

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU051823\
 Data File : VU054167.D
 Acq On : 18 May 2023 16:00
 Operator : JC/MD
 Sample : 02844-24
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 GBX18

Quant Time: May 19 02:07:42 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR051823WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Fri May 19 02:02:28 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Difluorobenzene	6.243	114	176157	5.000	ug/L	0.00
28) Chlorobenzene-d5	9.414	117	171141	5.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.806	152	93649	5.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.597	65	46817	4.930	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	98.600%
7) Chloroethane-d5	1.912	69	36545	5.144	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	102.800%
11) 1,1-Dichloroethene-d2	2.565	65	21289	4.963	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	99.200%
20) 2-Butanone-d5	4.632	46	85788	50.652	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	101.300%
24) Chloroform-d	5.057	84	96646	5.413	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	108.200%
26) 1,2-Dichloroethane-d4	5.697	65	41920	5.103	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.000%
32) Benzene-d6	5.722	84	173548	4.980	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	99.600%
36) 1,2-Dichloropropane-d6	6.684	67	51402	5.103	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	102.000%
41) Toluene-d8	7.893	98	166923	5.072	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.400%
43) trans-1,3-Dichloroprop...	8.176	79	21213	5.214	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	104.200%
46) 2-Hexanone-d5	8.629	63	63033	52.031	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	104.060%
56) 1,1,2,2-Tetrachloroeth...	10.751	84	36459	5.049	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	101.000%
66) 1,2-Dichlorobenzene-d4	12.188	152	57325	5.016	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	100.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.385	85	62207	4.671	ug/L	97
5) Vinyl chloride	1.604	62	65467	4.992	ug/L	99
8) Chloroethane	1.935	64	132211	15.914	ug/L	97
10) 1,1,2-Trichloro-1,2,2-...	2.578	101	141796	11.738	ug/L	97
12) 1,1-Dichloroethene	2.578	96	27654	2.565	ug/L #	75
13) Acetone	2.645	43	370625	160.857	ug/L	97
15) Methyl Acetate	2.951	43	46431	11.241	ug/L	94
18) trans-1,2-Dichloroethene	3.350	96	37681	3.436	ug/L	98
19) 1,1-Dichloroethane	3.864	63	51111	2.328	ug/L	96
22) cis-1,2-Dichloroethene	4.658	96	58572	4.568	ug/L	98
23) Bromochloromethane	4.970	128	32988	5.889	ug/L	92
25) Chloroform	5.083	83	204975	8.606	ug/L	98
27) 1,2-Dichloroethane	5.790	62	30963	2.261	ug/L #	94
29) 1,1,1-Trichloroethane	5.311	97	46751	2.182	ug/L	98
31) Carbon tetrachloride	5.520	117	59938	3.226	ug/L	97
34) Trichloroethene	6.539	95	32183	2.470	ug/L	95
39) cis-1,3-Dichloropropene	7.603	75	93213	4.919	ug/L	99
40) 4-Methyl-2-pentanone	7.787	43	425022	65.646	ug/L	99
44) trans-1,3-Dichloropropene	8.208	75	38500	2.475	ug/L	96

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Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

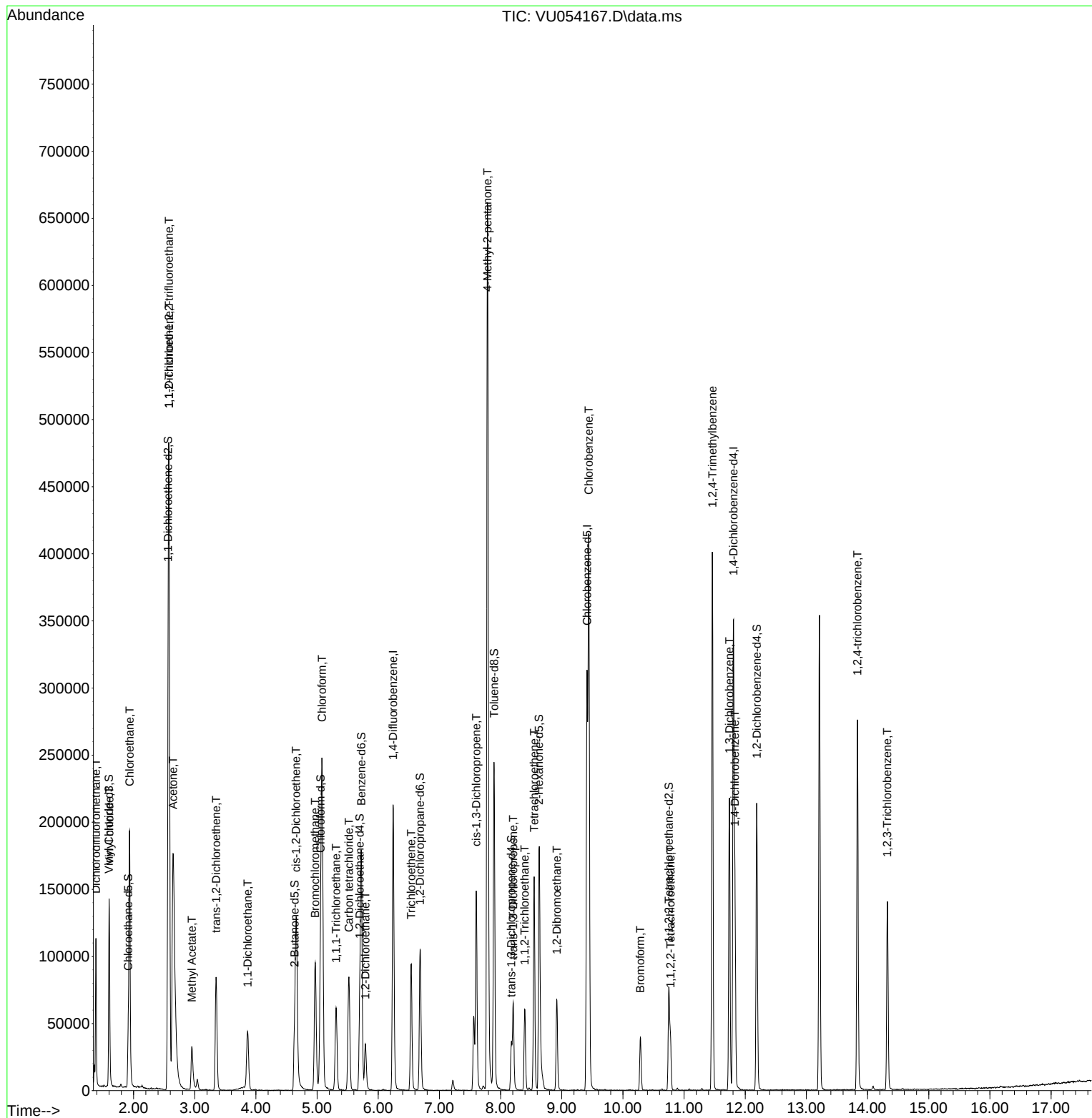
45) 1,1,2-Trichloroethane	8.394	97	19055	2.079	ug/L	98
47) Tetrachloroethene	8.549	164	36098	3.372	ug/L	97
50) 1,2-Dibromoethane	8.918	107	45407	5.390	ug/L	99
51) Chlorobenzene	9.443	112	222133	6.419	ug/L	97
57) 1,1,2,2-Tetrachloroethane	10.777	83	18272	1.679	ug/L	97
59) Bromoform	10.285	173	18079	3.002	ug/L	100
63) 1,2,4-Trimethylbenzene	11.462	105	217711	4.676	ug/L	100
64) 1,3-Dichlorobenzene	11.742	146	89686	3.144	ug/L	98
65) 1,4-Dichlorobenzene	11.832	146	58981	2.082	ug/L	99
70) 1,2,4-trichlorobenzene	13.835	180	89245	5.065	ug/L	98
72) 1,2,3-Trichlorobenzene	14.323	180	46700	3.132	ug/L	98

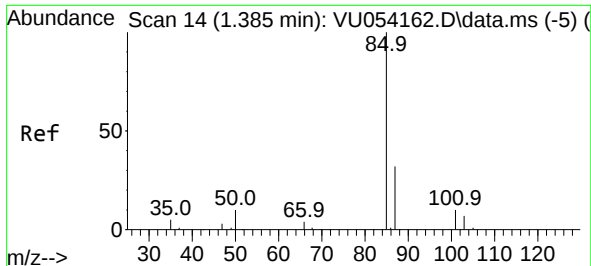
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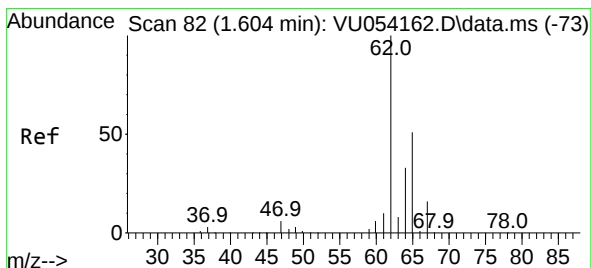
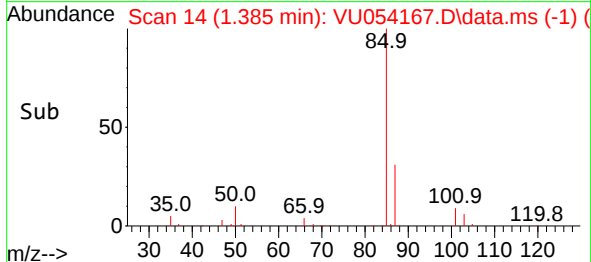
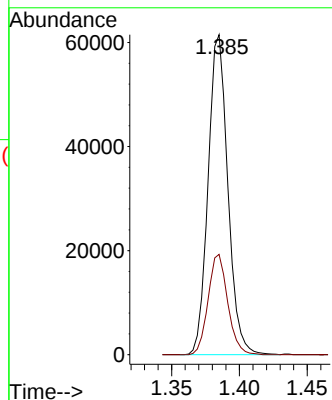
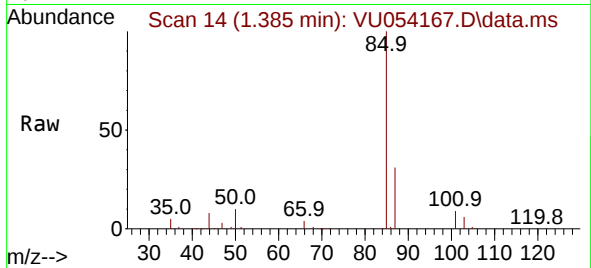




