

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VW112022\  
 Data File : VW029228.D  
 Acq On : 20 Nov 2022 16:26  
 Operator : SY/MD  
 Sample : N5652-05  
 Misc : 25.0mL/MSVOA\_V/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 21 00:58:46 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR111122WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Mon Nov 21 00:54:18 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 5.613  | 114   | 325315   | 5.000    | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 8.847  | 117   | 302642   | 5.000    | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.243 | 152   | 129483   | 5.000    | ug/L   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.307  | 65    | 96961    | 4.889    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 40 - 130 | Recovery | =      | 97.800%  |
| 7) Chloroethane-d5            | 1.568  | 69    | 79691    | 4.571    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 130 | Recovery | =      | 91.400%  |
| 11) 1,1-Dichloroethene-d2     | 2.108  | 63    | 139383   | 3.856    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 125 | Recovery | =      | 77.200%  |
| 20) 2-Butanone-d5             | 3.896  | 46    | 195801   | 58.978   | ug/L   | 0.01     |
| Spiked Amount                 | 50.000 | Range | 40 - 130 | Recovery | =      | 117.960% |
| 24) Chloroform-d              | 4.343  | 84    | 182737   | 4.488    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 89.800%  |
| 26) 1,2-Dichloroethane-d4     | 5.031  | 65    | 86475    | 4.720    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 94.400%  |
| 32) Benzene-d6                | 5.043  | 84    | 379689   | 4.203    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 84.000%  |
| 36) 1,2-Dichloropropane-d6    | 6.063  | 67    | 113978   | 4.518    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 140 | Recovery | =      | 90.400%  |
| 41) Toluene-d8                | 7.310  | 98    | 331946   | 4.082    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 81.600%  |
| 43) trans-1,3-Dichloroprop... | 7.622  | 79    | 34181    | 4.155    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 55 - 130 | Recovery | =      | 83.000%  |
| 46) 2-Hexanone-d5             | 8.088  | 63    | 151581   | 43.165   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 45 - 130 | Recovery | =      | 86.320%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.207 | 84    | 80862    | 4.624    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 120 | Recovery | =      | 92.400%  |
| 66) 1,2-Dichlorobenzene-d4    | 11.616 | 152   | 120034   | 5.182    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 80 - 120 | Recovery | =      | 103.600% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 1.127  | 85    | 2070     | 0.076    | ug/L   | 93       |
| 3) Chloromethane              | 1.240  | 50    | 3081     | 0.137    | ug/L   | 86       |
| 8) Chloroethane               | 1.455  | 64    | 55246    | 3.662    | ug/L # | 52       |
| 9) Trichlorofluoromethane     | 1.751  | 101   | 8587296  | 248.077  | ug/L   | 96       |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.118  | 101   | 151605   | 7.735    | ug/L   | 99       |
| 12) 1,1-Dichloroethene        | 2.118  | 96    | 34953    | 1.775    | ug/L # | 53       |
| 16) Methylene chloride        | 2.503  | 84    | 5580     | 0.219    | ug/L   | 94       |
| 17) Methyl tert-butyl Ether   | 2.764  | 73    | 311180   | 7.370    | ug/L   | 99       |
| 19) 1,1-Dichloroethane        | 3.185  | 63    | 260230   | 6.969    | ug/L   | 99       |
| 22) cis-1,2-Dichloroethene    | 3.912  | 96    | 12741    | 0.549    | ug/L   | 98       |
| 25) Chloroform                | 4.368  | 83    | 36796    | 0.940    | ug/L   | 88       |
| 27) 1,2-Dichloroethane        | 5.146  | 62    | 2663     | 0.132    | ug/L # | 77       |
| 29) 1,1,1-Trichloroethane     | 4.606  | 97    | 12712    | 0.358    | ug/L   | 99       |
| 31) Carbon tetrachloride      | 4.825  | 117   | 4423     | 0.145    | ug/L   | 99       |
| 34) Trichloroethene           | 5.908  | 95    | 141790   | 5.989    | ug/L   | 97       |
| 35) Methylcyclohexane         | 6.066  | 83    | 27347    | 0.657    | ug/L # | 21       |
| 37) 1,2-Dichloropropane       | 6.066  | 63    | 12203    | 0.572    | ug/L # | 85       |
| 38) Bromodichloromethane      | 6.513  | 83    | 1798     | 0.067    | ug/L # | 76       |
| 39) cis-1,3-Dichloropropene   | 6.982  | 75    | 2433     | 0.082    | ug/L # | 58       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV112022\  
 Data File : VV029228.D  
 Acq On : 20 Nov 2022 16:26  
 Operator : SY/MD  
 Sample : N5652-05  
 Misc : 25.0mL/MSVOA\_V/WATER  
 ALS Vial : 16 Sample Multiplier: 1

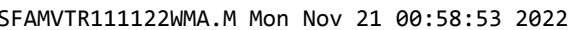
Instrument :  
 MSVOA\_V  
 ClientSampleId :

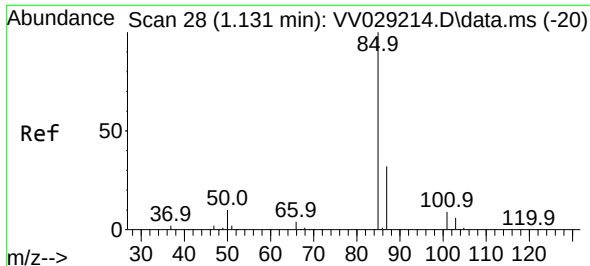
Quant Time: Nov 21 00:58:46 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR111122WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Mon Nov 21 00:54:18 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 45) 1,1,2-Trichloroethane     | 7.844  | 97   | 846      | 0.061 | ug/L   | 84       |
| 47) Tetrachloroethene         | 7.973  | 164  | 2272     | 0.120 | ug/L   | 97       |
| 61) 1,2,3-Trichloropropane    | 10.368 | 75   | 741      | 0.084 | ug/L # | 65       |
| 68) 1,2-Dibromo-3-chloropr... | 12.239 | 75   | 272      | 0.156 | ug/L # | 2        |

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

Quant Time: Nov 21 00:58:46 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR111122WMA.M  
Quant Title : TRACE VOA SFAM1.0  
QLast Update : Mon Nov 21 00:54:18 2022  
Response via : Initial Calibration

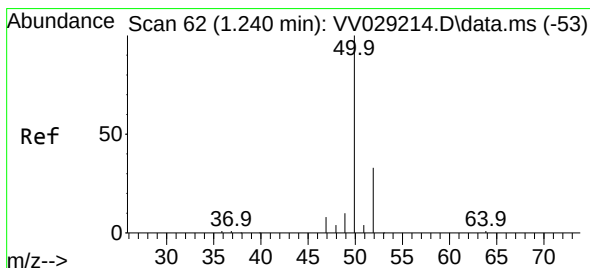
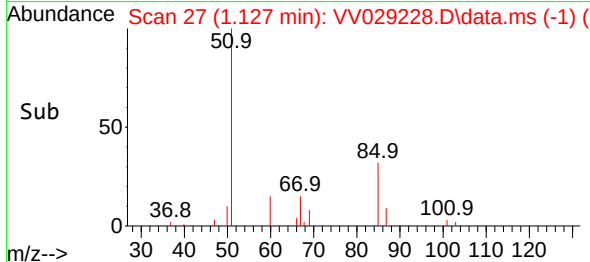
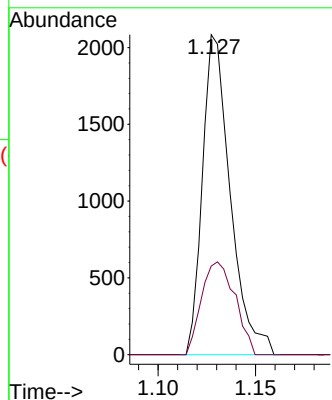
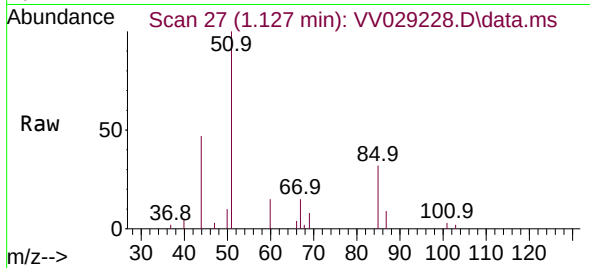




