

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU061224\
 Data File : VU059220.D
 Acq On : 12 Jun 2024 13:50
 Operator : MD/SY
 Sample : P2403-09
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT2-2024

Quant Time: Jun 13 04:37:08 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U060524DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Thu Jun 13 04:35:23 2024
 Response via : Initial Calibration

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

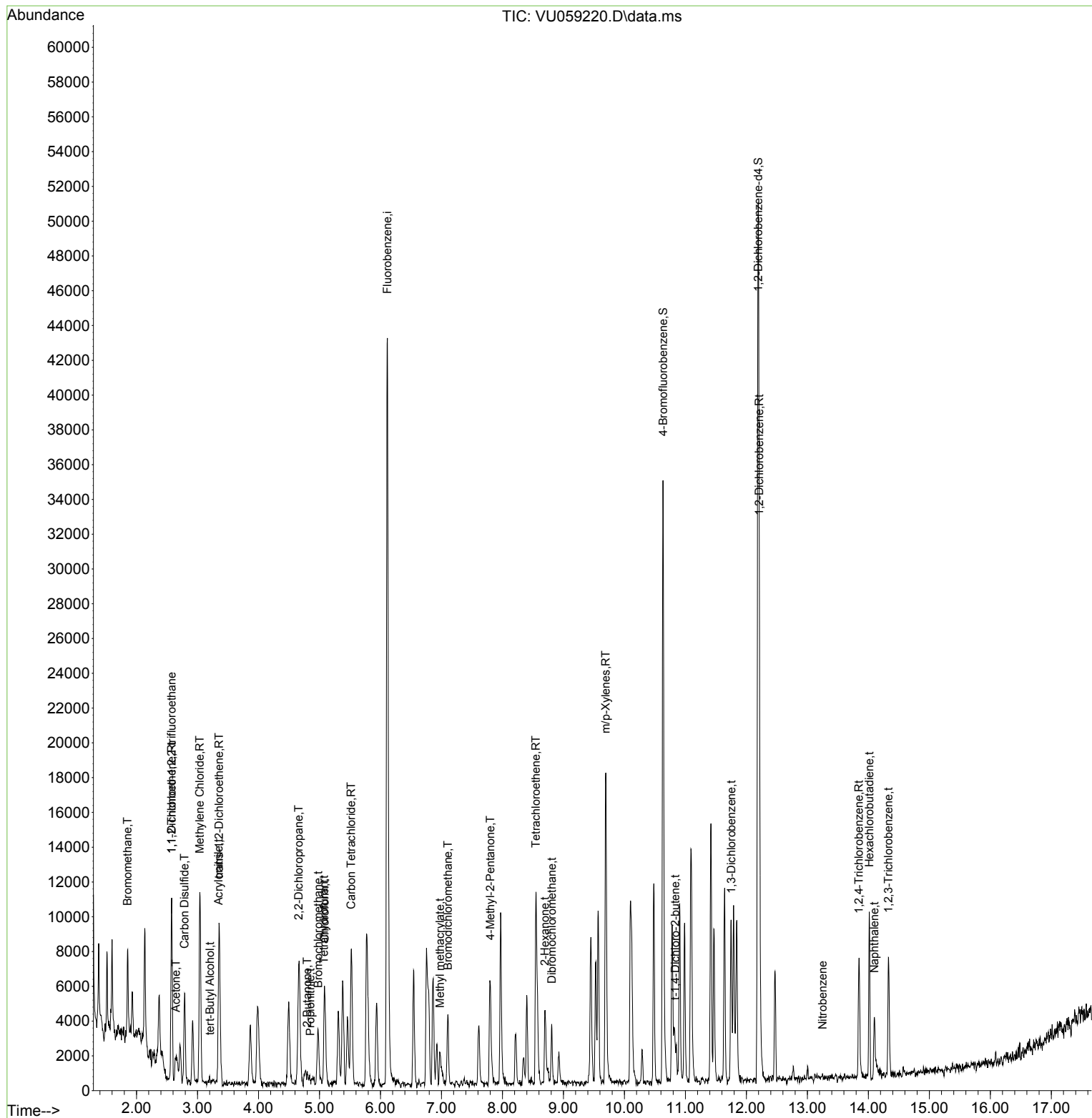
Internal Standards						
1) Fluorobenzene	6.113	96	42274	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.634	95	12767	0.888	ug/l	0.00
Spiked Amount 1.000			Recovery	=	89.000%	
68) 1,2-Dichlorobenzene-d4	12.193	152	13598	0.903	ug/l	0.00
Spiked Amount 1.000			Recovery	=	90.000%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.853	94	2250	0.230	ug/l	99
8) 1,1,2-Trichloro-1,2,2-...	2.576	101	2165	0.211	ug/l	97
9) 1,1-Dichloroethene	2.576	96	2095	0.206	ug/l	89
12) Acrylonitrile	3.348	53	878m	0.382	ug/l	
13) Acetone	2.647	43	3574	1.021	ug/l	94
14) Carbon Disulfide	2.788	76	6999	0.216	ug/l #	94
15) Methylene Chloride	3.036	84	5533	0.396	ug/l	94
16) trans-1,2-Dichloroethene	3.354	96	2235	0.201	ug/l	96
18) 2-Butanone	4.801	43	2834m	0.730	ug/l	
21) 2,2-Dichloropropane	4.660	77	3569	0.207	ug/l #	88
24) tert-Butyl Alcohol	3.206	59	733m	1.197	ug/l	
26) Bromochloromethane	4.981	128	1107	0.217	ug/l	94
27) Chloroform	5.084	83	5057	0.216	ug/l	96
30) Carbon Tetrachloride	5.518	117	3070	0.203	ug/l	92
34) Propionitrile	4.853	54	603m	0.678	ug/l	
41) Tetrahydrofuran	5.074	42	441m	0.249	ug/l	
44) Bromodichloromethane	7.106	83	3259	0.201	ug/l #	83
45) 4-Methyl-2-Pentanone	7.801	43	4836	0.722	ug/l #	94
46) t-1,4-Dichloro-2-butene	10.833	75	1070m	0.376	ug/l	
47) Methyl methacrylate	6.975	69	1199	0.223	ug/l	65
54) 2-Hexanone	8.698	43	4288m	0.826	ug/l	
55) Dibromochloromethane	8.811	129	2094	0.210	ug/l	85
58) Tetrachloroethene	8.550	164	2430	0.227	ug/l #	84
64) m/p-Xylenes	9.692	106	5537	0.297	ug/l	98
80) Nitrobenzene	13.251	77	125	0.503	ug/l #	42
82) 1,3-Dichlorobenzene	11.753	146	4842	0.202	ug/l	94
85) 1,2-Dichlorobenzene	12.212	146	4826	0.214	ug/l	95
87) 1,2,4-Trichlorobenzene	13.846	180	2687	0.222	ug/l	87
88) Hexachlorobutadiene	14.016	225	1731	0.229	ug/l	97
89) Naphthalene	14.097	128	4938	0.251	ug/l #	91
90) 1,2,3-Trichlorobenzene	14.328	180	2717	0.247	ug/l	91

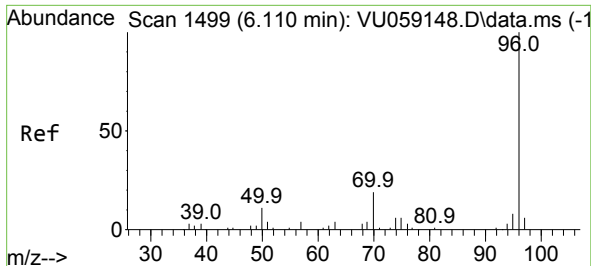
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU061224\
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ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

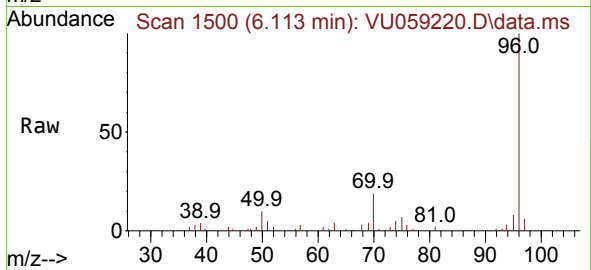
Quant Time: Jun 13 04:37:08 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U060524DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Thu Jun 13 04:35:23 2024
Response via : Initial Calibration





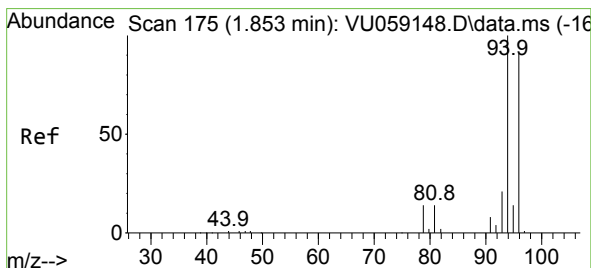
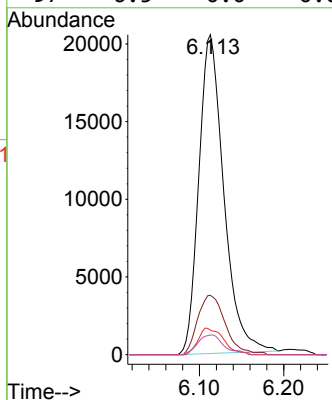
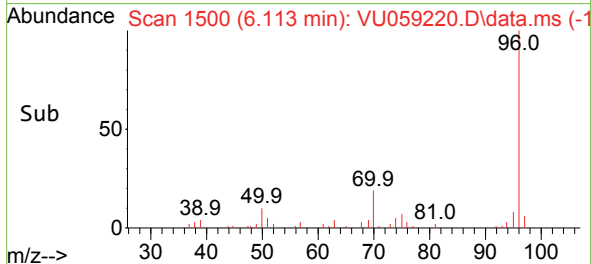
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.113 min Scan# 1499
Delta R.T. 0.003 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Instrument : MSVOA_U
ClientSampleId : MDL-WATER-03-QT2-2024



Tgt Ion: 96 Resp: 42274

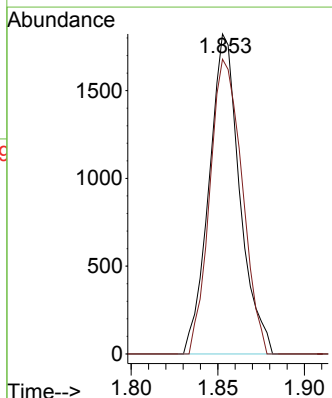
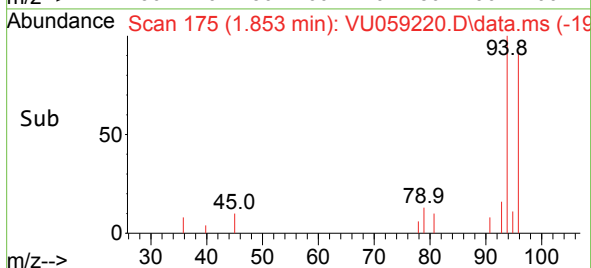
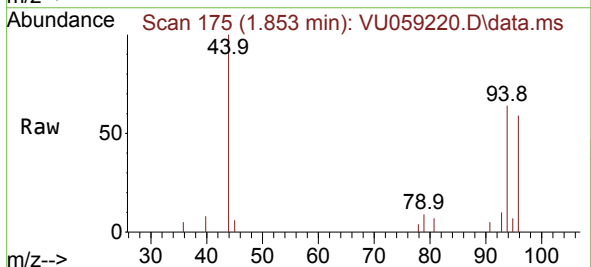
Ion	Ratio	Lower	Upper
96	100		
70	19.6	16.6	24.8
95	8.5	7.1	10.7
97	6.5	0.0	0.0