#2
Dichlorodifluoromethane
Concen: 4.671 ug/L
RT: 1.385 min Scan# 14
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

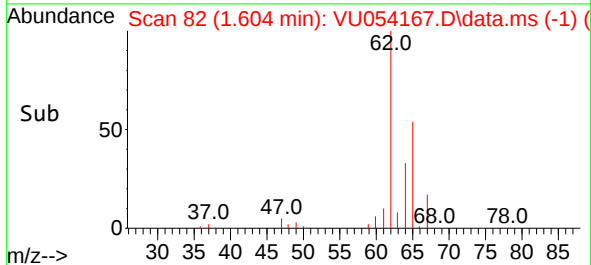
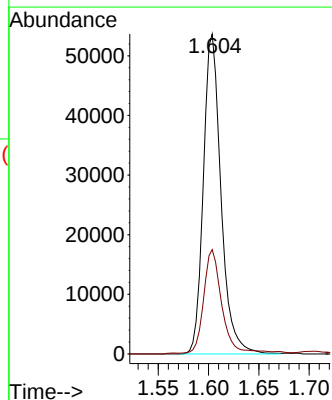
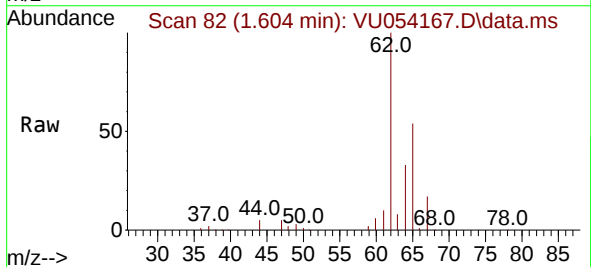
Instrument :
MSVOA_U
ClientSampleId :
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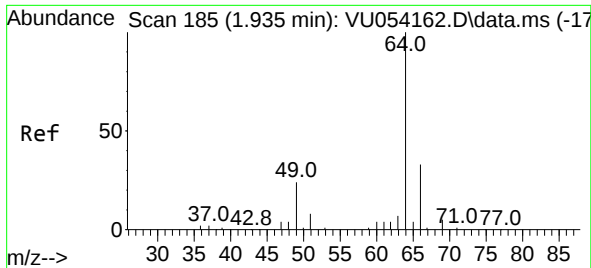
Tgt Ion: 85 Resp: 62207
Ion Ratio Lower Upper
85 100
87 31.1 26.1 39.1



#5
Vinyl chloride
Concen: 4.992 ug/L
RT: 1.604 min Scan# 82
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 62 Resp: 65467
Ion Ratio Lower Upper
62 100
64 32.6 22.4 41.6

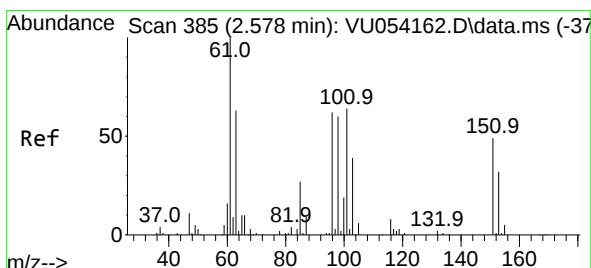
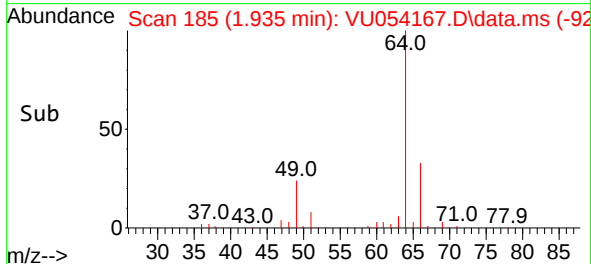
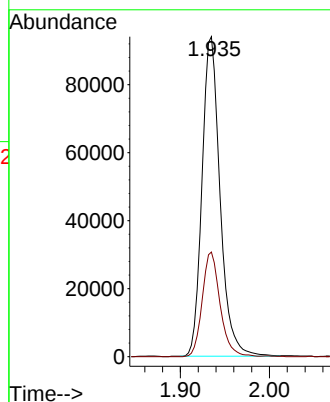
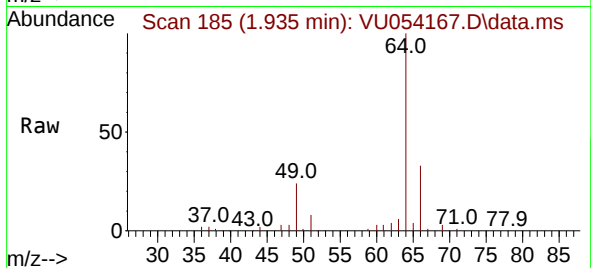




#8
Chloroethane
Concen: 15.914 ug/L
RT: 1.935 min Scan# 11
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

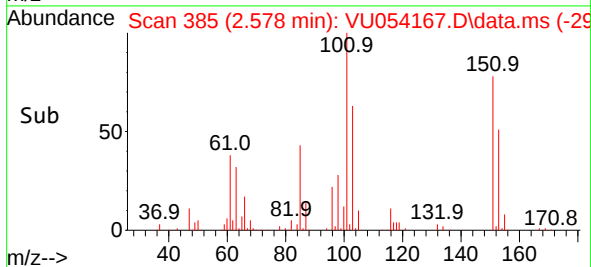
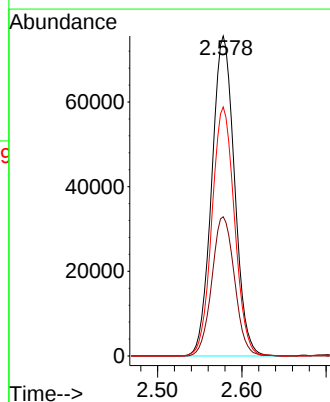
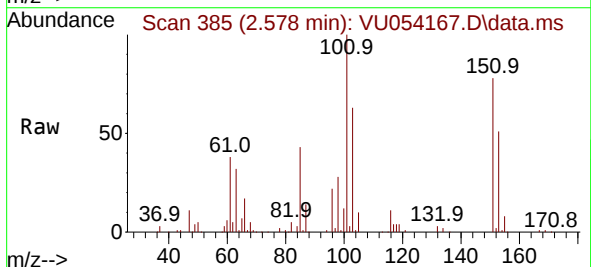
Instrument :
MSVOA_U
ClientSampleId :
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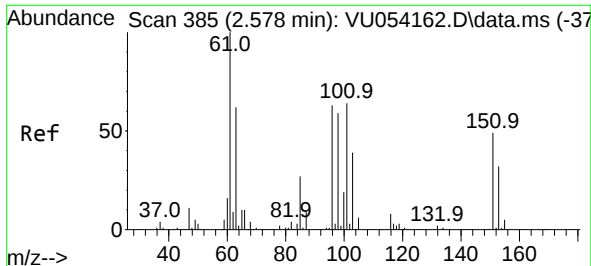
Tgt Ion: 64 Resp: 132211
Ion Ratio Lower Upper
64 100
66 32.7 21.6 40.0



#10
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 11.738 ug/L
RT: 2.578 min Scan# 385
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion:101 Resp: 141796
Ion Ratio Lower Upper
101 100
85 43.3 35.0 52.4
151 77.3 59.0 88.6

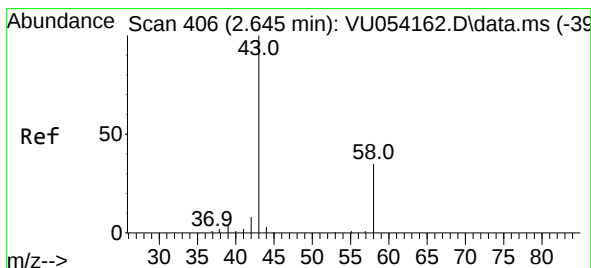
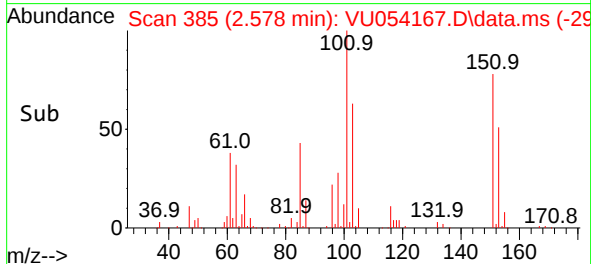
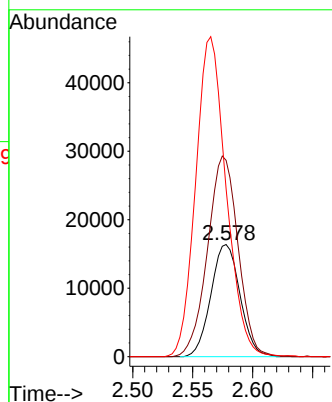
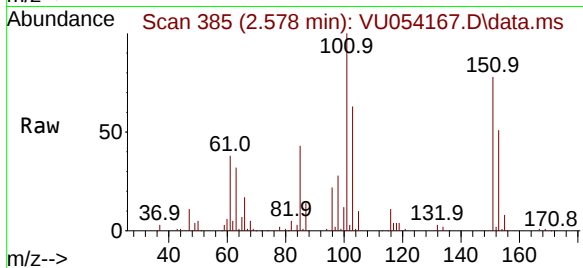