#2  
 Dichlorodifluoromethane  
 Concen: 0.076 ug/L  
 RT: 1.127 min Scan# 21  
 Delta R.T. -0.003 min  
 Lab File: VV029228.D  
 Acq: 20 Nov 2022 16:26

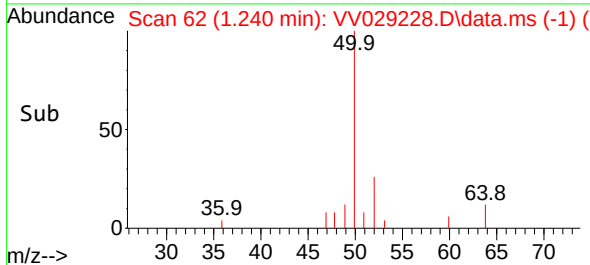
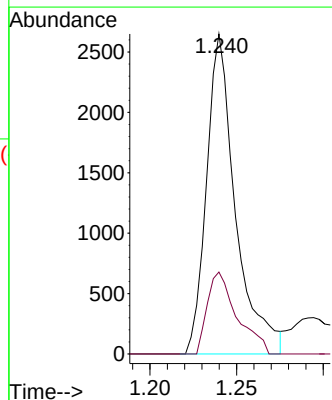
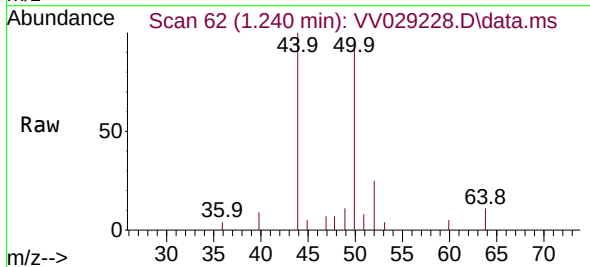
Instrument :  
 MSVOA\_V  
 ClientSampleId :

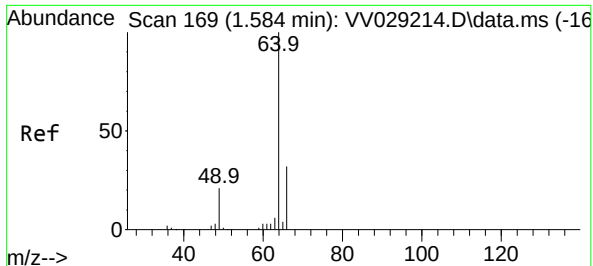
Tgt Ion: 85 Resp: 2070  
 Ion Ratio Lower Upper  
 85 100  
 87 34.8 25.0 37.4



#3  
 Chloromethane  
 Concen: 0.137 ug/L  
 RT: 1.240 min Scan# 62  
 Delta R.T. -0.000 min  
 Lab File: VV029228.D  
 Acq: 20 Nov 2022 16:26

Tgt Ion: 50 Resp: 3081  
 Ion Ratio Lower Upper  
 50 100  
 52 25.6 23.7 43.9

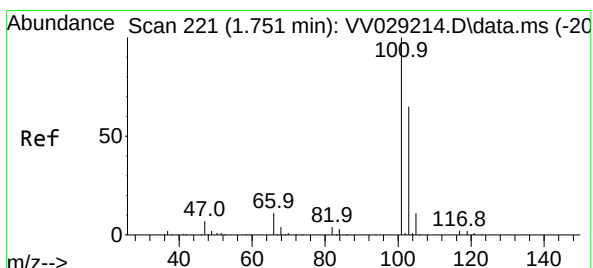
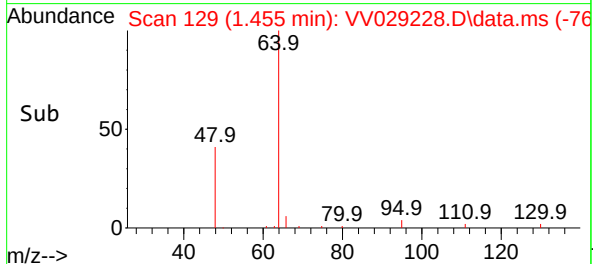
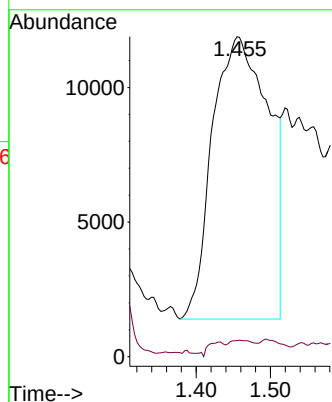
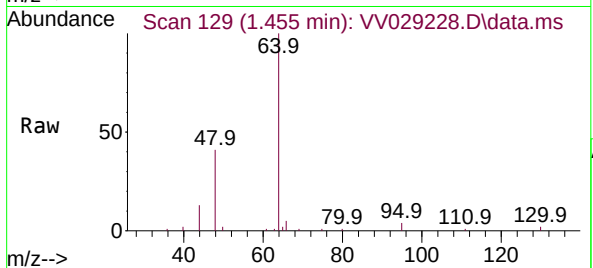




#8  
Chloroethane  
Concen: 3.662 ug/L  
RT: 1.455 min Scan# 11  
Delta R.T. -0.129 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

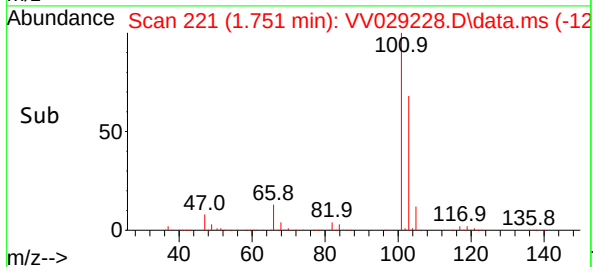
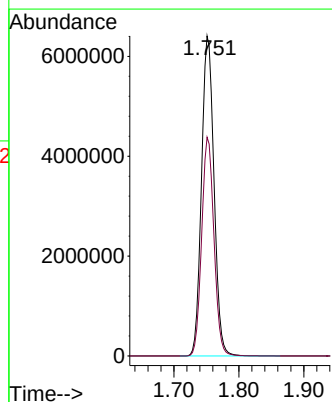
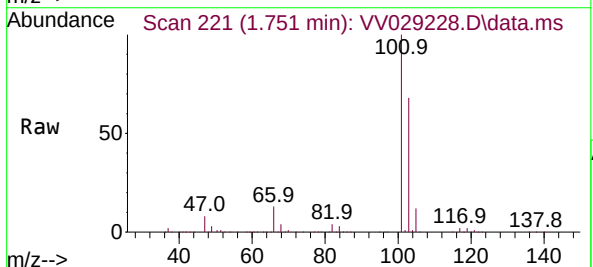
Instrument :  
MSVOA\_V  
ClientSampleId :