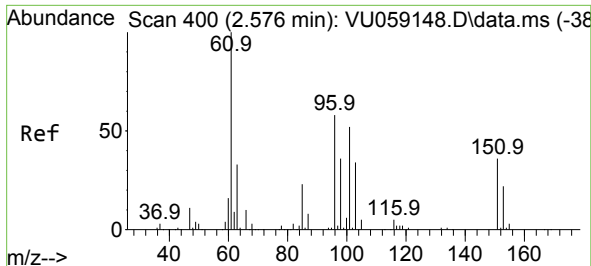


#5
Bromomethane
Concen: 0.230 ug/l
RT: 1.853 min Scan# 175
Delta R.T. 0.000 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 94 Resp: 2250

Ion	Ratio	Lower	Upper
94	100		
96	92.1	72.7	109.1

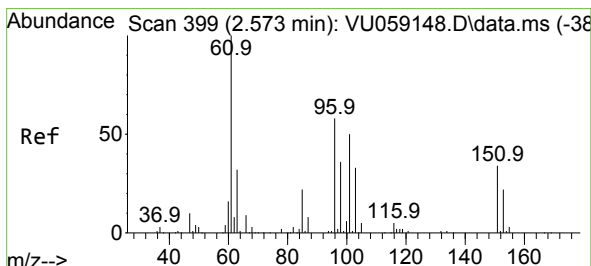
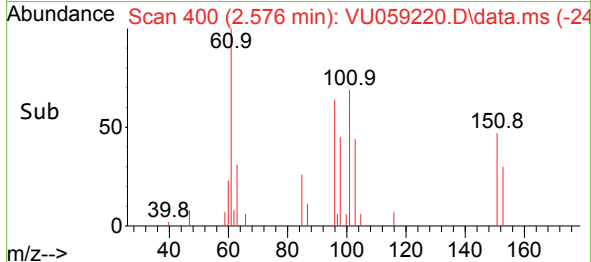
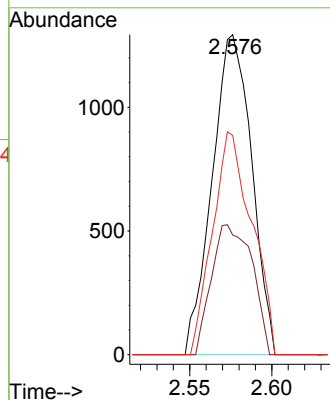
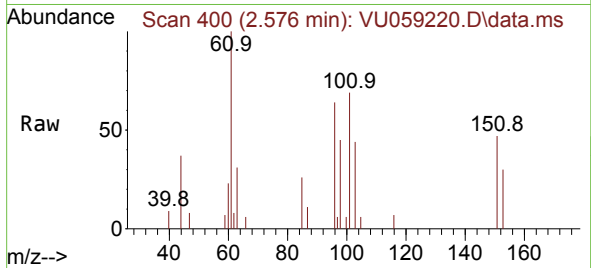




#8
 1,1,2-Trichloro-1,2,2-trifluoroethane
 Concen: 0.211 ug/l
 RT: 2.576 min Scan# 400
 Delta R.T. 0.000 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

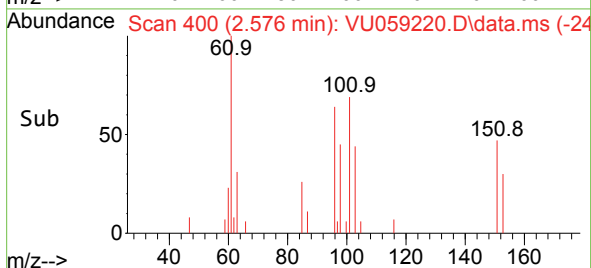
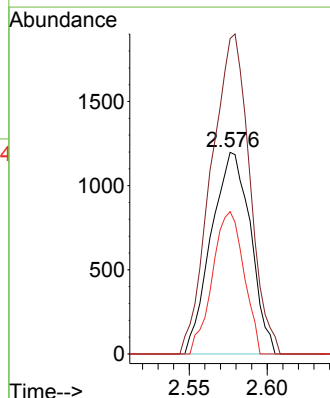
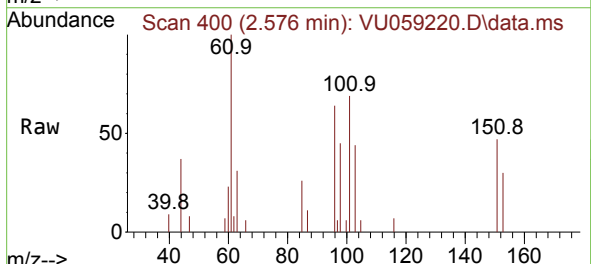
Instrument :
 MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT2-2024

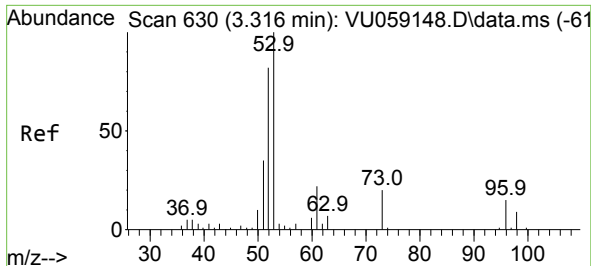
Tgt Ion:	101	Resp:	2165
Ion	Ratio	Lower	Upper
101	100		
85	41.7	36.1	54.1
151	69.4	55.0	82.6



#9
 1,1-Dichloroethene
 Concen: 0.206 ug/l
 RT: 2.576 min Scan# 400
 Delta R.T. 0.003 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

Tgt Ion:	96	Resp:	2095
Ion	Ratio	Lower	Upper
96	100		
61	156.3	0.0	515.4
98	70.6	0.0	124.4





#12

Acrylonitrile

Concen: 0.382 ug/l m

RT: 3.348 min Scan# 64

Delta R.T. 0.032 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT2-2024

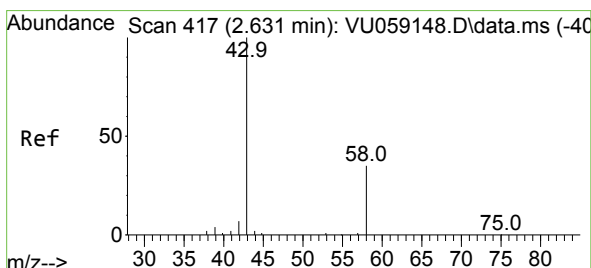
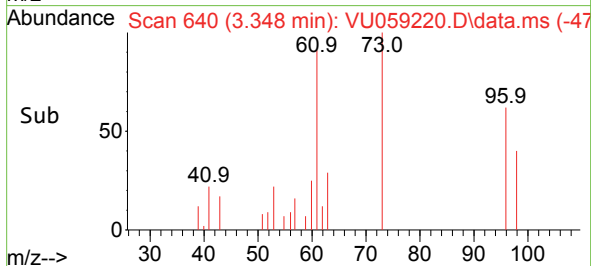
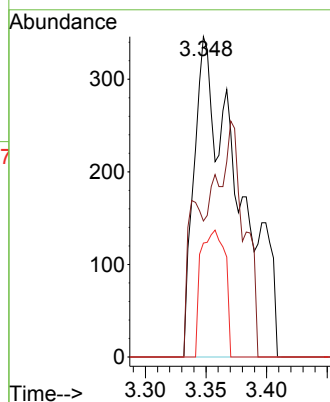
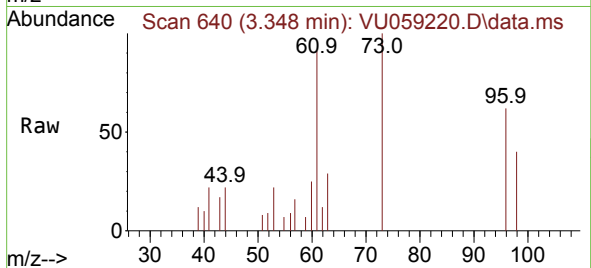
Tgt Ion: 53 Resp: 878

Ion Ratio Lower Upper

53 100

52 12.4 64.2 96.4#

51 21.5 33.0 49.4#



#13

Acetone

Concen: 1.021 ug/l

RT: 2.647 min Scan# 422

Delta R.T. 0.016 min

Lab File: VU059220.D

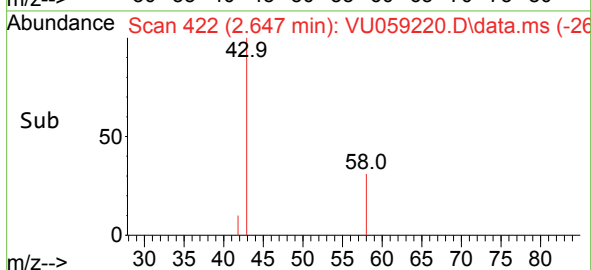
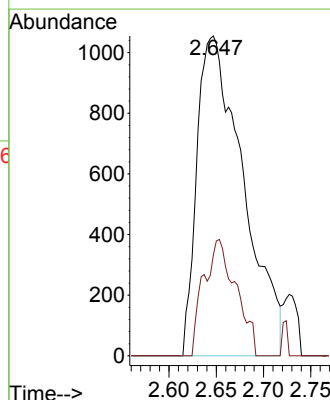
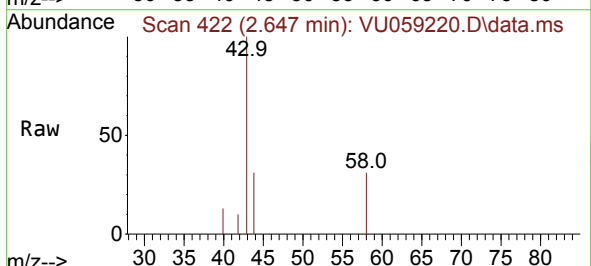
Acq: 12 Jun 2024 13:50