#12
1,1-Dichloroethene
Concen: 2.565 ug/L
RT: 2.578 min Scan# 385
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

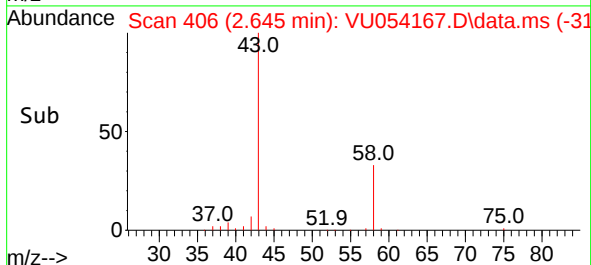
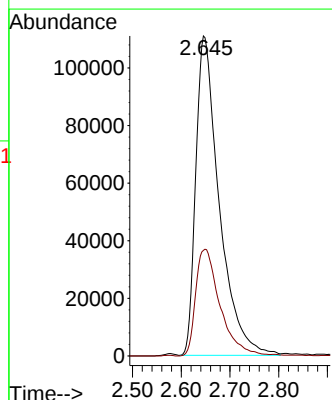
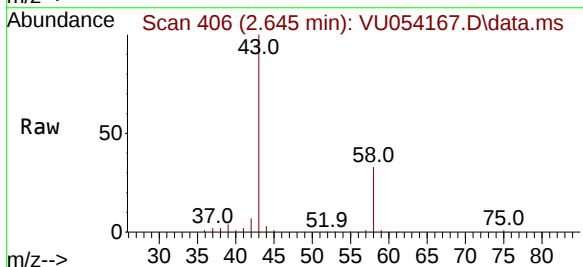
Instrument :
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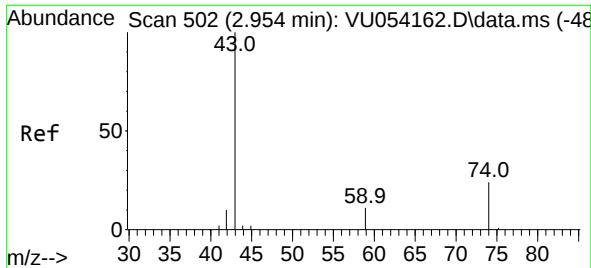
Tgt Ion: 96 Resp: 27654
Ion Ratio Lower Upper
96 100
61 175.1 114.7 212.9
63 149.6 68.6 127.4#



#13
Acetone
Concen: 160.857 ug/L
RT: 2.645 min Scan# 406
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 43 Resp: 370625
Ion Ratio Lower Upper
43 100
58 34.7 0.0 73.2

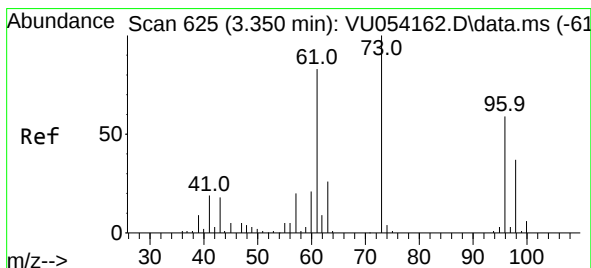
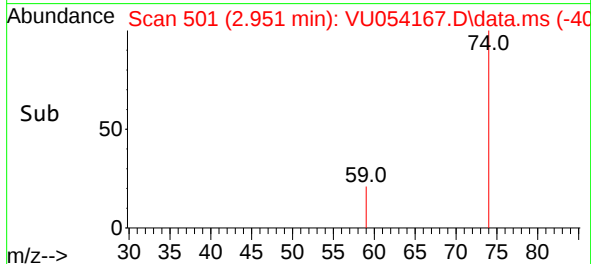
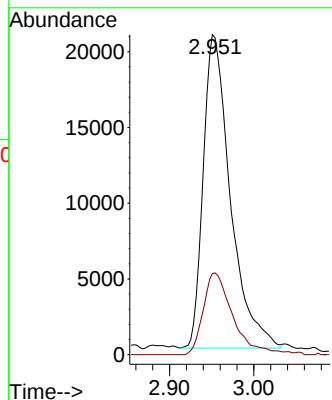
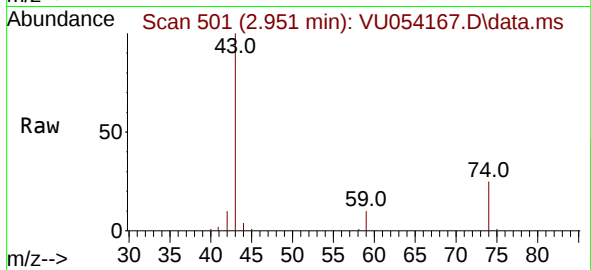




#15
Methyl Acetate
Concen: 11.241 ug/L
RT: 2.951 min Scan# 501
Delta R.T. -0.003 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

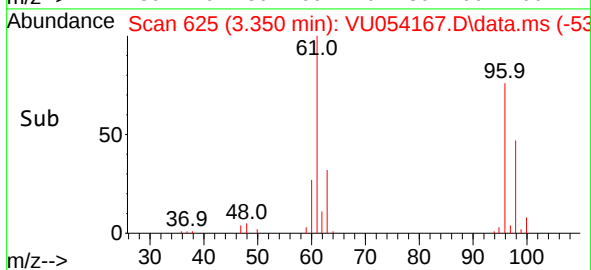
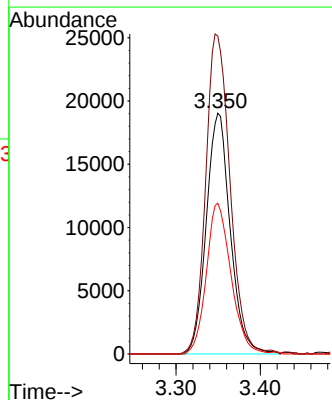
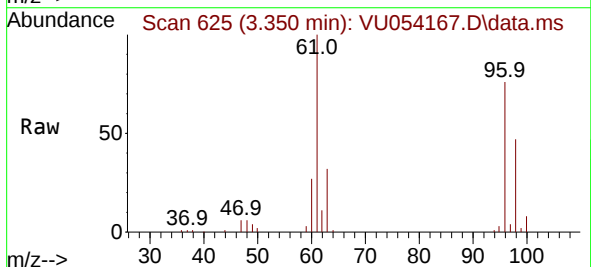
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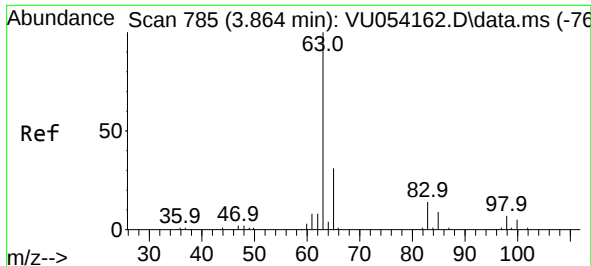
Tgt Ion: 43 Resp: 46431
Ion Ratio Lower Upper
43 100
74 28.5 20.3 30.5



#18
trans-1,2-Dichloroethene
Concen: 3.436 ug/L
RT: 3.350 min Scan# 625
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 96 Resp: 37681
Ion Ratio Lower Upper
96 100
61 132.0 94.1 174.8
98 62.6 45.3 84.1





#19

1,1-Dichloroethane

Concen: 2.328 ug/L

RT: 3.864 min Scan# 71

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

Instrument :

MSVOA_U

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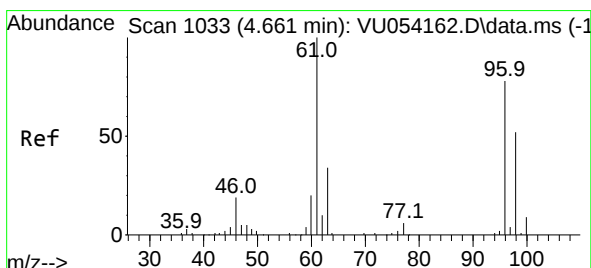
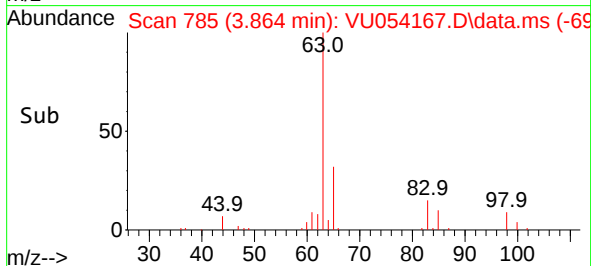
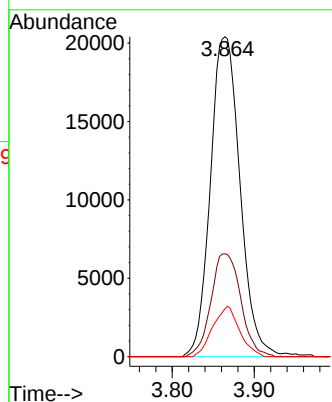
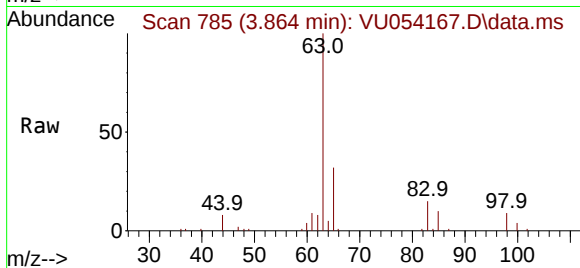
Tgt Ion: 63 Resp: 51111

