

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX120922\  
 Data File : VX033344.D  
 Acq On : 09 Dec 2022 13:54  
 Operator : JC/MD  
 Sample : N5944-04RE  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 GW-BR-04-100-114-120722

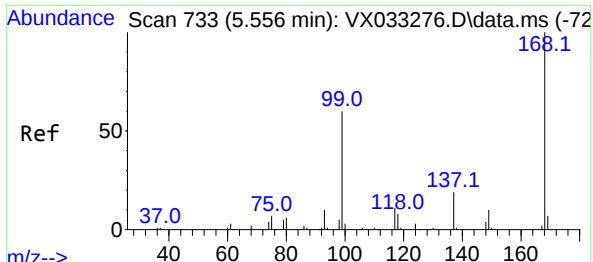
Quant Time: Dec 09 14:42:47 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X120722W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 07 12:43:54 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 5.556  | 168   | 156126   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 6.763  | 114   | 248446   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 10.055 | 117   | 217900   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.024 | 152   | 97686    | 50.000   | ug/l   | 0.00     |
|                               |        |       |          |          |        |          |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 5.958  | 65    | 48797    | 48.719   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 78 - 117 | Recovery | =      | 97.440%  |
| 35) Dibromofluoromethane      | 5.385  | 113   | 53491    | 47.868   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =      | 95.740%  |
| 50) Toluene-d8                | 8.647  | 98    | 112342   | 48.057   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 92 - 112 | Recovery | =      | 96.120%  |
| 62) 4-Bromofluorobenzene      | 11.079 | 95    | 84733    | 47.405   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery | =      | 94.820%  |
|                               |        |       |          |          |        |          |
| Target Compounds              |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane    | 1.142  | 85    | 381      | 0.349    | ug/l   | 99       |
| 6) Chloroethane               | 1.691  | 64    | 329      | 0.301    | ug/l # | 42       |
| 9) 1,1,2-Trichlorotrifluo...  | 2.337  | 101   | 699      | 0.487    | ug/l   | 93       |
| 11) Tert butyl alcohol        | 2.947  | 59    | 4135     | 13.503   | ug/l # | 72       |
| 12) 1,1-Dichloroethene        | 2.325  | 96    | 5609     | 3.963    | ug/l   | 97       |
| 14) Allyl chloride            | 2.581  | 41    | 495      | 0.219    | ug/l # | 73       |
| 16) Acetone                   | 2.386  | 43    | 1933     | 2.608    | ug/l   | 92       |
| 17) Carbon Disulfide          | 2.514  | 76    | 1002     | 0.276    | ug/l # | 79       |
| 21) trans-1,2-Dichloroethene  | 3.099  | 96    | 755      | 0.488    | ug/l   | 95       |
| 24) 1,1-Dichloroethane        | 3.617  | 63    | 1179     | 0.414    | ug/l # | 82       |
| 25) 2-Butanone                | 4.593  | 43    | 391      | 0.368    | ug/l # | 47       |
| 27) cis-1,2-Dichloroethene    | 4.495  | 96    | 24837    | 13.422   | ug/l   | 90       |
| 31) Cyclohexane               | 5.556  | 56    | 3285     | 1.380    | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 5.556  | 75    | 11743    | 5.390    | ug/l # | 50       |
| 38) Carbon Tetrachloride      | 5.550  | 117   | 15774    | 6.462    | ug/l # | 16       |
| 40) Benzene                   | 6.044  | 78    | 1442     | 0.227    | ug/l # | 87       |
| 42) 1,2-Dichloroethane        | 6.105  | 62    | 606      | 0.240    | ug/l # | 77       |
| 44) Trichloroethene           | 7.129  | 130   | 39277    | 22.426   | ug/l   | 99       |
| 52) Toluene                   | 8.720  | 92    | 159072   | 38.731   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 8.720  | 75    | 2048     | 3.256    | ug/l # | 1        |
| 65) Chlorobenzene             | 10.073 | 112   | 1087     | 0.246    | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 11.079 | 75    | 43246    | 21.760   | ug/l # | 37       |
| 81) trans-1,4-Dichloro-2-b... | 11.079 | 75    | 43246    | 67.688   | ug/l # | 6        |
| 91) 1,2-Dichlorobenzene       | 12.335 | 146   | 1066     | 0.329    | ug/l   | 96       |
| -----                         |        |       |          |          |        |          |

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

Quant Time: Dec 09 14:42:47 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X120722W.M  
Quant Title : SW846 8260  
QLast Update : Wed Dec 07 12:43:54 2022  
Response via : Initial Calibration

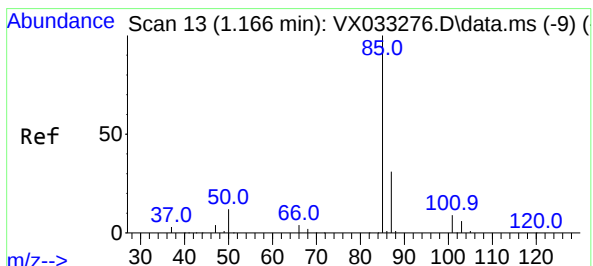
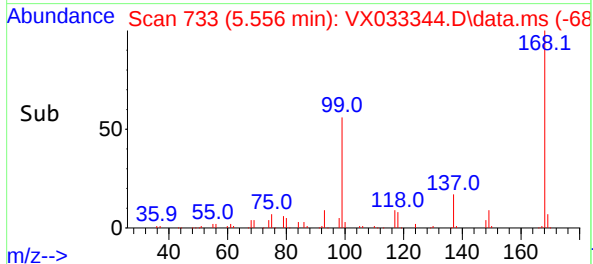
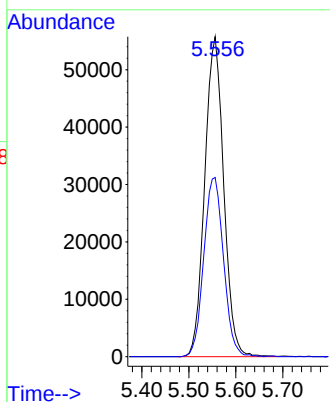
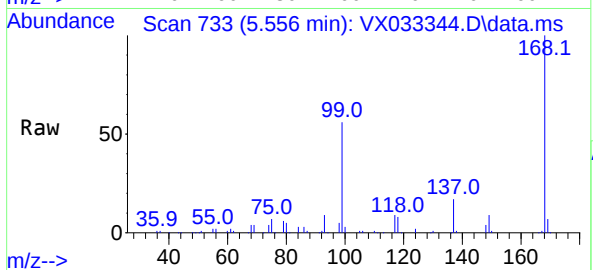




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.556 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

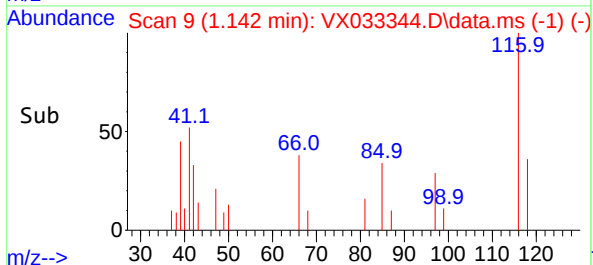
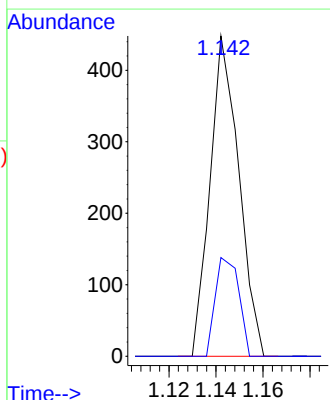
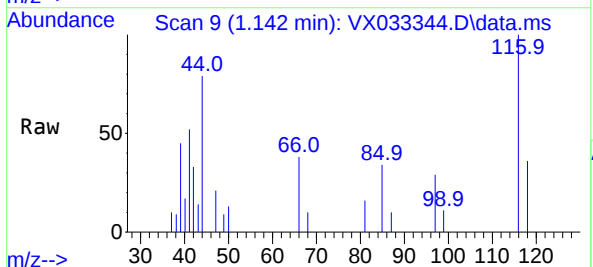
Instrument : MSVOA\_X  
ClientSampleId : GW-BR-04-100-114-120722

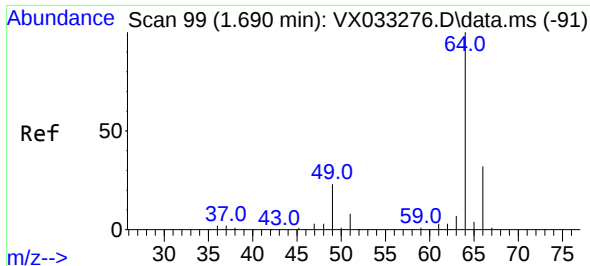
Tgt Ion:168 Resp: 156126  
Ion Ratio Lower Upper  
168 100  
99 56.0 46.1 69.1



#2  
Dichlorodifluoromethane  
Concen: 0.349 ug/l  
RT: 1.142 min Scan# 9  
Delta R.T. -0.024 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 85 Resp: 381  
Ion Ratio Lower Upper  
85 100  
87 30.8 15.6 46.7