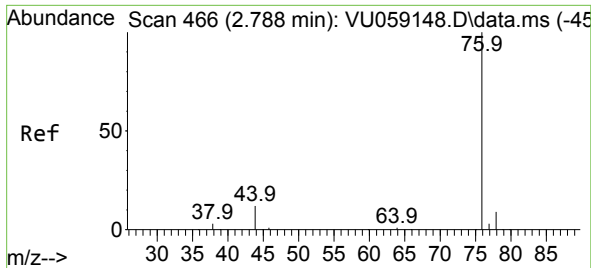
Tgt Ion: 43 Resp: 3574

Ion Ratio Lower Upper

43 100

58 31.5 27.9 41.9





#14

Carbon Disulfide

Concen: 0.216 ug/l

RT: 2.788 min Scan# 4

Delta R.T. 0.000 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Instrument :

MSVOA_U

ClientSampleId :

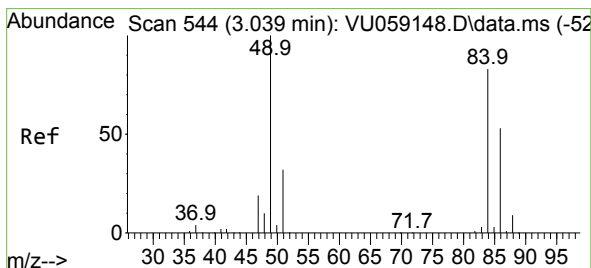
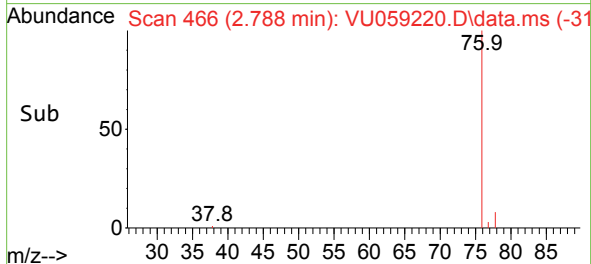
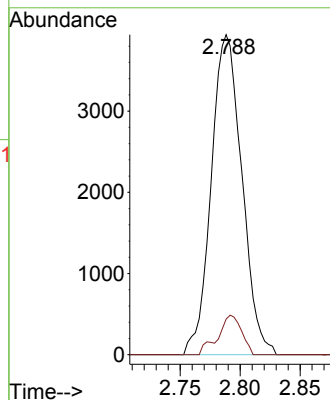
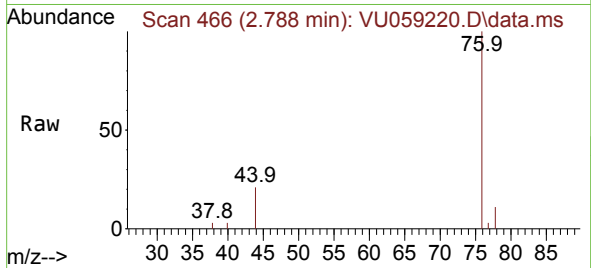
MDL-WATER-03-QT2-2024

Tgt Ion: 76 Resp: 6999

Ion Ratio Lower Upper

76 100

78 11.1 7.3 10.9#



#15

Methylene Chloride

Concen: 0.396 ug/l

RT: 3.036 min Scan# 543

Delta R.T. -0.003 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Tgt Ion: 84 Resp: 5533

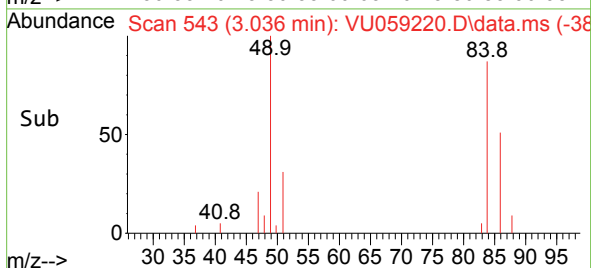
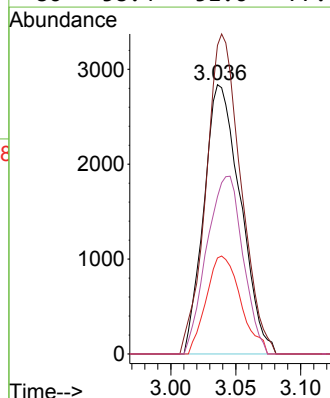
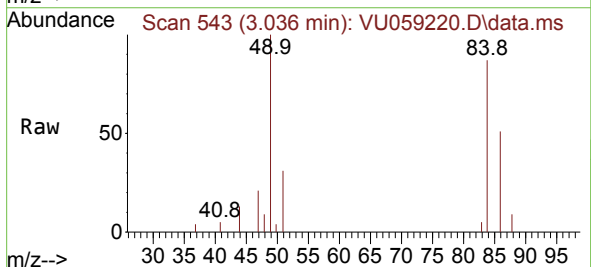
Ion Ratio Lower Upper

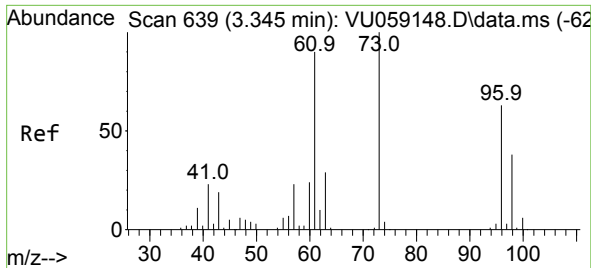
84 100

49 114.6 96.7 145.1

51 35.6 0.0 76.8

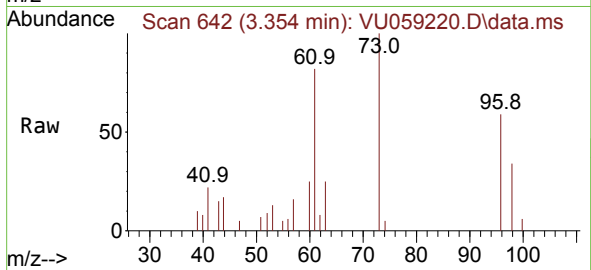
86 58.4 51.6 77.4



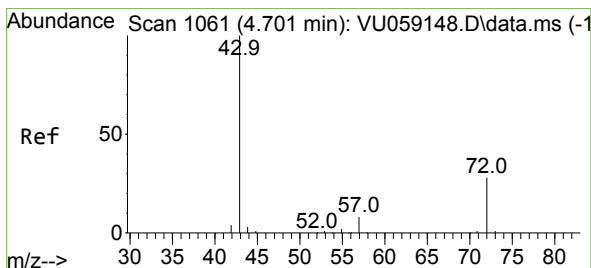
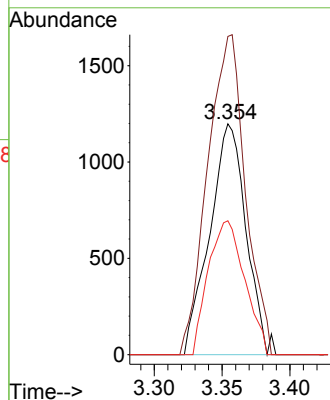
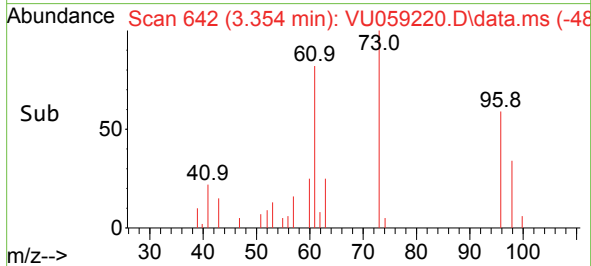


#16
trans-1,2-Dichloroethene
Concen: 0.201 ug/l
RT: 3.354 min Scan# 642
Delta R.T. 0.010 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

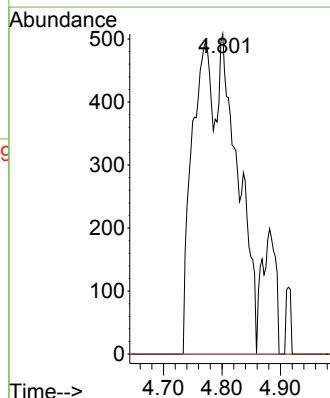
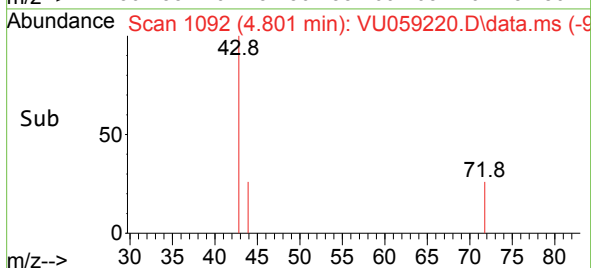
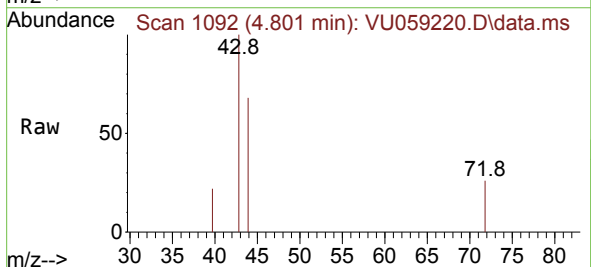


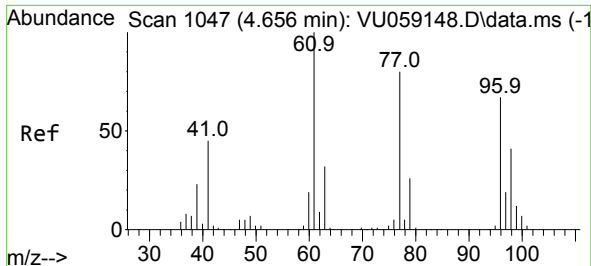
Tgt Ion:	96	Resp:	2235
Ion	Ratio	Lower	Upper
96	100		
61	137.9	114.8	172.2
98	58.0	48.8	73.2



#18
2-Butanone
Concen: 0.730 ug/l m
RT: 4.801 min Scan# 1092
Delta R.T. 0.100 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion:	43	Resp:	2834
Ion	Ratio	Lower	Upper
43	100		
57	0.0	0.0	16.8