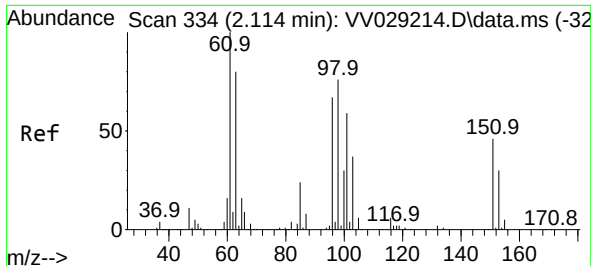
Tgt Ion: 64 Resp: 55246  
Ion Ratio Lower Upper  
64 100  
66 5.1 22.0 40.8#



#9  
Trichlorofluoromethane  
Concen: 248.077 ug/L  
RT: 1.751 min Scan# 221  
Delta R.T. -0.000 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

Tgt Ion:101 Resp: 8587296  
Ion Ratio Lower Upper  
101 100  
103 67.2 51.3 76.9

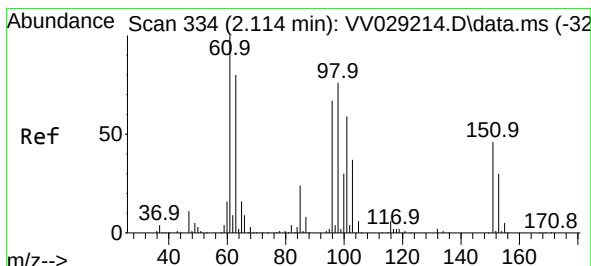
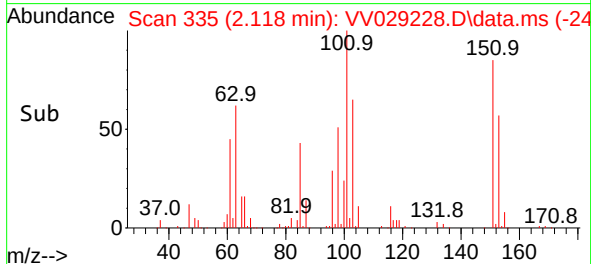
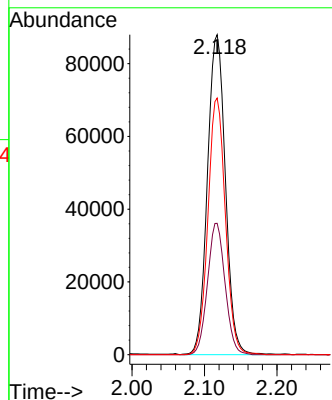
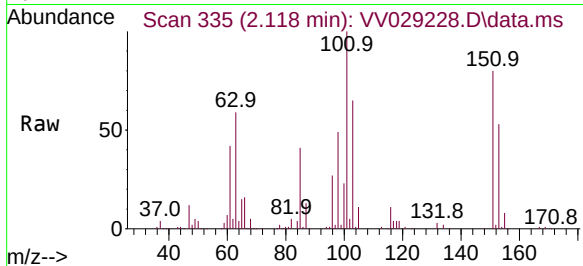




#10  
1,1,2-Trichloro-1,2,2-trifluoroethane  
Concen: 7.735 ug/L  
RT: 2.118 min Scan# 335  
Delta R.T. 0.003 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

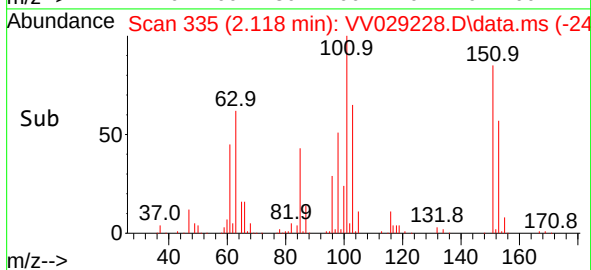
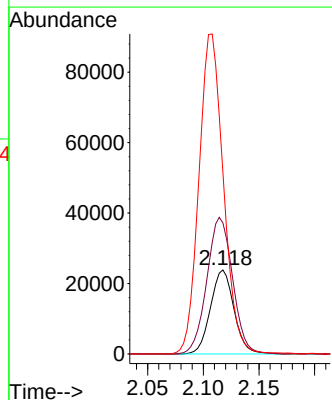
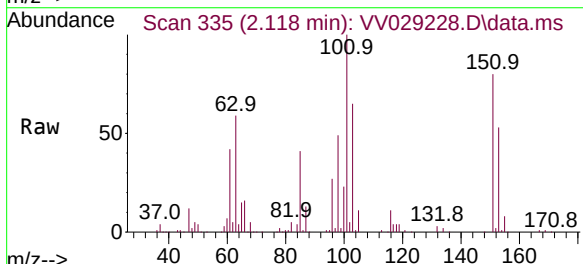
Instrument :  
MSVOA\_V  
ClientSampleId :

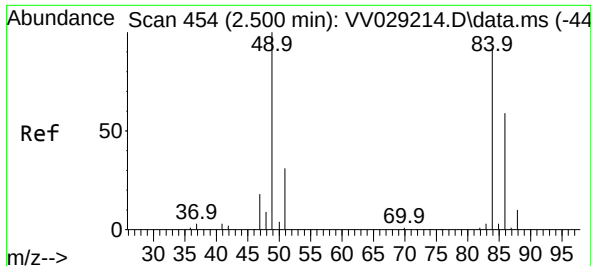
Tgt Ion:101 Resp: 151605  
Ion Ratio Lower Upper  
101 100  
85 40.1 32.9 49.3  
151 77.8 62.5 93.7



#12  
1,1-Dichloroethene  
Concen: 1.775 ug/L  
RT: 2.118 min Scan# 335  
Delta R.T. 0.003 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

Tgt Ion: 96 Resp: 34953  
Ion Ratio Lower Upper  
96 100  
61 156.1 104.2 193.4  
63 216.1 75.9 140.9#

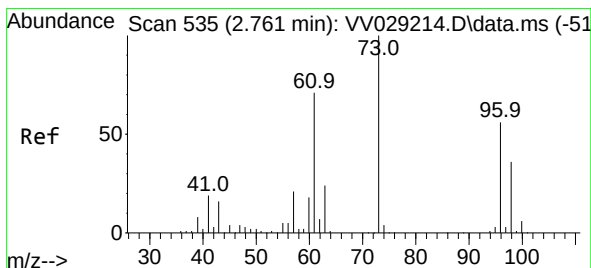
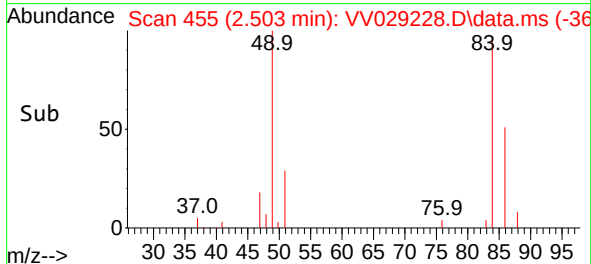
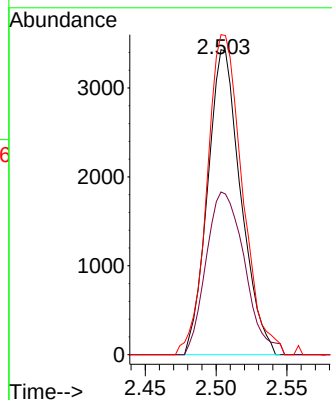
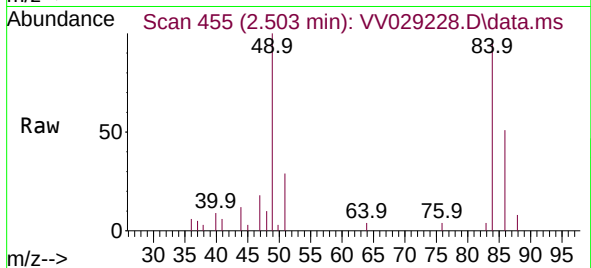