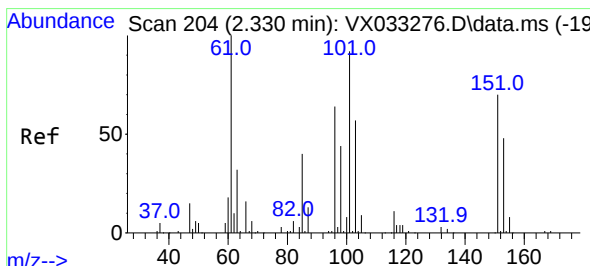
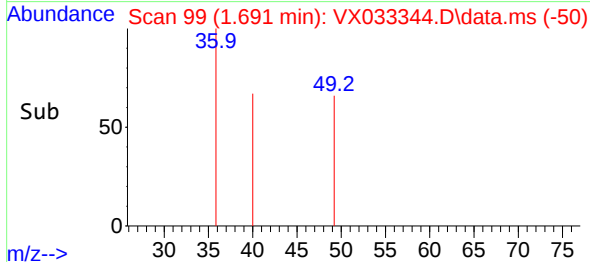
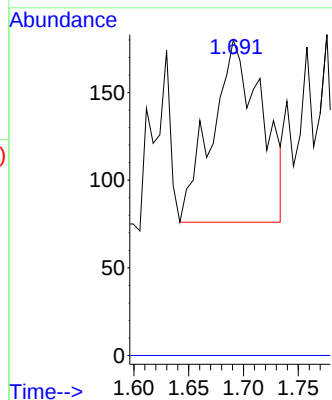
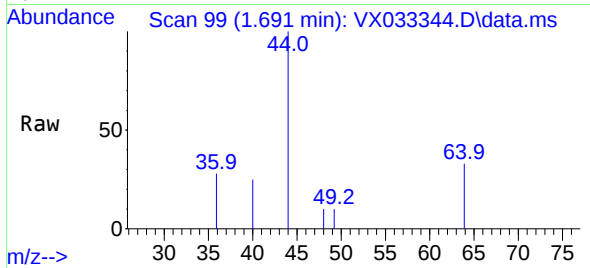




#6  
Chloroethane  
Concen: 0.301 ug/l  
RT: 1.691 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

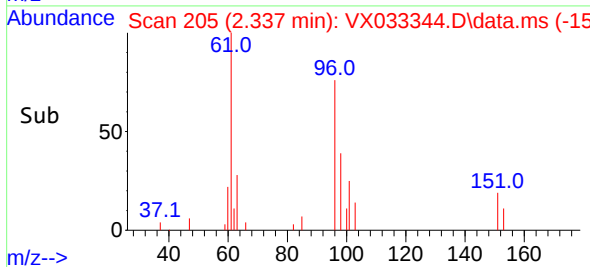
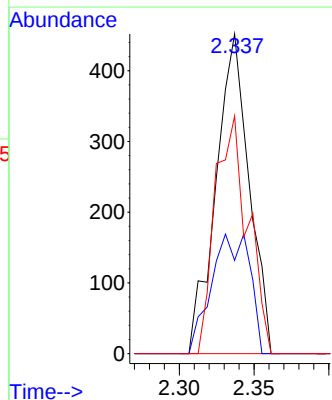
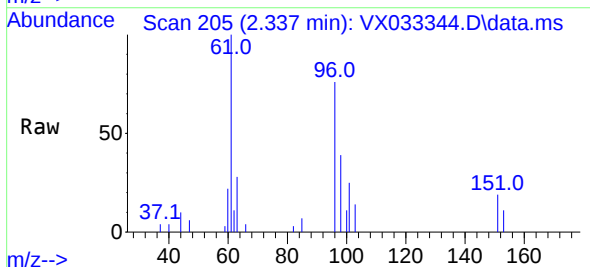
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

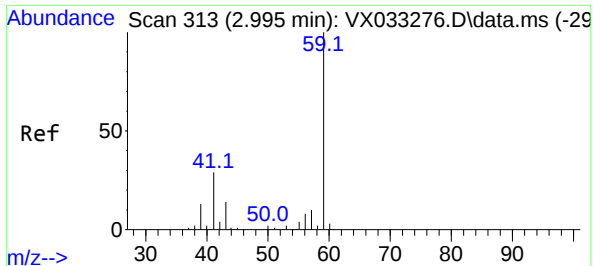
Tgt Ion: 64 Resp: 329  
Ion Ratio Lower Upper  
64 100  
66 0.0 26.0 39.0#



#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.487 ug/l  
RT: 2.337 min Scan# 205  
Delta R.T. 0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 101 Resp: 699  
Ion Ratio Lower Upper  
101 100  
85 43.1 37.0 55.4  
151 73.2 64.4 96.6





#11

Tert butyl alcohol

Concen: 13.503 ug/l

RT: 2.947 min Scan# 305

Delta R.T. -0.048 min

Lab File: VX033344.D

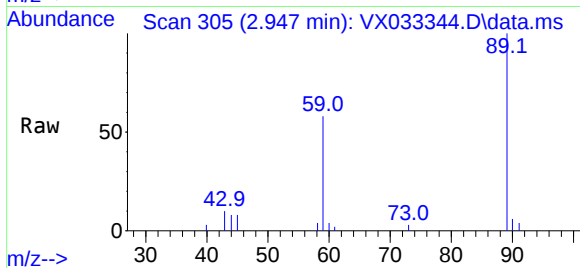
Acq: 09 Dec 2022 13:54

Instrument :

MSVOA\_X

ClientSampleId :

GW-BR-04-100-114-120722

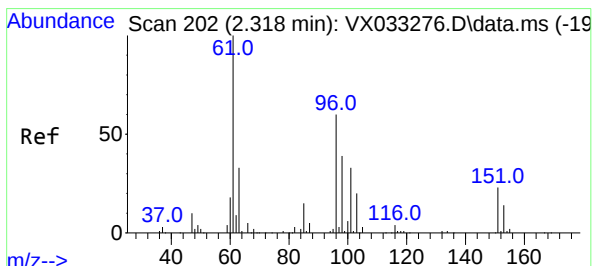
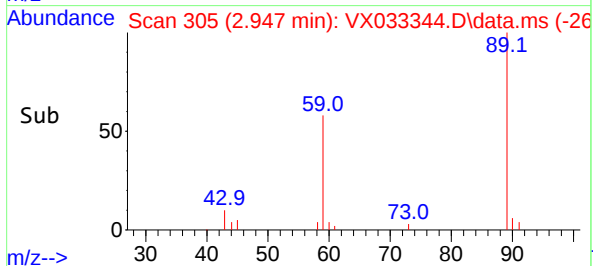
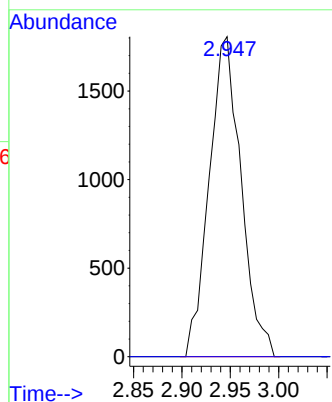


Tgt Ion: 59 Resp: 4135

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



#12

1,1-Dichloroethene

Concen: 3.963 ug/l

RT: 2.325 min Scan# 203

Delta R.T. 0.006 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

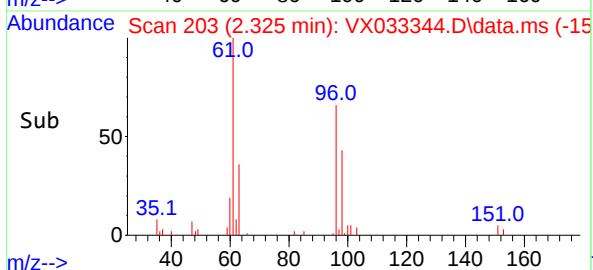
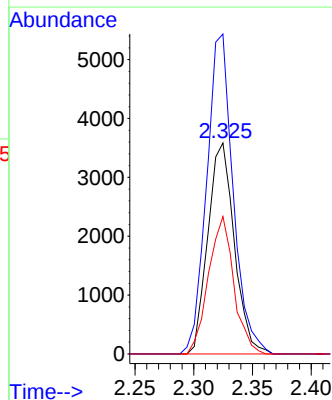
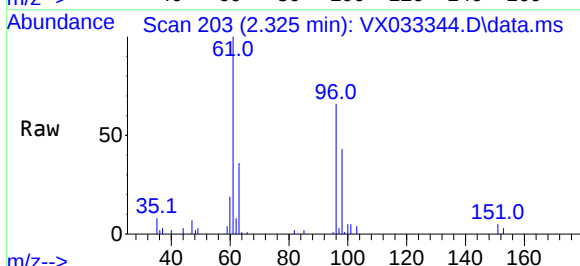
Tgt Ion: 96 Resp: 5609

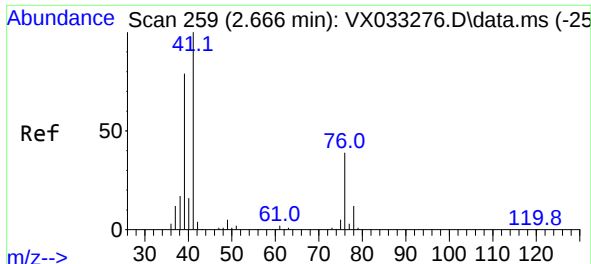
Ion Ratio Lower Upper

96 100

61 151.6 125.1 187.7

98 65.1 50.6 76.0





#14

Allyl chloride

Concen: 0.219 ug/l

RT: 2.581 min Scan# 245

Delta R.T. -0.085 min

Lab File: VX033344.D

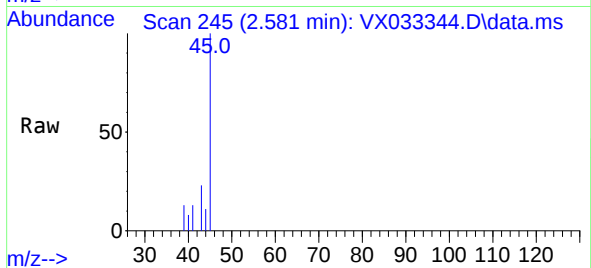
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Instrument :

MSVOA\_X

ClientSampleId :