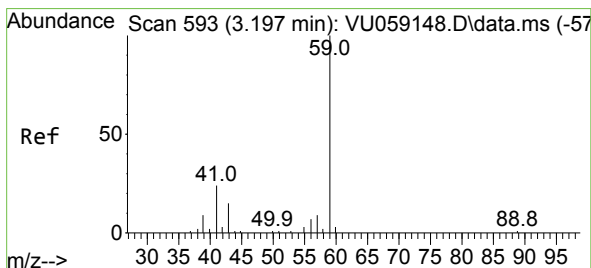
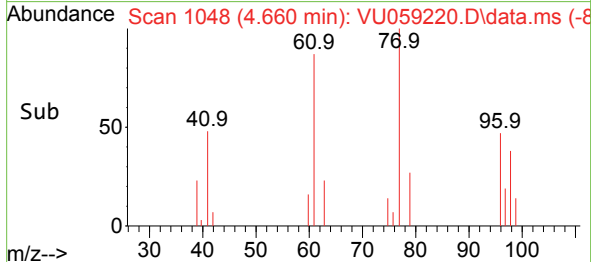
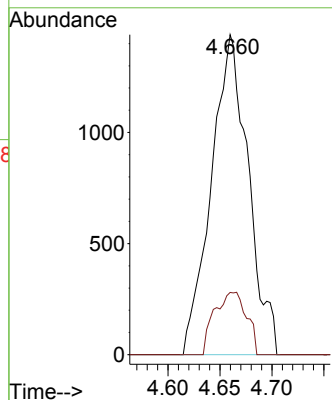
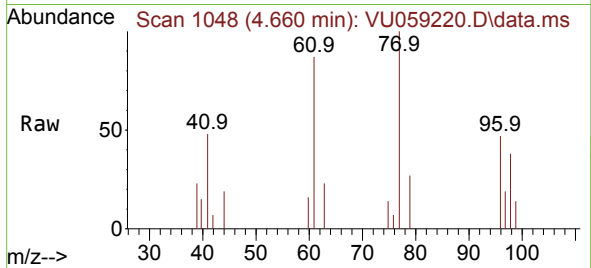




#21
2,2-Dichloropropane
Concen: 0.207 ug/l
RT: 4.660 min Scan# 1048
Delta R.T. 0.003 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

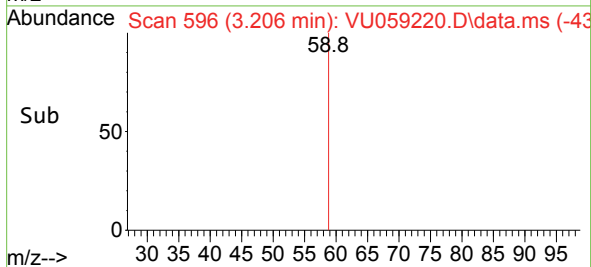
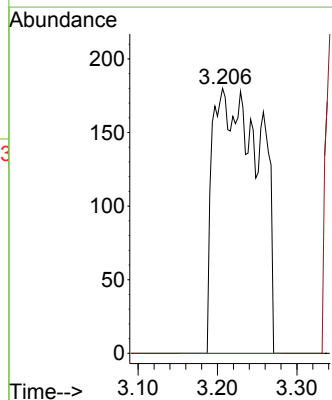
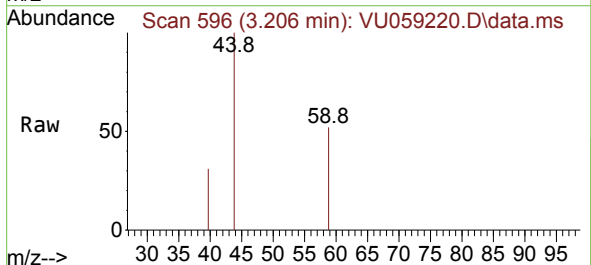
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

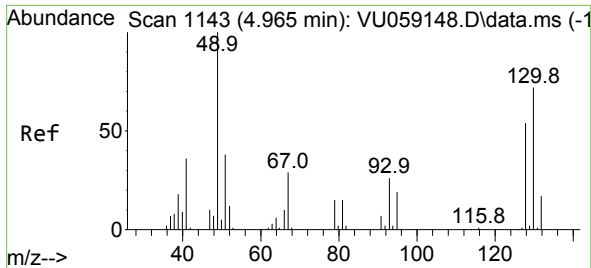
Tgt Ion: 77 Resp: 3569
Ion Ratio Lower Upper
77 100
97 16.9 18.1 27.1#



#24
tert-Butyl Alcohol
Concen: 1.197 ug/l m
RT: 3.206 min Scan# 596
Delta R.T. 0.009 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 59 Resp: 733
Ion Ratio Lower Upper
59 100
57 0.0 2.9 4.3#

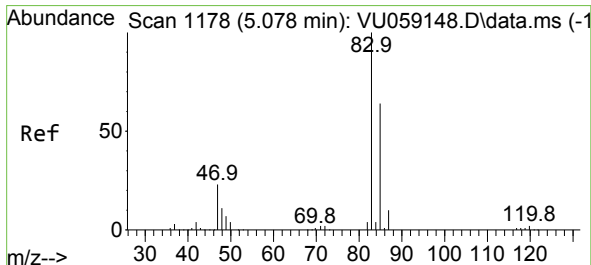
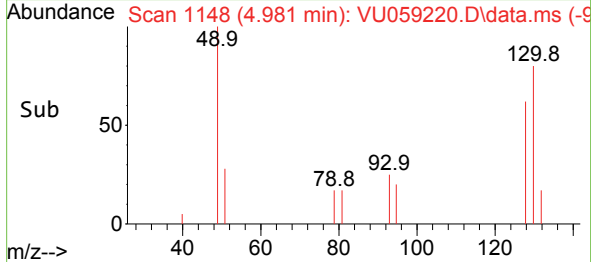
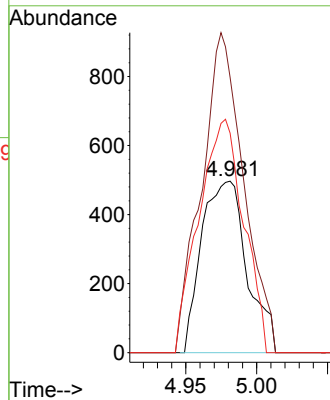
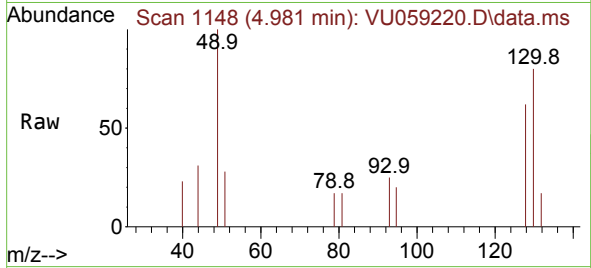




#26
Bromochloromethane
Concen: 0.217 ug/l
RT: 4.981 min Scan# 1148
Delta R.T. 0.016 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

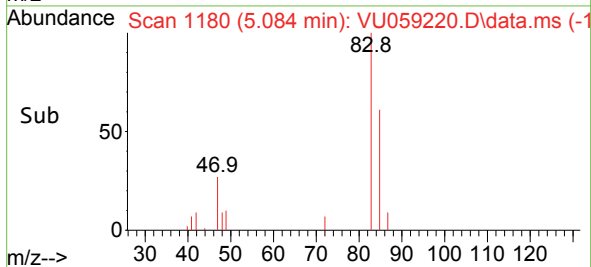
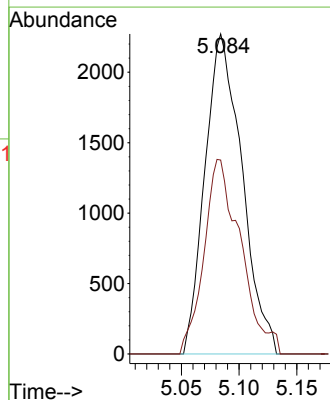
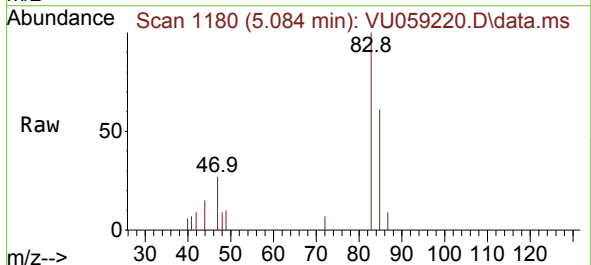
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

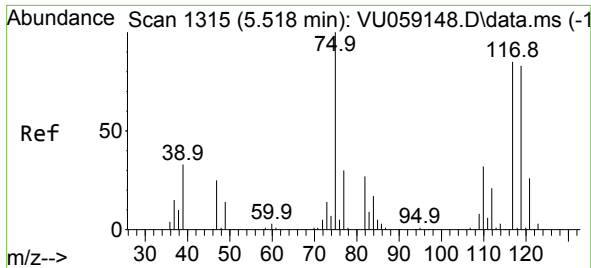
Tgt Ion:128 Resp: 1107
Ion Ratio Lower Upper
128 100
49 173.4 0.0 371.2
130 134.2 104.1 156.1



#27
Chloroform
Concen: 0.216 ug/l
RT: 5.084 min Scan# 1180
Delta R.T. 0.006 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 83 Resp: 5057
Ion Ratio Lower Upper
83 100
85 60.6 0.0 127.2

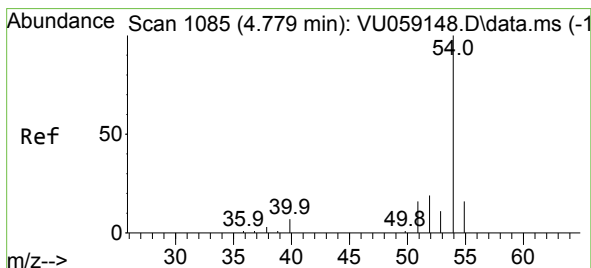
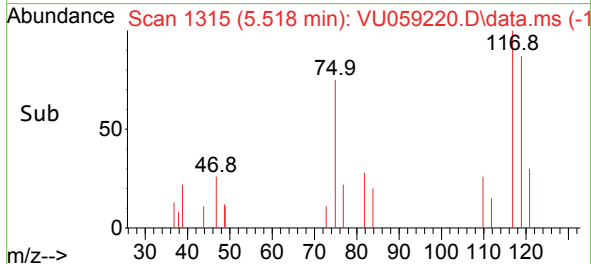
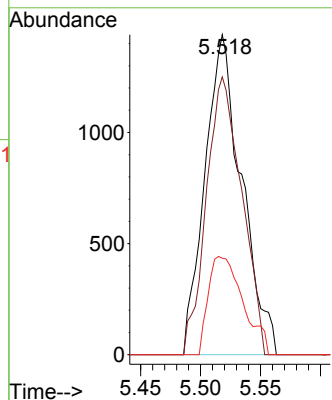
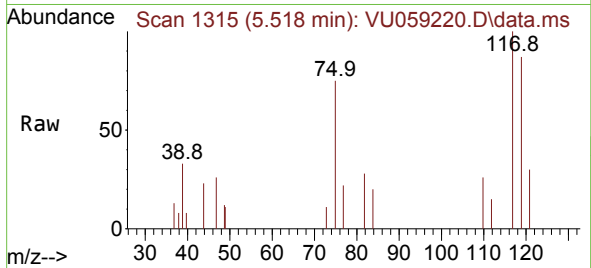




#30
Carbon Tetrachloride
Concen: 0.203 ug/l
RT: 5.518 min Scan# 1117
Delta R.T. 0.000 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