#16  
Methylene chloride  
Concen: 0.219 ug/L  
RT: 2.503 min Scan# 41  
Delta R.T. 0.003 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

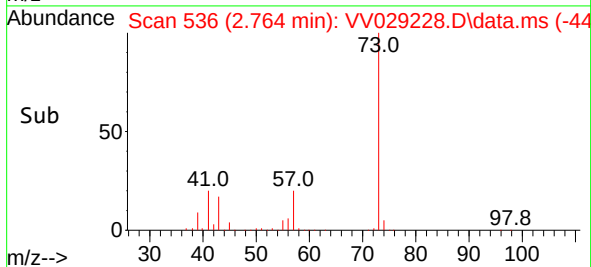
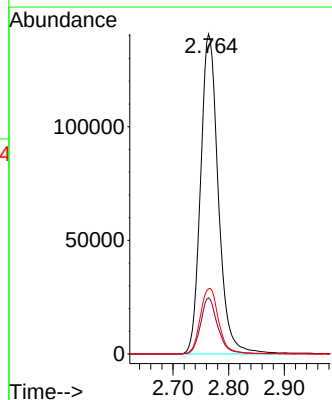
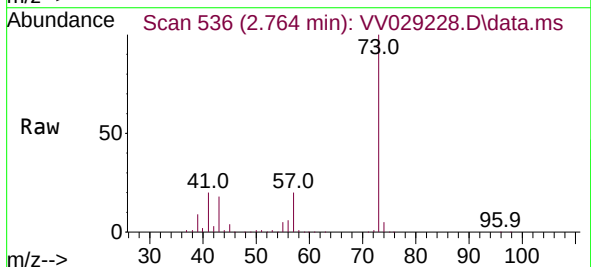
Instrument :  
MSVOA\_V  
ClientSampleId :

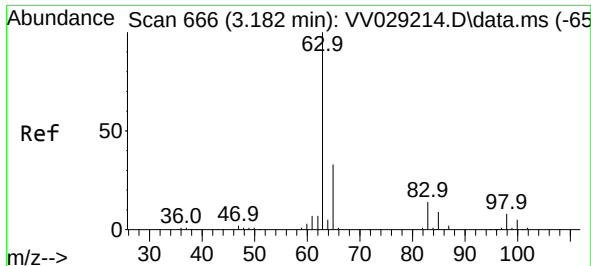
Tgt Ion: 84 Resp: 5580  
Ion Ratio Lower Upper  
84 100  
86 53.4 45.8 85.0  
49 108.5 75.5 140.1



#17  
Methyl tert-butyl Ether  
Concen: 7.370 ug/L  
RT: 2.764 min Scan# 536  
Delta R.T. 0.003 min  
Lab File: VV029228.D  
Acq: 20 Nov 2022 16:26

Tgt Ion: 73 Resp: 311180  
Ion Ratio Lower Upper  
73 100  
43 16.9 13.0 19.4  
57 21.3 16.6 24.8





#19

1,1-Dichloroethane

Concen: 6.969 ug/L

RT: 3.185 min Scan# 6

Delta R.T. 0.003 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

ClientSampleId :

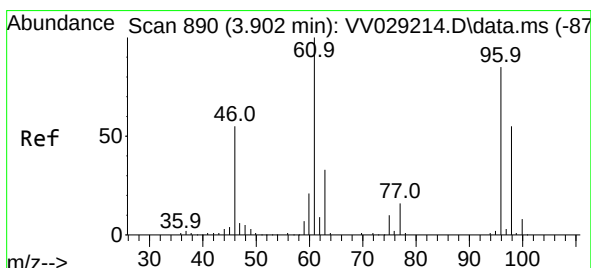
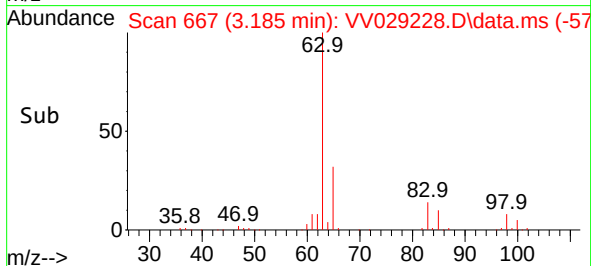
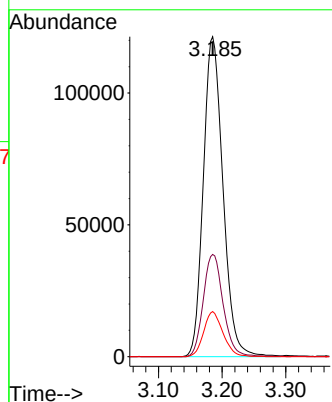
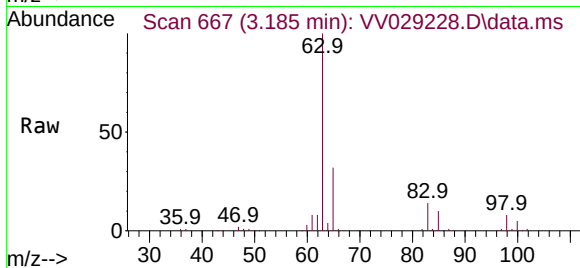
Tgt Ion: 63 Resp: 260230

Ion Ratio Lower Upper

63 100

65 32.0 23.0 42.6

83 14.1 9.4 17.6



#22

cis-1,2-Dichloroethene

Concen: 0.549 ug/L

RT: 3.912 min Scan# 893

Delta R.T. 0.010 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

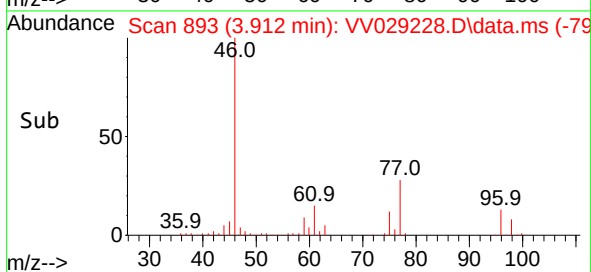
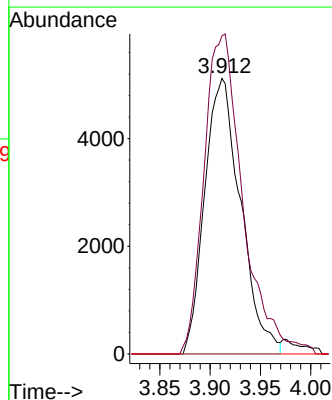
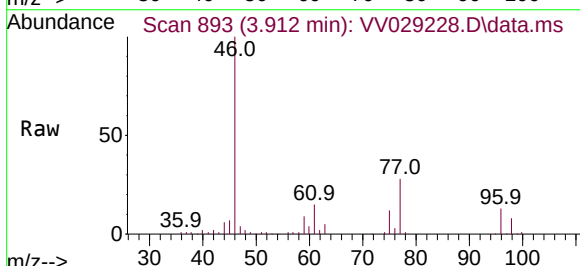
Tgt Ion: 96 Resp: 12741