Ion Ratio Lower Upper

63 100

65 32.1 20.7 38.5

83 14.9 10.1 18.7



#22

cis-1,2-Dichloroethene

Concen: 4.568 ug/L

RT: 4.658 min Scan# 1032

Delta R.T. -0.003 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

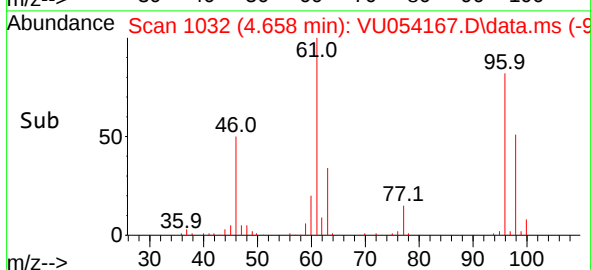
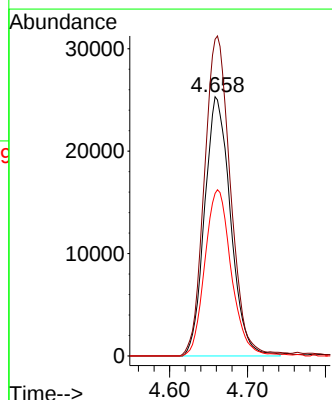
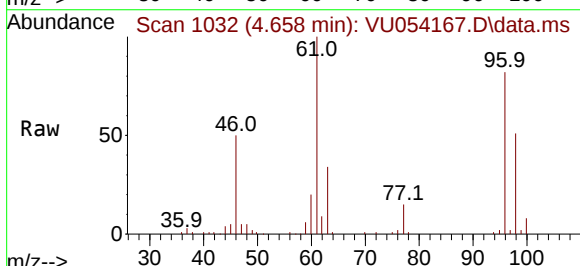
Tgt Ion: 96 Resp: 58572

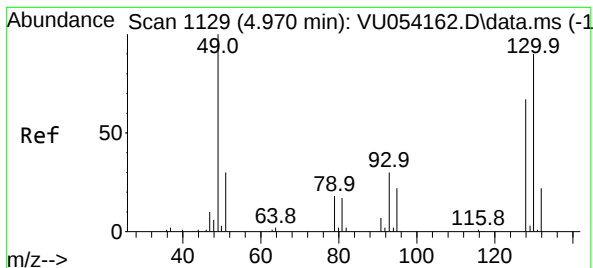
Ion Ratio Lower Upper

96 100

61 122.2 85.0 157.8

98 62.7 45.8 85.0





#23

Bromochloromethane

Concen: 5.889 ug/L

RT: 4.970 min Scan# 1129

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

Instrument :

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ClientSampleId :

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Tgt Ion:128 Resp: 32988

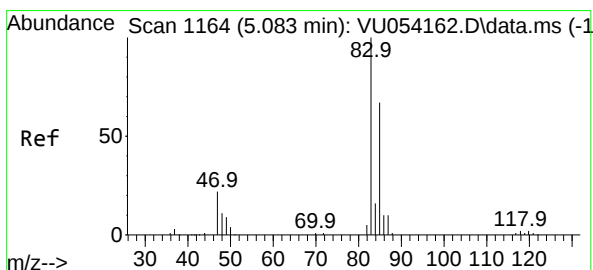
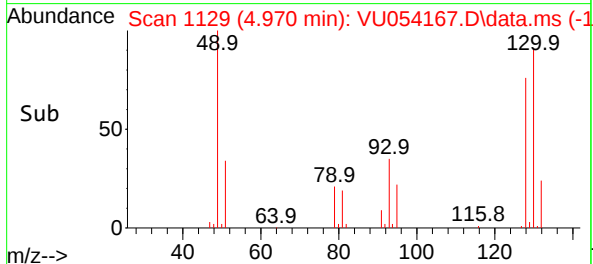
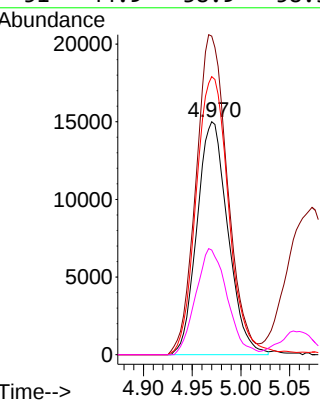
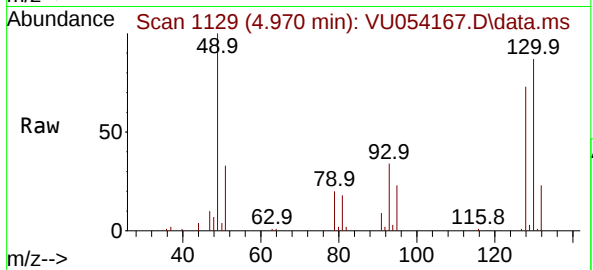
Ion Ratio Lower Upper

128 100

49 136.8 100.9 187.3

130 119.3 93.2 173.0

51 44.9 38.9 58.3



#25

Chloroform

Concen: 8.606 ug/L

RT: 5.083 min Scan# 1164

Delta R.T. -0.000 min

Lab File: VU054167.D

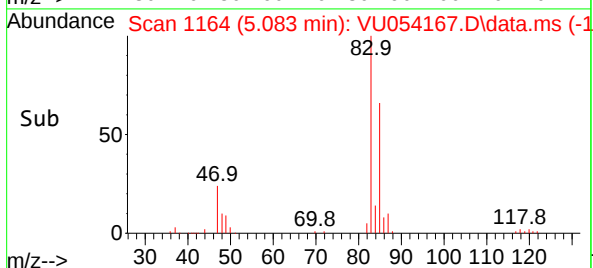
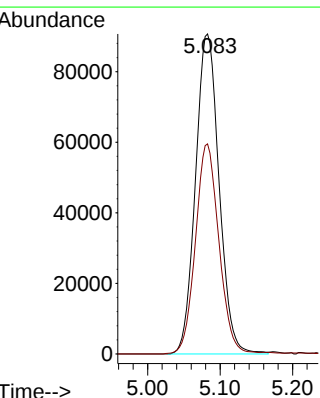
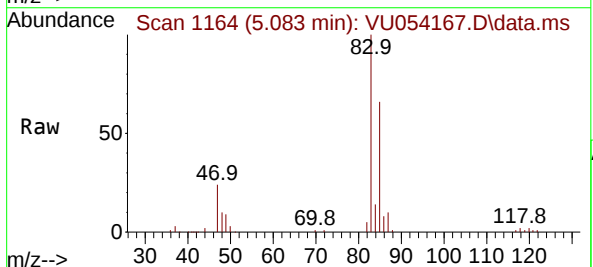
Acq: 18 May 2023 16:00

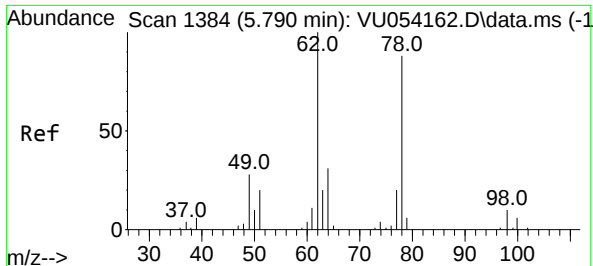
Tgt Ion: 83 Resp: 204975

Ion Ratio Lower Upper

83 100

85 65.6 46.8 87.0





#27

1,2-Dichloroethane

Concen: 2.261 ug/L

RT: 5.790 min Scan# 11

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

Instrument :

MSVOA_U

ClientSampleId :

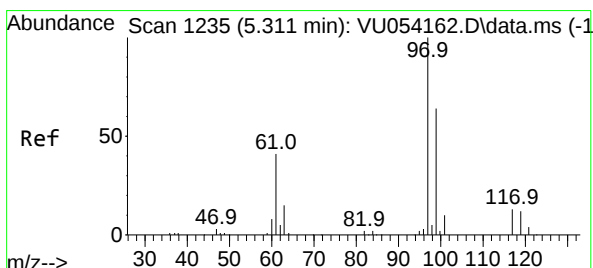
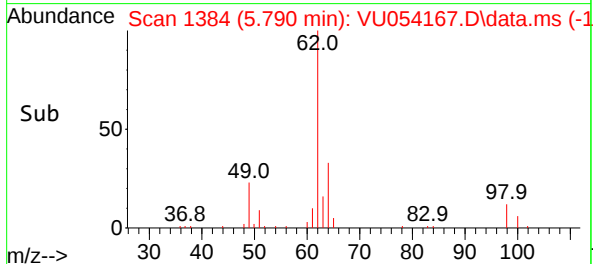
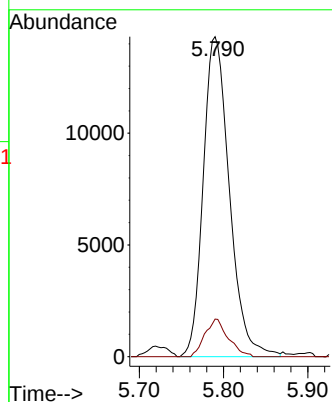
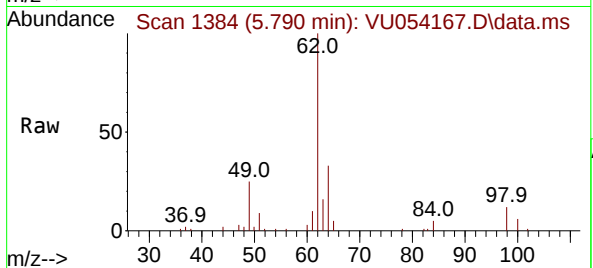
GBX18