GW-BR-04-100-114-120722



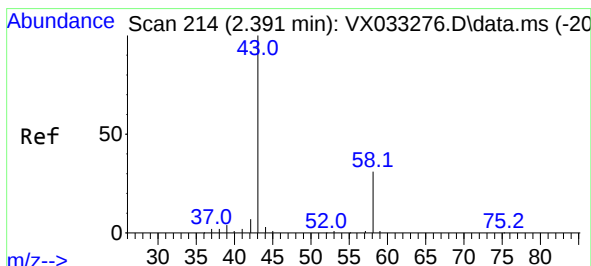
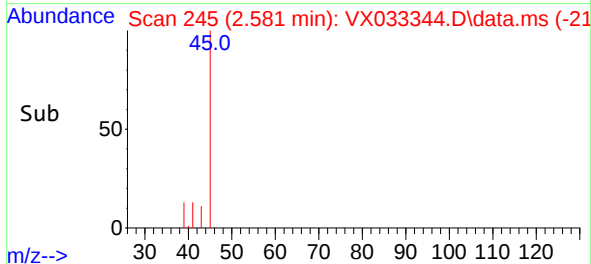
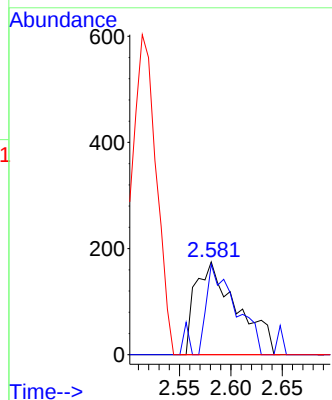
Tgt Ion: 41 Resp: 495

Ion Ratio Lower Upper

41 100

39 67.7 61.4 92.2

76 0.0 29.2 43.8#



#16

Acetone

Concen: 2.608 ug/l

RT: 2.386 min Scan# 213

Delta R.T. -0.006 min

Lab File: VX033344.D

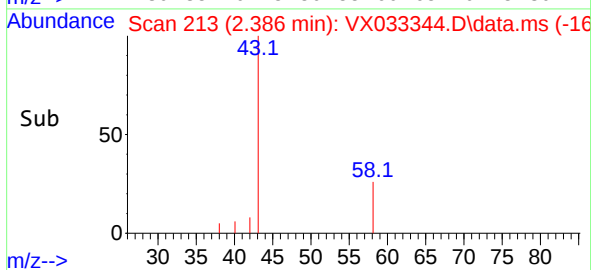
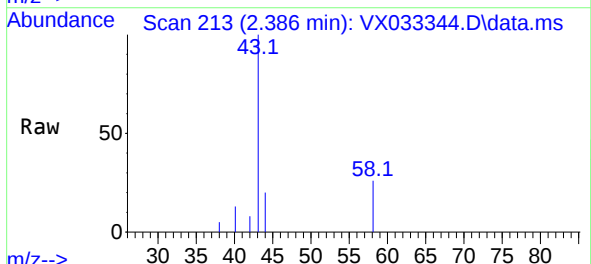
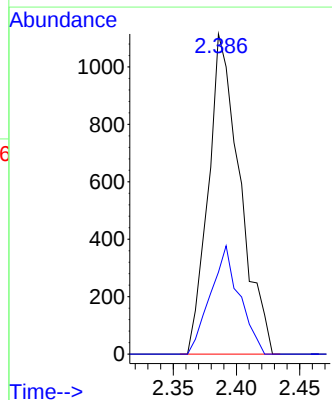
Acq: 09 Dec 2022 13:54

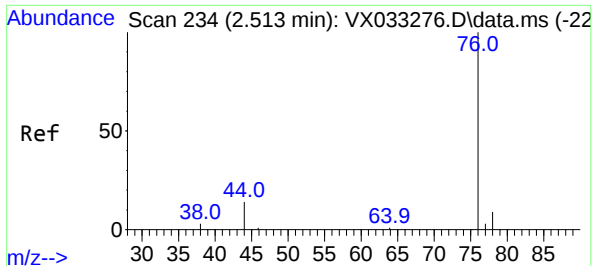
Tgt Ion: 43 Resp: 1933

Ion Ratio Lower Upper

43 100

58 25.6 23.8 35.8

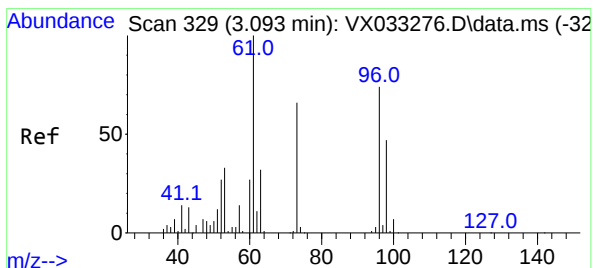
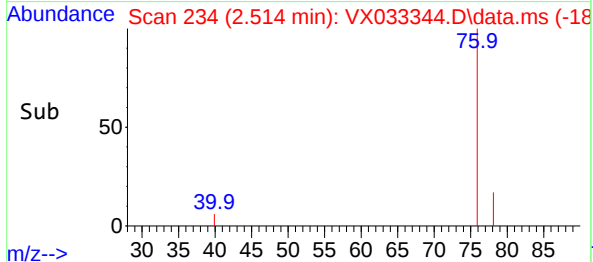
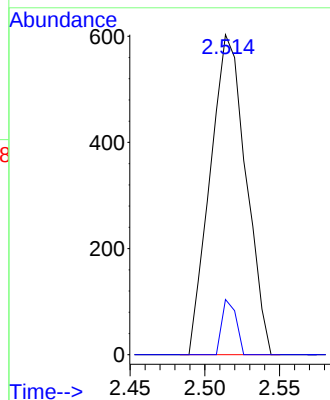
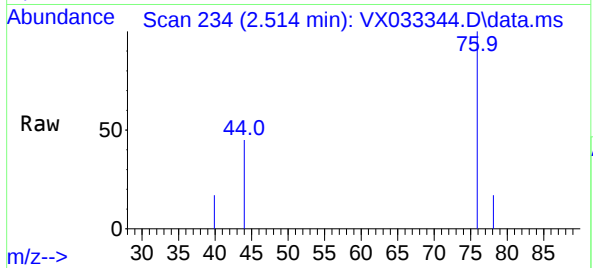




#17  
Carbon Disulfide  
Concen: 0.276 ug/l  
RT: 2.514 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

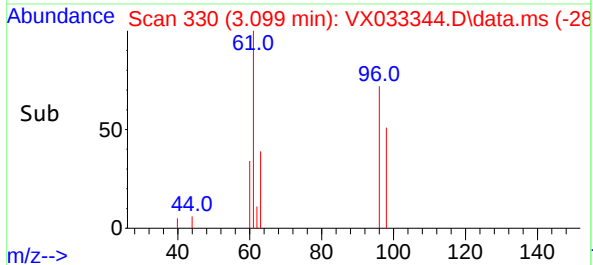
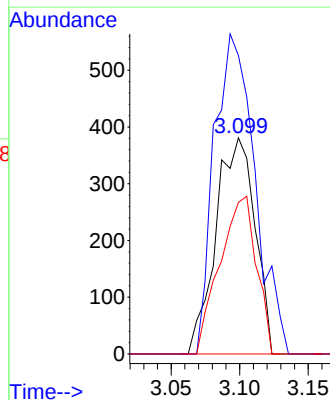
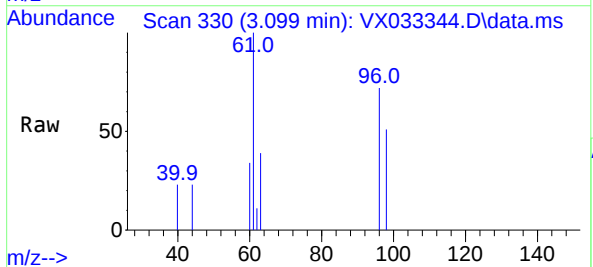
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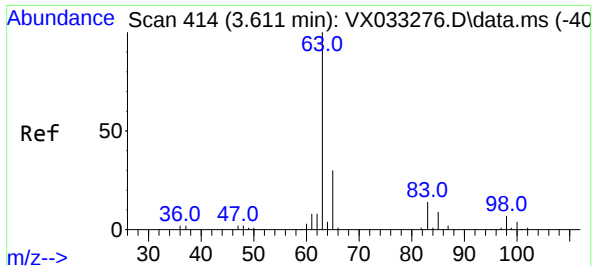
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Ion Ratio Lower Upper  
76 100  
78 17.2 7.5 11.3#



#21  
trans-1,2-Dichloroethene  
Concen: 0.488 ug/l  
RT: 3.099 min Scan# 330  
Delta R.T. 0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 96 Resp: 755  
Ion Ratio Lower Upper  
96 100  
61 138.1 106.6 160.0  
98 70.1 51.0 76.6

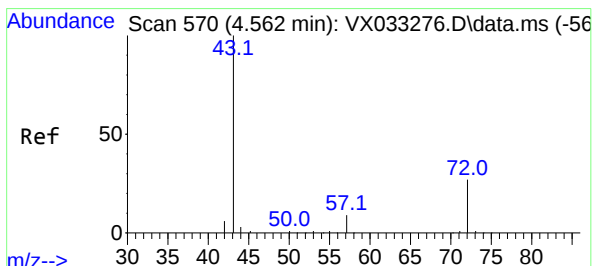
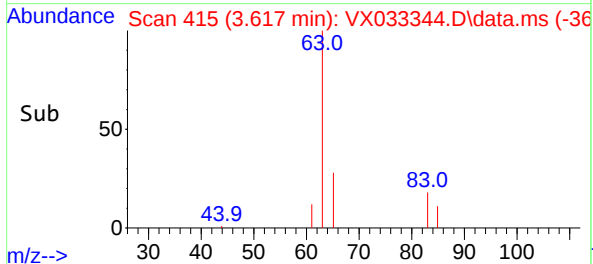
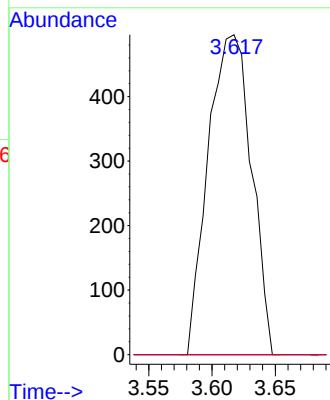
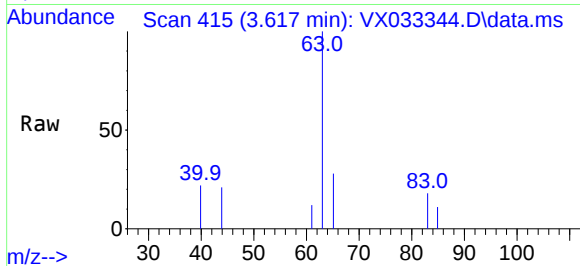