Ion Ratio Lower Upper

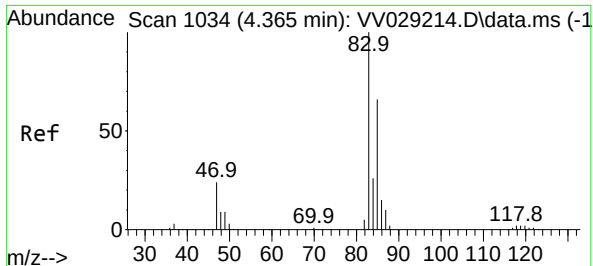
96 100

61 115.4 82.3 152.9

68 0.0 0.0 0.0







#25

Chloroform

Concen: 0.940 ug/L

RT: 4.368 min Scan# 1035

Delta R.T. 0.003 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

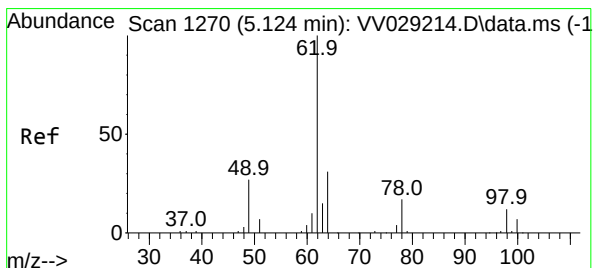
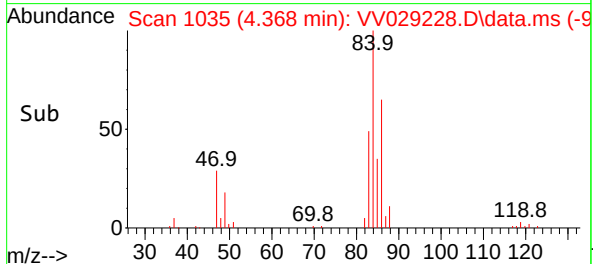
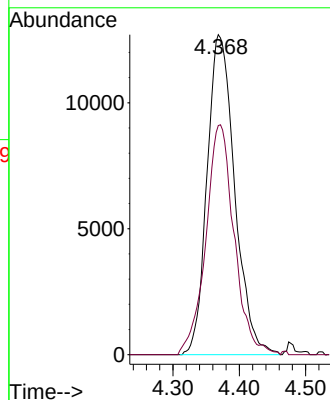
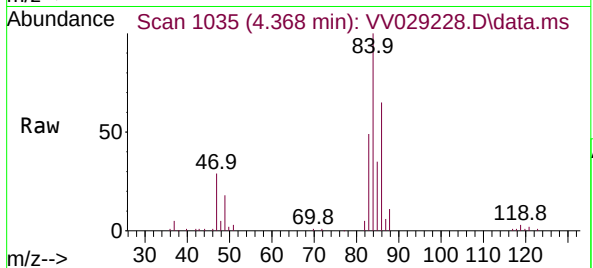
ClientSampleId :

Tgt Ion: 83 Resp: 36796

Ion Ratio Lower Upper

83 100

85 71.6 43.7 81.1



#27

1,2-Dichloroethane

Concen: 0.132 ug/L

RT: 5.146 min Scan# 1277

Delta R.T. 0.022 min

Lab File: VV029228.D

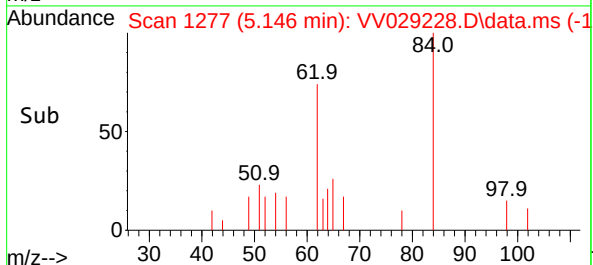
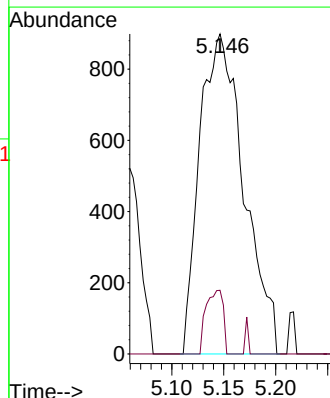
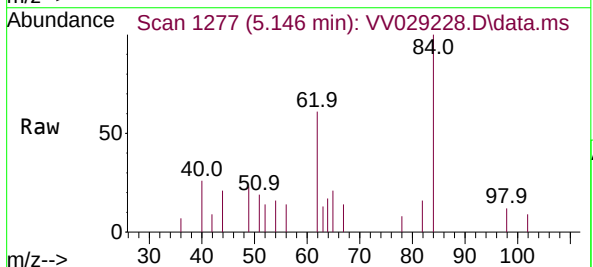
Acq: 20 Nov 2022 16:26

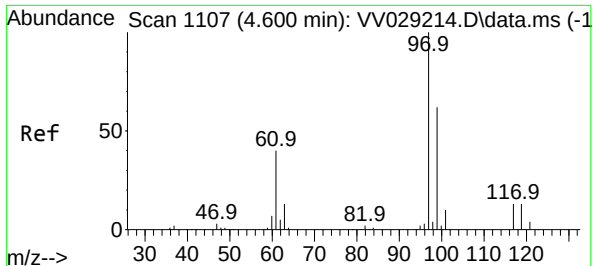
Tgt Ion: 62 Resp: 2663

Ion Ratio Lower Upper

62 100

98 19.9 9.0 13.6#





#29

1,1,1-Trichloroethane

Concen: 0.358 ug/L

RT: 4.606 min Scan# 1109

Delta R.T. 0.006 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

ClientSampleId :

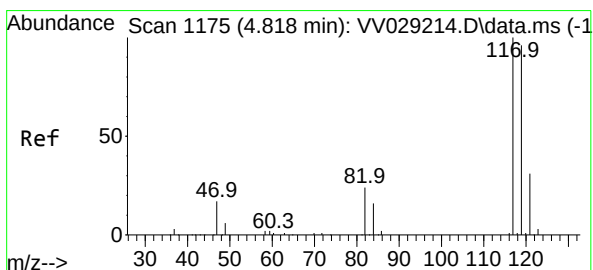
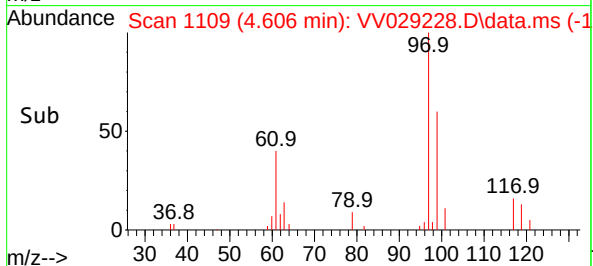
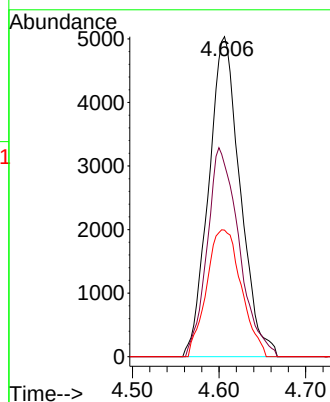
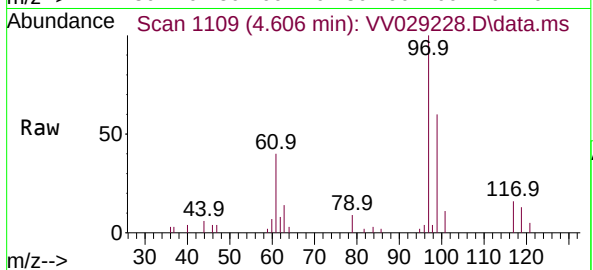
Tgt Ion: 97 Resp: 12712