Tgt Ion: 62 Resp: 30963

Ion Ratio Lower Upper

62 100

98 11.7 7.6 11.4#



#29

1,1,1-Trichloroethane

Concen: 2.182 ug/L

RT: 5.311 min Scan# 1235

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

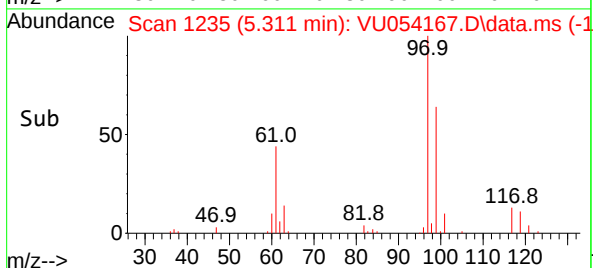
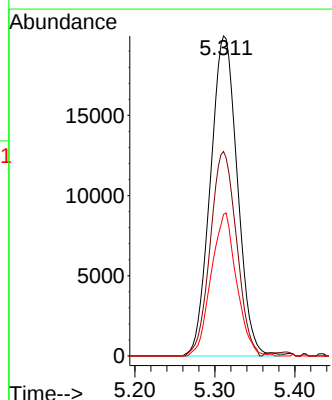
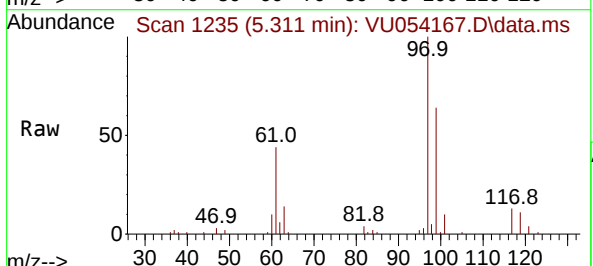
Tgt Ion: 97 Resp: 46751

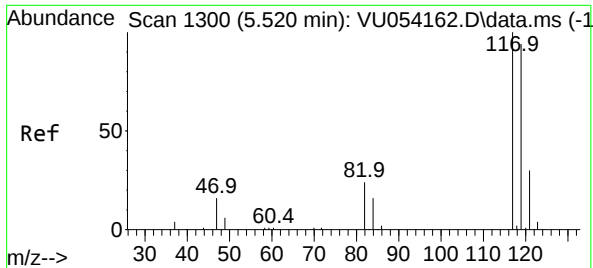
Ion Ratio Lower Upper

97 100

99 62.1 51.8 77.6

61 42.0 33.4 50.2

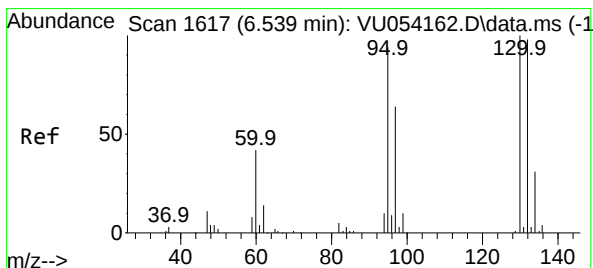
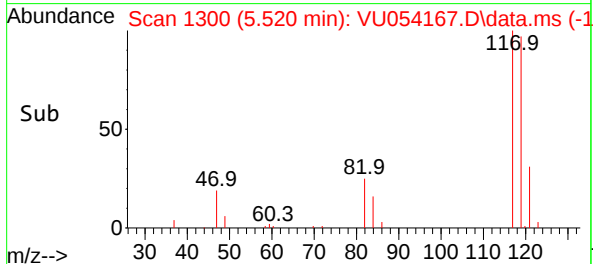
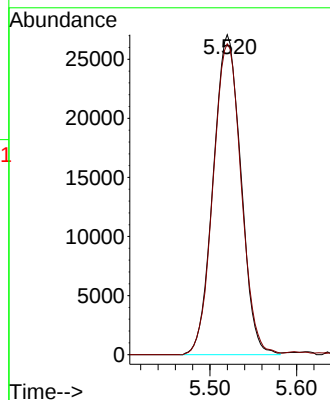
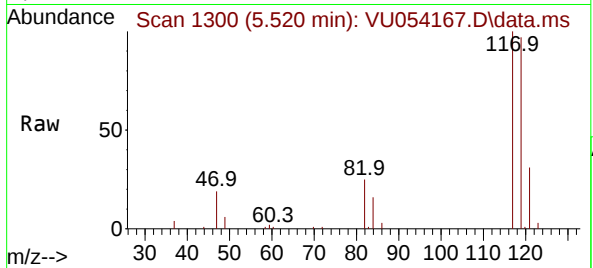




#31
Carbon tetrachloride
Concen: 3.226 ug/L
RT: 5.520 min Scan# 1117
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

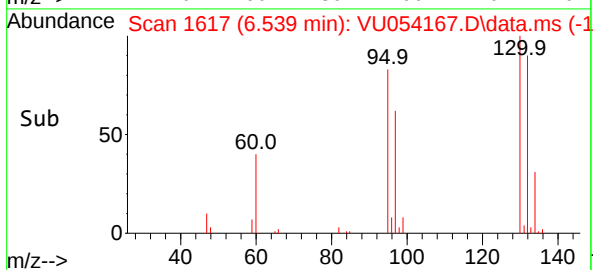
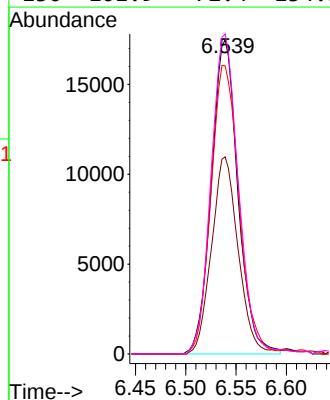
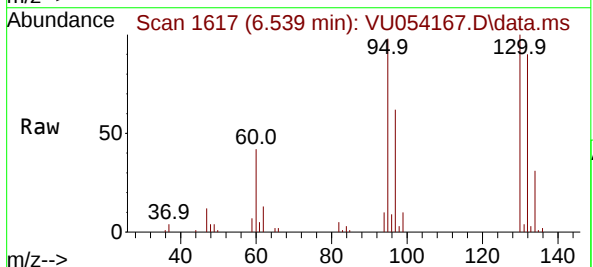
Instrument :
MSVOA_U
ClientSampleId :
GBX18

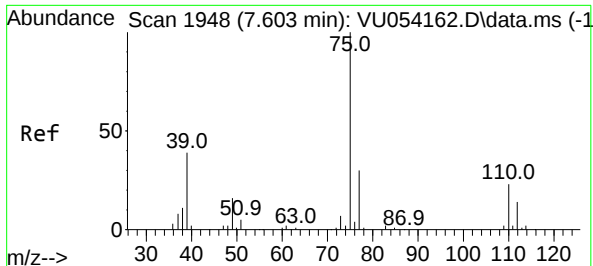
Tgt Ion:117 Resp: 59938
Ion Ratio Lower Upper
117 100
119 98.8 76.6 114.8



#34
Trichloroethene
Concen: 2.470 ug/L
RT: 6.539 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 95 Resp: 32183
Ion Ratio Lower Upper
95 100
97 62.8 45.8 85.0
132 91.8 70.1 130.3
130 101.9 72.4 134.5





#39

cis-1,3-Dichloropropene

Concen: 4.919 ug/L

RT: 7.603 min Scan# 1948

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

Instrument :

MSVOA_U

ClientSampleId :

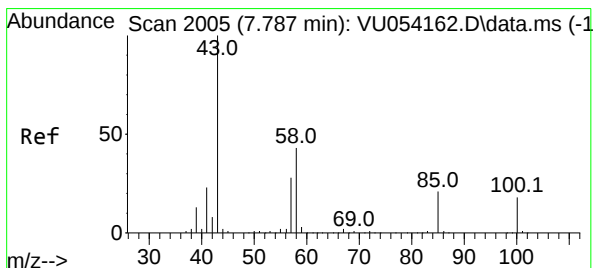
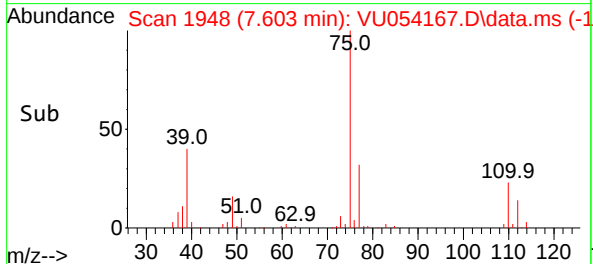
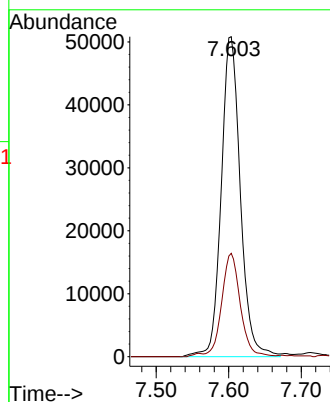
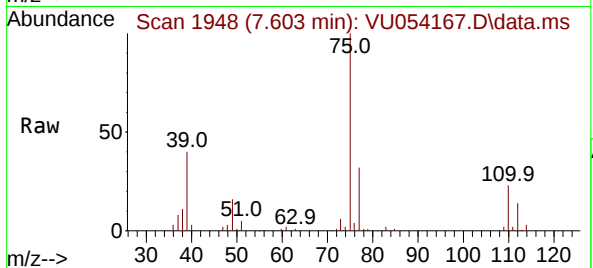
GBX18