#24  
1,1-Dichloroethane  
Concen: 0.414 ug/l  
RT: 3.617 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

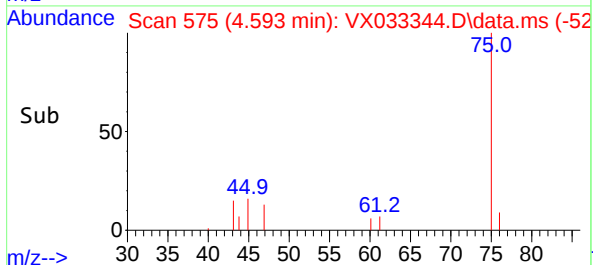
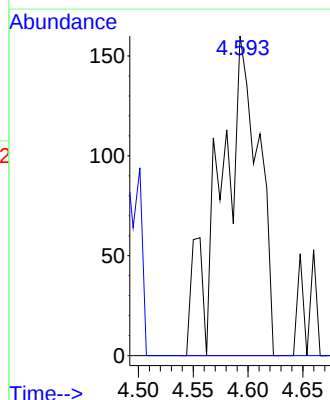
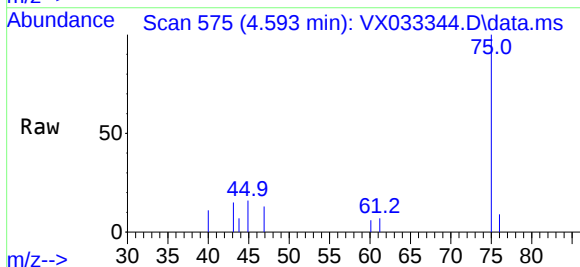
Instrument :  
MSVOA\_X  
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GW-BR-04-100-114-120722

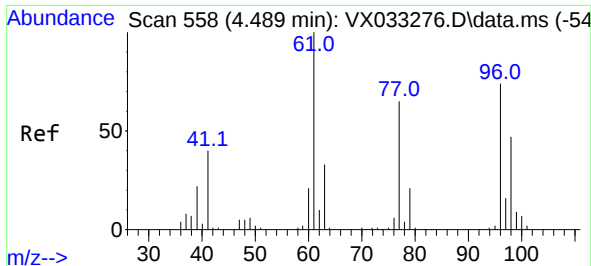
Tgt Ion: 63 Resp: 1179  
Ion Ratio Lower Upper  
63 100  
98 0.0 3.5 10.4#  
100 0.0 2.3 6.8#



#25  
2-Butanone  
Concen: 0.368 ug/l  
RT: 4.593 min Scan# 575  
Delta R.T. 0.031 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 43 Resp: 391  
Ion Ratio Lower Upper  
43 100  
72 0.0 22.2 33.2#





#27

cis-1,2-Dichloroethene

Concen: 13.422 ug/l

RT: 4.495 min Scan# 51

Delta R.T. 0.006 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

Instrument :

MSVOA\_X

ClientSampleId :

GW-BR-04-100-114-120722

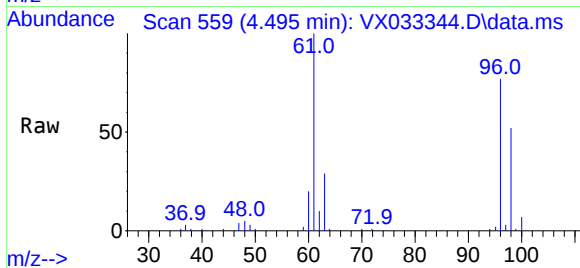
Tgt Ion: 96 Resp: 24837

Ion Ratio Lower Upper

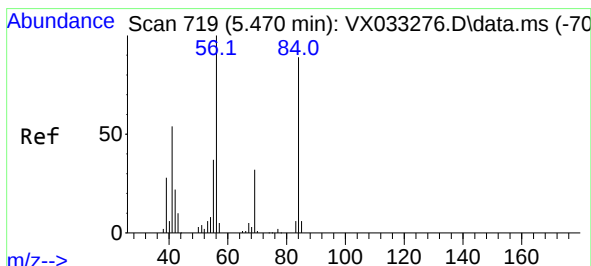
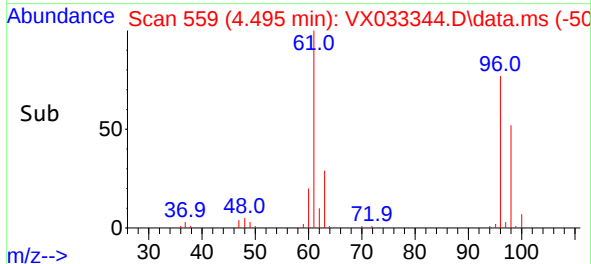
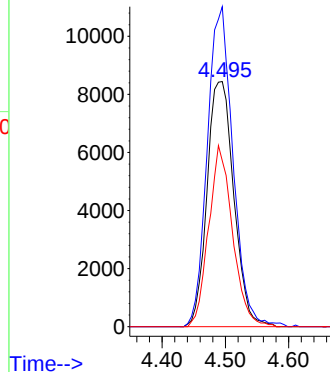
96 100

61 125.1 0.0 286.0

98 65.9 0.0 129.6



Abundance



#31

Cyclohexane

Concen: 1.380 ug/l

RT: 5.556 min Scan# 733

Delta R.T. 0.086 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

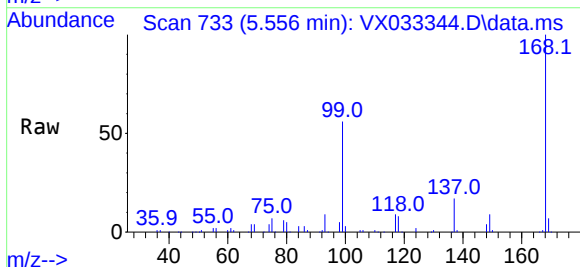
Tgt Ion: 56 Resp: 3285

Ion Ratio Lower Upper

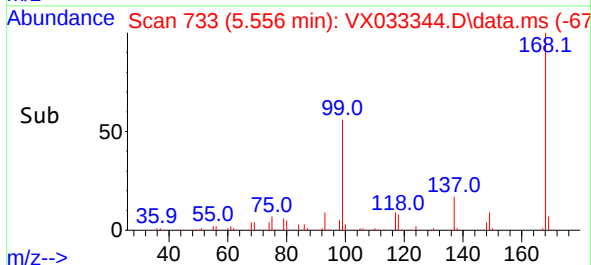
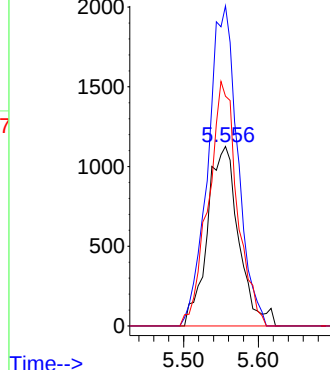
56 100

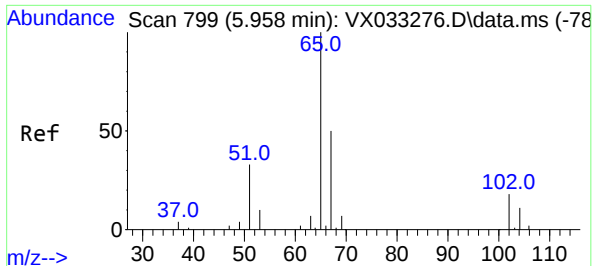
69 178.2 24.1 36.1#

84 128.0 66.9 100.3#



Abundance





#33

1,2-Dichloroethane-d4

Concen: 48.719 ug/l

RT: 5.958 min Scan# 799

Delta R.T. 0.000 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

Instrument :

MSVOA\_X

ClientSampleId :

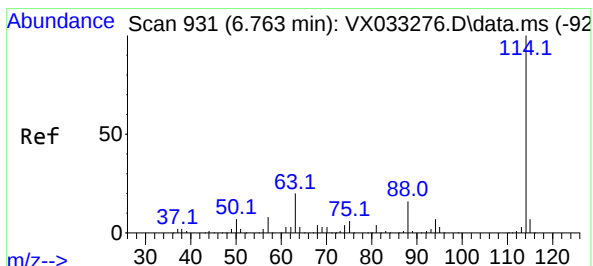
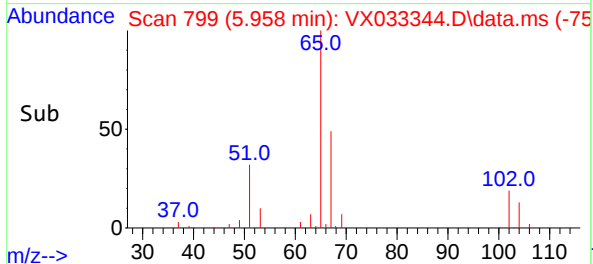
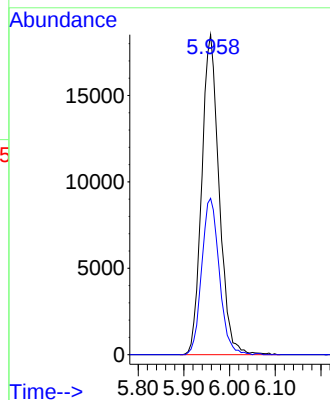
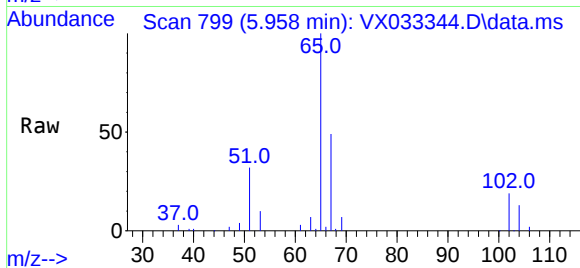
GW-BR-04-100-114-120722