Ion Ratio Lower Upper

97 100

99 66.1 52.7 79.1

61 43.6 33.8 50.6



#31

Carbon tetrachloride

Concen: 0.145 ug/L

RT: 4.825 min Scan# 1177

Delta R.T. 0.006 min

Lab File: VV029228.D

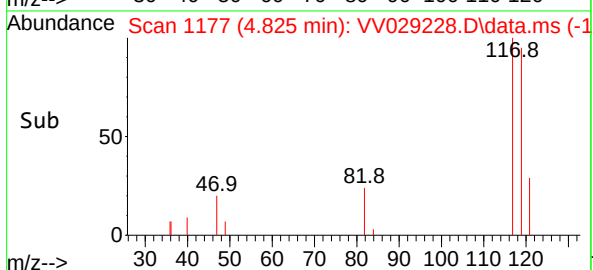
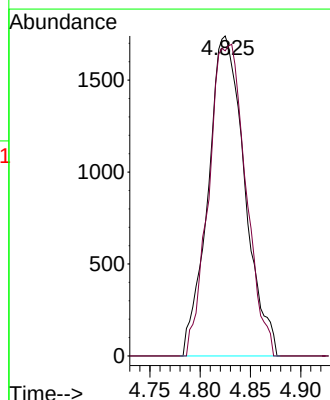
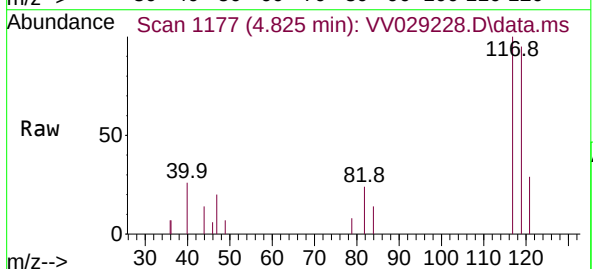
Acq: 20 Nov 2022 16:26

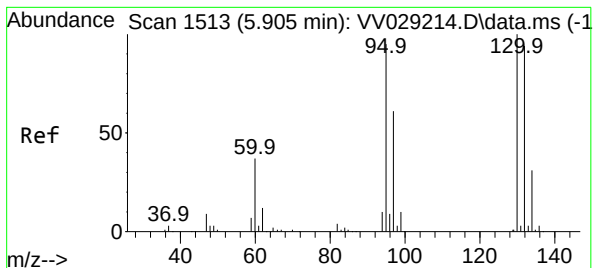
Tgt Ion: 117 Resp: 4423

Ion Ratio Lower Upper

117 100

119 97.8 77.0 115.6





#34

Trichloroethene

Concen: 5.989 ug/L

RT: 5.908 min Scan# 1

Delta R.T. 0.003 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

ClientSampleId :

Tgt Ion: 95 Resp: 141790

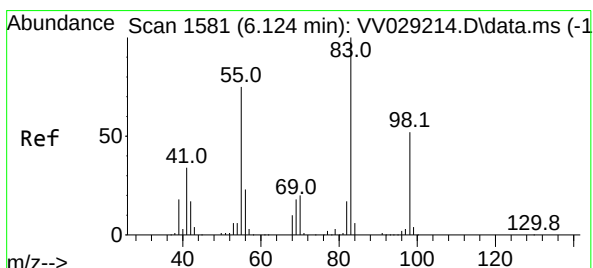
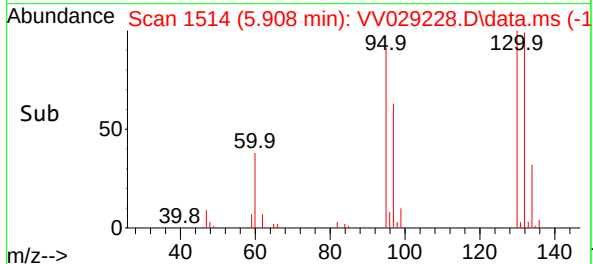
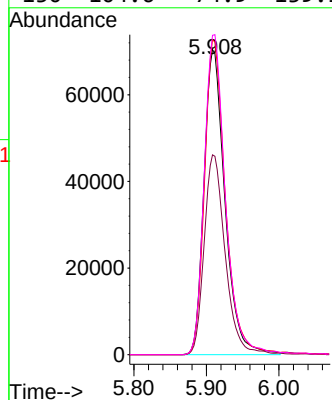
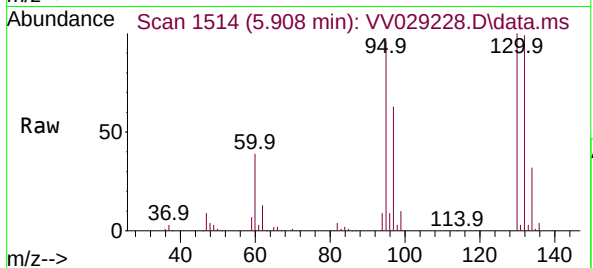
Ion Ratio Lower Upper

95 100

97 65.5 45.6 84.8

132 103.3 69.1 128.3

130 104.6 74.9 139.1



#35

Methylcyclohexane

Concen: 0.657 ug/L

RT: 6.066 min Scan# 1563

Delta R.T. -0.058 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

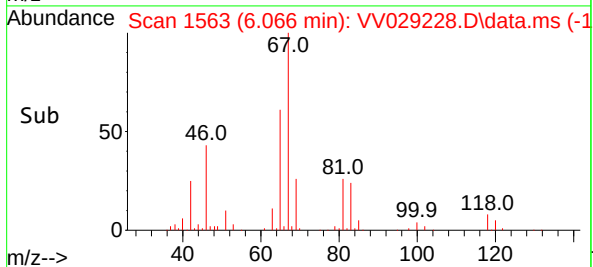
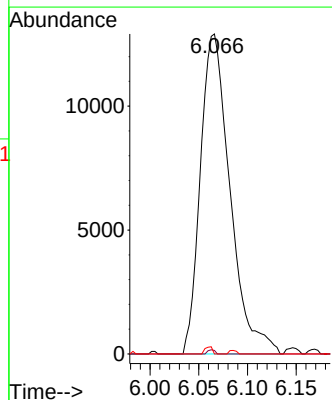
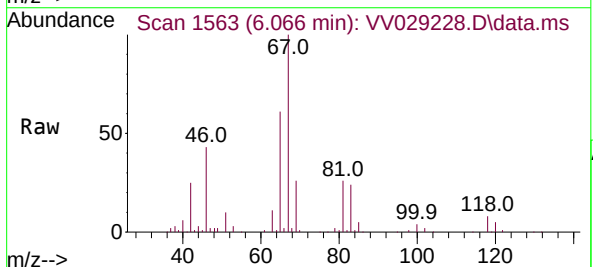
Tgt Ion: 83 Resp: 27347