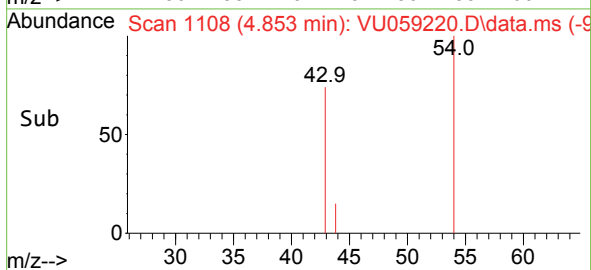
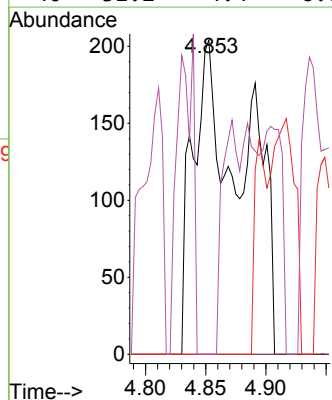
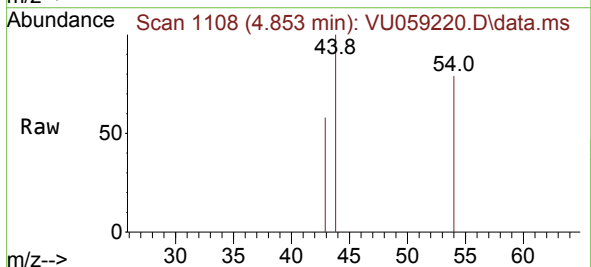
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

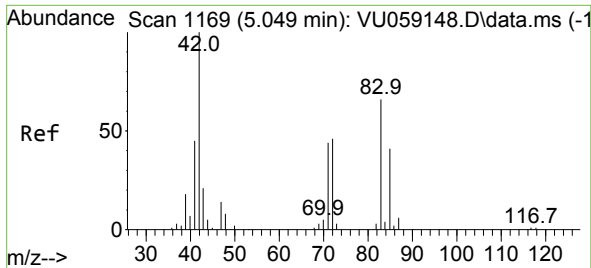
Tgt Ion:117 Resp: 3070
Ion Ratio Lower Upper
117 100
119 86.8 77.5 116.3
121 30.1 24.6 37.0



#34
Propionitrile
Concen: 0.678 ug/l m
RT: 4.853 min Scan# 1108
Delta R.T. 0.074 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 54 Resp: 603
Ion Ratio Lower Upper
54 100
52 0.0 15.2 22.8#
55 0.0 12.4 18.6#
40 31.2 4.4 6.6#

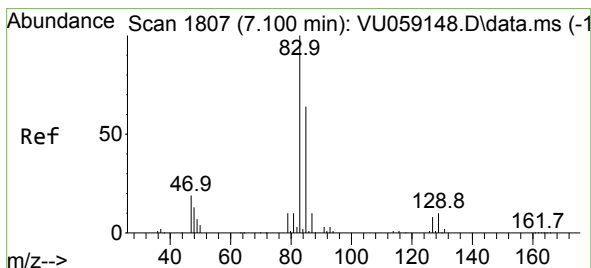
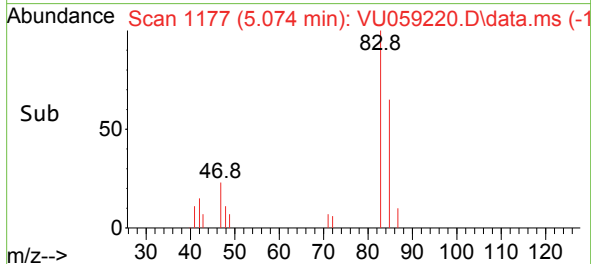
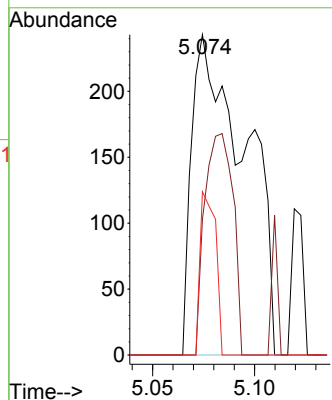
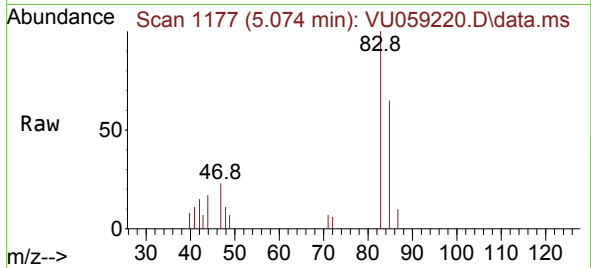




#41
Tetrahydrofuran
Concen: 0.249 ug/l m
RT: 5.074 min Scan# 1169
Delta R.T. 0.026 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

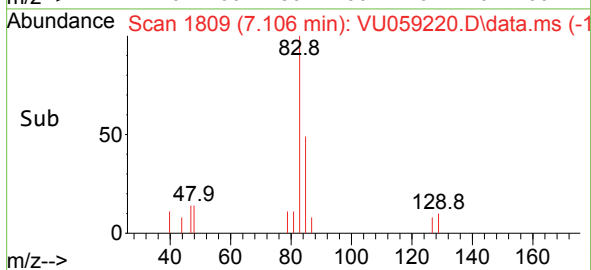
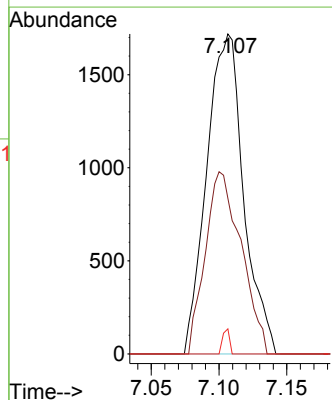
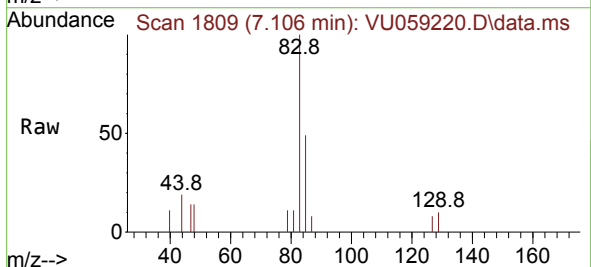
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

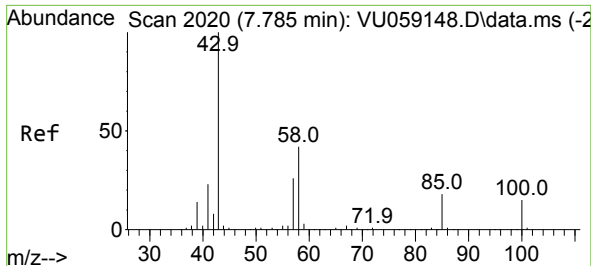
Tgt Ion: 42 Resp: 441
Ion Ratio Lower Upper
42 100
72 36.7 40.7 61.1#
71 15.0 36.5 54.7#



#44
Bromodichloromethane
Concen: 0.201 ug/l
RT: 7.106 min Scan# 1809
Delta R.T. 0.006 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 83 Resp: 3259
Ion Ratio Lower Upper
83 100
85 48.6 51.0 76.4#
127 7.9 6.4 9.6





#45

4-Methyl-2-Pentanone

Concen: 0.722 ug/l

RT: 7.801 min Scan# 2020

Delta R.T. 0.016 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT2-2024

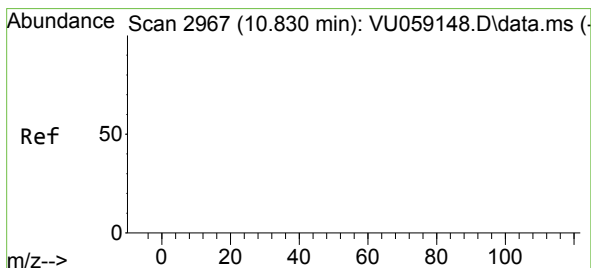
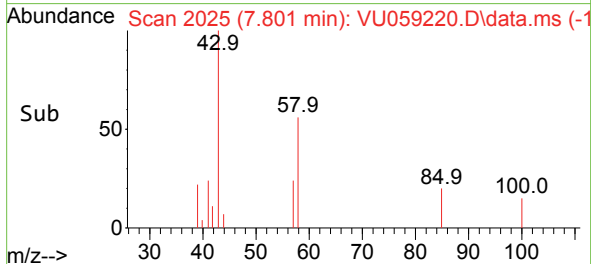
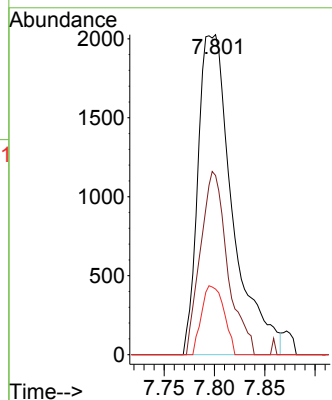
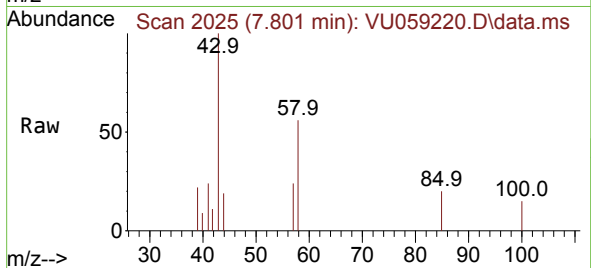
Tgt Ion: 43 Resp: 4836

Ion Ratio Lower Upper

43 100

58 45.0 21.1 63.3

85 13.9 14.6 22.0#



#46

t-1,4-Dichloro-2-butene

Concen: 0.376 ug/l m

RT: 10.833 min Scan# 2968

Delta R.T. 0.003 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Tgt Ion: 75 Resp: 1070

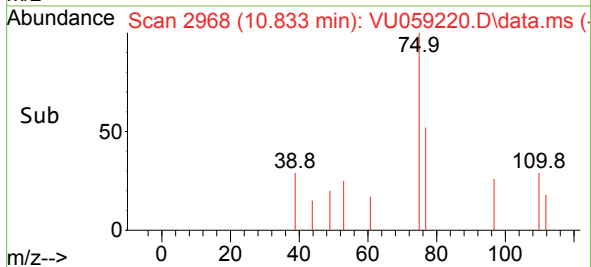
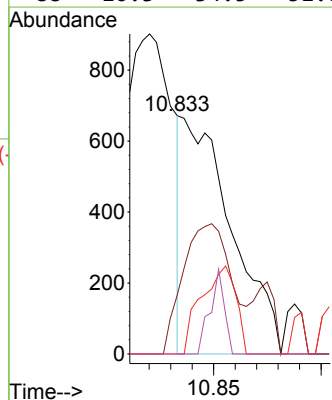
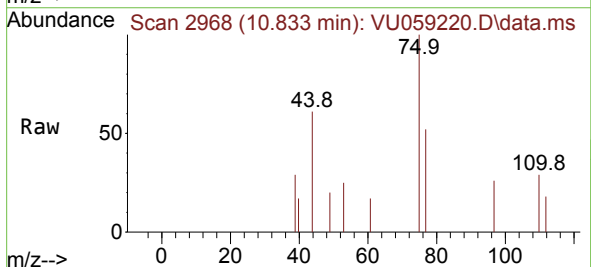
Ion Ratio Lower Upper