Tgt Ion: 75 Resp: 93213

Ion Ratio Lower Upper

75 100

77 32.3 22.1 41.1



#40

4-Methyl-2-pentanone

Concen: 65.646 ug/L

RT: 7.787 min Scan# 2005

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

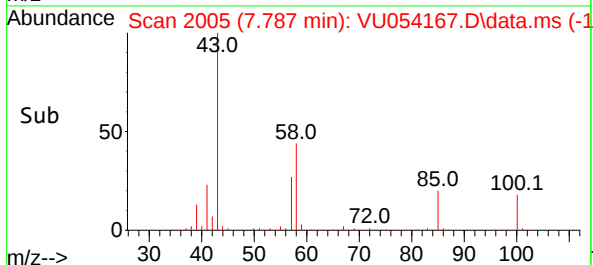
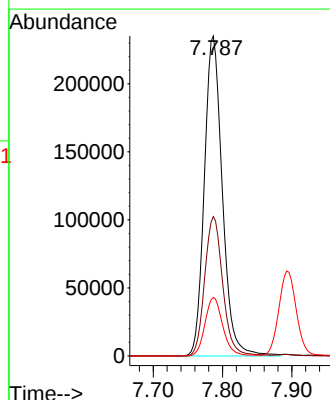
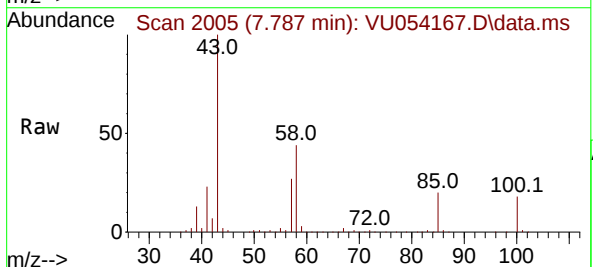
Tgt Ion: 43 Resp: 425022

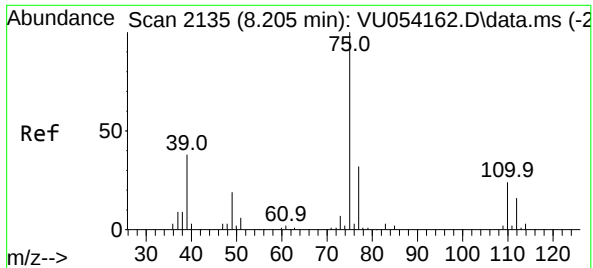
Ion Ratio Lower Upper

43 100

58 43.7 34.8 52.2

100 18.1 14.1 21.1

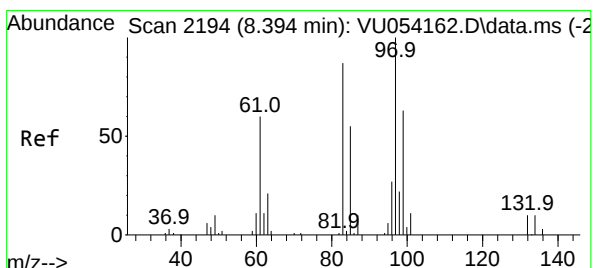
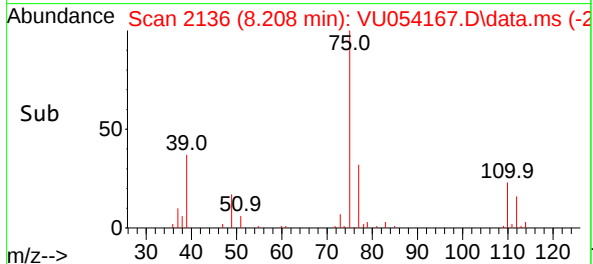
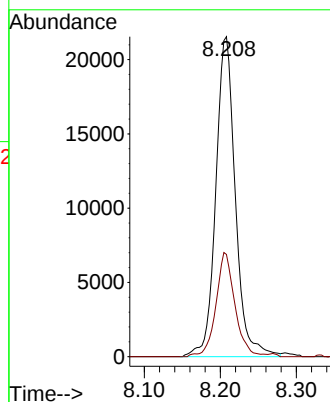
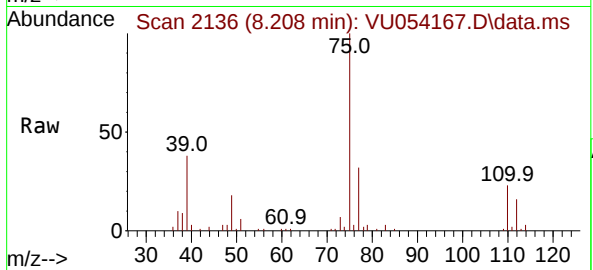




#44
trans-1,3-Dichloropropene
Concen: 2.475 ug/L
RT: 8.208 min Scan# 2136
Delta R.T. 0.003 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

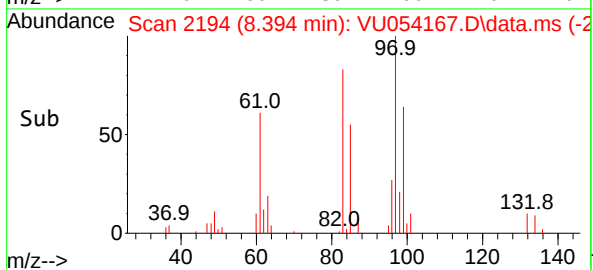
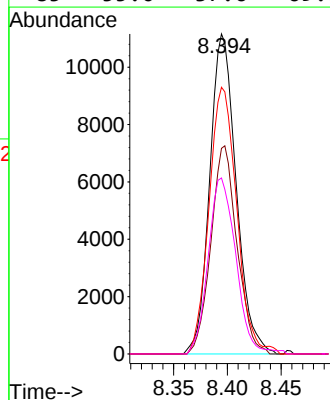
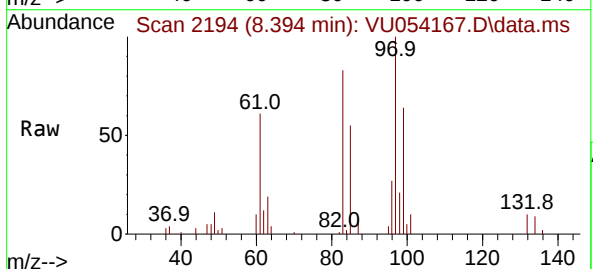
Instrument :
MSVOA_U
ClientSampleId :
GBX18

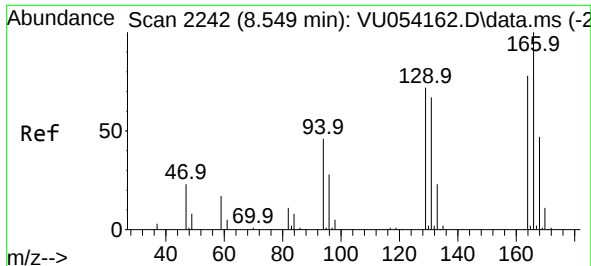
Tgt Ion: 75 Resp: 38500
Ion Ratio Lower Upper
75 100
77 32.0 20.8 38.6



#45
1,1,2-Trichloroethane
Concen: 2.079 ug/L
RT: 8.394 min Scan# 2194
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 97 Resp: 19055
Ion Ratio Lower Upper
97 100
99 64.3 43.0 79.8
83 83.4 59.1 109.9
85 55.0 37.6 69.8





#47

Tetrachloroethene

Concen: 3.372 ug/L

RT: 8.549 min Scan# 21

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

Instrument :

MSVOA_U

ClientSampleId :

GBX18

Tgt Ion:164 Resp: 36098

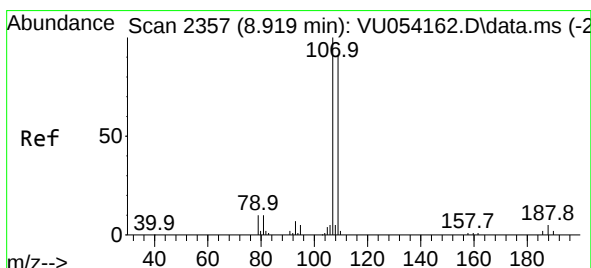
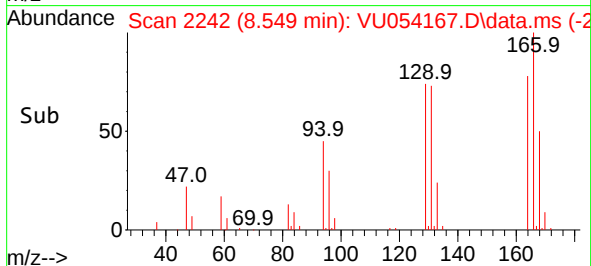
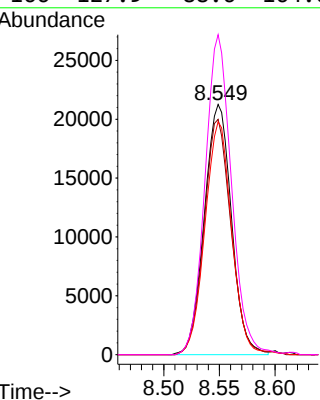
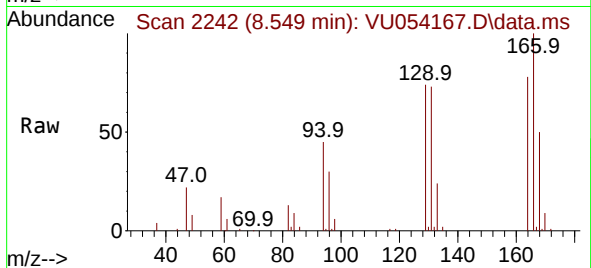
Ion Ratio Lower Upper