Tgt Ion: 65 Resp: 48797

Ion Ratio Lower Upper

65 100

67 49.4 0.0 101.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.763 min Scan# 931

Delta R.T. 0.000 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

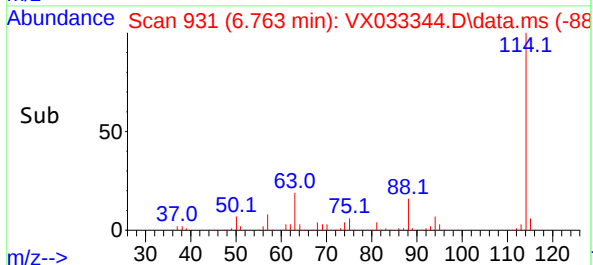
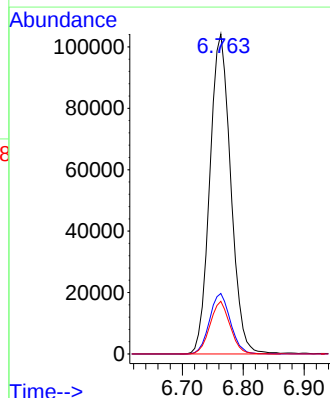
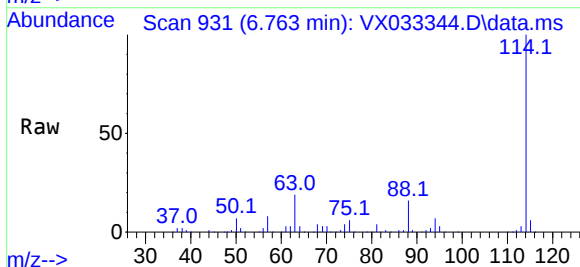
Tgt Ion: 114 Resp: 248446

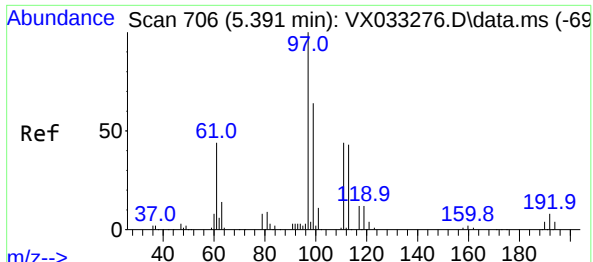
Ion Ratio Lower Upper

114 100

63 18.9 0.0 41.6

88 16.5 0.0 33.4

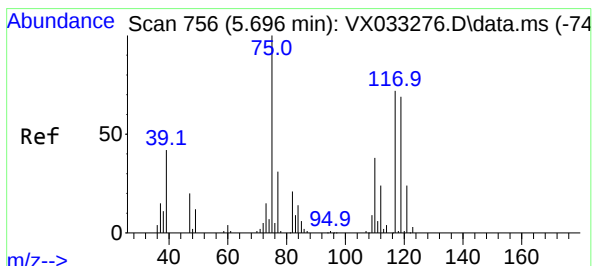
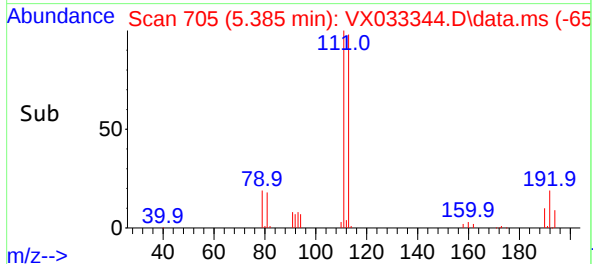
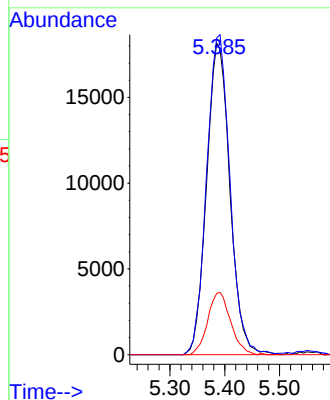
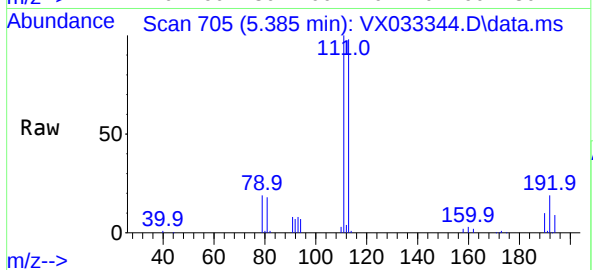




#35  
Dibromofluoromethane  
Concen: 47.868 ug/l  
RT: 5.385 min Scan# 706  
Delta R.T. -0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

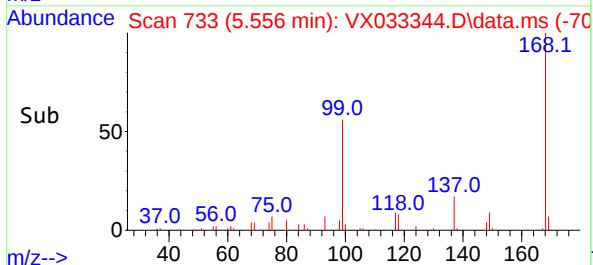
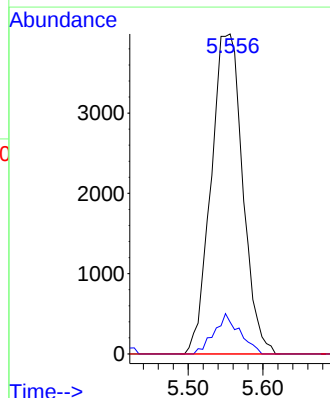
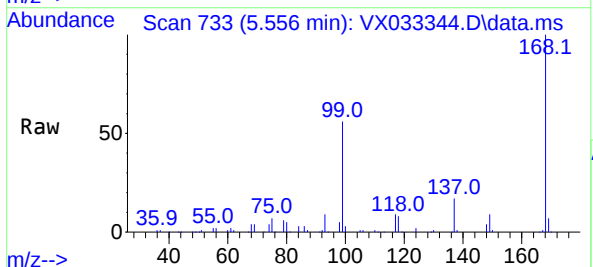
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

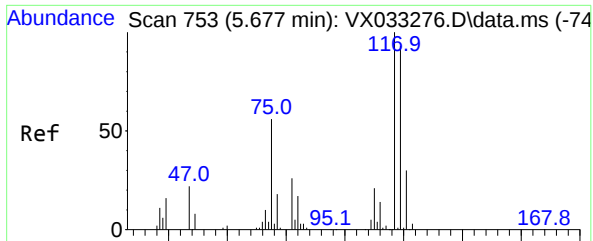
Tgt Ion:113 Resp: 53491  
Ion Ratio Lower Upper  
113 100  
111 103.1 82.4 123.6  
192 19.6 15.4 23.2



#36  
1,1-Dichloropropene  
Concen: 5.390 ug/l  
RT: 5.556 min Scan# 733  
Delta R.T. -0.140 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

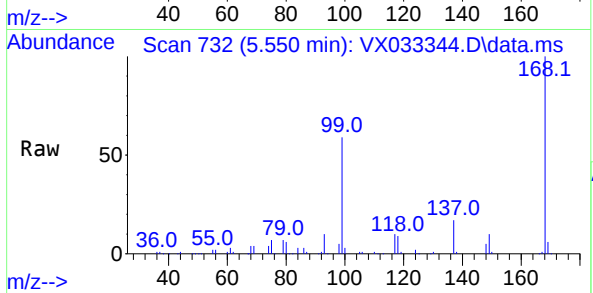
Tgt Ion: 75 Resp: 11743  
Ion Ratio Lower Upper  
75 100  
110 10.1 18.4 55.2#  
77 0.0 24.5 36.7#



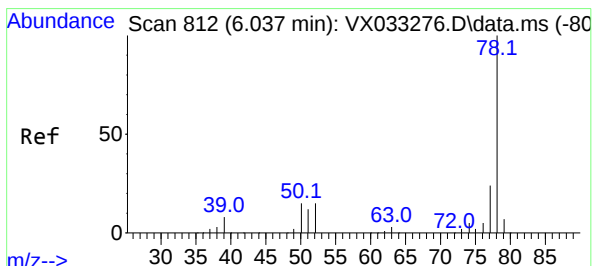
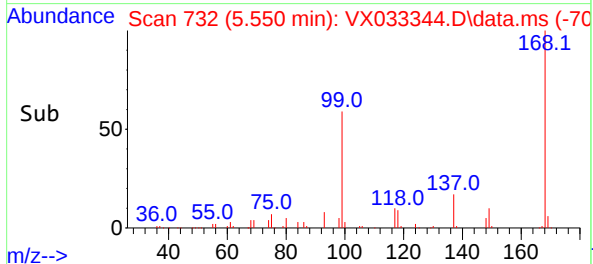
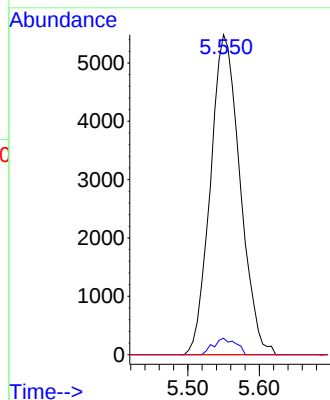