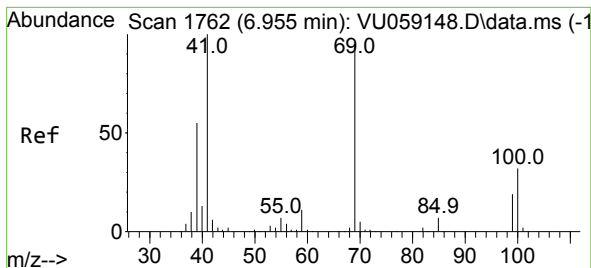
75 100

53 54.0 72.2 108.4#

89 25.8 47.0 70.4#

88 10.3 34.5 51.7#





#47

Methyl methacrylate

Concen: 0.223 ug/l

RT: 6.975 min Scan# 1

Delta R.T. 0.019 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT2-2024

Tgt Ion: 69 Resp: 1199

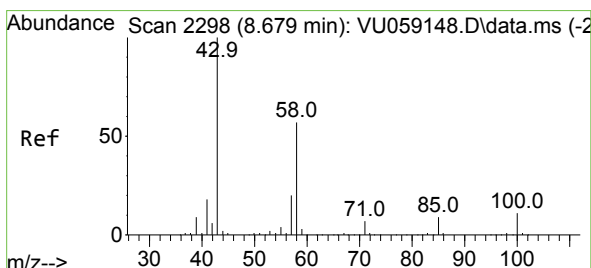
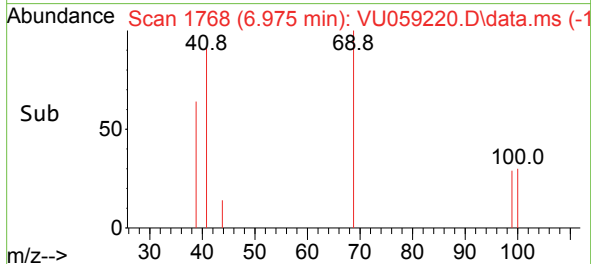
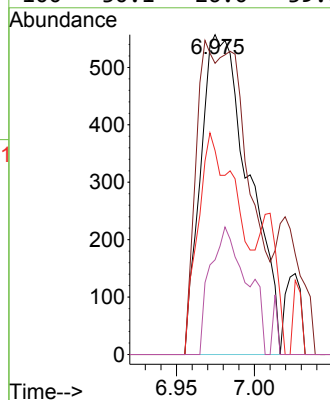
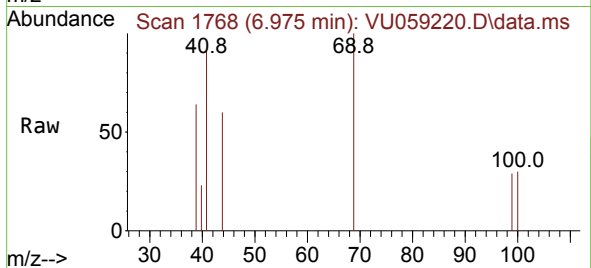
Ion Ratio Lower Upper

69 100

41 40.3 0.0 208.8

39 56.5 46.0 69.0

100 30.1 26.0 39.0



#54

2-Hexanone

Concen: 0.826 ug/l m

RT: 8.698 min Scan# 2304

Delta R.T. 0.019 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

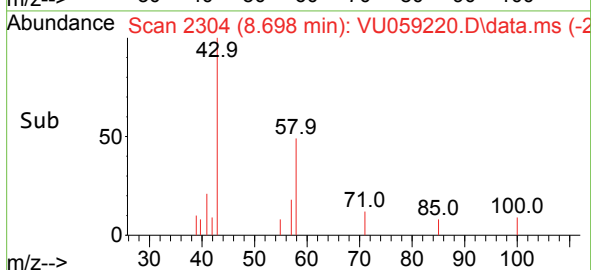
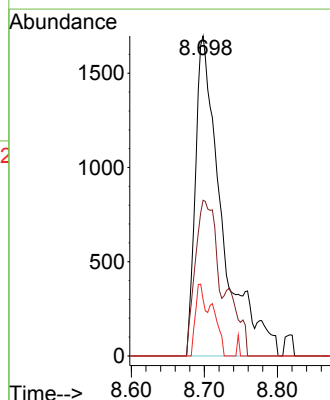
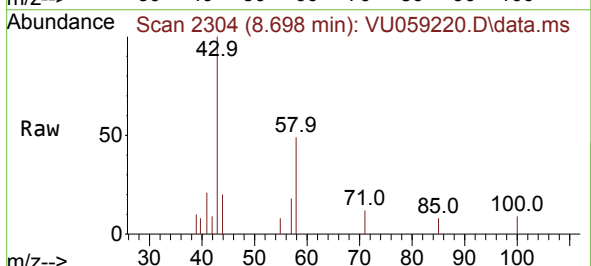
Tgt Ion: 43 Resp: 4288

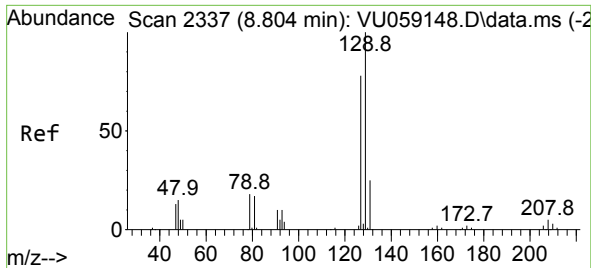
Ion Ratio Lower Upper

43 100

58 38.7 38.6 78.6

57 8.7 0.0 39.5

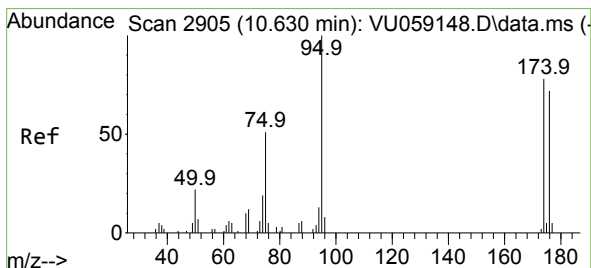
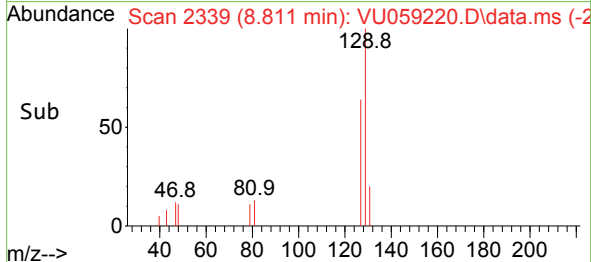
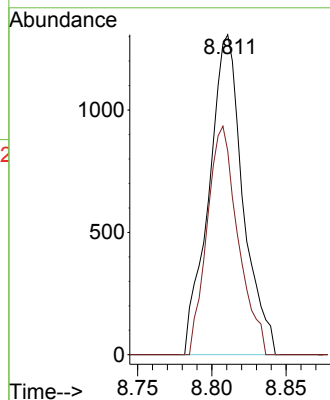
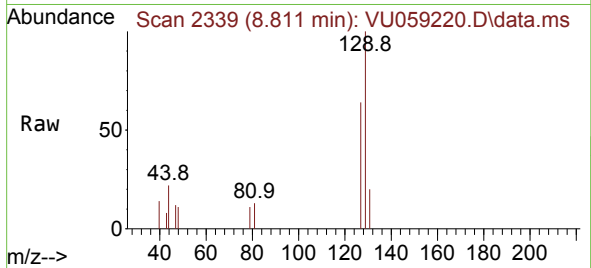




#55
Dibromochloromethane
Concen: 0.210 ug/l
RT: 8.811 min Scan# 21
Delta R.T. 0.006 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

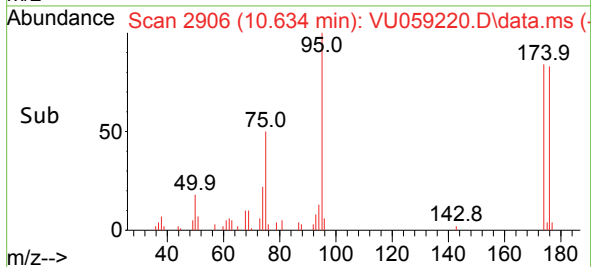
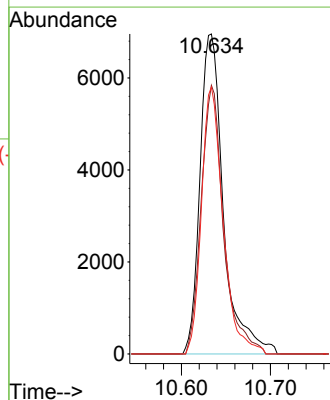
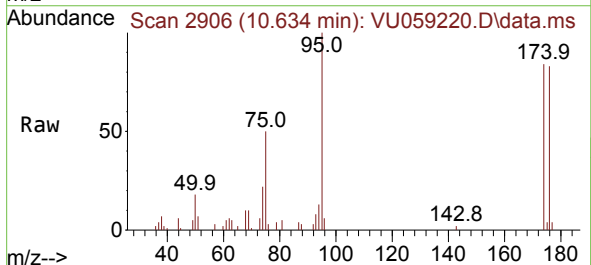
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

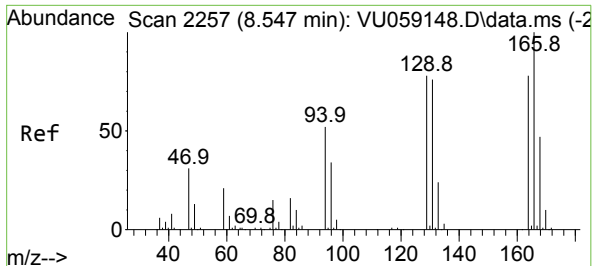
Tgt Ion:129 Resp: 2094
Ion Ratio Lower Upper
129 100
127 64.8 61.9 92.9



#57
4-Bromofluorobenzene
Concen: 0.888 ug/l
RT: 10.634 min Scan# 2906
Delta R.T. 0.003 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion: 95 Resp: 12767
Ion Ratio Lower Upper
95 100
174 79.7 59.6 89.4
176 76.9 57.3 85.9