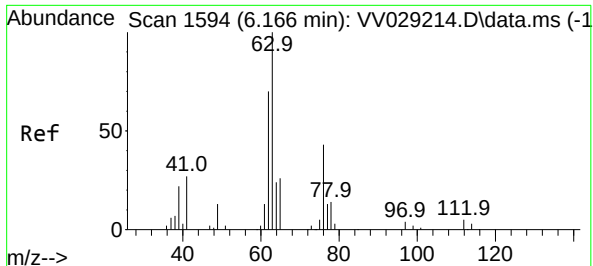
Ion Ratio Lower Upper

83 100

55 0.3 55.8 83.6#

98 0.6 38.2 57.2#





#37

1,2-Dichloropropane

Concen: 0.572 ug/L

RT: 6.066 min Scan# 11

Delta R.T. -0.100 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

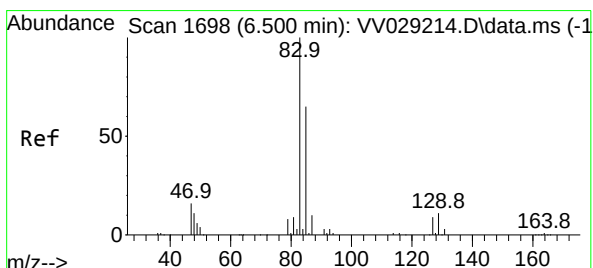
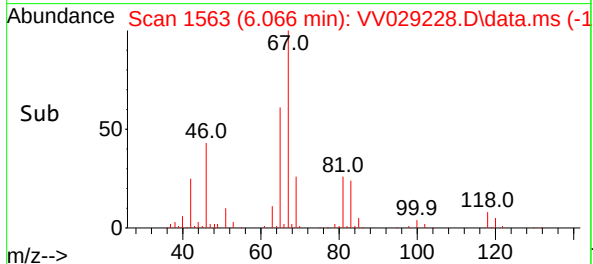
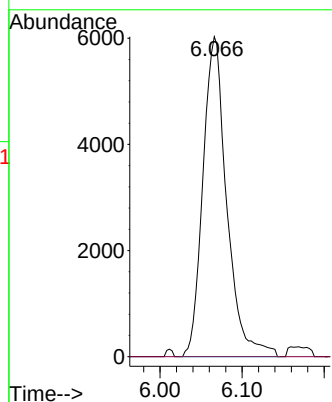
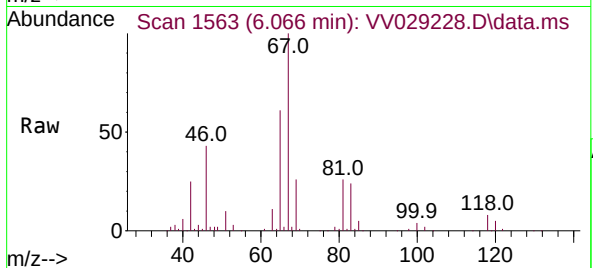
ClientSampleId :

Tgt Ion: 63 Resp: 12203

Ion Ratio Lower Upper

63 100

112 0.2 4.0 6.0#



#38

Bromodichloromethane

Concen: 0.067 ug/L

RT: 6.513 min Scan# 1702

Delta R.T. 0.013 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

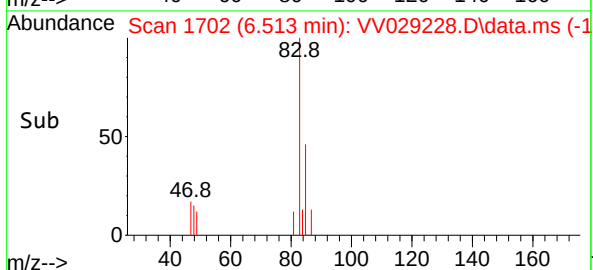
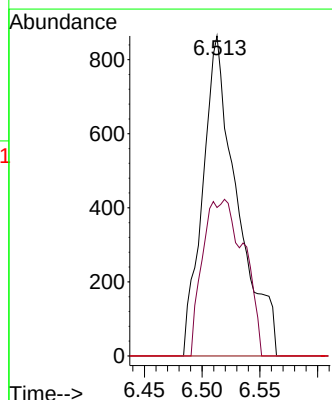
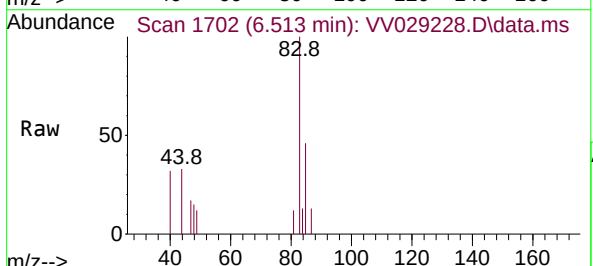
Tgt Ion: 83 Resp: 1798

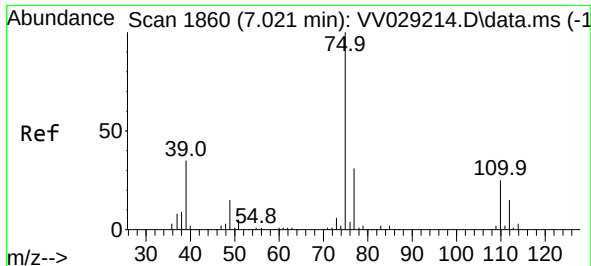
Ion Ratio Lower Upper

83 100

85 46.4 46.1 85.5

127 0.0 6.7 10.1#





#39

cis-1,3-Dichloropropene

Concen: 0.082 ug/L

RT: 6.982 min Scan# 11

Delta R.T. -0.039 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

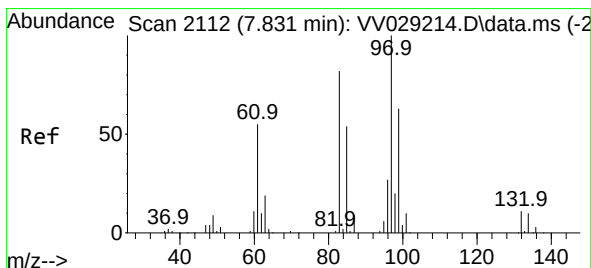
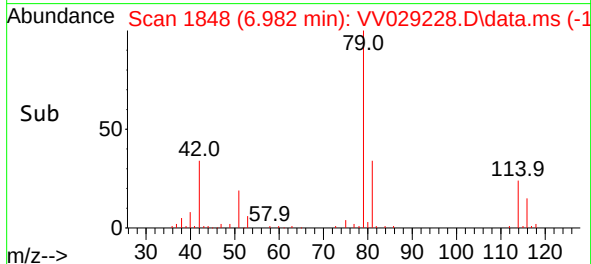
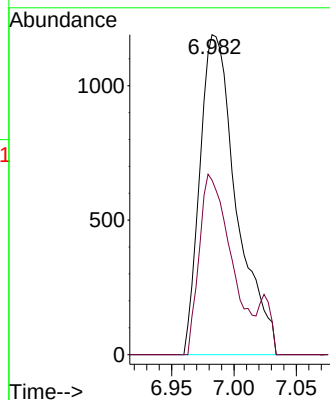
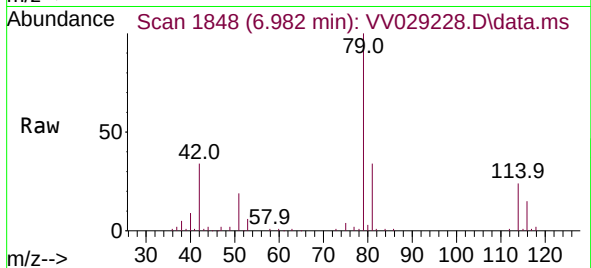
ClientSampleId :

Tgt Ion: 75 Resp: 2433

Ion Ratio Lower Upper

75 100

77 54.5 21.8 40.6#



#45

1,1,2-Trichloroethane

Concen: 0.061 ug/L

RT: 7.844 min Scan# 2116

Delta R.T. 0.013 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Tgt Ion: 97 Resp: 846

