Ion Ratio Lower Upper

146 100

111 38.5 27.2 50.4

148 62.4 44.2 82.2





#67

1,2-Dichlorobenzene

Concen: 29.496 ug/L

RT: 11.641 min Scan# 31

Delta R.T. 0.000 min

Lab File: VV027138.D

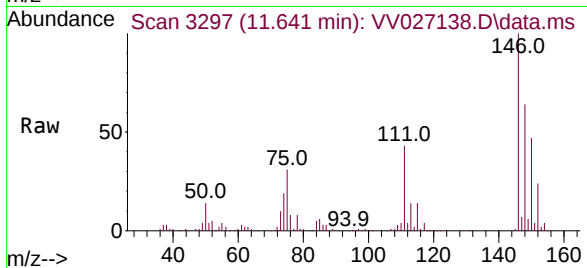
Acq: 01 Aug 2022 20:30

Instrument :

MSVOA\_V

ClientSampleId :

DBUP0



Tgt Ion:146 Resp: 238020

Ion Ratio Lower Upper

146 100

111 42.5 32.8 49.2

148 63.7 50.5 75.7