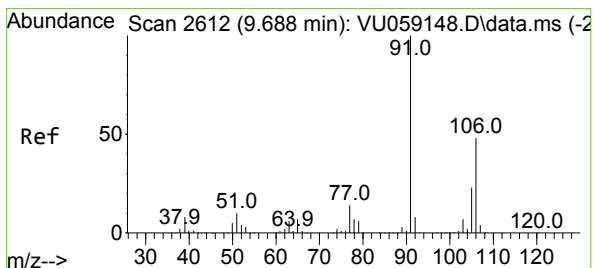
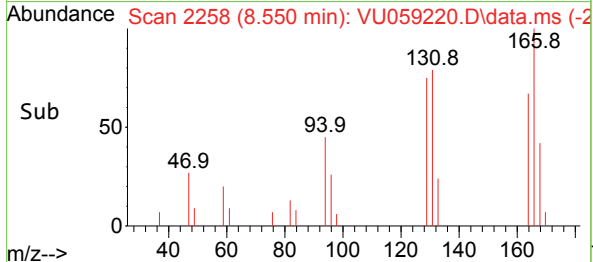
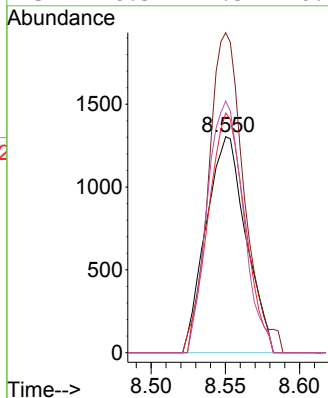
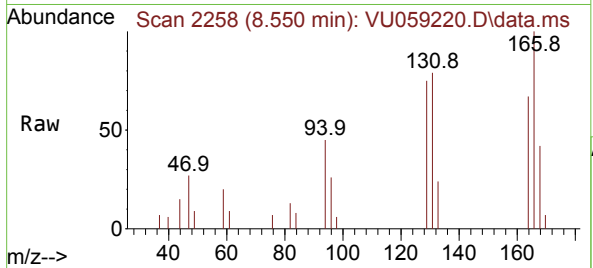




#58
Tetrachloroethene
Concen: 0.227 ug/l
RT: 8.550 min Scan# 21
Delta R.T. 0.003 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

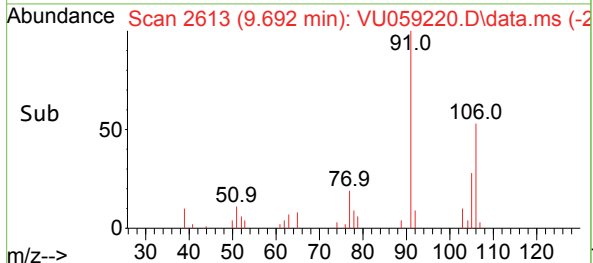
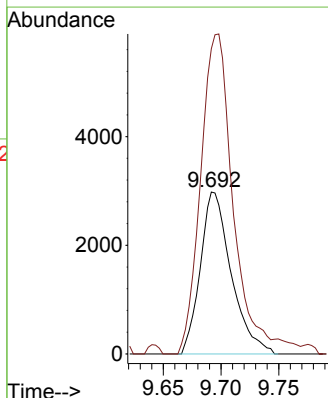
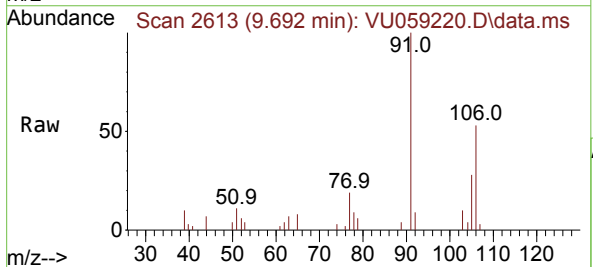
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

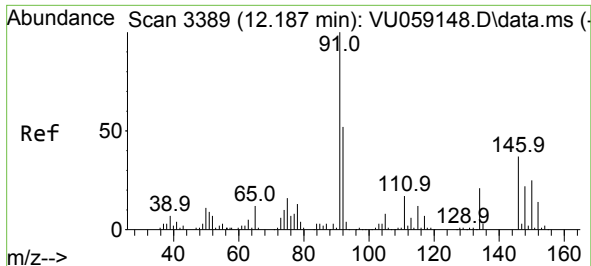
Tgt Ion:164 Resp: 2430
Ion Ratio Lower Upper
164 100
166 148.2 102.6 153.8
129 111.0 80.3 120.5
131 116.5 77.5 116.3#



#64
m/p-Xylenes
Concen: 0.297 ug/l
RT: 9.692 min Scan# 2613
Delta R.T. 0.003 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion:106 Resp: 5537
Ion Ratio Lower Upper
106 100
91 210.6 166.4 249.6

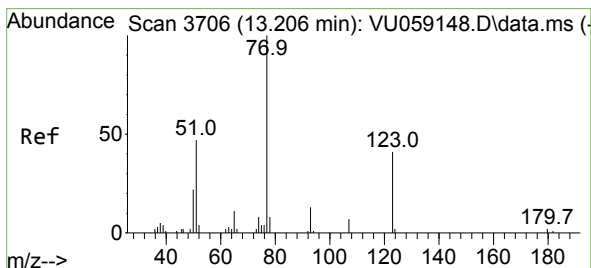
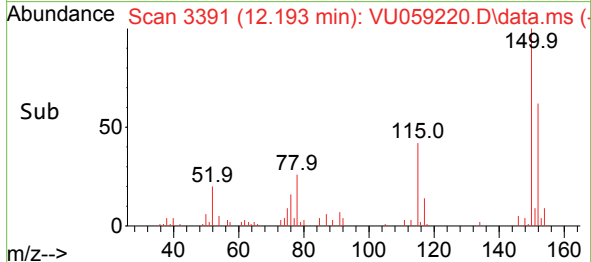
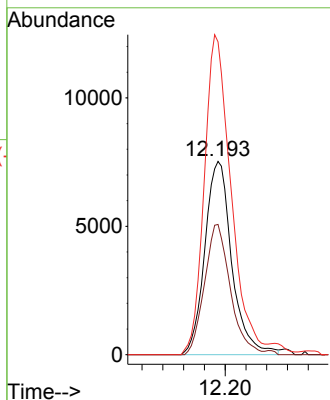
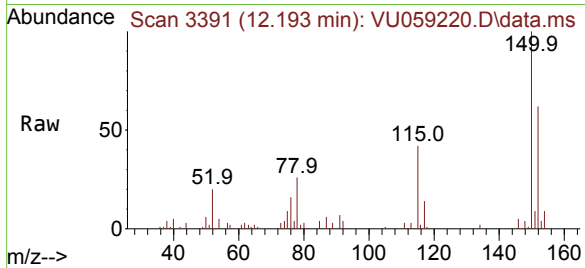




#68
 1,2-Dichlorobenzene-d4
 Concen: 0.903 ug/l
 RT: 12.193 min Scan# 31
 Delta R.T. 0.006 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

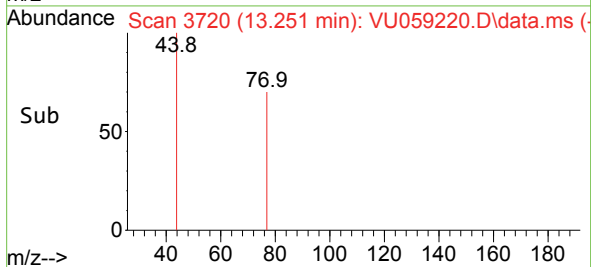
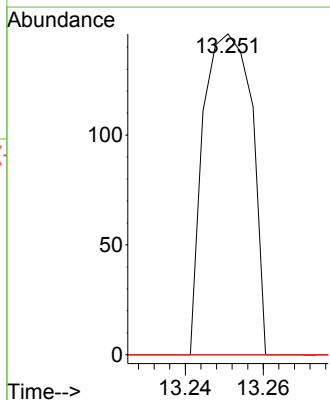
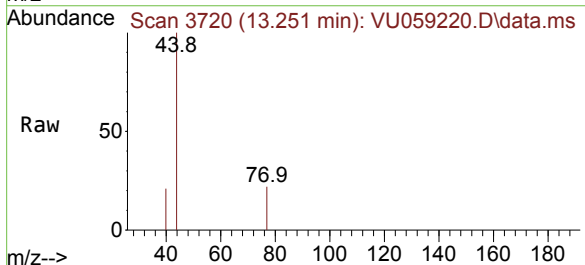
Instrument :
 MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT2-2024

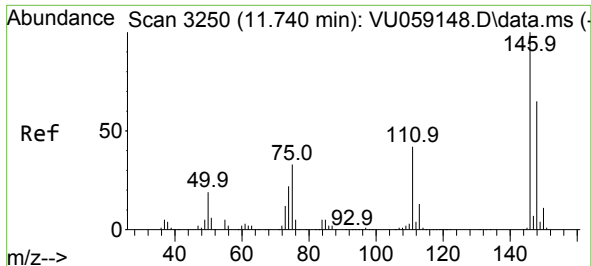
Tgt Ion:152 Resp: 13598
 Ion Ratio Lower Upper
 152 100
 115 64.4 0.0 293.2
 150 163.5 0.0 636.0



#80
 Nitrobenzene
 Concen: 0.503 ug/l
 RT: 13.251 min Scan# 3720
 Delta R.T. 0.045 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

Tgt Ion: 77 Resp: 125
 Ion Ratio Lower Upper
 77 100
 123 0.0 18.3 64.7#
 65 0.0 10.6 13.4#

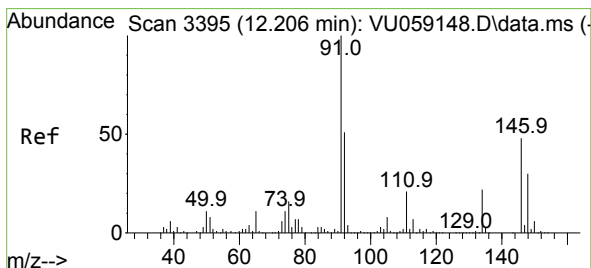
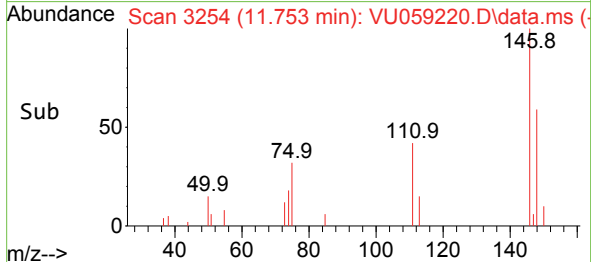
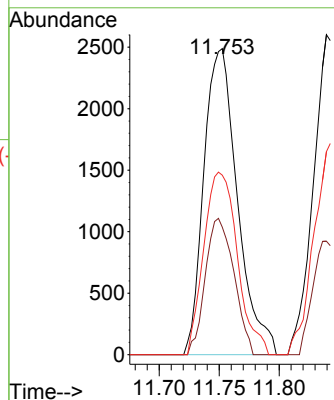
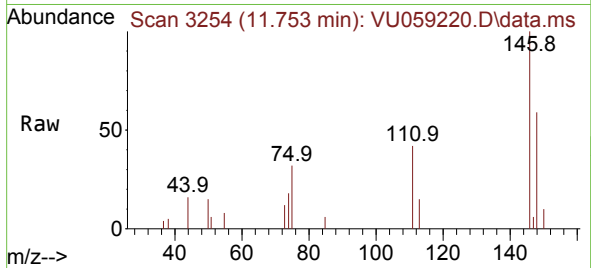