#38  
Carbon Tetrachloride  
Concen: 6.462 ug/l  
RT: 5.550 min Scan# 71  
Delta R.T. -0.128 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

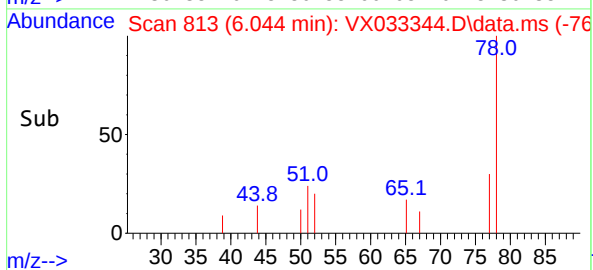
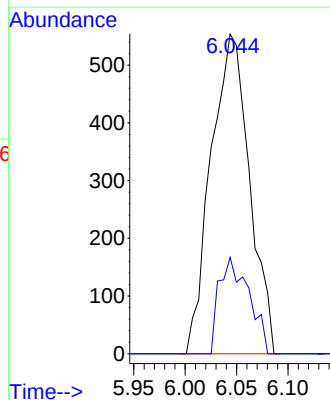
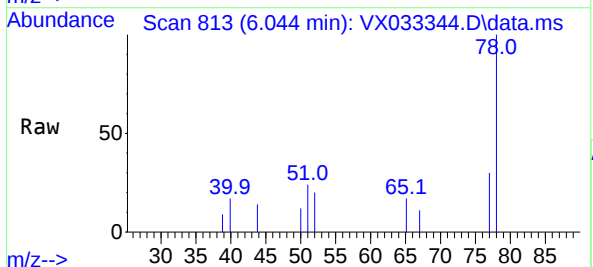


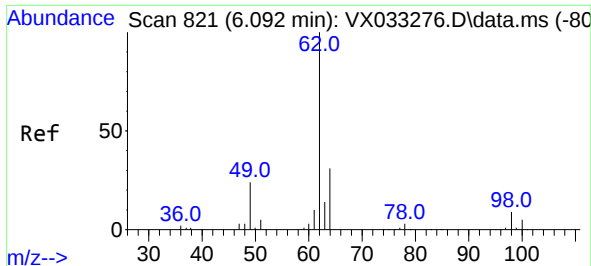
Tgt Ion:117 Resp: 15774  
Ion Ratio Lower Upper  
117 100  
119 5.1 77.2 115.8#  
121 0.0 25.8 38.6#



#40  
Benzene  
Concen: 0.227 ug/l  
RT: 6.044 min Scan# 813  
Delta R.T. 0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 78 Resp: 1442  
Ion Ratio Lower Upper  
78 100  
77 30.1 19.0 28.4#





#42

1,2-Dichloroethane

Concen: 0.240 ug/l

RT: 6.105 min Scan# 821

Delta R.T. 0.013 min

Lab File: VX033344.D

Acq: 09 Dec 2022 13:54

Instrument :

MSVOA\_X

ClientSampleId :

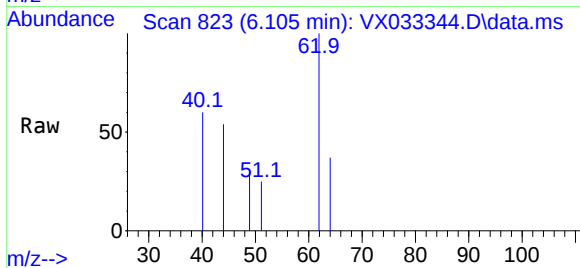
GW-BR-04-100-114-120722

Tgt Ion: 62 Resp: 606

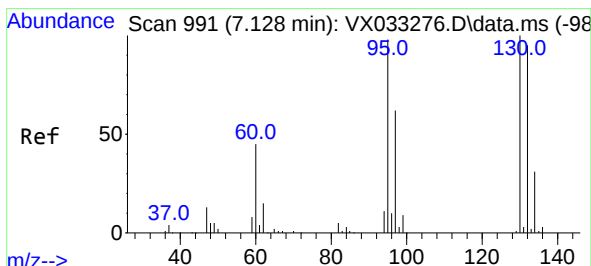
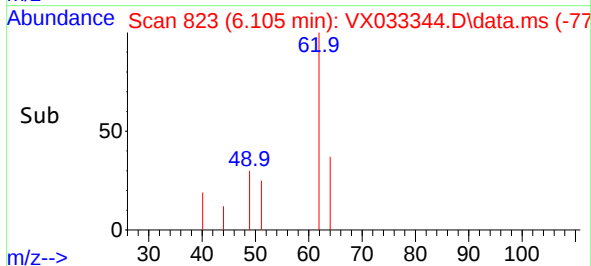
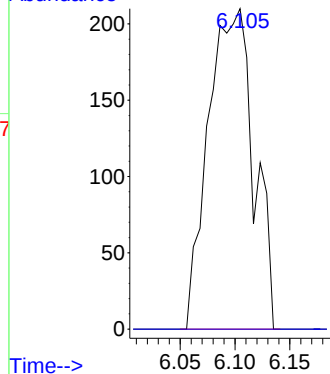
Ion Ratio Lower Upper

62 100

98 0.0 0.0 16.0



Abundance



#44

Trichloroethene

Concen: 22.426 ug/l

RT: 7.129 min Scan# 991

Delta R.T. 0.000 min

Lab File: VX033344.D

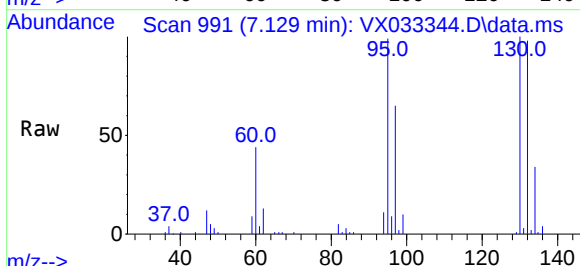
Acq: 09 Dec 2022 13:54

Tgt Ion:130 Resp: 39277

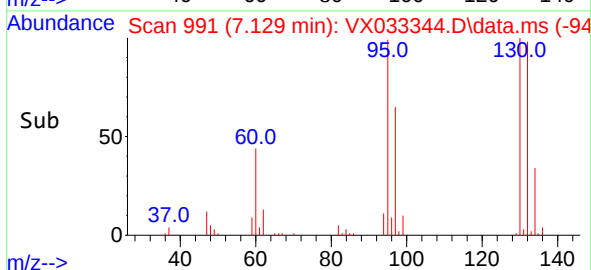
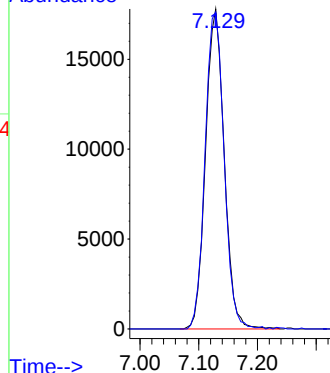
Ion Ratio Lower Upper

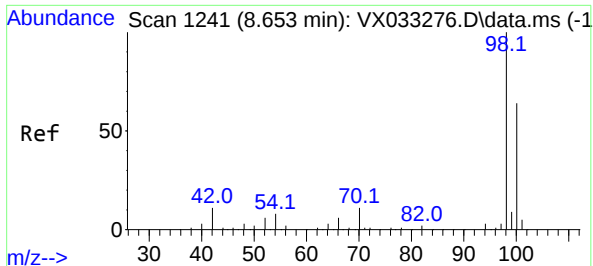
130 100

95 99.1 0.0 195.2



Abundance

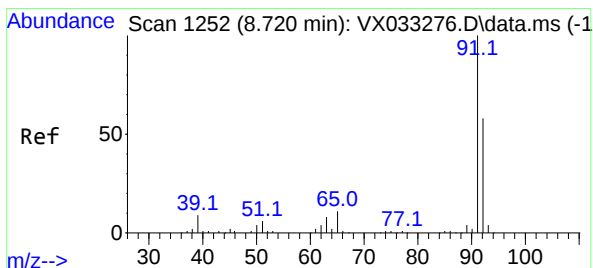
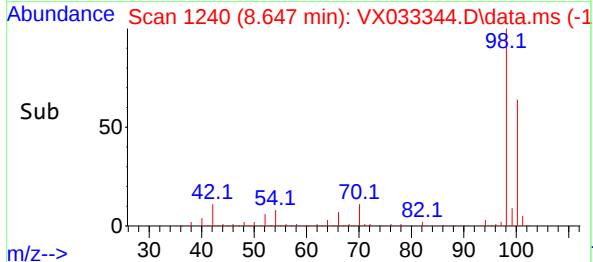
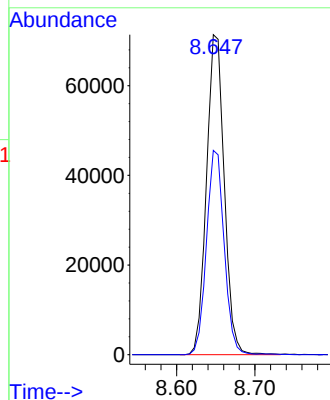
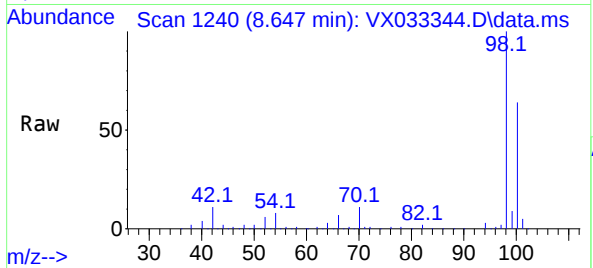