164 100

129 94.1 63.3 117.7

131 93.1 61.0 113.4

166 127.9 88.6 164.6



#50

1,2-Dibromoethane

Concen: 5.390 ug/L

RT: 8.918 min Scan# 2357

Delta R.T. -0.000 min

Lab File: VU054167.D

Acq: 18 May 2023 16:00

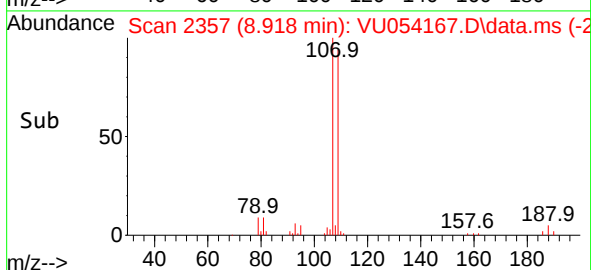
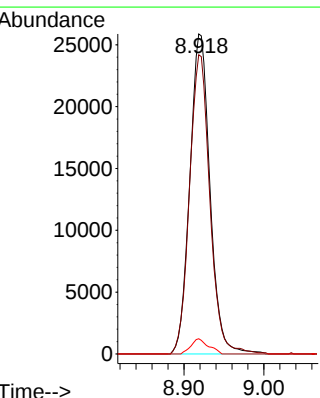
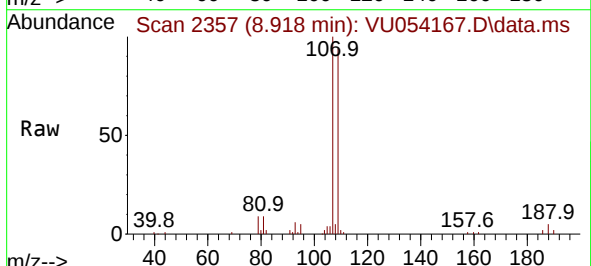
Tgt Ion:107 Resp: 45407

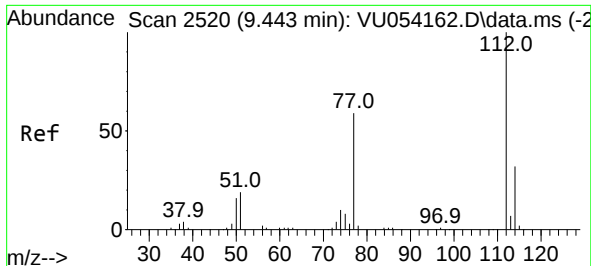
Ion Ratio Lower Upper

107 100

109 93.5 66.4 123.2

188 4.8 3.8 5.6

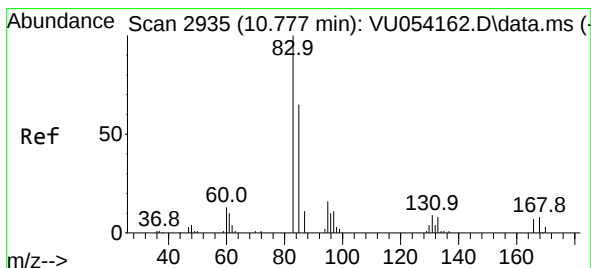
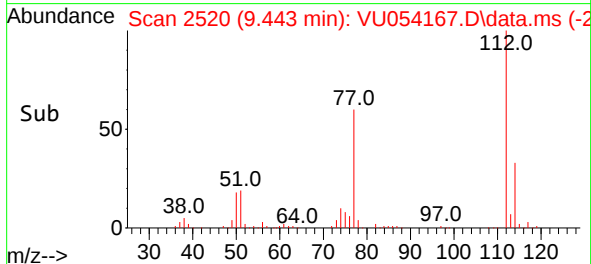
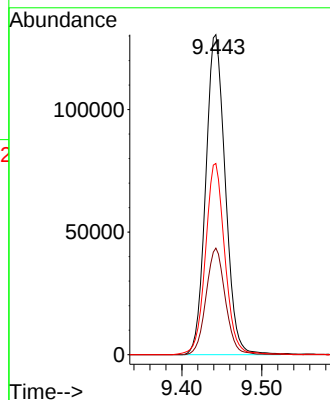
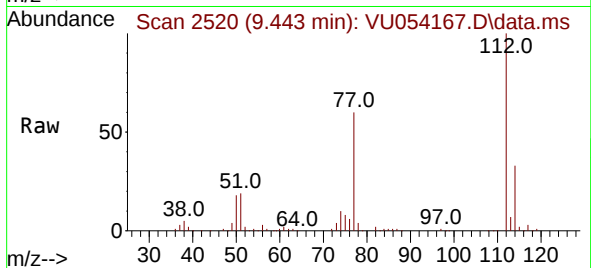




#51
Chlorobenzene
Concen: 6.419 ug/L
RT: 9.443 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

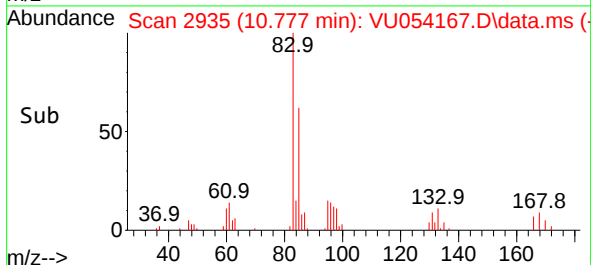
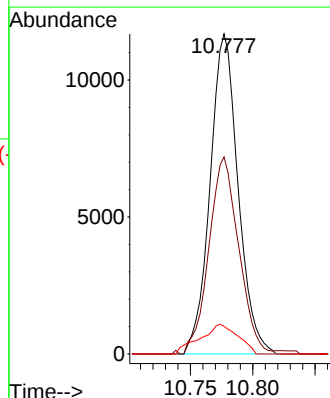
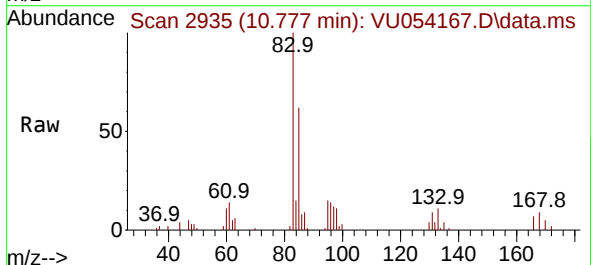
Instrument :
MSVOA_U
ClientSampleId :
GBX18

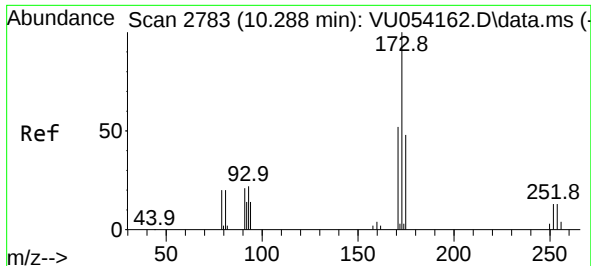
Tgt Ion:112 Resp: 222133
Ion Ratio Lower Upper
112 100
114 33.3 22.4 41.6
77 59.8 46.1 69.1



#57
1,1,2,2-Tetrachloroethane
Concen: 1.679 ug/L
RT: 10.777 min Scan# 2935
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion: 83 Resp: 18272
Ion Ratio Lower Upper
83 100
85 61.6 44.8 83.2
131 8.6 8.1 12.1

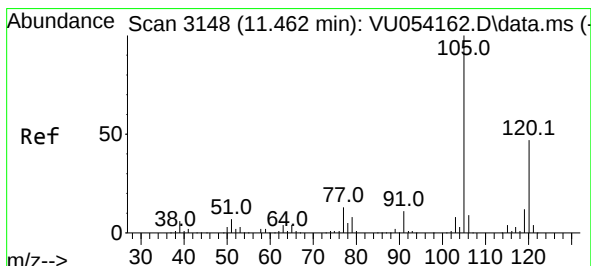
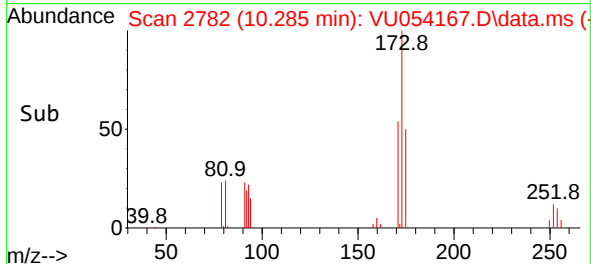
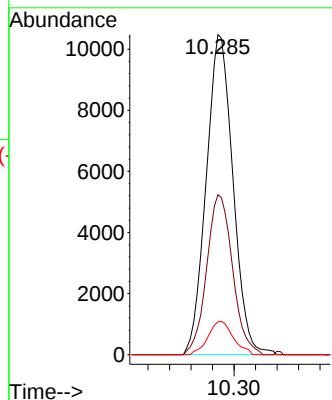
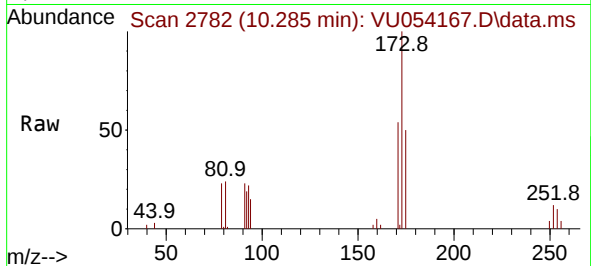




#59
Bromoform
Concen: 3.002 ug/L
RT: 10.285 min Scan# 21
Delta R.T. -0.003 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