#82
1,3-Dichlorobenzene
Concen: 0.202 ug/l
RT: 11.753 min Scan# 31
Delta R.T. 0.013 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

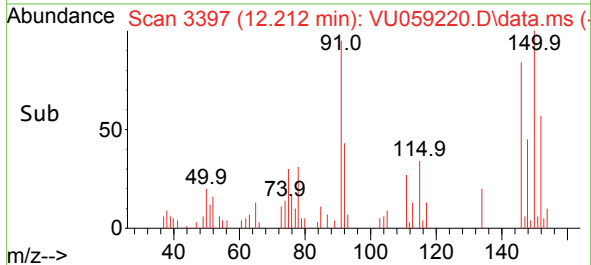
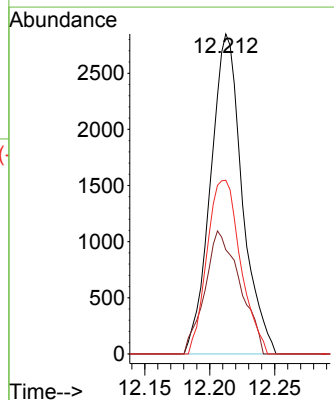
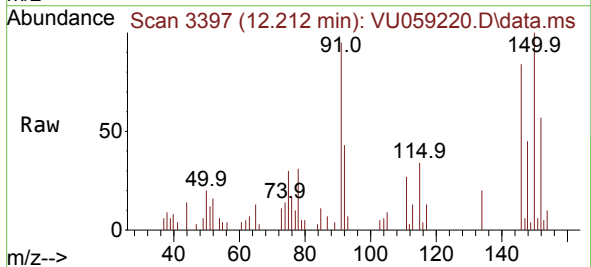
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT2-2024

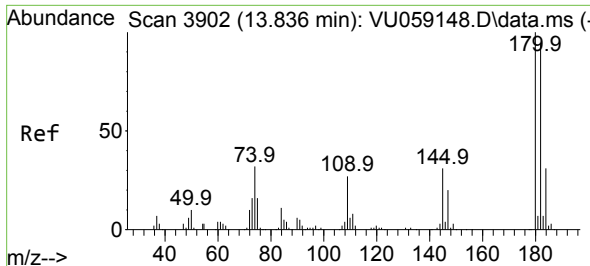
Tgt Ion:146 Resp: 4842
Ion Ratio Lower Upper
146 100
111 38.0 33.4 50.0
148 59.8 51.2 76.8



#85
1,2-Dichlorobenzene
Concen: 0.214 ug/l
RT: 12.212 min Scan# 3397
Delta R.T. 0.006 min
Lab File: VU059220.D
Acq: 12 Jun 2024 13:50

Tgt Ion:146 Resp: 4826
Ion Ratio Lower Upper
146 100
111 42.6 21.8 65.3
148 57.4 31.3 93.9

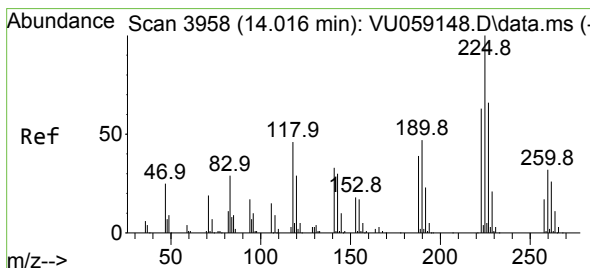
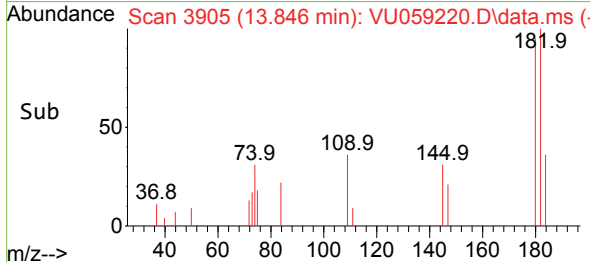
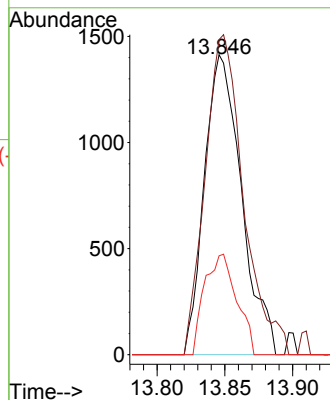
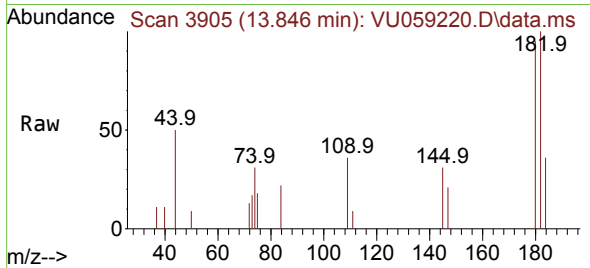




#87
 1,2,4-Trichlorobenzene
 Concen: 0.222 ug/l
 RT: 13.846 min Scan# 3905
 Delta R.T. 0.010 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

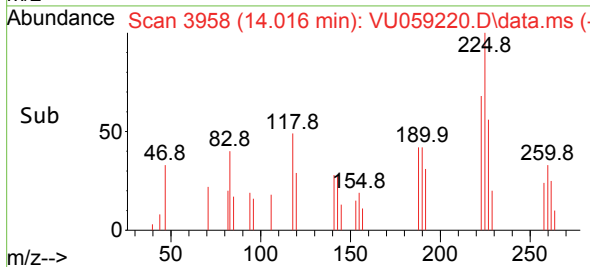
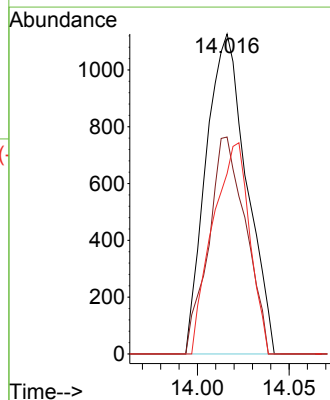
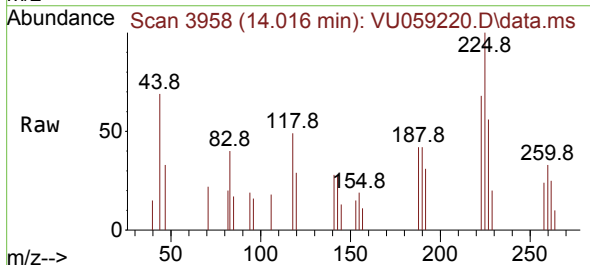
Instrument :
 MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT2-2024

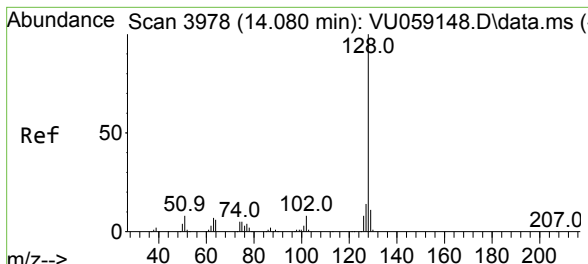
Tgt Ion:180 Resp: 2687
 Ion Ratio Lower Upper
 180 100
 182 110.5 75.7 113.5
 145 29.0 24.6 36.8



#88
 Hexachlorobutadiene
 Concen: 0.229 ug/l
 RT: 14.016 min Scan# 3958
 Delta R.T. 0.000 min
 Lab File: VU059220.D
 Acq: 12 Jun 2024 13:50

Tgt Ion:225 Resp: 1731
 Ion Ratio Lower Upper
 225 100
 223 62.0 50.0 75.0
 227 60.1 51.8 77.8





#89

Naphthalene

Concen: 0.251 ug/l

RT: 14.097 min Scan# 3983

Delta R.T. 0.017 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT2-2024

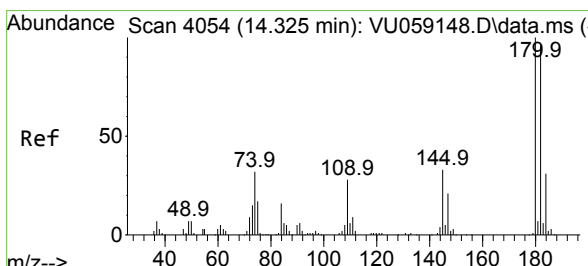
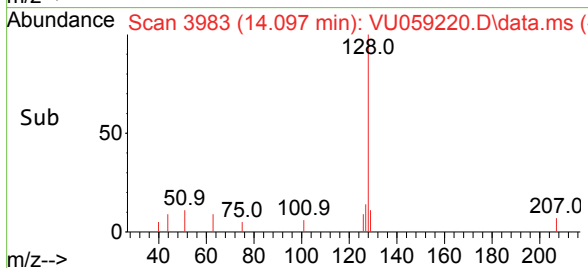
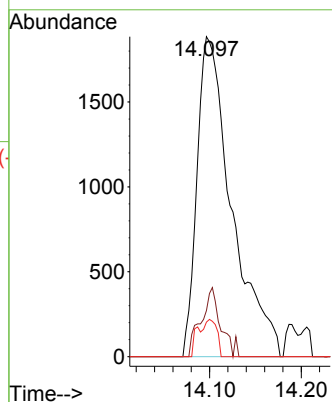
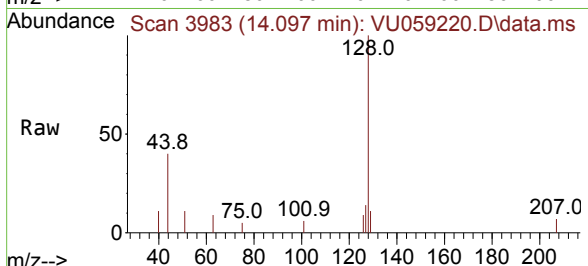
Tgt Ion:128 Resp: 4938

Ion Ratio Lower Upper

128 100

127 12.4 10.7 16.1

129 4.4 8.4 12.6#



#90

1,2,3-Trichlorobenzene

Concen: 0.247 ug/l

RT: 14.328 min Scan# 4055

Delta R.T. 0.003 min

Lab File: VU059220.D

Acq: 12 Jun 2024 13:50

Tgt Ion:180 Resp: 2717

Ion Ratio Lower Upper

180 100

182 106.5 76.3 114.5

145 31.2 26.5 39.7