#50  
Toluene-d8  
Concen: 48.057 ug/l  
RT: 8.647 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

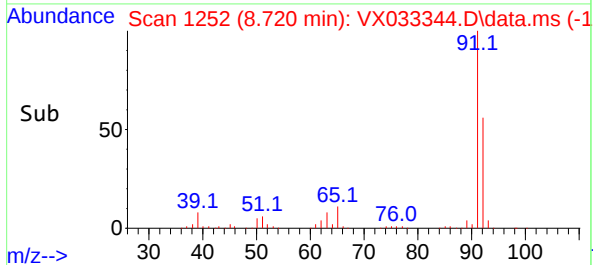
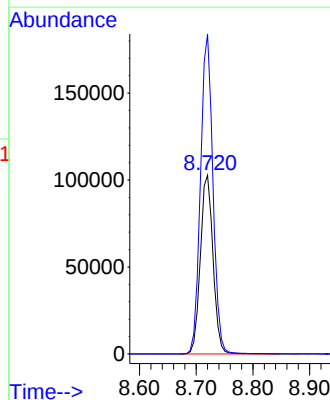
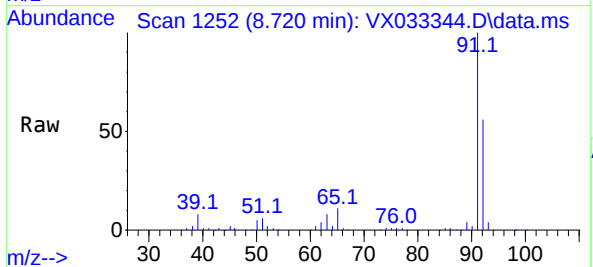
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

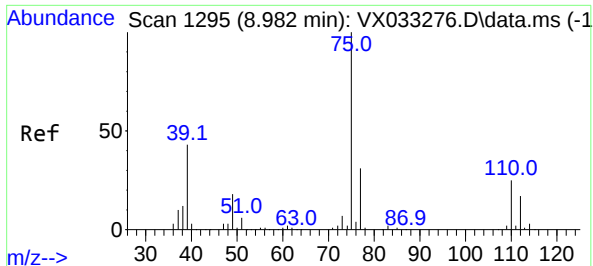
Tgt Ion: 98 Resp: 112342  
Ion Ratio Lower Upper  
98 100  
100 63.4 50.9 76.3



#52  
Toluene  
Concen: 38.731 ug/l  
RT: 8.720 min Scan# 1252  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 92 Resp: 159072  
Ion Ratio Lower Upper  
92 100  
91 175.6 138.3 207.5

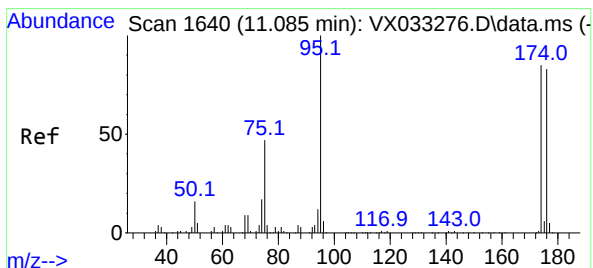
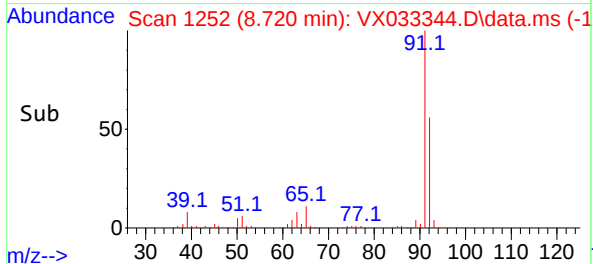
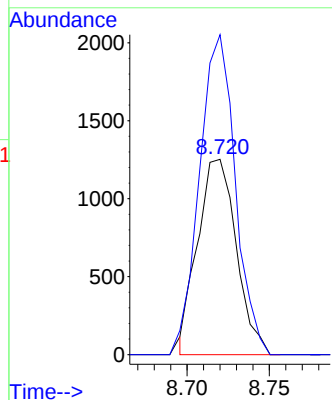
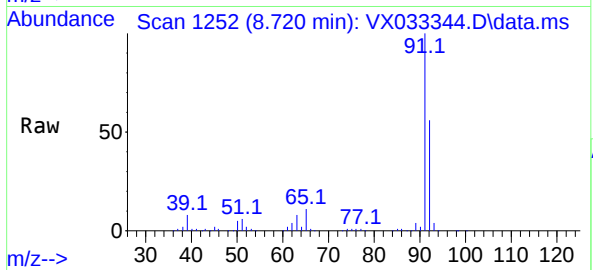




#53  
t-1,3-Dichloropropene  
Concen: 3.256 ug/l  
RT: 8.720 min Scan# 11  
Delta R.T. -0.262 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

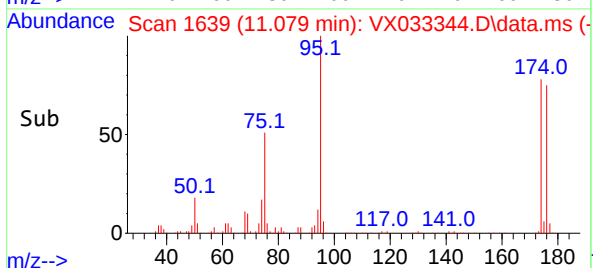
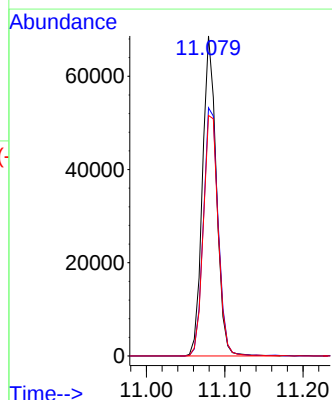
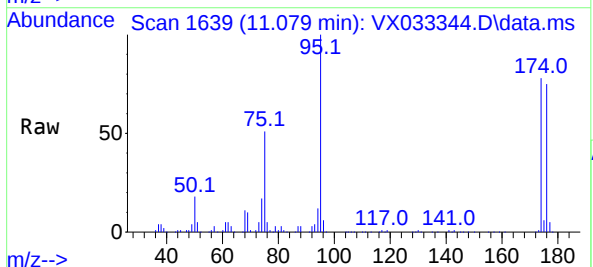
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

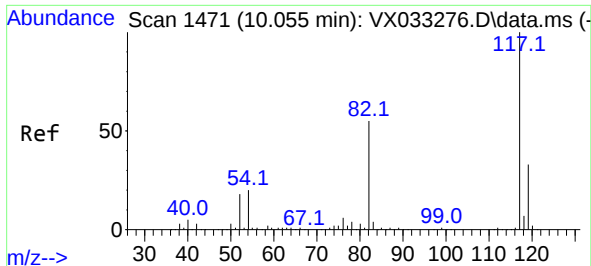
Tgt Ion: 75 Resp: 2048  
Ion Ratio Lower Upper  
75 100  
77 163.8 25.1 37.7#



#62  
4-Bromofluorobenzene  
Concen: 47.405 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 95 Resp: 84733  
Ion Ratio Lower Upper  
95 100  
174 82.2 0.0 164.0  
176 80.2 0.0 154.4

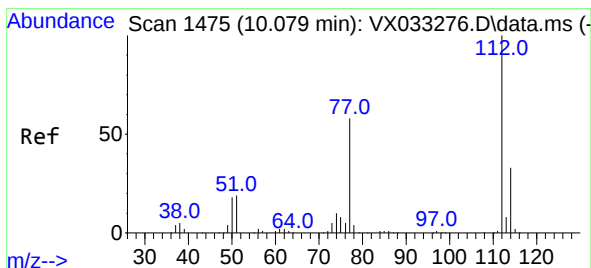
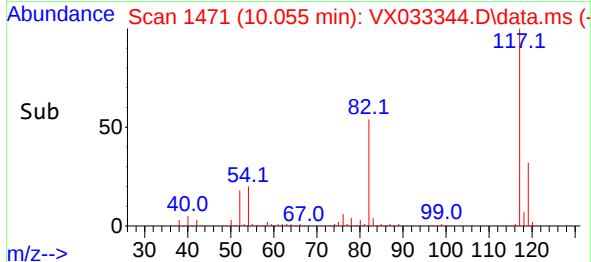
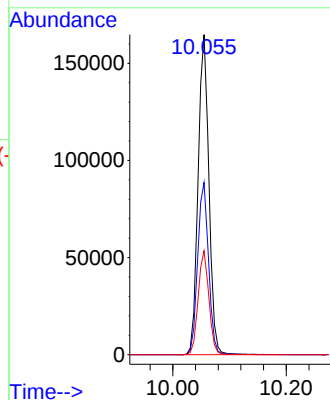
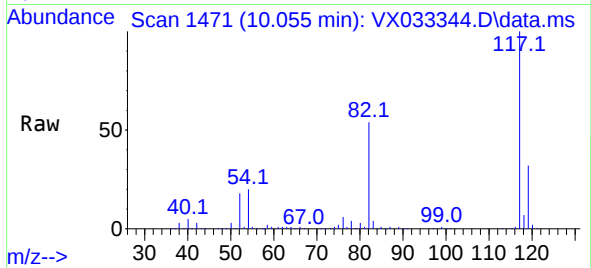




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.055 min Scan# 1471  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