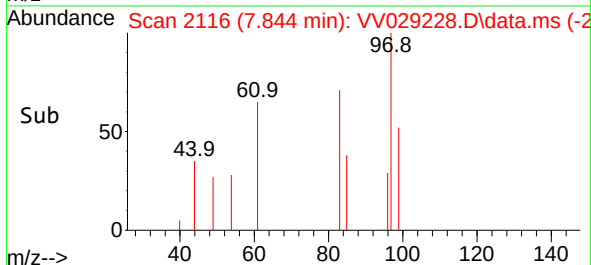
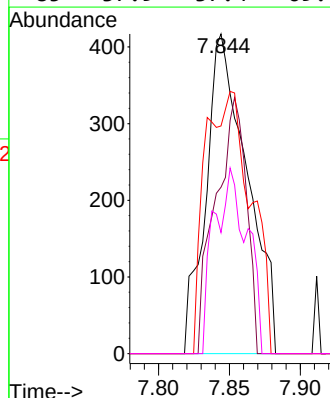
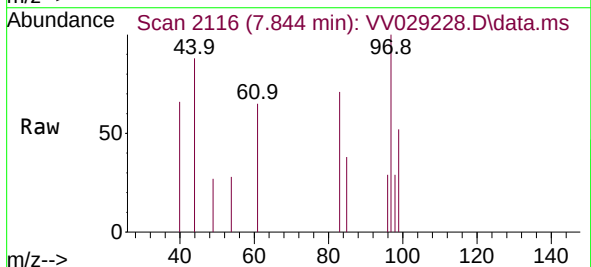
Ion Ratio Lower Upper

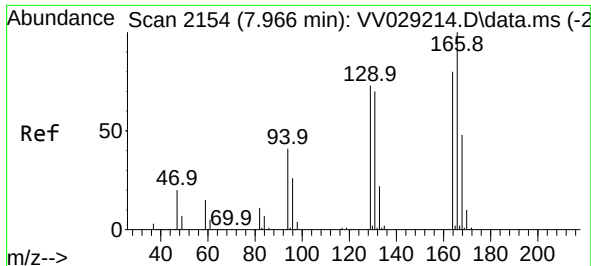
97 100

99 52.0 41.5 77.1

83 71.2 60.0 111.4

85 37.9 37.4 69.4





#47

Tetrachloroethene

Concen: 0.120 ug/L

RT: 7.973 min Scan# 2154

Delta R.T. 0.006 min

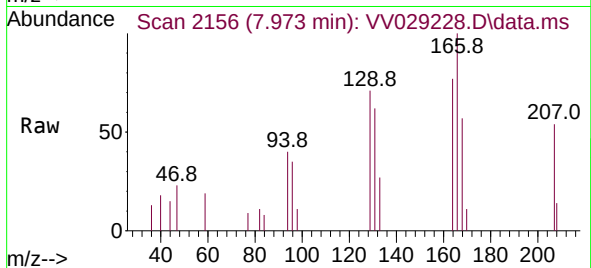
Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

Instrument :

MSVOA\_V

ClientSampleId :



Tgt Ion:164 Resp: 2272

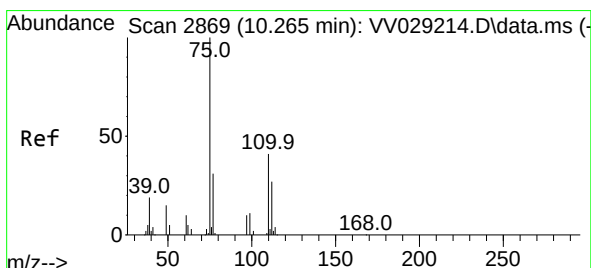
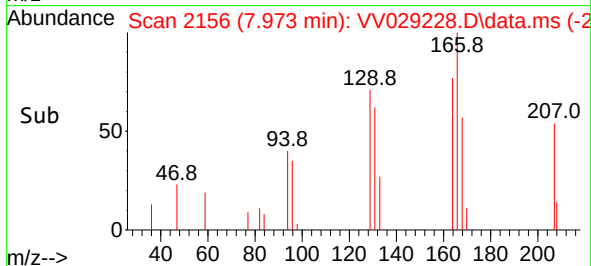
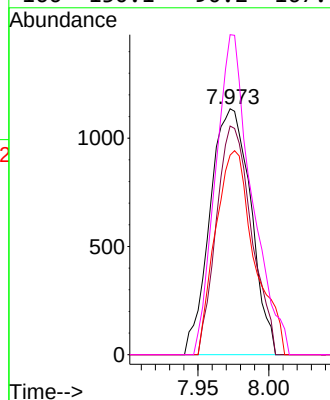
Ion Ratio Lower Upper

164 100

129 93.0 63.9 118.7

131 81.2 61.8 114.8

166 130.1 90.2 167.4



#61

1,2,3-Trichloropropane

Concen: 0.084 ug/L

RT: 10.368 min Scan# 2901

Delta R.T. 0.103 min

Lab File: VV029228.D

Acq: 20 Nov 2022 16:26

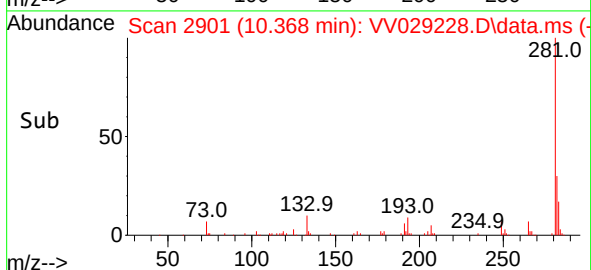
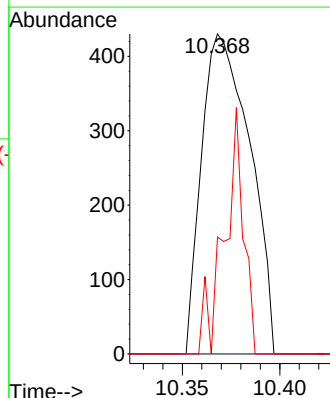
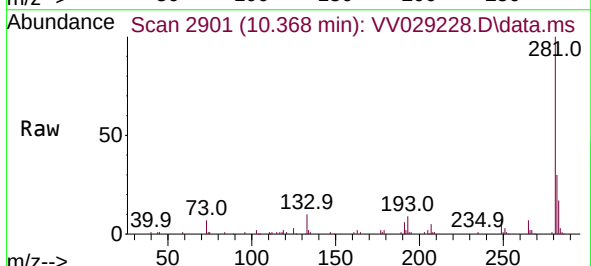
Tgt Ion: 75 Resp: 741

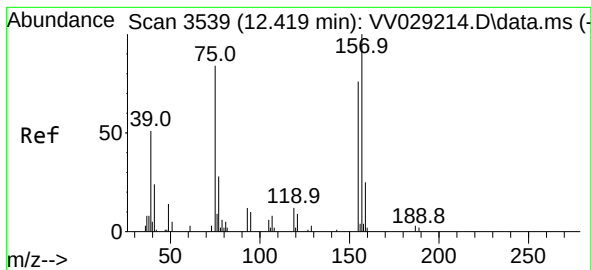
Ion Ratio Lower Upper

75 100

77 0.0 26.2 39.2#

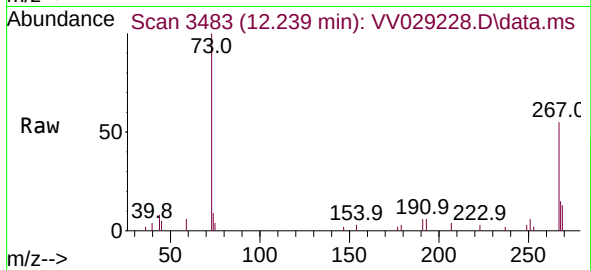
110 30.8 32.6 48.8#





#68  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.156 ug/L  
 RT: 12.239 min Scan# 34  
 Delta R.T. -0.180 min  
 Lab File: VV029228.D  
 Acq: 20 Nov 2022 16:26

Instrument :  
 MSVOA\_V  
 ClientSampleId :



Tgt Ion: 75 Resp: 272  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 64.8 97.2#  
 157 0.0 86.3 129.5#