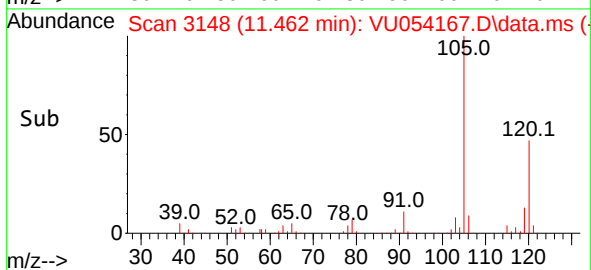
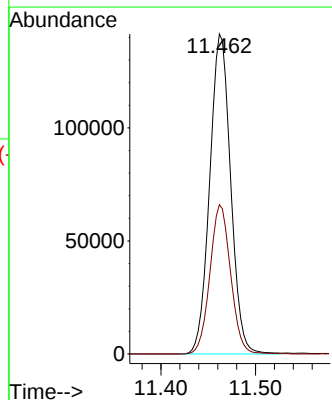
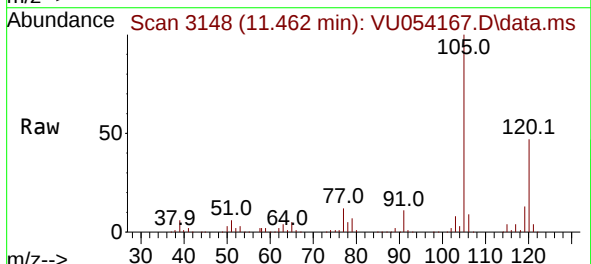
Instrument :
MSVOA_U
ClientSampleId :
GBX18

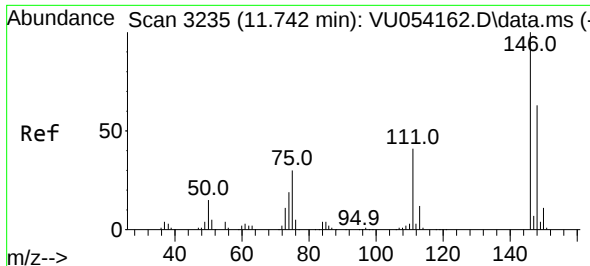
Tgt Ion:173 Resp: 18079
Ion Ratio Lower Upper
173 100
175 48.3 38.6 58.0
254 9.8 7.9 11.9



#63
1,2,4-Trimethylbenzene
Concen: 4.676 ug/L
RT: 11.462 min Scan# 3148
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion:105 Resp: 217711
Ion Ratio Lower Upper
105 100
120 46.1 36.9 55.3

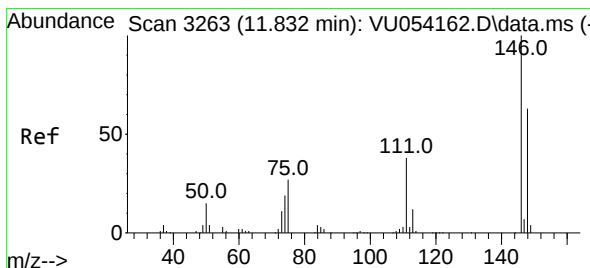
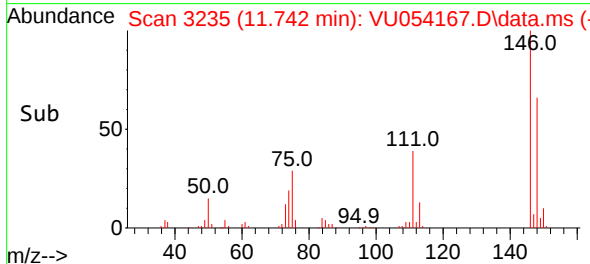
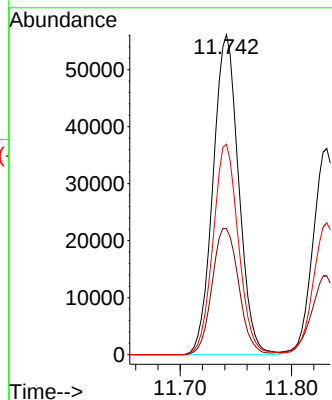
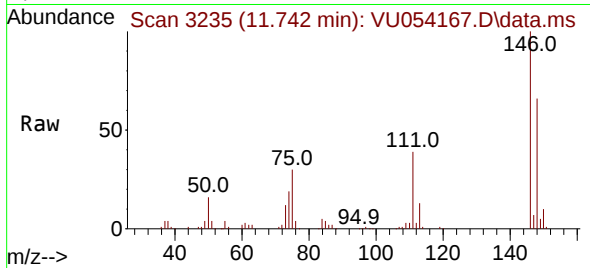




#64
1,3-Dichlorobenzene
Concen: 3.144 ug/L
RT: 11.742 min Scan# 31
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

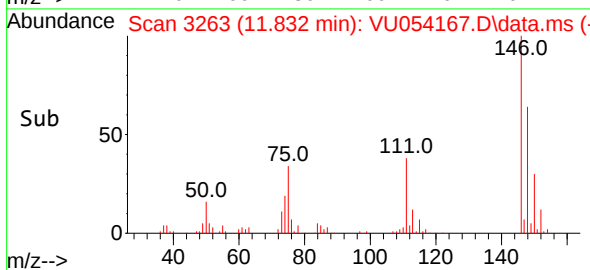
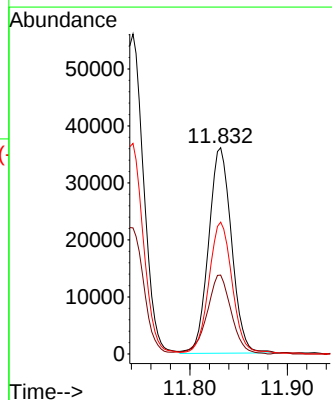
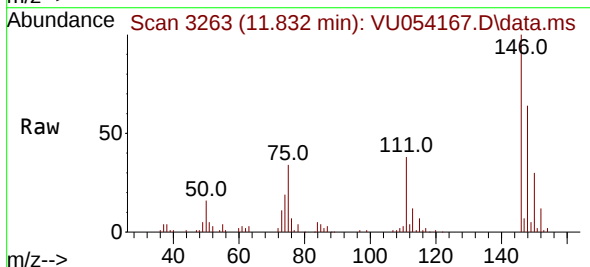
Instrument :
MSVOA_U
ClientSampleId :
GBX18

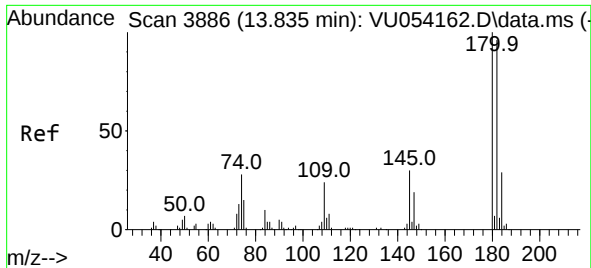
Tgt Ion:146 Resp: 89686
Ion Ratio Lower Upper
146 100
111 39.4 27.8 51.6
148 65.8 44.4 82.4



#65
1,4-Dichlorobenzene
Concen: 2.082 ug/L
RT: 11.832 min Scan# 3263
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion:146 Resp: 58981
Ion Ratio Lower Upper
146 100
111 38.2 26.6 49.4
148 63.9 43.8 81.3

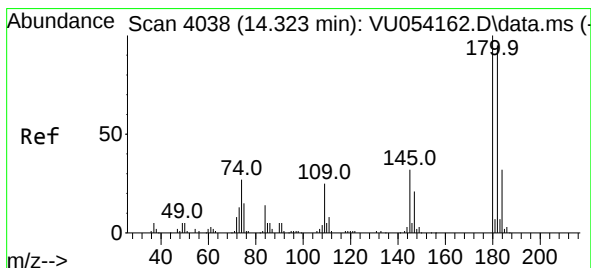
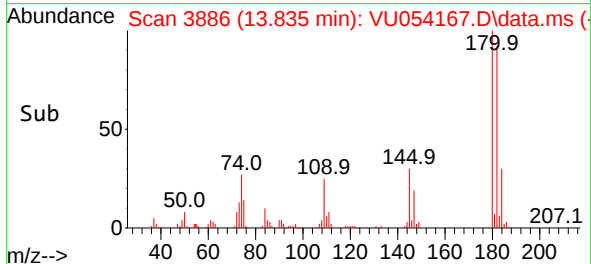
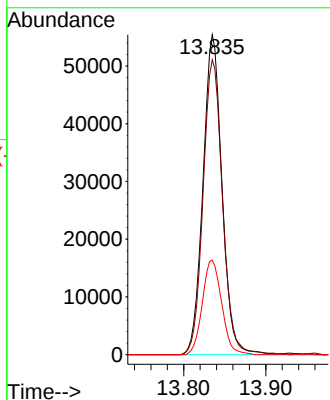
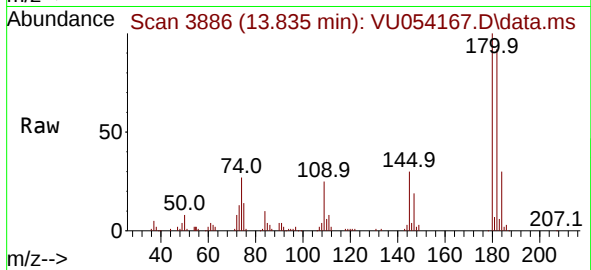




#70
1,2,4-trichlorobenzene
Concen: 5.065 ug/L
RT: 13.835 min Scan# 3886
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Instrument :
MSVOA_U
ClientSampleId :
GBX18

Tgt Ion:180 Resp: 89245
Ion Ratio Lower Upper
180 100
182 93.8 76.4 114.6
145 29.9 23.3 34.9



#72
1,2,3-Trichlorobenzene
Concen: 3.132 ug/L
RT: 14.323 min Scan# 4038
Delta R.T. -0.000 min
Lab File: VU054167.D
Acq: 18 May 2023 16:00

Tgt Ion:180 Resp: 46700
Ion Ratio Lower Upper
180 100
182 93.4 76.4 114.6
145 32.0 25.1 37.7