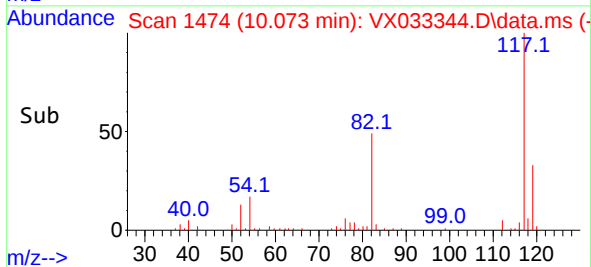
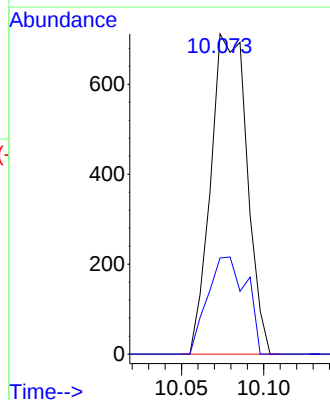
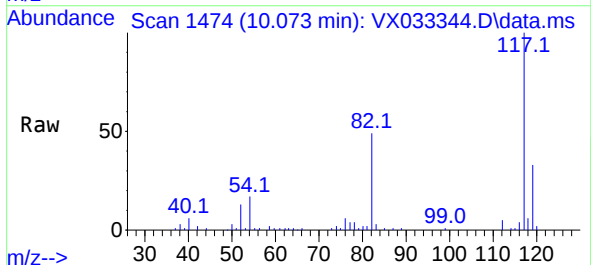
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

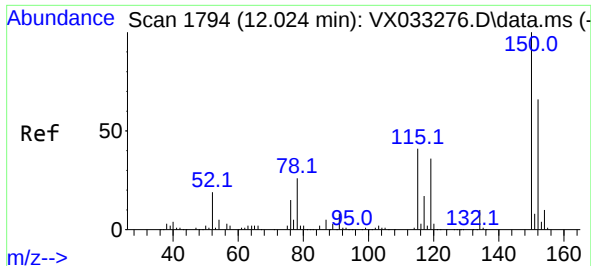
Tgt Ion:117 Resp: 217900  
Ion Ratio Lower Upper  
117 100  
82 53.8 44.3 66.5  
119 32.4 25.7 38.5



#65  
Chlorobenzene  
Concen: 0.246 ug/l  
RT: 10.073 min Scan# 1474  
Delta R.T. -0.006 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion:112 Resp: 1087  
Ion Ratio Lower Upper  
112 100  
114 30.1 25.4 38.2

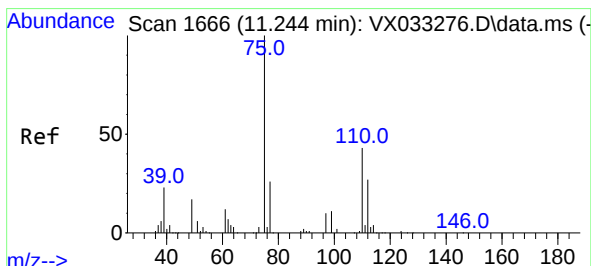
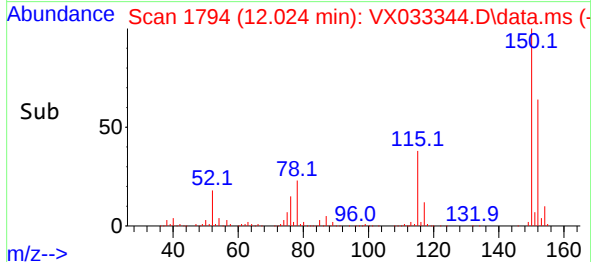
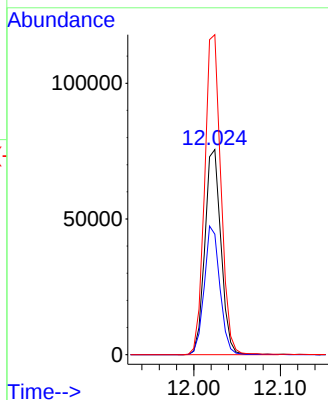
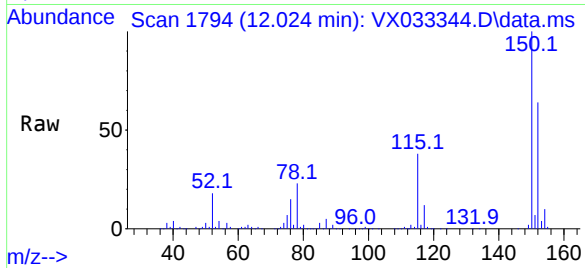




#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.024 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

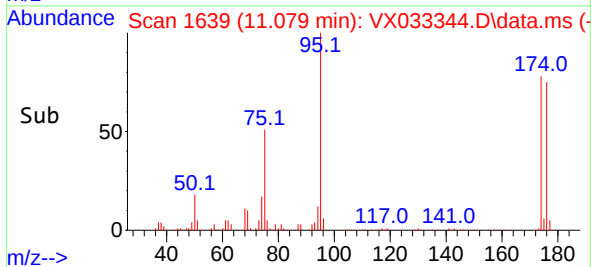
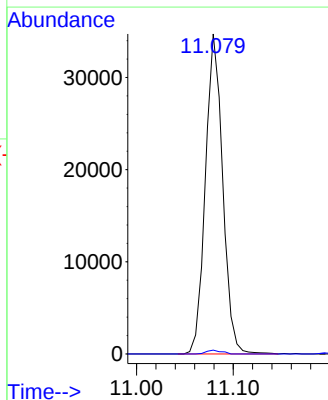
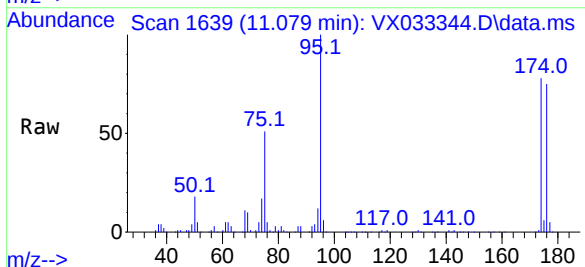
Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

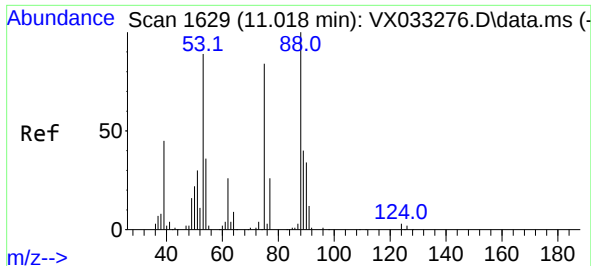
Tgt Ion:152 Resp: 97686  
Ion Ratio Lower Upper  
152 100  
115 60.8 44.0 132.0  
150 157.6 0.0 351.8



#76  
1,2,3-Trichloropropane  
Concen: 21.760 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.164 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion: 75 Resp: 43246  
Ion Ratio Lower Upper  
75 100  
77 1.1 20.0 60.0#

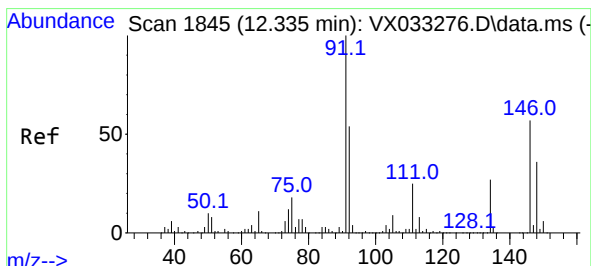
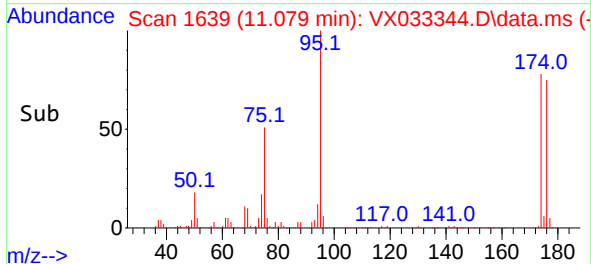
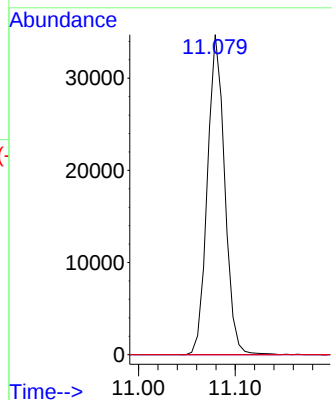
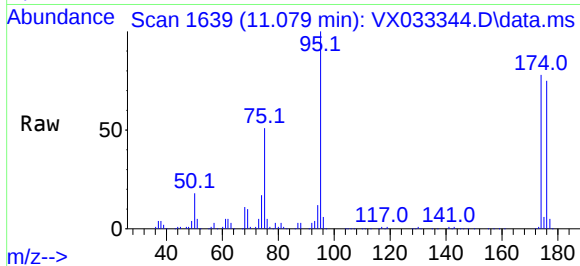




#81  
trans-1,4-Dichloro-2-butene  
Concen: 67.688 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. 0.061 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-BR-04-100-114-120722

Tgt Ion: 75 Resp: 43246  
Ion Ratio Lower Upper  
75 100  
53 0.0 86.9 130.3#  
89 0.0 38.3 57.5#



#91  
1,2-Dichlorobenzene  
Concen: 0.329 ug/l  
RT: 12.335 min Scan# 1845  
Delta R.T. 0.000 min  
Lab File: VX033344.D  
Acq: 09 Dec 2022 13:54

Tgt Ion:146 Resp: 1066  
Ion Ratio Lower Upper  
146 100  
111 44.7 21.5 64.5  
148 60.6 32.0 96.2

